

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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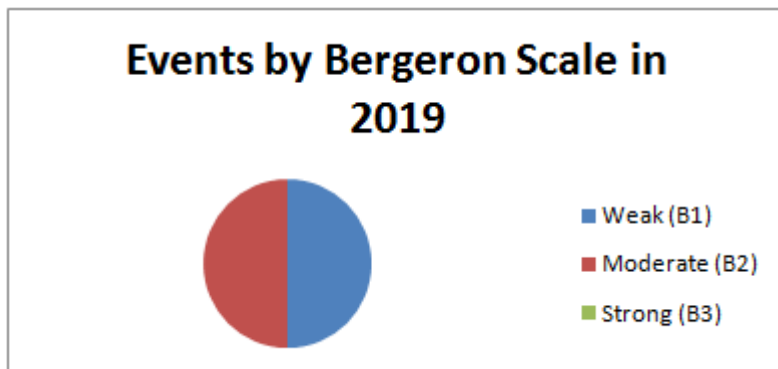
JANUARY 2019

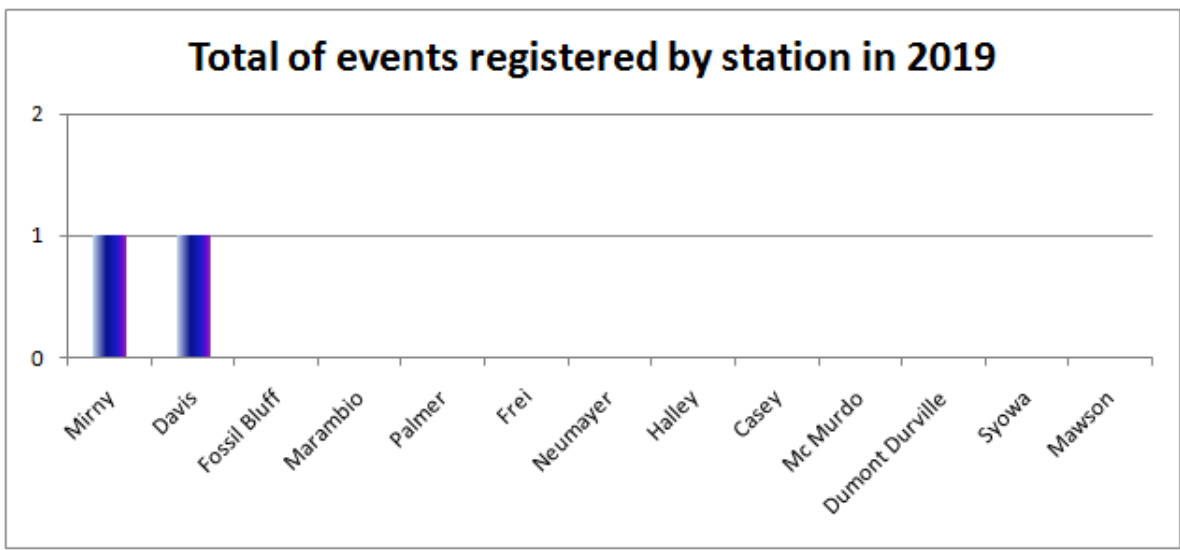
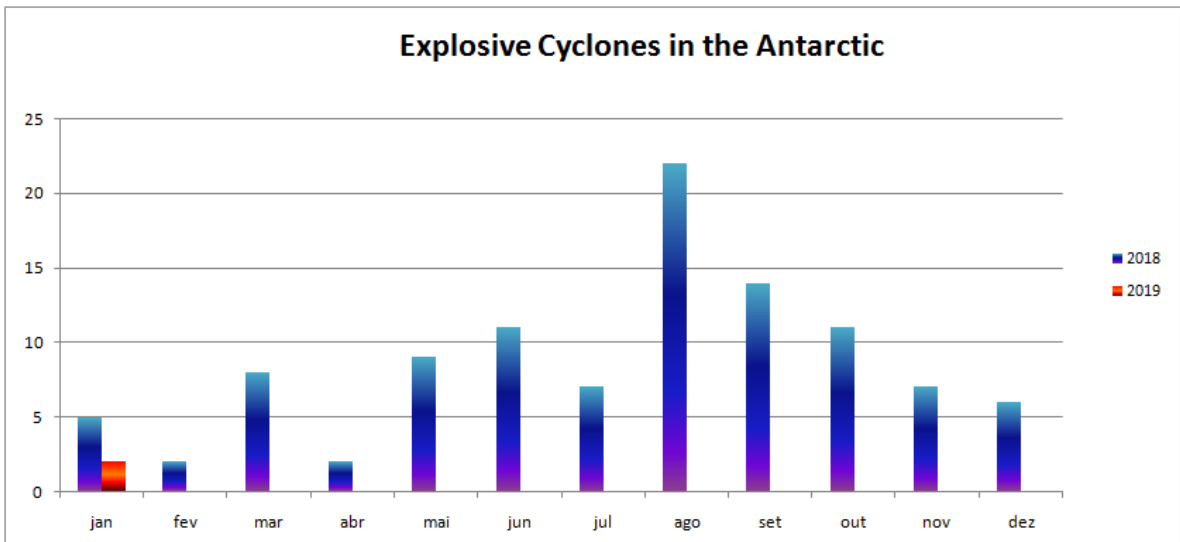
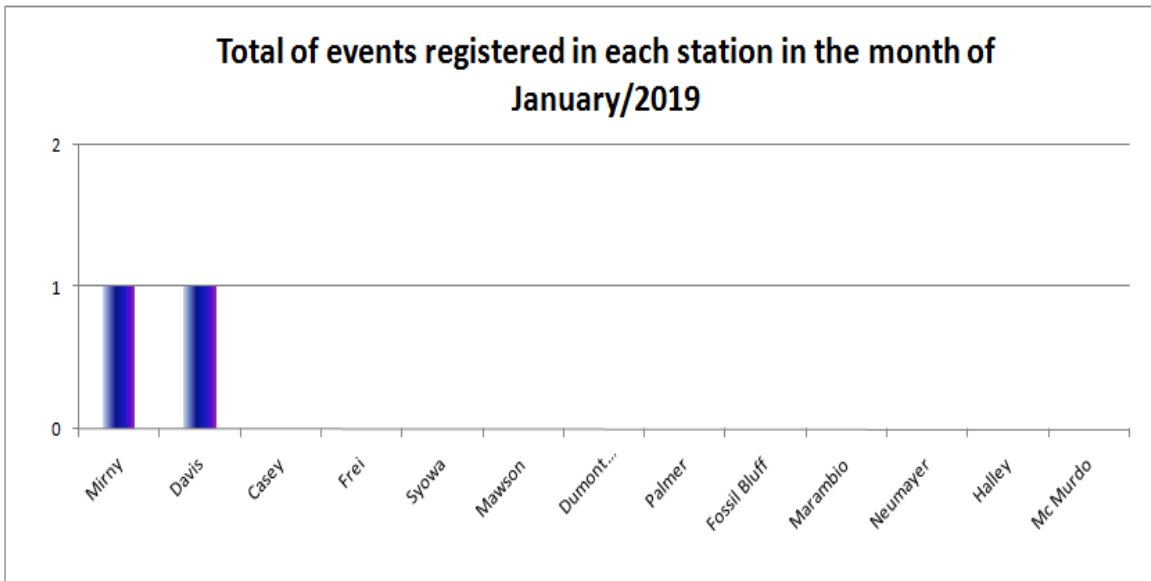
During this month, 02 events were recorded among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations that were affected by cyclones this month were: Mirny and Davis. The most intense cyclone recorded was no. 02/2019 at the Davis station on 21th with sustained winds of up to 24.7 m/s (55 mph). The cyclone with the lowest recorded atmospheric pressure at sea level was also no. 02/2019 at the Davos station, with values reaching 960.2 hPa.

STATISTICS OF THE MONTH

Classification	Bergeron Scale	Intensity	Total of cases registered in the month
B1	1 a 1.2	Weak	01
B2	1.3 a 1.8	Moderate	01
B3	>1.8	Strong	00

Highest pressure drop	Lowest recorded pressure	Highest sustained wind
32.3 hPa/24h	960.2 hPa	24.7 m/s
Davis	Davis	Davis
Jan. 21th	Jan. 21th	Jan. 21th





BOMB CYCLONE N°01/2019- DATE: JAN./21/2019

LOCAL: MIRNY STATION – WMO 89592 (OPERATED BY RUSSIA)

Drop of pressure in 24h	-25.0 hPa
Minimum pressure registered on station	968.1 hPa
Minimum pressure estimation in the cyclone core	954 hPa
Sustained maximum wind	9.5 m/s (21 mph)
Maximum wind gust	12.5 m/s (28 mph)
Bergeron	1.0 (weak)

BOMB CYCLONE N°02/2019- DATE: JAN./21/2019

LOCAL: DAVIS STATION – WMO 89571 (OPERATED BY AUSTRALIA)

Drop of pressure in 24h	-32.3 hPa
Minimum pressure registered on station	960.2 hPa
Minimum pressure estimation in the cyclone core	954 hPa
Sustained maximum wind	24.7 m/s (55 mph)
Maximum wind gust	none m/s (mph)
Bergeron	1.3 (moderate)

Sources:

AMRC – UW Madison

<https://worldview.earthdata.nasa.gov>

<http://www.bom.gov.au>

<https://data.aad.gov.au>

<http://www.smn.gov.ar>

<http://meteoarmada.directemar.cl>