Chemical:
MRID:
PC Code:
Plot:
Guideline:

Calculation of sampling period times
Application start time:
Area of field (acres):
Application rate (lbs/acre):
Applied dicamba (kg):

Indirect Method Sampling Periods

Period
1
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Data from Appendix III, Tables 2-3, pp. 464-465 of the study report.

Central Mast (Integrated Horizontal Flux Method and Aerodynamic Method) Sampling Periods

Period
1
2
3
4
5
6

Dicamba DGA and S-metolachlor
50958202
128931 (Dicamba DGA) and 108800 (S-metolachlor)
Soybean
835.8100

9/9/2019 9:38
18.2
0.5
4.128

Start Time	End Time
9/9/19 10:06	9/9/19 14:09
9/9/19 14:12	9/9/19 17:07
9/9/19 17:09	9/10/19 8:44
9/10/19 8:47	9/10/19 17:03
9/10/19 17:07	9/11/19 8:37
9/11/19 8:39	9/11/19 17:03
9/11/19 17:06	9/12/19 8:36
9/12/19 8:38	9/12/19 16:58
9/12/19 17:01	9/13/19 8:35
9/13/19 8:35	9/13/19 17:11
9/13/19 17:16	9/14/19 8:39
9/14/19 8:41	9/14/19 16:56
9/14/19 16:59	9/15/19 8:33
9/15/19 8:35	9/15/19 17:02
9/15/19 17:05	9/16/19 8:30

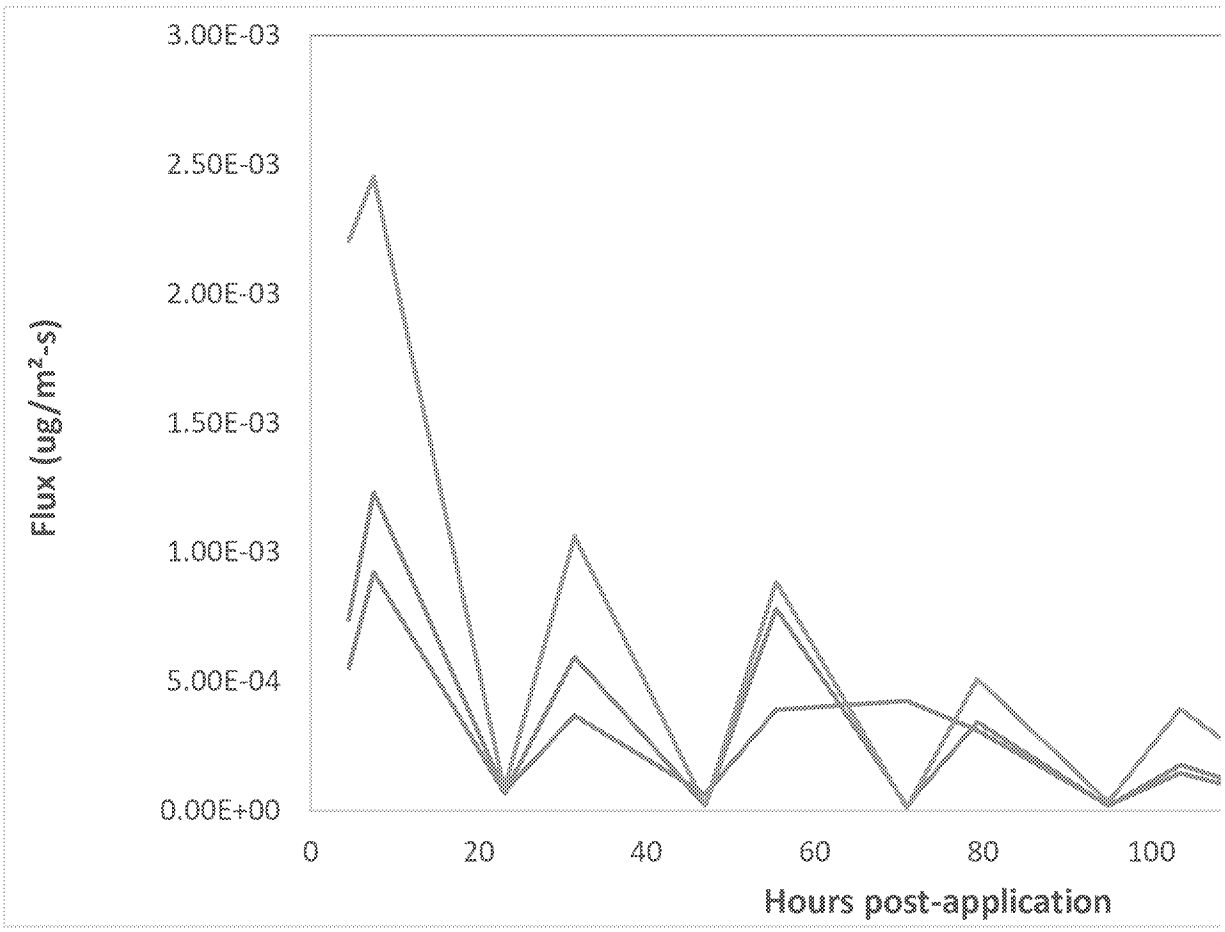
Start Time	End Time
9/9/2019 10:07	9/9/2019 14:10
9/9/2019 14:13	9/9/2019 17:07
9/9/2019 17:09	9/10/2019 8:39
9/10/2019 8:42	9/10/2019 17:02
9/10/2019 17:05	9/11/2019 8:35
9/11/2019 8:37	9/11/2019 17:01

(Appendix I, Table 5, p. 108 of the study report)
(p. 12 of the study report)
(p. 12 of the study report)
(calculated)

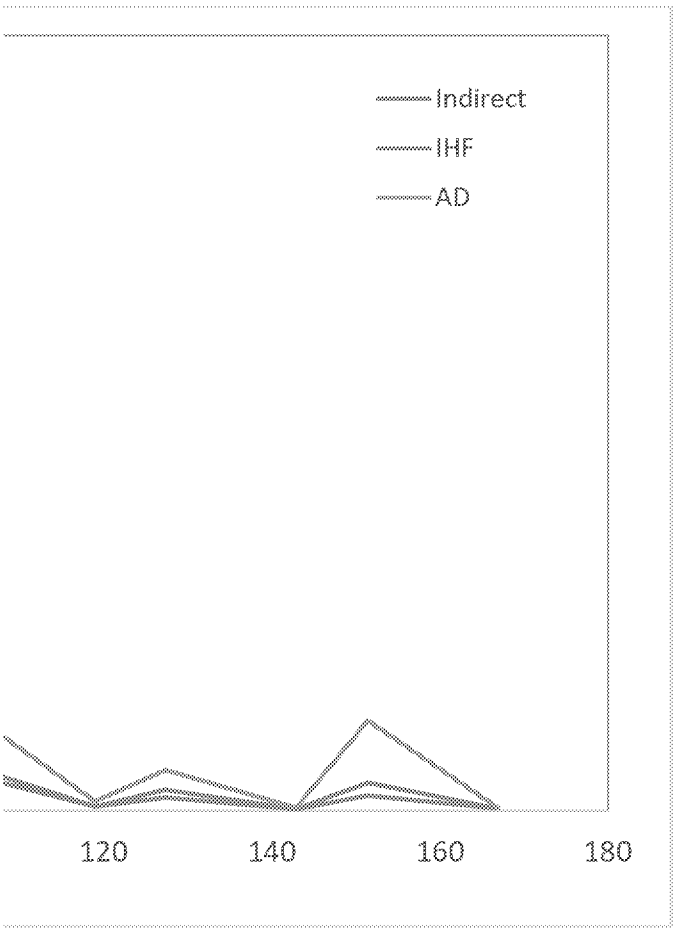
Duration (hours)	Start time after application (hours)	End time after application (hours)	Calculated Flux (ug/m²-s)	Percent Lost
4.05	0.47	4.52	7.38E-04	0.019%
2.92	4.57	7.48	1.23E-03	0.023%
15.58	7.52	23.10	6.80E-05	0.007%
8.27	23.15	31.42	5.96E-04	0.032%
15.50	31.48	46.98	1.91E-05	0.002%
8.40	47.02	55.42	7.82E-04	0.042%
15.50	55.47	70.97	1.89E-05	0.002%
8.33	71.00	79.33	3.42E-04	0.018%
15.57	79.38	94.95	1.83E-05	0.002%
8.60	94.95	103.55	1.76E-04	0.010%
15.38	103.63	119.02	1.51E-05	0.001%
8.25	119.05	127.30	7.99E-05	0.004%
15.57	127.35	142.92	5.35E-06	0.001%
8.45	142.95	151.40	1.06E-04	0.006%
15.42	151.45	166.87	7.43E-06	0.001%
			Total	**0.169%**

Duration (hours)	Start time after application (hours)	End time after application (hours)	AD Flux (ug/m²-s)	IHF Flux (ug/m²-s)
4.05	0.48	4.53	2.20E-03	5.50E-04
2.90	4.58	7.48	2.45E-03	9.21E-04
15.50	7.52	23.02	7.93E-05	6.99E-05
8.33	23.07	31.40	1.06E-03	3.67E-04
15.50	31.45	46.95	1.85E-05	6.28E-05
8.40	46.98	55.38	8.84E-04	3.90E-04

Figure 1 **Volatile Flux - Soybean Plot**



AD Percent Lost	IHF Percent Lost
0.057%	0.000%
0.046%	0.000%
0.008%	0.000%
0.057%	0.000%
0.002%	0.000%
0.048%	0.000%


Indirect
IHF
AD
120
140
160
180

7
8
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14
15

Data from Appendix III, Table 4, p. 468 of the study report.

9/11/2019 17:05	9/12/2019 8:34
9/12/2019 8:35	9/12/2019 16:57
9/12/2019 17:01	9/13/2019 8:33
9/13/2019 8:36	9/13/2019 17:03
9/13/2019 17:06	9/14/2019 8:38
9/14/2019 8:40	9/14/2019 16:57
9/14/2019 17:01	9/15/2019 8:32
9/15/2019 8:34	9/15/2019 17:03
9/15/2019 17:06	9/16/2019 8:32

15.48	55.45	70.93	9.43E-06	4.25E-04
8.37	70.95	79.32	5.09E-04	3.11E-04
15.53	79.38	94.92	3.24E-05	1.92E-05
8.45	94.97	103.42	3.93E-04	1.44E-04
15.53	103.47	119.00	3.49E-05	1.49E-05
8.28	119.03	127.32	1.56E-04	4.90E-05
15.52	127.38	142.90	1.13E-05	5.63E-06
8.48	142.93	151.42	3.47E-04	5.81E-05
15.43	151.47	166.90	1.10E-05	6.82E-06
				Total

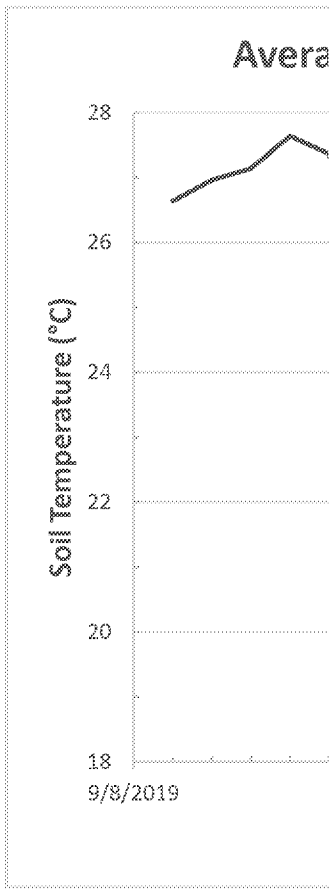
0.001%	0.000%
0.027%	0.000%
0.003%	0.000%
0.021%	0.000%
0.003%	0.000%
0.008%	0.000%
0.001%	0.000%
0.019%	0.000%
0.001%	0.000%
0.303%	**0.000%**

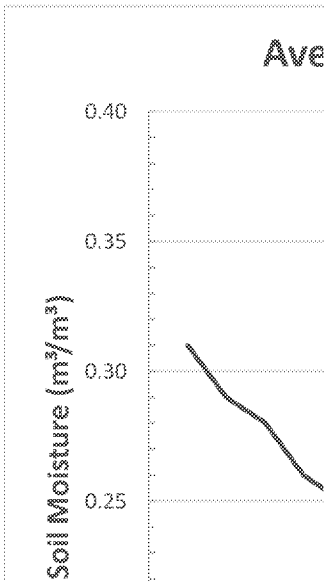
Chemical:
MRID:
PC Code:
Plot:
Guideline:

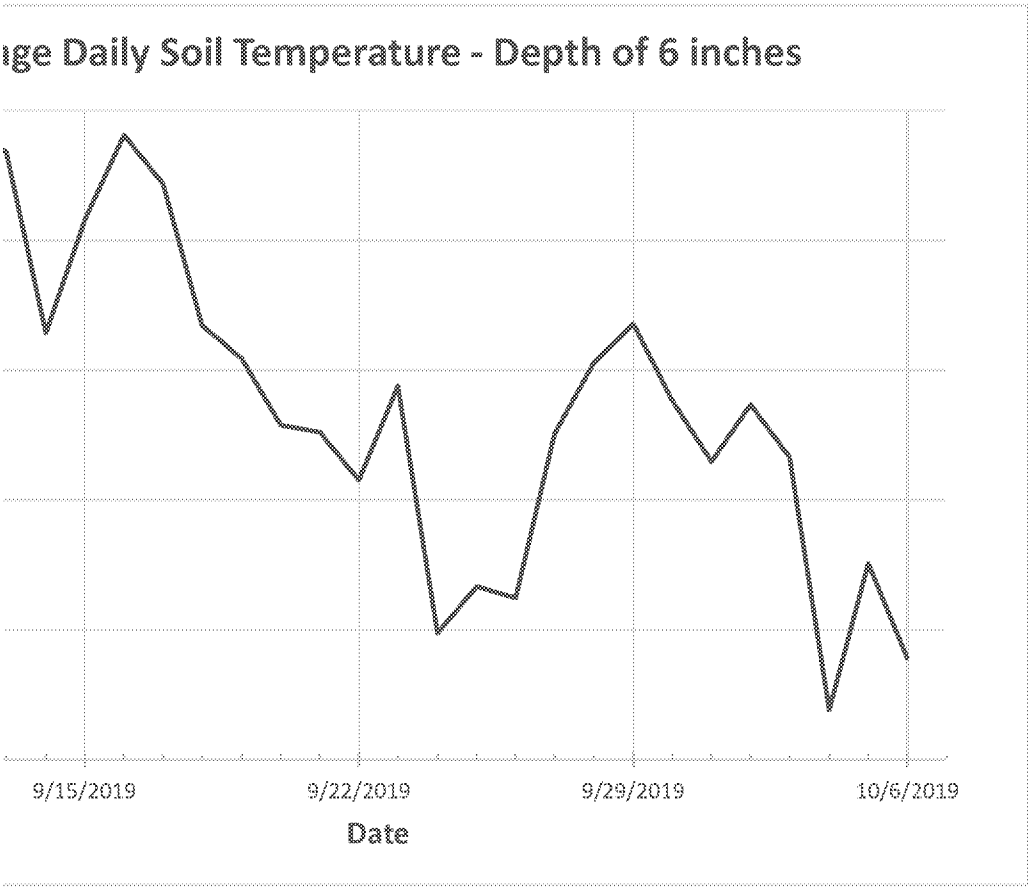
Date
9/9/2019
9/10/2019
9/11/2019
9/12/2019
9/13/2019
9/14/2019
9/15/2019
9/16/2019
9/17/2019
9/18/2019
9/19/2019
9/20/2019
9/21/2019
9/22/2019
9/23/2019
9/24/2019
9/25/2019
9/26/2019
9/27/2019
9/28/2019
9/29/2019
9/30/2019
10/1/2019
10/2/2019
10/3/2019
10/4/2019
10/5/2019
10/6/2019

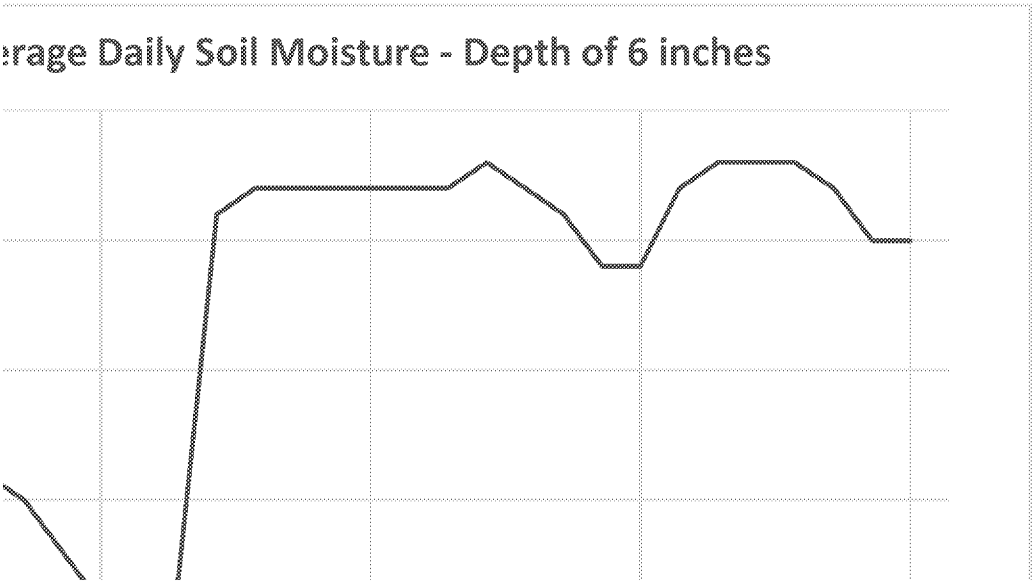
Dicamba DGA and S-metolachlor
50958202
128931 (Dicamba DGA) and 108800 (S-metolachlor)
Soybean
835.8100

Soil Temp at 6 in (°C)	Soil Moist at 6 in (m^3/m^3)
26.64	0.310
26.96	0.290
27.14	0.280
27.64	0.260
27.37	0.250
24.58	0.230
26.32	0.210
27.62	0.190
26.87	0.220
24.69	0.360
24.18	0.370
23.16	0.370
23.05	0.370
22.31	0.370
23.76	0.370
19.95	0.370
20.67	0.380
20.49	0.370
23.03	0.360
24.11	0.340
24.71	0.340
23.53	0.370
22.59	0.380
23.47	0.380
22.66	0.380
18.77	0.370
21.03	0.350
19.57	0.350

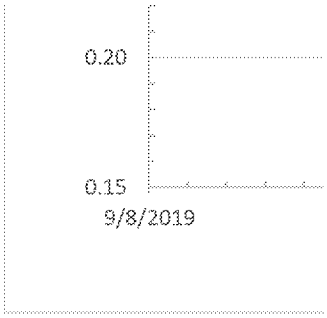


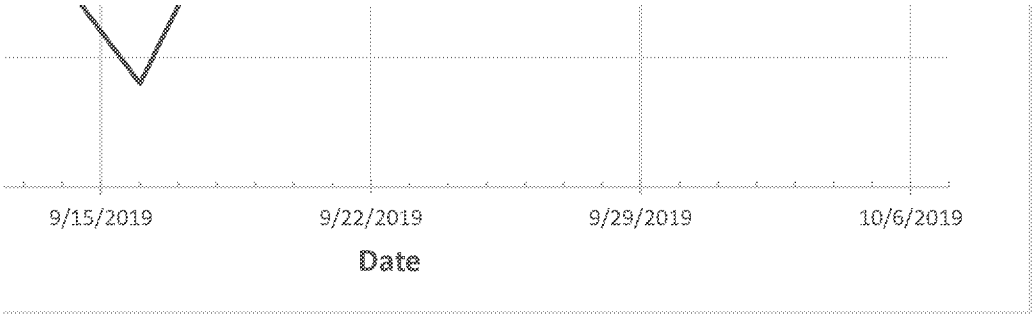



ıge Daily Soil Temperature - Depth of 6 inches
9/15/2019
9/22/2019
9/29/2019
10/6/2019
Date


ɛrage Daily Soil Moisture - Depth of 6 inches

Data are average daily data from 6-inch depth reported in Appendix I, Table 10, pp. 114-115 of the study report.


0.20
0.15
9/8/2019


9/15/2019
9/22/2019
9/29/2019
10/6/2019
Date

Chemical:
MRID:
PC Code:
Plot:
Guideline:

Wind direction data for center mast sampling periods.

Period
1
1
1
1
1
1
2
2
2
2
2
2
3
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3
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3
3
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Dicamba DGA and S-metolachlor
50958202
128931 (Dicamba DGA) and 108800 (S-metolachlor)
Soybean
835.8100

	Wind Direction				
Sample ID	**0.15 m**	**0.33 m**	**0.55 m**	**0.90 m**	**1.5 m**
PCM . 015 . 0-6 hr . 1 . 095	173.27	150.16	147.72	142.17	149.33
PCM . 033 . 0-6 hr . 1 . 096	173.05	149.98	147.63	142.01	149.18
PCM . 055 . 0-6 hr . 1 . 097	172.56	149.51	147.18	141.54	148.72
PCM . 090 . 0-6 hr . 1 . 098	171.81	148.8	146.51	140.84	148.05
PCM . 150 . 0-6 hr . 1 . 099	171.19	148.31	146.03	140.37	147.59
PCM . 150 . 0-6 hr . 2 . 100	171.1	148.1	145.82	140.12	147.35
PCM . 015 . 6-12 hr . 1 . 109	197.21	174.58	170.45	167.05	171.54
PCM . 033 . 6-12 hr . 1 . 110	197.53	174.91	170.78	167.34	171.84
PCM . 055 . 6-12 hr . 1 . 111	197.9	175.29	171.13	167.71	172.22
PCM . 090 . 6-12 hr . 1 . 112	198.67	176.05	171.92	168.45	173.01
PCM . 150 . 6-12 hr . 1 . 113	198.71	176.17	172.02	168.51	173.09
PCM . 150 . 6-12 hr . 2 . 114	199.33	176.79	172.65	169.12	173.75
PCM . 015 . 12-24 hr . 1 . 123	153.95	143.11	142.47	140.31	144.69
PCM . 033 . 12-24 hr . 1 . 124	153.95	143.1	142.46	140.3	144.68
PCM . 055 . 12-24 hr . 1 . 125	153.89	143.05	142.42	140.26	144.64
PCM . 090 . 12-24 hr . 1 . 126	153.84	142.98	142.36	140.2	144.57
PCM . 150 . 12-24 hr . 1 . 127	153.84	142.98	142.36	140.2	144.57
PCM . 150 . 12-24 hr . 2 . 128	153.82	142.98	142.35	140.19	144.56
PCM . 015 . 24-36 hr . 1 . 203	236.07	212.35	209.43	204.61	210.53
PCM . 033 . 24-36 hr . 1 . 204	236.01	212.29	209.37	204.56	210.48
PCM . 055 . 24-36 hr . 1 . 205	235.92	212.21	209.29	204.51	210.42
PCM . 090 . 24-36 hr . 1 . 206	235.88	212.17	209.26	204.47	210.39
PCM . 150 . 24-36 hr . 1 . 207	235.76	212.05	209.14	204.35	210.28
PCM . 150 . 24-36 hr . 2 . 208	235.7	212.01	209.08	204.3	210.22
PCM . 015 . 36-48 hr . 1 . 217	166.43	158.3	153.52	151.96	144.51
PCM . 033 . 36-48 hr . 1 . 218	166.45	158.33	153.56	151.99	144.55
PCM . 055 . 36-48 hr . 1 . 219	166.56	158.43	153.67	152.11	144.67
PCM . 090 . 36-48 hr . 1 . 220	166.56	158.43	153.67	152.11	144.67
PCM . 150 . 36-48 hr . 1 . 221	166.6	158.48	153.72	152.16	144.72
PCM . 150 . 36-48 hr . 2 . 222	166.71	158.57	153.81	152.24	144.82
PCM . 015 . 48-60 hr . 1 . 297	239.47	215.62	212.38	206.53	212.65
PCM . 033 . 48-60 hr . 1 . 298	239.42	215.58	212.32	206.48	212.6
PCM . 055 . 48-60 hr . 1 . 299	239.33	215.49	212.24	206.4	212.52
PCM . 090 . 48-60 hr . 1 . 300	239.28	215.42	212.16	206.33	212.45
PCM . 150 . 48-60 hr . 1 . 301	239.13	215.28	212.01	206.2	212.31
PCM . 150 . 48-60 hr . 2 . 302	239.1	215.25	211.98	206.17	212.27

Average wind direction

Period	Wind Direction
1	151.5
2	177.2
3	144.8
4	214.4
5	155.1
6	217.1
7	174.7
8	225.6
9	175.0
10	298.4
11	152.2
12	86.9
13	176.5
14	231.5
15	183.8

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PCM . 015 . 60-72 hr . 1 . 311	180.84	174.76	171.79	173.35	172.65
PCM . 033 . 60-72 hr . 1 . 312	180.85	174.76	171.8	173.35	172.65
PCM . 055 . 60-72 hr . 1 . 313	180.95	174.85	171.89	173.42	172.73
PCM . 090 . 60-72 hr . 1 . 314	180.95	174.85	171.89	173.42	172.73
PCM . 150 . 60-72 hr . 1 . 315	180.95	174.85	171.89	173.42	172.73
PCM . 150 . 60-72 hr . 2 . 316	180.99	174.87	171.91	173.43	172.74
PCM . 015 . 72-84 hr . 1 . 391	247.83	223.9	220.13	215.19	221.72
PCM . 033 . 72-84 hr . 1 . 392	247.76	223.85	220.07	215.13	221.66
PCM . 055 . 72-84 hr . 1 . 393	247.74	223.81	220.02	215.11	221.63
PCM . 090 . 72-84 hr . 1 . 394	247.68	223.76	219.96	215.08	221.59
PCM . 150 . 72-84 hr . 1 . 395	247.65	223.73	219.92	215.06	221.56
PCM . 150 . 72-84 hr . 2 . 396	247.59	223.68	219.86	215.03	221.51
PCM . 015 . 84-96 hr . 1 . 405	178.9	173.92	173.05	172.58	176.77
PCM . 033 . 84-96 hr . 1 . 406	178.85	173.86	172.98	172.52	176.71
PCM . 055 . 84-96 hr . 1 . 407	178.95	173.94	173.06	172.6	176.78
PCM . 090 . 84-96 hr . 1 . 408	178.87	173.86	172.98	172.52	176.71
PCM . 150 . 84-96 hr . 1 . 409	178.79	173.79	172.9	172.44	176.63
PCM . 150 . 84-96 hr . 2 . 410	178.87	173.84	172.95	172.49	176.69
PCM . 015 . 96-108 hr . 1 . 485	302.59	299.19	298.43	293.16	299.41
PCM . 033 . 96-108 hr . 1 . 486	302.58	299.15	298.38	293.12	299.37
PCM . 055 . 96-108 hr . 1 . 487	302.48	299.06	298.29	293.02	299.28
PCM . 090 . 96-108 hr . 1 . 488	302.37	298.96	298.2	292.92	299.19
PCM . 150 . 96-108 hr . 1 . 489	302.38	298.93	298.17	292.88	299.16
PCM . 150 . 96-108 hr . 2 . 490	302.33	298.87	298.11	292.81	299.08
PCM . 015 . 108-120 hr . 1 . 499	139.12	156.47	152.53	155.51	154.39
PCM . 033 . 108-120 hr . 1 . 500	138.99	156.68	152.74	155.71	154.59
PCM . 055 . 108-120 hr . 1 . 501	139.29	156.98	153.03	156.01	154.9
PCM . 090 . 108-120 hr . 1 . 502	139.8	157.46	153.51	156.49	155.38
PCM . 150 . 108-120 hr . 1 . 503	139.66	157.66	153.72	156.69	155.59
PCM . 150 . 108-120 hr . 2 . 504	139.61	157.98	154.03	157	155.9
PCM . 015 . 120-132 hr . 1 . 579	107.57	83.8	82.28	77.03	84.3
PCM . 033 . 120-132 hr . 1 . 580	107.49	83.72	82.2	76.95	84.23
PCM . 055 . 120-132 hr . 1 . 581	107.47	83.71	82.19	76.94	84.22
PCM . 090 . 120-132 hr . 1 . 582	107.42	83.65	82.15	76.88	84.17
PCM . 150 . 120-132 hr . 1 . 583	107.42	83.66	82.16	76.89	84.17
PCM . 150 . 120-132 hr . 2 . 584	107.46	83.67	82.17	76.91	84.19
PCM . 015 . 132-144 hr . 1 . 593	168.87	176.07	177.89	184.5	175.84
PCM . 033 . 132-144 hr . 1 . 594	169.11	176.44	178.28	184.94	176.2
PCM . 055 . 132-144 hr . 1 . 595	168.69	175.85	177.69	184.28	175.64
PCM . 090 . 132-144 hr . 1 . 596	168.6	175.73	177.57	184.13	175.51
PCM . 150 . 132-144 hr . 1 . 597	168.63	175.79	177.63	184.21	175.58
PCM . 150 . 132-144 hr . 2 . 598	168.47	175.55	177.4	183.94	175.34
PCM . 015 . 144-156 hr . 1 . 673	247.05	230.97	229	225.29	228.68
PCM . 033 . 144-156 hr . 1 . 674	246.7	230.65	228.68	224.98	228.36
PCM . 055 . 144-156 hr . 1 . 675	246.6	230.52	228.54	224.82	228.2
PCM . 090 . 144-156 hr . 1 . 676	246.2	230.14	228.19	224.44	227.84
PCM . 150 . 144-156 hr . 1 . 677	246.02	229.95	227.99	224.24	227.64

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Data from Appendix I, Appendix 9, pp. 167-175 of the study report.

PCM . 150 . 144-156 hr . 2 . 678	245.65	229.59	227.64	223.89	227.3
PCM . 015 . 156-168 hr . 1 . 687	175.41	182.13	181.75	188.5	190.59
PCM . 033 . 156-168 hr . 1 . 688	175.39	182.11	181.74	188.48	190.56
PCM . 055 . 156-168 hr . 1 . 689	175.39	182.11	181.74	188.48	190.56
PCM . 090 . 156-168 hr . 1 . 690	175.49	182.17	181.8	188.52	190.61
PCM . 150 . 156-168 hr . 1 . 691	175.75	182.39	182	188.73	190.81
PCM . 150 . 156-168 hr . 2 . 692	175.57	182.57	182.18	188.89	190.98