

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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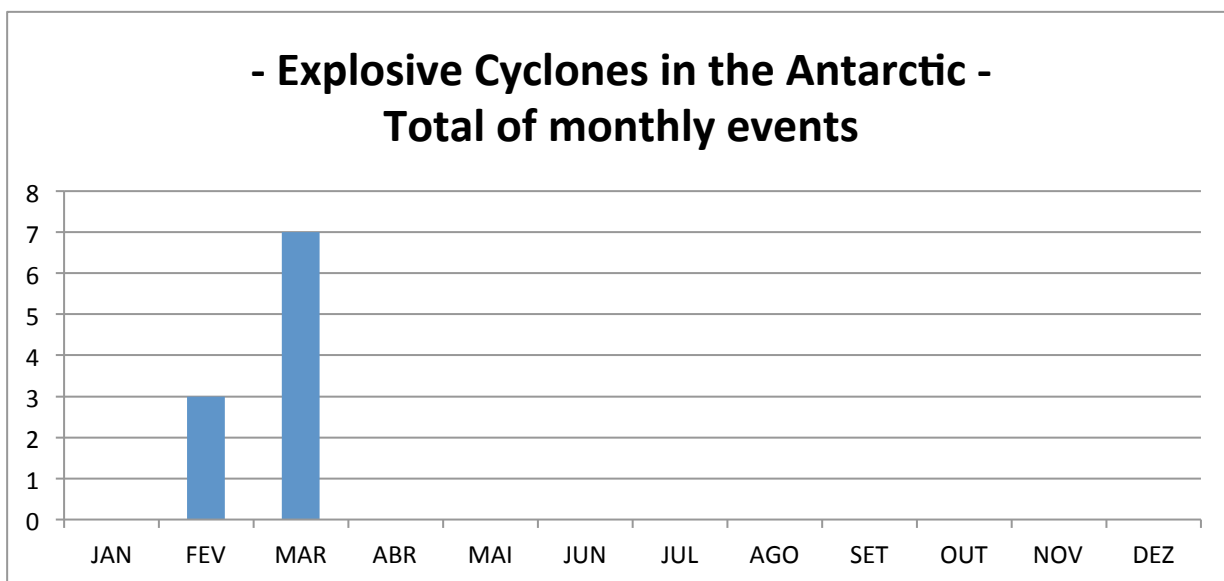
MARCH/2017

During this month, among all 12 research stations that we used as references for the monitoring of explosive cyclones located on the coast of Antarctic, 07 events were registered, in the stations of: Palmer, Mirny, Casey and Dumont D'Urville. The most intense cyclone recorded was at the Dumont D'Urville station on March 28th with sustained winds of up to 31.9 m/s (71.4 mph). The lowest atmospheric pressure of this cyclone was recorded at 962.9 hPa at sea level; at the center of the cyclone the lowest pressure estimate was 935.0 hPa.

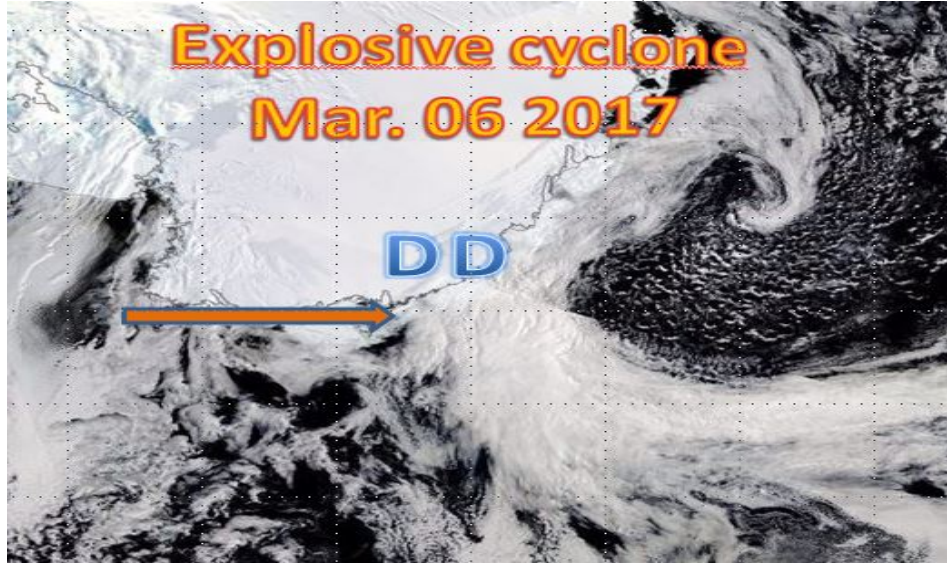
STATISTICS OF THE MONTH

Classification	Bergeron Scale	Intensity	Total of cases registered in the month
B1	1 a 1.2	Weak	06
B2	1.3 a 1.8	Moderate	01
B3	>1.8	Strong	00

Highest pressure drop	Lowest recorded pressure	Highest sustained wind	Average minimum pressures	Mean of pressure drops
30.6 hPa/24H	962.9 hPa	32,9 m/s (71.3 mph)	969.7 hPa	27.1 hPa/24H
Casey Station Mar. 21	D. D'Urville Station Mar. 28	D. D'Urville Station Mar. 28		



EXPLOSIVE CYCLONE N°04/2017- DATA: 06/MAR/2017
LOCAL: DUMONT D'URVILLE STATION (OPERATED BY FRANCE)



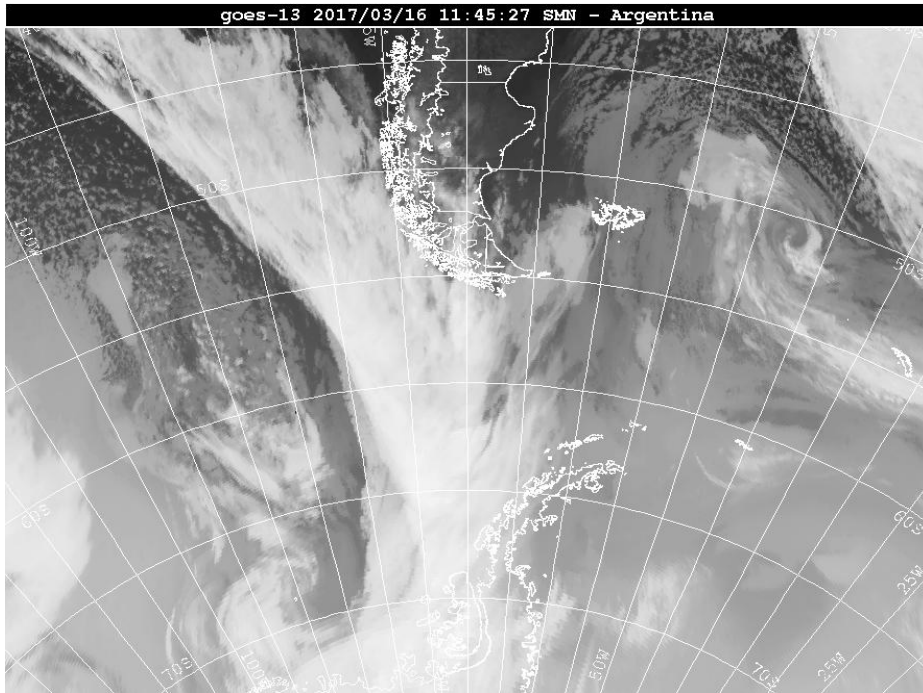
DROP OF PRESSURE IN 24H: 24.6 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 984.0 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 976.0 hPa
SUSTAINED MAXIMUM WIND: 29.7 m/s (66.4 mph)
MAXIMUM WIND GUST: 43.7 m/s (97.8 mph)
BERGERON: 1.0 (WEAK)

EXPLOSIVE CYCLONE N°05/2017- DATA: 14/MAR/2017
LOCAL: DUMONT D'URVILLE STATION (OPERATED BY FRANCE)



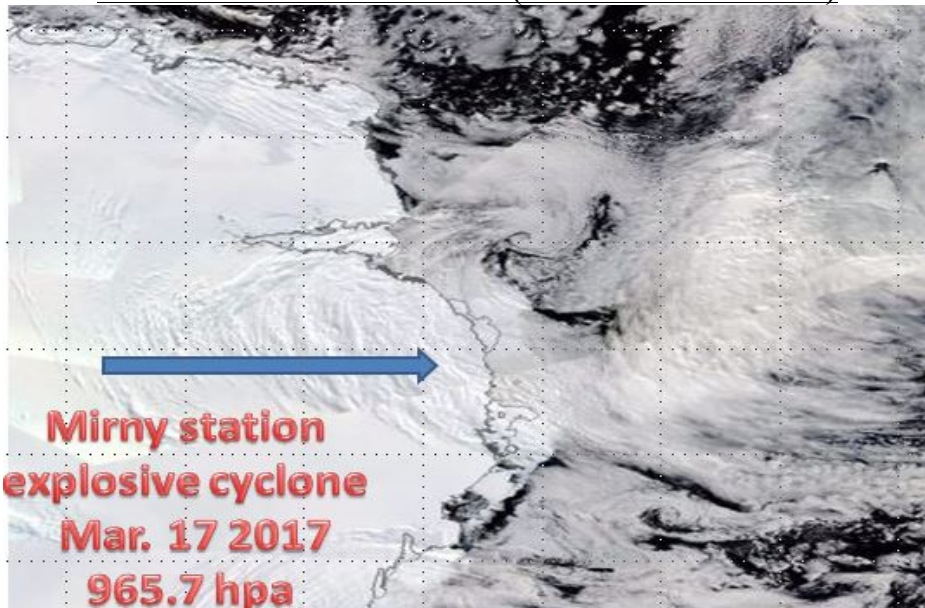
DROP OF PRESSURE IN 24H: 28.9 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 970.0 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 960 hPa
SUSTAINED MAXIMUM WIND: 28.8 m/s (64.4 mph)
MAXIMUM WIND GUST: 46.3 m/s (103.6 mph)
BERGERON: 1.2 (WEAK)

EXPLOSIVE CYCLONE N°06/2017- DATA: 17/MAR/2017
LOCAL: PALMER STATION (OPERATED BY USA)



DROP OF PRESSURE IN 24H: 24.0 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 983.1 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 974 hPa
SUSTAINED MAXIMUM WIND: 16.0 m/s (35.8 mph)
BERGERON: 1.0 (WEAK)

EXPLOSIVE CYCLONE N°07/2017- DATA: 17/MAR/2017
LOCAL: MIRNY STATION (OPERATED BY RUSSIA)



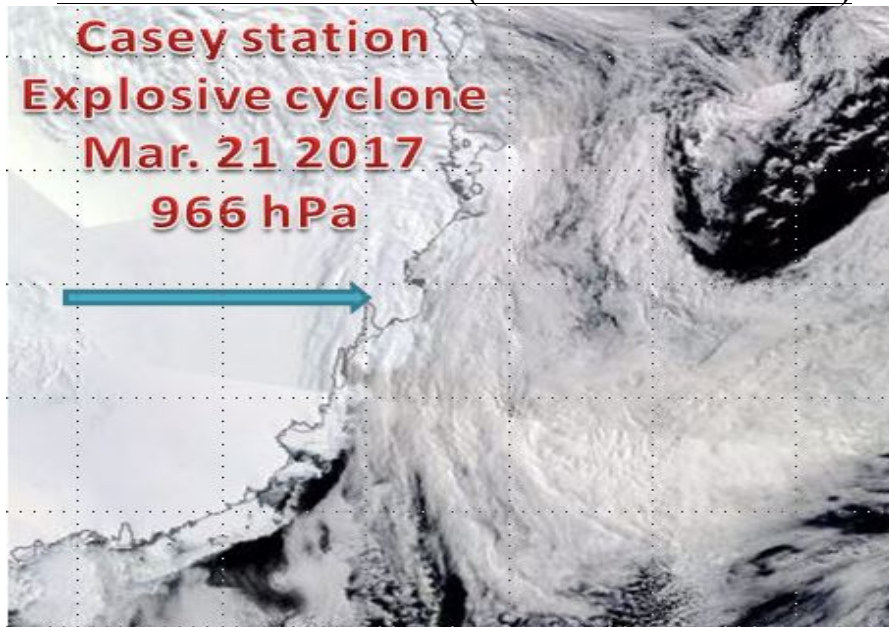
DROP OF PRESSURE IN 24H: 25.6 HPA
MINIMUM PRESSURE REGISTERED ON STATION: 965.7 HPA
SUSTAINED MAXIMUM WIND: 12.2 m/s (27.3 mph)
BERGERON: 1.1 (WEAK)

EXPLOSIVE CYCLONE N°08/2017- DATA: 19/MAR/2017
LOCAL: CASEY STATION (OPERATED BY AUSTRALIA)



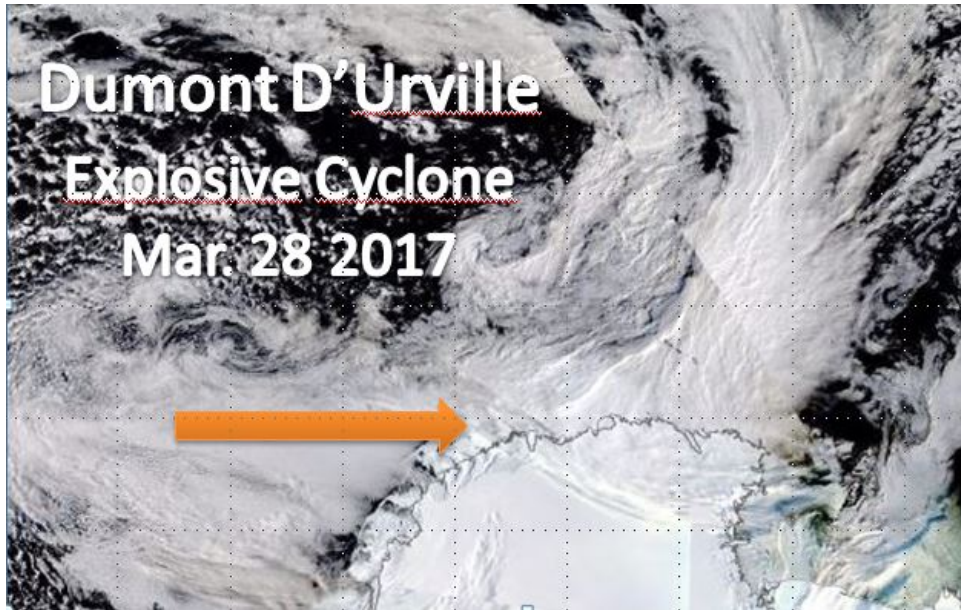
DROP OF PRESSURE IN 24H: 29.5 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 956.7 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 945.0 hPa
SUSTAINED MAXIMUM WIND: 29.3 m/s (65.5 mph)
BERGERON: 1.2 (WEAK)

EXPLOSIVE CYCLONE N°09/2017- DATA: 22/MAR/2017
LOCAL: CASEY STATION (OPERATED BY AUSTRALIA)



DROP OF PRESSURE IN 24H: 30.6 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 965.6 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 961.0 hPa
SUSTAINED MAXIMUM WIND: 30.3 m/s (67.8 mph)
BERGERON: 1.3 (MODERATE)

EXPLOSIVE CYCLONE N°10/2017- DATA: 28/MAR/2017
LOCAL: DUMONT D'URVILLE STATION (OPERATED BY FRANCE)



DROP OF PRESSURE IN 24H: 26.9 hPa
MINIMUM PRESSURE REGISTRED ON STATION: 962.9 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 935.0 hPa
SUSTINED MAXIMUM WIND: 32.9 m/s (71.3 mph)
MAXIMUM WIND GUST: 46.8 m/s (104.7 mph)
BERGERON: 1.1 (WEAK)