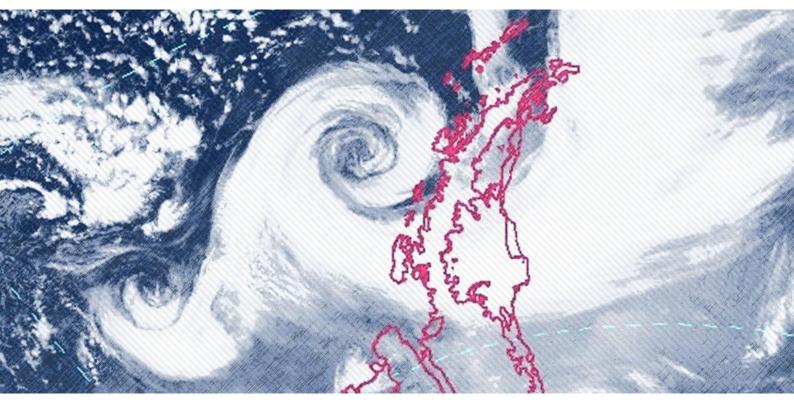


# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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



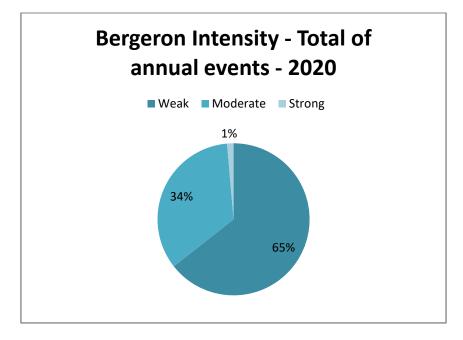
# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

OCTOBER 2020

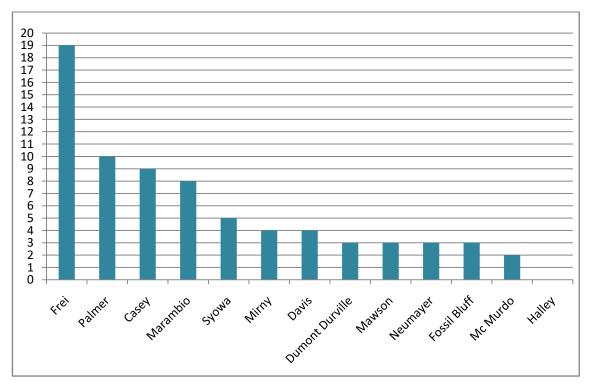
During this month, 11 events were registered among the 13 research stations located on the coast of the Antarctic utilized as references for the monitoring of bomb cyclones. The stations affected by cyclones this month were: Frei, Syowa, Palmer, Marambio and Fossil Bluff. There was a increase (175%) in the number of cyclones in comparison to the same month of the previous year (2019).

# STATISTICS OF THE MONTH

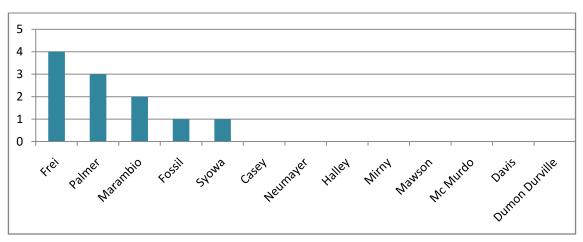
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	09
B2	1.3 a 1.8	Moderate	02
B3	> 1.8	Strong	00
HIGHEST PRESSURE DROP	LOWEST RE(	CORDED PRESSURE	HIGHEST SUSTAINED WIND
-35.0 hPa/24	n 95	51.7 hPa	20.0 m/s
Palmer Statio	n Fre	i Station	Syowa Station
Oct. 03	(	Oct. 11	Oct. 20



### TOTAL OF EVENTS REGISTERED BY STATION IN 2020

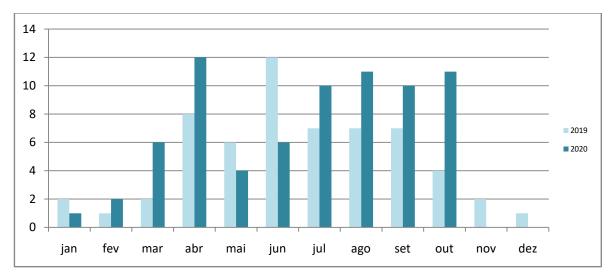


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### TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF OCT./2020

TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



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# BOMB CYCLONE N°63/2020- DATE: OCT./03/2020

	Drop of pressure in 24h	-34.0 hPa
	Min. pressure registered on station	968.0 hPa
	Min. pressure estimation in the cyclone core	967 hPa
The second second	Sustained maximum wind	14.0 m/s ( mph)
and the second sec	Maximum wind gust	None m/s (mph)
A DUN AND A DUNITSAT	Bergeron	1.4 (Moderat)

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

# BOMB CYCLONE N°64/2020- DATE: OCT./03/2020

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

	Drop of pressure in 24h	-35.0 hPa
and the second sec	Min. pressure registered on station	962.7 hPa
	Min. pressure estimation in the cyclone core	955 hPa
The second second	Sustained maximum wind	6.0 m/s ( mph)
A Contraction of the second seco	Maximum wind gust	None m/s (mph)
RUN AND CHARTSAT	Bergeron	1.1 (weak)

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# BOMB CYCLONE N°65/2020- DATE: OCT./03/2020

Drop of pressure in 24h	-25.5 hPa
Min. pressure registered on station	966.8 hPa
Min. pressure estimation in the cyclone core	955 hPa
Sustained maximum wind	17.0 m/s ( mph)
Maximum wind gust	None m/s (mph)
Bergeron	1.1 (weak)

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

# BOMB CYCLONE Nº66/2020- DATE: OCT./09/2020

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

	Drop of pressure in 24h	-28.0 hPa
	Min. pressure registered on station	955.0 hPa
	Min. pressure estimation in the cyclone core	955 hPa
	Sustained maximum wind	11.0 m/s ( mph)
C. C. C. IC	Maximum wind gust	None m/s (mph)
	Bergeron	1.2 (weak)

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# BOMB CYCLONE N°67/2020- DATE: OCT./09/2020

Drop of pressure in 24h	-25.8 hPa
Min. pressure registered on station	962.7 hPa
Min. pressure estimation in the cyclone core	955 hPa
Sustained maximum wind	24.0 m/s ( mph)
Maximum wind gust	None m/s (mph)
Bergeron	11 (weak)

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

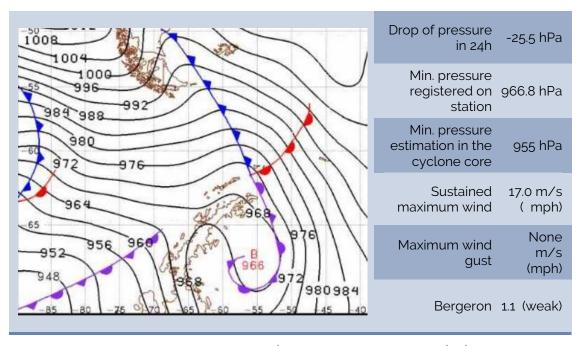
# BOMB CYCLONE N°68/2020- DATE: OCT./09/2020

#### Drop of pressure -24.8 hPa in 24h 996 992 Min. pressure 988 registered on 969.5 hPa station 984 Min. pressure -980estimation in the 978 955 hPa 60 cyclone core 872 968 Sustained 16.5 m/s 964 (mph) maximum wind 960 65 None Maximum wind m/s gust (mph) 988 95 6 39489\$2 Bergeron 1.0 (weak)

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

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## BOMB CYCLONE N°69/2020- DATE: OCT./10/2020



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

BOMB CYCLONE N°70/2020- DATE: OCT./11/2020

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

	Drop of pressure in 24h	-24.1 hPa
	Min. pressure registered on station	9517 hPa
	Min. pressure estimation in the cyclone core	949 hPa
All All and a second	Sustained maximum wind	15.5 m/s (mph)
Chill	Maximum wind gust	None m/s (mph)
	Bergeron	1.0 (weak)

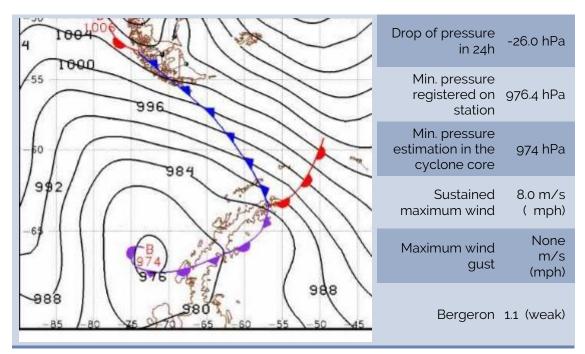
# BOMB CYCLONE N°71/2020- DATE: OCT./20/2020

LOCAL: SYOWA STATION - WMO 89532 (OPERATED BY JAPAN)

	Drop of pressure in 24h	-29.5 hPa
	Min. pressure registered on station	964.0 hPa
X too	Min. pressure estimation in the cyclone core	952 hPa
	Sustained maximum wind	30.0 m/s ( mph)
976	Maximum wind gust	None m/s (mph)
	Bergeron	1 2 (weak)

BOMB CYCLONE N°72/2020- DATE: OCT./22/2020

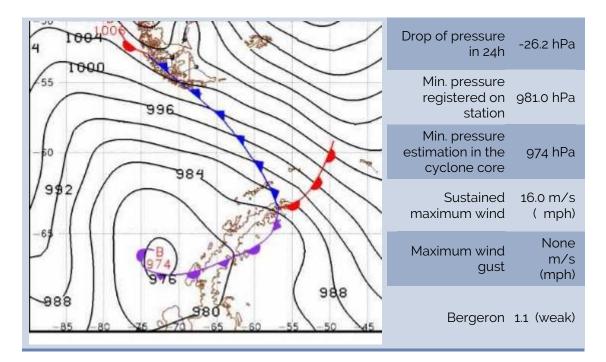
LOCAL: PALMER STATION - WMO 89061 (OPERATED BY U.S.A.)



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# BOMB CYCLONE N°73/2020- DATE: OCT./22/2020

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



### SOURCES

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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

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