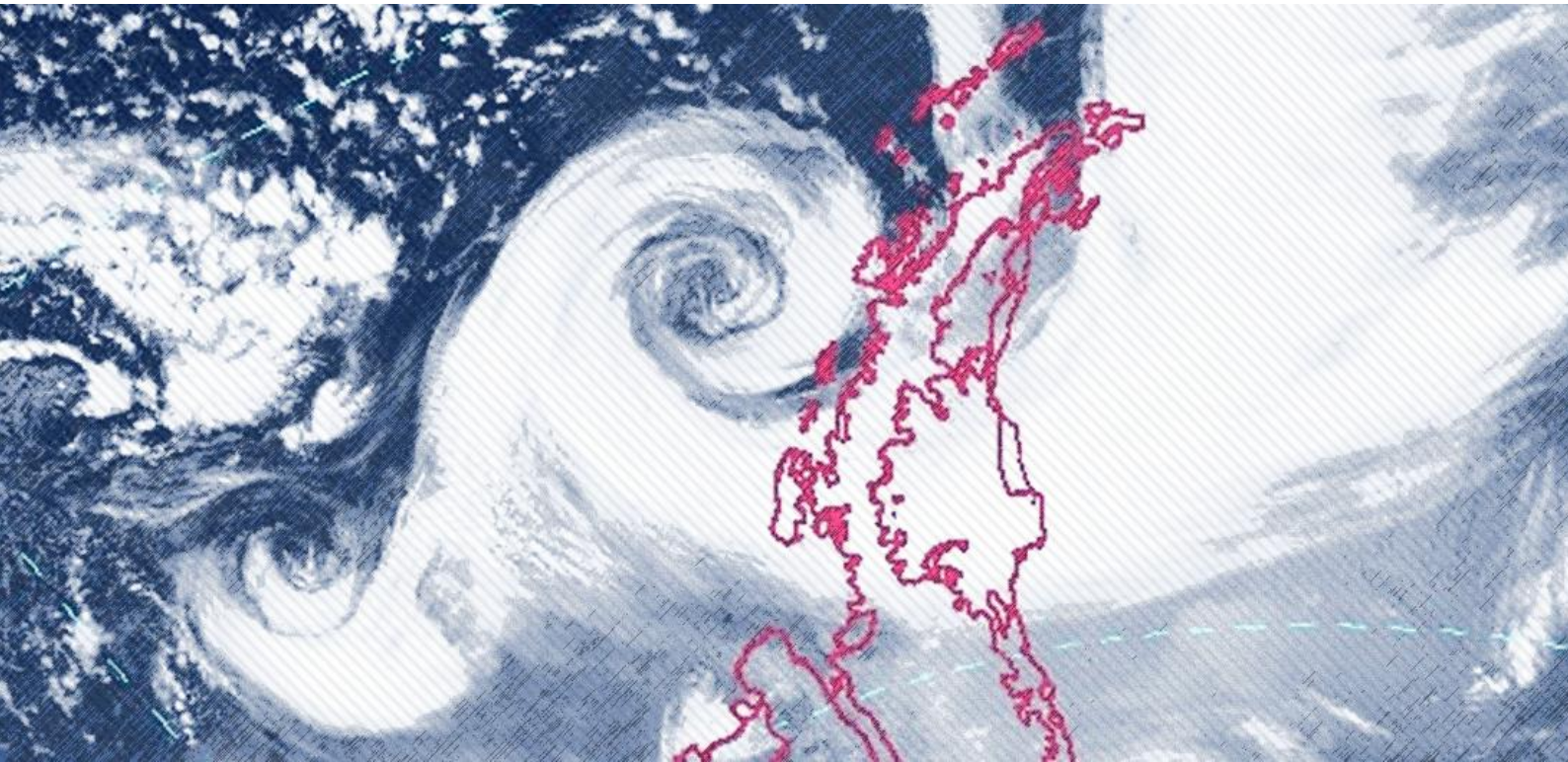




WORLD
ENVIRONMENTAL
CONSERVANCY

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

APRIL 2022

During this month, only 08 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, Neumayer, Marambio, Mirny and Davis. The cyclone that hit Mawson on the 9th reached the category of Antarctic Hurricane AH-1.

TOTAL OF EVENTS REGISTERED IN STATIONS IN APRIL

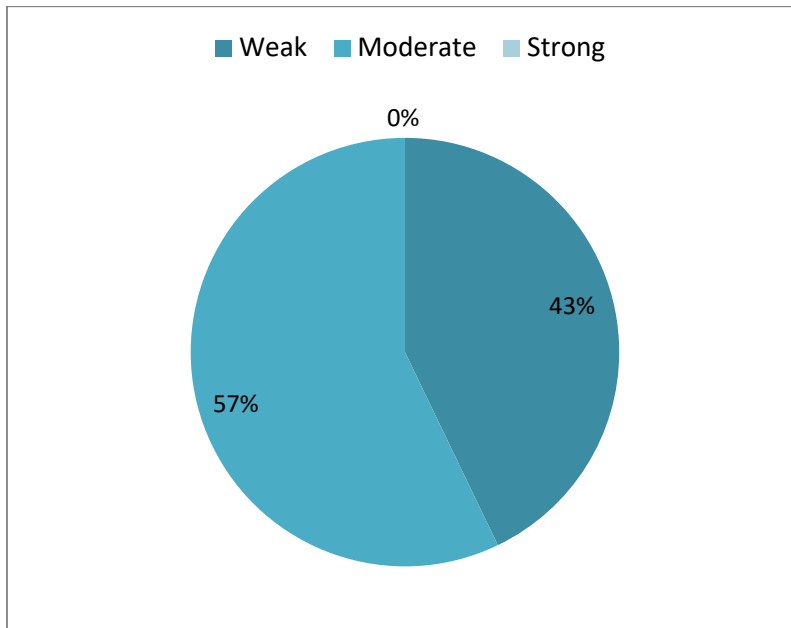
| 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------|------|------|------|------|------|
| 06 | 02 | 08 | 12 | 08 | 08 |

STATISTICS OF THE MONTH: APRIL 2022

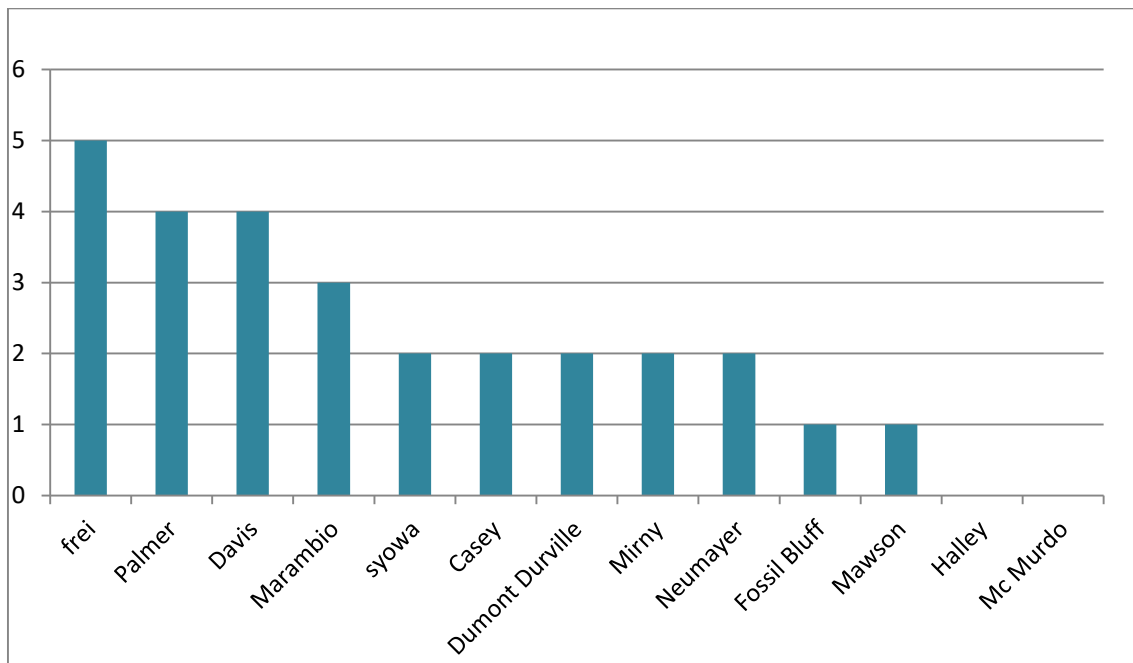
| CLASSIFICATION | BERGERON SCALE | INTENSITY | TOTAL OF CASES REGISTERED IN THE MONTH |
|----------------|----------------|-----------|----------------------------------------|
| B1 | 1 a 1.2 | Weak | 03 |
| B2 | 1.3 a 1.8 | Moderate | 05 |
| B3 | > 1.8 | Strong | 00 |

| HIGHEST PRESSURE DROP | LOWEST RECORDED PRESSURE | HIGHEST SUSTAINED WIND |
|-----------------------|--------------------------|------------------------|
| -37.1 hPa/24h | 954.7 hPa | 33.0 m/s |
| Davis Station | Davis Station | Mawson Station |
| April 16 | April 16 | April 09 |

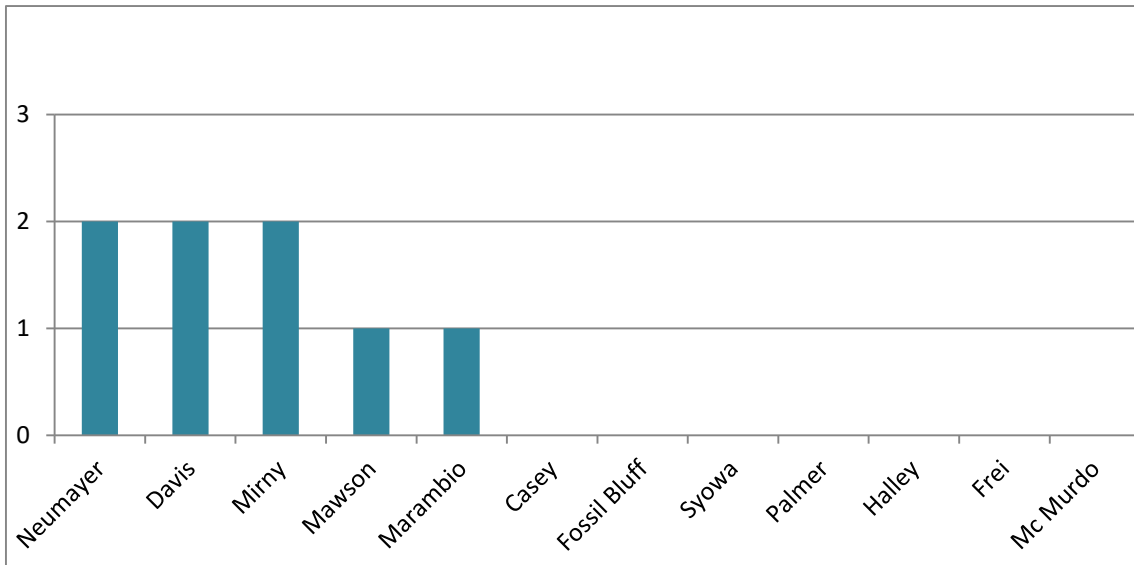
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2022



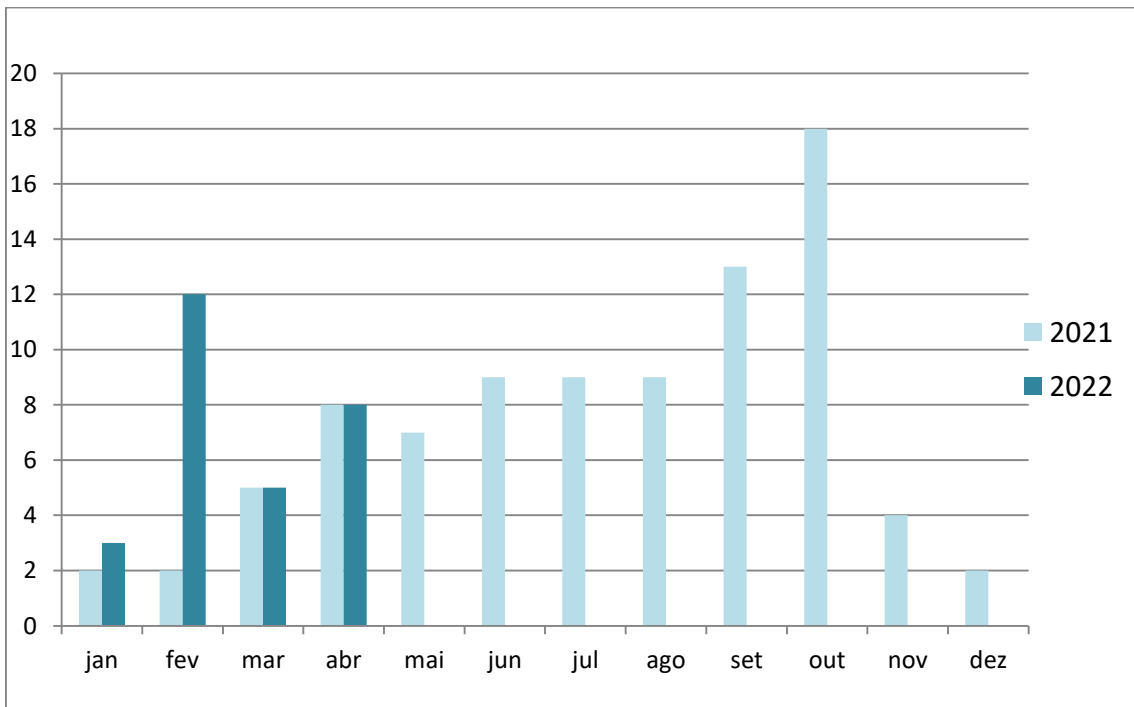
TOTAL OF EVENTS REGISTERED BY STATION IN 2022



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

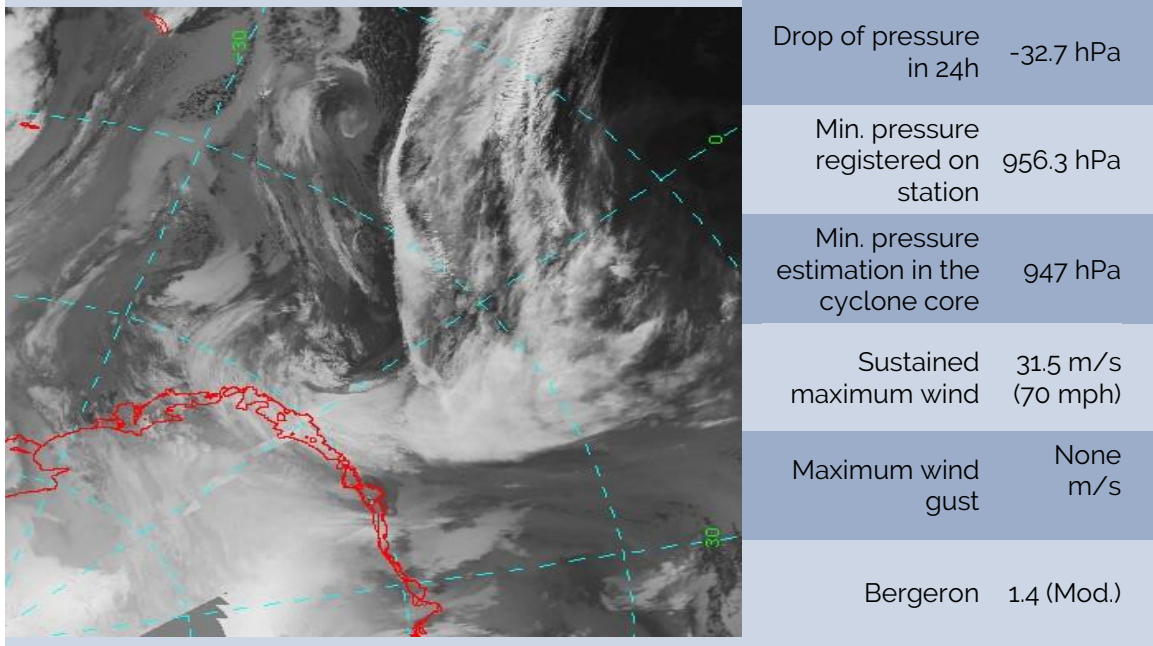


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



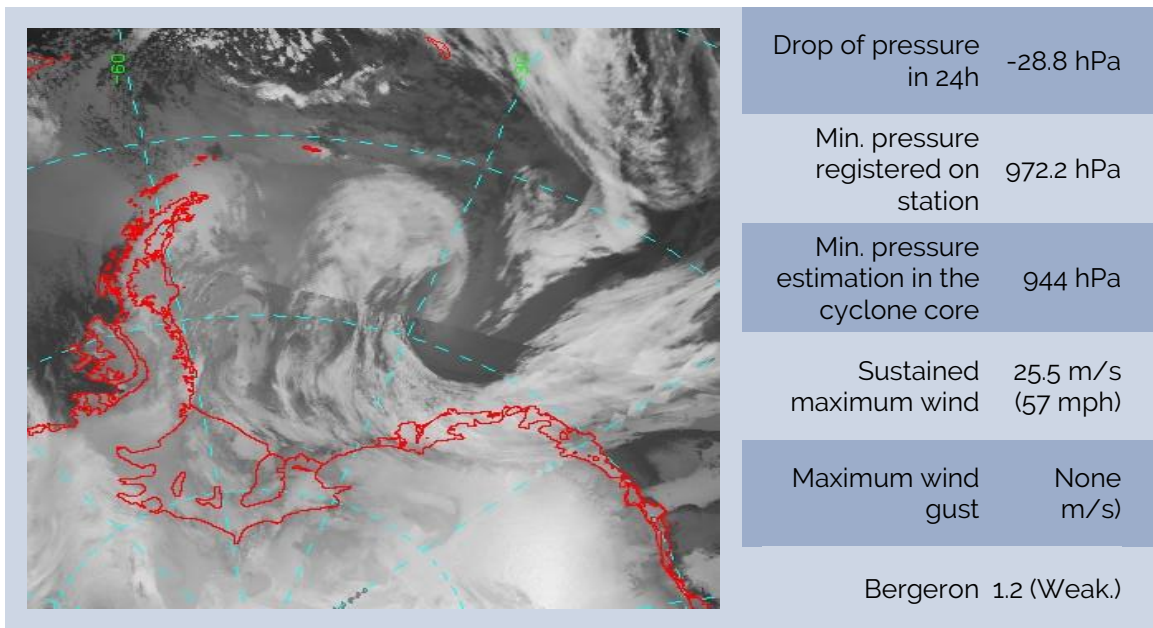
BOMB CYCLONE N°19/2022- DATE: APR./01/2022

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



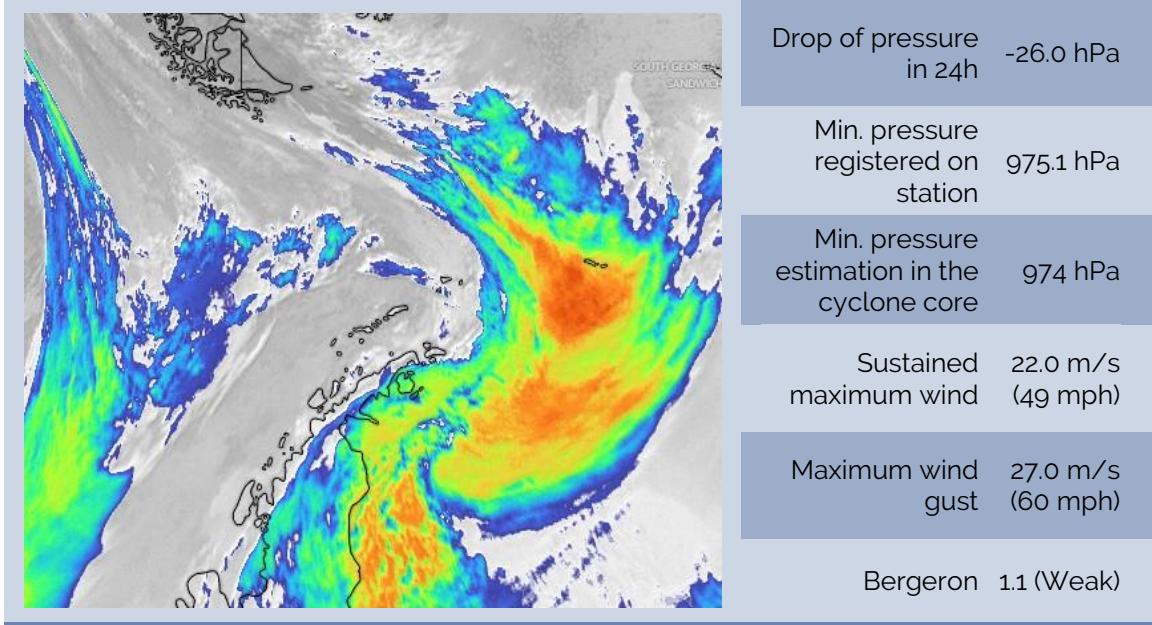
BOMB CYCLONE N°20/2022 - DATE: APR./06/2022

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



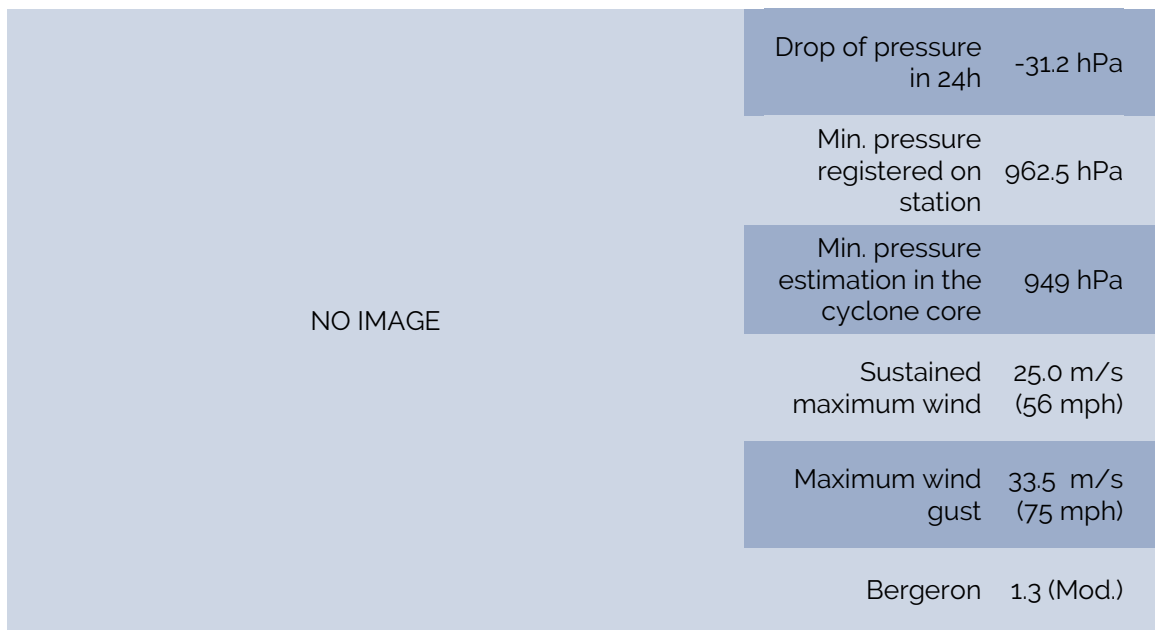
BOMB CYCLONE N°21/2022 - DATE: APR./09/2022

LOCAL: MARAMBIO STATION – WMO 89055 (OPERATED BY ARGENTINA)



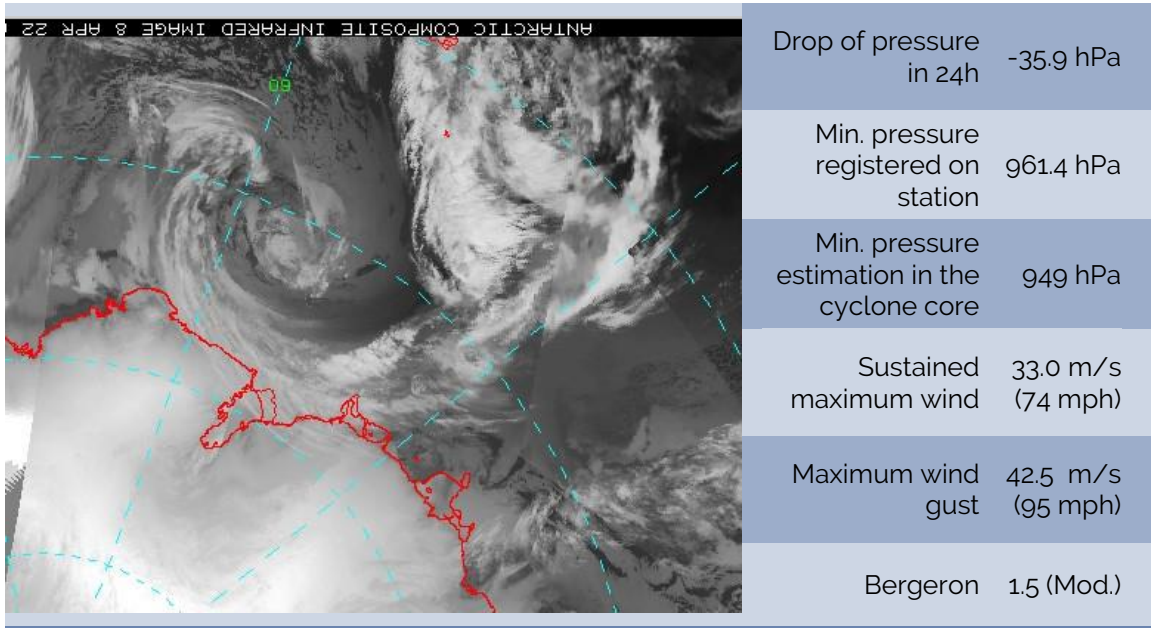
BOMB CYCLONE N°22/2022 - DATE: APR./09/2022

LOCAL: DAVIS STATION – WMO 89571 (OPERATED BY AUSTRALIA)



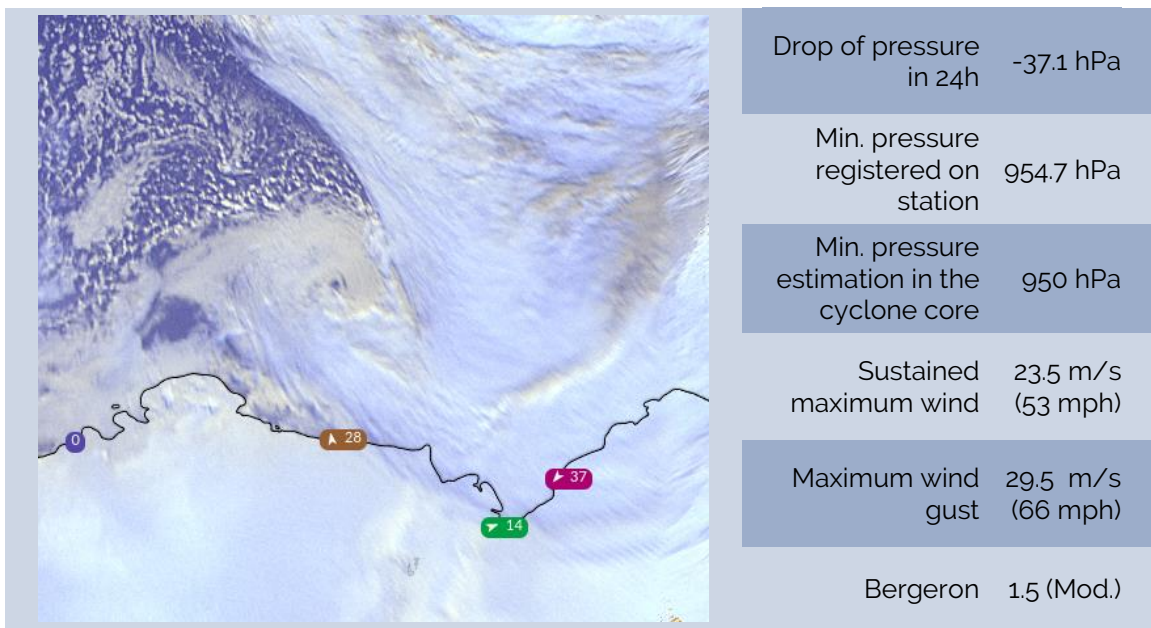
BOMB CYCLONE N°23/2022 - DATE: APR./09/2022

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



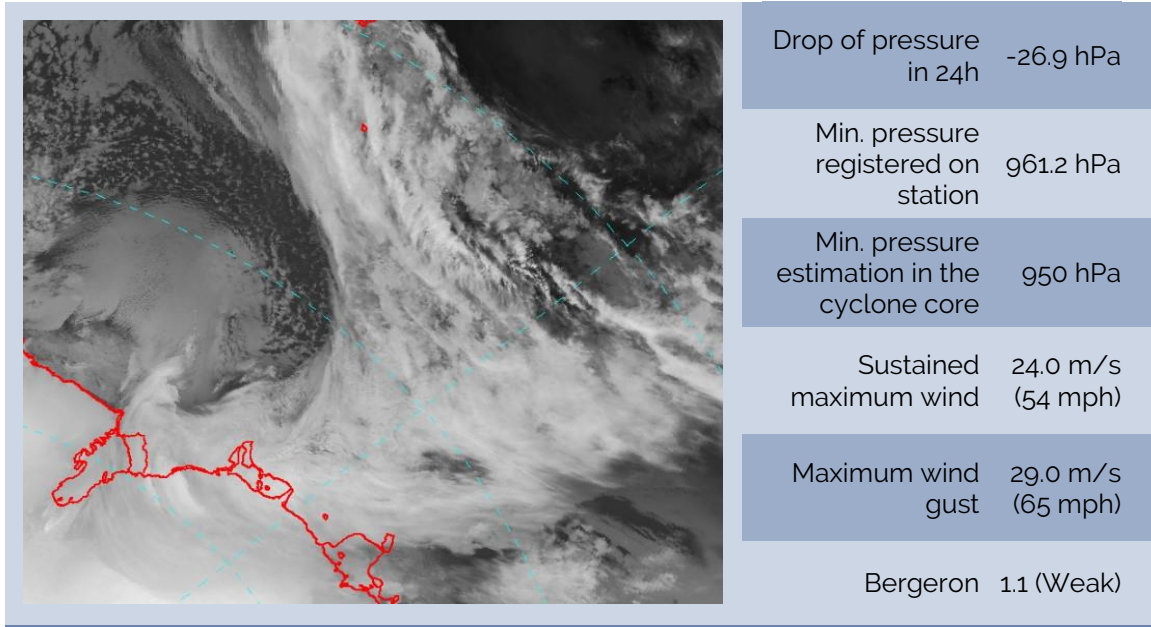
BOMB CYCLONE N°24/2022 - DATE: APR./16/2022

LOCAL: DAVIS STATION – WMO 89571 (OPERATED BY AUSTRALIA)



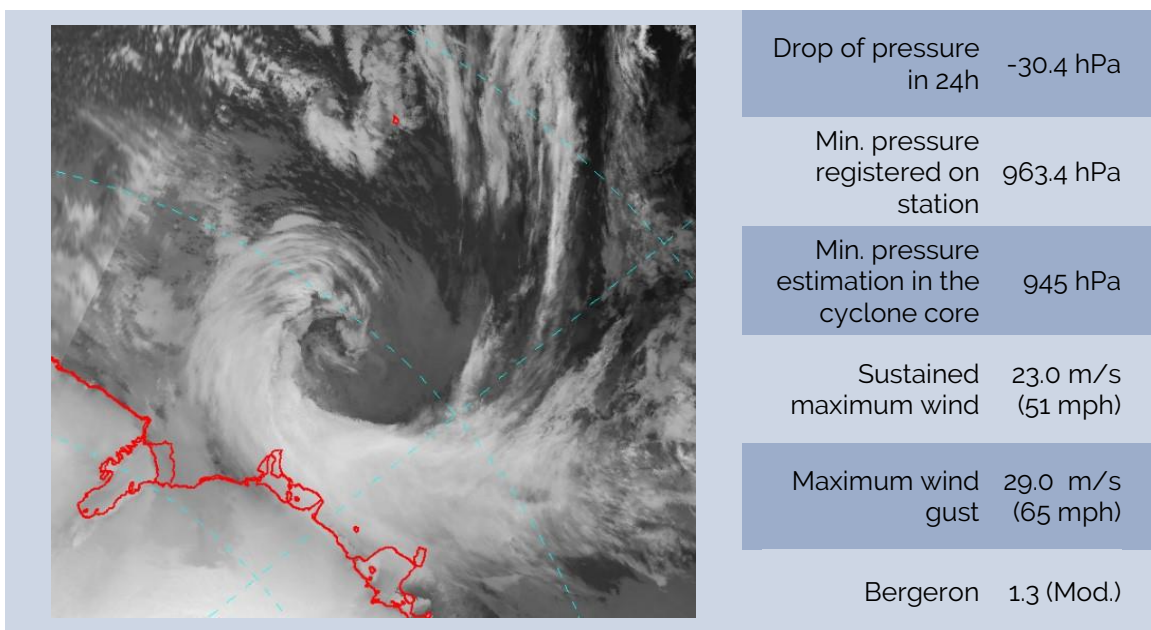
BOMB CYCLONE N°25/2022 - DATE: APR./17/2022

LOCAL: MIRNY STATION – WMO 89592 (OPERATED BY RUSSIA)



BOMB CYCLONE N°26/2022 - DATE: APR./20/2022

LOCAL: MIRNY STATION – WMO 89592 (OPERATED BY RUSSIA)



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>