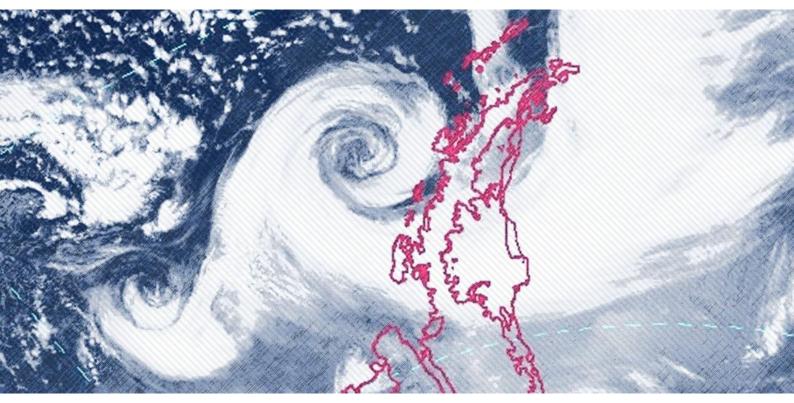


MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



DECEMBER 2020

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



MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

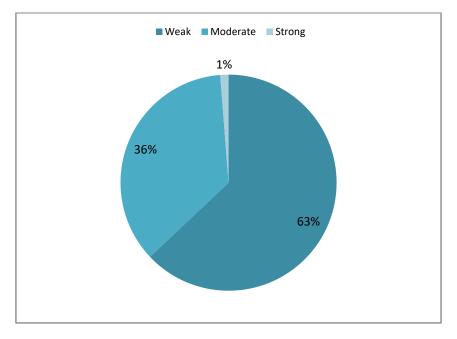
DECEMBER 2020

During this month, 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 affected by cyclones this month were: Neumayer, Dumont D'Urvilley and Fossil Bluff. There was a increase (300%) in the number of cyclones in comparison to the same month of the previous year (2019).

STATISTICS OF THE MONTH

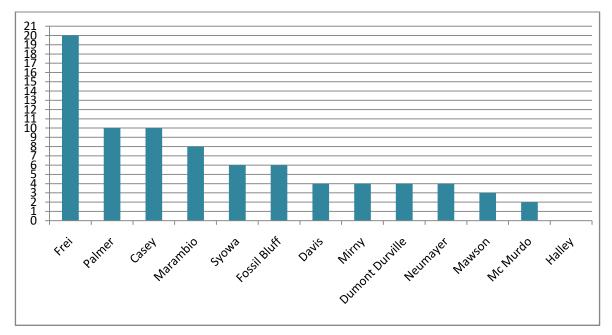
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	01
B2	1.3 a 1.8	Moderate	02
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND	
-37.6 hPa/24h	-37.6 hPa/24h 949.1 hPa		
Neumayer Station Neumayer Station		Neumayer Station	
Dec. 07	Dec. 07	Dec. 07	

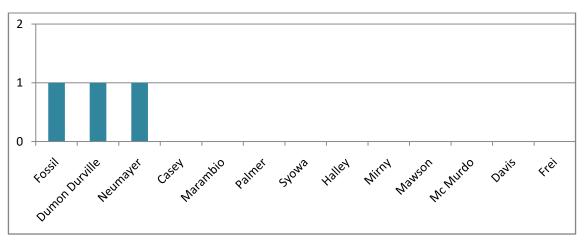


BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2020

TOTAL OF EVENTS REGISTERED BY STATION IN 2020

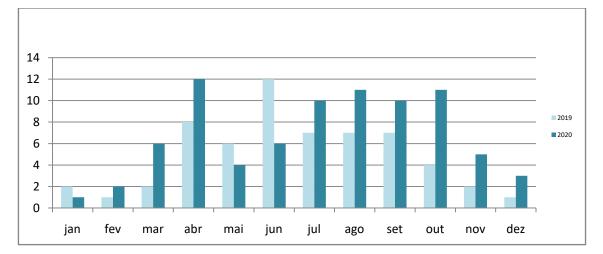


MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT - World Environmental Conservancy



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF DEC./2020

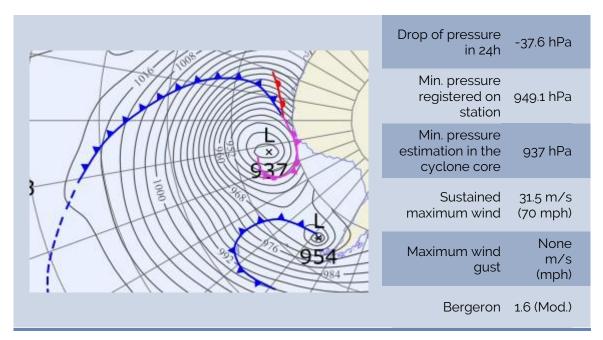
TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



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

BOMB CYCLONE N°79/2020- DATE: DEC./07/2020

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



BOMB CYCLONE N°80/2020- DATE: DEC./10/2020

LOCAL: FOSSIL BLUFF STATION - WMO 89065 (OPERATED BY U.K.)

	Drop of pressure in 24h	-26.0 hPa
and the second	Min. pressure registered on station	958.6 hPa
	Min. pressure estimation in the cyclone core	946 hPa
The second second	Sustained maximum wind	17.0 m/s (38 mph)
A Constant of the second secon	Maximum wind gust	None m⁄s (mph)
	Bergeron	1.1 (Weak)

BOMB CYCLONE N°81/2020- DATE: DEC./28/2020

LOCAL: DUMONT D'URVILLE STATION - WMO 89642 (OPERATED BY FRANCE)

997	Drop of pressure in 24h	-36.6 hPa
	Min. pressure registered on station	949.1 hPa
	Min. pressure estimation in the cyclone core	943 hPa
	Sustained maximum wind	26.0 m/s (58 mph)
	Maximum wind gust	44.5 m/s (99 mph)
	Bergeron	1.5 (Mod.)

SOURCES

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http://www.bom.gov.au

https://data.aad.gov.au

http://www.smn.gov.ar

http://meteoarmada.directemar.cl

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