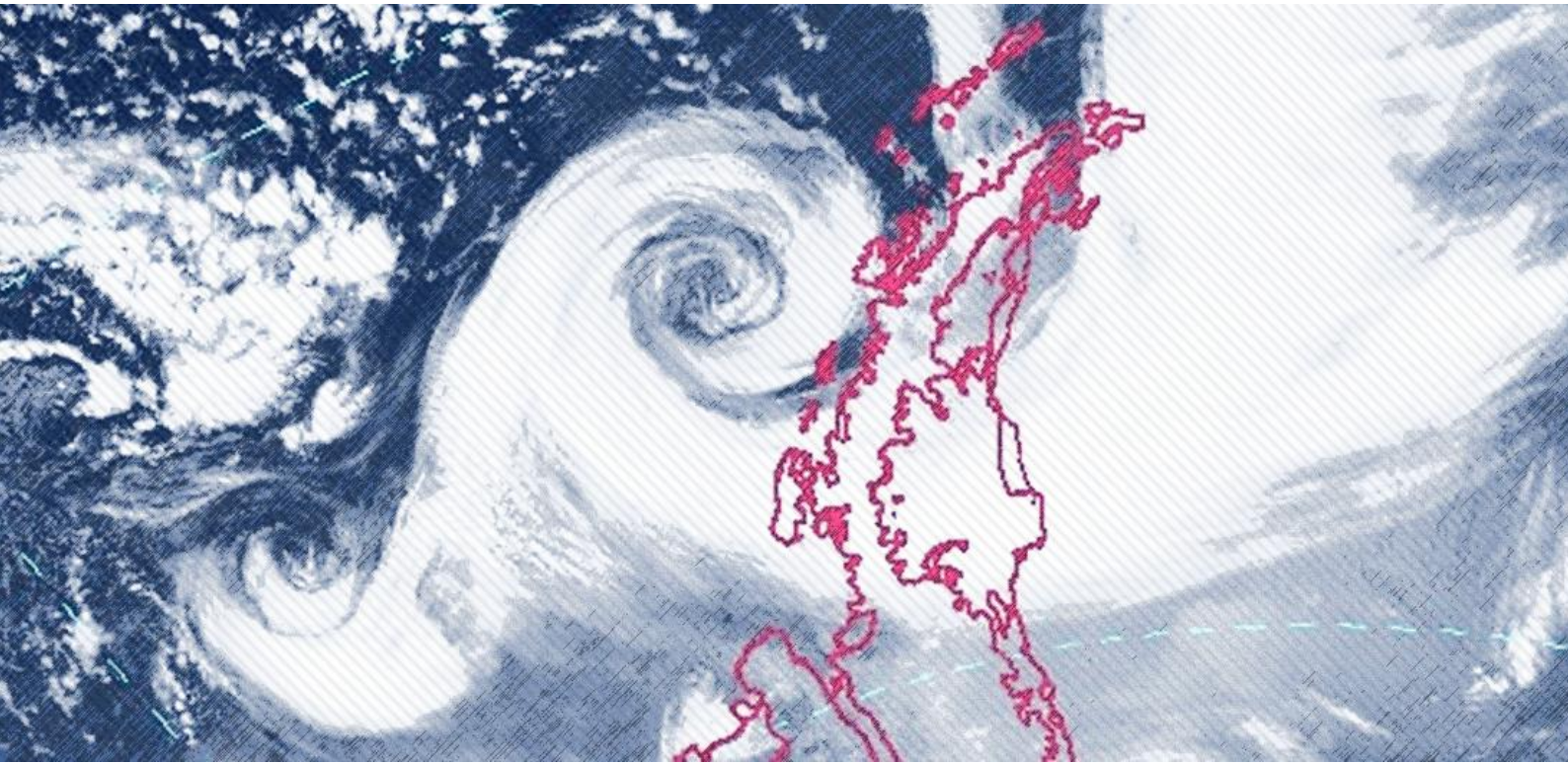




WORLD  
ENVIRONMENTAL  
CONSERVANCY

# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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## MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

NOVEMBER 2022

During this month, only 07 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 Halley, Mirny, Marambio, Palmer and Frei. Of these 07 events 00 of them reached the level of an Antarctic hurricane.

### TOTAL OF EVENTS REGISTERED IN STATIONS IN NOVEMBER

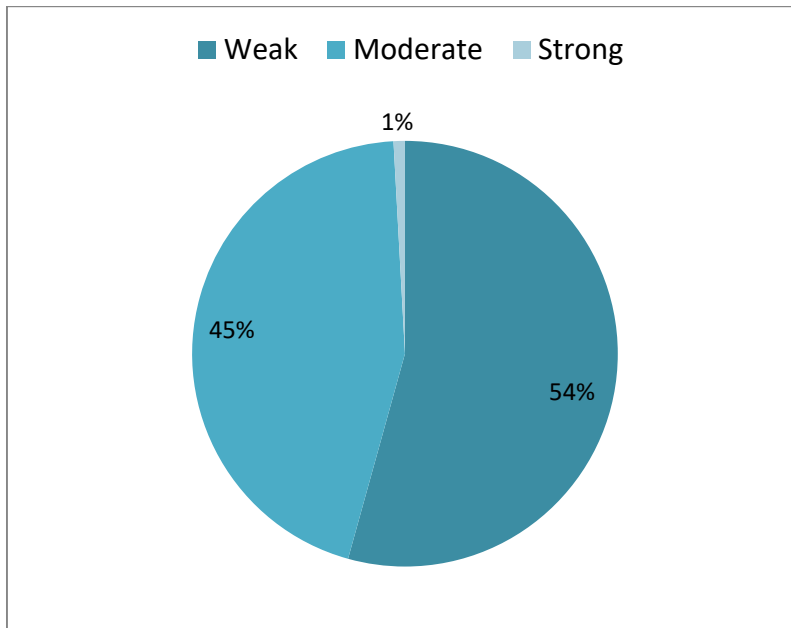
2017	2018	2019	2020	2021	2022
03	06	02	05	04	07

### STATISTICS OF THE MONTH: NOVEMBER 2022

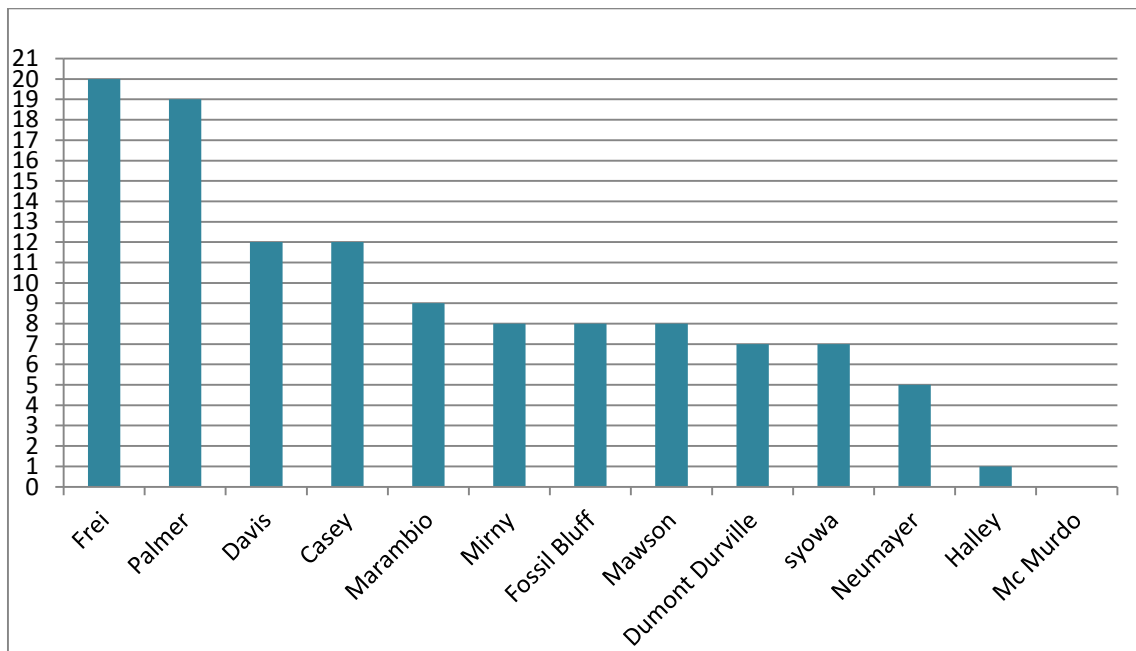
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	07
B2	1.3 a 1.8	Moderate	00
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-28.1 hPa/24h	943.9 hPa	26.9 m/s
Halley station	Marambio station	Frei station
Nov. 25	Nov. 29	Nov. 04

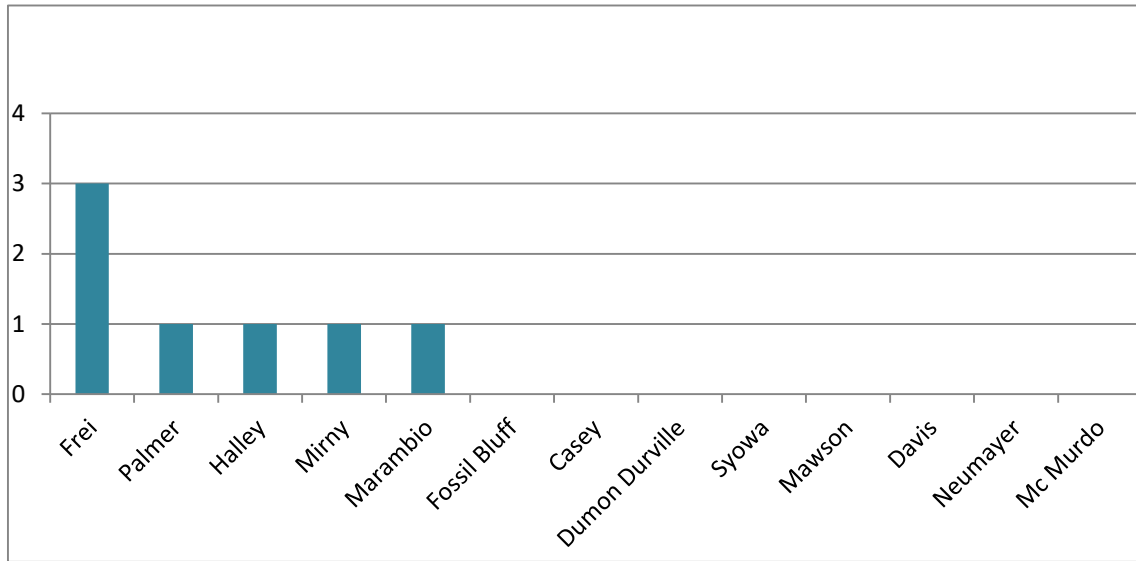
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2022



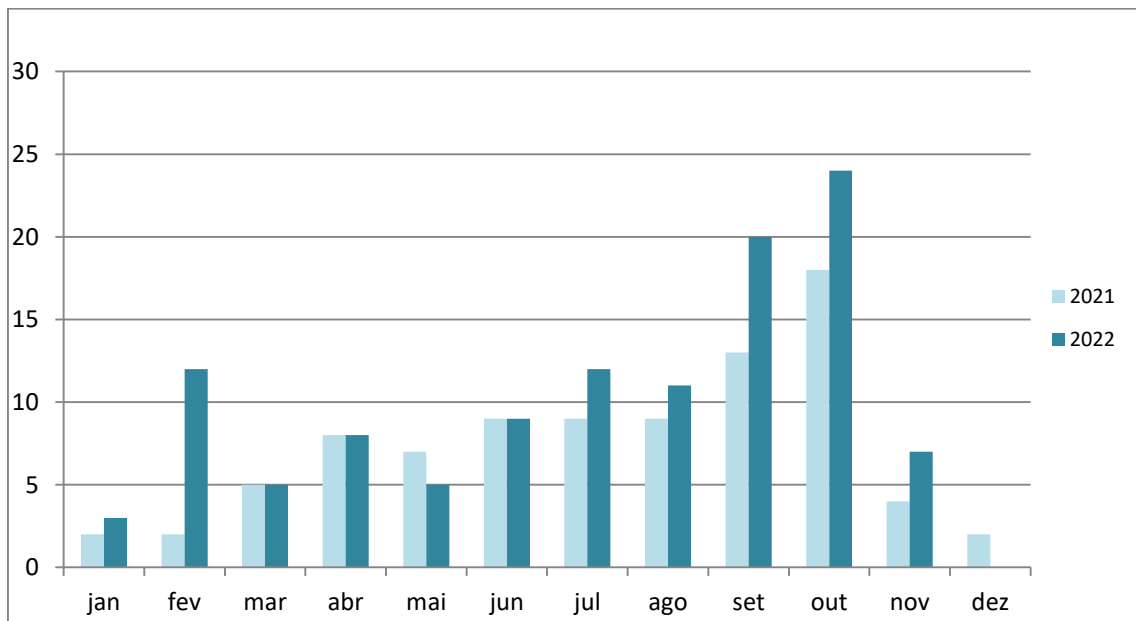
TOTAL OF EVENTS REGISTERED BY STATION IN 2022



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

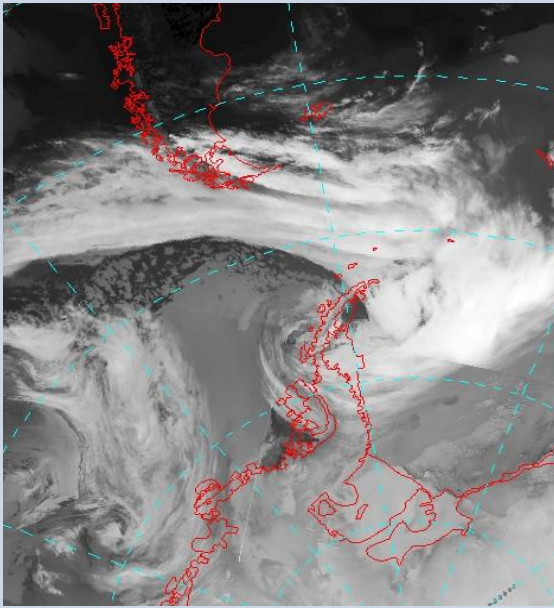


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



## BOMB CYCLONE N°107/2022 - DATE: NOV./04/2022

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



Drop of pressure in 24h -25.1 hPa

Min. pressure registered on station 966.6 hPa

Min. pressure estimation in the cyclone core 958 hPa

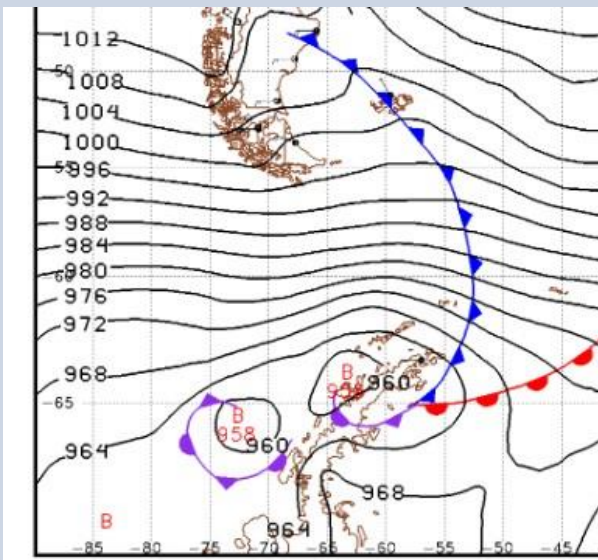
Sustained maximum wind 26.9 m/s (60 mph)

Maximum wind gust 37.4 m/s (84 mph)

Bergeron 1.0 (Weak)

## BOMB CYCLONE N°108/2022 - DATE: NOV./08/2022

LOCAL: PALMER STATION – WMO 89061 (OPERATED BY U.S.A.)



Drop of pressure in 24h -27.0 hPa

Min. pressure registered on station 952.0 hPa

Min. pressure estimation in the cyclone core 952 hPa

Sustained maximum wind 12.0 m/s (27 mph)

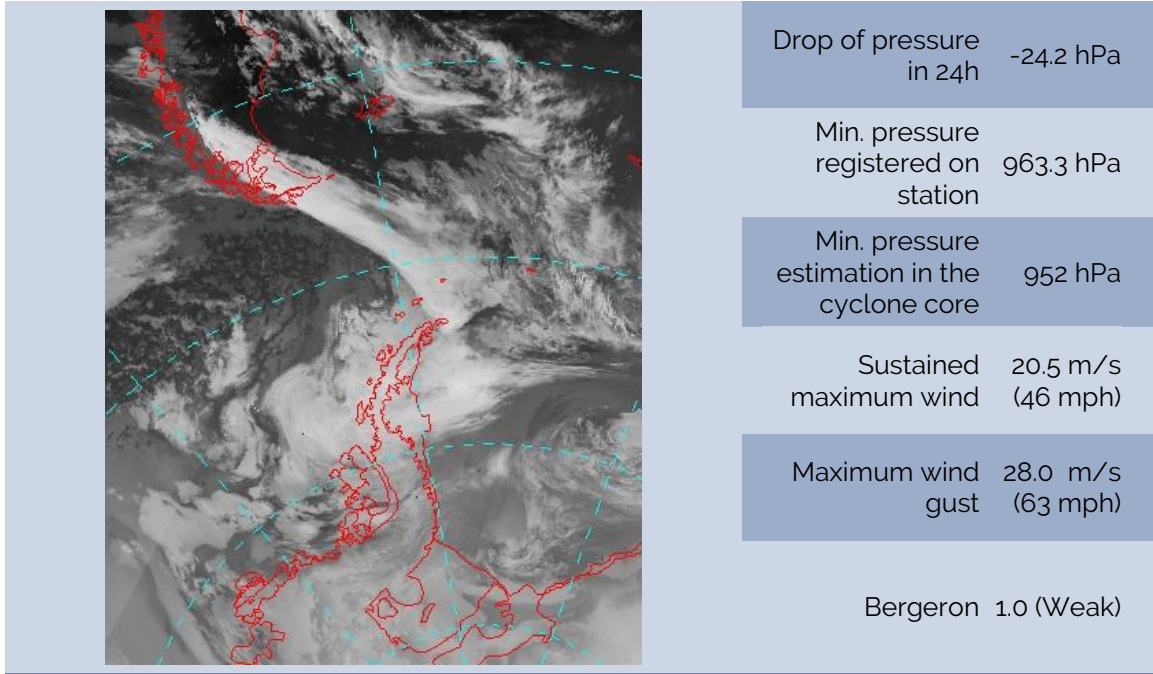
Maximum wind gust None m/s (mph)

Bergeron 1.1 (Weak)

## BOMB CYCLONE N°109/2022 - DATE: NOV./08/2022

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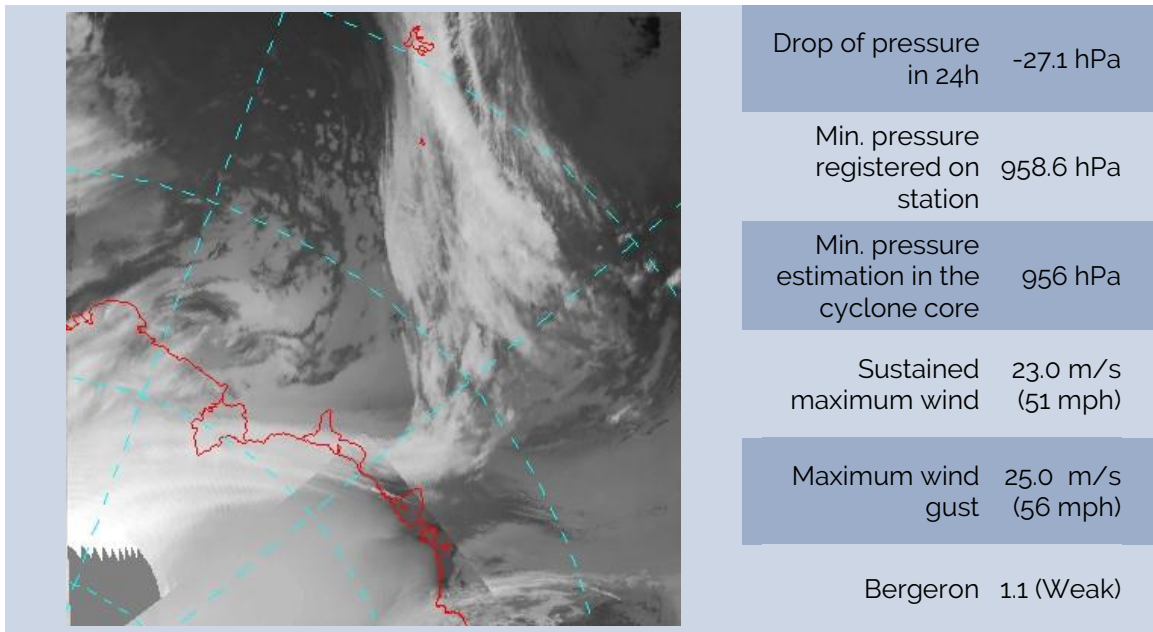
LOCAL: FREI STATION – WMO 89056 (OPERATED BY CHILE)



## BOMB CYCLONE 110/2022 - DATE: NOV./16/2022

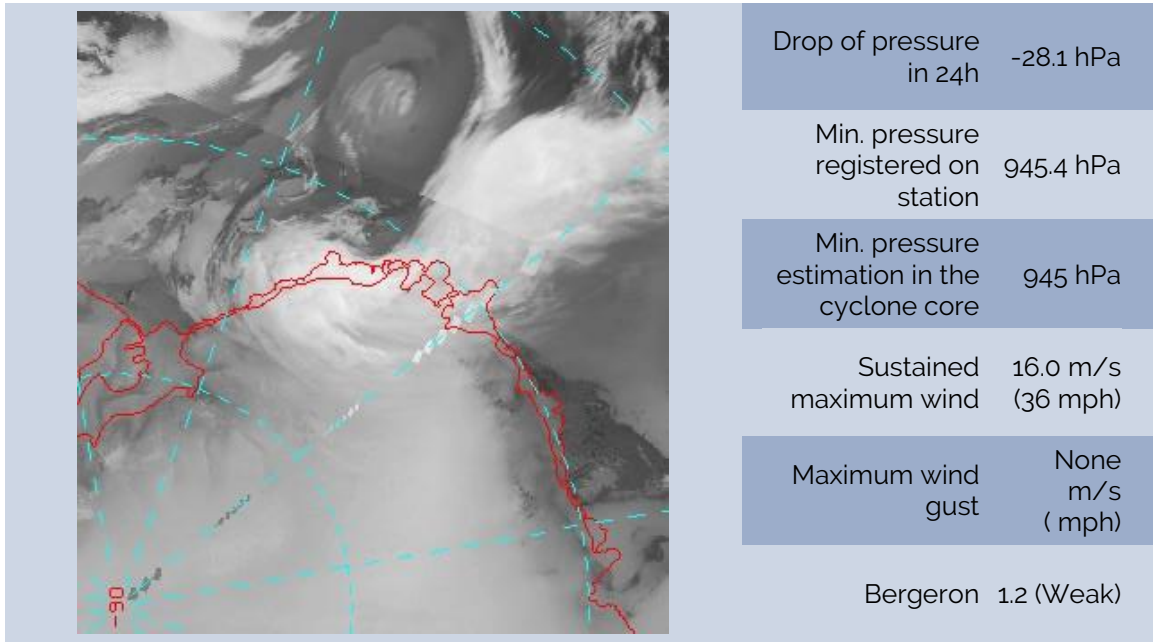
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LOCAL: MIRNY STATION – WMO 89592 (OPERATED BY RUSSIA)



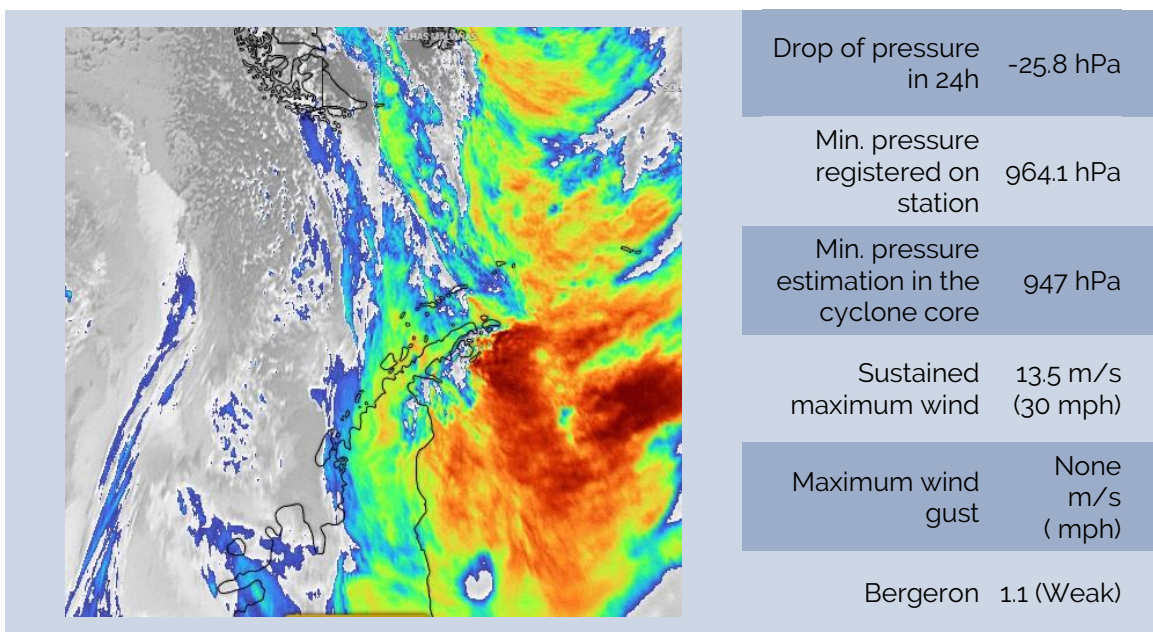
## BOMB CYCLONE N°111/2022 - DATE: NOV./25/2022

LOCAL: HALLEY STATION – WMO 89022 (OPERATED BY U.K.)



## BOMB CYCLONE N°112/2022 - DATE: NOV./29/2022

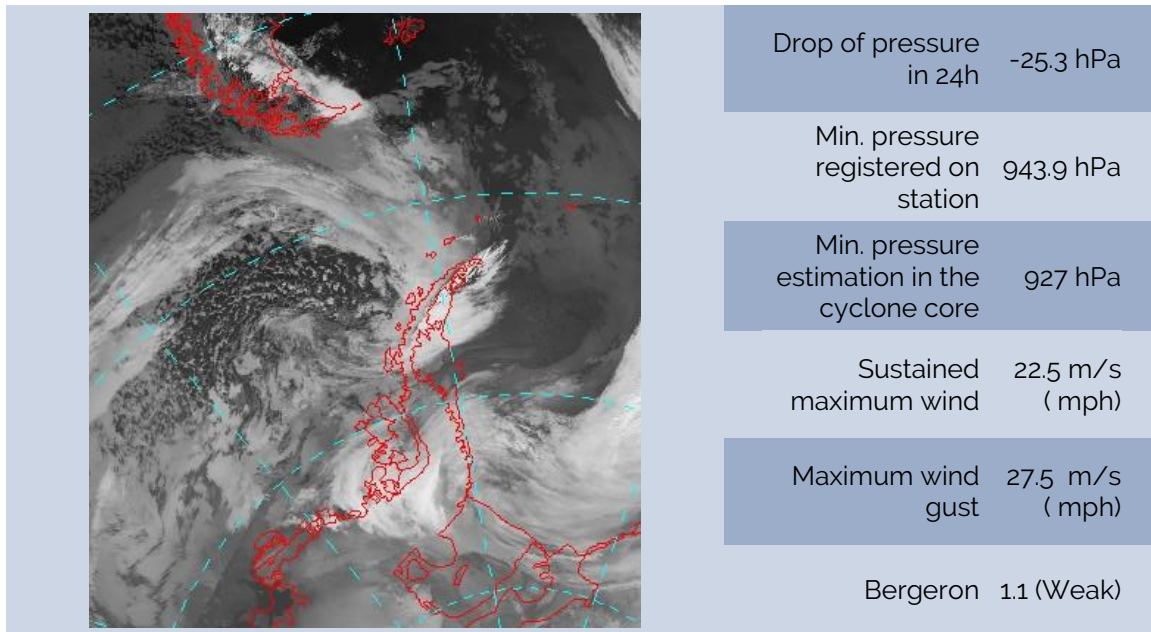
LOCAL: FREI STATION – WMO 89056 (OPERATED BY CHILE)



## BOMB CYCLONE N°113/2022 - DATE: NOV./29/2022

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



## 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>

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

[www.windy.com](http://www.windy.com)