

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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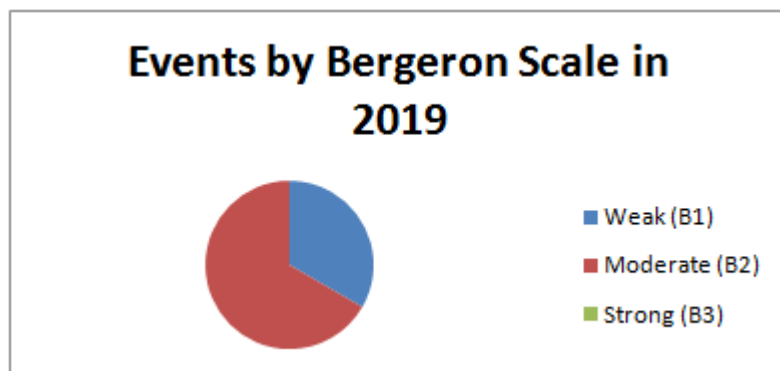
FEBRUARY 2019

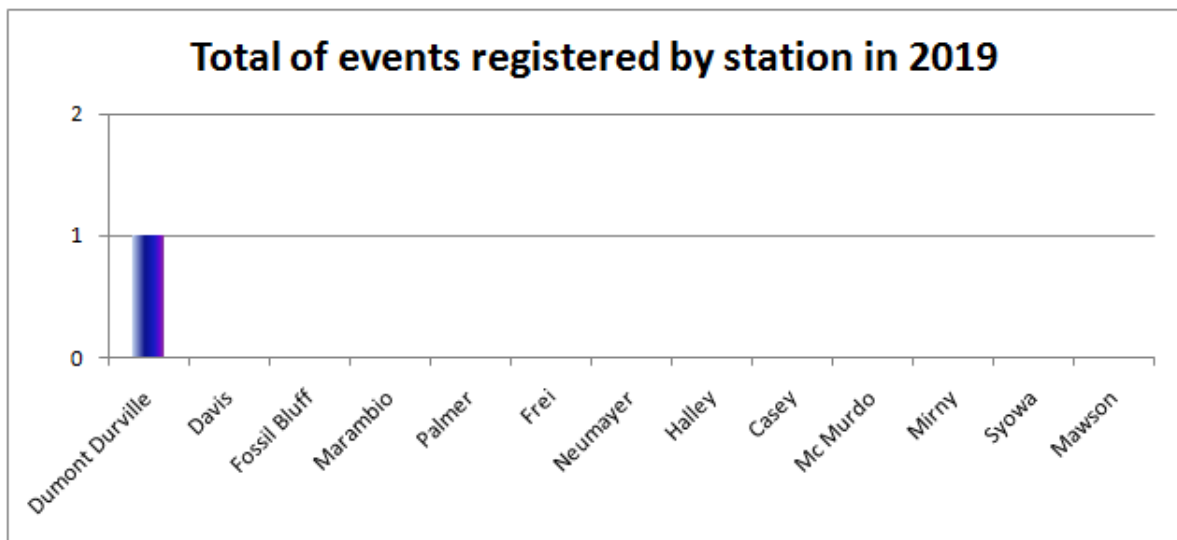
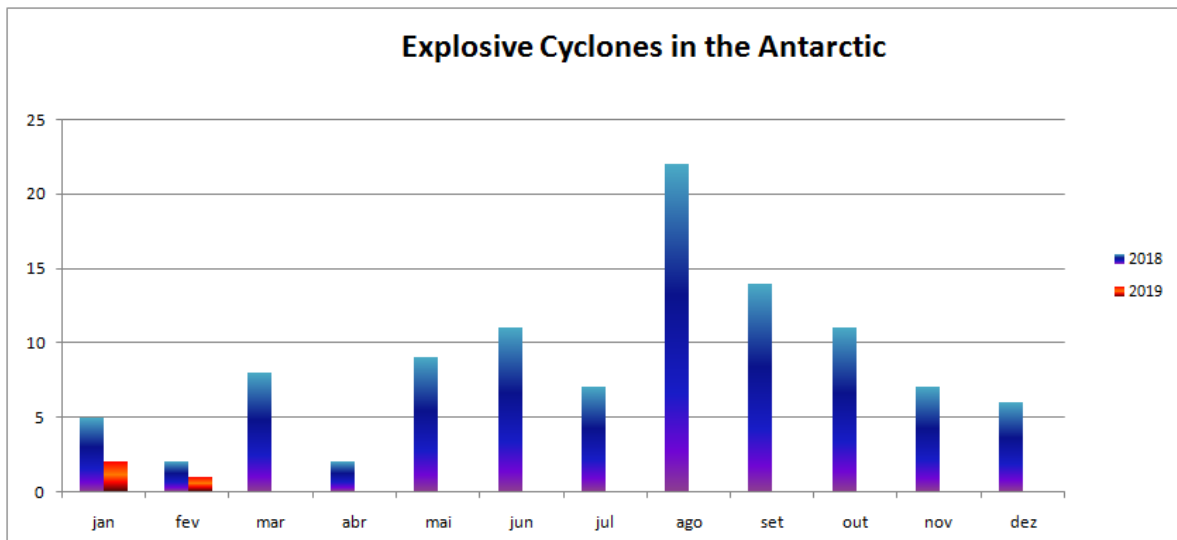
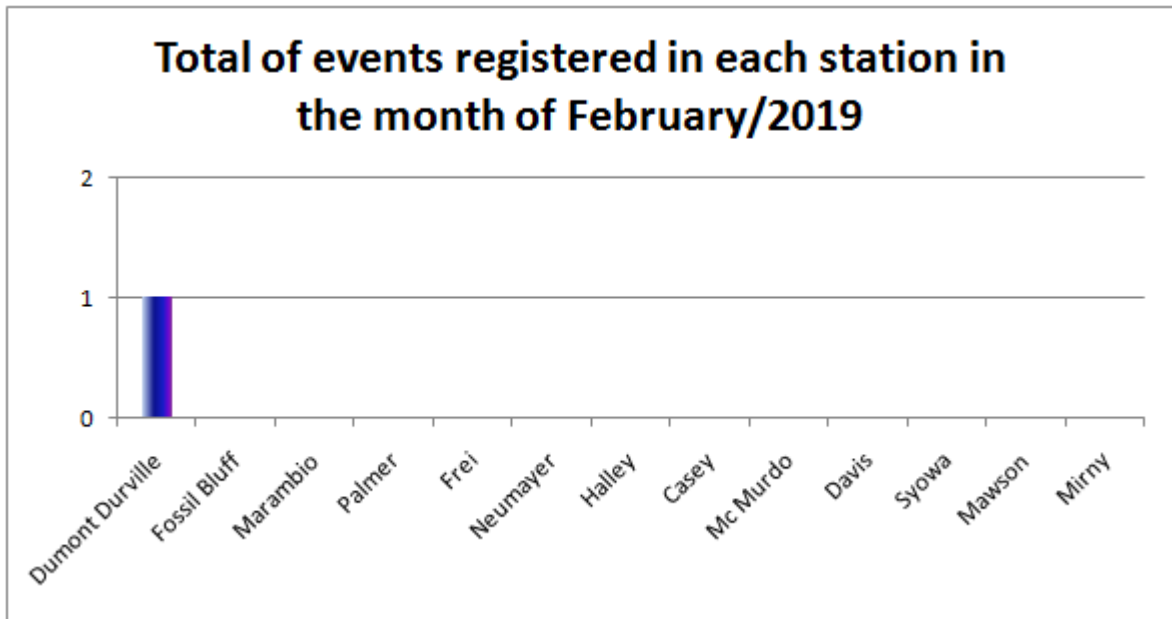
Among the 13 research stations that we used as a reference to monitor the explosive cyclones, Dumont D'Urville was the only to record this type of event, occurring on the 13th. The lowest pressure that was recorded on this day in Dumont D'Urville was 957 hPa, and it was accompanied by sustained winds that reached 34 m/s (76 mph).

STATISTICS OF THE MONTH

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

Highest pressure drop	Lowest recorded pressure	Highest sustained wind
33.9 hPa/24h	957.0 hPa	34.0 m/s
Dumont D'Urville	Dumont D'Urville	Dumont D'Urville
Feb. 13th	Feb. 13th	Feb. 13th





BOMB CYCLONE N°03/2019- DATE: FEB./13/2019

LOCAL: DUMONT D'URVILLE STATION – WMO 89642 (OPERATED BY FRANCE)

Drop of pressure in 24h	-33.9 hPa
Minimum pressure registered on station	957.0 hPa
Minimum pressure estimation in the cyclone core	952 hPa
Sustained maximum wind	34.0 m/s (76 mph)
Maximum wind gust	49.5 m/s (111 mph)
Bergeron	1.4 (weak)

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>