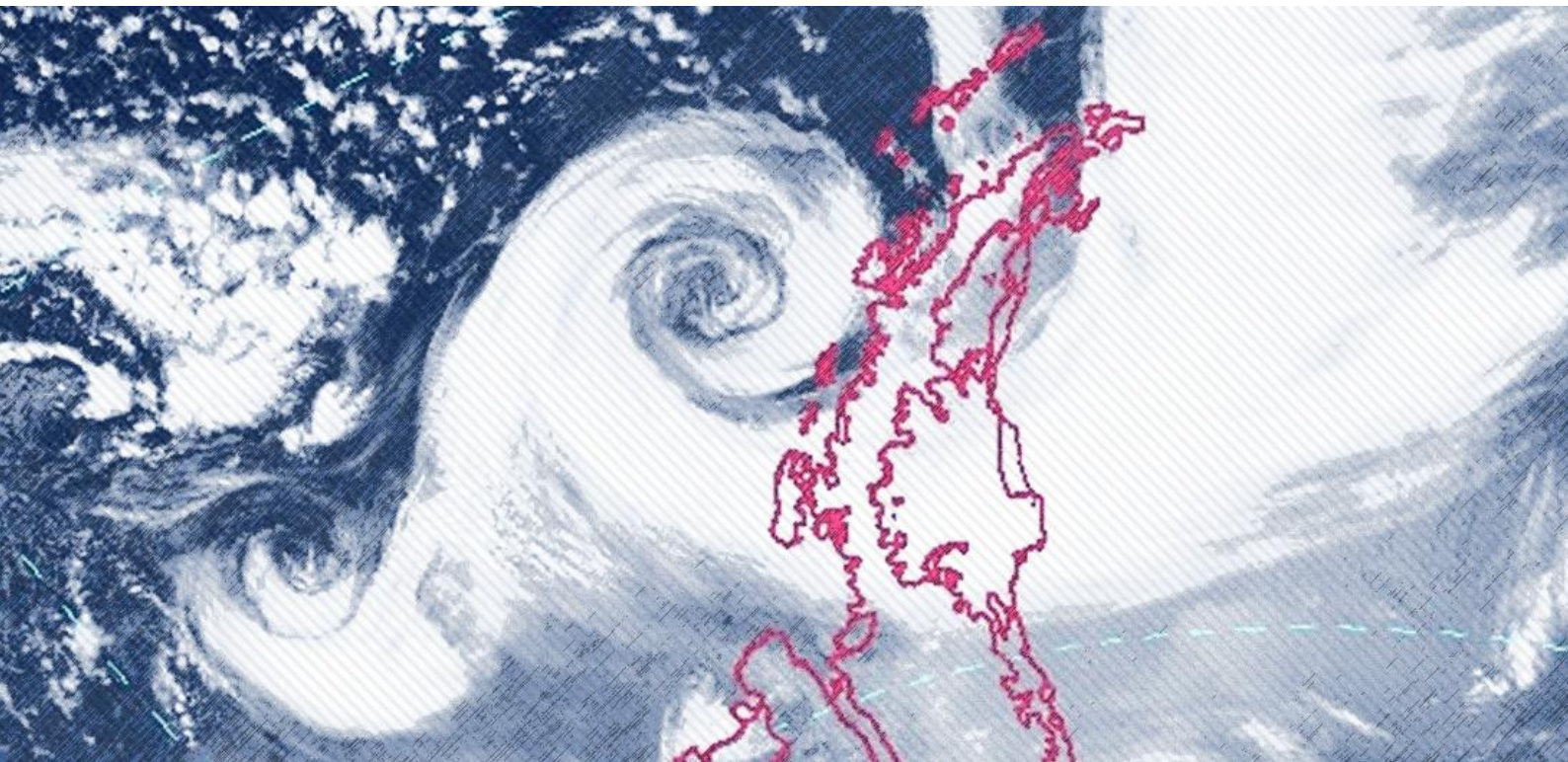




WORLD  
ENVIRONMENTAL  
CONSERVANCY

# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

FEBRUARY 2024

During this month, only 05 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, Frei, Palmer, Marambio and Davis. There was a increase (66%) in the number of cyclones in comparison to the same month of the previous year and a decrease of 58% in comparison the 2020 also.

## TOTAL OF EVENTS REGISTERED IN STATIONS IN FEBRUARY

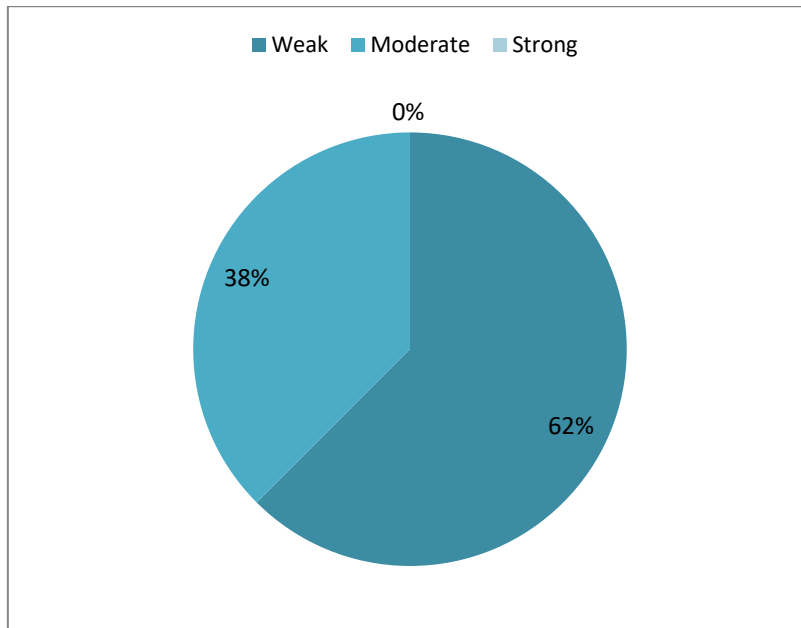
2017	2018	2019	2020	2021	2022	2023	2024
03	02	01	02	02	12	03	05

## STATISTICS OF THE MONTH: FEBRUARY 2024

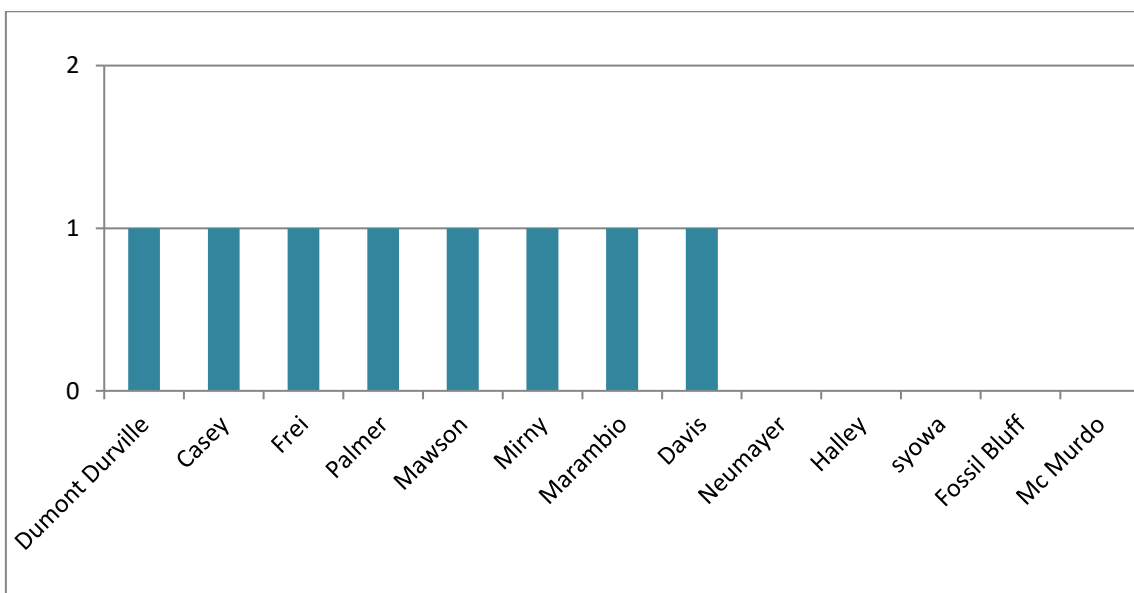
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	02
B2	1.3 a 1.8	Moderate	03
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-33.4 hPa/24h	949.7 hPa	33.4 m/s
Frei Station	Palmer Station	Mawson Station
Feb. 05	Feb. 05	Feb. 12

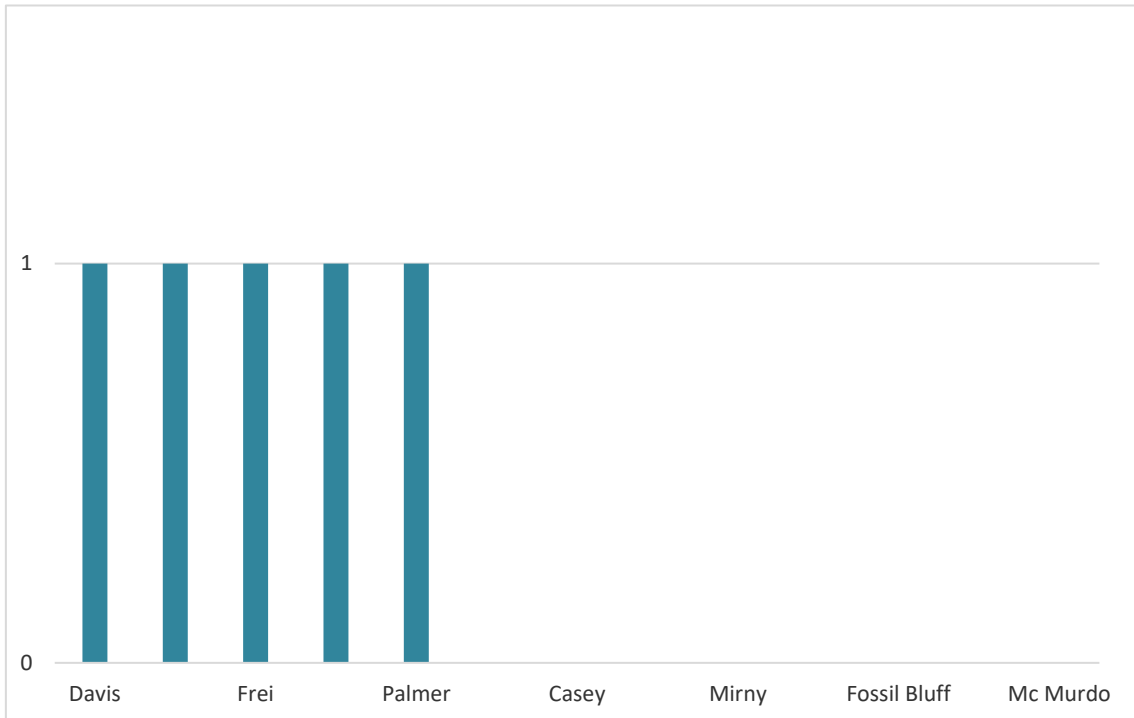
### BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2024



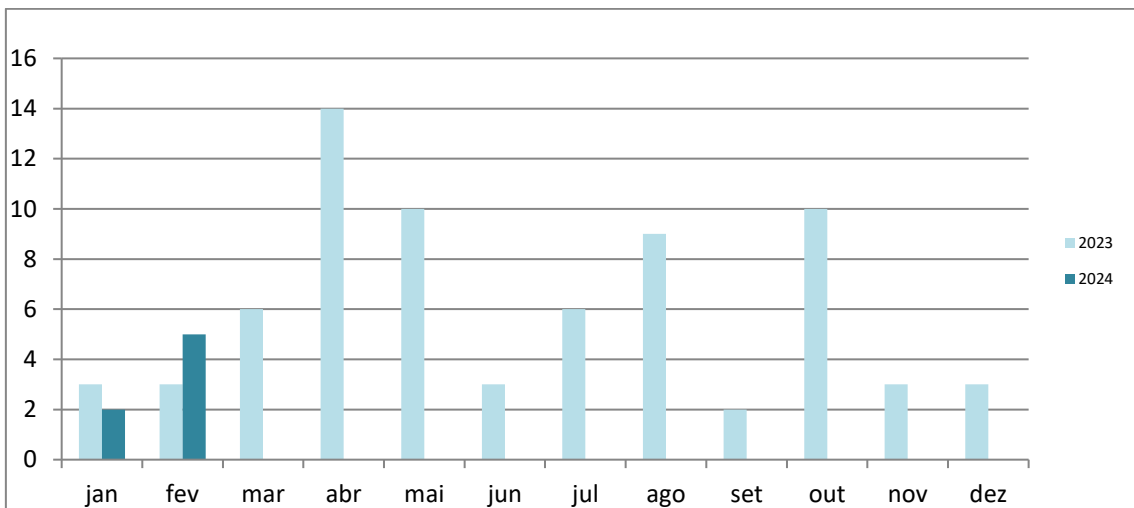
### TOTAL OF EVENTS REGISTERED BY STATION IN 2024



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF FEBRUARY/2024



TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



## BOMB CYCLONE N°03/2024 - DATE: FEB/05/2024

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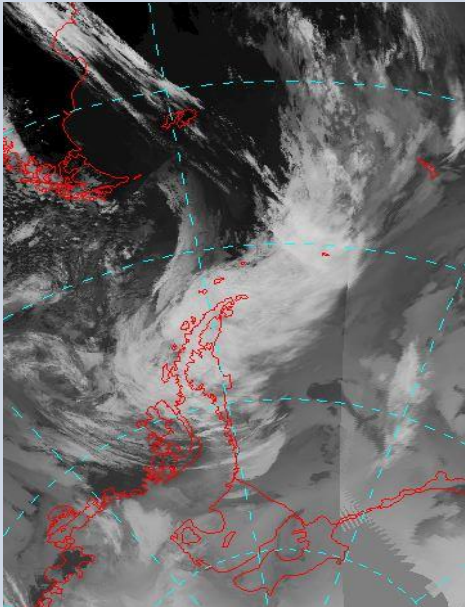
LOCAL: FREI STATION – WMO 89056 (OPERATED BY CHILE)

NO IMAGE	Drop of pressure in 24h	-33.4 hPa
	Min. pressure registered on station	959.4 hPa
	Min. pressure estimation in the cyclone core	953 hPa
	Sustained maximum wind	17.0 m/s (38 mph)
	Maximum wind gust	23.5 m/s (53 mph)
	Bergeron	1.4 (Mod.)

## BOMB CYCLONE N°04/2024 - DATE: FEB/05/2024

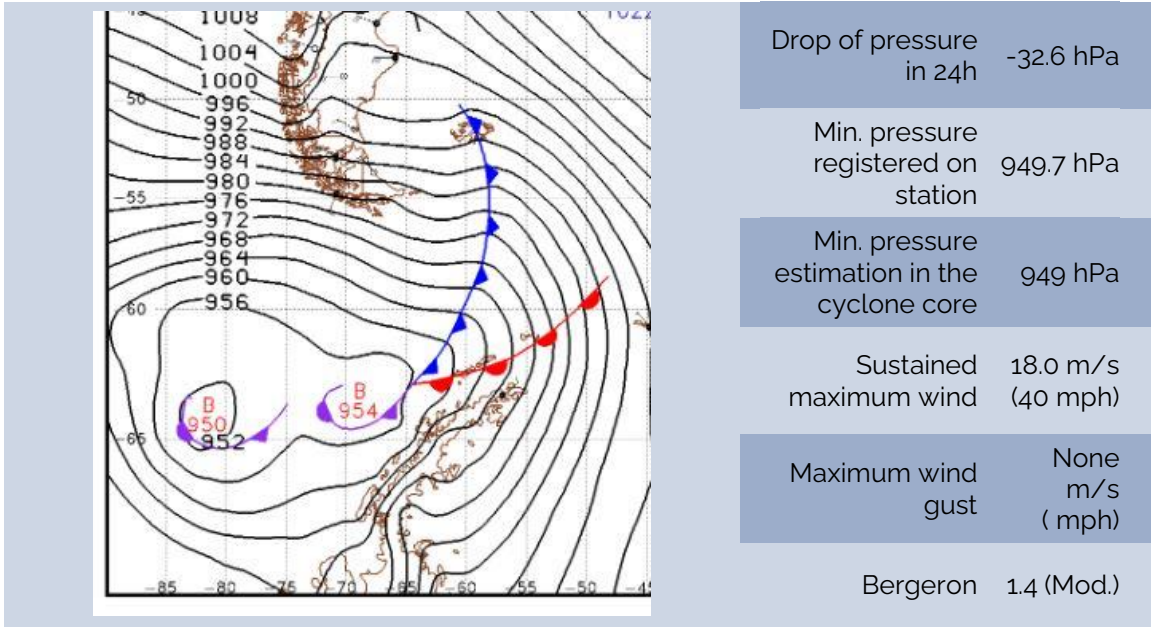
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LOCAL: MARAMBIO STATION – WMO 89055 (OPERATED BY ARGENTINA)

	Drop of pressure in 24h	-32.5 hPa
	Min. pressure registered on station	958.2 hPa
	Min. pressure estimation in the cyclone core	953 hPa
	Sustained maximum wind	14.5 m/s (32 mph)
	Maximum wind gust	None m/s (mph)
	Bergeron	1.4 (Mod.)

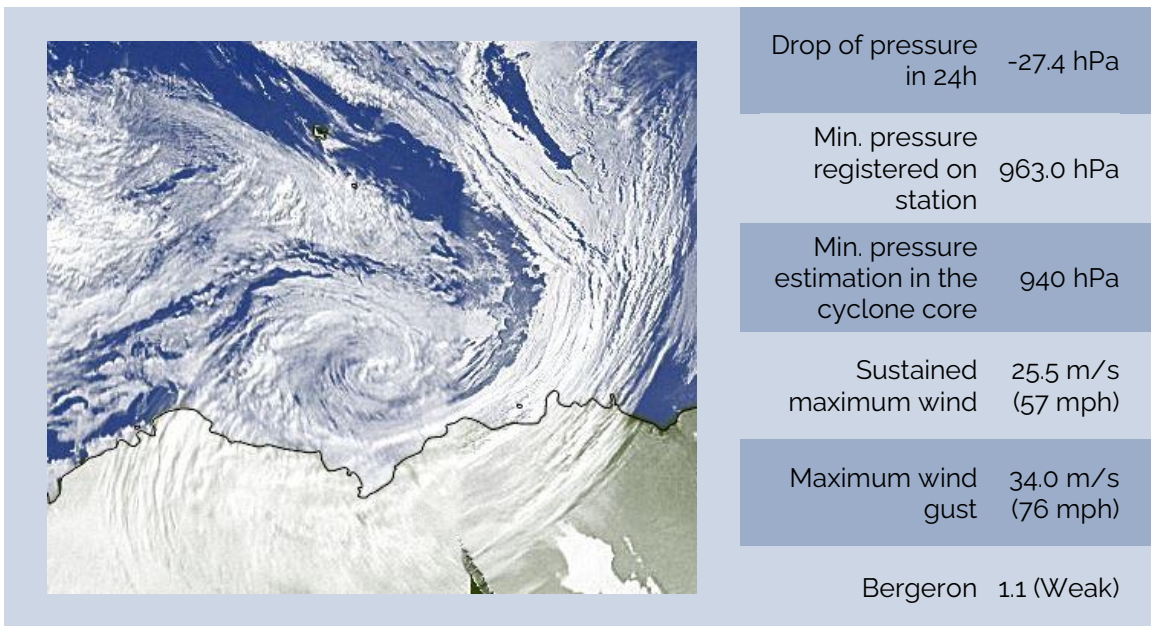
## BOMB CYCLONE N°05/2024 - DATE: FEB/05/2024

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



## BOMB CYCLONE N°06/2024 - DATE: FEB/12/2024

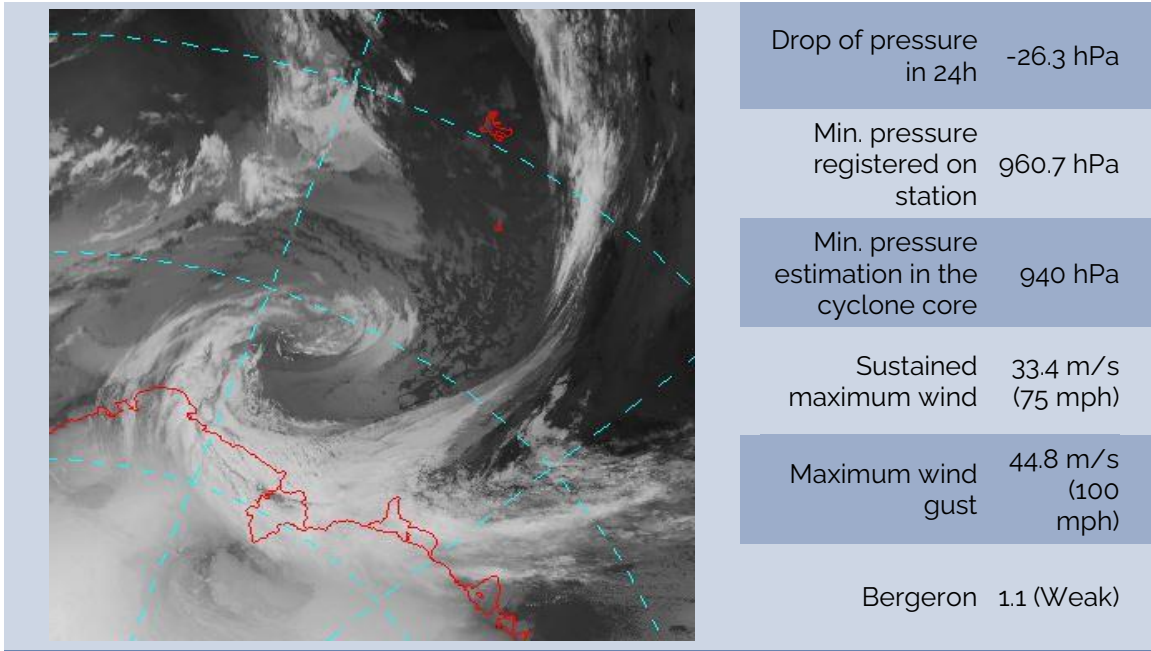
LOCAL: DAVIS STATION – WMO 89571 (OPERATED BY AUSTRALIA)



# BOMB CYCLONE N°05/2024 - DATE: FEB/12/2024

## ANTARCTIC HURRICANE (AH-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>