

CELIA QUARTERLY METEOROLOGICAL REPORT FOR THE SECOND QUARTER OF 2013

This report summarizes the meteorological data collection at Celia site for the period of April-June 2013. The data recovery for the period was very good with all parameters averaging 100%. The joint frequency distributions showed some minor differences when compared to the previous 2-year period which can be attributed to normal year-to-year variations in climatic conditions. There continues to be more unstable hours than would normally be expected at the 60-10m level with "A" stability occurring more than 31% of the time. It does improve later in the quarter to about 17% during June. The peak wind direction sector for the 3-month period was from the south-southeast at all 3-levels on the tower with secondary peaks from the north-northwest and the south.

Occurrence of Stability Classes (DT60-10m) in Celia Meteorological Data

Stability Class	2011	2012	2013	2-Year Average Percent Occurrence (2011-2012)
A	.05	25.09	31.27	12.59
B	1.43	5.98	7.05	3.71
C	5.99	6.90	6.73	6.45
D	45.67	17.50	16.21	31.56
E	26.63	17.26	18.27	21.94
F	14.24	12.71	12.23	13.47
G	5.99	14.55	8.24	10.28
Total Hours	8749	8781	2184	17530

Occurrence of Stability Classes (DT97-10m) in Celia Meteorological Data

Stability Class	2011	2012	2013	2-Year Average Percent Occurrence (2011-2012)
A	0.00	1.06	8.29	0.53
B	0.00	1.63	7.83	0.82
C	0.00	1.74	10.21	0.87
D	44.67	33.83	28.02	39.24
E	36.58	32.15	24.08	34.36
F	16.37	18.79	15.61	17.58
G	2.39	10.80	5.95	6.60
Total Hours	8749	8781	2184	17530

Celia Meteorological Tower 2nd Quarter 2013 Data Recovery (Percent)

Parameter	Percent Data Recovery
Wind Speed 10m	100.0
Wind Speed 60m	100.0
Wind Speed 97m	100.0
Wind Direction 10m	100.0
Wind Direction 60m	100.0
Wind Direction 97m	100.0
Delta Temperature 60-10m	100.0
Delta Temperature 97-10m	100.0
Temperature 10m	100.0
Temperature 60m	100.0
Temperature 97m	100.0
Dew Point Temperature 10m	100.0
Dew Point Temperature 60m	100.0
Dew Point Temperature 97m	100.0
Precipitation	100.0
<u>Composite</u>	
10m Wind Speed and Direction, Delta Temperature 60-10m	100.0
60m Wind Speed and Direction, Delta Temperature 60-10m	100.0
97m Wind Speed and Direction, Delta Temperature 97-10m	100.0

WIND ROSES FOR CELIA – 2ND QUARTER 2013



