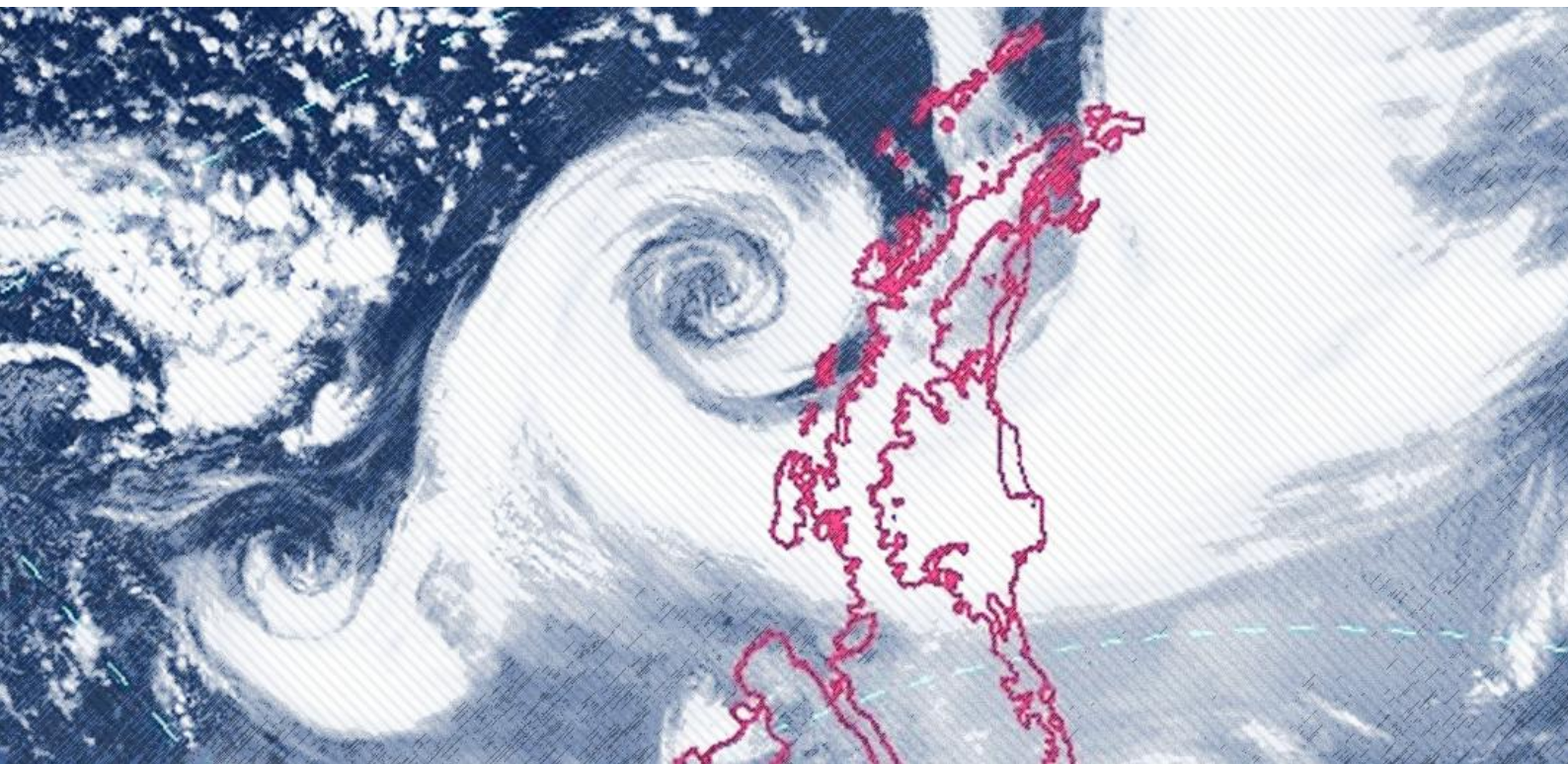




WORLD  
ENVIRONMENTAL  
CONSERVANCY

# MONITORING EXPLOSIVE CYCLONES ON THE COAST OF THE ANTARCTIC CONTINENT



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



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MARCH 2021

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During this month, only 05 event 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 cyclones this month were: Frei, Neumayer and Palmers. There was a decrease in the number of cases in comparison to the same month of the previous year (17%).

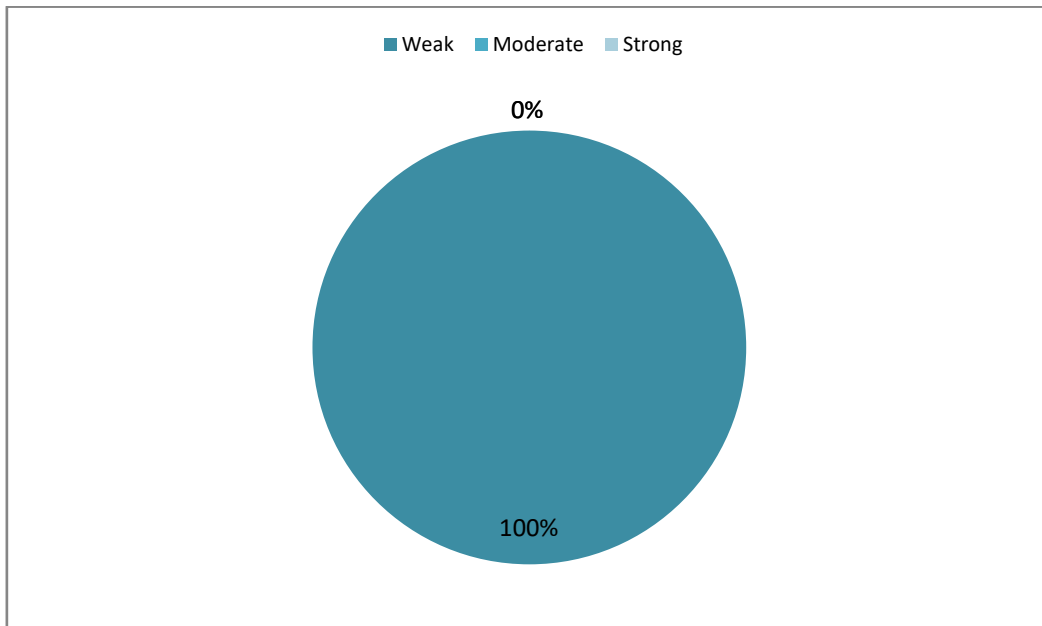
## STATISTICS OF THE MONTH

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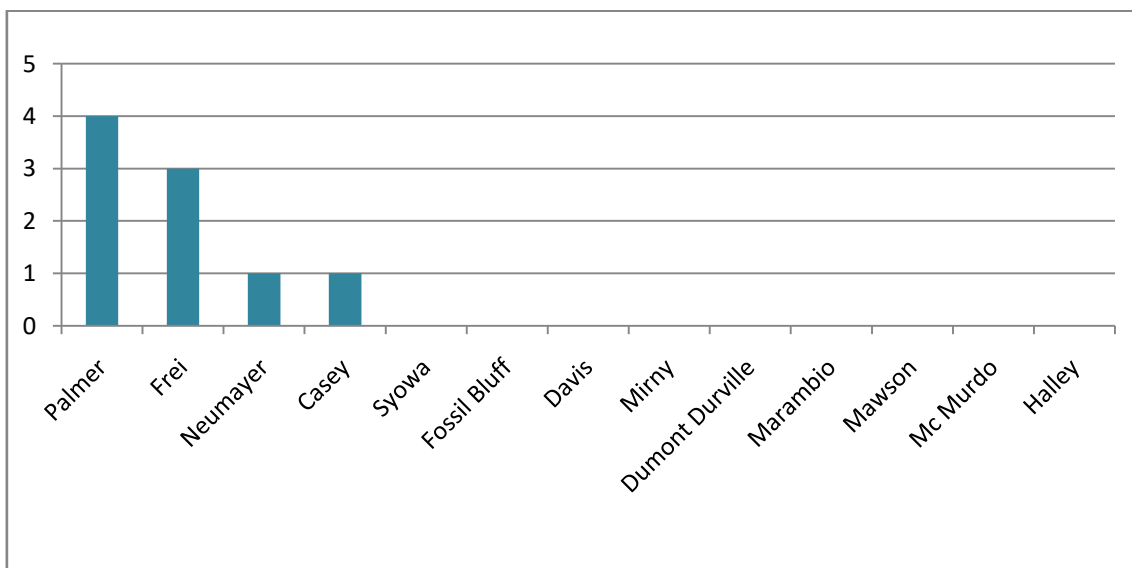
CLASSIFICATION	BERGERON SCALE	INTENSITY	TOTAL OF CASES REGISTERED IN THE MONTH
B1	1 a 1.2	Weak	05
B2	1.3 a 1.8	Moderate	00
B3	> 1.8	Strong	00

HIGHEST PRESSURE DROP	LOWEST RECORDED PRESSURE	HIGHEST SUSTAINED WIND
-28.3 hpa/24h	956.0 hPa	25.7 m/s
Neumayer Station	Frei Station	Neumayer Station
Mar. 12	Mar. 10	Mar. 25

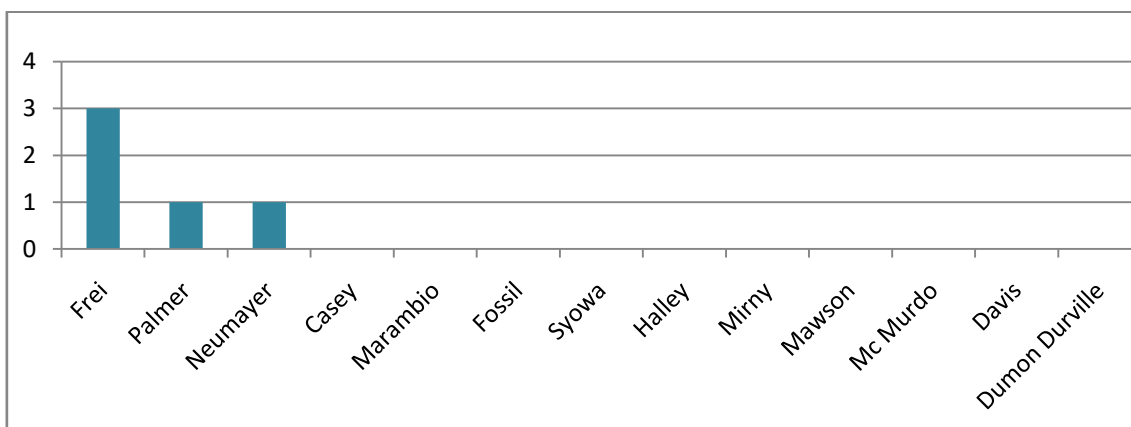
### BERGERON INTENSITY TOTAL OF ANNUAL EVENTS IN 2021



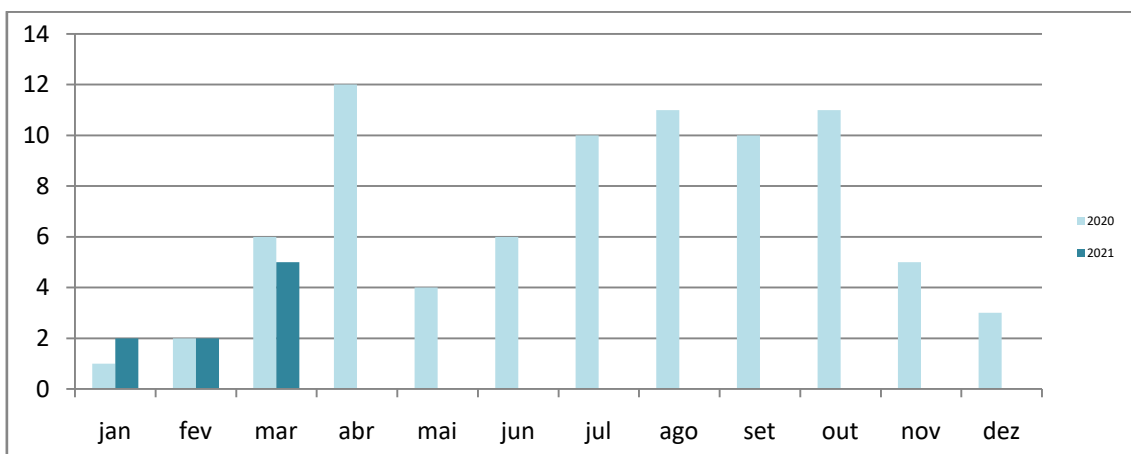
### TOTAL OF EVENTS REGISTERED BY STATION IN 2021



TOTAL OF EVENTS REGISTERED IN EACH STATION IN THE MONTH OF MAR/2021

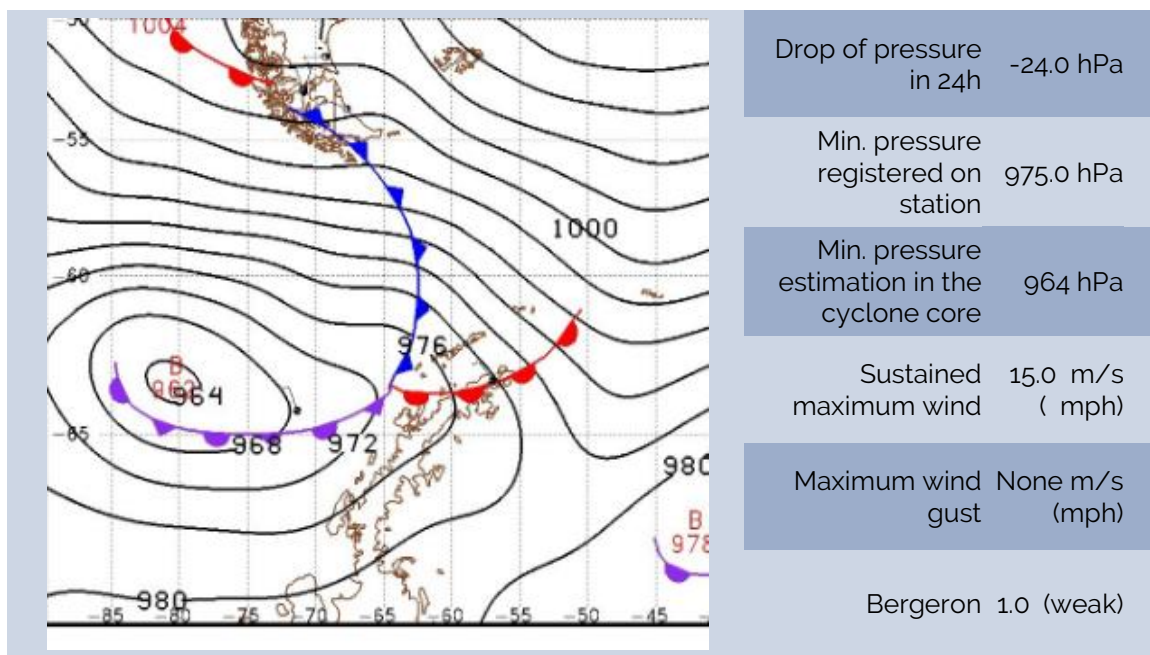


TOTAL EXPLOSIVE CYCLONES IN THE ANTARCTIC



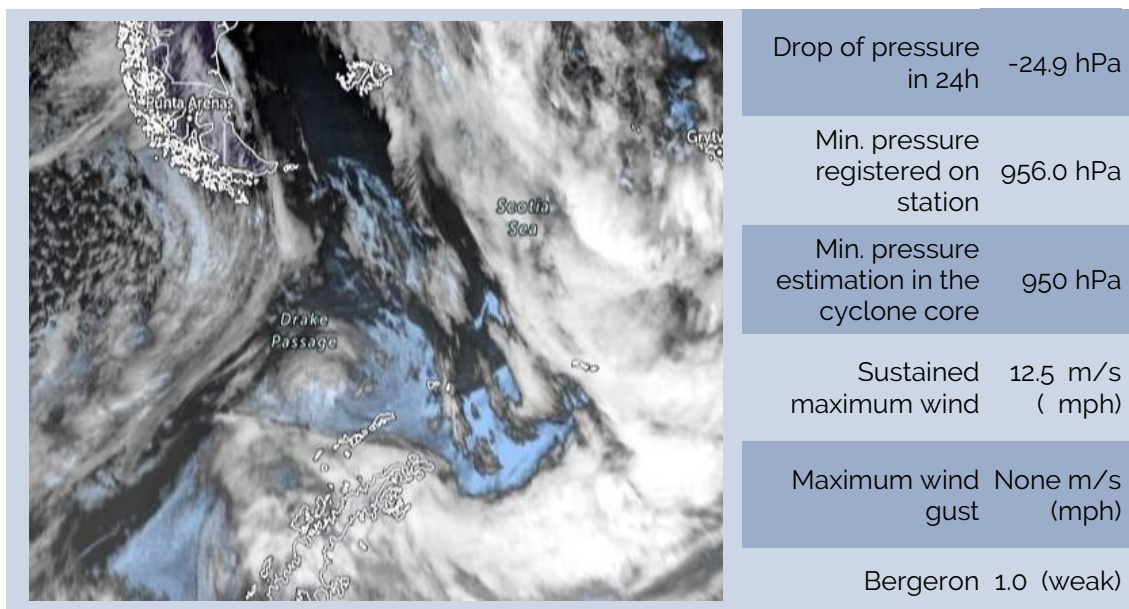
## BOMB CYCLONE N°05/2021- DATE: MAR/05/2021

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



## BOMB CYCLONE N°06/2021- DATE: MAR/10/2021

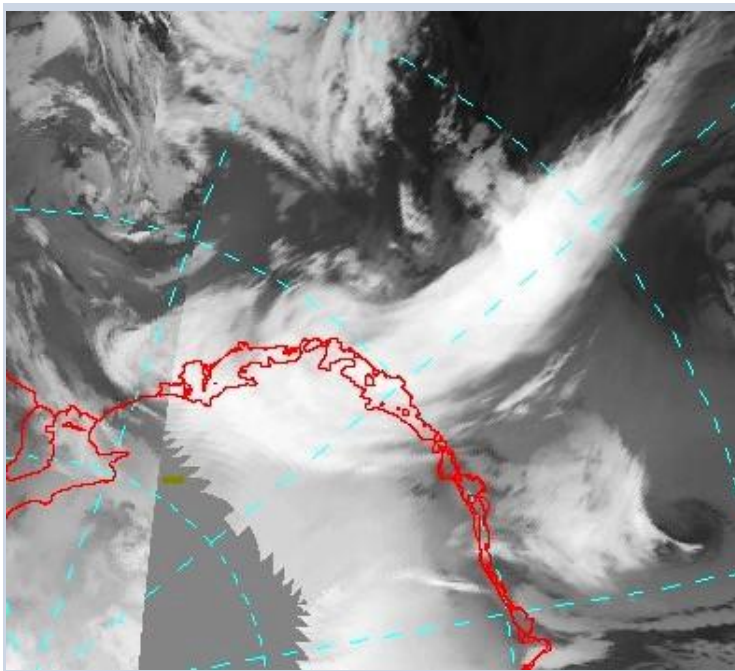
LOCAL: FREI STATION – WMO 89056 (OPERATED BY CHILE)





## BOMB CYCLONE N°07/2021 - DATE: MAR/12/2021

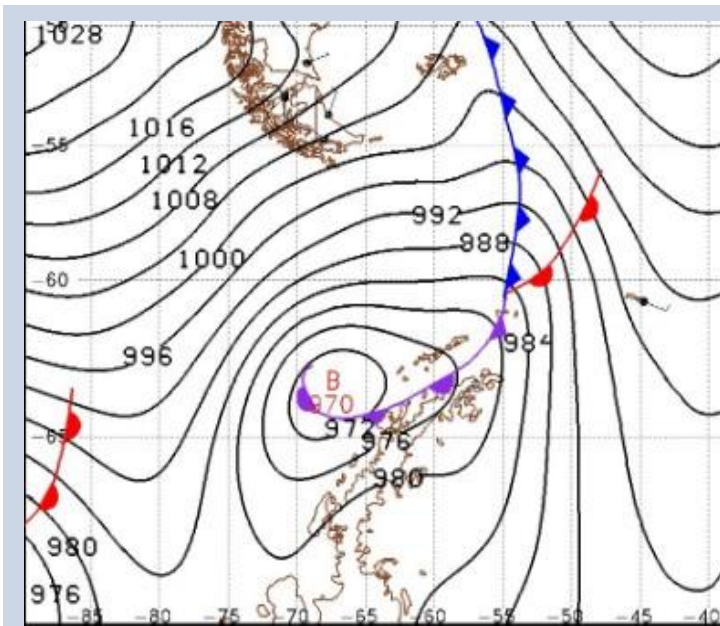
LOCAL: NEUMAYER STATION – WMO 89002 (OPERATED BY GERMANY)



Drop of pressure in 24h	-28.3 hPa
Min. pressure registered on station	962.1 hPa
Min. pressure estimation in the cyclone core	956 hPa
Sustained maximum wind	25.7 m/s ( mph)
Maximum wind gust	None m/s (mph)
Bergeron	1.2 (weak)

## BOMB CYCLONE N°08/2021 - DATE: MAR/16/2021

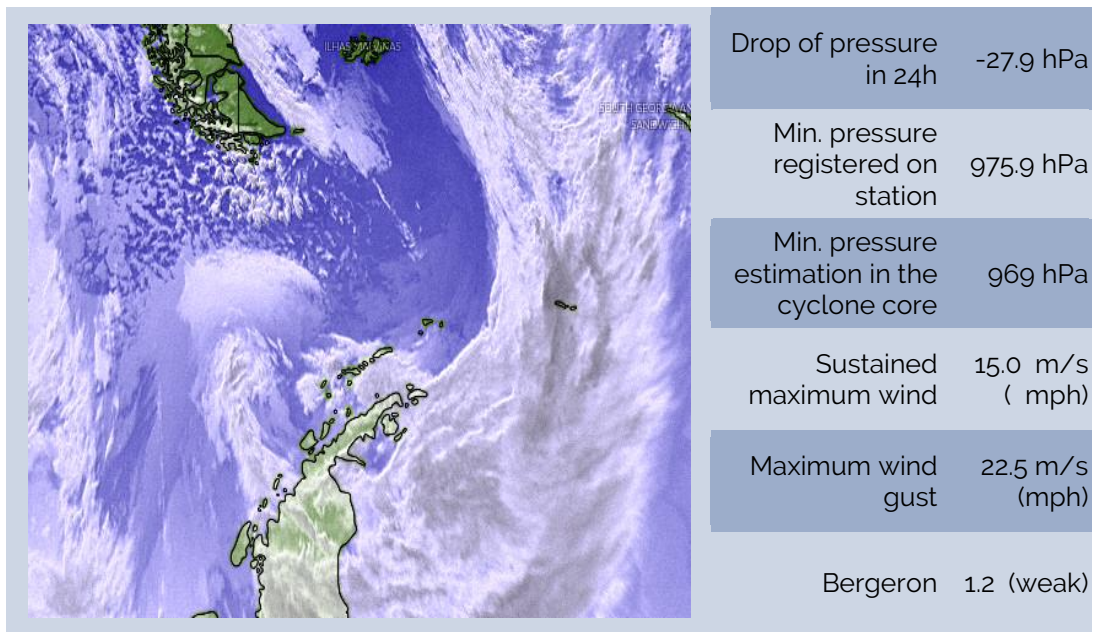
LOCAL: PALMER STATION – WMO 89061 (OPERATED BY U.S.A.)



Drop of pressure in 24h	-28.9 hPa
Min. pressure registered on station	969.3 hPa
Min. pressure estimation in the cyclone core	969 hPa
Sustained maximum wind	5.5 m/s ( mph)
Maximum wind gust	None m/s (mph)
Bergeron	1.2 (weak)

# BOMB CYCLONE N°09/2021- DATE: MAR/16/2021

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



## 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>