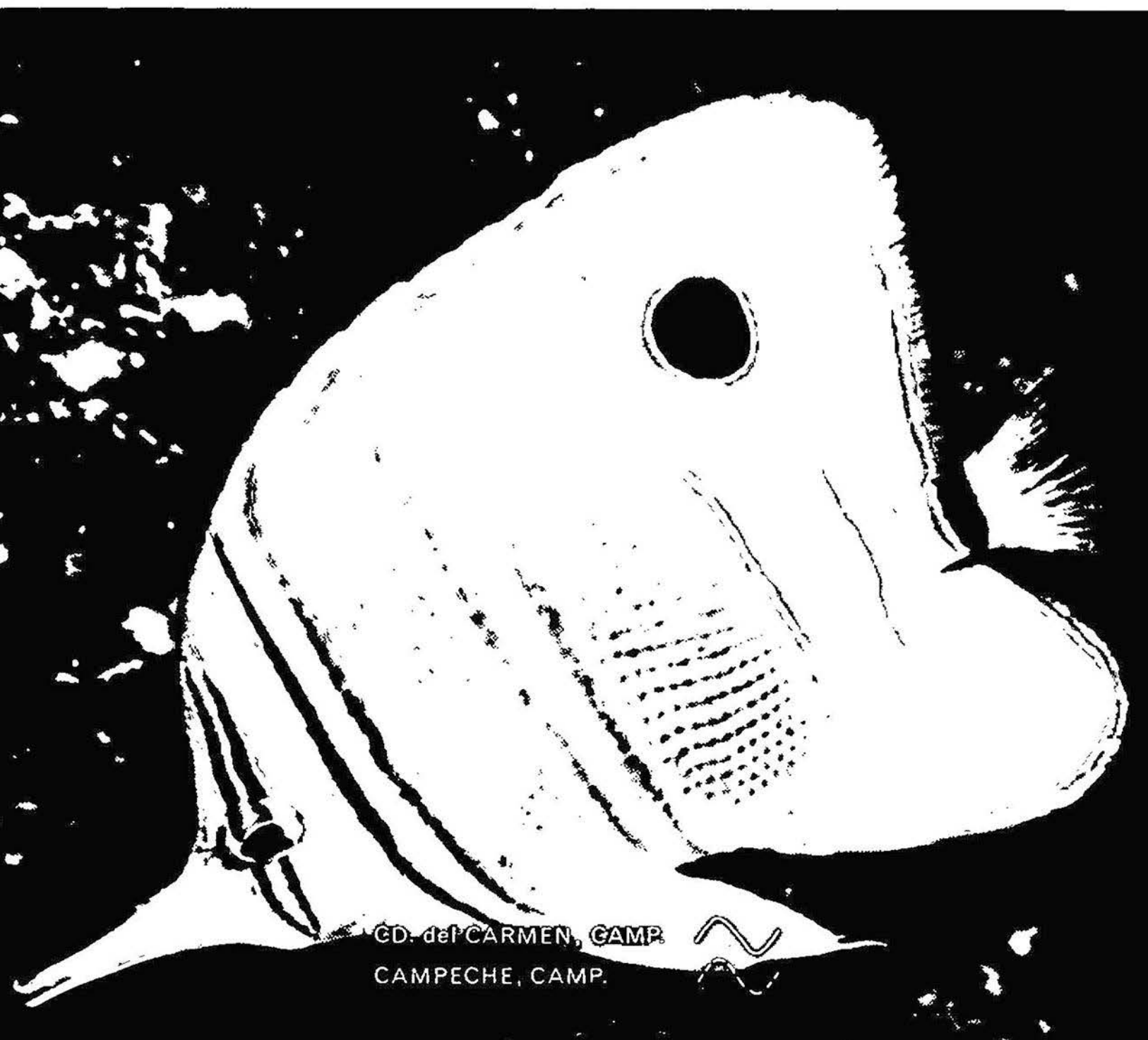


SECRETARIA DE MARINA  
INSTITUTO DE GEOFISICA



	SECRETARIA DE MARINA				
	de MAREAS			1984	



CD. de CARMEN, CAMP.  
CAMPECHE, CAMP.

DIRECCION GENERAL DE OCEANOGRAFIA

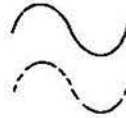
MEXICO, 1983

Precio \$300.00

CALENDARIO GRAFICO DE MAREAS, 1984

CD. DEL CARMEN, CAMP.

CAMPECHE, CAMP.



Régimen de mareas.

Cd. del Carmen, Camp. El tipo de marea es mixta diurna, con amplitud de 1.4 pies. Este pronóstico de mareas puede ser utilizado en la Laguna de Términos, aplicando ciertas correcciones al tiempo y diferencias en la altura:

	Diferencias de Tiempo				Diferencias de Altura			
	Pleamar		Bajamar		Pleamar		Bajamar	
	Hora	Min.	Hora	Min.	Pies	m.	Pies	m.
Puerto Real	-02	00	-02	30	0.2	0.06	0.2	0.06
Balchakaj	03	30	01	30	-0.3	-0.09	0.0	0.00
Boca de Pargos	05	00	04	00	-0.2	-0.06	0.0	0.00

Campeche, Camp. El tipo de marea es mixta semidiurna, con amplitud de 2.6 pies.

Tiempo:

La hora usada para la predicción de mareas, es la del meridiano 90° W; se cuentan desde las 00 horas que corresponden a la media noche.

Plano de referencia:

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

Cd. del Carmen, Camp. = 0.8 pies (0.24 m).

Campeche, Camp. = 1.5 pies (0.46 m).

Nota: Las temperaturas y salinidades medias del agua del mar, corresponden a Cd. del Carmen, Camp.

LISTA DE PUBLICACIONES EDITADAS POR LA DIRECCION GENERAL DE OCEANOGRAFIA

CLAVE	TITULO	ESCALA	EDICION	FECHA	PRECIO	CLAVE	TITULO	ESCALA	EDICION	FECHA	PRECIO
CARTAS DISPONIBLES											
S.M. 001	Zona Económica Exclusiva.	1:3,700,000	1ª	Mar/77/Rev. 77		S.M. 613	Mazatlán y Proximidades (en metros).	1: 12,500	1ª	Abr/75/Rev. 77	75.00
S.M. 4	(PNT) Golfo de México y Mar Caribe (en metros).	1:3,715,000	1ª	Jun/78	75.00	S.M. 616	Bahías de Manzanillo y Sinaloa.	1: 25,000	1ª	Jun/73/Rev. 79	75.00
S.M. 020	Mazatlán y Puerto Madero (en metros).	1:1,700,000	1ª	Nov/77	75.00	S.M. 623	Guaymas y Proximidades.	1: 25,000	1ª	Feb/74	75.00
S.M. 400	Cabo San Lucas y Manzanillo a Isla Revillagigedo (en metros) (suple a la S.M. 603).	1: 750,000	1ª	Sep/78	75.00	S.M. 625	Parícutino de Mazatlán (en metros).	1: 7,300	1ª	Jun/73/Rev. 79	75.00
S.M. 400	(OMIDA) Cabo San Lucas y Manzanillo a Isla Revillagigedo (en metros).	1: 750,000	1ª	Sep/78	75.00	S.M. 628	Parícutino de Manzanillo.	1: 5,000	1ª	Sep/73/Rev. 79	75.00
S.M. 500	Tampico a Progreso.	1:1,073,400	3ª	Oct/73/Rev. 79	75.00	S.M. 630	Bahía de Todos Santos.	1: 25,000	1ª	Ene/73	75.00
S.M. 507	Tampico a Punta del Marqués.	1: 250,000	2ª	Dic/74/Rev. 79	75.00	S.M. 630	Bahía de Todos Santos (en metros).	1: 25,000	1ª	Ene/73/Rev. 77	75.00
S.M. 514	Coahuacalco - Papantla.	1: 12,500	1ª	Jun/77	75.00	S.M. 633	Parícutino de Guaymas (en metros).	1: 15,000	1ª	Jul/74/Rev. 79	75.00
S.M. 516	Progreso - Tulumápan.	1: 20,000	1ª	Mar/74	75.00	S.M. 640	Parícutino de Ensenada (en metros).	1: 10,000	1ª	Feb/75	75.00
S.M. 529	Parícutino de Tulumápan.	1: 12,500	2ª	Oct/75	75.00	S.M. 644	Bahía de San Lucas.	1: 20,000	1ª	Oct/76	75.00
S.M. 600	San Diego a San Quintán.	1: 290,000	2ª	Ago/73	75.00	S.M. 648	Puerto Libertad Cárdenas.	1: 20,200	1ª	Jul/76	75.00
S.M. 601	Cabo San Quintán a Punta Eugenia.	1: 511,300	2ª	Jun/73/Rev. 78	75.00	S.M. 655	Puerto Vallarta.	1: 15,200	1ª	Ene/75	75.00
S.M. 602	Punta Eugenia a Cabo San Lázaro.	1: 725,573	2ª	Jul/73/Rev. 78	75.00	S.M. 657	Bahía Cruz y Proximidades.	1: 12,800	1ª	Jun/73/Rev. 79	75.00
S.M. 603	Golfo de California, Puerto Norte.	1: 629,400	3ª	Ene/73/Rev. 78	75.00	S.M. 667	Parícutino de Bahía Cruz.	1: 2,800	1ª	Jun/73/Rev. 79	75.00
S.M. 604	Cabo San Lázaro a Cabo San Lucas y Puerto Sur del Golfo de California.	1: 667,680	4ª	Nov/76/Rev. 79	75.00	S.M. 686	Parícutino de Acapulco (en metros).	1: 10,300	1ª	Ene/78	75.00
S.M. 606	Manzanillo a Punta Maldonado.	1: 698,700	3ª	Jul/73/Rev. 78	75.00	S.M. 696	Acapulco y Proximidades (en metros).	1: 25,300	1ª	Jun/77	75.00
S.M. 607	Punta Maldonado a Puerto Anadere.	1: 702,200	3ª	May/73/Rev. 78	75.00	S.M. 697	Puerto Madero (en metros).	1: 10,300	1ª	Jun/77/Rev. 78	75.00
S.M. 610	Derrames a Mazatlán incluyendo Golfo de California.	1:1,601,538	3ª	Sep/76/Rev. 79	75.00	S.M. 701	Canal de Yucatán y Proximidades.	1: 906,530	5ª	Feb/77/Rev. 79	75.00
S.M. 613	San Carlos, Son. (en metros).	1: 10,000	1ª	Jun/74	75.00	S.M. 842	Laguna de Terminos entrada Oeste.	1: 20,300	1ª	Feb/79	75.00
S.M. 613	San Carlos, Son.	1: 10,000	1ª	Ene/76	75.00	S.M. 843	Laguna de Terminos entrada Este.	1: 20,300	1ª	Feb/79	55.00
S.M. 614	Puerto San Carlos, S.C.S.	1: 20,000	2ª	Abr/76	75.00	S.M. 922	Isla Mujeres, Cancún y Proximidades (en metros).	1: 30,200	1ª	May/78	75.00
S.M. 615	Mazatlán y Proximidades.	1: 12,500	1ª	Abr/75	75.00	S.M. 923	Isla Cozumel (en metros).	1: 40,000	1ª	Ago/78	75.00
						S.M. 926	Parícutino de San Miguel de Cozumel (en metros).	1: 15,000	1ª	Ago/78	55.00
						S.M. 1141	Carta Meteorológica.				55.00
						S.M. 1700	Isla Chapperton.	1: 20,000	1ª	Sep/77	55.00
						S.M. 1700	(OMIDA) Golfo de México y Mar Caribe.	1:3,167,400	1ª	Sep/78	75.00

PUBLICACIONES DISPONIBLES

S.M. 101	Derrames Costas Atlánticas de México, América Central y Colombia.	2ª	1975	200.00	S.M. 301	Tablas de Identificación de Estratos.	1ª	1978	200.00
S.M. 100	Derrames Análisis Menores y Venezolán.	1ª	1978	200.00	S.M. 302	Tablas de Análisis de Sal.	1ª	1978	200.00
S.M. 201	Condensos de Fares, Capos de México, América Central y Colombia.	2ª	1975	125.00		Compendio de Hidrografía 1ª Parte.		1974	200.00
	Condensos de Fares Análisis Menores (Adición a la Pub. S.M. 201).	1ª	1974	25.00		Compendio de Hidrografía 2ª Parte.		1974	100.00
	Condensos de Fares Análisis Mayores (Adición a la Pub. S.M. 201).	1ª	1974	25.00		Atlas Oceanográfico del Golfo de México.		1980	175.00
	Estudios Geográficos de los Regímenes de:					Almanaque Náutica.		1980	175.00
	Guaymas	1ª	1973	200.00		Memorias de los (contaminantes) Hidrográficos de:			
	Ensenada	1ª	1974	200.00		Progreso - Tulumápan.	1ª	1971	50.00
	Mazatlán.	1ª	1974	200.00		Coahuacalco - Papantla.	1ª	1972	50.00
	Bahía Cruz.	1ª	1974	200.00		Loma - Campeche.	1ª	1973	50.00
	Acapulco.	1ª	1976/1977	200.00		Cabo San Lucas.	1ª	1973/1974	50.00
	Puerto Madero.	1ª	1976/1977	200.00		Lázaro Cárdenas.	1ª	1975/1976	50.00
	Isla Mujeres a Isla Cancún.	1ª	1978	200.00		Puerto Vallarta.	1ª	1975/1976	50.00
	Campeche.	1ª	1978	200.00					

Dirigir los pedidos a:

Dirección General de Oceanografía  
Medellín N° 10  
México 7, D. F.

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



# ENERO 1984

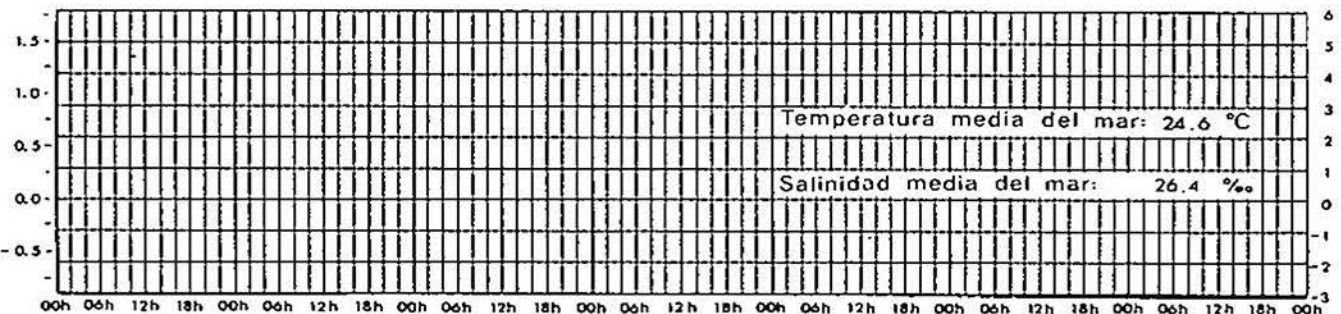
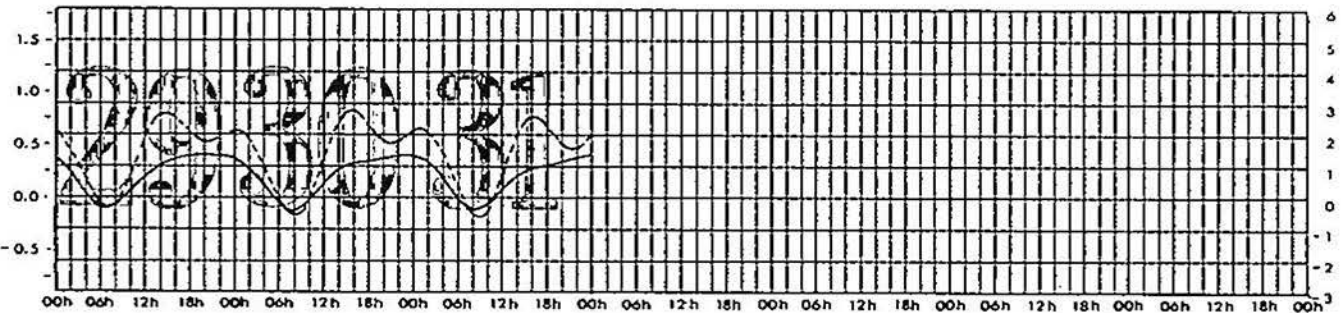
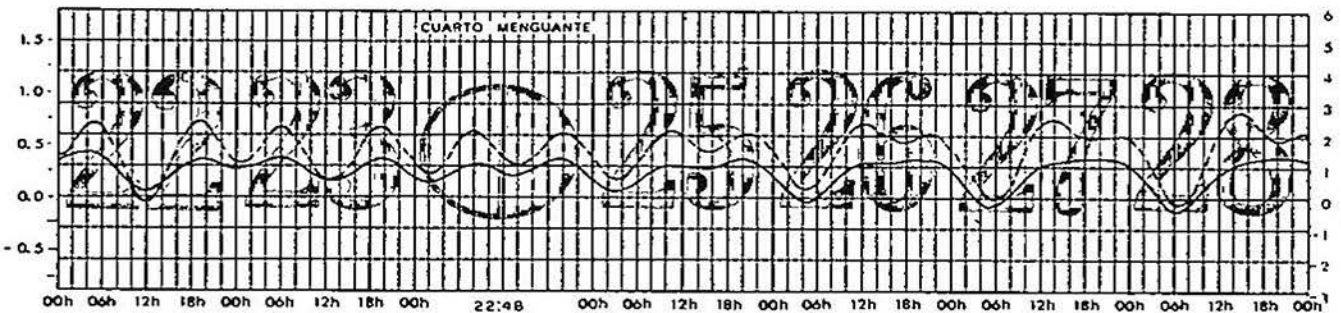
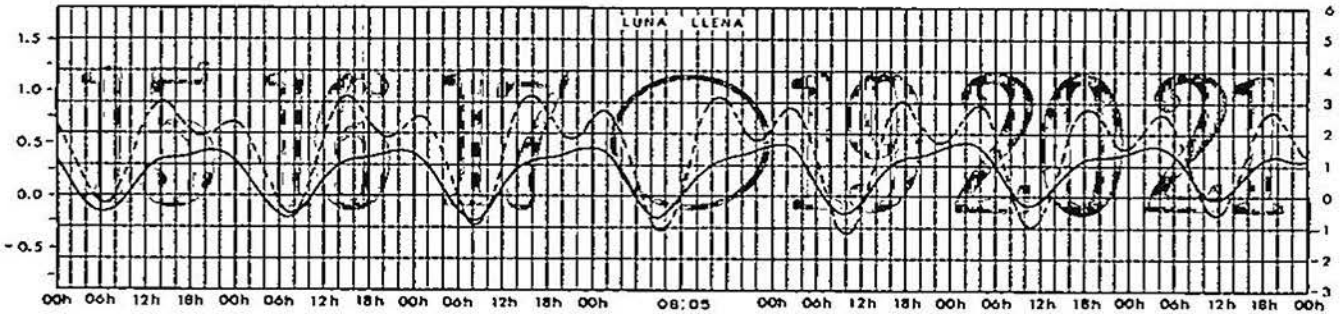
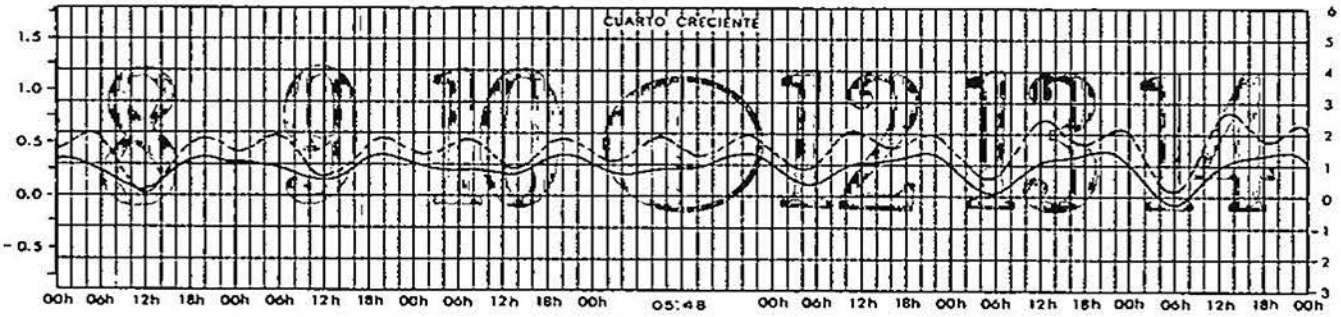
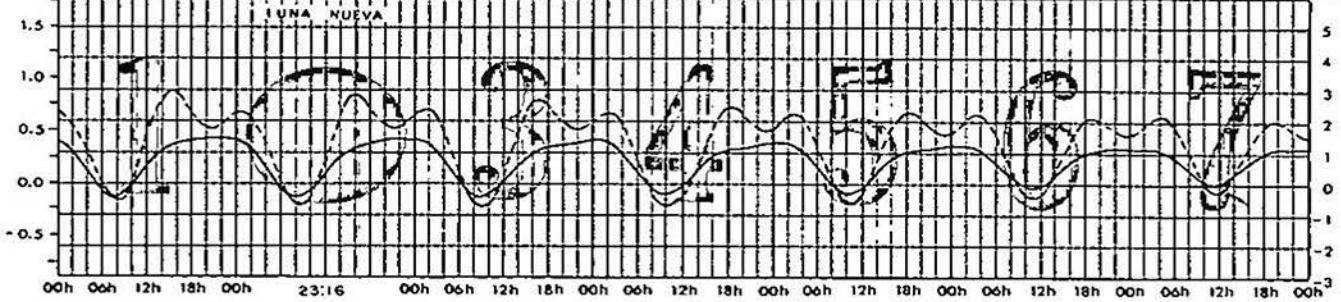
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CD. del CARMEN, CAMP.

CAMPECHE, CAMP.



Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 24.6 °C

Salinidad media del mar: 26.4 ‰

HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.1

A212 - 201

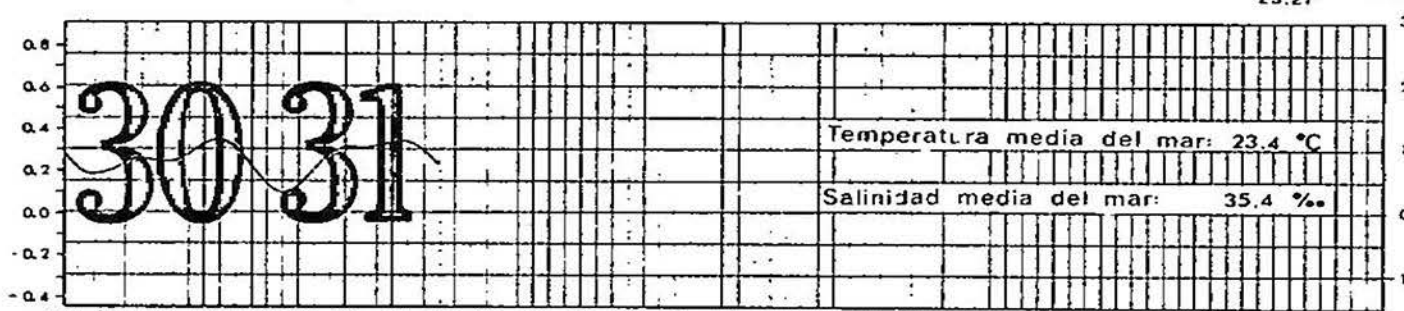
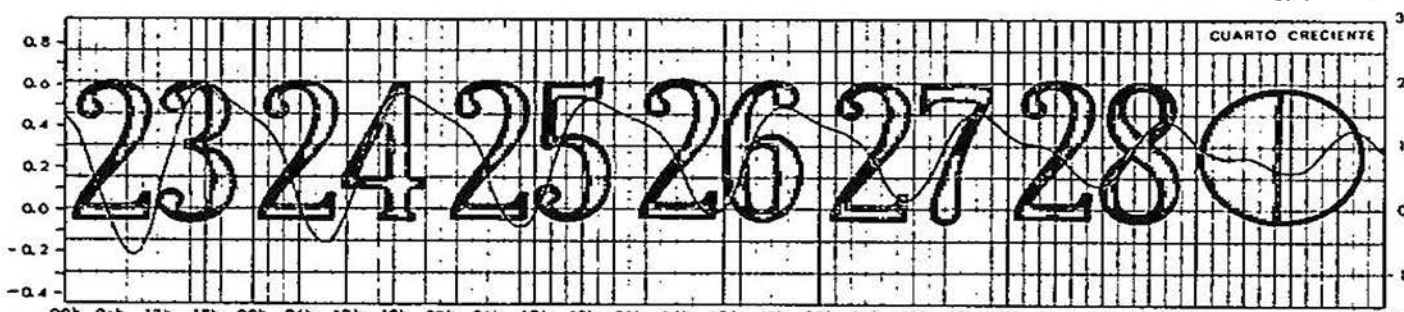
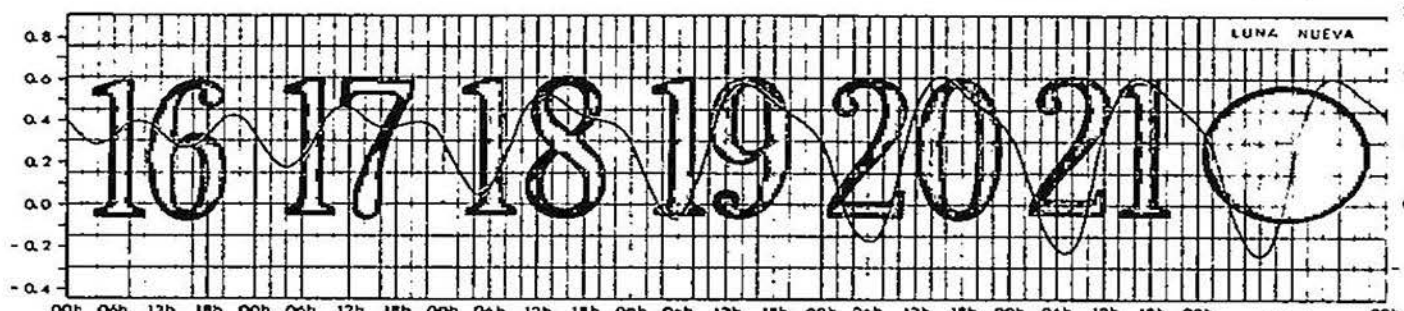
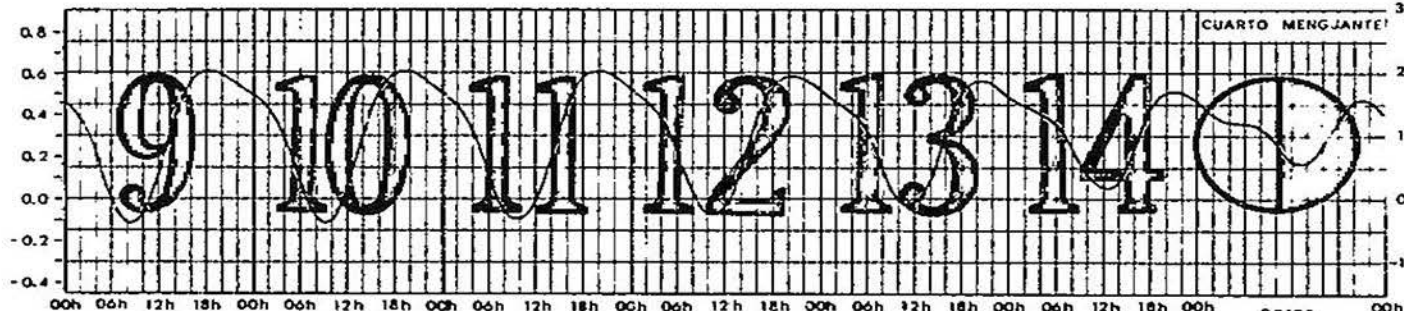
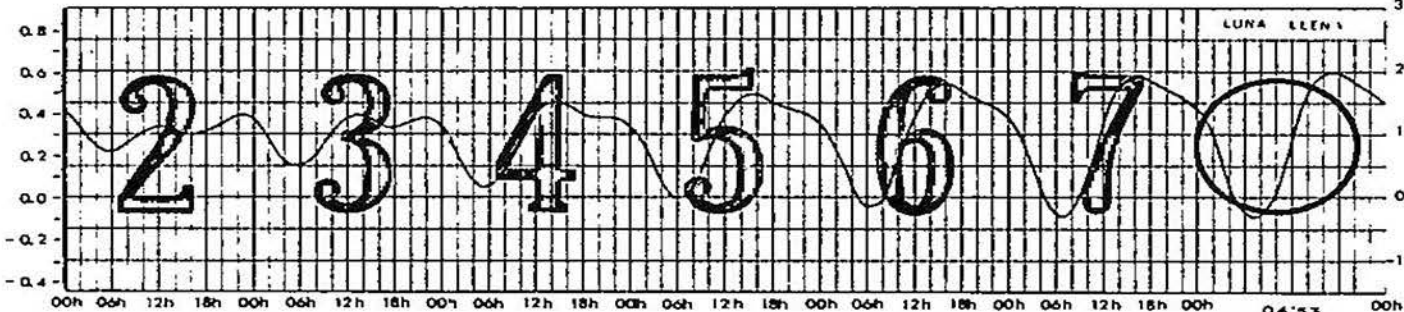
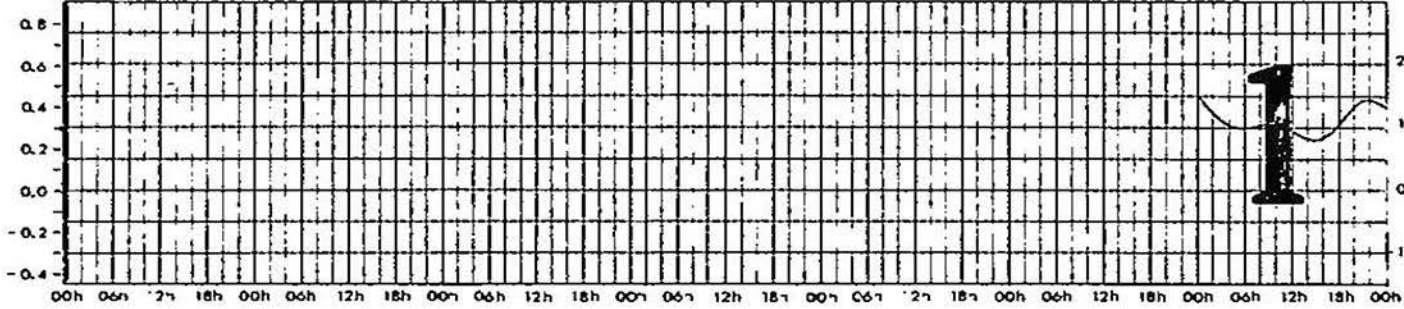


# DICIEMBRE 1984

INSTITUTO DE GEOFISICA U. N. A. M.

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90°W PLANO DE REFERENCIA: N.B.M

DIRECCION GENERAL DE CCEANOGRAFIA

Temperatura media del mar: 23.4 °C

Salinidad media del mar: 35.4 ‰

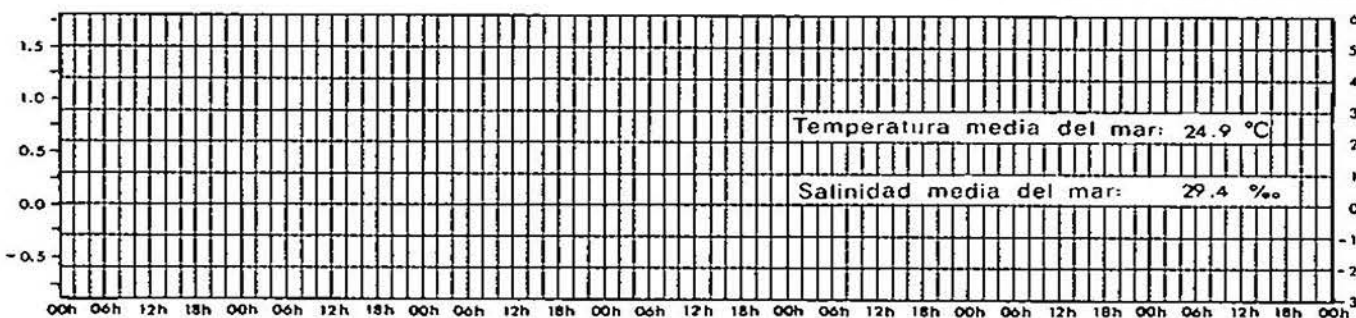
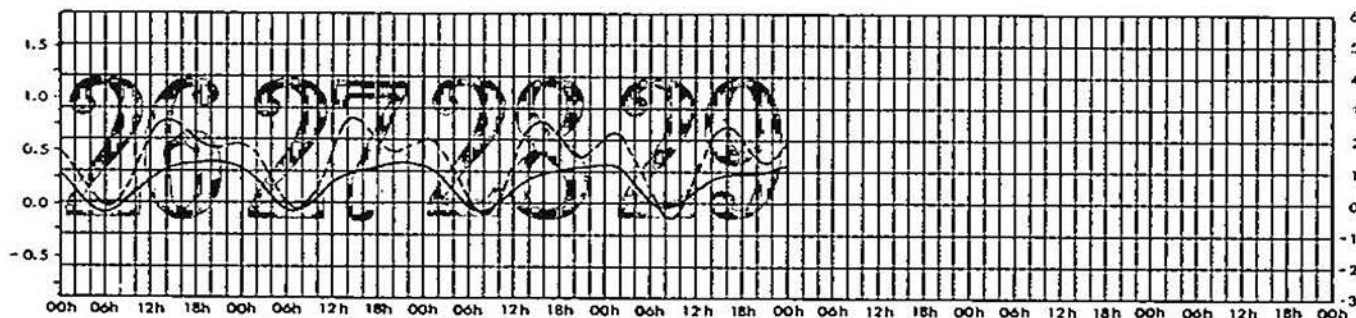
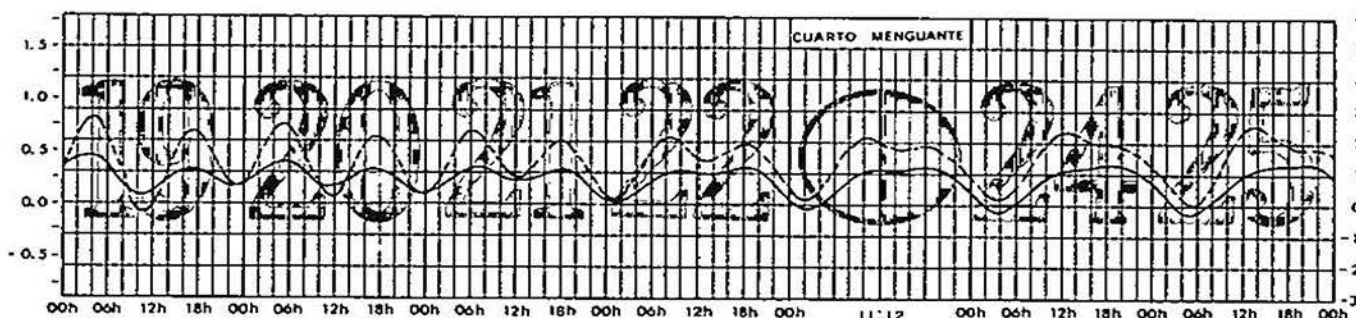
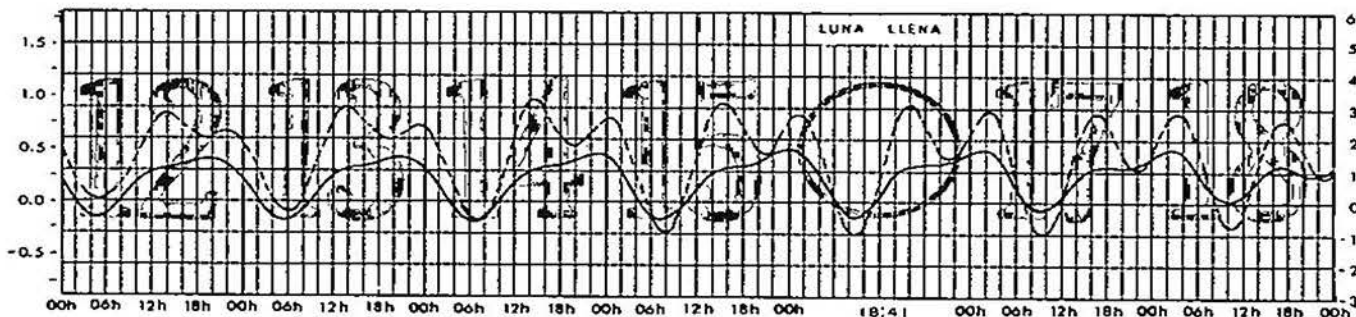
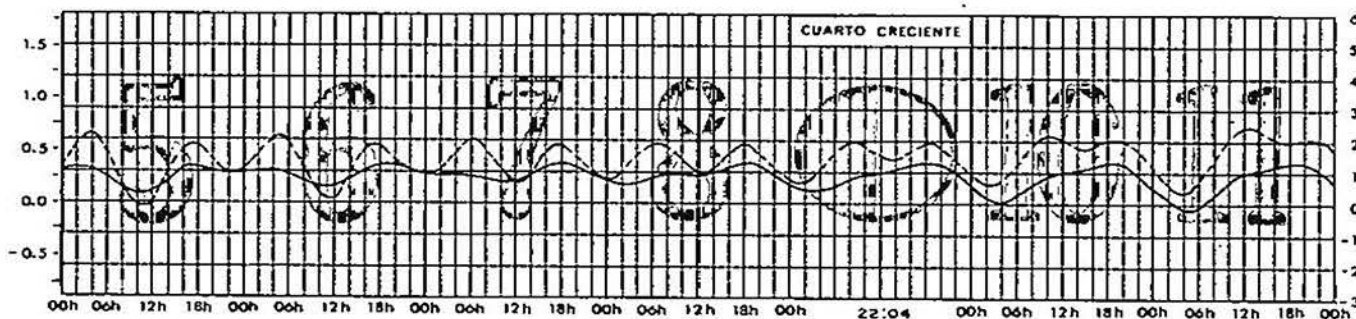
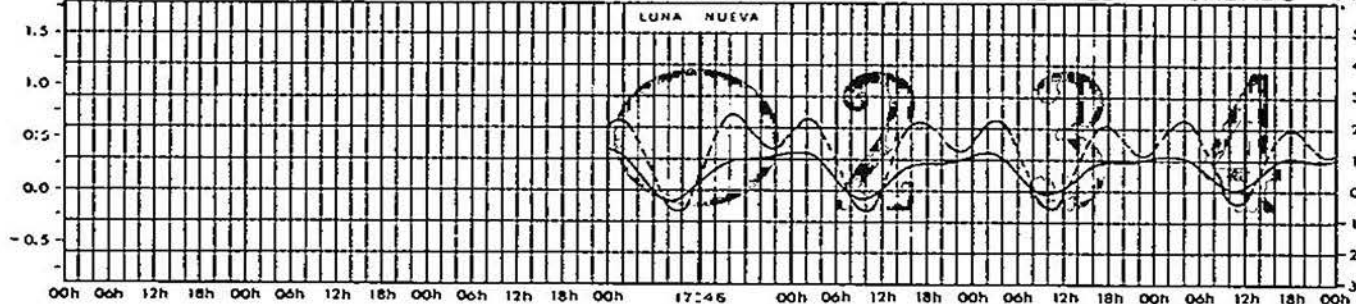


# FEBRERO 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.

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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 89° W

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

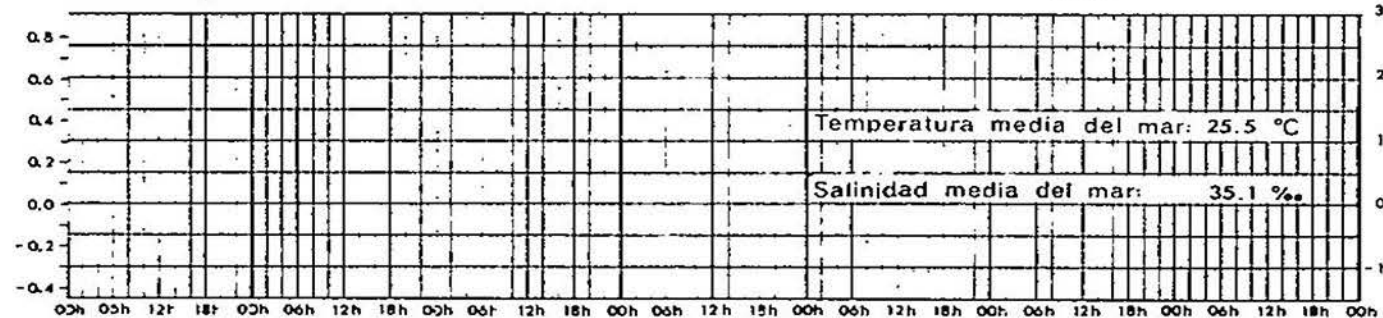
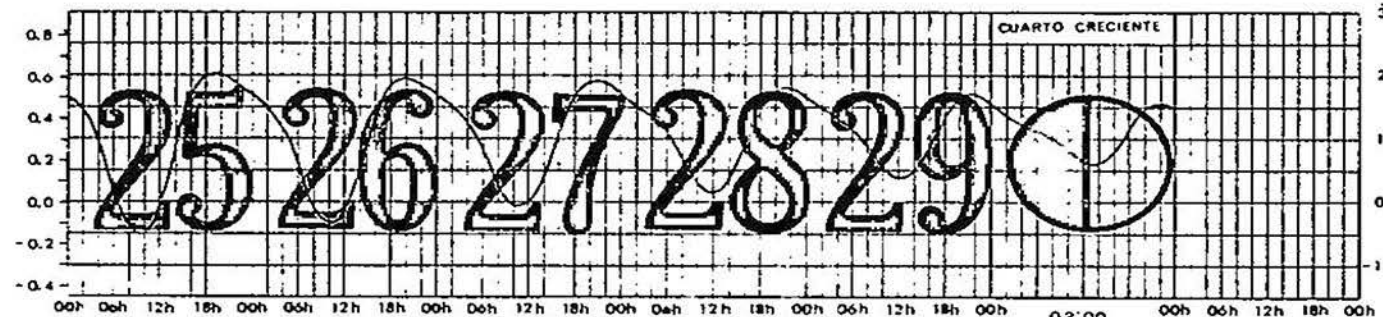
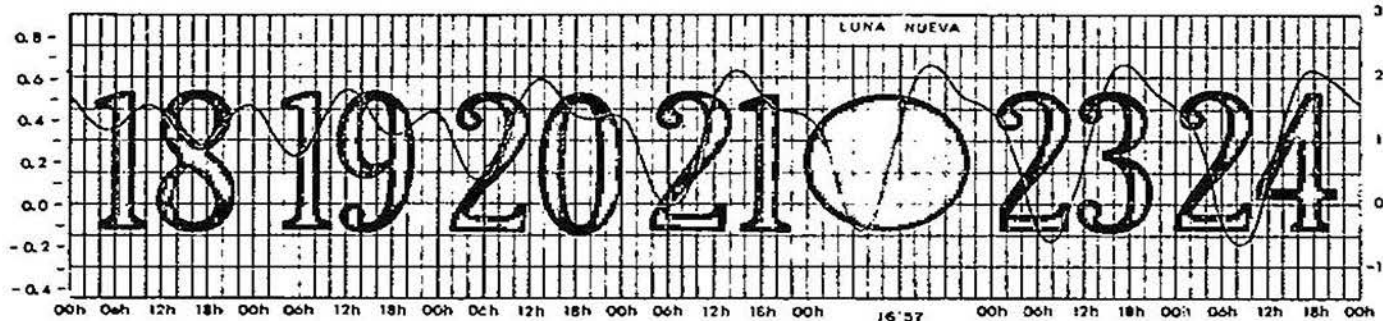
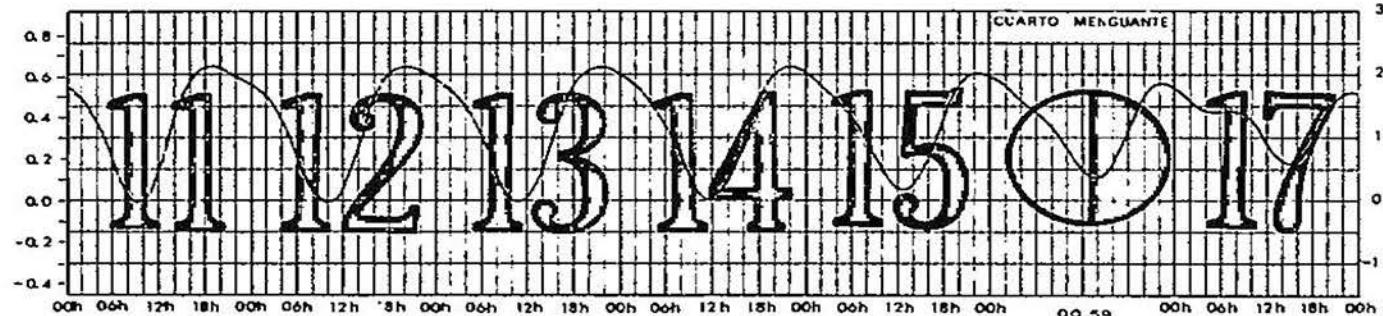
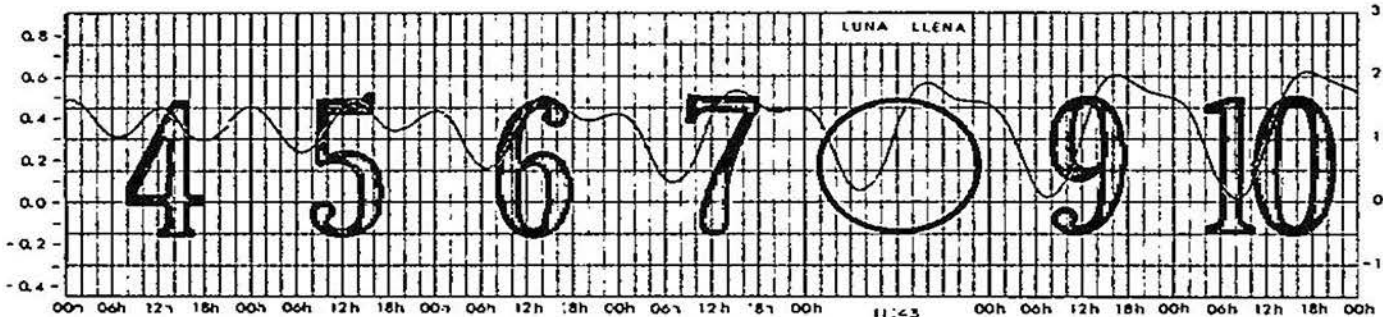
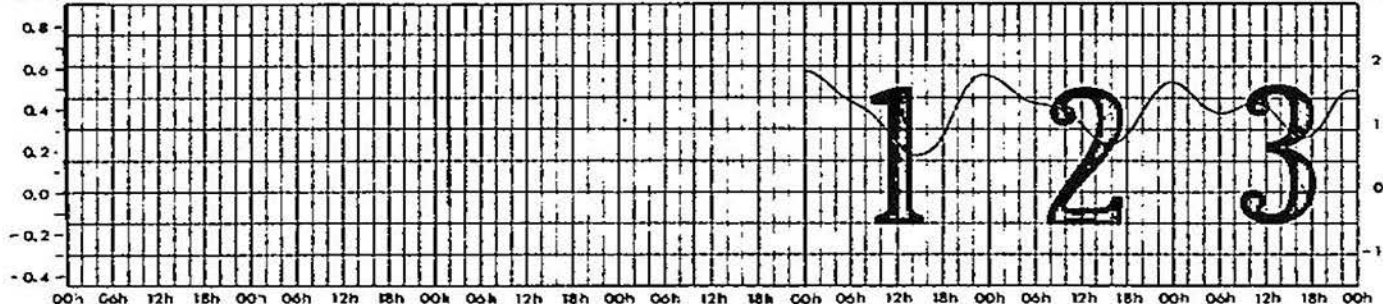


# NOVIEMBRE 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HOJA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.

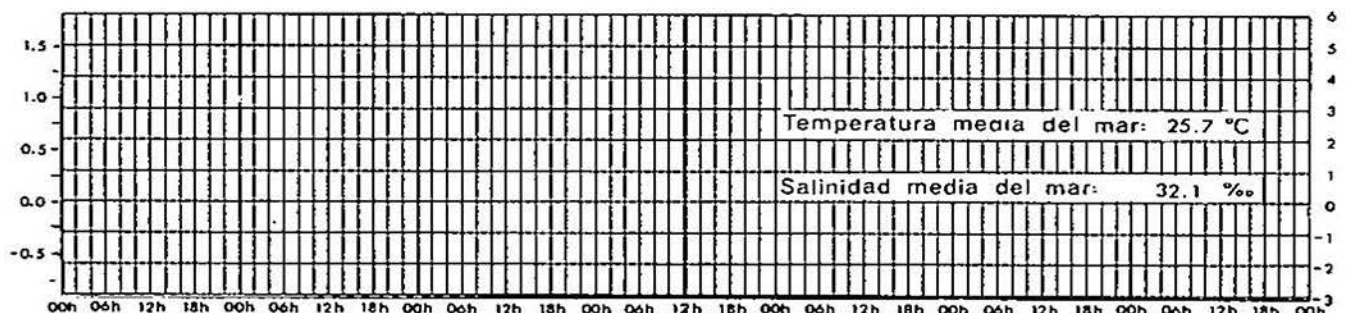
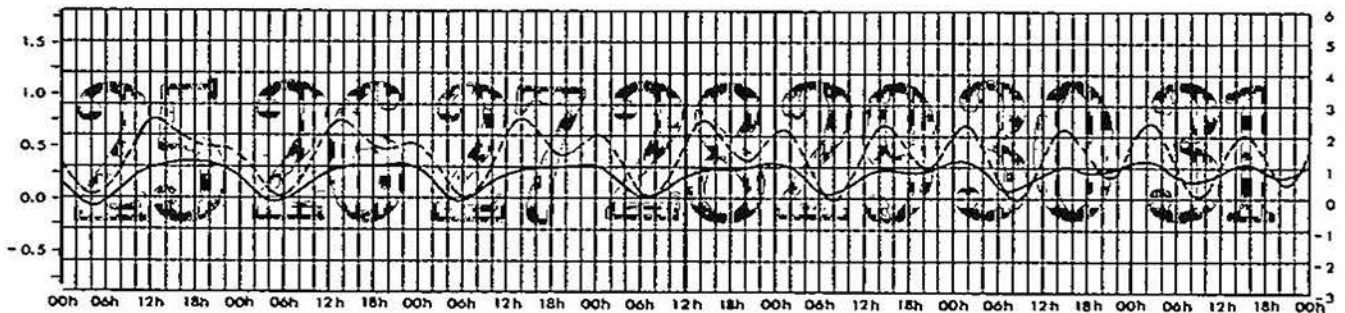
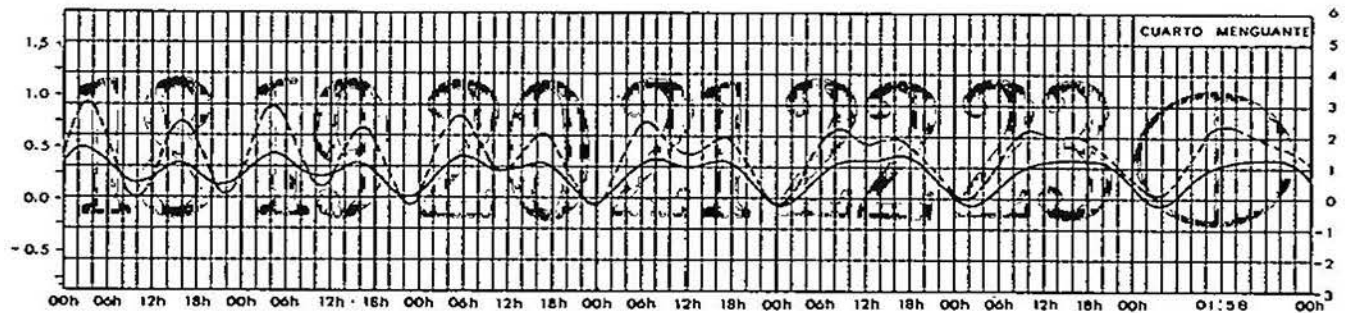
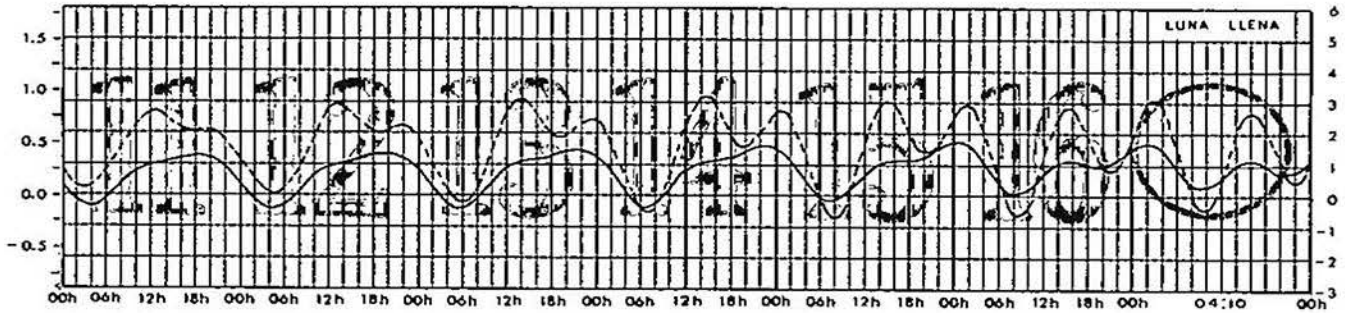
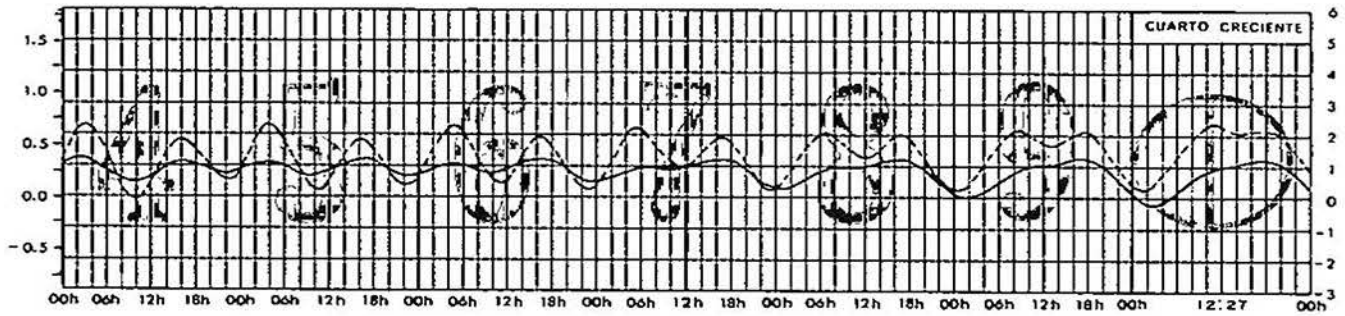
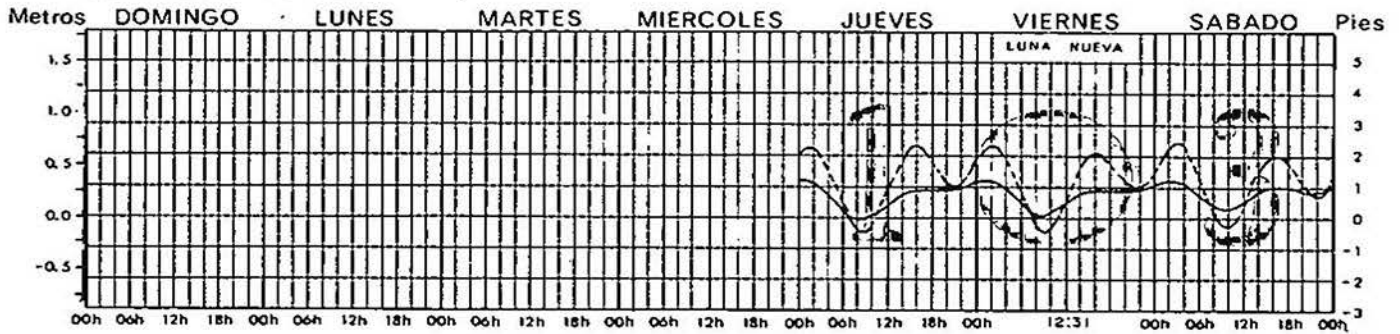


# MARZO 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.



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



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N. S. M. L.

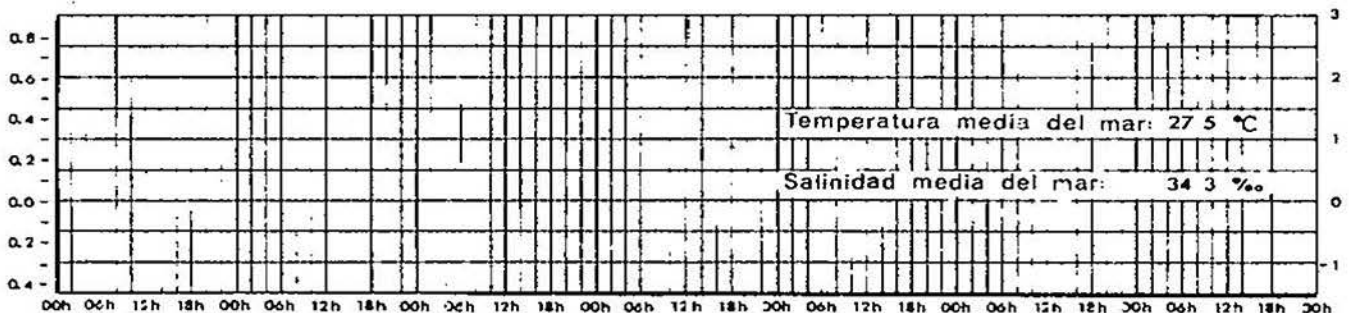
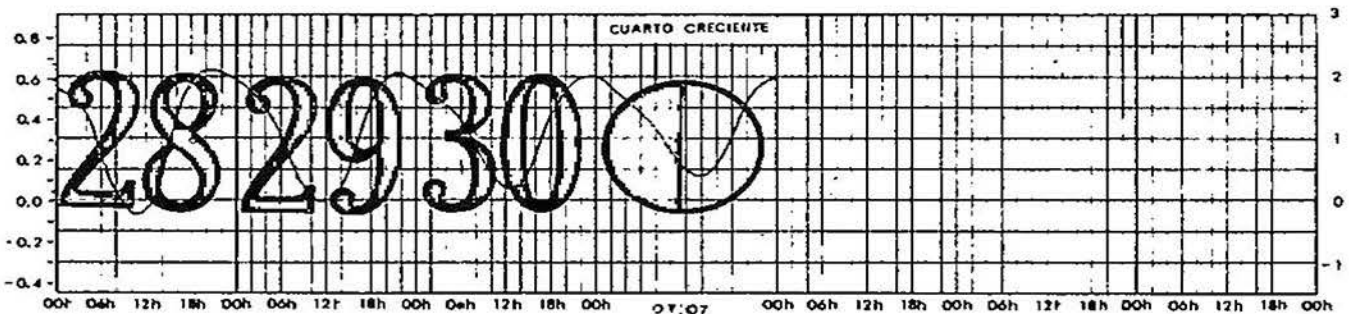
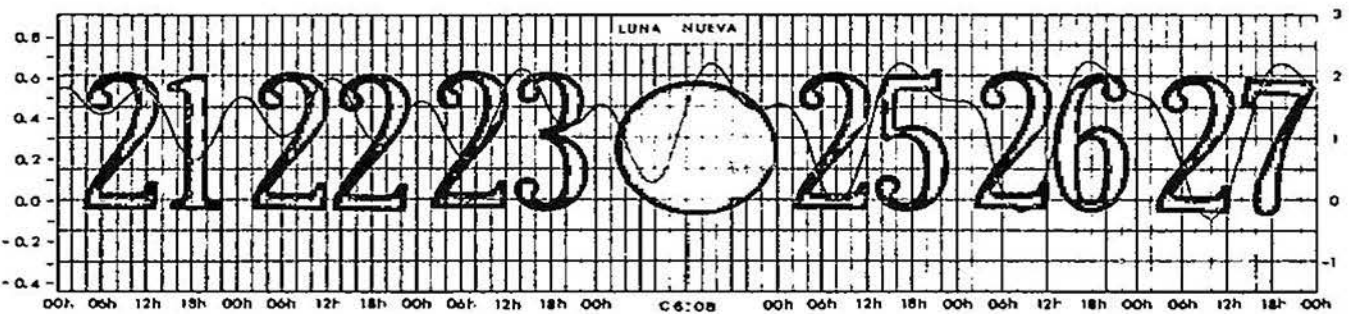
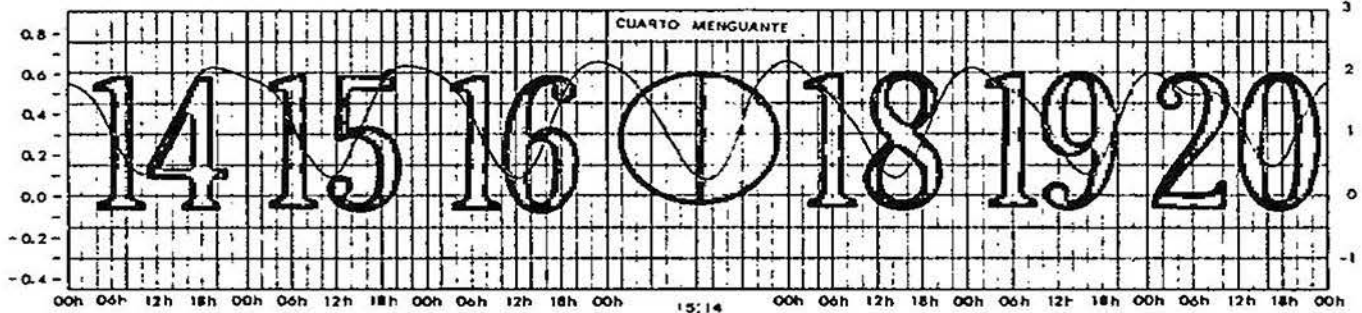
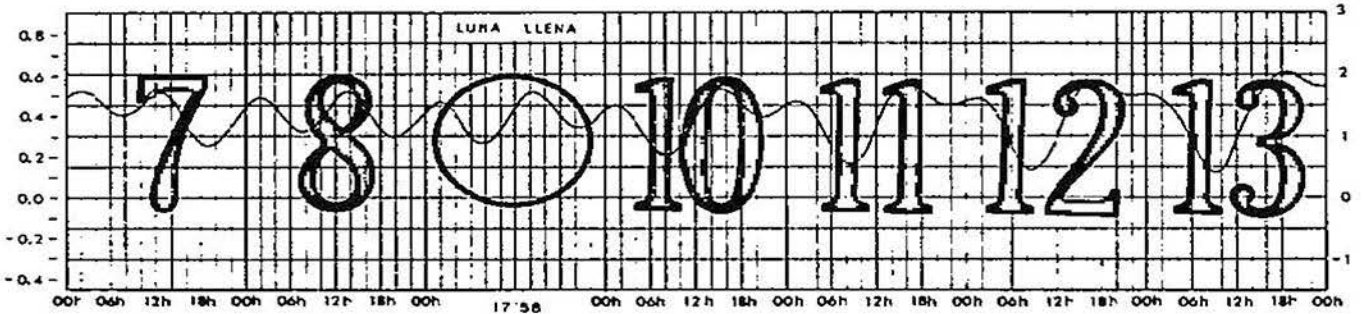
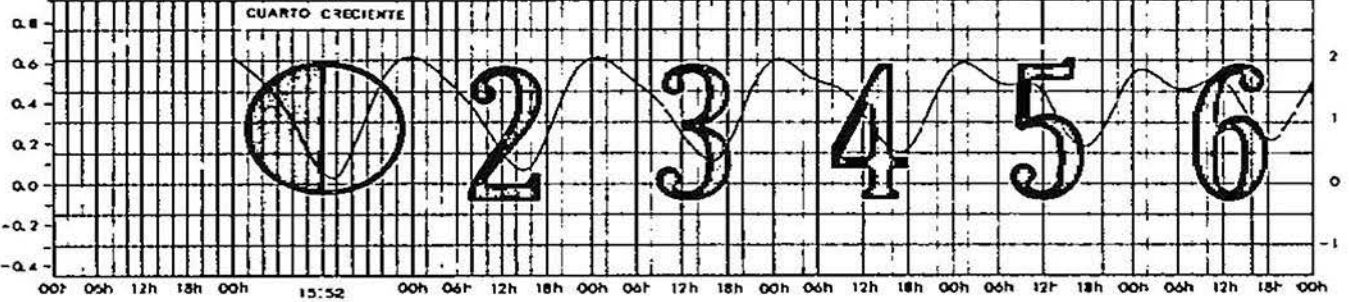


# OCTUBRE 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 27.5 °C

Salinidad media del mar: 34.3 ‰

HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA S.J.M



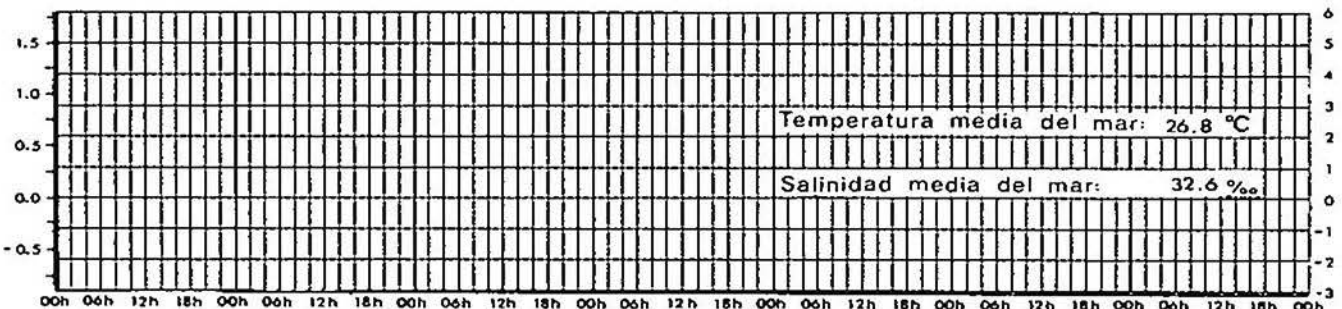
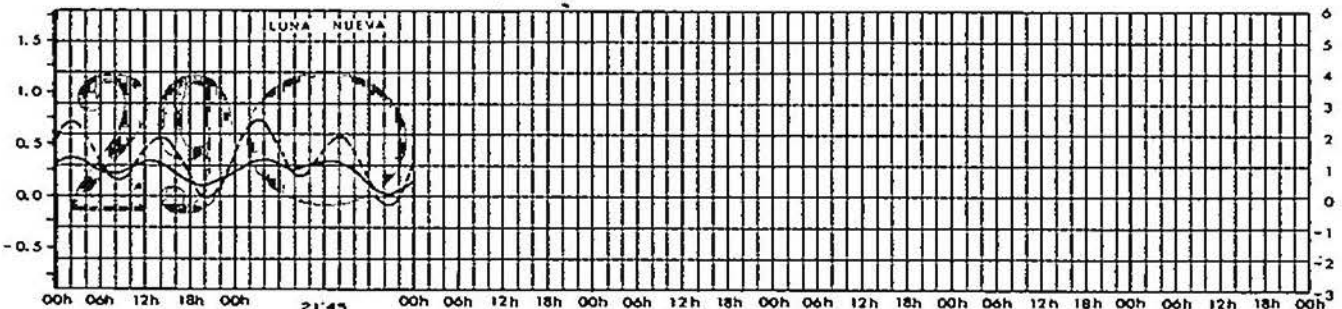
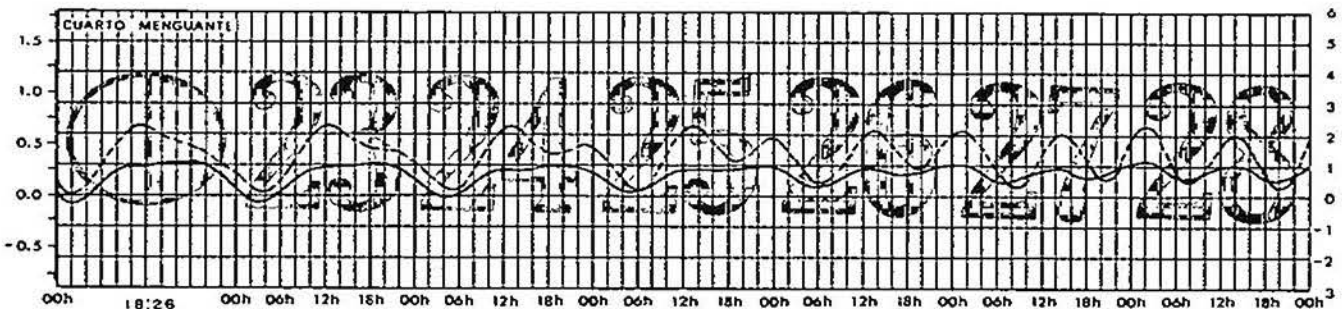
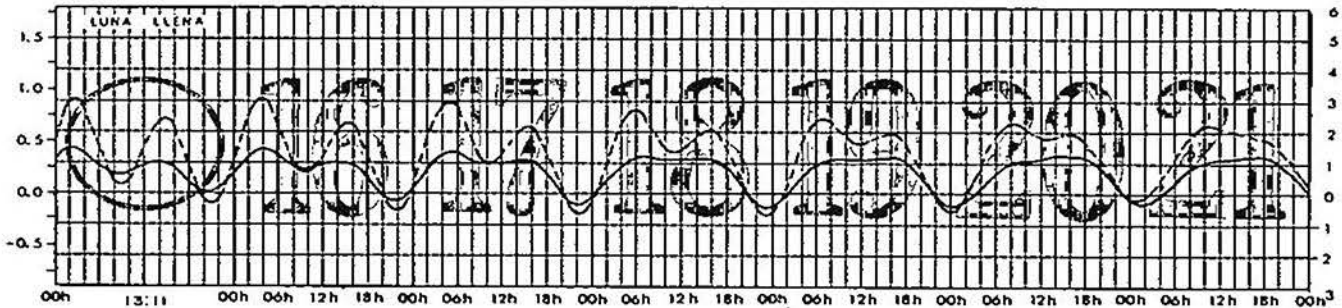
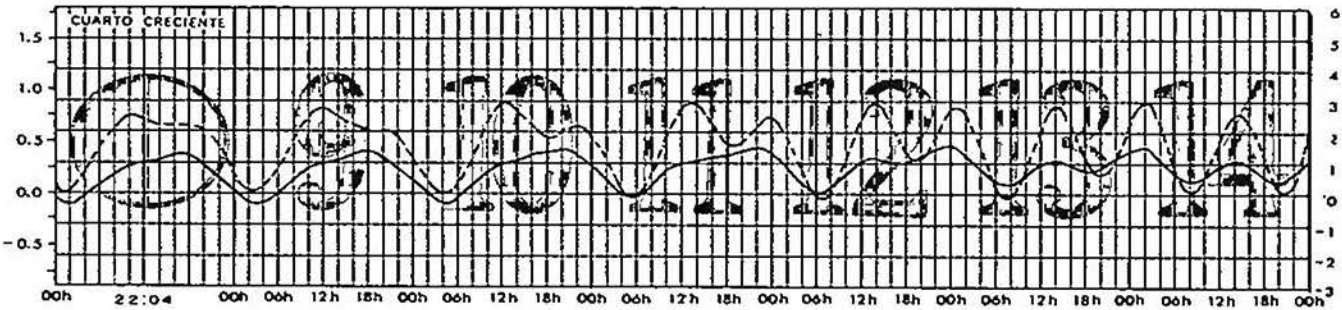
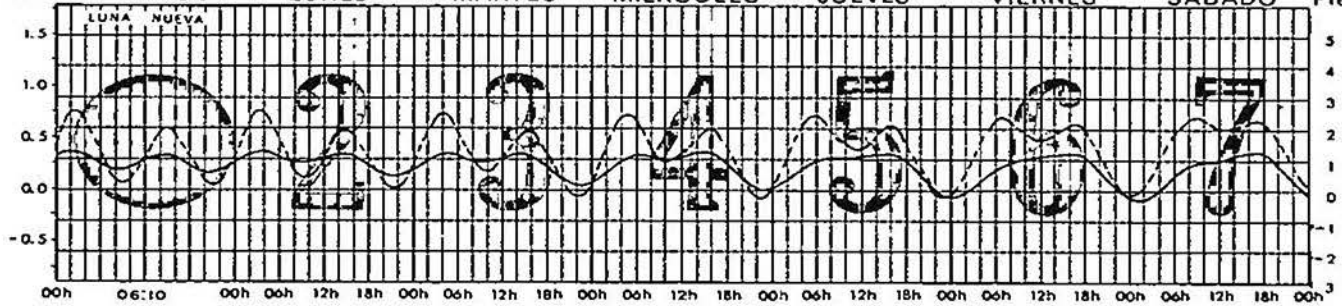


# ABRIL 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.

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. S. M. L.

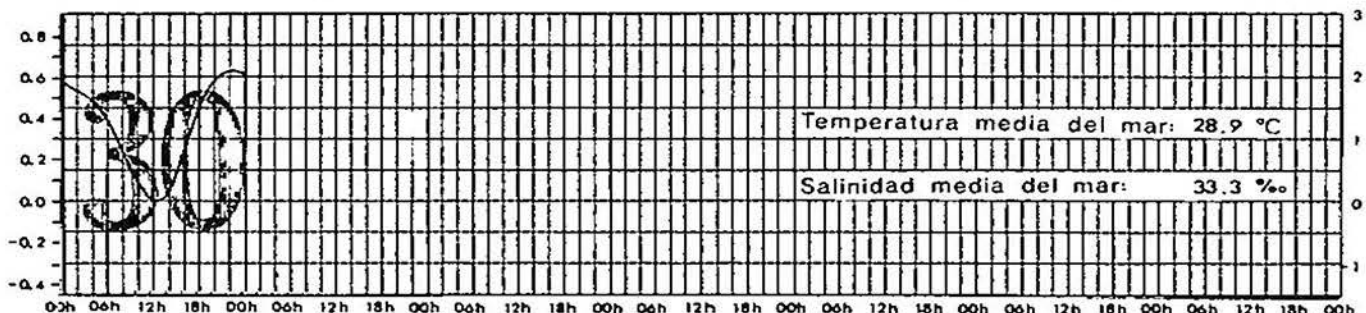
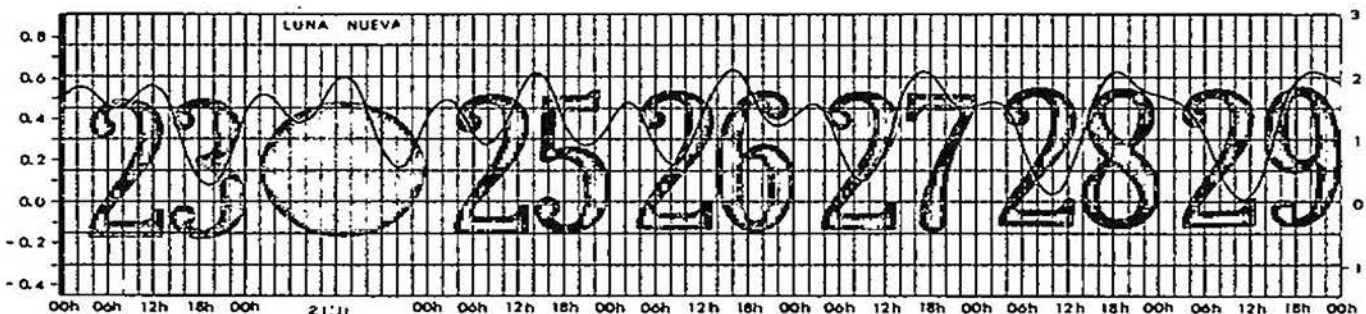
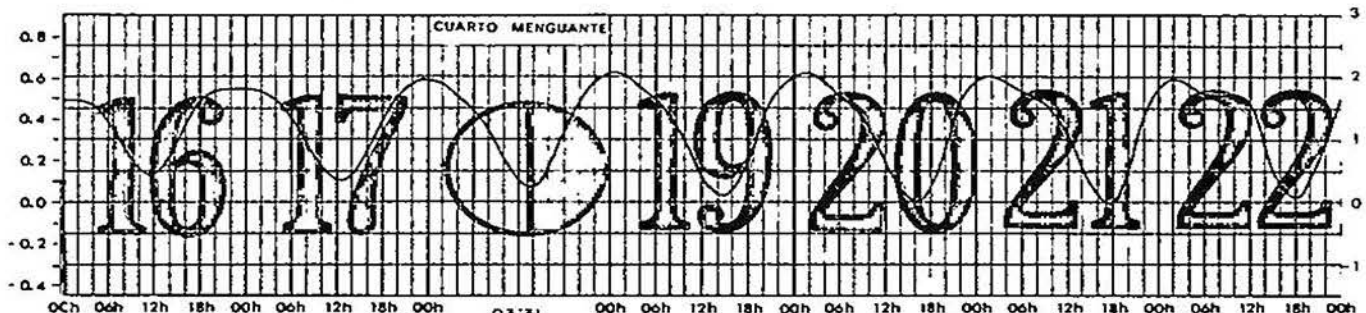
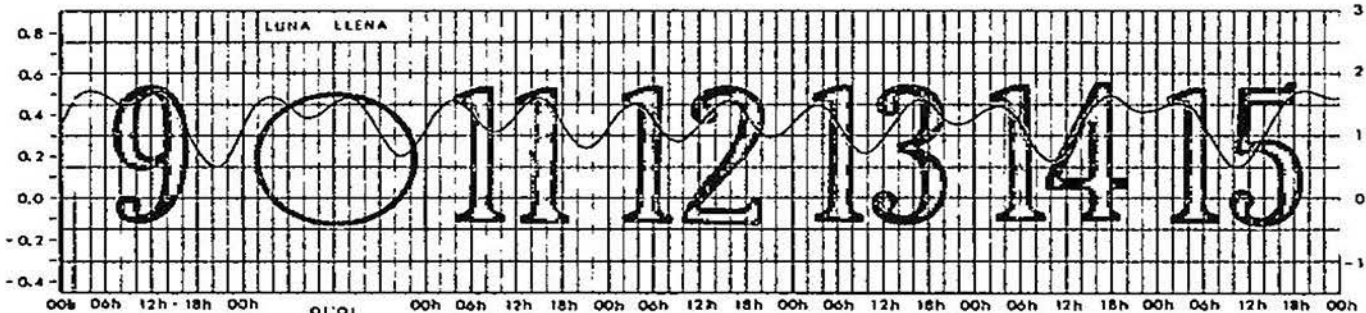
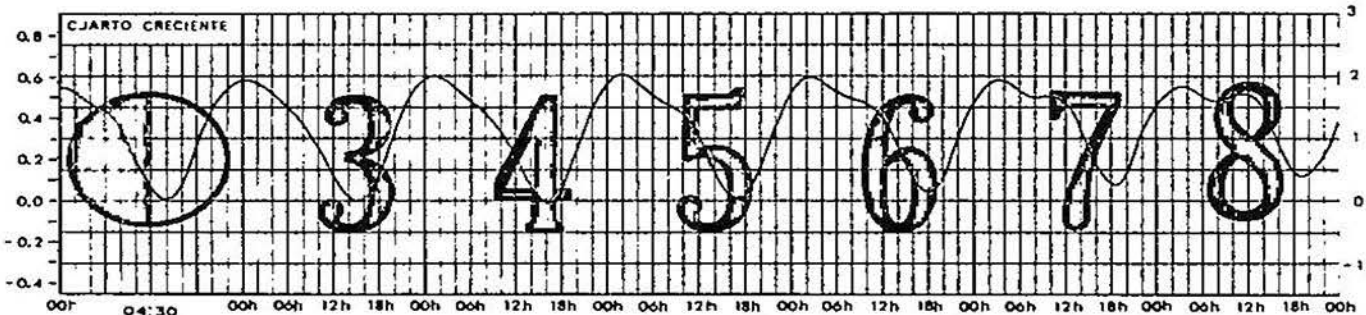
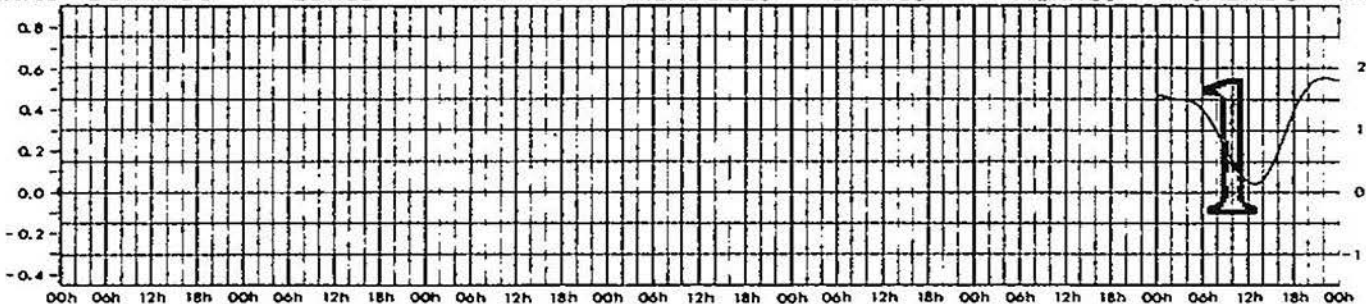


# SEPTIEMBRE 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.



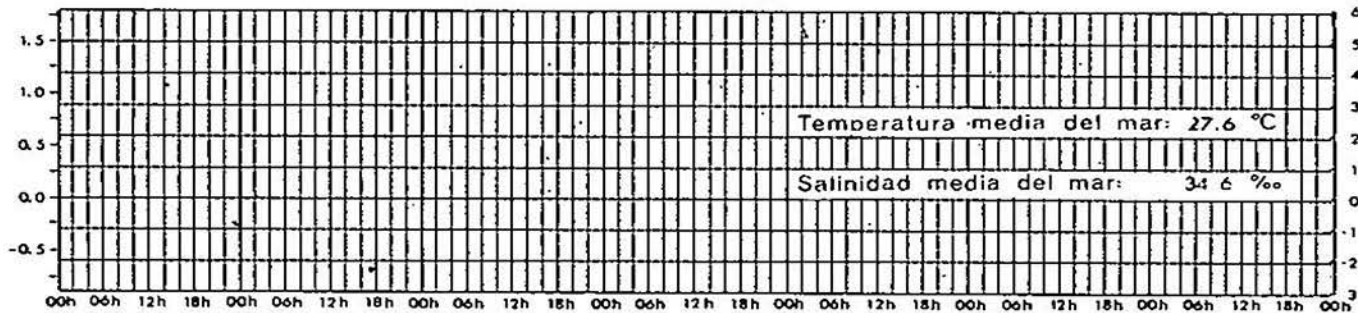
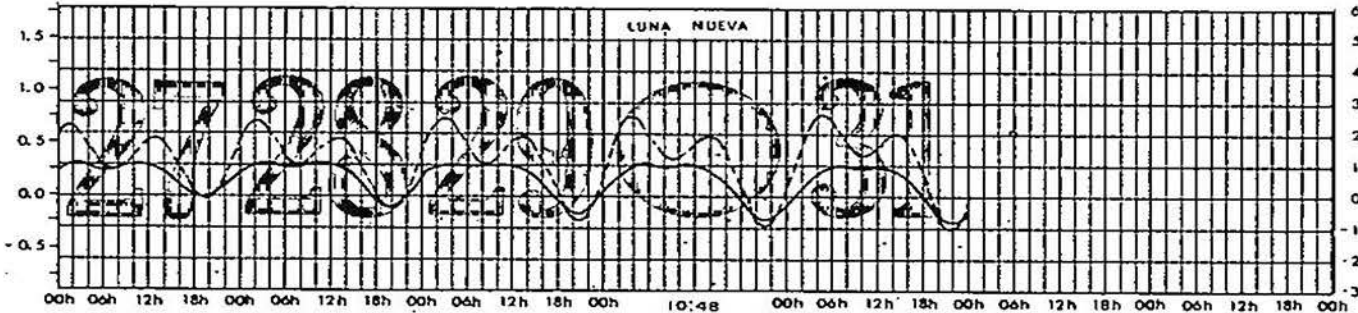
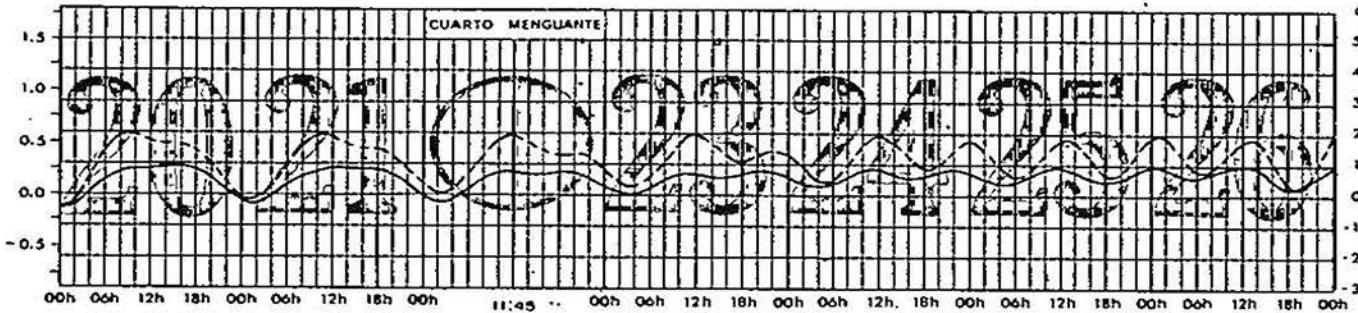
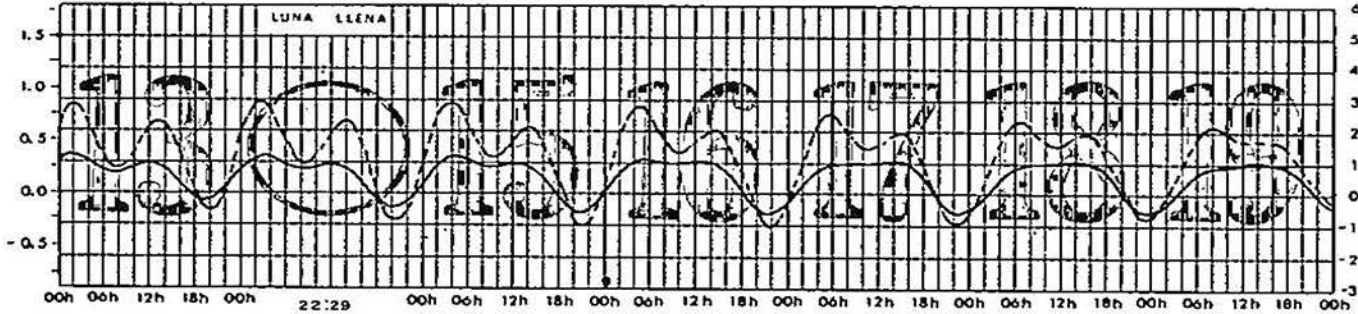
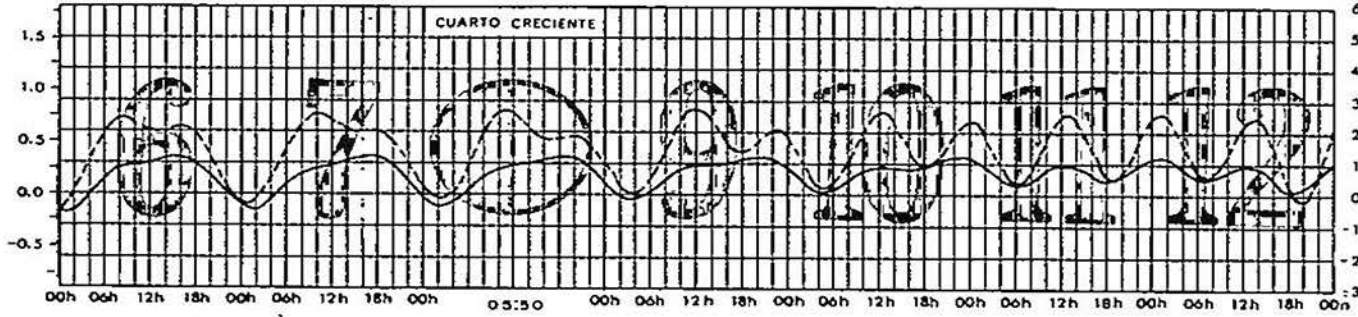
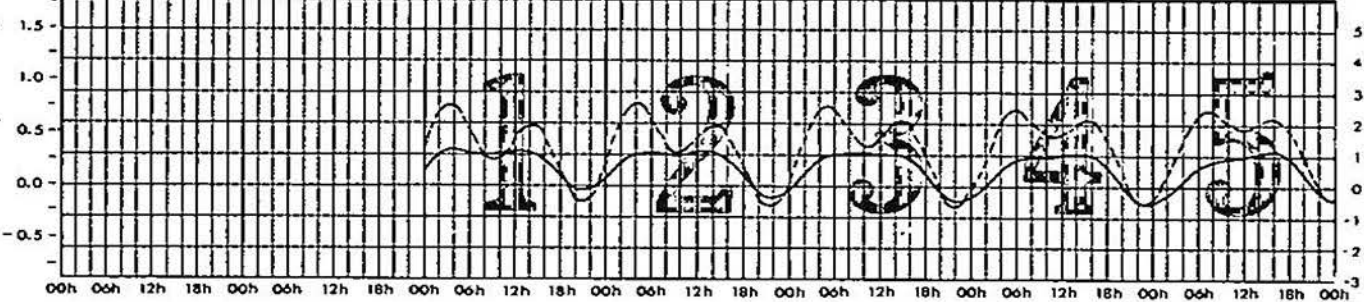
# MAYO 1984

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

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.



Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 27.6 °C

Salinidad media del mar: 34.6 ‰

HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: M. B. M. L.

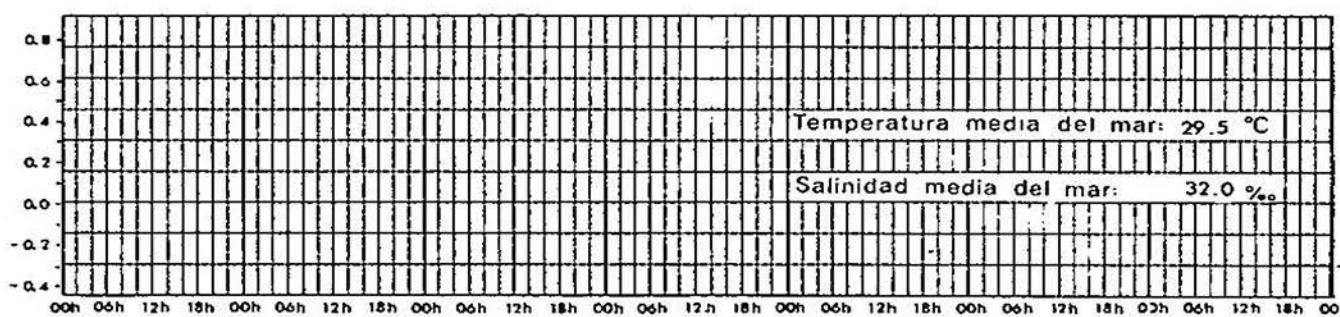
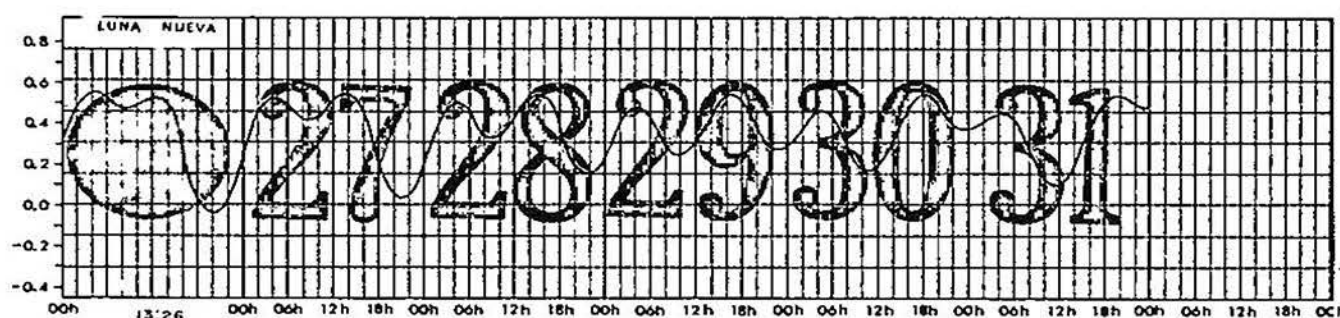
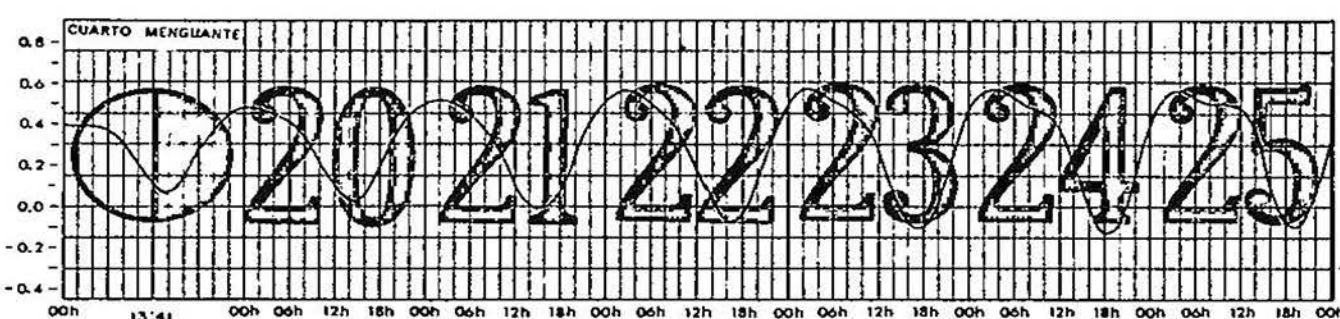
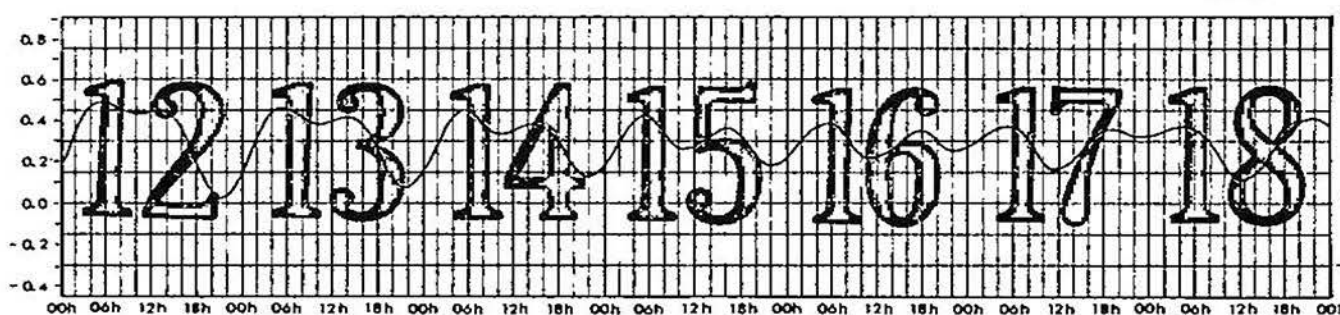
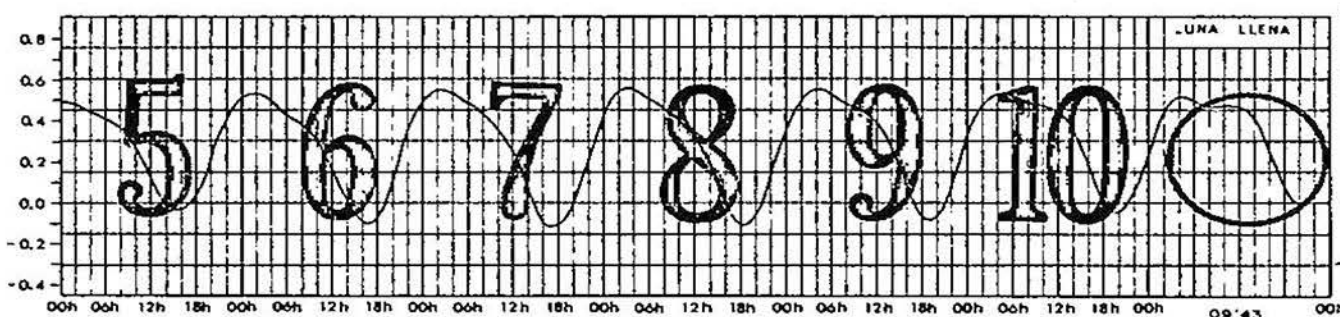
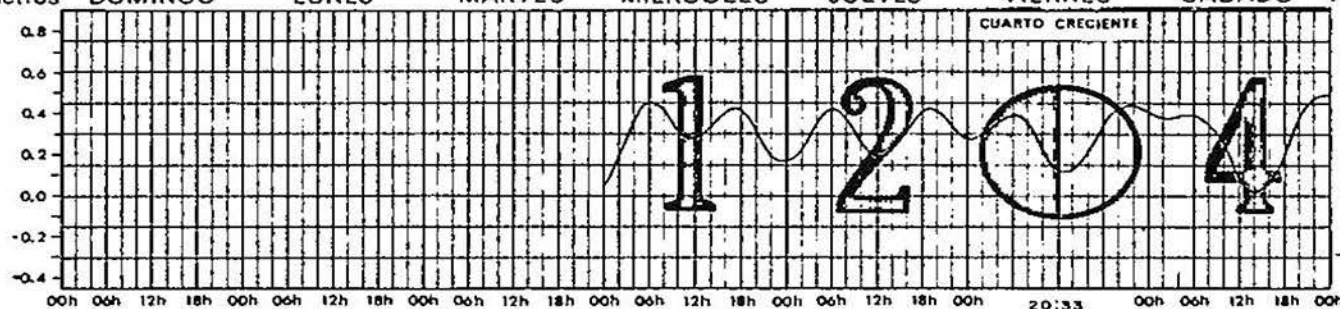


# AGOSTO 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA: N.B.M.

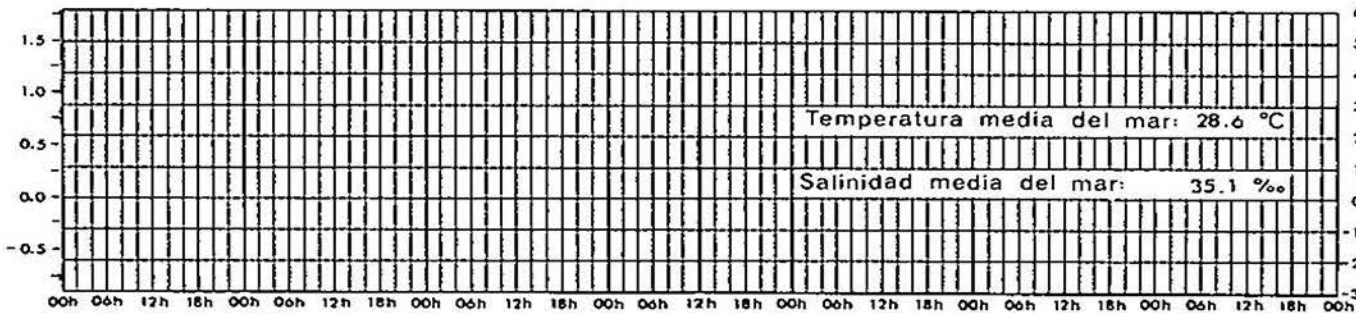
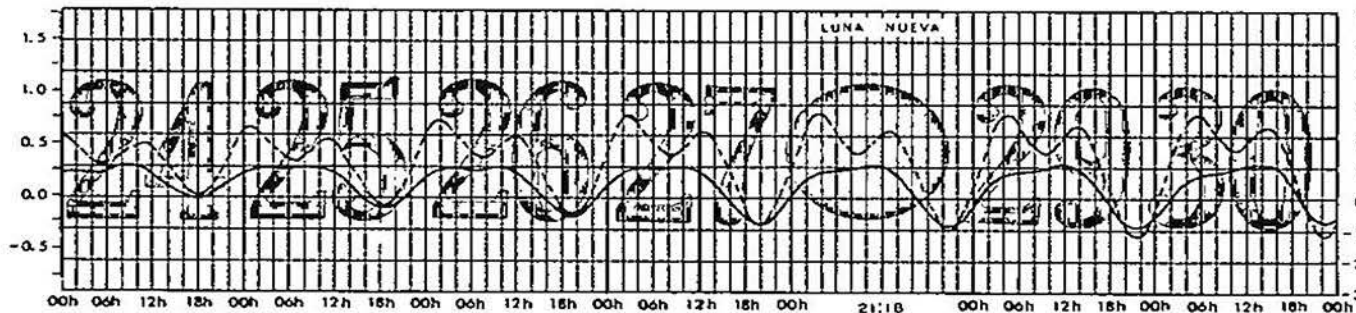
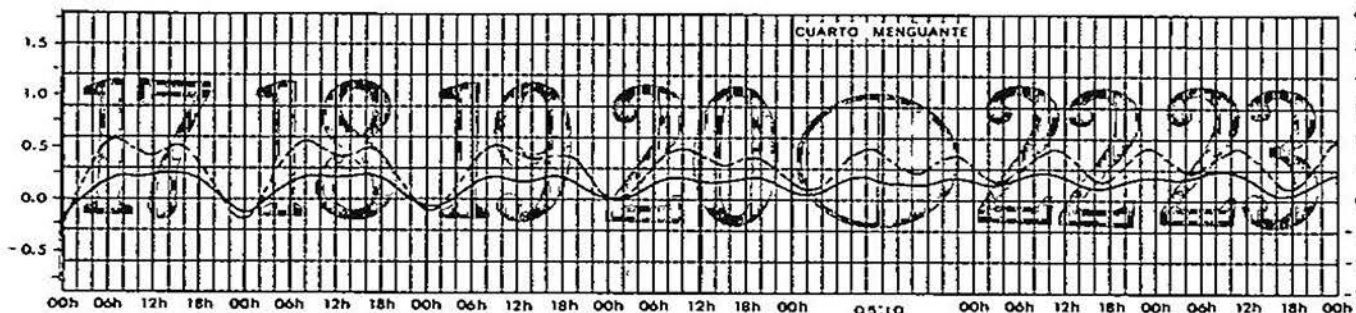
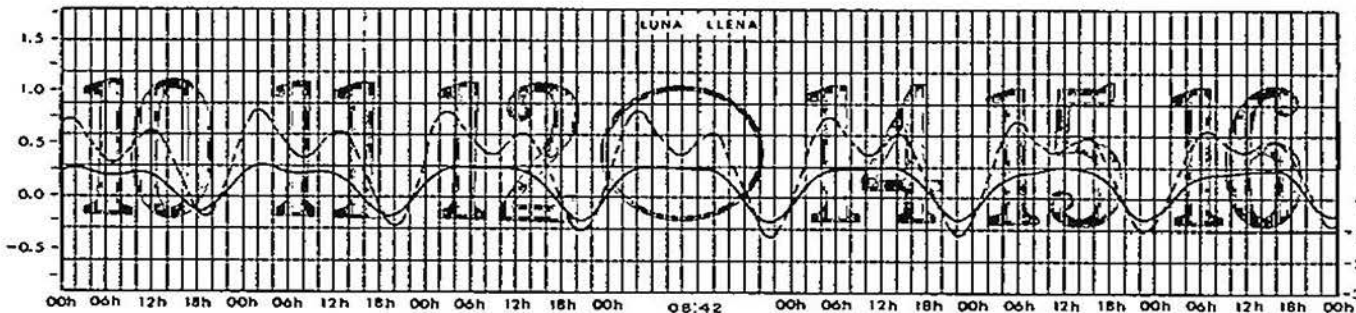
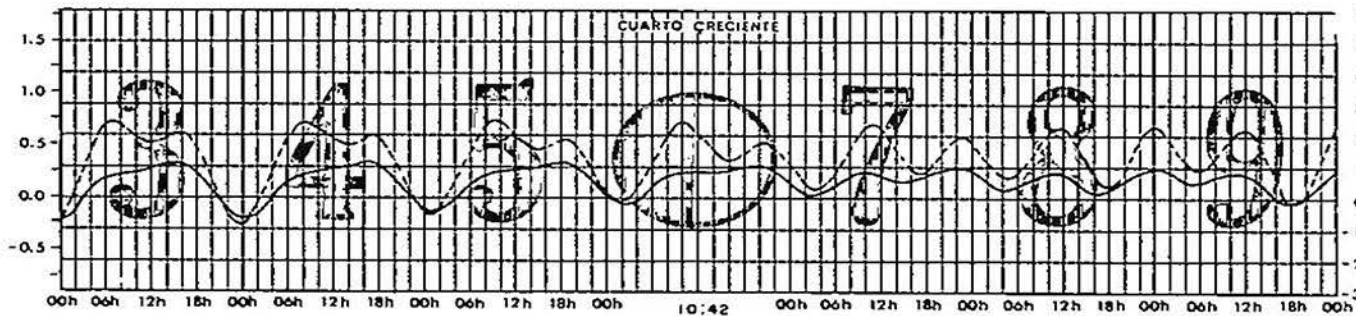
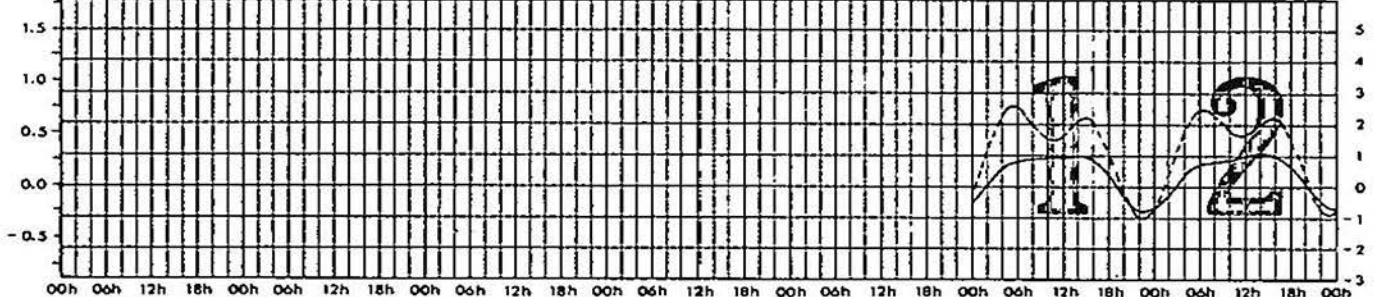


# JUNIO 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.

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

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 28.6 °C

Salinidad media del mar: 35.1 ‰

HORA DEL MERIDIANO 90°W

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

DIRECCION GENERAL DE OCEANOGRAFIA

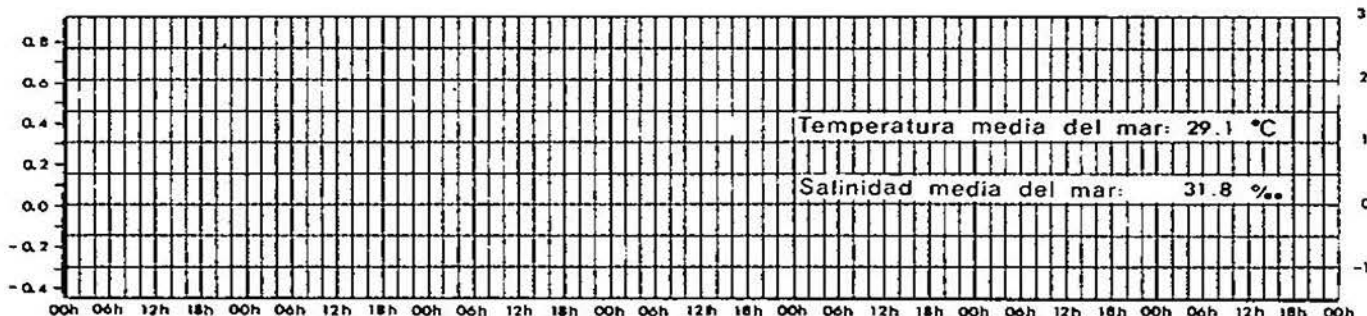
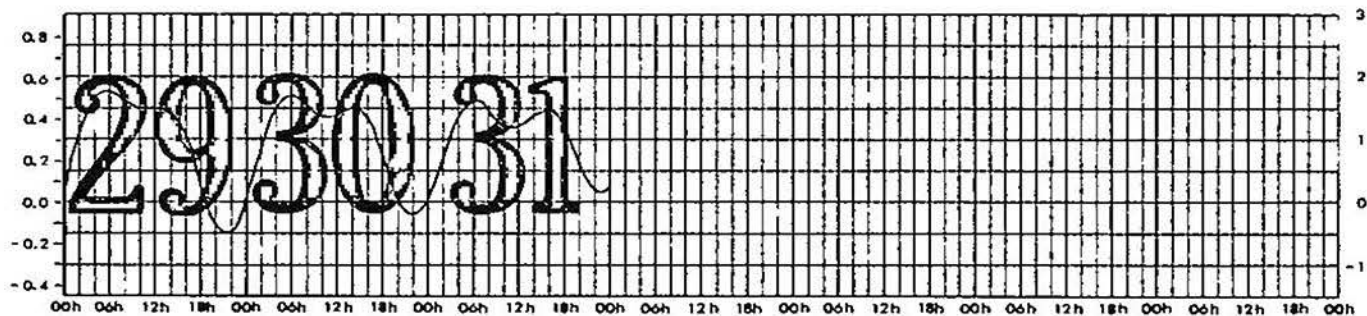
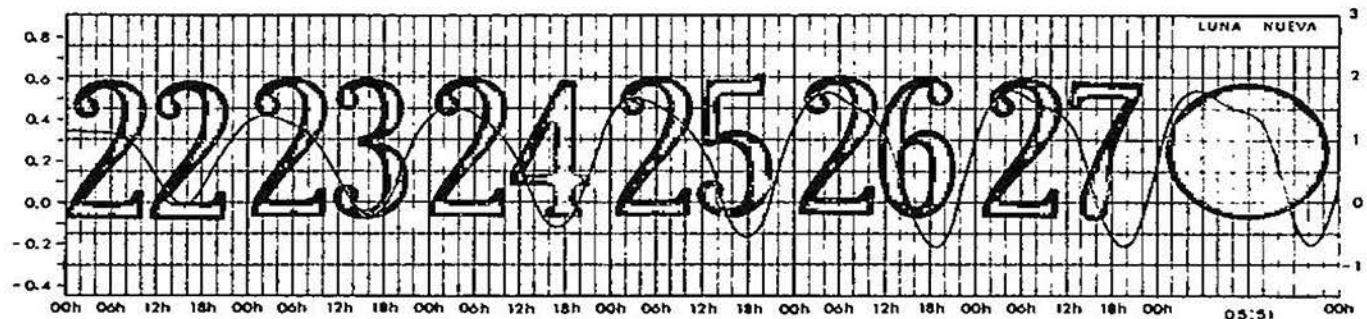
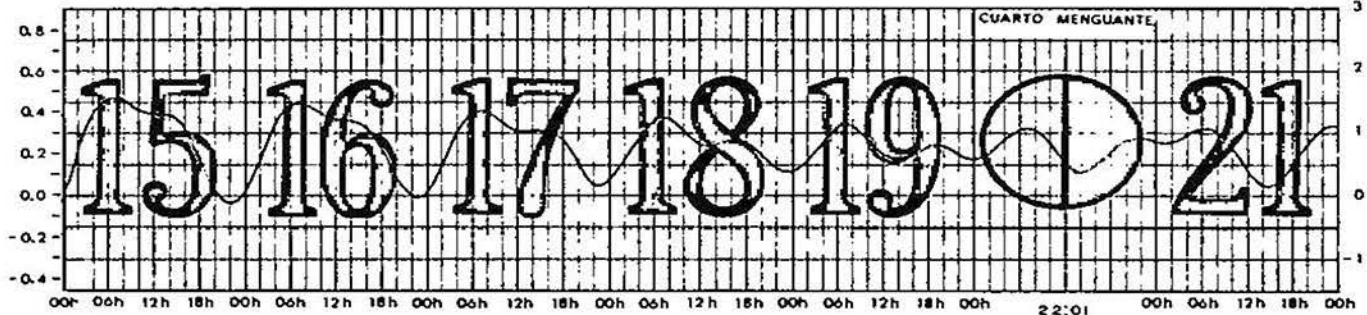
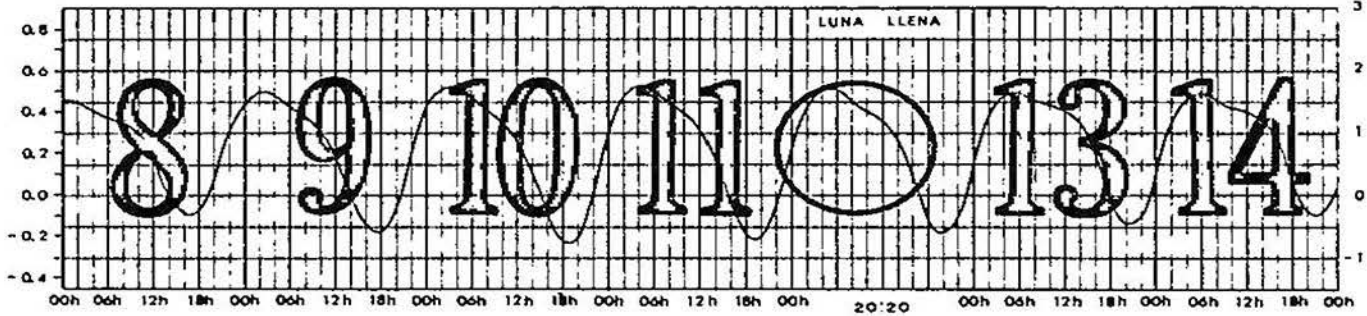
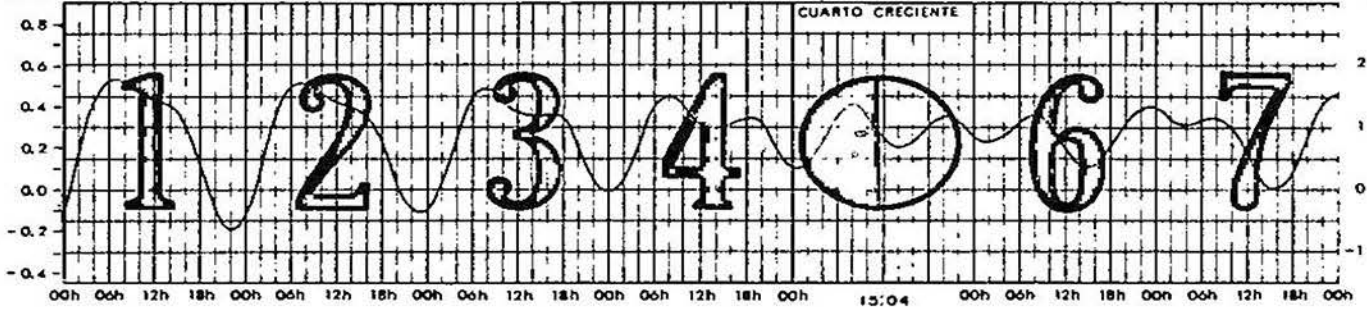


# JULIO 1984

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

VERACRUZ, VÉR.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA: N.B.M.



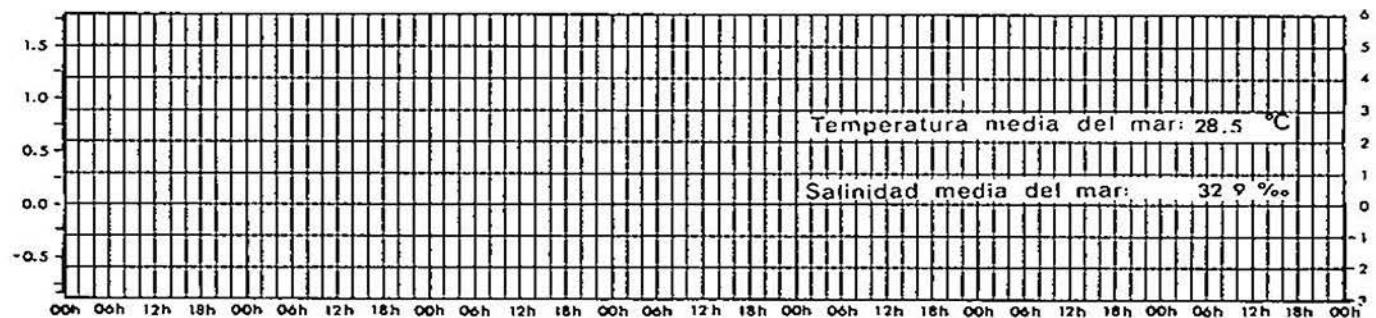
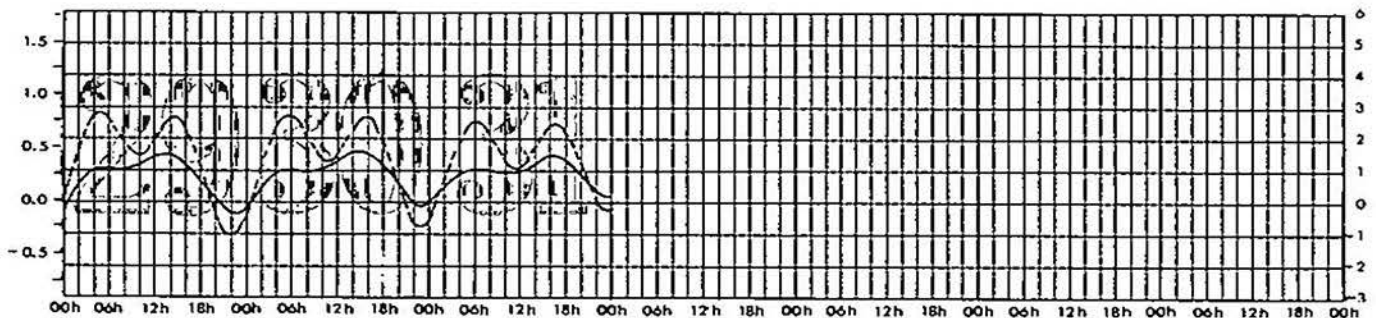
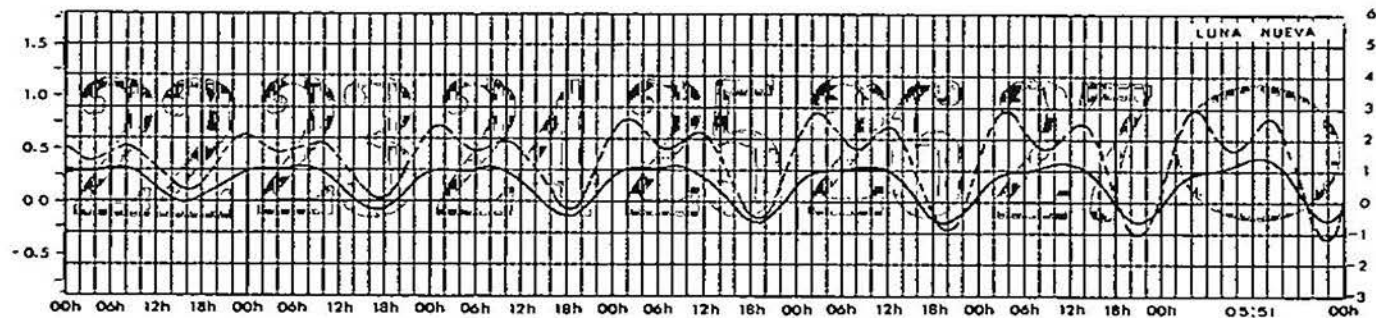
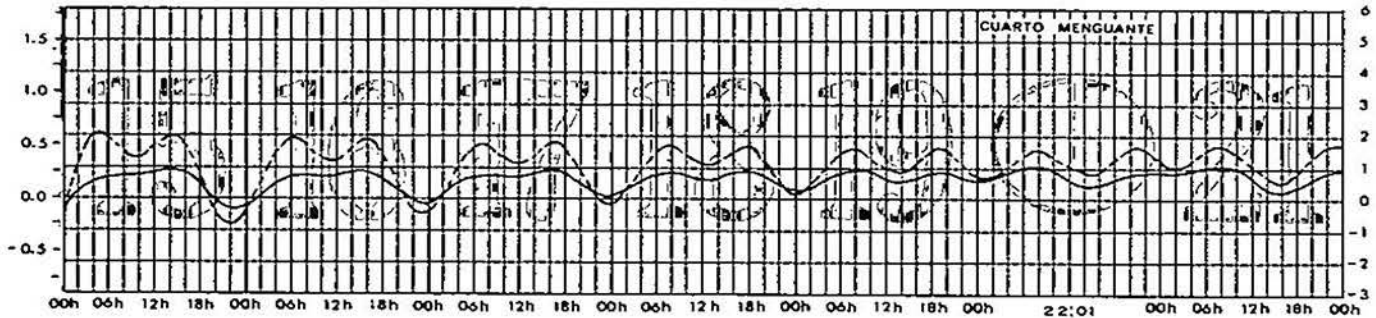
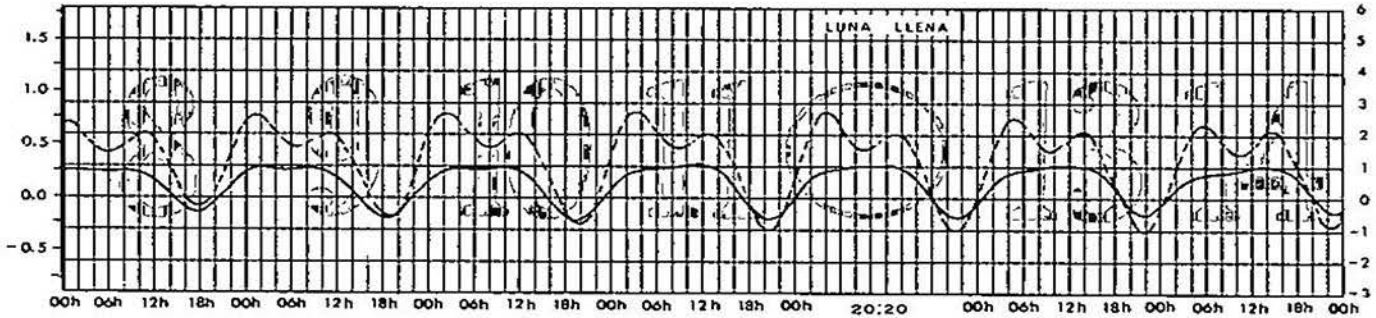
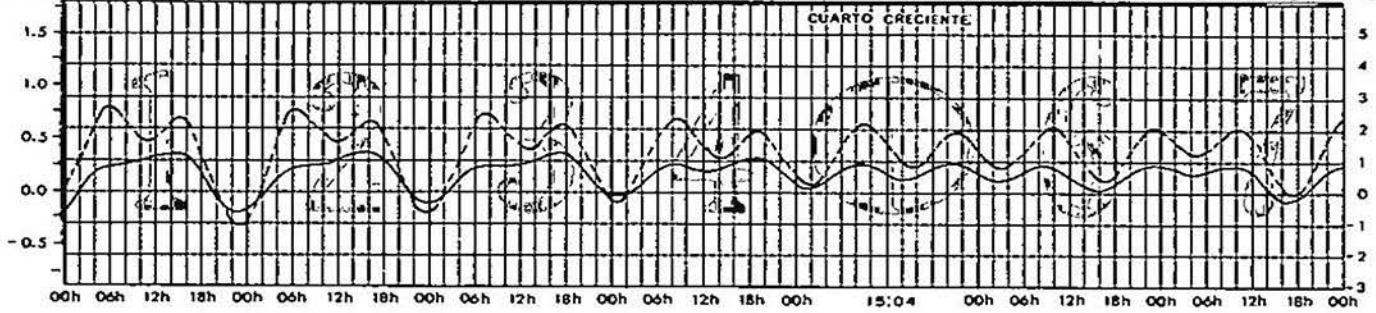
# JULIO 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.

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.

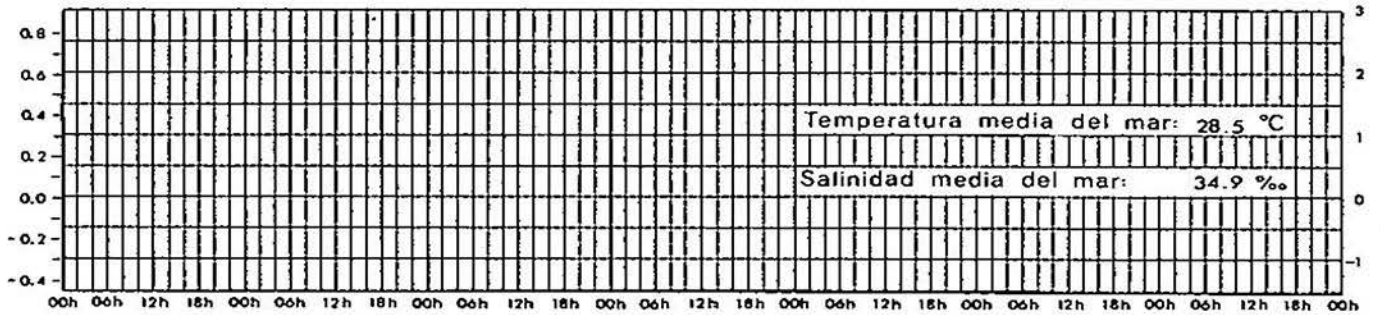
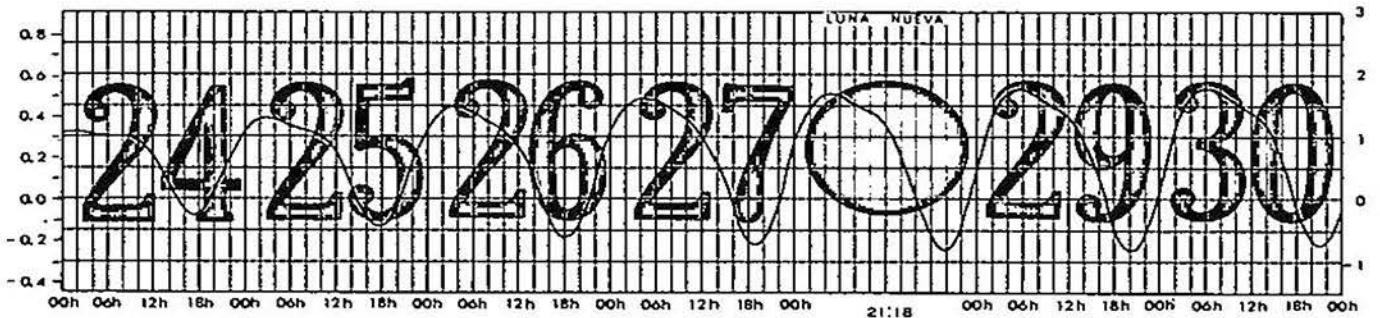
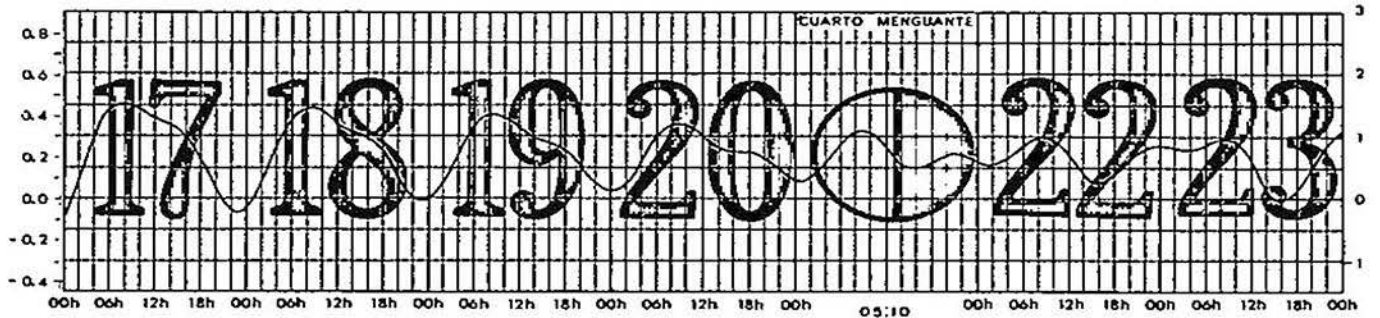
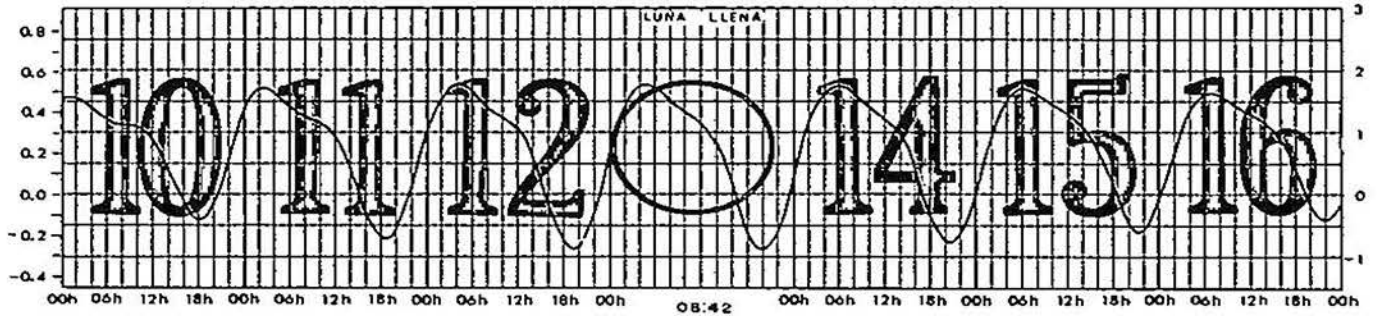
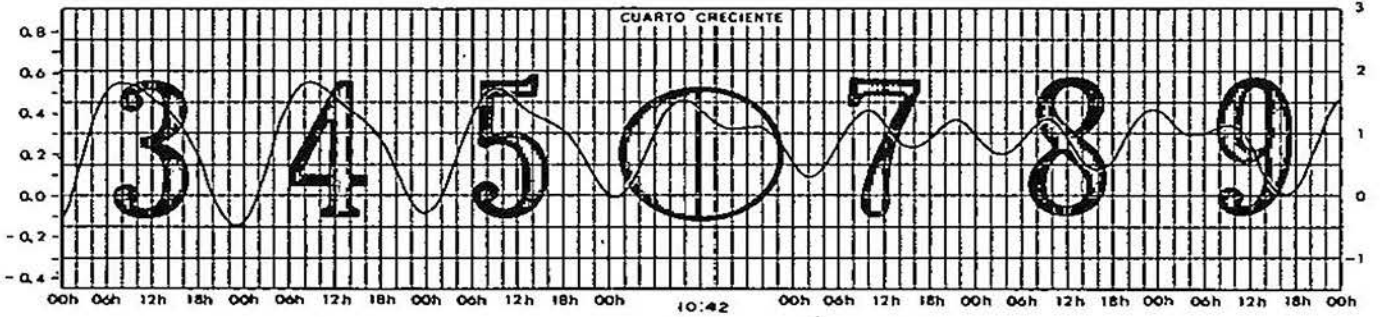
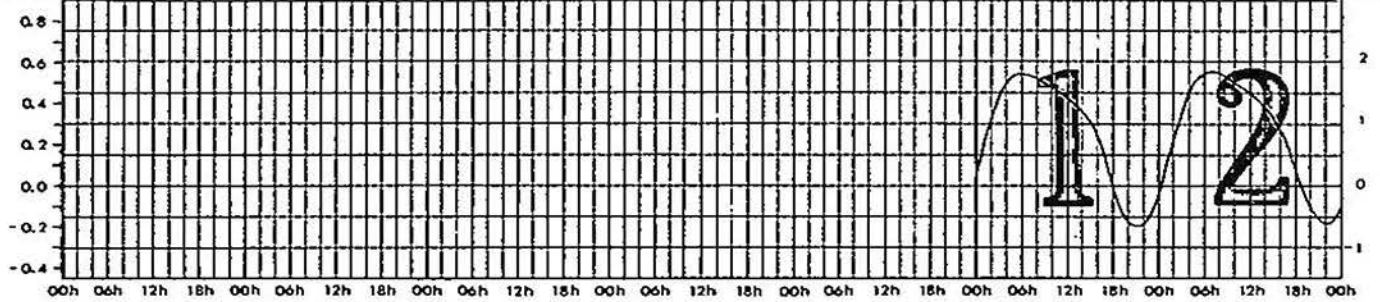


# JUNIO 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 28.5 °C

Salinidad media del mar: 34.9 ‰

HORA DEL MERIDIANO 10° W

PLANO DE REFERENCIA: N.S.M.





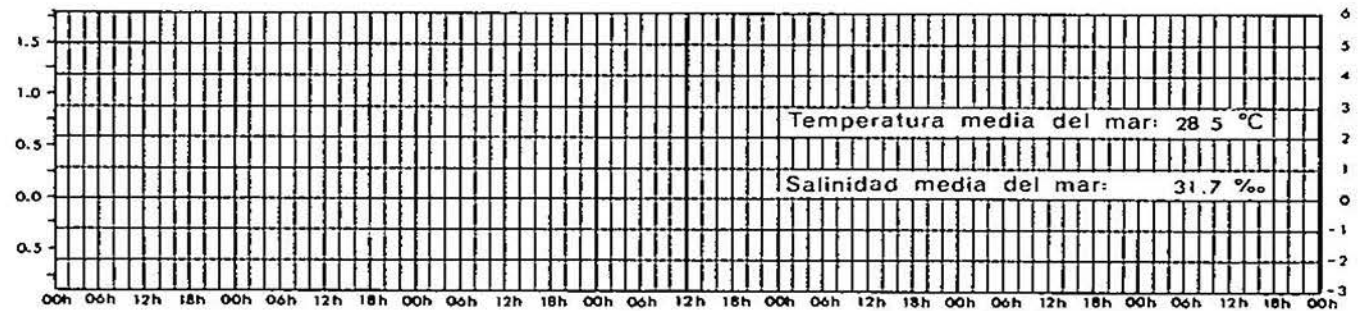
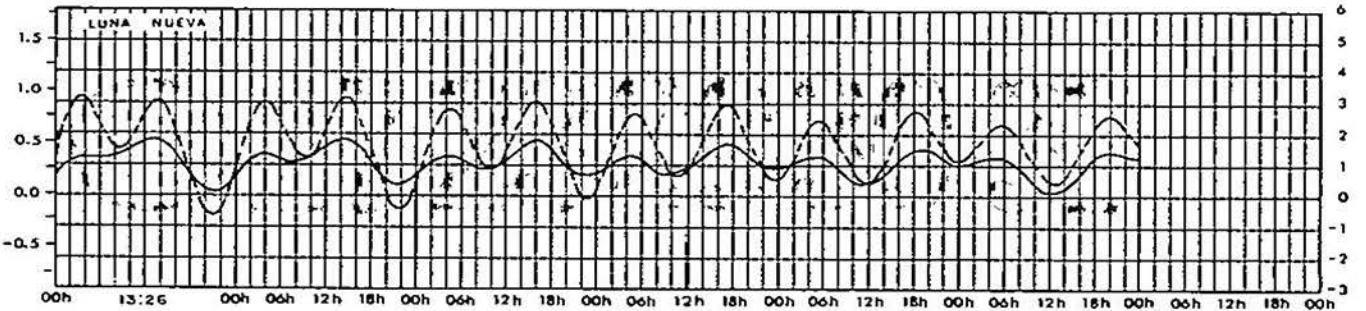
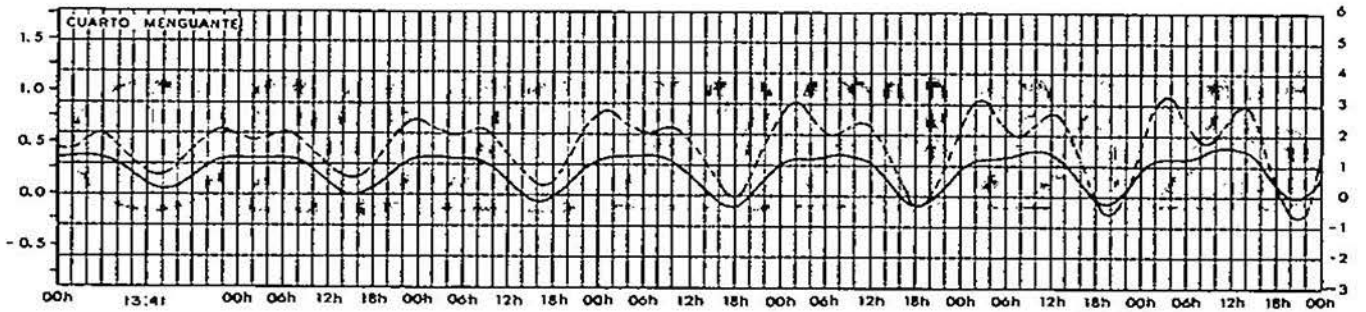
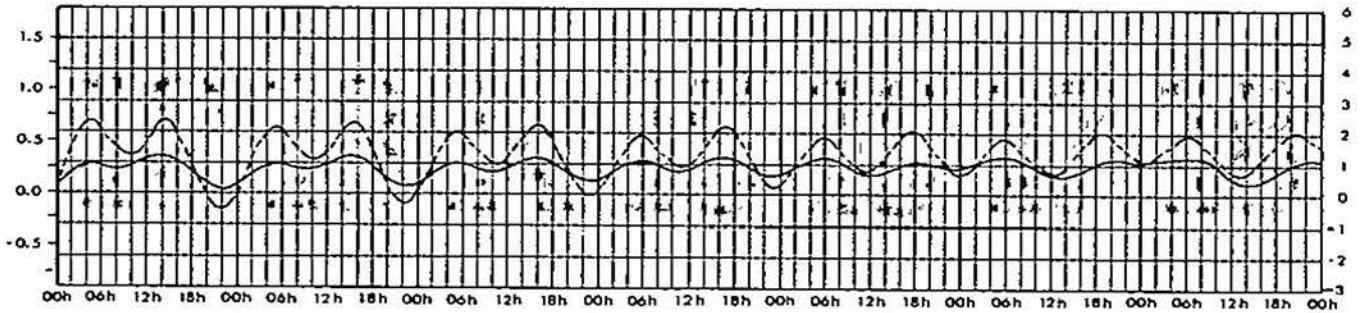
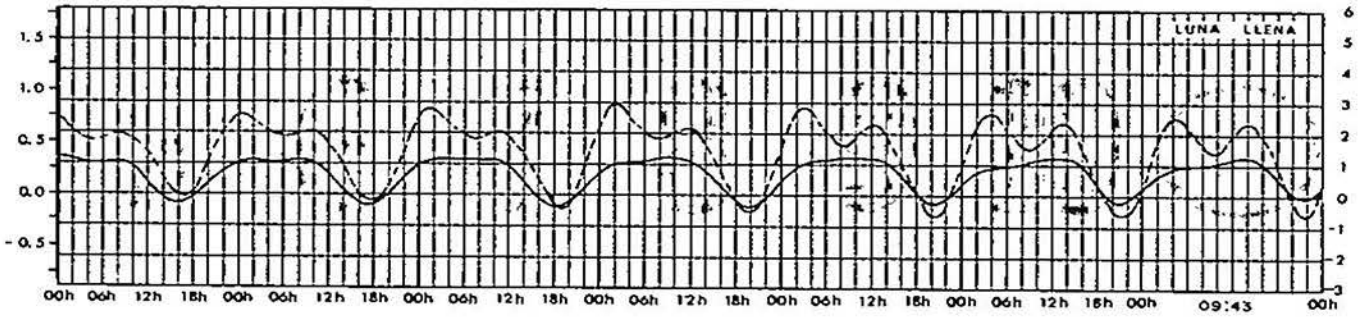
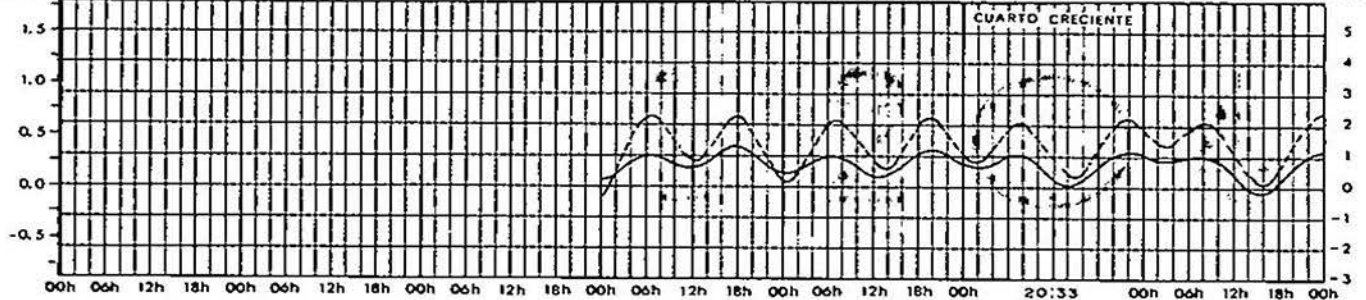
# AGOSTO 1984

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

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.



Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



HORA DEL MERIDIANO 90° W

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

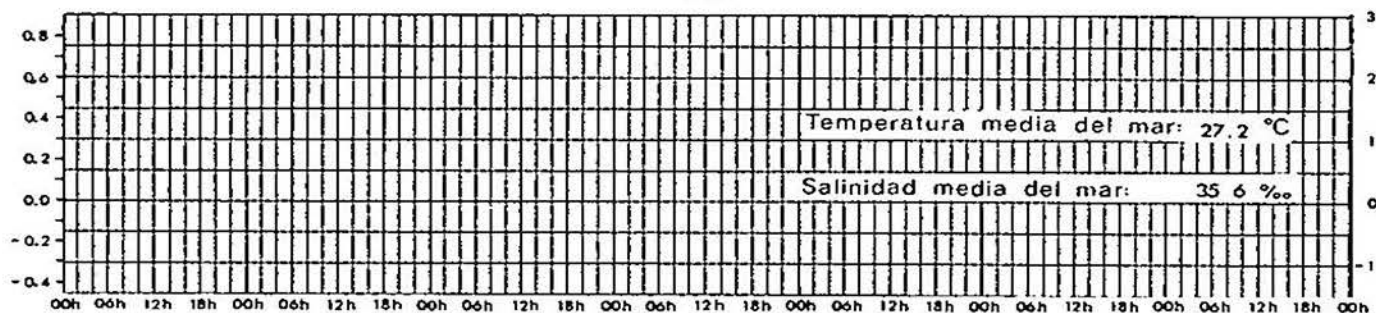
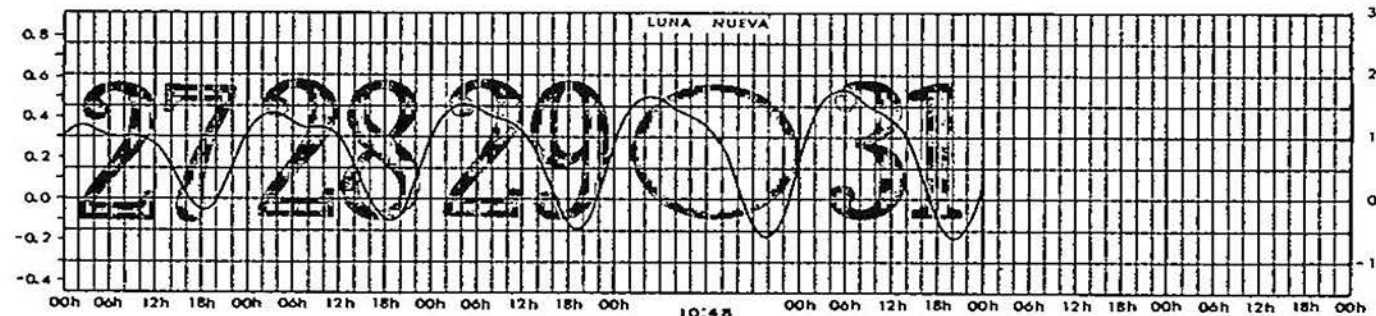
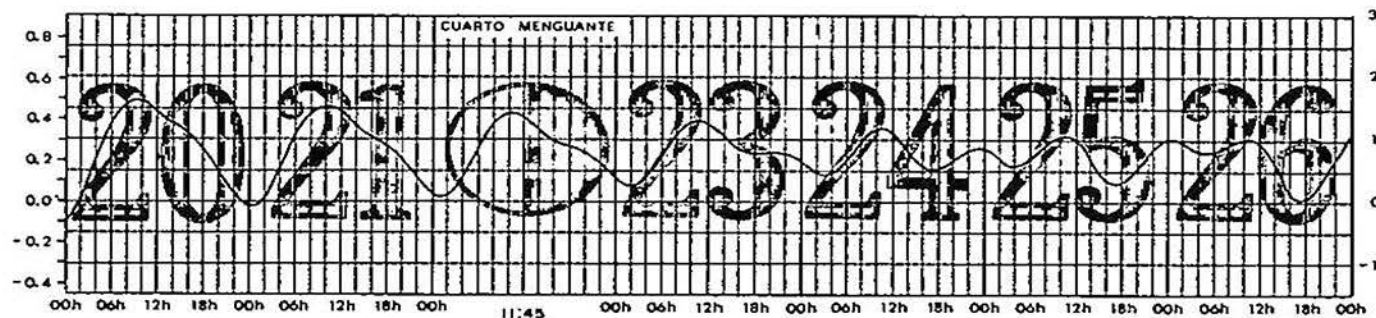
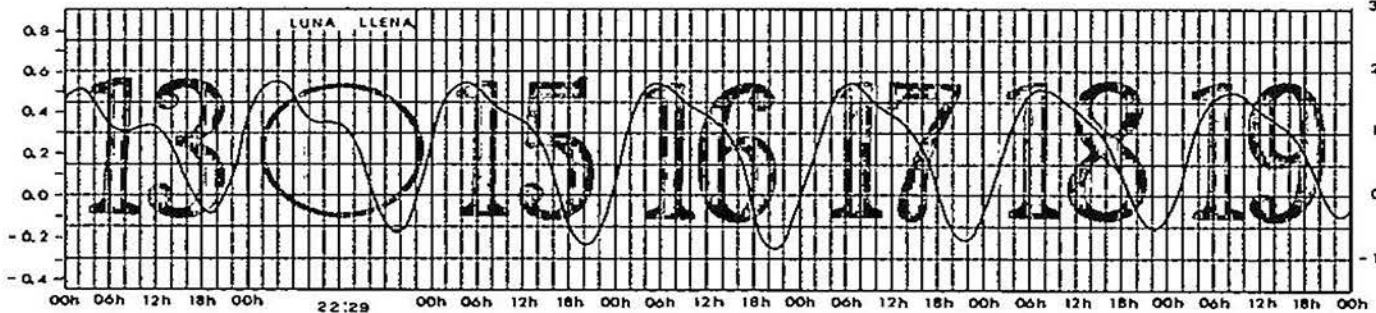
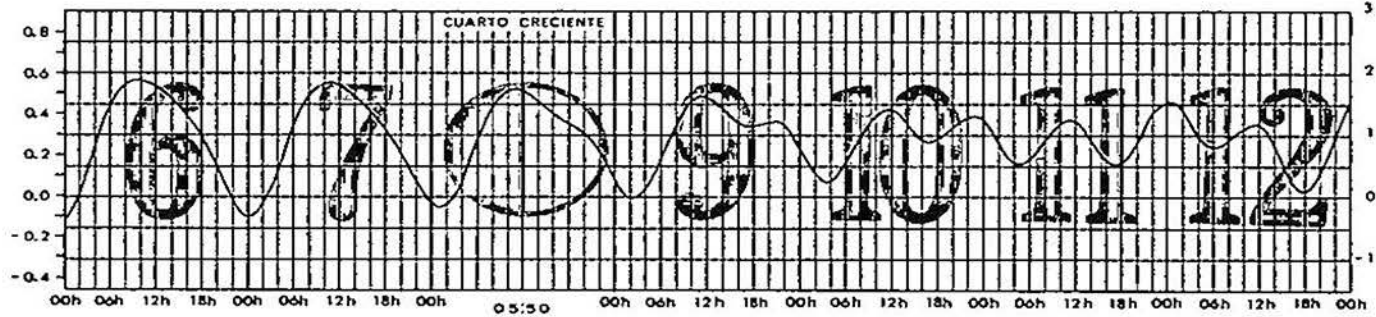
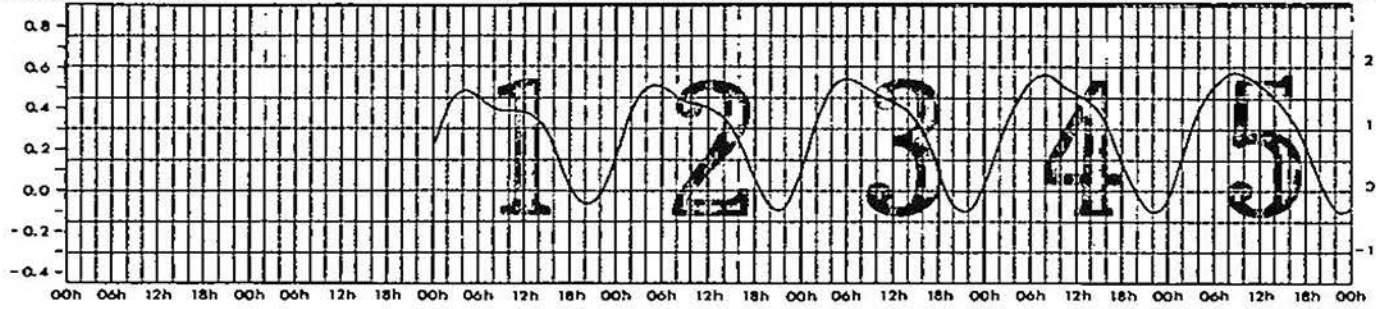


# MAYO 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 27.2 °C

Salinidad media del mar: 35.6 ‰

HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA: K. B. M.

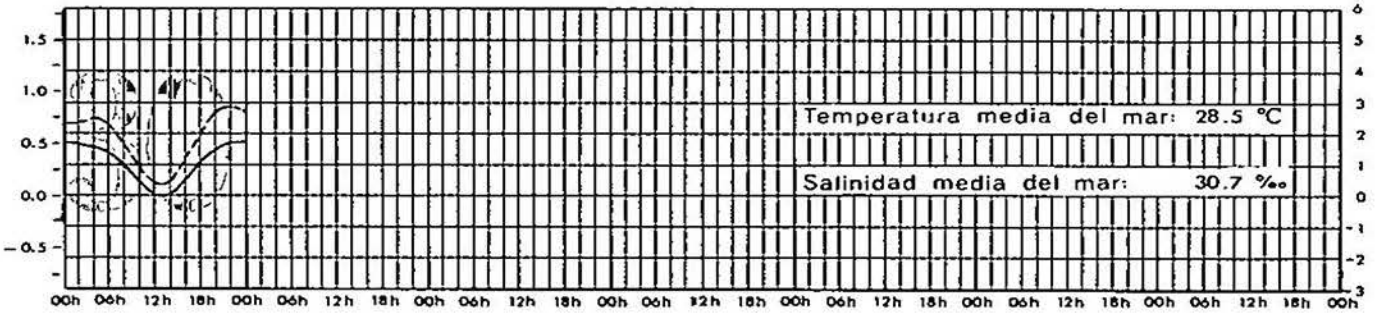
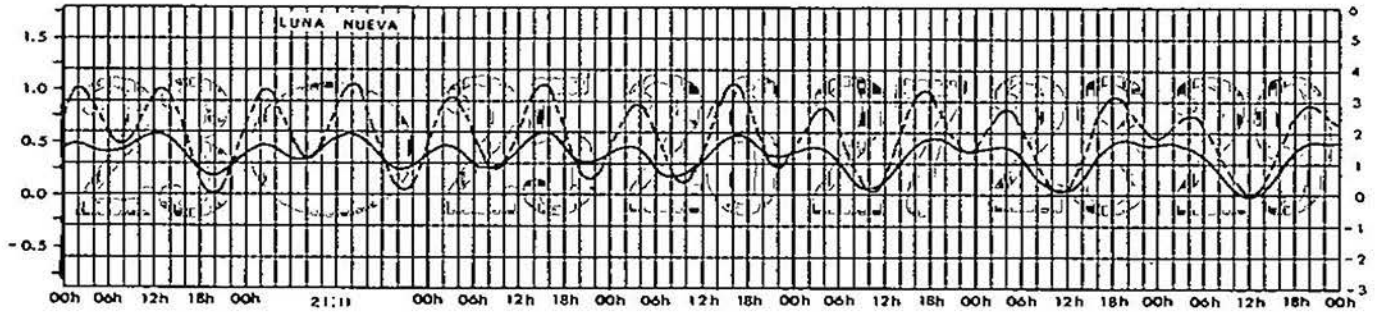
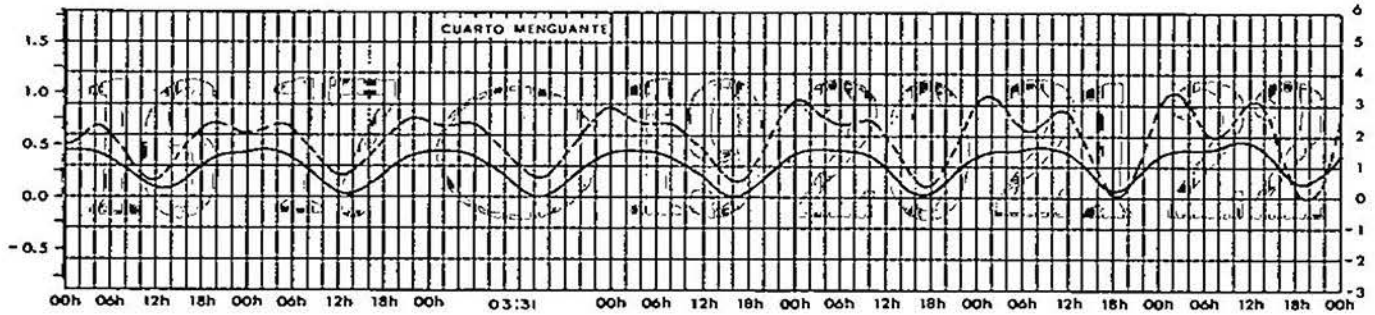
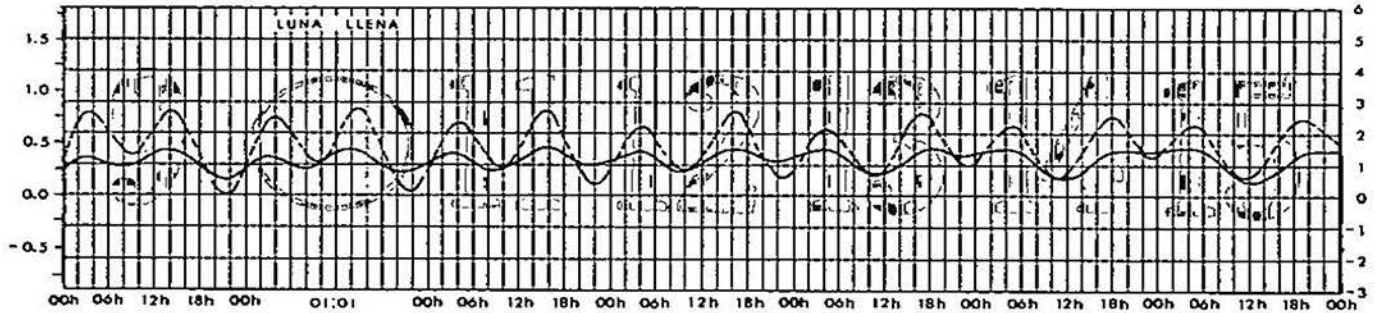
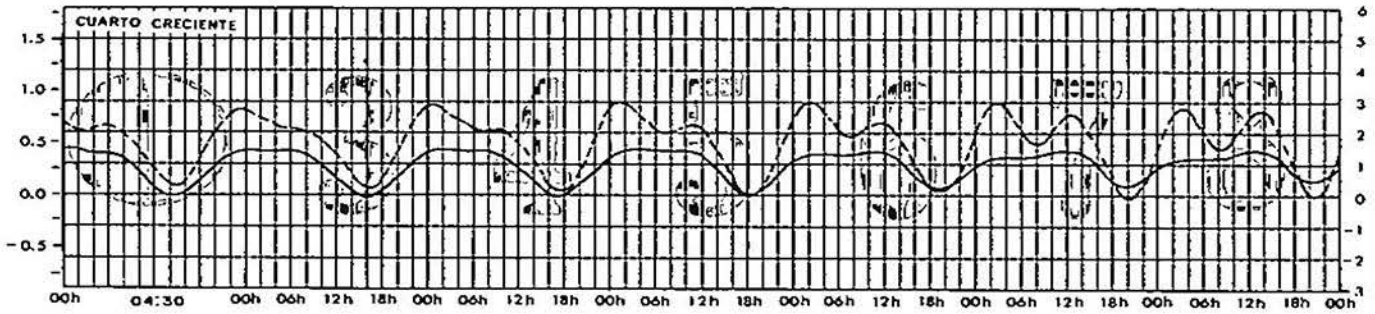
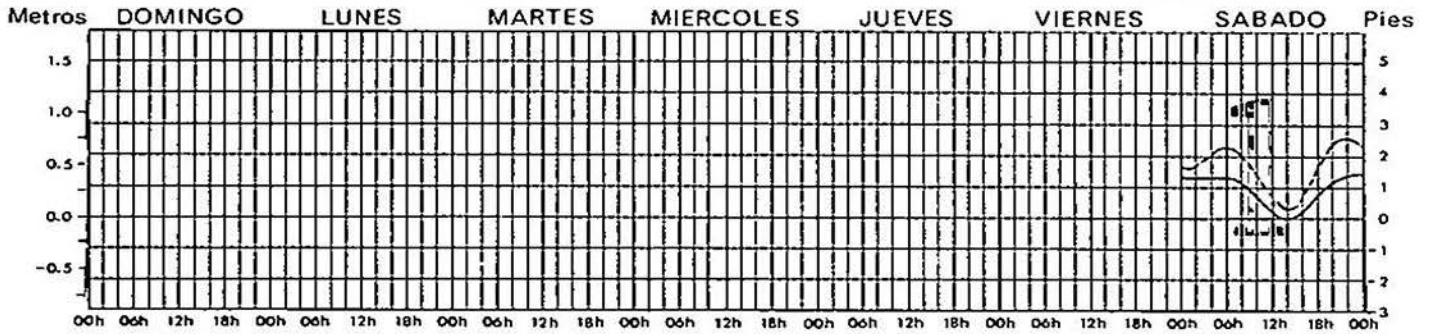


# SEPTIEMBRE 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.



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



HORA DEL MERIDIANO 99° W

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

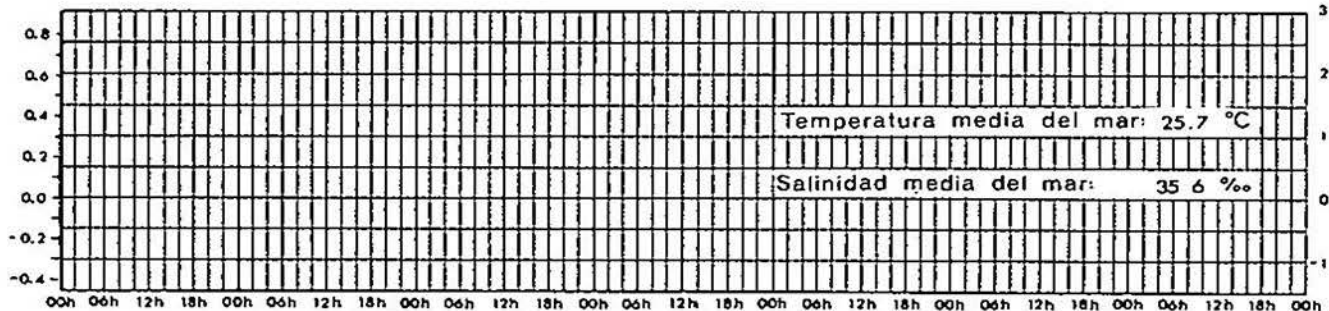
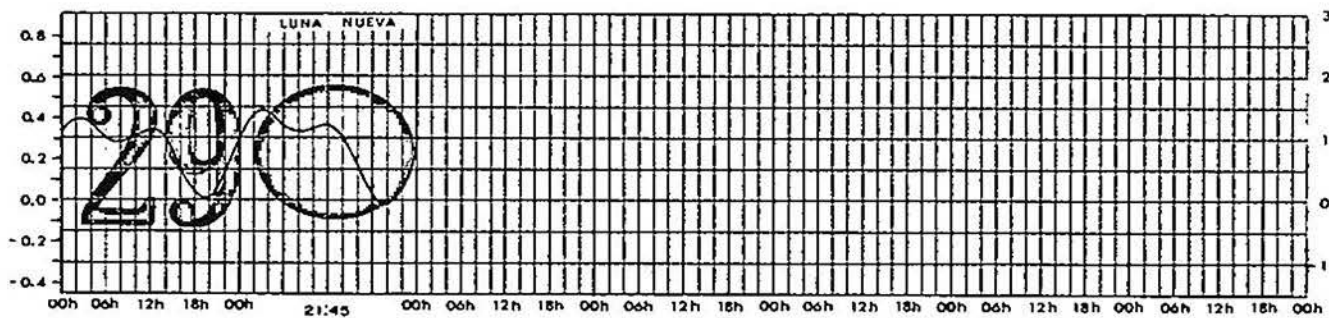
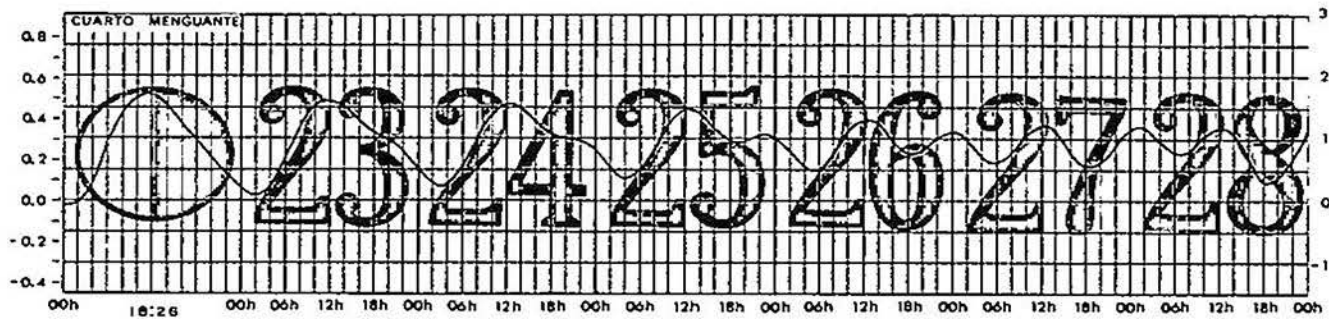
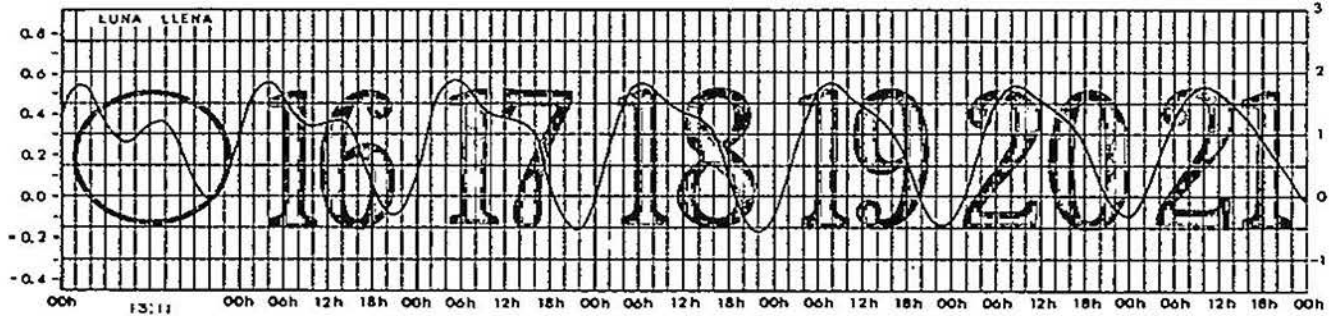
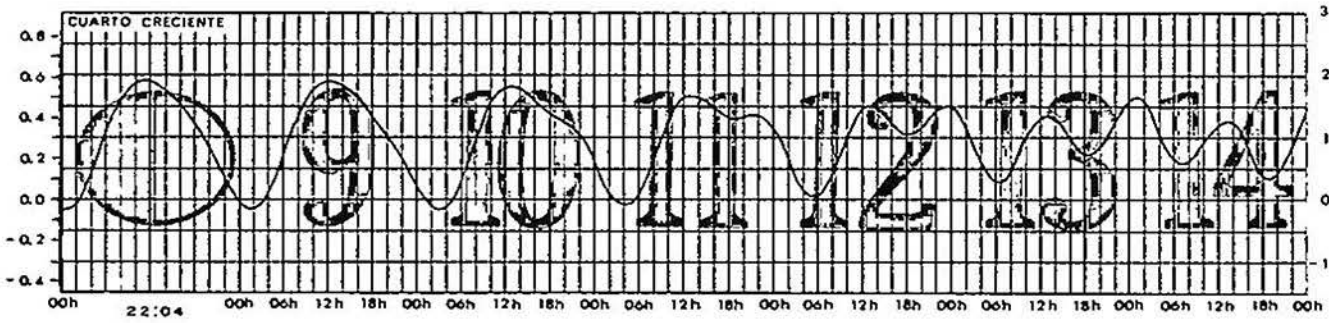
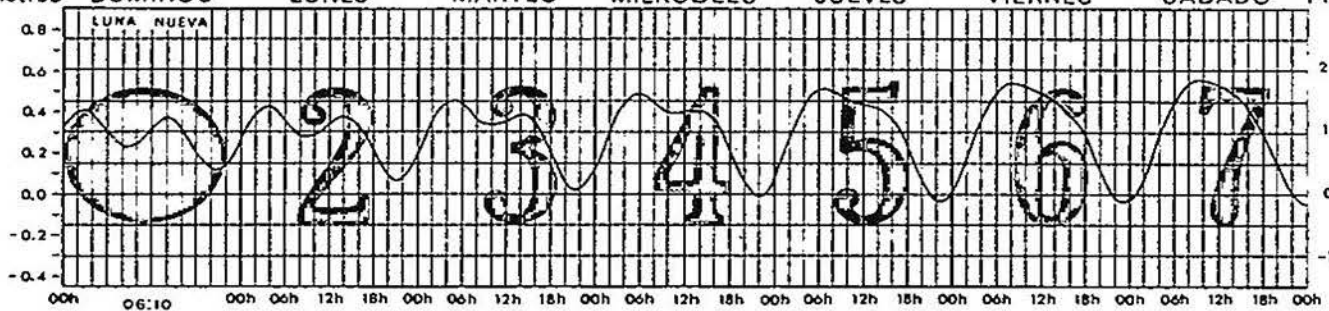


# ABRIL 1984

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

VERACRUZ, VER.

Metros DOMINGO LUNES MARTES MIERCOLES JUEVES VIERNES SABADO Pies



Temperatura media del mar: 25.7 °C  
 Salinidad media del mar: 35.6 ‰

HORA DEL MERIDIANO 89° W

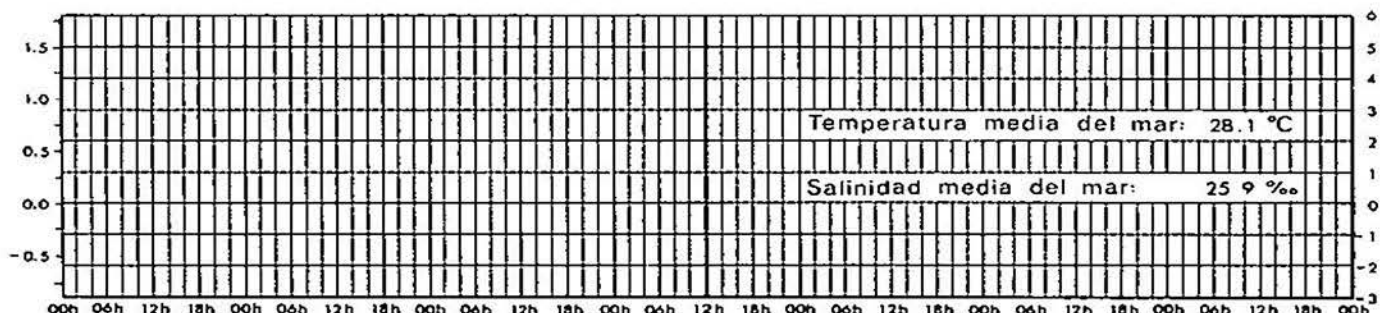
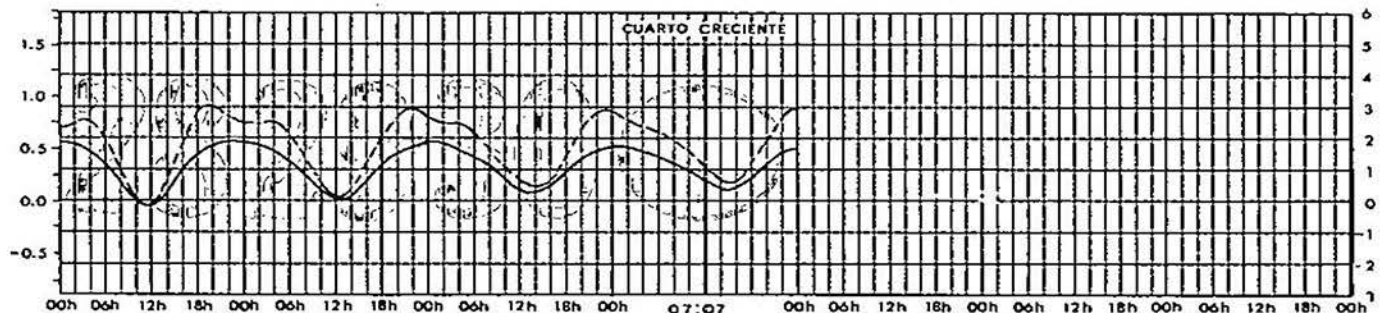
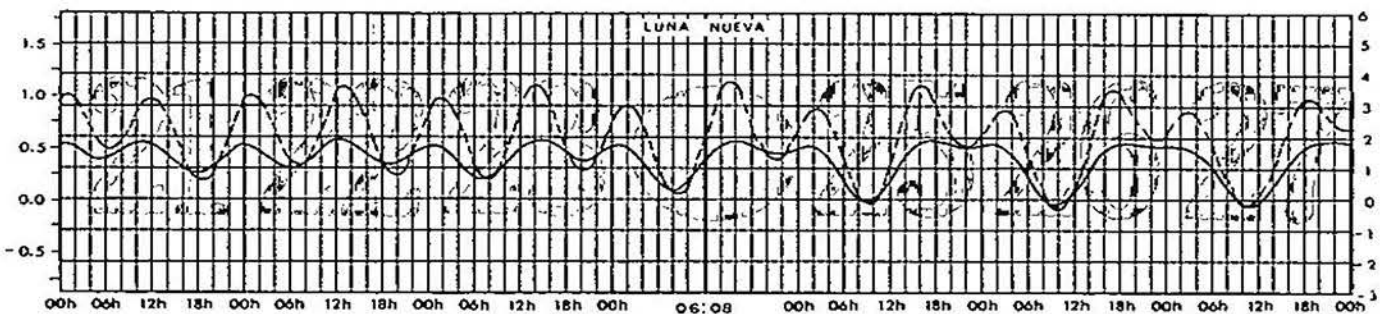
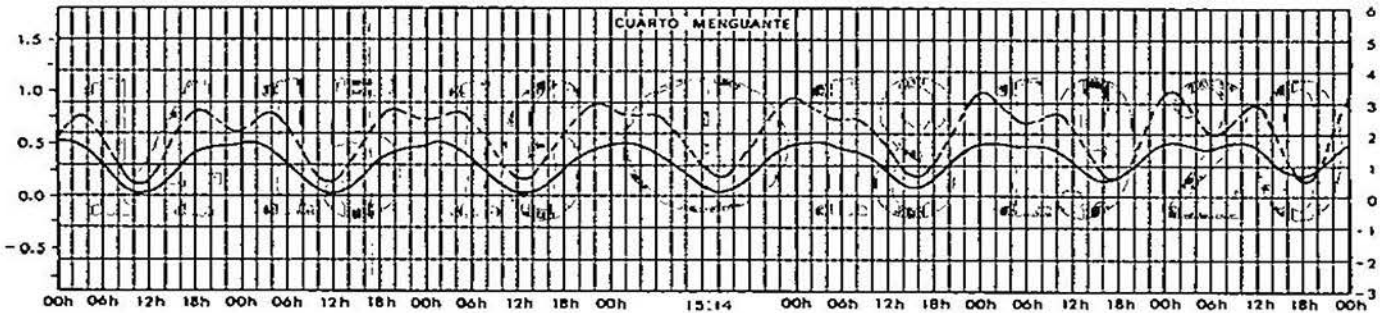
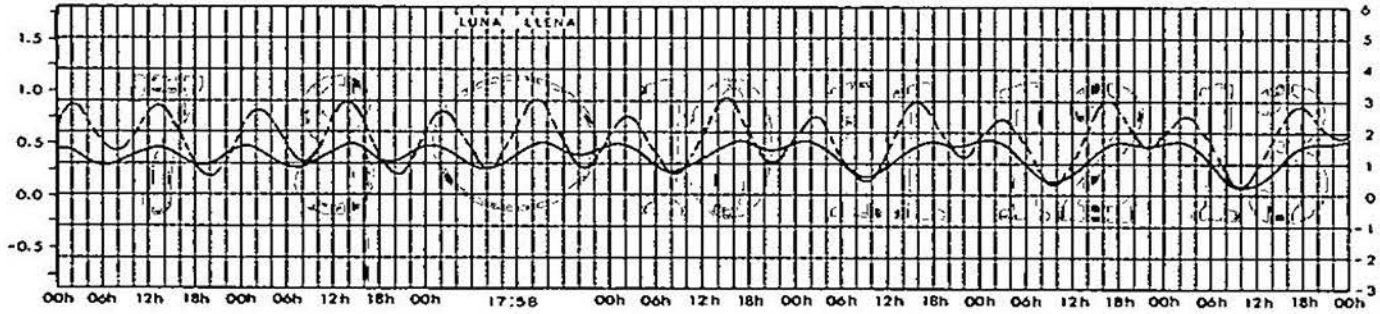
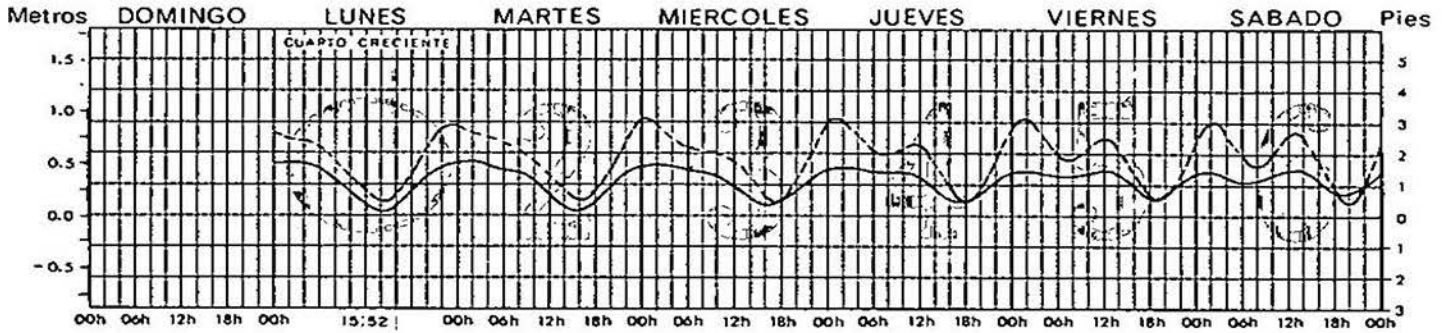
PLANO DE REFERENCIA: N. B. M.



# OCTUBRE 1984

CD. del CARMEN, CAMP.  
CAMPECHE, CAMP.

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



Temperatura media del mar: 28.1 °C

Salinidad media del mar: 25.9 ‰

HORA DEL MERIDIANO 90° W

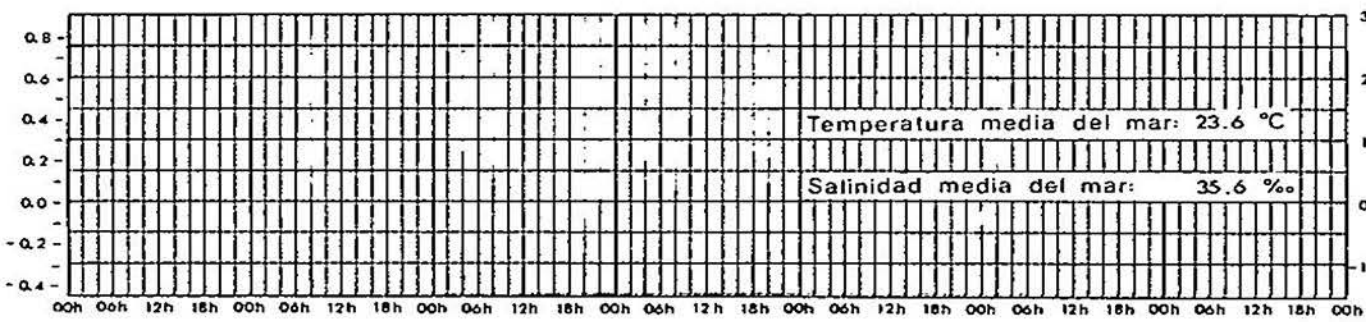
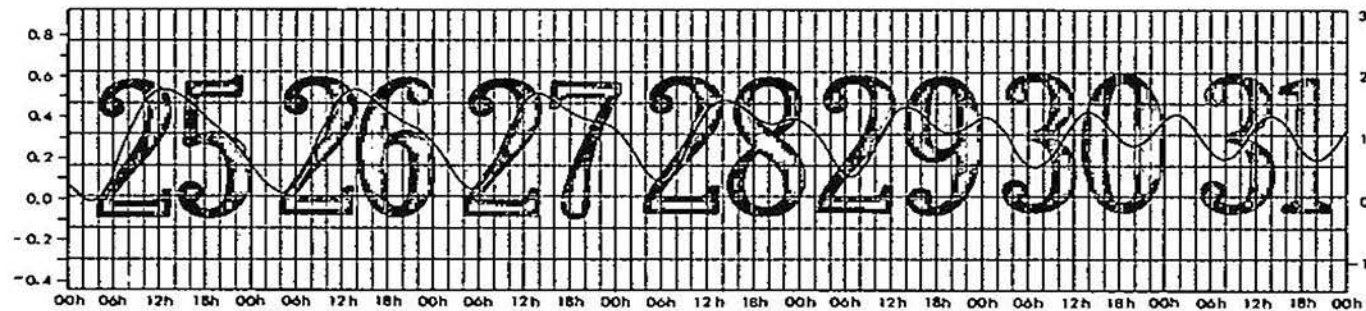
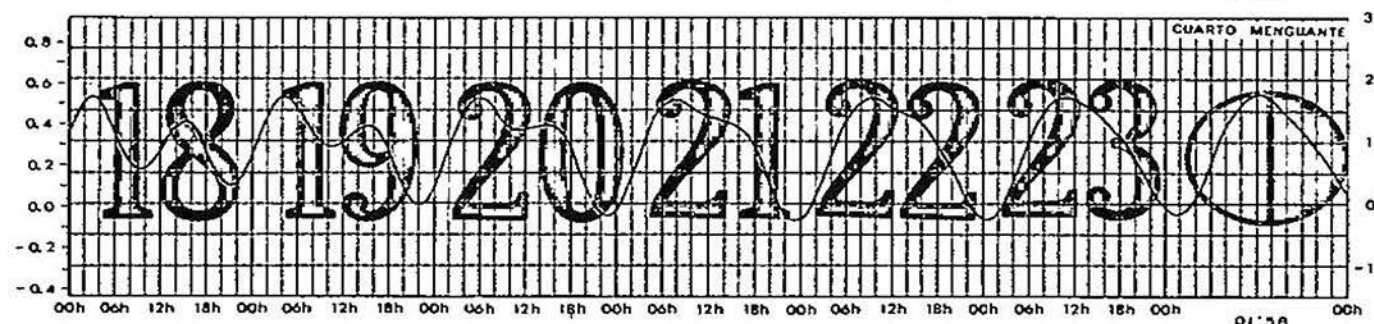
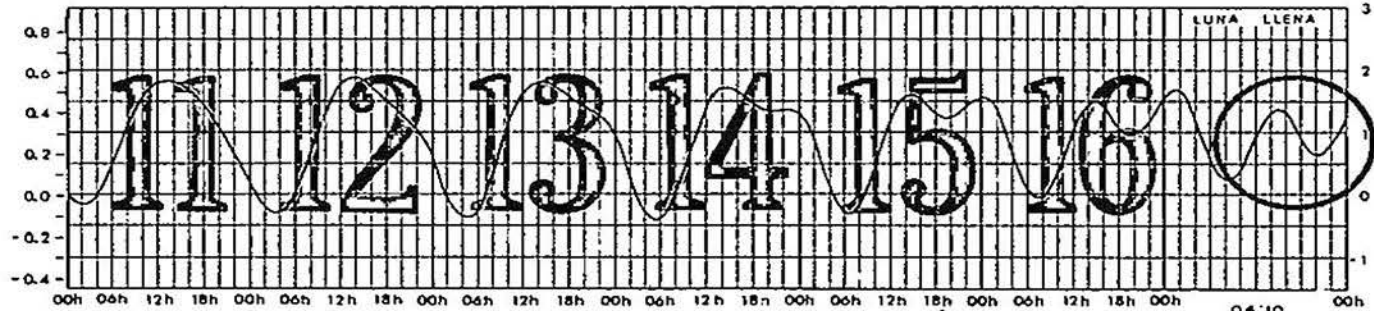
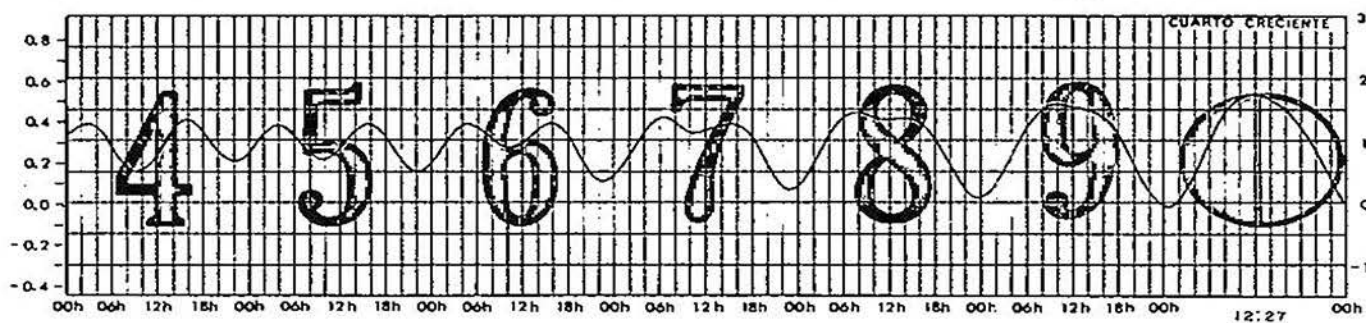
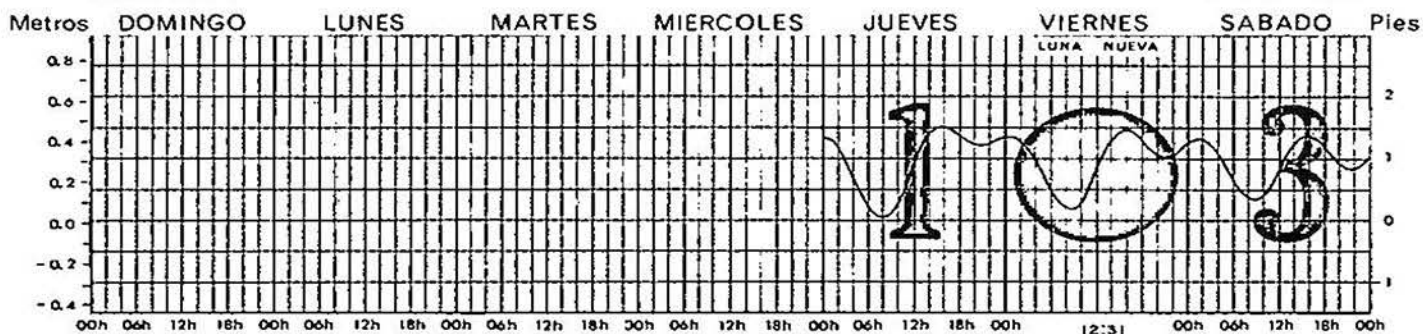
PLANO DE REFERENCIA: N. B. M. L.



# MARZO 1984

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

VERACRUZ, VER.



HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: N.B.M.

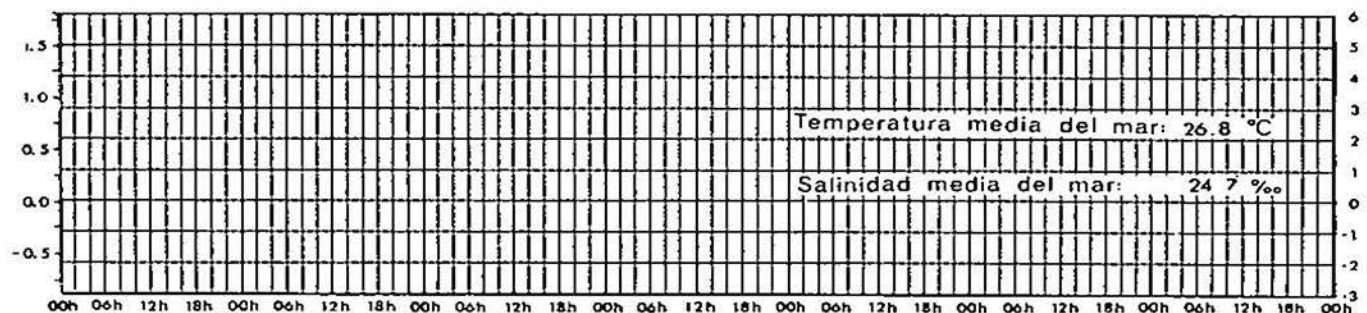
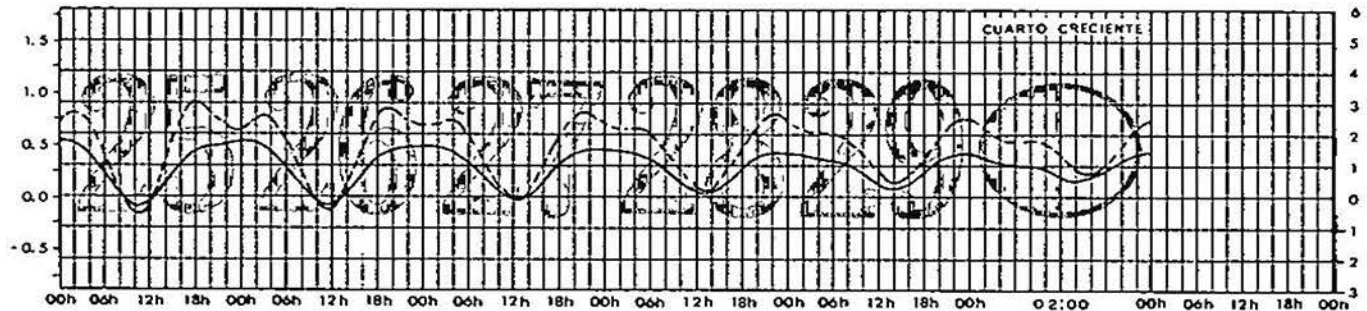
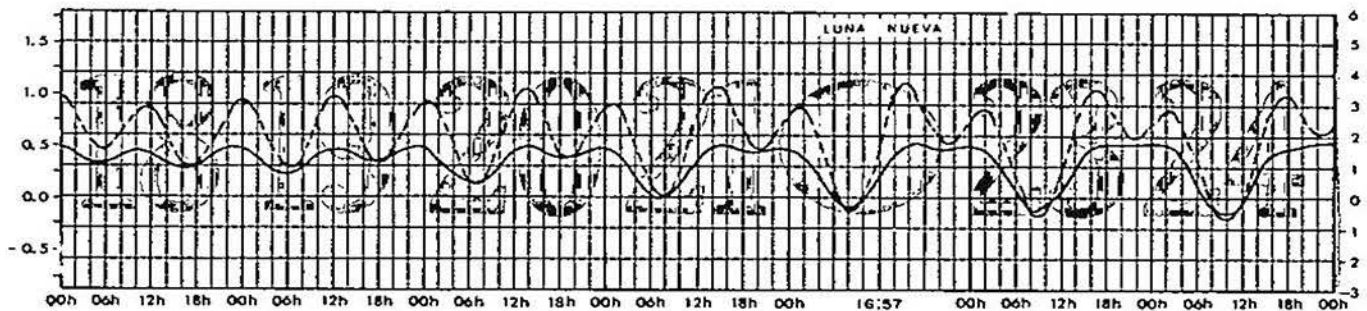
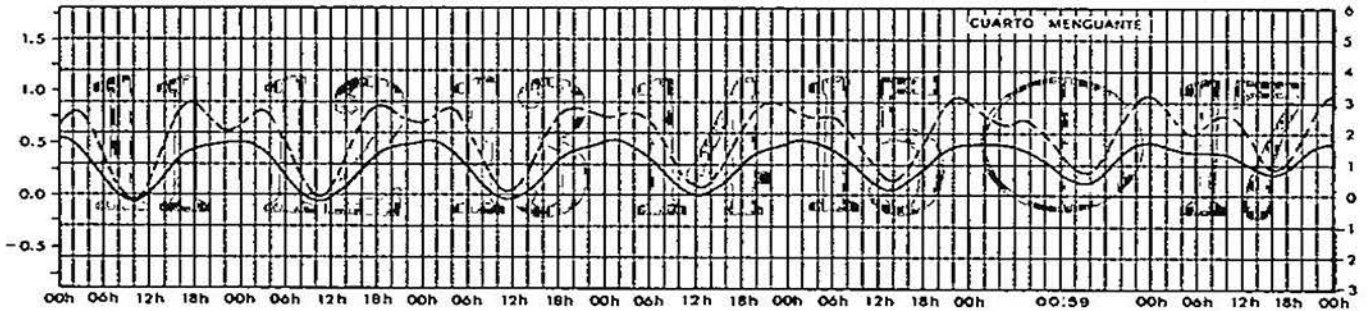
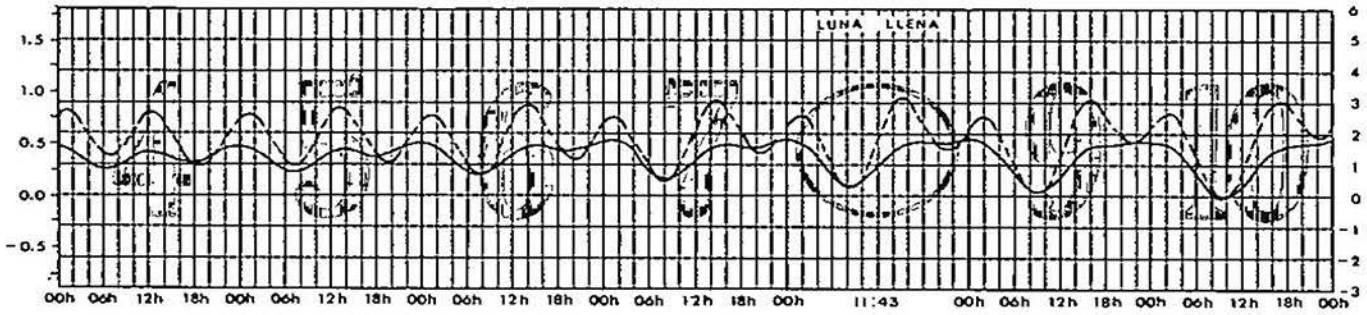
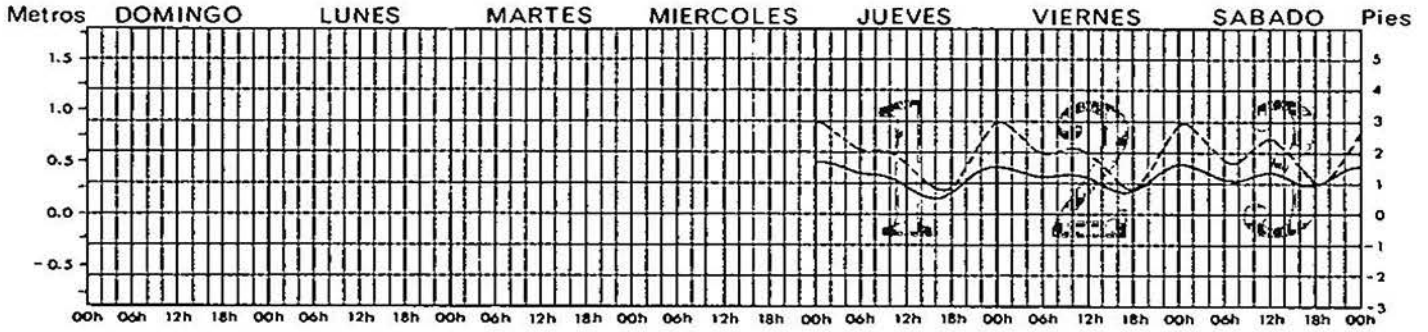


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HORA DEL MERIDIANO 90° W

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

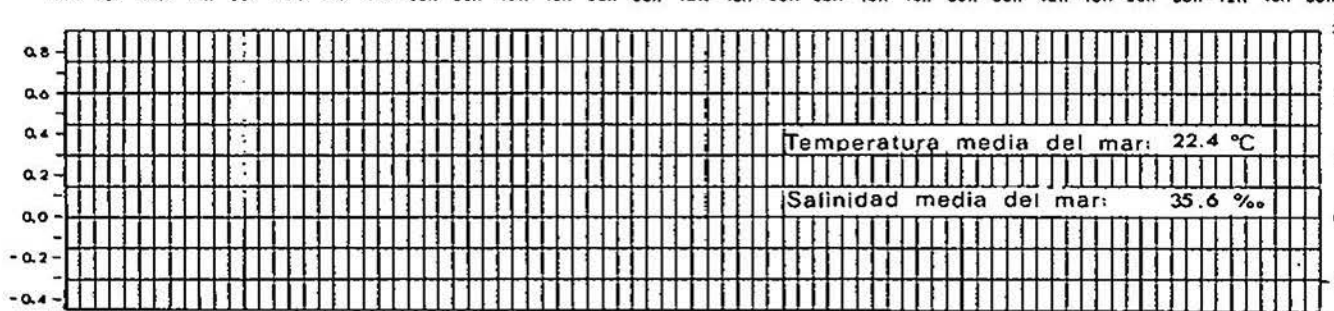
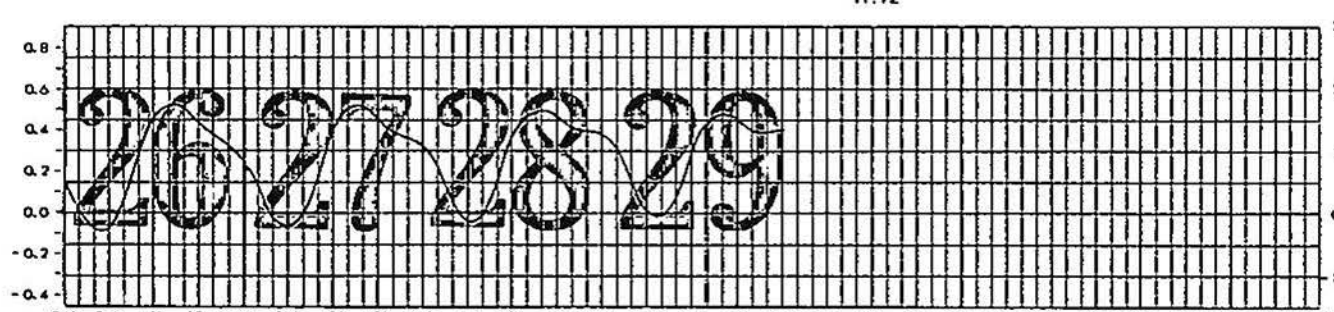
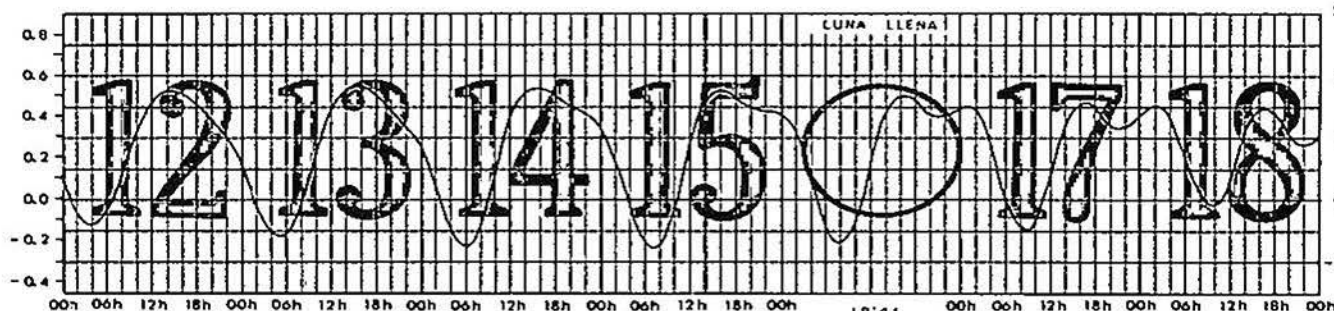
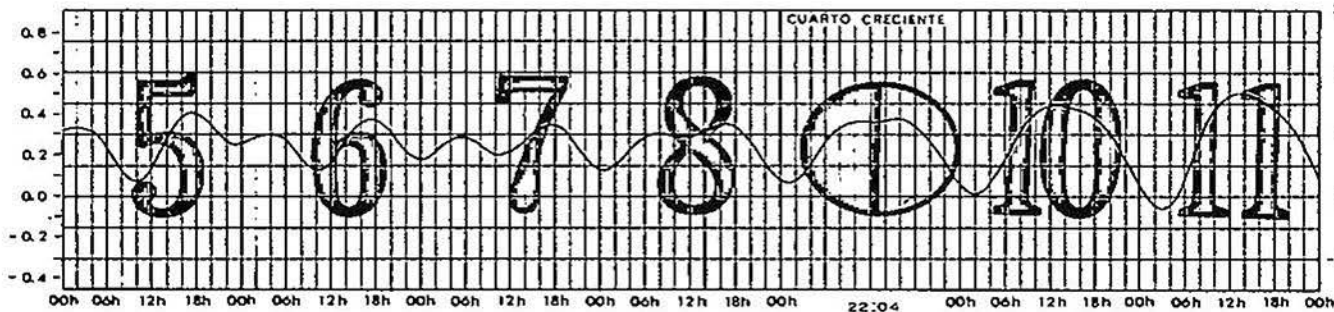
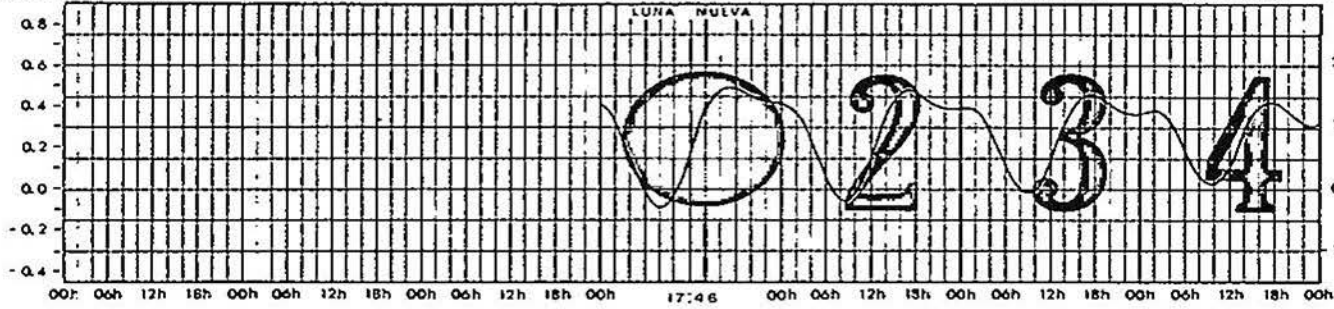


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HORA DEL MERIDIANO 90°W

PLANO DE REFERENCIA: K.B.M.





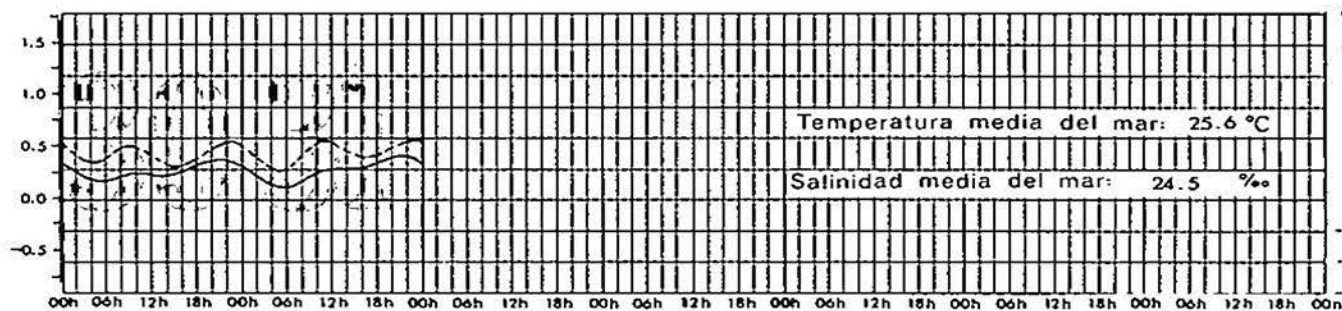
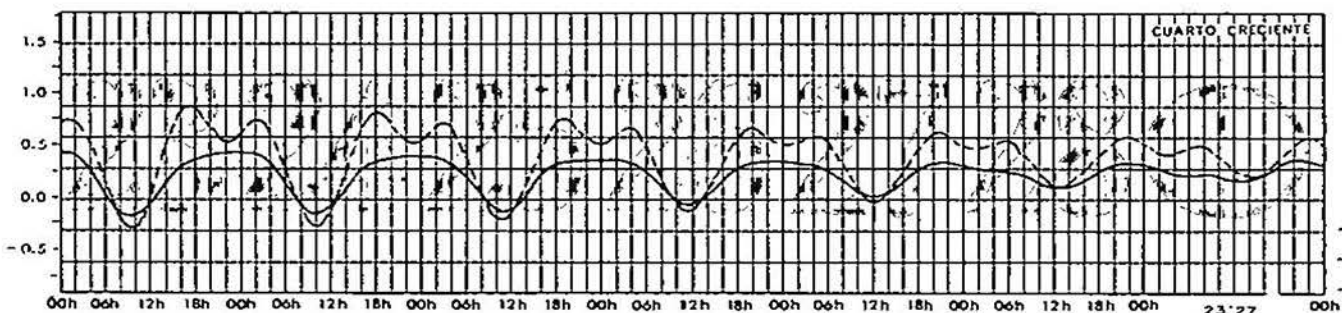
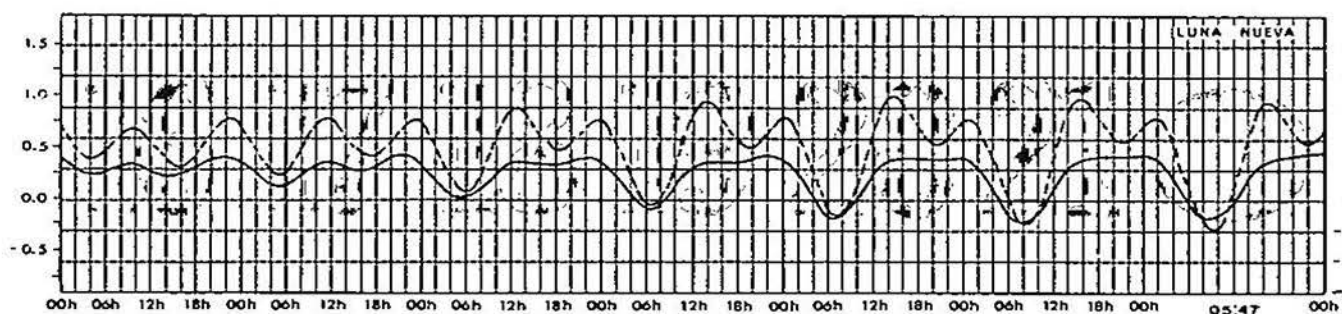
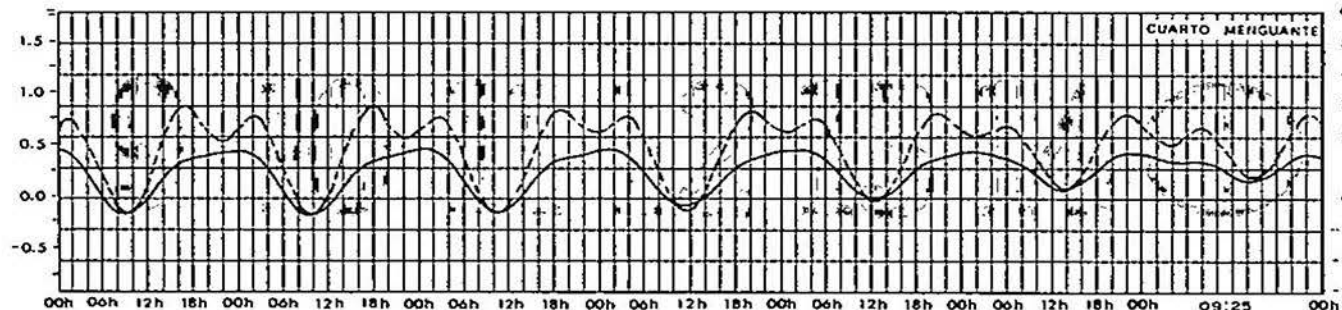
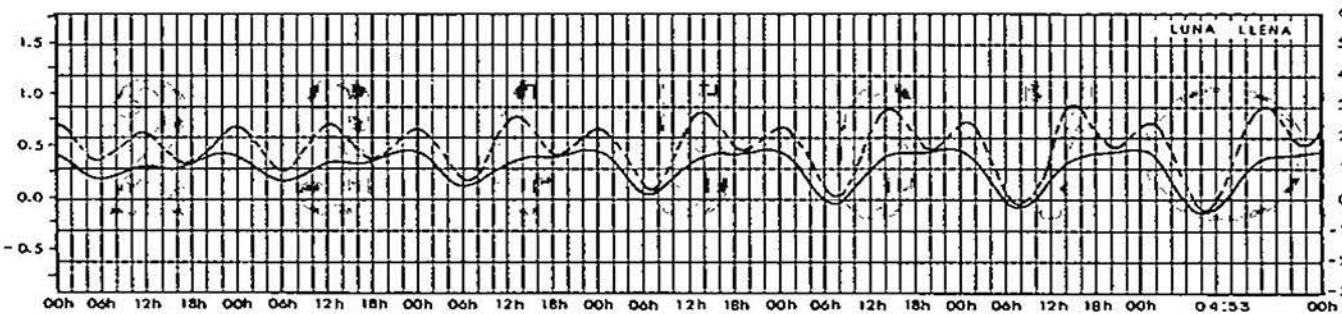
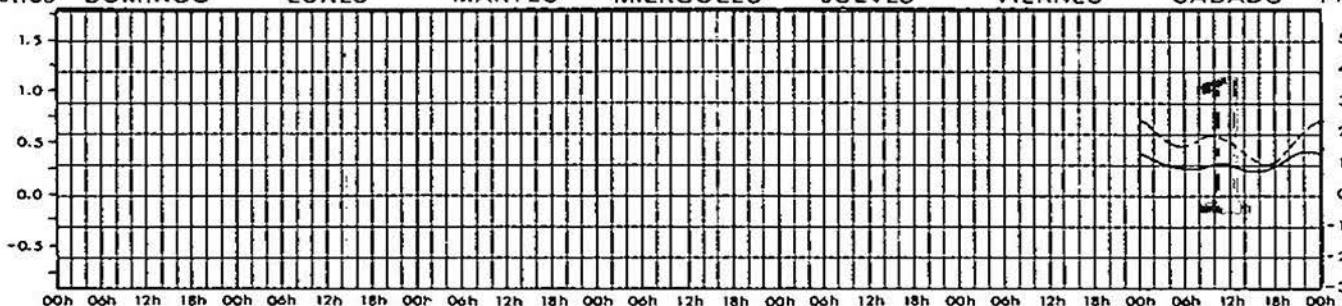
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Temperatura media del mar: 25.6 °C

Salinidad media del mar: 24.5 ‰

HORA DEL MERIDIANO 90°W

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



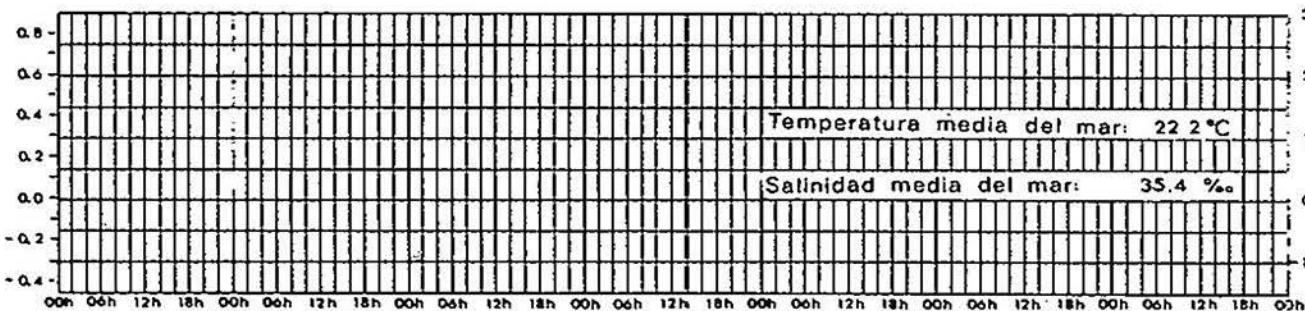
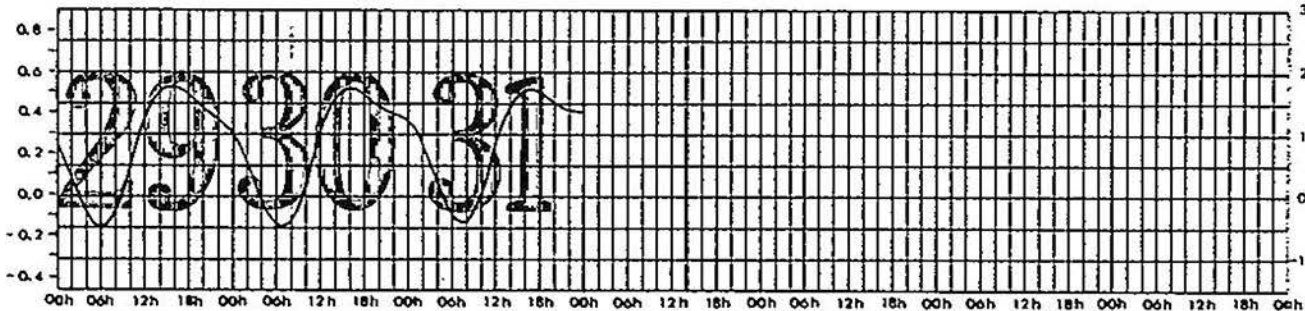
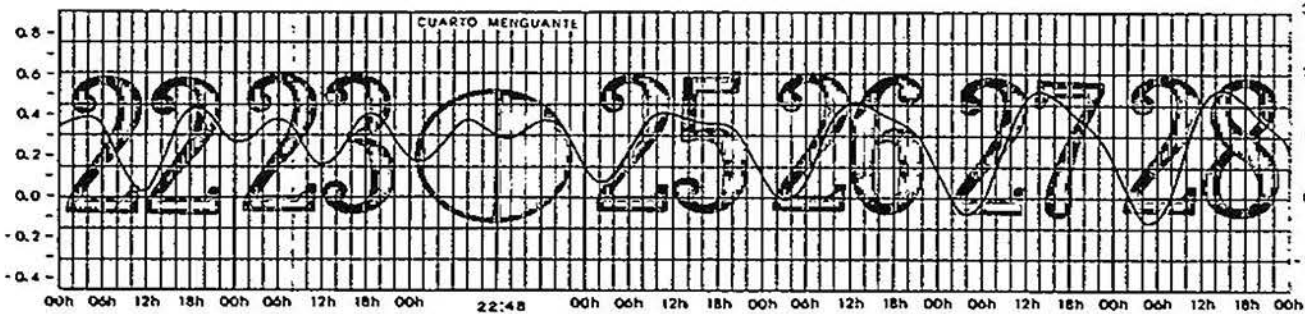
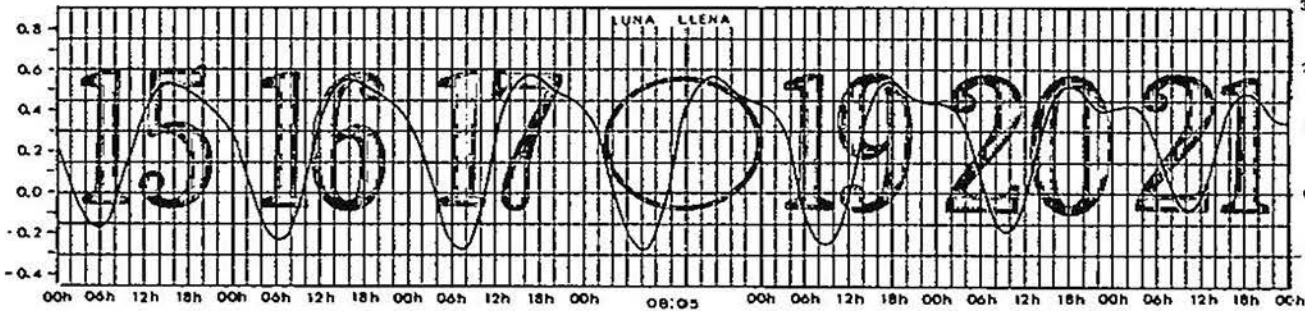
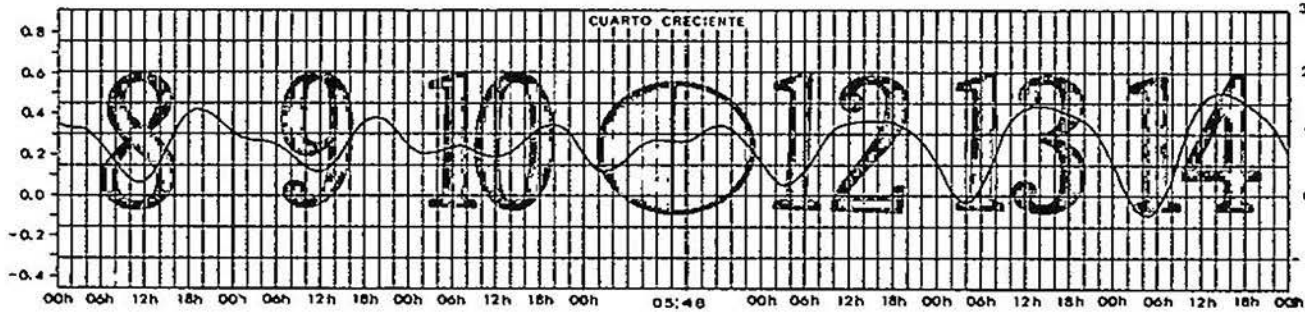
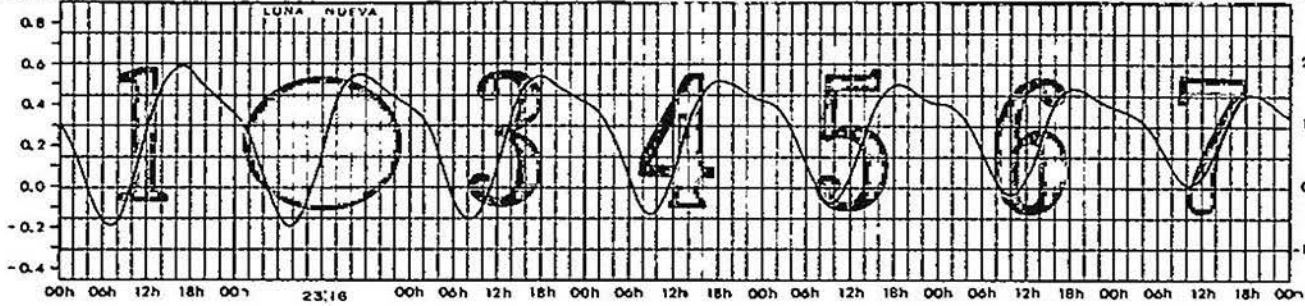
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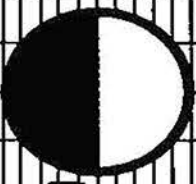
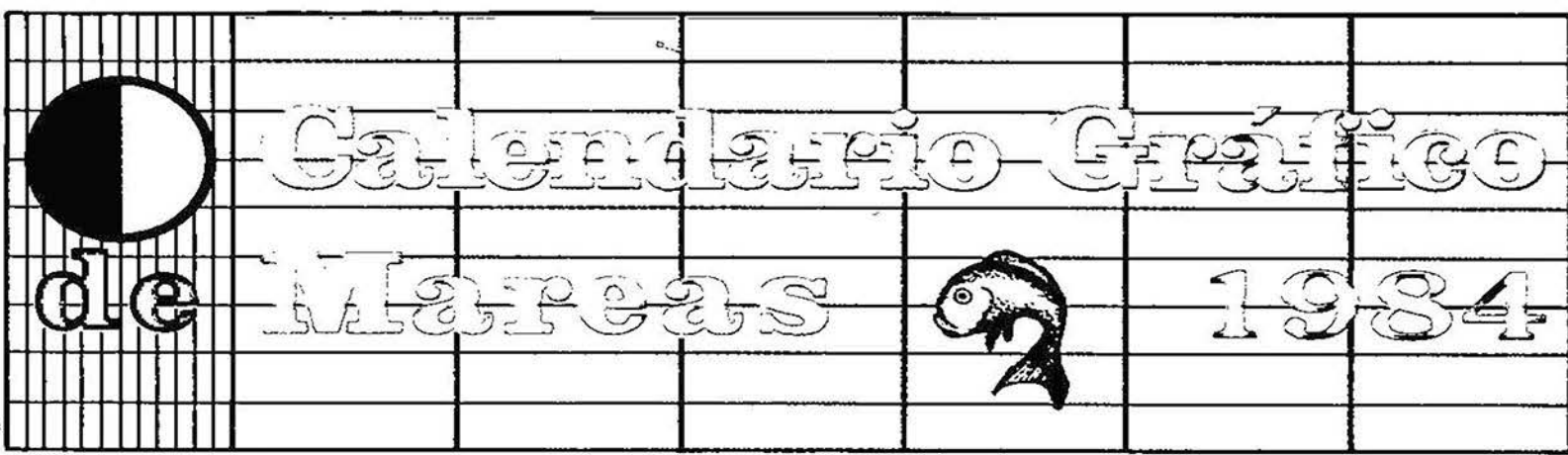
HORA DEL MERIDIANO 90° W

PLANO DE REFERENCIA: I.L.B.M

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