
From: Shea, James
Sent: Monday, March 14, 2011 9:27 AM
To: Hasselberg, Rick; RST01B Hoc; RST01 Hoc
Cc: Schoenebeck, Greg; Kowalczyk, Jeffrey; Brown, Michael; Collins, Frank; Alter, Peter; Berry, Rollie; Schoenebeck, Greg; Sloan, Scott; Marksberry, Don
Subject: RE: Let's add More Names to the RST Watch Standers List

Follow Up Flag: Follow up
Flag Status: Flagged

Just let me know when you need me to man the station, I am here. Have been frustrated watching events as a former Core Engineer, SRO Certified Operations Supervisor and STA at Oyster Creek for 20 years I could not understand why they could not get water into the Iso-Condenser early on and why they could not get a fire truck or Diesel Fire Pump to get water to the Core Spray System hours into the event. Venting into the (No Hardened Vent?) Rx Building without purging it seems puzzling also. How are they keeping the Fuel Pool Cool?

Jim Shea

From: Hasselberg, Rick
Sent: Monday, March 14, 2011 7:56 AM
To: RST01B Hoc; RST01 Hoc
Cc: Schoenebeck, Greg; Kowalczyk, Jeffrey; Brown, Michael; Collins, Frank; Alter, Peter; Berry, Rollie; Shea, James; Schoenebeck, Greg; Sloan, Scott; Marksberry, Don
Subject: Let's add More Names to the RST Watch Standers List

Peter –

Since we're going into a far more protracted protracted event response, we're going to need to add more folks to the rotation...

Starting with that list I started last night (residing on the desktop of RST01) let's add Mike Brown to the BWR Experts List, and move Frank Collins and Peter Alter over to that list (BWR) as well.

Let's add Rollie Berry, Jeff Kowalczyk and Greg Schoenebeck into the RST Coordinator rotation. Scott Sloan has also stepped forward.

Don Marksberry could be added to the Accident analysts position.

I'll be in in a few hours to get some other work done. We'll chat when you get a minute. Thanks.

Rick

From: Brown, Michael
Sent: Sunday, March 13, 2011 6:39 PM
To: Beardsley, James; Tappert, John
Cc: Hasselberg, Rick
Subject: Volunteer to assist with Japan Emergency

Jim et al,

Wade-1

I'm not sure if you need additional assistance but I'm willing to volunteer to assist with the Japanese Emergency as needed, including going to Japan to assist if desired.

I'm very familiar with BWR technology having been certified as a STA at Plant Hatch and working as the Resident Inspector at Peach Bottom for 3 years.

In addition, I have written and administered several BWR examinations in Region I and familiar with both BWR 2 and BWR 4/5 technology.

If I can be of assistance in anyway, let me know.

Mike

Mike Brown
Sr. Reactor Systems Engineer
NRO/DCIP/CIPB
email - michael.brown@nrc.gov
phone - 301-415-4096
cell - (b)(6)
office - T-7F14

From: HOO Hoc
Sent: Tuesday, March 15, 2011 1:10 PM
To: RST01 Hoc; PMT01 Hoc; LIA01 Hoc; LIA02 Hoc; LIA04 Hoc; LIA07 Hoc; LIA11 Hoc; LIA12 Hoc; Gott, William; Marshall, Jane; McDermott, Brian; Morris, Scott; Thorp, John
Subject: FW: 01時SPEEDI単位置放出図形イメージの送付
Attachments: FUKUSHIMA1 air doseüi01-02hüj.gif; FUKUSHIMA1 air doseüi02-03hüj.gif; FUKUSHIMA1 wind(01hüj.gif; FUKUSHIMA1 air concentrationüi01-02hüj.gif; FUKUSHIMA1 air concentrationüi02-03hüj.gif

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Tuesday, March 15, 2011 12:59 PM

To: [redacted] (b)(6)

[redacted] (b)(6)

Subject: RE: 01時SPEEDI単位置放出図形イメージの送付

0100 SPEEDI data.

SBU
This email is UNCLASSIFIED

Jerome Ryan
Political Officer
U.S. Embassy Tokyo
1-10-5, Akasaka 1-Chome, Minato-Ku, Tokyo 107
tel:(81)(03)3224-5343
fax:(81)(03)3224-5322
<http://japan.usembassy.gov/>

-----Original Message-----

From: nustec [mailto:spd01@nustec.or.jp]
Sent: Wednesday, March 16, 2011 1:33 AM

To: [redacted] (b)(6)

[redacted] (b)(6)

Handwritten signature

(b)(6)

Subject: 01時SPEEDI単位量放出図形イメージの送付

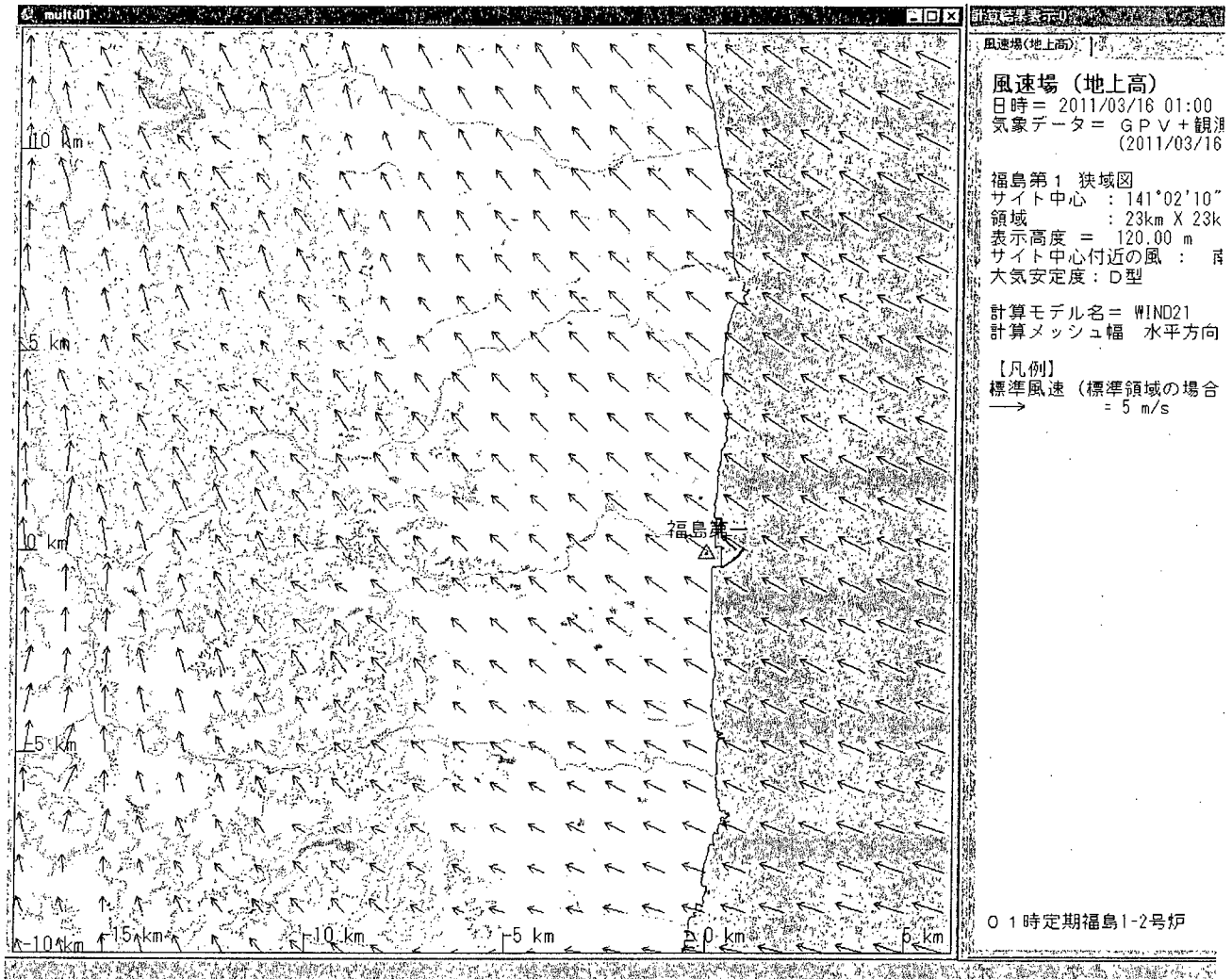
関係者各位

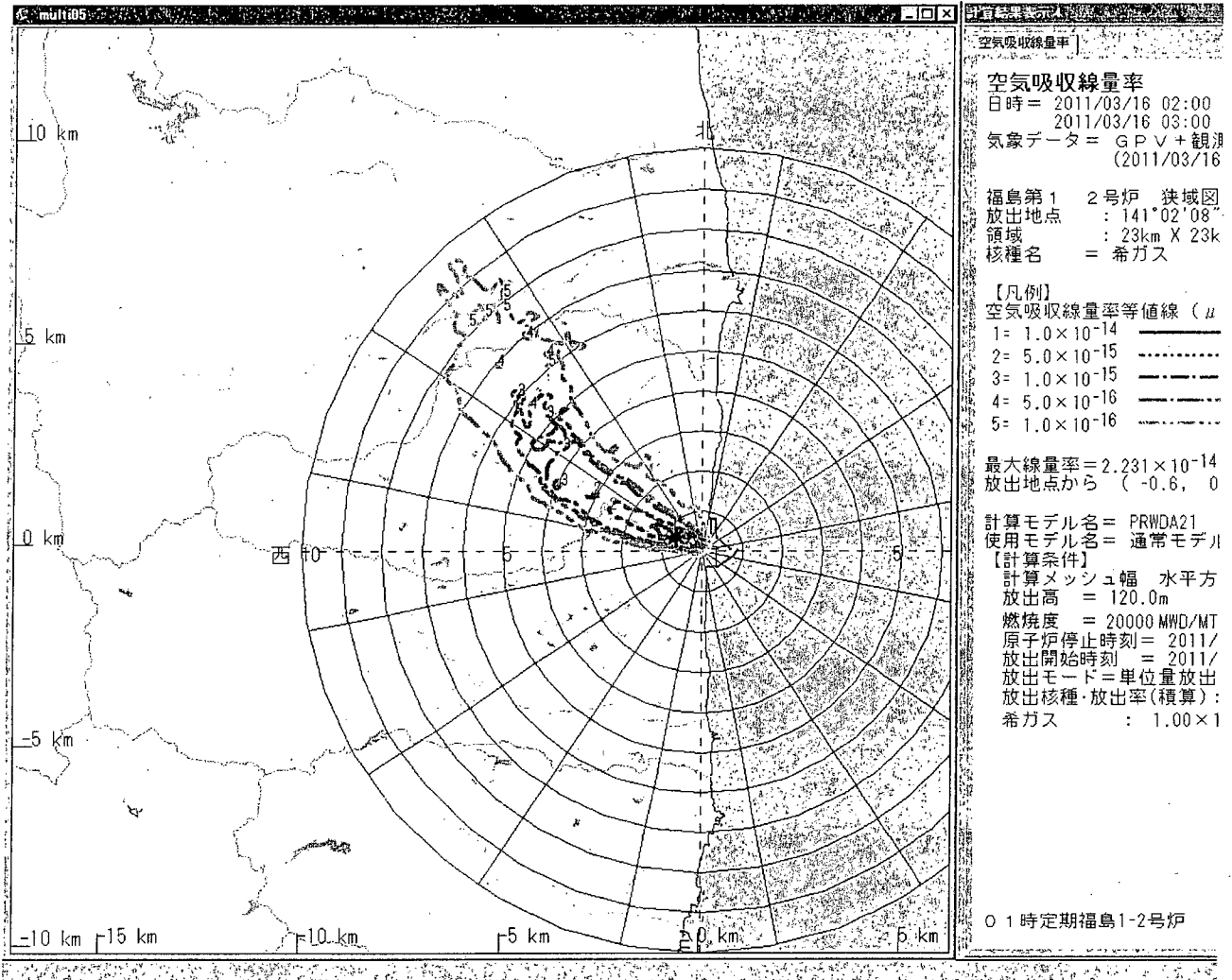
お世話になっております。

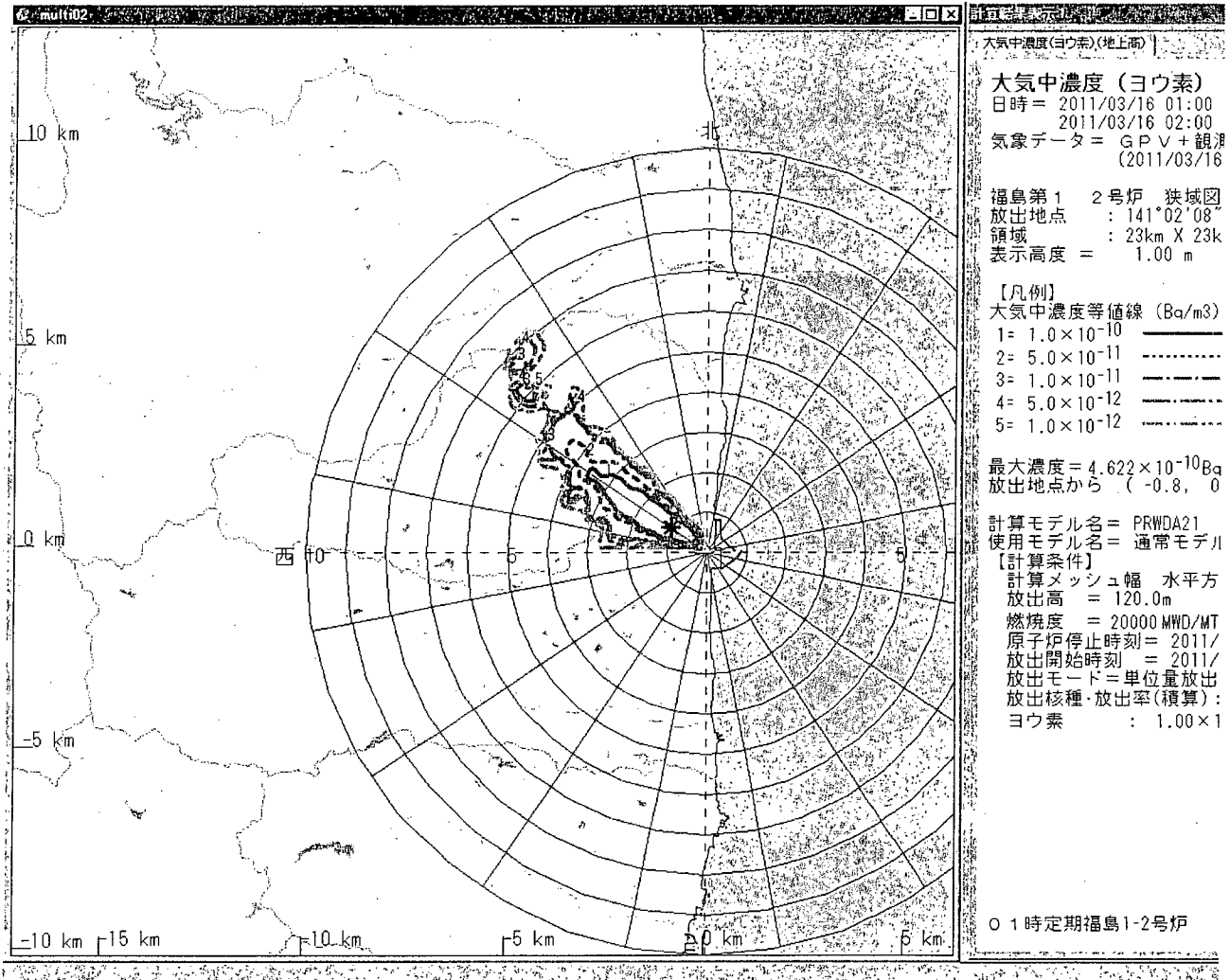
原子力安全技術センター 水野です。

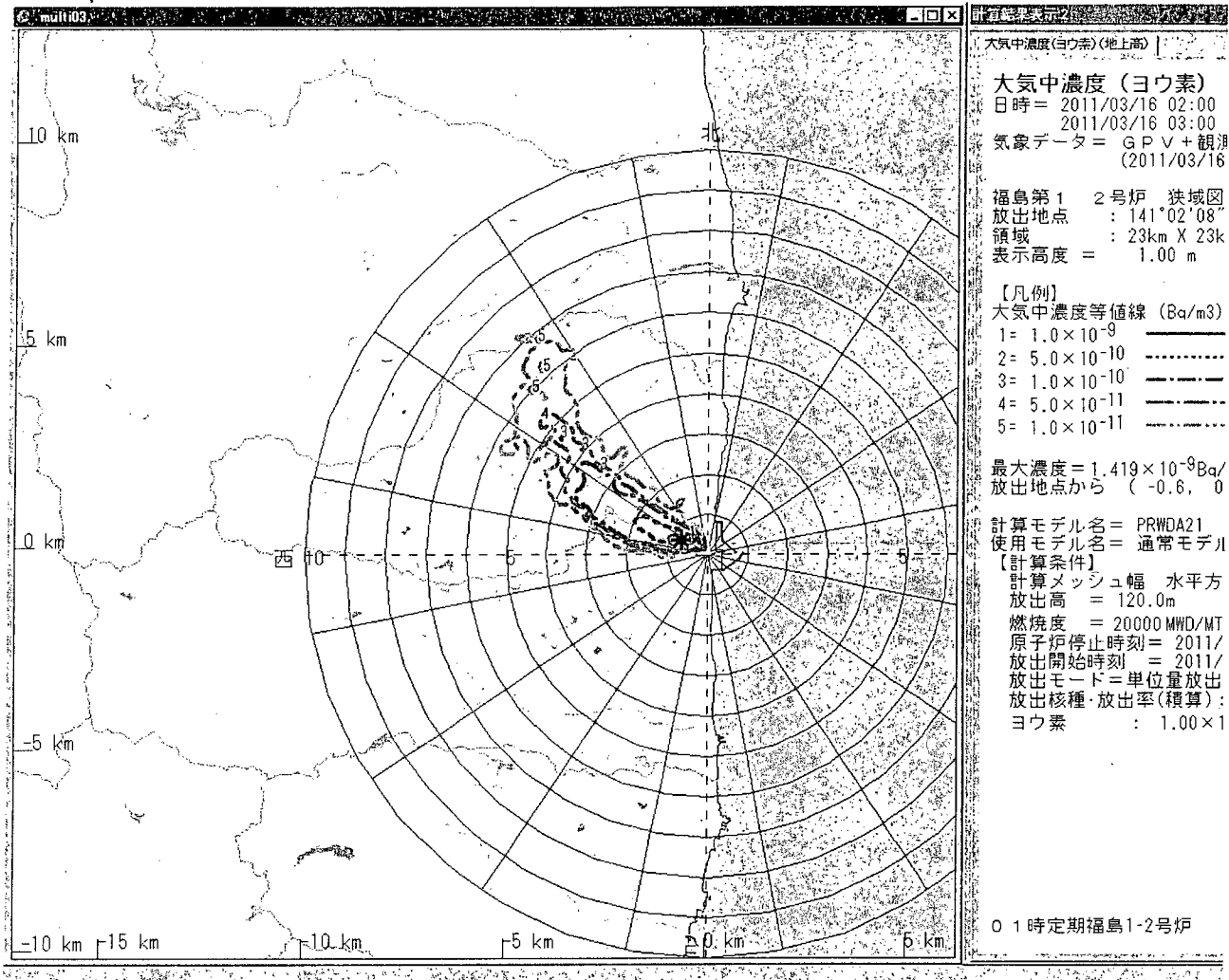
3/16 01時のSPEEDI単位量放出図形のイメージデータを送付致します。

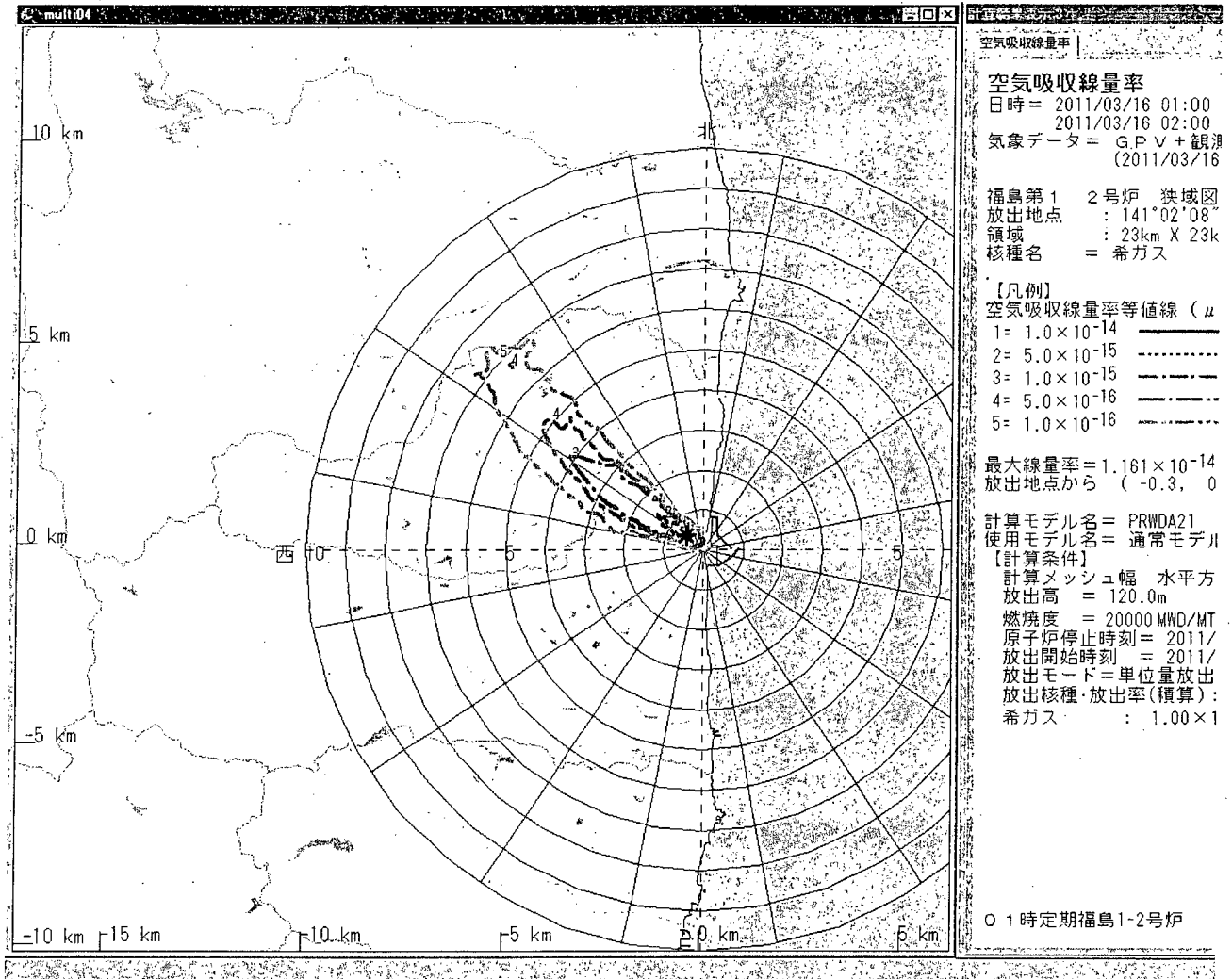
ご確認のほど、よろしくお願い致します。











From: [Rosewag, Daniel](#)
To: [Hayden, Elizabeth](#)
Subject: RE: STEM Fair Reminder, This Friday March 18th
Date: Wednesday, March 16, 2011 10:46:33 PM

Not a problem, Japan should be the priority. I spoke with Theresa today and she expressed interest in still providing both with she and LaRay switching back and forth. I told her that i would both support and accommodate anything she needed or wanted to do. Thank you again, for everything, and good luck with all that is going on as i am sure all of you are very busy.

Daniel Rosewag

From: Hayden, Elizabeth [Elizabeth.Hayden@nrc.gov]
Sent: Wednesday, March 16, 2011 7:56 PM
To: Rosewag, Daniel
Cc: Clark, Theresa; Benton, Laray; Burnell, Scott
Subject: Re: STEM Fair Reminder, This Friday March 18th

Daniel,
Due to the situation in Japan and 24/7 staffing in our Emergency Operations Center, we may not be able to support both the classroom presentation and the exhibit but we are trying to work that out.. We are down to 2 staff -- Theresa Clark and LaRay Benton who are still available. Theresa is organizing our effort and will be in touch if there are any more changes.

I'm sorry about the late changes, but I'm hoping you understand given the Japan disaster.
Beth Hayden

From: Rosewag, Daniel <DFROSEW@carrollk12.org>
To: Hayden, Elizabeth
Sent: Mon Mar 14 12:07:56 2011
Subject: RE: STEM Fair Reminder, This Friday March 18th

I checked and will be able to provide 2 easels that will be there waiting for you at you exhibit site when you arrive for the event. Thanks again, it should be a great experience for all,

Daniel Rosewag

From: Hayden, Elizabeth [mailto:Elizabeth.Hayden@nrc.gov]
Sent: Sunday, March 13, 2011 11:28 PM
To: Rosewag, Daniel
Cc: Burnell, Scott
Subject: RE: STEM Fair Reminder, This Friday March 18th

Daniel, I forgot to ask whether there are any easels available for behind the exhibit tables in the cafeteria for a couple of posters. If not, please let Scott Burnell know who will be filling in for me so he can bring 1 or 2 with him. Thanks.

Beth Hayden

From: Rosewag, Daniel [mailto:DFROSEW@carrollk12.org]
Sent: Sunday, March 13, 2011 11:05 PM
To: Ferrin, Charles; Eckles, William; [aemartin@umd.edu](#); [bcatterton@sha.state.md.us](#);
[Dalton1@jhmi.edu](#); [dathomas@towson.edu](#);
(b)(6)

www-3

David.Desrocher@jhuapl.edu; dhunsicker@globecomm.com; dkelly@evapco.com;
DMcLaughlin@umuc.edu; dominic.palumbo@ci.irs.gov; (b)(6) Hayden, Elizabeth;
(b)(6); hinge.fagnant@ngc.com; (b)(6);
isabel.tejero@fda.hhs.gov; ianine.ketter@ngc.com; leakins@ufi.edu; jeffrey.ammann@ttb.gov;
jessica.gray@ttb.gov; (b)(6); jordan.alpert@noaa.gov;
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lferretto@HCM2.com; lisa.ditillo@knorrbrakecorp.com; lperfetta@lincolntech.com;
marcianna.p.delaney@nasa.gov; (b)(6); (b)(6);
mcrampton@sha.state.md.us; mdemoss@umd.edu; (b)(6);
mkstapleton@towson.edu; mtartal@ec-san.com; (b)(6); rhonaker@lincolntech.com;
sarah_brezinski@partner.nps.gov; (b)(6); (b)(6);
shartsock@mdsp.org; skim70@jhu.edu; silivinski@stset.edu; sonal.deshpande@ngc.com;
sryan@natgeotv.com; (b)(6); steve.smallley@ngc.com; su@jhu.edu;
(b)(6) wnderby@qis.net

Subject: STEM Fair Reminder, This Friday March 18th

This is just a friendly reminder that STEM Fair is this coming Friday, March 18th. I sent itinerary and logistics some weeks ago and all confirmed clarity and participation. Please let me know if you have any questions, concerns, or changes to make me aware of. Thanks again and i look forward to meeting all of you this coming Friday, it should be a very enjoyable event for all!!

Daniel Rosewag
STEM Academy Leader
Social Studies / Technology Education
Century High School

From: Brenner, Eliot
To: Hayden, Elizabeth
Cc: Harrington, Holly
Subject: Re: NICCL Call at 10:30am (eastern) Japanese reactor
Date: Wednesday, March 16, 2011 11:31:43 AM

Once we put out our release, let's resummazize on tje blog and any subsequent release where additional info can be found.

Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

C (b)(6)

Sent from my Blackberry

From: Hayden, Elizabeth
To: Harrington, Holly; Brenner, Eliot
Sent: Wed Mar 16 11:29:36 2011
Subject: Re: NICCL Call at 10:30am (eastern) Japanese reactor

We need to summarize what the overall govt is doing and pointing to links/(if there are any) with useful info. I.e. EPA has monitors...DOS has traveler advisories ect

From: Harrington, Holly
To: Hayden, Elizabeth; Brenner, Eliot
Sent: Wed Mar 16 10:58:21 2011
Subject: RE: NICCL Call at 10:30am (eastern) Japanese reactor

Eliot says no. info changes too fast

From: Hayden, Elizabeth
Sent: Wednesday, March 16, 2011 10:54 AM
To: Harrington, Holly; Brenner, Eliot
Subject: Fw: NICCL Call at 10:30am (eastern) Japanese reactor

We need to get this info on our website as well as FAQs and links to other agency websites such as DOS for advice on travel to and travellers in Japan. That way we can refer callers there and take some workload off of us.

From: Shapiro, Nicholas S. <Nicholas_S._Shapiro@who.eop.gov>
To: NATIONAL JIC <NationalJIC@dhs.gov>

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(b)(6)

www-4

(b)(7)(C)

(b)(7)(C)

(b)(9)

(b)(9)

(b)(6)

Sent: Wed Mar 16 10:02:21 2011

Subject: RE: NICCL Call at 10:30am (eastern) Japanese reactor

Please make sure to get on this call as there seems to be some confusion over what folks can or should be doing.

No matter what, it is vital that everyone stays on same page regarding the facts, even as the situation worsens in Japan, the experts assure us that and I quote the NRC, **"You just aren't going to have any radiological material that, by the time it traveled those large distances, could present any risk to the American public."**

So that means, we should continue to talk about the many ways we are assisting the Japanese and the American citizens in Japan. DOE, NRC, HHS, DOD and State are all doing a great deal IN JAPAN and should continue to make sure folks know that.

We should also talk about the steps we are taking here at home.

The US Government will be studying every aspect of the Japanese disaster and the Japanese government's response, with the goal of learning as much as possible from that review.

The experts tell us that they see no harmful doses of radiation heading here but the EPA has radiological monitoring set up along the west coast and deploying to the US territories and that monitoring is public for all to see and will remain that way.

USDA and NOAA are working on plans to ensure that any food coming from Japan is unaffected and safe.

HHS and FEMA should be talking about how we have fantastic disaster preparedness plans in place here and they are exercised thoroughly with the rest of the federal government and with state and local officials.

It is good for HHS and FEMA to say if there were a nuclear accident here, this is how we would respond and then walk press through that, but it is important to make sure that while

doing this, it needs to be made clear that press understand we are talking about a hypothetical nuclear accident here, not any concerns whatsoever coming from Japan disaster to the US.

Nick

From: NATIONAL JIC [mailto:NationalJIC@dhs.gov]

Sent: Wednesday, March 16, 2011 9:53 AM

To: NATIONAL JIC;

(b)(6)

(b)(6)

(b)(6)

(b)(6)

Call info 1-800-320-4330

Code (b)(6)

From: NATIONAL JIC

Sent: Wednesday, March 16, 2011 9:39 AM

To: NATIONAL JIC;

(b)(6)

(b)(6)

(b)(6)

(b)(6)

Subject: NICCL Call at 10:30am (eastern) Japanese reactor

Federal communicators,

Please join a NICCL call at 10:30am to discuss your department's messaging role for the ongoing crisis in Japan.

We would like to focus our discussion on public events and opportunities taking place today, communications on Federal radiation monitoring, food, water, public health etc.

We will also plan to conduct a SICCL call this afternoon with Pacific Territorial communicators and western PIOs.

From: Hayden, Elizabeth
To: "JHayden@rappaportco.com"
Subject: Re: Bonjour
Date: Wednesday, March 16, 2011 11:47:43 AM

Thanks! I'll call you tomorrow.

----- Original Message -----

From: John H. Hayden <JHayden@rappaportco.com>
To: Hayden, Elizabeth
Sent: Wed Mar 16 11:45:54 2011
Subject: RE: Bonjour

Good idea.

I received the confirmation for your arrival tomorrow 3/17/11 @ 2:47.
Call me when you land and I'll be there in 15 -20 minutes.

Be safe
Love,

John H. Hayden, Jr.
Senior Director of Leasing
The Rappaport Companies
8405 Greensboro Drive, 8th Floor
McLean, VA 22102
jhayden@rappaportco.com
(571) 382-1222 Direct
(b)(6) Cell
(571) 382-1210 Fax
www.rappaportco.com

-----Original Message-----

From: Hayden, Elizabeth [mailto:Elizabeth.Hayden@nrc.gov]
Sent: Wednesday, March 16, 2011 3:16 AM
To: John H. Hayden
Subject: Re: Bonjour

Making arrangements to leave here Thurs afternoon since situation has deteriorated. Will keep you posted. Work is going crazy.

----- Original Message -----

From: John H. Hayden <JHayden@rappaportco.com>
To: Hayden, Elizabeth
Sent: Tue Mar 15 16:28:10 2011
Subject: RE: Bonjour

Excellent, glad to hear you made it safe & sound. Sorry the room was delayed.

(b)(6)

Keep me posted.

John H. Hayden, Jr.
Senior Director of Leasing
The Rappaport Companies

U)WW-5

8405 Greensboro Drive, 8th Floor
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www.rappaportco.com

-----Original Message-----

From: Hayden, Elizabeth [mailto:Elizabeth.Hayden@nrc.gov]
Sent: Tuesday, March 15, 2011 9:55 AM
To: John H. Hayden
Subject: Bonjour

Got here safely and quickly but had to wait 3 hours til my room was ready. I am at the Hotel Kyriad Prestige Ouest Boulogne - Pphone #33 1 48 25 80 80. Starting tomorrow I will be at Quality Hotel Acanthe #33 1 46 99 1040.
Off to the team leaders meeting in an hour.

From: Dean, Daniel
To: Hayden, Elizabeth
Subject: Chairman's Meeting Next Week
Date: Wednesday, March 16, 2011 5:05:51 PM

Hi Beth:

I understand that you're busy, but I have some questions regarding the planned media event here at NRC HQ next week with the Chairman. We (MCB) would like to get a bit of clarification on OPA's technical needs / expectations for this event so that we can plan accordingly.

I'm happy to discuss this on the phone, or I'll supply questions to you via email.

Thanks!

Dan

Dan Dean, CTS

Senior Audiovisual Production Specialist
U.S. Nuclear Regulatory Commission
Multimedia Communications Branch
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Rockville, Maryland 20852
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(301) 415-2385 (office)

(b)(6) (mobile)

From: Breskovic, Clarence
To: Breskovic, Clarence
Subject: Just in: Areva to supply 100 tons of boric acid and other aid to Japan
Date: Wednesday, March 16, 2011 4:35:31 PM

Areva press release:

AREVA is Mobilized for Japan

Paris, March 16, 2011

Following the earthquake and tsunami that struck northern Japan, AREVA is mobilizing its forces to provide support to residents of the affected area and to the rescue workers and personnel working near the Fukushima nuclear plant.

AREVA has chartered a plane that will depart for Japan as soon as possible to deliver 3,000 activated charcoal protective masks, 10,000 overalls and 20,000 gloves. The aircraft will also carry 100 tons of boric acid, a neutron absorber, made available by EDF.

French rescue workers left for Japan early this week with radioactivity detection equipment provided by AREVA's subsidiary, Canberra, specializing in the manufacture of nuclear detection and measurement equipment. Equipment in AREVA's Tokyo offices has already been made available to the Japanese security teams.

The Group also decided as of Monday to donate one million euros to the Japanese Red Cross.

Clarence Breskovic
International Policy Analyst
U.S. Nuclear Regulatory Commission
Office of International Programs
11555 Rockville Pike
Rockville, MD 20852, USA
Tel: 1-301-415-2364
Fax: 1-301-415-2395
Alternate Email: (b)(6)

From: [Harrington, Holly](#)
To: [Hayden, Elizabeth](#)
Subject: RE: NRC Press Release #8 (revised) through 10 - Japan Event Earthquake/Tsunami
Date: Wednesday, March 16, 2011 8:08:05 PM

Monday meeting is a briefing to the commission on status of response effort etc.

From: Hayden, Elizabeth
Sent: Wednesday, March 16, 2011 8:07 PM
To: Harrington, Holly
Subject: Re: NRC Press Release #8 (revised) through 10 - Japan Event Earthquake/Tsunami

Yes, this is vey helpful. Not sure what the Mon.Meeting is but - will talk to you tomorrow evening/Fri. Morning. Going to bed now at 1a.m.

From: Harrington, Holly
To: Hayden, Elizabeth
Sent: Wed Mar 16 19:58:34 2011
Subject: RE: NRC Press Release #8 (revised) through 10 - Japan Event Earthquake/Tsunami

What we have in place:

Press releases are written in the Op Center at Eliot's direction only. They are approved in the Op Center and disseminated. I then take them and turn them into a blog post. They are closely coordinated with the Chairman and the White House. We have not produced a lot of "paper"

All calls from media, etc., are handled via 8200 or opa.resource. Brenda, Bethany, Christine Steger and two other loaners are handling the phones. If it is a media call, they send it to Ivonne (or today, Mindy), who logs it and disseminates it either to Eliot, Scott, Dave, Rob Taylor, the regions or me depending on who is here and who is taking calls on what and how important it is. Some requests are immediately turned down i.e. Chile, Australia etc. If callers are members of the public, the secretaries give them to Amy Bonocorso and Ron Deaver (starting today) who respond using talking points and Q&As. If the caller is a federal or state person, they go to me and I forward to the liaison team. Estimate of calls a day are in the hundreds.

The system itself is working relatively well. I'd like Ivonne's logging to be more sophisticated, but it was created on the fly and is good for now. The public inquiry team is working great. Jenny Tobin is getting trained on it tomorrow. Am trying to get CDC to take the health/radiation calls, which most of these are. DHS is helping with that and we have a conference call tomorrow morning.

Lots and lots of issues, as you can imagine, ranging from spam e-mails about stopping nuclear power going all over the NRC with some people suggesting they just be forwarded to OPA (I said no) to getting videos and photos posted etc. EPA is nowhere in sight, and neither are most of the other federal agencies. WH refuses to consider this a public health crisis and keeps quoting NRC saying no health risk to U.S. This BTW, concerns me a lot. General public is completely freaked out.

Everyone is completely exhausted, but the FEMA folks I got here today aren't really any help. They

www-8

can't do media calls and that's what we need. HR says we can hire contractors within just days at the 13/14 level for 89 days with fingerprinting. Problem is getting them up to speed to be able to help us. One thought is get some in here to help staff the public inquiry and media referral desk (the former leaning heavily on other office loaners) and get some trained up to help us as spokespersons. The other thought is that it may take them too long to become spokesperson, so maybe find already nuke-savvy people in the agency who we can borrow and train as PR people.

What I'm realizing right now is that the process is working, everyone is in a rhythm and injecting additional people can be difficult (I used Undine for half a day and abandoned that idea.) But people are very, very, very tired. I'm told someone has scheduled a Monday public commissioner's meeting with Eliot as a speaker. This is a terrible idea. We don't have the hands to handle the media that will come . . .

Hope this helps.
Holly

From: Hayden, Elizabeth
Sent: Wednesday, March 16, 2011 7:32 PM
To: Harrington, Holly
Subject: Fw: NRC Press Release #8 (revised) through 10 - Japan Event Earthquake/Tsunami

Just for me to stay up to speed, what process are we using to get press releases approved?

From: OST03 HOC
To: DOI <doi_watch_office@ios.doi.gov>; (b)(6); chardin <chardin@crcpd.org>; rfraass@crcpd.org <rfraass@crcpd.org>; james.d.lloyd@nasa.gov <james.d.lloyd@nasa.gov>;
PN Distribution: FDA <emergencyoperations@fda.gov>; State Dept <SES-O@state.gov>; (b)(6)
(b)(6) Bernie Beaudin <Bernie.Beaudin@cnscccsn.gc.ca>; Canadian Nuclear Safety Commission (CNSC) <GOC-COG@PS-SP.GC.CA>; eoc2@cnscccsn.gc.ca <eoc2@cnsccsn.gc.ca>; DOEHOEOC@OEM.DOE.GOV <DOEHQEOC@OEM.DOE.GOV>; (b)(6)
(b)(6) EOC.EPAHQ@EPAMAIL.EPA.GOV <EOC.EPAHQ@EPAMAIL.EPA.GOV>; Lawrence Koleff <lawrence.koleff@ic.fbi.gov>; SIOC <sioc@leo.gov>; FEMA-operations-center@dhs.gov <FEMA-operations-center@dhs.gov>; Health Canada Operations Center <GOC-COG@PSEPC.GC.CA>; IAEA Emergency Response Unit <iec1@IAEA.ORG>; USDA <opscenter@usda.gov>; Screnci, Diane; Sheehan, Neil; Dricks, Victor; Clifford, James; Gamberoni, Marsha; Heater, Keith; Holian, Brian; Kay Gallagher <Kay.Gallagher@nrc.gov>; Kinneman, John; Lew, David; Nick, Joseph; ODaniell, Cynthia; Powell, Raymond; R1 IRC; Roberts, Darrell; Thompson, Margaret; Davenport, Patricia; McCallie, Karen; Miles, Patricia; Quinones-Navarro, Joylynn; R2 IRC; Rudisail, Steven; R3 IRC; Smith, Desiree; Alferink, Beth; Andrews, Tom; Howell, Linda; R4 IRC
Sent: Wed Mar 16 18:17:53 2011
Subject: NRC Press Release #8 (revised) through 10 - Japan Event Earthquake/Tsunami

*****Event Information is Attached*****

The NRC is responding to an event.

Please contact the NRC Executive Support Team if necessary at 301-816-5100 or reply to this e-mail.



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200
Washington, D.C. 20555-0001

E-mail: opa.resource@nrc.gov Site: www.nrc.gov

Blog: <http://public-blog.nrc-gateway.gov>

No. 11-048R

March 14, 2011

REVISED: NRC SENDS ADDITIONAL EXPERTS TO ASSIST JAPAN

The NRC has sent nine additional experts to Tokyo to provide assistance as requested by the Japanese government. Acting as part of a U.S. Agency for International Development assistance team, the NRC has dispatched the experts to Tokyo to provide assistance as requested by the Japanese government.

The first members of the team left the United States Monday evening and were due to arrive in Tokyo Wednesday afternoon. The team includes additional reactor experts, international affairs professional staffers, and a senior manager from one of the NRC's four operating regions.

The team members come from the NRC's headquarters in Rockville, Md., and from offices in King of Prussia, Pa., Chattanooga, Tenn., and Atlanta. The team has been instructed to: conduct all activities needed to understand the status of efforts to safely shut down the Japanese reactors; better understand the potential impact on people and the environment of any radioactivity releases; if asked, provide technical advice and support through the U.S. ambassador for the Japanese government's decision making process; and draw on NRC-headquarters expertise for any other additional technical requirements. The team will be in communication with the Japanese regulator, the U.S. Embassy, NRC headquarters, and other government stakeholders as appropriate.

The team is led by Charles A. Casto, deputy regional administrator of the NRC's Center of Construction Inspection, based in NRC's office in Atlanta. Casto has worked in the commercial nuclear power industry at three different nuclear power plants, including Browns Ferry, which has three boiling water reactors, operated by the Tennessee Valley Authority in Alabama. He has also worked as a licensed reactor operator and operator instructor. Casto will provide a single point of contact for the U.S. Ambassador in Japan on nuclear reactor issues.

The two reactor experts sent Saturday to Japan will participate as members of this assistance team.

Note To Editors: Revision reflects an additional team member, there are now a total of 11 NRC staffers on the assistance team.

###

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NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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Blog: <http://public-blog.nrc-gateway.gov>

No. 11-049

March 15, 2011

NRC ANALYSIS CONTINUES TO SUPPORT JAPAN'S PROTECTIVE ACTIONS

NRC analysts overnight continued their review of radiation data related to the damaged Japanese nuclear reactors. The analysts continue to conclude the steps recommend by Japanese authorities parallel those the United States would suggest in a similar situation.

The Japanese authorities Monday recommended evacuation to 20 kilometers around the affected reactors and said that persons out to 30 kilometers should shelter in place.

Those recommendations parallel the protective actions the United States would suggest should dose limits reach 1 rem to the entire body and 5 rem for the thyroid, an organ particularly susceptible to radiation uptake. The currently reported Japanese radiation measurements are well below these guidelines.

A rem is a measure of radiation dose. The average American is exposed to approximately 620 millirems, or 0.62 rem, of radiation each year from natural and manmade sources.

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News releases are available through a free *listserv* subscription at the following Web address: <http://www.nrc.gov/public-involve/listserver.html>. The NRC homepage at www.nrc.gov also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's website.



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Telephone: 301/415-8200

Washington, D.C. 20555-0001

E-mail: opa_resource@nrc.gov Site: www.nrc.gov

Blog: <http://public-blog.nrc-gateway.gov>

No. 11-050

March 16, 2011

NRC PROVIDES PROTECTIVE ACTION RECOMMENDATIONS BASED ON U.S. GUIDELINES

Under the guidelines for public safety that would be used in the United States under similar circumstances, the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate.

Among other things, in the United States protective actions recommendations are implemented when projected doses could exceed 1 rem to the body or 5 rem to the thyroid. A rem is a measure of radiation dose. The average American is exposed to approximately 620 millirems, or 0.62 rem, of radiation each year from natural and manmade sources.

In making protective action recommendations, the NRC takes into account a variety of factors that include weather, wind direction and speed, and the status of the problem at the reactors.

Attached are the results of two sets of computer calculations used to support the NRC recommendations.

In response to nuclear emergencies, the NRC works with other U.S. agencies to monitor radioactive releases and predict their path. All the available information continues to indicate Hawaii, Alaska, the U.S. Territories and the U.S. West Coast are not expected to experience any harmful levels of radioactivity.

###

News releases are available through a free *listserv* subscription at the following Web address: <http://www.nrc.gov/public-involve/listserver.html>. The NRC homepage at www.nrc.gov also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's website.

From:
To:

NATIONAL JIC
NATIONAL JIC:

(b)(6)

(b)(6)

(b)(6)

Subject:
Date:

RE: NICCL Call at 10:30am (eastern) Japanese reactor
Wednesday, March 16, 2011 9:53:48 AM

Call info 1-800-320-4330

Code (b)(6) #

www-10

From: NATIONAL JIC
Sent: Wednesday, March 16, 2011 9:39 AM
To: NATIONAL JIC

(b)(6)

(b)(6)

(b)(6)

(b)(6)

Subject: NICCL Call at 10:30am (eastern) Japanese reactor

Federal communicators,

Please join a NICCL call at 10:30am to discuss your department's messaging role for the ongoing crisis in Japan.

We would like to focus our discussion on public events and opportunities taking place today, communications on Federal radiation monitoring, food, water, public health etc.

We will also plan to conduct a SICCL call this afternoon with Pacific Territorial communicators and western PIOs.

From: [Hayden, Elizabeth](#)
To: [Schaeffer, James](#)
Subject: Re: Please immediately close older reactors for inspection
Date: Wednesday, March 16, 2011 9:53:28 AM

We really don't need anything but please keep passing these along.

----- Original Message -----

From: Schaeffer, James
To: Hayden, Elizabeth
Sent: Wed Mar 16 09:29:21 2011
Subject: FW: Please immediately close older reactors for inspection

Beth:

Is there anything that needs to be done with this e-mail. I have received the same message about five times.

Jim S.

-----Original Message-----

From: info@ecologicalinternet.org [<mailto:info@ecologicalinternet.org>] On Behalf Of Dr. Glen Barry
Sent: Wednesday, March 16, 2011 8:39 AM
To: Schaeffer, James
Subject: Please immediately close older reactors for inspection

Dear U.S. Nuclear Regulatory Commission,

Given the worsening Japanese nuclear disaster, I am writing to demand immediate closure of U.S. nuclear energy facilities that remain operational after having exceeded their engineered operable life. Please immediately close these facilities for inspection in an orderly manner as is occurring in Europe. It is the prudent thing to do given many older reactors in the U.S. are of similar design as those melting down in Japan.

Japan is facing the worst nuclear crisis since the atomic bombing of Hiroshima and Nagasaki. Multiple explosions have hit the Fukushima Daiichi nuclear plant, several reactors have lost their cooling systems, raising fears of meltdown(s). Radiation levels have been detected as far as 100 miles away. Many people have tested positive for radiation exposure, and hundreds of thousands of have been evacuated, with the numbers expected to rise.

Some reactors which have recently had their licenses extended are at or approaching 40 years old, and their owners are asking the Nuclear Regulatory Commission for approval to extend their lives. No further extensions should be granted, and these older reactors that have been extended must be taken off line immediately and inspected given recent happenings in Japan, as is being done in European countries. Clearly these 1970s vintage era systems were not adequately engineering for infrequent but large natural and increasingly human exacerbated events.

Further, it is presumptuous for the federal government to

WWW-10

be planning to provide for \$36 billion in loan guarantees to build still more nuclear plants, when we do not yet have a permanent waste repository. We are dooming civilizations for hundreds of thousands of years to having to protect and maintain enclosure upon our nuclear waste. Nuclear waste stored on site has caught fire in Japan, and the current on site storage across America is disaster(s) waiting to happen.

All existing nuclear energy plants, waste and weapons are accidents waiting to happen. Nuclear complexity, potential ecological costs, natural disasters and conflict ridden world show can never be safe. The price of nuclear fission is potentially enormous when even one accident happens, must less several as now with our Japanese brothers and sisters. In a continually more disorderly world, it is clear that no nuclear materials are safe, and that developing countries embracing nuclear energy will lead to weapon proliferation and yet more great loss of life.

It is time for humanity to choose which technologies they allow based upon full preponderance of the evidence - and as an ecologist I would predict all but certain similar impacts no matter the effort from the introduction of geo-engineering, genetically modified organisms (particularly food), nanotech, etc. Nuclear fission has been shown to be deadly in the field of battle, along the coastal plains, it's unsecured wastes are growing, and through terrorist and militaristic rhetoric regarding their use in an increasingly unstable world.

Please immediately cease extending the licenses of old nuclear power plants, and shut down for inspection those which have been extended. Some technologies at their root are anti human and Earth. Let's get it done, ban the bomb, ban nuclear energy, and commit to climate and energy solutions that are serious and include life-saving energy conservation, efficiency & using only true renewables. This may soon be the only energy at our disposal and we must transform our society accordingly.

With grave concern,

Dr. Glen Barry
Ecological Internet
United States

(b)(6)

cc:
President Obama; EPA Administrator, Lisa P. Jackson;
Secretary of Agriculture, Tom Vilsack; Secretary of Energy,
Steven Chu; Secretary of Interior, Ken Salazar; NOAA
Administrator, Jane Lubchenco; President's Science Advisor,
Dr. John Holden; NRC Contacts for Open Government

From: Operations Center Bulletin
To: Operations Center Bulletin
Subject: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS
Date: Wednesday, March 16, 2011 10:41:15 AM

THIS IS NOT A DRILL

The Office of Public Affairs is expecting a large volume of calls from media and the general public regarding the latest statements from the State Department and the NRC regarding the situation in Japan. ALL CALLS from media or the general public on this topic must be referred to the 301-415-8200 number.

The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response to the events in Japan. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC's Headquarters Operations Center in Rockville, MD has been stood up since the beginning of the emergency in Japan and is operating on a 24-hour basis.

NRC Incident Responders at Headquarters have spoken with the agency's counterpart in Japan and offered the assistance of U.S. technical experts. NRC representatives with expertise on boiling water nuclear reactors have deployed to Japan as part of a U.S. International Agency for International Development (USAID) team. USAID is the Federal government agency primarily responsible for providing assistance to countries recovering from disasters.

U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety significant structures, systems, and components be designed to take in account the most severe natural phenomena historically estimated for the site and surrounding area.

The NRC will not provide information on the status of Japan's nuclear power plants. For the latest information on NRC actions see the NRC's web site at www.nrc.gov or blog at <http://public-blog.nrc-gateway.gov>.

Two important reminders:

It is possible that some of us will be requested by colleagues in another country to provide technical advice and assistance during this emergency. It is essential that all such communications be handled through the NRC Operations Center. Any assistance to a foreign government or entity must be coordinated through the NRC Operations Center and the U.S. Department of State (DOS). If you receive such a request, contact the NRC Operations Officer (301-816-5100 or via the NRC Operator) immediately.

If you receive information regarding this or any emergency (foreign or domestic) and you are not

www-nrc

extended are at or approaching 40 years old, and their owners are asking the Nuclear Regulatory Commission for approval to extend their lives. No further extensions should be granted, and these older reactors that have been extended must be taken off line immediately and inspected given recent happenings in Japan, as is being done in European countries. Clearly these 1970s vintage era systems were not adequately engineering for infrequent but large natural and increasingly human exacerbated events.

Further, it is presumptuous for the federal government to be planning to provide for \$36 billion in loan guarantees to build still more nuclear plants, when we do not yet have a permanent waste repository. We are dooming civilizations for hundreds of thousands of years to having to protect and maintain enclosure upon our nuclear waste. Nuclear waste stored on site has caught fire in Japan, and the current on site storage across America is disaster(s) waiting to happen.

All existing nuclear energy plants, waste and weapons are accidents waiting to happen. Nuclear complexity, potential ecological costs, natural disasters and conflict ridden world show can never be safe. The price of nuclear fission is potentially enormous when even one accident happens, must less several as now with our Japanese brothers and sisters. In a continually more disorderly world, it is clear that no nuclear materials are safe, and that developing countries embracing nuclear energy will lead to weapon proliferation and yet more great loss of life.

It is time for humanity to choose which technologies they allow based upon full preponderance of the evidence - and as an ecologist I would predict all but certain similar impacts no matter the effort from the introduction of geo-engineering, genetically modified organisms (particularly food), nanotech, etc. Nuclear fission has been shown to be deadly in the field of battle, along the coastal plains, it's unsecured wastes are growing, and through terrorist and militaristic rhetoric regarding their use in an increasingly unstable world.

Please immediately cease extending the licenses of old nuclear power plants, and shut down for inspection those which have been extended. Some technologies at their root are anti human and Earth. Let's get it done, ban the bomb, ban nuclear energy, and commit to climate and energy solutions that are serious and include life-saving energy conservation, efficiency & using only true renewables. This may soon be the only energy at our disposal and we must transform our society accordingly.

With grave concern,

Dr. Glen Barry
Ecological Internet
United States

(b)(6)

cc:

President Obama; EPA Administrator, Lisa P. Jackson;
Secretary of Agriculture, Tom Vilsack; Secretary of Energy,
Steven Chu; Secretary of Interior, Ken Salazar; NOAA
Administrator, Jane Lubchenco; President's Science Advisor,
Dr. John Holden; NRC Contacts for Open Government

From: Harrington, Holly
To: Burnell, Scott; Brenner, Eliot; Shannon, Valerie; Akstulewicz, Brenda; Hayden, Elizabeth; Couret, Ivonne; Janbergs, Holly; McIntyre, David
Subject: RE: Hearing Today
Date: Wednesday, March 16, 2011 9:18:49 AM

I asked AV to tape.
Will ask Bethany to watch

From: Burnell, Scott
Sent: Wednesday, March 16, 2011 9:02 AM
To: Brenner, Eliot; Shannon, Valerie; Akstulewicz, Brenda; Harrington, Holly; Hayden, Elizabeth; Couret, Ivonne; Janbergs, Holly; McIntyre, David
Subject: RE: Hearing Today

OPS Ctr can't monitor – sorry to state the obvious.

From: Brenner, Eliot
Sent: Wednesday, March 16, 2011 9:02 AM
To: Shannon, Valerie; Akstulewicz, Brenda; Burnell, Scott; Harrington, Holly; Hayden, Elizabeth; Couret, Ivonne; Janbergs, Holly; McIntyre, David
Subject: Re: Hearing Today

Staff: pls monitor. We may commit lots of news.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

C: (b)(6)
Sent from my Blackberry

From: Shannon, Valerie
To: Akstulewicz, Brenda; Brenner, Eliot; Burnell, Scott; Harrington, Holly; Hayden, Elizabeth; Couret, Ivonne; Janbergs, Holly; McIntyre, David
Sent: Wed Mar 16 08:59:34 2011
Subject: Hearing Today

FYI,
The hearing at 9:30 today can be viewed on C-Span 3 which is channel 39 (NRC Broadband)
Val

WUWU-12

From: Wittick, Susan
To: Janbergs, Holly
Cc: Sargent, Kimberly; Hayden, Elizabeth; Baughman, James; Baval, Rochelle
Subject: Re: Commission Photo on SharePoint Site
Date: Wednesday, March 16, 2011 6:50:10 PM

Jim, I understand you are the site administrator. I will send you the appropriate photo in the morning. Would you please update the web site? Thank you!

Sent from NRC BlackBerry
Susan Wittick

(b)(6)

From: Janbergs, Holly
To: Wittick, Susan
Cc: Sargent, Kimberly; Hayden, Elizabeth; Baughman, James; Baval, Rochelle
Sent: Wed Mar 16 17:12:44 2011
Subject: RE: Commission Photo on SharePoint Site

Susan,

Unfortunately, I only have admin rights on OPA's Sharepoint site. I can provide a new photo if that's required, but you'll have to contact the owner of this particular page. I'm not sure who owns it; I would check with OCM.

Let me know if you need the new photo.

Thanks,
B.

From: Wittick, Susan
Sent: Wednesday, March 16, 2011 5:10 PM
To: Janbergs, Holly
Cc: Sargent, Kimberly; Hayden, Elizabeth; Baughman, James; Baval, Rochelle
Subject: FW: Commission Photo on SharePoint Site

Beth,
Here's the link that I mentioned to you. Would you please remove the photo and add the group photo of the current Commission.
Thank you so much!
Susan

From: Baval, Rochelle
Sent: Wednesday, March 16, 2011 4:01 PM
To: Baughman, James; Sargent, Kimberly; Wittick, Susan; Hayden, Elizabeth
Subject: Commission Photo on SharePoint Site

Good Afternoon,

I noticed that there is a photo of the Commission on the "Commission" link on the

11111-13

SharePoint Site, but the photo is old (Chairman Klein, Commissioners Lyons, Jaczko, and Svinicki).

Is it possible to put a photo of the current Commission there instead?

<http://portal.nrc.gov/OCM/default.aspx>

Rochelle

From: OST01 HOC
Sent: Friday, April 29, 2011 3:47 PM
To: Correia, Richard
Subject: weekend on call list
Attachments: On Call list.docx

On Call List for weekend of 4/29 – 5/2

If necessary, please call team members in order listed. If number is given, that is the number they prefer to be called at. Thanks!

Executive Team

Dave Skeen
Rich Correia
Glenn Tracy

Reactor Safety Team

Larry Vick (b)(6)
Raj Iyengar (b)(6)
Andrew Kugler (b)(6) (on call only, not available to come in)

Protective Measures Team

Greg Casto
Kathy Brock (call for issues on composite document)
Duane Hardesty (b)(6)

Liaison Team

Jeff Temple
Lisa (Gibney) Wright
Milt Murray

Support Team (staffing issues, generic issues)

Jeff Kowalczyk (b)(6)
Rebecca Stone (b)(6)
Dennis Andruskat (b)(6)

From: Skarda, Raymond
Sent: Saturday, April 30, 2011 11:19 PM
To: OST01 HOC
Subject: contact info for ops center & upcoming watchbill

Hi

My contact information is:

(301)251-7969 (work)
[redacted] (b)(6) (home)

Sincerely,

Ray Skarda

www-15

From: Hannah, Roger
To: Ellmers, Glenn; Suttenger, Jeremy; Hayden, Elizabeth; Thompson, Jon; Orr, Mark; Bonaccorso, Amy; Finch, R Lynne; Ryan, Michelle; Virgilio, Rosetta; Garrity, Paula; Zabel, Joseph; Goldberg, Francine; Azariah-Kribbs, Keith; Wright, Lisa (Gibney); Loyd, Susan; QTE Resource
Cc: Harrington, Holly; Couret, Ivonne
Subject: RE: Plain Writing Working Group
Date: Wednesday, March 16, 2011 8:58:20 AM
Attachments: image001.png

I am also unavailable for the meeting tomorrow – perhaps we should consider postponing given the current workload?

Roger Hannah, APR

Senior Public Affairs Officer

Region II -- Atlanta, Ga.

Office - 404-997-4417

Cell - (b)(6)

roger.hannah@nrc.gov



From: Ellmers, Glenn
Sent: Wednesday, March 16, 2011 8:50 AM
To: Suttenger, Jeremy; Hayden, Elizabeth; Thompson, Jon; Orr, Mark; Bonaccorso, Amy; Finch, R Lynne; Ryan, Michelle; Virgilio, Rosetta; Garrity, Paula; Zabel, Joseph; Goldberg, Francine; Azariah-Kribbs, Keith; Wright, Lisa (Gibney); Loyd, Susan; QTE Resource; Hannah, Roger
Cc: Harrington, Holly; Couret, Ivonne
Subject: Plain Writing Working Group
Importance: High

Jeremy,

Can you chair the meeting tomorrow? Things are a bit... hectic in the EDO's office this week. On top of hearings on the Hill, briefings, Op Center updates, etc., several of us on the communications side are helping out OPA, which is receiving hundreds of media inquiries every day. So I will be totally unavailable tomorrow. I would postpone, but Paula has put a lot of work into the website demo. (Paula, I will drop off the laptop today. What time is good?)

The website was the main agenda item. I hadn't planned anything else specific, although if Rosetta and Joe have something to add from the Report Writing subcommittee, please feel free to discuss.

Thanks

Glenn Ellmers
Senior Communications Specialist, OEDO
301-415-0442
OWFN - 17F03
Mail stop: 016E15

www-16

From: Reiter, Stuart
To: Hayden, Elizabeth; Landau, Mindy; Goldberg, Francine
Subject: FW: Sunshine Week Reminder - Open Gov work group follow-up
Date: Wednesday, March 16, 2011 8:31:27 AM

With regard to the highlight below [mine], other than updating the status of the milestone list, and the Dashboard (which is done quarterly), would we want to do anything else to highlight our progress?

Stu

From: Fraser, Nicholas A. [mailto:(b)(6)]
Sent: Tuesday, March 15, 2011 5:38 PM
To: KKyle@acus.gov; ESchleicher@acus.gov; Chris.L.Smith@ocio.usda.gov;
Doug.McKalip@osec.usda.gov; Francisco.Salguero@ocio.usda.gov; yvonne.jackson@ocio.usda.gov;
Charles.McClam@ocio.usda.gov; Shelia.Trollinger@osec.usda.gov; RAFriend@cns.gov;
kmansaray@cns.gov; wanderson@cns.gov; Wanderson@cns.gov; jcantor@doc.gov; eherbst@doc.gov;
JHutcherson@DOC.Gov; amaiumdar@doc.gov; elizabeth.mcgrath@osd.mil;

(b)(6)
(b)(6) Steven.Corey-bey@ed.gov; Ken.moore@ed.gov; Steve.Midgley@ed.gov;
John.Manahan@ed.gov; Hoekstra, Jason; DEIDRE.FLIPPEN@EEOC.GOV; Cammie Croft;
Scott.Harris@hq.doe.gov; Ingrid.kolb@hq.doe.gov; Theanne.Gordon@hq.doe.gov;
Niketa.Kumar@Hq.Doe.Gov; laurie.morman@hq.doe.gov; Battin.Andrew@epamail.epa.gov;
Schlosser.Lisa@epamail.epa.gov; Crawford.Tim@epamail.epa.gov; Moses.John@epamail.epa.gov;
Shenefiel.Pam@epamail.epa.gov; Petruska.Mike@epamail.epa.gov; david.mcclure@gsa.gov;
sally.kiel@gsa.gov; hyon.kim@gsa.gov; marion.royal@gsa.gov; kathleen.turco@gsa.gov;
Sanjeev.Bhagowalia@gsa.gov; angela.smith@gsa.gov; todd.park@hhs.gov;
Gregory.Downing@HHS.GOV; Ted.Smith@hhs.gov; Chris.Cummiskey@dhs.gov;
Caroline.Simmons@dhs.gov; dj.Harper@dhs.gov; Estelle.B.Richman@hud.gov; Peter.J.Grace@hud.gov;
lisa.e.danzig@hud.gov; Raphael.W.Bostic@hud.gov; David.E.Chase@hud.gov; Anna.Perng@hud.gov;
Stanley.A.Buch@hud.gov; Laura.S.Grossman@hud.gov; Andrew_jackson@ios.doi.gov;
James_Rolfes@ios.doi.gov; Elena_Gonzalez@ios.doi.gov; Beverley.Lumpkin@usdoj.gov;
Brian.Hauck@usdoj.gov; Jonathan.E.Meyer@usdoj.gov; Melanie.A.Pustay@usdoj.gov;
Fillichio.carl@dol.gov; Roberts.David@dol.gov; Pamela.Wright@nara.gov; paul.wester@nara.gov;
Miriam.Nisbet@nara.gov; linda.y.cureton@nasa.gov; nicholas.g.skytland@nasa.gov;
nadine.tremper@nasa.gov; yolanda.m.keiller@nasa.gov; david.r.mielke@nasa.gov;
nancy.cleeland@nlrb.gov; Anthony.Wagner@nlrb.gov; Reiter, Stuart; Ellmers, Glenn; jmunoz@nsf.gov;
krison@nsf.gov; mrubenst@nsf.gov; anorris@nsf.gov; steven.goldberg@ntsb.gov;
Matthew.Perry@opm.gov; Liz.Montoya@opm.gov; Kim.Jackson@opm.gov; Mary.Volz-Peacock@opm.gov;
Charles.Conyers@opm.gov; graham.wilmer@pbgc.gov; cthorup@peacecorps.gov;
jloughridge@peacecorps.gov; kevin.a.calamoneri@usps.gov; Joseph.Zepecki@sba.gov; jo.tittel@ssa.gov;
James.VanWert@sba.gov; murphy@sec.gov; blaszkowskyd@sec.gov; reedm@sec.gov;
Sanjay.Sardar@ferc.gov; burkem@arts.gov; JannaconeC@si.edu; KingBr@si.edu; alan.lane@ssa.gov;
linda.mccaw@ssa.gov; frank.baitman@ssa.gov; darilynda.bogle@ssa.gov; SwartSH@state.gov;
WebsterMA@state.gov; RogersKD@state.gov; Giovanni.camaroli@dot.gov; Nitin.Pradhan@dot.gov;
jennifer.gustetic.ctr@dot.gov; heather.miller.ctr@dot.gov; dan.morgan.CTR@dot.gov;
Melissa.Hartman@do.treas.gov; Dan.tangherlini@do.treas.gov; Patrick.Maloney@do.treas.gov;
Kevin.Donahue@do.treas.gov; scarroll@usaid.gov; jehorton@usaid.gov; Iglufing@usaid.gov;
dferguson@usaid.gov; Bob.Riess@usitc.gov; Peter.Levin@va.gov; johnr.gingrich@va.gov;
Rachel.Lunsford2@va.gov; Friedman, Brandon
Cc: Sunstein, Cass R.; Kundra, Vivek; Fitzpatrick, Michael A.; Neyland, Kevin F.; Hertz, Jessica R.; Hunt,
Alex; Fraser, Nicholas A.; Schwab, Margo; Hitter, Thomas E.; Bansal, Preeti D.; Seehra, Jasmeet;
Aitken, Steven D.; Hitter, Thomas E.; Zients, Jeffrey D.; Werfel, Danny; James, Dana M.; Bond, Debra
J.; Lee, Karen F.; Pica, Karen; Gordon, Dan; D'Amato, Michael A.; Bussow, Mark; Metzenbaum, Shelley
H.; Schiller, Jill A.; Astles, Ari Isaacman; Bernard, Scott; Bugg, Paul; Tucker, Will; Chopra, Aneesh;
Sturm, Robynn K.; Vein, Chris; Huang, Eugene J.; eugene.huang@do.treas.gov; Weiss, Rick; Gregg,
Remington A.; Moore, Michelle; Arnold, Dana F.; Kasdan, Matthew J.; Edgerton, Erin; Gottlieb, Michael

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K.; Ames, Fred L.; Adler, Devorah R.; Garcia, Lisa A.; Roberts, Blake C.; Nguyen, Alexander; Andrias, Kate; Harris, Kim; Kammerer, Chelsea; Phillips, Macon; Sabochik, Katelyn; Smith, Elizabeth S.; Hitchcock, Adam; Croley, Steve; McCarthy, Nell; Pope, David F.; Edgar, Timothy H.; Weinstein, Jeremy M.; Power, Samantha J.; Kimball, Astri B.; Skoczek, Tim; Bedingfield, Kate
Subject: RE: Sunshine Week Reminder - Open Gov work group follow-up

As an additional follow-up to our open gov work group last week, as discussed during the meeting find below the email address that was the recipient of information regarding the Regulatory Compliance Memorandum Implementation. We encourage you to reach out to these individuals within your agency to coordinate this effort. If your agency is not listed or if you have questions please contact Remington_A_Gregg@ostp.eop.gov.

Lastly please remember April 7th marks the one year anniversary of publication of the Open Government Plans. As discussed, agencies should aim to get up a brief self-evaluation looking back on the progress from this last year implementing their plans.

Thank you.

-Nick

Regulatory Compliance Memorandum Implementation contacts:

COLLEEN.HAMPTON-
LYSTER@EEOC.GOV
CAROL.MIASKOFF@EEOC.GOV
ERIN.NORRIS@EEOC.GOV
bryna.helfer@dot.gov
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Jill.McCabe@dot.gov
rosenthal.ann@dol.gov
bascus.carrol@dol.gov
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neil.eisner@dot.gov
owens.nicole@epa.gov
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Mike_French@ios.doi.gov
Franks.Kathleen@dol.gov
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Barbara.Holland@hhs.gov
LarkinAV@state.gov
Claudia.rodgers@sba.gov
michael.landweber@sba.gov
amathew@doc.gov
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Rochelle.Granat@treasury.gov
Heidi.Cohen@treasury.gov
Damon.Y.Smith@hud.gov
Daniel.B.Lurie@hud.gov
Shannan.Higgins@ed.gov
elizabeth.mcfadden@ed.gov

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Elizabeth.Kohl@hq.doe.gov

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pamela.a.harris@usdoj.gov

perciasepe.bob@epa.gov

robert.rivkin@dot.gov

ronald.c.sims@hud.gov

winslow.sargeant@sba.gov

david.horowitz@hhs.gov

Ralph.Tyler@fda.hhs.gov

dan.morgan.ctr@dot.gov

Gwyneth.Radloff@dot.gov

Giovanni.Carnaroli@dot.gov

Niles.Hewlett@dot.gov

ronald.jackson@dot.gov

harris.sd@dol.gov

From: [Hayden, Elizabeth](#)
To: [Harrington, Holly](#)
Subject: Re: Chairman interview on energyNOW!
Date: Wednesday, March 16, 2011 7:15:26 PM

Ivonne already has this request.

From: Harrington, Holly
To: Hayden, Elizabeth
Sent: Wed Mar 16 19:05:04 2011
Subject: RE: Chairman interview on energyNOW!

We have a system in place for logging and disseminating media requests. I'm cc'ing Mindy and Ivonne to get this request into the system. At this time, I do not see this happening soon and it needs no further response.

From: Hayden, Elizabeth
Sent: Wednesday, March 16, 2011 7:02 PM
To: 'ashley-bernardi@energynow.com'
Subject: Re: Chairman interview on energyNOW!

Ashley, I can't say at this point what interviews we will be setting up but we have captured your request and will get back to you when appropriate.

From: Ashley Bernardi <ashley-bernardi@energynow.com>
To: Hayden, Elizabeth
Sent: Wed Mar 16 12:25:46 2011
Subject: Re: Chairman interview on energyNOW!

Thanks, Beth. Will the Chairman be doing interviews this week? If so, we hope you consider ours -- we air on Bloomberg in 67 million homes across the country.

On Mon, Mar 14, 2011 at 12:47 PM, Hayden, Elizabeth <Elizabeth.Hayden@nrc.gov> wrote:
We'll add your request to the list.

Beth Hayden
Senior Advisor
Office of Public Affairs
U.S. Nuclear Regulatory Commission
--- Protecting People and the Environment
301-415-8202
elizabeth.hayden@nrc.gov

From: Ashley Baird [<mailto:ashley-baird@cleanskies.tv>]
Sent: Monday, March 14, 2011 11:29 AM
To: Hayden, Elizabeth
Cc: Ashley Bernardi

Subject: Re: Chairman interview on energyNOW!

www-18

Thank you, Beth. Yes, we are aware and we will be there. Might the Chairman be available on Wednesday to speak with us?

Ashley Bernardi
Senior Booker / Producer
energyNOW!

www.energynow.com

(b)(6)

(cell)

ashley-bernardi@energynow.com

Twitter: EnergyNOWBooker

On Mar 14, 2011, at 11:26 AM, "Hayden, Elizabeth" <Elizabeth.Hayden@nrc.gov> wrote:

Ashley, We have no one available at the moment for an interview today or tomorrow. However, you may be interested in knowing that the Chairman is testifying at a hearing March 16, 2011 – The **House Committee on Energy and Commerce** which originally was on the FY 2012 budget request but is now focused on the Japan situation.

Beth Hayden
Senior Advisor
Office of Public Affairs
U.S. Nuclear Regulatory Commission
--- Protecting People and the Environment
301-415-8202
elizabeth.hayden@nrc.gov

From: Ashley Bernardi [mailto:ashley-bernardi@energynow.com]
Sent: Monday, March 14, 2011 9:43 AM
To: Hayden, Elizabeth
Subject: Re: Chairman interview on energyNOW!

Hi Beth,

Just wanted to follow-up to see if the Chairman is available either today, tomorrow or Wednesday for an interview with energyNOW!. We air nationally in 65 million homes on Bloomberg. We can come to him for a 10 minute interview anytime he is available.

Please let me know if we can make it work, and if the Chairman is not available, might another NRC rep be available to talk to us?

Many thanks.
Ashley

On Sun, Mar 13, 2011 at 1:03 PM, Ashley Bernardi <ashley-bernardi@energynow.com> wrote:

Hi Beth,

This is Ashley Bernardi, Senior Booker and Producer for energyNOW!, airing nationally on Bloomberg and locally in DC on ABC7. I am writing to request a one-on-one interview with Chairman Jaczko on either Tuesday, March 15 or Wednesday, March 16 at anytime he is available. In light of the nuclear disaster in Japan, we will be focusing on show this coming week on nuclear safety in America. If we were to face a disaster similar to this, is the U.S. prepared to respond?

This would be a 10 minute interview with our Anchor Thalia Assuras.

I understand your schedules are packed next week and that he is surely receiving a lot of interview requests, but we are the premiere national energyNOW! show - - our national audience turns to us to get their energy news, and would expect to hear from someone such as Chairman Jaczko in for the U.S. response as to what happened in Japan.

I look forward to hearing from you.

Best,
Ashley

--

Ashley Bernardi
Senior Booker / Producer
energyNOW!
www.energynow.com
ashley@energynow.com
Twitter: BookerBernardi
750 1st Street NE, Suite 1100
Washington, D.C. 20002
Office: 202-621-2937
Cell: (b)(6)

--

Ashley Bernardi
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Twitter: BookerBernardi

750 1st Street NE, Suite 1100

Washington, D.C. 20002

Office: 202-621-2937

Cell: (b)(6)

From: LIA02 Hoc
Sent: Sunday, April 10, 2011 11:18 PM
To: LIA08 Hoc; LIA03 Hoc; LIA10 Hoc
Subject: FW: Published article - The Japan Times: Sunday, April 10, 2011 "U.S. mulls rethink of 80-km evac zone"

Importance: High

From: El-Jaby, Ali [mailto:Ali.El-Jaby@cnsccsn.gc.ca]
Sent: Sunday, April 10, 2011 11:18 PM
To: LIA02 Hoc
Cc: EOC18, CNSC Duty Officer
Subject: Published article - The Japan Times: Sunday, April 10, 2011 "U.S. mulls rethink of 80-km evac zone"
Importance: High

USNRC Colleagues,

It has been reported in a published article - **The Japan Times: Sunday, April 10, 2011** - that USNRC is planning on scaling back the 50 mile (80 km) evacuation zone (please see article below). Is it possible to get clarification by the daily 0930 EDT RST/PMT telecon (or before if possible). Please send any info you can provide to this email and the cc'd above.

Many thanks,

ALI

Ali El-Jaby, PhD
Specialist | Spécialiste
Physics and Fuel Division | Division de la physique et du combustible
Directorate of Assessment and Analysis | Direction de l'évaluation et de l'analyse
Technical Support Branch | Direction générale du soutien technique
Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire
Ottawa, Canada K1P 5S9
ali.el-jaby@cnsccsn.gc.ca
Telephone | Téléphone: 613-943-4918
Blackberry (b)(6)
Facsimile | Télécopieur: 613-995-8086
Government of Canada | Gouvernement du Canada

/START ARTICLE

U.S. mulls rethink of 80-km evac zone

WASHINGTON (Kyodo) U.S. nuclear regulators may revise the evacuation advisory for Americans living within an 80-km radius of the Fukushima No. 1 nuclear plant as radioactive substances in areas beyond 40 km of the stricken facility have subsided to levels that require no flight, officials said Friday.

The U.S. Energy Department compiled the evaluation report based on radiation data jointly observed by Japan and the United States near the plant in the quake-hit northeast.

The U.S. Nuclear Regulatory Commission issued an evacuation advisory for Americans living within an 80-km radius of the troubled plant on March 16. The decision was based on the assumption that fuel at the No. 2 reactor at the plant was completely damaged, not on observational data.

Based on the limited data it had at the time, the NRC may have overestimated the levels of radioactive substances that would leak from the nuclear plant.

NRC officials also attributed the review of the evacuation advisory to improvements in the situation surrounding the crippled nuclear plant.

The Japanese government set up a 20-km evacuation zone while at the same time asking people living between 20-30 km from the plant to stay indoors.

The NRC has said the Japanese evacuation advisory is also appropriate.

The Japan Times: Sunday, April 10, 2011

/END ARTICLE

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From: Powell, Marion
To: Abraham, Susan; Allwein, Russell; Andersen, James; Baker, Pamela; Bower, Phyllis; Champion, Tanya; Coleman, Judy; Cullison, David; Dambly, Jan; Dembek, Stephen; Ficks, Ben; Givvines, Mary; Golder, Jennifer; Grancorvitz, Teresa; Gusack, Barbara; Hackworth, Sandra; Hayden, Elizabeth; Hays, Myra; Holt, BJ; Horn, James; Huber, Deborah; Huth, Virginia; Janis, James; Jefferson, Steven; Kaplan, Michele; Ma, May; Matheson, Mary; McDevitt, Joan; Muessle, Mary; Orbach, Susan; Pellet, John; Peterson, Gordon; Pratcher, Rebecca; Pulliam, Timothy; Rheume, Cynthia; Ricketts, Paul; Rough, Richard; Schum, Constance; Sotiropoulos, Dina; Tenaglia, Mickey; Walker, Tracy; Weaver, Doug; Williams-Johnson, Patrice; Larche, Linda; Campbell, Andy; Nute-Blackshear, Lora; Miller, Fred; Jernell, Eleni; Madden, Patrick; Darby, Krystal; Somerville, Glenda; Fitch, Karen; R1DRMCAL_RESOURCE; Le, Hong; Narick, Marianne; Ha, Su; Rule, David; Collins, Daniel; Shay, Jason; Rand, Jennifer; Mattingley, Joel; Steinberg, Michael; Daly, Jill; Sanchez, Alba; Barnes, Robin; Martin, Starlet; Bayliff, Shirley; Gold, Meg; Solorio, Ilka; Moore, Tove; Arrighi, Russell; Smith, Pat; Huyck, Doug; Rivera, Eric; Sylvester, Dennis; Hall, Donald; Benner, Eric; Fredericks, Carl; Valentin, Andrea; Solander, Lars; Voytko, Victoria; Webber, Robert; McGill, Clinton
Cc: Liu, Leslie; Ferrell, Kimberly; Castello, Jennifer; Cowan, Grace; Butler, Rodney; Gardin, Kathy; Blond, Tamoria; Neff, Deborah; Clarkson, Sharon; Irani, Guita; Curtis, Michelle; Brezovec, Michael; Jacobs-Baynard, Elizabeth; Mahdi, Deborah; Gillen, Edward; Murphy, Jerome; Gulla, Gerald; Nibert, Patty; Mitchell, Reggie; Delligatti, Mark; Harvey, Sue; Williams, Mona; Williams, Monique; Sangimino, Donna-Marie; Somerville, Joseph; Kromer, Harry; Kardaras, Tom; Rivas, Audrey
Subject: UPDATE: Monthly OCFO/PMDA-DRMA Meeting
Attachments: Agenda for 03-16-11 OCFO PMDA DRMA Meeting.docx

When: Wednesday, March 16, 2011 3:00 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: CFO-TWFW-09A01-25p

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

Purpose: To discuss the OCFO/OEDO monthly Periodic Budget Meeting and Monthly OCFO/PMDA-DRMA Meeting.

Agenda:

YOU CAN VIEW THE BRIEFING SLIDES AT THE FOLLOWING LINK:
http://portal.nrc.gov/OCM/ocfo/ocfo_admin/dpba/Periodic%20Budget%20Briefing/Forms/AllItems.aspx

This meeting will occur every third Wednesday of the month from 3:00-4:00pm.

You may select Use Telephone after joining the meeting.
PMDA/DRMA Monthly Meeting

Join us for a GoToMeeting on March 16

1. Please join my meeting, Wednesday, March 16 at 3:00 PM Eastern Daylight Time.
<https://www1.gotomeeting.com/join/732888008>
2. Use your microphone and speakers (VoIP) - a headset is recommended. Or, call in using your telephone.

Dial +1 (630) 869-1011
Access Code: (b)(6)
Audio PIN: Shown after joining the meeting

Meeting ID: (b)(6)

GoToMeeting®
Online Meetings Made Easy™

Yours Respectfully,

www-20

OCFO-PMDA/DRMA PERIODIC MEETING AGENDA

03/16/2011

3:00pm - 4:00pm T-9 A1

- | | |
|---|---|
| Opening Remarks | Jennifer Golder |
| CFO/EDO Monthly Budget Prebrief | Patrice Williams-Johnson |
| ↓ Division of the Controller (15 min.) | Susan Orbach
Mona Williams
Michael Brezovec |
| <ul style="list-style-type: none">○ Status of Reporting○ Status of the Purchase Card process and Fee Billing○ AP Accrual○ Advanced Payments○ Travel Card Fees | |
| ↓ Division of Contracts (10 min.) | Virginia Huth |
| <ul style="list-style-type: none">○ Status of Obligations and Commitments○ Program Manager's Certifications | |
| ↓ Division of Planning and Budget (20 min.) | Russell Allwein |
| <ul style="list-style-type: none">○ FY 2013 Budget○ FY 2011 Critical Funding Needs | |

Reserve your GotoMeeting seat now at:
<https://www.l.gotomeeting.com/join/732888008>

From: Casto, Chuck
To: Burnell, Scott; Brenner, Eliot; Virgilio, Martin
Cc: Hayden, Elizabeth; Harrington, Holly
Subject: RE: Request from 60 Minutes
Date: Wednesday, March 16, 2011 11:01:21 AM
Attachments: Casto Talking Points for Interviews Japan....docx

agreed.....

nevertheless, some initial TP's attached.....

casto

From: Burnell, Scott
Sent: Wednesday, March 16, 2011 10:41 AM
To: Brenner, Eliot; Casto, Chuck; Virgilio, Martin
Subject: RE: Request from 60 Minutes

ET offers the opinion this is pretty low on Chuck's priority list but understands Eliot and Chuck are discussing.

From: Brenner, Eliot
Sent: Wednesday, March 16, 2011 10:10 AM
To: Casto, Chuck; Virgilio, Martin; McIntyre, David; Harrington, Holly; Burnell, Scott
Subject: Re: Request from 60 Minutes

Please re talking points.
Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200

C (b)(6)
Sent from my Blackberry

From: Casto, Chuck
To: Brenner, Eliot
Sent: Wed Mar 16 10:00:20 2011
Subject: Re: Request from 60 Minutes
I'll check on visuals. We have some rough drawings and diagrams. Don't want to share the pics we have. Your call I will do whatever you all agree to. I can send you my talking points.

From: Brenner, Eliot
To: Casto, Chuck
Sent: Wed Mar 16 09:56:59 2011
Subject: Re: Request from 60 Minutes
Thanks. Leaning forward on all requests like this. Will advise probably in 3-4 hours. Do you feel comfortable? Have you got good visuals?

Eliot Brenner
Director, Office of Public Affairs
US Nuclear Regulatory Commission
Protecting People and the Environment
301 415 8200
C (b)(6)

new-21

From: [Hayden, Elizabeth](#)
To: [Clark, Theresa](#); [Benton, Laray](#); [Burnell, Scott](#)
Subject: Re: UPDATE: Friday STEM fair logistics
Date: Wednesday, March 16, 2011 7:27:09 PM

Theresa,

Email Daniel Rosewag if you can't support both classroom presentation and exhibit. Or perhaps you can switch off w/presentation and exhibit. I'm sorry the group has shrunk from 6 to 2 and that you have to scramble.

From: Clark, Theresa
To: Benton, Laray; Burnell, Scott
Cc: Hayden, Elizabeth
Sent: Wed Mar 16 17:39:22 2011
Subject: UPDATE: Friday STEM fair logistics

Laray—I am still trying valiantly to round up people for Friday and hope to succeed. So far it is just you and me. At this point, I would like the two of us to prepare to handle the event on our own, with me doing presentation in the AM while you field the booth and switching for the last two sessions. This would mean I need you to show up between 8:30 and 9:00 and stay till about 2:00. All you need to bring is your presentation on a flash drive; I will handle the displays. **Can you still support this? Please confirm.**

Scott/Beth—I just spoke to Dan Rosewag from the school and he filled me in on the event and its logistics. It has gotten very big, with 125 presenters and (more importantly for your info) 80 guests, including multiple news stations, the Post, and various teachers and Dept. of Ed. staff. I don't think this changes any of our strategy—still want to focus on the presentations we prepared, but be ready for questions with the latest talking points (and don't answer those we shouldn't). If the media attention means anything different for what we should do, please let me know. Also, FYI, they will give us photos from their yearbook staff, so no need for Scott's former role of photo-taker.

All—my cell is (b)(6) if you need me on the day of.

Thanks!

--

Theresa Valentine Clark
Technical Assistant
Division of Safety Systems and Risk Assessment
U.S. NRC Office of New Reactors
T-10F10 | 301-415-4048
Theresa.Clark@nrc.gov

www-2a

From: Benton, Laray
To: Clark, Theresa; Alvarado, Lydiana; Fisher, Christian; English, Kimberly; Diaz, Marilyn; Billoch, Araceli; Burnell, Scott
Cc: Hayden, Elizabeth; Couret, Ivonne
Subject: RE: REMINDER: 3/18 Century HS Career Fair support - Info needed TODAY
Date: Wednesday, March 16, 2011 11:18:25 AM

Theresa,

If I need to I can come earlier and cover the applications booth in the morning and do my presentations in the afternoon. Either way, please just let me know. You can reach me on my cell phone at (b)(6) if you need to.

LaRay J. Benton

United States Nuclear Regulatory Commission (NRC)
Office of Nuclear Reactor Regulation
Division of Risk Assessment
Accident Dose Branch (AADB)
(301) 415-1088

From: Clark, Theresa
Sent: Wednesday, March 16, 2011 11:13 AM
To: Alvarado, Lydiana; Fisher, Christian; English, Kimberly; Benton, Laray; Diaz, Marilyn; Billoch, Araceli; Burnell, Scott
Cc: Hayden, Elizabeth; Couret, Ivonne
Subject: REMINDER: 3/18 Century HS Career Fair support - info needed TODAY
Importance: High

Just a reminder—I haven't heard from anyone who is planning to support the application fair exhibit (the booth) on Friday. Laray and I are covering the presentations, but we need someone at the booth, at least for half of the day. I know there were people who planned to do this, but I don't have that list. **Please let me know TODAY what you plan to support so that I can get additional people if needed.** I will be handling the pick-up of supplies/displays from OPA.

Details for reference from the handout we received:

- Century High School, 355 Ronsdale Road, Sykesville, MD 21784
- "1st shift" 9:00-12:00 (rotations 1 and 2, 9:40-11:30)
- "2nd shift" 10:30-1:30 (rotations 3 and 4, 11:20-1:10)
- Roles are:
 - Career presentations (me 1st shift, Laray 2nd shift—two 20-min presentations per rotation)
 - Application fair booth staff (need people here)
- Breakfast and lunch available
- Scott B. had reserved a car but I am likely to cancel that unless I hear there are people coming from HQ

Thank you for your support in this challenging time!

.nww-23

From: [Fisher, Christian](#)
To: [Clark, Theresa](#); [Alvarado, Lydiana](#); [English, Kimberly](#); [Benton, Laray](#); [Diaz, Marilyn](#); [Billoch, Araceli](#); [Burnell, Scott](#)
Cc: [Hayden, Elizabeth](#); [Courret, Ivonne](#)
Subject: RE: REMINDER: 3/18 Century HS Career Fair support - info needed TODAY
Date: Wednesday, March 16, 2011 6:59:46 PM

I am in NC on an SIT and unable to attend. I thought this message was already relayed, but I apologize if it was not.

Good Luck!!

From: Clark, Theresa
Sent: Wednesday, March 16, 2011 11:13 AM
To: Alvarado, Lydiana; Fisher, Christian; English, Kimberly; Benton, Laray; Diaz, Marilyn; Billoch, Araceli; Burnell, Scott
Cc: Hayden, Elizabeth; Courret, Ivonne
Subject: REMINDER: 3/18 Century HS Career Fair support - info needed TODAY
Importance: High

Just a reminder—I haven't heard from anyone who is planning to support the application fair exhibit (the booth) on Friday. Laray and I are covering the presentations, but we need someone at the booth, at least for half of the day. I know there were people who planned to do this, but I don't have that list. **Please let me know TODAY what you plan to support so that I can get additional people if needed.** I will be handling the pick-up of supplies/displays from OPA.

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- Roles are:
 - Career presentations (me 1st shift, Laray 2nd shift—two 20-min presentations per rotation)
 - Application fair booth staff (need people here)
- Breakfast and lunch available
- Scott B. had reserved a car but I am likely to cancel that unless I hear there are people coming from HQ

Thank you for your support in this challenging time!

From: Clark, Theresa
Sent: Tuesday, March 15, 2011 11:28 AM
To: Alvarado, Lydiana; Fisher, Christian; English, Kimberly; Alvarado, Lydiana; Benton, Laray; Diaz, Marilyn; Billoch, Araceli; Burnell, Scott; Sanders, Carleen
Cc: Hayden, Elizabeth; Courret, Ivonne
Subject: URGENT REQUEST: 3/18 Century HS Career Fair support
Importance: High

Folks,

In reference to **Friday's Century HS STEM Career Fair** – Scott Burnell is responding to the current situation in the ops center and will not be able to attend, so we need someone else who can extend their participation to the whole day. That person will need to take the lead to get the demo kit ("Grandma's Attic") from OPA. I can if needed, but wanted to put the opportunity out there.

If you are available to extend your participation and take the lead to get the demo kit ("Grandma's Attic") from OPA, please reply to me as soon as possible.

Also, because I don't have the full schedule, **could all of you please send me the times and activities you were planning to support?**

Finally, I have asked Ivonne in OPA to give us the latest talking points on the current situation by Thursday night so we'll have them for questions. I don't think any of us will have a BlackBerry so that'll be the freshest info available.

--

Theresa Valentine Clark
Technical Assistant
Division of Safety Systems and Risk Assessment
U.S. NRC Office of New Reactors
T-10F10 | 301-415-4048
Theresa.Clark@nrc.gov

From: OST02 HOC
Sent: Thursday, March 17, 2011 9:18 PM
To: RST01 Hoc; PMT02 Hoc; PMT11 Hoc
Subject: FW: IAEA distributed documents
Attachments: NISA_No28_en20110318-1_English[1].pdf; Meteo_Products_2011-03-14_2200_-_Joint_Statement[1].pdf; Meteo_Products_2011-03-14_2200_-_RSMC_Beijing[1].pdf

From: HOO Hoc
Sent: Thursday, March 17, 2011 8:47 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Thursday, March 17, 2011 8:29 PM
To: Kenagy, W David; McClelland, Vince; Rodriguez, Veronica; Heinrich, Ann; HOO Hoc; HOO2 Hoc; Huffman, William; DeCair.Sara@epamail.epa.gov; timothy.greten@dhs.gov; Maria.Marinissen@hhs.gov; (b)(6); doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; James.Kish@dhs.gov; HOO Hoc; Smith, Brooke; Zubarev, Jill E; Shaffer, Mark R; NITOPS@nnsa.doe.gov; Skypek, Thomas M
Subject: RE: IAEA distributed documents

This email is UNCLASSIFIED.

www-24



China Meteorological Administration

**National Meteorological Center
Beijing, China**

RSMC for Environmental Emergency Response

FAX: (86 10) 68407469, (86 10) 62172909

Tel: (86 10)68408594, (86 10)58993295

Email: RSMC@cma.gov.cn

TO: Operational Contacts of National Meteorological Services in RAII,

IAEA, WMO Secretariat,

RSMC Tokyo, and

RSMC Obninsk

From: RSMC Beijing

Date: Mar 17, 2011

Time: 18:40 UTC

Dear Colleagues,

Please find attached the Joint Statement of RAII for Environmental Emergency Response (EER) distributed by RSMC Tokyo, RSMC Obninsk, and RSMC Beijing.

Best regards,
RSMC Beijing

JOINT STATEMENT

by: RSMC Tokyo(JP), RSMC Obrinsk(RU) and RSMC Beijing(CN)

Emergency notified by the IAEA (Emergency)

Issued: 18³⁰ UTC, Mar. 17, 2011

RADIOLOGICAL EVENT DETAILS

Source:

Fukushima Dai-ichi, Japan

Location:

37.4206 degrees North latitude, 141.0329 degrees East longitude

Release date-time:

From: 22:00 UTC 14 Mar 2011

To: 04:30 UTC 16 Mar 2011

Comments:

Emergency Accident

RSMC Tokyo's model integrated for 122 hours while the model of RSMC Beijing and RSMC Obrinsk integrated only for 72 hours.

Weather Situation

Northwesterly winter monsoon flow prevails over the eastern and northern part of Japan. This condition is expected to continue up to around 00UTC 18 March. Its associated weak precipitation is expected around the Japan Sea side of Japan Islands and over the sea east of Japan. Then a high pressure system is expected to cover the most part of Japan Islands although an upper trough will pass the northern part of Japan temporarily.

Trajectories

RSMC Beijing forecasts the material released at 500m and 1500m goes to north-east during the first 48 hours, and then makes a clockwise turn; while at 3000m, the tracer is always going to the east during the 72 hours.

RSMC Tokyo predicts that the tracer released at 500m will move to the northeast in the first 72 hours from the start of emissions and then turn to the north during the rest of the forecast period. The tracer released at 1500m will move to the northeast in first 72 hours from the start of emissions and then turn to the north during the following 24 hours and then turn to the south during the rest of the forecast period. The tracer released at 3000m will move to the northeast in the first 24 hours from the start of emissions and then turn to the east during the following 48 hours and then turn to the

northeast during the rest of the forecast period.

RSMC Obninsk's simulation shows that the tracers at 500m moves to the west first and then goes to the southeast in the rest forecast period; the tracer at 1500m goes to the northeast in the first 24 hours and then turn to southeast.; while at 3000m the tracer moves to northeast in the first 36 hours then goes to east.

Exposure

For the both species, the three models forecast the exposure areas will spread toward southeast for the first hours and then spread to eastward for the rest of forecast period.

Depositions

The simulation results of RSMC Beijing and RSMC Obninsk show that deposition areas cover the central and eastern part of Japan and lays over the northwest of the Pacific Ocean; while RSMC Tokyo forecasts the deposition areas for the forecast period cover the eastern part of Japan and the western and eastern part of the North Pacific Ocean. The difference is mainly due to the different integrated time of the models.

Summary

There would be a hazard around eastern part of Japan and western part of the North Pacific Ocean.

END

From: Terrell, Patrick COL (USA) OSD POLICY (b)(6)
Sent: Thursday, March 17, 2011 12:35 PM
To: 'Skypek, Thomas M'; Pigg, David N; mary.bale@dm.usda.gov; McClelland, Vince; Scharf-Bell, Helga (HHS/ASPR/OPEO); Williams.Steven@epamail.epa.gov; williams.steven@epa.gov; scott.shelton@dhs.gov; Estes, A Scott COL JCS J3/NMCC; Bogdan, Bernard P., Jr.; Hubbard, Harvey CIV JCS J3/NMCC; steven.buntman@nnsa.doe.gov; (b)(6) ET07 Hoc
Cc: Lowe, Thomas J; Lewis, Brian M; Thur, Randy R; Lee, Siyoung; Schiller, Bryan S; piggd@fcmp.org
Subject: RE: Urgent RFI on Status of FCM Support
Attachments: FCM Tracking Sheet_17 March 2010.xlsx

Tom,

I didn't see this until 1157 so you have what I know right now. Harvey is working nights in the Japan CME. I included his boss COL Scott Estes above. I know USFJ has been working some of this already (e.g. suits, transport). The CME will have to collect that kind of data from PACOM.

There is a second RFI floating around out there where GOJ went to IAEA to ask about robotic survey capabilities (ground and air). The TF should be tracking that too.

Pat

-----Original Message-----

From: Skypek, Thomas M [mailto:SkypekTM@state.gov]
Sent: Thursday, March 17, 2011 11:39 AM
To: Pigg, David N; mary.bale@dm.usda.gov; Terrell, Patrick COL (USA) OSD POLICY; McClelland, Vince; Scharf-Bell, Helga (HHS/ASPR/OPEO); Williams.Steven@epamail.epa.gov; williams.steven@epa.gov; scott.shelton@dhs.gov; Bogdan, Bernard P., Jr.; Hubbard, Harvey CIV JCS J3/NMCC; steven.buntman@nnsa.doe.gov; (b)(6) et07.hoc@nrc.gov
Cc: Lowe, Thomas J; Lewis, Brian M; Thur, Randy R; Lee, Siyoung; Schiller, Bryan S; piggd@fcmp.org
Subject: Urgent RFI on Status of FCM Support

FC WG Members,

Kindly request that you review the attached matrix and provide inputs by 1215 EDT. I am responding to a tasker from Deputy Secretary Steinberg/Assistant Secretary Campbell on how and when the various D/As will fulfill the FCM requests for assistance.

On the left-hand side are the requests. Please populate the box with your deployed assets/personnel or with assets that are ready to deploy. Not all of these items are FCM and some have been executed, but I'm looking to get a better picture from the IA.

Any assistance with this is greatly appreciated. My apologies for the short suspense.

Best,

Tom

This email is UNCLASSIFIED.

From: HOO Hoc
Sent: Monday, April 11, 2011 8:41 PM
To: HOO Hoc
Subject: FW: Official notice (11/04/2011) Announcement of Mr. EDANO
Attachments: Announcement of Mr. EDANO.docx

From: Hinds, Lynda J [mailto:HindsLJ@state.gov] **On Behalf Of** Tokyo Staff Assistant
Sent: Monday, April 11, 2011 8:04 PM

To: (b)(6)

(b)(6)

Subject: FW: Official notice (11/04/2011) Announcement of Mr. EDANO

Lynda Hinds
Staff Assistant
(03) 3224- 5370

From: PROTOCOLOFFICE-EM [mailto:protocoloffice-em@mofa.go.jp]
Sent: Monday, April 11, 2011 11:11 PM
To: PROTOCOLOFFICE-EM
Subject: Official notice (11/04/2011) Announcement of Mr. EDANO

To All Missions (Embassies, Consular posts and International Organizations in Japan)

The Ministry of Foreign Affairs has the honour to send to the missions a tentative English translation of the announcement made by Chief Cabinet Secretary Mr. EDANO on the introduction of new kinds of evacuation area at the regular press briefing held at 4PM 11 April.

Besides, the Ministry would like to provide all Missions with updates on the effect of the latest strong earth quake that took place today.

At Fukushima Dai-ichi Nuclear Power Plant, external power sources were temporarily cut off due to the quake, and injection of coolant water into the reactors No. 1 to 3 halted about 50 minutes. The injection of coolant water was resumed after the external power was restored, and no major safety problem has been found.

No major problem was found in the external power sources of other nuclear power plants, such as Fukushima Dai-ni and Onagawa.

In the regular press briefing held at 4PM, Chief Cabinet Secretary Mr. EDANO made his announcement on the introduction of new kinds of evacuation area. Following is the main point of his announcement.

The area which is outside the 20km radius zone, and where accumulation of the radioactive material is found to be high and accumulative dose may reach 20 mSv within one year from the beginning of the accident because of weather and geographic conditions, is designated as Planned Evacuation Area. The following local communities belong to this Area: Katsurao Village, Namie Town, Iitate Village, part of Kawamata Town, and part of Minami-Soma City. It is desirable for residents in this area to leave the Area within one month.

The area which is in the zone between 20km and 30km radius and which does not belong to the Planned Evacuation Area is designated as Area for Evacuation Preparation in case of Emergency. Residents in this Area will be requested to stay in shelter or to evacuate in case of an emergency situation. The following local communities belong to this Area: Hirono Town, Naraha Town, Kawauchi Village, part of Tamura City, and part of Minami-Soma City. In particular, infants, children, pregnant women, and those who need special care or hospitalized people are requested not to enter this zone. Nurseries, kindergartens, primary schools, junior-high and high schools will not open in this area. Those who have to enter this area for work or business are requested to be prepared to leave this area on their own if it becomes necessary.

As for these two Areas, monitoring will be strengthened and on the basis of the monitoring data and their assessment, these Areas will be reviewed.

*This is preliminary explanation based on the oral explanation by Chief Cabinet Secretary.

From: junichi.soma.pv@hitachi.com
Sent: Friday, March 18, 2011 9:14 PM
To: cemercha@bechtel.com
Cc: cwrau@Bechtel.com; Kozal, Jason; RST01 Hoc; Kolb, Timothy; (b)(6); Steve.Hamilton@ge.com; masahito.yoshimura.fa@hitachi.com; shunsuke.utena.dp@hitachi.com; masahiko.nakane.rr@hitachi.com
Subject: (Important) Re: Shipment to Yokota AB

Ned,

As I repeated more than 100 times and as Bechtel agreed, we need to have Japanese government direction for us to support. Please make sure this important point. We do not have any contact from Japanese government so far and we do not even know who is in charge of this in Japanese government.

And also, please confirm of another thing. Even though Japanese government orders something, the transportation will be done by Japanese government as NRC people mentioned in the call yesterday. Thus this contact info of mine should not be correct.

Please understand this very important issue.

Regards,

Junichi (Jack) Soma

Hitachi-GE Nuclear Energy, Ltd

<Mobile Phone>

(b)(6)

<E-mail:Mobile>

(b)(6)

<E-mail:Hitachi>

junichi.soma.pv@hitachi.com

cemercha@bechtel.
com

2011/03/19 09:48

密件

(b)(6)

cc

RST01.Hoc@nrc.gov,
timothy.kolb@nrc.gov,
junichi.soma.pv@hitachi.com,
cwrau@Bechtel.com,
Jason.Kozal@nrc.gov

件名
Shipment to Yokota AB

Wayne, ,

The contact information for Tim Kolb is timothy.kolb@nrc.gov I do not have a phone number for him I do know that he is working out of the US Embassy in Tokyo.

Tim-Wayne Godfrey is at the Yokota Air base and is looking for the contact person to arrange to contract with for the services once the transport arrives at the airport. His phone number is (b)(6)

The contact info for Jack Soma at GE Hitachi is: Junichi (Jack) Soma

Hitachi-GE Nuclear Energy, Ltd

<Mobile Phone>

(b)(6)

<E-mail:Mobile>

(b)(6)

<E-mail:Hitachi>

junichi.soma.pv@hitachi.com

Best Regards, Ned

"Quality is not an act, it is a habit"

From: RST01 Hoc
Sent: Friday, April 29, 2011 5:08 AM
To: (b)(6)
Cc: FOIA Response.hoc Resource; RST02 Hoc; OST01 HOC; Garchow, Steve; Tracy, Glenn
Subject: Fukushima Instrumentation (TT4691) - -----Official Use
Only-----

Vince,

Sometime around April 13th, you forwarded a request related to the status of instrumentation for Units 1-3 and the Unit 4 spent fuel pool. Based on discussions with our Site Team, the information is being provided by the licensee and all the instruments are considered unreliable. TEPCO installed a temporary thermocouple in the Unit 4 spent fuel pool, but this may soon be removed.

Information regarding gauge failure can be found in EPRI NP7156
(<http://my.epri.com/portal/server.pt?space=CommunityPage&cached=true&parentname=ObiMgr&parentid=2&control=SetCommunity&CommunityID=221&PageIDqueryComId=0>).

There is also a NUREG which I hope to forward to you soon. Sorry this took so long.

Eva Brown, BWR Systems and Ops Analyst
Reactor Safety Team
Nuclear Regulatory Commission

aww-28

From: HOO Hoc
Sent: Tuesday, April 12, 2011 10:47 AM
To: LIA07 Hoc; LIA08 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: <Press Release> "The simulation of radioactivity in the sea"
Attachments: (Japanese)simulation in the sea.pdf

-----Original Message-----

From: eda@mext.go.jp [mailto:eda@mext.go.jp]

Sent: Tuesday, April 12, 2011 10:37 AM

To: (b)(6)

(b)(6)

Subject: <Press Release>"The simulation of radioactivity in the sea"

Dear Sir,

Please see attached the document, press release "The simulation of radioactivity in the sea".

Sincerely yours,

Kei EDA

EOC, Ministry of Education, Culture, Sports, Science & Technology (MEXT), Japan

海域における放射能濃度のシミュレーションについて

平成23年4月12日
文部科学省

1. 概要

文部科学省は、平成23年3月23日より福島第一原子力発電所沖合の海域におけるモニタリングを実施している。今般、数値海況予測システムJCOPE2（注1）のシミュレーション結果をもとに、最新の風の場と潮汐の影響を取り入れたJCOPE2（注2）による福島第一原子力発電所沖合における放射能濃度分布のシミュレーションを行った。

（注1）JCOPE2：日本近海の水温や塩分変動とともに、海況に大きく影響する黒潮や親潮などの海流系について、蛇行のような流路変動や中規模渦の挙動等を予測するモデル。独立行政法人海洋研究開発機構が開発した。（再現メッシュは8Km×8Km）

（注2）JCOPE2：上記モデルを高解像度化し潮汐及びより精度の高い海上風の影響を取り入れ、高精度な再現が可能なモデル。独立行政法人海洋研究開発機構が開発した。（再現メッシュは3Km×3Km）

2. 方法

本シミュレーションでは、発電所から排出された放射性物質の量に関する情報が無いため、以下のシナリオ及び仮定を置いて海表面のみの拡散を計算した。

- ・東京電力（株）が公表している4月8日までの海岸の海水放射能濃度をもとに保守的な想定シナリオを作成。【図1】
- ・上記の海水放射能濃度が、8km四方に、海岸の1/100の濃度で海表面のみに拡散するものと保守的に仮定。
- ・放射性物質の濃度は、原子力施設の排水濃度限度の何倍であるかを指数として表現する。
- ・発電所から大気中に放出された放射性物質の海面への降下は考慮しない。
- ・海水の中層への拡散は考慮しない。
- ・4月8日時点における福島第一原子力発電所から排出される水と同等の排出が4月11日まで継続し、4月12日以降は排出が停止したと仮定（4月12日以降は排出を0（ゼロ）とした）。
- ・半減期（ヨウ素131は約8日、セシウム137は約30年）は考慮する。

3. 結果

福島沖の海流場は、複雑でゆっくりとした流れとなっている。【図2】

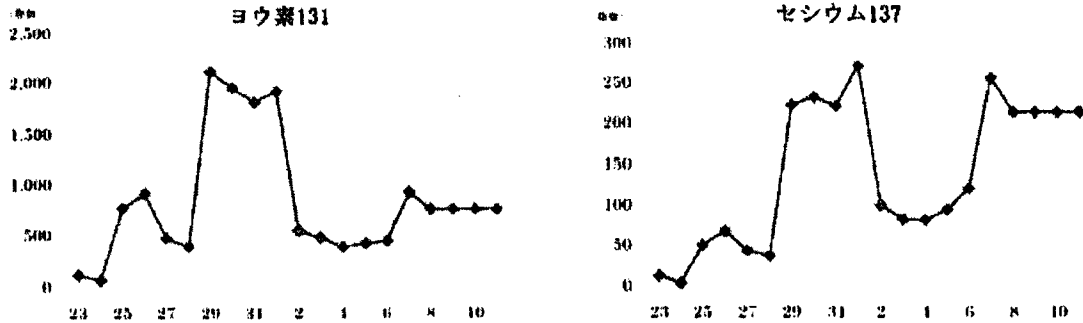
この複雑な流れとともに、発電所から排出される水は、沖に向かって拡散する。【図3-1】～【図3-5】

特に、福島第一原子力発電所の沖合では、徐々に拡散しながら沖へ移動するため、シミュレーション結果によると、同発電所30km沖合海域における放射能濃度は、同月4日～7日より4月9日～11日の方が高くなると計算される（4月9日に行った文部科学省の海域モニタリングの計測実績では、その傾向が見られた）。【図4-1】～【図4-4】

なお、4月12日以降、排出が停止した場合、5月には、海表面において、ヨウ素131で40Bq/L（原子力施設の排水の濃度限度）、セシウム137で90Bq/L（同）を超える海面はなくなるとのシミュレーション結果となっている。【図3-4】～【図3-5】

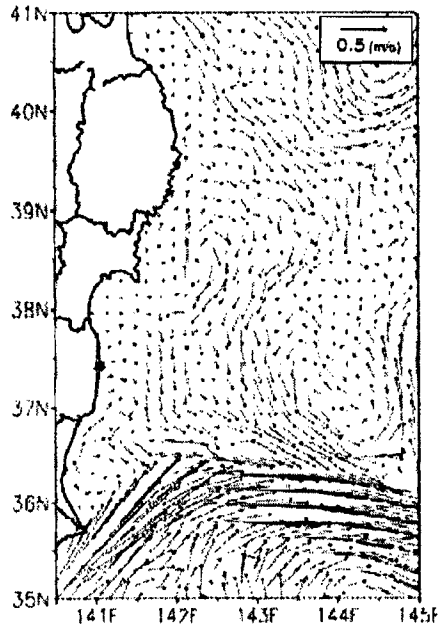
4. 留意事項

本予測は、4月2日時点のJCOPE2における流速場をもとに、文部科学省及び東京電力(株)が行った4月8日までのモニタリング結果の実測値を反映して、4月9日に海洋研究開発機構のスーパーコンピュータシステムで計算した結果の速報であり、今後、最新のモニタリング結果の実測値を反映させつつ見直しを行うこととしている。



【図1】福島第一原子力発電所から排出される水の放射能濃度に関する想定シナリオ

東京電力発表の「海水核種分析結果」(3月21日～4月8日)から8km四方に海岸の1/100の濃度で表層において拡散するものと想定し、4月11日まで4月8日と同水準の放出が続く(4月12日以降は放出されない)ものと想定したシナリオ。なお、縦軸は想定される放射能濃度を、原子力施設の排水濃度限度の何倍であるかを示した指数で表している。



【図2】JCOPE2における流速分布(4月2日時点)

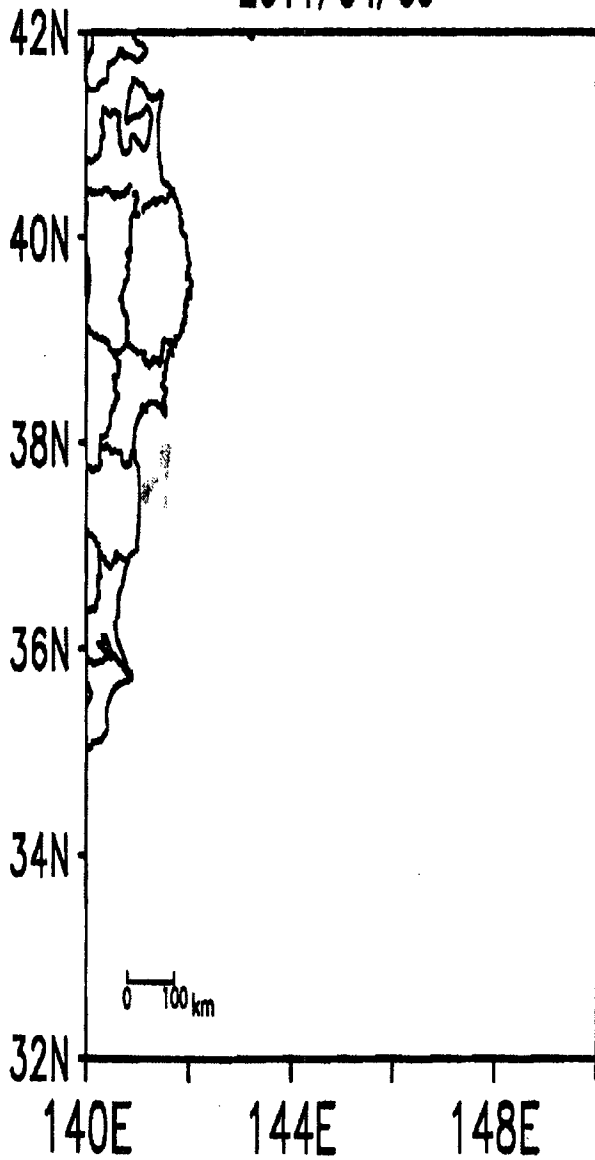
JCOPE2による流速分布は、4月2日までの現場観測データ及び衛星観測データを取り入れて計算したもの。計算を行う際に、半減期(ヨウ素131は8日、セシウム137は30年)は考慮して予測している。

【図3-1】JCOPE2による放射能濃度分布のシミュレーション-4月9日-

(4月8日までのデータに基づくシミュレーション)

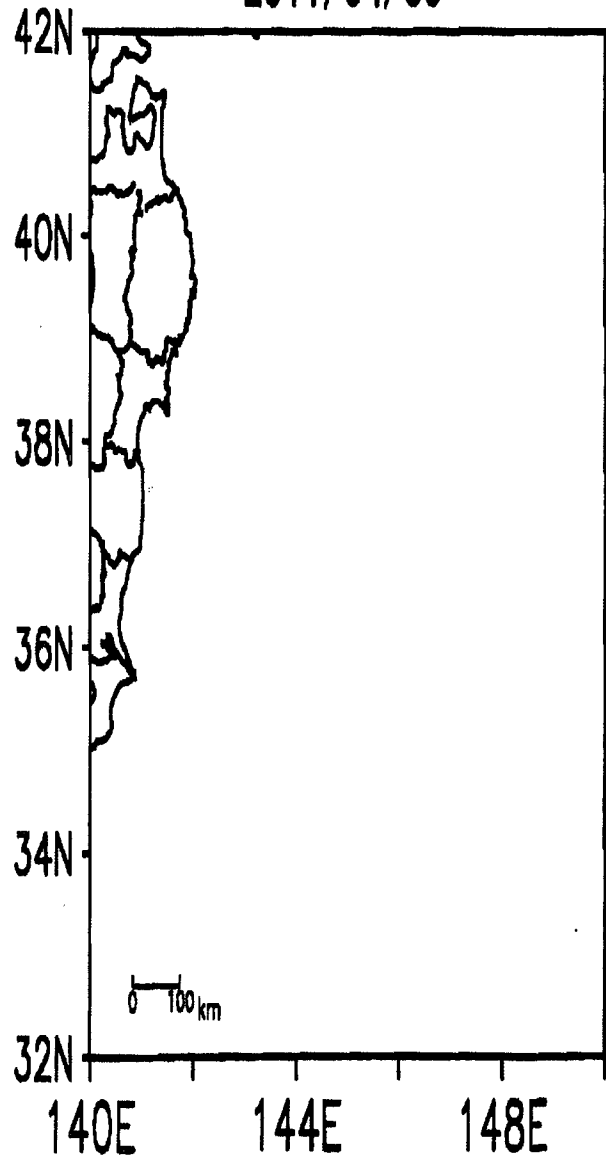
JCOPE2 予測値 (ヨウ素131)

2011/04/09

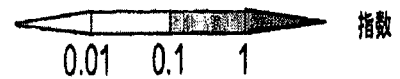


JCOPE2 予測値 (セシウム137)

2011/04/09



<注:上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したものと>



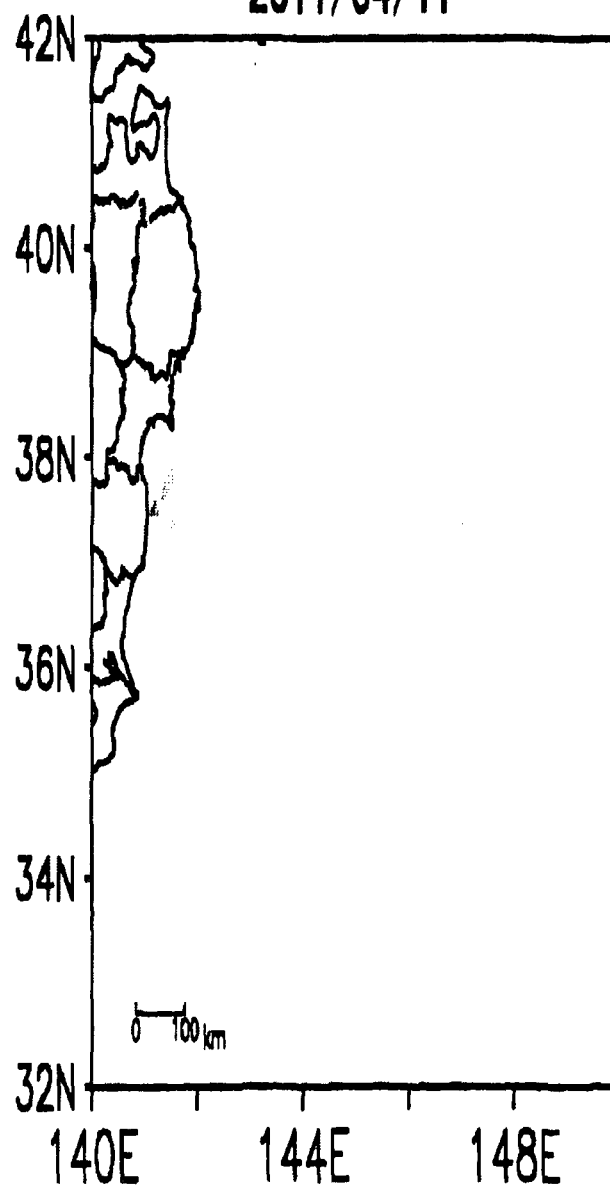
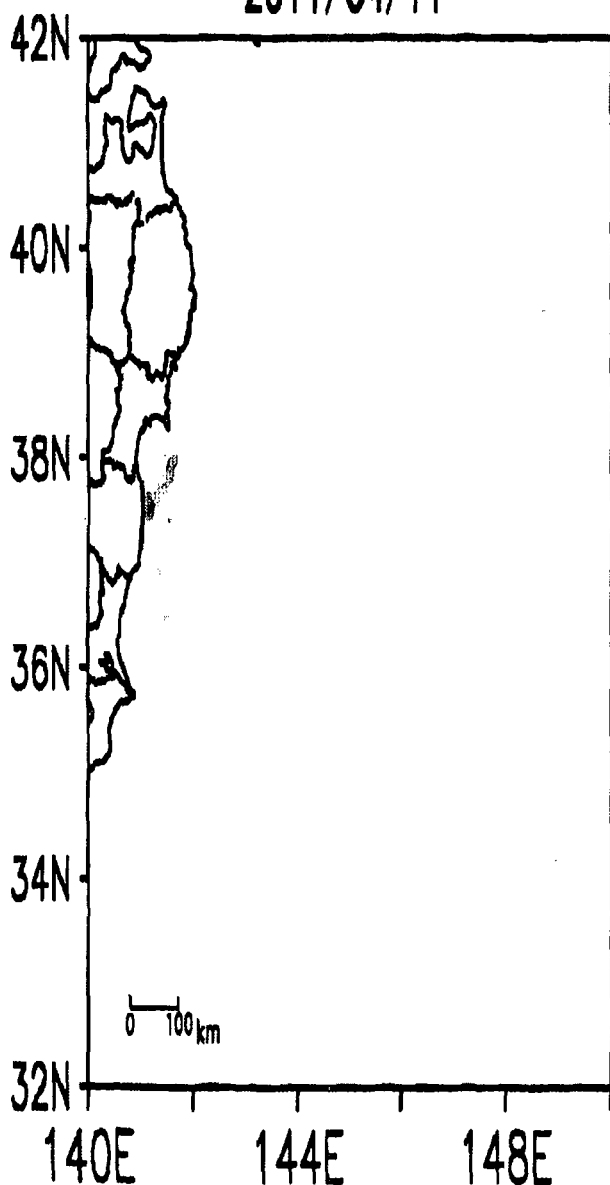
【図3-2】JCOPE2による放射能濃度分布のシミュレーション—4月11日—
 (4月8日までのデータに基づくシミュレーション)

JCOPE2 予測値 (ヨウ素131)

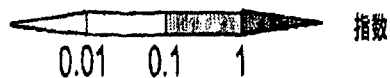
JCOPE2 予測値 (セシウム137)

2011/04/11

2011/04/11



＜注：上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの＞



【図3-3】JCOPE2による放射能濃度分布のシミュレーション-4月15日-

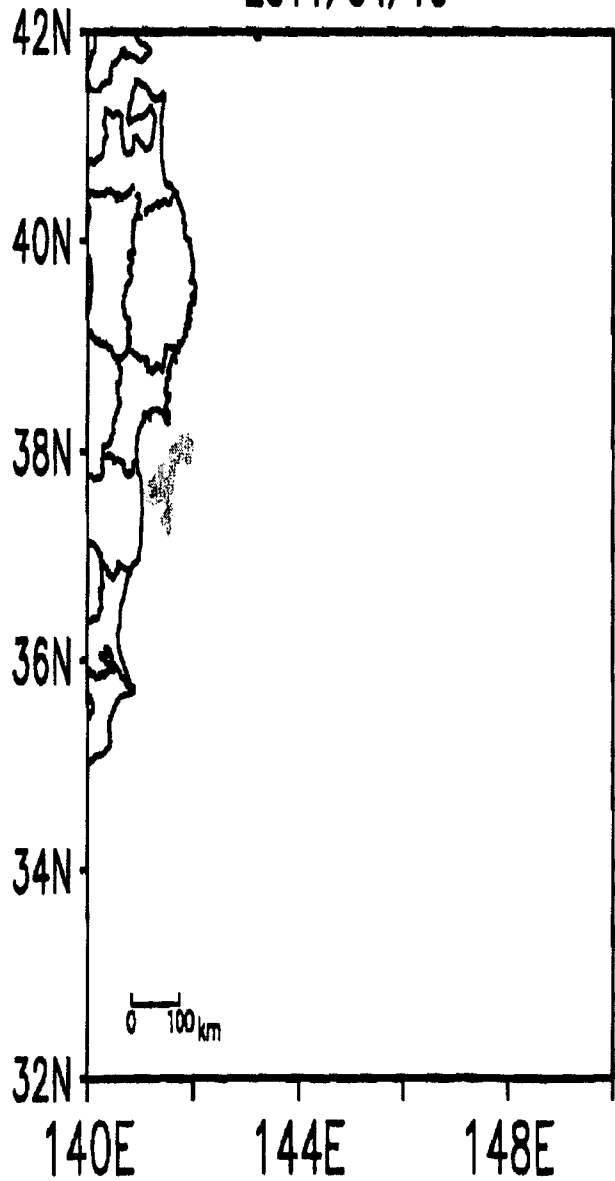
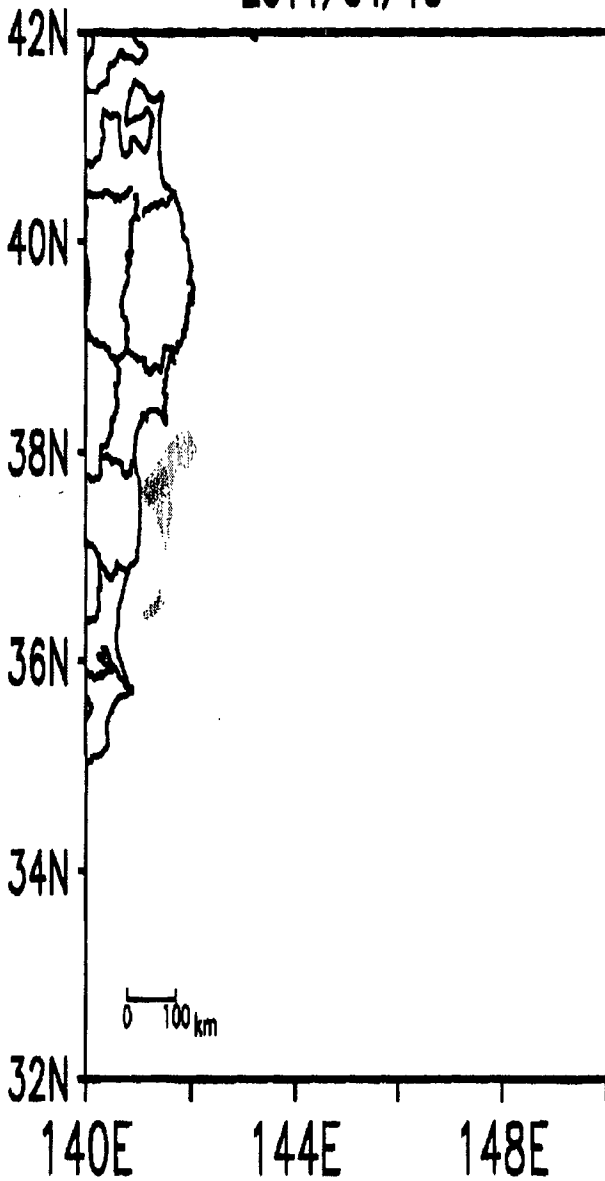
(4月8日までのデータに基づくシミュレーション)

JCOPE2 予測値 (ヨウ素131)

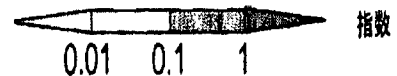
JCOPE2 予測値 (セシウム137)

2011/04/15

2011/04/15



<注: 上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したものと>



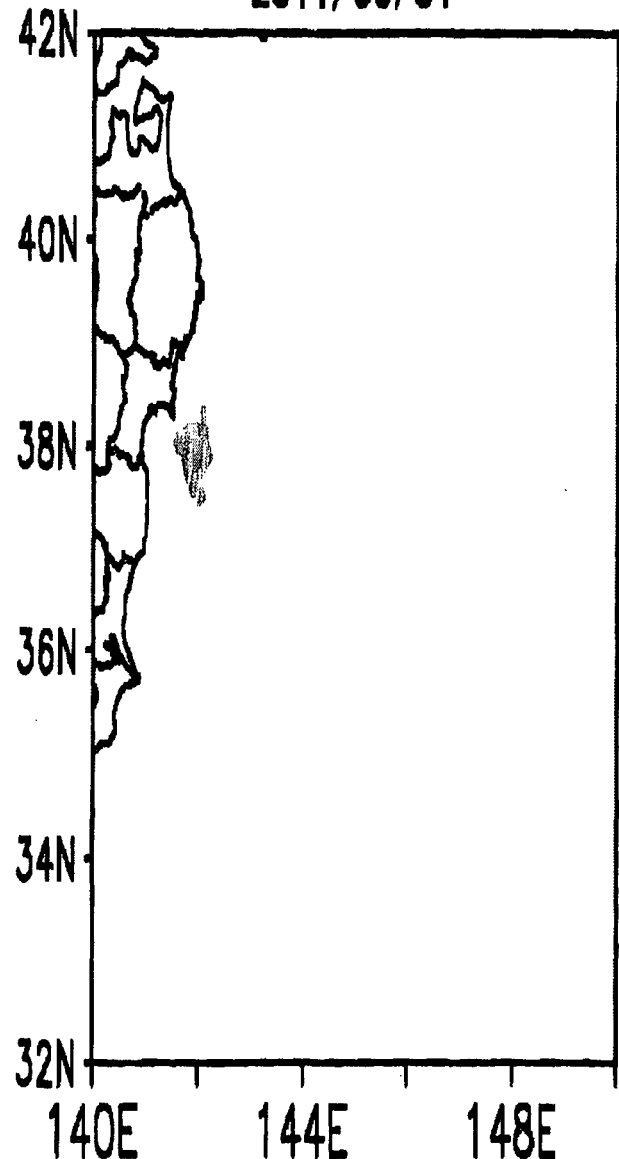
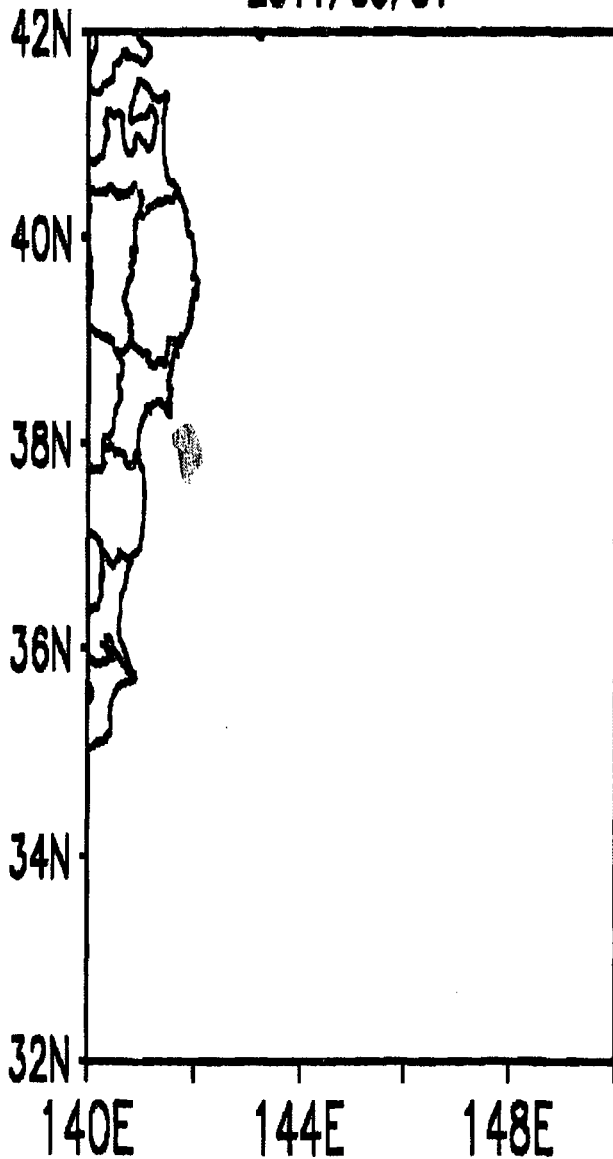
【図3-4】JCOPE2による放射能濃度分布のシミュレーション-5月1日-
 (4月8日までのデータに基づくシミュレーション)

JCOPE2 予測値 (ヨウ素131)

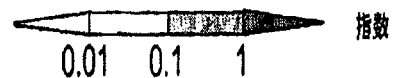
JCOPE2 予測値 (セシウム137)

2011/05/01

2011/05/01



<注: 上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したものと>



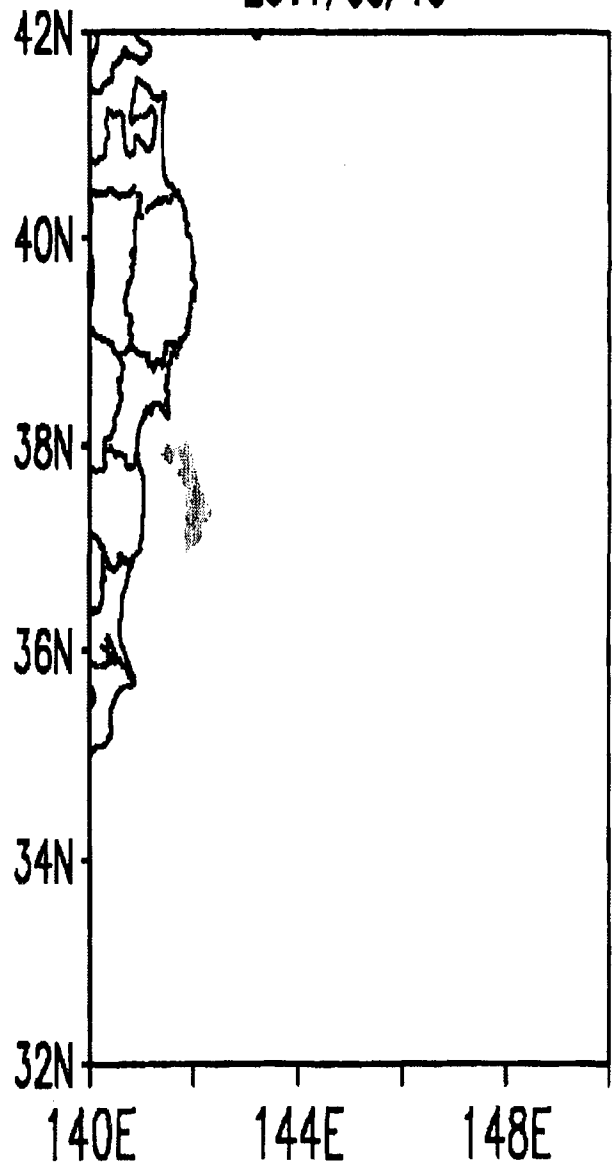
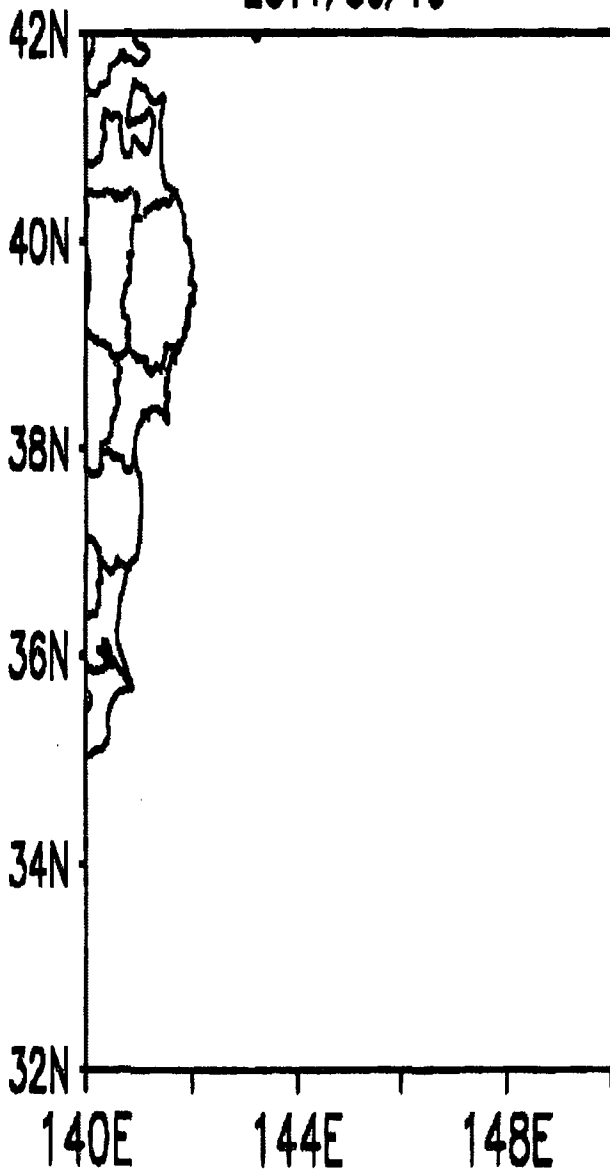
【図3-5】JCOPE2による放射能濃度分布のシミュレーション—5月15日—
 (4月8日までのデータに基づくシミュレーション)

JCOPE2 予測値 (ヨウ素131)

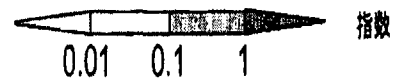
JCOPE2 予測値 (セシウム137)

2011/05/15

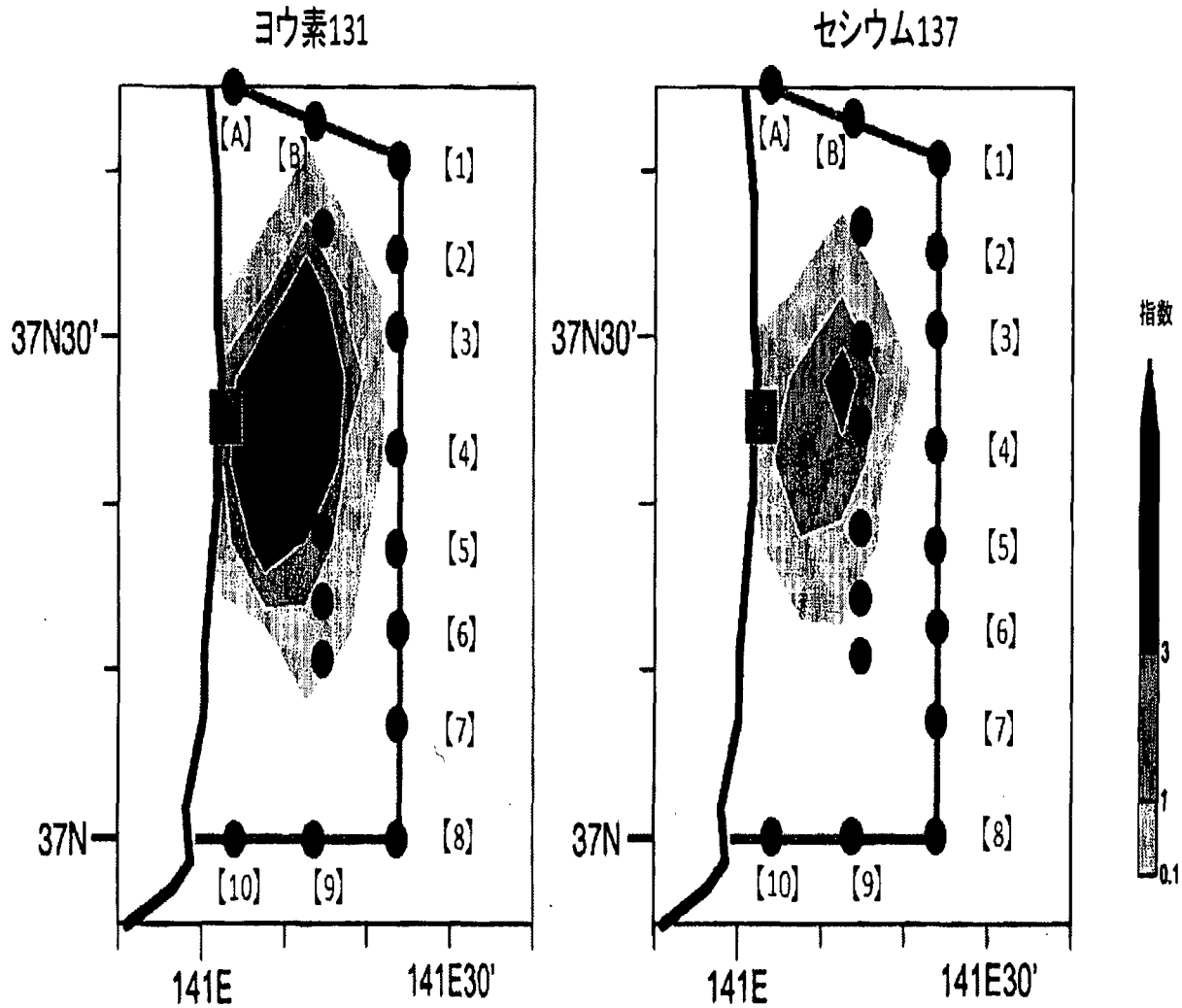
2011/05/15



＜注：上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの＞



【図4-1】JCOPEPによる濃度分布シミュレーション—4月4日—
 (4月8日までのデータに基づくシミュレーション)

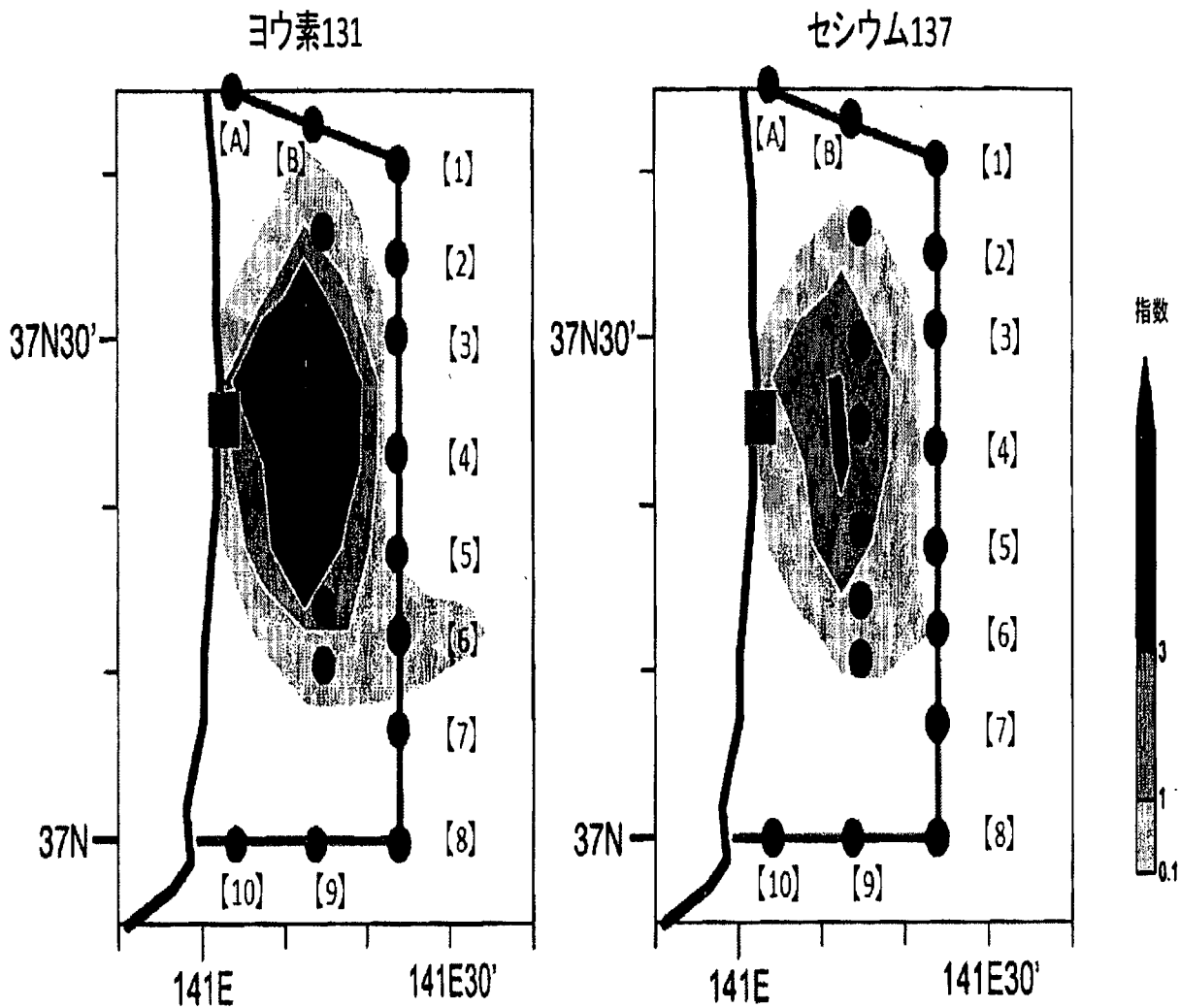


JCOPEPによる計算を行う際に、半減期(ヨウ素131は8日、セシウム137は30年)を考慮して予測している。

<注: 上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの>

【図4-2】JCOPEPによる濃度分布シミュレーションー4月7日ー

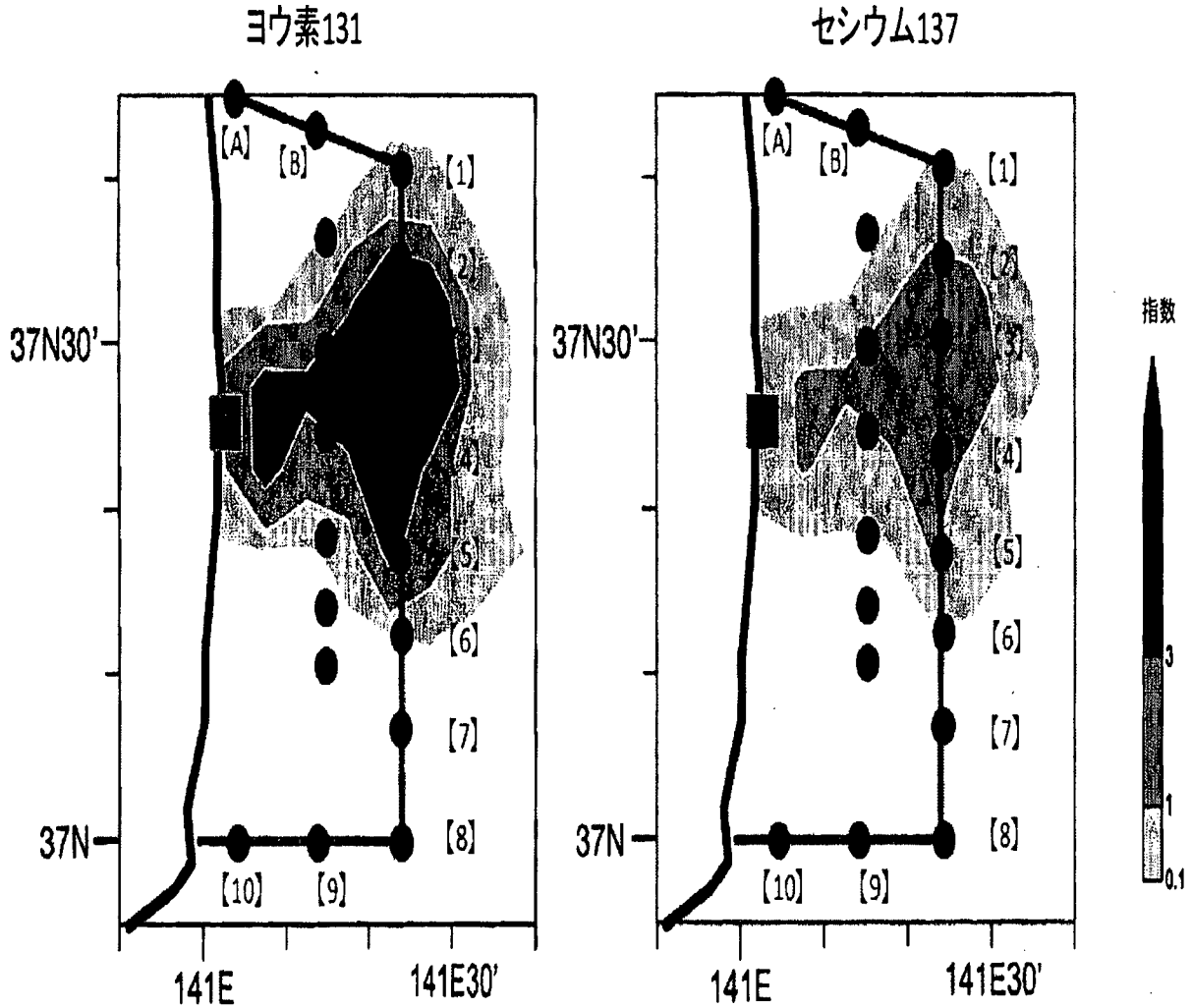
(4月8日までのデータに基づくシミュレーション)



JCOPEPによる計算を行う際に、半減期(ヨウ素131は8日、セシウム137は30年)を考慮して予測している。

<注:上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの>

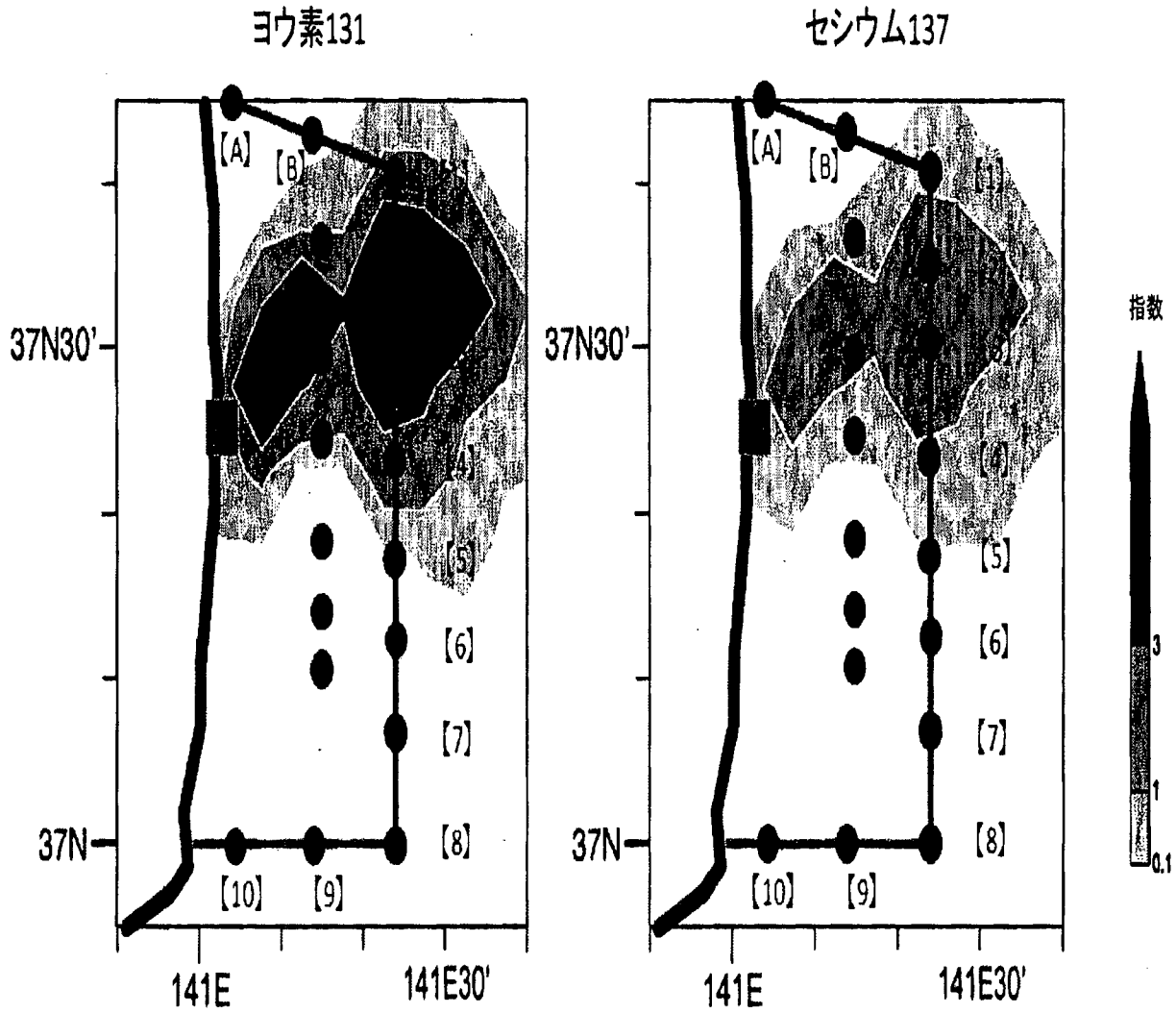
【図4-3】JCOPEPによる濃度分布シミュレーション-4月9日-
 (4月8日までのデータに基づくシミュレーション)



JCOPEPによる計算を行う際に、半減期(ヨウ素131は8日、セシウム137は30年)を考慮して予測している。

<注:上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの>

【図4-4】JCOPETによる濃度分布シミュレーション—4月11日—
 (4月8日までのデータに基づくシミュレーション)



JCOPETによる計算を行う際に、半減期(ヨウ素131は8日、セシウム137は30年)を考慮して予測している。

<注: 上図の指数は、原子力施設の排水濃度限度(ヨウ素131は40Bq/L、セシウム137は90Bq/L)の何倍かを示したもの>

From: OST01 HOC
Sent: Tuesday, April 12, 2011 11:04 AM
To: RST01 Hoc; Hoc, PMT12
Subject: FW: Radiation data by MEXT
Attachments: (Japanese)20110412_22.pdf; (unofficial)(Japanese)20110412_22with lat_long.pdf; (Japanese)20110412_23.pdf; (Japanese)20110412_24.pdf; (Japanese)20110412_25.pdf; (Japanese)20110412_26.pdf; (Japanese)20110412_27.pdf; (Japanese)20110412_28.pdf; (Japanese)20110412_29.pdf; (Japanese)20110410_19revised.pdf

-----Original Message-----

From: HOO Hoc
Sent: Tuesday, April 12, 2011 10:47 AM
To: LIA07 Hoc; LIA08 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Radiation data by MEXT

-----Original Message-----

From: eda@mext.go.jp [mailto:eda@mext.go.jp]
Sent: Tuesday, April 12, 2011 10:21 AM

To: (b)(6)

(b)(6)

Subject: Radiation data by MEXT

Dear Sir,

Please see attached the document.

"(Japanese)20110412_28.pdf" and "(Japanese)20110412_29.pdf" are new data regarding strontium. English versions will be sent later.

"(Japanese)20110410_19revised.pdf" is the revised file of what I sent you on April 10 regarding "Reading of environmental radioactivity level by prefecture [Fallout]". The revised points are as follows.

(4.9.9AM~4.10.9AM)
<Prefecture) 7 Fukushima
<I-131> (old) - (new) 18
<Cs-137> (old) - (new) 39

(Reason) Measurement arrived, though it had been under measurement at the time of previous publication.

<Prefecture) 12 Chiba(Ichihara)
<Cs-137> (old) 120 (new) 130

(Reason) Revision of the reading

Sincerely yours,

Kei EDA

EOC, Ministry of Education, Culture, Sports, Science & Technology (MEXT), Japan

環境放射能水準調査結果

H23.4.12 19:00

($\mu\text{Sv/h}$ (24時間平均))

都道府県名	4月11日							4月12日						
	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-1	1-2	2-3	3-4	4-5	5-6	6-7
北海道(札幌市)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
青森県(青森市)	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
岩手県(盛岡市)	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
宮城県(仙台市)	0.084	0.082	0.080	0.079	0.078	0.078	0.078	0.078	0.078	0.078	0.077	0.077	0.077	0.078
秋田県(秋田市)	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034
山形県(山形市)	0.055	0.055	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054
福島県(福島市)	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100
茨城県(水戸市)	0.145	0.153	0.159	0.159	0.159	0.147	0.147	0.144	0.143	0.142	0.142	0.142	0.142	0.142
栃木県(宇都宮市)	0.085	0.088	0.079	0.085	0.080	0.077	0.072	0.071	0.070	0.070	0.070	0.071	0.070	0.070
群馬県(前橋市)	0.040	0.042	0.041	0.040	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
埼玉県(さいたま市)	0.075	0.068	0.065	0.077	0.074	0.066	0.065	0.064	0.062	0.062	0.062	0.062	0.062	0.062
千葉県(市原市)	0.059	0.059	0.057	0.060	0.059	0.060	0.062	0.059	0.060	0.060	0.061	0.058	0.056	0.055
東京都(新宿区)	0.093	0.096	0.093	0.089	0.083	0.083	0.081	0.082	0.079	0.078	0.077	0.077	0.077	0.078
神奈川県(茅ヶ崎市)	0.057	0.058	0.057	0.058	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.058
新潟県(新潟市)	0.048	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
富山県(富山市)	0.049	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047
石川県(金沢市)	0.048	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
福井県(福井市)	0.048	0.046	0.045	0.045	0.045	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
山梨県(甲府市)	0.043	0.044	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043
長野県(長野市)	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
岐阜県(各務原市)	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
静岡県(静岡市)	0.040	0.040	0.040	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
愛知県(名古屋市中区)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
三重県(四日市市)	0.046	0.046	0.045	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
滋賀県(大津市)	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
京都府(京都市)	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
大阪府(大阪市)	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
兵庫県(神戸市)	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
奈良県(奈良市)	0.049	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.048	0.048
和歌山県(和歌山市)	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
鳥取県(鳥取市)	0.084	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083
島根県(松江市)	0.046	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
広島県(広島市)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
山口県(山口市)	0.092	0.091	0.092	0.091	0.092	0.091	0.092	0.093	0.094	0.094	0.094	0.094	0.094	0.094
徳島県(徳島市)	0.037	0.038	0.040	0.038	0.038	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.038
香川県(高松市)	0.073	0.072	0.068	0.063	0.071	0.085	0.084	0.084	0.087	0.086	0.086	0.086	0.086	0.086
愛媛県(松山市)	0.048	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048
高知県(高知市)	0.025	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.025
福岡県(太宰府市)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
佐賀県(佐賀市)	0.039	0.040	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.041
長崎県(大村市)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029
熊本県(宇土市)	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
大分県(大分市)	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049
宮崎県(宮崎市)	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
鹿児島県(鹿児島市)	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
沖縄県(那覇市)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
沖縄県(うるま市)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021

*宮城県では、可搬型モニタリングポストによる測定。
 また、過去の平常値の範囲については、仙台市に設置していた固定型モニタリングポストの値を記載。
 *福島県では、双葉郡のモニタリングポストが避難区域に入っており、測定が困難であるため、代替地として福島市紅葉山周モニタリングポストで測定。
 *鳥取県では、機密情報のため、4月17時から代替機器により測定。
 *本データは、1.0 $\mu\text{Sv/h}$ (24時間平均)毎時)と換算して算出
 *文科科学省が各都道府県等からの報告に基づき作成
 *過去の平常値の範囲は、震災発生直前の観測における上限値と下限値をのりとしたもの。
 *群馬県、山梨県、高知県の過去の平常値の範囲の値は4月9日19時発表分より訂正。

環境放射能水準調査結果

H23.4.12 19:00

(μSv/h(24時間平均))

都道府県名	4月12日											
	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	過去の常態の範囲	
1 北海道(札幌市)	0.029	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.02~0.106
2 青森県(青森市)	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.017~0.102
3 岩手県(盛岡市)	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.014~0.084
4 宮城県(仙台市)	0.078	0.080	0.078	0.080	0.080	0.080	0.081	0.081	0.080	0.079	0.079	0.0176~0.0513
5 秋田県(秋田市)	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.022~0.086
6 山形県(山形市)	0.054	0.053	0.053	0.054	0.054	0.054	0.054	0.054	0.054	0.053	0.053	0.025~0.082
7 福島県(福島市)	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	2.100	0.037~0.046
8 茨城県(水戸市)	0.142	0.142	0.143	0.143	0.143	0.143	0.142	0.142	0.142	0.142	0.142	0.036~0.056
9 栃木県(宇都宮市)	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.030~0.067
10 群馬県(前橋市)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.017~0.049
11 埼玉県(さいたま市)	0.082	0.081	0.081	0.082	0.082	0.081	0.081	0.081	0.082	0.081	0.081	0.031~0.060
12 千葉県(市原市)	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.022~0.044
13 東京都(新宿区)	0.078	0.077	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.028~0.079
14 神奈川県(茅ヶ崎市)	0.058	0.057	0.057	0.057	0.057	0.056	0.057	0.057	0.057	0.057	0.057	0.035~0.069
15 新潟県(新潟市)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.031~0.153
16 富山県(富山市)	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.029~0.147
17 石川県(金沢市)	0.047	0.047	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.047	0.047	0.0291~0.1275
18 福井県(福井市)	0.046	0.046	0.045	0.045	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.032~0.097
19 山梨県(甲府市)	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.040~0.066
20 長野県(長野市)	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.0299~0.0974
21 岐阜県(各務原市)	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.057~0.110
22 静岡県(静岡市)	0.039	0.038	0.040	0.041	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.0281~0.0755
23 愛知県(名古屋市)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.035~0.074
24 三重県(四日市市)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.0416~0.0789
25 滋賀県(大津市)	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.031~0.081
26 京都府(京都市)	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.033~0.087
27 大阪府(大阪市)	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042~0.081
28 兵庫県(神戸市)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035~0.076
29 奈良県(奈良市)	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.046~0.080
30 和歌山県(和歌山市)	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031~0.056
31 鳥取県(鳥取市)	0.063	0.063	0.063	0.063	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.038~0.110
32 島根県(松江市)	0.047	0.047	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.037~0.131
33 岡山県(岡山市)	0.050	0.049	0.049	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.043~0.104
34 広島県(広島市)	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.035~0.069
35 山口県(山口市)	0.097	0.095	0.093	0.092	0.092	0.092	0.092	0.092	0.091	0.091	0.091	0.084~0.128
36 徳島県(徳島市)	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037~0.067
37 香川県(高松市)	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.051~0.077
38 愛媛県(松山市)	0.049	0.048	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.046	0.045~0.074
39 高知県(高知市)	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.019~0.054
40 福岡県(太宰市)	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.034~0.079
41 佐賀県(佐賀市)	0.041	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.037~0.086
42 長崎県(大村市)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43 熊本県(宇土市)	0.029	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.021~0.067
44 大分県(大分市)	0.050	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.048~0.085
45 宮城県(宮崎市)	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.0243~0.0684
46 鹿児島県(鹿児島市)	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.0306~0.0943
47 沖縄県(うるま市)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.0133~0.0575

*宮城県では、可搬型モニタリングポストによる測定。

また、過去の平常値の範囲については、仙台市に設置していた固定型モニタリングポストの値を記載。

*福島県では、双葉郡のモニタリングポストが避難区域に入っており、測定が困難であったため、代替地として福島市紅葉山局モニタリングポストで測定。

また、福島県の子ウチは本日19時までに入手したものを掲載。

*鳥取県では、徳島点検のため、4月17時から代替機器により測定。

*本データは、1μSv/h(24時間平均)毎時(μSv/h(24時間平均))と換算して算出

*文科科学省が各都道府県等からの報告に基づき作成

*過去の平常値の範囲は、震災発生前の観測値における上限と下限値をのりとしたもの。

*群馬県、山梨県、高知県の過去の平常値の範囲の値は4月9日19時発表分より訂正。

福島第一原子力発電所の20km以遠のモニタリング結果について

平成23年4月12日 19時00分現在
文 部 科 学 省

○文部科学省が集計した結果 注) 太下線データが今回追加分

- *1 QM(ガイガーミュラー計数管)における値
- *2 電離箱における値
- *3 NaI(ヨウ化ナトリウム)シンチレータにおける値
- *4 測定時間内における測定値の変動範囲

測定場所 (福島第1発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	測定位置	測定位置の 備考	天候	実施者
測定エリア【1】 相馬市若菜町 (約40km北西)	4月12日8時48分	2.0 ^{*2}	N: 37° 44' 12.6" E: 140° 28' 02.9"	20110330 確認	降雨なし	日本原子力研究開発機構
測定エリア【7】 双葉郡安良野町内本屋敷 (約20km南)	4月12日16時48分	0.6 ^{*2}	N: 37° 41' 49.0" E: 140° 57' 57.7"	20110330 確認	降雨なし	日本原子力研究開発機構
測定エリア【13】 田村市常盤町西向屋敷 (約40km西)	4月12日11時18分	1.3 ^{*2}	N: 37° 26' 21.5" E: 140° 37' 20.7"	20110330 確認	降雨なし	文部科学省
測定エリア【14】 田村市常盤町常盤内町 (約35km南)	4月12日16時32分	0.4 ^{*2}	N: 37° 28' 08.4" E: 140° 38' 49.5"	20110330 確認	降雨なし	文部科学省
測定エリア【21】 双葉郡楳田町楳田直橋 (約30km北西)	4月12日15時28分	3.7 ^{*2}	N: 37° 30' 28.7" E: 140° 42' 08.7"	20110330 確認	降雨なし	文部科学省
測定エリア【31】 双葉郡楳田町楳田直橋 (約30km北西)	4月12日15時59分	12.3 ^{*2}	N: 37° 33' 03.2" E: 140° 44' 25.0"	20110330 確認	降雨なし	文部科学省
測定エリア【32】 双葉郡楳田町楳田直橋 (約30km北西)	4月12日16時20分	26.4 ^{*2}	N: 37° 35' 42.0" E: 140° 45' 14.5"	20110330 確認	降雨なし	文部科学省
測定エリア【33】 相馬郡新井町新井 (約30km北西)	4月12日16時38分	15.6 ^{*2}	N: 37° 38' 34.6" E: 140° 45' 09.1"	20110330 確認	降雨なし	文部科学省
測定エリア【34】 双葉郡楳田町楳田直橋 (約30km北西)	4月12日11時14分	5.8 ^{*2}	N: 37° 33' 03.2" E: 140° 44' 25.0"	20110330 確認	降雨なし	文部科学省
測定エリア【38】 いわき市四倉町白蓋保本 (約35km南)	4月12日11時38分	0.8 ^{*2}	N: 37° 07' 18.4" E: 140° 57' 03.8"	20110401 確認	降雨なし	日本原子力研究開発機構
測定エリア【39】 相馬市山上上笠木 (約45km北)	4月12日17時22分	0.6 ^{*2}	N: 37° 45' 52.7" E: 140° 51' 47.1"	20110402 確認	降雨なし	日本原子力研究開発機構
測定エリア【41】 田村市常盤町山崎山崎 (約20km南)	4月12日13時10分	0.7 ^{*2}			降雨なし	電力会社
測定エリア【41】 田村市常盤町山崎山崎 (約20km南)	4月12日9時30分	0.7 ^{*2}			降雨なし	電力会社
測定エリア【42】 田村市常盤町山崎山崎 (約20km南)	4月12日13時30分	0.8 ^{*2}			降雨なし	電力会社
測定エリア【42】 田村市常盤町山崎山崎 (約20km南)	4月12日9時50分	0.8 ^{*2}			降雨なし	電力会社
測定エリア【43】 双葉郡川内町下川内東 (約20km南)	4月12日15時00分	0.4 ^{*2}			降雨なし	電力会社
測定エリア【43】 双葉郡川内町下川内東 (約20km南)	4月12日11時00分	0.4 ^{*2}			降雨なし	電力会社
測定エリア【44】 いわき市四倉町白蓋保本 (約35km南)	4月12日13時00分	0.7 ^{*2}			降雨なし	電力会社
測定エリア【44】 いわき市四倉町白蓋保本 (約35km南)	4月12日10時00分	0.7 ^{*2}			降雨なし	電力会社
測定エリア【45】 双葉郡楳田町山崎山崎 (約20km南)	4月12日13時28分	1.0 ^{*2}			降雨なし	電力会社
測定エリア【45】 双葉郡楳田町山崎山崎 (約20km南)	4月12日10時27分	1.0 ^{*2}			降雨なし	電力会社
測定エリア【46】 双葉郡川内町山崎山崎 (約20km北西)	4月12日13時20分	4.6 ^{*2}			降雨なし	電力会社
測定エリア【46】 双葉郡川内町山崎山崎 (約20km北西)	4月12日10時30分	4.6 ^{*2}			降雨なし	電力会社
測定エリア【51】 田村市常盤町小野原町 (約40km南)	4月12日13時57分	0.2 ^{*3}			降雨なし	福島県
測定エリア【51】 田村市常盤町小野原町 (約40km南)	4月12日10時48分	0.2 ^{*3}			降雨なし	福島県
測定エリア【52】 田村市常盤町引越山崎 (約40km南)	4月12日14時32分	0.3 ^{*3}			降雨なし	福島県
測定エリア【52】 田村市常盤町引越山崎 (約40km南)	4月12日11時15分	0.4 ^{*3}			降雨なし	福島県
測定エリア【61】 相馬郡楳田町八木沢 (約40km北西)	4月12日15時13分	5.2 ^{*3}			降雨なし	福島県
測定エリア【61】 相馬郡楳田町八木沢 (約40km北西)	4月12日12時55分	5.0 ^{*3}			降雨なし	福島県
測定エリア【62】 相馬郡楳田町大塚 (約40km北西)	4月12日15時28分	9.3 ^{*3}			降雨なし	福島県
測定エリア【62】 相馬郡楳田町大塚 (約40km北西)	4月12日12時44分	5.8 ^{*3}			降雨なし	福島県
測定エリア【63】 相馬郡楳田町二枚橋 (約45km北西)	4月12日15時55分	2.1 ^{*3}			降雨なし	福島県
測定エリア【63】 相馬郡楳田町二枚橋 (約45km北西)	4月12日11時30分	1.4 ^{*3}			降雨なし	福島県
測定エリア【71】 双葉郡安良野町下北谷内 (約20km南)	4月12日12時16分	0.8 ^{*2}	N: 37° 12' 32.4" E: 140° 57' 08.2"	20110323 確認	降雨なし	日本原子力研究開発機構
測定エリア【71】 双葉郡安良野町下北谷内 (約20km南)	4月12日7時50分	0.6 ^{*2}	N: 37° 12' 32.4" E: 140° 57' 08.2"	20110323 確認	降雨なし	警察(NBC対策部隊)
測定エリア【72】 いわき市四倉町白蓋保本 (約35km南)	4月12日15時07分	1.0 ^{*2}			降雨なし	日本原子力研究開発機構
測定エリア【72】 いわき市四倉町白蓋保本 (約35km南)	4月12日8時20分	0.2 ^{*2}			降雨なし	警察(NBC対策部隊)
測定エリア【73】 いわき市四倉町 (約35km南)	4月12日11時53分	1.0 ^{*2}			降雨なし	文部科学省
測定エリア【73】 いわき市四倉町 (約35km南)	4月12日8時32分	0.3 ^{*2}			降雨なし	警察(NBC対策部隊)
測定エリア【74】 いわき市小川町高萩 (約35km南)	4月12日12時23分	0.2 ^{*2}			降雨なし	警察(NBC対策部隊)

- * 1 GM(ガイガーミュラー計数管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値
- * 4 測定時間内における測定値の変動範囲

測定場所 (福島第1発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	測定位置	測定位置の 備考	天候	実施者
測定エリア【75】 いわき市内御影町 (約45km南)	4月12日7時00分	0.3 [±]			降雨なし	警察(NBC対策部隊)
測定エリア【76】 双葉郡川内村上川内原 (約20km南西)	4月12日11時13分	0.4 [±]	N: 37° 20' 25.3" E: 140° 48' 25.7"	20110402 確認	降雨なし	警察(NBC対策部隊)
測定エリア【77】 いわき市小川町上小川 (約25km南西)	4月12日11時34分	1.2 [±]			降雨なし	警察(NBC対策部隊)
測定エリア【80】 喜望峯町区喜望峯 (約25km北)	4月12日16時12分	1.0 [±]	N: 37° 33' 22.2" E: 140° 45' 46.9"	20110323 確認	降雨なし	日本原子力研究開発機構
測定エリア【80】 南相馬市原町区高見町 (約25km北)	4月12日8時28分	0.1 [±]			降雨なし	警察(NBC対策部隊)
測定エリア【84】 いわき市三和町登壇 (約40km南西)	4月12日10時57分	0.6 [±]	N: 37° 33' 03.2" E: 140° 44' 25.0"	20110330 確認	降雨なし	日本原子力研究開発機構
測定エリア【85】 福島市荒井原種 (約80km北西)	4月12日12時00分	0.1 [±]	N: 37° 42' 45.0" E: 140° 22' 59.0"	20110330 確認	降雨なし	防衛省
測定エリア【85】 福島市荒井原種 (約80km北西)	4月12日6時00分	0.3 [±]	N: 37° 42' 45.0" E: 140° 22' 59.0"	20110330 確認	降雨なし	防衛省
測定エリア【86】 喜望峯町区喜望峯 (約25km北)	4月12日12時00分	0.5 [±]	N: 37° 23' 57.0" E: 140° 19' 35.0"	20110330 確認	降雨なし	防衛省
測定エリア【86】 郡山市大槻町長右工門科 (約25km西)	4月12日6時00分	1.2 [±]	N: 37° 23' 57.0" E: 140° 19' 35.0"	20110330 確認	降雨なし	防衛省
測定エリア【87】 双葉郡川内村上川内原/内 (約20km南西)	4月12日14時00分	1.1 [±]	N: 37° 21' 42.0" E: 140° 42' 54.0"	20110330 確認	降雨なし	防衛省
測定エリア【87】 双葉郡川内村上川内原/内 (約20km南西)	4月12日6時00分	1.1 [±]	N: 37° 21' 42.0" E: 140° 42' 54.0"	20110330 確認	降雨なし	防衛省
測定エリア【104】 双葉郡喜望峯町大字喜望峯 (約25km北西)	4月12日13時19分	2.4 [±]	N: 37° 23' 48.0" E: 140° 21' 50.7"	20110404 確認	降雨なし	文部科学省

環境放射能水準調査結果(定時降下物)
(4月9日9時～4月10日9時採取)

H23.4.10 19:00

(MBq/km²)

	都道府県名	定時降下物		
		I-131	Cs-137	備考
1	北海道(札幌市)	不検出	不検出	
2	青森県(青森市)	7.4	不検出	
3	岩手県(盛岡市)	不検出	不検出	
4	宮城県	-	-	震災被害によって計測不能
5	秋田県(秋田市)	9.4	不検出	
6	山形県(山形市)	不検出	27	
7	福島県(福島市)	18	39	測定中であったが到着
8	茨城県(ひたちなか市)	920	800	
9	栃木県(宇都宮市)	260	230	
10	群馬県(前橋市)	6.3	6.1	
11	埼玉県(さいたま市)	16	30	
12	千葉県(市原市)	42	130	
13	東京都(新宿区)	19	7.9	
14	神奈川県(茅ヶ崎市)	不検出	不検出	
15	新潟県(新潟市)	不検出	不検出	
16	富山県(射水市)	不検出	不検出	
17	石川県(金沢市)	不検出	不検出	
18	福井県(福井市)	不検出	不検出	
19	山梨県(甲府市)	不検出	不検出	
20	長野県(長野市)	不検出	不検出	
21	岐阜県(各務原市)	不検出	不検出	
22	静岡県(御前崎市)	不検出	不検出	
23	愛知県(名古屋市)	不検出	不検出	
24	三重県(四日市市)	不検出	不検出	
25	滋賀県(大津市)	不検出	不検出	
26	京都府(京都市)	不検出	不検出	
27	大阪府(大阪市)	不検出	不検出	
28	兵庫県(神戸市)	不検出	不検出	
29	奈良県(奈良市)	不検出	不検出	
30	和歌山県(和歌山市)	不検出	不検出	
31	鳥取県(東伯郡)	不検出	不検出	
32	島根県(松江市)	不検出	不検出	
33	岡山県(岡山市)	不検出	不検出	
34	広島県(広島市)	不検出	不検出	
35	山口県(山口市)	不検出	不検出	
36	徳島県(徳島市)	不検出	不検出	
37	香川県(高松市)	不検出	不検出	
38	愛媛県(八幡浜市)	不検出	不検出	
39	高知県(高知市)	不検出	不検出	
40	福岡県(太宰府市)	不検出	不検出	
41	佐賀県(佐賀市)	不検出	不検出	
42	長崎県(大村市)	不検出	不検出	
43	熊本県(宇土市)	不検出	不検出	
44	大分県(大分市)	不検出	不検出	
45	宮崎県(宮崎市)	不検出	不検出	
46	鹿児島県(鹿児島市)	不検出	不検出	
47	沖縄県(南城市)	不検出	不検出	

*文部科学省が各都道府県等からの報告に基づき作成

表 土壌及び植物試料*1の分析結果一覧

試料名	地点番号 または 採取地	採取日	¹³¹ I	¹³⁴ Cs	¹³⁷ Cs	⁸⁹ Sr	⁹⁰ Sr	単位
陸土	31* ²	3月17日	30,000	2,300	2,300	13	3.3	Bq/kg湿土
陸土	32* ²	3月16日	100,000	20,000	19,000	81	9.4	Bq/kg湿土
陸土	33* ³	3月16日	160,000	52,000	51,000	260	32	Bq/kg湿土
植物	大玉村	3月19日	43,000	89,000	90,000	61	5.9	Bq/kg生
植物	本宮市	3月19日	21,000	57,000	57,000	28	3.7	Bq/kg生
植物	小野町	3月19日	22,000	12,000	12,000	12	1.8	Bq/kg生
植物	西郷村	3月19日	12,000	25,000	25,000	15	3.8	Bq/kg生

*1 植物は福島県から提供された。

*2 浪江町

*3 飯舘村

全国大学等の協力による空間放射線量

上段: 24時間の積算値
下段: 上段の値を1時間あたりに換算した参考値

都道府県名	測定地点 番号	地区名	4月11日~4日12日
北海道	1	室蘭市	1 μ Sv (0.04 μ Sv/h)
	2	帯広市	1 μ Sv (0.04 μ Sv/h)
	3	旭川市	2 μ Sv (0.08 μ Sv/h)
	4	北見市	2 μ Sv (0.08 μ Sv/h)
	5	釧路市	2 μ Sv (0.08 μ Sv/h)
	6	函館市	2 μ Sv (0.08 μ Sv/h)
青森県	7	弘前市	1 μ Sv (0.04 μ Sv/h)
	8	八戸市	2 μ Sv (0.08 μ Sv/h)
宮城県	9	仙台市	2 μ Sv (0.08 μ Sv/h)
山形県	10	米沢市	3 μ Sv (0.13 μ Sv/h)
	11	鶴岡市	2 μ Sv (0.08 μ Sv/h)
福島県	12	福島市	9 μ Sv (0.38 μ Sv/h)
茨城県	13	つくば市	3 μ Sv (0.13 μ Sv/h)
栃木県	14	小山市	3 μ Sv (0.13 μ Sv/h)
群馬県	15	桐生市	3 μ Sv (0.13 μ Sv/h)
千葉県	16	千葉市	4 μ Sv (0.17 μ Sv/h)
	17	木更津市	3 μ Sv (0.13 μ Sv/h)
東京都	18	文京区	5 μ Sv (0.21 μ Sv/h)
	19	府中市	2 μ Sv (0.08 μ Sv/h)
	20	目黒区	1 μ Sv (0.04 μ Sv/h)
	21	港区	2 μ Sv (0.08 μ Sv/h)
	22	八王子市	3 μ Sv (0.13 μ Sv/h)
神奈川県	23	横浜市	1 μ Sv未満
新潟県	24	長岡市	1 μ Sv (0.04 μ Sv/h)
長野県	25	松本市	2 μ Sv (0.08 μ Sv/h)
	26	上田市	2 μ Sv (0.08 μ Sv/h)

* 毎日14時前後から翌日にかけて24時間の積算線量を測定
* ポケット線量計の測定範囲の下限値は1 μ Svのため、下段は参考値

富山県	27	高岡市	—
石川県	28	能美市	3 μ Sv (0.13 μ Sv/h)
福井県	29	吉田郡永平寺町	2 μ Sv (0.08 μ Sv/h)
岐阜県	30	岐阜市	2 μ Sv (0.08 μ Sv/h)
静岡県	31	浜松市	—
静岡県	32	沼津市	1 μ Sv (0.04 μ Sv/h)
愛知県	33	豊橋市	1 μ Sv (0.04 μ Sv/h)
三重県	34	津市	—
滋賀県	35	彦根市	2 μ Sv (0.08 μ Sv/h)
京都府	36	宇治市	—
大阪府	37	吹田市	1 μ Sv (0.04 μ Sv/h)
兵庫県	38	明石市	2 μ Sv (0.08 μ Sv/h)
奈良県	39	生駒市	2 μ Sv (0.08 μ Sv/h)
和歌山県	40	御坊市	2 μ Sv (0.08 μ Sv/h)
鳥取県	41	鳥取市	3 μ Sv (0.13 μ Sv/h)
岡山県	42	津山市	—
広島県	43	東広島市	—
山口県	44	宇部市	2 μ Sv (0.08 μ Sv/h)
徳島県	45	阿南市	2 μ Sv (0.08 μ Sv/h)
香川県	46	三豊市	—
愛媛県	47	新居浜市	2 μ Sv (0.08 μ Sv/h)
高知県	48	南国市	2 μ Sv (0.08 μ Sv/h)
福岡県	49	福岡市	2 μ Sv (0.08 μ Sv/h)
長崎県	50	長崎市	—
熊本県	51	熊本市	—
宮崎県	52	都城市	—
鹿児島県	53	霧島市	1 μ Sv (0.04 μ Sv/h)
沖縄県	54	中里郡西原町	1 μ Sv (0.04 μ Sv/h)

- * 毎日14時前後から翌日にかけて24時間の積算線量を測定
- * ポケット線量計の測定範囲の下限值は1 μ Svのため、下段は参考値
- * 太枠で囲まれた27番～54番については、今回追加された測定地点
- * 「—」となっている箇所については測定準備中

茨城県におけるモニタリング状況(1/1)

文部科学省

H23.4.12 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
4月12日			
0:00	1.09	0.59	0.92
1:00	1.08	0.59	0.92
2:00	1.08	0.59	0.92
3:00	1.08	0.58	0.92
4:00	1.08	0.58	0.92
5:00	1.08	0.59	0.92
6:00	1.08	0.58	0.92
7:00	1.08	0.58	0.91
8:00	1.08	0.58	0.92
9:00	1.07	0.58	0.88
10:00	1.07	0.58	0.93
11:00	1.07	0.58	0.91
12:00	1.07	0.58	0.93
13:00	1.07	0.58	0.97
14:00	1.07	0.58	0.90
15:00	1.07	0.58	0.93
16:00	1.07	0.58	1.06
17:00	1.07	0.58	0.90
18:00	1.07	0.58	

※このデータは、表記の3カ所における空間線量率を1時間毎に計測したもの。日本原子力研究開発機構原子力科学研究所及び日本原子力研究開発機構核燃料サイクル工学研究所のデータは、それぞれ以下のホームページでも掲載されている。

日本原子力研究開発機構原子力科学研究所

<http://erms.jaea.go.jp/Chart.htm>

日本原子力研究開発機構核燃料サイクル工学研究所

http://www.jaea.go.jp/04/ztokai/kankyo/realtime/tbi_10mStPo01.html

福島第一原子力発電所の20km以遠のモニタリング結果について

平成23年4月12日 19時00分現在
文 部 科 学 省

○文部科学省が集計した結果 注)太下線データが今回追加分

- * 1 GM(ガイガーミューラー計数管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値
- * 4 測定時間内における測定値の変動範囲

測定場所 (福島第一発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定エリア【1】 福島市杉葉町 (約60km北西)	4月12日9時48分	2.0 ^{*2}	降雨なし	日本原子力研究開発機構
測定エリア【7】 双葉郡川内町川内東線 (約35km北)	4月12日16時48分	0.6 ^{*2}	降雨なし	日本原子力研究開発機構
測定エリア【13】 田村市常葉町西向屋形 (約40km西)	4月12日11時18分	1.3 ^{*2}	降雨なし	文部科学省
測定エリア【14】 田村市常葉町常葉内町 (約35km西)	4月12日16時32分	0.4 ^{*2}	降雨なし	文部科学省
測定エリア【21】 双葉郡浪江町浪江東線 (約30km北西)	4月12日15時28分	3.7 ^{*2}	降雨なし	文部科学省
測定エリア【31】 双葉郡浪江町浪江北線 (約20km北西)	4月12日15時59分	12.3 ^{*2}	降雨なし	文部科学省
測定エリア【32】 双葉郡浪江町浪江北線 (約20km北西)	4月12日16時20分	26.4 ^{*2}	降雨なし	文部科学省
測定エリア【33】 相馬郡飯館村長堤 (約30km北西)	4月12日16時36分	15.6 ^{*2}	降雨なし	文部科学省
測定エリア【34】 双葉郡浪江町浪江本線 (約20km北西)	4月12日11時14分	5.8 ^{*2}	降雨なし	文部科学省
測定エリア【38】 いわき市四倉町白岩保木田 (約35km南)	4月12日11時38分	0.8 ^{*2}	降雨なし	日本原子力研究開発機構
測定エリア【39】 相馬市山上上並木 (約45km北)	4月12日17時22分	0.6 ^{*2}	降雨なし	日本原子力研究開発機構
測定エリア【41】 田村市常盤町古道寺ノ原 (約20km西)	4月12日13時10分	0.7 ^{*2}	降雨なし	電力会社
測定エリア【41】 田村市常盤町古道寺ノ原 (約20km西)	4月12日9時30分	0.7 ^{*2}	降雨なし	電力会社
測定エリア【42】 田村市常盤町山根重園 (約30km西)	4月12日13時30分	0.8 ^{*2}	降雨なし	電力会社
測定エリア【42】 田村市常盤町山根重園 (約30km西)	4月12日9時50分	0.8 ^{*2}	降雨なし	電力会社
測定エリア【43】 双葉郡川内町下川内東線 (約20km南西)	4月12日15時00分	0.4 ^{*2}	降雨なし	電力会社
測定エリア【43】 双葉郡川内町下川内東線 (約20km南西)	4月12日11時00分	0.4 ^{*2}	降雨なし	電力会社
測定エリア【44】 いわき市大久保町大久保ノ原 (約20km南)	4月12日13時00分	0.7 ^{*2}	降雨なし	電力会社
測定エリア【44】 いわき市大久保町大久保ノ原 (約20km南)	4月12日10時00分	0.7 ^{*2}	降雨なし	電力会社
測定エリア【45】 双葉郡飯館町山根重山 (約20km南)	4月12日13時28分	1.0 ^{*2}	降雨なし	電力会社
測定エリア【45】 双葉郡飯館町山根重山 (約20km南)	4月12日10時27分	1.0 ^{*2}	降雨なし	電力会社
測定エリア【46】 伊達郡川俣町山本原出山 (約30km北西)	4月12日13時20分	4.6 ^{*2}	降雨なし	電力会社
測定エリア【46】 伊達郡川俣町山本原出山 (約30km北西)	4月12日10時30分	4.6 ^{*2}	降雨なし	電力会社
測定エリア【51】 田村郡小野町小野町飯館 (約40km南西)	4月12日13時57分	0.2 ^{*3}	降雨なし	福島県
測定エリア【51】 田村郡小野町小野町飯館 (約40km南西)	4月12日10時49分	0.2 ^{*3}	降雨なし	福島県
測定エリア【52】 田村市船形町船形馬場川原 (約40km西)	4月12日14時32分	0.3 ^{*3}	降雨なし	福島県
測定エリア【52】 田村市船形町船形馬場川原 (約40km西)	4月12日11時15分	0.4 ^{*3}	降雨なし	福島県
測定エリア【61】 相馬郡飯館村八木沢 (約40km北西)	4月12日15時13分	5.2 ^{*3}	降雨なし	福島県
測定エリア【61】 相馬郡飯館村八木沢 (約40km北西)	4月12日12時55分	5.0 ^{*3}	降雨なし	福島県
測定エリア【62】 相馬郡飯館村栗野大館堂 (約40km北西)	4月12日15時26分	6.3 ^{*3}	降雨なし	福島県
測定エリア【62】 相馬郡飯館村栗野大館堂 (約40km北西)	4月12日12時44分	5.9 ^{*3}	降雨なし	福島県
測定エリア【63】 相馬郡飯館村二枚楯 (約45km北西)	4月12日15時55分	2.1 ^{*3}	降雨なし	福島県
測定エリア【63】 相馬郡飯館村二枚楯 (約45km北西)	4月12日11時30分	1.4 ^{*3}	降雨なし	福島県
測定エリア【71】 双葉郡広野町下北迫菅代 (約25km南)	4月12日12時16分	0.8 ^{*2}	降雨なし	日本原子力研究開発機構

- * 1 GM(ガイガーミュラー計数管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値
- * 4 測定時間内における測定値の変動範囲

測定場所 (福島第1発電所からの距離)	測定日時	数値 (マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定エリア【71】 双葉郡広野町下北迫苗代町 (約25km南)	4月12日7時50分	0.6 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【72】 いわき市久之原町上之原字大塚原 (約25km南)	4月12日15時07分	1.0 ⁺²	降雨なし	日本原子力研究開発機構
測定エリア【72】 いわき市久之原町上之原字大塚原 (約25km南)	4月12日8時20分	0.2 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【73】 いわき市四倉町 (約35km南)	4月12日11時53分	1.0 ⁺²	降雨なし	文部科学省
測定エリア【73】 いわき市四倉町 (約35km南)	4月12日8時32分	0.3 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【74】 いわき市小川町高萩 (約35km南)	4月12日12時23分	0.2 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【75】 いわき市内郷御殿町 (約45km南)	4月12日7時00分	0.3 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【76】 双葉郡川内村上川内早渡 (約20km南西)	4月12日11時13分	0.4 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【77】 いわき市小川町上小川 (約25km南西)	4月12日11時34分	1.2 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【80】 南相馬市原町区高見町 (約25km北)	4月12日16時12分	1.0 ⁺²	降雨なし	日本原子力研究開発機構
測定エリア【80】 南相馬市原町区高見町 (約25km北)	4月12日8時26分	0.1 ⁺²	降雨なし	警察(NBC対策部隊)
測定エリア【84】 いわき市三和町釜塚 (約40km南西)	4月12日10時57分	0.6 ⁺²	降雨なし	日本原子力研究開発機構
測定エリア【85】 福島市荒井原宿 (約80km北西)	4月12日12時00分	0.1 ⁺²	降雨なし	防衛省
測定エリア【85】 福島市荒井原宿 (約80km北西)	4月12日6時00分	0.3 ⁺²	降雨なし	防衛省
測定エリア【86】 郡山市大槻町五工門柱 (約55km西)	4月12日12時00分	0.5 ⁺²	降雨なし	防衛省
測定エリア【86】 郡山市大槻町長石工門柱 (約55km西)	4月12日6時00分	1.2 ⁺²	降雨なし	防衛省
測定エリア【87】 双葉郡川内村上川内花ノ内 (約30km南西)	4月12日14時00分	1.1 ⁺²	降雨なし	防衛省
測定エリア【87】 双葉郡川内村上川内花ノ内 (約30km南西)	4月12日6時00分	1.1 ⁺²	降雨なし	防衛省
測定エリア【104】 双葉郡高根村大字原合字原点 (約15km北西)	4月12日13時19分	2.4 ⁺²	降雨なし	文部科学省

環境放射能水準調査結果(定時降下物)
(4月11日9時~4月12日9時採取)

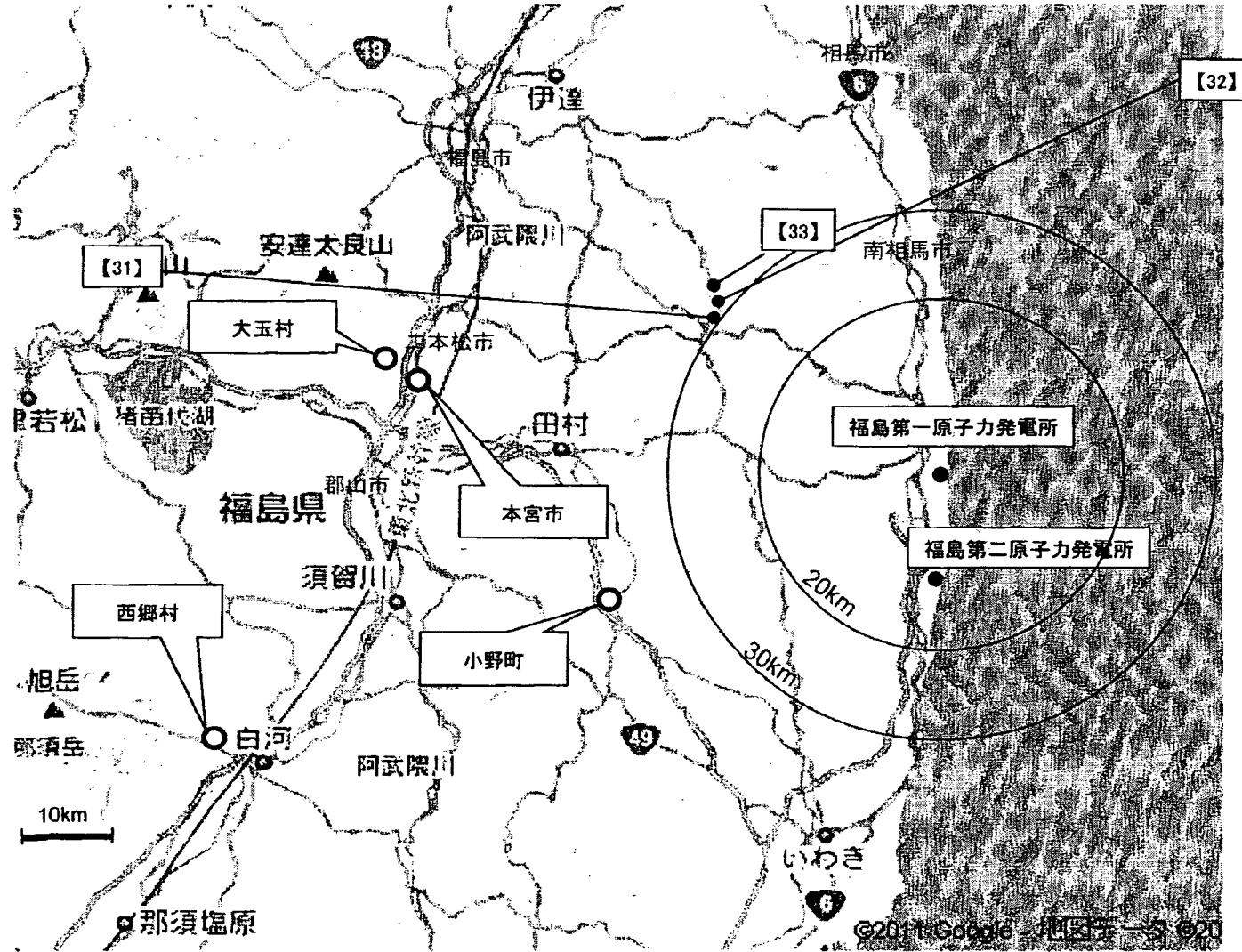
H23.4.12 19:00

(MBq/km²)

	都道府県名	定時降下物		
		I-131	Cs-137	備考
1	北海道(札幌市)	不検出	不検出	
2	青森県(青森市)	不検出	不検出	
3	岩手県(盛岡市)	不検出	不検出	
4	宮城県	-	-	震災被害によって計測不能
5	秋田県(秋田市)	不検出	不検出	
6	山形県(山形市)	不検出	180	
7	福島県(福島市)	-	-	現在測定中
8	茨城県(ひたちなか市)	460	700	
9	栃木県(宇都宮市)	11	31	
10	群馬県(前橋市)	不検出	不検出	
11	埼玉県(さいたま市)	25	107	
12	千葉県(市原市)	64	470	
13	東京都(新宿区)	100	169	
14	神奈川県(茅ヶ崎市)	5.0	不検出	
15	新潟県(新潟市)	不検出	不検出	
16	富山県(射水市)	不検出	不検出	
17	石川県(金沢市)	不検出	不検出	
18	福井県(福井市)	不検出	不検出	
19	山梨県(甲府市)	不検出	不検出	
20	長野県(長野市)	不検出	不検出	
21	岐阜県(各務原市)	不検出	不検出	
22	静岡県(御前崎市)	不検出	不検出	
23	愛知県(名古屋)	不検出	不検出	
24	三重県(四日市市)	不検出	不検出	
25	滋賀県(大津市)	不検出	不検出	
26	京都府(京都市)	不検出	不検出	
27	大阪府(大阪市)	不検出	不検出	
28	兵庫県(神戸市)	不検出	不検出	
29	奈良県(奈良市)	不検出	不検出	
30	和歌山県(和歌山市)	不検出	不検出	
31	鳥取県(東伯郡)	不検出	不検出	
32	島根県(松江市)	1.6	不検出	
33	岡山県(岡山市)	不検出	不検出	
34	広島県(広島市)	不検出	不検出	
35	山口県(山口市)	-	-	機器調整中
36	徳島県(徳島市)	不検出	不検出	
37	香川県(高松市)	不検出	不検出	
38	愛媛県(八幡浜市)	不検出	不検出	
39	高知県(高知市)	不検出	不検出	
40	福岡県(太宰府市)	不検出	不検出	
41	佐賀県(佐賀市)	不検出	不検出	
42	長崎県(大村市)	不検出	不検出	
43	熊本県(宇土市)	不検出	不検出	
44	大分県(大分市)	不検出	不検出	
45	宮崎県(宮崎市)	不検出	不検出	
46	鹿児島県(鹿児島市)	不検出	不検出	
47	沖縄県(南城市)	不検出	不検出	

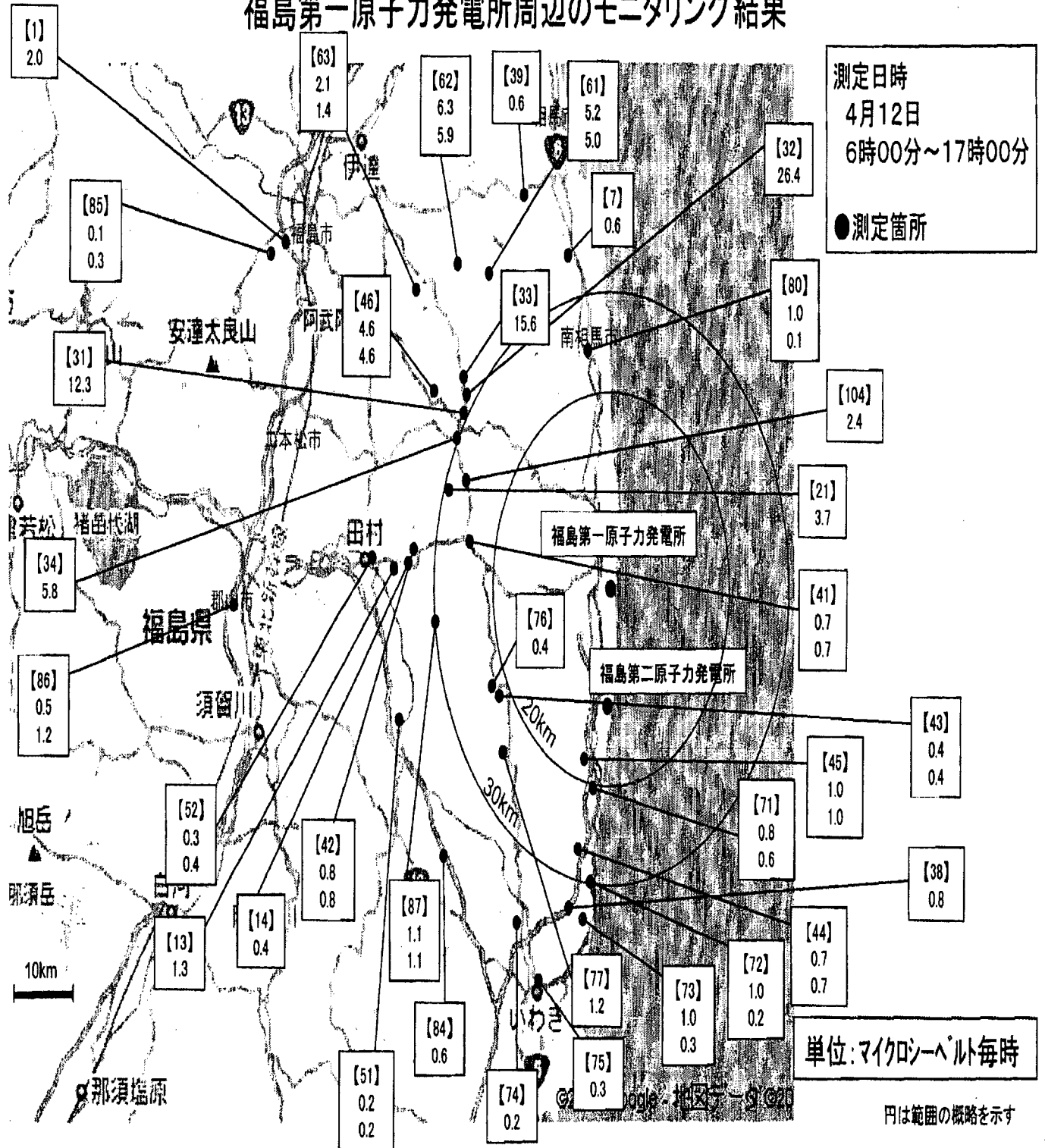
*文部科学省が各都道府県等からの報告に基づき作成

土壌及び植物試料の採取場所



市町村は役所・役場の所在地を示す
 円は範囲の概略を示す

福島第一原子力発電所周辺のモニタリング結果



From: Naples, Elmer M SES SEA 08 NR (b)(6)
Sent: Friday, March 18, 2011 6:58 AM
To: RST01 Hoc
Subject: FW: Final Executive Summary
Attachments: Fukushima Reactor and Water Pool Release Executive Summary - Final.doc

Please pass to Tom Roberts (Naval Reactors).

-----Original Message-----

From: Conran, Thomas C SES CIV NAVSEA 08 NR
Sent: Friday, March 18, 2011 6:47
To: Trautman, Stephen J SES CIV NAVSEA 08 NR; Naples, Elmer M SES SEA 08 NR; Burrows, Charles W SES CIV NAVSEA 08 NR
Subject: FW: Final Executive Summary

For info

-----Original Message-----

From: Conran, Thomas C SES CIV NAVSEA 08 NR
Sent: Friday, March 18, 2011 6:39
To: Giardina, Timothy M RADM COMPACFLT, N01; Caldwell, James F RADM CSP, N00 (b)(6)
Cc: Warner, David S NRR Pearl Harbor; Grooms, Bruce E RADM CNO, N3N5 B; Richardson, John M VADM COMSUBFOR, N00
Subject: FW: Final Executive Summary

Tim/Frank/Troy,

Attached is final paper which attempts to answer your questions as best we can. There are lots of uncertainties which make it difficult to predict the future

Tim: I would ask you to pass to ADM Walsh after you digest

Troy: I would ask you to pass to LTGEN Fields and then he could pass to ADM Willard

This paper has been passed to other senior leadership

If you have questions call into ECC.
tom

From: RST01 Hoc
Sent: Wednesday, March 23, 2011 3:24 PM
To: INPOERCAssistance; ge.hitachinuclearresponseteam@ge.com; Versluis, Rob; RST01B Hoc
Subject: FW: RFI water flow through reactors

All,

Please take a look at the email string below. USFJ is asking about fresh water needs long term. My second response is an effort to give them an idea of what flow rates are required for short/long term cooling.

Please feel free to add additional information as you see fit.

Thanks,
NRC reactor safety team

-----Original Message-----

From: RST01 Hoc
Sent: Wednesday, March 23, 2011 3:20 PM
To: 'Young, Samuel E LCDR USN SJFHQ'
Cc: Capria, Frederick CAPT; Fallon, Russell J CDR USN USFJ Det 105; Galligher, Brian T LTJG USN USFJ J2; Mercer, Robert LCDR USN USFJ J3; Opfer, Matthew D LT USN USFJ J3; Poe, Timothy CDR USN; Casto, Chuck; Robinson, Alexis M CTR DTRA; Spencer, Julie A. CDR USN; Wright, Curry D Civ DTRA; Nakanishi, Tony; Devercelly, Richard; Foster, Jack; Cook, William
Subject: RE: RFI water flow through reactors

LCDR Young,

Answers to your specific questions are below. Additionally, I will offer the following and cc our NRC team in Japan to see what other information they can provide.

Right now, we believe the decay heat loads in Units 1-3 are at a level where they require approximately 25 gpm (gallons per minute) per unit for decay heat removal.

In addition, the Spent Fuel Pool in Unit 4 requires about 70 gpm, and (conservatively) the remaining SFPs need about 25 gpm apiece.

So, you end up with a ballpark figure of 220 gpm which would need to be distributed as noted above across the 4 units, and this is a continuous flow that would be diminished as decay heat loads decrease. You can extrapolate this value out to calculate gallons/hr/day/week etc.

The above approximations do not take into account any needs to flush salt deposits or provide large re-fill quantities of water, etc.

I will also be forwarding this information to our industry partners to allow them to weigh in.

I hope this is the kind of feedback you are looking for.

www-31

Regards,
Eric Thomas
NRC Reactor Safety Team

-----Original Message-----

From: Young, Samuel E LCDR USN SJFHQ [mailto:(b)(6)]

Sent: Wednesday, March 23, 2011 2:35 PM

To: RST01 Hoc

Cc: Capria, Frederick CAPT; Fallon, Russell J CDR USN USFJ Det 105; Galligher, Brian T LTJG USN USFJ J2; Mercer, Robert LCDR USN USFJ J3; Opfer, Matthew D LT USN USFJ J3; Poe, Timothy CDR USN; Robinson, Alexis M CTR DTRA; Spencer, Julie A. CDR USN; Wright, Curry D Civ DTRA

Subject: RE: RFI water flow through reactors

Mr. Thomas,

Appreciate the assistance. Here are the plant parameters from 1200I Wed 23Mar. This shows a flow of 530 gal/hr for Rx 1 and 3200 gal/hr for Rx 2. We don't have a value for Rx 3.

How full do you think the suppression pools were at the start of this accident? With a total of 800,000 gals we hopefully will not be totally filling the suppression pools during the course of this accident.

A: The torus was approximately 1/2 full at the start of the accident. In the long term, we would plan on completely filling the suppression pool (also called a torus in a BWR Mark 1 containment) along with the Drywell, which is an additional significant volume (500,000 gallons).

How is the seawater that is being pumped into the reactor via the emergency core cooling system getting released into the suppression pools? Is it only via the over pressurization system relief valves that discharge into the suppression pools?

A: Water flows from the Reactor Coolant System to the suppression pool via the safety relief valves.

Very Respectfully,
LCDR Sam Young

-----Original Message-----

From: RST01 Hoc [mailto:RST01.Hoc@nrc.gov]

Sent: Thursday, March 24, 2011 2:34 AM

To: Young, Samuel E LCDR USN SJFHQ

Subject: RE: RFI water flow through reactors

LCDR Young.

BLUF: Freshwater barge is better because it has a larger capacity than tanker trucks, and we need a lot of water.

DETAILS:

We don't have a good diagram to show you exactly how water is being supplied at this point.

I think the barge, or whatever holds the most fresh water, is the best option. To give you an idea, the suppression pools are each about 800,000 gallons. The reactor and associated piping are much less in volume, but we are talking about flushing seawater and its deposits out of several reactors and suppression pools, so several million gallons of water once all is said and done.

18 tons/hour flowrate question...whether this is a metric ton (2200lbs) or an English ton (2000lbs), my quick math says we are in the 500 gallon/min range. This is the approximate flowrate of the Reactor Core Isolation Cooling pump in the emergency core cooling system, so very much within the realm of possibility.

I hope this info is helpful. Contact me if you need more.

Regards,
Eric Thomas
NRC Reactor Safety Team

-----Original Message-----

From: Young, Samuel E LCDR USN SJFHQ [mailto:(b)(6)]]
Sent: Wednesday, March 23, 2011 10:19 AM
To: (b)(6) RST01 Hoc; LIA01.Hoc@nrc.gov
Cc: Mercer, Robert LCDR USN USFJ J3; Aviles, Armando LT USN; Galligher, Brian T LTJG USN USFJ J2; Mercer, Andrew J Jr Maj USAF AFWA Det 1, 2 WS/CC; Opfer, Matthew D LT USN USFJ J3; Poe, Timothy CDR USN; Robinson, Alexis M CTR DTRA; Capria, Frederick CAPT; Fallon, Russell J CDR USN USFJ Det 105
Subject: RFI water flow through reactors

NRC RST, NACCC,

USFJ is working to provide the MOD with supplies of freshwater through barges and trucks. We need information to try to estimate how much freshwater the Japanese are going to need to flush through the reactors. To help inform what kind of supply, please assist in answering the following questions.

1. What is the water volume of the reactor cores with and without the suppression pool/torus?
2. Provide a line diagram of how the seawater is being inserted into the reactors. We have been told that fire pumper trucks are pumping the water through the fire suppression system that is connected into the emergency cooling line which supplies the core header spray. We do not have diagrams which show this path.
3. The flow rate through reactor 2 has been reported to be as high as 18tons/hour. Where do you estimate that much water is going? The suppression pool is probably damaged, but the path from inside the reactor vessel out through the suppression pool is not clear to us.

We are trying to provide freshwater by Friday so we will need these estimates as soon as possible.

Very Respectfully,
LCDR Sam Young
USFJ CAT RCMT
DSN: 315-225-7345/3397

Eric Thomas
NRC Reactor Safety Team

-----Original Message-----

From: Young, Samuel E LCDR USN SJFHQ [mailto:] (b)(6)

Sent: Wednesday, March 23, 2011 10:19 AM

To: (b)(6) RST01 Hoc; LIA01.Hoc@nrc.gov

Cc: Mercer, Robert LCDR USN USFJ J3; Aviles, Armando LT USN; Galligher, Brian T LTJG USN USFJ J2; Mercer, Andrew J Jr Maj USAF AFWA Det 1, 2 WS/CC; Opfer, Matthew D LT USN USFJ J3; Poe, Timothy CDR USN; Robinson, Alexis M CTR DTRA; Capria, Frederick CAPT; Fallon, Russell J CDR USN USFJ Det 105

Subject: RFI water flow through reactors

NRC RST, NACCC,

USFJ is working to provide the MOD with supplies of freshwater through barges and trucks. We need information to try to estimate how much freshwater the Japanese are going to need to flush through the reactors. To help inform what kind of supply, please assist in answering the following questions.

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3. The flow rate through reactor 2 has been reported to be as high as 18tons/hour. Where do you estimate that much water is going? The suppression pool is probably damaged, but the path from inside the reactor vessel out through the suppression pool is not clear to us.

We are trying to provide freshwater by Friday so we will need these estimates as soon as possible.

Very Respectfully,
LCDR Sam Young
USFJ CAT RCMT
DSN: 315-225-7345/3397

From: Modeen, David <dmodeen@epri.com>
Sent: Friday, March 18, 2011 4:10 PM
To: RST01 Hoc; RST07 Hoc
Subject: Potential for SFP Criticality -- very unlikely
Attachments: Fukushima Spent Fuel Pool Rubble Pellet for John KesslerMarch 18.doc

Ladies and Gentlemen:

As part of discussions earlier this morning among EPRI, NRC HOC and Naval Reactors on the topic of SFP cooling recommendations, I mentioned to Joe Williams that we were assessing likelihood of SFP criticality under degraded conditions. Our conclusion is that a criticality is very unlikely.

The relevant information is:

1. EPRI Report entitled "Fuel Relocation Effects on Transportation Packages" available at http://my.epri.com/portal/server.pt?Abstract_id=000000000001015050 or go to EPRI website—www.epri.com and enter the Report ID 1015050 into the search box. The report is freely available to the public and can be downloaded.
2. Assessment of relevance of the original EPRI report to spent fuel pools – see attachment

If you have any questions, please direct any questions to John Kessler, EPRI at 704-595-2737.

Dave

Director, External Affairs
EPRI Nuclear Power Sector
704-595-2670 (work)
(b)(6) (cell)
dmodeen@epri.com

March 18, 2011

EPRI performed a study for transportation casks that looked into the effects of fuel relocation upon the criticality and shielding of the cask. The fuel rods were assumed to be broken so that pellets came free from the rods and assumed the most reactive array possible. This array is a dodecahedral array, which is hexagonal in two axes and square for the third axis. The report looked at various conditions, but for Fukushima the one that matters is just the comparison of the fuel in its original condition ($k_{eff} < 0.95$) and in the optimum dodecahedral lattice versus a rubble bed. The fuel that was analyzed in the EPRI report 1015050, Chapter 4, was standard Westinghouse PWR fuel enriched to the maximum of five weight percent, which will bound the conditions of the fuel at Fukushima. The criticality analysis assumed free-floating pellets at optimum moderation, which is extremely unlikely because there are no support structures holding the pellets suspended in such a geometrically perfect lattice. The calculations for a Burnup Credit Cask are very similar for a Spent Fuel Pool, since both contain neutron absorber panels in their structures.

Fuel Condition	Reactivity In Spent Fuel Pool
As-Built, Undamaged	< 0.95, Nominal
Dodecahedral Lattice of "Rubble" Fuel Pellets	+ 0.011 reactivity increase
Fuel Pellet Heap (Collapsed by Gravity)	- 0.120 reactivity decrease

There is a potential reactivity increase for the dodecahedral geometric lattice, but for realistic fuel conditions of a fuel heap the rubble fuel pellets become substantially less reactive and the actual expected configuration of damaged fuel is more subcritical than the original fuel. Note also that the chlorine in sea water is a neutron absorber and will cause a less reactive condition than fresh water, which was used in the criticality calculations of the EPRI report. (The EPRI report also evaluated a fuel condition where the rods remain intact, but expand to an optimum lattice pitch with all grids removed, which yields a positive reactivity increase but that case is also a perfect lattice and does not result in a k_{eff} increase greater than the administrative margin of 0.05 in any case.)

An Oak Ridge Report [NUREG/CR-6835 ORNL/TM-2002/2], yielded larger reactivity increases (+0.0233) due to different assumptions used in the report, but did not evaluate a collapsed heap of fuel pellets. Please note that the Oak Ridge report also calculated a larger potential increase in reactivity for fresh fuel, which is not representative of a Spent Fuel Pool that contains irradiated, burned spent fuel assemblies.

Thus the potential for criticality of damaged fuel is highly unlikely, requiring a perfect dodecahedral lattice geometry and fresh water, and the maximum potential reactivity increase would still yield a k_{eff} less than 1.0 for spent fuel. The expected condition of pellet heaps is much more subcritical than the original Spent Fuel Pool limit.

From: Modeen, David <dmodeen@epri.com>
Sent: Friday, March 18, 2011 6:08 AM
To: RST01 Hoc
Cc: Edsinger, Kurt; Wall, James; Machiels, Albert
Subject: RE: Spent Fuel Pool Planning Bridge 0800 March 18

I have it. Thanks. EPRI will have Kurt Edsinger, Director, Nuclear Fuel, Joe Wall, Project Manager and possibly Albert Machiels, Senior Technical Executive on the call along with me.

Dave

Director, External Affairs
EPRI Nuclear Power Sector
704-595-2670 (work)
(b)(6) (cell)
dmodeen@epri.com

From: RST01 Hoc [mailto:RST01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 1:22 AM
To: inpoerc@inpo.org; inpoercassistance@inpo.org; ryanrd@wano.org; Modeen, David; Laur, Steven; Tinkler, Charles; Uhle, Jennifer; joseph.fitzgerald.contractor@unnpp.gov; paul.scheinert.contractor@unnpp.gov
Cc: RST01 Hoc
Subject: Spent Fuel Pool Planning Bridge 0800 March 18

All,
This call will take place at 0800 on March 18, 2011 to discuss the SFP issues.

Call in number (b)(6)
Pin: (b)(6)

From: Steinhurst, Laurel A CIV SEA 08 NR (b)(6)
Sent: Friday, March 18, 2011 9:02 AM
To: RST01 Hoc
Cc: Vavoso, Thomas G CIV NAVSEA, 08; Szeto, Gordon CIV SEA 08 NR; Steinhurst, Laurel A CIV SEA 08 NR
Subject: NRC recommendations on pool cooling - NR distribution

NRC will be routing a paper with recommendations for Unit #4's pool response for participants comments soon. Please put the CC addressees from this email on distribution for that email as well as the Naval Reactors representative in the NRC ECC.

Laurel Steinhurst
Naval Reactors

(b)(6) mil phone

-----Original Message-----

From: RST01 Hoc [mailto:RST01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 8:36 AM
To: Steinhurst, Laurel A CIV SEA 08 NR
Subject: RE: request for EPRI contact email and position paper

dmodeen@epri.com

Joe Williams
RST Coordinator

-----Original Message-----

From: Steinhurst, Laurel A CIV SEA 08 NR [mailto:(b)(6)]
Sent: Friday, March 18, 2011 8:20 AM
To: RST01 Hoc
Cc: Vavoso, Thomas G CIV NAVSEA, 08
Subject: request for EPRI contact email and position paper

EPRI has forwarded a position paper with 4 options for pool #4. May we have copy or email address for Dave Muldeen at EPRI (or proper contact info)?

Laurel Steinhurst
Naval Reactors

From: RMTPACTSU_ELNRC <RMTPACTSU_ELNRC@ofda.gov>
Sent: Friday, March 18, 2011 7:12 PM
To: LIA11 Hoc; PMT01 Hoc; RST01 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA12 Hoc; LIA04 Hoc
Cc: Gott, William; Marshall, Jane; Grant, Jeffery
Subject: FW: AMS flight data
Attachments: AMSData_18Mar2011 Report.ppt

FYI...I had to shake this out of them....hope I am not the only source of this.

From: RMTPACTSU_DOE
Sent: Friday, March 18, 2011 7:10 PM
To: RMTPACTSU_ELNRC
Subject: FW: AMS flight data

From: Stevenson, Bill [mailto:William.Stevenson@dhs.gov]
Sent: Friday, March 18, 2011 5:53 PM
To: RMTPACTSU_DOE
Subject: Fw: AMS flight data

Bill Stevenson
DHS/FEMA
National IMAT
William.stevenson@dhs.gov
202-212-3795

Sent using mobile device

From: Judd, Diana L
To: NRCC-11-RADT
Sent: Fri Mar 18 17:52:09 2011
Subject: Fw: AMS flight data

FYSA

Diana Judd
DHS/FEMA
National IMAT Central
Acting Planning Section Chief/
Situation Unit Leader
540-247-3639 - Cell

Sent using BlackBerry

From: FEMA-NWCC

To: FEMA-NRCC-planchief; CBRNE; Costello, Robert L-FEMA; Dewar, James; IMAT-EAST; LNO_USAID <RMTPACTSU_FEMA@ofda.gov>; Monroe, Logan; Washington, Russell; Widomski, Michael

Sent: Fri Mar 18 17:48:51 2011

Subject: FW: Email to Distro List

V/R

Wanda Scott

Watch Officer

National Watch Center

Response Directorate

U.S. Department of Homeland Security - FEMA

Office: 202-646-2828

Unsecure Fax: 202-646-4617

fema-nwc@dhs.gov

From: NITOPS [mailto:NITOPS@nnsa.doe.gov]

Sent: Friday, March 18, 2011 2:18 PM

To: (b)(6)

(b)(6)

(b)(6)

SCHU; Poneman, Daniel; DAgostino, Thomas; Hurlbut, Brandon; OConnor, Rod; Aoki, Steven; Krol, Joseph; Wilber, Deborah; Lippert, Alice (OGA); NITOPS; Leistikow, Dan; Sandalow, David; Richert, Scott T. (IN); Petish, Serge (IN); Atkins, Victor C. (IN); McKeown, Mike (IN); NOC SWO; NITOPS; 'jroos@state.gov'; 'eoc.epahq@epa.gov'; 'Irizarry.gilberto@epa.gov'; 'tulis.dana@epa.gov'; 'veal.lee@epa.gov'; 'Robert.sweet@faa.gov'; 'fema-nwc@dhs.gov'; (b)(6) 'rmtfactsu@ofda.gov'; 'Steven.fine@noaa.gov'; 'sdm@noaa.gov'; 'hoo.hoc@nrc.gov'; 'dartdoeliason1@ofda.gov'; (b)(6) 'taskforce-1@state.gov'; '1tfg@state.gov'; 'Robert.katz@montgomerycountymd.gov'; (b)(6) 'vinetta.howardking@fda.hhs.gov'; 'mark.russo@fda.hhs.gov'; 'Wayne.Gorski@fda.hhs.gov'; (b)(6) '9-AWA-ATS-ATASC@faa.gov'; 'cym3@cdc.gov';

'NOCMailbox@nga.mil'; 'IOC@treasury.gov'; 'na30ecc@nr.doe.gov'; (b)(6) 'pmt12.hoc@nrc.gov';

(b)(6) 'bitterr@state.gov'; 'JapanEmbassyTaskForce@state.gov'; Fitzgerald, Paige; 'OpsCenter@dm.usda.gov'; 'sioc@ic.fbi.gov'; 'hhs.soc@hhs.gov'; 'eocreport@cdc.gov'

Cc: Miller, Neile; Johnson, Shane; Connery, Joyce; Kelly, John E (NE); Alldridge, David; Lyons, Peter; Owens, Missy; Adams, Ian; Sandalow, David; Smith-Kevern, Rebecca; Golub, Sai; Sunshine, Alexander; Deeney, Chris; Huizenga, David; Fremont, Douglas; Allen, George; Looney, Heather; White, William; Underwood, Jefferson; Durbin, Karyn; LeChien, Keith; Rasar, Kimberly; Whitney, Mark; Thompson, Michael; Ciganer, Patrick; Adamson, Paul; Calbos, Philip; Niedzielski-Eichner, Phillip; Wright, Rasheem; Hanrahan, Robert; Shrum, Scott; Goodrum, Steve; Mustin, Tracy; Visosky, Mark; Aoki, Steven; LaVera, Damien; Mueller, Stephanie; Leistikow, Dan; Reynolds, Tom; Hanrahan, Robert; Miotla, Dennis; Elkind, Jonathan; O'Connor, Tom (NE-HQ); Freshwater, David

Subject: FW: Email to Distro List

Data from last night's (17MAR11 EDT) AMS flights.

NITOPS

Nuclear Incident Team (NIT)

Office of Emergency Response (NA-42)

National Nuclear Security Administration

U.S. Department of Energy

nitops@nnsa.doe.gov

nit@doe.sgov.gov

202-586-8100

From: NITOPS
Sent: Friday, March 18, 2011 1:50 PM
To: NITOPS
Subject: Email to Distro List

Per Dave Bowman.

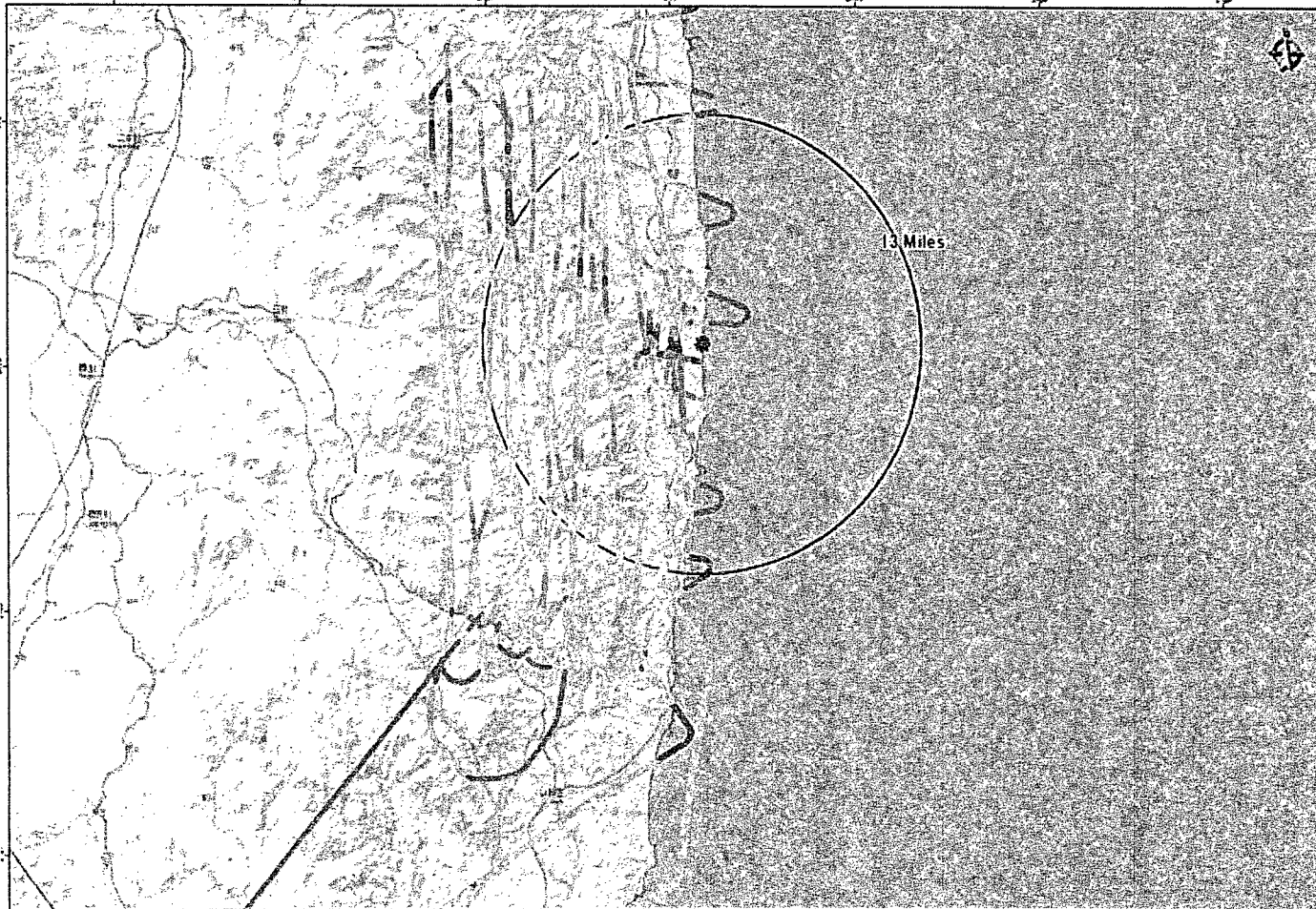
AMS Measurements

- DOE Team AMS Operations 17-18 March 2011
 - Two missions using military C-12 aircraft (fixed wing)
 - Serpentine and parallel patterns in the reactor vicinity at an altitude of 1000 ft.
 - UH-1 aircraft (helicopter)
 - Flights over U.S. facilities, including Embassy and military bases, at an altitude of 500 ft.
- Plot interpretation
 - Areas exceeding EPA Emergency Phase PAGs are shown in red and orange.
 - AMS data is presented as exposure rate 1 meter from the ground at the time the measurements occurred.
 - All measured exposure rates are assumed to be due to ground deposition. This is a conservative estimate because some of the measured dose is airborne. Measurements of ground truth under the flight path will be taken during the next 24 hours.

Aerial Monitoring Results

Exposure Rate

FUKUSHIMA DAICHI
JAPAN



★ FUKUSHIMA DAICHI

C-12 Aerial Data

Exposure Rate at 1 meter (mR/hr)

- < 0.02
- 0.02 - 0.10
- 0.10 - 1.00
- 1.00 - 5.00
- 5.00 - 10.00
- 10.00 - 20.00
- 20.00 - 32.42

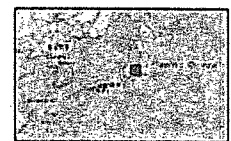
Notes of Consideration and Notes:
- This product is a derivative of the data collected by the exposure rate at 1 meter in the vicinity of the ground.
- CAUTION should be used when interpreting the exposure rate at 1 meter in the vicinity of the ground.
- The data is based on the data collected by the exposure rate at 1 meter in the vicinity of the ground.
- The data is based on the data collected by the exposure rate at 1 meter in the vicinity of the ground.

Not For Public Distribution

Usage Information:
- This product is a derivative of the data collected by the exposure rate at 1 meter in the vicinity of the ground.
- This map was produced by the Group under the authority of the Department of Energy, Environment and Safety (DEES) of the Ministry of Natural Resources and Environment (MRE) of the Government of Japan.
- The data is based on the data collected by the exposure rate at 1 meter in the vicinity of the ground.

File name: FukushimaDaichiAerialMonitoringResults.pdf
File path: C:\Users\Public\Desktop\FukushimaDaichiAerialMonitoringResults.pdf

1:190,000



Map created on 3/19/2011 4:08:03 AM PST
Check for revision in 12 hours

~~Official Use Only~~

Nuclear Incident Team DOE NIT
Contact (202) 585 - 8100

~~Official Use Only~~

Conclusions from Aerial Measurements

- The greatest concentration of contaminated material is located to the northwest of the accident site
- There is a narrow band to the northwest beyond 13 miles from the site where the integrated 4-day doses approach or exceed 1 Rem
- As of 18 March the aerial measurements have not covered a large enough geographical location to completely map out the extent of the contamination

From: Dyer, Jim
Sent: Tuesday, April 12, 2011 12:04 PM
To: OST01 HOC
Cc: Matheson, Mary; Brown, Milton; Mitchell, Reggie; Kaplan, Michele
Subject: FW: 1000 Conference call

Please add to the record for Task Tracker Item 4604.

-----Original Message-----

From: Brown, Milton
Sent: Tuesday, April 12, 2011 11:12 AM
To: Dyer, Jim
Subject: FW: 1000 Conference call

FYI. Milton

-----Original Message-----

From: Matheson, Mary
Sent: Tuesday, April 12, 2011 11:00 AM
To: Kaplan, Michele; Mitchell, Reggie; Brown, Milton
Subject: FW: 1000 Conference call

Reggie,

I had a conference call with USAID today in the e-mail below is a summary of the call. I will continue to provide updates as elements are determined.

Mary

-----Original Message-----

From: Matheson, Mary
Sent: Tuesday, April 12, 2011 10:58 AM
To: Kozal, Jason; 'RMTPACTSU_AC@ofda.gov'; 'RMTPACTSU_RM@ofda.gov'
Subject: RE: 1000 Conference call

Thank you very much for the call this morning. Here is a summary of how I understood the transition will go.

Travelers (6) that are currently scheduled to travel starting on or around April 12 are:

Steve Reynolds (1)
Steve Garchow (2)
Carl Moore (3)
Jeff Mittman (4)
Heather Gepford (5)
Tony Huffert (6)

Newly identified travelers (3) leaving the later this week are:

Lupold (7)
Norwood (8)
Meighan (9)

Traveler Chuck Casto (10) has been in Japan for the duration

All of these travelers are scheduled to return starting May 3 through May 5.

The USAID humanitarian effort will end April 30, 2011.

NRC funding will begin May 1, 2011.

An Inter-Agency agreement will be established with USAID and NRC. The agreement establishes that NRC will cover the expenses for the (10) travelers identified above from May 1, 2011 until their return.

Expenses for the travelers include - Lodging the night of May 1 until the conclusion of trip, Per diem starting May 1 until the conclusion of the trip, Misc expenses from May 1, until the conclusion of the trip, return airfare for all 10 travelers listed above.

Additional expenses to be included in the IA are ICASS - Embassy Support for the month of May and June. Additional months will need an amendment to the IA.

Possible additions to the IA could be Interpreter services at approximately \$20K per month.

TAKE AWAYS:

- NRC to provide a summary of the conference call for all participants to review. - This e-mail is the summary
- NRC to determine if they can procure interpreter services separately.
- NRC to determine if Embassy support is necessary for future traveler's hotel bookings in Japan.
- USAID to provide draft IA.
- USAID to provide information on Visa access at Japan airports.
- USAID to provide information on interpreter service currently used

Thanks again for the call and clarification. Please let me know if I missed any actions.

Mary Matheson
301-415-8748

-----Original Message-----

From: Kozal, Jason
Sent: Tuesday, April 12, 2011 8:39 AM
To: Matheson, Mary; 'RMTPACTSU_AC@ofda.gov'; 'RMTPACTSU_RM@ofda.gov'
Subject: 1000 Conference call

Please call [redacted] (b)(6)

Pin code [redacted] (b)(6)

Sent from an NRC BlackBerry
Jason W Kozal

(9)(9)

From: LIA08 Hoc
Sent: Friday, March 18, 2011 4:57 PM
To: LIA01 Hoc
Cc: LIA06 Hoc
Subject: FW: Seismic Q&As March 17th 2am update
Attachments: NRC QA.doc

Ted, can you run this by your counterpart at DOE for a quick (15 minute) QV&V and let me know when that is done?
Thanks,
Rani

From: Thaggard, Mark
Sent: Friday, March 18, 2011 4:55 PM
To: LIA06 Hoc; LIA08 Hoc
Subject: Fw: Seismic Q&As March 17th 2am update

Sent from NRC blackberry
Mark Thaggard

(b)(6)

From: Milligan, Patricia
To: Thaggard, Mark
Sent: Fri Mar 18 16:44:07 2011
Subject: Fw: Seismic Q&As March 17th 2am update

Sent from my NRC Blackberry
Patricia A Milligan, CHP RPh

(b)(6)

From: Milligan, Patricia
To: Nelson, Robert
Sent: Fri Mar 18 16:16:09 2011
Subject: Fw: Seismic Q&As March 17th 2am update

Sent from my NRC Blackberry
Patricia A Milligan, CHP RPh

(b)(6)

From: Milligan, Patricia
To: Howe, Allen
Cc: McDermott, Brian
Sent: Fri Mar 18 12:51:23 2011
Subject: RE: Seismic Q&As March 17th 2am update

Allan
Please consider the attached question for the Q&As

From: Howe, Allen

Sent: Thursday, March 17, 2011 3:43 PM

To: Doane, Margaret; Westreich, Barry; Gratton, Christopher; Boska, John; Scott, Michael; Wittick, Susan; Merzke, Daniel; Deegan, George; Williams, Kevin; Milligan, Patricia; Bajwa, Chris; Andersen, James

Subject: FW: Seismic Q&As March 17th 2am update

Current version of Q&A from Ops center.

Allen

From: Kammerer, Annie

Sent: Thursday, March 17, 2011 2:36 AM

To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Gitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Niles; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Gitter, Joseph; Howe, Allen; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffrey; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly; Seber, Dogan; Ledford, Joey; Johnson, Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas

Subject: Seismic Q&As March 17th 2am update

All,

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Happy St. Paddy's Day. May the world (especially our friends in Japan) have the luck of the Irish today.

Cheers,
Annie

Dr. Annie Kammerer, PE
Senior Seismologist and Earthquake Engineer
US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555

(b)(6)

mobile
BB

From: Kammerer, Annie

Sent: Tuesday, March 15, 2011 3:41 AM

To: Hiland, Patrick; Skeen, David

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael

Subject: latest version of Q&As

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Q. Why did the NRC recommend evacuation out to 50 miles for American citizens in Japan when they would only recommend a 10 mile evacuation in the United States?

There are two emergency planning zones, a 10 mile EPZ for plume exposure and a 50 mile EPZ for food exposure. The 10 mile emergency planning zone is the area that was established as a basis for planning because the projected doses from most accident sequences would not exceed the Environmental protection agency protective action dose guidelines (1-5 rem) at 10 miles. However the 10 mile EPZ was always considered a base for emergency response that could be expanded if the situation warranted. The situation in Japan, with four reactors experiencing exceptional difficulties simultaneously, led to the decision to expand the EPZ beyond the 10 mile radius.

From: Kammerer, Annie
Sent: Friday, March 18, 2011 6:51 AM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Glitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffrey; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly; Seber, Dogan; Ledford, Joey; Johnson, Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas; Webb, Michael; Manoly, Kamal; Khanna, Meena; Screnci, Diane; Thomas, Eric; Nguyen, Quynh; Meighan, Sean
Subject: RE: Seismic Q&As March 18th 5am update
Attachments: Seismic Questions for Incident Response 3-18-11 5am.pdf

All,

Please see the updated version of the Seismic Q&As.

Among today's highlights:

- *We added a Terms and Definitions section at the end of the document. (We know that an acronyms list would be helpful too, but it will have to wait a little)
- *The "additional information" section has been split into tables, plots, and fact sheets
- *A high-level draft fact sheet on NRC's seismic regulations has been added
- *We added a section to track outstanding questions that have come in from congress. This will support those who get the tickets in the short terms (most likely NRR). The questions will be moved to the appropriate sections long term (as long as they are not duplicates.)

I'm sure we all agree this has been a crazy week!. We're hoping that the weekend workload is lighter (if only because we won't get as many email from in house) and we can clean up this document and fill in some of the missing answers in preparation for the news story changing. We're trying hard to get out in front of the next wave.

Cheers,
Annie

From: Kammerer, Annie
Sent: Thursday, March 17, 2011 2:36 AM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Glitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Glitter, Joseph; Howe, Allen; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffrey; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly;

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Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose;

Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael
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Washington DC 20555

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Compiled Seismic Questions for NRC Response to the March 11, 2011 Japanese Earthquake and Tsunami

This is current as of 3-18-11 at 5am.

The keeper of this file is Annie Kammerer. Please provide comments, additions and updates to Annie with CC to Clifford Munson and Jon Ake.

A list of topics is shown in the Table of Contents at the front of this document.

A list of all questions is provided at the end of the document.

A list of terms and definitions is included at the end of the document.

We greatly appreciate the assistance of the many people who have contributed to this document. Please do not distribute beyond the NRC.

The latest Q&As are available on sharepoint at:

<http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/AllItems.aspx>

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Natural Hazards and Ground Shaking Design Levels

1) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants?

Public response: The magnitude of the earthquake was somewhat greater than was expected for that part of the subduction zone by seismologists worldwide. The Japanese plants were recently reviewed to ground shaking similar to that observed. The review level ground motions were expected to result from a smaller earthquake closer to the sites.

Additional, technical, non-public information: A PDF file provided by John Anderson (prepared by Japanese colleagues) indicates that the majority of the recorded ground motions during the main shock were below the attenuation curve by Si & Midorikawa (1999). Most of the recorded motions fit well to median minus 1 sigma of their GMPE. There are also about a dozen stations with the recorded ground motions above 1g. The highest recorded PGA (~3g) is at the K-Net station MYG004. We can use this information to try to predict motions at the plants as soon as someone catches a breath.

2) Can a very large earthquake and tsunami happen here?

Public response: This earthquake was caused by a "subduction zone" event, which is the type of mechanism that produces the largest magnitude earthquakes. A subduction zone is a tectonic plate boundary where one tectonic plate is pushed under another plate. In the continental US, the only subduction zone is the Cascadia subduction zone which lies off the coast of northern California, Oregon and Washington. So, an earthquake and tsunami this large could only happen in that region. The only plant in that area is Columbia, which is far from the coast and the subduction zone. Outside of the Cascadia subduction zone, earthquakes are not expected to exceed a magnitude of approximate 8, which is 10 times smaller than a magnitude 9.

Additional, technical, non-public information: Magnitude is on a log scale, so 9 is 10 times bigger than an 8.

3) Has this changed our perception of earthquake risk?

Public Answer: This does not change the NRC's perception of earthquake hazard (i.e. ground shaking) at US plants. It is too early to tell what the lessons from this earthquake are from an engineering perspective. The NRC will look closely at all aspects of response of the plants to the earthquake and tsunami to determine if any actions need to be taken in US plants and if any changes are necessary to NRC regulations.

Additional, technical, non-public information: We expect that there would be lessons learned and we may need to seriously relook at common cause failures, including dam failure and tsunami.

4) What magnitude earthquake are US plants designed to?

Public Answer: Each plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. Several tables that include plant design ground motions are provided as the first table in the "additional information" section of this document.

Additional, technical non-public information: In the past, "deterministic" or "scenario based" analyses were used to determine ground shaking (seismic hazard) levels. Now a probabilistic method is used that accounts for possible earthquakes of various magnitudes that come from potential sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs.

5) How many US reactors are located in active earthquake zones (and which reactors)?

Public Answer: Although we often think of the US as having "active" and "non-active" earthquake zones, earthquakes can actually happen almost anywhere. Seismologists typically separate the US into low, moderate, and high seismicity zones. The NRC requires that every plant be designed for site-specific ground motions that are appropriate for their locations. In addition, the NRC has specified a minimum ground shaking level to which plants must be designed.

Seismic designs at US nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" that accounts for the largest earthquake expected in the area around the plant.

Generally, seismic activity in the regions surrounding US plants is much lower than that for Japan since most US plants are located in the interior of the stable continental US. However, the most widely felt earthquakes within the continental US are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 7.0 to 7.75. Nuclear power plants in the US are sited far away from these two earthquake zones as well as other identified potential seismic sources.

On the west coast of the US, the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7+ on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion) type earthquakes, not subduction zone earthquakes. Therefore, the likelihood of a tsunami from these faults is remote.

Additional, technical non-public information: None.

6) How many reactors are along coastal areas that could be affected by a tsunami (and which ones)?

Public Answer: Many plants are located in coastal areas that could potentially be affected by tsunami. Two plants, Diablo Canyon and San Onofre, are on the Pacific Coast, which is known to have tsunami hazard. There are also two plants on the Gulf Coast, South Texas and Crystal River. There are many plants on the Atlantic Coast or on rivers that may be affected by a tidal bore resulting from a tsunami. These include St. Lucie, Turkey Point, Brunswick, Oyster Creek, Millstone, Pilgrim, Seabrook, Calvert Cliffs, Salem/Hope Creek, and Surry. Tsunami on the Gulf and Atlantic Coasts occur, but are very rare. Generally the flooding anticipated from hurricane storm surge exceeds the flooding expected from a tsunami for plants on the Atlantic and Gulf Coast.

Additional, technical non-public information: A table with information on tsunami design levels is provided in the "Additional Information" section of this document.

7) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US?

Public response: *Discuss in terms of, IPEEE, Seismic PRA to be provided by Nilesh*

Additional, technical, non-public information: ADD

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8) What if an earthquake like the Sendai earthquake occurred near a US plant?

Public response: ADD

Additional, technical, non-public information: ADD

9) What would be the results of a tsunami generated off the coast of a US plant? (Or why are we confident that large tsunamis will not occur relatively close to US shores?)

Public response: Request for answer by Henry Jones, Goutam Bagchi and/or Richard Raione (once the tsunami fact sheet is done and you have time).

Additional, technical, non-public information: ADD

10) Can this happen here (i.e., an earthquake that significantly damages a nuclear power plant)? Are the Japanese plants similar to US plants?

Public Answer: All US nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events.

The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

11) What level of earthquake hazard are the US reactors designed for?

Public Answer: Each reactor is designed for a different ground motion that is determined on a site-specific basis. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant. New reactors are designed using probabilistic techniques that characterize the hazard (i.e. ground shaking levels) and uncertainty at the proposed site. Ground motions from all potential seismic sources in the region are estimated and used to develop an appropriate site specific ground motion, which has a return period of 10,000 years on average over very long time periods.

Additional technical, non-public information: None

12) Does the NRC consider earthquakes of magnitude 9?

Public Answer: Earthquakes with very large magnitudes, such as the recent earthquake of the coast of Japan, occur only within subduction zones. Subduction zones are regions where one of the earth's tectonic plates is subducting beneath another. In the continental US, the only subduction zone is the Cascadia subduction zone, which lies off of the coast of northern California, Oregon, and Washington. The only nuclear power plant in that area is Columbia, which is far from the coast and the subduction zone.

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Additional technical, non-public information: None.

13) What is the likelihood of the design basis or "SSE" ground motions being exceeded over the life of the plant?

To estimate the probability of exceeding a specified ground motion level, such as an SSE, during a given time interval, the Poisson model is generally used. Using seismic hazard curves from the 2008 USGS National Seismic Hazard Map and assuming a 60-year life for a typical nuclear power plant, we can estimate the probability of exceeding the SSE over the life of the plant. The NRC recently performed these estimates as part of its GI-199 program (see the section below titled "Reassessment of US Plants and GI-199"). The mean probability value for the plants in the Central and Eastern United States is less than 2%, with values ranging from a low of 0.1% to a high of 6%.

It is important to remember that there is margin above the design basis. In the mid to late 1990s, the NRC staff reviewed the potential for ground motions beyond the design basis as part of the Individual Plant Examination of External Events (IPEEE). From this review, the staff determined that seismic designs of operating plants in the United States have adequate safety margins for withstanding earthquakes built into the designs.

14) What is magnitude anyway? What is the Richter Scale? What is intensity?

ADD

An earthquake's magnitude is a measure of the strength of the earthquake as determined from seismographic observations and is an objective, quantitative measure of the size of an earthquake. The magnitude can be expressed in various ways based on seismographic records (e.g., Richter Local Magnitude, Surface Wave Magnitude, Body Wave Magnitude, and Moment Magnitude). Currently, the most commonly used magnitude measurement is the Moment Magnitude, Mw, which is based on the

seismic moment computed as the rupture force along the fault multiplied by the average amount of slip, and thus is a direct measure of the energy released during an earthquake.

(this definition was lifted from USGS) The Richter magnitude scale was developed in 1935 by Charles F. Richter of the California Institute of Technology as a mathematical device to compare the size of earthquakes. The magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. Adjustments are included for the variation in the distance between the various seismographs and the epicenter of the earthquakes. On the Richter Scale, magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude; as an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.

The intensity of an earthquake is a qualitative description of the effects of the earthquake at a particular location, as evidenced by observed effects on humans, on human-built structures, and on the earth's surface at a particular location. Commonly used scales to specify intensity are the Rossi-Forel, Mercalli, and Modified Mercalli. The Modified Mercalli Intensity (MMI) scale describes intensities with values ranging from I to XII in the order of severity. MMI of I indicates an earthquake that was not felt except by a very few, whereas MMI of XII indicates total damage of all works of construction, either partially or completely.

15) How do magnitude and ground motion relate to each other?

ADD

16) How are combined seismic and tsunami events treated in risk space? Are they considered together?

The PRA Standard (ASME/ANS-Ra-Sa2009) does address the technical requirements for both seismic events and tsunamis (tsunami hazard under the technical requirements for external flooding analysis). But together? The standard does note that uncertainties associated with probabilistic analysis of tsunami hazard frequency are large and that an engineering analysis can usually be used to screen out tsunamis.

17) How are aftershocks treated in terms of risk assessment?

Seismic PRAs do not consider the affect of aftershocks since there are not methods to predict equipment fragility after the first main shock.

Design Against Natural Hazards & Plant Safety in the US

19) Are nuclear power plants designed for tsunamis?

Public Answer: Yes. Plants are built to withstand a variety of environmental hazards and those plants that might face a threat from tsunami are required to withstand large waves and the maximum wave height at the intake structure (which varies by plant.)

Additional, technical, non-public information: Tsunami are considered in the design of US nuclear plants. Nuclear plants are designed to withstand flooding from not only tsunami, but also hurricane and storm surge; therefore there is often significant margin against tsunami flooding. However, it should be noted that Japanese experience has shown that drawdown can be a significant problem.

Currently the US NRC has a tsunami research program that is focused on developing modern hazard assessment techniques and additional guidance through cooperation with the National Oceanic and Atmospheric Administration and the United States Geological Survey. This has already lead to several technical reports and an update to NUREG 0-800. The NOAA and USGS contractors are also assisting with NRO reviews of tsunami hazard. A new regulatory guide on tsunami hazard assessment is currently planned in the office of research, although it is not expected to be available in draft form until 2012.

20) What level of tsunami are we designed for?

Public Answer: Like seismic hazard, the level of tsunami that each plant is designed for is site-specific and is appropriate for what may occur at each location.

Additional, technical, non-public information: None.

21) Which plants are close to known active faults? What are the faults and how far away are they from the plants?

Public Answer: Jon to develop answer with Dogan's help. I created a placeholder table for your use "Table of Plants Near Known Active Faults" to be populated in the additional information section. The plots that Dogan made are in the additional information section under "Plot of Mapped Active Quaternary Faults and Nuclear Plants in the US". This is really high priority after the congressional hearings.

Additional, technical, non-public information: ADD

22) How was the seismic design basis for an existing nuclear power plant established?

Public Answer: The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html>).

Additional, technical, non-public information: See discussion at end of GI-199 section for discussion of safety margin and design basis.

23) Is there margin above the design basis?

Public Answer: Yes, there is margin beyond the design basis. In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential consequences of severe earthquakes (earthquakes beyond the safety margin included in each plant's design basis), which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the United States have adequate safety margins, for withstanding earthquakes, built into the designs.

Additional, technical, non-public information: None.

24) Are US plants safe?

Public Answer: US plants are designed for appropriate earthquake shaking levels and are safe. Currently the NRC is also conducting a program called Generic Issue 199 (GI-199), which is reviewing the adequacy of earthquake design of US nuclear power plants in the central and eastern North America based on the latest data and analysis techniques.

Additional, technical, non-public information: None.

25) Was the Japanese plant designed for this type of accident? Are US nuclear plants?

Public Answer: Nuclear plants in both the US and Japan are designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

26) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis?

Public Answer: Nuclear plants in both the US and Japan are designed for earthquake shaking. In addition to the design of the plants, significant effort goes into emergency response planning and accident mitigation. This approach is called defense-in-depth.

Additional, technical, non-public information: None.

27) Can this happen here (i.e., an earthquake that significantly damages a nuclear power plant)? Are the Japanese plants similar to US plants?

Public Answer: All US nuclear power plants are built to withstand environmental hazards, including earthquakes and tsunamis. Even those plants that are located within areas with low and moderate seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account even rare and extreme seismic and tsunami events. Nuclear power plants are designed to be safe based on the most severe natural phenomena historically reported for the site and surrounding area. The Japanese facilities are similar in design to several US facilities.

Additional technical, non-public information: Currently operating reactors were designed using a "deterministic" or "maximum credible earthquake" approach. Seismic hazard for the new plants is determined using a probabilistic seismic hazard assessment approach that explicitly addresses uncertainty, as described in Regulatory Guide 1.208. The NRC requires that adequate margin beyond the design basis ground shaking levels is assured. The NRC further enhances seismic safety for beyond-design-basis events through the use of a defense-in-depth approach.

In addition, the NRC reviews the seismic risk at operating reactors as needed when information may have changed. Over the last few years the NRC has undertaken a program called Generic Issue 199, which is focused on assessing hazard for plants in the central and eastern US using the latest techniques and data and is determining the possible risk implications of any increase in the anticipated ground shaking levels. This program will help us assure that the plants are safe under exceptionally rare and extreme ground motions that represent beyond-design-basis events.

The reactor design is a Boiling Water Reactor that is similar to some US designs, including Oyster Creek, Nine Mile Point and Dresden Units 2 and 3.

28) Could an accident like the one at Japan's Fukushima Daiichi nuclear plants happen in the US?

Public response: It is difficult to answer this question until we have a better understanding of the precise problems and conditions that faced the operators at Fukushima Daiichi. We do know, however, that Fukushima Daiichi Units 1-3 lost all offsite power and emergency diesel generators. This situation is called "station blackout." US nuclear power plants are designed to cope with a station blackout event that involves a loss of offsite power and onsite emergency power. The Nuclear Regulatory Commission's detailed regulations address this scenario. US nuclear plants are required to conduct a "coping" assessment and develop a strategy to demonstrate to the NRC that they could maintain the plant in a safe condition during a station blackout scenario. These assessments, proposed modifications and operating procedures were reviewed and approved by the NRC. Several plants added additional AC power sources to comply with this regulation.

In addition, US nuclear plant designs and operating practices since the terrorist events of September 11, 2001, are designed to mitigate severe accident scenarios such as aircraft impact, which include the complete loss of offsite power and all on-site emergency power sources.

US nuclear plant designs include consideration of seismic events and tsunamis'. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

Additional technical, non-public information: None

29) Should US nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not?

Public response: US nuclear reactors are designed to withstand an earthquake equal to the most significant historical event or the maximum projected seismic event and associated tsunami without any breach of safety systems.

The lessons learned from this experience must be reviewed carefully to see whether they apply to US nuclear power plants. It is important not to extrapolate earthquake and tsunami data from one location of the world to another when evaluating these natural hazards, however. These catastrophic natural events are very region- and location-specific, based on tectonic and geological fault line locations.

The United States Geological Survey (USGS) conducts continuous research of earthquake history and geology, and publishes updated seismic hazard curves for various regions in the continental US. These curves are updated approximately every six years. NRC identified a generic issue (GI-199) that is currently undergoing an evaluation to assess implications of this new information to nuclear plant sites located in the central and eastern United States. The industry is working with the NRC to address this issue.

Additional technical, non-public information: None

30) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?

Public response: Please see one of the several tables provided in the "Additional information" section of this document.

Additional, technical, non-public information: None

31) How do we know that the equipment in plants is safe in earthquakes?

Public response: All equipment important to safety (required to safely shutdown a nuclear power plant) is qualified to withstand earthquakes in accordance with plants' licensing basis and NRC regulations.

Additional, technical, non-public information: 10 CFR 50, Appendix A, General Design Criterion 2 and 4, 10 Part 100, and Appendix S. Guidance: Regulatory Guides 1.100, IEEE 344 and ASME QME-1

32) How do we know equipment will work if the magnitude is bigger than expected, like in Japan?

Public response: Nuclear plant systems are designed to mitigate a design basis earthquake which includes margin above the postulated site specific earthquake. (reviewers comment: this needs to be expanded)

Additional, technical, non-public information: See part 100 Reactor Site Criteria

33) Are US plants susceptible to the same kind of loss of power as happened in Japan?

Public response: NRC recognized that there is the possibility of a total loss of AC power at a site, called a 'Station Blackout', or SBO. Existing Regulations require the sites to be prepared for the possibility of an SBO. In addition to battery powered back-up system to immediately provide power for emergency systems, NRC regulations require the sites to have a detailed plan of action to address the loss of AC power while maintaining control of the reactor.

There has also been an understanding that sites can lose offsite power as well. Of course, this can be caused by earthquake. However, hurricane- or tornado-related high winds may potentially damage the transmission network in the vicinity of a nuclear plant as well. Flood waters can also affect transformers used to power station auxiliary system. These types of weather related events have the potential to degrade the offsite power source to a plant.

The onsite Emergency Diesel Generators need fuel oil stored in tanks that are normally buried underground. These tanks and associated pumps and piping require protection from the elements. Above ground tanks have tornado and missile protection.

In case both offsite and onsite power supplies fail, NRC has required all licensee to evaluate for a loss of all AC power (station blackout) scenario and implement coping measures to safely shutdown the plant law 10 CFR 50.63.

Additional, technical, non-public information: Some plants have safeguards equipment below sea level and rely on watertight doors or Bilge pumps to remove water from equipment required to support safe shutdown. Overflowing rivers can result in insurmountable volume of water flooding the vulnerable areas. SBO definition in 10CFR50.2, SBO plan requirements in 10CFR50.63

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34) How do we know that the emergency diesel generators in Diablo Canyon and SONGS will not fail to operate like in Japan?

Public response: Emergency Diesel Generators are installed in a seismically qualified structure. Even if these EDGs fail, plants can safely shutdown using station blackout power source law 10 CFR 50.63.

Additional, technical, non-public information: None.

35) Is all equipment at the plant vulnerable to tsunami?

Public response: Nuclear plants are designed to withstand protection against natural phenomena such as tsunami, earthquakes. (reviewers comment: this needs to be expanded. I need assistance with this)

Additional, technical, non-public information: ADD

36) What protection measures do plants have against tsunami?

Public response: Plants are designed to withstand protection against natural phenomena such as tsunami, earthquakes. (note from reviewer: add information on breakwater from songs and Diablo example. I need assistance with this)

Additional, technical, non-public information: ADD

37) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?

Public response: *Goutam, Henry and Rich, can you guys answer this?*

Additional, technical, non-public information: ADD

38) Are nuclear buildings built to withstand earthquakes? What about tsunami?

Public response: *There is language elsewhere in this document that answers that...copy here.*

Additional, technical, non-public information: ADD

39) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure?

Public response: ADD

Additional, technical, non-public information: ADD

40) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?

Public response: Both SONGS and Diablo canyon are licensed with an automatic trip for seismic events. *(can this be expanded? any others?) Mike Markley, can your group assist with this?*

Additional, technical, non-public information: ADD

41) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing US nuclear power plants?

Public response: The NRC would not require isolators for the next generation of plants. However, it is recognized that a properly designed isolation system can be very effective in mitigating the effect of earthquake. Currently the NRC is preparing guidance for plant designers considering the use of seismic isolation devices.

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Additional, technical, non-public information: A NUREG is in the works in the office of research. It is expected to be available for comment in 2011.

42) Are there any US nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas?

Public response: No currently constructed nuclear power plants in the US use seismic isolators. However seismic isolation is being considered for a number of reactor designs under development. Currently seismic design of plants is focused on assuring that design of structures, systems, and components are designed and qualified to assure that there is sufficient margin beyond the design basis ground motion.

Additional, technical, non-public information: None.

43) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis?

Public response: Whenever an event like this happens, the NRC thoroughly reviews the experience and tries to identify any lessons learned. The NRC further considers the need to change guidance or regulations. In this case, the event will be studied and any necessary changes will be made to the guidance under development. However, it should be noted that Japan does not have seismically isolated nuclear plants.

Additional, technical, non-public information: None.

About Japanese Hazard, Design and Earthquake Impact

44) Was the damage done to the plants from the earthquake or the tsunami?

Public response: It is hard to tell at this point. In the nuclear plants there seems to have been some damage from the shaking. However, the tsunami led to some of the biggest problems in terms of the loss of backup power. This is also true in the general population; the tsunami seems to have led to most of the deaths.

Additional, technical, non-public information: None

45) What was the disposition of the plant during the time after the earthquake struck and before the tsunami arrived? Was there indication of damage to the plant solely from the earthquake (if so, what systems) and did emergency procedures function during this time.

Public response: Given that the Fukushima plant is not in the US, the NRC does not yet have enough information to answer this question.

Additional, technical, non-public information: Typically there would be the opportunity to get this data, but given the situation it is not clear.

46) What magnitude earthquake was the plant designed to withstand? For example, what magnitude earthquake was the plant expected to sustain with damage but continued operation? And with an expected shutdown but no release of radioactive material?

Public response: There are two shaking levels relevant to the Fukushima plant, the original design level ground motion and a newer review level ground motion. As a result of a significant change in seismic regulations in 2006, NISA, the Japanese regulator initiated a program to reassess seismic hazard and seismic risk for all nuclear plants in Japan. This resulted in new assessments of higher ground shaking levels (i.e. seismic hazard) and a review of seismic safety for all Japanese plants. The program is still ongoing, but has already resulted in retrofit in some plants. Therefore, it is useful to discuss both the design level and a review level ground motion for the plants. A relevant table is found a few questions down, and also in the "Additional Information: Useful Tables" section.

Plant sites	Contributing earthquakes used for determination of hazard	New DBGM S_2	Original DBGM S_1
Fukushima	Magnitude 7.1 Earthquake near the site	600 gal (0.62g)	370 gal (0.37g)

Additional, technical, non-public information: Add

47) Did this reactor sustain damage in the July 16, 2007 earthquake, as the Kashiwazaki power plant did? What damage and how serious was it?

Public response: Neither Fukushima power plant was affected by the 2007 earthquake.

Additional, technical, non-public information: None.

48) Was the Fukushima power plant designed to withstand a tsunami of any size? What sort of modeling was done to design the plant to withstand either seismic events or tsunamis? What specific design criteria were applied in both cases?

Public response: Japanese plants are designed to withstand both earthquake and tsunami. An English explanation of how Tsunami hazard assessments are undertaken for Japanese plants is found in Annex II to IAEA Guidance on Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations Assessment of Tsunami Hazard: Current Practice in Some States in Japan. The design ground motions are as shown above. We do not have information on the design basis tsunami.

Additional, technical, non-public information: Annie has a copy of the draft annex and will put them into ADAMS

49) What is the design level of the Japanese plants? Was it exceeded?

Public response: As a result of a significant change in seismic regulations in 2006, the Japanese regulator initiated a program to reassess seismic hazard and seismic risk for all nuclear plants in Japan. This resulted in new assessments of higher ground shaking levels (i.e. seismic hazard) and a review of seismic safety for all Japanese plants. The program is still on-going, but has already resulted in retrofit in some plants. Therefore, it is useful to discuss both the design level and a review level ground motion for the plants, as shown below.

Currently we do not have official information. However, it appears that the ground motions (in terms of peak ground acceleration) are similar to the S_s shaking levels, although the causative earthquakes are different. Thus the design basis was exceeded, but the review level may not have been.

Table: Original Design Basis Ground Motions (S_2) and New Review Level Ground Motions (S_s) Used for Review of Japanese Plants

Plant sites	Contributing earthquakes used for determination of hazard	New DBGM S_s	Original DBGM S_1
Onagawa	Soutei Miyagiken-oki (M8.2)	580 gal (0.59g)	375 gal (0.38g)
Fukushima	Earthquake near the site (M7.1)	600 gal (0.62g)	370 gal (0.37g)
Tokai	Earthquakes specifically undefined	600 gal (0.62g)	380 gal (0.39g)
Hamaoka	Assumed Tokai (M8.0), etc.	800 gal (0.82g)	600 gal (0.62g)

Additional, technical, non-public information: None

50) What are the Japanese S_1 and S_s ground motions and how are they determined?

Public response: Japanese nuclear power plants are designed to withstand specified earthquake ground motions, previously specified as S_1 and S_2 , but now simply S_s . The design basis earthquake ground motion S_1 was defined as the largest earthquake that can reasonably be expected to occur at the site of a nuclear power plant, based on the known seismicity of the area and local faults that have shown activity during the past 10,000 years. A power reactor could continue to operate safely during an S_1 level earthquake, though in practice they are set to trip at lower levels. The S_2 level ground motion was

based on a larger earthquake from faults that have shown activity during the past 50,000 years and assumed to be closer to the site. The revised seismic regulations in May 2007 replaced S_1 and S_2 with S_5 . The S_5 design basis earthquake is based on evaluating potential earthquakes from faults that have shown activity during the past 130,000 years. The ground motion from these potential earthquakes are simulated for each of the sites and used to determine the revised S_5 design basis ground motion level. Along with the change in definition, came a requirement to consider "residual risk", which is a consideration of the beyond-design-basis event.

Additional, technical, non-public information: None

51) Did this earthquake affect the Kashiwazaki-Kariwa nuclear power plant?

Public response: No, this earthquake did not affect Kashiwazaki-Kariwa nuclear power plant and all reactors remained in the state of operation prior to the March 11, 2011, Japan earthquake. It also did not trip during an earthquake of magnitude XX that occurred on the western side subsequent to the 8.9 earthquake. This is very important for the stability of Japan's energy supply due to the loss of production at TEPCO's Fukushima nuclear power plants.

Additional, technical, non-public information: None

52) How high was the tsunami at the Fukushima nuclear power plants?

Public response: The actual tsunami height at the plants is not currently known. However, NOAA has publically information on the recordings at sea for many areas.

Additional, technical, non-public information: A preliminary rough estimate of tsunami height at the plant locations was provided to NRC by NOAA shortly after the earthquake. This was developed using NOAA's global ocean model and is shown in the "additional information" section. Most notably, there was a 6 meter wave at Fukushima and the wave at Onogawa may have been between 18 and 23 meters.

53) Wikileaks has a story that quotes US embassy correspondence and some un-named IAEA expert stating that the Japanese were warned about this ... Does the NRC want to comment?

<http://www.dailymail.co.uk/news/article-1366721/Japan-tsunami-Government-warned-nuclear-plants-withstand-earthquake.html>

Public response: TBD Annie to explain the history of their recent retrofit program.

Additional, technical, non-public information: The article talks about that the plants and that they were checked for a magnitude 7, but the earthquake was a 9. The reality is that they assumed the magnitude 7 close in had similar ground motions to a 9 farther away. They did check (and retrofit) the plant to the ground motions that they probably saw (or nearly). The problem was the tsunami. We probably need a small write up so that staff understands, even if we keep it internal.

What Happened to US Nuclear Power Plants During the March 11, 2011, Japan Earthquake?

54) Was there any damage to US reactors from either the earthquake or the resulting tsunami?

Public Answer: No

Additional, technical non-public information: Two US plants on the Pacific Ocean (Diablo Canyon and San Onofre) experienced higher than normal sea level due to tsunami. However, the wave heights were consistent with previously predicted levels and this had no negative impact to the plants. In response, Diablo Canyon Units 1 and 2 declared an "unusual event" based on tsunami warning following the Japanese earthquake. They have since exited the "unusual event" declaration, based on a downgrade to a tsunami advisory.

55) Have any lessons for US plants been identified?

Public Answer: The NRC is in the process of following and reviewing the event in real time. This, inevitably, leads to the indemnification of lessons that warrant further study. However, a complete understanding of lessons learned requires more information than is currently available to NRC staff.

Additional, technical non-public information: We need to take a closer look at common cause failures, such as earthquake and tsunami, and earthquake and dam failure.

Response and Future Licensing Actions

56) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?

Public Answer: We are closely following events in Japan, working with other agencies of the federal government, and have been in direct contact with our counterparts in that country. In addition, we are ready to provide assistance if there is a specific request. An NRC staffer is participating in the USAID team headed to Japan.

Additional technical, non-public information: We are taking the knowledge that the staff has about the design of the US nuclear plants and we are applying this knowledge to the Japan situation. For example, this includes calculations of severe accident mitigation that have been performed.

57) With NRC moving to design certification, at what point is seismic capability tested - during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?

Public Answer: During design certification, vendors propose a seismic design in terms of a ground motion spectrum for their nuclear facility. This spectrum is called a standard design response spectrum and is developed so that the proposed nuclear facility can be sited at most locations in the central and eastern United States. The vendors show that this design ground motion is suitable for a variety of different subsurface conditions such as hard rock, deep soil, or shallow soil over rock. Combined License and Early Site Permits applicants are required to develop a site specific ground motion response spectrum that takes into account all of the earthquakes in the region surrounding their site as well as the local site geologic conditions. Applicants estimate the ground motion from these postulated earthquakes to develop seismic hazard curves. These seismic hazard curves are then used to determine a site specific ground motion response spectrum that has a maximum annual likelihood of 1×10^{-4} of being exceeded. This can be thought of as a ground motion with a 10,000 year return period. This site specific ground motion response spectrum is then compared to the standard design response spectrum for the proposed design. If the standard design ground motion spectrum envelopes the site specific ground motion spectrum then the site is considered to be suitable for the proposed design. If the standard design spectrum does not completely envelope the site specific ground motion spectrum, then the COL applicant must do further detailed structural analysis to show that the design capacity is adequate. Margin beyond the standard design and site specific ground motions must also be demonstrated before fuel loading can begin.

Additional technical, non-public information: None.

Reassessment of US Plants and GI-199

58) Can we get the rankings of the plants in terms of safety? (Actually this answer should be considered any time GI-199 data is used to "rank" plants)

Public Response: The objective of the GI-199 Safety/Risk Assessment was to perform a conservative, screening-level assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern US (CEUS) are warranted consistent with NRC directives. The results of the GI-199 SRA should not be interpreted as definitive estimates of plant-specific seismic risk. The nature of the information used (both seismic hazard data and plant-level fragility information) make these estimates useful only as a screening tool. The NRC does not rank plants by seismic risk.

Currently operating nuclear plants in the United States remain safe, with no need for immediate action. This determination is based on NRC staff reviews of updated seismic hazard information and the conclusions of the Generic Issue 199 Screening Panel. Existing plants were designed with considerable margin to be able to withstand the ground motions from the "deterministic" or "scenario earthquake" that accounted for the largest earthquake expected in the area around the plant. During the mid-to-late-1990s, the NRC staff reassessed the margin beyond the design basis as part of the Individual Plant Examination of External Events (IPEEE) program. The results of the GI-199 assessment demonstrate that the probability of exceeding the design basis ground motion may have increased at some sites, but only by a relatively small amount. In addition, the Safety/Risk Assessment stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.

Additional, technical, non-public information: None.

59) If the plants are designed to withstand the ground shaking why is there so much risk from the design level earthquake

Much of the risk in the total risk levels provided in the report comes from earthquakes stronger than the safe shutdown ground motion. The anything indicated in the geologic record used to determine the design requirements at these sites. The numbers are based on an evaluation of all of the potential seismic sources in the CEUS and are used to produce seismic hazard estimates (curves) for each site. The GI-199 effort to date has performed a screening assessment to determine if further, more detailed studies are warranted. This study has utilized information from plant-specific evaluation of external hazards, including earthquakes. That information was gathered to identify potential seismic vulnerabilities, not to produce robust risk estimates. Therefore, the GI-199 results should be viewed as preliminary and not definitive.

60) Does the NRC have a position on the MSNBC article that ranked the safety of US plants?

Public Response: The NRC is preparing to issue a press release responding to MSNBC article. The content below.

THE BELOW IS STILL DRAFT

A recent article by MSNBC (add reference) cites results of a US Nuclear Regulatory Commission study released in September, 2010. The study investigated the implications of updated seismic hazard estimates in the central and eastern United States. The study was prepared as a screening assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern US (CEUS) are warranted, consistent with NRC directives. The report clearly states that "work to date supports a decision to continue ...; the methodology, input assumptions, and data are not sufficiently developed to support other regulatory actions or decisions." Accordingly, the results were not used to

rank or compare plants. The study produced plant-specific results of the estimated change in risk from seismic hazards. The study did not rely on the absolute value of the seismic risk except to assure that all operating plants are safe. The plant-specific results were used in aggregate to determine the need for continued evaluation and were included in the report for openness and transparency. The use of the absolute value of the seismic hazard-related risk, as done in the MSNBC article, is not the intended use, and the NRC considers it an inappropriate use of the results.

The report reached three main conclusions: 1) Seismic hazard estimates have increased at some operating plants in the central and eastern US; 2) there is no immediate safety concern, plants have significant safety margin and overall seismic risk estimates remain small; and 3) assessment of updated seismic hazards and plant performance should continue.

Additional, technical, non-public information: ADD.

61) Overall, how would the NRC characterize the CDF numbers? A quirk of numbers? A serious concern?

Public Response: The study is still underway and it is too early to predict the final outcome. However, staff has determined that there is no immediate safety concern and that overall seismic risk estimates remain small. If at any time the NRC determines that an immediate safety concern exists, action to address the issue will be taken. However, the NRC is focused on assuring safety during even very rare and extreme events. Therefore, the NRC has determined that assessment of updated seismic hazards and plant performance should continue.

Additional, technical, non-public information: None.

62) Describe the study and what it factored in – plant design, soils, previous quakes, etc.

Public Response: The study considers the factors that impact estimates of both the seismic hazard (i.e. ground shaking levels) at the site and the plants resistance to earthquakes (mathematically represented by the plant level fragility curve). Previous quakes, the tectonic environment, and the soils that underlie the site are all used in the development of the ground shaking estimates used in the analyses. Plant design and the seismic resistance of the important structures, systems, and components are all used in the development of plant level fragility curves.

Additional, technical, non-public information: None.

63) Explain “seismic curve” and “plant level fragility curve”.

Public Response: A seismic curve is a graphical representation of seismic hazard. Seismic hazard in this context is the highest level of ground motion expected to occur (on average) at a site over different periods of time. Plant level fragility is the probability of damage to plant structures, systems and components as a function of ground shaking levels.

Additional, technical, non-public information: None.

64) Explain the “weakest link model”.

Public Response: The weakest link model is a method for evaluating the importance of different frequencies of ground vibration to the overall plant performance. The model and its details are not integral to understanding the fundamental conclusions of the study.

Additional, technical, non-public information: None.

65) What would constitute fragility at a plant?

Public Response: Fragility is a term that relates the probability of failure of an individual structure, system or component to the level of seismic shaking it experiences. Plant level fragility is the probability of damage to sets of plant structures, systems and components as a function of ground shaking levels.

Additional, technical, non-public information: None.

66) The 1-in-18,868 risk for Limerick: What is the risk for? A jostling? A crack? Significant core damage leading to a meltdown?

Public Response: The objective of the GI-199 Safety/Risk Assessment was to perform a conservative, screening-level assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern US (CEUS) are warranted consistent with NRC directives. The results of the GI-199 SRA should not be interpreted as definitive estimates of plant-specific seismic risk. The nature of the information used (both seismic hazard data and plant-level fragility information) make these estimates useful only as a screening tool. The use of the absolute value of the seismic hazard-related risk, as done in the MSNBC article, is not the intended use, and the NRC considers it an inappropriate use of the results.

Additional, technical, non-public information: None.

67) Can someone put that risk factor into perspective, using something other than MSNBC's chances of winning the lottery?

Public Response: As noted above, the risk factors determined in GI-199 were conservative estimates of risk intended for use as a screening tool. Use of these factors beyond this intended purpose is inappropriate.

Additional, technical, non-public information: None.

68) What, if anything, can be done at a site experiencing such a risk? (Or at Limerick in particular.)

Public Response: The probabilistic seismic risk analyses (SPRA) that are performed to determine the core damage frequency (CDF) numbers also provides a significant amount of information on what the plant vulnerabilities are. This allows the analyst to determine what can be done to the plant to address the risk.

Additional, technical, non-public information: None.

69) Has anyone determined that anything SHOULD be done at Limerick or any of the other PA plants?

Public Response: The fundamental conclusion of the report is that "work to date supports a decision to continue ...; the methodology, input assumptions, and data are not sufficiently developed to support other regulatory actions or decisions." The NRC is planning to issue a Generic Communication to operating reactor licensees in the CEUS requesting additional information. This includes the plants in PA.

Additional, technical, non-public information: None.

70) I noted the language on Page 20 of the report: This result confirms NRR's conclusion that currently operating plants are adequately protected against the change in seismic hazard estimates because the guidelines in NRR Office Instruction LIC-504 "Integrated Risk-Informed Decision Making Process for Emergent Issues" are not exceeded. Can someone please explain?

Public response: Can someone help with this?

Additional, technical, non-public information: None.

71) Is the earthquake safety of US plants reviewed once the plants are constructed?

Public response: Yes, earthquake safety is reviewed during focused design inspections, under the Generic Issues Program (GI-199) and as part of the Individual Plant Evaluation of External Events program (IPEEE) that was conducted in response to Generic Letter 88-20 Supplement 4.

Additional, technical, non-public information: None.

72) Does the NRC ever review tsunami risk for existing plants?

Public Answer: The NRC has not conducted a generic issue program on tsunami risk to date. However, some plants have been reviewed as a result of the application for a license for a new reactor. In the ASME/ANS 2009 seismic probabilistic risk assessment standard, all external hazards are included.

Additional, technical, non-public information: None.

73) Does GI-199 consider tsunami?

Public response: GI-199 stems from the increased in perceived seismic hazard focused on understanding the impact of increased ground motion on the risk at a plant. GI-199 does not consider tsunami

Additional, technical, non-public information: In the past there has been discussion about a GI program on tsunami, but the NRC's research and guidance was not yet at the point it would be effective. We are just getting to this stage and the topic should be revisited.

74) What is Generic Issue 199 about?

Public Answer: Generic Issue 199 (GI-199) investigates the safety and risk implications of updated earthquake-related data and models. These data and models suggest that the probability for earthquake ground shaking above the seismic design basis for some nuclear power plants in the Central and Eastern United States is still low, but larger than previous estimates.

Additional, technical, non-public information: See additional summary/discussion of GI-199 and terms below.

75) Where can I get current information about Generic Issue 199?

Public Answer: The public NRC Generic Issues Program (GIP) website (<http://www.nrc.gov/about-nrc/regulatory/gen-issues.html>) contains program information and documents, background and historical information, generic issue status information, and links to related programs. The latest Generic Issue Management Control System quarterly report, which has regularly updated GI-199 information, is publicly available at <http://www.nrc.gov/reading-rm/doc-collections/generic-issues/quarterly/index.html>. Additionally, the US Geological Survey provides data and results that are publicly available at <http://earthquake.usgs.gov/hazards/products/conterminous/2008/>.

Additional, technical, non-public information: The GI-199 section of the NRC internal GIP website (<http://www.internal.nrc.gov/RES/projects/GIP/Individual%20GIs/GI-0199.html>) contains additional information about Generic Issue 199 (GI-199) and is available to NRC staff.

76) How was the seismic design basis for an existing nuclear power plant established?

Public Answer: The seismic ground motion used for the design basis was determined from the evaluation of the maximum historic earthquake within 200 miles of the site, without explicitly considering the time spans between such earthquakes; safety margin was then added beyond this maximum historic earthquake to form a hypothetical *design basis earthquake*. The relevant regulation for currently operating plants is 10 CFR Part 100, Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants" (<http://www.nrc.gov/reading-rm/doc-collections/cfr/part100/part100-appa.html>).

Additional, technical, non-public information: See discussion at end of GI-199 section for discussion of safety margin and design basis.

77) Is there margin above the design basis?

Public Answer: Yes, there is margin beyond the design basis. In the mid to late 1990s, NRC staff reviewed the plants' assessments of potential ground motion beyond the safety margin included in each plant's design basis, which licensees performed as part of the Individual Plant Examination of External Events (or IPEEE) program. From this review, the staff determined that seismic designs of operating plants in the United States have adequate safety margins, for withstanding earthquakes, built into the designs.

Additional, technical, non-public information: The goal of seismic engineering is to design structures, systems and components that explicitly do not fail at the design level. The application of specific codes, standards, and analysis techniques results in margin beyond the design level. The assessments carried out as part of the IPEEE program demonstrated that margin exists in the operating reactors against seismic demand.

78) Are all US plants being evaluated as a part of Generic Issue 199?

Public Answer: The scope of the Generic Issue 199 (GI-199) Safety/Risk Assessment is limited to all plants in the Central and Eastern United States. Although plants at the Columbia, Diablo Canyon, Palo Verde, and San Onofre sites are not included in the GI-199 Safety/Risk Assessment, the Information Notice on GI-199 is addressed to all operating power plants in the US (as well as all independent spent fuel storage installation licensees). The staff will also consider inclusion of operating reactors in the Western US in its future generic communication information requests.

Additional, technical, non-public information: The staff is currently developing specific information needs to be included in a Generic Letter to licensees in the CEUS.

79) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue?

Public Answer: Yes, currently operating nuclear plants in the United States remain safe, with no need for immediate action. This determination is based on NRC staff reviews associated with Early Site Permits (ESP) and updated seismic hazard information, the conclusions of the Generic Issue 199 Screening Panel (comprised of technical experts), and the conclusions of the Safety/Risk Assessment Panel (also comprised of technical experts).

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No immediate action is needed because: (1) existing plants were designed to withstand anticipated earthquakes with substantial design margins, as confirmed by the results of the Individual Plant Examination of External Events program; (2) the probability of exceeding the *safe shutdown earthquake* ground motion may have increased at some sites, but only by a relatively small amount; and (3) the Safety/Risk Assessment Stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.

Even though the staff has determined that existing plants remain safe, the Generic Issues Program criteria (Management Directive 6.4) direct staff to continue their analysis to determine whether any cost-justified plant improvements can be identified to make plants enhance plant safety.

Additional, technical, non-public information : The Safety/Risk Assessment results confirm that plants are safe. The relevant risk criterion for GI-199 is total *core damage frequency* (CDF). The threshold for taking immediate regulatory action (found in NRR Office Instruction LIC-504, see below) is a total CDF greater than or on the order of 10^{-3} (0.001) per year. For GI-199, the staff calculated seismic CDFs of 10^{-4} (0.0001) per year and below for nuclear power plants operating in the Central and Eastern US (CEUS) (based on the new US Geological Survey seismic hazard curves). The CDF from internal events (estimated using the staff-developed Standardized Plant Analysis of Risk models) and fires (as reported by licensees during the IPEEE process and documented in NUREG-1742), when added to the seismic CDF estimates results in the total risk for each plant to be, at most, 4×10^{-4} (0.0004) per year or below. This is well below the threshold (a CDF of 10^{-3} [0.001] per year) for taking immediate action. Based on the determination that there is no need for immediate action, and that this issue has not changed the licensing basis for any operating plant, the CEUS operating nuclear power plants are considered safe. In addition, as detailed in the GI-199 Safety/Risk Assessment there are additional, qualitative considerations that provide further support to the conclusion that plants are safe.

Note: The NRC has an integrated, risk-informed decision-making process for emergent reactor issues (NRR Office Instruction LIC-504, ADAMS Accession No. ML100541776 [not publically available]). In addition to deterministic criteria, LIC-504 contains risk criteria for determining when an emergent issue requires regulatory action to place or maintain a plant in a safe condition.

80) What do you mean by “increased estimates of seismic hazards” at nuclear power plant sites?

Public Answer: *Seismic hazard* (earthquake hazard) represents the chance (or probability) that a specific level of ground shaking could be observed or exceeded at a given location. Our estimates of seismic hazard at some Central and Eastern United States locations have changed based on results from recent research, indicating that earthquakes occurred more often in some locations than previously estimated. Our estimates of seismic hazard have also changed because the models used to predict the level of ground shaking, as caused by a specific magnitude earthquake at a certain distance from a site, changed. The increased estimates of seismic hazard at some locations in the Central and Eastern United States were discussed in a memorandum to the Commission, dated July 26, 2006. (The memorandum is available in the NRC Agencywide Documents Access and Management System [ADAMS] under Accession No. ML052360044).

Additional, technical, non-public information: See additional discussion of terms at the end of the document.

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81) Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5×10^{-6} , or 0.000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct?

Public Response: Yes, at least partly. In the subject documents the frequencies for core damage or ground motion exceedance have been expressed in the form "2.5E-06". As you noted this is equivalent to 2.5×10^{-6} , or 0.000025 per year. If, for example, the core damage frequency was estimated as 2.5E-06, this would be equivalent to an expectation of 2.5 divided by a million per year. It is not really correct to think of these values as "once every 400,000 years," the two numbers are mathematically equivalent but do not convey the same statistical meaning within this context. Rather, you could characterize it as 1 in 400,000 per year of something occurring.

Additional, technical, non-public information: None

82) The GI-199 documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the central and eastern US What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the western US?

Public Response: At this time the staff has not formally developed updated probabilistic seismic hazard estimates for the existing nuclear power plants in the Western US However, NRC staff during the mid- to late-1990's reviewed the plants' assessments of potential consequences of severe ground motion from earthquakes beyond the plant design basis as part of the Individual Plant Examination of External Events (IPEEE) program. From this review, the NRC staff determined that the seismic designs of operating plants in the US have adequate safety margin. NRC staff has continued to stay abreast of the latest research on seismic hazards in the Western US and interface with colleagues at the US Geological Survey. The focus of Generic Issue 199 has been on the CEUS. However, the Information Notice that summarized the results of the Safety/Risk Assessment was sent to all existing power reactor licensees. The documents that summarize existing hazard estimates are contained in the Final Safety Analysis Reports (FSARS) and in the IPEEE submittals. It must be noted that following 9/11 the IPEEE documents are no longer publicly available.

Additional, technical, non-public information: None

83) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, US Department of Energy, US Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment."

Public Response: The new consensus hazard curves are being developed in a cooperative project that has NRC, US Department of Energy, US Geological Survey (USGS) and Electric Power Research Institute (EPRI) participation. The title is: The Central and Eastern US Seismic Source Characterization (CEUS-SSC) project. The project is being conducted following comprehensive standards to ensure quality and regulatory defensibility. It is in its final phase and is expected to be publicly released in the fall of 2011. The project manager is Larry Salamone (Lawrence.salamone@srs.gov, 803-645-9195) and the technical lead on the project is Dr. Kevin Coppersmith (925-974-3335, kcoppersmith@earthlink.net). Additional

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information on this project can be found at: <http://mydocs.epri.com/docs/ANT/2008-04.pdf>, and http://my.epri.com/portal/server.pt?open=512&objID=319&&PageID=218833&mode=2&in_hi_us_erid=2&cached=true.

Additional, technical, non-public information: None

84) What is the timetable now for consideration of any regulatory changes from the GI-199 research?

Public Response: The NRC is working on developing a Generic Letter (GL) to request information from affected licensees. The GL will likely be issued in a draft form within the next 2 months to stimulate discussions with industry in a public meeting. After that it has to be approved by the Committee to Review Generic Requirements, presented to the Advisory Committee on Reactor Safeguards and issued as a draft for formal public comments (60 days). After evaluation of the public comments it can then be finalized for issuance. We expect to issue the GL by the end of this calendar year, as the new consensus seismic hazard estimates become available. The information from licensees will likely require 3 to 6 months to complete. Staff's review will commence after receiving licensees' responses. Based on staff's review, a determination can be made regarding cost beneficial backfits where it can be justified.

Additional, technical, non-public information: None

1. Please explain in plain language how the NRC determined plants are safe with regard to the results of our GI199 assessment report..
2. The GI199 Safety/Risk Assessment states 24 plants "lie in the continue zone" (pg 23) These plants "need more assessment." What are these 24 plants? Why are these plants that require further evaluation safe? (pg 23 and Figure 8)
3. Why is the list of plants identified by the NRC for further evaluation under GI199 different than those identified by MSNBC as the "top 10" likely to fail due to seismic event?
4. Why are plants safe when MSNBC calculations indicate several hundred percent increases in the risk of a seismic event that damages the core?
5. Why do Indian Point 2 and Indian Point 3 plants have different probabilities of failing due to a seismic event when the plants are located next to each other? Is IP3 calculated to be the most likely to fail due to a seismic event? Why? Why is IP2 different? Aren't these plant at the same location and very similar design?
6. Why is Pilgrim not in the NRC "continue to evaluate zone" but second on the MSNBC list as moist likely to fail due to a seismic event?

Seismic Probabilistic Risk Assessment (SPRA)

85) The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs useful in assessing an event such as this?

Public response: Nilesh Chokshi to provide Q&As on SPRA

Additional, technical, non-public information: None

Plant-Specific Questions

San Onofre Nuclear Generating Station (SONGS) Questions

86) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency?

Public response: The low voltage condition was caused by a failure to properly tighten bolts on a electrical breaker that connected the battery to the electrical bus that would be relied on to start the EDG in case of a loss of off-site power. This was corrected immediately on identification and actions taken to prevent its reoccurrence. The 3 other EDGs at SONGS were not affected.

Additional, technical, non-public information: None

87) Has the earthquake hazard at SONGS been reviewed like Diablo Canyon nuclear power plant (DCNPP) is doing? Are they planning on doing an update before relicensing?

Public Answer: Relicensing does not evaluate the potential change to seismic siting of a plant. If there is a seismic design concern, it would be addressed for the plant as it is currently operating.

The closest active fault is approximately five miles offshore from San Onofre, a system of folds and faults exist called the OZD need to write out full name. The Cristianitos fault is ½ mile southeast, but is an inactive fault. Other faults such as the San Andreas and San Jacinto, which can generate a larger magnitude earthquake, are far enough away that they would produce ground motions much less severe than the OZD for San Onofre.

Past history relative to nearby major quakes have been of no consequences to San Onofre. In fact, three major earthquakes from 1992 to 1994 (Big Bear, Landers and Northridge), ranging in distance from 70-90 miles away and registering approximately 6.5 to 7.3 magnitude, did not disrupt power production at San Onofre. The plant is expected to safely shutdown if a major earthquake occurs nearby. Safety related structures, systems and components have been designed and qualified to remain functional and not fail during and after an earthquake.

Additional, technical, non-public information: None

88) Is possible to have a tsunami at songs that is capable of damaging the plant?

Public Information: The San Onofre Units 2 and 3 plant grade is elevation +30.0 feet MLLW. The controlling tsunami for San Onofre occurring during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet MLLW at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 MLLW. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 MLLW. A tsunami greater than this height is extremely unlikely.

Additional, technical, non-public information: None

89) Does SONGS have an emergency plan for tsunami?

Public Response: The SONGS emergency plan does initiate the emergency response organization and results in declaration of emergency conditions via their EALs. The facility would then make protective

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action recommendations to the Governor, who would then decide on what protective actions would be ordered for the residents around SONGS.

Additional, technical, non-public information: None

90) Has evacuation planning at SONGS considered tsunami?

Public Response: These considerations would be contained in the State and local (City, County) emergency plans, which are reviewed by FEMA. FEMA then certifies to the NRC that they have "reasonable assurance" that the off-site facilities can support operation of SONGS in an emergency.

Additional, technical, non-public information: None

91) Is SONGS designed against tsunami and earthquake?

Public Response: Yes. SONGS is designed against both tsunami and earthquake.

Additional, technical, non-public information: None

92) What is the height of water that SONGS is designed to withstand?

Public Response: 30 feet (9.1 meters). Information for all plants can be found in the "Additional Information" section of this document.

Additional, technical, non-public information: None

93) What about drawdown and debris?

Public Response: *Good question...can HQ answer? Goutam, Henry, or Rich...can you help with this one?*

Additional, technical, non-public information: None

94) Will this be reviewed in light of the Japan earthquake.

Public Response: The NRC will do a thorough assessment of the lessons learned from this event and will review all potential issues at US nuclear plants as a result.

Additional, technical, non-public information: None

95) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after?

Public Response: Seismic Category I equipment is equipment that is essential to the safe shutdown and isolation of the reactor or whose failure or damage could result in significant release of radioactive material. All Seismic Category I equipment at SONGS is designed to function following a DBE with ground acceleration of 0.67g.

The operating basis earthquake (1/2 of the DBE) is characterized by maximum ground shaking of 0.33g. Historically, even this level of ground shaking has not been observed at the site. Based on expert analysis, the average recurrence interval for 0.33g ground shaking at the San Onofre site would be in excess of 1000 years and, thus, the probability of occurrence in the 40-year design life of the plant would be less than 1 in 25. The frequency of the DBE would be much more infrequent, and very unlikely to occur during the life of the plant. Even if an earthquake resulted in greater than the DBE movement/acceleration at SONGS, the containment structure would ultimately protect the public from harmful radiation release, in the event significant damage occurred to Seismic category 1 equipment.

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Additional, technical, non-public information: None

96) Are there any faults nearby SONGS that could generate a significant tsunami?

Public Response: Current expert evaluations estimate a magnitude 7 earthquake about 4 miles (6.4 km) from SONGS. This is significantly less than the Japan earthquake, and SONGS has been designed to withstand this size earthquake without incident. Should discuss the different tectonic nature (not a subduction zone like Japan)?

Additional, technical, non-public information: None

97) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site?

Public Response: The design basis earthquake (DBE) is defined as that earthquake producing the maximum vibratory ground motion that the nuclear power generating station is designed to withstand without functional impairment of those features necessary to shut down the reactor, maintain the station in a safe condition, and prevent undue risk to the health and safety of the public. The DBE for SONGS was assessed during the construction permit phase of the project. The DBE is postulated to occur near the site (5 miles (8km)), and the ground accelerations are postulated to be quite high (0.67g), when compared to other nuclear plant sites in the U.S (0.25g or less is typical for plants in the eastern US). Based on the unique seismic characteristics of the SONGS site, the site tends to amplify long-period motions, and to attenuate short-period motions. These site-specific characteristics were accounted for in the SONGS site-specific seismic analyses.

Additional, technical, non-public information: None

98) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake?

Public Response: We do not have current information on the ground motion at the Japanese reactors. SONGS was designed for approximately a 7.0 magnitude earthquake 4 miles (6.4 km) away. The Japanese earthquake was much larger (8.9), but was also almost 9 miles (14.5 km) away. The local ground motion at a particular plant is significantly affected by the local soil and bedrock conditions. SONGS was designed (0.67g) to withstand more than 2 times the design motion at average US plants.

Additional, technical, non-public information: None

99) What about the evacuation routes at SONGS? How do we know they are reasonable?

Public Response: FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at SONGS. The next such exercise is planned for April 12, 2011.

Additional, technical, non-public information: None

100) Regarding tsunami at DCNPP and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

Public response: See below

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101) What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger?

Public response: Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: None

102) Is there potential linkage between the South Coast Offshore fault near SONGS and the Newport-Inglewood Fault system and/or the Rose Canyon fault? Does this potential linkage impact the maximum magnitude that would be assigned to the South Coast Offshore fault and ultimately to the design basis ground motions for this facility?

Public response: Stephanie and Jon to answer (you may want to change the question) based on the discussions in the articles sent by Lara U.

Additional, technical, non-public information: Proposed action is to check the FSAR for San Onofre and read the discussion on characterization of the offshore fault. A quick look at discussion of the Newport Inglewood from other sources suggest this is part of the "system". It would be helpful to check the basis for segmenting the fault in the FSAR. Probably have to dig on this a bit, may need to look at the USGS/SCEC/ model for this area.

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Diablo Canyon Nuclear Power Plant (DCNPP) Questions

103) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast earthquake and tsunami?

Public response: ADD

Additional, technical, non-public information: ADD

104) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth?

Public Response: FEMA reviews off-site evacuation plans formally every 2 years during a biennial emergency preparedness exercise. NRC evaluates on-site evacuation plans during the same exercise. Population studies are formally done every 10 years, and evacuation time estimates are re-evaluated at that time. FEMA reviews these evacuation plans, and will conclude their acceptability through a finding of "reasonable assurance" that the off-site facilities and infrastructure is capable of protecting public health and safety in the event of an emergency at DCNPP.

Additional, technical, non-public information: None

105) Are there local offshore fault sources capable of producing a tsunami with very short warning times?

Public Response: ADD- question forwarded to region

Additional, technical, non-public information: ADD

106) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples.

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

107) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities?

Public Response: ADD question forwarded to region

Additional, technical, non-public information: ADD

108) Why did the Emergency Warning go out for a 'tsunami' that was only 6 ft (1.8 m) high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence.

Public Response: The warning system performed well. The 6 foot (1.8 meters) wave was predicted many hours before and arrived at the time it was predicted. Federal officials to accurately predicted the tsunami arrival time and size; allowing local official to take appropriate measures as they saw necessary to warn and protect the public. It should be understood that even a 6 foot tsunami is very dangerous. Tsunamis have far more energy and power than wind-driven waves.

Additional, technical, non-public information: ADD

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109) How big did the Japanese think an earthquake and tsunami could be before March 11, 2011? Why were they so wrong (assuming this earthquake/tsunami was bigger than what they had designed the plant for)?

Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week (both with the reactors and getting the people out...see #1, evacuation plan above)?

Public Response: ADD can HQ answer?

Additional, technical, non-public information: ADD

110) Regarding the tsunami at DCNPP and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami?

Public Response: Both the Diablo Canyon (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at Diablo canyon are designed for combination of tsunami-storm wave activity. SONGS has reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action

Additional, technical, non-public information: ADD

NOTE: need to add to SONGS and DCNPP... Canyon and San Onofre IPEEEs - based on the Technical Evaluation Reports, Diablo did consider a locally induced tsunami in a limited way (the aux service water pumps were assumed to become flooded following a seismic event) while SONGS did not consider a coupled seismic/tsunami event.

111) Shouldn't the NRC make licensees consider a Tsunami coincident with a seismic event that triggers the Tsunami?

ADD

112) Given that SSCs get fatigued over time, shouldn't the NRC consider after-shocks in seismic hazard analyses?

ADD

113) Did the Japanese also consider an 8.9 magnitude earthquake and resulting tsunami "way too low a probability for consideration"?

ADD

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- 114) GI-199 shows that the scientific community doesn't know everything about the seismicity of CEUS. And isn't there a prediction that the West coast is likely to get hit with some huge earthquake in the next 30 years or so? Why does the NRC continue to license plants on the west coast?**

Work the following into Q&As as time permits.

After an earthquake, in order to restart, in practice a licensee needs to determine from engineering analysis that the stresses on the plant did not exceed their licensed limits. That would be a very tall order for a plant that experienced a beyond design basis earthquake, and probably is why it had taken Japan so long to restore the KK plants following the earlier earthquake.

- 115) Has industry done anything on tsunami hazards? Also, has anyone done work to look at the effect of numerous cycles of low amplitude acceleration following a larger event. I would expect we would have some information because how do we know a plant would be fit to start back up after an event? We cannot possibly do NDE on everything to determine if flaws have propagated to the point where they need to be replaced.**

Indian Point Questions

116) Why is Indian Point safe if there is a fault line so close to it?

Public Response: The Ramapo fault system, located near the Indian Point Nuclear Power Plant, is an example of an old fault system that, based on geologic field evidence, has not been active in the last 65.5 million years. The Ramapo fault system extends primarily from southeastern New York to northern New Jersey and is made up of a series of northeast-oriented faults. Even though there is minor earthquake activity in the vicinity of the Ramapo faults, this earthquake activity cannot be directly correlated with any individual fault within the Ramapo fault system.

US nuclear power plants are designed and built to withstand the largest expected earthquake in the site region, based on observed historical seismicity and field evidence for prehistoric earthquakes, and are also designed to incorporate seismic safety margins. A potential earthquake in and around the vicinity of the Ramapo fault system was taken into account during the NRC licensing process for the Indian Point plants, and the plant design incorporated the largest expected earthquake in the site region. In summary, the Ramapo fault system exhibits no definitive evidence for recent fault displacement (i.e., no evidence for fault activity in the last 65.5 million years) and the Indian Point nuclear power plant was designed and built to safely shutdown in the event of an earthquake having the highest magnitude observed in the site region. Therefore, the NRC concluded that the risk of significant damage to the Indian Point reactors due to a potential earthquake is acceptable.

Additional, technical, non-public information: The information above and following is consistent with the literature and the UFSAR for IP related to the Ramapo fault. The Ramapo fault system, which passes through the Indian Point area, is a group of Mesozoic age faults, extending from southeastern New York to northern New Jersey, as well as further southwest. The fault system is composed of a series of southeast-dipping, northeast-striking faults. Various faults of the system contain evidence of repeated slip in various directions since Proterozoic time, including Mesozoic extensional reactivation. However, the USGS staff, who reviewed 31 geologic features in the Appalachian Mountains and Coastal Plain and compiled a National Database on Quaternary Faulting (Crone and Wheeler, 2000), listed the Ramapo fault system as low risk because the fault system lacks evidence for Quaternary slip. They further pointed out that the Ramapo fault system, and 17 other geologic features, "have little or no published geologic evidence of Quaternary tectonic faulting that could indicate the likely occurrence of earthquakes larger than those observed historically" (Wheeler and Crone, 2004). Among these faults, the Ramapo fault system is one of the three that underwent a paleoseismological study. In two trenches excavated across the Ramapo fault, no evidence of Quaternary tectonic faulting was found (Wheeler and Crone, 2000). Because the Ramapo fault system is relatively inactive, and because the plants are designed to safely shutdown in the event of an earthquake of the highest intensity ever recorded in that area, the NRC has concluded that the risk of significant damage to the reactors due to a probable earthquake in the area is extremely small.

The letter that was sent to the NRC from Rep Lowey refers to the Ramapo seismic zone (RSZ) and the Dobbs Ferry fault. The letter incorrectly states that the Dobbs Ferry fault is located within the Ramapo seismic zone. Based on the literature, it is not. It is close, but it is considered to be in the Manhattan Prong more to the east (more like 10-15 miles away) while the Ramapo fault system is considered to be in the Reading Prong (a couple of miles away from IP). Also for clarification, the seismicity is considered to be within the Precambrian/Paleozoic basement at depths greater than the Mesozoic Newark Basin where the RSZ is situated.

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Outstanding Questions from Congress

The below questions are gleaned from the congressional letters coming into the NRC. Because they generally cover different topics, they are being kept together as sets to assist the office assigned with response. Once a formal response is developed and sent, the questions will be moved to the appropriate sections.

117) Received 3/16/11 from Congresswoman Lowey

The key elements of the congresswoman's letter are as follows:

The Ramapo Seismic Zone is a particular threat because the zone passes within two miles of Indian Point. The Ramapo Seismic zone includes the Dobbs Ferry fault in Westchester, which generated a 4.1 magnitude earthquake in 1955. The Columbia University study suggests that this pattern of subtle but active faults increases the risk to the New York City area and that an earthquake with a magnitude of 7.0 on the Richter scale is within reach. Disturbingly, Entergy measures the risk of an earthquake near Indian Point to be between 1.0 and 3.0 on the Richter scale, despite evidence to the contrary.

The NRC should study Indian Point's risk of, and ability to sustain a disaster, including the impact of earthquakes and hurricanes, as well as collateral impacts such as loss of power, inability to cool reactors and emergency evacuation routes. The NRC should evaluate how a similar incident in the New York metropolitan area could be further complicated due to a dramatically higher population and the effectiveness of the proposed evacuation routes.

Public Response: Please see technical elements in the above question. NRR has the lead for developing the formal response

Additional, technical, non-public information: please see the significant amount of information above

118) From 3/16/11 Press Release from Senators Boxer and Feinstein

Plant Design and Operations

1. What changes to the design or operation of the Diablo Canyon and SONGS facilities have improved safety at the plants since they began operating in the mid-1980s?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

2. What emergency notification systems have been installed at California nuclear power plants? Has there ever been a lapse of these systems during previous earthquakes or emergencies?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

3. What safety measures are in place to ensure continued power to California reactors in the event of an extended power failure?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

Type of Reactor

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4. What are the differences and similarities between the reactors being used in California (pressurized water reactors) and those in Japan (boiling water reactors), as well as the facilities used to house the reactors, including the standards to which they were built and their ability to withstand natural and manmade disasters?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

Earthquakes and Tsunamis

5. We have been told that both Diablo Canyon and San Onofre Nuclear Generating Station are designed to withstand the maximum credible threat at both plants, which we understand to be much less than the 9.0 earthquake that hit Japan. What assumptions have you made about the ability of both plants to withstand an earthquake or tsunami? Given the disaster in Japan, what are our options to provide these plants with a greater margin for safety?

Public Response: Annie and Kamal developing response

Additional, technical, non-public information: ADD

6. Have new faults been discovered near Diablo Canyon or San Onofre Nuclear Generating Station since those plants began operations? If so, how have the plants been modified to account for the increased risk of an earthquake? How will the NRC consider information on ways to address risks posed by faults near these plants that is produced pursuant to state law or recommendations by state agencies during the NRC relicensing process?

Public Response: Annie and Kamal developing response

Additional, technical, non-public information: ADD

7. What are the evacuation plans for both plants in the event of an emergency? We understand that Highway 1 is the main route out of San Luis Obispo, what is the plan for evacuation of the nearby population if an earthquake takes out portions of the highway and a nuclear emergency occurs simultaneously?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

8. What is the NRC's role in monitoring radiation in the event of a nuclear accident both here and abroad? What is the role of EPA and other federal agencies?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

9. What monitoring systems currently are in place to track potential impacts on the US, including California, associated with the events in Japan?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

10. Which federal agency is leading the monitoring effort and which agencies have responsibility for assessing human health impacts? What impacts have occurred to date on the health or environment of the US or are currently projected or modeled in connection with the events in Japan?

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Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

11. What contingency plans are in place to ensure that the American public is notified in the event that hazardous materials associated with the events in Japan pose an imminent threat to the US?

Public Response: NRR/DORL developing response

Additional, technical, non-public information: ADD

119) From 3/15/11 Press Release from Congresspeople Markey and Capps

Note that these are only the seismic questions. There are other questions that are structural

1. Provide the Richter or moment magnitude scale rating for each operating nuclear reactor in the United States. If no such information exists, on what basis can such an assertion be made regarding the design of any single nuclear power plant?

Public Response: US nuclear power plants are designed for different ground motions determined on a site-specific basis, which are called the Safe Shutdown Earthquake ground motions (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Ground motion, or shaking, is a function of both earthquake magnitude and distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant.

Please see the available table of Design Basis Ground Motions for US Plants in the Additional Information: Useful Tables.

Additional, technical, non-public information: ADD

2. The San Onofre reactor is reportedly designed to withstand a 7.0 earthquake, and the Diablo Canyon reactor is designed to withstand a 7.5 magnitude. According to the Southern California Earthquake Center (SCEC), there is an 82% probability of an earthquake 7.0 magnitude in the next 30 years, and a 37 percent probability that an earthquake of 7.5 magnitude will occur. Shouldn't these reactors be retrofitted to ensure that they can withstand a stronger earthquake than a 7.5? If not, why not?

Public Response: This needs to be edited and enhanced. The noted SCEC magnitudes and probabilities are sourced from Uniform California Earthquake Rupture Forecast (UCERF) Figure 2 (<http://www.scec.org/core/public/scecontext.php/3935/13662>). The value quoted describes the probability that an earthquake of that magnitude will occur somewhere in Southern California. The probability that earthquakes of those magnitudes occur near the plants is far smaller. Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location.

Additional, technical, non-public information: The colors in UCERF Figure 2 represent the probabilities of having a nearby earthquake rupture (within 3 or 4 miles) of magnitude 6.7 or larger in the next 30 years. Therefore, reading the colors off of Figure 2, the San Onofre and Diablo Canyon NPPs have a $\leq 10\%$ probability of having a $\geq M6.7$ earthquake rupture within 3 to 4 miles in the next 30 years. Therefore, retrofitting these reactors to withstand earthquakes of magnitude 7.5 or stronger based on the UCERF study would put an unnecessary burden on the licensees.

3. Provide specific information regarding the differences in safety-significant structures between a nuclear power plant that is located in a seismically active area and one that is not. Provide, for each operating nuclear reactor in a seismically active area, a full list and description of the safety-significant design features that are included that are not included in similar models that are not located in seismically active areas.

Public Response: This is a rough draft. We need to get some reviews of this. Assumed NRR will have ultimate responsibility for the response.

There are no differences in safety requirements for nuclear power plants located in seismically active areas and ones that are not. Regardless of site seismicity, Appendix S to 10 CFR Part 50 requires for site-specific SSE ground motions, structures, systems, and components will remain functional and within applicable stress, strain, and deformation limits. The required safety functions of SSCs must be assured during and after the vibratory ground motion through design, testing, or qualification methods. The evaluation must take into account soil-structure interaction effects and the expected duration of the vibratory motions. Appendix S also requires that the horizontal component of the SSE ground motion in the free field at the foundation elevation of structures must be an appropriate response spectrum with peak ground acceleration (PGA) of at least 0.10g. Design basis loads for nuclear power plant structures, important to safety, include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the American Institute of Concrete (ACI-349) and the American Institute of Steel Construction (AISC N690), are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads. In addition to the nominal seismic design, all new generation reactors have to demonstrate a seismic margin of 1.67 relative to the site-specific seismic demands.

For the current operating fleet of nuclear power reactors, site-to-site differences in structural design can result from differences in external site hazards such as seismic, wind, tornado, and tsunami. For a low-seismicity region, wind or tornado loads may control the design. Conversely, for a high-seismicity region, seismic loads will likely control. Structures in high-seismicity regions have robust designs with typically higher capacity shear walls, as an example. Systems and components will also be more robust and are designed and tested to higher levels of acceleration.

Additional, technical, non-public information: ADD

4. In your opinion, can any operating nuclear reactors in the United States withstand an earthquake of the magnitude experience in Japan?

Public Response: The March 11, 2011, magnitude 9 earthquake that recently affected Japan is different than earthquakes that could affect US nuclear plants. Each US nuclear plant is designed to a ground-shaking level that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. The Japan earthquake was caused by a "subduction zone" event, which is the type of mechanism that produces the largest possible magnitude earthquakes. In the continental US, the only subduction zone is the Cascadia subduction zone which lies off the coast of northern California, Oregon and Washington, so an earthquake this large could only happen in that region. The only plant in that area is Columbia Generating Station, which is approximately 225 miles (363 km) from the coast and the subduction zone. Outside of the Cascadia subduction zone, earthquakes are not

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expected to exceed a magnitude of approximate 8, which is 10 times smaller than a magnitude 9.

Additional, technical, non-public information: ADD

Questions for the Japanese

NOTE: These were all collected from what we produced after the KKNPP earthquake. These need to be gone through and revised for this event. We should separate into high, medium and low priorities:

The below is pulled from an KKNPP summary...to be reviewed...

- What seismic monitoring equipment exists at the plants? Can we get the recordings from the
- Are there recordings of the tsunami at the plant location?
- What is the geology and soil profile at the plants?
- NOAA has a prediction of very large tsunami waves at Onagawa. Are these accurate?

The below is pulled from an KKNPP summary...to be reviewed...

DESIGN BASES: Exactly what is the design basis ground motion for each of the plants? Did it change through time (i.e. from the first plant to the seventh)? Where was the design basis motion defined, at the top of rock, at the ground surface, at the floor level or somewhere else? Were the site-specific geotechnical properties used in the development of the design basis ground motions for each plant?

SEISMIC HAZARDS: What assumptions were used in the seismic hazard evaluation to arrive at the design basis ground motions? What faults were considered, what magnitudes and geometries were assumed? What activity rates were assumed for both fault sources and "background" earthquakes?

OBSERVATIONS-GROUND MOTIONS: What ground motions were recorded and where were they recorded? Specifically, what free-field, in-structure and down-hole recordings were obtained? What are the locations of the instruments that obtained records? Did all the instruments respond as planned, or are there lessons to be learned? Can the digital data be shared with the NRC? Is there any way of evaluating how well the existing analysis methods predicted the observed motions at different points within the plant?

OBSERVATIONS-DAMAGE: What damage was observed at the plants? How well did equipment such as cranes perform? Were there observations of displacements of equipment from anchorages, were cracks observed in any of the buildings? How well did non-nuclear safety type of buildings and equipment perform? What types of geotechnical phenomena were observed, was there ground deformation/slope failures, lateral spreading or liquefaction near the facility? Did the ABWRs perform better or similar to the older designs?

And another set from the KKNPP earthquake...to be reviewed...

Please provide the following information in the time frame indicated:

Highest Priority Questions – as soon as possible

- A timeline describing the order of events and the individual plant responses to the earthquake
- Confirmation that all operating and shut down units achieved or maintained safe-shutdown conditions without manual operator intervention or complications. Did all safety-related systems respond to the seismic scram as designed? Please note if there were any unexpected plant responses to the event, including any spurious signals.
- A more detailed description of the impacts of the earthquake on the plant (e.g., what systems were involved, which pipes were damaged, where did the leakage occur (pipe wall, joints, fittings, etc).
- A description of seismic instrumentation at the site and at each of the 7 units, soil/rock shear wave properties through depth, instrument location and mounting condition, all the recorded

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data on the basis of unified starting time, such that the coherency of motion through the surface or the foundations and at depth can be determined

- Full spectrum seismic design basis for the plant.
- What actually caused the Unit 3B house transformer fire?

Additional Questions – please provide answers as more information is developed

- Damage to buildings, slope failures, intake structure failure, if any
- Behavior of cranes, cables and conduits
- Failures of any large pumps and valves, pipe mounted control or valve failure
- Instances of any relay or vibration sensitive components malfunctioning
- Nature of damage to service water and fire-suppression piping - their diameter, material they are made of including their elastic properties, design standards used for the piping design, nature of failure (at support, anchor motion, failure of anchors, subsidence differential movement etc)
- Were there any systems that changed state?
- Impact on physical security, and any vulnerabilities identified
- Were there any impacts on the grid because of the event?
- Please describe the switchyard performance?
- What emergency preparedness concerns have been identified as a result of the event?

3B Transformer Specific Questions – please respond when there is time and other issues have been addressed

- What are the primary and secondary voltages of the transformer?
- What type of transformer - liquid or dry-type (air-cooled)?
- Who was the manufacturer of the transformer?
- What are the physical dimensions of the transformer?
- How are the transformer coils restrained within the cabinet?
- What is the clearance between transformer energized component and cabinet?
- What is the relative displacement for connection between the high voltage leads and the first anchor point (adequate slack?) in the transformer?
- What was the natural frequency of the burned transformer, if known?
- What was the acceleration level (or the response spectrum, if available) at the support location of the burned transformer?
- What seismic requirements exist for the burned transformer? Was the transformer tested or analyzed to a specific acceleration or response spectra, and if so, what are they?
- Are there any of the same type of transformer installed at other locations in the plant?

Additional Information: Useful Tables

Table of Design Basis Ground Motions for US Plants

Design Basis Earthquake Information					
Nuclear Plant By State/Location	Maximum Observed Or Inferred Intensity (MMI Scale)	Relative Distance Of Seismic Source	Design SSE Peak Acceleration, <i>g</i>	OBE Peak Acceleration, <i>g</i>	Soil Condition
New York					
Fitzpatrick	VI	Near	0.15	0.08	Soil
Ginna 1	VIII/IX	>60 miles	0.2	0.08	Rock
Indian Point 2, 3	VII	Near	0.15	0.1	Rock
Nine Mile Point 1	IX-X	>60 miles	0.11	0.06	Rock
Nine Mile Point 2	VI	Near	0.15	0.075	Rock
New Jersey					
Salem 1,2	VII-VIII	Near	0.2	0.1	Deep Soil
Connecticut					
Millstone 1, 2, 3	VII	Near	0.17	0.07	Rock
Vermont					
Vermont Yankee	VI	Near	0.14	0.07	Rock
Ohio					
Davis Besse 1	VII	Near	0.15	0.08	Rock
Perry 1	VII	Near	0.15	0.08	Rock
Georgia					
Hatch 1, 2	VII	Near	0.15	0.08	Deep Soil
Vogtle 1, 2	VII-VIII	Near	0.2	0.12	Deep Soil
Tennessee					
Seqouyah 1, 2	VIII	Near	0.18	0.09	Rock
Watts Bar 1	VIII	Near	0.18	0.09	Rock
California					
San Onofre 2, 3	IX-X	Near	0.67	0.34	Soil
Diablo Canyon 1, 2	X-XI	Near	0.75	0.20	Rock
Florida					

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Crystal River 3	V	Near	0.10	0.05	Rock
St. Lucie 1, 2	VI	Near	0.10	0.05	Soil
Turkey Point 3, 4	VII	Near	0.15	0.05	Rock

NOTES:

MMI=Modified Mercalli Intensity, a measure of observed/reported damage and severity of shaking.
Relative distance measure used in FSAR to develop SSE acceleration, "Near" indicates distance less than 10 miles.

SSE=Safe Shutdown Earthquake ground motion, for horizontal acceleration, in units of earth's gravity, *g*.

OBE=Operating Basis Earthquake ground motion, level of horizontal acceleration, which if exceeded requires plant shutdown.

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Table of SSE, OBE and Tsunami Water Levels

Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Alabama			
Browns Ferry	0.200	0.100	N/A (Non-Coastal)
Farley	0.100	0.050	N/A (Non-Coastal)
Arkansas			
Arkansas Nuclear	0.200		N/A (Non-Coastal)
Arizona			
Palo Verde	0.200	0.100	N/A (Non-Coastal)
California			
Diablo Canyon	0.400	0.200	The design basis maximum combined wave runup is the greater of that determined for near-shore or distantly-generated tsunamis, and results from near-shore tsunamis. For distantly-generated tsunamis, the combined runup is 30 feet. For near-shore tsunamis, the combined wave runup is 34.6 feet, as determined by hydraulic model testing. The safety-related equipment is installed in watertight compartments to protect it from adverse sea wave events to elevation +48 feet above mean lower low water line (MLLWL).
San Onofre	0.670	0.340	The controlling tsunami occurs during simultaneous high tide and storm surge produces a maximum runup to elevation +15.6 feet mean lower low water line (MLLWL) at the Unit 2 and 3 seawall. When storm waves are superimposed, the predicted maximum runup is to elevation +27 MLLWL. Tsunami protection for the SONGS site is provided by a reinforced concrete seawall constructed to elevation +30.0 MLLWL.
Connecticut			
Millstone	0.170	0.090	18 ft SWL
Florida			
Crystal River	0.050	0.025	N/A (Non-Coastal)

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
St. Lucie	0.100	0.050	No maximum tsunami level, bounded by PMH surge of +18 MLW wave runup, with plant openings at +19.5 MLW
Turkey Point	0.150	0.050	No maximum tsunami level, bounded by PMH surge of +18.3 MLW water level, site protected to +20 MLW with vital equipment protected to +22 MLW
Georgia			
Hatch	0.150	0.080	N/A (Non-Coastal)
Vogtle	0.200	0.120	N/A (Non-Coastal)
Illinois			
Braidwood	0.200	0.090	N/A (Non-Coastal)
Byron	0.200	0.090	N/A (Non-Coastal)
Clinton	0.250	0.100	N/A (Non-Coastal)
Dresden	0.200	0.100	N/A (Non-Coastal)
LaSalle	0.200	0.100	N/A (Non-Coastal)
Quad Cities	0.240	0.120	N/A (Non-Coastal)
Iowa			
Duane Arnold	0.120	0.060	N/A (Non-Coastal)
Kansas			
Wolf Creek	0.120	0.060	N/A (Non-Coastal)
Louisiana			
River Bend	0.100	0.050	
Waterford	0.100		Floods – 30 feet MSL
Maryland			
Calvert Cliffs	0.150	0.080	14 ft design wave
Massachusetts			
Pilgrim	0.150	0.080	*Storm flooding design basis - 18.3ft
Michigan			
D.C. Cook	0.200	0.100	N/A
Fermi	0.150	0.080	N/A
Palisades	0.200	0.100	N/A

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Missouri			
Callaway	0.200		N/A (Non-Coastal)
Mississippi			
Grand Gulf	0.150	0.075	N/A
Minnesota			
Monticello	0.120	0.060	N/A (Non-Coastal)
Prarie Island	0.120	0.060	N/A (Non-Coastal)
Nebraska			
Cooper	0.200	0.100	N/A (Non-Coastal)
Fort Calhoun	0.170	0.080	N/A (Non-Coastal)
New York			
Fitzpatrick	0.150	0.080	N/A (Non-Coastal)
Giinna	0.200	0.080	N/A
Indian Point	0.150	0.100	15 ft msl
Nine Mile Point, Unit 1	0.110	0.060	N/A
Nine Mile Point, Unit 2	0.150	0.075	N/A
New Hampshire			
Seabrook	0.250	0.125	(+) 15.6' MSL Still Water Level (Tsunami Flooding -Such activity is extremely rare on the US Atlantic coast and would result in only minor wave action inside the harbor.)
New Jersey			
Hope Creek	0.200	0.100	35.4 MSL The maximum probable tsunami produces relatively minor water level changes at the site. The maximum runup height reaches an elevation of 18.1 feet MSL with coincident 10 percent exceedance high tide)
Oyster Creek	0.184	0.092	(+) 23.5' MSL Still Water Level (Probable Maximum Tsunami - Tsunami events are not typical of the eastern coast of the United States and have not, therefore, been addressed.)

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration, (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Salem	0.200	0.100	21.9 MSL (There is no evidence of surface rupture in East Coast earthquakes and no history of significant tsunami activity in the region)
North Carolina			
Brunswick	0.160	0.030	N/A
McGuire	0.150	0.080	N/A (Non-Coastal)
Shearon Harris	0.150		N/A (Non-Coastal)
Ohio			
Davis-Besse	0.150	0.080	N/A
Perry	0.150	0.080	N/A
Pennsylvania			
Beaver Valley	0.130	0.060	N/A (Non-Coastal)
Limerick	0.150	0.075	N/A (Non-Coastal)
Peach Bottom	0.120	0.050	N/A (Non-Coastal)
Three Mile Island	0.120	0.060	N/A (Non-Coastal)
Susquehanna	0.150	0.080	N/A (Non-Coastal)
South Carolina			
Catawba	0.150	0.080	N/A (Non-Coastal)
Oconee	0.150	0.050	N/A (Non-Coastal)
Robinson	0.200	0.100	N/A (Non-Coastal)
V.C. Summer	0.250	0.150	N/A (Non-Coastal)
Tennessee			
Sequoyah	0.180	0.090	N/A (Non-Coastal)
Watts Bar, Unit 1	0.180	0.090	N/A (Non-Coastal)
Texas			
Comanche Peak	0.120	0.060	N/A
South Texas Project	0.100	0.050	N/A
Vermont			

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Nuclear Plant Name By State/ Location	Safe Shutdown Earthquake (SSE) Peak Acceleration (g)	Operating Basis Earthquake (OBE) Peak Acceleration (g)	Probable Maximum Tsunami OR Maximum Tsunami Water Level
Vermont Yankee	0.140	0.070	N/A
Virginia			
North Anna	0.180		N/A
Surry	0.150	0.080	N/A
Washington			
Columbia	0.250		N/A (Non-Coastal)
Wisconsin			
Kewaunee	0.120	0.060	N/A
Point Beach	0.120		N/A
Definition of Safe Shutdown Earthquake	The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMRS), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).		
Definition of Operating Basis Earthquake:	<p>To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows:</p> <ul style="list-style-type: none"> (i) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS. (ii) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD). (iii) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii). 		

Table of Plants Near Known Active Faults

It should be noted that in much of the Central and Eastern US, the seismicity comes from "background" seismicity. Background seismicity is earthquake activity, where the earthquakes cannot be tied to known faults.

Jon Ake and Dogan Seber to complete. High priority to support chairman in response to questions asked by congress.

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Plant (state)	Nearest Active Fault or Fault Zone	Distance to Fault or Range of Distances to Zones	Type of Faulting Mechanism	Range of Maximum Magnitude (M_w)	OBE (g)	SSE (g)
Columbia						
Diablo Canyon (CA)	Hosgri Fault	5 miles	Predominantly Strike Slip	7.5		
	Shoreline Fault	0.5 miles	Strike Slip	6.25 to 6.75 best estimate by NRC staff in RIL 09-001. Final report on the fault in review by NRC staff		
San Onofre (CA)						
Comanche Peak	Meers					

Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes, and Seismic Core Damage Frequencies

Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Arkansas 1	05000313	0.2	2.8E-04	0.3	4.1E-06	0.3g full-scope EPRI SMA	GI-199
Arkansas 2	05000368	0.2	9.7E-05	0.3	4.1E-06	0.3g focused-scope EPRI SMA	GI-199
Beaver Valley 1	05000334	0.12	3.3E-04	n/a	4.8E-05	seismic PRA	GI-199
Beaver Valley 2	05000412	0.12	2.7E-04	n/a	2.2E-05	seismic PRA	GI-199
Braidwood 1	05000456	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Braidwood 2	05000457	0.2	6.7E-05	0.3	7.3E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 1	05000259	0.2	2.5E-04	0.3	3.7E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 2	05000260	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Browns Ferry 3	05000296	0.2	2.5E-04	0.26	5.4E-06	0.3g focused-scope EPRI SMA	GI-199
Brunswick 1	05000325	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Brunswick 2	05000324	0.16	7.3E-04	0.3	1.5E-05	0.3g focused-scope EPRI SMA	GI-199
Byron 1	05000454	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Byron 2	05000455	0.2	5.2E-05	0.3	5.8E-06	0.3g focused-scope EPRI SMA	GI-199
Callaway	05000483	0.2	3.8E-05	0.3	2.0E-06	0.3g focused-scope EPRI SMA	GI-199
Calvert Cliffs 1	05000317	0.15	1.9E-04	n/a	1.0E-05	seismic PRA	GI-199
Calvert Cliffs 2	05000318	0.15	1.9E-04	n/a	1.2E-05	seismic PRA	GI-199
Catawba 1	05000413	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Catawba 2	05000414	0.15	1.4E-04	n/a	3.7E-05	seismic PRA	GI-199
Clinton	05000461	0.25	5.8E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Columbia	05000397	0.25	1.7E-04	n/a	2.1E-05	seismic PRA	IPEEE
Comanche Peak 1	05000445	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Comanche	05000446	0.12	1.6E-05	0.12	4.0E-06	reduced-scope EPRI SMA; SSE =	GI-199

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Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Peak 2						0.12g	
Cooper	05000298	0.2	1.5E-04	0.3	7.0E-06	0.3g focused-scope EPRI SMA	GI-199
Crystal River 3	05000302	0.1	8.9E-05	0.1	2.2E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
D.C. Cook 1	05000315	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
D.C. Cook 2	05000316	0.2	2.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Davis Besse	05000346	0.15	6.3E-05	0.26	6.7E-06	reduced-scope EPRI SMA	GI-199
Diablo Canyon 1	05000275	0.75	2.0E-04	n/a	4.1E-05	seismic PRA	IPEEE
Diablo Canyon 2	05000323	0.75	2.0E-04	n/a	4.1E-05	seismic PRA	IPEEE
Dresden 2	05000237	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Dresden 3	05000249	0.2	9.7E-05	0.26	1.9E-05	0.3g focused-scope EPRI SMA	GI-199
Duane Arnold	05000331	0.12	2.3E-04	0.12	3.2E-05	reduced-scope EPRI SMA; SSE = 0.12g	GI-199
Farley 1	05000348	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Farley 2	05000364	0.1	1.0E-04	0.1	2.8E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Fermi 2	05000341	0.15	1.0E-04	0.3	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Fitzpatrick	05000333	0.15	3.2E-04	0.22	6.1E-06	0.3g focused-scope NRC SMA	GI-199
Fort Calhoun 1	05000285	0.17	3.7E-04	0.25	5.4E-06	0.3g focused-scope NRC SMA	GI-199
Ginna	05000244	0.2	1.0E-04	0.2	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Grand Gulf	05000416	0.15	1.0E-04	0.15	1.2E-05	reduced-scope EPRI SMA; SSE = 0.15g	GI-199
Hatch 1	05000400	0.148	3.9E-04	0.29	2.3E-06	0.3g focused-scope EPRI SMA	GI-199
Hatch 2	05000321	0.15	2.7E-04	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199

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Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Hope Creek	05000366	0.2	9.7E-05	0.3	2.5E-06	0.3g focused-scope EPRI SMA	GI-199
Indian Point 2	05000354	0.15	4.9E-04	n/a	2.8E-06	seismic PRA	GI-199
Indian Point 3	05000247	0.15	4.9E-04	n/a	3.3E-05	seismic PRA	GI-199
Kewaunee	05000286	0.12	2.8E-04	n/a	1.0E-04	seismic PRA	GI-199
LaSalle 1	05000305	0.2	1.7E-04	n/a	5.1E-06	seismic PRA	GI-199
LaSalle 2	05000373	0.2	1.7E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 1	05000374	0.15	1.8E-04	n/a	2.8E-06	seismic PRA	GI-199
Limerick 2	05000352	0.15	1.8E-04	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 1	05000353	0.15	9.5E-05	0.15	5.3E-05	reduced-scope EPRI SMA	GI-199
McGuire 2	05000369	0.15	9.5E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 1	05000370	0.254	9.3E-05	n/a	3.1E-05	seismic PRA	GI-199
Millstone 2	05000336	0.17	8.3E-05	0.25	1.1E-05	0.3g focused-scope EPRI SMA	GI-199
Millstone 3	05000423	0.17	8.3E-05	n/a	1.5E-05	seismic PRA	GI-199
Monticello	05000263	0.12	9.3E-05	0.12	1.9E-05	modified focused/expended reduced-scope EPRI SMA	GI-199
Nine Mile Point 1	05000220	0.11	1.5E-04	0.27	4.2E-06	0.3g focused-scope EPRI SMA	GI-199
Nine Mile Point 2	05000410	0.15	4.8E-05	0.23	5.6E-06	SPRA and focused-scope EPRI SMA	GI-199
North Anna 1	05000338	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
North Anna 2	05000339	0.12	2.1E-04	0.16	4.4E-05	0.3g focused-scope EPRI SMA	GI-199
Oconee 1	05000269	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 2	05000270	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oconee 3	05000287	0.1	9.7E-04	n/a	4.3E-05	seismic PRA	GI-199
Oyster Creek	05000219	0.17	1.5E-04	n/a	1.4E-05	seismic PRA	GI-199
Palisades	05000255	0.2	1.4E-04	n/a	6.4E-06	seismic PRA	GI-199
Palo Verde 1	05000528	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Palo Verde 2	05000529	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE

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Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
Palo Verde 3	05000530	0.258	3.5E-05	0.3	3.8E-05	0.3g full-scope EPRI SMA	IPEEE
Peach Bottom 2	05000277	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Peach Bottom 3	05000278	0.12	2.0E-04	0.2	2.4E-05	modified focused-scope EPRI SMA	GI-199
Perry	05000440	0.15	2.2E-04	0.3	2.1E-05	0.3g focused-scope EPRI SMA	GI-199
Pilgrim 1	05000293	0.15	8.1E-04	n/a	6.9E-05	seismic PRA	GI-199
Point Beach 1	05000266	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Point Beach 2	05000301	0.12	2.0E-04	n/a	1.1E-05	seismic PRA	GI-199
Prairie Island 1	05000282	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Prairie Island 2	05000306	0.12	2.0E-04	0.28	3.0E-06	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 1	05000254	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
Quad Cities 2	05000265	0.24	8.2E-04	0.09	2.7E-05	0.3g focused-scope EPRI SMA	GI-199
River Bend	05000458	0.1	2.4E-04	0.1	2.5E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Robinson (HR)	05000261	0.2	1.1E-03	0.28	1.5E-05	0.3g full-scope EPRI SMA	GI-199
Saint Lucie	05000335	0.1	1.4E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 1	05000389	0.2	2.6E-04	0.1	4.6E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Salem 2	05000272	0.2	2.6E-04	n/a	9.3E-06	seismic PRA	GI-199
San Onofre 2	05000361	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
San Onofre 3	05000362	0.67	1.2E-04	n/a	1.7E-05	seismic PRA	IPEEE
Seabrook	05000311	0.25	1.3E-04	n/a	9.3E-06	seismic PRA	GI-199
Sequoyah 1	05000443	0.18	7.1E-04	n/a	2.2E-05	seismic PRA	GI-199
Sequoyah 2	05000327	0.18	7.1E-04	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
Shearon Harris 1	05000328	0.15	4.6E-05	0.27	5.1E-05	0.3g full-scope EPRI SMA	GI-199
South Texas 1	05000498	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199

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Plant	Docket	SSE (g's)	Frequency of Exceeding the SSE (per year)	RLE (HCLPF) (g's)	Seismic Core Damage Frequency (per year)	IPEEE Method	Source
South Texas 2	05000499	0.1	3.0E-05	n/a	6.2E-06	seismic PRA	GI-199
Summer	05000395	0.15	3.9E-04	0.22	3.8E-05	0.3g focused-scope EPRI SMA	GI-199
Surry 1	05000280	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Surry 2	05000281	0.15	2.2E-04	n/a	5.7E-06	seismic PRA	GI-199
Susquehanna 1	05000387	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Susquehanna 2	05000388	0.1	1.9E-04	0.21	1.3E-05	0.3g focused-scope EPRI SMA	GI-199
Three Mile Island 1	05000289	0.12	1.0E-04	n/a	4.0E-05	seismic PRA	GI-199
Turkey Point 3	05000250	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Turkey Point 4	05000251	0.15	3.8E-05	0.15	1.0E-05	site-specific approach; SSE=0.15g	GI-199
Vermont Yankee	05000271	0.14	1.2E-04	0.25	8.1E-06	0.3g focused-scope EPRI SMA	GI-199
Vogtle 1	05000424	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Vogtle 2	05000425	0.2	1.5E-04	0.3	1.8E-05	0.3g focused-scope EPRI SMA	GI-199
Waterford 3	05000382	0.1	1.1E-04	0.1	2.0E-05	reduced-scope EPRI SMA; SSE = 0.1g	GI-199
Watts Bar	05000390	0.18	2.9E-04	0.3	3.6E-05	0.3g focused-scope EPRI SMA	GI-199
Wolf Creek	05000482	0.12	3.7E-05	0.2	1.8E-05	reduced-scope EPRI SMA	GI-199
25th percentile			9.6E-05		6.0E-06		
min			1.6E-05		2.0E-06		
median			1.7E-04		1.5E-05		
mean			3.1E-04		2.1E-05		
max			3.9E-03		1.0E-04		
75th percentile			2.6E-04		3.2E-05		

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Design Basis Ground Motions and New Review Level Ground Motions Used for Review of Japanese Plants

Plant sites	Contributing earthquakes	New DBGM S _s	Original DBGM S ₂
Tomari	Earthquakes undefined specifically	550 Gal	370 Gal
Onagawa	Soutei Miyagiken-oki (M8.2)	580	375
Higashidoori	Earthquakes undefined specifically	450	375
Fukushima	Earthquake near the site (M7.1)	600	370
Tokai	Earthquakes undefined specifically	600	380
Hamaoka	Assumed Tokai (M8.0), etc.	800	600
Shika	Sasanami-oki Fault (M7.6)	600	490
Tsuruga	Urazoko-Uchiikemi Fault (M6.9), etc. →Mera-Kareizaki - Kaburagi(M7.8), Shelf edge+B+Nosaka (M7.7)	800	532
Mihama	C, Fo-A Fault (M6.9)→ Shelf edge+B+Nosaka(M7.7)	750	405
Ohi	C, Fo-A Fault (M6.9)→Fo-A+Fo-B (M7.4)	700	405
Takahama	Fo-A Fault (M6.9) →Fo-A+Fo-B(M7.4)	550	370
Shimane	Shinji Fault (M7.1)	600	456
Ikata	Central Tectonic Structure (M7.6)	570	473
Genkai	Takekoba F. (M6.9) → Enhanced uncertainty consideration	540	370
Sendai	Gotandagawa F.(M6.9), F-A(M6.9)	540	372
Kashiwazaki-Kariwa	F-B Fault (M7.0), Nagaoka-plain-west Fault (M8.1)	2300 (R1 side) 1209 (R5 side)	450
Monju (Proto Type FBR)	Shiraki-Niu F.(M6.9) , C F.(M6.9)→Shelf edge+B+Nosaka(M7.7), Small Damping	760	408
Shimokita Reprocessing F.	Deto-Seiho F.(M6.8), Yokohama F.(M6.8)	450	320

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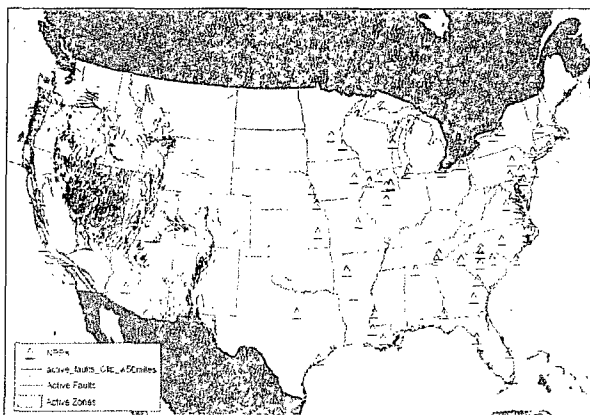
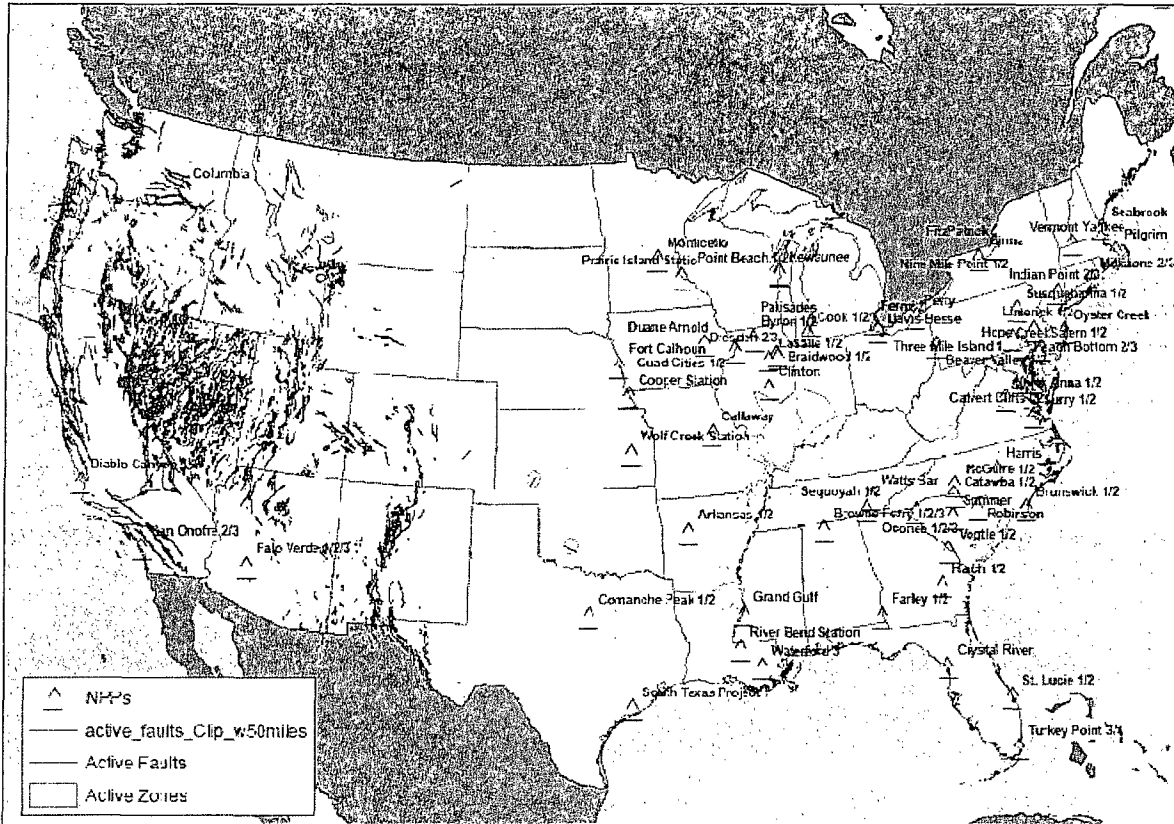
Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance

Utility	Site (Unit)	Type	Dec.2010
Hokkaido	Tomari	PWR	△
Tohoku	Onagawa (Unit1)	BWR	◎
	Higashi-dori	BWR	△
Tokyo	Kashiwazaki-Kariwa	BWR	Unit 1,5,6,7 ◎
	Fukushima-No1	BWR	Unit 3 ◇, 5 ◎
	Fukushima-No2	BWR	Unit 4,5 ◎
Chubu	Hamaoka	BWR	△
Hokuriku	Shika (Unit 2)	BWR	◎
Kansai	Mihama(Unit 1)	PWR	◎
	Ohi(Unit 3,4)	PWR	◎
	Takahama (Unit 3,4)	PWR	◎
Chugoku	Shimane (Unit 1, 2)	BWR	◎
Shikoku	Ikata (Unit 3)	PWR	◎
Kyushu	Genkai (Unit 3)	PWR	◎
	Sendai (Unit 1)	PWR	◎
Japan Atomic Power	Tokai-Daini	BWR	○
	Tsuruga	BWR/PWR	△
JAEA	Monju	Proto Type FBR	◎
Japan Nuc. Fuel	Rokkasyo	Reprocessing	◎
◎: NSC review finished, ○: NISA review finished and in NSC review, △: Under review by NISA			

Additional Information: Useful Plots

Plot of Mapped Active Quaternary Faults and Nuclear Plants in the US

It is important to note that this plot somewhat misleading as faults in the central and eastern US are not well characterized. For example, the faults responsible for very large historic events, such as the 1811 and 1812 New Madrid Earthquakes, and the 1886 Charleston Earthquakes have not been conclusively located.



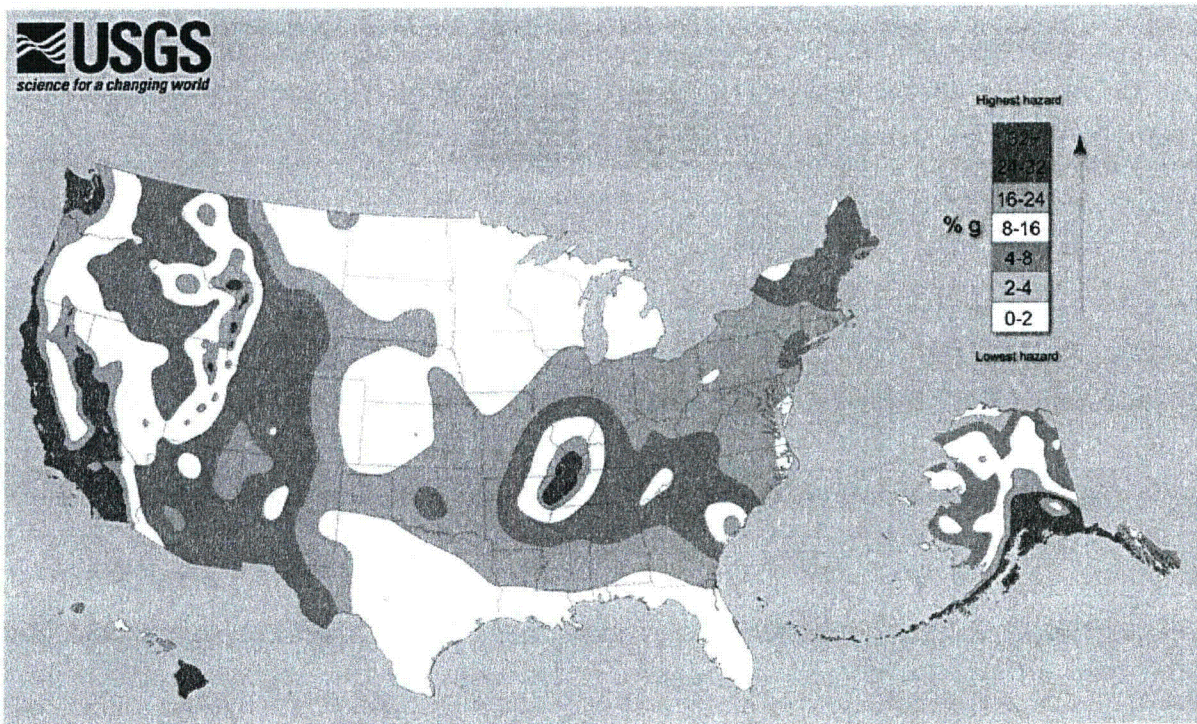
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Nuclear Plants in the US Compared to the USGS National Seismic Hazard Maps

Dogan to create the map

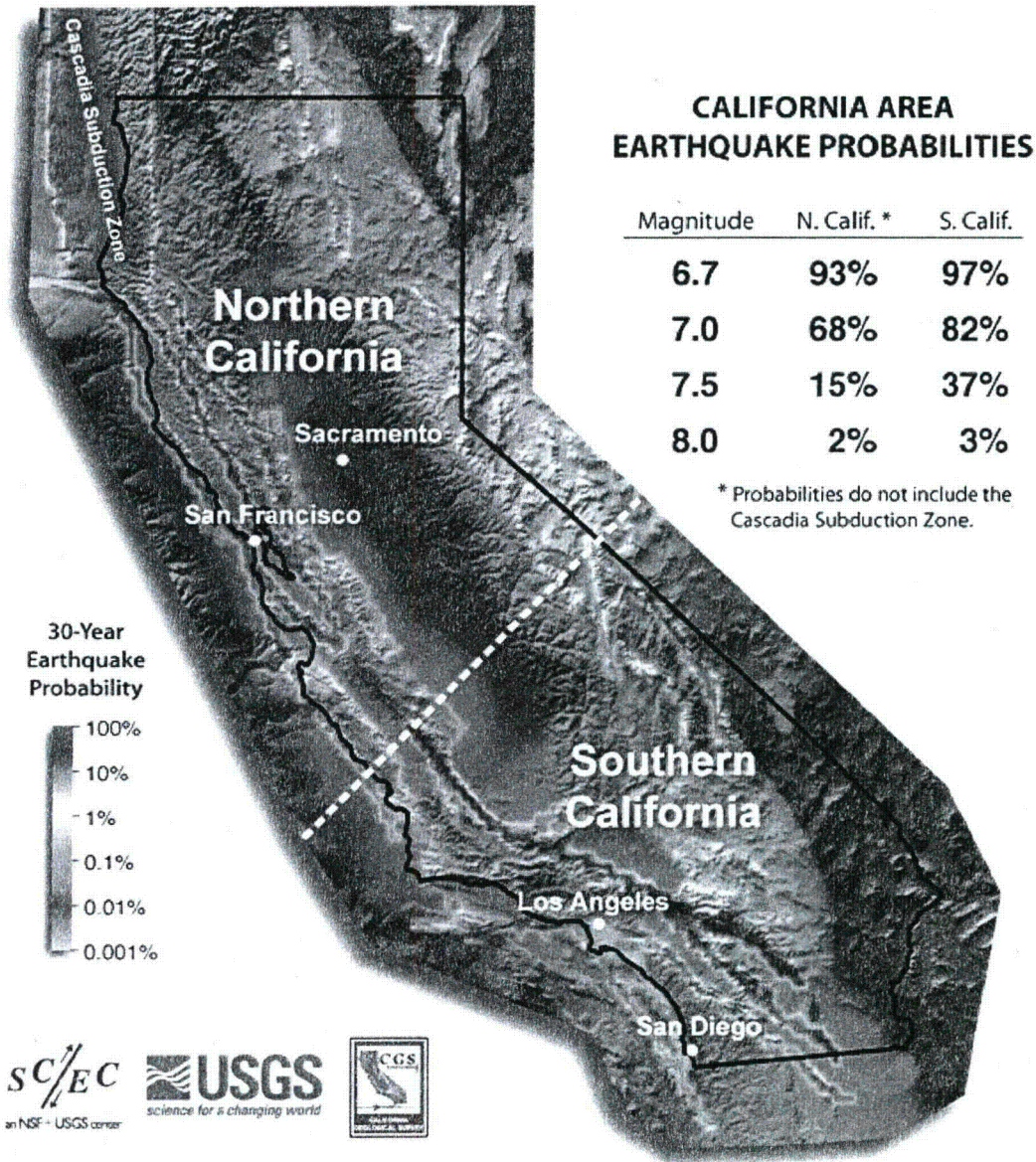
USGS US National Seismic Hazard Maps

Many version of this map are available at the USGS website at <http://earthquake.usgs.gov/hazards/>



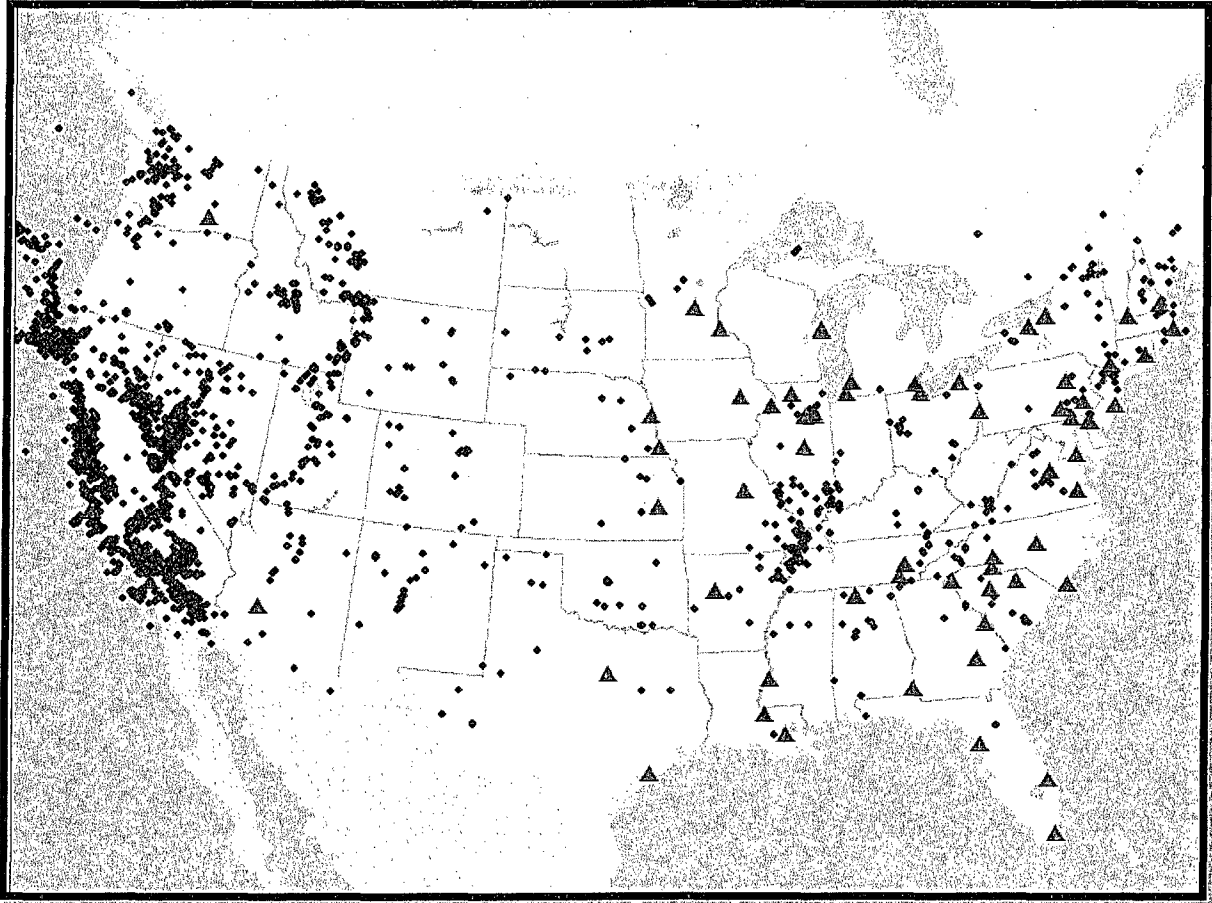
UCERF Map of California Earthquake Probabilities for Northern versus Southern California

This is included in this document as Markey (inappropriately) used the below statistics to say that the probability of a magnitude 7 at SONGS was 82%. The dashed line of this California map is the boundary between northern and southern California used in the UCERF study. As shown in the table, the 30-year probability of an earthquake of magnitude 7.5 or larger is higher in the southern half of the state (37%) than in the northern half (15%).



Plot of Nuclear Plants in the US Compared to Recent Earthquakes

Not sure of the date on this...It's an awesome plot. can we get this updated with a date? Who made this originally (NRO?RES?)

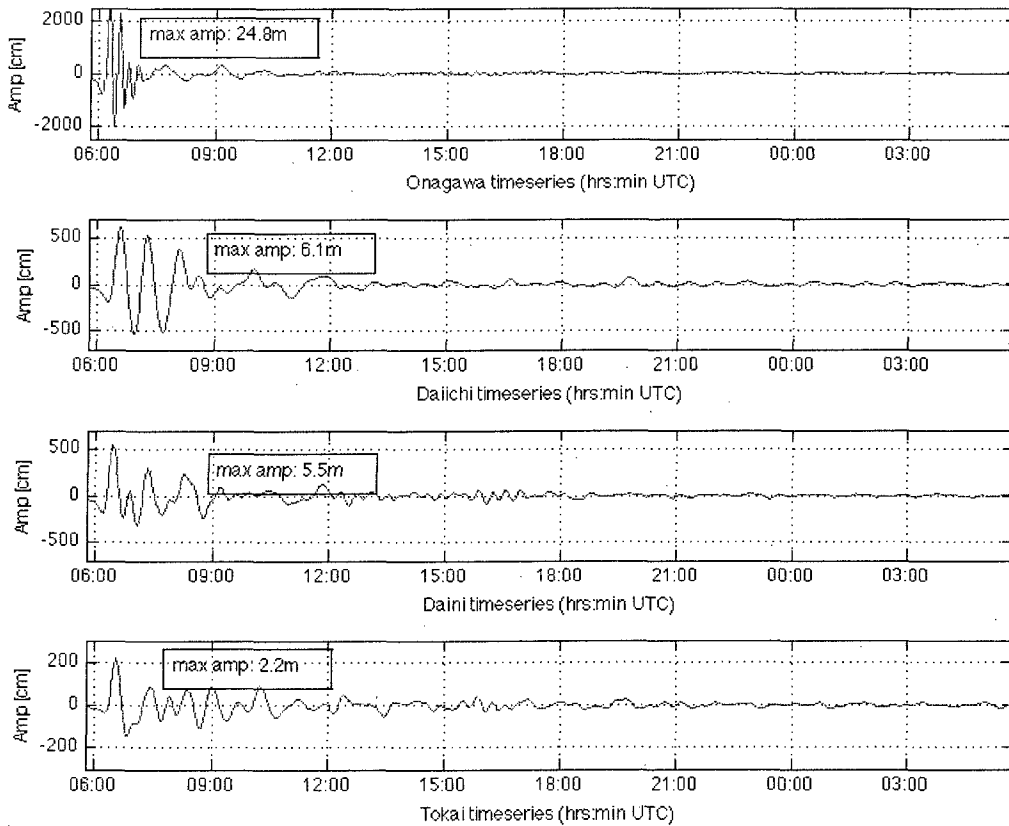


Plot of Tsunami Wave Heights at the Japanese Plants (unofficial from NOAA)

The below plots were developed for NRC seismic staff a few hours after the earthquake and tsunami by the PMEL group of NOAA. This group is responsible for scientific development of the models and tools used by the US tsunami warning system, as well as notification elements of system itself.

On 3/16/11, the PMEL NOAA team informed NRC staff that additional analyses have generally confirmed the below estimates and so they don't expect the final official numbers at the plant locations to change much.

Offshore wave amplitudes, scaled to the coastline



Additional Information: Fact Sheets

Fact Sheet: Summarization of the NRC's Regulatory Framework for Seismic Safety

Draft: under review by Meena, Kamal, Goutam and Nilesh

Currently Operating Reactors (licensed prior to 1997):

The seismic regulatory basis for licensing of the currently operating nuclear power reactors is contained in the following regulations: 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," including the "General Design Criteria for Nuclear Power Plants," and 10 CFR Part 100 ("Seismic and Geologic Siting Criteria For Nuclear Power Plants") and Appendix A to that Part which describes general criteria that guide the evaluation of the suitability of proposed sites for nuclear power plants.

General Design Criterion (GDC) 2, "Design Bases for Protection Against Natural Phenomena," in Appendix A requires that the structures, systems, and components (SSCs) important to safety be designed to withstand the effects of earthquakes, tsunamis, and seiches without loss of capability to perform their intended safety functions. The earthquake which could cause the maximum vibratory ground motion at the site is designated the **Safe Shutdown Earthquake (SSE)**.

Each plant is designed to a ground-shaking level (the SSE) that is appropriate for its location, given the possible earthquake sources that may affect the site and its tectonic environment. Ground shaking is a function of both the magnitude of an earthquake and the distance from the fault to the site. The magnitude alone cannot be used to predict ground motions. The existing plants were designed on a "deterministic" or "scenario earthquake" basis that accounted for the largest earthquake expected in the area around the plant based on an assessment of earthquakes that had occurred in the region historically. There is no specification of frequency of occurrence in the deterministic approach. GDC 2 and other design criteria require that the design include sufficient margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated. There is no requirement for a periodic reassessment of the seismic design basis.

Proposed New Reactors (submitted after 1997):

In 1997 new rules governing reactor siting were established. 10 CFR Part 50, 100.23 and Appendix S establish the seismic design basis for plants licensed after January 10, 1997. Similar to pre-1997, Appendix S defines the SSE as "the *Safe-shutdown earthquake ground motion* is the vibratory ground motion for which certain structures, systems, and components must be designed to remain functional." 10 CFR Part 100.23 "Geologic and Seismic Siting Criteria" requires that the applicant determine the SSE **and its uncertainty**, the potential for surface tectonic and nontectonic deformations. Regulatory Guide 1.165 (and subsequently Regulatory Guide 1.208) provides guidance on satisfying 10 CFR Part 100.23, one of which is performing a probabilistic seismic hazard assessment (**PSHA**).

Appendix S to 10 CFR Part 50 requires for SSE ground motions, SSCs will remain functional and within applicable stress, strain, and deformation limits. The required safety functions of SSCs must be assured during and after the vibratory ground motion through design, testing, or qualification methods. The evaluation must take into account soil-structure interaction effects and the expected duration of the vibratory motions. Appendix S also requires that the horizontal component of the SSE ground motion in

the free field at the foundation elevation of structures must be an appropriate response spectrum with a peak ground acceleration (PGA) of at least 0.10g. Design basis loads for nuclear power plant structures, important to safety, include combined loads for seismic, wind, tornado, normal operating conditions (pressure and thermal), and accident conditions. Codes and standards, such as the American Institute of Concrete (ACI-349) and the American Institute of Steel Construction (AISC N690), are used in the design of nuclear power plant structures to ensure a conservative, safe design under design basis loads.

In contrast to the deterministic approach used prior to 1997, the probabilistic method is used and explicitly accounts for possible earthquakes of various magnitudes that come from all plausible potential sources (including background seismicity) and the likelihood that each particular hypothetical earthquake occurs. The PSHA process provides a complete characterization of the ground motion and comprehensively addresses uncertainties in nuclear power plant seismic demands. The PSHA results are major input to seismic risk evaluation using either SPRA or SMA approaches. As for plants licensed prior to 1997, there is no requirement for a periodic reassessment of the seismic design basis.

In addition to the nominal seismic design, all new generation reactors have to demonstrate a **Seismic margin of 1.67** relative to the site-specific seismic demands. These designs are required to perform a Probabilistic Risk Assessment (PRA) based seismic margins analysis (SMA) to identify the vulnerabilities of their design to seismic events. The minimum high confidence, low probability of failure (HCLPF) for the plant should be at least 1.67 times the ground motion acceleration of the design basis safe-shutdown earthquake (SSE).

The Standard Review Plan (NUREG-0800), Regulatory Guides and Interim Staff Guidance provide the basis for staff reviews of existing reactors and new license applications.

Fact Sheet: Summarization of Seismological Information from Regional Instrumentation

Placeholder: to be developed.

Fact Sheet: Protection of Nuclear Power Plants against Tsunami Flooding

Nuclear power plants are designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The word tsunami literally means harbor wave. Tsunamis can be generated by large offshore earthquakes (usually greater than magnitude 6.5), submarine or on shore land slides or volcanoes. Some large onshore earthquakes close to the shoreline can generate tsunami. The Nuclear Regulatory Commission (NRC) requires all nuclear power plants to be protected against earthquakes, tsunamis and other natural hazards.

Background

Protection against tsunami effects was required for all operating plants and is required for all new reactors. Following the Indian Ocean tsunami on December 26, 2004, the President moved to protect lives and property by launching an initiative to improve domestic tsunami warning capabilities. This plan was placed under the auspices of the National Science and Technology Council through the President's initiative in July 2005 in the context of a broad national effort of tsunami risk reduction, and United States participated in international efforts to reduce tsunami risk worldwide. In response to the President's initiative, the NRC reviewed its licensing criteria and conducted independent studies and participated in international forums under the auspices of the International Atomic Energy Agency with many participating countries including India and Japan. The final report of the study was published in April 2009 as NUREG/CR 6966, "Tsunami Hazard Assessment at Nuclear Power Plant Sites in the United States of America," ADAMS Accession # ML0915901933. NRC revised its Standard Review Plan for conducting safety reviews of nuclear power plants in 2007. Section 2.4.6 specifically addresses tsunamis. The Office of Nuclear Regulatory Research is conducting tsunami studies in collaboration with the United States Geological Survey and has published a report on tsunami hazard in the Atlantic, Gulf and Pacific coastal areas. Selected nuclear power plants now get tsunami warning notification. The agency requires plant designs to withstand the effects of natural phenomena including effects of tsunamis. The agency's requirements, including General Design Criteria for licensing a plant, are described in Title 10 of the *Code of Federal Regulations* (10 CFR). These license requirements consist of incorporating margins in the initiating hazard and additional margins are due to traditional engineering practices such as "safety factors." Practices such as these add an extra element of safety into design, construction, and operations.

The NRC has always required licensees to design, operate, and maintain safety-significant structures, systems, and components to withstand the effects of natural hazards and to maintain the capability to perform their intended safety functions. The agency ensures these requirements are satisfied through the licensing, reactor oversight, and enforcement processes.

Tsunami Hazard Evaluation

Tsunami hazard evaluation is one component of the complete hydrological review requirements provided in the Standard Review Plan under Chapter 2.4. The safety determination of reactor sites require consideration of major flood causing events, including consideration of combined flood causing conditions. These conditions include Probable Maximum Flood (PMF) on Streams and Rivers, Potential Dam Failures, Probable Maximum Surge and Seiche Flooding and Probable Maximum Tsunami Hazards, among others. The most significant flooding event is called the design basis flood and flooding protection requirements are correlated to this flood level in 2.4.10.

The Probable Maximum Tsunami (PMT) is defined as that tsunami for which the impact at the site is derived from the use of best available scientific information to arrive at a set of scenarios reasonably expected to affect the nuclear power plant site taking into account (a) appropriate consideration of the most severe of the natural phenomena that have been historically reported or determine from geological and physical data for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, (b) appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena, and (c) the importance of the safety functions to be performed.

Site-specific tsunami data are collected from historical tsunami records, paleotsunami evidence, regional tsunami assessments, site-specific tsunami mechanisms, site-specific data, such as submarine survey of

sea bed and approach channel geometry. Effects of tsunami on a nuclear power plant can be flooding due to water run up, hydro-dynamic pressure on exterior walls of structures, impact of floating debris, and foundation scouring. In addition, tsunami can draw down water from the intake source of plant cooling water.

The tsunami database is available for interactive search and downloads on the internet at <http://www.ngdc.noaa.gov/hazard/tsu.shtml>.

Tsunami Safety Assessment

The licensing bases for existing nuclear power plants are based on historical data at each site. This data is used to determine probable maximum tsunami and the tsunami effects are evaluated for each site with potential for tsunami flooding. The potential for tsunami hazard is determined on a hierarchical analysis process that can identify tsunami potential based primarily on distance from tsunami source and site elevation. The NRC also required existing plants to assess their potential vulnerability to external events, as part of the Individual Plant Examination of External Events Program. This process ensured that existing plants are not vulnerable to tsunami hazard, and they continue to provide adequate public health and safety.

Today, the NRC utilizes a risk-informed regulatory approach, including insights from probabilistic assessments and traditional deterministic engineering methods to make regulatory decisions about existing plants (e.g., licensing amendment decisions). Any new nuclear plant the NRC licenses will use a probabilistic, performance-based approach to establish the plant's seismic hazard and the seismic loads for the plant's design basis.

Operating Plants

The NRC is fully engaged in national international tsunami hazard mitigation programs, and is conducting active research to refine the tsunami sources in the Atlantic, Gulf Coast and Pacific Coast areas. Diablo Canyon (DC) and San Onofre (SONGS) are two nuclear plant sites that have potential for tsunami hazard. Both the DC (main plant) and SONGS are located above the flood level associated with tsunami. However, the intake structures and Auxiliary Sea Water System at DC are designed for combination of tsunami-storm wave activity to 45 ft msl. SONGS has a reinforced concrete cantilevered retaining seawall and screen well perimeter wall designed to withstand the design basis earthquake, followed by the maximum predicted tsunami with coincident storm wave action, designed to protect at approximately 27 ft msl. These reactors are adequately protected against tsunami effects. Distant tsunami sources for DC include the Aleutian area, Kuril-Kamchatka region, and the South American coast (for Songs the Aleutian area). Distant sources for SONGS is limited by the presence of a broad continental shelf. Local or near sources for DC include the Santa Lucia Bank and Santa Maria Basin Faults (for Songs the Santa Ana wind).

Additional Information

To read more about risk-related NRC policy, see the fact sheets on Probabilistic Risk Assessment (<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/probabilistic-risk-asses.html>) and Nuclear Reactor Risk (<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/reactor-risk.html>). Each provides more information on the use of probability in evaluating hazards (including earthquakes) and their potential impact on plant safety margins. Other regulatory framework includes General Design Criterion 2, 10 CFR Part 100.23, Regulatory Guide 1.102 "Flood Protection for Nuclear Power Plants", Rev. 1 1976, Regulatory Guide 1.59 "Design Basis for Nuclear Power Plants" Rev. 2 1977 (update in progress), and USNRC Standard Review Plan "Probable Maximum Tsunami Flooding" Section 2.4.6, Rev. 2.

March 2011

INFORMATION FROM RES STILL NEEDS TO BE ADDED

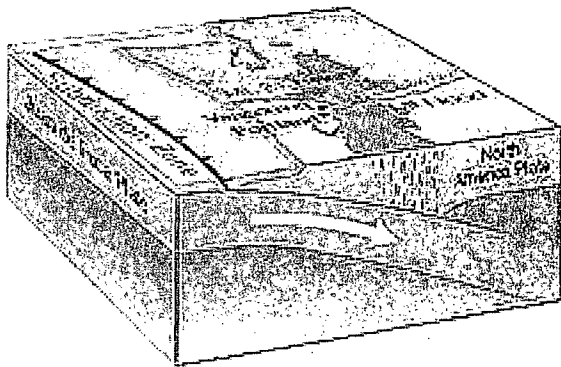
Fact Sheet: Seismicity of the Central and Eastern US

Key Points:

- To date, very large earthquakes (Magnitudes greater than 8.25) have only occurred in specific geological settings, in particular the interfaces between tectonic plates in major **subduction zones**. The only subduction zone that potentially impacts the continental US is the Cascadia zone off the coast of northern California, Oregon and Washington.
- Recent analyses of the magnitudes of the largest earthquakes **not associated** with subduction zones indicates magnitudes are less than ~8.25.
- The size (magnitude) of earthquakes is proportional to the fault area that slips in a given earthquake. The prediction of earthquake magnitudes for a specific fault considers the dimensions of the fault. Extremely large earthquakes do not occur on small faults.
- Nuclear power plants are licensed based on vibratory ground shaking, not earthquake magnitude. The ground shaking (accelerations) are used to estimate forces which are used in the seismic design process. In many cases smaller magnitude earthquakes closer to a site produce more severe ground shaking than larger, more distant earthquakes. Hence it is important to consider all potential earthquake sources regardless of magnitude.

Discussion: Earthquakes with very large magnitudes such as the March 2011 earthquake off the northeast coast of the Japanese island of Honshu occur within subduction zones, which are locations where one of the earth's tectonic plates is subducting beneath (being thrust under) another. The fault that defines the Japan Trench plate boundary dips to the west, i.e., becomes deeper towards the coast of Honshu. Large offshore earthquakes have historically occurred in the same subduction zone (in 1611, 1896, and 1933) all of which produced significant tsunami waves. The magnitudes of these previous large earthquakes have been estimated to be between 7.6 and 8.6. Prior to March 2011, the Japan Trench subduction zone has produced *nine* earthquakes with magnitudes greater than 7 just since 1973.

The only subduction zone that is capable of directly impacting the continental US is the Cascadia subduction zone, which lies off of the coast of northern California, Oregon, and Washington. The fault surface defined by this interface dips to the east (becomes deeper) beneath the coast. The Cascadia subduction zone is capable of producing very large earthquakes if all or a large portion of the fault area ruptures in a single event. However, the rate of earthquake occurrence along the Cascadia subduction zone is much less than has been observed along the Japan Trench subduction zone. The only operating nuclear power plant in that area is Columbia, which is far from the coast (~220 miles/350 km) and the Cascadia subduction zone. *The occurrence of earthquakes on the Cascadia subduction zone has been considered in the evaluation of the Columbia NPP.*



Schematic Illustration of the Cascadia Subduction Zone

The size (magnitude) of earthquakes is proportional to the surface area of a fault that slips in a given earthquake. Large earthquakes are associated with large (long) faults. Hence, the prediction of earthquake magnitudes for a specific fault considers the dimensions of the fault. Identification of fault size is usually based on geologic mapping or the evaluation of spatial patterns of small earthquakes. To provide **a point of comparison**, the length of the fault that slipped during the March 11, 2011 magnitude 9 Japanese earthquake was >620 km, the length of the fault(s) that slipped during the magnitude 7.3 1992 Landers, CA earthquake was ~90 km and the estimated length of the Hosgi fault near Diablo Canyon NPP is 140 km and a magnitude of 7.5 is assigned to that fault. A number of major crustal faults or fault zones (not associated with the Cascadia subduction zone) have been identified that have produced earthquakes of magnitude 7.5 to 8 in the continental US (including California). **These fault sources have been identified and characterized in seismic hazard assessments.**

Seismic designs at US nuclear power plants are developed in terms of seismic ground motion spectra, which are called the Safe Shutdown Earthquake ground motion response spectra (SSE). Each nuclear power plant is designed to a ground motion level that is appropriate for the geology and tectonics in the region surrounding the plant location. Currently operating nuclear power plants developed their SSEs based on a "deterministic" or "scenario earthquake" basis that account for the largest earthquake expected in the area around the plant. Seismic activity in the regions surrounding US plants is much lower than that for Japan since **most US plants are located in the interior of the stable continental US**. The largest earthquakes within the continental US are the 1811-12 New Madrid sequence and the 1886 Charleston, SC, which were estimated to be between about magnitude 6.8 to 7.5. On the west coast of the US, the two nuclear power plants are designed to specific ground motions from earthquakes of about magnitude 7+ on faults located just offshore of the plants. The earthquakes on these faults are mainly strike-slip (horizontal motion on near vertical planes) type earthquakes, not subduction zone earthquakes. This fault geometry does not produce large tsunamigenic waves. Therefore, the likelihood of a significant tsunami from these faults is very remote.

Fact Sheet: US Portable Array Information

NOTE: This is provided because IRIS participants let us know that here was a discussion about the NRC's involvement in this program during a meeting with congressional staffers. We have been involved in this for the last couple years.



The Incorporated Research Institutions for Seismology is the Consortium of United States Universities with Major Research Programs in Seismology and Related Fields.

The Transportable Array: A Science Investment that Can Be Leveraged

IRIS is installing the Transportable Array – a set of 400 broadband seismic instruments – in each of more than 1600 sites across the contiguous United States. The instruments operate at each site for two years and then are removed and redeployed further east. Roughly 1100 stations have been installed since 2003, and instruments have been removed from more than 600 of those sites in the western United States.

The National Science Foundation is funding the full cost to “roll” the Transportable Array across the US, more than \$90,000,000 over ten years. Comparatively small incremental investments could add significant data that are relevant to the safety of nuclear power plants. These efforts would be uniquely cost effective, since NSF is already funding installation, and they would feed data into an existing, standardized and widely used data management system that already incorporates the vast majority of seismic data from US networks. But these opportunities are time constrained: the array will be fully installed in the contiguous 48 states by late 2013.

More Value from Longer Term Regional Observations

A dense, uniform seismic network is necessary for long-term, broad-area seismic monitoring of the central and eastern United States due to low event recurrence rates and the risk of significant earthquakes ($M > 5$) anywhere in the region. Monitoring seismicity in the central and eastern US can be improved by turning selected sites into permanent seismic stations. A total of more than 35 Transportable Array stations have already been “adopted” by several organizations, creating a permanent legacy, but only in the western United States.

A strategic “1-in-4” plan would involve “adoption” of systematically selected stations in the central and eastern United States – every other station in both the east-west and north-south directions, creating a uniform grid of some 250 stations. Long-term regional operation could be combined with two optional enhancements to create a unique observatory for the study of seismicity, source characteristics, attenuation, and local ground acceleration.

Enhancement 1: Acquire Higher Frequency Data

Crustal rigidity in the central and eastern US makes it desirable to record high frequency characteristics of local and regional earthquakes. The existing instruments could be reconfigured to record high frequencies but doing so would nearly triple the data flow, necessitating improvements to the communications infrastructure.

Enhancement 2: Add Strong Motion Sensors

Acquiring strong motion sensors and reconfiguring field computers that record and telemeter the data would help to measure unique effects of severe shaking. The design anticipated this augmentation, and several stations in California and Washington were operated that way. Upgrade would be more efficient at sites that have not yet been installed.

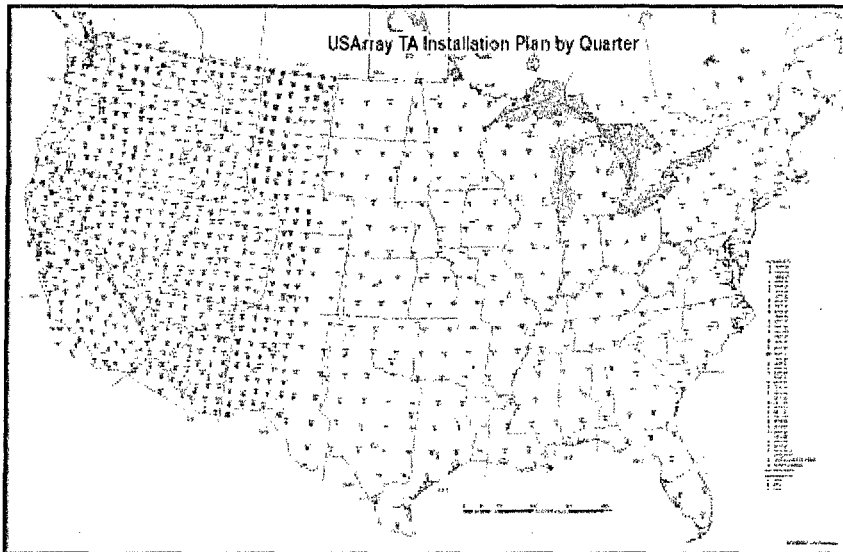
Estimate of annual acquisition and O&M costs for the 1-in-4, 250-station network in central and eastern US.

Year	Stations	Acquisition ¹	O&M ²	Total
2011	50	\$1,800,000	\$ 400,000	\$2,200,000
2012	50	\$1,800,000	\$ 800,000	\$2,600,000
2013	50	\$1,800,000	\$1,200,000	\$3,000,000
2014	50	\$1,800,000	\$1,600,000	\$3,400,000
2015	50	\$1,800,000	\$2,000,000	\$3,800,000
2016	–	–	\$2,000,000	\$2,000,000

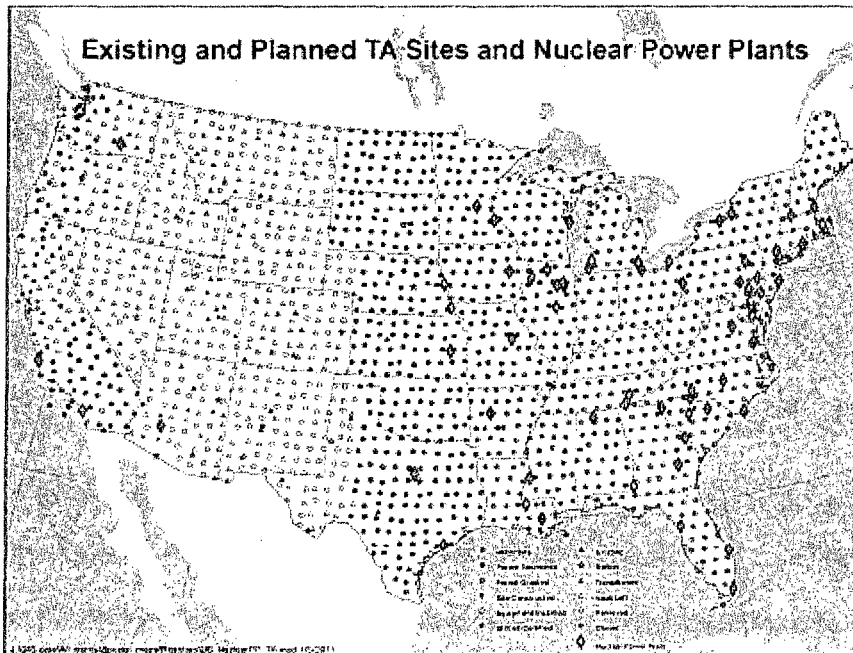
¹ Assumes upgrades to six channel data loggers with strong motion sensors.

² Assumes a conservative estimate of \$8,000/station/year.

The 1-in-4, 250-station network that could be created in the central and eastern US by "leaving behind" one out of every four Transportable Array stations during the years 2011 through 2015.



A large majority of nuclear power plants are located in the central and eastern parts of the US, where it is still possible to "leave behind" 1-in-4 Transportable Array stations for long-term regional observations.



Additional Information: Terms and Definitions

Annual exceedance frequency (AEF) – Number of times per year that a site's ground motion is expected to exceed a specified acceleration.

Active or seismogenic fault- need to add definition of active fault from

Capable Tectonic Source – A capable tectonic source is a tectonic structure that can generate both vibratory ground motion and tectonic surface deformation such as faulting or folding at or near the earth's surface in the present seismotectonic regime. It is described by at least one of the following characteristics:

- (1) presence of surface or near-surface deformation of landforms or geologic deposits of a recurring nature within the last approximately 500,000 years or at least once in the last approximately 50,000 years
- (2) a reasonable association with one or more moderate to large earthquakes or sustained earthquake activity that are usually accompanied by significant surface deformation
- (3) a structural association with a capable tectonic source that has characteristics of either item a or b (above), such that movement on one could be reasonably expected to be accompanied by movement on the other

In some cases, the geological evidence of past activity at or near the ground surface along a potential capable tectonic source may be obscured at a particular site. This might occur, for example, at a site having a deep overburden. For these cases, evidence may exist elsewhere along the structure from which an evaluation of its characteristics in the vicinity of the site can be reasonably based. Such evidence is to be used in determining whether the structure is a capable tectonic source within this definition. Notwithstanding the foregoing paragraphs, the association of a structure with geological structures that are at least pre-Quaternary, such as many of those found in the central and eastern regions of the United States, in the absence of conflicting evidence, will demonstrate that the structure is not a capable tectonic source within this definition.

Certified Seismic Design Response Spectra (CSDRS) – Site-independent seismic design response spectra that have been approved under Subpart B of 10 CFR Part 52 as the seismic design response spectra for an approved certified standard design nuclear power plant. The input or control location for the CSDRS is specified in the certified standard design.

Combined License – A combined construction permit and operating license with conditions for a nuclear power facility issued pursuant to Subpart C of 10 CFR Part 52.

Controlling Earthquakes – Earthquakes used to determine spectral shapes or to estimate ground motions at the site for some methods of dynamic site response. There may be several controlling earthquakes for a site. As a result of the probabilistic seismic hazard analysis (PSHA), controlling earthquakes are characterized as mean magnitudes and distances derived from a deaggregation analysis of the mean estimate of the PSHA.

Core damage frequency (CDF) – Expected number of core damage events per unit of time. *Core damage* refers to the uncovering and heat-up of the reactor core, to the point that prolonged oxidation and severe fuel damage are not only anticipated but also involve enough of the core to result in off-site

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public health effects if released. *Seismic core damage frequency* refers to the component of total CDF that is due to seismic events.

Cumulative Absolute Velocity (CAV) – For each component of the free-field ground motion, the CAV should be calculated as follows: (1) the absolute acceleration (g units) time-history is divided into 1-second intervals, (2) each 1-second interval that has at least 1 exceedance of 0.025g is integrated over time, and (3) all the integrated values are summed together to arrive at the CAV. The CAV is exceeded if the calculation is greater than 0.16 g-second. The application of the CAV in siting requires the development of a CAV model because the PSHA calculation does not use time histories directly.

Deaggregation – The process for determining the fractional contribution of each magnitude-distance pair to the total seismic hazard. To accomplish this, a set of magnitude and distance bins are selected and the annual probability of exceeding selected ground acceleration parameters from each magnitude-distance pair is computed and divided by the total probability for earthquakes.

Design basis earthquake or safe shutdown earthquake (SSE) – A *design basis earthquake* is a commonly employed term for the *safe shutdown earthquake (SSE)*; the SSE is the earthquake ground shaking for which certain structures, systems, and components are designed to remain functional. In the past, the SSE has been commonly characterized by a standardized spectral shape associated with a peak *ground acceleration* value.

Design Factor – The ratio between the site-specific GMRS and the UHRS. The design factor is aimed at achieving the target annual probability of failure associated with the target performance goals.

Early Site Permit – A Commission approval, issued pursuant to Subpart A of 10 CFR Part 52, for a site or sites for one or more nuclear power facilities.

Earthquake Recurrence – The frequency of occurrence of earthquakes as a function of magnitude. Recurrence relationships or curves are developed for each seismic source, and they reflect the frequency of occurrence (usually expressed on an annual basis) of magnitudes up to the maximum, including measures of uncertainty.

Frequency of Onset of Significant Inelastic Deformation (FOSID) – The annual probability of the onset of significant inelastic deformation (OSID). OSID is just beyond the occurrence of insignificant (or localized) inelastic deformation, and in this way corresponds to “essentially elastic behavior.” As such, OSID of a structure, system, or component (SSC) can be expected to occur well before seismically induced core damage, resulting in much larger frequencies of OSID than seismic core damage frequency (SCDF) values. In fact, OSID occurs before SSC “failure,” where the term failure refers to impaired functionality.

Ground acceleration – Acceleration produced at the ground surface by seismic waves, typically expressed in units of *g*, the acceleration of gravity at the earth’s surface.

Ground Motion Response Spectra (GMRS) – A site-specific ground motion response spectra characterized by horizontal and vertical response spectra determined as free-field motions on the ground surface or as free-field outcrop motions on the uppermost in-situ competent material using performance-based procedures. When the GMRS are determined as free-field outcrop motions on the uppermost in-situ competent material, only the effects of the materials below this elevation are included in the site response analysis.

Ground Motion Slope Ratio – Ratio of the spectral accelerations, frequency by frequency, from a seismic hazard curve corresponding to a 10-fold reduction in hazard exceedance frequency. (See Equation 3 in Regulatory Position 5.1.)

High confidence of low probability of failure (HCLPF) capacity – A measure of *seismic margin*. In *seismic risk* assessment, *HCLPF capacity* is defined as the earthquake motion level, at which there is high confidence (95%) of a low probability (at most 5%) of failure of a structure, system, or component.

In-column Motion – Motion that is within a soil column, as opposed to the motion at the surface or treated as if it is at the surface.

Intensity – The intensity of an earthquake is a qualitative description of the effects of the earthquake at a particular location, as evidenced by observed effects on humans, on human-built structures, and on the earth's surface at a particular location. Commonly used scales to specify intensity are the Rossi-Forel, Mercalli, and Modified Mercalli. The Modified Mercalli Intensity (MMI) scale describes intensities with values ranging from I to XII in the order of severity. MMI of I indicates an earthquake that was not felt except by a very few, whereas MMI of XII indicates total damage of all works of construction, either partially or completely.

Large early release frequency (LERF) – The expected number of large early releases per unit of time. A *large early release* is the rapid, unmitigated release of airborne fission products from the containment building to the environment, occurring before the effective implementation of off-site emergency response and protective actions, such that there is a potential for early health effects. *Seismic large early release frequency* refers to the component of total LERF that is due to seismic events.

Magnitude – An earthquake's magnitude is a measure of the strength of the earthquake as determined from seismographic observations and is an objective, quantitative measure of the size of an earthquake. The magnitude can be expressed in various ways based on seismographic records (e.g., Richter Local Magnitude, Surface Wave Magnitude, Body Wave Magnitude, and Moment Magnitude). Currently, the most commonly used magnitude measurement is the Moment Magnitude, M_w , which is based on the seismic moment computed as the rupture force along the fault multiplied by the average amount of slip, and thus is a direct measure of the energy released during an earthquake.

Maximum Magnitude – The maximum magnitude is the upper bound to earthquake recurrence curves.

Mean Site Amplification Function – The mean amplification function is obtained for each controlling earthquake, by dividing the response spectrum from the computed surface motion by the response spectrum from the input hard rock motion, and computing the arithmetic mean of the individual response spectral ratios.

Nontectonic Deformation – Nontectonic deformation is distortion of surface or near-surface soils or rocks that is not directly attributable to tectonic activity. Such deformation includes features associated with subsidence, karst terrain, glaciation or deglaciation, and growth faulting.

Response Spectrum – A plot of the maximum responses (acceleration, velocity, or displacement) of idealized single-degree-of-freedom oscillators as a function of the natural frequencies of the oscillators for a given damping value. The response spectrum is calculated for a specified vibratory motion input at the oscillators' supports.

Ring Area – Annular region bounded by radii associated with the distance rings used in hazard deaggregation (RG 1.208, Appendix D, Table D.1, "Recommended Magnitude and Distance Bins").

Safe Shutdown Earthquake Ground Motion (SSE) – The vibratory ground motion for which certain structures, systems, and components are designed, pursuant to Appendix S to 10 CFR Part 50, to remain functional. The SSE for the site is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface.

Seismic hazard – Any physical phenomenon, such as ground motion or ground failure, that is associated with an earthquake and may produce adverse effects on human activities (such as posing a risk to a nuclear facility).

Seismic margin – The difference between a plant's capacity and its seismic design basis (*safe shutdown earthquake, or SSE*).

Seismic risk – The risk (frequency of occurrence multiplied by its consequence) of severe earthquake-initiated accidents at a nuclear power plant. A severe accident is an accident that causes core damage, and, possibly, a subsequent release of radioactive materials into the environment. Several risk metrics may be used to express *seismic risk*, such as *seismic core damage frequency* and *seismic large early release frequency*.

Seismic Wave Transmission (Site Amplification) – The amplification (increase or decrease) of earthquake ground motion by rock and soil near the earth's surface in the vicinity of the site of interest. Topographic effects, the effect of the water table, and basin edge wave-propagation effects are sometimes included under site response.

Seismogenic Source – A portion of the earth that is assumed to have a uniform earthquake potential (same expected maximum earthquake and recurrence frequency), distinct from that of surrounding sources. A seismogenic source will generate vibratory ground motion but is assumed to not cause surface displacement. Seismogenic sources cover a wide range of seismotectonic conditions, from a well-defined tectonic structure to simply a large region of diffuse seismicity.

Spectral Acceleration – Peak acceleration response of an oscillator as a function of period or frequency and damping ratio when subjected to an acceleration time history. It is equal to the peak relative displacement of a linear oscillator of frequency, f , attached to the ground, times the quantity $(2Bf)^2$. It is expressed in units of gravity (g) or cm/second².

Stable Continental Region (SCR) – An SCR is composed of continental crust, including continental shelves, slopes, and attenuated continental crust, and excludes active plate boundaries and zones of currently active tectonics directly influenced by plate margin processes. It exhibits no significant deformation associated with the major Mesozoic-to-Cenozoic (last 240 million years) orogenic belts. It excludes major zones of Neogene (last 25 million years) rifting, volcanism, or suturing.

Stationary Poisson Process – A probabilistic model of the occurrence of an event over time (or space) that has the following characteristics: (1) the occurrence of the event in small intervals is constant over time (or space), (2) the occurrence of two (or more) events in a small interval is negligible, and (3) the occurrence of the event in non-overlapping intervals is independent.

Target Performance Goal (PF) – Target annual probability of exceeding the 1 E-05 frequency of onset of significant inelastic deformation (FOSID) limit state.

Tectonic Structure – A large-scale dislocation or distortion, usually within the earth's crust. Its extent may be on the order of tens of meters (yards) to hundreds of kilometers (miles).

Uniform Hazard Response Spectrum (UHRS) – A plot of a ground response parameter (for example, spectral acceleration or spectral velocity) that has an equal likelihood of exceedance at different frequencies.

Within Motion – An earthquake record modified for use in a site response model. Within motions are developed through deconvolution of a surface recording to account for the properties of the overburden material at the level at which the record is to be applied. The within motion can also be called the "bedrock motion" if it occurs at a high-impedance boundary where rock is first encountered.

What are the definitions of the SSE and OBE?

CLEAN UP BELOW information – and add above

From RG1.208 Safe Shutdown Earthquake Ground Motion (SSE). The vibratory ground motion for which certain structures, systems, and components are designed, pursuant to Appendix S to 10 CFR Part 50, to remain functional. The SSE for the site is characterized by both horizontal and vertical free-field ground motion response spectra at the free ground surface

Appendix S to 10 CFR Part 50 (3) has the following information: Required Plant Shutdown. If vibratory ground motion exceeding that of the Operating Basis Earthquake Ground Motion or if significant plant damage occurs, the licensee must shut down the nuclear power plant. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after the occurrence of the Operating Basis Earthquake Ground Motion, the licensee must consult with the Commission and must propose a plan for the timely, safe shutdown of the nuclear power plant. Prior to resuming operations, the licensee must demonstrate to the Commission that no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

The ratio is provided in guidance as the ratio that the licensees can chose without additional analysis. The OBE mostly used to be half for existing plants, but now it's a 1/3 unless you do analyses to show why it should be 1/2.

Definition of Safe Shutdown Earthquake	The safe-shutdown earthquake (SSE) for the site is the ground motion response spectra (GMRS), which also satisfies the minimum requirement of paragraph IV(a)(1)(i) of Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the Code of Federal Regulations (10 CFR Part 50).
Definition of Operating Basis Earthquake:	To satisfy the requirements of paragraph IV(a)(2)(A) of Appendix S to 10 CFR Part 50, the operating-basis earthquake (OBE) ground motion is defined as follows: (iv) For the certified design portion of the plant, the OBE ground motion is one-third of the CSDRS. (v) For the safety-related noncertified design portion of the plant, the OBE ground motion is one-third of the design motion response spectra, as stipulated in the design certification conditions specified in design control document (DCD). (vi) The spectrum ordinate criterion to be used in conjunction with Regulatory Guide 1.166, "Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post-earthquake Actions," issued March 1997, is the lowest of (i) and (ii).

List of Questions

Natural Hazards and Ground Shaking Design Levels 1

- 1) Did the Japanese underestimate the size of the maximum credible earthquake that could affect the plants? 1
- 2) Can a very large earthquake and tsunami happen here? 1
- 3) Has this changed our perception of earthquake risk? 1
- 4) What magnitude earthquake are US plants designed to? 1
- 5) How many US reactors are located in active earthquake zones (and which reactors)? 2
- 6) How many reactors are along coastal areas that could be affected by a tsunami (and which ones)? 2
- 7) If the earthquake in Japan was a larger magnitude than considered by plant design, why can't the same thing happen in the US? 2
- 8) What if an earthquake like the Sendai earthquake occurred near a US plant? 3
- 9) What would be the results of a tsunami generated off the coast of a US plant? (Or why are we confident that large tsunamis will not occur relatively close to US shores?) 3
- 10) Can this happen here (i.e., an earthquake that significantly damages a nuclear power plant)? Are the Japanese plants similar to US plants? 3
- 11) What level of earthquake hazard are the US reactors designed for? 3
- 12) Does the NRC consider earthquakes of magnitude 9? 4
- 13) What is the likelihood of the design basis or "SSE" ground motions being exceeded over the life of the plant? 4
- 14) What is magnitude anyway? What is the Richter Scale? What is intensity? 4
- 15) How do magnitude and ground motion relate to each other? 5
- 16) How are combined seismic and tsunami events treated in risk space? Are they considered together? 5
- 17) How are aftershocks treated in terms of risk assessment? 5

Design Against Natural Hazards & Plant Safety in the US 6

- 19) Are nuclear power plants designed for tsunamis? 6
- 20) What level of tsunami are we designed for? 6
- 21) Which plants are close to known active faults? What are the faults and how far away are they from the plants? 6
- 22) How was the seismic design basis for an existing nuclear power plant established? 6
- 23) Is there margin above the design basis? 7

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24) Are US plants safe?	7
25) Was the Japanese plant designed for this type of accident? Are US nuclear plants?	7
26) Why do we have confidence that US nuclear power plants are adequately designed for earthquakes and tsunamis?	7
27) Can this happen here (i.e., an earthquake that significantly damages a nuclear power plant)? Are the Japanese plants similar to US plants?	7
28) Could an accident like the one at Japan's Fukushima Daiichi nuclear plants happen in the US?	8
29) Should US nuclear facilities be required to withstand earthquakes and tsunamis of the kind just experienced in Japan? If not, why not?	8
30) Can you summarize the plant seismic design basis for the US plants? Are there any special issues associated with seismic design?	9
31) How do we know that the equipment in plants is safe in earthquakes?	9
32) How do we know equipment will work if the magnitude is bigger than expected, like in Japan?	9
33) Are US plants susceptible to the same kind of loss of power as happened in Japan?	9
34) How do we know that the emergency diesel generators in Diablo Canyon and SONGS will not fail to operate like in Japan?	10
35) Is all equipment at the plant vulnerable to tsunami?	10
36) What protection measures do plants have against tsunami?	10
37) Is there a risk of loss of water during tsunami drawdown? Is it considered in design?	10
38) Are nuclear buildings built to withstand earthquakes? What about tsunami?	10
39) Are aftershocks considered in the design of equipment at the plants? Are aftershocks considered in design of the structure?	10
40) Are there any special issues associated with seismic design at the plants? For example, Diablo Canyon has special requirements. Are there any others?	10
41) Is the NRC planning to require seismic isolators for the next generation of nuclear power plants? How does that differ from current requirements and/or precautions at existing US nuclear power plants?	10
42) Are there any US nuclear power plants that incorporate seismic isolators? What precautions are taken in earthquake-prone areas?	11
43) Do you think that the recent Japan disaster will cause any rethinking of the planned seismic isolation guidelines, particularly as it regards earthquakes and secondary effects such as tsunamis?	11

11

About Japanese Hazard, Design and Earthquake Impact..... 12

- 44) Was the damage done to the plants from the earthquake or the tsunami?..... 12
- 45) What was the disposition of the plant during the time after the earthquake struck and before the tsunami arrived? Was there indication of damage to the plant solely from the earthquake (if so, what systems) and did emergency procedures function during this time..... 12
- 46) What magnitude earthquake was the plant designed to withstand? For example, what magnitude earthquake was the plant expected to sustain with damage but continued operation? And with an expected shutdown but no release of radioactive material?..... 12
- 47) Did this reactor sustain damage in the July 16, 2007 earthquake, as the Kashiwazaki power plant did? What damage and how serious was it?..... 12
- 48) Was the Fukushima power plant designed to withstand a tsunami of any size? What sort of modeling was done to design the plant to withstand either seismic events or tsunamis? What specific design criteria were applied in both cases?..... 13
- 49) What is the design level of the Japanese plants? Was it exceeded?..... 13
- 50) What are the Japanese S_1 and S_2 ground motions and how are they determined?..... 13
- 51) Did this earthquake affect the Kashiwazaki-Kariwa nuclear power plant?..... 14
- 52) How high was the tsunami at the Fukushima nuclear power plants?..... 14
- 53) Wikileaks has a story that quotes US embassy correspondence and some un-named IAEA expert stating that the Japanese were warned about this ... Does the NRC want to comment? 14

What Happened to US Nuclear Power Plants During the March 11, 2011, Japan Earthquake?15

- 54) Was there any damage to US reactors from either the earthquake or the resulting tsunami? 15
- 55) Have any lessons for US plants been identified?..... 15

Response and Future Licensing Actions..... 16

- 56) What is the NRC doing about the emergencies at the nuclear power plants in Japan? Are you sending staff over there?..... 16
- 57) With NRC moving to design certification, at what point is seismic capability tested – during design or modified to be site-specific? If in design, what strength seismic event must these be built to withstand?..... 16

Reassessment of US Plants and GI-199..... 17

- 58) Can we get the rankings of the plants in terms of safety? (Actually this answer should be considered any time GI-199 data is used to “rank” plants)..... 17
- 59) If the plants are designed to withstand the ground shaking why is there so much risk from the design level earthquake..... 17
- 60) Does the NRC have a position on the MSNBC article that ranked the safety of US plants? .. 17

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- 61) Overall, how would the NRC characterize the CDF numbers? A quirk of numbers? A serious concern?..... 18
- 62) Describe the study and what it factored in – plant design, soils, previous quakes, etc. 18
- 63) Explain “seismic curve” and “plant level fragility curve”..... 18
- 64) Explain the “weakest link model”..... 18
- 65) What would constitute fragility at a plant? 19
- 66) The 1-in-18,868 risk for Limerick: What is the risk for? A jostling? A crack? Significant core damage leading to a meltdown? 19
- 67) Can someone put that risk factor into perspective, using something other than MSNBC’s chances of winning the lottery?..... 19
- 68) What, if anything, can be done at a site experiencing such a risk? (Or at Limerick in particular.)..... 19
- 69) Has anyone determined that anything SHOULD be done at Limerick or any of the other PA plants? 19
- 70) I noted the language on Page 20 of the report: This result confirms NRR’s conclusion that currently operating plants are adequately protected against the change in seismic hazard estimates because the guidelines in NRR Office Instruction LIC-504 “Integrated Risk-Informed Decision Making Process for Emergent Issues” are not exceeded. Can someone please explain?..... 20
- 71) Is the earthquake safety of US plants reviewed once the plants are constructed? 20
- 72) Does the NRC ever review tsunami risk for existing plants? 20
- 73) Does GI-199 consider tsunami? 20
- 74) What is Generic Issue 199 about? 20
- 75) Where can I get current information about Generic Issue 199? 20
- 76) How was the seismic design basis for an existing nuclear power plant established? 21
- 77) Is there margin above the design basis?..... 21
- 78) Are all US plants being evaluated as a part of Generic Issue 199?..... 21
- 79) Are the plants safe? If you are not sure they are safe, why are they not being shut down? If you are sure they are safe, why are you continuing evaluations related to this generic issue?..... 21
- 80) What do you mean by “increased estimates of seismic hazards” at nuclear power plant sites? 22
- 81) Let's say there's an estimate expressed as "2.5E-06." (I'm looking at Table D-2 of the safety/risk assessment of August 2010.) I believe that this expression means the same as 2.5×10^{-6} , or 0.0000025, or 2.5 divided by one million. In layman's terms, that means an expectation, on average, of 2.5 events every million years, or once every 400,000 years. Similarly, "2.5E-05" would

be 2.5 divided by 100,000, or 2.5 events every 100,000 years, on average, or once every 40,000 years. Is this correct? 23

82) The GI-199 documents give updated probabilistic seismic hazard estimates for existing nuclear power plants in the central and eastern US What document has the latest seismic hazard estimates (probabilistic or not) for existing nuclear power plants in the western US? 23

83) The GI-199 documents refer to newer data on the way. Have NRC, USGS et al. released those? I'm referring to this: "New consensus seismic-hazard estimates will become available in late 2010 or early 2011 (these are a product of a joint NRC, US Department of Energy, US Geological Survey (USGS) and Electric Power Research Institute (EPRI) project). These consensus seismic hazard estimates will supersede the existing EPRI, Lawrence Livermore National Laboratory, and USGS hazard estimates used in the GI-199 Safety/Risk Assessment." 23

84) What is the timetable now for consideration of any regulatory changes from the GI-199 research? 24

Seismic Probabilistic Risk Assessment (SPRA)..... 25

85) The NRC increasingly uses risk-information in regulatory decisions. Are risk-informed PRAs useful in assessing an event such as this? 25

Plant-Specific Questions 26

San Onofre Nuclear Generating Station (SONGS) Questions 26

86) SONGS received a white finding in 2008 for 125VDC battery issue related to the EDGs that went undetected for 4 years. NRC issued the white finding as there was increased risk that one EDG may not have started due to a low voltage condition on the battery on one Unit (Unit 2). Aren't all plants susceptible to the unknown? Is there any assurance the emergency cooling systems will function as desired in a Japan-like emergency? 26

87) Has the earthquake hazard at SONGS been reviewed like Diablo Canyon nuclear power plant (DCNPP) is doing? Are they planning on doing an update before relicensing? 26

88) Is possible to have a tsunami at songs that is capable of damaging the plant? 26

89) Does SONGS have an emergency plan for tsunami? 26

90) Has evacuation planning at SONGS considered tsunami? 27

91) Is SONGS designed against tsunami and earthquake? 27

92) What is the height of water that SONGS is designed to withstand? 27

93) What about drawdown and debris? 27

94) Will this be reviewed in light of the Japan earthquake. 27

95) Could all onsite and offsite power be disrupted from SONGS in the event of a tsunami, and if that happened, could the plant be safely cooled down if power wasn't restored for days after? 27

96) Are there any faults nearby SONGS that could generate a significant tsunami? 28

97) What magnitude or shaking level is SONGS designed to withstand? How likely is an earthquake of that magnitude for the SONGS site? 28

98) Could SONGS withstand an earthquake of the magnitude of the Japanese earthquake? 28

99) What about the evacuation routes at SONGS? How do we know they are reasonable?..... 28

100) Regarding tsunami at DCNPP and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami? 28

101) What is the design level flooding for DNCPP and SONGS? Can a tsunami be larger? 29

102) Is there potential linkage between the South Coast Offshore fault near SONGS and the Newport-Inglewood Fault system and/or the Rose Canyon fault? Does this potential linkage impact the maximum magnitude that would be assigned to the South Coast Offshore fault and ultimately to the design basis ground motions for this facility? 29

Diablo Canyon Nuclear Power Plant (DCNPP) Questions 30

103) Now after the Japan tragedy, will the NRC finally hear us (A4NR) and postpone DC license renewal until seismic studies are complete? How can you be sure that what happened there is not going to happen at Diablo with a worse cast earthquake and tsunami? 30

104) The evacuation routes at DCNPP see are not realistic. Highway 101 is small...and can you imagine what it will be like with 40K people on it? Has the evacuation plan been updated w/ all the population growth? 30

105) Are there local offshore fault sources capable of producing a tsunami with very short warning times?..... 30

106) Are there other seismically induced failure modes (other than tsunami) that would yield LTSBO? Flooding due to dam failure or widespread liquefaction are examples. 30

107) Ramifications of beyond design basis events (seismic and tsunami) and potential LTSBO on spent fuel storage facilities? 30

108) Why did the Emergency Warning go out for a 'tsunami' that was only 6 ft (1.8 m) high? Do these guys really know what they're doing? Would they know it if a big one was really coming? Crying wolf all the time doesn't instill a lot of confidence. 30

109) How big did the Japanese think an earthquake and tsunami could be before March 11, 2011? Why were they so wrong (assuming this earthquake/tsunami was bigger than what they had designed the plant for)?..... 31

The Japanese were supposed to have one of the best tsunami warning systems around. What went wrong last week (both with the reactors and getting the people out...see #1, evacuation plan above)?..... 31

110) Regarding the tsunami at DCNPP and SONGS, is the tsunami considered separately from flooding in licensing? And from the design perspective, is the flood still the controlling event for those plants rather than the tsunami? 31

111) Shouldn't the NRC make licensees consider a Tsunami coincident with a seismic event that triggers the Tsunami? 31

112) Given that SSCs get fatigued over time, shouldn't the NRC consider after-shocks in seismic hazard analyses? 31

113) Did the Japanese also consider an 8.9 magnitude earthquake and resulting tsunami "way too low a probability for consideration"? 31

114) GI-199 shows that the scientific community doesn't know everything about the seismicity of CEUS. And isn't there a prediction that the West coast is likely to get hit with some huge earthquake in the next 30 years or so? Why does the NRC continue to license plants on the west coast? 32

115) Has industry done anything on tsunami hazards? Also, has anyone done work to look at the effect of numerous cycles of low amplitude acceleration following a larger event. I would expect we would have some information because how do we know a plant would be fit to start back up after an event? We cannot possibly do NDE on everything to determine if flaws have propagated to the point where they need to be replaced..... 32

Indian Point Questions..... 33

116) Why is Indian Point safe if there is a fault line so close to it?..... 33

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117) Received 3/16/11 from Congresswoman Lowey 34

118) From 3/16/11 Press Release from Senators Boxer and Feinstein 34

119) From 3/15/11 Press Release from Congresspeople Markey and Capps..... 36

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Table From GI-199 Program Containing SSE, SSE Exceedance Frequencies, Review Level Earthquakes, and Seismic Core Damage Frequencies 49

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Status of Review of Japanese NPPs to New Earthquake Levels Based on 2006 Guidance..... 55

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Nuclear Plants in the US Compared to the USGS National Seismic Hazard Maps..... 57

USGS US National Seismic Hazard Maps..... 57

UCERF Map of California Earthquake Probabilities for Northern versus Southern California 58

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Plot of Nuclear Plants in the US Compared to Recent Earthquakes..... 59

Plot of Tsunami Wave Heights at the Japanese Plants (unofficial from NOAA) 60

Additional Information: Fact Sheets..... 61

 Fact Sheet: Summarization of the NRC’s Regulatory Framework for Seismic Safety 61

 Fact Sheet: Summarization of Seismological Information from Regional Instrumentation 63

 Fact Sheet: Protection of Nuclear Power Plants against Tsunami Flooding 64

 Fact Sheet: Seismicity of the Central and Eastern US 66

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From: LIA08 Hoc
Sent: Friday, April 15, 2011 5:48 PM
To: OST01 HOC; Hoc, PMT12; RST01 Hoc; Boger, Bruce
Subject: FW: NRR Comm Team SitRep - 4/15
Attachments: image001.png

FYI

Clyde Ragland
Liaison Coordinator

From: Chernoff, Harold
Sent: Friday, April 15, 2011 4:27 PM
To: Leeds, Eric; Grobe, Jack; Boger, Bruce; Burnell, Scott; LIA06 Hoc; Roberts, Darrell; Kennedy, Kriss; Lara, Julio; Croteau, Rick; Steger (Tucci), Christine; Landau, Mindy; Rihm, Roger; Bahadur, Sher; Blount, Tom; Brown, Frederick; Cheok, Michael; Evans, Michele; Ferrell, Kimberly; Galloway, Melanie; Glitter, Joseph; Givvines, Mary; Hiland, Patrick; Holian, Brian; Howe, Allen; Lee, Samson; Lubinski, John; McGinty, Tim; Ruland, William; Skeen, David; Thomas, Brian; Westreich, Barry
Cc: West, Steven; Shear, Gary; Burkhardt, Janet; Hayden, Elizabeth; Broaddus, Doug; Campbell, Stephen; Carlson, Robert; Chernoff, Harold; Kulesa, Gloria; Markley, Michael; Pascarelli, Robert; Salgado, Nancy; Simms, Sophonia; Wall, Scott; Guzman, Richard; Lyon, Fred; Meighan, Sean; Nguyen, Quynh; Oesterle, Eric; Polickoski, James; Tam, Peter; Thomas, Eric; Wertz, Trent
Subject: FYI: NRR Comm Team SitRep - 4/15

FYI: NRR Comm Team SitRep - 4/15 on behalf of Robert Nelson

1. Received and began to process request from Department of Homeland Security via NSIR concerning backup measures for certain plants for flooding, earthquakes, and station blackouts. Will respond generically.
2. Prepared NRR response to G20110216, a letter from the public with suggested questions to be answered publically.

Harold Chernoff on Behalf of

R.A. Nelson

Robert A. Nelson
NRR External Communications Coordinator, Japan Event
Deputy Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation



E-mail: robert.nelson@nrc.gov | Office: (301) 415-1453 | Cell: (b)(6) | Fax: (301) 415-2102

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Subject: Agenda for Industry Consortium Daily Call (NOTE TIME CHANGE to 2000 HRS DAILY)
Location: Ops Center

Start: Mon 4/18/2011 8:00 PM
End: Mon 4/18/2011 9:00 PM
Show Time As: Tentative

Recurrence: Weekly
Recurrence Pattern: every Monday and Wednesday from 8:00 PM to 9:00 PM

Meeting Status: Not yet responded

Organizer: LIA01 Hoc

Required Attendees: LIA01 Hoc; 'Aoki Steven'; Blamey, Alan; Blount, Tom; Boger, Bruce; Casto, Chuck; Dorman, Dan; ET05 Hoc; ET07 Hoc; FOIA Response.hoc Resource; Giitter, Joseph; 'Golub Sal'; 'Golub Sal'; 'Good Charles'; 'Hochevar Al'; HOO Hoc; 'INPO'; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; 'Lyons Peter'; McDermott, Brian; McGinty, Tim; Miller, Chris; Monninger, John; Morris, Scott; 'NRC Liaison functional account at USAID'; OST02 HOC; 'Pentagon Japan Crisis Team J-4 Desk'; Hoc, PMT12; Ross-Lee, MaryJane; RST01 Hoc; RST01B Hoc; 'Vavoso Tom'; Virgilio, Martin; Weber, Michael; 'Webster William'; Wiggins, Jim; Zimmerman, Roy

Optional Attendees: 'Hochevar, Albert R. (INPO)'; Tschiltz, Michael; DprNrrCal Resource; Temple, Jeffrey; DORLCAL Resource; Nielsen, Rick M (INPO); Maddox, James E. (INPO); Fadel, Daniel P; keith.moser@exeloncorp.com

When: Occurs every Monday and Wednesday effective 4/18/2011 until 5/8/2011 from 8:00 PM to 9:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Ops Center

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

The Industry Consortium Daily Calls have been rescheduled for 2000 hrs EDT.

The attached Agenda will be updated periodically.

The call in number is: (Passcode:)



www-39

Agenda for Daily Industry Consortium Teleconference Meeting

March 30, 2011 2000 hrs EDT

(b)(6)

(Passcode: (b)(6)

)

Purpose of the Meeting: Alignment of US Government and US Nuclear Industry support for Japan in responding to the Fukushima Nuclear Event.

Expected Outcome: Reinforce roles and responsibilities; identify problems and open issues surrounding our support

Meeting Chair: US NRC

- Roll Call
- Continued discussion of organizational Issues / Roles and Responsibilities
 - US Agency Roles and Leads
 - US Industry Support Structure and Roles
- INPO report on status of material requests
- INPO team report status of on-going work on requests for technical support
- Review Current Action Items Spreadsheet
- New Actions

From: Steinhurst, Laurel A CIV SEA 08 NR (b)(6)
Sent: Friday, March 18, 2011 10:33 AM
To: RST01 Hoc
Subject: Call ops officer and request connection to what bridge?

-----Original Message-----

From: RST01 Hoc [mailto:RST01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 10:32 AM
To: Steinhurst, Laurel A CIV SEA 08 NR
Subject: RE: What number to call at 1130???RE: SFP Recommendations

Call the Headquarters Operations Officer, 301-816-5100.

-----Original Message-----

From: Steinhurst, Laurel A CIV SEA 08 NR [mailto:(b)(6)]
Sent: Friday, March 18, 2011 10:31 AM
To: RST01 Hoc
Subject: What number to call at 1130???RE: SFP Recommendations

From: HOO Hoc
Sent: Saturday, April 16, 2011 3:35 PM
To: LIA07 Hoc; LIA08 Hoc; OST01 HOC
Subject: FW: Update of forecast wind conditions for Fukushima Daiichi 1
Attachments: WRF_Fukushima_NPP_Forecast_2011-04-16_12z.xlsx

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov

-----Original Message-----

From: Aluzzi, Fernando J. [mailto:aluzzi1@lnl.gov]
Sent: Saturday, April 16, 2011 3:13 PM
To: HOO Hoc; PMT02 Hoc; PMT01 Hoc; CMHT@nnsa.doe.gov; nitops@nnsa.doe.gov; alan.remick@nnsa.doe.gov; 'McMichael, Lukas C CIV SEA 08 NR'; na30ecc@nr.doe.gov; (b)(6)
Cc: narac@lnl.gov
Subject: Update of forecast wind conditions for Fukushima Daiichi 1

A spreadsheet is attached containing the latest forecast wind conditions at the Fukushima Power Plant.

The forecast time series is derived from the latest NARAC WRF simulation with 5 km horizontal grid spacing.

NOTE: Onshore winds and during forecast period

Fukushima Power Plant Forecast Summary:

16 April 18:00 Z to 17 April 03:00 Z:	Northwesterly to westerly winds at 2- 7 m/s.
17 April 04:00 Z to 17 April 07:00 Z:	Southeasterly (onshore) winds around 3 to 6 m/s.
17 April 10:00 Z to 17 April 22:00 Z:	Westerly winds at 2-6 m/s.
17 April 23:00 Z to 18 April 10:00 Z:	Southeasterly (onshore) winds around 2 to 6 m/s

Fernando Aluzzi
NARAC Operations

=====

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Forecast Model: WRF
 Horizontal Grid Spacing: 5 km
 Vertical Levels: 44
 Forecast Location: Fukushima NPP, Japan

YEAR	MO	DY	HR (UTC)	WSP (m/s)	WDR	CLASS	Temp (2m) (C)	RAIN (in/hr)
----	--	--			---	----		
2011	4	16	18	2.7	306	F	2	0
2011	4	16	19	4.1	286	E	1	0
2011	4	16	20	4.2	300	E	1	0
2011	4	16	21	4.4	310	D	3	0
2011	4	16	22	5.8	314	C	6	0
2011	4	16	23	6.8	318	C	8	0
2011	4	17	0	5.4	310	C	9	0
2011	4	17	1	4.9	310	C	11	0
2011	4	17	2	4.9	311	C	12	0
2011	4	17	3	1.7	270	C	13	0
2011	4	17	4	5.4	153	C	11	0
2011	4	17	5	5.9	150	C	11	0
2011	4	17	6	5.2	148	C	11	0
2011	4	17	7	3.7	166	C	11	0
2011	4	17	8	1.5	209	C	10	0
2011	4	17	9	1.1	16	F	9	0
2011	4	17	10	2.7	323	F	6	0
2011	4	17	11	3.7	285	E	5	0
2011	4	17	12	4.5	257	D	4	0
2011	4	17	13	4.5	265	D	4	0
2011	4	17	14	4.3	268	E	3	0
2011	4	17	15	5.6	266	D	5	0
2011	4	17	16	5.3	282	D	4	0
2011	4	17	17	3.6	277	E	2	0
2011	4	17	18	2.4	267	F	2	0
2011	4	17	19	2.5	268	F	2	0
2011	4	17	20	2.8	266	F	3	0
2011	4	17	21	2.3	266	F	4	0
2011	4	17	22	0.8	325	C	6	0
2011	4	17	23	1.7	91	C	7	0
2011	4	18	0	2.7	98	C	8	0
2011	4	18	1	3.5	101	C	9	0
2011	4	18	2	4.1	128	C	10	0
2011	4	18	3	4.5	142	C	10	0
2011	4	18	4	5.2	140	C	10	0
2011	4	18	5	5.8	146	C	10	0
2011	4	18	6	5.8	146	C	10	0
2011	4	18	7	5.2	143	C	9	0
2011	4	18	8	4.5	139	D	8	0

2011	4	18	9	2.3	152	E	6	0
2011	4	18	10	1.5	169	F	6	0
2011	4	18	11	0.8	193	F	6	0
2011	4	18	12	0.8	234	F	6	0

From: OST01 HOC
Sent: Friday, March 18, 2011 11:21 PM
To: PMT11 Hoc; PMT02 Hoc; PMT01 Hoc; RST01 Hoc
Subject: FW: IAEA distributed documents
Attachments: Meteo_Products_2011-03-16_0400_-_RSMC_Tokyo[1].pdf; Meteo_Products_2011-03-16_0400_-_RSMC_Tokyo-new-issue1648[1].pdf; Daiichi_surroundings_monitoring_results_(03181900)[1].pdf; download.pdf; Meteo_products_20110316_0400_JointStatement[1].pdf; Meteo_Products_2011-03-16_0400_-_RSMC_Beijing[1].pdf; image001.jpg

FYI

From: HOO Hoc
Sent: Friday, March 18, 2011 7:35 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo@nrc.sgov.gov



From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Friday, March 18, 2011 6:57 PM
To: Kenagy, W David; McClelland, Vince; Rodriguez, Veronica; Heinrich, Ann; HOO Hoc; HOO2 Hoc; Huffman, William; DeCair.Sara@epamail.epa.gov; timothy.greten@dhs.gov; Maria.Marinissen@hhs.gov; (b)(6); doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; James.Kish@dhs.gov; HOO Hoc; Smith, Brooke; Zubarev, Jill E; Shaffer, Mark R; NITOPS@nnsa.doe.gov; (b)(6)
Subject: RE: IAEA distributed documents

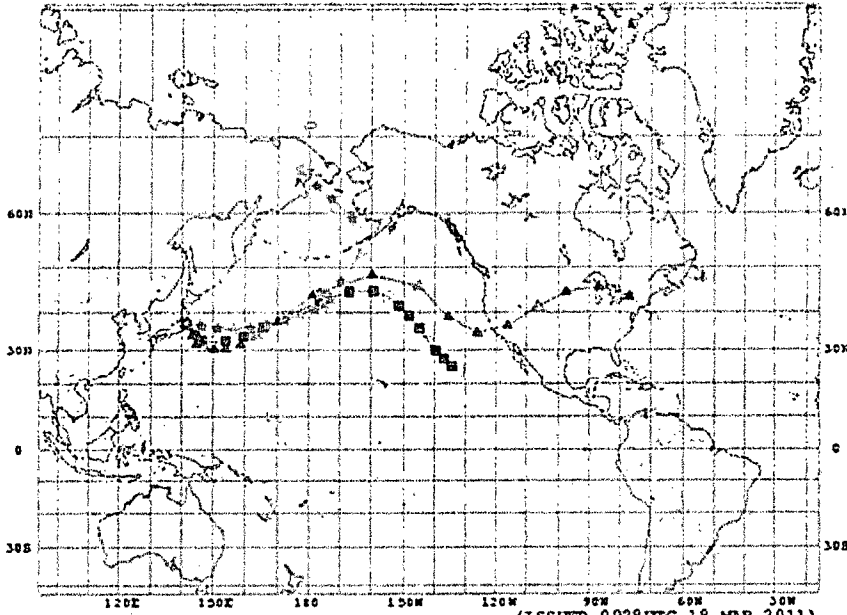
This email is UNCLASSIFIED.

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DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

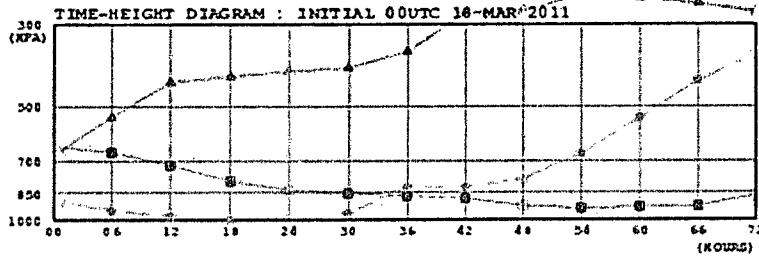
3-D TRAJECTORY

FROM 04UTC 16 MAR 2011 TO 00UTC 21 MAR 2011



(ISSUED 0928UTC 18 MAR 2011)

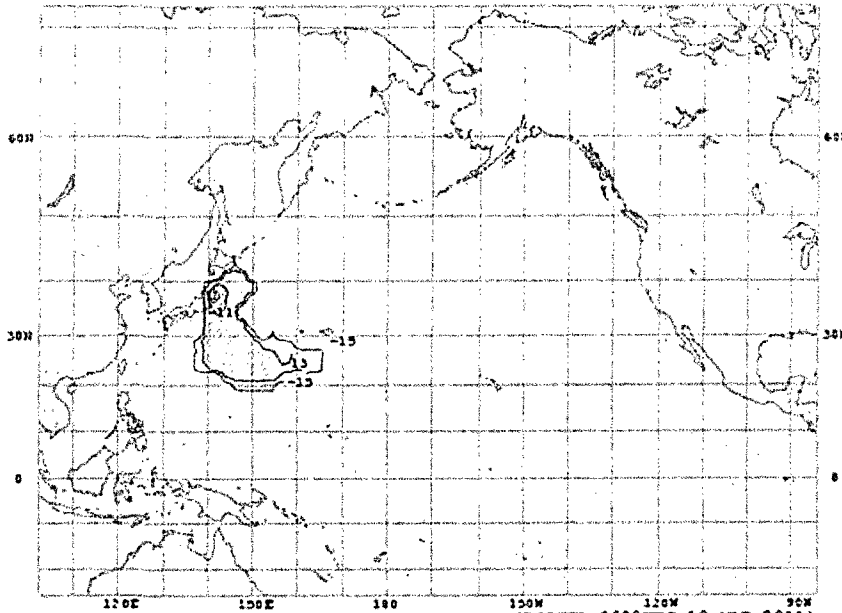
- ▲ INITIAL HEIGHT - 500M ABOVE THE SURFACE
- INITIAL HEIGHT - 1500M ABOVE THE SURFACE
- INITIAL HEIGHT - 3000M ABOVE THE SURFACE
- MARKED WITH TIME INTERVAL OF 6 HOURS
- SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI



DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 00UTC 18 MAR 2011
TO 00UTC 19 MAR 2011



(ISSUED 0928UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI

ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 9.68E-10 (BQ.S/M3)
CONTOURS: 1E-11, 1E-13, 1E-15

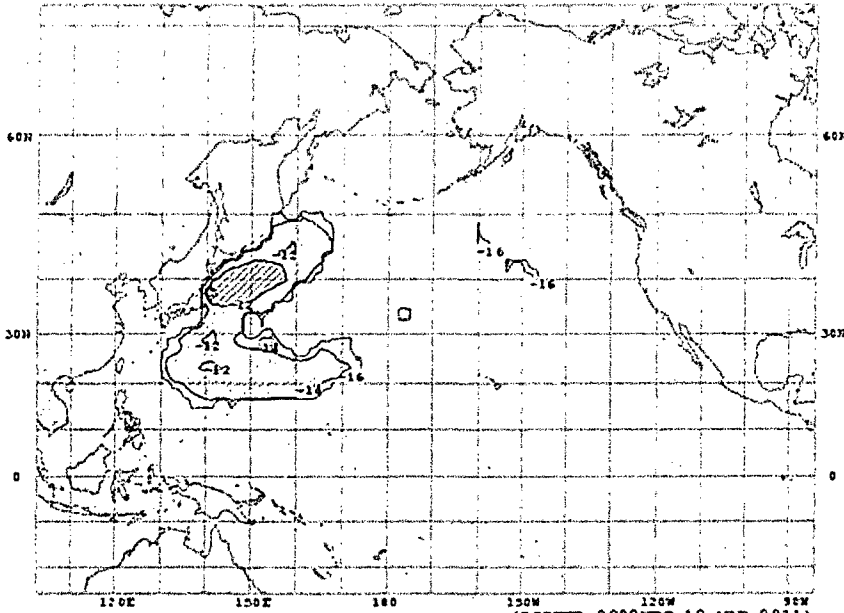
CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 2 / 5

DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 00UTC 19 MAR 2011
TO 00UTC 20 MAR 2011



(ISSUED 0928UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI
ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 5.69E-11 (BQ.S/M3)
CONTOURS: 1E-12, 1E-14, 1E-16

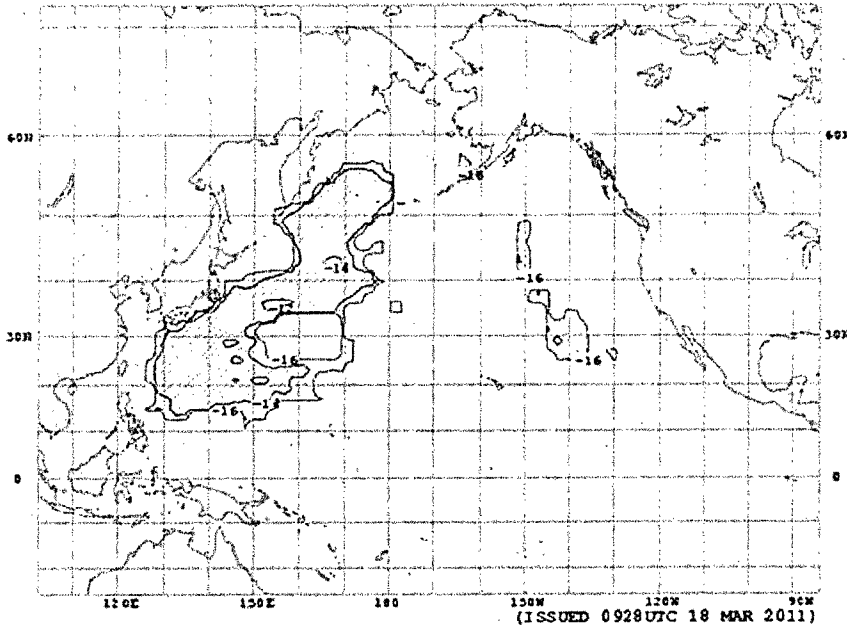
CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 3 / 5

DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 00UTC 20 MAR 2011
TO 00UTC 21 MAR 2011



(ISSUED 0928UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI

ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 2.13E-12 (BQ.S/M3)
CONTOURS: 1E-12, 1E-14, 1E-16

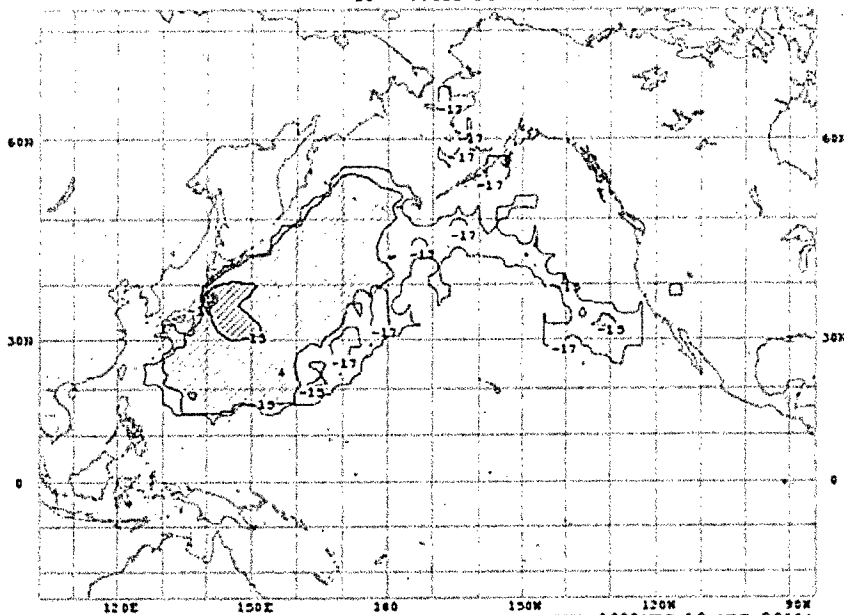
CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 4 / 5

DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TOTAL (WET AND DRY) DEPOSITION

INTEGRATED FROM 04UTC 16 MAR 2011
TO 00UTC 21 MAR 2011



(ISSUED 0928UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI
ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ/M2)
MAXIMUM : 8.45E-12 (BQ/M2)
CONTOURS: 1E-13, 1E-15, 1E-17

CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 5 / 5



China Meteorological Administration

**National Meteorological Center
Beijing, China**

RSMC for Environmental Emergency Response

FAX: (86 10) 68407469, (86 10) 62172909

Tel: (86 10)68408594, (86 10)58993295

Email: RSMC@cma.gov.cn

TO: Operational Contacts of National Meteorological Services in RAII,

IAEA, WMO Secretariat,

RSMC Tokyo, and

RSMC Obninsk

From: RSMC Beijing

Date: Mar 18, 2011

Time: 15:15 UTC

Dear Colleagues,

Please find attached the Joint Statement of RAII for Environmental Emergency Response (EER) distributed by RSMC Tokyo, RSMC Obninsk, and RSMC Beijing.

Best regards,
RSMC Beijing

JOINT STATEMENT

by: RSMC Tokyo(JP), RSMC Obrninsk(RU) and RSMC Beijing(CN)

Emergency notified by the IAEA (Emergency)

Issued: 15:10 UTC, Mar. 18, 2011

RADIOLOGICAL EVENT DETAILS

Source:

Fukushima Dai-ichi, Japan

Location:

37.4206 degrees North latitude, 141.0329 degrees East longitude

Release date-time:

From: 04:30 UTC 16 Mar 2011

To: 04:30 UTC 19 Mar 2011

Comments:

Emergency Accident

RSMC Tokyo's model integrated for 116 hours while the model of RSMC Beijing and RSMC Obrninsk integrated for 72 hours.

Weather Situation

A cold northwest airflow covered eastern part of Japan up to around 17th March. A high pressure system covers the most part of Japan Islands. An upper trough passes the northern part of Japan and will move eastward in the North Pacific Ocean. It is mostly dry around Japan and the upper trough with a low pressure system at the surface brings showers around the middle of the North Pacific.

Trajectories

Both RSMC Beijing and Tokyo predict the tracer at 500m, 1500m and 3000m will move to the southeast in the first 24 hours from the start of emissions and then turn to the northeast. From the longer forecast of RSMC Tokyo, we could get the information that the tracer released at 500m and 1500m will move to the east across the North Pacific Ocean and the tracer at 500m will reach mainland of U.S. The tracer released at 3000m will also move to northeast for the next 24 hours and then turn to the north during the rest of the forecast period.

RSMC Obrninsk's simulation shows that the tracers at 500m and 1500m move to the southeast first and then goes to the east in the rest of forecast period; the tracer at 3000m goes to the northeast in the first 24 hours and then turn to east; while at 3000m the tracer moves to the east in the first 24 hours then goes to northeast.

Reading of environmental radioactivity level by prefecture

19:00 March 18, 2011

(μ Sv/h)

	Prefecture(City)	2011/3/17							2011/3/18						
		17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-1	1-2	2-3	3-4	4-5	5-6	6-7
1	Hokkaido(Sapporo)	0.027	0.028	0.029	0.028	0.027	0.028	0.031	0.030	0.028	0.028	0.029	0.028	0.028	0.027
2	Aomori(Aomori)	0.024	0.022	0.021	0.021	0.020	0.020	0.019	0.019	0.020	0.020	0.019	0.019	0.019	0.019
3	Iwate(Morioka)	0.031	0.033	0.031	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.031
4	Miyagi(Sendai)														
5	Akita(Akita)	0.039	0.035	0.034	0.034	0.036	0.035	0.034	0.033	0.033	0.033	0.033	0.034	0.033	0.033
6	Yamagata(Yamagata)	0.049	0.052	0.047	0.049	0.050	0.047	0.043	0.041	0.041	0.040	0.040	0.040	0.040	0.040
7	Fukushima(Futaba)														
8	Ibaraki(Mito)	0.209	0.207	0.207	0.206	0.205	0.205	0.204	0.203	0.202	0.201	0.201	0.199	0.199	0.198
9	Toshigi(Utsunomiya)	0.188	0.186	0.187	0.185	0.185	0.183	0.182	0.182	0.181	0.180	0.179	0.178	0.177	0.175
10	Gunma(Maebashi)	0.096	0.095	0.095	0.095	0.094	0.093	0.093	0.092	0.092	0.091	0.091	0.090	0.090	0.089
11	Saitama(Saitama)	0.063				0.063	0.063	0.062	0.061	0.061	0.061	0.061	0.061	0.060	0.060
12	Chiba(Ishihara)	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
13	Tokyo(Chinjyuku)	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.049	0.050	0.049	0.049	0.049
14	kanagawa(Chigasaki)	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.051	0.051	0.052	0.051
15	Niigata(Niigata)	0.047	0.046	0.046	0.046	0.046	0.046	0.047	0.047	0.050	0.049	0.047	0.047	0.046	0.046
16	Toyama(Imizu)	0.053	0.049	0.048	0.051	0.051	0.051	0.049	0.048	0.047	0.046	0.046	0.046	0.046	0.046
17	Ichikawa(kanazawa)	0.049	0.048	0.047	0.049	0.048	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.046
18.	Fukui(Fukui)	0.050	0.047	0.046	0.047	0.050	0.047	0.044	0.044	0.044	0.044	0.044	0.044	0.043	0.043
19	Yamanashi(Kohu)	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
20	Nagano(Nagano)	0.077	0.077	0.078	0.078	0.078	0.079	0.079	0.079	0.079	0.080	0.078	0.077	0.076	0.075
21	Gifu(Kakumuhara)	0.060	0.060	0.060	0.060	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
22	Shizuoka(Shizuoka)	0.040	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
23	Aichi(Nagoya)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
24	Mie(Yokkaichi)	0.051	0.050	0.049	0.048	0.048	0.048	0.049	0.048	0.049	0.047	0.046	0.045	0.045	0.045
25	Shiga(Otsu)	0.033	0.033	0.034	0.033	0.032	0.032	0.036	0.036	0.034	0.033	0.032	0.032	0.032	0.032
26	Kyoto(Kyoto)	0.038	0.038	0.038	0.039	0.038	0.038	0.038	0.041	0.039	0.038	0.038	0.038	0.038	0.037
27	Osaka(Osaka)	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.042	0.042	0.042	0.042
28	Hyogo(Kobe)	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
29	Nara(Nara)	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047
30	Wakayama(Wakayama)	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.031
31	Tottori(Tohhaku)	0.059	0.058	0.058	0.057	0.063	0.060	0.058	0.057	0.056	0.056	0.057	0.057	0.057	0.058
32	Shimane(Matsue)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.037	0.038	0.039
33	Okayama(Okayama)	0.049	0.048	0.048	0.049	0.049	0.049	0.049	0.049	0.050	0.050	0.050	0.050	0.050	0.051
34	Hiroshima(Hiroshima)	0.046	0.047	0.047	0.046	0.047	0.047	0.048	0.049	0.050	0.050	0.050	0.051	0.051	0.051
35	Yamaguchi(Yamaguchi)	0.102	0.096	0.093	0.093	0.093	0.094	0.094	0.095	0.095	0.096	0.096	0.096	0.096	0.097
36	okushima(Tokushima)	0.042	0.040	0.039	0.038	0.038	0.038	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.038
37	Kagawa(Takamastu)	0.053	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.053
38	Ehime(Matsuyama)	0.049	0.050	0.048	0.048	0.048	0.048	0.049	0.049	0.049	0.050	0.050	0.051	0.050	0.050
39	Kochi(Kochi)	0.026	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.026	0.026	0.026	0.026	0.026	0.027
40	Fukuoka(Dazaifu)	0.036	0.036	0.036	0.036	0.036	0.037	0.037	0.037	0.037	0.038	0.037	0.037	0.037	0.038
41	Shiga(Shiga)	0.039	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
42	Nagasaki(Ohmura)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.030
43	Kumamoto(Uto)	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.028	0.028	0.028	0.028	0.028
44	Oita(Oita)	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.050	0.050	0.050	0.051	0.051
45	Miyazaki(Miyazaki)	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027
46	Kagoshima(Kagoshima)	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.035
47	Okinawa(Uruma)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021

*The datas in Miyagi are not measured because monitoring point has risk of collapsing.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for the datas in Fukushima. It could not

*Blanks are caused by device clearance, but the area was measured by Monitoring Posts.

*These dates are estimated as 1μ Gy/h= 1μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

Reading of environmental radioactivity level by prefecture

19:00 March 18, 2011

(μ Sv/h)

	Prefecture(City)	2011/3/18										Range of past usual figure	
		7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17		
1	Hokkaido(Sapporo)	0.027	0.027	0.027	0.027	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.02~0.105
2	Aomori(Aomori)	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.017~0.102
3	Iwate(Morioka)	0.031	0.030	0.029	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.014~0.084
4	Miyagi(Sendai)												0.0176~0.0513
5	Akita(Akita)	0.034	0.034	0.034	0.034	0.033	0.033	0.034	0.033	0.034	0.033	0.033	0.022~0.086
6	Yamagata(Yamagata)	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.040	0.040	0.040	0.025~0.082
7	Fukushima(Futaba)												0.037~0.071
8	Ibaraki(Mito)	0.197	0.195	0.195	0.193	0.192	0.191	0.190	0.189	0.188	0.187	0.187	0.036~0.056
9	Toshigi(Utsunomiya)	0.175	0.175	0.172	0.171	0.170	0.169	0.168	0.167	0.166	0.165	0.165	0.030~0.067
10	Gunma(Maebashi)	0.089	0.088	0.087	0.087	0.086	0.086	0.086	0.086	0.085	0.085	0.085	0.017~0.045
11	Saitama(Saitama)	0.060	0.059	0.059	0.059	0.059	0.058	0.058	0.058				0.031~0.060
12	Chiba(Ishihara)	0.036	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.022~0.044
13	Tokyo(Chinjyuku)	0.049	0.049	0.049	0.048	0.049	0.049	0.049	0.048	0.048	0.048	0.048	0.028~0.079
14	kanagawa(Chigasaki)	0.051	0.051	0.051	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.035~0.069
15	Niigata(Niigata)	0.046	0.045	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.031~0.153
16	Toyama(Imizu)	0.046	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.029~0.147
17	Ichikawa(kanazawa)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.0291~0.1275
18	Fukui(Fukui)	0.043	0.044	0.043	0.043	0.043	0.044	0.044	0.044	0.044	0.044	0.045	0.032~0.097
19	Yamanashi(Kohu)	0.044	0.043	0.043	0.043	0.044	0.043	0.043	0.043	0.043	0.043	0.044	0.040~0.064
20	Nagano(Nagano)	0.074	0.073	0.072	0.072	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.0299~0.0974
21	Gifu(Kakumuhara)	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.057~0.110
22	Shizuoka(Shizuoka)	0.038	0.037	0.038	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.0281~0.0765
23	Aichi(Nagoya)	0.039	0.039	0.039	0.039	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.035~0.074
24	Mie(Yokkaichi)	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.0416~0.0789
25	Shiga(Otsu)	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.033	0.031~0.061
26	Kyoto(Kyoto)	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.033~0.087
27	Osaka(Osaka)	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042~0.061
28	Hyogo(Kobe)	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035~0.076
29	Nara(Nara)	0.047	0.046	0.047	0.046	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.046~0.08
30	Wakayama(Wakayama)	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031~0.056
31	Tottori(Tohaku)	0.058	0.058	0.058	0.058	0.058	0.058	0.060	0.061	0.062	0.062	0.062	0.036~0.11
32	Shimane(Matsue)	0.039	0.038	0.037	0.037	0.036	0.037	0.036	0.037	0.036	0.036	0.036	0.033~0.079
33	Okayama(Okayama)	0.051	0.050	0.049	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.043~0.104
34	Hiroshima(Hiroshima)	0.051	0.051	0.049	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.035~0.069
35	Yamaguchi(Yamaguchi)	0.097	0.097	0.095	0.093	0.093	0.092	0.092	0.092	0.092	0.092	0.092	0.084~0.128
36	Iokushima(Tokushima)	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037~0.067
37	Kagawa(Takamastu)	0.053	0.052	0.052	0.052	0.052	0.051	0.052	0.052	0.051	0.052	0.052	0.051~0.077
38	Ehime(Matsuyama)	0.050	0.049	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.045~0.074
39	Kochi(Kochi)	0.027	0.027	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.023~0.076
40	Fukuoka(Dazaifu)	0.038	0.037	0.037	0.036	0.036	0.037	0.036	0.036	0.036	0.036	0.036	0.034~0.079
41	Shiga(Shiga)	0.041	0.041	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.037~0.086
42	Nagasaki(Ohmura)	0.029	0.030	0.030	0.030	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43	Kumamoto(Uto)	0.028	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.021~0.067
44	Oita(Oita)	0.051	0.051	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.048~0.085
45	Miyazaki(Miyazaki)	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.0243~0.0664
46	Kagoshima(Kagoshima)	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.0306~0.0943
47	Okinawa(Uruma)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.020	0.020	0.0133~0.0575

*Reading of Miyagi was not measured because monitoring point has risk of collapsing.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for reading of Fukushima. It could not be measured by

*Blanks are caused by device clearance, but the area was measured by Monitoring Posts.

*These dates are estimated as 1 μ Gy/h=1 μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

茨城県におけるモニタリング状況(1/3)

文部科学省

19:00 March 18, 2011

μ Sv/h

Date	JAEA nuclear science research institute (Tokai-village in Ibaraki-prefecture)	JAEA Nuclear fuel cycle engineering laboratory (Tokai-village in Ibaraki-prefecture)	Yayoi in Tokyo University (Tokai-village in Ibaraki-prefecture)
2011/3/15			
7:00	4.40	4.69	4.62
7:13		5.14	
7:18	5.00		
7:30	5.00	4.59	4.99
7:46			5.80
8:00	5.80	5.06	3.58
8:30	4.90	2.98	3.15
9:00	4.00	2.66	2.85
9:30	3.60	2.39	2.58
10:00	3.30	2.17	2.32
11:00	2.80	1.95	2.14
12:00	2.60	1.67	2.03
12:30	2.60		1.85
13:00	2.40	1.54	1.69
13:30	2.30	1.48	1.63
14:00	2.20	1.43	1.56
14:30	2.10	1.34	1.50
15:00	2.10	1.29	1.51
15:30	2.00	1.25	1.47
16:00	2.00	1.21	1.41
16:30	1.90	1.17	1.36
17:00	1.90	1.15	1.34
17:30	1.80		1.24
18:00	1.80	1.09	1.42
18:30	1.80	1.07	1.29
19:00	1.80	1.05	1.24
19:30	1.80	1.03	1.26
20:00	1.70	1.02	1.33
20:30	1.70		1.22
21:00	1.70	1.00	1.24
21:30		0.98	1.20
22:00	1.70		1.11
22:30	1.70	0.98	1.06
23:00	1.70	0.97	1.22
23:30		0.96	1.20
2011/3/16			
0:00	1.60	0.96	1.11
0:30		0.95	1.09
1:00	1.60	0.94	1.11
1:30	1.60	0.94	1.08
2:00	1.60	0.95	1.14
2:30	1.60	0.95	1.11
3:00	1.70	0.96	1.12
3:30	1.80	0.95	1.20
4:00	1.70	0.95	1.22
4:30	1.70	0.98	1.30
5:00	2.10	1.57	1.80
5:30	2.50	2.00	2.35
6:00	2.90	2.34	2.71
6:30	2.70	2.13	2.40
7:00	2.50	1.86	2.12
7:30	2.40	1.80	1.99
8:00	2.30	1.71	2.00
8:30	2.30	1.65	1.85
9:00	2.20	1.58	1.85
9:30	2.10	1.53	1.72
10:00	2.10		1.67
10:30			1.63
11:00			1.59
11:30			1.55
12:00	1.90	1.32	1.54
12:30	1.90	1.23	1.42
13:00	1.80		1.41
13:30	1.90	1.19	1.43
14:00	1.80	1.16	1.39
14:30	1.80	1.14	1.37
15:00	1.70	1.12	1.36
15:30	1.70	1.11	1.30
16:00	1.60	1.10	1.36
16:30	1.60		1.35
17:00	1.60	1.07	1.39
17:30	1.60	1.07	1.28
18:00	1.60	1.06	1.30
18:30	1.60	1.06	1.34
19:00	1.60	1.05	1.33

茨城県におけるモニタリング状況(2/3)

文部科学省

19:00 March 18, 2011

μ Sv/h

Date	JAEA nuclear science research institute (Tokai-village in Ibaraki-prefecture)	JAEA Nuclear fuel cycle engineering laboratory (Tokai-village in Ibaraki-prefecture)	Yayoi in Tokyo University (Tokai-village in Ibaraki-prefecture)
19:30	1.60	1.04	1.37
20:00	1.60	1.04	1.39
20:30	1.60	1.04	1.24
21:00	1.50		1.27
21:30	1.50	1.04	1.25
22:00	1.50	1.03	1.30
22:30	1.50	1.03	1.33
23:00	1.50	1.02	1.34
23:30	1.50	1.02	1.28
2011/3/17			
0:00	1.50	1.02	1.22
0:30	1.50	1.01	1.22
1:00	1.50	1.02	1.28
1:30	1.50	1.01	1.19
2:00	1.50	1.01	1.22
2:30	1.50	1.01	1.23
3:00	1.50	1.01	1.18
3:30	1.50	1.01	1.23
4:00	1.50	1.00	1.31
4:30	1.50	1.00	1.23
5:00	1.50	0.99	1.31
5:30	1.50	0.99	1.25
6:00	1.50	0.99	1.13
6:30	1.50	0.99	1.23
7:00	1.50	0.98	1.24
7:30	1.50	0.99	1.13
8:00	1.50	0.98	1.17
8:30	1.50	0.97	1.15
9:00	1.40	0.96	1.20
9:30	1.40	0.96	1.14
10:00	1.40	0.96	1.15
10:30	1.40	0.95	1.15
11:00	1.40	0.94	1.13
11:30	1.40	0.93	1.17
12:00	1.40	0.94	1.22
12:30	1.40	0.94	1.15
13:00	1.40	0.93	1.13
13:30	1.40	0.92	1.12
14:00	1.40	0.92	1.12
14:30	1.40	0.92	1.12
15:00	1.40	0.92	1.12
15:30	1.40	0.91	1.15
16:00	1.40	0.90	1.09
16:30	1.40	0.90	1.03
17:00	1.40	0.89	1.05
17:30	1.30	0.89	1.08
18:00	1.30	0.88	1.16
18:30	1.30	0.88	1.16
19:00	1.30	0.88	1.10
19:30	1.30	0.88	1.07
20:00	1.30	0.88	1.10
20:30	1.30	0.87	1.10
21:00	1.30	1.10	1.10
21:30	1.30	1.10	1.10
22:00	1.30	1.08	1.08
22:30	1.30	1.09	1.09
23:00	1.30	1.09	1.09
23:30	1.30	1.10	1.10
2011/3/18			
0:00	1.30	0.86	1.09
0:30	1.30	0.85	1.10
1:00	1.30	0.85	1.08
1:30	1.30	0.85	1.06
2:00	1.30	0.85	1.05
2:30	1.30	0.85	1.10
3:00	1.30	0.85	1.09
3:30	1.30	0.85	1.07
4:00	1.30	0.85	1.05
4:30	1.30	0.84	1.08
5:00	1.30	0.84	1.08
5:30	1.30	0.83	1.06
6:00	1.30	0.83	1.07
6:30	1.30	0.83	1.05
7:00	1.30	0.83	1.06
7:30	1.30	0.83	1.04
8:00	1.30	0.83	1.03

茨城県におけるモニタリング状況(3/3)

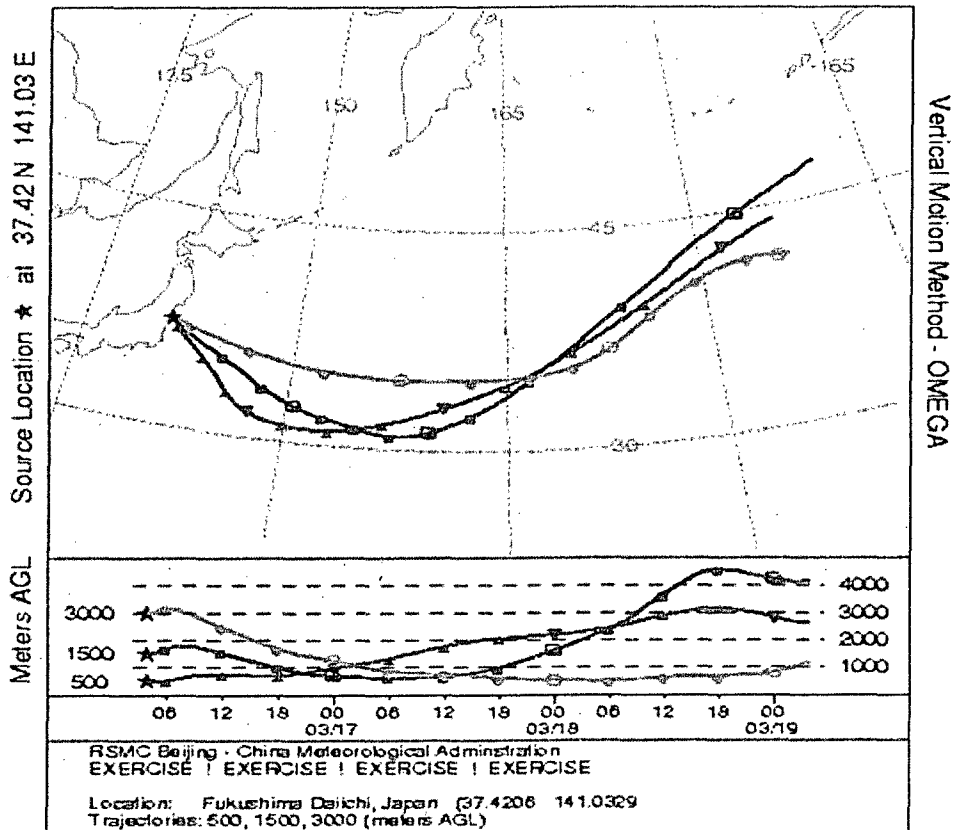
文部科学省

19:00 March 18, 2011

μ Sv/h

Date	JAEA nuclear science research institute (Tokai-village in Ibaraki- prefecture)	JAEA Nuclear fuel cycle engineering laboratory (Tokai-village in Ibaraki- prefecture)	Yayoi in Tokyo University (Tokai-village in Ibaraki- prefecture)
8:30	1.30	0.82	1.00
9:00	1.20	0.82	1.03
9:30	1.20	0.82	0.97
10:00	1.20	0.82	1.07
10:30	1.20	0.81	1.03
11:00	1.20	0.80	1.00
11:30	1.20	0.80	1.00
12:00	1.20	0.80	0.99
12:30	1.20	0.80	0.99
13:00	1.20	0.79	1.03
13:30	1.20	0.79	1.00
14:00	1.20	0.79	0.99
14:30	1.20	0.78	1.06
15:00	1.20	0.78	1.04
15:30	1.20	0.78	0.98
16:00	1.20	0.77	0.96
16:30	1.20	0.77	0.96
17:00	1.20	0.77	0.97
17:30	1.20	0.77	0.96
18:00		0.76	0.95

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION
 Forward trajectories starting at 04 UTC 16 Mar 11
 00 UTC 16 Mar CMAG Forecast Initialization

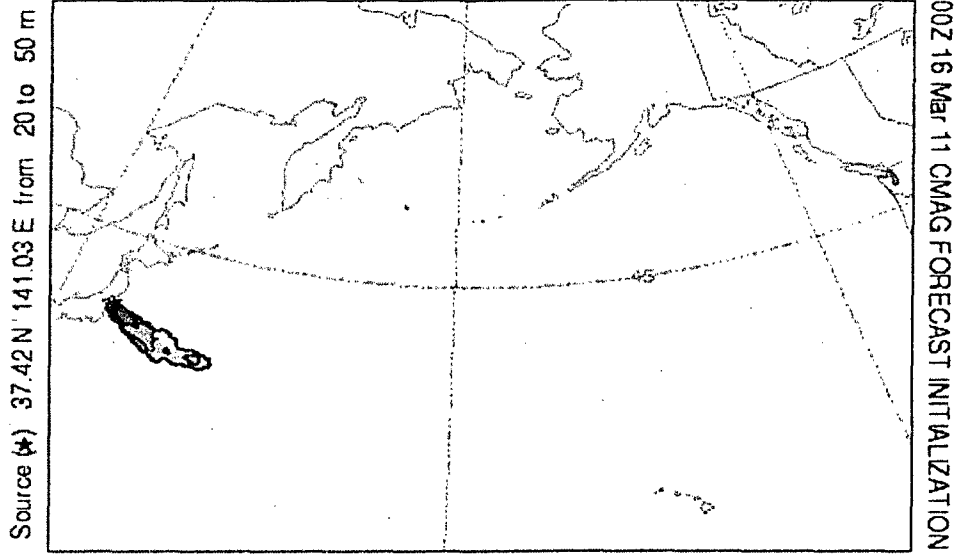


RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m³)

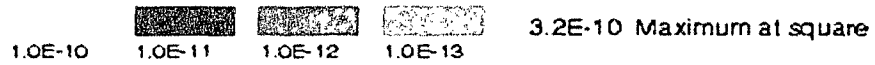
Integrated from 00z 16 Mar to 00z 17 Mar (UTC)

C137 Release Started at 04Z 16 Mar (UTC)



Source (★) 37.42 N 141.03 E from 20 to 50 m

00Z 16 Mar 11 CMAG FORECAST INITIALIZATION



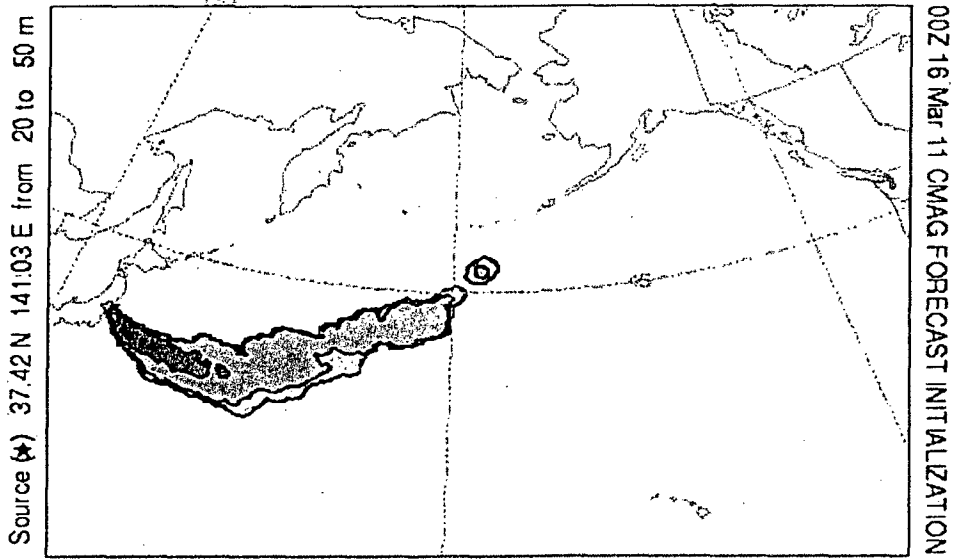
EMERGENCY ! EMERGENCY ! EMERGENCY ! EMERGENCY
Location: Fukushima Daiichi, Japan (37.4208 141.0329)
Meteorology: GT213
Emission: 1.0 Bq of C137 over 72 hr
Distribution: Uniform between 20 m - 50 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m³)

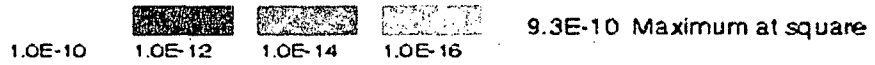
Integrated from 00z 17 Mar to 00z 18 Mar (UTC)

C137 Release Started at 04Z 16 Mar (UTC)



Source (★) 37.42 N 141.03 E from 20 to 50 m

00Z 16 Mar 11 CMAG FORECAST INITIALIZATION



EMERGENCY ! EMERGENCY ! EMERGENCY ! EMERGENCY
Location: Fukushima Daiichi, Japan (37.4206 141.0329)
Meteorology: GT213
Emission: 1.0 Bq of C137 over 72 hr
Distribution: Uniform between 20 m - 50 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

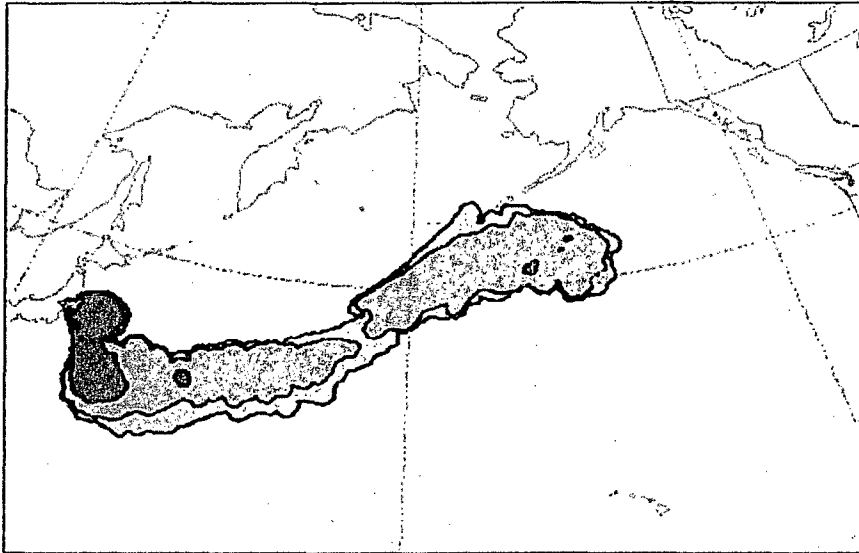
RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m³)

Integrated from 00z 18 Mar to 00z 19 Mar (UTC)

C137 Release Started at 04Z 16 Mar (UTC)

Source (★) 37.42 N 141.03 E from 20 to 50 m



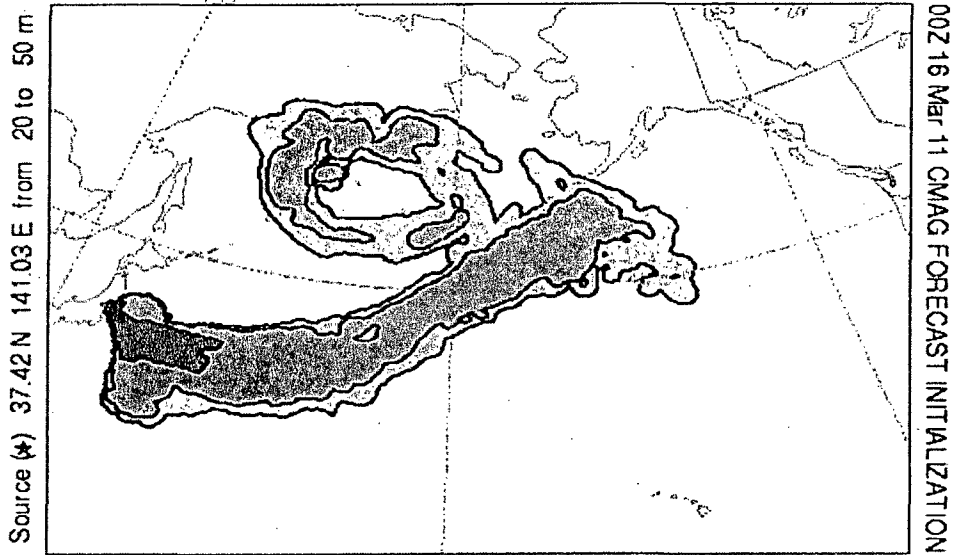
00Z 16 Mar 11 CMAG FORECAST INITIALIZATION

1.0E-10 1.0E-12 1.0E-14 1.0E-16 8.7E-10 Maximum at square

EMERGENCY ! EMERGENCY ! EMERGENCY ! EMERGENCY
Location: Fukushima Daiichi, Japan (37.4208 141.0329)
Meteorology: GT213
Emission: 1.0 Bq of C137 over 72 hr
Distribution: Uniform between 20 m - 50 m agl
Deposition: Wet and Dry (0.1 cm²)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Deposition at Ground-Level (Bq/m²)
Integrated from 00z 16 Mar to 00z 19 Mar (UTC)
C137 Release Started at 04Z 16 Mar (UTC)



1.0E-11 1.0E-13 1.0E-15 1.0E-17 1.7E-11 Maximum at square

EMERGENCY ! EMERGENCY ! EMERGENCY ! EMERGENCY
Location: Fukushima Daiichi, Japan (37.4206 141.0329)
Meteorology: GT213
Emission: 1.0 Bq of C137 over 72 hr
Distribution: Uniform between 20 m - 50 m agl
Deposition: Wet and Dry (0.1 cm²)
Notes: Contours may change from map to map
Results based on default values

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 19:00 March 18, 2011

Ministry of Education, Culture, Sports, Science

1. Monitoring Outputs by MEXT (reverse chronological order) *Boldface and underlined readings are new.

* 1 measured by Geiger-Müller counter

* 2 measured by ionization chamber type survey

* 3 measured by NaI scintillator detector

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : $\mu\text{Sv} / \text{h}$)	Weather	Reading by
Reading Point <u>[1]</u> (About60KmNorth/West)	<u>3/18 18:05</u>	<u>8.0</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point <u>[4]</u> (About50KmNorth/West)	<u>3/18 16:00</u>	<u>4.8</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point <u>[10]</u> (About40KmNorth/West)	<u>3/18 15:45</u>	<u>3.3</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point <u>[12]</u> (About40KmWest)	<u>3/18 15:32</u>	<u>0.6</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point <u>[11]</u> (About40KmNorth/West)	<u>3/18 15:28</u>	<u>4.8</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point <u>[23]</u> (About35KmWest/North/West)	<u>3/18 15:04</u>	<u>2.8</u> *2	No rain	<u>NUSTEC (Nuclear Safety Technology Center)</u>
Reading Point [22] (About35KmWest/North/West)	3/18 14:48	2.2 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [15] (About35KmWest)	3/18 14:36	2.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [21] (About30KmWest/North/West)	3/18 14:35	8.7 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [14] (About35KmWest)	3/18 14:22	0.8 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [7] (About45KmNorth)	3/18 14:18	2.4 *2	No rain	MEXT
Reading Point [6] (About45KmNorth)	3/18 14:10	3.0 *2	No rain	MEXT
Reading Point [13] (About40KmWest)	3/18 14:09	0.8 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [23] (About35KmWest/North/West)	3/18 14:04	3.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point [22] (About35KmWest/North/West)	3/18 13:48	2.3 *2	No rain	NUSTEC (Nuclear Safety Technology Center)

- * 1 measured by Geiger-Müller counter
- * 2 measured by ionization chamber type survey
- * 3 measured by NaI scintillator detector

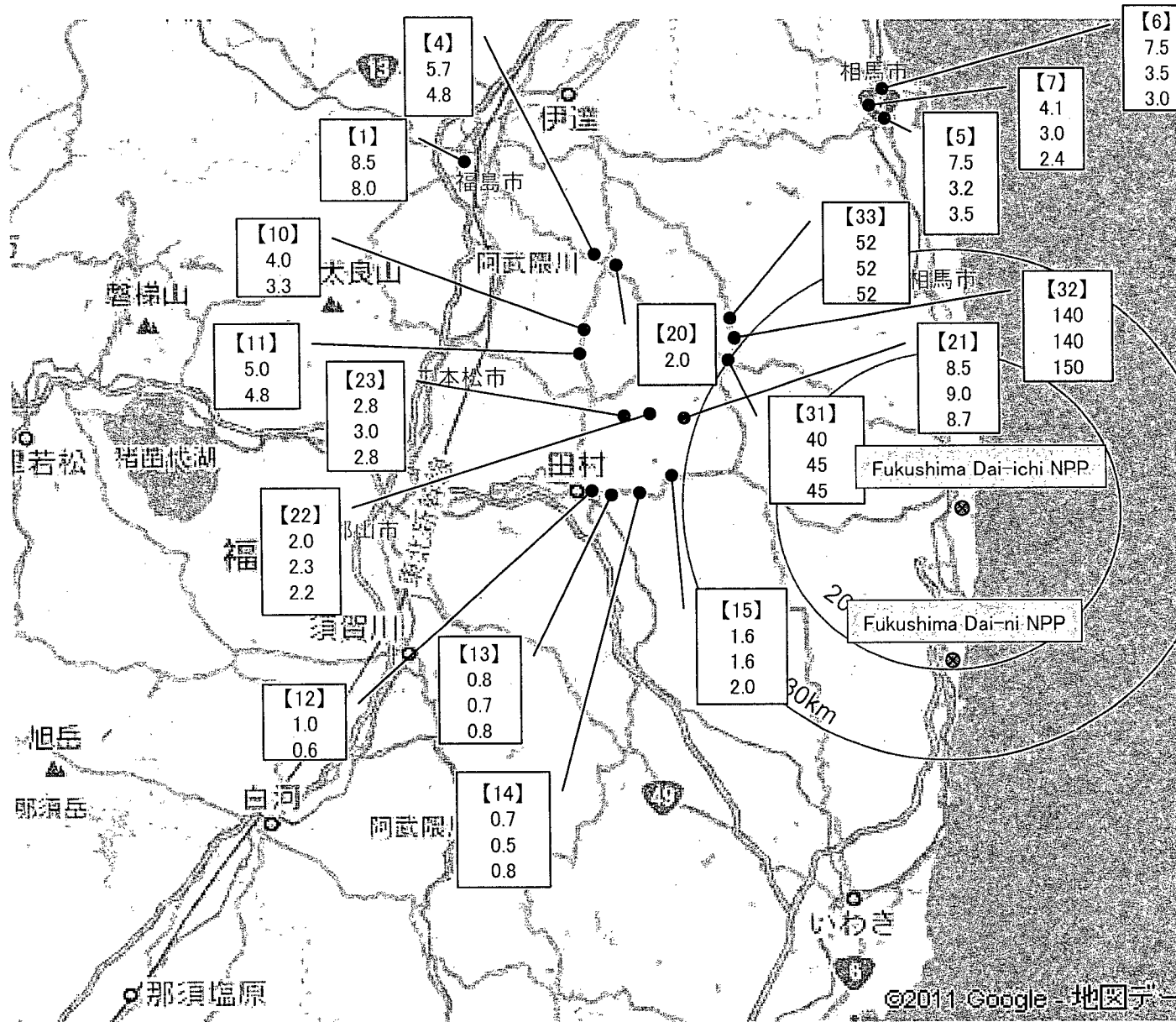
Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【33】 (About30KmNorth/West)	3/18 13:45	52.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【32】 (About30KmNorth/West)	3/18 13:32	150.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【5】 (About45KmNorth)	3/18 13:40	3.5 *2	No rain	MEXT
Reading Point 【15】 (About35KmWest)	3/18 13:36	1.6 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【21】 (About30KmWest/North/West)	3/18 13:34	9.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【14】 (About35KmWest)	3/18 13:22	0.5 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【31】 (About30KmWest/North/West)	3/18 13:20	45.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【7】 (About45KmNorth)	3/18 13:18	3.0 *2	No rain	MEXT
Reading Point 【6】 (About45KmNorth)	3/18 13:10	3.5 *2	No rain	MEXT
Reading Point 【13】 (About40KmWest)	3/18 13:09	0.7 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【23】 (About35KmWest/North/West)	3/18 13:04	2.8 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【22】 (About35KmWest/North/West)	3/18 12:48	2.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【33】 (About30KmNorth/West)	3/18 12:47	52.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【5】 (About45KmNorth)	3/18 12:40	3.2 *2	No rain	MEXT
Reading Point 【15】 (About35KmWest)	3/18 12:36	1.6 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【21】 (About30KmWest/North/West)	3/18 12:35	8.5 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【32】 (About30KmNorth/West)	3/18 12:33	140.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【14】 (About30KmWest/North/West)	3/18 12:22	0.7 *2	No rain	NUSTEC (Nuclear Safety Technology Center)

- * 1 measured by Geiger-Müller counter
- * 2 measured by ionization chamber type survey
- * 3 measured by NaI scintillator detector

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【7】 (About45KmNorth)	3/18 12:22	4.1 *2	No rain	MEXT
Reading Point 【31】 (About30KmWest/North/West)	3/18 12:20	45.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】 (About45KmNorth)	3/18 12:15	7.5 *2	No rain	MEXT
Reading Point 【20】 (About45KmNorth/West)	3/18 12:14	2.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【13】 (About45KmNorth/West)	3/18 12:09	0.8 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【12】 (About40KmWest)	3/18 12:00	1.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【33】 (About 30KmNorth/West)	3/18 11:47	52.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【5】 (About 45KmNorth)	3/18 11:40	7.5 *2	No rain	MEXT
Reading Point 【11】 (About 40KmNorth/West)	3/18 11:39	5.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【32】 (About30KmNorth/West)	3/18 11:33	140.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【10】 (About40KmNorth/West)	3/18 11:29	4.0 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【31】 (About30KmWest/North/West)	3/18 11:20	40.0 *2	No rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【4】 (About50KmNorth/West)	3/18 10:55	5.7 *2	No rain	NUSTEC (Nuclear Safety Technology Center)
Reading Point 【1】 (About60KmNorth/West)	3/18 10:08	8.5 *2	No rain	NUSTEC (Nuclear Safety Technology Center)

2. Under construction, Reading by Ministry of Defense

Readings at Monitoring Post out of Fukushima Dai-ichi NPP



Monitoring Time
 March 18,
 10:08~18:05

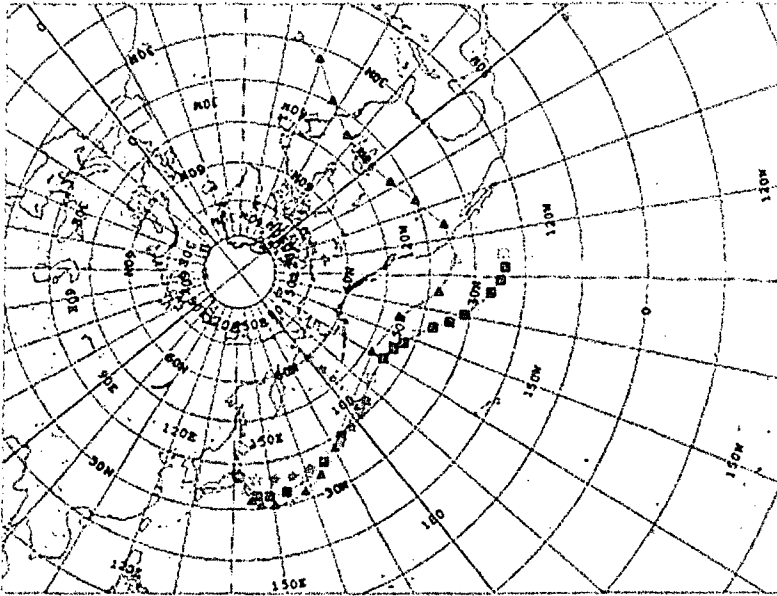
● Monitoring Post

Unit: $\mu\text{Sv per hour}$

- DELEGATED AUTHORITY REQUESTED
- LAEA NOTIFIED EMERGENCY

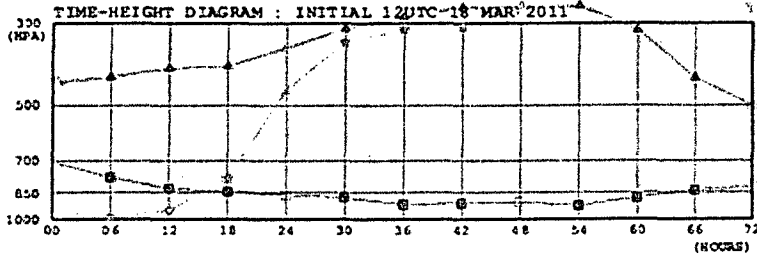
3-D TRAJECTORY

FROM 04UTC 16 MAR 2011 TO 12UTC 21 MAR 2011



(ISSUED 1648UTC 18 MAR 2011)

- ▲ INITIAL HEIGHT = 500M ABOVE THE SURFACE
- INITIAL HEIGHT = 1500M ABOVE THE SURFACE
- ★ INITIAL HEIGHT = 3000M ABOVE THE SURFACE
- MARKED WITH TIME INTERVAL OF 6 HOURS
- SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI

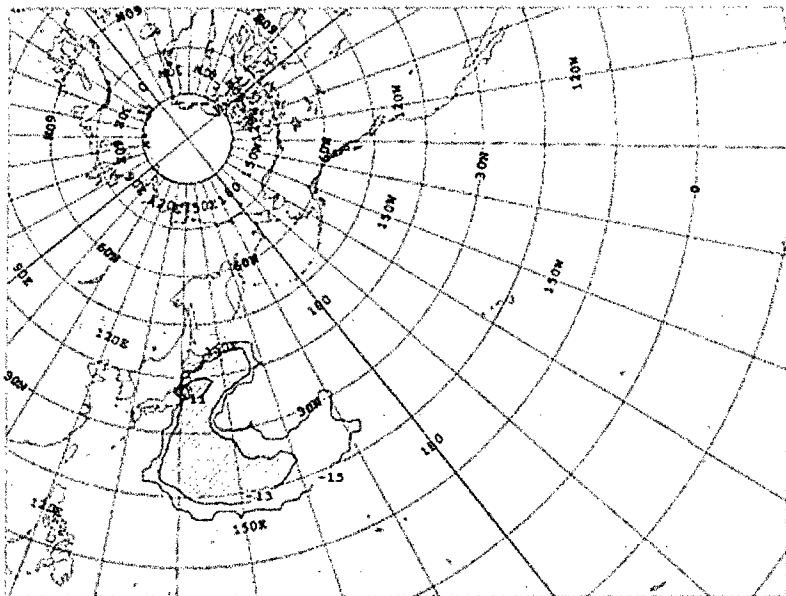


JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 1 / 5

DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 12UTC 18 MAR 2011
TO 12UTC 19 MAR 2011



(ISSUED 1648UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI
ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 3.01E-10 (BQ.S/M3)
CONTOURS: 1E-11, 1E-13, 1E-15

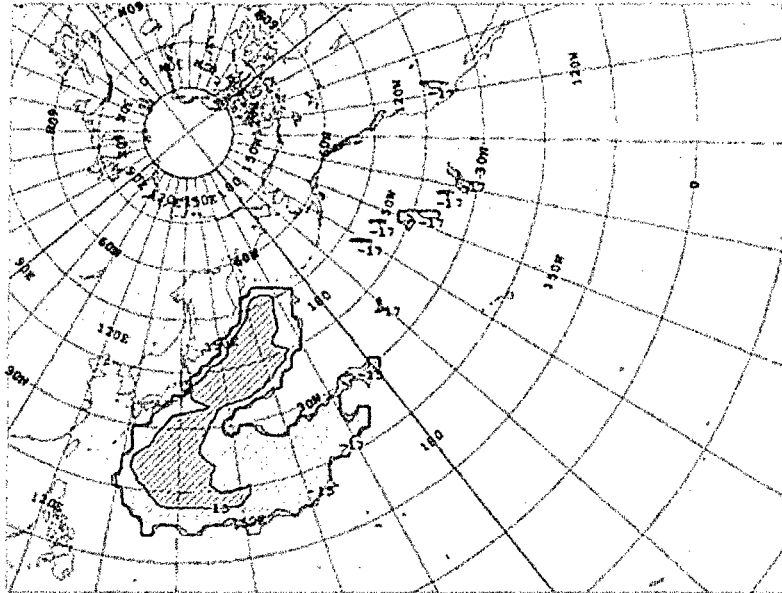
CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 2 / 5

DELEGATED AUTHORITY REQUESTED
 LAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 12UTC 19 MAR 2011
TO 12UTC 20 MAR 2011



(ISSUED 1648UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
G SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI
ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 3.21E-12 (BQ.S/M3)
CONTOURS: 1E-13, 1E-15, 1E-17

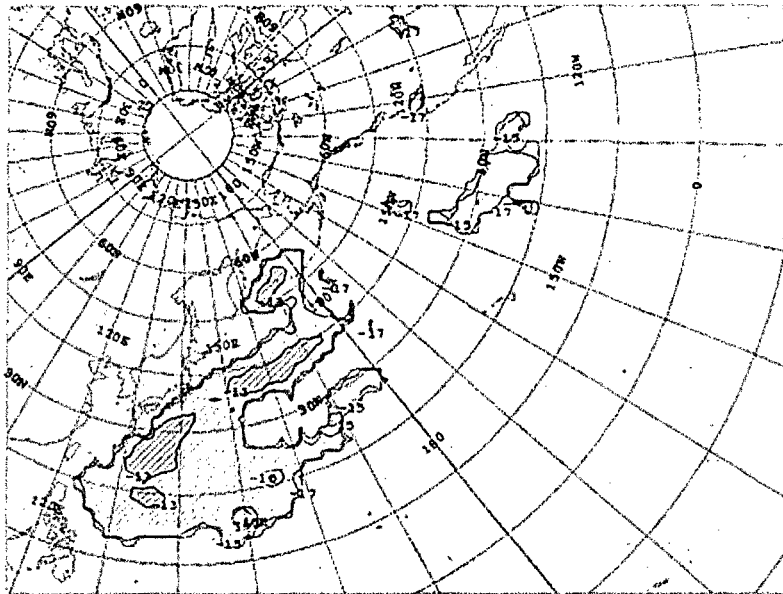
CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 3 / 5

DELEGATED AUTHORITY REQUESTED
 IAEA NOTIFIED EMERGENCY

TIME INTEGRATED SURFACE - 500M LAYER CONCENTRATION

INTEGRATED FROM 12UTC 20 MAR 2011
TO 12UTC 21 MAR 2011



(ISSUED 1648UTC 18 MAR 2011)

ASSUMED POLLUTANT RELEASED : CS-137
START OF THE EMISSION : 0430UTC 16 MAR 2011
END OF THE EMISSION : 0430UTC 19 MAR 2011
SOURCE LOCATION : LATITUDE 37.42N
LONGITUDE 141.03E
NAME FUKUSHIMA DAIICHI
ASSUMED TOTAL EMISSION : 1 BECQUEREL
UNIFORM RELEASE FROM 20- 50M ABOVE THE GROUND
UNIT : (BQ.S/M3)
MAXIMUM : 4.99E-13 (BQ.S/M3)
CONTOURS: 1E-13, 1E-15, 1E-17

CONTOUR VALUES MAY CHANGE FROM CHART TO CHART

JAPAN METEOROLOGICAL AGENCY
GLOBAL TRACER TRANSPORT MODEL
CHART 4 / 5

they would be able to drop ice on the fuel pools much more accurately. But ones like the one below, need a little more vetting. First if the RST thinks they are not useful, I can shut it down, but if the RST finds them potentially useful we will have to coordinate with the DART members to coordinate if the GoJ needs them.

Please advise if these suites are potentially useful to the response to the accident, and who on the DART we should coordinate with.

Let me know if you have any questions.

Thanks,

Jason Kozal
USNRC
202-712-4383 USAID ext
(b)(6) BB
609-276-2907

From: Gatz, Karen L [mailto:GatzKL@state.gov]
Sent: Friday, March 18, 2011 4:42 PM
To: RMT_PACTSU
Cc: Alwine, Patrick
Subject: Congressional Inquiry -- Ms. Ros-Lentinen

Hello, everyone -- Please see request below from Ms. Ros-Lehtinen staffer Dennis Halpin. Can you or CITI respond and let Dennis Halpin know how you can help.

Thanks -- Karen

Karen L. Gatz
Senior Congressional Adviser
Bureau of Legislative Affairs
Department of State
Phone: 202-647-8439
Fax: 202-647-9667

 Please consider the environment before printing this e-mail

From: Halpin, Dennis [mailto:Dennis.Halpin@mail.house.gov]
Sent: Thursday, March 17, 2011 3:17 PM
To: JapanUSCcongressional
Subject: Foreign Affairs Committee Chairman Ros-Lehtinen Requests Assistance in Connecting Coral Gables Radiation Suit Manufacturer with Those Who Can Assist in Delivery of Products in Japan

I will send the lead story today from the Miami Herald but can you advise how to get in touch with USAID or DART team in Tokyo on how Dr. DeMeo can deliver his radiation suits to Japan Please advise Japan desk and have them advise Embassy/Tokyo. Thanks, Dennis

Contact Information:

rdemeo@radshield.com

Radiation Shield Technologies & Meridian Spinal Therapeutics
PO Box 144254
Coral Gables 33114

Home (b)(6)
(b)(6)

Home (b)(6)
Work 305-4486166
mobile (b)(6)

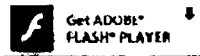
Article in Miami Herald:

Posted on Wednesday, 03.16.11

MEDICAL TECHNOLOGY

Radiation suits from South Florida sent to help Japan

Rescue workers will receive protective suits made of Demron, a unique material manufactured in a Medley factory.



Related Content

By Bridget Carey

bcarey@miamiherald.com

As Japan's nuclear crisis escalates, emergency workers are finding protection in a unique safety suit created in South Florida.

More than 200 full-body nuclear radiation protection suits manufactured in Medley have been donated to aid power plant workers and rescue teams in Japan, and the company, Radiation Shield Technologies, is working full-time to keep up with orders from companies in Japan.

The suits are in high demand because of their unique material, called Demron, invented by Coral Gables anesthesiologist and pain-management specialist Dr. Ronald DeMeo. The radiation-blocking material offers protection against multiple threats, including infrared radiation, extreme heat, nuclear fallout, biological and chemical agents.

DeMeo has been selling Demron products to military and rescue staff around the globe for several years, but he first invented the fabric for medical personal. After using a continuous X-ray machine with his patients, he saw sunburn-like skin damage on his arms and hands. And he also saw many colleagues in his field afflicted with different types of skin cancers.

“I didn’t think we were taking this X-ray machine seriously enough. I started to look into better shielding,” said DeMeo, who runs the medical practice *Meridian Pain & Diagnostics* in Coral Gables. “I didn’t realize I was venturing into something that hasn’t been invented before.”

After nuclear reactors following the earthquake and tsunami in Japan were damaged, DeMeo directed his Hong Kong distributors to send suits in stock to Japan. They are expected to arrive this weekend.

DeMeo made calls to donate the gear as soon as he saw footage of first responders who lacked protective clothing.

Rescue workers from Miami-Dade County, New York City and others worldwide have been customers of the Demron products. But with the Japan crisis, orders for the suits spiked. He said he plans to expand his current staff of 30 in Medley to keep up with growing demand from Asia and the Middle East, as well as an increase of interest from the U.S. West Coast. Currently, the company is able to make about 500 suits a month.

The all-black suits, valued at \$1,700 each, weigh nearly 10 pounds and can be put on by the wearer without outside assistance – which can’t be done with other radiological suits, according Dan Edward, head of business development at Radiation Shield Technologies.

DeMeo said he sees the wrong message being sent about how the radiation leak isn’t too dangerous.

“I really think it’s the wrong message. We really have to take this seriously,” DeMeo said. “Even low dose radiation exposure can increase your risk of cancer. Some people act like it’s a food group and it’s harmless. It’s not.”

Read more: <http://www.miamiherald.com/2011/03/16/2118690/radiation-suits-from-south-florida.html#ixzz1Griw95o6>

THE INFORMATION IN THIS MESSAGE IS TO BE TREATED AS SENSITIVE: This e-mail message, including any attachments, are considered sensitive but unclassified, and intended for a specific individual and purpose. If you are not the named and intended recipient or have had this email or an attachment forwarded to you, you are prohibited from disseminating and/or copying it or disclosing its contents to any other person who is not an intended recipient. If you have received this e-mail or attachment(s) in error, please notify us immediately by calling (202) 225-5021.

Subject: Re: Dr. DeMeo's donated radiation suits in JAPAN - lead story MHerold

Josh: please contact the japanese embassy. This company wants to donate more suits. Letter is best asap!
Thanks!

Sent via BlackBerry by AT&T

This email is UNCLASSIFIED.

Subject: Dr. DeMeo's donated radiation suits in JAPAN - lead story MHerold

JAPAN

Radiation suits from South Florida sent to help Japan

As Japan's nuclear crisis escalates, emergency workers are finding protection in a unique safety suit created in South Florida. More than 200 full-body nuclear radiation protection suits manufactured in Medley have been donated to aid power plant workers and rescue teams in Japan, and the company, Radiation Shield Technologies, is working full-time to keep up with orders from companies in Japan.

From: LIA08 Hoc
Sent: Friday, April 15, 2011 3:52 PM
To: Boger, Bruce; OST01 HOC; RST01 Hoc; Hoc, PMT12
Subject: Reoccurring Daily Actions and Calls - Revision 31
Attachments: Reoccurring Daily Actions and Calls Rev 31.docx

Rev. 31 is attached. Please review and send updates, if any, to LIA08. It is also on the WebEOC under ET Misc. Documents

Thanks

Clyde

From: Hoc, PMT12
Sent: Thursday, April 07, 2011 7:31 PM
To: PMT09 Hoc; PMT03 Hoc
Subject: FW: 0430 EDT (April 7, 2011) USNRC Earthquake/Tsunami Status Update

Importance: High

-----Original Message-----

From: LIA07 Hoc
Sent: Thursday, April 07, 2011 5:07 PM
To: OST02 HOC; Hoc, PMT12; RST01 Hoc
Subject: FW: 0430 EDT (April 7, 2011) USNRC Earthquake/Tsunami Status Update
Importance: High

Not sure whether you have received this request.

-----Original Message-----

From: JAPAN-CMT CBRNE OPS JCS [mailto: (b)(6)]
Sent: Thursday, April 07, 2011 10:03 AM
To: LIA07 Hoc
Subject: RE: 0430 EDT (April 7, 2011) USNRC Earthquake/Tsunami Status Update
Importance: High

To NRC EOC,

RE: "Bounding Scenarios"

We are looking for any documents or briefings concerning the term "Bounding Scenarios" with regards to the reactors we are all following.
We have also queried DOE.

If you have any documents or briefings, our CMT CBRNE OPS NIPR and SIPR email accounts are below.

My NIPR and SIPR accounts respectively are, (b)(6) and (b)(6)

Thank you in advance for your support.

Stephen Malone

Joint Staff Japan CMT CBRNE OPS

(703) 614-6702

NIPR: (b)(6)
SIPR: (b)(6)

-----Original Message-----

From: LIA07 Hoc [mailto:LIA07.Hoc@nrc.gov]
Sent: Thursday, April 07, 2011 4:54 AM
To: LIA07 Hoc
Subject: RE: 0430 EDT (April 7, 2011) USNRC Earthquake/Tsunami Status Update

Attached, please find a 0430 EDT, April 7, 2011 status update from the US Nuclear Regulatory Commission's Emergency Operations Center regarding the impacts of the earthquake/tsunami.

Please note that this information is "Official Use Only" and is only being shared within the federal family.

Please call the Headquarters Operations Officer at 301-816-5100 with questions.

-Jim

Jim Anderson

Executive Briefing Team Coordinator

Office of Nuclear Security and Incident Response

US Nuclear Regulatory Commission

LIA07.HOC@nrc.gov (Operations Center)

james.anderson@nrc.gov

Reoccurring Daily Actions and Calls

(Information Rolled into Transition Team Reoccurring Calls in Web EOC in ET Misc. Docs)

-Time (EDT)	Description	Lead Team	Action/Purpose of the Call
0300	RST/PMT call with Japan Team	RST/PMT (arranged by HOO's (b)(6) (b)(6))	Daily update for Site Team and HQ (convenient time for Site Team)
0600	One Pager (end of shift)	ET, Response Advisor	Provide input to EBT Coordinator
0600	Congressional Update		Taken From Status Update (Confirm w/ OCA)
0830	Daily call with Chuck Casto/Site Team	ET	Update chairman and staff during turnover
0845	Chairman Joins the Daily Call	ET	
	Deputy Secretaries (as scheduled)	ET	White House lead (-Chairman participates) -Interagency discussion
0930	UK/Canada/France Call	RST/PMT (arranged by HOO) Bridge (b)(6)	Information Exchange. Focused on Operational issues (Combining PMT call from 1400 for Dose issues. Starting 3/28)
1000	Input due to for Status Update	All	Inputs due to EBT for Status Update
1000	TAs & CAs briefing	ET (arranged by HOO) (b)(6)	ET Director lead -briefed Commission TAs and Ods (Tuesday and Thursday ONLY)
1100	ESFB (Public Health & Medical Services)	LT (Conference number provided by HHS)	HHS Secretary's Operations Center lead -Interagency discussion NOTE call will be held on (Tuesdays only).
1100	Technical Coordination with Industry Consortium	RST (arranged by HOO) (b)(6)	Technical discussion
1100	Info Exchange: US Environmental Monitoring Data	Arranged by NEI	"Radiological Status & Implications" call between NRC, NEI, EPA, DOE, OSTP. NEI or OSTP will set up the bridge line. (weekly after 4/5; next call to be April 12 at 11:00)
1230	NTAG teleconference (chaired by NSS)	PMT Director to lead	Nuclear Technical Advisory Group -email sent out daily with phone # and pass code
1400	USAID Starting 4/5 call will be on Tuesdays only 877.334.8037 Password (b)(6)	LT/OCA	USAID lead -Interagency discussion: Federal pre-coordination takes place at 1:45 and then the 2pm call with Congressional staff. (Tuesday Only)
1400	Advisory Team (A-Team)	White House/PMT	Call with the White House. These calls are now on Tuesdays and Thursdays only Call: (b)(6); Pin: (b)(6)

April 15, 2011 1545 hrs

Reoccurring Daily Actions and Call Rev 31

M: LT /Reoccurring Calls Rev 31

(CURRENT EDITION: See WebEOC ET Misc. Documents)

Reoccurring Daily Actions and Calls

(Information Rolled into Transition Team Reoccurring Calls in Web EOC in ET Misc. Docs)

			(b)(6) Pin #: (b)(6)
1500	One Pager <i>(end of shift)</i>	ET, Response Advisor	Provide Input to EBT Coordinator
1500	Congressional call	OCA & NRC Go-To Team (Leeds, M. Johnson, Sherron, B. Bopp, etc.) (b)(6)	OCA lead -Audience is Congressional staff who have or are near a plant; Oversight committees; House & Senate leadership
1700	PACOM J2 call	RST/PMT	Occurs in SGT Room on Mon, Wed, Fri. PACOM will dial into 301-415-5393.
1700	HHS call with 50 states and federal partners	LT/State Liaison FSME (Rich Turtill)	Meeting occurs each Tuesday and Thursday evening, as organized by HHS (N. Natarajan). HHS provides bridge line day of call
1700	DOE Science Panel	RES	Brian Sheron and Richard Lee, out of the box solutions.
1700	RST/PMT call with Japan Team	RST/PMT (arranged by the HOO) (b)(6)	Daily update for Site Team and HQ (convenient time for the Site Team)
1900	Call with Vince Holahan PACCOM	PMT	Status of Radiological Conditions Vince Direct Line – 808.477.9536, if no answer (b)(6) or (b)(6) Cell (b)(6)
2000	HHS Call with Pacific	HHS	Meeting occurs each Wed. evening. Call in (b)(6) (b)(6) is the passcode. PMT to participate
2000	Call with Industry Consortium (Next call 4/18 and every Monday and Wednesday at 2000 thereafter)	ET (arranged by HOO) (b)(6)	ET Led High-level discussions with industry and NRC Site Team (Call Covers “Nuclear Team Asks and Offers Tracker XX-XX-2011.xlsx” spreadsheet of major items).
2100	PMT call with Japan Team	PMT (arranged by the HOO) (b)(6)	Daily update for Site Team and HQ (convenient time for the Site Team)
2200	One Pager <i>(end of shift)</i>	ET, Response Advisor	Provide Input to EBT Coordinator
2200	One pager	EBT	Update chairman via email using one-pager

April 15, 2011 1545 hrs

Reoccurring Daily Actions and Call Rev 31

M: LT /Reoccurring Calls Rev 31

CURRENT VERSION: (See: WebEOC ET Misc. Documents)

From: RMTPACTSU_ELNRC <RMTPACTSU_ELNRC@ofda.gov>
Sent: Friday, March 18, 2011 10:30 PM
To: Bock, Yoni; RMTPACTSU_LC; Hughart, Joe; Frey, Tom; Hughart, Joseph (FOH); Grana, Brian T. Maj USMC
Cc: RMTPACTSU_LC; OFDALogistics [USAID]; [REDACTED] (b)(6)
Subject: RE: Bechtel Pumping System

Since Tim Kolb is returning to the USA, the new NRC POC in Japan for the Bechtel pumping system is Richard Devercelly (cc'd on this email).

Bob Kahler
NRC

From: Bock, Yoni
Sent: Friday, March 18, 2011 9:51 PM
To: RMTPACTSU_LC; Hughart, Joe; Frey, Tom; RMTPACTSU_ELNRC; Hughart, Joseph (FOH); Grana, Brian T. Maj USMC
Cc: RMTPACTSU_LC; OFDALogistics [USAID]; [REDACTED] (b)(6)
Subject: RE: Bechtel Pumping System

Brian: Who is the best POCs to serve as the focal point from the military logistics team on the pump movement. Would this be you, and do you have the latest details on movement?

Joe or RMT: Will work to get visibility on movement and get it back to you. Please let us know whether there is a specific POC for consignment identified.

Thanks,
Yoni

Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator
Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: [REDACTED] (b)(6)

DNS at USFJ: 225-4329, 3137, 2469

From US (or non DSN) (011 81) 425 522-511
From Japan (non DSN) 0425 522-511
after dial tone, ext 54329, 52469, 53137

Current Location: Yokota AB, Tokyo, Japan

From: RMTPACTSU_LC
Sent: Fri 3/18/2011 9:14 PM
To: Hughart, Joe; Frey, Tom; Bock, Yoni; RMTPACTSU_ELNRC
Cc: RMTPACTSU_LC; OFDALogistics [USAID]
Subject: RE: Bechtel Pumping System

Joe, Yoni & Tom,

Leigh and Bob from OFDA/Washington RMT are copied into this message.

They are trying to make sure there is a solid connection between the POC's from DC, Tokyo and the military logistics team on the movement of these pumps.

Can you please assist them with visibility on the movement as best you can?

They are rmtfactsu_einrc@ofda.gov and will provide specific contact information for you by replying to this message.

Thanks,

~Pat

Todd Horne / Pat Long / Rob Thibault
Logistics Coordinator
202-712-0039 x-5706

From: Hughart, Joe
Sent: Friday, March 18, 2011 4:26 AM
To: RMTFACTSU_LC
Subject: Re: Bechtel Pumping System

Have coordinated with NRC, they are working closely with me on validation and will not pull the trigger w/o our chop on it.
Best, Joe

From: RMTFACTSU_LC
To: Hughart, Joe
Cc: OFDALogistics [USAID]; RMTFACTSU_LC
Sent: Fri Mar 18 03:43:19 2011
Subject: RE: Bechtel Pumping System

OK. I wondered why you had it. We are having some conference calls right now regarding this. (NRC to NRC with me.) I am trying to make sure they don't task this company with anything prior to approval. He is starting to talk about invoices and payment info and we have not agreed to anything. If you have an NRC person in your reach, can you please make sure they are getting this validated prior to any tasking?

Todd Horne / Pat Long / Rob Thibault
Logistics Coordinator
202-712-0039 x-5706

From: Hughart, Joe
Sent: Friday, March 18, 2011 3:24 AM
To: RMTFACTSU_LC
Subject: Re: Bechtel Pumping System

No, once. We get the specs (cost, wt, dims, etc.), Bill Berger will validate, then RMT can coordinate shipping with Bechtel.

Best,
- Joe

From: RMTFACTSU_LC
To: Hughart, Joseph (FOH); Hughart, Joe
Cc: OFDALogistics [USAID]; RMTFACTSU_LC
Sent: Fri Mar 18 02:28:32 2011
Subject: Bechtel Pumping System

Hi Joe,

This was being discussed earlier on the DC side of the shop. I had asked the NRC reps (Jeff & Leigh) to gather the below information to assist us with transportation.

It looks like it is falling in your shop now. Anyway, I thought I'd share.

~Pat

Todd Horne / Pat Long / Rob Thibault
Logistics Coordinator
202-712-0039 x-5706

From: RMPACTSU_ELNRC
Sent: Thursday, March 17, 2011 11:14 PM
To: cemercha@bechtel.com
Cc: RST01 Hoc (RST01.Hoc@nrc.gov); Richard.Devercelly@nrc.gov; timothy.kolb@nrc.gov; 'Chuck.Casto@nrc.gov'; RMPACTSU_LC
Subject: Logistics Info Request for Pumping Mechanism

Good evening Mr. Merchant,

We're here with the logistics coordinator at USAID and he stated that once the request from the DART team leader (Bill Berger) was authorized, things will move very quickly for shipping. He said if we have info in advance, it would speed up the process. Below is a list of info regarding the shipment that we could use. We appreciate any or all of the info you could provide as soon as its available.

Location of pickup (single location or multiple)

- Accessibility (ie: 24 pickup site or shop hours)
- POC and phone number

Specifications

- General contents with quantity (ie: box of tools, 2 palettes of flexible pipe, 4 pumps, etc)
- Weight
- Dimensions (specifically including which dimension is height)
- Mention of dangerous goods (ie: engines, chemicals, etc. NOTE: engines must be drained of fuel prior to ship)
- General value of goods (for use in customs declarations)

Location of destination (our understanding to be a military base)

-POC of recipient or consignee and who is picking it up (driver) as well as driving credentials (Japanese equivalent of driver's license number)

-Note: Logistics said that they have previously shipped to USAF bases and it has not been a problem to have a nonmilitary party pick up goods, given they provide their credentials.

Thank you,

Jeff Kowalczyk / Leigh Trocine
NRC liaison at USAID

From: RMTFACTSU_ELNRC <RMTFACTSU_ELNRC@ofda.gov>
Sent: Friday, March 18, 2011 10:00 PM
To: RST01 Hoc
Subject: FW: Bechtel Pumping System

FYI, logistics of the pump equipment movement – questions in the pipeline. Will keep you in the loop.

Need to know a new point of contact on the NRC team since Tim Kolb was the POC and he is returning home on a flight that is leaving in about 5 hours.

Bob Kahler
NRC

From: Bock, Yoni
Sent: Friday, March 18, 2011 9:51 PM
To: RMTFACTSU_LC; Hughart, Joe; Frey, Tom; RMTFACTSU_ELNRC; Hughart, Joseph (FOH); Grana, Brian T. Maj USMC
Cc: RMTFACTSU_LC; OFDALogistics [USAID] [redacted] (b)(6)
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Sent: Fri Mar 18 03:43:19 2011
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Logistics Coordinator
202-712-0039 x-5706

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Cc: RST01 Hoc (RST01.Hoc@nrc.gov); Richard.Devercelly@nrc.gov; timothy.kolb@nrc.gov; 'Chuck.Casto@nrc.gov';

RMTFACTSU_LC

Subject: Logistics Info Request for Pumping Mechanism

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- Mention of dangerous goods (ie: engines, chemicals, etc. NOTE: engines must be drained of fuel prior to ship)
- General value of goods (for use in customs declarations)

Location of destination (our understanding to be a military base)

-POC of recipient or consignee and who is picking it up (driver) as well as driving credentials (Japanese equivalent of driver's license number)

-Note: Logistics said that they have previously shipped to USAF bases and it has not been a problem to have a nonmilitary party pick up goods, given they provide their credentials.

Thank you,

Jeff Kowalczyk / Leigh Trocine
NRC liaison at USAID

From: OST02 HOC
Sent: Friday, March 18, 2011 1:34 PM
To: PMT02 Hoc; PMT11 Hoc; RST01 Hoc
Subject: FW: 01:00 SPEEDI Data
Attachments: FUKUSHIMA1 031901.zip

-----Original Message-----

From: HOO Hoc
Sent: Friday, March 18, 2011 12:59 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: 01:00 SPEEDI Data

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov

-----Original Message-----

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Friday, March 18, 2011 12:56 PM

To: [REDACTED] (b)(6)

[REDACTED] (b)(6)

Subject: 01:00 SPEEDI Data

Attached please find the 01:00 SPEEDI Data.

SBU
This email is UNCLASSIFIED

Naomi Walcott
Emergency Action Officer
Japan Emergency Command Center
U.S. Embassy Tokyo

www-47

-----Original Message-----

From: nustec [mailto:spd01@nustec.or.jp]

Sent: Saturday, March 19, 2011 1:37 AM

To: (b)(6)

(b)(6)

Subject: 3/19 01時SPEEDI単位量放出図形イメージの送付

関係者各位

お世話になっております。

原子力安全技術センター SPEEDI担当です。

3/19 01時のSPEEDI単位量放出図形のイメージデータを送付致します。

ご確認のほど、よろしくお願い致します。

Attachment FUKUSHIMA1 031901.zip(420121 bytes) cannot be converted to PDF format.

From: RST07 Hoc
Sent: Friday, March 18, 2011 3:22 PM
To: RST12 Hoc
Subject: FW: assessment of the potential risk of a criticality configuration

-----Original Message-----

From: RST01 Hoc
Sent: Friday, March 18, 2011 3:08 PM
To: RST07 Hoc
Subject: FW: assessment of the potential risk of a criticality configuration

FYI.

-----Original Message-----

From: Lee, Richard
Sent: Friday, March 18, 2011 3:07 PM
To: RST01 Hoc
Cc: Wagner, Katie
Subject: FW: assessment of the potential risk of a criticality configuration

Joe:

This is our response to your earlier e-mail regarding potential of criticality. The following is ORNL's judgment. I concur.

Richard

-

From: Wagner, John C. [mailto:wagnerjc@ornl.gov]
Sent: Friday, March 18, 2011 2:44 PM
To: Lee, Richard
Cc: Carlson, Donald; Parks, Cecil V.
Subject: assessment of the potential risk of a criticality configuration

Richard,

Cecil indicated that you were interest in having an assessment of the potential risk of a critical configuration resulting from various actions that may be taken to cool or confine the spent fuel in the spent fuel pools.

Our opinion is that criticality in the spent fuel pools is very unlikely, particularly if boron is being used, and that, if other information is correct, such as the water level in the pool at unit 4 is very low (or empty), the consequences of criticality in one of the spent fuel pools will not be significant in comparison to the consequences of the pool remaining empty/exposed. As a reminder to all, these are BWR spent fuel pools, and hence did not have borated water in them to begin with. These are our personal/professional opinions, based on the information available to us at this time, and should be treated as such.

Call if you want to discuss - 865 274 1184.

Best Regards,

John

REFERENCE:

Richard,

Can you provide assets to evaluate potential criticality?

Thank you.

Joe Williams
RST Coordinator

From: Modeen, David [mailto:dmodeen@epri.com]
Sent: Friday, March 18, 2011 10:05 AM
To: RST01 Hoc
Subject: RE: SFP Recommendations

I will distribute, Joe. Thanks.

I didn't want to complicate the call, but would like to know if NRC staff has an assessment (not a calculation of the actual SFPs at 1F) as to the potential risk of a criticality configuration resulting from any of those strategies. Seems very unlikely but that is just a judgment. Any work done on your end on that?

Dave

Director, External Affairs
EPRI Nuclear Power Sector

704-595-2670 (work)

(b)(6) cell)
dmodeen@epri.com

From: RST01 Hoc [mailto:RST01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 10:00 AM
To: Modeen, David
Cc: Wall, James; Edsinger, Kurt; RST07 Hoc
Subject: RE: SFP Recommendations

Dave,

Here is NRC recommendation summary. Please ensure all phone call participants receive a copy.

Joe Williams

RST Coordinator

From: Modeen, David [mailto:dmodeen@epri.com]
Sent: Friday, March 18, 2011 8:55 AM
To: RST01 Hoc
Cc: Wall, James; Edsinger, Kurt
Subject: SFP Recommendations

Following up from the morning telcon, EPRI Contacts are:

David Modeen – dmodeen@epri.com
Kurt Edsinger – kedsinge@epri.com
James (Joe) Wall – jwall@epri.com

FYI, I am coordinating EPRI's response. Any requests for information or discussion on any other technical topic, the NRC Operations Center duty officer should feel free to contact me any time.

Dave
Director, External Affairs
EPRI Nuclear Power Sector
704-595-2670 (work)
(b)(6) (cell)
dmodeen@epri.com

-----Original Message-----

From: Wagner, John C. [mailto:wagnerjc@ornl.gov]
Sent: Friday, March 18, 2011 2:44 PM
To: Lee, Richard
Cc: Carlson, Donald; Parks, Cecil V.
Subject: assessment of the potential risk of a criticality configuration

Richard,
Cecil indicated that you were interest in having an assessment of the potential risk of a critical configuration resulting from various actions that may be taken to cool or confine the spent fuel in the spent fuel pools.

Our opinion is that criticality in the spent fuel pools is very unlikely, particularly if boron is being used, and that, if other information is correct, such as the water level in the pool at unit 4 is very low (or empty), the consequences of criticality in one of the spent fuel pools will not be significant in comparison to the consequences of the pool remaining empty/exposed. As a reminder to all, these are BWR spent fuel pools, and hence did not have borated water in them to begin with. These are our personal/professional opinions, based on the information available to us at this time, and should be treated as such.

Call if you want to discuss - 865 274 1184.

Best Regards,

John

From: RMPACTSU_ELNRC <RMPACTSU_ELNRC@ofda.gov>
Sent: Friday, March 18, 2011 8:59 PM
To: LIA06 Hoc
Subject: FW: URGENT: Need to Repatriate Tim Kolb

Importance: High

FYI, can the answers to the questions below be provided to facilitate Tim's return?

Bob Kahler

From: RMPACTSU_ELNRC
Sent: Friday, March 18, 2011 8:42 PM
To: 'LIA01 Hoc'; RMPACTSU_LC
Subject: RE: URGENT: Need to Repatriate Tim Kolb
Importance: High

USAID is requesting more details on the nature of the illness and whether medevac is necessary. Is it an emergency such that it needs attention for an immediate departure and does he need medical attention while in Japan until he leaves?

Bob Kahler

From: LIA01 Hoc [mailto:LIA01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 8:27 PM
To: RMPACTSU_ELNRC; RMPACTSU_LC
Subject: URGENT: Need to Repatriate Tim Kolb
Importance: High

Direction from ET team to make immediate arrangements to get Tim Kolb back to the US. Please confirm you've received this and are working on it.

Ted Smith

From: RMPACTSU_ELNRC [mailto:RMPACTSU_ELNRC@ofda.gov]
Sent: Friday, March 18, 2011 7:12 PM
To: LIA11 Hoc; PMT01 Hoc; RST01 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA12 Hoc; LIA04 Hoc
Cc: Gott, William; Marshall, Jane; Grant, Jeffery
Subject: FW: AMS flight data

FYI..I had to shake this out of them....hope I am not the only source of this.

From: RMPACTSU_DOE
Sent: Friday, March 18, 2011 7:10 PM
To: RMPACTSU_ELNRC
Subject: FW: AMS flight data

From: Stevenson, Bill [mailto:William.Stevenson@dhs.gov]
Sent: Friday, March 18, 2011 5:53 PM
To: RMTFACTSU_DOE
Subject: Fw: AMS flight data

Bill Stevenson
DHS/FEMA
National IMAT
William.stevenson@dhs.gov
202-212-3795

Sent using mobile device

From: Judd, Diana L
To: NRCC-11-RADT
Sent: Fri Mar 18 17:52:09 2011
Subject: Fw: AMS flight data

FYSA

Diana Judd
DHS/FEMA
National IMAT Central
Acting Planning Section Chief/
Situation Unit Leader
(b)(6) Cell

Sent using BlackBerry

From: FEMA-NWC
To: FEMA-NRCC-planchief; CBRNE; Costello, Robert L-FEMA; Dewar, James; IMAT-EAST; LNO_USAID <RMTFACTSU_FEMA@ofda.gov>; Monroe, Logan; Washington, Russell; Widomski, Michael
Sent: Fri Mar 18 17:48:51 2011
Subject: FW: Email to Distro List

V/R
Wanda Scott
Watch Officer
National Watch Center
Response Directorate
U.S. Department of Homeland Security - FEMA
Office: 202-646-2828
Unsecure Fax: 202-646-4617
fema-nwc@dhs.gov

From: NITOPS [mailto:NITOPS@nnsa.doe.gov]
Sent: Friday, March 18, 2011 2:18 PM

To: (b)(6)
(b)(6)

(b)(6)

(b)(6) SCHU; Poneman, Daniel; DAgostino, Thomas; Hurlbut, Brandon; OConnor, Rod; Aoki, Steven; Krol, Joseph; Wilber, Deborah; Lippert, Alice (OGA); NITOPS; Leistikow, Dan; Sandalow, David; Richert, Scott T. (IN); Petish, Serge (IN); Atkins, Victor C. (IN); McKeown, Mike (IN); NOC SWO; NITOPS; 'jroos@state.gov'; 'eoc.epahq@epa.gov'; 'Irizarry.gilberto@epa.gov'; 'tulis.dana@epa.gov'; 'veal.lee@epa.gov'; 'Robert.sweet@faa.gov'; 'fema-nwc@dhs.gov'; (b)(6) 'rmtpactsu@ofda.gov'; 'Steven.fine@noaa.gov'; 'sdm@noaa.gov'; 'hoo.hoc@nrc.gov'; 'dartdoeliasion1@ofda.gov' (b)(6) (b)(6) 'taskforce-1@state.gov'; '1tfg@state.gov'; 'Robert.katz@montgomerycountymd.gov'; (b)(6) (b)(6) 'vinetta.howardking@fda.hhs.gov'; 'mark.russo@fda.hhs.gov'; 'Wayne.Gorski@fda.hhs.gov'; (b)(6) (b)(6)

(b)(6) '9-AWA-ATS-ATASC@faa.gov'; 'cym3@cdc.gov'; (b)(6) 'IOC@treasury.gov'; 'na30ecc@nr.doe.gov'; (b)(6) 'pmt12.hoc@nrc.gov'; (b)(6) 'bitterr@state.gov'; 'JapanEmbassyTaskForce@state.gov'; Fitzgerald, Paige; 'OpsCenter@dm.usda.gov'; 'sioc@ic.fbi.gov'; 'hhs.soc@hhs.gov'; 'eocreport@cdc.gov'

Cc: Miller, Neile; Johnson, Shane; Connery, Joyce; Kelly, John E (NE); Alldridge, David; Lyons, Peter; Owens, Missy; Adams, Ian; Sandalow, David; Smith-Kevern, Rebecca; Golub, Sal; Sunshine, Alexander; Deeney, Chris; Huizenga, David; Fremont, Douglas; Allen, George; Looney, Heather; White, William; Underwood, Jefferson; Durbin, Karyn; LeChien, Keith; Rasar, Kimberly; Whitney, Mark; Thompson, Michael; Ciganer, Patrick; Adamson, Paul; Calbos, Philip; Niedzielski-Eichner, Phillip; Wright, Rasheem; Hanrahan, Robert; Shrum, Scott; Goodrum, Steve; Mustin, Tracy; Visosky, Mark; Aoki, Steven; LaVera, Damien; Mueller, Stephanie; Leistikow, Dan; Reynolds, Tom; Hanrahan, Robert; Miotla, Dennis; Elkind, Jonathan; O'Connor, Tom (NE-HQ); Freshwater, David

Subject: FW: Email to Distro List

Data from last night's (17MAR11 EDT) AMS flights.
NITOPS

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration
U.S. Department of Energy
nitops@nnsa.doe.gov
nit@doe.sgov.gov
202-586-8100

From: NITOPS
Sent: Friday, March 18, 2011 1:50 PM
To: NITOPS
Subject: Email to Distro List

Per Dave Bowman.

From: LIA01 Hoc
Sent: Friday, March 18, 2011 9:07 PM
To: LIA06 Hoc
Subject: FW: URGENT: Need to Repatriate Tim Kolb

Importance: High

We need to get this from ET.

From: RMTFACTSU_ELNRC [mailto:RMTFACTSU_ELNRC@ofda.gov]
Sent: Friday, March 18, 2011 8:42 PM
To: LIA01 Hoc; RMTFACTSU_LC
Subject: RE: URGENT: Need to Repatriate Tim Kolb
Importance: High

USAID is requesting more details on the nature of the illness and whether medevac is necessary. Is it an emergency such that it needs attention for an immediate departure and does he need medical attention while in Japan until he leaves?

Bob Kahler

From: LIA01 Hoc [mailto:LIA01.Hoc@nrc.gov]
Sent: Friday, March 18, 2011 8:27 PM
To: RMTFACTSU_ELNRC; RMTFACTSU_LC
Subject: URGENT: Need to Repatriate Tim Kolb
Importance: High

Direction from ET team to make immediate arrangements to get Tim Kolb back to the US. Please confirm you've received this and are working on it.

Ted Smith

From: RMTFACTSU_ELNRC [mailto:RMTFACTSU_ELNRC@ofda.gov]
Sent: Friday, March 18, 2011 7:12 PM
To: LIA11 Hoc; PMT01 Hoc; RST01 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA12 Hoc; LIA04 Hoc
Cc: Gott, William; Marshall, Jane; Grant, Jeffery
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FYI..I had to shake this out of them....hope I am not the only source of this.

From: RMTFACTSU_DOE
Sent: Friday, March 18, 2011 7:10 PM
To: RMTFACTSU_ELNRC
Subject: FW: AMS flight data

From: Stevenson, Bill [mailto:William.Stevenson@dhs.gov]
Sent: Friday, March 18, 2011 5:53 PM

To: RMTFACTSU_DOE
Subject: Fw: AMS flight data

Bill Stevenson
DHS/FEMA
National IMAT
William.stevenson@dhs.gov
202-212-3795

Sent using mobile device

From: Judd, Diana L
To: NRCC-11-RADT
Sent: Fri Mar 18 17:52:09 2011
Subject: Fw: AMS flight data

FYSA

Diana Judd
DHS/FEMA
National IMAT Central
Acting Planning Section Chief/
Situation Unit Leader

(b)(6) Cell

Sent using BlackBerry

From: FEMA-NWC
To: FEMA-NRCC-planchief; CBRNE; Costello, Robert L-FEMA; Dewar, James; IMAT-EAST; LNO_USAID
<RMTFACTSU_FEMA@ofda.gov>; Monroe, Logan; Washington, Russell; Widomski, Michael
Sent: Fri Mar 18 17:48:51 2011
Subject: FW: Email to Distro List

V/R
Wanda Scott
Watch Officer
National Watch Center
Response Directorate
U.S. Department of Homeland Security - FEMA
Office: 202-646-2828
Unsecure Fax: 202-646-4617
fema-nwc@dhs.gov

From: NITOPS [<mailto:NITOPS@nnsa.doe.gov>]
Sent: Friday, March 18, 2011 2:18 PM

To: (b)(6)

(b)(6)

(b)(6) SCHU; Poneman, Daniel; DAgostino, Thomas; Hurlbut,

Brandon; OConnor, Rod; Aoki, Steven; Krol, Joseph; Wilber, Deborah; Lippert, Alice (OGA); NITOPS; Leistikow, Dan; Sandalow, David; Richert, Scott T. (IN); Petish, Serge (IN); Atkins, Victor C. (IN); McKeown, Mike (IN); NOC SWO; NITOPS; 'jroos@state.gov'; 'eoc.epahq@epa.gov'; 'Irizarry.gilberto@epa.gov'; 'tulis.dana@epa.gov'; 'veal.lee@epa.gov'; 'Robert.sweet@faa.gov'; 'fema-nwc@dhs.gov'; (b)(6) 'rmtpactsu@ofda.gov'; 'Steven.fine@noaa.gov'; 'sdm@noaa.gov'; 'hoo.hoc@nrc.gov'; 'dartdoeliasion1@ofda.gov'; (b)(6) 'taskforce-1@state.gov'; '1tfg@state.gov'; 'Robert.katz@montgomerycountymd.gov'; (b)(6) 'vinetta.howardking@fda.hhs.gov'; 'mark.russo@fda.hhs.gov'; 'Wayne.Gorski@fda.hhs.gov'; 'Keri_Lowry@nss.eop.gov'; 'lholgate@nss.eop.gov'; 'Thomas_J._Zerr@nss.eop.gov'; '9-AWA-ATS-ATASC@faa.gov'; 'cym3@cdc.gov';

(b)(6) 'IOC@treasury.gov'; 'na30ecc@nr.doe.gov'; (b)(6) 'pmt12.hoc@nrc.gov'; (b)(6) 'bitterr@state.gov'; 'JapanEmbassyTaskForce@state.gov'; Fitzgerald, Paige; 'OpsCenter@dm.usda.gov'; 'sioc@ic.fbi.gov'; 'hhs.soc@hhs.gov'; 'eocreport@cdc.gov'

Cc: Miller, Neile; Johnson, Shane; Connery, Joyce; Kelly, John E (NE); Alldridge, David; Lyons, Peter; Owens, Missy; Adams, Ian; Sandalow, David; Smith-Kevern, Rebecca; Golub, Sal; Sunshine, Alexander; Deeney, Chris; Huizenga, David; Fremont, Douglas; Allen, George; Looney, Heather; White, William; Underwood, Jefferson; Durbin, Karyn; LeChien, Keith; Rasar, Kimberly; Whitney, Mark; Thompson, Michael; Ciganer, Patrick; Adamson, Paul; Calbos, Philip; Niedzielski-Eichner, Phillip; Wright, Rasheem; Hanrahan, Robert; Shrum, Scott; Goodrum, Steve; Mustin, Tracy; Visosky, Mark; Aoki, Steven; LaVera, Damien; Mueller, Stephanie; Leistikow, Dan; Reynolds, Tom; Hanrahan, Robert; Miotla, Dennis; Elkind, Jonathan; O'Connor, Tom (NE-HQ); Freshwater, David

Subject: FW: Email to Distro List

Data from last night's (17MAR11 EDT) AMS flights.
NITOPS

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration
U.S. Department of Energy
nitops@nnsa.doe.gov
nit@doe.sgov.gov
202-586-8100

From: NITOPS
Sent: Friday, March 18, 2011 1:50 PM
To: NITOPS
Subject: Email to Distro List

Per Dave Bowman.

From: Shea, James
Sent: Friday, March 18, 2011 7:31 AM
To: RST01 Hoc
Cc: RST07 Hoc
Subject: FW: JAPAN CONCRETE QUESTION

Before use of this information we need specific plant structural drawings for impact evaluation

From: Graves, Herman
Sent: Thursday, March 17, 2011 6:51 PM
To: Chokshi, Nilesh; Patel, Pravin; Ma, John; Tegeler, Bret
Cc: Shea, James; Hogan, Rosemary; Case, Michael; Richards, Stuart
Subject: JAPAN CONCRETE QUESTION

To All:

In response to the questions you asked today on concrete and sand properties. I worked with staff here at DE/RES to put together the attached table.

I am not sure if we addressed all the questions asked, but it is a start.

<<Herman>>

<<301.251.7625: Office>>

(b)(6)

BlackBerry>>

mail to: Herman.Graeves@nrc.gov

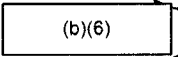
From: Gibson, Kathy
Sent: Friday, March 18, 2011 9:31 AM
To: RST01 Hoc; HOO Hoc; PMT01 Hoc
Cc: Lee, Richard; Sheron, Brian; Uhle, Jennifer
Subject: POC for RES/DSA

This message is from Kathy Gibson, Division Director, RES.

Apparently we missed a conference call this morning at 8am on SFP issues via an email that went to individual staff members. Also our office director and deputy are making trips to Congress and other duties outside of the office so they have missed calls from the Ops Center.

To help facilitate communications between RES and the Ops Center, I have assigned Richard Lee (BC for severe accident research) as our POC with the Ops Center (24x7). I request that any support that you need from RES/DSA be sent to Richard and he will either get the answer or put the right person in contact with the appropriate team or person in the Ops Center. Richard's contact information is:

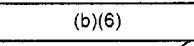
Office: 251-7526

BB:  (b)(6)

Richard.Lee@nrc.gov

As a backup, please contact me:

Office: 251-7499

BB:  (b)(6)

Kathy.Gibson@nrc.gov

Thank you!

From: LIA08 Hoc
Sent: Friday, April 15, 2011 10:30 AM
To: OST01 HOC
Subject: NRC Site Team and Hawaii
Attachments: JAPAN TRAVELER-list (2).docx

Last updated pages: 4/14/2011

#4 NRC TEAM In Japan - Leaving Week of April 9, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (Internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Steve Garchow Region IV Senior Operations Engineer	(b)(6)	Steve.Garchow@nrc.gov	Apr 13, 3:15 pm	May 3, 10:45 am	
Heather Gepford Region II Technical Assistant		Heather.Gepford@nrc.gov	Apr 13, 4:15 pm	May 3, 1:15 pm)
Anthony (Tony) Huffert RES Sr. Health Physicist		Anthony.Huffert@nrc.gov	Apr 13, 3:10 pm	May 3, 3:37 pm	
Jeff Mitman NRR Sr. Reliability & Risk Analyst		Jeffrey.Mitman@nrc.gov	April 13, 3:10 pm	May 3, 3:37 pm	
Carl Moore Region III Operations Engineer		Carl.Moore@nrc.gov	Apr 13, 4:15 pm	May 3, 8:55 am	J
Steve Reynolds Region III Executive Level - Team Lead To replace Elmo Collins		Steven.Reynolds@nrc.gov	April 13, 4:15 pm	May 3, 4:05 pm	
Tim Lupold NRR		Timothy.Lupold@nrc.gov	Apr 15 3:10 p.m.	May 3 3:37 p.m.	
Sean Meighan NRR		Sean.meighan@nrc.gov (b)(6)	April 15 3:10 p.m.	May 3 3:37 p.m.	
Donald Norwood NSIR		Donald.norwood@nrc.gov			
Brian Wittick, OIP Licensing Officer		Brian.Wittick@nrc.gov		Sun, Apr 9 3:55 p.m.	Sat, April 16 3:37 p.m.

#3 NRC TEAM in Japan - Leaving April 2/3 and Return on April 16, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Rudy Bernhard, Region II Expertise in severe accident management, B5b and accident recovery, Leaves 4/2	BB:	Rudolph.bernhard@nrc.gov	Sun, Apr 3 4:00 PM	Sat, April 16 2:55 p.m.	
Michel (Mike) Call, NMSS Nuclear Engineer Fluent in Japanese and lived in Japan for two years, Leaves 4/2	BB:	Michel.call@nrc.gov	Sun, Apr 3 3:10 PM	Sat, April 16 3:37 p.m.	
Elmo Collins, RIV Executive level – Assistant Team Leader.	BB:	Elmo.collins@nrc.gov	March 30 1:05 PM	April 14 (expected)	
Mike Hay, RIV Extensive experience in emergency planning and event response experience. Masters in HP, Leaves 4/22	BB:	Michael.Hay@nrc.gov	Sun, Apr 3 4:00 p.m.	Sat, April 16 9:20 a.m.	
Mike Salay, RES Severe accident expertise, OECD - leaves 4/2 or 3	BB:	Michael.Salay@nrc.gov	Sun, Apr 3 10:00 PM		
Vince Holahan, FSME Sr. level Advisor Departure with Navy Honolulu, HI			March 28 9:35 p.m.		

#2 NRC TEAM in Japan - Left last week in March and will return by April 7th -- NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Alan Blamey, RII Chief of Construction Project Branch Leaves 3/22	404-354-6719 (b)(6) (NRC bb)	Alan.Blamey@nrc.gov Picked up KI in Region II	March 23 3:30 PM,		

TEAM #1 - NRC TRAVELER INFORMATION IN JAPAN

Name	Phone Number	Email	Flight Arrival (Japan Time)	Flight Arrival (EDT)	Return Date to U.S.
Chuck Casto - Will remain in Japan Deputy Regional Administrator, Region II Executive Level - Team Lead Interface with the Ambassador, military, Japan cabinet and regulators	(b)(6)	Chuck.casto@nrc.gov	1:30 PM Wed., 3/16		

EVERYBODY IS STAYING AT HOTEL IN TOKYO

(b)(6)

From: PMT10 Hoc
Sent: Thursday, April 14, 2011 6:39 PM
To: Mike Aslaksen
Subject: RE: Environmental monitoring and plume modeling - Japan to Alaska

Mike, I appreciate your quick response. Tony Sievers called and we had a productive conversation this afternoon on the topic, which is particularly interesting to me. I used to establish environmental monitoring program elements for Navy, which I understand is a partner in this effort.

Best regards,
Sam

Sam Keith
CDC Liaison to NRC
(b)(6)

From: Mike Aslaksen [mailto:Mike.Aslaksen@noaa.gov]
Sent: Thursday, April 14, 2011 4:41 PM
To: PMT10 Hoc
Cc: russell.callender@noaa.gov; holly.bamford@noaa.gov; Hendrik Tolman; John Cortinas; info japan
Subject: Re: Environmental monitoring and plume modeling - Japan to Alaska

Sam,
The POC's for NOAA on this subject are John Cortinas and Hendrik Tolman cc'd on this response.

-Mike

Michael L. Aslaksen Jr.
Chief of Staff (Acting)
NOAA's National Ocean Service

Tel: 301-713-3074 x148
Mobile: (b)(6)

On 4/14/2011 4:31 PM, PMT10 Hoc wrote:
Dear Drs. Aslaksen, Callender, and Bamford,

As the CDC Liaison to the NRC for the Japan response, I have been asked to find out the status of NOAA/EPA efforts on ocean environmental sampling and plume modeling over the area from Japan to Alaska. I met with management at the EPA HQ EOC this afternoon and understand that EPA currently has no completed information on this topic other than perhaps a cost estimate for proposed work.

EPA provided your contact information in case you might be in a position to assist. As such, I am hoping you can share the results of any sampling that NOAA has conducted in the Pacific Ocean since the event started, as well as current status/future plans on monitoring and modeling, or provide some points of contact on these.

We have heard anecdotally that ocean water several miles off the Japanese east coast contains measurable Fukushima-related radionuclides at concentrations below the EPA maximum contaminant limit. This type information would be helpful.

Sincerely,
Sam Keith
CDC Liaison to NRC

(b)(6)

From: OST02 HOC
Sent: Saturday, March 19, 2011 11:36 PM
To: PMT02 Hoc; PMT11 Hoc; Hoc, PMT12
Subject: FW: monitoring data (latest version)
Attachments: content.pdf

-----Original Message-----

From: HOO Hoc
Sent: Saturday, March 19, 2011 11:36 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: monitoring data (latest version)

-----Original Message-----

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Saturday, March 19, 2011 11:32 PM

To: [redacted] (b)(6)

[redacted] (b)(6)

Subject: RE: monitoring data (latest version)

Resending with file attachment.

SBU

This email is UNCLASSIFIED-----Original Message-----

From: JapanEmbassy, TaskForce
Sent: Sunday, March 20, 2011 12:30 PM

To: [redacted] (b)(6)

[redacted] (b)(6)

www 54

(b)(6)

Subject: RE: monitoring data (latest version)

Looping in Monitoring Distro List.

Jerome Ryan
Emergency Action Officer
Japan Emergency Command Center
U.S. Embassy Tokyo

+81(3)3224-5533

SBU

This email is UNCLASSIFIED-----Original Message-----

From: HAMAGUCHI AYUMU [mailto:ayumu.hamaguchi@mofa.go.jp]

Sent: Sunday, March 20, 2011 12:25 PM

To:

Cc:

(b)(6)

(b)(6)

Subject: monitoring data (latest version)

Huntington-san, Craig-san;

This is the latest version of monitoring data.

v/r,

HAMAGUCHI

Ayumu HAMAGUCHI

States of U.S. Forces Agreement Division Ministry of Foreign Affairs

TEL: +81-3-5501-8000 (ext.2468)

TEL: +81-3-5501-8282 (Direct)

FAX: +81-3-5501-8281

放射線 ← 放射線

3月20日

福島第一(1F) 測定場所

- ①事務本館北(2号機より北西約0.5キロ)
- ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
- ③西門付近(MP-5付近)(2号機より西約1.1キロ)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																
モニタリングカー	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00
測定値(μ Sv/h)	2659.0	2652.0	2653.0	2637.0	2630.0	2629.0	2627.0	2626.0	2619.0	2617.0	2614.0	2614.0	2608.0	2623.0	2661.0	2742.0	2726.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	北東	北東	北	北東	北東	北東	東	北北東	東北東	東	東北東	南東	東南東	南南東	北東	南南東
風速(m/s)	0.6	0.6	0.6	0.9	1.3	1.3	1.6	1.3	1.5	1.4	1.2	1.2	1.0	1.0	1.6	1.2	1.2

View

リソシ → 幹. 2F.

11年03月20日(日)12時06分 測定:055018281

測定時刻 3月20日 12時19分

3月19日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
 ③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																							
モニタリングカー	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	
測定値(μ Sv/h)	2978.0	2972.0	2965.0	2961.0	2957.0	2946.0	2941.0	2937.0	2931.0	2924.0	2917.0	2912.0	2909.0	2906.0	2906.0	2895.0	2891.0	2883.0	2880.0	2880.0	2876.0	2865.0	2854.0	
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
風向	西	西南西	西南西	西南西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西北西	東北東	西南西	西
風速(m/s)	4.4	4.1	3.2	2.7	2.8	2.7	2.2	2.5	3.1	2.6	2.6	2.6	3.1	3.4	3.4	2.3	1.8	2.0	2.2	1.2	0.8	1.0	2.0	

測定場所	①							
モニタリングカー	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μ Sv/h)	2847.0	2844.0	2841.0	2836.0	2828.0	2828.0	2826.0	2823.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND
風向	西北西	西	西	西北西	西	西北西	西北西	西
風速(m/s)	1.4	1.8	2.5	2.4	2.4	2.9	2.5	2.8

3月20日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
 ③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																							
モニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	
測定値(μ Sv/h)	2821.0	2814.0	2808.0	2805.0	2803.0	2791.0	2797.0	2794.0	2793.0	2786.0	2785.0	2781.0	2778.0	2773.0	2771.0	2767.0	2764.0	2761.0	2759.0	2746.0	2745.0	2741.0	2758.0	
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
風向	南西	南西	西	南西	西南西	西南西	北西	北西	西	北東	南西	西	南西	西北西	西	西	北西	北西	西北西	西南西	南東	北北東	西	
風速(m/s)	4.5	3.7	2.8	3.5	3.0	3.4	4.6	3.2	3.0	2.9	2.1	2.5	1.8	2.1	1.6	1.8	1.5	2.3	2.1	1.0	1.1	1.0	1.1	

測定場所	①					③								④									
モニタリングカー	3:50	4:00	4:10	4:20	4:30	測定位置	4:40	4:50	5:00	5:10	5:20	5:30	5:40	測定位置	6:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
測定値(μ Sv/h)	3185.0	2939.0	2771.0	2743.0	2739.0	変更	273.2	271.8	271.2	270.9	270.4	269.8	269.5	変更	2663.1	2679.0	2679.0	2677.0	2670.0	2654.0	2664.0	2661.0	2661.0
中性子	ND	ND	ND	ND	ND	※14	ND	ND	ND	ND	ND	ND	ND	※15	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南	西	北西	南	南西	※14	北北西	北	北北西	西北西	北	北北東	北東	※15	北	北東	北東	東北東	東北東	東北東	東	東北東	東南東
風速(m/s)	1.0	0.9	0.5	0.8	0.8	※14	3.5	1.6	1.5	1.5	0.7	0.5	0.6	※15	2.2	0.6	0.7	0.9	0.9	0.6	0.9	1.1	0.6

※14 西門付近(MP-5付近)(2号機より西約1.1キロ) ※定点で測定するため移動
 ※15 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するためにより近傍へ移動

3月19日

福島第一(1F)

測定場所

①事務本館北(2号機より北西約0.5キロ)

②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)

③西門付近(MP-5付近)(2号機より西約1.1キロ)

④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	③																						
モニタリングカー	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20
測定値(μSv/h)	303.6	303.1	301.7	301.3	300.5	299.2	299.2	298.5	297.5	296.4	295.8	295.1	296.4	294.3	293.8	293.6	292.6	292.3	291.5	290.9	290.6	289.8	289
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	西北西	東	西	西北西	南東	西	南	南	南	東	北西	東	南東	西	南東	東北東	東南東	南南東	東	北西	西	西
風速(m/s)	0.9	0.6	0.6	0.5	0.4	0.6	0.6	0.4	0.5	0.5	0.9	0.9	0.9	0.6	0.9	0.7	0.5	0.4	0.3	0.4	0.7	0.3	0.1

測定場所	③																						
モニタリングカー	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10
測定値(μSv/h)	288.9	288.6	287.2	399.0	830.8	670.6	431.9	390.5	522.5	364.5	336.5	323.8	425.2	667.3	358.3	346.1	341.2	338.4	334.3	330.2	327.1	322.6	319.1
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	西南西	南西	南東	北北東	西北西	西北西	東	東北東	東北東	北東	東	東	東	東	南東	南東	南	南東	東	南南東	南南東	南西	西
風速(m/s)	0.8	0.6	0.6	0.3	0.5	0.3	0.4	0.6	0.5	0.5	1.6	2.1	2.0	1.5	1.8	1.8	1.9	1.9	1.7	1.5	1.5	1.6	2

測定場所	③		測定 位置 変更 ※13	①																			
モニタリングカー	11:20	11:30		11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50
測定値(μSv/h)	315.1	313.1		3954.0	3901.0	3882.0	3828.0	3502.0	3749.0	3704.0	3656.0	3629.0	3594.0	3555.0	3529.0	3491.0	3473.0	3443.0	3417.0	3396.0	3375.0	3348.0	3340.0
中性子	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	西北西	南西		西北西	西	西	西	西北西	西	西南西	西南西	北西	西	北西	西	西	南南西	西	北東	西	北	南南西	南東
風速(m/s)	2.9	3.4	4.0	4.7	6.0	5.7	5.6	5.7	5.9	6.1	4.2	3.7	5.3	4.3	5.1	4.3	5.8	3.4	4.8	4.9	3.1	2.1	

測定場所	①																						
モニタリングカー	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40
測定値(μSv/h)	3278.0	3281.0	3223.0	3194.0	3474.0	3167.0	3165.0	3137.0	3135.0	3125.0	3111.0	3069.0	3078.0	3071.0	3058.0	3051.0	3033.0	3024.0	3020.0	3007.0	3002.0	2998.0	2992.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	西	西	西	南西	南西	南	北西	西	西	西南西	西南西	西	西	西	北西	西	西	西	西	西	西	西	西
風速(m/s)	4.9	4.6	3.4	3.8	4.5	3.9	2.4	4.8	5.0	4.5	6.1	5.1	5.7	4.5	4.1	3.3	3.0	3.5	3.6	2.7	2.8	4.1	3.5

※13 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するためにより近傍へ移動

福島第一(1F) 3月19日 12時15分

3月20日 12時20分

1403R02E(日) 12時15分 12時20分

福島第一(1F) 3月19日 12時15分

3月18日

瀬島第一(1F) 測定場所

①事務本館北(2号機より北西約0.5キ口) ②体育館付近(MP-5東側)(2号機より西北西約0.9キ口)
 ③西門付近(MP-5付近)(2号機より西約1.1キ口) ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)

測定場所		①																						
モニタリングカー		14:45	14:50	14:55	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10
測定値(μ Sv/h)		3367.0	3339.0	3346.0	3345.0	3368.0	3582.0	4075.0	3823.0	4996.0	4485.0	4352.0	4535.0	4419.0	4277.0	4735.0	6065.0	6083.0	4952.0	4251.0	4182.0	4090.0	4084.0	4069.0
中性子		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向		南南東	東南東	南	南東	南	南南東	南南東	南南東	南南東	南南東	南南東	南	南南東	東	南南東	南	南南東	南南東	南	南	南南西	南南西	南
風速(m/s)		1.6	1.5	1.5	1.4	1.7	1.9	2.3	2.1	2.2	2.4	2.0	2.1	1.8	2.1	2.1	2.0	2.1	3.1	2.3	1.8	1.6	1.2	1.2

測定場所		①										③												
モニタリングカー		18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	測定位置	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50
測定値(μ Sv/h)		4969.0	3922.0	3885.0	3832.0	3788.0	3745.0	3728.0	3699.0	3669.0	3634.0	3611.0	変更	447.6	441.2	434.6	429.2	423.9	419.1	414.2	409.4	405.2	401.6	397.8
中性子		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	※10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向		南	南南西	南南西	南南西	西	南西	南西	南南西	南	西南西	西南西		南	西	西北西	南西	西南西	南南西	西	西	西	北北西	北北西
風速(m/s)		1.2	1.5	1.5	1.4	1.5	1.3	1.4	1.4	1.3	1.5	1.3		3.0	0.5	0.7	0.8	0.8	0.5	0.6	0.3	0.3	0.4	0.5

測定場所		③										①		
モニタリングカー		22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	測定位置	23:30	23:40	23:50
測定値(μ Sv/h)		393.9	389.2	385.9	382.9	379.6	375.9	373.5	371.2	369.9	変更	3254.0	3256.0	3244.0
中性子		ND	ND	ND	ND	ND	ND	ND	ND	ND	※11	西南西	南西	西南西
風向		南西	南西	西	西	南西	西	北	北西	西南西		2.8	1.2	1.2
風速(m/s)		0.5	0.7	0.5	0.5	0.4	0.4	0.3	0.4	0.3				

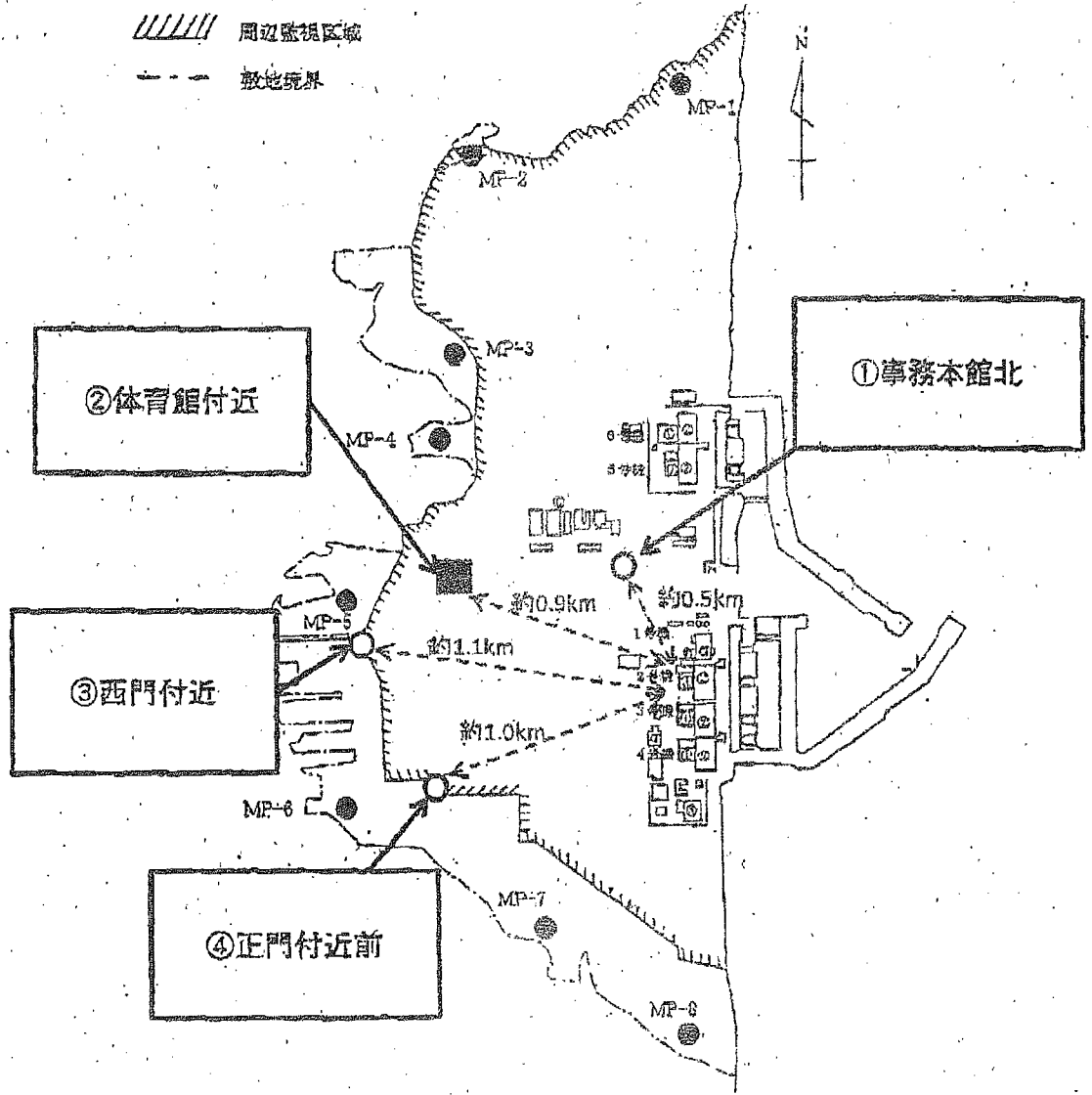
3月19日

測定場所		①												③										
モニタリングカー		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	測定位置	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
測定値(μ Sv/h)		3224.0	3224.0	3219.0	3231.0	3342.0	3284.0	3248.0	3279.3	3247.0	3195.0	3188.0	3181.0	変更	313.7	312.2	311.1	310.0	309.1	308.5	305.9	305.0	305.1	304.3
中性子		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	※12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向		西南西	西南西	南西	南西	西南西	西	西南西	西南西	西南西	西南西	南西	西南西		北	北	南	西南西	西南西	北北東	西北西	南南東	南南東	東
風速(m/s)		1.4	1.4	1.2	1.1	0.9	1.4	1.3	1.3	1.3	1.4	1.6	1.3		3.0	0.3	0.3	0.6	0.3	0.4	0.6	0.7	0.7	0.7

※10 西門付近(MP-5付近)(2号機より西約1.1キ口) ※定点で測定するため移動
 ※11 事務本館北(2号機より北西約0.5キ口) ※放水活動による効果を測定するためにより近傍へ移動
 ※12 西門付近(MP-5付近)(2号機より西約1.1キ口) ※定点で測定するため移動

3月20日 12時20分

福島第一原子力発電所



福島第二(2F) (事業者のモニタリングポスト)

3月20日																						
モニタリングポスト	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
MP1 ($\mu\text{Sv/h}$)	16.073	15.957	15.970	16.007	16.010	15.953	15.973	15.940	15.937	15.910	15.900	15.910	16.700	20.417	17.670	20.740	17.830	17.177	16.870	19.260	21.310	20.917
MP2 ($\mu\text{Sv/h}$)	9.687	9.720	9.697	9.667	9.663	9.693	9.660	9.673	9.647	9.653	9.643	9.647	10.020	16.447	10.983	14.283	11.443	10.787	10.640	12.560	14.973	15.303
MP3 ($\mu\text{Sv/h}$)	16.153	16.100	16.117	16.130	16.050	16.073	16.083	16.087	16.023	16.017	16.043	16.037	16.040	24.170	17.930	19.593	18.590	17.777	17.330	20.067	21.017	23.834
MP4 ($\mu\text{Sv/h}$)	11.093	11.130	11.130	11.083	11.110	11.107	11.080	11.087	11.057	11.060	11.060	11.043	11.133	19.093	12.487	15.200	12.433	13.427	12.733	16.243	16.413	21.604
MP5 ($\mu\text{Sv/h}$)	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	11.387	20.974	12.533	12.533	15.600	14.163	13.013	15.927	17.160	25.774
MP6 ($\mu\text{Sv/h}$)	12.447	12.453	12.387	12.360	12.333	12.370	12.400	12.360	12.353	12.313	12.333	12.343	16.200	18.430	13.497	14.823	15.540	14.193	13.573	14.993	19.853	21.450
MP7 ($\mu\text{Sv/h}$)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西北西	西北西	西北西	西北西	西北西	西北西	北西	北西	北西	北西	北北西	北北西	北	北東	北東	北東	北東	北東	北北東	北北東	北東	北北東
風速(m/s)	8.8	9.0	6.9	6.1	4.0	3.0	3.8	4.4	5.5	5.2	4.7	3.9	1.2	3.3	6.0	6.3	6.0	4.7	4.4	5.0	4.1	4.1

3月20日																	
モニタリングポスト	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00
MP1 ($\mu\text{Sv/h}$)	20.984	19.813	19.030	19.127	18.153	17.680	17.250	17.170	17.063	16.980	16.900	16.830	16.760	16.647	16.553	16.603	16.467
MP2 ($\mu\text{Sv/h}$)	14.313	13.543	12.443	12.677	11.403	10.913	10.303	10.227	10.173	10.153	10.077	10.053	10.013	9.973	9.893	9.887	9.863
MP3 ($\mu\text{Sv/h}$)	20.984	20.460	19.863	19.963	19.510	18.550	17.657	17.553	17.470	17.360	17.267	17.117	17.030	17.010	16.913	16.800	16.770
MP4 ($\mu\text{Sv/h}$)	16.437	15.540	15.287	16.083	14.427	13.550	12.923	12.693	12.573	12.470	12.390	12.297	12.217	12.110	12.023	11.993	11.907
MP5 ($\mu\text{Sv/h}$)	17.227	15.687	15.147	16.393	14.200	13.193	12.240	12.053	11.953	11.920	11.807	11.760	11.707	11.587	11.557	11.480	11.467
MP6 ($\mu\text{Sv/h}$)	15.633	15.467	17.017	15.437	14.340	13.860	13.240	13.167	13.117	13.050	13.003	12.937	12.897	12.820	12.810	12.767	12.713
MP7 ($\mu\text{Sv/h}$)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	北北東	北北東	北	南	東	東北東	東北東	北東	東北東	東北東	東	南東	南東	南東	南東	南東	東南東
風速(m/s)	9.7	3.3	1.8	0.8	0.9	1.6	2.5	3.3	4.3	3.0	3.2	1.5	1.8	2.7	2.6	2.2	1.9

New

福島第二(2F) 12時15分

福島第二(2F) 12時20分

140380日(日) 12時15分 電: 055018281

福島第二(2F) 12時20分

福島第二(2F) (事業者のモニタリングポスト)

3月19日																						
モニタリングポスト	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50
MP1(μ Sv/h)	16.723	16.720	16.743	16.803	16.773	16.747	16.740	16.730	16.707	16.710	16.657	16.710	16.623	16.613	16.610	16.590	16.583	16.550	16.547	16.583	16.510	16.557
MP2(μ Sv/h)	10.193	10.157	10.167	10.163	10.167	10.153	10.143	10.133	10.107	10.090	10.083	10.103	10.083	10.097	10.077	10.077	10.080	10.037	10.080	10.730	9.990	10.027
MP3(μ Sv/h)	16.963	16.890	16.860	16.890	16.980	16.853	16.887	16.797	16.797	16.807	16.820	16.800	16.817	16.763	16.760	16.727	16.737	16.703	16.707	16.710	16.713	16.650
MP4(μ Sv/h)	11.643	11.650	11.637	11.593	11.517	11.620	11.607	11.590	11.547	11.557	11.550	11.560	11.503	11.523	11.513	11.497	11.480	11.497	11.477	11.440	11.493	11.507
MP5(μ Sv/h)	11.527	11.567	11.560	11.507	11.553	11.513	11.507	11.467	11.467	11.467	11.467	11.467	11.373	11.467	11.387	11.467	11.467	11.367	11.380	11.367	11.367	11.367
MP6(μ Sv/h)	12.960	12.967	12.937	12.930	12.887	12.917	12.863	12.933	12.883	12.920	12.887	12.867	12.867	12.810	12.837	12.827	12.787	12.807	12.800	12.770	12.793	12.787
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西北西	北西	西北西	西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	北北西	北北西	北	南	南	南南西	西南西	西南西	西南西
風速(m/s)	2.6	3.5	1.8	2.5	3.7	2.7	5.3	6.5	5.5	4.7	2.6	1.4	1.6	1.8	0.9	3.2	1.9	1.8	3.4	5.1	8.8	10.8

3月19日												
モニタリングポスト	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1(μ Sv/h)	16.517	16.483	16.470	16.470	16.420	16.453	16.423	16.420	16.433	16.443	16.367	16.400
MP2(μ Sv/h)	10.017	10.003	9.997	9.973	9.967	9.990	9.950	9.933	9.970	9.923	9.910	9.953
MP3(μ Sv/h)	16.657	16.657	16.603	16.663	16.620	16.627	16.560	16.533	16.493	16.537	16.480	16.553
MP4(μ Sv/h)	11.457	11.457	11.447	11.443	11.470	11.440	11.387	11.423	11.420	11.387	11.410	11.400
MP5(μ Sv/h)	11.367	11.373	11.367	11.313	11.360	11.313	11.273	11.280	11.267	11.267	11.287	11.287
MP6(μ Sv/h)	12.747	12.730	12.743	12.730	12.703	12.717	12.710	12.703	12.663	12.673	12.660	12.640
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西北西	西	西南西	西	西南西	西南西	西	西	西	西	西南西	西
風速(m/s)	11.9	10.8	5.7	4.8	6.8	7.1	8.4	9.0	8.3	6.8	6.0	7.1

3月20日																						
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
MP1(μ Sv/h)	16.353	16.340	16.333	16.300	16.927	16.267	16.327	16.243	16.243	16.257	16.200	16.227	16.160	16.153	16.133	16.090	16.117	16.147	16.123	16.087	16.027	16.020
MP2(μ Sv/h)	9.903	9.920	9.863	9.917	9.887	9.853	9.880	9.867	9.840	9.880	0.813	9.820	9.783	9.770	9.757	9.787	9.758	9.733	9.743	9.710	9.727	9.710
MP3(μ Sv/h)	16.503	16.483	16.460	16.407	16.410	16.427	16.353	16.327	16.377	16.343	16.333	16.297	16.263	16.253	16.203	16.233	16.207	16.093	16.173	16.130	16.147	16.080
MP4(μ Sv/h)	11.367	11.323	11.323	11.303	11.320	11.303	11.300	11.303	11.290	11.233	11.310	11.277	11.257	11.247	11.190	11.187	11.197	11.210	11.150	11.177	11.170	11.157
MP5(μ Sv/h)	11.267	11.267	11.260	11.213	11.207	11.300	11.167	11.167	11.173	11.167	11.167	11.140	11.133	11.067	11.120	11.073	11.113	11.073	11.073	11.073	11.067	11.073
MP6(μ Sv/h)	12.590	12.613	12.647	12.603	12.600	11.167	12.597	12.563	12.557	12.587	12.533	12.503	12.513	12.527	12.523	12.527	12.490	12.470	12.460	12.437	12.443	12.423
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西	西南西	西	西	西	西南西	西北西	西	西北西	北西	北西	北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西
風速(m/s)	6.3	6.8	7.7	10.2	9.6	6.4	7.9	9.1	8.9	9.0	10.8	9.4	9.4	10.3	9.0	11.2	8.8	10.5	9.7	8.8	9.8	8.6

測定時刻 3月19日 12時16分

測定時刻 3月20日 12時20分

1年03月20日(日) 12時08分 測定時刻: 035018281

測定時刻: 035018281

福島第二(2F)(事業者のモニタリングポスト)

3月19日																						
モニタリングポスト	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50
MP1(μ Sv/h)	17.4	17.4	17.3	17.3	17.3	17.3	17.3	17.3	17.2	17.2	17.2	17.1	17.0	17.1	17.1	17.1	17.0	16.9	17.0	16.9	16.9	16.9
MP2(μ Sv/h)	10.6	10.5	10.5	10.5	10.5	10.5	10.5	10.4	10.4	10.4	10.3	10.3	10.3	10.2	10.3	10.2	10.2	10.2	10.2	10.2	10.1	10.1
MP3(μ Sv/h)	17.7	17.7	17.7	17.7	17.7	17.5	17.7	17.6	17.7	17.6	17.6	17.5	17.4	17.4	17.5	17.4	17.4	17.4	17.4	17.3	17.3	17.3
MP4(μ Sv/h)	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.2	12.1	12.1	12.1	12.1	12.1	12.0	12.0	12.0
MP5(μ Sv/h)	11.0	11.0	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
MP6(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南西	南	南南西	南南西	南	南西	西	南西	南	南	南南東	南	南	南	南	南	南	南	南	南南東	南東	南東
風速(m/s)	4.2	4.0	3.9	4.4	5.5	5.8	1.7	2.9	2.5	1.7	3.5	4.1	4.3	9.3	6.4	7.7	6.8	7.1	7.8	8.1	4.6	5.0

3月19日																						
モニタリングポスト	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30
MP1(μ Sv/h)	16.9	16.9	16.9	16.9	16.8	16.9	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.7	16.8	16.7	16.7
MP2(μ Sv/h)	10.6	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.5	10.4	10.5	10.5	10.4	10.4	10.4	10.4	10.4	10.4	10.2	10.3	10.3
MP3(μ Sv/h)	17.3	17.2	17.2	17.1	17.1	17.1	17.1	17.0	17.0	17.1	17.0	17.0	17.0	17.0	17.0	17.0	16.9	16.9	17.0	17.0	16.9	16.9
MP4(μ Sv/h)	12.0	12.0	12.0	11.9	11.9	11.9	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.7	11.8	11.7	11.7	11.7	11.7	11.7	11.7
MP5(μ Sv/h)	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.7	10.7	10.8	10.7	10.7	10.7	10.7	10.6
MP6(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南東	南南東	南南東	南東	南南東	南南東	南南東	南南東	南南東	南南東	南南西	西	西	西	西	西北西	西北西	西	西	西	西	西
風速(m/s)	7.6	8.0	8.3	6.3	7.4	8.3	8.2	9.4	6.3	5.6	5.0	8.9	11.2	10.2	11.9	11.0	7.2	6.0	7.1	5.9	8.6	5.4

3月19日																						
モニタリングポスト	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10
MP1(μ Sv/h)	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.6	16.6	16.5	16.5	16.5	16.5	16.5	16.4	16.913	16.867	16.840	16.890	16.820	16.800	16.927
MP2(μ Sv/h)	10.5	10.2	10.3	10.3	10.3	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.220	10.190	10.220	10.180	10.210	10.207	10.160
MP3(μ Sv/h)	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.8	16.8	16.9	16.8	16.8	17.027	17.067	17.003	17.040	17.027	17.007	16.997
MP4(μ Sv/h)	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.6	11.5	11.6	11.6	11.5	11.6	11.5	11.5	11.633	11.640	11.683	11.680	11.647	11.660	11.663
MP5(μ Sv/h)	10.6	10.6	10.5	10.5	10.5	10.6	10.5	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.3	11.567	11.560	11.567	11.567	11.567	11.567	11.567
MP6(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	13.020	12.997	13.003	12.970	12.960	12.980	12.967
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西	西北西	西	西北西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西北西
風速(m/s)	8.6	10.6	8.3	8.1	4.1	8.9	5.0	2.8	3.3	6.2	7.7	9.7	10.7	7.7	7.9	8.0	5.5	6.8	2.7	5.4	6.1	3.0

検査時刻 3月19日 12時16分

検査時刻 3月20日 12時20分

1403月20日(日) 12時30分 検査時刻 12時30分

検査時刻 12時30分

福島第二(2F)〈事業者のモニタリングポスト〉

3月18日												
モニタリングポスト	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1(μSv/h)	18.5	18.5	18.5	18.4	18.4	18.4	18.3	18.3	18.3	18.3	18.2	18.2
MP2(μSv/h)	11.2	11.2	11.1	11.2	11.1	11.1	11.2	11.1	11.1	11.1	11.1	11.1
MP3(μSv/h)	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.6
MP4(μSv/h)	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.9	13.0	12.9	12.9
MP5(μSv/h)	11.8	11.9	11.6	11.6	11.8	11.9	11.9	11.7	11.7	11.7	11.7	11.7
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西	西	西	西南西	南西	西南西	南西	南西	南西	南西	南
風速(m/s)	5.0	5.0	3.9	4.6	3.9	2.5	2.6	2.9	2.0	2.5	1.7	1.4

3月19日																						
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
MP1(μSv/h)	18.2	18.2	18.2	18.2	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	17.9	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.9	17.8
MP2(μSv/h)	11.1	10.9	11.0	11.0	11.0	10.8	10.9	10.9	10.9	10.8	10.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
MP3(μSv/h)	18.7	18.7	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.3	18.4	18.3	18.3	18.3	18.2	18.3	18.2
MP4(μSv/h)	12.9	12.9	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7
MP5(μSv/h)	11.7	11.7	11.7	11.6	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.5	11.6	11.6	11.5	11.5	11.5	11.5
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南西	南西	南西	南	南	南	南	南	南南西	南	南南西	南南西	南	南	南	南	南	南	南	南	南	南
風速(m/s)	0.3	1.6	1.4	0.6	0.6	1.2	1.5	3.5	3.6	3.6	5.4	5.1	5.8	5.5	6.6	5.8	5.6	4.9	4.4	3.6	4.1	5.6

3月19日																						
モニタリングポスト	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
MP1(μSv/h)	17.8	17.7	17.7	17.7	17.6	17.0	17.7	17.5	17.6	17.6	17.6	17.6	17.6	17.6	17.5	17.6	17.5	17.5	17.5	17.5	17.4	17.4
MP2(μSv/h)	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.6	10.7	10.6	10.6	10.6	10.7	10.6	10.6
MP3(μSv/h)	18.2	18.2	18.2	18.1	18.0	18.0	18.0	17.9	18.0	17.9	17.9	17.9	17.8	17.9	17.8	17.8	17.8	17.8	17.7	17.7	17.7	17.8
MP4(μSv/h)	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.4
MP5(μSv/h)	11.4	11.5	11.4	11.4	11.5	11.4	11.4	11.4	11.4	11.3	11.3	11.3	11.2	11.2	11.2	11.1	11.1	11.1	11.2	11.1	11.0	11.0
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南西	南	南	南	南南西	南	南	南	南	南南西	南南西	南西	南西	南南西	南	南南西	南	南	南	南	南南西	南南西
風速(m/s)	4.9	3.3	3.8	4.0	5.9	5.6	3.6	5.1	5.2	5.9	5.0	7.2	8.3	6.6	6.1	6.1	6.2	7.7	6.4	6.5	8.0	5.7

FUKUOKA UNIVERSITY

2020年3月19日 12時20分

1403920日 12時03分 055018281

FUKUOKA UNIVERSITY

送線の平常値の範囲	会社名	送線所名	3月19日
0.023~0.027	北海道電力	泊野送線所	0.022
0.024~0.050	東北電力	茨城原二原子力発電所	0.017
0.012~0.060	東北電力	東通原二原子力発電所	0.016
0.033~0.050	東京電力	福島第一原子力発電所	0.017
0.036~0.052	東京電力	福島第二原子力発電所	0.015
0.011~0.169	日本原子力発電	柏崎刈羽原子力発電所	0.016
0.035~0.053	日本原子力発電	東海第二発電所	0.015
0.039~0.110	中部電力	新豊原発電所	0.014
0.034~0.108	中部電力	瑞穂原原子力発電所	0.014
0.027~0.132	北陸電力	志賀原子力発電所	0.013
0.028~0.130	中国電力	高相原二原子力発電所	0.013
0.070~0.077	関西電力	高浜発電所	0.012
0.045~0.047	関西電力	高浜第二発電所	0.012
0.036~0.040	関西電力	大飯発電所	0.011
0.017~0.080	西園電力	伊方発電所	0.011
0.023~0.087	九州電力	玄海原子力発電所	0.010
0.034~0.120	九州電力	川内原子力発電所	0.009
0.009~0.069	日本原電(株)	六ヶ所 瑞穂発電所	0.015

*福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

送線の平常値の範囲	会社名	送線所名	3月19日
0.023~0.027	北海道電力	泊野送線所	0.022
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各送線所等の線長モニタリング結果

単位:μSv/h

3月19日

3/19 (土) 21時時点

From: RMTPACTSU_RM <RMTPACTSU_RM@ofda.gov>
Sent: Saturday, March 19, 2011 8:39 PM
To: RMTPACTSU_ELNRC; RMTPACTSU_LC
Cc: ET07 Hoc; RST01 Hoc; LIA01 Hoc; LIA11 Hoc
Subject: RE: 4 spray nozzle shipment from Atlanta to Japan

Received, thank you.

From: RMTPACTSU_ELNRC
Sent: Saturday, March 19, 2011 8:25 PM
To: RMTPACTSU_RM; RMTPACTSU_LC
Cc: et07.hoc@nrc.gov; RST01 Hoc (RST01.Hoc@nrc.gov); LIA01.Hoc@nrc.gov; LIA11.Hoc@nrc.gov
Subject: 4 spray nozzle shipment from Atlanta to Japan

USAID RM/LC:

The following is a response to your inquiry regarding if there is still a need for the 4 nozzles to be shipped from Atlanta to Japan.

The 4 nozzles had been offered by the Oconee Nuclear Power Station, for use at TEPCO, through the Institute of Nuclear Power Operations (INPO), based in Atlanta. The NRC had been coordinating the transport of the 4 nozzles from Atlanta to Japan through US AID. Subsequently, the NRC has informed INPO that Oconee is to contact TEPCO directly and make the offer of the 4 nozzles, private company to private company. Transport logistics of the nozzles would then be between the two private companies and no longer the responsibility of USAID.

This should close both of our involvement.

Bob Kahler

Robert E. Kahler
Branch Chief, Inspection and Regulatory Improvements Branch
US NRC NSIR/DPR/DDEP/IRIB
USAID NRC Liaison, Japanese Event
USAID Desk: (202) 712-4384
Blackberry: (b)(6)
Personal Cell: (b)(6)

From: RMTPACTSU_LC <RMTPACTSU_LC@ofda.gov>
Sent: Saturday, March 19, 2011 8:56 PM
To: RMTPACTSU_ELNRC; RMTPACTSU_RM
Cc: ET07 Hoc; RST01 Hoc; LIA01 Hoc; LIA11 Hoc; RMTPACTSU_LC; OFDALogistics [USAID]
Subject: RE: 4 spray nozzle shipment from Atlanta to Japan

Thanks for the overview Bob. Logs copies.
~Pat

Todd Horne / Pat Long / Rob Thibault
Logistics Coordinator
202-712-0039 x-5706

From: RMTPACTSU_ELNRC
Sent: Saturday, March 19, 2011 8:25 PM
To: RMTPACTSU_RM; RMTPACTSU_LC
Cc: et07.hoc@nrc.gov; RST01 Hoc (RST01.Hoc@nrc.gov); LIA01.Hoc@nrc.gov; LIA11.Hoc@nrc.gov
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Bob Kahler

Robert E. Kahler
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US NRC NSIR/DPR/DDEP/IRIB
USAID NRC Liaison, Japanese Event
USAID Desk: (202) 712-4384
Blackberry: (b)(6)
Personal Cell: (b)(6)

From: OST01 HOC
Sent: Saturday, April 16, 2011 4:10 PM
To: Kowalczyk, Jeffrey
Subject: task out highlighted calls
Attachments: Recurring Daily Actions and Calls Rev 31.docx

Recurring Daily Actions and Calls

(Information Rolled into Recurring Daily Actions and Calls on WebEOC under ET Misc. Document Collection)

Time (EDT)	Description	Lead Team	Action/Purpose of the Call
0300	RST/PMT call with Japan Team	RST/PMT (arranged by HOO's (b)(6) (b)(6))	Daily update for Site Team and HQ (convenient time for Site Team)
0600	One Pager (end of shift)	All	Provide input to EST Support
0600	Congressional Update		Taken From Status Update (Confirm w/ OCA)
0830	Daily call with Chuck Casto/Site Team (Chairman joins at 0845)	ET	Update chairman and staff during turnover
	Deputy Secretaries (as scheduled)	ET	White House lead (-Chairman participates) -Interagency discussion
0930	UK/Canada/France Call	RST/PMT (arranged by HOO) Bridge (b)(6)	Information Exchange. Focused on Operational issues (Combining PMT call from 1400 for Dose Issues. Starting 3/28)
1000	Input for Daily Status Update	All	Inputs due to LT Coordinator for Status Update
1000	TAs & CAs briefing	ET (arranged by HOO) (b)(6)	ET Director lead -briefed Commission TAs and Ods (Tuesday and Thursday ONLY)
1100	ESF8 (Public Health & Medical Services)	LT (Conference number provided by HHS)	HHS Secretary's Operations Center lead -Interagency discussion NOTE call will be held on (Tuesdays only).
1100	Technical Coordination with Industry Consortium	RST (arranged by HOO) (b)(6)	Technical discussion
1100	Info Exchange: US Environmental Monitoring Data	Arranged by NEI	"Radiological Status & Implications" call between NRC, NEI, EPA, DOE and OSTP. NEI or OSTP will set up the bridge line. (weekly after 4/5; next call to be April 12 at 11:00)
1230	NTAG teleconference (chaired by NSS)	PMT Director to lead	Nuclear Technical Advisory Group -email sent out daily with phone # and pass code
1400	USAID Starting 4/5 call will be on Tuesdays only 877.334.8037 Password (b)(6)	Primary Rep: JTemple Backup: LT/OCA	USAID lead -Interagency discussion: Federal pre-coordination takes place at 1:45 and then the 2pm call with Congressional staff. (Tuesday Only)
1400	Advisory Team (A-Team)	White House/PMT	Call with the White House. These calls are now on Tuesdays and Thursdays only. Call: (b)(6) Pin: (b)(6) 202-395-6392 Pin #: (b)(6)
1500	One Pager (end of shift)	All	Provide Input to EST Support

April 16, 2011 1500 hrs

Recurring Daily Actions and Calls Rev 32

Recurring Daily Actions and Calls

(Information Rolled into Recurring Daily Actions and Calls on WebEOC under ET Misc. Document Collection)

1500	Congressional call	OCA & NRC Go-To Team (Leeds, M. Johnson, Sherron, B. Booger, etc) (b)(6)	OCA lead - Audience is Congressional staff who have or are near a plant; Oversight committees; House & Senate leadership
1545	Radiological Community of Interest VTC	Vince Holahan, Tony Ulses, Jim Whitney	Held in SCIF
1700	PACOM J2 call	RST/PMT	Occurs in SGT Room on Mon, Wed, Fri. PACOM will dial into (b)(6).
1700	HHS call with 50 states and federal partners	LT/State Liaison FSME (Rich Turtill)	Meeting occurs each Tuesday and Thursday evening, as organized by HHS (N. Natarajan). HHS provides bridge line day of call
1700	DOE Science Panel	RES	Brian Sherron and Richard Lee, out of the box solutions.
1700	RST/PMT call with Japan Team	RST/PMT (arranged by the HOO) (b)(6)	Daily update for Site Team and HQ (convenient time for the Site Team)
1900	Call with Vince Holahan PACCOM	PMT	Status of Radiological Conditions Vince Direct Line - (b)(6), if no answer (b)(6) or (b)(6) Cell (b)(6)
2000	HHS Call with Pacific	HHS	Meeting occurs each Wed. evening. Call in (b)(6), (b)(6) is the passcode. PMT to participate
2000	Call with Industry Consortium (Next call 4/18 and every Monday & Wednesday at 2000 thereafter)	ET (arranged by HOO) (b)(6)	ET Led High-level discussions with industry and NRC Site Team (Call covers "Nuclear Team Asks and Offers Tracker XX-XX-2011.xlsx" spreadsheet of major items).
2100	PMT call with Japan Team	PMT (arranged by the HOO) (b)(6)	Daily update for Site Team and HQ (convenient time for the Site Team)
2200	One Pager (end of shift)	All	Provide Input to EST Support

April 16, 2011 1500 hrs

Recurring Daily Actions and Calls Rev 32

CURRENT VERSION: See WebEOC, ET Misc. Document Collection!

From: RMTPACTSU_ELNRC <RMTPACTSU_ELNRC@ofda.gov>
Sent: Saturday, March 19, 2011 9:19 PM
To: ET07 Hoc
Subject: RE: Guidance/ Path Forward?

John,

The question is the role of the NRC Liaisons at USAID with regard to the Bechtel pump issue. From Friday night to early this morning, the NRC liaisons at USAID were deeply involved in aiding the coordination of the move of the pumps through USAID and our NRC POC in Japan, Bill Cook. We would need to know how to address any future requests that may come from military, Bechtel, or our NRC staff in Japan. USAID considers to no longer be involved in the logistics and considers it to be a DOD project. 0

For instance, I just received a phone call from T. Frey in Japan on who he should contact to discuss creating a contract for Bechtel (I suggested that he call you).

Bob Kahler

Robert E. Kahler

Branch Chief, Inspection and Regulatory Improvements Branch

US NRC NSIR/DPR/DDEP/IRIB

USAID NRC Liaison, Japanese Event

USAID Desk: (202) 712-4384

Blackberry: (b)(6)

Personal Cell: (b)(6)

From: ET07 Hoc [mailto:ET07.Hoc@nrc.gov]
Sent: Saturday, March 19, 2011 7:42 PM
To: RMTPACTSU_ELNRC
Subject: RE: Guidance/ Path Forward?

Brian Sheron just spoke with John Monninger about this. I think John knows where we want to go with this.

John Jolicoeur
ET Status Officer

From: RMTPACTSU_ELNRC [mailto:RMTPACTSU_ELNRC@ofda.gov]
Sent: Saturday, March 19, 2011 7:08 PM
To: ET07 Hoc
Subject: Guidance/ Path Forward?

Bill, Jane, Jeff:

Is someone available to advise the NRC liaisons down here at USAID. We are unsure of our role going forward on this Bechtel pump issue. Any insights would be helpful?

Thanks

From: RST01 Hoc
Sent: Friday, April 29, 2011 5:08 AM
To: [REDACTED] (b)(6)
Cc: FOIA Response.hoc Resource; RST02 Hoc; OST01 HOC; Garchow, Steve; Tracy, Glenn
Subject: Fukushima Instrumentation (TT4691) - -----Official Use
Only-----

Vince,

Sometime around April 13th, you forwarded a request related to the status of instrumentation for Units 1-3 and the Unit 4 spent fuel pool. Based on discussions with our Site Team, the information is being provided by the licensee and all the instruments are considered unreliable. TEPCO installed a temporary thermocouple in the Unit 4 spent fuel pool, but this may soon be removed.

Information regarding gauge failure can be found in EPRI NP7156
(<http://my.epri.com/portal/server.pt?space=CommunityPage&cached=true&parentname=ObjMgr&parentid=2&control=SetCommunity&CommunityID=221&PageIDqueryComId=0>).

There is also a NUREG which I hope to forward to you soon. Sorry this took so long.

Eva Brown, BWR Systems and Ops Analyst
Reactor Safety Team
Nuclear Regulatory Commission

From: Szeto, Gordon CIV SEA 08 NR (b)(6)
Sent: Friday, March 18, 2011 2:47 PM
To: RST01 Hoc
Cc: Steinhurst, Laurel A CIV SEA 08 NR; Vavoso, Thomas G CIV NAVSEA, 08;
thomas.sambolt.contractor@unnpp.gov
Subject: NRC RST Spent Fuel Pool Fukushima Daiichi Cooling Recommendations for mitigation
of dose rates rev1NRComments
Attachments: NRC RST Spent Fuel Pool Fukushima Daiichi Cooling Recommendations for mitigation
of dose rates rev1NRComments.docx

<<NRC RST Spent Fuel Pool Fukushima Daiichi Cooling Recommendations for mitigation of dose rates
rev1NRComments.docx>> Attached are the NR Program comments from NR, Bettis, KAPL

gszeto

From: Thomas, Eric
Sent: Friday, March 18, 2011 12:00 PM
To: RST01 Hoc
Cc: Sigmon, Rebecca
Subject: FW: japanese industry site

Joe,

Don't know if you all have stumbled across this or not. I know there is information overload going on there, but this link is a one-pager that gives JAIF's version of what is going on. You all may find it is a good reference.

Eric

Eric Thomas
U.S. Nuclear Regulatory Commission
NRR/DIRS/IOEB
OWFN-7E24
eric.thomas@nrc.gov
301-415-6772 (office)

(b)(6) (mobile)

From: Sigmon, Rebecca
Sent: Friday, March 18, 2011 9:07 AM
To: Thomas, Eric
Subject: japanese industry site

http://www.jaif.or.jp/english/news_images/pdf/ENGNEWS01_1300368041P.pdf

This is the most recent version of the chart laying out each unit with a color-coded status of various essential systems.

Rebecca

From: Roberts, Thomas E CIV SEA 08 NR
Sent: Friday, March 18, 2011 10:57 AM
To: RST01 Hoc
Subject: Fw: GOJ deploying specialized equipment to Fukushima Reactor per NRC recommendation

(b)(6)

----- Original Message -----

From: Naples, Elmer M SES SEA 08 NR
To: Roberts, Thomas E CIV SEA 08 NR
Sent: Fri Mar 18 10:50:08 2011
Subject: FW: GOJ deploying specialized equipment to Fukushima Reactor per NRC recommendation

To: #Earthquake
Sent: Fri Mar 18 10:40:13 2011
Subject: GOJ deploying specialized equipment to Fukushima Reactor per NRC recommendation

Embassy Tokyo reports that the NRC team gave the GOJ an emergency action plan that included the use of a particular type of US-made specialized equipment and the Embassy/USFJ launched a major effort to locate and import it from the US. Turns out that the Tokyo Fire Department fortuitously already owns this specialized Bechtel-made disaster relief equipment and is now moving it to Fukushima and will attempt operations in line with the NRC proposal. I don't happen to know what the plan (or the equipment) is, but the Embassy team believes it would be very significant if the equipment can be successfully deployed.

I'll try to get more details.

Bowers, Anthony

From: Cherry, Ron [CherryRC@state.gov]
Sent: Saturday, March 19, 2011 10:10 AM
To: JapanEmbassy, TaskForce; NITOPS; CMHT; Hoc, PMT12
Cc: Duncan, Aleshia (State Dept); Duncan, Aleshia
Subject: FW: Radiation data by MEXT
Attachments: 20110319_02.pdf

Forwarding.

-----Original Message-----

From: (b)(6) mailto:(b)(6)

Sent: Saturday, March 19, 2011 5:22 PM

To: Cherry, Ronald C

Cc: Duncan, Aleshia D; Uchida, Koichi; (b)(6) cmht@nnsa.doe.gov (b)(6)

(b)(6) Robinson, Alexis M CTR DTRA; Wright, Curry D Civ DTRA; Wong,

Christopher L MAJ USA DTRA; Peeke, Richard S. MAJ USA; Davis, Latrice Y. CPT USA (b)(6)

Cherry, Ronald C (b)(6)

Subject: Radiation data by MEXT

Dear Mr. Cherry,

Please see attached the document.

Sincerely yours,

Naoaki

Naoki Akasaka

Office of International Relations, Nuclear Safety Division, Ministry of Education, Culture, Sports, Science and Technology - Japan

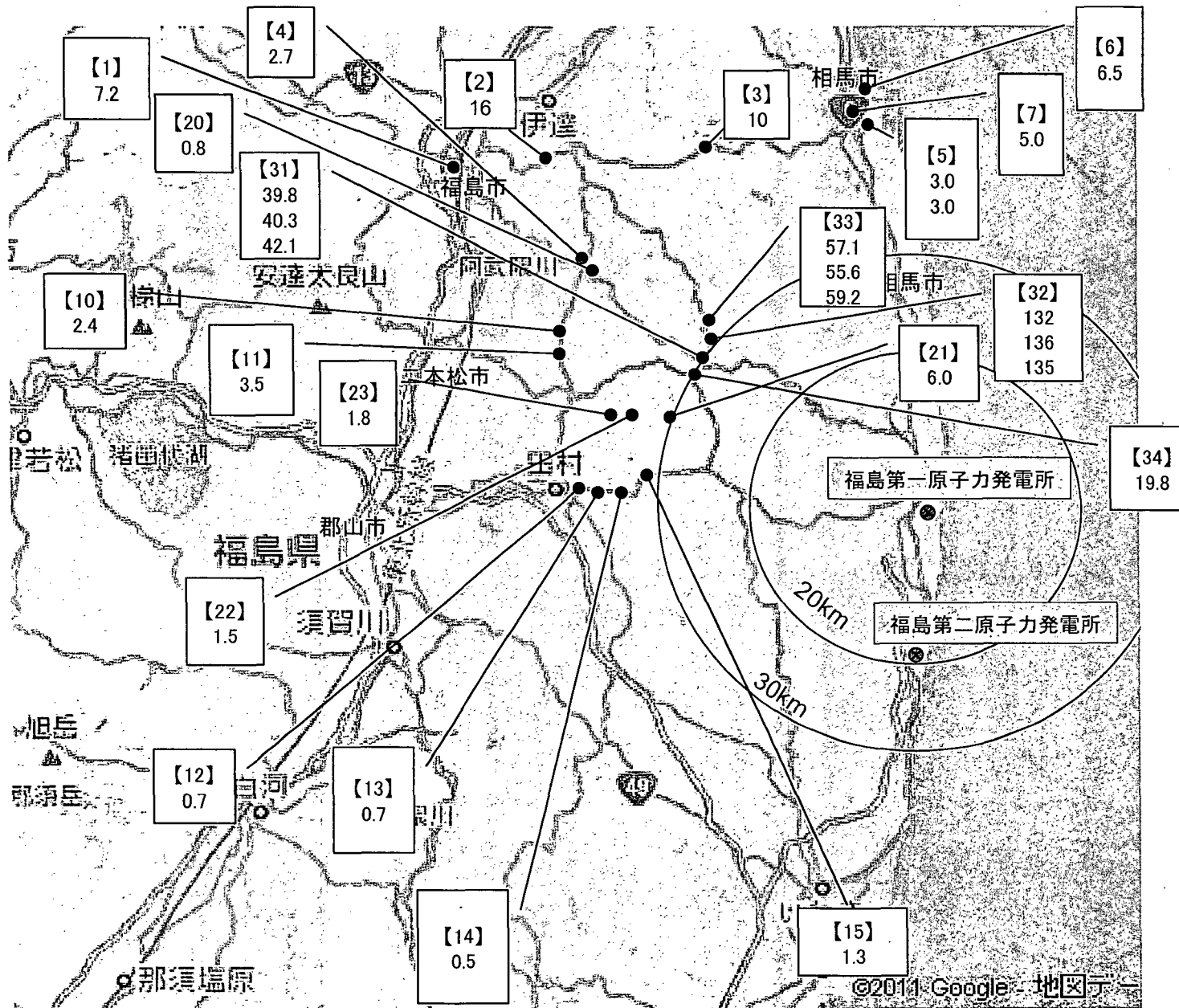
This email is UNCLASSIFIED

www-62

測定地点の番号と場所

地点 番号	福島第1から の距離と方角	場 所
1	(約60Km北西)	福島県庁前
2	(約55Km北西)	大波小学校前
3	(約45Km北西)	相馬市入り口
4	(約50Km北西)	川俣病院前
5	(約45Km北)	カワチ薬品相馬店
6	(約45Km北)	ツルハドラック店前
7	(約45Km北)	フレスコ(ドラックストア)
9	(約45Km北)	木幡郵便局前
10	(約40Km北西)	二本松東和町コミュニティバス停前(62号と349号の交差点)
11	(約40Km北西)	東和町道の駅
12	(約40Km西)	288号と349号の交差点(かっぱ寿司前)
13	(約40Km西)	西向小学校
14	(約35Km西)	常葉小学校入口駐車場
15	(約35Km西)	山根小学校
16	(約30Km西)	288号カマクラ石材
20	(約45Km北西)	Cルート分岐点(349号から入ったところ)
21	(約30Km西北西)	葛尾村と田村村の境界
22	(約35Km西北西)	JA田村移支店
23	(約35Km西北西)	水中内バス停
31	(約30Km西北西)	114号と399号交差点(399号入口)
32	(約30Km北西)	399号入口から5km地点
33	(約30Km北西)	399号入口から8km地点(飯館村長瀬十字路)
34	(約30Km北西)	399号から459号の入り口
35	(約30Km南)	399号から459号の入り口
41	(約20Km西)	福島第1から西20km地点付近
42	(約30Km西)	福島第1から西30km地点付近
43	(約20Km南西)	福島第1から南西20km地点付近
44	(約30Km南)	福島第1から南30km地点付近
45	(約20Km南)	福島第1から南20km地点付近
46	(約20Km北西)	福島第1から北西20km地点付近
51	(約40Km南西)	小野町役場
52	(約40Km西)	田村市役所
53	(約45Km南)	いわき合同庁舎
61	(約40Km北西)	石ポロ坂トンネル
62	(約40Km北西)	飯館公民館前
63	(約45Km北西)	飯館村境界

福島第一原子力発電所周辺のモニタリング結果

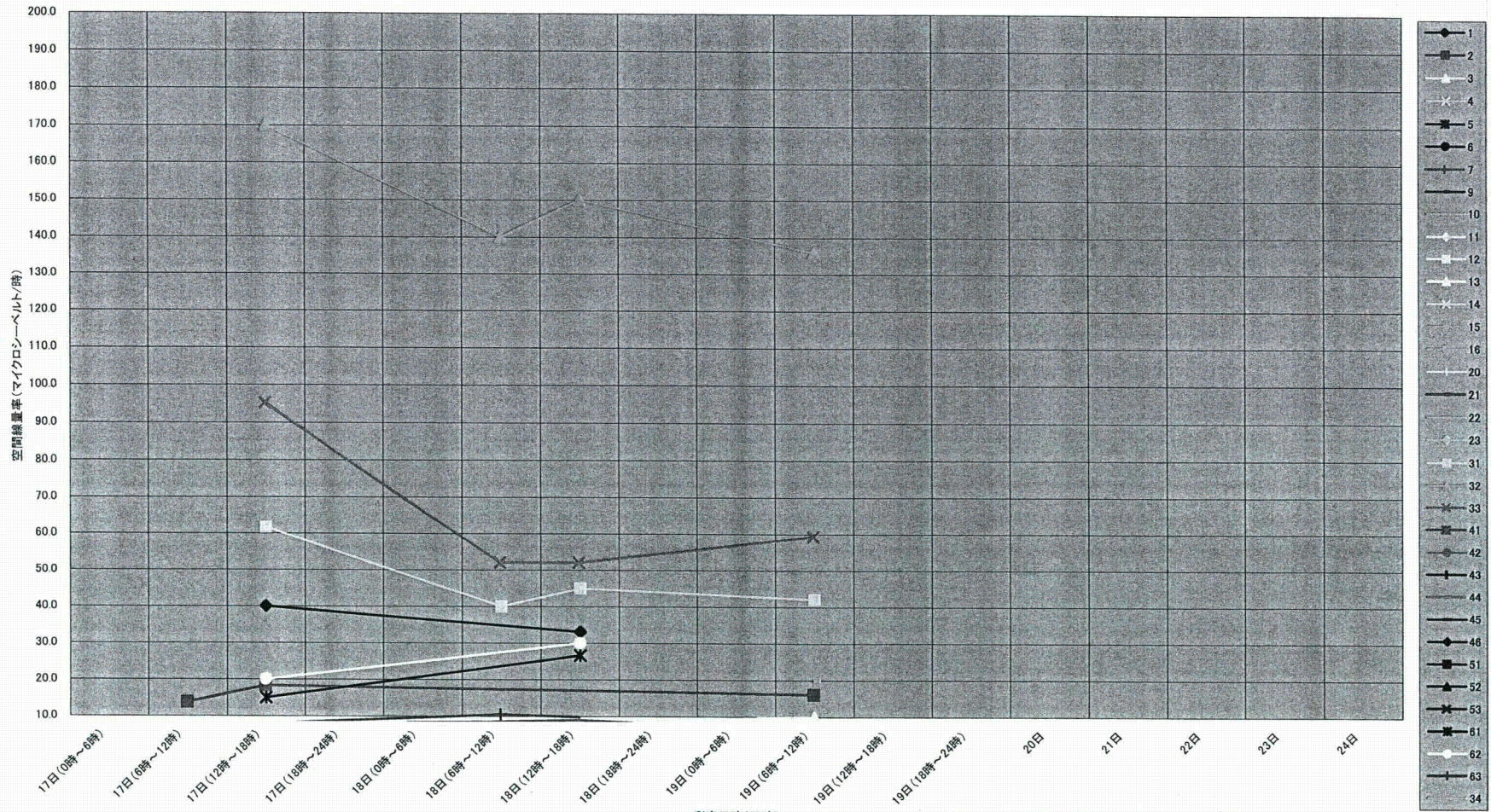


測定日時
3月19日
7時03分～12時00分

●測定箇所

単位:マイクロシーベルト毎時

福島第一原子力発電所の20Km以遠のモニタリング結果の推移



注:測定データが区分された4時間内に複数ある場合は、最大値をプロットしている。
 注:本グラフでは、10マイクロシーベルト/時以上のデータのみ表示している。

Bowers, Anthony

From: Cherry, Ron [CherryRC@state.gov]
Sent: Saturday, March 19, 2011 10:43 AM
To: JapanEmbassy, TaskForce; NITOPS; CMHT; Hoc. PMT12
Cc: Duncan, Aleshia (State Dept); Morales, Russell A (b)(6)
Subject: FW: Radiation data in prefectures by MEXT as of March 18
Attachments: MEXT Data by Mar18-1700.xlsx; ATT158578.htm

Forwarding.

Begin forwarded message:

From: "Mikako Sano" <mi-sano@nifty.com>
Date: March 19, 2011 12:05:50 PM GMT+09:00
To: <moralesRA@state.gov>, <anthony.ulsess@nrc.gov>, <cherryrc@state.gov>, <duncanad@state.gov>
Cc: "Akiko Chiba" <achiba@nsf.gov>, (b)(6), "Sano, Mikako" <SanoMX@state.gov>
Subject: Radiation data in prefectures by MEXT as of March 18

Russ,

Attached is MEXT's radiation data in prefectures as of 17:00 of March 18.

Sano

This email is UNCLASSIFIED.

From: NITOPS
To: CMHT; HOO.Hoc; NARAC; PMT01.Hoc; PMT02.Hoc
Subject: FW: Radiation Data from MEXT
Date: Saturday, March 19, 2011 12:25:09 PM
Attachments: [image001.png](#)
[FW Radiation data in prefectures by MEXT as of March 18.msg](#)
[FW Radiation data by MEXT.msg](#)
[FW Radiation data by MEXT.msg](#)

From: Hinds, Lynda J [mailto:HindsLJ@state.gov]
Sent: Saturday, March 19, 2011 12:17 PM
To: Alex Robinson; Anthony Uises; CAT 5; Cherry, Ron; CMHT; Coleman, Michael; Craig Haas; Curry Wright; DART Liaison; HOO; James Trapp; John Okon; latrice.davis@jtfcs.northcom.mil; Mears, Jeremy M; Morales, Russell A; Paul Guss; PMT 12; PMT01; PBLH PHNS RDCOM; Theodore Shaw; Uchida, Koichi

(b)(6)

(b)(6)

(b)(6)

Cc: JapanEmbassy, TaskForce
Subject: Radiation Data from MEXT

Please find attached MEXT Radiation Data.

Thank you,

Lynda Hinds
Staff Assistant to Ambassador John V. Roos
U.S. Embassy
1-10-5 Akasaka, Minato-ku
Tokyo 107-8420
Tel. (03) 3224- 5370

[Twitter.com/AmbassadorRoos](https://twitter.com/AmbassadorRoos)



This email is UNCLASSIFIED.

Bowers, Anthony

From: Cherry, Ron [CherryRC@state.gov]
Sent: Saturday, March 19, 2011 9:24 AM
To: JapanEmbassy, TaskForce; NITOPS; CMHT; Hoc, PMT12
Cc: Duncan, Aleshia (State Dept); DARTDOELiaison1; Brown, Courtney M (NST)
Subject: FW: Radiation data by MEXT
Attachments: 20110319_03.pdf; 20110319_04.pdf; 20110319_05.pdf; 20110319_06.pdf; 20110319_07.pdf

Forwarding.

This email is UNCLASSIFIED

-----Original Message-----

From: (b)(6) [mailto:(b)(6)]
Sent: Saturday, March 19, 2011 9:44 PM
To: Cherry, Ronald C
Cc: Duncan, Aleshia D; Uchida, Koichi; (b)(6) senami@mext.go.jp; cmht@nnsa.doc.gov (b)(6)
paul.guss@usfi.mil; (b)(6) Robinson, Alexis M CTR DTRA; Wright, Curry D Civ DTRA; Wong,
Christopher L MAJ USA DTRA; Peeke, Richard S MAJ USA; Davis, Latrice Y. CPT USA; (b)(6)
Cherry, Ronald C (b)(6)
Subject: Radiation data by MEXT

Dear Mr. Cherry,

Please see attached the document.

Sincerely yours,

Naoaki

Naoki Akasaka
Office of International Relations, Nuclear Safety Division, Ministry of Education, Culture, Sports, Science and Technology - Japan

茨城県におけるモニタリング状況(1/3)

文部科学省

H23.3.19 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
3月15日			
7:00	4.40	4.69	4.62
7:13		5.14	
7:18	5.00		
7:30	5.00	4.59	4.99
7:46			5.80
8:00	5.80	5.06	3.58
8:30	4.90	2.98	3.15
9:00	4.00	2.66	2.85
9:30	3.60	2.39	2.58
10:00	3.30	2.17	2.32
11:00	2.80	1.95	2.14
12:00	2.60	1.67	2.03
12:30	2.60		1.85
13:00	2.40	1.54	1.69
13:30	2.30	1.48	1.63
14:00	2.20	1.43	1.56
14:30	2.10	1.34	1.50
15:00	2.10	1.29	1.51
15:30	2.00	1.25	1.47
16:00	2.00	1.21	1.41
16:30	1.90	1.17	1.36
17:00	1.90	1.15	1.34
17:30	1.80		1.24
18:00	1.80	1.09	1.42
18:30	1.80	1.07	1.29
19:00	1.80	1.05	1.24
19:30	1.80	1.03	1.26
20:00	1.70	1.02	1.33
20:30	1.70		1.22
21:00	1.70	1.00	1.24
21:30		0.98	1.20
22:00	1.70		1.11
22:30	1.70	0.98	1.06
23:00	1.70	0.97	1.22
23:30		0.96	1.20
3月16日			
0:00	1.60	0.96	1.11
0:30		0.95	1.09
1:00	1.60	0.94	1.11
1:30	1.60	0.94	1.08
2:00	1.60	0.95	1.14
2:30	1.60	0.95	1.11
3:00	1.70	0.96	1.12
3:30	1.80	0.95	1.20
4:00	1.70	0.95	1.22
4:30	1.70	0.98	1.30
5:00	2.10	1.57	1.80
5:30	2.50	2.00	2.35
6:00	2.90	2.34	2.71
6:30	2.70	2.13	2.40
7:00	2.50	1.86	2.12
7:30	2.40	1.80	1.99
8:00	2.30	1.71	2.00
8:30	2.30	1.65	1.85
9:00	2.20	1.58	1.85
9:30	2.10	1.53	1.72
10:00	2.10		1.67
10:30			1.63
11:00			1.59
11:30			1.55
12:00	1.90	1.32	1.54
12:30	1.90	1.23	1.42
13:00	1.80		1.41
13:30	1.90	1.19	1.43
14:00	1.80	1.16	1.39
14:30	1.80	1.14	1.37
15:00	1.70	1.12	1.36
15:30	1.70	1.11	1.30
16:00	1.60	1.10	1.36
16:30	1.60		1.35
17:00	1.60	1.07	1.39
17:30	1.60	1.07	1.28
18:00	1.60	1.06	1.30
18:30	1.60	1.06	1.34
19:00	1.60	1.05	1.33

茨城県におけるモニタリング状況(2/3)

文部科学省

H23.3.19 19:00

#Sv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
19:30	1.60	1.04	1.37
20:00	1.60	1.04	1.39
20:30	1.60	1.04	1.24
21:00	1.50		1.27
21:30	1.50	1.04	1.25
22:00	1.50	1.03	1.30
22:30	1.50	1.03	1.33
23:00	1.50	1.02	1.34
23:30	1.50	1.02	1.28
3月17日			
0:00	1.50	1.02	1.22
0:30	1.50	1.01	1.22
1:00	1.50	1.02	1.28
1:30	1.50	1.01	1.19
2:00	1.50	1.01	1.22
2:30	1.50	1.01	1.23
3:00	1.50	1.01	1.18
3:30	1.50	1.01	1.23
4:00	1.50	1.00	1.31
4:30	1.50	1.00	1.23
5:00	1.50	0.99	1.31
5:30	1.50	0.99	1.25
6:00	1.50	0.99	1.13
6:30	1.50	0.99	1.23
7:00	1.50	0.98	1.24
7:30	1.50	0.99	1.13
8:00	1.50	0.98	1.17
8:30	1.50	0.97	1.15
9:00	1.40	0.96	1.20
9:30	1.40	0.96	1.14
10:00	1.40	0.96	1.15
10:30	1.40	0.95	1.15
11:00	1.40	0.94	1.13
11:30	1.40	0.93	1.17
12:00	1.40	0.94	1.22
12:30	1.40	0.94	1.15
13:00	1.40	0.93	1.13
13:30	1.40	0.92	1.12
14:00	1.40	0.92	1.12
14:30	1.40	0.92	1.12
15:00	1.40	0.92	1.12
15:30	1.40	0.91	1.15
16:00	1.40	0.90	1.09
16:30	1.40	0.90	1.03
17:00	1.40	0.89	1.05
17:30	1.30	0.89	1.08
18:00	1.30	0.88	1.16
18:30	1.30	0.88	1.16
19:00	1.30	0.88	1.10
19:30	1.30	0.88	1.07
20:00	1.30	0.88	1.10
20:30	1.30	0.87	1.10
21:00	1.30	1.10	1.10
21:30	1.30	1.10	1.10
22:00	1.30	1.08	1.08
22:30	1.30	1.09	1.09
23:00	1.30	1.09	1.09
23:30	1.30	1.10	1.10
3月18日			
0:00	1.30	0.86	1.09
0:30	1.30	0.85	1.10
1:00	1.30	0.85	1.08
1:30	1.30	0.85	1.06
2:00	1.30	0.85	1.05
2:30	1.30	0.85	1.10
3:00	1.30	0.85	1.09
3:30	1.30	0.85	1.07
4:00	1.30	0.85	1.05
4:30	1.30	0.84	1.08
5:00	1.30	0.84	1.08
5:30	1.30	0.83	1.06
6:00	1.30	0.83	1.07
6:30	1.30	0.83	1.05
7:00	1.30	0.83	1.06
7:30	1.30	0.83	1.04
8:00	1.30	0.83	1.03

茨城県におけるモニタリング状況(3/3)

文部科学省

H23.3.19 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
8:30	1.30	0.82	1.00
9:00	1.20	0.82	1.03
9:30	1.20	0.82	0.97
10:00	1.20	0.82	1.07
10:30	1.20	0.81	1.03
11:00	1.20	0.80	1.00
11:30	1.20	0.80	1.00
12:00	1.20	0.80	0.99
12:30	1.20	0.80	0.99
13:00	1.20	0.79	1.03
13:30	1.20	0.79	1.00
14:00	1.20	0.79	0.99
14:30	1.20	0.78	1.06
15:00	1.20	0.78	1.04
15:30	1.20	0.78	0.98
16:00	1.20	0.77	0.96
16:30	1.20	0.77	0.96
17:00	1.20	0.77	0.97
17:30	1.20	0.77	0.96
18:00	1.20	0.76	0.95
18:30	1.20	0.76	0.94
19:00	1.20	0.76	0.94
19:30	1.20	0.76	0.96
20:00	1.10	0.76	0.97
20:30	1.20	0.76	0.97
21:00	1.10	0.76	0.94
21:30	1.10	0.76	0.95
22:00	1.10	0.76	0.95
22:30	1.10	0.76	0.99
23:00	1.10	0.75	0.95
23:30	1.10	0.76	0.95
3月19日			
0:00	1.10	0.75	0.93
0:30	1.10	0.75	0.96
1:00	1.10	0.75	0.94
1:30	1.10	0.75	0.94
2:00	1.10	0.75	0.95
2:30	1.10	0.74	0.95
3:00	1.10	0.74	0.91
3:30	1.10	0.74	0.90
4:00	1.10	0.74	0.87
4:30	1.10	0.74	0.97
5:00	1.10	0.74	0.91
5:30	1.10	0.74	0.94
6:00	1.10	0.73	0.95
6:30	1.10	0.73	0.95
7:00	1.10	0.73	0.91
7:30	1.10	0.73	0.97
8:00	1.10	0.73	0.90
8:30	1.10	0.72	0.93
9:00	1.10	0.72	0.86
9:30	1.10	0.72	0.88
10:00	1.10	0.71	0.91
10:30	1.10	0.71	0.89
11:00	1.10	0.71	0.82
11:30	1.10	0.70	0.86
12:00	1.10	0.70	0.89
12:30	1.00	0.70	0.86
13:00	1.00	0.70	0.89
13:30	1.00	0.69	0.86
14:00	1.00	0.69	0.82
14:30	1.00	0.69	0.88
15:00	1.00	0.69	0.85
15:30	1.00	0.69	0.85
16:00	1.00	0.68	0.86
16:30	1.00	0.68	0.85
17:00	1.00	0.68	0.87
17:30	1.00	0.67	0.88
18:00	0.99	0.67	0.87

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【15】 (約35Km西)	3月19日11時46分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【15】 (約35Km西)	3月19日12時46分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【15】 (約35Km西)	3月19日13時46分	1.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【20】 (約45Km北西)	3月19日10時50分	0.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【20】 (約45Km北西)	3月19日14時34分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日11時12分	6.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日12時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日13時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【22】 (約35Km西北西)	3月19日11時30分	1.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【22】 (約35Km西北西)	3月19日12時30分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【22】 (約35Km西北西)	3月19日13時30分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日11時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日12時44分	2.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日13時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター

- *1 GM(ガイガー=ミュラー計測管)における値
- *2 電離箱における値
- *3 NaI(ヨウ化ナトリウム)シンチレータにおける値

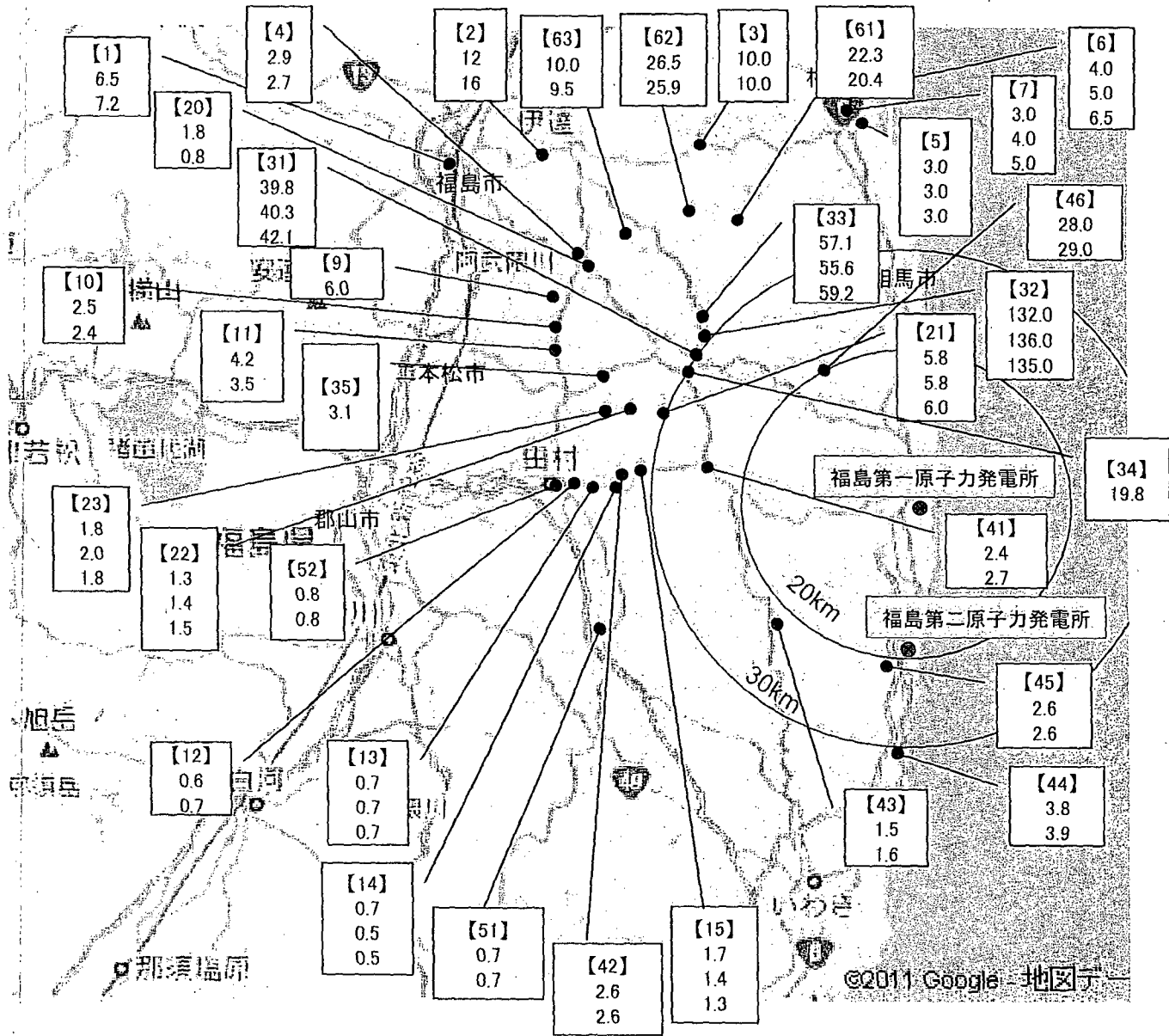
場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【31】(約30Km西北西)	3月19日9時09分	42.1 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日10時09分	40.3 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日11時09分	39.8 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日9時20分	135.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日10時20分	136.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日11時20分	132.0 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日9時35分	59.2 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日10時35分	55.6 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日11時35分	57.1 ^{*2}	降雨無し	文部科学省
測定箇所【34】(約30Km北西)	3月19日11時56分	19.8 ^{*2}	降雨無し	文部科学省
測定箇所【35】(約30Km南)	3月19日12時13分	3.1 ^{*2}	降雨無し	文部科学省
測定箇所【41】(約20Km西)	3月19日11時15分	2.7 ^{*2}	降雨無し	関西電力
測定箇所【41】(約20Km西)	3月19日15時23分	2.4 ^{*2}	降雨無し	関西電力
測定箇所【42】(約30Km西)	3月19日11時18分	2.6 ^{*2}	降雨無し	関西電力
測定箇所【42】(約30Km西)	3月19日15時20分	2.6 ^{*2}	降雨無し	関西電力
測定箇所【43】(約20Km南西)	3月19日11時00分	1.6 ^{*2}	降雨無し	日本原燃

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【43】(約20Km南西)	3月19日15時00分	1.5 ^{*2}	降雨無し	日本原燃
測定箇所【44】(約30Km南)	3月19日11時22分	3.9 ^{*2}	降雨無し	四国電力
測定箇所【44】(約30Km南)	3月19日15時27分	3.8 ^{*2}	降雨無し	四国電力
測定箇所【45】(約20Km南)	3月19日11時15分	2.6 ^{*2}	降雨無し	九州電力
測定箇所【45】(約20Km南)	3月19日15時00分	2.6 ^{*2}	降雨無し	九州電力
測定箇所【46】(約20Km北西)	3月19日11時40分	29.0 ^{*2}	降雨無し	中部電力
測定箇所【46】(約20Km北西)	3月19日15時00分	28.0 ^{*2}	降雨無し	中部電力
測定箇所【51】(約40Km南西)	3月19日12時09分	0.7 ^{*3}	降雨無し	福島県
測定箇所【51】(約40Km南西)	3月19日14時09分	0.7 ^{*3}	降雨無し	福島県
測定箇所【52】(約40Km西)	3月19日11時29分	0.8 ^{*3}	降雨無し	福島県
測定箇所【52】(約40Km西)	3月19日14時45分	0.8 ^{*3}	降雨無し	福島県
測定箇所【61】(約40Km北西)	3月19日12時13分	20.4 ^{*3}	降雨無し	福島県
測定箇所【61】(約40Km北西)	3月19日14時00分	22.3 ^{*3}	降雨無し	福島県
測定箇所【62】(約40Km北西)	3月19日11時59分	25.9 ^{*3}	降雨無し	福島県
測定箇所【62】(約40Km北西)	3月19日14時10分	26.5 ^{*3}	降雨無し	福島県
測定箇所【63】(約45Km北西)	3月19日11時23分	9.5 ^{*3}	降雨無し	福島県
測定箇所【63】(約45Km北西)	3月19日14時30分	10.0 ^{*3}	降雨無し	福島県

2. 防衛省の測定については準備中

福島第一原子力発電所周辺のモニタリング結果



測定日時
3月19日
7時03分～18時00分

●測定箇所

単位:マイクロシーベルト毎時

環境放射能水準調査結果
(3月18日採取)

H23.3.19 19:00

(Bq/kg)

	都道府県名	上水(蛇口)	
		I-131	Cs-137
1	北海道(札幌市)	不検出	不検出
2	青森県(青森市)	不検出	不検出
3	岩手県(盛岡市)	不検出	不検出
4	宮城県	-	-
5	秋田県(秋田市)	不検出	不検出
6	山形県(山形市)	不検出	不検出
7	福島県	-	-
8	茨城県	-	-
9	栃木県(宇都宮市)	77	1.6
10	群馬県(前橋市)	2.5	0.22
11	埼玉県(さいたま市)	0.62	不検出
12	千葉県(市原市)	0.79	不検出
13	東京都(新宿区)	1.5	不検出
14	神奈川県(茅ヶ崎市)	不検出	不検出
15	新潟県(新潟市)	0.27	不検出
16	富山県(射水市)	不検出	不検出
17	石川県(金沢市)	不検出	不検出
18	福井県(福井市)	不検出	不検出
19	山梨県(甲府市)	不検出	不検出
20	長野県(長野市)	不検出	不検出
21	岐阜県(各務原市)	不検出	不検出
22	静岡県(静岡市)	不検出	不検出
23	愛知県(名古屋市)	不検出	不検出
24	三重県(四日市市)	不検出	不検出
25	滋賀県(大津市)	不検出	不検出
26	京都府(京都市)	不検出	不検出
27	大阪府(大阪市)	不検出	不検出
28	兵庫県(神戸市)	不検出	不検出
29	奈良県	未到達	未到達
30	和歌山県(和歌山市)	不検出	不検出
31	鳥取県(東伯郡)	不検出	不検出
32	島根県(松江市)	不検出	不検出
33	岡山県(岡山市)	不検出	不検出
34	広島県(広島市)	不検出	不検出
35	山口県(宇部市)	不検出	不検出
36	徳島県(徳島市)	不検出	不検出
37	香川県(高松市)	不検出	不検出
38	愛媛県(八幡浜市)	不検出	不検出
39	高知県(高知市)	不検出	不検出
40	福岡県(太宰府市)	不検出	不検出
41	佐賀県(佐賀市)	不検出	不検出
42	長崎県(大村市)	不検出	不検出
43	熊本県(宇土市)	不検出	不検出
44	大分県(大分市)	不検出	不検出
45	宮崎県(宮崎市)	不検出	不検出
46	鹿児島県(鹿児島市)	不検出	不検出
47	沖縄県(那覇市)	不検出	不検出

*宮城県は震災被害によって計測不能、福島県については県が独自に調査・公表している。茨城県については、断水のため水の採取ができない。

*空欄は機器点検等のための欠測等

*本データは、1Bq/Lを1Bq/kgとみなす

*文部科学省が各都道府県等からの報告に基づき作成

*「原子力施設等の防災対策について(原子力安全委員会)」飲食物の摂取制限に関する指標に基づく飲料水の基準 放射性ヨウ素-131:300Bq/kg以上、放射性セシウム:200Bq/kg以上

福島第一原子力発電所の20Km以遠のモニタリング結果について

平成23年3月19日16時00分現在
文 部 科 学 省

1. 文部科学省が集計した結果 注)太下線データが今回追加分

- * 1 GM(ガイガー=ミュラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【1】 (約60Km北西)	3月19日7時03分	7.2 ^{*2}	降雨無し	文部科学省
測定箇所 【2】 (約55Km北西)	3月19日9時51分	16.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【2】 (約55Km北西)	3月19日15時00分	<u>12.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	3月19日10時18分	10.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	3月19日14時31分	<u>10.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【4】 (約50Km北西)	3月19日9時52分	2.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【5】 (約45Km北)	3月19日10時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	3月19日11時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	3月19日12時50分	<u>3.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日11時10分	6.5 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日12時10分	<u>5.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日13時10分	<u>4.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	3月19日11時16分	5.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	3月19日12時16分	<u>4.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	3月19日13時16分	<u>3.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【10】 (約40Km北西)	3月19日10時07分	2.4 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミュラー計測管)における値
 * 2 電離箱における値
 * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【11】(約40Km北西)	3月19日10時25分	3.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【11】(約40Km北西)	3月19日14時55分	4.2 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【12】(約40Km西)	3月19日11時04分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】(約40Km西)	3月19日11時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】(約40Km西)	3月19日12時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】(約40Km西)	3月19日13時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】(約35Km西)	3月19日11時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】(約35Km西)	3月19日12時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】(約35Km西)	3月19日13時30分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】(約35Km西)	3月19日11時46分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】(約35Km西)	3月19日12時46分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】(約35Km西)	3月19日13時46分	1.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【20】(約45Km北西)	3月19日10時50分	0.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【20】(約45Km北西)	3月19日14時34分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日11時12分	6.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日12時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日13時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日11時30分	1.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日12時30分	1.4 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミュラー計測管)における値
 * 2 電離箱における値
 * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【22】(約35Km西北西)	3月19日13時30分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日11時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日12時44分	2.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日13時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【31】(約30Km西北西)	3月19日9時09分	42.1 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日10時09分	40.3 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日11時09分	39.8 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日9時20分	135.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日10時20分	136.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日11時20分	132.0 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日9時35分	59.2 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日10時35分	55.6 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日11時35分	57.1 ^{*2}	降雨無し	文部科学省
測定箇所【34】(約30Km北西)	3月19日11時56分	19.8 ^{*2}	降雨無し	文部科学省
測定箇所【35】(約30Km南)	3月19日12時13分	3.1 ^{*2}	降雨無し	文部科学省
測定箇所【41】(約20Km西)	3月19日11時15分	2.7 ^{*2}	降雨無し	関西電力
測定箇所【42】(約30Km西)	3月19日11時18分	2.6 ^{*2}	降雨無し	関西電力
測定箇所【43】(約20Km南西)	3月19日11時00分	1.6 ^{*2}	降雨無し	日本原燃
測定箇所【44】(約30Km南)	3月19日11時22分	3.9 ^{*2}	降雨無し	四国電力

* 1 GM(ガイガー=ミューラー計測管)における値

* 2 電離箱における値

* 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

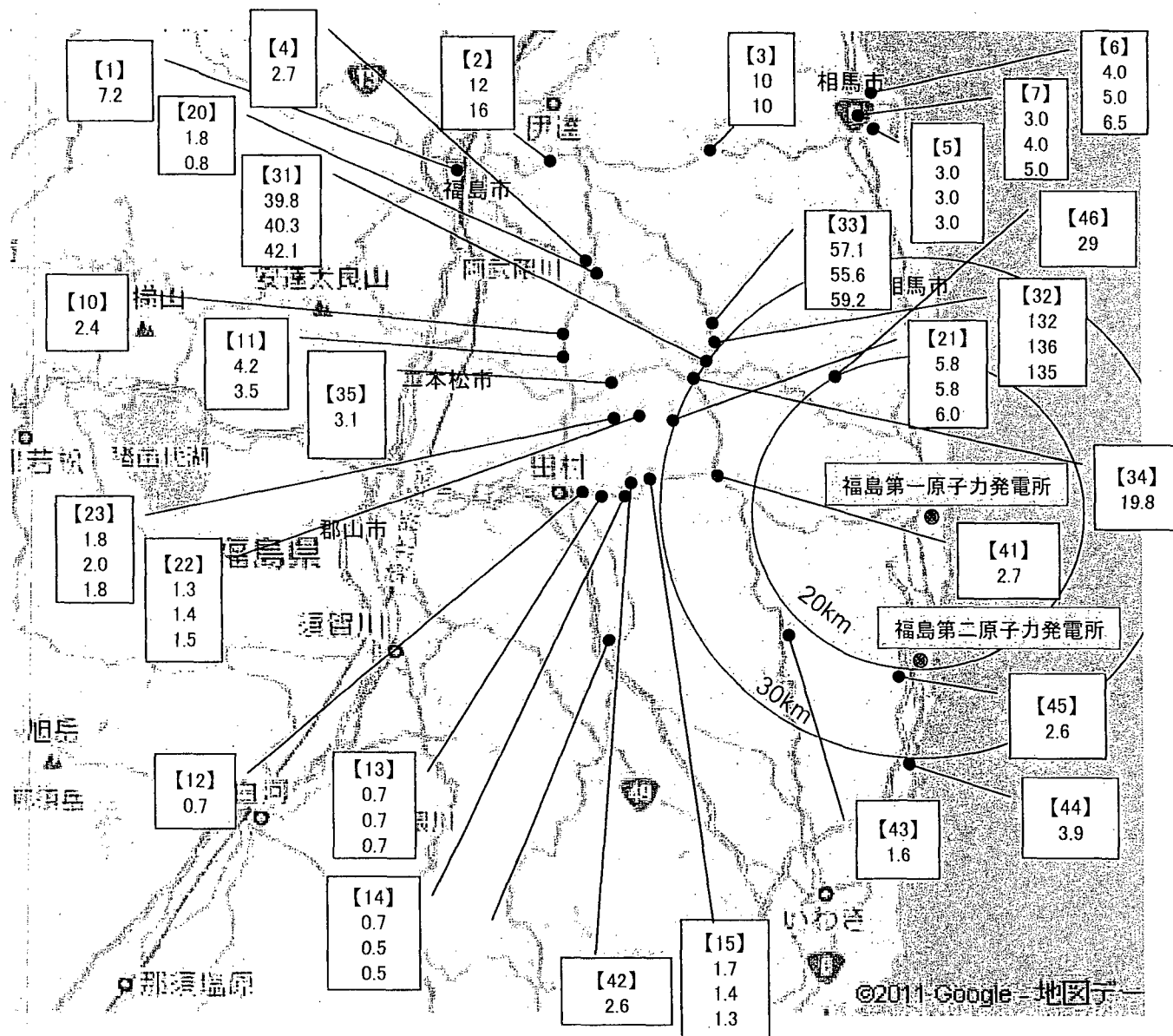
場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【45】 (約20Km南)	3月19日11時15分	2.6 *2	降雨無し	九州電力
測定箇所【46】 (約20Km北西)	3月19日11時40分	29.0 *2	降雨無し	中部電力

2. 防衛省の測定については準備中

福島第一原子力発電所周辺のモニタリング結果

測定日時
 3月19日
 7時03分～15時00分

●測定箇所



単位:マイクロシーベルト毎時

プレス発表資料

福島第一原子力発電所の20Km以遠のモニタリング結果について

平成23年3月19日13時00分現在
文 部 科 学 省

1. 文部科学省が集計した結果

- * 1 GM(ガイガー=ミュラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【1】 (約60Km北西)	3月19日7時03分	7.2 ^{*2}	降雨無し	文部科学省
測定箇所【2】 (約55Km北西)	3月19日9時51分	16.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【3】 (約45Km北西)	3月19日10時18分	10.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【4】 (約50Km北西)	3月19日9時52分	2.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【5】 (約45Km北)	3月19日10時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【5】 (約45Km北)	3月19日11時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【6】 (約45Km北)	3月19日11時10分	6.5 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【7】 (約45Km北)	3月19日11時16分	5.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【10】 (約40Km北西)	3月19日10時07分	2.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【11】 (約40Km北西)	3月19日10時25分	3.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【12】 (約40Km西)	3月19日11時04分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】 (約40Km西)	3月19日11時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】 (約35Km西)	3月19日11時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】 (約35Km西)	3月19日11時46分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【20】 (約45Km北西)	3月19日10時50分	0.8 ^{*2}	降雨無し	原子力安全技術センター

* 1 GM(ガイガー=ミュラー計測管)における値
 * 2 電離箱における値
 * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

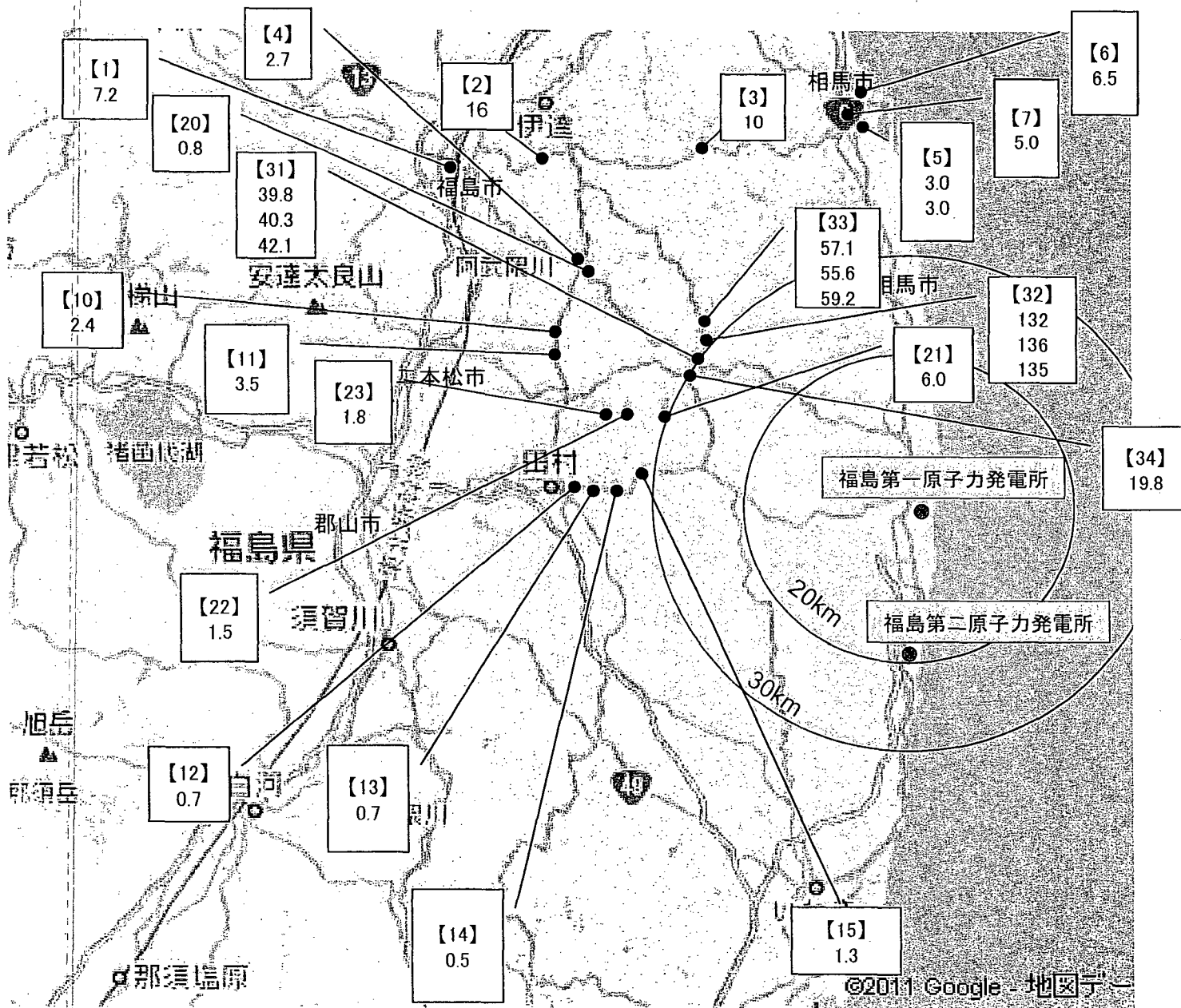
場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【21】(約30Km西北西)	3月19日11時12分	6.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日11時30分	1.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日11時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【31】(約30Km西北西)	3月19日9時09分	42.1 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日10時09分	40.3 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日11時09分	39.8 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日9時20分	135.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日10時20分	136.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日11時20分	132.0 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日9時35分	59.2 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日10時35分	55.6 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日11時35分	57.1 ^{*2}	降雨無し	文部科学省
測定箇所【34】(約30Km北西)	3月19日11時56分	19.8 ^{*2}	降雨無し	文部科学省

2. 防衛省の測定については準備中

測定地点の番号と場所

地点 番号	福島第1から の距離と方角	場 所
1	(約60Km北西)	福島県庁前
2	(約55Km北西)	大波小学校前
3	(約45Km北西)	相馬市入り口
4	(約50Km北西)	川俣病院前
5	(約45Km北)	カワチ薬品相馬店
6	(約45Km北)	ツルハドラック店前
7	(約45Km北)	フレスコ(ドラックストア)
9	(約45Km北)	木幡郵便局前
10	(約40Km北西)	二本松東和町コミュニティバス停前(62号と349号の交差点)
11	(約40Km北西)	東和町道の駅
12	(約40Km西)	288号と349号の交差点(かつば寿司前)
13	(約40Km西)	西向小学校
14	(約35Km西)	常葉小学校入口駐車場
15	(約35Km西)	山根小学校
16	(約30Km西)	288号カマクラ石材
20	(約45Km北西)	Cルート分岐点(349号から入ったところ)
21	(約30Km西北西)	葛尾村と田村村の境界
22	(約35Km西北西)	JA田村移支店
23	(約35Km西北西)	水中内バス停
31	(約30Km西北西)	114号と399号交差点(399号入口)
32	(約30Km北西)	399号入口から5km地点
33	(約30Km北西)	399号入口から8km地点(飯舘村長滞十字路)
34	(約30Km北西)	399号から459号の入り口
35	(約30Km南)	399号から459号の入り口
41	(約20Km西)	福島第1から西20km地点付近
42	(約30Km西)	福島第1から西30km地点付近
43	(約20Km南西)	福島第1から南西20km地点付近
44	(約30Km南)	福島第1から南30km地点付近
45	(約20Km南)	福島第1から南20km地点付近
46	(約20Km北西)	福島第1から北西20km地点付近
51	(約40Km南西)	小野町役場
52	(約40Km西)	田村市役所
53	(約45Km南)	いわき合同庁舎
61	(約40Km北西)	石ポロ坂トンネル
62	(約40Km北西)	飯舘公民館前
63	(約45Km北西)	飯舘村境界

福島第一原子力発電所周辺のモニタリング結果

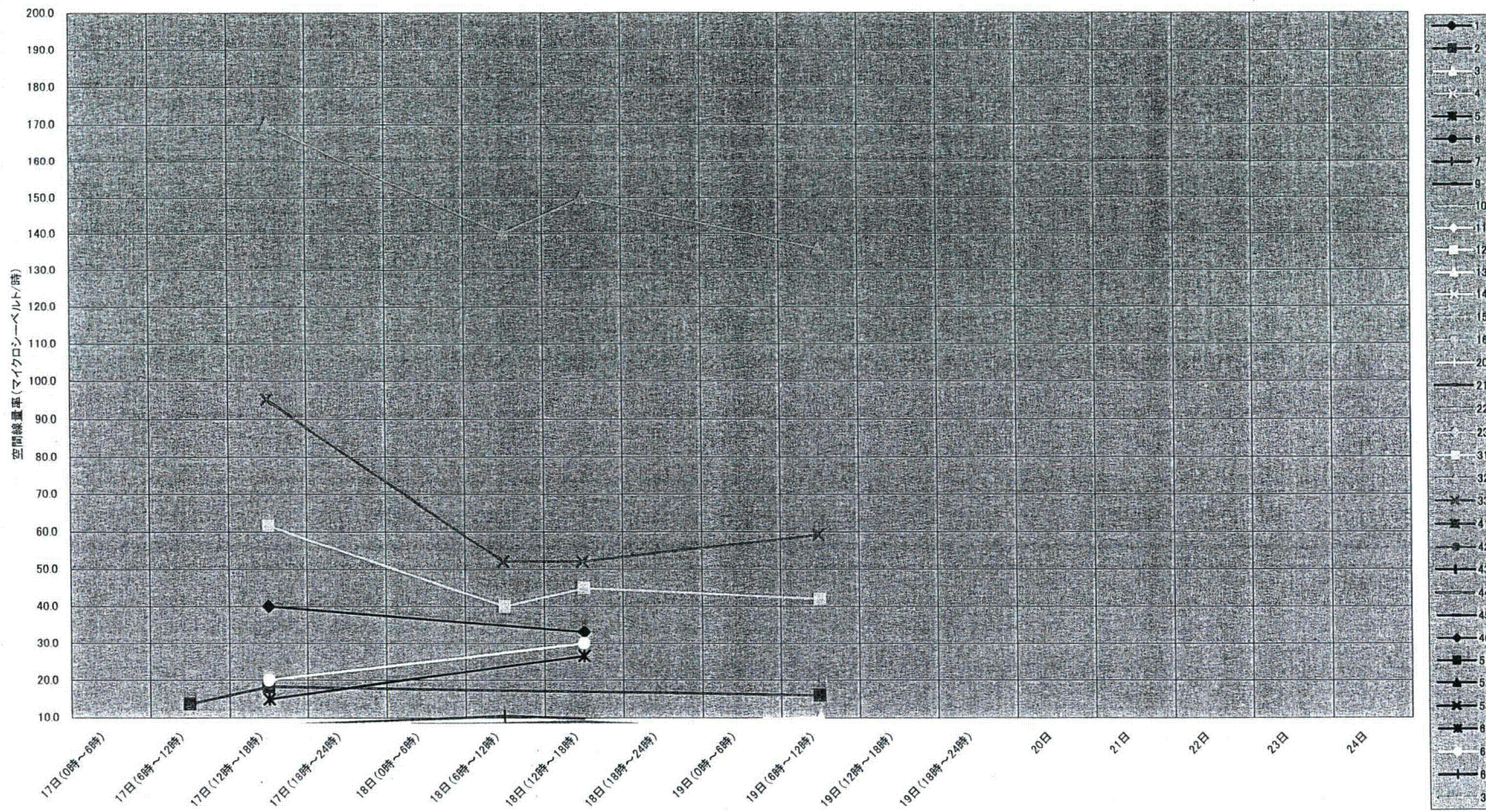


測定日時
 3月19日
 7時03分～12時00分

●測定箇所

単位: マイクロシーベルト毎時

福島第一原子力発電所の20Km以遠のモニタリング結果の推移



環境放射能水準調査結果

H23.3.19 19:00

(μ Sv/h(マイクロシーベルト毎時))

都道府県名	3月19日										過去の平常値の範囲	
	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17		
1 北海道(札幌市)	0.028	0.027	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.02~0.105
2 青森県(青森市)	0.020	0.019	0.020	0.020	0.021	0.023	0.024	0.021	0.021	0.020	0.020	0.017~0.102
3 岩手県(盛岡市)	0.028	0.028	0.027	0.027	0.027	0.028	0.031	0.031	0.029	0.029	0.029	0.014~0.084
4 宮城県(仙台市)												0.0176~0.0513
5 秋田県(秋田市)	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.022~0.086
6 山形県(山形市)	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.044	0.045	0.042	0.042	0.025~0.082
7 福島県(双葉郡)												0.037~0.071
8 茨城県(水戸市)	0.178	0.177	0.176	0.174	0.173	0.172	0.171	0.171	0.171	0.170	0.170	0.036~0.056
9 栃木県(宇都宮市)	0.156	0.155	0.154	0.153	0.152	0.151	0.150	0.149	0.148	0.148	0.148	0.030~0.067
10 群馬県(前橋市)	0.083	0.081	0.080	0.079	0.078	0.077	0.077	0.077	0.076	0.076	0.076	0.017~0.045
11 埼玉県(さいたま市)	0.057	0.057	0.057	0.056	0.056	0.055	0.055	0.055	0.055	0.055	0.055	0.031~0.060
12 千葉県(市原市)	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.032	0.032	0.022~0.044
13 東京都(新宿区)	0.048	0.047	0.048	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.028~0.079
14 神奈川県(茅ヶ崎市)	0.049	0.049	0.049	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.035~0.069
15 新潟県(新潟市)	0.047	0.047	0.047	0.047	0.046	0.047	0.046	0.046	0.046	0.046	0.047	0.031~0.153
16 富山県(射水市)	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.029~0.147
17 石川県(金沢市)	0.046	0.047	0.046	0.046	0.046	0.046	0.046	0.047	0.047	0.046	0.046	0.0291~0.1275
18 福井県(福井市)	0.046	0.045	0.045	0.045	0.045	0.044	0.045	0.044	0.044	0.044	0.045	0.032~0.097
19 山梨県(甲府市)	0.045	0.045	0.044	0.044	0.044	0.044	0.044	0.043	0.044	0.044	0.044	0.040~0.064
20 長野県(長野市)	0.071	0.070	0.069	0.069	0.068	0.067	0.067	0.066	0.066	0.066	0.066	0.0299~0.0974
21 岐阜県(各務原市)	0.063	0.062	0.062	0.060	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.057~0.110
22 静岡県(静岡市)	0.037	0.037	0.037	0.038	0.039	0.040	0.040	0.040	0.039	0.038	0.038	0.0281~0.0765
23 愛知県(名古屋)	0.042	0.042	0.041	0.040	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.035~0.074
24 三重県(四日市市)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.0416~0.0789
25 滋賀県(大津市)	0.037	0.036	0.034	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.031~0.061
26 京都府(京都市)	0.040	0.040	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.038	0.038	0.033~0.087
27 大阪府(大阪市)	0.043	0.044	0.043	0.043	0.042	0.043	0.042	0.042	0.042	0.042	0.042	0.042~0.061
28 兵庫県(神戸市)	0.038	0.038	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035~0.076
29 奈良県(奈良市)	0.048	0.048	0.048	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.046~0.08
30 和歌山県(和歌山市)	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031~0.056
31 鳥取県(東伯郡)	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.062	0.063	0.063	0.036~0.11
32 島根県(松江市)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.033~0.079
33 岡山県(岡山市)	0.050	0.051	0.049	0.049	0.049	0.048	0.048	0.048	0.048	0.048	0.048	0.043~0.104
34 広島県(広島市)	0.050	0.050	0.050	0.048	0.048	0.047	0.046	0.046	0.046	0.046	0.046	0.035~0.069
35 山口県(山口市)	0.096	0.096	0.094	0.093	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.084~0.128
36 徳島県(徳島市)	0.039	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037~0.067
37 香川県(高松市)	0.055	0.053	0.053	0.053	0.052	0.052	0.052	0.051	0.052	0.051	0.051	0.051~0.077
38 愛媛県(松山市)	0.048	0.048	0.047	0.047	0.046	0.046	0.046	0.047	0.047	0.047	0.047	0.045~0.074
39 高知県(高知市)	0.027	0.027	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.023~0.076
40 福岡県(太宰府市)	0.037	0.037	0.037	0.036	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.034~0.079
41 佐賀県(佐賀市)	0.041	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.039	0.039	0.037~0.086
42 長崎県(大村市)	0.029	0.030	0.029	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.027~0.069
43 熊本県(宇土市)	0.028	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.027	0.027	0.021~0.067
44 大分県(大分市)	0.050	0.051	0.050	0.050	0.050	0.050	0.050	0.049	0.049	0.050	0.050	0.048~0.085
45 宮崎県(宮崎市)	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.0243~0.0664
46 鹿児島県(鹿児島市)	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.0306~0.0943
47 沖縄県(うるま市)	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.020	0.020	0.020	0.0133~0.0575

*宮城県では、測定実施場所が倒壊の危険性があるため測定不能。宮城県内のモニタリング結果は、宮城県原子力安全対策室HPで公開

*福島県では、モニタリングポスト周辺の空間線量が高いことから測定が困難であるが、その分のデータはモニタリングカーを用いて測定。
別資料の「福島第一原子力発電所の20km以遠のモニタリング結果について(3月19日19:00現在)」参照。

*空欄は機器点検等のための欠測等

*本データは、1 μ Gy/h(マイクログレイ毎時)=1 μ Sv/h(マイクロシーベルト毎時)と換算して算出

*文部科学省が各都道府県等からの報告に基づき作成

茨城県におけるモニタリング状況(1/3)

文部科学省

H23.3.19 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
3月15日			
7:00	4.40	4.69	4.62
7:13		5.14	
7:18	5.00		
7:30	5.00	4.59	4.99
7:46			5.80
8:00	5.80	5.06	3.58
8:30	4.90	2.98	3.15
9:00	4.00	2.66	2.85
9:30	3.60	2.39	2.58
10:00	3.30	2.17	2.32
11:00	2.80	1.95	2.14
12:00	2.60	1.67	2.03
12:30	2.60		1.85
13:00	2.40	1.54	1.69
13:30	2.30	1.48	1.63
14:00	2.20	1.43	1.56
14:30	2.10	1.34	1.50
15:00	2.10	1.29	1.51
15:30	2.00	1.25	1.47
16:00	2.00	1.21	1.41
16:30	1.90	1.17	1.36
17:00	1.90	1.15	1.34
17:30	1.80		1.24
18:00	1.80	1.09	1.42
18:30	1.80	1.07	1.29
19:00	1.80	1.05	1.24
19:30	1.80	1.03	1.26
20:00	1.70	1.02	1.33
20:30	1.70		1.22
21:00	1.70	1.00	1.24
21:30		0.98	1.20
22:00	1.70		1.11
22:30	1.70	0.98	1.06
23:00	1.70	0.97	1.22
23:30		0.96	1.20
3月16日			
0:00	1.60	0.96	1.11
0:30		0.95	1.09
1:00	1.60	0.94	1.11
1:30	1.60	0.94	1.08
2:00	1.60	0.95	1.14
2:30	1.60	0.95	1.11
3:00	1.70	0.96	1.12
3:30	1.80	0.95	1.20
4:00	1.70	0.95	1.22
4:30	1.70	0.98	1.30
5:00	2.10	1.57	1.80
5:30	2.50	2.00	2.35
6:00	2.90	2.34	2.71
6:30	2.70	2.13	2.40
7:00	2.50	1.86	2.12
7:30	2.40	1.80	1.99
8:00	2.30	1.71	2.00
8:30	2.30	1.65	1.85
9:00	2.20	1.58	1.85
9:30	2.10	1.53	1.72
10:00	2.10		1.67
10:30			1.63
11:00			1.59
11:30			1.55
12:00	1.90	1.32	1.54
12:30	1.90	1.23	1.42
13:00	1.80		1.41
13:30	1.90	1.19	1.43
14:00	1.80	1.16	1.39
14:30	1.80	1.14	1.37
15:00	1.70	1.12	1.36
15:30	1.70	1.11	1.30
16:00	1.60	1.10	1.36
16:30	1.60		1.35
17:00	1.60	1.07	1.39
17:30	1.60	1.07	1.28
18:00	1.60	1.06	1.30
18:30	1.60	1.06	1.34
19:00	1.60	1.05	1.33

茨城県におけるモニタリング状況(2/3)

文部科学省

H23.3.19 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
19:30	1.60	1.04	1.37
20:00	1.60	1.04	1.39
20:30	1.60	1.04	1.24
21:00	1.50		1.27
21:30	1.50	1.04	1.25
22:00	1.50	1.03	1.30
22:30	1.50	1.03	1.33
23:00	1.50	1.02	1.34
23:30	1.50	1.02	1.28
3月17日			
0:00	1.50	1.02	1.22
0:30	1.50	1.01	1.22
1:00	1.50	1.02	1.28
1:30	1.50	1.01	1.19
2:00	1.50	1.01	1.22
2:30	1.50	1.01	1.23
3:00	1.50	1.01	1.18
3:30	1.50	1.01	1.23
4:00	1.50	1.00	1.31
4:30	1.50	1.00	1.23
5:00	1.50	0.99	1.31
5:30	1.50	0.99	1.25
6:00	1.50	0.99	1.13
6:30	1.50	0.99	1.23
7:00	1.50	0.98	1.24
7:30	1.50	0.99	1.13
8:00	1.50	0.98	1.17
8:30	1.50	0.97	1.15
9:00	1.40	0.96	1.20
9:30	1.40	0.96	1.14
10:00	1.40	0.96	1.15
10:30	1.40	0.95	1.15
11:00	1.40	0.94	1.13
11:30	1.40	0.93	1.17
12:00	1.40	0.94	1.22
12:30	1.40	0.94	1.15
13:00	1.40	0.93	1.13
13:30	1.40	0.92	1.12
14:00	1.40	0.92	1.12
14:30	1.40	0.92	1.12
15:00	1.40	0.92	1.12
15:30	1.40	0.91	1.15
16:00	1.40	0.90	1.09
16:30	1.40	0.90	1.03
17:00	1.40	0.89	1.05
17:30	1.30	0.89	1.08
18:00	1.30	0.88	1.16
18:30	1.30	0.88	1.16
19:00	1.30	0.88	1.10
19:30	1.30	0.88	1.07
20:00	1.30	0.88	1.10
20:30	1.30	0.87	1.10
21:00	1.30	1.10	1.10
21:30	1.30	1.10	1.10
22:00	1.30	1.08	1.08
22:30	1.30	1.09	1.09
23:00	1.30	1.09	1.09
23:30	1.30	1.10	1.10
3月18日			
0:00	1.30	0.86	1.09
0:30	1.30	0.85	1.10
1:00	1.30	0.85	1.08
1:30	1.30	0.85	1.06
2:00	1.30	0.85	1.05
2:30	1.30	0.85	1.10
3:00	1.30	0.85	1.09
3:30	1.30	0.85	1.07
4:00	1.30	0.85	1.05
4:30	1.30	0.84	1.08
5:00	1.30	0.84	1.08
5:30	1.30	0.83	1.06
6:00	1.30	0.83	1.07
6:30	1.30	0.83	1.05
7:00	1.30	0.83	1.06
7:30	1.30	0.83	1.04
8:00	1.30	0.83	1.03

茨城県におけるモニタリング状況(3/3)

文部科学省

H23.3.19 19:00

μSv/h(マイクロシーベルト毎時)

日時	日本原子力研究開発機構 原子力科学研究所 (茨城県東海村)	日本原子力研究開発機構 核燃料サイクル工学研究所 (茨城県東海村)	東京大学弥生 (茨城県東海村)
8:30	1.30	0.82	1.00
9:00	1.20	0.82	1.03
9:30	1.20	0.82	0.97
10:00	1.20	0.82	1.07
10:30	1.20	0.81	1.03
11:00	1.20	0.80	1.00
11:30	1.20	0.80	1.00
12:00	1.20	0.80	0.99
12:30	1.20	0.80	0.99
13:00	1.20	0.79	1.03
13:30	1.20	0.79	1.00
14:00	1.20	0.79	0.99
14:30	1.20	0.78	1.06
15:00	1.20	0.78	1.04
15:30	1.20	0.78	0.98
16:00	1.20	0.77	0.96
16:30	1.20	0.77	0.96
17:00	1.20	0.77	0.97
17:30	1.20	0.77	0.96
18:00	1.20	0.76	0.95
18:30	1.20	0.76	0.94
19:00	1.20	0.76	0.94
19:30	1.20	0.76	0.96
20:00	1.10	0.76	0.97
20:30	1.20	0.76	0.97
21:00	1.10	0.76	0.94
21:30	1.10	0.76	0.95
22:00	1.10	0.76	0.95
22:30	1.10	0.76	0.99
23:00	1.10	0.75	0.95
23:30	1.10	0.76	0.95
3月19日			
0:00	1.10	0.75	0.93
0:30	1.10	0.75	0.96
1:00	1.10	0.75	0.94
1:30	1.10	0.75	0.94
2:00	1.10	0.75	0.95
2:30	1.10	0.74	0.95
3:00	1.10	0.74	0.91
3:30	1.10	0.74	0.90
4:00	1.10	0.74	0.87
4:30	1.10	0.74	0.97
5:00	1.10	0.74	0.91
5:30	1.10	0.74	0.94
6:00	1.10	0.73	0.95
6:30	1.10	0.73	0.95
7:00	1.10	0.73	0.91
7:30	1.10	0.73	0.97
8:00	1.10	0.73	0.90
8:30	1.10	0.72	0.93
9:00	1.10	0.72	0.86
9:30	1.10	0.72	0.88
10:00	1.10	0.71	0.91
10:30	1.10	0.71	0.89
11:00	1.10	0.71	0.82
11:30	1.10	0.70	0.86
12:00	1.10	0.70	0.89
12:30	1.00	0.70	0.86
13:00	1.00	0.70	0.89
13:30	1.00	0.69	0.86
14:00	1.00	0.69	0.82
14:30	1.00	0.69	0.88
15:00	1.00	0.69	0.85
15:30	1.00	0.69	0.85
16:00	1.00	0.68	0.86
16:30	1.00	0.68	0.85
17:00	1.00	0.68	0.87
17:30	1.00	0.67	0.88
18:00	0.99	0.67	0.87

福島第一原子力発電所の20Km以遠のモニタリング結果について

平成23年3月19日19時00分現在
文 部 科 学 省

1. 文部科学省が集計した結果 注)太下線データが今回追加分

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【1】 (約60Km北西)	3月19日7時03分	7.2 ^{*2}	降雨無し	文部科学省
測定箇所 【1】 (約60Km北西)	3月19日17時15分	<u>6.5</u> ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【2】 (約55Km北西)	3月19日9時51分	16.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【2】 (約55Km北西)	3月19日15時00分	12.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	3月19日10時18分	10.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	3月19日14時31分	10.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【4】 (約50Km北西)	3月19日9時52分	2.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【4】 (約50Km北西)	3月19日16時06分	<u>2.9</u> ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【5】 (約45Km北)	3月19日10時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	3月19日11時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	3月19日12時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日11時10分	6.5 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日12時10分	5.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日13時10分	4.0 ^{*2}	降雨無し	日本原子力研究開発機構

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【7】 (約45Km北)	3月19日11時16分	5.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【7】 (約45Km北)	3月19日12時16分	4.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【7】 (約45Km北)	3月19日13時16分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所【9】 (約45Km北)	<u>3月19日16時19分</u>	<u>6.0^{*2}</u>	<u>降雨無し</u>	<u>原子力安全技術センター</u>
測定箇所【10】 (約40Km北西)	3月19日10時07分	2.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【10】 (約40Km北西)	<u>3月19日15時19分</u>	<u>2.5^{*2}</u>	<u>降雨無し</u>	<u>原子力安全技術センター</u>
測定箇所【11】 (約40Km北西)	3月19日10時25分	3.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【11】 (約40Km北西)	3月19日14時55分	4.2 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【12】 (約40Km西)	3月19日11時04分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【12】 (約40Km西)	<u>3月19日15時32分</u>	<u>0.6^{*2}</u>	<u>降雨無し</u>	<u>原子力安全技術センター</u>
測定箇所【13】 (約40Km西)	3月19日11時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】 (約40Km西)	3月19日12時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【13】 (約40Km西)	3月19日13時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】 (約35Km西)	3月19日11時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】 (約35Km西)	3月19日12時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【14】 (約35Km西)	3月19日13時30分	0.7 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【15】(約35Km西)	3月19日11時46分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】(約35Km西)	3月19日12時46分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【15】(約35Km西)	3月19日13時46分	1.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【20】(約45Km北西)	3月19日10時50分	0.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【20】(約45Km北西)	3月19日14時34分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日11時12分	6.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日12時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【21】(約30Km西北西)	3月19日13時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日11時30分	1.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日12時30分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【22】(約35Km西北西)	3月19日13時30分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日11時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日12時44分	2.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所【23】(約35Km西北西)	3月19日13時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

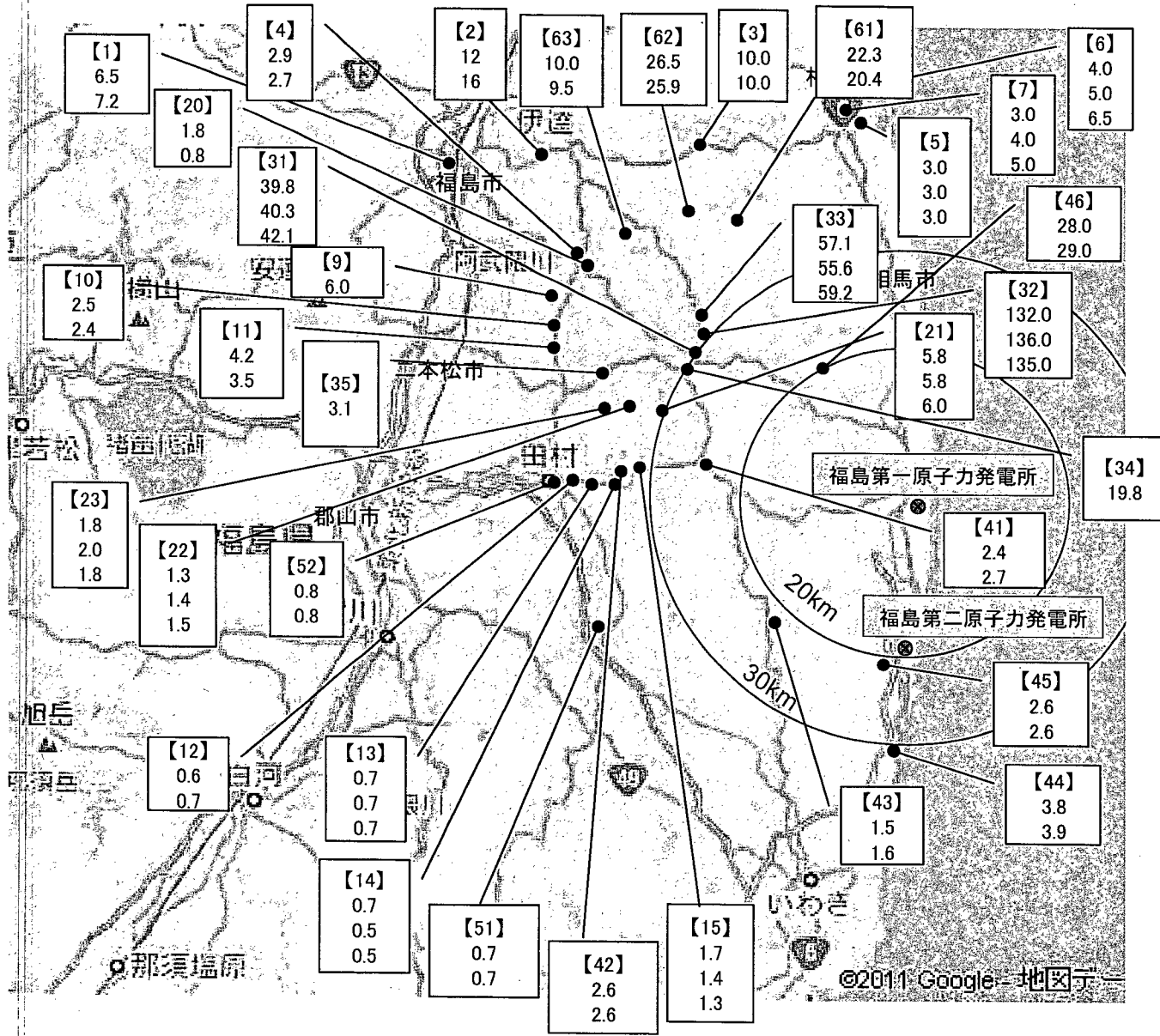
場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【31】(約30Km西北西)	3月19日9時09分	42.1 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日10時09分	40.3 ^{*2}	降雨無し	文部科学省
測定箇所【31】(約30Km西北西)	3月19日11時09分	39.8 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日9時20分	135.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日10時20分	136.0 ^{*2}	降雨無し	文部科学省
測定箇所【32】(約30Km北西)	3月19日11時20分	132.0 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日9時35分	59.2 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日10時35分	55.6 ^{*2}	降雨無し	文部科学省
測定箇所【33】(約30Km北西)	3月19日11時35分	57.1 ^{*2}	降雨無し	文部科学省
測定箇所【34】(約30Km北西)	3月19日11時56分	19.8 ^{*2}	降雨無し	文部科学省
測定箇所【35】(約30Km南)	3月19日12時13分	3.1 ^{*2}	降雨無し	文部科学省
測定箇所【41】(約20Km西)	3月19日11時15分	2.7 ^{*2}	降雨無し	関西電力
測定箇所【41】(約20Km西)	3月19日15時23分	2.4^{*2}	降雨無し	関西電力
測定箇所【42】(約30Km西)	3月19日11時18分	2.6 ^{*2}	降雨無し	関西電力
測定箇所【42】(約30Km西)	3月19日15時20分	2.6^{*2}	降雨無し	関西電力
測定箇所【43】(約20Km南西)	3月19日11時00分	1.6 ^{*2}	降雨無し	日本原燃

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【43】(約20Km南西)	3月19日15時00分	1.5 ^{*2}	降雨無し	日本原燃
測定箇所【44】(約30Km南)	3月19日11時22分	3.9 ^{*2}	降雨無し	四国電力
測定箇所【44】(約30Km南)	3月19日15時27分	3.8 ^{*2}	降雨無し	四国電力
測定箇所【45】(約20Km南)	3月19日11時15分	2.6 ^{*2}	降雨無し	九州電力
測定箇所【45】(約20Km南)	3月19日15時00分	2.6 ^{*2}	降雨無し	九州電力
測定箇所【46】(約20Km北西)	3月19日11時40分	29.0 ^{*2}	降雨無し	中部電力
測定箇所【46】(約20Km北西)	3月19日15時00分	28.0 ^{*2}	降雨無し	中部電力
測定箇所【51】(約40Km南西)	3月19日12時09分	0.7 ^{*3}	降雨無し	福島県
測定箇所【51】(約40Km南西)	3月19日14時09分	0.7 ^{*3}	降雨無し	福島県
測定箇所【52】(約40Km西)	3月19日11時29分	0.8 ^{*3}	降雨無し	福島県
測定箇所【52】(約40Km西)	3月19日14時45分	0.8 ^{*3}	降雨無し	福島県
測定箇所【61】(約40Km北西)	3月19日12時13分	20.4 ^{*3}	降雨無し	福島県
測定箇所【61】(約40Km北西)	3月19日14時00分	22.3 ^{*3}	降雨無し	福島県
測定箇所【62】(約40Km北西)	3月19日11時59分	25.9 ^{*3}	降雨無し	福島県
測定箇所【62】(約40Km北西)	3月19日14時10分	26.5 ^{*3}	降雨無し	福島県
測定箇所【63】(約45Km北西)	3月19日11時23分	9.5 ^{*3}	降雨無し	福島県
測定箇所【63】(約45Km北西)	3月19日14時30分	10.0 ^{*3}	降雨無し	福島県

2. 防衛省の測定については準備中

福島第一原子力発電所周辺のモニタリング結果



測定日時
3月19日
7時03分～18時00分

●測定箇所

単位:マイクロシーベルト毎時

環境放射能水準調査結果
(3月18日採取)

H23.3.19 19:00

(Bq/kg)

	都道府県名	上水(蛇口)	
		I-131	Cs-137
1	北海道(札幌市)	不検出	不検出
2	青森県(青森市)	不検出	不検出
3	岩手県(盛岡市)	不検出	不検出
4	宮城県	-	-
5	秋田県(秋田市)	不検出	不検出
6	山形県(山形市)	不検出	不検出
7	福島県	-	-
8	茨城県	-	-
9	栃木県(宇都宮市)	77	1.6
10	群馬県(前橋市)	2.5	0.22
11	埼玉県(さいたま市)	0.62	不検出
12	千葉県(市原市)	0.79	不検出
13	東京都(新宿区)	1.5	不検出
14	神奈川県(茅ヶ崎市)	不検出	不検出
15	新潟県(新潟市)	0.27	不検出
16	富山県(射水市)	不検出	不検出
17	石川県(金沢市)	不検出	不検出
18	福井県(福井市)	不検出	不検出
19	山梨県(甲府市)	不検出	不検出
20	長野県(長野市)	不検出	不検出
21	岐阜県(各務原市)	不検出	不検出
22	静岡県(静岡市)	不検出	不検出
23	愛知県(名古屋市)	不検出	不検出
24	三重県(四日市市)	不検出	不検出
25	滋賀県(大津市)	不検出	不検出
26	京都府(京都市)	不検出	不検出
27	大阪府(大阪市)	不検出	不検出
28	兵庫県(神戸市)	不検出	不検出
29	奈良県	未到達	未到達
30	和歌山県(和歌山市)	不検出	不検出
31	鳥取県(東伯郡)	不検出	不検出
32	島根県(松江市)	不検出	不検出
33	岡山県(岡山市)	不検出	不検出
34	広島県(広島市)	不検出	不検出
35	山口県(宇部市)	不検出	不検出
36	徳島県(徳島市)	不検出	不検出
37	香川県(高松市)	不検出	不検出
38	愛媛県(八幡浜市)	不検出	不検出
39	高知県(高知市)	不検出	不検出
40	福岡県(太宰府市)	不検出	不検出
41	佐賀県(佐賀市)	不検出	不検出
42	長崎県(大村市)	不検出	不検出
43	熊本県(宇土市)	不検出	不検出
44	大分県(大分市)	不検出	不検出
45	宮崎県(宮崎市)	不検出	不検出
46	鹿児島県(鹿児島市)	不検出	不検出
47	沖縄県(那覇市)	不検出	不検出

*宮城県は震災被害によって計測不能、福島県については県が独自に調査・公表している。茨城県については、断水のため水の採取ができない。

*空欄は機器点検等のための欠測等

*本データは、1Bq/Lを1Bq/kgとみなす

*文部科学省が各都道府県等からの報告に基づき作成

*「原子力施設等の防災対策について(原子力安全委員会)」飲食物の摂取制限に関する指標に基づく飲料水の基準 放射性ヨウ素-131:300Bq/kg以上、放射性セシウム:200Bq/kg以上

福島第一原子力発電所の20Km以遠のモニタリング結果について

平成23年3月19日16時00分現在
文 部 科 学 省

1. 文部科学省が集計した結果 注)太下線データが今回追加分

- * 1 GM(ガイガー=ミュラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【1】 (約60Km北西)	3月19日7時03分	7.2 ^{*2}	降雨無し	文部科学省
測定箇所 【2】 (約55Km北西)	3月19日9時51分	16.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【2】 (約55Km北西)	<u>3月19日15時00分</u>	<u>12.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	3月19日10時18分	10.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【3】 (約45Km北西)	<u>3月19日14時31分</u>	<u>10.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【4】 (約50Km北西)	3月19日9時52分	2.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【5】 (約45Km北)	3月19日10時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	3月19日11時50分	3.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【5】 (約45Km北)	<u>3月19日12時50分</u>	<u>3.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	3月19日11時10分	6.5 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	<u>3月19日12時10分</u>	<u>5.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【6】 (約45Km北)	<u>3月19日13時10分</u>	<u>4.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	3月19日11時16分	5.0 ^{*2}	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	<u>3月19日12時16分</u>	<u>4.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【7】 (約45Km北)	<u>3月19日13時16分</u>	<u>3.0^{*2}</u>	降雨無し	日本原子力研究開発機構
測定箇所 【10】 (約40Km北西)	3月19日10時07分	2.4 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミュラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【11】 (約40Km北西)	3月19日10時25分	3.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【11】 (約40Km北西)	3月19日14時55分	4.2 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【12】 (約40Km西)	3月19日11時04分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【13】 (約40Km西)	3月19日11時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【13】 (約40Km西)	3月19日12時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【13】 (約40Km西)	3月19日13時14分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【14】 (約35Km西)	3月19日11時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【14】 (約35Km西)	3月19日12時30分	0.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【14】 (約35Km西)	3月19日13時30分	0.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【15】 (約35Km西)	3月19日11時46分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【15】 (約35Km西)	3月19日12時46分	1.4 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【15】 (約35Km西)	3月19日13時46分	1.7 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【20】 (約45Km北西)	3月19日10時50分	0.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【20】 (約45Km北西)	3月19日14時34分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日11時12分	6.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日12時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【21】 (約30Km西北西)	3月19日13時12分	5.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【22】 (約35Km西北西)	3月19日11時30分	1.5 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【22】 (約35Km西北西)	3月19日12時30分	1.4 ^{*2}	降雨無し	原子力安全技術センター

- * 1 GM(ガイガー=ミューラー計測管)における値
 * 2 電離箱における値
 * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

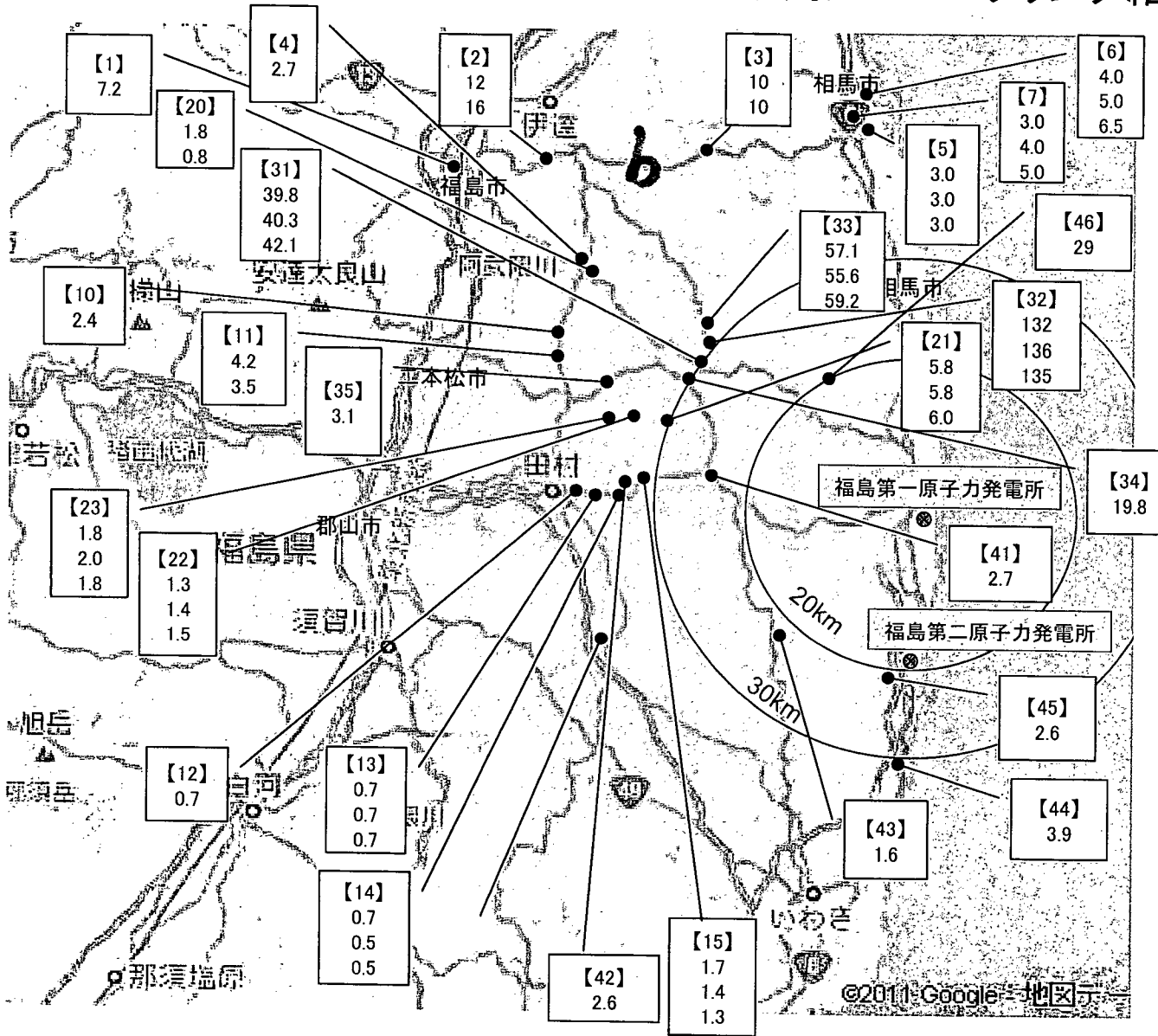
場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所 【22】 (約35Km西北西)	3月19日13時30分	1.3 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日11時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日12時44分	2.0 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【23】 (約35Km西北西)	3月19日13時44分	1.8 ^{*2}	降雨無し	原子力安全技術センター
測定箇所 【31】 (約30Km西北西)	3月19日9時09分	42.1 ^{*2}	降雨無し	文部科学省
測定箇所 【31】 (約30Km西北西)	3月19日10時09分	40.3 ^{*2}	降雨無し	文部科学省
測定箇所 【31】 (約30Km西北西)	3月19日11時09分	39.8 ^{*2}	降雨無し	文部科学省
測定箇所 【32】 (約30Km北西)	3月19日9時20分	135.0 ^{*2}	降雨無し	文部科学省
測定箇所 【32】 (約30Km北西)	3月19日10時20分	136.0 ^{*2}	降雨無し	文部科学省
測定箇所 【32】 (約30Km北西)	3月19日11時20分	132.0 ^{*2}	降雨無し	文部科学省
測定箇所 【33】 (約30Km北西)	3月19日9時35分	59.2 ^{*2}	降雨無し	文部科学省
測定箇所 【33】 (約30Km北西)	3月19日10時35分	55.6 ^{*2}	降雨無し	文部科学省
測定箇所 【33】 (約30Km北西)	3月19日11時35分	57.1 ^{*2}	降雨無し	文部科学省
測定箇所 【34】 (約30Km北西)	3月19日11時56分	19.8 ^{*2}	降雨無し	文部科学省
測定箇所 【35】 (約30Km南)	3月19日12時13分	3.1 ^{*2}	降雨無し	文部科学省
測定箇所 【41】 (約20Km西)	3月19日11時15分	2.7 ^{*2}	降雨無し	関西電力
測定箇所 【42】 (約30Km西)	3月19日11時18分	2.6 ^{*2}	降雨無し	関西電力
測定箇所 【43】 (約20Km南西)	3月19日11時00分	1.6 ^{*2}	降雨無し	日本原燃
測定箇所 【44】 (約30Km南)	3月19日11時22分	3.9 ^{*2}	降雨無し	四国電力

- * 1 GM(ガイガー=ミューラー計測管)における値
- * 2 電離箱における値
- * 3 NaI(ヨウ化ナトリウム)シンチレータにおける値

場所(福島第1発電所からの距離)	測定日時	数値(マイクロシーベルト/時) (記載のない限り屋外)	天候	実施者
測定箇所【45】 (約20Km南)	3月19日11時15分	2.6 ^{*2}	降雨無し	九州電力
測定箇所【46】 (約20Km北西)	3月19日11時40分	29.0 ^{*2}	降雨無し	中部電力

2. 防衛省の測定については準備中

福島第一原子力発電所周辺のモニタリング結果



測定日時
 3月19日
 7時03分～15時00分

●測定箇所

単位:マイクロシーベルト毎時

【1】
7.2

【20】
1.8
0.8

【4】
2.7

【2】
12
16

【3】
10
10

【6】
4.0
5.0
6.5

【31】
39.8
40.3
42.1

【5】
3.0
3.0
3.0

【7】
3.0
4.0
5.0

【46】
29

【10】
2.4

【11】
4.2
3.5

【35】
3.1

【33】
57.1
55.6
59.2

【21】
5.8
5.8
6.0

【32】
132
136
135

【23】
1.8
2.0
1.8

【22】
1.3
1.4
1.5

【34】
19.8

【41】
2.7

【45】
2.6

【12】
0.7

【13】
0.7
0.7
0.7

【43】
1.6

【44】
3.9

【14】
0.7
0.5
0.5

【15】
1.7
1.4
1.3

【42】
2.6

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From: Hoc, PMT12
Sent: Sunday, March 20, 2011 5:54 PM
To: PMT03 Hoc; PMT07 Hoc
Subject: FW: monitoring data (latest version)
Attachments: RE: monitoring data (latest version); **【Answer to your request】** monitoring data

Fyi - Mike is reviewing

-----Original Message-----

From: LIA02 Hoc
Sent: Sunday, March 20, 2011 5:46 AM
To: Hoc, PMT12
Subject: FW: monitoring data (latest version)

Please ask your meteorologist for the answer to the question below. Thanks!

-----Original Message-----

From: HAMAGUCHI AYUMU [mailto:ayumu.hamaguchi@mofa.go.jp]
Sent: Sunday, March 20, 2011 5:45 AM
To: LIA02 Hoc; Foggie, Kirk; Smith, Brooke
Cc: NAKAGAWA TOMOHIRO; TAMAURA SHU; IDENOUE KOSUKE; 'JapanEmbassy, TaskForce'
Subject: RE: monitoring data (latest version)

Dear colleagues,

I'm very glad to hear that our data is helpful for you. Please let me clarify one thing on your request. We received two similar requests from USEMB (please see attached files). I would like to know the specific time range which you need. Thanks for your cooperation.

v/r,

Ayumu HAMAGUCHI
States of U.S. Forces Agreement Division Ministry of Foreign Affairs
TEL: +81-3-5501-8000 (ext.2468)
TEL: +81-3-5501-8282 (Direct)
FAX: +81-3-5501-8281

-----Original Message-----

From: LIA02 Hoc [mailto:LIA02.Hoc@nrc.gov]
Sent: Sunday, March 20, 2011 4:34 PM
To: HAMAGUCHI AYUMU
Cc: LIA03 Hoc; Foggie, Kirk; Smith, Brooke
Subject: RE: monitoring data (latest version)

Dear sir,

www63

Thank you so much for your kind provision of this current data. It has been most helpful for us. Our Protective Measures Team has asked us whether it would be possible to obtain the monitoring data for 13-15 March, which is missing from what we have collected so far. It would be very useful if we could also obtain meteorological data for that time period, if it was recorded.

I appreciate your consideration of this request and look forward to your reply. Again, thank you for what you have provided.

Best regards,
Nuclear Regulatory Commission Operations Center International Liaison Desk

-----Original Message-----

From: HAMAGUCHI AYUMU [mailto:ayumu.hamaguchi@mofa.go.jp]

Sent: Sunday, March 20, 2011 2:07 AM

To: 'JapanEmbassy, TaskForce'; (b)(6)

Cc: (b)(6)

(b)(6)

(b)(6) LIA01 Hoc;

LIA02 Hoc; Status of U.S. Forces Agreement Division

Subject: monitoring data (latest version)

Huntington-san, Craig-san;

This is the latest version of monitoring data.

v/r,

HAMAGUCHI

Ayumu HAMAGUCHI
States of U.S. Forces Agreement Division Ministry of Foreign Affairs
TEL: +81-3-5501-8000 (ext.2468)
TEL: +81-3-5501-8282 (Direct)
FAX: +81-3-5501-8281

共有 ← ERC 放射線記録

3月20日

福島第一(1F) 測定場所

- ①事務本館北(2号機より北西約0.5キロ)
- ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
- ③西門付近(MP-5付近)(2号機より西約1.1キロ)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①											
モニタリングカー	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10
測定値($\mu\text{Sv/h}$)	2659.0	2652.0	2663.0	2637.0	2630.0	2629.0	2627.0	2626.0	2619.0	2617.0	2614.0	2614.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	北東	北東	北	北東	北東	北東	東	北北東	東北東	東	東北東
風速(m/s)	0.6	0.6	0.8	0.9	1.3	1.3	1.5	1.3	1.6	1.4	1.2	1.2

記録 3月20日 11時14分

記録 3月20日 11時25分

リエリック
外
部
の
分
子
工
場

芝有 ← ERC放射線班

3月20日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ)
- ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
- ③西門付近(MP-5付近)(2号機より西約1.1キロ)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																						
モニタリングカー	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00
測定値(μSv/h)	2858.0	2862.0	2853.0	2837.0	2830.0	2829.0	2627.0	2625.0	2619.0	2617.0	2614.0	2614.0	2608.0	2623.0	2661.0	2742.0	2726.0	2688.0	2685.0	2536.0	2589.0	2583.0	2679.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	北東	北東	北	北東	北東	北東	東	北北東	東北東	東	東北東	南東	東南東	南南東	北東	南南東	東	東	北東	東	北東	東北東
風速(m/s)	0.6	0.6	0.8	0.9	1.3	1.3	1.6	1.3	1.6	3.4	1.2	1.2	1.0	1.0	1.5	1.2	1.2	1.1	1.2	1.3	0.7	1.3	1.4

測定場所	①																						
モニタリングカー	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50
測定値(μSv/h)	2578.0	2569.0	2571.0	2562.0	2564.0	2559.0	2558.0	2552.0	2551.0	2551.0	2550.0	2567.0	2588.0	2660.0	2593.0	2664.0	2741.0	2768.0	2989.0	2923.0	3056.0	3202.0	3346.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	東北東	北東	東北東	北東	北東	東	南	南東	南東	北東	南東	東	南東	南東	南東	南東	南東	南東	南	南東	南東	南南東	南
風速(m/s)	1.8	1.5	1.4	1.2	1.3	1.1	1.2	1.0	1.1	1.3	1.5	1.4	1.6	1.7	1.8	2.0	1.6	1.7	1.8	1.9	2.3	2.1	

測定場所	①							
モニタリングカー	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10
測定値(μSv/h)	3064.0	3071.0	3342.0	3397.0	3603.0	3046.0	3171.0	2940.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	南	南	南	南	南南東	南	南
風速(m/s)	2.0	1.9	1.9	1.7	1.9	2.1	1.8	2.0

↑
NEW

↑
NEW

午前時刻 3月20日 17時40分

午後時刻 3月20日 17時50分

3月19日

福島第一(1F) 測定場所

①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																						
モニタリングカー	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30
測定値($\mu\text{Sv/h}$)	2978.0	2972.0	2965.0	2961.0	2957.0	2946.0	2941.0	2937.0	2931.0	2924.0	2917.0	2912.0	2909.0	2906.0	2906.0	2896.0	2891.0	2883.0	2880.0	2880.0	2876.0	2855.0	2854.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	西	西南西	西南西	西南西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西北西	東北東	西南西	西
風速(m/s)	4.4	4.1	3.2	2.7	2.8	2.7	2.2	2.6	3.1	2.6	2.5	2.6	3.1	3.4	3.4	2.3	1.8	2.0	2.2	1.2	0.8	1.0	2.0

測定場所	①							
モニタリングカー	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値($\mu\text{Sv/h}$)	2847.0	2844.0	2841.0	2836.0	2828.0	2828.0	2826.0	2823.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND
風向	西北西	西	西	西北西	西	西北西	西北西	西
風速(m/s)	1.4	1.8	2.6	2.4	2.4	2.9	2.5	2.8

3月20日

福島第一(1F) 測定場所

①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																						
モニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40
測定値($\mu\text{Sv/h}$)	2821.0	2814.0	2806.0	2805.0	2803.0	2791.0	2797.0	2794.0	2793.0	2788.0	2785.0	2781.0	2778.0	2773.0	2771.0	2767.0	2764.0	2761.0	2759.0	2745.0	2745.0	2741.0	2758.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南西	南西	西	南西	西南西	西南西	北西	北西	西	北東	南西	西	南西	西北西	西	西	北西	北西	西北西	西南西	南東	北北東	西
風速(m/s)	4.5	3.7	2.8	3.6	3.0	3.4	4.6	3.2	3.0	2.9	2.1	2.5	1.8	2.1	1.6	1.3	1.5	2.3	2.1	1.0	1.1	1.0	1.1

測定場所	①					測定位置変更	③						測定位置変更	①									
モニタリングカー	3:50	4:00	4:10	4:20	4:30	※14	4:40	4:50	5:00	5:10	5:20	5:30	5:40	※15	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
測定値($\mu\text{Sv/h}$)	3185.0	2999.0	2771.0	2743.0	2733.0	※14	273.2	271.8	271.2	270.9	270.4	269.3	269.5	※15	2683.1	2679.0	2679.0	2677.0	2670.0	2654.0	2664.0	2661.0	2661.0
中性子	ND	ND	ND	ND	ND	※14	ND	ND	ND	ND	ND	ND	ND	※15	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南	西	北西	南	南西	※14	北北西	北	北北西	西北西	北	北北東	北東	※15	北	北東	北東	東北東	東北東	東北東	東	東北東	東南
風速(m/s)	1.0	0.9	0.5	0.8	0.8	※14	3.5	1.6	1.5	1.5	0.7	0.5	0.6	※15	2.2	0.6	0.7	0.9	0.8	0.6	0.9	1.1	0.1

※14 西門付近(MP-5付近)(2号機より西約1.1キロ) ※定点で測定するため移動
※15 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するためにより近傍へ移動

受取時刻 3月20日 17時47分

出力時刻 3月20日 17時50分

① 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するために5分間移動
 ② 西門付近(MP-5付近)(2号機より西約1.1キロ)
 ③ 西門付近(MP-5東側)(2号機より北西約0.9キロ)
 ④ 正門付近部(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	中性子	風向	風速(m/s)
測定値(μSv/h)	340	南南東	0.9
測定値(μSv/h)	303.6	南南東	0.6
測定値(μSv/h)	301.7	西北西	0.5
測定値(μSv/h)	301.3	西	0.5
測定値(μSv/h)	300.5	西北西	0.4
測定値(μSv/h)	299.2	南東	0.6
測定値(μSv/h)	299.2	西	0.8
測定値(μSv/h)	298.5	南	0.4
測定値(μSv/h)	298.5	南	0.5
測定値(μSv/h)	297.5	南	0.6
測定値(μSv/h)	296.4	南	0.5
測定値(μSv/h)	295.8	南	0.6
測定値(μSv/h)	295.1	北西	0.9
測定値(μSv/h)	295.4	南	0.9
測定値(μSv/h)	294.8	南東	0.6
測定値(μSv/h)	293.8	西	0.9
測定値(μSv/h)	293.5	南東	0.7
測定値(μSv/h)	292.8	東北東	0.5
測定値(μSv/h)	292.3	南南東	0.4
測定値(μSv/h)	291.5	南南東	0.4
測定値(μSv/h)	290.9	南	0.3
測定値(μSv/h)	290.6	南	0.4
測定値(μSv/h)	289.8	北西	0.7
測定値(μSv/h)	289.1	西	0.3

測定場所	中性子	風向	風速(m/s)
測定値(μSv/h)	730	西南西	0.8
測定値(μSv/h)	740	南西	0.8
測定値(μSv/h)	750	南東	0.6
測定値(μSv/h)	800	南東	0.3
測定値(μSv/h)	810	西北西	0.5
測定値(μSv/h)	820	西北西	0.3
測定値(μSv/h)	830.5	東	0.6
測定値(μSv/h)	831.9	東北東	0.4
測定値(μSv/h)	890.5	東北東	0.6
測定値(μSv/h)	895	東北東	0.6
測定値(μSv/h)	905	北東	0.6
測定値(μSv/h)	964	北東	0.9
測定値(μSv/h)	965.5	北東	0.9
測定値(μSv/h)	923.8	東	1.6
測定値(μSv/h)	925.2	東	2.1
測定値(μSv/h)	957.3	東	2.0
測定値(μSv/h)	958.3	東	1.5
測定値(μSv/h)	946.1	南東	1.8
測定値(μSv/h)	941.2	南東	1.8
測定値(μSv/h)	938.4	南	1.9
測定値(μSv/h)	934.3	南	1.9
測定値(μSv/h)	830.2	南東	1.7
測定値(μSv/h)	827.1	南南東	1.5
測定値(μSv/h)	822.6	南南東	1.5
測定値(μSv/h)	819.5	南	1.6

測定場所	中性子	風向	風速(m/s)
測定値(μSv/h)	1130	北西	3.4
測定値(μSv/h)	1120	北西	2.9
測定値(μSv/h)	1131.1	南西	3.4
測定値(μSv/h)	1130	北西	4.0
測定値(μSv/h)	1150	西	4.7
測定値(μSv/h)	1200	西	6.8
測定値(μSv/h)	1210	西	5.7
測定値(μSv/h)	1220	西北西	5.6
測定値(μSv/h)	1230	西	5.7
測定値(μSv/h)	1240	西	5.9
測定値(μSv/h)	1250	西南西	6.1
測定値(μSv/h)	1300	北西	4.2
測定値(μSv/h)	1310	西	3.7
測定値(μSv/h)	1320	北西	6.3
測定値(μSv/h)	1330	西	4.3
測定値(μSv/h)	1340	西	5.1
測定値(μSv/h)	1360	西南西	4.9
測定値(μSv/h)	1400	西	6.8
測定値(μSv/h)	1410	北東	3.4
測定値(μSv/h)	1420	北東	4.6
測定値(μSv/h)	1430	西	4.9
測定値(μSv/h)	1440	北	3.1
測定値(μSv/h)	1440	南南西	2.6

測定場所	中性子	風向	風速(m/s)
測定値(μSv/h)	1800	西	4.9
測定値(μSv/h)	1810	西	4.6
測定値(μSv/h)	1820	西	3.4
測定値(μSv/h)	1830	西	3.6
測定値(μSv/h)	1840	西	3.6
測定値(μSv/h)	1850	西	3.5
測定値(μSv/h)	1860	西	3.8
測定値(μSv/h)	1870	西	3.3
測定値(μSv/h)	1880	西	4.1
測定値(μSv/h)	1890	北西	4.5
測定値(μSv/h)	1900	西	6.7
測定値(μSv/h)	1908	西	5.1
測定値(μSv/h)	1910	西南西	6.1
測定値(μSv/h)	1915	西南西	4.5
測定値(μSv/h)	1920	西	5.0
測定値(μSv/h)	1930	西	4.8
測定値(μSv/h)	1935	西	2.4
測定値(μSv/h)	1940	北西	3.9
測定値(μSv/h)	1945	南	4.8
測定値(μSv/h)	1950	南西	3.8
測定値(μSv/h)	1955	南西	3.4
測定値(μSv/h)	1960	西	4.6
測定値(μSv/h)	1965	西	4.8
測定値(μSv/h)	1970	西	4.9
測定値(μSv/h)	1975	西	2.8
測定値(μSv/h)	1980	西	4.1
測定値(μSv/h)	1985	西	3.6
測定値(μSv/h)	1990	西	4.1

※13 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するために5分間移動

3月18日

福島第一(1F) 測定場所

①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
 ③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	①																						
モニタリングカー	14:45	14:50	14:55	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10
測定値(μSv/h)	3357.0	3339.0	3340.0	3345.0	3368.0	3582.0	4076.0	3823.0	4396.0	4485.0	4352.0	4535.0	4419.0	4277.0	4735.0	5055.0	5039.0	4952.0	4251.0	4182.0	4090.0	4084.0	4069.0
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南南東	東南東	南	南東	南	南南東	南南東	南南東	南南東	南南東	東南東	南	南南東	東	南南東	南	南南東	南南東	南	南	南	南南西	南南西
風速(m/s)	1.6	1.6	1.6	1.4	1.7	1.9	2.3	2.1	2.2	2.4	2.0	2.1	1.8	2.1	2.1	2.0	2.1	3.1	2.3	1.8	1.8	1.2	1.2

測定場所	①											測定位置変更	③										
モニタリングカー	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	※10	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50
測定値(μSv/h)	4059.0	3922.0	3895.0	3832.0	3788.0	3745.0	3728.0	3699.0	3669.0	3634.0	3611.0	※10	447.6	441.2	434.5	429.2	423.9	419.1	414.2	409.4	405.2	401.5	397.8
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	※10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南	南南西	南南西	南南西	西	南西	南西	南南西	南	西南西	西南西	※10	南	西	西北西	南西	西南西	南南西	西	西	西	北北西	西
風速(m/s)	1.2	1.5	1.5	1.4	1.5	1.3	1.4	1.4	1.3	1.5	1.3	※10	3.0	0.5	0.7	0.8	0.6	0.6	0.6	0.3	0.3	0.4	0.5

測定場所	③										測定位置変更	①		
モニタリングカー	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	※11	23:30	23:40	23:50	
測定値(μSv/h)	393.8	389.2	386.9	382.9	379.6	376.9	373.6	371.2	368.9	※11	3254.0	3266.0	3244.0	
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	※11	ND	ND	ND	
風向	南西	南西	西	西	南西	西	北	北西	西南西	※11	西南西	南西	西南西	
風速(m/s)	0.5	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.3	※11	2.8	1.2	1.2	

3月19日

測定場所	①												測定位置変更	③									
モニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	※12	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
測定値(μSv/h)	3229.0	3224.0	3219.0	3231.0	3342.0	3284.0	3246.0	3279.0	3247.0	3195.0	3188.0	3161.0	※12	313.7	312.2	311.1	310.0	309.1	308.6	306.9	306.0	306.1	304.3
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	※12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	西南西	西南西	南西	南西	西南西	西	西南西	西南西	西南西	西南西	南西	西南西	※12	北	北	南	西南西	西南西	北北東	西北西	南西	南南東	東
風速(m/s)	1.4	1.4	1.2	1.1	0.9	1.4	1.3	1.3	1.3	1.4	1.6	1.3	※12	3.0	0.3	0.3	0.6	0.3	0.4	0.6	0.7	0.7	0.7

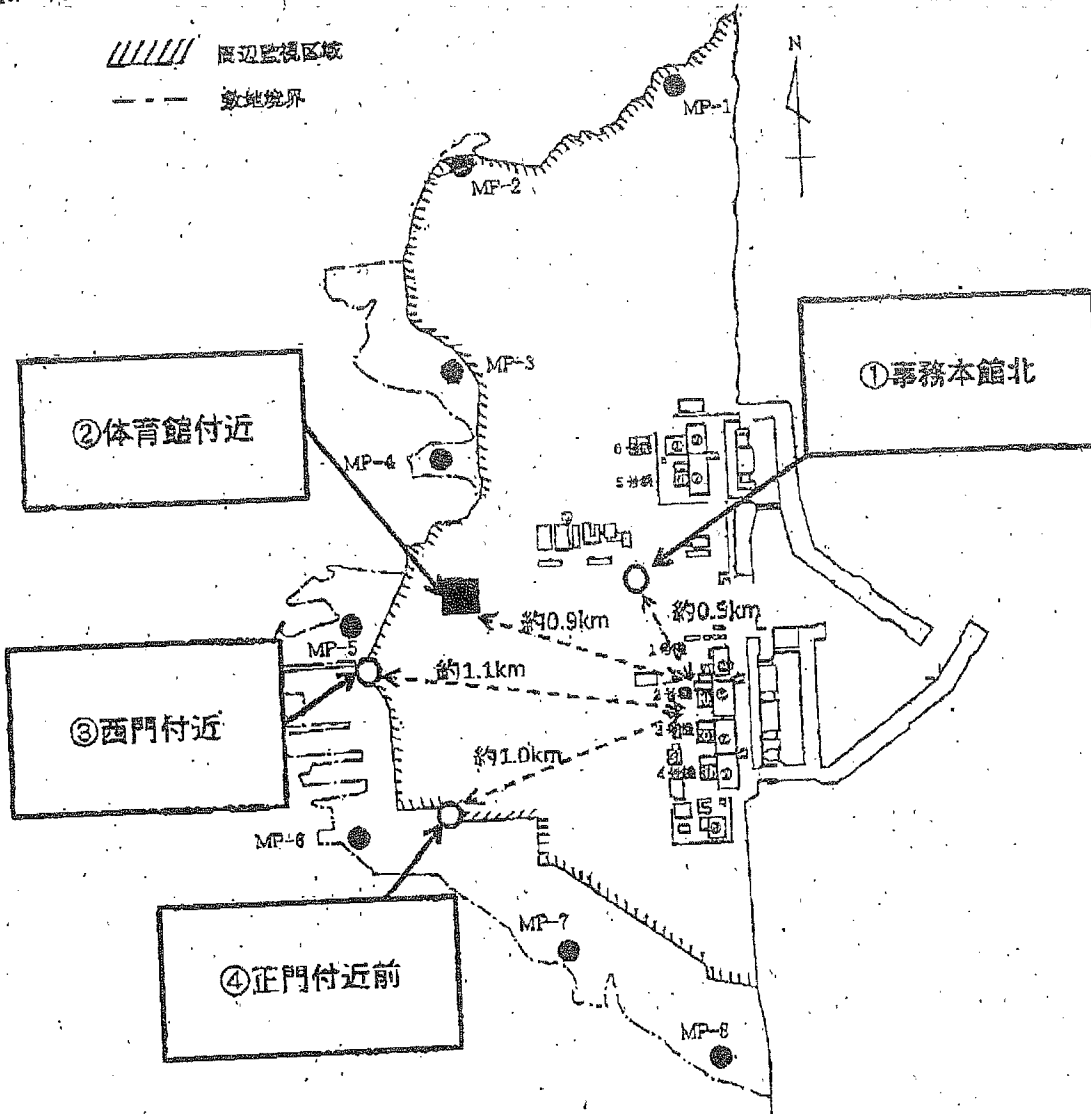
※10 西門付近(MP-5付近)(2号機より西約1.1キロ) ※定点で測定するため移動
 ※11 事務本館北(2号機より北西約0.5キロ) ※放水活動による効果を測定するためにより近傍へ移動
 ※12 西門付近(MP-5付近)(2号機より西約1.1キロ) ※定点で測定するため移動

観測時刻 3月20日 17時47分

観測時刻 3月20日 17時51分

11F030740 (F) 11F030740

福島第一原子力発電所



福島第二(2F) (事業者のモニタリングポスト)

3月20日									
モニタリングポスト	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	16:00
MP1(μ Sv/h)	15.553	15.543	15.560	15.507	15.453	15.470	15.457	15.473	15.453
MP2(μ Sv/h)	9.330	9.330	9.340	9.357	9.283	9.300	9.270	9.280	9.293
MP3(μ Sv/h)	15.743	15.777	15.730	15.723	15.693	15.683	15.663	15.610	15.663
MP4(μ Sv/h)	10.997	10.970	10.940	10.923	10.967	10.920	10.883	10.843	10.880
MP5(μ Sv/h)	10.707	10.687	10.680	10.680	10.680	10.627	10.680	10.587	10.633
MP6(μ Sv/h)	12.033	12.077	12.020	11.960	12.000	11.963	11.937	11.943	11.930
MP7(μ Sv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南東	南南東	南南東	南南東	南	南	南南西	南	南
風速(m/s)	1.9	2.2	3.2	3.6	2.9	2.9	0.7	0.4	1.2

NEW

受信時刻 3月20日 17時47分

出力時刻 3月20日 17時51分

110V/60W 100V/60W

福島第二(2F) (事業者のモニタリングポスト)

3月20日		3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
モニタリングポスト		3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
MP1(μSv/h)		16.073	15.957	16.970	16.007	16.010	15.953	15.973	15.940	15.937	15.910	15.900	15.910	18.700	20.417	17.670	20.740	17.830	17.177	16.870	19.260	21.810	20.917
MP2(μSv/h)		9.687	9.720	9.697	9.667	9.663	9.693	9.660	9.673	9.647	9.653	9.643	9.647	10.020	16.447	10.903	14.283	11.443	10.787	10.640	12.660	14.973	15.303
MP3(μSv/h)		16.153	16.100	16.117	16.130	16.050	16.073	16.083	16.087	16.033	16.017	16.043	16.037	16.040	24.170	17.950	19.593	18.590	17.777	17.330	20.087	21.017	23.634
MP4(μSv/h)		11.093	11.130	11.130	11.083	11.110	11.107	11.080	11.087	11.057	11.060	11.060	11.043	11.133	19.093	12.467	15.200	12.433	13.427	12.733	16.243	16.413	21.604
MP5(μSv/h)		10.973	10.873	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	10.973	11.387	20.974	12.533	12.533	15.500	14.153	13.013	15.927	17.160	25.774
MP6(μSv/h)		12.447	12.453	12.387	12.360	12.333	12.370	12.400	12.360	12.353	12.313	12.333	12.343	16.200	18.430	13.407	14.823	15.540	14.193	13.573	14.998	15.353	21.450
MP7(μSv/h)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向		西北西	西北西	西北西	西北西	西北西	西北西	北西	北西	北西	北西	北北西	北北西	北	北東	北東	北東	北東	北東	北北東	北北東	北東	北北東
風速(m/s)		8.8	9.0	6.9	6.1	4.0	3.8	3.8	4.4	5.5	5.2	4.7	3.9	1.2	3.5	6.0	6.3	6.0	4.7	4.4	6.0	4.1	4.1

3月20日		7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50
モニタリングポスト		7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50
MP1(μSv/h)		20.984	19.613	19.030	19.127	18.153	17.680	17.250	17.170	17.063	16.980	16.900	16.830	16.760	16.647	16.563	16.603	16.467	16.430	16.413	16.333	16.253	16.257
MP2(μSv/h)		14.313	13.543	12.443	12.077	11.403	10.919	10.303	10.227	10.173	10.153	10.077	10.053	10.013	9.973	9.893	9.887	9.863	9.830	9.770	9.780	9.757	9.730
MP3(μSv/h)		20.984	20.460	19.863	19.963	19.510	18.550	17.857	17.553	17.470	17.360	17.267	17.117	17.030	17.010	16.913	16.800	16.770	16.753	16.683	16.560	16.517	16.523
MP4(μSv/h)		16.437	15.540	15.287	16.093	14.427	13.650	12.923	12.693	12.573	12.470	12.390	12.297	12.217	12.110	12.023	11.983	11.907	11.870	11.800	11.773	11.697	11.720
MP5(μSv/h)		17.227	15.587	16.147	16.393	14.200	13.193	12.240	12.053	11.953	11.920	11.807	11.760	11.707	11.587	11.567	11.480	11.467	11.420	11.367	11.320	11.267	11.267
MP6(μSv/h)		15.593	15.467	17.017	15.437	14.340	13.860	13.240	13.187	13.187	13.050	13.003	12.937	12.897	12.820	12.810	12.767	12.713	12.670	12.640	12.587	12.527	12.537
MP7(μSv/h)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向		北北東	北北東	北	南	東	東北東	東北東	北東	東北東	東北東	東	南東	南東	東南東	南東	南東	東南東	東北東	東	北東	北東	北東
風速(m/s)		3.7	3.3	1.8	0.8	0.9	1.6	2.5	3.3	4.3	3.0	3.2	1.5	1.8	2.7	2.6	2.2	1.9	1.3	1.1	3.3	2.7	2.5

3月20日		11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30
モニタリングポスト		11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30
MP1(μSv/h)		16.230	16.143	16.027	16.070	16.027	15.923	15.937	15.967	15.917	15.880	15.850	15.790	15.787	15.737	15.710	15.717	15.713	15.687	15.697	15.667	15.643	15.587
MP2(μSv/h)		9.683	9.693	9.657	9.617	9.603	9.570	9.563	9.567	9.527	9.527	9.507	9.513	9.487	9.487	9.463	9.423	9.420	9.403	9.400	9.377	9.340	9.353
MP3(μSv/h)		16.510	16.403	16.390	16.360	16.220	16.270	16.163	16.060	16.163	16.117	16.103	16.050	15.987	15.987	15.933	15.947	15.863	15.900	15.850	15.803	15.803	15.780
MP4(μSv/h)		11.630	11.570	11.520	11.497	11.480	11.427	11.420	11.403	11.343	11.320	11.270	11.263	11.257	11.190	11.180	11.127	11.133	11.087	11.067	11.057	11.057	11.030
MP5(μSv/h)		11.220	11.167	11.167	11.073	11.073	11.073	11.067	10.973	10.973	10.973	10.880	10.873	10.873	10.873	10.873	10.847	10.780	10.780	10.813	10.780	10.773	10.733
MP6(μSv/h)		12.460	12.600	12.453	12.460	12.400	12.383	12.337	12.347	12.277	12.307	12.263	12.210	12.193	12.147	12.160	12.130	12.123	12.123	12.063	12.063	12.063	12.043
MP7(μSv/h)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向		北東	北東	東	北東	北東	北東	北東	北東	東	東北東	東	東	東	東南東	南南東	東南東	東南東	東南東	南南東	南南東	南東	南南東
風速(m/s)		2.2	1.9	1.6	2.2	2.9	2.4	1.2	2.0	1.3	1.7	2.6	2.5	2.5	2.2	1.9	1.5	1.4	1.9	2.4	1.8	2.7	2.5

受信時刻 3月20日 17時47分

受信時刻 3月20日 17時51分

11F074200 (0) 11F074200 2011.03.20 10:00

福島第二(2F) (事業者のモニタリングポスト)

3月19日		18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	
モニタリングポスト																								
MP1($\mu\text{Sv/h}$)		16.723	16.720	16.743	16.803	16.773	16.747	16.740	16.730	16.707	16.710	16.657	16.710	16.623	16.613	16.610	16.590	16.583	16.550	16.547	16.583	16.510	16.557	
MP2($\mu\text{Sv/h}$)		10.193	10.157	10.167	10.163	10.167	10.153	10.143	10.139	10.107	10.090	10.083	10.103	10.083	10.097	10.077	10.080	10.037	10.000	10.730	9.990	10.027		
MP3($\mu\text{Sv/h}$)		16.963	16.890	16.860	16.890	16.980	16.853	16.867	16.797	16.797	16.807	16.820	16.800	16.817	16.763	16.760	16.727	16.737	16.703	16.707	16.710	16.713	16.950	
MP4($\mu\text{Sv/h}$)		11.643	11.650	11.637	11.593	11.617	11.620	11.607	11.590	11.547	11.557	11.550	11.560	11.503	11.523	11.513	11.497	11.480	11.497	11.477	11.440	11.493	11.507	
MP5($\mu\text{Sv/h}$)		11.527	11.567	11.560	11.507	11.553	11.513	11.507	11.467	11.467	11.467	11.467	11.373	11.467	11.367	11.467	11.467	11.367	11.367	11.380	11.367	11.367	11.367	
MP6($\mu\text{Sv/h}$)		12.950	12.967	12.937	12.930	12.887	12.917	12.863	12.933	12.883	12.920	12.887	12.867	12.867	12.810	12.837	12.827	12.787	12.807	12.800	12.770	12.793	12.787	
MP7($\mu\text{Sv/h}$)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	
風向		西	西北西	北西	西北西	西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	北北西	北北西	北	南	南	南南西	西南西	西南西	西南西	西	
風速(m/s)		2.6	3.5	1.8	2.5	3.7	2.7	5.3	6.5	5.5	4.7	2.6	1.4	1.6	1.8	0.9	3.2	1.9	1.8	3.4	5.1	8.8	10.8	

3月19日		22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
モニタリングポスト													
MP1($\mu\text{Sv/h}$)		16.517	16.483	16.470	16.470	16.420	16.453	16.423	16.420	16.433	16.443	16.367	16.400
MP2($\mu\text{Sv/h}$)		10.017	10.003	9.997	9.973	9.967	9.990	9.950	9.933	9.970	9.923	9.910	9.953
MP3($\mu\text{Sv/h}$)		16.657	16.657	16.803	16.663	16.620	16.627	16.560	16.533	16.493	16.537	16.480	16.553
MP4($\mu\text{Sv/h}$)		11.457	11.457	11.447	11.443	11.470	11.440	11.387	11.423	11.420	11.387	11.410	11.400
MP5($\mu\text{Sv/h}$)		11.367	11.373	11.367	11.313	11.360	11.313	11.273	11.280	11.267	11.267	11.287	11.267
MP6($\mu\text{Sv/h}$)		12.747	12.730	12.743	12.730	12.703	12.717	12.710	12.703	12.663	12.673	12.650	12.643
MP7($\mu\text{Sv/h}$)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向		西北西	西	西南西	西	西南西	西南西	西	西	西	西	西南西	西
風速(m/s)		11.9	10.8	5.7	4.8	6.8	7.1	8.4	9.0	8.3	6.8	6.0	7.1

3月20日		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
モニタリングポスト																							
MP1($\mu\text{Sv/h}$)		16.353	16.340	16.333	16.300	16.927	16.267	16.327	16.243	16.243	16.257	16.200	16.227	16.160	16.153	16.133	16.090	16.117	16.147	16.123	16.087	16.027	16.020
MP2($\mu\text{Sv/h}$)		9.903	9.920	9.863	9.917	9.887	9.863	9.880	9.897	9.840	9.890	9.813	9.820	9.783	9.770	9.757	9.787	9.750	9.733	9.743	9.710	9.727	9.710
MP3($\mu\text{Sv/h}$)		16.503	16.483	16.460	16.407	16.410	16.427	16.363	16.327	16.377	16.343	16.333	16.297	16.263	16.253	16.293	16.233	16.207	16.093	16.173	16.130	16.147	16.080
MP4($\mu\text{Sv/h}$)		11.367	11.323	11.323	11.303	11.320	11.303	11.300	11.303	11.290	11.233	11.310	11.277	11.267	11.247	11.190	11.187	11.197	11.210	11.150	11.177	11.170	11.157
MP5($\mu\text{Sv/h}$)		11.267	11.267	11.260	11.213	11.207	11.300	11.167	11.167	11.173	11.157	11.167	11.140	11.133	11.067	11.120	11.073	11.113	11.073	11.073	11.073	11.067	11.073
MP6($\mu\text{Sv/h}$)		12.590	12.513	12.647	12.603	12.600	11.167	12.597	12.563	12.557	12.587	12.533	12.503	12.513	12.527	12.523	12.527	12.490	12.470	12.460	12.487	12.443	12.423
MP7($\mu\text{Sv/h}$)		欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向		西	西	西南西	西	西	西	西南西	西北西	西	西北西	北西	北西	北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西	西北西
風速(m/s)		6.3	6.8	7.7	10.2	9.6	6.4	7.9	9.1	8.9	9.0	10.8	9.4	9.4	10.3	9.0	11.2	8.6	10.5	9.7	8.8	9.8	8.6

福島第二 3月20日 17時47分

福島第二 3月20日 17時51分

14039208 (日) 17:47 24.00000000

福島第二(2F) (事業者のモニタリングポスト)

3月19日																						
モニタリングポスト	7:20	7:30	7:40	7:50	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50
MP1(μSv/h)	17.4	17.4	17.3	17.3	17.3	17.3	17.3	17.3	17.2	17.2	17.2	17.1	17.0	17.1	17.1	17.1	17.0	16.9	17.0	16.9	16.9	16.9
MP2(μSv/h)	10.6	10.5	10.5	10.5	10.5	10.5	10.5	10.4	10.4	10.4	10.3	10.3	10.3	10.2	10.3	10.2	10.2	10.2	10.2	10.2	10.1	10.1
MP3(μSv/h)	17.7	17.7	17.7	17.7	17.7	17.6	17.7	17.6	17.7	17.6	17.6	17.5	17.4	17.4	17.5	17.4	17.4	17.4	17.4	17.3	17.3	17.3
MP4(μSv/h)	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.2	12.1	12.1	12.1	12.1	12.1	12.0	12.0	12.0
MP5(μSv/h)	11.0	11.0	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南西	南	南南西	南南西	南	南西	西	南西	南	南	南南東	南	南	南	南	南	南	南	南	南南東	南東	南東
風速(m/s)	4.2	4.0	3.9	4.4	5.5	5.8	1.7	2.9	2.5	1.7	3.5	4.1	4.3	6.3	6.4	7.7	6.8	7.1	7.8	8.1	4.6	5.0

3月19日																						
モニタリングポスト	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30
MP1(μSv/h)	16.9	16.9	16.9	16.9	16.8	16.9	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.7	16.8	16.7	16.7
MP2(μSv/h)	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.4	10.5	10.5	10.4	10.4	10.4	10.4	10.4	10.2	10.3	10.3
MP3(μSv/h)	17.3	17.2	17.2	17.1	17.1	17.1	17.1	17.0	17.0	17.1	17.0	17.0	17.0	17.0	17.0	17.0	16.9	16.9	17.0	17.0	16.9	16.9
MP4(μSv/h)	12.0	12.0	12.0	11.9	11.9	11.9	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.7	11.8	11.7	11.7	11.7	11.7	11.7
MP5(μSv/h)	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.7	10.7	10.8	10.7	10.7	10.7	10.6
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南東	南南東	南南東	南東	南南東	南南東	南南東	南南東	南南東	南南東	南南西	西	西	西	西	西北西	西北西	西	西	西	西	西
風速(m/s)	7.5	8.0	8.3	6.3	7.4	8.3	8.2	9.4	6.3	5.6	6.0	8.9	11.2	10.2	11.9	11.0	7.2	6.0	7.1	5.8	8.6	5.4

3月19日																						
モニタリングポスト	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10
MP1(μSv/h)	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.6	16.6	16.5	16.5	16.5	16.5	16.5	16.4	16.913	16.867	16.840	16.890	16.820	16.830	16.827
MP2(μSv/h)	10.3	10.2	10.3	10.3	10.3	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.220	10.190	10.220	10.180	10.210	10.237	10.160
MP3(μSv/h)	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.8	16.8	16.9	16.8	16.8	17.027	17.067	17.003	17.040	17.027	17.007	16.997
MP4(μSv/h)	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.6	11.5	11.5	11.6	11.5	11.6	11.5	11.5	11.633	11.640	11.683	11.680	11.647	11.650	11.663
MP5(μSv/h)	10.6	10.6	10.5	10.5	10.5	10.6	10.5	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.3	11.567	11.560	11.567	11.567	11.567	11.567	11.567
MP6(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	13.020	12.997	13.003	12.970	12.960	12.980	12.967
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西	西北西	西	西北西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西	西北西
風速(m/s)	8.6	10.6	8.3	8.1	4.1	6.9	5.0	2.8	3.3	6.2	7.7	9.7	10.7	7.7	7.9	8.0	5.5	6.8	2.7	5.4	0.1	3.0

受審時刻 3月20日 17時47分

受審時刻 3月20日 17時51分

福島第二(2F) (事業者のモニタリングポスト)

3月18日												
モニタリングポスト	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1 (μSv/h)	18.5	18.5	18.5	18.4	18.4	18.4	18.3	18.3	18.3	18.3	18.2	18.2
MP2 (μSv/h)	11.2	11.2	11.1	11.2	11.1	11.1	11.2	11.1	11.1	11.1	11.1	11.1
MP3 (μSv/h)	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.6
MP4 (μSv/h)	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.9	13.0	12.9	12.9
MP5 (μSv/h)	11.8	11.9	11.6	11.6	11.8	11.9	11.9	11.7	11.7	11.7	11.7	11.7
MP6 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	西	西	西	西	西南西	南西	西南西	南西	南西	南西	南西	南
風速(m/s)	5.0	5.0	3.9	4.5	3.9	2.5	2.6	2.3	2.0	2.5	1.7	1.4

3月19日																						
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30
MP1 (μSv/h)	18.2	18.2	18.2	18.2	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	17.9	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.9	17.8
MP2 (μSv/h)	11.1	10.9	11.0	11.0	11.0	10.8	10.9	10.9	10.9	10.8	10.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
MP3 (μSv/h)	18.7	18.7	18.5	18.6	18.5	18.5	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.3	18.4	18.3	18.3	18.3	18.2	18.3	18.2
MP4 (μSv/h)	12.9	12.9	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7
MP5 (μSv/h)	11.7	11.7	11.7	11.6	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.5	11.6	11.6	11.5	11.5	11.5	11.5
MP6 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南西	南西	南西	南	南	南	南	南	南南西	南	南南西	南南西	南	南	南	南	南	南	南	南	南	南
風速(m/s)	0.3	1.6	1.4	0.6	0.6	1.2	1.6	3.5	3.6	3.6	5.4	5.1	5.8	6.5	6.6	5.8	5.6	4.9	4.4	3.6	4.1	5.8

3月19日																						
モニタリングポスト	3:40	3:50	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10
MP1 (μSv/h)	17.8	17.7	17.7	17.7	17.6	17.0	17.7	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.5	17.5	17.5	17.5	17.5	17.5	17.4	17.4
MP2 (μSv/h)	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.6	10.7	10.6	10.6	10.7	10.6	10.6
MP3 (μSv/h)	18.2	18.2	18.2	18.1	18.0	18.0	18.0	17.9	18.0	17.9	17.9	17.9	17.8	17.9	17.9	17.8	17.8	17.8	17.8	17.7	17.7	17.8
MP4 (μSv/h)	12.7	12.6	12.6	12.6	12.6	12.8	12.6	12.6	12.5	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.4
MP5 (μSv/h)	11.4	11.5	11.4	11.4	11.5	11.4	11.4	11.4	11.4	11.3	11.3	11.3	11.2	11.2	11.2	11.1	11.1	11.1	11.2	11.1	11.0	11.0
MP6 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
MP7 (μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南南西	南	南	南	南南西	南	南	南	南南西	南南西	南西	南西	南南西	南	南南西	南	南	南	南	南	南南西	南南西
風速(m/s)	4.9	3.3	3.8	4.0	5.9	5.6	3.6	5.1	5.2	5.9	5.0	7.2	8.3	6.6	6.1	6.1	6.2	7.7	6.4	6.5	6.0	6.7

全時刻 3月20日 17時47分

全時刻 3月20日 17時51分

各発電所等の環境モニタリング結果

単位: $\mu\text{Sv/h}$

通常の平常値の範囲	会社名	発電所名	3月19日												
			12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
0.023~0.027	北海道電力	泊原発	0.022	0.022	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.023
0.024~0.060	東北電力	女川原子力発電所	2.60	2.69	2.40	2.39	2.30	2.20	2.20	2.20	2.20	2.20	2.10	2.10	
0.012~0.060		東通原子力発電所	0.917	0.919	0.923	0.919	0.918	0.918	0.917	0.918	0.917	0.918	0.919	0.918	
0.033~0.050	東京電力	福島第一原子力発電所	3582	3628	3443	3279	3166	3078	3020	2972	2937	2906	2869	2841	
0.036~0.062		福島第二原子力発電所	17.1	17	17	16.9	16.9	16.8	17.07	16.98	16.82	16.737	16.657	16.56	
0.011~0.159		柏崎刈羽原子力発電所	0.066	0.063	0.064	0.066	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	
0.036~0.053	日本原子力発電	東海第二発電所	0.075	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
0.039~0.110		敦賀発電所	0.074	0.073	0.074	0.074	0.074	0.073	0.073	0.072	0.073	0.073	0.072	0.073	
0.064~0.108	中部電力	浜岡原子力発電所	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	
0.0207~0.132	北陸電力	志賀原子力発電所	0.032	0.033	0.032	0.032	0.033	0.032	0.033	0.032	0.032	0.032	0.032	0.032	
0.028~0.130	中国電力	島根原子力発電所	0.030	0.030	0.030	0.030	0.030	0.030	0.029	0.030	0.030	0.030	0.031		
0.070~0.077	関西電力	美浜発電所	0.073	0.074	0.072	0.072	0.073	0.073	0.073	0.072	0.073	0.074	0.072		
0.046~0.047		高浜発電所	0.042	0.042	0.042	0.042	0.043	0.043	0.042	0.042	0.043	0.043	0.042		
0.036~0.040	四国電力	大飯発電所	0.035	0.035	0.035	0.035	0.034	0.035	0.035	0.034	0.035	0.034	0.035		
0.011~0.080		伊方発電所	0.013	0.014	0.013	0.013	0.014	0.014	0.014	0.014	0.013	0.013	0.013		
0.023~0.027	九州電力	玄海原子力発電所	0.026	0.026	0.027	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027		
0.034~0.120		川内原子力発電所	0.035	0.042	0.037	0.036	0.036	0.030	0.037	0.036	0.036	0.039	0.037		
0.009~0.089	日本原燃(株)	六ヶ所 再処理事業所	0.014	0.015	0.017	0.016	0.014	0.014	0.014	0.015	0.015	0.016	0.015		
0.009~0.071		六ヶ所 廃棄物処理事業所	0.016	0.016	0.017	0.017	0.016	0.016	0.017	0.017	0.017	0.018	0.018		

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定値の変動が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月20日										
			0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
0.023~0.027	北海道電力	泊原発	0.023	0.023	0.024	0.024	0.024	0.024	0.025	0.025	0.026	0.025	0.025
0.024~0.060	東北電力	女川原子力発電所	2.10	2.10	2.10	2.10	2.00	2.00	2.00	2.00	2.00	2.00	
0.012~0.060		東通原子力発電所	0.918	0.918	0.918	0.917	0.917	0.917	0.918	0.917	0.917	0.918	
0.033~0.050	東京電力	福島第一原子力発電所	2821	2797	2778	2769	2939	2712	2679	2651	2630	2614	
0.036~0.062		福島第二原子力発電所	16.603	16.363	16.263	16.172	16.117	16.033	17.93	21.017	19.61	17.267	
0.011~0.159		柏崎刈羽原子力発電所	0.064	0.064	0.065	0.065	0.066	0.064	0.065	0.065	0.064	0.066	
0.036~0.053	日本原子力発電	東海第二発電所	0.067	0.062	0.061	0.060	0.061	0.057	0.054	0.050	0.048	0.043	
0.039~0.110		敦賀発電所	0.073	0.074	0.078	0.074	0.074	0.073	0.073	0.074	0.074	0.074	
0.064~0.108	中部電力	浜岡原子力発電所	0.069	0.069	0.068	0.068	0.069	0.069	0.069	0.069	0.069	0.069	
0.0207~0.132	北陸電力	志賀原子力発電所	0.033	0.033	0.032	0.033	0.032	0.032	0.032	0.033	0.033	0.033	
0.028~0.130	中国電力	島根原子力発電所	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	
0.070~0.077	関西電力	美浜発電所	0.073	0.072	0.073	0.073	0.072	0.073	0.074	0.074	0.074	0.072	
0.046~0.047		高浜発電所	0.042	0.042	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	
0.036~0.040	四国電力	大飯発電所	0.036	0.036	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.036	
0.011~0.080		伊方発電所	0.014	0.013	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.013	
0.023~0.027	九州電力	玄海原子力発電所	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.027	0.027	
0.034~0.120		川内原子力発電所	0.039	0.038	0.038	0.036	0.037	0.037	0.038	0.037	0.041	0.038	
0.009~0.089	日本原燃(株)	六ヶ所 再処理事業所	0.016	0.016	0.016	0.014	0.015	0.016	0.015	0.015	0.015	0.015	
0.009~0.071		六ヶ所 廃棄物処理事業所	0.018	0.018	0.018	0.018	0.017	0.018	0.018	0.017	0.018	0.017	

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定値の変動が生じることもございます。

3/20(日) 9時時点

環境省 原子力安全・保安院

3月20日 17時51分

From: Smith, Brooke
Sent: Sunday, March 20, 2011 8:54 PM
To: LIA03 Hoc
Subject: Re: call

Yep, daily. Thanks!

Sent from an NRC Blackberry.
Brooke G. Smith

(b)(6)

From: LIA03 Hoc
To: Smith, Brooke
Sent: Sun Mar 20 20:53:09 2011
Subject: call

Just want to confirm that the call with RST and PMT is daily. Also, we will set up a bridge. Call into the HOO and request the RST/PMT Japan team call. Okay?

Thanks.
Nancy

From: Hoc, PMT12
Sent: Sunday, March 20, 2011 4:49 PM
To: PMT07 Hoc
Subject: FW: ACTION: White House Meeting on Plume Model Developments - Monday, March 21, 8:30am
Attachments: 21 March Plume Model Meeting Agenda.pdf

From: PMT03 Hoc
Sent: Sunday, March 20, 2011 2:53 PM
To: Hoc, PMT12
Subject: FW: ACTION: White House Meeting on Plume Model Developments - Monday, March 21, 8:30am

From: OST01 HOC
Sent: Sunday, March 20, 2011 2:51 PM
To: PMT03 Hoc; PMT09 Hoc
Subject: FW: ACTION: White House Meeting on Plume Model Developments - Monday, March 21, 8:30am

From: HOO Hoc
Sent: Sunday, March 20, 2011 2:47 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: ACTION: White House Meeting on Plume Model Developments - Monday, March 21, 8:30am

From: Landau, Zachary L. [mailto:(b)(6)]
Sent: Sunday, March 20, 2011 2:46 PM
To: steven.aoki@nnsa.doe.gov; Mary.glackin@noaa.gov; steven.fine@noaa.gov; Fetter, Steve; (b)(6); cym3@cdc.gov; Nicole.Lurie@hhs.gov; Richard.Chavez1@dhs.gov; dniwatch@dni.gov; (b)(6); william.carwile@dhs.gov
Cc: NITOPS@nnsa.doe.gov; HOO Hoc; RMTFACTSU DMO@ofda.gov; eoc.epahq@epa.gov; hhs.soc@hhs.gov; NOC.SWO.Restricted@dhs.gov; (b)(6); #RESILIENCE; marcille.moss@hhs.gov; (b)(6); Angelov, Bonnie A; Axelrod, Samuel M; swo@state.gov; (b)(6); Bentz, Julie A.
Subject: ACTION: White House Meeting on Plume Model Developments - Monday, March 21, 8:30am

Good Afternoon,

Richard Reed will host a meeting to discuss plume model developments on Monday, March 21, at 8:30am, in the White House Situation Room. An agenda for the meeting is attached. **Please transmit this by email to the appropriate individuals ASAP** (suggested participation listed below) with a request that they confirm attendance with me as soon as possible - (b)(6) or (b)(6)

11/11-105

The meeting will include reviewing the latest plume models, so in-person attendance is encouraged. Seating only allows participation from each organization as listed below. If required, we can also support attendance by SVTC - please contact the Situation Room at (b)(6) to link in. If you plan to attend in person and do NOT have a White House pass, please send the following information to (b)(6) and (b)(6) AS SOON AS POSSIBLE: Full name, Social Security number, date of birth, country of birth, city and state of residence.

Suggested Participants:

- DOE (2) - Steve Aoki and NARAC rep
- OSTP (2) - Steve Fetter and (b)(6)
- NRC (1) - Source term expert
- NOAA (1) - Mary Glackin or Steve Fine
- HHS (2) - Nicki Lurie and Charlie Miller
- DHS (1) - IMAAC rep
- ODNI (1) - As appropriate
- DoD (3) (Craig Postlewaite (OSD HA), OSD(P), Navy Reactors)
- EPA (1) - Ed Tupin
- USAID - (1) or Via SVTC
- State - (1) or Via SVTC
- FEMA - (1) or Via SVTC
- USPACOM/ USFJ - Via SVTC
- EMB Tokyo - Via SVTC

Thanks,
Zach

Zach Landau
Resilience Directorate
National Security Staff
(o) 202-456-2494
(c) (b)(6)

Japanese Earthquake Restricted Plume Model Meeting

DATE: March 21, 2011
LOCATION: White House Situation Room
TIME: 8:30 - 10:00 a.m.

AGENDA

- I. Introduction NSS
- II. Plume Model Review DOE
- III. Information Gaps and Interagency Requirements
..... DOD/HHS/EPA/ODNI
- IV. Open Discussion All
- V. Conclusion and Way Ahead NSS

From: Young, Samuel E LCDR USN SJFHQ (b)(6) on behalf of USFJ-CAT-RCMT (b)(6)
Sent: Monday, March 21, 2011 8:29 PM
To: (b)(6)
Subject: FW: Operation schedule regarding Fukushima 1st Nuclear Plant 22 Mar
Attachments: 0322Operation schedule regarding Fukushima 1st Nuclear Plant.ppt
Follow Up Flag: Follow up
Flag Status: Flagged

FYSA

-----Original Message-----

From: j3temp5@jso.mod.go.jp [mailto:j3temp5@jso.mod.go.jp]
Sent: Tuesday, March 22, 2011 9:07 AM
To: USFJ-CAT-CHIEF; USFJ-CAT-J5; USFJ-CAT-RCMT; USFJ-CAT-J3; Barker, Matthew LCDR USN; Clausen, John M CAPT USN; Reynolds, Douglas J. LTC USA; Parker, David COL SJFHQ; Rueschhoff, Jason M. Lt Col USAF; Merz, Andrew M MAJ USMC; Young, Samuel E LCDR USN SJFHQ
Subject: FW: Operation schedule regarding Fukushima 1st Nuclear Plant 22 Mar

Gentlemen,

Here is the Power Point of the schedule that I emailed out.

V/R,
MAJ Walker

-----Original Message-----

From: yoshiyuki urasawa [mailto:j3urasawa@jso.mod.go.jp]
Sent: Tuesday, March 22, 2011 8:59 AM
To: j3cat2nd@jso.mod.go.jp; j3temp5@jso.mod.go.jp; j3temp4@jso.mod.go.jp
Subject: Operation schedule regarding Fukushima 1st Nuclear Plant 22 Mar

Gentleman,

Please see attached file.

JJS J3 Bilateral Ops. Section

Tiger

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆
LCDR Urasawa Bilateral Operation Section, JJS J3 DSN Phone: 224-7721 or
224-7786 ☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

www-66

22 Mar 2011

Operation schedule regarding Fukushima 1st Nuclear Plant

- 0600i Surface the place for setting "KIRIN" Truck mounted concrete boom pump for #4 Reactor
- 0900i JASDF RF-4's RECON flight #1 from Hyakuri A/B (depend on weather condition)
- 0910i JASDF RF-4's RECON flight #2 from Hyakuri A/B (depend on weather condition)
- 1000i Site survey prior to setting "KIRIN"
- 1100i Setting up KIRIN
- 1200i Determine whether "KIRIN" operation should be conducted or not
- 1200i-1300i Setting the "KIRIN" to appropriate hit-point with the camera of "KIRIN".(OCA-1: Set "KIRIN" Successfully)
- 1200i-1300i Withdraw "KIRIN" (OCA-3: Fail to set "KIRIN")
 - > after 1400i - +1hour SDF's water flashing(OCA-3)
 - >Then Tokyo Fire-fighting Department water flashing for #3 Reactor(OCA-3)
- 1300i-1400i Test flushing water(OCA-1)
- 1400i Preparing for pumping sea water up(OCA-1)
- 1400i-1500i Withdraw "KIRIN"(OCA-2: Fail at "KIRIN"'s Water Flushing Test)
 - > after 1500i - +1hour SDF's water flashing(OCA-2)
 - >Then Tokyo Fire-fighting Department water flashing for #3 Reactor(OCA-2)
- 1400i-1500i Tokyo Fire-fighting Department for #3 Reactor(OCA-1)
- 1600i-1900i "KIRIN" conduct pumping sea water up(OCA-1)
- 1700i JASDF RF-4's RECON flight from Hyakuri A/B

*JGSDF Helo (12nd Battalion)

Standing by at JGSDF Camp Koriyama for urgent MEDIBAC with 10 JGSDF doctors.

*Remarks

JIS report USFJ/LO Col Town if we could know that TEPCO will conduct decompression a reactor

From: ET07 Hoc
Sent: Monday, March 21, 2011 4:16 PM
To: HOO Hoc
Subject: FW: Charter
Attachments: Charter Rev 1.docx

Please forward to the requester.

-----Original Message-----

From: Emche, Danielle
Sent: Monday, March 21, 2011 4:09 PM
To: ET07 Hoc; LIA03 Hoc; LIA02 Hoc
Subject: Fw: Charter

Danielle
Sent from an NRC BlackBerry.

----- Original Message -----

From: Kreuter, Jane
To: Emche, Danielle
Sent: Mon Mar 21 15:56:34 2011
Subject: FW: Charter

The Chairman's office requested also. It has been sent electronically to them.

-----Original Message-----

From: Mamish, Nader
Sent: Monday, March 21, 2011 3:55 PM
To: Kreuter, Jane
Cc: Fragoyannis, Nancy
Subject: FW: Charter

-----Original Message-----

From: Ramsey, Jack
Sent: Saturday, March 19, 2011 9:22 PM
To: Mamish, Nader
Cc: Ross-Lee, MaryJane; Doane, Margaret
Subject: RE: Charter

This is what I have. It's the version you and I finalized after Chairman review (Chairman review of the initial draft). However, I don't know if any additional changes were made subsequent to our working on it.

-----Original Message-----

From: Mamish, Nader
Sent: Saturday, March 19, 2011 9:03 PM

UWU-607

To: Ramsey, Jack
Cc: Ross-Lee, MaryJane; Doane, Margaret
Subject: RE: Charter

Jack:

Could you please help? I don't recall getting an e-copy of it.

Thanks

-----Original Message-----

From: Ross-Lee, MaryJane
Sent: Saturday, March 19, 2011 7:17 PM
To: Doane, Margaret; Mamish, Nader
Subject: Charter

Can you send a copy of the japanese teams charter? Our guys on the ground. Thx Sent from my blackberry MJ (b)(6)

(b)(6)

Charter (Rev 1)
USNRC Support to USAID
March 14, 2011

Goal:

To support efforts by the U.S. Embassy in Japan to provide technical assistance to help assess and mitigate the impacts of the March 11, 2011 earthquake and tsunami on Japan's nuclear facilities.

Organization:

The NRC support team will be led by a Team Leader. The Team Leader will have ultimate responsibility for coordinating and executing the actions of the Team and U.S government support related to the nuclear facilities on behalf, and at the direction, of the U.S. Ambassador to Japan. The Team Leader will liaise with the Japanese officials, the US Embassy and other U.S. government stakeholders (as appropriate).

The Team will be comprised, initially, of NRC staff with experience in reactor analysis and reactor operations. The Team will be supplemented by NRC staff with experience in cooperation with Japan.

Activities:

The Team, in response to requests, shall:

- Conduct all activities needed to understand the status of efforts to place nuclear power plants impacted by the earthquake and tsunami into a safe shutdown condition;
- Deepen U.S. understanding of the situation on the ground;
- Conduct all activities needed to understand the potential impact, on people and the environment, of any actual or potential release of radioactivity from Japanese nuclear facilities;
- Provide, when asked, authorized U.S. technical advice and support, through the U.S. Ambassador, for the Japanese government's decision making process; and
- Rely on NRC headquarters for technical support beyond their onsite capabilities.

The Team shall establish and maintain communication with:

- NISA and its designated representatives;
- The US Embassy to Japan;
- NRC headquarters; and
- Other U.S. government stakeholders, as appropriate.

From: PMT07 Hoc
Sent: Monday, March 21, 2011 10:57 PM
To: Hoc, PMT12
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures
Attachments: Fukushima Daiichi Radiation Monitor Readings 2238 03212011.xlsx

FYI

-----Original Message-----

From: PMT07 Hoc
Sent: Monday, March 21, 2011 10:56 PM
To: (b)(6) Dorman, Dan; Foster, Jack
Cc: RST01 Hoc; FOIA Response.hoc Resource
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

Rob,

Please see the attached and the email below. The attachment provides site radiation data plotted in graphical format for the last nine days. Please let us know of any questions.

Thanks

Jay Patel

-----Original Message-----

From: PMT03 Hoc
Sent: Monday, March 21, 2011 10:40 PM
To: PMT07 Hoc
Subject: RE: Radiation monitoring data from TEPCO and from the prefectures

Jay,

Here is the excel workbook with the available onsite rad monitoring readings in graphical format, going back to 3/12/2011. The data is continuous for the past three days at least.

I compiled this data from NISA METI press release attachments on the IAEA ENAC website (current up to release #40) and from the TEPCO rad data excel workbook (current up to the March 20 book you just sent).

Hope it helps,

Ryan Craffey
Preventative Measures Team, USNRC

-----Original Message-----

From: PMT07 Hoc
Sent: Monday, March 21, 2011 10:12 PM
To: PMT03 Hoc
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

Walt 68

See below.

-----Original Message-----

From: PMT01 Hoc
Sent: Monday, March 21, 2011 10:07 PM
To: PMT02 Hoc; PMT07 Hoc; Hoc, PMT12
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

FYI

-----Original Message-----

From: RST01 Hoc
Sent: Monday, March 21, 2011 9:59 PM
To: PMT01 Hoc
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

FYI

-----Original Message-----

From: Mercer, Robert LCDR USN USFJ J3 [mailto:(b)(6)] On Behalf Of USFJ-CAT-RCMT
Sent: Monday, March 21, 2011 9:53 PM
To: USFJ-CAT-RCMT
Cc: Guss, Paul P. CTR; Haas, Craig T GS-14 USFJ J57; RST01 Hoc
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

Not sure who can do this but we need the site radiation data plotted in graphical format for the last three days. This may have to be extracted directly from the TEPCO site and hand jammed into Excel.

This information is needed ASAP so we can try to determine what happened with the unit 2 and 3 fires yesterday.

Thanks

Very Respectfully,
LCDR Rob Mercer

-----Original Message-----

From: Hewitt, James E. MAJ USA USFJ J39 On Behalf Of USFJ-CAT-CHIEF
Sent: Tuesday, March 22, 2011 7:56 AM
To: USFJ-CAT-AIR; USFJ-CAT-MARITIME; USFJ-CAT-GROUND; USFJ-CAT-IIIMEF-FORWARD
Cc: USFJ-CAT-RCMT; USFJ-CAT-MEDICAL; USFJ-CAT-EM
Subject: FW: Radiation monitoring data from TEPCO and from the prefectures

FYI - widest dissemination.

JIM HEWITT
MAJ, USA
CAT XO
DSN: 225-2469

-----Original Message-----

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]

Sent: Tuesday, March 22, 2011 7:36 AM

To

(b)(6)

(b)(6)

Subject: Radiation monitoring data from TEPCO and from the prefectures

Hello,

Attached please find monitoring data by the prefectures, provided by the Ministry of Education, Culture, Sports, Science and Technology (MEXT):

http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303723.htm

Also attached please find radiation monitoring data provided by TEPCO:

<http://www.tepco.co.jp/nu/monitoring/index-i.html>

An Embassy employee has been working on these translations; we will send updates as new translations become available.

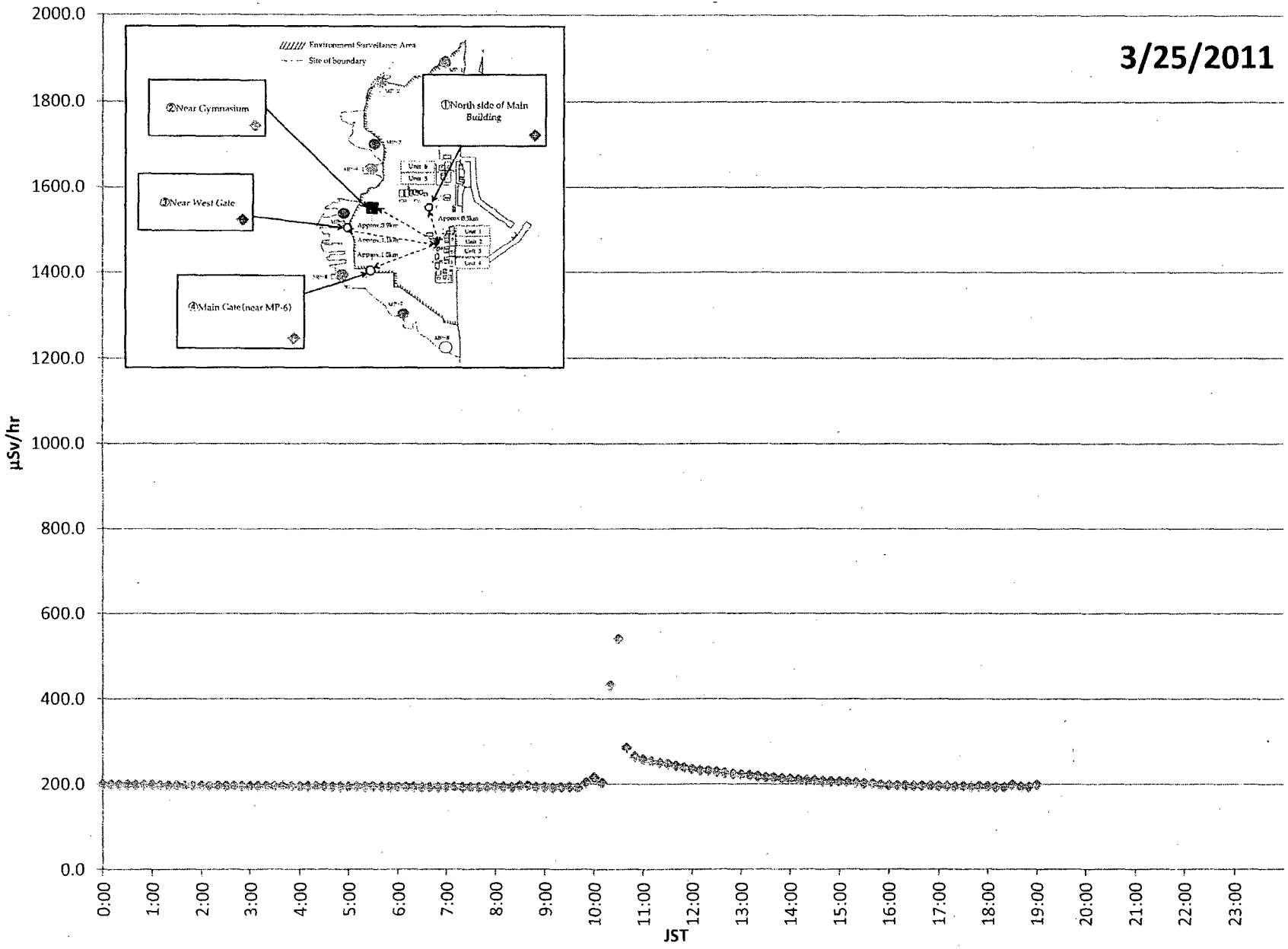
Naomi Walcott
Emergency Action Officer

Japan Emergency Command Center
U.S. Embassy Tokyo

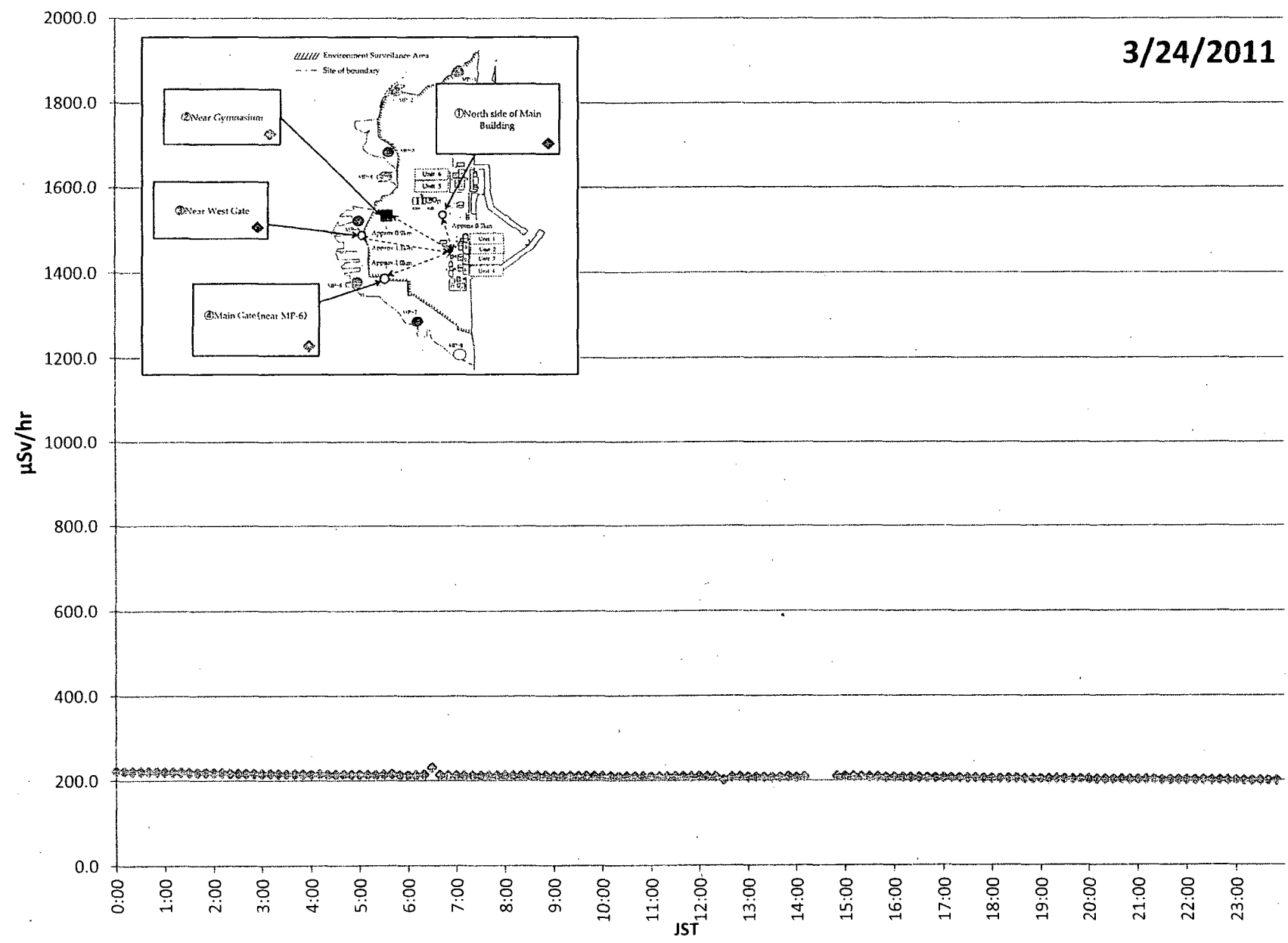
SBU

This email is UNCLASSIFIED.

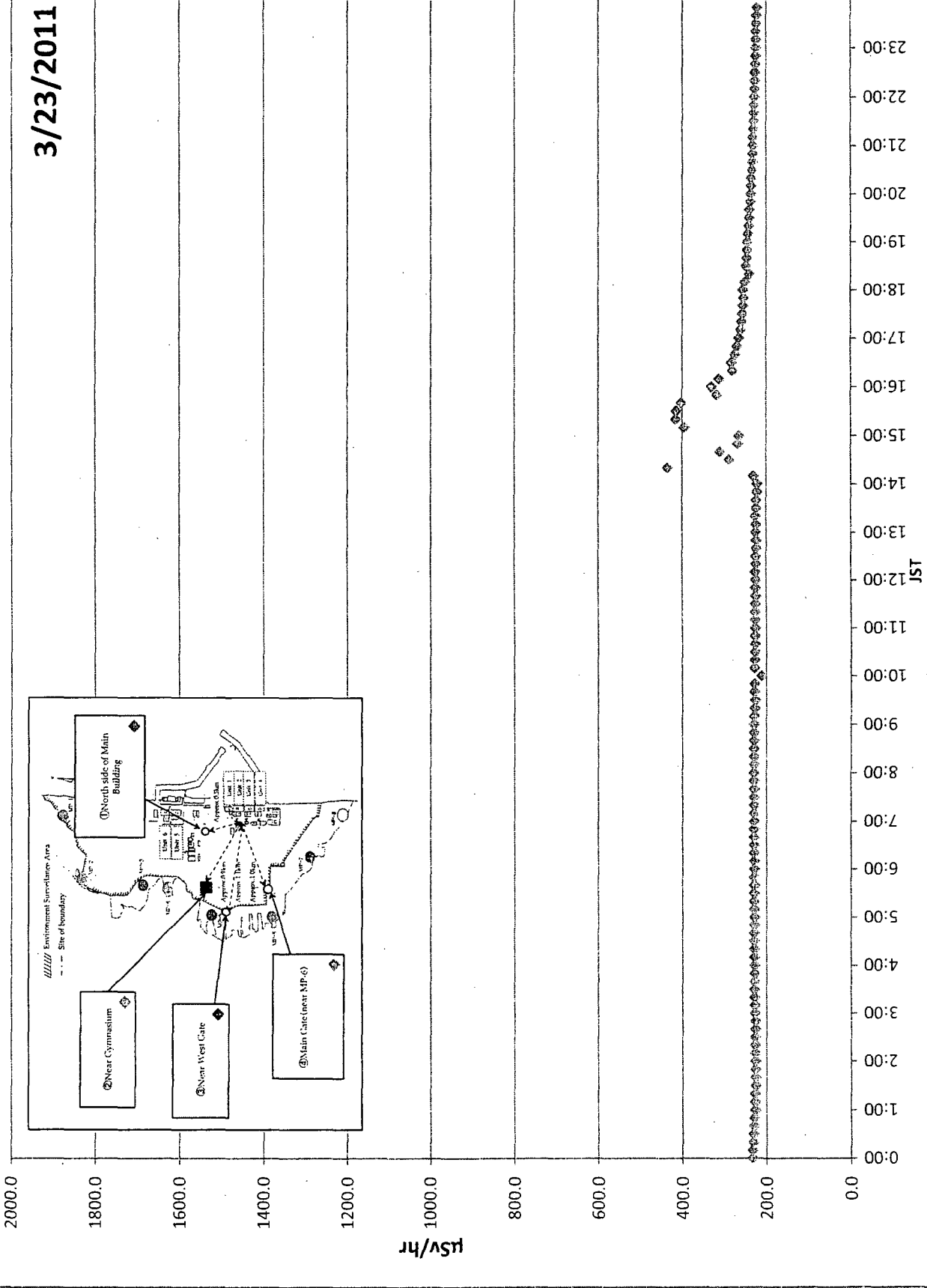
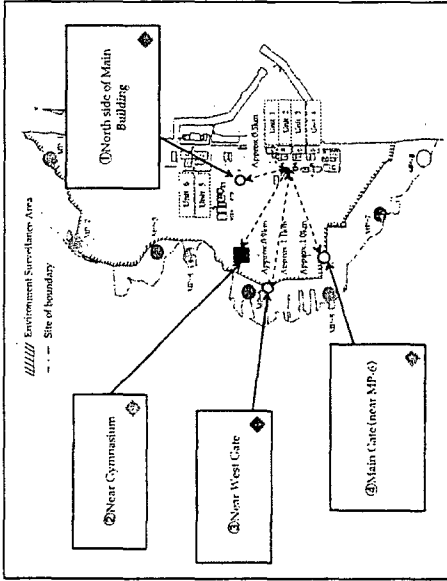
3/25/2011



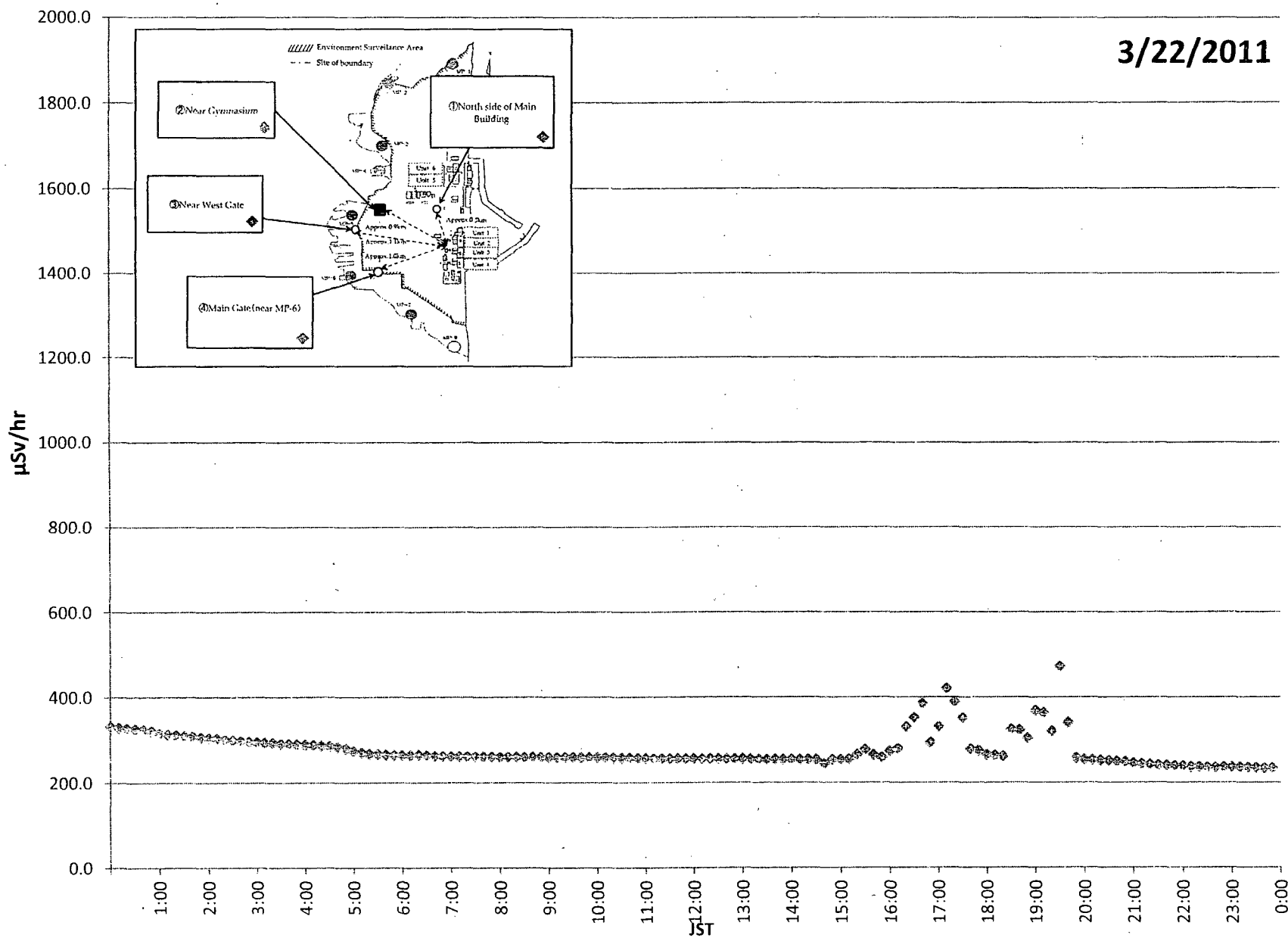
3/24/2011



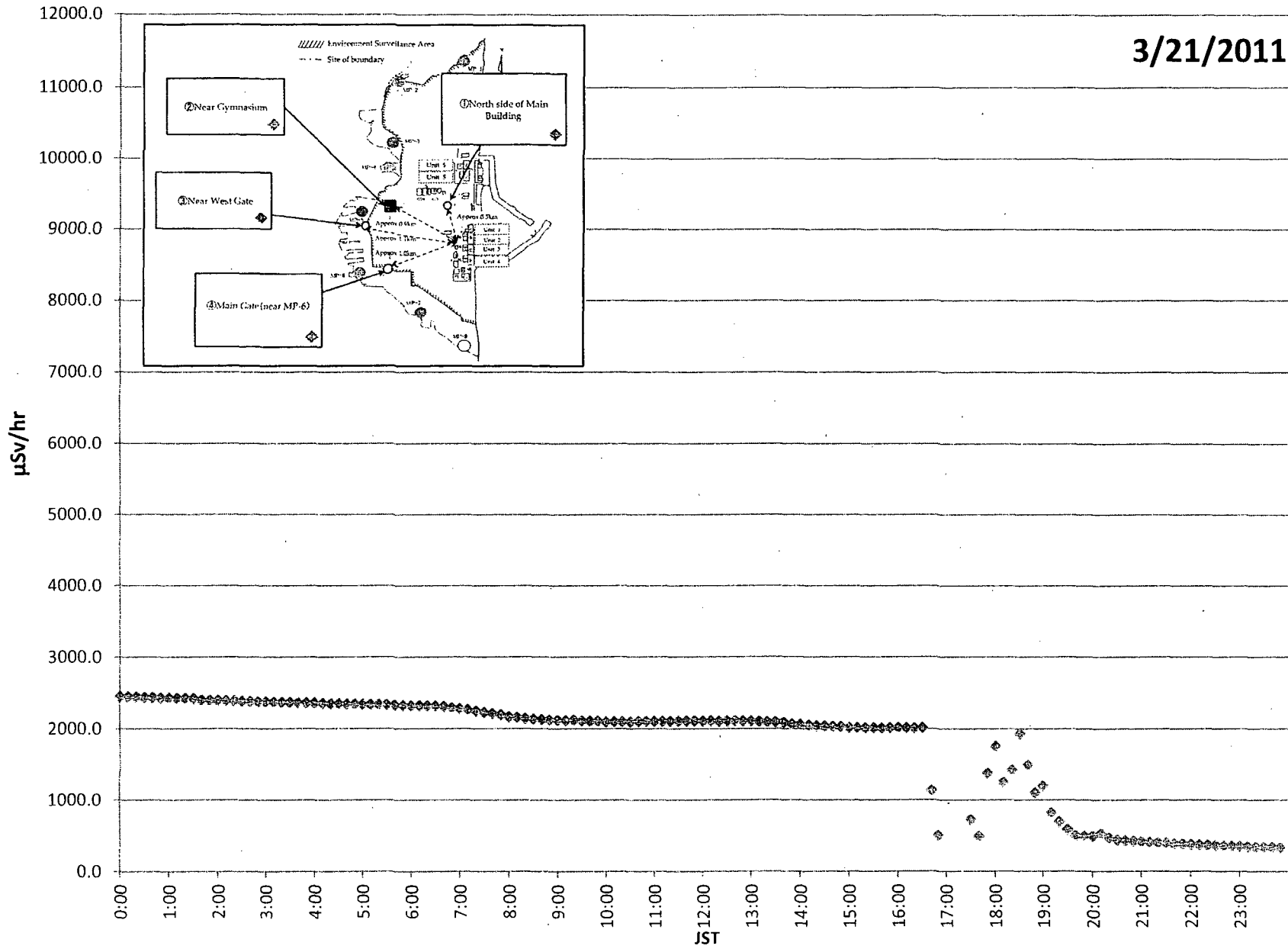
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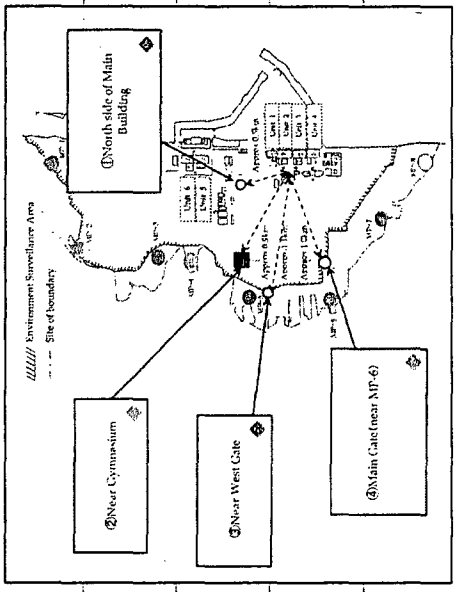
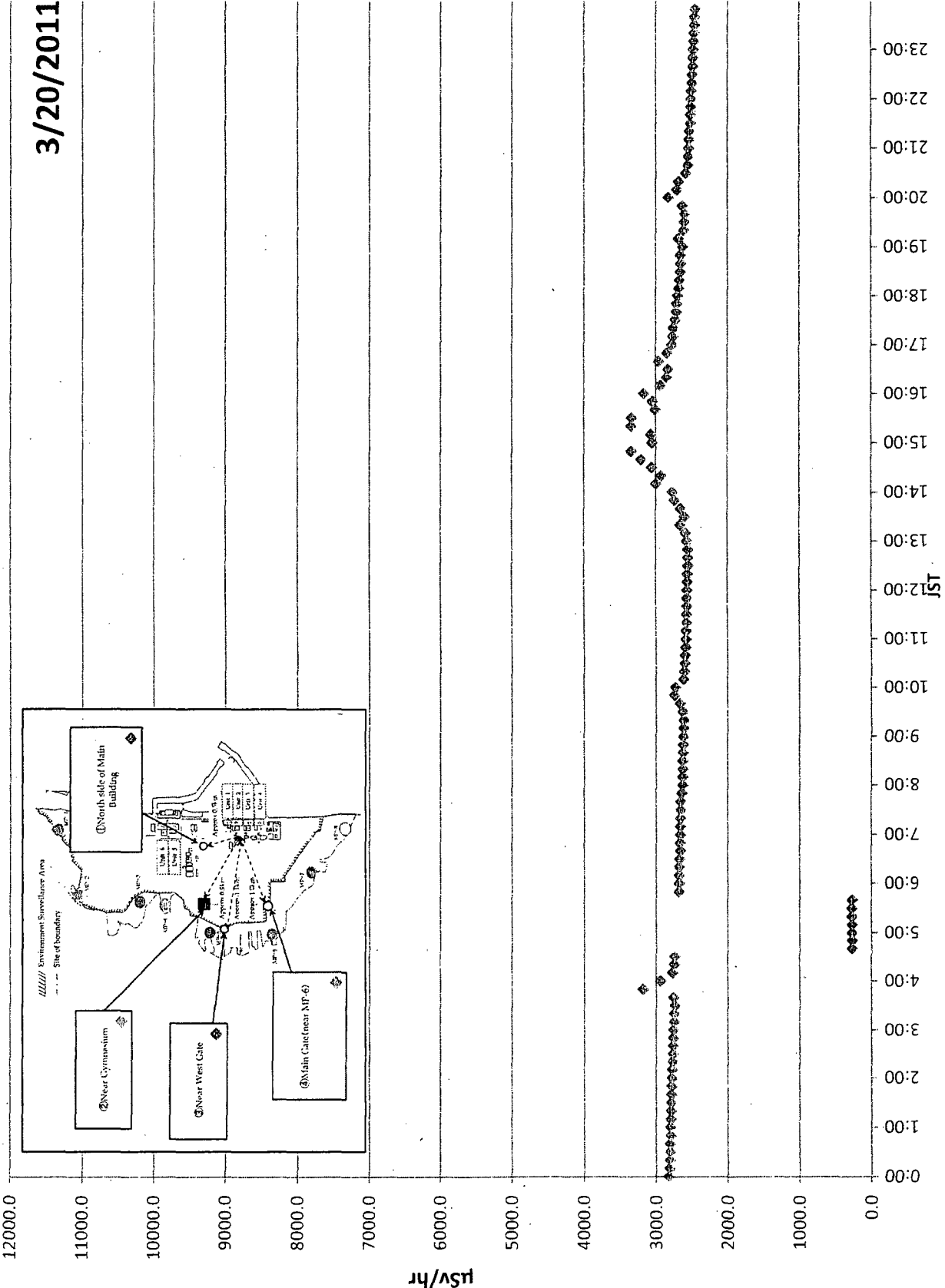
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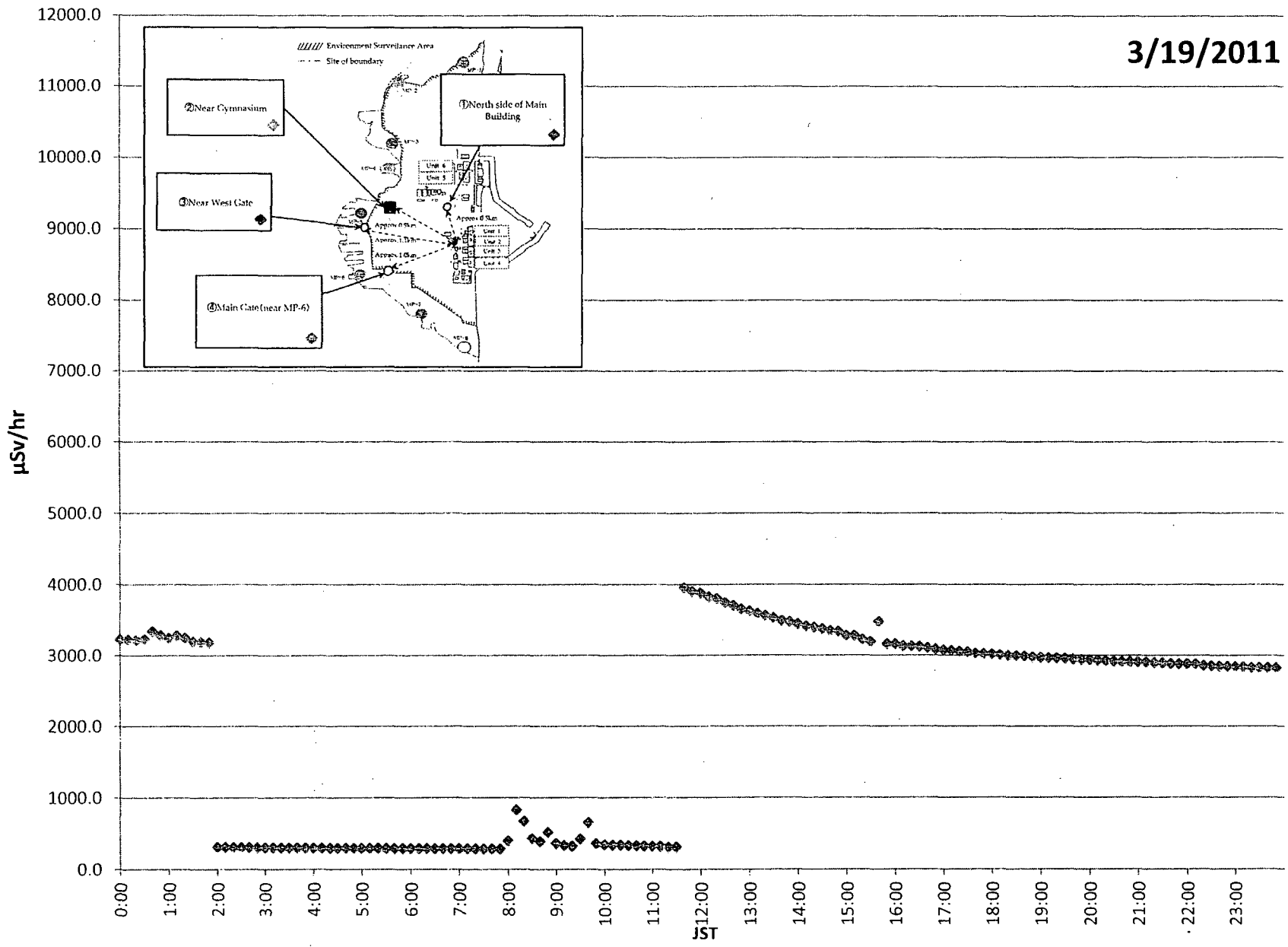
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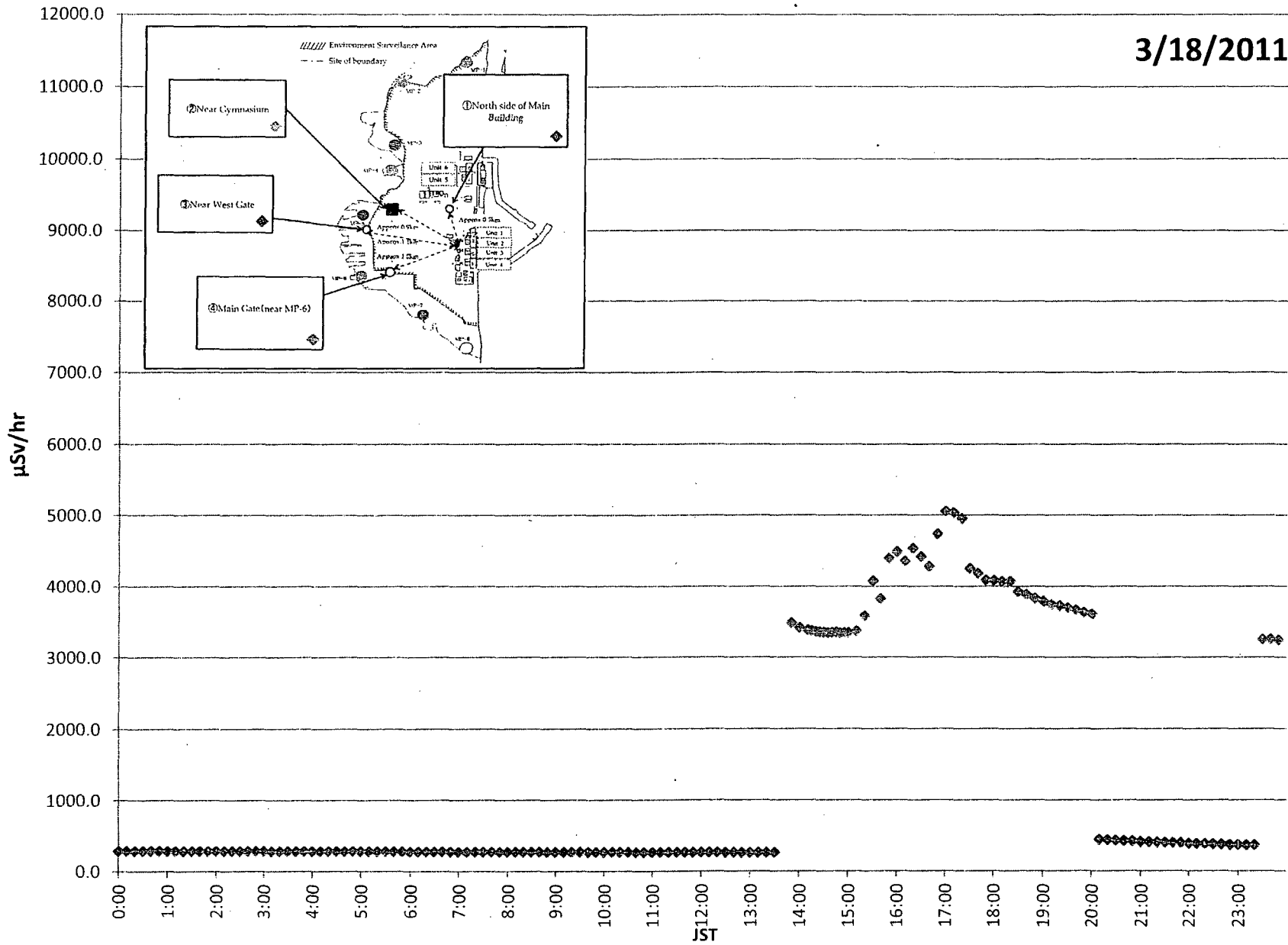
3/20/2011



3/19/2011



3/18/2011



3/17/2011

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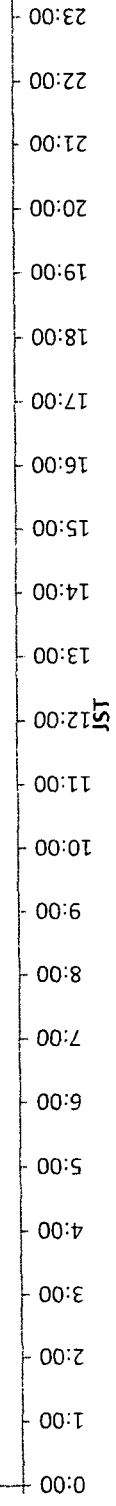
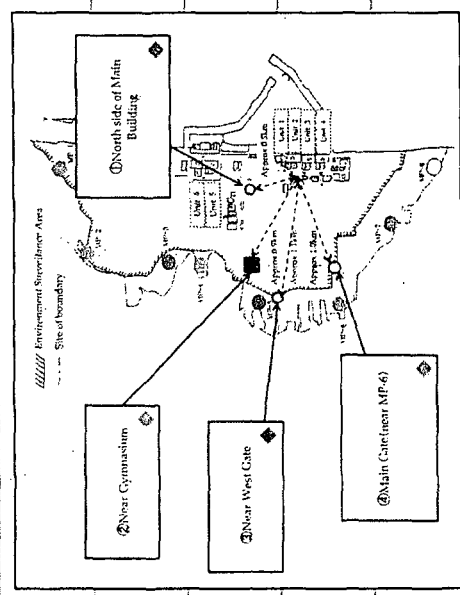
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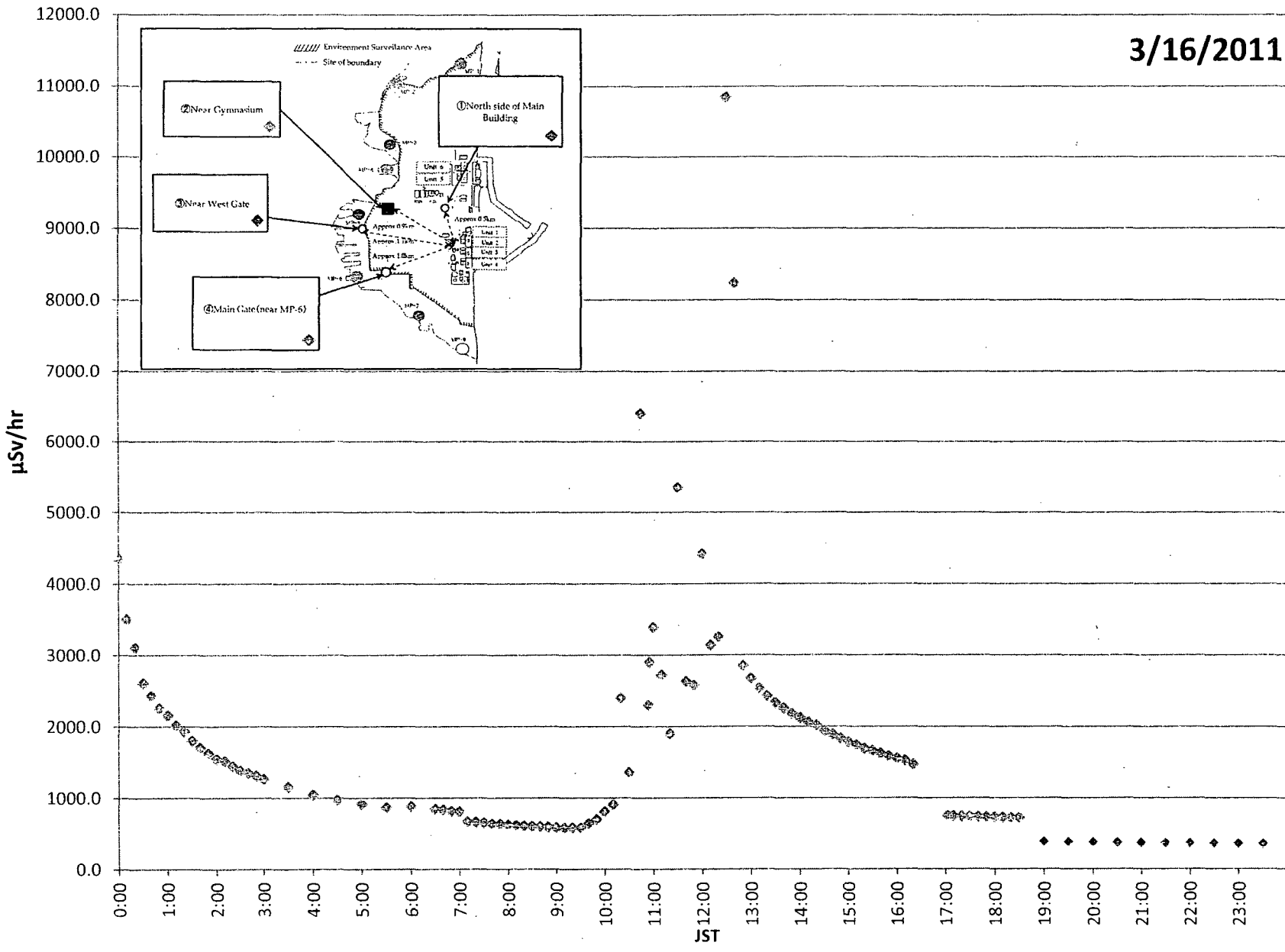
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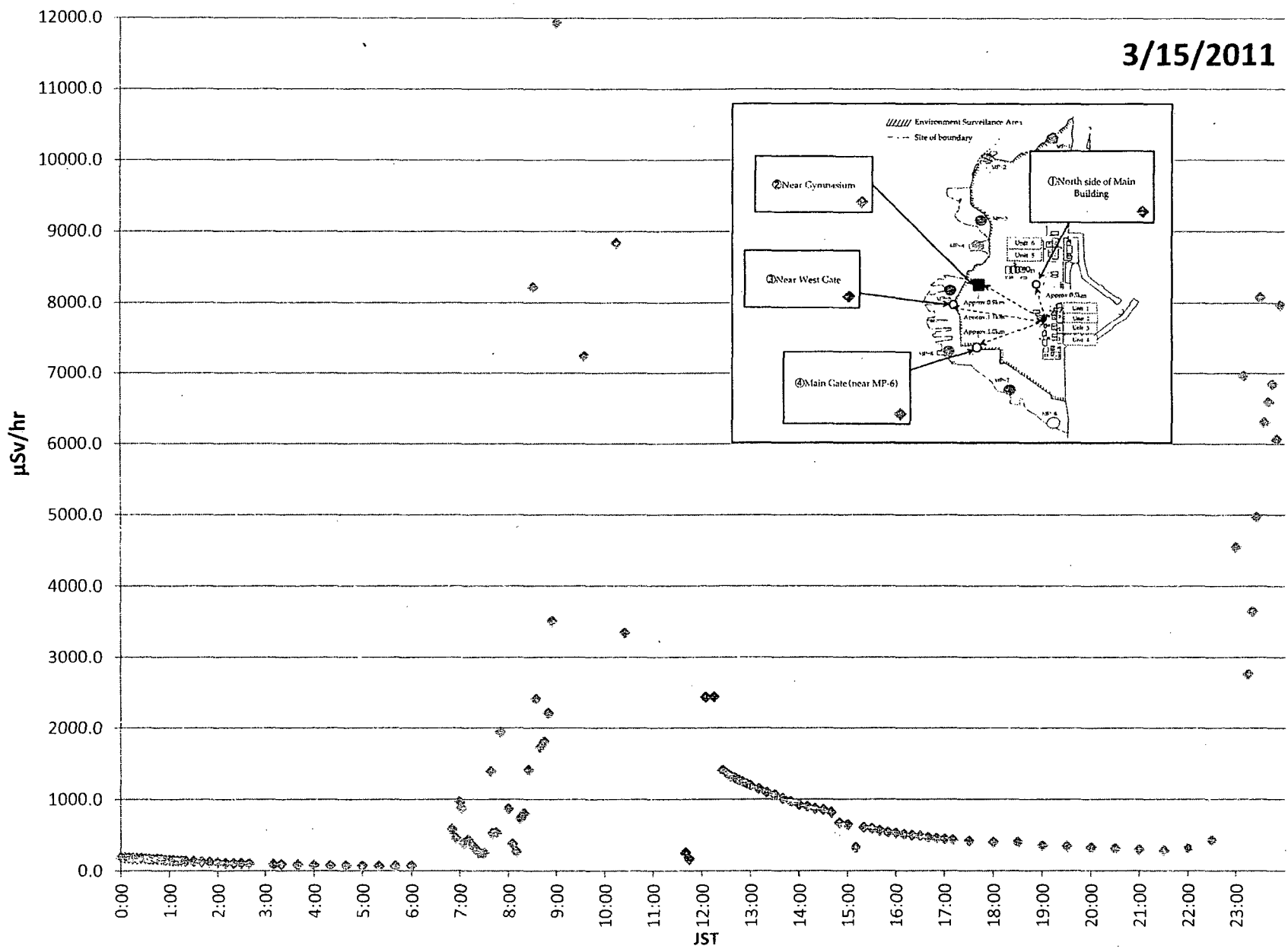
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3/16/2011

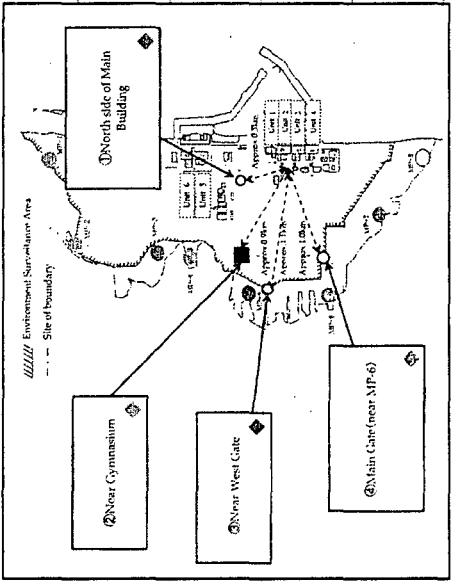


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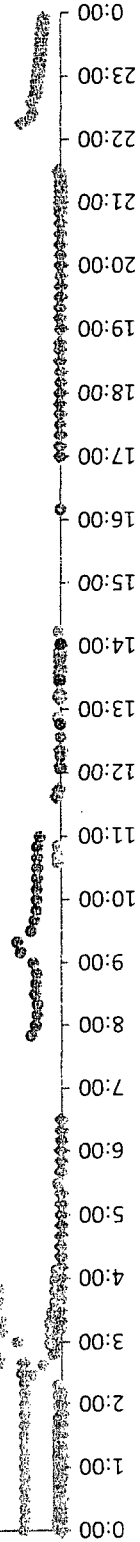
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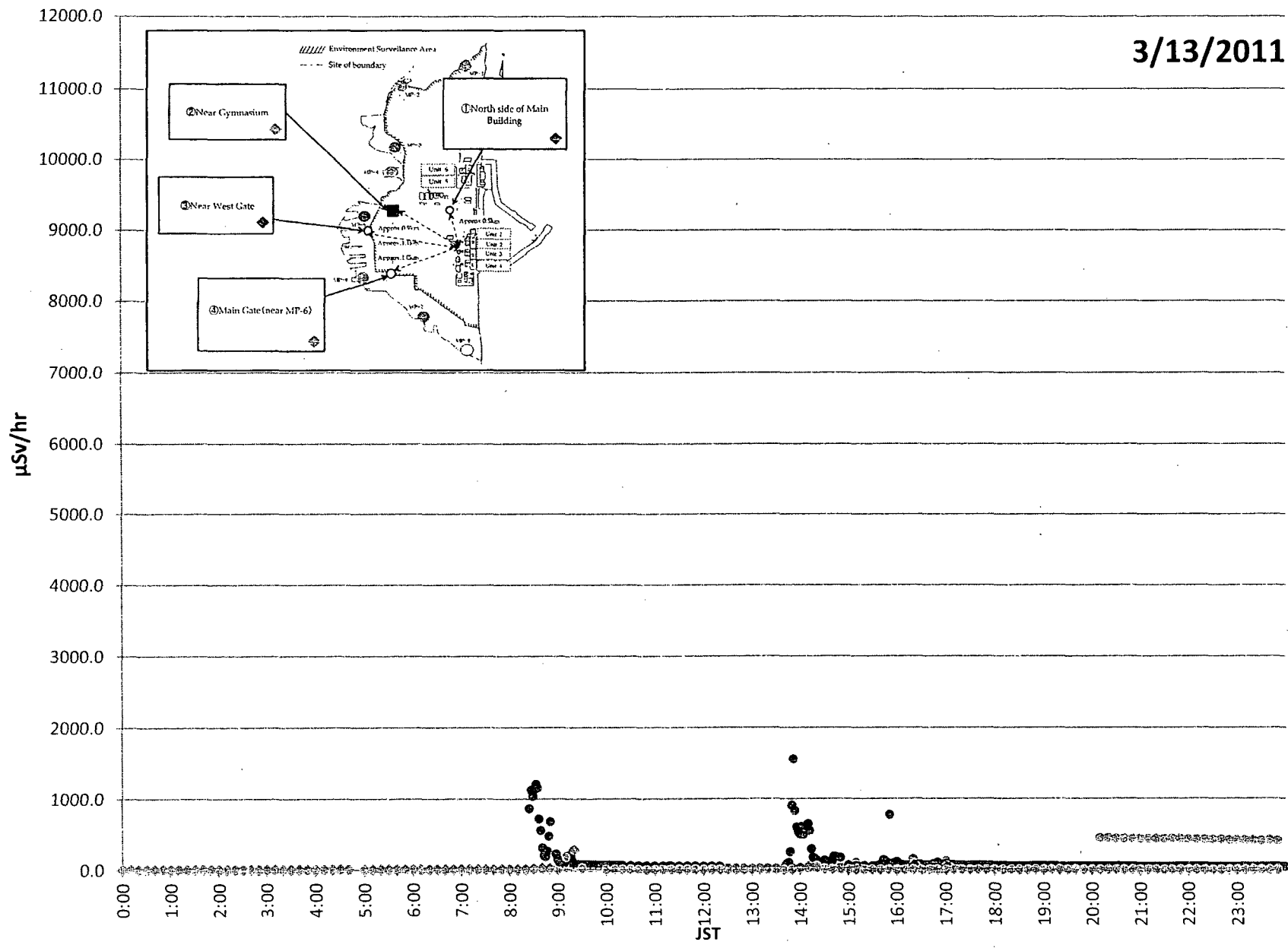


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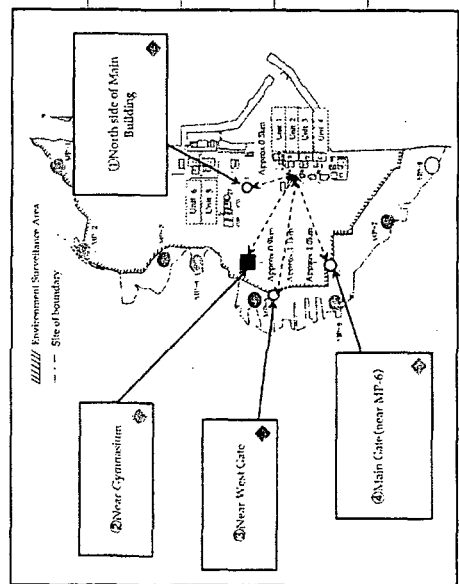
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3/12/2011

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5:10		6.5			
5:20		6.7			
5:29				41.3	
5:30					
5:40		6.4			
5:50		6.3			
6:00		5.1			
6:10		5.0			
6:20		5.0			
6:30		4.9			
6:40					
6:50					
7:00					
7:10					
7:20					
7:30					
7:40					
7:50				331.8	
8:00				282.4	
8:10				262.9	
8:20				261.3	
8:30				287.2	

Time	MS 1	MS 2	MS 3	MS 4	MP 1	MP 2	MP 3	MP 4	MP 5	MP 6	MP 7	MP 8
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0:10				3.3								
0:20				3.0								
0:30				3.1								
0:40				3.2								
0:50				3.2								
1:00				3.2								
1:10				3.2								
1:20				3.2								
1:30				3.1								
1:40				3.3								
1:50				3.1								
2:00				3.2								
2:10				3.1								
2:20				3.2								
2:30				3.2								
2:40				3.1								
2:50				3.1								
3:00				3.6								
3:10				4.0								
3:20				3.2								
3:30				3.1								
3:40				3.4								
3:50				3.2								
4:00				3.0								
4:10				3.6								
4:20				3.2								
4:30				3.1								
4:40				3.3								
4:50												
5:00				3.2								
5:10				3.4								
5:20				3.5								
5:30				3.8								
5:40				3.2								
5:50				3.2								
6:00				3.5								
6:10				3.2								
6:20				3.2								
6:30				3.6								
6:40				3.1								
6:50				3.0								
7:00				3.7								
7:10				3.4								
7:20				3.3								
7:30				3.5								
7:40				3.4								
7:50				7.2								
8:00				3.5								
8:10				3.2								
8:20				3.2								
8:25								864.2				
8:27								1124.3				
8:29								1038.2				
8:30				14.7								
8:31								1144.1				
8:33								1204.2				
8:35								1153.6				
8:37								717.7				
8:39								554.1				

8:40			16.0						
8:41						307.8			
8:43						197.7			
8:45						186.2			
8:47						261.2			
8:49						473.1			
8:50			15.9						
8:51						679.8			
8:58						221.3			
9:00			10.2	37.0		143.5			
9:02						108.5			
9:04						97.4			
9:06						88.7			
9:08						101.8			
9:10			175.0	30.0		138.8		175.0	
9:12						193.2			
9:14						199.5			
9:16						187.3			
9:18						124.5			
9:20			281.7	27.0		76.9		281.7	
9:22						75.3			
9:24						73.8			
9:26						72.3			
9:28						71.2			
9:30			26.0	25.0		70.3		26.0	
9:32						69.4			
9:34						68.6			
9:36						69.5			
9:38						68.3			
9:40				25.0		66.8			
9:42						66.3			
9:44						65.8			
9:46						65.4			
9:48						65.0			
9:50				23.0		64.7			
9:52						64.3			
9:54						63.9			
9:56						63.5			
9:58						63.2			
10:00			6.5	23.0		62.8		6.5	
10:02						62.5			
10:04						62.1			
10:06						61.8			
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10:12						60.8			
10:14						60.6			
10:16						60.3			
10:20			8.3	20.0		61.8		8.3	
10:30			6.8	19.0		58.0		6.8	
10:40			6.0	19.0		56.8		6.0	
10:50			6.0	19.0		55.5		6.0	
11:00			5.8	18.0		54.3		5.8	
11:10			5.6	18.0		53.3		5.6	
11:18						52.8			
11:20			6.0	18.0		53.7		6.0	
11:30			7.9	17.0		51.3		7.9	
11:40			6.8	17.0		50.0		6.8	
11:50			6.6	17.0		49.4		6.6	
12:00			5.5	17.0		48.6		5.5	
12:10			5.5	18.0		47.8		5.4	

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12:30			5.5	17.0				5.5	
12:40			5.3	17.0				5.3	
12:50			5.4	17.0				5.4	
13:00			5.0	17.0				5.0	
13:10			4.8	17.0				4.8	
13:20			4.9	17.0				4.9	
13:30			4.9	16.0				4.9	
13:40			4.9	16.0				4.9	
13:42						50.2			
13:44						82.5			
13:46						97.9			
13:48						251.8			
13:50			5.0	24.0		905.1		5.0	
13:52						1557.5			
13:54						829.7			
13:56						595.5			
13:58						531.8			
14:00			21.9	25.0		499.3		21.9	
14:02						602.6			
14:04						490.9			
14:06						599.1			
14:08						595.3			
14:10			39.7	21.0		646.0		39.0	
14:12						547.3			
14:14						289.7			
14:16						170.6			
14:18						154.3			
14:20			57.6	21.0		135.4		57.6	
14:30			17.6	32.0		129.9		17.6	
14:38						112.2			
14:40			10.1	52.0		133.0		10.1	
14:42						184.1			
14:44						179.8			
14:50			10.9	35.0		169.8		10.9	
15:00			8.3	52.0		58.8		8.3	
15:10			5.7	100.0		54.3		5.7	
15:20			4.7	24.0		53.0		5.0	
15:30			4.5	34.0		51.8		4.5	
15:36						51.6			
15:38						52.1			
15:40			4.4	24.0		56.5		4.4	
15:42						85.0			
15:44						135.8			
15:46						116.6			
15:48						100.7			
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15:52						773.4			
15:54						80.6			
15:56						82.8			
15:58						90.0			
16:00			5.2	31.0		107.0		5.2	
16:02						83.8			
16:04						71.1			
16:06						64.7			
16:08						61.4			
16:10			4.6	45.0		58.0		4.6	
16:12						56.5			
16:14						55.1			
16:16						54.2			
16:18						55.6			

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16:22						57.6		
16:24						60.7		
16:26						67.1		
16:28						72.8		
16:30			4.3	46.0		71.5	4.3	
16:32						6.7		
16:34						63.5		
16:36						60.0		
16:38						57.9		
16:40			4.2	60.0		57.2	4.2	
16:42						61.9		
16:44						78.5		
16:46						16.4		
16:48						13.6		
16:50			4.2	30.0		100.1	4.2	
16:52						68.7		
16:54						63.9		
16:56						6.2		
16:58						72.1		
17:00			4.3	120.0		79.4	4.3	
17:02						72.1		
17:04						64.8		
17:06						63.0		
17:08						62.4		
17:10			4.2	62.0		60.8	4.2	
17:12						58.6		
17:14						56.5		
17:16						55.4		
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17:38						56.8		
17:40			5.9	40.0		56.8	5.9	
17:42						56.3		
17:44						53.8		
17:46						53.0		
17:48						52.7		
17:50			6.0	35.0		52.3	6.0	
17:52						51.8		
17:54						52.3		
17:56						53.3		
17:58						51.2		
18:00			5.4	35.0		50.1	5.4	
18:02						50.0		
18:04						49.8		
18:06						49.7		
18:08						49.5		
18:10			5.2	30.0		49.4	5.2	
18:12						49.2		
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18:16						48.9		
18:18						48.8		
18:20			5.3	27.0		48.6	5.3	

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18:26						48.2			
18:28						48.1			
18:30			4.9	26.0		47.9	4.9		
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18:40			5.0			47.3	5.0		
18:42						47.2			
18:44						47.0			
18:46						46.8			
18:48						46.8			
18:50			4.8			46.7	4.8		
18:52						46.6			
18:54						46.5			
18:56						46.4			
18:58						46.3			
19:00			5.2			46.1	5.2		
19:02						46.0			
19:04						46.3			
19:06						47.3			
19:08						47.1			
19:10			5.1			46.9	5.1		
19:12						46.8			
19:14						46.6			
19:16						46.4			
19:20			4.7				4.7		
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19:29						44.5			
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19:31						44.4			
19:33						44.3			
19:35						45.3			
19:37						44.8			
19:39						43.9			
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19:49						43.7			
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19:51						43.8			
19:53						44.2			
19:55						43.5			
19:57						43.5			
19:59						43.3			
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20:01						43.2			
20:03						43.1			
20:05						43.0			
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20:09						42.9			
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20:13						42.7			
20:15						42.7			

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20:19						42.6		
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20:23						42.3		
20:25						42.3		
20:27						42.2		
20:29						42.2		
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20:35						44.6		
20:37						42.6		
20:39						42.2		
20:40			4.5		440.0			4.5
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20:43						41.9		
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20:47						41.7		
20:49						41.7		
20:50			4.4		440.0			4.4
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20:53						41.6		
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20:57						41.5		
20:59						41.3		
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21:01						41.3		
21:03						41.3		
21:05						41.2		
21:07						41.1		
21:09						41.0		
21:10			4.5		440.0			4.5
21:11						41.0		
21:13						41.0		
21:15						41.0		
21:17						40.8		
21:19						40.8		
21:20			4.5		440.0			4.5
21:21						40.8		
21:23						40.7		
21:25						40.7		
21:27						40.6		
21:29						40.6		
21:30			4.6		440.0			4.6
21:31						40.6		
21:33						40.5		
21:35						40.4		
21:37						42.0		
21:39						41.3		
21:40			4.8		440.0			4.8
21:41						40.3		
21:43						40.2		
21:45						40.2		
21:47						40.1		
21:49						40.1		
21:50			4.6		440.0			4.6
21:51						40.1		
21:53						40.0		
21:55						40.0		
21:57						39.9		

21:59						39.9			
22:00			4.6		430.0			4.6	
22:01						39.8			
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22:10			4.6		430.0			4.6	
22:11						39.7			
22:13						39.6			
22:15						39.6			
22:17						39.5			
22:19						41.0			
22:20			5.4		430.0			5.4	
22:21						40.4			
22:23						39.4			
22:25						39.3			
22:27						39.3			
22:29						39.3			
22:30			4.6		430.0			4.6	
22:31						39.3			
22:33						39.2			
22:35						39.2			
22:37						39.2			
22:39						39.1			
22:40			4.6		430.0			4.6	
22:41						39.1			
22:43						39.0			
22:45						39.0			
22:47						39.0			
22:49						38.9			
22:50			4.6		420.0			4.6	
22:51						38.9			
22:53						38.9			
22:55						38.8			
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22:59						38.7			
23:00			4.7		420.0			4.7	
23:01						38.7			
23:03						38.7			
23:05						39.7			
23:07						40.5			
23:09						40.6			
23:10			4.7		420.0			4.7	
23:11						39.0			
23:13						38.5			
23:15						38.5			
23:17						38.4			
23:19						38.3			
23:20			4.6		420.0			4.6	
23:21						38.3			
23:23						38.3			
23:25						38.3			
23:27						38.3			
23:29						38.3			
23:30			4.6		410.0			4.6	
23:31						38.2			
23:33						38.2			
23:35						38.2			
23:37						38.2			
23:39						38.1			

23:40				4.8		420.0				4.8		
23:41									38.1			
23:43									38.1			
23:45									38.0			
23:47									38.0			
23:49									38.0			
23:50				4.9		410.0				4.9		
23:51									37.9			
23:53									37.9			
23:55									37.9			
23:57									37.9			
23:59									37.8			

Time	MS 1	MS 2	MS 3	MS 4	MP 1	MP 2	MP 3	MP 4	MP 5	MP 6	MP 7	MP 8
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0:10												
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0:30												
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6:20												
6:30							3.3					
6:40							4.9					
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7:20												
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8:10							5.1					
8:20							4.8					
8:30												
8:40							4.6					
8:50							4.9					
9:00												
9:10												
9:20												
9:30							5.2					
9:40												
9:50							5.0					

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13:50			4.8						
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14:40			8.9						
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19:50			23.9						
20:00			2.7						

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22:50			3.1								
23:00			3.3								
23:10			3.3								
23:20			3.2								
23:30			3.1								
23:40			3.2								
23:50			3.1								

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23:00
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6:55	456.5
7:00	965.5
7:02	882.7
7:05	387.3
7:10	431.8
7:15	360.8
7:20	302.1
7:25	234.7
7:30	250.8
7:38	1390.0
7:40	529.0
7:45	537.4
7:50	1941.0
8:00	873.1
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8:10	268.9
8:15	735.9
8:20	807.7
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8:31	8217.0
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10:50	
11:00	
11:10	

11:20	
11:30	
11:40	253.8
11:45	162.4
11:50	
12:00	
12:05	2431.0
12:10	
12:15	2434.0
12:20	
12:25	1407.0
12:30	1362.0
12:35	1325.0
12:40	1300.0
12:45	1267.0
12:50	1242.0
12:55	1216.0
13:00	1191.0
13:10	1148.0
13:20	1100.0
13:30	1068.0
13:40	1014.0
13:50	969.9
14:00	928.2
14:10	903.9
14:20	874.4
14:30	855.5
14:40	821.3
14:50	673.8
15:00	649.0
15:10	328.5
15:20	613.8
15:30	596.4
15:40	566.9
15:50	544.9
16:00	531.6
16:10	513.2
16:20	502.6
16:30	489.8
16:40	473.0
16:50	460.0
17:00	449.4
17:10	437.5
17:20	
17:30	423.5
17:40	
17:50	

18:00	401.7
18:10	
18:20	
18:30	403.0
18:40	
18:50	
19:00	353.8
19:10	
19:20	
19:30	343.3
19:40	
19:50	
20:00	327.0
20:10	
20:20	
20:30	311.3
20:40	
20:50	
21:00	298.8
21:10	
21:20	
21:30	282.6
21:40	
21:50	
22:00	313.2
22:10	
22:20	
22:30	431.8
22:40	
22:50	
23:00	4548.0
23:10	6960.0
23:15	2761.0
23:20	3648.0
23:25	4976.0
23:30	8080.0
23:35	6308.0
23:40	6592.0
23:45	6847.0
23:50	6066.0
23:55	7966.0

MP 6

MP 7

MP 8

1:17			36.7
1:19			36.7
1:20	4.3	410.0	
1:21			36.7
1:23			36.7
1:25			36.7
1:27			36.6
1:29			36.6
1:30	4.3	410.0	
1:31			36.5
1:33			36.5
1:35			36.5
1:37			36.5
1:39			36.4
1:40	4.3	410.0	
1:41			36.4
1:43			36.4
1:45			36.4
1:47			36.8
1:50	4.4	410.0	
1:58			36.5
2:00	4.4	410.0	
2:08			36.3
2:10	4.6	410.0	
2:18			39.3
2:20	751.2	410.0	
2:28			308.2
2:30	433.0	440.0	
2:38			199.0
2:40	420.0	650.0	
2:48			90.5
2:50	66.3	720.0	
2:58			129.1
3:00	65.5	480.0	
3:08			124.1
3:10	45.5	650.0	
3:18			135.7
3:20	15.4	650.0	
3:28			110.0
3:30	19.0	720.0	
3:38			78.1
3:40	15.0	699.0	
3:48			74.7
3:50	10.3	680.0	
3:58			72.2
4:00	10.1		
4:08			56.4

4:10	6.7		
4:20	7.7		
4:30	7.7		
4:40	7.0		
4:50	6.9		
5:00	6.7		
5:10	6.5		
5:20	6.7		
5:29		41.3	
5:30			
5:40	6.4		
5:50	6.3		
6:00	5.1		
6:10	5.0		
6:20	5.0		
6:30	4.9		
6:40			
6:50			
7:00			
7:10			
7:20			
7:30			
7:40			
7:50		331.8	
8:00		282.4	
8:10		262.9	
8:20		261.3	
8:30		287.2	
8:40		274.0	
8:50		268.0	
9:00		304.8	
9:10		443.7	
9:20		481.0	
9:30		333.4	
9:40		293.7	
9:50		274.9	
10:00		269.4	
10:10		266.8	
10:20		265.4	
10:30		261.6	
10:35			40.2
10:40		261.9	
10:41			39.7
10:50		261.0	
10:51			39.4
11:00		229.7	
11:10			

11:20		
11:30		
11:37	50.4	
11:40		
11:44	19.6	
11:50		
12:00		
12:04		
12:06	10.8	
12:10		
12:16		
12:20		
12:21	10.7	
12:30		
12:34		
12:40		
12:46		6.9
12:50		
12:52		31.5
13:00		
13:10	12.0	
13:12		34.2
13:15	13.0	
13:20		
13:25	14.0	
13:28		6.4
13:30	13.0	
13:35	13.0	
13:40	11.0	
13:45	12.0	
13:50	13.0	
13:55	15.0	
14:00		
14:02		6.1
14:10		
14:14		29.8
14:20		
14:30		
14:40		
14:50		
15:00		
15:10		
15:20		
15:30		
15:40		
15:50		
16:00		

16:10	
16:20	
16:30	
16:40	
16:50	
17:00	8.1
17:10	8.1
17:20	7.3
17:30	7.6
17:40	7.6
17:50	8.0
18:00	7.6
18:10	7.0
18:20	7.2
18:30	8.0
18:40	10.4
18:46	10.1
18:50	
19:00	7.7
19:10	7.8
19:20	7.7
19:30	8.9
19:40	7.6
19:50	5.5
20:00	5.4
20:10	5.4
20:20	5.4
20:30	5.4
20:40	5.4
20:50	5.8
20:55	5.0
21:00	5.8
21:05	5.8
21:10	6.0
21:15	5.8
21:20	6.0
21:25	6.8
21:30	29.7
21:35	760.0
21:37	3130.0
21:40	
21:50	
22:00	
22:10	
22:15	431.7
22:20	336.6
22:25	301.9

22:30	
22:35	326.2
22:40	293.7
22:45	271.7
22:50	267.0
22:55	263.0
23:00	252.7
23:05	242.8
23:10	235.3
23:15	231.5
23:20	227.0
23:25	216.0
23:30	216.0
23:35	211.3
23:40	205.6
23:45	201.7
23:50	196.2
23:55	192.3

MP 6

MP 7

MP 8

4.9

4.5

4.6

4.5

4.5

4.4

4.4

4.4

4.3

4.3

4.3

4.4

4.4

4.6

751.2

433.0

420.0

66.3

Time	MS 1	MS 2	MS 3	MS 4	MP 1	MP 2	MP 3	MP 4	MP 5
0:00					3.2				
0:10					3.3				
0:20					3.0				
0:30					3.1				
0:40					3.2				
0:50					3.2				
1:00					3.2				
1:10					3.2				
1:20					3.2				
1:30					3.1				
1:40					3.3				
1:50					3.1				
2:00					3.2				
2:10					3.1				
2:20					3.2				
2:30					3.2				
2:40					3.1				
2:50					3.1				
3:00					3.6				
3:10					4.0				
3:20					3.2				
3:30					3.1				
3:40					3.4				
3:50					3.2				
4:00					3.0				
4:10					3.6				
4:20					3.2				
4:30					3.1				
4:40					3.3				
4:50									
5:00					3.2				
5:10					3.4				
5:20					3.5				
5:30					3.8				
5:40					3.2				
5:50					3.2				
6:00					3.5				
6:10					3.2				
6:20					3.2				
6:30					3.6				
6:40					3.1				
6:50					3.0				
7:00					3.7				
7:10					3.4				
7:20					3.3				
7:30					3.5				

7:40	3.4		
7:50	7.2		
8:00	3.5		
8:10	3.2		
8:20	3.2		
8:25			864.2
8:27			1124.3
8:29			1038.2
8:30	14.7		
8:31			1144.1
8:33			1204.2
8:35			1153.6
8:37			717.7
8:39			554.1
8:40	16.0		
8:41			307.8
8:43			197.7
8:45			186.2
8:47			261.2
8:49			473.1
8:50	15.9		
8:51			679.8
8:58			221.3
9:00	10.2	37.0	143.5
9:02			108.5
9:04			97.4
9:06			88.7
9:08			101.8
9:10	175.0	30.0	138.8
9:12			193.2
9:14			199.5
9:16			187.3
9:18			124.5
9:20	281.7	27.0	76.9
9:22			75.3
9:24			73.8
9:26			72.3
9:28			71.2
9:30	26.0	25.0	70.3
9:32			69.4
9:34			68.6
9:36			69.5
9:38			68.3
9:40		25.0	66.8
9:42			66.3
9:44			65.8
9:46			65.4

9:48			65.0
9:50		23.0	64.7
9:52			64.3
9:54			63.9
9:56			63.5
9:58			63.2
10:00	6.5	23.0	62.8
10:02			62.5
10:04			62.1
10:06			61.8
10:08			61.4
10:10	6.4	20.0	61.1
10:12			60.8
10:14			60.6
10:16			60.3
10:20	8.3	20.0	61.8
10:30	6.8	19.0	58.0
10:40	6.0	19.0	56.8
10:50	6.0	19.0	55.5
11:00	5.8	18.0	54.3
11:10	5.6	18.0	53.3
11:18			52.8
11:20	6.0	18.0	53.7
11:30	7.9	17.0	51.3
11:40	6.8	17.0	50.0
11:50	6.6	17.0	49.4
12:00	5.5	17.0	48.6
12:10	5.5	18.0	47.8
12:20	5.3	18.0	47.1
12:30	5.5	17.0	
12:40	5.3	17.0	
12:50	5.4	17.0	
13:00	5.0	17.0	
13:10	4.8	17.0	
13:20	4.9	17.0	
13:30	4.9	16.0	
13:40	4.9	16.0	
13:42			50.2
13:44			82.5
13:46			97.9
13:48			251.8
13:50	5.0	24.0	905.1
13:52			1557.5
13:54			829.7
13:56			595.5
13:58			531.8
14:00	21.9	25.0	499.3

14:02
14:04
14:06
14:08
14:10
14:12
14:14
14:16
14:18
14:20
14:30
14:38
14:40
14:42
14:44
14:50
15:00
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15:42
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15:46
15:48
15:50
15:52
15:54
15:56
15:58
16:00
16:02
16:04
16:06
16:08
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16:22
16:24
16:26
16:28

39.7

21.0

57.6
17.6

21.0
32.0

10.1

52.0

10.9

35.0

8.3

52.0

5.7

100.0

4.7

24.0

4.5

34.0

4.4

24.0

5.5

39.0

5.2

31.0

4.6

45.0

4.3

150.0

602.6
490.9
599.1
595.3
646.0
547.3
289.7
170.6
154.3
135.4
129.9
112.2
133.0
184.1
179.8
169.8
58.8
54.3
53.0
51.8
51.6
52.1
56.5
85.0
135.8
116.6
100.7
70.1
773.4
80.6
82.8
90.0
107.0
83.8
71.1
64.7
61.4
58.0
56.5
55.1
54.2
55.6
57.6
57.6
60.7
67.1
72.8

16:30	4.3	46.0	71.5
16:32			6.7
16:34			63.5
16:36			60.0
16:38			57.9
16:40	4.2	60.0	57.2
16:42			61.9
16:44			78.5
16:46			16.4
16:48			13.6
16:50	4.2	30.0	100.1
16:52			68.7
16:54			63.9
16:56			6.2
16:58			72.1
17:00	4.3	120.0	79.4
17:02			72.1
17:04			64.8
17:06			63.0
17:08			62.4
17:10	4.2	62.0	60.8
17:12			58.6
17:14			56.5
17:16			55.4
17:18			56.4
17:20	4.6	45.0	57.0
17:22			56.1
17:24			55.1
17:26			54.1
17:28			54.6
17:30	5.2	36.0	55.3
17:32			56.1
17:34			56.6
17:36			57.4
17:38			56.8
17:40	5.9	40.0	56.8
17:42			56.3
17:44			53.8
17:46			53.0
17:48			52.7
17:50	6.0	35.0	52.3
17:52			51.8
17:54			52.3
17:56			53.3
17:58			51.2
18:00	5.4	35.0	50.1
18:02			50.0

18:04			49.8
18:06			49.7
18:08			49.5
18:10	5.2	30.0	49.4
18:12			49.2
18:14			49.1
18:16			48.9
18:18			48.8
18:20	5.3	27.0	48.6
18:22			48.8
18:24			48.4
18:26			48.2
18:28			48.1
18:30	4.9	26.0	47.9
18:32			47.9
18:34			47.8
18:36			47.6
18:38			47.4
18:40	5.0		47.3
18:42			47.2
18:44			47.0
18:46			46.8
18:48			46.8
18:50	4.8		46.7
18:52			46.6
18:54			46.5
18:56			46.4
18:58			46.3
19:00	5.2		46.1
19:02			46.0
19:04			46.3
19:06			47.3
19:08			47.1
19:10	5.1		46.9
19:12			46.8
19:14			46.6
19:16			46.4
19:20	4.7		
19:23			44.8
19:25			44.8
19:27			44.6
19:29			44.5
19:30	4.6		
19:31			44.4
19:33			44.3
19:35			45.3
19:37			44.8

19:39			43.9
19:40	4.8		
19:41			44.0
19:43			43.9
19:45			43.9
19:47			43.8
19:49			43.7
19:50	5.6		
19:51			43.8
19:53			44.2
19:55			43.5
19:57			43.5
19:59			43.3
20:00	5.7		
20:01			43.2
20:03			43.1
20:05			43.0
20:07			42.9
20:09			42.9
20:10	4.5	450.0	
20:11			42.8
20:13			42.7
20:15			42.7
20:17			42.7
20:19			42.6
20:20	4.5	450.0	
20:21			42.5
20:23			42.3
20:25			42.3
20:27			42.2
20:29			42.2
20:30	4.4	440.0	
20:31			42.6
20:33			45.9
20:35			44.6
20:37			42.6
20:39			42.2
20:40	4.5	440.0	
20:41			42.0
20:43			41.9
20:45			41.8
20:47			41.7
20:49			41.7
20:50	4.4	440.0	
20:51			41.7
20:53			41.6
20:55			41.5

20:57			41.5
20:59			41.3
21:00	4.4	440.0	
21:01			41.3
21:03			41.3
21:05			41.2
21:07			41.1
21:09			41.0
21:10	4.5	440.0	
21:11			41.0
21:13			41.0
21:15			41.0
21:17			40.8
21:19			40.8
21:20	4.5	440.0	
21:21			40.8
21:23			40.7
21:25			40.7
21:27			40.6
21:29			40.6
21:30	4.6	440.0	
21:31			40.6
21:33			40.5
21:35			40.4
21:37			42.0
21:39			41.3
21:40	4.8	440.0	
21:41			40.3
21:43			40.2
21:45			40.2
21:47			40.1
21:49			40.1
21:50	4.6	440.0	
21:51			40.1
21:53			40.0
21:55			40.0
21:57			39.9
21:59			39.9
22:00	4.6	430.0	
22:01			39.8
22:03			39.8
22:05			39.7
22:07			39.7
22:09			39.7
22:10	4.6	430.0	
22:11			39.7
22:13			39.6

22:15			39.6
22:17			39.5
22:19			41.0
22:20	5.4	430.0	
22:21			40.4
22:23			39.4
22:25			39.3
22:27			39.3
22:29			39.3
22:30	4.6	430.0	
22:31			39.3
22:33			39.2
22:35			39.2
22:37			39.2
22:39			39.1
22:40	4.6	430.0	
22:41			39.1
22:43			39.0
22:45			39.0
22:47			39.0
22:49			38.9
22:50	4.6	420.0	
22:51			38.9
22:53			38.9
22:55			38.8
22:57			38.8
22:59			38.7
23:00	4.7	420.0	
23:01			38.7
23:03			38.7
23:05			39.7
23:07			40.5
23:09			40.6
23:10	4.7	420.0	
23:11			39.0
23:13			38.5
23:15			38.5
23:17			38.4
23:19			38.3
23:20	4.6	420.0	
23:21			38.3
23:23			38.3
23:25			38.3
23:27			38.3
23:29			38.3
23:30	4.6	410.0	
23:31			38.2

23:33			38.2
23:35			38.2
23:37			38.2
23:39			38.1
23:40	4.8	420.0	
23:41			38.1
23:43			38.1
23:45			38.0
23:47			38.0
23:49			38.0
23:50	4.9	410.0	
23:51			37.9
23:53			37.9
23:55			37.9
23:57			37.9
23:59			37.8

MP 6

MP 7

MP 8

175.0

281.7

26.0

6.5

6.4

8.3

6.8

6.0

6.0

5.8

5.6

6.0

7.9

6.8

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5.0

4.8

4.9

4.9

4.9

5.0

21.9

39.0

57.6

17.6

10.1

10.9

8.3

5.7

5.0

4.5

4.4

5.5

5.2

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5.2

5.9

6.0

5.4

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5.0

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7:50	5.0
8:00	4.9
8:10	5.1
8:20	4.8
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8:40	4.6
8:50	4.9
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9:10	
9:20	
9:30	5.2
9:40	
9:50	5.0
10:00	5.3
10:10	6.7
10:20	180.2
10:30	385.5
10:40	162.9
10:50	7.0
11:00	6.7
11:10	6.3
11:20	9.4
11:30	35.8
11:40	12.5
11:50	17.1
12:00	23.2
12:10	48.2
12:20	11.6
12:30	5.8
12:40	5.6
12:50	5.5
13:00	5.4
13:10	5.3
13:20	10.9
13:30	
13:40	4.8
13:50	4.8
14:00	4.6
14:10	7.3
14:20	10.9
14:30	10.0
14:40	8.9
14:50	7.7
15:00	7.0
15:10	7.0
15:20	5.6

15:30	5.5
15:40	8.2
15:50	5.3
16:00	5.3
16:10	3.6
16:20	3.4
16:30	3.3
16:40	3.3
16:50	3.3
17:00	
17:10	
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19:50	23.9
20:00	2.7
20:10	3.2
20:20	3.2
20:30	3.2
20:40	
20:50	
21:00	
21:10	
21:20	
21:30	
21:40	
21:50	3.0
22:00	3.0
22:10	21.6
22:20	2.9
22:30	2.9
22:40	2.9
22:50	3.1
23:00	3.3
23:10	3.3

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MP 6

MP 7

MP 8

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MP 6

MP 7

MP 8

【別紙】福島第一原子力発電所モニタリングカーによる計測状況
 Radaitaion data around Fukushima No.1 NPP by monitoring vehicle

Date	Time	Location	Location	γ-ray (μSv/h)
3/11	P.M. 5:30	体育館付近	around Gym	49 nG y/h
3/11	P.M. 5:40	正門付近	around Front Gate	56 nG y/h
3/11	P.M. 5:50	管理棟	admin. Bldg.	64 nG y/h
3/11	P.M. 6:45	MP-6		56 nG y/h
3/11	P.M. 7:00	MP-7		57 nG y/h
3/11	P.M. 7:10	MP-5		55 nG y/h
3/11	P.M. 7:15	MP-4		59 nG y/h
3/11	P.M. 7:20	MP-3		59 nG y/h
3/11	P.M. 7:52	MP-6		57 nG y/h
3/11	P.M. 8:00	MP-6		60 nG y/h
3/11	P.M. 8:10	MP-6		59 nG y/h
3/11	P.M. 8:20	MP-6		67 nG y/h
3/11	P.M. 9:30	正門付近	around Front Gate	62 nG y/h
3/11	P.M. 9:40	正門付近	around Front Gate	61 nG y/h
3/11	P.M. 9:50	正門付近	around Front Gate	61 nG y/h
3/11	P.M. 10:00	正門付近	around Front Gate	59 nG y/h
3/11	P.M. 10:10	正門付近	around Front Gate	60 nG y/h
3/11	P.M. 10:20	正門付近	around Front Gate	62 nG y/h
3/11	P.M. 10:30	正門付近	around Front Gate	60 nG y/h
3/11	P.M. 10:40	正門付近	around Front Gate	60 nG y/h
3/11	P.M. 10:50	正門付近	around Front Gate	59 nG y/h
3/11	P.M. 11:00	正門付近	around Front Gate	60 nG y/h
3/11	P.M. 11:10	正門付近	around Front Gate	63 nG y/h
3/11	P.M. 11:20	正門付近	around Front Gate	60 nG y/h
3/11	P.M. 11:40	正門付近	around Front Gate	63 nG y/h
3/11	P.M. 11:50	正門付近	around Front Gate	59 nG y/h
3/12	A.M.0:00	正門付近	around Front Gate	60 nG y/h
3/12	A.M. 0:10	正門	Front Gate	62 nG y/h
3/12	A.M. 0:20	正門	Front Gate	65 nG y/h
3/12	A.M. 0:30	正門	Front Gate	64 nG y/h
3/12	A.M. 0:40	正門	Front Gate	63 nG y/h
3/12	A.M. 1:40	正門	Front Gate	68 nG y/h
3/12	A.M. 1:50	正門	Front Gate	66 nG y/h
3/12	A.M. 2:00	正門	Front Gate	68 nG y/h
3/12	A.M. 2:10	正門	Front Gate	64 nG y/h
3/12	A.M. 2:20	正門	Front Gate	67 nG y/h
3/12	A.M. 2:30	正門	Front Gate	65 nG y/h
3/12	A.M. 2:40	正門	Front Gate	66 nG y/h
3/12	A.M. 2:50	正門	Front Gate	65 nG y/h

3/12	A.M. 3:00	正門	Front Gate	69 nG y/h
3/12	A.M. 3:10	正門	Front Gate	66 nG y/h
3/12	A.M. 3:20	正門	Front Gate	69 nG y/h
3/12	A.M. 3:30	正門	Front Gate	68 nG y/h
3/12	A.M. 3:40	正門	Front Gate	66 nG y/h
3/12	A.M. 3:50	正門	Front Gate	64 nG y/h
3/12	A.M. 4:00	正門	Front Gate	69 nG y/h
3/12	A.M. 4:40	正門	Front Gate	866 nGy/h
3/12	A.M. 4:50	正門	Front Gate	1002 nGy/h
3/12	A.M. 5:00	正門	Front Gate	1307 nGy/h
3/12	A.M. 5:10	正門	Front Gate	1590 nGy/h
3/12	A.M.6:25	MP - 8 付	around MP-8	1.21μSv/h
3/12	A.M. 6:30	正門	Front Gate	3.29μSv/h
3/12	A.M.6:30	MP - 8 付	around MP-8	1.53μSv/h
3/12	A.M. 6:40	正門	Front Gate	4.92μSv/h
3/12	A.M.7:35	MP - 8 付	around MP-8	2.47μSv/h
3/12	A.M.7:40	MP - 8 付	around MP-8	2.56μSv/h
3/12	A.M.7:45	MP - 8 付	around MP-8	2.53μSv/h
3/12	A.M. 7:50	正門	Front Gate	4.97μSv/h
3/12	A.M.7:50	MP - 8 付	around MP-8	2.50μSv/h
3/12	A.M.7:55	MP - 8 付	around MP-8	2.50μSv/h
3/12	A.M.8:00	MP - 8 付	around MP-8	2.42μSv/h
3/12	A.M. 8:00	正門	Front Gate	4.89μSv/h
3/12	A.M.8:05	MP - 8 付	around MP-8	2.43μSv/h
3/12	A.M. 8:10	正門	Front Gate	5.08μSv/h
3/12	A.M.8:15	MP - 8 付	around MP-8	2.40μSv/h
3/12	A.M. 8:20	正門	Front Gate	4.77μSv/h
3/12	A.M.8:20	MP - 8 付	around MP-8	2.37μSv/h
3/12	A.M.8:25	MP - 8 付	around MP-8	2.38μSv/h
3/12	A.M.8:30	MP - 8 付	around MP-8	2.36μSv/h
3/12	A.M.8:35	MP - 8 付	around MP-8	2.40μSv/h
3/12	A.M. 8:40	正門	Front Gate	4.56μSv/h
3/12	A.M.8:40	MP - 8 付	around MP-8	2.34μSv/h
3/12	A.M.8:45	MP - 8 付	around MP-8	2.51μSv/h
3/12	A.M. 8:50	正門	Front Gate	4.87μSv/h
3/12	A.M.9:10	MP - 8 付	around MP-8	2.68μSv/h
3/12	A.M.9:15	MP - 8 付	around MP-8	2.77μSv/h
3/12	A.M.9:20	MP - 8 付	around MP-8	2.55μSv/h
3/12	A.M.9:25	MP - 8 付	around MP-8	2.59μSv/h
3/12	A.M. 9:30	正門	Front Gate	5.16μSv/h
3/12	A.M.9:30	MP - 8 付	around MP-8	2.61μSv/h
3/12	A.M.9:35	MP - 8 付	around MP-8	2.59μSv/h
3/12	A.M.9:40	MP - 8 付	around MP-8	2.62μSv/h
3/12	A.M.9:45	MP - 8 付	around MP-8	2.64μSv/h
3/12	A.M. 9:50	正門	Front Gate	5.03μSv/h
3/12	A.M.9:50	MP - 8 付	around MP-8	2.61μSv/h
3/12	A.M.9:55	MP - 8 付	around MP-8	2.62μSv/h

3/12	A.M.10:00	正門	Front Gate	5.28 μ Sv/h
3/12	A.M.10:00	MP - 8 付	around MP-8	4.50 μ Sv/h
3/12	A.M.10:05	MP - 8 付	around MP-8	4.56 μ Sv/h
3/12	A.M.10:10	正門	Front Gate	6.65 μ Sv/h
3/12	A.M.10:10	MP - 8 付	around MP-8	4.61 μ Sv/h
3/12	A.M.10:15	MP - 8 付	around MP-8	4.25 μ Sv/h
3/12	A.M.10:20	正門	Front Gate	180.2 μ Sv/h
3/12	A.M.10:20	MP - 8 付	around MP-8	3.85 μ Sv/h
3/12	A.M.10:25	MP - 8 付	around MP-8	4.75 μ Sv/h
3/12	A.M.10:30	正門	Front Gate	385.5 μ Sv/h
3/12	A.M.10:30	MP - 8 付	around MP-8	9.14 μ Sv/h
3/12	A.M.10:35	MP - 8 付	around MP-8	24.1 μ Sv/h
3/12	A.M.10:40	正門	Front Gate	162.9 μ Sv/h
3/12	A.M.10:45	MP - 8 付	around MP-8	16.9 μ Sv/h
3/12	P.M. 10:50	正門	Front Gate	7.04 μ Sv/h
3/12	P.M. 10:50	MP - 8 付	around MP-8	6.65 μ Sv/h
3/12	A.M.11:00	正門	Front Gate	6.69 μ Sv/h
3/12	A.M.11:00	MP - 8 付	around MP-8	5.16 μ Sv/h
3/12	A.M.11:10	正門	Front Gate	6.32 μ Sv/h
3/12	A.M.11:10	MP - 8 付	around MP-8	4.86 μ Sv/h
3/12	A.M.11:20	正門	Front Gate	9.43 μ Sv/h
3/12	A.M.11:20	MP - 8 付	around MP-8	5.22 μ Sv/h
3/12	A.M.11:30	正門	Front Gate	35.77 μ Sv/h
3/12	A.M.11:30	MP - 8 付	around MP-8	5.03 μ Sv/h
3/12	A.M.11:40	正門	Front Gate	12.53 μ Sv/h
3/12	A.M.11:40	MP - 8 付	around MP-8	3.80 μ Sv/h
3/12	A.M.11:50	正門	Front Gate	17.10 μ Sv/h
3/12	A.M.11:50	MP - 8 付	around MP-8	4.05 μ Sv/h
3/12	P.M. 0:00	正門	Front Gate	23.21 μ Sv/h
3/12	P.M. 0:00	MP - 8 付	around MP-8	5.32 μ Sv/h
3/12	P.M. 0:05	MP - 8 付	around MP-8	8.80 μ Sv/h
3/12	P.M. 0:10	正門	Front Gate	48.23 μ Sv/h
3/12	A.M.0:10	MP - 8 付	around MP-8	13.5 μ Sv/h
3/12	P.M. 0:15	MP - 8 付	around MP-8	11.7 μ Sv/h
3/12	P.M. 0:20	正門	Front Gate	11.56 μ Sv/h
3/12	P.M. 0:20	MP - 8 付	around MP-8	4.13 μ Sv/h
3/12	P.M. 0:25	MP - 8 付	around MP-8	3.83 μ Sv/h
3/12	P.M. 0:30	正門	Front Gate	5.78 μ Sv/h
3/12	P.M. 0:30	MP - 8 付	around MP-8	3.58 μ Sv/h
3/12	P.M. 0:40	正門	Front Gate	5.62 μ Sv/h
3/12	P.M. 0:40	MP - 8 付	around MP-8	3.60 μ Sv/h
3/12	P.M. 0:50	正門	Front Gate	5.48 μ Sv/h
3/12	P.M. 0:50	MP - 8 付	around MP-8	3.52 μ Sv/h
3/12	P.M. 1:00	正門	Front Gate	5.39 μ Sv/h
3/12	P.M. 1:00	MP - 8 付	around MP-8	3.66 μ Sv/h
3/12	P.M. 1:10	正門	Front Gate	5.31 μ Sv/h
3/12	P.M. 1:10	MP - 8 付	around MP-8	3.74 μ Sv/h

3/12	P.M. 1:20	正門	Front Gate	10.90 μ Sv/h
3/12	P.M. 1:30	MP - 8 付	around MP-8	2.33 μ Sv/h
3/12	P.M. 1:40	正門	Front Gate	4.782 μ Sv/h
3/12	P.M. 1:40	MP - 8 付	around MP-8	2.31 μ Sv/h
3/12	P.M. 1:50	MP - 8 付	around MP-8	2.81 μ Sv/h
3/12	P.M. 1:50	正門	Front Gate	4.82 μ Sv/h
3/12	P.M. 1:55	MP - 8 付	around MP-8	3.13 μ Sv/h
3/12	P.M. 2:00	正門	Front Gate	4.60 μ Sv/h
3/12	P.M. 2:00	MP - 8 付	around MP-8	2.11 μ Sv/h
3/12	P.M. 2:10	正門	Front Gate	7.30 μ Sv/h
3/12	P.M. 2:10	MP - 8 付	around MP-8	3.02 μ Sv/h
3/12	P.M. 2:20	正門	Front Gate	10.90 μ Sv/h
3/12	P.M. 2:20	MP - 8 付	around MP-8	3.80 μ Sv/h
3/12	P.M. 2:30	正門	Front Gate	9.98 μ Sv/h
3/12	P.M. 2:30	MP - 8 付	around MP-8	3.49 μ Sv/h
3/12	P.M. 2:40	正門	Front Gate	8.86 μ Sv/h
3/12	P.M. 2:40	MP - 8 付	around MP-8	3.33 μ Sv/h
3/12	P.M. 2:50	正門	Front Gate	7.72 μ Sv/h
3/12	P.M. 2:50	MP - 8 付	around MP-8	3.50 μ Sv/h
3/12	P.M. 3:00	正門	Front Gate	6.95 μ Sv/h
3/12	P.M. 3:00	MP - 8 付	around MP-8	3.50 μ Sv/h
3/12	P.M. 3:10	正門	Front Gate	6.99 μ Sv/h
3/12	P.M. 3:10	MP - 8 付	around MP-8	3.33 μ Sv/h
3/12	P.M. 3:20	正門	Front Gate	5.59 μ Sv/h
3/12	P.M. 3:20	MP - 8 付	around MP-8	3.23 μ Sv/h
3/12	P.M. 3:30	正門	Front Gate	5.49 μ Sv/h
3/12	P.M. 3:30	MP - 8 付	around MP-8	3.21 μ Sv/h
3/12	P.M. 3:40	正門	Front Gate	8.23 μ Sv/h
3/12	P.M. 3:40	MP - 8 付	around MP-8	3.33 μ Sv/h
3/12	P.M. 3:50	正門	Front Gate	5.311 μ Sv/h
3/12	P.M. 3:50	MP - 8 付	around MP-8	2.19 μ Sv/h
3/12	P.M. 4:00	正門	Front Gate	5.29 μ Sv/h
3/12	P.M. 4:00	MP - 8 付	around MP-8	2.22 μ Sv/h
3/12	P.M. 4:10	正門	Front Gate	3.64 μ Sv/h
3/12	P.M. 4:10	MP - 8 付	around MP-8	2.20 μ Sv/h
3/12	P.M. 4:20	正門	Front Gate	3.43 μ Sv/h
3/12	P.M. 4:20	MP - 8 付	around MP-8	2.18 μ Sv/h
3/12	P.M. 4:30	正門	Front Gate	3.32 μ Sv/h
3/12	P.M. 4:30	MP - 8 付	around MP-8	2.12 μ Sv/h
3/12	P.M. 4:40	正門	Front Gate	3.25 μ Sv/h
3/12	P.M. 4:40	MP - 8 付	around MP-8	2.06 μ Sv/h
3/12	P.M. 4:50	正門	Front Gate	3.25 μ Sv/h
3/12	P.M. 4:50	MP - 8 付	around MP-8	3.78 μ Sv/h
3/12	P.M. 7:25	MP - 8 付	around MP-8	80.0 μ Sv/h
3/12	P.M. 7:50	正門	Front Gate	23.9 μ Sv/h
3/12	P.M. 8:00	正門	Front Gate	2.74 μ Sv/h
3/12	P.M. 8:00	MP - 8 付	around MP-8	10.0 μ Sv/h

3/12	P.M. 8:10	正門	Front Gate	3.21 μ Sv/h
3/12	P.M. 8:10	MP - 8 付	around MP-8	10.0 μ Sv/h
3/12	P.M. 8:20	正門	Front Gate	3.19 μ Sv/h
3/12	P.M. 8:20	MP - 8 付	around MP-8	10.0 μ Sv/h
3/12	P.M. 8:30	正門	Front Gate	3.16 μ Sv/h
3/12	P.M. 8:40	MP - 8 付	around MP-8	5.0 μ Sv/h
3/12	P.M. 8:50	MP - 8 付	around MP-8	6.0 μ Sv/h
3/12	P.M. 9:00	MP - 8 付	around MP-8	80.0 μ Sv/h
3/12	P.M. 9:10	MP - 8 付	around MP-8	80.0 μ Sv/h
3/12	P.M. 9:20	MP - 8 付	around MP-8	70.0 μ Sv/h
3/12	P.M. 9:30	MP - 8 付	around MP-8	80.0 μ Sv/h
3/12	P.M. 9:40	MP - 8 付	around MP-8	50.0 μ Sv/h
3/12	P.M. 9:50	正門	Front Gate	2.958 μ Sv/h
3/12	P.M. 9:50	MP - 8 付	around MP-8	70.0 μ Sv/h
3/12	P.M. 10:00	正門	Front Gate	2.985 μ Sv/h
3/12	P.M. 10:00	MP - 8 付	around MP-8	70.0 μ Sv/h
3/12	P.M. 10:10	正門	Front Gate	21.620 μ Sv/h
3/12	P.M. 10:20	正門	Front Gate	2.91 μ Sv/h
3/12	P.M. 10:30	正門	Front Gate	2.92 μ Sv/h
3/12	P.M. 10:30	MP - 8 付	around MP-8	4.87 μ Sv/h
3/12	P.M. 10:35	MP - 8 付	around MP-8	4.70 μ Sv/h
3/12	P.M. 10:40	正門	Front Gate	2.85 μ Sv/h
3/12	P.M. 10:40	MP - 8 付	around MP-8	4.12 μ Sv/h
3/12	P.M. 10:50	正門	Front Gate	3.14 μ Sv/h
3/12	P.M. 10:50	MP - 8 付	around MP-8	4.35 μ Sv/h
3/12	P.M. 11:00	正門	Front Gate	3.33 μ Sv/h
3/12	P.M. 11:00	MP - 8 付	around MP-8	4.30 μ Sv/h
3/12	P.M. 11:10	正門	Front Gate	3.29 μ Sv/h
3/12	P.M. 11:20	正門	Front Gate	3.27 μ Sv/h
3/12	P.M. 11:30	正門	Front Gate	3.09 μ Sv/h
3/12	P.M. 11:30	MP - 8 付	around MP-8	4.50 μ Sv/h
3/12	P.M. 11:40	正門	Front Gate	3.21 μ Sv/h
3/12	P.M. 11:50	正門	Front Gate	3.07 μ Sv/h
3/13	A.M. 0:00	正門	Front Gate	3.16 μ Sv/h
3/13	A.M.0:00	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 0:10	正門	Front Gate	3.291 μ Sv/h
3/13	A.M.0:10	MP - 8 付	around MP-8	4.7 μ Sv/h
3/13	A.M. 0:20	正門	Front Gate	3.016 μ Sv/h
3/13	A.M.0:20	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 0:30	正門	Front Gate	3.146 μ Sv/h
3/13	A.M.0:30	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 0:40	正門	Front Gate	3.181 μ Sv/h
3/13	A.M.0:40	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 0:50	正門	Front Gate	3.177 μ Sv/h
3/13	A.M.0:50	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 1:00	正門	Front Gate	3.201 μ Sv/h
3/13	A.M.1:00	MP - 8 付	around MP-8	5.5 μ Sv/h

3/13	A.M. 1:10	正門	Front Gate	3.207 μ Sv/h
3/13	A.M.1:10	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 1:20	正門	Front Gate	3.163 μ Sv/h
3/13	A.M.1:20	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 1:30	正門	Front Gate	3.127 μ Sv/h
3/13	A.M.1:30	MP - 8 付	around MP-8	5.5 μ Sv/h
3/13	A.M. 1:40	正門	Front Gate	3.329 μ Sv/h
3/13	A.M.1:40	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 1:50	正門	Front Gate	3.125 μ Sv/h
3/13	A.M.1:50	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 2:00	正門	Front Gate	3.186 μ Sv/h
3/13	A.M.2:00	MP - 8 付	around MP-8	5.5 μ Sv/h
3/13	A.M. 2:10	正門	Front Gate	3.116 μ Sv/h
3/13	A.M.2:10	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 2:20	正門	Front Gate	3.214 μ Sv/h
3/13	A.M.2:20	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 2:30	正門	Front Gate	3.164 μ Sv/h
3/13	A.M.2:30	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 2:40	正門	Front Gate	3.129 μ Sv/h
3/13	A.M.2:40	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 2:50	正門	Front Gate	3.104 μ Sv/h
3/13	A.M.2:50	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 3:00	正門	Front Gate	3.574 μ Sv/h
3/13	A.M. 3:10	正門	Front Gate	3.978 μ Sv/h
3/13	A.M. 3:20	正門	Front Gate	3.236 μ Sv/h
3/13	A.M. 3:30	正門	Front Gate	3.103 μ Sv/h
3/13	A.M. 3:40	正門	Front Gate	3.392 μ Sv/h
3/13	A.M.3:40	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 3:50	正門	Front Gate	3.186 μ Sv/h
3/13	A.M.3:50	MP - 8 付	around MP-8	5.1 μ Sv/h
3/13	A.M. 4:00	正門	Front Gate	3.039 μ Sv/h
3/13	A.M.4:00	MP - 8 付	around MP-8	5.2 μ Sv/h
3/13	A.M. 4:10	正門	Front Gate	3.564 μ Sv/h
3/13	A.M.4:10	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 4:20	正門	Front Gate	3.150 μ Sv/h
3/13	A.M.4:20	MP - 8 付	around MP-8	5.5 μ Sv/h
3/13	A.M. 4:30	正門	Front Gate	3.122 μ Sv/h
3/13	A.M.4:30	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 4:40	正門	Front Gate	3.256 μ Sv/h
3/13	A.M.4:40	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M.4:50	正門		3.104 μ Sv/h
3/13	A.M.4:50	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 5:00	正門	Front Gate	3.204 μ Sv/h
3/13	A.M.5:00	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 5:10	正門	Front Gate	3.360 μ Sv/h
3/13	A.M.5:10	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 5:20	正門	Front Gate	3.472 μ Sv/h

3/13	A.M.5:20	MP - 8 付	around MP-8	4.6 μ Sv/h
3/13	A.M. 5:30	正門	Front Gate	3.817 μ Sv/h
3/13	A.M.5:30	MP - 8 付	around MP-8	5.0 μ Sv/h
3/13	A.M. 5:40	正門	Front Gate	3.224 μ Sv/h
3/13	A.M.5:40	MP - 8 付	around MP-8	4.5 μ Sv/h
3/13	A.M. 5:50	正門	Front Gate	3.192 μ Sv/h
3/13	A.M.5:50	MP - 8 付	around MP-8	5.2 μ Sv/h
3/13	A.M. 6:00	正門	Front Gate	3.467 μ Sv/h
3/13	A.M.6:00	MP - 8 付	around MP-8	5.6 μ Sv/h
3/13	A.M. 6:10	正門	Front Gate	3.188 μ Sv/h
3/13	A.M.6:10	MP - 8 付	around MP-8	5.9 μ Sv/h
3/13	A.M. 6:20	正門	Front Gate	3.160 μ Sv/h
3/13	A.M.6:20	MP - 8 付	around MP-8	5.7 μ Sv/h
3/13	A.M. 6:30	正門	Front Gate	3.625 μ Sv/h
3/13	A.M.6:30	MP - 8 付	around MP-8	5.7 μ Sv/h
3/13	A.M. 6:40	正門	Front Gate	3.092 μ Sv/h
3/13	A.M.6:40	MP - 8 付	around MP-8	5.7 μ Sv/h
3/13	A.M. 6:50	正門	Front Gate	3.006 μ Sv/h
3/13	A.M.6:50	MP - 8 付	around MP-8	5.7 μ Sv/h
3/13	A.M. 7:00	正門	Front Gate	3.652 μ Sv/h
3/13	A.M.7:00	MP - 8 付	around MP-8	7.7 μ Sv/h
3/13	A.M. 7:10	正門	Front Gate	3.415 μ Sv/h
3/13	A.M.7:10	MP - 8 付	around MP-8	8.5 μ Sv/h
3/13	A.M. 7:20	正門	Front Gate	3.325 μ Sv/h
3/13	A.M.7:20	MP - 8 付	around MP-8	6.0 μ Sv/h
3/13	A.M. 7:30	正門	Front Gate	3.530 μ Sv/h
3/13	A.M.7:30	MP - 8 付	around MP-8	5.6 μ Sv/h
3/13	A.M. 7:40	正門	Front Gate	3.413 μ Sv/h
3/13	A.M. 7:50	正門	Front Gate	7.227 μ Sv/h
3/13	A.M. 8:00	正門	Front Gate	3.510 μ Sv/h
3/13	A.M. 8:10	正門	Front Gate	3.166 μ Sv/h
3/13	A.M.8:10	MP - 1 付	around MP-1	100 μ Sv/h
3/13	A.M. 8:20	正門	Front Gate	3.166 μ Sv/h
3/13	A.M.8:20	MP - 1 付	around MP-1	100 μ Sv/h
3/13	A.M. 8:30	正門	Front Gate	14.730 μ Sv/h
3/13	A.M.8:30	MP - 1 付	around MP-1	80 μ Sv/h
3/13	A.M. 8:40	正門	Front Gate	16.030 μ Sv/h
3/13	A.M.8:40	MP - 1 付	around MP-1	80 μ Sv/h
3/13	A.M. 8:50	正門	Front Gate	15.900 μ Sv/h
3/13	A.M.8:50	MP - 1 付	around MP-1	90 μ Sv/h
3/13	A.M. 9:00	正門	Front Gate	10.240 μ Sv/h
3/13	A.M.9:00	MP - 1 付	around MP-1	37 μ Sv/h
3/13	A.M.9:00	MP - 4 付	around MP-4	143.5 μ Sv/h
3/13	A.M. 9:10	正門	Front Gate	175.000 μ Sv/h
3/13	A.M.9:10	MP - 1 付	around MP-1	30 μ Sv/h
3/13	A.M.9:10	MP - 4 付	around MP-4	137.8 μ Sv/h
3/13	A.M. 9:20	正門	Front Gate	281.700 μ Sv/h

3/13	A.M.9:20	MP - 1 付	around MP-1	27 μ Sv/h
3/13	A.M.9:20	MP - 4 付	around MP-4	76.9 μ Sv/h
3/13	A.M. 9:30	正門	Front Gate	26.000 μ Sv/h
3/13	A.M.9:30	MP - 1 付	around MP-1	25 μ Sv/h
3/13	A.M.9:30	MP - 4 付	around MP-4	70.3 μ Sv/h
3/13	A.M.9:40	MP - 1 付	around MP-1	25 μ Sv/h
3/13	A.M.9:40	MP - 4 付	around MP-4	66.8 μ Sv/h
3/13	A.M.9:50	MP - 1 付	around MP-1	23 μ Sv/h
3/13	A.M.9:50	MP - 4 付	around MP-4	64.7 μ Sv/h
3/13	A.M.10:00	正門	Front Gate	6.512 μ Sv/h
3/13	A.M.10:00	MP - 1 付	around MP-1	23 μ Sv/h
3/13	A.M.10:00	MP - 4 付	around MP-4	62.9 μ Sv/h
3/13	A.M.10:10	正門	Front Gate	6.372 μ Sv/h
3/13	A.M.10:10	MP - 1 付	around MP-1	23 μ Sv/h
3/13	A.M.10:10	MP - 4 付	around MP-4	61.1 μ Sv/h
3/13	A.M.10:20	正門	Front Gate	8.265 μ Sv/h
3/13	A.M.10:20	MP - 1 付	around MP-1	20 μ Sv/h
3/13	A.M.10:20	MP - 4 付	around MP-4	61.8 μ Sv/h
3/13	A.M.10:30	正門	Front Gate	6.755 μ Sv/h
3/13	A.M.10:30	MP - 1 付	around MP-1	19 μ Sv/h
3/13	A.M.10:30	MP - 4 付	around MP-4	58.0 μ Sv/h
3/13	A.M.10:40	正門	Front Gate	6.020 μ Sv/h
3/13	A.M.10:40	MP - 1 付	around MP-1	19 μ Sv/h
3/13	A.M.10:40	MP - 4 付	around MP-4	56.8 μ Sv/h
3/13	A.M.10:50	正門	Front Gate	6.038 μ Sv/h
3/13	A.M.10:50	MP - 1 付	around MP-1	19 μ Sv/h
3/13	A.M.10:50	MP - 4 付	around MP-4	55.4 μ Sv/h
3/13	A.M.11:00	正門	Front Gate	5.766 μ Sv/h
3/13	A.M.11:00	MP - 1 付	around MP-1	18 μ Sv/h
3/13	A.M.11:00	MP - 4 付	around MP-4	54.3 μ Sv/h
3/13	A.M.11:10	正門	Front Gate	5.610 μ Sv/h
3/13	A.M.11:10	MP - 1 付	around MP-1	18 μ Sv/h
3/13	A.M.11:10	MP - 4 付	around MP-4	53.3 μ Sv/h
3/13	A.M.11:20	正門	Front Gate	5.998 μ Sv/h
3/13	A.M.11:20	MP - 1 付	around MP-1	18 μ Sv/h
3/13	A.M.11:20	MP - 4 付	around MP-4	53.7 μ Sv/h
3/13	A.M.11:30	正門	Front Gate	7.888 μ Sv/h
3/13	A.M.11:30	MP - 1 付	around MP-1	17 μ Sv/h
3/13	A.M.11:30	MP - 4 付	around MP-4	51.3 μ Sv/h
3/13	A.M.11:40	正門	Front Gate	6.837 μ Sv/h
3/13	A.M.11:40	MP - 1 付	around MP-1	17 μ Sv/h
3/13	A.M.11:40	MP - 4 付	around MP-4	50.0 μ Sv/h
3/13	A.M.11:50	正門	Front Gate	6.617 μ Sv/h
3/13	A.M.11:50	MP - 1 付	around MP-1	17 μ Sv/h
3/13	A.M.11:50	MP - 4 付	around MP-4	49.4 μ Sv/h
3/13	P.M. 0:00	正門	Front Gate	5.545 μ Sv/h
3/13	P.M. 0:00	MP - 1 付	around MP-1	17 μ Sv/h

3/13	P.M. 0:00	M P - 4 付	around MP-4	48.7 μ Sv/h
3/13	P.M. 0:10	正門	Front Gate	5.537 μ Sv/h
3/13	P.M. 0:10	M P - 1 付	around MP-1	18 μ Sv/h
3/13	P.M. 0:10	M P - 4 付	around MP-4	47.8 μ Sv/h
3/13	P.M. 0:20	正門	Front Gate	5.316 μ Sv/h
3/13	P.M. 0:20	M P - 1 付	around MP-1	18 μ Sv/h
3/13	P.M. 0:20	M P - 4 付	around MP-4	47.1 μ Sv/h
3/13	P.M. 0:30	正門	Front Gate	5.495 μ Sv/h
3/13	P.M. 0:30	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 0:30	M P - 4 付	around MP-4	46.3 μ Sv/h
3/13	P.M. 0:40	正門	Front Gate	5.266 μ Sv/h
3/13	P.M. 0:40	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 0:40	M P - 4 付	around MP-4	49.7 μ Sv/h
3/13	P.M. 0:50	正門	Front Gate	5.369 μ Sv/h
3/13	P.M. 0:50	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 0:50	M P - 4 付	around MP-4	45.2 μ Sv/h
3/13	P.M. 1:00	正門	Front Gate	4.953 μ Sv/h
3/13	P.M. 1:00	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 1:00	M P - 4 付	around MP-4	44.6 μ Sv/h
3/13	P.M. 1:10	正門	Front Gate	4.794 μ Sv/h
3/13	P.M. 1:10	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 1:10	M P - 4 付	around MP-4	44.0 μ Sv/h
3/13	P.M. 1:20	正門	Front Gate	4.907 μ Sv/h
3/13	P.M. 1:20	M P - 1 付	around MP-1	17 μ Sv/h
3/13	P.M. 1:20	M P - 4 付	around MP-4	43.5 μ Sv/h
3/13	P.M. 1:30	正門	Front Gate	4.852 μ Sv/h
3/13	P.M. 1:30	M P - 1 付	around MP-1	16 μ Sv/h
3/13	P.M. 1:30	M P - 4 付	around MP-4	42.9 μ Sv/h
3/13	P.M. 1:40	正門	Front Gate	4.883 μ Sv/h
3/13	P.M. 1:40	M P - 1 付	around MP-1	16 μ Sv/h
3/13	P.M. 1:40	M P - 4 付	around MP-4	44.0 μ Sv/h
3/13	P.M. 1:50	正門	Front Gate	4.965 μ Sv/h
3/13	P.M. 1:50	M P - 1 付	around MP-1	24 μ Sv/h
3/13	P.M. 1:50	M P - 4 付	around MP-4	905.1 μ Sv/h
3/13	P.M. 2:00	正門	Front Gate	21.880 μ Sv/h
3/13	P.M. 2:00	M P - 1 付	around MP-1	21 μ Sv/h
3/13	P.M. 2:00	M P - 4 付	around MP-4	499.3 μ Sv/h
3/13	P.M. 2:10	正門	Front Gate	39.710 μ Sv/h
3/13	P.M. 2:10	M P - 1 付	around MP-1	21 μ Sv/h
3/13	P.M. 2:10	M P - 4 付	around MP-4	646.0 μ Sv/h
3/13	P.M. 2:20	正門	Front Gate	57.630 μ Sv/h
3/13	P.M. 2:20	M P - 1 付	around MP-1	21 μ Sv/h
3/13	P.M. 2:20	M P - 4 付	around MP-4	135.4 μ Sv/h
3/13	P.M. 2:30	正門	Front Gate	17.610 μ Sv/h
3/13	P.M. 2:30	M P - 1 付	around MP-1	32 μ Sv/h
3/13	P.M. 2:30	M P - 4 付	around MP-4	129.9 μ Sv/h
3/13	P.M. 2:40	正門	Front Gate	10.050 μ Sv/h

3/13	P.M. 2:40	M P - 1 付	around MP-1	52 μ Sv/h
3/13	P.M. 2:40	M P - 4 付	around MP-4	133.0 μ Sv/h
3/13	P.M. 2:50	正門	Front Gate	10.850 μ Sv/h
3/13	P.M. 2:50	M P - 1 付	around MP-1	35 μ Sv/h
3/13	P.M. 2:50	M P - 4 付	around MP-4	169.0 μ Sv/h
3/13	P.M. 3:00	正門	Front Gate	8.311 μ Sv/h
3/13	P.M. 3:00	M P - 1 付	around MP-1	52 μ Sv/h
3/13	P.M. 3:00	M P - 4 付	around MP-4	58.7 μ Sv/h
3/13	P.M. 3:10	正門	Front Gate	5.717 μ Sv/h
3/13	P.M. 3:10	M P - 1 付	around MP-1	100 μ Sv/h
3/13	P.M. 3:10	M P - 4 付	around MP-4	54.3 μ Sv/h
3/13	P.M. 3:20	正門	Front Gate	4.717 μ Sv/h
3/13	P.M. 3:20	M P - 1 付	around MP-1	24 μ Sv/h
3/13	P.M. 3:20	M P - 4 付	around MP-4	54.0 μ Sv/h
3/13	P.M. 3:30	正門	Front Gate	4.461 μ Sv/h
3/13	P.M. 3:30	M P - 1 付	around MP-1	34 μ Sv/h
3/13	P.M. 3:30	M P - 4 付	around MP-4	51.8 μ Sv/h
3/13	P.M. 3:40	正門	Front Gate	4.360 μ Sv/h
3/13	P.M. 3:40	M P - 1 付	around MP-1	24 μ Sv/h
3/13	P.M. 3:40	M P - 4 付	around MP-4	56.5 μ Sv/h
3/13	P.M. 3:50	正門	Front Gate	5.469 μ Sv/h
3/13	P.M. 3:50	M P - 1 付	around MP-1	30 μ Sv/h
3/13	P.M. 3:50	M P - 4 付	around MP-4	76.1 μ Sv/h
3/13	P.M. 4:00	正門	Front Gate	5.154 μ Sv/h
3/13	P.M. 4:00	M P - 1 付	around MP-1	31 μ Sv/h
3/13	P.M. 4:00	M P - 4 付	around MP-4	107.1 μ Sv/h
3/13	P.M. 4:10	正門	Front Gate	4.555 μ Sv/h
3/13	P.M. 4:10	M P - 1 付	around MP-1	45 μ Sv/h
3/13	P.M. 4:10	M P - 4 付	around MP-4	58.0 μ Sv/h
3/13	P.M. 4:20	正門	Front Gate	4.336 μ Sv/h
3/13	P.M. 4:20	M P - 1 付	around MP-1	150 μ Sv/h
3/13	P.M. 4:20	M P - 4 付	around MP-4	57.6 μ Sv/h
3/13	P.M. 4:30	正門	Front Gate	4.277 μ Sv/h
3/13	P.M. 4:30	M P - 1 付	around MP-1	46 μ Sv/h
3/13	P.M. 4:30	M P - 4 付	around MP-4	71.5 μ Sv/h
3/13	P.M. 4:40	正門	Front Gate	4.235 μ Sv/h
3/13	P.M. 4:40	M P - 1 付	around MP-1	60 μ Sv/h
3/13	P.M. 4:40	M P - 4 付	around MP-4	57.2 μ Sv/h
3/13	P.M. 4:50	正門	Front Gate	4.224 μ Sv/h
3/13	P.M. 4:50	M P - 1 付	around MP-1	30 μ Sv/h
3/13	P.M. 4:50	M P - 4 付	around MP-4	100.1 μ Sv/h
3/13	P.M. 5:00	正門	Front Gate	4.301 μ Sv/h
3/13	P.M. 5:00	M P - 1 付	around MP-1	120 μ Sv/h
3/13	P.M. 5:00	M P - 4 付	around MP-4	79.4 μ Sv/h
3/13	P.M. 5:10	正門	Front Gate	4.213 μ Sv/h
3/13	P.M. 5:10	M P - 1 付	around MP-1	62 μ Sv/h
3/13	P.M. 5:10	M P - 4 付	around MP-4	60.8 μ Sv/h

3/13	P.M. 5:20	正門	Front Gate	4.640 μ Sv/h
3/13	P.M. 5:20	M P - 1 付	around MP-1	45 μ Sv/h
3/13	P.M. 5:20	M P - 4 付	around MP-4	57.0 μ Sv/h
3/13	P.M. 5:30	正門	Front Gate	5.171 μ Sv/h
3/13	P.M. 5:30	M P - 1 付	around MP-1	36 μ Sv/h
3/13	P.M. 5:30	M P - 4 付	around MP-4	52.3 μ Sv/h
3/13	P.M. 5:40	正門	Front Gate	5.898 μ Sv/h
3/13	P.M. 5:40	M P - 1 付	around MP-1	40 μ Sv/h
3/13	P.M. 5:40	M P - 4 付	around MP-4	56.8 μ Sv/h
3/13	P.M. 5:50	正門	Front Gate	5.953 μ Sv/h
3/13	P.M. 5:50	M P - 1 付	around MP-1	35 μ Sv/h
3/13	P.M. 5:50	M P - 4 付	around MP-4	52.3 μ Sv/h
3/13	P.M. 6:00	正門	Front Gate	5.382 μ Sv/h
3/13	P.M. 6:00	M P - 1 付	around MP-1	35 μ Sv/h
3/13	P.M. 6:00	M P - 4 付	around MP-4	50.1 μ Sv/h
3/13	P.M. 6:10	正門	Front Gate	5.168 μ Sv/h
3/13	P.M. 6:10	M P - 1 付	around MP-1	30 μ Sv/h
3/13	P.M. 6:10	M P - 4 付	around MP-4	49.4 μ Sv/h
3/13	P.M. 6:20	正門	Front Gate	5.250 μ Sv/h
3/13	P.M. 6:20	M P - 1 付	around MP-1	27 μ Sv/h
3/13	P.M. 6:20	M P - 4 付	around MP-4	48.6 μ Sv/h
3/13	P.M. 6:30	正門	Front Gate	4.883 μ Sv/h
3/13	P.M. 6:30	M P - 1 付	around MP-1	26 μ Sv/h
3/13	P.M. 6:30	M P - 4 付	around MP-4	47.9 μ Sv/h
3/13	P.M. 6:40	正門	Front Gate	4.980 μ Sv/h
3/13	P.M. 6:40	M P - 1 付	around MP-1	25 μ Sv/h
3/13	P.M. 6:40	M P - 4 付	around MP-4	47.3 μ Sv/h
3/13	P.M. 6:50	正門	Front Gate	4.831 μ Sv/h
3/13	P.M. 6:50	M P - 1 付	around MP-1	25 μ Sv/h
3/13	P.M. 6:50	M P - 4 付	around MP-4	46.7 μ Sv/h
3/13	P.M. 7:00	正門	Front Gate	5.224 μ Sv/h
3/13	P.M. 7:00	M P - 1 付	around MP-1	25 μ Sv/h
3/13	P.M. 7:00	M P - 4 付	around MP-4	46.1 μ Sv/h
3/13	P.M. 7:10	正門	Front Gate	5.077 μ Sv/h
3/13	P.M. 7:10	M P - 1 付	around MP-1	23 μ Sv/h
3/13	P.M. 7:10	M P - 4 付	around MP-4	46.3 μ Sv/h
3/13	P.M. 7:20	正門	Front Gate	4.709 μ Sv/h
3/13	P.M. 7:20	M P - 1 付	around MP-1	22 μ Sv/h
3/13	P.M. 7:23	M P - 4 付	around MP-4	44.8 μ Sv/h
3/13	P.M. 7:30	正門	Front Gate	4.622 μ Sv/h
3/13	P.M. 7:30	M P - 1 付	around MP-1	20 μ Sv/h
3/13	P.M. 7:31	M P - 4 付	around MP-4	44.4 μ Sv/h
3/13	P.M. 7:40	正門	Front Gate	4.844 μ Sv/h
3/13	P.M. 7:40	M P - 1 付	around MP-1	26 μ Sv/h
3/13	P.M. 7:41	M P - 4 付	around MP-4	44.0 μ Sv/h
3/13	P.M. 7:50	正門	Front Gate	5.577 μ Sv/h
3/13	P.M. 7:50	M P - 1 付	around MP-1	24 μ Sv/h

3/13	P.M. 7:51	M P - 4 付	around MP-4	43.8 μ Sv/h
3/13	P.M. 8:00	正門	Front Gate	5.721 μ Sv/h
3/13	P.M. 8:00	M P - 1 付	around MP-1	24 μ Sv/h
3/13	P.M. 8:01	M P - 4 付	around MP-4	43.2 μ Sv/h
3/13	P.M. 8:10	正門	Front Gate	4.471 μ Sv/h
3/13	P.M. 8:10	M P - 2 付	around MP-1	450 μ Sv/h
3/13	P.M. 8:11	M P - 4 付	around MP-4	42.8 μ Sv/h
3/13	P.M. 8:20	正門	Front Gate	4.521 μ Sv/h
3/13	P.M. 8:20	M P - 2 付	around MP-1	450 μ Sv/h
3/13	P.M. 8:21	M P - 4 付	around MP-4	42.5 μ Sv/h
3/13	P.M. 8:30	正門	Front Gate	4.427 μ Sv/h
3/13	P.M. 8:30	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 8:31	M P - 4 付	around MP-4	42.6 μ Sv/h
3/13	P.M. 8:40	正門	Front Gate	4.454 μ Sv/h
3/13	P.M. 8:40	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 8:41	M P - 4 付	around MP-4	42.0 μ Sv/h
3/13	P.M. 8:50	正門	Front Gate	4.377 μ Sv/h
3/13	P.M. 8:50	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 8:51	M P - 4 付	around MP-4	41.7 μ Sv/h
3/13	P.M. 9:00	正門	Front Gate	4.371 μ Sv/h
3/13	P.M. 9:00	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:01	M P - 4 付	around MP-4	41.3 μ Sv/h
3/13	P.M. 9:10	正門	Front Gate	4.480 μ Sv/h
3/13	P.M. 9:10	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:11	M P - 4 付	around MP-4	41.0 μ Sv/h
3/13	P.M. 9:20	正門	Front Gate	4.463 μ Sv/h
3/13	P.M. 9:20	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:21	M P - 4 付	around MP-4	40.8 μ Sv/h
3/13	P.M. 9:30	正門	Front Gate	4.552 μ Sv/h
3/13	P.M. 9:30	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:31	M P - 4 付	around MP-4	40.6 μ Sv/h
3/13	P.M. 9:40	正門	Front Gate	4.785 μ Sv/h
3/13	P.M. 9:40	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:41	M P - 4 付	around MP-4	40.3 μ Sv/h
3/13	P.M. 9:50	正門	Front Gate	4.626 μ Sv/h
3/13	P.M. 9:50	M P - 2 付	around MP-2	440 μ Sv/h
3/13	P.M. 9:51	M P - 4 付	around MP-4	40.1 μ Sv/h
3/13	P.M. 10:00	正門	Front Gate	4.636 μ Sv/h
3/13	P.M. 10:00	M P - 2 付	around MP-2	430 μ Sv/h
3/13	P.M. 10:01	M P - 4 付	around MP-4	39.8 μ Sv/h
3/13	P.M. 10:10	正門	Front Gate	4.622 μ Sv/h
3/13	P.M. 10:10	M P - 2 付	around MP-2	430 μ Sv/h
3/13	P.M. 10:11	M P - 4 付	around MP-4	39.7 μ Sv/h
3/13	P.M. 10:20	正門	Front Gate	5.417 μ Sv/h
3/13	P.M. 10:20	M P - 2 付	around MP-2	430 μ Sv/h
3/13	P.M. 10:21	M P - 4 付	around MP-4	40.4 μ Sv/h
3/13	P.M. 10:30	正門	Front Gate	4.645 μ Sv/h

3/13	P.M. 10:30	MP - 2 付	around MP-2	430 μ Sv/h
3/13	P.M. 10:31	MP - 4 付	around MP-4	39.3 μ Sv/h
3/13	P.M. 10:40	正門	Front Gate	4.622 μ Sv/h
3/13	P.M. 10:40	MP - 2 付	around MP-2	430 μ Sv/h
3/13	P.M. 10:41	MP - 4 付	around MP-4	39.1 μ Sv/h
3/13	P.M. 10:50	正門	Front Gate	4.632 μ Sv/h
3/13	P.M. 10:50	MP - 2 付	around MP-2	420 μ Sv/h
3/13	P.M. 10:51	MP - 4 付	around MP-4	38.9 μ Sv/h
3/13	P.M. 11:00	正門	Front Gate	4.668 μ Sv/h
3/13	P.M. 11:00	MP - 2 付	around MP-2	420 μ Sv/h
3/13	P.M. 11:01	MP - 4 付	around MP-4	38.7 μ Sv/h
3/13	P.M. 11:10	正門	Front Gate	4.700 μ Sv/h
3/13	P.M. 11:10	MP - 2 付	around MP-2	420 μ Sv/h
3/13	P.M. 11:11	MP - 4 付	around MP-4	39.0 μ Sv/h
3/13	P.M. 11:20	正門	Front Gate	4.647 μ Sv/h
3/13	P.M. 11:20	MP - 2 付	around MP-2	420 μ Sv/h
3/13	P.M. 11:21	MP - 4 付	around MP-4	38.3 μ Sv/h
3/13	P.M. 11:30	正門	Front Gate	4.610 μ Sv/h
3/13	P.M. 11:30	MP - 2 付	around MP-2	410 μ Sv/h
3/13	P.M. 11:31	MP - 4 付	around MP-4	38.2 μ Sv/h
3/13	P.M. 11:40	正門	Front Gate	4.828 μ Sv/h
3/13	P.M. 11:40	MP - 2 付	around MP-2	420 μ Sv/h
3/13	P.M. 11:41	MP - 4 付	around MP-4	38.1 μ Sv/h
3/13	P.M. 11:50	正門	Front Gate	4.868 μ Sv/h
3/13	P.M. 11:50	MP - 2 付	around MP-2	410 μ Sv/h
3/13	P.M. 11:51	MP - 4 付	around MP-4	37.9 μ Sv/h
3/14	A.M. 0:00	正門	Front Gate	4.855 μ Sv/h
3/14	A.M.0:00	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:01	MP - 4 付	around MP-4	38.2 μ Sv/h
3/14	A.M. 0:10	正門	Front Gate	4.529 μ Sv/h
3/14	A.M.0:10	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:11	MP - 4 付	around MP-4	38.4 μ Sv/h
3/14	A.M. 0:20	正門	Front Gate	4.582 μ Sv/h
3/14	A.M.0:20	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:21	MP - 4 付	around MP-4	37.7 μ Sv/h
3/14	A.M. 0:30	正門	Front Gate	4.469 μ Sv/h
3/14	A.M.0:30	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:31	MP - 4 付	around MP-4	37.5 μ Sv/h
3/14	A.M. 0:40	正門	Front Gate	4.450 μ Sv/h
3/14	A.M.0:40	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:41	MP - 4 付	around MP-4	37.3 μ Sv/h
3/14	A.M. 0:50	正門	Front Gate	4.442 μ Sv/h
3/14	A.M.0:50	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.0:51	MP - 4 付	around MP-4	37.0 μ Sv/h
3/14	A.M. 1:00	正門	Front Gate	4.447 μ Sv/h
3/14	A.M.1:00	MP - 2 付	around MP-2	410 μ Sv/h
3/14	A.M.1:01	MP - 4 付	around MP-4	38.0 μ Sv/h

3/14	A.M. 1:10	正門	Front Gate	4.426μSv/h
3/14	A.M.1:10	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.1:11	MP - 4 付	around MP-4	36.9μSv/h
3/14	A.M. 1:20	正門	Front Gate	4.281μSv/h
3/14	A.M.1:20	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.1:21	MP - 4 付	around MP-4	36.7μSv/h
3/14	A.M. 1:30	正門	Front Gate	4.321μSv/h
3/14	A.M.1:30	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.1:31	MP - 4 付	around MP-4	36.5μSv/h
3/14	A.M. 1:40	正門	Front Gate	4.322μSv/h
3/14	A.M.1:40	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.1:41	MP - 4 付	around MP-4	36.4μSv/h
3/14	A.M. 1:50	正門	Front Gate	4.371μSv/h
3/14	A.M.1:50	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.1:51	MP - 4 付	around MP-4	38.3μSv/h
3/14	A.M. 2:00	正門	Front Gate	4.356μSv/h
3/14	A.M.2:00	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.2:00	MP - 4 付	around MP-4	36.4μSv/h
3/14	A.M. 2:10	正門	Front Gate	4.594μSv/h
3/14	A.M.2:10	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.2:10	MP - 4 付	around MP-4	36.5μSv/h
3/14	A.M. 2:20	正門	Front Gate	751.2μSv/h
3/14	A.M.2:20	MP - 2 付	around MP-2	410μSv/h
3/14	A.M.2:20	MP - 4 付	around MP-4	44.6μSv/h
3/14	A.M. 2:30	正門	Front Gate	433.0μSv/h
3/14	A.M.2:30	MP - 2 付	around MP-2	440μSv/h
3/14	A.M.2:30	MP - 4 付	around MP-4	319.3μSv/h
3/14	A.M. 2:40	正門	Front Gate	420.0μSv/h
3/14	A.M.2:40	MP - 2 付	around MP-2	650μSv/h
3/14	A.M.2:40	MP - 4 付	around MP-4	189.7μSv/h
3/14	A.M. 2:50	正門	Front Gate	66.27μSv/h
3/14	A.M.2:50	MP - 2 付	around MP-2	490μSv/h
3/14	A.M.2:50	MP - 4 付	around MP-4	86.9μSv/h
3/14	A.M. 3:00	正門	Front Gate	65.520μSv/h
3/14	A.M.3:00	MP - 2 付	around MP-2	480μSv/h
3/14	A.M.3:00	MP - 4 付	around MP-4	144.2μSv/h
3/14	A.M. 3:10	正門	Front Gate	45.5μSv/h
3/14	A.M.3:10	MP - 2 付	around MP-2	650μSv/h
3/14	A.M.3:10	MP - 4 付	around MP-4	129.8μSv/h
3/14	A.M. 3:20	正門	Front Gate	15.43μSv/h
3/14	A.M.3:20	MP - 2 付	around MP-2	650μSv/h
3/14	A.M.3:20	MP - 4 付	around MP-4	123.9μSv/h
3/14	A.M. 3:30	正門	Front Gate	18.99μSv/h
3/14	A.M.3:30	MP - 2 付	around MP-2	720μSv/h
3/14	A.M.3:30	MP - 4 付	around MP-4	112.9μSv/h
3/14	A.M. 3:40	正門	Front Gate	14.99μSv/h
3/14	A.M.3:40	MP - 2 付	around MP-2	600μSv/h

3/14	A.M.3:40	MP - 4 付	around MP-4	73.6 μ Sv/h
3/14	A.M. 3:50	正門	Front Gate	10.32 μ Sv/h
3/14	A.M.3:50	MP - 2 付	around MP-2	680 μ Sv/h
3/14	A.M.3:50	MP - 4 付	around MP-4	70.0 μ Sv/h
3/14	A.M. 4:00	正門	Front Gate	10.07 μ Sv/h
3/14	A.M.4:00	MP - 2 付	around MP-2	820 μ Sv/h
3/14	A.M.4:00	MP - 4 付	around MP-4	68.8 μ Sv/h
3/14	A.M. 4:10	正門	Front Gate	6.706 μ Sv/h
3/14	A.M.4:10	MP - 2 付	around MP-2	450 μ Sv/h
3/14	A.M.4:10	MP - 4 付	around MP-4	54.7 μ Sv/h
3/14	A.M. 4:20	正門	Front Gate	7.748 μ Sv/h
3/14	A.M.4:20	MP - 2 付	around MP-2	430 μ Sv/h
3/14	A.M.4:20	MP - 4 付	around MP-4	47.6 μ Sv/h
3/14	A.M. 4:30	正門	Front Gate	7.710 μ Sv/h
3/14	A.M.4:30	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.4:30	MP - 4 付	around MP-4	50.0 μ Sv/h
3/14	A.M. 4:40	正門	Front Gate	7.045 μ Sv/h
3/14	A.M.4:40	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.4:40	MP - 4 付	around MP-4	42.9 μ Sv/h
3/14	A.M. 4:50	正門	Front Gate	6.900 μ Sv/h
3/14	A.M.4:50	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.4:51	MP - 4 付	around MP-4	40.6 μ Sv/h
3/14	A.M. 5:00	正門	Front Gate	6.65 μ Sv/h
3/14	A.M.5:00	MP - 2 付	around MP-2	400 μ Sv/h
3/14	A.M.5:01	MP - 4 付	around MP-4	39.9 μ Sv/h
3/14	A.M. 5:10	正門	Front Gate	6.516 μ Sv/h
3/14	A.M.5:10	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.5:11	MP - 4 付	around MP-4	39.0 μ Sv/h
3/14	A.M. 5:20	正門	Front Gate	6.735 μ Sv/h
3/14	A.M.5:20	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.5:21	MP - 4 付	around MP-4	41.3 μ Sv/h
3/14	A.M. 5:29	MP - 4 付	Front Gate	41.3 μ Sv/h
3/14	A.M.5:30	正門	around MP-2	6.494 μ Sv/h
3/14	A.M.5:30	MP - 2 付	around MP-4	400 μ Sv/h
3/14	A.M. 5:40	正門	Front Gate	6.410 μ Sv/h
3/14	A.M.5:40	MP - 2 付	around MP-2	420 μ Sv/h
3/14	A.M.5:41	MP - 4 付	around MP-4	38.3 μ Sv/h
3/14	A.M. 5:50	正門	Front Gate	6.340 μ Sv/h
3/14	A.M.5:50	MP - 2 付	around MP-2	400 μ Sv/h
3/14	A.M.5:51	MP - 4 付	around MP-4	38.1 μ Sv/h
3/14	A.M. 6:00	正門	Front Gate	5.144 μ Sv/h
3/14	A.M.6:00	MP - 2 付	around MP-2	400 μ Sv/h
3/14	A.M.6:01	MP - 4 付	around MP-4	37.9 μ Sv/h
3/14	A.M. 6:10	正門	Front Gate	5.021 μ Sv/h
3/14	A.M.6:11	MP - 4 付	around MP-4	37.8 μ Sv/h
3/14	A.M. 6:20	正門	Front Gate	5.032 μ Sv/h
3/14	A.M.6:21	MP - 4 付	around MP-4	37.4 μ Sv/h

3/14	A.M. 6:30	正門	Front Gate	4.920 μ Sv/h
3/14	A.M.7:53	MP - 4 付	around MP-4	69 μ Sv/h
3/14	A.M.8:07	MP - 4 付	around MP-4	40 μ Sv/h
3/14	A.M.8:19	MP - 4 付	around MP-4	39 μ Sv/h
3/14	A.M.8:30	MP - 3 付	around MP-3	287.2 μ Sv/h
3/14	A.M.8:31	MP - 4 付	around MP-4	75 μ Sv/h
3/14	A.M.8:40	MP - 3 付	around MP-3	274 μ Sv/h
3/14	A.M.8:41	MP - 4 付	around MP-4	40 μ Sv/h
3/14	A.M.8:50	MP - 3 付	around MP-3	268 μ Sv/h
3/14	A.M.9:00	MP - 3 付	around MP-3	304.8 μ Sv/h
3/14	A.M.9:10	MP - 3 付	around MP-3	443.7 μ Sv/h
3/14	A.M.9:12	MP - 3 付	around MP-3	518.7 μ Sv/h
3/14	A.M.9:20	MP - 3 付	around MP-3	481.0 μ Sv/h
3/14	A.M.9:25	MP - 4 付	around MP-4	87.083 μ Sv/h
3/14	A.M.9:30	MP - 3 付	around MP-3	339.4 μ Sv/h
3/14	A.M.9:40	MP - 3 付	around MP-3	293.7 μ Sv/h
3/14	A.M.9:43	MP - 4 付	around MP-4	48.899 μ Sv/h
3/14	A.M.9:50	MP - 3 付	around MP-3	274.9 μ Sv/h
3/14	A.M.9:53	MP - 4 付	around MP-4	43.256 μ Sv/h
3/14	A.M.10:00	MP - 3 付	around MP-3	269.4 μ Sv/h
3/14	A.M.10:05	MP - 4 付	around MP-4	41.998 μ Sv/h
3/14	A.M.10:10	MP - 3 付	around MP-3	266.8 μ Sv/h
3/14	A.M.10:11	MP - 4 付	around MP-4	41.533 μ Sv/h
3/14	A.M.10:20	MP - 3 付	around MP-3	265.4 μ Sv/h
3/14	A.M.10:27	MP - 4 付	around MP-4	40.694 μ Sv/h
3/14	A.M.10:30	MP - 3 付	around MP-3	261.6 μ Sv/h
3/14	A.M.10:35	MP - 4 付	around MP-4	40.155 μ Sv/h
3/14	A.M.10:40	MP - 3 付	around MP-3	261.900 μ Sv/h
3/14	A.M.10:41	MP - 4 付	around MP-4	39.716 μ Sv/h
3/14	A.M.10:50	MP - 3 付	around MP-3	261.0 μ Sv/h
3/14	A.M.10:51	MP - 4 付	around MP-4	39.406 μ Sv/h
3/14	A.M. 11:37	正門	Front Gate	50.387 μ Sv/h
3/14	A.M. 11:44	正門	Front Gate	19.6 μ Sv/h
3/14	P.M. 0:06	正門	Front Gate	10.816 μ Sv/h
3/14	P.M. 0:21	正門	Front Gate	10.65 μ Sv/h
3/14	P.M. 0:34	MP - 6 付	around MP-6	4.226 μ Sv/h
3/14	P.M. 0:46	MP - 5 付	around MP-5	6.86 μ Sv/h
3/14	P.M. 0:52	MP - 4 付	around MP-4	31.53 μ Sv/h
3/14	P.M. 1:04	MP - 3 付	around MP-3	229.7 μ Sv/h
3/14	P.M. 1:10	正門	Front Gate	12.0 μ Sv/h
3/14	P.M. 1:12	MP - 4 付	around MP-4	34.2 μ Sv/h
3/14	P.M. 1:15	正門	Front Gate	13.0 μ Sv/h
3/14	P.M. 1:20	正門	Front Gate	15.0 μ Sv/h
3/14	P.M. 1:25	正門	Front Gate	14.0 μ Sv/h
3/14	P.M. 1:28	MP - 5 付	around MP-5	6.377 μ Sv/h
3/14	P.M. 1:30	正門	Front Gate	13.0 μ Sv/h
3/14	P.M. 1:35	正門	Front Gate	13.0 μ Sv/h

3/14	P.M. 1:40	正門	Front Gate	11.0 μ Sv/h
3/14	P.M. 1:40	MP - 6 付	around MP-6	3.65 μ Sv/h
3/14	P.M. 1:45	正門	Front Gate	12.0 μ Sv/h
3/14	P.M. 1:50	正門	Front Gate	13.0 μ Sv/h
3/14	P.M. 1:55	正門	Front Gate	15.0 μ Sv/h
3/14	P.M. 2:02	MP - 5 付	around MP-5	6.088 μ Sv/h
3/14	P.M. 2:14	MP - 4 付	around MP-4	29.8 μ Sv/h
3/14	P.M. 2:30	MP - 3 付	around MP-3	231.1 μ Sv/h
3/14	P.M. 2:46	MP - 4 付	around MP-4	31.3 μ Sv/h
3/14	P.M. 2:58	MP - 5 付	around MP-4	6.2 μ Sv/h
3/14	P.M. 3:09	MP - 6 付	around MP-4	3.9 μ Sv/h
3/14	P.M. 2:16	MP - 5 付	around MP-5	6.0 μ Sv/h
3/14	P.M. 3:23	MP - 4 付	around MP-4	29.6 μ Sv/h
3/14	P.M. 3:30	MP - 3 付	around MP-3	226.2 μ Sv/h
3/14	P.M. 3:38	MP - 4 付	around MP-4	30.4 μ Sv/h
3/14	P.M. 4:02	MP - 5 付	around MP-5	5.9 μ Sv/h
3/14	P.M. 4:10	MP - 6 付	around MP-6	3.7 μ Sv/h
3/14	P.M. 5:00	正門	Front Gate	8.1 μ Sv/h
3/14	P.M. 5:10	正門	Front Gate	8.1 μ Sv/h
3/14	P.M. 5:20	正門	Front Gate	7.275 μ Sv/h
3/14	P.M. 5:30	正門	Front Gate	7.605 μ Sv/h
3/14	P.M. 5:40	正門	Front Gate	7.620 μ Sv/h
3/14	P.M. 5:50	正門	Front Gate	8.044 μ Sv/h
3/14	P.M. 6:00	正門	Front Gate	7.637 μ Sv/h
3/14	P.M. 6:10	正門	Front Gate	7.037 μ Sv/h
3/14	P.M. 6:20	正門	Front Gate	7.177 μ Sv/h
3/14	P.M. 6:30	正門	Front Gate	8.047 μ Sv/h
3/14	P.M. 6:40	正門	Front Gate	10.4 μ Sv/h
3/14	P.M. 6:46	正門	Front Gate	10.1 μ Sv/h
3/14	P.M. 7:00	正門	Front Gate	7.7 μ Sv/h
3/14	P.M. 7:10	正門	Front Gate	7.8 μ Sv/h
3/14	P.M. 7:20	正門	Front Gate	7.7 μ Sv/h
3/14	P.M. 7:30	正門	Front Gate	8.9 μ Sv/h
3/14	P.M. 7:40	正門	Front Gate	7.6 μ Sv/h
3/14	P.M. 7:50	正門	Front Gate	5.5 μ Sv/h
3/14	P.M. 8:00	正門	Front Gate	5.4 μ Sv/h
3/14	P.M. 8:10	正門	Front Gate	5.4 μ Sv/h
3/14	P.M. 8:20	正門	Front Gate	5.4 μ Sv/h
3/14	P.M. 8:30	正門	Front Gate	5.4 μ Sv/h
3/14	P.M. 8:40	正門	Front Gate	5.4 μ Sv/h
3/14	P.M. 8:50	正門	Front Gate	5.8 μ Sv/h
3/14	P.M. 8:55	正門	Front Gate	5.0 μ Sv/h
3/14	P.M. 9:00	正門	Front Gate	5.8 μ Sv/h
3/14	P.M. 9:05	正門	Front Gate	5.8 μ Sv/h
3/14	P.M. 9:10	正門	Front Gate	6.0 μ Sv/h
3/14	P.M. 9:15	正門	Front Gate	5.8 μ Sv/h
3/14	P.M. 9:20	正門	Front Gate	6.0 μ Sv/h

3/14	P.M. 9:25	正門	Front Gate	6.8μSv/h
3/14	P.M. 9:30	正門	Front Gate	29.7μSv/h
3/14	P.M. 9:35	正門	Front Gate	760.0μSv/h
3/14	P.M. 9:37	正門	Front Gate	3130.0μSv/h
3/14	P.M. 10:15	正門	Front Gate	431.7μSv/h
3/14	P.M. 10:20	正門	Front Gate	336.6μSv/h
3/14	P.M. 10:25	正門	Front Gate	301.9μSv/h
3/14	P.M. 10:35	正門	Front Gate	326.2μSv/h
3/14	P.M. 10:40	正門	Front Gate	293.7μSv/h
3/14	P.M. 10:45	正門	Front Gate	271.7μSv/h
3/14	P.M. 10:50	正門	Front Gate	267.0μSv/h
3/14	P.M. 10:55	正門	Front Gate	263.0μSv/h
3/14	P.M. 11:00	正門	Front Gate	252.7μSv/h
3/14	P.M. 11:05	正門	Front Gate	242.8μSv/h
3/14	P.M. 11:10	正門	Front Gate	235.3μSv/h
3/14	P.M. 11:15	正門	Front Gate	231.5μSv/h
3/14	P.M. 11:20	正門	Front Gate	227.0μSv/h
3/14	P.M. 11:25	正門	Front Gate	216.0μSv/h
3/14	P.M. 11:30	正門	Front Gate	216.0μSv/h
3/14	P.M. 11:35	正門	Front Gate	211.3μSv/h
3/14	P.M. 11:40	正門	Front Gate	205.6μSv/h
3/14	P.M. 11:45	正門	Front Gate	201.7μSv/h
3/14	P.M. 11:50	正門	Front Gate	196.2μSv/h
3/14	P.M. 11:55	正門	Front Gate	192.3μSv/h
3/15	A.M. 0:00	正門	Front Gate	188.9μSv/h
3/15	A.M. 0:05	正門	Front Gate	185.0μSv/h
3/15	A.M. 0:10	正門	Front Gate	181.0μSv/h
3/15	A.M. 0:15	正門	Front Gate	177.3μSv/h
3/15	A.M. 0:20	正門	Front Gate	175.8μSv/h
3/15	A.M. 0:25	正門	Front Gate	173.3μSv/h
3/15	A.M. 0:30	正門	Front Gate	168.0μSv/h
3/15	A.M. 0:35	正門	Front Gate	164.9μSv/h
3/15	A.M. 0:40	正門	Front Gate	164.4μSv/h
3/15	A.M. 0:45	正門	Front Gate	167.6μSv/h
3/15	A.M. 0:50	正門	Front Gate	164.3μSv/h
3/15	A.M. 0:55	正門	Front Gate	151.7μSv/h
3/15	A.M. 1:00	正門	Front Gate	150.3μSv/h
3/15	A.M. 1:05	正門	Front Gate	147.1μSv/h
3/15	A.M. 1:20	正門	Front Gate	137.8μSv/h
3/15	A.M. 1:30	正門	Front Gate	135.5μSv/h
3/15	A.M. 1:40	正門	Front Gate	130.4μSv/h
3/15	A.M. 1:50	正門	Front Gate	123.3μSv/h
3/15	A.M. 2:00	正門	Front Gate	120.2μSv/h
3/15	A.M. 2:10	正門	Front Gate	114.1μSv/h
3/15	A.M. 2:20	正門	Front Gate	111.4μSv/h
3/15	A.M. 2:30	正門	Front Gate	109.6μSv/h
3/15	A.M. 2:40	正門	Front Gate	105.4μSv/h

3/15	A.M. 3:10	正門	Front Gate	94.3μSv/h
3/15	A.M. 3:20	正門	Front Gate	92.8μSv/h
3/15	A.M. 3:40	正門	Front Gate	87.0μSv/h
3/15	A.M. 4:00	正門	Front Gate	81.9μSv/h
3/15	A.M. 4:20	正門	Front Gate	77.6μSv/h
3/15	A.M. 4:40	正門	Front Gate	73.6μSv/h
3/15	A.M. 5:00	正門	Front Gate	70.0μSv/h
3/15	A.M. 5:20	正門	Front Gate	67.4μSv/h
3/15	A.M. 5:40	正門	Front Gate	65.7μSv/h
3/15	A.M. 6:00	正門	Front Gate	73.2μSv/h
3/15	A.M. 8:20	正門	Front Gate	807.7μSv/h
3/15	A.M. 8:31	正門	Front Gate	8217.0μSv/h
3/15	A.M. 8:40	正門	Front Gate	1726.0μSv/h
3/15	A.M. 8:50	正門	Front Gate	2208.0μSv/h
3/15	A.M. 9:00	正門	Front Gate	11930.0μSv/h
3/15	A.M. 9:15	MP - 4 付	around MP-4	58.0μSv/h
3/15	A.M. 9:20	MP - 4 付	around MP-4	50.0μSv/h
3/15	A.M. 9:35	正門	Front Gate	7241.0μSv/h
3/15	A.M.10:15	正門	Front Gate	8837.0μSv/h
3/15	A.M.11:40	西門	West Gate	253.8μSv/h
3/15	A.M.11:45	西門	West Gate	162.4μSv/h
3/15	P.M. 0:05	西門	West Gate	2431.0μSv/h
3/15	P.M. 0:15	西門	West Gate	2434.0μSv/h
3/15	P.M. 0:25	正門	Front Gate	1407.0μSv/h
3/15	P.M. 0:35	正門	Front Gate	1325.0μSv/h
3/15	P.M. 0:45	正門	Front Gate	1267.0μSv/h
3/15	P.M. 0:55	正門	Front Gate	1216.0μSv/h
3/15	P.M. 1:00	正門	Front Gate	1191.0μSv/h
3/15	P.M. 1:10	正門	Front Gate	1148.0μSv/h
3/15	P.M. 1:20	正門	Front Gate	1100.0μSv/h
3/15	P.M. 1:30	正門	Front Gate	1068.0μSv/h
3/15	P.M. 1:40	正門	Front Gate	1014.0μSv/h
3/15	P.M. 1:50	正門	Front Gate	969.9μSv/h
3/15	P.M. 2:00	正門	Front Gate	928.2μSv/h
3/15	P.M. 2:10	正門	Front Gate	903.9μSv/h
3/15	P.M. 2:20	正門	Front Gate	874.4μSv/h
3/15	P.M. 2:30	正門	Front Gate	855.5μSv/h
3/15	P.M. 2:40	正門	Front Gate	821.3μSv/h
3/15	P.M. 2:50	正門	Front Gate	673.8μSv/h
3/15	P.M. 3:00	正門	Front Gate	649.0μSv/h
3/15	P.M. 3:10	正門	Front Gate	628.5μSv/h
3/15	P.M. 3:20	正門	Front Gate	613.8μSv/h
3/15	P.M. 3:30	正門	Front Gate	596.4μSv/h
3/15	P.M. 3:40	正門	Front Gate	566.9μSv/h
3/15	P.M. 3:50	正門	Front Gate	544.9μSv/h
3/15	P.M. 4:00	正門	Front Gate	531.6μSv/h
3/15	P.M. 4:10	正門	Front Gate	513.2μSv/h

3/15	P.M. 4:20	正門	Front Gate	502.6μSv/h
3/15	P.M. 4:30	正門	Front Gate	489.8μSv/h
3/15	P.M. 4:40	正門	Front Gate	473.0μSv/h
3/15	P.M. 4:50	正門	Front Gate	460.3μSv/h
3/15	P.M. 5:00	正門	Front Gate	449.4μSv/h
3/15	P.M. 5:10	正門	Front Gate	437.5μSv/h
3/15	P.M. 5:30	正門	Front Gate	423.5μSv/h
3/15	P.M. 6:00	正門	Front Gate	401.7μSv/h
3/15	P.M. 6:30	正門	Front Gate	403.0μSv/h
3/15	P.M. 7:00	正門	Front Gate	353.8μSv/h
3/15	P.M. 7:30	正門	Front Gate	343.3μSv/h
3/15	P.M. 8:00	正門	Front Gate	347.0μSv/h
3/15	P.M. 8:30	正門	Front Gate	311.3μSv/h
3/15	P.M. 9:00	正門	Front Gate	298.8μSv/h
3/15	P.M. 9:30	正門	Front Gate	282.6μSv/h
3/15	P.M. 10:00	正門	Front Gate	313.2μSv/h
3/15	P.M. 10:30	正門	Front Gate	431.8μSv/h
3/15	P.M. 11:00	正門	Front Gate	4548.0μSv/h
3/15	P.M. 11:10	正門	Front Gate	6960.0μSv/h
3/15	P.M. 11:15	正門	Front Gate	2761.0μSv/h
3/15	P.M. 11:20	正門	Front Gate	3648.0μSv/h
3/15	P.M. 11:25	正門	Front Gate	4976.0μSv/h
3/15	P.M. 11:30	正門	Front Gate	8080.0μSv/h
3/15	P.M. 11:35	正門	Front Gate	6308.0μSv/h
3/15	P.M. 11:40	正門	Front Gate	6592.0μSv/h
3/15	P.M. 11:45	正門	Front Gate	6847.0μSv/h
3/15	P.M. 11:50	正門	Front Gate	6066.0μSv/h
3/15	P.M. 11:55	正門	Front Gate	7966.0μSv/h
3/16	A.M. 0:00	正門	Front Gate	4351.0μSv/h
3/16	A.M. 0:10	正門	Front Gate	3504.0μSv/h
3/16	A.M. 0:20	正門	Front Gate	3108.0μSv/h
3/16	A.M. 0:30	正門	Front Gate	2609.0μSv/h
3/16	A.M. 1:00	正門	Front Gate	2159.0μSv/h
3/16	A.M. 1:10	正門	Front Gate	2021.0μSv/h
3/16	A.M. 1:20	正門	Front Gate	1937.0μSv/h
3/16	A.M. 1:30	正門	Front Gate	1805.0μSv/h
3/16	A.M. 1:40	正門	Front Gate	1708.0μSv/h
3/16	A.M. 1:50	正門	Front Gate	1628.0μSv/h
3/16	A.M. 2:00	正門	Front Gate	1552.0μSv/h
3/16	A.M. 2:10	正門	Front Gate	1522.0μSv/h
3/16	A.M. 2:20	正門	Front Gate	1453.0μSv/h
3/16	A.M. 2:30	正門	Front Gate	1386.0μSv/h
3/16	A.M. 2:40	正門	Front Gate	1357.0μSv/h
3/16	A.M. 2:50	正門	Front Gate	1316.0μSv/h
3/16	A.M. 3:00	正門	Front Gate	1267.0μSv/h
3/16	A.M. 3:30	正門	Front Gate	1159.0μSv/h
3/16	A.M. 4:00	正門	Front Gate	1047.0μSv/h

3/16	A.M. 4:30	正門	Front Gate	975.3μSv/h
3/16	A.M. 5:00	正門	Front Gate	918.2μSv/h
3/16	A.M. 5:30	正門	Front Gate	868.0μSv/h
3/16	A.M. 6:00	正門	Front Gate	884.0μSv/h
3/16	A.M. 6:30	正門	Front Gate	848.4μSv/h
3/16	A.M. 6:40	正門	Front Gate	837.0μSv/h
3/16	A.M. 6:50	正門	Front Gate	815.9μSv/h
3/16	A.M. 7:00	正門	Front Gate	808.8μSv/h
3/16	A.M. 7:10	正門	Front Gate	670.3μSv/h
3/16	A.M. 7:20	正門	Front Gate	661.8μSv/h
3/16	A.M. 7:30	正門	Front Gate	651.1μSv/h
3/16	A.M. 7:40	正門	Front Gate	644.0μSv/h
3/16	A.M. 7:50	正門	Front Gate	636.8μSv/h
3/16	A.M. 8:00	正門	Front Gate	627.5μSv/h
3/16	A.M. 8:10	正門	Front Gate	620.6μSv/h
3/16	A.M. 8:20	正門	Front Gate	613.9μSv/h
3/16	A.M. 8:30	正門	Front Gate	606.6μSv/h
3/16	A.M. 8:40	正門	Front Gate	600.4μSv/h
3/16	A.M. 8:50	正門	Front Gate	593.4μSv/h
3/16	A.M. 9:00	正門	Front Gate	587.6μSv/h
3/16	A.M. 9:10	正門	Front Gate	582.2μSv/h
3/16	A.M. 9:20	正門	Front Gate	582.4μSv/h
3/16	A.M. 9:30	正門	Front Gate	582.3μSv/h
3/16	A.M. 9:40	正門	Front Gate	641.8μSv/h
3/16	A.M. 9:50	正門	Front Gate	700.6μSv/h
3/16	A.M.10:00	正門	Front Gate	810.3μSv/h
3/16	A.M.10:10	正門	Front Gate	908.5μSv/h
3/16	A.M.10:20	正門	Front Gate	2399.0μSv/h
3/16	A.M.10:30	正門	Front Gate	1361.0μSv/h
3/16	A.M.10:45	正門	Front Gate	6400.0μSv/h
3/16	A.M.10:54	正門	Front Gate	2300.0μSv/h
3/16	A.M.10:55	正門	Front Gate	2900.0μSv/h
3/16	A.M.11:00	正門	Front Gate	3391.0μSv/h
3/16	A.M.11:10	正門	Front Gate	2720.0μSv/h
3/16	A.M.11:20	正門	Front Gate	1900.0μSv/h
3/16	A.M.11:30	正門	Front Gate	5350.0μSv/h
3/16	A.M.11:40	正門	Front Gate	2633.0μSv/h
3/16	A.M.11:50	正門	Front Gate	2578.0μSv/h
3/16	A.M. 0:00	正門	Front Gate	4418.0μSv/h
3/16	P.M. 0:10	正門	Front Gate	3138.0μSv/h
3/16	P.M. 0:20	正門	Front Gate	3261.0μSv/h
3/16	P.M. 0:30	正門	Front Gate	10850.0μSv/h
3/16	P.M. 0:40	正門	Front Gate	8234.0μSv/h
3/16	P.M. 0:50	正門	Front Gate	2851.0μSv/h
3/16	P.M. 1:00	正門	Front Gate	2672.0μSv/h
3/16	P.M. 1:10	正門	Front Gate	2538.0μSv/h
3/16	P.M. 1:20	正門	Front Gate	2430.0μSv/h

3/16	P.M. 1:30	正門	Front Gate	2331.0μSv/h
3/16	P.M. 1:40	正門	Front Gate	2257.0μSv/h
3/16	P.M. 1:50	正門	Front Gate	2182.0μSv/h
3/16	P.M. 2:00	正門	Front Gate	2122.0μSv/h
3/16	P.M. 2:10	正門	Front Gate	2059.0μSv/h
3/16	P.M. 2:20	正門	Front Gate	2002.0μSv/h
3/16	P.M. 2:30	正門	Front Gate	1937.0μSv/h
3/16	P.M. 2:40	正門	Front Gate	1888.0μSv/h
3/16	P.M. 2:50	正門	Front Gate	1835.0μSv/h
3/16	P.M. 3:00	正門	Front Gate	1788.0μSv/h
3/16	P.M. 3:10	正門	Front Gate	1752.0μSv/h
3/16	P.M. 3:20	正門	Front Gate	1697.0μSv/h
3/16	P.M. 3:30	正門	Front Gate	1664.0μSv/h
3/16	P.M. 3:40	正門	Front Gate	1629.0μSv/h
3/16	P.M. 3:50	正門	Front Gate	1591.0μSv/h
3/17	A.M. 0:30	西門	West Gate	351.4 μSv/h
3/17	A.M. 0:50	西門	West Gate	350.1 μSv/h
3/17	A.M. 1:00	西門	West Gate	350.0 μSv/h
3/17	A.M. 1:30	西門	West Gate	348.2 μSv/h
3/17	A.M. 2:00	西門	West Gate	345.9 μSv/h
3/17	A.M. 2:30	西門	West Gate	344.8 μSv/h
3/17	A.M. 3:00	西門	West Gate	344.6 μSv/h
3/17	A.M. 3:30	西門	West Gate	341.7 μSv/h
3/17	A.M. 4:00	西門	West Gate	340.8 μSv/h
3/17	A.M. 4:30	西門	West Gate	339.4 μSv/h
3/17	A.M. 5:00	西門	West Gate	338.3 μSv/h
3/17	A.M. 5:30	西門	West Gate	336.1 μSv/h
3/17	A.M. 6:00	西門	West Gate	334.7 μSv/h
3/17	A.M. 6:30	西門	West Gate	333.8 μSv/h
3/17	A.M. 7:30	西門	West Gate	314.5 μSv/h
3/17	A.M. 7:30	西門	West Gate	313.5 μSv/h
3/17	A.M. 7:50	體育館脇	a side of Gym	381.3 μSv/h
3/17	A.M. 8:00	體育館脇	a side of Gym	379.0 μSv/h
3/17	A.M. 8:30	體育館脇	a side of Gym	373.0 μSv/h
3/17	A.M. 8:40	體育館脇	a side of Gym	372.5 μSv/h
3/17	A.M. 8:50	體育館脇	a side of Gym	372.7 μSv/h
3/17	A.M. 9:00	體育館脇	a side of Gym	373.7 μSv/h
3/17	A.M. 9:10	體育館脇	a side of Gym	371.9 μSv/h
3/17	A.M. 9:30	事務本館北	North of Main Admin. Bldg.	3786.0 μSv/h
3/17	A.M. 9:40	事務本館北	North of Main Admin. Bldg.	3782.0 μSv/h
3/17	A.M. 9:50	事務本館北	North of Main Adnmin. Bldg.	3763.0 μSv/h
3/17	A.M. 10:00	事務本館北	North of Main Adnmin. Bldg.	3759.0 μSv/h
3/17	A.M. 10:10	事務本館北	North of Main Adnmin. Bldg.	3755.0 μSv/h
3/17	A.M. 10:20	事務本館北	North of Main Adnmin. Bldg.	3754.0 μSv/h
3/17	A.M. 10:30	事務本館北	North of Main Adnmin. Bldg.	3750.0 μSv/h
3/17	A.M. 10:40	事務本館北	North of Main Adnmin. Bldg.	3753.0 μSv/h
3/17	A.M. 10:50	事務本館北	North of Main Adnmin. Bldg.	3743.0 μSv/h
3/17	A.M. 11:00	正門	Front Gate	647.3 μSv/h

3/17	A.M. 11:10	正門	Front Gate	646.2 μ Sv/h
3/17	A.M. 11:15	西門	West Gate	313.1 μ Sv/h
3/17	A.M. 11:20	西門	West Gate	312.5 μ Sv/h
3/17	A.M. 11:30	西門	West Gate	312.3 μ Sv/h
3/17	P.M. 0:00	西門	West Gate	311.0 μ Sv/h
3/17	P.M. 0:30	西門	West Gate	310.7 μ Sv/h
3/17	P.M. 1:00	西門	West Gate	309.7 μ Sv/h
3/17	P.M. 1:10	西門	West Gate	309.3 μ Sv/h
3/17	P.M. 1:20	西門	West Gate	309.1 μ Sv/h
3/17	P.M. 1:30	事務本館北	North of Main Admin. Bldg.	4175.0 μ Sv/h
3/17	P.M. 1:40	事務本館北	North of Main Admin. Bldg.	4165.0 μ Sv/h
3/17	P.M. 2:00	事務本館北	North of Main Admin. Bldg.	3810.0 μ Sv/h
3/17	P.M. 2:10	西門	West Gate	311.1 μ Sv/h
3/17	P.M. 2:30	西門	West Gate	310.3 μ Sv/h
3/17	P.M. 3:00	西門	West Gate	309.1 μ Sv/h
3/17	P.M. 3:30	西門	West Gate	309.7 μ Sv/h
3/17	P.M. 3:50	事務本館北	North of Main Admin. Bldg.	3700.0 μ Sv/h
3/17	P.M. 4:00	事務本館北	North of Main Admin. Bldg.	3698.0 μ Sv/h
3/17	P.M. 4:10	事務本館北	North of Main Admin. Bldg.	3695.0 μ Sv/h
3/17	P.M. 4:15	事務本館北	North of Main Admin. Bldg.	3691.0 μ Sv/h
3/17	P.M. 5:00	事務本館北	North of Main Admin. Bldg.	3676.0 μ Sv/h
3/17	P.M. 5:10	事務本館北	North of Main Admin. Bldg.	3675.0 μ Sv/h
3/17	P.M. 5:20	事務本館北	North of Main Admin. Bldg.	3672.0 μ Sv/h
3/17	P.M. 5:30	事務本館北	North of Main Admin. Bldg.	3667.0 μ Sv/h
3/17	P.M. 5:40	事務本館北	North of Main Admin. Bldg.	3639.0 μ Sv/h
3/17	P.M. 5:50	事務本館北	North of Main Admin. Bldg.	3650.0 μ Sv/h
3/17	P.M. 6:00	事務本館北	North of Main Admin. Bldg.	3649.0 μ Sv/h
3/17	P.M. 6:10	事務本館北	North of Main Admin. Bldg.	3641.0 μ Sv/h
3/17	P.M. 6:20	事務本館北	North of Main Admin. Bldg.	3645.0 μ Sv/h
3/17	P.M. 6:30	事務本館北	North of Main Admin. Bldg.	3643.0 μ Sv/h
3/17	P.M. 6:40	事務本館北	North of Main Admin. Bldg.	3638.0 μ Sv/h
3/17	P.M. 5:50	事務本館北	North of Main Admin. Bldg.	3638.0 μ Sv/h
3/17	P.M. 7:00	事務本館北	North of Main Admin. Bldg.	3630.0 μ Sv/h
3/17	P.M. 7:10	事務本館北	North of Main Admin. Bldg.	3626.0 μ Sv/h
3/17	P.M. 8:40	西門	West Gate	292.2 μ Sv/h
3/17	P.M. 9:00	西門	West Gate	291.9 μ Sv/h
3/17	P.M. 9:10	西門	West Gate	291.7 μ Sv/h
3/17	P.M. 9:20	西門	West Gate	291.3 μ Sv/h
3/17	P.M. 9:30	西門	West Gate	291.2 μ Sv/h
3/17	P.M. 9:40	西門	West Gate	291.1 μ Sv/h
3/17	P.M. 9:50	西門	West Gate	290.9 μ Sv/h
3/17	P.M. 10:00	西門	West Gate	290.4 μ Sv/h
3/17	P.M. 10:10	西門	West Gate	290.4 μ Sv/h
3/17	P.M. 10:20	西門	West Gate	289.9 μ Sv/h
3/17	P.M. 10:30	西門	West Gate	289.7 μ Sv/h
3/17	P.M. 10:40	西門	West Gate	289.6 μ Sv/h
3/17	P.M. 10:50	西門	West Gate	289.5 μ Sv/h
3/17	P.M. 11:00	西門	West Gate	289.0 μ Sv/h

3/17	P.M. 11:10	西門	West Gate	289.0 μ Sv/h
3/17	P.M. 11:20	西門	West Gate	288.8 μ Sv/h
3/17	P.M. 11:30	西門	West Gate	288.7 μ Sv/h
3/17	P.M. 11:40	西門	West Gate	287.8 μ Sv/h
3/17	P.M. 11:50	西門	West Gate	288.9 μ Sv/h
3/18	A.M. 0:00	西門	West Gate	287.0 μ Sv/h
3/18	A.M. 0:10	西門	West Gate	287.3 μ Sv/h
3/18	A.M. 0:20	西門	West Gate	286.6 μ Sv/h
3/18	A.M. 0:30	西門	West Gate	286.4 μ Sv/h
3/18	A.M. 0:40	西門	West Gate	286.3 μ Sv/h
3/18	A.M. 0:50	西門	West Gate	286.0 μ Sv/h
3/18	A.M. 1:00	西門	West Gate	285.6 μ Sv/h
3/18	A.M. 1:10	西門	West Gate	285.5 μ Sv/h
3/18	A.M. 1:20	西門	West Gate	285.2 μ Sv/h
3/18	A.M. 1:30	西門	West Gate	284.9 μ Sv/h
3/18	A.M. 1:40	西門	West Gate	284.6 μ Sv/h
3/18	A.M. 1:50	西門	West Gate	284.4 μ Sv/h
3/18	A.M. 2:00	西門	West Gate	284.0 μ Sv/h
3/18	A.M. 2:10	西門	West Gate	283.7 μ Sv/h
3/18	A.M. 2:20	西門	West Gate	283.7 μ Sv/h
3/18	A.M. 2:30	西門	West Gate	283.5 μ Sv/h
3/18	A.M. 2:40	西門	West Gate	283.0 μ Sv/h
3/18	A.M. 2:50	西門	West Gate	282.9 μ Sv/h
3/18	A.M. 3:00	西門	West Gate	282.6 μ Sv/h
3/18	A.M. 3:10	西門	West Gate	282.0 μ Sv/h
3/18	A.M. 3:20	西門	West Gate	282.0 μ Sv/h
3/18	A.M. 3:30	西門	West Gate	281.6 μ Sv/h
3/18	A.M. 3:40	西門	West Gate	281.5 μ Sv/h
3/18	A.M. 3:50	西門	West Gate	281.2 μ Sv/h
3/18	A.M. 4:00	西門	West Gate	281.1 μ Sv/h
3/18	A.M. 4:10	西門	West Gate	280.9 μ Sv/h
3/18	A.M. 4:20	西門	West Gate	280.7 μ Sv/h
3/18	A.M. 4:30	西門	West Gate	280.2 μ Sv/h
3/18	A.M. 4:40	西門	West Gate	280.0 μ Sv/h
3/18	A.M. 4:50	西門	West Gate	279.8 μ Sv/h
3/18	A.M. 5:00	西門	West Gate	279.4 μ Sv/h
3/18	A.M. 5:10	西門	West Gate	279.3 μ Sv/h
3/18	A.M. 5:20	西門	West Gate	279.0 μ Sv/h
3/18	A.M. 5:30	西門	West Gate	278.9 μ Sv/h
3/18	A.M. 5:40	西門	West Gate	278.9 μ Sv/h
3/18	A.M. 5:50	西門	West Gate	277.1 μ Sv/h
3/18	A.M. 6:00	西門	West Gate	274.0 μ Sv/h
3/18	A.M. 6:10	西門	West Gate	274.0 μ Sv/h
3/18	A.M. 6:20	西門	West Gate	273.8 μ Sv/h
3/18	A.M. 6:30	西門	West Gate	274.1 μ Sv/h
3/18	A.M. 6:40	西門	West Gate	272.7 μ Sv/h
3/18	A.M. 6:50	西門	West Gate	273.4 μ Sv/h
3/18	A.M. 7:00	西門	West Gate	272.4 μ Sv/h

3/18	A.M. 7:10	西門	West Gate	271.7 μ Sv/h
3/18	A.M. 7:20	西門	West Gate	271.6 μ Sv/h
3/18	A.M. 7:30	西門	West Gate	271.4 μ Sv/h
3/18	A.M. 7:40	西門	West Gate	271.1 μ Sv/h
3/18	A.M. 7:50	西門	West Gate	271.2 μ Sv/h
3/18	A.M. 8:00	西門	West Gate	270.5 μ Sv/h
3/18	A.M. 8:10	西門	West Gate	270.3 μ Sv/h
3/18	A.M. 8:20	西門	West Gate	269.9 μ Sv/h
3/18	A.M. 8:30	西門	West Gate	269.9 μ Sv/h
3/18	A.M. 8:40	西門	West Gate	269.8 μ Sv/h
3/18	A.M. 8:50	西門	West Gate	269.2 μ Sv/h
3/18	A.M. 9:00	西門	West Gate	268.7 μ Sv/h
3/18	A.M. 9:10	西門	West Gate	267.6 μ Sv/h
3/18	A.M. 9:20	西門	West Gate	268.9 μ Sv/h
3/18	A.M. 9:30	西門	West Gate	267.5 μ Sv/h
3/18	A.M. 9:40	西門	West Gate	267.0 μ Sv/h
3/18	A.M. 9:50	西門	West Gate	266.9 μ Sv/h
3/18	A.M. 10:00	西門	West Gate	266.7 μ Sv/h
3/18	A.M. 10:10	西門	West Gate	266.4 μ Sv/h
3/18	A.M. 10:20	西門	West Gate	266.1 μ Sv/h
3/18	A.M. 10:30	西門	West Gate	265.7 μ Sv/h
3/18	A.M. 10:40	西門	West Gate	265.4 μ Sv/h
3/18	A.M. 10:50	西門	West Gate	264.8 μ Sv/h
3/18	A.M. 11:00	西門	West Gate	265.0 μ Sv/h
3/18	A.M. 11:10	西門	West Gate	264.4 μ Sv/h
3/18	A.M. 11:20	西門	West Gate	264.5 μ Sv/h
3/18	A.M. 11:30	西門	West Gate	264.1 μ Sv/h
3/18	A.M. 11:40	西門	West Gate	264.4 μ Sv/h
3/18	A.M. 11:50	西門	West Gate	263.4 μ Sv/h
3/18	P.M. 0:00	西門	West Gate	263.5 μ Sv/h
3/18	P.M. 0:10	西門	West Gate	263.1 μ Sv/h
3/18	P.M. 0:20	西門	West Gate	262.9 μ Sv/h
3/18	P.M. 0:30	西門	West Gate	263.3 μ Sv/h
3/18	A.M. 0:40	西門	West Gate	264.3 μ Sv/h
3/18	P.M. 0:50	西門	West Gate	261.3 μ Sv/h
3/18	P.M. 1:00	西門	West Gate	262.0 μ Sv/h
3/18	P.M. 1:10	西門	West Gate	261.9 μ Sv/h
3/18	P.M. 1:20	西門	West Gate	262.7 μ Sv/h
3/18	P.M. 1:30	西門	West Gate	264.1 μ Sv/h
3/18	P.M. 1:50	事務本館北	North of Main Admin. Bldg.	3484.0 μ Sv/h
3/18	P.M. 2:00	事務本館北	North of Main Admin. Bldg.	3414.0 μ Sv/h
3/18	P.M. 2:10	事務本館北	North of Main Admin. Bldg.	3382.0 μ Sv/h
3/18	P.M. 2:15	事務本館北	North of Main Admin. Bldg.	3371 μ Sv/h
3/18	P.M. 2:20	事務本館北	North of Main Admin. Bldg.	3362 μ Sv/h
3/18	P.M. 2:25	事務本館北	North of Main Admin. Bldg.	3357 μ Sv/h
3/18	P.M. 2:30	事務本館北	North of Main Admin. Bldg.	3352 μ Sv/h
3/18	P.M. 2:35	事務本館北	North of Main Admin. Bldg.	3342 μ Sv/h
3/18	P.M. 2:40	事務本館北	North of Main Admin. Bldg.	3348 μ Sv/h

3/18	P.M. 2:45	事務本館北	North of Main Admin. Bldg.	3357 μ Sv/h
3/18	P.M. 2:50	事務本館北	North of Main Admin. Bldg.	3339 μ Sv/h
3/18	P.M. 2:55	事務本館北	North of Main Admin. Bldg.	3346 μ Sv/h
3/18	P.M. 3:00	事務本館北	North of Main Admin. Bldg.	3345 μ Sv/h
3/18	P.M. 3:10	事務本館北	North of Main Admin. Bldg.	3368 μ Sv/h
3/18	P.M. 3:20	事務本館北	North of Main Admin. Bldg.	3582 μ Sv/h
3/18	P.M. 3:30	事務本館北	North of Main Admin. Bldg.	4075 μ Sv/h
3/18	P.M. 3:40	事務本館北	North of Main Admin. Bldg.	3823 μ Sv/h
3/18	P.M. 3:50	事務本館北	North of Main Admin. Bldg.	4396 μ Sv/h
3/18	P.M. 4:00	事務本館北	North of Main Admin. Bldg.	4485 μ Sv/h
3/18	P.M. 4:10	事務本館北	North of Main Admin. Bldg.	4352 μ Sv/h
3/18	P.M. 4:20	事務本館北	North of Main Admin. Bldg.	4535 μ Sv/h
3/18	P.M. 4:30	事務本館北	North of Main Admin. Bldg.	4419 μ Sv/h
3/18	P.M. 4:40	事務本館北	North of Main Admin. Bldg.	4277 μ Sv/h
3/18	P.M. 4:50	事務本館北	North of Main Admin. Bldg.	4735 μ Sv/h
3/18	P.M. 5:00	事務本館北	North of Main Admin. Bldg.	5055 μ Sv/h
3/18	P.M. 5:10	事務本館北	North of Main Admin. Bldg.	5033 μ Sv/h
3/18	P.M. 5:20	事務本館北	North of Main Admin. Bldg.	4952 μ Sv/h
3/18	P.M. 5:30	事務本館北	North of Main Admin. Bldg.	4251 μ Sv/h
3/18	P.M. 5:40	事務本館北	North of Main Admin. Bldg.	4182 μ Sv/h
3/18	P.M. 5:50	事務本館北	North of Main Admin. Bldg.	4090 μ Sv/h
3/18	P.M. 6:00	事務本館北	North of Main Admin. Bldg.	4084 μ Sv/h
3/18	P.M. 6:10	事務本館北	North of Main Admin. Bldg.	4069 μ Sv/h
3/18	P.M. 6:20	事務本館北	North of Main Admin. Bldg.	4069 μ Sv/h
3/18	P.M. 6:30	事務本館北	North of Main Admin. Bldg.	3922 μ Sv/h
3/18	P.M. 6:40	事務本館北	North of Main Admin. Bldg.	3885 μ Sv/h
3/18	P.M. 6:50	事務本館北	North of Main Admin. Bldg.	3832 μ Sv/h
3/18	P.M. 7:00	事務本館北	North of Main Admin. Bldg.	3788 μ Sv/h
3/18	P.M. 7:10	事務本館北	North of Main Admin. Bldg.	3745 μ Sv/h
3/18	P.M. 7:20	事務本館北	North of Main Admin. Bldg.	3728 μ Sv/h
3/18	P.M. 7:30	事務本館北	North of Main Admin. Bldg.	3699 μ Sv/h
3/18	P.M. 7:40	事務本館北	North of Main Admin. Bldg.	3669 μ Sv/h
3/18	P.M. 7:50	事務本館北	North of Main Admin. Bldg.	3634 μ Sv/h
3/18	P.M. 8:00	事務本館北	North of Main Admin. Bldg.	3611 μ Sv/h
3/18	P.M. 8:10	西門	West Gate	447.6 μ Sv/h
3/18	P.M. 8:20	西門	West Gate	441.2 μ Sv/h
3/18	P.M. 8:30	西門	West Gate	434.5 μ Sv/h
3/18	P.M. 8:40	西門	West Gate	429.2 μ Sv/h
3/18	P.M. 8:50	西門	West Gate	423.9 μ Sv/h
3/18	P.M. 9:00	西門	West Gate	419.1 μ Sv/h
3/18	P.M. 9:10	西門	West Gate	414.2 μ Sv/h
3/18	P.M. 9:20	西門	West Gate	409.4 μ Sv/h
3/18	P.M. 9:30	西門	West Gate	405.2 μ Sv/h
3/18	P.M. 9:40	西門	West Gate	401.6 μ Sv/h
3/18	P.M. 9:50	西門	West Gate	397.8 μ Sv/h
3/18	P.M. 10:00	西門	West Gate	393.9 μ Sv/h
3/18	P.M. 10:10	西門	West Gate	389.2 μ Sv/h
3/18	P.M. 10:20	西門	West Gate	385.9 μ Sv/h

3/18	P.M. 10:30	西門	West Gate	382.9μSv/h
3/18	P.M. 10:40	西門	West Gate	379.6μSv/h
3/18	P.M. 10:50	西門	West Gate	375.9μSv/h
3/18	P.M. 11:00	西門	West Gate	373.6μSv/h
3/18	P.M. 11:10	西門	West Gate	371.2μSv/h
3/18	P.M. 11:20	西門	West Gate	368.9μSv/h
3/18	P.M. 11:30	事務本館北	North of Main Admin. Bldg.	3254μSv/h
3/18	P.M. 11:40	事務本館北	North of Main Admin. Bldg.	3256μSv/h
3/18	P.M. 11:50	事務本館北	North of Main Admin. Bldg.	3244μSv/h
3/19	A.M. 0:00	事務本館北	North of Main Admin. Bldg.	3229μSv/h
3/19	A.M. 0:10	事務本館北	North of Main Admin. Bldg.	3224μSv/h
3/19	A.M. 0:20	事務本館北	North of Main Admin. Bldg.	3219μSv/h
3/19	A.M. 0:30	事務本館北	North of Main Admin. Bldg.	3231μSv/h
3/19	A.M. 0:40	事務本館北	North of Main Admin. Bldg.	3342μSv/h
3/19	A.M. 0:50	事務本館北	North of Main Admin. Bldg.	3284μSv/h
3/19	A.M. 1:00	事務本館北	North of Main Admin. Bldg.	3248μSv/h
3/19	A.M. 1:10	事務本館北	North of Main Admin. Bldg.	3279μSv/h
3/19	A.M. 1:20	事務本館北	North of Main Admin. Bldg.	3247μSv/h
3/19	A.M. 1:30	事務本館北	North of Main Admin. Bldg.	3195μSv/h
3/19	A.M. 1:40	事務本館北	North of Main Admin. Bldg.	3188μSv/h
3/19	A.M. 1:50	事務本館北	North of Main Admin. Bldg.	3181μSv/h
3/19	A.M. 2:00	西門	West Gate	313.7μSv/h
3/19	A.M. 2:10	西門	West Gate	312.2μSv/h
3/19	A.M. 2:20	西門	West Gate	311.1μSv/h
3/19	A.M. 2:30	西門	West Gate	310μSv/h
3/19	A.M. 2:40	西門	West Gate	309.1μSv/h
3/19	A.M. 2:50	西門	West Gate	308.6μSv/h
3/19	A.M. 3:00	西門	West Gate	306.9μSv/h
3/19	A.M. 3:10	西門	West Gate	306μSv/h
3/19	A.M. 3:20	西門	West Gate	305.1μSv/h
3/19	A.M. 3:30	西門	West Gate	304.3μSv/h
3/19	A.M. 3:40	西門	West Gate	303.6μSv/h
3/19	A.M. 3:50	西門	West Gate	303.1μSv/h
3/19	A.M. 4:00	西門	West Gate	301.7μSv/h
3/19	A.M. 4:10	西門	West Gate	301.3μSv/h
3/19	A.M. 4:20	西門	West Gate	300.5μSv/h
3/19	A.M. 4:30	西門	West Gate	299.2μSv/h
3/19	A.M. 4:40	西門	West Gate	299.2μSv/h
3/19	A.M. 4:50	西門	West Gate	298.5μSv/h
3/19	A.M. 5:00	西門	West Gate	297.5μSv/h
3/19	A.M. 5:10	西門	West Gate	296.4μSv/h
3/19	A.M. 5:20	西門	West Gate	295.8μSv/h
3/19	A.M. 5:30	西門	West Gate	295.1μSv/h
3/19	A.M. 5:40	西門	West Gate	295.4μSv/h
3/19	A.M. 5:50	西門	West Gate	294.3μSv/h
3/19	A.M. 6:00	西門	West Gate	293.8μSv/h
3/19	A.M. 6:10	西門	West Gate	293.6μSv/h
3/19	A.M. 6:20	西門	West Gate	292.6μSv/h

3/19	A.M. 6:30	西門	West Gate	292.3μSv/h
3/19	A.M. 6:40	西門	West Gate	291.5μSv/h
3/19	A.M. 6:50	西門	West Gate	290.9μSv/h
3/19	A.M. 7:00	西門	West Gate	290.6μSv/h
3/19	A.M. 7:10	西門	West Gate	289.8μSv/h
3/19	A.M. 7:20	西門	West Gate	289.1μSv/h
3/19	A.M. 7:30	西門	West Gate	288.9μSv/h
3/19	A.M. 7:40	西門	West Gate	288.6μSv/h
3/19	A.M. 7:50	西門	West Gate	287.2μSv/h
3/19	A.M. 8:00	西門	West Gate	399μSv/h
3/19	A.M. 8:10	西門	West Gate	830.8μSv/h
3/19	A.M. 8:20	西門	West Gate	670.6μSv/h
3/19	A.M. 8:30	西門	West Gate	431.9μSv/h
3/19	A.M. 8:40	西門	West Gate	390.5μSv/h
3/19	A.M. 8:50	西門	West Gate	522.5μSv/h
3/19	A.M. 9:00	西門	West Gate	364.5μSv/h
3/19	A.M. 9:10	西門	West Gate	336.5μSv/h
3/19	A.M. 9:20	西門	West Gate	323.8μSv/h
3/19	A.M. 9:30	西門	West Gate	425.2μSv/h
3/19	A.M. 9:40	西門	West Gate	657.3μSv/h
3/19	A.M. 9:50	西門	West Gate	358.3μSv/h
3/19	A.M. 10:00	西門	West Gate	346.1μSv/h
3/19	A.M. 10:10	西門	West Gate	341.2μSv/h
3/19	A.M. 10:20	西門	West Gate	338.4μSv/h
3/19	A.M. 10:30	西門	West Gate	334.3μSv/h
3/19	A.M. 10:40	西門	West Gate	330.2μSv/h
3/19	A.M. 10:50	西門	West Gate	327.1μSv/h
3/19	A.M. 11:00	西門	West Gate	322.6μSv/h
3/19	A.M. 11:10	西門	West Gate	319.8μSv/h
3/19	A.M. 11:20	西門	West Gate	315.1μSv/h
3/19	A.M. 11:30	西門	West Gate	313.1μSv/h
3/19	A.M. 11:40	事務本館北	North of Main Admin. Bldg.	3954μSv/h
3/19	A.M. 11:50	事務本館北	North of Main Admin. Bldg.	3901μSv/h
3/19	P.M. 0:00	事務本館北	North of Main Admin. Bldg.	3882μSv/h
3/19	P.M. 0:10	事務本館北	North of Main Admin. Bldg.	3828μSv/h
3/19	P.M. 0:20	事務本館北	North of Main Admin. Bldg.	3802μSv/h
3/19	P.M. 0:30	事務本館北	North of Main Admin. Bldg.	3749μSv/h
3/19	A.M. 0:40	事務本館北	North of Main Admin. Bldg.	3704μSv/h
3/19	P.M. 0:50	事務本館北	North of Main Admin. Bldg.	3655μSv/h
3/19	P.M. 1:00	事務本館北	North of Main Admin. Bldg.	3629μSv/h
3/19	P.M. 1:10	事務本館北	North of Main Admin. Bldg.	3594μSv/h
3/19	P.M. 1:20	事務本館北	North of Main Admin. Bldg.	3565μSv/h
3/19	P.M. 1:30	事務本館北	North of Main Admin. Bldg.	3529μSv/h
3/19	P.M. 1:50	事務本館北	North of Main Admin. Bldg.	3491μSv/h
3/19	P.M. 2:00	事務本館北	North of Main Admin. Bldg.	3473μSv/h
3/19	P.M. 2:10	事務本館北	North of Main Admin. Bldg.	3443μSv/h
3/19	P.M. 2:15	事務本館北	North of Main Admin. Bldg.	3417μSv/h
3/19	P.M. 2:20	事務本館北	North of Main Admin. Bldg.	3396μSv/h

3/19	P.M. 10:30	事務本館北	North of Main Admin. Bldg.	2854 μ Sv/h
3/19	P.M. 10:40	事務本館北	North of Main Admin. Bldg.	2847 μ Sv/h
3/19	P.M. 10:50	事務本館北	North of Main Admin. Bldg.	2844 μ Sv/h
3/19	P.M. 11:00	事務本館北	North of Main Admin. Bldg.	2841 μ Sv/h
3/19	P.M. 11:10	事務本館北	North of Main Admin. Bldg.	2836 μ Sv/h
3/19	P.M. 11:20	事務本館北	North of Main Admin. Bldg.	2828 μ Sv/h
3/19	P.M. 11:30	事務本館北	North of Main Admin. Bldg.	2828 μ Sv/h
3/20	A.M. 0:00	事務本館北	North of Main Admin. Bldg.	2821.0 μ Sv/h
3/20	A.M. 0:10	事務本館北	North of Main Admin. Bldg.	2814.0 μ Sv/h
3/20	A.M. 0:20	事務本館北	North of Main Admin. Bldg.	2808.0 μ Sv/h
3/20	A.M. 0:30	事務本館北	North of Main Admin. Bldg.	2805.0 μ Sv/h
3/20	A.M. 0:40	事務本館北	North of Main Admin. Bldg.	2803.0 μ Sv/h
3/20	A.M. 0:50	事務本館北	North of Main Admin. Bldg.	2791.0 μ Sv/h
3/20	A.M. 1:00	事務本館北	North of Main Admin. Bldg.	2797.0 μ Sv/h
3/20	A.M. 1:10	事務本館北	North of Main Admin. Bldg.	2794.0 μ Sv/h
3/20	A.M. 1:20	事務本館北	North of Main Admin. Bldg.	2793.0 μ Sv/h
3/20	A.M. 1:30	事務本館北	North of Main Admin. Bldg.	2788.0 μ Sv/h
3/20	A.M. 1:40	事務本館北	North of Main Admin. Bldg.	2785.0 μ Sv/h
3/20	A.M. 1:50	事務本館北	North of Main Admin. Bldg.	2781.0 μ Sv/h
3/20	A.M. 2:00	事務本館北	North of Main Admin. Bldg.	2778.0 μ Sv/h
3/20	A.M. 2:10	事務本館北	North of Main Admin. Bldg.	2773.0 μ Sv/h
3/20	A.M. 2:20	事務本館北	North of Main Admin. Bldg.	2771.0 μ Sv/h
3/20	A.M. 2:30	事務本館北	North of Main Admin. Bldg.	2767.0 μ Sv/h
3/20	A.M. 2:40	事務本館北	North of Main Admin. Bldg.	2764.0 μ Sv/h
3/20	A.M. 2:50	事務本館北	North of Main Admin. Bldg.	2761.0 μ Sv/h
3/20	A.M. 3:00	事務本館北	North of Main Admin. Bldg.	2759.0 μ Sv/h
3/20	A.M. 3:10	事務本館北	North of Main Admin. Bldg.	2745.0 μ Sv/h
3/20	A.M. 3:20	事務本館北	North of Main Admin. Bldg.	2745.0 μ Sv/h
3/20	A.M. 3:30	事務本館北	North of Main Admin. Bldg.	2741.0 μ Sv/h
3/20	A.M. 3:40	事務本館北	North of Main Admin. Bldg.	2758.0 μ Sv/h
3/20	A.M. 3:50	事務本館北	North of Main Admin. Bldg.	3185.0 μ Sv/h
3/20	A.M. 4:00	事務本館北	North of Main Admin. Bldg.	2939.0 μ Sv/h
3/20	A.M. 4:10	事務本館北	North of Main Admin. Bldg.	2771.0 μ Sv/h
3/20	A.M. 4:20	事務本館北	North of Main Admin. Bldg.	2743.0 μ Sv/h
3/20	A.M. 4:30	事務本館北	North of Main Admin. Bldg.	2739.0 μ Sv/h
3/20	A.M. 4:40	西門	West Gate	273.2 μ Sv/h
3/20	A.M. 4:50	西門	West Gate	271.8 μ Sv/h
3/20	A.M. 5:00	西門	West Gate	271.2 μ Sv/h
3/20	A.M. 5:10	西門	West Gate	270.9 μ Sv/h
3/20	A.M. 5:20	西門	West Gate	270.4 μ Sv/h
3/20	A.M. 5:30	西門	West Gate	269.8 μ Sv/h
3/20	A.M. 5:40	西門	West Gate	269.5 μ Sv/h
3/20	A.M. 5:50	事務本館北	North of Main Admin. Bldg.	2683.0 μ Sv/h
3/20	A.M. 6:00	事務本館北	North of Main Admin. Bldg.	2679.0 μ Sv/h
3/20	A.M. 6:10	事務本館北	North of Main Admin. Bldg.	2679.0 μ Sv/h
3/20	A.M. 6:20	事務本館北	North of Main Admin. Bldg.	2677.0 μ Sv/h
3/20	A.M. 6:30	事務本館北	North of Main Admin. Bldg.	2670.0 μ Sv/h
3/20	A.M. 6:40	事務本館北	North of Main Admin. Bldg.	2654.0 μ Sv/h

3/20	P.M. 2:50	事務本館北	North of Main Admin. Bldg.	3346.0 μ Sv/h
3/20	P.M. 3:00	事務本館北	North of Main Admin. Bldg.	3054.0 μ Sv/h
3/20	P.M. 3:10	事務本館北	North of Main Admin. Bldg.	3071.0 μ Sv/h
3/20	P.M. 3:20	事務本館北	North of Main Admin. Bldg.	3342.0 μ Sv/h
3/20	P.M. 3:30	事務本館北	North of Main Admin. Bldg.	3337.0 μ Sv/h
3/20	P.M. 3:40	事務本館北	North of Main Admin. Bldg.	3003.0 μ Sv/h
3/20	P.M. 3:50	事務本館北	North of Main Admin. Bldg.	3046.0 μ Sv/h
3/20	P.M. 4:00	事務本館北	North of Main Admin. Bldg.	3171.0 μ Sv/h
3/20	P.M. 4:10	事務本館北	North of Main Admin. Bldg.	2940.0 μ Sv/h
3/20	P.M. 4:20	事務本館北	North of Main Admin. Bldg.	2851.0 μ Sv/h
3/20	P.M. 4:30	事務本館北	North of Main Admin. Bldg.	2830.0 μ Sv/h
3/20	P.M. 4:40	事務本館北	North of Main Admin. Bldg.	2960.0 μ Sv/h
3/20	P.M. 4:50	事務本館北	North of Main Admin. Bldg.	2839.0 μ Sv/h
3/20	P.M. 5:00	事務本館北	North of Main Admin. Bldg.	2773.0 μ Sv/h
3/20	P.M. 5:10	事務本館北	North of Main Admin. Bldg.	2763.0 μ Sv/h
3/20	P.M. 5:20	事務本館北	North of Main Admin. Bldg.	2758.0 μ Sv/h
3/20	P.M. 5:30	事務本館北	North of Main Admin. Bldg.	2729.0 μ Sv/h
3/20	P.M. 5:40	事務本館北	North of Main Admin. Bldg.	2715.0 μ Sv/h
3/20	P.M. 5:50	事務本館北	North of Main Admin. Bldg.	2707.0 μ Sv/h
3/20	P.M. 6:00	事務本館北	North of Main Admin. Bldg.	2693.0 μ Sv/h
3/20	P.M. 6:10	事務本館北	North of Main Admin. Bldg.	2680.0 μ Sv/h
3/20	P.M. 6:20	事務本館北	North of Main Admin. Bldg.	2673.0 μ Sv/h
3/20	P.M. 6:30	事務本館北	North of Main Admin. Bldg.	2658.0 μ Sv/h
3/20	P.M. 6:40	事務本館北	North of Main Admin. Bldg.	2651.0 μ Sv/h
3/20	P.M. 6:50	事務本館北	North of Main Admin. Bldg.	2658.0 μ Sv/h
3/20	P.M. 7:00	事務本館北	North of Main Admin. Bldg.	2623.0 μ Sv/h
3/20	P.M. 7:10	事務本館北	North of Main Admin. Bldg.	2683.0 μ Sv/h
3/20	P.M. 7:20	事務本館北	North of Main Admin. Bldg.	2614.0 μ Sv/h
3/20	P.M. 7:30	事務本館北	North of Main Admin. Bldg.	2602.0 μ Sv/h
3/20	P.M. 7:40	事務本館北	North of Main Admin. Bldg.	2595.0 μ Sv/h
3/20	P.M. 7:50	事務本館北	North of Main Admin. Bldg.	2632.0 μ Sv/h
3/20	P.M. 8:00	事務本館北	North of Main Admin. Bldg.	2828.0 μ Sv/h
3/20	P.M. 8:10	事務本館北	North of Main Admin. Bldg.	2704.0 μ Sv/h
3/20	P.M. 8:20	事務本館北	North of Main Admin. Bldg.	2682.0 μ Sv/h
3/20	P.M. 8:30	事務本館北	North of Main Admin. Bldg.	2586.0 μ Sv/h
3/20	P.M. 8:40	事務本館北	North of Main Admin. Bldg.	2552.0 μ Sv/h
3/20	P.M. 8:50	事務本館北	North of Main Admin. Bldg.	2550.0 μ Sv/h
3/20	P.M. 9:00	事務本館北	North of Main Admin. Bldg.	2542.0 μ Sv/h
3/20	P.M. 9:10	事務本館北	North of Main Admin. Bldg.	2537.0 μ Sv/h
3/20	P.M. 9:20	事務本館北	North of Main Admin. Bldg.	2532.0 μ Sv/h
3/20	P.M. 9:30	事務本館北	North of Main Admin. Bldg.	2518.0 μ Sv/h
3/20	P.M. 9:40	事務本館北	North of Main Admin. Bldg.	2517.0 μ Sv/h
3/20	P.M. 9:50	事務本館北	North of Main Admin. Bldg.	2510.0 μ Sv/h
3/20	P.M. 10:00	事務本館北	North of Main Admin. Bldg.	2506.0 μ Sv/h
3/20	P.M. 10:10	事務本館北	North of Main Admin. Bldg.	2503.0 μ Sv/h
3/20	P.M. 10:20	事務本館北	North of Main Admin. Bldg.	2492.0 μ Sv/h
3/20	P.M. 10:30	事務本館北	North of Main Admin. Bldg.	2487.0 μ Sv/h
3/20	P.M. 10:40	事務本館北	North of Main Admin. Bldg.	2485.0 μ Sv/h

3/20	P.M. 10:50	事務本館北	North of Main Admin. Bldg.	2483.0 μ Sv/h
3/20	P.M. 11:00	事務本館北	North of Main Admin. Bldg.	2475.0 μ Sv/h
3/20	P.M. 11:10	事務本館北	North of Main Admin. Bldg.	2469.0 μ Sv/h
3/20	P.M. 11:20	事務本館北	North of Main Admin. Bldg.	2462.0 μ Sv/h
3/20	P.M. 11:30	事務本館北	North of Main Admin. Bldg.	2455.0 μ Sv/h
3/20	P.M. 11:40	事務本館北	North of Main Admin. Bldg.	2457.0 μ Sv/h
3/20	P.M. 11:50	事務本館北	North of Main Admin. Bldg.	2453.0 μ Sv/h

Neutron ray	Wind direction	Wind direction	Wind speed (m/s)
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< 0.001μSv/h	北東	NE	0.4
< 0.001μSv/h	北西	NW	0.5
< 0.001μSv/h	東北東	ENE	0.4
< 0.001μSv/h	北	N	0.4
< 0.001μSv/h	東北東	ENE	0.6
< 0.001μSv/h	北東	NE	0.5
< 0.001μSv/h	北北西	NNW	0.5
< 0.001μSv/h	北	N	0.6
< 0.001μSv/h	西	W	0.7
< 0.001μSv/h	北	N	0.8
< 0.001μSv/h	西北西	WNW	0.4
< 0.001μSv/h	北	N	0.3
< 0.001μSv/h	北	N	0.4
< 0.001μSv/h	北北東	NNE	0.4
< 0.001μSv/h	南東	SE	0.5
< 0.001μSv/h	北東	NE	2.0
< 0.001μSv/h	北東		1.8
< 0.001μSv/h	東北東	ENE	0.9
< 0.001μSv/h	東北東	ENE	1.1
< 0.001μSv/h	北北西	NNW	0.6
< 0.001μSv/h	西南西	WSW	0.8
< 0.001μSv/h	南西	SW	0.7
< 0.001μSv/h	西南西	WSW	0.7
< 0.001μSv/h	北西	NW	1.0
< 0.001μSv/h	北北西	NNW	0.9
< 0.001μSv/h	北北西	NNW	1.4
< 0.001μSv/h	北北西	NNW	2.0

< 0.001μSv/h	北西	NW	1.7
< 0.001μSv/h	西	W	0.9
< 0.001μSv/h	西	W	1.0
< 0.001μSv/h	西	W	0.6
< 0.001μSv/h	西南西	WSW	0.5
< 0.001μSv/h	北北西	NNW	0.4
< 0.001μSv/h	北東	NE	0.5
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	西	W	0.5
—	—		—
< 0.001μSv/h	西南西	WSW	0.2
—	—		—
< 0.001μSv/h	西北西	WNW	0.7
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南	S	1.1
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南東	SE	0.9
—	—		—
< 0.001μSv/h	南西	SW	0.9
—	—		—
< 0.001μSv/h	南	S	1.2
—	—		—
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南	S	2.0
—	—		—
—	—		—
< 0.001μSv/h	南	S	1.6
—	—		—
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南東	SE	2.5
—	—		—
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南南東	SSW	2.8
—	—		—
—	—		—

< 0.001μSv/h	南	S	1.9
—	—		—
—	—		—
< 0.001μSv/h	南東	SE	2.2
—	—		—
—	—		—
< 0.001μSv/h	南東	SE	2.0
—	—		—
—	—		—
< 0.001μSv/h	北	N	1.8
—	—		—
—	—		—
< 0.001μSv/h	北	N	2.0
—	—		—
< 0.001μSv/h	北	N	1.7
—	—		—
< 0.001μSv/h	南西	SW	1.6
—	—		—
< 0.001μSv/h	南西	SW	2.7
—	—		—
< 0.001μSv/h	北東	NE	2.2
—	—		—
< 0.001μSv/h	東	E	1.6
—	—		—
< 0.001μSv/h	南西	SW	2.0
—	—		—
< 0.001μSv/h	北西	NW	2.7
—	—		—
< 0.001μSv/h	北	N	2.3
—	—		—
—	—		—
< 0.001μSv/h	西	W	1.9
—	—		—
—	—		—
< 0.001μSv/h	北西	NE	2.2
—	—		—
—	—		—
< 0.001μSv/h	南東	SE	1.8
—	—		—
< 0.001μSv/h	南	S	2.0
—	—		—
< 0.001μSv/h	南東	SE	1.7
—	—		—
< 0.001μSv/h	東	E	1.7
—	—		—
< 0.001μSv/h	南	S	2.6
—	—		—

< 0.001μSv/h	東	E	2.6
—	—		—
< 0.001μSv/h	南東	SE	3.5
—	—		—
—	—		—
< 0.001μSv/h	東	E	2.9
—	—		—
< 0.001μSv/h	南南東	SSE	3.3
—	—		—
< 0.001μSv/h	南南東	SSE	3.3
—	—		—
< 0.001μSv/h	南南東	SSE	3.3
—	—		—
< 0.001μSv/h	南	S	2.7
—	—		—
< 0.001μSv/h	南	S	2.7
—	—		—
< 0.001μSv/h	南	S	3.4
—	—		—
< 0.001μSv/h	南南西	SSW	2.7
—	—		—
< 0.001μSv/h	南	S	2.5
—	—		—
< 0.001μSv/h	南南西	SSW	3.2
—	—		—
< 0.001μSv/h	南	S	2.5
—	—		—
< 0.001μSv/h	南	S	3.0
—	—		—
< 0.001μSv/h	南	S	2.6
—	—		—
< 0.001μSv/h	南南東	SSE	2.3
—	—		—
< 0.001μSv/h	南南東	SSE	2.4
—	—		—
< 0.001μSv/h	南南東	SSE	2.4
—	—		—
< 0.001μSv/h	南	S	2.2
—	—		—
< 0.001μSv/h	南南西	SSW	2.4
—	—		—
< 0.001μSv/h	南南西	SSW	1.9
—	—		—
—	—		—
< 0.001μSv/h	西	W	0.5
< 0.001μSv/h	北西	SW	0.4
—	—		—

< 0.001μSv/h	西	W	0.3
—	—		—
< 0.001μSv/h	西	S	0.5
—	—		—
< 0.001μSv/h	南西	SW	0.6
—	—		—
—	—		—
—	—		—
—	—		—
—	—		—
—	—		—
< 0.001μSv/h	南西	SW	0.5
—	—		—
< 0.001μSv/h	北西	NW	0.4
—	—		—
< 0.001μSv/h	南西	SW	0.4
< 0.001μSv/h	西	W	0.4
< 0.001μSv/h	西	W	0.4
—	—		—
—	—		—
< 0.001μSv/h	西	W	0.3
—	—		—
< 0.001μSv/h	南	S	0.4
—	—		—
< 0.001μSv/h	北	NW	0.4
—	—		—
< 0.001μSv/h	北西	NW	0.4
< 0.001μSv/h	西	W	0.4
< 0.001μSv/h	西	W	0.5
—	—		—
< 0.001μSv/h	西	W	0.4
< 0.001μSv/h	北西	NW	0.5
< 0.001μSv/h	北東	NE	0.3
—	—		—
< 0.001μSv/h	北北西	NNW	0.4
—	—		—
< 0.001μSv/h	西	W	0.4
—	—		—
< 0.001μSv/h	南	S	0.4
—	—		—
< 0.001μSv/h	西北西	WNW	0.6
—	—		—
< 0.001μSv/h	北西	NW	0.6
—	—		—
< 0.001μSv/h	南東	SE	0.5
—	—		—

< 0.001μSv/h	北西	NW	0.4
—	—		—
< 0.001μSv/h	西	W	0.4
—	—		—
< 0.001μSv/h	北東	NE	0.6
—	—		—
< 0.001μSv/h	北東	NE	0.5
—	—		—
< 0.001μSv/h	西	W	0.5
—	—		—
< 0.001μSv/h	西	W	0.5
—	—		—
< 0.001μSv/h	西北西	WNW	0.4
—	—		—
< 0.001μSv/h	南東	SE	0.5
—	—		—
< 0.001μSv/h	南	S	0.6
—	—		—
< 0.001μSv/h	南西	SW	0.7
—	—		—
< 0.001μSv/h	南	S	0.7
—	—		—
< 0.001μSv/h	南	S	1.2
< 0.001μSv/h	南東	SE	1.5
< 0.001μSv/h	南南東	SSE	2.0
< 0.001μSv/h	南	S	1.6
< 0.001μSv/h	南西	SW	1.2
—	—		—
< 0.001μSv/h	南	S	0.8
—	—		—
< 0.001μSv/h	南西	SW	1.2
—	—		—
< 0.001μSv/h	南	S	1.3
—	—		—
< 0.001μSv/h	南南西	SSW	1.3
—	—		—
< 0.001μSv/h	南	S	0.6
—	—		—
< 0.001μSv/h	西	W	1.2
—	—		—
< 0.001μSv/h	北北東	NNE	0.7
—	—		—
< 0.001μSv/h	北	N	0.8
—	—		—
< 0.001μSv/h	北	N	0.7
—	—		—
< 0.001μSv/h	西	W	0.3

—	—	—	—
0.002	北西	NW	0.6
—	—	—	—
0.002	西	W	0.6
—	—	—	—
0.001	南東	SE	0.5
—	—	—	—
< 0.001 μ Sv/h	南	S	0.6
—	—	—	—
< 0.001 μ Sv/h	南	S	0.9
—	—	—	—
< 0.001 μ Sv/h	南	S	1.1
—	—	—	—
0.002	南南西	SSW	0.9
—	—	—	—
0.001	西	W	0.8
—	—	—	—
< 0.001 μ Sv/h	南南西	SSW	1.3
—	—	—	—
< 0.001 μ Sv/h	西北西	WNW	1.6
—	—	—	—
0.001	北	N	0.9
—	—	—	—
< 0.001 μ Sv/h	北	N	0.9
—	—	—	—
< 0.001 μ Sv/h	北西	NW	0.9
—	—	—	—
0.001	北西	NW	0.9
< 0.001 μ Sv/h	北西	NW	0.4
0.001	南	S	0.4
< 0.001 μ Sv/h	東	E	0.5
—	—	—	—
< 0.001 μ Sv/h	東	E	0.5
—	—	—	—
< 0.001 μ Sv/h	南南東	SSE	1.6
—	—	—	—
< 0.001 μ Sv/h	南東	SE	1.4
—	—	—	—
< 0.001 μ Sv/h	南東		2.0
—	—	—	—
< 0.001 μ Sv/h	南南東	SSE	2.4
—	—	—	—
—	東北東	ENE	0.5
< 0.001 μ Sv/h	東	E	1.5
—	—	—	—
—	西北西	WNW	0.8
< 0.001 μ Sv/h	南南西	SSE	1.4

—	—	—	—
—	西北西	WNW	1.8
0.001	北	N	1.5
—	—	—	—
—	北西	NW	1.8
—	—	—	—
—	北西	NW	2.3
—	—	—	—
—	北西	NW	2.7
< 0.001μSv/h	北西	NW	3.1
—	—	—	—
—	北西	NW	2.6
< 0.001μSv/h	北西	NW	3.2
—	—	—	—
—	北西	NW	2.9
< 0.001μSv/h	北北西	NNW	4.2
—	—	—	—
—	北西	NW	2.3
< 0.001μSv/h	北	N	2.8
—	—	—	—
—	北西	NW	2.4
< 0.001μSv/h	北	N	3.3
—	—	—	—
—	北西	NW	2.8
0.002	北北西	NNW	3.3
—	—	—	—
—	北西	NW	2.7
< 0.001μSv/h	南東	SE	3.3
—	—	—	—
—	北西	NW	2.2
< 0.001μSv/h	南	S	2.4
—	—	—	—
—	北北西	NNW	2.3
< 0.001μSv/h	北西	NW	2.8
—	—	—	—
—	北西	NW	2.5
< 0.001μSv/h	北西	NW	2.7
—	—	—	—
—	北西	NW	2.1
< 0.001μSv/h	西	WNW	2.7
—	—	—	—
—	西北西	WNW	3.1
< 0.001μSv/h	北北西	NNW	2.5
—	—	—	—
—	北西	NW	2.4
< 0.001μSv/h	東	E	2.4
—	—	—	—

—	北西	NW	1.6
< 0.001μSv/h	西	W	2.2
—	—	—	—
—	北西	NW	1.3
< 0.001μSv/h	南	S	2.1
—	—	—	—
—	北西	NW	2.9
< 0.001μSv/h	北	N	2.0
—	—	—	—
—	北西	NW	2.3
< 0.001μSv/h	南南西		2.1
—	—	—	—
—	北西	NW	2.8
< 0.001μSv/h	西		2.1
—	—	—	—
—	北北西	NNW	1.9
< 0.001μSv/h	北西	NW	2.1
—	—	—	—
—	北北西	NNW	2.3
< 0.001μSv/h	南南西	SSW	2.6
—	—	—	—
—	西北西	WNW	2.6
< 0.001μSv/h	南	S	2.7
—	—	—	—
—	西北西	WNW	2.5
< 0.001μSv/h	南西	SW	1.6
—	—	—	—
—	西北西	WNW	1.7
< 0.001μSv/h	北北西	NNW	2.2
—	—	—	—
—	北西	NW	1.6
< 0.001μSv/h	南東	SE	1.7
—	—	—	—
—	東北東	ENE	1.5
< 0.001μSv/h	南	S	2.6
—	—	—	—
—	南	S	0.6
< 0.001μSv/h	南南東	SSE	2.1
—	—	—	—
—	東南東	ESE	0.7
< 0.001μSv/h	南南東	SSE	2.5
—	—	—	—
—	南	S	0.6
< 0.001μSv/h	南南東	SSE	2.2
—	—	—	—
—	南南東	SSE	0.5
< 0.001μSv/h	南東	SE	1.6

—	—		—
—	南南東	SSE	0.7
< 0.001μSv/h	南南東	SSE	2.0
—	—		—
—	—		—
< 0.001μSv/h	南西	SW	1.3
—	—		—
—	南南東	SSE	0.8
< 0.001μSv/h	南南東	SSE	1.6
—	—		—
—	西北西		2.3
< 0.001μSv/h	南南東		1.6
—	—		—
—	西北西	WNW	1.1
< 0.001μSv/h	北西	NW	2.0
—	—		—
—	東北東	ENE	2.1
< 0.001μSv/h	西北西	WNW	1.5
—	—		—
—	東北東	ENE	1.1
< 0.001μSv/h	南東	SE	2.3
—	—		—
—	南南東	SSE	0.7
< 0.001μSv/h	南東	SE	2.2
—	—		—
—	南	S	0.7
< 0.001μSv/h	南	S	1.8
—	—		—
—	南	S	0.4
< 0.001μSv/h	南	S	1.8
—	—		—
—	南南東	SSE	0.4
< 0.001μSv/h	南東	SE	1.1
—	—		—
—	南南東	SSE	0.5
< 0.001μSv/h	南	S	1.0
—	—		—
—	南南西	SSW	0.4
< 0.001μSv/h	南	S	1.0
—	—		—
—	南東	SE	0.5
< 0.001μSv/h	南南西	SSW	1.5
—	—		—
—	南西	SW	0.4
< 0.001μSv/h	南	S	1.8
—	—		—
—	南西	SW	0.4

< 0.001μSv/h	南南東	SSE	0.6
—	—	—	—
—	西南西	WSW	0.5
< 0.001μSv/h	北北西	NNW	0.5
—	—	—	—
—	南東	SE	0.4
< 0.001μSv/h	西	W	0.6
—	—	—	—
—	北北西	NNW	0.5
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	北西	NW	0.6
—	—	—	—
—	北西	—	0.6
< 0.001μSv/h	北西	NW	0.8
—	—	—	—
—	北北西	NNW	0.6
< 0.001μSv/h	北西	NW	0.9
—	—	—	—
—	北北東	NNE	0.3
< 0.001μSv/h	北西	NW	1.1
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	北西	NW	1.3
—	—	—	—
—	北	N	0.3
< 0.001μSv/h	北北西	NNW	1.2
—	—	—	—
—	北西	NW	0.6
0.001μSv/h未滿	北西	NW	1.0
—	—	—	—
—	北北西	NNW	0.5
< 0.001μSv/h	西	W	0.8
—	—	—	—
—	北西	NW	0.3
< 0.001μSv/h	北西	NW	0.8
—	—	—	—
—	北西	NW	0.4
< 0.001μSv/h	南西	SW	0.8
—	—	—	—
—	西北西	WNW	0.4
< 0.001μSv/h	西	W	0.6
—	—	—	—
—	北	N	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—

—	北北西	NNW	0.5
< 0.001μSv/h	北西	NW	0.6
—	—	—	—
—	北西	NW	0.5
< 0.001μSv/h	南西	SW	0.3
—	—	—	—
—	北西	NW	0.6
< 0.001μSv/h	北西	NW	0.2
—	—	—	—
—	北北東	NNE	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	西北西	WNW	0.4
< 0.001μSv/h	西北西	WNW	0.7
—	—	—	—
—	北	N	0.4
< 0.001μSv/h	西北西	WMW	0.6
—	—	—	—
—	北北東	NNE	0.3
< 0.001μSv/h	北西	NW	0.8
—	—	—	—
—	北	N	0.4
< 0.001μSv/h	北	N	0.5
—	—	—	—
—	北	N	0.4
< 0.001μSv/h	北	N	0.5
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	南	S	0.3
—	—	—	—
—	北西	NW	0.4
< 0.001μSv/h	北西	NW	0.3
—	—	—	—
—	北	N	0.3
< 0.001μSv/h	北	N	0.3
—	—	—	—
—	北北東	NNE	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	北	N	0.3
—	—	—	—
—	北北西	NNE	0.5
< 0.001μSv/h	西北西	WNW	0.4

—	—	—	—
—	東南東	ESE	0.3
< 0.001μSv/h	北東	NE	0.5
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	北西	NW	0.4
—	—	—	—
—	北	N	0.5
< 0.001μSv/h	北	N	0.5
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	北	N	0.7
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	北	N	0.3
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	西南西	WSW	0.6
—	—	—	—
—	東北東	ENE	0.4
< 0.001μSv/h	西	W	0.4
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	西	E	0.5
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北西	NW	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北西	NW	0.3
< 0.001μSv/h	西	W	0.4
—	—	—	—
—	北	N	0.3
< 0.001μSv/h	北	N	0.4
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	西	W	0.4
—	—	—	—
—	北	N	0.5
0.001μSv/h未滿	南	S	0.5
—	—	—	—
—	南西	SW	0.3
< 0.001μSv/h	南	S	0.5
—	—	—	—
—	北北西	NNW	0.3

< 0.001μSv/h	北西	NW	0.4
—	—	—	—
—	北北東	NNE	0.3
< 0.001μSv/h	南	S	0.3
—	—	—	—
—	南東	SE	0.3
< 0.001μSv/h	西北西	WNW	0.6
—	—	—	—
—	北西	NW	0.3
< 0.001μSv/h	西北西	WNW	0.6
—	—	—	—
—	北西	NW	0.6
< 0.001μSv/h	西北西	WNW	0.7
—	—	—	—
—	北北東	NNE	0.5
< 0.001μSv/h	南東	SE	0.7
—	—	—	—
—	東	E	0.4
< 0.001μSv/h	北東	NE	0.7
—	—	—	—
—	東南東	ESE	0.4
< 0.001μSv/h	北西	NE	0.5
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	南	S	0.4
—	—	—	—
—	北北西	NNW	0.4
< 0.001μSv/h	南西	SW	0.5
—	—	—	—
—	北北西	NNW	0.3
< 0.001μSv/h	東北東	ENE	0.7
—	—	—	—
—	北	N	0.2
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北	N	0.4
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	西北西	WNW	0.3
< 0.001μSv/h	西	W	0.5
—	—	—	—
—	北北東	NNE	0.4
< 0.001μSv/h	南東	SE	0.4
—	—	—	—
—	西北西	WNW	0.3
< 0.001μSv/h	南	S	0.4
—	—	—	—

—	西	W	0.5
< 0.001μSv/h	南	S	0.2
—	—		—
—	北西	NW	0.3
< 0.001μSv/h	北	N	0.3
—	—		—
—	北北東	NNE	0.4
< 0.001μSv/h	西北西	WNW	0.6
—	—		—
—	北北西	NNW	0.5
< 0.001μSv/h	北	N	0.9
—	—		—
—	北西	NW	0.5
< 0.001μSv/h	東南東	ESE	0.6
—	—		—
—	—		—
< 0.001μSv/h	北北西	NNW	0.7
—	—		—
—	北北西	NNW	0.4
< 0.001μSv/h	北	N	0.8
—	—		—
—	北北西	NNW	0.6
< 0.001μSv/h	南西	SW	0.5
—	—		—
—	北北西	NNW	0.5
< 0.001μSv/h	西	W	0.4
—	—		—
—	北西	NW	0.3
< 0.001μSv/h	南東	SE	0.5
—	—		—
—	東北東	ENE	0.3
< 0.001μSv/h	西北西	WNW	0.4
—	西南西	WSW	0.4
—	—		—
< 0.001μSv/h	西	W	0.4
—	—		—
—	西北西	WNW	0.5
< 0.001μSv/h	北西	NW	0.3
—	—		—
—	北	N	0.5
< 0.001μSv/h	西北西	WNW	0.5
—	—		—
—	北	N	0.6
< 0.001μSv/h	西	W	0.5
—	北北西	NNW	0.3
< 0.001μSv/h	南西	SW	0.4
—	西南西	WSW	0.6

< 0.001μSv/h	北西	NW	0.4
—	西	W	0.5
—	西北西	WNW	1.3
—	西北西	WNW	1.0
—	西	W	1.3
—	西	W	0.8
—	西	W	0.7
—	西	W	0.8
0μSv/h	南南西	SSE	0.8
0μSv/h	南南西	SSE	1.2
0μSv/h	西北西	WNW	1.1
0μSv/h	南東	SE	1.1
0μSv/h	南	S	0.8
—	南南西	SSW	0.5
0μSv/h	南	S	1.0
0μSv/h	南	S	1.0
—	南西	SW	0.8
0μSv/h	南南西	SSW	1.2
—	西北西	WSW	1.1
0μSv/h	南西	SW	1.3
—	北西	NW	1.8
0μSv/h	南西	SW	1.3
—	北北西	NNW	2.1
0μSv/h	南西	SW	1.2
—	北西	NW	2.5
0μSv/h	西	W	1.2
—	北西	NW	3.7
0μSv/h	西	W	1.1
—	北西	NW	3.0
0μSv/h	南南西	SSW	0.8
—	北北西	NNW	2.9
0μSv/h	—		—
0μSv/h	—		—
0μSv/h	北北東	NNE	1.9
0μSv/h	西北西	WNW	0.9
0μSv/h	北西	NW	3.1
0μSv/h	北		2.3
0μSv/h	西南西	WSW	3.2
0μSv/h	南東	SE	3.1
—	—		—
0μSv/h	南西	SW	2.4
—	—		—
—	—		—
—	—		—
0μSv/h	北	N	2.7
—	—		—
—	—		—

—	—	—	—
0μSv/h	北北西	NNW	1.0
—	—	—	—
—	—	—	—
—	—	—	—
0μSv/h	北	N	2.3
0μSv/h	北西	NW	2.6
0μSv/h	北西	NW	2.6
0μSv/h	北	N	2.2
0μSv/h	北	N	3.6
0μSv/h	北	N	2.2
0μSv/h	北北東	NNE	2.6
0μSv/h	西北西	WNW	3.2
0μSv/h	北北西	NNW	3.8
0μSv/h	西北西	WNW	3.6
0μSv/h	西北西	WNW	3.2
0μSv/h	北北東	NNE	2.1
0μSv/h	西北西	WNW	2.5
0μSv/h	北西	NW	3.1
< 0.001μSv/h	西北西	WNW	2.7
< 0.001μSv/h	西	W	2.8
< 0.001μSv/h	南西	SW	1.7
< 0.001μSv/h	西	W	1.9
< 0.001μSv/h	西	W	1.2
< 0.001μSv/h	南	S	1.3
< 0.001μSv/h	北西	NW	1.1
< 0.001μSv/h	南南東	SSE	1.2
< 0.001μSv/h	東	E	0.8
< 0.001μSv/h	南	S	1.3
< 0.001μSv/h	南東	SE	0.7
< 0.001μSv/h	南東	SE	0.8
< 0.001μSv/h	南	S	0.6
< 0.001μSv/h	北	N	0.6
< 0.001μSv/h	西	W	0.7
< 0.001μSv/h	東	E	0.8
< 0.001μSv/h	北	N	0.7
< 0.001μSv/h	北西	NW	0.8
< 0.001μSv/h	西北西	WNW	1.0
< 0.001μSv/h	北西	NW	—
< 0.001μSv/h	西北西	WNW	—
< 0.001μSv/h	西	W	0.9
< 0.001μSv/h	北東	NE	0.9
< 0.001μSv/h	北	N	0.9
< 0.001μSv/h	南西	SW	1.0
< 0.001μSv/h	南西	SW	1.0
< 0.001μSv/h	北	N	0.9
< 0.001μSv/h	北西	NW	0.7

< 0.001μSv/h	南西	SW	0.9
< 0.001μSv/h	南東	SE	1.0
< 0.001μSv/h	南東	SE	1.6
< 0.001μSv/h	南	S	1.7
< 0.001μSv/h	北	N	1.2
< 0.001μSv/h	北	N	1.2
< 0.001μSv/h	南西	SW	4.6
< 0.001μSv/h	北東	NE	4.2
—	北北東	NNE	4.4
—	北北東	NNE	4.4
—	北北東	NNE	4.4
—	北北東	NNE	4.4
—	北北東	NNE	4.8
—	北東	NE	2.2
—	北東	NE	2.1
—	北	N	2.2
—	北	N	2.2
—	北北西	NNW	1.8
—	北北西	NNW	1.8
—	北北東	NNE	1.8
—	北北西	NNW	1.1
—	北西	NW	1.0
—	西北西	WNW	0.9
—	西	W	0.8
—	西北西	WNW	0.7
—	西北西	WNW	0.7
—	北北東	NNE	0.6
—	北東	NE	0.6
—	北東	NE	0.5
—	北	N	0.5
—	北	N	0.6
—	北	N	0.7
—	北北東	NNE	0.8
—	東北東	ENE	0.8
—	北	N	0.6
—	北西	NW	0.5
—	北北西	NNW	0.5
—	北北東	NNE	0.7
< 0.01μSv/h	北北西	NNW	1.3
0.02μSv/h	北北東	NNE	1.1
0.01μSv/h	北	N	1.0
< 0.01μSv/h	北東	NE	2.8
< 0.01μSv/h	北北東	NNE	3.4
< 0.01μSv/h	北北東	NNE	3.2
< 0.01μSv/h	北	N	3.6
< 0.01μSv/h	北東	NE	3.6
< 0.01μSv/h	北北東	NNE	3.4

< 0.01μSv/h	北	N	3.4
< 0.01μSv/h	北東	NE	4.2
< 0.01μSv/h	北北西	NNW	2.0
< 0.01μSv/h	北	N	2.1
< 0.01μSv/h	北東	NE	1.0
< 0.01μSv/h	北	N	0.8
< 0.01μSv/h	北東	NE	0.9
< 0.01μSv/h	北北西	NNW	0.7
< 0.01μSv/h	北	N	0.7
< 0.01μSv/h	北	N	0.8
< 0.01μSv/h	北東	NE	1.5
< 0.01μSv/h	北東	NE	1.5
< 0.01μSv/h	北	N	1.6
< 0.01μSv/h	北	N	1.8
< 0.01μSv/h	北北東	NNE	1.5
< 0.01μSv/h	—		—
< 0.01μSv/h	—		—
< 0.01μSv/h	北東	NE	5.3
< 0.01μSv/h	—		—
< 0.01μSv/h	—		—
< 0.01μSv/h	—		—
< 0.01μSv/h	南東	SE	1.2
< 0.01μSv/h	東	E	1.3
< 0.01μSv/h	東南東	ESE	3.4
< 0.01μSv/h	南東	SE	1.3
< 0.01μSv/h	南	S	1.4
< 0.01μSv/h	南	S	1.8
< 0.01μSv/h	南	S	1.3
< 0.01μSv/h	南	S	1.3
< 0.01μSv/h	南南東	SSE	1.4
< 0.01μSv/h	南	S	1.0
< 0.01μSv/h	南南東	SSE	1.5
< 0.01μSv/h	南	S	1.9
< 0.01μSv/h	南	S	1.6
< 0.01μSv/h	南	S	1.5
< 0.01μSv/h	東南東	ESE	1.4
< 0.01μSv/h	南	S	1.2
< 0.01μSv/h	南南東	SSE	1.2
< 0.01μSv/h	東	E	1.2
< 0.01μSv/h	南東	SE	1.2
< 0.01μSv/h	南	S	1.0
< 0.01μSv/h	南東	SE	1.1
< 0.01μSv/h	南	S	1.1
< 0.01μSv/h	南東	SE	1.1
< 0.01μSv/h	南南東	SSE	1.3
< 0.01μSv/h	南	S	1.0
< 0.01μSv/h	南南東		1.4

< 0.01μSv/h	南	S	1.1
< 0.01μSv/h	南南東	SSE	1.1
< 0.01μSv/h	南南東	SSE	1.3
< 0.01μSv/h	南	S	1.3
< 0.01μSv/h	南	S	1.6
< 0.01μSv/h	南東	SE	1.5
< 0.01μSv/h	南	S	1.1
< 0.01μSv/h	南東	SE	1.2
< 0.01μSv/h	南	S	1.1
< 0.01μSv/h	南	S	1.0
< 0.01μSv/h	南	S	1.1
< 0.01μSv/h	南	S	1.0
< 0.01μSv/h	南南東	SSE	1.3
< 0.01μSv/h	東	S	1.4
< 0.01μSv/h	南南東	SSE	1.8
< 0.01μSv/h	南東	SE	1.6
< 0.01μSv/h	南東	SE	1.6
< 0.01μSv/h	西	W	0.7
< 0.01μSv/h	北	N	0.7
< 0.01μSv/h	南	S	0.9
< 0.01μSv/h	東	E	0.9
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	3.7
< 0.01μSv/h	東	E	5.6
< 0.01μSv/h	北北東	NNE	4.0
< 0.01μSv/h	北北東	NNE	4.0
< 0.01μSv/h	東	E	2.2
< 0.01μSv/h	北東	NE	1.7
< 0.01μSv/h	北北東	NNE	2.5
< 0.01μSv/h	北西	NW	2.1
< 0.01μSv/h	北	N	2.4
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	0.6
< 0.01μSv/h	北西	NW	0.6
< 0.01μSv/h	北東	NE	3.8
< 0.01μSv/h	北	N	1.1
< 0.01μSv/h	北西	NW	2.2
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	0.9
< 0.01μSv/h	北北西	NNE	0.9
< 0.01μSv/h	北西	NW	1.1
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	1.0
< 0.01μSv/h	北西	NW	5.0
< 0.01μSv/h	北	N	4.2

< 0.01μSv/h	北北西	NNW	3.1
< 0.01μSv/h	北西	NW	2.9
< 0.01μSv/h	北北西	NNW	2.6
< 0.01μSv/h	北西	NW	2.0
< 0.01μSv/h	西	W	1.4
< 0.01μSv/h	西北西	WNW	1.4
< 0.01μSv/h	西北西	WNW	1.4
< 0.01μSv/h	北西	NW	1.4
< 0.01μSv/h	北西	NW	1.4
< 0.01μSv/h	北西	NW	1.2
< 0.01μSv/h	北西	NW	1.3
< 0.01μSv/h	西	W	1.2
< 0.01μSv/h	西	W	1.2
< 0.01μSv/h	北北西	NNW	1.2
< 0.01μSv/h	西北西	WNW	1.3
< 0.01μSv/h	北北西	NNW	1.4
< 0.01μSv/h	北北西	NNW	1.4
< 0.01μSv/h	北	N	1.7
< 0.01μSv/h	北北西	NNW	2.2
< 0.01μSv/h	北西	NW	1.7
< 0.01μSv/h	北	N	2.3
< 0.01μSv/h	北西	NW	1.8
< 0.01μSv/h	北西	NW	1.9
< 0.01μSv/h	西	W	1.6
< 0.01μSv/h	北北西	NNW	1.5
< 0.01μSv/h	東北東	ENE	1.8
< 0.01μSv/h	北東	NE	1.5
< 0.01μSv/h	東北東	ENE	1.4
< 0.01μSv/h	東	E	
< 0.01μSv/h	東北東	ENE	4.9
< 0.01μSv/h	北東	NE	—
< 0.01μSv/h	—		—
< 0.01μSv/h	北東	NE	2.0
< 0.01μSv/h	北北東	NNE	1.9
< 0.01μSv/h	東北東	ENE	2.3
< 0.01μSv/h	北東	NE	1.6
< 0.01μSv/h	東	E	1.8
< 0.01μSv/h	北	N	1.8
< 0.01μSv/h	東南東	ESE	1.6
< 0.01μSv/h	東	E	0.9
< 0.01μSv/h	北	N	1.8
< 0.01μSv/h	東北東	ENE	1.4
< 0.01μSv/h	西	W	1.4
< 0.01μSv/h	北西	NW	4.1
< 0.01μSv/h	西南西	WSW	3.0
< 0.01μSv/h	西南西	WSW	1.0
< 0.01μSv/h	西南西	WSW	1.2

< 0.01μSv/h	北	N	2.4
< 0.01μSv/h	北西	NW	2.7
< 0.01μSv/h	北西	NW	2.1
< 0.01μSv/h	東北東	ENE	1.7
< 0.01μSv/h	南南西	SSW	1.9
< 0.01μSv/h	南南東	SSE	2.3
< 0.01μSv/h	西	W	2.1
< 0.01μSv/h	西北西	WNW	2.1
< 0.01μSv/h	西南西	WEW	3.1
< 0.01μSv/h	北西	NW	2.3
< 0.01μSv/h	北西	NW	3.4
< 0.01μSv/h	北北西	NNW	3.0
< 0.01μSv/h	北	N	2.7
< 0.01μSv/h	北北西	NNW	2.6
< 0.01 μSv/h	西	W	2.6
< 0.01 μSv/h	北東	NE	1.1
< 0.01 μSv/h	南南西	SSW	0.4
< 0.01 μSv/h	北北西	NNW	0.6
< 0.01 μSv/h	東	E	0.9
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	北	N	1.5
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	西	W	1.3
< 0.01 μSv/h	西	W	2.3
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	西	W	3.6
< 0.01 μSv/h	西	W	3.7
< 0.01 μSv/h	西	W	3.8
< 0.01 μSv/h	西	W	3.7
< 0.01 μSv/h	南西	SW	3.7
< 0.01 μSv/h	西南西	WSW	3.2
< 0.01 μSv/h	南西	SW	3.8
< 0.01 μSv/h	南西	SW	3.4
< 0.01 μSv/h	南西	SW	3.7
< 0.01 μSv/h	南西	SW	3.0
< 0.01 μSv/h	西	W	5.1
< 0.01 μSv/h	西南西	WSW	5.0
< 0.01 μSv/h	西	W	6.8
< 0.01 μSv/h	北西	NW	5.2
< 0.01 μSv/h	北西	NW	5.6
< 0.01 μSv/h	西	W	5.2
< 0.01 μSv/h	西	W	7.0
< 0.01 μSv/h	西南西	WSW	4.5
< 0.01 μSv/h	南西	SW	2.2
< 0.01 μSv/h	北西	NW	4.8

< 0.01 μSv/h	北北西	NNW	2.3
< 0.01 μSv/h	北西	NW	4.7
< 0.01 μSv/h	西	W	4.4
< 0.01 μSv/h	西北西	WNW	2.9
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	3.8
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	北西	NW	4.5
< 0.01 μSv/h	西	W	4.7
< 0.01 μSv/h	西	W	5.2
< 0.01 μSv/h	北西	NW	5.8
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	3.2
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	西	W	5.2
< 0.01 μSv/h	西	W	4.3
< 0.01 μSv/h	西	W	4.3
< 0.01 μSv/h	西	W	4.1
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	北西	NW	2.8
< 0.01 μSv/h	北西	NW	3.3
< 0.01 μSv/h	北西	NW	3.4
< 0.01 μSv/h	西北西	WNW	3.6
< 0.01 μSv/h	西	W	2.7
< 0.01 μSv/h	西北西	WNW	2.1
< 0.01 μSv/h	北西	NW	2.4
< 0.01 μSv/h	西	W	2.6
< 0.01 μSv/h	西北西	WNW	2.7
< 0.01 μSv/h	北西	NW	2.9
< 0.01 μSv/h	西北西	WNW	2.4
< 0.01 μSv/h	西南西	WSW	2.7
< 0.01 μSv/h	西北西	WNW	2.7
< 0.01 μSv/h	西北西	WNW	1.2
< 0.01 μSv/h	北西	NW	0.9
< 0.01 μSv/h	北西	NW	1.6
< 0.01 μSv/h	西	W	1.7
< 0.01 μSv/h	北西	NW	1.8
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	北西	NW	1.4
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	西北西	WNW	1.3
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	北西	NW	1.3
< 0.01 μSv/h	北北西	NNW	1.2
< 0.01 μSv/h	北西	NW	0.9

< 0.01 μSv/h	北西	NW	0.9
< 0.01 μSv/h	北北西	NNW	0.7
< 0.01 μSv/h	北西	NW	1.2
< 0.01 μSv/h	北西	NW	1.3
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	西	W	1.4
< 0.01 μSv/h	西	W	1.0
< 0.01 μSv/h	西	W	1.0
< 0.01 μSv/h	西	W	0.8
< 0.01 μSv/h	北西	NW	0.9
< 0.01 μSv/h	西北西	WNW	1.0
< 0.01 μSv/h	北西	NW	1.6
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	北西	NW	1.7
< 0.01 μSv/h	北西	NW	1.4
< 0.01 μSv/h	北	N	0.9
< 0.01 μSv/h	北西	NW	0.6
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	北西	NW	0.5
< 0.01 μSv/h	北西	NW	0.2
< 0.01 μSv/h	北西	NW	0.2
< 0.01 μSv/h	北北東	NNE	0.2
< 0.01 μSv/h	北西	NW	0.2
< 0.01 μSv/h	西	W	0.2
< 0.01 μSv/h	西北西	WNW	0.3
< 0.01 μSv/h	西北西	WNW	0.4
< 0.01 μSv/h	西	W	0.7
< 0.01 μSv/h	北西	NW	0.6
< 0.01 μSv/h	東	E	0.4
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	北	N	0.4
< 0.01 μSv/h	北西	NW	0.2
< 0.01 μSv/h	北	N	0.6
< 0.01 μSv/h	北東	NE	0.5
< 0.01 μSv/h	北北東	NNE	0.5
< 0.01 μSv/h	北北西	NNW	0.5
< 0.01 μSv/h	北	N	0.6
< 0.01 μSv/h	北西	NW	0.7
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	北	N	1.0
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	西	W	1.6
< 0.01 μSv/h	北	N	1.4
< 0.01 μSv/h	西	W	1.2
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	西	W	1.6
< 0.01 μSv/h	西	W	2.3

< 0.01 μSv/h	北	N	2.1
< 0.01 μSv/h	北	N	1.9
< 0.01 μSv/h	西	W	2.0
< 0.01 μSv/h	北西	NW	2.9
< 0.01 μSv/h	北	N	3.0
< 0.01 μSv/h	北西	NW	2.7
< 0.01 μSv/h	北西	NW	2.9
< 0.01 μSv/h	西	W	3.4
< 0.01 μSv/h	西	W	3.7
< 0.01 μSv/h	西	W	3.3
< 0.01 μSv/h	北西	NW	2.5
< 0.01 μSv/h	西北西	WNW	2.6
< 0.01 μSv/h	西北西	WNW	2.8
< 0.01 μSv/h	西	W	2.3
< 0.01 μSv/h	西	W	3.3
< 0.01 μSv/h	西	W	2.9
< 0.01 μSv/h	西北西	WNW	3.1
< 0.01 μSv/h	北北西	NNW	2.0
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	北西	NW	2.2
< 0.01 μSv/h	北西	NW	2.5
< 0.01 μSv/h	北	N	2.3
< 0.01 μSv/h	南西	SW	1.8
< 0.01 μSv/h	西	W	1.9
< 0.01 μSv/h	北	N	1.5
< 0.01 μSv/h	北西	NW	1.3
< 0.01 μSv/h	南西	SW	1.5
< 0.01 μSv/h	南西	SW	1.7
< 0.01 μSv/h	西北西	WNW	1.6
< 0.01 μSv/h	北	N	1.7
< 0.01 μSv/h	西	W	1.3
< 0.01 μSv/h	南東	SE	1.2
< 0.01 μSv/h	東	E	1.1
< 0.01 μSv/h	南	S	1.8
< 0.01 μSv/h	南東	SE	2.7
< 0.01 μSv/h	南	S	3.0
< 0.01 μSv/h	東南東	ESE	2.6
< 0.01 μSv/h	南東	SE	2.5
< 0.01 μSv/h	東	E	2.0
< 0.01 μSv/h	東南東	ESE	1.8
< 0.01 μSv/h	南南東	SSE	2.0
< 0.01 μSv/h	南東	SE	1.7
< 0.01 μSv/h	東南東	ESE	1.6
< 0.01 μSv/h	南	S	1.7
< 0.01 μSv/h	東南東	ESE	1.9
< 0.01 μSv/h	南東	SE	1.9
< 0.01 μSv/h	南南東	SSE	1.7
< 0.01 μSv/h	南南東	SSE	1.8

< 0.01 μSv/h	南南東	SSE	1.6
< 0.01 μSv/h	東南東	ESE	1.5
< 0.01 μSv/h	南	S	1.5
< 0.01 μSv/h	南東	SE	1.4
< 0.01 μSv/h	南	S	1.7
< 0.01 μSv/h	南南東	SSE	1.9
< 0.01 μSv/h	南南東	SSE	2.3
< 0.01 μSv/h	南南東	SSE	2.1
< 0.01 μSv/h	南南東	SSE	2.2
< 0.01 μSv/h	南南東	SSE	2.4
< 0.01 μSv/h	東南東	ESE	2.0
< 0.01 μSv/h	南	S	2.1
< 0.01 μSv/h	南南西	SSE	1.8
< 0.01 μSv/h	東	E	2.1
< 0.01 μSv/h	南南東	SSE	2.1
< 0.01 μSv/h	南	S	2.0
< 0.01 μSv/h	南南東	SSE	2.1
< 0.01 μSv/h	南南東	SSE	3.1
< 0.01 μSv/h	南	S	2.3
< 0.01 μSv/h	南	S	1.8
< 0.01 μSv/h	南南西	SSW	1.8
< 0.01 μSv/h	南南西	SSW	1.2
< 0.01 μSv/h	南	S	1.2
< 0.01 μSv/h	南	S	1.2
< 0.01 μSv/h	南南西	SSW	1.5
< 0.01 μSv/h	南南西	SSW	1.5
< 0.01 μSv/h	南南西	SSW	1.4
< 0.01 μSv/h	西	W	1.5
< 0.01 μSv/h	南西	SW	1.3
< 0.01 μSv/h	南西	SW	1.4
< 0.01 μSv/h	南南西	SSW	1.4
< 0.01 μSv/h	南	S	1.3
< 0.01 μSv/h	西南西	WSW	1.5
< 0.01 μSv/h	西南西	WSW	1.3
< 0.01 μSv/h	南	S	3.0
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	西北西	WSW	0.7
< 0.01 μSv/h	南西	SW	0.8
< 0.01 μSv/h	西北西	WNW	0.6
< 0.01 μSv/h	南南西	SSW	0.5
< 0.01 μSv/h	西	W	0.6
< 0.01 μSv/h	西	W	0.3
< 0.01 μSv/h	西	W	0.3
< 0.01 μSv/h	北北西	NNW	0.4
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	南西	SW	0.5
< 0.01 μSv/h	南西	SW	0.7
< 0.01 μSv/h	西	W	0.5

< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	南西	SW	0.4
< 0.01 μSv/h	西	W	0.4
< 0.01 μSv/h	北	S	0.3
< 0.01 μSv/h	北西	NW	0.4
< 0.01 μSv/h	西北西	WNW	0.3
< 0.01 μSv/h	西北西	WNW	2.8
< 0.01 μSv/h	北西	NW	1.2
< 0.01 μSv/h	西北西	WNW	1.2
< 0.01 μSv/h	西南西	WSW	1.4
< 0.01 μSv/h	西南西	WSW	1.4
< 0.01 μSv/h	南西	SW	1.2
< 0.01 μSv/h	南西	SW	1.1
< 0.01 μSv/h	西南西	WSW	0.9
< 0.01 μSv/h	西	W	1.4
< 0.01 μSv/h	西南西	WSW	1.3
< 0.01 μSv/h	西南西	WSW	1.3
< 0.01 μSv/h	西南西	WSW	1.3
< 0.01 μSv/h	西南西	WSW	1.4
< 0.01 μSv/h	南西	SW	1.6
< 0.01 μSv/h	西南西	WSW	1.3
< 0.01 μSv/h	北	N	3.0
< 0.01 μSv/h	北	N	0.3
< 0.01 μSv/h	南	S	0.3
< 0.01 μSv/h	西南西	WSW	0.6
< 0.01 μSv/h	西南西	WSW	0.3
< 0.01 μSv/h	北北西	NNW	0.4
< 0.01 μSv/h	西北西	WNW	0.6
< 0.01 μSv/h	南西	SW	0.7
< 0.01 μSv/h	南南東	SSE	0.7
< 0.01 μSv/h	東	E	0.7
< 0.01 μSv/h	南南東	SSE	0.9
< 0.01 μSv/h	西北西	WNW	0.6
< 0.01 μSv/h	東	E	0.6
< 0.01 μSv/h	西	W	0.5
< 0.01 μSv/h	西北西	WNW	0.4
< 0.01 μSv/h	南東	SE	0.6
< 0.01 μSv/h	西	W	0.6
< 0.01 μSv/h	南	S	0.4
< 0.01 μSv/h	南	S	0.5
< 0.01 μSv/h	南	S	0.5
< 0.01 μSv/h	東	E	0.9
< 0.01 μSv/h	北西	NW	0.9
< 0.01 μSv/h	東	E	0.9
< 0.01 μSv/h	南東	SE	0.9
< 0.01 μSv/h	西	W	0.9
< 0.01 μSv/h	南東	SE	0.7
< 0.01 μSv/h	東北東	ENE	0.5

< 0.01 μSv/h	東南東	ESE	0.4
< 0.01 μSv/h	南南東	NNE	0.3
< 0.01 μSv/h	東	E	0.4
< 0.01 μSv/h	北西	NW	0.7
< 0.01 μSv/h	西	W	0.3
< 0.01 μSv/h	西	W	0.7
< 0.01 μSv/h	西	W	0.8
< 0.01 μSv/h	南西	NW	0.6
< 0.01 μSv/h	南東	SE	0.6
< 0.01 μSv/h	北北東	NNE	0.3
< 0.01 μSv/h	西北西	WNW	0.5
< 0.01 μSv/h	西南西	WSW	0.3
< 0.01 μSv/h	東	E	0.4
< 0.01 μSv/h	東北東	ENE	0.6
< 0.01 μSv/h	東北東	ENE	0.6
< 0.01 μSv/h	北東	NE	0.9
< 0.01 μSv/h	東	E	1.6
< 0.01 μSv/h	東	E	2.1
< 0.01 μSv/h	東	E	2.0
< 0.01 μSv/h	東	E	1.5
< 0.01 μSv/h	南東	SE	1.8
< 0.01 μSv/h	南東	SE	1.8
< 0.01 μSv/h	南	S	1.9
< 0.01 μSv/h	南東	SE	1.9
< 0.01 μSv/h	東	E	1.7
< 0.01 μSv/h	南南東	SSE	1.5
< 0.01 μSv/h	南南東	SSE	1.5
< 0.01 μSv/h	南西	SW	1.6
< 0.01 μSv/h	西	W	2.2
< 0.01 μSv/h	西北西	WNW	2.9
< 0.01 μSv/h	南西	SW	3.4
< 0.01 μSv/h	西北西	WNW	4.0
< 0.01 μSv/h	西	W	4.7
< 0.01 μSv/h	西	W	6.8
< 0.01 μSv/h	西	W	5.7
< 0.01 μSv/h	西北西	WNW	5.6
< 0.01 μSv/h	西	W	5.7
< 0.01 μSv/h	西南西	WSW	5.9
< 0.01 μSv/h	西南西	WSW	6.1
< 0.01 μSv/h	北西	NW	4.2
< 0.01 μSv/h	西	W	3.7
< 0.01 μSv/h	北西	NW	5.3
< 0.01 μSv/h	西	W	4.3
< 0.01 μSv/h	西	W	5.1
< 0.01 μSv/h	南南西	SSW	4.9
< 0.01 μSv/h	西	W	5.8
< 0.01 μSv/h	北東	NE	3.4
< 0.01 μSv/h	西	W	4.6

< 0.01 μSv/h	北	N	4.9
< 0.01 μSv/h	南南西	SSW	3.1
< 0.01 μSv/h	南東	SE	2.6
< 0.01 μSv/h	西	W	4.9
< 0.01 μSv/h	西	W	4.6
< 0.01 μSv/h	西	W	3.4
< 0.01 μSv/h	南西	SW	3.8
< 0.01 μSv/h	南西	SW	4.6
< 0.01 μSv/h	南	S	3.9
< 0.01 μSv/h	北西	NW	2.4
< 0.01 μSv/h	西	W	4.8
< 0.01 μSv/h	西	W	5.0
< 0.01 μSv/h	西南西	WSW	4.5
< 0.01 μSv/h	西南西	WSW	6.1
< 0.01 μSv/h	西	W	5.1
< 0.01 μSv/h	西	W	5.7
< 0.01 μSv/h	西	W	4.5
< 0.01 μSv/h	北西	NW	4.1
< 0.01 μSv/h	西	W	3.3
< 0.01 μSv/h	西	W	3.8
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	3.6
< 0.01 μSv/h	西	W	2.7
< 0.01 μSv/h	西	W	2.8
< 0.01 μSv/h	西	W	4.1
< 0.01 μSv/h	西	W	3.5
< 0.01 μSv/h	西	W	4.4
< 0.01 μSv/h	西南西	WSW	4.1
< 0.01 μSv/h	西南西	WSW	3.2
< 0.01 μSv/h	西南西	WSW	2.7
< 0.01 μSv/h	西	W	2.8
< 0.01 μSv/h	西	W	2.7
< 0.01 μSv/h	西	W	2.2
< 0.01 μSv/h	西	W	2.6
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	西	W	2.6
< 0.01 μSv/h	西	W	2.5
< 0.01 μSv/h	西	W	2.6
< 0.01 μSv/h	西	W	3.1
< 0.01 μSv/h	西	W	3.4
< 0.01 μSv/h	西	W	3.3
< 0.01 μSv/h	西	W	2.3
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	西	W	2.0
< 0.01 μSv/h	西	W	2.2
< 0.01 μSv/h	東北東	ENE	1.2
< 0.01 μSv/h	西南西	WSW	0.8
< 0.01 μSv/h	西	W	1.0

< 0.01 μSv/h	西	W	2.0
< 0.01 μSv/h	西北西	WNW	1.4
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	西	W	2.5
< 0.01 μSv/h	西北西	WNW	2.4
< 0.01 μSv/h	西	W	2.4
< 0.01 μSv/h	西北西	WNW	2.9
< 0.01 μSv/h	南西	SW	4.5
< 0.01 μSv/h	南西	SW	3.7
< 0.01 μSv/h	西	W	2.8
< 0.01 μSv/h	南西	SW	3.5
< 0.01 μSv/h	西南西	WSW	3.0
< 0.01 μSv/h	西南西	WSW	3.4
< 0.01 μSv/h	北西	NW	4.6
< 0.01 μSv/h	北西	NW	3.2
< 0.01 μSv/h	西	W	3.0
< 0.01 μSv/h	北東	NE	2.9
< 0.01 μSv/h	南西	SW	2.1
< 0.01 μSv/h	西	NE	2.5
< 0.01 μSv/h	南西	W	1.8
< 0.01 μSv/h	西北西	WNW	2.1
< 0.01 μSv/h	西	W	1.6
< 0.01 μSv/h	西	W	1.8
< 0.01 μSv/h	北西	NW	1.5
< 0.01 μSv/h	北西	NW	2.3
< 0.01 μSv/h	西北西	WNW	2.1
< 0.01 μSv/h	西南西	WSW	1.0
< 0.01 μSv/h	北東	NE	1.1
< 0.01 μSv/h	北北東	NNE	1.9
< 0.01 μSv/h	西	W	1.1
< 0.01 μSv/h	南	S	1.0
< 0.01 μSv/h	西	W	0.9
< 0.01 μSv/h	北西	NW	0.5
< 0.01 μSv/h	南	S	0.8
< 0.01 μSv/h	南西	SW	0.8
< 0.01 μSv/h	北北西	NNW	3.5
< 0.01 μSv/h	北	N	1.6
< 0.01 μSv/h	北北西	NNW	1.5
< 0.01 μSv/h	西北西	WNW	1.5
< 0.01 μSv/h	北	N	0.7
< 0.01 μSv/h	北北東	NNE	0.6
< 0.01 μSv/h	北東	NE	0.6
< 0.01 μSv/h	北	N	2.2
< 0.01 μSv/h	北東	NE	0.6
< 0.01 μSv/h	北東	NE	0.7
< 0.01 μSv/h	東北東	ENE	0.9
< 0.01 μSv/h	東北東	ENE	0.8
< 0.01 μSv/h	東北東	ENE	0.6

< 0.01 μSv/h	東	ENE	0.9
< 0.01 μSv/h	東北東	ENE	1.1
< 0.01 μSv/h	東南東	ESE	0.6
< 0.01 μSv/h	南南東	SSE	0.6
< 0.01 μSv/h	北東	NE	0.6
< 0.01 μSv/h	北東	NE	0.8
< 0.01 μSv/h	北	N	0.9
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	東	E	1.3
< 0.01 μSv/h	東	E	1.5
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	東	E	1.5
< 0.01 μSv/h	北東	NE	1.4
< 0.01 μSv/h	東北東	ENE	1.2
< 0.01 μSv/h	東北東	ENE	1.2
< 0.01 μSv/h	北東	NE	1.0
< 0.01 μSv/h	東北東	ENE	1.0
< 0.01 μSv/h	北東	NE	1.5
< 0.01 μSv/h	北東	NE	1.2
< 0.01 μSv/h	東	E	1.2
< 0.01 μSv/h	東	E	1.1
< 0.01 μSv/h	東	E	1.2
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	東	E	0.7
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	東北東	ENE	1.4
< 0.01 μSv/h	東北東	ENE	1.8
< 0.01 μSv/h	北東	NE	1.5
< 0.01 μSv/h	東北東	ENE	1.4
< 0.01 μSv/h	北東	NE	1.2
< 0.01 μSv/h	北東	NE	1.3
< 0.01 μSv/h	東	E	1.3
< 0.01 μSv/h	南	S	1.1
< 0.01 μSv/h	南東	SE	1.2
< 0.01 μSv/h	南東	SE	1.0
< 0.01 μSv/h	北東	NE	1.1
< 0.01 μSv/h	南東	SE	1.3
< 0.01 μSv/h	東	E	1.5
< 0.01 μSv/h	南東	SE	1.4
< 0.01 μSv/h	南東	SE	1.6
< 0.01 μSv/h	南東	SE	1.7
< 0.01 μSv/h	南東	SE	1.8
< 0.01 μSv/h	南東	SE	2.0
< 0.01 μSv/h	南東	SE	1.6
< 0.01 μSv/h	南	S	1.7
< 0.01 μSv/h	南東	SE	1.8
< 0.01 μSv/h	南東	SE	1.9
< 0.01 μSv/h	南南東	SSE	2.3

< 0.01 μSv/h	南	S	2.1
< 0.01 μSv/h	南南東	SSE	2.0
< 0.01 μSv/h	南	S	1.9
< 0.01 μSv/h	南	S	1.9
< 0.01 μSv/h	南	S	1.7
< 0.01 μSv/h	南	S	1.9
< 0.01 μSv/h	南南東	SSE	2.1
< 0.01 μSv/h	南	S	1.8
< 0.01 μSv/h	南	S	2.0
< 0.01 μSv/h	南	S	1.9
< 0.01 μSv/h	南南西	SSW	2.2
< 0.01 μSv/h	南	S	2.0
< 0.01 μSv/h	南南西	SSW	2.1
< 0.01 μSv/h	南	S	2.1
< 0.01 μSv/h	南西	SW	1.8
< 0.01 μSv/h	南南西	SSW	2.0
< 0.01 μSv/h	南東	SE	1.7
< 0.01 μSv/h	南南西	SSW	2.1
< 0.01 μSv/h	南西	SW	1.7
< 0.01 μSv/h	南南西	SSW	1.6
< 0.01 μSv/h	南	S	2.6
< 0.01 μSv/h	南	S	2.6
< 0.01 μSv/h	南西	SW	2.4
< 0.01 μSv/h	西南西	WSW	1.8
< 0.01 μSv/h	北北東	NNE	1.0
< 0.01 μSv/h	西	W	1.4
< 0.01 μSv/h	西南西	WSW	1.0
< 0.01 μSv/h	南西	SW	2.0
< 0.01 μSv/h	南西	SW	1.8
< 0.01 μSv/h	北北西	NNW	0.8
< 0.01 μSv/h	北東	NE	1.2
< 0.01 μSv/h	西	W	1.2
< 0.01 μSv/h	北東	NE	1.4
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	西	W	1.6
< 0.01 μSv/h	西北西	WNW	1.2
< 0.01 μSv/h	北西	NW	1.0
< 0.01 μSv/h	西北西	WNW	2.0
< 0.01 μSv/h	西	W	2.2
< 0.01 μSv/h	西北西	WNW	2.4
< 0.01 μSv/h	西	W	2.4
< 0.01 μSv/h	西	W	2.0
< 0.01 μSv/h	西北西	WNW	2.0
< 0.01 μSv/h	西北西	WNW	2.2
< 0.01 μSv/h	北西	NW	1.6
< 0.01 μSv/h	北西	NW	2.2
< 0.01 μSv/h	西北西	WNW	2.6
< 0.01 μSv/h	北西	NW	3.2

< 0.01 $\mu\text{Sv/h}$	西	W	1.2
< 0.01 $\mu\text{Sv/h}$	西北西	WNW	1.3
< 0.01 $\mu\text{Sv/h}$	西北西	WNW	0.8
< 0.01 $\mu\text{Sv/h}$	西	W	1.0
< 0.01 $\mu\text{Sv/h}$	西北西	WNW	1.2
< 0.01 $\mu\text{Sv/h}$	西	W	1.0
< 0.01 $\mu\text{Sv/h}$	西	W	0.8

Prefectural level Radiation Monitoring

Coc Date	Period of Reading	Prefecture	Prefecture (City)	Radiation (μ Gy/h)		
				Max	Min	Avg
1	3/14 09:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.034	0.028	0.03
2	3/14 09:00 ~ 17:00	青森県	Aomori (Aomori)	0.022	0.02	0.021
3	3/14 09:00 ~ 17:00	岩手県	Iwate (Morioka)	0.052	0.051	0.052
4	3/14 09:00 ~ 17:00	宮城県	Miyagi (Sendai)			
5	3/14 09:00 ~ 17:00	秋田県	Akita (Akita)	0.036	0.034	0.035
6	3/14 09:00 ~ 17:00	山形県	Yamagata (Yamagata)	0.036	0.035	0.036
7	3/14 09:00 ~ 17:00	福島県	Fukushima (Futaba-gun)			
8	3/14 09:00 ~ 17:00	茨城県	Ibaraki (Mito)			
9	3/14 09:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	0.039	0.038	0.038
10	3/14 09:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.019	0.018	0.019
11	3/14 09:00 ~ 17:00	埼玉県	Saitama (Saitama)	0.034	0.032	0.033
12	3/14 09:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.023	0.023	0.023
13	3/14 09:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.037	0.031	0.034
14	3/14 09:00 ~ 17:00	神奈川県	Kanagawa (Chigasaki)	0.037	0.036	0.036
15	3/14 09:00 ~ 17:00	新潟県	Niigata (Niigata)	0.047	0.047	0.047
16	3/14 09:00 ~ 17:00	富山県	Toyama (Imizu)	0.048	0.047	0.048
17	3/14 09:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.05	0.044	0.046
18	3/14 09:00 ~ 17:00	福井県	Fukui (Fukui)	0.046	0.044	0.045
19	3/14 09:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.044	0.042	0.043
20	3/14 09:00 ~ 17:00	長野県	Nagano (Nagano)	0.039	0.037	0.038
21	3/14 09:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.063	0.06	0.061
22	3/14 09:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.038	0.036	0.037
23	3/14 09:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.042	0.039	0.041
24	3/14 09:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.047	0.046	0.047
25	3/14 09:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.034	0.033	0.034
26	3/14 09:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.04	0.037	0.038
27	3/14 09:00 ~ 17:00	大阪府	Osaka (Osaka)	0.043	0.042	0.042
28	3/14 09:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.038	0.036	0.037
29	3/14 09:00 ~ 17:00	奈良県	Nara (Nara)	0.049	0.046	0.048
30	3/14 09:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.032	0.031	0.031
31	3/14 09:00 ~ 17:00	鳥取県	Tottori (Touhaku-gun)	0.063	0.063	0.063
32	3/14 09:00 ~ 17:00	島根県	Shimane (Matsue)	0.037	0.036	0.036
33	3/14 09:00 ~ 17:00	岡山県	Okayama (Okayama)	0.051	0.048	0.049
34	3/14 09:00 ~ 17:00	広島県	Hiroshima (Hiroshima)	0.05	0.047	0.049
35	3/14 09:00 ~ 17:00	山口県	Yamaguchi (Yamaguchi)	0.099	0.087	0.092
36	3/14 09:00 ~ 17:00	徳島県	Tokushima (Tokushima)	0.039	0.037	0.038
37	3/14 09:00 ~ 17:00	香川県	Kagawa (Takamatsu)	0.054	0.052	0.053
38	3/14 09:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.049	0.046	0.048
39	3/14 09:00 ~ 17:00	高知県	Kochi (Kochi)	0.028	0.021	0.024
40	3/14 09:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.039	0.036	0.037
41	3/14 09:00 ~ 17:00	佐賀県	Saga (Saga)	0.045	0.039	0.041
42	3/14 09:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.032	0.029	0.031
43	3/14 09:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.03	0.027	0.028
44	3/14 09:00 ~ 17:00	大分県	Oita (Oita)	0.05	0.05	0.05
45	3/14 09:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.029	0.026	0.027
46	3/14 09:00 ~ 17:00	鹿児島県	Kagoshima (Kagoshima)	0.035	0.034	0.034
47	3/14 09:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.024	0.018	0.021
1	3/14 17:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.039	0.028	0.03
2	3/14 17:00 ~ 09:00	青森県	Aomori (Aomori)	0.022	0.021	0.021
3	3/14 17:00 ~ 09:00	岩手県	Iwate (Morioka)	0.052	0.049	0.051
4	3/14 17:00 ~ 09:00	宮城県	Miyagi (Sendai)			
5	3/14 17:00 ~ 09:00	秋田県	Akita (Akita)	0.036	0.035	0.035
6	3/14 17:00 ~ 09:00	山形県	Yamagata (Yamagata)	0.037	0.036	0.036
7	3/14 17:00 ~ 09:00	福島県	Fukushima (Futaba-gun)			

8	3/14 17:00 ~ 09:00	茨城県	Ibaraki (Mito)			
9	3/14 17:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	0.864	0.038	0.093
10	3/14 17:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.019	0.018	0.019
11	3/14 17:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.129	0.032	0.052
12	3/14 17:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.074	0.023	0.049
13	3/14 17:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.147	0.03	0.045
14	3/14 17:00 ~ 09:00	神奈川県	Kanagawa (Chigasaki)	0.086	0.036	0.044
15	3/14 17:00 ~ 09:00	新潟県	Niigata (Niigata)	0.048	0.047	0.048
16	3/14 17:00 ~ 09:00	富山県	Toyama (Imizu)	0.049	0.048	0.049
17	3/14 17:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.051	0.044	0.048
18	3/14 17:00 ~ 09:00	福井県	Fukui (Fukui)	0.047	0.045	0.046
19	3/14 17:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.045	0.042	0.043
20	3/14 17:00 ~ 09:00	長野県	Nagano (Nagano)	0.038	0.036	0.037
21	3/14 17:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.062	0.06	0.061
22	3/14 17:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.036	0.032	0.034
23	3/14 17:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.041	0.039	0.04
24	3/14 17:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.047	0.046	0.046
25	3/14 17:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.036	0.033	0.034
26	3/14 17:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.038	0.038	0.038
27	3/14 17:00 ~ 09:00	大阪府	Osaka (Osaka)	0.043	0.042	0.042
28	3/14 17:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.038	0.037	0.037
29	3/14 17:00 ~ 09:00	奈良県	Nara (Nara)	0.049	0.047	0.048
30	3/14 17:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.033	0.031	0.032
31	3/14 17:00 ~ 09:00	鳥取県	Tottori (Touhaku-gun)	0.066	0.063	0.064
32	3/14 17:00 ~ 09:00	島根県	Shimane (Matsue)	0.039	0.037	0.038
33	3/14 17:00 ~ 09:00	岡山県	Okayama (Okayama)	0.05	0.048	0.049
34	3/14 17:00 ~ 09:00	広島県	Hiroshima (Hiroshima)	0.05	0.047	0.049
35	3/14 17:00 ~ 09:00	山口県	Yamaguchi (Yamaguchi)	0.1	0.087	0.093
36	3/14 17:00 ~ 09:00	徳島県	Tokushima (Tokushima)	0.039	0.037	0.038
37	3/14 17:00 ~ 09:00	香川県	Kagawa (Takamatsu)	0.053	0.052	0.052
38	3/14 17:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.048	0.047	0.048
39	3/14 17:00 ~ 09:00	高知県	Kochi (Kochi)	0.029	0.022	0.025
40	3/14 17:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.043	0.036	0.038
41	3/14 17:00 ~ 09:00	佐賀県	Saga (Saga)	0.043	0.04	0.041
42	3/14 17:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.032	0.029	0.03
43	3/14 17:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.029	0.027	0.027
44	3/14 17:00 ~ 09:00	大分県	Oita (Oita)	0.053	0.05	0.051
45	3/14 17:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.033	0.026	0.028
46	3/14 17:00 ~ 09:00	鹿児島県	Kagoshima (Kagoshima)	0.037	0.035	0.036
47	3/14 17:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.026	0.017	0.022
1	3/14 17:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.034	0.027	0.03
2	3/14 17:00 ~ 09:00	青森県	Aomori (Aomori)	0.021	0.021	0.021
3	3/14 17:00 ~ 09:00	岩手県	Iwate (Morioka)	0.049	0.046	0.047
4	3/14 17:00 ~ 09:00	宮城県	Miyagi (Sendai)			
5	3/14 17:00 ~ 09:00	秋田県	Akita (Akita)	0.035	0.034	0.035
6	3/14 17:00 ~ 09:00	山形県	Yamagata (Yamagata)	0.04	0.036	0.038
7	3/14 17:00 ~ 09:00	福島県	Fukushima (Futaba-gun)			
8	3/14 17:00 ~ 09:00	茨城県	Ibaraki (Mito)			
9	3/14 17:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	1.318	0.359	0.701
10	3/14 17:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.562	0.019	0.191
11	3/14 17:00 ~ 09:00	埼玉県	Saitama (Saitama)	1.222	0.096	0.328
12	3/14 17:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.313	0.03	0.172
13	3/14 17:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.809	0.062	0.144
14	3/14 17:00 ~ 09:00	神奈川県	Kanagawa (Chigasaki)	0.182	0.054	0.109
15	3/14 17:00 ~ 09:00	新潟県	Niigata (Niigata)	0.05	0.047	0.049
16	3/14 17:00 ~ 09:00	富山県	Toyama (Imizu)	0.055	0.049	0.05
17	3/14 17:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.056	0.043	0.048

18	3/14 17:00 ~ 09:00	福井県	Fukui (Fukui)	0.046	0.046	0.046
19	3/14 17:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.069	0.043	0.052
20	3/14 17:00 ~ 09:00	長野県	Nagano (Nagano)	0.038	0.037	0.037
21	3/14 17:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.061	0.06	0.061
22	3/14 17:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.089	0.043	0.062
23	3/14 17:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.04	0.039	0.04
24	3/14 17:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.047	0.046	0.046
25	3/14 17:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.033	0.033	0.033
26	3/14 17:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.038	0.038	0.038
27	3/14 17:00 ~ 09:00	大阪府	Osaka (Osaka)	0.043	0.042	0.043
28	3/14 17:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.037	0.037	0.037
29	3/14 17:00 ~ 09:00	奈良県	Nara (Nara)	0.048	0.047	0.047
30	3/14 17:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.032	0.031	0.032
31	3/14 17:00 ~ 09:00	鳥取県	Tottori (Touhaku-gun)	0.08	0.064	0.067
32	3/14 17:00 ~ 09:00	島根県	Shimane (Matsue)	0.045	0.037	0.04
33	3/14 17:00 ~ 09:00	岡山県	Okayama (Okayama)	0.049	0.049	0.049
34	3/14 17:00 ~ 09:00	広島県	Hiroshima (Hiroshima)	0.05	0.046	0.048
35	3/14 17:00 ~ 09:00	山口県	Yamaguchi (Yamaguchi)	0.094	0.091	0.092
36	3/14 17:00 ~ 09:00	徳島県	Tokushima (Tokushima)	0.038	0.038	0.038
37	3/14 17:00 ~ 09:00	香川県	Kagawa (Takamatsu)	0.053	0.052	0.052
38	3/14 17:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.047	0.047	0.047
39	3/14 17:00 ~ 09:00	高知県	Kochi (Kochi)	0.027	0.022	0.025
40	3/14 17:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.037	0.036	0.036
41	3/14 17:00 ~ 09:00	佐賀県	Saga (Saga)	0.04	0.04	0.04
42	3/14 17:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.03	0.029	0.029
43	3/14 17:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.027	0.027	0.027
44	3/14 17:00 ~ 09:00	大分県	Oita (Oita)	0.051	0.049	0.05
45	3/14 17:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.027	0.026	0.026
46	3/14 17:00 ~ 09:00	鹿児島県	Kagoshima (Kagoshima)	0.035	0.034	0.034
47	3/14 17:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.024	0.018	0.021
1	3/15 09:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.034	0.027	0.03
2	3/15 09:00 ~ 17:00	青森県	Aomori (Aomori)	0.021	0.021	0.021
3	3/15 09:00 ~ 17:00	岩手県	Iwate (Morioka)	0.049	0.046	0.047
4	3/15 09:00 ~ 17:00	宮城県	Miyagi (Sendai)			
5	3/15 09:00 ~ 17:00	秋田県	Akita (Akita)	0.035	0.034	0.035
6	3/15 09:00 ~ 17:00	山形県	Yamagata (Yamagata)	0.04	0.036	0.038
7	3/15 09:00 ~ 17:00	福島県	Fukushima (Futaba-gun)			
8	3/15 09:00 ~ 17:00	茨城県	Ibaraki (Mito)			
9	3/15 09:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	1.318	0.359	0.701
10	3/15 09:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.562	0.019	0.191
11	3/15 09:00 ~ 17:00	埼玉県	Saitama (Saitama)	1.222	0.096	0.328
12	3/15 09:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.313	0.03	0.172
13	3/15 09:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.809	0.062	0.144
14	3/15 09:00 ~ 17:00	神奈川県	Kanagawa (Chigasaki)	0.182	0.054	0.109
15	3/15 09:00 ~ 17:00	新潟県	Niigata (Niigata)	0.05	0.047	0.049
16	3/15 09:00 ~ 17:00	富山県	Toyama (Imizu)	0.055	0.049	0.05
17	3/15 09:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.056	0.043	0.048
18	3/15 09:00 ~ 17:00	福井県	Fukui (Fukui)	0.046	0.046	0.046
19	3/15 09:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.069	0.043	0.052
20	3/15 09:00 ~ 17:00	長野県	Nagano (Nagano)	0.038	0.037	0.037
21	3/15 09:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.061	0.06	0.061
22	3/15 09:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.089	0.043	0.062
23	3/15 09:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.04	0.039	0.04
24	3/15 09:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.047	0.046	0.046
25	3/15 09:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.033	0.033	0.033
26	3/15 09:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.038	0.038	0.038
27	3/15 09:00 ~ 17:00	大阪府	Osaka (Osaka)	0.043	0.042	0.043

28	3/15 09:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.037	0.037	0.037
29	3/15 09:00 ~ 17:00	奈良県	Nara (Nara)	0.048	0.047	0.047
30	3/15 09:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.032	0.031	0.032
31	3/15 09:00 ~ 17:00	鳥取県	Tottori (Touhaku-gun)	0.08	0.064	0.067
32	3/15 09:00 ~ 17:00	島根県	Shimane (Matsue)	0.045	0.037	0.04
33	3/15 09:00 ~ 17:00	岡山県	Okayama (Okayama)	0.049	0.049	0.049
34	3/15 09:00 ~ 17:00	広島県	Hiroshima (Hiroshima)	0.05	0.046	0.048
35	3/15 09:00 ~ 17:00	山口県	Yamaguchi (Yamaguchi)	0.094	0.091	0.092
36	3/15 09:00 ~ 17:00	徳島県	Tokushima (Tokushima)	0.038	0.038	0.038
37	3/15 09:00 ~ 17:00	香川県	Kagawa (Takamatsu)	0.053	0.052	0.052
38	3/15 09:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.047	0.047	0.047
39	3/15 09:00 ~ 17:00	高知県	Kochi (Kochi)	0.027	0.022	0.025
40	3/15 09:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.037	0.036	0.036
41	3/15 09:00 ~ 17:00	佐賀県	Saga (Saga)	0.04	0.04	0.04
42	3/15 09:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.03	0.029	0.029
43	3/15 09:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.027	0.027	0.027
44	3/15 09:00 ~ 17:00	大分県	Oita (Oita)	0.051	0.049	0.05
45	3/15 09:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.027	0.026	0.026
46	3/15 09:00 ~ 17:00	鹿児島県	Kagoshima (Kagoshima)	0.035	0.034	0.034
47	3/15 09:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.024	0.018	0.021
1	3/15 17:00 ~ 18:00	北海道	Hokkaido (Sapporo)	0.028		
2	3/15 17:00 ~ 18:00	青森県	Aomori (Aomori)	0.021		
3	3/15 17:00 ~ 18:00	岩手県	Iwate (Morioka)	0.045		
4	3/15 17:00 ~ 18:00	宮城県	Miyagi (Sendai)	0.083		
5	3/15 17:00 ~ 18:00	秋田県	Akita (Akita)	0.0355		
6	3/15 17:00 ~ 18:00	山形県	Yamagata (Yamagata)	0.04		
7	3/15 17:00 ~ 18:00	福島県	Fukushima (Futaba-gun)			
8	3/15 17:00 ~ 18:00	茨城県	Ibaraki (Mito)	0.28		
9	3/15 17:00 ~ 18:00	栃木県	Tochigi (Itsunomiya)	0.388		
10	3/15 17:00 ~ 18:00	群馬県	Gunma (Maebashi)			
11	3/15 17:00 ~ 18:00	埼玉県	Saitama (Saitama)	1.039		
12	3/15 17:00 ~ 18:00	千葉県	Chiba (Ichihara)	0.253		
13	3/15 17:00 ~ 18:00	東京都	Tokyo (Shinjuku-ku)	0.0941		
14	3/15 17:00 ~ 18:00	神奈川県	Kanagawa (Chigasaki)	0.061		
15	3/15 17:00 ~ 18:00	新潟県	Niigata (Niigata)	0.05		
16	3/15 17:00 ~ 18:00	富山県	Toyama (Imizu)	0.063		
17	3/15 17:00 ~ 18:00	石川県	Ishikawa (Kanazawa)	0.0542		
18	3/15 17:00 ~ 18:00	福井県	Fukui (Fukui)	0.052		
19	3/15 17:00 ~ 18:00	山梨県	Yamanashi (Kofu)	0.053		
20	3/15 17:00 ~ 18:00	長野県	Nagano (Nagano)	0.04		
21	3/15 17:00 ~ 18:00	岐阜県	Gifu (Kakamigahara)	0.061		
22	3/15 17:00 ~ 18:00	静岡県	Shizuoka (Shizuoka)	0.0536		
23	3/15 17:00 ~ 18:00	愛知県	Aichi (Nagoya)	0.04		
24	3/15 17:00 ~ 18:00	三重県	Mie (Yokkaichi)	0.046		
25	3/15 17:00 ~ 18:00	滋賀県	Shiga (Ohtsu)	0.033		
26	3/15 17:00 ~ 18:00	京都府	Kyoto (Kyoto)	0.0378		
27	3/15 17:00 ~ 18:00	大阪府	Osaka (Osaka)	0.042		
28	3/15 17:00 ~ 18:00	兵庫県	Hyogo (Kobe)	0.037		
29	3/15 17:00 ~ 18:00	奈良県	Nara (Nara)	0.047		
30	3/15 17:00 ~ 18:00	和歌山県	Wakayama (Wakaya)	0.032		
31	3/15 17:00 ~ 18:00	鳥取県	Tottori (Touhaku-g)	0.074		
32	3/15 17:00 ~ 18:00	島根県	Shimane (Matsue)	0.044		
33	3/15 17:00 ~ 18:00	岡山県	Okayama (Okayama)	0.049		
34	3/15 17:00 ~ 18:00	広島県	Hiroshima (Hiroshima)	0.047		
35	3/15 17:00 ~ 18:00	山口県	Yamaguchi (Yamaguchi)	0.092		
36	3/15 17:00 ~ 18:00	徳島県	Tokushima (Tokushima)	0.038		
37	3/15 17:00 ~ 18:00	香川県	Kagawa (Takamatsu)	0.052		

38	3/15 17:00 ~ 18:00	愛媛県	Ehime (Matsuyama)	0.0473
39	3/15 17:00 ~ 18:00	高知県	Kochi (Kochi)	0.0246
40	3/15 17:00 ~ 18:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 17:00 ~ 18:00	佐賀県	Saga (Saga)	0.04
42	3/15 17:00 ~ 18:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 17:00 ~ 18:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 17:00 ~ 18:00	大分県	Oita (Oita)	0.05
45	3/15 17:00 ~ 18:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/15 17:00 ~ 18:00	鹿児島県	Kagoshima (Kagosh)	0.0345
47	3/15 17:00 ~ 18:00	沖縄県	Okinawa (Uruma)	0.0213
1	3/15 18:00 ~ 19:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.022
3	3/15 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.042
4	3/15 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	0.1127
5	3/15 18:00 ~ 19:00	秋田県	Akita (Akita)	0.0364
6	3/15 18:00 ~ 19:00	山形県	Yamagata (Yamaga)	0.043
7	3/15 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/15 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.253
9	3/15 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya)	0.375
10	3/15 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	
11	3/15 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	0.986
12	3/15 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.103
13	3/15 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku)	0.2
14	3/15 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasa)	0.061
15	3/15 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.051
16	3/15 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.063
17	3/15 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.0593
18	3/15 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.053
19	3/15 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.051
20	3/15 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.0414
21	3/15 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/15 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.0525
23	3/15 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.039
24	3/15 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.0459
25	3/15 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/15 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.0379
27	3/15 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.043
28	3/15 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.037
29	3/15 18:00 ~ 19:00	奈良県	Nara (Nara)	0.048
30	3/15 18:00 ~ 19:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/15 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-g)	0.067
32	3/15 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.043
33	3/15 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.052
34	3/15 18:00 ~ 19:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/15 18:00 ~ 19:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/15 18:00 ~ 19:00	徳島県	Tokushima (Tokush)	0.038
37	3/15 18:00 ~ 19:00	香川県	Kagawa (Takamats)	0.052
38	3/15 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.0478
39	3/15 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.0245
40	3/15 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.04
42	3/15 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 18:00 ~ 19:00	大分県	Oita (Oita)	0.05
45	3/15 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.0265
46	3/15 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagosh)	0.0346
47	3/15 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.0213

1	3/15 18:00 ~ 19:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.023
3	3/15 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.04
4	3/15 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	0.1799
5	3/15 18:00 ~ 19:00	秋田県	Akita (Akita)	0.0361
6	3/15 18:00 ~ 19:00	山形県	Yamagata (Yamagata)	0.051
7	3/15 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/15 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.239
9	3/15 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya)	0.321
10	3/15 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	0.389
11	3/15 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	0.169
12	3/15 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.055
13	3/15 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku)	0.361
14	3/15 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasaki)	0.062
15	3/15 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.052
16	3/15 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.062
17	3/15 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.0662
18	3/15 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.053
19	3/15 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.05
20	3/15 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.0431
21	3/15 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/15 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.0513
23	3/15 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.039
24	3/15 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.0463
25	3/15 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/15 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.0379
27	3/15 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.043
28	3/15 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.038
29	3/15 18:00 ~ 19:00	奈良県	Nara (Nara)	0.048
30	3/15 18:00 ~ 19:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/15 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-gun)	0.065
32	3/15 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.039
33	3/15 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.055
34	3/15 18:00 ~ 19:00	広島県	Hiroshima (Hiroshima)	0.046
35	3/15 18:00 ~ 19:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/15 18:00 ~ 19:00	徳島県	Tokushima (Tokushima)	0.038
37	3/15 18:00 ~ 19:00	香川県	Kagawa (Takamatsu)	0.052
38	3/15 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.0479
39	3/15 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.0246
40	3/15 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.04
42	3/15 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 18:00 ~ 19:00	大分県	Oita (Oita)	0.049
45	3/15 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.0266
46	3/15 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagoshima)	0.0344
47	3/15 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.0213
1	3/15 19:00 ~ 20:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 19:00 ~ 20:00	青森県	Aomori (Aomori)	0.023
3	3/15 19:00 ~ 20:00	岩手県	Iwate (Morioka)	0.04
4	3/15 19:00 ~ 20:00	宮城県	Miyagi (Sendai)	0.1799
5	3/15 19:00 ~ 20:00	秋田県	Akita (Akita)	0.0361
6	3/15 19:00 ~ 20:00	山形県	Yamagata (Yamagata)	0.051
7	3/15 19:00 ~ 20:00	福島県	Fukushima (Futaba-gun)	
8	3/15 19:00 ~ 20:00	茨城県	Ibaraki (Mito)	0.239
9	3/15 19:00 ~ 20:00	栃木県	Tochigi (Itsunomiya)	0.321
10	3/15 19:00 ~ 20:00	群馬県	Gunma (Maebashi)	0.389

11	3/15 19:00 ~ 20:00	埼玉県	Saitama (Saitama)	0.169
12	3/15 19:00 ~ 20:00	千葉県	Chiba (Ichihara)	0.055
13	3/15 19:00 ~ 20:00	東京都	Tokyo (Shinjuku-ku)	0.361
14	3/15 19:00 ~ 20:00	神奈川県	Kanagawa (Chigasa)	0.062
15	3/15 19:00 ~ 20:00	新潟県	Niigata (Niigata)	0.052
16	3/15 19:00 ~ 20:00	富山県	Toyama (Imizu)	0.062
17	3/15 19:00 ~ 20:00	石川県	Ishikawa (Kanazawa)	0.0662
18	3/15 19:00 ~ 20:00	福井県	Fukui (Fukui)	0.053
19	3/15 19:00 ~ 20:00	山梨県	Yamanashi (Kofu)	0.05
20	3/15 19:00 ~ 20:00	長野県	Nagano (Nagano)	0.0431
21	3/15 19:00 ~ 20:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/15 19:00 ~ 20:00	静岡県	Shizuoka (Shizuoka)	0.0513
23	3/15 19:00 ~ 20:00	愛知県	Aichi (Nagoya)	0.039
24	3/15 19:00 ~ 20:00	三重県	Mie (Yokkaichi)	0.0463
25	3/15 19:00 ~ 20:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/15 19:00 ~ 20:00	京都府	Kyoto (Kyoto)	0.0379
27	3/15 19:00 ~ 20:00	大阪府	Osaka (Osaka)	0.043
28	3/15 19:00 ~ 20:00	兵庫県	Hyogo (Kobe)	0.038
29	3/15 19:00 ~ 20:00	奈良県	Nara (Nara)	0.048
30	3/15 19:00 ~ 20:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/15 19:00 ~ 20:00	鳥取県	Tottori (Touhaku-g)	0.065
32	3/15 19:00 ~ 20:00	島根県	Shimane (Matsue)	0.039
33	3/15 19:00 ~ 20:00	岡山県	Okayama (Okayama)	0.055
34	3/15 19:00 ~ 20:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/15 19:00 ~ 20:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/15 19:00 ~ 20:00	徳島県	Tokushima (Tokush)	0.038
37	3/15 19:00 ~ 20:00	香川県	Kagawa (Takamats)	0.052
38	3/15 19:00 ~ 20:00	愛媛県	Ehime (Matsuyama)	0.0479
39	3/15 19:00 ~ 20:00	高知県	Kochi (Kochi)	0.0246
40	3/15 19:00 ~ 20:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 19:00 ~ 20:00	佐賀県	Saga (Saga)	0.04
42	3/15 19:00 ~ 20:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 19:00 ~ 20:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 19:00 ~ 20:00	大分県	Oita (Oita)	0.049
45	3/15 19:00 ~ 20:00	宮崎県	Miyazaki (Miyazaki)	0.0266
46	3/15 19:00 ~ 20:00	鹿児島県	Kagoshima (Kagosh)	0.0344
47	3/15 19:00 ~ 20:00	沖縄県	Okinawa (Uruma)	0.0213
1	3/15 20:00 ~ 21:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 20:00 ~ 21:00	青森県	Aomori (Aomori)	0.024
3	3/15 20:00 ~ 21:00	岩手県	Iwate (Morioka)	0.043
4	3/15 20:00 ~ 21:00	宮城県	Miyagi (Sendai)	0.1989
5	3/15 20:00 ~ 21:00	秋田県	Akita (Akita)	0.0367
6	3/15 20:00 ~ 21:00	山形県	Yamagata (Yamaga)	0.062
7	3/15 20:00 ~ 21:00	福島県	Fukushima (Futaba-gun)	
8	3/15 20:00 ~ 21:00	茨城県	Ibaraki (Mito)	0.229
9	3/15 20:00 ~ 21:00	栃木県	Tochigi (Itsunomiya)	0.305
10	3/15 20:00 ~ 21:00	群馬県	Gunma (Maebashi)	0.406
11	3/15 20:00 ~ 21:00	埼玉県	Saitama (Saitama)	0.111
12	3/15 20:00 ~ 21:00	千葉県	Chiba (Ichihara)	0.039
13	3/15 20:00 ~ 21:00	東京都	Tokyo (Shinjuku-ku)	0.123
14	3/15 20:00 ~ 21:00	神奈川県	Kanagawa (Chigasa)	0.069
15	3/15 20:00 ~ 21:00	新潟県	Niigata (Niigata)	0.055
16	3/15 20:00 ~ 21:00	富山県	Toyama (Imizu)	0.067
17	3/15 20:00 ~ 21:00	石川県	Ishikawa (Kanazawa)	0.0674
18	3/15 20:00 ~ 21:00	福井県	Fukui (Fukui)	0.056
19	3/15 20:00 ~ 21:00	山梨県	Yamanashi (Kofu)	0.05
20	3/15 20:00 ~ 21:00	長野県	Nagano (Nagano)	0.0606

21	3/15 20:00 ~ 21:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/15 20:00 ~ 21:00	静岡県	Shizuoka (Shizuoka)	0.0498
23	3/15 20:00 ~ 21:00	愛知県	Aichi (Nagoya)	0.04
24	3/15 20:00 ~ 21:00	三重県	Mie (Yokkaichi)	0.0465
25	3/15 20:00 ~ 21:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/15 20:00 ~ 21:00	京都府	Kyoto (Kyoto)	0.0391
27	3/15 20:00 ~ 21:00	大阪府	Osaka (Osaka)	0.043
28	3/15 20:00 ~ 21:00	兵庫県	Hyogo (Kobe)	0.04
29	3/15 20:00 ~ 21:00	奈良県	Nara (Nara)	0.048
30	3/15 20:00 ~ 21:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/15 20:00 ~ 21:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/15 20:00 ~ 21:00	島根県	Shimane (Matsue)	0.038
33	3/15 20:00 ~ 21:00	岡山県	Okayama (Okayama)	0.051
34	3/15 20:00 ~ 21:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/15 20:00 ~ 21:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/15 20:00 ~ 21:00	徳島県	Tokushima (Tokushima)	0.038
37	3/15 20:00 ~ 21:00	香川県	Kagawa (Takamatsushima)	0.054
38	3/15 20:00 ~ 21:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/15 20:00 ~ 21:00	高知県	Kochi (Kochi)	0.0246
40	3/15 20:00 ~ 21:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 20:00 ~ 21:00	佐賀県	Saga (Saga)	0.04
42	3/15 20:00 ~ 21:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 20:00 ~ 21:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 20:00 ~ 21:00	大分県	Oita (Oita)	0.049
45	3/15 20:00 ~ 21:00	宮崎県	Miyazaki (Miyazaki)	0.0265
46	3/15 20:00 ~ 21:00	鹿児島県	Kagoshima (Kagoshima)	0.0344
47	3/15 20:00 ~ 21:00	沖縄県	Okinawa (Uruma)	0.0211
1	3/15 21:00 ~ 22:00	北海道	Hokkaido (Sapporo)	0.027
2	3/15 21:00 ~ 22:00	青森県	Aomori (Aomori)	0.024
3	3/15 21:00 ~ 22:00	岩手県	Iwate (Morioka)	0.043
4	3/15 21:00 ~ 22:00	宮城県	Miyagi (Sendai)	0.1836
5	3/15 21:00 ~ 22:00	秋田県	Akita (Akita)	0.0368
6	3/15 21:00 ~ 22:00	山形県	Yamagata (Yamagata)	0.073
7	3/15 21:00 ~ 22:00	福島県	Fukushima (Futaba-gun)	
8	3/15 21:00 ~ 22:00	茨城県	Ibaraki (Mito)	0.223
9	3/15 21:00 ~ 22:00	栃木県	Tochigi (Itsunomiya)	0.293
10	3/15 21:00 ~ 22:00	群馬県	Gunma (Maebashi)	0.398
11	3/15 21:00 ~ 22:00	埼玉県	Saitama (Saitama)	0.076
12	3/15 21:00 ~ 22:00	千葉県	Chiba (Ichihara)	0.034
13	3/15 21:00 ~ 22:00	東京都	Tokyo (Shinjuku-ku)	0.0888
14	3/15 21:00 ~ 22:00	神奈川県	Kanagawa (Chigasaki)	0.074
15	3/15 21:00 ~ 22:00	新潟県	Niigata (Niigata)	0.055
16	3/15 21:00 ~ 22:00	富山県	Toyama (Imizu)	0.065
17	3/15 21:00 ~ 22:00	石川県	Ishikawa (Kanazawa)	0.0643
18	3/15 21:00 ~ 22:00	福井県	Fukui (Fukui)	0.059
19	3/15 21:00 ~ 22:00	山梨県	Yamanashi (Kofu)	0.05
20	3/15 21:00 ~ 22:00	長野県	Nagano (Nagano)	0.0939
21	3/15 21:00 ~ 22:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/15 21:00 ~ 22:00	静岡県	Shizuoka (Shizuoka)	0.0476
23	3/15 21:00 ~ 22:00	愛知県	Aichi (Nagoya)	0.04
24	3/15 21:00 ~ 22:00	三重県	Mie (Yokkaichi)	0.0477
25	3/15 21:00 ~ 22:00	滋賀県	Shiga (Ohtsu)	0.046
26	3/15 21:00 ~ 22:00	京都府	Kyoto (Kyoto)	0.0442
27	3/15 21:00 ~ 22:00	大阪府	Osaka (Osaka)	0.044
28	3/15 21:00 ~ 22:00	兵庫県	Hyogo (Kobe)	0.044
29	3/15 21:00 ~ 22:00	奈良県	Nara (Nara)	0.049
30	3/15 21:00 ~ 22:00	和歌山県	Wakayama (Wakaya)	0.032

31	3/15 21:00 ~ 22:00	鳥取県	Tottori (Touhaku-g	0.064
32	3/15 21:00 ~ 22:00	島根県	Shimane (Matsue)	0.038
33	3/15 21:00 ~ 22:00	岡山県	Okayama (Okayama)	0.049
34	3/15 21:00 ~ 22:00	広島県	Hiroshima (Hiroshin	0.047
35	3/15 21:00 ~ 22:00	山口県	Yamaguchi (Yamagi	0.092
36	3/15 21:00 ~ 22:00	徳島県	Tokushima (Tokush	0.038
37	3/15 21:00 ~ 22:00	香川県	Kagawa (Takamats	0.059
38	3/15 21:00 ~ 22:00	愛媛県	Ehime (Matsuyama)	0.0478
39	3/15 21:00 ~ 22:00	高知県	Kochi (Kochi)	0.0248
40	3/15 21:00 ~ 22:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 21:00 ~ 22:00	佐賀県	Saga (Saga)	0.04
42	3/15 21:00 ~ 22:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 21:00 ~ 22:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 21:00 ~ 22:00	大分県	Oita (Oita)	0.05
45	3/15 21:00 ~ 22:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/15 21:00 ~ 22:00	鹿児島県	Kagoshima (Kagosh	0.0346
47	3/15 21:00 ~ 22:00	沖縄県	Okinawa (Uruma)	0.0208
1	3/15 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.025
3	3/15 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.04
4	3/15 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	0.1786
5	3/15 22:00 ~ 23:00	秋田県	Akita (Akita)	0.0373
6	3/15 22:00 ~ 23:00	山形県	Yamagata (Yamaga	0.099
7	3/15 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	
8	3/15 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.218
9	3/15 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya	0.272
10	3/15 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.358
11	3/15 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.068
12	3/15 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.034
13	3/15 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.0657
14	3/15 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasa	0.07
15	3/15 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.058
16	3/15 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.062
17	3/15 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.0679
18	3/15 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.059
19	3/15 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.049
20	3/15 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.107
21	3/15 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara	0.061
22	3/15 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.0469
23	3/15 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.04
24	3/15 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.0491
25	3/15 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.047
26	3/15 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.0472
27	3/15 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.047
28	3/15 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.042
29	3/15 22:00 ~ 23:00	奈良県	Nara (Nara)	0.053
30	3/15 22:00 ~ 23:00	和歌山県	Wakayama (Wakaya	0.032
31	3/15 22:00 ~ 23:00	鳥取県	Tottori (Touhaku-g	0.068
32	3/15 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.038
33	3/15 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.049
34	3/15 22:00 ~ 23:00	広島県	Hiroshima (Hiroshin	0.047
35	3/15 22:00 ~ 23:00	山口県	Yamaguchi (Yamagi	0.093
36	3/15 22:00 ~ 23:00	徳島県	Tokushima (Tokush	0.038
37	3/15 22:00 ~ 23:00	香川県	Kagawa (Takamats	0.055
38	3/15 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/15 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.0249
40	3/15 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.036

41	3/15 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/15 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/15 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 22:00 ~ 23:00	大分県	Oita (Oita)	0.05
45	3/15 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.0262
46	3/15 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagosh)	0.0347
47	3/15 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.0214
1	3/15 23:00 ~ 24:00	北海道	Hokkaido (Sapporo)	0.028
2	3/15 23:00 ~ 24:00	青森県	Aomori (Aomori)	0.025
3	3/15 23:00 ~ 24:00	岩手県	Iwate (Morioka)	0.04
4	3/15 23:00 ~ 24:00	宮城県	Miyagi (Sendai)	0.1786
5	3/15 23:00 ~ 24:00	秋田県	Akita (Akita)	0.0373
6	3/15 23:00 ~ 24:00	山形県	Yamagata (Yamaga)	0.099
7	3/15 23:00 ~ 24:00	福島県	Fukushima (Futaba-gun)	
8	3/15 23:00 ~ 24:00	茨城県	Ibaraki (Mito)	0.214
9	3/15 23:00 ~ 24:00	栃木県	Tochigi (Itsunomiya)	0.286
10	3/15 23:00 ~ 24:00	群馬県	Gunma (Maebashi)	0.48
11	3/15 23:00 ~ 24:00	埼玉県	Saitama (Saitama)	0.069
12	3/15 23:00 ~ 24:00	千葉県	Chiba (Ichihara)	0.033
13	3/15 23:00 ~ 24:00	東京都	Tokyo (Shinjuku-ku)	0.0556
14	3/15 23:00 ~ 24:00	神奈川県	Kanagawa (Chigasa)	0.062
15	3/15 23:00 ~ 24:00	新潟県	Niigata (Niigata)	0.056
16	3/15 23:00 ~ 24:00	富山県	Toyama (Imizu)	0.059
17	3/15 23:00 ~ 24:00	石川県	Ishikawa (Kanazawa)	0.0645
18	3/15 23:00 ~ 24:00	福井県	Fukui (Fukui)	0.06
19	3/15 23:00 ~ 24:00	山梨県	Yamanashi (Kofu)	0.05
20	3/15 23:00 ~ 24:00	長野県	Nagano (Nagano)	0.102
21	3/15 23:00 ~ 24:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/15 23:00 ~ 24:00	静岡県	Shizuoka (Shizuoka)	0.0454
23	3/15 23:00 ~ 24:00	愛知県	Aichi (Nagoya)	0.04
24	3/15 23:00 ~ 24:00	三重県	Mie (Yokkaichi)	0.0498
25	3/15 23:00 ~ 24:00	滋賀県	Shiga (Ohtsu)	0.047
26	3/15 23:00 ~ 24:00	京都府	Kyoto (Kyoto)	0.0443
27	3/15 23:00 ~ 24:00	大阪府	Osaka (Osaka)	0.045
28	3/15 23:00 ~ 24:00	兵庫県	Hyogo (Kobe)	0.039
29	3/15 23:00 ~ 24:00	奈良県	Nara (Nara)	0.053
30	3/15 23:00 ~ 24:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/15 23:00 ~ 24:00	鳥取県	Tottori (Touhaku-g)	0.066
32	3/15 23:00 ~ 24:00	島根県	Shimane (Matsue)	0.037
33	3/15 23:00 ~ 24:00	岡山県	Okayama (Okayama)	0.049
34	3/15 23:00 ~ 24:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/15 23:00 ~ 24:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/15 23:00 ~ 24:00	徳島県	Tokushima (Tokush)	0.038
37	3/15 23:00 ~ 24:00	香川県	Kagawa (Takamats)	0.054
38	3/15 23:00 ~ 24:00	愛媛県	Ehime (Matsuyama)	0.0484
39	3/15 23:00 ~ 24:00	高知県	Kochi (Kochi)	0.0248
40	3/15 23:00 ~ 24:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/15 23:00 ~ 24:00	佐賀県	Saga (Saga)	0.04
42	3/15 23:00 ~ 24:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/15 23:00 ~ 24:00	熊本県	Kumamoto (Uto)	0.027
44	3/15 23:00 ~ 24:00	大分県	Oita (Oita)	0.05
45	3/15 23:00 ~ 24:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/15 23:00 ~ 24:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/15 23:00 ~ 24:00	沖縄県	Okinawa (Uruma)	0.0212
1	3/16 00:00 ~ 01:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 00:00 ~ 01:00	青森県	Aomori (Aomori)	0.026
3	3/16 00:00 ~ 01:00	岩手県	Iwate (Morioka)	0.041

4	3/16 00:00 ~ 01:00	宮城県	Miyagi (Sendai)	0.1935
5	3/16 00:00 ~ 01:00	秋田県	Akita (Akita)	0.0372
6	3/16 00:00 ~ 01:00	山形県	Yamagata (Yamaga	0.107
7	3/16 00:00 ~ 01:00	福島県	Fukushima (Futaba-gun)	
8	3/16 00:00 ~ 01:00	茨城県	Ibaraki (Mito)	0.214
9	3/16 00:00 ~ 01:00	栃木県	Tochigi (Itsunomiya	0.281
10	3/16 00:00 ~ 01:00	群馬県	Gunma (Maebashi)	0.501
11	3/16 00:00 ~ 01:00	埼玉県	Saitama (Saitama)	0.065
12	3/16 00:00 ~ 01:00	千葉県	Chiba (Ichihara)	0.033
13	3/16 00:00 ~ 01:00	東京都	Tokyo (Shinjuku-ku	0.0538
14	3/16 00:00 ~ 01:00	神奈川県	Kanagawa (Chigasa	0.092
15	3/16 00:00 ~ 01:00	新潟県	Niigata (Niigata)	0.053
16	3/16 00:00 ~ 01:00	富山県	Toyama (Imizu)	0.052
17	3/16 00:00 ~ 01:00	石川県	Ishikawa (Kanazawa	0.0565
18	3/16 00:00 ~ 01:00	福井県	Fukui (Fukui)	0.049
19	3/16 00:00 ~ 01:00	山梨県	Yamanashi (Kofu)	0.049
20	3/16 00:00 ~ 01:00	長野県	Nagano (Nagano)	0.0989
21	3/16 00:00 ~ 01:00	岐阜県	Gifu (Kakamigahara	0.062
22	3/16 00:00 ~ 01:00	静岡県	Shizuoka (Shizuoka	0.0453
23	3/16 00:00 ~ 01:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 00:00 ~ 01:00	三重県	Mie (Yokkaichi)	0.0595
25	3/16 00:00 ~ 01:00	滋賀県	Shiga (Ohtsu)	0.041
26	3/16 00:00 ~ 01:00	京都府	Kyoto (Kyoto)	0.0413
27	3/16 00:00 ~ 01:00	大阪府	Osaka (Osaka)	0.044
28	3/16 00:00 ~ 01:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 00:00 ~ 01:00	奈良県	Nara (Nara)	0.052
30	3/16 00:00 ~ 01:00	和歌山県	Wakayama (Wakaya	0.032
31	3/16 00:00 ~ 01:00	鳥取県	Tottori (Touhaku-g	0.068
32	3/16 00:00 ~ 01:00	島根県	Shimane (Matsue)	0.037
33	3/16 00:00 ~ 01:00	岡山県	Okayama (Okayama	0.049
34	3/16 00:00 ~ 01:00	広島県	Hiroshima (Hiroshin	0.047
35	3/16 00:00 ~ 01:00	山口県	Yamaguchi (Yamagi	0.092
36	3/16 00:00 ~ 01:00	徳島県	Tokushima (Tokush	0.038
37	3/16 00:00 ~ 01:00	香川県	Kagawa (Takamatsu	0.053
38	3/16 00:00 ~ 01:00	愛媛県	Ehime (Matsuyama)	0.0485
39	3/16 00:00 ~ 01:00	高知県	Kochi (Kochi)	0.0247
40	3/16 00:00 ~ 01:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 00:00 ~ 01:00	佐賀県	Saga (Saga)	0.04
42	3/16 00:00 ~ 01:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 00:00 ~ 01:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 00:00 ~ 01:00	大分県	Oita (Oita)	0.05
45	3/16 00:00 ~ 01:00	宮崎県	Miyazaki (Miyazaki)	0.0265
46	3/16 00:00 ~ 01:00	鹿児島県	Kagoshima (Kagosh	0.0349
47	3/16 00:00 ~ 01:00	沖縄県	Okinawa (Uruma)	0.0211
1	3/16 01:00 ~ 02:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 01:00 ~ 02:00	青森県	Aomori (Aomori)	0.026
3	3/16 01:00 ~ 02:00	岩手県	Iwate (Morioka)	0.041
4	3/16 01:00 ~ 02:00	宮城県	Miyagi (Sendai)	0.1928
5	3/16 01:00 ~ 02:00	秋田県	Akita (Akita)	0.0364
6	3/16 01:00 ~ 02:00	山形県	Yamagata (Yamaga	0.11
7	3/16 01:00 ~ 02:00	福島県	Fukushima (Futaba-gun)	
8	3/16 01:00 ~ 02:00	茨城県	Ibaraki (Mito)	0.214
9	3/16 01:00 ~ 02:00	栃木県	Tochigi (Itsunomiya	0.299
10	3/16 01:00 ~ 02:00	群馬県	Gunma (Maebashi)	0.498
11	3/16 01:00 ~ 02:00	埼玉県	Saitama (Saitama)	0.078
12	3/16 01:00 ~ 02:00	千葉県	Chiba (Ichihara)	0.032
13	3/16 01:00 ~ 02:00	東京都	Tokyo (Shinjuku-ku	0.0547

14	3/16 01:00 ~ 02:00	神奈川県	Kanagawa (Chigasa)	0.089
15	3/16 01:00 ~ 02:00	新潟県	Niigata (Niigata)	0.053
16	3/16 01:00 ~ 02:00	富山県	Toyama (Imizu)	0.052
17	3/16 01:00 ~ 02:00	石川県	Ishikawa (Kanazawa)	0.051
18	3/16 01:00 ~ 02:00	福井県	Fukui (Fukui)	0.049
19	3/16 01:00 ~ 02:00	山梨県	Yamanashi (Kofu)	0.047
20	3/16 01:00 ~ 02:00	長野県	Nagano (Nagano)	0.0964
21	3/16 01:00 ~ 02:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 01:00 ~ 02:00	静岡県	Shizuoka (Shizuoka)	0.0449
23	3/16 01:00 ~ 02:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 01:00 ~ 02:00	三重県	Mie (Yokkaichi)	0.0659
25	3/16 01:00 ~ 02:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/16 01:00 ~ 02:00	京都府	Kyoto (Kyoto)	0.0391
27	3/16 01:00 ~ 02:00	大阪府	Osaka (Osaka)	0.043
28	3/16 01:00 ~ 02:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 01:00 ~ 02:00	奈良県	Nara (Nara)	0.049
30	3/16 01:00 ~ 02:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 01:00 ~ 02:00	鳥取県	Tottori (Touhaku-g)	0.066
32	3/16 01:00 ~ 02:00	島根県	Shimane (Matsue)	0.037
33	3/16 01:00 ~ 02:00	岡山県	Okayama (Okayama)	0.049
34	3/16 01:00 ~ 02:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/16 01:00 ~ 02:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 01:00 ~ 02:00	徳島県	Tokushima (Tokush)	0.038
37	3/16 01:00 ~ 02:00	香川県	Kagawa (Takamats)	0.053
38	3/16 01:00 ~ 02:00	愛媛県	Ehime (Matsuyama)	0.0482
39	3/16 01:00 ~ 02:00	高知県	Kochi (Kochi)	0.0247
40	3/16 01:00 ~ 02:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 01:00 ~ 02:00	佐賀県	Saga (Saga)	0.04
42	3/16 01:00 ~ 02:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 01:00 ~ 02:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 01:00 ~ 02:00	大分県	Oita (Oita)	0.05
45	3/16 01:00 ~ 02:00	宮崎県	Miyazaki (Miyazaki)	0.0265
46	3/16 01:00 ~ 02:00	鹿児島県	Kagoshima (Kagosh)	0.0347
47	3/16 01:00 ~ 02:00	沖縄県	Okinawa (Uruma)	0.0212
1	3/16 02:00 ~ 03:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 02:00 ~ 03:00	青森県	Aomori (Aomori)	0.027
3	3/16 02:00 ~ 03:00	岩手県	Iwate (Morioka)	0.041
4	3/16 02:00 ~ 03:00	宮城県	Miyagi (Sendai)	0.1896
5	3/16 02:00 ~ 03:00	秋田県	Akita (Akita)	0.0356
6	3/16 02:00 ~ 03:00	山形県	Yamagata (Yamaga)	0.114
7	3/16 02:00 ~ 03:00	福島県	Fukushima (Futaba-gun)	
8	3/16 02:00 ~ 03:00	茨城県	Ibaraki (Mito)	0.241
9	3/16 02:00 ~ 03:00	栃木県	Tochigi (Itsunomiya)	0.322
10	3/16 02:00 ~ 03:00	群馬県	Gunma (Maebashi)	0.361
11	3/16 02:00 ~ 03:00	埼玉県	Saitama (Saitama)	0.101
12	3/16 02:00 ~ 03:00	千葉県	Chiba (Ichihara)	0.031
13	3/16 02:00 ~ 03:00	東京都	Tokyo (Shinjuku-ku)	0.0672
14	3/16 02:00 ~ 03:00	神奈川県	Kanagawa (Chigasa)	0.078
15	3/16 02:00 ~ 03:00	新潟県	Niigata (Niigata)	0.053
16	3/16 02:00 ~ 03:00	富山県	Toyama (Imizu)	0.051
17	3/16 02:00 ~ 03:00	石川県	Ishikawa (Kanazawa)	0.0481
18	3/16 02:00 ~ 03:00	福井県	Fukui (Fukui)	0.046
19	3/16 02:00 ~ 03:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 02:00 ~ 03:00	長野県	Nagano (Nagano)	0.0946
21	3/16 02:00 ~ 03:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 02:00 ~ 03:00	静岡県	Shizuoka (Shizuoka)	0.0444
23	3/16 02:00 ~ 03:00	愛知県	Aichi (Nagoya)	0.039

24	3/16 02:00 ~ 03:00	三重県	Mie (Yokkaichi)	0.0542
25	3/16 02:00 ~ 03:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 02:00 ~ 03:00	京都府	Kyoto (Kyoto)	0.0386
27	3/16 02:00 ~ 03:00	大阪府	Osaka (Osaka)	0.043
28	3/16 02:00 ~ 03:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 02:00 ~ 03:00	奈良県	Nara (Nara)	0.048
30	3/16 02:00 ~ 03:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 02:00 ~ 03:00	鳥取県	Tottori (Touhaku-g)	0.07
32	3/16 02:00 ~ 03:00	島根県	Shimane (Matsue)	0.037
33	3/16 02:00 ~ 03:00	岡山県	Okayama (Okayama)	0.049
34	3/16 02:00 ~ 03:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/16 02:00 ~ 03:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/16 02:00 ~ 03:00	徳島県	Tokushima (Tokushima)	0.038
37	3/16 02:00 ~ 03:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/16 02:00 ~ 03:00	愛媛県	Ehime (Matsuyama)	0.0483
39	3/16 02:00 ~ 03:00	高知県	Kochi (Kochi)	0.0251
40	3/16 02:00 ~ 03:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 02:00 ~ 03:00	佐賀県	Saga (Saga)	0.04
42	3/16 02:00 ~ 03:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 02:00 ~ 03:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 02:00 ~ 03:00	大分県	Oita (Oita)	0.05
45	3/16 02:00 ~ 03:00	宮崎県	Miyazaki (Miyazaki)	0.0265
46	3/16 02:00 ~ 03:00	鹿児島県	Kagoshima (Kagoshima)	0.0343
47	3/16 02:00 ~ 03:00	沖縄県	Okinawa (Uruma)	0.0215
1	3/16 03:00 ~ 04:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 03:00 ~ 04:00	青森県	Aomori (Aomori)	0.029
3	3/16 03:00 ~ 04:00	岩手県	Iwate (Morioka)	0.04
4	3/16 03:00 ~ 04:00	宮城県	Miyagi (Sendai)	0.1832
5	3/16 03:00 ~ 04:00	秋田県	Akita (Akita)	0.0346
6	3/16 03:00 ~ 04:00	山形県	Yamagata (Yamagata)	0.104
7	3/16 03:00 ~ 04:00	福島県	Fukushima (Futaba-gun)	
8	3/16 03:00 ~ 04:00	茨城県	Ibaraki (Mito)	0.235
9	3/16 03:00 ~ 04:00	栃木県	Tochigi (Itsunomiya)	0.309
10	3/16 03:00 ~ 04:00	群馬県	Gunma (Maebashi)	0.25
11	3/16 03:00 ~ 04:00	埼玉県	Saitama (Saitama)	0.167
12	3/16 03:00 ~ 04:00	千葉県	Chiba (Ichihara)	0.032
13	3/16 03:00 ~ 04:00	東京都	Tokyo (Shinjuku-ku)	0.101
14	3/16 03:00 ~ 04:00	神奈川県	Kanagawa (Chigasaki)	0.108
15	3/16 03:00 ~ 04:00	新潟県	Niigata (Niigata)	0.053
16	3/16 03:00 ~ 04:00	富山県	Toyama (Imizu)	0.049
17	3/16 03:00 ~ 04:00	石川県	Ishikawa (Kanazawa)	0.0476
18	3/16 03:00 ~ 04:00	福井県	Fukui (Fukui)	0.052
19	3/16 03:00 ~ 04:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 03:00 ~ 04:00	長野県	Nagano (Nagano)	0.0943
21	3/16 03:00 ~ 04:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 03:00 ~ 04:00	静岡県	Shizuoka (Shizuoka)	0.0439
23	3/16 03:00 ~ 04:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 03:00 ~ 04:00	三重県	Mie (Yokkaichi)	0.0486
25	3/16 03:00 ~ 04:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 03:00 ~ 04:00	京都府	Kyoto (Kyoto)	0.0385
27	3/16 03:00 ~ 04:00	大阪府	Osaka (Osaka)	0.043
28	3/16 03:00 ~ 04:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 03:00 ~ 04:00	奈良県	Nara (Nara)	0.048
30	3/16 03:00 ~ 04:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 03:00 ~ 04:00	鳥取県	Tottori (Touhaku-g)	0.071
32	3/16 03:00 ~ 04:00	島根県	Shimane (Matsue)	0.037
33	3/16 03:00 ~ 04:00	岡山県	Okayama (Okayama)	0.048

34	3/16 03:00 ~ 04:00	広島県	Hiroshima (Hiroshin	0.047
35	3/16 03:00 ~ 04:00	山口県	Yamaguchi (Yamagi	0.092
36	3/16 03:00 ~ 04:00	徳島県	Tokushima (Tokush	0.038
37	3/16 03:00 ~ 04:00	香川県	Kagawa (Takamats	0.052
38	3/16 03:00 ~ 04:00	愛媛県	Ehime (Matsuyama	0.048
39	3/16 03:00 ~ 04:00	高知県	Kochi (Kochi)	0.0247
40	3/16 03:00 ~ 04:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 03:00 ~ 04:00	佐賀県	Saga (Saga)	0.04
42	3/16 03:00 ~ 04:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 03:00 ~ 04:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 03:00 ~ 04:00	大分県	Oita (Oita)	0.05
45	3/16 03:00 ~ 04:00	宮崎県	Miyazaki (Miyazaki)	0.0262
46	3/16 03:00 ~ 04:00	鹿児島県	Kagoshima (Kagosh	0.0343
47	3/16 03:00 ~ 04:00	沖縄県	Okinawa (Uruma)	0.0214
1	3/16 04:00 ~ 05:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 04:00 ~ 05:00	青森県	Aomori (Aomori)	0.026
3	3/16 04:00 ~ 05:00	岩手県	Iwate (Morioka)	0.039
4	3/16 04:00 ~ 05:00	宮城県	Miyagi (Sendai)	0.1739
5	3/16 04:00 ~ 05:00	秋田県	Akita (Akita)	0.0346
6	3/16 04:00 ~ 05:00	山形県	Yamagata (Yamaga	0.096
7	3/16 04:00 ~ 05:00	福島県	Fukushima (Futaba-gun)	
8	3/16 04:00 ~ 05:00	茨城県	Ibaraki (Mito)	0.218
9	3/16 04:00 ~ 05:00	栃木県	Tochigi (Itsunomiya	0.312
10	3/16 04:00 ~ 05:00	群馬県	Gunma (Maebashi)	0.17
11	3/16 04:00 ~ 05:00	埼玉県	Saitama (Saitama)	0.188
12	3/16 04:00 ~ 05:00	千葉県	Chiba (Ichihara)	0.033
13	3/16 04:00 ~ 05:00	東京都	Tokyo (Shinjuku-ku	0.141
14	3/16 04:00 ~ 05:00	神奈川県	Kanagawa (Chigasa	0.127
15	3/16 04:00 ~ 05:00	新潟県	Niigata (Niigata)	0.055
16	3/16 04:00 ~ 05:00	富山県	Toyama (Imizu)	0.05
17	3/16 04:00 ~ 05:00	石川県	Ishikawa (Kanazawa	0.0533
18	3/16 04:00 ~ 05:00	福井県	Fukui (Fukui)	0.052
19	3/16 04:00 ~ 05:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 04:00 ~ 05:00	長野県	Nagano (Nagano)	0.0951
21	3/16 04:00 ~ 05:00	岐阜県	Gifu (Kakamigahara	0.061
22	3/16 04:00 ~ 05:00	静岡県	Shizuoka (Shizuoka	0.0425
23	3/16 04:00 ~ 05:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 04:00 ~ 05:00	三重県	Mie (Yokkaichi)	0.0486
25	3/16 04:00 ~ 05:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 04:00 ~ 05:00	京都府	Kyoto (Kyoto)	0.0386
27	3/16 04:00 ~ 05:00	大阪府	Osaka (Osaka)	0.043
28	3/16 04:00 ~ 05:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 04:00 ~ 05:00	奈良県	Nara (Nara)	0.048
30	3/16 04:00 ~ 05:00	和歌山県	Wakayama (Wakaya	0.032
31	3/16 04:00 ~ 05:00	鳥取県	Tottori (Touhaku-g	0.068
32	3/16 04:00 ~ 05:00	島根県	Shimane (Matsue)	0.037
33	3/16 04:00 ~ 05:00	岡山県	Okayama (Okayam	0.048
34	3/16 04:00 ~ 05:00	広島県	Hiroshima (Hiroshin	0.047
35	3/16 04:00 ~ 05:00	山口県	Yamaguchi (Yamagi	0.092
36	3/16 04:00 ~ 05:00	徳島県	Tokushima (Tokush	0.038
37	3/16 04:00 ~ 05:00	香川県	Kagawa (Takamats	0.051
38	3/16 04:00 ~ 05:00	愛媛県	Ehime (Matsuyama	0.0477
39	3/16 04:00 ~ 05:00	高知県	Kochi (Kochi)	0.0249
40	3/16 04:00 ~ 05:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 04:00 ~ 05:00	佐賀県	Saga (Saga)	0.039
42	3/16 04:00 ~ 05:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 04:00 ~ 05:00	熊本県	Kumamoto (Uto)	0.027

44	3/16 04:00 ~ 05:00	大分県	Oita (Oita)	0.049
45	3/16 04:00 ~ 05:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/16 04:00 ~ 05:00	鹿児島県	Kagoshima (Kagosh)	0.0344
47	3/16 04:00 ~ 05:00	沖縄県	Okinawa (Uruma)	0.0211
1	3/16 05:00 ~ 06:00	北海道	Hokkaido (Sapporo)	0.029
2	3/16 05:00 ~ 06:00	青森県	Aomori (Aomori)	0.023
3	3/16 05:00 ~ 06:00	岩手県	Iwate (Morioka)	0.037
4	3/16 05:00 ~ 06:00	宮城県	Miyagi (Sendai)	0.1674
5	3/16 05:00 ~ 06:00	秋田県	Akita (Akita)	0.0346
6	3/16 05:00 ~ 06:00	山形県	Yamagata (Yamaga)	0.09
7	3/16 05:00 ~ 06:00	福島県	Fukushima (Futaba-gun)	
8	3/16 05:00 ~ 06:00	茨城県	Ibaraki (Mito)	0.218
9	3/16 05:00 ~ 06:00	栃木県	Tochigi (Itsunomiya)	0.31
10	3/16 05:00 ~ 06:00	群馬県	Gunma (Maebashi)	0.146
11	3/16 05:00 ~ 06:00	埼玉県	Saitama (Saitama)	0.155
12	3/16 05:00 ~ 06:00	千葉県	Chiba (Ichihara)	0.042
13	3/16 05:00 ~ 06:00	東京都	Tokyo (Shinjuku-ku)	0.143
14	3/16 05:00 ~ 06:00	神奈川県	Kanagawa (Chigasa)	0.152
15	3/16 05:00 ~ 06:00	新潟県	Niigata (Niigata)	0.056
16	3/16 05:00 ~ 06:00	富山県	Toyama (Imizu)	0.051
17	3/16 05:00 ~ 06:00	石川県	Ishikawa (Kanazawa)	0.0514
18	3/16 05:00 ~ 06:00	福井県	Fukui (Fukui)	0.048
19	3/16 05:00 ~ 06:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 05:00 ~ 06:00	長野県	Nagano (Nagano)	0.0959
21	3/16 05:00 ~ 06:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 05:00 ~ 06:00	静岡県	Shizuoka (Shizuoka)	0.041
23	3/16 05:00 ~ 06:00	愛知県	Aichi (Nagoya)	0.041
24	3/16 05:00 ~ 06:00	三重県	Mie (Yokkaichi)	0.0521
25	3/16 05:00 ~ 06:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 05:00 ~ 06:00	京都府	Kyoto (Kyoto)	0.0382
27	3/16 05:00 ~ 06:00	大阪府	Osaka (Osaka)	0.043
28	3/16 05:00 ~ 06:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 05:00 ~ 06:00	奈良県	Nara (Nara)	0.048
30	3/16 05:00 ~ 06:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 05:00 ~ 06:00	鳥取県	Tottori (Touhaku-g)	0.066
32	3/16 05:00 ~ 06:00	島根県	Shimane (Matsue)	0.037
33	3/16 05:00 ~ 06:00	岡山県	Okayama (Okayama)	0.048
34	3/16 05:00 ~ 06:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/16 05:00 ~ 06:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 05:00 ~ 06:00	徳島県	Tokushima (Tokush)	0.037
37	3/16 05:00 ~ 06:00	香川県	Kagawa (Takamats)	0.052
38	3/16 05:00 ~ 06:00	愛媛県	Ehime (Matsuyama)	0.0475
39	3/16 05:00 ~ 06:00	高知県	Kochi (Kochi)	0.0251
40	3/16 05:00 ~ 06:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 05:00 ~ 06:00	佐賀県	Saga (Saga)	0.039
42	3/16 05:00 ~ 06:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 05:00 ~ 06:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 05:00 ~ 06:00	大分県	Oita (Oita)	0.049
45	3/16 05:00 ~ 06:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/16 05:00 ~ 06:00	鹿児島県	Kagoshima (Kagosh)	0.0342
47	3/16 05:00 ~ 06:00	沖縄県	Okinawa (Uruma)	0.0215
1	3/16 06:00 ~ 07:00	北海道	Hokkaido (Sapporo)	0.029
2	3/16 06:00 ~ 07:00	青森県	Aomori (Aomori)	0.021
3	3/16 06:00 ~ 07:00	岩手県	Iwate (Morioka)	0.036
4	3/16 06:00 ~ 07:00	宮城県	Miyagi (Sendai)	0.1649
5	3/16 06:00 ~ 07:00	秋田県	Akita (Akita)	0.0346
6	3/16 06:00 ~ 07:00	山形県	Yamagata (Yamaga)	0.083

7	3/16 06:00 ~ 07:00	福島県	Fukushima (Futaba-gun)	
8	3/16 06:00 ~ 07:00	茨城県	Ibaraki (Mito)	0.32
9	3/16 06:00 ~ 07:00	栃木県	Tochigi (Itsunomiya)	0.308
10	3/16 06:00 ~ 07:00	群馬県	Gunma (Maebashi)	0.158
11	3/16 06:00 ~ 07:00	埼玉県	Saitama (Saitama)	0.208
12	3/16 06:00 ~ 07:00	千葉県	Chiba (Ichihara)	0.053
13	3/16 06:00 ~ 07:00	東京都	Tokyo (Shinjuku-ku)	0.142
14	3/16 06:00 ~ 07:00	神奈川県	Kanagawa (Chigasa)	0.152
15	3/16 06:00 ~ 07:00	新潟県	Niigata (Niigata)	0.055
16	3/16 06:00 ~ 07:00	富山県	Toyama (Imizu)	0.049
17	3/16 06:00 ~ 07:00	石川県	Ishikawa (Kanazawa)	0.0482
18	3/16 06:00 ~ 07:00	福井県	Fukui (Fukui)	0.049
19	3/16 06:00 ~ 07:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 06:00 ~ 07:00	長野県	Nagano (Nagano)	0.0964
21	3/16 06:00 ~ 07:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 06:00 ~ 07:00	静岡県	Shizuoka (Shizuoka)	0.0402
23	3/16 06:00 ~ 07:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 06:00 ~ 07:00	三重県	Mie (Yokkaichi)	0.0495
25	3/16 06:00 ~ 07:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 06:00 ~ 07:00	京都府	Kyoto (Kyoto)	0.0383
27	3/16 06:00 ~ 07:00	大阪府	Osaka (Osaka)	0.043
28	3/16 06:00 ~ 07:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 06:00 ~ 07:00	奈良県	Nara (Nara)	0.048
30	3/16 06:00 ~ 07:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 06:00 ~ 07:00	鳥取県	Tottori (Touhaku-g)	0.067
32	3/16 06:00 ~ 07:00	島根県	Shimane (Matsue)	0.037
33	3/16 06:00 ~ 07:00	岡山県	Okayama (Okayama)	0.049
34	3/16 06:00 ~ 07:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/16 06:00 ~ 07:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 06:00 ~ 07:00	徳島県	Tokushima (Tokush)	0.037
37	3/16 06:00 ~ 07:00	香川県	Kagawa (Takamats)	0.052
38	3/16 06:00 ~ 07:00	愛媛県	Ehime (Matsuyama)	0.0476
39	3/16 06:00 ~ 07:00	高知県	Kochi (Kochi)	0.0247
40	3/16 06:00 ~ 07:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 06:00 ~ 07:00	佐賀県	Saga (Saga)	0.039
42	3/16 06:00 ~ 07:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 06:00 ~ 07:00	熊本県	Kumamoto (Uto)	0.026
44	3/16 06:00 ~ 07:00	大分県	Oita (Oita)	0.049
45	3/16 06:00 ~ 07:00	宮崎県	Miyazaki (Miyazaki)	0.0263
46	3/16 06:00 ~ 07:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 06:00 ~ 07:00	沖縄県	Okinawa (Uruma)	0.0211
1	3/16 07:00 ~ 08:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 07:00 ~ 08:00	青森県	Aomori (Aomori)	0.021
3	3/16 07:00 ~ 08:00	岩手県	Iwate (Morioka)	0.035
4	3/16 07:00 ~ 08:00	宮城県	Miyagi (Sendai)	0.1624
5	3/16 07:00 ~ 08:00	秋田県	Akita (Akita)	0.0352
6	3/16 07:00 ~ 08:00	山形県	Yamagata (Yamaga)	0.078
7	3/16 07:00 ~ 08:00	福島県	Fukushima (Futaba-gun)	
8	3/16 07:00 ~ 08:00	茨城県	Ibaraki (Mito)	1.035
9	3/16 07:00 ~ 08:00	栃木県	Tochigi (Itsunomiya)	0.335
10	3/16 07:00 ~ 08:00	群馬県	Gunma (Maebashi)	0.14
11	3/16 07:00 ~ 08:00	埼玉県	Saitama (Saitama)	0.141
12	3/16 07:00 ~ 08:00	千葉県	Chiba (Ichihara)	0.066
13	3/16 07:00 ~ 08:00	東京都	Tokyo (Shinjuku-ku)	0.104
14	3/16 07:00 ~ 08:00	神奈川県	Kanagawa (Chigasa)	0.153
15	3/16 07:00 ~ 08:00	新潟県	Niigata (Niigata)	0.052
16	3/16 07:00 ~ 08:00	富山県	Toyama (Imizu)	0.049

17	3/16 07:00 ~ 08:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/16 07:00 ~ 08:00	福井県	Fukui (Fukui)	0.049
19	3/16 07:00 ~ 08:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 07:00 ~ 08:00	長野県	Nagano (Nagano)	0.0984
21	3/16 07:00 ~ 08:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/16 07:00 ~ 08:00	静岡県	Shizuoka (Shizuoka)	0.0403
23	3/16 07:00 ~ 08:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 07:00 ~ 08:00	三重県	Mie (Yokkaichi)	0.0481
25	3/16 07:00 ~ 08:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 07:00 ~ 08:00	京都府	Kyoto (Kyoto)	0.0381
27	3/16 07:00 ~ 08:00	大阪府	Osaka (Osaka)	0.043
28	3/16 07:00 ~ 08:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 07:00 ~ 08:00	奈良県	Nara (Nara)	0.047
30	3/16 07:00 ~ 08:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 07:00 ~ 08:00	鳥取県	Tottori (Touhaku-g)	0.067
32	3/16 07:00 ~ 08:00	島根県	Shimane (Matsue)	0.043
33	3/16 07:00 ~ 08:00	岡山県	Okayama (Okayama)	0.049
34	3/16 07:00 ~ 08:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/16 07:00 ~ 08:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 07:00 ~ 08:00	徳島県	Tokushima (Tokush)	0.037
37	3/16 07:00 ~ 08:00	香川県	Kagawa (Takamats)	0.052
38	3/16 07:00 ~ 08:00	愛媛県	Ehime (Matsuyama)	0.0474
39	3/16 07:00 ~ 08:00	高知県	Kochi (Kochi)	0.0243
40	3/16 07:00 ~ 08:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 07:00 ~ 08:00	佐賀県	Saga (Saga)	0.039
42	3/16 07:00 ~ 08:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 07:00 ~ 08:00	熊本県	Kumamoto (Uto)	0.026
44	3/16 07:00 ~ 08:00	大分県	Oita (Oita)	0.049
45	3/16 07:00 ~ 08:00	宮崎県	Miyazaki (Miyazaki)	0.0262
46	3/16 07:00 ~ 08:00	鹿児島県	Kagoshima (Kagosh)	0.0338
47	3/16 07:00 ~ 08:00	沖縄県	Okinawa (Uruma)	0.0215
1	3/16 08:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 08:00 ~ 09:00	青森県	Aomori (Aomori)	0.02
3	3/16 08:00 ~ 09:00	岩手県	Iwate (Morioka)	0.034
4	3/16 08:00 ~ 09:00	宮城県	Miyagi (Sendai)	0.1606
5	3/16 08:00 ~ 09:00	秋田県	Akita (Akita)	0.0348
6	3/16 08:00 ~ 09:00	山形県	Yamagata (Yamaga)	0.073
7	3/16 08:00 ~ 09:00	福島県	Fukushima (Futaba-gun)	
8	3/16 08:00 ~ 09:00	茨城県	Ibaraki (Mito)	0.962
9	3/16 08:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	0.337
10	3/16 08:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.127
11	3/16 08:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.094
12	3/16 08:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.097
13	3/16 08:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.0891
14	3/16 08:00 ~ 09:00	神奈川県	Kanagawa (Chigasa)	0.139
15	3/16 08:00 ~ 09:00	新潟県	Niigata (Niigata)	0.058
16	3/16 08:00 ~ 09:00	富山県	Toyama (Imizu)	0.054
17	3/16 08:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.0508
18	3/16 08:00 ~ 09:00	福井県	Fukui (Fukui)	0.047
19	3/16 08:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 08:00 ~ 09:00	長野県	Nagano (Nagano)	0.0983
21	3/16 08:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.065
22	3/16 08:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.0409
23	3/16 08:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 08:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.0469
25	3/16 08:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 08:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.0385

27	3/16 08:00 ~ 09:00	大阪府	Osaka (Osaka)	0.043
28	3/16 08:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 08:00 ~ 09:00	奈良県	Nara (Nara)	0.048
30	3/16 08:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 08:00 ~ 09:00	鳥取県	Tottori (Touhaku-g)	0.072
32	3/16 08:00 ~ 09:00	島根県	Shimane (Matsue)	0.046
33	3/16 08:00 ~ 09:00	岡山県	Okayama (Okayama)	0.049
34	3/16 08:00 ~ 09:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/16 08:00 ~ 09:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 08:00 ~ 09:00	徳島県	Tokushima (Tokush)	0.037
37	3/16 08:00 ~ 09:00	香川県	Kagawa (Takamats)	0.052
38	3/16 08:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.0475
39	3/16 08:00 ~ 09:00	高知県	Kochi (Kochi)	0.0244
40	3/16 08:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 08:00 ~ 09:00	佐賀県	Saga (Saga)	0.039
42	3/16 08:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/16 08:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.026
44	3/16 08:00 ~ 09:00	大分県	Oita (Oita)	0.049
45	3/16 08:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 08:00 ~ 09:00	鹿児島県	Kagoshima (Kagosh)	0.0337
47	3/16 08:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.0213
1	3/16 09:00 ~ 10:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 09:00 ~ 10:00	青森県	Aomori (Aomori)	0.021
3	3/16 09:00 ~ 10:00	岩手県	Iwate (Morioka)	0.033
4	3/16 09:00 ~ 10:00	宮城県	Miyagi (Sendai)	0.158
5	3/16 09:00 ~ 10:00	秋田県	Akita (Akita)	0.035
6	3/16 09:00 ~ 10:00	山形県	Yamagata (Yamaga)	0.073
7	3/16 09:00 ~ 10:00	福島県	Fukushima (Futaba-gun)	
8	3/16 09:00 ~ 10:00	茨城県	Ibaraki (Mito)	0.65
9	3/16 09:00 ~ 10:00	栃木県	Tochigi (Itsunomiya)	0.254
10	3/16 09:00 ~ 10:00	群馬県	Gunma (Maebashi)	0.123
11	3/16 09:00 ~ 10:00	埼玉県	Saitama (Saitama)	0.073
12	3/16 09:00 ~ 10:00	千葉県	Chiba (Ichihara)	0.141
13	3/16 09:00 ~ 10:00	東京都	Tokyo (Shinjuku-ku)	0.069
14	3/16 09:00 ~ 10:00	神奈川県	Kanagawa (Chigasa)	0.126
15	3/16 09:00 ~ 10:00	新潟県	Niigata (Niigata)	0.06
16	3/16 09:00 ~ 10:00	富山県	Toyama (Imizu)	0.058
17	3/16 09:00 ~ 10:00	石川県	Ishikawa (Kanazawa)	0.057
18	3/16 09:00 ~ 10:00	福井県	Fukui (Fukui)	0.048
19	3/16 09:00 ~ 10:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 09:00 ~ 10:00	長野県	Nagano (Nagano)	0.097
21	3/16 09:00 ~ 10:00	岐阜県	Gifu (Kakamigahara)	0.069
22	3/16 09:00 ~ 10:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 09:00 ~ 10:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 09:00 ~ 10:00	三重県	Mie (Yokkaichi)	0.048
25	3/16 09:00 ~ 10:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 09:00 ~ 10:00	京都府	Kyoto (Kyoto)	0.039
27	3/16 09:00 ~ 10:00	大阪府	Osaka (Osaka)	0.043
28	3/16 09:00 ~ 10:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 09:00 ~ 10:00	奈良県	Nara (Nara)	0.048
30	3/16 09:00 ~ 10:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 09:00 ~ 10:00	鳥取県	Tottori (Touhaku-g)	0.071
32	3/16 09:00 ~ 10:00	島根県	Shimane (Matsue)	0.044
33	3/16 09:00 ~ 10:00	岡山県	Okayama (Okayama)	0.048
34	3/16 09:00 ~ 10:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/16 09:00 ~ 10:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 09:00 ~ 10:00	徳島県	Tokushima (Tokush)	0.037

37	3/16 09:00 ~ 10:00	香川県	Kagawa (Takamats	0.052
38	3/16 09:00 ~ 10:00	愛媛県	Ehime (Matsuyama	0.047
39	3/16 09:00 ~ 10:00	高知県	Kochi (Kochi)	0.024
40	3/16 09:00 ~ 10:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 09:00 ~ 10:00	佐賀県	Saga (Saga)	0.04
42	3/16 09:00 ~ 10:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 09:00 ~ 10:00	熊本県	Kumamoto (Uto)	0.026
44	3/16 09:00 ~ 10:00	大分県	Oita (Oita)	0.049
45	3/16 09:00 ~ 10:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 09:00 ~ 10:00	鹿児島県	Kagoshima (Kagosh	0.034
47	3/16 09:00 ~ 10:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 10:00 ~ 11:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 10:00 ~ 11:00	青森県	Aomori (Aomori)	0.021
3	3/16 10:00 ~ 11:00	岩手県	Iwate (Morioka)	0.033
4	3/16 10:00 ~ 11:00	宮城県	Miyagi (Sendai)	0.159
5	3/16 10:00 ~ 11:00	秋田県	Akita (Akita)	0.035
6	3/16 10:00 ~ 11:00	山形県	Yamagata (Yamaga	0.076
7	3/16 10:00 ~ 11:00	福島県	Fukushima (Futaba-gun)	
8	3/16 10:00 ~ 11:00	茨城県	Ibaraki (Mito)	0.49
9	3/16 10:00 ~ 11:00	栃木県	Tochigi (Itsunomiya	0.229
10	3/16 10:00 ~ 11:00	群馬県	Gunma (Maebashi)	0.122
11	3/16 10:00 ~ 11:00	埼玉県	Saitama (Saitama)	0.071
12	3/16 10:00 ~ 11:00	千葉県	Chiba (Ichihara)	0.124
13	3/16 10:00 ~ 11:00	東京都	Tokyo (Shinjuku-ku	0.058
14	3/16 10:00 ~ 11:00	神奈川県	Kanagawa (Chigasa	0.115
15	3/16 10:00 ~ 11:00	新潟県	Niigata (Niigata)	0.068
16	3/16 10:00 ~ 11:00	富山県	Toyama (Imizu)	0.059
17	3/16 10:00 ~ 11:00	石川県	Ishikawa (Kanazawa	0.052
18	3/16 10:00 ~ 11:00	福井県	Fukui (Fukui)	0.051
19	3/16 10:00 ~ 11:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 10:00 ~ 11:00	長野県	Nagano (Nagano)	0.1
21	3/16 10:00 ~ 11:00	岐阜県	Gifu (Kakamigahara	0.071
22	3/16 10:00 ~ 11:00	静岡県	Shizuoka (Shizuoka	0.046
23	3/16 10:00 ~ 11:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 10:00 ~ 11:00	三重県	Mie (Yokkaichi)	0.052
25	3/16 10:00 ~ 11:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 10:00 ~ 11:00	京都府	Kyoto (Kyoto)	0.039
27	3/16 10:00 ~ 11:00	大阪府	Osaka (Osaka)	0.043
28	3/16 10:00 ~ 11:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 10:00 ~ 11:00	奈良県	Nara (Nara)	0.048
30	3/16 10:00 ~ 11:00	和歌山県	Wakayama (Wakaya	0.031
31	3/16 10:00 ~ 11:00	鳥取県	Tottori (Touhaku-g	0.078
32	3/16 10:00 ~ 11:00	島根県	Shimane (Matsue)	0.043
33	3/16 10:00 ~ 11:00	岡山県	Okayama (Okayama	0.049
34	3/16 10:00 ~ 11:00	広島県	Hiroshima (Hiroshin	0.048
35	3/16 10:00 ~ 11:00	山口県	Yamaguchi (Yamagi	0.091
36	3/16 10:00 ~ 11:00	徳島県	Tokushima (Tokush	0.037
37	3/16 10:00 ~ 11:00	香川県	Kagawa (Takamats	0.053
38	3/16 10:00 ~ 11:00	愛媛県	Ehime (Matsuyama	0.047
39	3/16 10:00 ~ 11:00	高知県	Kochi (Kochi)	0.024
40	3/16 10:00 ~ 11:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 10:00 ~ 11:00	佐賀県	Saga (Saga)	0.04
42	3/16 10:00 ~ 11:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 10:00 ~ 11:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 10:00 ~ 11:00	大分県	Oita (Oita)	0.049
45	3/16 10:00 ~ 11:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 10:00 ~ 11:00	鹿児島県	Kagoshima (Kagosh	0.034

47	3/16 10:00 ~ 11:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 11:00 ~ 12:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 11:00 ~ 12:00	青森県	Aomori (Aomori)	0.022
3	3/16 11:00 ~ 12:00	岩手県	Iwate (Morioka)	0.033
4	3/16 11:00 ~ 12:00	宮城県	Miyagi (Sendai)	0.16
5	3/16 11:00 ~ 12:00	秋田県	Akita (Akita)	0.035
6	3/16 11:00 ~ 12:00	山形県	Yamagata (Yamagata)	0.073
7	3/16 11:00 ~ 12:00	福島県	Fukushima (Futaba-gun)	
8	3/16 11:00 ~ 12:00	茨城県	Ibaraki (Mito)	0.446
9	3/16 11:00 ~ 12:00	栃木県	Tochigi (Itsunomiya)	0.224
10	3/16 11:00 ~ 12:00	群馬県	Gunma (Maebashi)	0.12
11	3/16 11:00 ~ 12:00	埼玉県	Saitama (Saitama)	0.071
12	3/16 11:00 ~ 12:00	千葉県	Chiba (Ichihara)	0.076
13	3/16 11:00 ~ 12:00	東京都	Tokyo (Shinjuku-ku)	0.057
14	3/16 11:00 ~ 12:00	神奈川県	Kanagawa (Chigasa)	0.099
15	3/16 11:00 ~ 12:00	新潟県	Niigata (Niigata)	0.06
16	3/16 11:00 ~ 12:00	富山県	Toyama (Imizu)	0.053
17	3/16 11:00 ~ 12:00	石川県	Ishikawa (Kanazawa)	0.051
18	3/16 11:00 ~ 12:00	福井県	Fukui (Fukui)	0.053
19	3/16 11:00 ~ 12:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 11:00 ~ 12:00	長野県	Nagano (Nagano)	0.1
21	3/16 11:00 ~ 12:00	岐阜県	Gifu (Kakamigahara)	0.067
22	3/16 11:00 ~ 12:00	静岡県	Shizuoka (Shizuoka)	0.046
23	3/16 11:00 ~ 12:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 11:00 ~ 12:00	三重県	Mie (Yokkaichi)	0.054
25	3/16 11:00 ~ 12:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 11:00 ~ 12:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 11:00 ~ 12:00	大阪府	Osaka (Osaka)	0.045
28	3/16 11:00 ~ 12:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 11:00 ~ 12:00	奈良県	Nara (Nara)	0.049
30	3/16 11:00 ~ 12:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/16 11:00 ~ 12:00	鳥取県	Tottori (Touhaku-gun)	0.087
32	3/16 11:00 ~ 12:00	島根県	Shimane (Matsue)	0.04
33	3/16 11:00 ~ 12:00	岡山県	Okayama (Okayama)	0.049
34	3/16 11:00 ~ 12:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/16 11:00 ~ 12:00	山口県	Yamaguchi (Yamaguchi)	0.091
36	3/16 11:00 ~ 12:00	徳島県	Tokushima (Tokushima)	0.037
37	3/16 11:00 ~ 12:00	香川県	Kagawa (Takamatsu)	0.052
38	3/16 11:00 ~ 12:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 11:00 ~ 12:00	高知県	Kochi (Kochi)	0.024
40	3/16 11:00 ~ 12:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 11:00 ~ 12:00	佐賀県	Saga (Saga)	0.04
42	3/16 11:00 ~ 12:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 11:00 ~ 12:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 11:00 ~ 12:00	大分県	Oita (Oita)	0.049
45	3/16 11:00 ~ 12:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 11:00 ~ 12:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/16 11:00 ~ 12:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 12:00 ~ 13:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 12:00 ~ 13:00	青森県	Aomori (Aomori)	0.021
3	3/16 12:00 ~ 13:00	岩手県	Iwate (Morioka)	0.034
4	3/16 12:00 ~ 13:00	宮城県	Miyagi (Sendai)	0.155
5	3/16 12:00 ~ 13:00	秋田県	Akita (Akita)	0.036
6	3/16 12:00 ~ 13:00	山形県	Yamagata (Yamagata)	0.063
7	3/16 12:00 ~ 13:00	福島県	Fukushima (Futaba-gun)	
8	3/16 12:00 ~ 13:00	茨城県	Ibaraki (Mito)	0.306
9	3/16 12:00 ~ 13:00	栃木県	Tochigi (Itsunomiya)	0.223

10	3/16 12:00 ~ 13:00	群馬県	Gunma (Maebashi)	0.119
11	3/16 12:00 ~ 13:00	埼玉県	Saitama (Saitama)	0.07
12	3/16 12:00 ~ 13:00	千葉県	Chiba (Ichihara)	0.051
13	3/16 12:00 ~ 13:00	東京都	Tokyo (Shinjuku-ku)	0.056
14	3/16 12:00 ~ 13:00	神奈川県	Kanagawa (Chigasa)	0.079
15	3/16 12:00 ~ 13:00	新潟県	Niigata (Niigata)	0.052
16	3/16 12:00 ~ 13:00	富山県	Toyama (Imizu)	0.05
17	3/16 12:00 ~ 13:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/16 12:00 ~ 13:00	福井県	Fukui (Fukui)	0.054
19	3/16 12:00 ~ 13:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 12:00 ~ 13:00	長野県	Nagano (Nagano)	0.097
21	3/16 12:00 ~ 13:00	岐阜県	Gifu (Kakamigahara)	0.065
22	3/16 12:00 ~ 13:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 12:00 ~ 13:00	愛知県	Aichi (Nagoya)	0.042
24	3/16 12:00 ~ 13:00	三重県	Mie (Yokkaichi)	0.055
25	3/16 12:00 ~ 13:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 12:00 ~ 13:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 12:00 ~ 13:00	大阪府	Osaka (Osaka)	0.049
28	3/16 12:00 ~ 13:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 12:00 ~ 13:00	奈良県	Nara (Nara)	0.048
30	3/16 12:00 ~ 13:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 12:00 ~ 13:00	鳥取県	Tottori (Touhaku-g)	0.077
32	3/16 12:00 ~ 13:00	島根県	Shimane (Matsue)	0.038
33	3/16 12:00 ~ 13:00	岡山県	Okayama (Okayama)	0.05
34	3/16 12:00 ~ 13:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/16 12:00 ~ 13:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 12:00 ~ 13:00	徳島県	Tokushima (Tokush)	0.037
37	3/16 12:00 ~ 13:00	香川県	Kagawa (Takamats)	0.053
38	3/16 12:00 ~ 13:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 12:00 ~ 13:00	高知県	Kochi (Kochi)	0.024
40	3/16 12:00 ~ 13:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 12:00 ~ 13:00	佐賀県	Saga (Saga)	0.04
42	3/16 12:00 ~ 13:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 12:00 ~ 13:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 12:00 ~ 13:00	大分県	Oita (Oita)	0.049
45	3/16 12:00 ~ 13:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 12:00 ~ 13:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 12:00 ~ 13:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 13:00 ~ 14:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 13:00 ~ 14:00	青森県	Aomori (Aomori)	0.024
3	3/16 13:00 ~ 14:00	岩手県	Iwate (Morioka)	0.034
4	3/16 13:00 ~ 14:00	宮城県	Miyagi (Sendai)	0.151
5	3/16 13:00 ~ 14:00	秋田県	Akita (Akita)	0.038
6	3/16 13:00 ~ 14:00	山形県	Yamagata (Yamaga)	0.058
7	3/16 13:00 ~ 14:00	福島県	Fukushima (Futaba-gun)	
8	3/16 13:00 ~ 14:00	茨城県	Ibaraki (Mito)	0.279
9	3/16 13:00 ~ 14:00	栃木県	Tochigi (Itsunomiya)	0.22
10	3/16 13:00 ~ 14:00	群馬県	Gunma (Maebashi)	0.119
11	3/16 13:00 ~ 14:00	埼玉県	Saitama (Saitama)	0.069
12	3/16 13:00 ~ 14:00	千葉県	Chiba (Ichihara)	0.042
13	3/16 13:00 ~ 14:00	東京都	Tokyo (Shinjuku-ku)	0.055
14	3/16 13:00 ~ 14:00	神奈川県	Kanagawa (Chigasa)	0.065
15	3/16 13:00 ~ 14:00	新潟県	Niigata (Niigata)	0.051
16	3/16 13:00 ~ 14:00	富山県	Toyama (Imizu)	0.05
17	3/16 13:00 ~ 14:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/16 13:00 ~ 14:00	福井県	Fukui (Fukui)	0.058
19	3/16 13:00 ~ 14:00	山梨県	Yamanashi (Kofu)	0.045

20	3/16 13:00 ~ 14:00	長野県	Nagano (Nagano)	0.091
21	3/16 13:00 ~ 14:00	岐阜県	Gifu (Kakamigahara)	0.064
22	3/16 13:00 ~ 14:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 13:00 ~ 14:00	愛知県	Aichi (Nagoya)	0.044
24	3/16 13:00 ~ 14:00	三重県	Mie (Yokkaichi)	0.056
25	3/16 13:00 ~ 14:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 13:00 ~ 14:00	京都府	Kyoto (Kyoto)	0.039
27	3/16 13:00 ~ 14:00	大阪府	Osaka (Osaka)	0.05
28	3/16 13:00 ~ 14:00	兵庫県	Hyogo (Kobe)	0.04
29	3/16 13:00 ~ 14:00	奈良県	Nara (Nara)	0.048
30	3/16 13:00 ~ 14:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 13:00 ~ 14:00	鳥取県	Tottori (Touhaku-g)	0.069
32	3/16 13:00 ~ 14:00	島根県	Shimane (Matsue)	0.037
33	3/16 13:00 ~ 14:00	岡山県	Okayama (Okayama)	0.051
34	3/16 13:00 ~ 14:00	広島県	Hiroshima (Hiroshim)	0.046
35	3/16 13:00 ~ 14:00	山口県	Yamaguchi (Yamaguchi)	0.091
36	3/16 13:00 ~ 14:00	徳島県	Tokushima (Tokushu)	0.038
37	3/16 13:00 ~ 14:00	香川県	Kagawa (Takamats)	0.053
38	3/16 13:00 ~ 14:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 13:00 ~ 14:00	高知県	Kochi (Kochi)	0.024
40	3/16 13:00 ~ 14:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 13:00 ~ 14:00	佐賀県	Saga (Saga)	0.04
42	3/16 13:00 ~ 14:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 13:00 ~ 14:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 13:00 ~ 14:00	大分県	Oita (Oita)	0.049
45	3/16 13:00 ~ 14:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 13:00 ~ 14:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 13:00 ~ 14:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 14:00 ~ 15:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 14:00 ~ 15:00	青森県	Aomori (Aomori)	0.022
3	3/16 14:00 ~ 15:00	岩手県	Iwate (Morioka)	0.04
4	3/16 14:00 ~ 15:00	宮城県	Miyagi (Sendai)	0.15
5	3/16 14:00 ~ 15:00	秋田県	Akita (Akita)	0.037
6	3/16 14:00 ~ 15:00	山形県	Yamagata (Yamagata)	0.057
7	3/16 14:00 ~ 15:00	福島県	Fukushima (Futaba-gun)	
8	3/16 14:00 ~ 15:00	茨城県	Ibaraki (Mito)	0.267
9	3/16 14:00 ~ 15:00	栃木県	Tochigi (Itsunomiya)	0.218
10	3/16 14:00 ~ 15:00	群馬県	Gunma (Maebashi)	0.116
11	3/16 14:00 ~ 15:00	埼玉県	Saitama (Saitama)	0.069
12	3/16 14:00 ~ 15:00	千葉県	Chiba (Ichihara)	0.042
13	3/16 14:00 ~ 15:00	東京都	Tokyo (Shinjuku-ku)	0.054
14	3/16 14:00 ~ 15:00	神奈川県	Kanagawa (Chigasa)	0.057
15	3/16 14:00 ~ 15:00	新潟県	Niigata (Niigata)	0.049
16	3/16 14:00 ~ 15:00	富山県	Toyama (Imizu)	0.049
17	3/16 14:00 ~ 15:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/16 14:00 ~ 15:00	福井県	Fukui (Fukui)	0.053
19	3/16 14:00 ~ 15:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 14:00 ~ 15:00	長野県	Nagano (Nagano)	0.088
21	3/16 14:00 ~ 15:00	岐阜県	Gifu (Kakamigahara)	0.066
22	3/16 14:00 ~ 15:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 14:00 ~ 15:00	愛知県	Aichi (Nagoya)	0.041
24	3/16 14:00 ~ 15:00	三重県	Mie (Yokkaichi)	0.053
25	3/16 14:00 ~ 15:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/16 14:00 ~ 15:00	京都府	Kyoto (Kyoto)	0.04
27	3/16 14:00 ~ 15:00	大阪府	Osaka (Osaka)	0.051
28	3/16 14:00 ~ 15:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 14:00 ~ 15:00	奈良県	Nara (Nara)	0.048

30	3/16 14:00 ~ 15:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 14:00 ~ 15:00	鳥取県	Tottori (Touhaku-g)	0.066
32	3/16 14:00 ~ 15:00	島根県	Shimane (Matsue)	0.037
33	3/16 14:00 ~ 15:00	岡山県	Okayama (Okayama)	0.052
34	3/16 14:00 ~ 15:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/16 14:00 ~ 15:00	山口県	Yamaguchi (Yamagi)	0.091
36	3/16 14:00 ~ 15:00	徳島県	Tokushima (Tokush)	0.039
37	3/16 14:00 ~ 15:00	香川県	Kagawa (Takamats)	0.054
38	3/16 14:00 ~ 15:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 14:00 ~ 15:00	高知県	Kochi (Kochi)	0.024
40	3/16 14:00 ~ 15:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 14:00 ~ 15:00	佐賀県	Saga (Saga)	0.04
42	3/16 14:00 ~ 15:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 14:00 ~ 15:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 14:00 ~ 15:00	大分県	Oita (Oita)	0.049
45	3/16 14:00 ~ 15:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 14:00 ~ 15:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 14:00 ~ 15:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 15:00 ~ 16:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 15:00 ~ 16:00	青森県	Aomori (Aomori)	0.022
3	3/16 15:00 ~ 16:00	岩手県	Iwate (Morioka)	0.042
4	3/16 15:00 ~ 16:00	宮城県	Miyagi (Sendai)	0.151
5	3/16 15:00 ~ 16:00	秋田県	Akita (Akita)	0.039
6	3/16 15:00 ~ 16:00	山形県	Yamagata (Yamaga)	0.056
7	3/16 15:00 ~ 16:00	福島県	Fukushima (Futaba-gun)	
8	3/16 15:00 ~ 16:00	茨城県	Ibaraki (Mito)	0.259
9	3/16 15:00 ~ 16:00	栃木県	Tochigi (Itsunomiya)	0.216
10	3/16 15:00 ~ 16:00	群馬県	Gunma (Maebashi)	0.111
11	3/16 15:00 ~ 16:00	埼玉県	Saitama (Saitama)	0.068
12	3/16 15:00 ~ 16:00	千葉県	Chiba (Ichihara)	0.042
13	3/16 15:00 ~ 16:00	東京都	Tokyo (Shinjuku-ku)	0.054
14	3/16 15:00 ~ 16:00	神奈川県	Kanagawa (Chigasa)	0.056
15	3/16 15:00 ~ 16:00	新潟県	Niigata (Niigata)	0.048
16	3/16 15:00 ~ 16:00	富山県	Toyama (Imizu)	0.048
17	3/16 15:00 ~ 16:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/16 15:00 ~ 16:00	福井県	Fukui (Fukui)	0.048
19	3/16 15:00 ~ 16:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 15:00 ~ 16:00	長野県	Nagano (Nagano)	0.089
21	3/16 15:00 ~ 16:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/16 15:00 ~ 16:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 15:00 ~ 16:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 15:00 ~ 16:00	三重県	Mie (Yokkaichi)	0.053
25	3/16 15:00 ~ 16:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/16 15:00 ~ 16:00	京都府	Kyoto (Kyoto)	0.041
27	3/16 15:00 ~ 16:00	大阪府	Osaka (Osaka)	0.047
28	3/16 15:00 ~ 16:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 15:00 ~ 16:00	奈良県	Nara (Nara)	0.048
30	3/16 15:00 ~ 16:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 15:00 ~ 16:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/16 15:00 ~ 16:00	島根県	Shimane (Matsue)	0.038
33	3/16 15:00 ~ 16:00	岡山県	Okayama (Okayama)	0.051
34	3/16 15:00 ~ 16:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/16 15:00 ~ 16:00	山口県	Yamaguchi (Yamagi)	0.091
36	3/16 15:00 ~ 16:00	徳島県	Tokushima (Tokush)	0.039
37	3/16 15:00 ~ 16:00	香川県	Kagawa (Takamats)	0.054
38	3/16 15:00 ~ 16:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 15:00 ~ 16:00	高知県	Kochi (Kochi)	0.024

40	3/16 15:00 ~ 16:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 15:00 ~ 16:00	佐賀県	Saga (Saga)	0.04
42	3/16 15:00 ~ 16:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 15:00 ~ 16:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 15:00 ~ 16:00	大分県	Oita (Oita)	0.049
45	3/16 15:00 ~ 16:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 15:00 ~ 16:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 15:00 ~ 16:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 16:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 16:00 ~ 17:00	青森県	Aomori (Aomori)	0.025
3	3/16 16:00 ~ 17:00	岩手県	Iwate (Morioka)	0.037
4	3/16 16:00 ~ 17:00	宮城県	Miyagi (Sendai)	0.153
5	3/16 16:00 ~ 17:00	秋田県	Akita (Akita)	0.039
6	3/16 16:00 ~ 17:00	山形県	Yamagata (Yamaga)	0.057
7	3/16 16:00 ~ 17:00	福島県	Fukushima (Futaba-gun)	
8	3/16 16:00 ~ 17:00	茨城県	Ibaraki (Mito)	0.252
9	3/16 16:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	0.215
10	3/16 16:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.11
11	3/16 16:00 ~ 17:00	埼玉県	Saitama (Saitama)	0.068
12	3/16 16:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.041
13	3/16 16:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.054
14	3/16 16:00 ~ 17:00	神奈川県	Kanagawa (Chigasa)	0.056
15	3/16 16:00 ~ 17:00	新潟県	Niigata (Niigata)	0.047
16	3/16 16:00 ~ 17:00	富山県	Toyama (Imizu)	0.048
17	3/16 16:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/16 16:00 ~ 17:00	福井県	Fukui (Fukui)	0.046
19	3/16 16:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.046
20	3/16 16:00 ~ 17:00	長野県	Nagano (Nagano)	0.087
21	3/16 16:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 16:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.045
23	3/16 16:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 16:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.056
25	3/16 16:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/16 16:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.041
27	3/16 16:00 ~ 17:00	大阪府	Osaka (Osaka)	0.045
28	3/16 16:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 16:00 ~ 17:00	奈良県	Nara (Nara)	0.047
30	3/16 16:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 16:00 ~ 17:00	鳥取県	Tottori (Touhaku-g)	0.067
32	3/16 16:00 ~ 17:00	島根県	Shimane (Matsue)	0.039
33	3/16 16:00 ~ 17:00	岡山県	Okayama (Okayama)	0.05
34	3/16 16:00 ~ 17:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/16 16:00 ~ 17:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 16:00 ~ 17:00	徳島県	Tokushima (Tokush)	0.04
37	3/16 16:00 ~ 17:00	香川県	Kagawa (Takamats)	0.053
38	3/16 16:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 16:00 ~ 17:00	高知県	Kochi (Kochi)	0.024
40	3/16 16:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 16:00 ~ 17:00	佐賀県	Saga (Saga)	0.04
42	3/16 16:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 16:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 16:00 ~ 17:00	大分県	Oita (Oita)	0.049
45	3/16 16:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 16:00 ~ 17:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 16:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 17:00 ~ 18:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 17:00 ~ 18:00	青森県	Aomori (Aomori)	0.042

3	3/16 17:00 ~ 18:00	岩手県	Iwate (Morioka)	0.039
4	3/16 17:00 ~ 18:00	宮城県	Miyagi (Sendai)	0.155
5	3/16 17:00 ~ 18:00	秋田県	Akita (Akita)	0.035
6	3/16 17:00 ~ 18:00	山形県	Yamagata (Yamagata)	0.056
7	3/16 17:00 ~ 18:00	福島県	Fukushima (Futaba-gun)	
8	3/16 17:00 ~ 18:00	茨城県	Ibaraki (Mito)	0.248
9	3/16 17:00 ~ 18:00	栃木県	Tochigi (Itsunomiya)	0.214
10	3/16 17:00 ~ 18:00	群馬県	Gunma (Maebashi)	0.11
11	3/16 17:00 ~ 18:00	埼玉県	Saitama (Saitama)	0.068
12	3/16 17:00 ~ 18:00	千葉県	Chiba (Ichihara)	0.041
13	3/16 17:00 ~ 18:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 17:00 ~ 18:00	神奈川県	Kanagawa (Chigasa)	0.056
15	3/16 17:00 ~ 18:00	新潟県	Niigata (Niigata)	0.047
16	3/16 17:00 ~ 18:00	富山県	Toyama (Imizu)	0.051
17	3/16 17:00 ~ 18:00	石川県	Ishikawa (Kanazawa)	0.051
18	3/16 17:00 ~ 18:00	福井県	Fukui (Fukui)	0.046
19	3/16 17:00 ~ 18:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 17:00 ~ 18:00	長野県	Nagano (Nagano)	0.087
21	3/16 17:00 ~ 18:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 17:00 ~ 18:00	静岡県	Shizuoka (Shizuoka)	0.042
23	3/16 17:00 ~ 18:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 17:00 ~ 18:00	三重県	Mie (Yokkaichi)	0.053
25	3/16 17:00 ~ 18:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/16 17:00 ~ 18:00	京都府	Kyoto (Kyoto)	0.041
27	3/16 17:00 ~ 18:00	大阪府	Osaka (Osaka)	0.044
28	3/16 17:00 ~ 18:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 17:00 ~ 18:00	奈良県	Nara (Nara)	0.047
30	3/16 17:00 ~ 18:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/16 17:00 ~ 18:00	鳥取県	Tottori (Touhaku-gun)	0.075
32	3/16 17:00 ~ 18:00	島根県	Shimane (Matsue)	0.038
33	3/16 17:00 ~ 18:00	岡山県	Okayama (Okayama)	0.049
34	3/16 17:00 ~ 18:00	広島県	Hiroshima (Hiroshima)	0.046
35	3/16 17:00 ~ 18:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/16 17:00 ~ 18:00	徳島県	Tokushima (Tokushima)	0.04
37	3/16 17:00 ~ 18:00	香川県	Kagawa (Takamatsushima)	0.053
38	3/16 17:00 ~ 18:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 17:00 ~ 18:00	高知県	Kochi (Kochi)	0.024
40	3/16 17:00 ~ 18:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 17:00 ~ 18:00	佐賀県	Saga (Saga)	0.04
42	3/16 17:00 ~ 18:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 17:00 ~ 18:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 17:00 ~ 18:00	大分県	Oita (Oita)	0.05
45	3/16 17:00 ~ 18:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 17:00 ~ 18:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/16 17:00 ~ 18:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 18:00 ~ 19:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.05
3	3/16 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.036
4	3/16 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	0.153
5	3/16 18:00 ~ 19:00	秋田県	Akita (Akita)	0.036
6	3/16 18:00 ~ 19:00	山形県	Yamagata (Yamagata)	0.052
7	3/16 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/16 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.244
9	3/16 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya)	0.213
10	3/16 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	0.109
11	3/16 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	0.068
12	3/16 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.041

13	3/16 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasa)	0.056
15	3/16 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.048
16	3/16 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.055
17	3/16 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.05
18	3/16 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.049
19	3/16 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.087
21	3/16 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/16 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.055
25	3/16 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.039
27	3/16 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.043
28	3/16 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 18:00 ~ 19:00	奈良県	Nara (Nara)	0.047
30	3/16 18:00 ~ 19:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-g)	0.074
32	3/16 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.037
33	3/16 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.049
34	3/16 18:00 ~ 19:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/16 18:00 ~ 19:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 18:00 ~ 19:00	徳島県	Tokushima (Tokush)	0.04
37	3/16 18:00 ~ 19:00	香川県	Kagawa (Takamats)	0.052
38	3/16 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/16 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.024
40	3/16 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.04
42	3/16 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 18:00 ~ 19:00	大分県	Oita (Oita)	0.05
45	3/16 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/16 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 19:00 ~ 20:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 19:00 ~ 20:00	青森県	Aomori (Aomori)	0.05
3	3/16 19:00 ~ 20:00	岩手県	Iwate (Morioka)	0.034
4	3/16 19:00 ~ 20:00	宮城県	Miyagi (Sendai)	0.153
5	3/16 19:00 ~ 20:00	秋田県	Akita (Akita)	0.037
6	3/16 19:00 ~ 20:00	山形県	Yamagata (Yamaga)	0.053
7	3/16 19:00 ~ 20:00	福島県	Fukushima (Futaba-gun)	
8	3/16 19:00 ~ 20:00	茨城県	Ibaraki (Mito)	0.241
9	3/16 19:00 ~ 20:00	栃木県	Tochigi (Itsunomiya)	0.212
10	3/16 19:00 ~ 20:00	群馬県	Gunma (Maebashi)	0.109
11	3/16 19:00 ~ 20:00	埼玉県	Saitama (Saitama)	0.067
12	3/16 19:00 ~ 20:00	千葉県	Chiba (Ichihara)	0.04
13	3/16 19:00 ~ 20:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 19:00 ~ 20:00	神奈川県	Kanagawa (Chigasa)	0.055
15	3/16 19:00 ~ 20:00	新潟県	Niigata (Niigata)	0.048
16	3/16 19:00 ~ 20:00	富山県	Toyama (Imizu)	0.052
17	3/16 19:00 ~ 20:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/16 19:00 ~ 20:00	福井県	Fukui (Fukui)	0.049
19	3/16 19:00 ~ 20:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 19:00 ~ 20:00	長野県	Nagano (Nagano)	0.089
21	3/16 19:00 ~ 20:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 19:00 ~ 20:00	静岡県	Shizuoka (Shizuoka)	0.04

23	3/16 19:00 ~ 20:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 19:00 ~ 20:00	三重県	Mie (Yokkaichi)	0.057
25	3/16 19:00 ~ 20:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 19:00 ~ 20:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 19:00 ~ 20:00	大阪府	Osaka (Osaka)	0.043
28	3/16 19:00 ~ 20:00	兵庫県	Hyogo (Kobe)	0.037
29	3/16 19:00 ~ 20:00	奈良県	Nara (Nara)	0.047
30	3/16 19:00 ~ 20:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 19:00 ~ 20:00	鳥取県	Tottori (Touhaku-g)	0.072
32	3/16 19:00 ~ 20:00	島根県	Shimane (Matsue)	0.036
33	3/16 19:00 ~ 20:00	岡山県	Okayama (Okayama)	0.048
34	3/16 19:00 ~ 20:00	広島県	Hiroshima (Hiroshim)	0.046
35	3/16 19:00 ~ 20:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/16 19:00 ~ 20:00	徳島県	Tokushima (Tokush)	0.038
37	3/16 19:00 ~ 20:00	香川県	Kagawa (Takamats)	0.052
38	3/16 19:00 ~ 20:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/16 19:00 ~ 20:00	高知県	Kochi (Kochi)	0.025
40	3/16 19:00 ~ 20:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 19:00 ~ 20:00	佐賀県	Saga (Saga)	0.04
42	3/16 19:00 ~ 20:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 19:00 ~ 20:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 19:00 ~ 20:00	大分県	Oita (Oita)	0.049
45	3/16 19:00 ~ 20:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 19:00 ~ 20:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 19:00 ~ 20:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 21:00 ~ 22:00	北海道	Hokkaido (Sapporo)	0.027
2	3/16 21:00 ~ 22:00	青森県	Aomori (Aomori)	0.026
3	3/16 21:00 ~ 22:00	岩手県	Iwate (Morioka)	0.034
4	3/16 21:00 ~ 22:00	宮城県	Miyagi (Sendai)	0.151
5	3/16 21:00 ~ 22:00	秋田県	Akita (Akita)	0.04
6	3/16 21:00 ~ 22:00	山形県	Yamagata (Yamaga)	0.055
7	3/16 21:00 ~ 22:00	福島県	Fukushima (Futaba-gun)	
8	3/16 21:00 ~ 22:00	茨城県	Ibaraki (Mito)	0.237
9	3/16 21:00 ~ 22:00	栃木県	Tochigi (Itsunomiya)	0.211
10	3/16 21:00 ~ 22:00	群馬県	Gunma (Maebashi)	0.108
11	3/16 21:00 ~ 22:00	埼玉県	Saitama (Saitama)	0.067
12	3/16 21:00 ~ 22:00	千葉県	Chiba (Ichihara)	0.041
13	3/16 21:00 ~ 22:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 21:00 ~ 22:00	神奈川県	Kanagawa (Chigasa)	0.055
15	3/16 21:00 ~ 22:00	新潟県	Niigata (Niigata)	0.047
16	3/16 21:00 ~ 22:00	富山県	Toyama (Imizu)	0.049
17	3/16 21:00 ~ 22:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/16 21:00 ~ 22:00	福井県	Fukui (Fukui)	0.046
19	3/16 21:00 ~ 22:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 21:00 ~ 22:00	長野県	Nagano (Nagano)	0.088
21	3/16 21:00 ~ 22:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 21:00 ~ 22:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/16 21:00 ~ 22:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 21:00 ~ 22:00	三重県	Mie (Yokkaichi)	0.06
25	3/16 21:00 ~ 22:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/16 21:00 ~ 22:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 21:00 ~ 22:00	大阪府	Osaka (Osaka)	0.043
28	3/16 21:00 ~ 22:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 21:00 ~ 22:00	奈良県	Nara (Nara)	0.048
30	3/16 21:00 ~ 22:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 21:00 ~ 22:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/16 21:00 ~ 22:00	島根県	Shimane (Matsue)	0.036

33	3/16 21:00 ~ 22:00	岡山県	Okayama (Okayama)	0.049
34	3/16 21:00 ~ 22:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/16 21:00 ~ 22:00	山口県	Yamaguchi (Yamaguchi)	0.093
36	3/16 21:00 ~ 22:00	徳島県	Tokushima (Tokushima)	0.038
37	3/16 21:00 ~ 22:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/16 21:00 ~ 22:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/16 21:00 ~ 22:00	高知県	Kochi (Kochi)	0.025
40	3/16 21:00 ~ 22:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 21:00 ~ 22:00	佐賀県	Saga (Saga)	0.04
42	3/16 21:00 ~ 22:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/16 21:00 ~ 22:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 21:00 ~ 22:00	大分県	Oita (Oita)	0.05
45	3/16 21:00 ~ 22:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/16 21:00 ~ 22:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/16 21:00 ~ 22:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.024
3	3/16 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.033
4	3/16 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	0.149
5	3/16 22:00 ~ 23:00	秋田県	Akita (Akita)	0.038
6	3/16 22:00 ~ 23:00	山形県	Yamagata (Yamagata)	0.053
7	3/16 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	
8	3/16 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.235
9	3/16 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya)	0.21
10	3/16 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.108
11	3/16 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.067
12	3/16 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.04
13	3/16 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasaki)	0.055
15	3/16 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.047
16	3/16 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.05
17	3/16 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.051
18	3/16 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.048
19	3/16 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.089
21	3/16 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/16 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/16 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.057
25	3/16 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/16 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.043
28	3/16 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.038
29	3/16 22:00 ~ 23:00	奈良県	Nara (Nara)	0.047
30	3/16 22:00 ~ 23:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/16 22:00 ~ 23:00	鳥取県	Tottori (Tottori-g)	0.063
32	3/16 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.036
33	3/16 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.049
34	3/16 22:00 ~ 23:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/16 22:00 ~ 23:00	山口県	Yamaguchi (Yamaguchi)	0.094
36	3/16 22:00 ~ 23:00	徳島県	Tokushima (Tokushima)	0.038
37	3/16 22:00 ~ 23:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/16 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/16 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.025
40	3/16 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/16 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029

43	3/16 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 22:00 ~ 23:00	大分県	Oita (Oita)	0.05
45	3/16 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/16 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/16 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.021
1	3/16 23:00 ~ 24:00	北海道	Hokkaido (Sapporo)	0.028
2	3/16 23:00 ~ 24:00	青森県	Aomori (Aomori)	0.028
3	3/16 23:00 ~ 24:00	岩手県	Iwate (Morioka)	0.034
4	3/16 23:00 ~ 24:00	宮城県	Miyagi (Sendai)	0.148
5	3/16 23:00 ~ 24:00	秋田県	Akita (Akita)	0.039
6	3/16 23:00 ~ 24:00	山形県	Yamagata (Yamaga)	0.051
7	3/16 23:00 ~ 24:00	福島県	Fukushima (Futaba-gun)	
8	3/16 23:00 ~ 24:00	茨城県	Ibaraki (Mito)	0.233
9	3/16 23:00 ~ 24:00	栃木県	Tochigi (Itsunomiya)	0.208
10	3/16 23:00 ~ 24:00	群馬県	Gunma (Maebashi)	0.107
11	3/16 23:00 ~ 24:00	埼玉県	Saitama (Saitama)	0.067
12	3/16 23:00 ~ 24:00	千葉県	Chiba (Ichihara)	0.04
13	3/16 23:00 ~ 24:00	東京都	Tokyo (Shinjuku-ku)	0.053
14	3/16 23:00 ~ 24:00	神奈川県	Kanagawa (Chigasa)	0.055
15	3/16 23:00 ~ 24:00	新潟県	Niigata (Niigata)	0.047
16	3/16 23:00 ~ 24:00	富山県	Toyama (Imizu)	0.055
17	3/16 23:00 ~ 24:00	石川県	Ishikawa (Kanazawa)	0.053
18	3/16 23:00 ~ 24:00	福井県	Fukui (Fukui)	0.049
19	3/16 23:00 ~ 24:00	山梨県	Yamanashi (Kofu)	0.045
20	3/16 23:00 ~ 24:00	長野県	Nagano (Nagano)	0.087
21	3/16 23:00 ~ 24:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/16 23:00 ~ 24:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/16 23:00 ~ 24:00	愛知県	Aichi (Nagoya)	0.04
24	3/16 23:00 ~ 24:00	三重県	Mie (Yokkaichi)	0.055
25	3/16 23:00 ~ 24:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/16 23:00 ~ 24:00	京都府	Kyoto (Kyoto)	0.038
27	3/16 23:00 ~ 24:00	大阪府	Osaka (Osaka)	0.043
28	3/16 23:00 ~ 24:00	兵庫県	Hyogo (Kobe)	0.039
29	3/16 23:00 ~ 24:00	奈良県	Nara (Nara)	0.047
30	3/16 23:00 ~ 24:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/16 23:00 ~ 24:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/16 23:00 ~ 24:00	島根県	Shimane (Matsue)	0.036
33	3/16 23:00 ~ 24:00	岡山県	Okayama (Okayama)	0.049
34	3/16 23:00 ~ 24:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/16 23:00 ~ 24:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/16 23:00 ~ 24:00	徳島県	Tokushima (Tokush)	0.038
37	3/16 23:00 ~ 24:00	香川県	Kagawa (Takamats)	0.052
38	3/16 23:00 ~ 24:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/16 23:00 ~ 24:00	高知県	Kochi (Kochi)	0.025
40	3/16 23:00 ~ 24:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/16 23:00 ~ 24:00	佐賀県	Saga (Saga)	0.04
42	3/16 23:00 ~ 24:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/16 23:00 ~ 24:00	熊本県	Kumamoto (Uto)	0.027
44	3/16 23:00 ~ 24:00	大分県	Oita (Oita)	0.05
45	3/16 23:00 ~ 24:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/16 23:00 ~ 24:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/16 23:00 ~ 24:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 00:00 ~ 01:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 00:00 ~ 01:00	青森県	Aomori (Aomori)	0.026
3	3/17 00:00 ~ 01:00	岩手県	Iwate (Morioka)	0.036
4	3/17 00:00 ~ 01:00	宮城県	Miyagi (Sendai)	0.147
5	3/17 00:00 ~ 01:00	秋田県	Akita (Akita)	0.042

6	3/17 00:00 ~ 01:00	山形県	Yamagata (Yamaga	0.05
7	3/17 00:00 ~ 01:00	福島県	Fukushima (Futaba-gun)	
8	3/17 00:00 ~ 01:00	茨城県	Ibaraki (Mito)	0.232
9	3/17 00:00 ~ 01:00	栃木県	Tochigi (Itsunomiya	0.208
10	3/17 00:00 ~ 01:00	群馬県	Gunma (Maebashi)	0.106
11	3/17 00:00 ~ 01:00	埼玉県	Saitama (Saitama)	0.067
12	3/17 00:00 ~ 01:00	千葉県	Chiba (Ichihara)	0.04
13	3/17 00:00 ~ 01:00	東京都	Tokyo (Shinjuku-ku	0.053
14	3/17 00:00 ~ 01:00	神奈川県	Kanagawa (Chigasa	0.055
15	3/17 00:00 ~ 01:00	新潟県	Niigata (Niigata)	0.047
16	3/17 00:00 ~ 01:00	富山県	Toyama (Imizu)	0.056
17	3/17 00:00 ~ 01:00	石川県	Ishikawa (Kanazawa	0.052
18	3/17 00:00 ~ 01:00	福井県	Fukui (Fukui)	0.051
19	3/17 00:00 ~ 01:00	山梨県	Yamanashi (Kofu)	0.045
20	3/17 00:00 ~ 01:00	長野県	Nagano (Nagano)	0.086
21	3/17 00:00 ~ 01:00	岐阜県	Gifu (Kakamigahara	0.061
22	3/17 00:00 ~ 01:00	静岡県	Shizuoka (Shizuoka	0.039
23	3/17 00:00 ~ 01:00	愛知県	Aichi (Nagoya)	0.04
24	3/17 00:00 ~ 01:00	三重県	Mie (Yokkaichi)	0.052
25	3/17 00:00 ~ 01:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 00:00 ~ 01:00	京都府	Kyoto (Kyoto)	0.04
27	3/17 00:00 ~ 01:00	大阪府	Osaka (Osaka)	0.043
28	3/17 00:00 ~ 01:00	兵庫県	Hyogo (Kobe)	0.038
29	3/17 00:00 ~ 01:00	奈良県	Nara (Nara)	0.048
30	3/17 00:00 ~ 01:00	和歌山県	Wakayama (Wakaya	0.032
31	3/17 00:00 ~ 01:00	鳥取県	Tottori (Touhaku-g	0.063
32	3/17 00:00 ~ 01:00	島根県	Shimane (Matsue)	0.036
33	3/17 00:00 ~ 01:00	岡山県	Okayama (Okayama	0.049
34	3/17 00:00 ~ 01:00	広島県	Hiroshima (Hiroshin	0.049
35	3/17 00:00 ~ 01:00	山口県	Yamaguchi (Yamagi	0.096
36	3/17 00:00 ~ 01:00	徳島県	Tokushima (Tokush	0.038
37	3/17 00:00 ~ 01:00	香川県	Kagawa (Takamatsu	0.052
38	3/17 00:00 ~ 01:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 00:00 ~ 01:00	高知県	Kochi (Kochi)	0.026
40	3/17 00:00 ~ 01:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 00:00 ~ 01:00	佐賀県	Saga (Saga)	0.041
42	3/17 00:00 ~ 01:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 00:00 ~ 01:00	熊本県	Kumamoto (Uto)	0.028
44	3/17 00:00 ~ 01:00	大分県	Oita (Oita)	0.05
45	3/17 00:00 ~ 01:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/17 00:00 ~ 01:00	鹿児島県	Kagoshima (Kagosh	0.036
47	3/17 00:00 ~ 01:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 01:00 ~ 02:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 01:00 ~ 02:00	青森県	Aomori (Aomori)	0.022
3	3/17 01:00 ~ 02:00	岩手県	Iwate (Morioka)	0.041
4	3/17 01:00 ~ 02:00	宮城県	Miyagi (Sendai)	0.146
5	3/17 01:00 ~ 02:00	秋田県	Akita (Akita)	0.044
6	3/17 01:00 ~ 02:00	山形県	Yamagata (Yamaga	0.05
7	3/17 01:00 ~ 02:00	福島県	Fukushima (Futaba-gun)	
8	3/17 01:00 ~ 02:00	茨城県	Ibaraki (Mito)	0.231
9	3/17 01:00 ~ 02:00	栃木県	Tochigi (Itsunomiya	0.207
10	3/17 01:00 ~ 02:00	群馬県	Gunma (Maebashi)	0.106
11	3/17 01:00 ~ 02:00	埼玉県	Saitama (Saitama)	0.066
12	3/17 01:00 ~ 02:00	千葉県	Chiba (Ichihara)	0.039
13	3/17 01:00 ~ 02:00	東京都	Tokyo (Shinjuku-ku	0.053
14	3/17 01:00 ~ 02:00	神奈川県	Kanagawa (Chigasa	0.055
15	3/17 01:00 ~ 02:00	新潟県	Niigata (Niigata)	0.047

16	3/17 01:00 ~ 02:00	富山県	Toyama (Imizu)	0.051
17	3/17 01:00 ~ 02:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/17 01:00 ~ 02:00	福井県	Fukui (Fukui)	0.048
19	3/17 01:00 ~ 02:00	山梨県	Yamanashi (Kofu)	0.045
20	3/17 01:00 ~ 02:00	長野県	Nagano (Nagano)	0.086
21	3/17 01:00 ~ 02:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 01:00 ~ 02:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 01:00 ~ 02:00	愛知県	Aichi (Nagoya)	0.04
24	3/17 01:00 ~ 02:00	三重県	Mie (Yokkaichi)	0.052
25	3/17 01:00 ~ 02:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 01:00 ~ 02:00	京都府	Kyoto (Kyoto)	0.039
27	3/17 01:00 ~ 02:00	大阪府	Osaka (Osaka)	0.043
28	3/17 01:00 ~ 02:00	兵庫県	Hyogo (Kobe)	0.038
29	3/17 01:00 ~ 02:00	奈良県	Nara (Nara)	0.047
30	3/17 01:00 ~ 02:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 01:00 ~ 02:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/17 01:00 ~ 02:00	島根県	Shimane (Matsue)	0.037
33	3/17 01:00 ~ 02:00	岡山県	Okayama (Okayama)	0.049
34	3/17 01:00 ~ 02:00	広島県	Hiroshima (Hiroshim)	0.049
35	3/17 01:00 ~ 02:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/17 01:00 ~ 02:00	徳島県	Tokushima (Tokush)	0.038
37	3/17 01:00 ~ 02:00	香川県	Kagawa (Takamatsu)	0.052
38	3/17 01:00 ~ 02:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/17 01:00 ~ 02:00	高知県	Kochi (Kochi)	0.026
40	3/17 01:00 ~ 02:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 01:00 ~ 02:00	佐賀県	Saga (Saga)	0.041
42	3/17 01:00 ~ 02:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 01:00 ~ 02:00	熊本県	Kumamoto (Uto)	0.028
44	3/17 01:00 ~ 02:00	大分県	Oita (Oita)	0.05
45	3/17 01:00 ~ 02:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 01:00 ~ 02:00	鹿児島県	Kagoshima (Kagosh)	0.036
47	3/17 01:00 ~ 02:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 02:00 ~ 03:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 02:00 ~ 03:00	青森県	Aomori (Aomori)	0.02
3	3/17 02:00 ~ 03:00	岩手県	Iwate (Morioka)	0.045
4	3/17 02:00 ~ 03:00	宮城県	Miyagi (Sendai)	0.145
5	3/17 02:00 ~ 03:00	秋田県	Akita (Akita)	0.048
6	3/17 02:00 ~ 03:00	山形県	Yamagata (Yamaga)	0.05
7	3/17 02:00 ~ 03:00	福島県	Fukushima (Futaba-gun)	
8	3/17 02:00 ~ 03:00	茨城県	Ibaraki (Mito)	0.23
9	3/17 02:00 ~ 03:00	栃木県	Tochigi (Itsunomiya)	0.205
10	3/17 02:00 ~ 03:00	群馬県	Gunma (Maebashi)	0.105
11	3/17 02:00 ~ 03:00	埼玉県	Saitama (Saitama)	0.066
12	3/17 02:00 ~ 03:00	千葉県	Chiba (Ichihara)	0.039
13	3/17 02:00 ~ 03:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 02:00 ~ 03:00	神奈川県	Kanagawa (Chigasa)	0.055
15	3/17 02:00 ~ 03:00	新潟県	Niigata (Niigata)	0.048
16	3/17 02:00 ~ 03:00	富山県	Toyama (Imizu)	0.05
17	3/17 02:00 ~ 03:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/17 02:00 ~ 03:00	福井県	Fukui (Fukui)	0.048
19	3/17 02:00 ~ 03:00	山梨県	Yamanashi (Kofu)	0.045
20	3/17 02:00 ~ 03:00	長野県	Nagano (Nagano)	0.085
21	3/17 02:00 ~ 03:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 02:00 ~ 03:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 02:00 ~ 03:00	愛知県	Aichi (Nagoya)	0.04
24	3/17 02:00 ~ 03:00	三重県	Mie (Yokkaichi)	0.056
25	3/17 02:00 ~ 03:00	滋賀県	Shiga (Ohtsu)	0.032

26	3/17 02:00 ~ 03:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 02:00 ~ 03:00	大阪府	Osaka (Osaka)	0.043
28	3/17 02:00 ~ 03:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 02:00 ~ 03:00	奈良県	Nara (Nara)	0.047
30	3/17 02:00 ~ 03:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 02:00 ~ 03:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/17 02:00 ~ 03:00	島根県	Shimane (Matsue)	0.037
33	3/17 02:00 ~ 03:00	岡山県	Okayama (Okayama)	0.049
34	3/17 02:00 ~ 03:00	広島県	Hiroshima (Hiroshim)	0.049
35	3/17 02:00 ~ 03:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/17 02:00 ~ 03:00	徳島県	Tokushima (Tokush)	0.038
37	3/17 02:00 ~ 03:00	香川県	Kagawa (Takamatsu)	0.052
38	3/17 02:00 ~ 03:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 02:00 ~ 03:00	高知県	Kochi (Kochi)	0.026
40	3/17 02:00 ~ 03:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 02:00 ~ 03:00	佐賀県	Saga (Saga)	0.041
42	3/17 02:00 ~ 03:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 02:00 ~ 03:00	熊本県	Kumamoto (Uto)	0.028
44	3/17 02:00 ~ 03:00	大分県	Oita (Oita)	0.05
45	3/17 02:00 ~ 03:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/17 02:00 ~ 03:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/17 02:00 ~ 03:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 03:00 ~ 04:00	北海道	Hokkaido (Sapporo)	0.029
2	3/17 03:00 ~ 04:00	青森県	Aomori (Aomori)	0.026
3	3/17 03:00 ~ 04:00	岩手県	Iwate (Morioka)	0.048
4	3/17 03:00 ~ 04:00	宮城県	Miyagi (Sendai)	0.144
5	3/17 03:00 ~ 04:00	秋田県	Akita (Akita)	0.047
6	3/17 03:00 ~ 04:00	山形県	Yamagata (Yamaga)	0.054
7	3/17 03:00 ~ 04:00	福島県	Fukushima (Futaba-gun)	
8	3/17 03:00 ~ 04:00	茨城県	Ibaraki (Mito)	0.228
9	3/17 03:00 ~ 04:00	栃木県	Tochigi (Itsunomiya)	0.203
10	3/17 03:00 ~ 04:00	群馬県	Gunma (Maebashi)	0.104
11	3/17 03:00 ~ 04:00	埼玉県	Saitama (Saitama)	0.066
12	3/17 03:00 ~ 04:00	千葉県	Chiba (Ichihara)	0.039
13	3/17 03:00 ~ 04:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 03:00 ~ 04:00	神奈川県	Kanagawa (Chigasa)	0.054
15	3/17 03:00 ~ 04:00	新潟県	Niigata (Niigata)	0.048
16	3/17 03:00 ~ 04:00	富山県	Toyama (Imizu)	0.049
17	3/17 03:00 ~ 04:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 03:00 ~ 04:00	福井県	Fukui (Fukui)	0.046
19	3/17 03:00 ~ 04:00	山梨県	Yamanashi (Kofu)	0.045
20	3/17 03:00 ~ 04:00	長野県	Nagano (Nagano)	0.085
21	3/17 03:00 ~ 04:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 03:00 ~ 04:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 03:00 ~ 04:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 03:00 ~ 04:00	三重県	Mie (Yokkaichi)	0.052
25	3/17 03:00 ~ 04:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 03:00 ~ 04:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 03:00 ~ 04:00	大阪府	Osaka (Osaka)	0.042
28	3/17 03:00 ~ 04:00	兵庫県	Hyogo (Kobe)	0.036
29	3/17 03:00 ~ 04:00	奈良県	Nara (Nara)	0.047
30	3/17 03:00 ~ 04:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 03:00 ~ 04:00	鳥取県	Tottori (Touhaku-g)	0.069
32	3/17 03:00 ~ 04:00	島根県	Shimane (Matsue)	0.038
33	3/17 03:00 ~ 04:00	岡山県	Okayama (Okayama)	0.05
34	3/17 03:00 ~ 04:00	広島県	Hiroshima (Hiroshim)	0.049
35	3/17 03:00 ~ 04:00	山口県	Yamaguchi (Yamagi)	0.096

36	3/17 03:00 ~ 04:00	徳島県	Tokushima (Tokushu)	0.038
37	3/17 03:00 ~ 04:00	香川県	Kagawa (Takamats)	0.052
38	3/17 03:00 ~ 04:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 03:00 ~ 04:00	高知県	Kochi (Kochi)	0.026
40	3/17 03:00 ~ 04:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 03:00 ~ 04:00	佐賀県	Saga (Saga)	0.041
42	3/17 03:00 ~ 04:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 03:00 ~ 04:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 03:00 ~ 04:00	大分県	Oita (Oita)	0.05
45	3/17 03:00 ~ 04:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/17 03:00 ~ 04:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/17 03:00 ~ 04:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 04:00 ~ 05:00	北海道	Hokkaido (Sapporo)	0.031
2	3/17 04:00 ~ 05:00	青森県	Aomori (Aomori)	0.023
3	3/17 04:00 ~ 05:00	岩手県	Iwate (Morioka)	0.043
4	3/17 04:00 ~ 05:00	宮城県	Miyagi (Sendai)	0.143
5	3/17 04:00 ~ 05:00	秋田県	Akita (Akita)	0.04
6	3/17 04:00 ~ 05:00	山形県	Yamagata (Yamaga)	0.056
7	3/17 04:00 ~ 05:00	福島県	Fukushima (Futaba-gun)	
8	3/17 04:00 ~ 05:00	茨城県	Ibaraki (Mito)	0.226
9	3/17 04:00 ~ 05:00	栃木県	Tochigi (Itsunomiya)	0.203
10	3/17 04:00 ~ 05:00	群馬県	Gunma (Maebashi)	0.104
11	3/17 04:00 ~ 05:00	埼玉県	Saitama (Saitama)	0.066
12	3/17 04:00 ~ 05:00	千葉県	Chiba (Ichihara)	0.039
13	3/17 04:00 ~ 05:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 04:00 ~ 05:00	神奈川県	Kanagawa (Chigasa)	0.054
15	3/17 04:00 ~ 05:00	新潟県	Niigata (Niigata)	0.048
16	3/17 04:00 ~ 05:00	富山県	Toyama (Imizu)	0.051
17	3/17 04:00 ~ 05:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 04:00 ~ 05:00	福井県	Fukui (Fukui)	0.049
19	3/17 04:00 ~ 05:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 04:00 ~ 05:00	長野県	Nagano (Nagano)	0.085
21	3/17 04:00 ~ 05:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 04:00 ~ 05:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 04:00 ~ 05:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 04:00 ~ 05:00	三重県	Mie (Yokkaichi)	0.049
25	3/17 04:00 ~ 05:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 04:00 ~ 05:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 04:00 ~ 05:00	大阪府	Osaka (Osaka)	0.042
28	3/17 04:00 ~ 05:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 04:00 ~ 05:00	奈良県	Nara (Nara)	0.047
30	3/17 04:00 ~ 05:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 04:00 ~ 05:00	鳥取県	Tottori (Touhaku-g)	0.071
32	3/17 04:00 ~ 05:00	島根県	Shimane (Matsue)	0.038
33	3/17 04:00 ~ 05:00	岡山県	Okayama (Okayama)	0.05
34	3/17 04:00 ~ 05:00	広島県	Hiroshima (Hiroshim)	0.05
35	3/17 04:00 ~ 05:00	山口県	Yamaguchi (Yamagi)	0.098
36	3/17 04:00 ~ 05:00	徳島県	Tokushima (Tokushu)	0.037
37	3/17 04:00 ~ 05:00	香川県	Kagawa (Takamats)	0.052
38	3/17 04:00 ~ 05:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 04:00 ~ 05:00	高知県	Kochi (Kochi)	0.026
40	3/17 04:00 ~ 05:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 04:00 ~ 05:00	佐賀県	Saga (Saga)	0.041
42	3/17 04:00 ~ 05:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 04:00 ~ 05:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 04:00 ~ 05:00	大分県	Oita (Oita)	0.05
45	3/17 04:00 ~ 05:00	宮崎県	Miyazaki (Miyazaki)	0.027

46	3/17 04:00 ~ 05:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/17 04:00 ~ 05:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 05:00 ~ 06:00	北海道	Hokkaido (Sapporo)	0.031
2	3/17 05:00 ~ 06:00	青森県	Aomori (Aomori)	0.021
3	3/17 05:00 ~ 06:00	岩手県	Iwate (Morioka)	0.036
4	3/17 05:00 ~ 06:00	宮城県	Miyagi (Sendai)	0.141
5	3/17 05:00 ~ 06:00	秋田県	Akita (Akita)	0.036
6	3/17 05:00 ~ 06:00	山形県	Yamagata (Yamagata)	0.051
7	3/17 05:00 ~ 06:00	福島県	Fukushima (Futaba-gun)	
8	3/17 05:00 ~ 06:00	茨城県	Ibaraki (Mito)	0.225
9	3/17 05:00 ~ 06:00	栃木県	Tochigi (Itsunomiya)	0.201
10	3/17 05:00 ~ 06:00	群馬県	Gunma (Maebashi)	0.103
11	3/17 05:00 ~ 06:00	埼玉県	Saitama (Saitama)	0.065
12	3/17 05:00 ~ 06:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 05:00 ~ 06:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 05:00 ~ 06:00	神奈川県	Kanagawa (Chigasaki)	0.054
15	3/17 05:00 ~ 06:00	新潟県	Niigata (Niigata)	0.048
16	3/17 05:00 ~ 06:00	富山県	Toyama (Imizu)	0.055
17	3/17 05:00 ~ 06:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 05:00 ~ 06:00	福井県	Fukui (Fukui)	0.052
19	3/17 05:00 ~ 06:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 05:00 ~ 06:00	長野県	Nagano (Nagano)	0.085
21	3/17 05:00 ~ 06:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 05:00 ~ 06:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 05:00 ~ 06:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 05:00 ~ 06:00	三重県	Mie (Yokkaichi)	0.048
25	3/17 05:00 ~ 06:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 05:00 ~ 06:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 05:00 ~ 06:00	大阪府	Osaka (Osaka)	0.043
28	3/17 05:00 ~ 06:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 05:00 ~ 06:00	奈良県	Nara (Nara)	0.047
30	3/17 05:00 ~ 06:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/17 05:00 ~ 06:00	鳥取県	Tottori (Tottori)	0.071
32	3/17 05:00 ~ 06:00	島根県	Shimane (Matsue)	0.037
33	3/17 05:00 ~ 06:00	岡山県	Okayama (Okayama)	0.05
34	3/17 05:00 ~ 06:00	広島県	Hiroshima (Hiroshima)	0.049
35	3/17 05:00 ~ 06:00	山口県	Yamaguchi (Yamaguchi)	0.099
36	3/17 05:00 ~ 06:00	徳島県	Tokushima (Tokushima)	0.038
37	3/17 05:00 ~ 06:00	香川県	Kagawa (Takamatsu)	0.052
38	3/17 05:00 ~ 06:00	愛媛県	Ehime (Matsuyama)	0.051
39	3/17 05:00 ~ 06:00	高知県	Kochi (Kochi)	0.027
40	3/17 05:00 ~ 06:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 05:00 ~ 06:00	佐賀県	Saga (Saga)	0.041
42	3/17 05:00 ~ 06:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 05:00 ~ 06:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 05:00 ~ 06:00	大分県	Oita (Oita)	0.05
45	3/17 05:00 ~ 06:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/17 05:00 ~ 06:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/17 05:00 ~ 06:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 06:00 ~ 07:00	北海道	Hokkaido (Sapporo)	0.03
2	3/17 06:00 ~ 07:00	青森県	Aomori (Aomori)	0.02
3	3/17 06:00 ~ 07:00	岩手県	Iwate (Morioka)	0.033
4	3/17 06:00 ~ 07:00	宮城県	Miyagi (Sendai)	0.14
5	3/17 06:00 ~ 07:00	秋田県	Akita (Akita)	0.034
6	3/17 06:00 ~ 07:00	山形県	Yamagata (Yamagata)	0.055
7	3/17 06:00 ~ 07:00	福島県	Fukushima (Futaba-gun)	
8	3/17 06:00 ~ 07:00	茨城県	Ibaraki (Mito)	0.225

9	3/17 06:00 ~ 07:00	栃木県	Tochigi (Itsunomiya)	0.2
10	3/17 06:00 ~ 07:00	群馬県	Gunma (Maebashi)	0.102
11	3/17 06:00 ~ 07:00	埼玉県	Saitama (Saitama)	0.065
12	3/17 06:00 ~ 07:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 06:00 ~ 07:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 06:00 ~ 07:00	神奈川県	Kanagawa (Chigasa)	0.054
15	3/17 06:00 ~ 07:00	新潟県	Niigata (Niigata)	0.047
16	3/17 06:00 ~ 07:00	富山県	Toyama (Imizu)	0.051
17	3/17 06:00 ~ 07:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/17 06:00 ~ 07:00	福井県	Fukui (Fukui)	0.048
19	3/17 06:00 ~ 07:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 06:00 ~ 07:00	長野県	Nagano (Nagano)	0.085
21	3/17 06:00 ~ 07:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 06:00 ~ 07:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 06:00 ~ 07:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 06:00 ~ 07:00	三重県	Mie (Yokkaichi)	0.047
25	3/17 06:00 ~ 07:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 06:00 ~ 07:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 06:00 ~ 07:00	大阪府	Osaka (Osaka)	0.043
28	3/17 06:00 ~ 07:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 06:00 ~ 07:00	奈良県	Nara (Nara)	0.047
30	3/17 06:00 ~ 07:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 06:00 ~ 07:00	鳥取県	Tottori (Touhaku-g)	0.069
32	3/17 06:00 ~ 07:00	島根県	Shimane (Matsue)	0.038
33	3/17 06:00 ~ 07:00	岡山県	Okayama (Okayama)	0.051
34	3/17 06:00 ~ 07:00	広島県	Hiroshima (Hiroshim)	0.049
35	3/17 06:00 ~ 07:00	山口県	Yamaguchi (Yamaguchi)	0.098
36	3/17 06:00 ~ 07:00	徳島県	Tokushima (Tokushu)	0.038
37	3/17 06:00 ~ 07:00	香川県	Kagawa (Takamatsu)	0.052
38	3/17 06:00 ~ 07:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 06:00 ~ 07:00	高知県	Kochi (Kochi)	0.027
40	3/17 06:00 ~ 07:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 06:00 ~ 07:00	佐賀県	Saga (Saga)	0.04
42	3/17 06:00 ~ 07:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 06:00 ~ 07:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 06:00 ~ 07:00	大分県	Oita (Oita)	0.05
45	3/17 06:00 ~ 07:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 06:00 ~ 07:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/17 06:00 ~ 07:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 07:00 ~ 08:00	北海道	Hokkaido (Sapporo)	0.03
2	3/17 07:00 ~ 08:00	青森県	Aomori (Aomori)	0.02
3	3/17 07:00 ~ 08:00	岩手県	Iwate (Morioka)	0.032
4	3/17 07:00 ~ 08:00	宮城県	Miyagi (Sendai)	0.131
5	3/17 07:00 ~ 08:00	秋田県	Akita (Akita)	0.034
6	3/17 07:00 ~ 08:00	山形県	Yamagata (Yamagata)	0.054
7	3/17 07:00 ~ 08:00	福島県	Fukushima (Futaba-gun)	
8	3/17 07:00 ~ 08:00	茨城県	Ibaraki (Mito)	0.224
9	3/17 07:00 ~ 08:00	栃木県	Tochigi (Itsunomiya)	0.199
10	3/17 07:00 ~ 08:00	群馬県	Gunma (Maebashi)	0.101
11	3/17 07:00 ~ 08:00	埼玉県	Saitama (Saitama)	0.065
12	3/17 07:00 ~ 08:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 07:00 ~ 08:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 07:00 ~ 08:00	神奈川県	Kanagawa (Chigasa)	0.054
15	3/17 07:00 ~ 08:00	新潟県	Niigata (Niigata)	0.047
16	3/17 07:00 ~ 08:00	富山県	Toyama (Imizu)	0.048
17	3/17 07:00 ~ 08:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/17 07:00 ~ 08:00	福井県	Fukui (Fukui)	0.046

19	3/17 07:00 ~ 08:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 07:00 ~ 08:00	長野県	Nagano (Nagano)	0.083
21	3/17 07:00 ~ 08:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 07:00 ~ 08:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 07:00 ~ 08:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 07:00 ~ 08:00	三重県	Mie (Yokkaichi)	0.046
25	3/17 07:00 ~ 08:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 07:00 ~ 08:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 07:00 ~ 08:00	大阪府	Osaka (Osaka)	0.043
28	3/17 07:00 ~ 08:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 07:00 ~ 08:00	奈良県	Nara (Nara)	0.047
30	3/17 07:00 ~ 08:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 07:00 ~ 08:00	鳥取県	Tottori (Touhaku-g)	0.076
32	3/17 07:00 ~ 08:00	島根県	Shimane (Matsue)	0.042
33	3/17 07:00 ~ 08:00	岡山県	Okayama (Okayama)	0.051
34	3/17 07:00 ~ 08:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/17 07:00 ~ 08:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/17 07:00 ~ 08:00	徳島県	Tokushima (Tokush)	0.038
37	3/17 07:00 ~ 08:00	香川県	Kagawa (Takamats)	0.052
38	3/17 07:00 ~ 08:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 07:00 ~ 08:00	高知県	Kochi (Kochi)	0.028
40	3/17 07:00 ~ 08:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 07:00 ~ 08:00	佐賀県	Saga (Saga)	0.04
42	3/17 07:00 ~ 08:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 07:00 ~ 08:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 07:00 ~ 08:00	大分県	Oita (Oita)	0.05
45	3/17 07:00 ~ 08:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 07:00 ~ 08:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 07:00 ~ 08:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 08:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.029
2	3/17 08:00 ~ 09:00	青森県	Aomori (Aomori)	0.02
3	3/17 08:00 ~ 09:00	岩手県	Iwate (Morioka)	0.031
4	3/17 08:00 ~ 09:00	宮城県	Miyagi (Sendai)	
5	3/17 08:00 ~ 09:00	秋田県	Akita (Akita)	0.034
6	3/17 08:00 ~ 09:00	山形県	Yamagata (Yamaga)	0.051
7	3/17 08:00 ~ 09:00	福島県	Fukushima (Futaba-gun)	
8	3/17 08:00 ~ 09:00	茨城県	Ibaraki (Mito)	0.222
9	3/17 08:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	0.197
10	3/17 08:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.101
11	3/17 08:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.064
12	3/17 08:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 08:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 08:00 ~ 09:00	神奈川県	Kanagawa (Chigasa)	0.054
15	3/17 08:00 ~ 09:00	新潟県	Niigata (Niigata)	0.046
16	3/17 08:00 ~ 09:00	富山県	Toyama (Imizu)	0.049
17	3/17 08:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 08:00 ~ 09:00	福井県	Fukui (Fukui)	0.05
19	3/17 08:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 08:00 ~ 09:00	長野県	Nagano (Nagano)	0.082
21	3/17 08:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 08:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/17 08:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 08:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.045
25	3/17 08:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 08:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 08:00 ~ 09:00	大阪府	Osaka (Osaka)	0.042
28	3/17 08:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.036

29	3/17 08:00 ~ 09:00	奈良県	Nara (Nara)	0.047
30	3/17 08:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 08:00 ~ 09:00	鳥取県	Tottori (Touhaku-g)	0.078
32	3/17 08:00 ~ 09:00	島根県	Shimane (Matsue)	0.043
33	3/17 08:00 ~ 09:00	岡山県	Okayama (Okayama)	0.051
34	3/17 08:00 ~ 09:00	広島県	Hiroshima (Hiroshima)	0.049
35	3/17 08:00 ~ 09:00	山口県	Yamaguchi (Yamaguchi)	0.094
36	3/17 08:00 ~ 09:00	徳島県	Tokushima (Tokushima)	0.038
37	3/17 08:00 ~ 09:00	香川県	Kagawa (Takamatsuki)	0.052
38	3/17 08:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/17 08:00 ~ 09:00	高知県	Kochi (Kochi)	0.027
40	3/17 08:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 08:00 ~ 09:00	佐賀県	Saga (Saga)	0.04
42	3/17 08:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 08:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 08:00 ~ 09:00	大分県	Oita (Oita)	0.05
45	3/17 08:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 08:00 ~ 09:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/17 08:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 09:00 ~ 10:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 09:00 ~ 10:00	青森県	Aomori (Aomori)	0.02
3	3/17 09:00 ~ 10:00	岩手県	Iwate (Morioka)	0.031
4	3/17 09:00 ~ 10:00	宮城県	Miyagi (Sendai)	0.138
5	3/17 09:00 ~ 10:00	秋田県	Akita (Akita)	0.034
6	3/17 09:00 ~ 10:00	山形県	Yamagata (Yamagata)	0.052
7	3/17 09:00 ~ 10:00	福島県	Fukushima (Futaba-gun)	
8	3/17 09:00 ~ 10:00	茨城県	Ibaraki (Mito)	0.218
9	3/17 09:00 ~ 10:00	栃木県	Tochigi (Itsunomiya)	0.195
10	3/17 09:00 ~ 10:00	群馬県	Gunma (Maebashi)	0.1
11	3/17 09:00 ~ 10:00	埼玉県	Saitama (Saitama)	0.064
12	3/17 09:00 ~ 10:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 09:00 ~ 10:00	東京都	Tokyo (Shinjuku-ku)	0.052
14	3/17 09:00 ~ 10:00	神奈川県	Kanagawa (Chigasaki)	0.053
15	3/17 09:00 ~ 10:00	新潟県	Niigata (Niigata)	0.046
16	3/17 09:00 ~ 10:00	富山県	Toyama (Imizu)	0.05
17	3/17 09:00 ~ 10:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 09:00 ~ 10:00	福井県	Fukui (Fukui)	0.051
19	3/17 09:00 ~ 10:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 09:00 ~ 10:00	長野県	Nagano (Nagano)	0.081
21	3/17 09:00 ~ 10:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 09:00 ~ 10:00	静岡県	Shizuoka (Shizuoka)	0.043
23	3/17 09:00 ~ 10:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 09:00 ~ 10:00	三重県	Mie (Yokkaichi)	0.045
25	3/17 09:00 ~ 10:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 09:00 ~ 10:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 09:00 ~ 10:00	大阪府	Osaka (Osaka)	0.042
28	3/17 09:00 ~ 10:00	兵庫県	Hyogo (Kobe)	0.036
29	3/17 09:00 ~ 10:00	奈良県	Nara (Nara)	0.047
30	3/17 09:00 ~ 10:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 09:00 ~ 10:00	鳥取県	Tottori (Touhaku-g)	0.079
32	3/17 09:00 ~ 10:00	島根県	Shimane (Matsue)	0.039
33	3/17 09:00 ~ 10:00	岡山県	Okayama (Okayama)	0.049
34	3/17 09:00 ~ 10:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/17 09:00 ~ 10:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/17 09:00 ~ 10:00	徳島県	Tokushima (Tokushima)	0.037
37	3/17 09:00 ~ 10:00	香川県	Kagawa (Takamatsuki)	0.052
38	3/17 09:00 ~ 10:00	愛媛県	Ehime (Matsuyama)	0.048

39	3/17 09:00 ~ 10:00	高知県	Kochi (Kochi)	0.025
40	3/17 09:00 ~ 10:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 09:00 ~ 10:00	佐賀県	Saga (Saga)	0.04
42	3/17 09:00 ~ 10:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 09:00 ~ 10:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 09:00 ~ 10:00	大分県	Oita (Oita)	0.049
45	3/17 09:00 ~ 10:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 09:00 ~ 10:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 09:00 ~ 10:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 10:00 ~ 11:00	北海道	Hokkaido (Sapporo)	0.029
2	3/17 10:00 ~ 11:00	青森県	Aomori (Aomori)	0.02
3	3/17 10:00 ~ 11:00	岩手県	Iwate (Morioka)	0.031
4	3/17 10:00 ~ 11:00	宮城県	Miyagi (Sendai)	0.137
5	3/17 10:00 ~ 11:00	秋田県	Akita (Akita)	0.034
6	3/17 10:00 ~ 11:00	山形県	Yamagata (Yamaga)	0.053
7	3/17 10:00 ~ 11:00	福島県	Fukushima (Futaba-gun)	
8	3/17 10:00 ~ 11:00	茨城県	Ibaraki (Mito)	0.217
9	3/17 10:00 ~ 11:00	栃木県	Tochigi (Itsunomiya)	0.194
10	3/17 10:00 ~ 11:00	群馬県	Gunma (Maebashi)	0.099
11	3/17 10:00 ~ 11:00	埼玉県	Saitama (Saitama)	0.064
12	3/17 10:00 ~ 11:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 10:00 ~ 11:00	東京都	Tokyo (Shinjuku-ku)	0.051
14	3/17 10:00 ~ 11:00	神奈川県	Kanagawa (Chigasa)	0.053
15	3/17 10:00 ~ 11:00	新潟県	Niigata (Niigata)	0.046
16	3/17 10:00 ~ 11:00	富山県	Toyama (Imizu)	0.049
17	3/17 10:00 ~ 11:00	石川県	Ishikawa (Kanazawa)	0.05
18	3/17 10:00 ~ 11:00	福井県	Fukui (Fukui)	0.049
19	3/17 10:00 ~ 11:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 10:00 ~ 11:00	長野県	Nagano (Nagano)	0.08
21	3/17 10:00 ~ 11:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 10:00 ~ 11:00	静岡県	Shizuoka (Shizuoka)	0.044
23	3/17 10:00 ~ 11:00	愛知県	Aichi (Nagoya)	0.04
24	3/17 10:00 ~ 11:00	三重県	Mie (Yokkaichi)	0.045
25	3/17 10:00 ~ 11:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 10:00 ~ 11:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 10:00 ~ 11:00	大阪府	Osaka (Osaka)	0.043
28	3/17 10:00 ~ 11:00	兵庫県	Hyogo (Kobe)	0.036
29	3/17 10:00 ~ 11:00	奈良県	Nara (Nara)	0.047
30	3/17 10:00 ~ 11:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 10:00 ~ 11:00	鳥取県	Tottori (Touhaku-g)	0.083
32	3/17 10:00 ~ 11:00	島根県	Shimane (Matsue)	0.041
33	3/17 10:00 ~ 11:00	岡山県	Okayama (Okayama)	0.048
34	3/17 10:00 ~ 11:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/17 10:00 ~ 11:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/17 10:00 ~ 11:00	徳島県	Tokushima (Tokush)	0.037
37	3/17 10:00 ~ 11:00	香川県	Kagawa (Takamats)	0.052
38	3/17 10:00 ~ 11:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/17 10:00 ~ 11:00	高知県	Kochi (Kochi)	0.025
40	3/17 10:00 ~ 11:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 10:00 ~ 11:00	佐賀県	Saga (Saga)	0.039
42	3/17 10:00 ~ 11:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 10:00 ~ 11:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 10:00 ~ 11:00	大分県	Oita (Oita)	0.05
45	3/17 10:00 ~ 11:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 10:00 ~ 11:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 10:00 ~ 11:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 11:00 ~ 12:00	北海道	Hokkaido (Sapporo)	0.031

2	3/17 11:00 ~ 12:00	青森県	Aomori (Aomori)	0.022
3	3/17 11:00 ~ 12:00	岩手県	Iwate (Morioka)	0.03
4	3/17 11:00 ~ 12:00	宮城県	Miyagi (Sendai)	0.139
5	3/17 11:00 ~ 12:00	秋田県	Akita (Akita)	0.034
6	3/17 11:00 ~ 12:00	山形県	Yamagata (Yamaga	0.05
7	3/17 11:00 ~ 12:00	福島県	Fukushima (Futaba-gun)	
8	3/17 11:00 ~ 12:00	茨城県	Ibaraki (Mito)	0.215
9	3/17 11:00 ~ 12:00	栃木県	Tochigi (Itsunomiya	0.193
10	3/17 11:00 ~ 12:00	群馬県	Gunma (Maebashi)	0.099
11	3/17 11:00 ~ 12:00	埼玉県	Saitama (Saitama)	0.064
12	3/17 11:00 ~ 12:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 11:00 ~ 12:00	東京都	Tokyo (Shinjuku-ku	0.051
14	3/17 11:00 ~ 12:00	神奈川県	Kanagawa (Chigasa	0.053
15	3/17 11:00 ~ 12:00	新潟県	Niigata (Niigata)	0.046
16	3/17 11:00 ~ 12:00	富山県	Toyama (Imizu)	0.048
17	3/17 11:00 ~ 12:00	石川県	Ishikawa (Kanazawa	0.048
18	3/17 11:00 ~ 12:00	福井県	Fukui (Fukui)	0.049
19	3/17 11:00 ~ 12:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 11:00 ~ 12:00	長野県	Nagano (Nagano)	0.079
21	3/17 11:00 ~ 12:00	岐阜県	Gifu (Kakamigahara	0.06
22	3/17 11:00 ~ 12:00	静岡県	Shizuoka (Shizuoka	0.044
23	3/17 11:00 ~ 12:00	愛知県	Aichi (Nagoya)	0.04
24	3/17 11:00 ~ 12:00	三重県	Mie (Yokkaichi)	0.045
25	3/17 11:00 ~ 12:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 11:00 ~ 12:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 11:00 ~ 12:00	大阪府	Osaka (Osaka)	0.043
28	3/17 11:00 ~ 12:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 11:00 ~ 12:00	奈良県	Nara (Nara)	0.047
30	3/17 11:00 ~ 12:00	和歌山県	Wakayama (Wakaya	0.031
31	3/17 11:00 ~ 12:00	鳥取県	Tottori (Touhaku-g	0.078
32	3/17 11:00 ~ 12:00	島根県	Shimane (Matsue)	0.042
33	3/17 11:00 ~ 12:00	岡山県	Okayama (Okayama	0.048
34	3/17 11:00 ~ 12:00	広島県	Hiroshima (Hiroshin	0.048
35	3/17 11:00 ~ 12:00	山口県	Yamaguchi (Yamagi	0.092
36	3/17 11:00 ~ 12:00	徳島県	Tokushima (Tokush	0.037
37	3/17 11:00 ~ 12:00	香川県	Kagawa (Takamats	0.052
38	3/17 11:00 ~ 12:00	愛媛県	Ehime (Matsuyama	0.047
39	3/17 11:00 ~ 12:00	高知県	Kochi (Kochi)	0.025
40	3/17 11:00 ~ 12:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 11:00 ~ 12:00	佐賀県	Saga (Saga)	0.039
42	3/17 11:00 ~ 12:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 11:00 ~ 12:00	熊本県	Kumamoto (Uto)	0.026
44	3/17 11:00 ~ 12:00	大分県	Oita (Oita)	0.05
45	3/17 11:00 ~ 12:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 11:00 ~ 12:00	鹿児島県	Kagoshima (Kagosh	0.034
47	3/17 11:00 ~ 12:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 12:00 ~ 13:00	北海道	Hokkaido (Sapporo	0.035
2	3/17 12:00 ~ 13:00	青森県	Aomori (Aomori)	0.027
3	3/17 12:00 ~ 13:00	岩手県	Iwate (Morioka)	0.03
4	3/17 12:00 ~ 13:00	宮城県	Miyagi (Sendai)	0.143
5	3/17 12:00 ~ 13:00	秋田県	Akita (Akita)	0.034
6	3/17 12:00 ~ 13:00	山形県	Yamagata (Yamaga	0.052
7	3/17 12:00 ~ 13:00	福島県	Fukushima (Futaba-gun)	
8	3/17 12:00 ~ 13:00	茨城県	Ibaraki (Mito)	0.214
9	3/17 12:00 ~ 13:00	栃木県	Tochigi (Itsunomiya	0.192
10	3/17 12:00 ~ 13:00	群馬県	Gunma (Maebashi)	0.099
11	3/17 12:00 ~ 13:00	埼玉県	Saitama (Saitama)	0.063

12	3/17 12:00 ~ 13:00	千葉県	Chiba (Ichihara)	0.037
13	3/17 12:00 ~ 13:00	東京都	Tokyo (Shinjuku-ku)	0.051
14	3/17 12:00 ~ 13:00	神奈川県	Kanagawa (Chigasa)	0.053
15	3/17 12:00 ~ 13:00	新潟県	Niigata (Niigata)	0.046
16	3/17 12:00 ~ 13:00	富山県	Toyama (Imizu)	0.049
17	3/17 12:00 ~ 13:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/17 12:00 ~ 13:00	福井県	Fukui (Fukui)	0.046
19	3/17 12:00 ~ 13:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 12:00 ~ 13:00	長野県	Nagano (Nagano)	0.078
21	3/17 12:00 ~ 13:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 12:00 ~ 13:00	静岡県	Shizuoka (Shizuoka)	0.044
23	3/17 12:00 ~ 13:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 12:00 ~ 13:00	三重県	Mie (Yokkaichi)	0.046
25	3/17 12:00 ~ 13:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 12:00 ~ 13:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 12:00 ~ 13:00	大阪府	Osaka (Osaka)	0.043
28	3/17 12:00 ~ 13:00	兵庫県	Hyogo (Kobe)	0.038
29	3/17 12:00 ~ 13:00	奈良県	Nara (Nara)	0.048
30	3/17 12:00 ~ 13:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/17 12:00 ~ 13:00	鳥取県	Tottori (Touhaku-g)	0.066
32	3/17 12:00 ~ 13:00	島根県	Shimane (Matsue)	0.043
33	3/17 12:00 ~ 13:00	岡山県	Okayama (Okayama)	0.048
34	3/17 12:00 ~ 13:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/17 12:00 ~ 13:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/17 12:00 ~ 13:00	徳島県	Tokushima (Tokushima)	0.037
37	3/17 12:00 ~ 13:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/17 12:00 ~ 13:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/17 12:00 ~ 13:00	高知県	Kochi (Kochi)	0.025
40	3/17 12:00 ~ 13:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 12:00 ~ 13:00	佐賀県	Saga (Saga)	0.039
42	3/17 12:00 ~ 13:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 12:00 ~ 13:00	熊本県	Kumamoto (Uto)	0.026
44	3/17 12:00 ~ 13:00	大分県	Oita (Oita)	0.049
45	3/17 12:00 ~ 13:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 12:00 ~ 13:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/17 12:00 ~ 13:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 13:00 ~ 14:00	北海道	Hokkaido (Sapporo)	0.033
2	3/17 13:00 ~ 14:00	青森県	Aomori (Aomori)	0.033
3	3/17 13:00 ~ 14:00	岩手県	Iwate (Morioka)	0.03
4	3/17 13:00 ~ 14:00	宮城県	Miyagi (Sendai)	0.141
5	3/17 13:00 ~ 14:00	秋田県	Akita (Akita)	0.034
6	3/17 13:00 ~ 14:00	山形県	Yamagata (Yamagata)	0.052
7	3/17 13:00 ~ 14:00	福島県	Fukushima (Futaba-gun)	
8	3/17 13:00 ~ 14:00	茨城県	Ibaraki (Mito)	0.212
9	3/17 13:00 ~ 14:00	栃木県	Tochigi (Itsunomiya)	0.191
10	3/17 13:00 ~ 14:00	群馬県	Gunma (Maebashi)	0.098
11	3/17 13:00 ~ 14:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 13:00 ~ 14:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 13:00 ~ 14:00	東京都	Tokyo (Shinjuku-ku)	0.051
14	3/17 13:00 ~ 14:00	神奈川県	Kanagawa (Chigasaki)	
15	3/17 13:00 ~ 14:00	新潟県	Niigata (Niigata)	0.046
16	3/17 13:00 ~ 14:00	富山県	Toyama (Imizu)	0.049
17	3/17 13:00 ~ 14:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/17 13:00 ~ 14:00	福井県	Fukui (Fukui)	0.046
19	3/17 13:00 ~ 14:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 13:00 ~ 14:00	長野県	Nagano (Nagano)	0.078
21	3/17 13:00 ~ 14:00	岐阜県	Gifu (Kakamigahara)	0.06

22	3/17 13:00 ~ 14:00	静岡県	Shizuoka (Shizuoka)	0.044
23	3/17 13:00 ~ 14:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 13:00 ~ 14:00	三重県	Mie (Yokkaichi)	0.046
25	3/17 13:00 ~ 14:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/17 13:00 ~ 14:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 13:00 ~ 14:00	大阪府	Osaka (Osaka)	0.043
28	3/17 13:00 ~ 14:00	兵庫県	Hyogo (Kobe)	0.039
29	3/17 13:00 ~ 14:00	奈良県	Nara (Nara)	0.048
30	3/17 13:00 ~ 14:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 13:00 ~ 14:00	鳥取県	Tottori (Touhaku-g)	0.061
32	3/17 13:00 ~ 14:00	島根県	Shimane (Matsue)	0.039
33	3/17 13:00 ~ 14:00	岡山県	Okayama (Okayama)	0.049
34	3/17 13:00 ~ 14:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/17 13:00 ~ 14:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/17 13:00 ~ 14:00	徳島県	Tokushima (Tokush)	0.037
37	3/17 13:00 ~ 14:00	香川県	Kagawa (Takamats)	0.052
38	3/17 13:00 ~ 14:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/17 13:00 ~ 14:00	高知県	Kochi (Kochi)	0.025
40	3/17 13:00 ~ 14:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 13:00 ~ 14:00	佐賀県	Saga (Saga)	0.039
42	3/17 13:00 ~ 14:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 13:00 ~ 14:00	熊本県	Kumamoto (Uto)	0.026
44	3/17 13:00 ~ 14:00	大分県	Oita (Oita)	0.049
45	3/17 13:00 ~ 14:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 13:00 ~ 14:00	鹿児島県	Kagoshima (Kagosh)	0.033
47	3/17 13:00 ~ 14:00	沖縄県	Okinawa (Uruma)	0.022
1	3/17 14:00 ~ 15:00	北海道	Hokkaido (Sapporo)	0.031
2	3/17 14:00 ~ 15:00	青森県	Aomori (Aomori)	0.033
3	3/17 14:00 ~ 15:00	岩手県	Iwate (Morioka)	0.029
4	3/17 14:00 ~ 15:00	宮城県	Miyagi (Sendai)	0.141
5	3/17 14:00 ~ 15:00	秋田県	Akita (Akita)	0.036
6	3/17 14:00 ~ 15:00	山形県	Yamagata (Yamaga)	0.047
7	3/17 14:00 ~ 15:00	福島県	Fukushima (Futaba-gun)	
8	3/17 14:00 ~ 15:00	茨城県	Ibaraki (Mito)	0.212
9	3/17 14:00 ~ 15:00	栃木県	Tochigi (Itsunomiya)	0.19
10	3/17 14:00 ~ 15:00	群馬県	Gunma (Maebashi)	0.097
11	3/17 14:00 ~ 15:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 14:00 ~ 15:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 14:00 ~ 15:00	東京都	Tokyo (Shinjuku-ku)	0.051
14	3/17 14:00 ~ 15:00	神奈川県	Kanagawa (Chigasaki)	
15	3/17 14:00 ~ 15:00	新潟県	Niigata (Niigata)	0.046
16	3/17 14:00 ~ 15:00	富山県	Toyama (Imizu)	0.05
17	3/17 14:00 ~ 15:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/17 14:00 ~ 15:00	福井県	Fukui (Fukui)	0.046
19	3/17 14:00 ~ 15:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 14:00 ~ 15:00	長野県	Nagano (Nagano)	0.078
21	3/17 14:00 ~ 15:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 14:00 ~ 15:00	静岡県	Shizuoka (Shizuoka)	0.044
23	3/17 14:00 ~ 15:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 14:00 ~ 15:00	三重県	Mie (Yokkaichi)	0.047
25	3/17 14:00 ~ 15:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/17 14:00 ~ 15:00	京都府	Kyoto (Kyoto)	0.041
27	3/17 14:00 ~ 15:00	大阪府	Osaka (Osaka)	0.046
28	3/17 14:00 ~ 15:00	兵庫県	Hyogo (Kobe)	0.039
29	3/17 14:00 ~ 15:00	奈良県	Nara (Nara)	0.048
30	3/17 14:00 ~ 15:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 14:00 ~ 15:00	鳥取県	Tottori (Touhaku-g)	0.062

32	3/17 14:00 ~ 15:00	島根県	Shimane (Matsue)	0.037
33	3/17 14:00 ~ 15:00	岡山県	Okayama (Okayama)	0.053
34	3/17 14:00 ~ 15:00	広島県	Hiroshima (Hiroshima)	0.049
35	3/17 14:00 ~ 15:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/17 14:00 ~ 15:00	徳島県	Tokushima (Tokushima)	0.037
37	3/17 14:00 ~ 15:00	香川県	Kagawa (Takamatsushima)	0.053
38	3/17 14:00 ~ 15:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/17 14:00 ~ 15:00	高知県	Kochi (Kochi)	0.025
40	3/17 14:00 ~ 15:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 14:00 ~ 15:00	佐賀県	Saga (Saga)	0.039
42	3/17 14:00 ~ 15:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 14:00 ~ 15:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 14:00 ~ 15:00	大分県	Oita (Oita)	0.049
45	3/17 14:00 ~ 15:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 14:00 ~ 15:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/17 14:00 ~ 15:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 15:00 ~ 16:00	北海道	Hokkaido (Sapporo)	0.031
2	3/17 15:00 ~ 16:00	青森県	Aomori (Aomori)	0.029
3	3/17 15:00 ~ 16:00	岩手県	Iwate (Morioka)	0.03
4	3/17 15:00 ~ 16:00	宮城県	Miyagi (Sendai)	0.141
5	3/17 15:00 ~ 16:00	秋田県	Akita (Akita)	0.041
6	3/17 15:00 ~ 16:00	山形県	Yamagata (Yamagata)	0.046
7	3/17 15:00 ~ 16:00	福島県	Fukushima (Futaba-gun)	
8	3/17 15:00 ~ 16:00	茨城県	Ibaraki (Mito)	0.21
9	3/17 15:00 ~ 16:00	栃木県	Tochigi (Itsunomiya)	0.189
10	3/17 15:00 ~ 16:00	群馬県	Gunma (Maebashi)	0.096
11	3/17 15:00 ~ 16:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 15:00 ~ 16:00	千葉県	Chiba (Ichihara)	0.038
13	3/17 15:00 ~ 16:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 15:00 ~ 16:00	神奈川県	Kanagawa (Chigasaki)	0.052
15	3/17 15:00 ~ 16:00	新潟県	Niigata (Niigata)	0.046
16	3/17 15:00 ~ 16:00	富山県	Toyama (Imizu)	0.05
17	3/17 15:00 ~ 16:00	石川県	Ishikawa (Kanazawa)	0.05
18	3/17 15:00 ~ 16:00	福井県	Fukui (Fukui)	0.045
19	3/17 15:00 ~ 16:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 15:00 ~ 16:00	長野県	Nagano (Nagano)	0.077
21	3/17 15:00 ~ 16:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 15:00 ~ 16:00	静岡県	Shizuoka (Shizuoka)	0.044
23	3/17 15:00 ~ 16:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 15:00 ~ 16:00	三重県	Mie (Yokkaichi)	0.049
25	3/17 15:00 ~ 16:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/17 15:00 ~ 16:00	京都府	Kyoto (Kyoto)	0.041
27	3/17 15:00 ~ 16:00	大阪府	Osaka (Osaka)	0.044
28	3/17 15:00 ~ 16:00	兵庫県	Hyogo (Kobe)	0.04
29	3/17 15:00 ~ 16:00	奈良県	Nara (Nara)	0.048
30	3/17 15:00 ~ 16:00	和歌山県	Wakayama (Wakayama)	0.035
31	3/17 15:00 ~ 16:00	鳥取県	Tottori (Tottori-g)	0.063
32	3/17 15:00 ~ 16:00	島根県	Shimane (Matsue)	0.036
33	3/17 15:00 ~ 16:00	岡山県	Okayama (Okayama)	0.051
34	3/17 15:00 ~ 16:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/17 15:00 ~ 16:00	山口県	Yamaguchi (Yamaguchi)	0.094
36	3/17 15:00 ~ 16:00	徳島県	Tokushima (Tokushima)	0.039
37	3/17 15:00 ~ 16:00	香川県	Kagawa (Takamatsushima)	0.055
38	3/17 15:00 ~ 16:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/17 15:00 ~ 16:00	高知県	Kochi (Kochi)	0.025
40	3/17 15:00 ~ 16:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 15:00 ~ 16:00	佐賀県	Saga (Saga)	0.04

42	3/17 15:00 ~ 16:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 15:00 ~ 16:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 15:00 ~ 16:00	大分県	Oita (Oita)	0.049
45	3/17 15:00 ~ 16:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 15:00 ~ 16:00	鹿児島県	Kagoshima (Kagosh)	0.033
47	3/17 15:00 ~ 16:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 16:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.029
2	3/17 16:00 ~ 17:00	青森県	Aomori (Aomori)	0.026
3	3/17 16:00 ~ 17:00	岩手県	Iwate (Morioka)	0.03
4	3/17 16:00 ~ 17:00	宮城県	Miyagi (Sendai)	0.141
5	3/17 16:00 ~ 17:00	秋田県	Akita (Akita)	0.044
6	3/17 16:00 ~ 17:00	山形県	Yamagata (Yamaga)	0.047
7	3/17 16:00 ~ 17:00	福島県	Fukushima (Futaba-gun)	
8	3/17 16:00 ~ 17:00	茨城県	Ibaraki (Mito)	0.209
9	3/17 16:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	0.189
10	3/17 16:00 ~ 17:00	群馬県	Gunma (Maebashi)	
11	3/17 16:00 ~ 17:00	埼玉県	Saitama (Saitama)	0.062
12	3/17 16:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.037
13	3/17 16:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 16:00 ~ 17:00	神奈川県	Kanagawa (Chigasa)	0.053
15	3/17 16:00 ~ 17:00	新潟県	Niigata (Niigata)	0.046
16	3/17 16:00 ~ 17:00	富山県	Toyama (Imizu)	0.052
17	3/17 16:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.05
18	3/17 16:00 ~ 17:00	福井県	Fukui (Fukui)	0.05
19	3/17 16:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 16:00 ~ 17:00	長野県	Nagano (Nagano)	0.077
21	3/17 16:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 16:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.043
23	3/17 16:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 16:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.049
25	3/17 16:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 16:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.039
27	3/17 16:00 ~ 17:00	大阪府	Osaka (Osaka)	0.043
28	3/17 16:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.039
29	3/17 16:00 ~ 17:00	奈良県	Nara (Nara)	0.048
30	3/17 16:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.034
31	3/17 16:00 ~ 17:00	鳥取県	Tottori (Touhaku-g)	0.061
32	3/17 16:00 ~ 17:00	島根県	Shimane (Matsue)	0.036
33	3/17 16:00 ~ 17:00	岡山県	Okayama (Okayama)	0.049
34	3/17 16:00 ~ 17:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/17 16:00 ~ 17:00	山口県	Yamaguchi (Yamagi)	0.099
36	3/17 16:00 ~ 17:00	徳島県	Tokushima (Tokush)	0.045
37	3/17 16:00 ~ 17:00	香川県	Kagawa (Takamats)	0.054
38	3/17 16:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/17 16:00 ~ 17:00	高知県	Kochi (Kochi)	0.025
40	3/17 16:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 16:00 ~ 17:00	佐賀県	Saga (Saga)	0.039
42	3/17 16:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/17 16:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 16:00 ~ 17:00	大分県	Oita (Oita)	0.049
45	3/17 16:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 16:00 ~ 17:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 16:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 17:00 ~ 18:00	北海道	Hokkaido (Sapporo)	0.027
2	3/17 17:00 ~ 18:00	青森県	Aomori (Aomori)	0.024
3	3/17 17:00 ~ 18:00	岩手県	Iwate (Morioka)	0.031
4	3/17 17:00 ~ 18:00	宮城県	Miyagi (Sendai)	

5	3/17 17:00 ~ 18:00	秋田県	Akita (Akita)	0.039
6	3/17 17:00 ~ 18:00	山形県	Yamagata (Yamaga	0.049
7	3/17 17:00 ~ 18:00	福島県	Fukushima (Futaba-gun)	
8	3/17 17:00 ~ 18:00	茨城県	Ibaraki (Mito)	0.209
9	3/17 17:00 ~ 18:00	栃木県	Tochigi (Itsunomiya	0.188
10	3/17 17:00 ~ 18:00	群馬県	Gunma (Maebashi)	0.096
11	3/17 17:00 ~ 18:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 17:00 ~ 18:00	千葉県	Chiba (Ichihara)	0.037
13	3/17 17:00 ~ 18:00	東京都	Tokyo (Shinjuku-ku	0.05
14	3/17 17:00 ~ 18:00	神奈川県	Kanagawa (Chigasa	0.052
15	3/17 17:00 ~ 18:00	新潟県	Niigata (Niigata)	0.047
16	3/17 17:00 ~ 18:00	富山県	Toyama (Imizu)	0.053
17	3/17 17:00 ~ 18:00	石川県	Ishikawa (Kanazawa	0.049
18	3/17 17:00 ~ 18:00	福井県	Fukui (Fukui)	0.05
19	3/17 17:00 ~ 18:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 17:00 ~ 18:00	長野県	Nagano (Nagano)	0.077
21	3/17 17:00 ~ 18:00	岐阜県	Gifu (Kakamigahara	0.06
22	3/17 17:00 ~ 18:00	静岡県	Shizuoka (Shizuoka	0.04
23	3/17 17:00 ~ 18:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 17:00 ~ 18:00	三重県	Mie (Yokkaichi)	0.051
25	3/17 17:00 ~ 18:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 17:00 ~ 18:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 17:00 ~ 18:00	大阪府	Osaka (Osaka)	0.043
28	3/17 17:00 ~ 18:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 17:00 ~ 18:00	奈良県	Nara (Nara)	0.047
30	3/17 17:00 ~ 18:00	和歌山県	Wakayama (Wakaya	0.033
31	3/17 17:00 ~ 18:00	鳥取県	Tottori (Touhaku-g	0.059
32	3/17 17:00 ~ 18:00	島根県	Shimane (Matsue)	0.036
33	3/17 17:00 ~ 18:00	岡山県	Okayama (Okayam	0.049
34	3/17 17:00 ~ 18:00	広島県	Hiroshima (Hiroshin	0.046
35	3/17 17:00 ~ 18:00	山口県	Yamaguchi (Yamagi	0.102
36	3/17 17:00 ~ 18:00	徳島県	Tokushima (Tokush	0.042
37	3/17 17:00 ~ 18:00	香川県	Kagawa (Takamats	0.053
38	3/17 17:00 ~ 18:00	愛媛県	Ehime (Matsuyama	0.049
39	3/17 17:00 ~ 18:00	高知県	Kochi (Kochi)	0.026
40	3/17 17:00 ~ 18:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 17:00 ~ 18:00	佐賀県	Saga (Saga)	0.039
42	3/17 17:00 ~ 18:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 17:00 ~ 18:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 17:00 ~ 18:00	大分県	Oita (Oita)	0.049
45	3/17 17:00 ~ 18:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 17:00 ~ 18:00	鹿児島県	Kagoshima (Kagosh	0.034
47	3/17 17:00 ~ 18:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 18:00 ~ 19:00	北海道	Hokkaido (Sapporo	0.028
2	3/17 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.022
3	3/17 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.033
4	3/17 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	
5	3/17 18:00 ~ 19:00	秋田県	Akita (Akita)	0.035
6	3/17 18:00 ~ 19:00	山形県	Yamagata (Yamaga	0.052
7	3/17 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/17 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.207
9	3/17 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya	0.186
10	3/17 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	0.095
11	3/17 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	
12	3/17 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.037
13	3/17 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku	0.05
14	3/17 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasa	0.052

15	3/17 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.046
16	3/17 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.049
17	3/17 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/17 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.047
19	3/17 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.077
21	3/17 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.05
25	3/17 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.042
28	3/17 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 18:00 ~ 19:00	奈良県	Nara (Nara)	0.047
30	3/17 18:00 ~ 19:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/17 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.036
33	3/17 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.048
34	3/17 18:00 ~ 19:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/17 18:00 ~ 19:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/17 18:00 ~ 19:00	徳島県	Tokushima (Tokush)	0.04
37	3/17 18:00 ~ 19:00	香川県	Kagawa (Takamats)	0.052
38	3/17 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/17 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.026
40	3/17 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.04
42	3/17 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 18:00 ~ 19:00	大分県	Oita (Oita)	0.049
45	3/17 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 19:00 ~ 20:00	北海道	Hokkaido (Sapporo)	0.029
2	3/17 19:00 ~ 20:00	青森県	Aomori (Aomori)	0.021
3	3/17 19:00 ~ 20:00	岩手県	Iwate (Morioka)	0.031
4	3/17 19:00 ~ 20:00	宮城県	Miyagi (Sendai)	
5	3/17 19:00 ~ 20:00	秋田県	Akita (Akita)	0.034
6	3/17 19:00 ~ 20:00	山形県	Yamagata (Yamaga)	0.047
7	3/17 19:00 ~ 20:00	福島県	Fukushima (Futaba-gun)	
8	3/17 19:00 ~ 20:00	茨城県	Ibaraki (Mito)	0.207
9	3/17 19:00 ~ 20:00	栃木県	Tochigi (Itsunomiya)	0.187
10	3/17 19:00 ~ 20:00	群馬県	Gunma (Maebashi)	0.095
11	3/17 19:00 ~ 20:00	埼玉県	Saitama (Saitama)	
12	3/17 19:00 ~ 20:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 19:00 ~ 20:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 19:00 ~ 20:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/17 19:00 ~ 20:00	新潟県	Niigata (Niigata)	0.046
16	3/17 19:00 ~ 20:00	富山県	Toyama (Imizu)	0.048
17	3/17 19:00 ~ 20:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 19:00 ~ 20:00	福井県	Fukui (Fukui)	0.046
19	3/17 19:00 ~ 20:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 19:00 ~ 20:00	長野県	Nagano (Nagano)	0.078
21	3/17 19:00 ~ 20:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 19:00 ~ 20:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 19:00 ~ 20:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 19:00 ~ 20:00	三重県	Mie (Yokkaichi)	0.049

25	3/17 19:00 ~ 20:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/17 19:00 ~ 20:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 19:00 ~ 20:00	大阪府	Osaka (Osaka)	0.042
28	3/17 19:00 ~ 20:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 19:00 ~ 20:00	奈良県	Nara (Nara)	0.047
30	3/17 19:00 ~ 20:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 19:00 ~ 20:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/17 19:00 ~ 20:00	島根県	Shimane (Matsue)	0.036
33	3/17 19:00 ~ 20:00	岡山県	Okayama (Okayama)	0.048
34	3/17 19:00 ~ 20:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/17 19:00 ~ 20:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/17 19:00 ~ 20:00	徳島県	Tokushima (Tokush)	0.039
37	3/17 19:00 ~ 20:00	香川県	Kagawa (Takamats)	0.052
38	3/17 19:00 ~ 20:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/17 19:00 ~ 20:00	高知県	Kochi (Kochi)	0.025
40	3/17 19:00 ~ 20:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 19:00 ~ 20:00	佐賀県	Saga (Saga)	0.04
42	3/17 19:00 ~ 20:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 19:00 ~ 20:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 19:00 ~ 20:00	大分県	Oita (Oita)	0.049
45	3/17 19:00 ~ 20:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 19:00 ~ 20:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 19:00 ~ 20:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 20:00 ~ 21:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 20:00 ~ 21:00	青森県	Aomori (Aomori)	0.021
3	3/17 20:00 ~ 21:00	岩手県	Iwate (Morioka)	0.031
4	3/17 20:00 ~ 21:00	宮城県	Miyagi (Sendai)	
5	3/17 20:00 ~ 21:00	秋田県	Akita (Akita)	0.034
6	3/17 20:00 ~ 21:00	山形県	Yamagata (Yamaga)	0.049
7	3/17 20:00 ~ 21:00	福島県	Fukushima (Futaba-gun)	
8	3/17 20:00 ~ 21:00	茨城県	Ibaraki (Mito)	0.206
9	3/17 20:00 ~ 21:00	栃木県	Tochigi (Itsunomiya)	0.185
10	3/17 20:00 ~ 21:00	群馬県	Gunma (Maebashi)	0.095
11	3/17 20:00 ~ 21:00	埼玉県	Saitama (Saitama)	
12	3/17 20:00 ~ 21:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 20:00 ~ 21:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 20:00 ~ 21:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/17 20:00 ~ 21:00	新潟県	Niigata (Niigata)	0.046
16	3/17 20:00 ~ 21:00	富山県	Toyama (Imizu)	0.051
17	3/17 20:00 ~ 21:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/17 20:00 ~ 21:00	福井県	Fukui (Fukui)	0.047
19	3/17 20:00 ~ 21:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 20:00 ~ 21:00	長野県	Nagano (Nagano)	0.078
21	3/17 20:00 ~ 21:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 20:00 ~ 21:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 20:00 ~ 21:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 20:00 ~ 21:00	三重県	Mie (Yokkaichi)	0.048
25	3/17 20:00 ~ 21:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/17 20:00 ~ 21:00	京都府	Kyoto (Kyoto)	0.039
27	3/17 20:00 ~ 21:00	大阪府	Osaka (Osaka)	0.042
28	3/17 20:00 ~ 21:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 20:00 ~ 21:00	奈良県	Nara (Nara)	0.047
30	3/17 20:00 ~ 21:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 20:00 ~ 21:00	鳥取県	Tottori (Touhaku-g)	0.057
32	3/17 20:00 ~ 21:00	島根県	Shimane (Matsue)	0.036
33	3/17 20:00 ~ 21:00	岡山県	Okayama (Okayama)	0.049
34	3/17 20:00 ~ 21:00	広島県	Hiroshima (Hiroshin)	0.046

35	3/17 20:00 ~ 21:00	山口県	Yamaguchi (Yamagi	0.093
36	3/17 20:00 ~ 21:00	徳島県	Tokushima (Tokush	0.038
37	3/17 20:00 ~ 21:00	香川県	Kagawa (Takamats	0.052
38	3/17 20:00 ~ 21:00	愛媛県	Ehime (Matsuyama	0.048
39	3/17 20:00 ~ 21:00	高知県	Kochi (Kochi)	0.025
40	3/17 20:00 ~ 21:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 20:00 ~ 21:00	佐賀県	Saga (Saga)	0.04
42	3/17 20:00 ~ 21:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 20:00 ~ 21:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 20:00 ~ 21:00	大分県	Oita (Oita)	0.049
45	3/17 20:00 ~ 21:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 20:00 ~ 21:00	鹿児島県	Kagoshima (Kagosh	0.034
47	3/17 20:00 ~ 21:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 21:00 ~ 22:00	北海道	Hokkaido (Sapporo	0.027
2	3/17 21:00 ~ 22:00	青森県	Aomori (Aomori)	0.02
3	3/17 21:00 ~ 22:00	岩手県	Iwate (Morioka)	0.03
4	3/17 21:00 ~ 22:00	宮城県	Miyagi (Sendai)	
5	3/17 21:00 ~ 22:00	秋田県	Akita (Akita)	0.036
6	3/17 21:00 ~ 22:00	山形県	Yamagata (Yamaga	0.05
7	3/17 21:00 ~ 22:00	福島県	Fukushima (Futaba-gun)	
8	3/17 21:00 ~ 22:00	茨城県	Ibaraki (Mito)	0.205
9	3/17 21:00 ~ 22:00	栃木県	Tochigi (Itsunomiya	0.185
10	3/17 21:00 ~ 22:00	群馬県	Gunma (Maebashi)	0.094
11	3/17 21:00 ~ 22:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 21:00 ~ 22:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 21:00 ~ 22:00	東京都	Tokyo (Shinjuku-ku	0.05
14	3/17 21:00 ~ 22:00	神奈川県	Kanagawa (Chigasa	0.052
15	3/17 21:00 ~ 22:00	新潟県	Niigata (Niigata)	0.046
16	3/17 21:00 ~ 22:00	富山県	Toyama (Imizu)	0.051
17	3/17 21:00 ~ 22:00	石川県	Ishikawa (Kanazawa	0.048
18	3/17 21:00 ~ 22:00	福井県	Fukui (Fukui)	0.05
19	3/17 21:00 ~ 22:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 21:00 ~ 22:00	長野県	Nagano (Nagano)	0.078
21	3/17 21:00 ~ 22:00	岐阜県	Gifu (Kakamigahara	0.06
22	3/17 21:00 ~ 22:00	静岡県	Shizuoka (Shizuoka	0.038
23	3/17 21:00 ~ 22:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 21:00 ~ 22:00	三重県	Mie (Yokkaichi)	0.048
25	3/17 21:00 ~ 22:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/17 21:00 ~ 22:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 21:00 ~ 22:00	大阪府	Osaka (Osaka)	0.042
28	3/17 21:00 ~ 22:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 21:00 ~ 22:00	奈良県	Nara (Nara)	0.047
30	3/17 21:00 ~ 22:00	和歌山県	Wakayama (Wakaya	0.032
31	3/17 21:00 ~ 22:00	鳥取県	Tottori (Touhaku-g	0.063
32	3/17 21:00 ~ 22:00	島根県	Shimane (Matsue)	0.036
33	3/17 21:00 ~ 22:00	岡山県	Okayama (Okayam	0.049
34	3/17 21:00 ~ 22:00	広島県	Hiroshima (Hiroshin	0.047
35	3/17 21:00 ~ 22:00	山口県	Yamaguchi (Yamagi	0.093
36	3/17 21:00 ~ 22:00	徳島県	Tokushima (Tokush	0.038
37	3/17 21:00 ~ 22:00	香川県	Kagawa (Takamats	0.052
38	3/17 21:00 ~ 22:00	愛媛県	Ehime (Matsuyama	0.048
39	3/17 21:00 ~ 22:00	高知県	Kochi (Kochi)	0.025
40	3/17 21:00 ~ 22:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/17 21:00 ~ 22:00	佐賀県	Saga (Saga)	0.04
42	3/17 21:00 ~ 22:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 21:00 ~ 22:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 21:00 ~ 22:00	大分県	Oita (Oita)	0.049

45	3/17 21:00 ~ 22:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 21:00 ~ 22:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 21:00 ~ 22:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.02
3	3/17 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.03
4	3/17 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	
5	3/17 22:00 ~ 23:00	秋田県	Akita (Akita)	0.035
6	3/17 22:00 ~ 23:00	山形県	Yamagata (Yamaga)	0.047
7	3/17 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	
8	3/17 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.205
9	3/17 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya)	0.183
10	3/17 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.093
11	3/17 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/17 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.046
16	3/17 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.051
17	3/17 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.047
19	3/17 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.079
21	3/17 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.048
25	3/17 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/17 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.042
28	3/17 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 22:00 ~ 23:00	奈良県	Nara (Nara)	0.047
30	3/17 22:00 ~ 23:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 22:00 ~ 23:00	鳥取県	Tottori (Touhaku-g)	0.06
32	3/17 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.036
33	3/17 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.049
34	3/17 22:00 ~ 23:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/17 22:00 ~ 23:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/17 22:00 ~ 23:00	徳島県	Tokushima (Tokush)	0.038
37	3/17 22:00 ~ 23:00	香川県	Kagawa (Takamats)	0.052
38	3/17 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/17 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.025
40	3/17 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/17 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 22:00 ~ 23:00	大分県	Oita (Oita)	0.049
45	3/17 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/17 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.02
3	3/17 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.03
4	3/17 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	
5	3/17 22:00 ~ 23:00	秋田県	Akita (Akita)	0.035
6	3/17 22:00 ~ 23:00	山形県	Yamagata (Yamaga)	0.047
7	3/17 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	

8	3/17 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.205
9	3/17 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya)	0.183
10	3/17 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.093
11	3/17 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.063
12	3/17 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/17 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.046
16	3/17 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.051
17	3/17 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/17 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.047
19	3/17 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.079
21	3/17 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/17 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.048
25	3/17 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/17 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.042
28	3/17 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 22:00 ~ 23:00	奈良県	Nara (Nara)	0.047
30	3/17 22:00 ~ 23:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 22:00 ~ 23:00	鳥取県	Tottori (Touhaku-g)	0.06
32	3/17 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.036
33	3/17 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.049
34	3/17 22:00 ~ 23:00	広島県	Hiroshima (Hiroshim)	0.047
35	3/17 22:00 ~ 23:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/17 22:00 ~ 23:00	徳島県	Tokushima (Tokush)	0.038
37	3/17 22:00 ~ 23:00	香川県	Kagawa (Takamats)	0.052
38	3/17 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/17 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.025
40	3/17 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/17 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 22:00 ~ 23:00	大分県	Oita (Oita)	0.049
45	3/17 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.021
1	3/17 23:00 ~ 24:00	北海道	Hokkaido (Sapporo)	0.031
2	3/17 23:00 ~ 24:00	青森県	Aomori (Aomori)	0.019
3	3/17 23:00 ~ 24:00	岩手県	Iwate (Morioka)	0.03
4	3/17 23:00 ~ 24:00	宮城県	Miyagi (Sendai)	
5	3/17 23:00 ~ 24:00	秋田県	Akita (Akita)	0.034
6	3/17 23:00 ~ 24:00	山形県	Yamagata (Yamaga)	0.043
7	3/17 23:00 ~ 24:00	福島県	Fukushima (Futaba-gun)	
8	3/17 23:00 ~ 24:00	茨城県	Ibaraki (Mito)	0.204
9	3/17 23:00 ~ 24:00	栃木県	Tochigi (Itsunomiya)	0.182
10	3/17 23:00 ~ 24:00	群馬県	Gunma (Maebashi)	0.093
11	3/17 23:00 ~ 24:00	埼玉県	Saitama (Saitama)	0.062
12	3/17 23:00 ~ 24:00	千葉県	Chiba (Ichihara)	0.036
13	3/17 23:00 ~ 24:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/17 23:00 ~ 24:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/17 23:00 ~ 24:00	新潟県	Niigata (Niigata)	0.047
16	3/17 23:00 ~ 24:00	富山県	Toyama (Imizu)	0.049
17	3/17 23:00 ~ 24:00	石川県	Ishikawa (Kanazawa)	0.047

18	3/17 23:00 ~ 24:00	福井県	Fukui (Fukui)	0.044
19	3/17 23:00 ~ 24:00	山梨県	Yamanashi (Kofu)	0.044
20	3/17 23:00 ~ 24:00	長野県	Nagano (Nagano)	0.079
21	3/17 23:00 ~ 24:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/17 23:00 ~ 24:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/17 23:00 ~ 24:00	愛知県	Aichi (Nagoya)	0.039
24	3/17 23:00 ~ 24:00	三重県	Mie (Yokkaichi)	0.049
25	3/17 23:00 ~ 24:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/17 23:00 ~ 24:00	京都府	Kyoto (Kyoto)	0.038
27	3/17 23:00 ~ 24:00	大阪府	Osaka (Osaka)	0.042
28	3/17 23:00 ~ 24:00	兵庫県	Hyogo (Kobe)	0.037
29	3/17 23:00 ~ 24:00	奈良県	Nara (Nara)	0.047
30	3/17 23:00 ~ 24:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/17 23:00 ~ 24:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/17 23:00 ~ 24:00	島根県	Shimane (Matsue)	0.036
33	3/17 23:00 ~ 24:00	岡山県	Okayama (Okayama)	0.049
34	3/17 23:00 ~ 24:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/17 23:00 ~ 24:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/17 23:00 ~ 24:00	徳島県	Tokushima (Tokush)	0.037
37	3/17 23:00 ~ 24:00	香川県	Kagawa (Takamatsu)	0.052
38	3/17 23:00 ~ 24:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/17 23:00 ~ 24:00	高知県	Kochi (Kochi)	0.025
40	3/17 23:00 ~ 24:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/17 23:00 ~ 24:00	佐賀県	Saga (Saga)	0.041
42	3/17 23:00 ~ 24:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/17 23:00 ~ 24:00	熊本県	Kumamoto (Uto)	0.027
44	3/17 23:00 ~ 24:00	大分県	Oita (Oita)	0.049
45	3/17 23:00 ~ 24:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/17 23:00 ~ 24:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/17 23:00 ~ 24:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 00:00 ~ 01:00	北海道	Hokkaido (Sapporo)	0.03
2	3/18 00:00 ~ 01:00	青森県	Aomori (Aomori)	0.019
3	3/18 00:00 ~ 01:00	岩手県	Iwate (Morioka)	0.03
4	3/18 00:00 ~ 01:00	宮城県	Miyagi (Sendai)	
5	3/18 00:00 ~ 01:00	秋田県	Akita (Akita)	0.033
6	3/18 00:00 ~ 01:00	山形県	Yamagata (Yamaga)	0.041
7	3/18 00:00 ~ 01:00	福島県	Fukushima (Futaba-gun)	
8	3/18 00:00 ~ 01:00	茨城県	Ibaraki (Mito)	0.203
9	3/18 00:00 ~ 01:00	栃木県	Tochigi (Itsunomiya)	0.182
10	3/18 00:00 ~ 01:00	群馬県	Gunma (Maebashi)	0.092
11	3/18 00:00 ~ 01:00	埼玉県	Saitama (Saitama)	0.061
12	3/18 00:00 ~ 01:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 00:00 ~ 01:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/18 00:00 ~ 01:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/18 00:00 ~ 01:00	新潟県	Niigata (Niigata)	0.047
16	3/18 00:00 ~ 01:00	富山県	Toyama (Imizu)	0.048
17	3/18 00:00 ~ 01:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 00:00 ~ 01:00	福井県	Fukui (Fukui)	0.044
19	3/18 00:00 ~ 01:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 00:00 ~ 01:00	長野県	Nagano (Nagano)	0.079
21	3/18 00:00 ~ 01:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 00:00 ~ 01:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 00:00 ~ 01:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 00:00 ~ 01:00	三重県	Mie (Yokkaichi)	0.048
25	3/18 00:00 ~ 01:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/18 00:00 ~ 01:00	京都府	Kyoto (Kyoto)	0.041
27	3/18 00:00 ~ 01:00	大阪府	Osaka (Osaka)	0.042

28	3/18 00:00 ~ 01:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 00:00 ~ 01:00	奈良県	Nara (Nara)	0.047
30	3/18 00:00 ~ 01:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 00:00 ~ 01:00	鳥取県	Tottori (Touhaku-g)	0.057
32	3/18 00:00 ~ 01:00	島根県	Shimane (Matsue)	0.036
33	3/18 00:00 ~ 01:00	岡山県	Okayama (Okayama)	0.049
34	3/18 00:00 ~ 01:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/18 00:00 ~ 01:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/18 00:00 ~ 01:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 00:00 ~ 01:00	香川県	Kagawa (Takamats)	0.052
38	3/18 00:00 ~ 01:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/18 00:00 ~ 01:00	高知県	Kochi (Kochi)	0.025
40	3/18 00:00 ~ 01:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 00:00 ~ 01:00	佐賀県	Saga (Saga)	0.041
42	3/18 00:00 ~ 01:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 00:00 ~ 01:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 00:00 ~ 01:00	大分県	Oita (Oita)	0.049
45	3/18 00:00 ~ 01:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 00:00 ~ 01:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 00:00 ~ 01:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 01:00 ~ 02:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 01:00 ~ 02:00	青森県	Aomori (Aomori)	0.02
3	3/18 01:00 ~ 02:00	岩手県	Iwate (Morioka)	0.03
4	3/18 01:00 ~ 02:00	宮城県	Miyagi (Sendai)	
5	3/18 01:00 ~ 02:00	秋田県	Akita (Akita)	0.033
6	3/18 01:00 ~ 02:00	山形県	Yamagata (Yamaga)	0.041
7	3/18 01:00 ~ 02:00	福島県	Fukushima (Futaba-gun)	
8	3/18 01:00 ~ 02:00	茨城県	Ibaraki (Mito)	0.202
9	3/18 01:00 ~ 02:00	栃木県	Tochigi (Itsunomiya)	0.181
10	3/18 01:00 ~ 02:00	群馬県	Gunma (Maebashi)	0.092
11	3/18 01:00 ~ 02:00	埼玉県	Saitama (Saitama)	0.061
12	3/18 01:00 ~ 02:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 01:00 ~ 02:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/18 01:00 ~ 02:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/18 01:00 ~ 02:00	新潟県	Niigata (Niigata)	0.05
16	3/18 01:00 ~ 02:00	富山県	Toyama (Imizu)	0.047
17	3/18 01:00 ~ 02:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 01:00 ~ 02:00	福井県	Fukui (Fukui)	0.044
19	3/18 01:00 ~ 02:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 01:00 ~ 02:00	長野県	Nagano (Nagano)	0.079
21	3/18 01:00 ~ 02:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 01:00 ~ 02:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 01:00 ~ 02:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 01:00 ~ 02:00	三重県	Mie (Yokkaichi)	0.049
25	3/18 01:00 ~ 02:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/18 01:00 ~ 02:00	京都府	Kyoto (Kyoto)	0.039
27	3/18 01:00 ~ 02:00	大阪府	Osaka (Osaka)	0.042
28	3/18 01:00 ~ 02:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 01:00 ~ 02:00	奈良県	Nara (Nara)	0.047
30	3/18 01:00 ~ 02:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 01:00 ~ 02:00	鳥取県	Tottori (Touhaku-g)	0.056
32	3/18 01:00 ~ 02:00	島根県	Shimane (Matsue)	0.036
33	3/18 01:00 ~ 02:00	岡山県	Okayama (Okayama)	0.05
34	3/18 01:00 ~ 02:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/18 01:00 ~ 02:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/18 01:00 ~ 02:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 01:00 ~ 02:00	香川県	Kagawa (Takamats)	0.052

38	3/18 01:00 ~ 02:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/18 01:00 ~ 02:00	高知県	Kochi (Kochi)	0.026
40	3/18 01:00 ~ 02:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 01:00 ~ 02:00	佐賀県	Saga (Saga)	0.041
42	3/18 01:00 ~ 02:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 01:00 ~ 02:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 01:00 ~ 02:00	大分県	Oita (Oita)	0.049
45	3/18 01:00 ~ 02:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 01:00 ~ 02:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 01:00 ~ 02:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 02:00 ~ 03:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 02:00 ~ 03:00	青森県	Aomori (Aomori)	0.02
3	3/18 02:00 ~ 03:00	岩手県	Iwate (Morioka)	0.03
4	3/18 02:00 ~ 03:00	宮城県	Miyagi (Sendai)	
5	3/18 02:00 ~ 03:00	秋田県	Akita (Akita)	0.033
6	3/18 02:00 ~ 03:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 02:00 ~ 03:00	福島県	Fukushima (Futaba-gun)	
8	3/18 02:00 ~ 03:00	茨城県	Ibaraki (Mito)	0.201
9	3/18 02:00 ~ 03:00	栃木県	Tochigi (Itsunomiya)	0.18
10	3/18 02:00 ~ 03:00	群馬県	Gunma (Maebashi)	0.091
11	3/18 02:00 ~ 03:00	埼玉県	Saitama (Saitama)	0.061
12	3/18 02:00 ~ 03:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 02:00 ~ 03:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 02:00 ~ 03:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/18 02:00 ~ 03:00	新潟県	Niigata (Niigata)	0.049
16	3/18 02:00 ~ 03:00	富山県	Toyama (Imizu)	0.046
17	3/18 02:00 ~ 03:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 02:00 ~ 03:00	福井県	Fukui (Fukui)	0.044
19	3/18 02:00 ~ 03:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 02:00 ~ 03:00	長野県	Nagano (Nagano)	0.08
21	3/18 02:00 ~ 03:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 02:00 ~ 03:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 02:00 ~ 03:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 02:00 ~ 03:00	三重県	Mie (Yokkaichi)	0.047
25	3/18 02:00 ~ 03:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/18 02:00 ~ 03:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 02:00 ~ 03:00	大阪府	Osaka (Osaka)	0.043
28	3/18 02:00 ~ 03:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 02:00 ~ 03:00	奈良県	Nara (Nara)	0.047
30	3/18 02:00 ~ 03:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 02:00 ~ 03:00	鳥取県	Tottori (Touhaku-g)	0.056
32	3/18 02:00 ~ 03:00	島根県	Shimane (Matsue)	0.036
33	3/18 02:00 ~ 03:00	岡山県	Okayama (Okayama)	0.05
34	3/18 02:00 ~ 03:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/18 02:00 ~ 03:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/18 02:00 ~ 03:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 02:00 ~ 03:00	香川県	Kagawa (Takamats)	0.052
38	3/18 02:00 ~ 03:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/18 02:00 ~ 03:00	高知県	Kochi (Kochi)	0.026
40	3/18 02:00 ~ 03:00	福岡県	Fukuoka (Dazaifu)	0.038
41	3/18 02:00 ~ 03:00	佐賀県	Saga (Saga)	0.041
42	3/18 02:00 ~ 03:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 02:00 ~ 03:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 02:00 ~ 03:00	大分県	Oita (Oita)	0.05
45	3/18 02:00 ~ 03:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 02:00 ~ 03:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/18 02:00 ~ 03:00	沖縄県	Okinawa (Uruma)	0.021

1	3/18 03:00 ~ 04:00	北海道	Hokkaido (Sapporo)	0.029
2	3/18 03:00 ~ 04:00	青森県	Aomori (Aomori)	0.019
3	3/18 03:00 ~ 04:00	岩手県	Iwate (Morioka)	0.03
4	3/18 03:00 ~ 04:00	宮城県	Miyagi (Sendai)	
5	3/18 03:00 ~ 04:00	秋田県	Akita (Akita)	0.033
6	3/18 03:00 ~ 04:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 03:00 ~ 04:00	福島県	Fukushima (Futaba-gun)	
8	3/18 03:00 ~ 04:00	茨城県	Ibaraki (Mito)	0.201
9	3/18 03:00 ~ 04:00	栃木県	Tochigi (Itsunomiya)	0.179
10	3/18 03:00 ~ 04:00	群馬県	Gunma (Maebashi)	0.091
11	3/18 03:00 ~ 04:00	埼玉県	Saitama (Saitama)	0.061
12	3/18 03:00 ~ 04:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 03:00 ~ 04:00	東京都	Tokyo (Shinjuku-ku)	0.05
14	3/18 03:00 ~ 04:00	神奈川県	Kanagawa (Chigasaki)	0.051
15	3/18 03:00 ~ 04:00	新潟県	Niigata (Niigata)	0.047
16	3/18 03:00 ~ 04:00	富山県	Toyama (Imizu)	0.046
17	3/18 03:00 ~ 04:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 03:00 ~ 04:00	福井県	Fukui (Fukui)	0.044
19	3/18 03:00 ~ 04:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 03:00 ~ 04:00	長野県	Nagano (Nagano)	0.078
21	3/18 03:00 ~ 04:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 03:00 ~ 04:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 03:00 ~ 04:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 03:00 ~ 04:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 03:00 ~ 04:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 03:00 ~ 04:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 03:00 ~ 04:00	大阪府	Osaka (Osaka)	0.042
28	3/18 03:00 ~ 04:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 03:00 ~ 04:00	奈良県	Nara (Nara)	0.047
30	3/18 03:00 ~ 04:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/18 03:00 ~ 04:00	鳥取県	Tottori (Tottori-g)	0.057
32	3/18 03:00 ~ 04:00	島根県	Shimane (Matsue)	0.036
33	3/18 03:00 ~ 04:00	岡山県	Okayama (Okayama)	0.05
34	3/18 03:00 ~ 04:00	広島県	Hiroshima (Hiroshima)	0.05
35	3/18 03:00 ~ 04:00	山口県	Yamaguchi (Yamaguchi)	0.096
36	3/18 03:00 ~ 04:00	徳島県	Tokushima (Tokushima)	0.038
37	3/18 03:00 ~ 04:00	香川県	Kagawa (Takamatsu)	0.052
38	3/18 03:00 ~ 04:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/18 03:00 ~ 04:00	高知県	Kochi (Kochi)	0.026
40	3/18 03:00 ~ 04:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 03:00 ~ 04:00	佐賀県	Saga (Saga)	0.041
42	3/18 03:00 ~ 04:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 03:00 ~ 04:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 03:00 ~ 04:00	大分県	Oita (Oita)	0.05
45	3/18 03:00 ~ 04:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 03:00 ~ 04:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/18 03:00 ~ 04:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 04:00 ~ 05:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 04:00 ~ 05:00	青森県	Aomori (Aomori)	0.019
3	3/18 04:00 ~ 05:00	岩手県	Iwate (Morioka)	0.03
4	3/18 04:00 ~ 05:00	宮城県	Miyagi (Sendai)	
5	3/18 04:00 ~ 05:00	秋田県	Akita (Akita)	0.034
6	3/18 04:00 ~ 05:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 04:00 ~ 05:00	福島県	Fukushima (Futaba-gun)	
8	3/18 04:00 ~ 05:00	茨城県	Ibaraki (Mito)	0.199
9	3/18 04:00 ~ 05:00	栃木県	Tochigi (Itsunomiya)	0.178
10	3/18 04:00 ~ 05:00	群馬県	Gunma (Maebashi)	0.09

11	3/18 04:00 ~ 05:00	埼玉県	Saitama (Saitama)	0.061
12	3/18 04:00 ~ 05:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 04:00 ~ 05:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 04:00 ~ 05:00	神奈川県	Kanagawa (Chigasa)	0.051
15	3/18 04:00 ~ 05:00	新潟県	Niigata (Niigata)	0.047
16	3/18 04:00 ~ 05:00	富山県	Toyama (Imizu)	0.046
17	3/18 04:00 ~ 05:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 04:00 ~ 05:00	福井県	Fukui (Fukui)	0.044
19	3/18 04:00 ~ 05:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 04:00 ~ 05:00	長野県	Nagano (Nagano)	0.077
21	3/18 04:00 ~ 05:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 04:00 ~ 05:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 04:00 ~ 05:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 04:00 ~ 05:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 04:00 ~ 05:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 04:00 ~ 05:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 04:00 ~ 05:00	大阪府	Osaka (Osaka)	0.042
28	3/18 04:00 ~ 05:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 04:00 ~ 05:00	奈良県	Nara (Nara)	0.047
30	3/18 04:00 ~ 05:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 04:00 ~ 05:00	鳥取県	Tottori (Touhaku-g)	0.057
32	3/18 04:00 ~ 05:00	島根県	Shimane (Matsue)	0.037
33	3/18 04:00 ~ 05:00	岡山県	Okayama (Okayama)	0.05
34	3/18 04:00 ~ 05:00	広島県	Hiroshima (Hiroshima)	0.051
35	3/18 04:00 ~ 05:00	山口県	Yamaguchi (Yamaguchi)	0.096
36	3/18 04:00 ~ 05:00	徳島県	Tokushima (Tokushima)	0.038
37	3/18 04:00 ~ 05:00	香川県	Kagawa (Takamatsu)	0.052
38	3/18 04:00 ~ 05:00	愛媛県	Ehime (Matsuyama)	0.051
39	3/18 04:00 ~ 05:00	高知県	Kochi (Kochi)	0.026
40	3/18 04:00 ~ 05:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 04:00 ~ 05:00	佐賀県	Saga (Saga)	0.041
42	3/18 04:00 ~ 05:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 04:00 ~ 05:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 04:00 ~ 05:00	大分県	Oita (Oita)	0.05
45	3/18 04:00 ~ 05:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 04:00 ~ 05:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/18 04:00 ~ 05:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 05:00 ~ 06:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 05:00 ~ 06:00	青森県	Aomori (Aomori)	0.019
3	3/18 05:00 ~ 06:00	岩手県	Iwate (Morioka)	0.03
4	3/18 05:00 ~ 06:00	宮城県	Miyagi (Sendai)	
5	3/18 05:00 ~ 06:00	秋田県	Akita (Akita)	0.033
6	3/18 05:00 ~ 06:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 05:00 ~ 06:00	福島県	Fukushima (Futaba-gun)	
8	3/18 05:00 ~ 06:00	茨城県	Ibaraki (Mito)	0.199
9	3/18 05:00 ~ 06:00	栃木県	Tochigi (Itsunomiya)	0.177
10	3/18 05:00 ~ 06:00	群馬県	Gunma (Maebashi)	0.09
11	3/18 05:00 ~ 06:00	埼玉県	Saitama (Saitama)	0.06
12	3/18 05:00 ~ 06:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 05:00 ~ 06:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 05:00 ~ 06:00	神奈川県	Kanagawa (Chigasa)	0.052
15	3/18 05:00 ~ 06:00	新潟県	Niigata (Niigata)	0.046
16	3/18 05:00 ~ 06:00	富山県	Toyama (Imizu)	0.046
17	3/18 05:00 ~ 06:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 05:00 ~ 06:00	福井県	Fukui (Fukui)	0.043
19	3/18 05:00 ~ 06:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 05:00 ~ 06:00	長野県	Nagano (Nagano)	0.076

21	3/18 05:00 ~ 06:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 05:00 ~ 06:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 05:00 ~ 06:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 05:00 ~ 06:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 05:00 ~ 06:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 05:00 ~ 06:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 05:00 ~ 06:00	大阪府	Osaka (Osaka)	0.042
28	3/18 05:00 ~ 06:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 05:00 ~ 06:00	奈良県	Nara (Nara)	0.047
30	3/18 05:00 ~ 06:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 05:00 ~ 06:00	鳥取県	Tottori (Touhaku-g)	0.057
32	3/18 05:00 ~ 06:00	島根県	Shimane (Matsue)	0.038
33	3/18 05:00 ~ 06:00	岡山県	Okayama (Okayama)	0.05
34	3/18 05:00 ~ 06:00	広島県	Hiroshima (Hiroshima)	0.051
35	3/18 05:00 ~ 06:00	山口県	Yamaguchi (Yamaguchi)	0.096
36	3/18 05:00 ~ 06:00	徳島県	Tokushima (Tokushima)	0.038
37	3/18 05:00 ~ 06:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/18 05:00 ~ 06:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/18 05:00 ~ 06:00	高知県	Kochi (Kochi)	0.026
40	3/18 05:00 ~ 06:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 05:00 ~ 06:00	佐賀県	Saga (Saga)	0.041
42	3/18 05:00 ~ 06:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 05:00 ~ 06:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 05:00 ~ 06:00	大分県	Oita (Oita)	0.051
45	3/18 05:00 ~ 06:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 05:00 ~ 06:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/18 05:00 ~ 06:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 06:00 ~ 07:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 06:00 ~ 07:00	青森県	Aomori (Aomori)	0.019
3	3/18 06:00 ~ 07:00	岩手県	Iwate (Morioka)	0.031
4	3/18 06:00 ~ 07:00	宮城県	Miyagi (Sendai)	
5	3/18 06:00 ~ 07:00	秋田県	Akita (Akita)	0.033
6	3/18 06:00 ~ 07:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 06:00 ~ 07:00	福島県	Fukushima (Futaba-gun)	
8	3/18 06:00 ~ 07:00	茨城県	Ibaraki (Mito)	0.198
9	3/18 06:00 ~ 07:00	栃木県	Tochigi (Itsunomiya)	0.175
10	3/18 06:00 ~ 07:00	群馬県	Gunma (Maebashi)	0.089
11	3/18 06:00 ~ 07:00	埼玉県	Saitama (Saitama)	0.06
12	3/18 06:00 ~ 07:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 06:00 ~ 07:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 06:00 ~ 07:00	神奈川県	Kanagawa (Chigasaki)	0.051
15	3/18 06:00 ~ 07:00	新潟県	Niigata (Niigata)	0.046
16	3/18 06:00 ~ 07:00	富山県	Toyama (Imizu)	0.046
17	3/18 06:00 ~ 07:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 06:00 ~ 07:00	福井県	Fukui (Fukui)	0.043
19	3/18 06:00 ~ 07:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 06:00 ~ 07:00	長野県	Nagano (Nagano)	0.075
21	3/18 06:00 ~ 07:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 06:00 ~ 07:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 06:00 ~ 07:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 06:00 ~ 07:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 06:00 ~ 07:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 06:00 ~ 07:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 06:00 ~ 07:00	大阪府	Osaka (Osaka)	0.042
28	3/18 06:00 ~ 07:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 06:00 ~ 07:00	奈良県	Nara (Nara)	0.047
30	3/18 06:00 ~ 07:00	和歌山県	Wakayama (Wakaya)	0.031

31	3/18 06:00 ~ 07:00	鳥取県	Tottori (Touhaku-g	0.058
32	3/18 06:00 ~ 07:00	島根県	Shimane (Matsue)	0.039
33	3/18 06:00 ~ 07:00	岡山県	Okayama (Okayama	0.051
34	3/18 06:00 ~ 07:00	広島県	Hiroshima (Hiroshin	0.051
35	3/18 06:00 ~ 07:00	山口県	Yamaguchi (Yamagi	0.097
36	3/18 06:00 ~ 07:00	徳島県	Tokushima (Tokush	0.038
37	3/18 06:00 ~ 07:00	香川県	Kagawa (Takamatsu	0.053
38	3/18 06:00 ~ 07:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/18 06:00 ~ 07:00	高知県	Kochi (Kochi)	0.027
40	3/18 06:00 ~ 07:00	福岡県	Fukuoka (Dazaifu)	0.038
41	3/18 06:00 ~ 07:00	佐賀県	Saga (Saga)	0.041
42	3/18 06:00 ~ 07:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/18 06:00 ~ 07:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 06:00 ~ 07:00	大分県	Oita (Oita)	0.051
45	3/18 06:00 ~ 07:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 06:00 ~ 07:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/18 06:00 ~ 07:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 07:00 ~ 08:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 07:00 ~ 08:00	青森県	Aomori (Aomori)	0.02
3	3/18 07:00 ~ 08:00	岩手県	Iwate (Morioka)	0.031
4	3/18 07:00 ~ 08:00	宮城県	Miyagi (Sendai)	
5	3/18 07:00 ~ 08:00	秋田県	Akita (Akita)	0.034
6	3/18 07:00 ~ 08:00	山形県	Yamagata (Yamaga	0.04
7	3/18 07:00 ~ 08:00	福島県	Fukushima (Futaba-gun)	
8	3/18 07:00 ~ 08:00	茨城県	Ibaraki (Mito)	0.197
9	3/18 07:00 ~ 08:00	栃木県	Tochigi (Itsunomiya	0.175
10	3/18 07:00 ~ 08:00	群馬県	Gunma (Maebashi)	0.089
11	3/18 07:00 ~ 08:00	埼玉県	Saitama (Saitama)	0.06
12	3/18 07:00 ~ 08:00	千葉県	Chiba (Ichihara)	0.036
13	3/18 07:00 ~ 08:00	東京都	Tokyo (Shinjuku-ku	0.049
14	3/18 07:00 ~ 08:00	神奈川県	Kanagawa (Chigasa	0.051
15	3/18 07:00 ~ 08:00	新潟県	Niigata (Niigata)	0.046
16	3/18 07:00 ~ 08:00	富山県	Toyama (Imizu)	0.046
17	3/18 07:00 ~ 08:00	石川県	Ishikawa (Kanazawa	0.046
18	3/18 07:00 ~ 08:00	福井県	Fukui (Fukui)	0.043
19	3/18 07:00 ~ 08:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 07:00 ~ 08:00	長野県	Nagano (Nagano)	0.074
21	3/18 07:00 ~ 08:00	岐阜県	Gifu (Kakamigahara	0.061
22	3/18 07:00 ~ 08:00	静岡県	Shizuoka (Shizuoka	0.038
23	3/18 07:00 ~ 08:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 07:00 ~ 08:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 07:00 ~ 08:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 07:00 ~ 08:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 07:00 ~ 08:00	大阪府	Osaka (Osaka)	0.042
28	3/18 07:00 ~ 08:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 07:00 ~ 08:00	奈良県	Nara (Nara)	0.047
30	3/18 07:00 ~ 08:00	和歌山県	Wakayama (Wakaya	0.031
31	3/18 07:00 ~ 08:00	鳥取県	Tottori (Touhaku-g	0.058
32	3/18 07:00 ~ 08:00	島根県	Shimane (Matsue)	0.039
33	3/18 07:00 ~ 08:00	岡山県	Okayama (Okayama	0.051
34	3/18 07:00 ~ 08:00	広島県	Hiroshima (Hiroshin	0.051
35	3/18 07:00 ~ 08:00	山口県	Yamaguchi (Yamagi	0.097
36	3/18 07:00 ~ 08:00	徳島県	Tokushima (Tokush	0.038
37	3/18 07:00 ~ 08:00	香川県	Kagawa (Takamatsu	0.053
38	3/18 07:00 ~ 08:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/18 07:00 ~ 08:00	高知県	Kochi (Kochi)	0.027
40	3/18 07:00 ~ 08:00	福岡県	Fukuoka (Dazaifu)	0.038

41	3/18 07:00 ~ 08:00	佐賀県	Saga (Saga)	0.041
42	3/18 07:00 ~ 08:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 07:00 ~ 08:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 07:00 ~ 08:00	大分県	Oita (Oita)	0.051
45	3/18 07:00 ~ 08:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 07:00 ~ 08:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/18 07:00 ~ 08:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 08:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 08:00 ~ 09:00	青森県	Aomori (Aomori)	0.02
3	3/18 08:00 ~ 09:00	岩手県	Iwate (Morioka)	0.03
4	3/18 08:00 ~ 09:00	宮城県	Miyagi (Sendai)	
5	3/18 08:00 ~ 09:00	秋田県	Akita (Akita)	0.034
6	3/18 08:00 ~ 09:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 08:00 ~ 09:00	福島県	Fukushima (Futaba-gun)	
8	3/18 08:00 ~ 09:00	茨城県	Ibaraki (Mito)	0.195
9	3/18 08:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	0.175
10	3/18 08:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.088
11	3/18 08:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.059
12	3/18 08:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.035
13	3/18 08:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 08:00 ~ 09:00	神奈川県	Kanagawa (Chigasa)	0.051
15	3/18 08:00 ~ 09:00	新潟県	Niigata (Niigata)	0.045
16	3/18 08:00 ~ 09:00	富山県	Toyama (Imizu)	0.047
17	3/18 08:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 08:00 ~ 09:00	福井県	Fukui (Fukui)	0.044
19	3/18 08:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 08:00 ~ 09:00	長野県	Nagano (Nagano)	0.073
21	3/18 08:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 08:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 08:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 08:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 08:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 08:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 08:00 ~ 09:00	大阪府	Osaka (Osaka)	0.042
28	3/18 08:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 08:00 ~ 09:00	奈良県	Nara (Nara)	0.046
30	3/18 08:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 08:00 ~ 09:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/18 08:00 ~ 09:00	島根県	Shimane (Matsue)	0.038
33	3/18 08:00 ~ 09:00	岡山県	Okayama (Okayama)	0.05
34	3/18 08:00 ~ 09:00	広島県	Hiroshima (Hiroshin)	0.051
35	3/18 08:00 ~ 09:00	山口県	Yamaguchi (Yamagi)	0.097
36	3/18 08:00 ~ 09:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 08:00 ~ 09:00	香川県	Kagawa (Takamats)	0.052
38	3/18 08:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/18 08:00 ~ 09:00	高知県	Kochi (Kochi)	0.027
40	3/18 08:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 08:00 ~ 09:00	佐賀県	Saga (Saga)	0.041
42	3/18 08:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/18 08:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 08:00 ~ 09:00	大分県	Oita (Oita)	0.051
45	3/18 08:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 08:00 ~ 09:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/18 08:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 09:00 ~ 10:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 09:00 ~ 10:00	青森県	Aomori (Aomori)	0.02
3	3/18 09:00 ~ 10:00	岩手県	Iwate (Morioka)	0.029

4	3/18 09:00 ~ 10:00	宮城県	Miyagi (Sendai)	
5	3/18 09:00 ~ 10:00	秋田県	Akita (Akita)	0.034
6	3/18 09:00 ~ 10:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 09:00 ~ 10:00	福島県	Fukushima (Futaba-gun)	
8	3/18 09:00 ~ 10:00	茨城県	Ibaraki (Mito)	0.195
9	3/18 09:00 ~ 10:00	栃木県	Tochigi (Itsunomiya)	0.172
10	3/18 09:00 ~ 10:00	群馬県	Gunma (Maebashi)	0.087
11	3/18 09:00 ~ 10:00	埼玉県	Saitama (Saitama)	0.059
12	3/18 09:00 ~ 10:00	千葉県	Chiba (Ichihara)	0.035
13	3/18 09:00 ~ 10:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 09:00 ~ 10:00	神奈川県	Kanagawa (Chigasa)	0.051
15	3/18 09:00 ~ 10:00	新潟県	Niigata (Niigata)	0.046
16	3/18 09:00 ~ 10:00	富山県	Toyama (Imizu)	0.047
17	3/18 09:00 ~ 10:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 09:00 ~ 10:00	福井県	Fukui (Fukui)	0.043
19	3/18 09:00 ~ 10:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 09:00 ~ 10:00	長野県	Nagano (Nagano)	0.072
21	3/18 09:00 ~ 10:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 09:00 ~ 10:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 09:00 ~ 10:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 09:00 ~ 10:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 09:00 ~ 10:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 09:00 ~ 10:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 09:00 ~ 10:00	大阪府	Osaka (Osaka)	0.042
28	3/18 09:00 ~ 10:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 09:00 ~ 10:00	奈良県	Nara (Nara)	0.047
30	3/18 09:00 ~ 10:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 09:00 ~ 10:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/18 09:00 ~ 10:00	島根県	Shimane (Matsue)	0.037
33	3/18 09:00 ~ 10:00	岡山県	Okayama (Okayama)	0.049
34	3/18 09:00 ~ 10:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/18 09:00 ~ 10:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/18 09:00 ~ 10:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 09:00 ~ 10:00	香川県	Kagawa (Takamats)	0.052
38	3/18 09:00 ~ 10:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 09:00 ~ 10:00	高知県	Kochi (Kochi)	0.025
40	3/18 09:00 ~ 10:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 09:00 ~ 10:00	佐賀県	Saga (Saga)	0.041
42	3/18 09:00 ~ 10:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/18 09:00 ~ 10:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 09:00 ~ 10:00	大分県	Oita (Oita)	0.05
45	3/18 09:00 ~ 10:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 09:00 ~ 10:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/18 09:00 ~ 10:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 10:00 ~ 11:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 10:00 ~ 11:00	青森県	Aomori (Aomori)	0.02
3	3/18 10:00 ~ 11:00	岩手県	Iwate (Morioka)	0.029
4	3/18 10:00 ~ 11:00	宮城県	Miyagi (Sendai)	
5	3/18 10:00 ~ 11:00	秋田県	Akita (Akita)	0.034
6	3/18 10:00 ~ 11:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 10:00 ~ 11:00	福島県	Fukushima (Futaba-gun)	
8	3/18 10:00 ~ 11:00	茨城県	Ibaraki (Mito)	0.193
9	3/18 10:00 ~ 11:00	栃木県	Tochigi (Itsunomiya)	0.171
10	3/18 10:00 ~ 11:00	群馬県	Gunma (Maebashi)	0.087
11	3/18 10:00 ~ 11:00	埼玉県	Saitama (Saitama)	0.059
12	3/18 10:00 ~ 11:00	千葉県	Chiba (Ichihara)	0.035
13	3/18 10:00 ~ 11:00	東京都	Tokyo (Shinjuku-ku)	0.048

14	3/18 10:00 ~ 11:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 10:00 ~ 11:00	新潟県	Niigata (Niigata)	0.046
16	3/18 10:00 ~ 11:00	富山県	Toyama (Imizu)	0.047
17	3/18 10:00 ~ 11:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 10:00 ~ 11:00	福井県	Fukui (Fukui)	0.043
19	3/18 10:00 ~ 11:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 10:00 ~ 11:00	長野県	Nagano (Nagano)	0.072
21	3/18 10:00 ~ 11:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 10:00 ~ 11:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 10:00 ~ 11:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 10:00 ~ 11:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 10:00 ~ 11:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 10:00 ~ 11:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 10:00 ~ 11:00	大阪府	Osaka (Osaka)	0.042
28	3/18 10:00 ~ 11:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 10:00 ~ 11:00	奈良県	Nara (Nara)	0.046
30	3/18 10:00 ~ 11:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 10:00 ~ 11:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/18 10:00 ~ 11:00	島根県	Shimane (Matsue)	0.037
33	3/18 10:00 ~ 11:00	岡山県	Okayama (Okayama)	0.048
34	3/18 10:00 ~ 11:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/18 10:00 ~ 11:00	山口県	Yamaguchi (Yamaguchi)	0.093
36	3/18 10:00 ~ 11:00	徳島県	Tokushima (Tokushima)	0.037
37	3/18 10:00 ~ 11:00	香川県	Kagawa (Takamatsu)	0.052
38	3/18 10:00 ~ 11:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 10:00 ~ 11:00	高知県	Kochi (Kochi)	0.024
40	3/18 10:00 ~ 11:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 10:00 ~ 11:00	佐賀県	Saga (Saga)	0.04
42	3/18 10:00 ~ 11:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/18 10:00 ~ 11:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 10:00 ~ 11:00	大分県	Oita (Oita)	0.05
45	3/18 10:00 ~ 11:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 10:00 ~ 11:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/18 10:00 ~ 11:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 11:00 ~ 12:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 11:00 ~ 12:00	青森県	Aomori (Aomori)	0.02
3	3/18 11:00 ~ 12:00	岩手県	Iwate (Morioka)	0.028
4	3/18 11:00 ~ 12:00	宮城県	Miyagi (Sendai)	
5	3/18 11:00 ~ 12:00	秋田県	Akita (Akita)	0.033
6	3/18 11:00 ~ 12:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 11:00 ~ 12:00	福島県	Fukushima (Futaba-gun)	
8	3/18 11:00 ~ 12:00	茨城県	Ibaraki (Mito)	0.192
9	3/18 11:00 ~ 12:00	栃木県	Tochigi (Itsunomiya)	0.17
10	3/18 11:00 ~ 12:00	群馬県	Gunma (Maebashi)	0.086
11	3/18 11:00 ~ 12:00	埼玉県	Saitama (Saitama)	0.059
12	3/18 11:00 ~ 12:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 11:00 ~ 12:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 11:00 ~ 12:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 11:00 ~ 12:00	新潟県	Niigata (Niigata)	0.046
16	3/18 11:00 ~ 12:00	富山県	Toyama (Imizu)	0.047
17	3/18 11:00 ~ 12:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 11:00 ~ 12:00	福井県	Fukui (Fukui)	0.043
19	3/18 11:00 ~ 12:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 11:00 ~ 12:00	長野県	Nagano (Nagano)	0.071
21	3/18 11:00 ~ 12:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 11:00 ~ 12:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 11:00 ~ 12:00	愛知県	Aichi (Nagoya)	0.038

24	3/18 11:00 ~ 12:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 11:00 ~ 12:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 11:00 ~ 12:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 11:00 ~ 12:00	大阪府	Osaka (Osaka)	0.042
28	3/18 11:00 ~ 12:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 11:00 ~ 12:00	奈良県	Nara (Nara)	0.047
30	3/18 11:00 ~ 12:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 11:00 ~ 12:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/18 11:00 ~ 12:00	島根県	Shimane (Matsue)	0.036
33	3/18 11:00 ~ 12:00	岡山県	Okayama (Okayama)	0.048
34	3/18 11:00 ~ 12:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/18 11:00 ~ 12:00	山口県	Yamaguchi (Yamaguchi)	0.093
36	3/18 11:00 ~ 12:00	徳島県	Tokushima (Tokushima)	0.037
37	3/18 11:00 ~ 12:00	香川県	Kagawa (Takamatsu)	0.052
38	3/18 11:00 ~ 12:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 11:00 ~ 12:00	高知県	Kochi (Kochi)	0.024
40	3/18 11:00 ~ 12:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 11:00 ~ 12:00	佐賀県	Saga (Saga)	0.04
42	3/18 11:00 ~ 12:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 11:00 ~ 12:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 11:00 ~ 12:00	大分県	Oita (Oita)	0.05
45	3/18 11:00 ~ 12:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 11:00 ~ 12:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/18 11:00 ~ 12:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 12:00 ~ 13:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 12:00 ~ 13:00	青森県	Aomori (Aomori)	0.02
3	3/18 12:00 ~ 13:00	岩手県	Iwate (Morioka)	0.028
4	3/18 12:00 ~ 13:00	宮城県	Miyagi (Sendai)	
5	3/18 12:00 ~ 13:00	秋田県	Akita (Akita)	0.033
6	3/18 12:00 ~ 13:00	山形県	Yamagata (Yamagata)	0.04
7	3/18 12:00 ~ 13:00	福島県	Fukushima (Futaba-gun)	
8	3/18 12:00 ~ 13:00	茨城県	Ibaraki (Mito)	0.191
9	3/18 12:00 ~ 13:00	栃木県	Tochigi (Itsunomiya)	0.169
10	3/18 12:00 ~ 13:00	群馬県	Gunma (Maebashi)	0.086
11	3/18 12:00 ~ 13:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 12:00 ~ 13:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 12:00 ~ 13:00	東京都	Tokyo (Shinjuku-ku)	0.049
14	3/18 12:00 ~ 13:00	神奈川県	Kanagawa (Chigasaki)	0.05
15	3/18 12:00 ~ 13:00	新潟県	Niigata (Niigata)	0.046
16	3/18 12:00 ~ 13:00	富山県	Toyama (Imizu)	0.047
17	3/18 12:00 ~ 13:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 12:00 ~ 13:00	福井県	Fukui (Fukui)	0.044
19	3/18 12:00 ~ 13:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 12:00 ~ 13:00	長野県	Nagano (Nagano)	0.071
21	3/18 12:00 ~ 13:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 12:00 ~ 13:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/18 12:00 ~ 13:00	愛知県	Aichi (Nagoya)	0.038
24	3/18 12:00 ~ 13:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 12:00 ~ 13:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 12:00 ~ 13:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 12:00 ~ 13:00	大阪府	Osaka (Osaka)	0.042
28	3/18 12:00 ~ 13:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 12:00 ~ 13:00	奈良県	Nara (Nara)	0.047
30	3/18 12:00 ~ 13:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 12:00 ~ 13:00	鳥取県	Tottori (Touhaku-g)	0.058
32	3/18 12:00 ~ 13:00	島根県	Shimane (Matsue)	0.037
33	3/18 12:00 ~ 13:00	岡山県	Okayama (Okayama)	0.048

34	3/18 12:00 ~ 13:00	広島県	Hiroshima (Hiroshin	0.047
35	3/18 12:00 ~ 13:00	山口県	Yamaguchi (Yamagi	0.092
36	3/18 12:00 ~ 13:00	徳島県	Tokushima (Tokush	0.037
37	3/18 12:00 ~ 13:00	香川県	Kagawa (Takamats	0.051
38	3/18 12:00 ~ 13:00	愛媛県	Ehime (Matsuyama	0.047
39	3/18 12:00 ~ 13:00	高知県	Kochi (Kochi)	0.024
40	3/18 12:00 ~ 13:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 12:00 ~ 13:00	佐賀県	Saga (Saga)	0.04
42	3/18 12:00 ~ 13:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 12:00 ~ 13:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 12:00 ~ 13:00	大分県	Oita (Oita)	0.05
45	3/18 12:00 ~ 13:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 12:00 ~ 13:00	鹿児島県	Kagoshima (Kagosh	0.034
47	3/18 12:00 ~ 13:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 13:00 ~ 14:00	北海道	Hokkaido (Sapporo	0.027
2	3/18 13:00 ~ 14:00	青森県	Aomori (Aomori)	0.02
3	3/18 13:00 ~ 14:00	岩手県	Iwate (Morioka)	0.028
4	3/18 13:00 ~ 14:00	宮城県	Miyagi (Sendai)	
5	3/18 13:00 ~ 14:00	秋田県	Akita (Akita)	0.034
6	3/18 13:00 ~ 14:00	山形県	Yamagata (Yamaga	0.039
7	3/18 13:00 ~ 14:00	福島県	Fukushima (Futaba-gun)	
8	3/18 13:00 ~ 14:00	茨城県	Ibaraki (Mito)	0.19
9	3/18 13:00 ~ 14:00	栃木県	Tochigi (Itsunomiya	0.168
10	3/18 13:00 ~ 14:00	群馬県	Gunma (Maebashi)	0.086
11	3/18 13:00 ~ 14:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 13:00 ~ 14:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 13:00 ~ 14:00	東京都	Tokyo (Shinjuku-ku	0.049
14	3/18 13:00 ~ 14:00	神奈川県	Kanagawa (Chigasa	0.05
15	3/18 13:00 ~ 14:00	新潟県	Niigata (Niigata)	0.046
16	3/18 13:00 ~ 14:00	富山県	Toyama (Imizu)	0.047
17	3/18 13:00 ~ 14:00	石川県	Ishikawa (Kanazawa	0.046
18	3/18 13:00 ~ 14:00	福井県	Fukui (Fukui)	0.044
19	3/18 13:00 ~ 14:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 13:00 ~ 14:00	長野県	Nagano (Nagano)	0.071
21	3/18 13:00 ~ 14:00	岐阜県	Gifu (Kakamigahara	0.06
22	3/18 13:00 ~ 14:00	静岡県	Shizuoka (Shizuoka	0.038
23	3/18 13:00 ~ 14:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 13:00 ~ 14:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 13:00 ~ 14:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 13:00 ~ 14:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 13:00 ~ 14:00	大阪府	Osaka (Osaka)	0.042
28	3/18 13:00 ~ 14:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 13:00 ~ 14:00	奈良県	Nara (Nara)	0.047
30	3/18 13:00 ~ 14:00	和歌山県	Wakayama (Wakaya	0.031
31	3/18 13:00 ~ 14:00	鳥取県	Tottori (Touhaku-g	0.06
32	3/18 13:00 ~ 14:00	島根県	Shimane (Matsue)	0.036
33	3/18 13:00 ~ 14:00	岡山県	Okayama (Okayam	0.048
34	3/18 13:00 ~ 14:00	広島県	Hiroshima (Hiroshin	0.047
35	3/18 13:00 ~ 14:00	山口県	Yamaguchi (Yamagi	0.092
36	3/18 13:00 ~ 14:00	徳島県	Tokushima (Tokush	0.037
37	3/18 13:00 ~ 14:00	香川県	Kagawa (Takamats	0.052
38	3/18 13:00 ~ 14:00	愛媛県	Ehime (Matsuyama	0.047
39	3/18 13:00 ~ 14:00	高知県	Kochi (Kochi)	0.024
40	3/18 13:00 ~ 14:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 13:00 ~ 14:00	佐賀県	Saga (Saga)	0.04
42	3/18 13:00 ~ 14:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 13:00 ~ 14:00	熊本県	Kumamoto (Uto)	0.027

44	3/18 13:00 ~ 14:00	大分県	Oita (Oita)	0.05
45	3/18 13:00 ~ 14:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 13:00 ~ 14:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 13:00 ~ 14:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 14:00 ~ 15:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 14:00 ~ 15:00	青森県	Aomori (Aomori)	0.019
3	3/18 14:00 ~ 15:00	岩手県	Iwate (Morioka)	0.028
4	3/18 14:00 ~ 15:00	宮城県	Miyagi (Sendai)	
5	3/18 14:00 ~ 15:00	秋田県	Akita (Akita)	0.033
6	3/18 14:00 ~ 15:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 14:00 ~ 15:00	福島県	Fukushima (Futaba-gun)	
8	3/18 14:00 ~ 15:00	茨城県	Ibaraki (Mito)	0.189
9	3/18 14:00 ~ 15:00	栃木県	Tochigi (Itsunomiya)	0.167
10	3/18 14:00 ~ 15:00	群馬県	Gunma (Maebashi)	0.086
11	3/18 14:00 ~ 15:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 14:00 ~ 15:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 14:00 ~ 15:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/18 14:00 ~ 15:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 14:00 ~ 15:00	新潟県	Niigata (Niigata)	0.046
16	3/18 14:00 ~ 15:00	富山県	Toyama (Imizu)	0.047
17	3/18 14:00 ~ 15:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 14:00 ~ 15:00	福井県	Fukui (Fukui)	0.044
19	3/18 14:00 ~ 15:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 14:00 ~ 15:00	長野県	Nagano (Nagano)	0.071
21	3/18 14:00 ~ 15:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 14:00 ~ 15:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 14:00 ~ 15:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 14:00 ~ 15:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 14:00 ~ 15:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 14:00 ~ 15:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 14:00 ~ 15:00	大阪府	Osaka (Osaka)	0.042
28	3/18 14:00 ~ 15:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 14:00 ~ 15:00	奈良県	Nara (Nara)	0.047
30	3/18 14:00 ~ 15:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 14:00 ~ 15:00	鳥取県	Tottori (Touhaku-g)	0.061
32	3/18 14:00 ~ 15:00	島根県	Shimane (Matsue)	0.037
33	3/18 14:00 ~ 15:00	岡山県	Okayama (Okayama)	0.048
34	3/18 14:00 ~ 15:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/18 14:00 ~ 15:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/18 14:00 ~ 15:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 14:00 ~ 15:00	香川県	Kagawa (Takamats)	0.052
38	3/18 14:00 ~ 15:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 14:00 ~ 15:00	高知県	Kochi (Kochi)	0.024
40	3/18 14:00 ~ 15:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 14:00 ~ 15:00	佐賀県	Saga (Saga)	0.04
42	3/18 14:00 ~ 15:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 14:00 ~ 15:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 14:00 ~ 15:00	大分県	Oita (Oita)	0.05
45	3/18 14:00 ~ 15:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 14:00 ~ 15:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 14:00 ~ 15:00	沖縄県	Okinawa (Uruma)	0.02
1	3/18 15:00 ~ 16:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 15:00 ~ 16:00	青森県	Aomori (Aomori)	0.019
3	3/18 15:00 ~ 16:00	岩手県	Iwate (Morioka)	0.028
4	3/18 15:00 ~ 16:00	宮城県	Miyagi (Sendai)	
5	3/18 15:00 ~ 16:00	秋田県	Akita (Akita)	0.034
6	3/18 15:00 ~ 16:00	山形県	Yamagata (Yamaga)	0.04

7	3/18 15:00 ~ 16:00	福島県	Fukushima (Futaba-gun)	
8	3/18 15:00 ~ 16:00	茨城県	Ibaraki (Mito)	0.188
9	3/18 15:00 ~ 16:00	栃木県	Tochigi (Itsunomiya)	0.166
10	3/18 15:00 ~ 16:00	群馬県	Gunma (Maebashi)	0.085
11	3/18 15:00 ~ 16:00	埼玉県	Saitama (Saitama)	
12	3/18 15:00 ~ 16:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 15:00 ~ 16:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/18 15:00 ~ 16:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 15:00 ~ 16:00	新潟県	Niigata (Niigata)	0.046
16	3/18 15:00 ~ 16:00	富山県	Toyama (Imizu)	0.047
17	3/18 15:00 ~ 16:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 15:00 ~ 16:00	福井県	Fukui (Fukui)	0.044
19	3/18 15:00 ~ 16:00	山梨県	Yamanashi (Kofu)	0.043
20	3/18 15:00 ~ 16:00	長野県	Nagano (Nagano)	0.071
21	3/18 15:00 ~ 16:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 15:00 ~ 16:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 15:00 ~ 16:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 15:00 ~ 16:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 15:00 ~ 16:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 15:00 ~ 16:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 15:00 ~ 16:00	大阪府	Osaka (Osaka)	0.042
28	3/18 15:00 ~ 16:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 15:00 ~ 16:00	奈良県	Nara (Nara)	0.047
30	3/18 15:00 ~ 16:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 15:00 ~ 16:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/18 15:00 ~ 16:00	島根県	Shimane (Matsue)	0.036
33	3/18 15:00 ~ 16:00	岡山県	Okayama (Okayama)	0.048
34	3/18 15:00 ~ 16:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/18 15:00 ~ 16:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/18 15:00 ~ 16:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 15:00 ~ 16:00	香川県	Kagawa (Takamats)	0.051
38	3/18 15:00 ~ 16:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 15:00 ~ 16:00	高知県	Kochi (Kochi)	0.024
40	3/18 15:00 ~ 16:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 15:00 ~ 16:00	佐賀県	Saga (Saga)	0.04
42	3/18 15:00 ~ 16:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 15:00 ~ 16:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 15:00 ~ 16:00	大分県	Oita (Oita)	0.05
45	3/18 15:00 ~ 16:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 15:00 ~ 16:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 15:00 ~ 16:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 16:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 16:00 ~ 17:00	青森県	Aomori (Aomori)	0.019
3	3/18 16:00 ~ 17:00	岩手県	Iwate (Morioka)	0.028
4	3/18 16:00 ~ 17:00	宮城県	Miyagi (Sendai)	
5	3/18 16:00 ~ 17:00	秋田県	Akita (Akita)	0.033
6	3/18 16:00 ~ 17:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 16:00 ~ 17:00	福島県	Fukushima (Futaba-gun)	
8	3/18 16:00 ~ 17:00	茨城県	Ibaraki (Mito)	0.187
9	3/18 16:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	0.165
10	3/18 16:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.085
11	3/18 16:00 ~ 17:00	埼玉県	Saitama (Saitama)	
12	3/18 16:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 16:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/18 16:00 ~ 17:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 16:00 ~ 17:00	新潟県	Niigata (Niigata)	0.046
16	3/18 16:00 ~ 17:00	富山県	Toyama (Imizu)	0.047

17	3/18 16:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 16:00 ~ 17:00	福井県	Fukui (Fukui)	0.045
19	3/18 16:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 16:00 ~ 17:00	長野県	Nagano (Nagano)	0.071
21	3/18 16:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 16:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 16:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 16:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.045
25	3/18 16:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/18 16:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 16:00 ~ 17:00	大阪府	Osaka (Osaka)	0.042
28	3/18 16:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 16:00 ~ 17:00	奈良県	Nara (Nara)	0.047
30	3/18 16:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 16:00 ~ 17:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/18 16:00 ~ 17:00	島根県	Shimane (Matsue)	0.036
33	3/18 16:00 ~ 17:00	岡山県	Okayama (Okayama)	0.048
34	3/18 16:00 ~ 17:00	広島県	Hiroshima (Hiroshima)	0.046
35	3/18 16:00 ~ 17:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/18 16:00 ~ 17:00	徳島県	Tokushima (Tokushima)	0.037
37	3/18 16:00 ~ 17:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/18 16:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 16:00 ~ 17:00	高知県	Kochi (Kochi)	0.024
40	3/18 16:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 16:00 ~ 17:00	佐賀県	Saga (Saga)	0.04
42	3/18 16:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 16:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 16:00 ~ 17:00	大分県	Oita (Oita)	0.05
45	3/18 16:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 16:00 ~ 17:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/18 16:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.02
1	3/18 17:00 ~ 18:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 17:00 ~ 18:00	青森県	Aomori (Aomori)	0.019
3	3/18 17:00 ~ 18:00	岩手県	Iwate (Morioka)	0.028
4	3/18 17:00 ~ 18:00	宮城県	Miyagi (Sendai)	
5	3/18 17:00 ~ 18:00	秋田県	Akita (Akita)	0.034
6	3/18 17:00 ~ 18:00	山形県	Yamagata (Yamagata)	0.039
7	3/18 17:00 ~ 18:00	福島県	Fukushima (Futaba-gun)	
8	3/18 17:00 ~ 18:00	茨城県	Ibaraki (Mito)	0.186
9	3/18 17:00 ~ 18:00	栃木県	Tochigi (Itsunomiya)	0.165
10	3/18 17:00 ~ 18:00	群馬県	Gunma (Maebashi)	0.084
11	3/18 17:00 ~ 18:00	埼玉県	Saitama (Saitama)	
12	3/18 17:00 ~ 18:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 17:00 ~ 18:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 17:00 ~ 18:00	神奈川県	Kanagawa (Chigasaki)	0.05
15	3/18 17:00 ~ 18:00	新潟県	Niigata (Niigata)	0.046
16	3/18 17:00 ~ 18:00	富山県	Toyama (Imizu)	0.047
17	3/18 17:00 ~ 18:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 17:00 ~ 18:00	福井県	Fukui (Fukui)	0.045
19	3/18 17:00 ~ 18:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 17:00 ~ 18:00	長野県	Nagano (Nagano)	0.071
21	3/18 17:00 ~ 18:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 17:00 ~ 18:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 17:00 ~ 18:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 17:00 ~ 18:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 17:00 ~ 18:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/18 17:00 ~ 18:00	京都府	Kyoto (Kyoto)	0.037

27	3/18 17:00 ~ 18:00	大阪府	Osaka (Osaka)	0.042
28	3/18 17:00 ~ 18:00	兵庫県	Hyogo (Kobe)	0.036
29	3/18 17:00 ~ 18:00	奈良県	Nara (Nara)	0.047
30	3/18 17:00 ~ 18:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 17:00 ~ 18:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 17:00 ~ 18:00	島根県	Shimane (Matsue)	0.036
33	3/18 17:00 ~ 18:00	岡山県	Okayama (Okayama)	0.048
34	3/18 17:00 ~ 18:00	広島県	Hiroshima (Hiroshim)	0.046
35	3/18 17:00 ~ 18:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/18 17:00 ~ 18:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 17:00 ~ 18:00	香川県	Kagawa (Takamats)	0.052
38	3/18 17:00 ~ 18:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 17:00 ~ 18:00	高知県	Kochi (Kochi)	0.024
40	3/18 17:00 ~ 18:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 17:00 ~ 18:00	佐賀県	Saga (Saga)	0.04
42	3/18 17:00 ~ 18:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 17:00 ~ 18:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 17:00 ~ 18:00	大分県	Oita (Oita)	0.05
45	3/18 17:00 ~ 18:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 17:00 ~ 18:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 17:00 ~ 18:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 18:00 ~ 19:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.019
3	3/18 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.028
4	3/18 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	
5	3/18 18:00 ~ 19:00	秋田県	Akita (Akita)	0.034
6	3/18 18:00 ~ 19:00	山形県	Yamagata (Yamaga)	0.039
7	3/18 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/18 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.186
9	3/18 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya)	0.165
10	3/18 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	0.084
11	3/18 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/18 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasa)	0.05
15	3/18 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.046
16	3/18 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.047
17	3/18 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.045
19	3/18 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.071
21	3/18 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/18 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.037
27	3/18 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.042
28	3/18 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 18:00 ~ 19:00	奈良県	Nara (Nara)	0.047
30	3/18 18:00 ~ 19:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.037
33	3/18 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.048
34	3/18 18:00 ~ 19:00	広島県	Hiroshima (Hiroshim)	0.046
35	3/18 18:00 ~ 19:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/18 18:00 ~ 19:00	徳島県	Tokushima (Tokush)	0.037

37	3/18 18:00 ~ 19:00	香川県	Kagawa (Takamats)	0.052
38	3/18 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.024
40	3/18 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.04
42	3/18 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 18:00 ~ 19:00	大分県	Oita (Oita)	0.05
45	3/18 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 19:00 ~ 20:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 19:00 ~ 20:00	青森県	Aomori (Aomori)	0.019
3	3/18 19:00 ~ 20:00	岩手県	Iwate (Morioka)	0.028
4	3/18 19:00 ~ 20:00	宮城県	Miyagi (Sendai)	
5	3/18 19:00 ~ 20:00	秋田県	Akita (Akita)	0.034
6	3/18 19:00 ~ 20:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 19:00 ~ 20:00	福島県	Fukushima (Futaba-gun)	
8	3/18 19:00 ~ 20:00	茨城県	Ibaraki (Mito)	0.185
9	3/18 19:00 ~ 20:00	栃木県	Tochigi (Itsunomiya)	0.164
10	3/18 19:00 ~ 20:00	群馬県	Gunma (Maebashi)	0.083
11	3/18 19:00 ~ 20:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 19:00 ~ 20:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 19:00 ~ 20:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 19:00 ~ 20:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/18 19:00 ~ 20:00	新潟県	Niigata (Niigata)	0.046
16	3/18 19:00 ~ 20:00	富山県	Toyama (Imizu)	0.047
17	3/18 19:00 ~ 20:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/18 19:00 ~ 20:00	福井県	Fukui (Fukui)	0.045
19	3/18 19:00 ~ 20:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 19:00 ~ 20:00	長野県	Nagano (Nagano)	0.072
21	3/18 19:00 ~ 20:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 19:00 ~ 20:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/18 19:00 ~ 20:00	愛知県	Aichi (Nagoya)	0.038
24	3/18 19:00 ~ 20:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 19:00 ~ 20:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 19:00 ~ 20:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 19:00 ~ 20:00	大阪府	Osaka (Osaka)	0.042
28	3/18 19:00 ~ 20:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 19:00 ~ 20:00	奈良県	Nara (Nara)	0.047
30	3/18 19:00 ~ 20:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 19:00 ~ 20:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 19:00 ~ 20:00	島根県	Shimane (Matsue)	0.037
33	3/18 19:00 ~ 20:00	岡山県	Okayama (Okayama)	0.048
34	3/18 19:00 ~ 20:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/18 19:00 ~ 20:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/18 19:00 ~ 20:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 19:00 ~ 20:00	香川県	Kagawa (Takamats)	0.052
38	3/18 19:00 ~ 20:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/18 19:00 ~ 20:00	高知県	Kochi (Kochi)	0.024
40	3/18 19:00 ~ 20:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 19:00 ~ 20:00	佐賀県	Saga (Saga)	0.039
42	3/18 19:00 ~ 20:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 19:00 ~ 20:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 19:00 ~ 20:00	大分県	Oita (Oita)	0.05
45	3/18 19:00 ~ 20:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 19:00 ~ 20:00	鹿児島県	Kagoshima (Kagosh)	0.034

47	3/18 19:00 ~ 20:00	沖縄県	Okinawa (Uruma)	0.02
1	3/18 20:00 ~ 21:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 20:00 ~ 21:00	青森県	Aomori (Aomori)	0.019
3	3/18 20:00 ~ 21:00	岩手県	Iwate (Morioka)	0.028
4	3/18 20:00 ~ 21:00	宮城県	Miyagi (Sendai)	
5	3/18 20:00 ~ 21:00	秋田県	Akita (Akita)	0.034
6	3/18 20:00 ~ 21:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 20:00 ~ 21:00	福島県	Fukushima (Futaba-gun)	
8	3/18 20:00 ~ 21:00	茨城県	Ibaraki (Mito)	0.185
9	3/18 20:00 ~ 21:00	栃木県	Tochigi (Itsunomiya)	0.164
10	3/18 20:00 ~ 21:00	群馬県	Gunma (Maebashi)	0.083
11	3/18 20:00 ~ 21:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 20:00 ~ 21:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 20:00 ~ 21:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 20:00 ~ 21:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/18 20:00 ~ 21:00	新潟県	Niigata (Niigata)	0.046
16	3/18 20:00 ~ 21:00	富山県	Toyama (Imizu)	0.047
17	3/18 20:00 ~ 21:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 20:00 ~ 21:00	福井県	Fukui (Fukui)	0.045
19	3/18 20:00 ~ 21:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 20:00 ~ 21:00	長野県	Nagano (Nagano)	0.071
21	3/18 20:00 ~ 21:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 20:00 ~ 21:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/18 20:00 ~ 21:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 20:00 ~ 21:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 20:00 ~ 21:00	滋賀県	Shiga (Ohtsu)	0.032
26	3/18 20:00 ~ 21:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 20:00 ~ 21:00	大阪府	Osaka (Osaka)	0.042
28	3/18 20:00 ~ 21:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 20:00 ~ 21:00	奈良県	Nara (Nara)	0.047
30	3/18 20:00 ~ 21:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 20:00 ~ 21:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 20:00 ~ 21:00	島根県	Shimane (Matsue)	0.037
33	3/18 20:00 ~ 21:00	岡山県	Okayama (Okayama)	0.048
34	3/18 20:00 ~ 21:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/18 20:00 ~ 21:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/18 20:00 ~ 21:00	徳島県	Tokushima (Tokush)	0.037
37	3/18 20:00 ~ 21:00	香川県	Kagawa (Takamats)	0.052
38	3/18 20:00 ~ 21:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/18 20:00 ~ 21:00	高知県	Kochi (Kochi)	0.025
40	3/18 20:00 ~ 21:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 20:00 ~ 21:00	佐賀県	Saga (Saga)	0.039
42	3/18 20:00 ~ 21:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 20:00 ~ 21:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 20:00 ~ 21:00	大分県	Oita (Oita)	0.05
45	3/18 20:00 ~ 21:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 20:00 ~ 21:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 20:00 ~ 21:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 21:00 ~ 22:00	北海道	Hokkaido (Sapporo)	0.027
2	3/18 21:00 ~ 22:00	青森県	Aomori (Aomori)	0.019
3	3/18 21:00 ~ 22:00	岩手県	Iwate (Morioka)	0.028
4	3/18 21:00 ~ 22:00	宮城県	Miyagi (Sendai)	
5	3/18 21:00 ~ 22:00	秋田県	Akita (Akita)	0.034
6	3/18 21:00 ~ 22:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 21:00 ~ 22:00	福島県	Fukushima (Futaba-gun)	
8	3/18 21:00 ~ 22:00	茨城県	Ibaraki (Mito)	0.184
9	3/18 21:00 ~ 22:00	栃木県	Tochigi (Itsunomiya)	0.164

10	3/18 21:00 ~ 22:00	群馬県	Gunma (Maebashi)	0.083
11	3/18 21:00 ~ 22:00	埼玉県	Saitama (Saitama)	0.057
12	3/18 21:00 ~ 22:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 21:00 ~ 22:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 21:00 ~ 22:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/18 21:00 ~ 22:00	新潟県	Niigata (Niigata)	0.046
16	3/18 21:00 ~ 22:00	富山県	Toyama (Imizu)	0.047
17	3/18 21:00 ~ 22:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 21:00 ~ 22:00	福井県	Fukui (Fukui)	0.045
19	3/18 21:00 ~ 22:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 21:00 ~ 22:00	長野県	Nagano (Nagano)	0.072
21	3/18 21:00 ~ 22:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/18 21:00 ~ 22:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 21:00 ~ 22:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 21:00 ~ 22:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 21:00 ~ 22:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/18 21:00 ~ 22:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 21:00 ~ 22:00	大阪府	Osaka (Osaka)	0.042
28	3/18 21:00 ~ 22:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 21:00 ~ 22:00	奈良県	Nara (Nara)	0.047
30	3/18 21:00 ~ 22:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/18 21:00 ~ 22:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 21:00 ~ 22:00	島根県	Shimane (Matsue)	0.037
33	3/18 21:00 ~ 22:00	岡山県	Okayama (Okayama)	0.048
34	3/18 21:00 ~ 22:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/18 21:00 ~ 22:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/18 21:00 ~ 22:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 21:00 ~ 22:00	香川県	Kagawa (Takamats)	0.052
38	3/18 21:00 ~ 22:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/18 21:00 ~ 22:00	高知県	Kochi (Kochi)	0.025
40	3/18 21:00 ~ 22:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/18 21:00 ~ 22:00	佐賀県	Saga (Saga)	0.04
42	3/18 21:00 ~ 22:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 21:00 ~ 22:00	熊本県	Kumamoto (Uto)	0.027
44	3/18 21:00 ~ 22:00	大分県	Oita (Oita)	0.05
45	3/18 21:00 ~ 22:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/18 21:00 ~ 22:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 21:00 ~ 22:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.019
3	3/18 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.028
4	3/18 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	
5	3/18 22:00 ~ 23:00	秋田県	Akita (Akita)	0.034
6	3/18 22:00 ~ 23:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	
8	3/18 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.184
9	3/18 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya)	0.163
10	3/18 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.083
11	3/18 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.057
12	3/18 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/18 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.046
16	3/18 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.048
17	3/18 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.046
19	3/18 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.044

20	3/18 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.072
21	3/18 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/18 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/18 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/18 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.038
27	3/18 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.042
28	3/18 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 22:00 ~ 23:00	奈良県	Nara (Nara)	0.047
30	3/18 22:00 ~ 23:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 22:00 ~ 23:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.038
33	3/18 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.048
34	3/18 22:00 ~ 23:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/18 22:00 ~ 23:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/18 22:00 ~ 23:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 22:00 ~ 23:00	香川県	Kagawa (Takamats)	0.053
38	3/18 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/18 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.025
40	3/18 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/18 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 22:00 ~ 23:00	大分県	Oita (Oita)	0.051
45	3/18 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/18 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.021
1	3/18 23:00 ~ 24:00	北海道	Hokkaido (Sapporo)	0.028
2	3/18 23:00 ~ 24:00	青森県	Aomori (Aomori)	0.019
3	3/18 23:00 ~ 24:00	岩手県	Iwate (Morioka)	0.028
4	3/18 23:00 ~ 24:00	宮城県	Miyagi (Sendai)	
5	3/18 23:00 ~ 24:00	秋田県	Akita (Akita)	0.034
6	3/18 23:00 ~ 24:00	山形県	Yamagata (Yamaga)	0.04
7	3/18 23:00 ~ 24:00	福島県	Fukushima (Futaba-gun)	
8	3/18 23:00 ~ 24:00	茨城県	Ibaraki (Mito)	0.183
9	3/18 23:00 ~ 24:00	栃木県	Tochigi (Itsunomiya)	0.163
10	3/18 23:00 ~ 24:00	群馬県	Gunma (Maebashi)	0.083
11	3/18 23:00 ~ 24:00	埼玉県	Saitama (Saitama)	0.058
12	3/18 23:00 ~ 24:00	千葉県	Chiba (Ichihara)	0.034
13	3/18 23:00 ~ 24:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/18 23:00 ~ 24:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/18 23:00 ~ 24:00	新潟県	Niigata (Niigata)	0.046
16	3/18 23:00 ~ 24:00	富山県	Toyama (Imizu)	0.048
17	3/18 23:00 ~ 24:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/18 23:00 ~ 24:00	福井県	Fukui (Fukui)	0.046
19	3/18 23:00 ~ 24:00	山梨県	Yamanashi (Kofu)	0.044
20	3/18 23:00 ~ 24:00	長野県	Nagano (Nagano)	0.072
21	3/18 23:00 ~ 24:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/18 23:00 ~ 24:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/18 23:00 ~ 24:00	愛知県	Aichi (Nagoya)	0.039
24	3/18 23:00 ~ 24:00	三重県	Mie (Yokkaichi)	0.046
25	3/18 23:00 ~ 24:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/18 23:00 ~ 24:00	京都府	Kyoto (Kyoto)	0.039
27	3/18 23:00 ~ 24:00	大阪府	Osaka (Osaka)	0.042
28	3/18 23:00 ~ 24:00	兵庫県	Hyogo (Kobe)	0.037
29	3/18 23:00 ~ 24:00	奈良県	Nara (Nara)	0.048

30	3/18 23:00 ~ 24:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/18 23:00 ~ 24:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/18 23:00 ~ 24:00	島根県	Shimane (Matsue)	0.038
33	3/18 23:00 ~ 24:00	岡山県	Okayama (Okayama)	0.049
34	3/18 23:00 ~ 24:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/18 23:00 ~ 24:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/18 23:00 ~ 24:00	徳島県	Tokushima (Tokush)	0.038
37	3/18 23:00 ~ 24:00	香川県	Kagawa (Takamats)	0.053
38	3/18 23:00 ~ 24:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/18 23:00 ~ 24:00	高知県	Kochi (Kochi)	0.026
40	3/18 23:00 ~ 24:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/18 23:00 ~ 24:00	佐賀県	Saga (Saga)	0.04
42	3/18 23:00 ~ 24:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/18 23:00 ~ 24:00	熊本県	Kumamoto (Uto)	0.028
44	3/18 23:00 ~ 24:00	大分県	Oita (Oita)	0.05
45	3/18 23:00 ~ 24:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/18 23:00 ~ 24:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/18 23:00 ~ 24:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 00:00 ~ 01:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 00:00 ~ 01:00	青森県	Aomori (Aomori)	0.019
3	3/19 00:00 ~ 01:00	岩手県	Iwate (Morioka)	0.028
4	3/19 00:00 ~ 01:00	宮城県	Miyagi (Sendai)	
5	3/19 00:00 ~ 01:00	秋田県	Akita (Akita)	0.034
6	3/19 00:00 ~ 01:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 00:00 ~ 01:00	福島県	Fukushima (Futaba-gun)	
8	3/19 00:00 ~ 01:00	茨城県	Ibaraki (Mito)	0.183
9	3/19 00:00 ~ 01:00	栃木県	Tochigi (Itsunomiya)	0.162
10	3/19 00:00 ~ 01:00	群馬県	Gunma (Maebashi)	0.084
11	3/19 00:00 ~ 01:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 00:00 ~ 01:00	千葉県	Chiba (Ichihara)	0.034
13	3/19 00:00 ~ 01:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 00:00 ~ 01:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 00:00 ~ 01:00	新潟県	Niigata (Niigata)	0.046
16	3/19 00:00 ~ 01:00	富山県	Toyama (Imizu)	0.048
17	3/19 00:00 ~ 01:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 00:00 ~ 01:00	福井県	Fukui (Fukui)	0.045
19	3/19 00:00 ~ 01:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 00:00 ~ 01:00	長野県	Nagano (Nagano)	0.072
21	3/19 00:00 ~ 01:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 00:00 ~ 01:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 00:00 ~ 01:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 00:00 ~ 01:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 00:00 ~ 01:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/19 00:00 ~ 01:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 00:00 ~ 01:00	大阪府	Osaka (Osaka)	0.042
28	3/19 00:00 ~ 01:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 00:00 ~ 01:00	奈良県	Nara (Nara)	0.048
30	3/19 00:00 ~ 01:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/19 00:00 ~ 01:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 00:00 ~ 01:00	島根県	Shimane (Matsue)	0.038
33	3/19 00:00 ~ 01:00	岡山県	Okayama (Okayama)	0.049
34	3/19 00:00 ~ 01:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/19 00:00 ~ 01:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/19 00:00 ~ 01:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 00:00 ~ 01:00	香川県	Kagawa (Takamats)	0.053
38	3/19 00:00 ~ 01:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 00:00 ~ 01:00	高知県	Kochi (Kochi)	0.026

40	3/19 00:00 ~ 01:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 00:00 ~ 01:00	佐賀県	Saga (Saga)	0.041
42	3/19 00:00 ~ 01:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 00:00 ~ 01:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 00:00 ~ 01:00	大分県	Oita (Oita)	0.051
45	3/19 00:00 ~ 01:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 00:00 ~ 01:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/19 00:00 ~ 01:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 01:00 ~ 02:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 01:00 ~ 02:00	青森県	Aomori (Aomori)	0.02
3	3/19 01:00 ~ 02:00	岩手県	Iwate (Morioka)	0.028
4	3/19 01:00 ~ 02:00	宮城県	Miyagi (Sendai)	
5	3/19 01:00 ~ 02:00	秋田県	Akita (Akita)	0.034
6	3/19 01:00 ~ 02:00	山形県	Yamagata (Yamagata)	0.04
7	3/19 01:00 ~ 02:00	福島県	Fukushima (Futaba-gun)	
8	3/19 01:00 ~ 02:00	茨城県	Ibaraki (Mito)	0.182
9	3/19 01:00 ~ 02:00	栃木県	Tochigi (Itsunomiya)	0.161
10	3/19 01:00 ~ 02:00	群馬県	Gunma (Maebashi)	0.084
11	3/19 01:00 ~ 02:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 01:00 ~ 02:00	千葉県	Chiba (Ichihara)	0.034
13	3/19 01:00 ~ 02:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 01:00 ~ 02:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 01:00 ~ 02:00	新潟県	Niigata (Niigata)	0.047
16	3/19 01:00 ~ 02:00	富山県	Toyama (Imizu)	0.049
17	3/19 01:00 ~ 02:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/19 01:00 ~ 02:00	福井県	Fukui (Fukui)	0.046
19	3/19 01:00 ~ 02:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 01:00 ~ 02:00	長野県	Nagano (Nagano)	0.072
21	3/19 01:00 ~ 02:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 01:00 ~ 02:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 01:00 ~ 02:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 01:00 ~ 02:00	三重県	Mie (Yokkaichi)	0.047
25	3/19 01:00 ~ 02:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/19 01:00 ~ 02:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 01:00 ~ 02:00	大阪府	Osaka (Osaka)	0.042
28	3/19 01:00 ~ 02:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 01:00 ~ 02:00	奈良県	Nara (Nara)	0.048
30	3/19 01:00 ~ 02:00	和歌山県	Wakayama (Wakayama)	0.033
31	3/19 01:00 ~ 02:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/19 01:00 ~ 02:00	島根県	Shimane (Matsue)	0.038
33	3/19 01:00 ~ 02:00	岡山県	Okayama (Okayama)	0.049
34	3/19 01:00 ~ 02:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/19 01:00 ~ 02:00	山口県	Yamaguchi (Yamaguchi)	0.095
36	3/19 01:00 ~ 02:00	徳島県	Tokushima (Tokushima)	0.038
37	3/19 01:00 ~ 02:00	香川県	Kagawa (Takamatsu)	0.053
38	3/19 01:00 ~ 02:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 01:00 ~ 02:00	高知県	Kochi (Kochi)	0.026
40	3/19 01:00 ~ 02:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 01:00 ~ 02:00	佐賀県	Saga (Saga)	0.041
42	3/19 01:00 ~ 02:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 01:00 ~ 02:00	熊本県	Kumamoto (Uto)	0.028
44	3/19 01:00 ~ 02:00	大分県	Oita (Oita)	0.05
45	3/19 01:00 ~ 02:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 01:00 ~ 02:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/19 01:00 ~ 02:00	沖縄県	Okinawa (Uruma)	0.02
1	3/19 02:00 ~ 03:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 02:00 ~ 03:00	青森県	Aomori (Aomori)	0.019

3	3/19 02:00 ~ 03:00	岩手県	Iwate (Morioka)	0.028
4	3/19 02:00 ~ 03:00	宮城県	Miyagi (Sendai)	
5	3/19 02:00 ~ 03:00	秋田県	Akita (Akita)	0.034
6	3/19 02:00 ~ 03:00	山形県	Yamagata (Yamagata)	0.04
7	3/19 02:00 ~ 03:00	福島県	Fukushima (Futaba-gun)	
8	3/19 02:00 ~ 03:00	茨城県	Ibaraki (Mito)	0.182
9	3/19 02:00 ~ 03:00	栃木県	Tochigi (Itsunomiya)	0.161
10	3/19 02:00 ~ 03:00	群馬県	Gunma (Maebashi)	0.083
11	3/19 02:00 ~ 03:00	埼玉県	Saitama (Saitama)	0.057
12	3/19 02:00 ~ 03:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 02:00 ~ 03:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 02:00 ~ 03:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 02:00 ~ 03:00	新潟県	Niigata (Niigata)	0.047
16	3/19 02:00 ~ 03:00	富山県	Toyama (Imizu)	0.049
17	3/19 02:00 ~ 03:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/19 02:00 ~ 03:00	福井県	Fukui (Fukui)	0.046
19	3/19 02:00 ~ 03:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 02:00 ~ 03:00	長野県	Nagano (Nagano)	0.072
21	3/19 02:00 ~ 03:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 02:00 ~ 03:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 02:00 ~ 03:00	愛知県	Aichi (Nagoya)	0.04
24	3/19 02:00 ~ 03:00	三重県	Mie (Yokkaichi)	0.047
25	3/19 02:00 ~ 03:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/19 02:00 ~ 03:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 02:00 ~ 03:00	大阪府	Osaka (Osaka)	0.042
28	3/19 02:00 ~ 03:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 02:00 ~ 03:00	奈良県	Nara (Nara)	0.048
30	3/19 02:00 ~ 03:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/19 02:00 ~ 03:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 02:00 ~ 03:00	島根県	Shimane (Matsue)	0.038
33	3/19 02:00 ~ 03:00	岡山県	Okayama (Okayama)	0.049
34	3/19 02:00 ~ 03:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/19 02:00 ~ 03:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/19 02:00 ~ 03:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 02:00 ~ 03:00	香川県	Kagawa (Takamats)	0.053
38	3/19 02:00 ~ 03:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 02:00 ~ 03:00	高知県	Kochi (Kochi)	0.027
40	3/19 02:00 ~ 03:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 02:00 ~ 03:00	佐賀県	Saga (Saga)	0.041
42	3/19 02:00 ~ 03:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 02:00 ~ 03:00	熊本県	Kumamoto (Uto)	0.028
44	3/19 02:00 ~ 03:00	大分県	Oita (Oita)	0.051
45	3/19 02:00 ~ 03:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 02:00 ~ 03:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 02:00 ~ 03:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 03:00 ~ 04:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 03:00 ~ 04:00	青森県	Aomori (Aomori)	0.02
3	3/19 03:00 ~ 04:00	岩手県	Iwate (Morioka)	0.028
4	3/19 03:00 ~ 04:00	宮城県	Miyagi (Sendai)	
5	3/19 03:00 ~ 04:00	秋田県	Akita (Akita)	0.034
6	3/19 03:00 ~ 04:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 03:00 ~ 04:00	福島県	Fukushima (Futaba-gun)	
8	3/19 03:00 ~ 04:00	茨城県	Ibaraki (Mito)	0.181
9	3/19 03:00 ~ 04:00	栃木県	Tochigi (Itsunomiya)	0.16
10	3/19 03:00 ~ 04:00	群馬県	Gunma (Maebashi)	0.082
11	3/19 03:00 ~ 04:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 03:00 ~ 04:00	千葉県	Chiba (Ichihara)	0.033

13	3/19 03:00 ~ 04:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/19 03:00 ~ 04:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 03:00 ~ 04:00	新潟県	Niigata (Niigata)	0.047
16	3/19 03:00 ~ 04:00	富山県	Toyama (Imizu)	0.049
17	3/19 03:00 ~ 04:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 03:00 ~ 04:00	福井県	Fukui (Fukui)	0.046
19	3/19 03:00 ~ 04:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 03:00 ~ 04:00	長野県	Nagano (Nagano)	0.072
21	3/19 03:00 ~ 04:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/19 03:00 ~ 04:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/19 03:00 ~ 04:00	愛知県	Aichi (Nagoya)	0.041
24	3/19 03:00 ~ 04:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 03:00 ~ 04:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/19 03:00 ~ 04:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 03:00 ~ 04:00	大阪府	Osaka (Osaka)	0.042
28	3/19 03:00 ~ 04:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 03:00 ~ 04:00	奈良県	Nara (Nara)	0.048
30	3/19 03:00 ~ 04:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/19 03:00 ~ 04:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 03:00 ~ 04:00	島根県	Shimane (Matsue)	0.037
33	3/19 03:00 ~ 04:00	岡山県	Okayama (Okayama)	0.05
34	3/19 03:00 ~ 04:00	広島県	Hiroshima (Hiroshima)	0.049
35	3/19 03:00 ~ 04:00	山口県	Yamaguchi (Yamaguchi)	0.096
36	3/19 03:00 ~ 04:00	徳島県	Tokushima (Tokushima)	0.038
37	3/19 03:00 ~ 04:00	香川県	Kagawa (Takamatsushima)	0.054
38	3/19 03:00 ~ 04:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 03:00 ~ 04:00	高知県	Kochi (Kochi)	0.027
40	3/19 03:00 ~ 04:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 03:00 ~ 04:00	佐賀県	Saga (Saga)	0.041
42	3/19 03:00 ~ 04:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 03:00 ~ 04:00	熊本県	Kumamoto (Uto)	0.028
44	3/19 03:00 ~ 04:00	大分県	Oita (Oita)	0.05
45	3/19 03:00 ~ 04:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 03:00 ~ 04:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/19 03:00 ~ 04:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 04:00 ~ 05:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 04:00 ~ 05:00	青森県	Aomori (Aomori)	0.019
3	3/19 04:00 ~ 05:00	岩手県	Iwate (Morioka)	0.028
4	3/19 04:00 ~ 05:00	宮城県	Miyagi (Sendai)	
5	3/19 04:00 ~ 05:00	秋田県	Akita (Akita)	0.034
6	3/19 04:00 ~ 05:00	山形県	Yamagata (Yamagata)	0.04
7	3/19 04:00 ~ 05:00	福島県	Fukushima (Futaba-gun)	
8	3/19 04:00 ~ 05:00	茨城県	Ibaraki (Mito)	0.18
9	3/19 04:00 ~ 05:00	栃木県	Tochigi (Itsunomiya)	0.159
10	3/19 04:00 ~ 05:00	群馬県	Gunma (Maebashi)	0.083
11	3/19 04:00 ~ 05:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 04:00 ~ 05:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 04:00 ~ 05:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 04:00 ~ 05:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 04:00 ~ 05:00	新潟県	Niigata (Niigata)	0.047
16	3/19 04:00 ~ 05:00	富山県	Toyama (Imizu)	0.048
17	3/19 04:00 ~ 05:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/19 04:00 ~ 05:00	福井県	Fukui (Fukui)	0.046
19	3/19 04:00 ~ 05:00	山梨県	Yamanashi (Kofu)	0.045
20	3/19 04:00 ~ 05:00	長野県	Nagano (Nagano)	0.071
21	3/19 04:00 ~ 05:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/19 04:00 ~ 05:00	静岡県	Shizuoka (Shizuoka)	0.037

23	3/19 04:00 ~ 05:00	愛知県	Aichi (Nagoya)	0.041
24	3/19 04:00 ~ 05:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 04:00 ~ 05:00	滋賀県	Shiga (Ohtsu)	0.037
26	3/19 04:00 ~ 05:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 04:00 ~ 05:00	大阪府	Osaka (Osaka)	0.043
28	3/19 04:00 ~ 05:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 04:00 ~ 05:00	奈良県	Nara (Nara)	0.048
30	3/19 04:00 ~ 05:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/19 04:00 ~ 05:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 04:00 ~ 05:00	島根県	Shimane (Matsue)	0.037
33	3/19 04:00 ~ 05:00	岡山県	Okayama (Okayama)	0.05
34	3/19 04:00 ~ 05:00	広島県	Hiroshima (Hiroshim)	0.05
35	3/19 04:00 ~ 05:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/19 04:00 ~ 05:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 04:00 ~ 05:00	香川県	Kagawa (Takamatsu)	0.054
38	3/19 04:00 ~ 05:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 04:00 ~ 05:00	高知県	Kochi (Kochi)	0.027
40	3/19 04:00 ~ 05:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 04:00 ~ 05:00	佐賀県	Saga (Saga)	0.041
42	3/19 04:00 ~ 05:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 04:00 ~ 05:00	熊本県	Kumamoto (Uto)	0.028
44	3/19 04:00 ~ 05:00	大分県	Oita (Oita)	0.05
45	3/19 04:00 ~ 05:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 04:00 ~ 05:00	鹿児島県	Kagoshima (Kagosh)	0.036
47	3/19 04:00 ~ 05:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 05:00 ~ 06:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 05:00 ~ 06:00	青森県	Aomori (Aomori)	0.02
3	3/19 05:00 ~ 06:00	岩手県	Iwate (Morioka)	0.028
4	3/19 05:00 ~ 06:00	宮城県	Miyagi (Sendai)	
5	3/19 05:00 ~ 06:00	秋田県	Akita (Akita)	0.034
6	3/19 05:00 ~ 06:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 05:00 ~ 06:00	福島県	Fukushima (Futaba-gun)	
8	3/19 05:00 ~ 06:00	茨城県	Ibaraki (Mito)	0.18
9	3/19 05:00 ~ 06:00	栃木県	Tochigi (Itsunomiya)	0.159
10	3/19 05:00 ~ 06:00	群馬県	Gunma (Maebashi)	0.082
11	3/19 05:00 ~ 06:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 05:00 ~ 06:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 05:00 ~ 06:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 05:00 ~ 06:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 05:00 ~ 06:00	新潟県	Niigata (Niigata)	0.047
16	3/19 05:00 ~ 06:00	富山県	Toyama (Imizu)	0.048
17	3/19 05:00 ~ 06:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 05:00 ~ 06:00	福井県	Fukui (Fukui)	0.046
19	3/19 05:00 ~ 06:00	山梨県	Yamanashi (Kofu)	0.045
20	3/19 05:00 ~ 06:00	長野県	Nagano (Nagano)	0.071
21	3/19 05:00 ~ 06:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/19 05:00 ~ 06:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/19 05:00 ~ 06:00	愛知県	Aichi (Nagoya)	0.041
24	3/19 05:00 ~ 06:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 05:00 ~ 06:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/19 05:00 ~ 06:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 05:00 ~ 06:00	大阪府	Osaka (Osaka)	0.043
28	3/19 05:00 ~ 06:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 05:00 ~ 06:00	奈良県	Nara (Nara)	0.048
30	3/19 05:00 ~ 06:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 05:00 ~ 06:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 05:00 ~ 06:00	島根県	Shimane (Matsue)	0.037

33	3/19 05:00 ~ 06:00	岡山県	Okayama (Okayama)	0.05
34	3/19 05:00 ~ 06:00	広島県	Hiroshima (Hiroshin	0.05
35	3/19 05:00 ~ 06:00	山口県	Yamaguchi (Yamagi	0.096
36	3/19 05:00 ~ 06:00	徳島県	Tokushima (Tokush	0.039
37	3/19 05:00 ~ 06:00	香川県	Kagawa (Takamatsu	0.054
38	3/19 05:00 ~ 06:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 05:00 ~ 06:00	高知県	Kochi (Kochi)	0.027
40	3/19 05:00 ~ 06:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 05:00 ~ 06:00	佐賀県	Saga (Saga)	0.041
42	3/19 05:00 ~ 06:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 05:00 ~ 06:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 05:00 ~ 06:00	大分県	Oita (Oita)	0.05
45	3/19 05:00 ~ 06:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 05:00 ~ 06:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/19 05:00 ~ 06:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 06:00 ~ 07:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 06:00 ~ 07:00	青森県	Aomori (Aomori)	0.019
3	3/19 06:00 ~ 07:00	岩手県	Iwate (Morioka)	0.028
4	3/19 06:00 ~ 07:00	宮城県	Miyagi (Sendai)	
5	3/19 06:00 ~ 07:00	秋田県	Akita (Akita)	0.034
6	3/19 06:00 ~ 07:00	山形県	Yamagata (Yamaga	0.04
7	3/19 06:00 ~ 07:00	福島県	Fukushima (Futaba-gun)	
8	3/19 06:00 ~ 07:00	茨城県	Ibaraki (Mito)	0.18
9	3/19 06:00 ~ 07:00	栃木県	Tochigi (Itsunomiya	0.157
10	3/19 06:00 ~ 07:00	群馬県	Gunma (Maebashi)	0.083
11	3/19 06:00 ~ 07:00	埼玉県	Saitama (Saitama)	0.058
12	3/19 06:00 ~ 07:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 06:00 ~ 07:00	東京都	Tokyo (Shinjuku-ku	0.047
14	3/19 06:00 ~ 07:00	神奈川県	Kanagawa (Chigasa	0.049
15	3/19 06:00 ~ 07:00	新潟県	Niigata (Niigata)	0.047
16	3/19 06:00 ~ 07:00	富山県	Toyama (Imizu)	0.048
17	3/19 06:00 ~ 07:00	石川県	Ishikawa (Kanazawa	0.047
18	3/19 06:00 ~ 07:00	福井県	Fukui (Fukui)	0.046
19	3/19 06:00 ~ 07:00	山梨県	Yamanashi (Kofu)	0.045
20	3/19 06:00 ~ 07:00	長野県	Nagano (Nagano)	0.071
21	3/19 06:00 ~ 07:00	岐阜県	Gifu (Kakamigahara	0.063
22	3/19 06:00 ~ 07:00	静岡県	Shizuoka (Shizuoka	0.038
23	3/19 06:00 ~ 07:00	愛知県	Aichi (Nagoya)	0.042
24	3/19 06:00 ~ 07:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 06:00 ~ 07:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/19 06:00 ~ 07:00	京都府	Kyoto (Kyoto)	0.04
27	3/19 06:00 ~ 07:00	大阪府	Osaka (Osaka)	0.044
28	3/19 06:00 ~ 07:00	兵庫県	Hyogo (Kobe)	0.038
29	3/19 06:00 ~ 07:00	奈良県	Nara (Nara)	0.049
30	3/19 06:00 ~ 07:00	和歌山県	Wakayama (Wakaya	0.033
31	3/19 06:00 ~ 07:00	鳥取県	Tottori (Touhaku-g	0.063
32	3/19 06:00 ~ 07:00	島根県	Shimane (Matsue)	0.037
33	3/19 06:00 ~ 07:00	岡山県	Okayama (Okayama)	0.05
34	3/19 06:00 ~ 07:00	広島県	Hiroshima (Hiroshin	0.05
35	3/19 06:00 ~ 07:00	山口県	Yamaguchi (Yamagi	0.096
36	3/19 06:00 ~ 07:00	徳島県	Tokushima (Tokush	0.039
37	3/19 06:00 ~ 07:00	香川県	Kagawa (Takamatsu	0.054
38	3/19 06:00 ~ 07:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 06:00 ~ 07:00	高知県	Kochi (Kochi)	0.027
40	3/19 06:00 ~ 07:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 06:00 ~ 07:00	佐賀県	Saga (Saga)	0.041
42	3/19 06:00 ~ 07:00	長崎県	Nagasaki (Ohmura)	0.029

43	3/19 06:00 ~ 07:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 06:00 ~ 07:00	大分県	Oita (Oita)	0.05
45	3/19 06:00 ~ 07:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 06:00 ~ 07:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 06:00 ~ 07:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 07:00 ~ 08:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 07:00 ~ 08:00	青森県	Aomori (Aomori)	0.02
3	3/19 07:00 ~ 08:00	岩手県	Iwate (Morioka)	0.028
4	3/19 07:00 ~ 08:00	宮城県	Miyagi (Sendai)	
5	3/19 07:00 ~ 08:00	秋田県	Akita (Akita)	0.034
6	3/19 07:00 ~ 08:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 07:00 ~ 08:00	福島県	Fukushima (Futaba-gun)	
8	3/19 07:00 ~ 08:00	茨城県	Ibaraki (Mito)	0.178
9	3/19 07:00 ~ 08:00	栃木県	Tochigi (Itsunomiya)	0.156
10	3/19 07:00 ~ 08:00	群馬県	Gunma (Maebashi)	0.083
11	3/19 07:00 ~ 08:00	埼玉県	Saitama (Saitama)	0.057
12	3/19 07:00 ~ 08:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 07:00 ~ 08:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/19 07:00 ~ 08:00	神奈川県	Kanagawa (Chigasa)	0.049
15	3/19 07:00 ~ 08:00	新潟県	Niigata (Niigata)	0.047
16	3/19 07:00 ~ 08:00	富山県	Toyama (Imizu)	0.047
17	3/19 07:00 ~ 08:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 07:00 ~ 08:00	福井県	Fukui (Fukui)	0.046
19	3/19 07:00 ~ 08:00	山梨県	Yamanashi (Kofu)	0.045
20	3/19 07:00 ~ 08:00	長野県	Nagano (Nagano)	0.071
21	3/19 07:00 ~ 08:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/19 07:00 ~ 08:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 07:00 ~ 08:00	愛知県	Aichi (Nagoya)	0.042
24	3/19 07:00 ~ 08:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 07:00 ~ 08:00	滋賀県	Shiga (Ohtsu)	0.037
26	3/19 07:00 ~ 08:00	京都府	Kyoto (Kyoto)	0.04
27	3/19 07:00 ~ 08:00	大阪府	Osaka (Osaka)	0.043
28	3/19 07:00 ~ 08:00	兵庫県	Hyogo (Kobe)	0.038
29	3/19 07:00 ~ 08:00	奈良県	Nara (Nara)	0.048
30	3/19 07:00 ~ 08:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 07:00 ~ 08:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 07:00 ~ 08:00	島根県	Shimane (Matsue)	0.036
33	3/19 07:00 ~ 08:00	岡山県	Okayama (Okayama)	0.05
34	3/19 07:00 ~ 08:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/19 07:00 ~ 08:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/19 07:00 ~ 08:00	徳島県	Tokushima (Tokush)	0.039
37	3/19 07:00 ~ 08:00	香川県	Kagawa (Takamats)	0.055
38	3/19 07:00 ~ 08:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 07:00 ~ 08:00	高知県	Kochi (Kochi)	0.027
40	3/19 07:00 ~ 08:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 07:00 ~ 08:00	佐賀県	Saga (Saga)	0.041
42	3/19 07:00 ~ 08:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 07:00 ~ 08:00	熊本県	Kumamoto (Uto)	0.028
44	3/19 07:00 ~ 08:00	大分県	Oita (Oita)	0.05
45	3/19 07:00 ~ 08:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 07:00 ~ 08:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 07:00 ~ 08:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 08:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 08:00 ~ 09:00	青森県	Aomori (Aomori)	0.019
3	3/19 08:00 ~ 09:00	岩手県	Iwate (Morioka)	0.028
4	3/19 08:00 ~ 09:00	宮城県	Miyagi (Sendai)	
5	3/19 08:00 ~ 09:00	秋田県	Akita (Akita)	0.034

6	3/19 08:00 ~ 09:00	山形県	Yamagata (Yamaga	0.04
7	3/19 08:00 ~ 09:00	福島県	Fukushima (Futaba-gun)	
8	3/19 08:00 ~ 09:00	茨城県	Ibaraki (Mito)	0.177
9	3/19 08:00 ~ 09:00	栃木県	Tochigi (Itsunomiya	0.155
10	3/19 08:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.081
11	3/19 08:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.057
12	3/19 08:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 08:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 08:00 ~ 09:00	神奈川県	Kanagawa (Chigasa	0.049
15	3/19 08:00 ~ 09:00	新潟県	Niigata (Niigata)	0.047
16	3/19 08:00 ~ 09:00	富山県	Toyama (Imizu)	0.047
17	3/19 08:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 08:00 ~ 09:00	福井県	Fukui (Fukui)	0.045
19	3/19 08:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.045
20	3/19 08:00 ~ 09:00	長野県	Nagano (Nagano)	0.07
21	3/19 08:00 ~ 09:00	岐阜県	Gifu (Kakamigahara	0.062
22	3/19 08:00 ~ 09:00	静岡県	Shizuoka (Shizuoka	0.037
23	3/19 08:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.042
24	3/19 08:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 08:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/19 08:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.04
27	3/19 08:00 ~ 09:00	大阪府	Osaka (Osaka)	0.044
28	3/19 08:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.038
29	3/19 08:00 ~ 09:00	奈良県	Nara (Nara)	0.048
30	3/19 08:00 ~ 09:00	和歌山県	Wakayama (Wakaya	0.032
31	3/19 08:00 ~ 09:00	鳥取県	Tottori (Touhaku-g	0.063
32	3/19 08:00 ~ 09:00	島根県	Shimane (Matsue)	0.036
33	3/19 08:00 ~ 09:00	岡山県	Okayama (Okayama	0.051
34	3/19 08:00 ~ 09:00	広島県	Hiroshima (Hiroshin	0.05
35	3/19 08:00 ~ 09:00	山口県	Yamaguchi (Yamagi	0.096
36	3/19 08:00 ~ 09:00	徳島県	Tokushima (Tokush	0.039
37	3/19 08:00 ~ 09:00	香川県	Kagawa (Takamatsi	0.053
38	3/19 08:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 08:00 ~ 09:00	高知県	Kochi (Kochi)	0.027
40	3/19 08:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 08:00 ~ 09:00	佐賀県	Saga (Saga)	0.041
42	3/19 08:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/19 08:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 08:00 ~ 09:00	大分県	Oita (Oita)	0.051
45	3/19 08:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 08:00 ~ 09:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/19 08:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 09:00 ~ 10:00	北海道	Hokkaido (Sapporo)	0.027
2	3/19 09:00 ~ 10:00	青森県	Aomori (Aomori)	0.02
3	3/19 09:00 ~ 10:00	岩手県	Iwate (Morioka)	0.027
4	3/19 09:00 ~ 10:00	宮城県	Miyagi (Sendai)	
5	3/19 09:00 ~ 10:00	秋田県	Akita (Akita)	0.034
6	3/19 09:00 ~ 10:00	山形県	Yamagata (Yamaga	0.04
7	3/19 09:00 ~ 10:00	福島県	Fukushima (Futaba-gun)	
8	3/19 09:00 ~ 10:00	茨城県	Ibaraki (Mito)	0.176
9	3/19 09:00 ~ 10:00	栃木県	Tochigi (Itsunomiya	0.154
10	3/19 09:00 ~ 10:00	群馬県	Gunma (Maebashi)	0.08
11	3/19 09:00 ~ 10:00	埼玉県	Saitama (Saitama)	0.057
12	3/19 09:00 ~ 10:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 09:00 ~ 10:00	東京都	Tokyo (Shinjuku-ku)	0.048
14	3/19 09:00 ~ 10:00	神奈川県	Kanagawa (Chigasa	0.049
15	3/19 09:00 ~ 10:00	新潟県	Niigata (Niigata)	0.047

16	3/19 09:00 ~ 10:00	富山県	Toyama (Imizu)	0.047
17	3/19 09:00 ~ 10:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 09:00 ~ 10:00	福井県	Fukui (Fukui)	0.045
19	3/19 09:00 ~ 10:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 09:00 ~ 10:00	長野県	Nagano (Nagano)	0.069
21	3/19 09:00 ~ 10:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/19 09:00 ~ 10:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 09:00 ~ 10:00	愛知県	Aichi (Nagoya)	0.041
24	3/19 09:00 ~ 10:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 09:00 ~ 10:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/19 09:00 ~ 10:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 09:00 ~ 10:00	大阪府	Osaka (Osaka)	0.043
28	3/19 09:00 ~ 10:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 09:00 ~ 10:00	奈良県	Nara (Nara)	0.048
30	3/19 09:00 ~ 10:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 09:00 ~ 10:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 09:00 ~ 10:00	島根県	Shimane (Matsue)	0.036
33	3/19 09:00 ~ 10:00	岡山県	Okayama (Okayama)	0.049
34	3/19 09:00 ~ 10:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/19 09:00 ~ 10:00	山口県	Yamaguchi (Yamagi)	0.094
36	3/19 09:00 ~ 10:00	徳島県	Tokushima (Tokush)	0.039
37	3/19 09:00 ~ 10:00	香川県	Kagawa (Takamats)	0.053
38	3/19 09:00 ~ 10:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 09:00 ~ 10:00	高知県	Kochi (Kochi)	0.026
40	3/19 09:00 ~ 10:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 09:00 ~ 10:00	佐賀県	Saga (Saga)	0.04
42	3/19 09:00 ~ 10:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 09:00 ~ 10:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 09:00 ~ 10:00	大分県	Oita (Oita)	0.05
45	3/19 09:00 ~ 10:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 09:00 ~ 10:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 09:00 ~ 10:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 10:00 ~ 11:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 10:00 ~ 11:00	青森県	Aomori (Aomori)	0.02
3	3/19 10:00 ~ 11:00	岩手県	Iwate (Morioka)	0.027
4	3/19 10:00 ~ 11:00	宮城県	Miyagi (Sendai)	
5	3/19 10:00 ~ 11:00	秋田県	Akita (Akita)	0.034
6	3/19 10:00 ~ 11:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 10:00 ~ 11:00	福島県	Fukushima (Futaba-gun)	
8	3/19 10:00 ~ 11:00	茨城県	Ibaraki (Mito)	0.174
9	3/19 10:00 ~ 11:00	栃木県	Tochigi (Itsunomiya)	0.153
10	3/19 10:00 ~ 11:00	群馬県	Gunma (Maebashi)	0.079
11	3/19 10:00 ~ 11:00	埼玉県	Saitama (Saitama)	0.056
12	3/19 10:00 ~ 11:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 10:00 ~ 11:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 10:00 ~ 11:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 10:00 ~ 11:00	新潟県	Niigata (Niigata)	0.047
16	3/19 10:00 ~ 11:00	富山県	Toyama (Imizu)	0.047
17	3/19 10:00 ~ 11:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 10:00 ~ 11:00	福井県	Fukui (Fukui)	0.045
19	3/19 10:00 ~ 11:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 10:00 ~ 11:00	長野県	Nagano (Nagano)	0.069
21	3/19 10:00 ~ 11:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 10:00 ~ 11:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/19 10:00 ~ 11:00	愛知県	Aichi (Nagoya)	0.04
24	3/19 10:00 ~ 11:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 10:00 ~ 11:00	滋賀県	Shiga (Ohtsu)	0.033

26	3/19 10:00 ~ 11:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 10:00 ~ 11:00	大阪府	Osaka (Osaka)	0.043
28	3/19 10:00 ~ 11:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 10:00 ~ 11:00	奈良県	Nara (Nara)	0.048
30	3/19 10:00 ~ 11:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 10:00 ~ 11:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 10:00 ~ 11:00	島根県	Shimane (Matsue)	0.036
33	3/19 10:00 ~ 11:00	岡山県	Okayama (Okayama)	0.049
34	3/19 10:00 ~ 11:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/19 10:00 ~ 11:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/19 10:00 ~ 11:00	徳島県	Tokushima (Tokush)	0.039
37	3/19 10:00 ~ 11:00	香川県	Kagawa (Takamats)	0.053
38	3/19 10:00 ~ 11:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 10:00 ~ 11:00	高知県	Kochi (Kochi)	0.025
40	3/19 10:00 ~ 11:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 10:00 ~ 11:00	佐賀県	Saga (Saga)	0.04
42	3/19 10:00 ~ 11:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 10:00 ~ 11:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 10:00 ~ 11:00	大分県	Oita (Oita)	0.05
45	3/19 10:00 ~ 11:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 10:00 ~ 11:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 10:00 ~ 11:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 11:00 ~ 12:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 11:00 ~ 12:00	青森県	Aomori (Aomori)	0.021
3	3/19 11:00 ~ 12:00	岩手県	Iwate (Morioka)	0.027
4	3/19 11:00 ~ 12:00	宮城県	Miyagi (Sendai)	
5	3/19 11:00 ~ 12:00	秋田県	Akita (Akita)	0.035
6	3/19 11:00 ~ 12:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 11:00 ~ 12:00	福島県	Fukushima (Futaba-gun)	
8	3/19 11:00 ~ 12:00	茨城県	Ibaraki (Mito)	0.173
9	3/19 11:00 ~ 12:00	栃木県	Tochigi (Itsunomiya)	0.152
10	3/19 11:00 ~ 12:00	群馬県	Gunma (Maebashi)	0.078
11	3/19 11:00 ~ 12:00	埼玉県	Saitama (Saitama)	0.056
12	3/19 11:00 ~ 12:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 11:00 ~ 12:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 11:00 ~ 12:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 11:00 ~ 12:00	新潟県	Niigata (Niigata)	0.046
16	3/19 11:00 ~ 12:00	富山県	Toyama (Imizu)	0.047
17	3/19 11:00 ~ 12:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 11:00 ~ 12:00	福井県	Fukui (Fukui)	0.045
19	3/19 11:00 ~ 12:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 11:00 ~ 12:00	長野県	Nagano (Nagano)	0.068
21	3/19 11:00 ~ 12:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 11:00 ~ 12:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/19 11:00 ~ 12:00	愛知県	Aichi (Nagoya)	0.04
24	3/19 11:00 ~ 12:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 11:00 ~ 12:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 11:00 ~ 12:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 11:00 ~ 12:00	大阪府	Osaka (Osaka)	0.042
28	3/19 11:00 ~ 12:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 11:00 ~ 12:00	奈良県	Nara (Nara)	0.048
30	3/19 11:00 ~ 12:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 11:00 ~ 12:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 11:00 ~ 12:00	島根県	Shimane (Matsue)	0.036
33	3/19 11:00 ~ 12:00	岡山県	Okayama (Okayama)	0.049
34	3/19 11:00 ~ 12:00	広島県	Hiroshima (Hiroshin)	0.048
35	3/19 11:00 ~ 12:00	山口県	Yamaguchi (Yamagi)	0.092

36	3/19 11:00 ~ 12:00	徳島県	Tokushima (Tokushu)	0.038
37	3/19 11:00 ~ 12:00	香川県	Kagawa (Takamats)	0.052
38	3/19 11:00 ~ 12:00	愛媛県	Ehime (Matsuyama)	0.046
39	3/19 11:00 ~ 12:00	高知県	Kochi (Kochi)	0.025
40	3/19 11:00 ~ 12:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/19 11:00 ~ 12:00	佐賀県	Saga (Saga)	0.04
42	3/19 11:00 ~ 12:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 11:00 ~ 12:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 11:00 ~ 12:00	大分県	Oita (Oita)	0.05
45	3/19 11:00 ~ 12:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 11:00 ~ 12:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 11:00 ~ 12:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 12:00 ~ 13:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 12:00 ~ 13:00	青森県	Aomori (Aomori)	0.023
3	3/19 12:00 ~ 13:00	岩手県	Iwate (Morioka)	0.028
4	3/19 12:00 ~ 13:00	宮城県	Miyagi (Sendai)	
5	3/19 12:00 ~ 13:00	秋田県	Akita (Akita)	0.035
6	3/19 12:00 ~ 13:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 12:00 ~ 13:00	福島県	Fukushima (Futaba-gun)	
8	3/19 12:00 ~ 13:00	茨城県	Ibaraki (Mito)	0.172
9	3/19 12:00 ~ 13:00	栃木県	Tochigi (Itsunomiya)	0.151
10	3/19 12:00 ~ 13:00	群馬県	Gunma (Maebashi)	0.077
11	3/19 12:00 ~ 13:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 12:00 ~ 13:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 12:00 ~ 13:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 12:00 ~ 13:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 12:00 ~ 13:00	新潟県	Niigata (Niigata)	0.047
16	3/19 12:00 ~ 13:00	富山県	Toyama (Imizu)	0.047
17	3/19 12:00 ~ 13:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 12:00 ~ 13:00	福井県	Fukui (Fukui)	0.044
19	3/19 12:00 ~ 13:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 12:00 ~ 13:00	長野県	Nagano (Nagano)	0.067
21	3/19 12:00 ~ 13:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 12:00 ~ 13:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/19 12:00 ~ 13:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 12:00 ~ 13:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 12:00 ~ 13:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 12:00 ~ 13:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 12:00 ~ 13:00	大阪府	Osaka (Osaka)	0.043
28	3/19 12:00 ~ 13:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 12:00 ~ 13:00	奈良県	Nara (Nara)	0.047
30	3/19 12:00 ~ 13:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 12:00 ~ 13:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 12:00 ~ 13:00	島根県	Shimane (Matsue)	0.036
33	3/19 12:00 ~ 13:00	岡山県	Okayama (Okayama)	0.048
34	3/19 12:00 ~ 13:00	広島県	Hiroshima (Hiroshin)	0.047
35	3/19 12:00 ~ 13:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 12:00 ~ 13:00	徳島県	Tokushima (Tokushu)	0.038
37	3/19 12:00 ~ 13:00	香川県	Kagawa (Takamats)	0.052
38	3/19 12:00 ~ 13:00	愛媛県	Ehime (Matsuyama)	0.046
39	3/19 12:00 ~ 13:00	高知県	Kochi (Kochi)	0.025
40	3/19 12:00 ~ 13:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 12:00 ~ 13:00	佐賀県	Saga (Saga)	0.04
42	3/19 12:00 ~ 13:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 12:00 ~ 13:00	熊本県	Kumamoto (Uto)	0.026
44	3/19 12:00 ~ 13:00	大分県	Oita (Oita)	0.05
45	3/19 12:00 ~ 13:00	宮崎県	Miyazaki (Miyazaki)	0.026

46	3/19 12:00 ~ 13:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/19 12:00 ~ 13:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 13:00 ~ 14:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 13:00 ~ 14:00	青森県	Aomori (Aomori)	0.024
3	3/19 13:00 ~ 14:00	岩手県	Iwate (Morioka)	0.031
4	3/19 13:00 ~ 14:00	宮城県	Miyagi (Sendai)	
5	3/19 13:00 ~ 14:00	秋田県	Akita (Akita)	0.035
6	3/19 13:00 ~ 14:00	山形県	Yamagata (Yamagata)	0.041
7	3/19 13:00 ~ 14:00	福島県	Fukushima (Futaba-gun)	
8	3/19 13:00 ~ 14:00	茨城県	Ibaraki (Mito)	0.171
9	3/19 13:00 ~ 14:00	栃木県	Tochigi (Itsunomiya)	0.15
10	3/19 13:00 ~ 14:00	群馬県	Gunma (Maebashi)	0.077
11	3/19 13:00 ~ 14:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 13:00 ~ 14:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 13:00 ~ 14:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 13:00 ~ 14:00	神奈川県	Kanagawa (Chigasaki)	0.048
15	3/19 13:00 ~ 14:00	新潟県	Niigata (Niigata)	0.046
16	3/19 13:00 ~ 14:00	富山県	Toyama (Imizu)	0.047
17	3/19 13:00 ~ 14:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 13:00 ~ 14:00	福井県	Fukui (Fukui)	0.045
19	3/19 13:00 ~ 14:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 13:00 ~ 14:00	長野県	Nagano (Nagano)	0.067
21	3/19 13:00 ~ 14:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 13:00 ~ 14:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/19 13:00 ~ 14:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 13:00 ~ 14:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 13:00 ~ 14:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 13:00 ~ 14:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 13:00 ~ 14:00	大阪府	Osaka (Osaka)	0.042
28	3/19 13:00 ~ 14:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 13:00 ~ 14:00	奈良県	Nara (Nara)	0.047
30	3/19 13:00 ~ 14:00	和歌山県	Wakayama (Wakayama)	0.031
31	3/19 13:00 ~ 14:00	鳥取県	Tottori (Tottori)	0.063
32	3/19 13:00 ~ 14:00	島根県	Shimane (Matsue)	0.036
33	3/19 13:00 ~ 14:00	岡山県	Okayama (Okayama)	0.048
34	3/19 13:00 ~ 14:00	広島県	Hiroshima (Hiroshima)	0.046
35	3/19 13:00 ~ 14:00	山口県	Yamaguchi (Yamaguchi)	0.092
36	3/19 13:00 ~ 14:00	徳島県	Tokushima (Tokushima)	0.038
37	3/19 13:00 ~ 14:00	香川県	Kagawa (Takamatsu)	0.052
38	3/19 13:00 ~ 14:00	愛媛県	Ehime (Matsuyama)	0.046
39	3/19 13:00 ~ 14:00	高知県	Kochi (Kochi)	0.025
40	3/19 13:00 ~ 14:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 13:00 ~ 14:00	佐賀県	Saga (Saga)	0.04
42	3/19 13:00 ~ 14:00	長崎県	Nagasaki (Nagasaki)	0.028
43	3/19 13:00 ~ 14:00	熊本県	Kumamoto (Kumamoto)	0.026
44	3/19 13:00 ~ 14:00	大分県	Oita (Oita)	0.05
45	3/19 13:00 ~ 14:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 13:00 ~ 14:00	鹿児島県	Kagoshima (Kagoshima)	0.034
47	3/19 13:00 ~ 14:00	沖縄県	Okinawa (Uruma)	0.02
1	3/19 14:00 ~ 15:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 14:00 ~ 15:00	青森県	Aomori (Aomori)	0.021
3	3/19 14:00 ~ 15:00	岩手県	Iwate (Morioka)	0.031
4	3/19 14:00 ~ 15:00	宮城県	Miyagi (Sendai)	
5	3/19 14:00 ~ 15:00	秋田県	Akita (Akita)	0.034
6	3/19 14:00 ~ 15:00	山形県	Yamagata (Yamagata)	0.044
7	3/19 14:00 ~ 15:00	福島県	Fukushima (Futaba-gun)	
8	3/19 14:00 ~ 15:00	茨城県	Ibaraki (Mito)	0.171

9	3/19 14:00 ~ 15:00	栃木県	Tochigi (Itsunomiya)	0.149
10	3/19 14:00 ~ 15:00	群馬県	Gunma (Maebashi)	0.077
11	3/19 14:00 ~ 15:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 14:00 ~ 15:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 14:00 ~ 15:00	東京都	Tokyo (Shinjuku-ku)	0.047
14	3/19 14:00 ~ 15:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 14:00 ~ 15:00	新潟県	Niigata (Niigata)	0.046
16	3/19 14:00 ~ 15:00	富山県	Toyama (Imizu)	0.047
17	3/19 14:00 ~ 15:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 14:00 ~ 15:00	福井県	Fukui (Fukui)	0.044
19	3/19 14:00 ~ 15:00	山梨県	Yamanashi (Kofu)	0.043
20	3/19 14:00 ~ 15:00	長野県	Nagano (Nagano)	0.066
21	3/19 14:00 ~ 15:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 14:00 ~ 15:00	静岡県	Shizuoka (Shizuoka)	0.04
23	3/19 14:00 ~ 15:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 14:00 ~ 15:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 14:00 ~ 15:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 14:00 ~ 15:00	京都府	Kyoto (Kyoto)	0.037
27	3/19 14:00 ~ 15:00	大阪府	Osaka (Osaka)	0.042
28	3/19 14:00 ~ 15:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 14:00 ~ 15:00	奈良県	Nara (Nara)	0.047
30	3/19 14:00 ~ 15:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 14:00 ~ 15:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 14:00 ~ 15:00	島根県	Shimane (Matsue)	0.036
33	3/19 14:00 ~ 15:00	岡山県	Okayama (Okayama)	0.048
34	3/19 14:00 ~ 15:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/19 14:00 ~ 15:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 14:00 ~ 15:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 14:00 ~ 15:00	香川県	Kagawa (Takamatsu)	0.051
38	3/19 14:00 ~ 15:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 14:00 ~ 15:00	高知県	Kochi (Kochi)	0.025
40	3/19 14:00 ~ 15:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 14:00 ~ 15:00	佐賀県	Saga (Saga)	0.04
42	3/19 14:00 ~ 15:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 14:00 ~ 15:00	熊本県	Kumamoto (Uto)	0.026
44	3/19 14:00 ~ 15:00	大分県	Oita (Oita)	0.049
45	3/19 14:00 ~ 15:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 14:00 ~ 15:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 14:00 ~ 15:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 15:00 ~ 16:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 15:00 ~ 16:00	青森県	Aomori (Aomori)	0.021
3	3/19 15:00 ~ 16:00	岩手県	Iwate (Morioka)	0.029
4	3/19 15:00 ~ 16:00	宮城県	Miyagi (Sendai)	
5	3/19 15:00 ~ 16:00	秋田県	Akita (Akita)	0.034
6	3/19 15:00 ~ 16:00	山形県	Yamagata (Yamaga)	0.045
7	3/19 15:00 ~ 16:00	福島県	Fukushima (Futaba-gun)	
8	3/19 15:00 ~ 16:00	茨城県	Ibaraki (Mito)	0.171
9	3/19 15:00 ~ 16:00	栃木県	Tochigi (Itsunomiya)	0.148
10	3/19 15:00 ~ 16:00	群馬県	Gunma (Maebashi)	0.076
11	3/19 15:00 ~ 16:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 15:00 ~ 16:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 15:00 ~ 16:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 15:00 ~ 16:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 15:00 ~ 16:00	新潟県	Niigata (Niigata)	0.046
16	3/19 15:00 ~ 16:00	富山県	Toyama (Imizu)	0.047
17	3/19 15:00 ~ 16:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 15:00 ~ 16:00	福井県	Fukui (Fukui)	0.044

19	3/19 15:00 ~ 16:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 15:00 ~ 16:00	長野県	Nagano (Nagano)	0.067
21	3/19 15:00 ~ 16:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 15:00 ~ 16:00	静岡県	Shizuoka (Shizuoka)	0.039
23	3/19 15:00 ~ 16:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 15:00 ~ 16:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 15:00 ~ 16:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 15:00 ~ 16:00	京都府	Kyoto (Kyoto)	0.037
27	3/19 15:00 ~ 16:00	大阪府	Osaka (Osaka)	0.042
28	3/19 15:00 ~ 16:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 15:00 ~ 16:00	奈良県	Nara (Nara)	0.047
30	3/19 15:00 ~ 16:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 15:00 ~ 16:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/19 15:00 ~ 16:00	島根県	Shimane (Matsue)	0.036
33	3/19 15:00 ~ 16:00	岡山県	Okayama (Okayama)	0.048
34	3/19 15:00 ~ 16:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/19 15:00 ~ 16:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 15:00 ~ 16:00	徳島県	Tokushima (Tokush)	0.037
37	3/19 15:00 ~ 16:00	香川県	Kagawa (Takamats)	0.052
38	3/19 15:00 ~ 16:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 15:00 ~ 16:00	高知県	Kochi (Kochi)	0.025
40	3/19 15:00 ~ 16:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 15:00 ~ 16:00	佐賀県	Saga (Saga)	0.039
42	3/19 15:00 ~ 16:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 15:00 ~ 16:00	熊本県	Kumamoto (Uto)	0.026
44	3/19 15:00 ~ 16:00	大分県	Oita (Oita)	0.049
45	3/19 15:00 ~ 16:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 15:00 ~ 16:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 15:00 ~ 16:00	沖縄県	Okinawa (Uruma)	0.02
1	3/19 16:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 16:00 ~ 17:00	青森県	Aomori (Aomori)	0.02
3	3/19 16:00 ~ 17:00	岩手県	Iwate (Morioka)	0.029
4	3/19 16:00 ~ 17:00	宮城県	Miyagi (Sendai)	
5	3/19 16:00 ~ 17:00	秋田県	Akita (Akita)	0.034
6	3/19 16:00 ~ 17:00	山形県	Yamagata (Yamaga)	0.042
7	3/19 16:00 ~ 17:00	福島県	Fukushima (Futaba-gun)	
8	3/19 16:00 ~ 17:00	茨城県	Ibaraki (Mito)	0.17
9	3/19 16:00 ~ 17:00	栃木県	Tochigi (Itsunomiya)	0.148
10	3/19 16:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.076
11	3/19 16:00 ~ 17:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 16:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.032
13	3/19 16:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 16:00 ~ 17:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 16:00 ~ 17:00	新潟県	Niigata (Niigata)	0.047
16	3/19 16:00 ~ 17:00	富山県	Toyama (Imizu)	0.047
17	3/19 16:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 16:00 ~ 17:00	福井県	Fukui (Fukui)	0.045
19	3/19 16:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 16:00 ~ 17:00	長野県	Nagano (Nagano)	0.066
21	3/19 16:00 ~ 17:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 16:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/19 16:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 16:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 16:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 16:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 16:00 ~ 17:00	大阪府	Osaka (Osaka)	0.042
28	3/19 16:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.036

29	3/19 16:00 ~ 17:00	奈良県	Nara (Nara)	0.047
30	3/19 16:00 ~ 17:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 16:00 ~ 17:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 16:00 ~ 17:00	島根県	Shimane (Matsue)	0.036
33	3/19 16:00 ~ 17:00	岡山県	Okayama (Okayama)	0.048
34	3/19 16:00 ~ 17:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/19 16:00 ~ 17:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 16:00 ~ 17:00	徳島県	Tokushima (Tokush)	0.037
37	3/19 16:00 ~ 17:00	香川県	Kagawa (Takamats)	0.051
38	3/19 16:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 16:00 ~ 17:00	高知県	Kochi (Kochi)	0.025
40	3/19 16:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 16:00 ~ 17:00	佐賀県	Saga (Saga)	0.039
42	3/19 16:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 16:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 16:00 ~ 17:00	大分県	Oita (Oita)	0.05
45	3/19 16:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 16:00 ~ 17:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 16:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.02
1	3/19 17:00 ~ 18:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 17:00 ~ 18:00	青森県	Aomori (Aomori)	0.02
3	3/19 17:00 ~ 18:00	岩手県	Iwate (Morioka)	0.027
4	3/19 17:00 ~ 18:00	宮城県	Miyagi (Sendai)	
5	3/19 17:00 ~ 18:00	秋田県	Akita (Akita)	0.034
6	3/19 17:00 ~ 18:00	山形県	Yamagata (Yamaga)	0.041
7	3/19 17:00 ~ 18:00	福島県	Fukushima (Futaba-gun)	
8	3/19 17:00 ~ 18:00	茨城県	Ibaraki (Mito)	0.169
9	3/19 17:00 ~ 18:00	栃木県	Tochigi (Itsunomiya)	0.148
10	3/19 17:00 ~ 18:00	群馬県	Gunma (Maebashi)	0.076
11	3/19 17:00 ~ 18:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 17:00 ~ 18:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 17:00 ~ 18:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 17:00 ~ 18:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 17:00 ~ 18:00	新潟県	Niigata (Niigata)	0.047
16	3/19 17:00 ~ 18:00	富山県	Toyama (Imizu)	0.047
17	3/19 17:00 ~ 18:00	石川県	Ishikawa (Kanazawa)	0.046
18	3/19 17:00 ~ 18:00	福井県	Fukui (Fukui)	0.045
19	3/19 17:00 ~ 18:00	山梨県	Yamanashi (Kofu)	0.043
20	3/19 17:00 ~ 18:00	長野県	Nagano (Nagano)	0.066
21	3/19 17:00 ~ 18:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 17:00 ~ 18:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 17:00 ~ 18:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 17:00 ~ 18:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 17:00 ~ 18:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 17:00 ~ 18:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 17:00 ~ 18:00	大阪府	Osaka (Osaka)	0.042
28	3/19 17:00 ~ 18:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 17:00 ~ 18:00	奈良県	Nara (Nara)	0.047
30	3/19 17:00 ~ 18:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 17:00 ~ 18:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/19 17:00 ~ 18:00	島根県	Shimane (Matsue)	0.036
33	3/19 17:00 ~ 18:00	岡山県	Okayama (Okayama)	0.048
34	3/19 17:00 ~ 18:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/19 17:00 ~ 18:00	山口県	Yamaguchi (Yamagi)	0.091
36	3/19 17:00 ~ 18:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 17:00 ~ 18:00	香川県	Kagawa (Takamats)	0.052
38	3/19 17:00 ~ 18:00	愛媛県	Ehime (Matsuyama)	0.047

39	3/19 17:00 ~ 18:00	高知県	Kochi (Kochi)	0.024
40	3/19 17:00 ~ 18:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 17:00 ~ 18:00	佐賀県	Saga (Saga)	0.039
42	3/19 17:00 ~ 18:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 17:00 ~ 18:00	熊本県	Kumamoto (Uto)	0.026
44	3/19 17:00 ~ 18:00	大分県	Oita (Oita)	0.05
45	3/19 17:00 ~ 18:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 17:00 ~ 18:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 17:00 ~ 18:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 18:00 ~ 19:00	北海道	Hokkaido (Sapporo)	0.029
2	3/19 18:00 ~ 19:00	青森県	Aomori (Aomori)	0.02
3	3/19 18:00 ~ 19:00	岩手県	Iwate (Morioka)	0.027
4	3/19 18:00 ~ 19:00	宮城県	Miyagi (Sendai)	
5	3/19 18:00 ~ 19:00	秋田県	Akita (Akita)	0.034
6	3/19 18:00 ~ 19:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 18:00 ~ 19:00	福島県	Fukushima (Futaba-gun)	
8	3/19 18:00 ~ 19:00	茨城県	Ibaraki (Mito)	0.168
9	3/19 18:00 ~ 19:00	栃木県	Tochigi (Itsunomiya)	0.148
10	3/19 18:00 ~ 19:00	群馬県	Gunma (Maebashi)	0.076
11	3/19 18:00 ~ 19:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 18:00 ~ 19:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 18:00 ~ 19:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 18:00 ~ 19:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 18:00 ~ 19:00	新潟県	Niigata (Niigata)	0.046
16	3/19 18:00 ~ 19:00	富山県	Toyama (Imizu)	0.047
17	3/19 18:00 ~ 19:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 18:00 ~ 19:00	福井県	Fukui (Fukui)	0.045
19	3/19 18:00 ~ 19:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 18:00 ~ 19:00	長野県	Nagano (Nagano)	0.066
21	3/19 18:00 ~ 19:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 18:00 ~ 19:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 18:00 ~ 19:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 18:00 ~ 19:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 18:00 ~ 19:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 18:00 ~ 19:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 18:00 ~ 19:00	大阪府	Osaka (Osaka)	0.042
28	3/19 18:00 ~ 19:00	兵庫県	Hyogo (Kobe)	0.036
29	3/19 18:00 ~ 19:00	奈良県	Nara (Nara)	0.047
30	3/19 18:00 ~ 19:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 18:00 ~ 19:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/19 18:00 ~ 19:00	島根県	Shimane (Matsue)	0.036
33	3/19 18:00 ~ 19:00	岡山県	Okayama (Okayama)	0.048
34	3/19 18:00 ~ 19:00	広島県	Hiroshima (Hiroshir)	0.046
35	3/19 18:00 ~ 19:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 18:00 ~ 19:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 18:00 ~ 19:00	香川県	Kagawa (Takamats)	0.052
38	3/19 18:00 ~ 19:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 18:00 ~ 19:00	高知県	Kochi (Kochi)	0.025
40	3/19 18:00 ~ 19:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 18:00 ~ 19:00	佐賀県	Saga (Saga)	0.039
42	3/19 18:00 ~ 19:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 18:00 ~ 19:00	熊本県	Kumamoto (Uto)	0.026
44	3/19 18:00 ~ 19:00	大分県	Oita (Oita)	0.049
45	3/19 18:00 ~ 19:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 18:00 ~ 19:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 18:00 ~ 19:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 19:00 ~ 20:00	北海道	Hokkaido (Sapporo)	0.029

2	3/19 19:00 ~ 20:00	青森県	Aomori (Aomori)	0.021
3	3/19 19:00 ~ 20:00	岩手県	Iwate (Morioka)	0.027
4	3/19 19:00 ~ 20:00	宮城県	Miyagi (Sendai)	
5	3/19 19:00 ~ 20:00	秋田県	Akita (Akita)	0.034
6	3/19 19:00 ~ 20:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 19:00 ~ 20:00	福島県	Fukushima (Futaba-gun)	
8	3/19 19:00 ~ 20:00	茨城県	Ibaraki (Mito)	0.167
9	3/19 19:00 ~ 20:00	栃木県	Tochigi (Itsunomiya)	0.147
10	3/19 19:00 ~ 20:00	群馬県	Gunma (Maebashi)	0.075
11	3/19 19:00 ~ 20:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 19:00 ~ 20:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 19:00 ~ 20:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 19:00 ~ 20:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 19:00 ~ 20:00	新潟県	Niigata (Niigata)	0.046
16	3/19 19:00 ~ 20:00	富山県	Toyama (Imizu)	0.047
17	3/19 19:00 ~ 20:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 19:00 ~ 20:00	福井県	Fukui (Fukui)	0.045
19	3/19 19:00 ~ 20:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 19:00 ~ 20:00	長野県	Nagano (Nagano)	0.066
21	3/19 19:00 ~ 20:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 19:00 ~ 20:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 19:00 ~ 20:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 19:00 ~ 20:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 19:00 ~ 20:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 19:00 ~ 20:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 19:00 ~ 20:00	大阪府	Osaka (Osaka)	0.042
28	3/19 19:00 ~ 20:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 19:00 ~ 20:00	奈良県	Nara (Nara)	0.047
30	3/19 19:00 ~ 20:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 19:00 ~ 20:00	鳥取県	Tottori (Touhaku-g)	0.062
32	3/19 19:00 ~ 20:00	島根県	Shimane (Matsue)	0.036
33	3/19 19:00 ~ 20:00	岡山県	Okayama (Okayama)	0.048
34	3/19 19:00 ~ 20:00	広島県	Hiroshima (Hiroshin)	0.046
35	3/19 19:00 ~ 20:00	山口県	Yamaguchi (Yamagi)	0.092
36	3/19 19:00 ~ 20:00	徳島県	Tokushima (Tokush)	0.037
37	3/19 19:00 ~ 20:00	香川県	Kagawa (Takamats)	0.052
38	3/19 19:00 ~ 20:00	愛媛県	Ehime (Matsuyama)	0.047
39	3/19 19:00 ~ 20:00	高知県	Kochi (Kochi)	0.025
40	3/19 19:00 ~ 20:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 19:00 ~ 20:00	佐賀県	Saga (Saga)	0.039
42	3/19 19:00 ~ 20:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 19:00 ~ 20:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 19:00 ~ 20:00	大分県	Oita (Oita)	0.05
45	3/19 19:00 ~ 20:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 19:00 ~ 20:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 19:00 ~ 20:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 20:00 ~ 21:00	北海道	Hokkaido (Sapporo)	0.029
2	3/19 20:00 ~ 21:00	青森県	Aomori (Aomori)	0.021
3	3/19 20:00 ~ 21:00	岩手県	Iwate (Morioka)	0.026
4	3/19 20:00 ~ 21:00	宮城県	Miyagi (Sendai)	
5	3/19 20:00 ~ 21:00	秋田県	Akita (Akita)	0.034
6	3/19 20:00 ~ 21:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 20:00 ~ 21:00	福島県	Fukushima (Futaba-gun)	
8	3/19 20:00 ~ 21:00	茨城県	Ibaraki (Mito)	0.167
9	3/19 20:00 ~ 21:00	栃木県	Tochigi (Itsunomiya)	0.147
10	3/19 20:00 ~ 21:00	群馬県	Gunma (Maebashi)	0.075
11	3/19 20:00 ~ 21:00	埼玉県	Saitama (Saitama)	0.055

12	3/19 20:00 ~ 21:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 20:00 ~ 21:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 20:00 ~ 21:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 20:00 ~ 21:00	新潟県	Niigata (Niigata)	0.046
16	3/19 20:00 ~ 21:00	富山県	Toyama (Imizu)	0.047
17	3/19 20:00 ~ 21:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 20:00 ~ 21:00	福井県	Fukui (Fukui)	0.045
19	3/19 20:00 ~ 21:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 20:00 ~ 21:00	長野県	Nagano (Nagano)	0.067
21	3/19 20:00 ~ 21:00	岐阜県	Gifu (Kakamigahara)	0.06
22	3/19 20:00 ~ 21:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 20:00 ~ 21:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 20:00 ~ 21:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 20:00 ~ 21:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 20:00 ~ 21:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 20:00 ~ 21:00	大阪府	Osaka (Osaka)	0.042
28	3/19 20:00 ~ 21:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 20:00 ~ 21:00	奈良県	Nara (Nara)	0.047
30	3/19 20:00 ~ 21:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/19 20:00 ~ 21:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 20:00 ~ 21:00	島根県	Shimane (Matsue)	0.036
33	3/19 20:00 ~ 21:00	岡山県	Okayama (Okayama)	0.048
34	3/19 20:00 ~ 21:00	広島県	Hiroshima (Hiroshiri)	0.047
35	3/19 20:00 ~ 21:00	山口県	Yamaguchi (Yamagi)	0.093
36	3/19 20:00 ~ 21:00	徳島県	Tokushima (Tokush)	0.038
37	3/19 20:00 ~ 21:00	香川県	Kagawa (Takamats)	0.052
38	3/19 20:00 ~ 21:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 20:00 ~ 21:00	高知県	Kochi (Kochi)	0.025
40	3/19 20:00 ~ 21:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 20:00 ~ 21:00	佐賀県	Saga (Saga)	0.039
42	3/19 20:00 ~ 21:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 20:00 ~ 21:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 20:00 ~ 21:00	大分県	Oita (Oita)	0.05
45	3/19 20:00 ~ 21:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 20:00 ~ 21:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/19 20:00 ~ 21:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 21:00 ~ 22:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 21:00 ~ 22:00	青森県	Aomori (Aomori)	0.021
3	3/19 21:00 ~ 22:00	岩手県	Iwate (Morioka)	0.026
4	3/19 21:00 ~ 22:00	宮城県	Miyagi (Sendai)	
5	3/19 21:00 ~ 22:00	秋田県	Akita (Akita)	0.035
6	3/19 21:00 ~ 22:00	山形県	Yamagata (Yamaga)	0.04
7	3/19 21:00 ~ 22:00	福島県	Fukushima (Futaba-gun)	
8	3/19 21:00 ~ 22:00	茨城県	Ibaraki (Mito)	0.167
9	3/19 21:00 ~ 22:00	栃木県	Tochigi (Itsunomiya)	0.146
10	3/19 21:00 ~ 22:00	群馬県	Gunma (Maebashi)	0.075
11	3/19 21:00 ~ 22:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 21:00 ~ 22:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 21:00 ~ 22:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 21:00 ~ 22:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/19 21:00 ~ 22:00	新潟県	Niigata (Niigata)	0.046
16	3/19 21:00 ~ 22:00	富山県	Toyama (Imizu)	0.047
17	3/19 21:00 ~ 22:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 21:00 ~ 22:00	福井県	Fukui (Fukui)	0.045
19	3/19 21:00 ~ 22:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 21:00 ~ 22:00	長野県	Nagano (Nagano)	0.067
21	3/19 21:00 ~ 22:00	岐阜県	Gifu (Kakamigahara)	0.061

22	3/19 21:00 ~ 22:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 21:00 ~ 22:00	愛知県	Aichi (Nagoya)	0.039
24	3/19 21:00 ~ 22:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 21:00 ~ 22:00	滋賀県	Shiga (Ohtsu)	0.033
26	3/19 21:00 ~ 22:00	京都府	Kyoto (Kyoto)	0.038
27	3/19 21:00 ~ 22:00	大阪府	Osaka (Osaka)	0.042
28	3/19 21:00 ~ 22:00	兵庫県	Hyogo (Kobe)	0.038
29	3/19 21:00 ~ 22:00	奈良県	Nara (Nara)	0.047
30	3/19 21:00 ~ 22:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 21:00 ~ 22:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/19 21:00 ~ 22:00	島根県	Shimane (Matsue)	0.036
33	3/19 21:00 ~ 22:00	岡山県	Okayama (Okayama)	0.048
34	3/19 21:00 ~ 22:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/19 21:00 ~ 22:00	山口県	Yamaguchi (Yamaguchi)	0.093
36	3/19 21:00 ~ 22:00	徳島県	Tokushima (Tokushima)	0.038
37	3/19 21:00 ~ 22:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/19 21:00 ~ 22:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/19 21:00 ~ 22:00	高知県	Kochi (Kochi)	0.025
40	3/19 21:00 ~ 22:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 21:00 ~ 22:00	佐賀県	Saga (Saga)	0.04
42	3/19 21:00 ~ 22:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 21:00 ~ 22:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 21:00 ~ 22:00	大分県	Oita (Oita)	0.05
45	3/19 21:00 ~ 22:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/19 21:00 ~ 22:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/19 21:00 ~ 22:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 22:00 ~ 23:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 22:00 ~ 23:00	青森県	Aomori (Aomori)	0.021
3	3/19 22:00 ~ 23:00	岩手県	Iwate (Morioka)	0.027
4	3/19 22:00 ~ 23:00	宮城県	Miyagi (Sendai)	
5	3/19 22:00 ~ 23:00	秋田県	Akita (Akita)	0.035
6	3/19 22:00 ~ 23:00	山形県	Yamagata (Yamagata)	0.04
7	3/19 22:00 ~ 23:00	福島県	Fukushima (Futaba-gun)	
8	3/19 22:00 ~ 23:00	茨城県	Ibaraki (Mito)	0.166
9	3/19 22:00 ~ 23:00	栃木県	Tochigi (Itsunomiya)	0.146
10	3/19 22:00 ~ 23:00	群馬県	Gunma (Maebashi)	0.075
11	3/19 22:00 ~ 23:00	埼玉県	Saitama (Saitama)	0.055
12	3/19 22:00 ~ 23:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 22:00 ~ 23:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 22:00 ~ 23:00	神奈川県	Kanagawa (Chigasaki)	0.048
15	3/19 22:00 ~ 23:00	新潟県	Niigata (Niigata)	0.046
16	3/19 22:00 ~ 23:00	富山県	Toyama (Imizu)	0.047
17	3/19 22:00 ~ 23:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 22:00 ~ 23:00	福井県	Fukui (Fukui)	0.046
19	3/19 22:00 ~ 23:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 22:00 ~ 23:00	長野県	Nagano (Nagano)	0.066
21	3/19 22:00 ~ 23:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 22:00 ~ 23:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 22:00 ~ 23:00	愛知県	Aichi (Nagoya)	0.04
24	3/19 22:00 ~ 23:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 22:00 ~ 23:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/19 22:00 ~ 23:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 22:00 ~ 23:00	大阪府	Osaka (Osaka)	0.042
28	3/19 22:00 ~ 23:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 22:00 ~ 23:00	奈良県	Nara (Nara)	0.048
30	3/19 22:00 ~ 23:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/19 22:00 ~ 23:00	鳥取県	Tottori (Touhaku-g)	0.063

32	3/19 22:00 ~ 23:00	島根県	Shimane (Matsue)	0.036
33	3/19 22:00 ~ 23:00	岡山県	Okayama (Okayama)	0.048
34	3/19 22:00 ~ 23:00	広島県	Hiroshima (Hiroshima)	0.047
35	3/19 22:00 ~ 23:00	山口県	Yamaguchi (Yamaguchi)	0.094
36	3/19 22:00 ~ 23:00	徳島県	Tokushima (Tokushima)	0.038
37	3/19 22:00 ~ 23:00	香川県	Kagawa (Takamatsushima)	0.052
38	3/19 22:00 ~ 23:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/19 22:00 ~ 23:00	高知県	Kochi (Kochi)	0.026
40	3/19 22:00 ~ 23:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 22:00 ~ 23:00	佐賀県	Saga (Saga)	0.04
42	3/19 22:00 ~ 23:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/19 22:00 ~ 23:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 22:00 ~ 23:00	大分県	Oita (Oita)	0.05
45	3/19 22:00 ~ 23:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 22:00 ~ 23:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/19 22:00 ~ 23:00	沖縄県	Okinawa (Uruma)	0.021
1	3/19 23:00 ~ 24:00	北海道	Hokkaido (Sapporo)	0.028
2	3/19 23:00 ~ 24:00	青森県	Aomori (Aomori)	0.021
3	3/19 23:00 ~ 24:00	岩手県	Iwate (Morioka)	0.027
4	3/19 23:00 ~ 24:00	宮城県	Miyagi (Sendai)	
5	3/19 23:00 ~ 24:00	秋田県	Akita (Akita)	0.035
6	3/19 23:00 ~ 24:00	山形県	Yamagata (Yamagata)	0.04
7	3/19 23:00 ~ 24:00	福島県	Fukushima (Futaba-gun)	
8	3/19 23:00 ~ 24:00	茨城県	Ibaraki (Mito)	0.166
9	3/19 23:00 ~ 24:00	栃木県	Tochigi (Itsunomiya)	0.146
10	3/19 23:00 ~ 24:00	群馬県	Gunma (Maebashi)	0.075
11	3/19 23:00 ~ 24:00	埼玉県	Saitama (Saitama)	0.054
12	3/19 23:00 ~ 24:00	千葉県	Chiba (Ichihara)	0.033
13	3/19 23:00 ~ 24:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/19 23:00 ~ 24:00	神奈川県	Kanagawa (Chigasaki)	0.048
15	3/19 23:00 ~ 24:00	新潟県	Niigata (Niigata)	0.046
16	3/19 23:00 ~ 24:00	富山県	Toyama (Imizu)	0.047
17	3/19 23:00 ~ 24:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/19 23:00 ~ 24:00	福井県	Fukui (Fukui)	0.045
19	3/19 23:00 ~ 24:00	山梨県	Yamanashi (Kofu)	0.044
20	3/19 23:00 ~ 24:00	長野県	Nagano (Nagano)	0.067
21	3/19 23:00 ~ 24:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/19 23:00 ~ 24:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/19 23:00 ~ 24:00	愛知県	Aichi (Nagoya)	0.04
24	3/19 23:00 ~ 24:00	三重県	Mie (Yokkaichi)	0.046
25	3/19 23:00 ~ 24:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/19 23:00 ~ 24:00	京都府	Kyoto (Kyoto)	0.039
27	3/19 23:00 ~ 24:00	大阪府	Osaka (Osaka)	0.043
28	3/19 23:00 ~ 24:00	兵庫県	Hyogo (Kobe)	0.037
29	3/19 23:00 ~ 24:00	奈良県	Nara (Nara)	0.048
30	3/19 23:00 ~ 24:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/19 23:00 ~ 24:00	鳥取県	Tottori (Touhaku-gun)	0.063
32	3/19 23:00 ~ 24:00	島根県	Shimane (Matsue)	0.037
33	3/19 23:00 ~ 24:00	岡山県	Okayama (Okayama)	0.049
34	3/19 23:00 ~ 24:00	広島県	Hiroshima (Hiroshima)	0.048
35	3/19 23:00 ~ 24:00	山口県	Yamaguchi (Yamaguchi)	0.094
36	3/19 23:00 ~ 24:00	徳島県	Tokushima (Tokushima)	0.039
37	3/19 23:00 ~ 24:00	香川県	Kagawa (Takamatsushima)	0.053
38	3/19 23:00 ~ 24:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/19 23:00 ~ 24:00	高知県	Kochi (Kochi)	0.026
40	3/19 23:00 ~ 24:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/19 23:00 ~ 24:00	佐賀県	Saga (Saga)	0.04

42	3/19 23:00 ~ 24:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/19 23:00 ~ 24:00	熊本県	Kumamoto (Uto)	0.027
44	3/19 23:00 ~ 24:00	大分県	Oita (Oita)	0.05
45	3/19 23:00 ~ 24:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/19 23:00 ~ 24:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/19 23:00 ~ 24:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 00:00 ~ 01:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 00:00 ~ 01:00	青森県	Aomori (Aomori)	0.021
3	3/20 00:00 ~ 01:00	岩手県	Iwate (Morioka)	0.026
4	3/20 00:00 ~ 01:00	宮城県	Miyagi (Sendai)	
5	3/20 00:00 ~ 01:00	秋田県	Akita (Akita)	0.035
6	3/20 00:00 ~ 01:00	山形県	Yamagata (Yamaga)	0.04
7	3/20 00:00 ~ 01:00	福島県	Fukushima (Futaba-gun)	
8	3/20 00:00 ~ 01:00	茨城県	Ibaraki (Mito)	0.166
9	3/20 00:00 ~ 01:00	栃木県	Tochigi (Itsunomiya)	0.145
10	3/20 00:00 ~ 01:00	群馬県	Gunma (Maebashi)	0.074
11	3/20 00:00 ~ 01:00	埼玉県	Saitama (Saitama)	0.055
12	3/20 00:00 ~ 01:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 00:00 ~ 01:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 00:00 ~ 01:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/20 00:00 ~ 01:00	新潟県	Niigata (Niigata)	0.046
16	3/20 00:00 ~ 01:00	富山県	Toyama (Imizu)	0.048
17	3/20 00:00 ~ 01:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 00:00 ~ 01:00	福井県	Fukui (Fukui)	0.046
19	3/20 00:00 ~ 01:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 00:00 ~ 01:00	長野県	Nagano (Nagano)	0.067
21	3/20 00:00 ~ 01:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 00:00 ~ 01:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/20 00:00 ~ 01:00	愛知県	Aichi (Nagoya)	0.04
24	3/20 00:00 ~ 01:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 00:00 ~ 01:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/20 00:00 ~ 01:00	京都府	Kyoto (Kyoto)	0.038
27	3/20 00:00 ~ 01:00	大阪府	Osaka (Osaka)	0.043
28	3/20 00:00 ~ 01:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 00:00 ~ 01:00	奈良県	Nara (Nara)	0.048
30	3/20 00:00 ~ 01:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/20 00:00 ~ 01:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/20 00:00 ~ 01:00	島根県	Shimane (Matsue)	0.037
33	3/20 00:00 ~ 01:00	岡山県	Okayama (Okayama)	0.05
34	3/20 00:00 ~ 01:00	広島県	Hiroshima (Hiroshin)	0.049
35	3/20 00:00 ~ 01:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/20 00:00 ~ 01:00	徳島県	Tokushima (Tokush)	0.038
37	3/20 00:00 ~ 01:00	香川県	Kagawa (Takamats)	0.054
38	3/20 00:00 ~ 01:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/20 00:00 ~ 01:00	高知県	Kochi (Kochi)	0.026
40	3/20 00:00 ~ 01:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/20 00:00 ~ 01:00	佐賀県	Saga (Saga)	0.04
42	3/20 00:00 ~ 01:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/20 00:00 ~ 01:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 00:00 ~ 01:00	大分県	Oita (Oita)	0.05
45	3/20 00:00 ~ 01:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/20 00:00 ~ 01:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/20 00:00 ~ 01:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 01:00 ~ 02:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 01:00 ~ 02:00	青森県	Aomori (Aomori)	0.021
3	3/20 01:00 ~ 02:00	岩手県	Iwate (Morioka)	0.027
4	3/20 01:00 ~ 02:00	宮城県	Miyagi (Sendai)	

5	3/20 01:00 ~ 02:00	秋田県	Akita (Akita)	0.035
6	3/20 01:00 ~ 02:00	山形県	Yamagata (Yamaga	0.04
7	3/20 01:00 ~ 02:00	福島県	Fukushima (Futaba-gun)	
8	3/20 01:00 ~ 02:00	茨城県	Ibaraki (Mito)	0.165
9	3/20 01:00 ~ 02:00	栃木県	Tochigi (Itsunomiya	0.145
10	3/20 01:00 ~ 02:00	群馬県	Gunma (Maebashi)	0.074
11	3/20 01:00 ~ 02:00	埼玉県	Saitama (Saitama)	0.055
12	3/20 01:00 ~ 02:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 01:00 ~ 02:00	東京都	Tokyo (Shinjuku-ku	0.046
14	3/20 01:00 ~ 02:00	神奈川県	Kanagawa (Chigasa	0.048
15	3/20 01:00 ~ 02:00	新潟県	Niigata (Niigata)	0.046
16	3/20 01:00 ~ 02:00	富山県	Toyama (Imizu)	0.048
17	3/20 01:00 ~ 02:00	石川県	Ishikawa (Kanazawa	0.047
18	3/20 01:00 ~ 02:00	福井県	Fukui (Fukui)	0.046
19	3/20 01:00 ~ 02:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 01:00 ~ 02:00	長野県	Nagano (Nagano)	0.067
21	3/20 01:00 ~ 02:00	岐阜県	Gifu (Kakamigahara	0.061
22	3/20 01:00 ~ 02:00	静岡県	Shizuoka (Shizuoka	0.036
23	3/20 01:00 ~ 02:00	愛知県	Aichi (Nagoya)	0.041
24	3/20 01:00 ~ 02:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 01:00 ~ 02:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/20 01:00 ~ 02:00	京都府	Kyoto (Kyoto)	0.038
27	3/20 01:00 ~ 02:00	大阪府	Osaka (Osaka)	0.043
28	3/20 01:00 ~ 02:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 01:00 ~ 02:00	奈良県	Nara (Nara)	0.048
30	3/20 01:00 ~ 02:00	和歌山県	Wakayama (Wakaya	0.032
31	3/20 01:00 ~ 02:00	鳥取県	Tottori (Touhaku-g	0.064
32	3/20 01:00 ~ 02:00	島根県	Shimane (Matsue)	0.037
33	3/20 01:00 ~ 02:00	岡山県	Okayama (Okayam	0.05
34	3/20 01:00 ~ 02:00	広島県	Hiroshima (Hiroshin	0.05
35	3/20 01:00 ~ 02:00	山口県	Yamaguchi (Yamagi	0.096
36	3/20 01:00 ~ 02:00	徳島県	Tokushima (Tokush	0.039
37	3/20 01:00 ~ 02:00	香川県	Kagawa (Takamats	0.054
38	3/20 01:00 ~ 02:00	愛媛県	Ehime (Matsuyama	0.049
39	3/20 01:00 ~ 02:00	高知県	Kochi (Kochi)	0.026
40	3/20 01:00 ~ 02:00	福岡県	Fukuoka (Dazaifu)	0.036
41	3/20 01:00 ~ 02:00	佐賀県	Saga (Saga)	0.04
42	3/20 01:00 ~ 02:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/20 01:00 ~ 02:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 01:00 ~ 02:00	大分県	Oita (Oita)	0.05
45	3/20 01:00 ~ 02:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 01:00 ~ 02:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/20 01:00 ~ 02:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 02:00 ~ 03:00	北海道	Hokkaido (Sapporo	0.028
2	3/20 02:00 ~ 03:00	青森県	Aomori (Aomori)	0.021
3	3/20 02:00 ~ 03:00	岩手県	Iwate (Morioka)	0.027
4	3/20 02:00 ~ 03:00	宮城県	Miyagi (Sendai)	
5	3/20 02:00 ~ 03:00	秋田県	Akita (Akita)	0.035
6	3/20 02:00 ~ 03:00	山形県	Yamagata (Yamaga	0.04
7	3/20 02:00 ~ 03:00	福島県	Fukushima (Futaba-gun)	
8	3/20 02:00 ~ 03:00	茨城県	Ibaraki (Mito)	0.164
9	3/20 02:00 ~ 03:00	栃木県	Tochigi (Itsunomiya	0.145
10	3/20 02:00 ~ 03:00	群馬県	Gunma (Maebashi)	0.074
11	3/20 02:00 ~ 03:00	埼玉県	Saitama (Saitama)	0.055
12	3/20 02:00 ~ 03:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 02:00 ~ 03:00	東京都	Tokyo (Shinjuku-ku	0.046
14	3/20 02:00 ~ 03:00	神奈川県	Kanagawa (Chigasa	0.048

15	3/20 02:00 ~ 03:00	新潟県	Niigata (Niigata)	0.047
16	3/20 02:00 ~ 03:00	富山県	Toyama (Imizu)	0.048
17	3/20 02:00 ~ 03:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 02:00 ~ 03:00	福井県	Fukui (Fukui)	0.046
19	3/20 02:00 ~ 03:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 02:00 ~ 03:00	長野県	Nagano (Nagano)	0.067
21	3/20 02:00 ~ 03:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 02:00 ~ 03:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 02:00 ~ 03:00	愛知県	Aichi (Nagoya)	0.041
24	3/20 02:00 ~ 03:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 02:00 ~ 03:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/20 02:00 ~ 03:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 02:00 ~ 03:00	大阪府	Osaka (Osaka)	0.043
28	3/20 02:00 ~ 03:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 02:00 ~ 03:00	奈良県	Nara (Nara)	0.048
30	3/20 02:00 ~ 03:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 02:00 ~ 03:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 02:00 ~ 03:00	島根県	Shimane (Matsue)	0.037
33	3/20 02:00 ~ 03:00	岡山県	Okayama (Okayama)	0.051
34	3/20 02:00 ~ 03:00	広島県	Hiroshima (Hiroshima)	0.05
35	3/20 02:00 ~ 03:00	山口県	Yamaguchi (Yamaguchi)	0.095
36	3/20 02:00 ~ 03:00	徳島県	Tokushima (Tokushima)	0.039
37	3/20 02:00 ~ 03:00	香川県	Kagawa (Takamatsushima)	0.054
38	3/20 02:00 ~ 03:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/20 02:00 ~ 03:00	高知県	Kochi (Kochi)	0.026
40	3/20 02:00 ~ 03:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 02:00 ~ 03:00	佐賀県	Saga (Saga)	0.041
42	3/20 02:00 ~ 03:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/20 02:00 ~ 03:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 02:00 ~ 03:00	大分県	Oita (Oita)	0.051
45	3/20 02:00 ~ 03:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 02:00 ~ 03:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/20 02:00 ~ 03:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 03:00 ~ 04:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 03:00 ~ 04:00	青森県	Aomori (Aomori)	0.021
3	3/20 03:00 ~ 04:00	岩手県	Iwate (Morioka)	0.026
4	3/20 03:00 ~ 04:00	宮城県	Miyagi (Sendai)	
5	3/20 03:00 ~ 04:00	秋田県	Akita (Akita)	0.035
6	3/20 03:00 ~ 04:00	山形県	Yamagata (Yamagata)	0.041
7	3/20 03:00 ~ 04:00	福島県	Fukushima (Futaba-gun)	
8	3/20 03:00 ~ 04:00	茨城県	Ibaraki (Mito)	0.164
9	3/20 03:00 ~ 04:00	栃木県	Tochigi (Itsunomiya)	0.144
10	3/20 03:00 ~ 04:00	群馬県	Gunma (Maebashi)	0.074
11	3/20 03:00 ~ 04:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 03:00 ~ 04:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 03:00 ~ 04:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 03:00 ~ 04:00	神奈川県	Kanagawa (Chigasaki)	0.048
15	3/20 03:00 ~ 04:00	新潟県	Niigata (Niigata)	0.047
16	3/20 03:00 ~ 04:00	富山県	Toyama (Imizu)	0.048
17	3/20 03:00 ~ 04:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 03:00 ~ 04:00	福井県	Fukui (Fukui)	0.046
19	3/20 03:00 ~ 04:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 03:00 ~ 04:00	長野県	Nagano (Nagano)	0.067
21	3/20 03:00 ~ 04:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 03:00 ~ 04:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/20 03:00 ~ 04:00	愛知県	Aichi (Nagoya)	0.041
24	3/20 03:00 ~ 04:00	三重県	Mie (Yokkaichi)	0.046

25	3/20 03:00 ~ 04:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/20 03:00 ~ 04:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 03:00 ~ 04:00	大阪府	Osaka (Osaka)	0.043
28	3/20 03:00 ~ 04:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 03:00 ~ 04:00	奈良県	Nara (Nara)	0.049
30	3/20 03:00 ~ 04:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 03:00 ~ 04:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 03:00 ~ 04:00	島根県	Shimane (Matsue)	0.037
33	3/20 03:00 ~ 04:00	岡山県	Okayama (Okayama)	0.051
34	3/20 03:00 ~ 04:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/20 03:00 ~ 04:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/20 03:00 ~ 04:00	徳島県	Tokushima (Tokush)	0.039
37	3/20 03:00 ~ 04:00	香川県	Kagawa (Takamats)	0.054
38	3/20 03:00 ~ 04:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/20 03:00 ~ 04:00	高知県	Kochi (Kochi)	0.027
40	3/20 03:00 ~ 04:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 03:00 ~ 04:00	佐賀県	Saga (Saga)	0.041
42	3/20 03:00 ~ 04:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/20 03:00 ~ 04:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 03:00 ~ 04:00	大分県	Oita (Oita)	0.05
45	3/20 03:00 ~ 04:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/20 03:00 ~ 04:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/20 03:00 ~ 04:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 04:00 ~ 05:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 04:00 ~ 05:00	青森県	Aomori (Aomori)	0.021
3	3/20 04:00 ~ 05:00	岩手県	Iwate (Morioka)	0.027
4	3/20 04:00 ~ 05:00	宮城県	Miyagi (Sendai)	
5	3/20 04:00 ~ 05:00	秋田県	Akita (Akita)	0.035
6	3/20 04:00 ~ 05:00	山形県	Yamagata (Yamaga)	0.041
7	3/20 04:00 ~ 05:00	福島県	Fukushima (Futaba-gun)	
8	3/20 04:00 ~ 05:00	茨城県	Ibaraki (Mito)	0.164
9	3/20 04:00 ~ 05:00	栃木県	Tochigi (Itsunomiya)	0.144
10	3/20 04:00 ~ 05:00	群馬県	Gunma (Maebashi)	0.074
11	3/20 04:00 ~ 05:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 04:00 ~ 05:00	千葉県	Chiba (Ichihara)	0.034
13	3/20 04:00 ~ 05:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 04:00 ~ 05:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/20 04:00 ~ 05:00	新潟県	Niigata (Niigata)	0.047
16	3/20 04:00 ~ 05:00	富山県	Toyama (Imizu)	0.049
17	3/20 04:00 ~ 05:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 04:00 ~ 05:00	福井県	Fukui (Fukui)	0.046
19	3/20 04:00 ~ 05:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 04:00 ~ 05:00	長野県	Nagano (Nagano)	0.066
21	3/20 04:00 ~ 05:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/20 04:00 ~ 05:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 04:00 ~ 05:00	愛知県	Aichi (Nagoya)	0.041
24	3/20 04:00 ~ 05:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 04:00 ~ 05:00	滋賀県	Shiga (Ohtsu)	0.037
26	3/20 04:00 ~ 05:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 04:00 ~ 05:00	大阪府	Osaka (Osaka)	0.043
28	3/20 04:00 ~ 05:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 04:00 ~ 05:00	奈良県	Nara (Nara)	0.049
30	3/20 04:00 ~ 05:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 04:00 ~ 05:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 04:00 ~ 05:00	島根県	Shimane (Matsue)	0.038
33	3/20 04:00 ~ 05:00	岡山県	Okayama (Okayama)	0.051
34	3/20 04:00 ~ 05:00	広島県	Hiroshima (Hiroshin)	0.05

35	3/20 04:00 ~ 05:00	山口県	Yamaguchi (Yamagi	0.096
36	3/20 04:00 ~ 05:00	徳島県	Tokushima (Tokush	0.039
37	3/20 04:00 ~ 05:00	香川県	Kagawa (Takamatsi	0.054
38	3/20 04:00 ~ 05:00	愛媛県	Ehime (Matsuyama,	0.049
39	3/20 04:00 ~ 05:00	高知県	Kochi (Kochi)	0.026
40	3/20 04:00 ~ 05:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 04:00 ~ 05:00	佐賀県	Saga (Saga)	0.041
42	3/20 04:00 ~ 05:00	長崎県	Nagasaki (Ohmura)	0.028
43	3/20 04:00 ~ 05:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 04:00 ~ 05:00	大分県	Oita (Oita)	0.051
45	3/20 04:00 ~ 05:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/20 04:00 ~ 05:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/20 04:00 ~ 05:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 05:00 ~ 06:00	北海道	Hokkaido (Sapporo,	0.028
2	3/20 05:00 ~ 06:00	青森県	Aomori (Aomori)	0.021
3	3/20 05:00 ~ 06:00	岩手県	Iwate (Morioka)	0.027
4	3/20 05:00 ~ 06:00	宮城県	Miyagi (Sendai)	
5	3/20 05:00 ~ 06:00	秋田県	Akita (Akita)	0.035
6	3/20 05:00 ~ 06:00	山形県	Yamagata (Yamaga	0.041
7	3/20 05:00 ~ 06:00	福島県	Fukushima (Futaba-gun)	
8	3/20 05:00 ~ 06:00	茨城県	Ibaraki (Mito)	0.163
9	3/20 05:00 ~ 06:00	栃木県	Tochigi (Itsunomiya	0.143
10	3/20 05:00 ~ 06:00	群馬県	Gunma (Maebashi)	0.073
11	3/20 05:00 ~ 06:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 05:00 ~ 06:00	千葉県	Chiba (Ichihara)	0.034
13	3/20 05:00 ~ 06:00	東京都	Tokyo (Shinjuku-ku	0.046
14	3/20 05:00 ~ 06:00	神奈川県	Kanagawa (Chigasa	0.048
15	3/20 05:00 ~ 06:00	新潟県	Niigata (Niigata)	0.047
16	3/20 05:00 ~ 06:00	富山県	Toyama (Imizu)	0.048
17	3/20 05:00 ~ 06:00	石川県	Ishikawa (Kanazawa	0.047
18	3/20 05:00 ~ 06:00	福井県	Fukui (Fukui)	0.046
19	3/20 05:00 ~ 06:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 05:00 ~ 06:00	長野県	Nagano (Nagano)	0.066
21	3/20 05:00 ~ 06:00	岐阜県	Gifu (Kakamigahara	0.062
22	3/20 05:00 ~ 06:00	静岡県	Shizuoka (Shizuoka	0.037
23	3/20 05:00 ~ 06:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 05:00 ~ 06:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 05:00 ~ 06:00	滋賀県	Shiga (Ohtsu)	0.037
26	3/20 05:00 ~ 06:00	京都府	Kyoto (Kyoto)	0.04
27	3/20 05:00 ~ 06:00	大阪府	Osaka (Osaka)	0.043
28	3/20 05:00 ~ 06:00	兵庫県	Hyogo (Kobe)	0.039
29	3/20 05:00 ~ 06:00	奈良県	Nara (Nara)	0.049
30	3/20 05:00 ~ 06:00	和歌山県	Wakayama (Wakaya	0.033
31	3/20 05:00 ~ 06:00	鳥取県	Tottori (Touhaku-g	0.064
32	3/20 05:00 ~ 06:00	島根県	Shimane (Matsue)	0.038
33	3/20 05:00 ~ 06:00	岡山県	Okayama (Okayama	0.052
34	3/20 05:00 ~ 06:00	広島県	Hiroshima (Hiroshin	0.05
35	3/20 05:00 ~ 06:00	山口県	Yamaguchi (Yamagi	0.096
36	3/20 05:00 ~ 06:00	徳島県	Tokushima (Tokush	0.039
37	3/20 05:00 ~ 06:00	香川県	Kagawa (Takamatsi	0.054
38	3/20 05:00 ~ 06:00	愛媛県	Ehime (Matsuyama,	0.05
39	3/20 05:00 ~ 06:00	高知県	Kochi (Kochi)	0.027
40	3/20 05:00 ~ 06:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 05:00 ~ 06:00	佐賀県	Saga (Saga)	0.041
42	3/20 05:00 ~ 06:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/20 05:00 ~ 06:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 05:00 ~ 06:00	大分県	Oita (Oita)	0.051

45	3/20 05:00 ~ 06:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 05:00 ~ 06:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/20 05:00 ~ 06:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 06:00 ~ 07:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 06:00 ~ 07:00	青森県	Aomori (Aomori)	0.021
3	3/20 06:00 ~ 07:00	岩手県	Iwate (Morioka)	0.027
4	3/20 06:00 ~ 07:00	宮城県	Miyagi (Sendai)	
5	3/20 06:00 ~ 07:00	秋田県	Akita (Akita)	0.035
6	3/20 06:00 ~ 07:00	山形県	Yamagata (Yamagata)	0.041
7	3/20 06:00 ~ 07:00	福島県	Fukushima (Futaba-gun)	
8	3/20 06:00 ~ 07:00	茨城県	Ibaraki (Mito)	0.163
9	3/20 06:00 ~ 07:00	栃木県	Tochigi (Itsunomiya)	0.142
10	3/20 06:00 ~ 07:00	群馬県	Gunma (Maebashi)	0.073
11	3/20 06:00 ~ 07:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 06:00 ~ 07:00	千葉県	Chiba (Ichihara)	0.034
13	3/20 06:00 ~ 07:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 06:00 ~ 07:00	神奈川県	Kanagawa (Chigasaki)	0.048
15	3/20 06:00 ~ 07:00	新潟県	Niigata (Niigata)	0.047
16	3/20 06:00 ~ 07:00	富山県	Toyama (Imizu)	0.049
17	3/20 06:00 ~ 07:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/20 06:00 ~ 07:00	福井県	Fukui (Fukui)	0.046
19	3/20 06:00 ~ 07:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 06:00 ~ 07:00	長野県	Nagano (Nagano)	0.067
21	3/20 06:00 ~ 07:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/20 06:00 ~ 07:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 06:00 ~ 07:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 06:00 ~ 07:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 06:00 ~ 07:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/20 06:00 ~ 07:00	京都府	Kyoto (Kyoto)	0.04
27	3/20 06:00 ~ 07:00	大阪府	Osaka (Osaka)	0.043
28	3/20 06:00 ~ 07:00	兵庫県	Hyogo (Kobe)	0.039
29	3/20 06:00 ~ 07:00	奈良県	Nara (Nara)	0.049
30	3/20 06:00 ~ 07:00	和歌山県	Wakayama (Wakayama)	0.033
31	3/20 06:00 ~ 07:00	鳥取県	Tottori (Tottori)	0.063
32	3/20 06:00 ~ 07:00	島根県	Shimane (Matsue)	0.038
33	3/20 06:00 ~ 07:00	岡山県	Okayama (Okayama)	0.052
34	3/20 06:00 ~ 07:00	広島県	Hiroshima (Hiroshima)	0.051
35	3/20 06:00 ~ 07:00	山口県	Yamaguchi (Yamaguchi)	0.096
36	3/20 06:00 ~ 07:00	徳島県	Tokushima (Tokushima)	0.039
37	3/20 06:00 ~ 07:00	香川県	Kagawa (Takamatsushima)	0.054
38	3/20 06:00 ~ 07:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/20 06:00 ~ 07:00	高知県	Kochi (Kochi)	0.027
40	3/20 06:00 ~ 07:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 06:00 ~ 07:00	佐賀県	Saga (Saga)	0.041
42	3/20 06:00 ~ 07:00	長崎県	Nagasaki (Ohmura)	0.029
43	3/20 06:00 ~ 07:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 06:00 ~ 07:00	大分県	Oita (Oita)	0.051
45	3/20 06:00 ~ 07:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 06:00 ~ 07:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/20 06:00 ~ 07:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 07:00 ~ 08:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 07:00 ~ 08:00	青森県	Aomori (Aomori)	0.021
3	3/20 07:00 ~ 08:00	岩手県	Iwate (Morioka)	0.027
4	3/20 07:00 ~ 08:00	宮城県	Miyagi (Sendai)	
5	3/20 07:00 ~ 08:00	秋田県	Akita (Akita)	0.035
6	3/20 07:00 ~ 08:00	山形県	Yamagata (Yamagata)	0.04
7	3/20 07:00 ~ 08:00	福島県	Fukushima (Futaba-gun)	

8	3/20 07:00 ~ 08:00	茨城県	Ibaraki (Mito)	0.162
9	3/20 07:00 ~ 08:00	栃木県	Tochigi (Itsunomiya)	0.142
10	3/20 07:00 ~ 08:00	群馬県	Gunma (Maebashi)	0.073
11	3/20 07:00 ~ 08:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 07:00 ~ 08:00	千葉県	Chiba (Ichihara)	0.034
13	3/20 07:00 ~ 08:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 07:00 ~ 08:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/20 07:00 ~ 08:00	新潟県	Niigata (Niigata)	0.047
16	3/20 07:00 ~ 08:00	富山県	Toyama (Imizu)	0.049
17	3/20 07:00 ~ 08:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/20 07:00 ~ 08:00	福井県	Fukui (Fukui)	0.046
19	3/20 07:00 ~ 08:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 07:00 ~ 08:00	長野県	Nagano (Nagano)	0.067
21	3/20 07:00 ~ 08:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/20 07:00 ~ 08:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 07:00 ~ 08:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 07:00 ~ 08:00	三重県	Mie (Yokkaichi)	0.047
25	3/20 07:00 ~ 08:00	滋賀県	Shiga (Ohtsu)	0.038
26	3/20 07:00 ~ 08:00	京都府	Kyoto (Kyoto)	0.04
27	3/20 07:00 ~ 08:00	大阪府	Osaka (Osaka)	0.043
28	3/20 07:00 ~ 08:00	兵庫県	Hyogo (Kobe)	0.039
29	3/20 07:00 ~ 08:00	奈良県	Nara (Nara)	0.049
30	3/20 07:00 ~ 08:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 07:00 ~ 08:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 07:00 ~ 08:00	島根県	Shimane (Matsue)	0.038
33	3/20 07:00 ~ 08:00	岡山県	Okayama (Okayama)	0.052
34	3/20 07:00 ~ 08:00	広島県	Hiroshima (Hiroshim)	0.051
35	3/20 07:00 ~ 08:00	山口県	Yamaguchi (Yamagi)	0.097
36	3/20 07:00 ~ 08:00	徳島県	Tokushima (Tokush)	0.039
37	3/20 07:00 ~ 08:00	香川県	Kagawa (Takamatsu)	0.054
38	3/20 07:00 ~ 08:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/20 07:00 ~ 08:00	高知県	Kochi (Kochi)	0.026
40	3/20 07:00 ~ 08:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 07:00 ~ 08:00	佐賀県	Saga (Saga)	0.041
42	3/20 07:00 ~ 08:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/20 07:00 ~ 08:00	熊本県	Kumamoto (Uto)	0.029
44	3/20 07:00 ~ 08:00	大分県	Oita (Oita)	0.051
45	3/20 07:00 ~ 08:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/20 07:00 ~ 08:00	鹿児島県	Kagoshima (Kagosh)	0.035
47	3/20 07:00 ~ 08:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 08:00 ~ 09:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 08:00 ~ 09:00	青森県	Aomori (Aomori)	0.021
3	3/20 08:00 ~ 09:00	岩手県	Iwate (Morioka)	0.027
4	3/20 08:00 ~ 09:00	宮城県	Miyagi (Sendai)	
5	3/20 08:00 ~ 09:00	秋田県	Akita (Akita)	0.035
6	3/20 08:00 ~ 09:00	山形県	Yamagata (Yamaga)	0.041
7	3/20 08:00 ~ 09:00	福島県	Fukushima (Futaba-gun)	
8	3/20 08:00 ~ 09:00	茨城県	Ibaraki (Mito)	0.161
9	3/20 08:00 ~ 09:00	栃木県	Tochigi (Itsunomiya)	0.141
10	3/20 08:00 ~ 09:00	群馬県	Gunma (Maebashi)	0.073
11	3/20 08:00 ~ 09:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 08:00 ~ 09:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 08:00 ~ 09:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 08:00 ~ 09:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/20 08:00 ~ 09:00	新潟県	Niigata (Niigata)	0.047
16	3/20 08:00 ~ 09:00	富山県	Toyama (Imizu)	0.049
17	3/20 08:00 ~ 09:00	石川県	Ishikawa (Kanazawa)	0.048

18	3/20 08:00 ~ 09:00	福井県	Fukui (Fukui)	0.046
19	3/20 08:00 ~ 09:00	山梨県	Yamanashi (Kofu)	0.045
20	3/20 08:00 ~ 09:00	長野県	Nagano (Nagano)	0.066
21	3/20 08:00 ~ 09:00	岐阜県	Gifu (Kakamigahara)	0.063
22	3/20 08:00 ~ 09:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/20 08:00 ~ 09:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 08:00 ~ 09:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 08:00 ~ 09:00	滋賀県	Shiga (Ohtsu)	0.035
26	3/20 08:00 ~ 09:00	京都府	Kyoto (Kyoto)	0.04
27	3/20 08:00 ~ 09:00	大阪府	Osaka (Osaka)	0.043
28	3/20 08:00 ~ 09:00	兵庫県	Hyogo (Kobe)	0.038
29	3/20 08:00 ~ 09:00	奈良県	Nara (Nara)	0.048
30	3/20 08:00 ~ 09:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 08:00 ~ 09:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 08:00 ~ 09:00	島根県	Shimane (Matsue)	0.039
33	3/20 08:00 ~ 09:00	岡山県	Okayama (Okayama)	0.051
34	3/20 08:00 ~ 09:00	広島県	Hiroshima (Hiroshim)	0.052
35	3/20 08:00 ~ 09:00	山口県	Yamaguchi (Yamagi)	0.099
36	3/20 08:00 ~ 09:00	徳島県	Tokushima (Tokush)	0.039
37	3/20 08:00 ~ 09:00	香川県	Kagawa (Takamats)	0.054
38	3/20 08:00 ~ 09:00	愛媛県	Ehime (Matsuyama)	0.049
39	3/20 08:00 ~ 09:00	高知県	Kochi (Kochi)	0.027
40	3/20 08:00 ~ 09:00	福岡県	Fukuoka (Dazaifu)	0.037
41	3/20 08:00 ~ 09:00	佐賀県	Saga (Saga)	0.042
42	3/20 08:00 ~ 09:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/20 08:00 ~ 09:00	熊本県	Kumamoto (Uto)	0.031
44	3/20 08:00 ~ 09:00	大分県	Oita (Oita)	0.05
45	3/20 08:00 ~ 09:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 08:00 ~ 09:00	鹿児島県	Kagoshima (Kagosh)	0.036
47	3/20 08:00 ~ 09:00	沖縄県	Okinawa (Uruma)	0.02
1	3/20 09:00 ~ 10:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 09:00 ~ 10:00	青森県	Aomori (Aomori)	0.021
3	3/20 09:00 ~ 10:00	岩手県	Iwate (Morioka)	0.027
4	3/20 09:00 ~ 10:00	宮城県	Miyagi (Sendai)	
5	3/20 09:00 ~ 10:00	秋田県	Akita (Akita)	0.035
6	3/20 09:00 ~ 10:00	山形県	Yamagata (Yamaga)	0.041
7	3/20 09:00 ~ 10:00	福島県	Fukushima (Futaba-gun)	
8	3/20 09:00 ~ 10:00	茨城県	Ibaraki (Mito)	0.161
9	3/20 09:00 ~ 10:00	栃木県	Tochigi (Itsunomiya)	0.139
10	3/20 09:00 ~ 10:00	群馬県	Gunma (Maebashi)	0.071
11	3/20 09:00 ~ 10:00	埼玉県	Saitama (Saitama)	0.054
12	3/20 09:00 ~ 10:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 09:00 ~ 10:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 09:00 ~ 10:00	神奈川県	Kanagawa (Chigasa)	0.048
15	3/20 09:00 ~ 10:00	新潟県	Niigata (Niigata)	0.047
16	3/20 09:00 ~ 10:00	富山県	Toyama (Imizu)	0.049
17	3/20 09:00 ~ 10:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/20 09:00 ~ 10:00	福井県	Fukui (Fukui)	0.046
19	3/20 09:00 ~ 10:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 09:00 ~ 10:00	長野県	Nagano (Nagano)	0.066
21	3/20 09:00 ~ 10:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/20 09:00 ~ 10:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 09:00 ~ 10:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 09:00 ~ 10:00	三重県	Mie (Yokkaichi)	0.047
25	3/20 09:00 ~ 10:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 09:00 ~ 10:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 09:00 ~ 10:00	大阪府	Osaka (Osaka)	0.043

28	3/20 09:00 ~ 10:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 09:00 ~ 10:00	奈良県	Nara (Nara)	0.049
30	3/20 09:00 ~ 10:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 09:00 ~ 10:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 09:00 ~ 10:00	島根県	Shimane (Matsue)	0.039
33	3/20 09:00 ~ 10:00	岡山県	Okayama (Okayama)	0.05
34	3/20 09:00 ~ 10:00	広島県	Hiroshima (Hiroshim)	0.051
35	3/20 09:00 ~ 10:00	山口県	Yamaguchi (Yamagi)	0.098
36	3/20 09:00 ~ 10:00	徳島県	Tokushima (Tokush)	0.039
37	3/20 09:00 ~ 10:00	香川県	Kagawa (Takamats)	0.054
38	3/20 09:00 ~ 10:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 09:00 ~ 10:00	高知県	Kochi (Kochi)	0.026
40	3/20 09:00 ~ 10:00	福岡県	Fukuoka (Dazaifu)	0.038
41	3/20 09:00 ~ 10:00	佐賀県	Saga (Saga)	0.045
42	3/20 09:00 ~ 10:00	長崎県	Nagasaki (Ohmura)	0.03
43	3/20 09:00 ~ 10:00	熊本県	Kumamoto (Uto)	0.03
44	3/20 09:00 ~ 10:00	大分県	Oita (Oita)	0.05
45	3/20 09:00 ~ 10:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 09:00 ~ 10:00	鹿児島県	Kagoshima (Kagosh)	0.036
47	3/20 09:00 ~ 10:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 10:00 ~ 11:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 10:00 ~ 11:00	青森県	Aomori (Aomori)	0.021
3	3/20 10:00 ~ 11:00	岩手県	Iwate (Morioka)	0.026
4	3/20 10:00 ~ 11:00	宮城県	Miyagi (Sendai)	
5	3/20 10:00 ~ 11:00	秋田県	Akita (Akita)	0.035
6	3/20 10:00 ~ 11:00	山形県	Yamagata (Yamaga)	0.04
7	3/20 10:00 ~ 11:00	福島県	Fukushima (Futaba-gun)	
8	3/20 10:00 ~ 11:00	茨城県	Ibaraki (Mito)	0.159
9	3/20 10:00 ~ 11:00	栃木県	Tochigi (Itsunomiya)	0.138
10	3/20 10:00 ~ 11:00	群馬県	Gunma (Maebashi)	0.07
11	3/20 10:00 ~ 11:00	埼玉県	Saitama (Saitama)	0.053
12	3/20 10:00 ~ 11:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 10:00 ~ 11:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 10:00 ~ 11:00	神奈川県	Kanagawa (Chigasa)	0.047
15	3/20 10:00 ~ 11:00	新潟県	Niigata (Niigata)	0.047
16	3/20 10:00 ~ 11:00	富山県	Toyama (Imizu)	0.049
17	3/20 10:00 ~ 11:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 10:00 ~ 11:00	福井県	Fukui (Fukui)	0.046
19	3/20 10:00 ~ 11:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 10:00 ~ 11:00	長野県	Nagano (Nagano)	0.065
21	3/20 10:00 ~ 11:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/20 10:00 ~ 11:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/20 10:00 ~ 11:00	愛知県	Aichi (Nagoya)	0.042
24	3/20 10:00 ~ 11:00	三重県	Mie (Yokkaichi)	0.047
25	3/20 10:00 ~ 11:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 10:00 ~ 11:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 10:00 ~ 11:00	大阪府	Osaka (Osaka)	0.043
28	3/20 10:00 ~ 11:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 10:00 ~ 11:00	奈良県	Nara (Nara)	0.049
30	3/20 10:00 ~ 11:00	和歌山県	Wakayama (Wakaya)	0.033
31	3/20 10:00 ~ 11:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/20 10:00 ~ 11:00	島根県	Shimane (Matsue)	0.038
33	3/20 10:00 ~ 11:00	岡山県	Okayama (Okayama)	0.05
34	3/20 10:00 ~ 11:00	広島県	Hiroshima (Hiroshim)	0.051
35	3/20 10:00 ~ 11:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/20 10:00 ~ 11:00	徳島県	Tokushima (Tokush)	0.039
37	3/20 10:00 ~ 11:00	香川県	Kagawa (Takamats)	0.053

38	3/20 10:00 ~ 11:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 10:00 ~ 11:00	高知県	Kochi (Kochi)	0.026
40	3/20 10:00 ~ 11:00	福岡県	Fukuoka (Dazaifu)	0.039
41	3/20 10:00 ~ 11:00	佐賀県	Saga (Saga)	0.048
42	3/20 10:00 ~ 11:00	長崎県	Nagasaki (Ohmura)	0.032
43	3/20 10:00 ~ 11:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 10:00 ~ 11:00	大分県	Oita (Oita)	0.051
45	3/20 10:00 ~ 11:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 10:00 ~ 11:00	鹿児島県	Kagoshima (Kagosh)	0.038
47	3/20 10:00 ~ 11:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 11:00 ~ 12:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 11:00 ~ 12:00	青森県	Aomori (Aomori)	0.021
3	3/20 11:00 ~ 12:00	岩手県	Iwate (Morioka)	0.026
4	3/20 11:00 ~ 12:00	宮城県	Miyagi (Sendai)	
5	3/20 11:00 ~ 12:00	秋田県	Akita (Akita)	0.034
6	3/20 11:00 ~ 12:00	山形県	Yamagata (Yamaga)	0.04
7	3/20 11:00 ~ 12:00	福島県	Fukushima (Futaba-gun)	
8	3/20 11:00 ~ 12:00	茨城県	Ibaraki (Mito)	0.263
9	3/20 11:00 ~ 12:00	栃木県	Tochigi (Itsunomiya)	0.137
10	3/20 11:00 ~ 12:00	群馬県	Gunma (Maebashi)	0.069
11	3/20 11:00 ~ 12:00	埼玉県	Saitama (Saitama)	0.053
12	3/20 11:00 ~ 12:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 11:00 ~ 12:00	東京都	Tokyo (Shinjuku-ku)	0.046
14	3/20 11:00 ~ 12:00	神奈川県	Kanagawa (Chigasa)	0.047
15	3/20 11:00 ~ 12:00	新潟県	Niigata (Niigata)	0.047
16	3/20 11:00 ~ 12:00	富山県	Toyama (Imizu)	0.049
17	3/20 11:00 ~ 12:00	石川県	Ishikawa (Kanazawa)	0.047
18	3/20 11:00 ~ 12:00	福井県	Fukui (Fukui)	0.046
19	3/20 11:00 ~ 12:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 11:00 ~ 12:00	長野県	Nagano (Nagano)	0.064
21	3/20 11:00 ~ 12:00	岐阜県	Gifu (Kakamigahara)	0.062
22	3/20 11:00 ~ 12:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/20 11:00 ~ 12:00	愛知県	Aichi (Nagoya)	0.041
24	3/20 11:00 ~ 12:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 11:00 ~ 12:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 11:00 ~ 12:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 11:00 ~ 12:00	大阪府	Osaka (Osaka)	0.043
28	3/20 11:00 ~ 12:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 11:00 ~ 12:00	奈良県	Nara (Nara)	0.049
30	3/20 11:00 ~ 12:00	和歌山県	Wakayama (Wakaya)	0.032
31	3/20 11:00 ~ 12:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/20 11:00 ~ 12:00	島根県	Shimane (Matsue)	0.038
33	3/20 11:00 ~ 12:00	岡山県	Okayama (Okayama)	0.05
34	3/20 11:00 ~ 12:00	広島県	Hiroshima (Hiroshin)	0.05
35	3/20 11:00 ~ 12:00	山口県	Yamaguchi (Yamagi)	0.096
36	3/20 11:00 ~ 12:00	徳島県	Tokushima (Tokush)	0.038
37	3/20 11:00 ~ 12:00	香川県	Kagawa (Takamats)	0.053
38	3/20 11:00 ~ 12:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 11:00 ~ 12:00	高知県	Kochi (Kochi)	0.026
40	3/20 11:00 ~ 12:00	福岡県	Fukuoka (Dazaifu)	0.038
41	3/20 11:00 ~ 12:00	佐賀県	Saga (Saga)	0.045
42	3/20 11:00 ~ 12:00	長崎県	Nagasaki (Ohmura)	0.031
43	3/20 11:00 ~ 12:00	熊本県	Kumamoto (Uto)	0.027
44	3/20 11:00 ~ 12:00	大分県	Oita (Oita)	0.05
45	3/20 11:00 ~ 12:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 11:00 ~ 12:00	鹿児島県	Kagoshima (Kagosh)	0.037
47	3/20 11:00 ~ 12:00	沖縄県	Okinawa (Uruma)	0.021

1	3/20 12:00 ~ 13:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 12:00 ~ 13:00	青森県	Aomori (Aomori)	0.021
3	3/20 12:00 ~ 13:00	岩手県	Iwate (Morioka)	0.026
4	3/20 12:00 ~ 13:00	宮城県	Miyagi (Sendai)	
5	3/20 12:00 ~ 13:00	秋田県	Akita (Akita)	0.034
6	3/20 12:00 ~ 13:00	山形県	Yamagata (Yamagata)	0.04
7	3/20 12:00 ~ 13:00	福島県	Fukushima (Futaba-gun)	
8	3/20 12:00 ~ 13:00	茨城県	Ibaraki (Mito)	0.204
9	3/20 12:00 ~ 13:00	栃木県	Tochigi (Itsunomiya)	0.136
10	3/20 12:00 ~ 13:00	群馬県	Gunma (Maebashi)	0.069
11	3/20 12:00 ~ 13:00	埼玉県	Saitama (Saitama)	0.053
12	3/20 12:00 ~ 13:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 12:00 ~ 13:00	東京都	Tokyo (Shinjuku-ku)	0.045
14	3/20 12:00 ~ 13:00	神奈川県	Kanagawa (Chigasaki)	0.047
15	3/20 12:00 ~ 13:00	新潟県	Niigata (Niigata)	0.047
16	3/20 12:00 ~ 13:00	富山県	Toyama (Imizu)	0.049
17	3/20 12:00 ~ 13:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/20 12:00 ~ 13:00	福井県	Fukui (Fukui)	0.046
19	3/20 12:00 ~ 13:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 12:00 ~ 13:00	長野県	Nagano (Nagano)	0.064
21	3/20 12:00 ~ 13:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 12:00 ~ 13:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/20 12:00 ~ 13:00	愛知県	Aichi (Nagoya)	0.04
24	3/20 12:00 ~ 13:00	三重県	Mie (Yokkaichi)	0.047
25	3/20 12:00 ~ 13:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 12:00 ~ 13:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 12:00 ~ 13:00	大阪府	Osaka (Osaka)	0.043
28	3/20 12:00 ~ 13:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 12:00 ~ 13:00	奈良県	Nara (Nara)	0.048
30	3/20 12:00 ~ 13:00	和歌山県	Wakayama (Wakayama)	0.032
31	3/20 12:00 ~ 13:00	鳥取県	Tottori (Tottori)	0.063
32	3/20 12:00 ~ 13:00	島根県	Shimane (Matsue)	0.041
33	3/20 12:00 ~ 13:00	岡山県	Okayama (Okayama)	0.05
34	3/20 12:00 ~ 13:00	広島県	Hiroshima (Hiroshima)	0.05
35	3/20 12:00 ~ 13:00	山口県	Yamaguchi (Yamaguchi)	0.095
36	3/20 12:00 ~ 13:00	徳島県	Tokushima (Tokushima)	0.038
37	3/20 12:00 ~ 13:00	香川県	Kagawa (Takamatsu)	0.053
38	3/20 12:00 ~ 13:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 12:00 ~ 13:00	高知県	Kochi (Kochi)	0.026
40	3/20 12:00 ~ 13:00	福岡県	Fukuoka (Dazaifu)	0.038
41	3/20 12:00 ~ 13:00	佐賀県	Saga (Saga)	0.046
42	3/20 12:00 ~ 13:00	長崎県	Nagasaki (Ohmura)	0.033
43	3/20 12:00 ~ 13:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 12:00 ~ 13:00	大分県	Oita (Oita)	0.05
45	3/20 12:00 ~ 13:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 12:00 ~ 13:00	鹿児島県	Kagoshima (Kagoshima)	0.035
47	3/20 12:00 ~ 13:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 13:00 ~ 14:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 13:00 ~ 14:00	青森県	Aomori (Aomori)	0.021
3	3/20 13:00 ~ 14:00	岩手県	Iwate (Morioka)	0.026
4	3/20 13:00 ~ 14:00	宮城県	Miyagi (Sendai)	
5	3/20 13:00 ~ 14:00	秋田県	Akita (Akita)	0.035
6	3/20 13:00 ~ 14:00	山形県	Yamagata (Yamagata)	0.04
7	3/20 13:00 ~ 14:00	福島県	Fukushima (Futaba-gun)	
8	3/20 13:00 ~ 14:00	茨城県	Ibaraki (Mito)	0.186
9	3/20 13:00 ~ 14:00	栃木県	Tochigi (Itsunomiya)	0.14
10	3/20 13:00 ~ 14:00	群馬県	Gunma (Maebashi)	0.069

11	3/20 13:00 ~ 14:00	埼玉県	Saitama (Saitama)	0.053
12	3/20 13:00 ~ 14:00	千葉県	Chiba (Ichihara)	0.033
13	3/20 13:00 ~ 14:00	東京都	Tokyo (Shinjuku-ku)	0.045
14	3/20 13:00 ~ 14:00	神奈川県	Kanagawa (Chigasa)	0.047
15	3/20 13:00 ~ 14:00	新潟県	Niigata (Niigata)	0.047
16	3/20 13:00 ~ 14:00	富山県	Toyama (Imizu)	0.049
17	3/20 13:00 ~ 14:00	石川県	Ishikawa (Kanazawa)	0.048
18	3/20 13:00 ~ 14:00	福井県	Fukui (Fukui)	0.046
19	3/20 13:00 ~ 14:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 13:00 ~ 14:00	長野県	Nagano (Nagano)	0.063
21	3/20 13:00 ~ 14:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 13:00 ~ 14:00	静岡県	Shizuoka (Shizuoka)	0.038
23	3/20 13:00 ~ 14:00	愛知県	Aichi (Nagoya)	0.04
24	3/20 13:00 ~ 14:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 13:00 ~ 14:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 13:00 ~ 14:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 13:00 ~ 14:00	大阪府	Osaka (Osaka)	0.043
28	3/20 13:00 ~ 14:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 13:00 ~ 14:00	奈良県	Nara (Nara)	0.048
30	3/20 13:00 ~ 14:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/20 13:00 ~ 14:00	鳥取県	Tottori (Touhaku-g)	0.063
32	3/20 13:00 ~ 14:00	島根県	Shimane (Matsue)	0.039
33	3/20 13:00 ~ 14:00	岡山県	Okayama (Okayama)	0.049
34	3/20 13:00 ~ 14:00	広島県	Hiroshima (Hiroshin)	0.051
35	3/20 13:00 ~ 14:00	山口県	Yamaguchi (Yamagi)	0.095
36	3/20 13:00 ~ 14:00	徳島県	Tokushima (Tokush)	0.037
37	3/20 13:00 ~ 14:00	香川県	Kagawa (Takamats)	0.053
38	3/20 13:00 ~ 14:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 13:00 ~ 14:00	高知県	Kochi (Kochi)	0.028
40	3/20 13:00 ~ 14:00	福岡県	Fukuoka (Dazaifu)	0.039
41	3/20 13:00 ~ 14:00	佐賀県	Saga (Saga)	0.048
42	3/20 13:00 ~ 14:00	長崎県	Nagasaki (Ohmura)	0.033
43	3/20 13:00 ~ 14:00	熊本県	Kumamoto (Uto)	0.028
44	3/20 13:00 ~ 14:00	大分県	Oita (Oita)	0.05
45	3/20 13:00 ~ 14:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 13:00 ~ 14:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/20 13:00 ~ 14:00	沖縄県	Okinawa (Uruma)	0.02
1	3/20 14:00 ~ 15:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 14:00 ~ 15:00	青森県	Aomori (Aomori)	0.021
3	3/20 14:00 ~ 15:00	岩手県	Iwate (Morioka)	0.026
4	3/20 14:00 ~ 15:00	宮城県	Miyagi (Sendai)	
5	3/20 14:00 ~ 15:00	秋田県	Akita (Akita)	0.034
6	3/20 14:00 ~ 15:00	山形県	Yamagata (Yamaga)	0.04
7	3/20 14:00 ~ 15:00	福島県	Fukushima (Futaba-gun)	
8	3/20 14:00 ~ 15:00	茨城県	Ibaraki (Mito)	0.183
9	3/20 14:00 ~ 15:00	栃木県	Tochigi (Itsunomiya)	0.164
10	3/20 14:00 ~ 15:00	群馬県	Gunma (Maebashi)	0.069
11	3/20 14:00 ~ 15:00	埼玉県	Saitama (Saitama)	0.052
12	3/20 14:00 ~ 15:00	千葉県	Chiba (Ichihara)	0.032
13	3/20 14:00 ~ 15:00	東京都	Tokyo (Shinjuku-ku)	0.045
14	3/20 14:00 ~ 15:00	神奈川県	Kanagawa (Chigasa)	0.047
15	3/20 14:00 ~ 15:00	新潟県	Niigata (Niigata)	0.047
16	3/20 14:00 ~ 15:00	富山県	Toyama (Imizu)	0.049
17	3/20 14:00 ~ 15:00	石川県	Ishikawa (Kanazawa)	0.049
18	3/20 14:00 ~ 15:00	福井県	Fukui (Fukui)	0.047
19	3/20 14:00 ~ 15:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 14:00 ~ 15:00	長野県	Nagano (Nagano)	0.063

21	3/20 14:00 ~ 15:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 14:00 ~ 15:00	静岡県	Shizuoka (Shizuoka)	0.037
23	3/20 14:00 ~ 15:00	愛知県	Aichi (Nagoya)	0.04
24	3/20 14:00 ~ 15:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 14:00 ~ 15:00	滋賀県	Shiga (Ohtsu)	0.034
26	3/20 14:00 ~ 15:00	京都府	Kyoto (Kyoto)	0.039
27	3/20 14:00 ~ 15:00	大阪府	Osaka (Osaka)	0.043
28	3/20 14:00 ~ 15:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 14:00 ~ 15:00	奈良県	Nara (Nara)	0.048
30	3/20 14:00 ~ 15:00	和歌山県	Wakayama (Wakaya)	0.031
31	3/20 14:00 ~ 15:00	鳥取県	Tottori (Touhaku-g)	0.064
32	3/20 14:00 ~ 15:00	島根県	Shimane (Matsue)	0.039
33	3/20 14:00 ~ 15:00	岡山県	Okayama (Okayama)	0.049
34	3/20 14:00 ~ 15:00	広島県	Hiroshima (Hiroshin)	0.053
35	3/20 14:00 ~ 15:00	山口県	Yamaguchi (Yamagi)	0.097
36	3/20 14:00 ~ 15:00	徳島県	Tokushima (Tokush)	0.037
37	3/20 14:00 ~ 15:00	香川県	Kagawa (Takamats)	0.053
38	3/20 14:00 ~ 15:00	愛媛県	Ehime (Matsuyama)	0.048
39	3/20 14:00 ~ 15:00	高知県	Kochi (Kochi)	0.027
40	3/20 14:00 ~ 15:00	福岡県	Fukuoka (Dazaifu)	0.04
41	3/20 14:00 ~ 15:00	佐賀県	Saga (Saga)	0.049
42	3/20 14:00 ~ 15:00	長崎県	Nagasaki (Ohmura)	0.033
43	3/20 14:00 ~ 15:00	熊本県	Kumamoto (Uto)	0.03
44	3/20 14:00 ~ 15:00	大分県	Oita (Oita)	0.05
45	3/20 14:00 ~ 15:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 14:00 ~ 15:00	鹿児島県	Kagoshima (Kagosh)	0.034
47	3/20 14:00 ~ 15:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 15:00 ~ 16:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 15:00 ~ 16:00	青森県	Aomori (Aomori)	0.021
3	3/20 15:00 ~ 16:00	岩手県	Iwate (Morioka)	0.025
4	3/20 15:00 ~ 16:00	宮城県	Miyagi (Sendai)	
5	3/20 15:00 ~ 16:00	秋田県	Akita (Akita)	0.034
6	3/20 15:00 ~ 16:00	山形県	Yamagata (Yamaga)	0.04
7	3/20 15:00 ~ 16:00	福島県	Fukushima (Futaba-gun)	
8	3/20 15:00 ~ 16:00	茨城県	Ibaraki (Mito)	0.177
9	3/20 15:00 ~ 16:00	栃木県	Tochigi (Itsunomiya)	0.153
10	3/20 15:00 ~ 16:00	群馬県	Gunma (Maebashi)	0.069
11	3/20 15:00 ~ 16:00	埼玉県	Saitama (Saitama)	0.052
12	3/20 15:00 ~ 16:00	千葉県	Chiba (Ichihara)	0.032
13	3/20 15:00 ~ 16:00	東京都	Tokyo (Shinjuku-ku)	0.045
14	3/20 15:00 ~ 16:00	神奈川県	Kanagawa (Chigasa)	0.047
15	3/20 15:00 ~ 16:00	新潟県	Niigata (Niigata)	0.047
16	3/20 15:00 ~ 16:00	富山県	Toyama (Imizu)	0.051
17	3/20 15:00 ~ 16:00	石川県	Ishikawa (Kanazawa)	0.052
18	3/20 15:00 ~ 16:00	福井県	Fukui (Fukui)	0.047
19	3/20 15:00 ~ 16:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 15:00 ~ 16:00	長野県	Nagano (Nagano)	0.063
21	3/20 15:00 ~ 16:00	岐阜県	Gifu (Kakamigahara)	0.061
22	3/20 15:00 ~ 16:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/20 15:00 ~ 16:00	愛知県	Aichi (Nagoya)	0.039
24	3/20 15:00 ~ 16:00	三重県	Mie (Yokkaichi)	0.046
25	3/20 15:00 ~ 16:00	滋賀県	Shiga (Ohtsu)	0.036
26	3/20 15:00 ~ 16:00	京都府	Kyoto (Kyoto)	0.043
27	3/20 15:00 ~ 16:00	大阪府	Osaka (Osaka)	0.044
28	3/20 15:00 ~ 16:00	兵庫県	Hyogo (Kobe)	0.036
29	3/20 15:00 ~ 16:00	奈良県	Nara (Nara)	0.051
30	3/20 15:00 ~ 16:00	和歌山県	Wakayama (Wakaya)	0.031

31	3/20 15:00 ~ 16:00	鳥取県	Tottori (Touhaku-g	0.064
32	3/20 15:00 ~ 16:00	島根県	Shimane (Matsue)	0.04
33	3/20 15:00 ~ 16:00	岡山県	Okayama (Okayama)	0.051
34	3/20 15:00 ~ 16:00	広島県	Hiroshima (Hiroshin	0.053
35	3/20 15:00 ~ 16:00	山口県	Yamaguchi (Yamagi	0.097
36	3/20 15:00 ~ 16:00	徳島県	Tokushima (Tokush	0.037
37	3/20 15:00 ~ 16:00	香川県	Kagawa (Takamats	0.053
38	3/20 15:00 ~ 16:00	愛媛県	Ehime (Matsuyama)	0.05
39	3/20 15:00 ~ 16:00	高知県	Kochi (Kochi)	0.027
40	3/20 15:00 ~ 16:00	福岡県	Fukuoka (Dazaifu)	0.039
41	3/20 15:00 ~ 16:00	佐賀県	Saga (Saga)	0.048
42	3/20 15:00 ~ 16:00	長崎県	Nagasaki (Ohmura)	0.032
43	3/20 15:00 ~ 16:00	熊本県	Kumamoto (Uto)	0.032
44	3/20 15:00 ~ 16:00	大分県	Oita (Oita)	0.051
45	3/20 15:00 ~ 16:00	宮崎県	Miyazaki (Miyazaki)	0.026
46	3/20 15:00 ~ 16:00	鹿児島県	Kagoshima (Kagosh	0.035
47	3/20 15:00 ~ 16:00	沖縄県	Okinawa (Uruma)	0.021
1	3/20 16:00 ~ 17:00	北海道	Hokkaido (Sapporo)	0.028
2	3/20 16:00 ~ 17:00	青森県	Aomori (Aomori)	0.021
3	3/20 16:00 ~ 17:00	岩手県	Iwate (Morioka)	0.026
4	3/20 16:00 ~ 17:00	宮城県	Miyagi (Sendai)	
5	3/20 16:00 ~ 17:00	秋田県	Akita (Akita)	0.035
6	3/20 16:00 ~ 17:00	山形県	Yamagata (Yamaga	0.04
7	3/20 16:00 ~ 17:00	福島県	Fukushima (Futaba-gun)	
8	3/20 16:00 ~ 17:00	茨城県	Ibaraki (Mito)	0.174
9	3/20 16:00 ~ 17:00	栃木県	Tochigi (Itsunomiya	0.153
10	3/20 16:00 ~ 17:00	群馬県	Gunma (Maebashi)	0.072
11	3/20 16:00 ~ 17:00	埼玉県	Saitama (Saitama)	0.052
12	3/20 16:00 ~ 17:00	千葉県	Chiba (Ichihara)	0.032
13	3/20 16:00 ~ 17:00	東京都	Tokyo (Shinjuku-ku	0.045
14	3/20 16:00 ~ 17:00	神奈川県	Kanagawa (Chigasa	0.047
15	3/20 16:00 ~ 17:00	新潟県	Niigata (Niigata)	0.047
16	3/20 16:00 ~ 17:00	富山県	Toyama (Imizu)	0.054
17	3/20 16:00 ~ 17:00	石川県	Ishikawa (Kanazawa)	0.052
18	3/20 16:00 ~ 17:00	福井県	Fukui (Fukui)	0.048
19	3/20 16:00 ~ 17:00	山梨県	Yamanashi (Kofu)	0.044
20	3/20 16:00 ~ 17:00	長野県	Nagano (Nagano)	0.066
21	3/20 16:00 ~ 17:00	岐阜県	Gifu (Kakamigahara	0.065
22	3/20 16:00 ~ 17:00	静岡県	Shizuoka (Shizuoka)	0.036
23	3/20 16:00 ~ 17:00	愛知県	Aichi (Nagoya)	0.04
24	3/20 16:00 ~ 17:00	三重県	Mie (Yokkaichi)	0.048
25	3/20 16:00 ~ 17:00	滋賀県	Shiga (Ohtsu)	0.037
26	3/20 16:00 ~ 17:00	京都府	Kyoto (Kyoto)	0.045
27	3/20 16:00 ~ 17:00	大阪府	Osaka (Osaka)	0.046
28	3/20 16:00 ~ 17:00	兵庫県	Hyogo (Kobe)	0.037
29	3/20 16:00 ~ 17:00	奈良県	Nara (Nara)	0.053
30	3/20 16:00 ~ 17:00	和歌山県	Wakayama (Wakaya	0.031
31	3/20 16:00 ~ 17:00	鳥取県	Tottori (Touhaku-g	0.064
32	3/20 16:00 ~ 17:00	島根県	Shimane (Matsue)	0.039
33	3/20 16:00 ~ 17:00	岡山県	Okayama (Okayama)	0.053
34	3/20 16:00 ~ 17:00	広島県	Hiroshima (Hiroshin	0.051
35	3/20 16:00 ~ 17:00	山口県	Yamaguchi (Yamagi	0.096
36	3/20 16:00 ~ 17:00	徳島県	Tokushima (Tokush	0.037
37	3/20 16:00 ~ 17:00	香川県	Kagawa (Takamats	0.054
38	3/20 16:00 ~ 17:00	愛媛県	Ehime (Matsuyama)	0.051
39	3/20 16:00 ~ 17:00	高知県	Kochi (Kochi)	0.029
40	3/20 16:00 ~ 17:00	福岡県	Fukuoka (Dazaifu)	0.037

41	3/20 16:00 ~ 17:00	佐賀県	Saga (Saga)	0.045
42	3/20 16:00 ~ 17:00	長崎県	Nagasaki (Ohmura)	0.032
43	3/20 16:00 ~ 17:00	熊本県	Kumamoto (Uto)	0.031
44	3/20 16:00 ~ 17:00	大分県	Oita (Oita)	0.052
45	3/20 16:00 ~ 17:00	宮崎県	Miyazaki (Miyazaki)	0.027
46	3/20 16:00 ~ 17:00	鹿児島県	Kagoshima (Kagosh)	0.037
47	3/20 16:00 ~ 17:00	沖縄県	Okinawa (Uruma)	0.02

Normal Range

0.02~0.105
0.017~0.102
0.014~0.084
0.0176~0.0513
0.022~0.086
0.025~0.082
0.037~0.071
0.036~0.056
0.030~0.067
0.017~0.045
0.031~0.060
0.022~0.044
0.028~0.079
0.035~0.069
0.031~0.153
0.029~0.147
0.0291~0.1275
0.032~0.097
0.040~0.064
0.0299~0.0974
0.057~0.110
0.0281~0.0765
0.035~0.074
0.0416~0.0789
0.031~0.061
0.033~0.087
0.042~0.061
0.035~0.076
0.046~0.08
0.031~0.056
0.036~0.11
0.033~0.079
0.043~0.104
0.035~0.069
0.084~0.128
0.037~0.067
0.051~0.077
0.045~0.074
0.023~0.076
0.034~0.079
0.037~0.086
0.027~0.069
0.021~0.067
0.048~0.085
0.0243~0.0664
0.0306~0.0943
0.0133~0.0575
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0.0416~0.0789
0.031~0.061
0.033~0.087
0.042~0.061
0.035~0.076
0.046~0.08
0.031~0.056
0.036~0.11
0.033~0.079
0.043~0.104
0.035~0.069
0.084~0.128
0.037~0.067
0.051~0.077
0.045~0.074
0.023~0.076
0.034~0.079

0.037~0.086
0.027~0.069
0.021~0.067
0.048~0.085
0.0243~0.0664
0.0306~0.0943
0.0133~0.0575