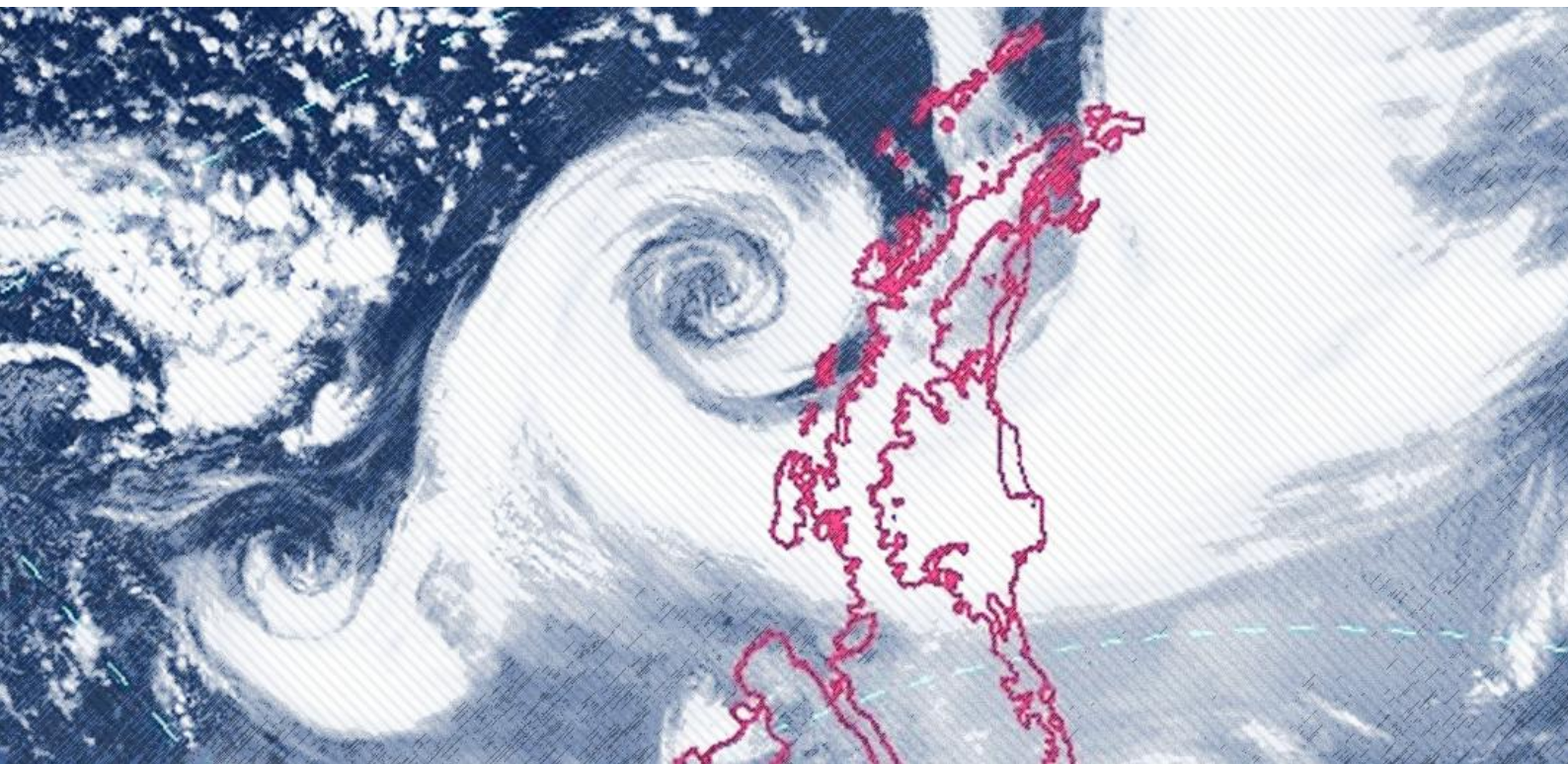




WORLD
ENVIRONMENTAL
CONSERVANCY

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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



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JUNE 2020

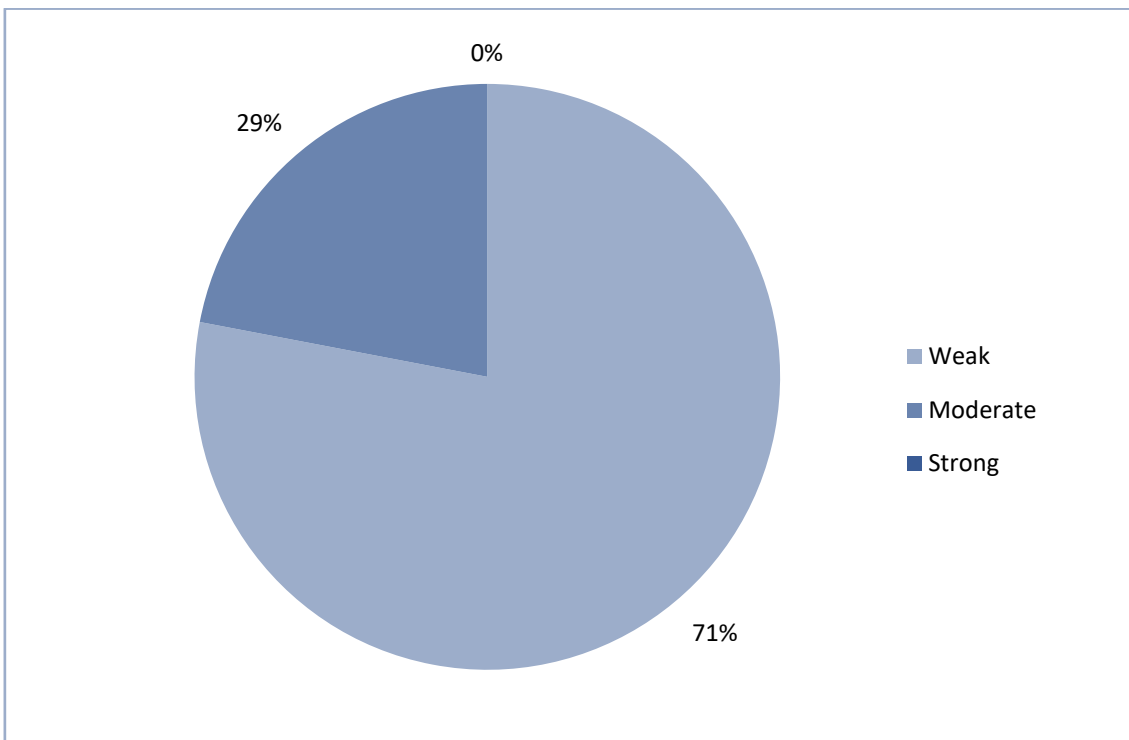
During this month, 06 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of explosive cyclones (bomb cyclones). The stations affected by cyclones this month were: Frei, Marambio, Casey, Neumayer and Palmer. There was a reduction of 50% in the number of cyclones in comparison to the same month of the previous year (2019).

STATISTICS OF THE MONTH

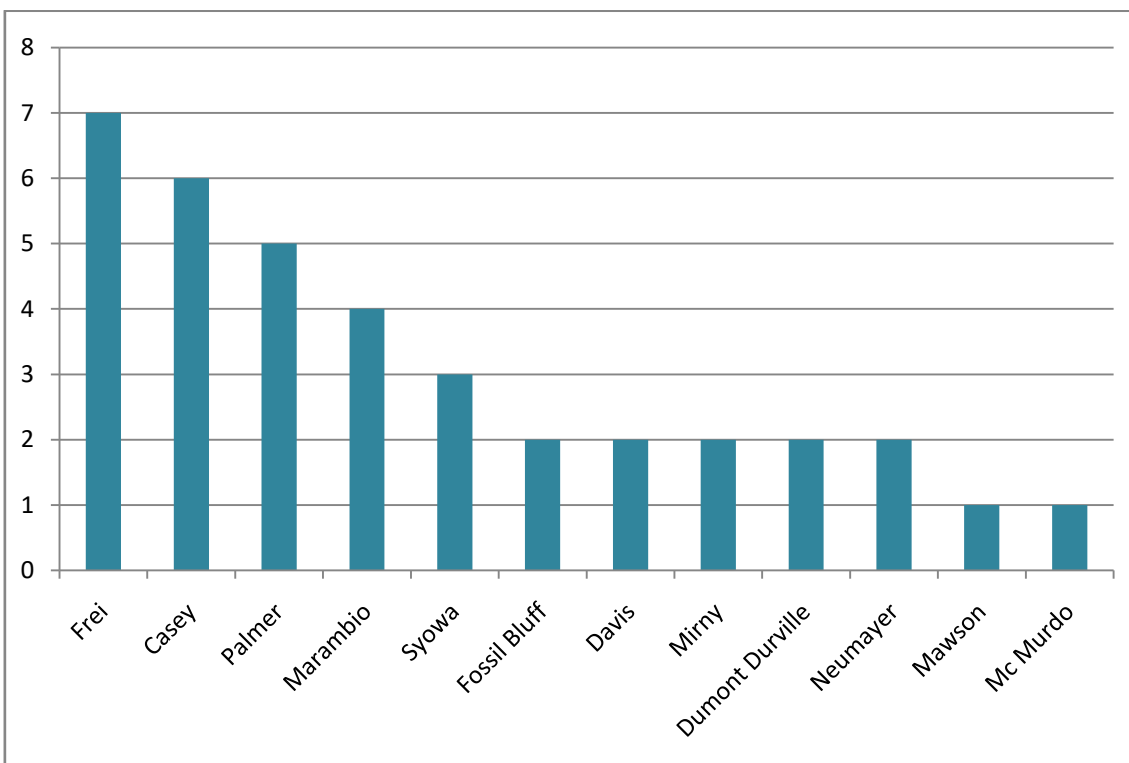
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	04
B2	1.3 a 1.8	Moderate	02
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-36.2 hPa/24h	942.4 hPa	33.5 m/s
Palmer	Palmer	Casey
June 04th	June 04th	June 21st

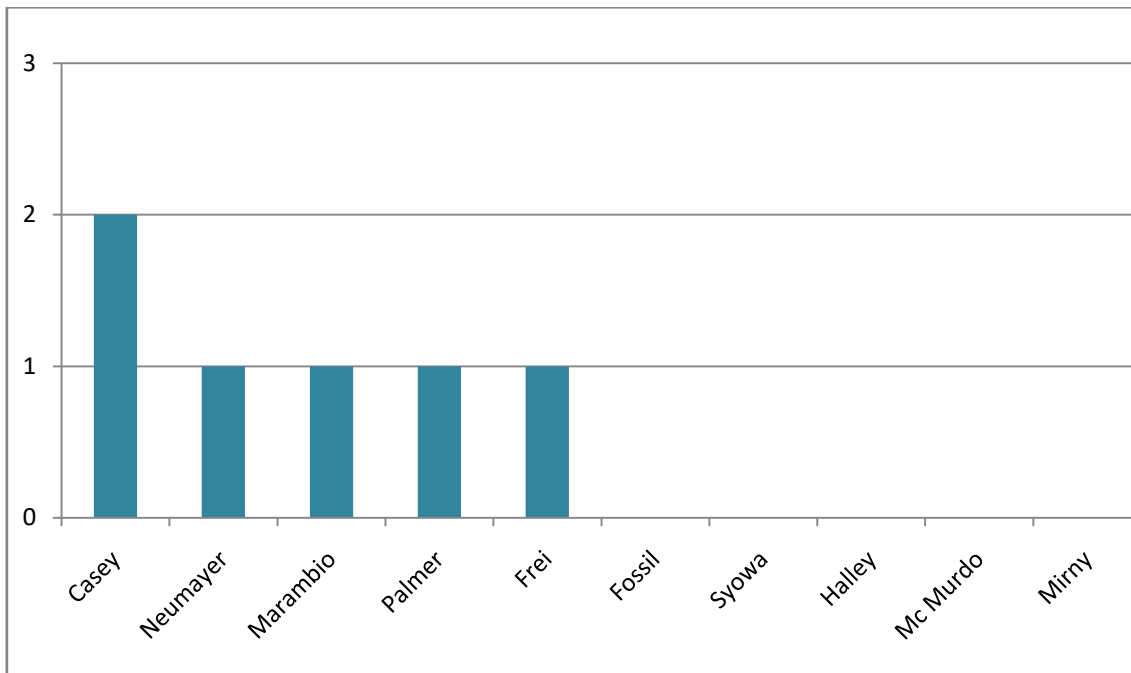
BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2020



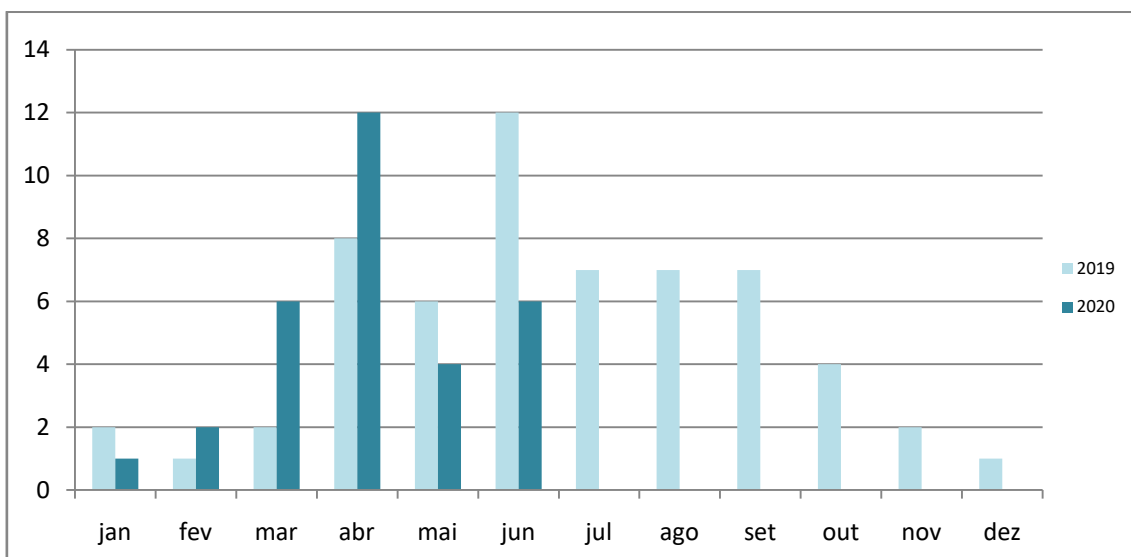
TOTAL OF EVENTS REGISTERED BY STATION IN 2020



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF JUN/2020

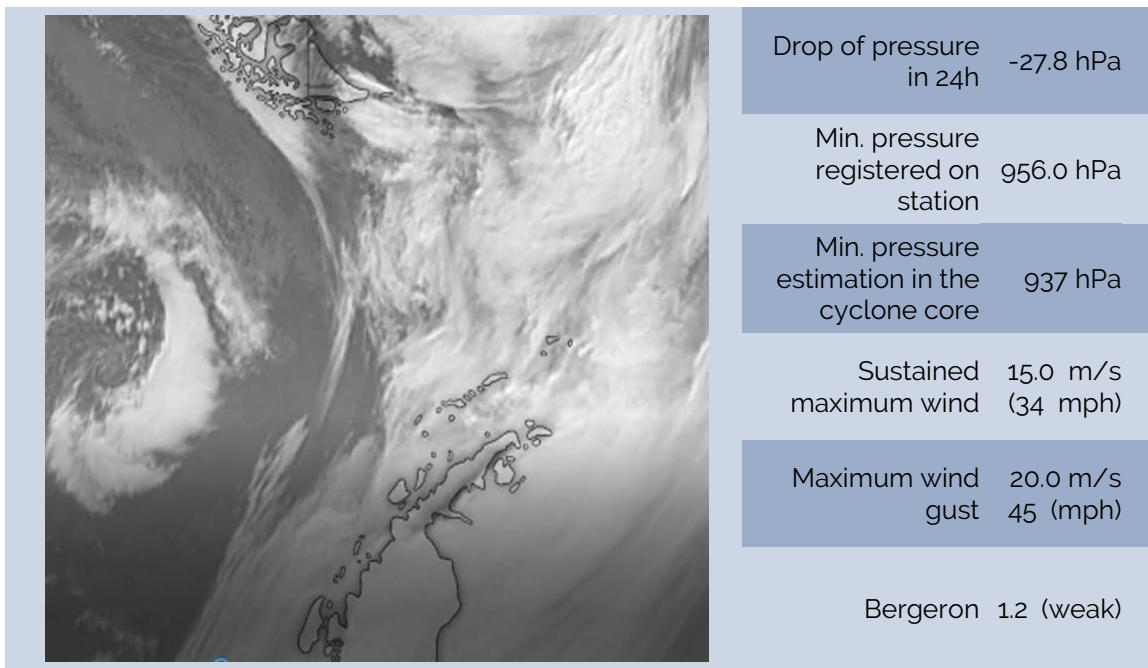


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



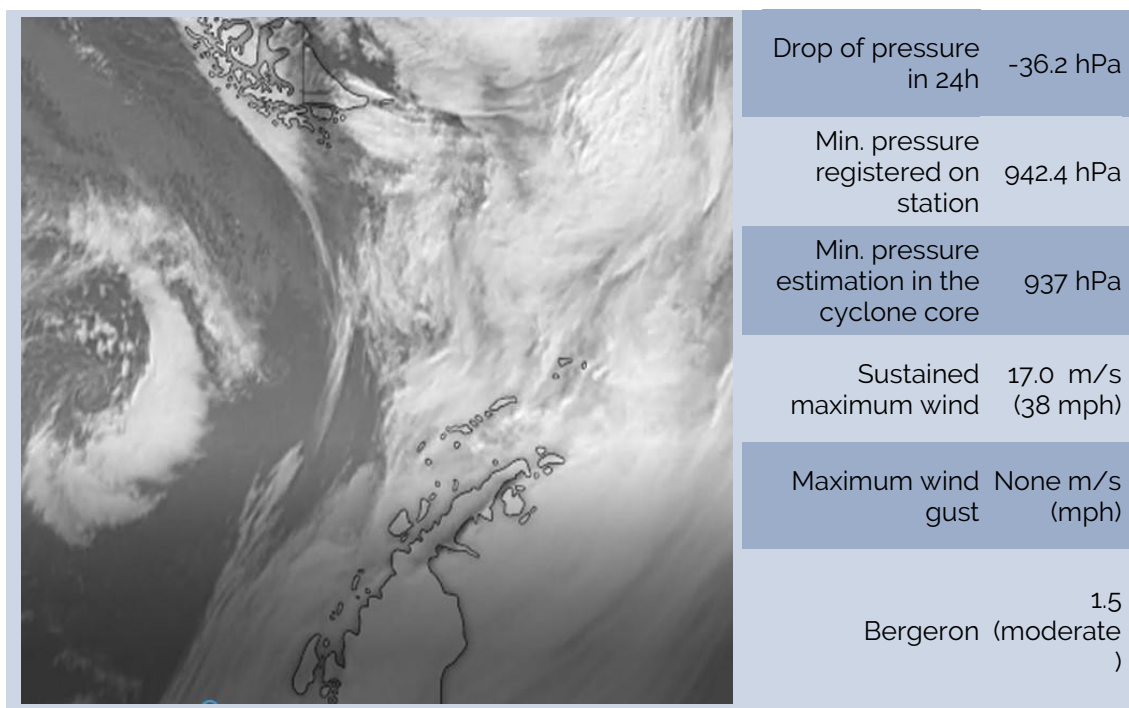
BOMB CYCLONE N°26/2020- DATE: JUN/04/2020

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



BOMB CYCLONE N°27/2020- DATE: JUN/04/2020

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



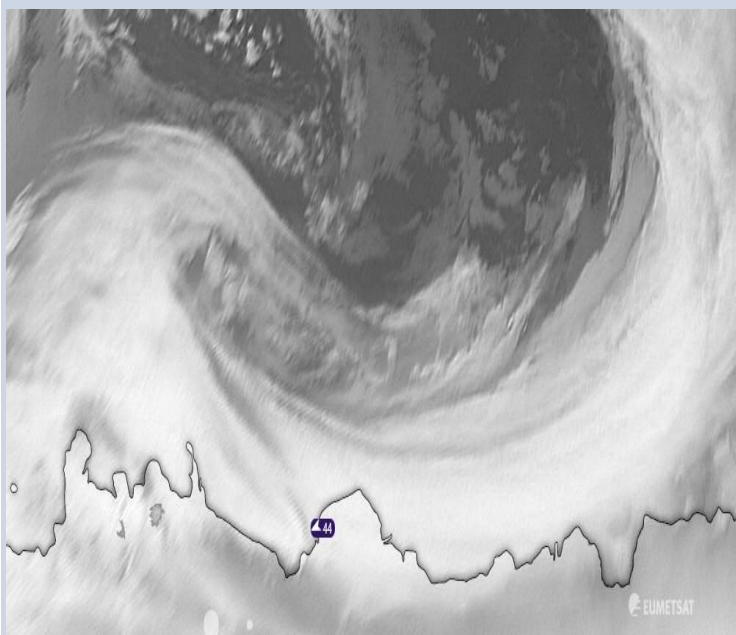
BOMB CYCLONE N°28/2020 - DATE: JUN/04/2020

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

No image	Drop of pressure in 24h	-29.5 hPa
	Min. pressure registered on station	953.9 hPa
	Min. pressure estimation in the cyclone core	937 hPa
	Sustained maximum wind	18.5 m/s (41 mph)
	Maximum wind gust	None m/s (mph)
	Bergeron	1.2 (weak)

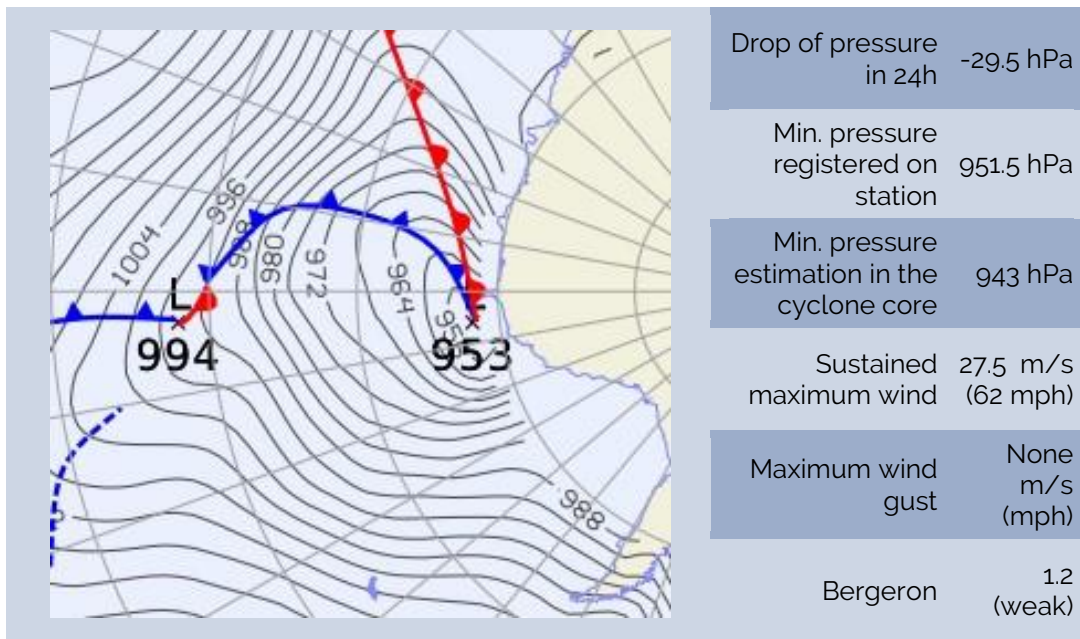
BOMB CYCLONE N°29/2020 - DATE: JUN/11/2020

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

	Drop of pressure in 24h	-25.4 hPa
	Min. pressure registered on station	971.6 hPa
	Min. pressure estimation in the cyclone core	961 hPa
	Sustained maximum wind	32.0 m/s (72 mph)
	Maximum wind gust	36.5 m/s (82 mph)
	Bergeron	1.1 (weak)

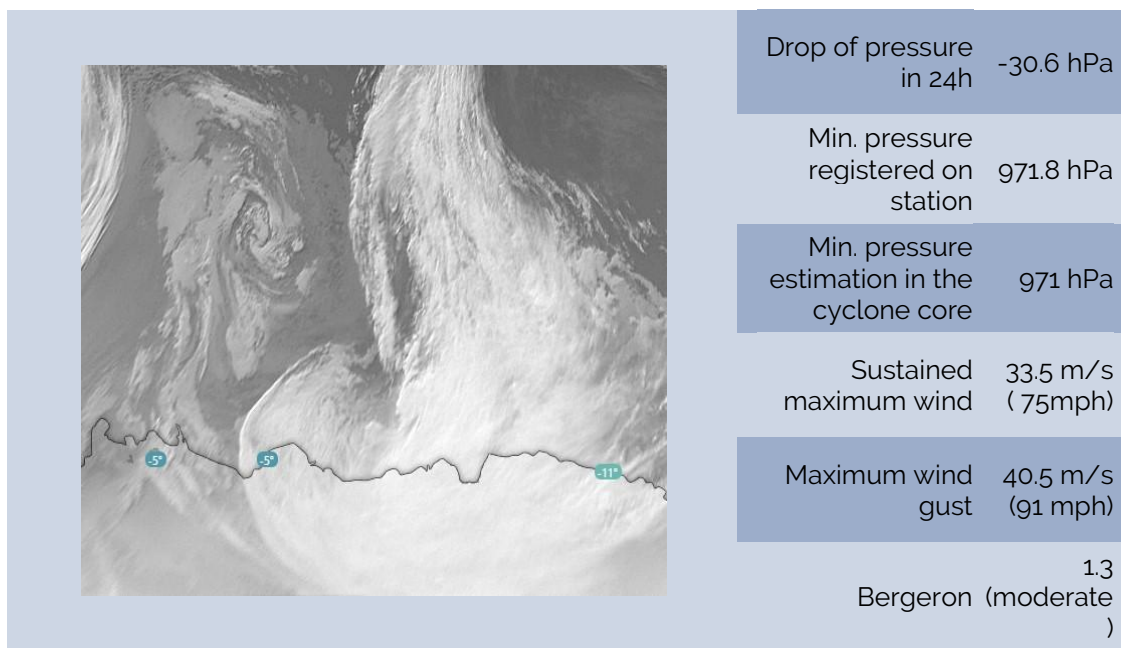
BOMB CYCLONE N°30/2020- DATE: JUN/16/2020

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



BOMB CYCLONE N°31/2020- DATE: JUN/21/2020

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



SOURCES

AMRC – UW Madison

<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>