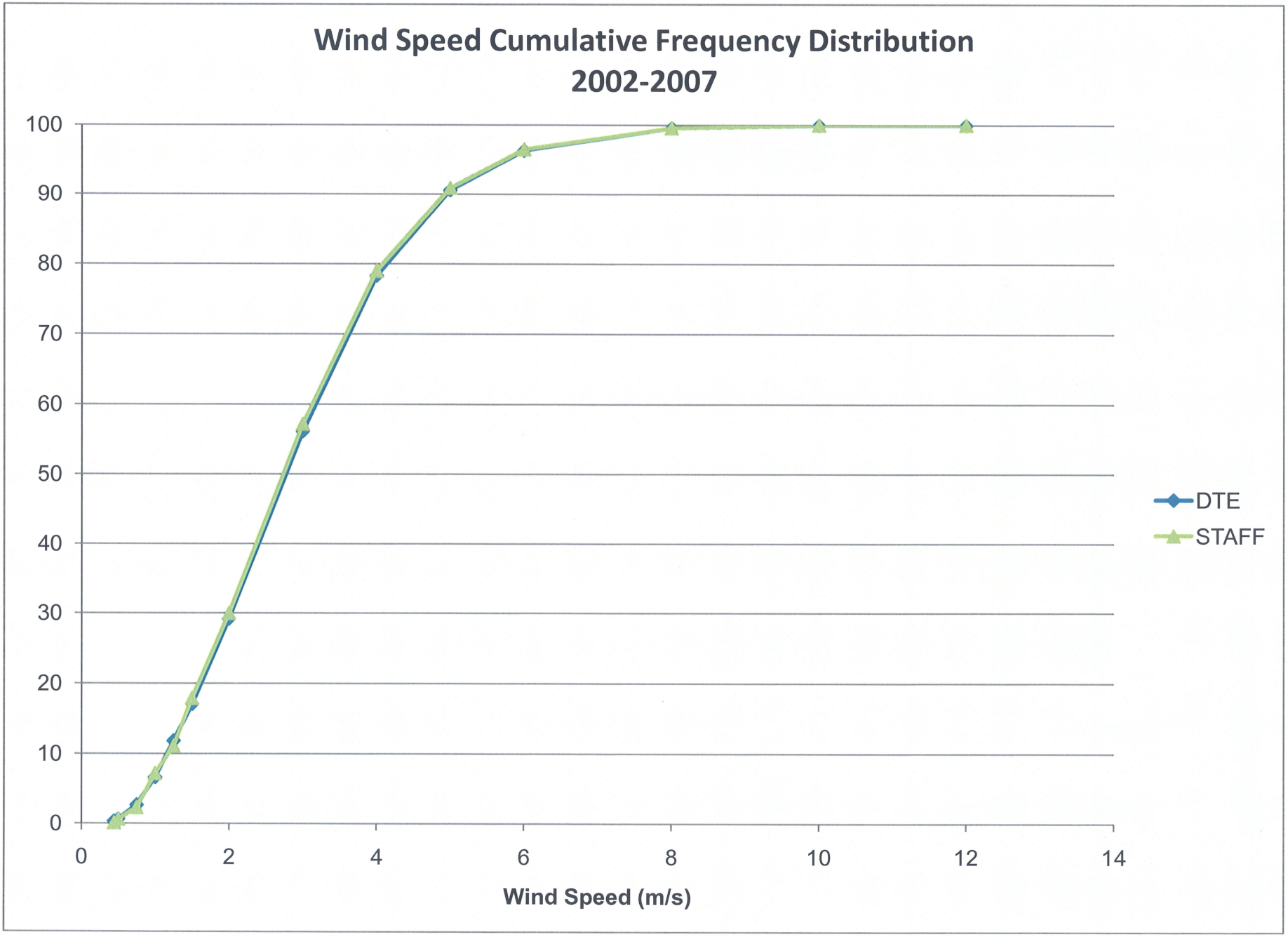
Wind Speed Cumulative Frequency Distribution
2002-2007
100
90
80
70
60
50
40
30
20
10
0
0
2
4
6
8
10
12
14
Wind Speed (m/s)
DTE
STAFF

```
DTE 2002-2007 JFD (from revised met data set)
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-2007_rev.txt
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07a.JFQ
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07a.JFD
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07a.ARN
5
1
2002 1 1
2007 12 31
1
1
3
0
0
3
1
test
13
0.44 0.5 0.75 1 1.25 1.5 2 3 4 5 6 8 10
```

2002-07a.JFQ

PROGRAM: JFREQ VERSION: 5.0 DATED: MAY 1997 TIME = 17: 0:19.29 DATE = 8-16-2010
TITLE:DTE 2002-2007 JFD (from revised met data set)

WIND DATA FROM LEVEL: LOWER
DELTA-T INTERVAL: UPPER MINUS LOWER
Create Hourly JFD for PAVAN: YES
HOURLY DATA CODED: 01-24
WRITE STABILITY CLASS BY HOUR OF DAY: NO
CALM WINDS CODED: 0.44 M/S
NO WINDS CODED AS A VARIABLE DIRECTION
JFD FOR DATA PERIOD: BEGINNING - 2002 1 1
ENDING - 2007 12 31

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	2
CALM- 0.50	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	3
0.50- 0.75	0	0	0	1	0	0	0	0	0	1	1	0	1	4	1	0	9
0.75- 1.00	3	0	3	2	0	2	1	3	2	0	1	5	12	7	6	3	50
1.00- 1.25	5	6	5	3	1	5	2	4	4	3	5	6	5	11	9	1	75
1.25- 1.50	16	13	10	11	5	9	10	6	12	10	14	28	28	38	31	16	257
1.50- 2.00	30	32	39	28	36	45	57	48	53	61	50	65	95	99	86	46	870
2.00- 3.00	86	77	130	131	132	356	491	305	275	247	166	186	245	291	265	191	3574
3.00- 4.00	94	57	147	166	171	323	411	312	188	330	171	214	179	241	212	154	3370
4.00- 5.00	54	44	50	104	149	166	75	69	48	182	133	92	87	92	87	90	1522
5.00- 6.00	19	9	12	38	107	63	9	13	6	62	83	31	36	39	33	37	597
6.00- 8.00	18	12	5	26	67	21	1	2	2	24	38	8	12	17	12	17	282
8.00-10.00	0	0	0	0	4	0	0	0	0	6	5	0	0	0	0	0	15
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
VARIABLE																	0
TOTAL	325	250	401	510	675	990	1057	762	590	926	667	635	700	840	743	555	10628

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
CALM- 0.50	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0.50- 0.75	3	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	8
0.75- 1.00	0	0	1	1	0	0	0	2	1	1	0	2	3	4	1	1	17
1.00- 1.25	2	0	0	0	1	0	0	1	1	0	1	3	7	5	3	4	28
1.25- 1.50	4	2	2	1	0	3	4	3	1	6	2	14	7	7	12	3	71
1.50- 2.00	9	8	6	4	2	4	18	5	12	9	6	16	22	18	19	18	176
2.00- 3.00	27	17	20	16	19	37	42	36	24	43	48	63	42	50	51	39	574
3.00- 4.00	18	24	20	22	18	24	26	35	23	57	83	78	43	28	26	26	551
4.00- 5.00	15	11	15	21	21	16	5	7	8	40	55	27	19	14	10	21	305
5.00- 6.00	9	5	5	10	18	5	2	1	1	21	45	10	6	7	5	4	154
6.00- 8.00	4	2	1	10	10	3	1	0	0	11	29	3	2	9	3	2	90
8.00-10.00	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
>10.00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
VARIABLE																	0
TOTAL	91	70	70	85	89	92	98	90	72	190	275	217	151	143	130	118	1982

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
0.50- 0.75	2	0	0	1	0	0	0	0	0	2	0	0	0	2	1	0	8
0.75- 1.00	1	1	3	1	0	0	0	1	2	2	4	0	7	5	3	3	33
1.00- 1.25	0	1	0	2	1	0	0	2	0	1	1	0	2	5	4	0	19
1.25- 1.50	3	7	3	4	1	2	3	4	4	4	7	10	10	11	9	5	87
1.50- 2.00	9	16	11	7	5	13	10	7	7	20	24	31	21	17	20	15	233
2.00- 3.00	38	32	26	18	17	31	28	40	38	38	60	74	55	45	40	54	634
3.00- 4.00	21	17	37	38	20	24	24	17	14	60	80	69	39	34	27	36	557
4.00- 5.00	22	11	12	38	16	15	9	6	7	39	57	33	28	20	14	14	341
5.00- 6.00	12	20	9	22	11	15	3	3	5	25	40	12	26	12	4	9	228
6.00- 8.00	3	8	7	16	16	6	2	0	0	19	50	7	4	5	3	4	150
8.00-10.00	0	1	0	3	1	0	0	0	0	0	8	0	0	0	0	0	13
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	111	115	108	150	89	106	79	80	77	210	332	236	193	156	125	140	2307

CALM= 0.44 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	7
CALM- 0.50	2	0	0	1	1	0	1	0	0	0	0	1	2	5	2	3	18
0.50- 0.75	3	4	4	1	2	1	1	1	4	6	8	7	20	12	5	6	85
0.75- 1.00	16	14	14	2	2	4	8	5	10	18	18	37	38	43	32	24	285
1.00- 1.25	20	19	11	6	4	5	4	4	9	11	15	32	41	35	33	18	267
1.25- 1.50	43	38	19	10	12	18	13	18	29	20	54	85	62	81	62	55	619
1.50- 2.00	79	112	64	30	27	49	40	49	59	60	146	253	186	132	166	119	1571
2.00- 3.00	156	192	310	152	129	192	192	129	181	247	475	510	341	324	295	331	4156
3.00- 4.00	166	122	371	254	205	194	176	111	177	320	502	360	241	189	175	224	3787
4.00- 5.00	167	106	223	222	157	139	75	66	104	333	442	159	114	113	85	88	2593
5.00- 6.00	82	100	95	100	126	52	14	19	34	173	315	53	50	79	24	51	1367
6.00- 8.00	56	40	17	83	100	43	12	5	10	120	197	39	14	25	8	20	789
8.00-10.00	5	16	2	5	25	1	4	2	0	3	39	4	1	0	0	0	107
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	795	763	1130	866	791	698	540	409	617	1311	2212	1540	1110	1038	887	939	15653

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	24
CALM- 0.50	3	3	1	1	1	3	0	1	1	6	6	8	9	10	6	1	60
0.50- 0.75	9	4	4	2	5	5	2	7	13	11	24	35	38	31	12	15	217
0.75- 1.00	38	26	17	14	8	9	13	13	34	38	57	100	94	116	94	41	712
1.00- 1.25	29	28	15	4	4	7	4	19	30	42	60	131	93	114	62	39	681
1.25- 1.50	57	59	29	21	16	33	28	25	51	56	148	195	128	151	158	82	1237
1.50- 2.00	100	159	43	41	52	68	54	79	136	159	290	284	166	184	234	180	2229
2.00- 3.00	186	181	243	156	156	214	216	218	301	540	375	229	162	151	162	234	3724
3.00- 4.00	99	67	144	133	131	191	151	143	215	486	179	57	55	72	55	63	2241
4.00- 5.00	35	19	31	59	68	54	59	72	106	277	89	21	16	21	19	20	966
5.00- 6.00	16	3	9	17	61	37	13	20	36	107	57	3	5	6	6	9	405
6.00- 8.00	7	2	0	6	43	19	5	0	15	67	30	2	2	4	3	7	212

8.00-10.00	0	0	0	4	12	2	0	2	1	2	4	0	1	1	0	0	29
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
VARIABLE																	0
TOTAL	579	551	536	458	559	642	545	599	939	1791	1319	1065	769	862	811	691	12740

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	23
CALM- 0.50	3	4	0	1	1	1	1	4	4	5	8	7	10	17	5	6	77
0.50- 0.75	9	5	3	2	2	1	2	5	14	29	22	32	57	66	30	17	296
0.75- 1.00	28	21	10	6	5	9	9	27	43	39	79	116	128	121	94	42	777
1.00- 1.25	28	13	6	3	2	2	3	11	35	33	65	99	58	90	62	49	559
1.25- 1.50	41	23	10	6	8	9	9	24	40	74	98	111	59	118	82	50	762
1.50- 2.00	99	48	8	6	11	34	37	41	57	93	105	53	31	71	52	73	819
2.00- 3.00	106	39	12	12	35	59	71	104	86	170	35	9	8	17	14	49	826
3.00- 4.00	12	10	5	14	28	35	38	69	62	113	18	5	6	2	6	4	427
4.00- 5.00	7	2	0	7	10	12	22	22	38	72	5	2	1	4	2	6	212
5.00- 6.00	2	0	0	1	7	2	9	9	21	17	1	2	0	1	0	0	72
6.00- 8.00	0	0	0	0	10	3	2	5	5	10	1	6	1	0	0	0	43
8.00-10.00	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
VARIABLE																	0
TOTAL	335	165	54	58	119	167	203	321	405	656	437	444	361	507	347	296	4898

CALM= 0.44 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS G

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	13
CALM- 0.50	2	1	1	0	0	1	0	0	0	1	5	9	11	7	6	5	49
0.50- 0.75	1	3	3	1	0	4	0	5	3	6	18	38	67	81	41	8	279
0.75- 1.00	16	6	0	1	1	4	6	2	11	14	20	61	125	185	79	51	582
1.00- 1.25	11	7	2	0	1	3	3	2	4	20	11	36	36	114	52	35	337
1.25- 1.50	33	8	4	3	2	9	14	8	5	22	25	46	34	105	47	34	399
1.50- 2.00	30	3	0	3	8	20	28	15	11	29	20	23	6	26	10	37	269
2.00- 3.00	24	10	2	3	10	31	49	39	21	29	11	2	2	3	3	21	260
3.00- 4.00	2	0	0	1	14	19	20	26	8	18	5	1	0	1	0	0	115
4.00- 5.00	1	0	0	0	6	9	14	11	5	11	7	4	0	0	0	0	68
5.00- 6.00	0	0	0	0	1	1	5	5	0	2	1	1	0	0	0	0	16
6.00- 8.00	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	4
8.00-10.00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VARIABLE																	0
TOTAL	120	38	12	12	44	102	140	115	68	152	123	221	281	522	238	191	2392

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS ALL

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	70
CALM- 0.50	10	9	2	3	4	5	2	5	5	12	19	26	33	40	20	15	210
0.50- 0.75	27	17	14	8	9	11	5	18	35	56	74	112	183	197	90	46	902
0.75- 1.00	102	68	48	27	16	28	37	53	103	112	179	321	407	481	309	165	2456

1.00- 1.25	95	74	39	18	14	22	16	43	83	110	158	307	242	374	225	146	1966
1.25- 1.50	197	150	77	56	44	83	81	88	142	192	348	489	328	511	401	245	3432
1.50- 2.00	356	378	171	119	141	233	244	244	335	431	641	725	527	547	587	488	6167
2.00- 3.00	623	548	743	488	498	920	1089	871	926	1314	1170	1073	855	881	830	919	13748
3.00- 4.00	412	297	724	628	587	810	846	713	687	1384	1038	784	563	567	501	507	11048
4.00- 5.00	301	193	331	451	427	411	259	253	316	954	788	338	265	264	217	239	6007
5.00- 6.00	140	137	130	188	331	175	55	70	103	407	542	112	123	144	72	110	2839
6.00- 8.00	88	64	30	141	246	96	24	14	32	251	345	65	35	60	29	50	1570
8.00-10.00	5	17	2	12	43	3	4	4	1	13	60	6	3	1	0	0	174
>10.00	0	0	0	0	6	0	0	0	0	0	3	0	1	1	0	0	11
VARIABLE																	0
TOTAL	2356	1952	2311	2139	2366	2797	2662	2376	2768	5236	5365	4358	3565	4068	3281	2930	50600

CALM= 0.44 M/S

TOTAL VALID HOURS = 50600 TOTAL POSSIBLE HOURS = 52584

OVERALL STABILITY CLASS FREQUENCIES IN HOURS

STABILITY:	A	B	C	D	E	F	G	ALL
FREQUENCY:	10628	1982	2307	15653	12740	4898	2392	50600

OVERALL WIND SPEED FREQUENCIES IN HOURS

WIND SPEED (M/S):	CALM	CALM- 0.50	0.50- 0.75	0.75- 1.00	1.00- 1.25	1.25- 1.50	1.50- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 6.00	6.00- 8.00	8.00-10.00	>10.00	VARIABLE
FREQUENCY:	70	210	902	2456	1966	3432	6167	13748	11048	6007	2839	1570	174	11	0
CUMULATIVE FREQ:	70	280	1182	3638	5604	9036	15203	28951	39999	46006	48845	50415	50589	50600	

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

DISTRIBUTION OF VARIABLE WINDS

U (M/S)	A	B	C	D	E	F	G	TOTAL
CALM	0	0	0	0	0	0	0	0
CALM- 0.50	0	0	0	0	0	0	0	0
0.50- 0.75	0	0	0	0	0	0	0	0
0.75- 1.00	0	0	0	0	0	0	0	0
1.00- 1.25	0	0	0	0	0	0	0	0
1.25- 1.50	0	0	0	0	0	0	0	0
1.50- 2.00	0	0	0	0	0	0	0	0
2.00- 3.00	0	0	0	0	0	0	0	0
3.00- 4.00	0	0	0	0	0	0	0	0
4.00- 5.00	0	0	0	0	0	0	0	0
5.00- 6.00	0	0	0	0	0	0	0	0
6.00- 8.00	0	0	0	0	0	0	0	0
8.00-10.00	0	0	0	0	0	0	0	0
>10.00	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02

0.75- 1.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.10
1.00- 1.25	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.00	0.15
1.25- 1.50	0.03	0.03	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.03	0.06	0.06	0.08	0.06	0.03	0.51
1.50- 2.00	0.06	0.06	0.08	0.06	0.07	0.09	0.11	0.09	0.10	0.12	0.10	0.13	0.19	0.20	0.17	0.09	1.72
2.00- 3.00	0.17	0.15	0.26	0.26	0.26	0.70	0.97	0.60	0.54	0.49	0.33	0.37	0.48	0.58	0.52	0.38	7.06
3.00- 4.00	0.19	0.11	0.29	0.33	0.34	0.64	0.81	0.62	0.37	0.65	0.34	0.42	0.35	0.48	0.42	0.30	6.66
4.00- 5.00	0.11	0.09	0.10	0.21	0.29	0.33	0.15	0.14	0.09	0.36	0.26	0.18	0.17	0.18	0.17	0.18	3.01
5.00- 6.00	0.04	0.02	0.02	0.08	0.21	0.12	0.02	0.03	0.01	0.12	0.16	0.06	0.07	0.08	0.07	0.07	1.18
6.00- 8.00	0.04	0.02	0.01	0.05	0.13	0.04	0.00	0.00	0.00	0.05	0.08	0.02	0.02	0.03	0.02	0.03	0.56
8.00-10.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.64	0.49	0.79	1.01	1.33	1.96	2.09	1.51	1.17	1.83	1.32	1.25	1.38	1.66	1.47	1.10	21.00

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.03
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.06
1.25- 1.50	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.03	0.01	0.01	0.02	0.01	0.14
1.50- 2.00	0.02	0.02	0.01	0.01	0.00	0.01	0.04	0.01	0.02	0.02	0.01	0.03	0.04	0.04	0.04	0.04	0.35
2.00- 3.00	0.05	0.03	0.04	0.03	0.04	0.07	0.08	0.07	0.05	0.08	0.09	0.12	0.08	0.10	0.10	0.08	1.13
3.00- 4.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.07	0.05	0.11	0.16	0.15	0.08	0.06	0.05	0.05	1.09
4.00- 5.00	0.03	0.02	0.03	0.04	0.04	0.03	0.01	0.01	0.02	0.08	0.11	0.05	0.04	0.03	0.02	0.04	0.60
5.00- 6.00	0.02	0.01	0.01	0.02	0.04	0.01	0.00	0.00	0.00	0.04	0.09	0.02	0.01	0.01	0.01	0.01	0.30
6.00- 8.00	0.01	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.02	0.06	0.01	0.00	0.02	0.01	0.00	0.18
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.18	0.14	0.14	0.17	0.18	0.18	0.19	0.18	0.14	0.38	0.54	0.43	0.30	0.28	0.26	0.23	3.92

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.07
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.04
1.25- 1.50	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.17
1.50- 2.00	0.02	0.03	0.02	0.01	0.01	0.03	0.02	0.01	0.01	0.04	0.05	0.06	0.04	0.03	0.04	0.03	0.46
2.00- 3.00	0.08	0.06	0.05	0.04	0.03	0.06	0.06	0.08	0.08	0.08	0.12	0.15	0.11	0.09	0.08	0.11	1.25
3.00- 4.00	0.04	0.03	0.07	0.08	0.04	0.05	0.05	0.03	0.03	0.12	0.16	0.14	0.08	0.07	0.05	0.07	1.10
4.00- 5.00	0.04	0.02	0.02	0.08	0.03	0.03	0.02	0.01	0.01	0.08	0.11	0.07	0.06	0.04	0.03	0.03	0.67
5.00- 6.00	0.02	0.04	0.02	0.04	0.02	0.03	0.01	0.01	0.01	0.05	0.08	0.02	0.05	0.02	0.01	0.02	0.45
6.00- 8.00	0.01	0.02	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.04	0.10	0.01	0.01	0.01	0.01	0.01	0.30
8.00-10.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.22	0.23	0.21	0.30	0.18	0.21	0.16	0.16	0.15	0.42	0.66	0.47	0.38	0.31	0.25	0.28	4.56

CALM= 0.44 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.01
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.04
0.50- 0.75	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.04	0.02	0.01	0.01	0.17
0.75- 1.00	0.03	0.03	0.03	0.00	0.00	0.01	0.02	0.01	0.02	0.04	0.04	0.07	0.08	0.08	0.06	0.05	0.56
1.00- 1.25	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.06	0.08	0.07	0.07	0.04	0.53
1.25- 1.50	0.08	0.08	0.04	0.02	0.02	0.04	0.03	0.04	0.06	0.04	0.11	0.17	0.12	0.16	0.12	0.11	1.22
1.50- 2.00	0.16	0.22	0.13	0.06	0.05	0.10	0.08	0.10	0.12	0.12	0.29	0.50	0.37	0.26	0.33	0.24	3.10
2.00- 3.00	0.31	0.38	0.61	0.30	0.25	0.38	0.38	0.25	0.36	0.49	0.94	1.01	0.67	0.64	0.58	0.65	8.21
3.00- 4.00	0.33	0.24	0.73	0.50	0.41	0.38	0.35	0.22	0.35	0.63	0.99	0.71	0.48	0.37	0.35	0.44	7.48
4.00- 5.00	0.33	0.21	0.44	0.44	0.31	0.27	0.15	0.13	0.21	0.66	0.87	0.31	0.23	0.22	0.17	0.17	5.12
5.00- 6.00	0.16	0.20	0.19	0.20	0.25	0.10	0.03	0.04	0.07	0.34	0.62	0.10	0.10	0.16	0.05	0.10	2.70
6.00- 8.00	0.11	0.08	0.03	0.16	0.20	0.08	0.02	0.01	0.02	0.24	0.39	0.08	0.03	0.05	0.02	0.04	1.56
8.00-10.00	0.01	0.03	0.00	0.01	0.05	0.00	0.01	0.00	0.00	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.21
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	1.57	1.51	2.23	1.71	1.56	1.38	1.07	0.81	1.22	2.59	4.37	3.04	2.19	2.05	1.75	1.86	30.93

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.05
CALM- 0.50	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.01	0.00	0.12
0.50- 0.75	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.03	0.02	0.05	0.07	0.08	0.06	0.02	0.03	0.43
0.75- 1.00	0.08	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.07	0.08	0.11	0.20	0.19	0.23	0.19	0.08	1.41
1.00- 1.25	0.06	0.06	0.03	0.01	0.01	0.01	0.01	0.04	0.06	0.08	0.12	0.26	0.18	0.23	0.12	0.08	1.35
1.25- 1.50	0.11	0.12	0.06	0.04	0.03	0.07	0.06	0.05	0.10	0.11	0.29	0.39	0.25	0.30	0.31	0.16	2.44
1.50- 2.00	0.20	0.31	0.08	0.08	0.10	0.13	0.11	0.16	0.27	0.31	0.57	0.56	0.33	0.36	0.46	0.36	4.41
2.00- 3.00	0.37	0.36	0.48	0.31	0.31	0.42	0.43	0.43	0.59	1.07	0.74	0.45	0.32	0.30	0.32	0.46	7.36
3.00- 4.00	0.20	0.13	0.28	0.26	0.26	0.38	0.30	0.28	0.42	0.96	0.35	0.11	0.11	0.14	0.11	0.12	4.43
4.00- 5.00	0.07	0.04	0.06	0.12	0.13	0.11	0.12	0.14	0.21	0.55	0.18	0.04	0.03	0.04	0.04	0.04	1.91
5.00- 6.00	0.03	0.01	0.02	0.03	0.12	0.07	0.03	0.04	0.07	0.21	0.11	0.01	0.01	0.01	0.01	0.02	0.80
6.00- 8.00	0.01	0.00	0.00	0.01	0.08	0.04	0.01	0.00	0.03	0.13	0.06	0.00	0.00	0.01	0.01	0.01	0.42
8.00-10.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
VARIABLE																	0.00
TOTAL	1.14	1.09	1.06	0.91	1.10	1.27	1.08	1.18	1.86	3.54	2.61	2.10	1.52	1.70	1.60	1.37	25.18

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.05
CALM- 0.50	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.01	0.01	0.15
0.50- 0.75	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.04	0.06	0.11	0.13	0.06	0.03	0.58
0.75- 1.00	0.06	0.04	0.02	0.01	0.01	0.02	0.02	0.05	0.08	0.08	0.16	0.23	0.25	0.24	0.19	0.08	1.54
1.00- 1.25	0.06	0.03	0.01	0.01	0.00	0.00	0.01	0.02	0.07	0.07	0.13	0.20	0.11	0.18	0.12	0.10	1.10
1.25- 1.50	0.08	0.05	0.02	0.01	0.02	0.02	0.02	0.05	0.08	0.15	0.19	0.22	0.12	0.23	0.16	0.10	1.51
1.50- 2.00	0.20	0.09	0.02	0.01	0.02	0.07	0.07	0.08	0.11	0.18	0.21	0.10	0.06	0.14	0.10	0.14	1.62
2.00- 3.00	0.21	0.08	0.02	0.02	0.07	0.12	0.14	0.21	0.17	0.34	0.07	0.02	0.02	0.03	0.03	0.10	1.63
3.00- 4.00	0.02	0.02	0.01	0.03	0.06	0.07	0.08	0.14	0.12	0.22	0.04	0.01	0.01	0.00	0.01	0.01	0.84
4.00- 5.00	0.01	0.00	0.00	0.01	0.02	0.02	0.04	0.04	0.08	0.14	0.01	0.00	0.00	0.01	0.00	0.01	0.42
5.00- 6.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14
6.00- 8.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.08

8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.66	0.33	0.11	0.11	0.24	0.33	0.40	0.63	0.80	1.30	0.86	0.88	0.71	1.00	0.69	0.58	9.68

CALM= 0.44 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS G

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.03
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.01	0.01	0.10
0.50- 0.75	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.04	0.08	0.13	0.16	0.08	0.02	0.55
0.75- 1.00	0.03	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.03	0.04	0.12	0.25	0.37	0.16	0.10	1.15
1.00- 1.25	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.04	0.02	0.07	0.07	0.23	0.10	0.07	0.67
1.25- 1.50	0.07	0.02	0.01	0.01	0.00	0.02	0.03	0.02	0.01	0.04	0.05	0.09	0.07	0.21	0.09	0.07	0.79
1.50- 2.00	0.06	0.01	0.00	0.01	0.02	0.04	0.06	0.03	0.02	0.06	0.04	0.05	0.01	0.05	0.02	0.07	0.53
2.00- 3.00	0.05	0.02	0.00	0.01	0.02	0.06	0.10	0.08	0.04	0.06	0.02	0.00	0.00	0.01	0.01	0.04	0.51
3.00- 4.00	0.00	0.00	0.00	0.00	0.03	0.04	0.04	0.05	0.02	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.23
4.00- 5.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.13
5.00- 6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
6.00- 8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.24	0.08	0.02	0.02	0.09	0.20	0.28	0.23	0.13	0.30	0.24	0.44	0.56	1.03	0.47	0.38	4.73

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS ALL

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.14
CALM- 0.50	0.02	0.02	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.04	0.05	0.07	0.08	0.04	0.03	0.42
0.50- 0.75	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.04	0.07	0.11	0.15	0.22	0.36	0.39	0.18	0.09	1.78
0.75- 1.00	0.20	0.13	0.09	0.05	0.03	0.06	0.07	0.10	0.20	0.22	0.35	0.63	0.80	0.95	0.61	0.33	4.85
1.00- 1.25	0.19	0.15	0.08	0.04	0.03	0.04	0.03	0.08	0.16	0.22	0.31	0.61	0.48	0.74	0.44	0.29	3.89
1.25- 1.50	0.39	0.30	0.15	0.11	0.09	0.16	0.16	0.17	0.28	0.38	0.69	0.97	0.65	1.01	0.79	0.48	6.78
1.50- 2.00	0.70	0.75	0.34	0.24	0.28	0.46	0.48	0.48	0.66	0.85	1.27	1.43	1.04	1.08	1.16	0.96	12.19
2.00- 3.00	1.23	1.08	1.47	0.96	0.98	1.82	2.15	1.72	1.83	2.60	2.31	2.12	1.69	1.74	1.64	1.82	27.17
3.00- 4.00	0.81	0.59	1.43	1.24	1.16	1.60	1.67	1.41	1.36	2.74	2.05	1.55	1.11	1.12	0.99	1.00	21.83
4.00- 5.00	0.59	0.38	0.65	0.89	0.84	0.81	0.51	0.50	0.62	1.89	1.56	0.67	0.52	0.52	0.43	0.47	11.87
5.00- 6.00	0.28	0.27	0.26	0.37	0.65	0.35	0.11	0.14	0.20	0.80	1.07	0.22	0.24	0.28	0.14	0.22	5.61
6.00- 8.00	0.17	0.13	0.06	0.28	0.49	0.19	0.05	0.03	0.06	0.50	0.68	0.13	0.07	0.12	0.06	0.10	3.10
8.00-10.00	0.01	0.03	0.00	0.02	0.08	0.01	0.01	0.01	0.00	0.03	0.12	0.01	0.01	0.00	0.00	0.00	0.34
>10.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02
VARIABLE																	0.00
TOTAL	4.66	3.86	4.57	4.23	4.68	5.53	5.26	4.70	5.47	10.35	10.60	8.61	7.05	8.04	6.48	5.79	100.00

CALM= 0.44 M/S
PERCENT DATA RECOVERY = 96.2

OVERALL STABILITY CLASS FREQUENCIES IN PERCENT

STABILITY:	A	B	C	D	E	F	G	ALL
FREQUENCY:	21.0	3.9	4.6	30.9	25.2	9.7	4.7	100.0

OVERALL WIND SPEED FREQUENCIES IN PERCENT

2002-07a.JFQ

WIND SPEED (M/S):	CALM	CALM- 0.50	0.50- 0.75	0.75- 1.00	1.00- 1.25	1.25- 1.50	1.50- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 6.00	6.00- 8.00	8.00-10.00	>10.00	VARIABLE
FREQUENCY:		0.1	0.4	1.8	4.9	3.9	6.8	12.2	27.2	21.8	11.9	5.6	3.1	0.3	0.0
CUMULATIVE FREQ:		0.1	0.6	2.3	7.2	11.1	17.9	30.0	57.2	79.0	90.9	96.5	99.6	100.0	100.0

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

DISTRIBUTION OF VARIABLE WINDS

U (M/S)	A	B	C	D	E	F	G	TOTAL
CALM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.75- 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.25- 1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50- 2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00- 3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00- 4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00- 5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00- 6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00- 8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

```
DTE 2002-2007 JFD (from revised met data set)
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-2007_rev.txt
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07b.JFQ
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07b.JFD
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07b.ARN
5
1
2002 1 1
2007 12 31
1
1
3
0
0
3
1
test
13
0 0.5 0.75 1 1.25 1.5 2 3 4 5 6 8 10
```

2002-07b.JFQ

PROGRAM: JFREQ VERSION: 5.0 DATED: MAY 1997 TIME = 17: 8:24.18 DATE = 8-16-2010
TITLE:DTE 2002-2007 JFD (from revised met data set)

WIND DATA FROM LEVEL: LOWER
DELTA-T INTERVAL: UPPER MINUS LOWER
Create Hourly JFD for PAVAN: YES
HOURLY DATA CODED: 01-24
WRITE STABILITY CLASS BY HOUR OF DAY: NO
CALM WINDS CODED: 0.00 M/S
NO WINDS CODED AS A VARIABLE DIRECTION
JFD FOR DATA PERIOD: BEGINNING - 2002 1 1
ENDING - 2007 12 31

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	0	0	0	1	0	0	0	0	0	1	0	0	2	1	0	5
0.50- 0.75	0	0	0	1	0	0	0	0	0	1	1	0	1	4	1	0	9
0.75- 1.00	3	0	3	2	0	2	1	3	2	0	1	5	12	7	6	3	50
1.00- 1.25	5	6	5	3	1	5	2	4	4	3	5	6	5	11	9	1	75
1.25- 1.50	16	13	10	11	5	9	10	6	12	10	14	28	28	38	31	16	257
1.50- 2.00	30	32	39	28	36	45	57	48	53	61	50	65	95	99	86	46	870
2.00- 3.00	86	77	130	131	132	356	491	305	275	247	166	186	245	291	265	191	3574
3.00- 4.00	94	57	147	166	171	323	411	312	188	330	171	214	179	241	212	154	3370
4.00- 5.00	54	44	50	104	149	166	75	69	48	182	133	92	87	92	87	90	1522
5.00- 6.00	19	9	12	38	107	63	9	13	6	62	83	31	36	39	33	37	597
6.00- 8.00	18	12	5	26	67	21	1	2	2	24	38	8	12	17	12	17	282
8.00-10.00	0	0	0	0	4	0	0	0	0	6	5	0	0	0	0	0	15
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
VARIABLE																	0
TOTAL	325	250	401	510	675	990	1057	762	590	926	668	635	700	841	743	555	10628

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
0.50- 0.75	3	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	8
0.75- 1.00	0	0	1	1	0	0	0	2	1	1	0	2	3	4	1	1	17
1.00- 1.25	2	0	0	0	1	0	0	1	1	0	1	3	7	5	3	4	28
1.25- 1.50	4	2	2	1	0	3	4	3	1	6	2	14	7	7	12	3	71
1.50- 2.00	9	8	6	4	2	4	18	5	12	9	6	16	22	18	19	18	176
2.00- 3.00	27	17	20	16	19	37	42	36	24	43	48	63	42	50	51	39	574
3.00- 4.00	18	24	20	22	18	24	26	35	23	57	83	78	43	28	26	26	551
4.00- 5.00	15	11	15	21	21	16	5	7	8	40	55	27	19	14	10	21	305
5.00- 6.00	9	5	5	10	18	5	2	1	1	21	45	10	6	7	5	4	154
6.00- 8.00	4	2	1	10	10	3	1	0	0	11	29	3	2	9	3	2	90
8.00-10.00	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
>10.00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
VARIABLE																	0
TOTAL	91	70	70	85	89	92	98	90	72	190	275	217	152	143	130	118	1982

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
0.50- 0.75	2	0	0	1	0	0	0	0	0	2	0	0	0	2	1	0	8
0.75- 1.00	1	1	3	1	0	0	0	1	2	2	4	0	7	5	3	3	33
1.00- 1.25	0	1	0	2	1	0	0	2	0	1	1	0	2	5	4	0	19
1.25- 1.50	3	7	3	4	1	2	3	4	4	4	7	10	10	11	9	5	87
1.50- 2.00	9	16	11	7	5	13	10	7	7	20	24	31	21	17	20	15	233
2.00- 3.00	38	32	26	18	17	31	28	40	38	38	60	74	55	45	40	54	634
3.00- 4.00	21	17	37	38	20	24	24	17	14	60	80	69	39	34	27	36	557
4.00- 5.00	22	11	12	38	16	15	9	6	7	39	57	33	28	20	14	14	341
5.00- 6.00	12	20	9	22	11	15	3	3	5	25	40	12	26	12	4	9	228
6.00- 8.00	3	8	7	16	16	6	2	0	0	19	50	7	4	5	3	4	150
8.00-10.00	0	1	0	3	1	0	0	0	0	0	8	0	0	0	0	0	13
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	111	115	108	150	89	106	79	80	77	210	332	236	193	156	125	140	2307

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	2	0	0	1	1	1	1	0	0	0	1	4	4	5	2	3	25
0.50- 0.75	3	4	4	1	2	1	1	1	4	6	8	7	20	12	5	6	85
0.75- 1.00	16	14	14	2	2	4	8	5	10	18	18	37	38	43	32	24	285
1.00- 1.25	20	19	11	6	4	5	4	4	9	11	15	32	41	35	33	18	267
1.25- 1.50	43	38	19	10	12	18	13	18	29	20	54	85	62	81	62	55	619
1.50- 2.00	79	112	64	30	27	49	40	49	59	60	146	253	186	132	166	119	1571
2.00- 3.00	156	192	310	152	129	192	192	129	181	247	475	510	341	324	295	331	4156
3.00- 4.00	166	122	371	254	205	194	176	111	177	320	502	360	241	189	175	224	3787
4.00- 5.00	167	106	223	222	157	139	75	66	104	333	442	159	114	113	85	88	2593
5.00- 6.00	82	100	95	100	126	52	14	19	34	173	315	53	50	79	24	51	1367
6.00- 8.00	56	40	17	83	100	43	12	5	10	120	197	39	14	25	8	20	789
8.00-10.00	5	16	2	5	25	1	4	2	0	3	39	4	1	0	0	0	107
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	795	763	1130	866	791	699	540	409	617	1311	2213	1543	1112	1038	887	939	15653

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	3	4	2	1	3	3	1	2	2	10	8	9	14	12	9	1	84
0.50- 0.75	9	4	4	2	5	5	2	7	13	11	24	35	38	31	12	15	217
0.75- 1.00	38	26	17	14	8	9	13	13	34	38	57	100	94	116	94	41	712
1.00- 1.25	29	28	15	4	4	7	4	19	30	42	60	131	93	114	62	39	681
1.25- 1.50	57	59	29	21	16	33	28	25	51	56	148	195	128	151	158	82	1237
1.50- 2.00	100	159	43	41	52	68	54	79	136	159	290	284	166	184	234	180	2229
2.00- 3.00	186	181	243	156	156	214	216	218	301	540	375	229	162	151	162	234	3724
3.00- 4.00	99	67	144	133	131	191	151	143	215	486	179	57	55	72	55	63	2241
4.00- 5.00	35	19	31	59	68	54	59	72	106	277	89	21	16	21	19	20	966
5.00- 6.00	16	3	9	17	61	37	13	20	36	107	57	3	5	6	6	9	405
6.00- 8.00	7	2	0	6	43	19	5	0	15	67	30	2	2	4	3	7	212

8.00-10.00	0	0	0	4	12	2	0	2	1	2	4	0	1	1	0	0	29
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
VARIABLE																	0
TOTAL	579	552	537	458	561	642	546	600	940	1795	1321	1066	774	864	814	691	12740

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	5	5	2	1	2	1	1	4	4	6	12	11	12	20	7	7	100
0.50- 0.75	9	5	3	2	2	1	2	5	14	29	22	32	57	66	30	17	296
0.75- 1.00	28	21	10	6	5	9	9	27	43	39	79	116	128	121	94	42	777
1.00- 1.25	28	13	6	3	2	2	3	11	35	33	65	99	58	90	62	49	559
1.25- 1.50	41	23	10	6	8	9	9	24	40	74	98	111	59	118	82	50	762
1.50- 2.00	99	48	8	6	11	34	37	41	57	93	105	53	31	71	52	73	819
2.00- 3.00	106	39	12	12	35	59	71	104	86	170	35	9	8	17	14	49	826
3.00- 4.00	12	10	5	14	28	35	38	69	62	113	18	5	6	2	6	4	427
4.00- 5.00	7	2	0	7	10	12	22	22	38	72	5	2	1	4	2	6	212
5.00- 6.00	2	0	0	1	7	2	9	9	21	17	1	2	0	1	0	0	72
6.00- 8.00	0	0	0	0	10	3	2	5	5	10	1	6	1	0	0	0	43
8.00-10.00	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
VARIABLE																	0
TOTAL	337	166	56	58	120	167	203	321	405	657	441	448	363	510	349	297	4898

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS G

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	2	1	1	0	0	1	0	1	1	3	5	12	13	10	7	5	62
0.50- 0.75	1	3	3	1	0	4	0	5	3	6	18	38	67	81	41	8	279
0.75- 1.00	16	6	0	1	1	4	6	2	11	14	20	61	125	185	79	51	582
1.00- 1.25	11	7	2	0	1	3	3	2	4	20	11	36	36	114	52	35	337
1.25- 1.50	33	8	4	3	2	9	14	8	5	22	25	46	34	105	47	34	399
1.50- 2.00	30	3	0	3	8	20	28	15	11	29	20	23	6	26	10	37	269
2.00- 3.00	24	10	2	3	10	31	49	39	21	29	11	2	2	3	3	21	260
3.00- 4.00	2	0	0	1	14	19	20	26	8	18	5	1	0	1	0	0	115
4.00- 5.00	1	0	0	0	6	9	14	11	5	11	7	4	0	0	0	0	68
5.00- 6.00	0	0	0	0	1	1	5	5	0	2	1	1	0	0	0	0	16
6.00- 8.00	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	4
8.00-10.00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VARIABLE																	0
TOTAL	120	38	12	12	44	102	140	116	69	154	123	224	283	525	239	191	2392

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS ALL

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	12	11	5	3	7	6	3	7	7	19	27	37	45	49	26	16	280
0.50- 0.75	27	17	14	8	9	11	5	18	35	56	74	112	183	197	90	46	902
0.75- 1.00	102	68	48	27	16	28	37	53	103	112	179	321	407	481	309	165	2456

1.00- 1.25	95	74	39	18	14	22	16	43	83	110	158	307	242	374	225	146	1966
1.25- 1.50	197	150	77	56	44	83	81	88	142	192	348	489	328	511	401	245	3432
1.50- 2.00	356	378	171	119	141	233	244	244	335	431	641	725	527	547	587	488	6167
2.00- 3.00	623	548	743	488	498	920	1089	871	926	1314	1170	1073	855	881	830	919	13748
3.00- 4.00	412	297	724	628	587	810	846	713	687	1384	1038	784	563	567	501	507	11048
4.00- 5.00	301	193	331	451	427	411	259	253	316	954	788	338	265	264	217	239	6007
5.00- 6.00	140	137	130	188	331	175	55	70	103	407	542	112	123	144	72	110	2839
6.00- 8.00	88	64	30	141	246	96	24	14	32	251	345	65	35	60	29	50	1570
8.00-10.00	5	17	2	12	43	3	4	4	1	13	60	6	3	1	0	0	174
>10.00	0	0	0	0	6	0	0	0	0	0	3	0	1	1	0	0	11
VARIABLE																	0
TOTAL	2358	1954	2314	2139	2369	2798	2663	2378	2770	5243	5373	4369	3577	4077	3287	2931	50600

CALM= 0.00 M/S

TOTAL VALID HOURS = 50600 TOTAL POSSIBLE HOURS = 52584

OVERALL STABILITY CLASS FREQUENCIES IN HOURS

STABILITY:	A	B	C	D	E	F	G	ALL
FREQUENCY:	10628	1982	2307	15653	12740	4898	2392	50600

OVERALL WIND SPEED FREQUENCIES IN HOURS

WIND SPEED (M/S):	CALM	CALM- 0.50	0.50- 0.75	0.75- 1.00	1.00- 1.25	1.25- 1.50	1.50- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 6.00	6.00- 8.00	8.00-10.00	>10.00	VARIABLE
FREQUENCY:	0	280	902	2456	1966	3432	6167	13748	11048	6007	2839	1570	174	11	0
CUMULATIVE FREQ:	0	280	1182	3638	5604	9036	15203	28951	39999	46006	48845	50415	50589	50600	

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

DISTRIBUTION OF VARIABLE WINDS

U (M/S)	A	B	C	D	E	F	G	TOTAL
CALM	0	0	0	0	0	0	0	0
CALM- 0.50	0	0	0	0	0	0	0	0
0.50- 0.75	0	0	0	0	0	0	0	0
0.75- 1.00	0	0	0	0	0	0	0	0
1.00- 1.25	0	0	0	0	0	0	0	0
1.25- 1.50	0	0	0	0	0	0	0	0
1.50- 2.00	0	0	0	0	0	0	0	0
2.00- 3.00	0	0	0	0	0	0	0	0
3.00- 4.00	0	0	0	0	0	0	0	0
4.00- 5.00	0	0	0	0	0	0	0	0
5.00- 6.00	0	0	0	0	0	0	0	0
6.00- 8.00	0	0	0	0	0	0	0	0
8.00-10.00	0	0	0	0	0	0	0	0
>10.00	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02

0.75- 1.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.10
1.00- 1.25	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.00	0.15
1.25- 1.50	0.03	0.03	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.03	0.06	0.06	0.08	0.06	0.03	0.51
1.50- 2.00	0.06	0.06	0.08	0.06	0.07	0.09	0.11	0.09	0.10	0.12	0.10	0.13	0.19	0.20	0.17	0.09	1.72
2.00- 3.00	0.17	0.15	0.26	0.26	0.26	0.70	0.97	0.60	0.54	0.49	0.33	0.37	0.48	0.58	0.52	0.38	7.06
3.00- 4.00	0.19	0.11	0.29	0.33	0.34	0.64	0.81	0.62	0.37	0.65	0.34	0.42	0.35	0.48	0.42	0.30	6.66
4.00- 5.00	0.11	0.09	0.10	0.21	0.29	0.33	0.15	0.14	0.09	0.36	0.26	0.18	0.17	0.18	0.17	0.18	3.01
5.00- 6.00	0.04	0.02	0.02	0.08	0.21	0.12	0.02	0.03	0.01	0.12	0.16	0.06	0.07	0.08	0.07	0.07	1.18
6.00- 8.00	0.04	0.02	0.01	0.05	0.13	0.04	0.00	0.00	0.00	0.05	0.08	0.02	0.02	0.03	0.02	0.03	0.56
8.00-10.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.64	0.49	0.79	1.01	1.33	1.96	2.09	1.51	1.17	1.83	1.32	1.25	1.38	1.66	1.47	1.10	21.00

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.03
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.06
1.25- 1.50	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.03	0.01	0.01	0.02	0.01	0.14
1.50- 2.00	0.02	0.02	0.01	0.01	0.00	0.01	0.04	0.01	0.02	0.02	0.01	0.03	0.04	0.04	0.04	0.04	0.35
2.00- 3.00	0.05	0.03	0.04	0.03	0.04	0.07	0.08	0.07	0.05	0.08	0.09	0.12	0.08	0.10	0.10	0.08	1.13
3.00- 4.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.07	0.05	0.11	0.16	0.15	0.08	0.06	0.05	0.05	1.09
4.00- 5.00	0.03	0.02	0.03	0.04	0.04	0.03	0.01	0.01	0.02	0.08	0.11	0.05	0.04	0.03	0.02	0.04	0.60
5.00- 6.00	0.02	0.01	0.01	0.02	0.04	0.01	0.00	0.00	0.00	0.04	0.09	0.02	0.01	0.01	0.01	0.01	0.30
6.00- 8.00	0.01	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.02	0.06	0.01	0.00	0.02	0.01	0.00	0.18
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.18	0.14	0.14	0.17	0.18	0.18	0.19	0.18	0.14	0.38	0.54	0.43	0.30	0.28	0.26	0.23	3.92

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.07
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.04
1.25- 1.50	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.17
1.50- 2.00	0.02	0.03	0.02	0.01	0.01	0.03	0.02	0.01	0.01	0.04	0.05	0.06	0.04	0.03	0.04	0.03	0.46
2.00- 3.00	0.08	0.06	0.05	0.04	0.03	0.06	0.06	0.08	0.08	0.08	0.12	0.15	0.11	0.09	0.08	0.11	1.25
3.00- 4.00	0.04	0.03	0.07	0.08	0.04	0.05	0.05	0.03	0.03	0.12	0.16	0.14	0.08	0.07	0.05	0.07	1.10
4.00- 5.00	0.04	0.02	0.02	0.08	0.03	0.03	0.02	0.01	0.01	0.08	0.11	0.07	0.06	0.04	0.03	0.03	0.67
5.00- 6.00	0.02	0.04	0.02	0.04	0.02	0.03	0.01	0.01	0.01	0.05	0.08	0.02	0.05	0.02	0.01	0.02	0.45
6.00- 8.00	0.01	0.02	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.04	0.10	0.01	0.01	0.01	0.01	0.01	0.30
8.00-10.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.22	0.23	0.21	0.30	0.18	0.21	0.16	0.16	0.15	0.42	0.66	0.47	0.38	0.31	0.25	0.28	4.56

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.05
0.50- 0.75	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.04	0.02	0.01	0.01	0.17
0.75- 1.00	0.03	0.03	0.03	0.00	0.00	0.01	0.02	0.01	0.02	0.04	0.04	0.07	0.08	0.08	0.06	0.05	0.56
1.00- 1.25	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.06	0.08	0.07	0.07	0.04	0.53
1.25- 1.50	0.08	0.08	0.04	0.02	0.02	0.04	0.03	0.04	0.06	0.04	0.11	0.17	0.12	0.16	0.12	0.11	1.22
1.50- 2.00	0.16	0.22	0.13	0.06	0.05	0.10	0.08	0.10	0.12	0.12	0.29	0.50	0.37	0.26	0.33	0.24	3.10
2.00- 3.00	0.31	0.38	0.61	0.30	0.25	0.38	0.38	0.25	0.36	0.49	0.94	1.01	0.67	0.64	0.58	0.65	8.21
3.00- 4.00	0.33	0.24	0.73	0.50	0.41	0.38	0.35	0.22	0.35	0.63	0.99	0.71	0.48	0.37	0.35	0.44	7.48
4.00- 5.00	0.33	0.21	0.44	0.44	0.31	0.27	0.15	0.13	0.21	0.66	0.87	0.31	0.23	0.22	0.17	0.17	5.12
5.00- 6.00	0.16	0.20	0.19	0.20	0.25	0.10	0.03	0.04	0.07	0.34	0.62	0.10	0.10	0.16	0.05	0.10	2.70
6.00- 8.00	0.11	0.08	0.03	0.16	0.20	0.08	0.02	0.01	0.02	0.24	0.39	0.08	0.03	0.05	0.02	0.04	1.56
8.00-10.00	0.01	0.03	0.00	0.01	0.05	0.00	0.01	0.00	0.00	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.21
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	1.57	1.51	2.23	1.71	1.56	1.38	1.07	0.81	1.22	2.59	4.37	3.05	2.20	2.05	1.75	1.86	30.93

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.03	0.02	0.02	0.00	0.17
0.50- 0.75	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.03	0.02	0.05	0.07	0.08	0.06	0.02	0.03	0.43
0.75- 1.00	0.08	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.07	0.08	0.11	0.20	0.19	0.23	0.19	0.08	1.41
1.00- 1.25	0.06	0.06	0.03	0.01	0.01	0.01	0.01	0.04	0.06	0.08	0.12	0.26	0.18	0.23	0.12	0.08	1.35
1.25- 1.50	0.11	0.12	0.06	0.04	0.03	0.07	0.06	0.05	0.10	0.11	0.29	0.39	0.25	0.30	0.31	0.16	2.44
1.50- 2.00	0.20	0.31	0.08	0.08	0.10	0.13	0.11	0.16	0.27	0.31	0.57	0.56	0.33	0.36	0.46	0.36	4.41
2.00- 3.00	0.37	0.36	0.48	0.31	0.31	0.42	0.43	0.43	0.59	1.07	0.74	0.45	0.32	0.30	0.32	0.46	7.36
3.00- 4.00	0.20	0.13	0.28	0.26	0.26	0.38	0.30	0.28	0.42	0.96	0.35	0.11	0.11	0.14	0.11	0.12	4.43
4.00- 5.00	0.07	0.04	0.06	0.12	0.13	0.11	0.12	0.14	0.21	0.55	0.18	0.04	0.03	0.04	0.04	0.04	1.91
5.00- 6.00	0.03	0.01	0.02	0.03	0.12	0.07	0.03	0.04	0.07	0.21	0.11	0.01	0.01	0.01	0.01	0.02	0.80
6.00- 8.00	0.01	0.00	0.00	0.01	0.08	0.04	0.01	0.00	0.03	0.13	0.06	0.00	0.00	0.01	0.01	0.01	0.42
8.00-10.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
VARIABLE																	0.00
TOTAL	1.14	1.09	1.06	0.91	1.11	1.27	1.08	1.19	1.86	3.55	2.61	2.11	1.53	1.71	1.61	1.37	25.18

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.04	0.01	0.01	0.20
0.50- 0.75	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.04	0.06	0.11	0.13	0.06	0.03	0.58
0.75- 1.00	0.06	0.04	0.02	0.01	0.01	0.02	0.02	0.05	0.08	0.08	0.16	0.23	0.25	0.24	0.19	0.08	1.54
1.00- 1.25	0.06	0.03	0.01	0.01	0.00	0.00	0.01	0.02	0.07	0.07	0.13	0.20	0.11	0.18	0.12	0.10	1.10
1.25- 1.50	0.08	0.05	0.02	0.01	0.02	0.02	0.02	0.05	0.08	0.15	0.19	0.22	0.12	0.23	0.16	0.10	1.51
1.50- 2.00	0.20	0.09	0.02	0.01	0.02	0.07	0.07	0.08	0.11	0.18	0.21	0.10	0.06	0.14	0.10	0.14	1.62
2.00- 3.00	0.21	0.08	0.02	0.02	0.07	0.12	0.14	0.21	0.17	0.34	0.07	0.02	0.02	0.03	0.03	0.10	1.63
3.00- 4.00	0.02	0.02	0.01	0.03	0.06	0.07	0.08	0.14	0.12	0.22	0.04	0.01	0.01	0.00	0.01	0.01	0.84
4.00- 5.00	0.01	0.00	0.00	0.01	0.02	0.02	0.04	0.04	0.08	0.14	0.01	0.00	0.00	0.01	0.00	0.01	0.42
5.00- 6.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14
6.00- 8.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.08

8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.67	0.33	0.11	0.11	0.24	0.33	0.40	0.63	0.80	1.30	0.87	0.89	0.72	1.01	0.69	0.59	9.68

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS G

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.02	0.01	0.01	0.12
0.50- 0.75	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.04	0.08	0.13	0.16	0.08	0.02	0.55
0.75- 1.00	0.03	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.03	0.04	0.12	0.25	0.37	0.16	0.10	1.15
1.00- 1.25	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.04	0.02	0.07	0.07	0.23	0.10	0.07	0.67
1.25- 1.50	0.07	0.02	0.01	0.01	0.00	0.02	0.03	0.02	0.01	0.04	0.05	0.09	0.07	0.21	0.09	0.07	0.79
1.50- 2.00	0.06	0.01	0.00	0.01	0.02	0.04	0.06	0.03	0.02	0.06	0.04	0.05	0.01	0.05	0.02	0.07	0.53
2.00- 3.00	0.05	0.02	0.00	0.01	0.02	0.06	0.10	0.08	0.04	0.06	0.02	0.00	0.00	0.01	0.01	0.04	0.51
3.00- 4.00	0.00	0.00	0.00	0.00	0.03	0.04	0.04	0.05	0.02	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.23
4.00- 5.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.13
5.00- 6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
6.00- 8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.24	0.08	0.02	0.02	0.09	0.20	0.28	0.23	0.14	0.30	0.24	0.44	0.56	1.04	0.47	0.38	4.73

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS ALL

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.05	0.07	0.09	0.10	0.05	0.03	0.55
0.50- 0.75	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.04	0.07	0.11	0.15	0.22	0.36	0.39	0.18	0.09	1.78
0.75- 1.00	0.20	0.13	0.09	0.05	0.03	0.06	0.07	0.10	0.20	0.22	0.35	0.63	0.80	0.95	0.61	0.33	4.85
1.00- 1.25	0.19	0.15	0.08	0.04	0.03	0.04	0.03	0.08	0.16	0.22	0.31	0.61	0.48	0.74	0.44	0.29	3.89
1.25- 1.50	0.39	0.30	0.15	0.11	0.09	0.16	0.16	0.17	0.28	0.38	0.69	0.97	0.65	1.01	0.79	0.48	6.78
1.50- 2.00	0.70	0.75	0.34	0.24	0.28	0.46	0.48	0.48	0.66	0.85	1.27	1.43	1.04	1.08	1.16	0.96	12.19
2.00- 3.00	1.23	1.08	1.47	0.96	0.98	1.82	2.15	1.72	1.83	2.60	2.31	2.12	1.69	1.74	1.64	1.82	27.17
3.00- 4.00	0.81	0.59	1.43	1.24	1.16	1.60	1.67	1.41	1.36	2.74	2.05	1.55	1.11	1.12	0.99	1.00	21.83
4.00- 5.00	0.59	0.38	0.65	0.89	0.84	0.81	0.51	0.50	0.62	1.89	1.56	0.67	0.52	0.52	0.43	0.47	11.87
5.00- 6.00	0.28	0.27	0.26	0.37	0.65	0.35	0.11	0.14	0.20	0.80	1.07	0.22	0.24	0.28	0.14	0.22	5.61
6.00- 8.00	0.17	0.13	0.06	0.28	0.49	0.19	0.05	0.03	0.06	0.50	0.68	0.13	0.07	0.12	0.06	0.10	3.10
8.00-10.00	0.01	0.03	0.00	0.02	0.08	0.01	0.01	0.01	0.00	0.03	0.12	0.01	0.01	0.00	0.00	0.00	0.34
>10.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02
VARIABLE																	0.00
TOTAL	4.66	3.86	4.57	4.23	4.68	5.53	5.26	4.70	5.47	10.36	10.62	8.63	7.07	8.06	6.50	5.79	100.00

CALM= 0.00 M/S
PERCENT DATA RECOVERY = 96.2

OVERALL STABILITY CLASS FREQUENCIES IN PERCENT

STABILITY:	A	B	C	D	E	F	G	ALL
FREQUENCY:	21.0	3.9	4.6	30.9	25.2	9.7	4.7	100.0

OVERALL WIND SPEED FREQUENCIES IN PERCENT

2002-07b.JFQ

WIND SPEED (M/S):	CALM	CALM- 0.50	0.50- 0.75	0.75- 1.00	1.00- 1.25	1.25- 1.50	1.50- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 6.00	6.00- 8.00	8.00-10.00	>10.00	VARIABLE
FREQUENCY:	0.0	0.6	1.8	4.9	3.9	6.8	12.2	27.2	21.8	11.9	5.6	3.1	0.3	0.0	0.0
CUMULATIVE FREQ:	0.0	0.6	2.3	7.2	11.1	17.9	30.0	57.2	79.0	90.9	96.5	99.6	100.0	100.0	

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

DISTRIBUTION OF VARIABLE WINDS

U (M/S)	A	B	C	D	E	F	G	TOTAL
CALM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.75- 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00- 1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.25- 1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50- 2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00- 3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00- 4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00- 5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00- 6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00- 8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.00-10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

```
DTE 2002-2007 JFD (from revised met data set)
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-2007_rev.txt
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07.JFQ
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07.JFD
C:\Program Files\METQA\Fermi 3\RAI 02.03.05-3\2002-07.ARN
5
1
2002 1 1
2007 12 31
1
1
3
0
0
3
1
test
9
0 0.5 0.75 1 1.5 2 3 5 10
```

PROGRAM: JFREQ VERSION: 5.0 DATED: MAY 1997 TIME = 16:56:11.35 DATE = 8-16-2010
TITLE:DTE 2002-2007 JFD (from revised met data set)

WIND DATA FROM LEVEL: LOWER
DELTA-T INTERVAL: UPPER MINUS LOWER
Create Hourly JFD for PAVAN: YES
HOURLY DATA CODED: 01-24
WRITE STABILITY CLASS BY HOUR OF DAY: NO
CALM WINDS CODED: 0.00 M/S
NO WINDS CODED AS A VARIABLE DIRECTION
JFD FOR DATA PERIOD: BEGINNING - 2002 1 1
ENDING - 2007 12 31

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	0	0	0	1	0	0	0	0	0	1	0	0	2	1	0	5
0.50- 0.75	0	0	0	1	0	0	0	0	0	1	1	0	1	4	1	0	9
0.75- 1.00	3	0	3	2	0	2	1	3	2	0	1	5	12	7	6	3	50
1.00- 1.50	21	19	15	14	6	14	12	10	16	13	19	34	33	49	40	17	332
1.50- 2.00	30	32	39	28	36	45	57	48	53	61	50	65	95	99	86	46	870
2.00- 3.00	86	77	130	131	132	356	491	305	275	247	166	186	245	291	265	191	3574
3.00- 5.00	148	101	197	270	320	489	486	381	236	512	304	306	266	333	299	244	4892
5.00-10.00	37	21	17	64	178	84	10	15	8	92	126	39	48	56	45	54	894
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
VARIABLE																	0
TOTAL	325	250	401	510	675	990	1057	762	590	926	668	635	700	841	743	555	10628

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
0.50- 0.75	3	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	8
0.75- 1.00	0	0	1	1	0	0	0	2	1	1	0	2	3	4	1	1	17
1.00- 1.50	6	2	2	1	1	3	4	4	2	6	3	17	14	12	15	7	99
1.50- 2.00	9	8	6	4	2	4	18	5	12	9	6	16	22	18	19	18	176
2.00- 3.00	27	17	20	16	19	37	42	36	24	43	48	63	42	50	51	39	574
3.00- 5.00	33	35	35	43	39	40	31	42	31	97	138	105	62	42	36	47	856
5.00-10.00	13	7	6	20	28	8	3	1	1	33	78	13	8	16	8	6	249
>10.00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
VARIABLE																	0
TOTAL	91	70	70	85	89	92	98	90	72	190	275	217	152	143	130	118	1982

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
0.50- 0.75	2	0	0	1	0	0	0	0	0	2	0	0	0	2	1	0	8
0.75- 1.00	1	1	3	1	0	0	0	1	2	2	4	0	7	5	3	3	33
1.00- 1.50	3	8	3	6	2	2	3	6	4	5	8	10	12	16	13	5	106
1.50- 2.00	9	16	11	7	5	13	10	7	7	20	24	31	21	17	20	15	233

2.00- 3.00	38	32	26	18	17	31	28	40	38	38	60	74	55	45	40	54	634
3.00- 5.00	43	28	49	76	36	39	33	23	21	99	137	102	67	54	41	50	898
5.00-10.00	15	29	16	41	28	21	5	3	5	44	98	19	30	17	7	13	391
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	111	115	108	150	89	106	79	80	77	210	332	236	193	156	125	140	2307

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	2	0	0	1	1	1	1	0	0	0	1	4	4	5	2	3	25
0.50- 0.75	3	4	4	1	2	1	1	1	4	6	8	7	20	12	5	6	85
0.75- 1.00	16	14	14	2	2	4	8	5	10	18	18	37	38	43	32	24	285
1.00- 1.50	63	57	30	16	16	23	17	22	38	31	69	117	103	116	95	73	886
1.50- 2.00	79	112	64	30	27	49	40	49	59	60	146	253	186	132	166	119	1571
2.00- 3.00	156	192	310	152	129	192	192	129	181	247	475	510	341	324	295	331	4156
3.00- 5.00	333	228	594	476	362	333	251	177	281	653	944	519	355	302	260	312	6380
5.00-10.00	143	156	114	188	251	96	30	26	44	296	551	96	65	104	32	71	2263
>10.00	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
VARIABLE																	0
TOTAL	795	763	1130	866	791	699	540	409	617	1311	2213	1543	1112	1038	887	939	15653

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	3	4	2	1	3	3	1	2	2	10	8	9	14	12	9	1	84
0.50- 0.75	9	4	4	2	5	5	2	7	13	11	24	35	38	31	12	15	217
0.75- 1.00	38	26	17	14	8	9	13	13	34	38	57	100	94	116	94	41	712
1.00- 1.50	86	87	44	25	20	40	32	44	81	98	208	326	221	265	220	121	1918
1.50- 2.00	100	159	43	41	52	68	54	79	136	159	290	284	166	184	234	180	2229
2.00- 3.00	186	181	243	156	156	214	216	218	301	540	375	229	162	151	162	234	3724
3.00- 5.00	134	86	175	192	199	245	210	215	321	763	268	78	71	93	74	83	3207
5.00-10.00	23	5	9	27	116	58	18	22	52	176	91	5	8	11	9	16	646
>10.00	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
VARIABLE																	0
TOTAL	579	552	537	458	561	642	546	600	940	1795	1321	1066	774	864	814	691	12740

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	5	5	2	1	2	1	1	4	4	6	12	11	12	20	7	7	100
0.50- 0.75	9	5	3	2	2	1	2	5	14	29	22	32	57	66	30	17	296
0.75- 1.00	28	21	10	6	5	9	9	27	43	39	79	116	128	121	94	42	777
1.00- 1.50	69	36	16	9	10	11	12	35	75	107	163	210	117	208	144	99	1321
1.50- 2.00	99	48	8	6	11	34	37	41	57	93	105	53	31	71	52	73	819
2.00- 3.00	106	39	12	12	35	59	71	104	86	170	35	9	8	17	14	49	826
3.00- 5.00	19	12	5	21	38	47	60	91	100	185	23	7	7	6	8	10	639
5.00-10.00	2	0	0	1	17	5	11	14	26	28	2	10	2	1	0	0	119
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

VARIABLE																	0
TOTAL	337	166	56	58	120	167	203	321	405	657	441	448	363	510	349	297	4898

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS G

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	2	1	1	0	0	1	0	1	1	3	5	12	13	10	7	5	62
0.50- 0.75	1	3	3	1	0	4	0	5	3	6	18	38	67	81	41	8	279
0.75- 1.00	16	6	0	1	1	4	6	2	11	14	20	61	125	185	79	51	582
1.00- 1.50	44	15	6	3	3	12	17	10	9	42	36	82	70	219	99	69	736
1.50- 2.00	30	3	0	3	8	20	28	15	11	29	20	23	6	26	10	37	269
2.00- 3.00	24	10	2	3	10	31	49	39	21	29	11	2	2	3	3	21	260
3.00- 5.00	3	0	0	1	20	28	34	37	13	29	12	5	0	1	0	0	183
5.00-10.00	0	0	0	0	2	2	6	7	0	2	1	1	0	0	0	0	21
>10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VARIABLE																	0
TOTAL	120	38	12	12	44	102	140	116	69	154	123	224	283	525	239	191	2392

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS ATMOSPHERIC STABILITY CLASS ALL

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
CALM- 0.50	12	11	5	3	7	6	3	7	7	19	27	37	45	49	26	16	280
0.50- 0.75	27	17	14	8	9	11	5	18	35	56	74	112	183	197	90	46	902
0.75- 1.00	102	68	48	27	16	28	37	53	103	112	179	321	407	481	309	165	2456
1.00- 1.50	292	224	116	74	58	105	97	131	225	302	506	796	570	885	626	391	5398
1.50- 2.00	356	378	171	119	141	233	244	244	335	431	641	725	527	547	587	488	6167
2.00- 3.00	623	548	743	488	498	920	1089	871	926	1314	1170	1073	855	881	830	919	13748
3.00- 5.00	713	490	1055	1079	1014	1221	1105	966	1003	2338	1826	1122	828	831	718	746	17055
5.00-10.00	233	218	162	341	620	274	83	88	136	671	947	183	161	205	101	160	4583
>10.00	0	0	0	0	6	0	0	0	0	0	3	0	1	1	0	0	11
VARIABLE																	0
TOTAL	2358	1954	2314	2139	2369	2798	2663	2378	2770	5243	5373	4369	3577	4077	3287	2931	50600

CALM= 0.00 M/S

TOTAL VALID HOURS = 50600 TOTAL POSSIBLE HOURS = 52584

OVERALL STABILITY CLASS FREQUENCIES IN HOURS

STABILITY:	A	B	C	D	E	F	G	ALL
FREQUENCY:	10628	1982	2307	15653	12740	4898	2392	50600

OVERALL WIND SPEED FREQUENCIES IN HOURS

WIND SPEED (M/S):	CALM	CALM- 0.50	0.50- 0.75	0.75- 1.00	1.00- 1.50	1.50- 2.00	2.00- 3.00	3.00- 5.00	5.00-10.00	>10.00
VARIABLE FREQUENCY:	0	280	902	2456	5398	6167	13748	17055	4583	11
CUMULATIVE FREQ:	0	280	1182	3638	9036	15203	28951	46006	50589	50600

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

DISTRIBUTION OF VARIABLE WINDS

2002-07.JFQ

U (M/S)	A	B	C	D	E	F	G	TOTAL
CALM	0	0	0	0	0	0	0	0
CALM- 0.50	0	0	0	0	0	0	0	0
0.50- 0.75	0	0	0	0	0	0	0	0
0.75- 1.00	0	0	0	0	0	0	0	0
1.00- 1.50	0	0	0	0	0	0	0	0
1.50- 2.00	0	0	0	0	0	0	0	0
2.00- 3.00	0	0	0	0	0	0	0	0
3.00- 5.00	0	0	0	0	0	0	0	0
5.00-10.00	0	0	0	0	0	0	0	0
>10.00	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS A

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
0.75- 1.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.10
1.00- 1.50	0.04	0.04	0.03	0.03	0.01	0.03	0.02	0.02	0.03	0.03	0.04	0.07	0.07	0.10	0.08	0.03	0.66
1.50- 2.00	0.06	0.06	0.08	0.06	0.07	0.09	0.11	0.09	0.10	0.12	0.10	0.13	0.19	0.20	0.17	0.09	1.72
2.00- 3.00	0.17	0.15	0.26	0.26	0.26	0.70	0.97	0.60	0.54	0.49	0.33	0.37	0.48	0.58	0.52	0.38	7.06
3.00- 5.00	0.29	0.20	0.39	0.53	0.63	0.97	0.96	0.75	0.47	1.01	0.60	0.60	0.53	0.66	0.59	0.48	9.67
5.00-10.00	0.07	0.04	0.03	0.13	0.35	0.17	0.02	0.03	0.02	0.18	0.25	0.08	0.09	0.11	0.09	0.11	1.77
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.64	0.49	0.79	1.01	1.33	1.96	2.09	1.51	1.17	1.83	1.32	1.25	1.38	1.66	1.47	1.10	21.00

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS B

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.03
1.00- 1.50	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.03	0.03	0.02	0.03	0.01	0.20
1.50- 2.00	0.02	0.02	0.01	0.01	0.00	0.01	0.04	0.01	0.02	0.02	0.01	0.03	0.04	0.04	0.04	0.04	0.35
2.00- 3.00	0.05	0.03	0.04	0.03	0.04	0.07	0.08	0.07	0.05	0.08	0.09	0.12	0.08	0.10	0.10	0.08	1.13
3.00- 5.00	0.07	0.07	0.07	0.08	0.08	0.08	0.06	0.08	0.06	0.19	0.27	0.21	0.12	0.08	0.07	0.09	1.69
5.00-10.00	0.03	0.01	0.01	0.04	0.06	0.02	0.01	0.00	0.00	0.07	0.15	0.03	0.02	0.03	0.02	0.01	0.49
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.18	0.14	0.14	0.17	0.18	0.18	0.19	0.18	0.14	0.38	0.54	0.43	0.30	0.28	0.26	0.23	3.92

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS C

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50- 0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.75- 1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.07

1.00- 1.50	0.01	0.02	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.01	0.21
1.50- 2.00	0.02	0.03	0.02	0.01	0.01	0.03	0.02	0.01	0.01	0.04	0.05	0.06	0.04	0.03	0.04	0.03	0.46
2.00- 3.00	0.08	0.06	0.05	0.04	0.03	0.06	0.06	0.08	0.08	0.08	0.12	0.15	0.11	0.09	0.08	0.11	1.25
3.00- 5.00	0.08	0.06	0.10	0.15	0.07	0.08	0.07	0.05	0.04	0.20	0.27	0.20	0.13	0.11	0.08	0.10	1.77
5.00-10.00	0.03	0.06	0.03	0.08	0.06	0.04	0.01	0.01	0.01	0.09	0.19	0.04	0.06	0.03	0.01	0.03	0.77
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	0.22	0.23	0.21	0.30	0.18	0.21	0.16	0.16	0.15	0.42	0.66	0.47	0.38	0.31	0.25	0.28	4.56

CALM= 0.00 M/S

LEVEL OF WIND DATA: 10.0 METERS DELTA T LAYER: 60.0- 10.0 METERS

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS D

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.05
0.50- 0.75	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.04	0.02	0.01	0.01	0.17
0.75- 1.00	0.03	0.03	0.03	0.00	0.00	0.01	0.02	0.01	0.02	0.04	0.04	0.07	0.08	0.08	0.06	0.05	0.56
1.00- 1.50	0.12	0.11	0.06	0.03	0.03	0.05	0.03	0.04	0.08	0.06	0.14	0.23	0.20	0.23	0.19	0.14	1.75
1.50- 2.00	0.16	0.22	0.13	0.06	0.05	0.10	0.08	0.10	0.12	0.12	0.29	0.50	0.37	0.26	0.33	0.24	3.10
2.00- 3.00	0.31	0.38	0.61	0.30	0.25	0.38	0.38	0.25	0.36	0.49	0.94	1.01	0.67	0.64	0.58	0.65	8.21
3.00- 5.00	0.66	0.45	1.17	0.94	0.72	0.66	0.50	0.35	0.56	1.29	1.87	1.03	0.70	0.60	0.51	0.62	12.61
5.00-10.00	0.28	0.31	0.23	0.37	0.50	0.19	0.06	0.05	0.09	0.58	1.09	0.19	0.13	0.21	0.06	0.14	4.47
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE																	0.00
TOTAL	1.57	1.51	2.23	1.71	1.56	1.38	1.07	0.81	1.22	2.59	4.37	3.05	2.20	2.05	1.75	1.86	30.93

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS E

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.03	0.02	0.02	0.00	0.17
0.50- 0.75	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.03	0.02	0.05	0.07	0.08	0.06	0.02	0.03	0.43
0.75- 1.00	0.08	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.07	0.08	0.11	0.20	0.19	0.23	0.19	0.08	1.41
1.00- 1.50	0.17	0.17	0.09	0.05	0.04	0.08	0.06	0.09	0.16	0.19	0.41	0.64	0.44	0.52	0.43	0.24	3.79
1.50- 2.00	0.20	0.31	0.08	0.08	0.10	0.13	0.11	0.16	0.27	0.31	0.57	0.56	0.33	0.36	0.46	0.36	4.41
2.00- 3.00	0.37	0.36	0.48	0.31	0.31	0.42	0.43	0.43	0.59	1.07	0.74	0.45	0.32	0.30	0.32	0.46	7.36
3.00- 5.00	0.26	0.17	0.35	0.38	0.39	0.48	0.42	0.42	0.63	1.51	0.53	0.15	0.14	0.18	0.15	0.16	6.34
5.00-10.00	0.05	0.01	0.02	0.05	0.23	0.11	0.04	0.04	0.10	0.35	0.18	0.01	0.02	0.02	0.02	0.03	1.28
>10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
VARIABLE																	0.00
TOTAL	1.14	1.09	1.06	0.91	1.11	1.27	1.08	1.19	1.86	3.55	2.61	2.11	1.53	1.71	1.61	1.37	25.18

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN FRACTIONS ATMOSPHERIC STABILITY CLASS F

U (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0.00
CALM- 0.50	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.04	0.01	0.01	0.20
0.50- 0.75	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.04	0.06	0.11	0.13	0.06	0.03	0.58
0.75- 1.00	0.06	0.04	0.02	0.01	0.01	0.02	0.02	0.05	0.08	0.08	0.16	0.23	0.25	0.24	0.19	0.08	1.54
1.00- 1.50	0.14	0.07	0.03	0.02	0.02	0.02	0.02	0.07	0.15	0.21	0.32	0.42	0.23	0.41	0.28	0.20	2.61
1.50- 2.00	0.20	0.09	0.02	0.01	0.02	0.07	0.07	0.08	0.11	0.18	0.21	0.10	0.06	0.14	0.10	0.14	1.62
2.00- 3.00	0.21	0.08	0.02	0.02	0.07	0.12	0.14	0.21	0.17	0.34	0.07	0.02	0.02	0.03	0.03	0.10	1.63
3.00- 5.00	0.04	0.02	0.01	0.04	0.08	0.09	0.12	0.18	0.20	0.37	0.05	0.01	0.01	0.01	0.02	0.02	1.26