ASC Meteorological Services

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Summer Support: Jeffrey De Rosa (SPO-Met@usap.gov)

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Weather

Quantity	Date	Value
Temperature		
Average		-38.4°C (-37.1 °F)
Maximum	17 Nov	$-25.1^{\circ}\text{C} \ (-13.2^{\circ}\text{F})$
Minimum	10 Nov	$-48.4^{\circ}\text{C} \ (-55.1^{\circ}\text{F})$
Atmospheric Pressure		
Average		682.9 mb
Highest	28 Nov	692.7 mb
Lowest	1 Nov	660.2 mb
Physiological Altitude		
Average		3,206 m (10,519 ft)
Highest	1 Nov	3,470 m (11,384 ft)
Lowest	28 Nov	3,095 m (10,153 ft)
Visibility		
	1 day v	with $1/4$ mile or less
Wind		
Average Wind Speed		10.4 mph (9.1 kts)
Maximum Wind Gust	3 Nov	29 mph (25 kts)
Maximum Wind Gust Direction		Grid North
Average Vectored Wind		014° at 6.1 kts
Prevailing Direction		Grid Northeast 060°

Notes

- All three summer meteorologists have arrived. The department is fully operational 24/7.
- Job-specific safety and sexual harassment trainings were completed on Tuesday, November 21.
- A weekly departmental meeting has been scheduled for Tuesdays, at 1800 Local.
- A meteorology training calendar for our winter Research Associates (RAs) has been created.
- The sunshine recorder was broken. The north-facing globe had a freeze-break running through the middle. A crack in the orb was reported late last-summer. We suspect the early-season cold penetrated this crack and broke the globe.
- The winter-over machinist made new parts for our Campbell Stokes sunshine recorder. The new glass orb was installed on 11/14 at 1945Z. Sunshine is no longer estimated. However, we no longer have a spare/backup globe.

- Our local weather satellite system will remain inoperable throughout the summer. We will depend on 24/7 email to acquire satellite imagery from Charleston. In February, the backup unit for WAIS Divide will be sent to South Pole for the winter season. The pending new system is self-contained and will only use the computer as a display. No software is needed except a VNC viewer.
- Post-winter inspection of the Meteorology towers found snow clogging both temperature sensors. This puts a strain on the fans of these sensitive instruments and reduces airflow, which decreases accuracy (especially when the sun is up). Weekly inspections of the towers are an important task that did not occur over the winter. These weekly inspections have resumed.
- The Clean Air tower's "Thermometer 2" was irreparably damaged during maintenance procedures. Consequently, we will operate on "Temp Sensor 1" without a backup. If staffing permits, NIWC will install a new temperature sensor in December. However, due to staffing limitations, a February repair seems most likely.
- A new upper-air computer, monitor, and keyboard have been installed. However, the system is not yet fully operational due to account permissions, ability to pull files, and lack of access to the Airport Weather Advisor. We are therefore using the old computer while NIWC's software engineer fixes the issue from afar. Once fixed, we will have this new computer plus two backups connected to the network.
- Pressure for the past year has been taken from the Clean Air tower barometers with an adjustment of +0.6 mb. This month, we switched to the Skiway tower barometer with no corrective adjustment.
- As per FMH-1 section 11.5.1, barometric pressure shall be recorded by rounding down to the nearest 0.005 inches in columns 36 and 37 of the surface observation form. This department stopped following the standard in 2010 for an undocumented reason. We have therefore decided to switch back to FMH-1 standards and have documented this change in the SOP.
- Three radiosondes failed post-launch during consecutive 12Z launches. The night meteorologist has altered the frequency of that launch, which has solved the problem.
- A data request was fulfilled for AMRC who asked for prior synoptic information.
- The intranet "FAQ" page for meteorology had some significant errors pertaining to sun angle. This has been corrected.
- Supply has confirmed that no helium half-rack will be delivered this summer. Additionally, weather balloons are currently staged for vessel. Radiosondes have been ordered.
- All other meteorological operations continued as normal.

Records

• No records were tied or broken this month