

MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT

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APRIL/2017



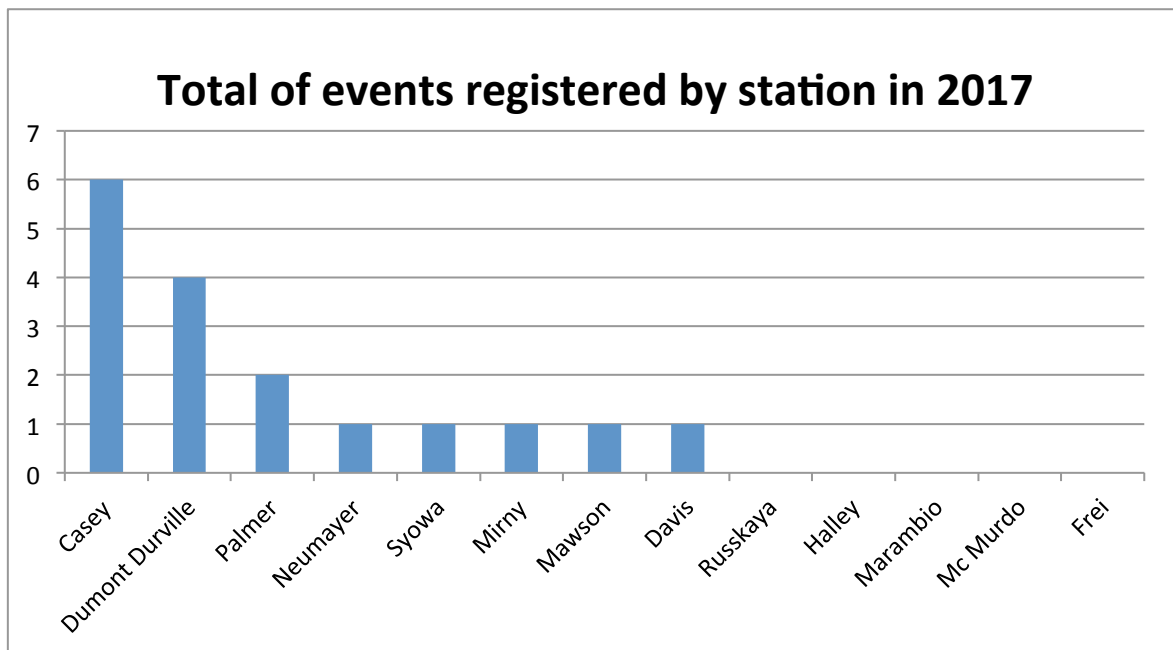
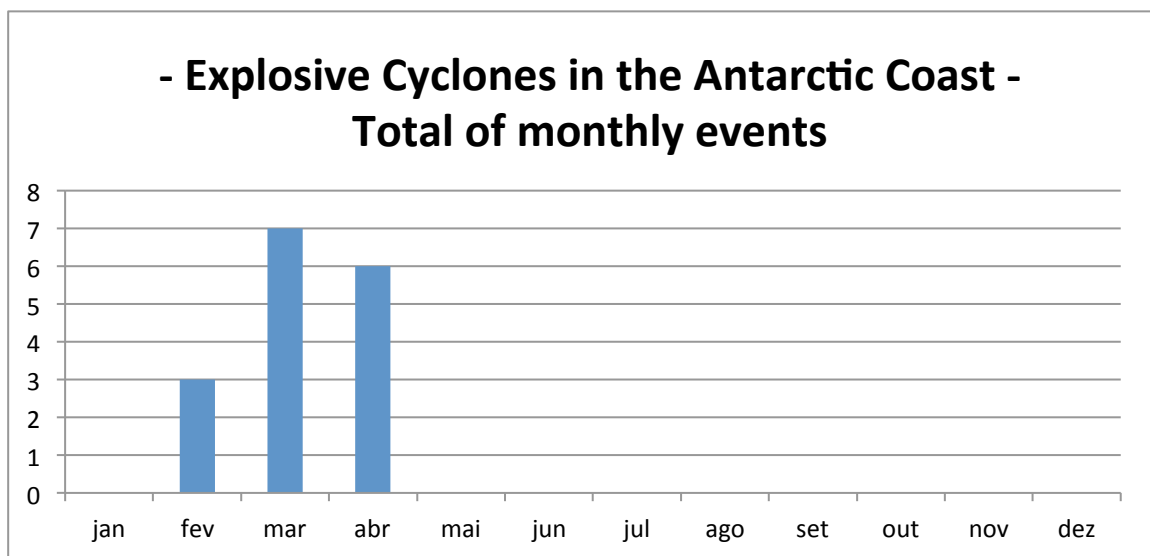
Photo by Alex.9999.9999

During this month, 06 events were registered among all 13 research stations that we used as references for the monitoring of explosive cyclones located on the coast of Antarctic, in the stations of: Casey, Palmer, Syowa, Neumayer and Davis. The most intense cyclone recorded was at the Casey station on April 26th with sustained winds of up to 32.5 m/s (73 mph). The cyclone that registered the lowest atmospheric pressure at sea level was at the Syowa station, with values reaching 946.6 hPa; at the center of the cyclone, the lowest pressure estimate was 934 hPa.

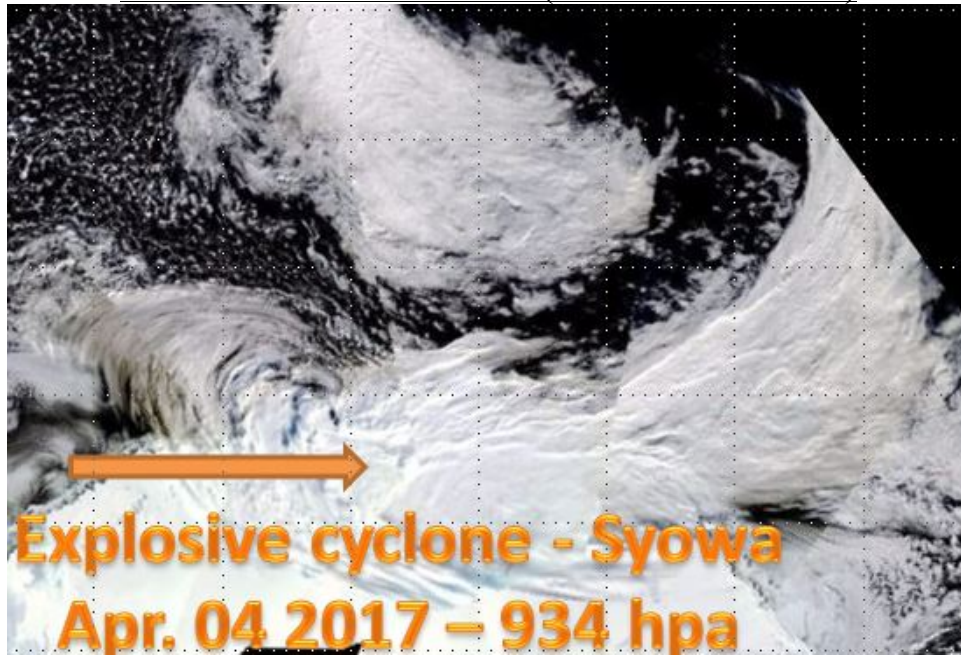
STATISTICS OF THE MONTH

Classification	Bergeron Scale	Intensity	Total of cases registered in the month
B1	1 a 1.2	Weak	05
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
40.7 hPa/24H	946.6 hPa	32.5 m/s (71.3 mph)	957 hPa	29.5 hPa/24H
Syowa Station	Syowa Station	Casey Station		
Apr. 04	Apr. 04	Apr. 26		



EXPLOSIVE CYCLONE N°11/2017- DATA: 04/APRIL/2017
LOCAL: SYOWA STATION (OPERATED BY JAPAN)



DROP OF PRESSURE IN 24H: 40.7 hPa

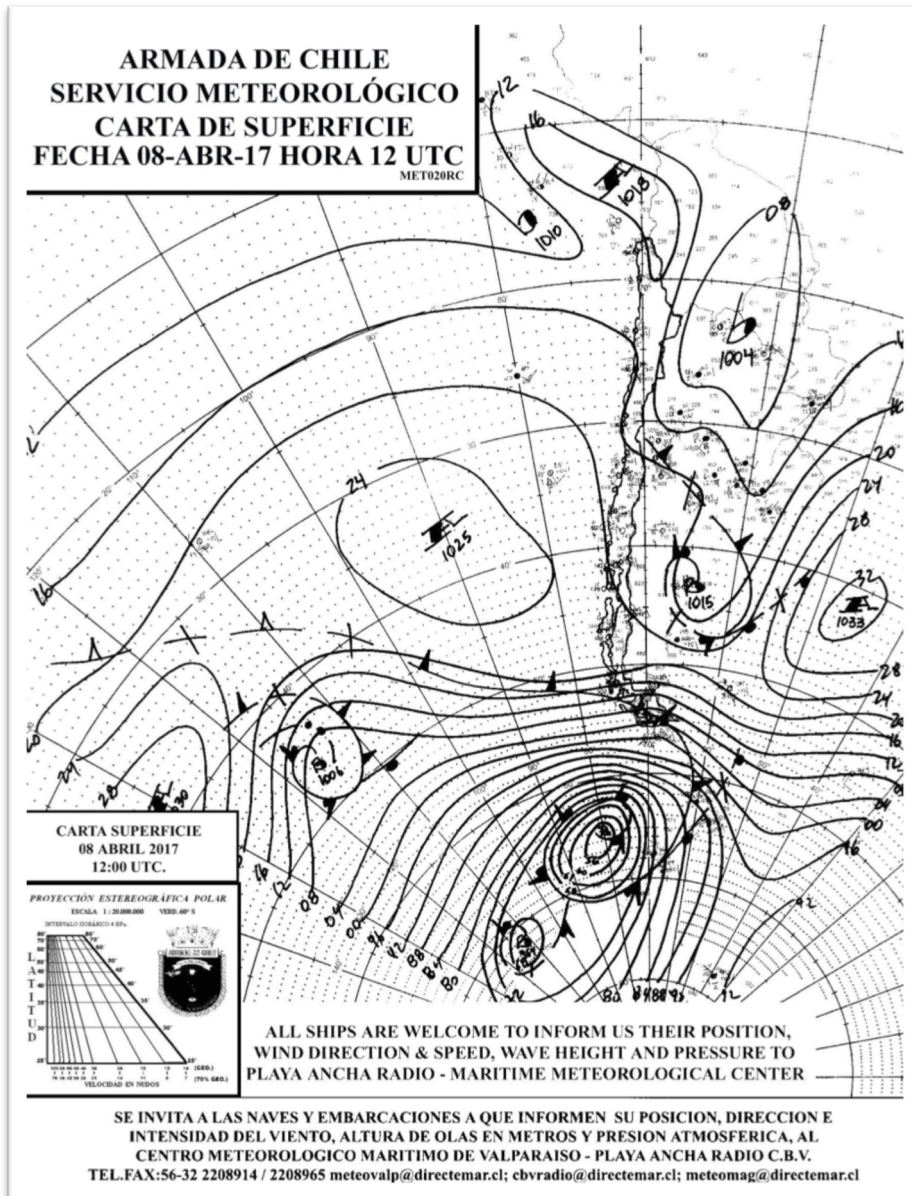
MINIMUM PRESSURE REGISTERED ON STATION: 946.4 hPa

MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 934.0 hPa

SUSTAINED MAXIMUM WIND: 24.0 m/s (54 mph)

BERGERON: 1.7 (MODERATE)

EXPLOSIVE CYCLONE N°12/2017- DATA: 08/APRIL/2017
LOCAL: PAMER STATION (OPERATED BY USA)



DROP OF PRESSURE IN 24H: 27.5 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 969.0 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 952 hPa
SUSTAINED MAXIMUM WIND: 12.0 m/s (27.0 mph)
BERGERON: 1.2 (WEAK)

EXPLOSIVE CYCLONE N°13/2017- DATA: 12/APRIL/2017
LOCAL: CASEY STATION (OPERATED BY AUSTRALIA)



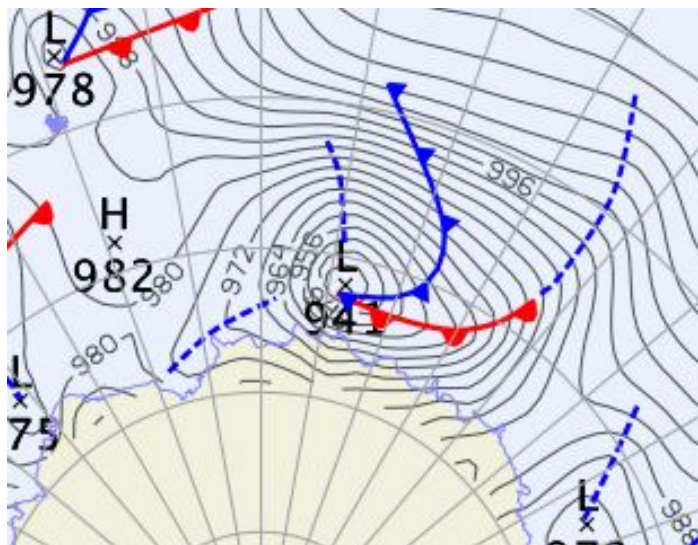
DROP OF PRESSURE IN 24H: 27.0 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 949.0 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 940.0 hPa
SUSTAINED MAXIMUM WIND: 23.5 m/s (53.0 mph)
MXIMUM WIND GUST: 26.5 m/s (59.0 mph)
BERGERON: 1.1 (WEAK)

EXPLOSIVE CYCLONE N°14/2017- DATA: 14/APRIL/2017
LOCAL: NEUMAYER STATION (OPERATED BY GERMAN)



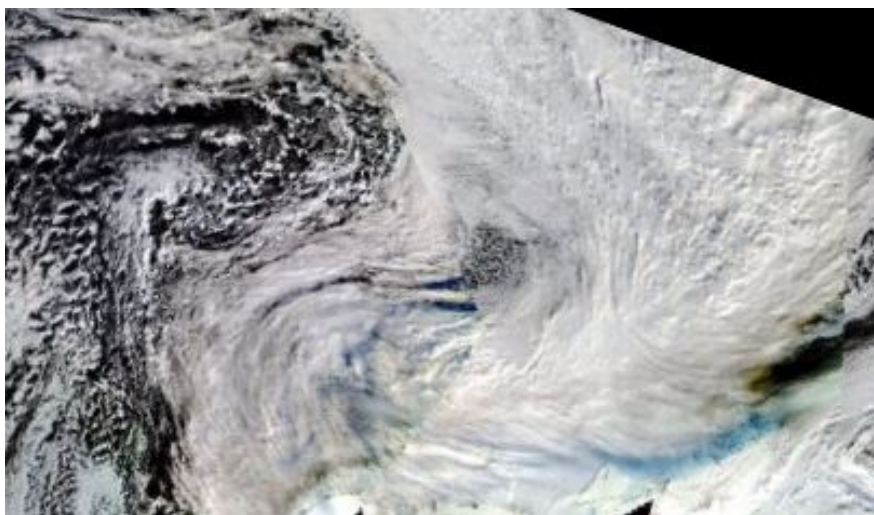
DROP OF PRESSURE IN 24H: 28.2 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 960.4 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 942.0 hPa
SUSTAINED MAXIMUM WIND: 23.2 m/s (52 mph)
BERGERON: 1.2 (WEAK)

EXPLOSIVE CYCLONE N°15/2017- DATA: 26/APRIL/2017
LOCAL: CASEY STATION (OPERATED BY AUSTRALIA)



DROP OF PRESSURE IN 24H: 24.1 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 964.8 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 941.0 hPa
SUSTAINED MAXIMUM WIND: 32.5 m/s (73.0 mph)
MAXIMUM WIND GUST: 37.5 m/s (84 mph)
BERGERON: 1.0 (WEAK)

EXPLOSIVE CYCLONE N°16/2017- DATA: 30/APRIL/2017
LOCAL: DAVIS STATION (OPERATED BY AUSTRALIA)



DROP OF PRESSURE IN 24H: 29.7 hPa
MINIMUM PRESSURE REGISTERED ON STATION: 951.9 hPa
MINIMUM PRESSURE ESTIMATED IN THE CYCLONE CORE: 948.0 hPa
SUSTAINED MAXIMUM WIND: 27.8 m/s (62.0 mph)
MAXIMUM WIND GUST: 30.5 m/s (68 mph)
BERGERON: 1.2 (WEAK)