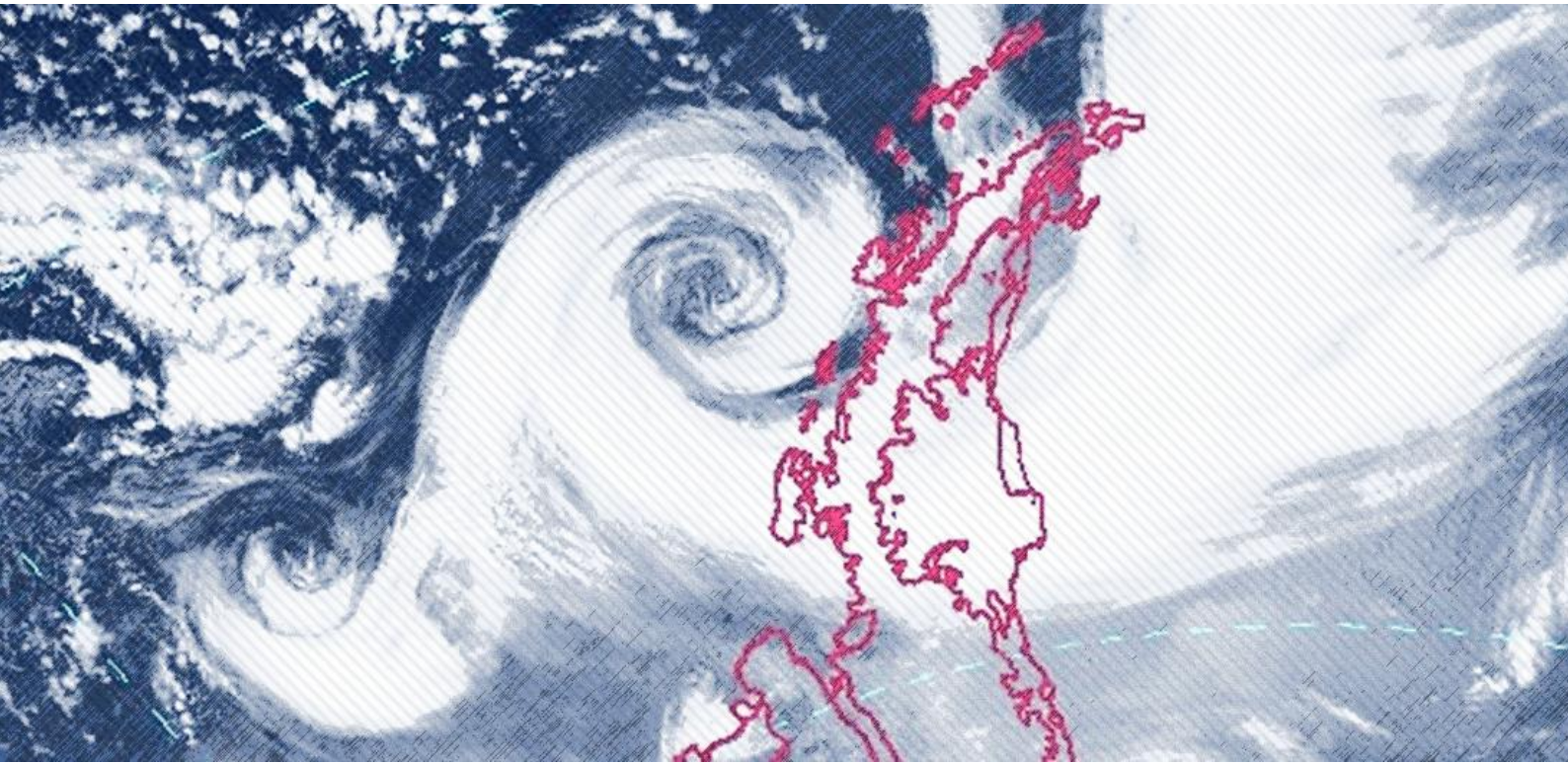




WORLD
ENVIRONMENTAL
CONSERVANCY

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



DECEMBER 2021

By Romao, M. and Pires, L. B. M.

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DECEMBER 2021

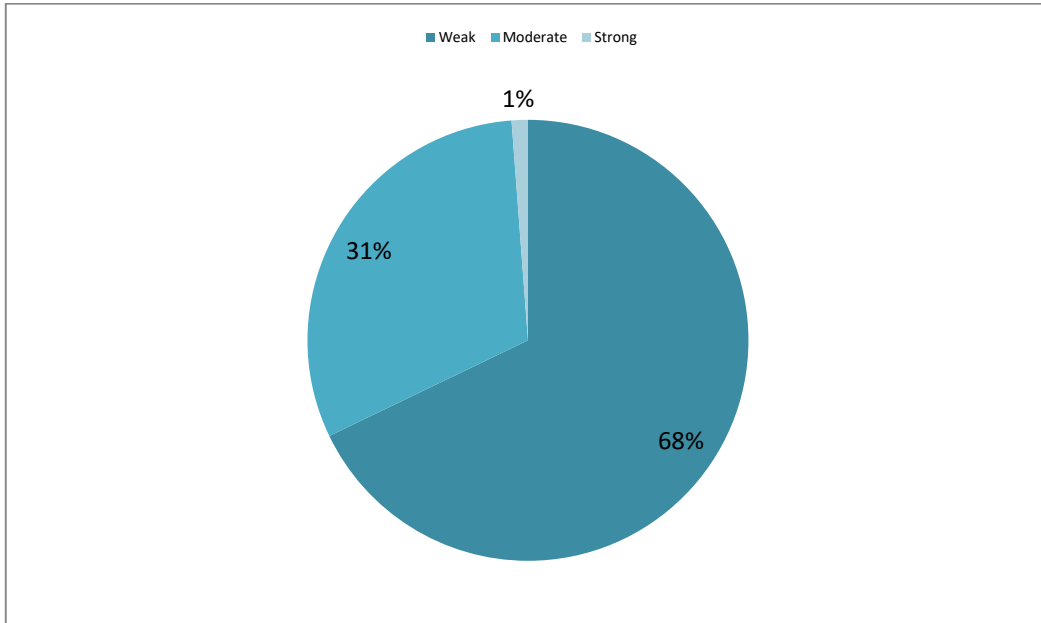
During this month, 02 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations affected by cyclones this month were: Frei and Neumayer. There was a decrease (33%) in the number of cyclones in comparison to the same month of the previous year (2020).

STATISTICS OF THE MONTH

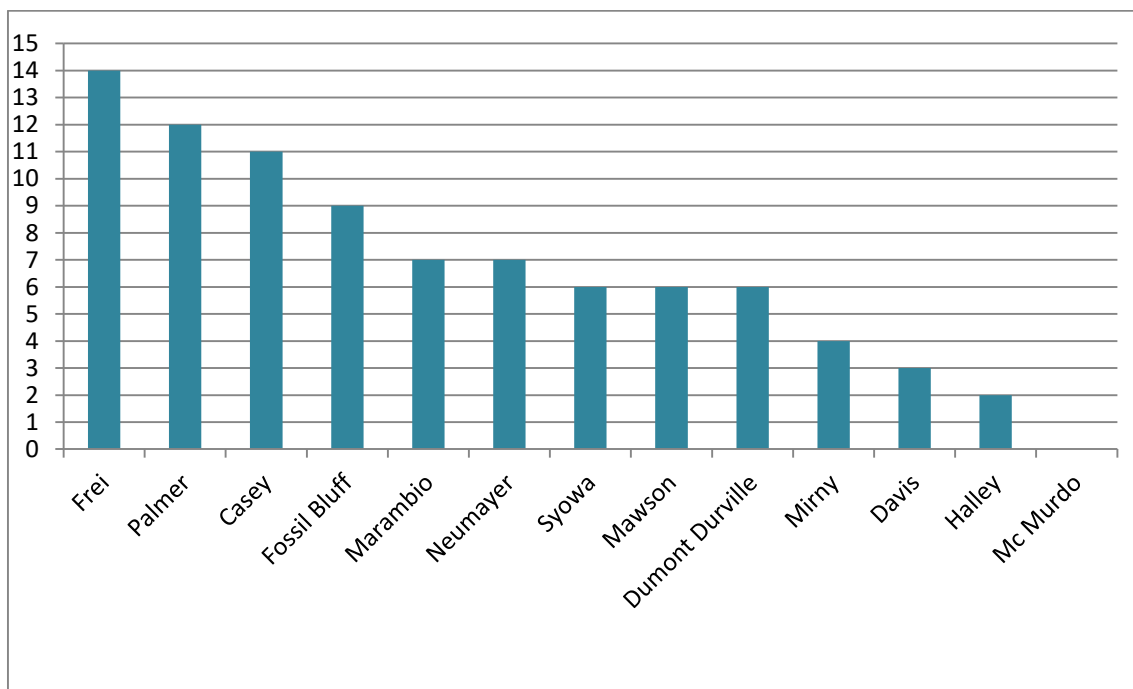
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	02
B2	1.3 a 1.8	Moderate	00
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST REGISTERED PRESSURE	HIGHEST SUSTAINED WIND
-28.8 hPa/24h	959.3 hPa	30.4 m/s
Frei Station	Neumayer Station	Neumayer Station
Dec. 30	Dec. 16	Dec. 16

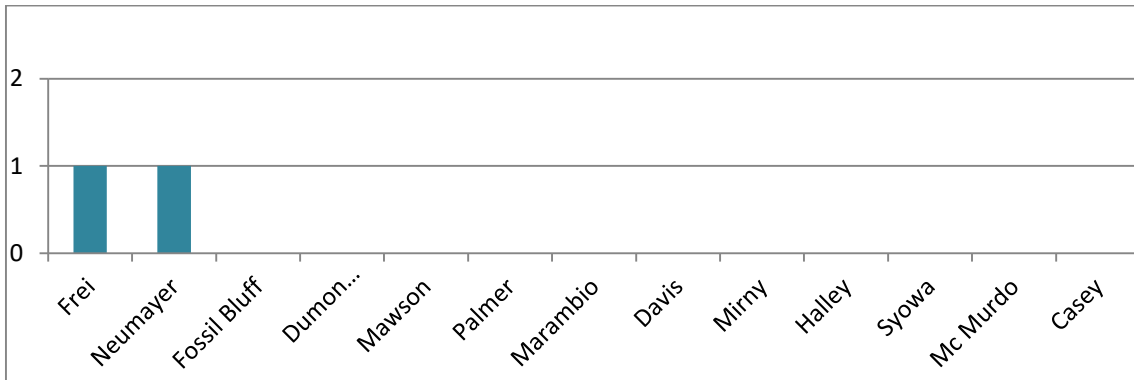
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2021



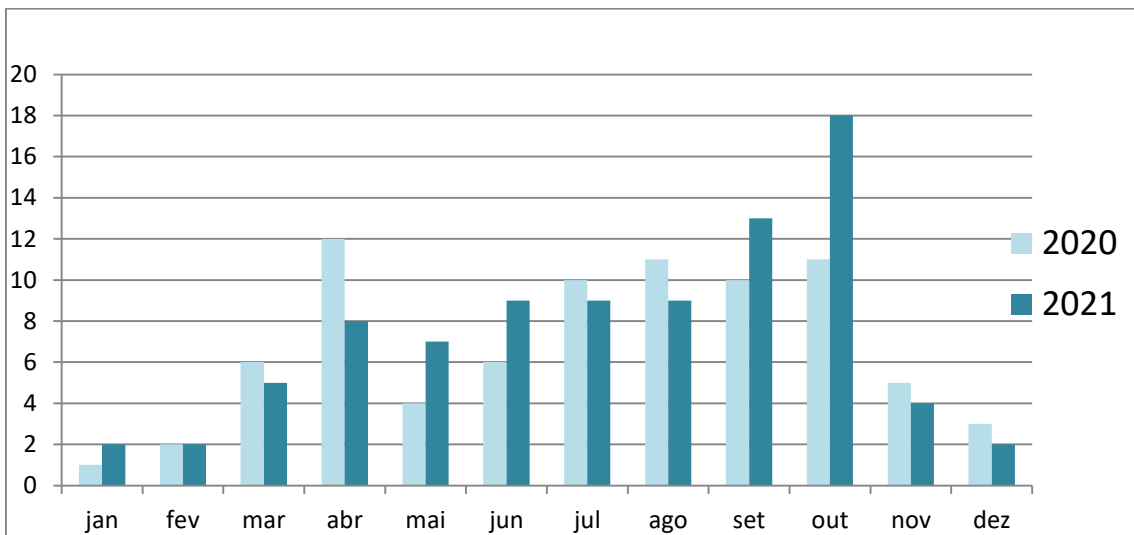
TOTAL OF EVENTS REGISTERED BY STATION IN 2021



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF DEC./2021

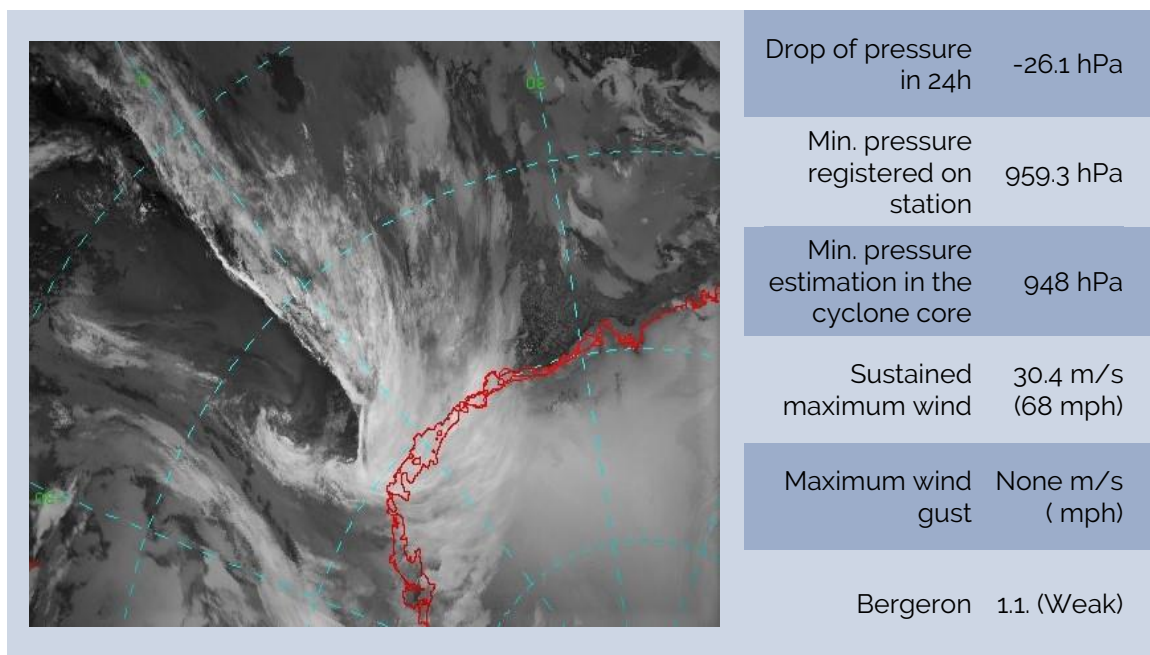


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



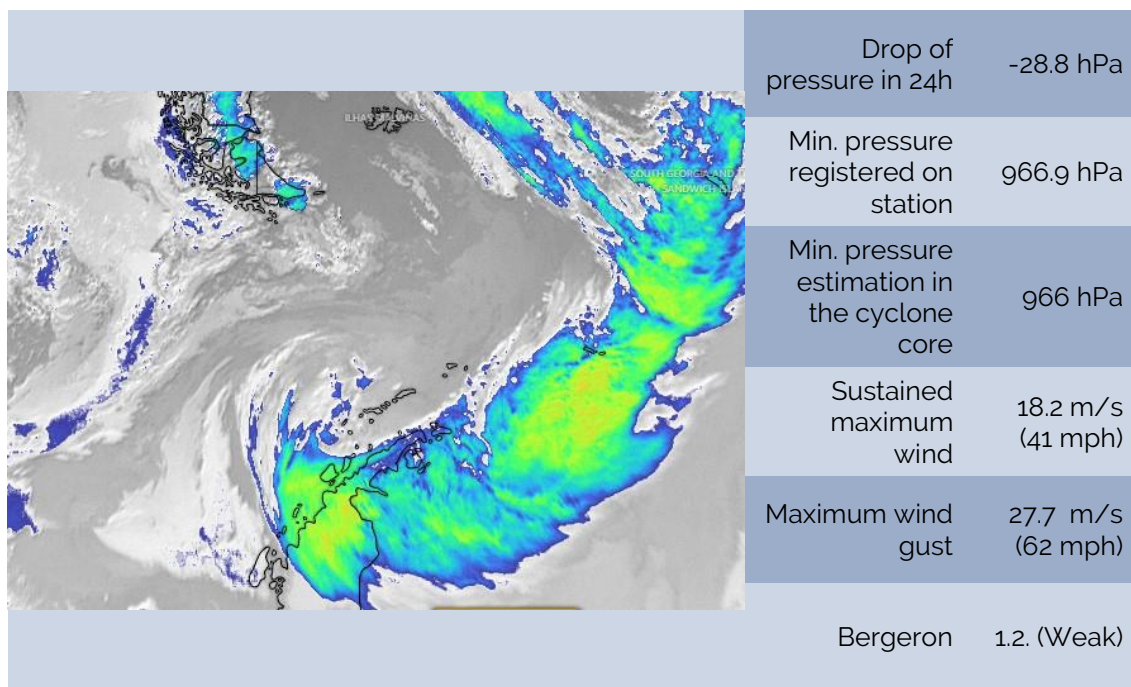
BOMB CYCLONE N°86/2021 - DATE: DEC./16/2021

LOCAL: NEUMAYER STATION – WMO 89002 (OPERATED BY GERMANY)



BOMB CYCLONE N°87/2021 - DATE: DEC./30/2021

LOCAL: FREI STATION – WMO 89056 (OPERATED BY CHILE)



SOURCES

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

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

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

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

<http://meteoarmada.directemar.cl>

<https://www.marinha.mil.br/chm/chm/dados-do-smm-cartas-sinoticas>

GFS Model Forecast

AMRDC, SSEC, UW-Madison

www.windy.com