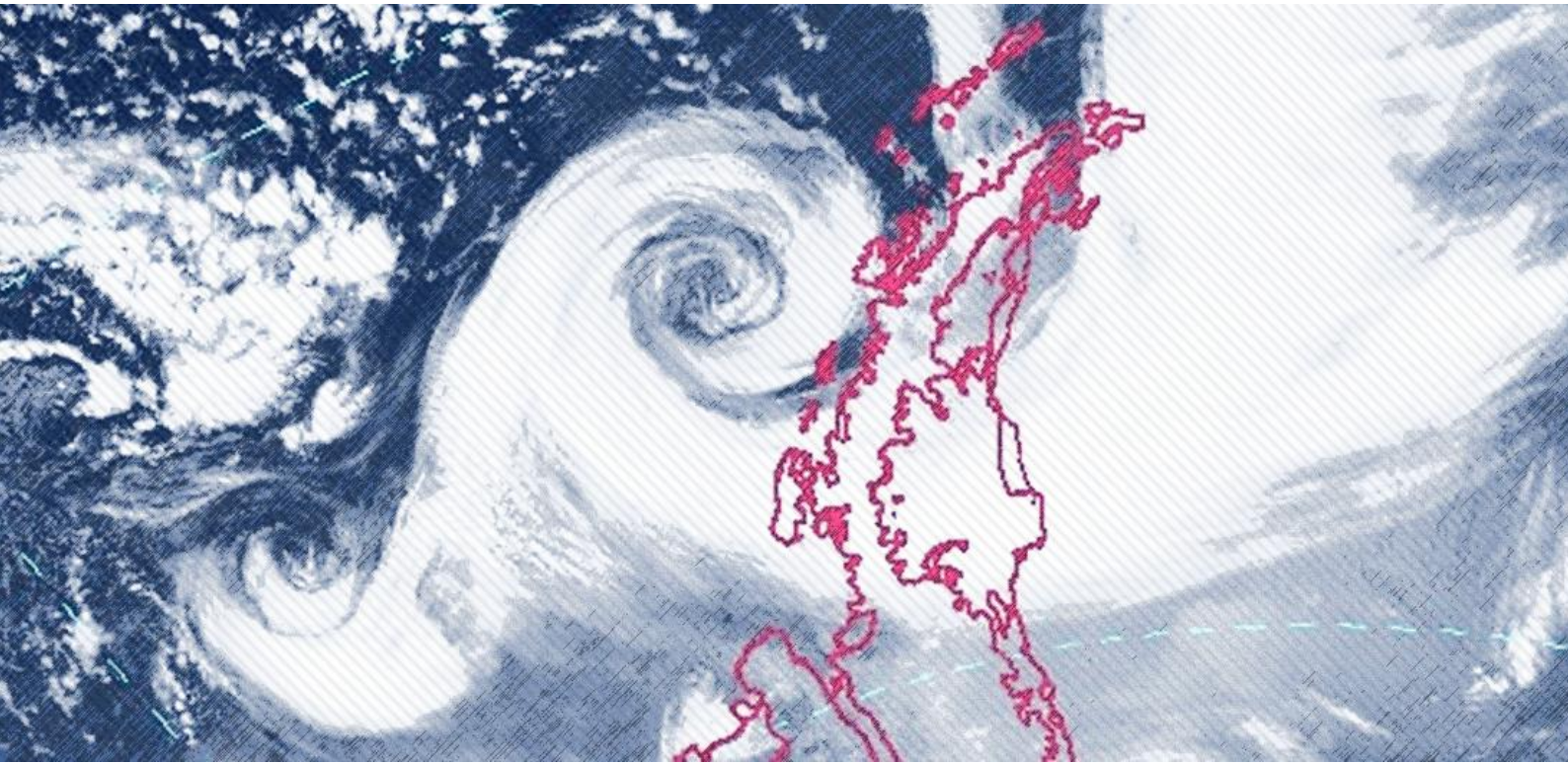




WORLD
ENVIRONMENTAL
CONSERVANCY

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

JANUARY 2022

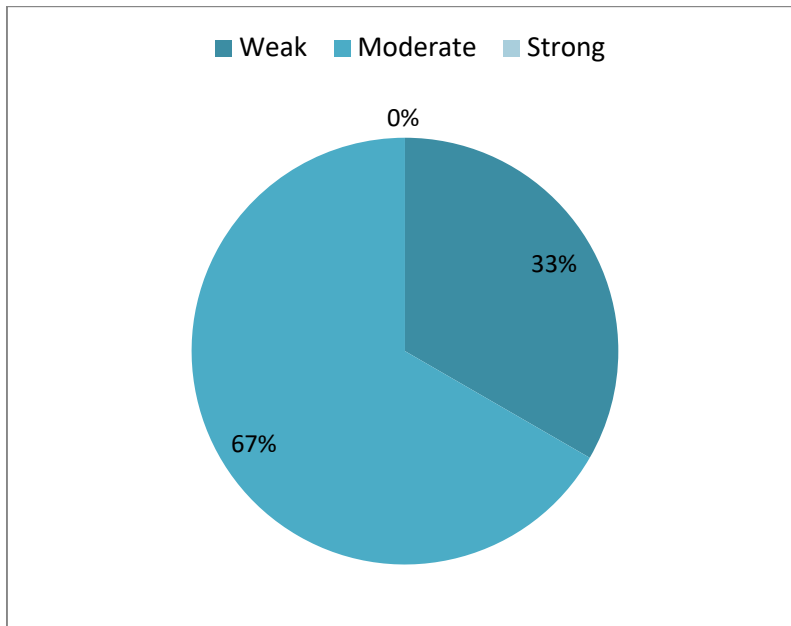
During this month, only 03 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations hit by a cyclone this month was Frei, Syowa and Casey. There was an increase (50%) in the number of cyclones in comparison to the same month of the previous year (2021) and an increase of 200% in comparison to the 2020.

STATISTICS OF THE MONTH

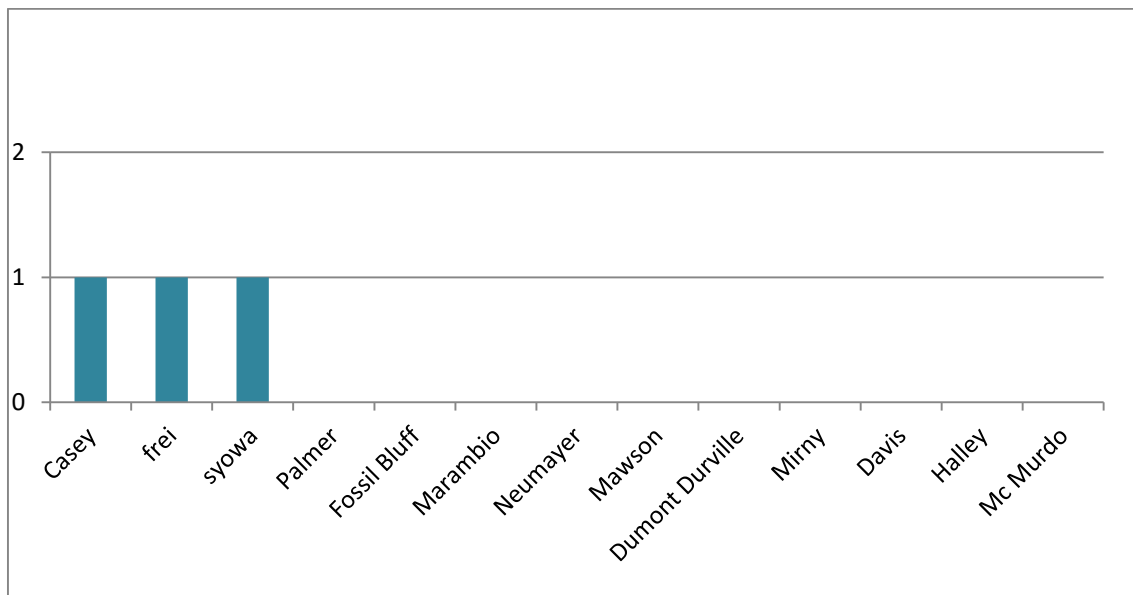
| CLASSIFICATION | BERGERON SCALE | INTENSITY | TOTAL OF CASES REGISTERED IN THE MONTH |
|----------------|----------------|-----------|--|
| B1 | 1 a 1.2 | Weak | 01 |
| B2 | 1.3 a 1.8 | Moderate | 02 |
| B3 | > 1.8 | Strong | 00 |

| HIGHEST PRESSURE DROP | LOWEST RECORDED PRESSURE | HIGHEST SUSTAINED WIND |
|-----------------------|--------------------------|------------------------|
| -36.2 hPa/24h | 953.1 hPa | 43.5 m/s |
| Casey Station | Casey Station | Casey Station |
| Jan. 05 | Jan. 05 | Jan. 05 |

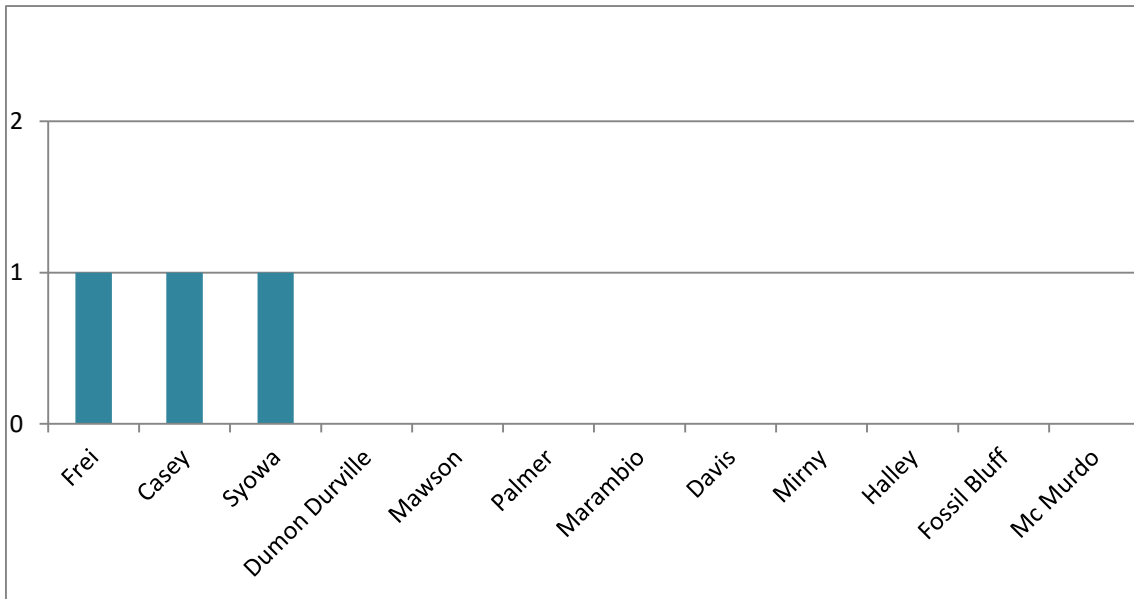
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2022



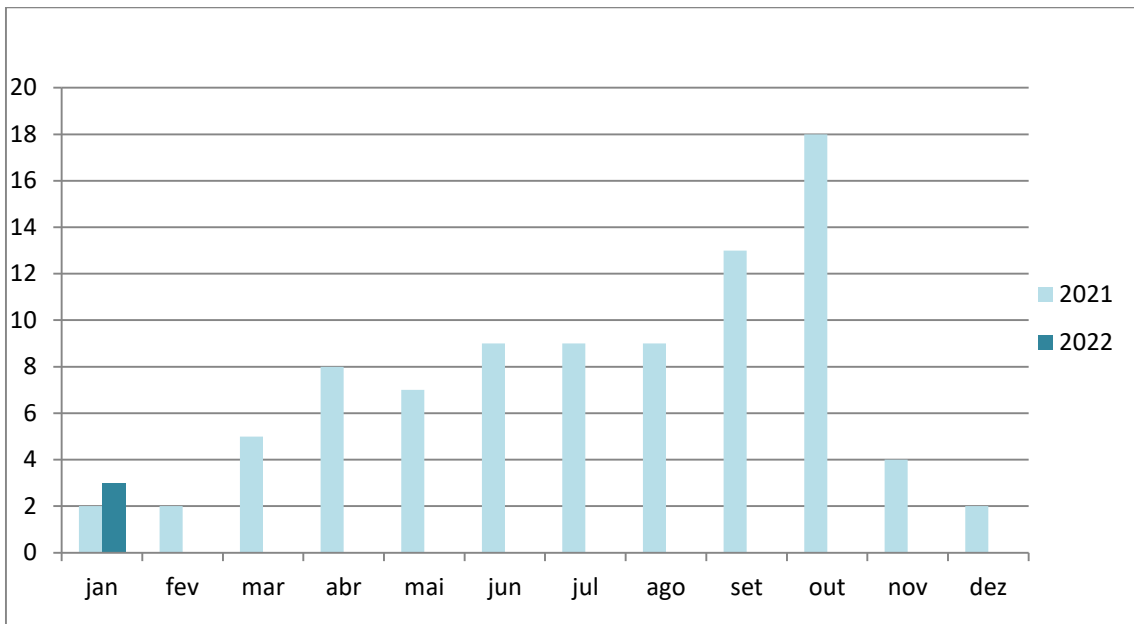
TOTAL OF EVENTS REGISTERED BY STATION IN 2022



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF JANUARY/2022

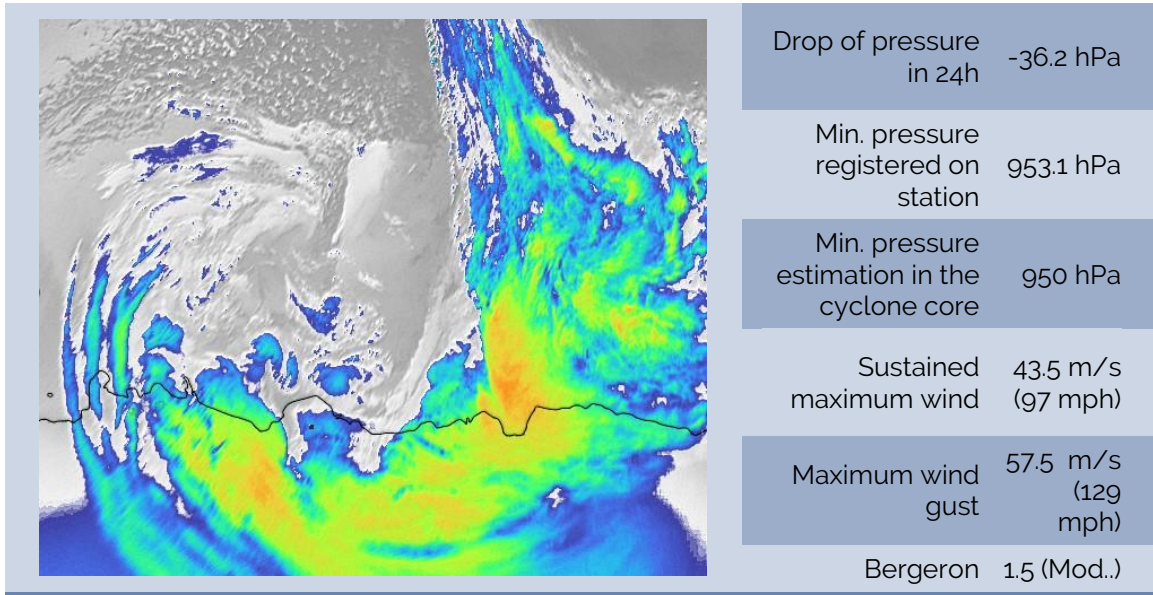


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



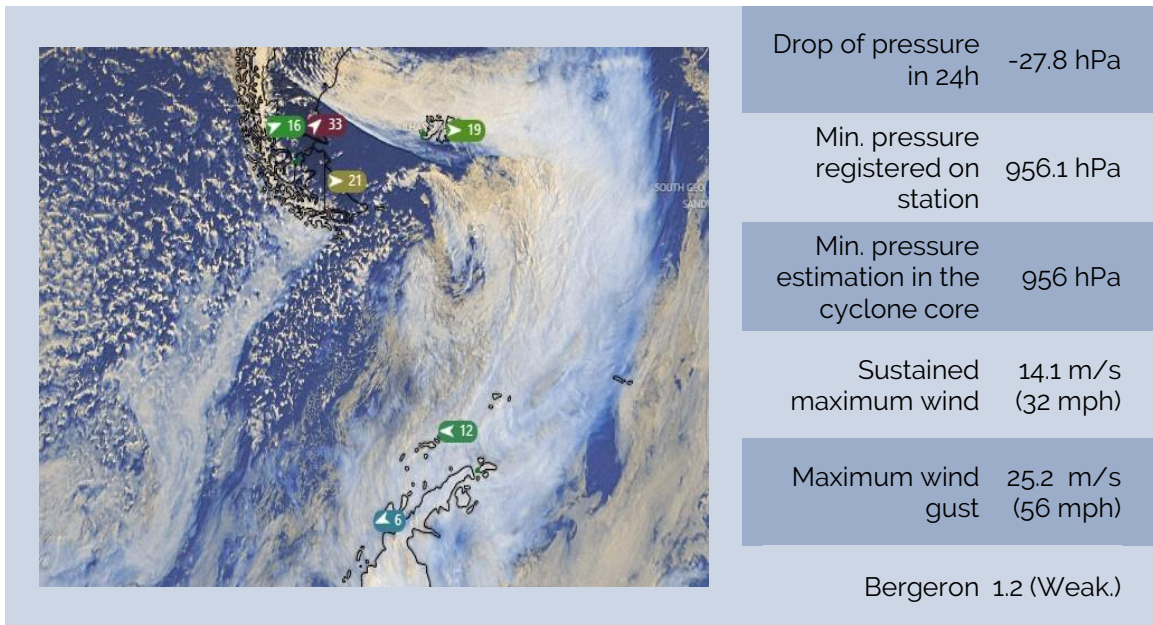
BOMB CYCLONE N°01/2022- DATE: JAN/05/2022

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



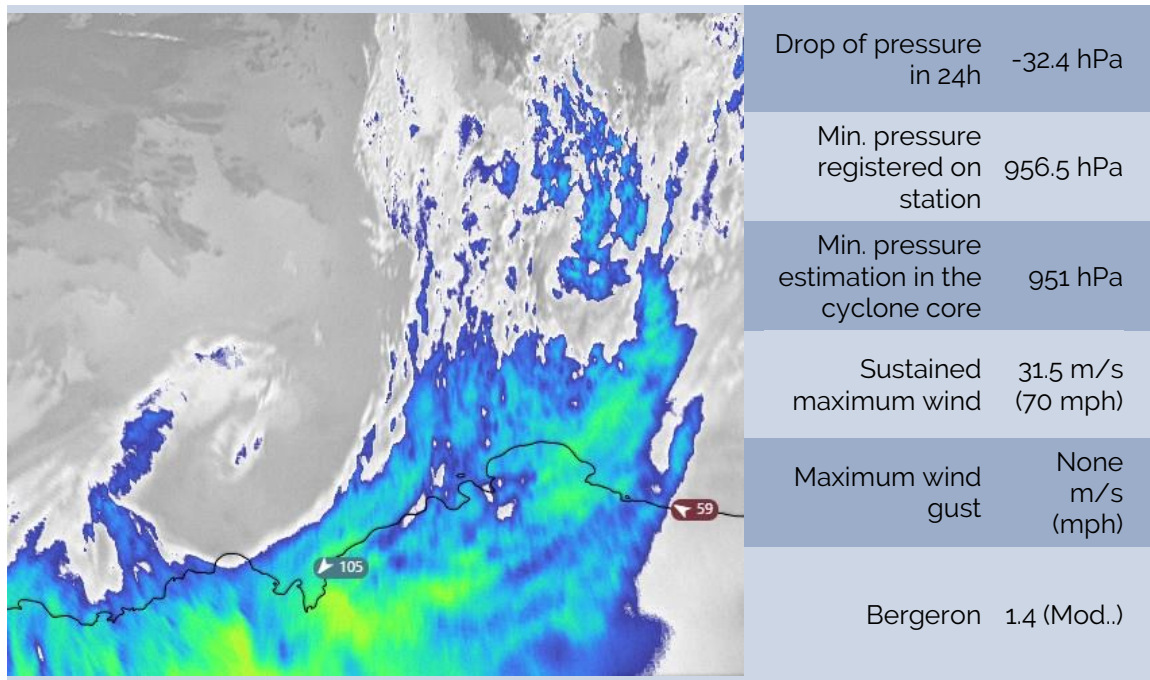
BOMB CYCLONE N°02/2022- DATE: JAN./10/2022

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



BOMB CYCLONE N°03/2022- DATE: JAN./17/2022

LOCAL: SYOWA STATION – WMO 89532 (OPERATED BY JAPAN)



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>

Ferraz Station weather data