

ap atmos

- * GENERAL DESCRIPTIVE TITLE DESCRIBING THIS AP1000 "ATMOS" INPUT
- * This is the AP1000 BASE CASE ATMOS input deck
- * The Westinghouse 4 Plumes have been collapsed into 2 Plumes
- * Duration of Plume Segments Set = 36000 seconds max limit
- * LAST MODIFIED by MGM 04/19/04

RIATNAM1001 'IN1A.INP, NAPS AP1000 Model--Using stacked ST data, ATMOS input'

- * GEOMETRY DATA BLOCK, LOADED BY INPGEO, STORED IN /GEOM/

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- * NUMBER OF RADIAL SPATIAL ELEMENTS

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GENUMRAD001 11

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- * AP1000

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GESPAEND001	1.61	3.22	4.83	6.44	8.05
GESPAEND002	9.65	16.09	32.18	48.27	64.37
GESPAEND003	80.47				

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- * NUCLIDE DATA BLOCK, LOADED BY INPISO, STORED IN /ISOGRP/, /ISONAM/

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- * Number of pseudo-stable nuclides (used to truncate the decay chains)

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ISNUMSTB001 27

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- * List of pseudo-stable nuclides

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ISNAMSTB001	I-129	(daughter of Te-129 and Te-129m)
ISNAMSTB002	Xe-131m	(daughter of I-131)
ISNAMSTB003	Xe-133m	(daughter of I-133)
ISNAMSTB004	Xe-135m	(daughter of I-135)
ISNAMSTB005	Cs-135	(daughter of Xe-135 and Xe-135m)
ISNAMSTB006	Sm-147	(daughter of Pm-147)
ISNAMSTB007	U-234	(daughter of Pu-238)
ISNAMSTB008	U-235	(daughter of Pu-239)
ISNAMSTB009	U-236	(daughter of Pu-240)
ISNAMSTB010	U-237	(daughter of Pu-241)
ISNAMSTB011	Np-237	(daughter of Am-241)
ISNAMSTB012	Rb-87	(daughter of Kr-87)
ISNAMSTB013	Ba-137m	(daughter of Cs-137)
ISNAMSTB014	Rb-88	(daughter of Kr-88)
ISNAMSTB015	Y-91m	(daughter of Sr-91)
ISNAMSTB016	Zr-93	(daughter of Y-93)
ISNAMSTB017	Nb-93m	(daughter of Zr-93)
ISNAMSTB018	Nb-95m	(daughter of Zr-95)
ISNAMSTB019	Nb-97	(daughter of Zr-97 and Nb-97m)
ISNAMSTB020	Nb-97m	(daughter of Zr-97)
ISNAMSTB021	Tc-99	(daughter of Mo-99)
ISNAMSTB022	Rh-103m	(daughter of Ru-103)

ISNAMSTB023 Rh-106 (daughter of Ru-106)
ISNAMSTB024 Te-131 (daughter of Te-131m)
ISNAMSTB025 Pr-144 (daughter of Ce-144 and Pr-144m)
ISNAMSTB026 Pr-144m (daughter of Ce-144)
ISNAMSTB027 Pm-147 (daughter of Nd-147)

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* Number of radioactive nuclides to be considered

ISNUMISO001 60

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* NUMBER OF NUCLIDE GROUPS

ISMAXGRP001 9

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* WET AND DRY DEPOSITION FLAGS FOR EACH NUCLIDE GROUP

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* WETDEP DRYDEP

*
ISDEPFLA001 .FALSE. .FALSE.
ISDEPFLA002 .TRUE. .TRUE.
ISDEPFLA003 .TRUE. .TRUE.
ISDEPFLA004 .TRUE. .TRUE.
ISDEPFLA005 .TRUE. .TRUE.
ISDEPFLA006 .TRUE. .TRUE.
ISDEPFLA007 .TRUE. .TRUE.
ISDEPFLA008 .TRUE. .TRUE.
ISDEPFLA009 .TRUE. .TRUE.

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* NUCLIDE GROUP DATA FOR 9 NUCLIDE GROUPS

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* NUCNAM IGROUP

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ISOTPGRP001 Co-58 6
ISOTPGRP002 Co-60 6
ISOTPGRP003 Kr-85 1
ISOTPGRP004 Kr-85m 1
ISOTPGRP005 Kr-87 1
ISOTPGRP006 Kr-88 1
ISOTPGRP007 Rb-86 3
ISOTPGRP008 Sr-89 5
ISOTPGRP009 Sr-90 5
ISOTPGRP010 Sr-91 5
ISOTPGRP011 Sr-92 5
ISOTPGRP012 Y-90 7
ISOTPGRP013 Y-91 7
ISOTPGRP014 Y-92 7
ISOTPGRP015 Y-93 7
ISOTPGRP016 Zr-95 7
ISOTPGRP017 Zr-97 7
ISOTPGRP018 Nb-95 7

ISOTPGRP019	Mo-99	6
ISOTPGRP020	Tc-99m	6
ISOTPGRP021	Ru-103	6
ISOTPGRP022	Ru-105	6
ISOTPGRP023	Ru-106	6
ISOTPGRP024	Rh-105	6
ISOTPGRP025	Sb-127	4
ISOTPGRP026	Sb-129	4
ISOTPGRP027	Te-127	4
ISOTPGRP028	Te-127m	4
ISOTPGRP029	Te-129	4
ISOTPGRP030	Te-129m	4
ISOTPGRP031	Te-131m	4
ISOTPGRP032	Te-132	4
ISOTPGRP033	I-131	2
ISOTPGRP034	I-132	2
ISOTPGRP035	I-133	2
ISOTPGRP036	I-134	2
ISOTPGRP037	I-135	2
ISOTPGRP038	Xe-133	1
ISOTPGRP039	Xe-135	1
ISOTPGRP040	Cs-134	3
ISOTPGRP041	Cs-136	3
ISOTPGRP042	Cs-137	3
ISOTPGRP043	Ba-139	9
ISOTPGRP044	Ba-140	9
ISOTPGRP045	La-140	7
ISOTPGRP046	La-141	7
ISOTPGRP047	La-142	7
ISOTPGRP048	Ce-141	8
ISOTPGRP049	Ce-143	8
ISOTPGRP050	Ce-144	8
ISOTPGRP051	Pr-143	7
ISOTPGRP052	Nd-147	7
ISOTPGRP053	Np-239	8
ISOTPGRP054	Pu-238	8
ISOTPGRP055	Pu-239	8
ISOTPGRP056	Pu-240	8
ISOTPGRP057	Pu-241	8
ISOTPGRP058	Am-241	7
ISOTPGRP059	Cm-242	7
ISOTPGRP060	Cm-244	7

* WET DEPOSITION DATA BLOCK, LOADED BY INPWET, STORED IN /WETCON/

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* WASHOUT COEFFICIENT NUMBER ONE, LINEAR FACTOR

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WDCWASH1001 9.5E-5 (JON HELTON AFTER JONES, 1986)

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* WASHOUT COEFFICIENT NUMBER TWO, EXPONENTIAL FACTOR

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WDCWASH2001 0.8 (JON HELTON AFTER JONES, 1986)

* DRY DEPOSITION DATA BLOCK, LOADED BY INPDY, STORED IN /DRYCON/

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* NUMBER OF PARTICLE SIZE GROUPS

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DDNPSGRP001 1

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* DEPOSITION VELOCITY OF EACH PARTICLE SIZE GROUP (M/S)

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DDVDEPOS001 0.01 (VALUE SELECTED BY S. ACHARYA, NRC)

* DISPERSION PARAMETER DATA BLOCK, LOADED BY INPDIS, STORED IN /DISPY/, /DISPZ/

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* # of distances in plume-size tables--which can be used as an alternative to the power-law model:

* (to utilize the power-law model, set NUM_DIST to zero or delete the following data card)

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NUM_DIST001 50

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* A-stability Distance (m) Sigma-y (m) Sigma-z (m)

* A-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
A-STB/DIS01	1.000E+00	3.6580E-01	2.5000E-04	Tadmor/Gur (0.5-5 km)
A-STB/DIS02	1.400E+00	4.9569E-01	5.1105E-04	Tadmor/Gur (0.5-5 km)
A-STB/DIS03	2.000E+00	6.8408E-01	1.0905E-03	Tadmor/Gur (0.5-5 km)
A-STB/DIS04	3.000E+00	9.8658E-01	2.5812E-03	Tadmor/Gur (0.5-5 km)
A-STB/DIS05	4.000E+00	1.2793E+00	4.7568E-03	Tadmor/Gur (0.5-5 km)
A-STB/DIS06	5.000E+00	1.5649E+00	7.6428E-03	Tadmor/Gur (0.5-5 km)
A-STB/DIS07	6.000E+00	1.8450E+00	1.1259E-02	Tadmor/Gur (0.5-5 km)
A-STB/DIS08	8.000E+00	2.3923E+00	2.0749E-02	Tadmor/Gur (0.5-5 km)
A-STB/DIS09	1.000E+01	2.9265E+00	3.3338E-02	Tadmor/Gur (0.5-5 km)
A-STB/DIS10	1.000E+02	2.3412E+01	4.4457E+00	Tadmor/Gur (0.5-5 km)
A-STB/DIS11	1.400E+02	3.1726E+01	9.0879E+00	Tadmor/Gur (0.5-5 km)
A-STB/DIS12	2.000E+02	4.3783E+01	1.9392E+01	Tadmor/Gur (0.5-5 km)
A-STB/DIS13	3.000E+02	6.3144E+01	4.5901E+01	Tadmor/Gur (0.5-5 km)
A-STB/DIS14	4.000E+02	8.1877E+01	8.4590E+01	Tadmor/Gur (0.5-5 km)
A-STB/DIS15	5.000E+02	1.0016E+02	1.3591E+02	Tadmor/Gur (0.5-5 km)
A-STB/DIS16	6.000E+02	1.1808E+02	2.0022E+02	Tadmor/Gur (0.5-5 km)
A-STB/DIS17	8.000E+02	1.5312E+02	3.6898E+02	Tadmor/Gur (0.5-5 km)
A-STB/DIS18	1.000E+03	1.8730E+02	5.9284E+02	Tadmor/Gur (0.5-5 km)
A-STB/DIS19	1.400E+03	2.5381E+02	1.2119E+03	Tadmor/Gur (0.5-5 km)
A-STB/DIS20	2.000E+03	3.5027E+02	2.5860E+03	Tadmor/Gur (0.5-5 km)
A-STB/DIS21	3.000E+03	5.0516E+02	6.1210E+03	Tadmor/Gur (0.5-5 km)
A-STB/DIS22	4.000E+03	6.5503E+02	1.1280E+04	Tadmor/Gur (0.5-5 km)
A-STB/DIS23	5.000E+03	8.0128E+02	1.8124E+04	Tadmor/Gur (0.5-5 km)
A-STB/DIS24	6.000E+03	9.4470E+02	2.6700E+04	Tadmor/Gur (0.5-5 km)
A-STB/DIS25	8.000E+03	1.2250E+03	4.9205E+04	Tadmor/Gur (0.5-5 km)
A-STB/DIS26	1.000E+04	1.4985E+03	7.9057E+04	Tadmor/Gur (0.5-5 km)
A-STB/DIS27	1.400E+04	2.0305E+03	1.6161E+05	Tadmor/Gur (0.5-5 km)

A-STB/DIS28	2.000E+04	2.8022E+03	3.4485E+05	Tadmor/Gur (0.5-5 km)
A-STB/DIS29	3.000E+04	4.0414E+03	8.1625E+05	Tadmor/Gur (0.5-5 km)
A-STB/DIS30	4.000E+04	5.2404E+03	1.5042E+06	Tadmor/Gur (0.5-5 km)
A-STB/DIS31	5.000E+04	6.4104E+03	2.4169E+06	Tadmor/Gur (0.5-5 km)
A-STB/DIS32	6.000E+04	7.5577E+03	3.5605E+06	Tadmor/Gur (0.5-5 km)
A-STB/DIS33	8.000E+04	9.8000E+03	6.5615E+06	Tadmor/Gur (0.5-5 km)
A-STB/DIS34	1.000E+05	1.1988E+04	1.0542E+07	Tadmor/Gur (0.5-5 km)
A-STB/DIS35	1.400E+05	1.6245E+04	2.1551E+07	Tadmor/Gur (0.5-5 km)
A-STB/DIS36	2.000E+05	2.2418E+04	4.5986E+07	Tadmor/Gur (0.5-5 km)
A-STB/DIS37	3.000E+05	3.2332E+04	1.0885E+08	Tadmor/Gur (0.5-5 km)
A-STB/DIS38	4.000E+05	4.1924E+04	2.0059E+08	Tadmor/Gur (0.5-5 km)
A-STB/DIS39	5.000E+05	5.1284E+04	3.2229E+08	Tadmor/Gur (0.5-5 km)
A-STB/DIS40	6.000E+05	6.0463E+04	4.7480E+08	Tadmor/Gur (0.5-5 km)
A-STB/DIS41	8.000E+05	7.8401E+04	8.7500E+08	Tadmor/Gur (0.5-5 km)
A-STB/DIS42	1.000E+06	9.5906E+04	1.4059E+09	Tadmor/Gur (0.5-5 km)
A-STB/DIS43	1.400E+06	1.2996E+05	2.8738E+09	Tadmor/Gur (0.5-5 km)
A-STB/DIS44	2.000E+06	1.7935E+05	6.1324E+09	Tadmor/Gur (0.5-5 km)
A-STB/DIS45	3.000E+06	2.5866E+05	1.4515E+10	Tadmor/Gur (0.5-5 km)
A-STB/DIS46	4.000E+06	3.3540E+05	2.6750E+10	Tadmor/Gur (0.5-5 km)
A-STB/DIS47	5.000E+06	4.1028E+05	4.2979E+10	Tadmor/Gur (0.5-5 km)
A-STB/DIS48	6.000E+06	4.8372E+05	6.3316E+10	Tadmor/Gur (0.5-5 km)
A-STB/DIS49	8.000E+06	6.2723E+05	1.1668E+11	Tadmor/Gur (0.5-5 km)
A-STB/DIS50	1.000E+07	7.6726E+05	1.8747E+11	Tadmor/Gur (0.5-5 km)

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* B-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
B-STB/DIS01	1.000E+00	2.7510E-01	1.9000E-03	Tadmor/Gur (0.5-5 km)
B-STB/DIS02	1.400E+00	3.7279E-01	3.2574E-03	Tadmor/Gur (0.5-5 km)
B-STB/DIS03	2.000E+00	5.1446E-01	5.7681E-03	Tadmor/Gur (0.5-5 km)
B-STB/DIS04	3.000E+00	7.4196E-01	1.1045E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS05	4.000E+00	9.6208E-01	1.7511E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS06	5.000E+00	1.1769E+00	2.5036E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS07	6.000E+00	1.3875E+00	3.3530E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS08	8.000E+00	1.7992E+00	5.3161E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS09	1.000E+01	2.2009E+00	7.6007E-02	Tadmor/Gur (0.5-5 km)
B-STB/DIS10	1.000E+02	1.7607E+01	3.0406E+00	Tadmor/Gur (0.5-5 km)
B-STB/DIS11	1.400E+02	2.3859E+01	5.2127E+00	Tadmor/Gur (0.5-5 km)
B-STB/DIS12	2.000E+02	3.2927E+01	9.2307E+00	Tadmor/Gur (0.5-5 km)
B-STB/DIS13	3.000E+02	4.7487E+01	1.7675E+01	Tadmor/Gur (0.5-5 km)
B-STB/DIS14	4.000E+02	6.1576E+01	2.8023E+01	Tadmor/Gur (0.5-5 km)
B-STB/DIS15	5.000E+02	7.5323E+01	4.0066E+01	Tadmor/Gur (0.5-5 km)
B-STB/DIS16	6.000E+02	8.8805E+01	5.3657E+01	Tadmor/Gur (0.5-5 km)
B-STB/DIS17	8.000E+02	1.1515E+02	8.5073E+01	Tadmor/Gur (0.5-5 km)
B-STB/DIS18	1.000E+03	1.4086E+02	1.2163E+02	Tadmor/Gur (0.5-5 km)
B-STB/DIS19	1.400E+03	1.9088E+02	2.0853E+02	Tadmor/Gur (0.5-5 km)
B-STB/DIS20	2.000E+03	2.6342E+02	3.6926E+02	Tadmor/Gur (0.5-5 km)
B-STB/DIS21	3.000E+03	3.7991E+02	7.0705E+02	Tadmor/Gur (0.5-5 km)
B-STB/DIS22	4.000E+03	4.9262E+02	1.1210E+03	Tadmor/Gur (0.5-5 km)
B-STB/DIS23	5.000E+03	6.0260E+02	1.6028E+03	Tadmor/Gur (0.5-5 km)
B-STB/DIS24	6.000E+03	7.1046E+02	2.1465E+03	Tadmor/Gur (0.5-5 km)
B-STB/DIS25	8.000E+03	9.2124E+02	3.4033E+03	Tadmor/Gur (0.5-5 km)

B-STB/DIS26	1.000E+04	1.1269E+03	4.8658E+03	Tadmor/Gur (0.5-5 km)
B-STB/DIS27	1.400E+04	1.5271E+03	8.3419E+03	Tadmor/Gur (0.5-5 km)
B-STB/DIS28	2.000E+04	2.1074E+03	1.4772E+04	Tadmor/Gur (0.5-5 km)
B-STB/DIS29	3.000E+04	3.0393E+03	2.8285E+04	Tadmor/Gur (0.5-5 km)
B-STB/DIS30	4.000E+04	3.9410E+03	4.4845E+04	Tadmor/Gur (0.5-5 km)
B-STB/DIS31	5.000E+04	4.8209E+03	6.4117E+04	Tadmor/Gur (0.5-5 km)
B-STB/DIS32	6.000E+04	5.6838E+03	8.5868E+04	Tadmor/Gur (0.5-5 km)
B-STB/DIS33	8.000E+04	7.3701E+03	1.3614E+05	Tadmor/Gur (0.5-5 km)
B-STB/DIS34	1.000E+05	9.0155E+03	1.9465E+05	Tadmor/Gur (0.5-5 km)
B-STB/DIS35	1.400E+05	1.2217E+04	3.3371E+05	Tadmor/Gur (0.5-5 km)
B-STB/DIS36	2.000E+05	1.6860E+04	5.9093E+05	Tadmor/Gur (0.5-5 km)
B-STB/DIS37	3.000E+05	2.4315E+04	1.1315E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS38	4.000E+05	3.1529E+04	1.7940E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS39	5.000E+05	3.8568E+04	2.5649E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS40	6.000E+05	4.5471E+04	3.4350E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS41	8.000E+05	5.8962E+04	5.4462E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS42	1.000E+06	7.2126E+04	7.7867E+06	Tadmor/Gur (0.5-5 km)
B-STB/DIS43	1.400E+06	9.7737E+04	1.3350E+07	Tadmor/Gur (0.5-5 km)
B-STB/DIS44	2.000E+06	1.3488E+05	2.3639E+07	Tadmor/Gur (0.5-5 km)
B-STB/DIS45	3.000E+06	1.9453E+05	4.5264E+07	Tadmor/Gur (0.5-5 km)
B-STB/DIS46	4.000E+06	2.5224E+05	7.1765E+07	Tadmor/Gur (0.5-5 km)
B-STB/DIS47	5.000E+06	3.0855E+05	1.0261E+08	Tadmor/Gur (0.5-5 km)
B-STB/DIS48	6.000E+06	3.6378E+05	1.3741E+08	Tadmor/Gur (0.5-5 km)
B-STB/DIS49	8.000E+06	4.7171E+05	2.1787E+08	Tadmor/Gur (0.5-5 km)
B-STB/DIS50	1.000E+07	5.7702E+05	3.1150E+08	Tadmor/Gur (0.5-5 km)

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* C-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
C-STB/DIS01	1.000E+00	2.0890E-01	2.0000E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS02	1.400E+00	2.8308E-01	2.6660E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS03	2.000E+00	3.9066E-01	3.6158E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS04	3.000E+00	5.6341E-01	5.1125E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS05	4.000E+00	7.3056E-01	6.5369E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS06	5.000E+00	8.9367E-01	7.9097E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS07	6.000E+00	1.0536E+00	9.2428E-01	Tadmor/Gur (0.5-5 km)
C-STB/DIS08	8.000E+00	1.3662E+00	1.1818E+00	Tadmor/Gur (0.5-5 km)
C-STB/DIS09	1.000E+01	1.6712E+00	1.4300E+00	Tadmor/Gur (0.5-5 km)
C-STB/DIS10	1.000E+02	1.3370E+01	1.0224E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS11	1.400E+02	1.8118E+01	1.3629E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS12	2.000E+02	2.5003E+01	1.8484E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS13	3.000E+02	3.6060E+01	2.6136E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS14	4.000E+02	4.6758E+01	3.3417E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS15	5.000E+02	5.7198E+01	4.0435E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS16	6.000E+02	6.7435E+01	4.7250E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS17	8.000E+02	8.7442E+01	6.0414E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS18	1.000E+03	1.0696E+02	7.3102E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS19	1.400E+03	1.4495E+02	9.7447E+01	Tadmor/Gur (0.5-5 km)
C-STB/DIS20	2.000E+03	2.0003E+02	1.3216E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS21	3.000E+03	2.8849E+02	1.8687E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS22	4.000E+03	3.7408E+02	2.3893E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS23	5.000E+03	4.5759E+02	2.8911E+02	Tadmor/Gur (0.5-5 km)

C-STB/DIS24	6.000E+03	5.3949E+02	3.3784E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS25	8.000E+03	6.9955E+02	4.3196E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS26	1.000E+04	8.5573E+02	5.2267E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS27	1.400E+04	1.1596E+03	6.9673E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS28	2.000E+04	1.6003E+03	9.4493E+02	Tadmor/Gur (0.5-5 km)
C-STB/DIS29	3.000E+04	2.3080E+03	1.3361E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS30	4.000E+04	2.9927E+03	1.7083E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS31	5.000E+04	3.6608E+03	2.0671E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS32	6.000E+04	4.3161E+03	2.4155E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS33	8.000E+04	5.5965E+03	3.0884E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS34	1.000E+05	6.8460E+03	3.7371E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS35	1.400E+05	9.2770E+03	4.9816E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS36	2.000E+05	1.2803E+04	6.7562E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS37	3.000E+05	1.8464E+04	9.5529E+03	Tadmor/Gur (0.5-5 km)
C-STB/DIS38	4.000E+05	2.3942E+04	1.2214E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS39	5.000E+05	2.9287E+04	1.4780E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS40	6.000E+05	3.4529E+04	1.7270E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS41	8.000E+05	4.4773E+04	2.2082E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS42	1.000E+06	5.4769E+04	2.6720E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS43	1.400E+06	7.4218E+04	3.5618E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS44	2.000E+06	1.0242E+05	4.8306E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS45	3.000E+06	1.4772E+05	6.8302E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS46	4.000E+06	1.9154E+05	8.7331E+04	Tadmor/Gur (0.5-5 km)
C-STB/DIS47	5.000E+06	2.3430E+05	1.0567E+05	Tadmor/Gur (0.5-5 km)
C-STB/DIS48	6.000E+06	2.7624E+05	1.2348E+05	Tadmor/Gur (0.5-5 km)
C-STB/DIS49	8.000E+06	3.5819E+05	1.5788E+05	Tadmor/Gur (0.5-5 km)
C-STB/DIS50	1.000E+07	4.3817E+05	1.9104E+05	Tadmor/Gur (0.5-5 km)

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* D-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
D-STB/DIS01	1.000E+00	1.4740E-01	3.0000E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS02	1.400E+00	1.9974E-01	3.7374E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS03	2.000E+00	2.7565E-01	4.7180E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS04	3.000E+00	3.9754E-01	6.1486E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS05	4.000E+00	5.1549E-01	7.4197E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS06	5.000E+00	6.3058E-01	8.5840E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS07	6.000E+00	7.4344E-01	9.6696E-01	Tadmor/Gur (0.5-5 km)
D-STB/DIS08	8.000E+00	9.6400E-01	1.1669E+00	Tadmor/Gur (0.5-5 km)
D-STB/DIS09	1.000E+01	1.1792E+00	1.3500E+00	Tadmor/Gur (0.5-5 km)
D-STB/DIS10	1.000E+02	9.4340E+00	6.0746E+00	Tadmor/Gur (0.5-5 km)
D-STB/DIS11	1.400E+02	1.2784E+01	7.5678E+00	Tadmor/Gur (0.5-5 km)
D-STB/DIS12	2.000E+02	1.7642E+01	9.5533E+00	Tadmor/Gur (0.5-5 km)
D-STB/DIS13	3.000E+02	2.5444E+01	1.2450E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS14	4.000E+02	3.2993E+01	1.5024E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS15	5.000E+02	4.0359E+01	1.7382E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS16	6.000E+02	4.7582E+01	1.9580E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS17	8.000E+02	6.1699E+01	2.3628E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS18	1.000E+03	7.5474E+01	2.7335E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS19	1.400E+03	1.0227E+02	3.4054E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS20	2.000E+03	1.4114E+02	4.2989E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS21	3.000E+03	2.0356E+02	5.6024E+01	Tadmor/Gur (0.5-5 km)

D-STB/DIS22	4.000E+03	2.6395E+02	6.7606E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS23	5.000E+03	3.2288E+02	7.8215E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS24	6.000E+03	3.8067E+02	8.8107E+01	Tadmor/Gur (0.5-5 km)
D-STB/DIS25	8.000E+03	4.9360E+02	1.0632E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS26	1.000E+04	6.0381E+02	1.2300E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS27	1.400E+04	8.1821E+02	1.5324E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS28	2.000E+04	1.1292E+03	1.9344E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS29	3.000E+04	1.6285E+03	2.5210E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS30	4.000E+04	2.1116E+03	3.0422E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS31	5.000E+04	2.5831E+03	3.5196E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS32	6.000E+04	3.0454E+03	3.9647E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS33	8.000E+04	3.9489E+03	4.7843E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS34	1.000E+05	4.8306E+03	5.5350E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS35	1.400E+05	6.5458E+03	6.8956E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS36	2.000E+05	9.0335E+03	8.7047E+02	Tadmor/Gur (0.5-5 km)
D-STB/DIS37	3.000E+05	1.3028E+04	1.1344E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS38	4.000E+05	1.6893E+04	1.3689E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS39	5.000E+05	2.0665E+04	1.5838E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS40	6.000E+05	2.4364E+04	1.7841E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS41	8.000E+05	3.1592E+04	2.1529E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS42	1.000E+06	3.8645E+04	2.4907E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS43	1.400E+06	5.2368E+04	3.1029E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS44	2.000E+06	7.2270E+04	3.9170E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS45	3.000E+06	1.0423E+05	5.1048E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS46	4.000E+06	1.3515E+05	6.1601E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS47	5.000E+06	1.6532E+05	7.1267E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS48	6.000E+06	1.9492E+05	8.0280E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS49	8.000E+06	2.5274E+05	9.6877E+03	Tadmor/Gur (0.5-5 km)
D-STB/DIS50	1.000E+07	3.0917E+05	1.1208E+04	Tadmor/Gur (0.5-5 km)

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* E-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
E-STB/DIS01	1.000E+00	1.0460E-01	4.0000E-01	Tadmor/Gur (0.5-5 km)
E-STB/DIS02	1.400E+00	1.4174E-01	4.8983E-01	Tadmor/Gur (0.5-5 km)
E-STB/DIS03	2.000E+00	1.9561E-01	6.0717E-01	Tadmor/Gur (0.5-5 km)
E-STB/DIS04	3.000E+00	2.8211E-01	7.7506E-01	Tadmor/Gur (0.5-5 km)
E-STB/DIS05	4.000E+00	3.6581E-01	9.2164E-01	Tadmor/Gur (0.5-5 km)
E-STB/DIS06	5.000E+00	4.4748E-01	1.0542E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS07	6.000E+00	5.2757E-01	1.1765E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS08	8.000E+00	6.8409E-01	1.3990E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS09	1.000E+01	8.3682E-01	1.6001E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS10	1.000E+02	6.6947E+00	6.4012E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS11	1.400E+02	9.0719E+00	7.8387E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS12	2.000E+02	1.2520E+01	9.7165E+00	Tadmor/Gur (0.5-5 km)
E-STB/DIS13	3.000E+02	1.8056E+01	1.2403E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS14	4.000E+02	2.3413E+01	1.4749E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS15	5.000E+02	2.8640E+01	1.6870E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS16	6.000E+02	3.3766E+01	1.8827E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS17	8.000E+02	4.3784E+01	2.2388E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS18	1.000E+03	5.3559E+01	2.5607E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS19	1.400E+03	7.2577E+01	3.1358E+01	Tadmor/Gur (0.5-5 km)

E-STB/DIS20	2.000E+03	1.0016E+02	3.8870E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS21	3.000E+03	1.4445E+02	4.9617E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS22	4.000E+03	1.8731E+02	5.9001E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS23	5.000E+03	2.2912E+02	6.7485E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS24	6.000E+03	2.7013E+02	7.5316E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS25	8.000E+03	3.5028E+02	8.9559E+01	Tadmor/Gur (0.5-5 km)
E-STB/DIS26	1.000E+04	4.2848E+02	1.0244E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS27	1.400E+04	5.8063E+02	1.2544E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS28	2.000E+04	8.0129E+02	1.5549E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS29	3.000E+04	1.1556E+03	1.9849E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS30	4.000E+04	1.4985E+03	2.3603E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS31	5.000E+04	1.8330E+03	2.6997E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS32	6.000E+04	2.1611E+03	3.0129E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS33	8.000E+04	2.8023E+03	3.5827E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS34	1.000E+05	3.4279E+03	4.0979E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS35	1.400E+05	4.6452E+03	5.0182E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS36	2.000E+05	6.4105E+03	6.2203E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS37	3.000E+05	9.2453E+03	7.9403E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS38	4.000E+05	1.1988E+04	9.4419E+02	Tadmor/Gur (0.5-5 km)
E-STB/DIS39	5.000E+05	1.4665E+04	1.0800E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS40	6.000E+05	1.7289E+04	1.2053E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS41	8.000E+05	2.2419E+04	1.4332E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS42	1.000E+06	2.7424E+04	1.6393E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS43	1.400E+06	3.7162E+04	2.0074E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS44	2.000E+06	5.1285E+04	2.4883E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS45	3.000E+06	7.3964E+04	3.1764E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS46	4.000E+06	9.5907E+04	3.7771E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS47	5.000E+06	1.1732E+05	4.3203E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS48	6.000E+06	1.3832E+05	4.8215E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS49	8.000E+06	1.7935E+05	5.7334E+03	Tadmor/Gur (0.5-5 km)
E-STB/DIS50	1.000E+07	2.1940E+05	6.5578E+03	Tadmor/Gur (0.5-5 km)

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* F-stability	Distance (m)	Sigma-y (m)	Sigma-z (m)	
F-STB/DIS01	1.000E+00	7.2200E-02	2.0000E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS02	1.400E+00	9.7838E-02	2.4491E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS03	2.000E+00	1.3502E-01	3.0356E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS04	3.000E+00	1.9473E-01	3.8749E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS05	4.000E+00	2.5250E-01	4.6076E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS06	5.000E+00	3.0887E-01	5.2700E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS07	6.000E+00	3.6415E-01	5.8814E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS08	8.000E+00	4.7219E-01	6.9934E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS09	1.000E+01	5.7761E-01	7.9989E-01	Tadmor/Gur (0.5-5 km)
F-STB/DIS10	1.000E+02	4.6210E+00	3.1991E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS11	1.400E+02	6.2619E+00	3.9174E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS12	2.000E+02	8.6417E+00	4.8557E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS13	3.000E+02	1.2463E+01	6.1981E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS14	4.000E+02	1.6161E+01	7.3700E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS15	5.000E+02	1.9769E+01	8.4297E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS16	6.000E+02	2.3307E+01	9.4076E+00	Tadmor/Gur (0.5-5 km)
F-STB/DIS17	8.000E+02	3.0222E+01	1.1186E+01	Tadmor/Gur (0.5-5 km)

F-STB/DIS18	1.000E+03	3.6969E+01	1.2795E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS19	1.400E+03	5.0096E+01	1.5667E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS20	2.000E+03	6.9135E+01	1.9420E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS21	3.000E+03	9.9707E+01	2.4789E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS22	4.000E+03	1.2929E+02	2.9476E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS23	5.000E+03	1.5815E+02	3.3714E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS24	6.000E+03	1.8646E+02	3.7625E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS25	8.000E+03	2.4178E+02	4.4739E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS26	1.000E+04	2.9576E+02	5.1172E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS27	1.400E+04	4.0078E+02	6.2661E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS28	2.000E+04	5.5309E+02	7.7669E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS29	3.000E+04	7.9767E+02	9.9142E+01	Tadmor/Gur (0.5-5 km)
F-STB/DIS30	4.000E+04	1.0343E+03	1.1789E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS31	5.000E+04	1.2653E+03	1.3484E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS32	6.000E+04	1.4917E+03	1.5048E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS33	8.000E+04	1.9343E+03	1.7893E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS34	1.000E+05	2.3661E+03	2.0466E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS35	1.400E+05	3.2063E+03	2.5061E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS36	2.000E+05	4.4248E+03	3.1063E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS37	3.000E+05	6.3815E+03	3.9651E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS38	4.000E+05	8.2748E+03	4.7149E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS39	5.000E+05	1.0122E+04	5.3927E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS40	6.000E+05	1.1934E+04	6.0183E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS41	8.000E+05	1.5475E+04	7.1563E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS42	1.000E+06	1.8929E+04	8.1852E+02	Tadmor/Gur (0.5-5 km)
F-STB/DIS43	1.400E+06	2.5651E+04	1.0023E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS44	2.000E+06	3.5400E+04	1.2424E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS45	3.000E+06	5.1053E+04	1.5858E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS46	4.000E+06	6.6200E+04	1.8857E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS47	5.000E+06	8.0980E+04	2.1568E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS48	6.000E+06	9.5474E+04	2.4070E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS49	8.000E+06	1.2380E+05	2.8621E+03	Tadmor/Gur (0.5-5 km)
F-STB/DIS50	1.000E+07	1.5144E+05	3.2736E+03	Tadmor/Gur (0.5-5 km)

*

* LINEAR SCALING FACTOR FOR SIGMA-Y FUNCTION, NORMALLY 1

*

DPYSCALE001 1.

*

* LINEAR SCALING FACTOR FOR SIGMA-Z FUNCTION,
 * NORMALLY USED FOR SURFACE ROUGHNESS LENGTH CORRECTION.
 * (Z1 / Z0) ** 0.2, FROM CRAC2 WE HAVE (10 CM / 3 CM) ** 0.2 = 1.27

*

DPZSCALE001 1.27

***** *

* EXPANSION FACTOR DATA BLOCK, LOADED BY INPEXP, STORED IN /EXPAND/

*

* TIME BASE FOR EXPANSION FACTOR (SECONDS)

*

PMTIMBAS001 600. (10 MINUTES)

*

* BREAK POINT FOR FORMULA CHANGE (SECONDS)
 *
 PMBRKPNT001 3600. (1 HOUR)
 *
 * EXPONENTIAL EXPANSION FACTOR NUMBER 1
 *
 PMXPFAC1001 0.2
 *
 * EXPONENTIAL EXPANSION FACTOR NUMBER 2
 *
 PMXPFAC2001 0.25

 * PLUME RISE DATA BLOCK, LOADED BY INPLRS, STORED IN /PLUMRS/
 *
 * SCALING FACTOR FOR THE CRITICAL WIND SPEED FOR ENTRAINMENT OF A
 BOUYANT PLUME
 * (USED BY FUNCTION CAUGHT)
 *
 PRSCLCRW001 1.
 *
 * SCALING FACTOR FOR THE A-D STABILITY PLUME RISE FORMULA
 * (USED BY FUNCTION PLMRIS)
 *
 PRSCLADP001 1.
 *
 * SCALING FACTOR FOR THE E-F STABILITY PLUME RISE FORMULA
 * (USED BY FUNCTION PLMRIS)
 *
 PRSCLEFP001 1.

 * RELEASE DATA BLOCK, LOADED BY INPREL, STORED IN /ATNAM2/, /MULREL/
 *
 RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case CFI'
 *
 * TIME AFTER ACCIDENT INITIATION WHEN THE ACCIDENT REACHES GENERAL
 EMERGENCY
 * CONDITIONS (AS DEFINED IN NUREG-0654), OR WHEN PLANT PERSONNEL CAN
 RELIABLY
 * PREDICT THAT GENERAL EMERGENCY CONDITIONS WILL BE ATTAINED
 *
 RDOALARM001 2924.
 *
 * NUMBER OF PLUME SEGMENTS THAT ARE RELEASED
 *
 RDNUMREL001 2
 *
 * SELECTION OF RISK DOMINANT PLUME
 *
 RDMAXRIS001 1
 *

* REFERENCE TIME FOR DISPERSION AND RADIOACTIVE DECAY

*

RDREFTIM001 0.0 0.5

*

* HEAT CONTENT OF THE RELEASE SEGMENTS (W)

* A VALUE SPECIFIED FOR EACH OF THE RELEASE SEGMENTS

*

RDPLHEAT001 3.0E+6 2.0E+6

*

* HEIGHT OF THE PLUME SEGMENTS AT RELEASE (M)

* A VALUE SPECIFIED FOR EACH OF THE RELEASE SEGMENTS

*

RDPLHITE001 30. 30.

*

* DURATION OF THE PLUME SEGMENTS (S)

* A VALUE SPECIFIED FOR EACH OF THE RELEASE SEGMENTS

*

*RDPLUDUR001 53830. 86400.

RDPLUDUR001 36000. 36000.

*

* TIME OF RELEASE FOR EACH PLUME (S AFTER SCRAM)

* A VALUE SPECIFIED FOR EACH OF THE RELEASE SEGMENTS

*

RDPDELAY001 2924. 32590.

*

* Initial value of sigma-y for each plume--Note: values required for each plume

*

SIGYINIT001 9.302 9.302 (initial sigma-y, for 40 meter wide bldg.)

*

* Initial value of sigma-z for each plume--Note: values required for each plume

*

SIGZINIT001 23.26 23.26 (initial sigma-z, for 50 meter high bldg.)

*

* Building height (meters)--Note: values required for each plume

*

WEBUILDH001 50.0 50.0 (Surry)

*

* PARTICLE SIZE DISTRIBUTION OF EACH NUCLIDE GROUP

* YOU MUST SPECIFY A COLUMN OF DATA FOR EACH OF THE PARTICLE SIZE GROUPS

*

RDPSDIST001 1.

RDPSDIST002 1.

RDPSDIST003 1.

RDPSDIST004 1.

RDPSDIST005 1.

RDPSDIST006 1.

RDPSDIST007 1.

RDPSDIST008 1.

RDPSDIST009 1.

*

*AP1000 CORE ORIGEN RUN, 07/05/01 at 17:45:07

*WESTINGHOUSE - R. Les Bencini

* CO58 AND CO60 NOT Provided and Replaced by Generic Data From SPS/NAPS Model

*

* NUCNAM CORINV(BQ)

*

RDCORINV001	Co-58	3.22E+16
RDCORINV002	Co-60	2.47E+16
RDCORINV003	Kr-85	3.93E+16
RDCORINV004	Kr-85m	8.87E+17
RDCORINV005	Kr-87	1.70E+18
RDCORINV006	Kr-88	2.39E+18
RDCORINV007	Rb-86	9.04E+15
RDCORINV008	Sr-89	3.17E+18
RDCORINV009	Sr-90	3.11E+17
RDCORINV010	Sr-91	4.04E+18
RDCORINV011	Sr-92	4.38E+18
RDCORINV012	Y-90	3.25E+17
RDCORINV013	Y-91	4.10E+18
RDCORINV014	Y-92	4.40E+18
RDCORINV015	Y-93	5.09E+18
RDCORINV016	Zr-95	5.59E+18
RDCORINV017	Zr-97	5.69E+18
RDCORINV018	Nb-95	5.66E+18
RDCORINV019	Mo-99	6.44E+18
RDCORINV020	Tc-99m	5.64E+18
RDCORINV021	Ru-103	5.10E+18
RDCORINV022	Ru-105	3.59E+18
RDCORINV023	Ru-106	1.82E+18
RDCORINV024	Rh-105	3.27E+18
RDCORINV025	Sb-127	3.68E+17
RDCORINV026	Sb-129	1.10E+18
RDCORINV027	Te-127	3.65E+17
RDCORINV028	Te-127m	4.71E+16
RDCORINV029	Te-129	1.08E+18
RDCORINV030	Te-129m	1.57E+17
RDCORINV031	Te-131m	4.92E+17
RDCORINV032	Te-132	4.81E+18
RDCORINV033	I-131	3.35E+18
RDCORINV034	I-132	4.89E+18
RDCORINV035	I-133	6.91E+18
RDCORINV036	I-134	7.57E+18
RDCORINV037	I-135	6.46E+18
RDCORINV038	Xe-133	6.60E+18
RDCORINV039	Xe-135	1.63E+18
RDCORINV040	Cs-134	7.96E+17
RDCORINV041	Cs-136	2.17E+17
RDCORINV042	Cs-137	4.30E+17
RDCORINV043	Ba-139	6.16E+18
RDCORINV044	Ba-140	5.84E+18

RDCORINV045 La-140 6.33E+18
RDCORINV046 La-141 5.61E+18
RDCORINV047 La-142 5.43E+18
RDCORINV048 Ce-141 5.48E+18
RDCORINV049 Ce-143 5.21E+18
RDCORINV050 Ce-144 4.32E+18
RDCORINV051 Pr-143 4.98E+18
RDCORINV052 Nd-147 2.22E+18
RDCORINV053 Np-239 2.91E+19
RDCORINV054 Pu-238 1.61E+15
RDCORINV055 Pu-239 4.18E+14
RDCORINV056 Pu-240 4.38E+14
RDCORINV057 Pu-241 1.19E+17
RDCORINV058 Am-241 7.47E+13
RDCORINV059 Cm-242 1.52E+16
RDCORINV060 Cm-244 4.45E+14

* SCALING FACTOR TO ADJUST THE CORE INVENTORY FOR POWER LEVEL

RDCORSCA001 1.0009 * AP1000 scaling factor = 3415/3412

RDAPLFRC001 PARENT (apply rel fracs the same as prior versions)

* SOURCE TERM NUMBER (CFI) FROM AP1000

* RELEASE FRACTIONS FOR ISOTOPE GROUPS IN RELEASE 1 of 9 (CFI)

* ISOTOPE GROUPS:

* XE/KR I CS TE SR RU LA CE BA

RDRELFRC001 7.98E-01 3.33E-03 3.32E-03 4.35E-04 2.18E-02 9.28E-03 8.06E-03 4.32E-05
1.65E-02

RDRELFRC002 1.22E-01 0.00E+00 0.00E+00 6.04E-06 0.00E+00 0.00E+00 1.12E-02
4.06E-05 0.00E+00

* OUTPUT CONTROL DATA BLOCK, LOADED BY INPOPT, STORED IN /STOPME/
/ATMOPT/

* FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN

OCENDAT1001 .FALSE. (SET THIS VALUE TO .TRUE. TO SKIP EARLY AND CHRONC)

OCIDEBUG001 0

* NAME OF THE NUCLIDE TO BE LISTED ON THE DISPERSION LISTINGS

OCNUCOUT001 Cs-137

* NUM0

TYPE0NUMBER 2

*

* INDREL INDRAD

TYPE0OUT001 1 9

TYPE0OUT002 1 10 XCCDF

* METEOROLOGICAL SAMPLING DATA BLOCK

*

* METEOROLOGICAL SAMPLING OPTION CODE:

*

* METCOD = 1, USER SPECIFIED DAY AND HOUR IN THE YEAR (FROM MET FILE),

* 2, WEATHER CATEGORY BIN SAMPLING,

* 3, 120 HOURS OF WEATHER SPECIFIED ON THE ATMOS USER INPUT FILE,

* 4, CONSTANT MET (BOUNDARY WEATHER USED FROM THE START),

* 5, STRATIFIED RANDOM SAMPLES FOR EACH DAY OF THE YEAR.

*

M1METCOD001 2

*

* LAST SPATIAL INTERVAL FOR MEASURED WEATHER

*

M2LIMSPA001 11

*

* BOUNDARY WEATHER MIXING LAYER HEIGHT

*

M2BNDMXH001 1000. (METERS)

*

* BOUNDARY WEATHER STABILITY CLASS INDEX

*

M2IBDSTB001 4 (D-STABILITY)

*

* BOUNDARY WEATHER RAIN RATE

*

M2BNDRAN001 5. (MM/HR)

*

* BOUNDARY WEATHER WIND SPEED

*

M2BNDWND001 5. (M/S)

*

* NUMBER OF RAIN DISTANCE INTERVALS FOR BINNING

*

M4NRNINT001 5

*

* ENDPOINTS OF THE RAIN DISTANCE INTERVALS (KILOMETERS)

*

* NOTE: THESE MUST BE CHOSEN TO MATCH THE SPATIAL ENDPOINT DISTANCES

* SPECIFIED FOR THE ARRAY SPAEND (10 % ERROR IS ALLOWED).

*

M4RNDSTS001 3.22 6.44 8.05 16.09 32.18

*

* NUMBER OF RAIN INTENSITY BREAKPOINTS

```

*
M4NRINTN001 3
*
* RAIN INTENSITY BREAKPOINTS FOR WEATHER BINNING (MILLIMETERS PER HOUR)
*
M4RNRATE001 2. 4. 6.
*
* NUMBER OF SAMPLES PER BIN
*
M4NSMPLS001 4 (THIS NUMBER SHOULD BE SET TO 4 FOR RISK ASSESSMENT)
*
* INITIAL SEED FOR RANDOM NUMBER GENERATOR
*
M4IRSEED001 79
*****
.
*****AP1000 ST STACKED CASES BEGIN
HERE*****
*****
*
* SOURCE TERM NUMBER 2 OF 7 (CFE)
RIATNAM1001 'CFE'
*
RDOALARM001 3004.
*
RDNUMREL001 2
*
RDMAXRIS001 1
*
RDREFTIM001 0.0 0.5
*
RDPLHEAT001 3.0E+6 2.0E+6
*
RDPLHITE001 30. 30.
*
*RDPLUDUR001 70160. 86400.
RDPLUDUR001 36000. 36000.
*
RDPDELAY001 3004. 19810.
*
***** RELEASE DATA BLOCK *****
* SOURCE TERM NUMBER 2 OF 7 (CFE)
*
RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case CFE'
*
* XE/KR I CS TE SR RU LA CE BA
*
RDRELFR001 8.21E-01 5.66E-02 5.49E-02 1.39E-03 3.48E-03 1.42E-02 6.54E-05 1.00E-06
5.28E-03

```


RDRELFRC002 1.42E-01 0.00E+00 0.00E+00 6.04E-07 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00

.

* SOURCE TERM NUMBER 3 OF 7 (DIRECT)

RIATNAM1001 'DIRECT'

*

RDOALARM001 4378.

*

RDNUMREL001 2

*

RDMAXRIS001 1

*

RDREFTIM001 0.0 0.5

*

RDPLHEAT001 3.0E+6 2.0E+6

*

RDPLHITE001 30. 30.

*

*RDPLUDUR001 80432. 86400.

RDPLUDUR001 36000. 36000.

*

RDPDELAY001 4378. 84810.

*

***** RELEASE DATA BLOCK *****

* SOURCE TERM NUMBER 3 OF 7 (DIRECT)

*

RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case DIRECT'

*

* XE/KR I CS TE SR RU LA CE BA

*

RDRELFRC001 4.43E-03 3.61E-05 3.46E-05 2.42E-06 3.22E-05 3.94E-05 4.06E-06 1.76E-08
3.61E-05

RDRELFRC002 3.50E-03 0.00E+00 0.00E+00 5.44E-09 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00

.

* SOURCE TERM NUMBER 4 OF 7 (IC)

RIATNAM1001 'IC'

*

RDOALARM001 4378.

*

RDNUMREL001 2

*

RDMAXRIS001 1

*

RDREFTIM001 0.0 0.5

*

RDPLHEAT001 3.0E+6 2.0E+6

*
RDPLHITE001 30. 30.
*

*RDPLUDUR001 80432. 86400.
RDPLUDUR001 36000. 36000.
*

RDPDELAY001 4378. 84810.
*

***** RELEASE DATA BLOCK *****

* SOURCE TERM NUMBER 4 OF 7 (IC)
*

RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case IC'
*

* XE/KR I CS TE SR RU LA CE BA
*

RDRELFRC001 1.48E-03 1.20E-05 1.15E-05 8.09E-07 1.07E-05 1.31E-05 1.36E-06 5.88E-09
1.20E-05

RDRELFRC002 1.17E-03 0.00E+00 0.00E+00 1.81E-09 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00

* SOURCE TERM NUMBER 5 OF 7 (BP)

RIATNAM1001 'BP'
*

RDOALARM001 31890.
*

RDNUMREL001 2
*

RDMAXRIS001 1
*

RDREFTIM001 0.5 0.0
*

RDPLHEAT001 3.0E+6 3.0E+6
*

RDPLHITE001 30. 30.
*

*RDPLUDUR001 40050. 86400.

RDPLUDUR001 36000. 36000.
*

RDPDELAY001 31890. 46440.
*

***** RELEASE DATA BLOCK *****

* SOURCE TERM NUMBER 5 OF 7 (BP)
*

RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case BP'
*

* XE/KR I CS TE SR RU LA CE BA
*

RDRELFRC001 1.00E+00 2.15E-01 1.96E-01 9.84E-03 3.57E-03 4.48E-02 1.30E-04 3.19E-06
8.93E-03

RDRELFRC002 0.00E+00 2.34E-01 7.60E-02 6.89E-03 0.00E+00 0.00E+00 0.00E+00
0.00E+00 1.00E-06

* SOURCE TERM NUMBER 6 OF 7 (CI)
RIATNAM1001 'CI'

*
RDOALARM001 100.8

*
RDNUMREL001 2

*
RDMAXRIS001 1

*
RDREFTIM001 0.5 0.5

*
RDPLHEAT001 3.0E+6 2.0E+6

*
RDPLHITE001 30. 30.

*
*RDPLUDUR001 86380. 75300.

RDPLUDUR001 36000. 36000.

*
RDPDELAY001 100.8 50020.

***** RELEASE DATA BLOCK *****

* SOURCE TERM NUMBER 6 OF 7 (CI)

*
RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case CI'

*
* XE/KR I CS TE SR RU LA CE BA

*
RDRELFRC001 6.86E-01 4.56E-02 2.10E-02 1.65E-03 2.03E-02 4.04E-02 2.39E-04 2.97E-06
3.16E-02

RDRELFRC002 8.40E-02 0.00E+00 0.00E+00 9.37E-05 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00

* SOURCE TERM NUMBER 7 OF 7 (CFL)
RIATNAM1001 'CFL'

*
RDOALARM001 2922.

*
RDNUMREL001 2

*
RDMAXRIS001 1

*
RDREFTIM001 0.5 0.5

*

RDPLHEAT001 3.0E+6 2.0E+6

*

RDPLHITE001 30. 30.

*

*RDPLUDUR001 81640. 86400.

RDPLUDUR001 36000. 36000.

*

RDPDELAY001 2922. 26360.

*

***** RELEASE DATA BLOCK *****

* SOURCE TERM NUMBER 7 OF 7 (CFL)

*

RDATNAM2001 'RELEASE FRACTIONS OF SOURCE TERM FROM AP1000 Case CFL'

*

* XE/KR I CS TE SR RU LA CE BA

*

RDRELFRC001 1.53E-03 1.21E-05 1.15E-05 1.02E-06 1.67E-05 1.71E-05 1.17E-05 4.79E-08
1.68E-05

RDRELFRC002 9.79E-01 2.13E-05 1.19E-05 3.67E-05 2.83E-03 1.42E-03 1.41E-01 5.34E-04
2.60E-03

.