

Meteorological Services

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- Secondary balloon launches were performed from the 13th to the 17th in order to support weather forecasts for Winfly flights at McMurdo on the 15th and 18th.
- With the assistance of the NOAA tech, the aspirator fan from the temperature/relative humidity sensor which malfunctioned on June 16th was replaced on the 12th. The motor itself was stripped of its grease in the bearings and replaced with Tri-Flow lubricant. The sensor now stands as a back-up for the two current running temperature/relative humidity sensors.
- A power outage occurred on the 30th at 0845 UTC until around 1115 UTC (20:45~23:15 NZST). All meteorological data inclusive of those times was lost.
- A second balloon launch was performed on the 31st in order to support weather forecasts for the Winfly flight at McMurdo September 1st.
- All routine data collection and reporting activities continued as normal.

<i>Weather: August 2013</i>		
Temperatures:	Date	
Average		-53.3°C / -63.9°F
Departure from Normal		+6.4°C / +11.6°F
Maximum	08/05/13	-38.0°C / -36.4°F
Minimum	08/26/13	-71.7°C / -97.1°F
Station Pressure in millibars:		
Average pressure		684.6 mb / 20.216 in. Hg
Departure from Normal		+8.8 mb / +0.260 in. Hg
Highest pressure	08/13/13	712.4 mb / 21.037 in. Hg
Lowest pressure	08/04/13	666.8 mb / 19.691 in. Hg
Physiological altitude in feet and meters:		
Average physio-altitude	10,455 ft / 3,187 m	Highest physio-altitude 08/04/13
		11,130 ft / 3,392 m
Lowest physio-altitude	08/13/13	9,429 ft / 2,874 m
Visibility:		
		11 days with ¼ mile or less
Wind:		
Average Wind Speed		15.9 mph or 13.8 knots
Maximum Gust	08/04/13	52 mph or 45 knots
Maximum Gust Direction		Grid Northeast
Vectored Wind Direction		037 degrees
Vectored Wind Speed		11.5 knots
Prevailing Direction		Grid Northeast or 040 degrees

** Records**

Day 3: The peak wind speed of 41 knots/47 mph broke the previous peak wind speed record of 39 knots/45 mph set in 1961.

Day 4: The peak wind speed of 45 knots/52 mph broke the previous peak wind speed record of 37 knots/43 mph set in 1963.

Day 5: The peak wind speed of 42 knots/48 mph broke the previous peak wind speed record of 34 knots/39 mph set in 1963.

Day 8: The peak wind speed of 32 knots/37 mph tied the previous peak wind speed record set in 1988.

Day 9: The peak wind speed of 35 knots/40 mph broke the previous peak wind speed record of 29 knots/33 mph set in 2001.

Day 10: The peak wind speed of 32 knots/37 mph broke the previous peak wind speed record of 30 knots/34 mph set in 1983.

Day 10: Average wind speed of 18.8 knots/21.6 mph broke previous highest avg wind speed record of 17.3 knots/20.0 mph set in 1983.

Day 11: The peak wind speed of 33 knots/38 mph broke the previous peak wind speed record of 31 knots/36 mph set in 1986.

Day 11: The temperature of $-38.3^{\circ}\text{C}/-36.9^{\circ}\text{F}$ broke the previous maximum temperature record of $-40.0^{\circ}\text{C}/-40.0^{\circ}\text{F}$ set in 1968.

Day 11: Average wind speed of 21.1 knots/24.3 mph broke previous highest avg wind speed record of 19.9 knots/22.9 mph set in 1976.

Day 18: The peak wind speed of 34 knots/39 mph tied the previous peak wind speed record set in 1986.

Day 25: Average wind speed of 2.1 knots/2.4 mph broke the previous lowest average wind speed record of 3.6 knots/4.1 mph set in 1991.

The record average max temperature of $-49.0^{\circ}\text{C}/-56.2^{\circ}\text{F}$ broke previous record of $-49.6^{\circ}\text{C}/-57.3^{\circ}\text{F}$ for the month of August set in 1996.

The record average temperature of $-53.3^{\circ}\text{C}/-63.9^{\circ}\text{F}$ broke the previous record of $-53.6^{\circ}\text{C}/-64.5^{\circ}\text{F}$ for the month of August set in 1996.