**2022 South Pole Weather Summary**

**January 2022**

The average temperature for the month was -28.1°C/-18.6°F, which is 0.1°C cooler than the WMO average. The prevailing wind direction was Grid North, or 350 degrees, while wind speeds averaged at 9.7 kts, which is 1.5kts higher than the monthly average. A peak wind occurred on day 3 with 28kts/32MPH, a record for that day. Average station pressure was 686.6mb, 2.7mb lower than January average. It was a relatively cloudy month, with 6/8 of the sky typically covered, compared to the average 4/8, and 2 days with visibility ¼ miles or less. The snow stakes accumulated 1.419 inches.

**Records:**

Day 3: Peak Wind Gust of 28 kts / 32 mph breaks the previous daily peak wind gust of 24 kts / 28 mph previously set in 1990

Day 8: Peak wind gust of 26 kts / 30 mph breaks the previous daily peak wind gust record of 22 kts / 25 mph previously set in 2002

Day 15: The daily low of 34.6°C / -30.3°F breaks the previous daily record low of 34.4 °C / 29.9 °F previously set in 1995

Day 22: The daily high temperature of -17.6°C / +0.3°F breaks the previous daily record high of -19.2°C / -2.6°F previously set in 2019.

Day 23: The daily high temperature of -20.5°C / -4.9°F breaks the previous daily record high of -20.9°C / -5.6°F previously set in 1967.

**February 2022**

February was a relatively warm month, with the average temperature of -40.4°C/ -40.7°F being 0.4°C warmer than the normal. It was slightly windier than the norm, with an average wind speed of 10.9mph / 9.4kts just a bit higher than the monthly average of 10.7mph / 9.3kts. Our pressure was lower than average by 0.4mb / 0.012 in. Hg, despite having a high pressure of 705.4mb / 20.830 on the 9th. The visibility never dropped below ¼ mile this month and the snow stakes accrued 0.130 inches. The station closed on the 15th and the month ended with the final demobilization flights leaving for the north.

**Records:**

Day 05: Peak wind gust of 26 kts / 30 mph breaks the previous daily high peak wind gust of 24 kts / 28 mph previously set in 1989

Day 05: Daily average wind speed of 17.3 kts / 19.9 mph breaks the previous daily high average wind speed of 14.4 kts / 16.6 mph previously set in 1978

Day 07: Daily average wind speed 14.8kts/17.1mph; breaks previous record high of 13.6kts/15.7mph set in 1991

**March 2022**

March was -1.7°C / -3.1°F colder than average with one record cold daily temperature set during the month. This month’s wind speed was one-knot below average. However, we did have some windy days both mid-month and to close out the month with one daily peak wind gust broken on day 28. It was an otherwise average month for wind which minimized blowing and drifting snow on station. Our station pressure this month was slightly below average which made for typical physio-altitude days here on station. Average cloud cover this month was 5/8ths which, although cloudy, was not out of the ordinary for a South Pole March. In fact, this makes for the fifth year in a row with 5/8ths coverage for the month (the record is 7/8th, set in 1998). Sunset of course occurred this month. However, this event occurred during the cloudiest part of the month and was therefore not observed.

**Records:**

Day 02: 5.3mph / 4.6kts breaks previous record for lowest daily avg. wind of 5.5mph/ 4.8kts set in 1982

Day 08: Minimum temperature of -63.5C/ -82.3F breaks previous record of -63.3C/ -81.9F set in 1982.

Day 12: Average wind of 2.7mph/ 2.3kts breaks previous record for lowest daily average wind of 3.3mph/ 2.9kts set in 1985.

Day 13: Average wind speed of 1.6mph/ 1.4kts breaks previous record for lowest daily average wind speed of 5.4mph/ 4.7kts set in 2020.

Day 28: The Daily Peak Wind Gust of 31 kts / 36 mph ties the previous record high peak wind of the same value previously set in 2001.

**April 2022**

April 2022 was an atypical combination of both cold (-1.7C/ -3.1F below the monthly average) and cloudy (5/8ths oktas coverage for the month ties the record high cloud cover set back in 2006). Cold weather created an early soft snow surface resulting in plenty of blowing snow during otherwise light winds. Our average barometric pressure was -1.8 mb below normal which created a higher than average physio altitude. It’s early, so -100F is not expected. However, we did come close on day 19 when we dropped to -95.1F.

**Records:**

The monthly average sky cover of 5/8ths coverage ties record for maximum average cloud cover set in 2006.

**May 2022**

The month of May was a bit colder than normal, featuring temperatures -0.7℃ chillier than the norm. This may in part be due to the average wind speed being 2.2kts lighter than typical. Our low winds set a 36-year record on the 6th. On the other hand, the pressure was 2.1mb higher than normal which often indicates warmer temperatures. Our minimum temperature was actually a couple degrees warmer than last month’s minimum and nowhere near record-setting.

**Records:**

6th: Lowest average wind of 5.1mph/ 4.4kts breaks previous record of 6.2mph/ 5.4kts set in 1985.

**June 2022**

Wind and blowing snow were the norm this month, which brought with it many days of clouds. While not as cloudy as the record-holding 1990, we’ve had the most days of cloudy weather since 2007. With the wind and clouds came higher than normal temperatures, 3.7℃ warmer than the average. Our pressure also exceeded the norm, with averages 4.6mb higher than is typical. Despite our blustery conditions, June ended the month with back-to-back days of record-setting low winds.

**Records:**

Day 29: Lowest daily average wind of 4.1mph/ 3.6kts breaks previous record of 5.2mph/ 4.5kts set in 2021.

Day 30: Daily average wind of 3.8mph/ 3.3kts breaks the previous daily average low wind speed record of 4.6mph/ 4.0kts previously set in 1964.

**July 2022**

The station reached -100℉ for the first time this winter on the 15th of the month. In fact, temperatures were down all month, with an average temperature of -61.5℃/ -78.7℉, which was 1.6℃/ 2.9℉ lower than normal. Our pressure was also lower than normal, the average of 675.2mb being 1.5mb lower than the monthly average. Otherwise, the weather was unremarkable, our maximum gust was 33kts on the 20th, which falls considerably short of any monthly records, as does the average wind speed of 9.9kts. Our cloud cover was unremarkable as well, with an average of 4 oktas and only one day of visibility less than ¼ mile.

**Records:**

No records were tied or broken during the month.

**August 2022**

August 2021 tied a record for minimum cloudy days. In contrast, this August of 2022 featuredan average of 6/8ths sky coverage (tied for most) and 20 cloudy days which shattered the previous cloudy day record of 16. Yes, this was the cloudiest August on record. With clouds comes warmth as proven by our average temperature of -55.3C / -67.5°F which was +4.3°C / +7.8°F above normal. Two daily record highs helped contribute to that warmth. Overall, winds were near average, though we did peak at 36 mph / 31 kts on two separate days. This partly contributed to five days with a visibility of ¼ mile or less. Pressure was normal and we accumulated more than an inch at our snow stake field.

**Records:**

Day 27: High temperature of -39.0°C / -38.2°F breaks the previous daily record high of -42°C / -43.6°F previously set in 1987

Day 28: High temperature of -38.0°C / -36.4°F breaks the previous daily record high of -40.5°C / -40.9°F previously set in 2014.

Average monthly cloud cover of 6/8 ties the record for highest average cloud cover set in 2010.

20 total cloudy days for the month beats the previous record of 16 set in 2010.

**September 2022**

The September sky was much more clear than August which also made the month colder than August and overall -0.3°C/-0.5°F colder than average September temperatures. This colder average can be attributed to a late-month cold snap which included a record low temperature of -71.0℃/ -95.8℉. Although cold, the month was warmer than average. It was during these early September days that we reached our peak wind gust for the month of 34 mph / 30 kts. Subjectively speaking, sunrise seemed “prettier” than normal with vibrant colors occurring during the waning days of twilight. Our snow stake’s confirmed average accumulation.

**Records:**

Day 29: Low temperature of -71.0℃/ -95.8℉ breaks the previous record of -70.8℃/ -95.4℉ set in 1973.

**October 2022**

October’s weather was slightly cooler, less windy, and less cloudy than average. The average temperature was -52.1℃/-61.8F which was 1.2℃/2.2F cooler than average. The average wind speed this month was 9.8kts (the historical average is 11.2kts). A bit of stormy weather blew in on the 17th, breaking two wind records which are listed below.

**Records:**

Day 17: Daily peak wind gust of 36 kts / 42 MPH breaks the previous daily peak wind of 33 kts / 38 mph set in 1990.

Day 17: Average wind of 22.1 kts/ 25.4mph breaks the previous highest average wind of 21.3kts/ 24.5 mph set in 1990.

**November 2022**

The month averaged below average by 2.6 degrees F as an early month cold spell lead to the November’s lowest observed temperature of -58.2 degrees F. Closer to the end of the November brought the month’s peak wind at 32 mph observed on the 27th. The month saw 3 consecutive record breaking days were the minimum temperature record was broken for the days below. Overall weather occurrences happened on a fairly regular basis.

**Records:**

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| Day 16: Minimum temperature of -46.0°C/-50.8°F broke the record of -45.7°C/-50.3°F previously set in 1987. |
| Day 17: Minimum temperature of -45.1°C/-49.2°F tied the record previously set in 1999. |
| Day 18: Minimum temperature of -45.2°C/-49.4°F broke the record of -44.7°C/-48.5°F previously set in 1985. |
| Day 27: Peak wind of 32mph/28kts broke the record of 29mph/26kts previously set in 1971. |

**December 2021**

December was slightly colder with a -1.6°/-2.9°F departure from the average temperature. The maximum temperature for the month as -21.0°C/-5.8°F. The minimum temperature was -33.8°C/-28.8°F. The average pressure was lower than average as well with an average pressure of 681.0mb compared with the climatological average of 987.0mb. The average wind speed for the month was 7.8kts/9.0mph, less than the climatological average of 9.6kts/11.1mph.

**Records:**

Day 11: Highest average wind speed of 23.5 mph/20.4 kts broke the record of 22.4 mph/19.5 kts previously set in 2015.

Day 22: Lowest average wind speed of 0.8mph/0.7kts broke the record of 2.8mph/2.5kts previously set in 1987.

Number of Partly Cloudy days for December was 23 days, breaking the previous record of 21 days previously set in 2019.