

Figure 27 WP 010A Launch Ramp Turnaround Daily Dust Average (mg/m³) 7/14-7/20

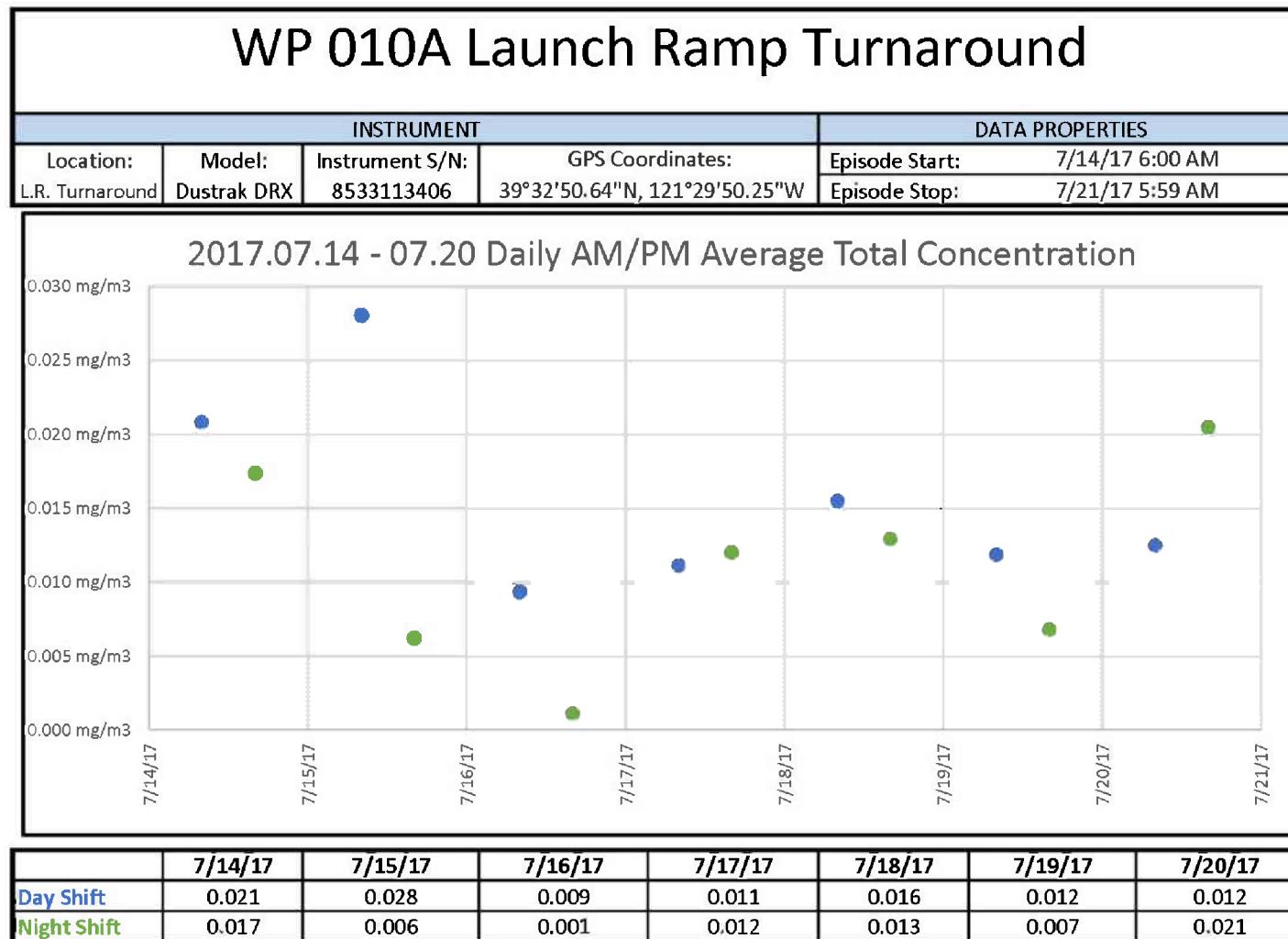


Figure 28 WP 010A Launch Ramp Turnaround Daily Dust Average (mg/m³) 7/21-7/27

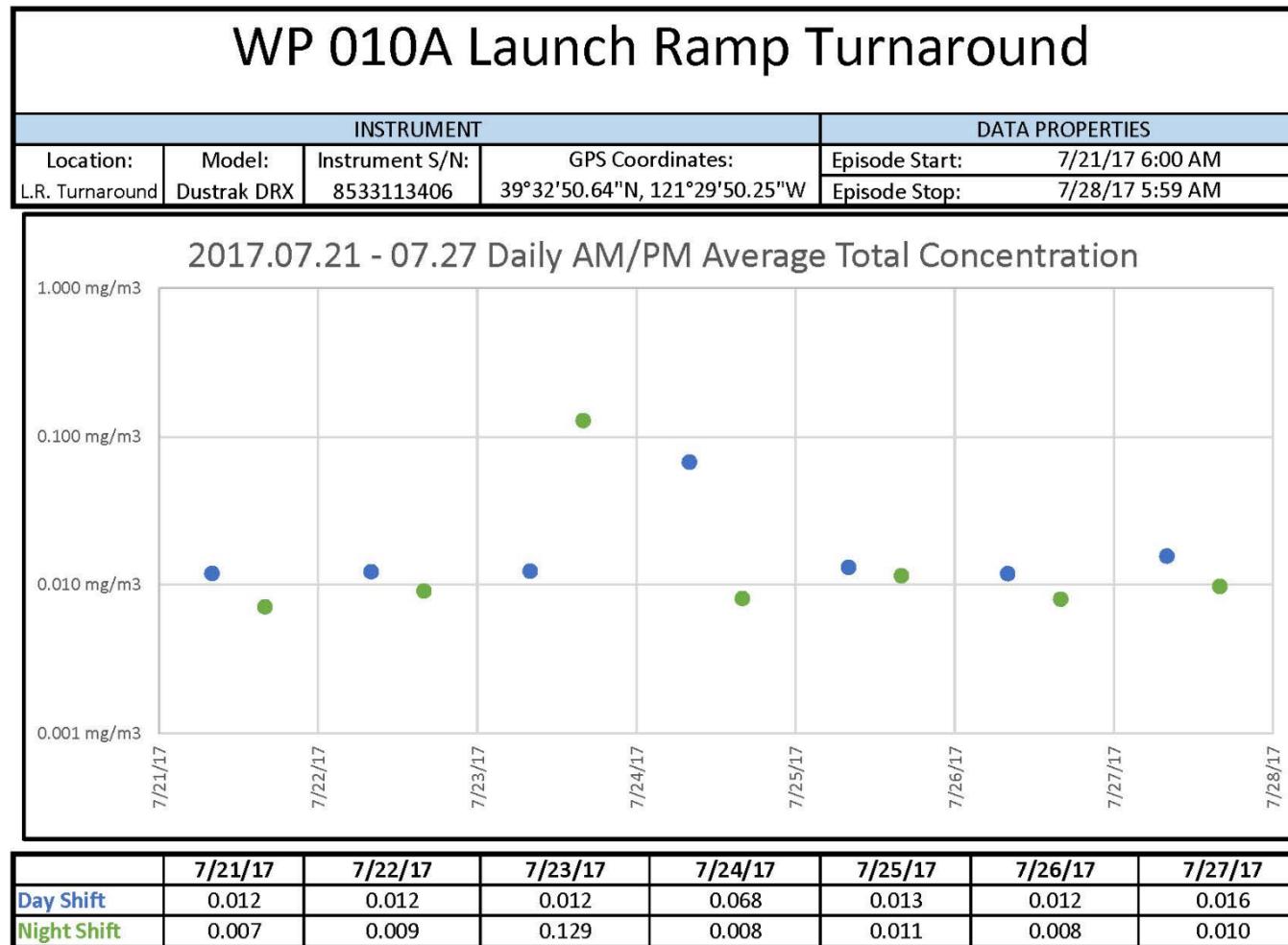


Figure 29 WP 019A East Diversion Dam Daily Dust Average (mg/m³) 7/14-7/20

WP 019A East Diversion Dam

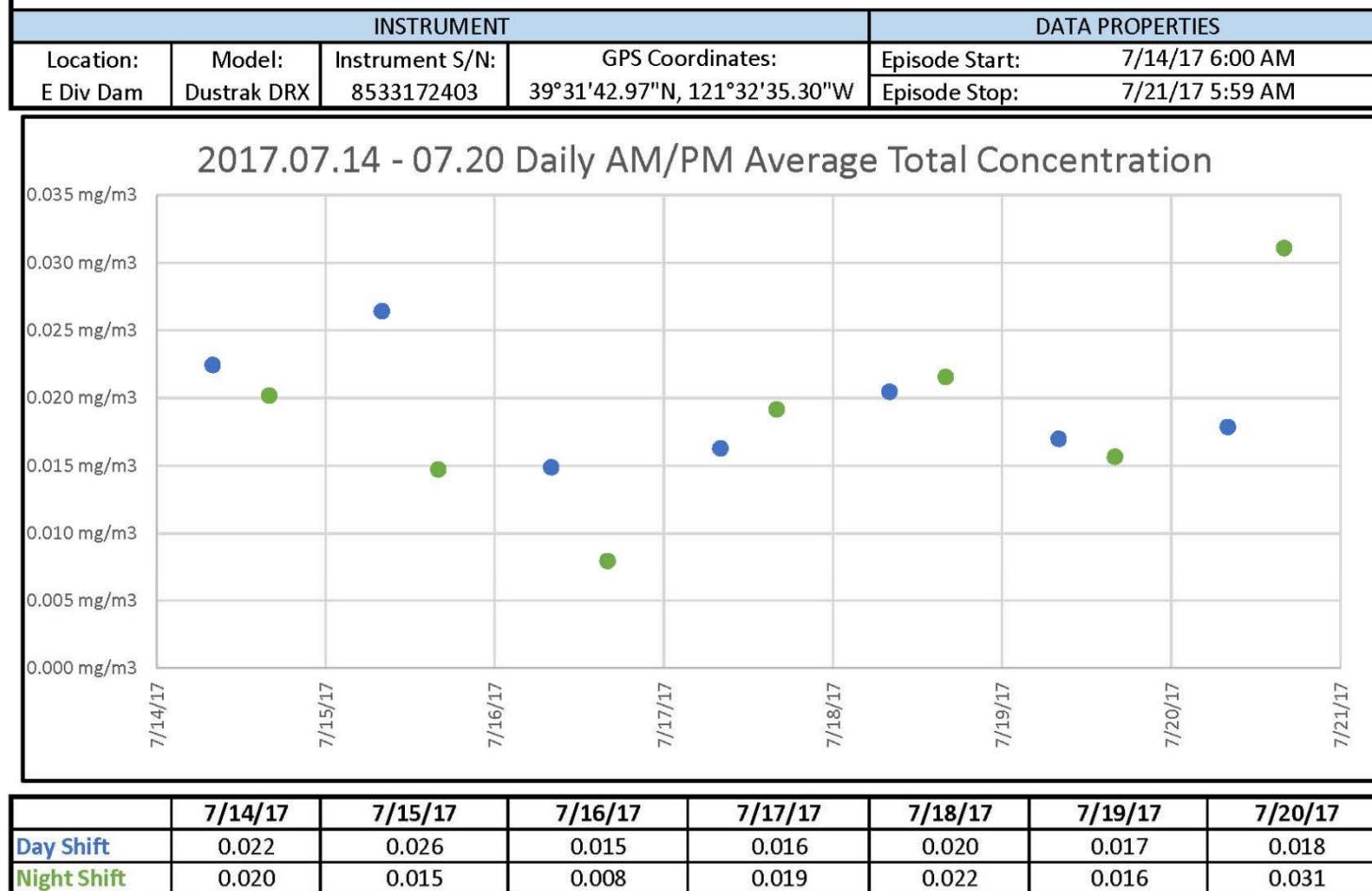


Figure 30 WP 019A East Diversion Dam Daily Dust Average (mg/m³) 7/21-7/27

WP 019A East Diversion Dam

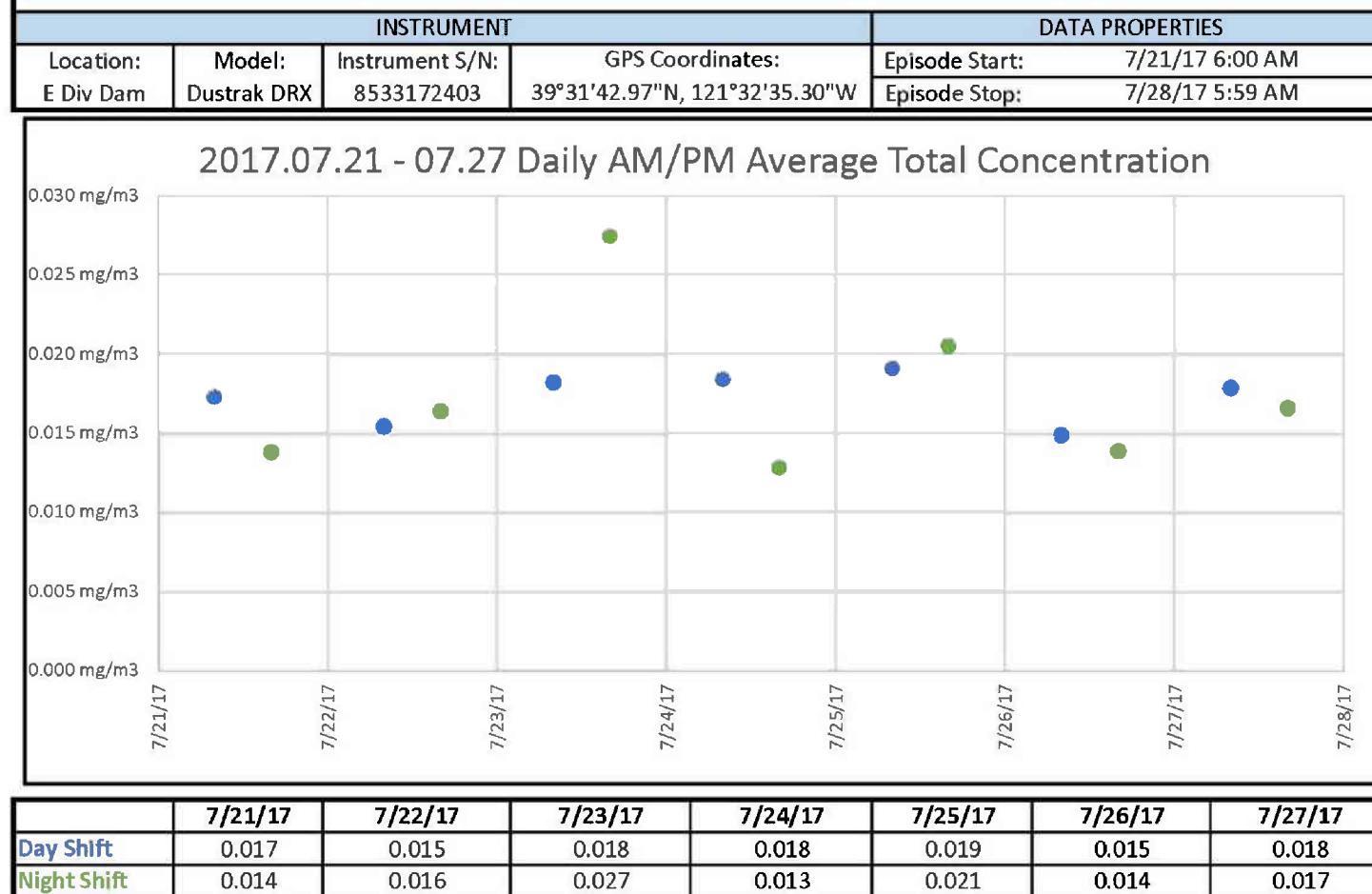


Figure 31 WP 020A SE Canal Daily Dust Average (mg/m³) 7/14-7/21

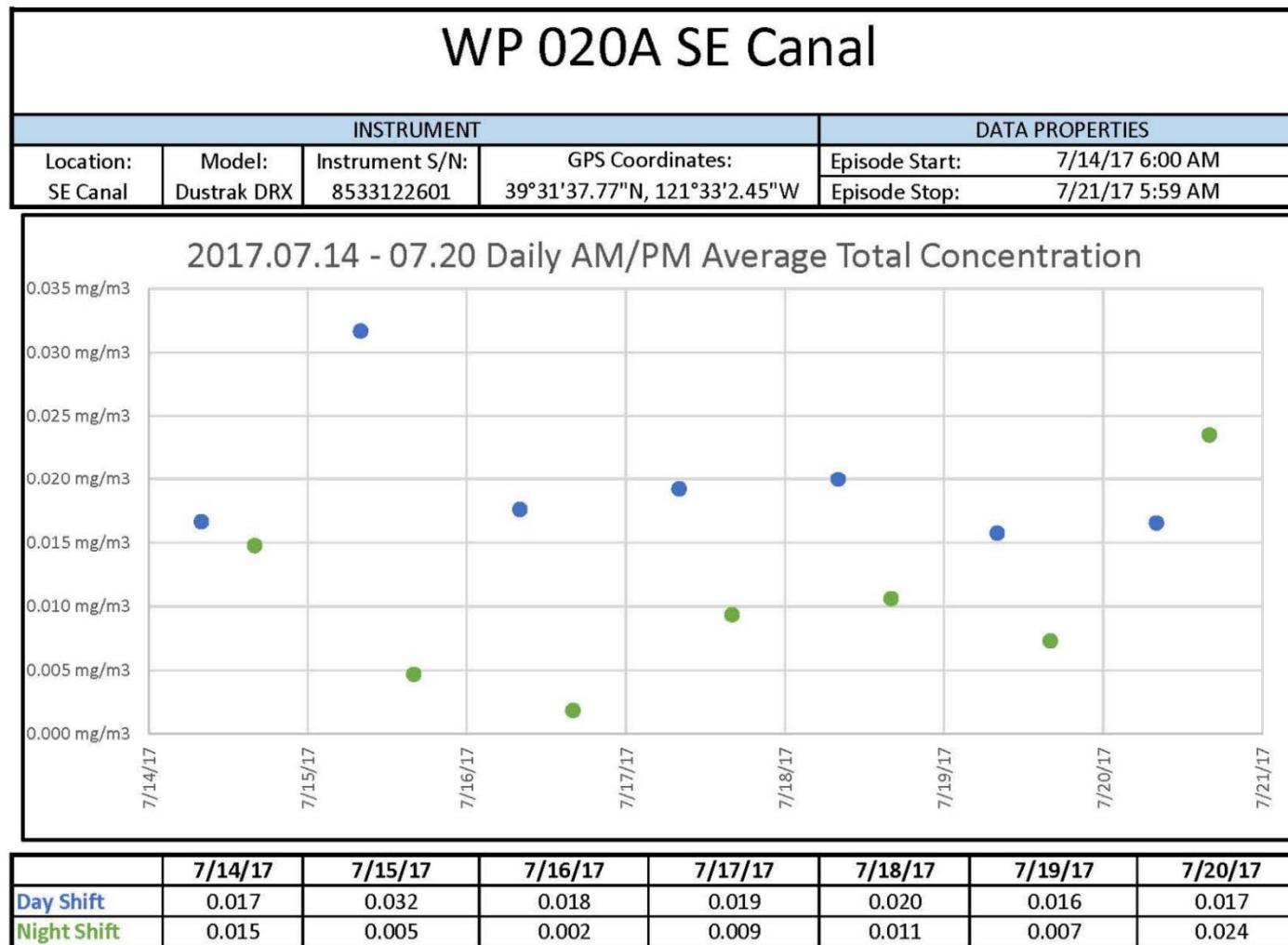


Figure 32 WP 020A SE Canal Daily Dust Average (mg/m³) 7/21-7/27

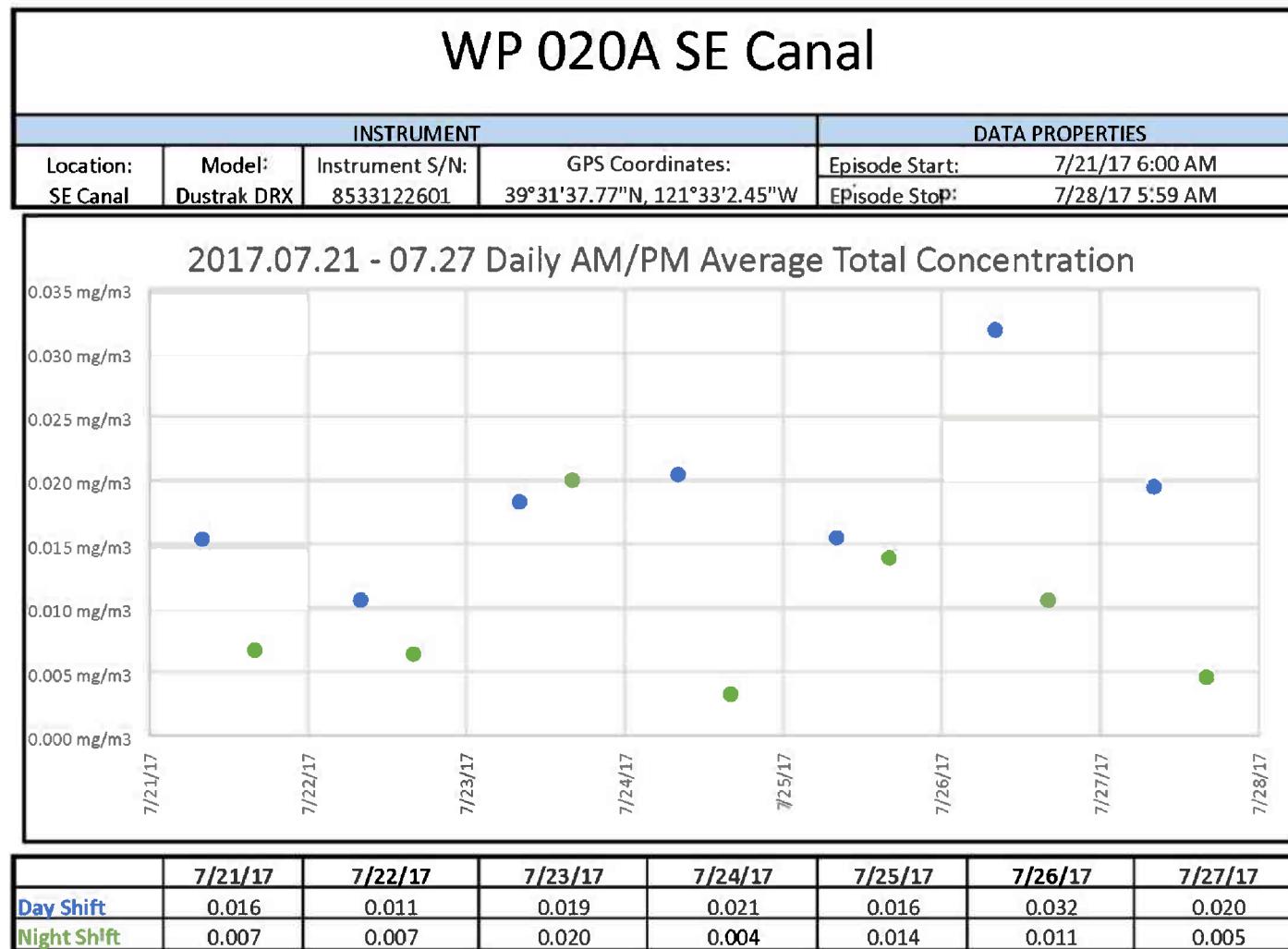


Figure 33 WP 021A SW Canal Daily Dust Average (mg/m³) 7/14-7/20

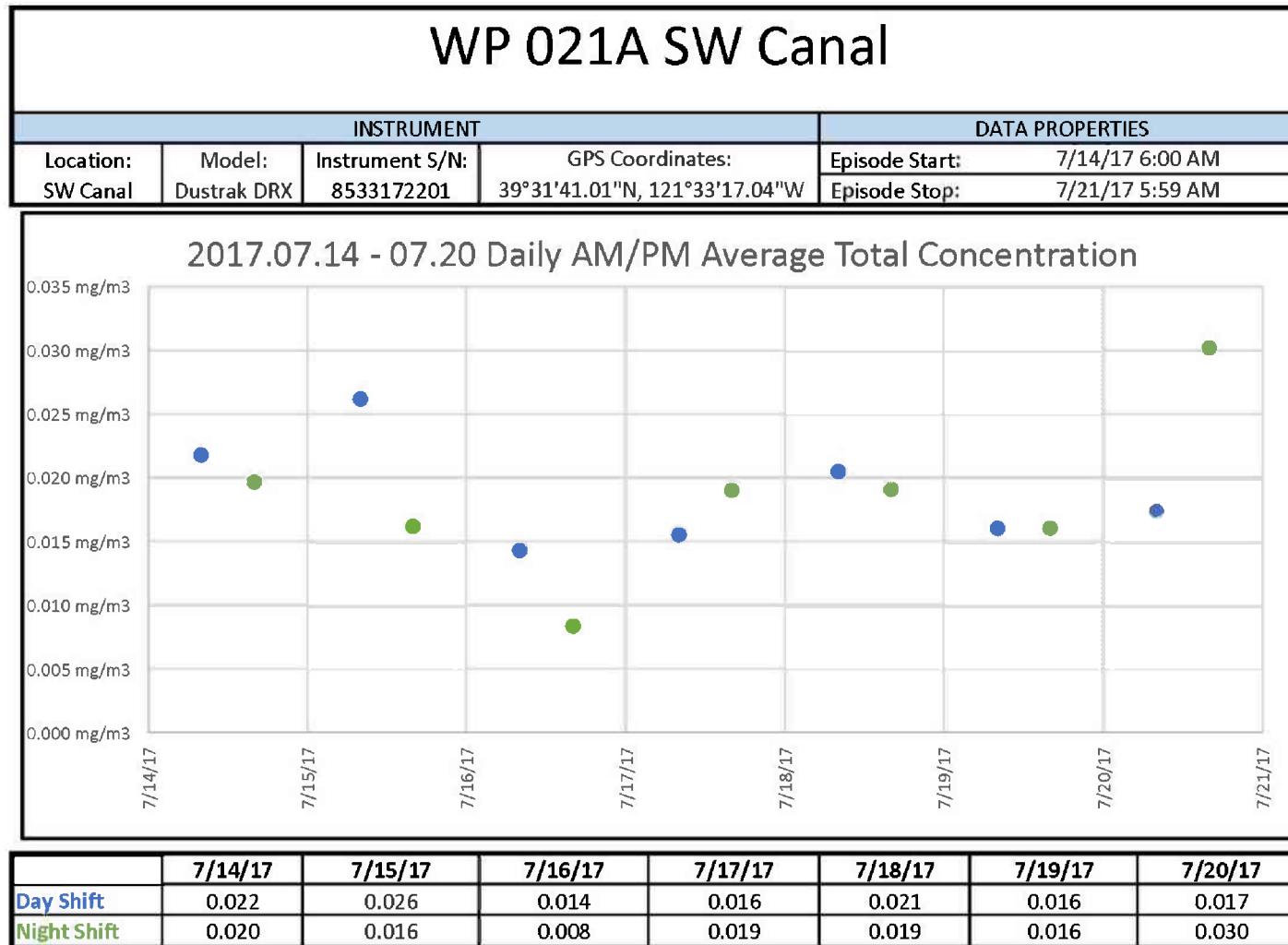
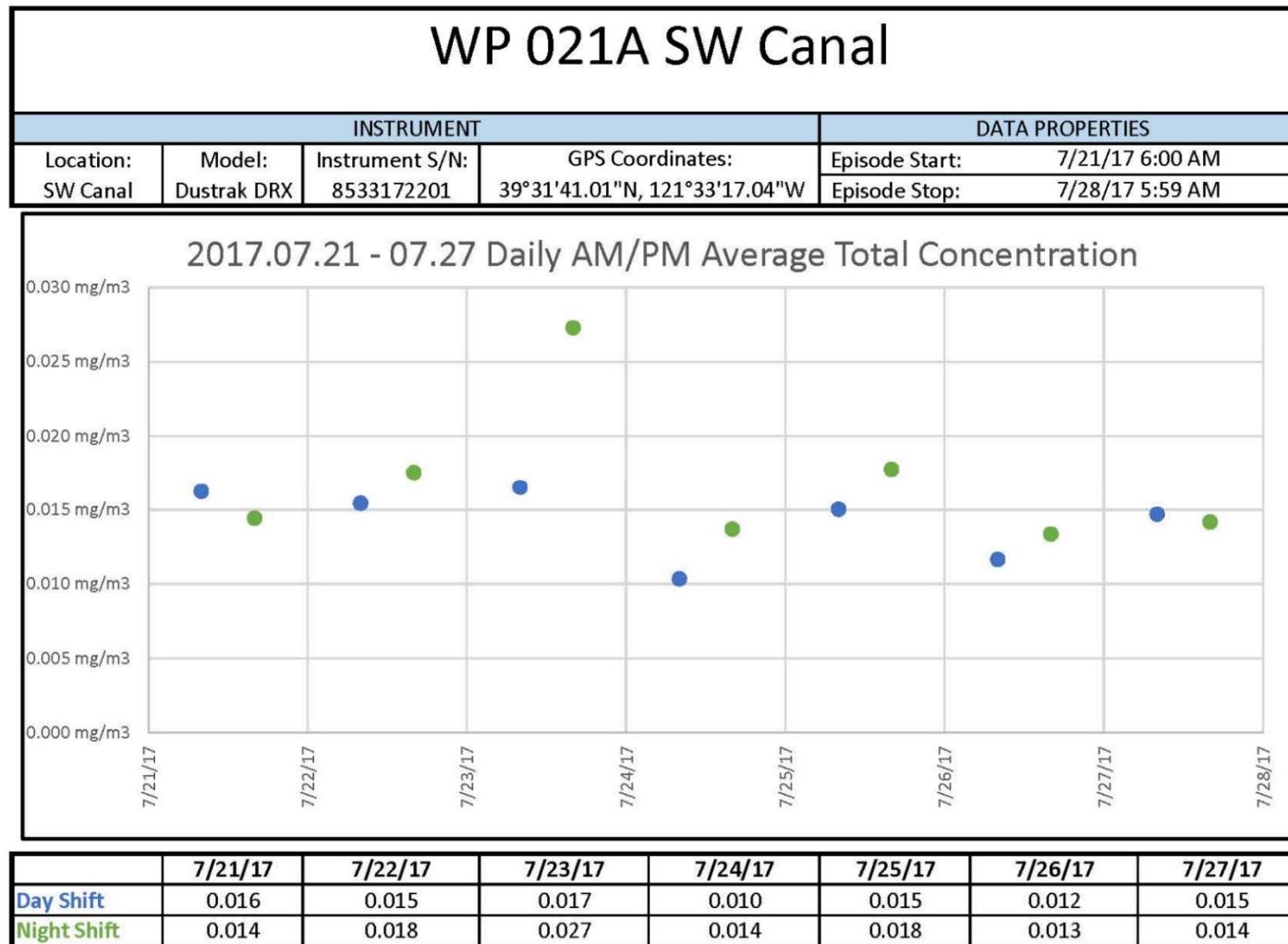


Figure 34 WP 021A SW Canal Daily Dust Average (mg/m³) 7/21-7/27



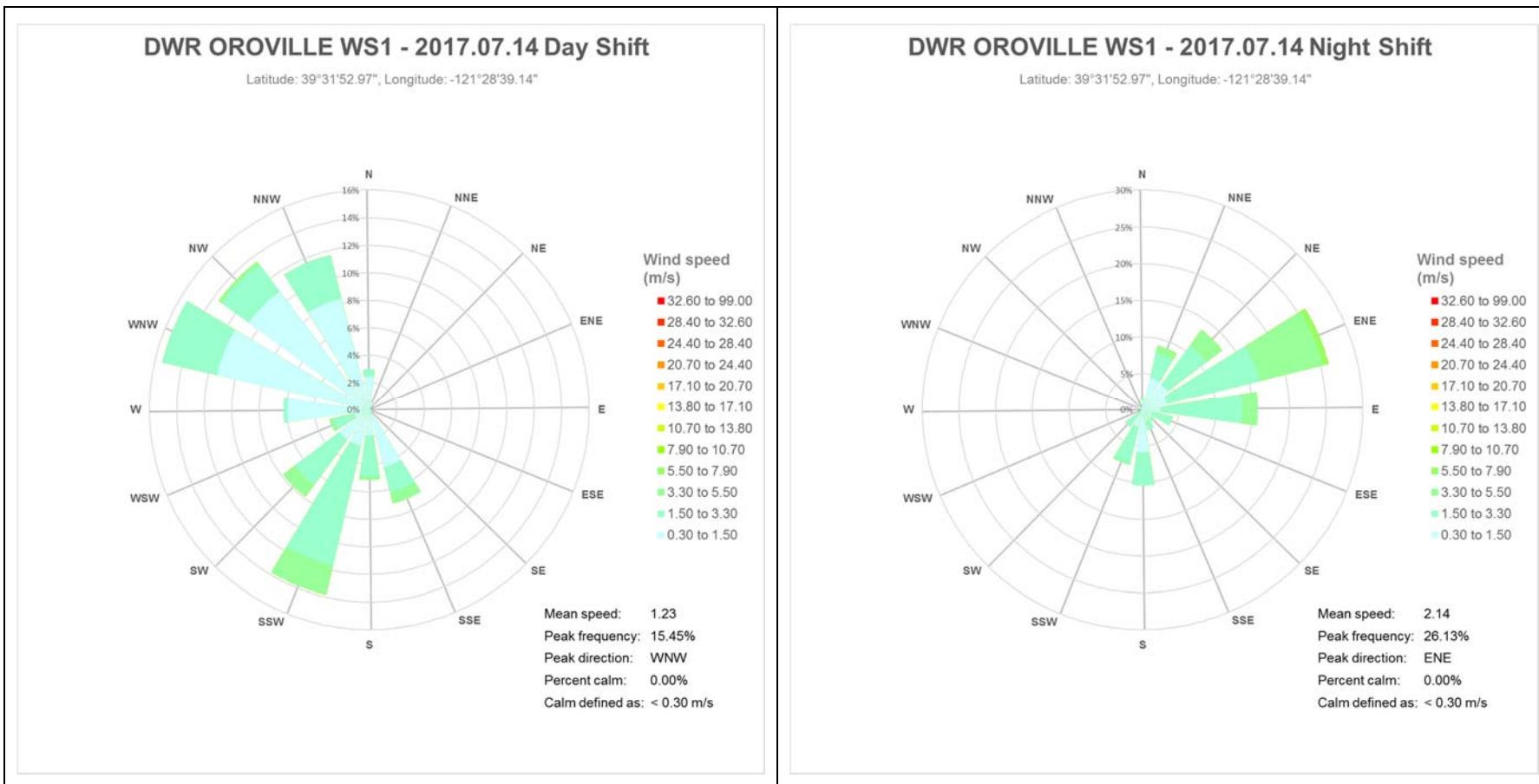
8.0 Meteorological Data & Daily Wind Rose

WS1 Weather Station is a Davis Instruments Vantage Pro2. This station is at 39°31'52.97"N 121°28'39.14"W at the Upper Overlook area.

WS2 Weather Station is a Davis Instruments Vantage Pro2. This station is at 39°31'47.96"N 121°33'6.42"W at the Diversion Dam area. This unit was activated and began transmitting data on 04/26/2017.

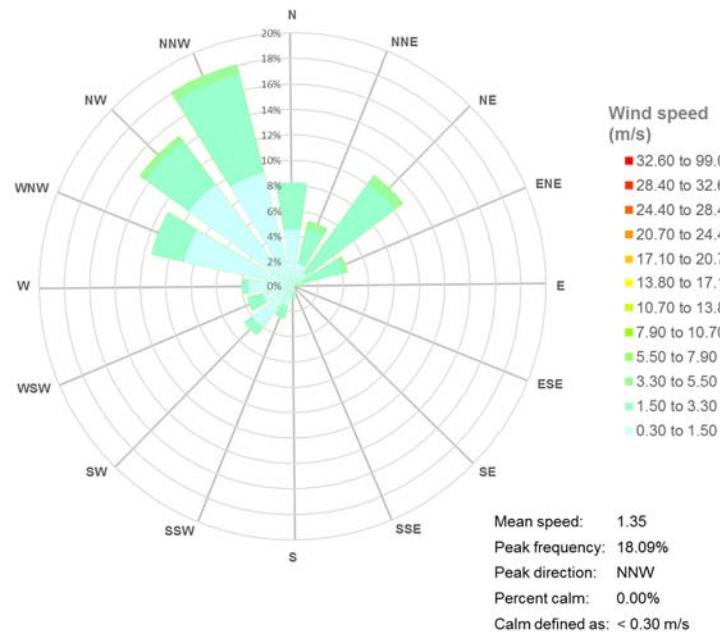
The standard Vantage Pro 2 station consists of three main components: the indoor console on which all the weather readings are displayed; the anemometer for measuring wind speed and direction; and an assembly known as the Integrated Sensor Suite (ISS for short) that contains all the other outside sensors, such as those for temperature, humidity, rainfall etc.

Figure 35 Wind Rose – Day & Night Shift Upper Overlook



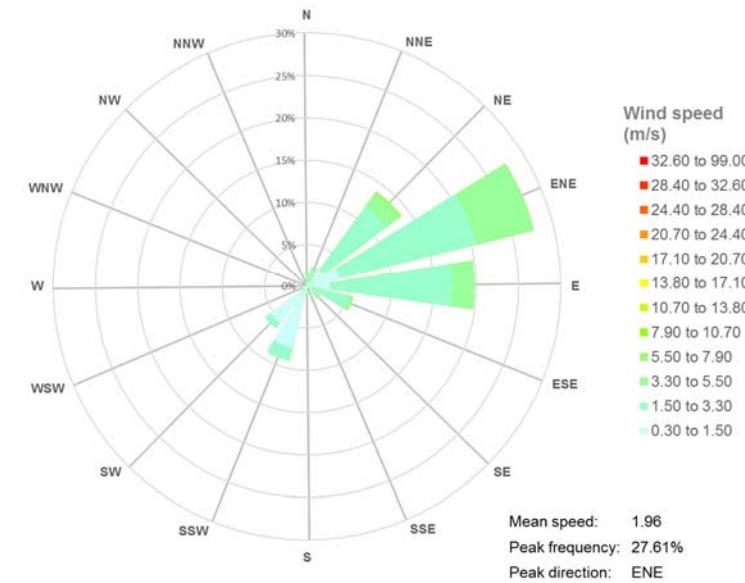
DWR OROVILLE WS1 - 2017.07.15 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



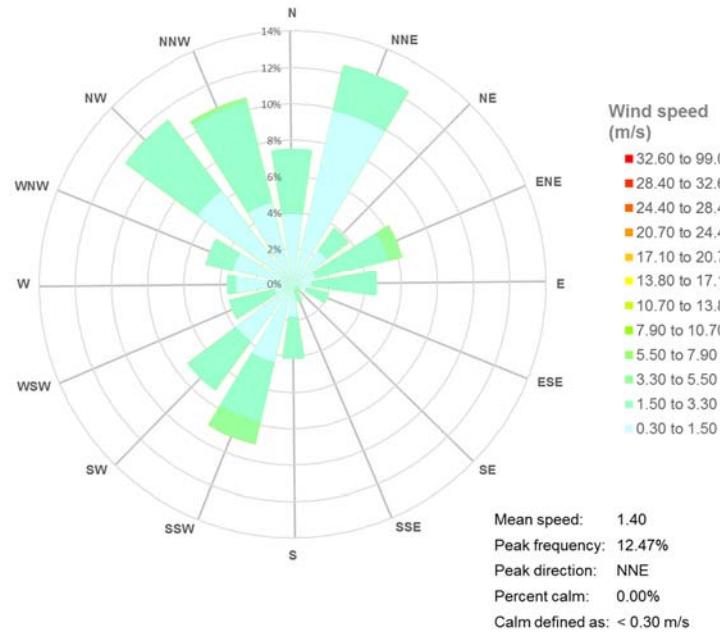
DWR OROVILLE WS1 - 2017.07.15 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



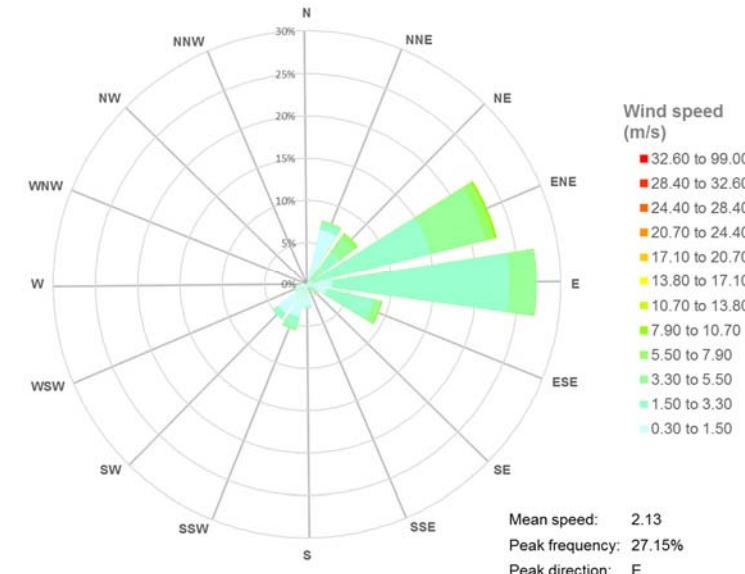
DWR OROVILLE WS1 - 2017.07.16 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



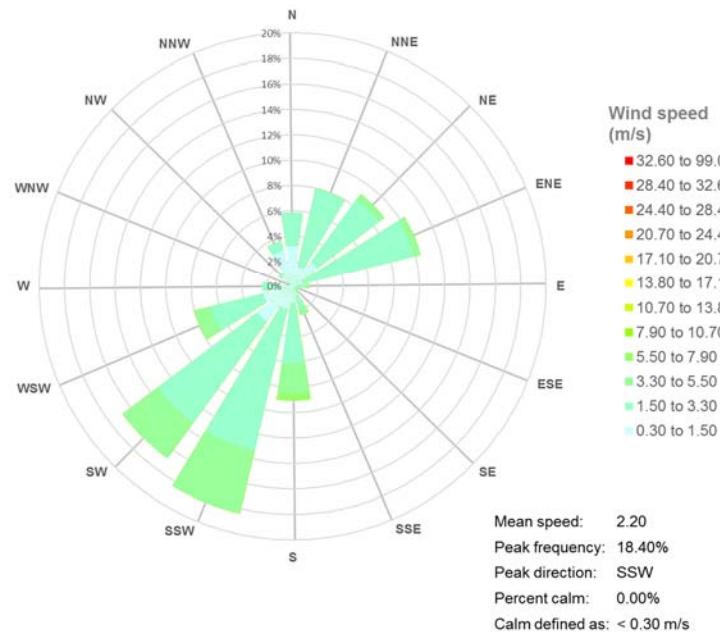
DWR OROVILLE WS1 - 2017.07.16 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



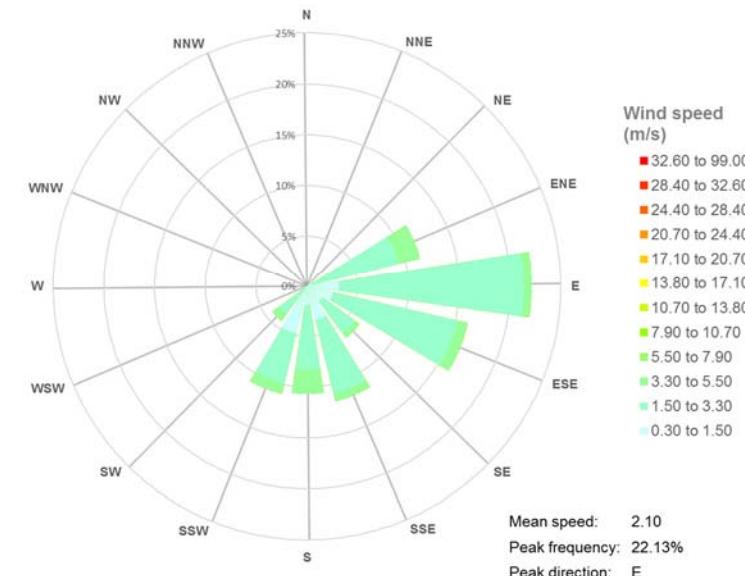
DWR OROVILLE WS1 - 2017.07.17 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



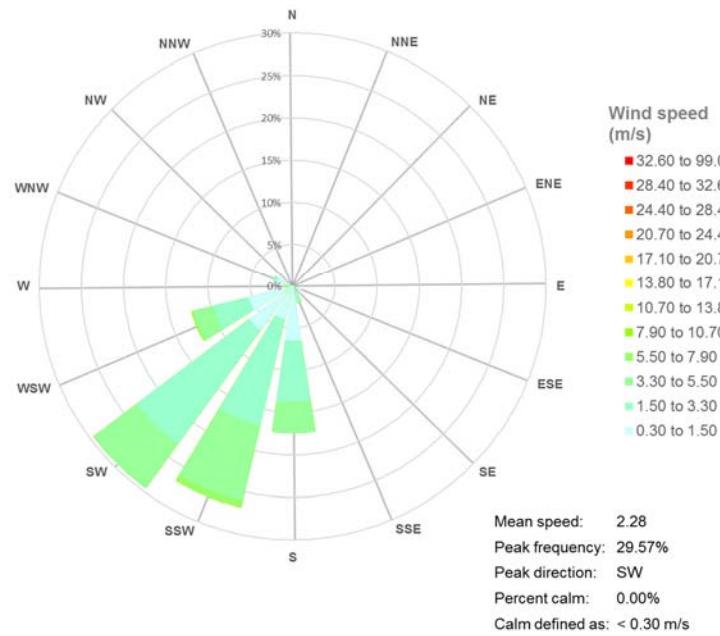
DWR OROVILLE WS1 - 2017.07.17 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



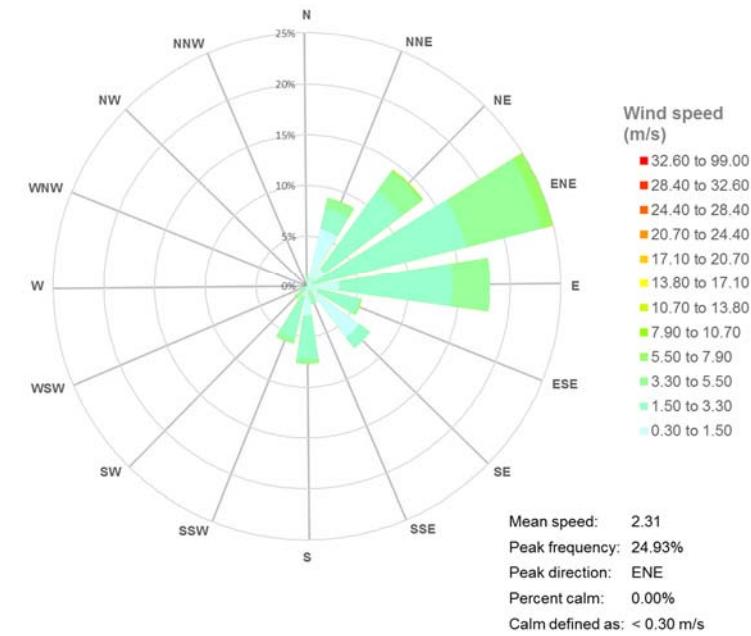
DWR OROVILLE WS1 - 2017.07.18 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



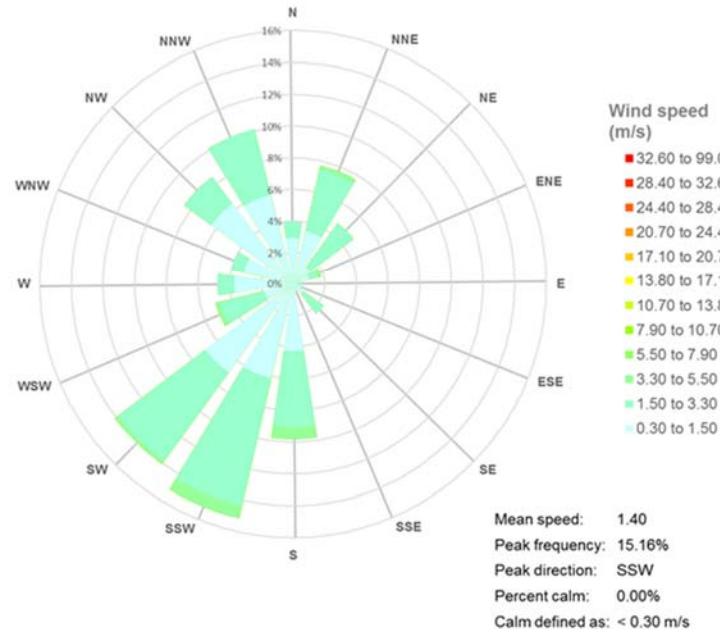
DWR OROVILLE WS1 - 2017.07.18 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



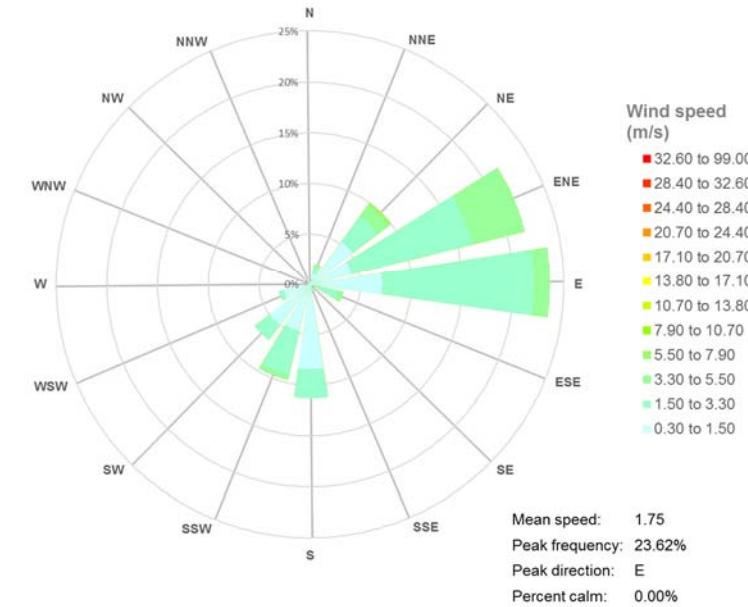
DWR OROVILLE WS1 - 2017.07.19 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



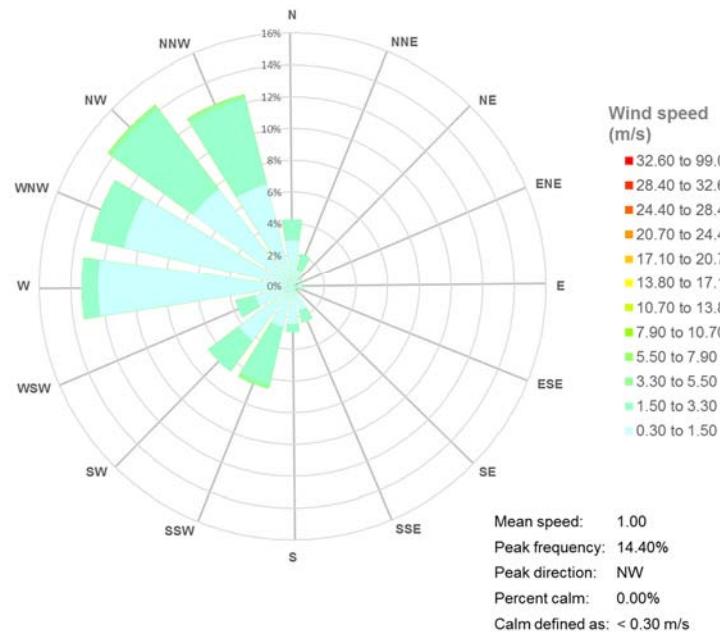
DWR OROVILLE WS1 - 2017.07.19 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



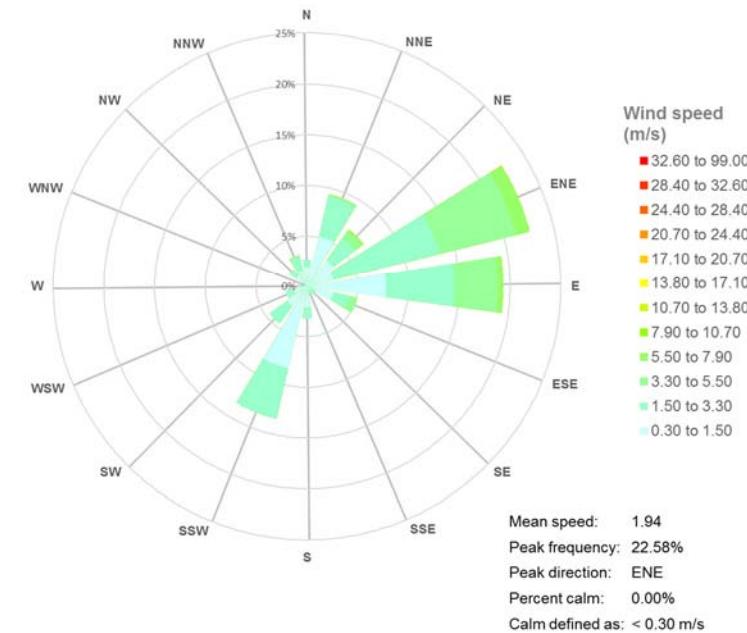
DWR OROVILLE WS1 - 2017.07.20 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



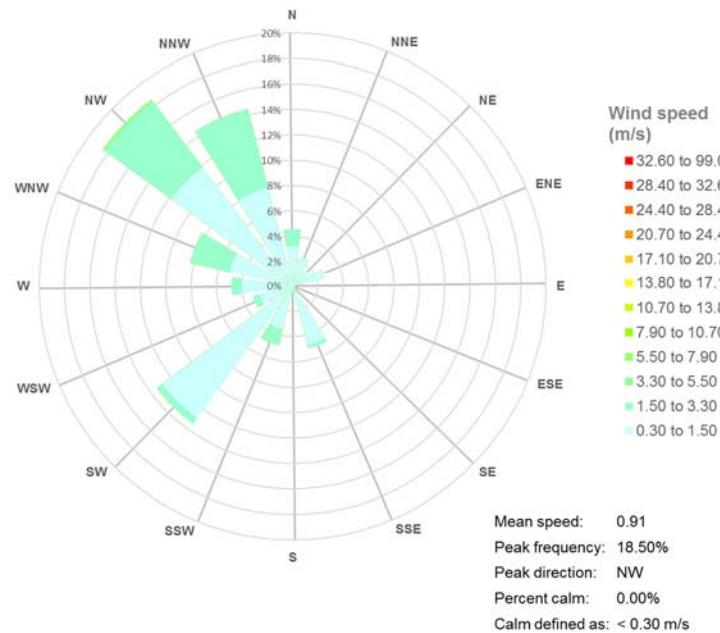
DWR OROVILLE WS1 - 2017.07.20 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



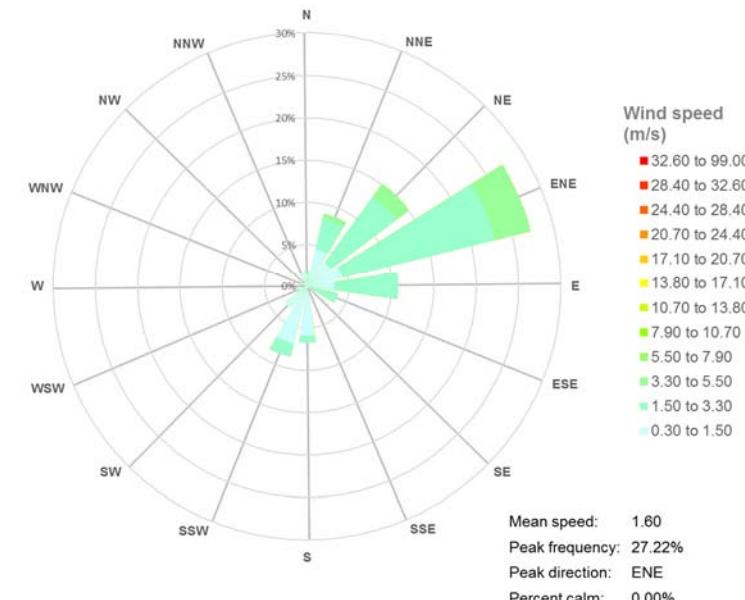
DWR OROVILLE WS1 - 2017.07.21 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



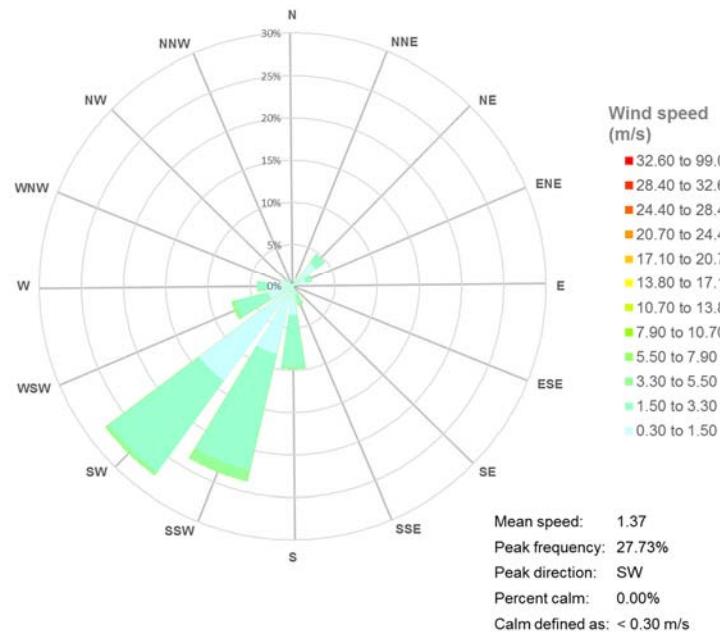
DWR OROVILLE WS1 - 2017.07.21 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



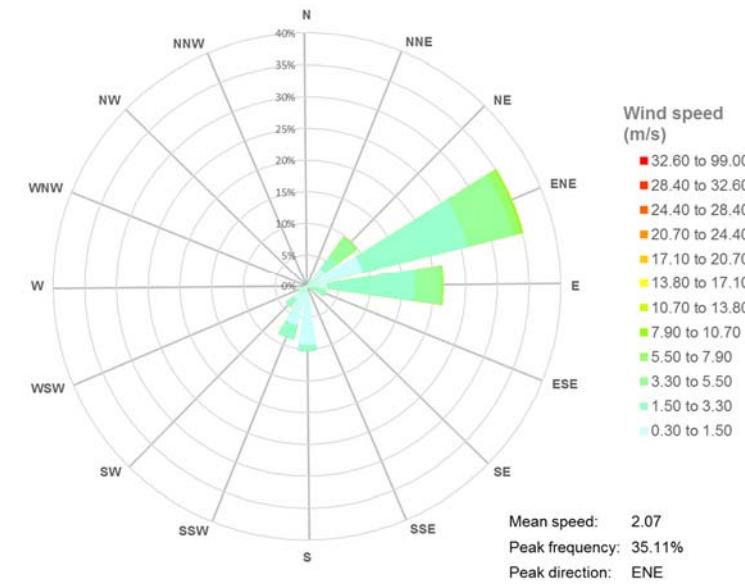
DWR OROVILLE WS1 - 2017.07.22 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



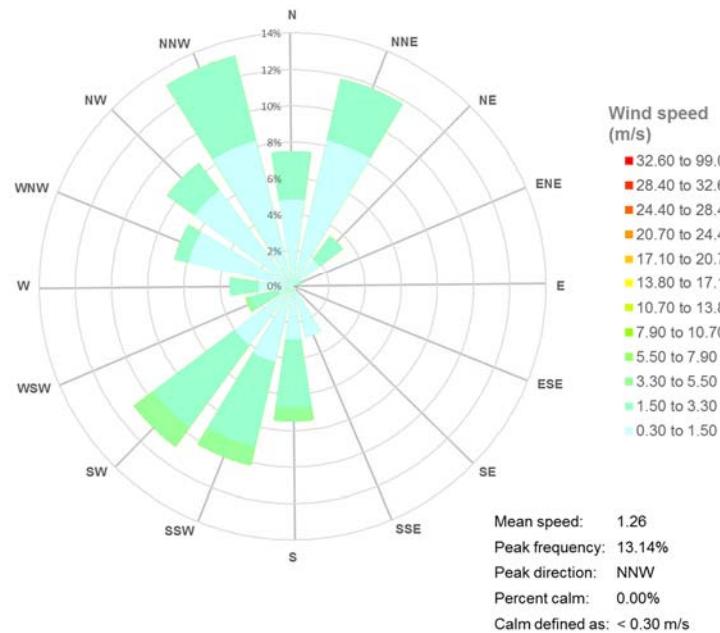
DWR OROVILLE WS1 - 2017.07.22 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



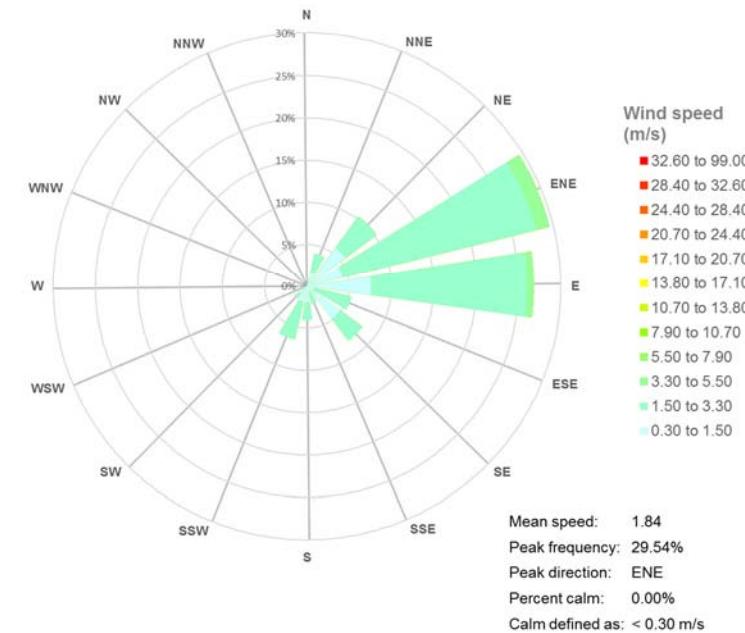
DWR OROVILLE WS1 - 2017.07.23 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



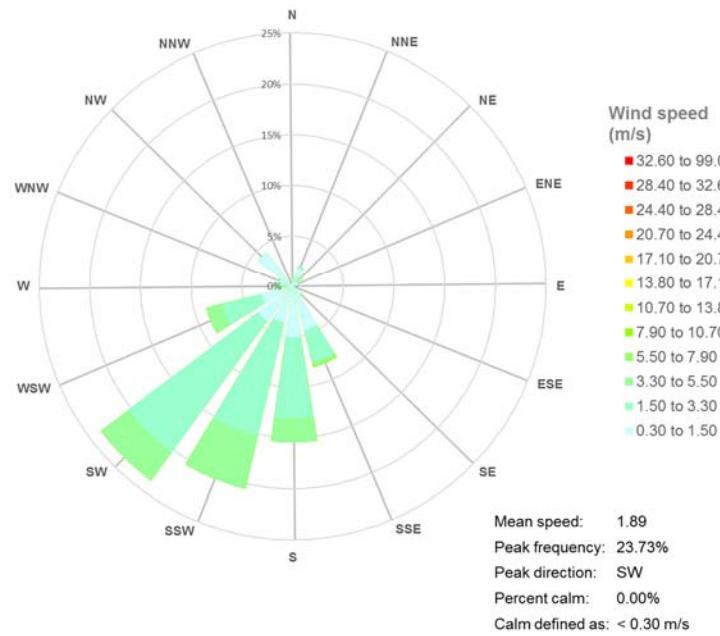
DWR OROVILLE WS1 - 2017.07.23 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



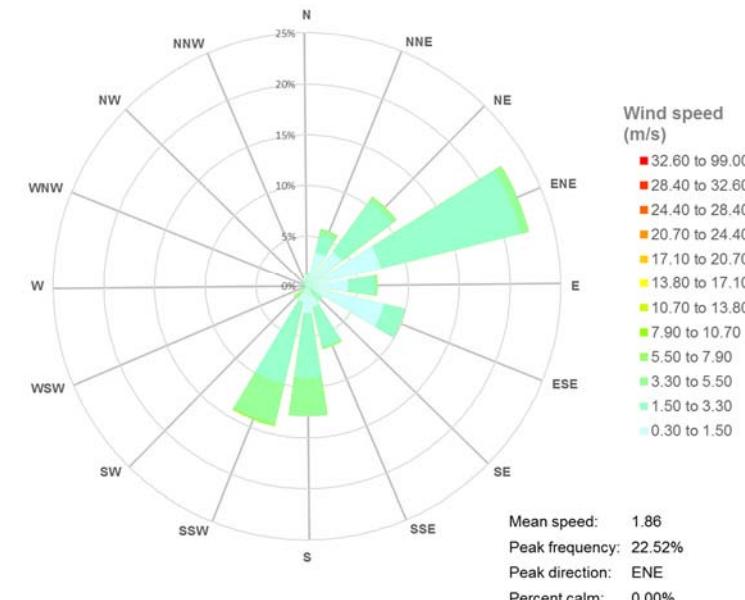
DWR OROVILLE WS1 - 2017.07.24 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



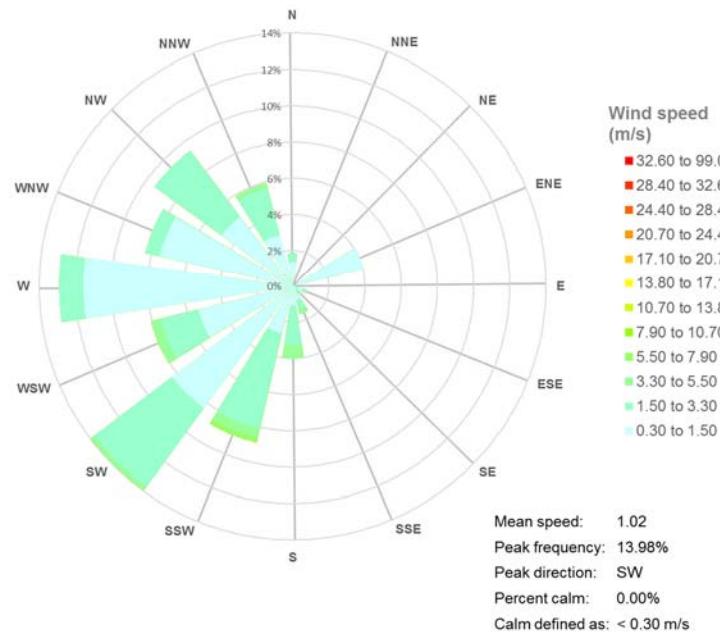
DWR OROVILLE WS1 - 2017.07.24 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



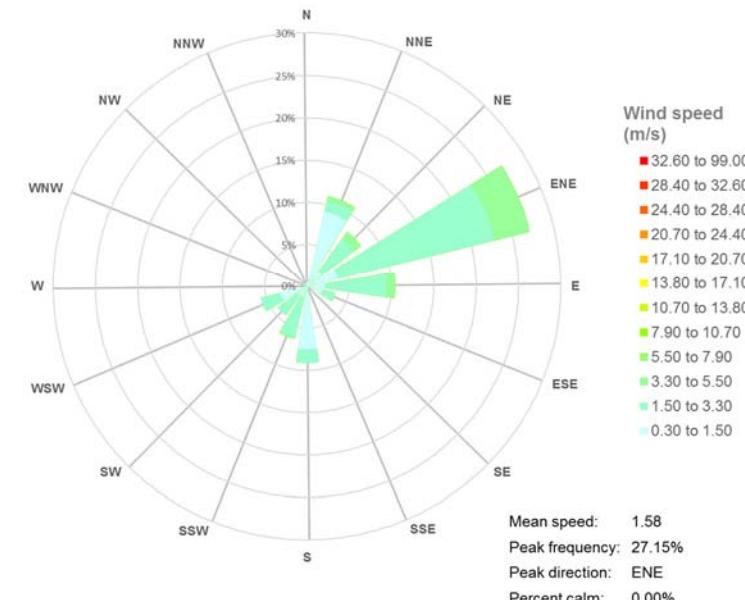
DWR OROVILLE WS1 - 2017.07.25 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



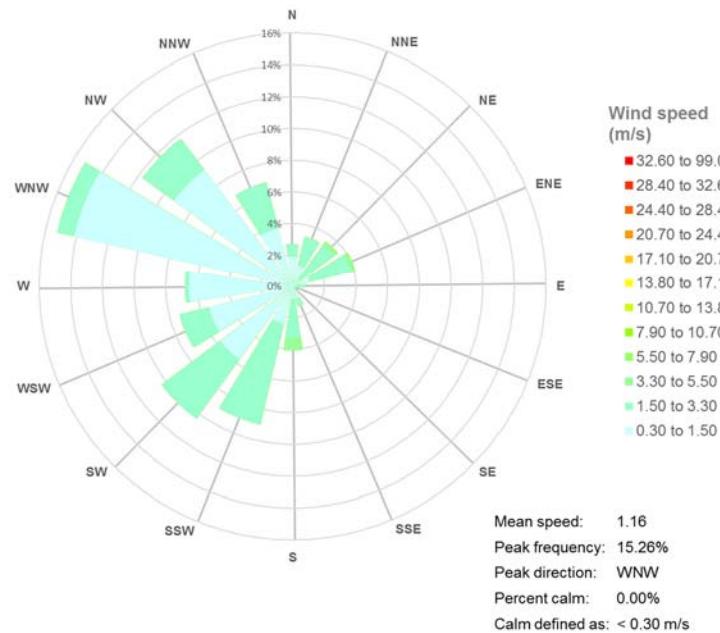
DWR OROVILLE WS1 - 2017.07.25 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



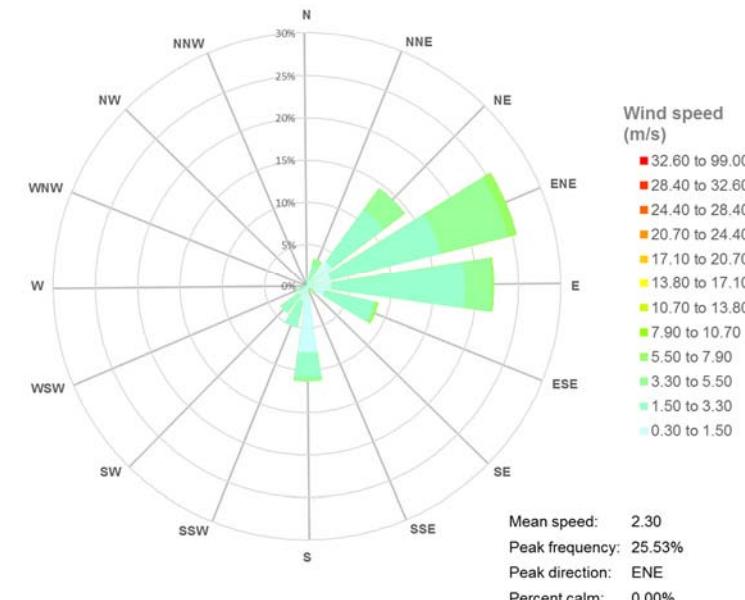
DWR OROVILLE WS1 - 2017.07.26 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



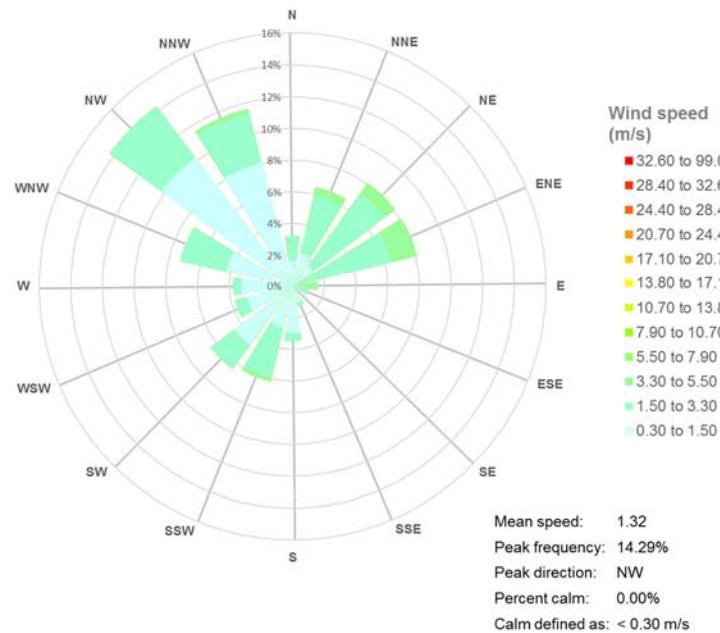
DWR OROVILLE WS1 - 2017.07.26 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



DWR OROVILLE WS1 - 2017.07.27 Day Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"



DWR OROVILLE WS1 - 2017.07.27 Night Shift

Latitude: 39°31'52.97", Longitude: -121°28'39.14"

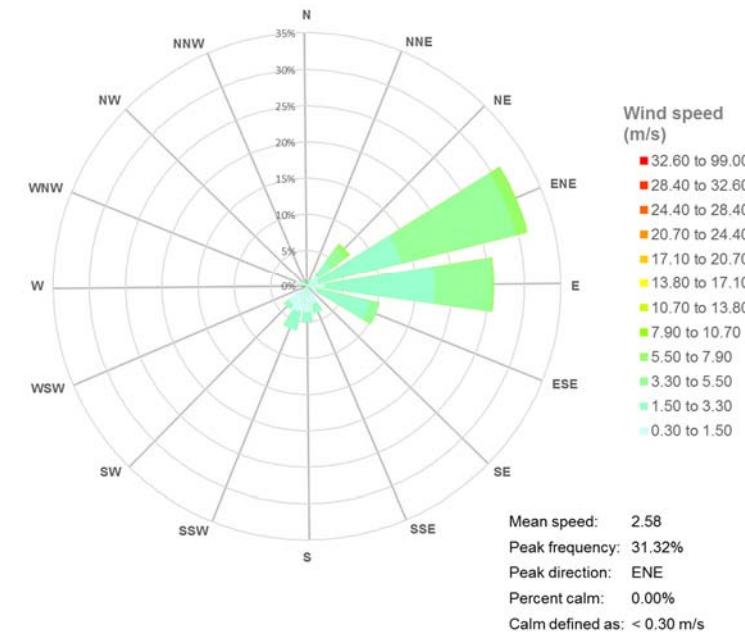
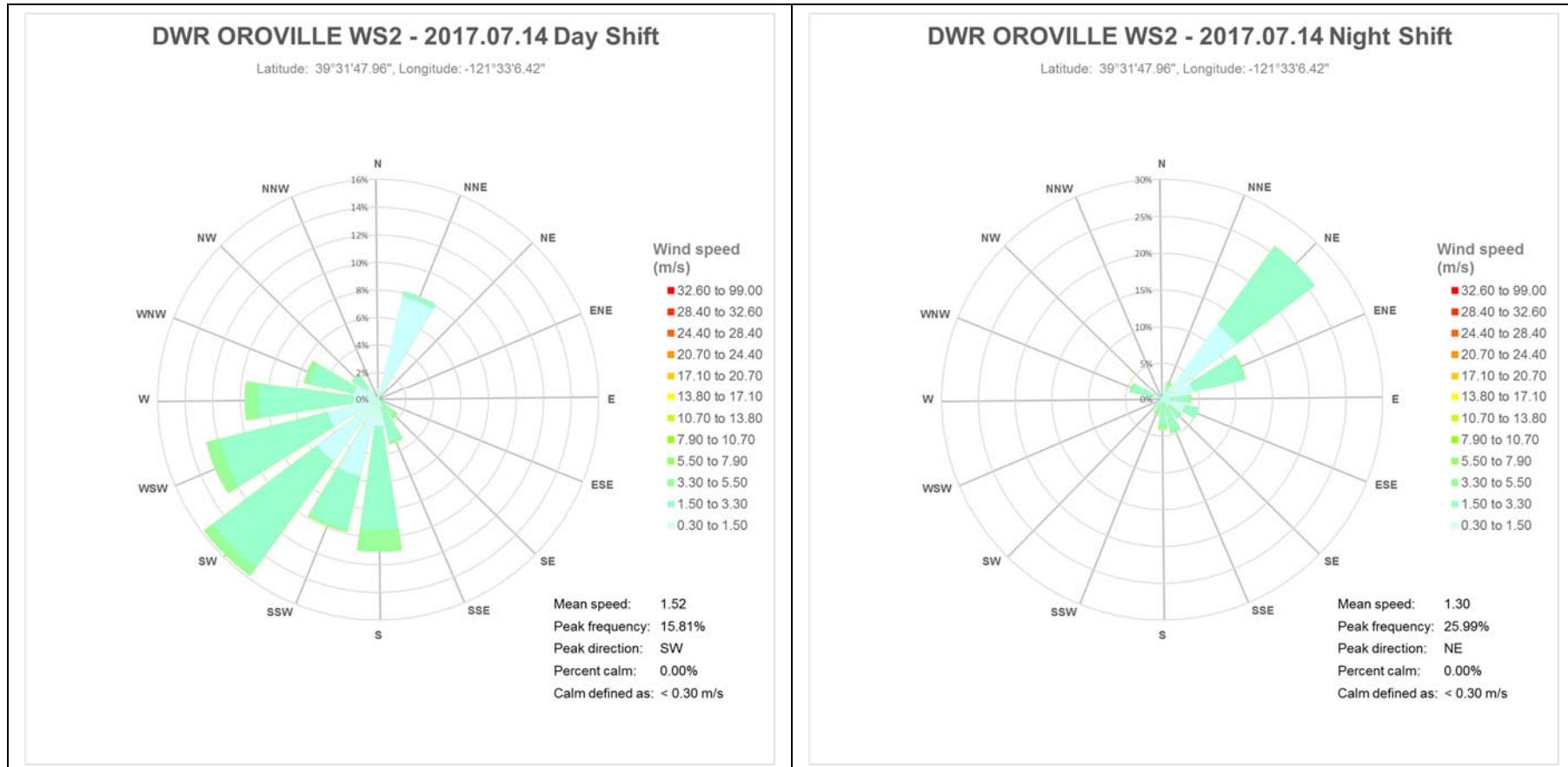
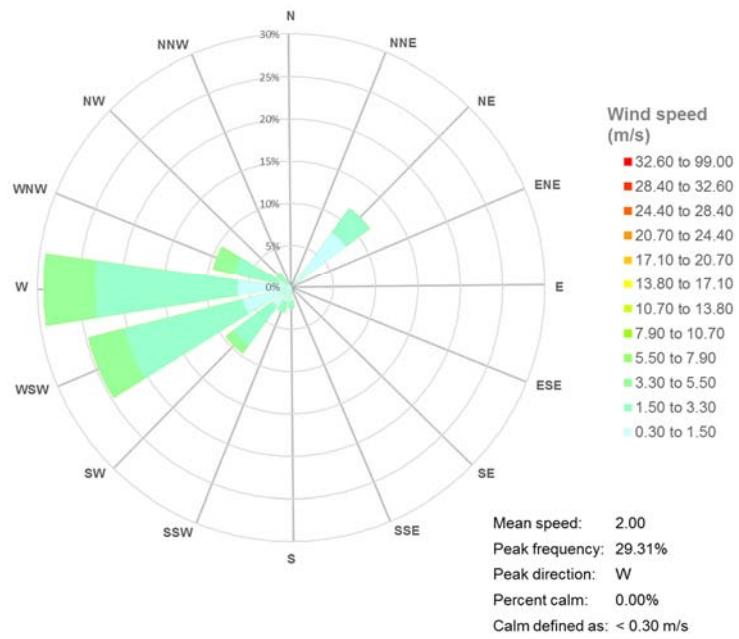


Figure 36 Wind Rose – Day & Night Shift Diversion Dam



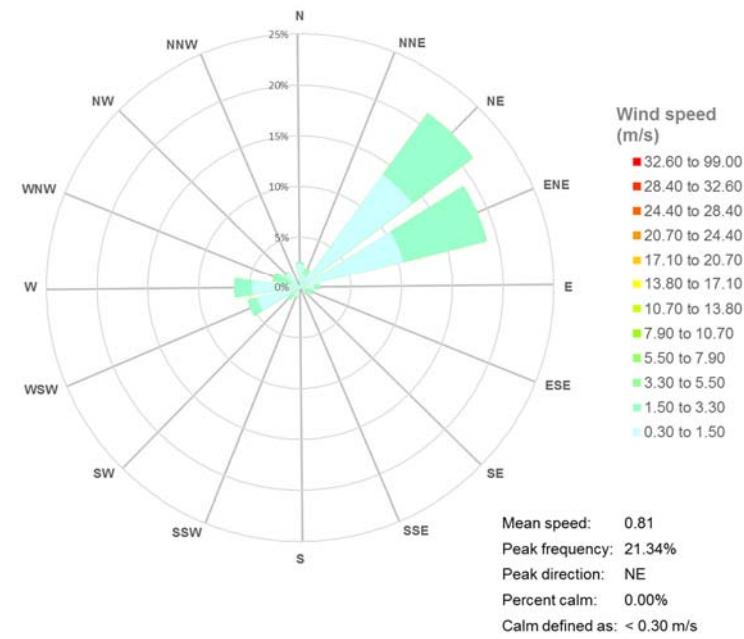
DWR OROVILLE WS2 - 2017.07.15 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



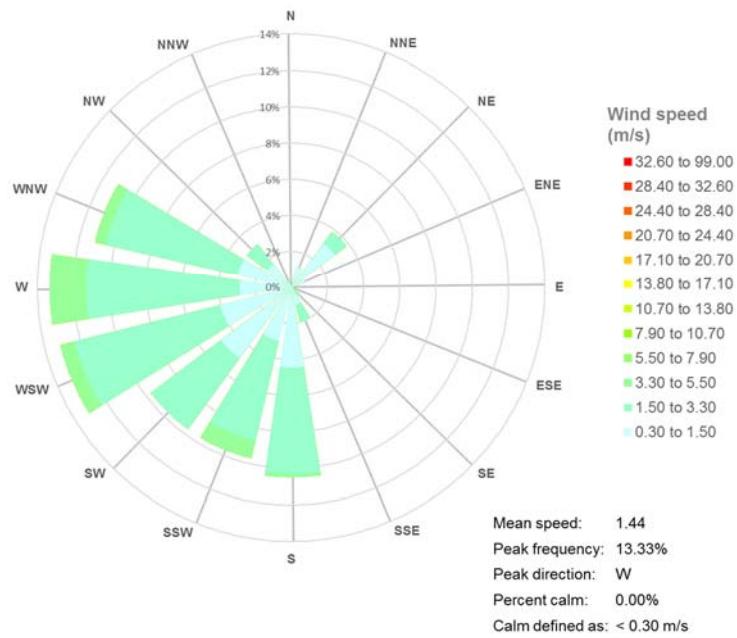
DWR OROVILLE WS2 - 2017.07.15 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



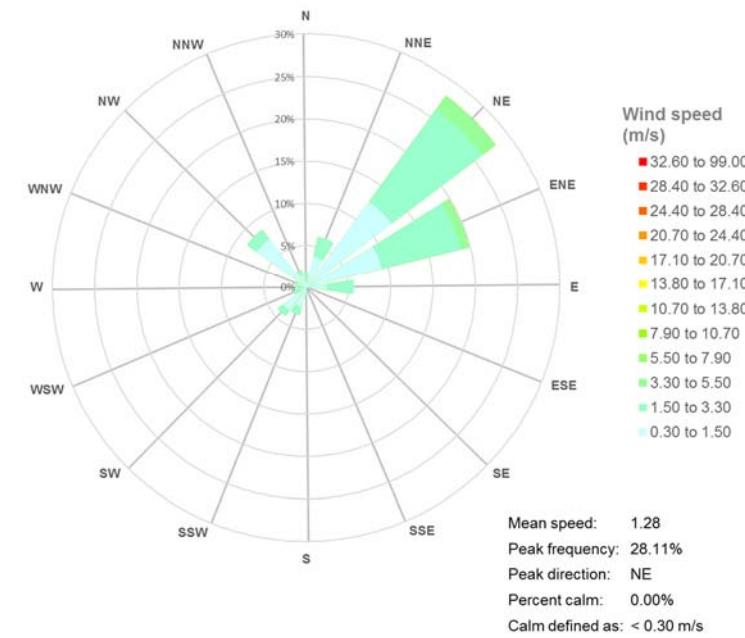
DWR OROVILLE WS2 - 2017.07.16 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



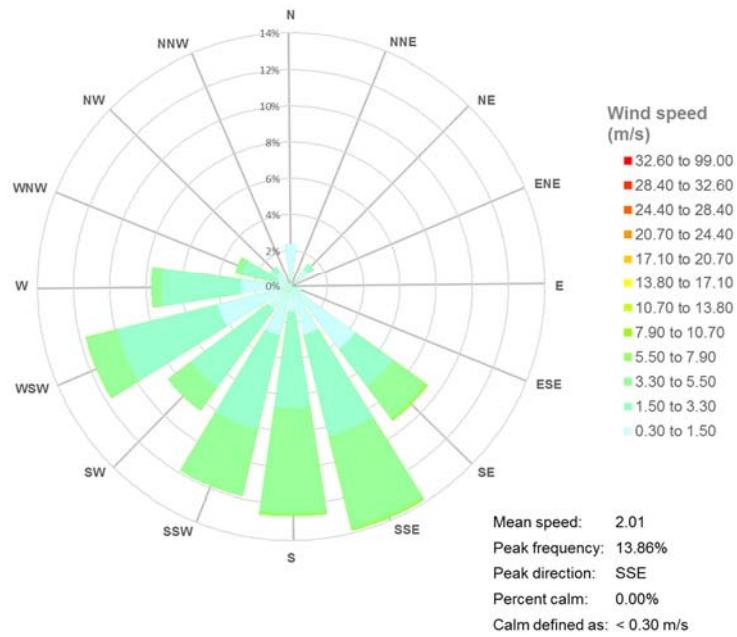
DWR OROVILLE WS2 - 2017.07.16 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



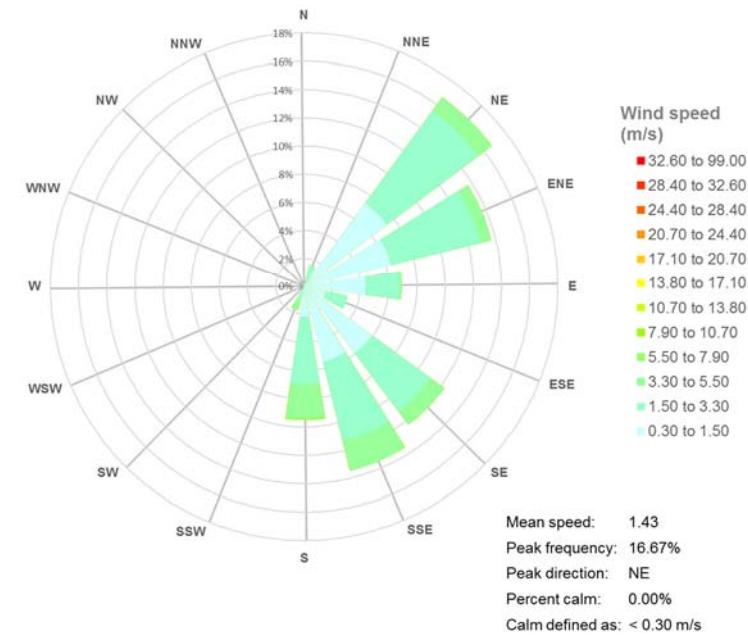
DWR OROVILLE WS2 - 2017.07.17 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



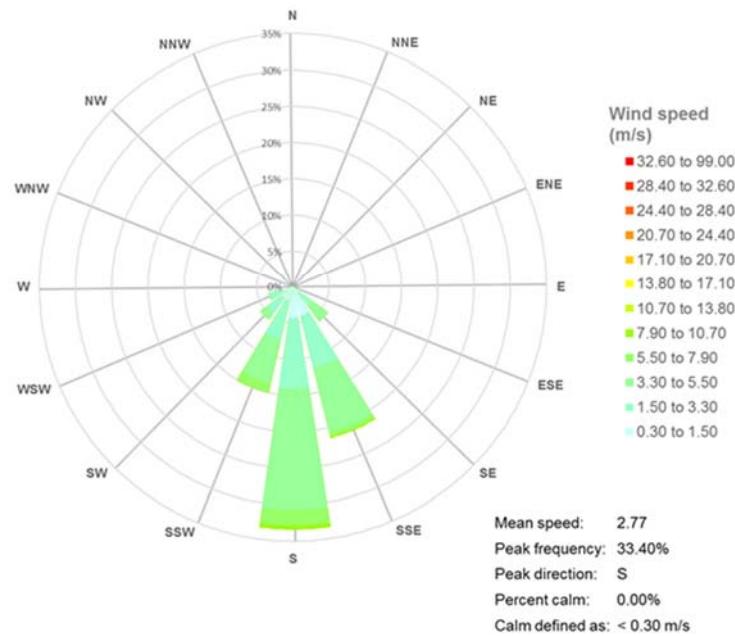
DWR OROVILLE WS2 - 2017.07.17 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



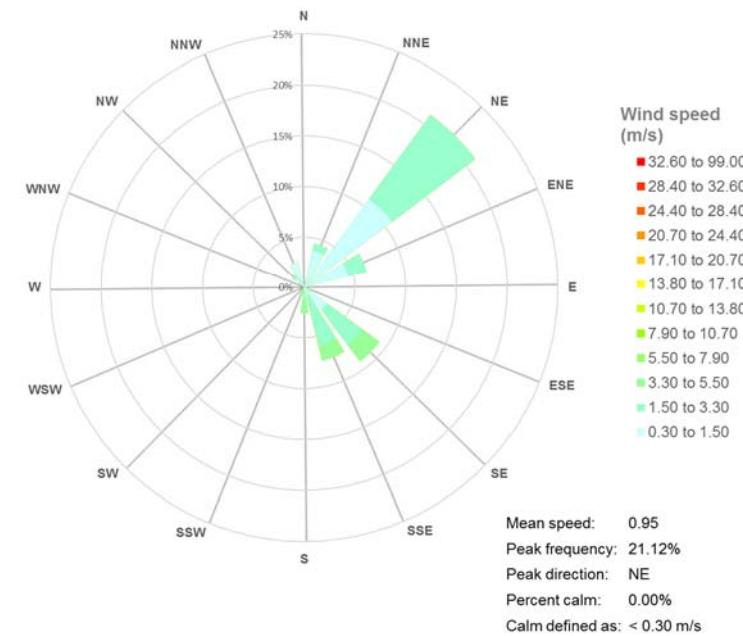
DWR OROVILLE WS2 - 2017.07.18 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



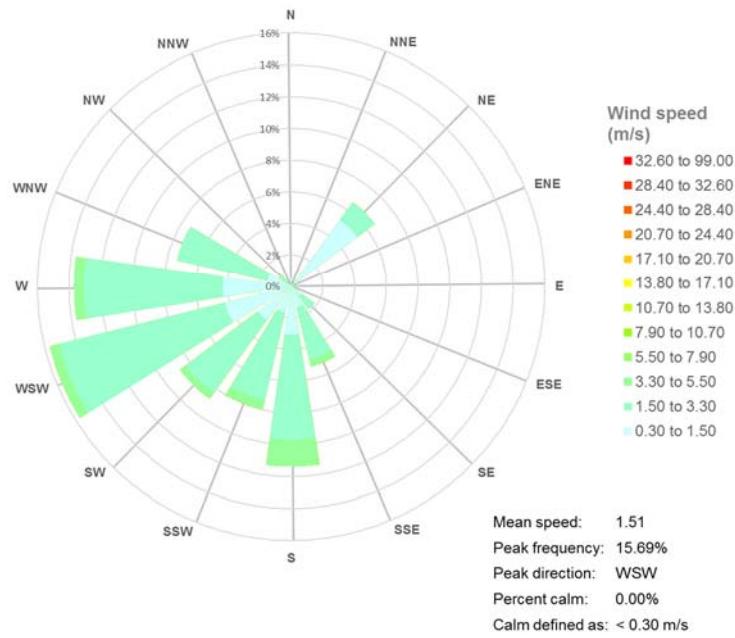
DWR OROVILLE WS2 - 2017.07.18 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



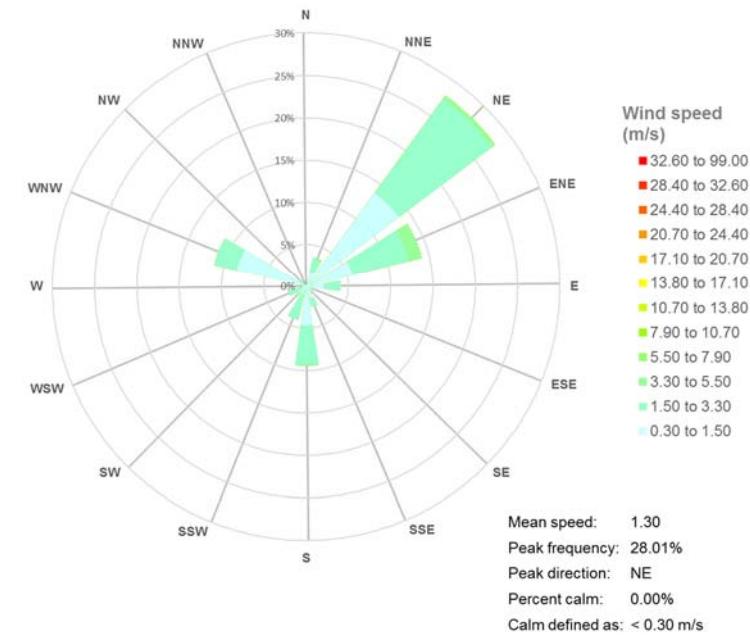
DWR OROVILLE WS2 - 2017.07.19 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



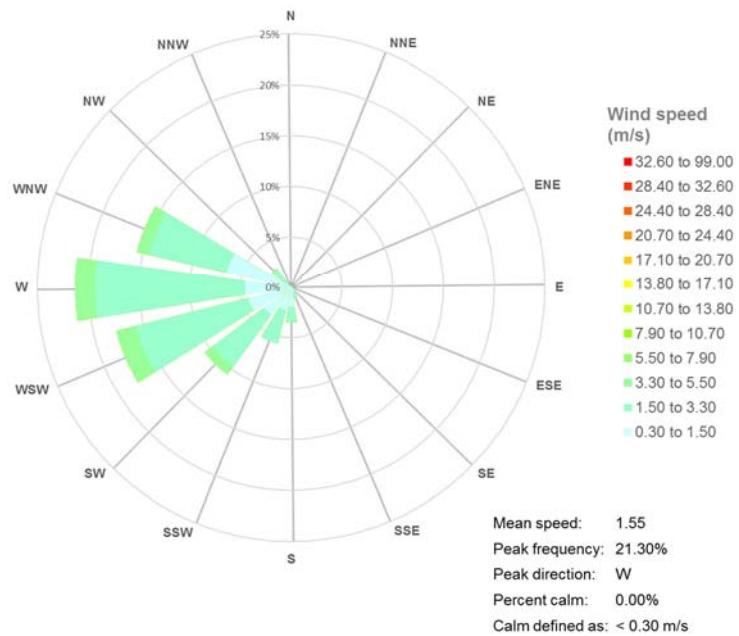
DWR OROVILLE WS2 - 2017.07.19 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



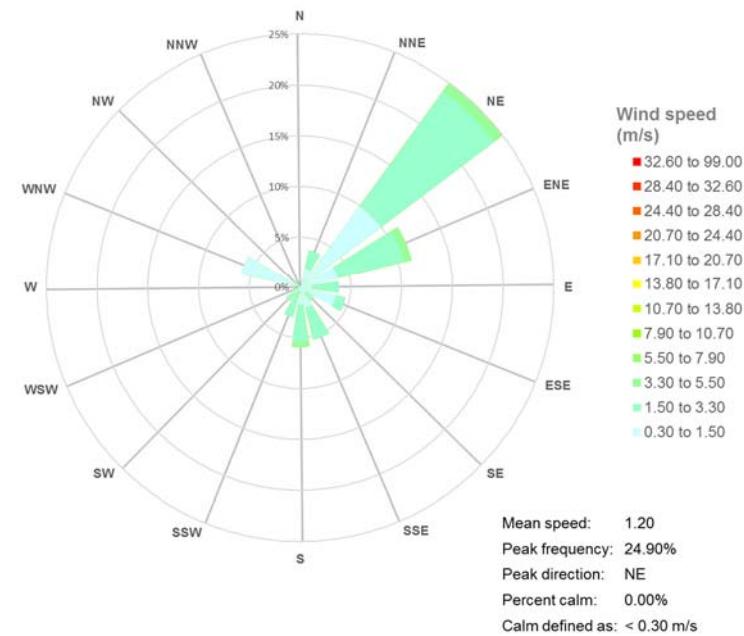
DWR OROVILLE WS2 - 2017.07.20 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



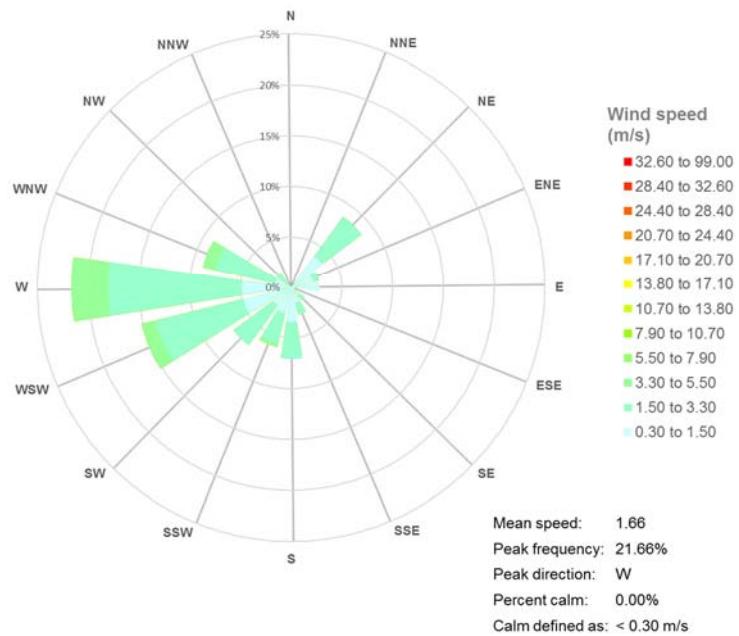
DWR OROVILLE WS2 - 2017.07.20 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



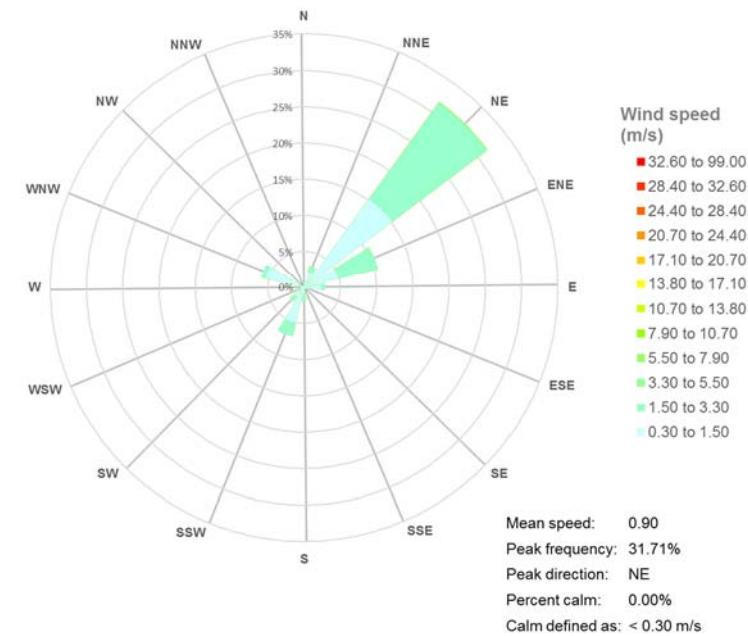
DWR OROVILLE WS2 - 2017.07.21 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



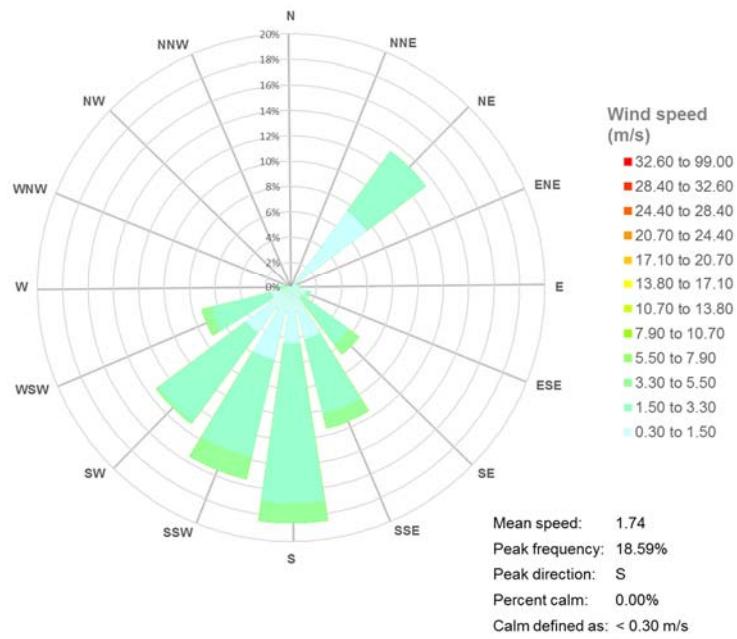
DWR OROVILLE WS2 - 2017.07.21 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



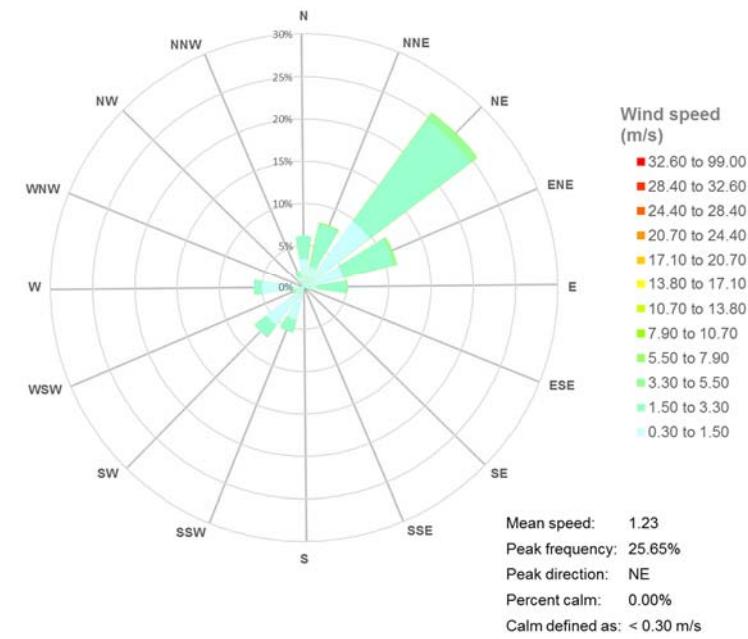
DWR OROVILLE WS2 - 2017.07.22 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



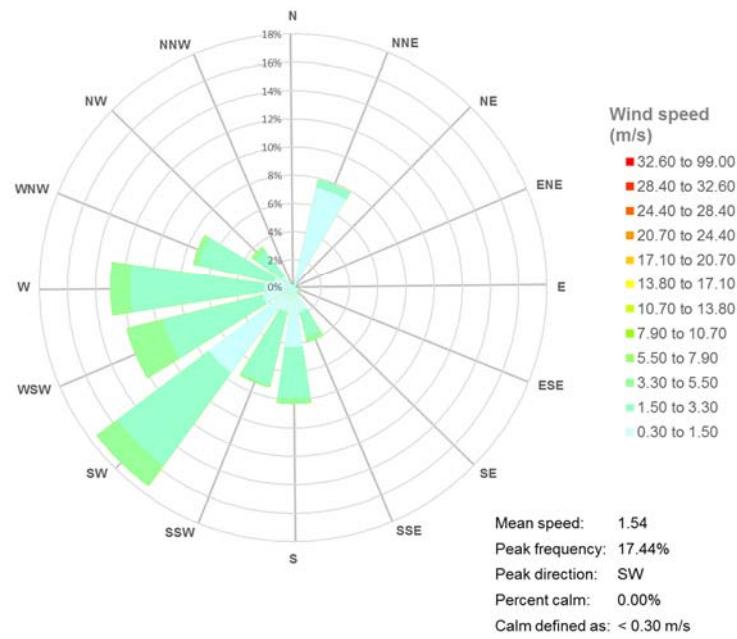
DWR OROVILLE WS2 - 2017.07.22 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



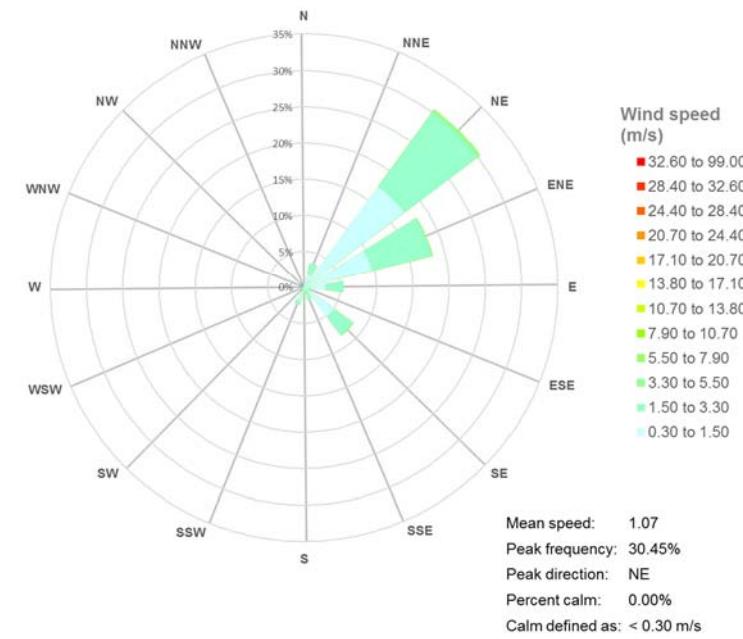
DWR OROVILLE WS2 - 2017.07.23 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



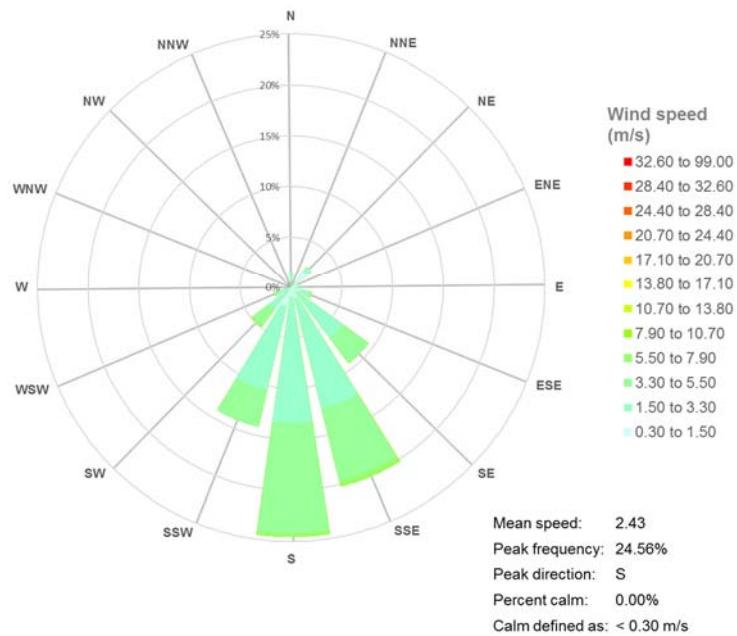
DWR OROVILLE WS2 - 2017.07.23 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



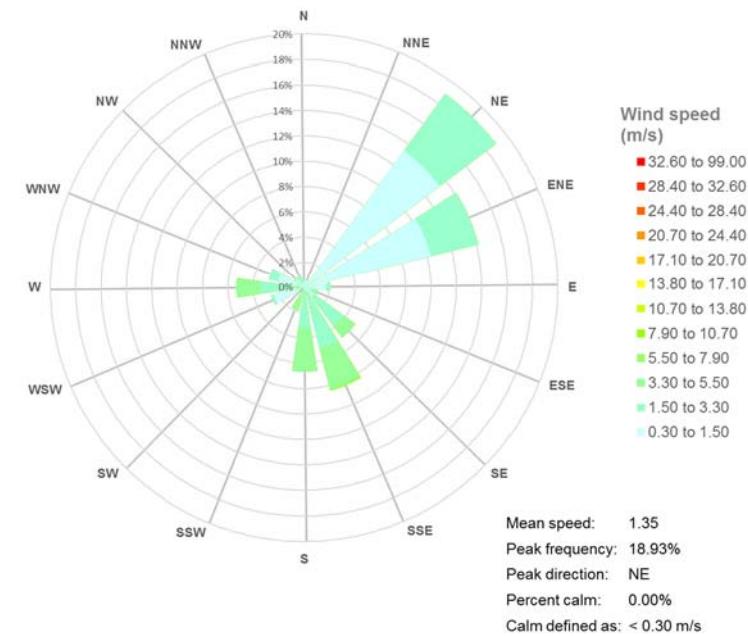
DWR OROVILLE WS2 - 2017.07.24 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



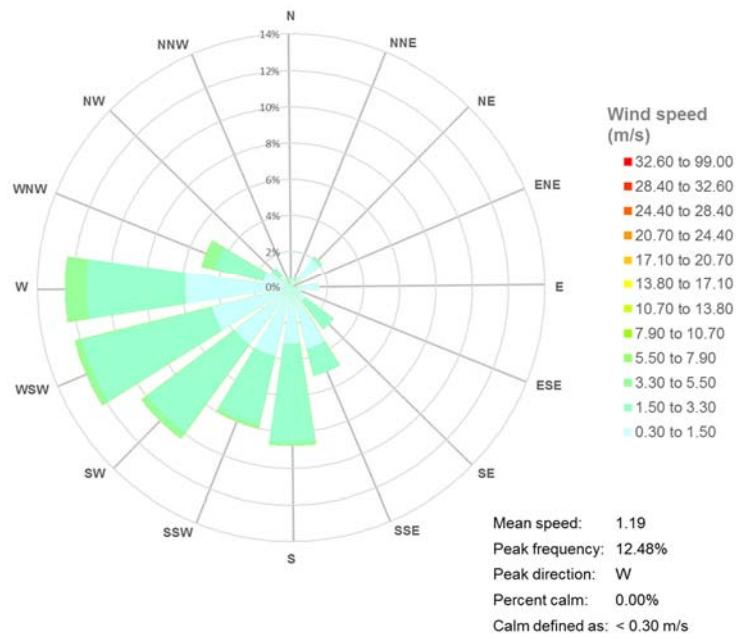
DWR OROVILLE WS2 - 2017.07.24 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



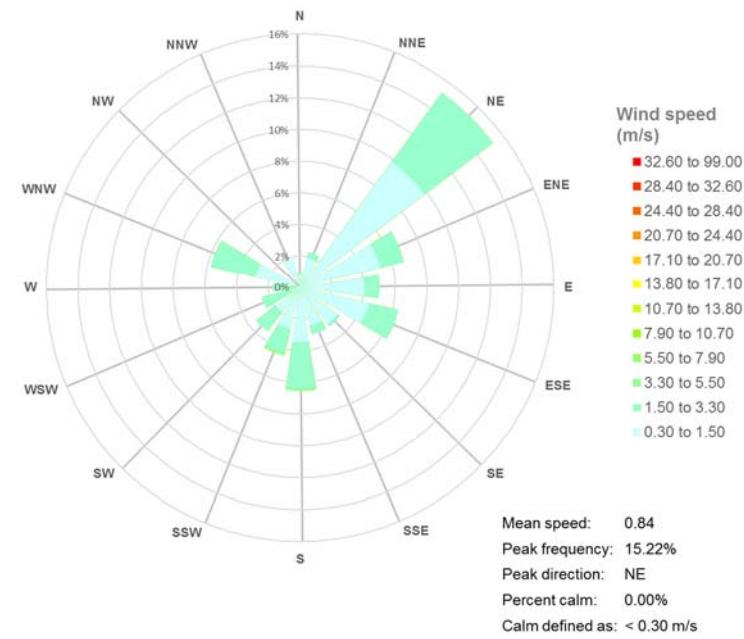
DWR OROVILLE WS2 - 2017.07.25 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



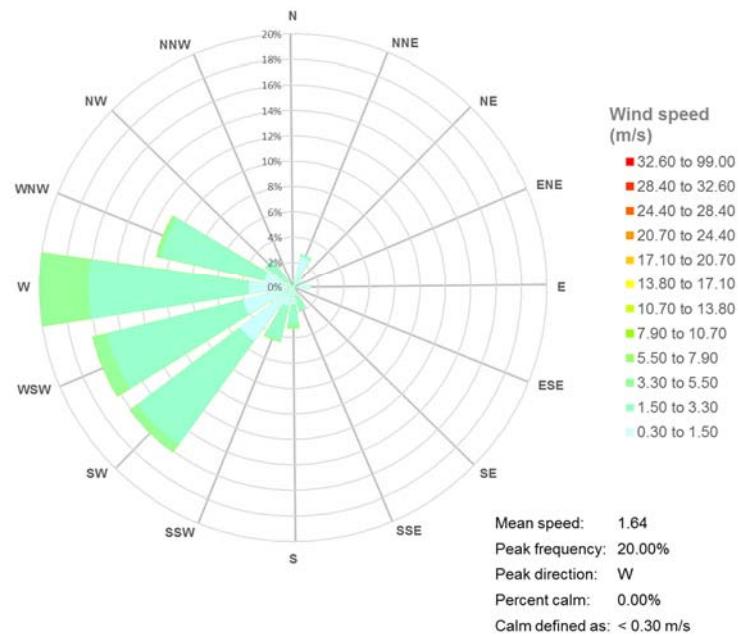
DWR OROVILLE WS2 - 2017.07.25 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



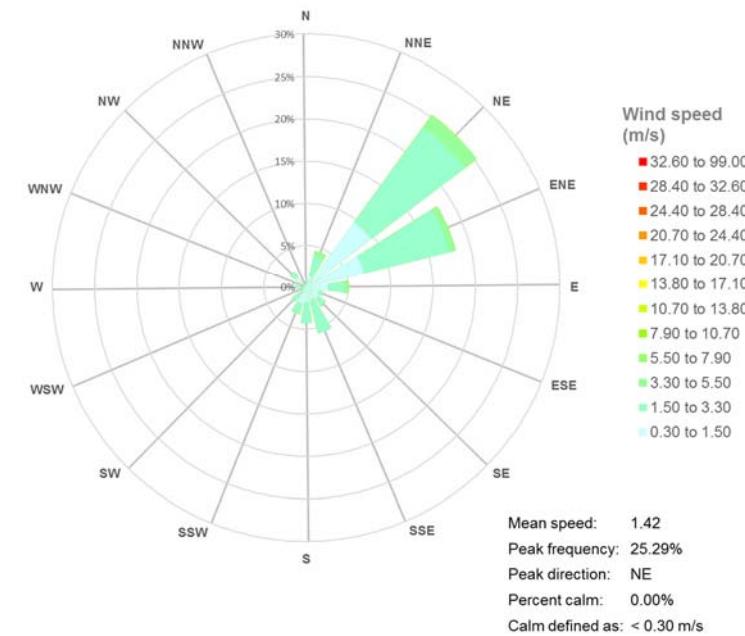
DWR OROVILLE WS2 - 2017.07.26 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



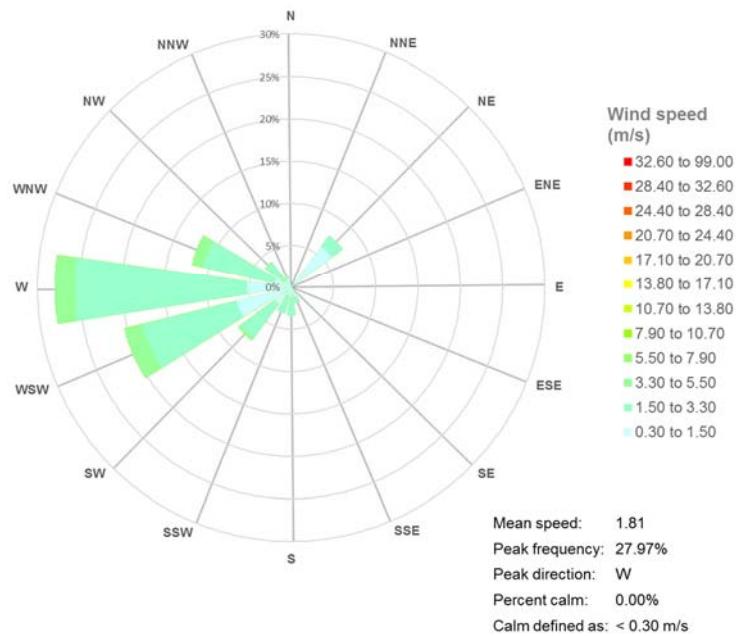
DWR OROVILLE WS2 - 2017.07.26 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



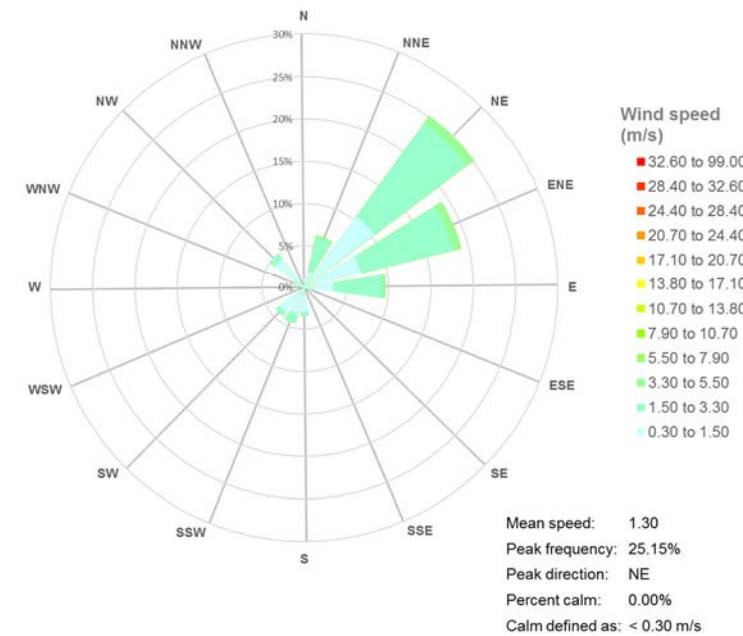
DWR OROVILLE WS2 - 2017.07.27 Day Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



DWR OROVILLE WS2 - 2017.07.27 Night Shift

Latitude: 39°31'47.96", Longitude: -121°33'6.42"



9.0 Weather Pattern Events

Table 31 Weather Pattern Events July 14 – July 27, 2017

2017	Temp. (°F)			Dew Point (°F)			Humidity (%)			Sea Level Press. (in)			Visibility (mi)			Wind (mph)			Precip. (in)	Events
	July	high	avg	low	high	avg	low	high	avg	low	high	avg	low	high	avg	high	sum			
14	99	84	68	60	55	48	68	41	19	30.01	29.96	29.91	10	10	10	9	4	-	0.00	
15	102	86	69	64	57	36	68	42	10	30.01	29.95	29.88	10	10	10	8	4	-	0.00	
16	106	89	72	61	53	29	64	35	7	29.91	29.85	29.76	10	10	10	9	3	-	0.00	
17	102	86	73	61	54	49	62	33	19	29.84	29.80	29.76	10	10	10	13	5	17	0.00	
18	96	82	69	51	42	24	49	27	8	29.96	29.91	29.82	10	10	10	16	9	25	0.00	
19	97	79	61	51	45	24	70	35	8	29.99	29.94	29.87	10	10	10	8	3	-	0.00	
20	96	80	64	55	51	39	65	39	15	30.02	29.96	29.89	10	10	10	8	5	-	0.00	
21	97	82	68	64	56	49	61	43	20	29.98	29.91	29.84	10	10	10	7	4	-	0.00	
22	99	84	69	62	58	49	75	43	19	29.91	29.85	29.78	10	10	10	9	5	-	0.00	
23	100	86	72	63	57	43	73	38	14	29.84	29.78	29.70	10	10	10	10	6	-	0.00	
24	98	84	71	55	50	44	57	33	16	29.85	29.78	29.74	10	10	10	13	7	17	0.00	
25	96	80	66	56	54	48	70	42	24	29.94	29.89	29.85	10	10	10	8	4	-	0.00	
26	98	82	66	58	54	49	70	42	19	30.01	29.95	29.89	10	10	10	9	5	-	0.00	
27	102	84	68	61	55	44	61	37	14	29.97	29.90	29.81	10	10	10	8	3	-	0.00	

10.0 Potential Offsite Air Contaminant Events

The Knife River Silica Quarry mine just north of the west end of the site north of the Diversion Dam area is still active and carries the potential to affect our sampling when the winds carry dust towards the Oroville Dam Project.

Trains continue night and day through the Diversion Dam area.

11.0 Changes to Proposed Sampling Locations or Methodology

Five (5) stations are pending approval as additional Perimeter Sampling Locations.

E. Diversion Dam (PENDING APPROVAL)	WP 019A	39°31'42.97"N	121°32'35.30"W
S.E. Canal (PENDING APPROVAL)	WP 020A	39°31'37.77"N	121°33'2.45"W
S.W. Canal (PENDING APPROVAL)	WP 021A	39°31'41.01"N	121°33'17.04"W
Burma Rd. Station 22 (PENDING APPROVAL)	WP036A	39°32'21.2"N	121°31'12.6"W
Burma Rd. Station 23 (PENDING APPROVAL)	WP037A	39°32'53.2"N	121°32'18.8"W

Appendix A – Laboratory Reports

Appendix B – Perimeter Dust Monitoring