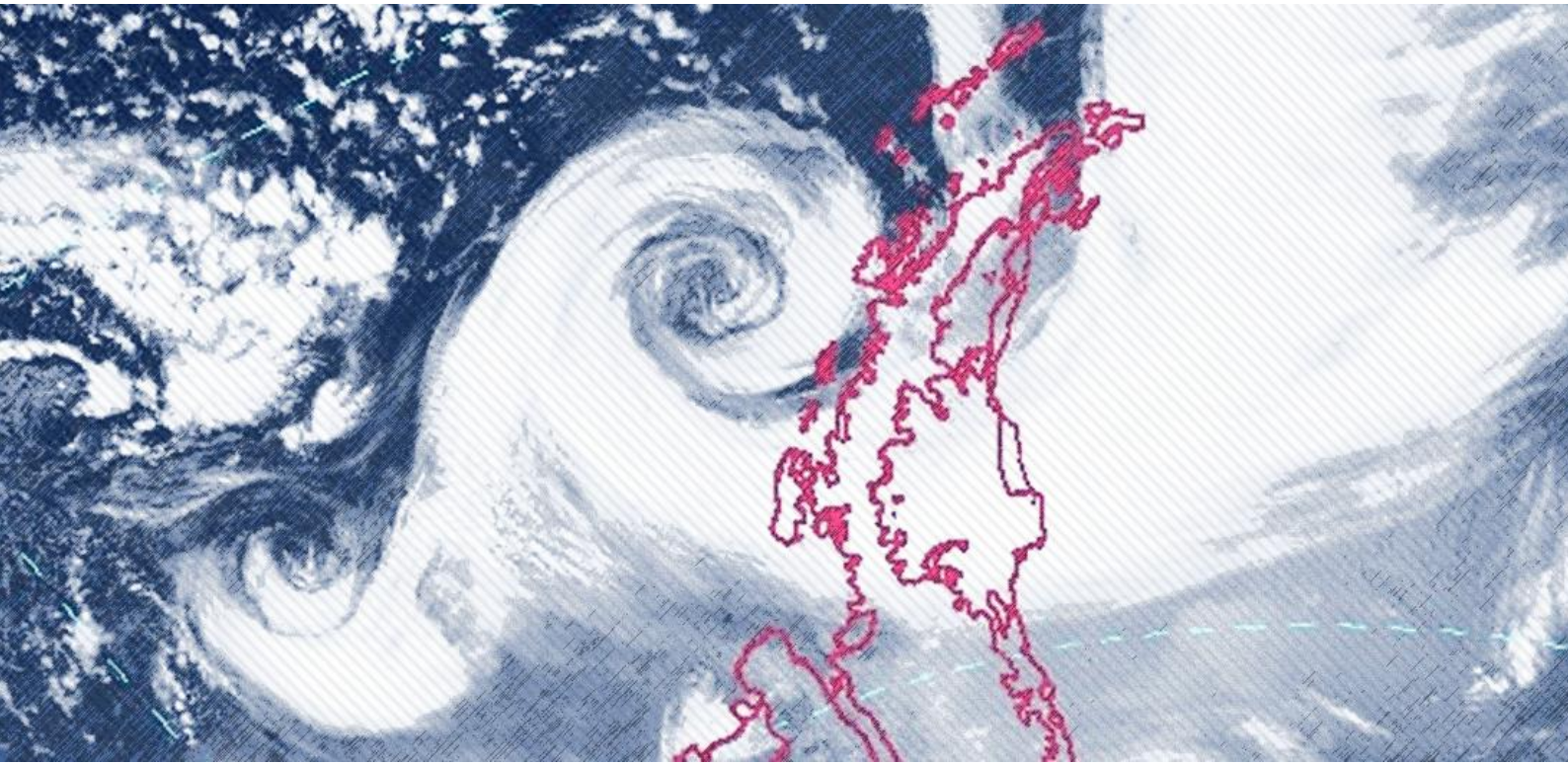




WORLD
ENVIRONMENTAL
CONSERVANCY

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



NOVEMBER 2021

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

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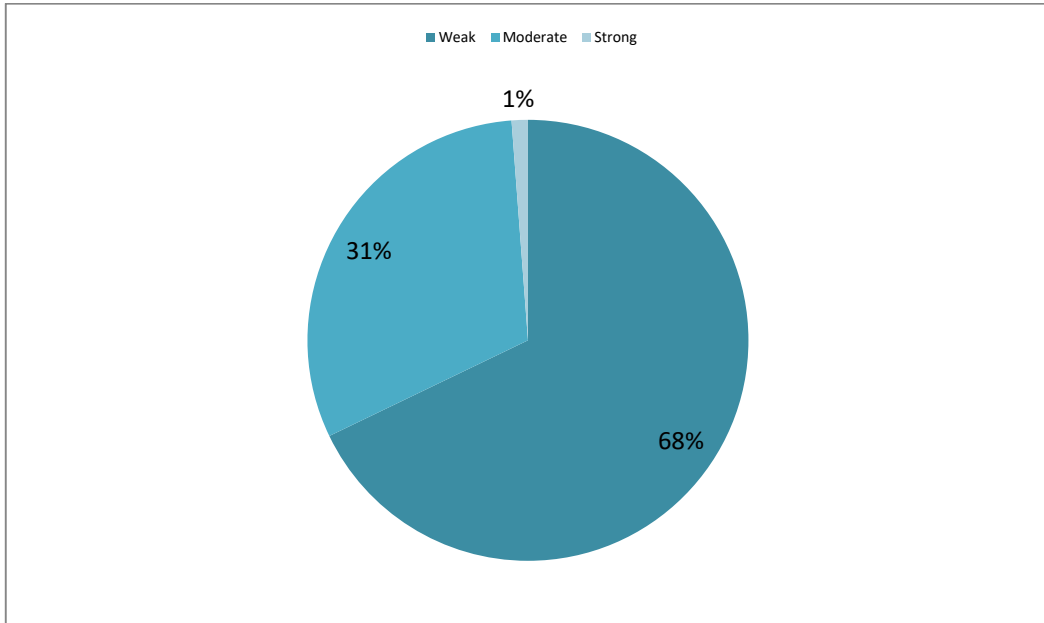
During this month, 04 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations affected by cyclones this month were: Frei, Mawson, Dumont D'Urville and Fossil Bluff. There was a decrease (20%) in the number of cyclones in comparison to the same month of the previous year (2020).

STATISTICS OF THE MONTH

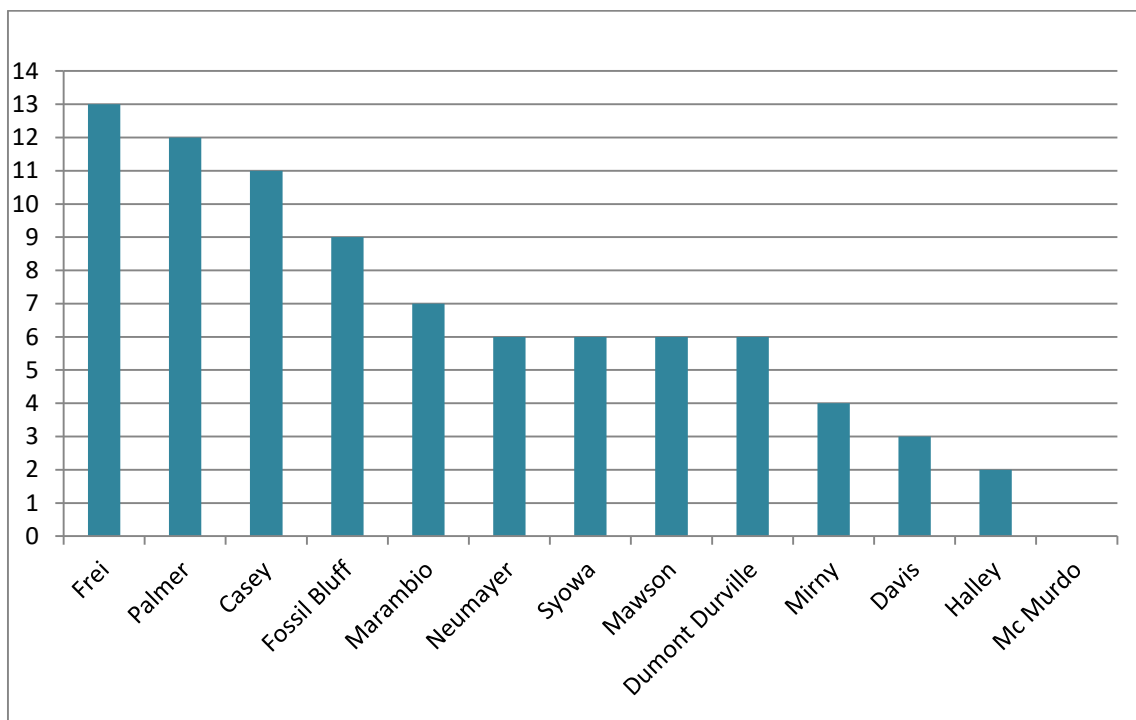
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	03
B2	1.3 a 1.8	Moderate	01
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST REGISTERED PRESSURE	HIGHEST SUSTAINED WIND
-33.1 hPa/24h	951.7 hPa	34.5 m/s
Fossil Bluff Station	Fossil Bluff Station	Mawson Station
Nov. 10	Nov. 10	Nov. 13

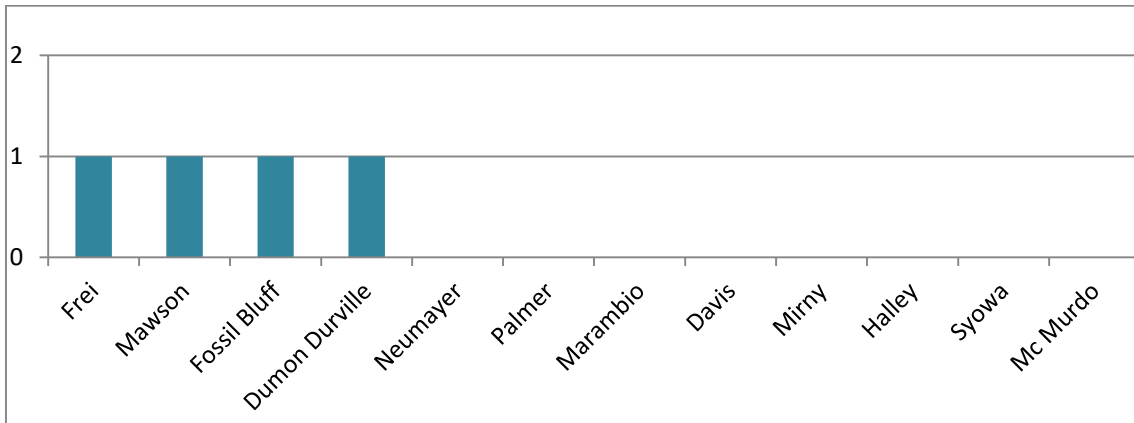
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2021



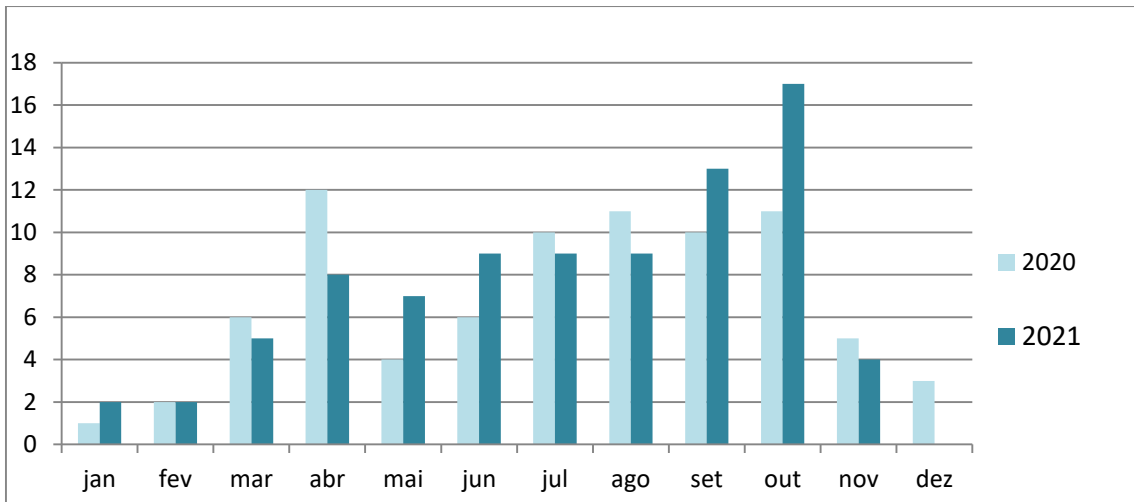
TOTAL OF EVENTS REGISTERED BY STATION IN 2021



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

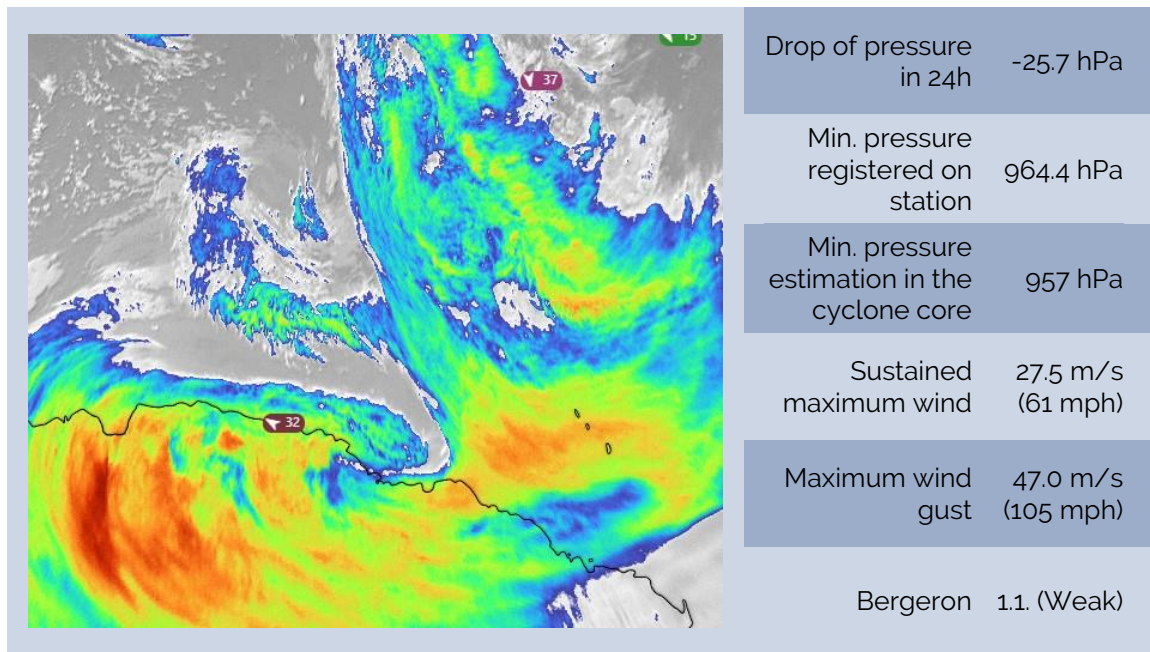


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



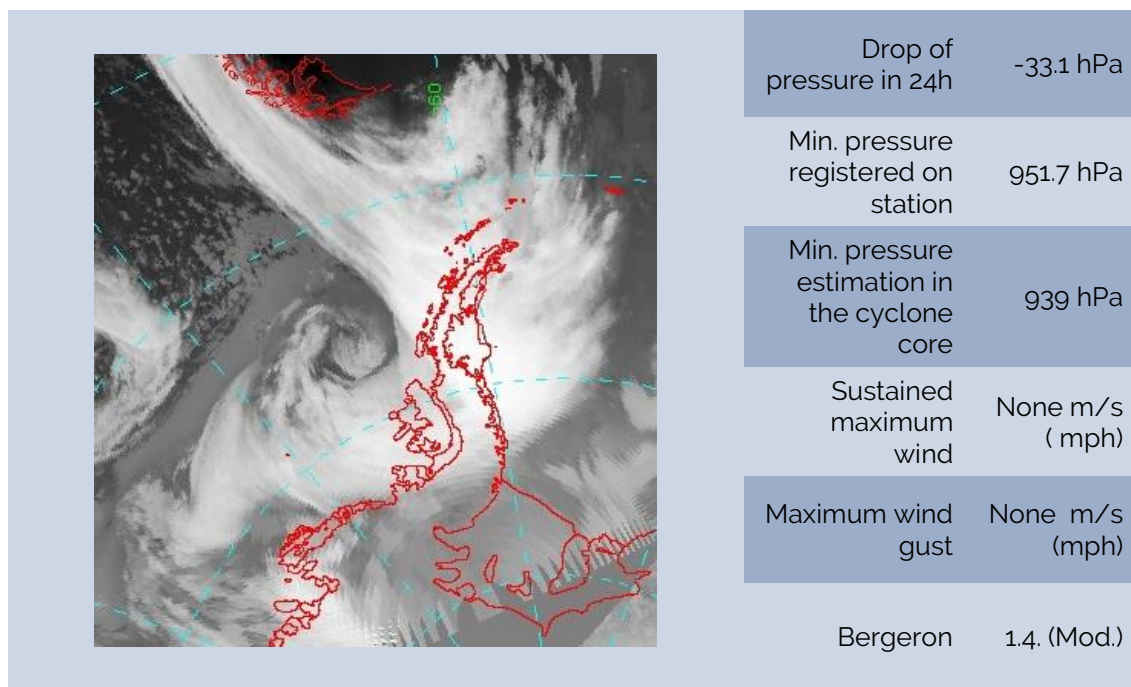
BOMB CYCLONE N°82/2021 - DATE: NOV./03/2021

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



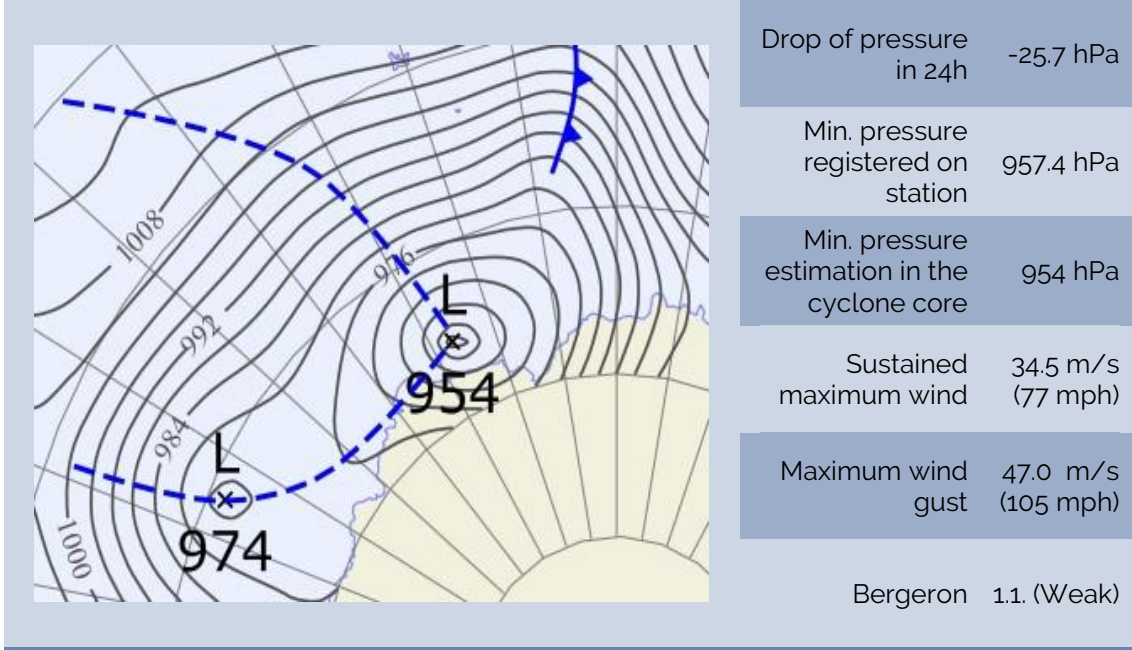
BOMB CYCLONE N°83/2021 - DATE: NOV./10/2021

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



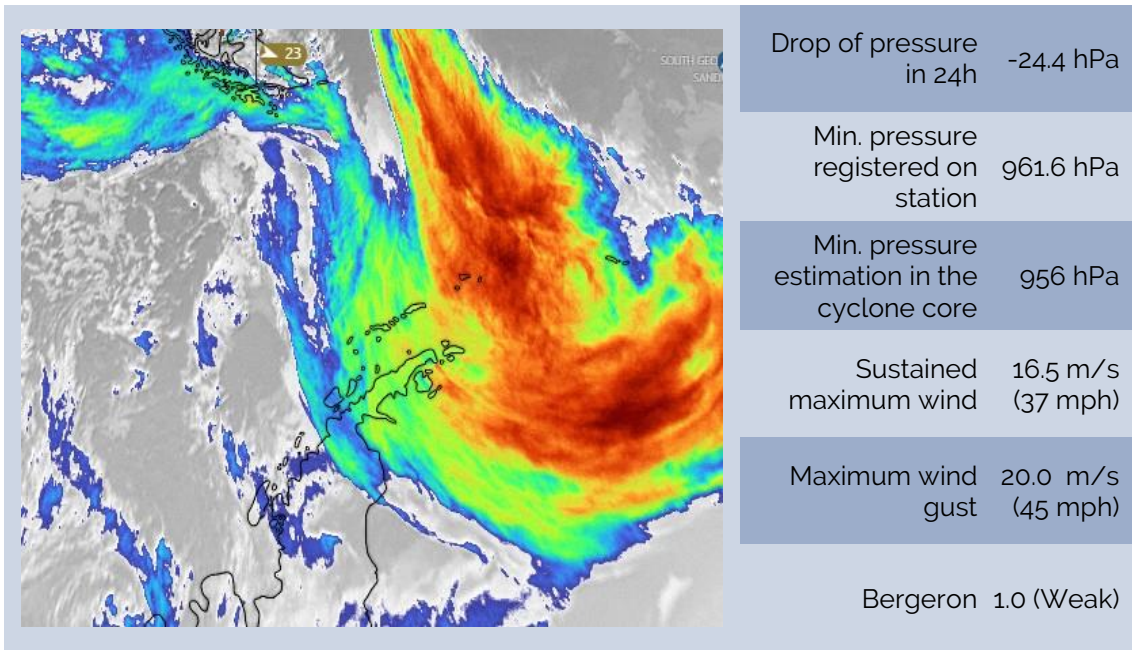
BOMB CYCLONE N°84/2021 - DATE: NOV./13/2021

LOCAL: MAWSON STATION – WMO 89564 (OPERATED BY AUSTRALIA)



BOMB CYCLONE N°85/2021 - DATE: NOV./17/2021

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