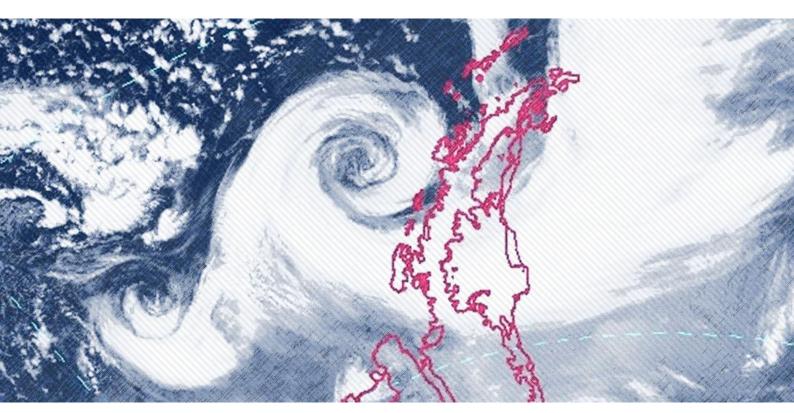


MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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



MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

MAY 2022

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, Neumayer, Marambio, Palmer and Frei. The cyclone that hit Mawson on the 27th reached the category of Antarctic Hurricane AH-2.

TOTAL OF EVENTS REGISTERED IN STATIONS IN MAY

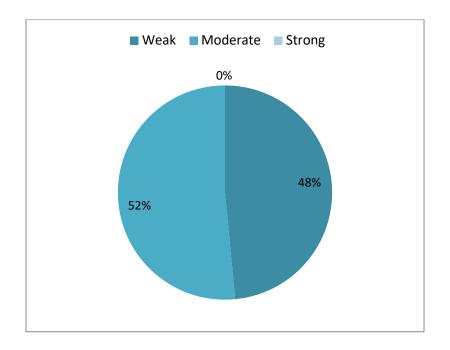
2017	2018	2019	2020	2021	2022
10	08	06	04	07	05

STATISTICS OF THE MONTH: MAY 2022

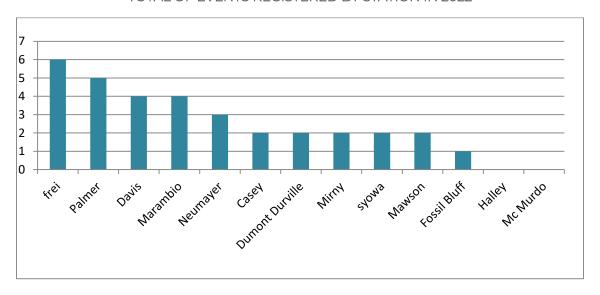
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	04
B2	1.3 a 1.8	Moderate	01
В3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND	
-31.3 hPa/24h	961.3 hPa	43.5 m/s	
Marambio Station	Neumayer Station	Mawson Station	
May 16	May 20	May 27	

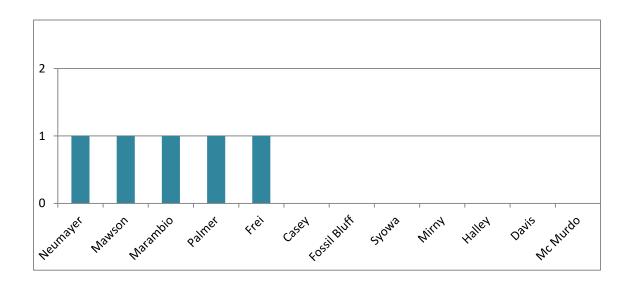
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2022



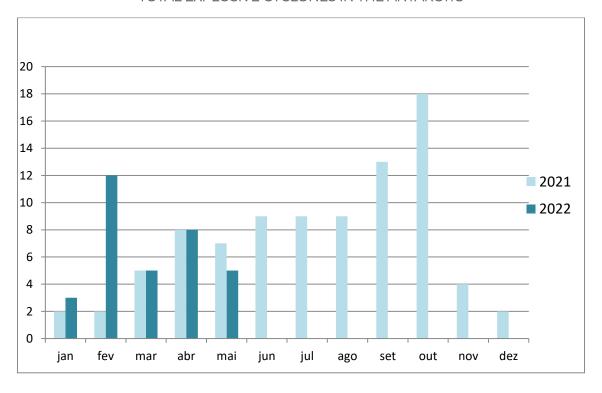
TOTAL OF EVENTS REGISTERED BY STATION IN 2022



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

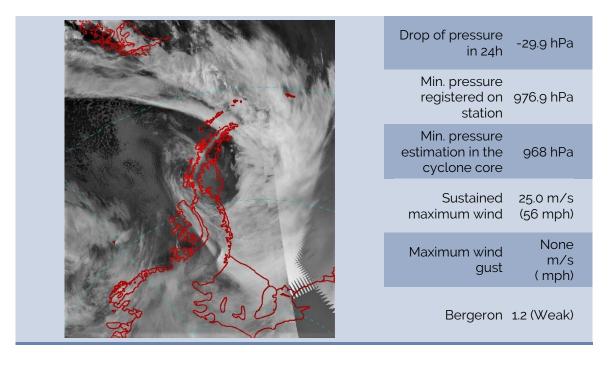


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



BOMB CYCLONE N°27/2022- DATE: MAY/16/2022

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



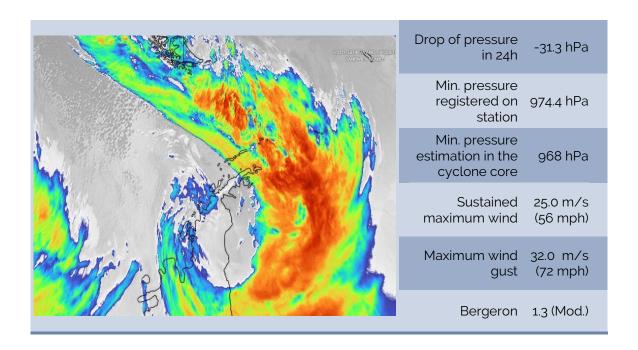
BOMB CYCLONE N°28/2022 - DATE: MAY/16/2022

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

	Drop of pressure in 24h	-27.4 hPa
	Min. pressure registered on station	984.3 hPa
NO IMAGE	Min. pressure estimation in the cyclone core	968 hPa
	Sustained maximum wind	25.0 m/s (56 mph)
	Maximum wind gust	35.4 m/s (79 mph)
	Bergeron	1.1 (Weak)

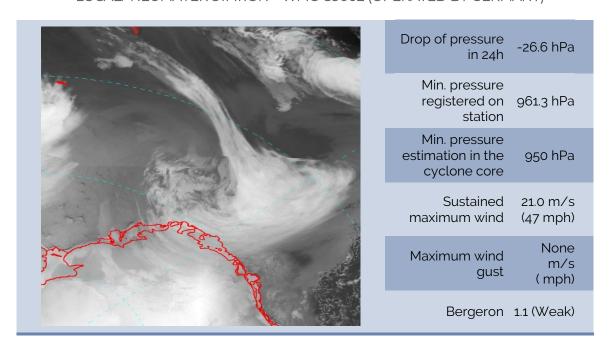
BOMB CYCLONE N°29/2022 - DATE: MAY/16/2022

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



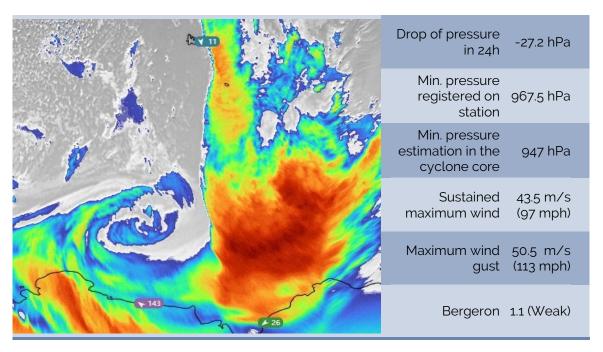
BOMB CYCLONE N°30/2022 - DATE: MAY/20/2022

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



BOMB CYCLONE N°31/2022 - DATE: MAY/27/2022

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



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/