

# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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AUGUST 2022

During this month, only 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 hit by a cyclone this month was Neumayer, Davis, Syowa, Dumont D'Urville, Mawson, Marambio, Palmer and Frei. Of these 11 events 01 of them reached the level of an Antarctic hurricane.

## TOTAL OF EVENTS REGISTERED IN STATIONS IN AUGUST

2017	2018	2019	2020	2021	2022
24	20	07	08	09	11

## STATISTICS OF THE MONTH: AUGUST 2022

CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	07
B2	1.3 a 1.8	Moderate	04
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-37.9 hPa/24h	948.1 hPa	36.0 m/s
Syowa Station	Syowa Station	Neumayer Station
Aug. 30	Aug. 30	Aug. 29

#### BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2022



#### TOTAL OF EVENTS REGISTERED BY STATION IN 2022



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#### TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF AUGUST/2022



#### TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC

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## BOMB CYCLONE N°54/2022 - DATE: AUG./14/2022

	Drop of pressure in 24h	-29.4 hPa
	Min. pressure registered on station	974.3 hPa
	Min. pressure estimation in the cyclone core	964 hPa
and the second	Sustained maximum wind	22.0 m/s ( mph)
Mar Cix	Maximum wind gust	29.5 m/s ( mph)
ALL RAS	Bergeron	1.2 (Weak)

LOCAL: DAVIS STATION - WMO 89571 (OPERATED BY AUSTRALIA)

## BOMB CYCLONE N°55/2022 - DATE: AUG./17/2022

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

Cara Aug 2011	Drop of pressure in 24h	-31.5 hPa
	Min. pressure registered on station	962.8 hPa
	Min. pressure estimation in the cyclone core	943 hPa
and a server	Sustained maximum wind	28.5 m/s ( mph)
	Maximum wind gust	47.0 m/s ( mph)
	Bergeron	1.3 (Mod.)

## BOMB CYCLONE N°56/2022 - DATE: AUG./19/2022

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

Torres de	Drop of pressure in 24h	-28.0 hPa
	Min. pressure registered on station	964.1 hPa
	Min. pressure estimation in the cyclone core	946 hPa
has 2	Sustained maximum wind	22.5 m/s ( mph)
and a set	Maximum wind gust	None m/s ( mph)
June 1	Bergeron	1.2 (Weak)

## BOMB CYCLONE N°57/2022 - DATE: AUG./21/2022

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

	Drop of pressure in 24h	-25.6 hPa
	Min. pressure registered on station	965.9 hPa
NO IMAGE	Min. pressure estimation in the cyclone core	960 hPa
	Sustained maximum wind	31.5 m/s ( mph)
	Maximum wind gust	36.5 m/s ( mph)
	Bergeron	1.1 (Weak)

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## BOMB CYCLONE N°58/2022 - DATE: AUG./22/2022

Drop of pressure -26.7 hPa in 24h Min. pressure registered on 969.9 hPa station Min. pressure estimation in the 953 hPa cyclone core Sustained 23.0 m/s (mph) maximum wind None Maximum wind HIRING m/s gust (mph) Bergeron 1.1 (Weak)

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

## BOMB CYCLONE N°59/2022 - DATE: AUG./22/2022

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

LEASE MALDING	Drop of pressure in 24h	-25.1 hPa
	Min. pressure registered on station	980.3 hPa
	Min. pressure estimation in the cyclone core	953 hPa
	Sustained maximum wind	17.0 m/s ( mph)
	Maximum wind gust	21.0 m/s ( mph)
·	Bergeron	1.0 (Weak)

## BOMB CYCLONE N°60/2022 - DATE: AUG./22/2022

	Drop of pressure in 24h	-34.6 hPa
	Min. pressure registered on station	962.5 hPa
Low 2	Min. pressure estimation in the cyclone core	959 hPa
	Sustained maximum wind	25.0 m/s ( mph)
En and a	Maximum wind gust	32.0 m/s ( mph)
1 Charles	Bergeron	1.4 (Mod.)

LOCAL: DAVIS STATION - WMO 89571 (OPERATED BY AUSTRALIA)

## BOMB CYCLONE N°61/2022 - DATE: AUG./22/2022

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



## BOMB CYCLONE N°62/2022 - DATE: AUG./26/2022

	Drop of pressure in 24h	-26.5 hPa
	Min. pressure registered on station	963.9 hPa
	Min. pressure estimation in the cyclone core	956 hPa
	Sustained maximum wind	10.0 m/s ( mph)
and the second second	Maximum wind gust	None m⁄s ( mph)
	Bergeron	1.1 (Weak.)

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

## BOMB CYCLONE N°63/2022 - (ANTARCTIC HURRICANE CAT-1) DATE: AUG./29/2022

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

	Drop of pressure in 24h	-34.7 hPa
	Min. pressure registered on station	949.1 hPa
	Min. pressure estimation in the cyclone core	924 hPa
	Sustained maximum wind	36.0 m/s ( mph)
	Maximum wind gust	None m/s ( mph)
and the second second	Bergeron	1.4 (Mod.)

## BOMB CYCLONE N°64/2022 - DATE: AUG./30/2022

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



## SOURCES

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