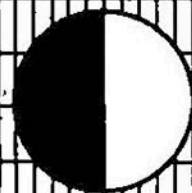
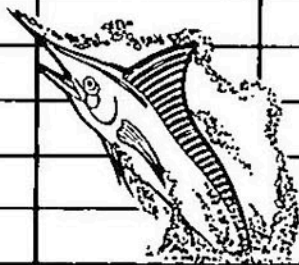


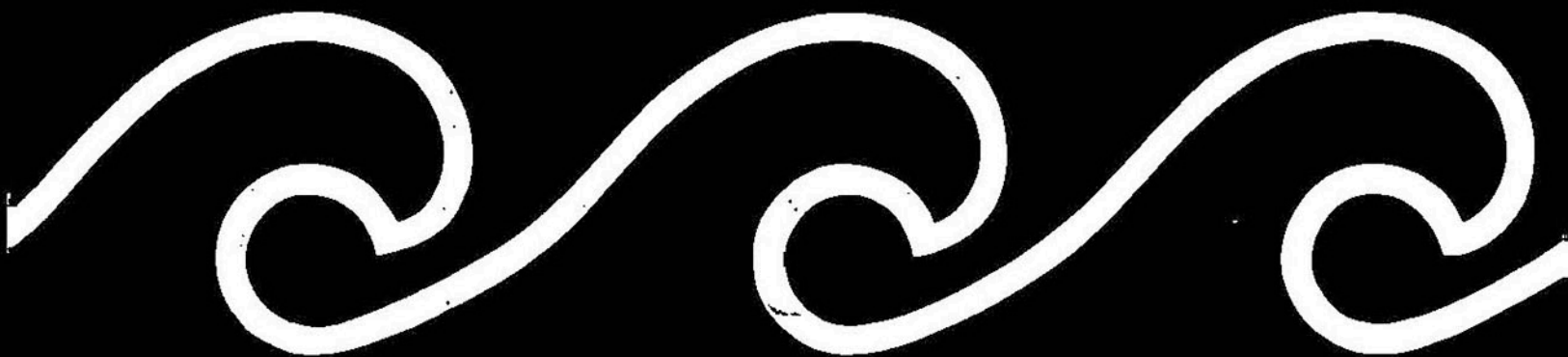
INSTITUTO DE GEOFISICA



**Calendario Gráfico
de Mareas**



1988



**Topolobampo, Sin.
Guaymas, Son.
Puerto Peñasco, Son.**

CALENDARIO GRAFICO DE MAREAS, 1988

TOPOLOBAMPO, SIN.

GUAYMAS, SON.

PUERTO PEÑASCO, SON.

Con objeto de que este Calendario Gráfico de Mareas sea más útil en esta región del Golfo de California, se superponen las mareas de Topolobampo, Guaymas y Puerto Peñasco en una cara y en la otra La Paz y Bahía de los Angeles, cubriendo en esta forma todo el Golfo. Los lugares intermedios pueden interpolarse en tiempo y altura sin gran error.

TIEMPO:

La hora usada para la predicción de mareas de Topolobampo, Guaymas y Puerto Peñasco, es la del meridiano 105° W, se cuentan desde las 00 horas que corresponden a la media noche.

PLANO DE REFERENCIA:

El plano de referencia que esta bajo el nivel medio del mar, al cual están referidas las alturas, es el nivel de bajamar media inferior.

TOPOLOBAMPO, SIN.	= 2.0 pies (0.61 m).
GUAYMAS, SON.	= 1.5 pies (0.45 m).
PUERTO PEÑASCO, SON.	= 7.0 pies (2.13 m).

NOTA: Las temperaturas y salinidades medias del agua del mar, están indicadas para cada mes y en el mismo orden en que están enlistadas las estaciones.

Las escalas de amplitudes para la estación de Pto. Peñasco (pies y metros), se indican en las partes extremas.

Ing. Fco. Grivel Piña
Instituto de Geofísica,
U.N.A.M.

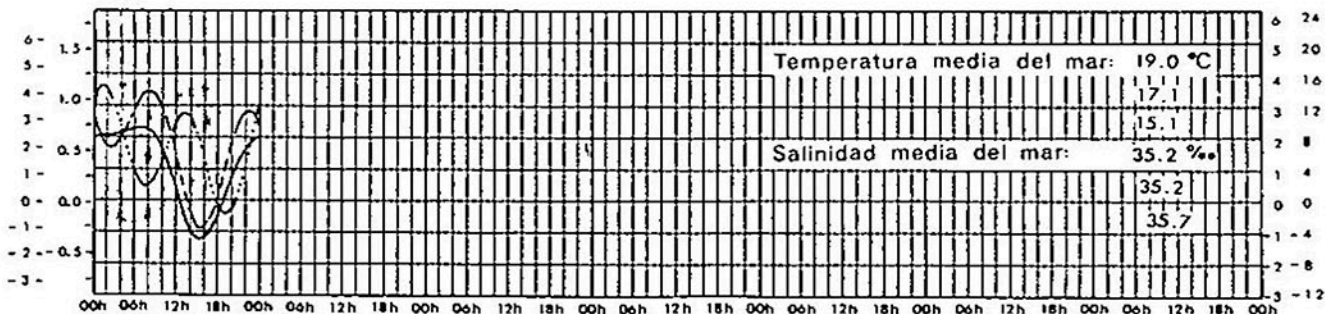
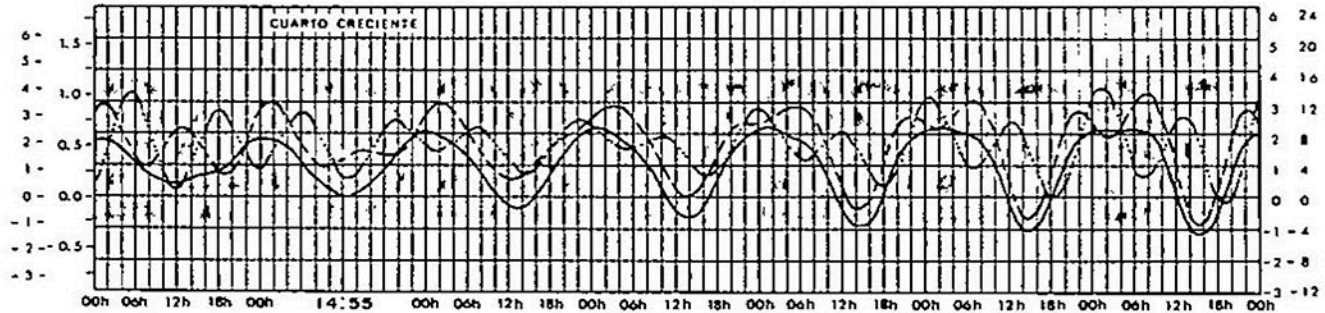
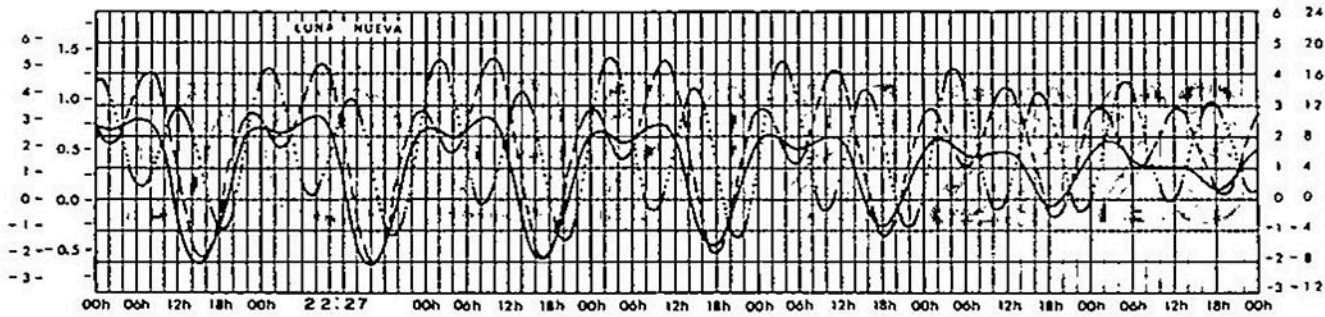
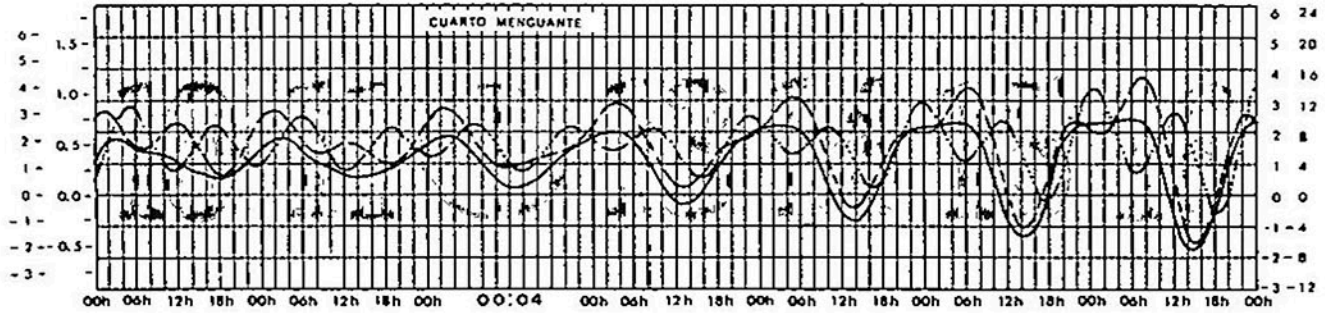
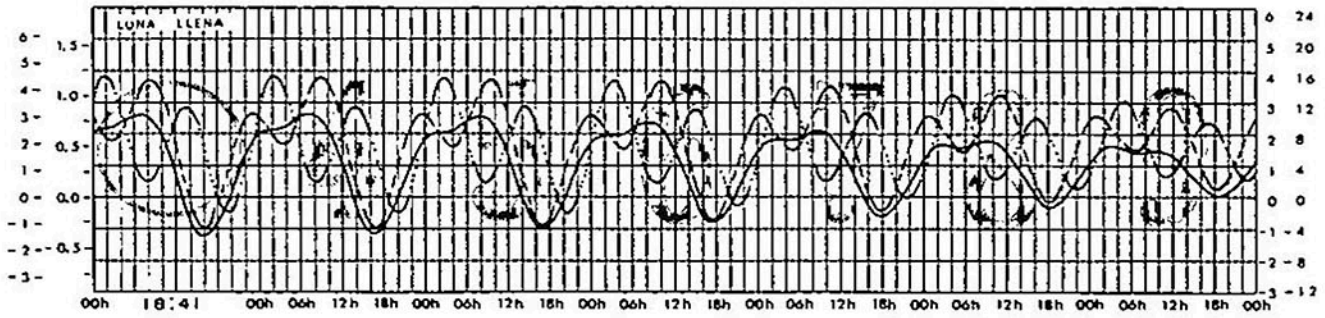
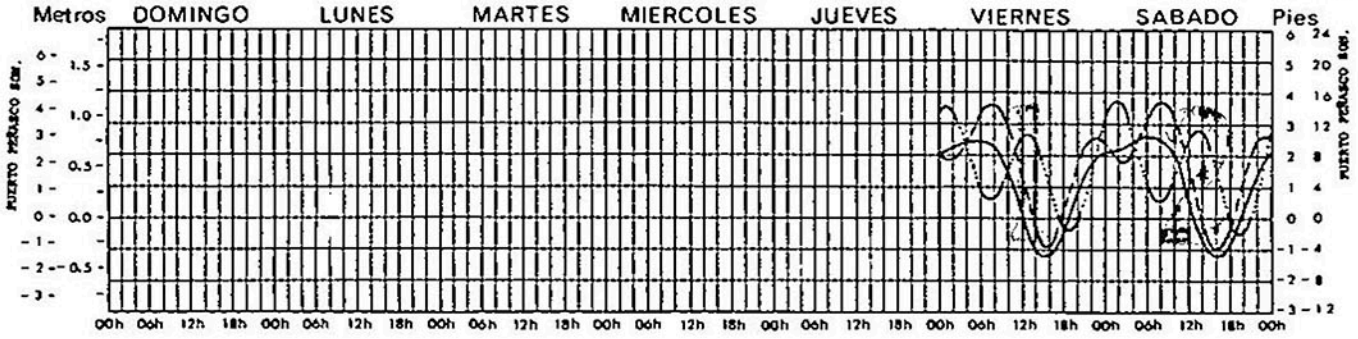


ENERO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.

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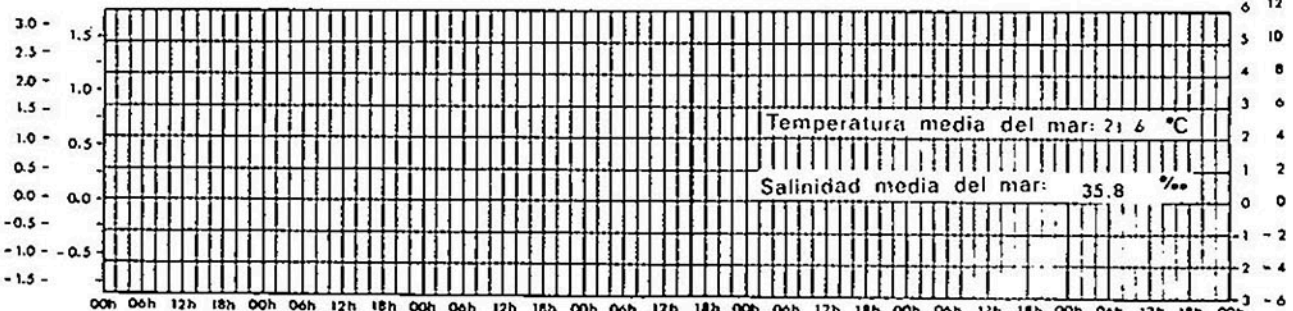
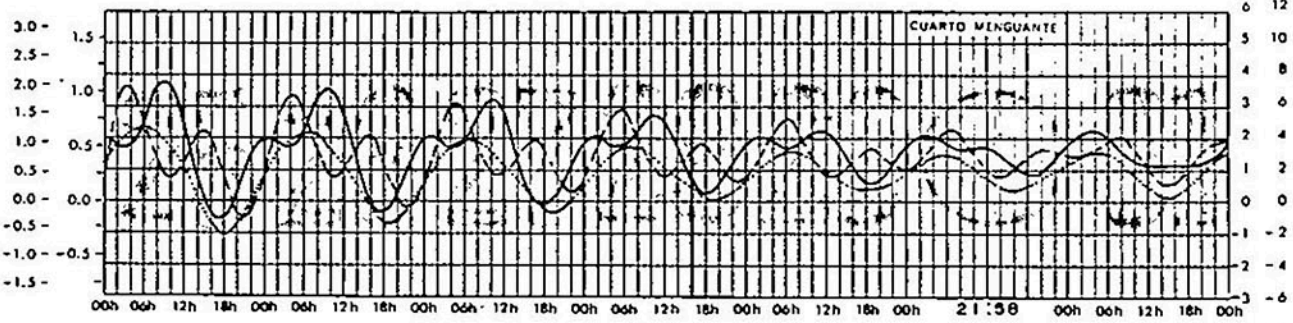
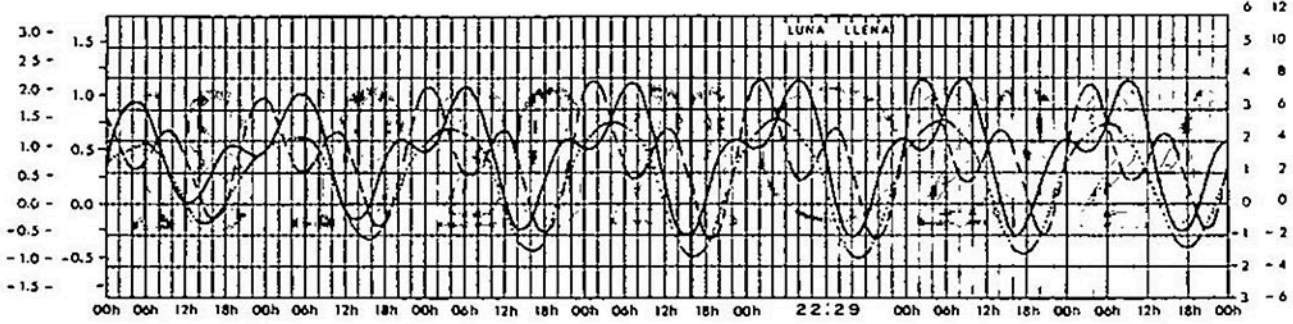
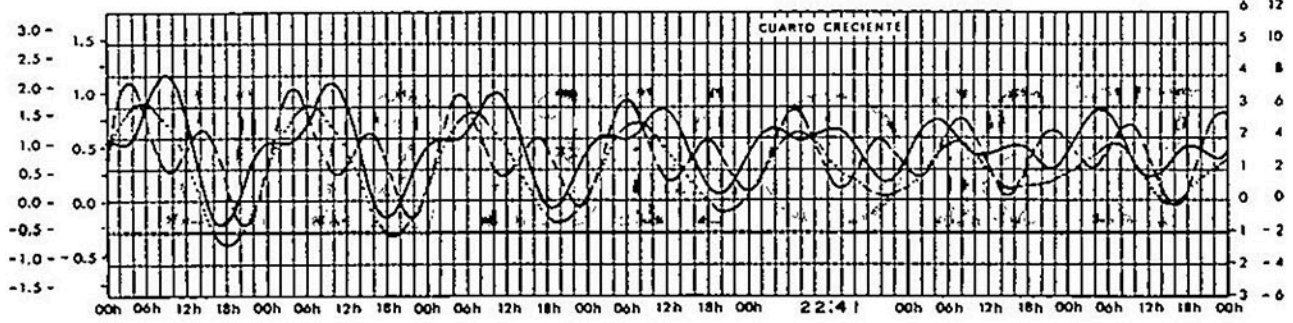
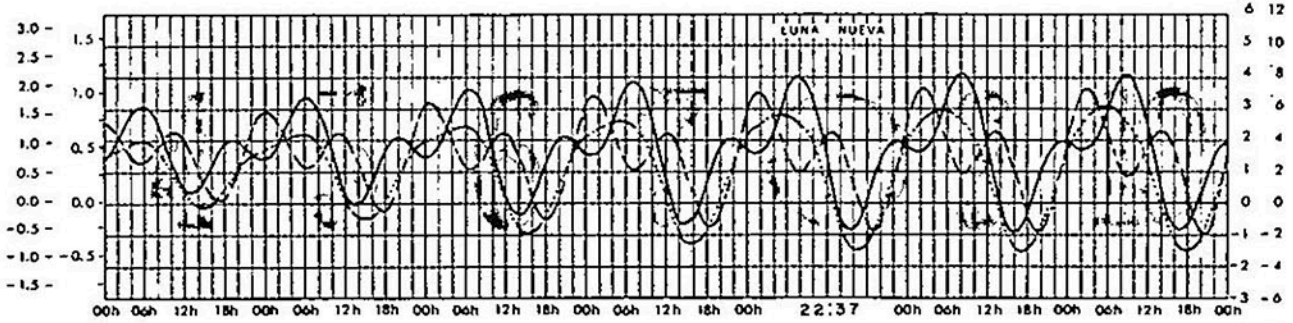
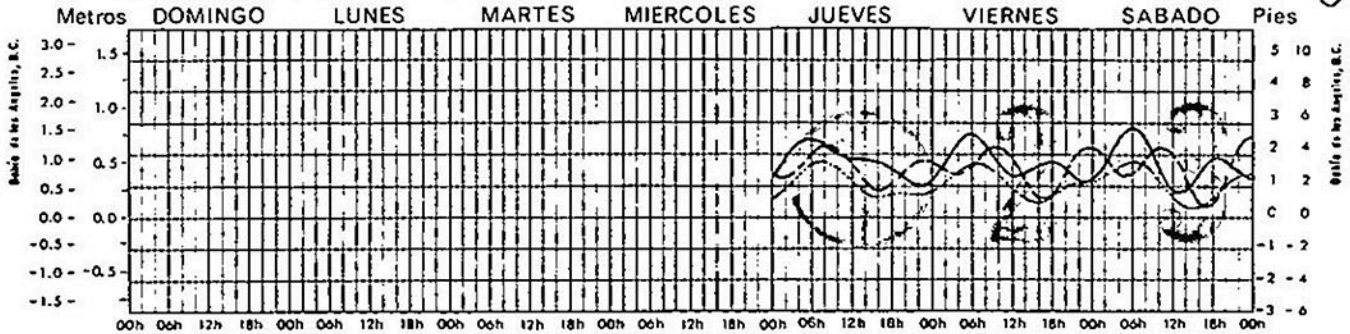


DICIEMBRE 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.



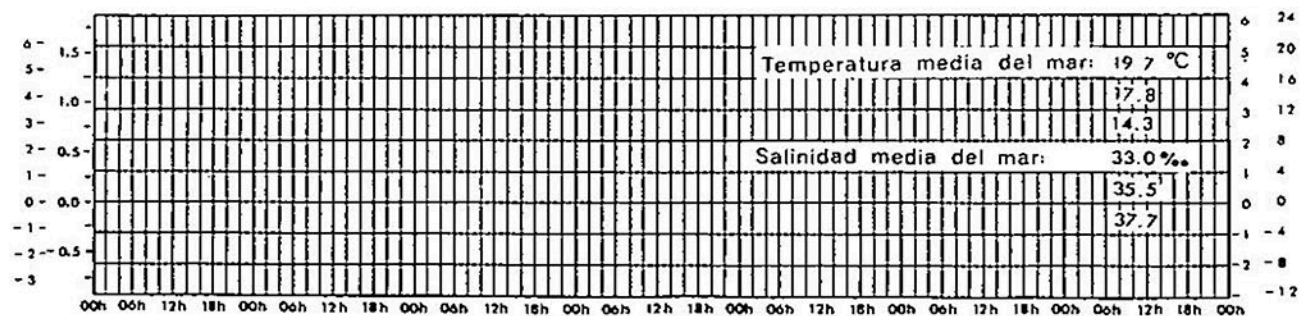
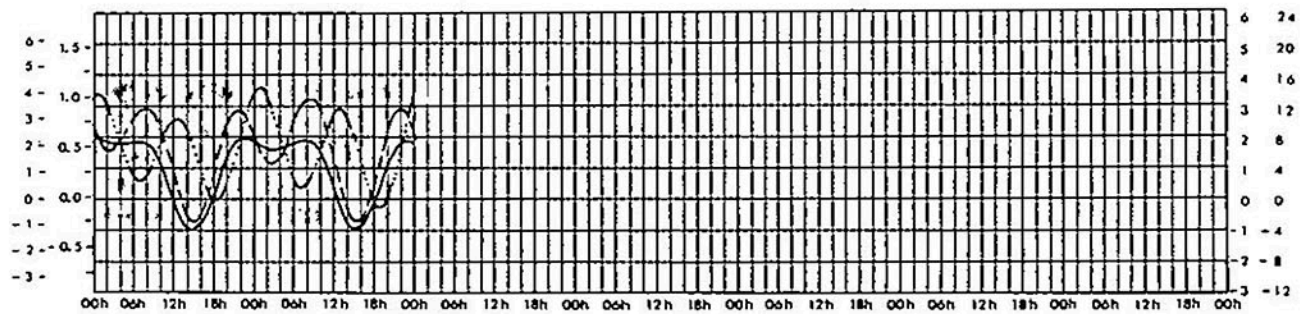
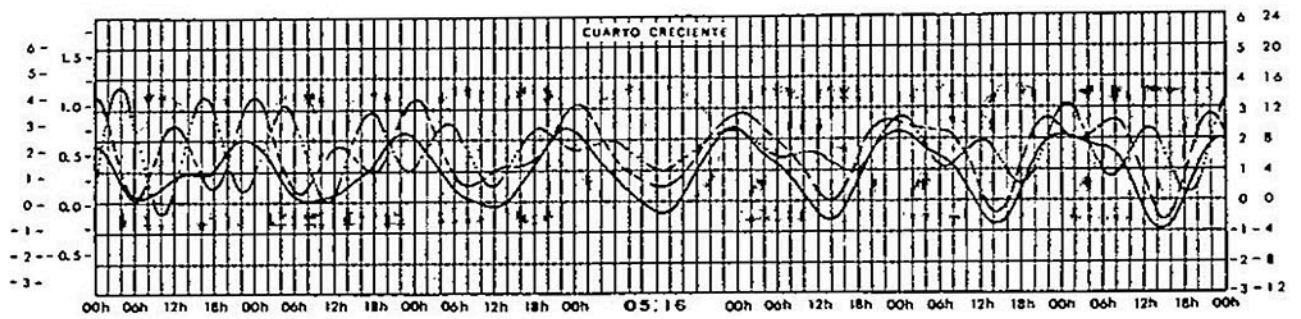
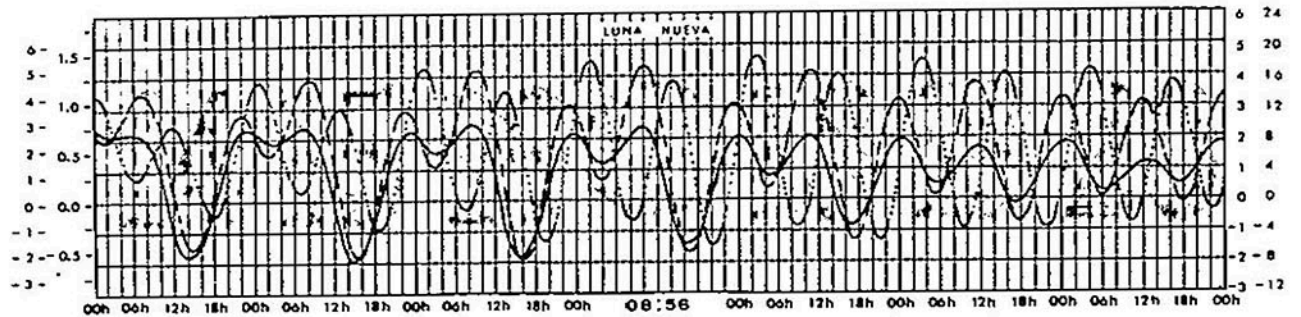
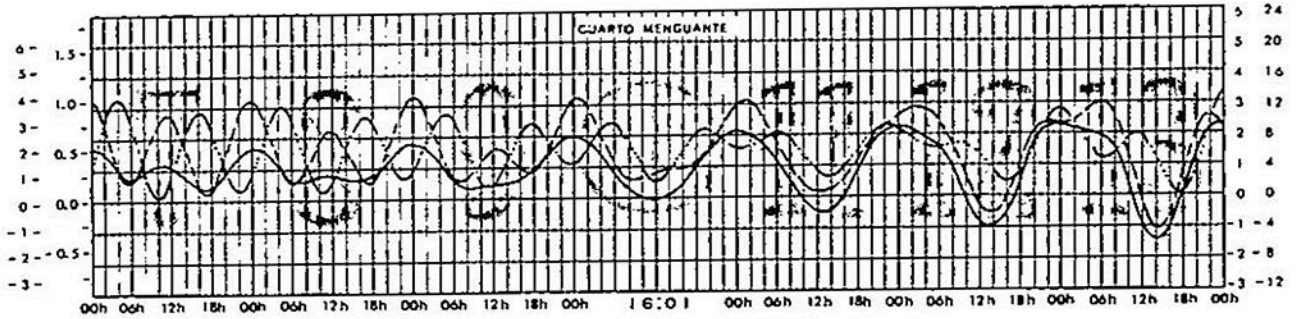
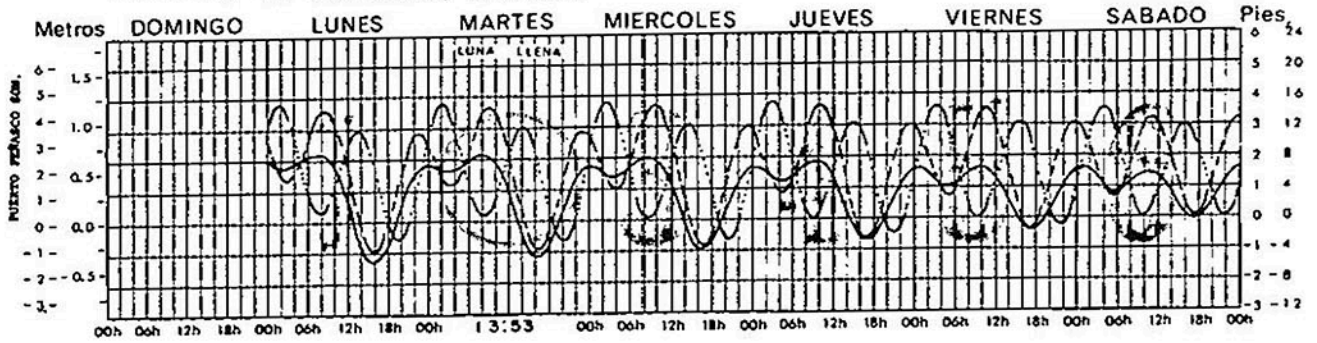


FEBRERO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



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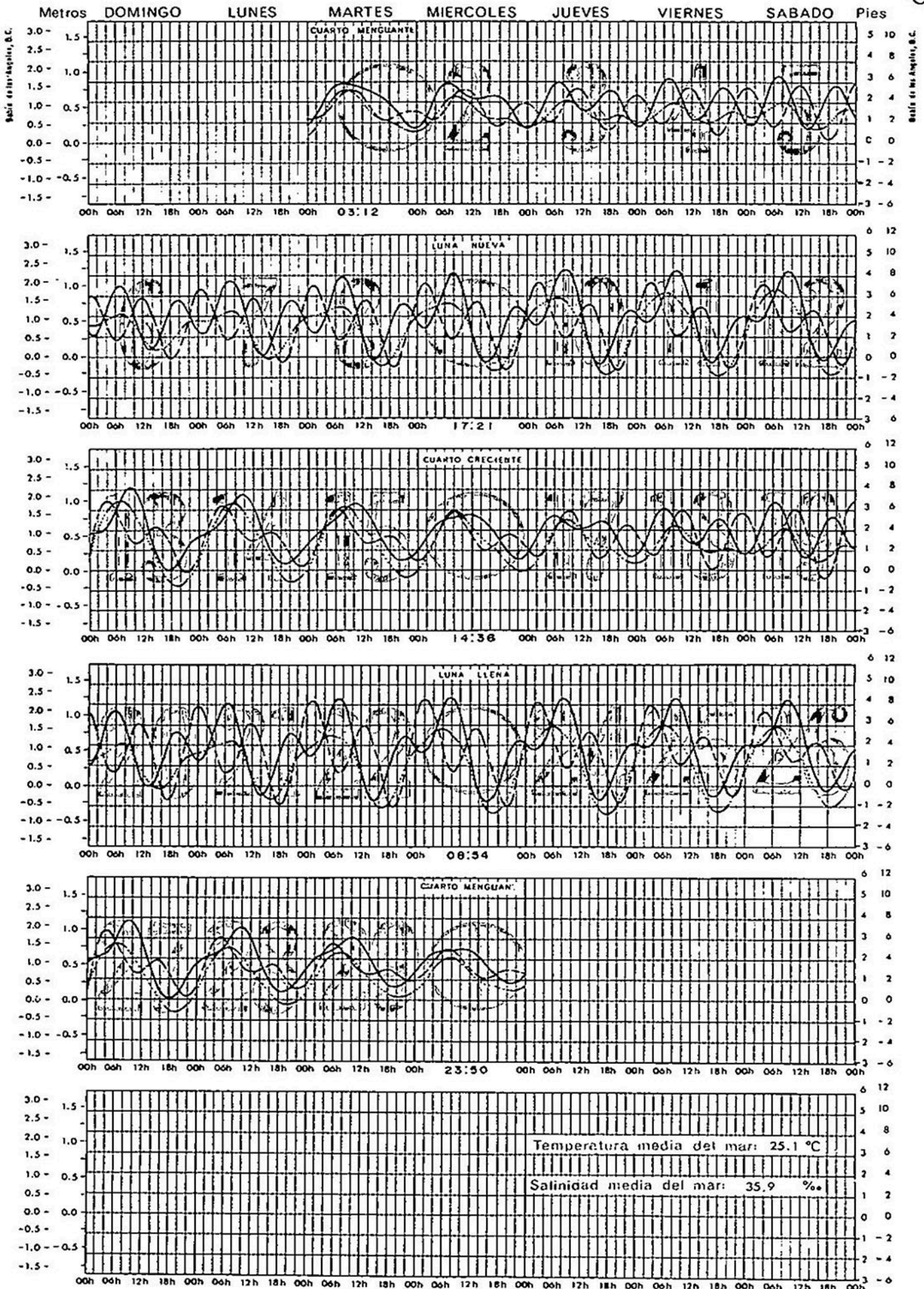


NOVIEMBRE 1988

LA PAZ, B.C.S.
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STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.



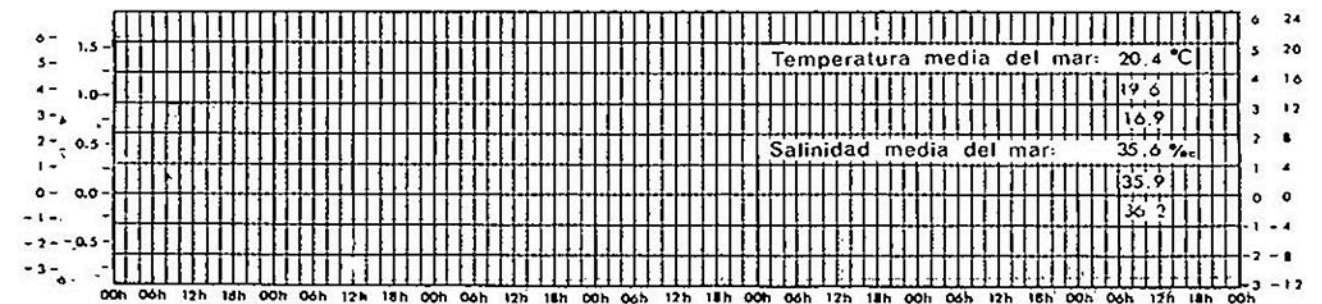
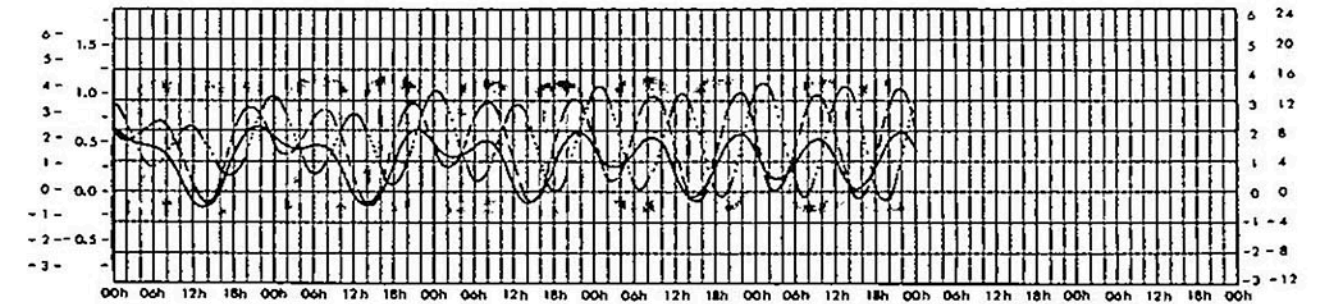
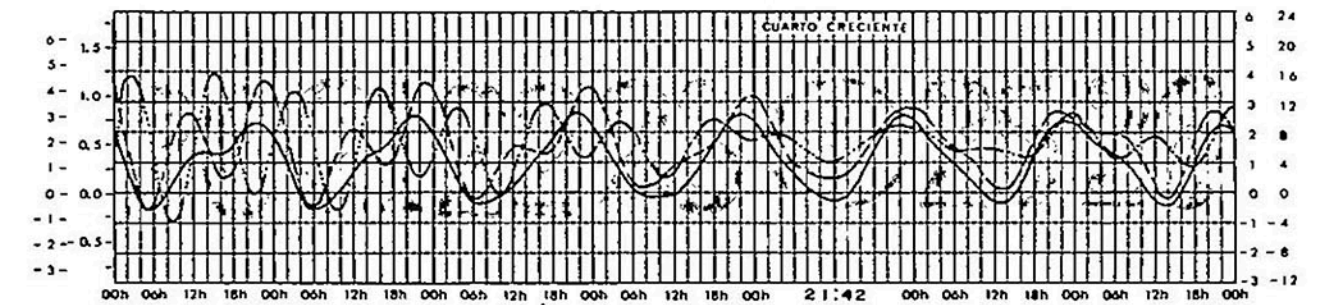
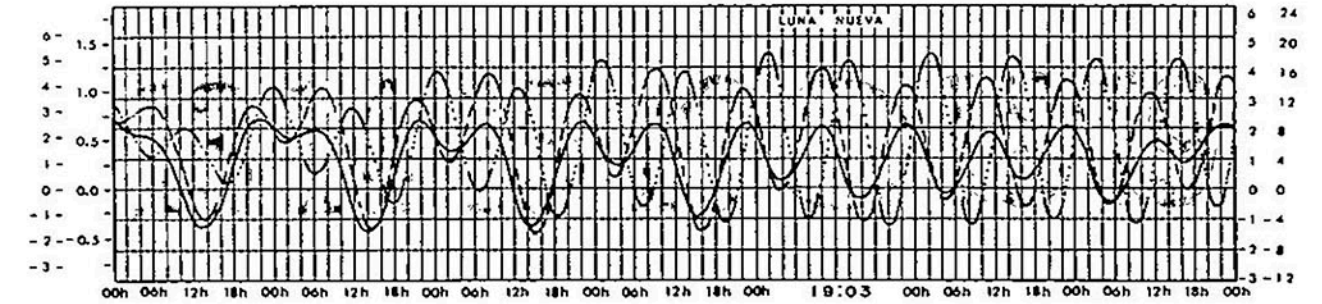
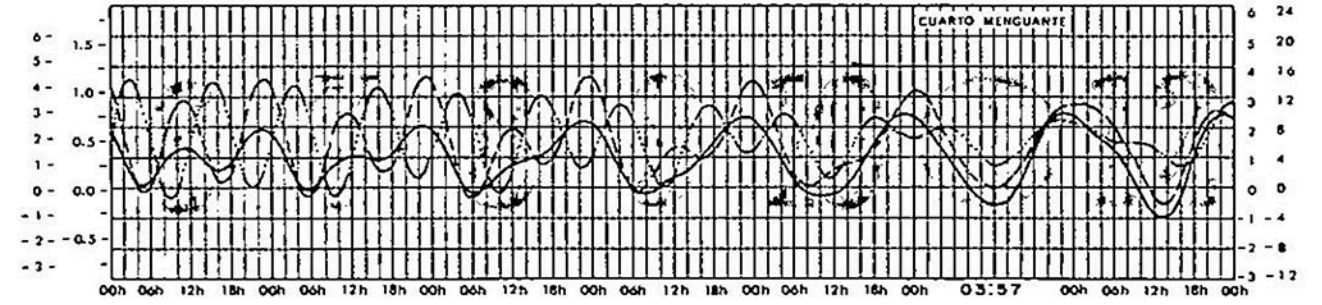
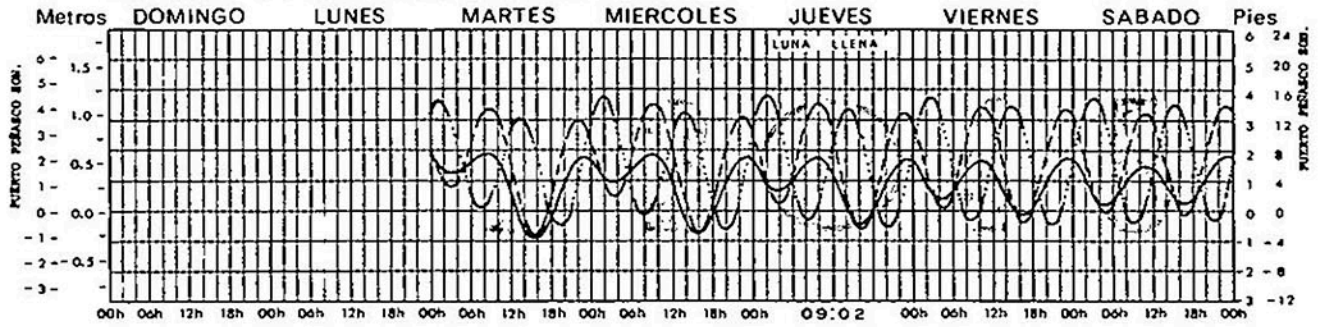


MARZO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



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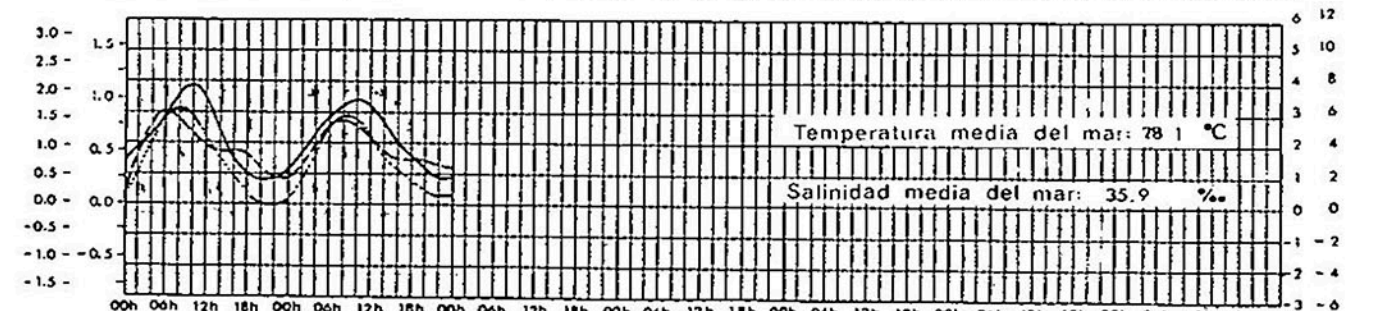
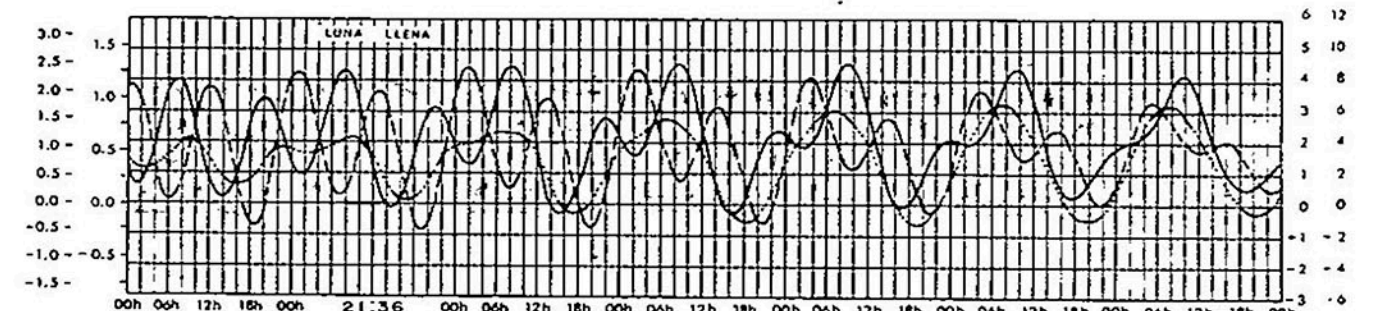
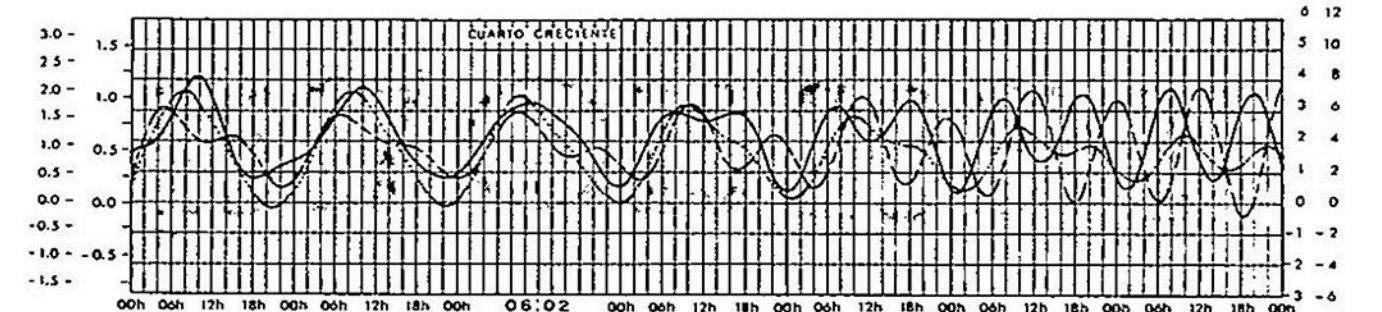
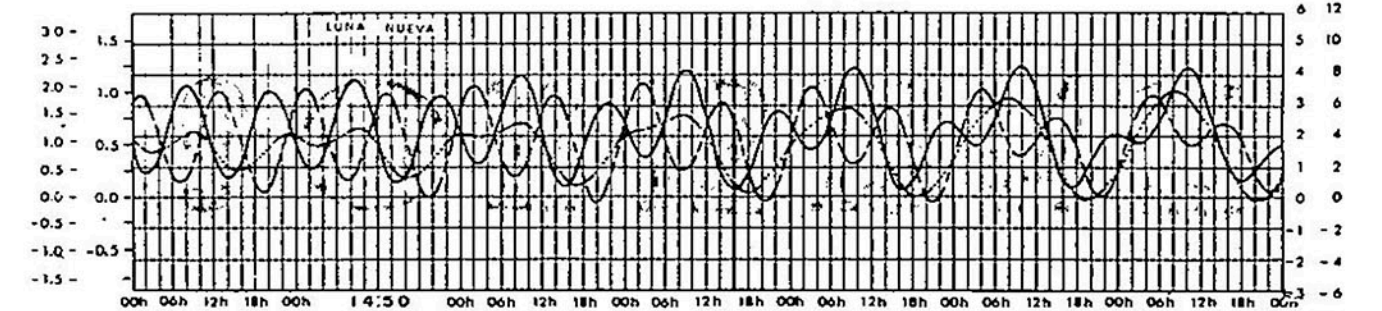
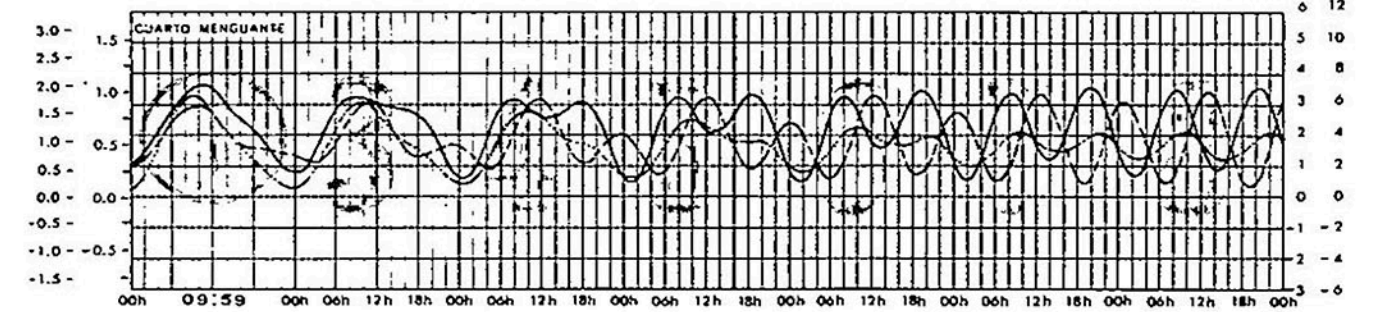
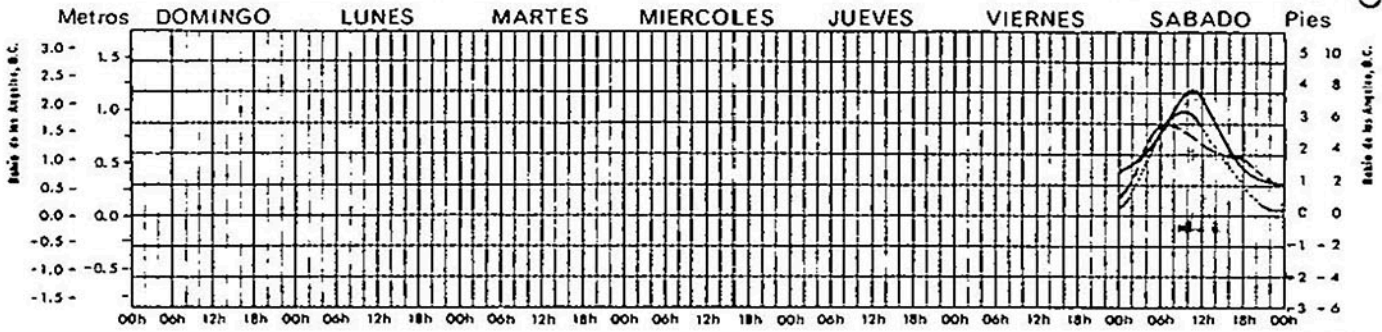


OCTUBRE 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



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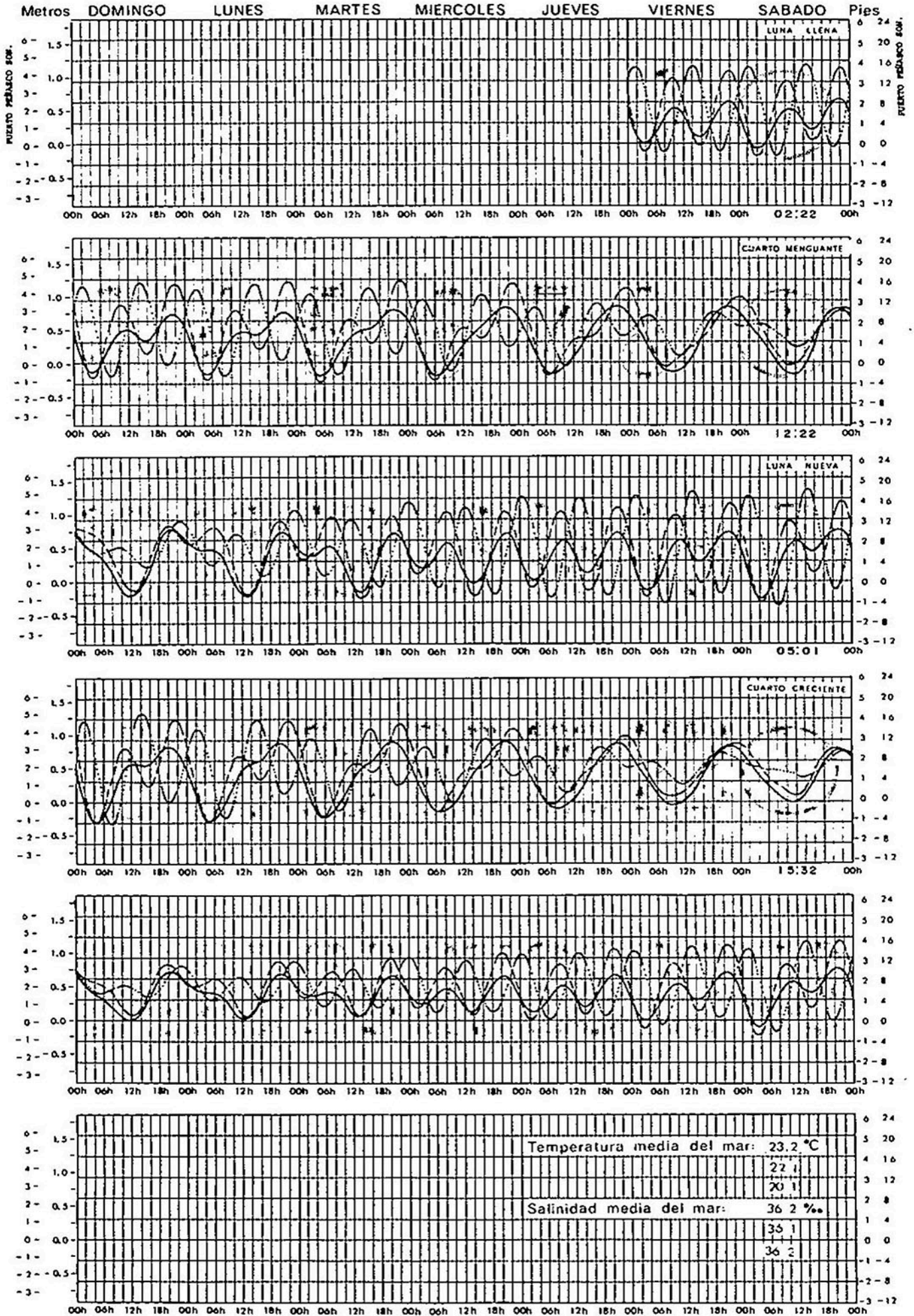


ABRIL 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



INSTITUTO DE GEOFISICA, U. N. A. M.



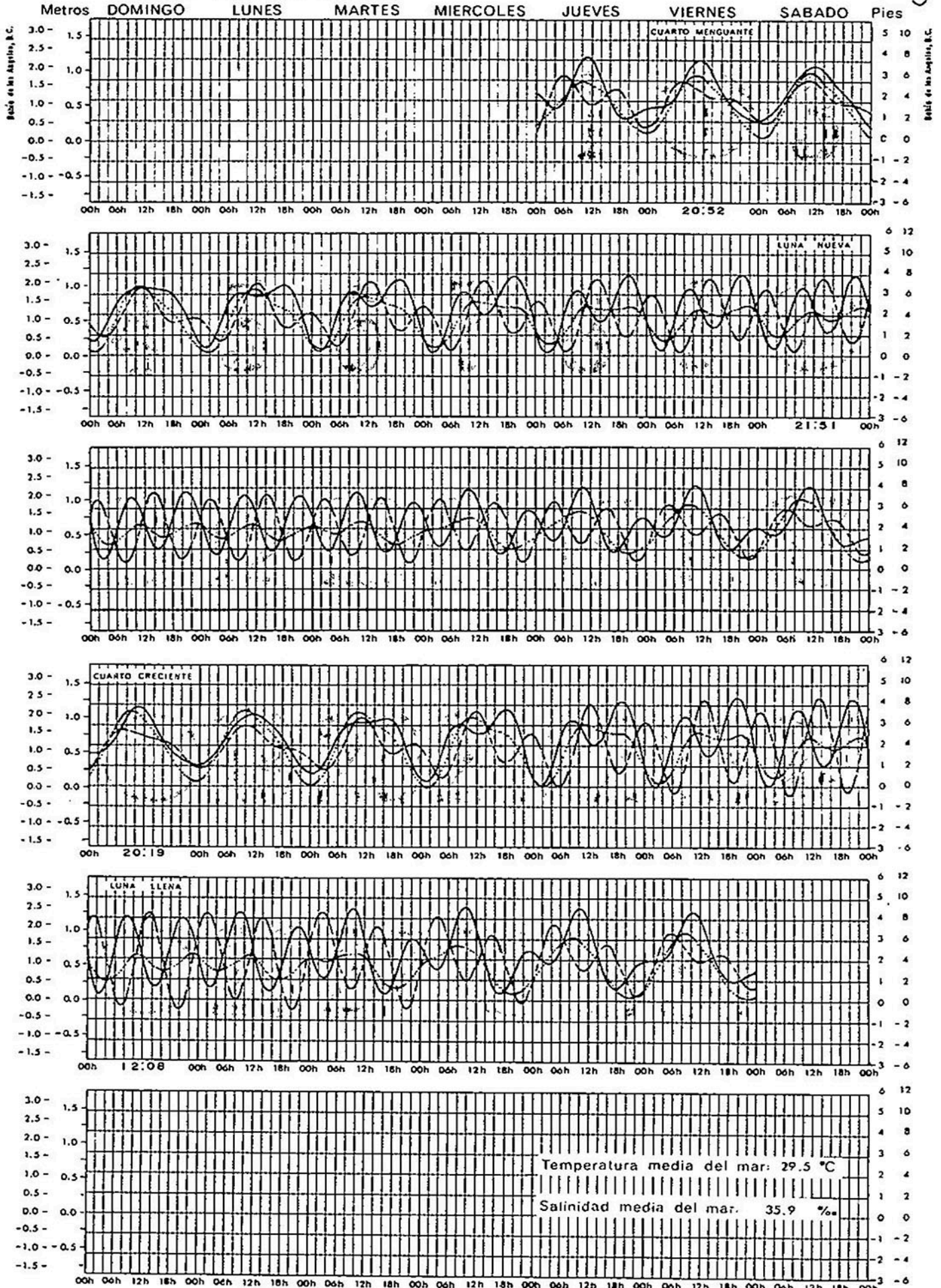


SEPTIEMBRE 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



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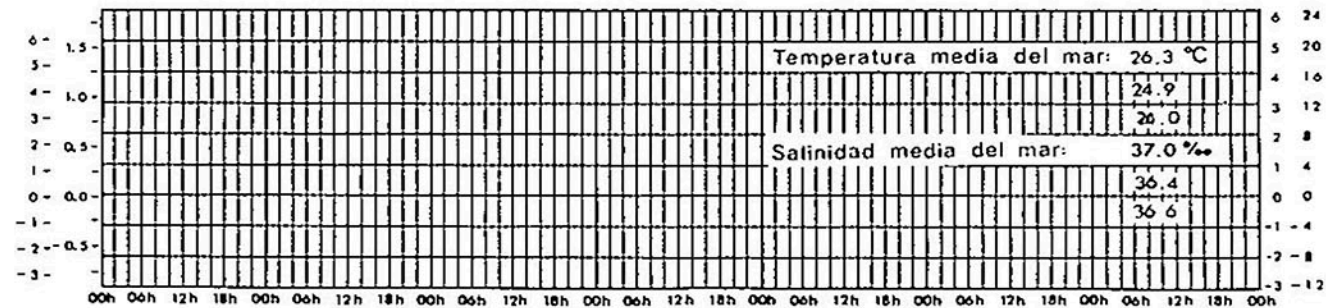
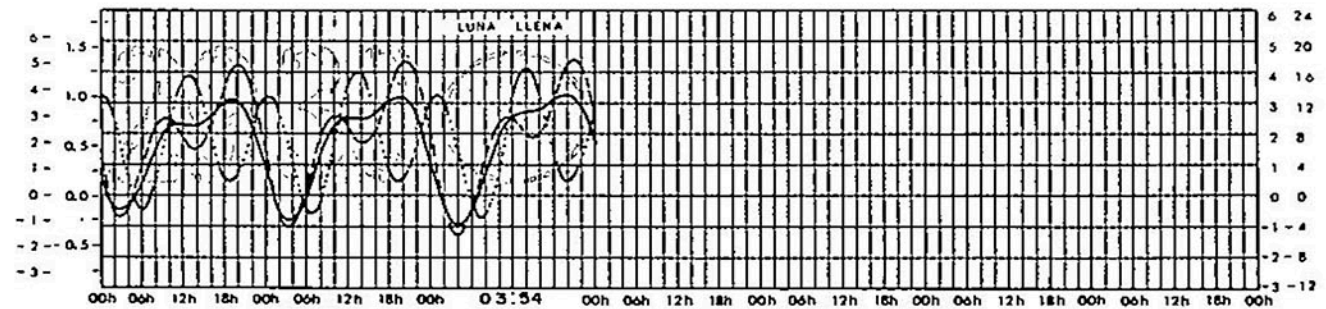
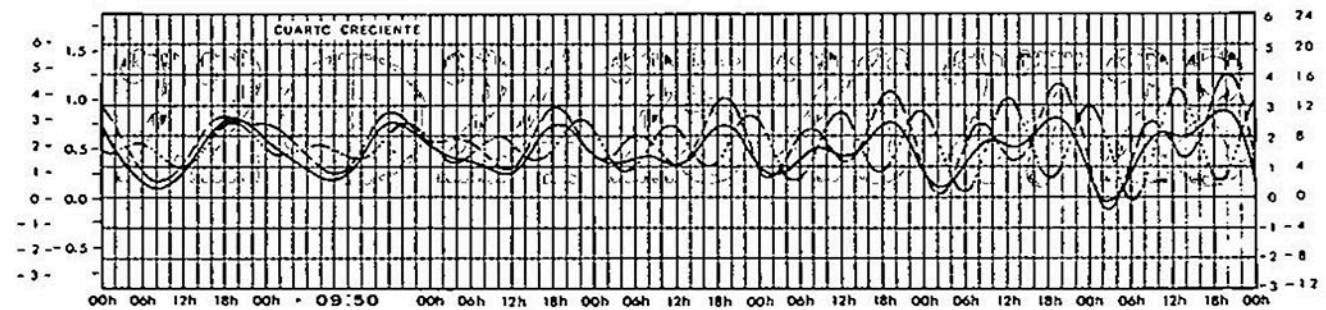
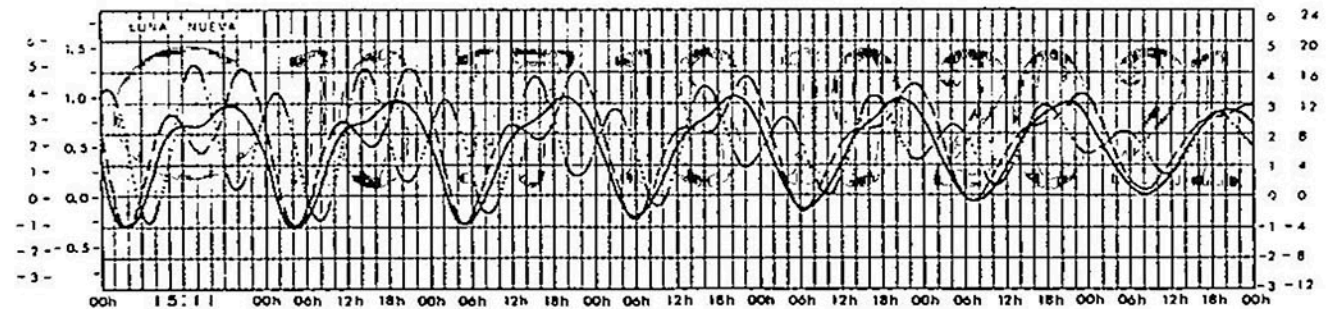
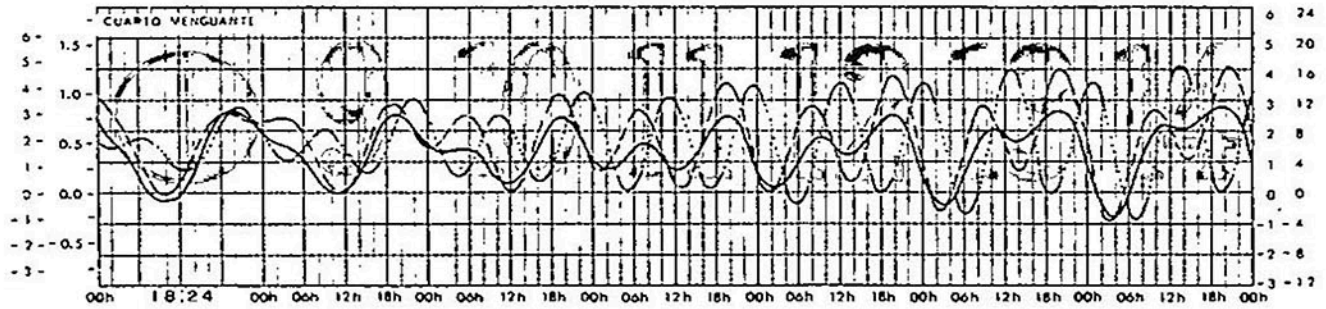
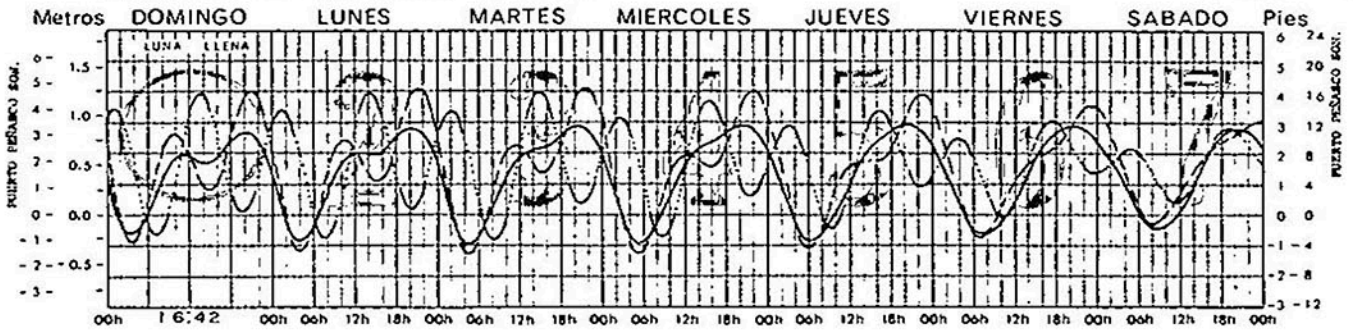


MAYO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



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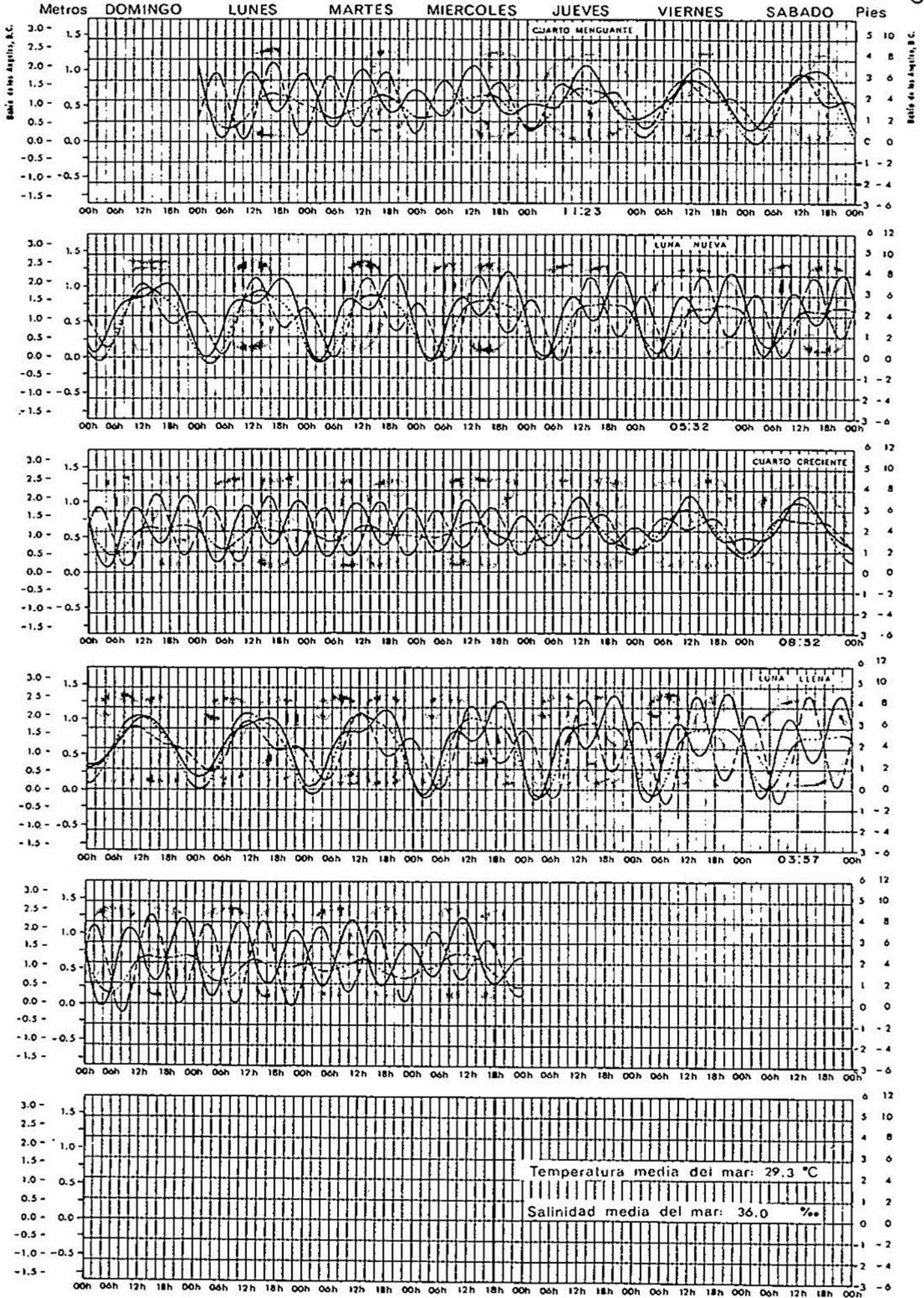


AGOSTO 1988

LA PAZ, B.C.S.
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STA. ROSALIA, B.C.S.



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JUNIO 1988

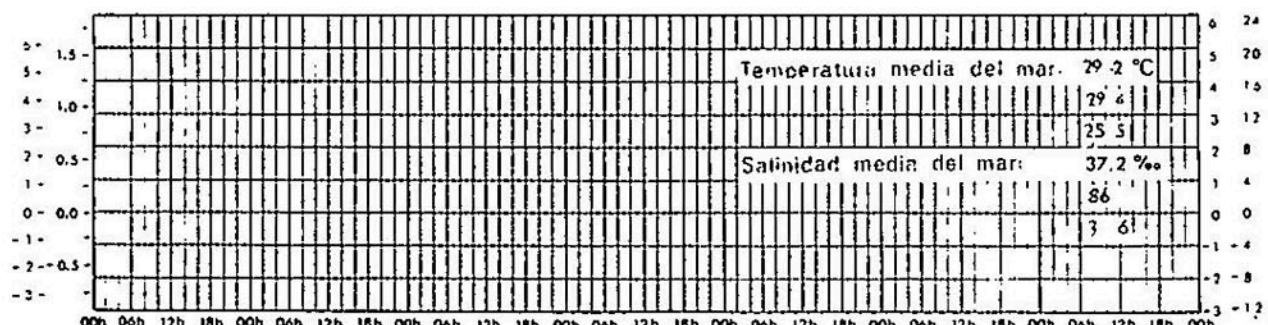
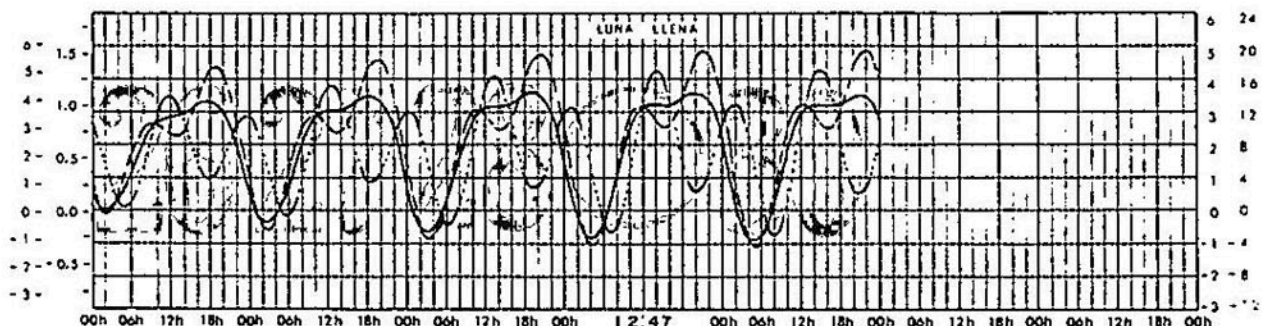
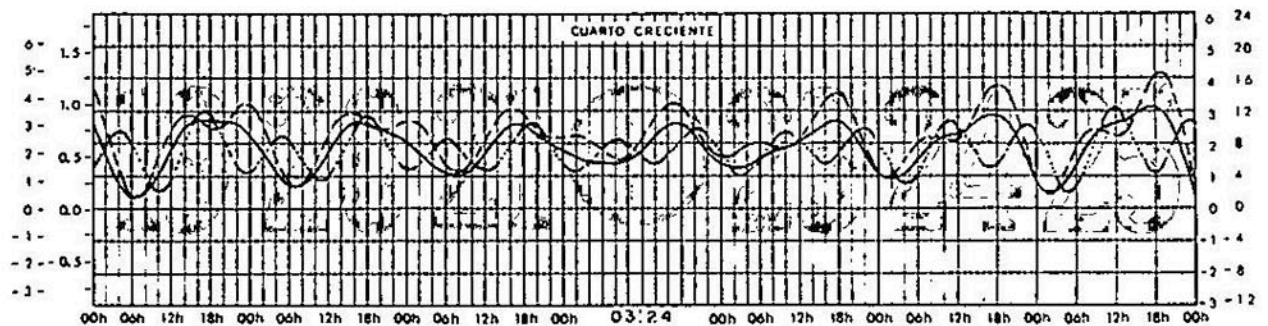
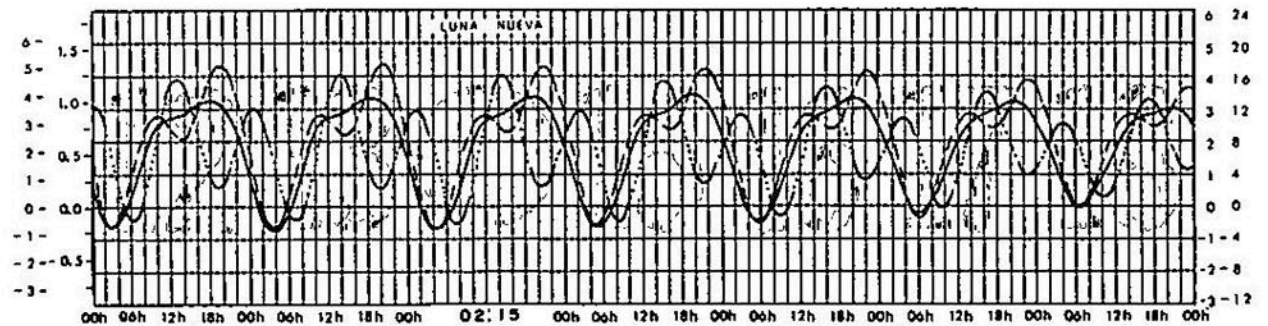
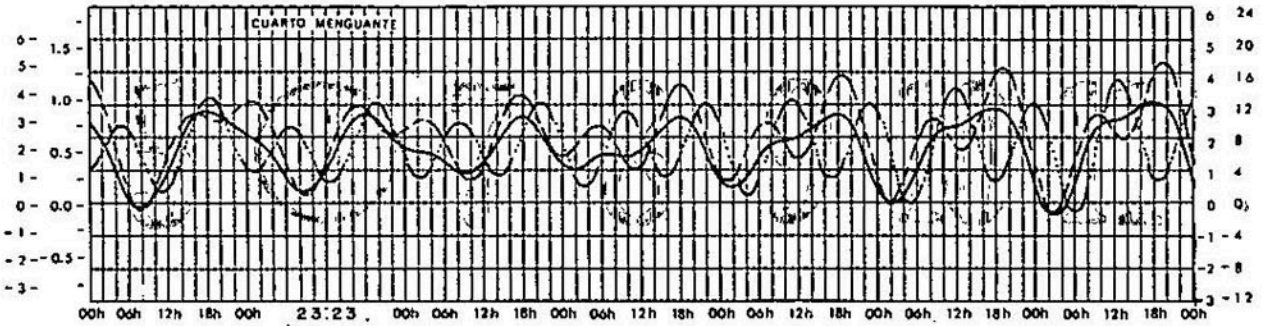
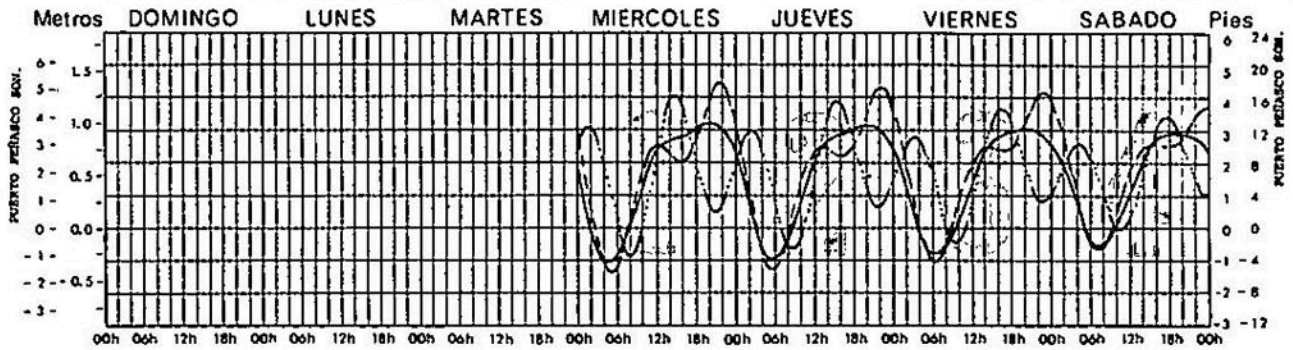
TOPOLOBAMPO, SIN.

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INSTITUTO DE GEOFISICA, U. N. A. M.



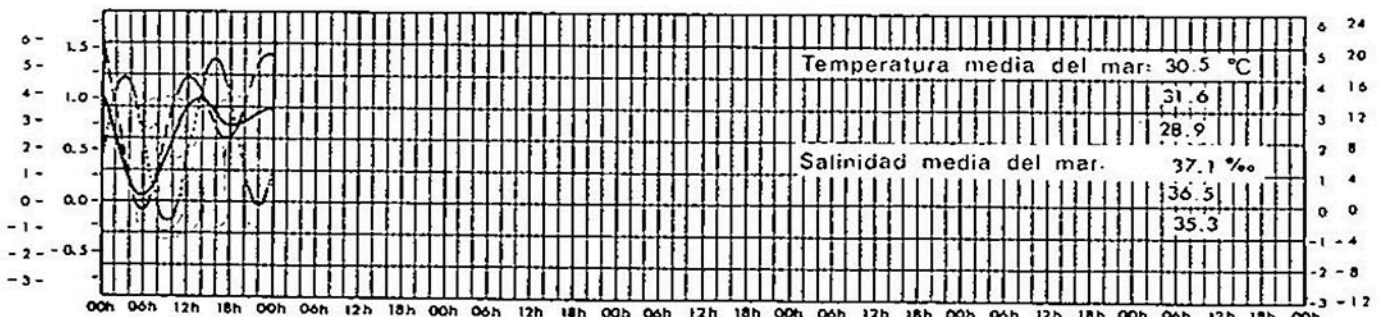
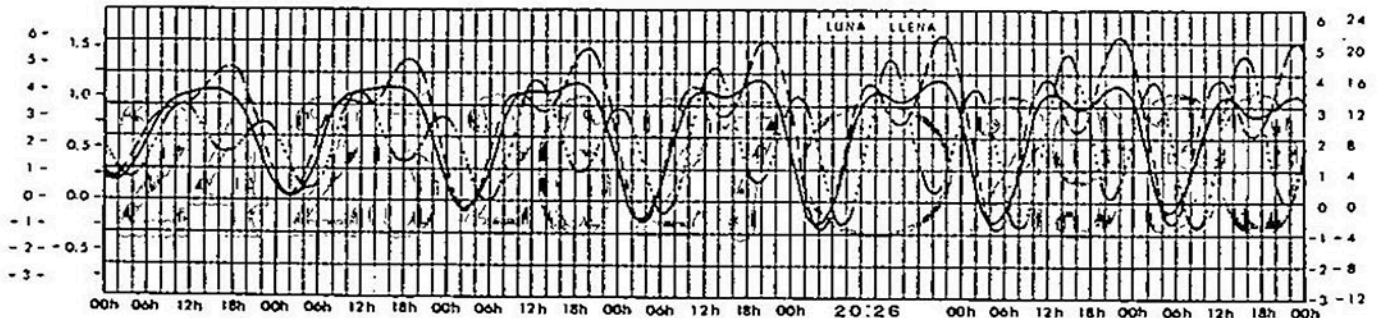
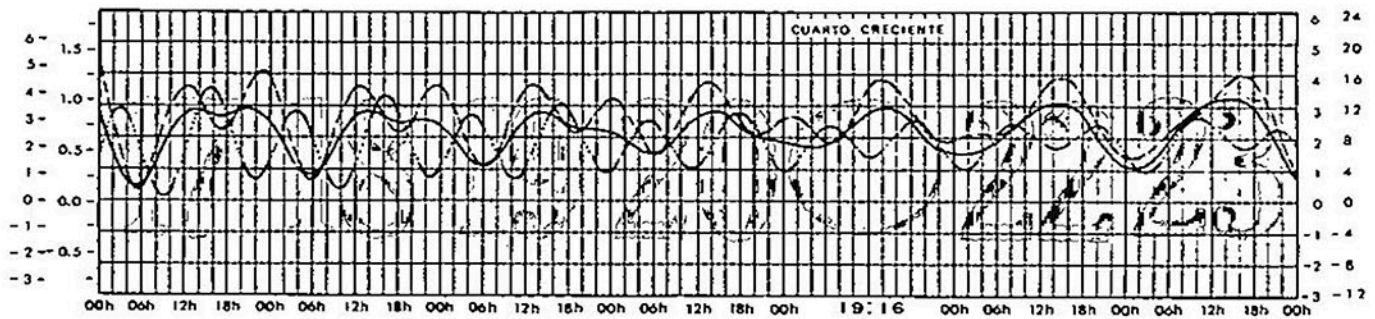
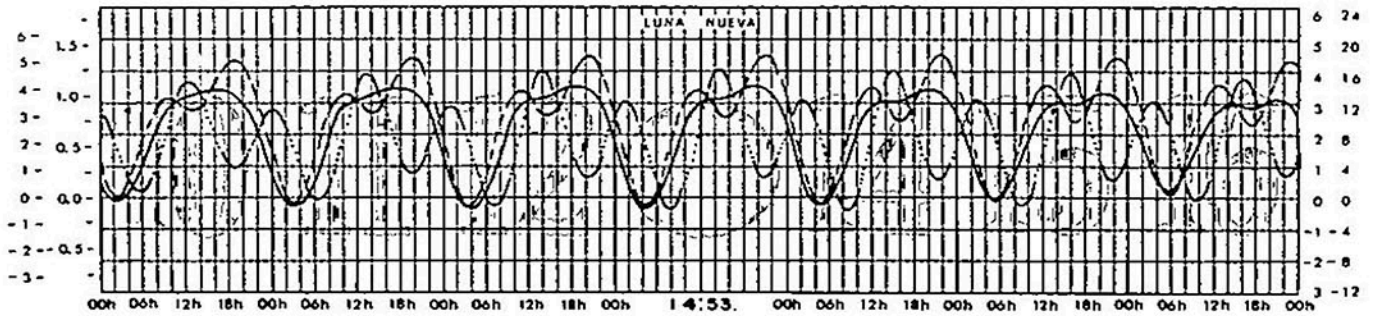
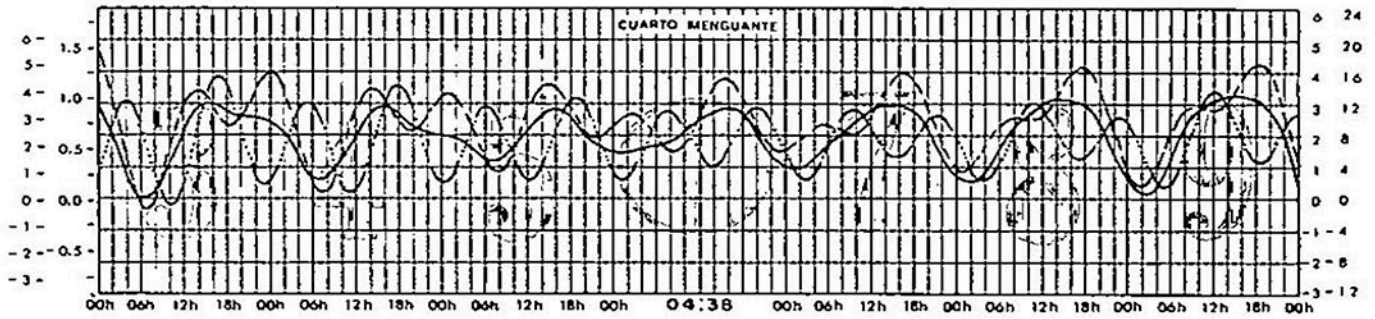
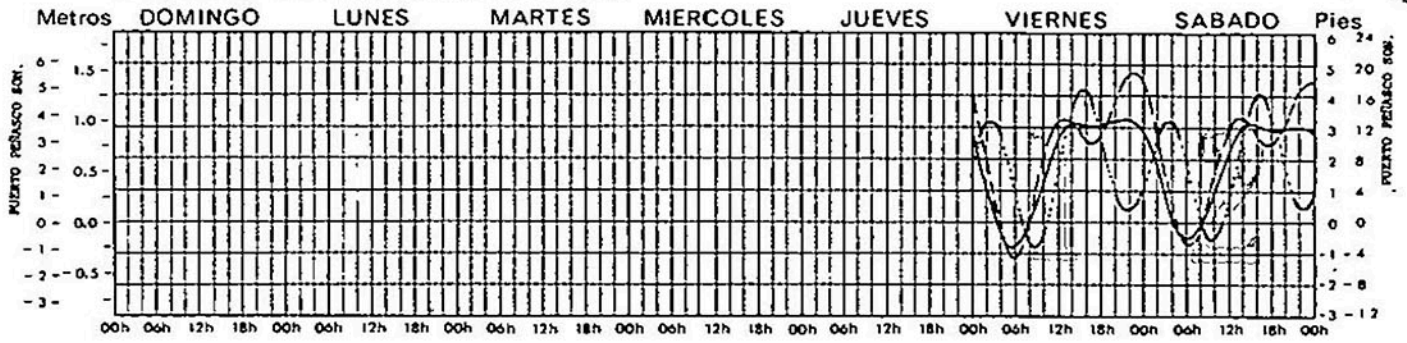


JULIO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
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HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N. S. M. I

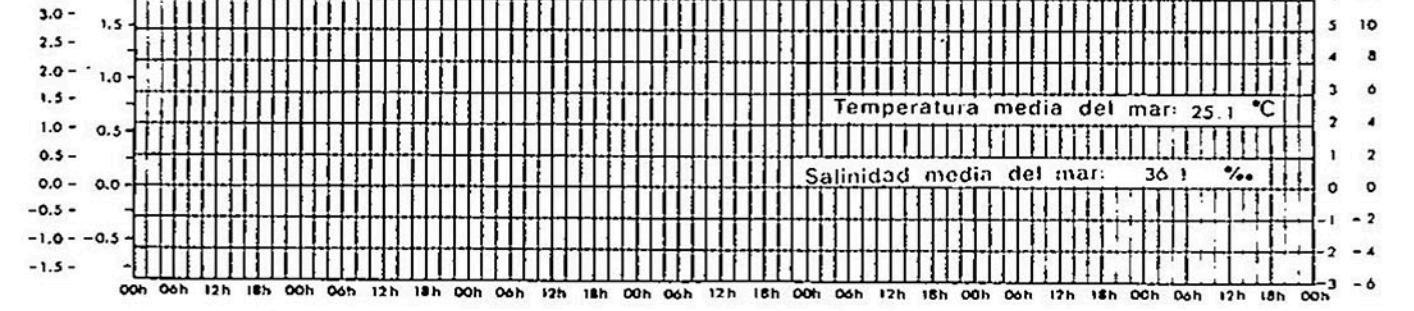
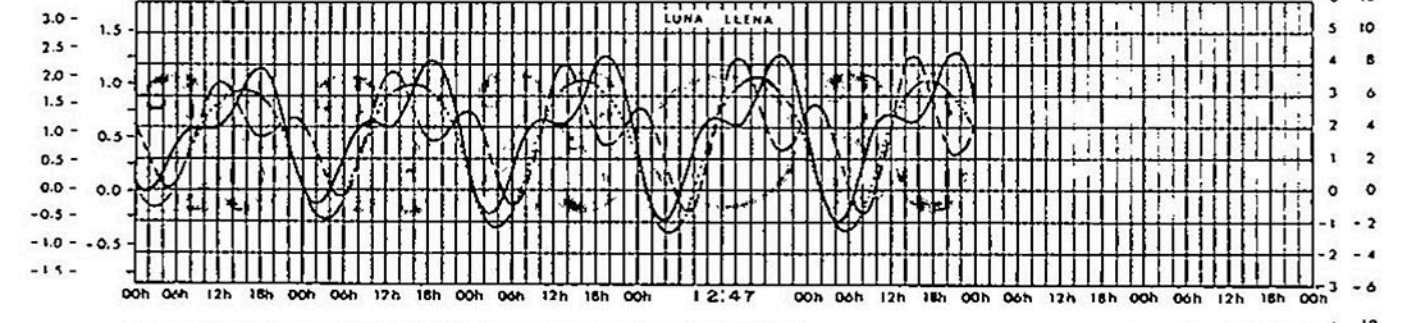
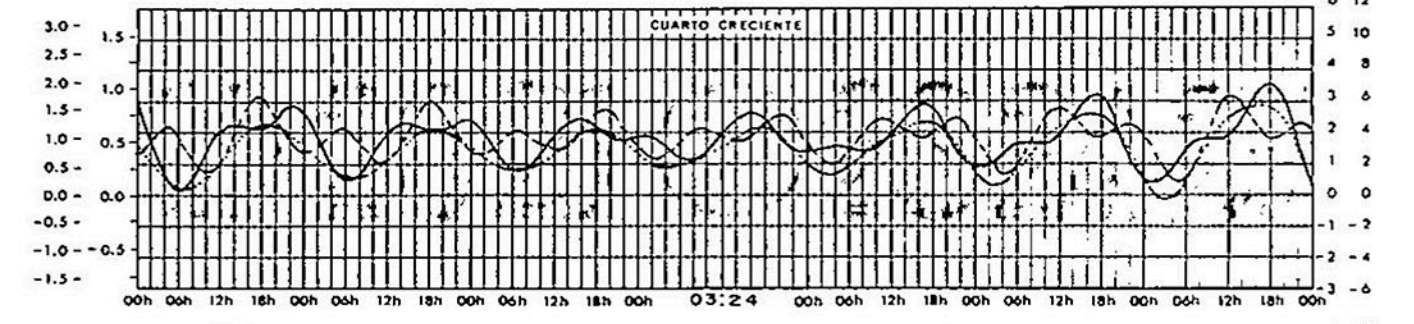
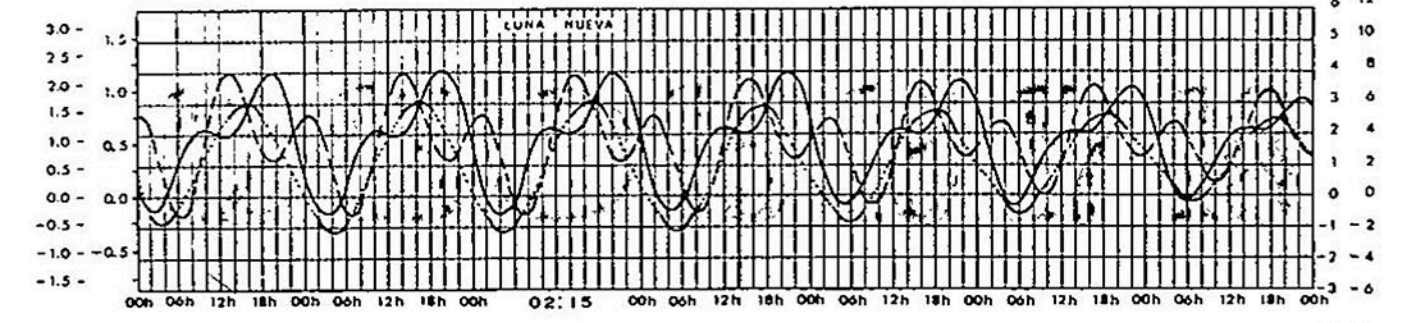
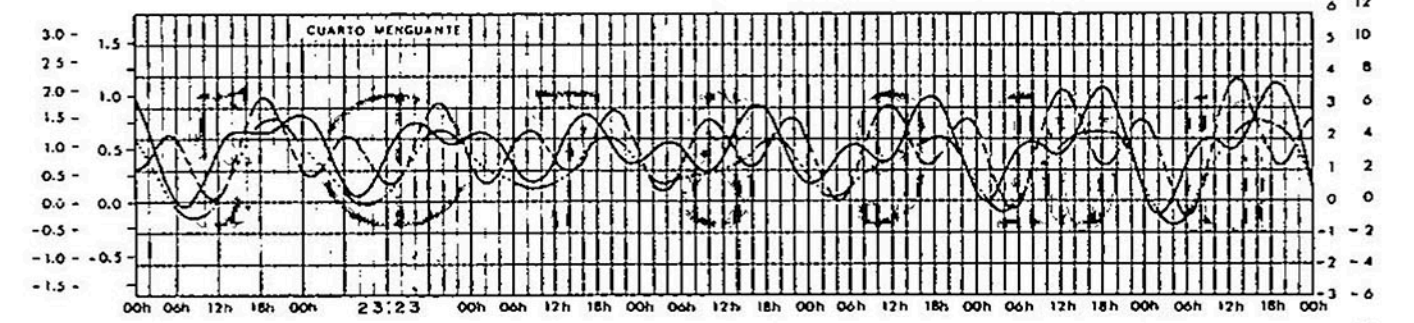
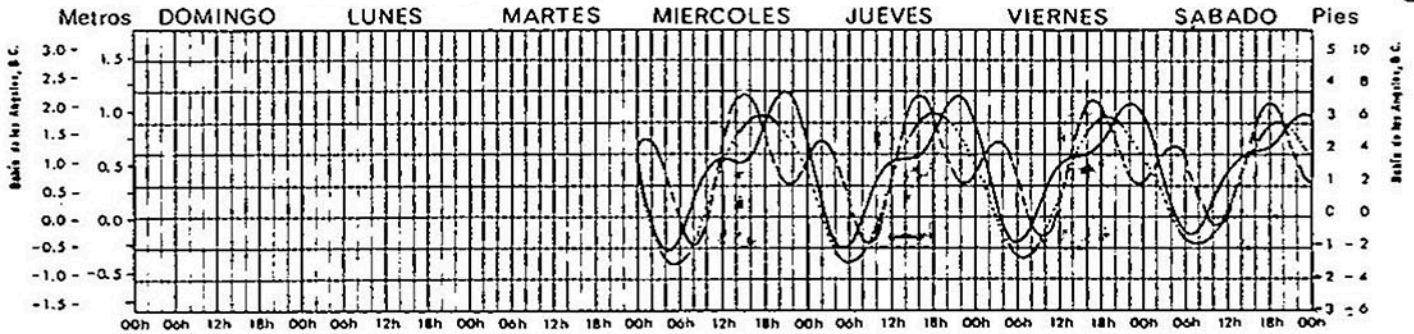


JUNIO 1988

LA PAZ, B.C.S.
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STA. ROSALIA, B.C.S.



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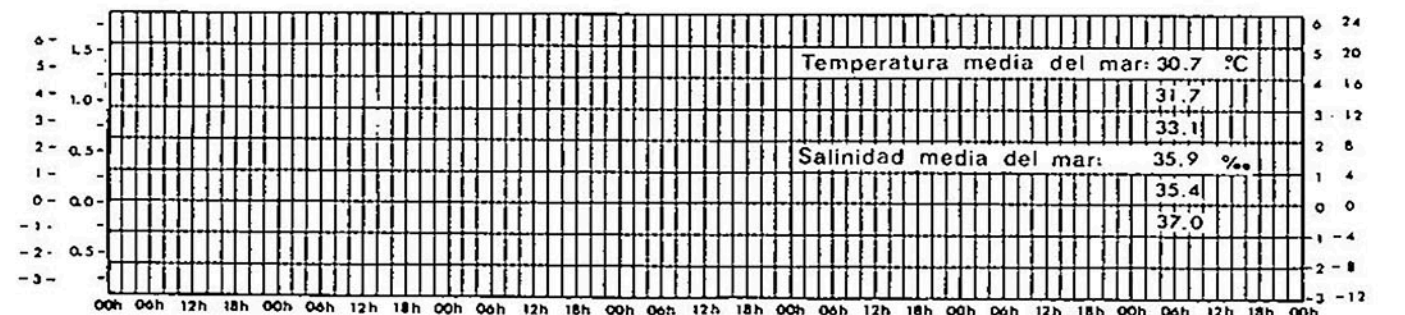
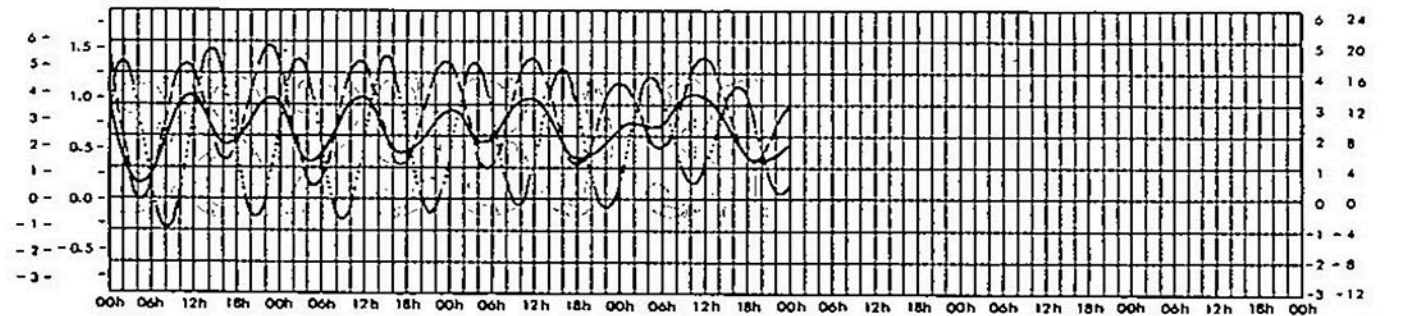
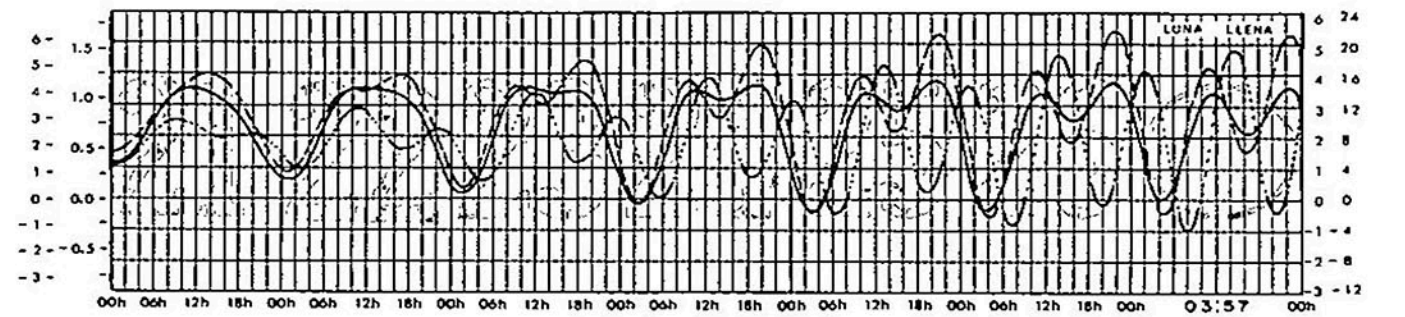
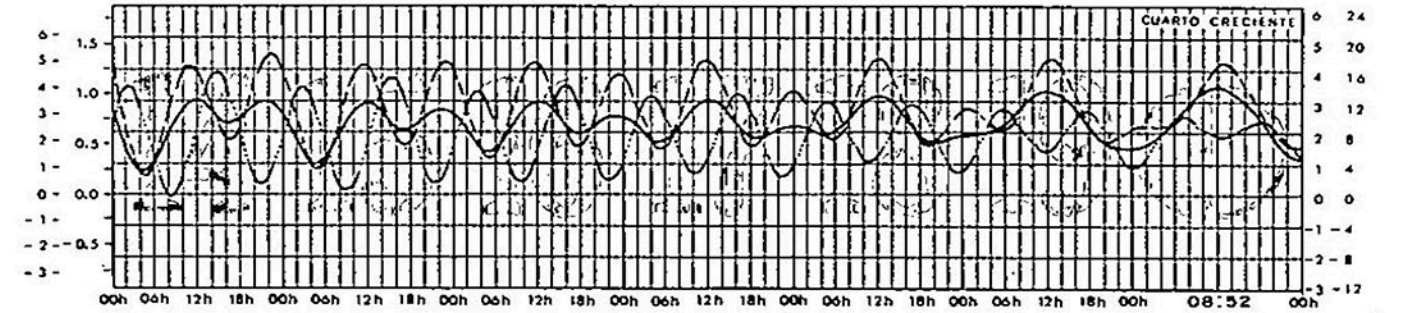
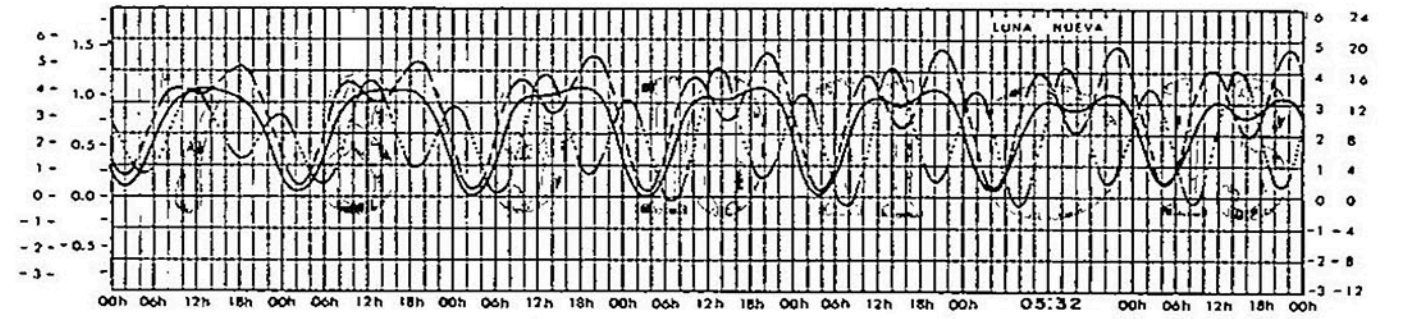
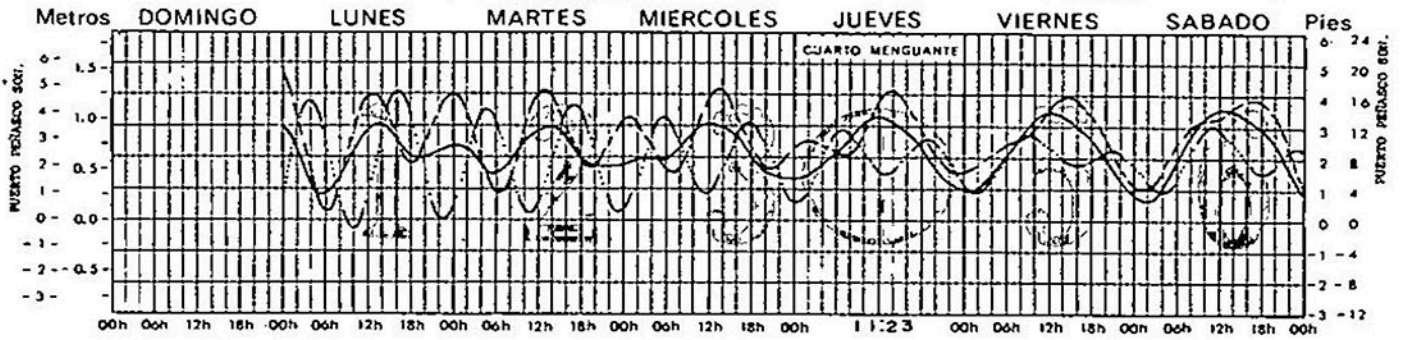


AGOSTO 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



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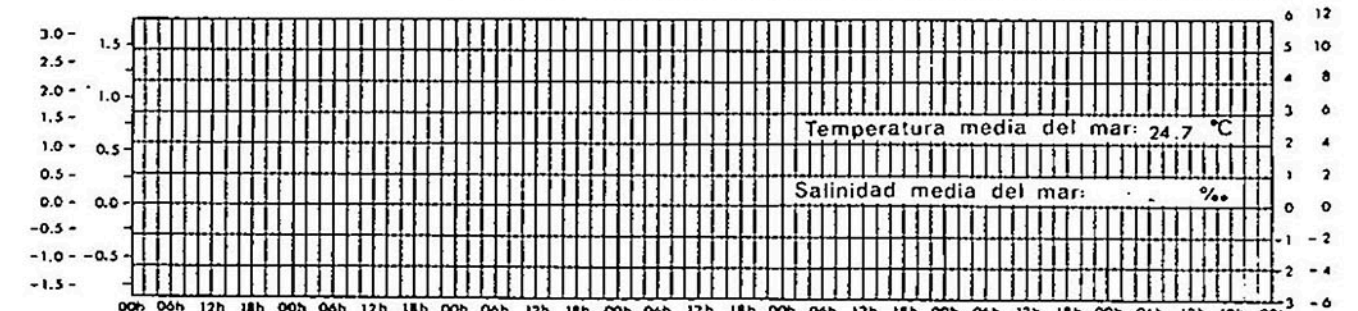
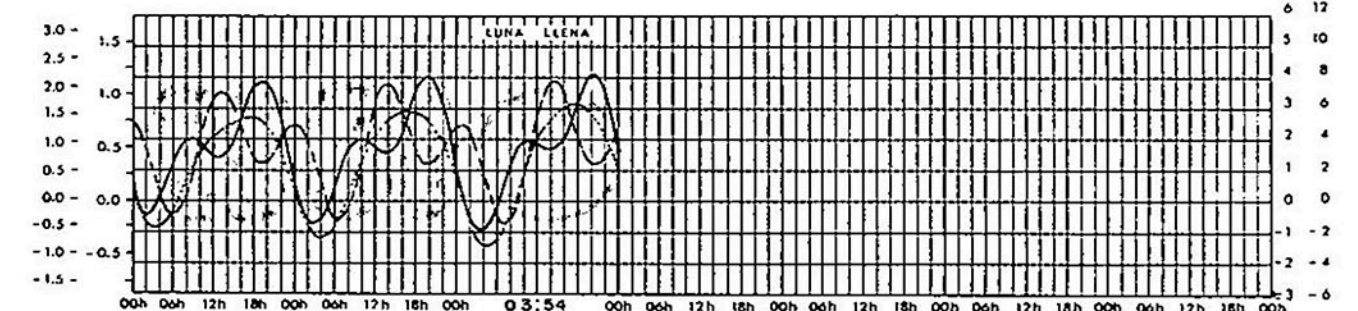
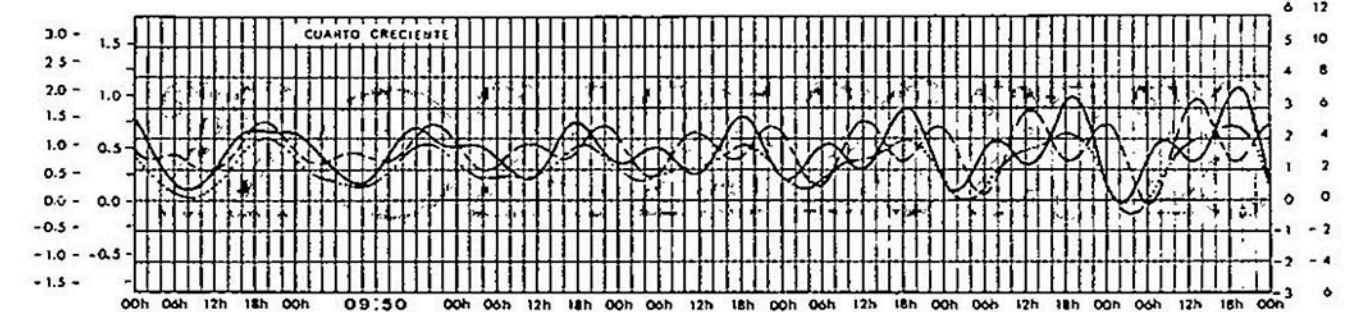
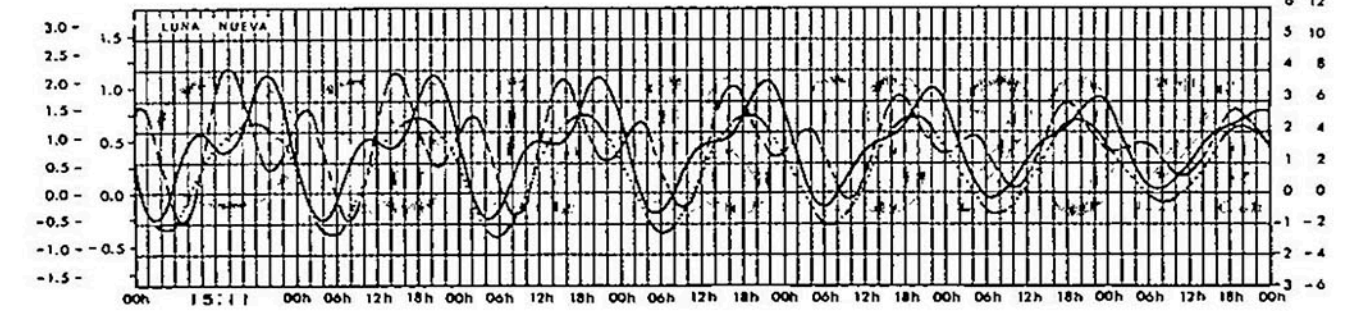
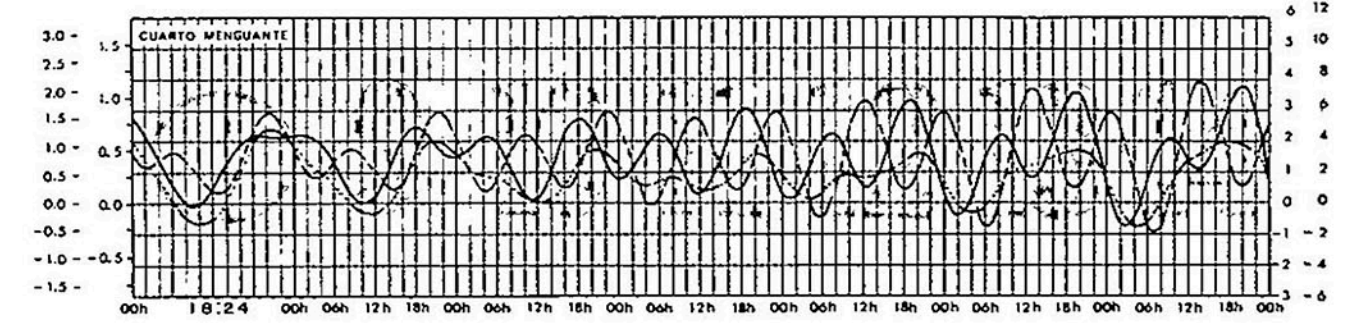
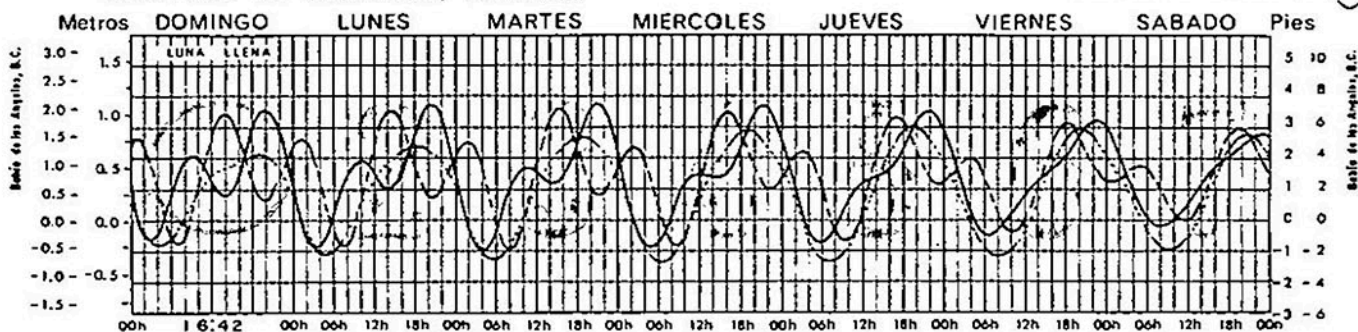


MAYO 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.





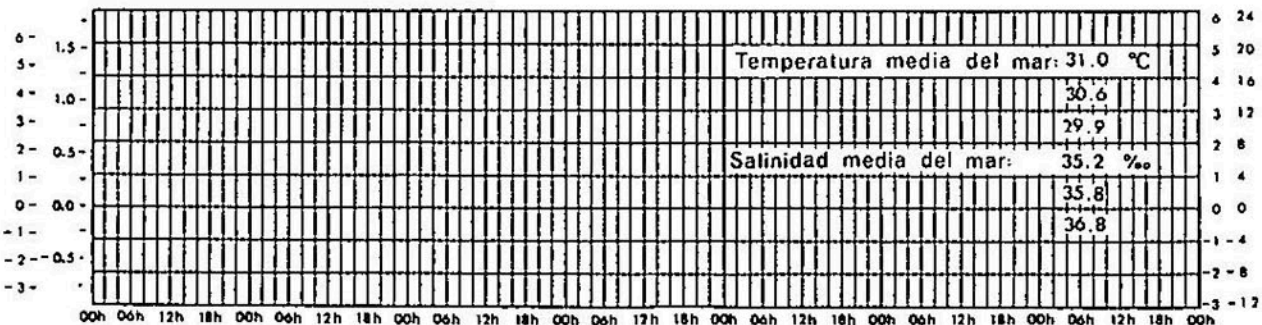
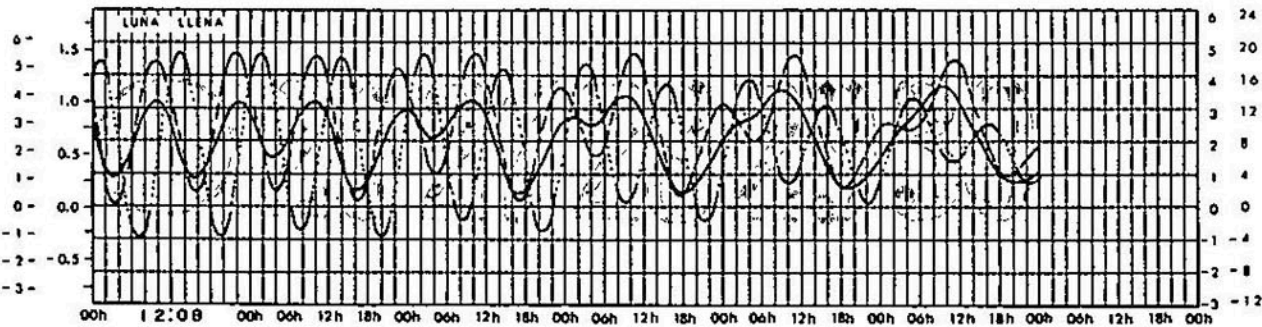
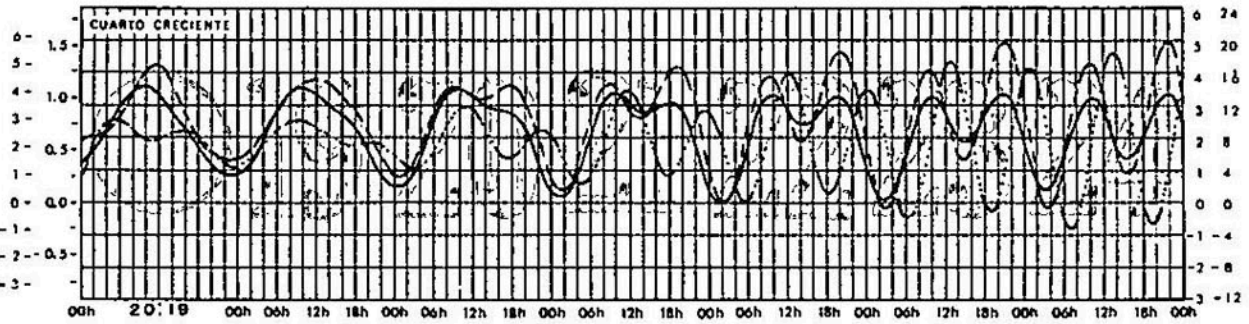
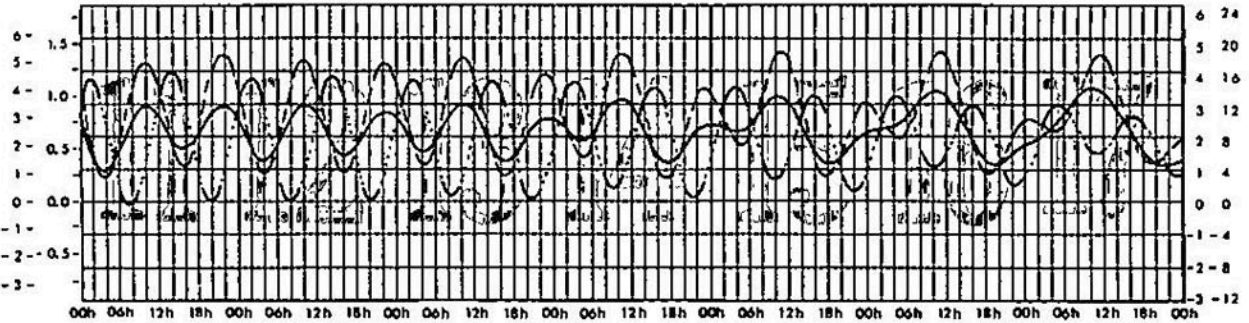
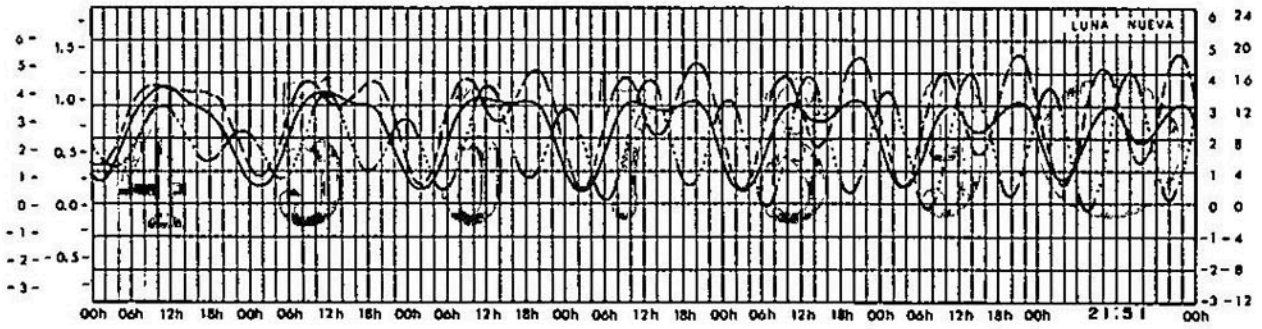
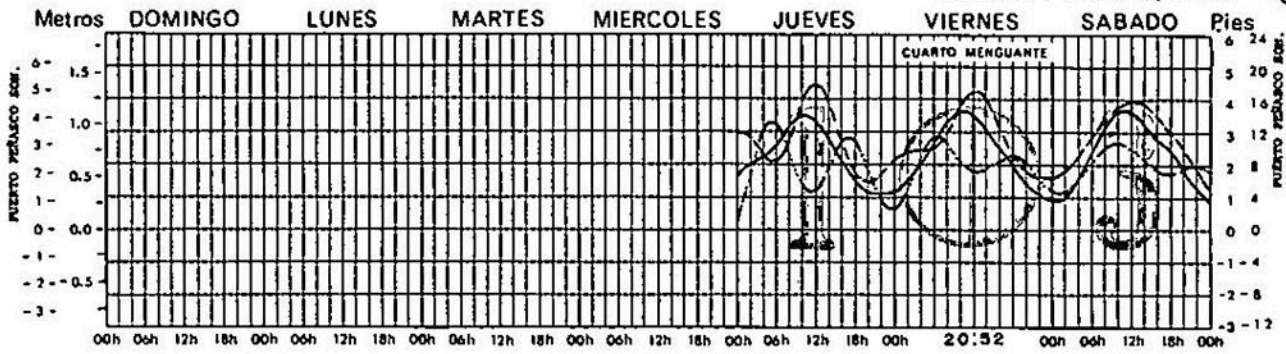
SEPTIEMBRE 1988

TOPOLOBAMPO, SIN.

GUAYMAS, SON.

PUERTO PEÑASCO, SON.

INSTITUTO DE GEOFISICA. U. N. A. M.



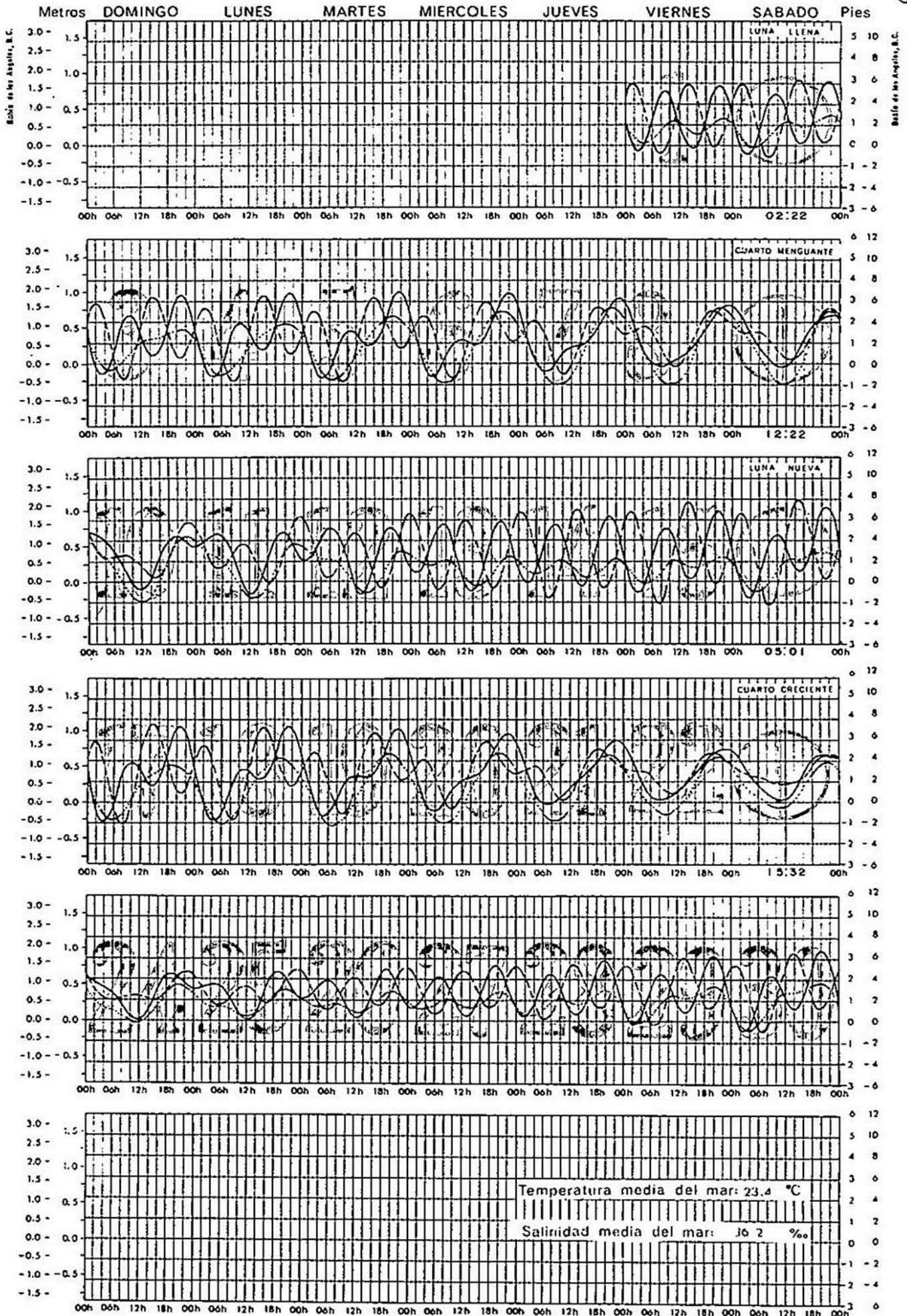


ABRIL 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.





OCTUBRE 1988

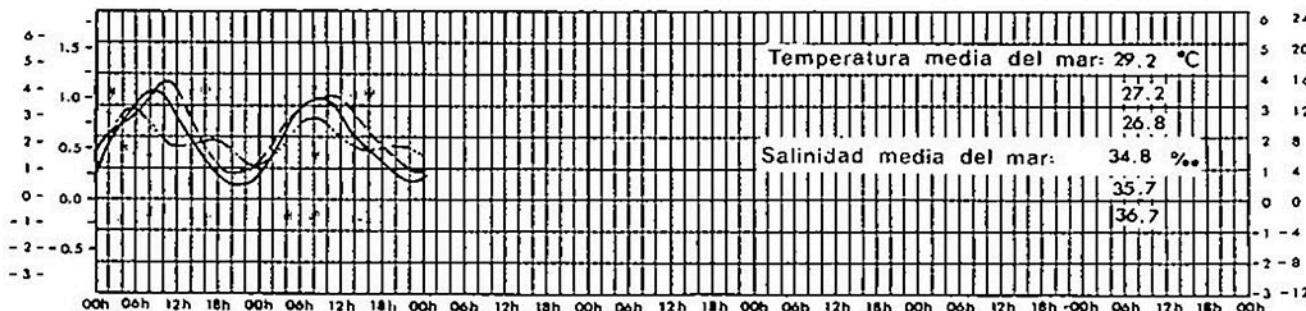
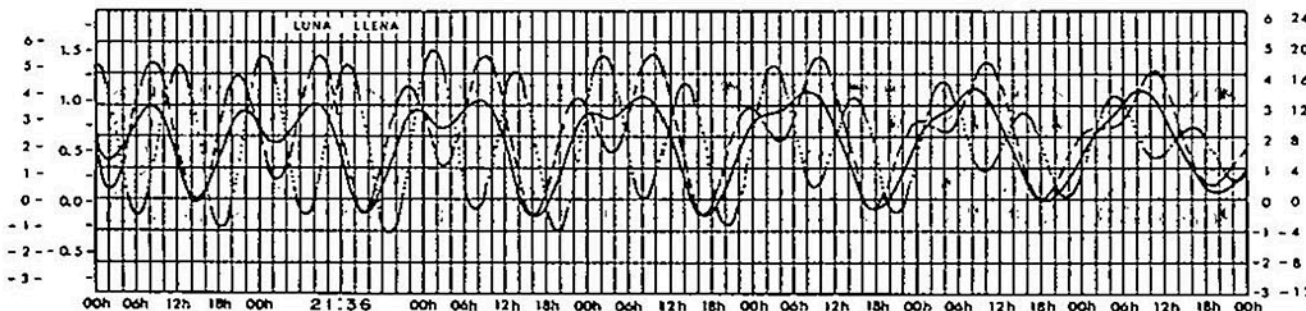
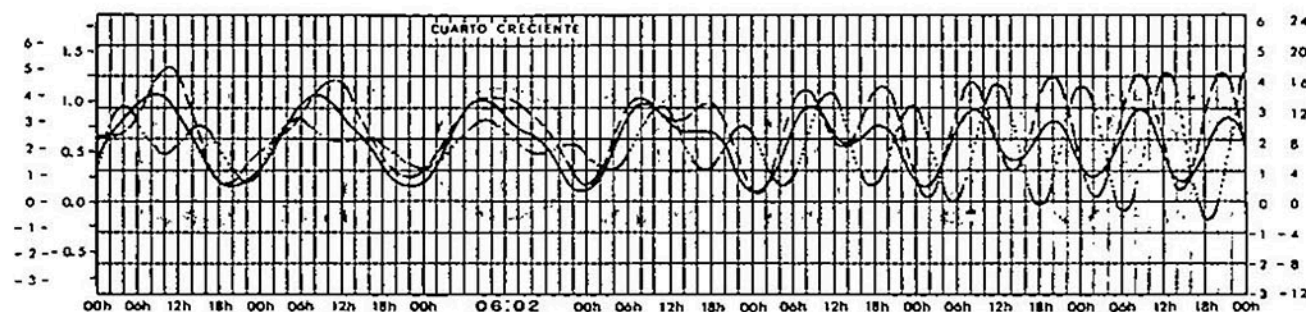
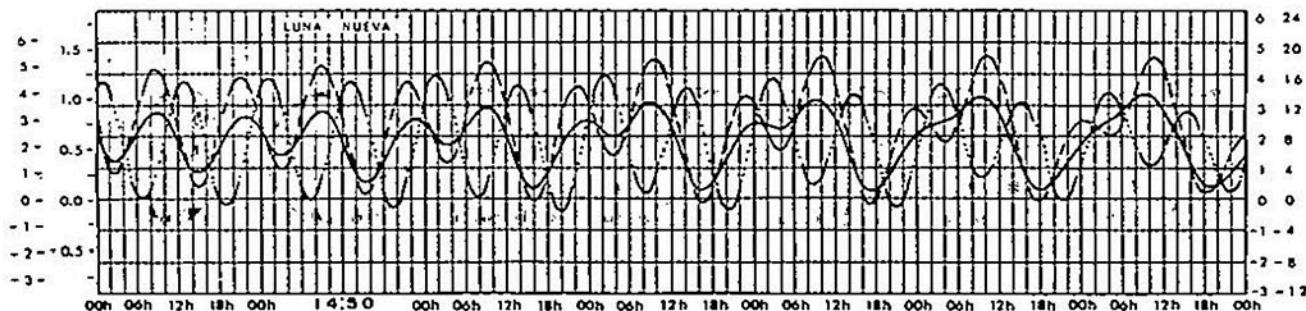
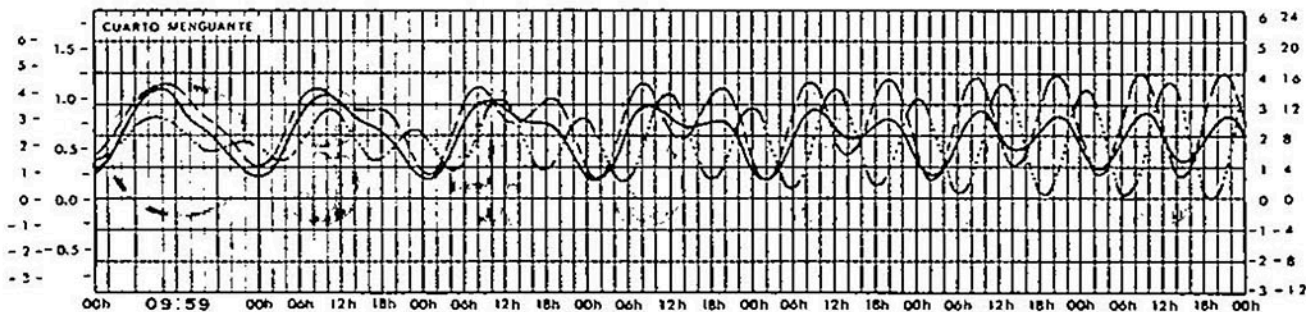
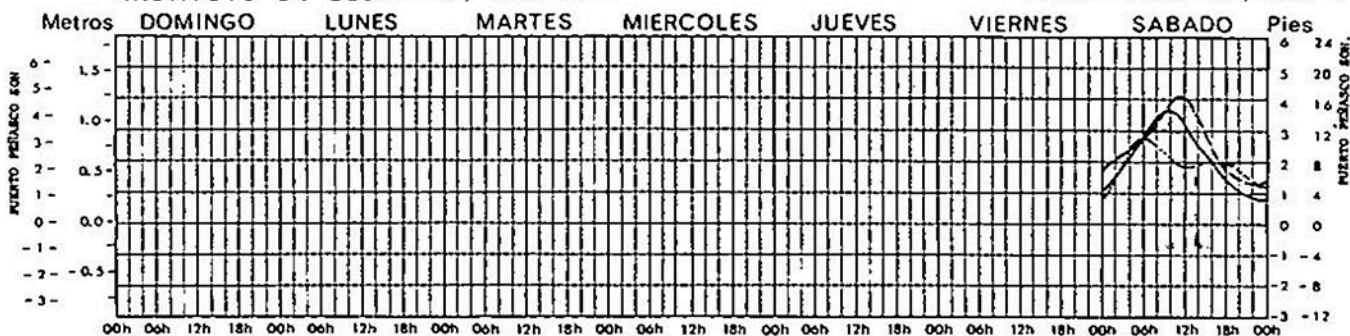
TOPOLOBAMPO, SIN.

GUAYMAS, SON.

PUERTO PEÑASCO, SON.



INSTITUTO DE GEOFISICA, U. N. A. M.



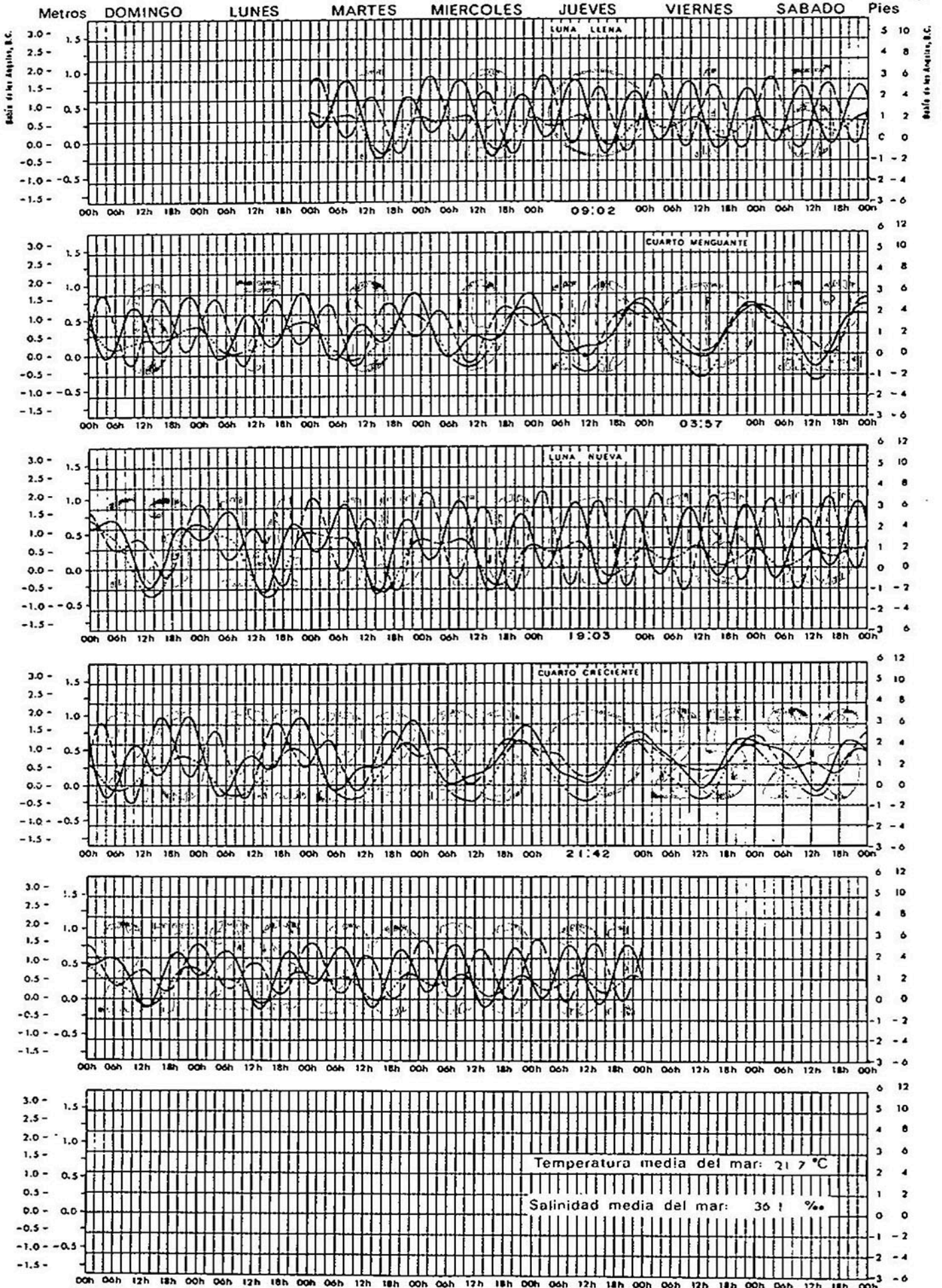


MARZO 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.



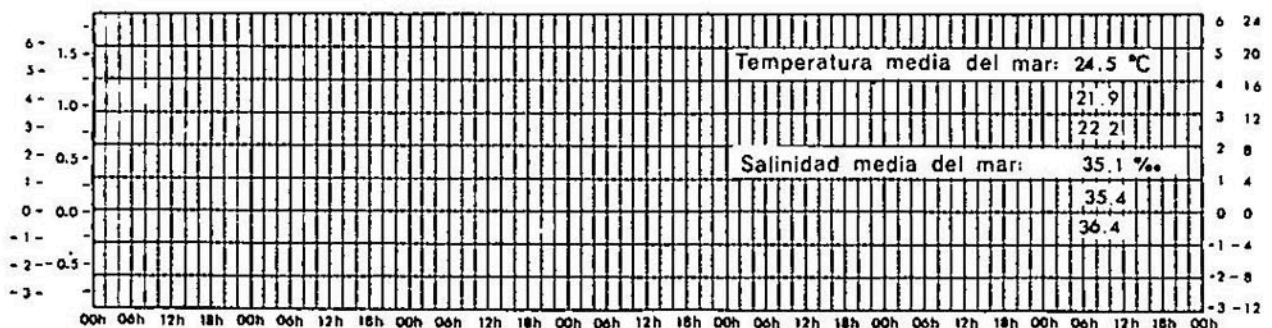
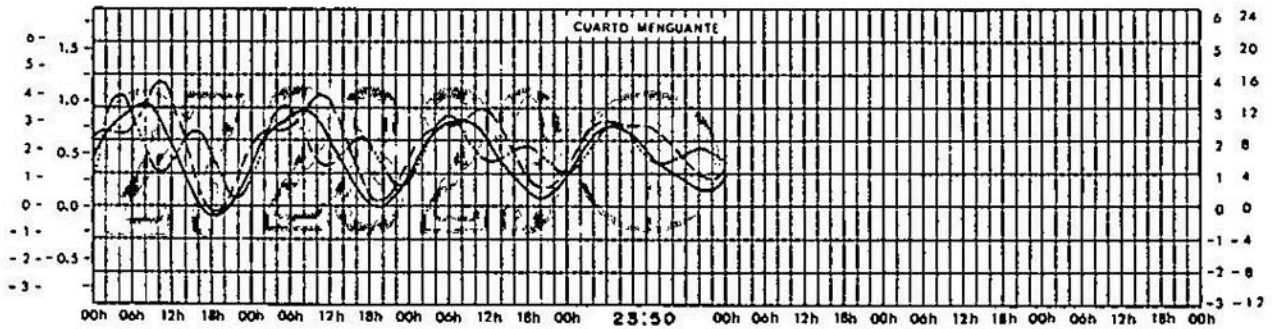
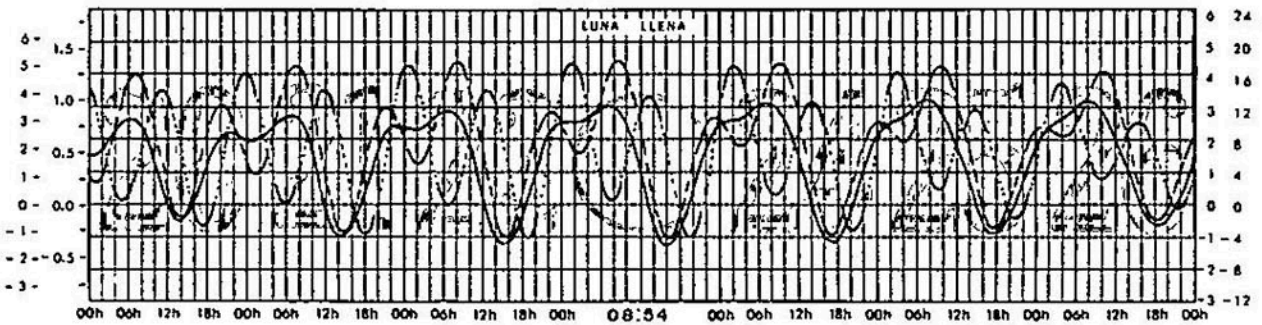
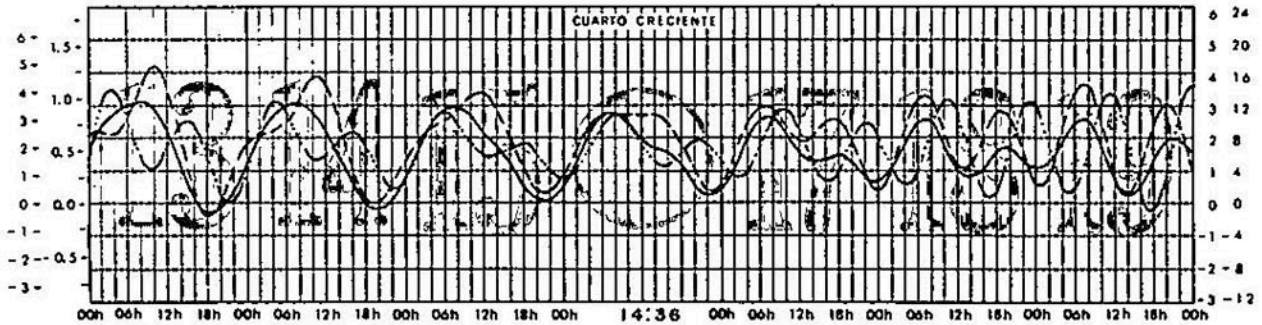
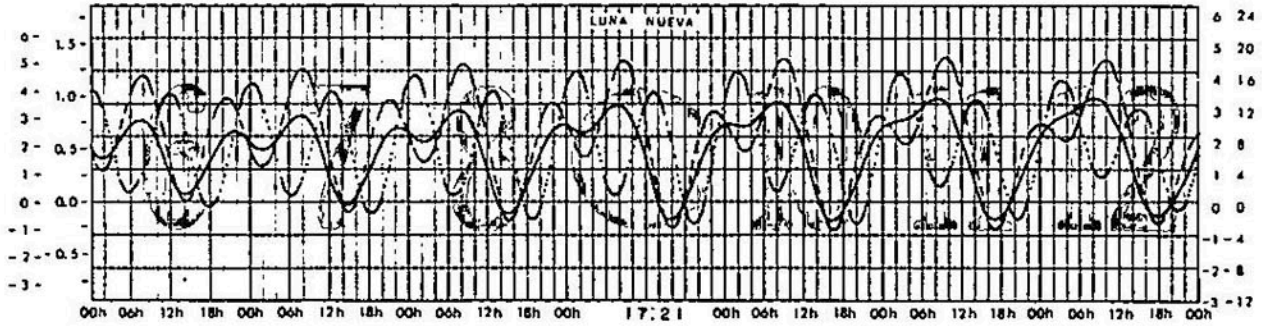
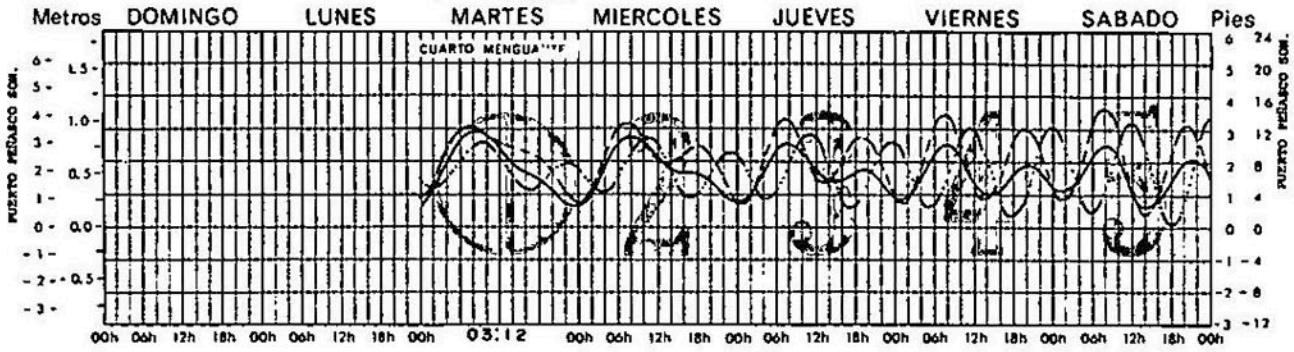


NOVIEMBRE 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



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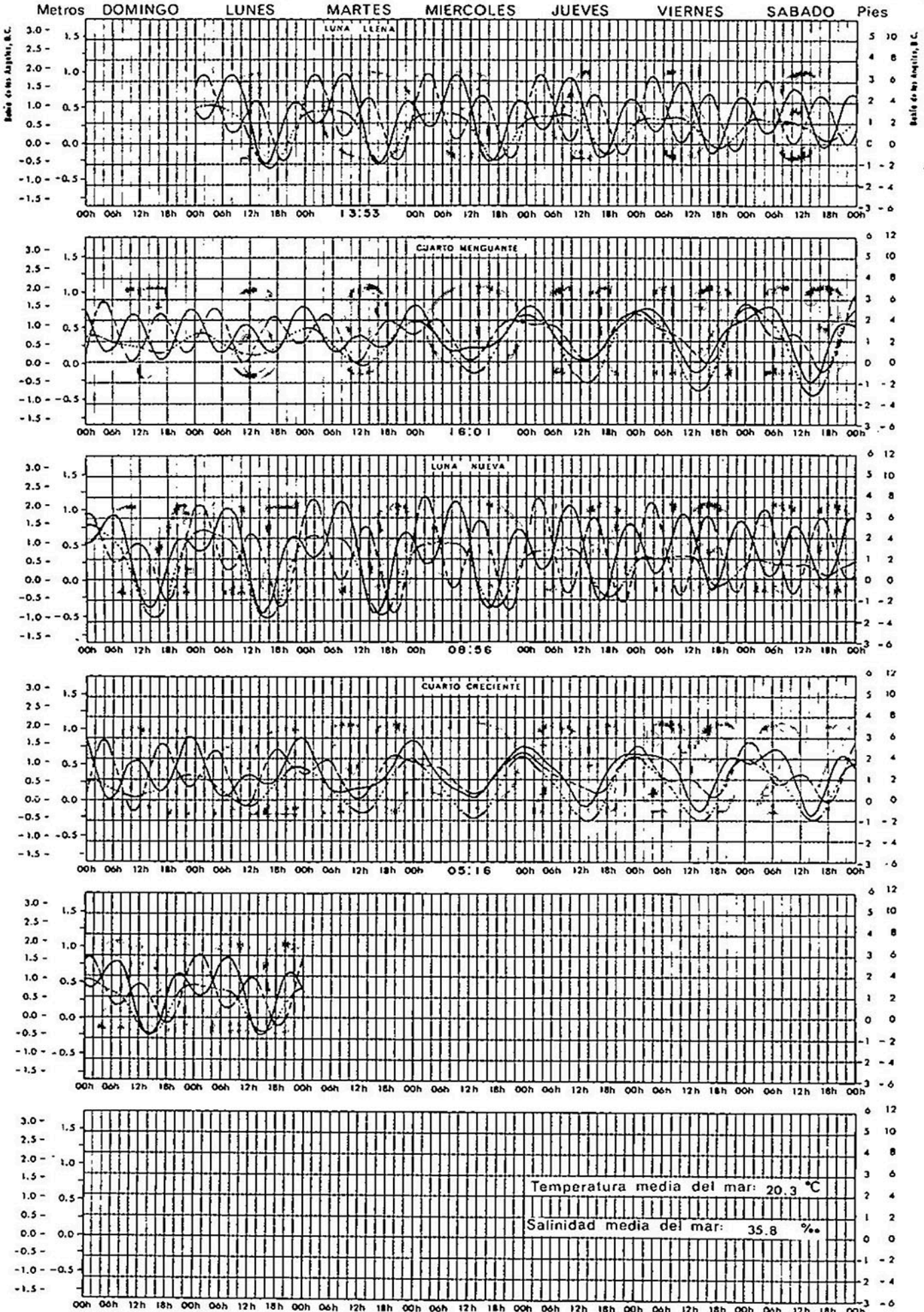


FEBRERO 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.

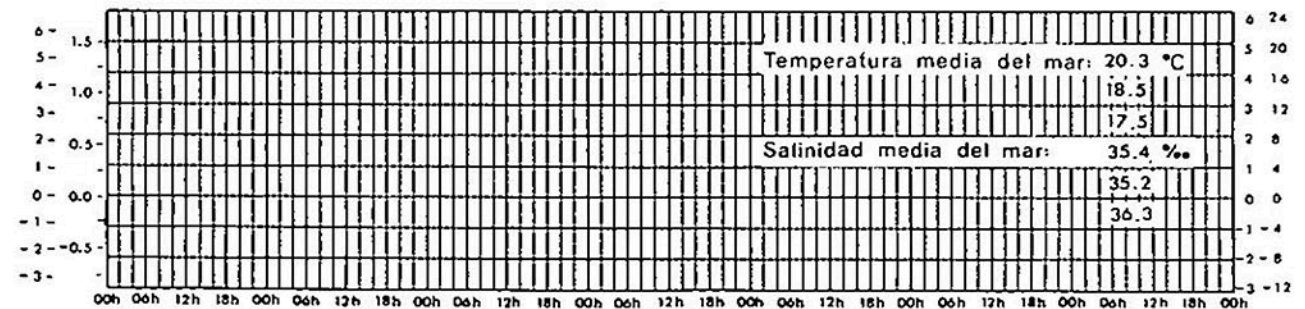
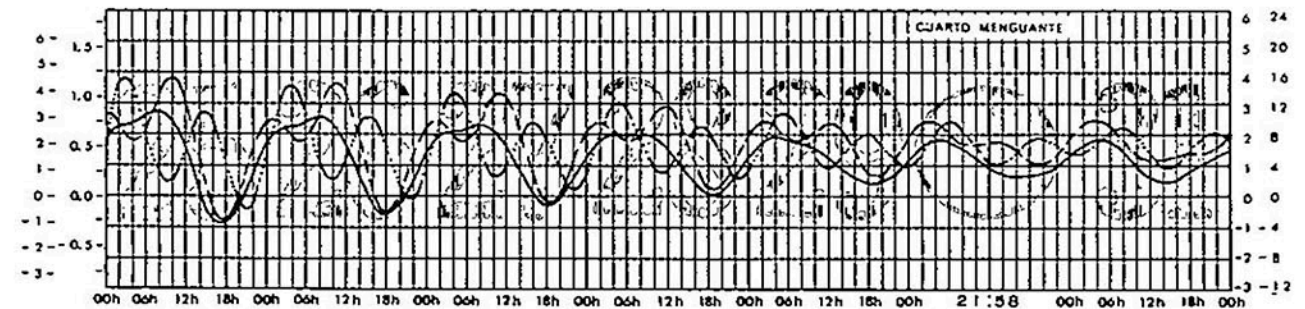
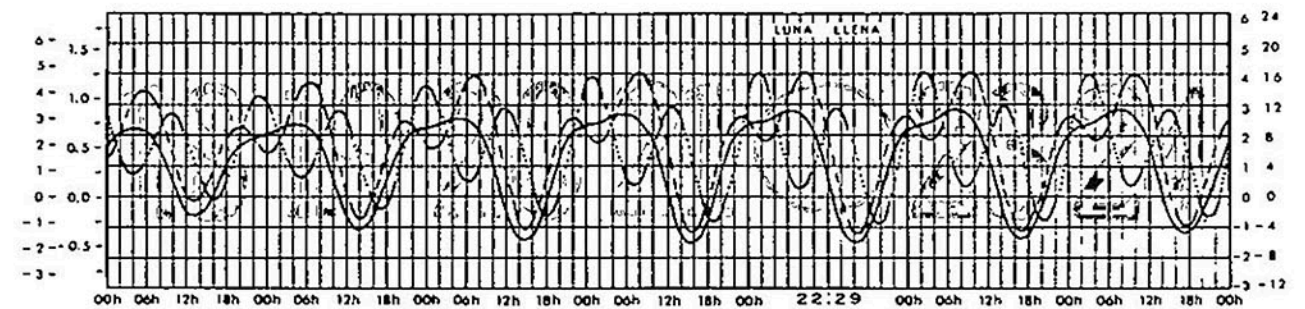
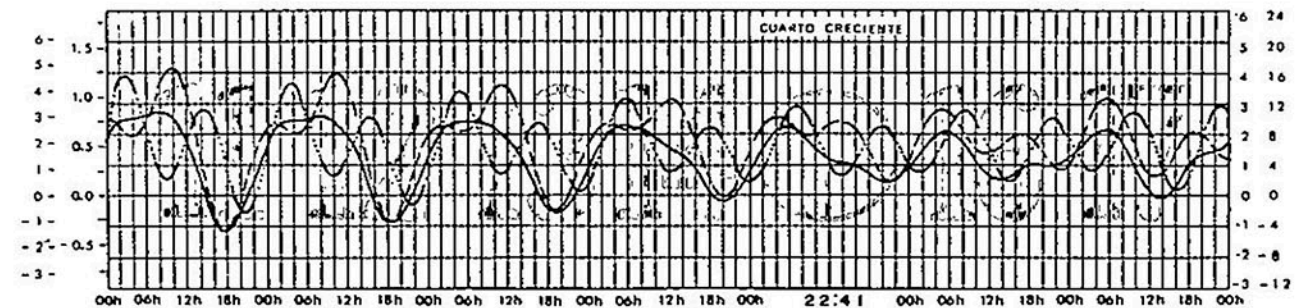
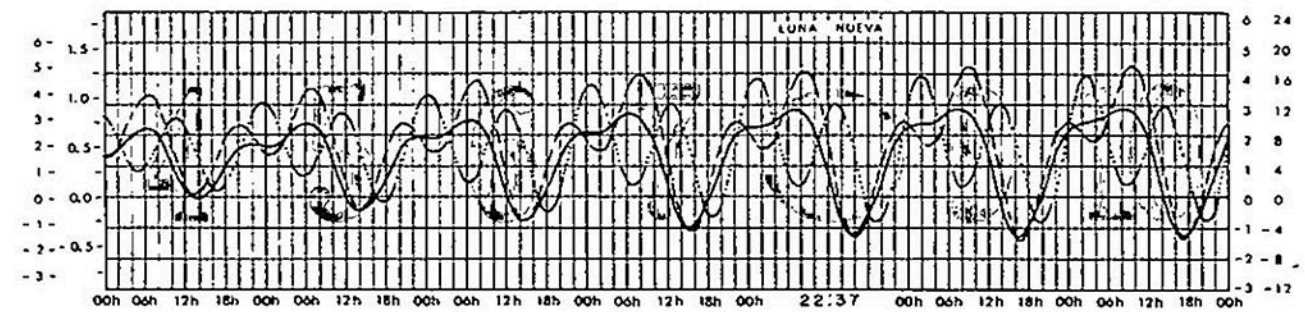
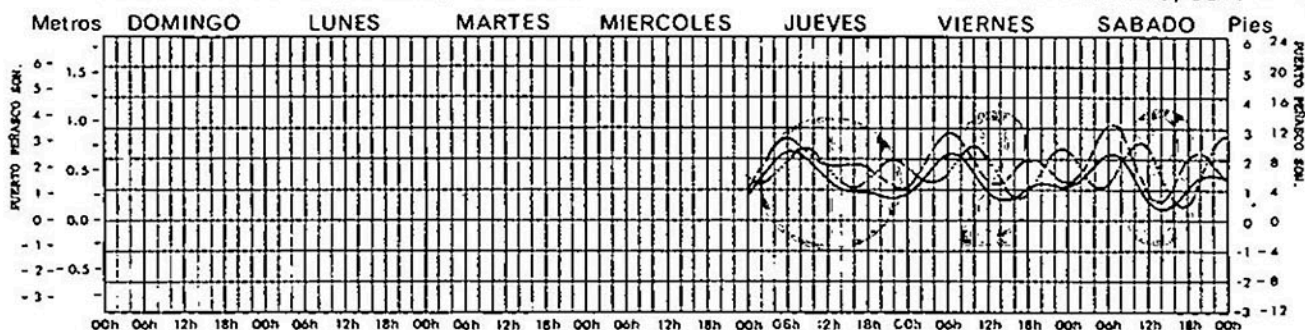


DICIEMBRE 1988

TOPOLOBAMPO, SIN.
GUAYMAS, SON.
PUERTO PEÑASCO, SON.



INSTITUTO DE GEOFISICA, U. N. A. M.



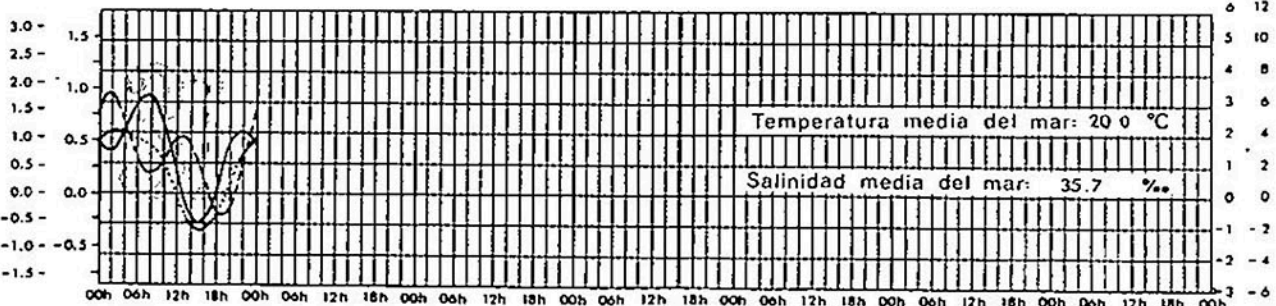
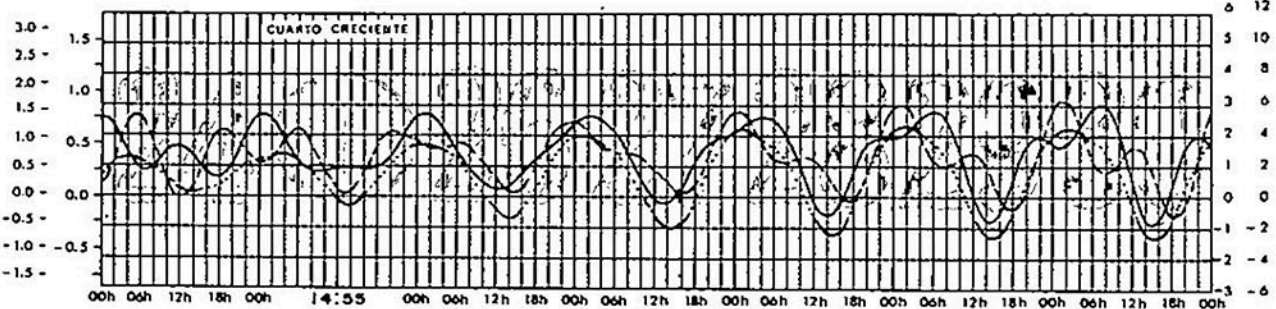
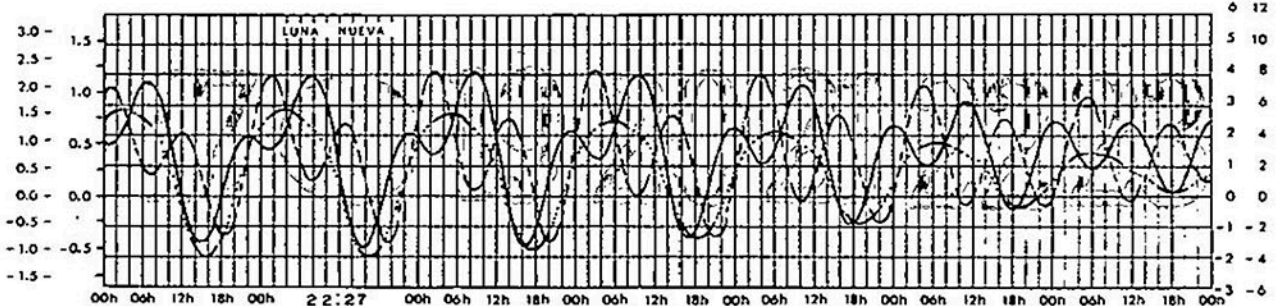
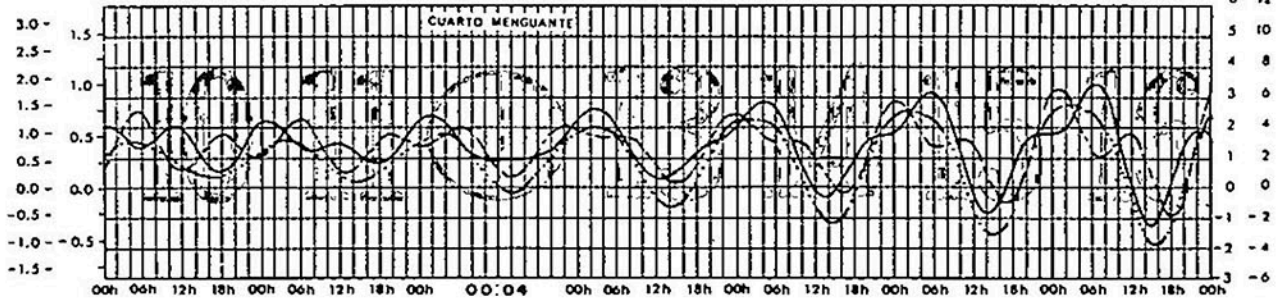
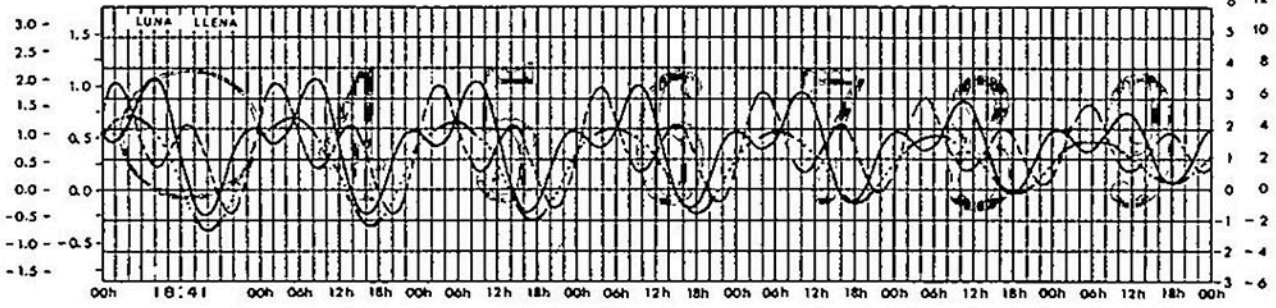
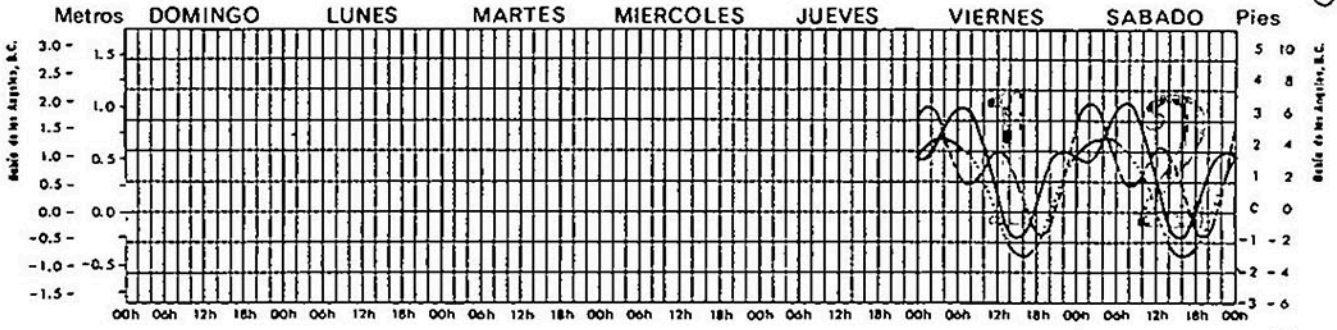


ENERO 1988

LA PAZ, B.C.S.
B. DE LOS ANGELES, B.C.
STA. ROSALIA, B.C.S.



INSTITUTO DE GEOFISICA, U. N. A. M.



Temperatura media del mar: 20.0 °C

Salinidad media del mar: 35.7 ‰

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1209
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CALENDARIO GRAFICO DE MAREAS, 1988

LA PAZ, B.C.S. SANTA ROSALIA, B.C.S. BAHIA DE LOS ANGELES, B.C.

Con objeto de que este Calendario Gráfico de Mareas, sea más útil en esta región del Golfo de California, se superponen las mareas de La Paz, Santa-Rosalía y Bahía de los Angeles, en una de las caras y en la otra Topolobampo, Guaymas y Puerto Peñasco, cubriendo en esta forma todo el Golfo. Los lugares intermedios pueden interpolarse en tiempo y altura sin gran error.

TIEMPO:

La hora usada para la predicción de mareas de La Paz, Santa Rosalía y Bahía de los Angeles, es la del meridiano 105° W; se cuentan desde las 00 horas que corresponden a la media noche.

PLANO DE REFERENCIA:

El plano de referencia que está bajo el nivel medio del mar, al cual están referidas las alturas, es el nivel de bajamar media inferior:

La Paz, B.C.S.	= 1.7 pies (0.52 m).
Santa Rosalía, B.C.S.	= 1.2 pies (0.36 m).
Bahía de los Angeles, B.C.S.	= 3.3 pies (1.01 m).

NOTA: Las temperaturas y salinidades medias del agua del mar, corresponden a La Paz, B.C.S. Las escalas de amplitudes para la estación de Bahía de los Angeles (pies y metros), se indican en las partes extremas.

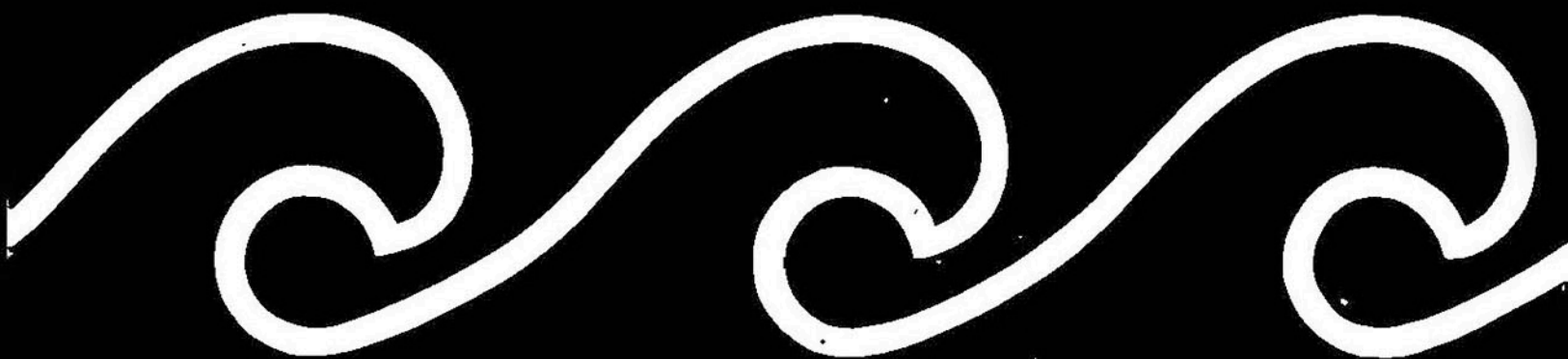
Ing. Fco. Grivel Piña
Instituto de Geofísica,
U.N.A.M.

INSTITUTO DE GEOFISICA

1213-111
(252)



Calendario Gráfico
de Mareas  **1988**



La Paz, B. C. S.
Bahía de los Angeles, B. C
Santa Rosalía, B. C. S.