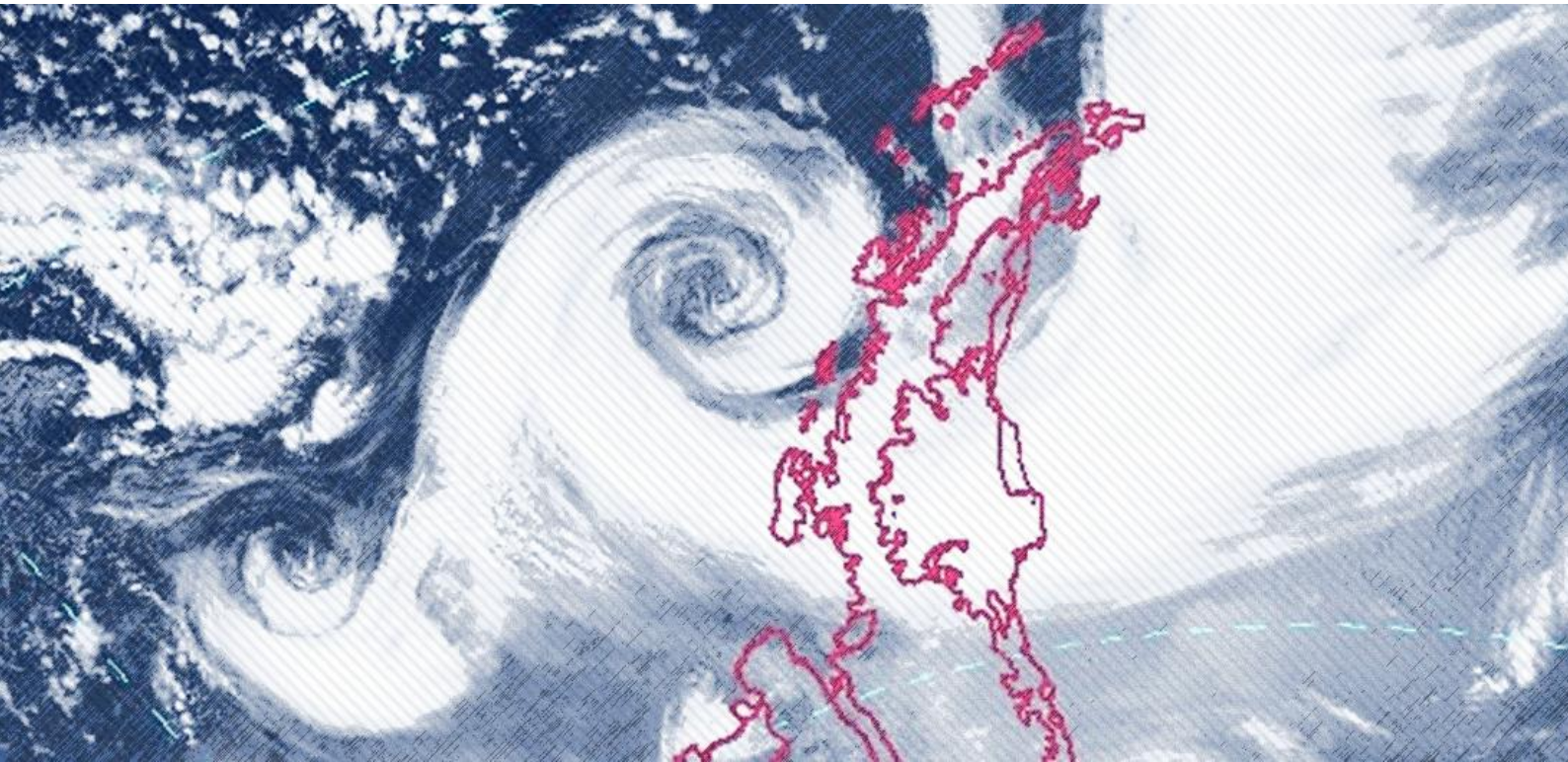




WORLD
ENVIRONMENTAL
CONSERVANCY

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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



MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

FEBRUARY 2023

During this month, only 03 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 a cyclone this month was Mawson, Casey and Fossil Bluff. There was a decrease (75%) in the number of cyclones in comparison to the same month of the previous year (2022) and a increase of 50% in comparison the 2020 also.

TOTAL OF EVENTS REGISTERED IN STATIONS IN FEBRUARY

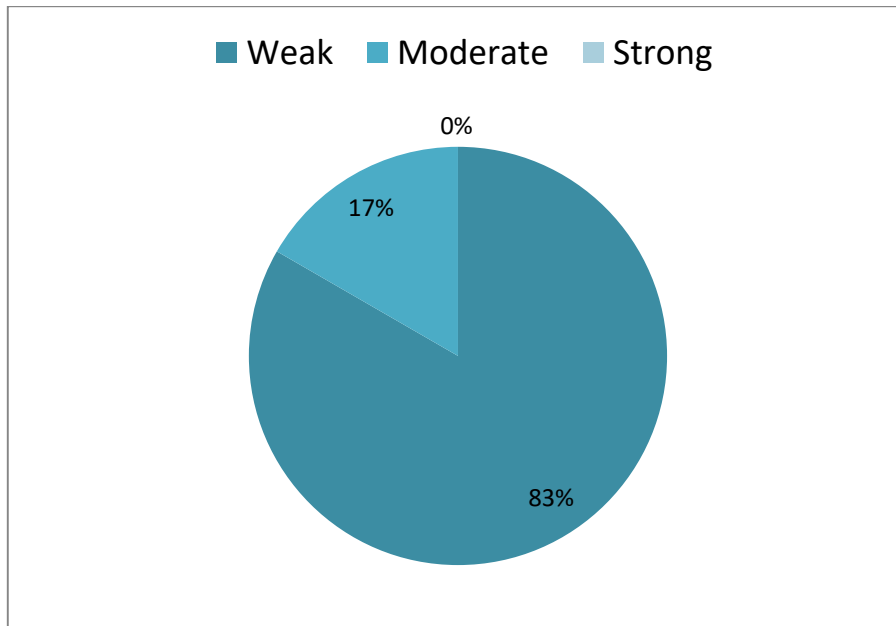
2017	2018	2019	2020	2021	2022	2023
03	02	01	02	02	12	03

STATISTICS OF THE MONTH: FEBRUARY 2023

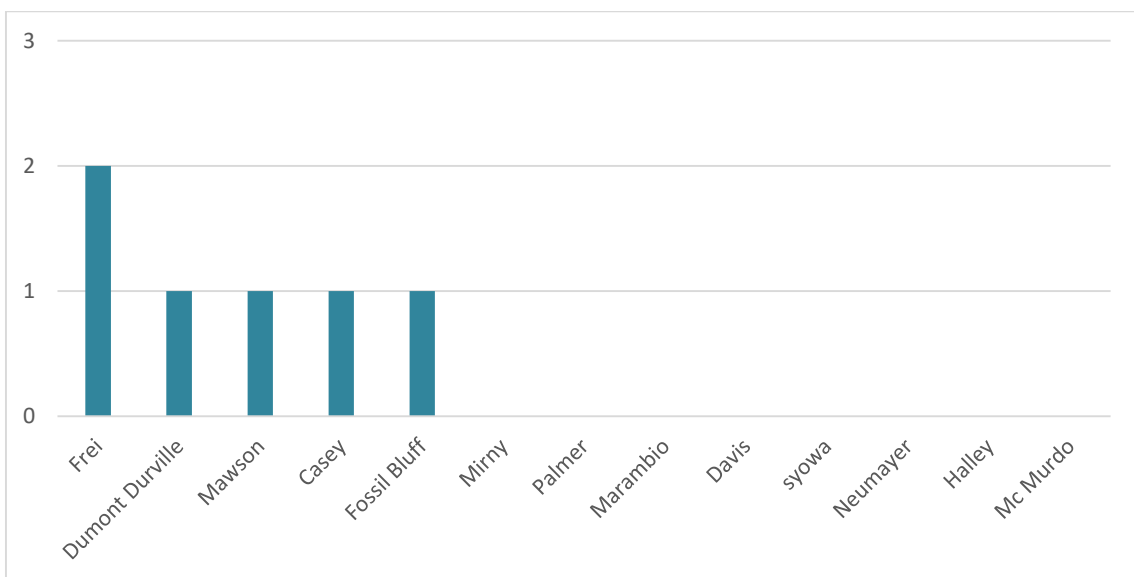
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	02
B2	1.3 a 1.8	Moderate	01
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-35.2 hPa/24h	958.6 hPa	35.0 m/s
Fossil Bluff Station	Mawson Station	Mawson Station
Feb. 17	Feb. 22	Feb. 22

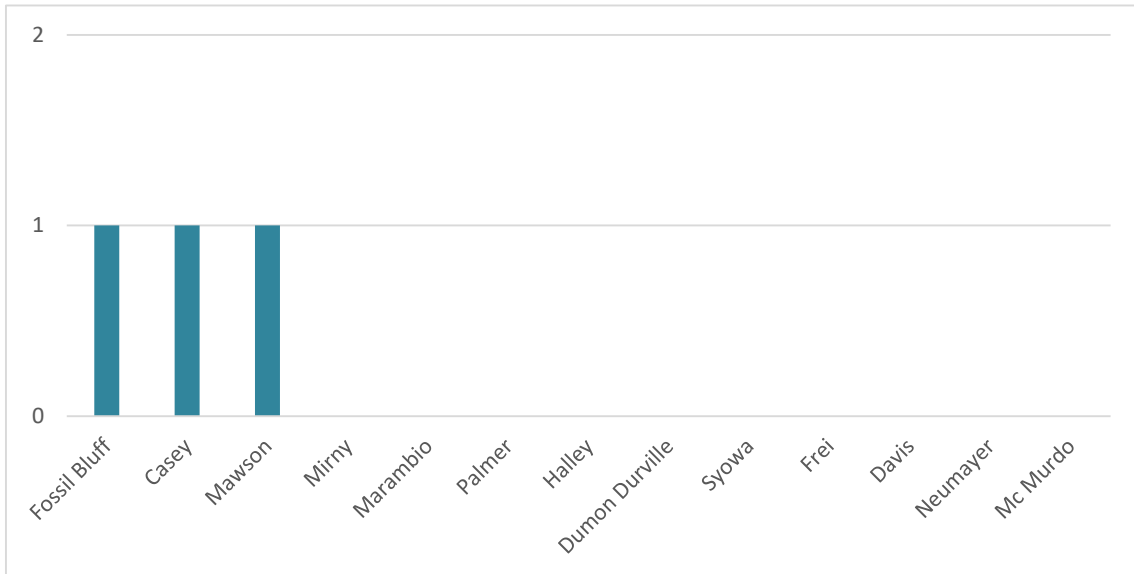
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2023



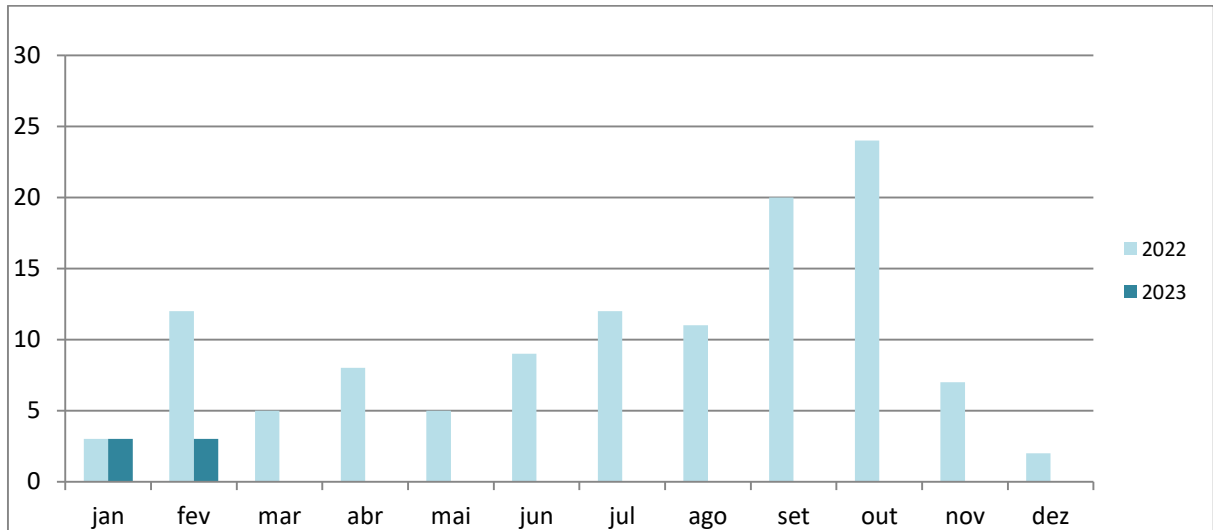
TOTAL OF EVENTS REGISTERED BY STATION IN 2023



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF FEBRUARY/2023

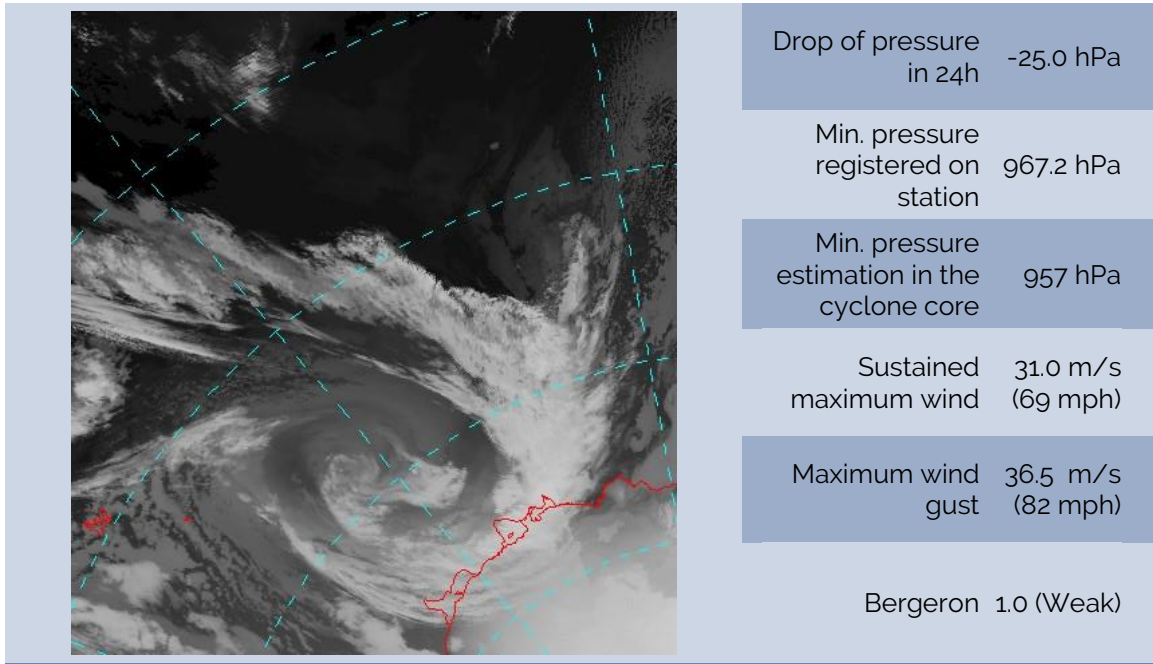


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



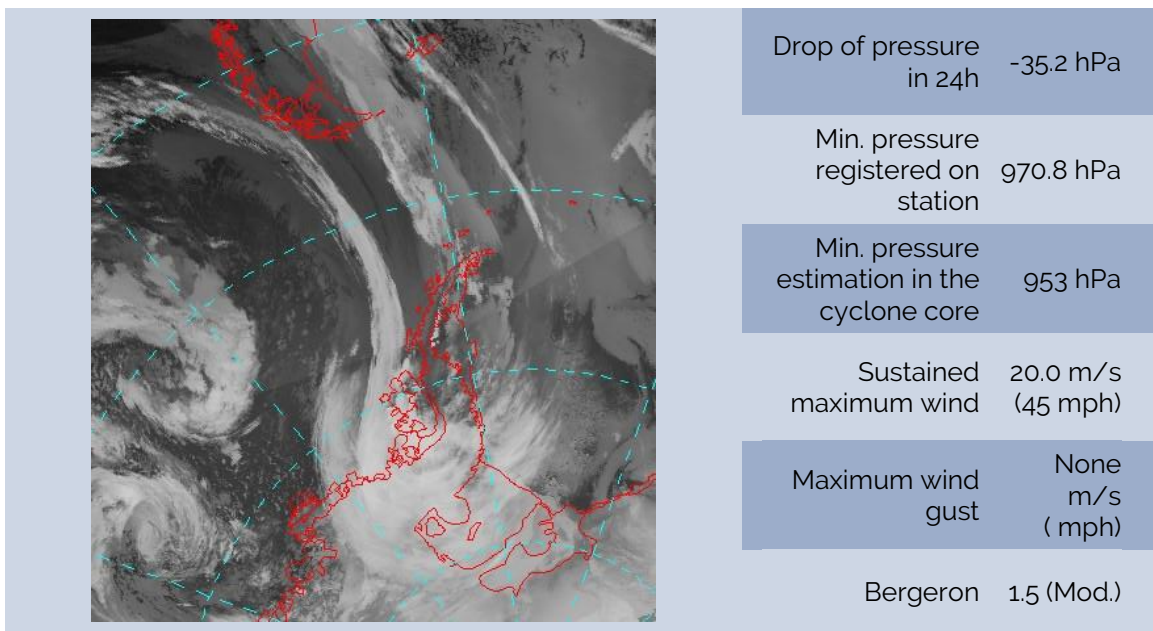
BOMB CYCLONE N°04/2023- DATE: FEB/02/2023

LOCAL: CASEY STATION – WMO 89611 (OPERATED BY AUSTRALIA)



BOMB CYCLONE N°05/2023- DATE: FEB/17/2023

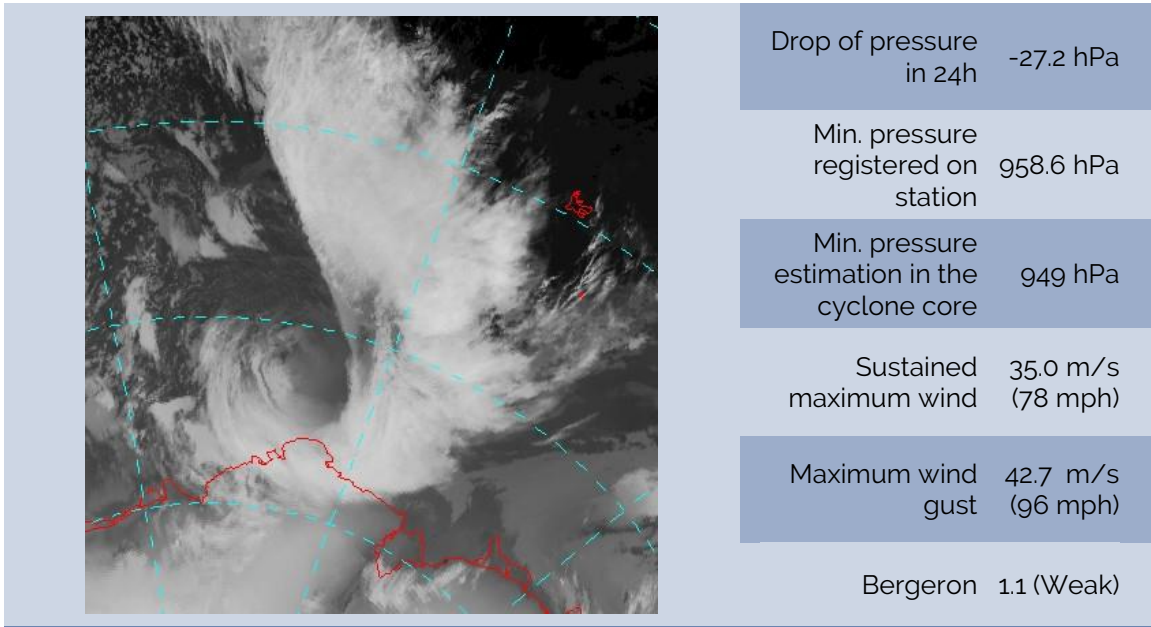
LOCAL: FOSSIL BLUFF STATION – WMO 89065 (OPERATED BY U.K.)



BOMB CYCLONE N°06/2023- DATE: FEB/22/2023

(ANTARCTIC HURRICANE CAT-1)

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



SOURCES

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

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

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

<https://amrc.ssec.wisc.edu/>

<http://meteoarmada.directemar.cl>

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