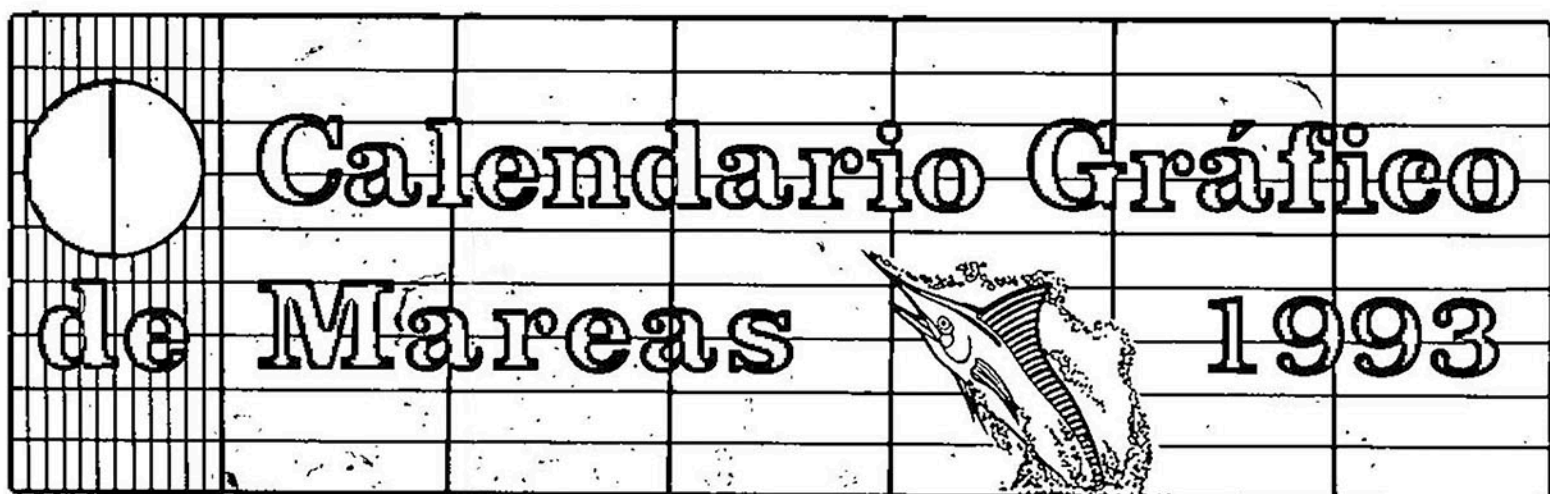


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OCEANO PACIFICO



SECRETARIA DE MARINA



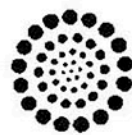
PUERTOS MEXICANOS



LAGUNA VERDE



FONATUR



CONACYT

Cabo San Lucas, B.C.S.

Mazatlán, Sin.

Pto. Vallarta, Jal.

Pto. Peñasco, Son.

Guaymas, Son.

Topolobampo, Sin.

Pto. Angel, Oax.

Salinas Cruz, Oax.

Pto. Madero, Chis.

CALENDARIO GRAFICO DE MAREAS 1993 OCEANO PACIFICO

El pronóstico de mareas de Salina Cruz, Oax., prácticamente puede ser utilizado en todos los lugares de la costa comprendidos desde Salina Cruz hasta Balboa, Panamá, mediante la aplicación de ciertas correcciones al tiempo y a la altura de las pleamares y bajamares (puntos máximos y mínimos de la gráfica de mareas). El progreso total de la marea se dirige hacia el Sur aumentando de amplitud rápidamente hasta alcanzar su valor máximo en el Golfo de Panamá, en cambio la fase varía muy lentamente, o sea que las horas de las pleamares y bajamares en toda esta zona casi ocurre simultáneamente.

DIFERENCIAS:

Las diferencias en tiempo y altura se aplicarán según su signo a las pleamares y bajamares de la gráfica de Salina Cruz, para obtener las del lugar deseado. Las horas encontradas estarán referidas al meridiano en uso del lugar.

DIFERENCIAS DE TIEMPO

ESTACIONES	PLEAMAR SUP.		PLEAMAR INF.		BAJAMAR INF.		BAJAMAR SUP.	
	Hora	Min.	Hora	Min.	Hora	Min.	Hora	Min.
Champerico, Guatemala	00	00	00	00	00	00	00	00
San José, Guatemala	00	00	00	00	00	00	00	00
La Unión, El Salvador	+ 00	20	+ 00	30	00	00	+ 00	20
Puntarenas, Costa Rica	+ 00	20	00	00	-00	10	+ 00	10
Balboa, Zona del Canal de Panamá	+ 01	20	+ 01	00	+ 01	00	+ 01	30

DIFERENCIAS DE ALTURA

ESTACIONES	PLEAMAR SUP.		PLEAMAR INF.		BAJAMAR INF.		BAJAMAR SUP.	
	Pies	m	Pies	m	Pies	m	Pies	m
Champerico, Guatemala	+ 1.1	+ 0.34	+ 1.1	+ 0.34	0.0	0.00	0.0	0.00
San José, Guatemala	+ 1.6	+ 0.49	+ 1.7	+ 0.52	+ 0.1	+ 0.03	+ 0.1	+ 0.03
La Unión, El Salvador	+ 5.0	+ 1.52	+ 5.1	+ 1.55	0.0	0.00	+ 0.4	+ 0.12
Puntarenas, Costa Rica	+ 4.4	+ 1.34	+ 4.5	+ 1.37	-0.1	-0.03	+ 0.3	+ 0.09
Balboa, Zona del Canal de Panamá	+ 10.5	+ 3.20	+ 10.4	+ 3.17	+ 0.4	+ 0.12	+ 1.2	+ 0.36

INSTITUTO DE GEOFISICA

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Editor Técnico

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ENERO 1993

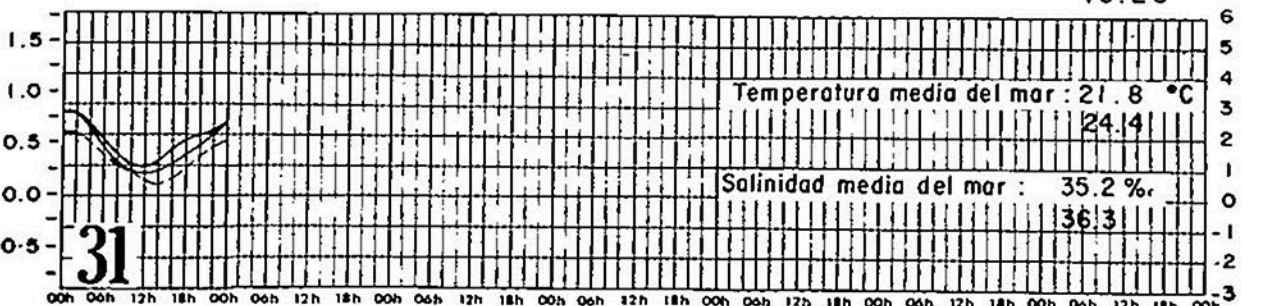
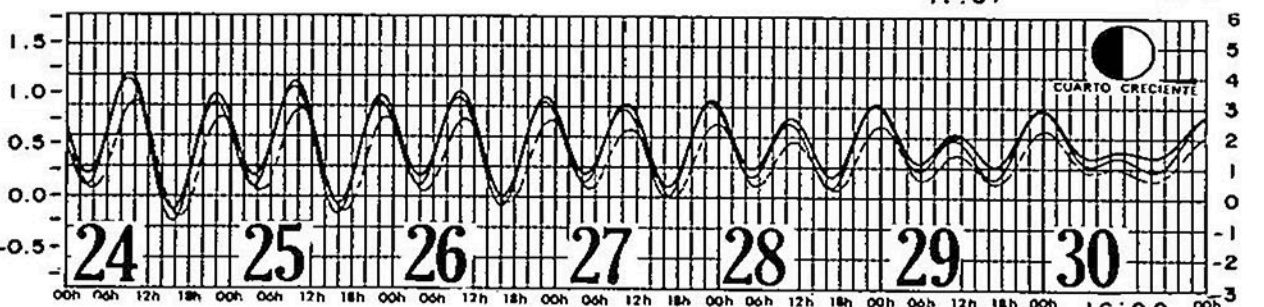
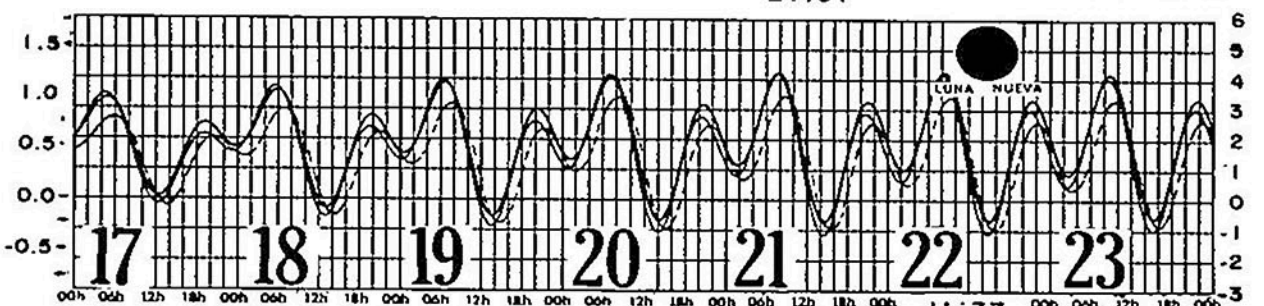
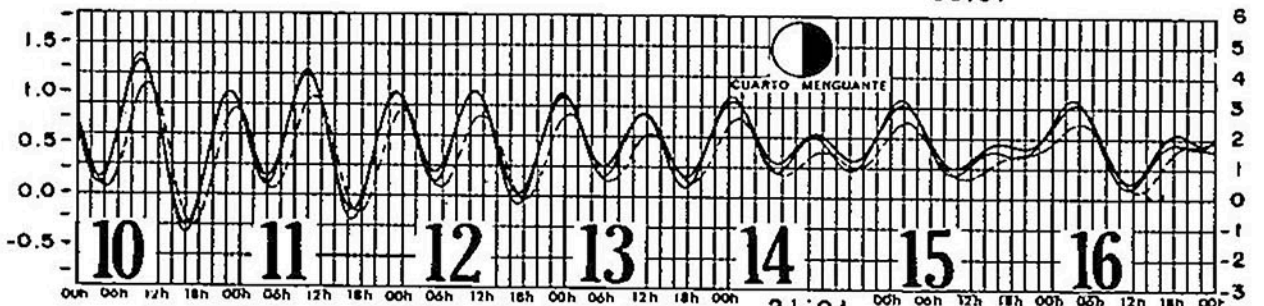
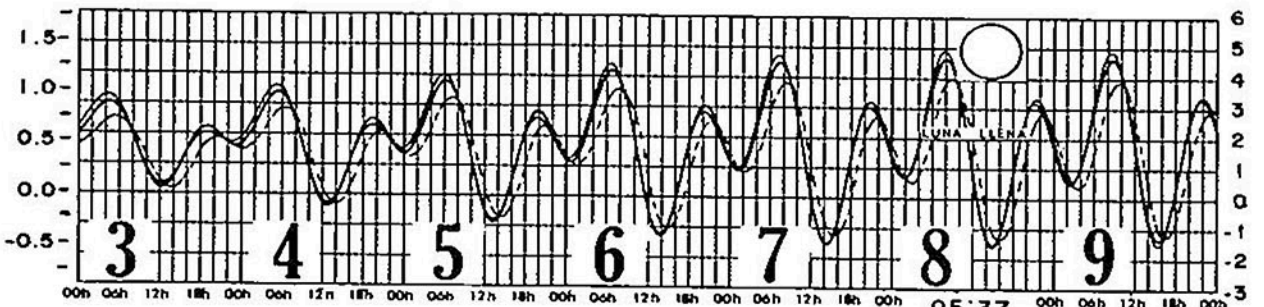
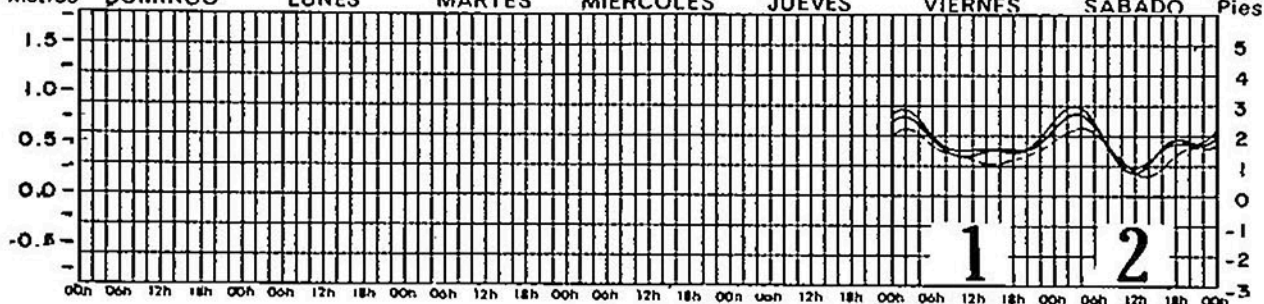
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VK 715
C 345

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Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar : 21.8 °C
24.4

Salinidad media del mar : 35.2 ‰
36.3

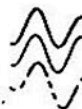
HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

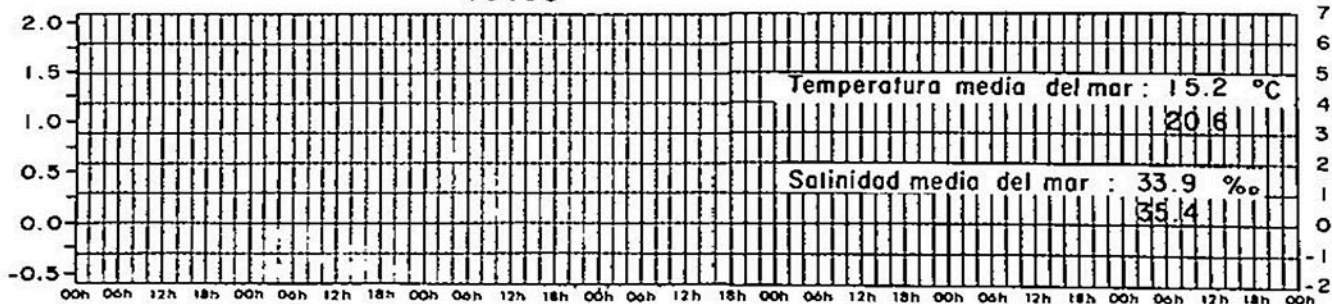
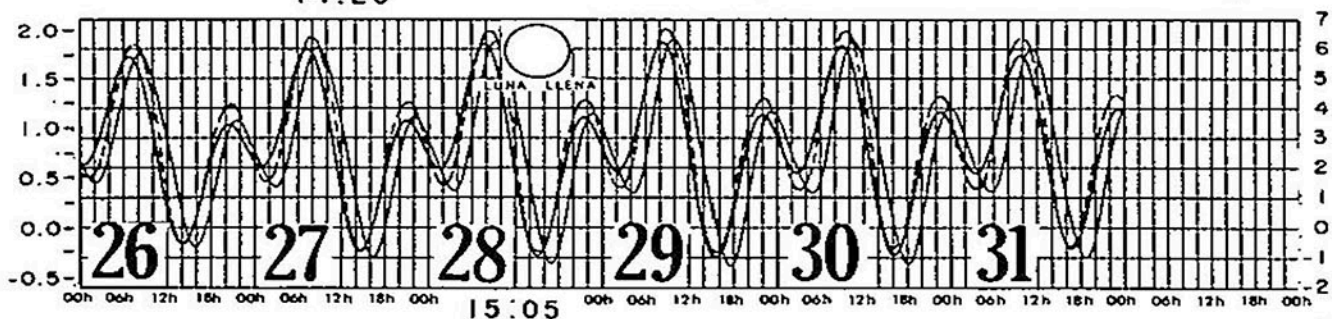
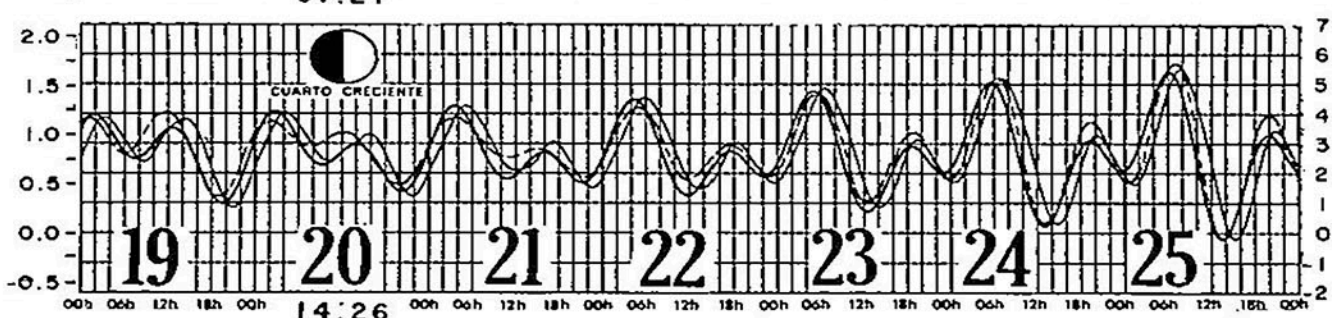
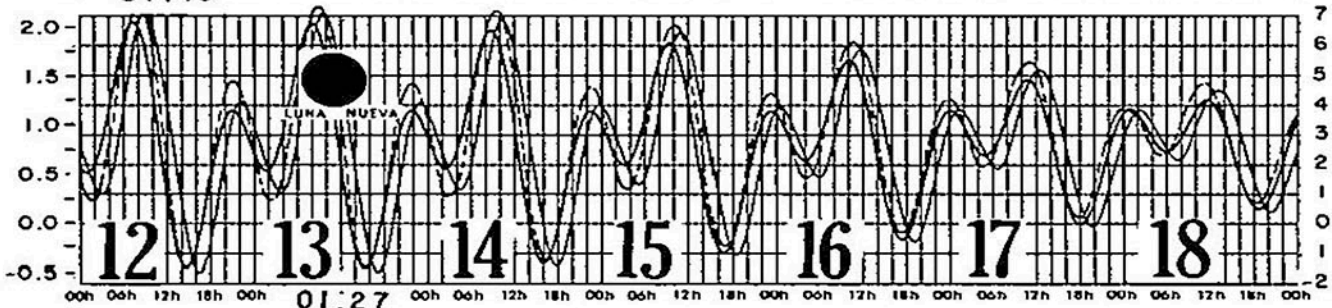
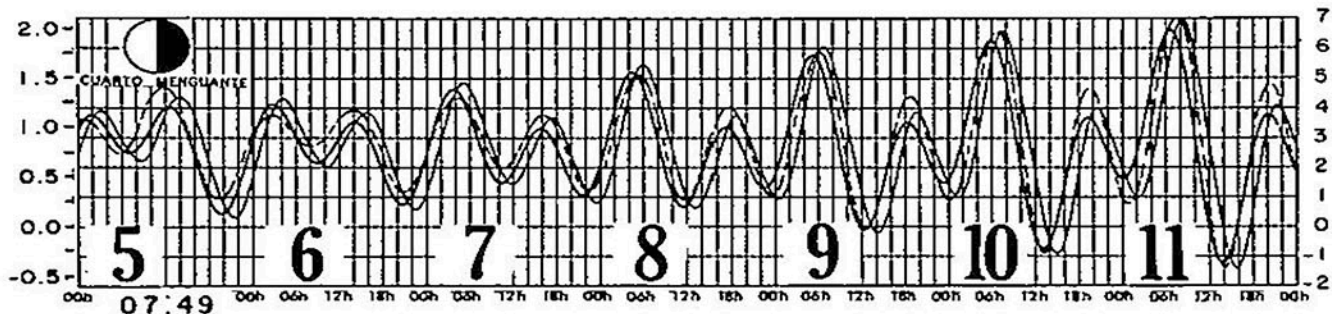
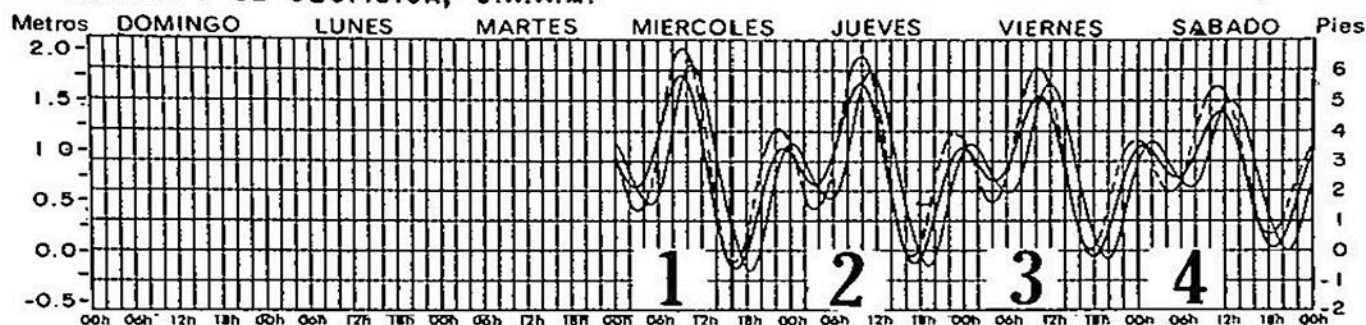


DICIEMBRE 1993

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HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.1.

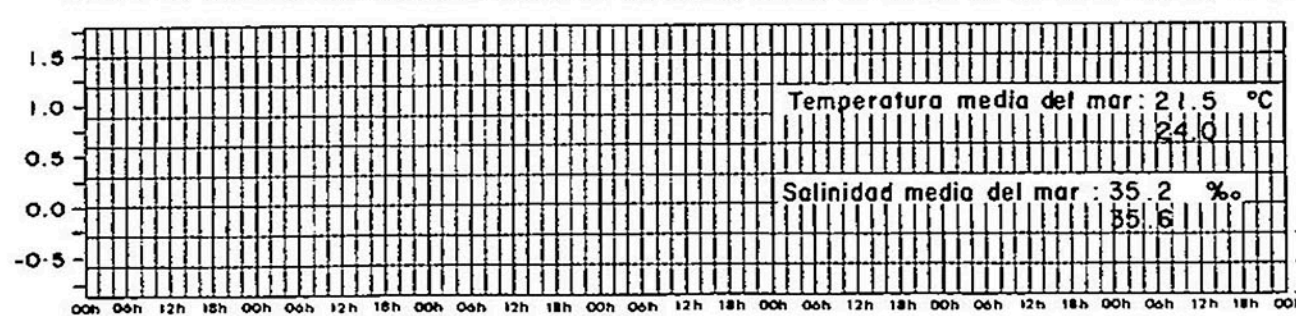
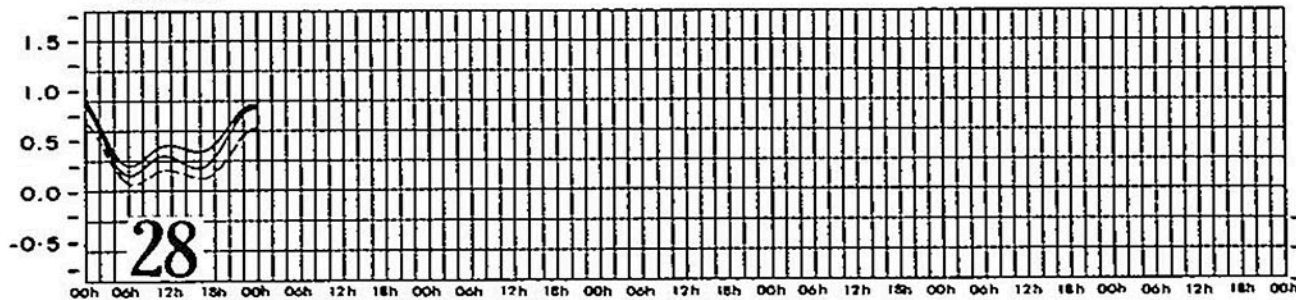
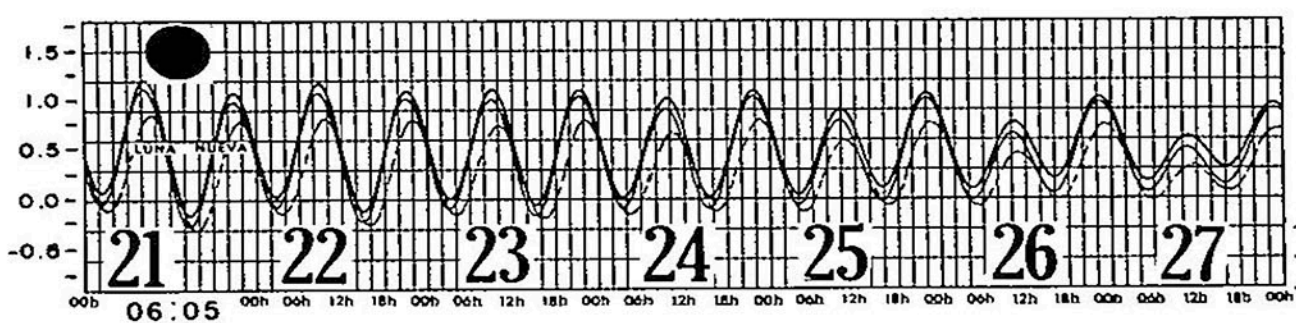
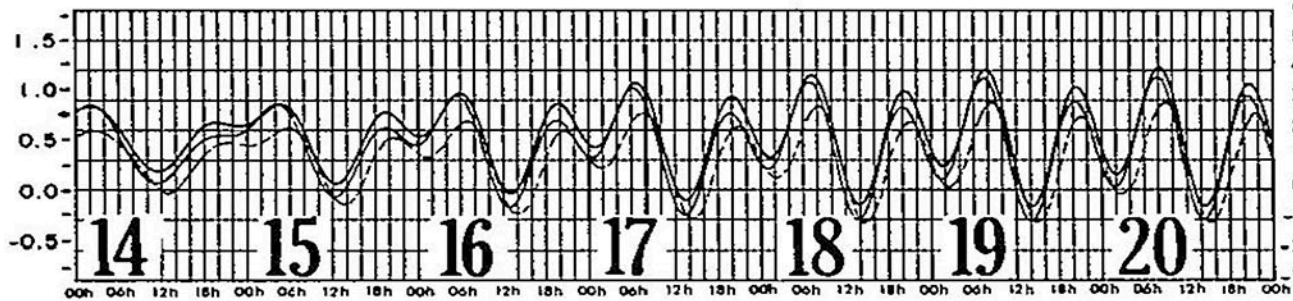
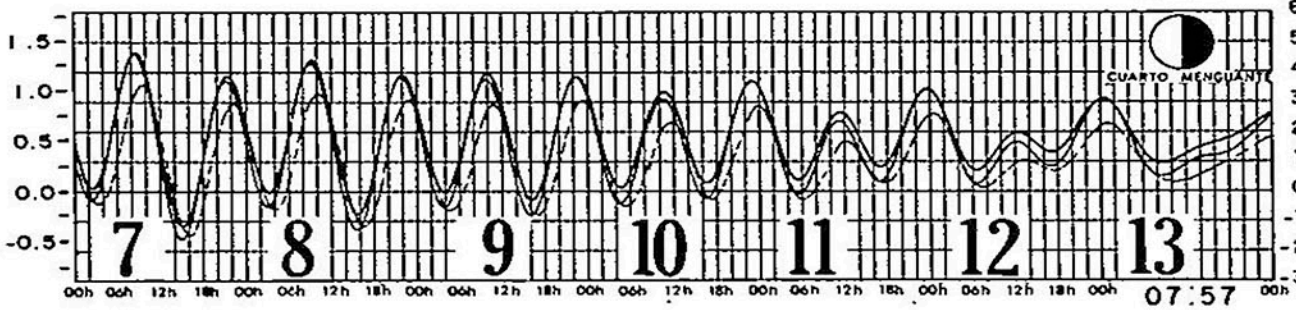
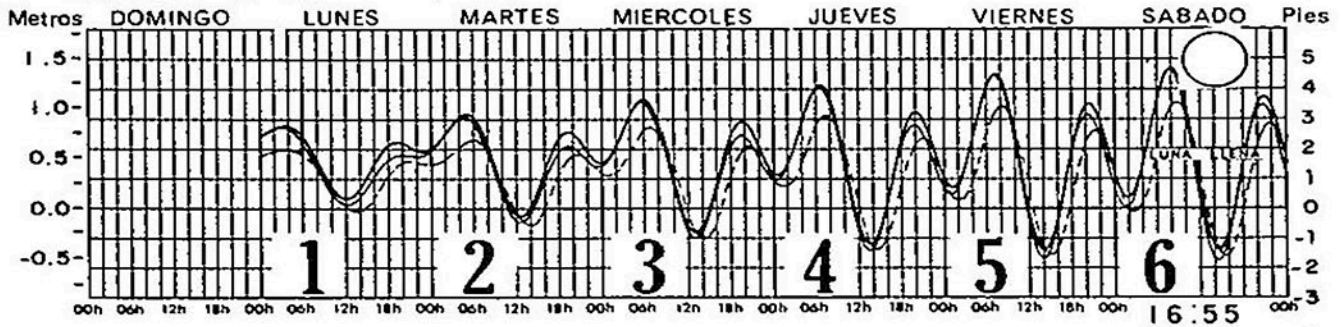


FEBRERO 1993

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HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

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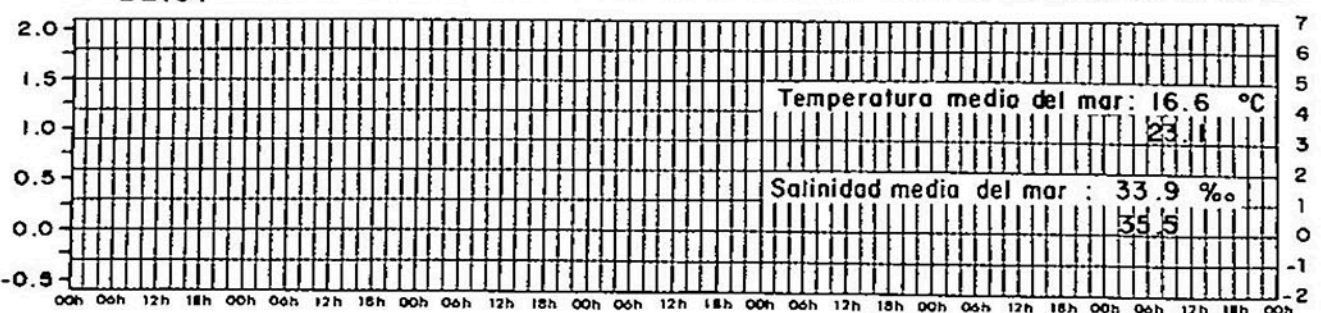
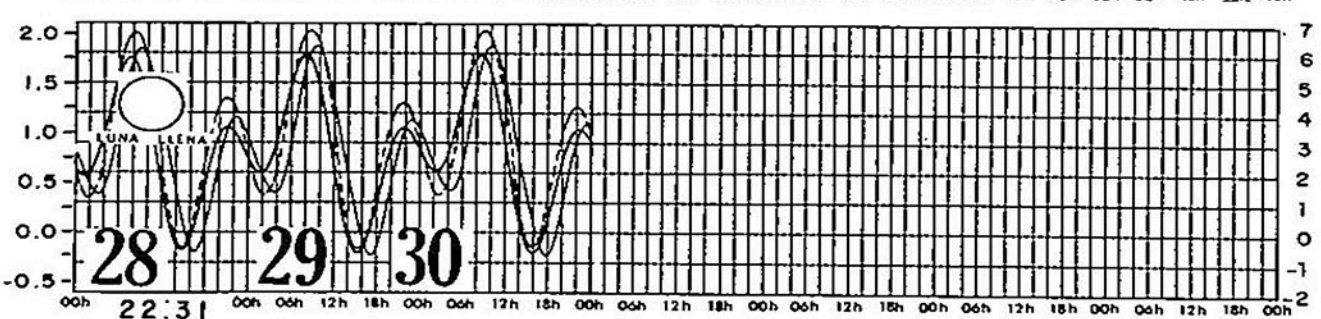
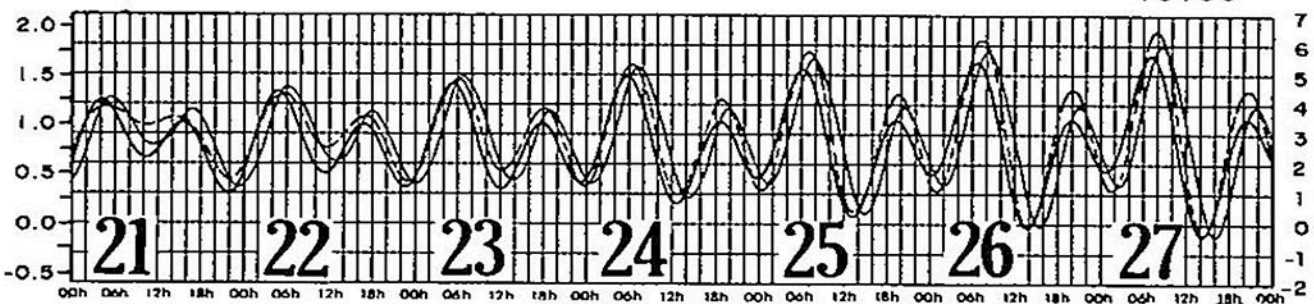
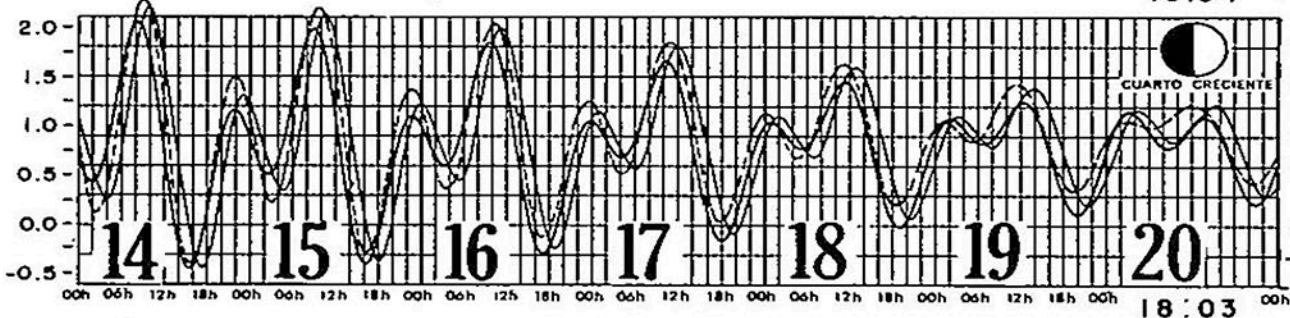
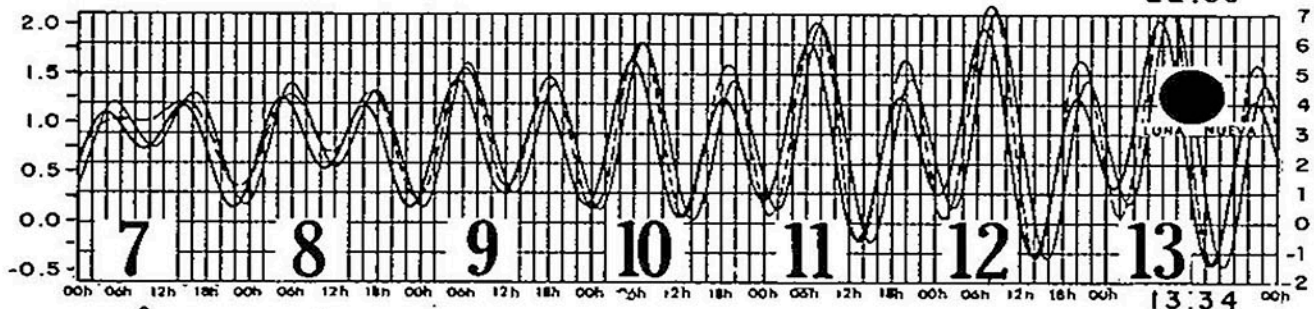
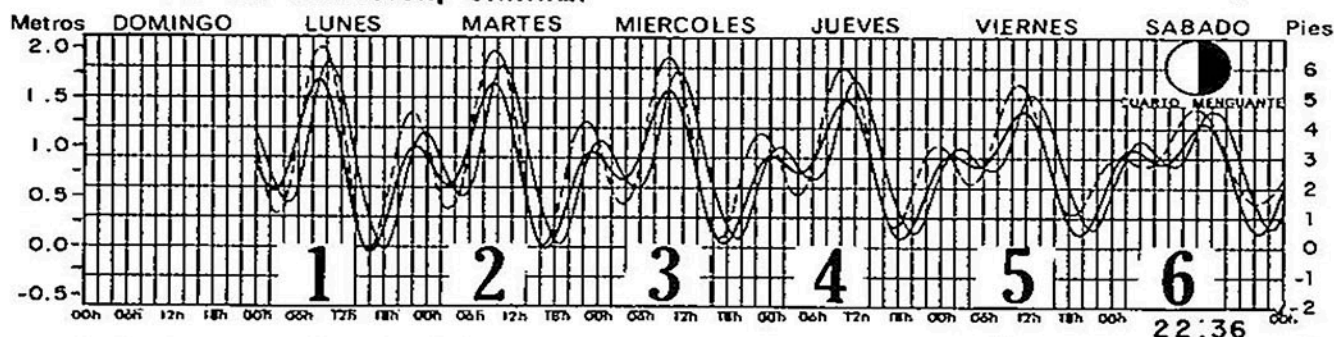


NOVIEMBRE 1993

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HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

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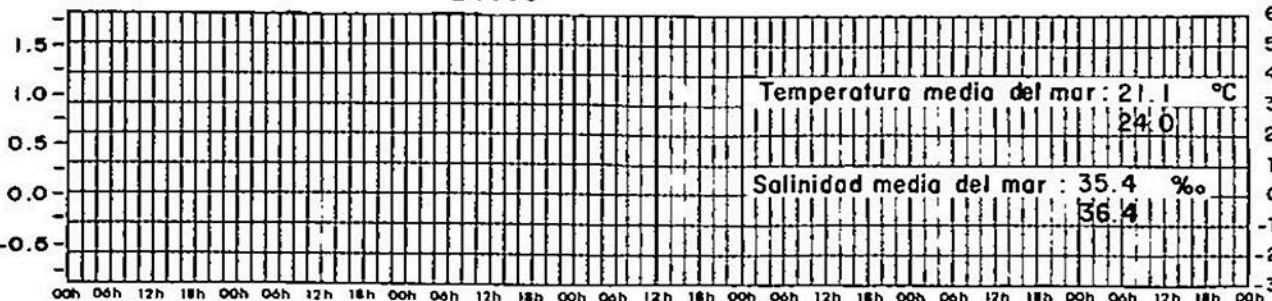
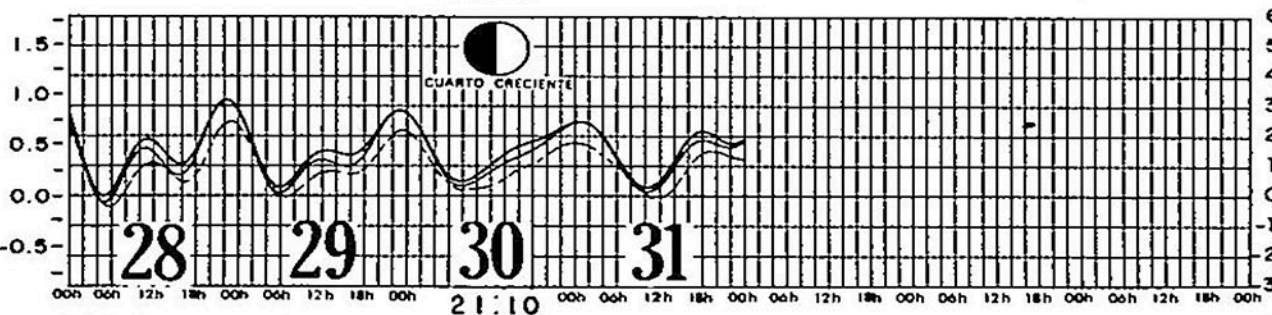
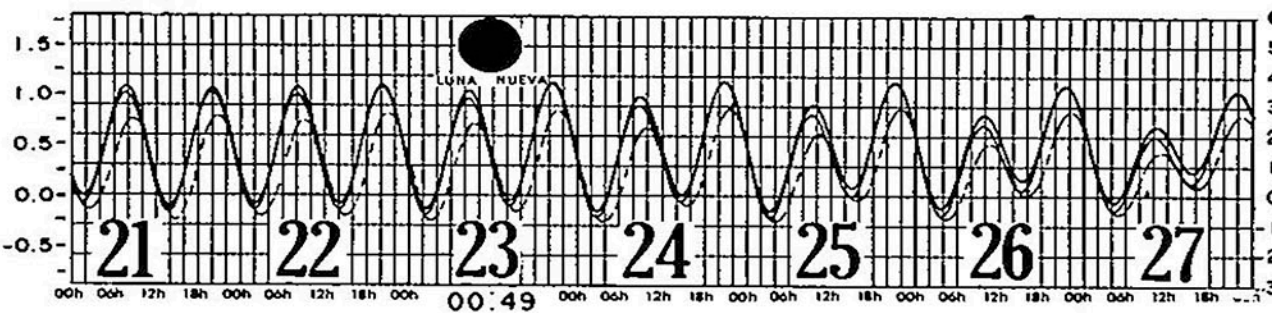
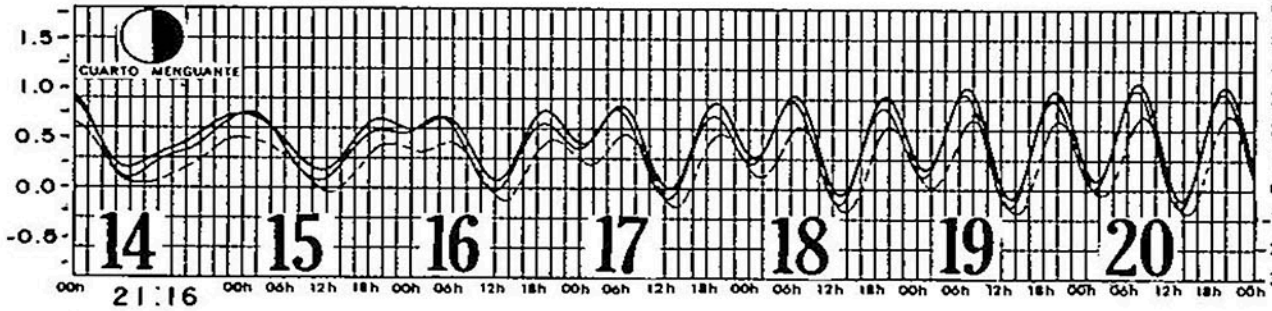
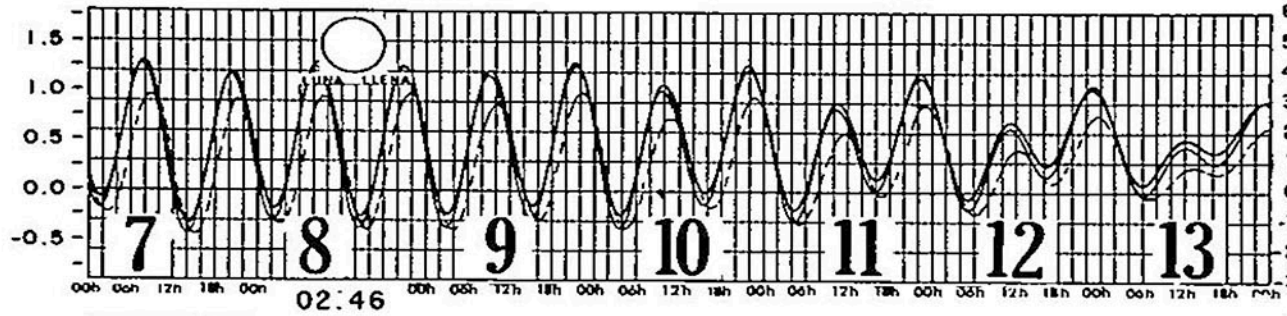
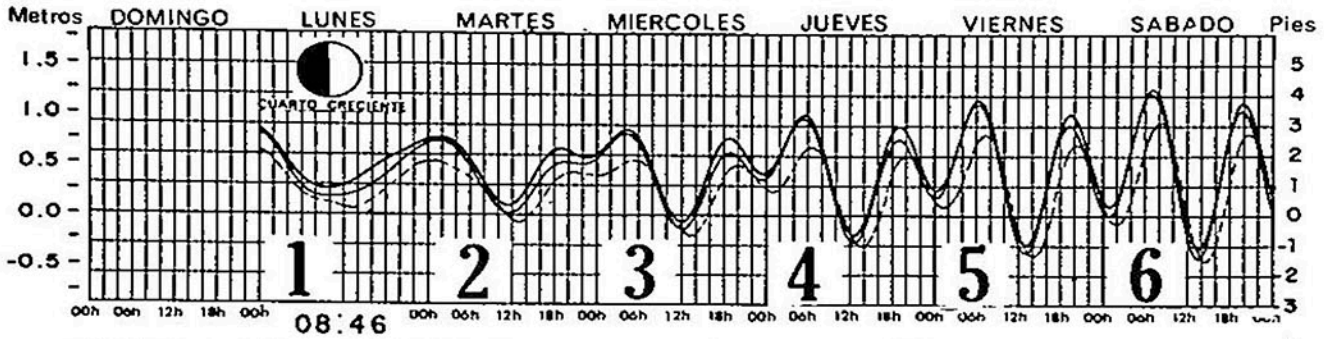


MAR^TU J93

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HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

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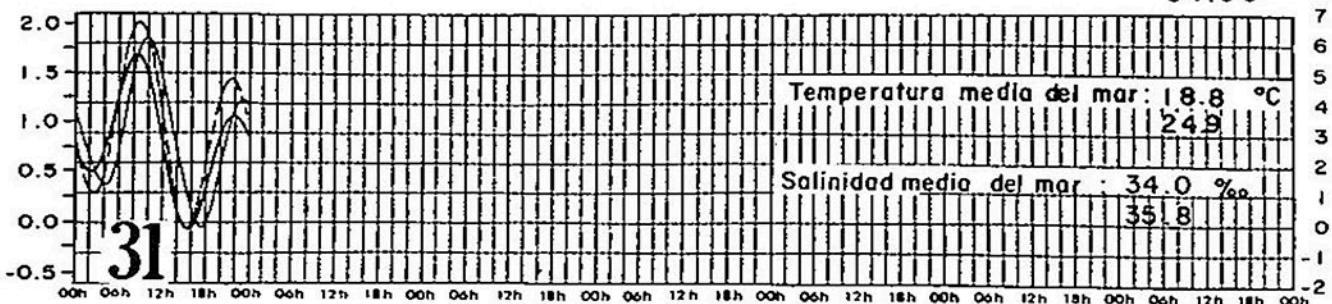
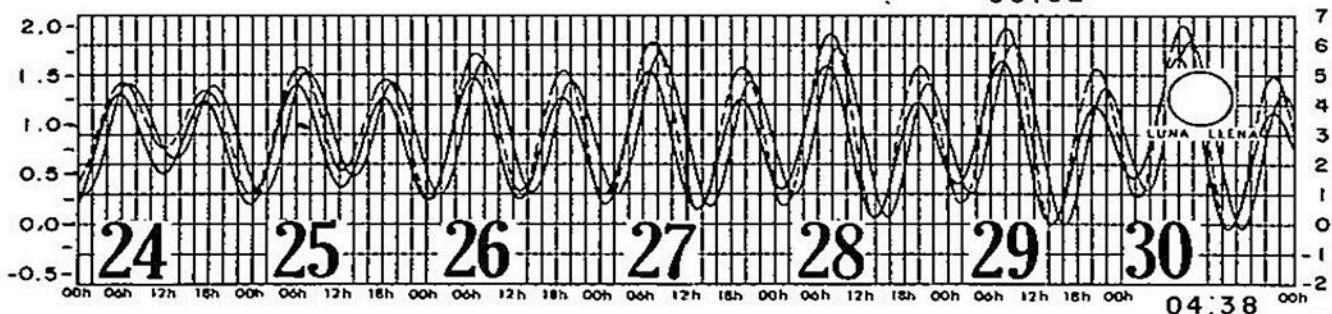
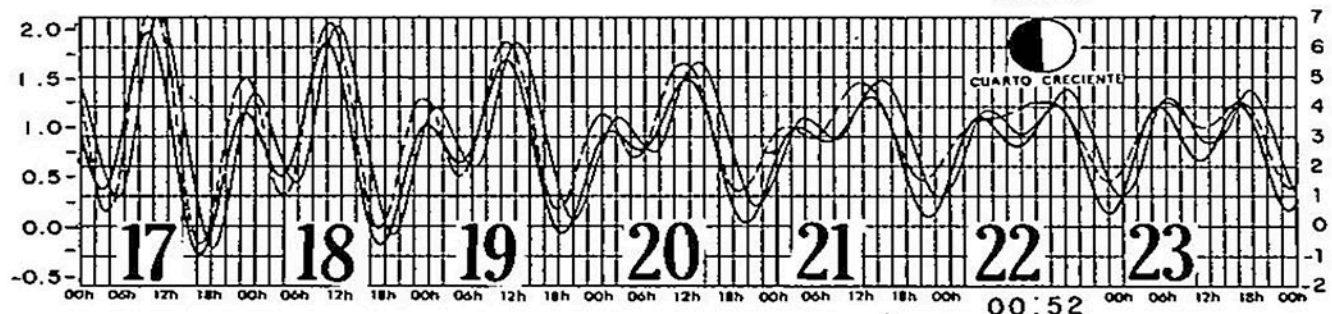
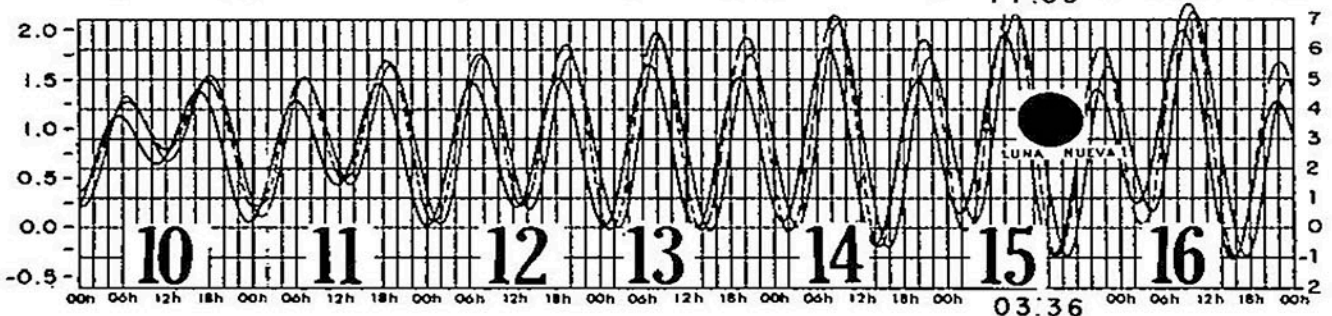
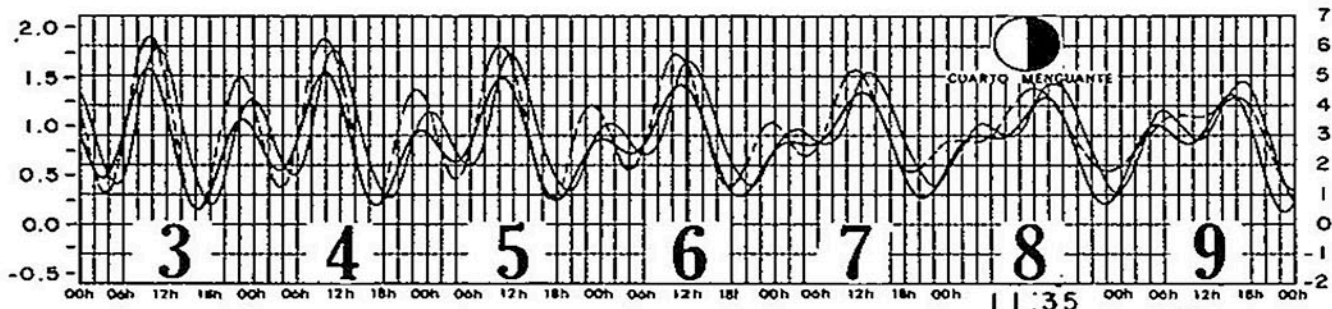
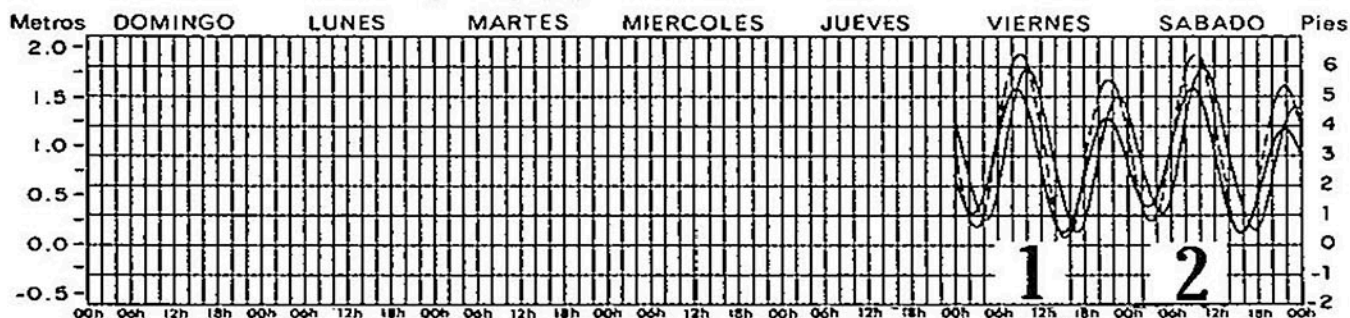


OCTUBRE 1993

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HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

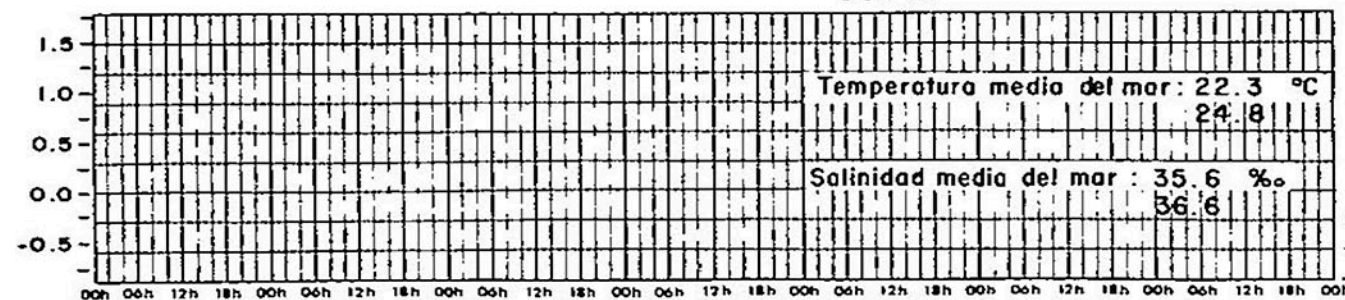
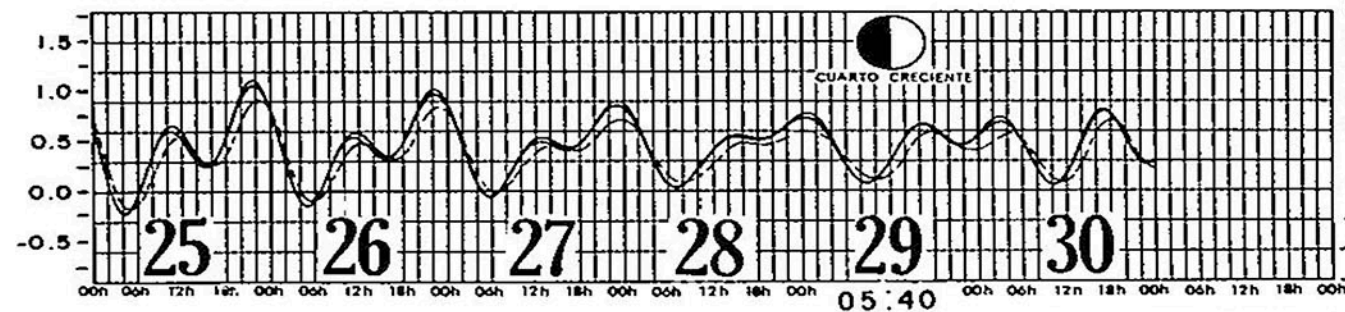
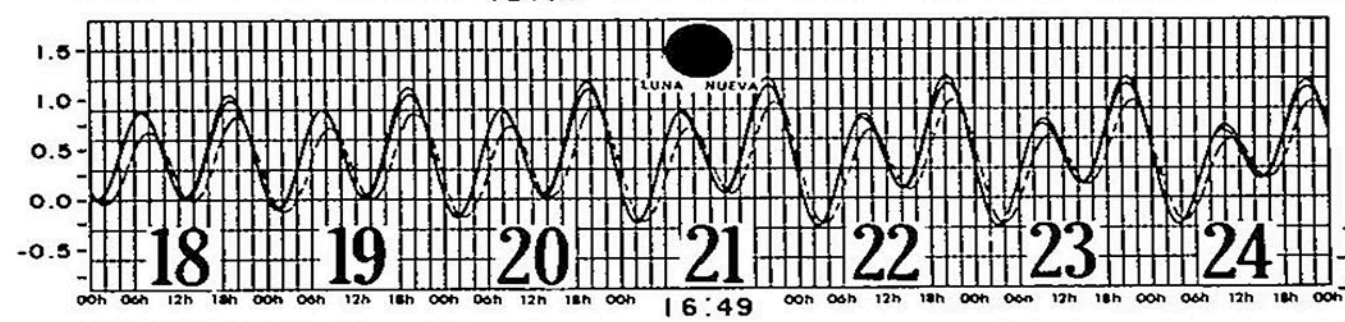
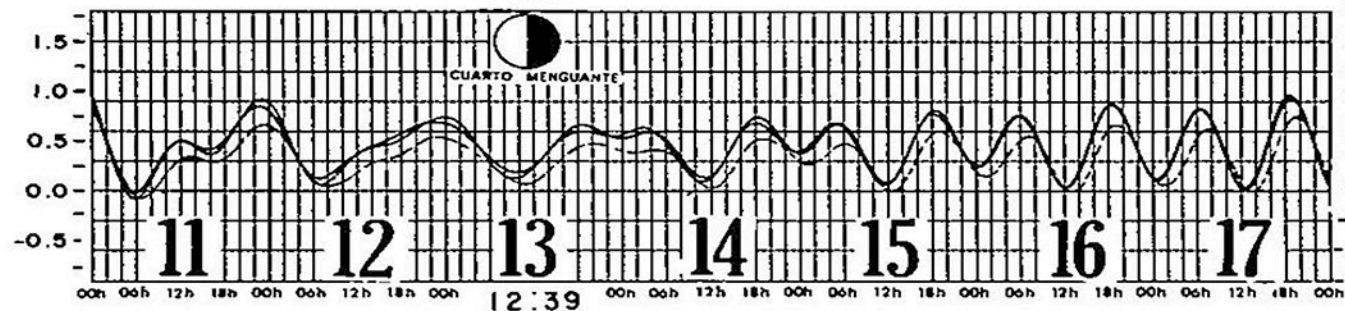
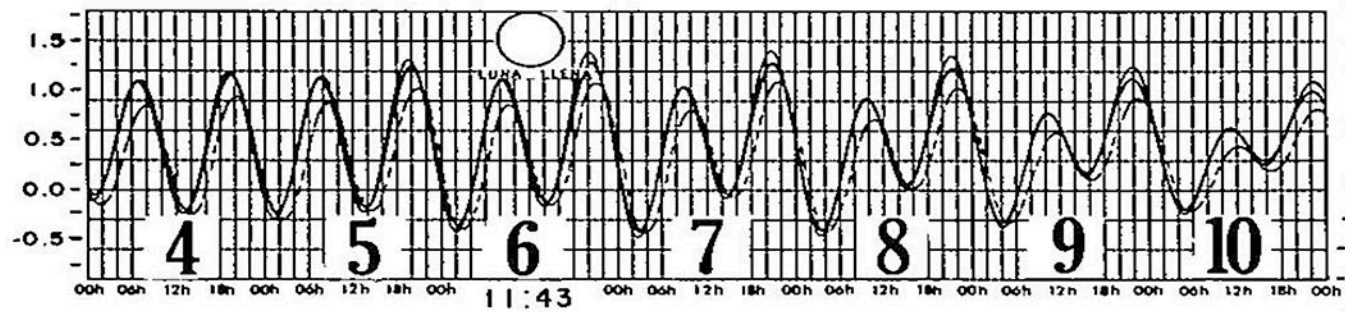
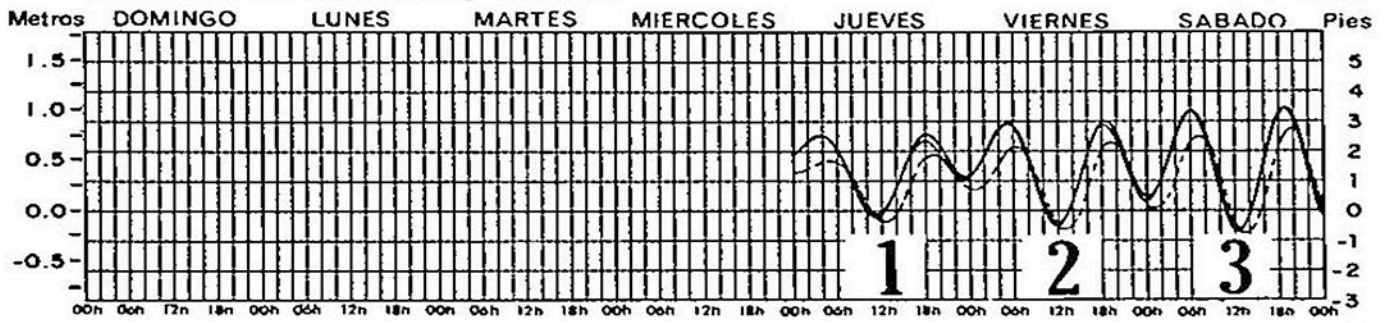


ABRIL 1993

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HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

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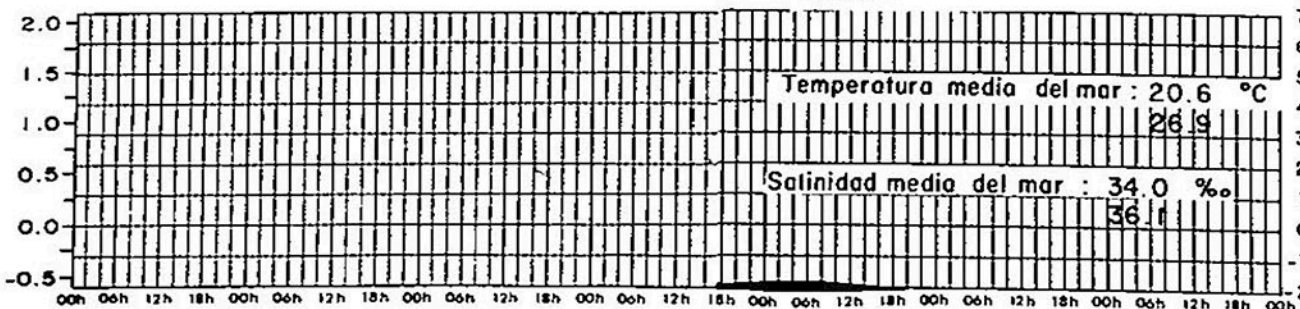
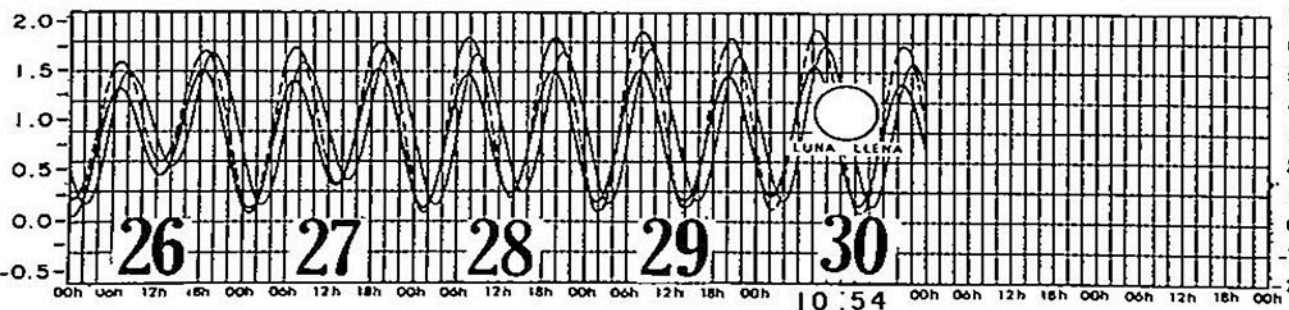
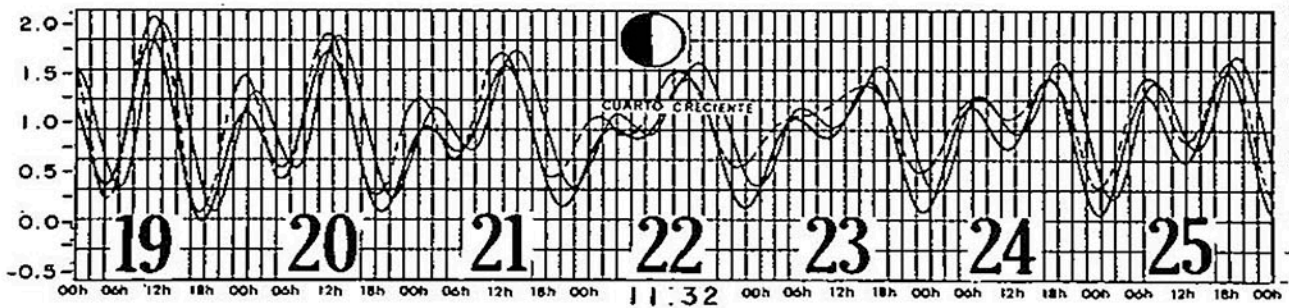
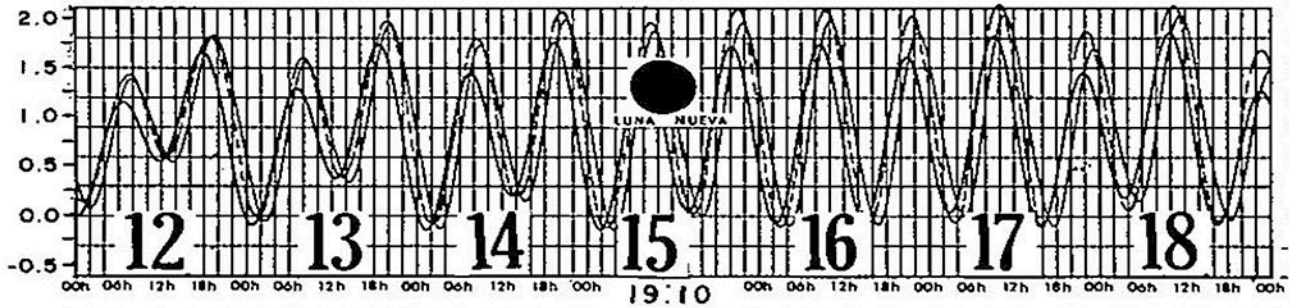
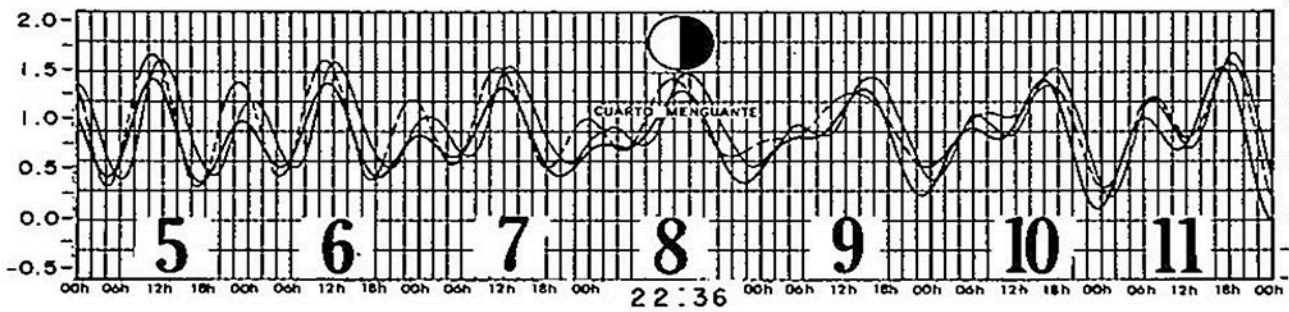
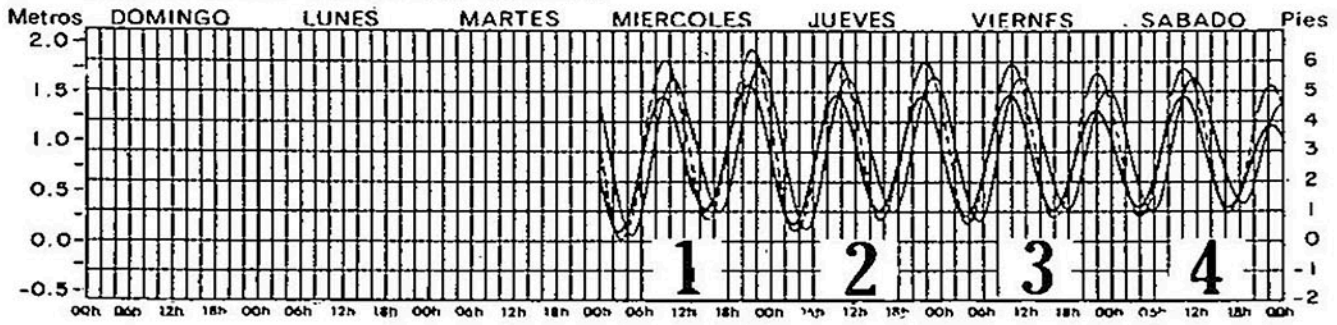


SEPTIEMBRE 1993

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



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.



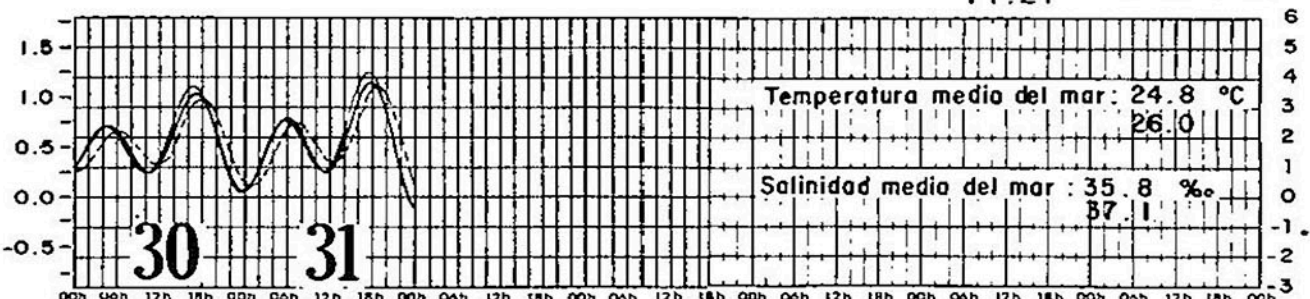
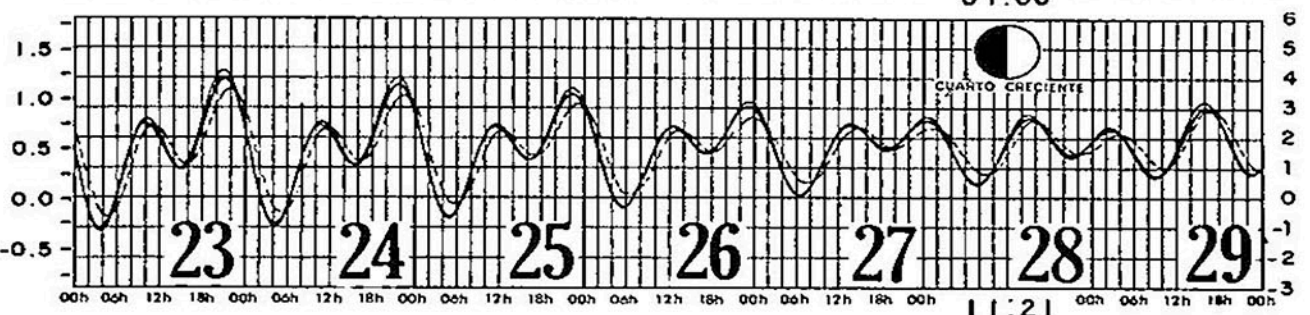
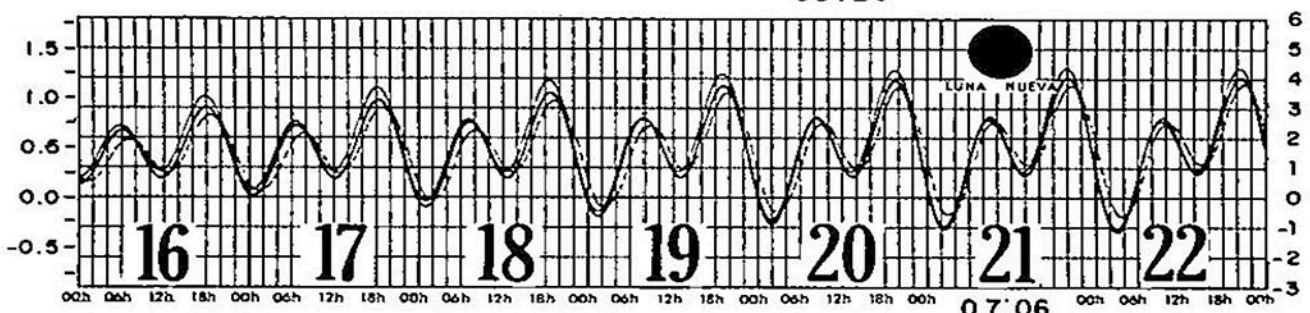
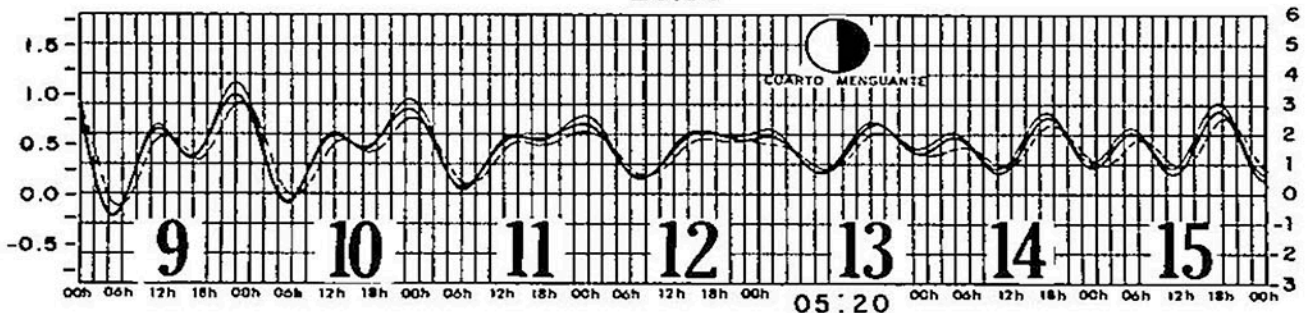
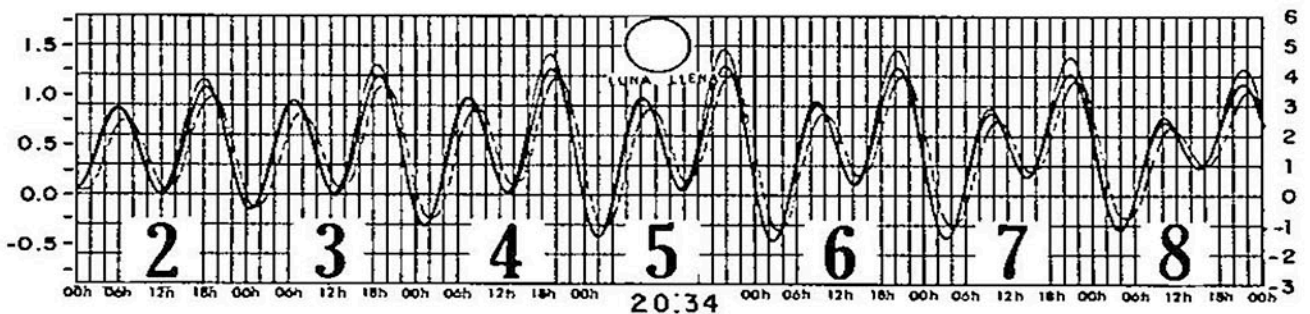
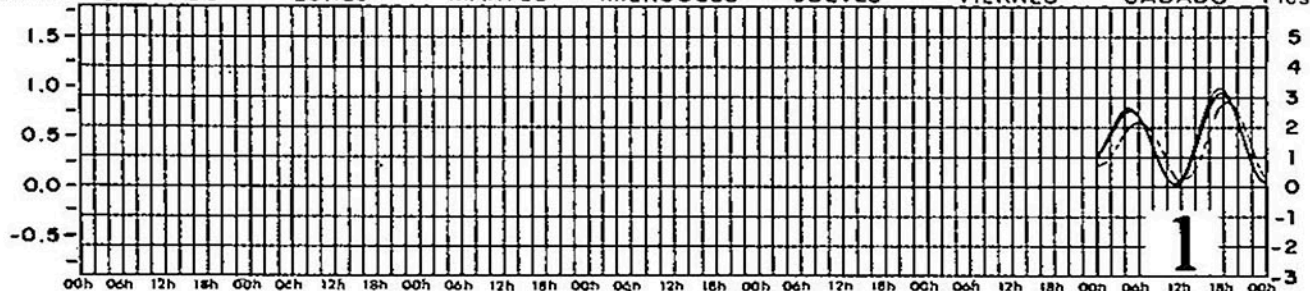
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PTO. VALLARTA, JAL.



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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

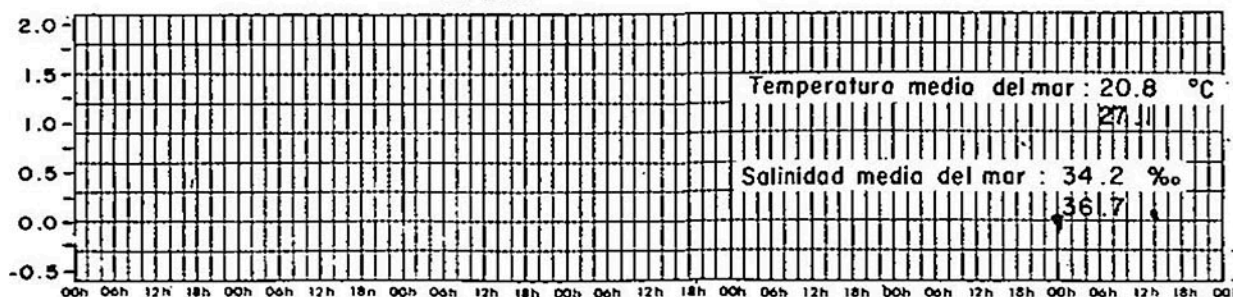
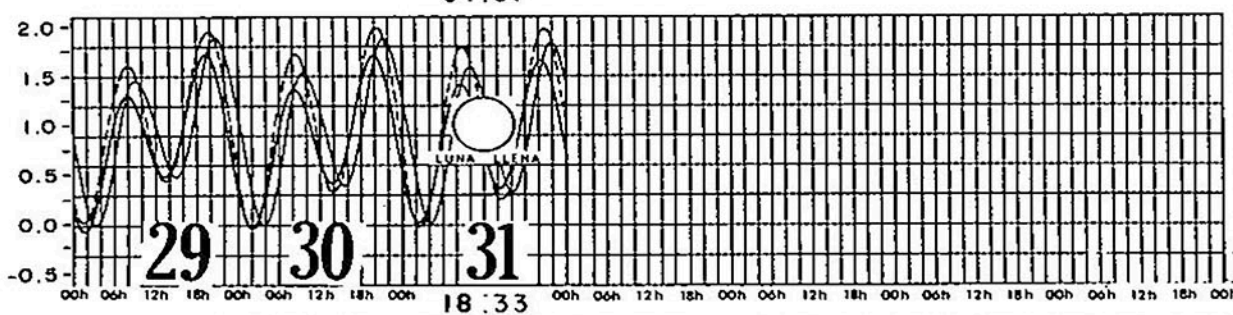
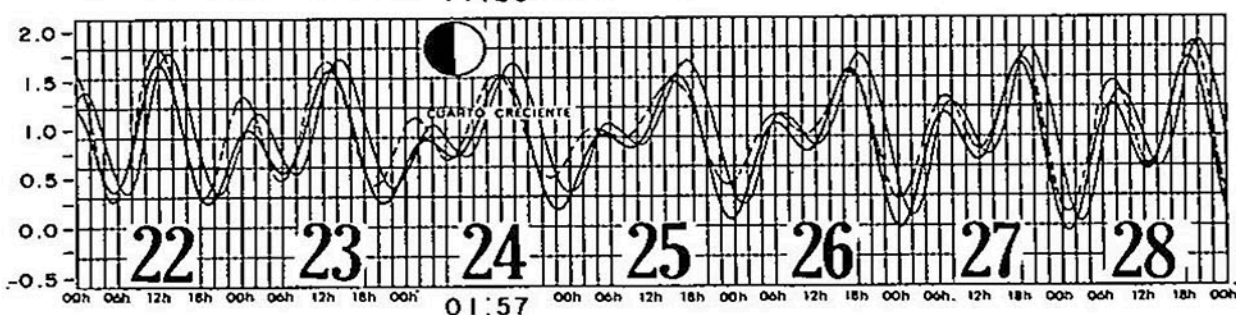
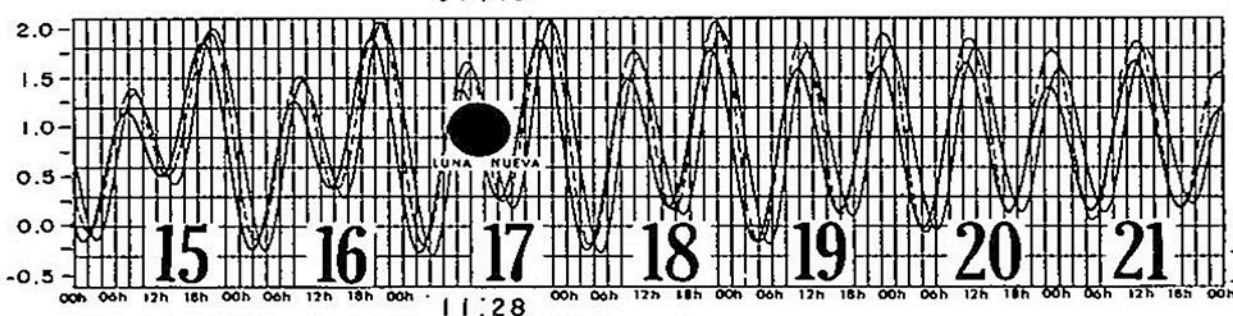
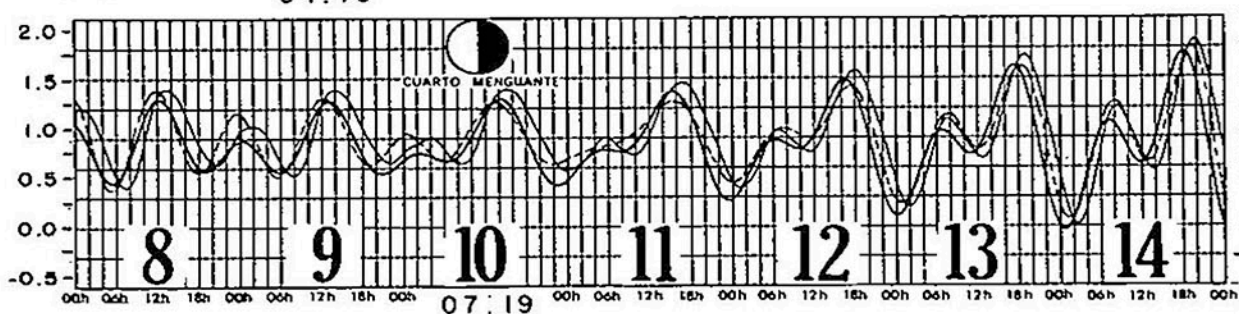
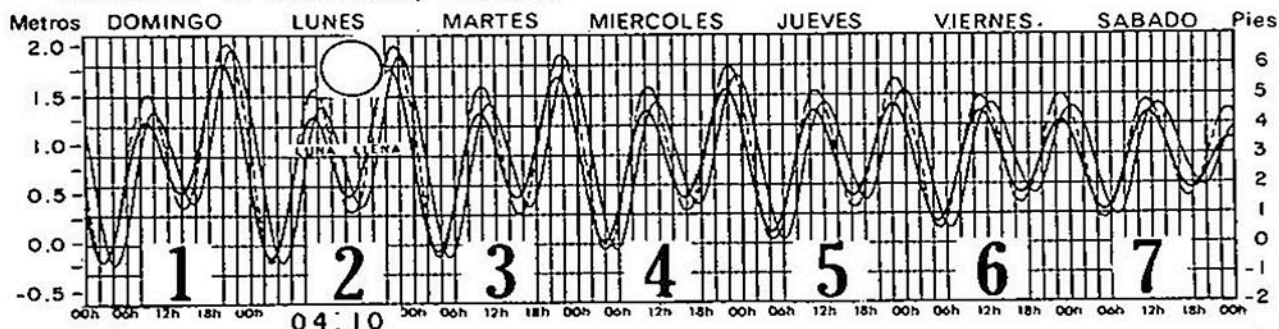


AGOSTO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN CARLOS, B.C.S.



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



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

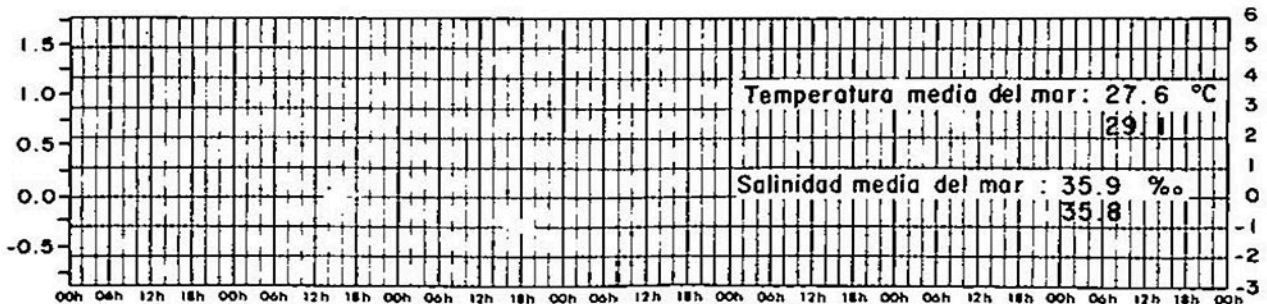
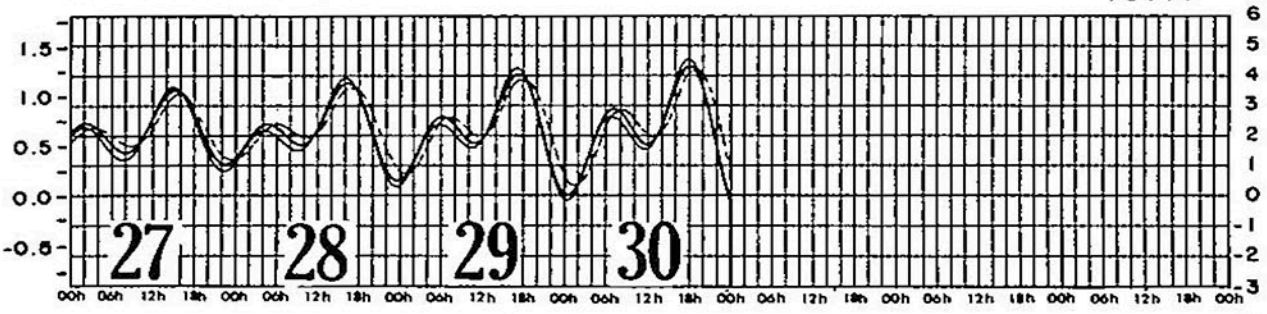
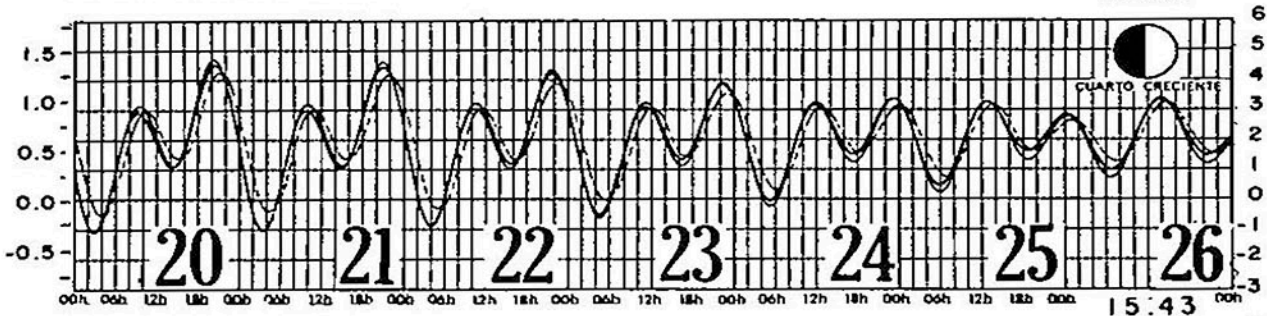
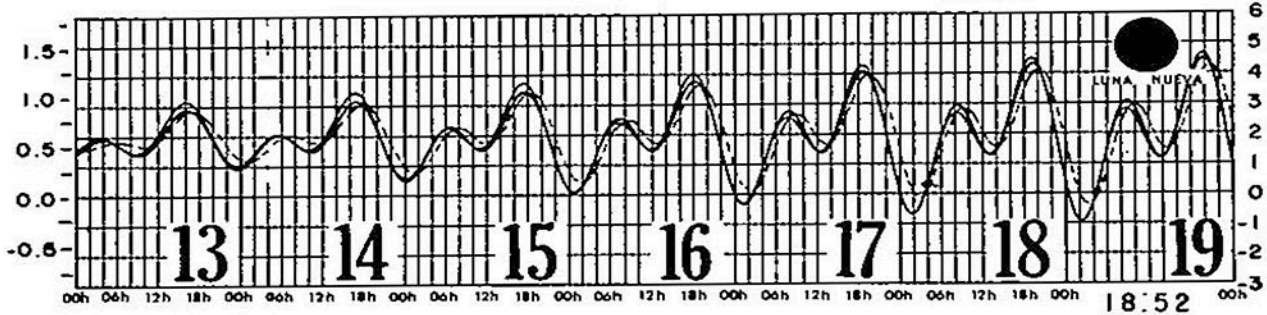
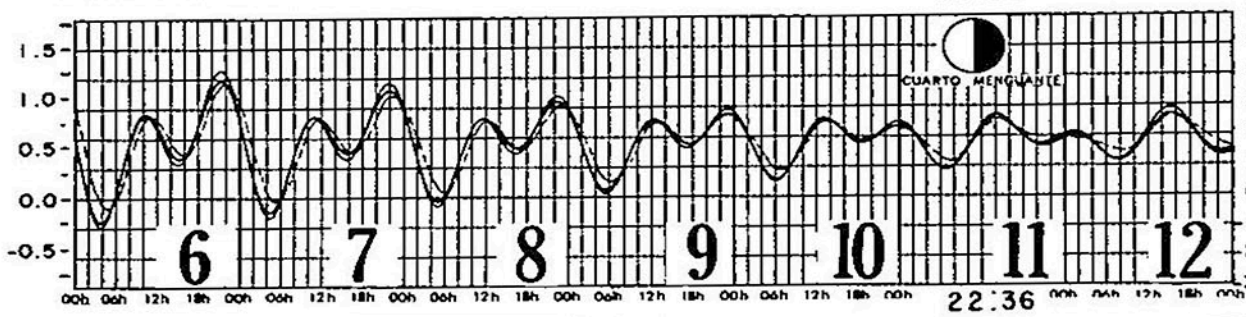
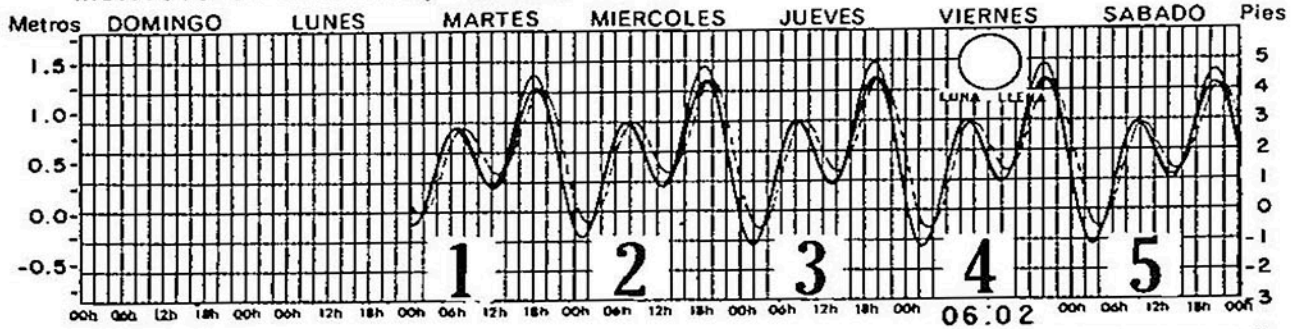


JUN 93

CABO SAN LUCAS, B.C.S.
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PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

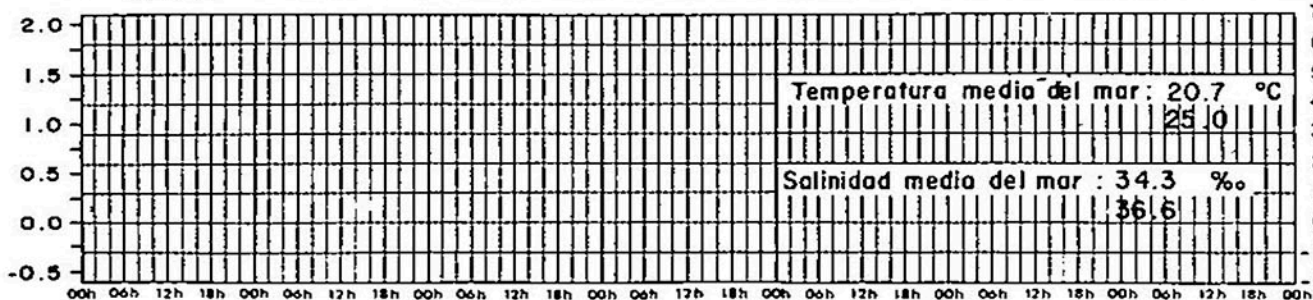
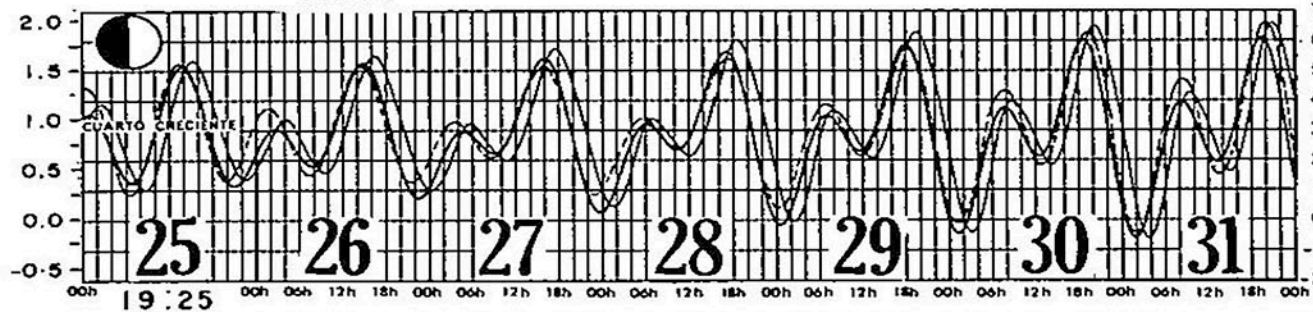
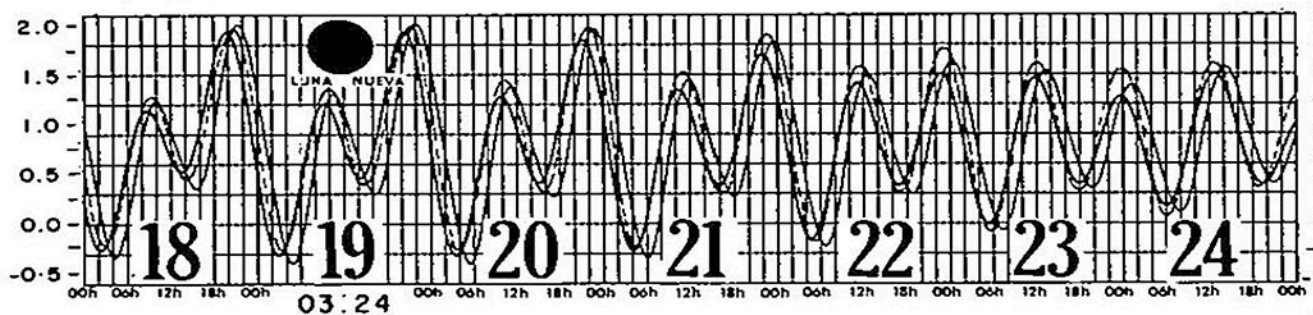
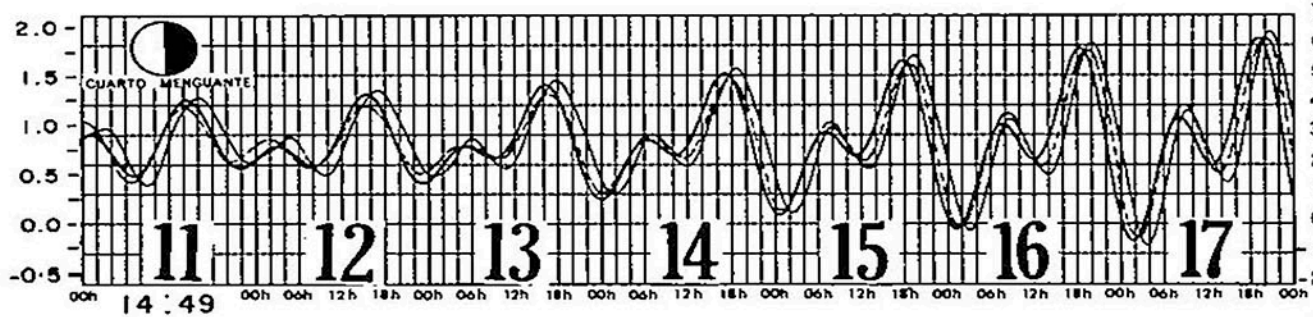
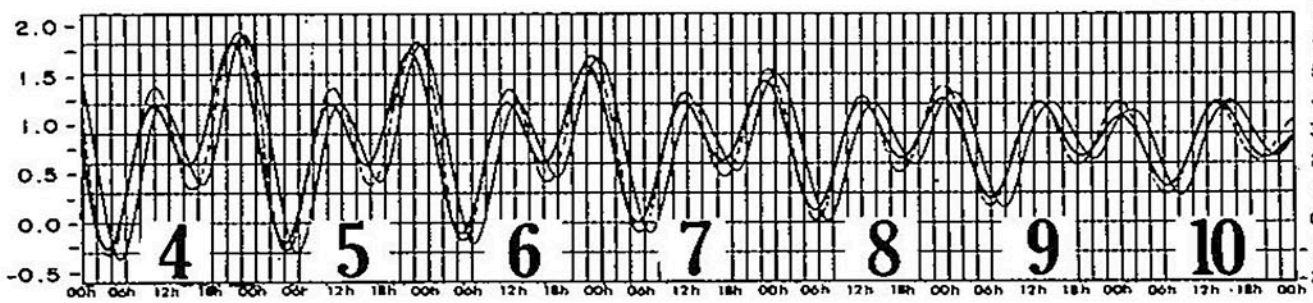
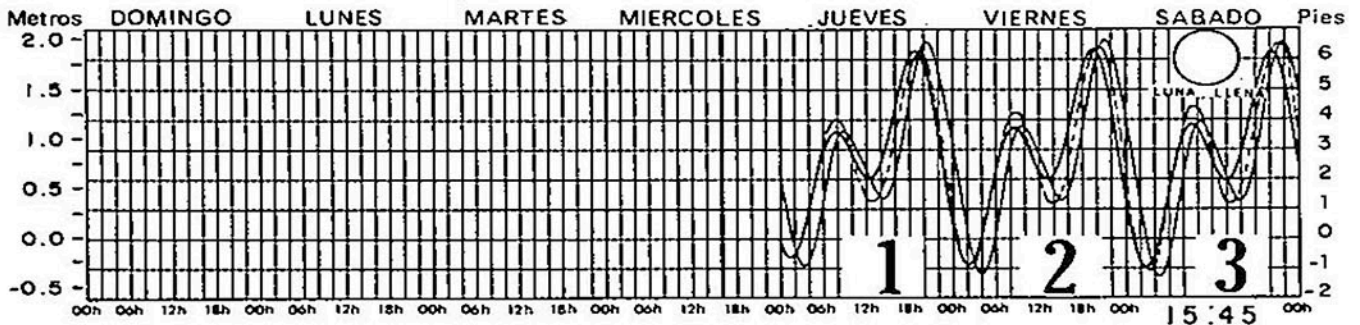


JULIO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN CARLOS, B.C.S.



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



Temperatura media del mar: 20.7 °C
25.0

Salinidad media del mar: 34.3 ‰
36.6

HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

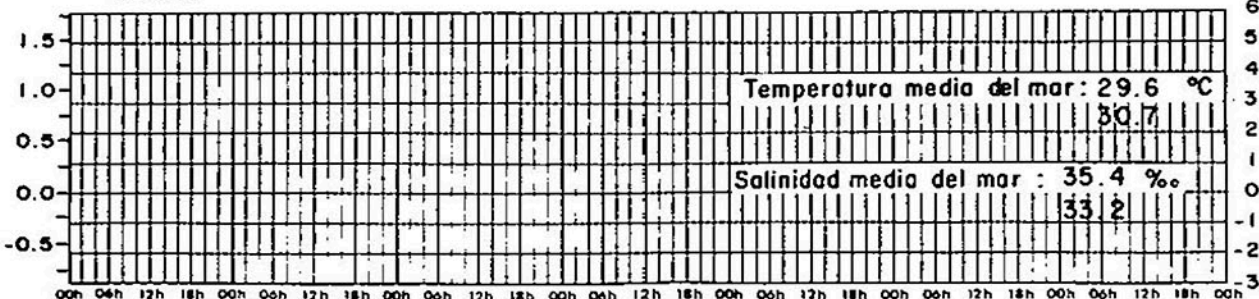
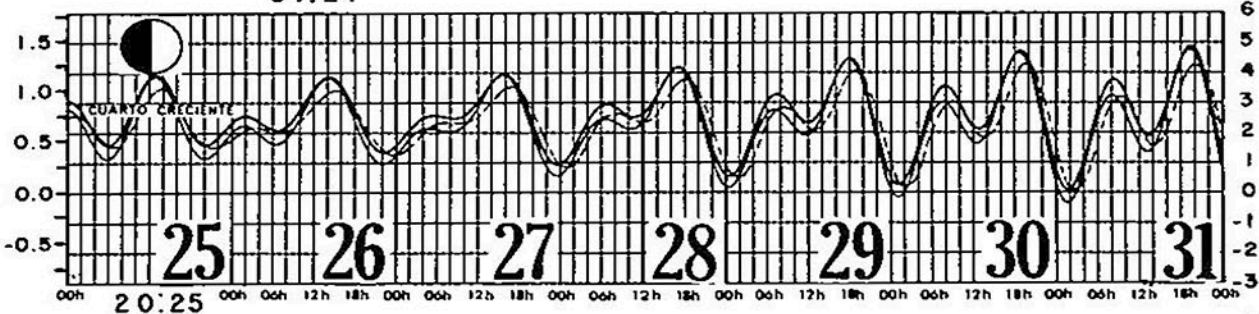
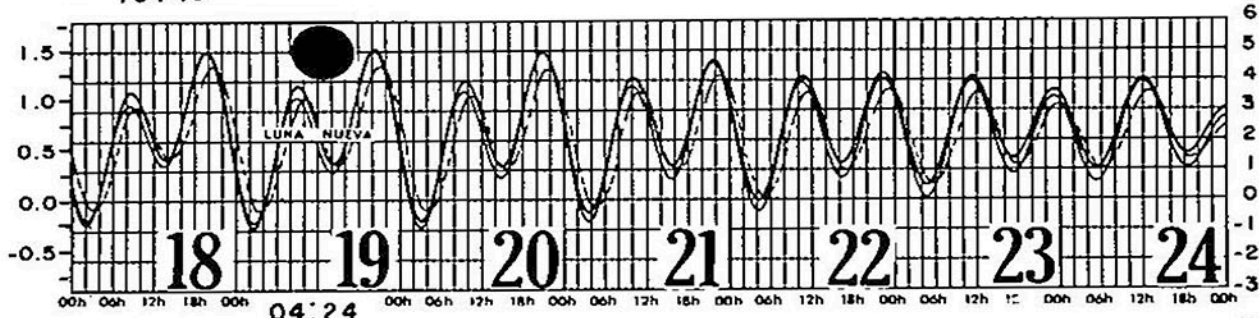
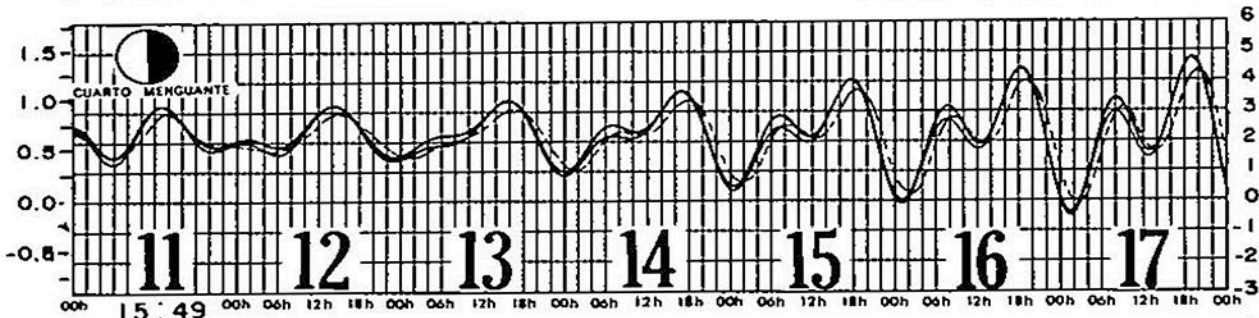
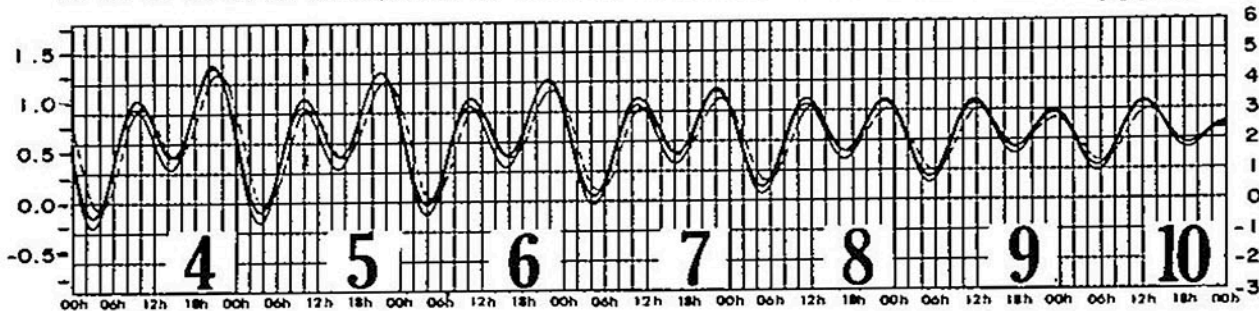
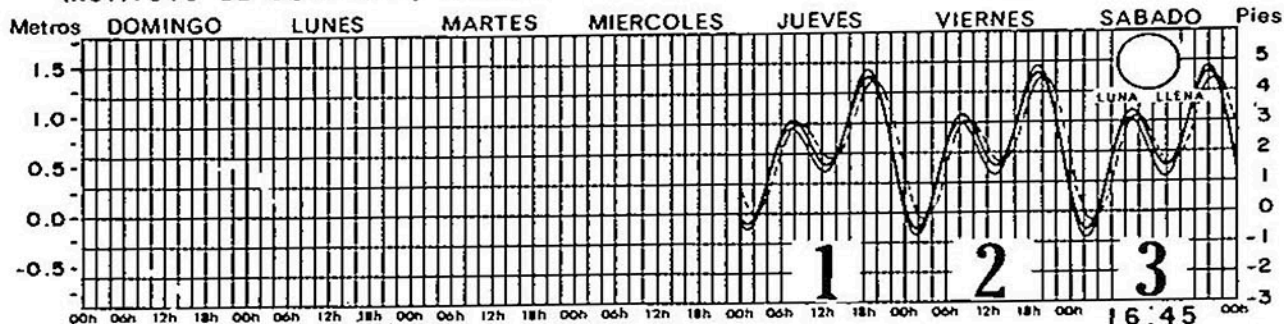


'ULIO' 1992

CABO SN. LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

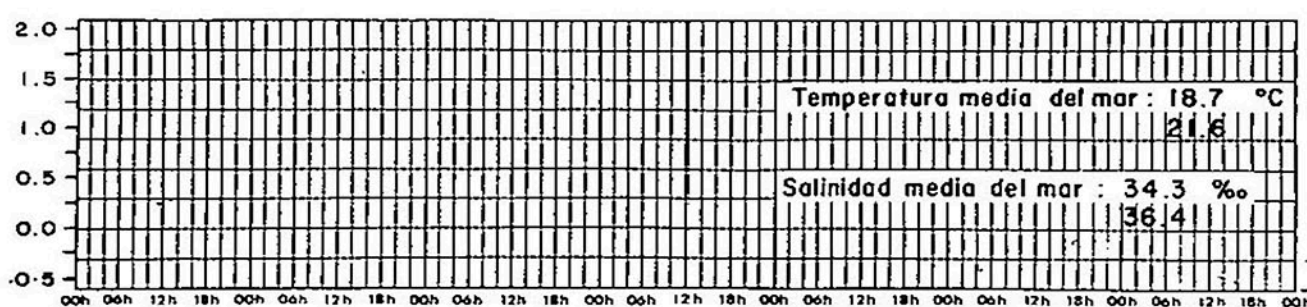
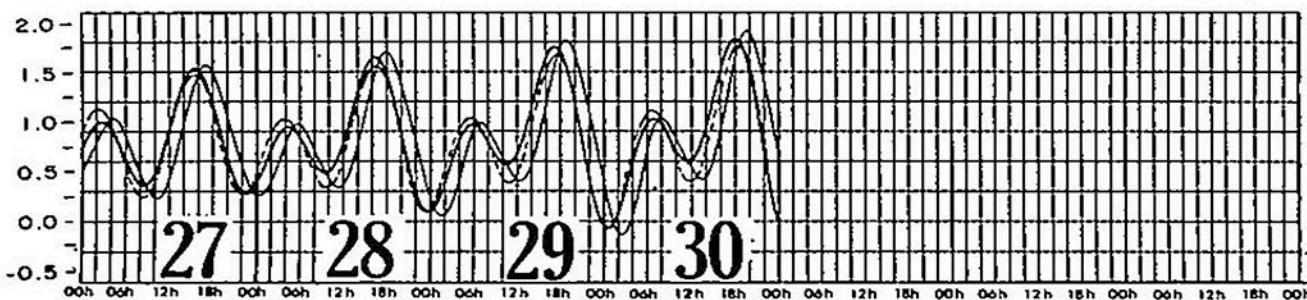
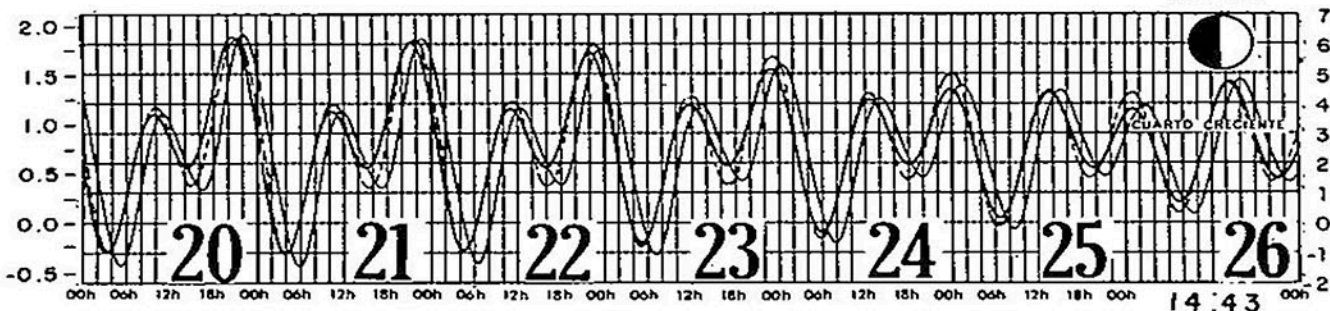
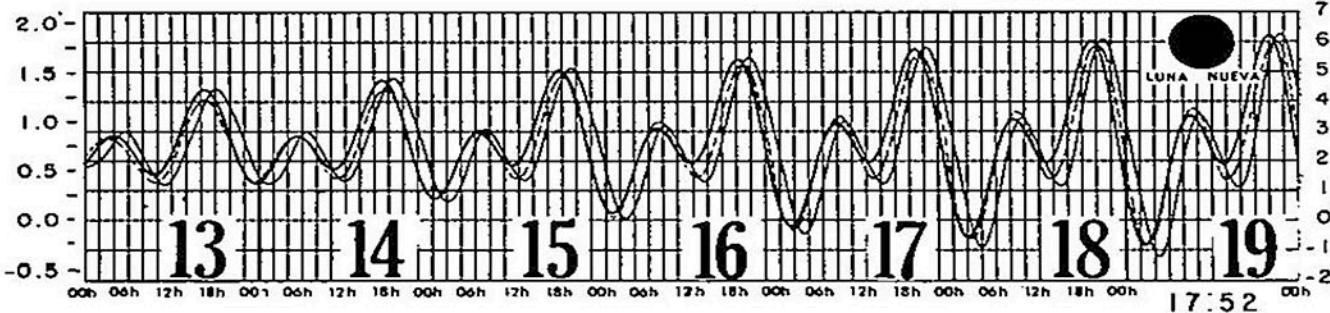
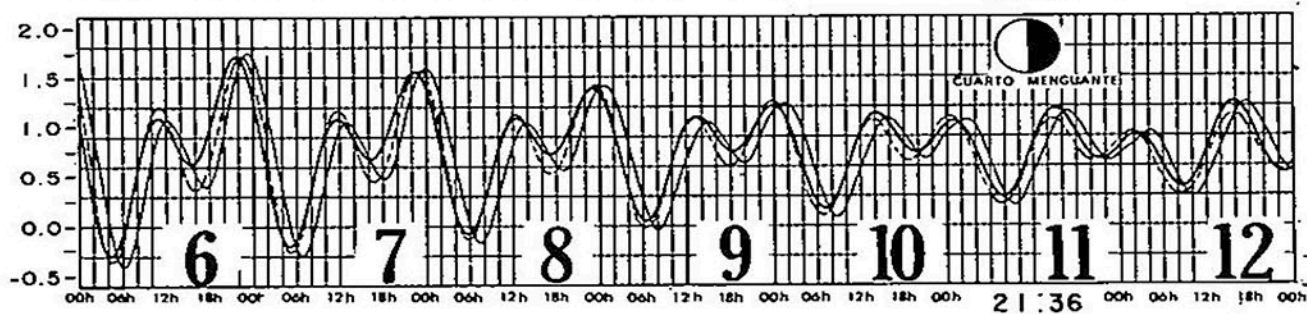
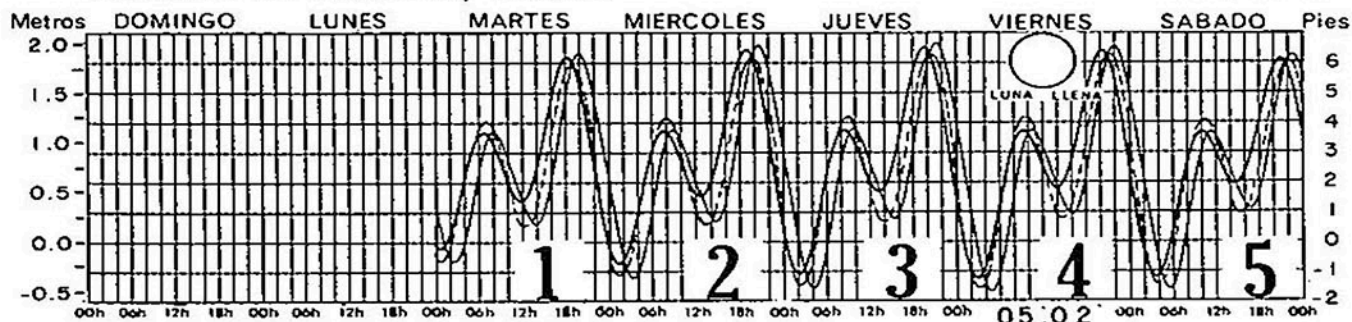


JUNIO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN CARLOS, B.C.S.



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



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

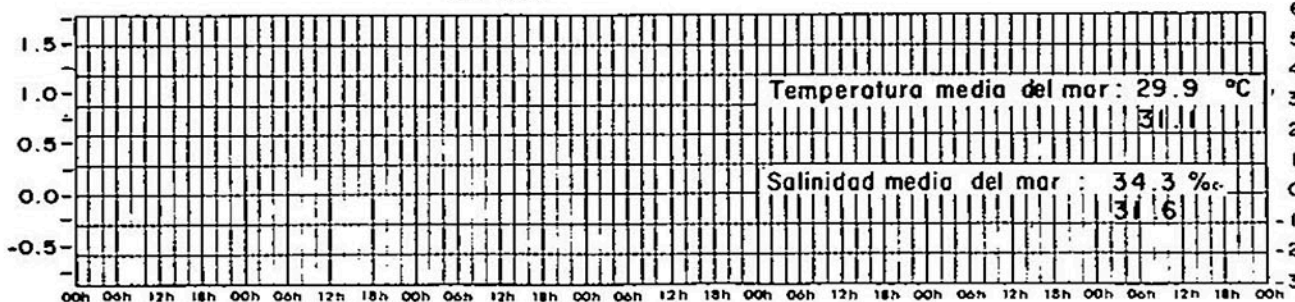
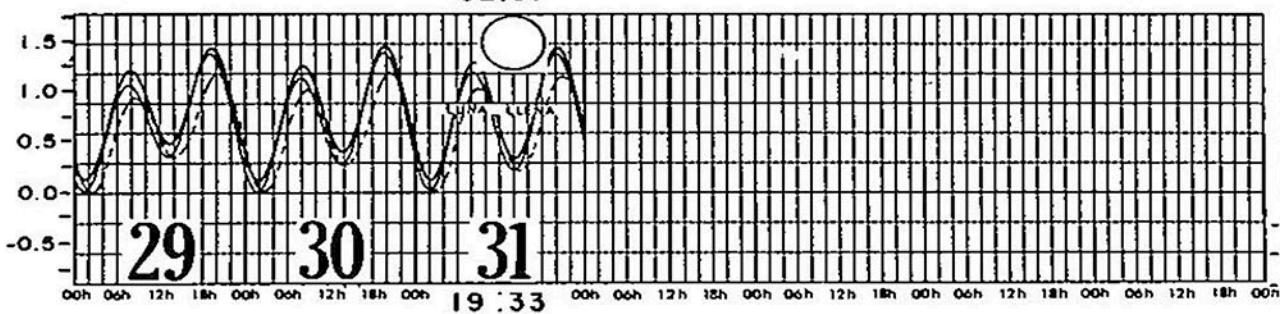
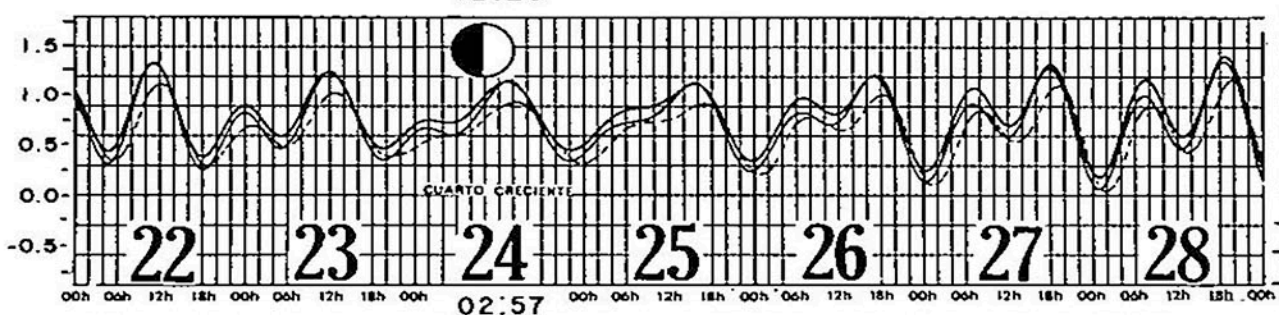
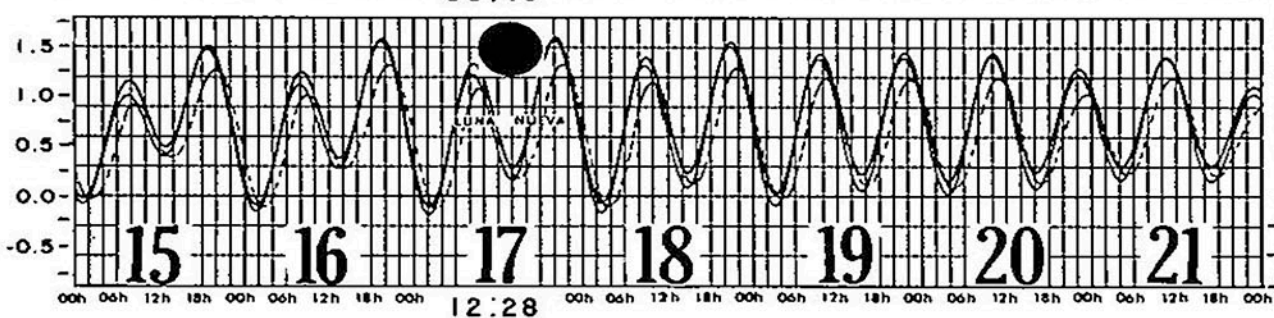
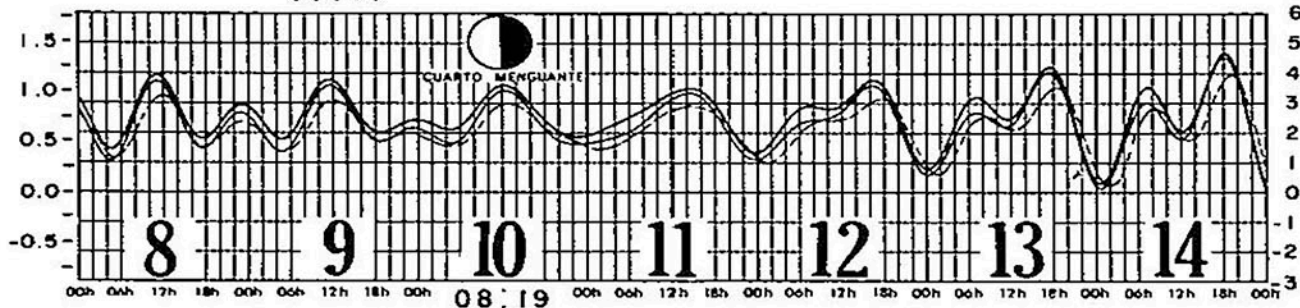
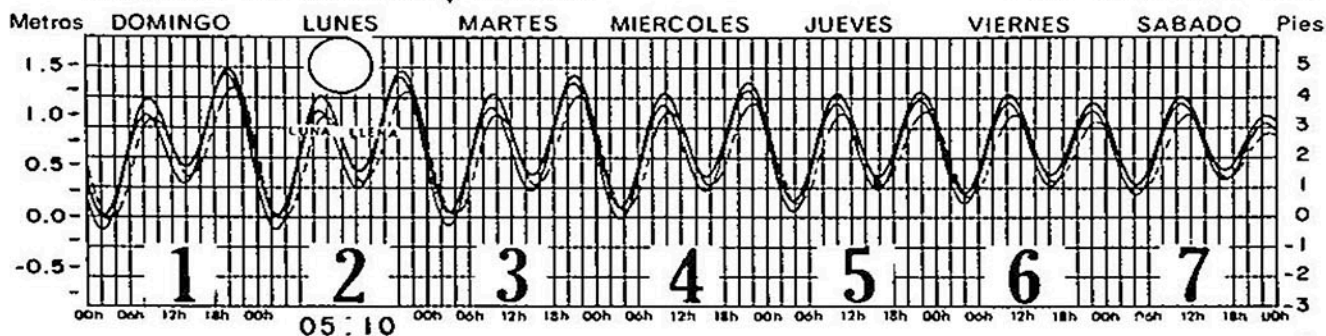


AGOSTO 993

CABO SN. LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.



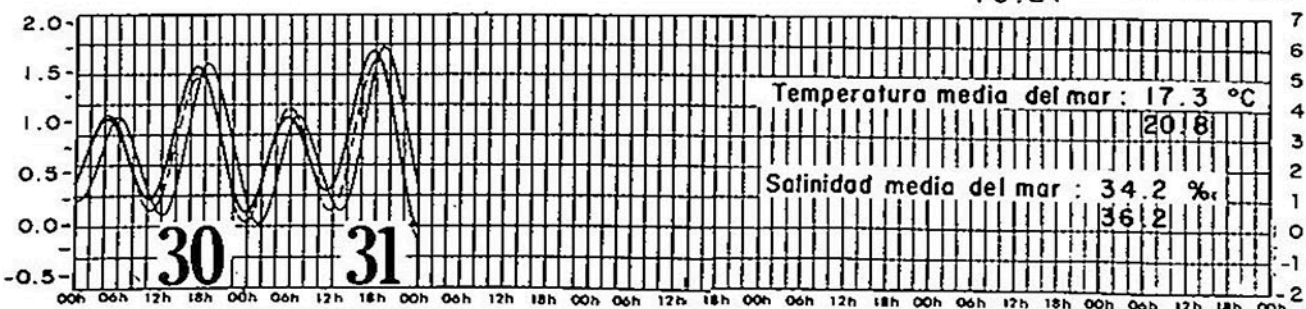
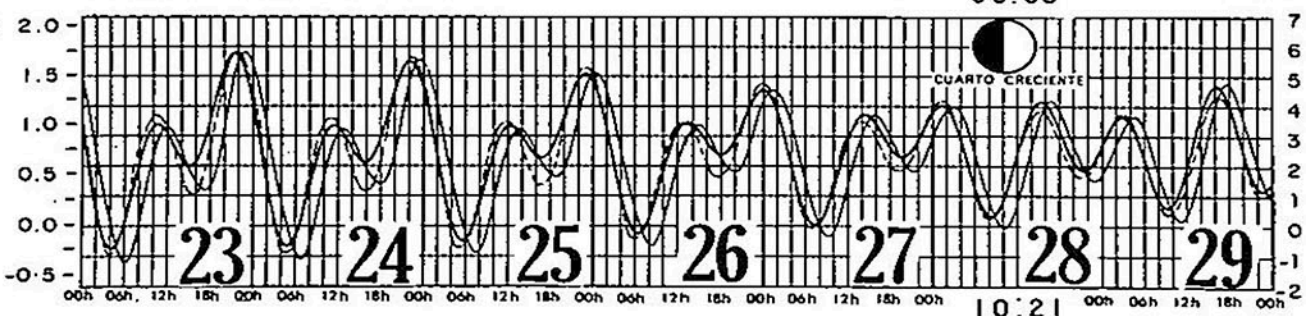
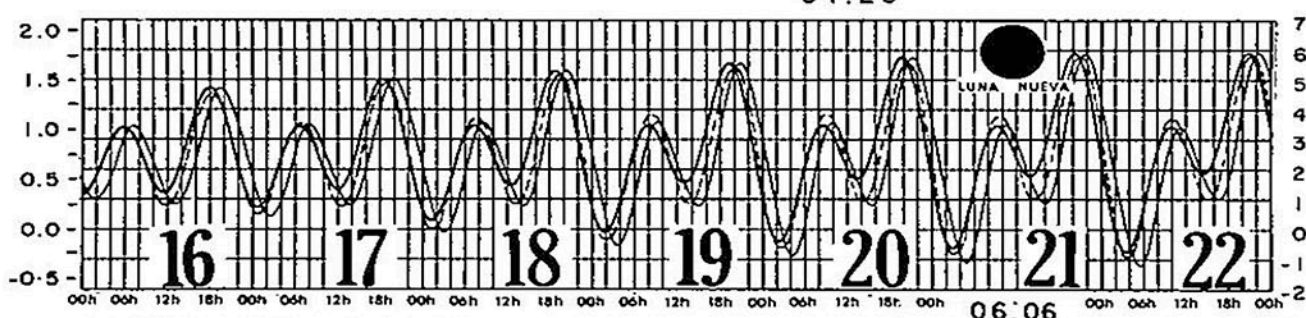
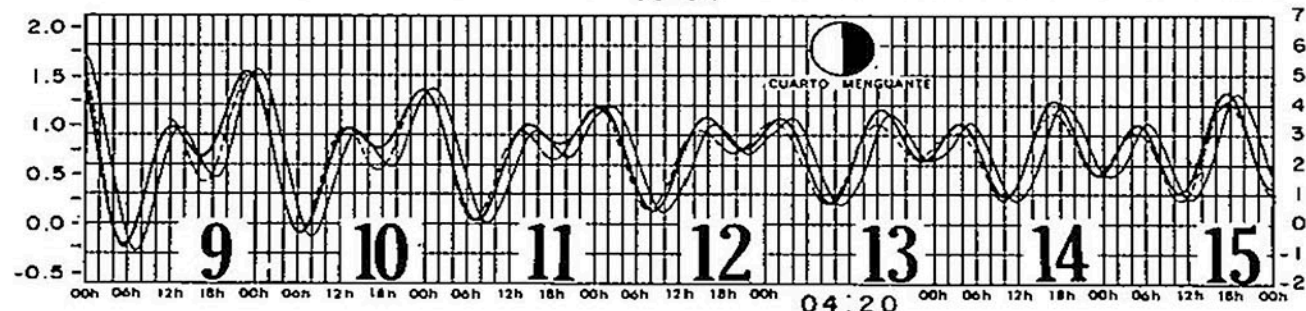
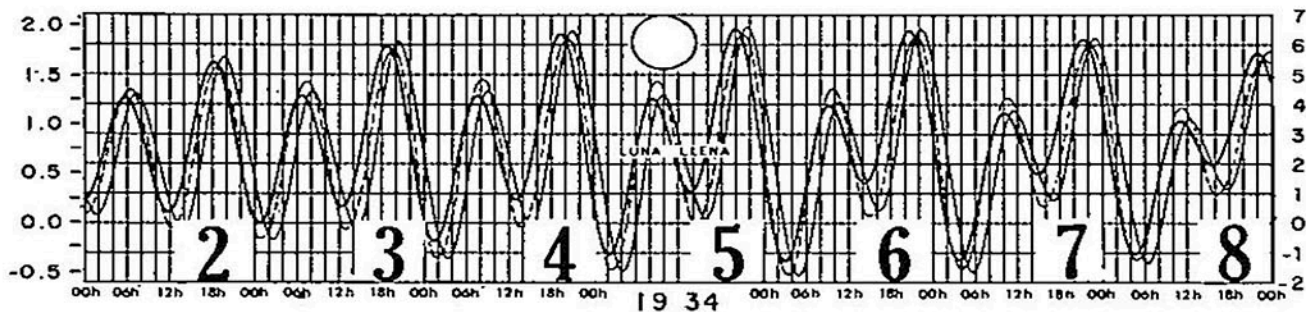
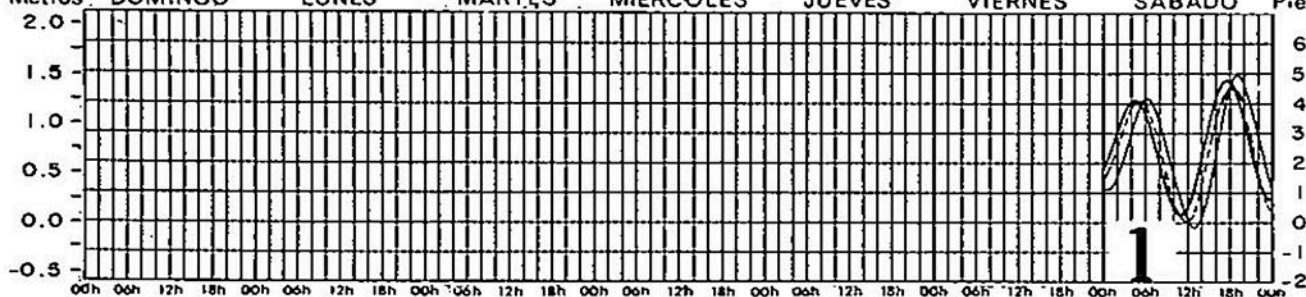
MAYO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN. CARLOS, B.C.S.



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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

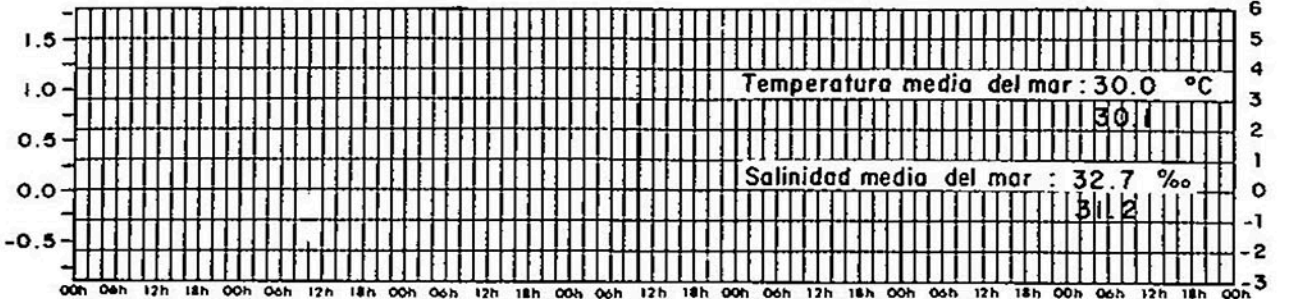
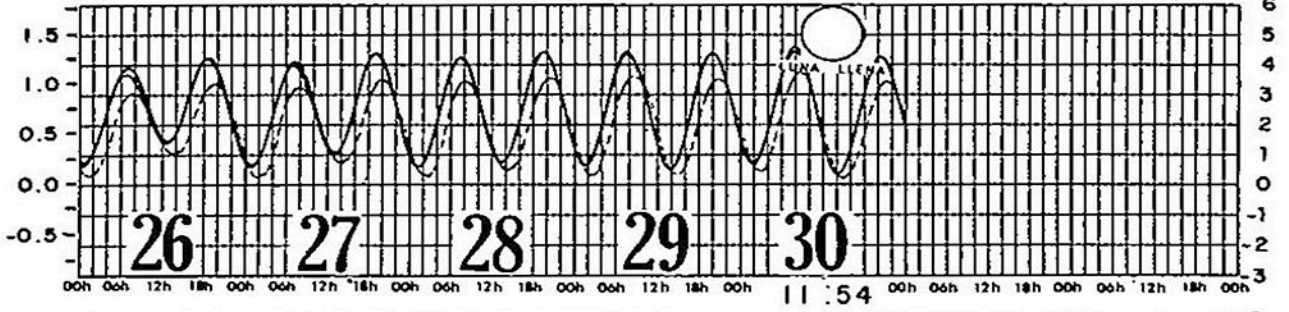
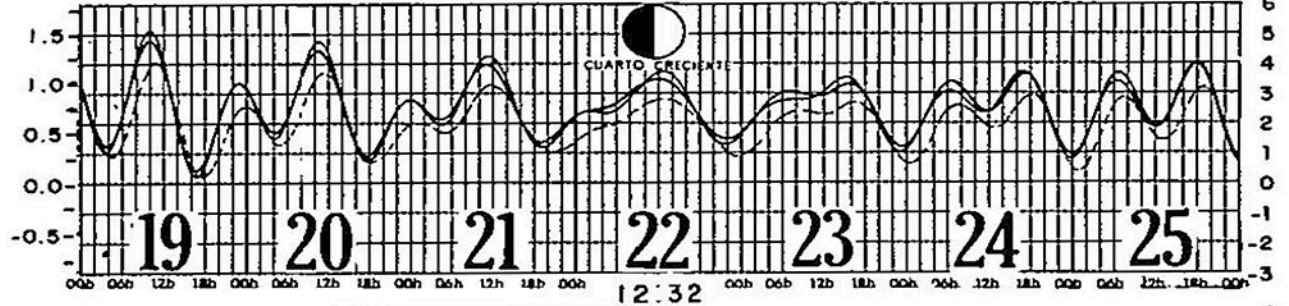
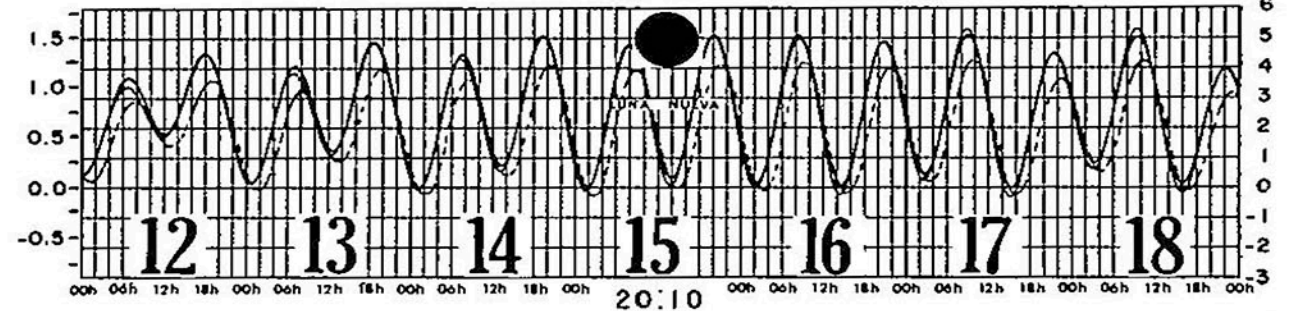
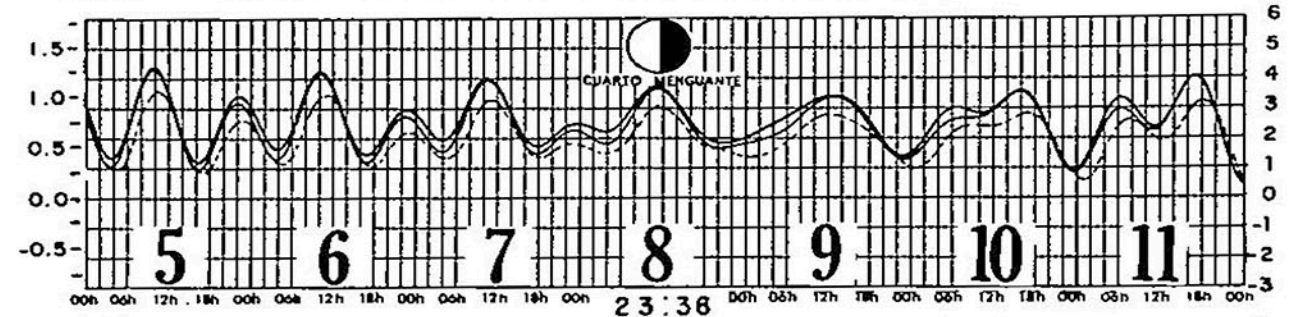
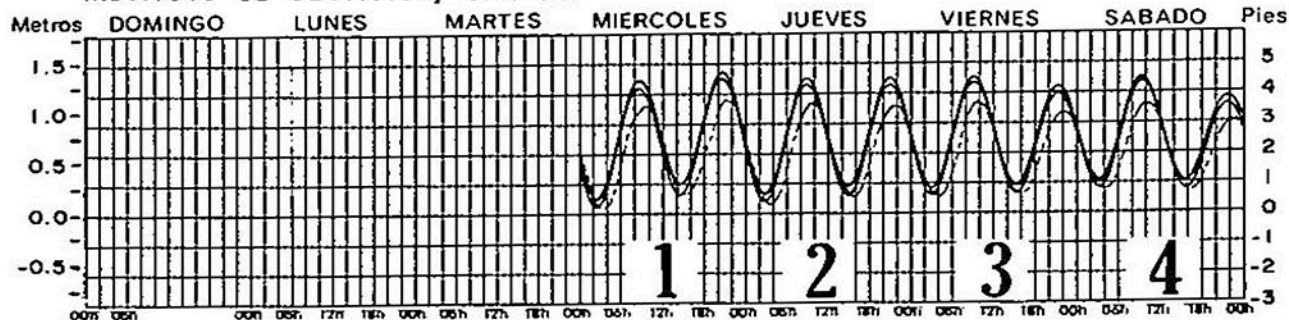


SEPTIEMBRE 1963

CABO SN. LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

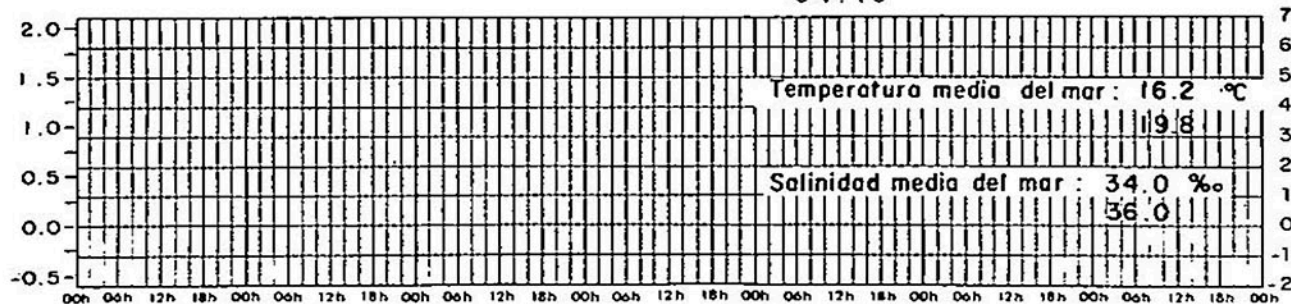
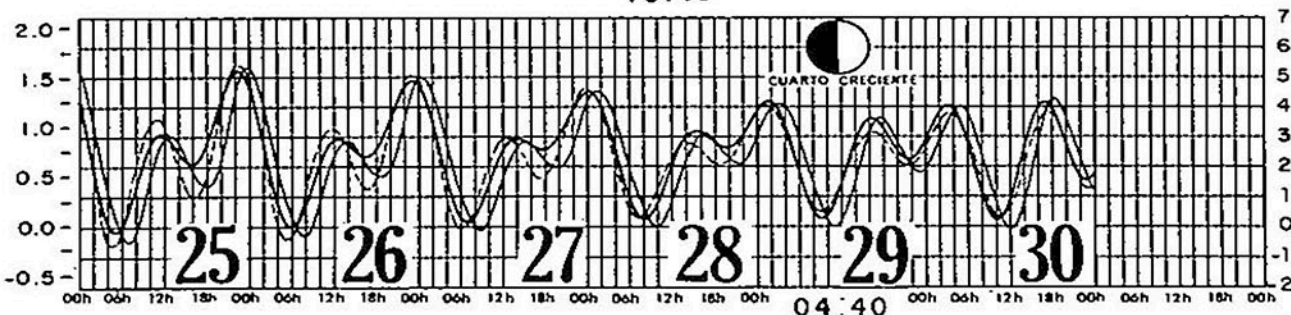
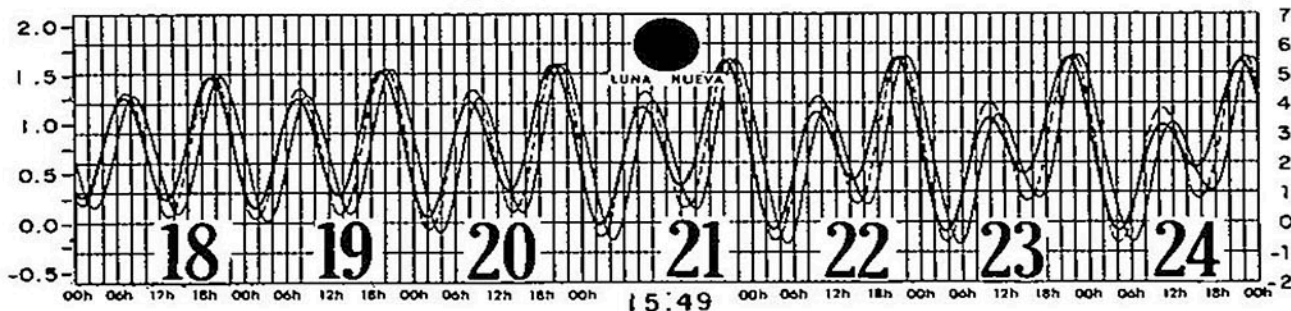
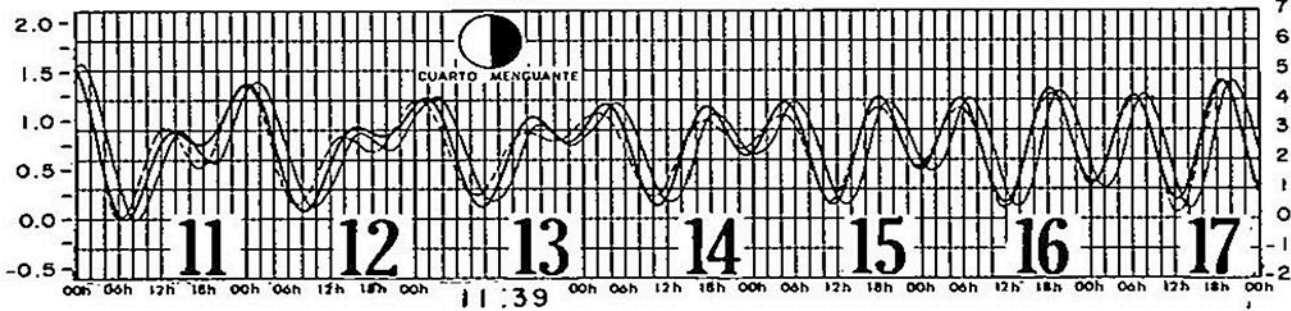
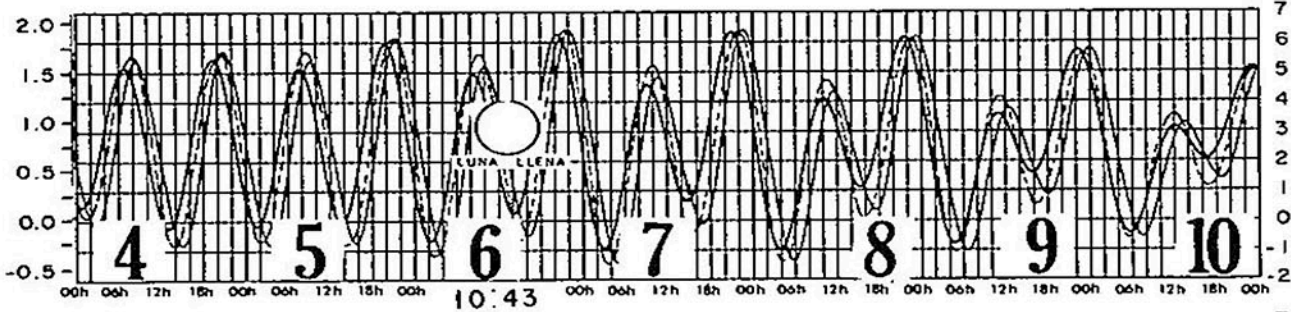
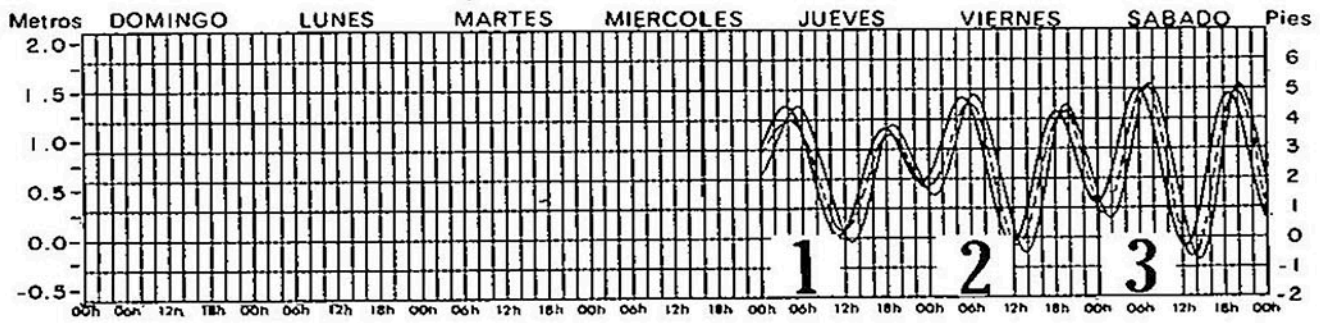


ABRIL 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN. CARLOS, B.C.S.



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



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

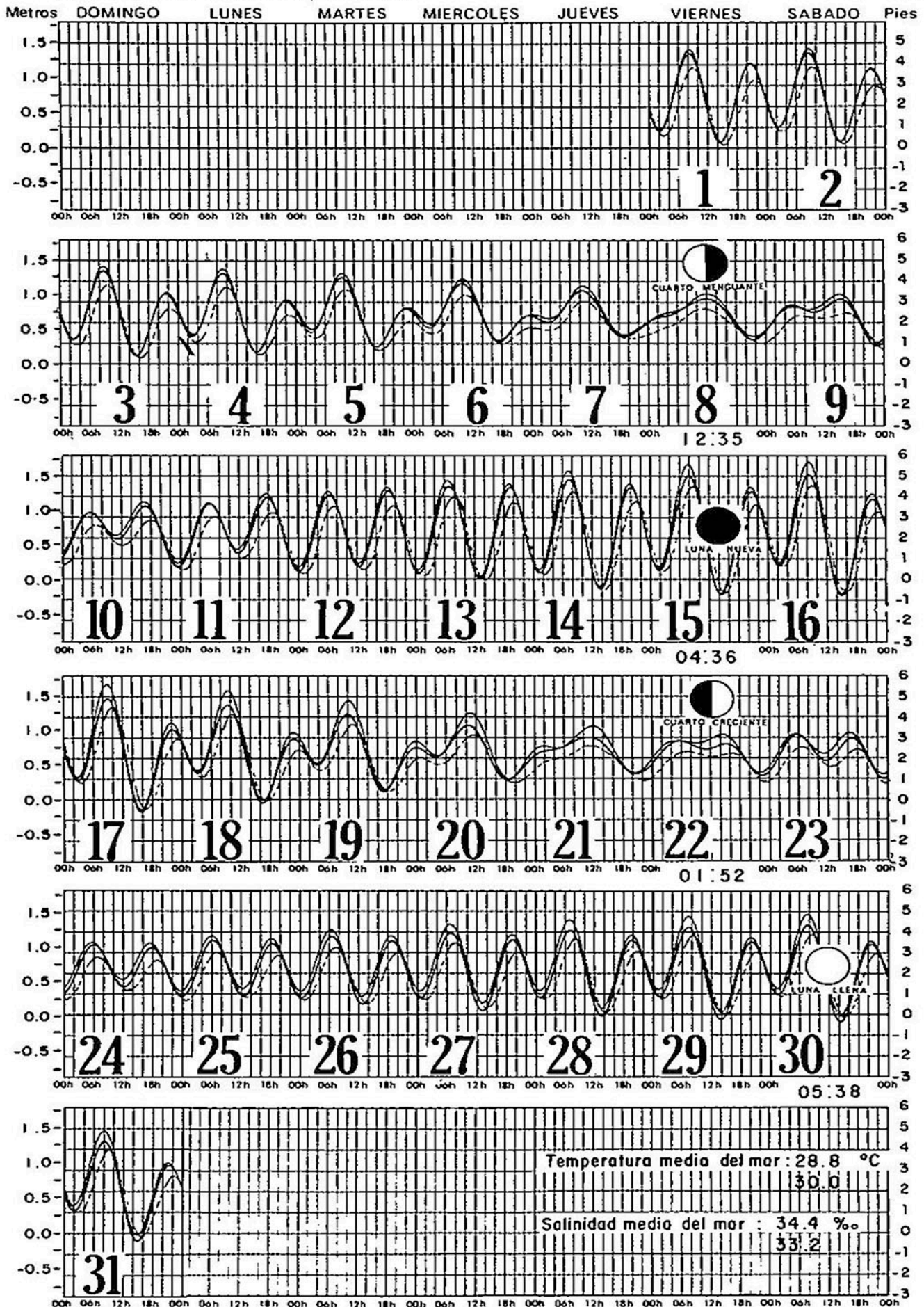


OCTUBRE 1993

CABO SN. LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



Temperatura media del mar : 28.8 °C

30.0

Salinidad media del mar : 34.4 ‰

33.2

HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

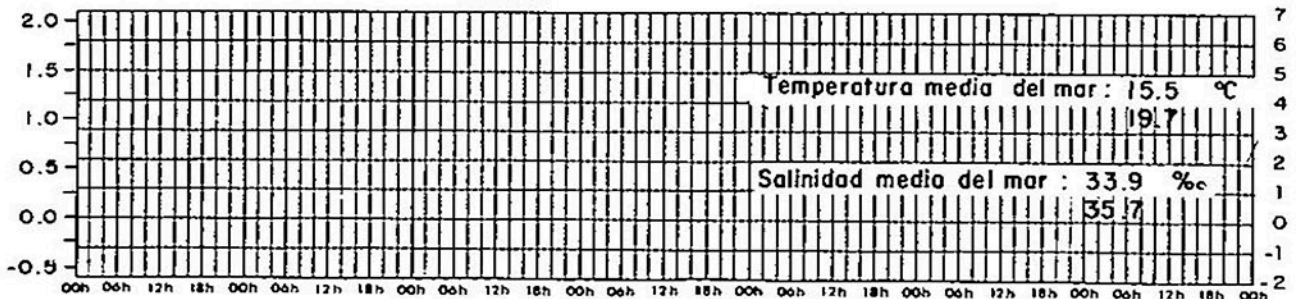
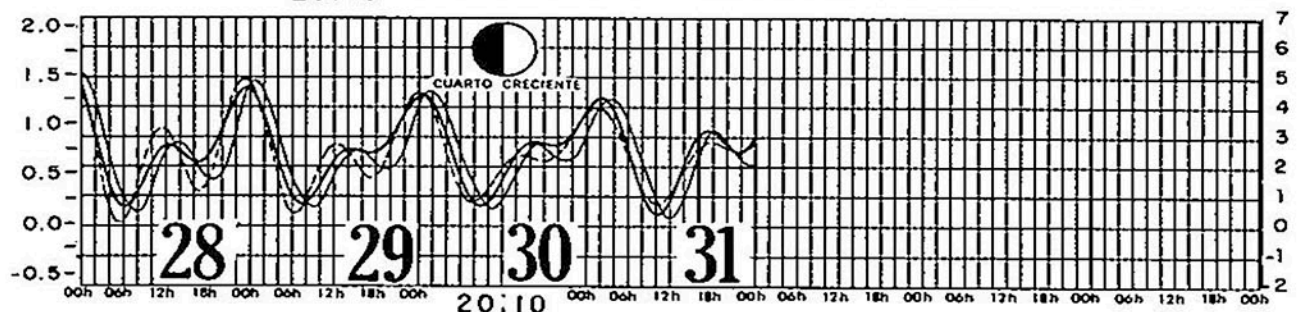
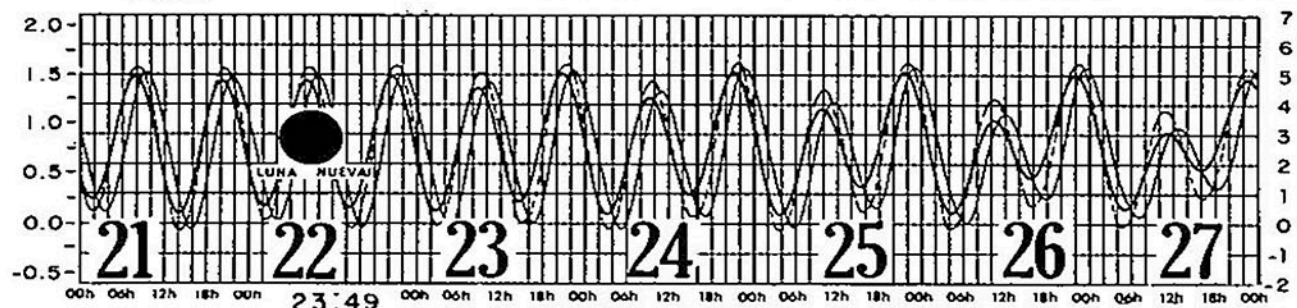
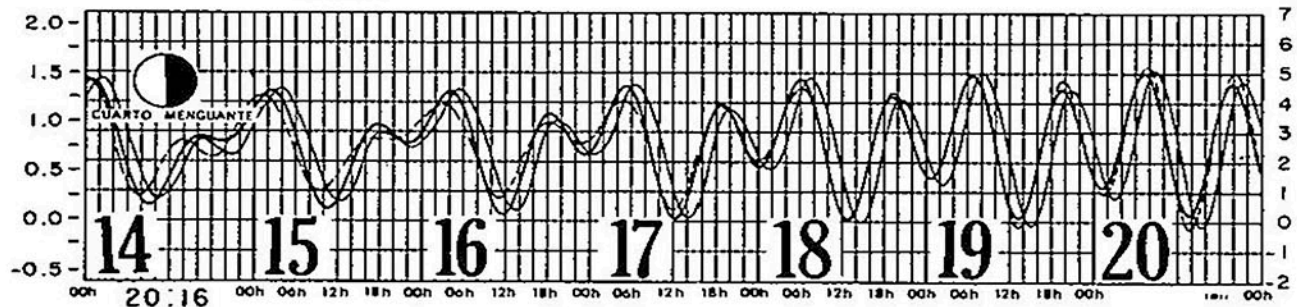
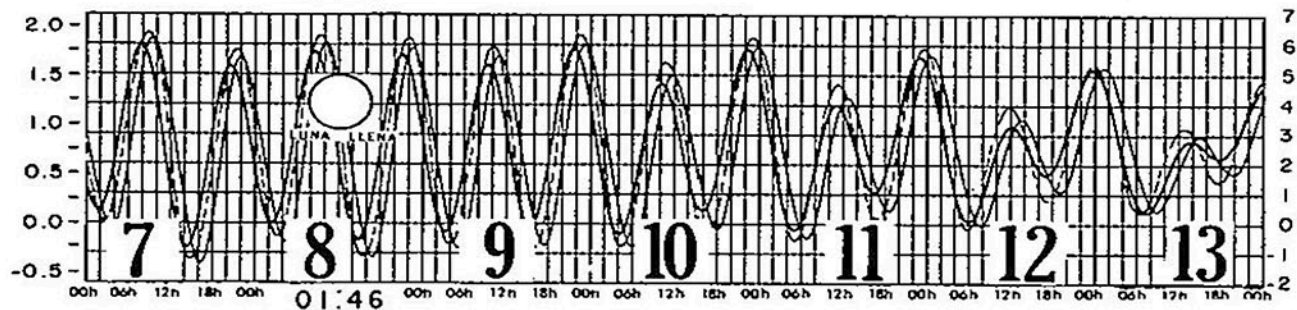
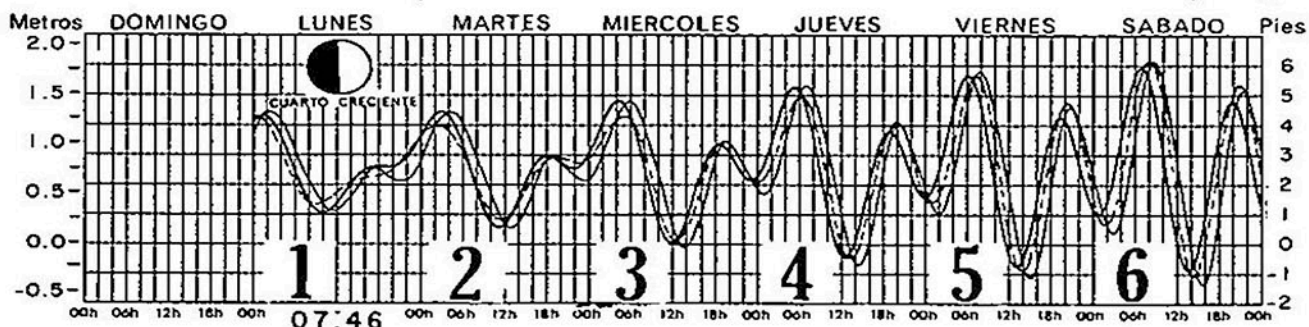


MARZO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN. CARLOS, B.C.S.



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

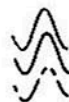


HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

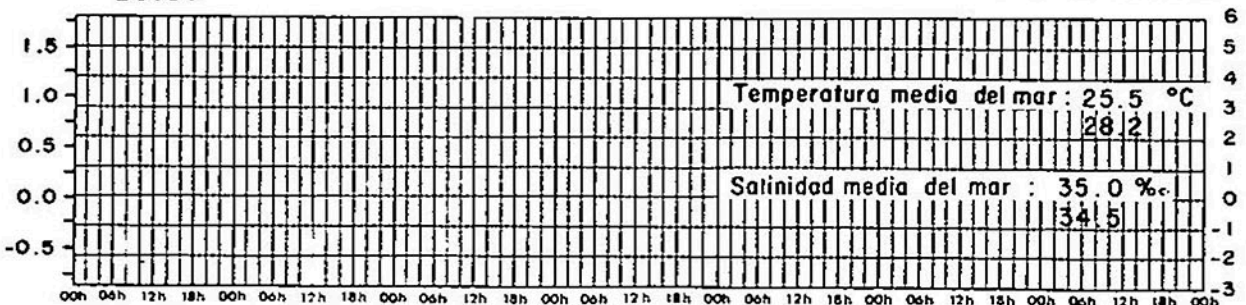
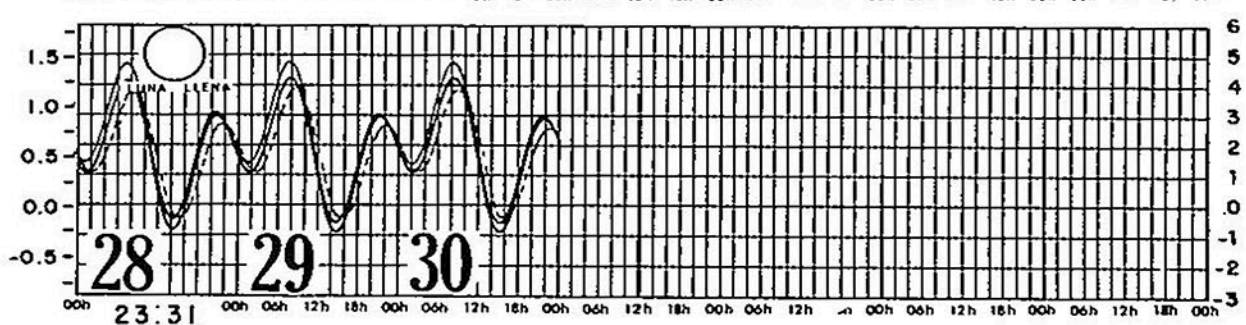
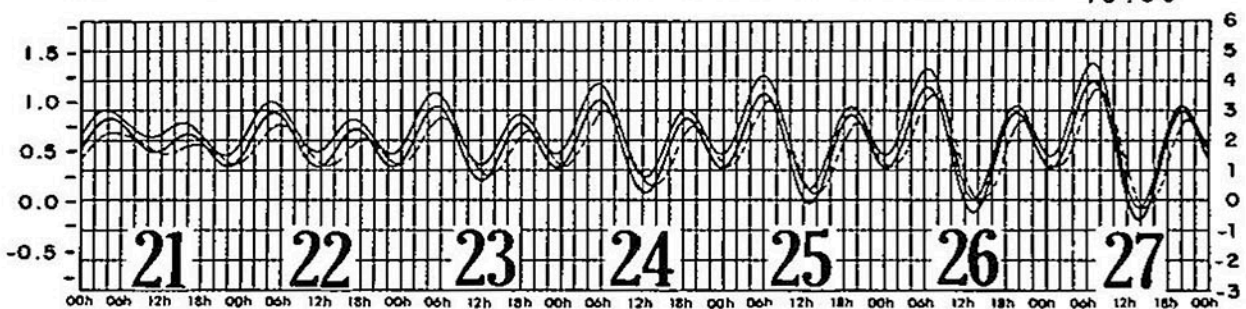
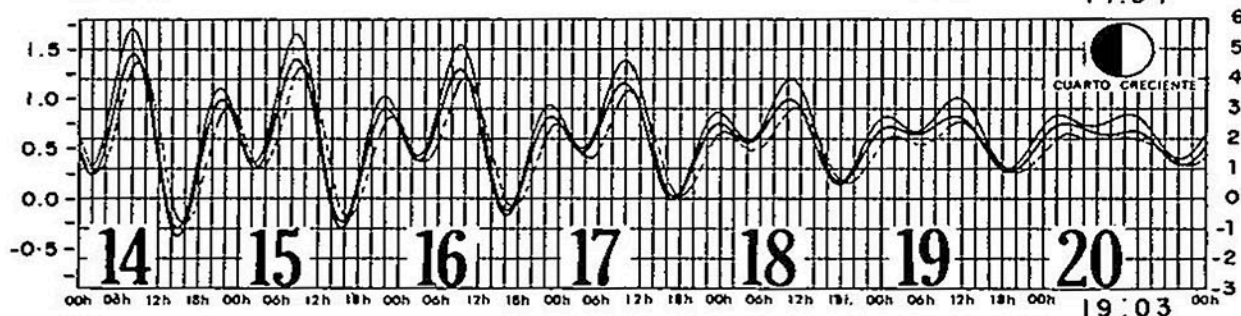
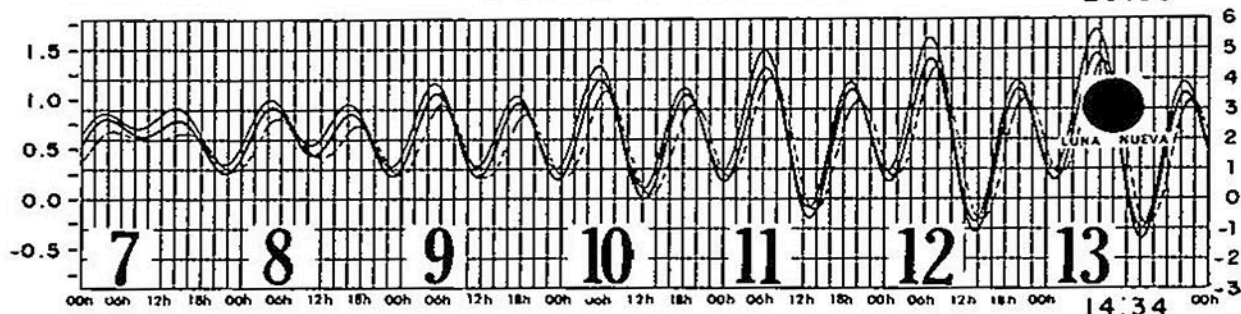
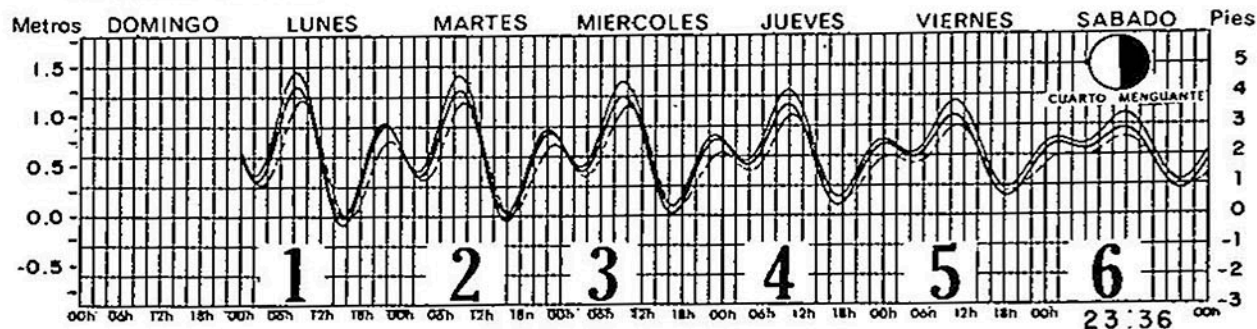
PLANO DE REFERENCIA N.B.M.I.

NOVIEMBRE 1993

CABO SAN LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

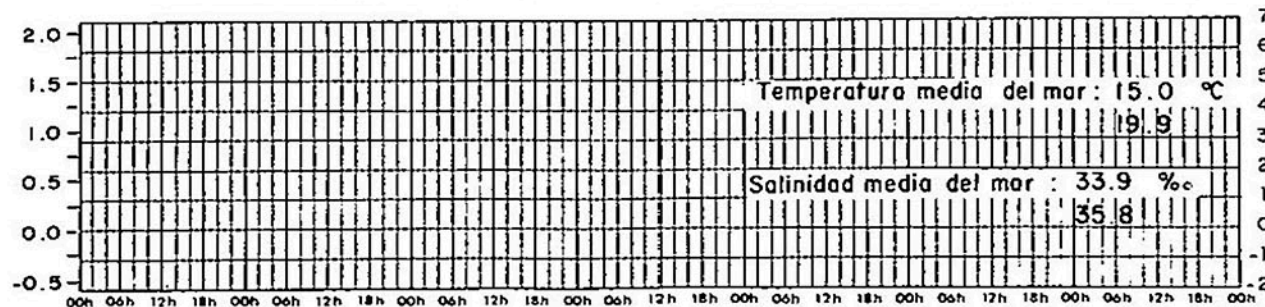
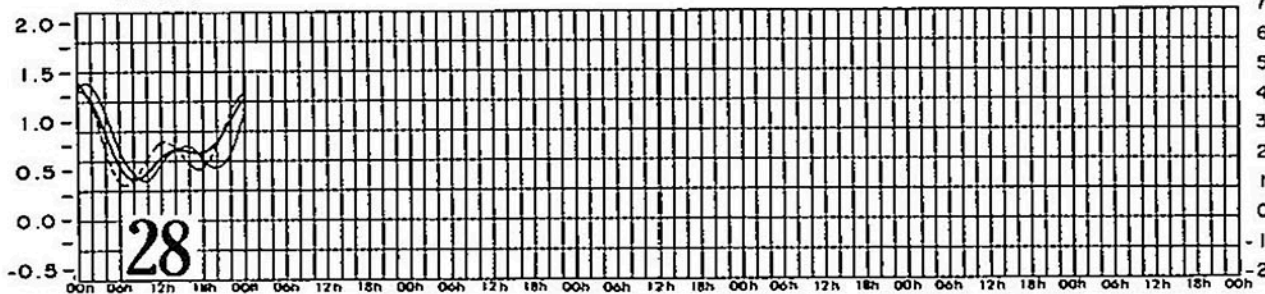
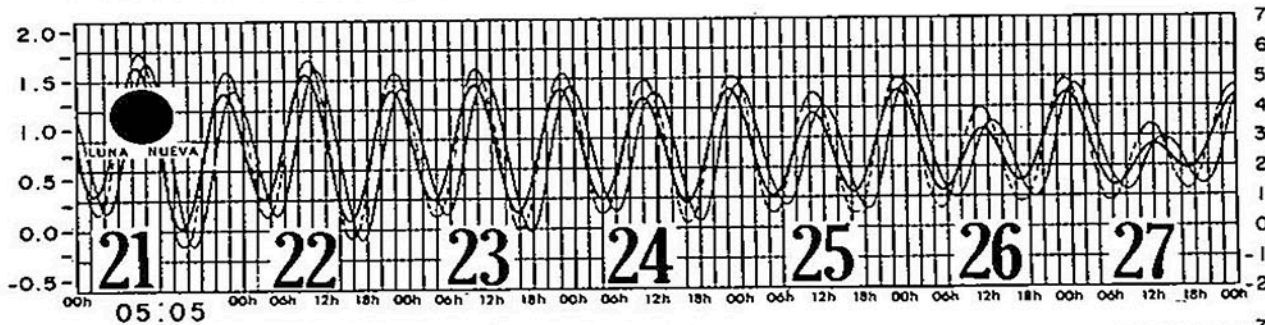
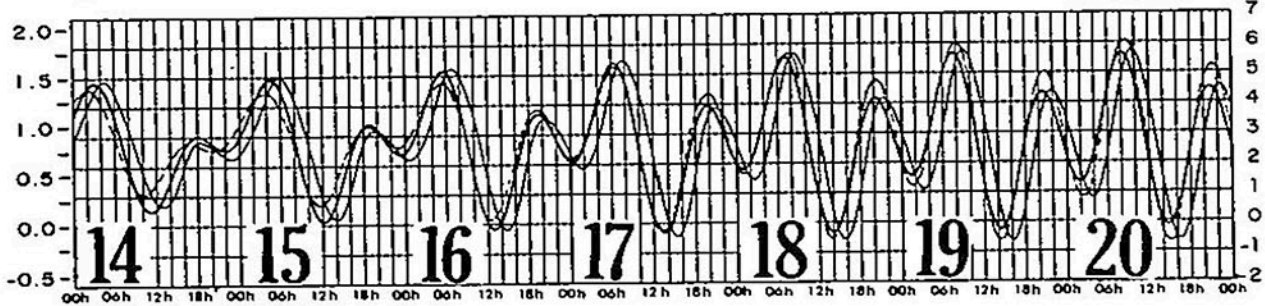
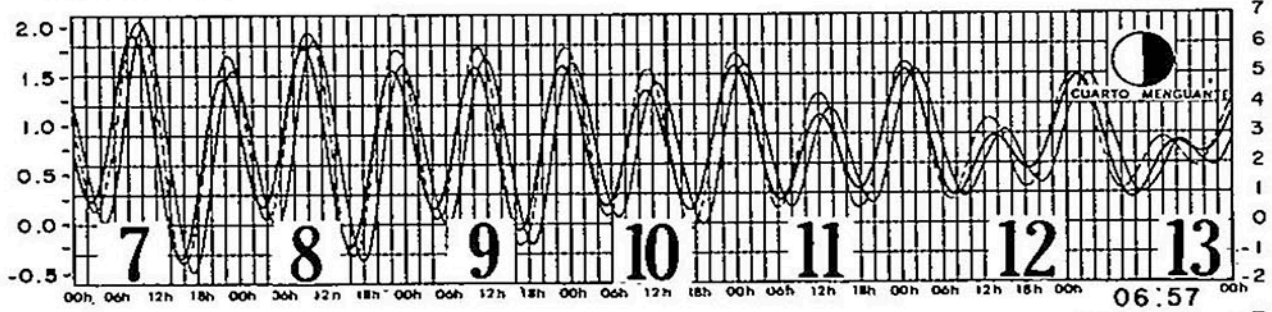
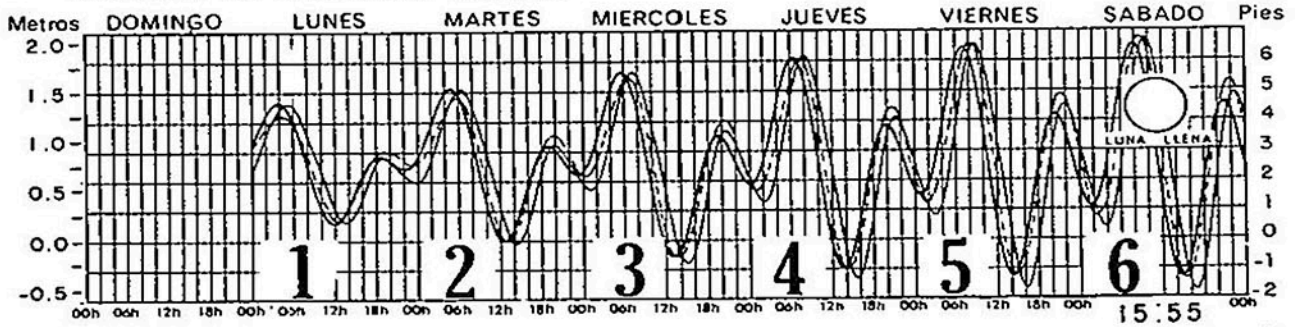


FEBREKO 1993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN. CARLOS, B.C.S.



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



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

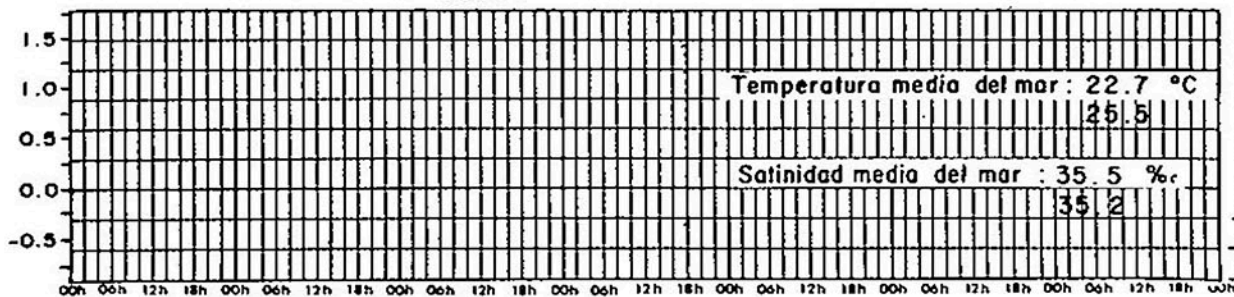
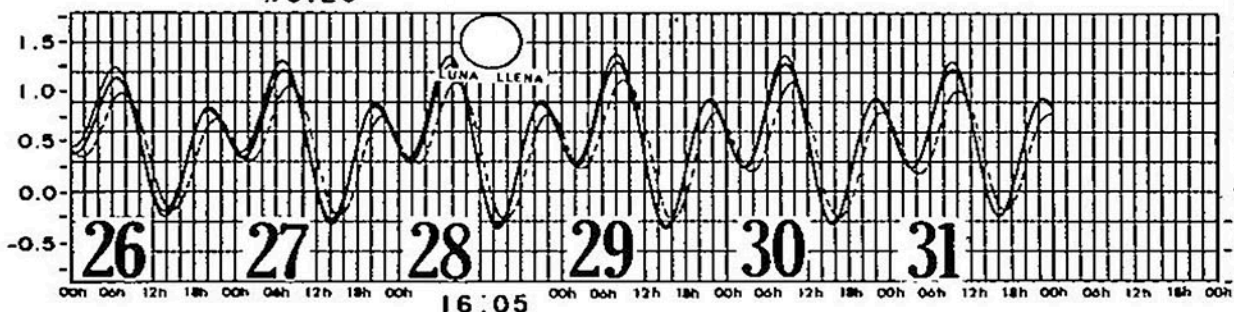
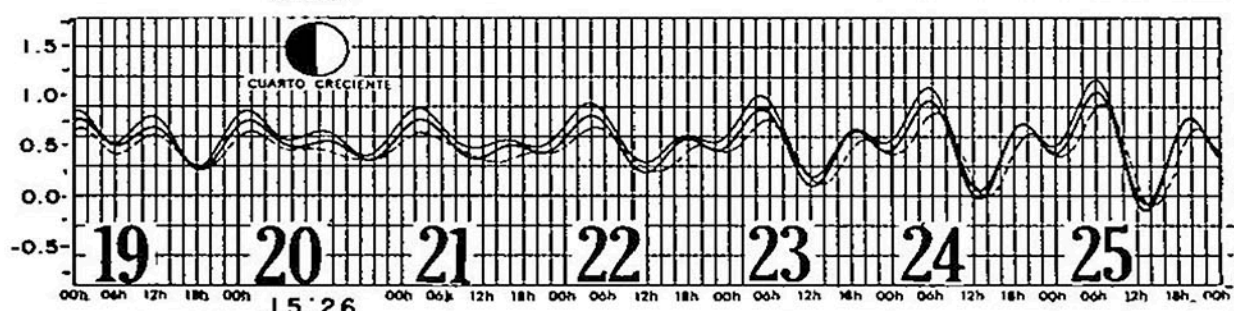
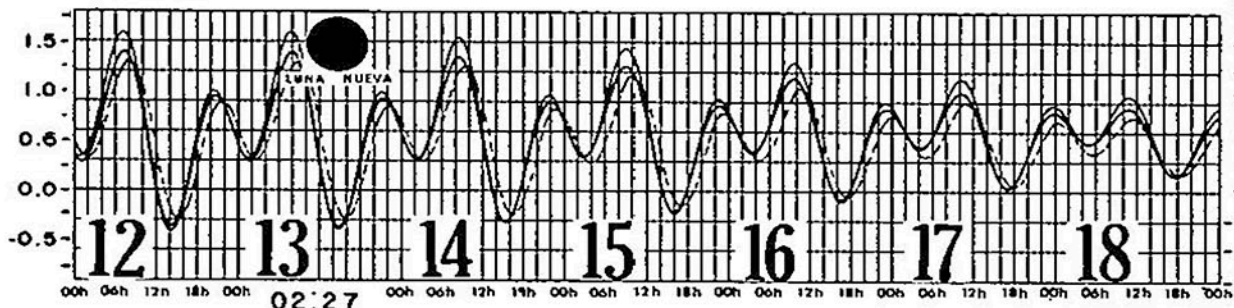
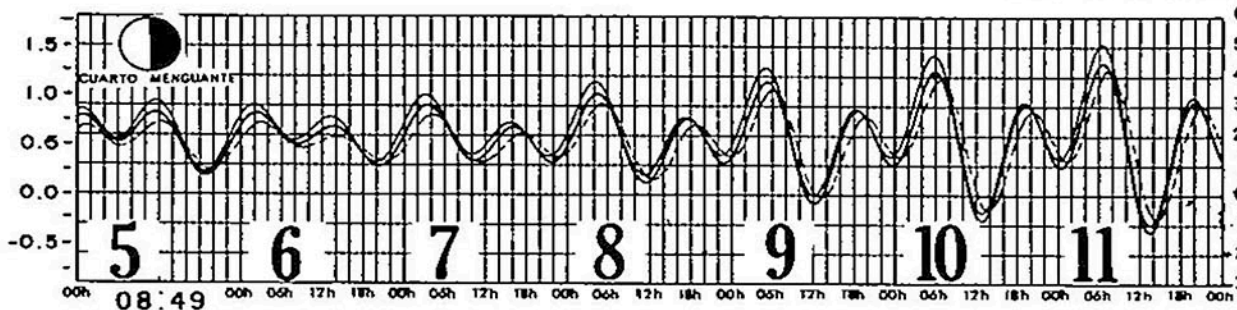
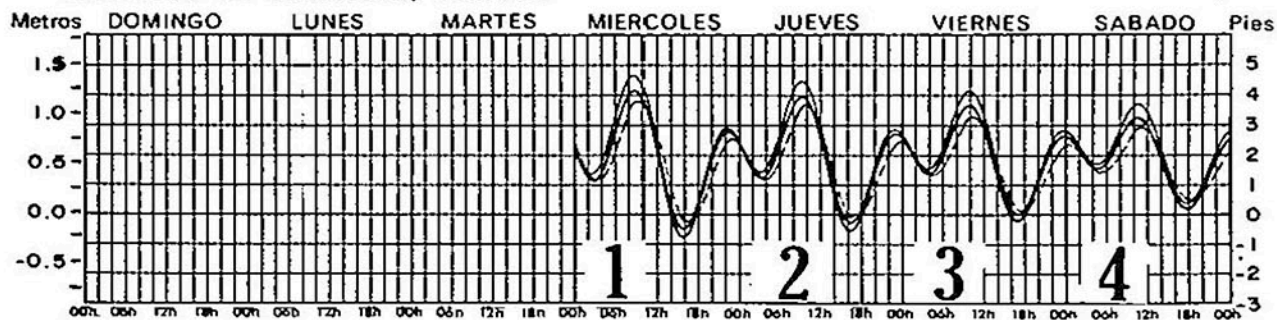


DICIEMBRE 1993

CABO SAN LUCAS, B.C.S.
MAZATLAN, SIN.
PTO. VALLARTA, JAL.



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



HORA DEL MERIDIANO 105° W
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.



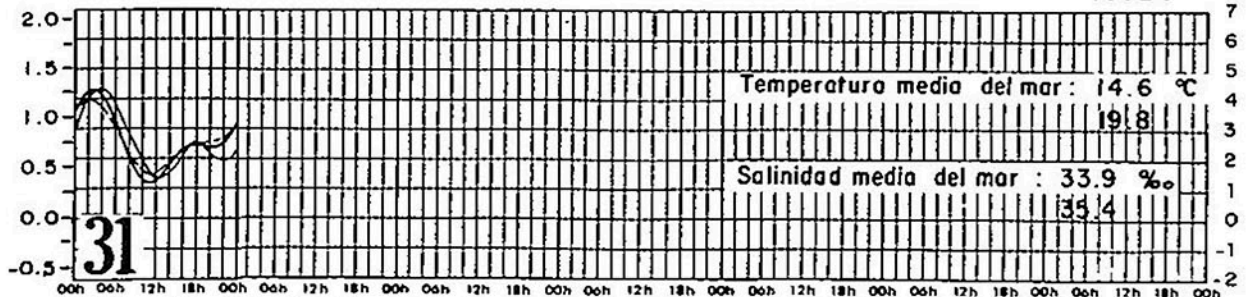
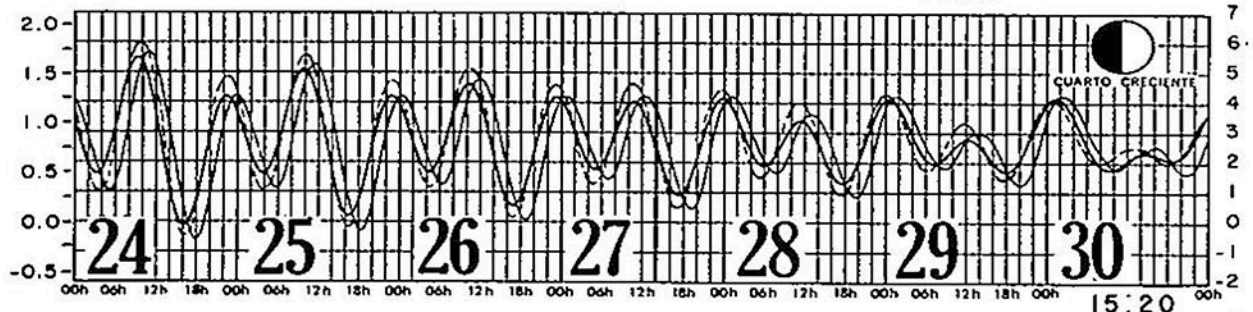
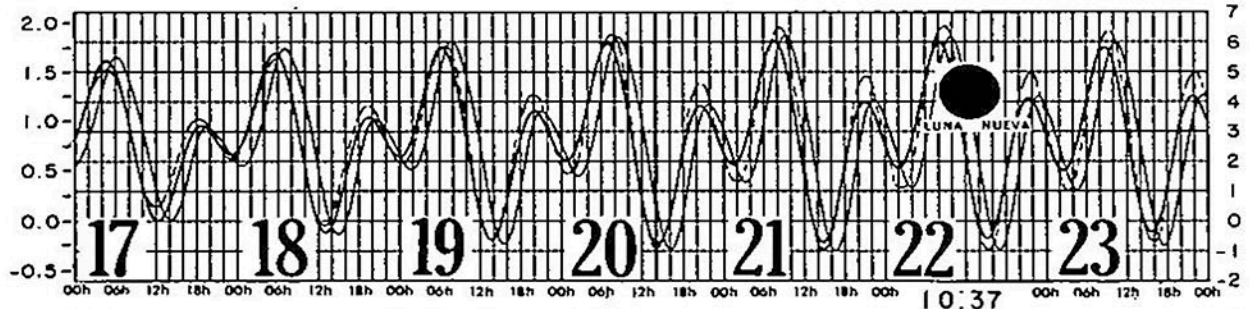
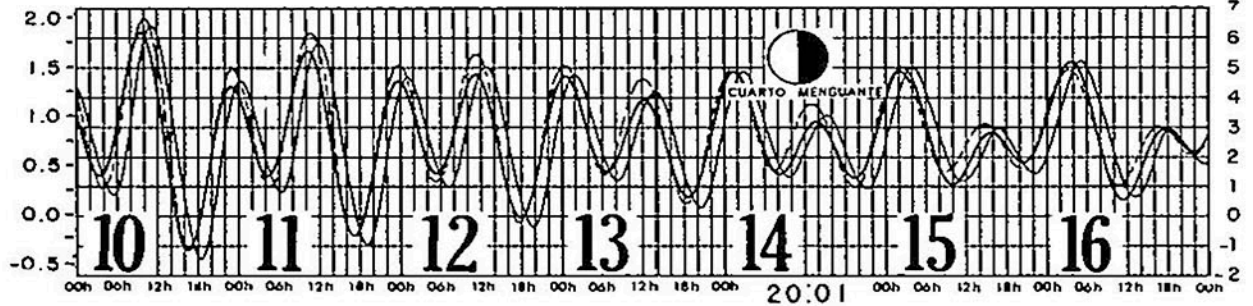
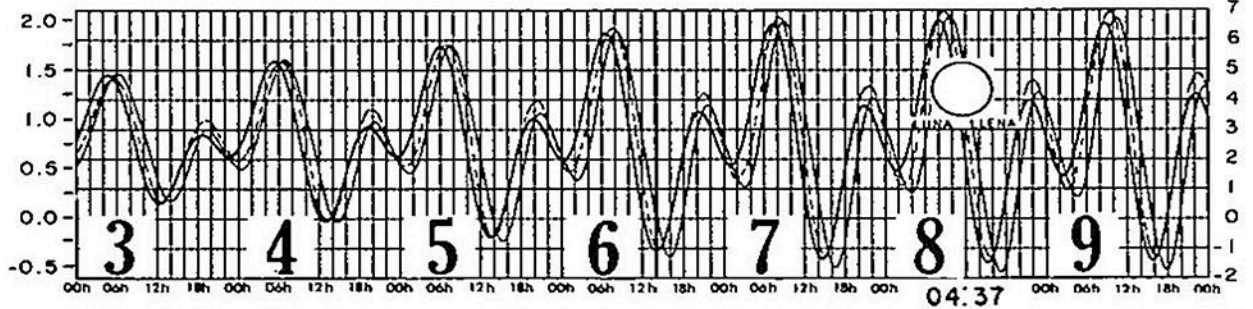
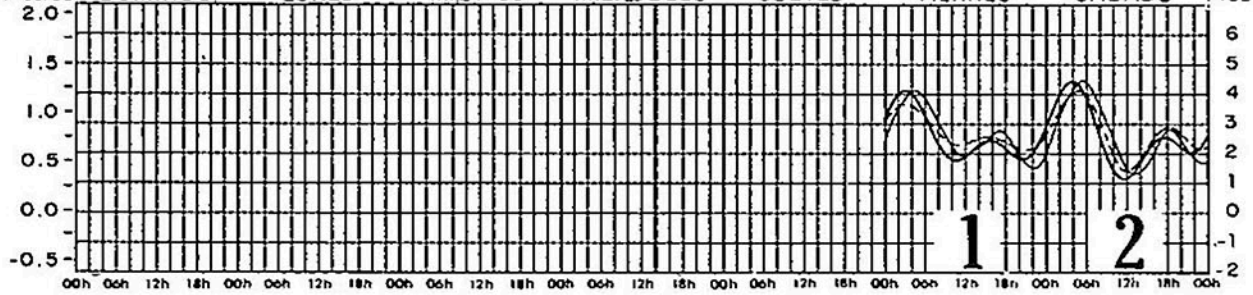
ENTRO 993

ENSENADA, B.C.
GRO. NEGRO, B.C.S.
SAN CARLOS, B.C.S.



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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 120° W
HORA DEL MERIDIANO 105° W

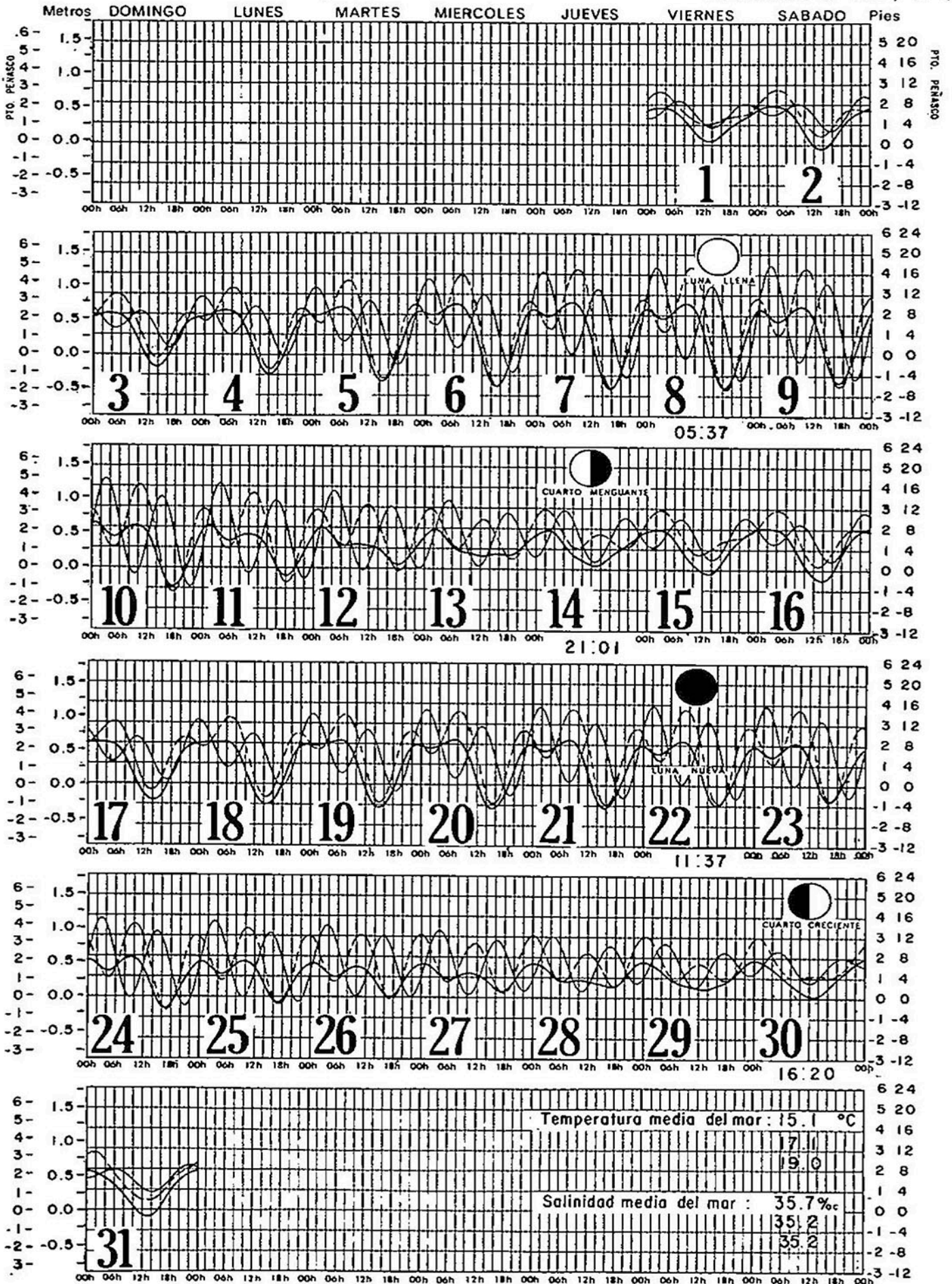
PLANO DE REFERENCIA N.B.M.I.



ENERO 1993

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

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.8 M. I.



DICIEMBRE 1993

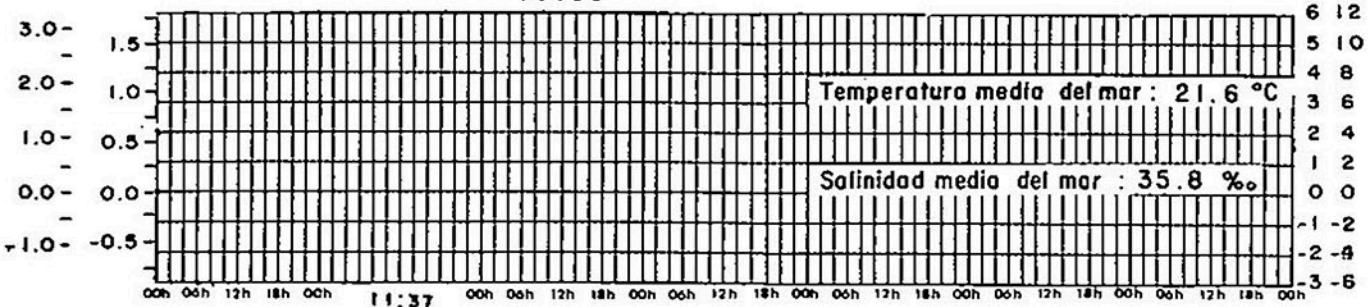
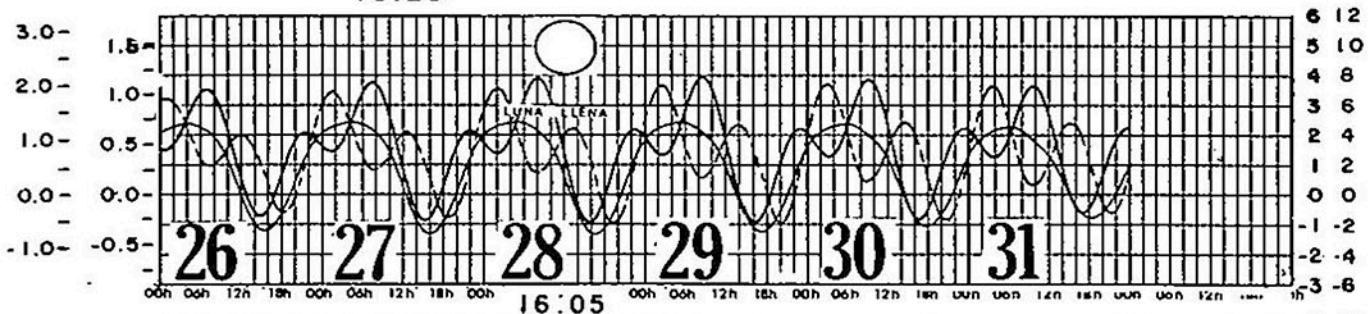
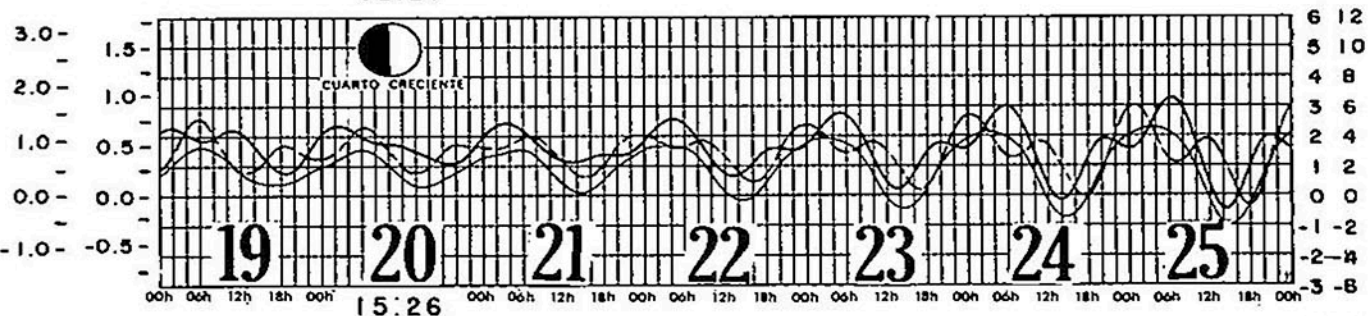
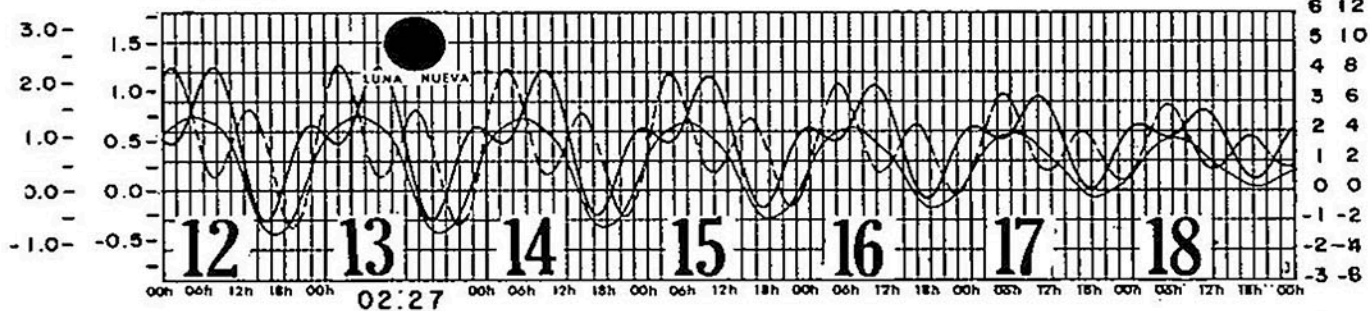
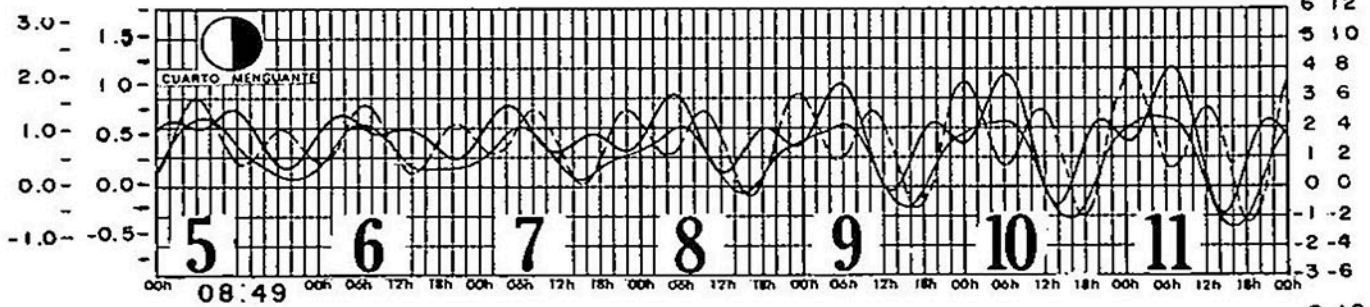
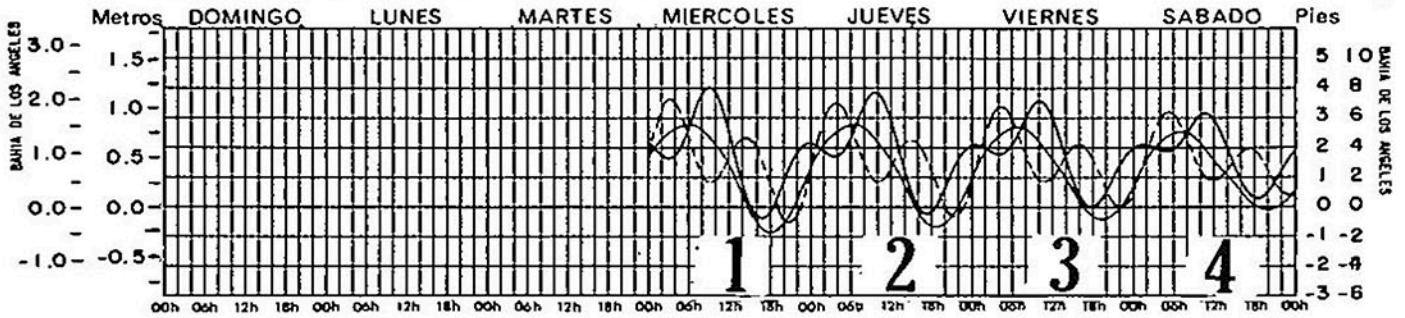
B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

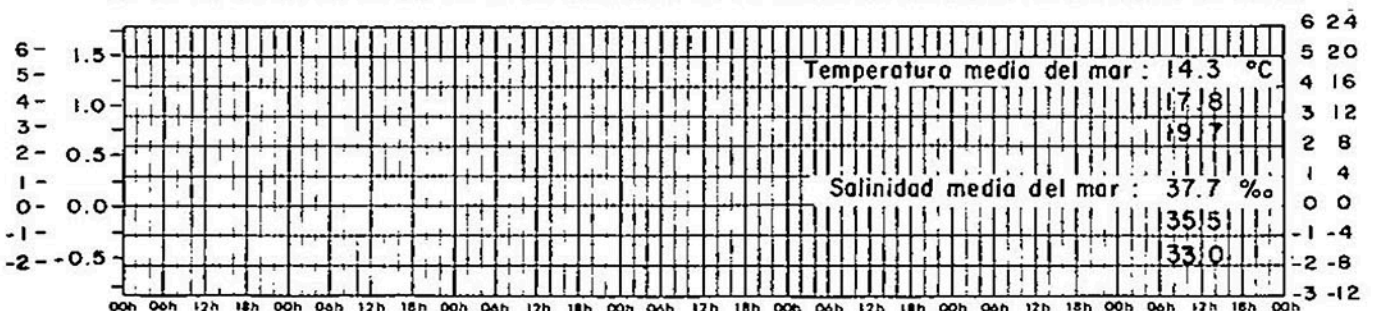
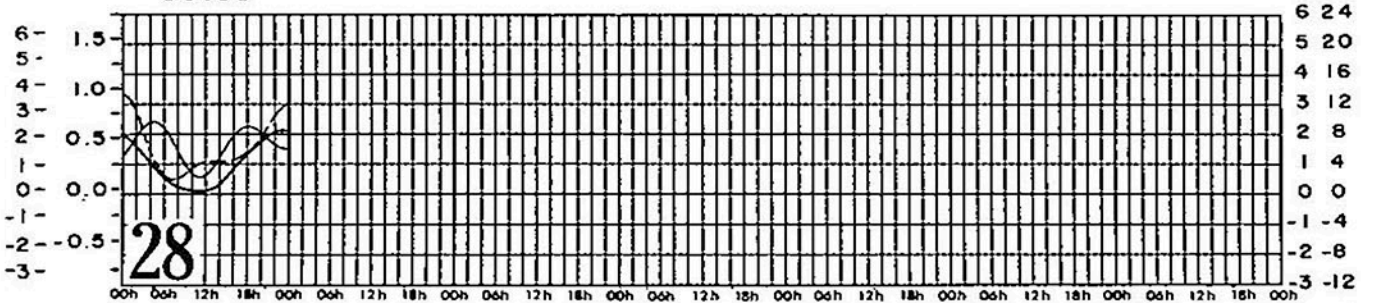
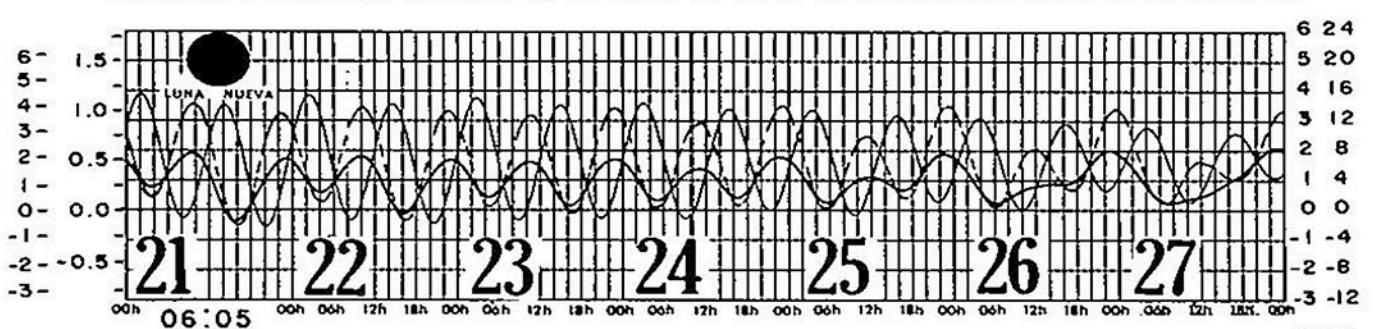
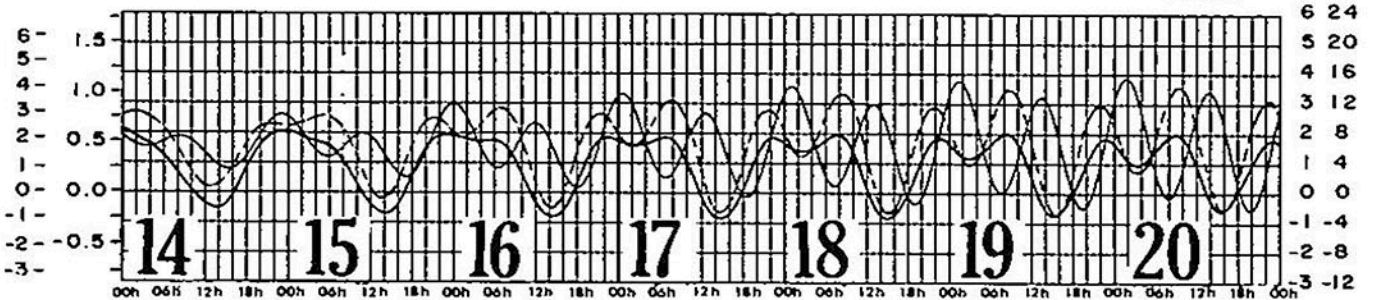
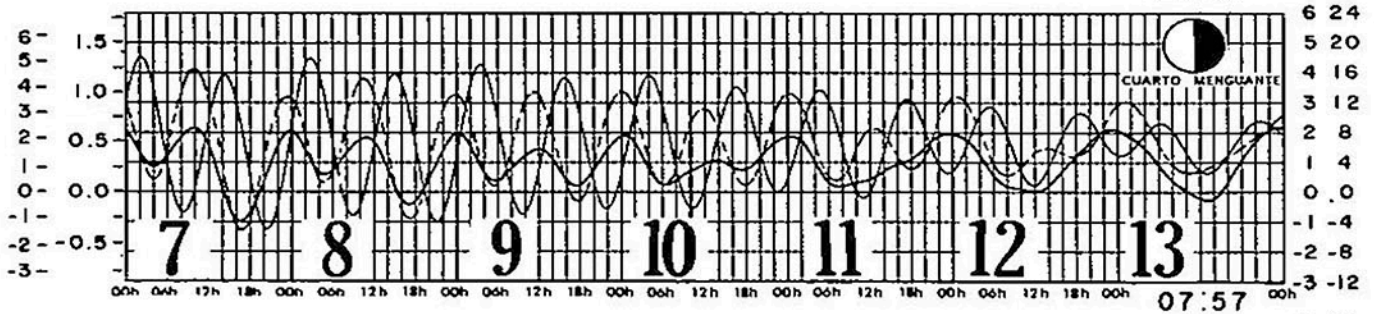
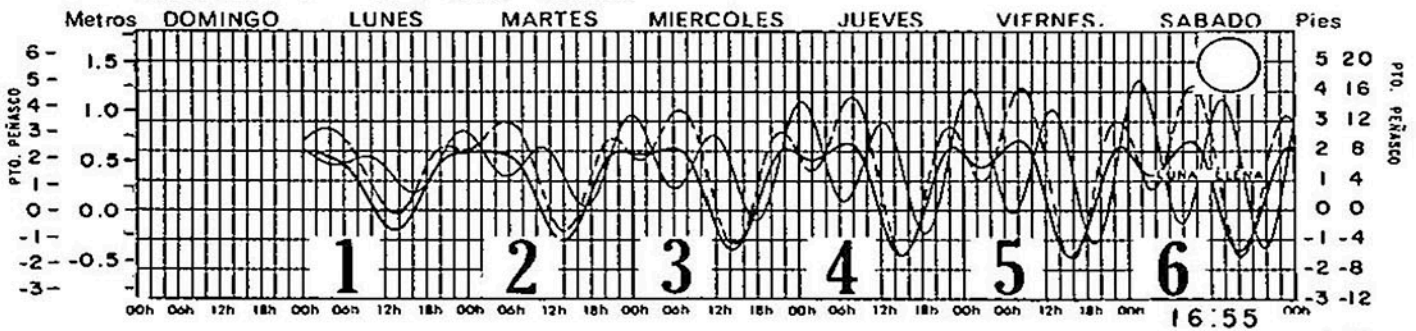


FEBRERO 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.B.M.I.



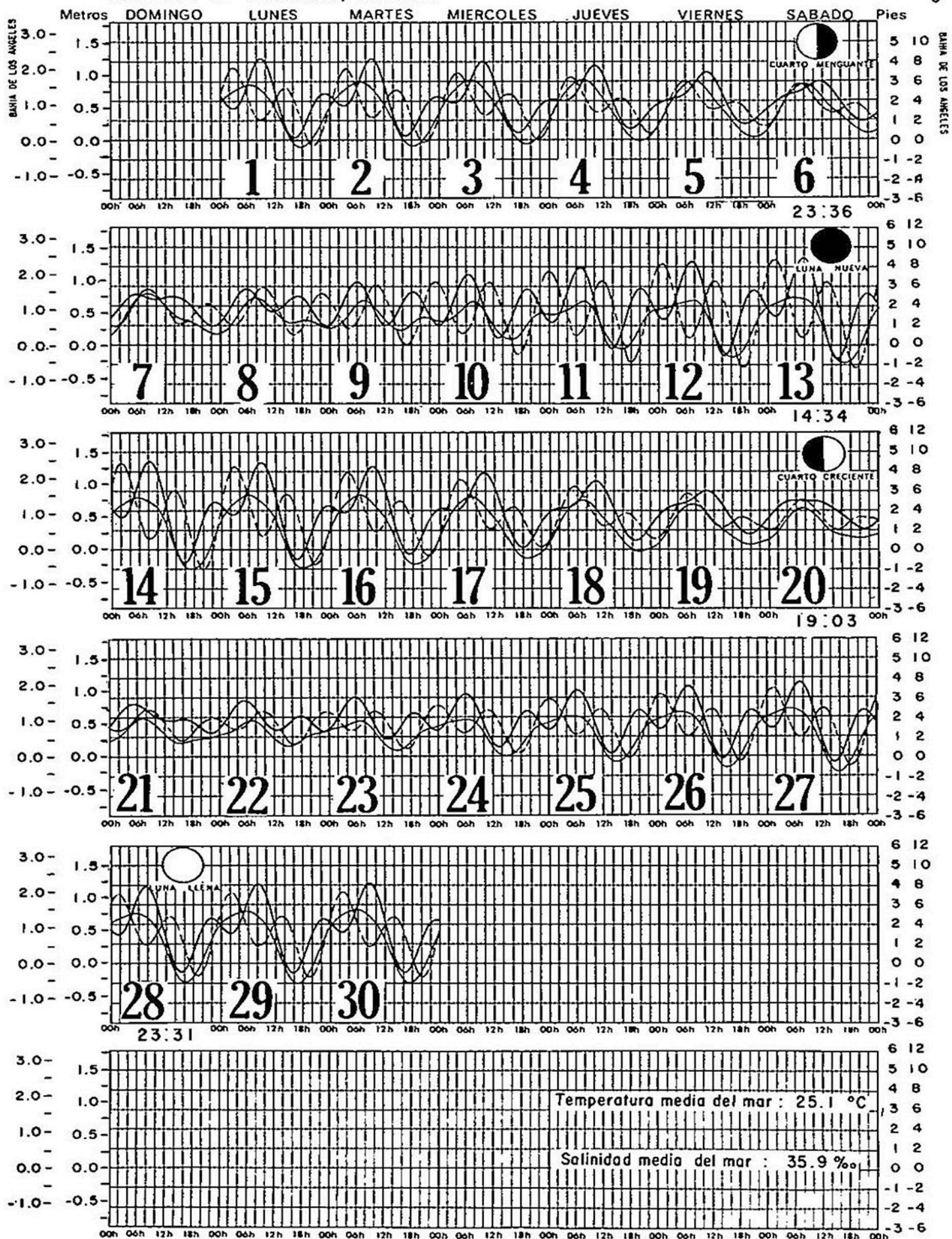
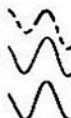
NOVIEMBRE 1993

B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.

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



HORA DEL MERIDIANO 105° W

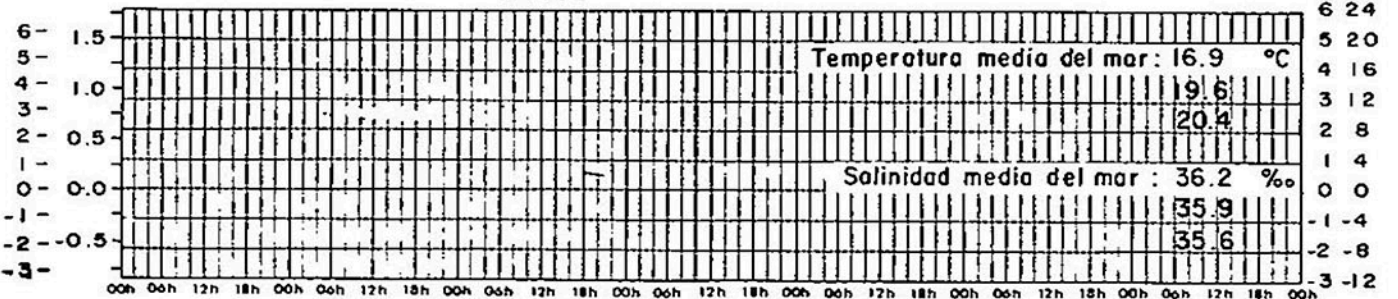
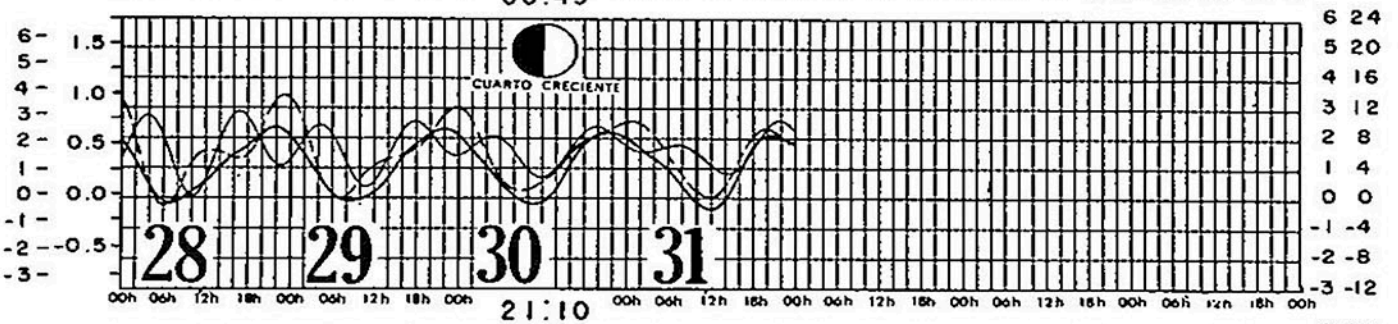
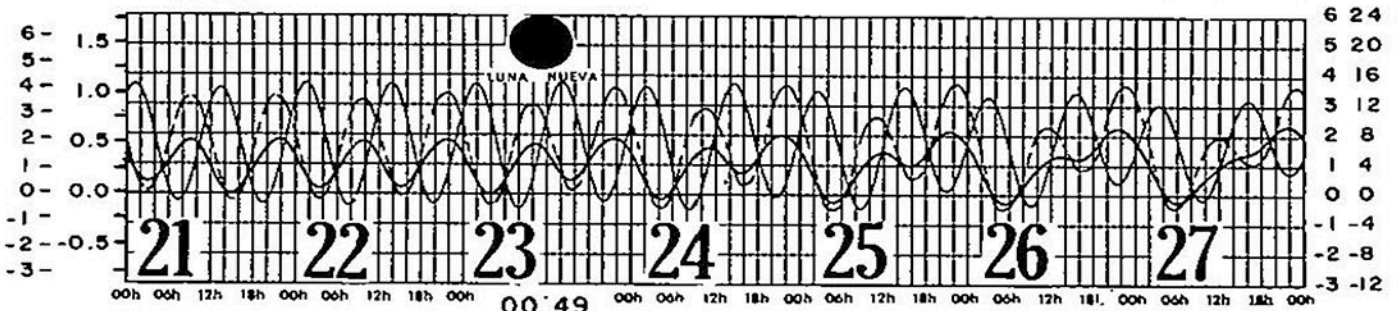
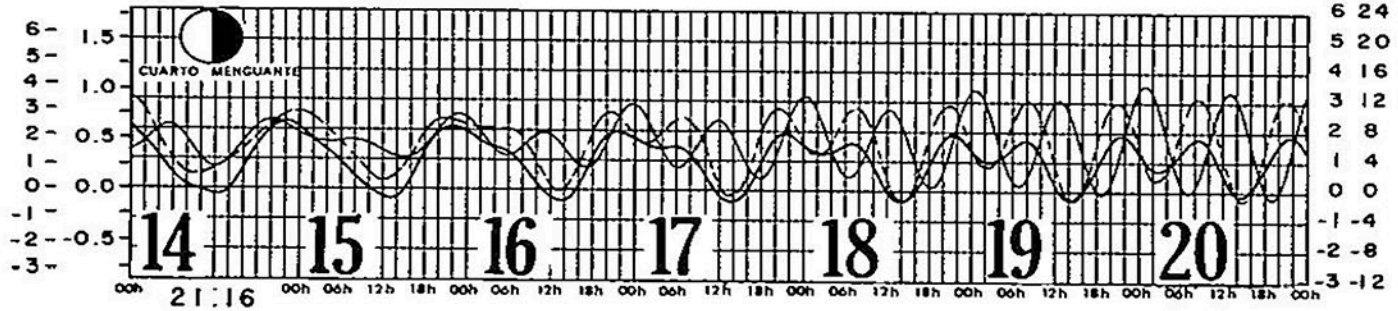
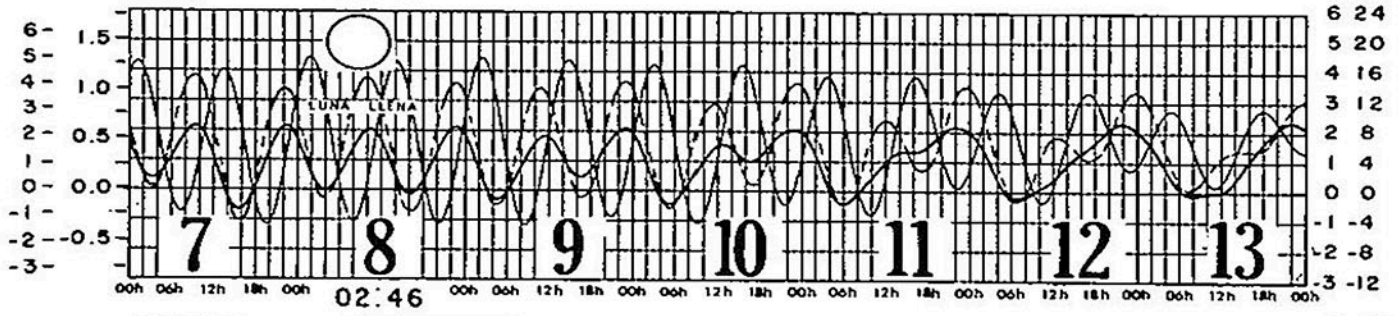
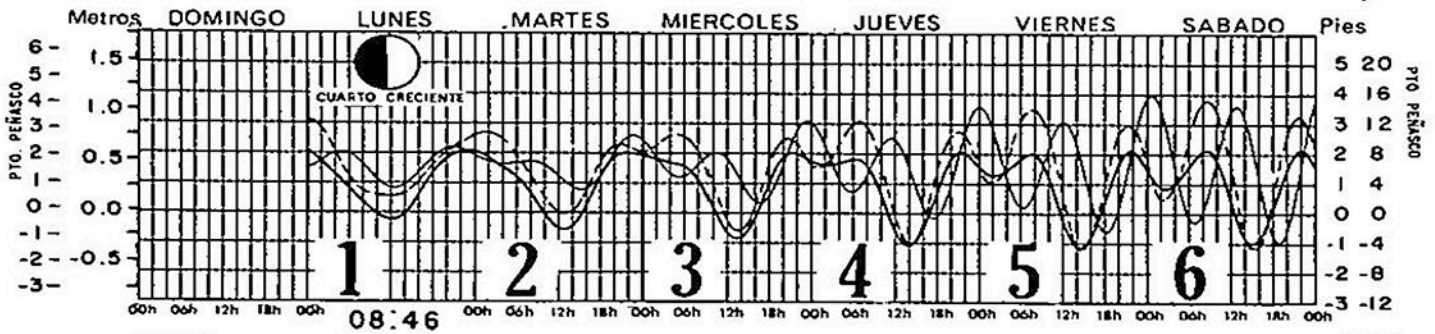
PLANO DE REFERENCIA N.B.M.I.



MARZO 1993

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

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.B.M.I.



OCTUBRE 1953

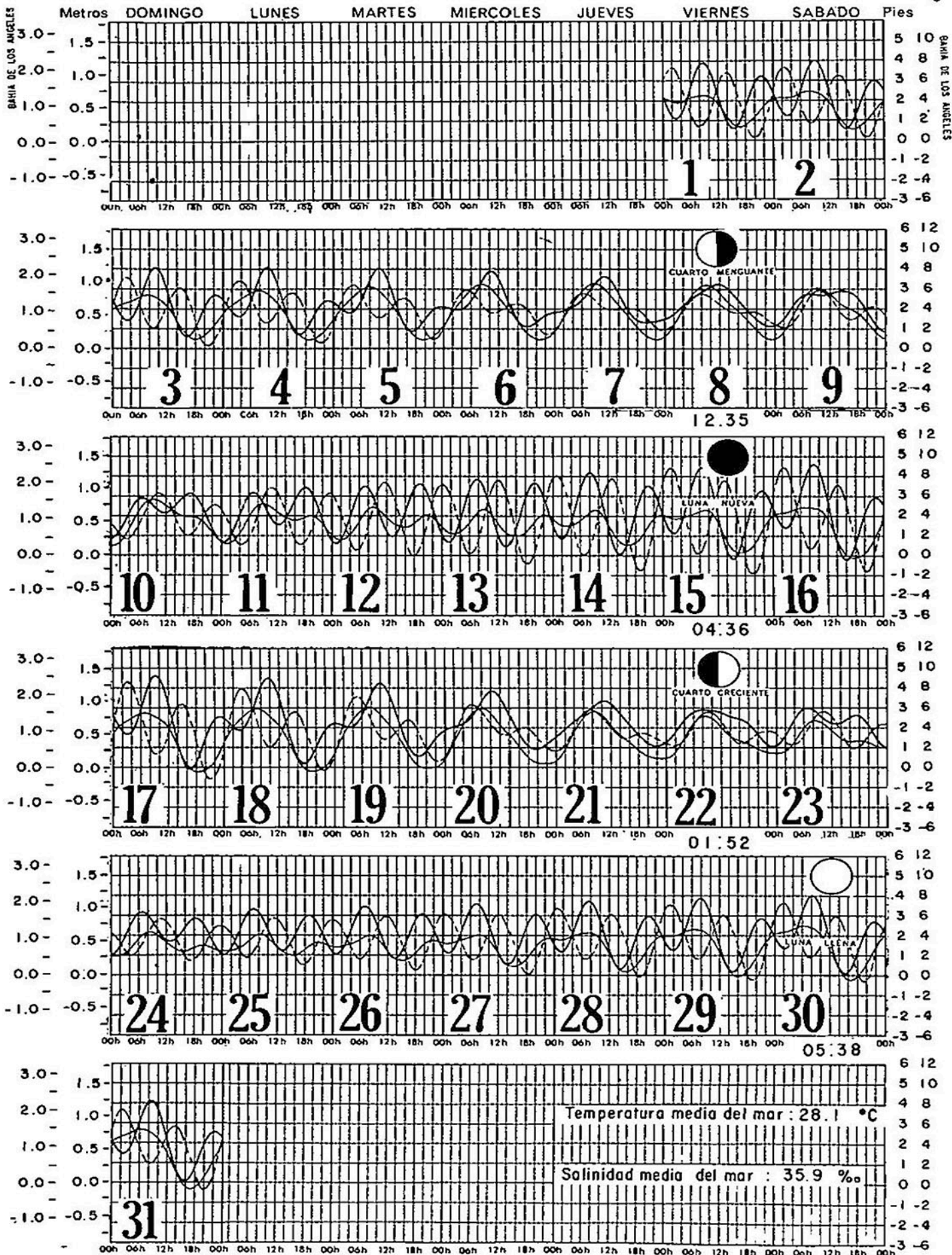
B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

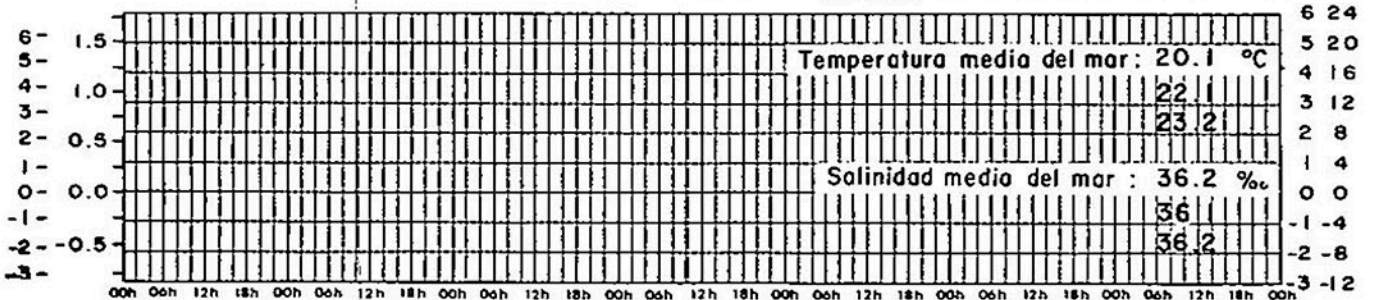
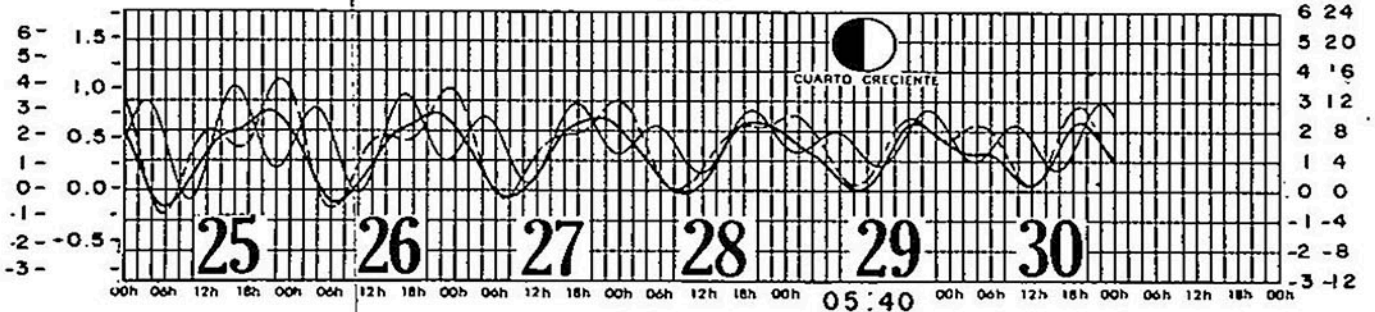
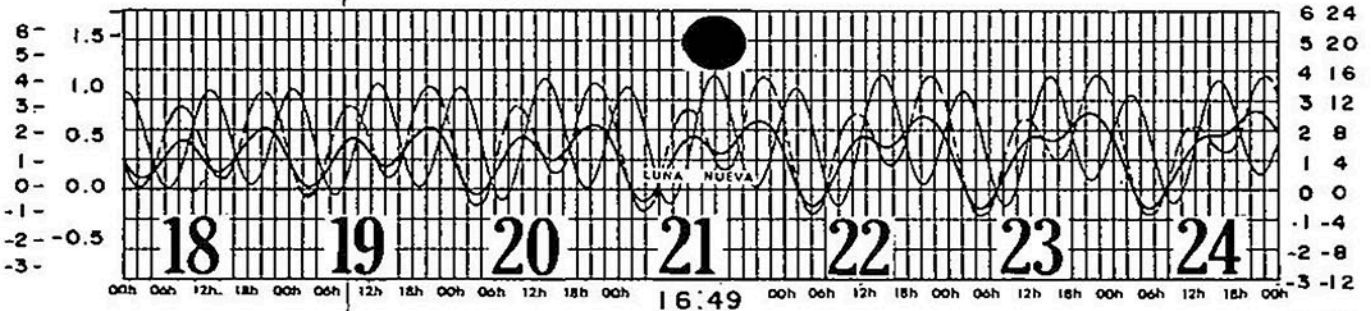
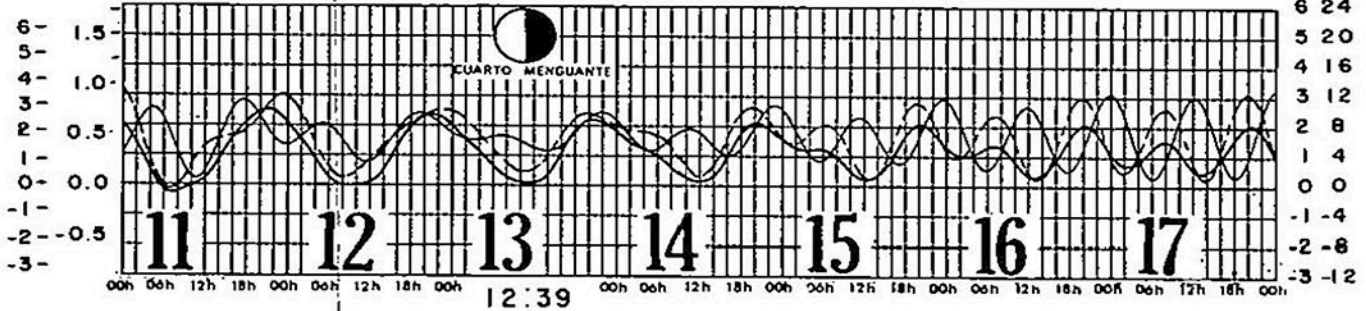
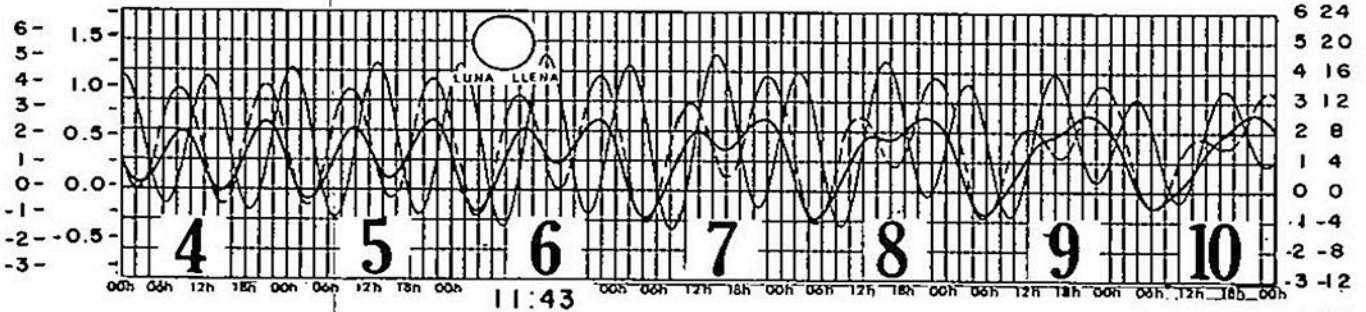
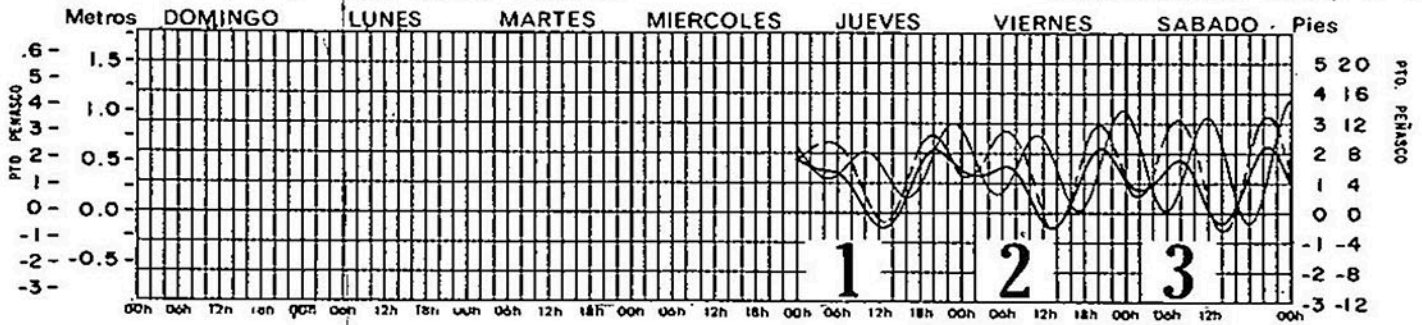


ABRIL 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO: 105° W

PLANO DE REFERENCIA: N.B.M.I.

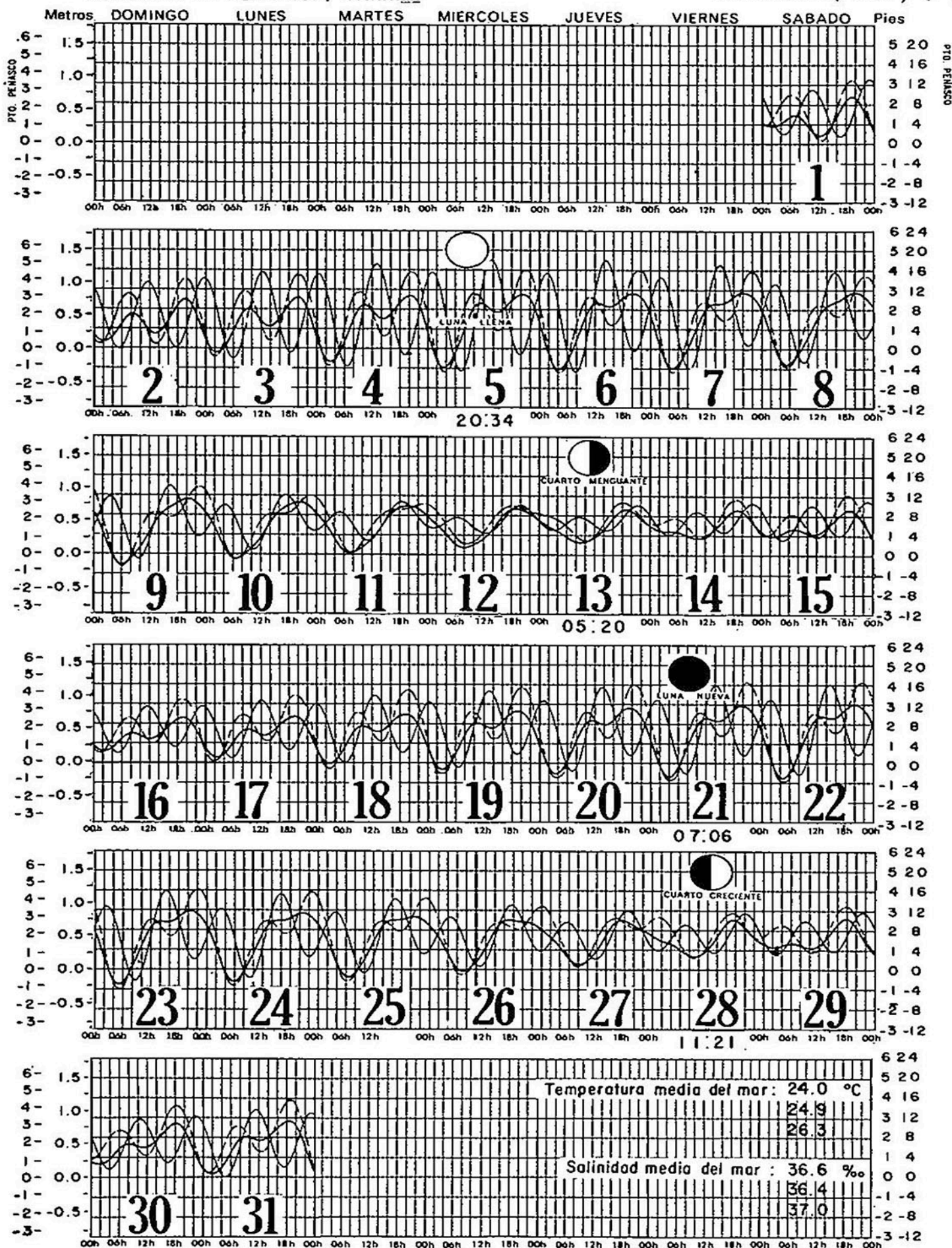


MAYO 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO 105° W

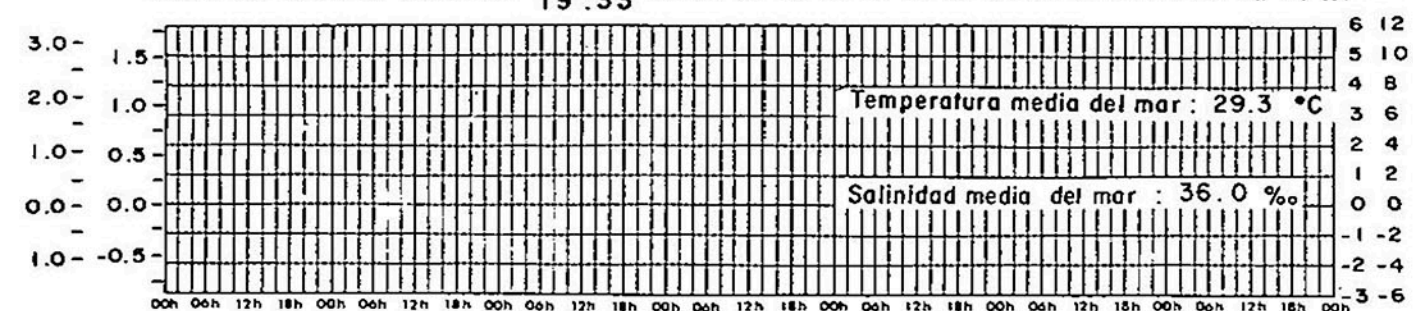
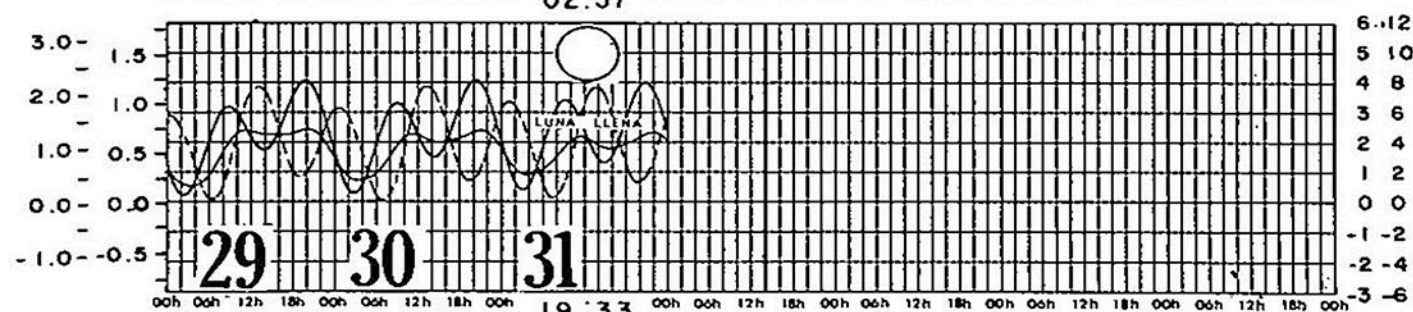
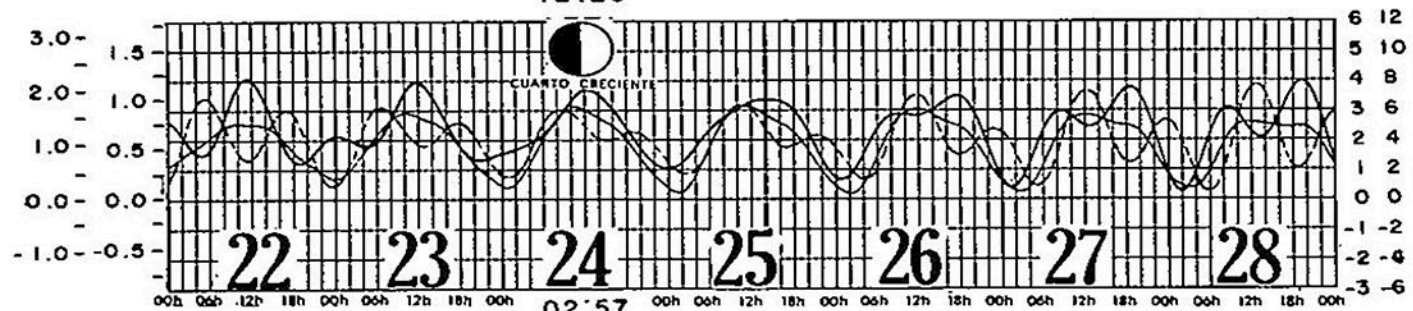
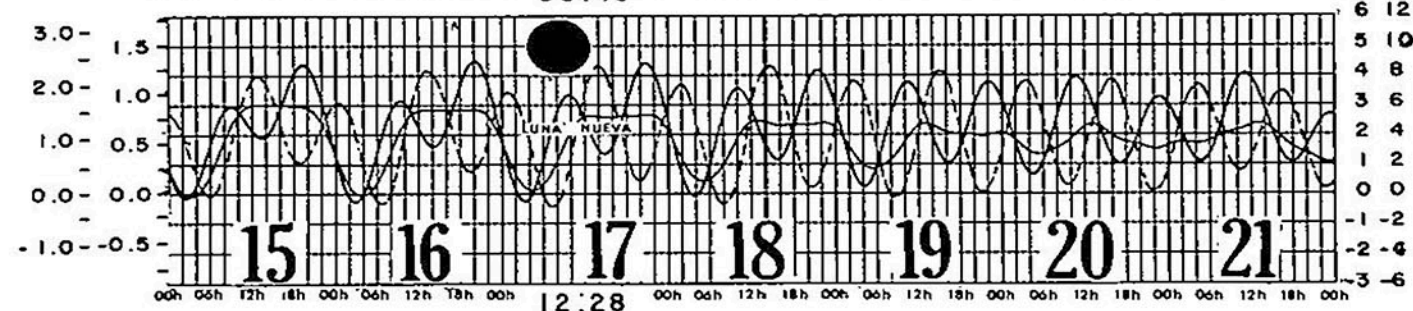
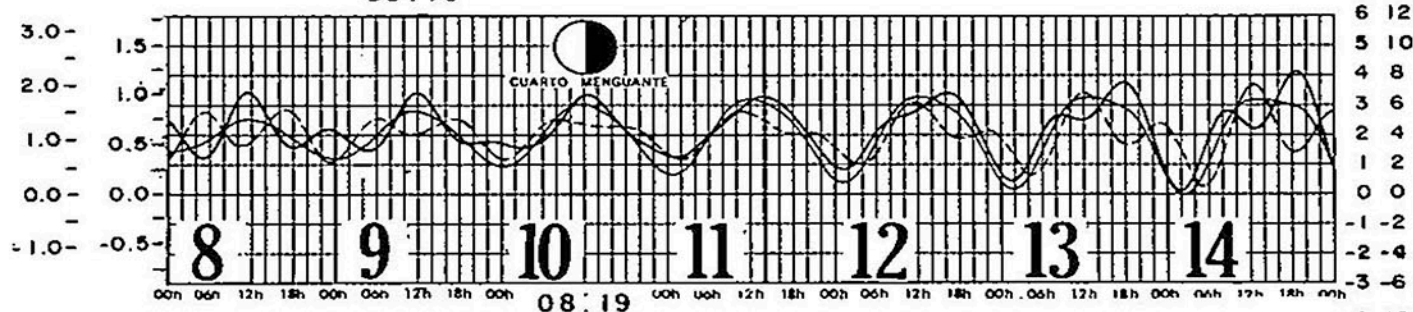
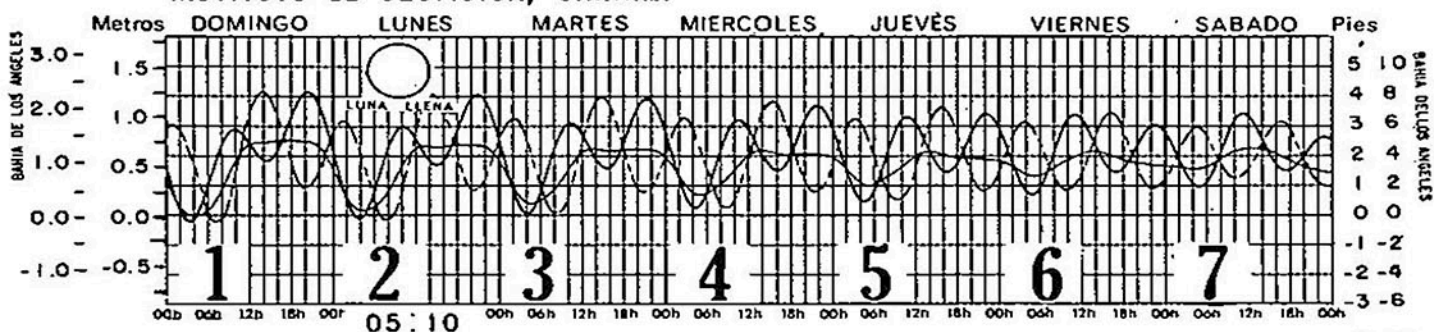
PLANO DE REFERENCIA: N.B.M.I.



AGOSTO J93

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

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



HORA DEL MERIDIANO 105° W

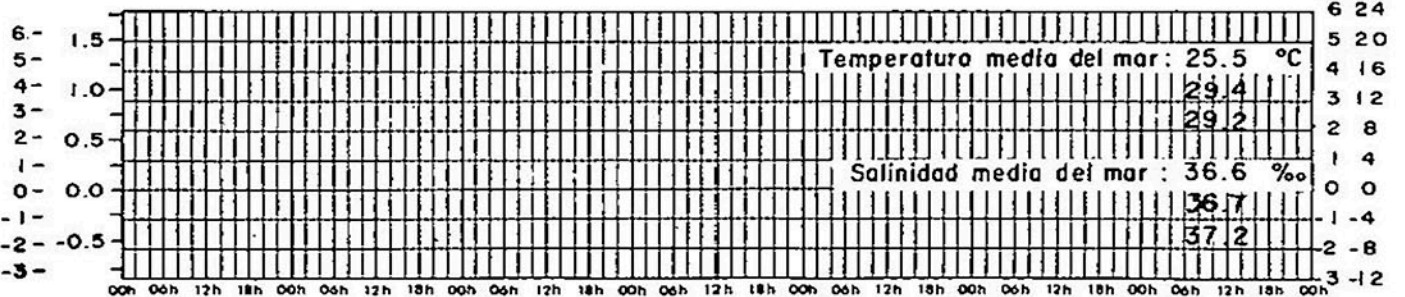
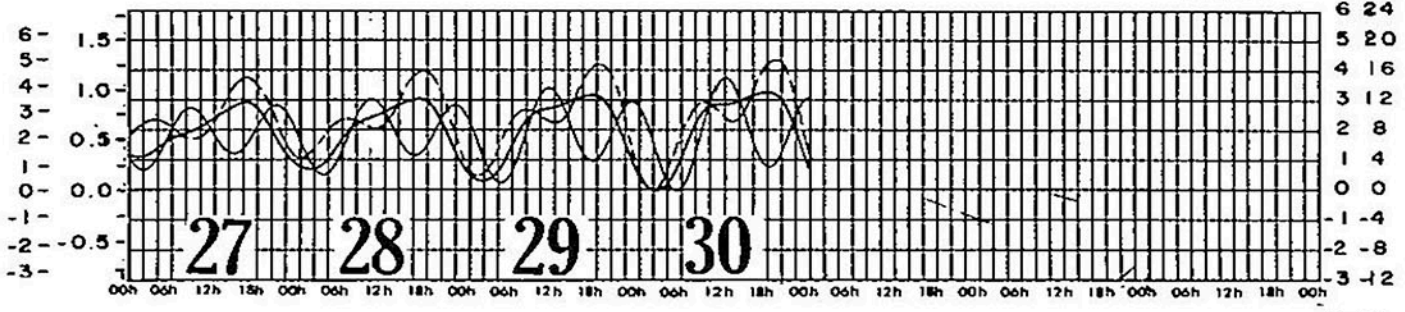
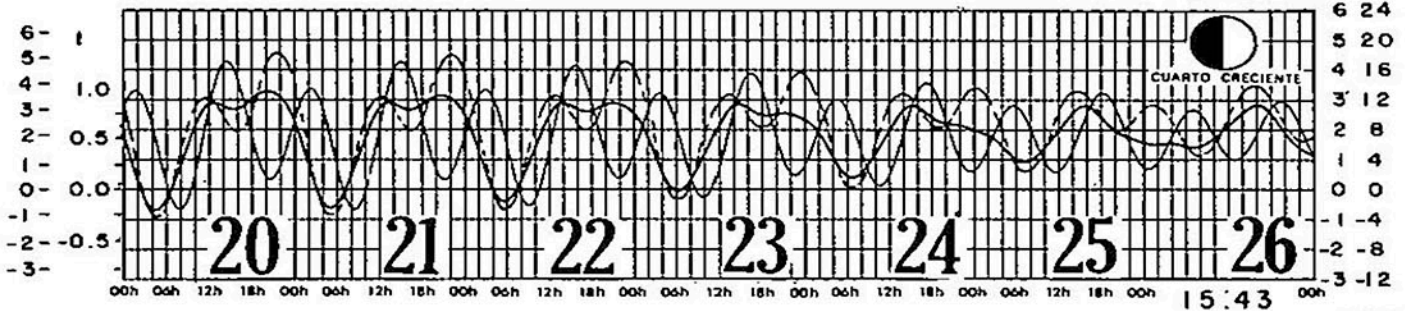
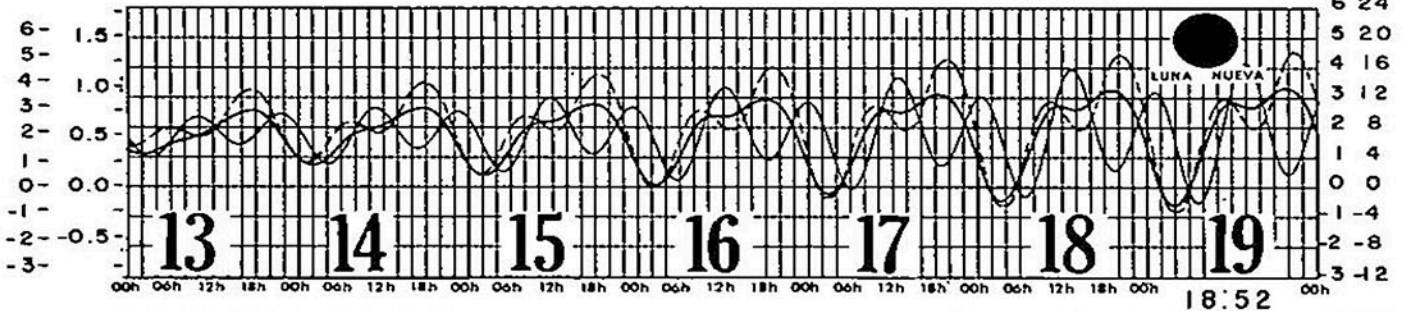
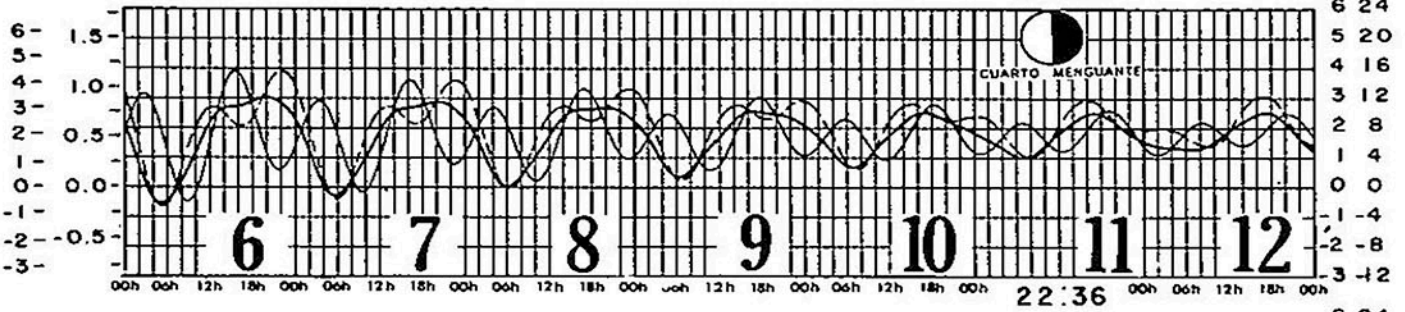
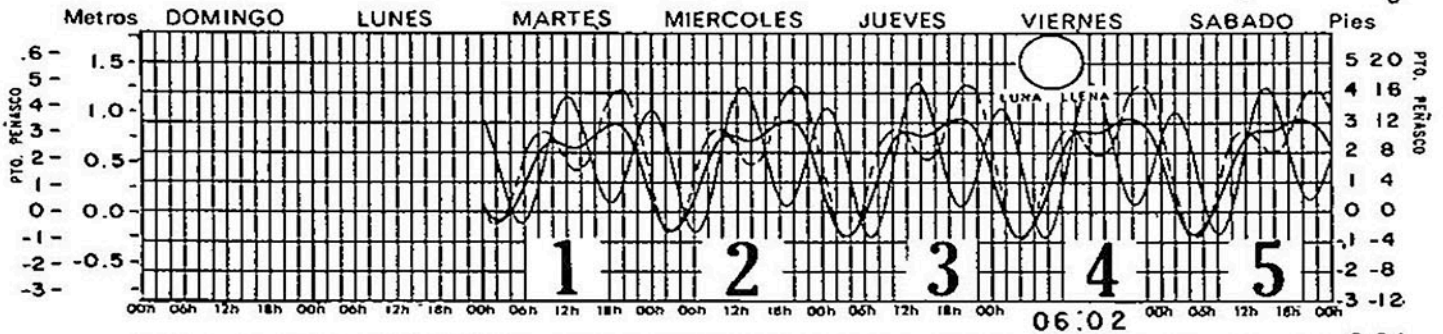
PLANO DE REFERENCIA N.B.M.I.



J NIO '93

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

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



HORA DEL MERIDIANO 105° W

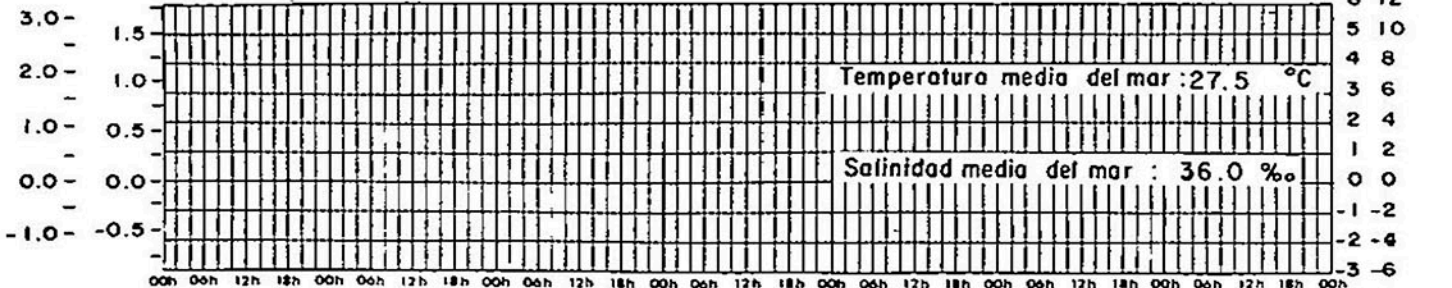
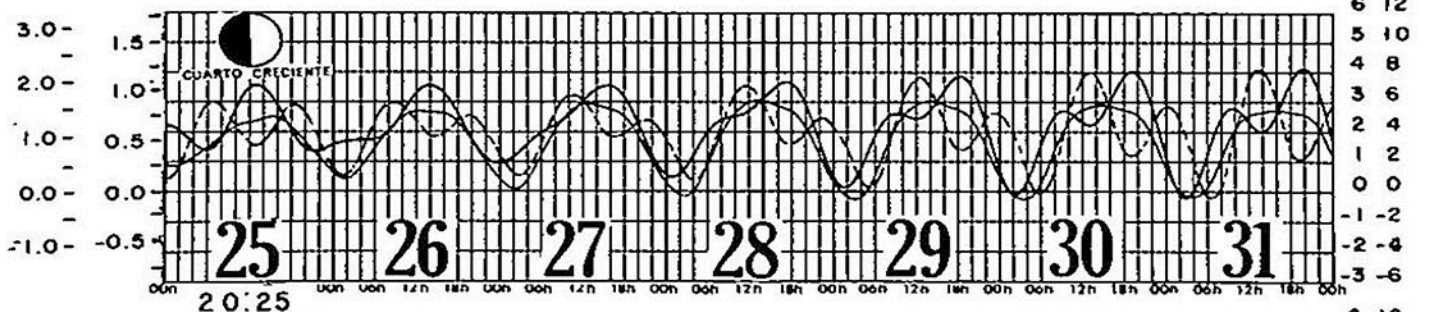
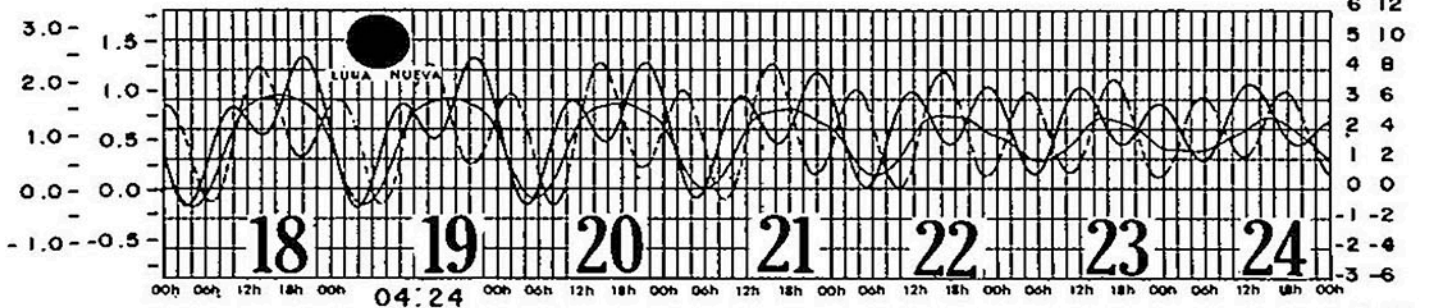
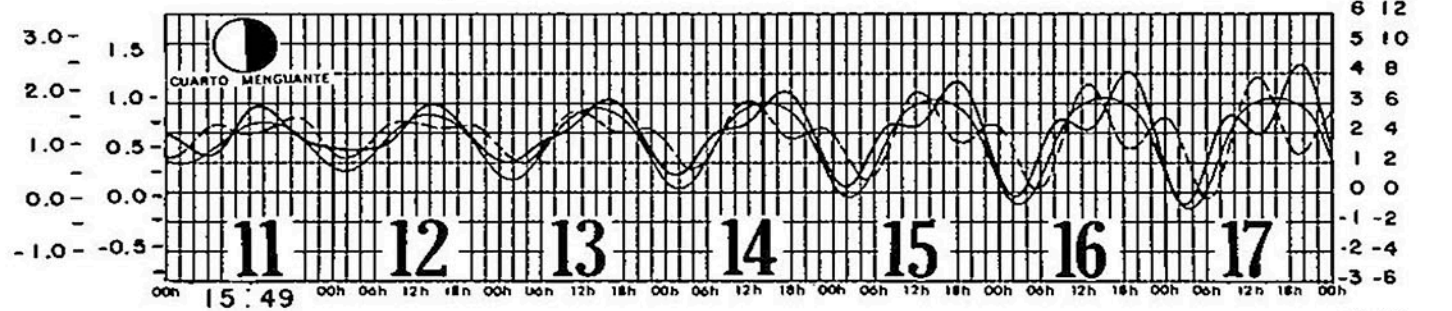
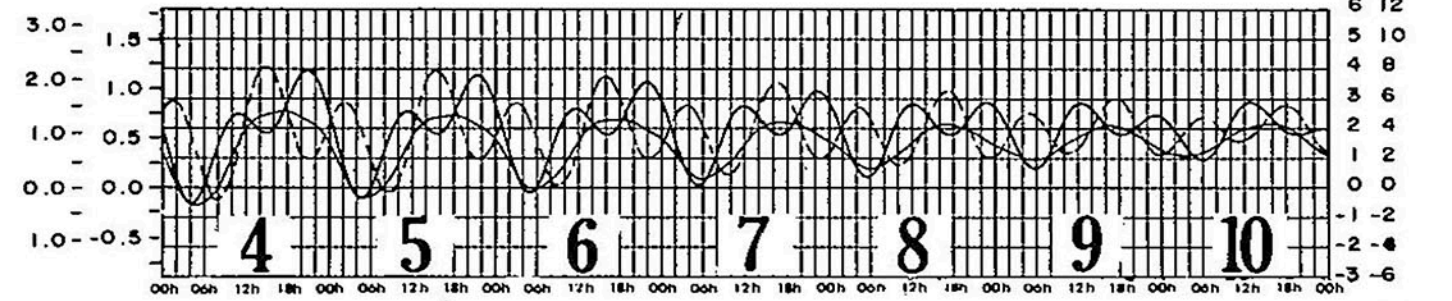
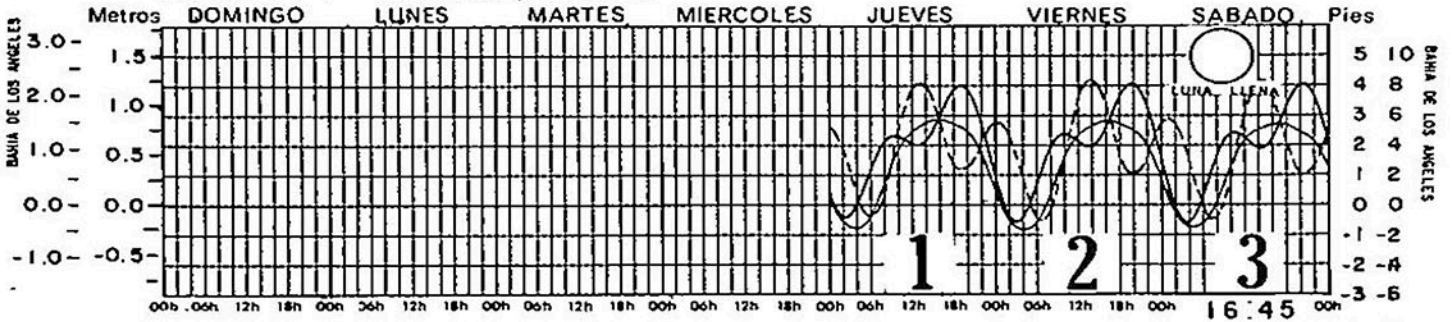
PLANO DE REFERENCIA: N.B.M.I.



JULIO 1993

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

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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

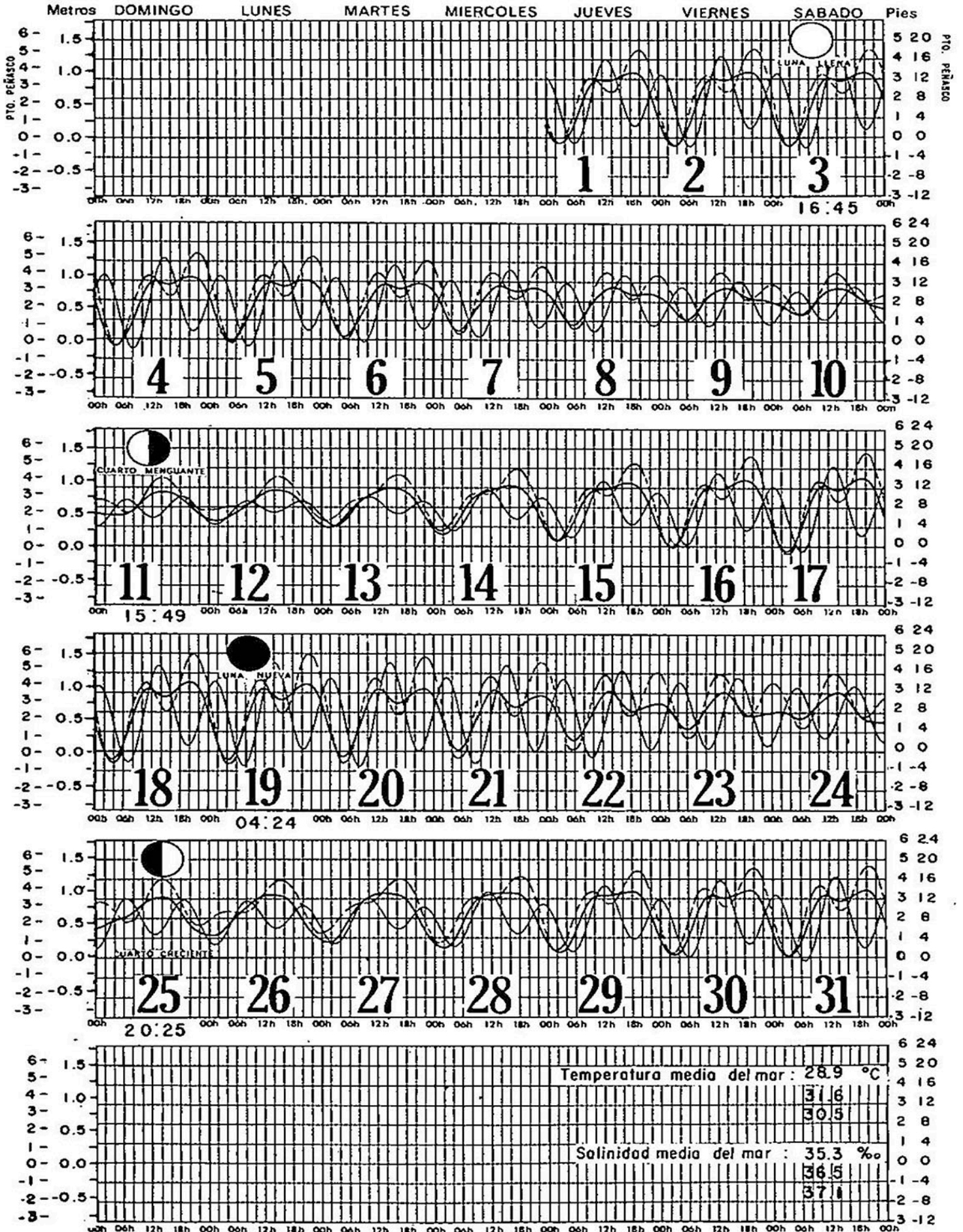


JULIO 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



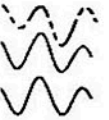
INSTITUTO DE GEOFISICA, U.N.A.M.



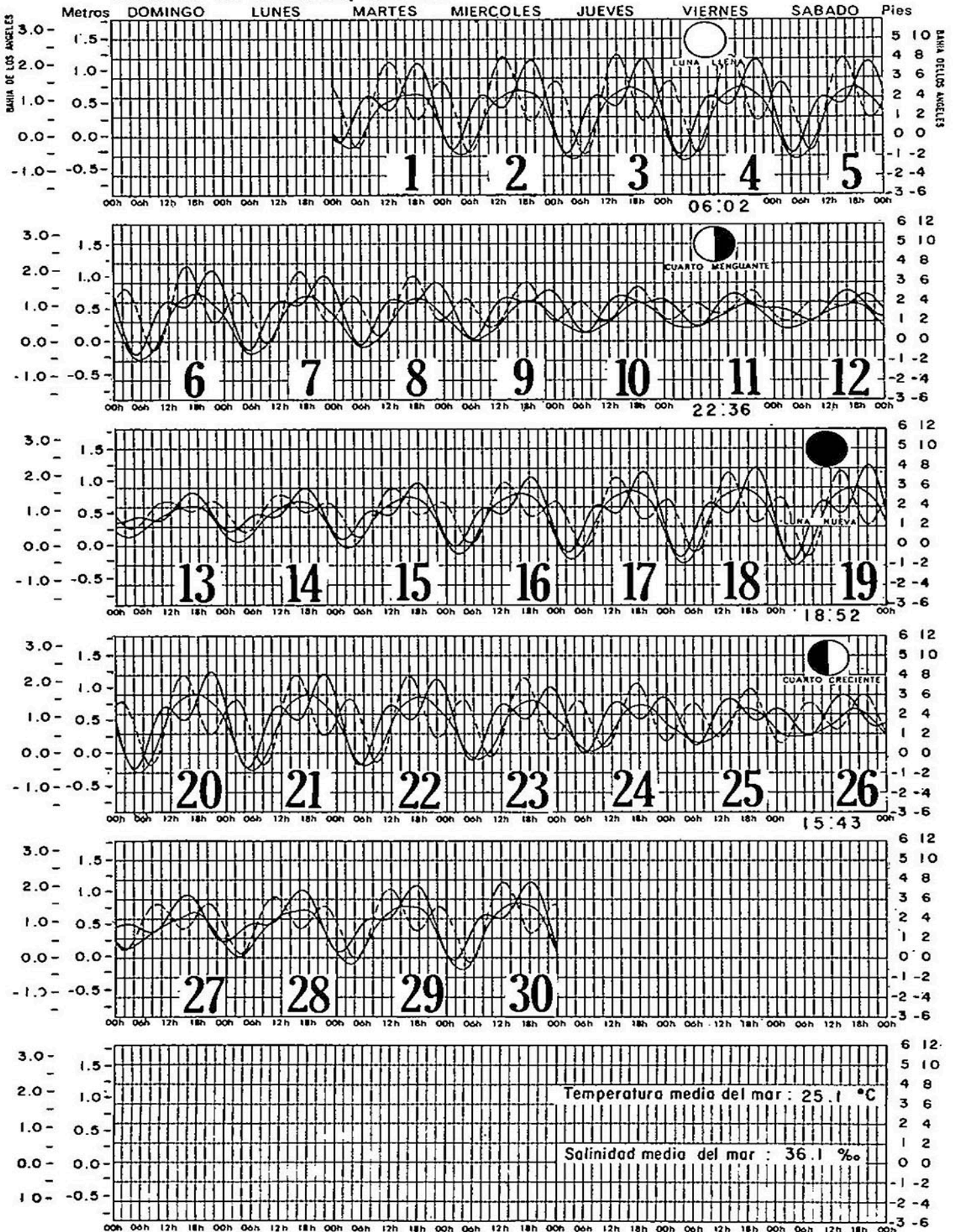


JULIO 1953

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



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

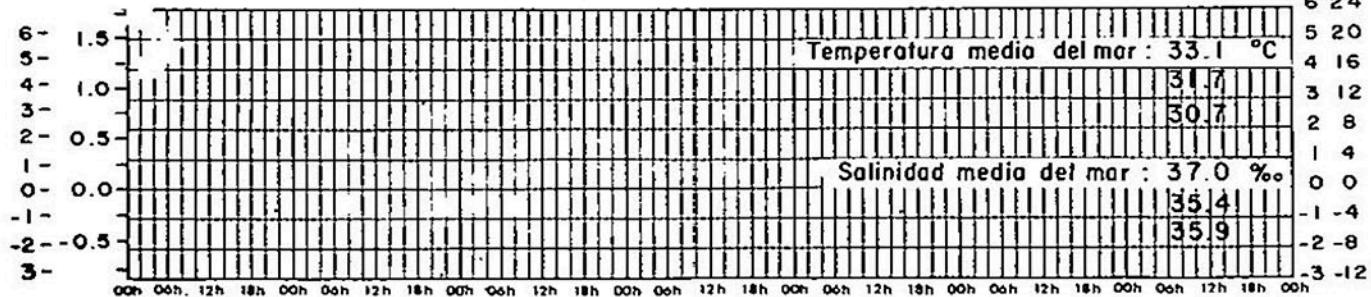
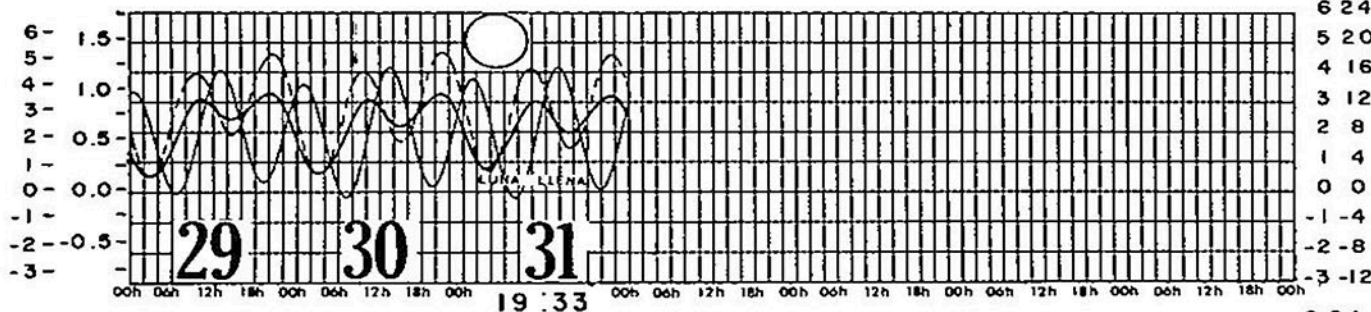
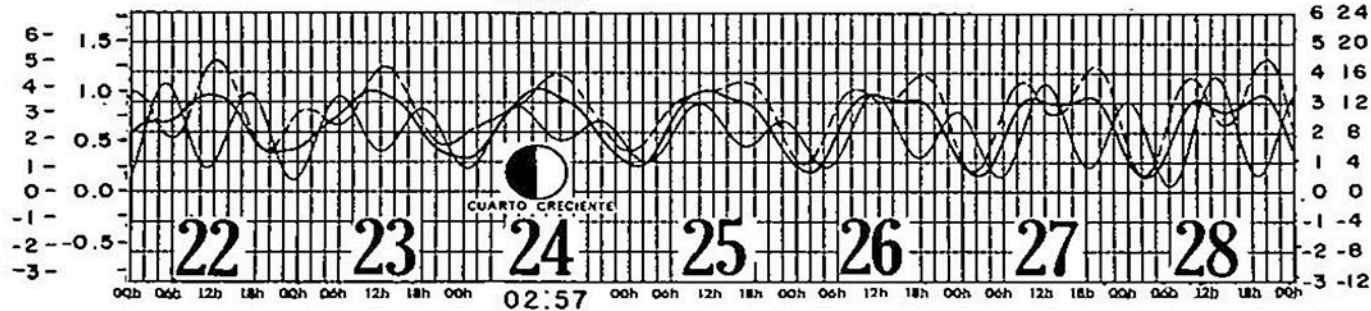
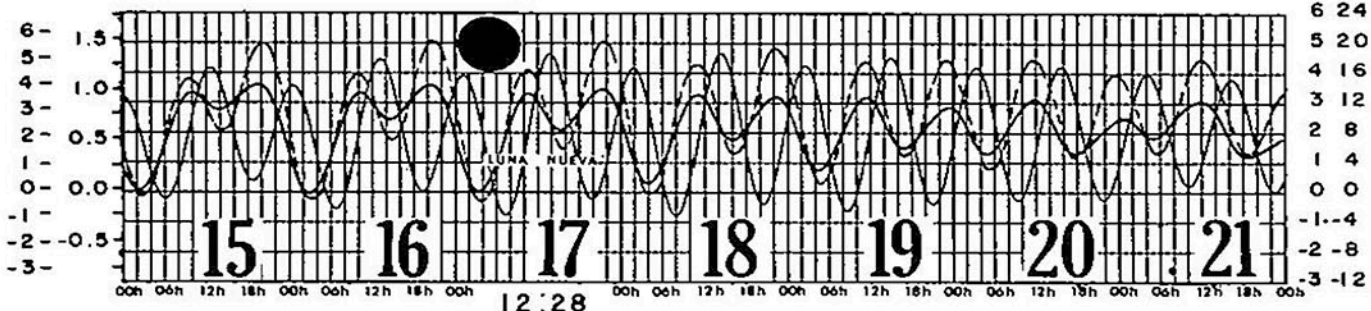
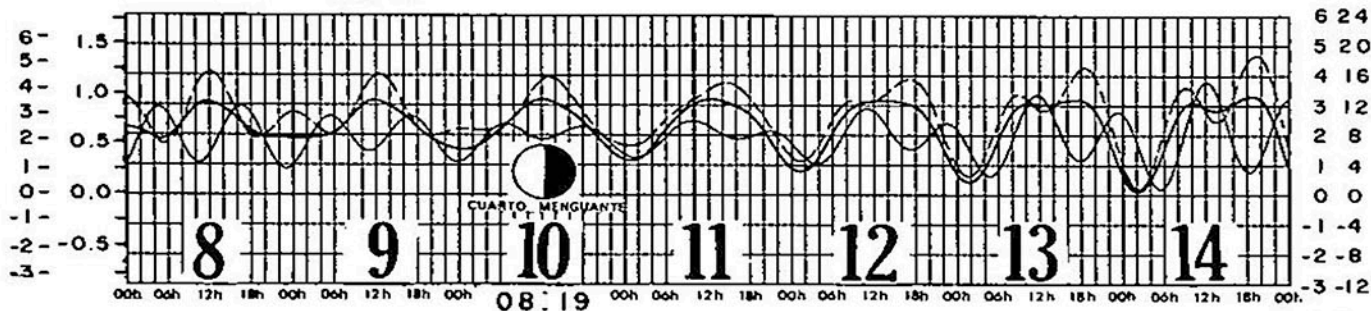
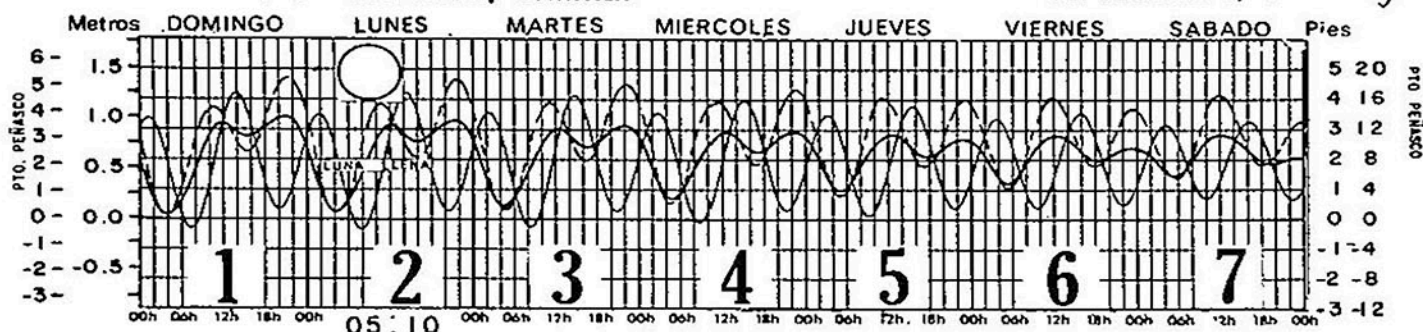


AUGUSTO 193

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.B.M.I.

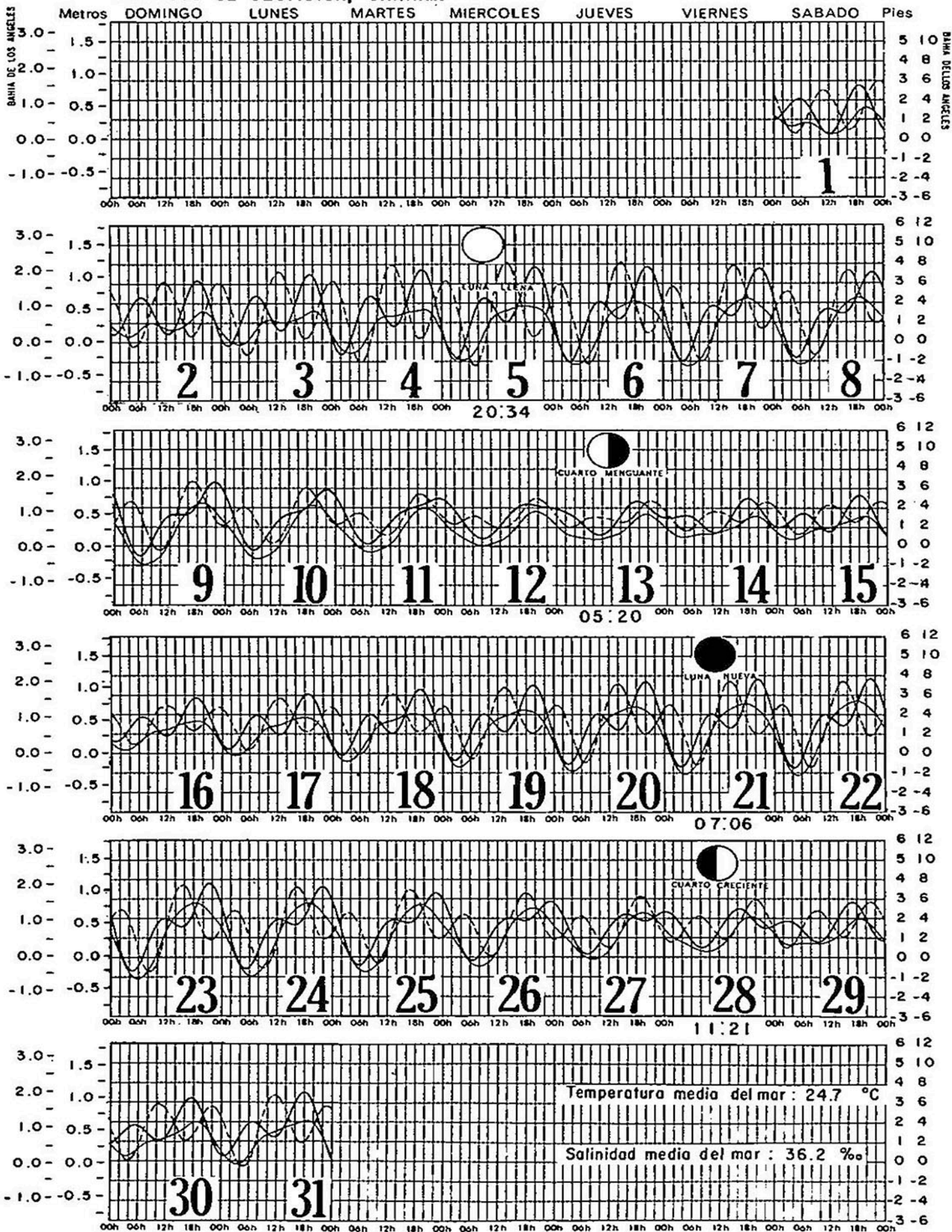


MAYO 1993

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



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



Temperatura media del mar : 24.7 °C
Salinidad media del mar : 36.2 ‰

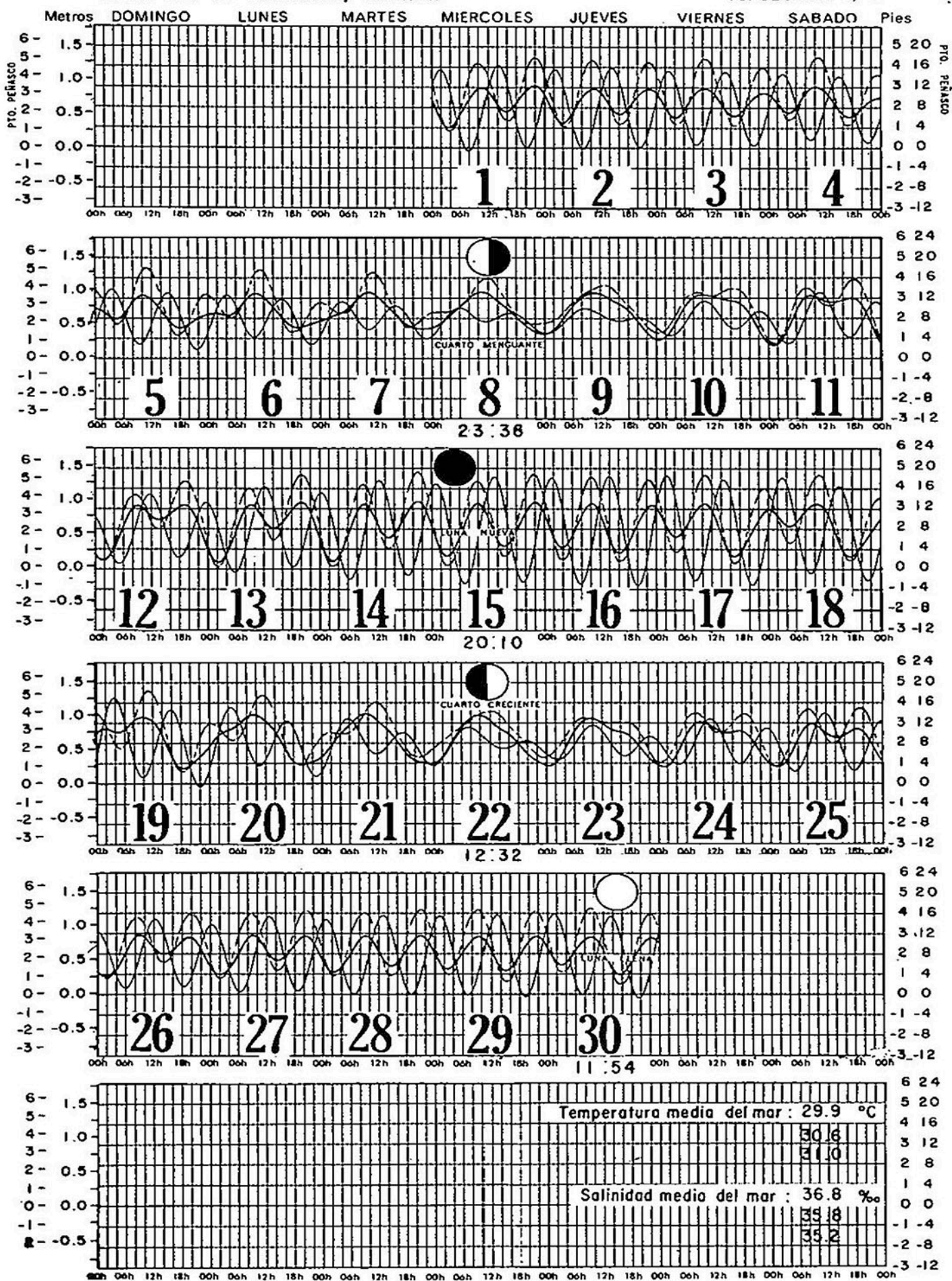


SEPTIEMBRE 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



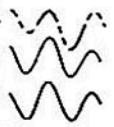


ABRIL 1993

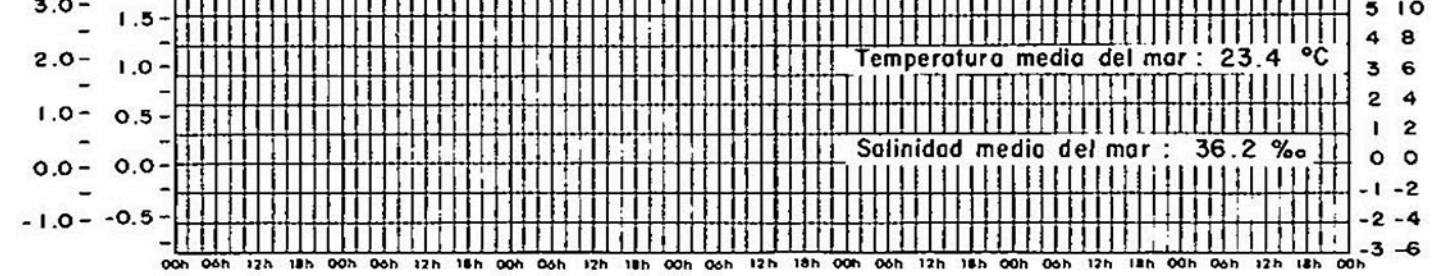
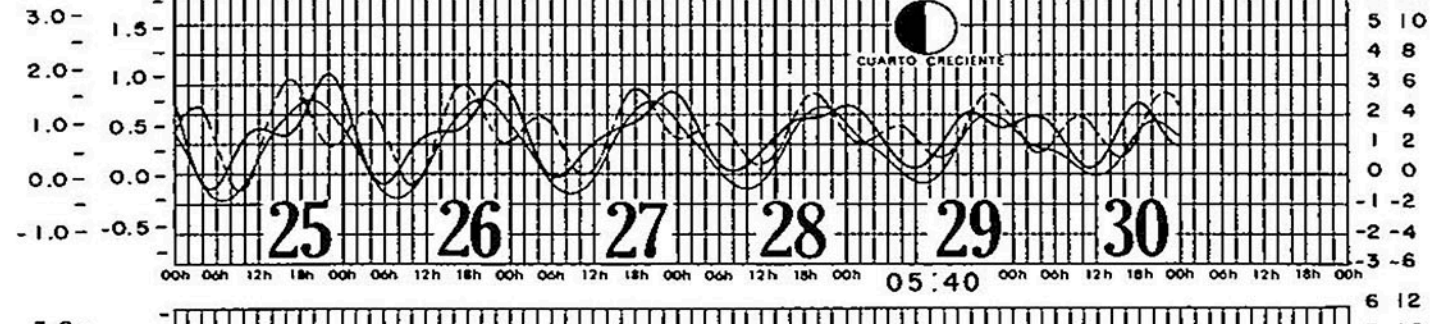
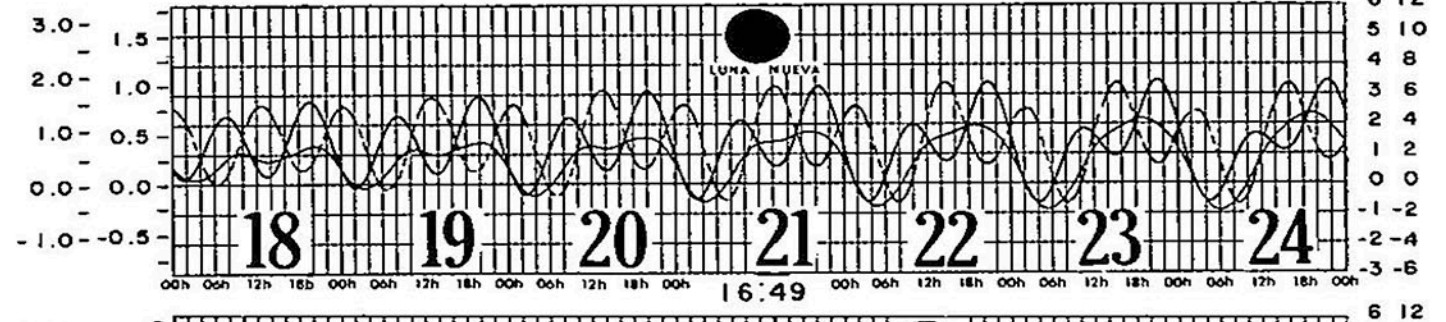
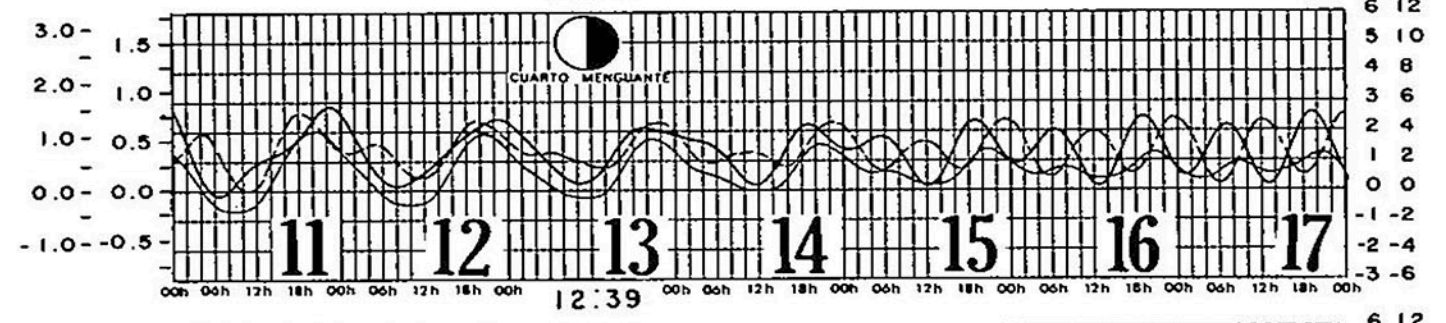
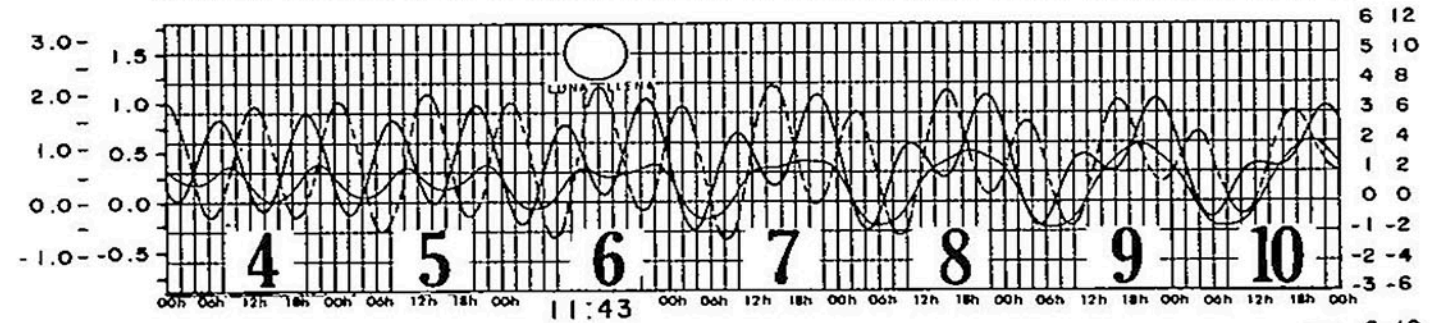
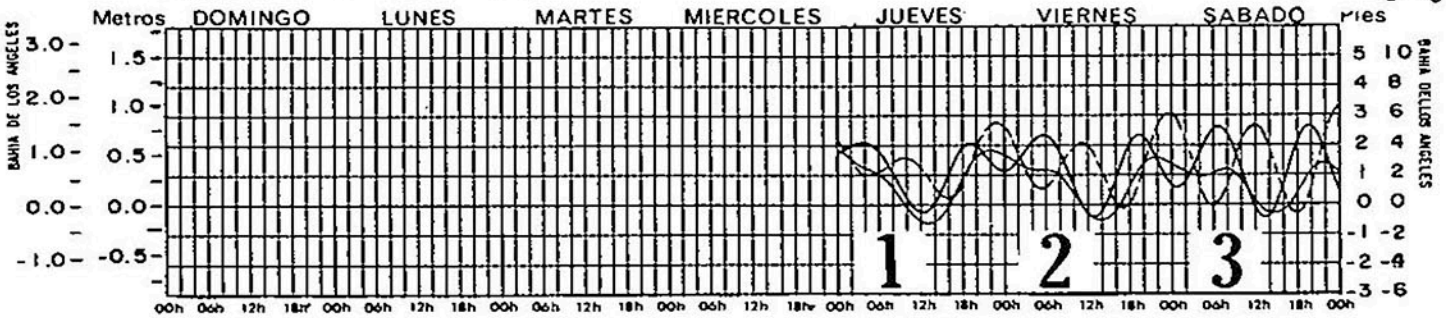
B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.



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



HORA DEL MERIDIANO 105° W

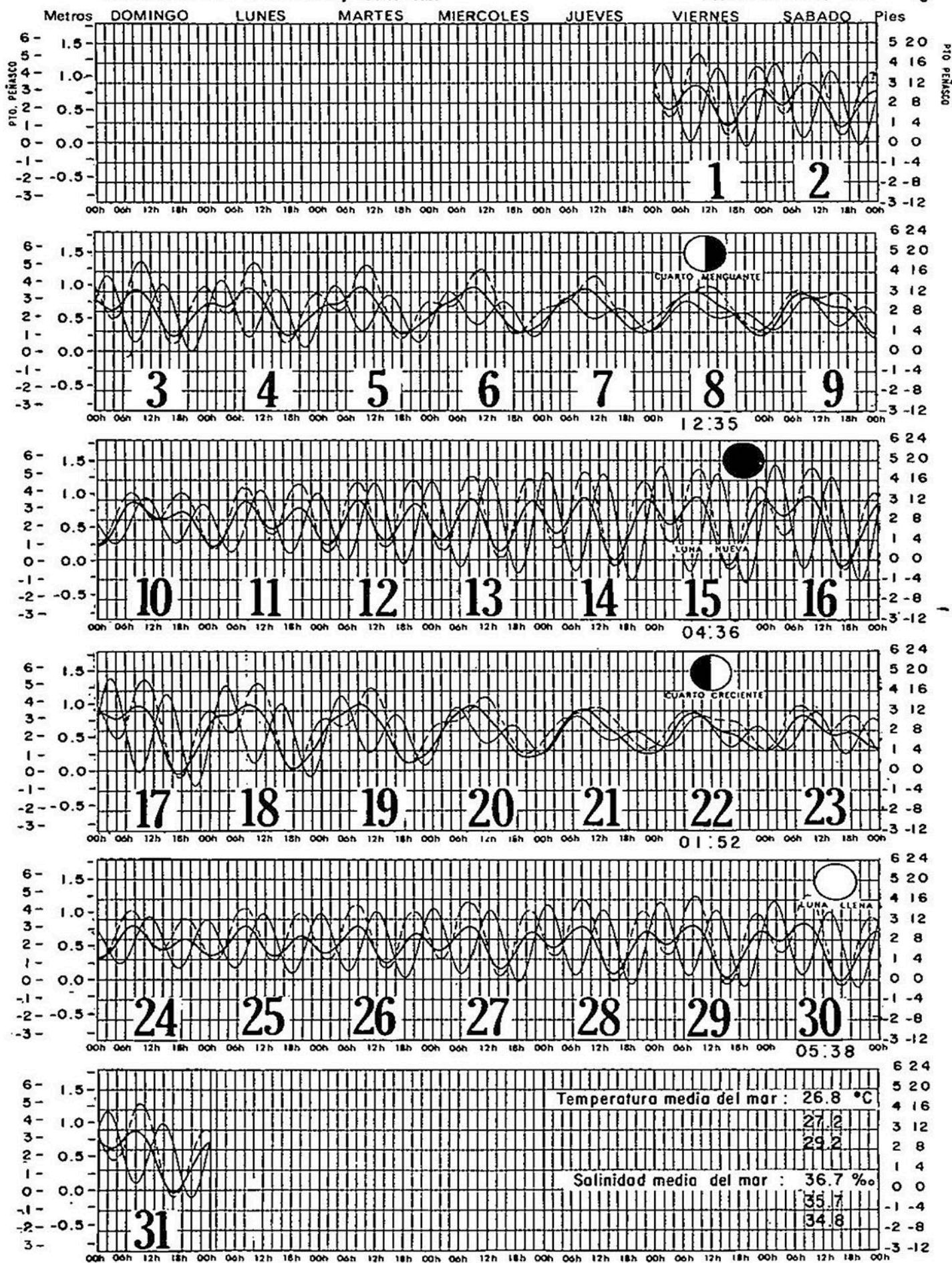
PLANO DE REFERENCIA N.B.M.I.



OCTUBRE 993

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

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



Temperatura media del mar : 26.8 °C

27.2

29.2

Salinidad media del mar : 36.7 ‰

35.7

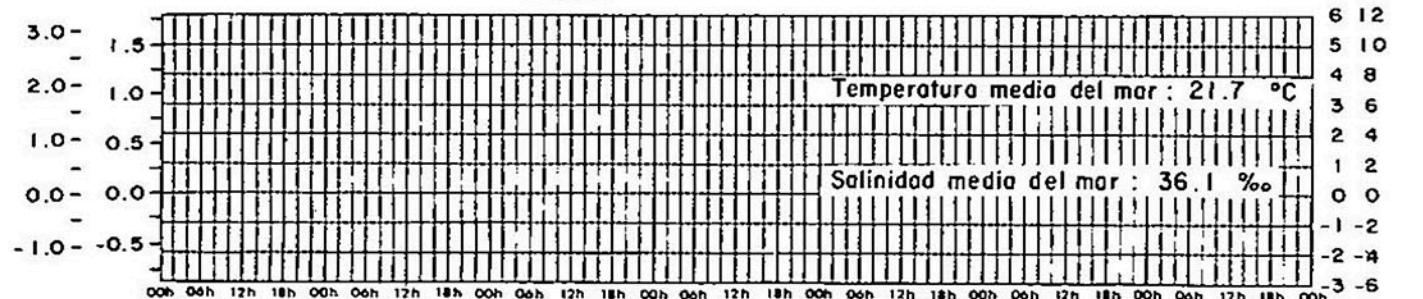
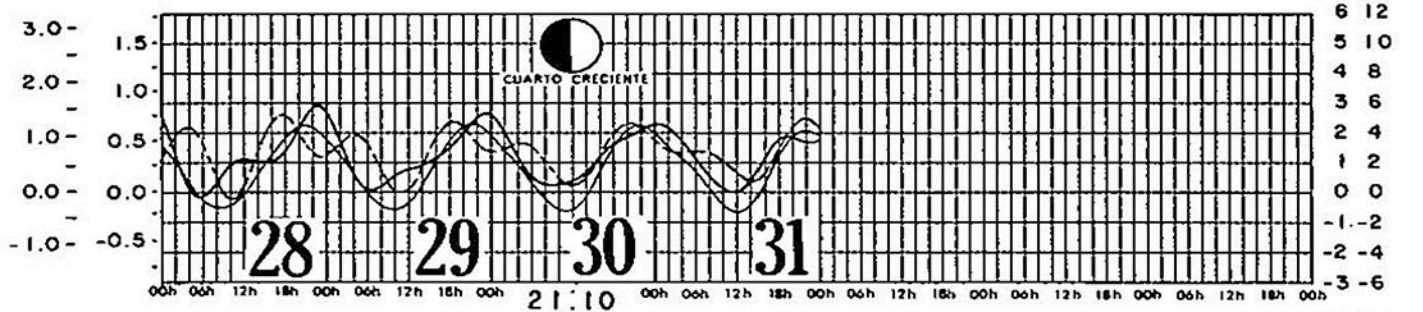
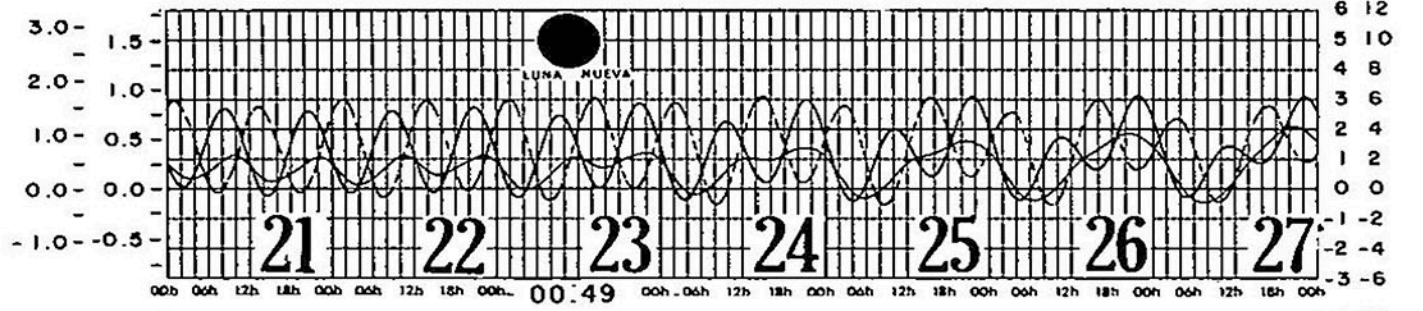
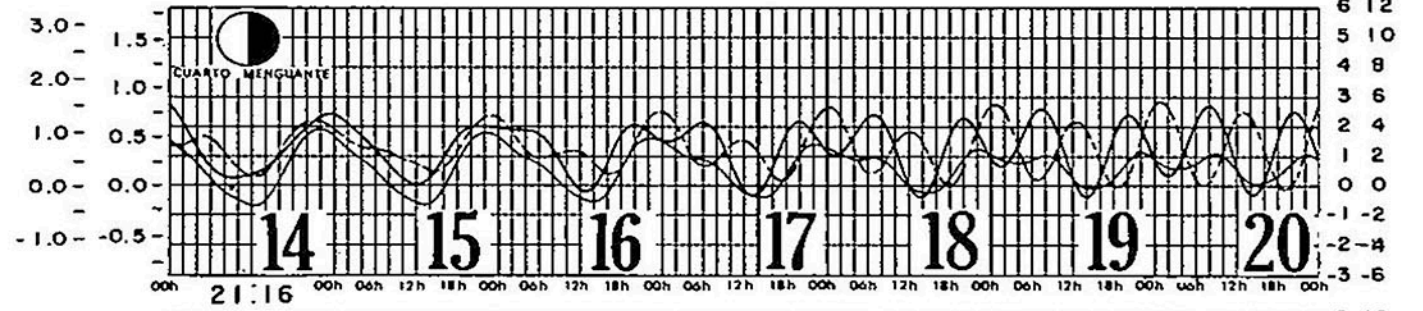
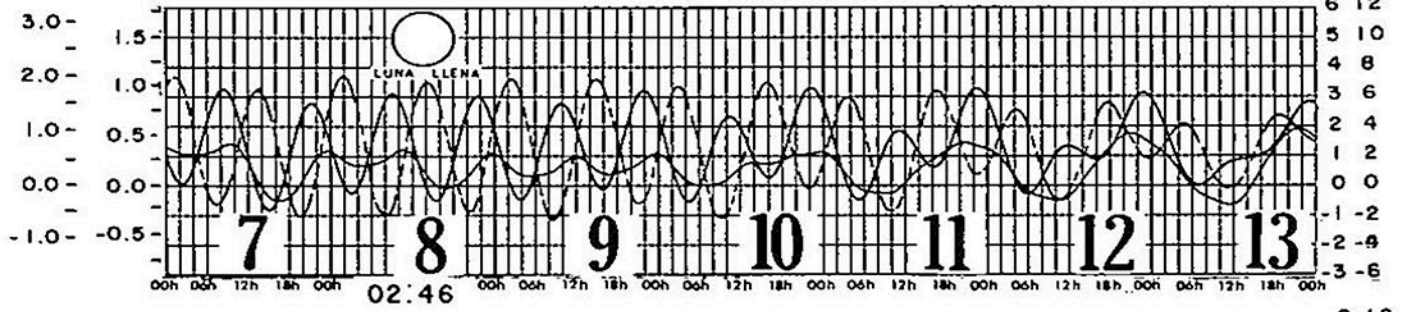
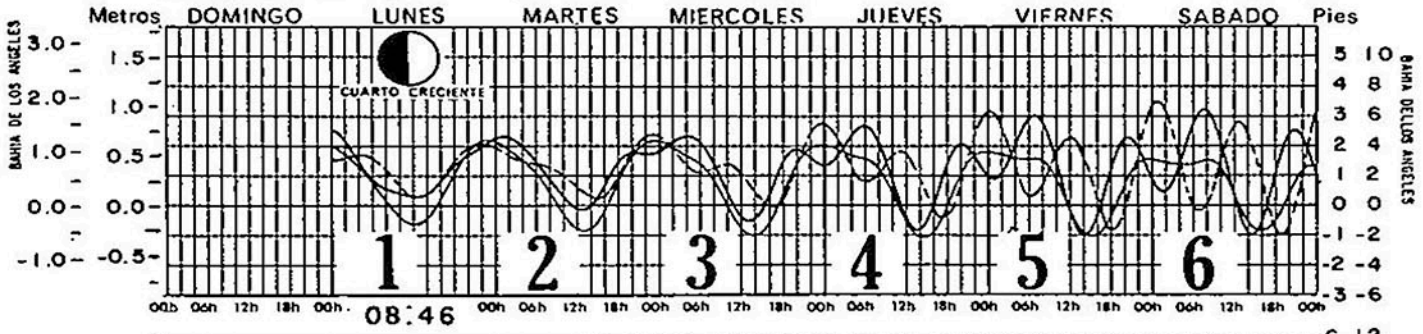
34.8



MARZO 1993

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

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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

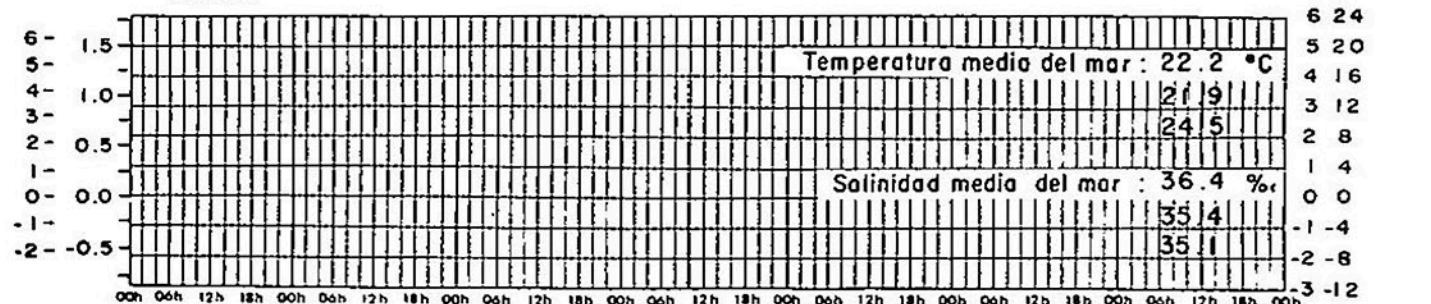
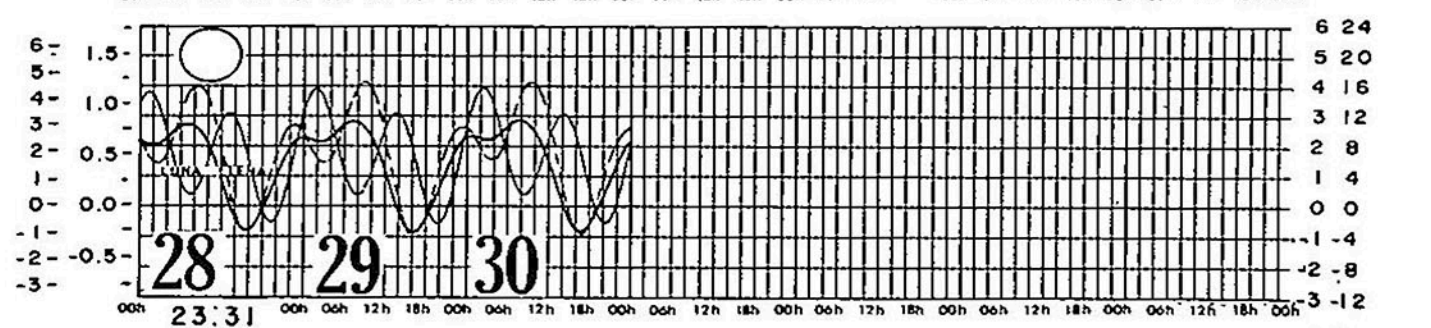
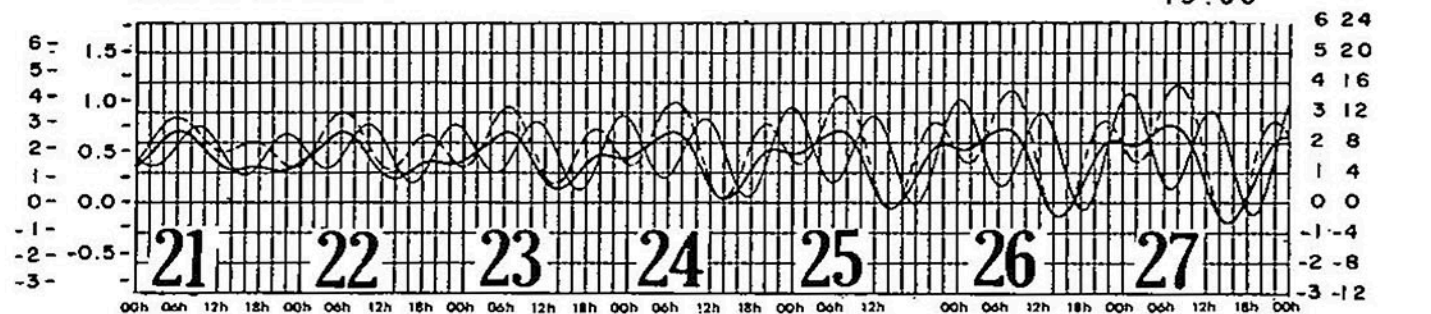
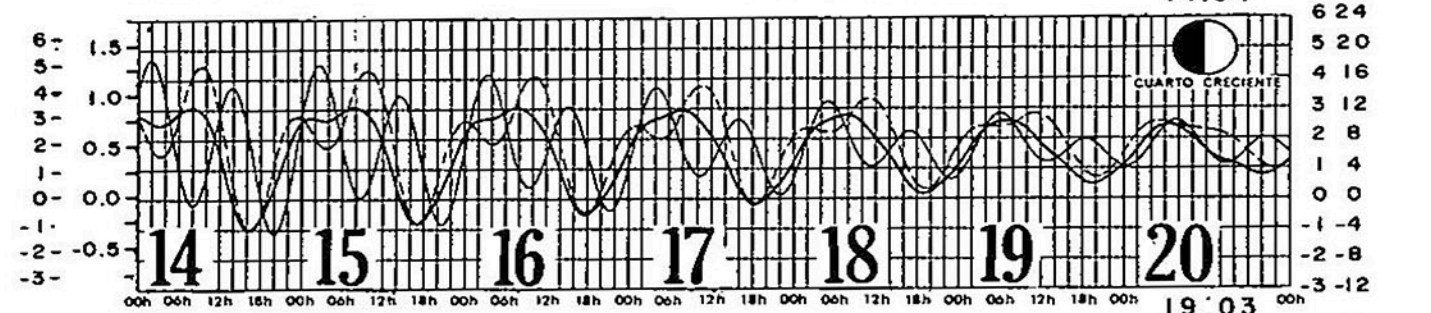
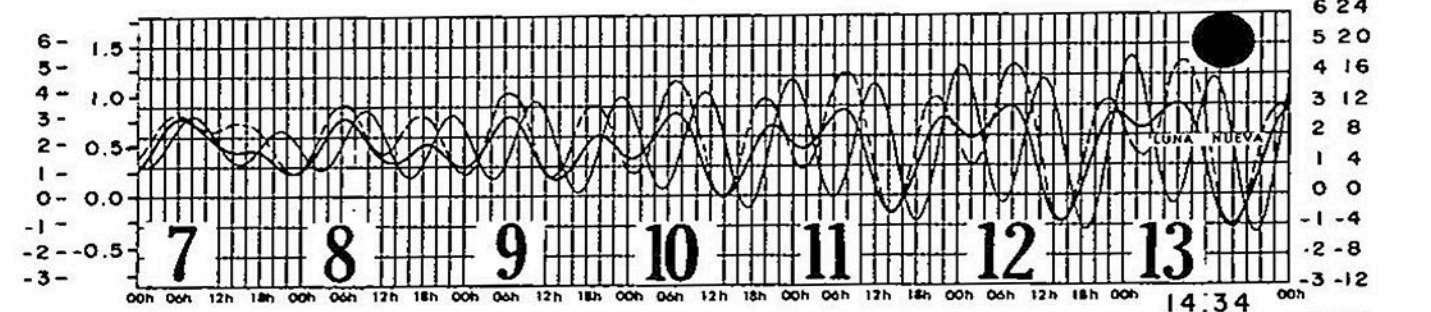
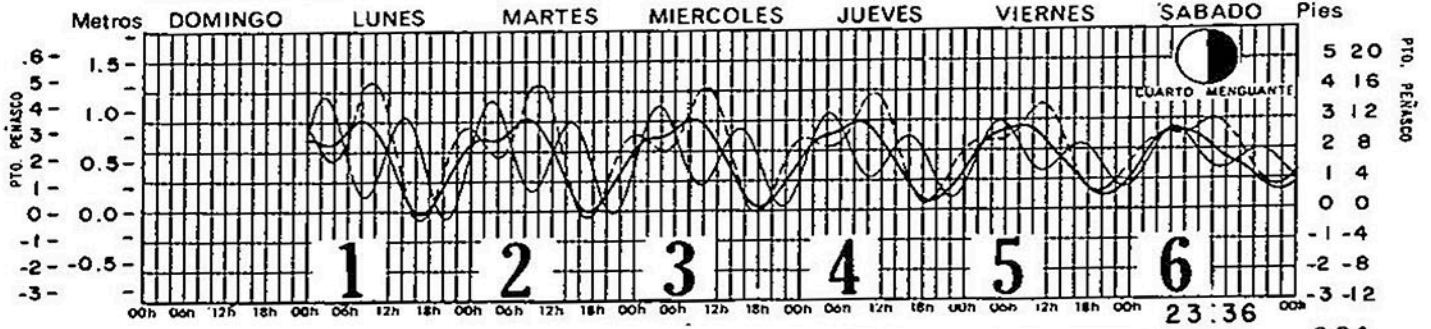


NOVIEMBRE 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.B.M.I.



FEBRERO 19, 3

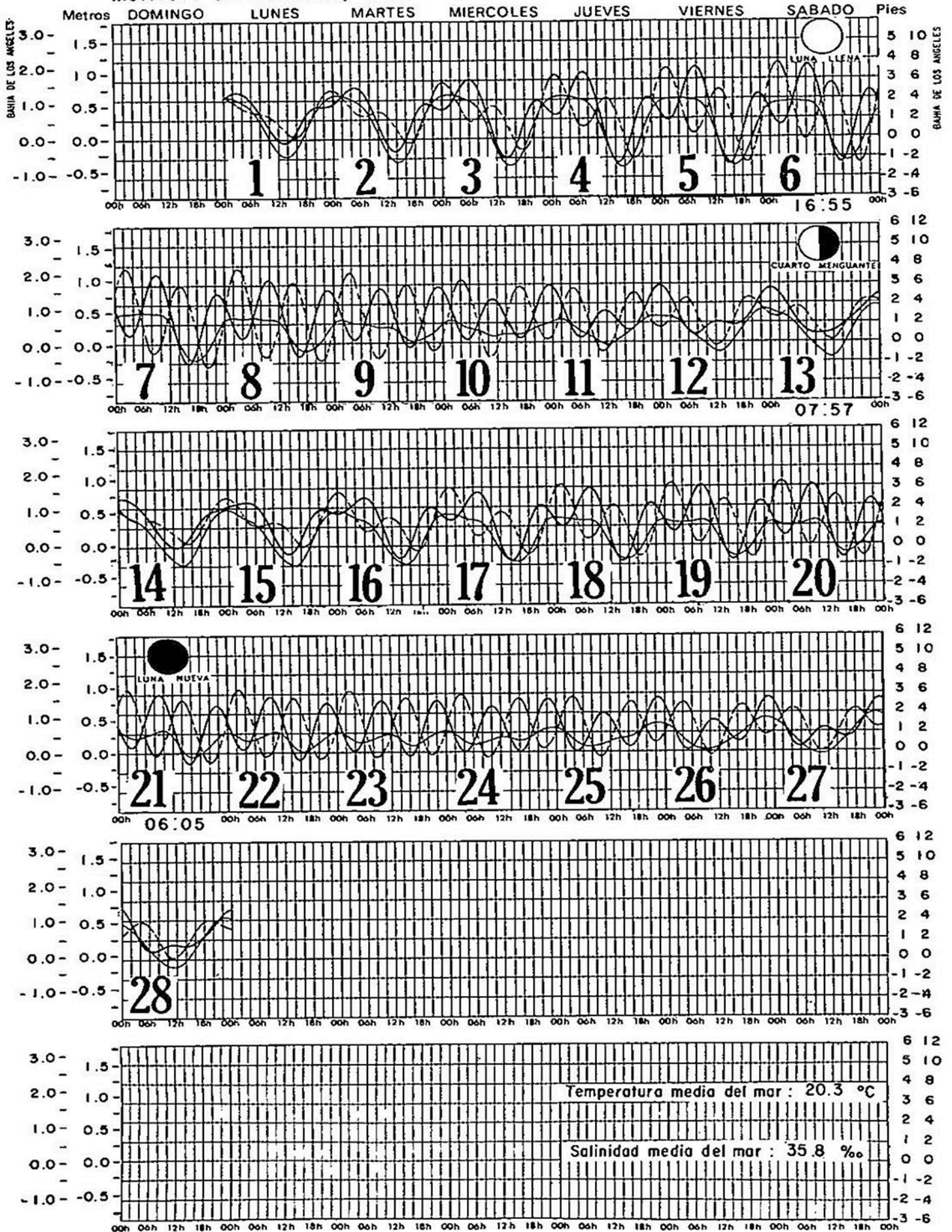
B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.R.M.I

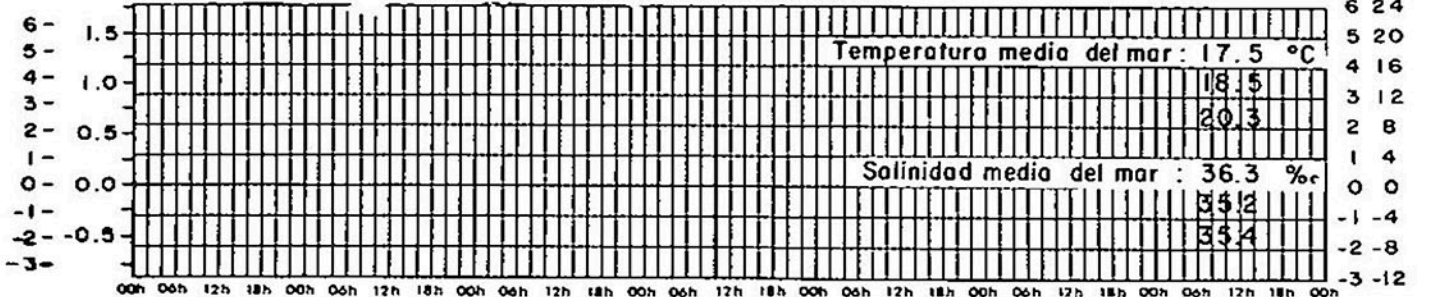
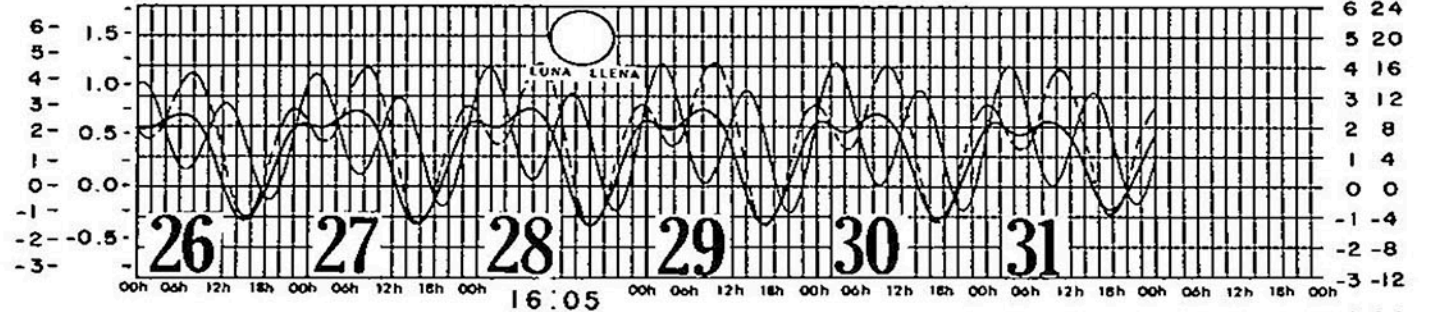
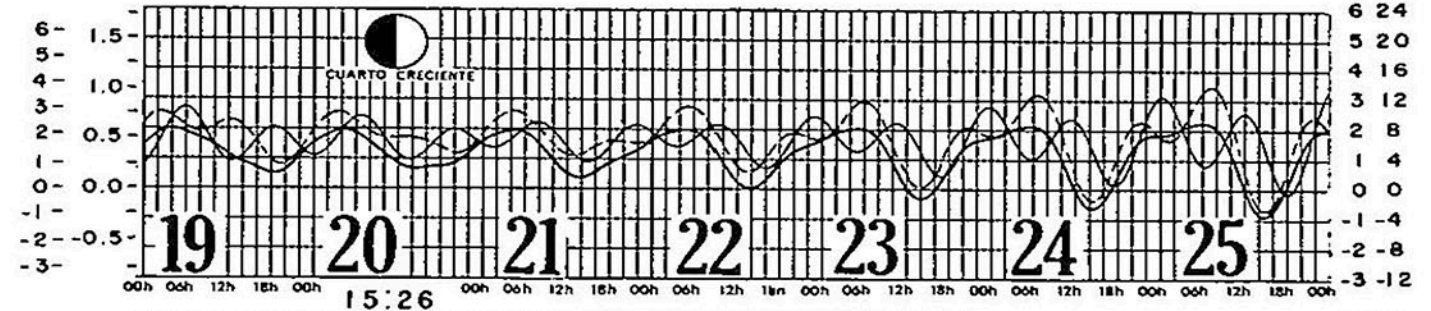
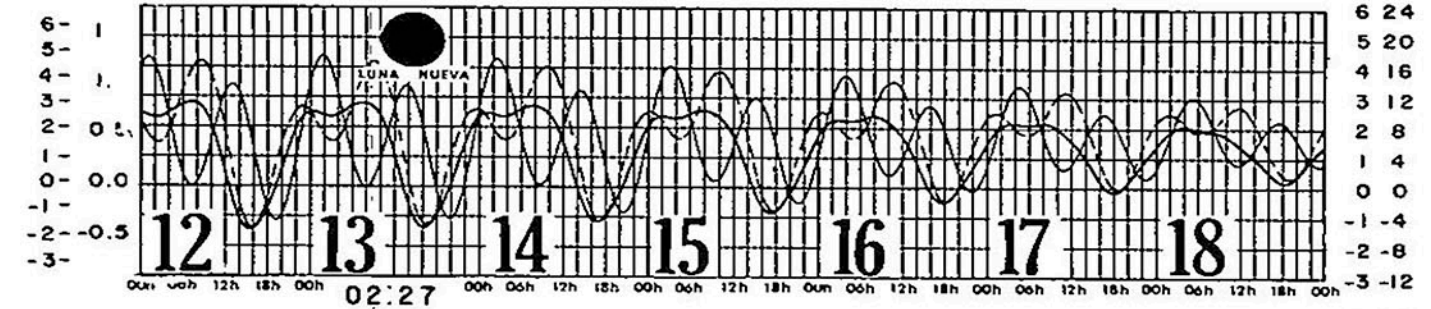
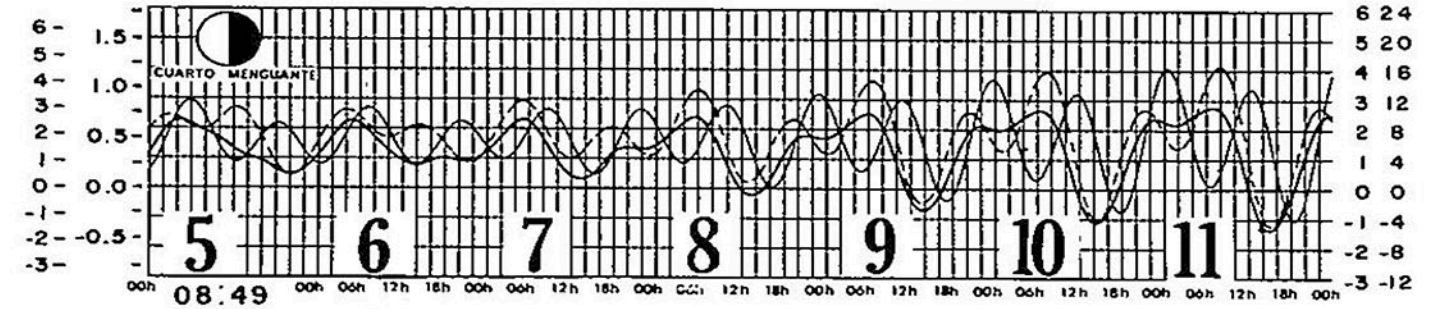
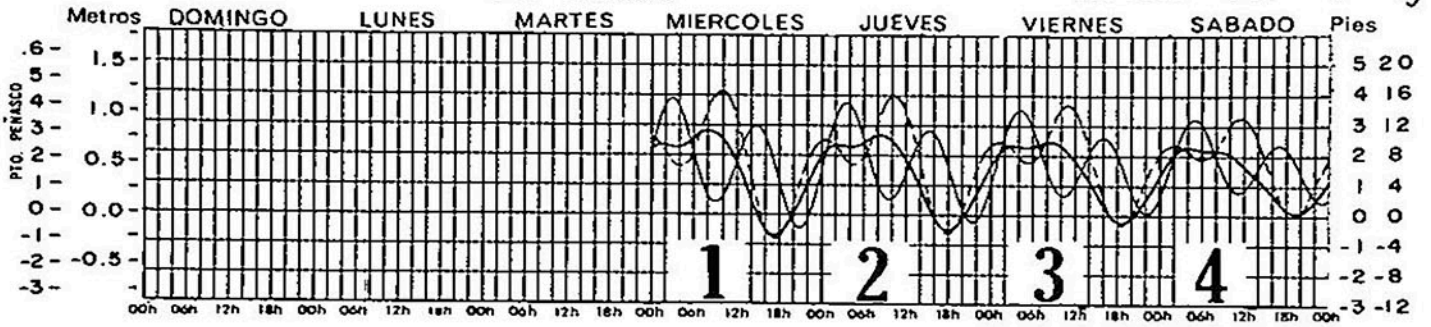


DICIEMBRE 1993

PTO. PEÑASCO, SON.
GUAYMAS, SON.
TOPOLOBAMPO, SIN.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA: N.B.M.I.



ENERO 1993

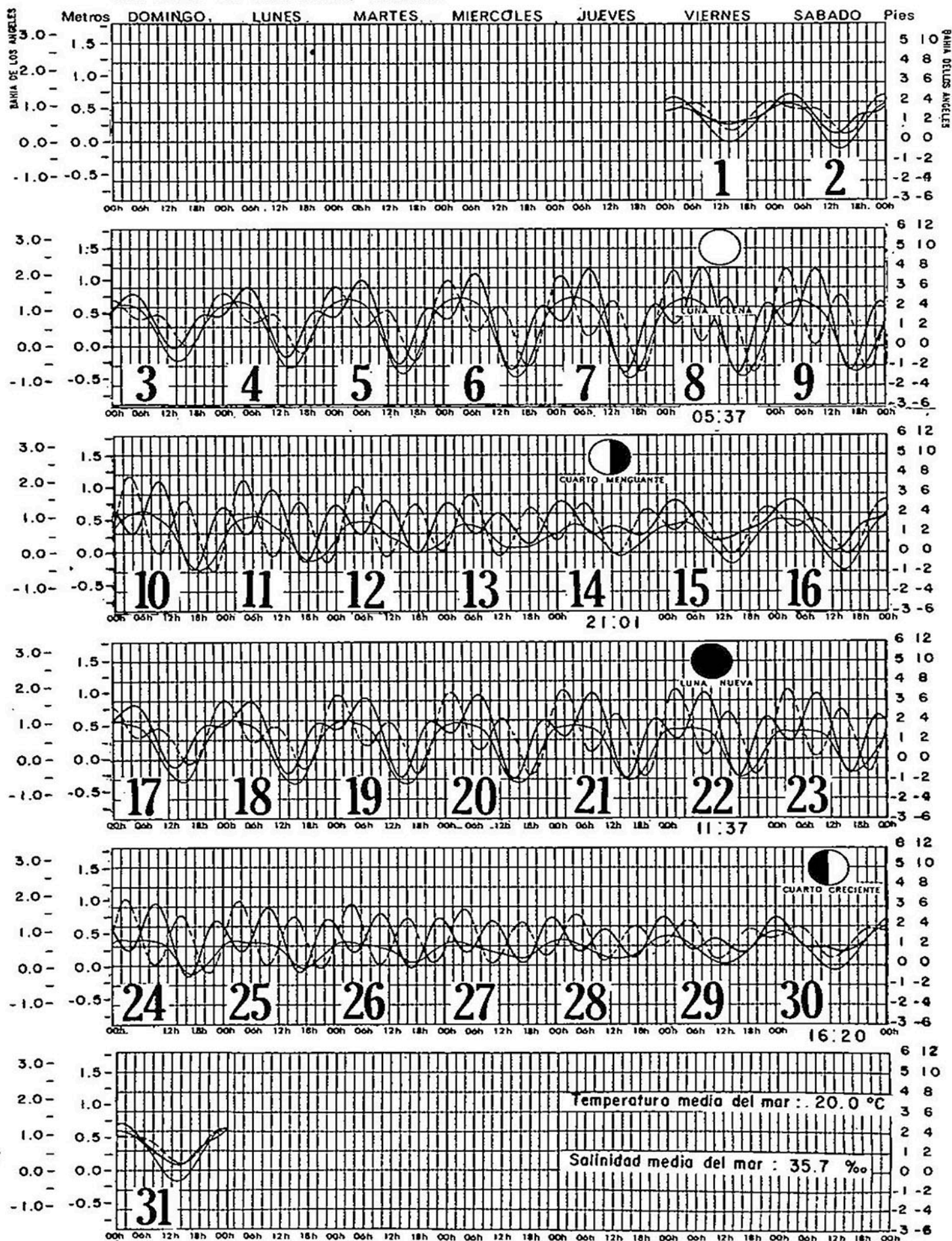
B. DE LOS ANGELES, B.C.S.

STA. ROSALIA, B.C.S.

LA PAZ, B.C.S.



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



HORA DEL MERIDIANO 105° W

PLANO DE REFERENCIA N.B.M.I.

Temperatura media del mar : 20.0 °C

Salinidad media del mar : 35.7 ‰

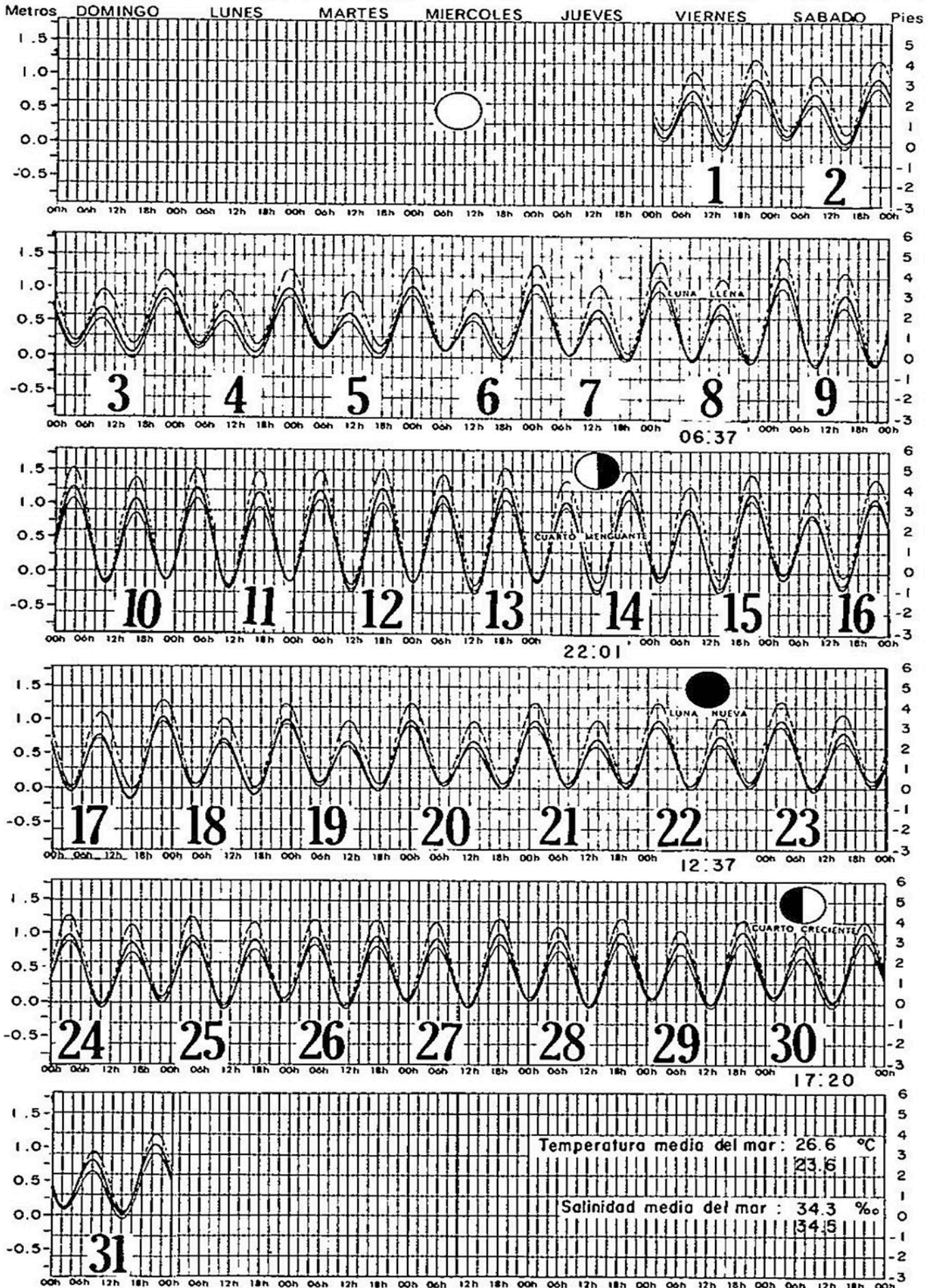


ENERO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

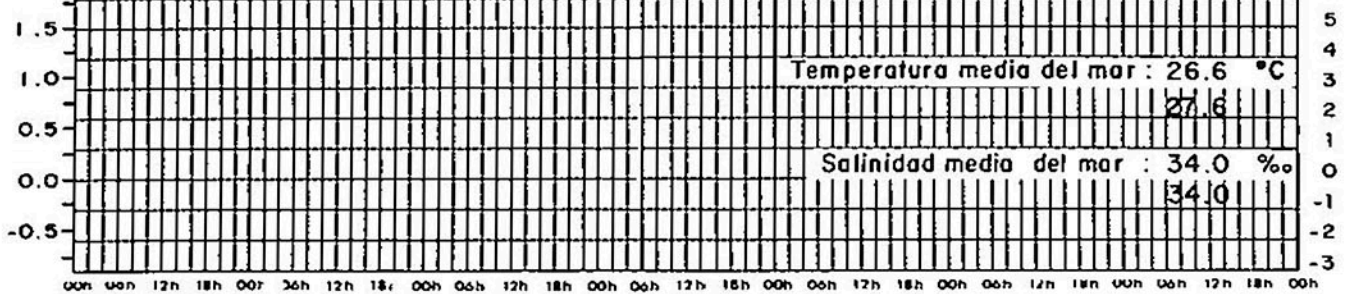
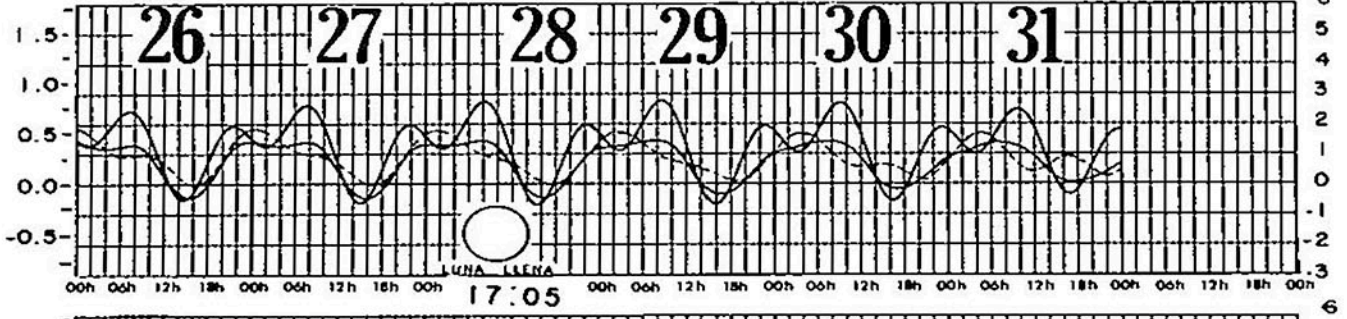
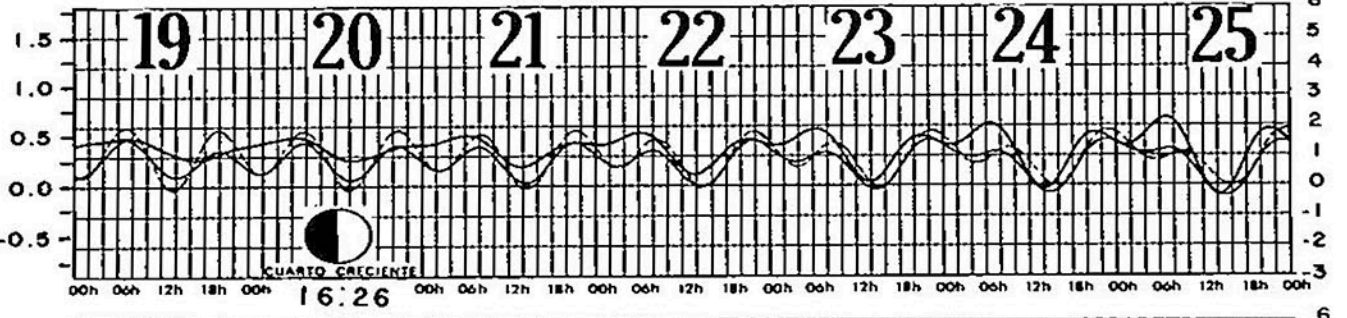
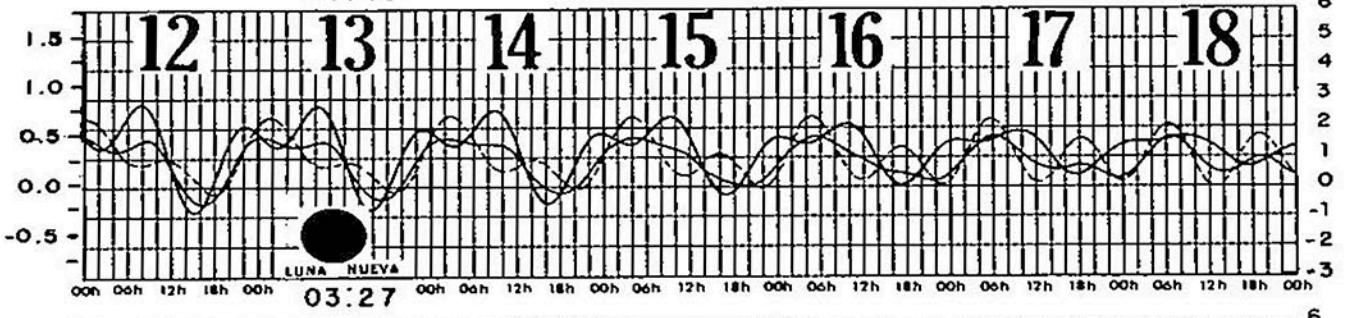
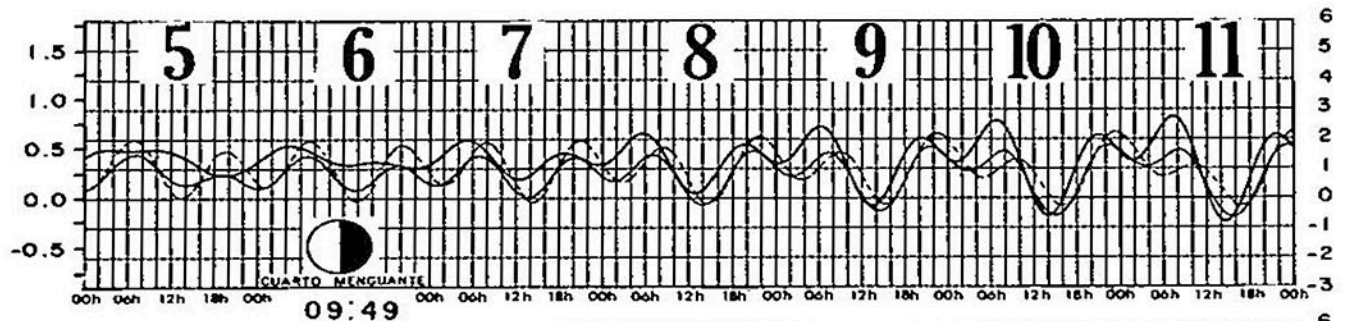
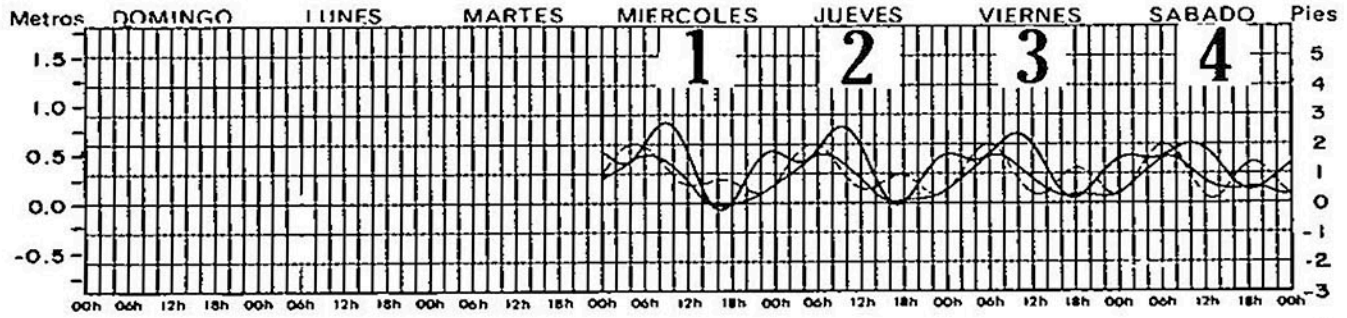


DICIEMBRE 1993

MANZANILLO, COL.
L. CARDENAS, MICH
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.



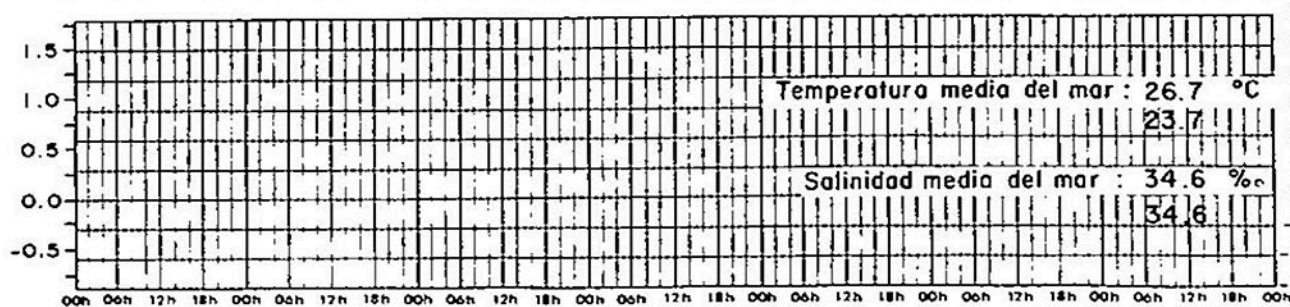
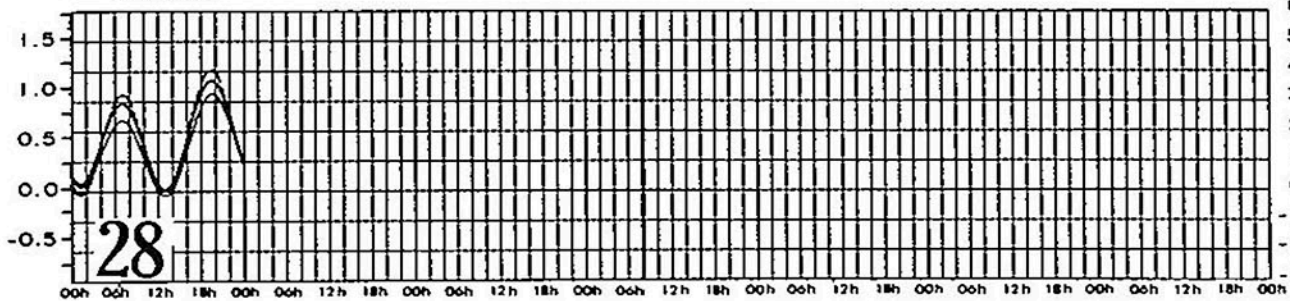
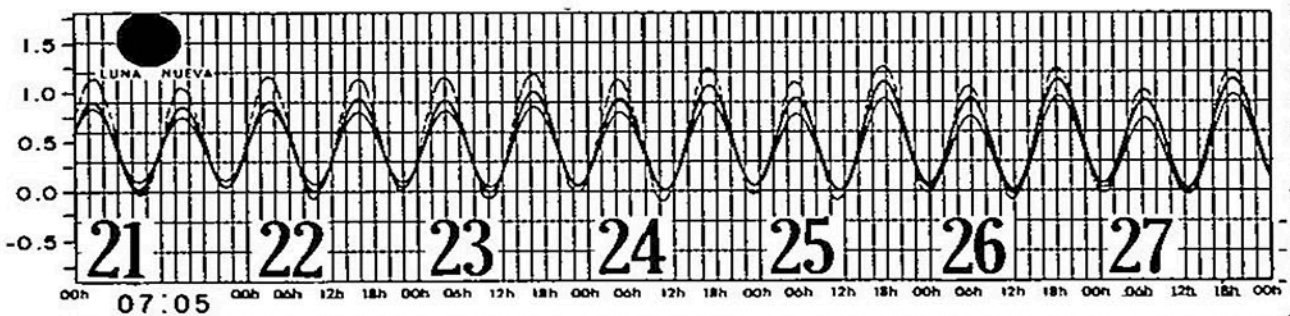
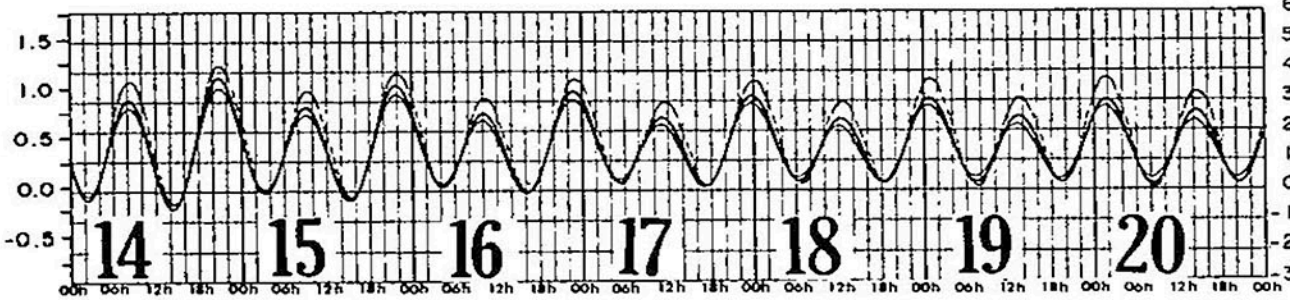
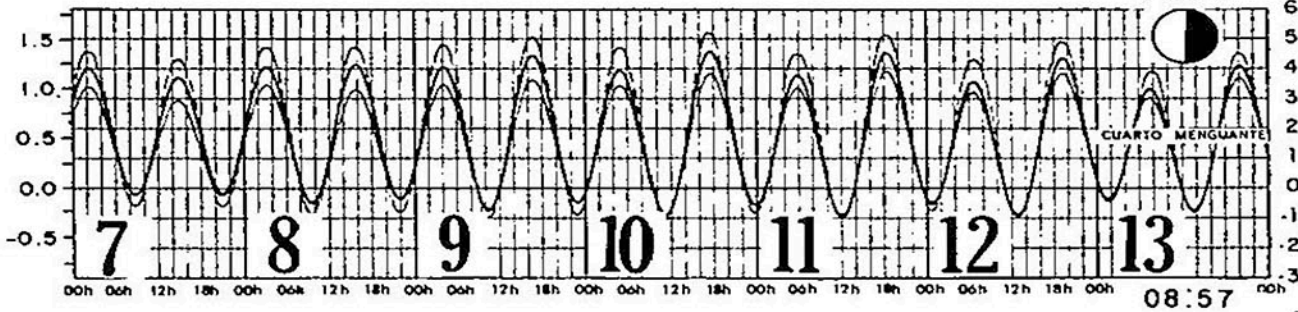
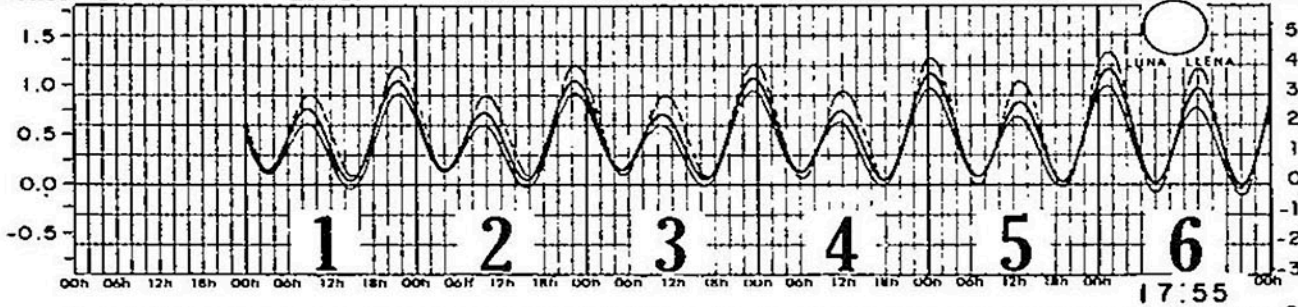
FEBRERO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO **Pies**



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

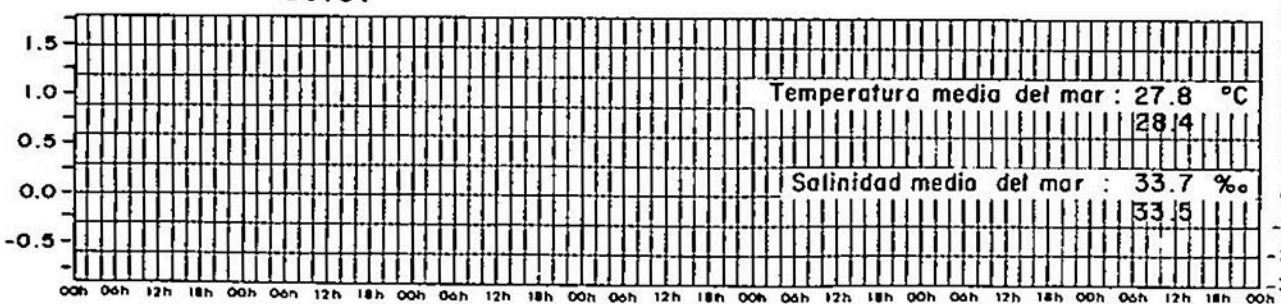
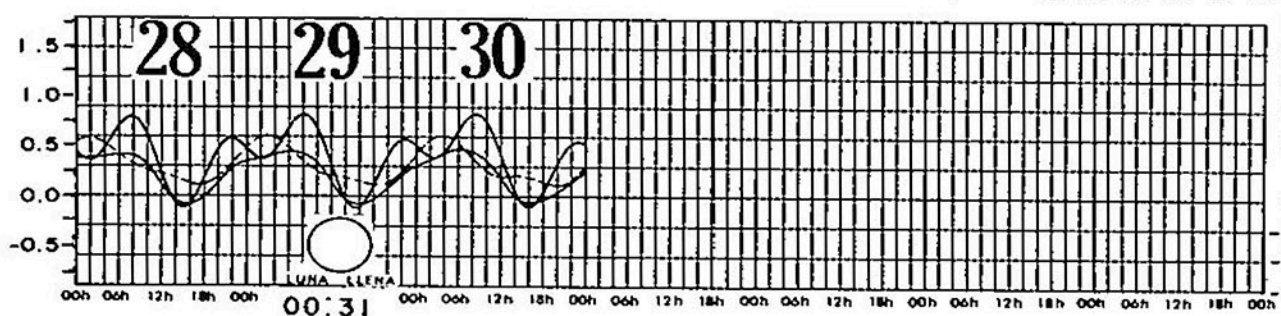
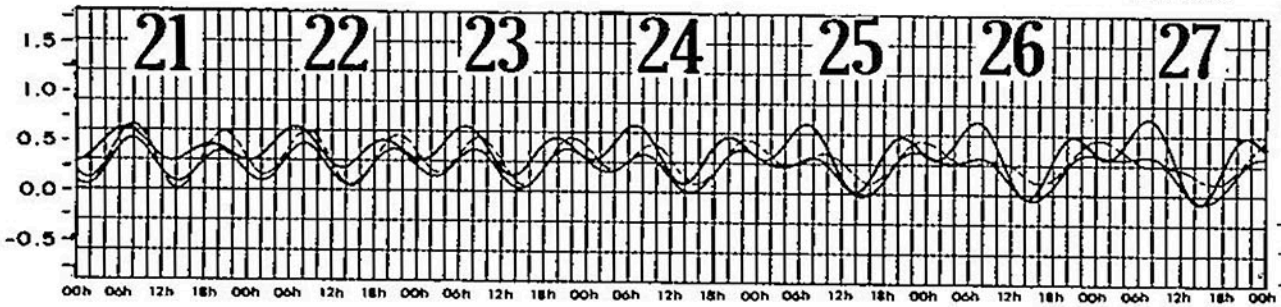
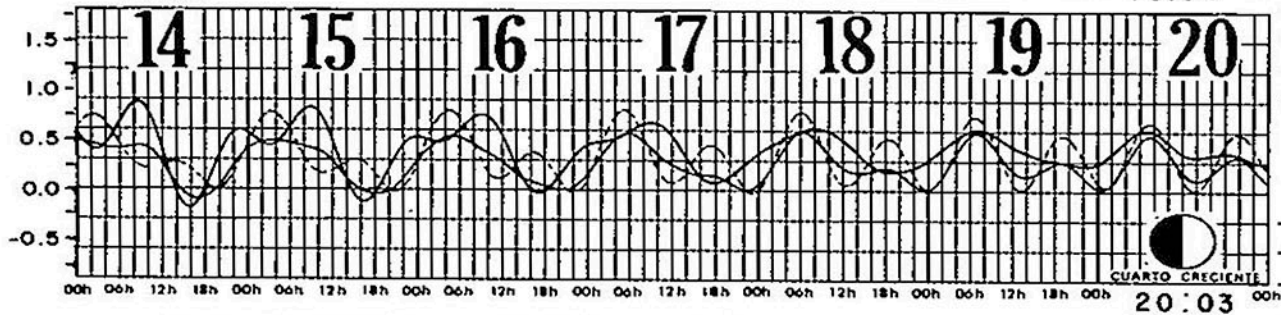
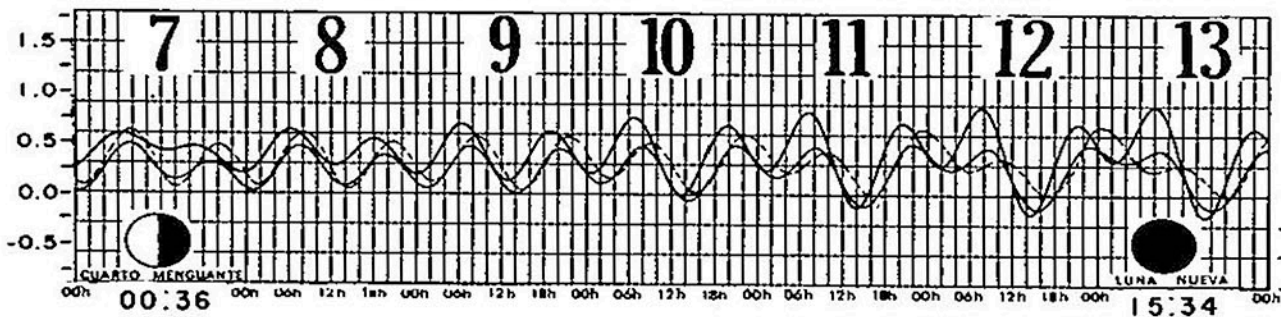
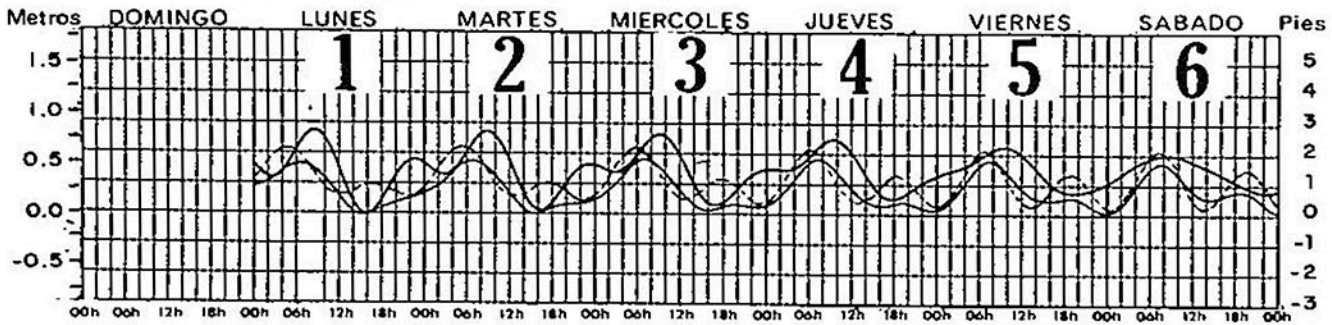


NOVIEMBRE 993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



NORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

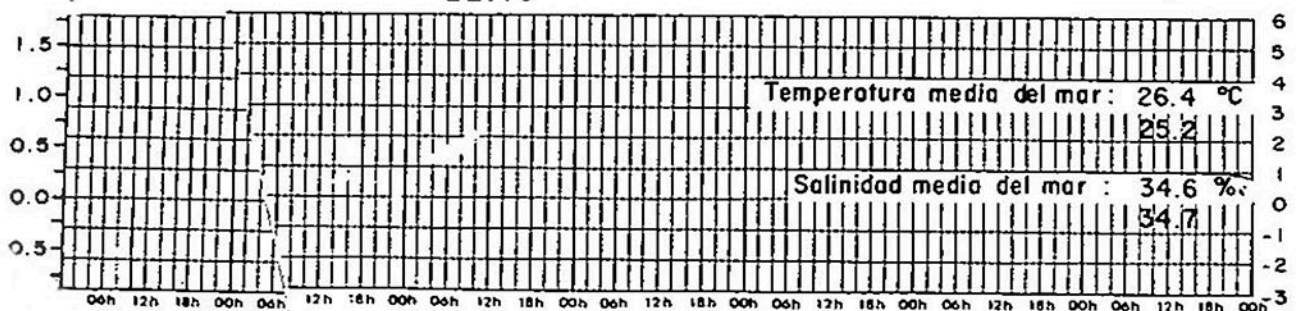
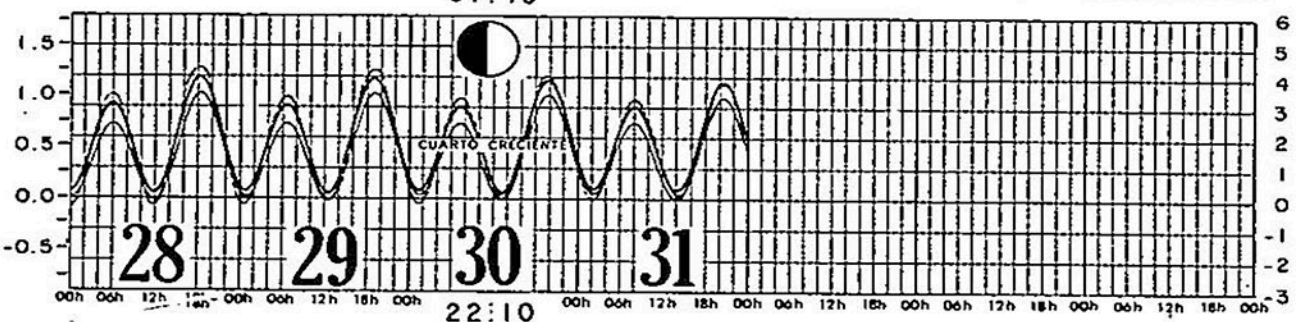
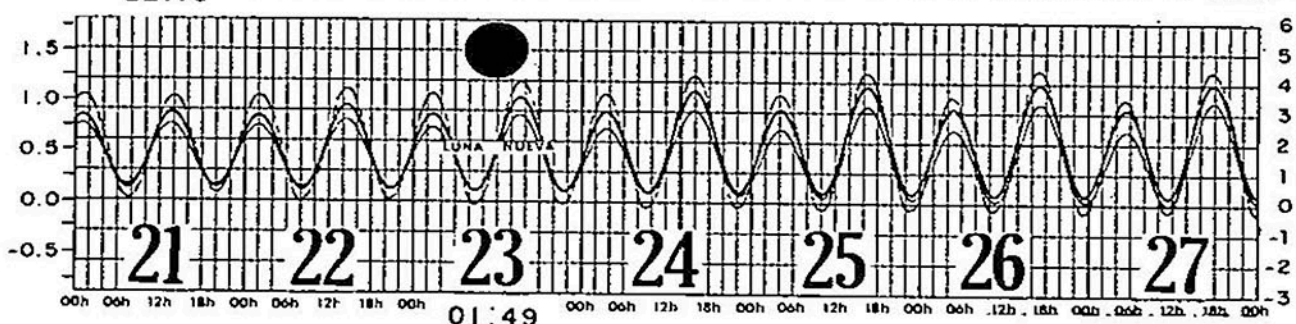
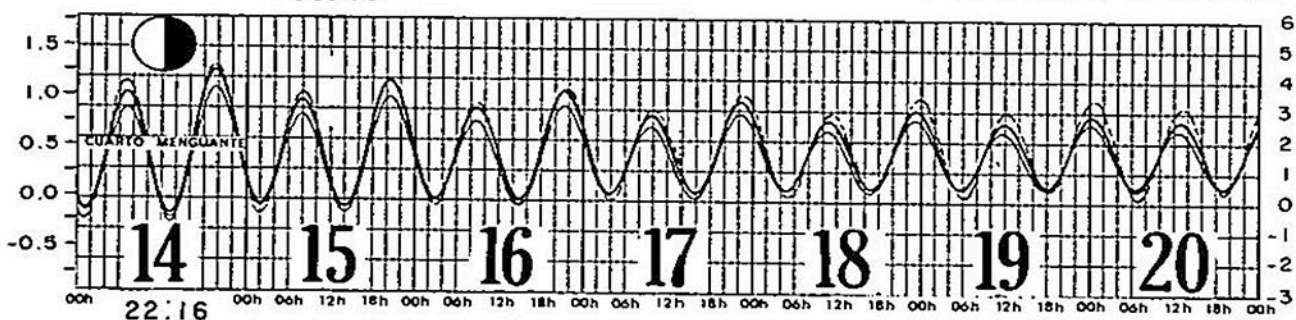
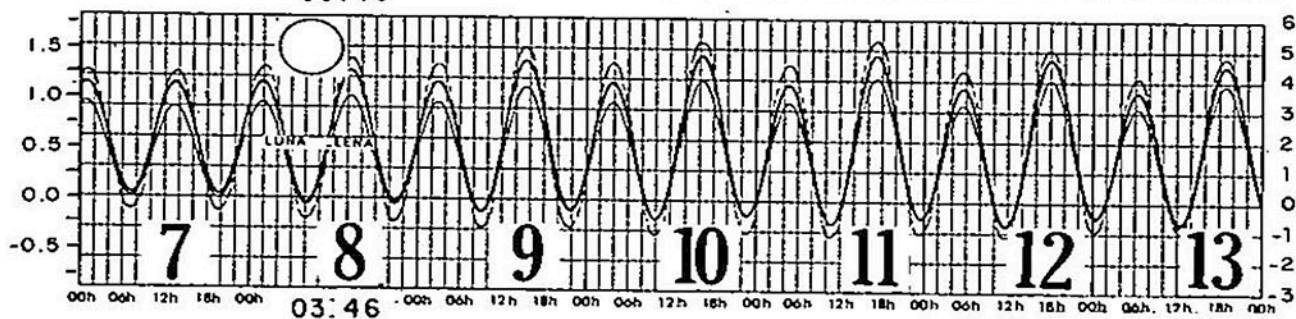
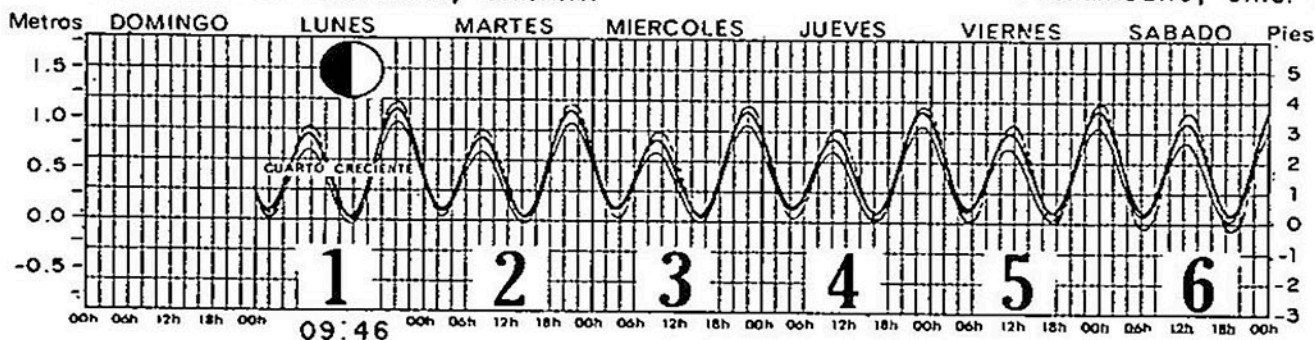


MARZO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

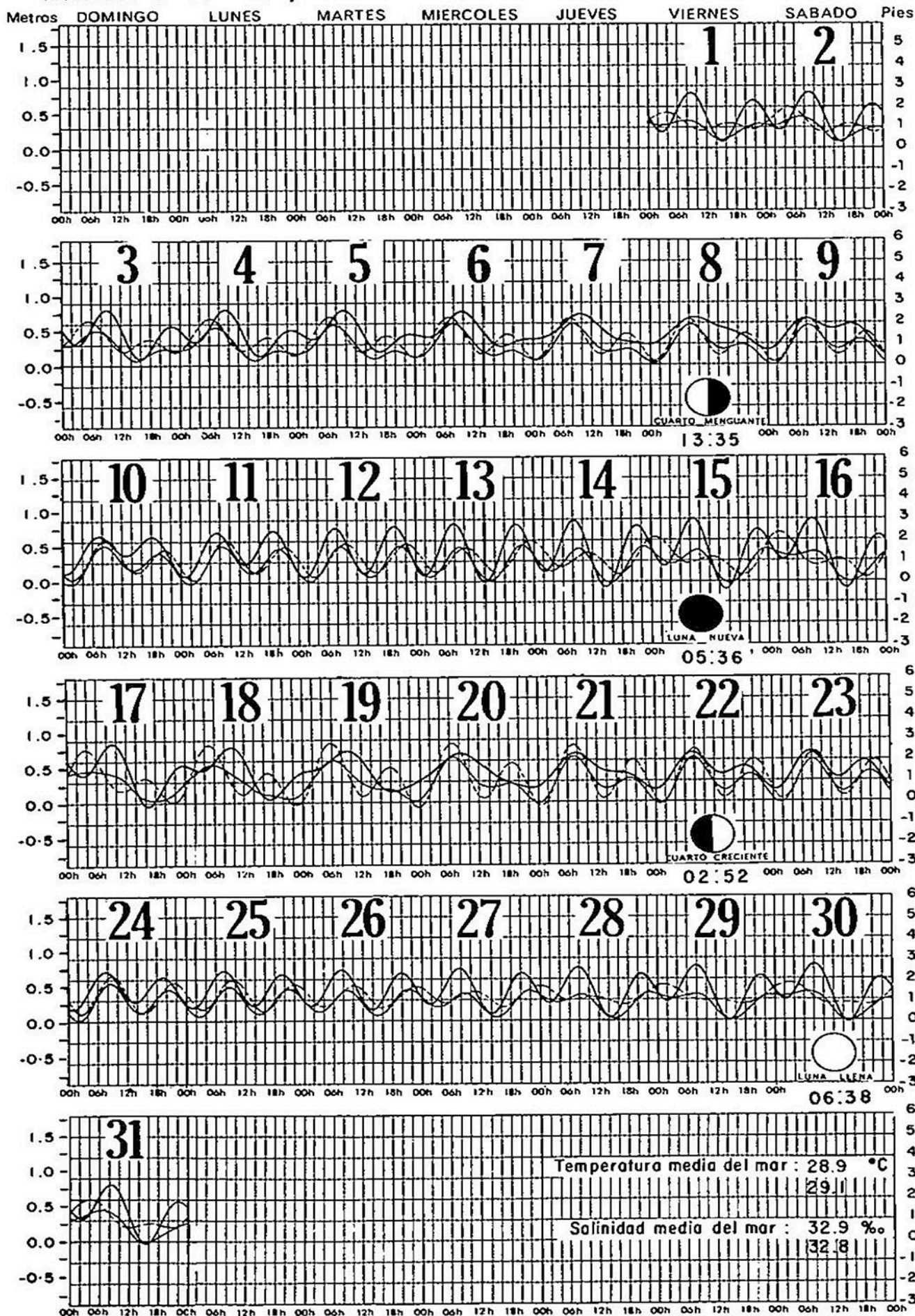


OCTUBRE 1993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.V

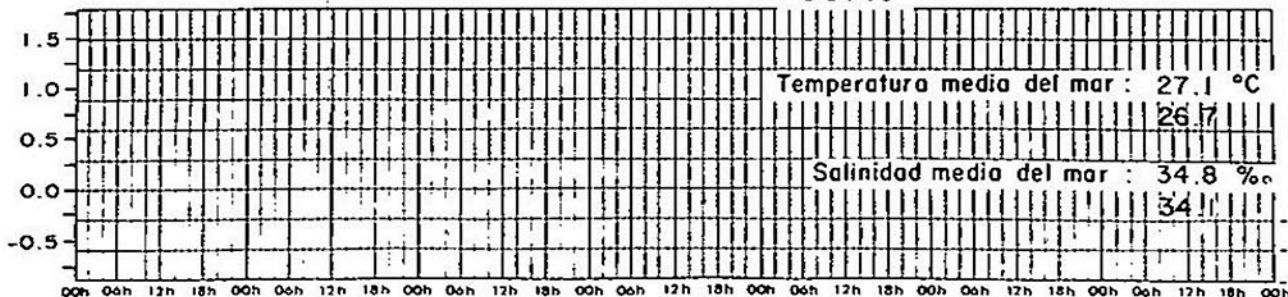
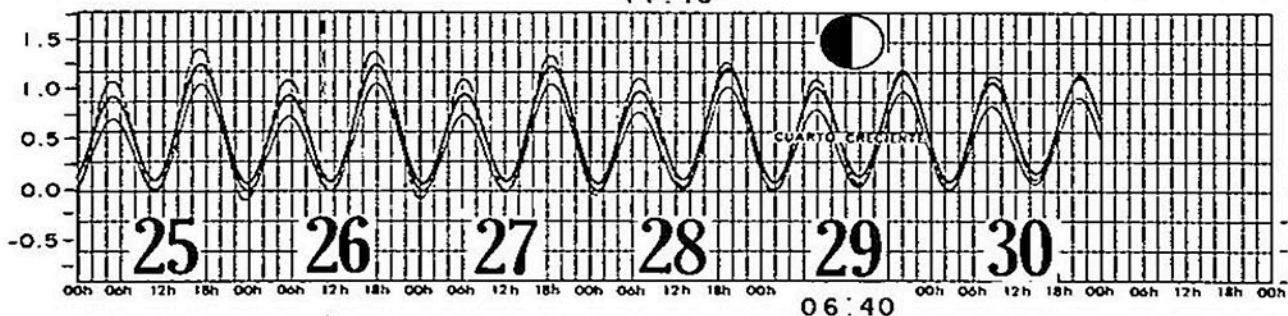
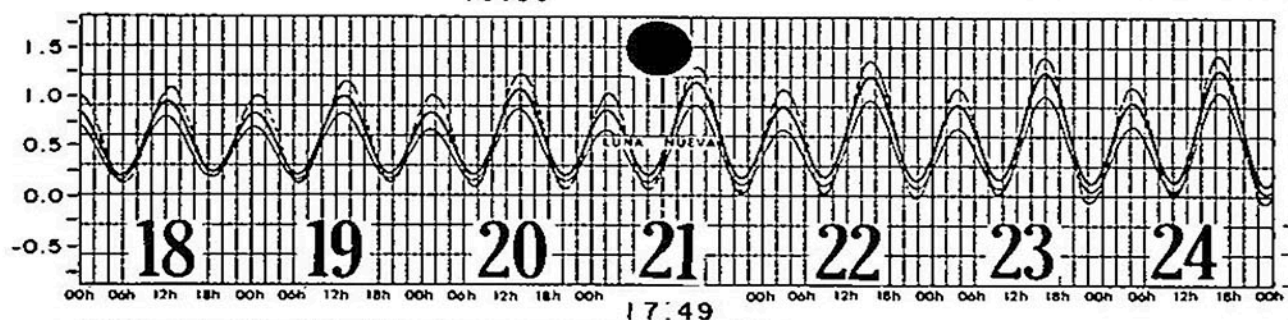
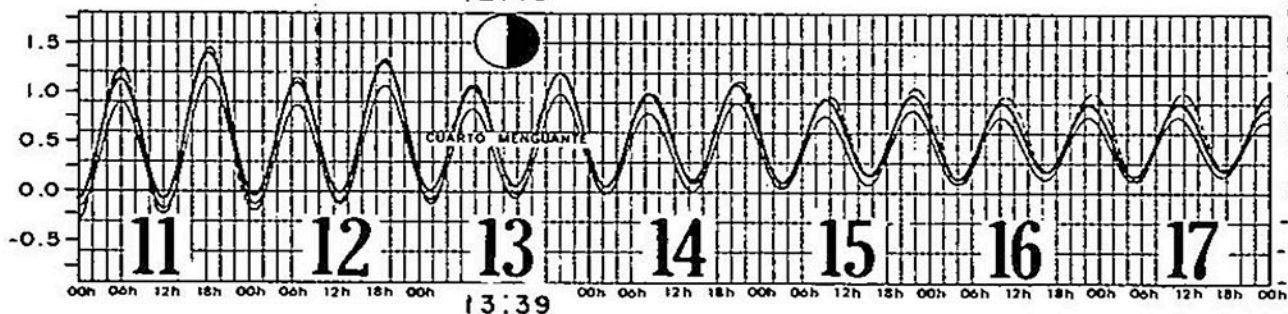
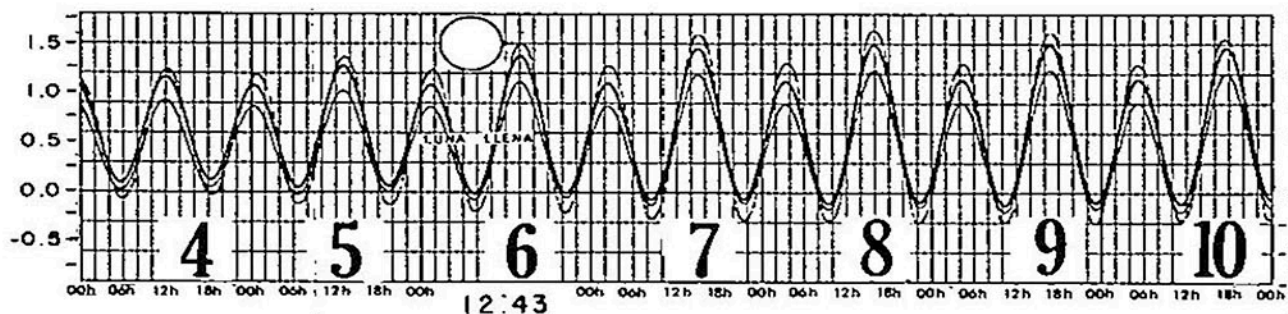
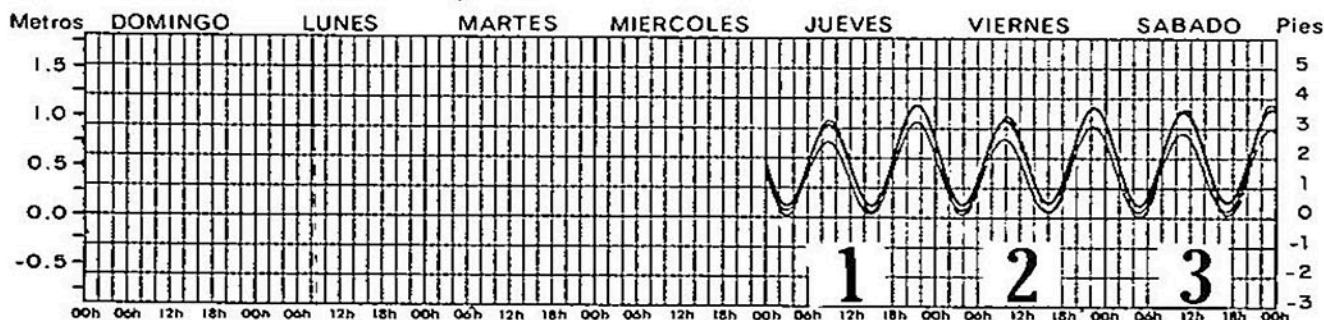


ABRIL 1963

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

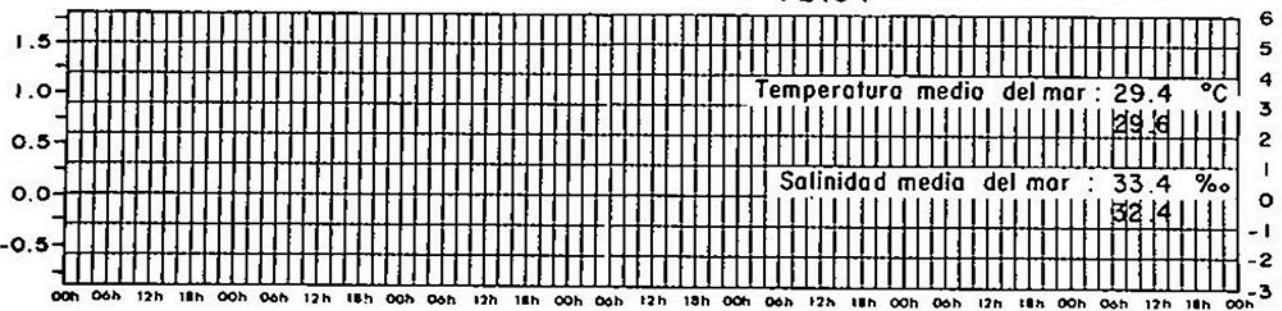
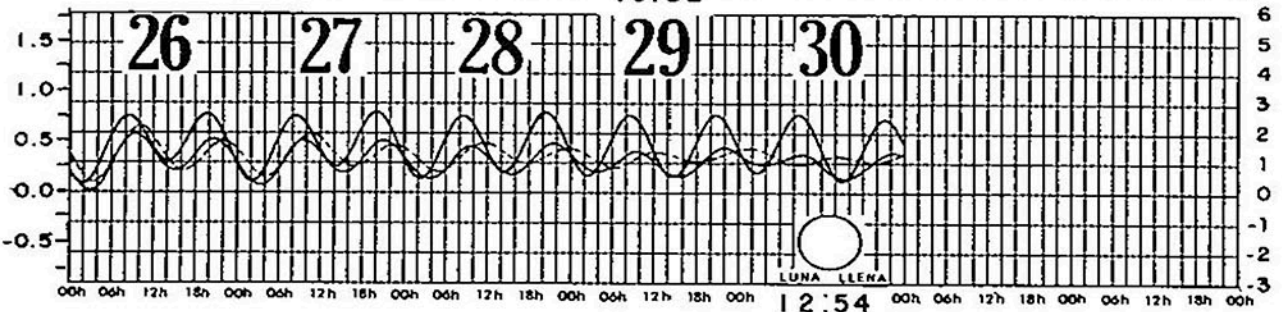
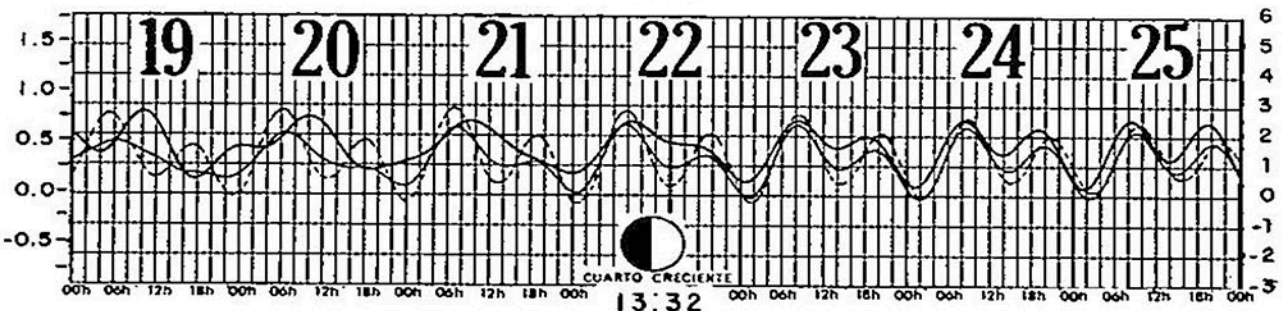
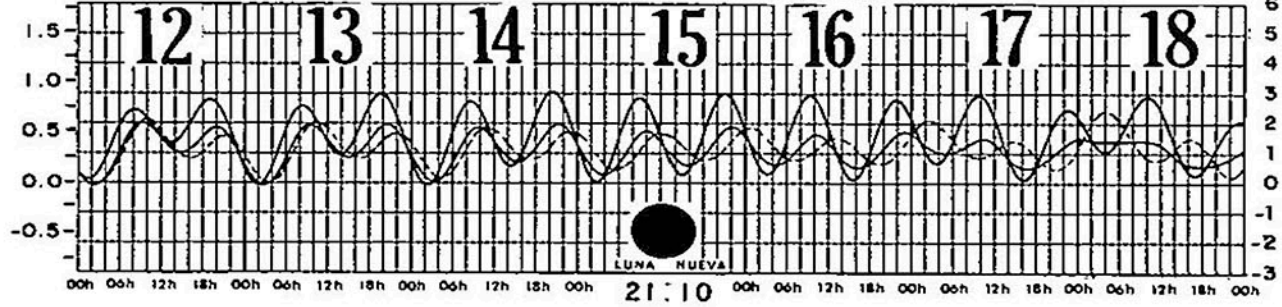
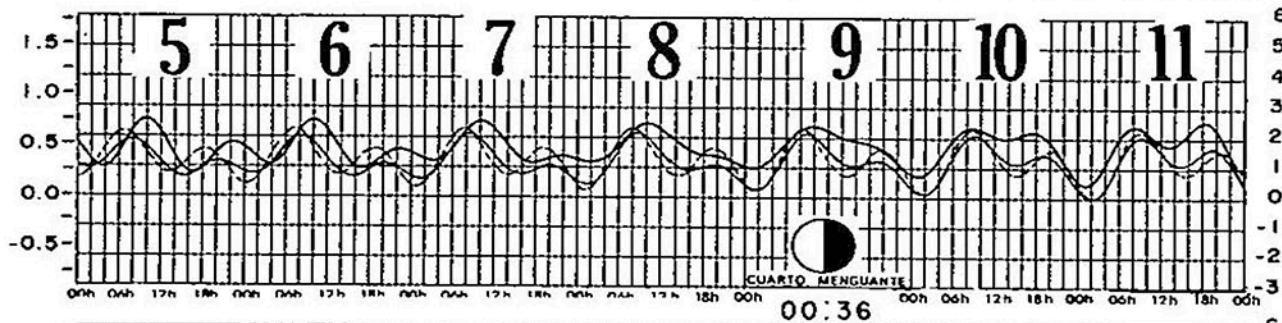
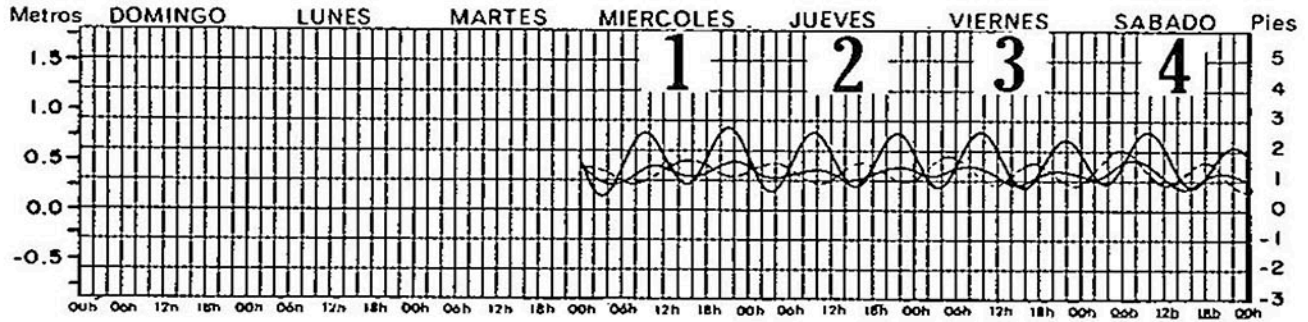


SEPTIEMBRE J93

MANZANILLO, COL.
L. CARDENAS, MICH
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

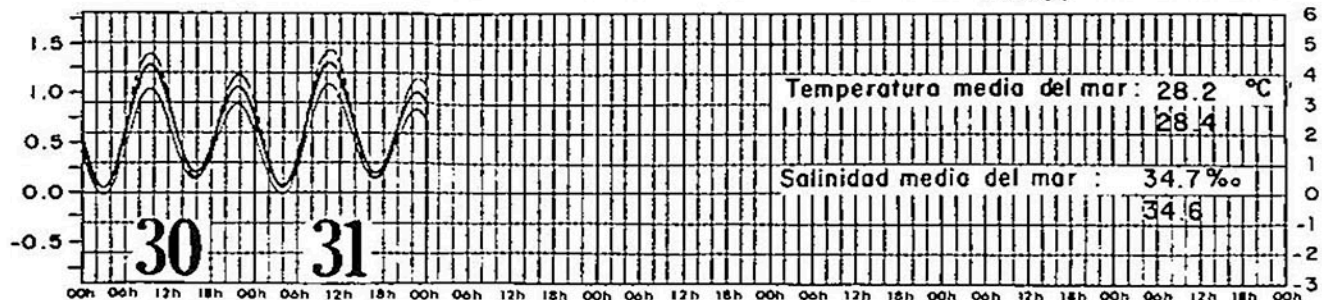
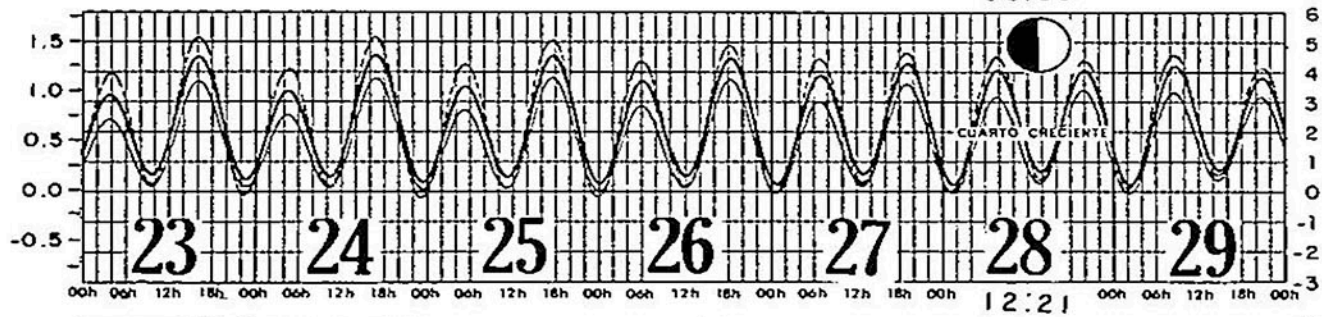
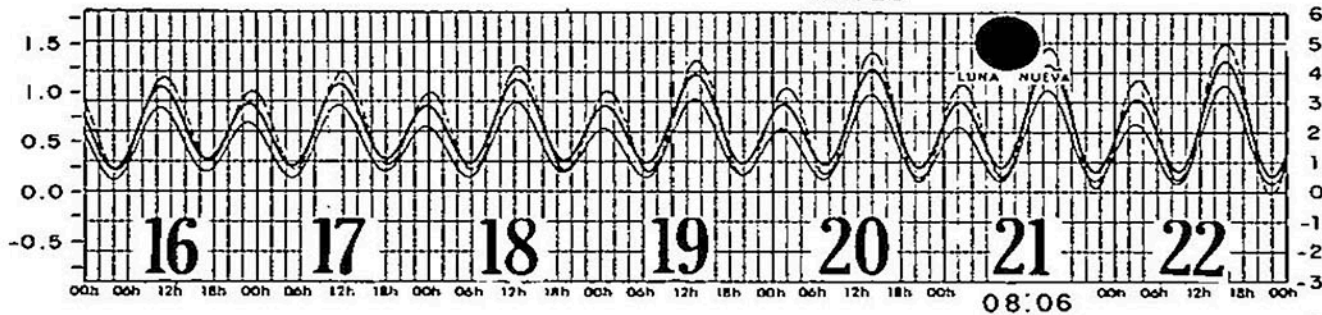
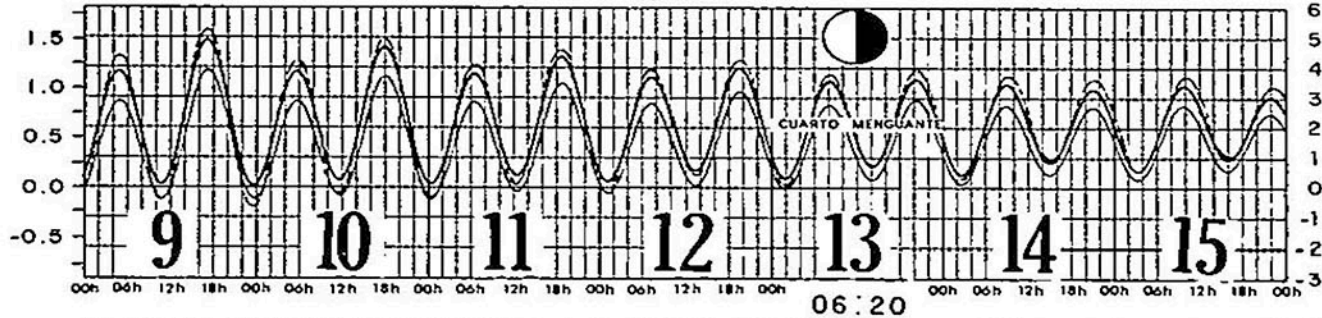
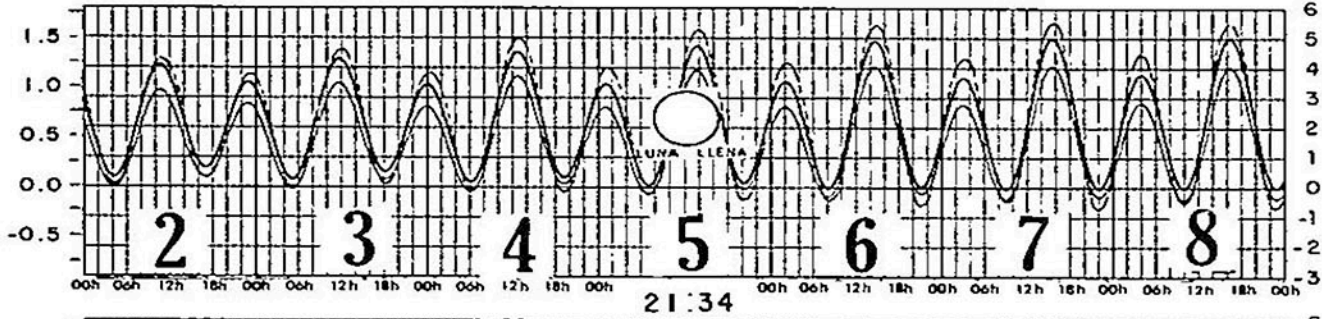
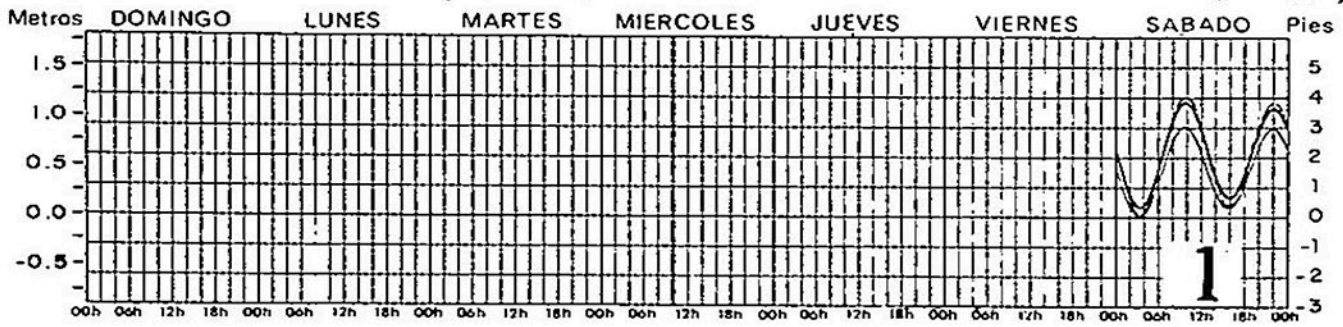


MAIO 1953

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



Temperatura media del mar: 28.2 °C
28.4

Salinidad media del mar: 34.7‰
34.6

HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

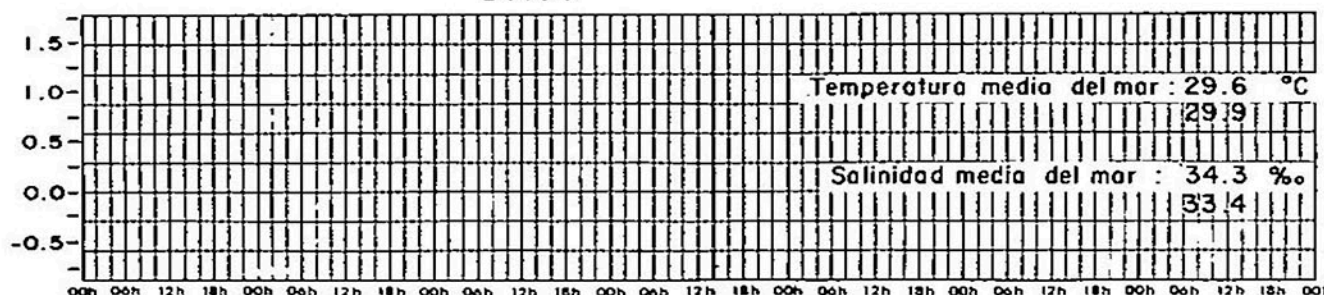
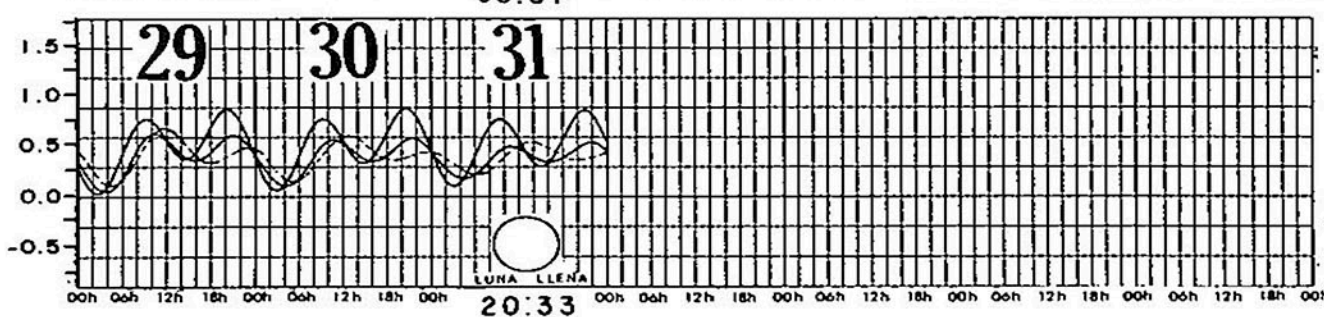
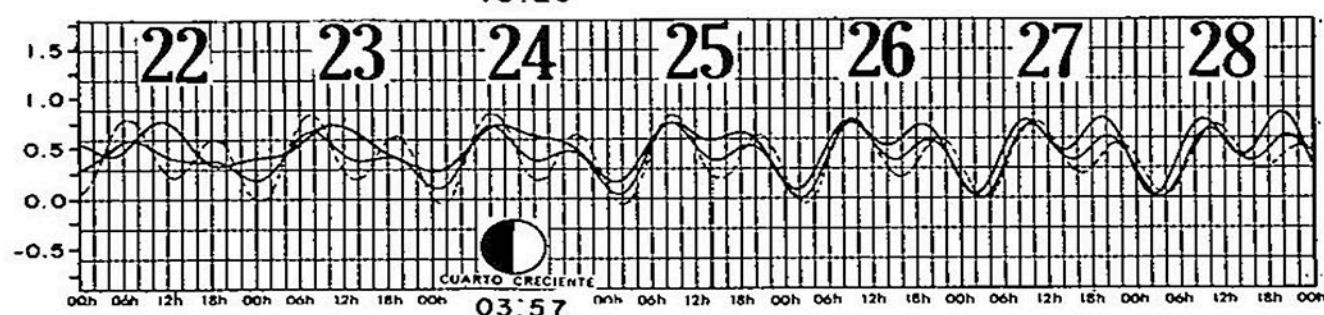
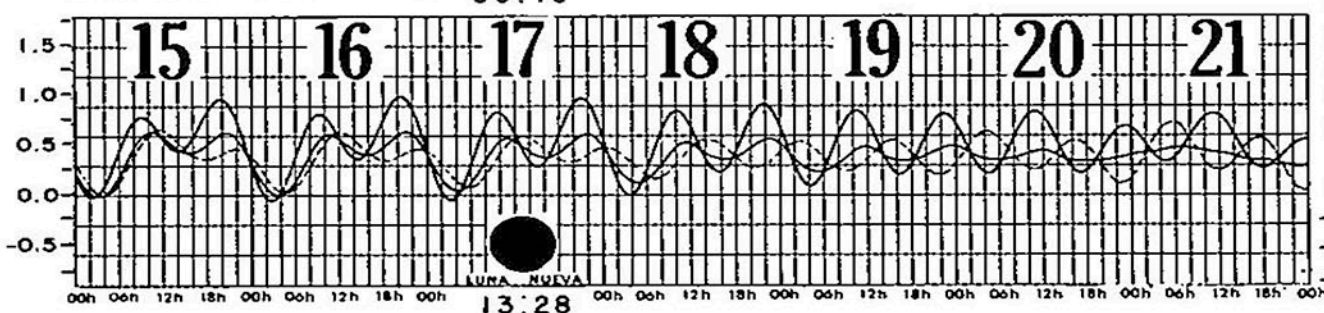
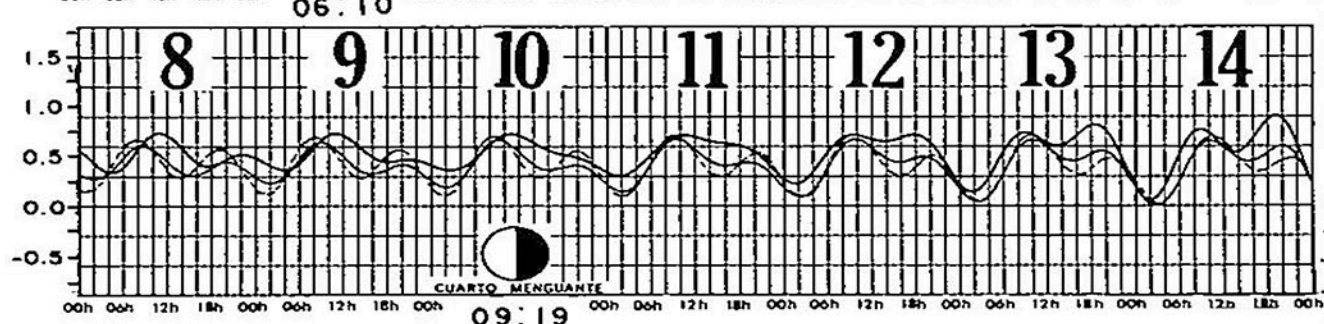
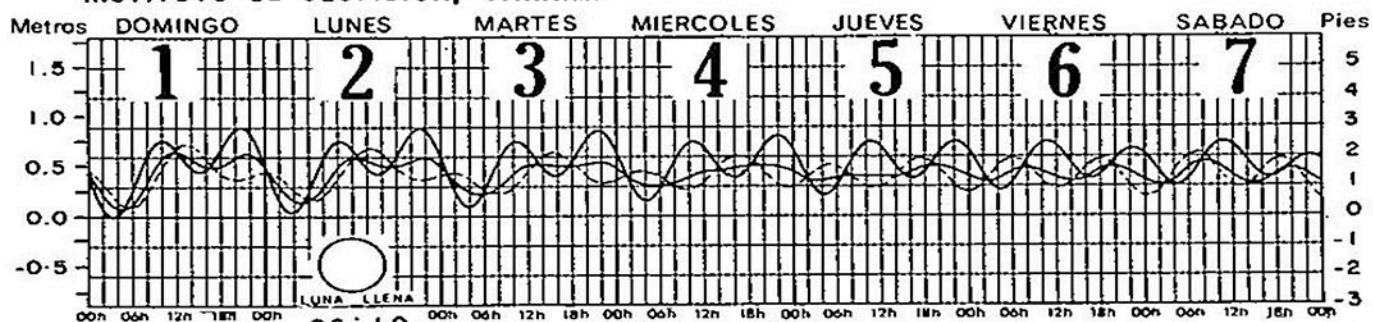


GOSTG 1993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

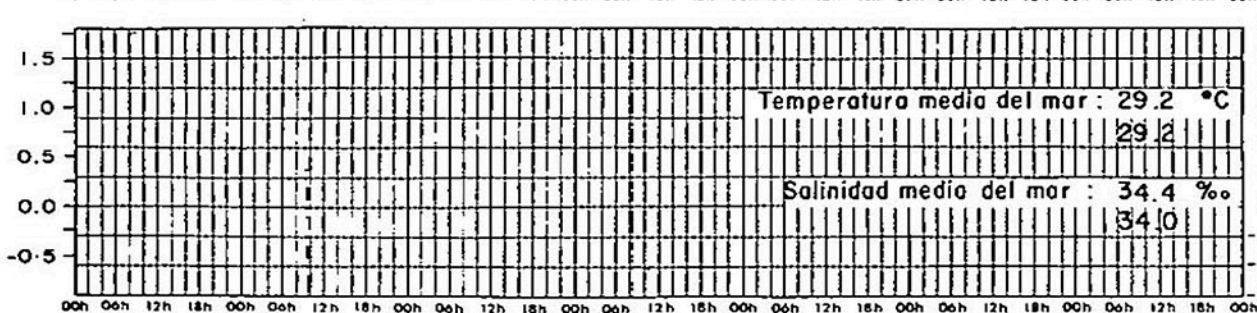
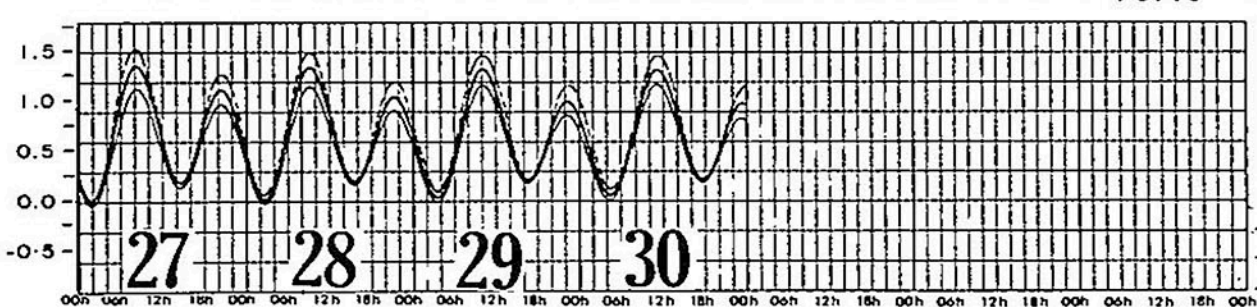
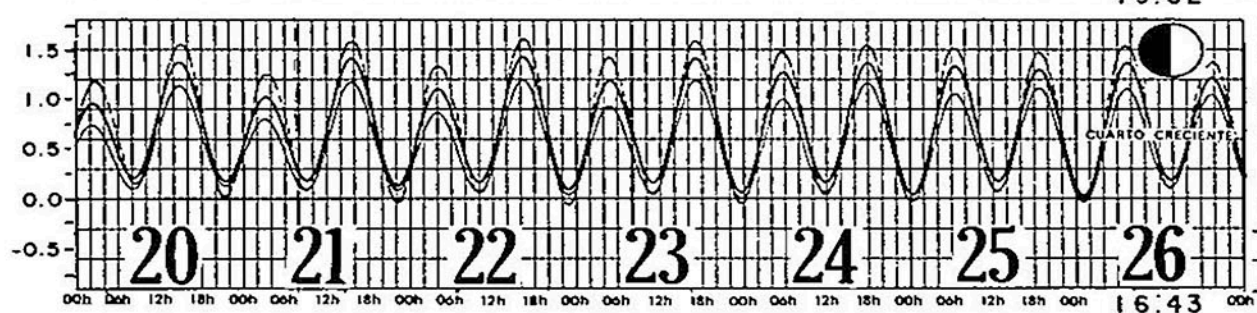
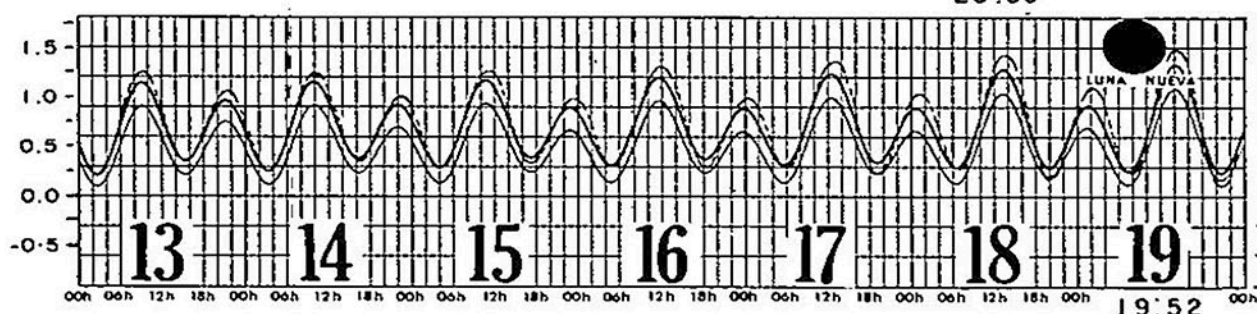
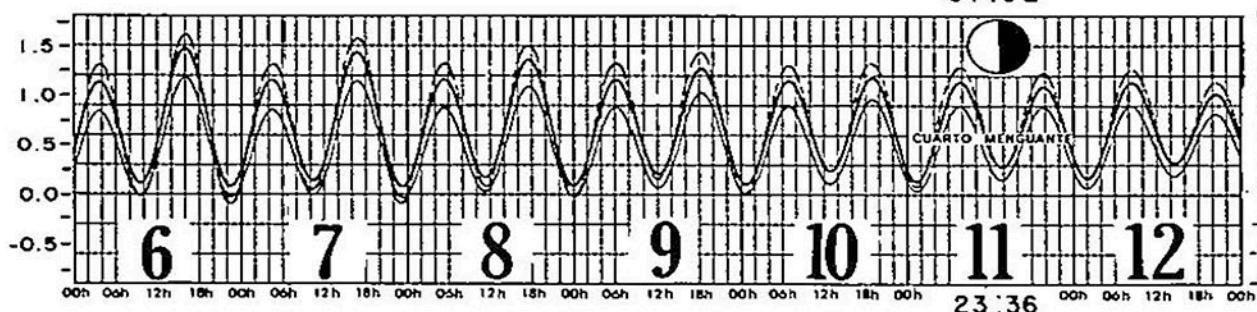
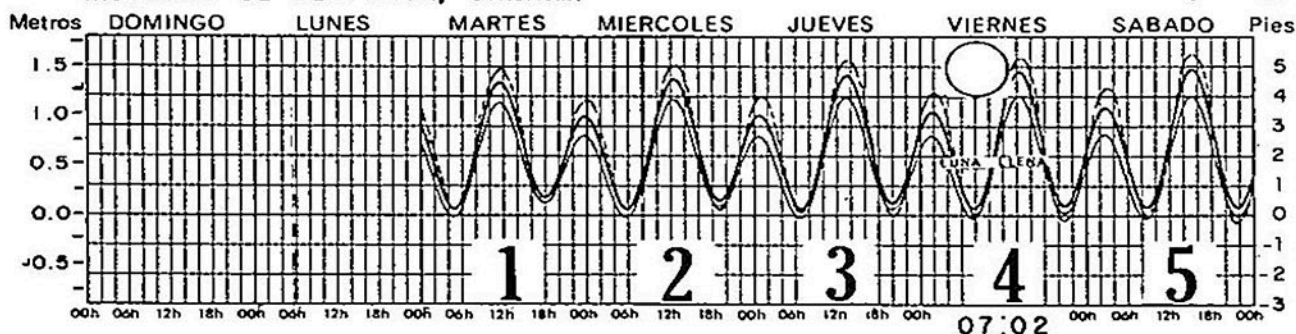


JUNIO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

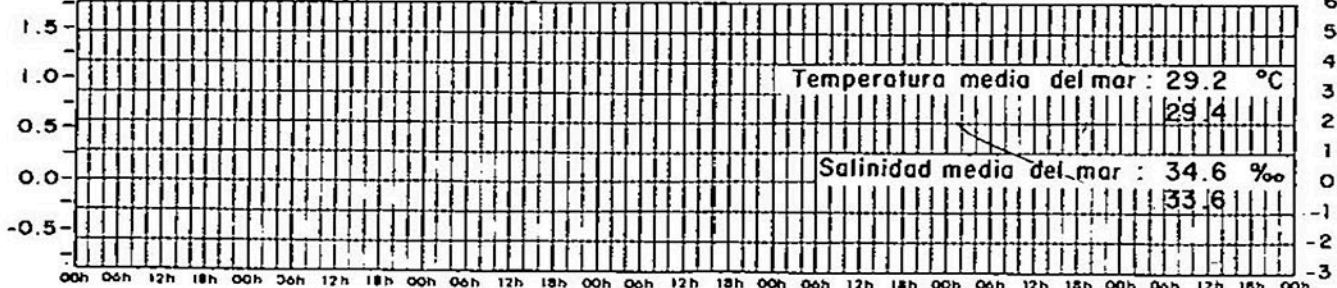
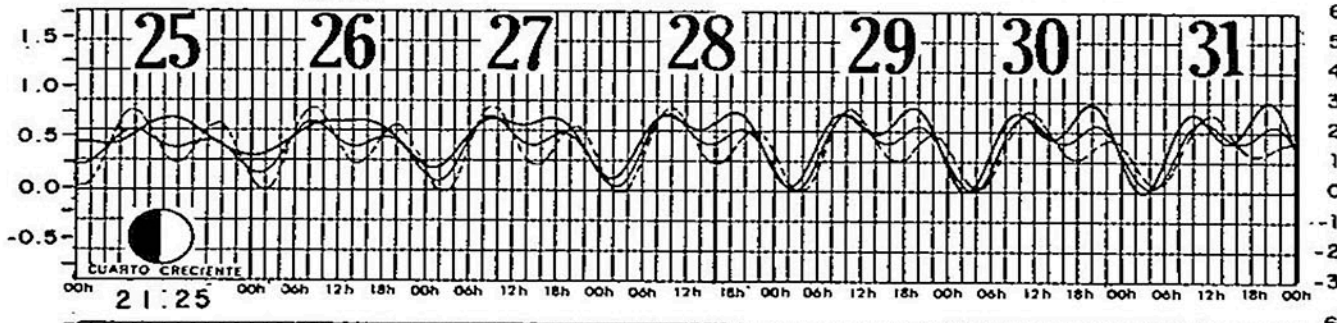
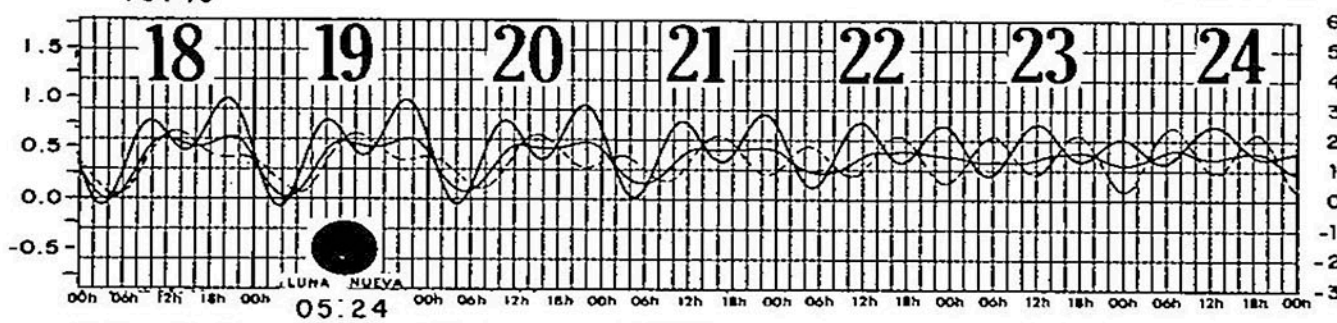
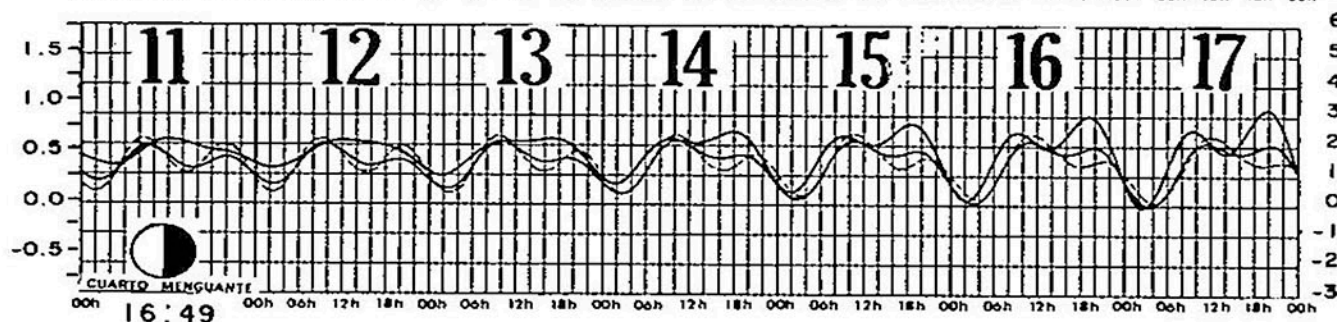
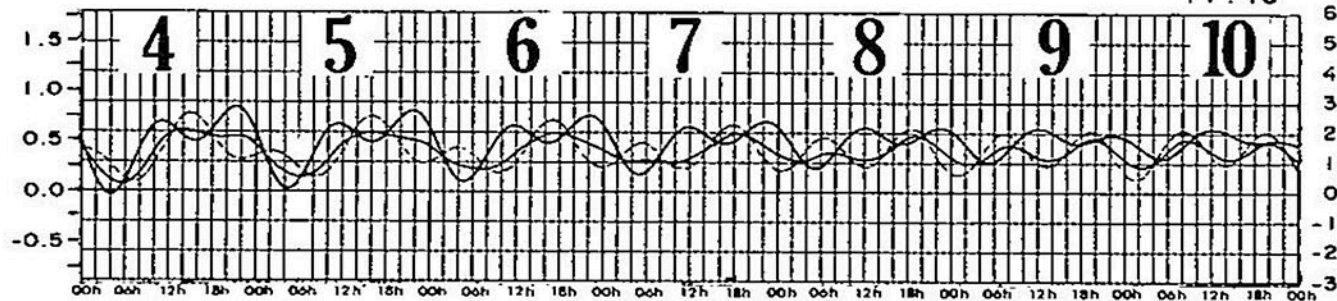
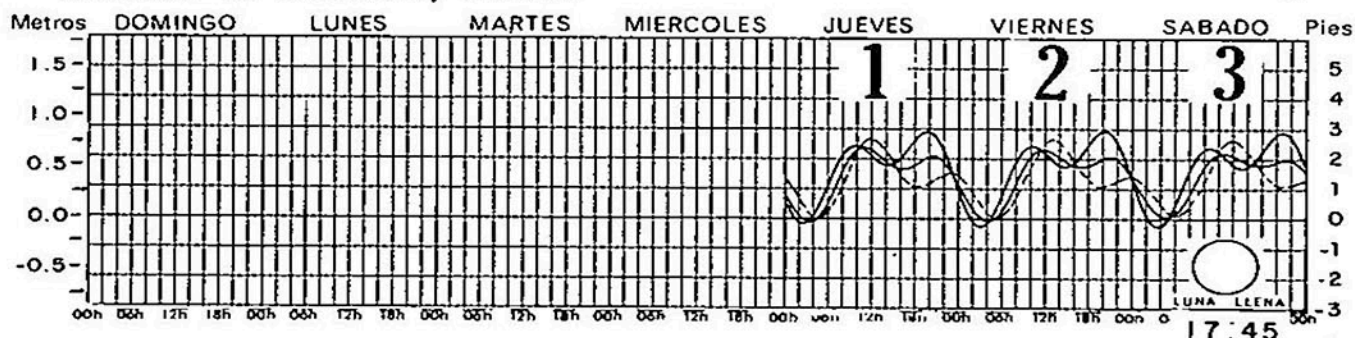


JULIO 993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

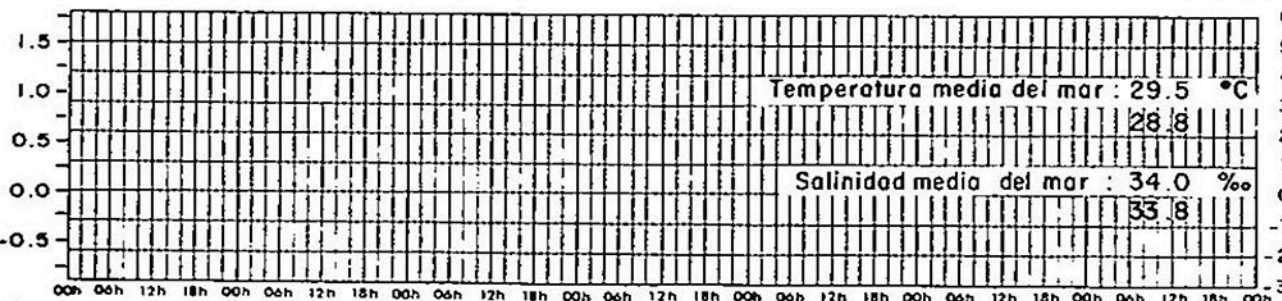
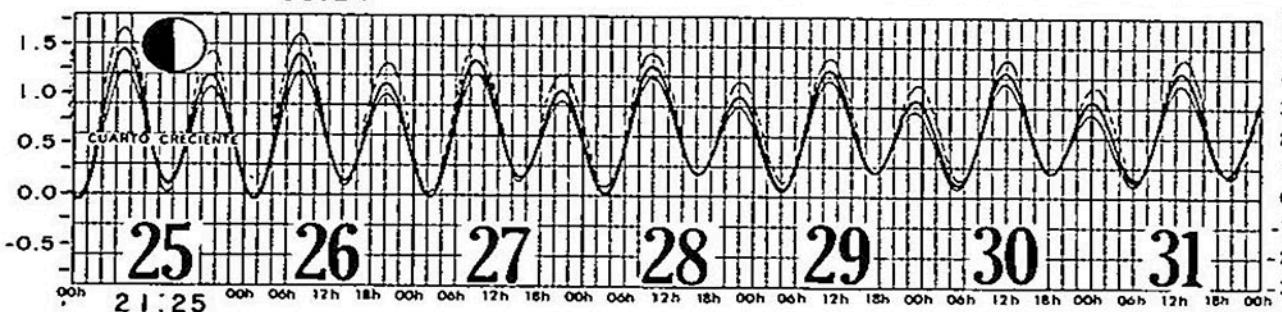
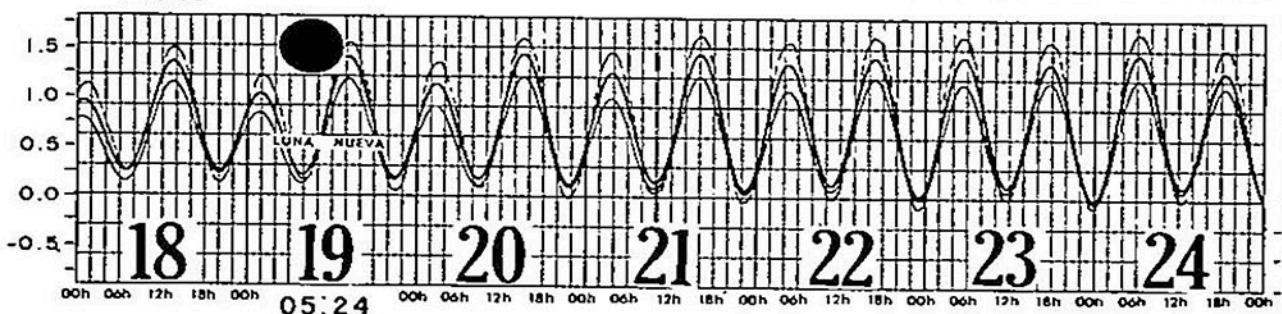
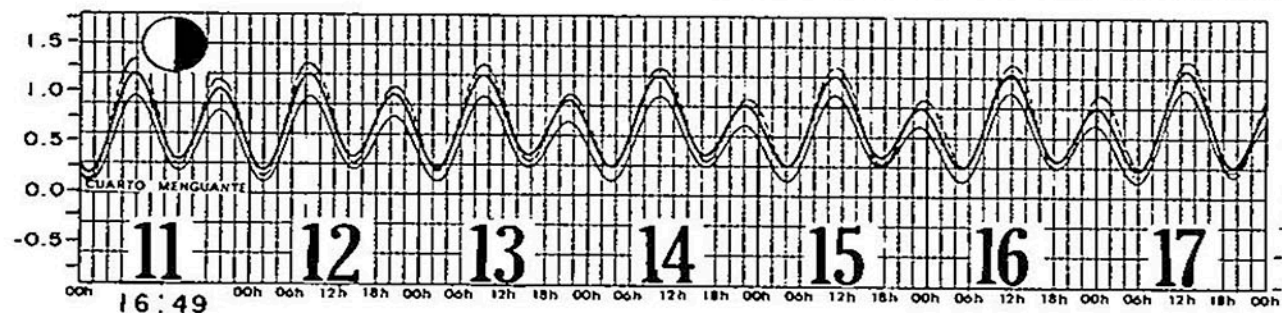
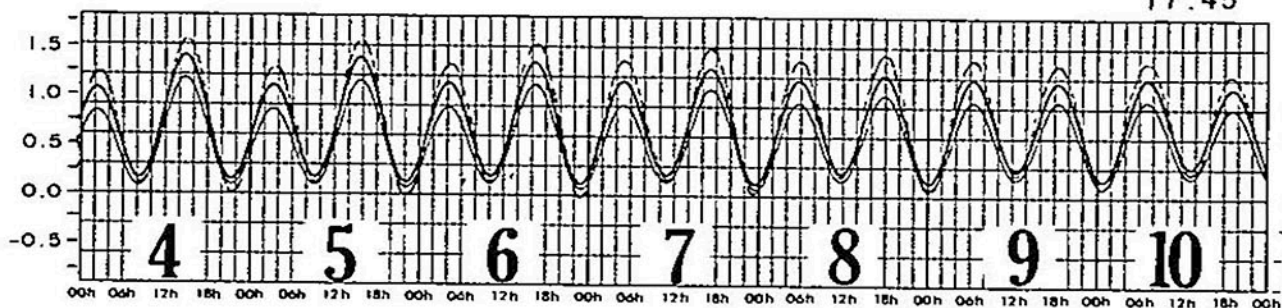
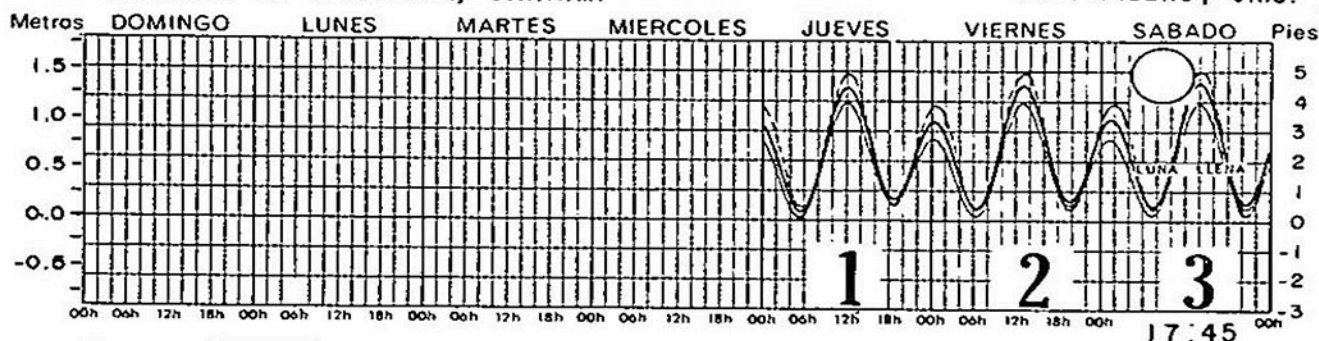


JULIO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

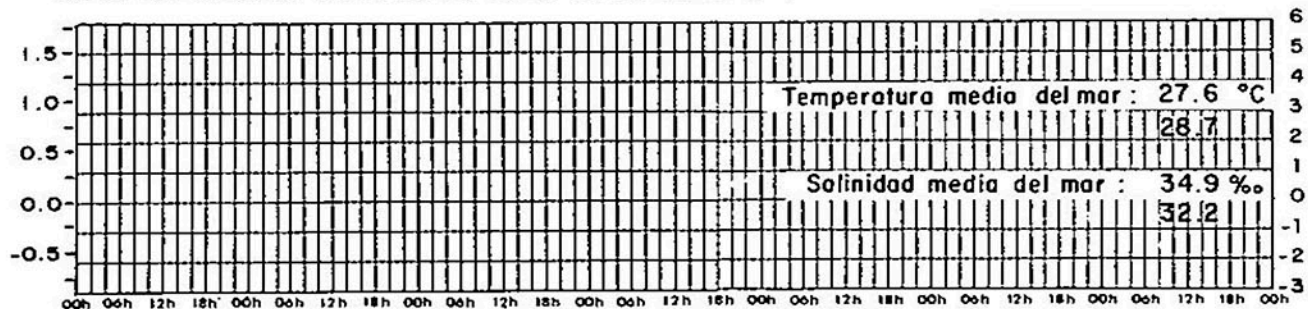
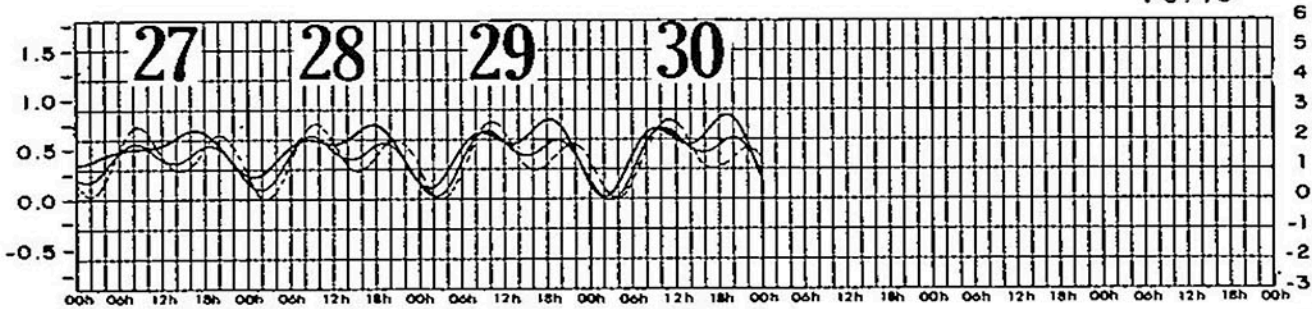
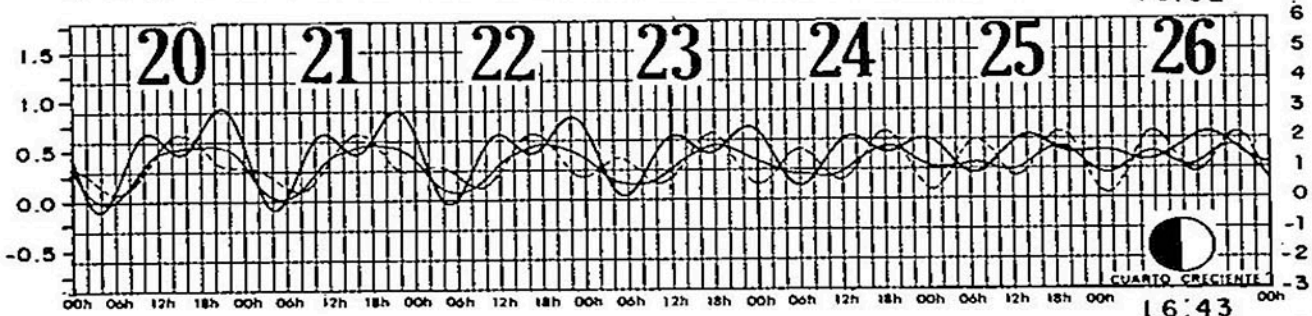
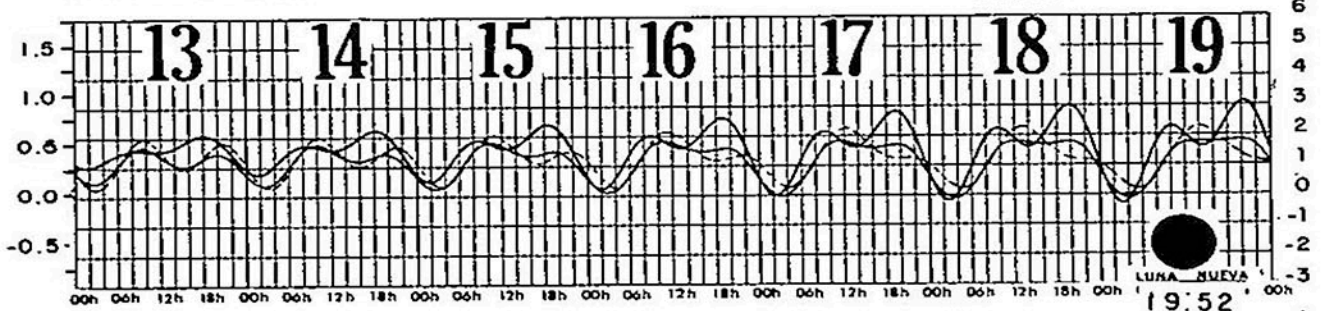
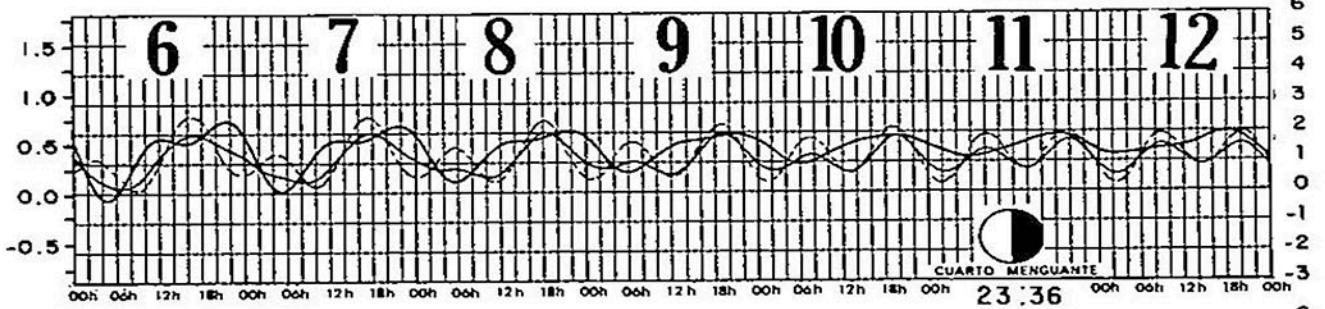
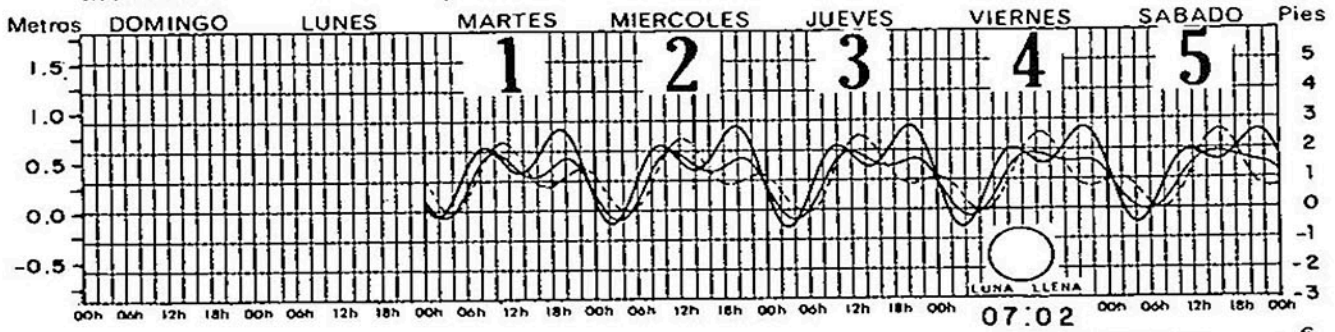


JUNIO 1993

MANZANILLO, COL.
L. CARDENAS, MICH
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.



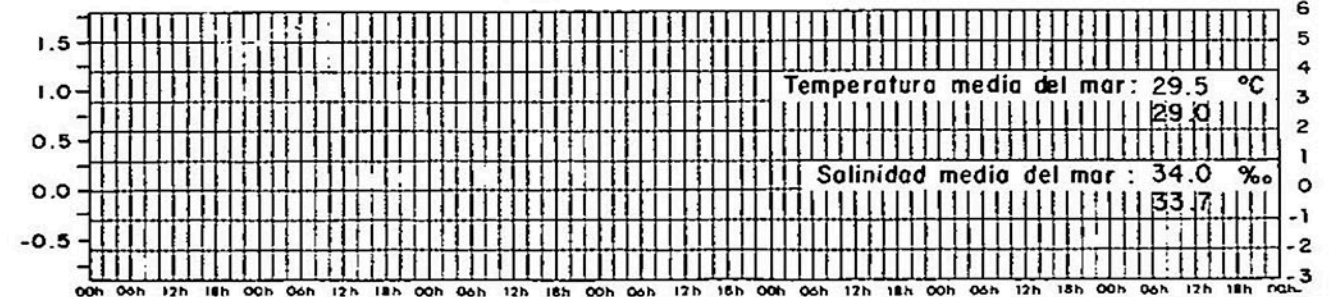
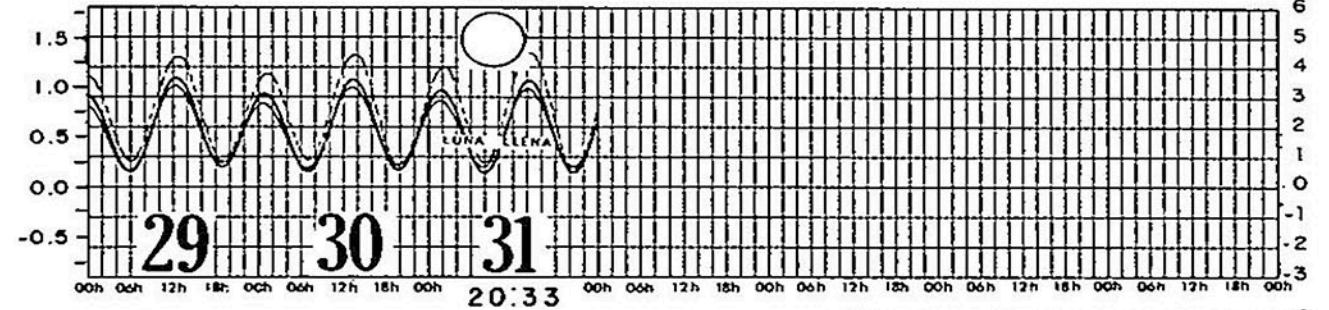
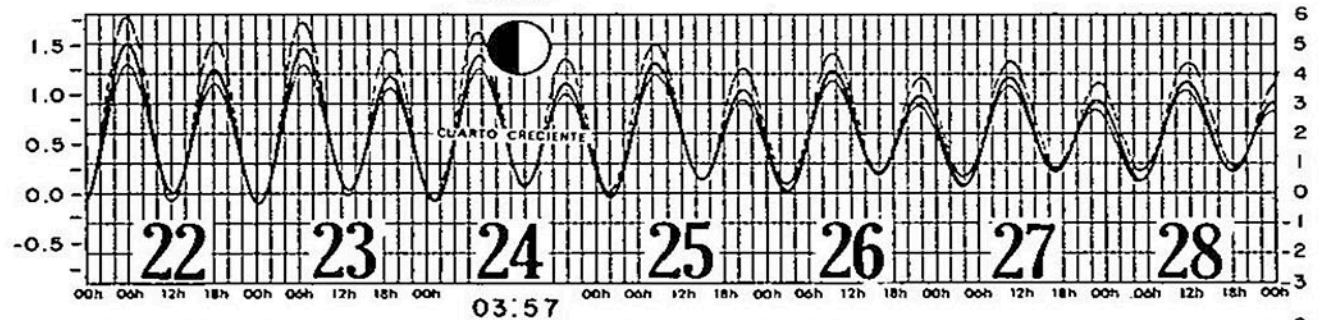
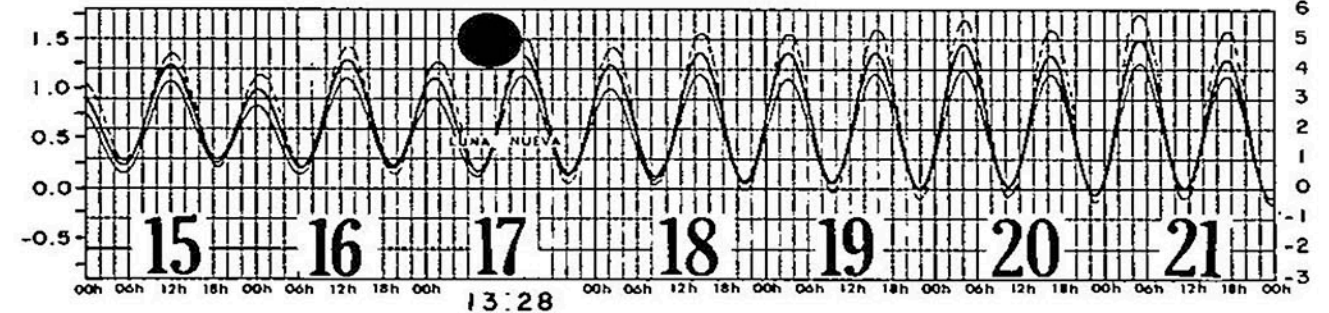
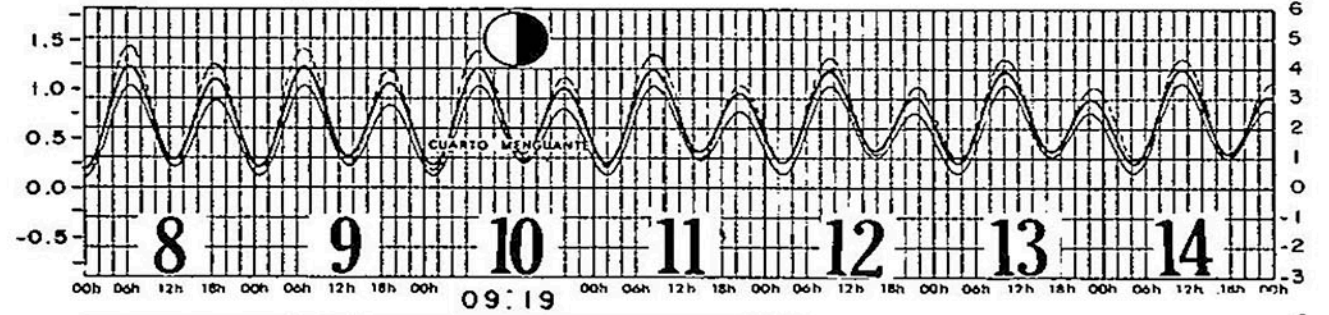
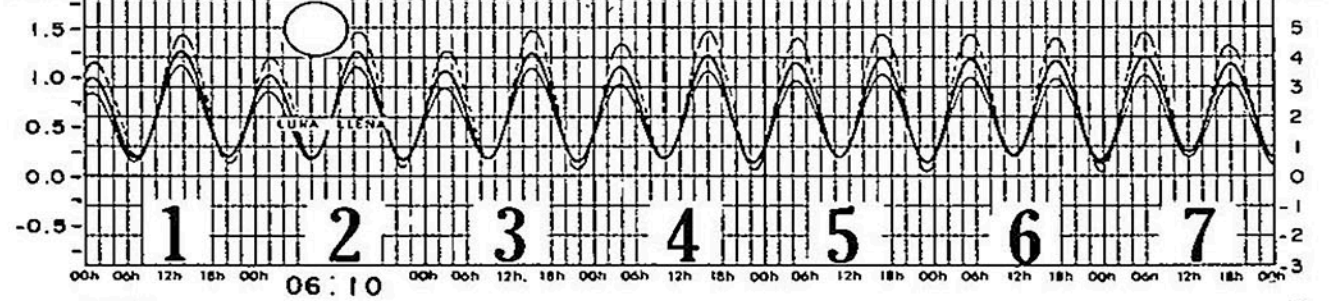
AGOSTO 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS.



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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

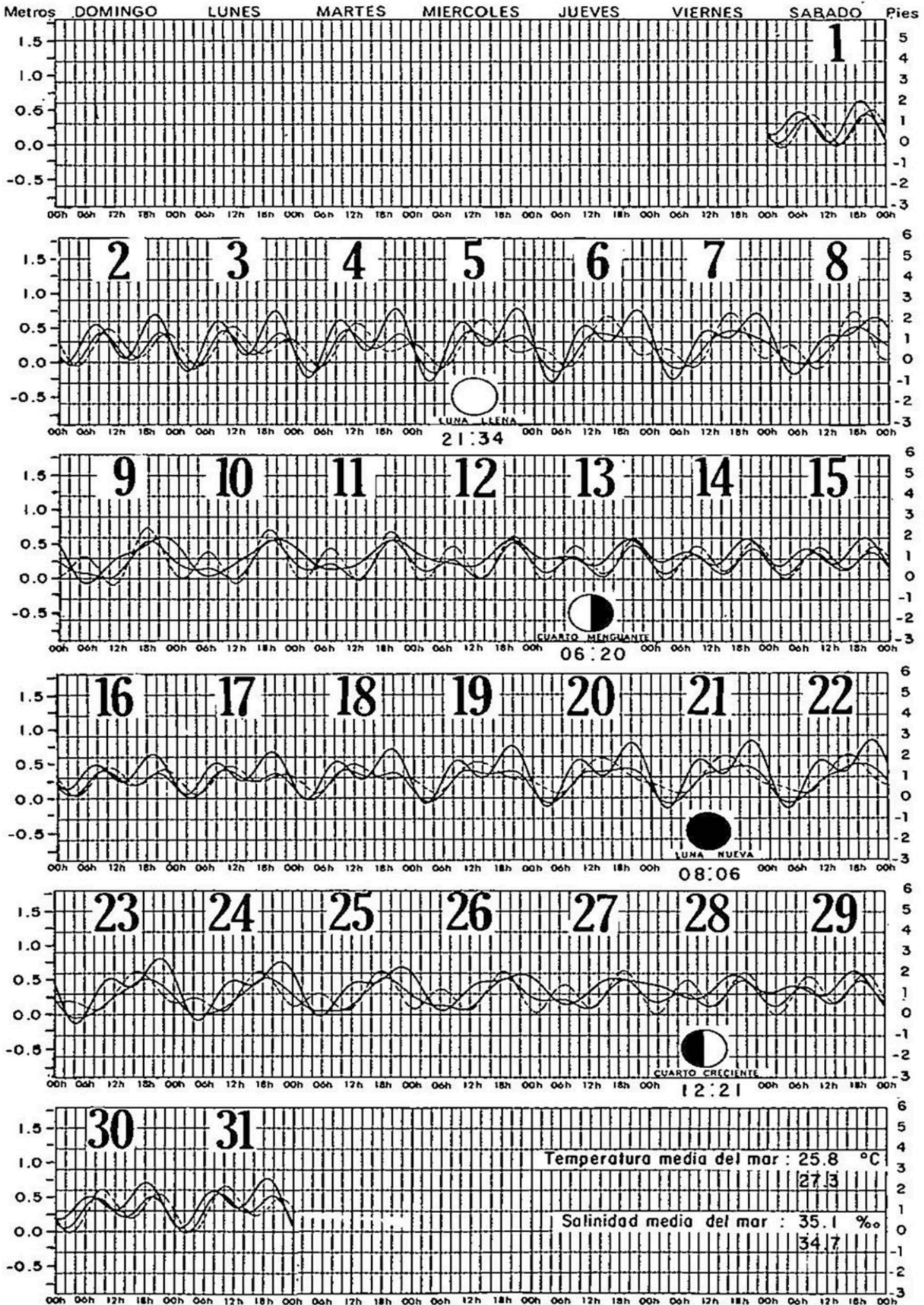


MAYO '993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

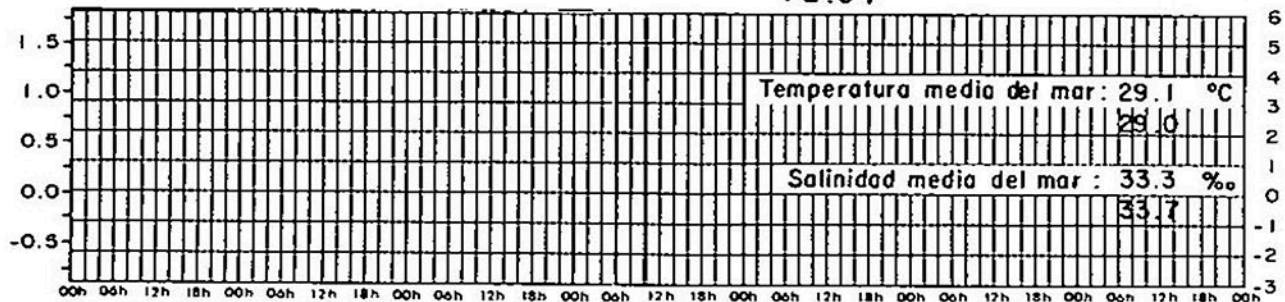
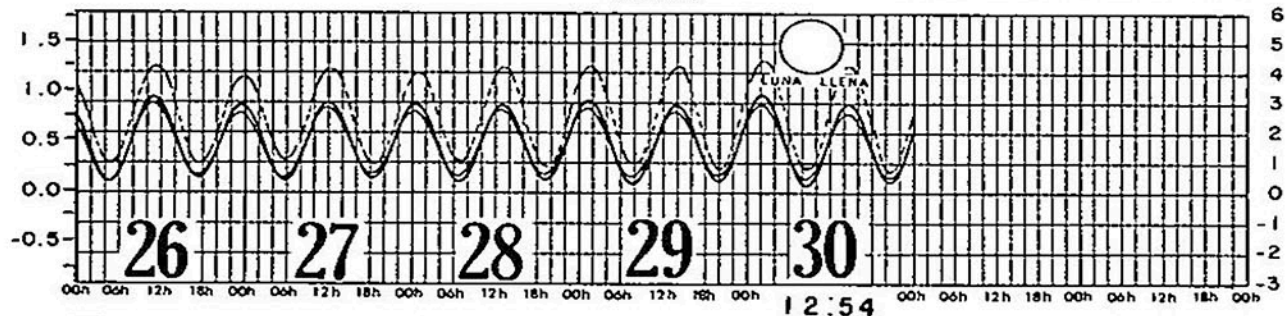
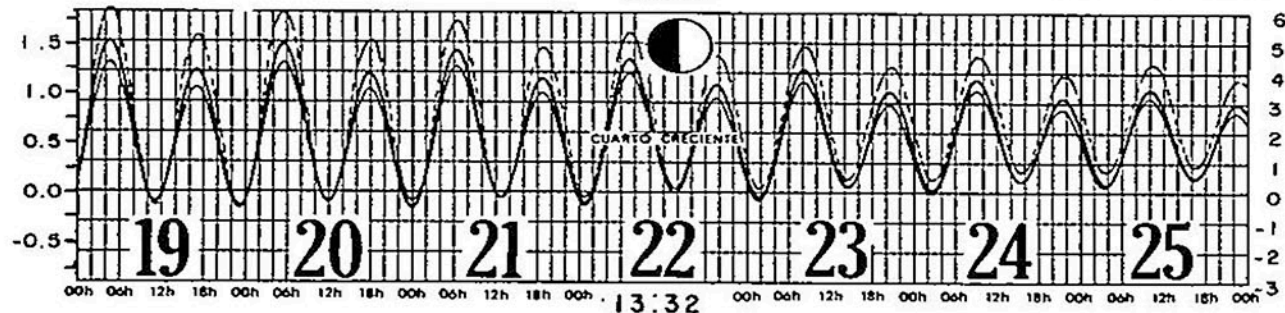
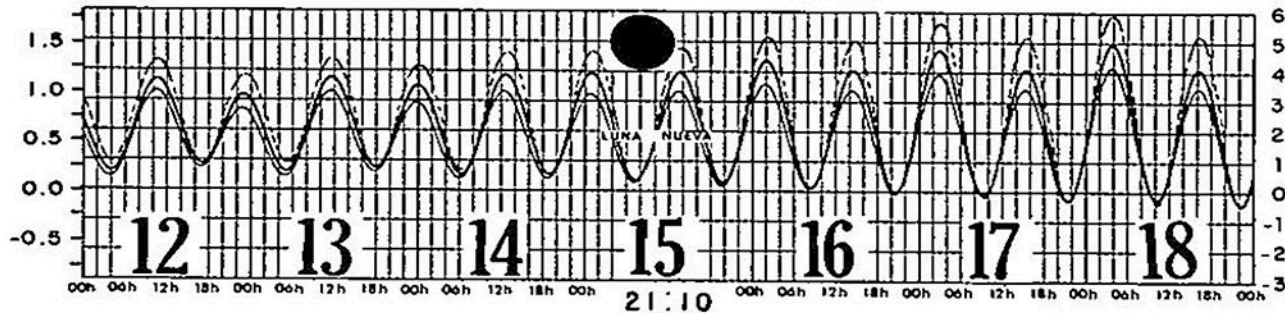
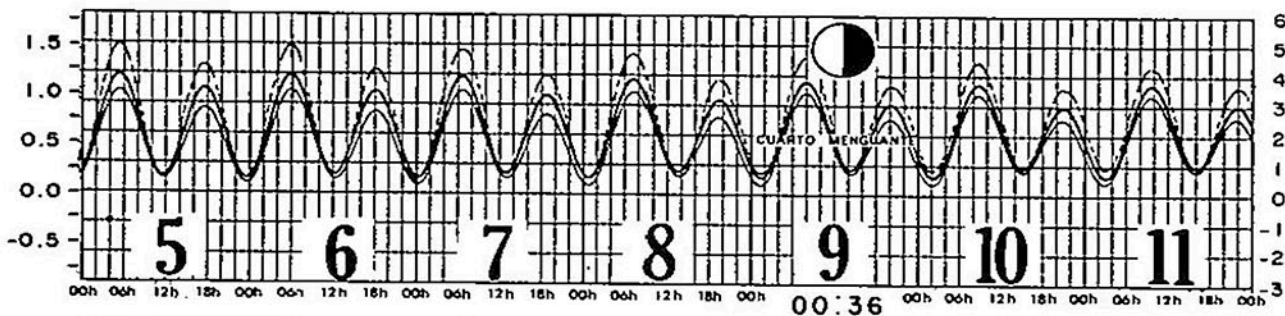
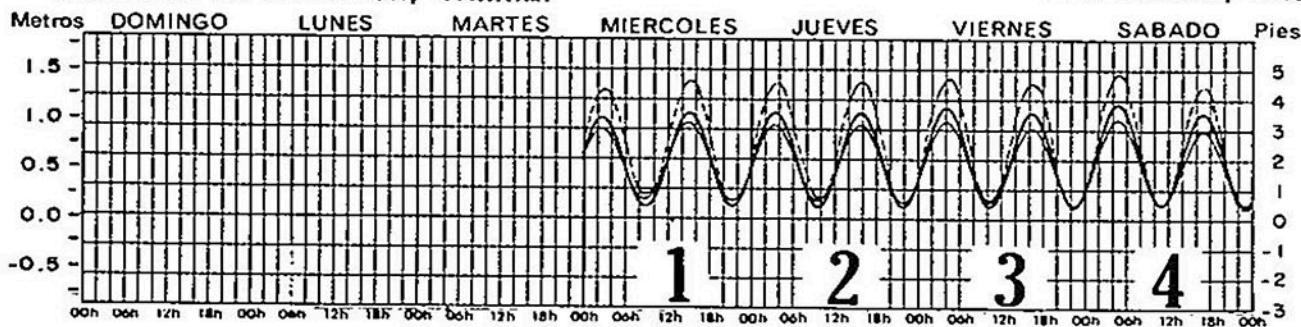


SEPTIEMBRE 1993

PTO. ANGEL, OAX.
SALINA CRUZ, OAX.
PTO. MADERO, CHIS



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



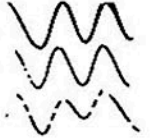
HORA DEL MERIDIANO 90° W

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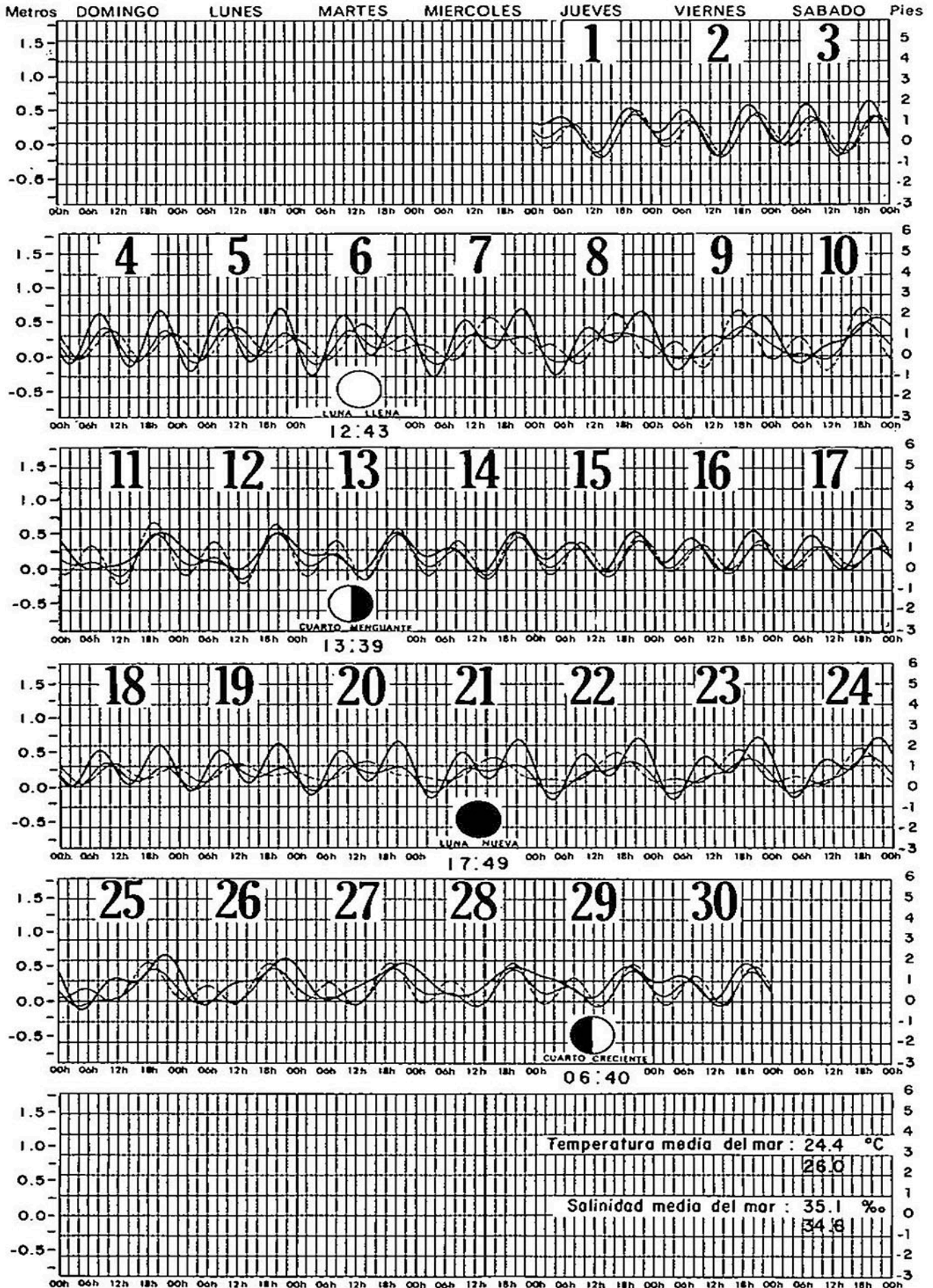


ABRIL 1993

MANZANILLO, COL
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

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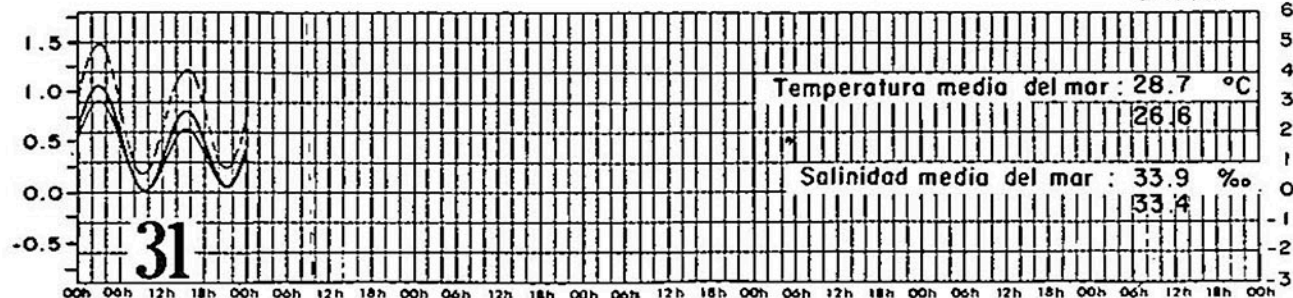
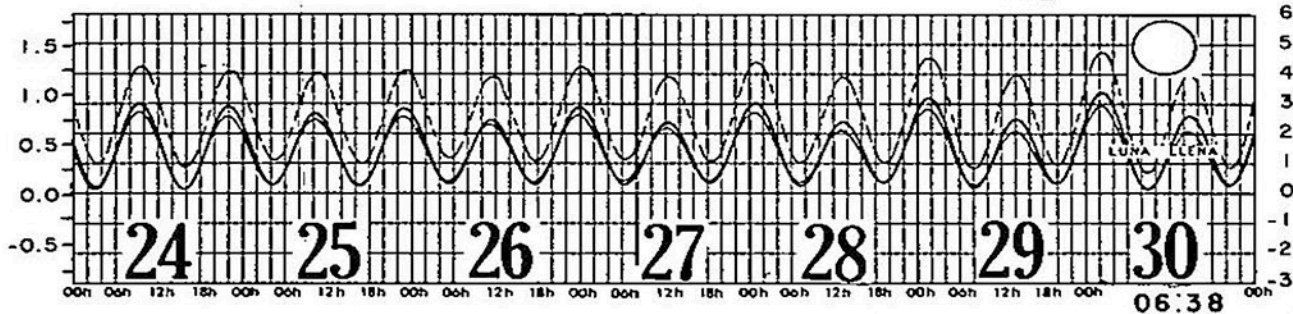
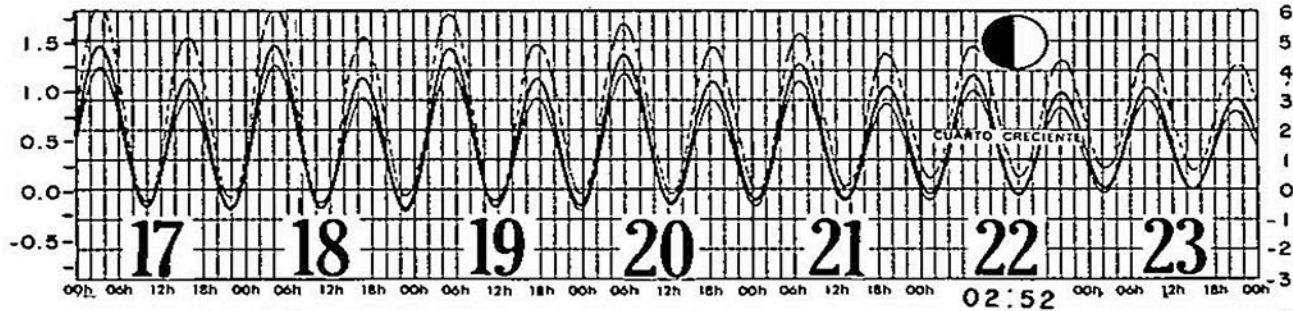
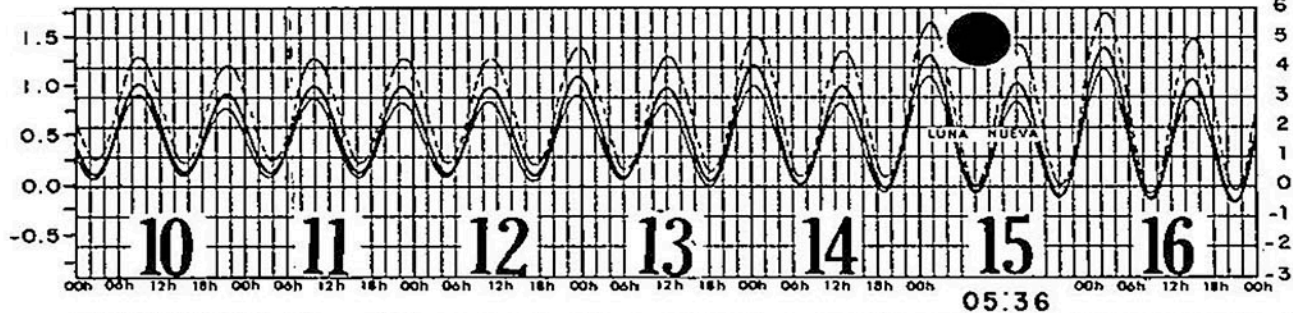
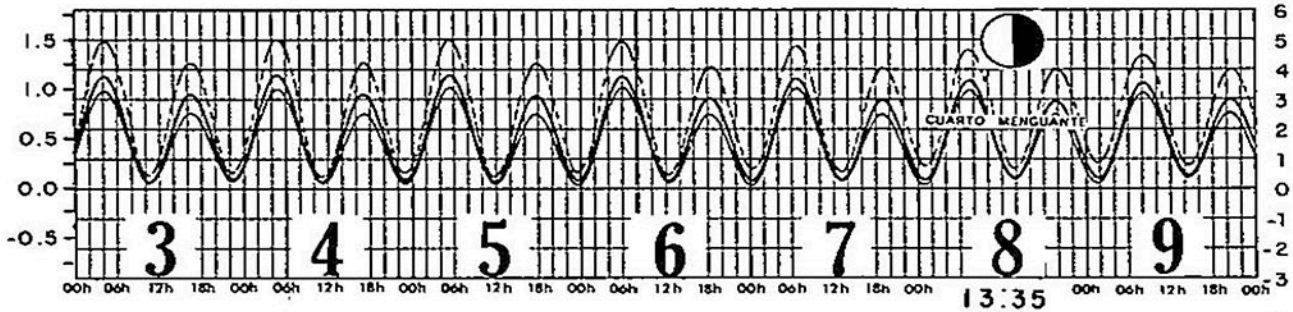
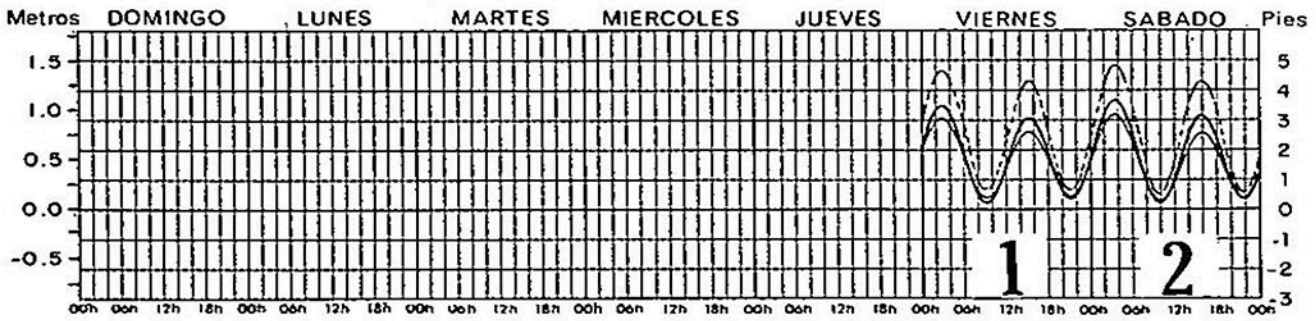


OCTUBRE 1993

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PTO. MADERO, CHIS



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HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.I.

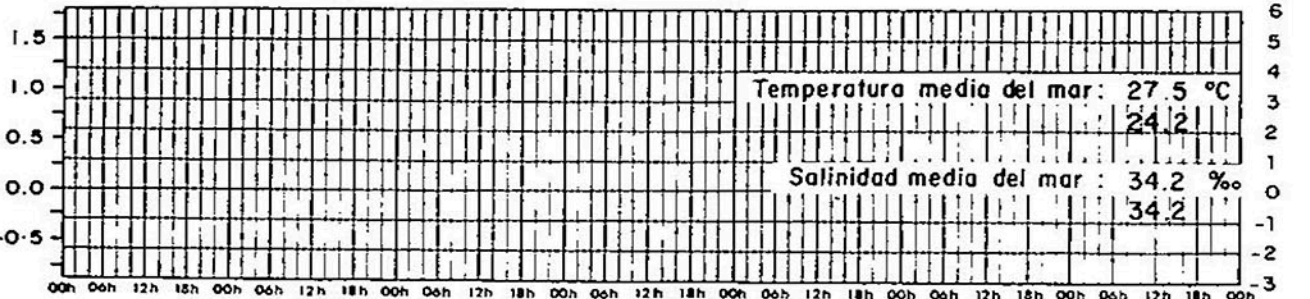
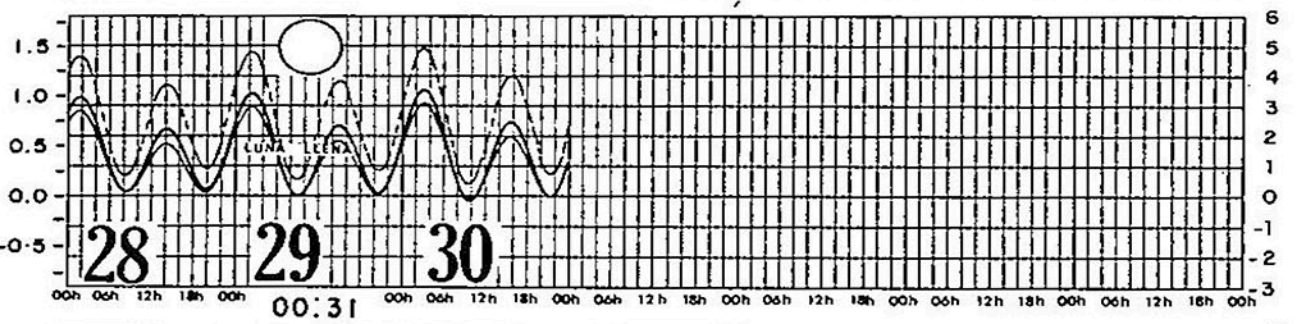
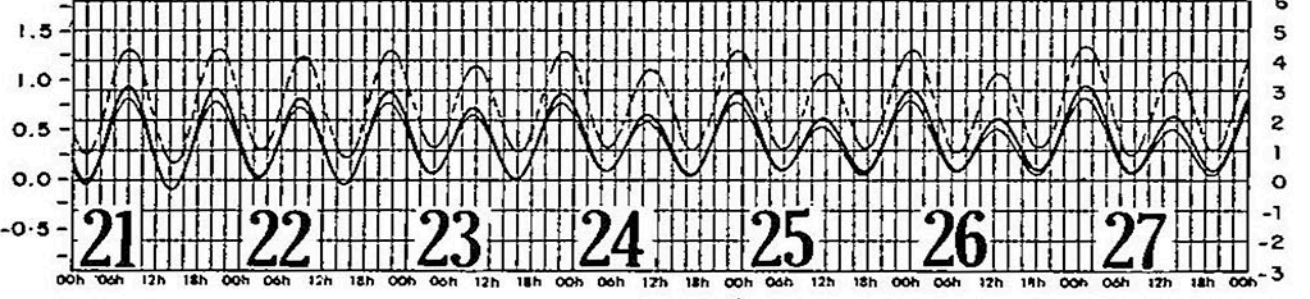
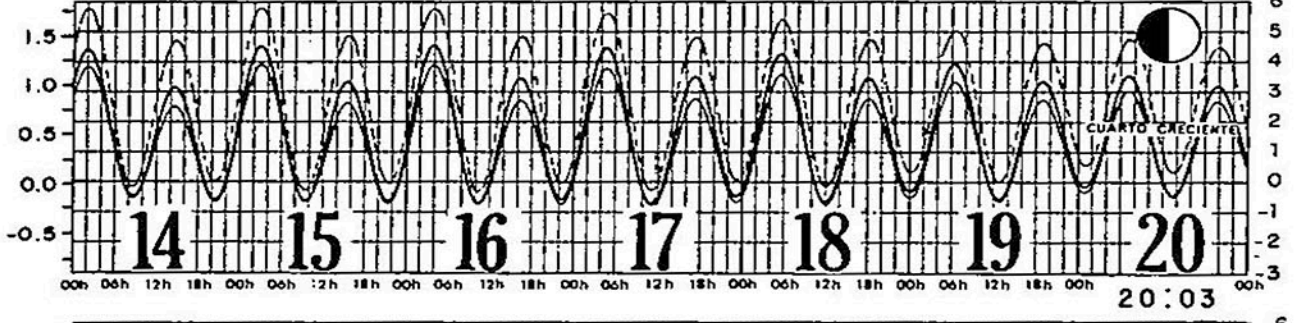
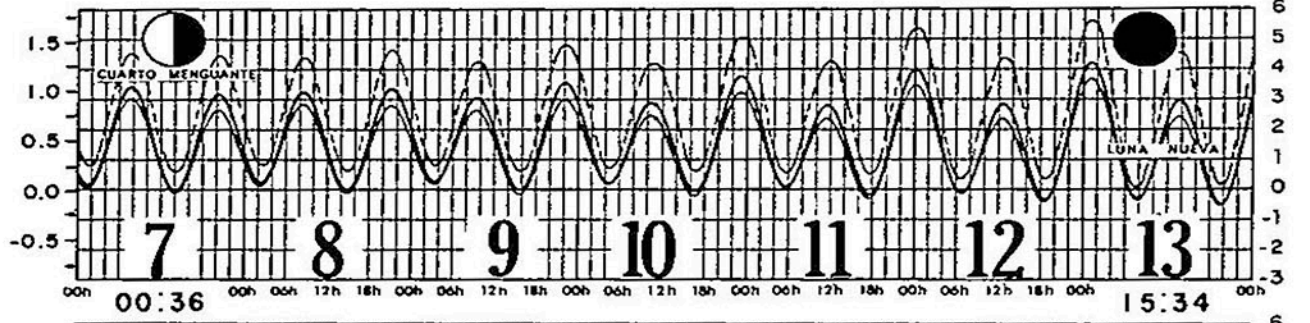
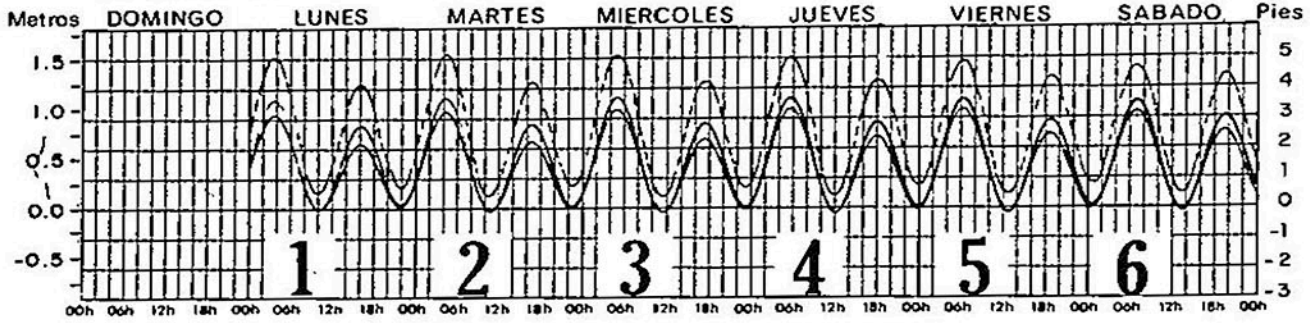


NOVIEMBRE 1993

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PTO. MADERO, CHIS



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FEBRERO 1993

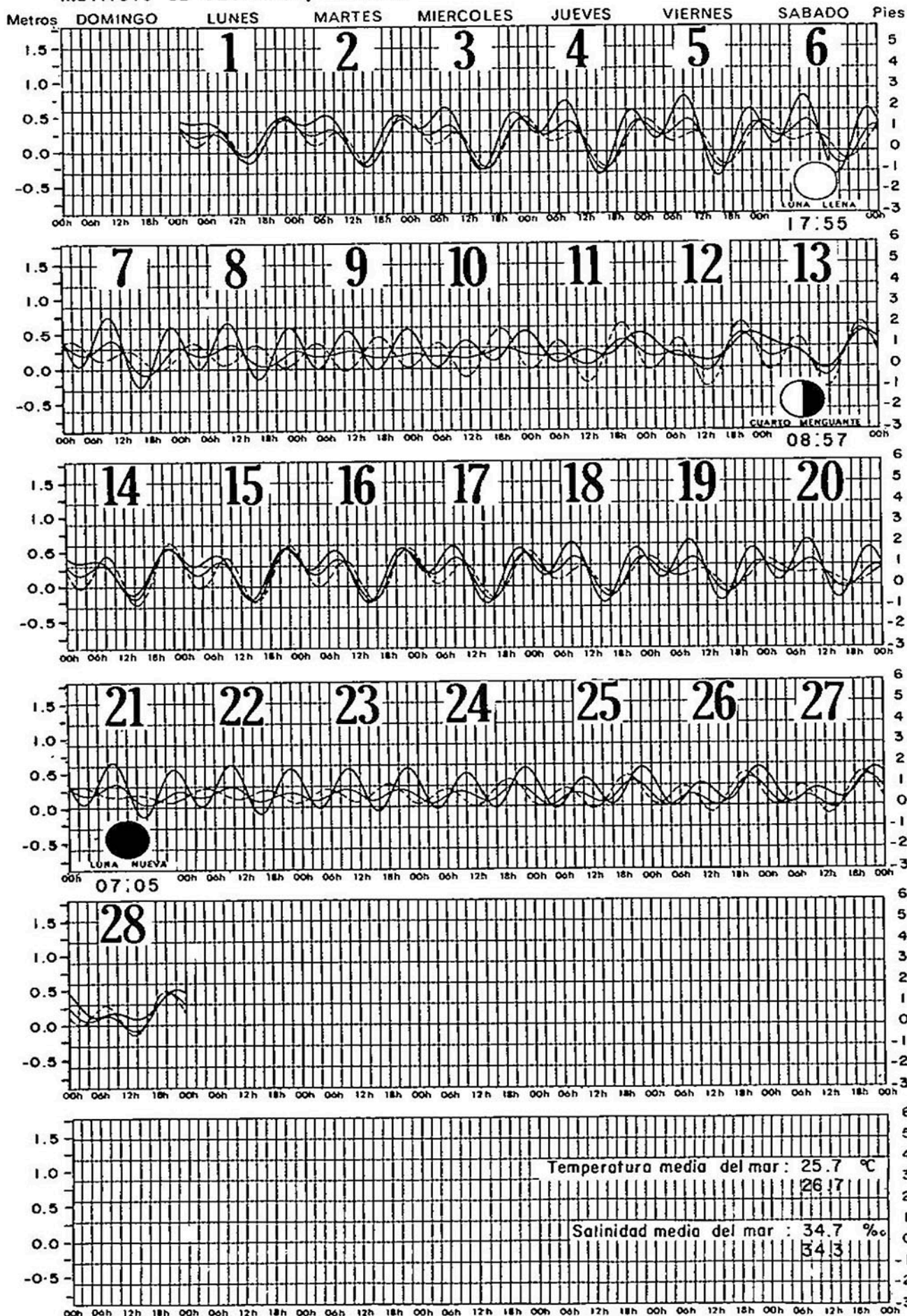
MANZANILLO, COL.

L. CARDENAS, MICH.

ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

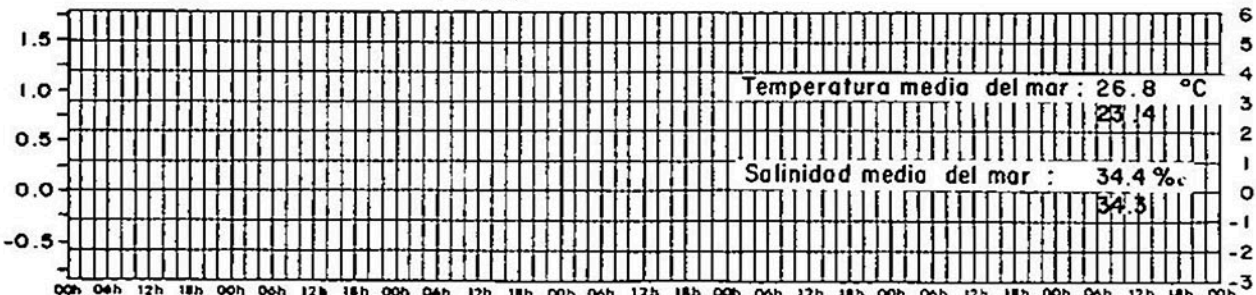
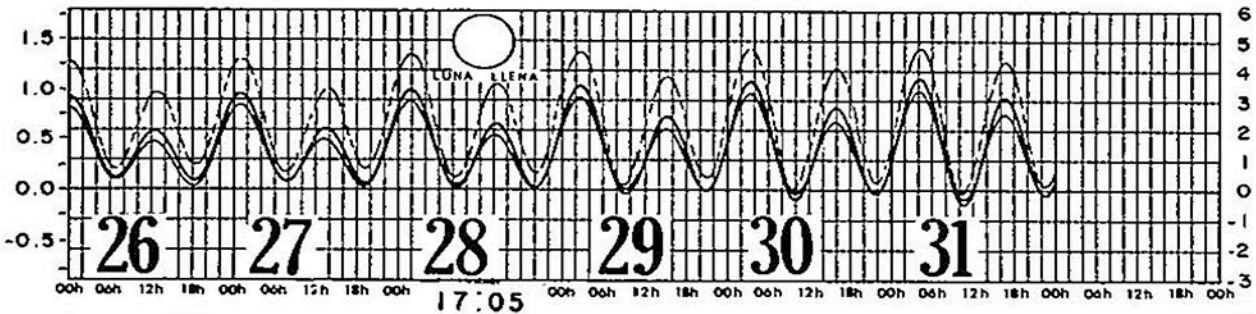
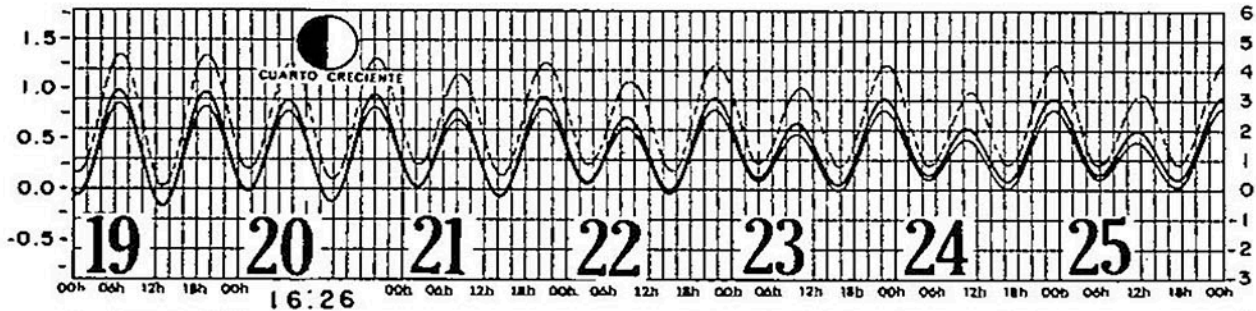
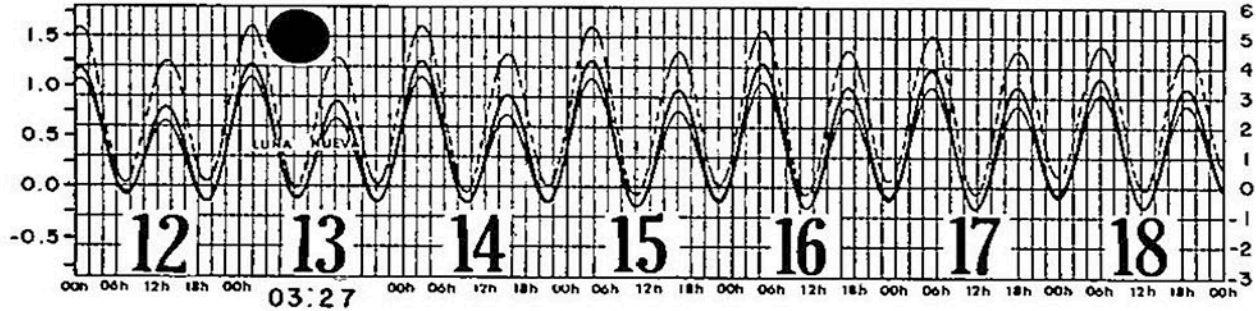
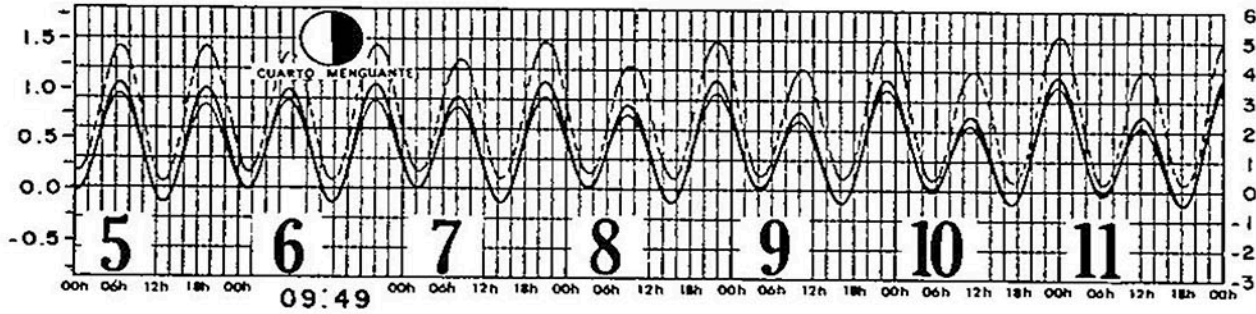
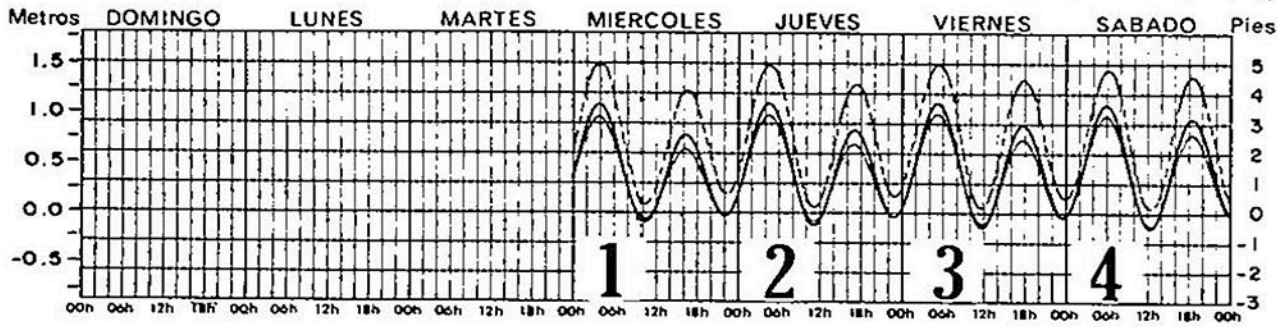


DICIEMBRE 1993

P.T.O. ANGEL, OAX.
SALINA CRUZ, OAX.
P.T.O. MADERO, CHIS.



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



HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA N.B.M.I.

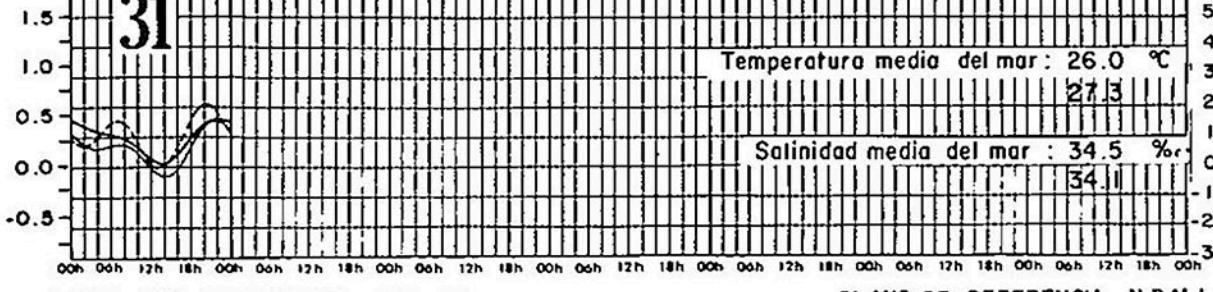
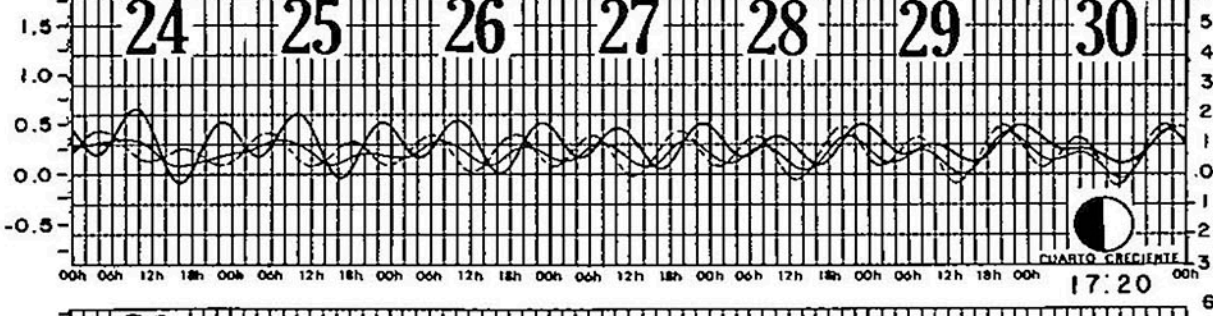
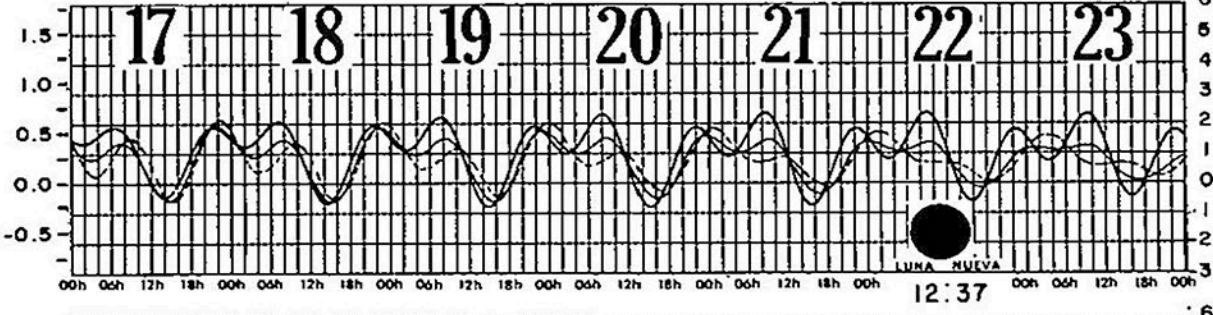
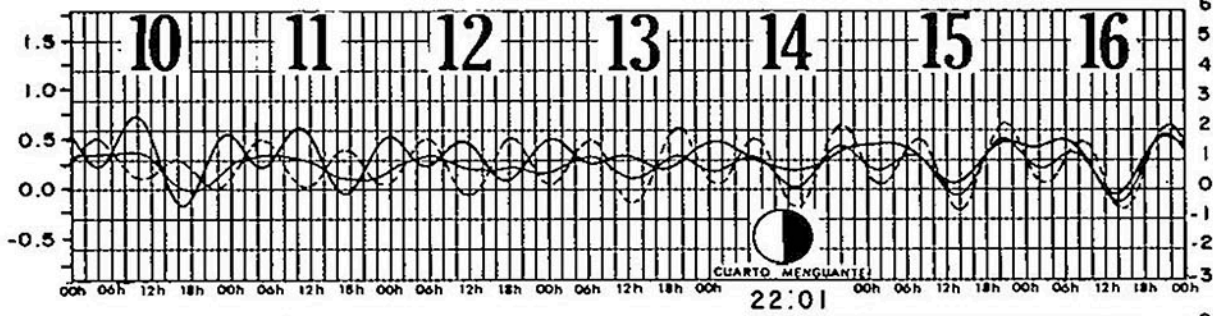
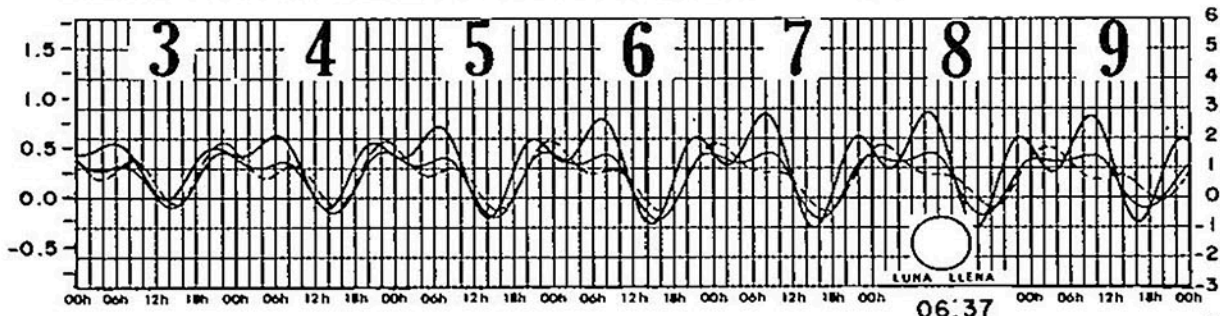
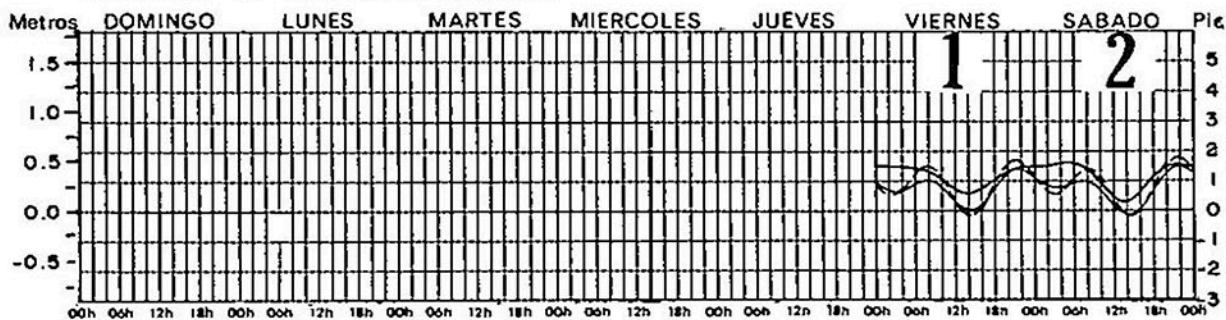


ENR 1993

MANZANILLO, COL.
L. CARDENAS, MICH.
ACAPULCO, GRO.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA N.B.M.I.

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**CALENDARIO GRAFICO DE MAREAS 1993
OCEANO PACIFICO**

ESTACIONES	PLANO DE REFERENCIA BAJO EL NIVEL MEDIO DEL MAR		TIEMPO
REGION I			
Ensenada, B. C.	2.7 pies	0.82 m	120°W
Guerrero Negro, B.C.S.	2.7 pies	0.82 m	120°W
San Carlos, B.C.S.	2.9 pies	0.88 m	105°W
Cabo San Lucas, B.C.S.	2.1 pies	0.64 m	105°W
Mazatlán, Sin.	2.0 pies	0.61 m	105°W
Puerto Vallarta, Jal.	1.8 pies	0.55 m	90°W
REGION II			
Bahía de los Angeles, B.C.	3.3 pies	1.01 m	105°W
Santa Rosalia, B.C.S.	1.2 pies	0.36 m	105°W
La Paz, B.C.S.	1.7 pies	0.52 m	105°W
Puerto Peñasco, Son.	7.0 pies	2.13 m	105°W
Guaymas, Son.	1.5 pies	0.46 m	105°W
Topolobampo, Sin.	2.0 pies	0.61 m	105°W
REGION III			
Manzanillo, Col.	1.3 pies	0.40 m	90°W
Lázaro Cárdenas, Mich.	0.9 pies	0.27 m	90°W
Acapulco, Gro.	1.0 pies	0.30 m	90°W
Puerto Angel, Oax.	1.6 pies	0.49 m	90°W
Salina Cruz, Oax.	1.9 pies	0.58 m	90°W
Puerto Madero, Chis.	2.3 pies	0.70 m	90°W

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Ing. Francisco Grivel Villegas

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Editor Técnico

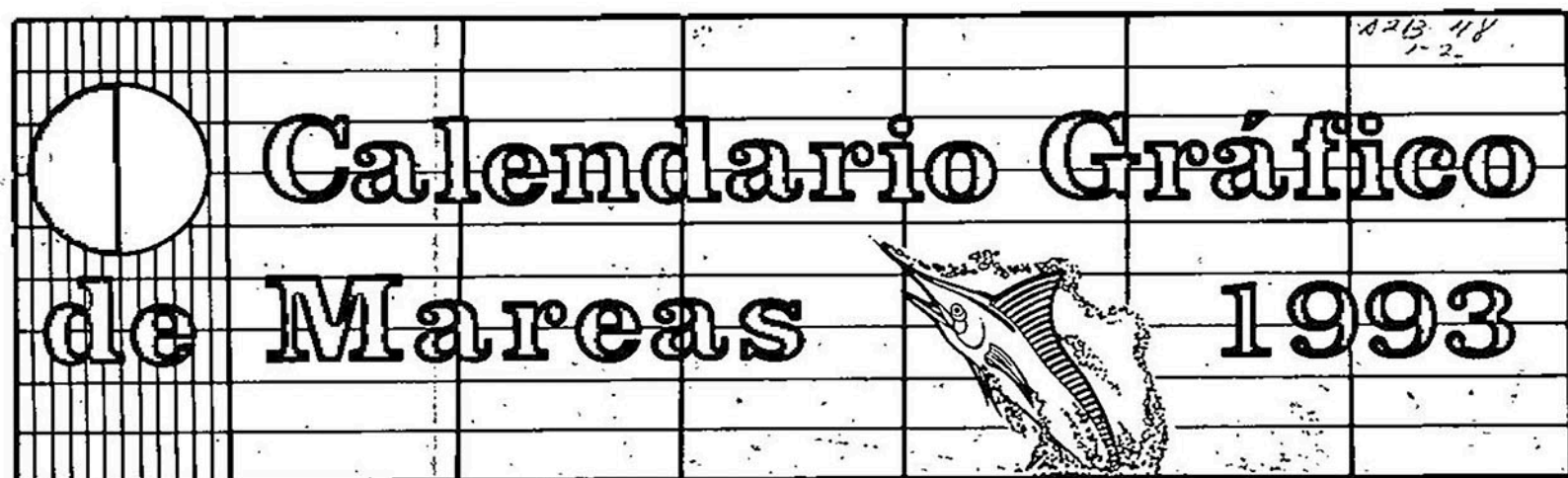
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OCEANO PACIFICO



SECRETARIA DE MARINA



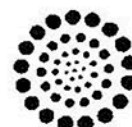
PUERTOS MEXICANOS



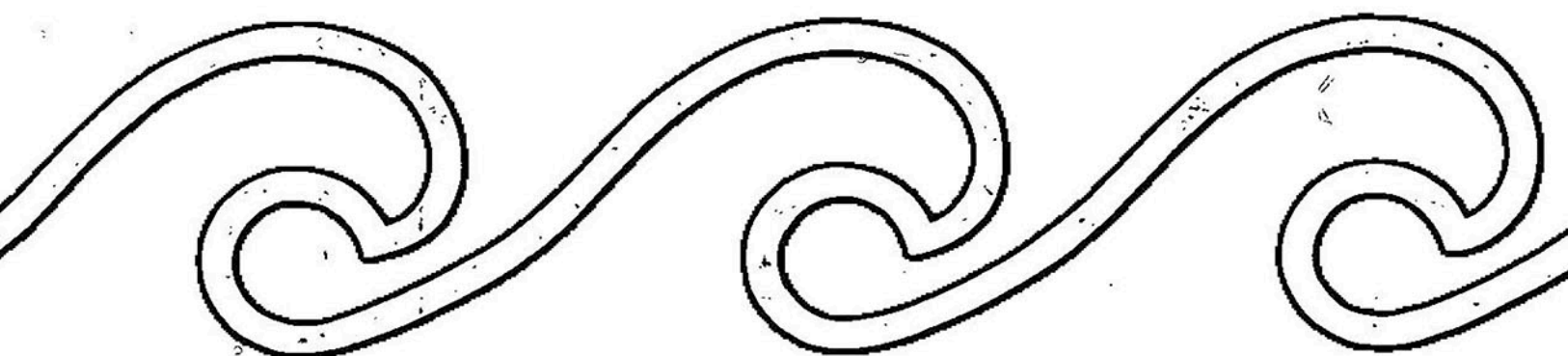
LAGUNA VERDE



FONATUR



CONACYT



Manzanillo, Col.

Bahía de los Angeles, B.C.N.

Ensenada, B.C.

Lázaro Cárdenas, Mich.

Santa Rosalía, B.C.S.

Guerrero Negro, B.C.N.

Acapulco, Gro.

La Paz, B.C.S.

San Carlos, B.C.S.