

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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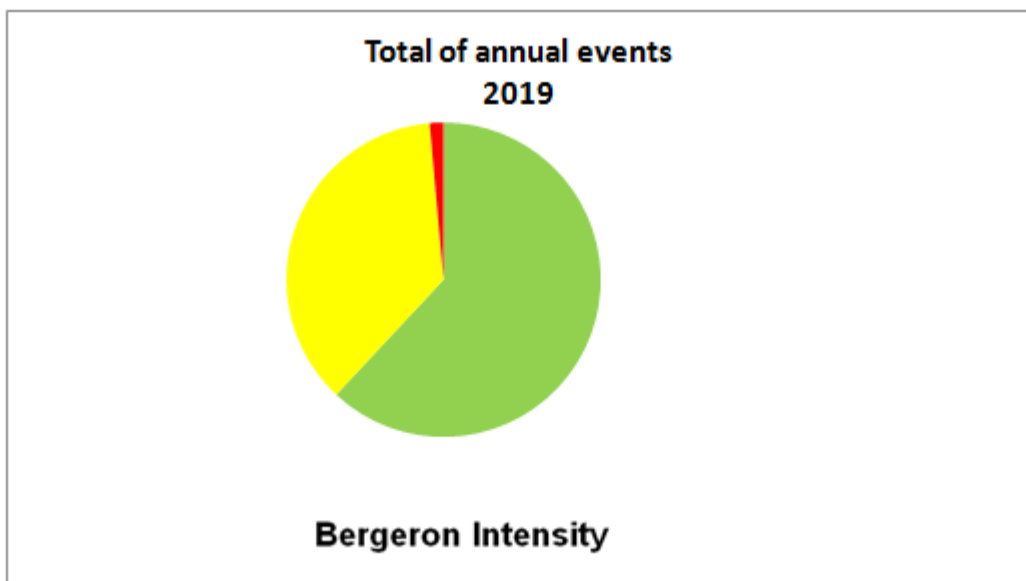
NOVEMBER 2019

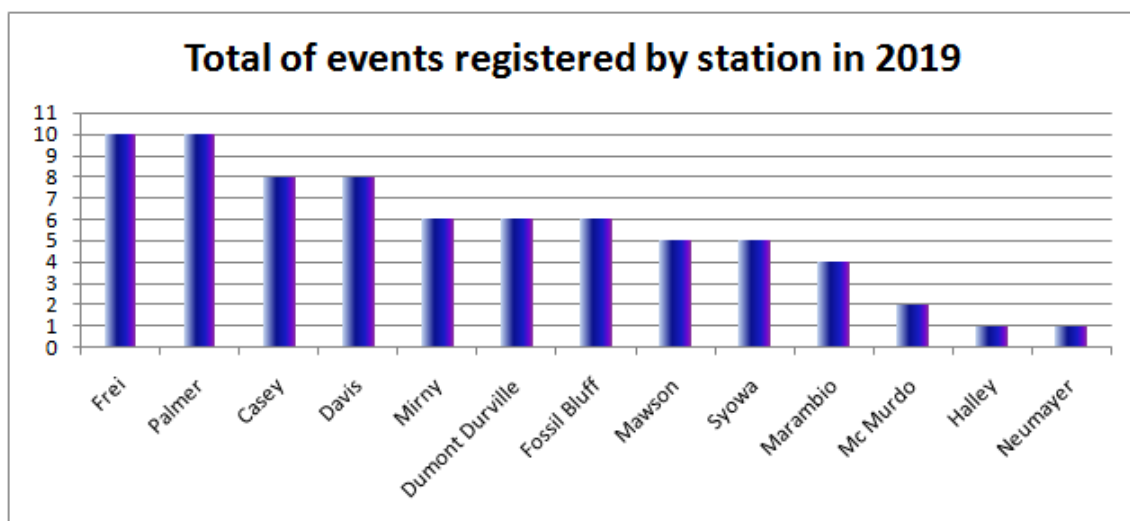
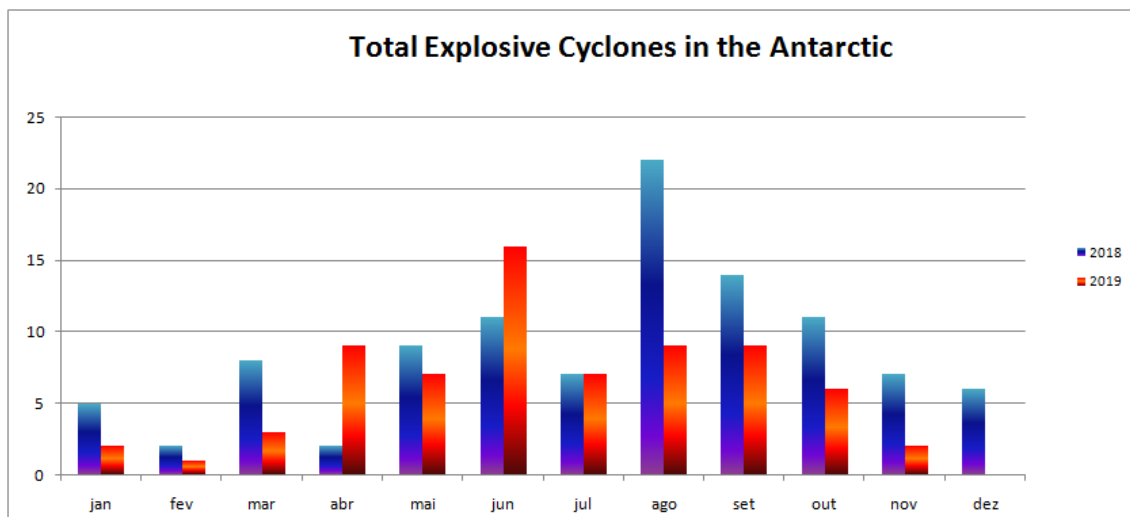
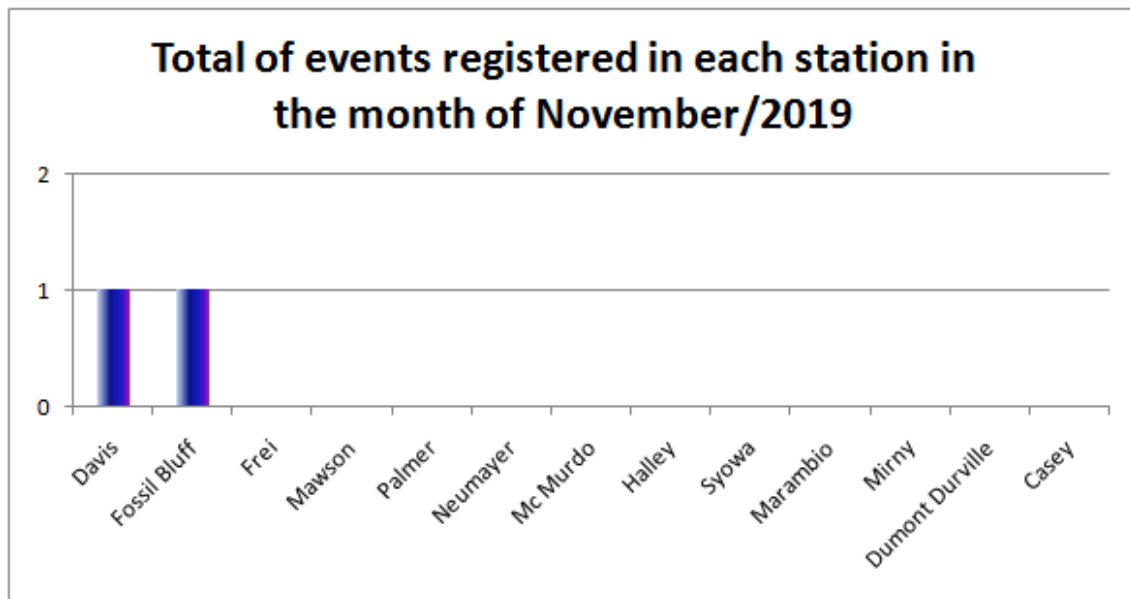
During this month, 02 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations hit by cyclones this month were: Fossil Bluff, and Davis. The most intense cyclone recorded was no.72/2019 at the Davis station on 28th with sustained winds of up to 27.0 m/s (60 mph). The cyclone which registered the lowest atmospheric pressure at sea level also was the no.72/2019 at the Davis station, with values reaching 970.9 hPa. There was a significant decrease in the number of cases in comparison to the same month of the previous year (71%).

STATISTICS OF THE MONTH

Classification	Bergeron Scale	Intensity	Total of cases registered in the month
B1	1 a 1.2	Weak	02
B2	1.3 a 1.8	Moderate	00
B3	>1.8	Strong	00

Highest pressure drop	Lowest recorded pressure	Highest sustained wind
-27.0 hPa/24h	970.9 hPa	27.0 m/s
Davis	Davis	Davis
Nov. 28th	Nov. 28th	Nov. 28th





BOMB CYCLONE Nº70/2019- DATE: NOVEMBER/10/2019

LOCAL: FOSSIL BLUFF STATION – WMO 89065 (OPERATED BY U.K.)

Drop of pressure in 24h	-26.3 hPa
Minimum pressure registered on station	974.5 hPa
Minimum pressure estimation in the cyclone core	970 hPa
Sustained maximum wind	10.0 m/s (22 mph)
Maximum wind gust	none m/s (mph)
Bergeron	1.1 (weak)

BOMB CYCLONE N°71/2019- DATE: NOVEMBER/28/2019

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

Drop of pressure in 24h	-27.0 hPa
Minimum pressure registered on station	970.9 hPa
Minimum pressure estimation in the cyclone core	956 hPa
Sustained maximum wind	27.0 m/s (60 mph)
Maximum wind gust	37.0 m/s (83 mph)
Bergeron	1.1 (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>