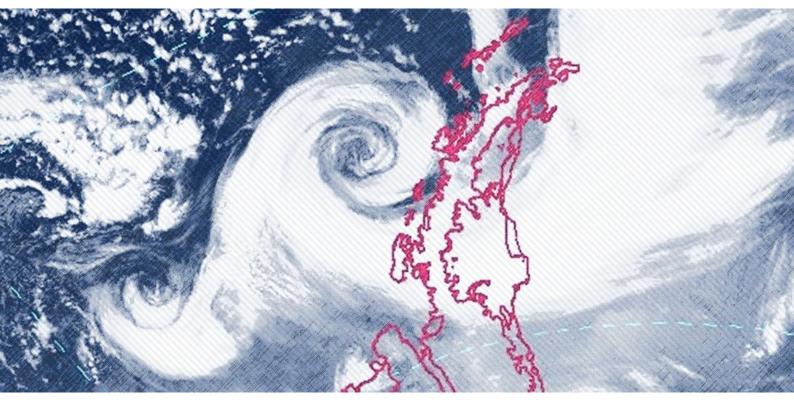


# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



By Romao, M. and Pires, L. B. M.



# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

DECEMBER 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. Of these 03 events 00 of them reached the level of an Antarctic Hurricane.

TOTAL OF EVENTS REGISTERED IN STATIONS IN DECEMBER

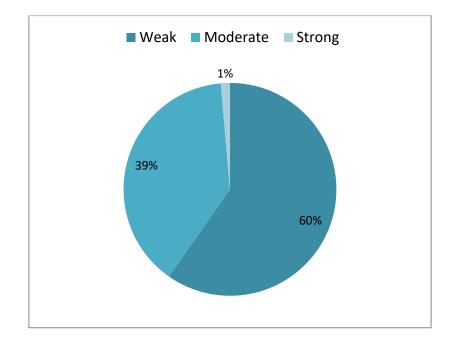
2017	2018	2019	2020	2021	2022	2023
04	05	01	03	02	02	03

## STATISTICS OF THE MONTH: DECEMBER 2023

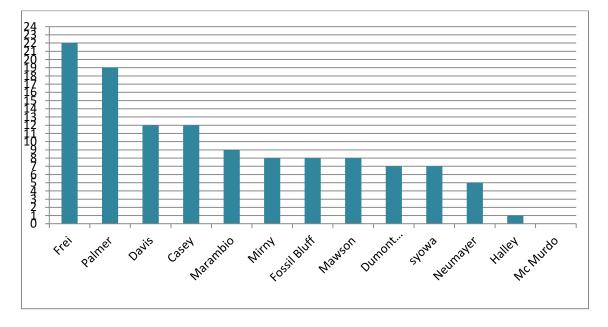
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	02
B2	1.3 a 1.8	Moderate	01
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-35.4 hPa/24h	954 hPa	25.0 m/s
Syowa station	Syowa station	Syowa station
Dec. 23	Dec. 23	Dec. 23



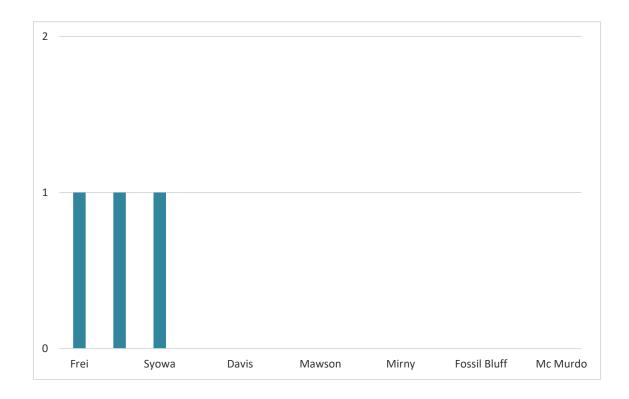


#### TOTAL OF EVENTS REGISTERED BY STATION IN 2023

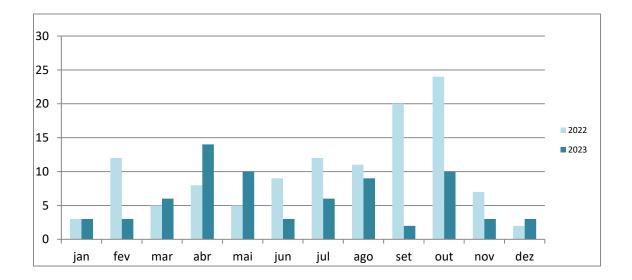


MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT - World Environmental Conservancy

# TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF DECEMBER/2023



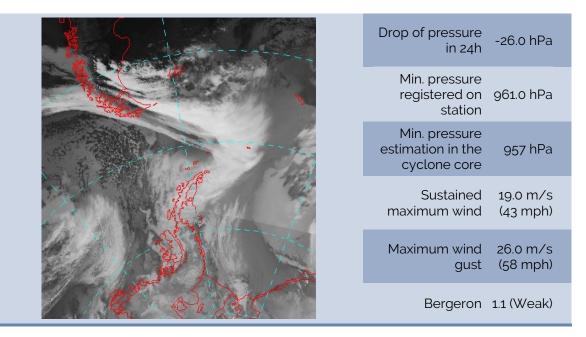
#### TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT - World Environmental Conservancy

## BOMB CYCLONE N°70/2023 - DATE: DEC./05/2023

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



## BOMB CYCLONE N°71/2023 - DATE: DEC./09/2023

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

	Drop of pressure in 24h	-25.0 hPa
	Min. pressure registered on station	960.3 hPa
Contraction of the second s	Min. pressure estimation in the cyclone core	949 hPa
	Sustained maximum wind	19.5 m/s (44 mph)
Contraction of the second seco	Maximum wind gust	24.0 m/s (54 mph)
South X Stand I and	Bergeron	1.0 (Weak)

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT - World Environmental Conservancy

# BOMB CYCLONE Nº72/2023 - DATE: DEC./23/2023

and the second sec	Drop of pressure in 24h	-35.4 hPa
	Min. pressure registered on station	960.3 hPa
	Min. pressure estimation in the cyclone core	937 hPa
	Sustained maximum wind	25 m/s (59 mph)
	Maximum wind gust	None ( mph)
and the second	Bergeron	1.5 (Mod.)

#### 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

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

www.windy.com