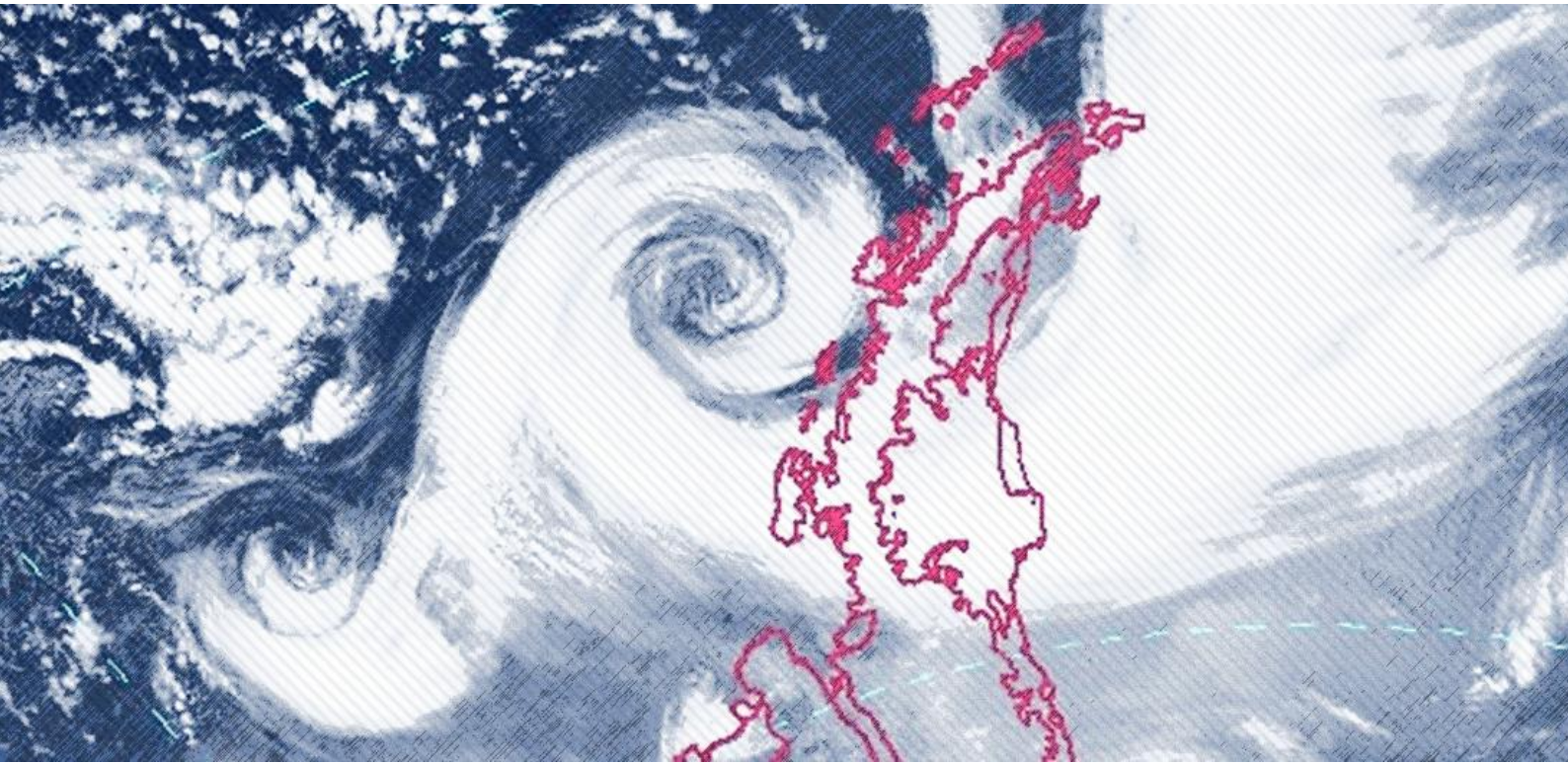




WORLD
ENVIRONMENTAL
CONSERVANCY

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 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 Frei and Dumont D'Urville. Of these 03 events 00 of them reached the level of an Antarctic Hurricane.

TOTAL OF EVENTS REGISTERED IN STATIONS IN JANUARY

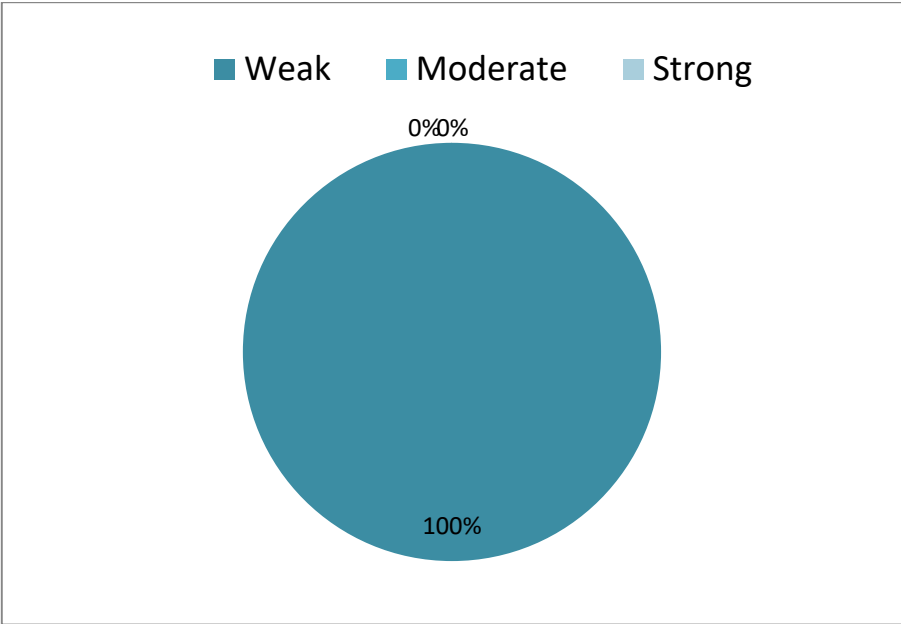
| 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------|------|------|------|------|------|------|
| 00 | 04 | 02 | 01 | 02 | 03 | 03 |

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 | 00 |
| B3 | > 1.8 | Strong | 00 |

| HIGHEST PRESSURE DROP | LOWEST RECORDED PRESSURE | HIGHEST SUSTAINED WIND |
|-----------------------|--------------------------|--------------------------|
| -27.2 hPa/24h | 964.4 hPa | 25.0 m/s |
| Frei Station | Dumont D'Urville Station | Dumont D'Urville Station |
| Jan. 01 | Jan. 24 | Jan. 24 |

BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2023



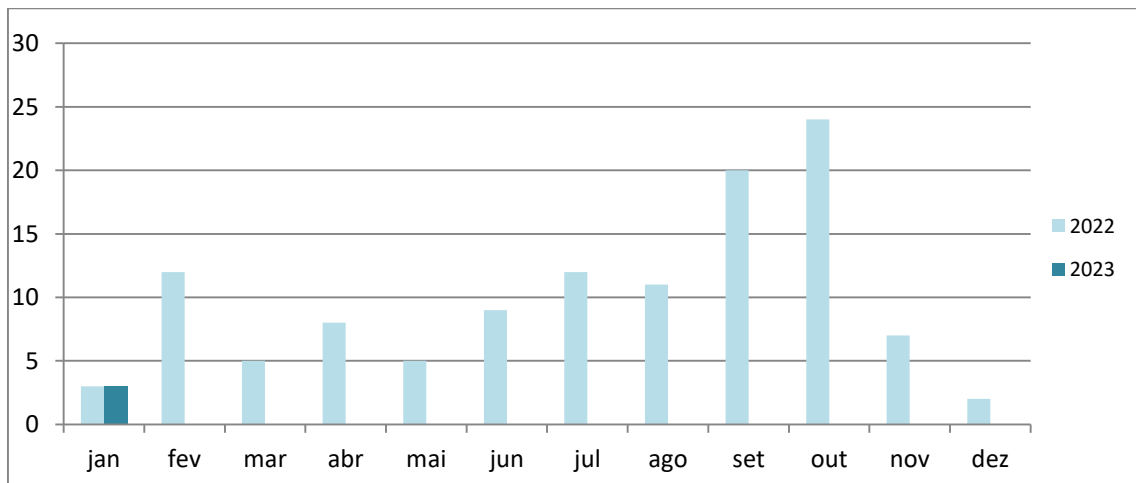
TOTAL OF EVENTS REGISTERED BY STATION IN 2023



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

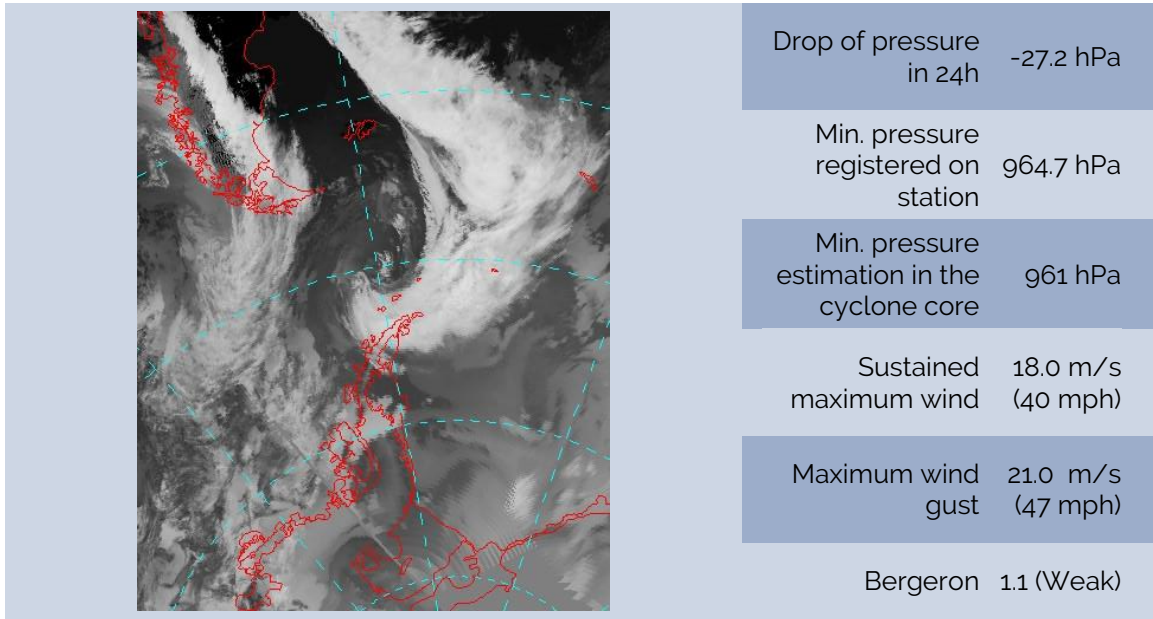


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



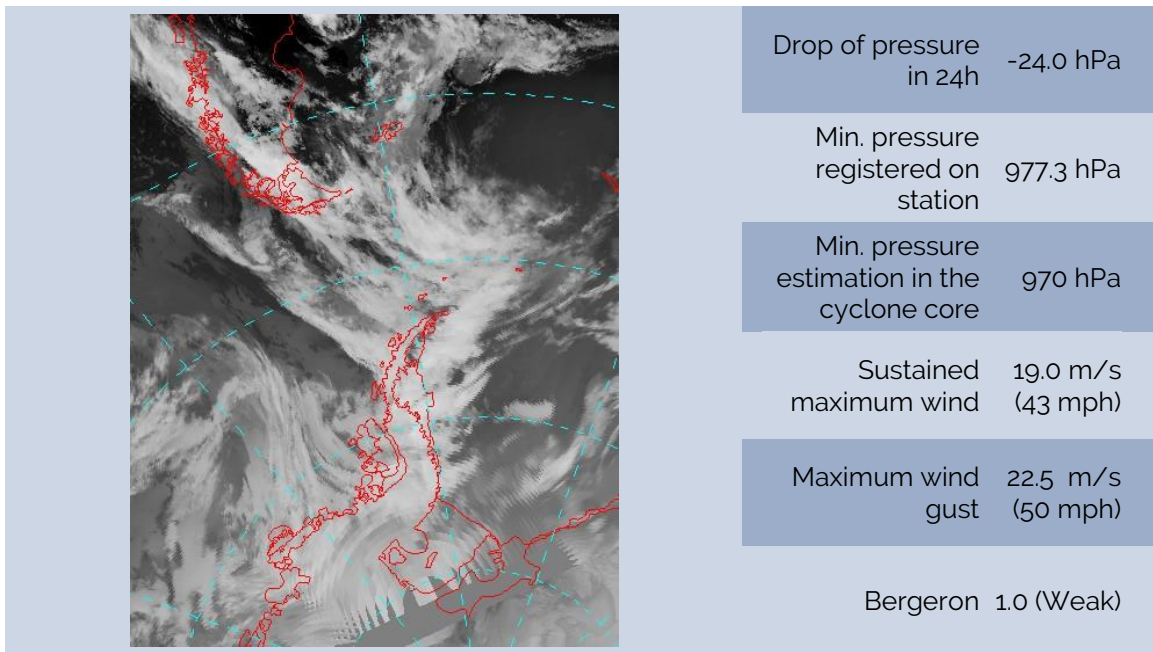
BOMB CYCLONE N°01/2023- DATE: JAN/01/2023

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



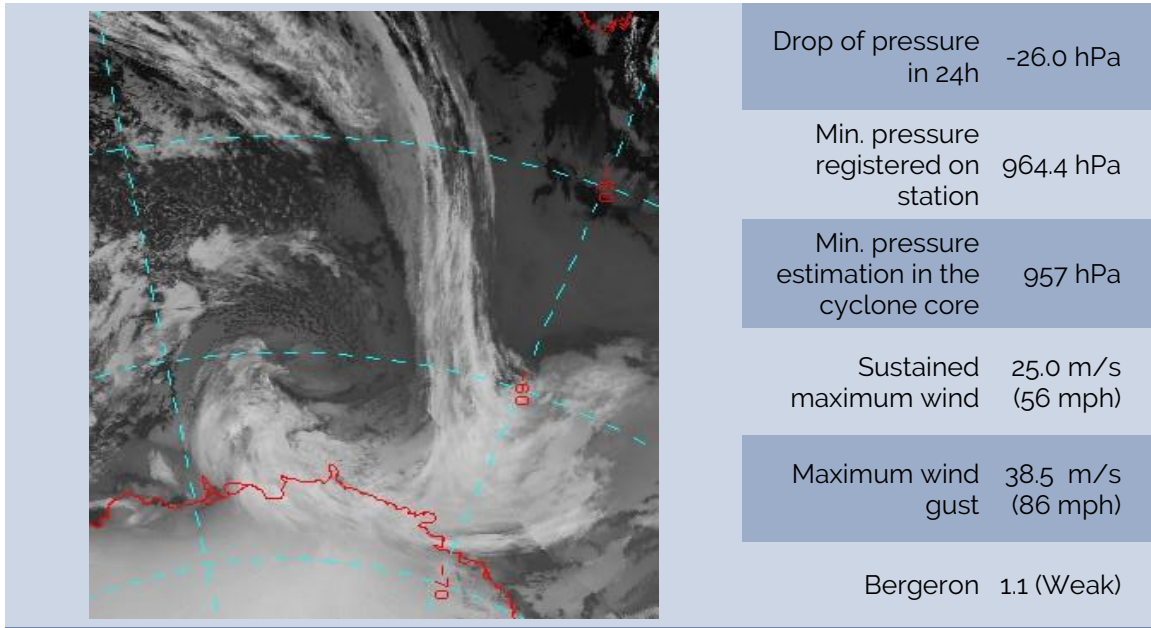
BOMB CYCLONE N°02/2023- DATE: JAN./10/2023

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



BOMB CYCLONE N°03/2022- DATE: JAN./24/2023

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



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>