

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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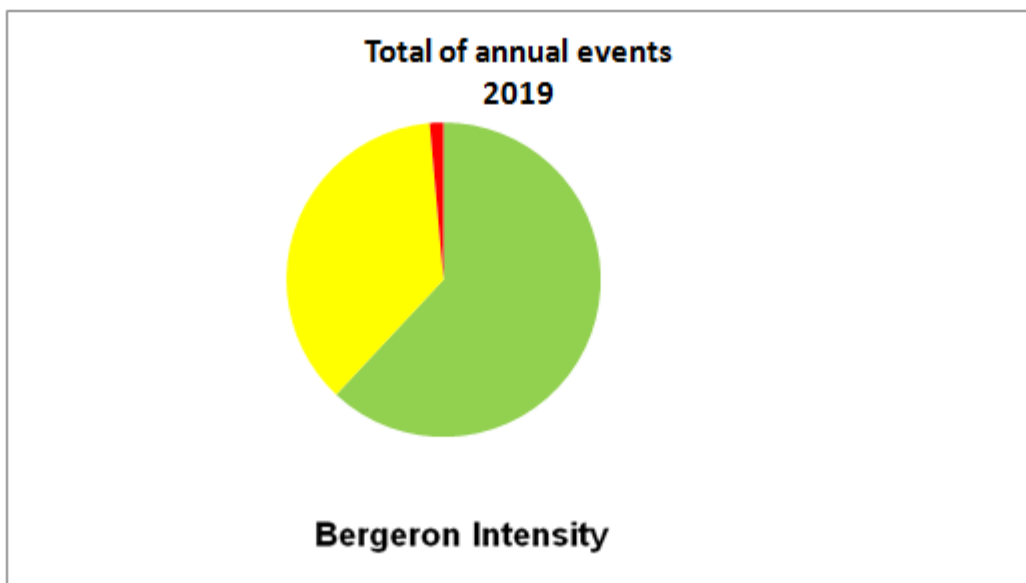
DECEMBER 2019

During this month, only 01 event were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The only station hit by a cyclone this month was Dumont D'Urville, with sustained winds of up to 27.5 m/s (61 mph). There was a significant decrease in the number of cases in comparison to the same month of the previous year (83%).

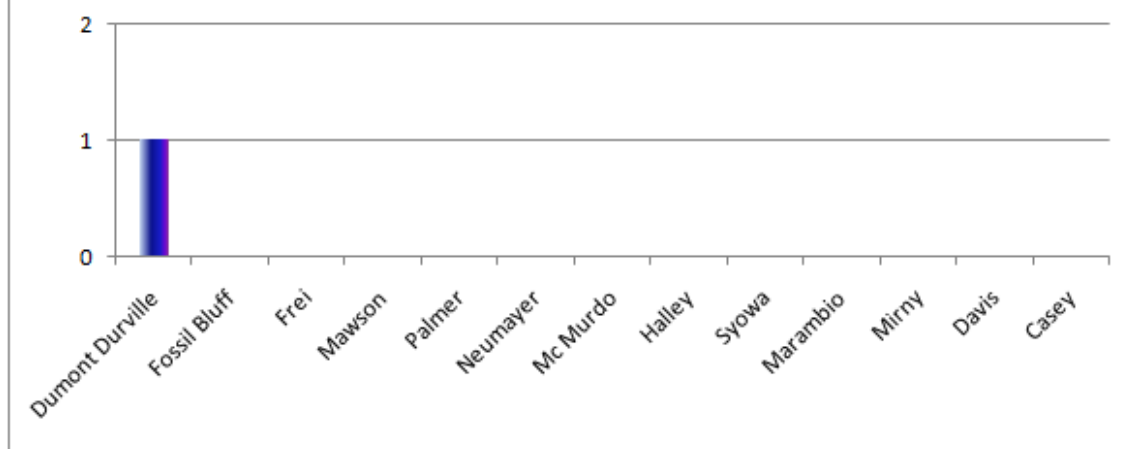
STATISTICS OF THE MONTH

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	00
B3	>1.8	Strong	00

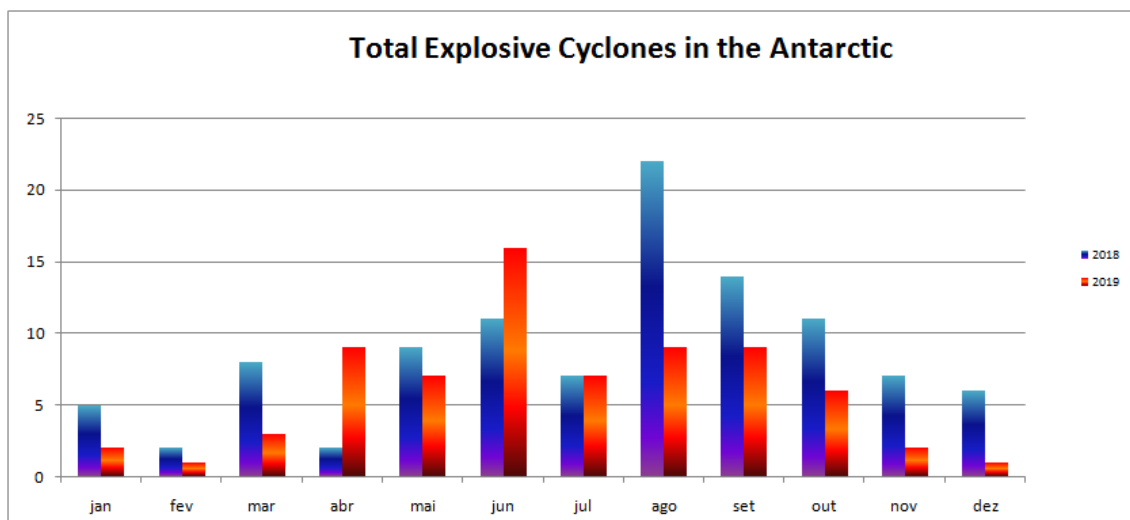
Highest pressure drop	Lowest recorded pressure	Highest sustained wind
-28.9 hPa/24h	957.5 hPa	27.5 m/s
Dumont D'Urville	Dumont D'Urville	Dumont D'Urville
Dec. 31th	Dec. 31th	Dec. 31th

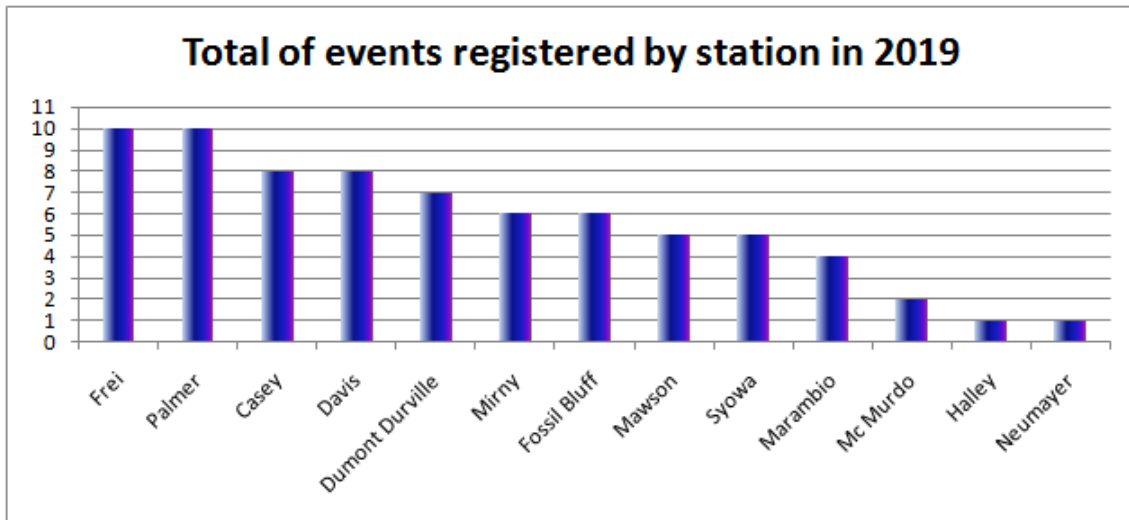


Total of events registered in each station in the month of December/2019



Total Explosive Cyclones in the Antarctic





BOMB CYCLONE Nº72/2019- DATE: DECEMBER/31/2019

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

Drop of pressure in 24h	-28.9 hPa
Minimum pressure registered on station	957.5 hPa
Minimum pressure estimation in the cyclone core	950 hPa
Sustained maximum wind	27.5 m/s (61 mph)
Maximum wind gust	45.0 m/s (101mph)
Bergeron	1.2 (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://meteormada.directemar.cl>