

ASSOCIATION D'OCÉANOGRAPHIE PHYSIQUE

Union Géodésique et Géophysique Internationale

PUBLICATION SCIENTIFIQUE N° 24



014211984

PERMANENT SERVICE FOR MEAN SEA LEVEL

MONTHLY and ANNUAL MEAN HEIGHTS

of SEA LEVEL

1959 to 1961

and

unpublished data for earlier years

1963

Secrétariat de l'Association :

Oceanografiska Institutet, Göteborg, Suède

Permanent Service :

The University of Liverpool Tidal Institute and Observatory,

Birkenhead, England

**MONTHLY and ANNUAL MEAN HEIGHTS  
of SEA LEVEL  
1959 to 1961**

**TABLE OF CONTENTS**

---

Publications of the International Association of Physical Oceanography	iv
Introduction by J. R. Rossiter	v
Table A - Authorities, Stations and Conditions	1
Table B - Monthly and Annual Mean Heights of Sea Level	13
Table C - Annual Mean Heights of Sea Level	54
Alphabetical Index	55

---

PUBLICATIONS OF THE INTERNATIONAL ASSOCIATION  
OF PHYSICAL OCEANOGRAPHY

---

The Association issues two series of publications : the "Publications Scientifiques" and the "Procès-Verbaux". The following numbers have appeared :

Publications Scientifiques

- N° 1. S.F. Grace: I. Historical review of dynamical explanations of tides in non-elongated enclosed seas and lakes. II. Historical review of dynamical explanations of the tides of the Mediterranean, the Baltic Sea, the Gulf of Mexico, and the Arctic Ocean ; 1931. Out of print.
- N° 2. Tidal Bibliography (3rd instalment) ; 1932. Out of print.
- N° 3. Bibliography on tides and certain kindred matters (4th instalment) ; 1936, 1/-
- N° 4. Phil. E. Church: Temperatures of the Western North Atlantic from thermograph records ; 1937, 1/6
- N° 5. Monthly and annual mean heights of sea-level, up to and including the year 1936 ; 1940, 22/-
- N° 6. Bibliography on tides and certain kindred matters (5th instalment) ; 1939, 6d
- N° 7. J.P. Jacobsen and Martin Knudsen: Unormal 1937 or Primary Standard sea-water 1937 ; 1940, 1/4
- N° 8. Report of the committee on the criteria and nomenclature of the major divisions of the ocean bottom ; 1940, 5/6
- N° 9. B. Helland-Hansen, J.P. Jacobsen and T.G. Thompson: Chemical methods and units ; 1948, 2/-
- N° 10. Monthly and annual mean heights of sea-level, 1937 to 1946 and unpublished data for earlier years ; 1950, 15/6
- N° 11. J.P. Jacobsen, Rex J. Robinsen and Thomas G. Thompson: A review of the determination of dissolved oxygen in sea water by the Winkler Method ; 1950, 1/-
- N° 12. Monthly and annual mean heights of sea-level 1947 to 1951 and unpublished data for earlier years ; 12/-
- N° 13. Secular variation of sea-level ; 1955, 4/-
- N° 14. G. Böhnecke: The principles of measuring currents ; 1955, 3/-
- N° 15. Bibliography on Tides 1665-1939 ; 1955, 24/-
- N° 16. Report on oceanographical work from ocean weather ships ; 1957, 3/-
- N° 17. Bibliography on Tides 1940-1954 ; 1957, 8/-
- N° 18. Bibliography on generation of currents and changes of surface level in oceans, seas and lakes by wind and atmospheric pressure 1726-1955 ; 8/-
- N° 19. Monthly and annual mean heights of sea-level, 1952 to 1956, and unpublished data for earlier years ; 1958, 12/-
- N° 20. Monthly and annual mean heights of sea-level for the period of the International Geophysical Year (1957-1958) and unpublished data for earlier years ; 1959, 6/-
- N° 21. Manual of instruments and methods for measuring currents.
- N° 22. Bibliographical Classification.
- N° 23. Catalogue of Published Mean Sea Level Data (1807-1958); 1961.

Procès-Verbaux

- N° 1. Cinquième Assemblée Générale réunie à Lisbonne, septembre 1933 ; 1934, 1/6
- N° 2. General Assembly at Edinburgh, September 1936 ; 1937. Out of print.
- N° 3. General Assembly at Washington, September 1939 ; 1940, 3/6
- N° 4. General Assembly at Oslo, August 1948 ; 1949. Out of print.
- N° 5. General Assembly at Brussels, August 1951 ; 1952, 18/-
- N° 6. General Assembly at Rome, September 1954 ; 1955, 30/-
- N° 7. General Assembly at Toronto, September 1957 ; 1960, 35/-

These publications form a continuation of the "Bulletins de la Section d'Océanographie de l'Union Géodésique et Géophysique Internationale", of which there were 17 numbers, N° 1 being issued in 1921 and N° 17 in 1931. Out of print.

---

# MONTHLY and ANNUAL MEAN HEIGHTS of SEA LEVEL

1959 to 1961

## Permanent Service for Mean Sea Level

Director: Dr. J. R. Rossiter, University of Liverpool Tidal Institute and Observatory,  
Bidston, Birkenhead, England.

Committee: Rear-Admiral R. W. Knox (Chairman), International Hydrographic Bureau,  
Monaco

M. L. Cahierre, Institut Géographique National, Paris.

Dr. E. Lisitzin, Merentutkimuslaitos, Helsinki.

Dr. J. G. Pattullo, Oregon State University.

Mr. A.N. Ramanathan, Survey of India, Dehra Dun.

Mr. W. Shofnos, U.S. Coast and Geodetic Survey, Washington.

Ir. P. J. Wemelsfelder, Rijkswaterstaat, 's-Gravenhage.

Dr. S. Yamaguchi, Tokyo Science University.

## INTRODUCTION

This publication is the sixth in the series of volumes containing monthly and annual means of sea level, its companions being Publications Scientifiques Nos 5, 10, 12, 19 and 20. Continuity of presentation has been preserved in the form of Tables A, B and C.

Table A contains details of observing stations, methods of reductions of data, and the years for which data are published.

The authority quoted is that which has supplied the information; that maintaining the tide-gauge is sometimes different.

The datum is that above or below which the heights in Tables B and C are measured.

B.M. denotes a local Bench Mark. When the datum for the heights of sea level is stated in reference to a national system of precision levelling, no reference to local Bench Marks is made.

In the column headed Obs., a number indicates the number of readings of tide gauge per day; HL indicates high and low water heights only; c denotes that mean values have been determined by integration from a continuous record; a indicates that a correction for atmospheric pressure has been incorporated in the entries of Table B; m indicates medimarémètre.

Table B contains monthly and annual mean values of sea level.

Table C contains annual mean values of sea levels for stations at which no monthly means are computed.

In both Tables B and C data which for any reason are considered doubtful are indicated by ( ).

The replacement or correction of data previously published are indicated in the appropriate sections of Tables A, B or C.

Publication Scientifique N° 23 (IUGG Monograph N° 13)  
Catalogue of Published Mean Sea Level Data (1807-1958)

Since the publication of this catalogue a number of errata have come to the attention of the Permanent Service. These are listed as follows:

Page	Station	Errata
13	Belfast	Should read DDEE not ..EE
14	Brest	" " DDEE not DD..
18	Ashdod	" " ..eE not .eE.
22	Cochin	" " E.eE not EeE.
34	Wake Island	The longitude should read 166°37'E, not W. In consequence this station should not be in the Hawaiian Islands group, but should follow Kwajalein in the Marshall Islands group.
38	Cristobal	Should read BBCC not BBcc
38	Ushuaia (not Ushuria)	Should read ..ee not .ee.
39	Piramide	" " " "
	Rosales	ditto
	Mar del Plata (Puerto)	"
	Mar del Plata (Club)	"
	San Clemente	"
	Rio Santiago	"
	Palermo	"
	Isla Martin Garcia	"
49	Tamatave	Replace entry by 1930 DDDDD DDDDD 1940 DDDDD DDDDD 1950 DD... . . . .

In continuation of the coding system adopted, data appearing in the present publication can be added to the catalogue list by "F" for a complete year and "f" for an incomplete year.

The treatment of incomplete tidal records in mean sea level reduction.

One of the most important things for users of the mean sea level data publications to know is the accuracy of the published figures. Many factors can contribute to a lack of accuracy, and it is obviously impossible to list them all, still less to make an estimate of their magnitude.

One aspect of this problem concerns the uncertainty introduced by gaps in the tidal record. In the past, such uncertainties have been covered, along with those arising from all other sources, by entering the monthly and annual means affected in parentheses, thus: ( ).

The Mean Sea Level Committee feels that some guide should be given to contributors of data in an attempt to standardise procedure. At present some authorities indicate, when sending mean values to the Permanent Service, how many days observations are missing in each month. Others ignore gaps altogether when communicating their averages, with the result that all such published data appear to have equal weight. There appears to be no reason why a monthly mean based on only one day's observations should not be published:

The Committee therefore makes the following recommendations:

- 1) Gaps in observed tidal records should be interpolated, if possible, before computing monthly and annual means.
- 2) The interpolation should be performed at an early stage in the processing, (e. g. recorded curve, high and low water heights, hourly heights, 3-hourly heights, or daily totals or means). One principle to adopt is that of a comparison with the complete records from a nearby station.
- 3) In cases where interpolation is impossible, the monthly mean should be compiled from the incomplete data. Where more than 15 days are missing from the month a mean value should not be computed

- 4) When sending mean values to the Permanent Service in future, authorities are requested to use suffixes after each monthly mean to indicate the exact number of missing days of data. The suffix should be in parentheses. It should be underlined if it refers to missing days which have been interpolated. Thus: 6.24(3) would mean 3 days were missing and not interpolated; 6.43(3) would mean 3 days were interpolated and the interpolations contributed to the average of 6.43
- 5) No suffixes need be placed after the annual mean. It is assumed that all the data used to calculate monthly means will be used to calculate the annual mean, and the user of the publications will judge the reliability of the annual mean accordingly.

These recommendations have raised the question of the best method of computing the annual mean. Two methods appear to be in use. The first is to average all the available daily values of mean sea level (see page 8 of Special Publication N° 23 of the International Hydrographic Bureau); the second is to average the twelve monthly means. Even for a year with no missing data, the first method is slightly more accurate, as it gives equal weight to each daily mean; the second method gives equal weight to each calendar month, even though these are not of equal duration. But for a year with missing observations, particularly if the gaps were concentrated in one month, the average of the 12 monthly means can give a false annual mean.

It is therefore recommended:

- 6) That if annual means are computed by averaging the monthly means, the monthly means must first be weighted. The weight for each month should be the number of days for which readings were available:

#### Acknowledgements.

The Mean Sea Level Committee of the International Association of Physical Oceanography, and the Director of the Permanent Service wish to thank all those authorities who have so willingly contributed data and information regarding their installations. We respectfully urge these authorities to maintain and, if possible, to increase the quantity and quality of the data.

J. R. Rossiter  
Secretary to the Committee

TABLE A

## Authorities, Stations and Conditions

Country	Authority	Station	Lat.	Long.	Datum	Obs	Years
Iceland	Columbia University New York	Grindavik	63 43N	20 39W	18.07 feet below BM N° 2	24	1958-61
Soviet Union (Arctic Coast)	Institute of Aeroclimatology, Moscow	Murmanesk	68 58N	33 03E	BM	24	1959
		Russkaya Gavan	76 14	62 32		24	1958-59
		Cape Zhelanija	76 57	68 35		24	1959
		Cape Chelyuskin	77 43	104 17		24	1959
		Cape Schmidt	68 55	179 28		24	1959
Norway *	Norges Geografiske Oppmaling, Oslo.	Vardø	70 20N	31 06E	N. N. N.	24	1959-61
	Norges Sjokartvek, Oslo.	Hammerfest	70 40	23 40		24	1959-61
		Tromso	69 39	18 58	Harbour Authority Zero	c	1958-61
	Norges Geografiske Oppmaling, Oslo.	Harstad	68 48	16 33		c	1958-61
		Evenskaer	68 35	16 33		24	1959-61
		Narvik	68 26	17 25		24	1959-61
		Kabelbag	68 13	14 29		c	1958-61
	Norges Geografiske Oppmaling, Oslo.	Bodo	67 17	14 23	N. N.	24	1959-61
		Mosjoen	65 51	13 12	N. N.	24	1959-61
		Bronnoysund	65 29	12 13	Local	c	1958-61
	Norges Geografiske Oppmaling, Oslo.	Trondheim	63 26	10 26	Local	c	1958-61
		Heimsjo	63 26	09 07	N. N.	24	1959-61
		Kristiansund N.	63 07	07 44	Local	c	1956-61
	Norges Geografiske Oppmaling, Oslo.	Alesund	62 28	06 09	Local	c	1957-61
		Kjolsdal	61 55	05 38	N. N.	24	1959-61
	Norges Sjokartverk, Oppmaling, Oslo	Maloy	61 56	05 07	Local	c	1958-61
		Bergen	60 24	05 18	N. N.	24	1959-61
		Oslo	59 54	10 45	N. N.	24	1959-61
		Oscarsborg	59 40	10 37	N. N.	24	1959-61
		Stavanger	58 58	05 44	N. N.	24	1959-61
		Tregde	58 00	07 34	N. N.	24	1959-61
		Nevlunghavn	58 58	09 53	N. N.	24	1959-61
		Stromstad	58 57N	11 11E	220 cm below the zero of the Swedish precision levelling.	1	
		Smögen	58 22	11 13		24	
		Göteborg	57 43	11 57		24	
		Varberg	57 06	12 13		24	
		Klaghamn	55 31	12 54		24	
		Ystad	55 25	13 49		24	
		Kungsholmsfort	56 06	15 35		24	
		Olands n. Udde	57 22	17 06		1	
		Landsort	58 45	17 52		24	1959-61
		Nedre Söderfjärde	59 12	17 37		1	
Sweden	Svenska Meteorologiska och Hydrologiska Institut, Stockholm	Stockholm	59 19	18 05		24	
		Björn	60 38	17 58		24	
		Nedre Gävle	60 40	17 10		24	
		Dragsfjällan	62 20	17 28		24	
		Ratan	64 00	20 55		24	
		Furuågrund	64 55	21 14		24	
		Kemi	65 44N	24 33E	1921.0 Reference plane, or 200.0cm below the mean sea level at the epoch 1921.0	6	1959-61
		Oulu/Uleåborg	65 02	25 26			
		Raahe/Brahestad	64 42	24 30			
		Pietarsaari/					
		Jakobstad	63 42	22 42			
		Vasa/Vasa	63 06	21 34			
		Kaskinen/Kaskö	62 23	21 13			
		Mäntyluoto	61 36	21 29			
		Rauma/Raumo	61 08	21 29			
		Helsinki/ Helsingfors	60 09	24 58			

\* N. N. denotes Norwegian Normal Null.

N. N. N. denotes North Norwegian Normal Null.

## IAPO PUBLICATION SCIENTIFIQUE

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Finland (Cont'd)	Merentutkimuslaitos (Havsforsknings- institutet) Helsinki	Hamina/ Frederikshamn	60 34N	27 11E	1921.0 Reference plane, or 200.0cm below the mean sea level at the epoch 1921.0	6	1959-61
		Turku/Abo	60 25	22 06			
		Degerby	60 02	20 23			
		Hanko/Hango	59 49	22 58			
Soviet Union (Baltic Coast)	Institute of Aeroclimatology, Moscow	Kaliningrad	54 57N	20 13E	B. M.	24	1959
Denmark	Det Danske Meteorologiske Institut, Charlottenlund	Gedser	54 34N	11 58E	Dansk N. N.	24	1959-61
		Rodbyhavn	54 39	11 21			
		København	55 41	12 36			
		Hørnbaek	56 06	12 28			
		Korsør	55 20	11 08			
		Slipshavn	55 17	10 50			
		Mommark	54 56	10 04			
		Fredericia	55 34	09 46			
		Aarhus	56 09	10 13			
		Frederikshavn	57 26	10 34			
		Hirtshals	57 36	09 57			
		Esbjerg	55 28	08 27			
		Helgoland	54 11N	0754E			1960
Germany (North Sea)	Bundesanstalt für Gewässerkunde, Koblenz	Büsum	54 08	08 51			1960
		Deutsches Hydrogra- phisches Institut, Hamburg	Cuxhaven*	53 52	08 43	Normal Null	1938-59
	Bundesanstalt für Gewässerkunde	Wilhelmshaven	53 31	08 09	Normal Amsterdams Peil (N. A. P.)	8	1936-60
		Melnum Plate	53 46	08 06			
Netherlands	Rijkswaterstaat Directie Algemeene Dienst, Terschelling ts-Gravenhage	Delfzijl	53 20N	06 56E	Normal Amsterdams Peil (N. A. P.)	8	1959-61
		Terschelling	53 22	05 13			
		Harlingen	53 10	05 25			
		Den Helder	52 58	04 45			
		IJmuiden	52 28	04 35			
		Hoek van Holland	51 59	04 07			
		Hellevoetsluis	51 49	04 08			
		Brouwershaven	51 44	03 54			
		Zierikzee	51 38	03 55			
		Vlissingen	51 27	03 36			
		Lerwick	60 09N	01 08W			
		Invergordon	57 41	04 10			
British Isles	National Institute of Oceanography Liverpool Tidal Institute Hydrographic Dept. London Liverpool Tidal Institute Blyth Harbour Commission Liverpool Tidal Institute Scarborough Immingham Lowestoft Harwich Southend Hydrographic Dept. London Liverpool Tidal Institute Ramsgate Dover	Aberdeen	57 09	02 05	6, 60 Ft. below Ord- nance Datum (Newlyn)	8	1959-61
		Leith	55 59	03 10	8, 96 Ft. below Ord- nance Datum (Newlyn)	8	1931-34
		Sheerness	51 27	00 45	21, 85 Ft. below Ord- nance Datum 1844	8	1959-61
		Tilbury	51 28	00 22	6, 49 ft. below Ord- nance Datum (Newlyn)	HL	1959-61
		Ramsgate	51 20	01 25	6, 84 ft. below Ord- nance Datum (Newlyn)	8	1959-61
		Dover	51 07	01 19	8, 61 ft. below Ord- nance Datum (Newlyn)	8	1959-61
					37, 70 ft. below Ord- nance Datum (Newlyn)	8	1959-61
					14, 98 ft. below Ord- nance Datum (Newlyn)	8	1955-61
					6, 70 ft. below Ord- nance Datum (Newlyn)	8	1959-61
					10, 00 ft. below Ord- nance Datum (Newlyn)	8	1959-61
					Ordnance Datum (Newlyn)	24	1959-61
					10, 00 ft. below Ord- nance Datum (Newlyn)	8	1959-61
					10, 78 ft. below Ord- nance Datum (Newlyn)	8	1961
					9, 71 ft. below Ord- nance Datum (Newlyn)	8	1959-61

\* To replace values previously published in P. S. Nos 12 &amp; 19.

## MEAN SEA LEVEL DATA (1959-1961)

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years	
British Isles	Hydrographic Dept., London	Devonport	50 22N	04 11W	8.92 ft. below Ordnance Datum (Newlyn)	24	1961	
(cont'd)	Ordnance Survey	Newlyn	50 06	05 33	9.412 ft. below Ordnance Datum (Newlyn)	24	1959-61	
	Liverpool Tidal Institute	Swansea	51 37	03 55	25.66 ft. below Ordnance Datum (Newlyn)	8	1960-61	
	Hydrographic Dept., London	Milford Haven	51 42	05 01	Ordnance Datum (Newlyn)	24	1959-61	
	Liverpool Tidal Institute	Fishguard	52 00	04 58	6.13 ft. below Ordnance Datum (Newlyn)	8	1959-61	
	British Transport Commission	Holyhead	53 19	04 37	26.3 ft. below Ordnance Datum 1844	HL	1958-59	
	Liverpool Tidal Institute	Hilbre Island	52 23	03 13	22.03 ft. below Ordnance Datum (Newlyn)	8	1960-61	
		Liverpool (Princes Pier)	53 25	03 00	14.54 ft. below Ordnance Datum (Newlyn)	8	1959-61	
		Birkenhead (Alfred Dock)	53 24	03 01	14.54 ft. below Ordnance Datum (Newlyn)	8	1959-61	
		Heysham	54 02	02 55	29.51 ft. below Ordnance Datum (Newlyn)	8	1959-61	
	Meteorological Office, Bracknell	Millport	55 45	04 56	Ordnance Datum (Newlyn)	24	1955-58	
	Isle of Man Harbour Board	Douglas	54 09	04 28	10.22 ft. below OM	HL	1959-61	
	National Institute of Oceanography	Stornoway	58 12	06 23	Ordnance Datum 1866	Admiralty Chart Datum	24	1959-61
	Ordnance Survey Office, Dublin	Malin Head	55 22	07 20	Irish Ordnance Datum (Poolbeg)	24	1959-61	
	Liverpool Tidal Institute	Larne	54 51	05 47	3.32 ft. above Irish Ordnance Datum	8	1959-61	
		Belfast	54 36	05 55	2.40 ft. above Irish Ordnance Datum	8	1959-61	
	Dublin Port and Docks Board	Dublin	53 21	06 13	1.43 ft. above Ordnance Datum (Ireland)	HL	1959-61	
Channel Isles	States' Engineer's Office	St. Helier (Jersey)	49 11N	02 07W	Admiralty Chart Datum	HL	1959-61	
France (North & West Coasts)	Institut Géographique National, Paris	Dunkerque	51 03N	02 22E	Zéro du nivelllement général de la France	m	1956-59	
		Boulogne	50 44	01 35			1957	
		Le Havre	49 29	00 06			1956-59	
		Cherbourg	49 39	01 37W			1952-54	
		Le Conquet	48 22	04 47			1958-59	
	Service Hydrographique de la Marine, Paris	St. Jean de Luz	43 24	01 41			1957, 59	
		Brest	48 23	04 30			1957, 59	
							1959-61	
Spain (North Coast)	Instituto Geográfico y Catastral, Madrid	La Coruna	43 22N	08 23W	Local datum	24	1950-51 1953-61	
Portugal	Instituto Geográfico e Catastral, Lisbon	Cascais	34 41N	09 25W	B. M.	HL	1959-61	
		Lagos	37 06	08 40			1959-61	
Gibraltar	Hydrographic Dept., London	Gibraltar	36 07N	05 21W		24	1961	
Spain (South & East Coasts)	Instituto Geográfico y Catastral, Madrid	Alicante	38 20N	00 29W	B. M.	24	1950-61	
France (South Coast)	Institut Géographique National, Paris	Port Vendres	42 31N	03 07E	Zéro du nivelllement général de la France	m	1957, 59	
		Sète	43 24	03 42			1957, 59	
		Port-de-Bouc	43 24	04 59			1956-57, 59	
		Martigues	43 24	05 03			1957-58	
		Villefranche	43 42	07 20			1956-57	
Corsica	Institut Géographique National, Paris	Ajaccio	41 55N	08 44E	207.1 cm below B. M.	m	1956-57, 59	
		Bonifacio	41 23	09 08			1957, 1959	
		Bastia	42 41	09 26			1956-58	
Italy (West Coast)	Istituto Idrografico	Genova	44 25N	08 54E	B. M.	HL	1959-61	
Sicily	Istituto Sperimentale Talassografico, Trieste	Capo Passero	36 41N	15 09E			1957-58	

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Italy (East Coast)	Servizio Idrografico-Sezione Autonoma di Bologna	Porto Corsini	44 29N	12 17E	Local	HL	1959-61
	Istituto Sperimentale Talassografico, Trieste	Trieste	45 39	13 45	1.50 m below L. M. Hopmer (1949)	HL	1959
Yugoslavia	Hydrographic Institute of Yugoslav Navy	Rovinj	45 05N	13 38E	582.0 cm below B. M.	24	1958-61
	Geophysical Institute, Zagreb	Bakar	45 18	14 32	337.3 cm below B. M.	24	1959-61
	Institute of Oceanography and Fisheries, Split	Split rt Marjana	43 30	16 23	323.0 cm below B. M.	24	1958-61
	Hydrographic Institute of Yugoslav Navy	Split Harbour	43 30	16 26	393.32 cm below B. M.	24	1958-61
	Hidrografiski Institut, Split	Mali Ston	42 50	17 42		24	1958-59
	Broce	42 49	17 43			24	1958-59
	Hydrographic Institute of Yugoslav Navy	Dubrovnik	42 40	18 04	533.3 cm below B. M.	24	1958-61
Soviet Union (Black Sea)	Hidrografiski Institut, Split	Herceg Novi	42 27	18 32		24	1958
	Institute of Aero-climatology, Moscow	Port Tuapse	44 06N	39 04E	B. M.	24	1959
Turkey	Meteorological Service of Turkey	Ereglisi	41 17N	31 25E			1949-55, 1959
		Izmir	30 26	27 10			1959
		Iskenderun	36 37	36 07			1952-55, 1959
		Antalya	36 53	30 44			1959
		Trabzon	41 00	39 43			1959
Israel	Ministry of Transport	Haifa Port	32 49N	35 00E			1956-59
		Jaffa Port	32 03	34 45			1955-59
	Port Authority	Ashdod	31 50	34 39	0.329 m. below Land Levelling System	24	1959-61
Tunisia	I. G. N., Paris	Sfax	34 44N	10 46E		m	1957, 1959
		Sousse	35 49	10 37		m	1957, 1959
		La Goulette	36 49	10 18		m	1956-57
Algeria	I. G. N., Paris	Bône N° 2	36 54N	07 46E		m	1957, 1959
		Alger	36 47	03 04		m	1957, 1959
		Oran	35 43	00 39		m	1957, 1959
Morocco	Physical Oceanography Sub-Committee, Paris	Casablanca (1)	33 37N	07 36W	6.460 m below B. M.	24	1958-59
	I. G. N., Paris	Casablanca (2)	33 36	07 37			1957-59
		Agadir	30 25	09 38			1958-59
Azores	Serviço Meteorológico Nacional, Lisbon	Angra do Heroísmo (A)	38 39N	27 14W	Zero of the Portuguese Navy Chart, Angra and Fanal. 5.72 m below B. M.	HL a	1959-61
	Columbia University	Angra do Heroísmo (B)	38 39	27 13	19.76 ft. below B. M.	24	1958-61
	Serviço Meteorológico Nacional, Lisbon	Ponta Delgada	37 44	25 40	3.178 m. below B. M.	HL a	1959-60
Canary Islands	Instituto Geográfico y Catastral, Madrid	Horta	38 32	28 38	Hydrographic zero	HL a	1959-61
		Santa Cruz das Flores	39 27	31 08	Provisional	HL a	1959-61
Senegal	Physical Oceanography Sub-Committee, Paris	Santa Cruz de Tenerife	28 29N	16 14W	Local datum	24	1947-55, 1958-61
		Dakar	14 41N	17 26W	B. M.	24	1959
Ghana	Survey Dept., Accra	Gorée	14 40	17 24	B. M.	24	1958-59
		Takoradi	04 54N	01 45W	10.126 ft. below B. M. c H4		1947-49, 1958-61
South Africa	S. A. Naval Hydrographic Office	Walvis Bay	22 57S	14 30E	20.88 ft. below S. A. N. I.		1959-61
		Luderitz	26 38	15 09	12.135 ft. below B. M.		1959-61
		Port Nolloth	29 15	16 52	20.86 ft. below B. M.		1959-61
		Stompsneus Bay	32 43	17 59	17.030 ft. below S. A. N. I.		1959-61

## MEAN SEA LEVEL DATA (1959-1961)

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
South Africa (Cont'd.)	S. A. Naval Hydrographic Office	Robben Island	33 48 S	18 23 E	15. 57 ft. below Base plate	8	1959
		Table Bay Harbour (Duncan Dock)	33 55	18 26	14 ft. below B. M. I		1959-61
		Simons Bay	34 11	18 26	12, 739 ft. below S. A. N. 222		1959-61
		Hermanus	34 26	19 14	9, 815 ft. below H. 41G.		1959-61
		Mossel Bay	34 11	22 09	21. 236 ft. below S. A. N. xxx		1959-61
		Knysna	34 05	23 03	12, 892 ft. below SAN. I		1960-61
		Port Elizabeth	33 58	25 38	Tide gauge zero		1957-60
Madagascar	Physical Oceanography Sub-Committee, Paris I. G. N., Paris	Nosy Bé	13 24 S	48 17 E	B. M.	24	1959
Mauritius	Columbia University	Tamatave	18 09	49 26	Nivel. de Madagascar m	24	1952, 1958-59
		Grand Port	20 22 S	57 45 E	6. 11 ft. below B. M. N° 1		1958-60
Chagos Archipelago	Columbia University	Diego Garcia	07 00 S	70 21 E	8. 0 ft. below B.M. I	24	1959-61
Arabia	Survey of India, Dehra Dun	Aden	12 47 N	44 59 E	11. 40 ft. below B. M. HL	24	1959-60
Pakistan (West)	Meteorological Service	Karachi (Manora)					1959-61
India	Survey of India, Dehra Dun	Kandla	23 01 N	70 13 E	26. 99 ft. below B. M. HL	24	1959-61
		Veraval	20 53	70 22	20. 55 ft. below B. M. HL		1959-61
		Bhavnagar	21 48	72 09	37. 24 ft. below B. M. HL		1959-61
		Bombay (Apollo Bandar)	18 55	72 50	27. 96 ft. below B. M. HL		1959-61
		Mangalore	12 51	74 50	14. 562 ft. below B. M. HL		1961
		Cochin	09 58	76 16	6. 77 ft. below B. M. HL		1959-61
		Madras	13 06	80 18	16. 54 ft. below B. M. HL		1959-61
		Vizakhapatnam	17 41	83 17	22. 43 ft. below B. M. HL		1959-61
		Saugor	21 39	88 03	19. 55 ft. below B. M. HL		1959-61
		Diamond Harbour	22 11	88 11	15. 98 ft. below B. M. HL		1959-61
		Calcutta (Garden Reach)	22 33	88 18	23. 80 ft. below B. M. HL		1959-61
		Chittagong (Sadarghat)	22 20 N	91 50 E	Tide Pole Zero	24	1956-57
		Chittagong (Patenga Point)					1959-61
Pakistan (East)	Meteorological Service	Chittagong (T. M. Compound)	22 19	91 49	19. 45 ft. below B. M.		1954-57
		Chittagong (Julida Point)	22 15	91 50	31. 98 ft. below B. M.		1959-60
		Rangoon	16 46 N	96 10 E	22. 33 ft. below B. M. HL	24	1960-61
		Moulmein	16 29	97 37	23. 90 ft. below B. M. HL		1959-61
		Amherst	16 05	97 34	34. 71 ft. below B. M. HL		1959-61
Burma	Survey of India, Dehra Dun	Macau-Siac	22 12 N	113 33 E	Local	HL	1959-61
Andaman Islands	Survey of India, Dehra Dun	Port Blair	11 41 N	92 46 E	17. 39 ft. below B. M. HL	24	1959-61
China	Ministerio da Marinha	Chi Ma Wan (Lantau)	22 14 N	114 00 E	Admiralty Chart Datum	c	1961
China	Port Works Office, Hong Kong	Hong Kong	22 18	114 10	18. 31 ft. below B. M. c		1959-61
Soviet Union (Pacific Coast)	Institute of Aero-climatology, Moscow	Yuzhno Kurilsk	44 01 N	145 52 E	B. M.	24	1958-59
		Nagaeva Bay	59 33	150 47			1959
		Petropavlovsk	53 01	158 29			1959
		Ugolnaja Bay	63 02	179 25			1958-59

## IAPO PUBLICATION SCIENTIFIQUE

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Japan (Hokkaido)	Japanese National Committee	Monbetsu	44 21N	143 22E	5. 601 m below B. M.		1959
	Meteorological Agency, Tokyo	Hanasaki	43 17	145 35	4. 000 m. below B. M.		1959-61
		Kushira	42 58	144 22	4. 000 m. below B. M.		1959-61
	Geographical Survey Institute, Tokyo	Hakodate	41 47	140 44	3. 000 m. below B. M.		1959-61
		Oshora	43 13	140 52	0. 4584 m. below B. M. 24 Nº 9		1959-61
Japan (Honshu, East Coast)	Meteorological Agency, Tokyo	Hachinohe	40 32	141 31	3. 827 m. below B. M.		1959-61
		Miyako	39 38	141 58	3. 886 m. below B. M.		1959-61
		Ayukawa	38 18	141 31	4. 152 m. below B. M.		1959-61
		Onahama	36 56	140 55	3. 660 m. below B. M.		1959-61
		Choshi	35 44	140 50	4. 347 m. below B. M.		1959-61
		Mera	34 55	139 50	6. 671 m. below B. M.		1959-61
		Tokyo	35 40	139 46	5. 500 m. below B. M.		1959-61
	Geographical Survey Institute, Tokyo	Aburatsubo	35 09	139 37	1. 6179 m. below B. M. 24 Nº 2		1959-61
	Meteorological Agency, Tokyo	Uchiura	35 01	138 54	3. 602 m. below B. M.		1959-61
		Ito	34 58	139 06	4. 888 m. below B. M.		1959-61
Japan (Inland Sea)		Shimizu	35 00	138 30	3. 291 m. below B. M.		1959-61
		Nagoya	35 05	136 53	4. 790 m. below B. M.		1959-61
		Kushimoto	33 28	135 46	5. 552 m. below B. M.		1959-61
	Geographical Survey Institute, Tokyo	Kainan	34 08	135 12	0. 5502 m. below B. M. 24 Nº 14		1959-61
	Meteorological Agency, Tokyo	Komatsushima	33 59	134 37	4. 000 m. below B. M.		1959-61
		Kobe	34 41	135 11	4. 068 m. below B. M.		1959-61
		Tannowa	34 20	135 10	4. 550 m. below B. M.		1959-61
		Wakayama	34 13	135 09	3. 982 m. below B. M.		1959-61
		Takamatsu	34 21	134 03	3. 500 m. below B. M.		1959-61
		Uno	34 29	133 57	3. 914 m. below B. M.		1959-61
Japan (Shikoku)		Matuyama	33 52	132 43	4. 982 m. below B. M.		1959-61
	Meteorological Agency, Tokyo	Uwajima	33 14	132 33	4. 080 m. below B. M.		1959-61
		Tosa-Shimizu	32 47	132 58	4. 538 m. below B. M.		1959-61
	Geographical Survey Institute, Tokyo	Kochi	33 30	133 35	0. 3706 m. above B. M. 24 Nº 13		1959-61
Japan (Kyushu)	Geographical Survey Institute, Tokyo	Hosojima	32 26	131 40	0. 1334 m. above B. M. 24 Nº 4		1959-61
	Japanese National Committee	Sasebo	33 10	129 43	6. 141 m. below B. M.		1959
Japan (Nansei Shoto)	Meteorological Agency, Tokyo	Naze	28 23	129 30	3. 869 m. below B. M.		1959
Japan (Honshu, West Coast)	Japanese National Committee	Tokuyama	34 02	131 48	5. 698 m. below B. M.		1959
	Meteorological Agency, Tokyo	Shimonoseki	33 58	130 57	5. 800 m. below B. M.		1959-61
		Tonoura	34 54	132 04	3. 865 m. below B. M.		1959-61
		Sakai	35 33	133 14	2. 770 m. below B. M.		1959-61
	Japanese National Committee	Maizuru	35 29	135 24	3. 168 m. below B. M.		1959
	Meteorological Agency, Tokyo	Miyazu	35 32	135 12	3. 255 m. below B. M.		1959-61
	Geographical Survey Institute, Tokyo	Wajima	37 24	136 54	1. 3532 m. below B. M. 24 Nº 17		1959-61
		Kashiwazaki	37 21	138 31	1. 6791 m. below B. M. 24 Nº 17		1959-61
		Neuzasaki	38 34	139 33	0. 3676 m. below B. M. 24 Nº 17		1959-61
	Meteorological Agency, Tokyo	Iwasaki	40 35	139 55	6. 000 m. below B. M.		1959-61
Philippine Islands	Japanese National Committee	Ominato	41 15	141 09	2. 838 m. below B. M.		1959
	Geographical Survey Institute, Tokyo	Asamushi	40 54	140 52	0. 0099 m. above B. M. 24 Nº 15		1959-61
	Bureau of Coast and Geodetic Survey, Manila	Manila	14 35N	120 58E	16. 907 ft. below B. M. 24 Nº 4		1959-61
		Legaspi	13 09	123 45	12. 032 ft. below B. M. 24 Nº 1		1959-61
		Tacloban, Leyte	11 15	125 00	14. 358 ft. below B. M. 24 Nº 5		1959-61

## MEAN SEA LEVEL DATA (1959-1961)

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Philippine Islands (Cont'd)	Bureau of Coast and Geodetic Survey, Manila	Cebu	10 18N	123 54E	12.641 ft. below B. M. Nº 6	24	1959-61
		Davao	07 05	125 38	13.01 ft. below B. M. Nº 4	24	1959-61
		Jolo, Sulu	06 04	121 00	13.992 ft. below B. M. Nº 1	24	1959-61
Australasia	Commonwealth Scientific and Industrial Research Organisation	Port Moresby, New Guinea	09 29S	147 08E	12.04 ft. below waterfront B. M.	24	1959
		Darwin, Northern Territory	12 29	130 58		HL	1959-60
	Department of Harbours & Marine, Brisbane	Cairns, Queensland	16 55	145 43		HL	1959-60
	C.S.I.R.O.	Karumba	17 29	140 50	2.76 ft. below State Datum		1957-60
	D.H. & M., Brisbane	Townsville,	19 20	146 50		HL	1959-60
		Townsville	19 15	146 50	28.69 ft. below State B. M. 11		1949-60
		Mackay	21 06	149 14	Low water datum 32.59 ft. below State B. M. 43		1955-60
	C.S.I.R.O.	Gladstone, Queensland	23 53	151 12		HL	1959-60
	D.H. & M., Brisbane	Brisbane	27 22	153 10	3.485 ft. below State Datum		1957-60
	Department of Public Works, Sydney	Ballina	28 52	153 35			1959-61
	C.S.I.R.O.	Norfolk Island	29 04	167 56		24	1959
	D.P.W., Sydney	Coff's Harbour(1)	30 20	153 00	21.45 ft. below B. M. HL Nº 1		1959-61
	C.S.I.R.O.	Coff's Harbour(2)					1957-60
		Lord Howe Island	31 31	159 07	16.96 ft. below B. M. HL on concrete step		1959-60
	D.P.W., Sydney	Newcastle, N. S. W.	32 55	151 48	14.00 ft. below B. M. HL Nº 1		1959-61
	Maritime Services Board, Sydney	Sydney (Fort Denison)	33 51	151 14	31.82 ft. below B. M.		1955-61
	C.S.I.R.O.	Camp Cove, N. S. W.	33 53	151 15	Indian Spring Low Water	24	1959-60
	D.P.W., Sydney	Port Kembla, N. S. W.	34 28	150 55	12.51 ft. below B. M. HL Nº 5		1959-61
	C.S.I.R.O.	Eden, N. S. W.	37 05	149 59	Visual Staff zero R. L. 0.19 ft.	HL	1959-60
	Melbourne Harbor Trust	Williamstown (1)	37 52	144 58			1959-61
	C.S.I.R.O.	Williamstown(2)	37 52	144 58			1957-60
		Hobart, Tasmania	42 50	147 19		HL	1959-60
		Matsuyker Island,	43 38	146 22	11.25 ft. below jetty B. M.	24	1959
		Tasmania					
		Cape Sorrell, Tasmania	42 13	145 13	9.76 ft. below B. M.	24	1959
	C.S.I.R.O., S.A.H.B.	Port MacDonnell, S. Australia	38 00	140 40	R. L. 106.46 ft.	24	1959-61
	Liverpool Tidal Institute	Thevenard	32 09	133 39			1959-60
	C.S.I.R.O.	Albany, W. A.	35 00	117 57	Indian Spring Low Water	HL	1959-60
		Bunbury, W. A.	33 17	115 38	Indian Spring Low Water	HL	1959-60
	Fremantle Harbour Trust	Fremantle, W. A.	32 03	115 44	Tide Gauge Zero	HL	1959-60
	C.S.I.R.O.	Port Hedland, W.A20 20	118 35		1.9 ft. below Chart Datum	HL	1959-60
Marianas Islands	U. S. Coast and Geodetic Survey, Washington	Apra Harbour, Guam	13 26N	144 39E	10.12 ft. below B. M. 1 (1949)	24	1958-60
Caroline Islands	U. S. C. & G. S.	Moen Island	07 27N	151 51E	8.05 ft. below B. M. B.	24	1959-60
Marshall Islands	U. S. C. & G. S.	Eniwetok	11 22N	162 21E	11.36 ft. below B. M. 1	24	1959-60
		Kwajalein	08 44	167 44	10.01 ft. below B. M. A.	24	1959-60
Wake Island	U. S. C. & G. S.	Wake Island	19 17N	166 37E	16.36 ft. below B. M. 2	24	1959-60

## IAPO PUBLICATION SCIENTIFIQUE

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Gilbert Islands	Scripps Institute, California	Ocean Island	00 53S	169 35E	Tide staff zero		1959
New Caledonia	Physical Oceanography Sub-Committee, Paris	Nouméa	22 18S	166 26E	6.12 m. below B.M.	24	1958-59
Phoenix Islands	U.S.C. & G.S.	Canton Island	02 48S	171 43W	10.10 ft. below B.M. 2 (1929)	24	1959-60
Hawaiian Islands	U.S.C. & G.S.	Midway Island	28 13N	177 22W	13.54 ft. below B.M. 73		1959-60
		Johnston Island	16 45	169 31	9.43 ft. below B.M. 3		1959-60
		Nawiliwili	21 58	159 21	8.86 ft. below B.M. 7		1959-60
		Honolulu	21 18	157 52	20.82 ft. below B.M. 2 (1872)		1959-60
					12.25 ft. below B.M. 8 (1913)	24	
		Mokuoloe Island	21 26	157 47	6.45 ft. below B.M. 1		1959-60
		Kahului	20 45	156 28	11.34 ft. below B.M. 2		1959-60
		Hilo	19 44	155 03	12.29 ft. below B.M. E-2 (1926)		1959-60
Line Islands	U.S.C. & G.S.	Christmas Island	01 57N	157 28W	9.76 ft. below B.M. 3	24	1959-60
Iles de la Société	Physical Oceanography Sub-Committee, Paris	Mataval, Tahiti	17 31S	149 31W		24	1958-59
Aleutian Islands	U.S.C. & G.S. *	Massacre Bay, Attu	52 50N	173 12E	16.50 ft. below B.M. 6		
		Sweeper Cove, Adak	51 52	176 39W	22.54 ft. below B.M. 16 (1951)	24	1959-60
		Unalaska	53 53	166 32	10.65 ft. below B.M. 2		
Alaska	U.S.C. & G.S.	Woman's Bay	57 43N	152 31W	20.05 ft. below B.M. 4		
		Kodiak			17.53 ft. below B.M. 1a (1919)		
		Seward	60 05	149 27	66.62 ft. below B.M. k-11(1923)		
					18.09 ft. below B.M. 8 (1924)	24	1959-60
		Sitka	57 03	135 20	36.14 ft. below B.M. 1 (1921)		
		Skagway	59 27	135 19	24.54 ft. below B.M. 22 (1919)		
		Ketchikan	55 20	131 38	29.35 ft. below B.M. 24 (1921)		
Canada (Pacific Coast)	Canadian Hydrographic Service, Ottawa	Prince Rupert	54 19N	130 20W	30.05 ft. below B.M. (1912)		
		Alert Bay	50 35	126 56	22.45 ft. below B.M. (1947)	24	1959-61
		Point Atkinson (Caulfield)	49 20	123 15	14.86 ft. below B.M. (Geodetic N°213-J-2)	24	1914-21, 1944-59
					13.56 ft. below B.M. (Geodetic N°213-J-2)		1959-61
		Vancouver	49 17	123 07	41.77 ft. below B.M. (1912)		
		Tofino (Clayoquot)	49 09	125 55	40.17 ft. below B.M. (1912)	24	1959-61
		Fulford Harbour	48 46	123 27	12.93 ft. below B.M. (1940)		
		Victoria	48 25	123 22	43.95 ft. below B.M. 738-J	24	1959-61

## MEAN SEA LEVEL DATA (1959-1961)

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
United States (Pacific Coast)	U. S. C. & G. S.	Neah Bay	48 22N	124 37W	22.78 ft. below B. M. 15 (1954)		1959-61
		Seattle	47 36	122 20	29.56 ft. below B. M. 7 (1912)		1959-61
		Crescent City	41 45	124 12	18.63 ft. below B. M. 10 (1950)		1959-61
		San Francisco	37 48	122 28	15.80 ft. below B. M. 173 (1925)		1959-61
					19.01 ft. below B. M. 180 (1936)		
		Avila	35 10	120 44	26.09 ft. below B. M. 11 (1945)	24	1958-60
		Los Angeles	33 43	118 16	17.59 ft. below B. M. 8		1959-60
		San Clemente Island	33 00	118 33	18.90 ft. below B. M. 2		1959-60
		La Jolla	32 52	117 15	19.45 ft. below B. M. 5		1959-60
					19.49 ft. below B. M. 5 (1945)		
		San Diego	32 43	117 10	16.22 ft. below B. M. 13-M		1959-60
Mexico (Pacific Coast)	Instituto de Geofisica	Ensenada	31 51N	116 38W	14.305 ft. below B. M. Nº 1		1959-61
		La Paz	24 10	110 21	15.283 ft. below B. M. Nº 1		1959-61
		Guaymas	27 55	110 54	14.557 ft. below B. M. Nº 1		1959-61
		Topolobampo	25 36	109 03	26.130 ft. below B. M. Nº 2		1959-61
		Mazatlan	23 12	106 25	15.601 ft. below B. M. Nº 1	24	1959-61
		Socorro Island	18 44	110 01	12.900 ft. below B. M. Nº 1		1959
		Manzanillo	19 03	104 20	18.249 ft. below B. M. Nº 1		1959-61
		Acapulco	16 50	99 55	10.629 ft. below B. M. Nº 1		1959-61
		Puerto Angel	15 30	96 30			1961
		Salina Cruz	16 10	95 12	14.357 ft. below B. M. 24 Nº 1A		1959-61
Guatemala	U. S. C. & G. S.	San Jose	13 55N	90 50W			1960
El Salvador	U. S. C. & G. S.	La Union	13 20N	87 49W	22.86 ft. below B. M. 3		1948-60
Costa Rica (Pacific Coast)	U. S. C. & G. S.	Puntarenas	09 58N	84 50W	21.16 ft. below B. M. 1		1941-60
		Quepos	09 24	84 10	25.29 ft. below B. M. 1Q		1957-60
Panama (Pacific Coast)	U. S. C. & G. S. Panama Canal Authority U. S. C. & G. S. Panama Canal Authority	Puerto Armuelles	08 16N	82 52W	25.85 ft. below B. M. 3		1951-60
		Balboa	08 58	79 34			1949-61
		Naos Island	08 55	79 32	28.16 ft. below B. M. 3		1949-60
		Cristobal	09 21	79 55			1949-61
Colombia (Pacific Coast)	U. S. C. & G. S.	Buenaventura	03 54N	77 06W	24.82 ft. below B. M. 2		1941-60
		Tumaco	01 50	78 44	20.72 ft. below B. M. 1		1953-60
Ecuador	Scripps Institute	San Cristobal	00 54S	89 37W			1958
					18.14 ft. below B. M. BW-1		1960
Peru	U. S. C. & G. S.	La Libertad	02 12	80 55	21.33 ft. below B. M. 1		1948-60
		Talara	04 37S	81 17W	19.93 ft. below B. M. 2		1942-60
		Chimbote	09 05	78 38	17.65 ft. below B. M. 1		1955-60
		Callao	12 03	77 09	16.68 ft. below B. M. 1		1942-55, 60
		La Punta (Callao)	12 05	77 11	11.94 ft. below B. M. 14		1954-59
		San Juan	15 22	75 12	15.67 ft. below B. M. 1		1958-60
		Matarani	17 00	72 07	15.08 ft. below B. M. 2		1941-60

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Chile	Dept. de Navegacion e Hidrografica	Arica	18 28S	70 20W		1956-61	
		Iquique	20 13	70 10		1959	
		Antofagasta	23 39	70 25		1956-61	
		Caldera	27 04	70 50		1956-61	
		Coquimbo	29 56	71 21		1960-61	
		Valparaiso	33 02	71 38		1956-61	
	Columbia University Servicio Oficial Armada	Juan Fernandez	33 38	78 50		1957-58	
		Talcahuano	36 41	73 06	Datum changed at end 1960	1956-61	
	Dept. de Navegacion e Hidrografica Servicio Oficial Armada	Puerto Montt	41 29	72 58	Datum changed from previous publication	1957-59	
		Tierra del Fuego:					
		Caleta Percy	52 53	70 07		1961	
		Punta Arenas	53 10	70 54		1956-61	
		Isla de Pascua	27 09	109 17		1957-58	
South Georgia	National Institute of Oceanography, England	King Edward Point	54 16S	36 30W	8.8 ft. below B. M.	1957-59	
Argentina	Servicio de Hidrografica Naval	Ushuaia	54 49S	68 13W		1958-59	
	Servicio Hidrografico del Ministerio de Marina, Buenos Aires	Comodora Rivadavia	45 52	67 29		1959	
		Puerto Madryn	42 46	65 02		1958-59	
Brazil	U. S. C. & G. S.	Piramide	43 35S	64 17W		1958-59	
		Rosales	38 56	62 04		1958-59	
		Quequen	38 35	58 42		1958-59	
		Mar del Plata (Puerto)	38 02	57 32		1958-59	
		Mar del Plata (Club)	38 00	57 33		1958-59	
		San Clemente	36 18	56 46		1958	
		Rio Santiago	34 51	57 54		1958-59	
		Buenos Aires	34 38	58 21		1958-59	
		Palermo	34 34	58 24		1958-59	
		Isla Martin Garcia	34 11	58 15		1958-59	
		Imbituba, Santa Catarina	28 14S	48 39W	14.14 ft. below B. M. 1-M	1948-60	
		Rio de Janeiro	22 56	43 08	34.13 ft. below B. M. 1	1949-60	
Venezuela	Cartografia Nacional Division de Geodisia	Canavieiras	15 40	38 58	15.54 ft. below B. M. 2	1952-60	
		Salvador	12 58	38 31	9.85 ft. below B. M. 1	1949-60	
		Recife	08 03	34 52	13.63 ft. below B. M. 1	1948-60	
		Fortaleza	03 43	38 29	15.82 ft. below B. M. 1	1948-58, 60	
	Tidal Institute	Salinopolis	00 39	47 23	17.24 ft. below B. M. 1	1949-56	
		Belem	01 27	48 30	14.91 ft. below B. M. 1	1949-60	
Colombia (Caribbean Coast)	U. S. C. & G. S.	Puerto de Hierro	10 37N	62 05W		1959-61	
		Cumana	10 28	64 12		1959-61	
		La Guayra	10 37	66 56		1959-61	
		Amuay	11 45	70 13		1959-61	
		Malecon	11 00	71 35		1959-61	
		Punta Diablo	10 57	71 36		1959-61	
Costa Rica (Caribbean Coast)	U. S. C. & G. S.	Rio hacha	11 33N	72 55W	15.37 ft. below B. M. 4	1953-60	
		Cartagena	10 24	75 33	7.76 ft. below B. M. 4	1949-60	
Honduras	U. S. C. & G. S.	Puerto Limon	10 00N	83 02W	14.12 ft. below B. M. 2L	1948-60	
Barbados	Columbia University	Puerto Castilla	16 01N	86 02W	5.91 ft. below B. M. M-3	1955-60	
		La Ceiba	15 46	86 50		1960	
		Puerto Cortes	15 50	87 57	9.01 ft. below B. M. 2	1948-60	
Puerto Rico	U. S. C. & G. S.	St. James	13 11N	59 39W	10.14 ft. below B. M.	1958-60	
		Maqueyes Island	17 58N	67 03W	Staff zero	1955-60	

## MEAN SEA LEVEL DATA (1959-1961)

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
Dominican Republic	U. S. C. & G. S.	Puerto Plata	19 49N	70 42W	10.73 ft. below B. M. 1		1949-59
		Ciudad Trujillo	18 27	69 53	8.62 ft. below B. M. 1		1949-54
		Barahona	18 12	71 05	7.42 ft. below B. M. 1		1944-59
Haiti	U. S. C. & G. S.	Port au Prince	18 34N	72 21W	9.63 ft. below B. M. 1		1949-60
Mexico (Gulf Coast)	Instituto de Geofisica	Progreso	21 18N	89 40W			1959-61
		Ciudad del Carmen	18 38	91 50			1959-61
		Coatzacoalcos	18 09	94 24			1959, 1961
		Alvarado	18 46	95 46			1959-61
		Veracruz	19 12	96 08			1959-61
		Tuxpan	21 00	97 20			1959-61
		Tampico	22 13	97 51	Datum changed 1961		1959-61
Cuba	Negociado de Hydrografia, Havana	Havana	23 09N	82 20W	8.08 ft. below B. M. 1		1952-56
		Gibara	21 07	76 07	14.21 ft. below B. M. 1		1952-57
		Guantanamo Bay	19 54	75 09	32.37 ft. below B. M. 1		1944-60
		Casilda	21 45	79 59	4.88 ft. below B. M. 1		1952-56
United States (Gulf Coast)	U. S. C. & G. S.	Galveston	29 19N	94 48W	9.50 ft. below B. M. 28a (1913)		
		Eugene Island	29 22	91 23	9.37 ft. below B. M. 35 (1920)		
		Bayou Rigaud	29 15	89 58	5.04 ft. below B. M. 3 (1934)		
		Platform "A", Humble Oil	29 10	89 55	6.46 ft. below B. M. 1 (1947)	24	1959-60
		Pensacola	30 24	87 13	Zero of staff		
		St. Petersburg	27 46	82 37	17.02 ft. below B. M. 7 (1923)		
		Key West (Naval Base)	24 33	81 48	8.75 ft. below B. M. 4 (1925)		
					13.06 ft. below B. M. 29 (1923)		
Bermuda	Columbia University	Paget Island	32 22N	64 40W	9.902 ft. below B. M.		1959-61
	U. S. C. & G. S.	St. George's	32 22	64 42	Nº 1		
					8.95 ft. below B. M.	24	1959-60
United States (Atlantic Coast)	U. S. C. & G. S.	Miami Beach	25 46N	80 08W	Nº 6 (U. S. E. D. 1931)		
		Mayport	30 24	81 26	7.72 ft. below B. M.		
		Fort Pulaski	32 02	80 54	Nº 15 (1929)		
		Charleston	32 47	79 55	16.00 ft. below B. M.		
					Nº 5 (1939)		
		Myrtle Beach	33 41	78 53	14.22 ft. below B. M.		
					Nº 1		
		Wilmington	34 14	77 57	13.19 ft. below B. M.		
		Hampton Roads	36 57	76 20	Nº 13 (1928)		
		Baltimore	39 16	76 35	15.52 ft. below B. M.		
					Nº 1		
		Atlantic City	39 21	74 25	9.04 ft. below B. M.		
		Sandy Hook (Fort Hancock)	40 28	74 01	Nº 1 (1935)		
		New York	40 42	74 01	17.05 ft. below B. M.		
					Nº 6 (1927)		
		Willets Point (Fort Totten)	40 48	73 47	8.53 ft. below B. M.		
		New London (State Pier)	41 22	72 05	Nº 1		
					10.03 ft. below B. M.		
					Nº 25		
					19.95 ft. below B. M.		
					Nº 32 (1922)		
					11.26 ft. below B. M.		
					Nº 2 (1923)		
					22.06 ft. below B. M.		
					Nº 748		
					18.34 ft. below B. M.		
					Nº 2		
					19.13 ft. below B. M.		
					Nº 737		
					13.70 ft. below B. M.		
					Nº 13		

## IAPO PUBLICATION SCIENTIFIQUE

Country	Authority	Station	Lat.	Long.	Datum	Obs.	Years
United States (Atlantic Coast)	U. S. C. & G. S.	Newport	41 30 N	71 20 W	37.34 ft. below B. M. N° 1 (1930) 8.64 ft. below B. M. N° 4	24	1959-60
		Boston	42 21	71 03	21.45 ft. below B. M. N° 7 (1922) 21.45 ft. below B. M. N° 13		
		Portland	43 40	70 15	27.58 ft. below B. M. N° 31 (1910)		
		Bar Harbor	44 23	68 12	20.94 ft. below B. M. N° 6		
		Eastport	44 54	66 59	51.46 ft. below B. M. N° 3 (1918)		
Canada (Atlantic & North Coasts)	Canadian Hydrographic Service, Ottawa	St. John, N. B.	45 16 N	66 04 W	55.60 ft. below B. M.	24	1959-60
		Halifax	44 40	63 35	13.96 ft. below B. M. (1946)		1959-61
		Charlottetown	46 13	63 08	18.38 ft. below B. M. (1901)		1959-61
		Father Point	48 31	68 28	24.72 ft. below B. M. (Geodetic N° R.)		1959-60
		Quebec	46 50	71 10	22.58 ft. below B. M. (Geodetic N° LXXIV)		1959-60
		Harrington	50 30	59 29	13.90 ft. below B. M. (1910)		1959-61
		St. John's, Newfoundland	47 34	52 42			1959-60
		Churchill	58 47	94 12	20.25 ft. below B. M. (1929)		1959-61
		Resolute	74 41	94 53			1959, 1961
Antarctica	Servicio de Hidrografía Naval, Buenos Aires	Bahia Esperanza	63 24 S	57 00 W			1958-59
		Almirante Brown	64 54	62 52			1957-58
		Melchior	64 19	62 59			1957-59
	Physical Oceanography Subcommittee, Paris	Ile des Pétrrels	66 40 S	140 01 E	Referred to B. M.		1957

# TABLE B

MONTHLY AND ANNUAL MEAN HEIGHTS OF SEA-LEVEL

## ICELAND

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean
GRINDAVIK													
1958	5.98	5.56	5.60	5.62	5.42	5.49	5.70	5.97	6.14	6.28	6.50	6.43	5.891
1959	5.76	....	6.39	5.80	5.46	5.85	6.02	5.83	6.00	5.94	6.28	6.47	5.987
1960	6.06	5.85	6.22	6.16	6.15	6.22	6.34	5.99	6.35	6.05	6.63	6.51	6.211
1961	6.56	6.40	5.92	5.89	5.75	6.06	5.72	6.08	6.42				
SOVIET UNION (ARCTIC COAST)													
MURMANSK													
1959	203	227	216	192	205	208	206	210	225	214	202	194	208
RUSSKAYA GAVAN													
1958	110	91	81	85	79	90	98	102	107	107	111	90	96
1959	79	116	109	84	86	104	102	102	102	99	106	97	99
CAPE ZHELANIJA													
1959	59	89	78	49	59	67	67	60	64	62	62	66	65
CAPE CHELYUSKIN													
1959	62	95	92	66	67	83	74	62	64	58	74	92	74
CAPE SCHMIDT													
1959	101	137	119	107	121	147	162	120	112	(154)	(132)	(156)	(131)
NORWAY													
VARDO													
d 1959	-0.130	0.154	0.024	-0.231	-0.218	-0.116	-0.136	-0.115	-0.005	-0.057	-0.115	-0.149	-0.091
1960	-0.160	-0.175	-0.246	-0.234	-0.275	-0.182	-0.249	-0.206	-0.235	-0.144	-0.168	-0.133	-0.201
1961	-0.181	-0.097	0.042	-0.194	-0.267	-0.132	-0.178	-0.156	-0.036	-0.036	0.001	0.045	-0.099
HAMMERFEST													
d 1959	-0.025	0.193	0.101	-0.199	-0.178	-0.075	-0.074	-0.102	0.008	0.002	-0.049	-0.050	-0.037
1960	-0.106	-0.148	-0.233	-0.218	-0.236	-0.046	-0.184	-0.156	-0.161	-0.142	-0.120	-0.104	-0.154
1961	0.240	0.320	0.125	-0.167	-0.197	-0.053	-0.177	.....	-0.009	0.022	0.101	0.121	0.030
TROMSO													
1958	1.514	1.471	1.290	1.306	1.350	1.317	1.432	1.391	1.451	1.582	1.635	1.646	1.450
1959	1.484	1.655	1.537	1.375	1.274	1.440	1.433	1.435	1.519	1.514	1.494	1.457	1.468
1960	1.382	1.389	1.289	1.326	1.271	1.327	1.259	1.348	1.322	1.316	1.378	1.443	1.337
1961	(1.391)	1.424	1.642	1.356	1.293	....	(1.369)	1.362	1.268	1.425	1.579	1.544	(1.423)
HARSTAD													
1958	1.616	1.548	1.382	1.397	1.423	1.394	1.510	1.479	1.533	1.666	1.694	1.673	1.526
1959	1.552	1.692	1.573	1.454	1.369	1.487	1.475	1.498	1.574	1.578	1.556	1.551	1.528
1960	1.504	1.519	1.378	1.422	1.311	1.374	1.359	1.413	1.379	1.343	1.459	1.458	1.409
1961	1.437	1.523	1.615	1.374	1.371	1.490	1.444	1.464	1.532	1.575	1.660	1.645	1.511
EVENSKJAER													
1958	-2.328	-2.392	-2.591	-2.558	-2.515	-2.552	-2.451	-2.483	-2.420	-2.281	-2.269	-2.308	-2.429
d 1959	0.054	0.144	0.041	-0.091	-0.172	-0.053	-0.062	-0.028	0.043	0.049	0.026	-0.031	-0.007
1960	-0.111	-0.120	-0.229	-0.174	-0.250	-0.156	-0.171	-0.121	-0.147	-0.174	-0.084	-0.034	-0.148
1961	-0.085	0.002	0.096	-0.127	-0.147	-0.017	-0.061	-0.059	0.025	0.064	0.235	0.110	0.003
NARVIK													
d 1959	-0.020	0.193	0.045	-0.136	-0.190	-0.039	-0.038	0.004	0.094	0.066	0.035	0.009	0.002
1960	-0.083	-0.089	-0.186	-0.113	-0.191	-0.084	-0.104	0.097	-0.121	-0.144	-0.082	0.010	-0.107
1961	-0.029	0.082	0.153	-0.075	-0.121	0.012	-0.010	-0.023	0.085	0.119	0.188	0.139	0.043

d. Datum changed. See Table A.

## NORWAY

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
* KABELVAG													
													Unit : 1 metre
1958	1.874	1.829	1.594	1.593	1.669	1.611	(1.693)	1.710	1.764	1.975	1.987	1.970	1.776
1959	1.752	1.823	1.720	1.715	1.546	1.626	1.638	1.636	1.703	(1.778)	1.773	1.748	1.704
1960	1.642	(1.668)	1.516	1.552	1.450	(1.602)	1.578	1.612	1.630	1.537	1.660	1.808	1.601
1961	1.795	1.837	1.839	1.596	1.588	1.674	1.692	1.733	1.750	1.832	1.942	1.868	1.762
BODO													
d 1958	-0.067	0.046	-0.076	-0.217	-0.314	-0.172	-0.194	-0.172	-0.083	-0.035	-0.063	-0.069	-0.118
1960	-0.142	-0.129	-0.274	-0.201	-0.282	-0.191	-0.209	-0.167	-0.175	-0.201	-0.107	-0.059	-0.178
1961	-0.107	-0.009	0.063	-0.161	-0.198	-0.095	-0.121	-0.112	-0.014	0.048	0.127	0.071	-0.042
MOSJOEN													
d 1959	-0.121	0.074	-0.054	-0.151	-0.207	-0.062	-0.105	-0.090	0.020	-0.050	-0.086	-0.116	-0.079
1960	-0.179	-0.126	-0.274	-0.185	-0.220	-0.106	-0.182	-0.135	-0.156	-0.209	-0.116	-0.049	-0.161
1961	-0.082	0.071	0.213	-0.097	-0.099	0.015	-0.031	-0.027	0.057	0.075	0.181	0.096	0.031
BRONNOYSUND													
1958	1.246	1.213	0.984	1.026	1.093	1.013	1.105	1.104	1.163	1.332	1.293	1.290	1.155
1959	1.146	1.211	1.139	1.085	0.961	1.091	1.063	1.088	1.193	1.165	1.168	1.140	1.120
1960	1.055	1.083	0.931	1.003	0.934	1.007	1.002	.....	(1.044)	0.995	1.087	1.153	(1.026)
1961	1.139	1.236	(1.267)	1.070	1.039	1.121	(1.089)	.....	(1.150)	1.210	1.306	1.195	(1.166)
TRONDHEIM													
1958	0.911	0.887	0.665	0.864	0.942	0.936	0.946	0.951	0.976	(1.039)	0.990	0.902	0.913
1959	0.805	0.838	0.735	0.789	0.696	0.799	0.751	0.751	0.850	0.817	0.798	0.796	0.785
1960	0.720	0.772	0.641	0.760	0.766	0.859	0.842	0.991	0.883	0.818	0.810	0.987	0.827
1961	0.909	0.974	1.062	0.833	0.847	0.923	0.856	0.898	0.968	1.014	1.079	1.032	0.950
HEIMSDJO													
d 1959	-0.022	-0.009	-0.052	-0.056	-0.213	-0.048	-0.096	-0.030	-0.071	0.002	0.097	0.064	-0.036
1960	-0.041	0.001	-0.104	-0.076	-0.198	-0.151	-0.134	-0.136	-0.135	-0.150	0.026	0.039	-0.088
1961	-0.004	0.093	0.111	-0.093	-0.109	-0.049	-0.082	-0.023	0.108	0.150	0.162	0.131	0.033
KRISTIANSUND N.													
1956	2.041	1.753	1.844	1.840	1.910	1.882	1.851	1.891	1.922	2.158	2.086	2.158	1.945
1957	2.135	2.118	1.982	1.831	1.801	1.830	1.845	1.867	2.044	2.227	2.098	2.119	1.989
1958	2.036	1.987	1.804	1.837	1.892	1.800	1.882	1.955	2.014	2.152	2.078	2.087	1.957
1959	1.960	1.960	1.922	1.925	1.771	1.950	1.878	1.911	1.928	1.995	2.007	2.030	1.936
1960	1.862	1.893	1.767	1.811	1.728	1.779	1.796	1.854	1.879	1.846	1.983	2.008	1.850
1961	1.959	2.038	(2.044)	1.835	1.820	(1.898)	1.865	1.927	2.068	2.107	2.078	(2.098)	(1.978)
ALESEND													
1957	-0.192	-0.206	-0.330	-0.461	-0.497	-0.480	(-0.412)	-0.396	-0.212	-0.089	-0.199	-0.102	-0.293
1958	-0.258	-0.311	-0.488	-0.467	-0.409	-0.513	-0.459	-0.348	-0.290	-0.127	-0.212	-0.202	-0.341
1959	-0.314	-0.335	-0.331	-0.327	-0.506	-0.368	-0.277	-0.357	-0.357	-0.270	-0.243	-0.188	-0.331
1960	-0.350	0.327	-0.461	-0.474	-0.552	-0.492	-0.490	-0.377	-0.415	-0.437	-0.292	-0.279	-0.413
1961	-0.355	-0.290	-0.292	-0.428	-0.452	-0.395	-0.460	-0.375	-0.267	-0.253	-0.206	-0.240	-0.334
KJOLSDAL													
d 1959	0.022	-0.042	-0.013	0.021	-0.110	-0.009	0.030	-0.037	-0.089	0.045	0.047	0.069	-0.006
1960	-0.009	0.058	-0.127	-0.058	-0.150	-0.037	-0.065	0.062	0.037	-0.011	0.152	0.036	-0.009
1961	0.035	0.159	0.155	0.032	-0.005	0.098	0.025	0.046	0.127	0.185	0.166	0.106	0.094
MALOY													
1958	-0.265	-0.347	-0.515	-0.487	-0.437	-0.513	-0.467	-0.329	-0.290	-0.187	-0.295	-0.256	-0.366
1959	-0.387	-0.425	-0.401	-0.376	-0.578	-0.473	-0.440	-0.438	-0.462	-0.371	-0.335	-0.316	-0.417
1960	-0.496	-0.527	-0.571	-0.585	-0.614	-0.568	-0.528	-0.432	-0.479	-0.481	-0.327	-0.328	-0.495
1961	-0.408	-0.366	-0.383	-0.505	-0.532	-0.473	-0.539	-0.413	-0.295	-0.241	-0.256	-0.293	-0.392
BERGEN													
d 1959	0.040	-0.066	-0.032	0.016	-0.093	-0.050	-0.018	-0.035	-0.074	0.045	0.067	0.090	-0.009
1960	0.003	0.008	-0.131	-0.116	-0.135	-0.072	-0.029	0.066	0.036	0.066	0.174	0.146	0.001
1961	0.021	0.066	0.056	-0.029	-0.012	0.007	0.005	0.083	0.125	0.209	0.195	0.120	0.071
OSLO													
d 1959	-0.050	-0.140	-0.140	-0.077	-0.174	-0.034	-0.006	-0.054	-0.071	-0.009	-0.100	-0.117	-0.081
1960	-0.217	-0.271	-0.392	-0.249	-0.255	-0.028	-0.052	-0.032	-0.083	-0.249	-0.062	-0.083	-0.164
1961	-0.172	-0.061	0.027	-0.179	-0.122	0.019	0.014	0.049	0.025	0.080	0.039	0.001	-0.023

\* Erratum for 1951 data : December 2, 1955

d. Datum changed. See Table A.

## MEAN SEA LEVEL DATA (1959-1961)

## NORWAY

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>OSCARSBORG</b>													
d 1959	....	....	....	....	-0.160	-0.041	-0.008	-0.031	-0.044	0.216	-0.087	-0.076	(-0.029)
1960	-0.143	-0.223	-0.360	-0.211	-0.201	0.001	-0.016	0.029	-0.051	-0.269	-0.053	-0.107	-0.134
1961	-0.105	-0.059	0.076	-0.140	....	....	....	....	0.100	0.142	0.101	0.091	0.017

Unit : ± metre

<b>STAVANGER</b>													
d 1959	0.008	-0.132	-0.093	0.005	-0.196	-0.167	-0.077	-0.104	-0.157	-0.001	-0.031	0.030	-0.076
1960	-0.021	-0.081	-0.190	-0.210	-0.220	-0.149	-0.045	-0.014	-0.035	0.035	0.120	0.051	-0.063
1961	-0.048	0.010	-0.030	-0.090	-0.112	-0.069	-0.023	0.034	0.077	0.118	0.084	0.013	-0.003

## TREGDE

d 1959	0.092	-0.122	-0.082	-0.015	-0.186	-0.076	-0.040	0.000	-0.023	0.057	0.027	0.059	-0.026
1960	0.004	-0.046	-0.169	-0.116	-0.126	-0.075	0.011	0.013	0.014	0.047	0.139	0.034	-0.022
1961	-0.028	0.047	0.005	-0.032	0.028	0.007	0.062	0.071	0.074	0.150	0.112	0.038	0.045

## NEVLUNCHAVN

d 1959	0.023	-0.096	-0.102	-0.034	-0.122	-0.053	0.032	-0.004	-0.041	0.056	0.048	0.014	-0.023
1960	-0.107	-0.132	-0.242	-0.135	-0.134	-0.023	0.012	(-0.058)	....	-0.130	0.081	0.013	(-0.078)
1961	-0.073	0.025	0.053	-0.073	-0.006	0.030	0.104	0.111	0.106	0.193	0.098	0.066	0.053

## SWEDEN

## STROMSTAD

1959	200.3	186.4	188.8	193.0	185.3	196.4	200.2	196.5	192.0	201.3	193.6	194.5	194.1
1960	183.5	179.0	170.3	180.7	182.4	197.2	198.4	200.6	195.4	179.7	202.1	198.9	189.0
1961	193.7	202.7	211.9	191.8	195.8	209.1	210.1	212.3	206.9	213.7	208.9	206.0	205.2

Unit : ± cm.

## SMOGEN

1959	203.4	193.0	191.2	196.5	187.2	198.0	202.6	200.4	197.4	206.4	195.4	193.3	197.1
1960	183.3	180.6	169.0	178.6	187.7	199.1	202.2	205.2	202.3	190.5	209.2	204.4	192.7
1961	197.3	204.8	211.9	198.3	(200.6)	(210.6)	212.8	(216.6)	213.8	214.6	211.6	208.5	208.4

## GOTEBORG

1959	226	210	205	211	201	212	217	215	217	226	213	210	214
1960	206	204	190	193	201	212	215	218	216	204	225	227	209.2
1961	219	226	235	217	(219)	228	(233)	236	232	234	233	228	(228.3)

## VARBERG

1959	224.9	210.3	204.2	210.3	199.9	213.3	215.8	214.4	215.6	220.5	207.5	200.9	211.5
1960	202.8	196.7	185.2	194.5	202.6	212.1	217.0	219.8	215.5	203.4	216.8	218.9	207.1
1961	207.9	215.9	227.8	(209.2)	214.8	224.9	229.4	231.8	225.7	223.4	225.6	222.2	(221.6)

## KLAGSHAMN

1959	233	211	213	215	202	220	223	222	222	215	210	193	214.9
1960	217	201	195	194	208	214	225	227	230	215	208	227	214.4
1961	205	215	(227)	222	220	226	238	239	232	212	224	227	(223.9)

## YSTAD

1959	232.9	214.2	216.4	216.8	203.5	220.4	224.9	221.0	226.9	216.8	212.6	194.8	216.8
1960	219.1	200.0	192.9	192.5	208.7	213.8	226.9	229.0	231.7	215.8	208.4	229.9	214.1
1961	206.2	216.6	229.0	(234.8)	220.4	227.1	238.5	240.5	234.1	210.7	224.7	228.9	(226.0)

## KUNGSHOLMSFORT

1959	240.1	219.9	217.3	217.8	204.3	222.6	226.7	209.1	230.9	219.7	212.2	193.3	217.8
1960	220.2	202.3	191.8	194.4	211.7	219.3	230.4	232.5	235.0	214.7	211.5	235.1	216.6
1961	210.0	221.4	238.9	(236.8)	224.4	232.4	244.9	246.6	237.7	213.6	229.9	(235.4)	(231.0)

## ÖLANDS N. UDDE

1959	246	221	214	216	202	223	225	222	231	220	210	191	218.4
1960	222	202	186	193	209	221	232	234	234	209	211	235	215.7
1961	210	221	244	234	220	231	248	248	236	211	227	233	230.2

## LANDSORT

1959	217.6	192.8	186.9	188.1	173.4	193.4	196.4	192.0	200.9	192.7	184.7	162.5	190.1
1960	187.8	174.6	154.6	164.5	180.7	193.2	204.1	204.9	203.4	177.9	182.8	208.0	186.4
1961	183.1	196.7	215.3	204.6	192.4	204.0	218.3	221.0	209.5	186.1	201.6	207.3	203.3

d. Datum changed. See Table A.

## SWEDEN

Years	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>NEDRE SÖDERTÄLJE</b>													
1959	212	192	192	192	178	192	198	191	198	193	187	165	190.9
1960	189	181	155	165	181	193	204	205	203	178	184	208	187.2
1961	184	199	214	207	192	204	218	221	211	189	203	207	204.1
<b>STOCKHOLM</b>													
1959	221.6	196.7	191.5	192.6	177.0	197.1	198.3	192.7	201.5	193.7	187.7	166.8	193.1
1960	190.3	177.0	156.9	167.9	183.9	195.2	206.3	208.0	206.5	181.0	187.3	212.8	189.4
1961	186.5	200.3	218.5	209.1	(196.9)	211.0	(227.5)	223.8	212.3	189.5	(208.8)	210.6	(207.9)
<b>BJORN</b>													
1959	204.9	178.6	175.0	175.7	159.0	181.7	180.7	173.8	184.8	180.3	175.6	153.1	176.9
1960	176.4	160.1	138.9	152.1	166.4	180.4	190.2	192.1	190.4	161.6	171.9	196.9	173.1
1961	169.9	187.3	202.2	192.1	177.5	190.9	205.6	208.3	196.8	176.1	190.2	196.4	191.1
<b>NEDRE GAVLE</b>													
1959	205	183	177	178	162	182	182	174	184	180	176	156	178.4
1960	173	162	142	152	167	181	190	193	187	160	171	195	172.8
1961	168	185	199	190	175	188	203	206	194	172	187	191	188.2
<b>DRAGHALLAN</b>													
1959	184.6	164.3	159.6	158.1	142.5	162.9	162.9	154.0	164.5	162.7	162.0	140.6	159.9
1960	153.3	146.7	126.2	137.3	151.6	165.5	174.7	177.0	171.1	143.4	154.7	178.6	156.7
1961	154.6	171.9	185.1	176.3	161.3	176.7	190.4	193.3	179.1	162.8	173.2	177.5	175.2
<b>RATAN</b>													
1959	175.0	166.8	162.9	154.9	141.8	162.9	160.5	147.5	158.8	158.3	160.3	137.5	157.3
1960	141.6	141.9	122.4	135.9	150.2	162.9	169.3	170.8	166.1	136.4	147.6	175.2	151.7
1961	152.7	173.6	185.7	177.0	158.8	175.2	188.0	(187.5)	179.9	167.3	177.1	175.3	(174.8)
<b>FURUOGRUND</b>													
1959	175.9	169.7	164.4	154.2	141.6	164.6	162.9	149.8	160.3	157.9	161.6	141.4	158.7
1960	148.2	147.4	123.9	136.2	147.3	163.3	168.0	170.8	164.3	134.2	145.0	174.5	151.9
1961	151.3	174.3	185.3	(173.9)	153.8	(176.0)	187.7	187.2	(181.3)	(168.3)	(177.2)	174.0	174.2
<b>FINLAND</b>													
<b>KEMI</b>													
1959	182.5	180.9	174.4	(160.3)	150.8	175.2	173.2	(163.0)	168.5	165.8	172.6	(152.4)	168.3
1960	(152.4)	155.0	(131.2)	(143.3)	156.3	171.9	176.5	176.4	171.9	(140.6)	151.3	181.4	(159.0)
1961	159.6	182.6	195.9	183.1	162.1	186.1	197.0	191.2	192.5	183.9	192.0	186.1	184.3
<b>OULU/ULEABORG</b>													
1959	183.5	181.6	175.1	161.9	153.3	175.4	174.4	162.8	174.1	166.6	169.8	151.9	169.2
1960	153.8	156.9	134.1	146.0	161.9	175.9	172.8	176.1	171.5	143.6	150.8	182.4	160.5
1961	161.8	183.9	197.3	184.5	163.9	(185.8)	197.5	191.3	(193.1)	181.6	192.7	188.7	185.2
<b>RAAHE/BRAHESTAD</b>													
1959	180.7	177.7	171.7	158.6	148.8	171.1	170.4	161.1	170.4	164.5	166.7	(145.7)	165.6
1960	150.8	153.2	128.9	(142.0)	154.5	170.3	174.0	174.2	169.3	140.3	149.3	(179.3)	157.2
1961	158.7	180.9	194.0	181.3	161.0	181.3	193.7	191.0	187.7	(176.7)	(188.6)	(184.6)	(181.7)
<b>PIETARSAARI/JAKOBSTAD</b>													
1959	(178.6)	171.2	(166.1)	(155.4)	(143.4)	(165.8)	164.5	155.0	165.6	159.8	159.8	138.3	(160.3)
1960	147.7	147.2	124.0	136.0	149.7	165.0	170.0	171.0	166.5	137.3	146.9	175.1	153.0
1961	153.5	175.1	188.8	176.4	157.2	177.1	189.4	189.1	182.1	168.3	179.4	179.9	176.4
<b>VAASA/VASA</b>													
1959	185.4	172.4	167.3	(160.5)	147.9	170.0	169.3	(160.4)	(168.9)	167.6	(162.7)	140.7	(164.4)
1960	154.1	(149.9)	(125.3)	(137.5)	(153.0)	(167.1)	(175.3)	(176.5)	(171.7)	(143.4)	(153.7)	(179.8)	(157.3)
1961	(157.5)	177.9	(191.1)	(179.3)	(161.6)	(181.1)	194.2	194.7	184.9	169.8	182.2	184.2	(179.9)
<b>KASKINEN/KASKO</b>													
1959	189.6	173.7	168.2	163.6	148.7	(170.9)	170.1	162.0	172.0	168.2	166.4	142.6	166.3
1960	158.6	(151.9)	129.0	141.2	155.7	170.8	179.0	180.2	175.4	147.1	157.5	183.6	160.8
1961	161.5	180.4	193.7	182.2	165.9	183.2	196.9	197.8	186.0	170.6	183.1	187.4	182.4

## MEAN SEA LEVEL DATA (1959-1961)

## FINLAND

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>MANTYLUOTO</b>													
1959	193.4	176.7	170.6	166.0	151.8	173.5	173.2	165.9	175.9	171.1	166.3	141.3	168.8
1960	162.0	154.8	131.6	143.6	158.8	173.5	181.7	183.0	178.1	150.0	159.1	186.0	163.5
1961	164.1	182.3	198.1	185.1	169.6	185.9	199.4	201.6	188.7	170.6	185.3	190.5	185.1
<b>RAUMA/RAUMO</b>													
1959	196.2	178.2	170.8	167.6	154.0	176.0	176.0	169.8	179.5	173.9	168.1	(142.8)	171.1
1960	165.0	156.7	133.9	145.8	161.6	176.2	184.5	185.7	180.8	152.9	161.2	188.2	166.0
1961	165.9	183.6	200.7	187.2	172.2	188.1	201.9	204.5	191.0	172.1	187.4	192.6	187.3
<b>HELSINKI/HELSINGFORS</b>													
1959	(213.2)	197.5	183.0	180.1	169.1	189.6	188.7	185.7	197.4	186.4	174.1	145.2	184.2
1960	178.5	167.5	144.6	156.6	174.0	188.5	195.4	196.8	(194.1)	(165.0)	171.7	200.5	177.8
1961	179.5	194.2	219.1	199.7	186.1	200.9	212.8	(220.6)	203.5	180.2	199.8	208.2	200.4
<b>HAMINA/FREDRIKSHAMN</b>													
1959	211.2	(200.4)	(186.8)	(179.9)	(170.2)	191.1	190.2	189.2	201.4	188.2	174.4	140.9	(185.3)
1960	175.6	167.2	145.5	(157.8)	(174.3)	191.8	195.9	195.8	193.7	162.0	168.8	197.9	177.2
1961	181.9	199.3	224.5	201.2	187.0	203.7	217.1	224.7	205.9	182.9	203.0	211.4	203.6
<b>TURKU/ABO</b>													
1959	205.8	184.6	175.2	(172.8)	159.9	182.1	182.7	177.9	186.5	178.9	170.8	144.2	176.8
1960	172.7	161.0	138.8	151.2	167.8	182.2	190.6	192.5	188.1	159.8	167.5	195.8	172.3
1961	173.0	189.2	210.9	194.8	(180.2)	194.9	208.3	211.7	196.9	176.3	(195.8)	200.1	(194.3)
<b>DEGERBY</b>													
1959	(203.7)	(182.4)	(174.2)	(172.8)	159.5	181.5	181.8	178.0	187.7	180.0	(171.8)	(147.2)	176.7
1960	172.9	161.5	139.8	151.6	166.9	(181.1)	189.5	191.5	187.8	160.1	167.7	194.3	172.1
1961	170.8	187.1	206.2	192.3	178.8	(192.6)	206.4	209.5	196.4	175.6	191.9	198.3	192.2
<b>HANKO/HANGO</b>													
1959	212.8	191.4	(180.1)	177.0	165.7	187.0	187.1	184.7	193.6	184.8	(176.5)	148.3	(182.4)
1960	178.7	166.8	144.1	156.1	172.4	185.3	194.2	196.7	192.1	165.3	(172.4)	200.0	177.0
1961	177.4	192.0	214.4	(196.8)	(183.2)	197.6	(210.7)	(216.8)	(201.7)	(178.1)	197.7	205.8	(197.7)

## SOVIET UNION (BALTIC COAST)

KALININGRAD													Unit : 1 cm.
1959	526	508	497	498	486	509	509	507	519	503	486	.....	.....
<b>DENMARK</b>													
<b>GEDSER</b>													
1959	0.101	0.008	0.081	0.080	-0.028	0.085	0.137	0.105	0.144	0.014	0.013	-0.170	0.047
1960	0.087	-0.086	-0.066	-0.165	0.024	0.040	0.157	0.176	0.228	0.134	-0.029	0.116	0.052
1961	-0.059	0.023	0.080	0.246	0.104	0.135	0.218	0.250	0.239	0.002	0.084	0.130	0.121
<b>RODBYHAVN</b>													
1959	0.068	-0.010	0.089	0.066	-0.051	0.057	0.114	0.076	0.104	0.012	0.005	-0.137	0.033
1960	0.068	-0.097	-0.048	-0.165	-0.003	0.004	0.121	0.168	0.214	0.152	-0.071	0.093	0.038
1961	-0.063	0.002	0.026	0.251	0.082	0.128	0.202	0.238	0.008	0.090	0.086	0.107	
<b>KOBENHAVN</b>													
1959	0.136	0.009	-0.071	-0.024	-0.115	0.054	0.083	0.068	0.095	0.039	-0.087	-0.182	0.000
1960	-0.041	-0.194	-0.230	-0.194	-0.086	0.011	0.059	0.112	0.089	-0.034	-0.030	0.092	-0.036
1961	-0.120	-0.012	0.159	0.059	0.065	0.161	0.205	0.223	0.151	0.022	0.115	0.104	0.095
<b>HORNBAEK</b>													
1959	0.125	-0.018	-0.136	-0.033	-0.115	0.048	0.057	0.055	0.082	0.036	-0.148	-0.143	-0.016
1960	-0.064	-0.243	-0.297	-0.171	-0.098	0.014	0.044	0.086	0.041	-0.120	-0.056	0.028	-0.069
1961	-0.103	-0.025	0.186	-0.040	0.058	0.161	0.166	0.218	0.112	0.003	0.094	0.029	0.072
<b>KORSOR</b>													
1959	0.120	0.026	0.030	0.054	-0.040	0.059	0.119	0.099	0.108	0.068	-0.011	-0.064	0.048
1960	0.059	-0.102	-0.089	-0.099	0.001	0.033	0.117	0.166	0.167	0.105	0.014	0.110	0.041
1961	-0.030	0.044	0.122	0.153	0.099	0.152	0.184	0.229	0.209	0.058	0.136	0.121	0.123

## DENMARK

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>SLIPSHAVN</b>													
1959	0.096	0.007	-0.021	0.009	-0.077	0.057	0.091	0.105	0.108	0.037	-0.070	-0.081	0.022
1960	'0.037	-0.139	-0.117	-0.102	-0.040	0.007	0.069	0.137	0.133	0.079	0.015	0.062	0.012
1961	-0.071	0.012	0.131	0.059	0.108	0.138	0.144	0.187	0.155	0.032	0.119	0.091	0.092
<b>MOMMARK</b>													
1959	0.103	0.007	0.106	0.074	0.020	0.120	0.146	0.137	0.139	0.044	0.062	-0.019	0.079
1960	0.099	-0.059	0.009	-0.076	0.025	0.038	0.124	0.197	0.240	0.231	0.050	0.087	0.081
1961	-0.010	0.064	0.048	0.213	0.135	0.166	0.190	0.234	0.254	0.107	0.150	0.139	0.141
<b>FREDERICIA</b>													
1959	0.097	-0.016	0.019	0.031	-0.063	0.048	0.084	0.100	0.090	0.056	-0.012	0.001	0.037
1960	0.067	-0.077	-0.062	-0.079	-0.036	-0.004	0.054	0.141	0.144	0.144	0.090	0.076	0.039
1961	-0.027	0.036	0.076	0.082	0.108	0.121	0.117	0.169	0.166	0.098	0.147	0.149	0.104
<b>AARHUS</b>													
1959	0.057	-0.051	-0.074	-0.029	-0.131	0.012	0.040	0.044	0.053	0.034	-0.062	-0.022	-0.010
1960	0.008	-0.141	-0.155	-0.118	-0.102	-0.024	0.018	0.100	0.051	0.050	0.069	0.033	-0.017
1961	-0.076	0.012	0.090	-0.035	0.063	0.094	0.073	0.123	0.094	0.075	0.115	0.078	0.059
<b>FREDERIKSHAVN</b>													
1959	.....	.....	.....	.....	-0.159	-0.015	0.001	0.005	0.001	0.037	-0.070	-0.050	.....
1960	-0.054	-0.153	-0.245	-0.160	-0.152	-0.033	-0.003	0.048	-0.013	-0.055	0.087	0.019	-0.059
1961	-0.078	0.009	0.100	-0.120	-0.012	0.096	0.084	0.118	0.069	0.099	0.111	0.057	0.045
<b>HIRTSHALS</b>													
1959	0.055	-0.160	-0.219	-0.128	-0.227	-0.098	-0.051	-0.068	-0.055	0.003	-0.122	-0.128	-0.099
1960	-0.159	-0.202	-0.398	-0.257	-0.195	-0.067	-0.024	0.005	-0.096	-0.209	0.046	-0.016	-0.131
1961	-0.129	0.002	0.088	-0.162	-0.046	0.053	0.060	0.091	0.034	0.052	0.034	0.006	0.007
<b>ESBJERG</b>													
1959	0.406	-0.020	-0.057	0.087	-0.108	0.035	0.079	0.039	0.035	0.259	0.043	0.106	0.076
1960	0.042	0.010	-0.316	-0.047	-0.076	0.075	0.168	0.177	0.069	0.022	0.370	0.254	0.062
1961	0.061	0.231	0.306	0.029	0.110	0.172	0.239	0.280	0.185	0.303	0.194	0.251	0.197

## GERMANY (NORTH SEA)

GERMANY (NORTH SEA)													
HELIGOLAND													
1960	-36.2	-45.2	-70.8	-47.4	-46.7	-35.7	--29.7	-22.3	-30.3	-36.8	-17.6	-26.0	-37.1
BUSUM													
1960	-8.7	-15.7	-43.1	-18.3	-16.7	0.3	4.2	5.6	-4.9	-12.9	16.8	9.0	-7.0
+ CUXHAVEN													
1938	22.9	-4.7	16.4	9.2	-8.6	8.0	-4.1	0.7	-1.4	23.2	25.8	-25.5	5.2
1939	-0.2	8.0	-10.4	0.6	-17.4	-4.8	5.9	-3.3	-3.1	-27.1	13.9	-0.6	-3.3
1940	-30.0	-34.7	6.3	-7.2	-9.5	-5.8	6.1	23.0	26.1	-10.9	31.4	1.1	-0.3
1941	-46.8	-15.5	-11.1	-26.2	-10.6	0.9	2.8	19.1	-1.9	17.4	-29.3	28.8	-5.9
1942	-40.6	-31.6	-41.0	-24.0	-7.0	1.2	6.6	-0.1	13.4	29.4	18.6	22.4	-4.2
1943	-6.3	28.3	-9.3	23.0	-9.6	0.6	5.9	16.8	6.1	0.5	15.8	-2.9	5.5
1944	36.2	1.0	14.3	-4.6	2.9	4.7	2.7	-0.1	13.3	-4.4	19.6	6.7	7.7
1945	1.2	10.3	13.3	7.7	-0.3	10.3	11.1	11.5	2.8	15.1	0.9	11.5	8.0
1946	2.0	39.3	-15.5	5.2	-10.3	12.1	6.7	....	....	....	....	-16.3	(2.4)
1947	-45.4	-77.3	-6.7	9.6	-26.3	1.2	1.8	9.2	10.4	-14.8	35.9	16.4	-8.4
1948	13.2	-7.8	0.7	-1.1	-8.0	5.2	9.5	14.2	28.7	20.8	12.8	3.7	7.7
1949	27.7	22.7	-10.2	17.4	-1.6	6.1	6.3	11.6	-2.5	15.5	4.7	38.4	11.3
1950	-11.9	13.3	1.1	11.9	-9.2	5.2	5.5	3.6	29.4	12.4	9.6	6.0	6.3
1951	10.0	-10.7	-3.3	4.6	-14.8	-1.5	3.1	6.6	7.6	-17.0	14.4	39.4	3.3
1952	22.6	19.5	-21.0	-4.4	0.0	10.9	4.7	8.1	19.5	12.8	12.8	8.7	7.8
1953	7.9	6.7	-4.4	-8.7	0.0	-2.6	12.4	20.2	16.3	5.5	11.1	-0.1	5.4
1954	-2.8	-40.3	-11.9	-8.9	-12.0	2.7	19.8	15.0	30.8	25.4	5.0	39.8	5.6
1955	3.5	-2.5	-11.6	0.8	12.2	-2.9	2.3	2.1	17.1	23.8	14.1	38.0	8.2
1956	12.6	-30.3	-14.1	-4.8	-1.9	3.3	11.6	18.7	4.8	14.6	10.5	4.0	2.6
1957	12.2	11.7	-3.1	-12.3	-8.9	-1.2	4.8	14.4	24.9	24.4	2.0	11.9	6.7
1958	12.3	22.2	-20.2	-9.0	-1.1	-3.5	15.4	8.8	5.9	22.1	-1.3	17.3	5.7
1959	34.4	-7.3	-14.1	2.5	-11.9	1.5	4.9	4.1	1.9	13.0	-11.6	-11.2	0.6

† To replace values previously published in P.S. N° 12 and 19.

## MEAN SEA LEVEL DATA (1959-1961)

## GERMANY (NORTH SEA)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
WILHELMSHAVEN													
1936	5.7	-18.1	-25.8	1.0	-22.5	-10.4	-1.5	-1.9	-11.7	23.1	-4.0	16.0	-4.2
1960	-2.9	-14.5	-36.4	-12.2	-10.3	0.6	5.2	8.6	-4.8	-5.6	14.2	8.4	-4.1
MELLUM PLATE													
1960	-16.8	-25.7	-49.8	-25.1	-23.5	-1.0	5.9	10.1	-0.7	-0.5	21.5	5.8	-8.3
NETHERLANDS													
DELFIJL													
1959	22.0	-17.0	-18.7	-4.7	-16.9	-5.0	-0.7	-1.5	-4.2	5.3	-14.4	-11.9	-5.6
1960	-1.7	-9.4	-31.7	-6.8	-10.7	-2.3	5.5	11.2	2.6	3.7	19.4	11.2	-0.8
1961	-8.9	7.8	21.3	-4.2	8.4	10.3	20.0	18.3	9.5	9.6	8.8	11.6	9.4
TERSCHELLING													
1959	20.7	-20.2	-16.0	-6.6	-21.8	-9.6	-6.0	-8.0	-10.2	8.4	-9.4	-3.9	-6.9
1960	-3.2	-9.7	-30.2	-14.2	-18.3	-7.5	-0.6	2.7	-2.0	4.1	19.4	6.5	-4.3
1961	-12.4	0.7	4.2	-13.9	-8.0	-5.6	0.9	2.6	-2.9	7.1	-1.0	3.2	-2.1
HARLINGEN													
1959	26.2	-18.5	-14.8	-4.0	-19.0	-5.6	-4.3	-6.8	-10.1	9.9	-10.9	-6.2	-5.3
1960	1.5	-9.1	-31.4	-10.9	-18.0	-4.3	3.0	6.5	1.1	7.4	23.5	10.6	-1.7
1961	-7.3	9.9	16.1	-5.9	3.6	3.9	12.6	12.6	4.1	13.7	4.0	10.5	6.5
DEN HELDER													
1959	17.0	-25.7	-18.4	-9.3	-22.3	-11.3	-8.7	-10.9	-14.3	3.2	-13.6	-7.7	-10.2
1960	-6.6	-14.5	-30.8	-15.8	-19.8	-9.9	-2.4	0.5	-4.6	3.9	19.6	2.6	-6.8
1961	-12.5	1.0	2.1	-12.5	-6.3	-3.4	1.4	3.5	-2.3	7.7	-1.8	4.1	-1.6
IJMUIDEN													
1959	19.5	-24.1	-15.0	-6.5	-19.1	-8.3	-4.8	-7.6	-11.0	7.2	-10.7	-5.5	-7.2
1960	-2.0	-9.7	-24.4	-12.4	-14.7	-5.1	2.9	6.3	0.5	9.5	18.8	5.3	-2.1
1961	-9.1	4.2	3.7	-7.4	-1.3	2.0	6.0	7.7	2.8	11.1	1.9	7.5	2.4
HOEK VAN HOLLAND													
1959	17.3	-24.9	-16.9	-9.0	-20.4	-10.9	-8.3	-11.2	-13.6	0.4	-16.8	-11.4	-10.5
1960	-6.3	-13.9	-25.4	-15.6	-16.8	-8.9	-2.6	1.8	-3.0	8.5	15.2	3.9	-5.3
1961	-8.2	5.0	3.2	-5.8	1.0	3.4	7.5	8.0	2.9	8.7	2.9	9.1	3.1
HELLEVOETSLUIS													
1959	31.8	-13.4	-5.7	2.9	-8.8	0.9	2.8	-0.7	-3.3	10.2	-11.2	-5.1	0.0
1960	2.8	-5.8	-17.2	-6.5	-8.4	-0.1	5.2	9.7	5.8	16.6	21.1	9.4	2.7
1961	-3.7	8.9	8.6	-1.3	8.3	11.2	15.5	17.2	10.7	17.4	13.7	19.4	10.4
BROUWERSHAVEN													
1959	18.9	-22.8	-12.8	-4.4	-15.4	-6.8	-4.6	-7.1	-8.2	4.9	-14.8	-9.1	-6.8
1960	-5.9	-12.8	-22.9	-12.5	-13.6	-6.7	-1.9	2.7	-1.9	8.1	10.2	1.3	-4.7
1961	-9.2	0.5	2.0	-7.3	0.4	0.7	4.3	5.3	0.0	6.2	0.6	5.0	0.6
ZIERIKZEE													
1959	18.5	-22.9	-12.5	-5.3	-18.3	-9.7	-8.0	-10.6	-12.2	0.6	-16.7	-10.6	-9.0
1960	-7.1	-14.8	-23.5	-11.7	-13.3	-6.4	-0.9	2.8	-0.8	9.8	14.7	2.4	-4.1
1961	-9.2	1.4	2.7	-6.8	-1.2	0.0	3.5	4.9	-0.2	7.2	1.0	6.1	0.8
VLASSINGEN													
1959	16.4	-24.8	-11.4	-4.4	-16.9	-7.6	-5.6	-7.3	-9.4	5.1	-11.8	-6.7	-7.0
1960	-6.5	-13.2	-22.3	-14.7	-15.5	-8.7	-2.7	0.9	-2.6	8.6	13.1	0.3	-5.3
1961	-10.9	-1.4	-1.5	-7.6	-3.0	-2.6	0.5	2.6	-1.1	5.8	0.1	6.1	-1.1
BRITISH ISLES													
LERWICK													
1959	3.33	3.24	3.39	3.41	2.90	3.28	3.36	3.29	3.38	3.68	3.66	3.81	3.394
1960	3.37	3.40	3.09	3.15	3.06	3.23	3.42	3.48	3.45	3.53	3.93	3.77	3.41
1961	3.40	3.63	3.53	3.29	3.26	3.48	3.36	3.54	3.73	3.92	3.74	3.65	3.55

## BRITISH ISLES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>INVERGORDON</b>													
1959	....	....	....	....	....	7.28	7.57	7.51	7.56	7.92	7.91	8.01	....
1960	7.62	7.75	7.46	7.41	7.43	7.57	7.84	7.80	7.68	7.89	8.31	7.92	7.721
1961	7.71	7.94	7.65	7.68	7.56	7.72	7.59	7.78	(8.11)	8.17	7.96	7.96	7.812
<b>ABERDEEN</b>													
1931	....	....	....	....	....	9.66	9.93	9.59	9.48	10.02	10.21	9.99	....
1932	10.29	9.25	9.62	9.66	9.53	9.46	9.76	9.61	9.90	10.18	9.94	10.16	9.784
1933	9.88	9.67	9.76	9.47	9.42	9.48	9.72	9.76	9.60	9.95	9.82	9.65	9.682
1934	10.02	9.92	9.56	9.49	9.55	9.33	9.51	9.84	9.98	10.12	9.80	10.27	9.781
1959	0.99	0.65	0.88	0.87	0.35	0.70	0.75	0.75	0.72	0.79	1.11	1.16	1.33 0.86
1960	0.98	0.97	0.54	0.70	0.60	0.75	0.94	0.94	0.85	1.28	1.55	1.12	0.936
1961	0.94	1.16	1.07	0.92	0.76	0.89	0.79	0.92	1.12	1.26	1.17	1.18	1.012
<b>LEITH</b>													
1959	22.51	22.09	22.36	22.36	22.04	22.28	22.48	22.28	22.41	22.69	22.62	22.63	22.396
1960	22.47	(22.41)	(22.18)	22.12	(22.31)	22.30	22.49	22.51	22.58	22.79	23.03	22.72	22.504
1961	22.48	22.60	22.44	22.38	22.39	22.45	22.33	22.41	22.74	22.80	22.74	22.82	22.543
<b>TYNEMOUTH</b>													
1959	7.99	7.47	7.69	7.72	7.34	7.64	7.69	7.63	7.73	8.03	7.86	7.92	7.728
1960	7.96	7.83	7.53	7.49	7.58	7.70	7.85	7.94	7.89	8.21	8.32	8.03	7.861
1961	7.78	7.90	7.89	7.73	7.75	7.84	7.74	7.88	8.02	8.13	8.21	8.20	7.921
<b>SCARBOROUGH</b>													
1959	....	....	....	....	....	....	....	....	....	(9.91)	8.96	9.09	....
1960	(9.04)	(8.87)	(8.76)	(8.75)	(9.16)	9.05	9.35	9.46	9.43	9.63	9.74	9.56	(9.237)
1961	9.29	9.34	9.40	9.27	9.38	9.44	9.42	9.42	9.41	9.64	9.58	9.61	9.434
<b>IMMINGHAM</b>													
1959	....	....	....	....	....	....	....	....	....	38.69	38.32	38.36	....
1960	38.55	38.41	38.22	38.17	38.13	38.20	38.37	38.56	38.54	38.89	38.77	38.62	38.454
1961	38.24	38.40	38.47	38.35	(38.46)	38.46	38.45	38.49	38.70	38.86	38.79	38.73	38.537
<b>LOWESTOFT</b>													
1955	15.24	15.19	14.93	14.82	....	....	15.20	15.18	15.44	15.73	15.54	15.45	(15.263)
1956	15.19	14.80	15.00	14.87	14.85	14.78	15.04	15.38	15.28	15.41	15.23	14.77	15.053
1957	15.11	15.24	14.94	14.82	....	....	....	....	15.37	15.36	15.30	15.26	(15.173)
1958	15.19	15.44	14.83	14.94	14.83	15.03	15.20	15.35	15.34	15.26	14.98	15.54	15.166
1959	....	....	....	....	....	....	....	....	....	15.37	14.77	14.82	....
1960	14.99	14.83	14.74	14.88	15.03	15.10	15.16	15.42	15.51	15.72	15.40	15.42	15.185
1961	15.10	15.16	15.36	15.10	15.39	15.25	15.28	15.20	15.19	15.33	15.54	15.63	15.294
<b>HARWICH</b>													
1959	....	....	....	....	....	....	....	....	....	(7.27)	6.56	6.66	....
1960	7.02	6.84	6.62	6.60	6.83	6.89	6.95	7.17	7.08	7.27	7.22	7.05	6.964
1961	6.63	6.78	6.96	6.86	(7.07)	6.96	7.07	7.08	7.17	7.20	7.27	7.15	7.018
<b>SOUTHEND</b>													
1959	10.71	10.05	10.30	10.34	10.25	10.32	10.32	10.39	10.55	10.52	10.05	9.93	10.312
1960	10.27	10.15	10.12	10.09	10.23	10.25	10.19	10.51	10.50	10.70	10.50	10.27	10.304
1961	10.10	10.28	10.40	10.08	10.45	10.21	10.38	11.03	10.35	10.38	10.68	10.57	10.409
<b>SHEERNESS</b>													
1959	0.39	-0.27	0.07	0.18	0.05	0.13	0.11	0.16	0.33	0.36	-0.08	-0.30	0.09
1960	0.10	0.12	(-0.20)	(-0.04)	(0.04)	(0.14)	(0.04)	(0.35)	0.30	(0.55)	....	(0.18)	....
1961	-0.21	(-0.20)	0.14	....	0.27	0.02	0.13	(0.20)	0.12	0.26	0.49	(0.46)	(0.15)
<b>TILBURY</b>													
1959	10.74	10.17	10.37	10.28	10.28	10.36	(10.46)	10.50	10.68	10.57	10.09	10.23	10.394
1960	10.50	10.41	10.28	10.10	10.27	10.33	10.20	10.56	10.61	10.88	10.61	10.45	10.434
1961	10.50	10.49	10.56	10.47	10.56	10.58	10.49	11.04	10.57	10.43	10.95	10.84	10.624
<b>RAMSGATE</b>													
1961	11.19	10.82	10.88	10.89	(11.09)	10.89	(10.98)	10.90	10.99	11.25	11.27	11.18	11.033

## MEAN SEA LEVEL DATA (1959-1961)

## BRITISH ISLES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>DOVER</b>													
1959	9.960	(8.876)	(9.265)	9.512	9.159	9.380	9.620	9.704	9.535	9.856	9.555	9.713	(9.511)
1960	9.73	9.68	9.41	9.35	9.47	9.65	9.88	10.00	9.95	10.38	10.33	10.00	9.820
1961	9.74	9.85	9.05	9.76	9.81	9.80	9.91	9.91	9.62	10.28	10.09	10.20	9.836
<b>DEVONPORT</b>													
1961	....	....	....	....	....	....	....	....	9.704	10.025	9.479	9.772	....
<b>NEWLYN</b>													
1959	9.921	9.205	9.904	9.709	9.479	9.485	9.547	9.484	9.727	9.879	9.978	10.217	9.711
1960	9.718	10.056	10.038	9.423	9.649	9.594	9.704	9.952	9.829	10.488	10.460	9.797	9.892
1961	9.787	9.593	9.308	9.921	9.713	9.580	9.576	9.496	9.880	10.111	9.944	10.278	9.765
<b>SWANSEA</b>													
1960	....	....	....	....	....	....	....	26.23	26.22	26.74	(27.22)	(26.22)	....
1961	26.32	26.15	25.76	26.37	26.13	26.00	26.03	26.06	26.45	26.70	26.30	26.52	26.233
<b>MILFORD HAVEN (NEWTON NOYES PIER)</b>													
1959	0.70	0.32	0.95	0.61	0.22	0.40	0.45	(0.64)	1.06	1.00	1.16	1.36	0.74
1960	0.45	1.05	(0.86)	0.60	0.43	0.35	0.70	0.87	0.68	1.28	1.68	0.76	0.81
1961	0.75	0.53	0.23	0.74	0.50	0.29	0.45	0.39	0.83	1.00	0.62	1.36	0.64
<b>FISHGUARD</b>													
1959	....	....	....	....	....	(6.52)	6.59	6.53	6.64	6.94	6.98	7.17	....
1960	6.64	6.90	6.79	6.38	6.56	6.51	6.77	6.93	6.74	7.31	7.56	6.85	6.830
1961	(6.70)	(6.75)	6.25	6.87	6.60	6.52	6.54	6.58	6.98	7.23	6.87	7.15	6.758
<b>HOLYHEAD</b>													
1958	26.53	26.47	26.38	25.08	25.91	25.97	25.31	26.11	26.23	26.39	25.88	26.37	26.052
1959	26.434	25.341	26.053	25.367	25.855	26.036	26.141	25.994	26.131	26.454	26.635	26.510	26.079
d 1960	22.92	23.16	23.02	22.65	22.73	22.70	22.93	22.97	23.01	23.47	23.78	23.00	23.025
1961	22.96	(22.86)	(22.54)	23.03	22.82	22.83	22.64	22.84	23.22	23.26	22.95	23.22	22.940
<b>HILBRE ISLAND</b>													
1959	....	(14.38)	15.34	15.21	14.73	15.13	15.35	15.23	15.09	15.46	15.51	16.02	(15.238)
1960	15.40	15.62	15.16	(14.99)	15.10	....	....	....	....	....	16.07	15.39	....
1961	(15.18)	15.48	15.17	15.36	15.33	15.42	15.37	15.55	15.49	15.69	15.48	(15.25)	(15.431)
<b>LIVERPOOL (PRINCES PIER)</b>													
1959	15.34	14.52	15.19	15.12	14.69	15.06	15.03	15.07	15.03	15.50	15.45	15.84	15.156
1960	15.21	15.54	15.03	14.95	15.00	15.11	15.37	15.48	15.19	15.64	16.15	15.53	15.345
1961	15.30	15.43	14.95	15.20	15.03	15.15	15.19	15.32	15.54	(15.87)	(15.24)	15.52	15.292
<b>BIRKENHEAD (ALFRED DOCK)</b>													
1959	15.62	14.81	15.34	15.43	14.94	14.93	15.05	14.96	14.99	15.40	15.14	15.86	15.206
1960	15.21	(15.30)	14.86	14.99	14.95	15.08	15.34	15.50	15.15	15.44	16.09	15.46	15.273
1961	15.28	15.44	14.88	15.18	15.10	15.04	15.12	(15.28)	(15.44)	15.75	15.36	15.53	15.277
<b>HEYSHAM</b>													
1959	....	....	30.12	30.20	29.78	30.10	30.01	30.28	30.12	30.22	30.33	30.79	(30.202)
1960	30.00	30.31	29.90	29.86	29.81	29.95	(30.42)	....	....	....	....	....	....
1961	....	....	....	....	....	30.22	30.19	30.29	....	....	....	....	....
<b>MILLPORT (ISLE OF CUMBRAE)</b>													
1955	....	....	....	1.02	1.16	1.17	0.90	0.99	1.43	1.32	1.54	1.90	....
1956	1.34	0.49	1.11	0.72	1.06	0.88	1.09	1.22	1.33	1.22	1.07	1.73	1.11
1957	1.50	1.86	1.60	0.63	0.85	0.89	1.08	1.11	1.27	1.43	1.30	1.49	1.25
1958	1.46	1.38	1.06	0.79	1.09	1.06	1.15	1.41	1.54	1.47	0.96	1.92	1.27
<b>DOUGLAS</b>													
1959	10.58	10.18	10.78	10.70	10.54	10.42	10.57	10.51	10.53	10.87	11.07	11.39	10.68
1960	10.77	11.07	10.76	10.30	10.31	10.40	10.70	10.76	10.54	11.00	11.58	10.90	10.76
1961	10.88	10.88	10.43	10.85	10.55	10.60	10.53	10.69	11.04	11.27	10.92	11.07	10.81
<b>STORNOWAY</b>													
1959	7.58	7.62	7.92	7.72	7.15	7.57	7.60	7.49	7.55	7.95	7.96	8.28	7.699
1960	7.67	7.86	7.65	7.43	7.37	7.41	7.68	7.62	7.61	7.69	8.32	7.94	7.69
1961	7.77	7.91	7.46	7.52	7.35	7.53	7.31	7.59	7.89	8.02	(7.84)	7.80	7.67

d. Datum changed. See Table A.

## BRITISH ISLES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>MALIN HEAD</b>													
1959	8.518	8.208	8.588	8.468	7.985	8.258	8.398	8.328	8.348	8.688	8.688	9.070	8.458
1960	8.438	8.608	8.398	(8.018)	8.598	....	(8.518)	8.458	(8.358)	8.718	8.988	8.648	(8.522)
1961	8.758	8.708	8.258	8.538	8.408	8.528	8.268	8.408	8.768	8.888	8.738	8.888	8.596
<b>LARNE</b>													
1959	5.58	5.11	5.66	5.56	5.04	5.34	5.35	5.26	5.33	5.58	5.74	6.03	5.465
1960	5.38	5.73	5.41	5.22	5.25	5.30	5.54	5.56	5.41	5.76	6.27	5.62	5.542
1961	5.54	5.67	5.22	5.57	5.49	5.40	5.24	5.45	5.75	5.95	5.64	5.82	5.564
<b>BELFAST</b>													
1959	6.71	6.22	6.78	6.63	6.17	6.58	6.50	6.39	6.39	6.74	6.81	7.20	6.599
1960	6.73	6.96	6.60	6.26	6.47	6.42	(6.61)	6.74	6.61	7.01	7.41	6.83	6.714
1961	6.67	6.79	6.28	6.72	6.50	6.48	6.37	6.49	6.87	7.10	6.80	7.01	6.671
<b>DUBLIN</b>													
1959	7.15	6.61	7.24	7.07	6.74	6.96	6.97	6.86	6.84	7.30	7.64	7.71	7.091
1960	7.13	7.42	7.18	6.79	6.94	6.89	7.27	7.27	7.14	7.66	7.96	7.27	7.244
1961	7.19	7.30	6.87	7.32	7.12	7.04	6.96	7.15	7.44	7.56	7.30	7.58	7.237

## CHANNEL ISLANDS

St. HELIER-JERSEY	Unit : 1 foot												
1959 . 19.31 . 18.41 . 19.19 . 18.92 . 18.83 . 18.93 . 19.07 . 18.96 . 19.04 . 19.40 . 19.50 . 19.64 . 19.100													
1960 18.94 19.33 19.33 18.80 19.02 19.00 18.92 19.49 19.20 19.80 19.98 19.25 19.255													
1961 19.15 19.16 18.63 19.33 19.04 19.16 19.13 19.14 19.39 19.59 19.24 19.51 19.115													

## FRANCE

BREST	Unit : 1 cm.												
1959 469.5 447.2 464.1 460.0 449.9 451.7 451.8 451.1 455.4 464.8 464.7 473.9 458.6													
1960 456.9 470.8 474.4 456.1 456.5 453.3 460.0 462.3 460.8 479.8 484.3 467.5 465.2													
1961 465.8 458.0 447.7 466.0 457.4 449.1 452.9 455.0 464.7 472.4 466.4 475.0 460.8													

## SPAIN (NORTH COAST)

LA CORUNA	Unit : 1 metre												
1950 -3.571 -3.556 -3.763 -3.413 -3.246 -3.313 -3.340 -3.660 -3.431 -3.404 -3.321 -3.313 -3.444													
1951 -3.353 -3.663 -3.597 -3.704 -3.545 -3.580 -3.605 -3.674 -3.342 -3.432 .... .... .... ....													
1952 .... .... .... .... .... .... .... .... .... .... .... .... .... .... ....													
1953 -3.383 -3.442 -3.563 -3.361 -3.412 -3.407 -3.493 -3.426 -3.364 -3.344 -3.339 -3.226 -3.395													
1954 -3.441 -3.403 -3.377 -3.488 -3.424 -3.434 -3.487 -3.456 .... -3.360 -3.143 -3.393 -3.396													
1955 -3.213 -3.232 -3.330 -3.371 -3.401 -3.340 -3.372 -3.401 -3.425 .... -3.198 -3.227 -3.320													
1956 -3.295 -3.416 -3.376 -3.314 -3.387 .... -3.387 -3.288 -3.298 -3.354 -3.412 -3.382 -3.358													
1957 -3.440 -3.290 -3.277 -3.441 -3.420 -3.418 -3.411 -3.407 -3.377 -3.351 -3.296 -3.307 -3.370													
1958 -3.355 -3.299 -3.275 -3.397 -3.378 -3.330 -3.371 -3.335 -3.277 -3.347 -3.374 -3.173 -3.326													
1959 -3.245 -3.345 -3.247 -3.333 -3.359 -3.384 -3.370 -3.359 -3.297 -3.296 -3.274 -3.283 -3.317													
1960 -3.324 -3.156 -3.167 -3.364 -3.276 -3.361 -3.369 -3.312 -3.312 -3.136 -3.161 -3.300 -3.271													
1961 -3.363 -3.333 -3.343 -3.249 -3.278 -3.370 -3.375 -3.380 -3.298 -3.236 -3.209 -3.109 -3.295													

## PORTUGAL

CASCAIS	Unit : 1 metre												
1959 -4.222 .... .... .... .... .... .... .... .... .... .... .... .... ....													
1960 .... .... .... .... -4.214 -4.229 -4.249 -4.220 -4.196 -4.116 -4.162 -4.278 ....													
1961 -4.329 -4.314 -4.176 -4.238 -4.155 -4.228 -4.219 -4.214 -4.183 -4.183 -4.075 -4.097 -4.201													
LAGOS	.....												
1959 -2.774 -2.870 -2.850 -2.911 -2.841 -2.846 -2.804 -2.796 -2.763 -2.769 -2.770 -2.944 -2.827													
1960 -2.821 -2.766 -2.792 -2.821 -2.812 -2.783 -2.819 -2.825 -2.784 -2.744 -2.793 -2.875 -2.803													
1961 -2.939 -2.920 -2.810 -2.857 -2.765 -2.798 -2.784 -2.750 -2.755 -2.796 -2.693 -2.714 -2.799													

## GIBRALTAR

GIBRALTAR	Unit : 1 foot												
1961 .... .... .... .... .... .... .... .... .... .... .... .... ....	2.8	2.732	3.114	2.883	....								

## MEAN SEA LEVEL DATA (1959-1961)

## SPAIN (SOUTH AND EAST COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>ALICANTE</b>													
													Unit : 1 metre
1950	....	....	-1.315	-1.249	-1.245	-1.244	-1.216	-1.143	-1.169	-1.145	-1.156	-1.133	-1.202
1951	-1.216	-1.229	-1.217	-1.274	-1.189	-1.203	-1.192	-1.179	....	-1.074	-1.111	-1.222	-1.191
1952	-1.268	-1.261	-1.240	-1.231	-1.212	-1.188	-1.167	-1.144	-1.141	-1.166	-1.149	-1.175	-1.195
1953	-1.256	-1.292	-1.375	-1.237	-1.224	-1.127	-1.209	-1.176	-1.134	-1.104	-1.198	-1.130	-1.205
1954	-1.261	-1.219	-1.191	-1.258	-1.216	-1.215	-1.186	-1.171	-1.202	-1.175	-1.089	-1.205	-1.199
1955	-1.119	-1.108	-1.187	-1.261	-1.254	-1.204	-1.136	-1.131	-1.115	-1.046	-1.036	-1.186	-1.149
1956	-1.160	-1.212	-1.245	-1.207	-1.278	-1.265	-1.196	-1.123	-1.154	-1.156	-1.162	-1.252	-1.201
1957	-1.285	-1.331	-1.231	-1.239	-1.206	-1.205	-1.188	-1.177	-1.164	-1.047	-1.062	-1.120	-1.189
1958	-1.245	-1.275	-1.231	-1.210	-1.255	-1.201	-1.194	-1.148	-1.132	-1.120	-1.116	-1.046	-1.181
1959	-1.211	-1.310	-1.210	-1.242	-1.177	-1.173	-1.172	-1.144	-1.065	-1.098	-1.056	-1.193	-1.171
1960	-1.157	-1.146	-1.147	-1.203	-1.184	-1.152	-1.144	-1.125	-1.132	-1.074	-1.116	-1.131	-1.143
1961	-1.233	-1.301	-1.302	-1.201	-1.150	-1.156	-1.128	-1.146	-1.112	-1.106	-0.986	-1.122	-1.162

## ITALY (WEST COAST)

GENOVA													Unit : 1 metre
1959	-3.170	-3.435	-3.283	-3.257	-3.242	-3.230	-3.227	-3.225	-3.228	-3.221	-3.140	-3.111	-3.231
1960	-3.148	-3.133	-3.172	-3.255	-3.240	-3.230	-3.197	-3.173	-3.173	-3.047	-3.084	-3.132	-3.165
1961	-3.209	-3.317	-3.376	-3.238	-3.180	-3.197	-3.217	-3.237	-3.230	-3.157	-3.063	-3.129	-3.212

## SICILY

CAPO PASSERO													Unit : 1 cm.
1957	39.8	38.5	38.5	(33.5)	43.8	41.0	44.9	43.0	44.3	51.2	53.0	50.6	43.4
1958	43.2	35.3	48.4	14.4	19.0	23.8	28.2	31.6	49.9	48.5	....	59.7	36.5

## ITALY (EAST COAST)

*PORTO CORSINI													Unit : 1 cm.
1959	110.6	82.3	101.0	105.1	102.3	101.0	99.3	106.7	105.9	104.3	121.2	130.6	105.8
1960	116.4	115.6	118.6	109.3	106.3	104.4	110.2	111.5	115.5	129.6	127.9	126.6	116.0
1961	113.0	101.0	93.6	108.9	111.2	108.3	106.7	104.6	104.6	118.4	122.9	116.1	109.0

TRIESTE													Unit : 1 metre
1959	1.593	1.277	1.521	1.596	1.532	1.551	1.548	1.512	1.503	1.535	1.673	1.771	1.551

## YUGOSLAVIA

ROVINJ													Unit : 1 cm.
1958	94.89	74.40	85.48	95.92	89.42	97.07	96.51	98.30	95.81	97.96	101.36	119.24	95.60
1959	99.13	67.97	91.40	95.50	91.91	92.22	92.82	90.46	(90.59)	92.19	107.17	117.06	94.24
1960	104.60	103.13	102.18	92.24	93.48	94.04	98.01	101.58	105.02	115.80	108.26	107.61	102.18
1961	102.87	91.78	84.28	101.23	103.51	101.00	99.03	96.61	96.93	111.27	116.64	107.39	101.09

BAKAR													Unit : 1 cm.
1959	75.9	46.0	68.4	73.2	70.1	69.0	68.1	65.0	63.8	66.3	82.6	93.7	70.18
1960	80.8	79.3	78.9	67.1	68.0	66.7	71.5	75.3	78.3	98.7	94.3	93.9	78.40
1961	77.4	67.2	59.4	75.8	75.9	74.0	69.7	67.7	67.7	82.4	91.3	80.3	74.07

SPLIT rt MARJANA													Unit : 1 cm.
1958	72.43	70.94	83.84	80.60	68.28	74.19	72.18	72.22	70.34	72.56	77.51	98.28	76.16
1959	80.6	48.9	69.4	71.8	68.2	69.6	68.0	65.3	65.9	66.7	82.5	85.3	70.18
1960	81.3	79.6	80.1	69.0	71.1	67.3	72.1	74.8	76.1	93.0	90.3	81.2	77.99
1961	79.2	74.9	60.8	74.6	71.0	75.4	70.9	68.9	68.9	92.0	83.9	84.7	75.4

SPLIT HARBOUR													Unit : 1 cm.
1958	59.99	54.49	65.34	63.46	53.05	57.91	56.72	56.95	54.73	56.89	61.67	81.71	60.30
1959	64.30	33.35	53.99	56.19	54.64	55.74	53.67	50.70	51.02	51.33	66.97	78.42	56.07
1960	67.72	66.40	65.32	55.52	55.56	51.64	54.98	57.58	60.72	76.31	74.31	75.20	63.45
1961	63.87	53.75	45.26	59.80	63.14	60.61	55.93	53.76	53.95	69.35	77.55	70.47	60.65

Erratum for 1958 data: Annual mean 107.7

## YUGOSLAVIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>MALI STON</b>													
1958	148.89	(140.09)	(155.54)	152.43	144.74	149.18	146.82	146.11	143.06	144.03	147.65	(169.43)	148.85
1959	152.10	122.49	141.03	143.36	144.17	147.39	146.35	138.18	135.95	(134.70)	....	....	(140.90)

## BROCE

1958	110.53	102.85	114.26	109.42	98.45	103.79	104.88	107.76	106.13	105.99	110.97	130.51	108.86
1959	111.33	79.01	(96.53)	(100.89)	(93.45)	94.46	(95.44)	95.51	97.56	(95.20)	....	....	....

## DUBROVNIK

1958	111.22	100.42	117.48	114.49	104.22	108.81	106.65	106.94	104.74	106.96	111.46	130.16	110.38
1959	112.74	82.73	100.97	104.10	102.32	104.48	102.22	100.07	101.37	101.53	114.67	123.17	104.32
1960	117.92	116.72	116.09	106.43	106.69	101.53	105.61	109.37	112.52	126.36	124.89	123.90	114.02
1961	112.54	104.68	96.69	109.55	113.94	110.44	106.66	104.23	106.44	118.60	126.03	120.30	110.86

## HERCEGNOVI

1958	(56.09)	(62.59)	69.12	63.24	51.12	55.22	53.19	53.37	50.96	52.93	57.95	76.29	58.41
------	---------	---------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

## SOVIET UNION (BLACK SEA)

<b>PORT TUAPSE</b>													
1959	134	138	129	129	134	137	139	139	130	118	123	128	132

## TURKEY

<b>EREGLISI</b>													
1949	3.389	3.438	3.342	3.299	3.221	3.145	3.137	3.170	3.096	3.193	3.260	3.205	3.241
1950	3.111	3.147	3.061	3.053	3.028	3.123	3.167	3.235	3.281	3.213	3.154	3.155	3.144
1951	3.055	3.032	3.045	2.999	2.999	2.959	3.012	3.122	3.187	3.234	3.300	3.278	3.101
1952	3.234	3.205	3.145	3.139	3.111	3.078	3.091	3.148	3.308	3.311	3.233	3.181	3.182
1953	3.046	3.094	3.079	3.071	3.038	3.008	3.052	3.110	3.166	3.215	3.277	3.359	3.126
1954	3.342	3.247	3.310	3.310	3.285	3.102	3.049	3.144	3.171	3.197	3.151	3.127	3.203
1955	3.134	3.093	3.042	3.029	3.062	3.052	3.091	2.998	3.038	3.110	3.090	3.194	3.077
1959	3.320	3.219	3.169	3.173	3.139	3.104	3.079	3.128	3.181	3.309	3.255	3.181	3.188

## IZMIR

1959	1.415	1.515	1.464	1.446	1.388	1.341	1.276	1.287	1.154	1.406	1.287	....	(1.362)
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	------	---------

## ISKENDERUN

1952	....	....	....	2.914	2.992	2.929	2.841	2.856	2.873	2.967	2.913	3.109	(2.932)
1953	3.102	3.159	3.350	3.229	3.212	3.090	3.039	2.997	3.084	3.160	3.224	3.265	3.159
1954	3.143	3.061	3.140	3.175	3.052	3.013	2.864	2.855	2.917	2.996	2.936	2.958	3.009
1955	3.022	2.923	3.033	3.080	3.014	2.874	2.719	2.689	2.726	....	....	....	(2.897)
1959	3.085	3.239	3.203	3.185	3.148	3.055	2.939	3.011	3.072	3.186	3.133	3.188	3.120

## ANTALYA

1959	1.383	1.653	1.570	1.543	1.524	1.445	1.343	1.324	1.369	1.504	1.393	1.397	1.454
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

## TRABZON

1959	2.692	2.654	2.785	2.828	2.790	2.801	2.698	2.735	2.819	2.932	2.901	2.749	2.782
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

## ISRAEL

<b>HAIFA PORT</b>													
1956	9.2	14.5	9.6	5.0	5.3	10.0	21.2	23.7	19.0	10.4	9.3	7.6	12.07
1957	5.4	3.3	6.4	2.5	6.8	14.4	23.4	22.6	17.6	10.2	17.4	19.0	12.42
1958	12.0	-	0.9	12.6	9.1	7.6	13.4	19.1	26.4	21.0	15.2	1.7	17.0
1959	22.6	-	6.5	-	0.8	0.1	3.3	13.0	24.0	23.4	....	....	....

## JAFFA PORT

1955	....	11.1	6.5	0.7	0.5	10.2	19.9	21.9	18.1	....	19.5	18.5	(12.69)
1956	....	....	5.0	0.2	2.9	3.0	15.5	18.8	14.5	6.0	4.2	....	(7.79)
1957	2.8	1.1	5.2	-0.9	2.2	7.4	19.5	15.9	10.2	4.7	10.6	16.3	7.92
1958	10.4	-5.9	4.8	4.6	5.4	11.2	19.3	22.8	18.7	11.1	-1.6	21.0	10.15
1959	18.0	-21.0	-3.7	-4.0	-0.5	7.5	23.4	18.0	14.0	....	....	....	....

## MEAN SEA LEVEL DATA (1959-1961)

## ISRAEL

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>ASHDOD</b>													
d 1959	0.092	-0.143	-0.086	-0.090	-0.038	0.061	0.158	0.106	0.144	0.034	0.110	0.067	0.035
1960	0.117	0.039	0.086	-0.004	0.053	0.119	0.228	0.255	0.227	0.170	0.209	0.092	0.133
1961	0.084	0.080	-0.061	-0.012	0.086	0.102	0.175	0.210	0.142	0.070	0.111	0.157	0.095

## MOROCCO

	CASABLANCA													Unit : 1 metre
1958	-4.256	-4.241	-4.278	-4.340	-4.364	-4.291	(-4.358)	-4.270	(-4.236)	-4.210	(-4.197)	(-4.121)	-4.264	
1959	....	....	....	....	....	....	....	....	-4.243	-4.322	-4.238	-4.359	....	

## AZORES

	ANGRA do HEROISMO (A)													Unit : 1 metre
1959	1.220	1.172	1.165	1.169	1.195	1.236	1.277	1.284	1.287	1.283	1.267	1.279	1.236	
1960	1.218	1.232	1.197	1.225	1.199	1.215	1.272	1.298	1.304	1.275	1.257	1.292	1.249	
1961	1.276	1.256	1.252	1.254	1.285	1.292	1.305	1.293	1.027	1.289	1.290	1.212	1.253	

## ANCRA do HEROISMO (B)

	ANCRA do HEROISMO (B)													Unit : 1 foot
1958	3.84	....	....	3.58	3.61	3.64	3.86	4.00	4.18	4.09	3.85	3.80	3.845	
1959	3.94	3.51	3.67	3.54	3.64	3.64	3.76	3.94	4.04	3.99	3.84	3.86	3.781	
1960	4.12	4.22	3.93	3.77	3.65	3.60	3.72	4.02	3.96	4.17	3.94	3.73	3.902	
1961	3.80	3.94	3.93	3.90	4.04	3.75	3.82	3.93	3.98	....	....	....	....	

## PONTA DELGADA

	PONTA DELGADA													Unit : 1 cm.
1959	....	131.8	129.1	130.5	133.0	133.4	136.3	138.9	134.2	137.8	144.1	146.7	(136.0)	
1960	....	....	....	....	....	....	....	....	145.3	140.0	138.2	135.1	....	

## HORTA

	HORTA													Unit : 1 cm.
1959	127.3	124.6	125.1	119.5	121.0	125.8	130.4	133.1	131.4	130.6	131.9	132.3	127.8	
1960	129.7	127.2	125.2	125.6	128.6	133.5	139.5	137.3	136.5	132.6	132.7	134.6	131.9	
1961	131.2	132.3	128.2	128.5	129.6	131.8	135.7	136.2	134.7	138.4	138.2	131.3	133.0	

## SANTA CRUZ DAS FLORES

	SANTA CRUZ DAS FLORES													Unit : 1 cm.
1959	130.0	119.6	120.5	119.8	124.6	126.9	123.9	123.3	121.9	122.1	122.1	122.7	123.1	
1960	120.0	119.1	114.8	114.7	121.2	123.3	126.2	122.4	121.4	124.3	127.7	130.2	122.1	
1961	131.1	128.2	122.8	119.2	126.5	118.6	120.0	126.9	127.5	127.1	127.8	121.4	124.8	

## CANARY ISLANDS

	SANTA CRUZ DE TENERIFE													Unit : 1 metre
d 1947	-3.923	-3.881	-3.900	-3.949	-3.926	-3.908	-3.823	-3.798	-3.802	-3.815	-3.828	-3.884	-3.870	
1948	-3.925	-3.911	-3.919	-3.877	-3.865	-3.826	-3.785	-3.778	-3.783	-3.813	-3.875	-3.912	-3.856	
1949	-3.910	-3.973	-3.909	-3.922	-3.888	-3.873	-3.827	-3.781	-3.798	-3.822	-3.837	-3.829	-3.863	
1950	-3.877	-3.956	-3.923	-3.870	-3.864	-3.868	-3.812	-3.762	-3.779	-3.828	-3.817	-3.839	-3.850	
1951	-3.888	-3.902	-3.863	-3.870	-3.879	-3.831	-3.792	-3.795	-3.812	-3.818	-3.829	-3.856	-3.845	
1952	-3.924	-3.908	-3.882	-3.907	-3.872	-3.862	-3.793	-3.792	-3.785	-3.826	-3.820	-3.916	-3.857	
1953	-3.925	-3.887	-3.918	-3.851	-3.875	-3.839	-3.815	-3.817	-3.811	-3.790	-3.821	-3.912	-3.855	
1954	-3.968	-4.002	-3.945	-3.867	-3.907	-3.888	-3.865	-3.835	-3.867	-3.847	-3.806	-3.923	-3.893	
1955	-3.886	-3.905	-4.041	-4.099	-4.048	-3.819	-3.776	-3.767	-3.740	-3.788	-3.809	-4.068	-3.895	
1958	-3.864	-3.879	-3.880	-3.897	-3.904	-3.859	-3.812	-3.793	-3.757	-3.782	-3.782	....	-3.837	
1959	-3.745	-3.874	-3.834	-3.844	-3.837	-3.838	-3.757	-3.744	-3.728	-3.709	-3.808	-3.897	-3.810	
1960	-3.890	-3.844	-3.815	-3.839	-3.826	-3.795	-3.795	-3.768	-3.704	-3.796	-3.790	-3.814	-3.806	
1961	-3.870	-3.887	-3.846	-3.858	-3.762	-3.769	-3.708	-3.706	-3.698	-3.732	-3.730	-3.769	-3.778	

## SENEGAL

	DAKAR													Unit : 1 metre
1959	-1.359	-1.395	-1.390	-1.361	-1.380	-1.262	-1.235	-1.252	-1.296	-1.285	-1.332	-1.383	-1.328	
1959	-1.561	-1.611	-1.611	-1.566	-1.574	-1.457	-1.337	-1.379	-1.409	-1.395	-1.444	-1.492	-1.486	

d. Datum changed. See Table A

## GHANA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean	
1947	TAKORADI	Unit : 1 foot												
1947	3.117	3.166	3.367	3.138	3.245	2.931	2.860	2.820	2.990	3.389	3.378	3.122	3.127	
1948	3.051	3.068	3.302	3.149	3.170	2.827	2.773	2.697	2.920	3.293	3.290	3.143	3.057	
1949	3.040	3.113	3.270	3.324	3.112	3.046	2.859	2.862	2.866	3.406	3.452	3.252	3.134	
1958	3.126	3.046	3.096	3.146	2.960	2.682	2.539	2.636	2.855	3.213	3.241	3.151	2.974	
1959	3.217	3.073	3.156	3.138	2.998	2.972	2.649	2.668	2.934	3.234	3.338	3.057	3.036	
1960	3.065	3.066	3.120	3.298	3.120	2.926	2.710	2.787	2.918	3.338	3.419	3.085	3.071	
1961	3.137	3.297	3.188	3.424	3.393	2.963	2.684	2.705	2.923	3.252	3.365	3.153	3.124	
SOUTH AFRICA														
WALVIS BAY														
1959	5.666	5.766	5.581	5.366	5.253	5.273	5.180	5.315	5.519	5.325	5.539	5.419	5.433	
1960	5.565	5.717	5.616	5.546	5.450	5.208	5.465	5.409	5.476	5.620	(5.592)	5.356	5.494	
1961	5.571	5.610	5.609	5.575	5.356	5.220	5.191	(5.218)	5.302	5.431	5.526	5.484	5.426	
LUDERITZ														
1959	5.035	5.109	5.067	4.803	4.784	4.746	4.655	4.673	4.914	4.987	5.040	(4.950)	(4.896)	
1960	(5.084)	5.260	5.123	5.039	4.894	4.754	(5.078)	4.942	4.968	(5.306)	5.341	5.087	5.066	
1961	5.283	5.361	5.337	(5.339)	5.072	5.067	4.978	5.011	5.123	5.123	5.300	5.193	5.178	
PORT NOLLOTH														
1959	(4.614)	4.717	4.648	4.484	4.533	4.402	4.329	4.362	4.579	4.654	4.548	4.543	4.531	
1960	4.589	4.772	(4.682)	4.599	(4.601)	4.372	4.490	4.482	4.549	4.652	4.658	4.556	4.580	
1961	4.671	4.699	(4.692)	....	....	(4.614)	(4.415)	4.490	4.591	4.502	4.636	4.581	4.592	
STOMPNEUS BAY														
1959	5.284	5.442	5.363	5.317	5.355	5.160	5.149	5.079	5.317	5.368	5.310	5.327	5.291	
1960	5.399	5.608	5.528	5.376	5.366	5.261	5.384	5.289	(5.521)	5.336	5.372	5.301	5.390	
1961	5.486	5.579	5.459	5.583	(5.474)	....	....	(5.308)	(5.033)	5.058	5.401	(5.261)	(5.394)	
ROBBEN ISLAND														
1959	5.273	5.357	5.323	5.136	5.337	5.083	5.015	5.054	5.218	(5.273)	5.180	5.188	5.200	
TABLE BAY HARBOUR (Duncan Dock)														
1959	2.817	2.782	2.740	2.566	2.847	2.603	2.546	2.591	2.730	2.769	2.724	2.784	2.708	
1960	2.767	2.925	2.747	2.528	2.497	2.436	2.508	2.572	2.610	2.678	2.675	2.557	2.623	
1961	2.537	2.455	2.325	2.331	2.342	2.314	(2.554)	2.803	(2.873)	(2.774)	2.937	2.924	(2.592)	
SIMONS BAY														
1959	4.248	4.273	4.224	4.123	4.283	4.071	3.997	4.039	4.211	4.221	4.180	4.185	4.171	
1960	4.212	4.323	4.250	4.080	4.109	4.034	4.099	4.110	4.173	4.269	4.288	4.245	4.182	
1961	(4.343)	4.312	4.206	4.312	4.259	4.271	4.000	4.085	4.262	4.146	4.278	4.192	4.220	
HERMANUS														
1959	5.084	5.061	5.064	5.020	5.251	4.992	4.868	4.963	5.089	5.147	5.011	5.051	5.049	
1960	5.091	5.250	5.174	5.032	5.080	5.078	5.039	5.095	5.165	5.250	5.126	5.084	5.122	
1961	5.295	5.211	5.062	5.144	5.190	5.226	4.905	5.013	(5.149)	5.106	5.190	5.101	5.186	
MOSSEL BAY														
1959	4.801	4.781	4.729	4.787	5.022	4.767	4.645	4.748	4.794	4.827	4.660	4.705	4.773	
1960	4.637	4.796	4.770	....	(4.722)	4.796	4.781	4.859	4.867	4.977	4.827	4.770	(4.805)	
1961	5.088	(4.925)	4.828	4.831	(4.864)	4.965	4.565	(4.750)	4.922	4.827	4.797	4.727	(4.838)	
KNYSNA														
1960	....	....	....	....	....	....	....	4.215	3.974	4.089	3.827	3.889	....	
1961	4.192	4.054	3.949	3.958	4.061	4.183	3.750	3.899	(4.117)	4.100	3.988	(3.986)	(4.018)	
PORT ELIZABETH														
1957	3.444	3.691	3.316	3.379	3.619	3.466	3.445	3.462	3.455	3.609	3.811	3.489	3.515	
1958	3.444	3.605	3.345	3.481	3.495	3.465	3.450	3.358	3.511	(3.481)	3.692	(3.178)	3.471	
1959	3.220	3.240	3.243	3.256	3.432	3.326	3.083	3.257	3.220	(3.307)	3.063	3.261	3.241	
1960	3.244	3.300	3.259	3.336	3.425	3.331	3.233	3.475	(3.331)	3.552	3.287	3.329	3.343	

MEAN SEA LEVEL DATA (1959-1961)

**MADAGASCAR**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
	NOSY-BE												Unit : 1 metre
1958	(-5.497)	(-5.569)	-5.453	-5.431	-5.502	-5.482	-5.495	-5.475	-5.468	-5.433	....	....	....
1959	(-5.453)	(-5.415)	(-5.524)	-5.509	-5.461	-5.541	-5.576	-5.566	-5.525	-5.561	-5.582	-5.581	-5.524

**MAURITIUS**

	GRAND PORT												Unit : 1 foot		
** 1958								1.97	1.82	2.02	2.03	1.77	1.72	2.42	....
** 1959	(2.73)	(2.61)	2.37	1.99	2.23	1.99	1.92	2.03	2.04	1.98	2.17	2.15	2.184		
††** 1960	2.23														

**CHACOS ARCHIPELAGO**

	DIEGO GARCIA												Unit : 1 foot	
1959	....	....	....	....	....	....	....	3.10	3.30	3.43	3.47	3.41	3.90	....
1960	(3.59)	3.47	(3.39)	(3.33)	3.34	3.26	3.25	3.58	3.16	3.14	2.86	3.23	3.302	
1961	2.98	(2.85)	3.03	3.07	3.02	3.20	3.56							

**ARABIA**

	ADEN												Unit : 1 foot
+ 1959	4.80	4.78	4.65	4.86	4.96	4.68	4.30	4.09	4.08	4.22	4.46	4.70	4.548
+ 1960	4.63	4.67	4.94	4.97	4.97	4.77	4.54	....	....	....	....	....	....
* 1959	4.789	4.752	4.632	4.831	4.929	4.625	4.231	3.998	4.058	4.194	4.411	....	(4.495)
* 1960	4.586	4.739	4.920	4.947	4.940	4.738	4.514	....	....	....	....	....	....

**PAKISTAN (WEST)**

	KARACHI (Manora)												Unit : 1 foot
1959	5.59	5.77	5.56	5.68	6.07	5.97	6.15	5.84	5.67	5.70	(5.59)	5.57	5.76
1960	5.48	5.54	5.67	5.86	5.89	6.10	5.93	5.80	5.63	5.30	5.51	5.61	5.69
1961	5.44	5.35	5.60	5.69	5.86	6.06	6.09	5.77	5.80	5.54	5.71	5.45	5.70

**INDIA**

	KANDLA												Unit : 1 foot
+ 1959	12.05	12.09	12.05	12.18	12.81	12.60	12.72	12.75	12.39	11.97	12.19	12.34	12.345
+ 1960	12.02	12.29	12.21	12.38	12.60	12.49	12.39	12.08	11.85	11.72	11.95	12.07	12.171
+ 1961	11.80	11.80	11.98	12.09	12.27	12.43	12.53	12.25	12.26	12.22	12.34	12.06	12.169
* 1959	12.604	12.669	12.732	12.760	13.321	13.097	13.316	13.247	12.899	12.497	12.718	12.800	12.888
* 1960	12.516	12.725	12.696	12.840	12.910	12.922	12.892	12.628	12.415	12.190	12.461	12.576	12.648
* 1961	12.268	12.299	12.487	12.577	12.773	12.980	13.164	12.864	12.811	12.743	12.834	12.501	12.692

**D'VERÁVAL**

	D'VERÁVAL												Unit : 1 foot
+ 1959	(4.64)	4.49	4.44	4.46	4.84	....	4.81	4.59	4.43	4.58	4.77	4.72	(4.615)
+ 1960	4.56	4.70	4.46	4.58	4.57	(4.64)	4.48	4.14	3.98	4.04	4.51	4.59	4.438
+ 1961	3.96	3.79	4.44	4.48	4.40	4.62	4.66	4.42	....	....	5.00	4.65	(4.560)
* 1959	(4.599)	4.432	4.265	4.420	4.816	....	(4.791)	4.527	4.384	4.519	4.720	4.686	(4.560)
* 1960	4.521	4.665	4.416	4.615	4.567	4.609	4.452	4.067	3.916	4.008	4.468	4.554	4.405
* 1961	3.921	3.743	4.388	4.433	4.341	4.557	4.597	4.353	....	....	4.961	4.609	(4.390)

**BHÁUNAGAR**

	BHÁUNAGAR												Unit : 1 foot
1959	19.16	19.10	19.14	19.24	19.74	19.62	19.81	19.51	19.36	19.42	19.12	19.24	19.372
1960	18.93	19.14	18.94	19.20	19.30	19.48	19.52	19.24	18.92	18.84	18.96	19.33	19.150
1961	18.69	....	19.50	19.20	19.28	19.60	19.76	19.45	19.74	19.29	19.44	19.16	(19.353)

**BOMBAY (APOLLO BANDAR)**

	BOMBAY (APOLLO BANDAR)												Unit : 1 foot
+ 1959	8.83	8.64	8.61	8.67	8.82	8.47	9.14	8.63	8.51	8.45	8.56	8.79	8.677
+ 1960	8.73	8.82	8.61	8.78	8.46	8.54	8.76	8.38	8.16	8.30	8.56	8.88	8.582
+ 1961	8.53	8.44	8.57	8.56	8.28	8.63	8.62	8.21	8.26	8.35	8.79	8.54	8.482
* 1959	8.668	8.515	8.540	8.582	8.738	8.332	8.982	8.513	8.475	8.409	8.532	8.695	8.582
* 1960	8.598	8.747	8.493	8.664	8.331	8.473	8.616	8.255	8.092	8.228	8.485	8.776	8.480
* 1961	8.460	8.319	8.440	8.447	8.076	8.575	8.484	8.095	8.131	8.288	8.707	8.487	8.376

d. Datum changed since P.S. N°20 See Table A.

\*\* To replace values previously given in P.S. N° 20

†† Installation damaged in hurricane.

† From high and low waters

\* From hourly heights.

## INDIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>MANGALORE</b>													
† 1961	....	....	....	....	(3.10)	3.62	4.52	3.75	3.20	(3.60)	3.95	3.76	....
* 1961	....	....	....	....	(3.074)	3.594	4.437	3.711	3.177	(3.732)	3.959	3.720	....
<b>COCHIN</b>													
† 1959	2.57	2.43	2.36	2.22	2.40	2.32	2.52	1.98	(2.00)	2.14	2.48	2.54	2.330
† 1960	2.46	2.49	2.44	2.41	2.26	2.18	2.15	1.97	1.98	2.04	2.49	(2.58)	2.288
† 1961	2.40	2.36	2.24	2.32	2.06	2.28	2.41	2.15	2.15	2.13	2.46	2.20	2.263
* 1959	2.567	2.426	2.350	2.227	2.384	2.293	2.496	1.957	(1.985)	2.126	2.490	2.519	2.318
* 1960	2.455	2.485	2.460	2.437	2.286	2.177	2.155	1.964	1.915	2.055	2.498	(2.564)	2.288
<b>MADRAS</b>													
† 1959	1.95	1.68	1.51	1.64	1.97	2.42	2.35	1.77	1.86	2.59	2.94	2.36	2.087
† 1960	2.12	(1.87)	1.78	1.61	2.12	2.21	1.97	2.15	2.11	2.44	2.90	2.50	2.148
† 1961	2.16	1.82	1.78	1.94	2.14	1.89	1.55	1.56	1.65	1.77	2.33	2.01	1.882
* 1959	....	1.672	1.501	1.649	1.964	2.397	2.357	1.772	1.822	2.578	2.946	2.338	(2.091)
* 1960	2.115	(1.855)	1.770	1.570	2.119	2.219	1.965	2.163	2.122	2.434	2.903	2.501	2.145
1961	2.168	1.810	1.783	1.938	2.143	1.891	1.542	1.553	1.648	1.765	2.339	2.012	1.883
<b>VISAKHAPATNAM</b>													
† 1959	2.37	2.06	1.90	2.11	2.61	3.18	3.31	2.72	2.88	3.73	3.42	2.75	2.753
† 1960	2.39	2.20	1.98	1.91	2.54	3.00	2.54	2.96	2.92	3.50	....	(3.06)	(2.636)
† 1961	(2.46)	2.17	2.27	2.04	2.46	2.64	2.32	2.30	2.35	2.70	2.71	2.16	2.382
* 1959	2.383	2.068	1.886	1.901	2.597	3.168	3.275	2.677	2.826	3.699	3.400	2.722	2.717
* 1960	2.378	2.175	1.980	1.890	2.505	2.982	2.508	2.911	2.879	3.485	....	....	(2.569)
* 1961	(2.470)	2.184	2.279	2.056	2.463	2.641	2.306	2.295	2.350	2.695	2.716	2.160	2.385
<b>SAUGOR</b>													
† 1959	9.84	9.62	9.66	10.08	10.72	11.35	11.76	11.19	11.28	11.38	10.93	10.26	10.677
† 1960	9.82	9.84	9.59	9.68	10.52	11.36	11.07	11.25	11.14	11.36	10.86	10.53	10.585
† 1961	10.06	9.70	10.18	10.08	10.86	10.91	10.89	11.06	11.05	10.70	10.10	9.48	10.422
* 1959	9.759	9.550	9.575	10.034	10.678	11.218	11.657	11.072	11.156	11.206	10.869	10.157	10.578
* 1960	9.743	9.768	9.529	9.628	10.414	11.234	10.973	11.132	11.011	11.262	10.739	10.423	10.488
* 1961	9.953	9.602	10.110	10.008	10.755	10.783	10.794	10.917	10.915	10.568	9.982	9.384	10.314
<b>DIAMOND HARBOUR</b>													
† 1959	9.45	9.29	9.50	9.92	10.72	11.02	11.48	11.22	11.52	11.67	10.72	9.84	10.529
† 1960	9.50	9.58	9.57	9.86	10.76	11.13	11.02	11.38	11.20	11.12	10.42	10.02	10.463
† 1961	9.63	9.36	10.06	9.96	10.64	10.68	10.86	11.08	11.00	10.50	9.70	9.00	10.206
* 1959	9.592	9.426	9.704	10.208	10.967	11.225	11.659	11.377	11.639	11.778	10.788	9.944	10.692
* 1960	9.577	9.722	9.696	10.032	10.909	11.231	11.163	11.508	11.310	11.248	(10.665)	10.150	10.601
* 1961	9.737	9.492	10.292	10.169	10.816	10.870	11.037	11.224	11.209	10.738	9.838	9.182	10.384
<b>CALCUTTA (GARDEN REACH)</b>													
† 1959	8.84	8.70	9.01	9.43	10.26	10.68	11.48	12.63	13.43	14.60	11.02	9.37	10.788
† 1960	8.86	8.94	8.92	9.20	10.12	10.65	11.29	12.43	12.82	12.26	10.34	9.44	10.439
† 1961	8.80	8.60	9.62	9.44	10.19	10.34	11.08	12.37	12.85	12.23	10.05	8.63	10.350
* 1959	9.079	8.936	9.290	9.731	10.542	10.920	11.647	12.741	13.408	14.381	11.076	9.525	10.940
* 1960	9.050	9.150	9.147	9.435	10.344	10.857	11.483	12.570	12.864	12.264	10.495	9.635	10.608
* 1961	9.014	8.862	9.959	9.712	10.424	10.546	11.310	12.496	12.890	12.206	10.126	8.774	10.527

## PAKISTAN (EAST)

CHITTAGONG (SADARGHAT)													Unit : 1 foot
1956	5.44	5.39	5.92	6.41	7.83	9.54	8.76	9.07	8.44	7.53	7.11	6.01	7.29
1957	5.43	5.55	5.69	6.26	7.06	8.14	....	....	....	....	....	....	....
1959	5.84	5.79	6.25	6.58	7.60	8.74	9.06	8.94	8.53	8.26	7.33	6.24	7.43
1960	5.82	5.93	(5.92)	6.36	(7.46)	8.62	9.37	8.87	8.59	8.18	....	(6.31)	....
1961	5.90	....	....	....	....	....	....	....	....	....	....	....	....
CHITTAGONG (PATENGA POINT)													
1954	6.96	7.36	7.43	8.05	8.68	9.35	9.60	9.63	9.64	8.73	8.06	7.58	8.42
1955	7.07	7.10	7.70	....	....	....	....	....	9.03	9.12	9.02	....	....
1956	7.19	7.24	7.66	8.09	9.45	9.92	9.65	9.76	9.22	8.69	8.47	7.61	8.58
1957	6.95	7.18	7.32	7.83	8.64	9.47	....	....	....	....	....	....	....
1959	7.54	7.49	7.89	8.33	9.26	9.92	10.24	9.79	9.54	9.38	8.69	8.01	8.84
1960	7.52	7.76	7.68	8.24	9.20	9.90	9.98	9.92	9.44	....	....	....	....

† From high and low waters.

\* From hourly heights.

## MEAN SEA LEVEL DATA (1959-1961)

## PAKISTAN (EAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>CHITTACONG (T. M. COMPOUND)</b>													
1960	....	....	5.88	6.44	7.47	8.63	9.36	8.83	8.46	....	(6.85)	....	....
1961	5.97	5.62	(6.92)	(6.66)	7.67	8.58	(9.54)	(9.00)	8.48	(6.87)	....	(5.39)	(7.34)
<b>CHITTACONG (JULDIA POINT)</b>													
1961	6.80	6.56	7.66	7.48	8.53	8.99	9.35	9.37	8.79	7.66	6.89	6.36	7.87
<b>BURMA</b>													
<b>RANGOON</b>													
† 1959	9.48	9.40	9.50	9.84	10.48	11.30	11.68	11.85	11.98	11.77	10.88	9.80	10.663
† 1960	9.52	9.54	9.61	9.58	10.32	11.09	11.36	12.04	11.75	11.46	10.67	9.78	10.560
* 1959	9.797	9.693	9.802	10 <sup>1</sup> .172	10.841	11.671	11.967	12.005	12.208	12.042	11.289	10.257	10.979
* 1960	9.925	9.897	9.943	9.920	10.709	11.498	11.656	12.239	11.998	11.762	11.115	10.230	10.908
<b>MOULMEIN</b>													
1959	4.72	4.72	5.00	5.46	6.07	7.64	8.33	9.58	9.25	7.71	6.50	5.40	6.698
1960	4.96	4.90	5.14	5.26	5.98	7.31	8.04	9.90	8.78	7.34	6.28	5.24	6.594
1961	4.66	4.91	5.40	5.49	6.38	7.76	9.40	10.64	10.42	7.60	5.58	....	....
<b>AMHERST</b>													
1959	8.98	8.98	9.28	10.08	10.80	11.32	11.29	10.88	10.72	10.24	9.96	9.36	10.158
1960	9.14	9.32	9.54	9.92	10.84	11.38	11.10	11.15	10.68	10.33	10.04	9.46	10.242
1961	9.03	9.26	9.81	9.93	10.86	10.99	10.90	10.96	10.64	9.78	8.92	....	....
<b>ANDAMAN ISLANDS</b>													
<b>PORT BLAIR</b>													
† 1959	3.84	3.77	3.62	3.78	4.08	4.28	4.32	4.18	4.02	3.92	4.20	4.14	4.012
† 1960	3.95	3.86	3.85	(3.96)	4.18	4.30	4.44	(4.44)	4.31	4.20	4.43	4.34	4.188
† 1961	4.14	4.04	....	....	....	4.12	4.20	....	4.19	4.14	4.18	4.08	....
* 1959	3.819	3.742	3.589	3.761	4.094	4.271	4.329	4.157	3.995	3.907	4.180	4.137	3.998
* 1960	3.935	3.862	3.882	(3.962)	4.146	4.287	4.447	(4.431)	4.270	4.178	4.422	4.328	4.179
* 1961	4.129	4.036	....	....	....	4.107	4.171	....	4.061	3.991	4.061	3.958	....
<b>CHINA</b>													
<b>MACAU-SIAC</b>													
Unit : 1 cm.													
1959	2.30	2.28	2.34	2.34	2.38	2.32	2.30	2.37	2.39	2.64	2.54	2.43	2.385
1960	2.36	2.30	2.32	2.35	2.36	2.48	2.28	2.46	2.43	2.67	2.40	2.32	2.394
1961	2.25	2.34	2.29	2.26	2.28	2.31	2.26	2.37	2.49	2.58	2.47	2.39	2.356
<b>CHI MA WAN (LANTAU)</b>													
Unit : 1 foot													
1961	4.38	4.60	4.39	4.19	4.35	....	4.42	4.59	5.05	5.40	5.03	4.86	4.66
<b>HONG KONG</b>													
Unit : 1 foot													
1959	4.33	4.33	4.44	4.30	4.31	3.77	4.21	4.43	4.60	5.38	5.09	5.10	4.52
1960	4.52	4.33	4.31	(4.43)	4.31	4.59	4.10	4.67	4.68	(5.45)	(4.35)	4.49	4.52
1961	4.31	4.45	4.28	4.05	4.12	4.15	4.17	4.34	4.81	5.15	4.85	4.65	4.44
<b>SOVIET UNION (PACIFIC COAST)</b>													
<b>YU7-JNO KURILSK</b>													
Unit : 1 cm.													
1958	145	138	141	134	139	143	145	146	147	138	138	146	142
1959	158	140	128	138	140	139	146	151	147	145	145	150	144
<b>NAGAEVA BAY</b>													
1959	363	353	340	358	359	360	361	357	364	362	366	377	360
<b>PETROPAVLOVSK</b>													
1959	137	133	119	124	125	130	125	133	135	144	145	151	133
<b>UGOLNaja BAY</b>													
1958	68	69	73	76	63	56	61	61	71	72	86	79	70
1959	67	79	54	58	58	62	71	60	71	91	84	82	70
†	From high and low waters.												
*	From hourly heights.												

## JAPAN (HOKKAIDO)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
Unit : 1 metre													
<b>MONBETSU</b>													
1959	3.506	3.383	3.322	3.430	3.441	3.448	3.583	3.551	3.553	3.546	3.501	3.549	3.484
<b>HANASAKI</b>													
1959	2.161	2.067	2.043	2.077	2.097	2.098	(2.160)	2.204	2.203	(2.172)	(2.161)	2.187	(2.136)
1960	2.270	2.167	2.094	2.069	2.061	2.109	2.164	2.189	2.209	2.081	2.089	2.203	2.142
1961	2.250	2.255	2.130	2.105	2.109	2.145	2.196	2.190	2.145	2.064	2.010	....	(2.145)
<b>KUSHIRO</b>													
1959	1.459	1.352	1.335	1.369	(1.384)	1.409	1.482	1.520	1.503	1.484	1.468	1.496	1.438
1960	1.564	1.468	1.409	1.396	1.393	1.439	1.492	1.498	1.543	1.414	1.411	1.496	1.460
1961	....	(1.537)	1.430	1.413	1.424	1.458	(1.498)	(1.512)	1.492	(1.425)	....	1.504	(1.469)
<b>HAKODATE</b>													
1959	(1.422)	1.306	1.314	1.402	1.409	1.465	(1.558)	1.581	1.608	(1.534)	(1.482)	1.437	(1.460)
1960	1.485	1.402	1.351	1.362	1.391	1.462	(1.500)	1.519	1.548	1.420	1.412	1.444	1.441
1961	(1.450)	(1.459)	1.346	1.349	1.378	1.444	1.520	1.572	1.532	....	(1.355)	(1.471)	(1.443)
<b>OSHORO</b>													
1959	-1.641	-1.739	-1.746	-1.603	-1.565	-1.517	-1.405	-1.475	-1.444	-1.503	-1.602	-1.643	-1.571
1960	-1.631	-1.660	-1.709	-1.685	-1.630	-1.553	-1.512	-1.465	-1.462	-1.657	-1.672	-1.650	-1.607
1961	-1.663	-1.630	-1.746	-1.679	-1.640	-1.545	-1.476	-1.455	-1.506	-1.654	-1.671	-1.598	-1.606
JAPAN (HONSHU-EAST COAST)													
Unit : 1 metre													
<b>HACHINOHE</b>													
1959	0.665	0.543	0.533	0.606	0.666	0.712	0.827	0.833	0.855	0.828	0.744	0.688	0.708
1960	0.700	0.639	0.595	0.590	0.628	0.718	0.786	0.819	0.849	0.747	0.715	0.684	0.706
1961	0.673	0.684	0.553	0.584	0.628	0.694	0.807	0.869	0.839	0.741	....	0.737	(0.710)
<b>MIYAKO</b>													
1959	1.123	1.002	1.014	1.054	1.109	1.172	1.249	1.258	1.301	1.259	1.179	1.134	1.155
1960	1.152	1.071	1.033	1.033	1.086	1.160	1.229	1.246	1.309	1.197	1.185	1.172	1.156
1961	1.148	1.140	1.017	1.034	1.075	1.154	1.239	1.279	....	1.154	1.099	1.207	(1.140)
<b>AYUKAWA</b>													
1959	1.670	....	(1.530)	1.581	1.629	1.656	1.778	1.824	1.816	1.797	1.735	1.693	(1.700)
1960	....	1.600	1.591	1.563	1.606	....	(1.781)	1.783	1.790	(1.742)	1.700	1.700	(1.686)
1961	....	....	(1.539)	(1.545)	....	1.687	(1.760)	1.803	1.769	1.713	1.637	1.716	(1.685)
<b>ONAHAMA</b>													
1959	1.442	1.336	1.315	1.321	1.395	....	1.533	1.591	1.593	1.590	1.523	1.472	(1.465)
1960	1.466	1.369	1.337	1.312	1.367	1.443	1.511	1.521	1.534	(1.522)	(1.465)	(1.464)	(1.442)
1961	(1.418)	1.396	1.277	1.293	1.324	1.413	1.504	1.555	1.520	(1.511)	1.410	1.477	(1.425)
<b>CHOSHII</b>													
1959	1.037	0.914	0.902	0.872	0.973	1.057	1.109	1.198	1.186	1.185	1.122	(1.075)	1.053
1960	1.077	0.998	0.964	0.926	....	1.025	1.055	(1.068)	(1.155)	1.146	(1.094)	(1.065)	(1.053)
1961	(1.055)	(1.037)	0.938	0.925	0.929	(0.994)	(1.067)	(1.112)	(1.106)	(1.161)	(1.028)	(1.089)	(1.037)
<b>MERA</b>													
1959	1.179	1.084	1.102	1.145	1.145	1.285	1.291	1.312	1.336	1.355	1.300	1.273	1.234
1960	1.243	1.214	1.191	1.171	1.235	1.246	1.269	1.302	1.340	1.299	1.262	1.208	1.248
1961	1.199	1.186	1.162	1.107	1.148	1.263	1.272	1.343	1.293	1.336	1.251	1.266	1.236
<b>TOKYO</b>													
1959	1.736	1.645	1.638	1.699	1.782	1.943	1.843	1.957	1.981	2.011	1.938	1.916	1.841
1960	1.878	1.842	1.822	1.814	1.930	1.940	1.951	2.019	2.024	1.885	1.873	1.855	1.903
1961	1.829	1.781	1.717	1.638	1.822	1.890	1.742	1.893	(1.883)	1.928	1.891	1.891	1.825
<b>ABURATSUBO</b>													
1959	-3.262	-3.358	-3.336	-3.289	-3.299	-3.149	-3.125	-3.112	-3.099	-3.086	-3.152	-3.158	-3.202
1960	-3.171	-3.225	-3.228	-3.257	-3.166	-3.138	-3.141	-3.080	-3.060	-3.101	-3.157	-3.207	-3.161
1961	-3.233	-3.228	-3.242	-3.305	-3.248	-3.145	-3.160	-3.096	-3.164	-3.160	-3.210	-3.202	-3.199

## MEAN SEA LEVEL DATA (1959-1961)

## JAPAN (HONSHU-EAST COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>UCHIURA</b>													
1959	1.541	1.465	1.495	1.514	1.509	1.747	1.709	1.748	1.773	1.840	1.739	(1.710)	1.649
1960	1.613	1.607	1.598	....	1.682	1.698	1.740	1.807	1.809	1.728	1.686	1.619	(1.690)
1961	1.578	1.570	1.540	1.544	1.590	1.769	1.777	1.831	1.735	1.733	1.714	1.600	1.665
<b>ITO</b>													
1959	2.047	1.950	1.976	1.982	2.017	2.169	2.168	2.189	2.229	2.255	2.166	2.156	2.109
1960	2.108	2.062	2.055	2.031	2.099	2.130	2.148	2.205	2.221	2.188	2.148	2.082	2.123
1961	2.055	2.057	2.045	1.995	2.034	2.155	2.174	2.244	2.171	2.188	2.134	2.131	2.115
<b>SHIMIZU</b>													
1959	1.373	1.290	1.312	1.326	1.332	1.577	1.519	1.559	1.598	1.662	1.565	1.528	1.470
1960	1.439	1.433	1.419	1.409	1.513	1.517	1.564	1.643	1.647	(1.589)	1.534	1.443	1.512
1961	1.416	1.399	(1.375)	1.368	1.406	1.579	(1.587)	1.660	1.586	1.585	1.554	1.479	1.500
<b>NAGOYA</b>													
1959	1.900	1.866	1.883	1.951	1.994	2.282	2.167	2.216	2.256	2.305	2.176	2.150	2.096
1960	1.989	2.043	2.023	2.036	2.176	2.215	2.217	2.352	2.309	2.237	2.150	2.036	2.148
1961	1.989	1.983	1.958	1.995	2.066	2.255	2.239	2.316	2.284	2.354	2.161	2.055	2.130
<b>KUSHIMOTO</b>													
1959	1.568	1.549	1.579	1.639	1.727	1.832	1.863	1.775	(1.766)	1.840	1.744	1.736	1.718
1960	1.655	1.627	1.618	1.614	1.708	1.775	1.724	1.849	(1.829)	(1.800)	(1.707)	1.603	(1.709)
1961	1.574	1.586	1.595	1.584	1.579	1.737	1.728	1.829	1.800	1.789	1.715	1.630	1.679
<b>JAPAN (INLAND SEA)</b>													
<b>KAINAN</b>													
1959	-2.776	-2.824	-2.764	-2.677	-2.573	-2.472	-2.423	-2.512	-2.533	-2.473	-2.569	-2.588	-2.598
1960	-2.690	-2.704	-2.719	-2.717	-2.608	-2.519	-2.557	-2.424	-2.476	-2.539	-2.611	-2.726	-2.607
1961	<b>-2.763</b>	-2.746	-2.741	-2.722	-2.715	-2.558	-2.557	-2.461	-2.484	-2.517	-2.590	-2.693	-2.628
<b>KOMATSUSHIMA</b>													
1959	1.767	1.740	1.784	1.881	1.999	2.088	2.153	2.071	2.053	2.101	1.998	1.964	1.967
1960	1.858	1.863	1.861	1.867	1.972	2.069	2.019	2.147	2.106	2.042	1.956	(1.843)	1.967
1961	1.789	1.809	1.834	1.856	1.864	2.020	2.019	2.110	2.094	2.071	1.991	1.879	1.945
<b>KOBE</b>													
1959	(1.159)	1.103	1.164	1.260	1.365	1.474	1.557	1.499	1.474	1.499	1.386	1.371	1.359
1960	1.272	1.259	1.242	1.251	1.362	1.467	1.445	(1.589)	(1.552)	1.455	1.380	1.268	(1.378)
1961	1.222	1.242	1.245	1.268	1.281	....	(1.489)	(1.578)	(1.520)	1.497	....	1.317	(1.366)
<b>TANNOWA</b>													
1959	1.741	1.698	1.757	(1.832)	....	....	(2.090)	2.009	1.983	....	1.933	1.906	(1.888)
1960	1.814	1.789	1.787	1.789	1.900	1.995	1.954	2.073	2.032	1.970	1.906	1.785	1.899
1961	1.746	1.756	1.772	1.786	1.794	1.966	1.971	2.058	....	2.001	1.883	....	....
<b>WAKAYAMA</b>													
1959	0.957	0.913	0.968	1.071	1.148	1.259	1.311	1.242	1.182	1.242	1.139	1.062	1.125
1960	1.000	0.988	0.978	0.974	1.071	1.175	1.123	....	1.223	1.175	1.067	0.967	(1.067)
1961	0.930	0.943	0.946	0.963	0.989	1.146	1.141	1.233	1.205	1.189	1.124	0.987	1.066
<b>TAKAMATSU</b>													
1959	1.732	1.704	1.755	1.867	(1.973)	(2.081)	(2.135)	2.063	2.034	2.083	1.974	1.916	(1.943)
1960	1.804	1.824	1.819	1.825	1.935	2.035	(1.982)	(2.131)	2.089	2.007	1.944	1.797	(1.933)
1961	1.751	1.769	1.785	1.816	1.826	1.979	2.013	2.104	2.096	2.040	1.962	1.841	1.915
<b>UNO</b>													
1959	1.480	1.451	1.506	1.598	1.703	1.814	1.874	1.803	1.784	1.815	1.726	1.677	1.686
1960	1.572	1.579	1.573	1.583	1.680	1.775	1.735	1.888	1.835	1.759	1.687	....	(1.697)
1961	1.483	1.513	1.521	1.557	1.573	1.721	1.764	1.851	1.847	1.794	1.721	1.604	1.662
<b>MATSUYAMA</b>													
1959	2.146	(2.138)	2.168	2.254	2.299	2.460	2.520	2.433	2.399	2.444	2.369	2.316	2.329
1960	2.210	2.207	2.204	2.220	2.290	2.397	2.352	2.494	(2.442)	2.380	2.325	2.183	2.309
1961	(2.107)	2.128	2.151	2.189	2.212	2.369	(2.375)	2.434	2.477	2.412	2.344	2.235	2.286

## JAPAN (SHIKOKU)

Years	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>UWAJIMA</b>													
1959	2.033	2.049	2.055	2.139	(2.182)	2.319	2.359	2.334	2.299	2.352	2.263	2.208	2.216
1960	2.099	2.099	2.110	2.123	2.188	2.309	2.240	2.390	2.309	2.270	2.216	2.091	2.204
1961	2.040	2.065	2.074	2.093	2.109	2.276	2.274	2.325	2.358	2.320	2.239	2.141	2.193
<b>OTOSHIMIZU</b>													
1959	1.534	1.516	1.573	1.654	1.710	1.821	1.842	1.809	1.796	1.843	1.750	1.705	1.713
1960	1.626	1.636	1.625	1.624	1.709	1.781	1.728	1.877	1.813	1.792	1.707	1.583	1.708
1961	1.558	1.575	1.607	1.596	1.599	1.762	1.744	1.837	1.831	1.831	1.729	1.627	1.691
<b>KOCHI</b>													
1959	-3.079	-3.096	-3.014	-2.904	-2.844	-2.759	-2.730	-2.777	-2.807	-2.752	-2.834	-2.875	-2.870
1960	-2.971	-2.974	-2.979	-2.982	-2.873	-2.804	-2.852	-2.706	-2.758	-2.801	-2.887	-3.034	-2.885
1961	-3.052	-3.039	-3.006	-3.002	-2.994	-2.834	-2.843	-2.757	-2.754	-2.757	-2.863	-2.992	-2.908
<b>JAPAN (KYUSHU)</b>													
<b>HOSOJIMA</b>													
1959	-2.740	-2.717	-2.718	-2.657	-2.587	-2.467	-2.445	-2.474	-2.516	-2.446	-2.553	-2.602	-2.574
1960	-2.701	-2.702	-2.680	-2.667	-2.608	-2.516	-2.579	-2.428	-2.514	-2.535	-2.601	-2.736	-2.606
1961	-2.779	-2.734	-2.726	-2.716	-2.708	-2.544	-2.559	-2.485	-2.454	-2.493	-2.568	-2.678	-2.620
<b>SASEBO</b>													
1959	2.562	2.596	2.583	2.667	2.731	2.893	2.999	2.967	2.980	2.957	2.793	2.693	2.785
<b>JAPAN (NANSEI SHOTO)</b>													
<b>NAZE</b>													
1959	1.210	1.289	1.289	1.302	1.286	1.378	1.422	1.526	1.543	1.436	....	....	(1.368)
<b>JAPAN (HONSHU-WEST COAST)</b>													
<b>TOKUYAMA</b>													
1959	2.403	2.422	2.422	2.452	2.508	2.653	2.750	2.680	2.664	2.714	2.580	2.511	2.563
<b>SHIMONOSEKI</b>													
1959	2.404	2.406	2.388	2.497	2.590	2.729	2.813	2.755	2.743	2.724	2.614	2.512	2.598
1960	2.408	2.387	(1.874)	2.456	2.563	2.664	2.615	2.733	2.682	2.592	2.582	2.412	2.497
1961	2.345	2.374	2.365	2.421	2.470	2.609	2.662	2.745	2.727	2.638	2.564	2.468	2.532
<b>TONOURA</b>													
1959	0.886	0.798	0.821	0.948	1.000	1.148	1.298	1.243	1.255	1.211	1.086	1.012	1.059
1960	0.948	0.887	0.891	0.901	1.000	1.112	1.161	1.240	1.231	1.037	1.044	0.908	1.030
1961	0.825	0.837	0.792	0.871	0.948	1.079	1.180	1.262	1.199	1.047	1.021	0.971	1.003
<b>SAKAI</b>													
1959	1.191	1.080	1.095	1.229	1.281	1.423	1.570	1.527	1.548	1.474	1.347	1.288	1.338
1960	1.234	1.163	1.170	1.175	1.275	1.378	1.430	1.485	1.476	1.301	1.308	1.213	1.301
1961	1.137	1.122	1.068	1.137	1.211	1.345	1.472	1.531	1.469	1.331	1.310	1.271	1.284
<b>MAIZURU</b>													
1959	1.008	0.898	0.946	1.036	1.078	1.226	1.371	1.324	1.342	1.306	1.173	1.118	1.152
<b>MIYAZU</b>													
1959	0.967	0.861	0.887	0.975	1.020	1.171	1.319	1.278	1.291	2.248	1.127	1.084	1.102
1960	1.057	0.967	(0.960)	(0.923)	1.019	1.118	1.196	1.255	1.260	1.092	1.098	1.023	(1.081)
1961	0.958	0.924	0.849	0.915	0.981	1.120	1.230	1.311	1.236	1.101	1.096	1.075	1.066
<b>WAJIMA</b>													
1959	-1.976	-2.155	-2.124	-2.006	-1.986	-1.837	-1.696	-1.738	-1.669	-1.784	-1.902	-1.927	-1.905
1960	-1.917	-2.025	-2.043	-2.048	-1.978	-1.886	-1.832	-1.769	-1.773	-1.973	-1.913	-1.937	-1.925
1961	-1.974	-2.025	-2.155	-2.093	-2.028	-1.899	-1.765	-1.698	-1.742	-1.917	-1.908	-1.879	-1.926
<b>KASHIWAZAKI</b>													
1959	-2.573	-2.758	-2.722	-2.613	-2.593	-2.469	-2.327	-2.347	-2.326	-2.384	-2.502	-2.514	-2.512
1960	-2.480	-2.622	-2.637	-2.650	-2.602	-2.502	-2.463	-2.397	-2.379	-2.563	-2.519	-2.518	-2.529
1961	-2.568	-2.587	-2.758	-2.702	-2.644	-2.529	-2.408	-2.313	-2.374	-2.543	-2.524	-2.447	-2.530

## JAPAN (HONSHU WEST COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>NEZUGASEKI</b>													
													Unit : 1 metre
1959	-2.093	-2.318	-2.277	-2.162	-2.169	-2.056	-1.900	-1.932	-1.890	-1.958	-2.043	-2.083	-2.072
1960	-2.035	-2.181	-2.216	-2.204	-2.168	-2.079	-2.033	-1.978	-1.973	-2.168	-2.108	-2.083	-2.102
1961	-2.111	-2.129	-2.314	-2.245	-2.208	-2.108	-1.972	-1.900	-1.971	-2.160	-2.110	-2.037	-2.103
<b>IWASAKI</b>													
													Unit : 1 metre
1959	(1.619)	(1.416)	1.462	1.628	1.618	(1.710)	(1.867)	(1.793)	(1.819)	(1.774)	1.661	1.620	(1.666)
1960	1.644	1.580	1.540	1.574	1.623	1.703	1.738	1.780	(1.781)	(1.571)	(1.611)	(1.609)	(1.646)
1961	1.578	1.582	1.449	1.554	1.611	(1.673)	(1.796)	1.842	....	1.580	(1.598)	(1.669)	(1.630)
<b>OMINATO</b>													
													Unit : 1 metre
1959	(1.547)	(1.383)	1.395	(1.539)	(1.527)	(1.583)	(1.713)	(1.709)	(1.739)	(1.654)	1.598	1.538	1.577
<b>ASAMUSHI</b>													
													Unit : 1 metre
1959	-2.961	-3.112	-3.094	-2.972	-2.960	-2.899	-2.775	-2.787	-2.759	-2.810	-2.898	-2.950	-2.913
1960	-2.917	-2.988	-3.018	-3.017	-2.975	-2.893	-2.857	-2.818	-2.794	-2.969	-2.959	-2.941	-2.929
1961	-2.950	-2.943	-3.092	-3.047	-2.987	-2.907	-2.831	-2.770	-2.806	-2.956	-2.992	-2.903	-2.931

## PHILIPPINE ISLANDS

<b>MANILA</b>													
													Unit : 1 foot
1959	6.55	6.70	6.85	6.94	7.02	7.23	7.39	7.63	7.60	7.76	7.30	7.04	7.17
1960	6.89	6.90	6.99	7.21	7.35	7.62	7.57	8.13	7.74	7.62	7.26	7.16	7.37
1961	6.80	6.81	6.89	7.08	7.26	7.38	7.80	7.85	7.75	7.43	7.12	7.07	7.27
<b>LEGASPI</b>													
													Unit : 1 foot
1959	4.90	5.02	5.16	5.15	5.12	5.24	5.36	5.47	5.48	5.46	5.16	5.13	5.22
1960	4.97	4.97	5.04	5.27	5.37	5.41	5.48	5.43	5.44	5.38	5.27	5.13	5.26
1961	4.91	4.87	5.06	5.25	5.21	5.23	5.47	5.45	5.29	5.25	5.11	5.10	5.18
<b>TACLOBAN, LEYTE</b>													
													Unit : 1 foot
1959	4.60	4.76	4.84	4.83	4.92	5.12	5.19	5.36	5.41	5.31	5.14	4.98	5.04
1960	4.85	4.92	4.88	5.13	5.29	5.28	5.30	5.41	5.41	5.29	5.10	5.01	5.16
1961	4.67	4.68	4.87	5.08	5.09	5.06	5.36	5.37	5.21	5.14	4.73	4.61	4.99
<b>CEBU</b>													
													Unit : 1 foot
1959	5.25	5.25	5.42	5.44	5.53	5.69	5.80	5.88	5.98	5.90	5.79	5.58	5.63
1960	5.38	5.39	5.42	5.62	5.79	5.88	5.86	5.99	5.97	5.92	5.74	5.63	5.72
1961	5.33	5.31	5.40	5.59	5.64	5.66	5.84	5.90	5.81	5.82	5.59	5.51	5.62
<b>DAVAO</b>													
													Unit : 1 foot
1959	5.58	5.75	5.80	5.85	5.88	6.16	6.15	6.35	6.48	6.24	6.14	6.02	6.03
1960	5.91	5.99	6.02	6.34	6.33	6.33	6.28	6.48	6.58	6.42	6.33	6.25	6.27
1961	5.88	5.78	5.90	6.28	6.26	6.11	6.30	6.28	6.31	6.21	6.12	6.10	6.13
<b>JOLO, SULU</b>													
													Unit : 1 foot
1959	....	....	....	....	....	....	....	....	....	....	8.14	....	....
1960	6.43	6.43	6.43	6.65	6.73	6.69	6.62	6.70	6.73	6.78	6.62	6.52	6.61
1961	6.42	6.32	6.25	6.51	6.54	6.44	6.47	6.62	6.56	6.55	6.46	....	(6.47)

## AUSTRALASIA

<b>PORT MORESBY, NEW GUINEA</b>													
													Unit : 1 cm.
1959	159.4	161.2	171.0	174.0	170.7	166.1	163.1	165.2	170.1	160.6	165.8	168.6	166.3
<b>DARWIN, NORTHERN TERRITORY</b>													
													Unit : 1 cm.
1959	....	413.9	410.0	397.3	395.2	389.5	394.7	393.5	401.4	406.1	416.5	416.8	(403.2)
1960	419.1	421.8	424.1	420.8	411.4	401.0	403.6	397.4	404.4	406.8	413.7	417.2	411.8
<b>CAIRNS, QUEENSLAND</b>													
													Unit : 1 cm.
1959	152.3	156.6	158.4	161.1	158.7	140.7	144.5	145.1	143.0	138.1	145.4	144.5	149.0
1960	148.9	150.4	166.3	151.6	145.3	147.3	141.9	139.7	138.0	140.9	141.6	145.4	146.4

## AUSTRALASIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>KARUMBA</b>													
1957	6.16	6.31	5.67	5.03	3.64	4.29	4.29	4.70	5.06	5.61	6.07	6.56	5.28
1958	6.92	7.12	6.79	6.40	5.53	4.92	5.22	4.81	5.04	5.13	5.39	5.91	5.76
1959	7.51	6.42	6.29	5.44	4.46	3.96	4.13	4.19	4.52	5.36	5.85	6.29	5.37
1960	5.98	6.10	5.90	5.26	4.51	3.93	3.81	3.91	4.53	5.26	5.54	5.70	5.04
<b>TOWNSVILLE, (1)</b>													
1959	166.7	169.7	166.1	170.1	168.6	153.7	153.3	154.0	149.3	147.9	155.5	149.9	158.7
1960	154.6	164.7	172.7	156.1	147.8	153.2	144.8	149.6	146.1	151.6	151.2	154.8	153.9
<b>TOWNSVILLE (2)</b>													
1949	5.25	5.45	6.02	5.66	5.32	4.99	5.06	5.08	5.00	5.00	5.19	5.40	5.28
1950	5.56	5.61	5.87	5.98	5.35	5.19	5.37	5.25	5.25	5.25	5.51	5.79	(5.52)
1951	5.69	5.66	5.92	5.36	5.15	5.01	5.09	4.94	5.15	4.98	5.29	5.25	5.29
1952	5.65	5.86	5.69	5.51	5.31	5.19	5.31	5.17	5.21	5.29	5.22	5.20	5.38
1953	5.68	5.84	5.87	5.53	5.39	5.17	5.36	5.00	5.24	4.97	5.17	5.30	5.38
1954	5.71	5.75	6.00	6.07	5.82	5.47	5.20	5.30	5.28	5.21	5.08	5.46	5.53
1955	5.31	5.46	5.86	5.68	5.42	5.39	5.18	5.17	5.28	5.13	5.34	5.26	5.37
1956	5.60	5.24	5.61	5.54	5.22	5.08	4.98	5.22	5.18	5.12	5.20	(5.27)	
1957	5.74	5.87	5.42	5.27	5.26	5.04	5.00	5.03	4.86	4.95	4.85	5.18	5.21
1958	5.13	5.09	5.19	5.04	5.42	5.40	4.92	4.98	4.96	4.87	5.14	5.04	5.10
1959	5.47	5.57	5.46	5.58	5.57	5.05	5.09	5.11	4.92	4.83	5.16	4.96	5.23
1960	5.05	5.40	5.66	5.09	4.90	4.94	4.76	4.86	4.82	5.14	4.97	5.09	5.06
<b>MACKAY</b>													
1955	10.16	10.17	10.85	10.66	10.25	9.94	9.65	9.62	9.57	9.51	9.75	9.72	9.99
1956	10.23	9.82	10.35	10.07	9.64	....	9.36	9.65	9.64	9.27	9.39	9.53	(9.72)
1957	10.01	10.40	9.68	9.61	9.70	9.42	9.30	9.50	9.17	9.33	9.47	9.54	9.59
1958	9.52	10.12	10.12	10.54	9.76	9.90	9.43	9.32	9.20	9.61	9.76	9.68	9.75
1959	10.13	10.07	10.16	10.33	10.18	9.63	9.61	9.42	9.35	9.59	9.65	....	(9.83)
1960	....	10.18	10.22	9.95	9.65	9.52	9.19	9.43	9.16	9.47	9.33	9.66	(9.61)
<b>GLADSTONE</b>													
1959	230.8	224.8	228.1	221.7	237.2	214.9	....	....	....	....	....	....	....
1960	224.9	233.6	230.4	212.4	212.8	216.6	220.2	222.2	....	....	....	....	....
<b>BRISBANE</b>													
1957	....	3.6	3.3	3.5	....	....	....	3.5	3.6	3.7	3.5	3.2	3.5
1958	3.6	3.4	3.9	3.6	3.6	3.8	3.6	3.3	3.4	3.5	3.4	3.8	3.6
1959	3.8	3.7	3.7	3.8	3.9	3.5	3.5	3.4	....	3.5	3.6	....	3.6
1960	3.4	4.0	3.8	....	....	3.5	3.4	3.4	3.4	3.6	3.6	3.4	3.6
<b>BALLINA</b>													
1959	....	....	....	....	2.88	(2.30)	2.65	(2.48)	2.32	2.37	2.60	(2.23)	....
1960	2.30	2.95	....	2.12	2.37	2.66	2.40	....	....	....	....	....	....
1961	....	....	2.54	2.54	....	....	....	....	....	....	....	....	....
<b>NORFOLK ISLAND</b>													
1959	179.8	176.5	....	....	....	....	....	....	....	....	....	....	....
<b>COFF'S HARBOUR (1)</b>													
1959	2.75	(2.00)	2.52	3.00	....	2.58	2.43	2.37	2.42	3.17	2.44	2.41	(2.59)
1960	2.58	2.74	2.80	2.67	2.98	2.78	2.64	2.74	2.62	2.86	2.76	2.32	2.708
1961	2.45	2.52	2.56	2.54	2.61	2.84	2.64	2.48	2.46	2.56	2.43	2.63	2.560
<b>COFF'S HARBOUR (2)</b>													
1957	....	....	....	....	....	....	93.0	80.8	88.4	84.8	78.0	78.0	....
1958	78.3	86.9	97.5	92.0	98.4	93.6	89.0	85.6	83.2	81.7	72.5	86.9	87.1
1959	(83.2)	....	(76.2)	89.3	92.1	77.1	74.1	72.2	73.2	78.3	74.4	73.5	(78.5)
1960	....	83.5	85.3	81.4	90.8	84.7	80.5	83.5	79.9	87.2	84.1	70.7	(82.9)
<b>LORD HOWE ISLAND</b>													
1959	132.9	121.9	118.5	123.3	135.6	129.0	132.4	118.3	109.3	123.3	119.3	119.8	123.6
1960	93.3	....	150.6	135.7	140.9	127.1	123.3	106.2	108.1	127.3	135.6	102.2	(122.8)

## AUSTRALASIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>NEWCASTLE, N. S. W.</b>													
1959	3.33	3.25	3.30	3.45	3.55	3.22	3.38	3.26	3.07	3.17	3.05	3.46	3.29
1960	3.08	3.28	3.03	3.40	3.62	3.30	3.23	3.29	3.25	3.14	3.23	3.38	3.27
1961	2.94	3.18	3.17	3.09	3.34	3.42	3.22	3.05	2.90	3.04	2.91	3.23	3.12
<b>SYDNEY (FORT DENISON)</b>													
1955	3.10	3.03	3.08	3.19	3.36	3.29	3.06	3.30	2.85	3.08	3.31	3.16	3.150
1956	3.07	3.12	2.92	3.47	3.59	3.55	3.17	3.16	2.83	2.98	3.21	3.40	3.208
1957	3.09	2.95	3.07	3.28	3.19	2.88	3.10	2.85	2.92	2.98	3.13	3.10	3.045
1958	2.94	3.19	3.49	3.29	3.54	3.25	3.17	2.89	2.85	3.03	2.83	3.04	3.126
1959	3.06	2.89	3.02	3.21	3.38	3.11	3.07	2.93	2.77	2.89	2.80	3.27	3.033
1960	2.87	3.19	2.90	3.23	3.44	3.12	3.01	3.18	2.97	3.03	3.13	2.87	2.078
1961	2.70	2.92	3.09	3.00	3.25	3.28	3.05	2.91	2.85	2.92	2.86	3.01	2.987
<b>CAMP COVE, N. S. W.</b>													
1959	92.4	88.1	93.0	97.8	104.2	94.2	95.2	89.7	84.3	88.3	83.8	98.6	92.5
1960	87.6	96.3	89.8	98.6	....	94.8	92.0	96.0	88.7	91.3	95.7	86.3	(92.5)
<b>PORT KEMBLA, N. S. W.</b>													
1959	2.91	2.41	2.81	3.02	3.09	2.89	2.92	2.67	2.49	2.64	2.52	2.97	2.78
1960	2.57	2.80	2.53	2.87	3.04	2.75	2.70	2.84	2.66	2.70	2.86	2.57	2.74
1961	2.33	2.63	2.66	....	....	....	....	....	....	....	....	....	....
<b>EDEN, N. S. W.</b>													
1959	....	....	....	....	....	89.9	89.2	86.1	81.8	77.8	81.6	....	....
1960	83.4	89.0	81.1	98.4	....	83.4	89.1	81.4	84.0	81.2	83.7	77.0	(84.7)
<b>WILLIAMSTOWN (1)</b>													
1959	1.27	1.48	1.35	1.58	1.46	1.64	1.64	1.64	1.43	1.14	1.38	1.88	1.49
1960	1.56	1.67	1.46	2.10	2.19	1.58	1.69	1.58	1.48	1.58	1.68	1.33	1.66
1961	1.43	1.64	1.36	1.69	1.79	1.96	1.73	1.46	1.31	1.53	1.27	1.38	1.55
<b>WILLIAMSTOWN (2)</b>													
1957	....	....	....	....	....	....	51.2	44.2	52.7	50.6	56.7	52.7	....
1958	45.7	44.5	51.5	44.2	70.7	52.7	60.0	49.4	43.3	51.5	49.4	45.7	50.7
1959	39.0	46.0	41.8	48.8	45.7	50.9	50.3	50.6	44.2	35.4	42.7	57.9	46.1
1960	48.8	52.1	45.7	65.5	59.7	49.4	52.7	48.8	46.3	49.4	52.7	41.8	51.1
<b>HOBART, TASMANIA</b>													
1959	311.9	318.0	213.8	316.7	311.9	316.5	317.8	317.9	309.1	306.3	312.1	318.4	314.2
1960	304.9	314.7	308.2	321.4	324.7	312.1	316.2	312.2	305.9	311.8	311.4	313.2	313.1
<b>MAAT SUYKER ISLAND, TASMANIA</b>													
1959	140.0	(156.4)	150.6	156.1	152.4	157.3	153.0	....	142.6	161.8	....	140.5	(151.1)
<b>CAPE SORRELL, TASMANIA</b>													
1959	89.0	93.3	90.8	96.3	89.6	98.8	98.1	100.3	88.4	80.1	93.0	103.3	93.4
<b>PORT MACDONNELL</b>													
1959	50.9	50.6	57.6	57.6	53.9	60.7	59.3	63.1	54.7	48.6	50.5	66.3	56.2
1960	57.8	59.6	55.6	73.6	74.2	65.5	68.0	57.9	55.5	56.5	56.7	52.1	61.1
1961	54.7	60.0	54.1	67.7	70.0	78.0	70.5	63.1	56.7	62.7	59.4	59.8	63.1
<b>THEVENARD</b>													
1959	....	....	....	....	3.03	3.32	3.19	3.28	2.91	2.98	3.02	3.25	....
1960	3.04	2.92	3.12	3.54	....	....	....	....	....	....	....	....	....
<b>ALBANY, W. A.</b>													
1959	61.9	63.1	69.2	73.8	78.3	86.3	78.6	72.5	56.7	63.4	63.4	67.1	69.5
1960	68.0	54.9	61.9	69.8	76.2	73.8	73.8	65.2	64.6	65.5	67.4	72.5	67.8
<b>BUNBURY, W. A.</b>													
1959	49.7	54.9	59.4	62.5	73.2	84.7	71.9	63.4	46.0	53.9	51.5	52.4	60.3
1960	55.5	58.8	57.6	72.0	77.1	67.1	75.0	55.5	55.5	48.8	50.3	55.8	60.8

## AUSTRALASIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>FREMANTLE, W.A.</b>													
1959	55.5	66.3	67.7	83.2	82.9	82.6	81.4	74.4	58.8	66.4	66.1	58.8	(72.7)
1960	55.5	66.3	67.7	76.8	85.4	77.9	81.6	67.9	65.7	62.2	57.7	60.3	68.8
<b>PORT HEDLAND, W.A.</b>													
1959	323.1	328.6	333.8	336.2	334.1	338.6	316.4	344.3	346.0	343.8	331.9	...	336.0
1960	323.1	328.6	333.8	368.6	366.8	355.6	348.8	348.7	345.8	347.9	357.8	359.6	(355.5)
<b>MARIANAS ISLANDS</b>													
<b>APRA HARBOUR, GUAM</b>													
1958	2.33	2.44	2.41	2.51	2.50	2.50	2.71	2.80	2.60	2.51	2.40	2.11	2.49
1959	1.90	2.26	2.44	2.72	2.78	2.84	2.89	2.85	2.86	2.68	2.46	2.39	2.59
1960	2.36	2.63	2.58	2.78	2.83	2.95	2.88	2.90	2.66	2.65	2.60	2.46	2.69
<b>CAROLINE ISLANDS</b>													
<b>MOEN ISLAND</b>													
1959	3.40	3.44	3.34	3.54	3.62	3.46	3.30	3.31	3.46	3.46	3.44	3.27	3.42
1960	3.40	3.44	3.34	3.75	3.74	3.75	3.87	3.96	3.89	3.77	3.87	3.69	...
<b>MARSHALL ISLANDS</b>													
<b>ENIWETOK</b>													
1959	4.09	4.08	4.20	4.40	4.48	4.39	4.37	4.48	4.42	4.11	4.23	4.15	4.28
1960	4.07	4.18	4.23	4.39	4.43	4.63	4.72	4.59	4.53	4.50	4.34	4.21	4.40
<b>KWAJALEIN</b>													
1959	4.35	4.37	4.64	4.71	4.53	4.30	4.35	4.43	4.61	4.65	4.49	4.42	4.49
1960	4.42	4.63	4.79	4.71	4.86	4.87	4.78	4.74	4.84	5.01	4.83	4.67	4.76
<b>WAKE ISLAND</b>													
<b>WAKE ISLAND</b>													
1959	5.07	4.84	4.94	5.12	4.95	5.25	4.83	5.30	5.67	5.50	5.15	5.16	5.15
1960	4.90	5.11	5.40	5.68	5.17	(5.20)	5.23	4.94	5.26	5.15	4.93	5.36	5.19
<b>GILBERT ISLANDS</b>													
<b>OCEAN</b>													
1959	(184)	180	180	177	174	173	178	183	184	183	186	189	181
<b>NEW CALEDONIA</b>													
<b>NOUMEA</b>													
1958	-3.058	(-3.026)	(-2.984)	(-3.030)	(-3.020)	...	...	...	...	...	...	...	...
1959	...	...	...	...	...	...	-2.511	-2.538	-2.552	-2.529	-2.499	-2.449	...
<b>PHOENIX ISLANDS</b>													
<b>CANTON ISLAND</b>													
1959	5.03	5.12	4.89	4.70	4.68	4.58	4.68	4.84	4.83	4.87	4.87	4.79	4.82
1960	4.88	4.66	4.66	(4.65)	4.59	4.60	4.71	4.65	4.81	4.88	4.82	4.93	4.74
<b>HAWAIIAN ISLANDS</b>													
<b>MIDWAY ISLAND</b>													
1959	3.33	2.74	3.01	2.84	2.88	3.11	3.11	3.39	3.54	3.28	3.18	3.31	3.14
1960	3.63	3.37	3.15	(3.10)	3.36	3.46	3.49	3.51	3.21	3.36	3.23	2.99	3.32
<b>JOHNSON ISLAND</b>													
1959	3.20	2.56	2.58	2.70	2.64	2.63	2.94	2.98	3.27	3.19	2.87	3.11	2.89
1960	3.09	3.04	2.48	2.51	2.87	2.51	2.48	2.80	3.17	2.74	2.99	3.07	2.81

## MEAN SEA LEVEL DATA (1959-1961)

## HAWAIIAN ISLANDS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>NAWILIWILI</b>													
1959	3.22	2.87	2.83	3.03	3.04	2.99	3.05	3.22	3.40	3.25	3.20	3.14	3.10
1960	3.05	3.01	2.95	2.85	2.75	2.88	2.86	2.85	3.08	2.99	2.96	3.01	2.94
<b>HONOLULU</b>													
1959	4.74	4.64	4.61	4.64	4.72	4.79	4.74	5.01	4.93	4.74	4.64	4.62	4.74
1960	4.43	4.44	4.38	4.25	4.20	4.31	4.32	4.37	4.44	4.56	4.54	4.56	4.40
<b>MOKUOLOE</b>													
1959	4.04	3.90	(3.87)	3.89	3.95	4.14	4.07	4.34	4.28	4.07	4.01	3.96	(4.04)
1960	3.77	3.79	3.73	3.59	3.62	3.66	3.60	3.69	3.71	3.86	3.85	3.82	3.72
<b>KAHULUI</b>													
1959	3.45	3.36	3.37	3.34	3.33	3.48	3.52	3.80	3.68	3.51	3.50	3.38	3.47
1960	3.22	3.25	3.20	3.14	....	....	....	....	....	3.45	3.35	3.43	....
<b>HILO</b>													
1959	4.86	4.87	4.94	4.81	4.75	4.85	4.93	5.26	5.04	5.00	4.81	4.85	4.91
1960	4.69	4.67	4.69	4.63	4.46	4.74	4.46	4.61	4.91	4.78	4.84	4.97	4.70

## LINE ISLANDS

CHRISTMAS ISLAND												Unit : 1 foot	
1959	4.17	4.14	3.98	3.89	3.84	3.75	3.79	4.02	4.03	....	....	3.94	....
1960	3.93	3.75	3.78	3.74	3.76	3.88	3.96	3.75	3.91	4.00	3.93	4.05	3.87

## ILES DE LA SOCIÉTÉ

MATAVAI, TAHTI												Unit : 1 metre	
1958	-2.962	-2.949	-2.911	-2.872	-2.868	-2.959	-3.261	-2.815	-3.111	-3.082	-3.220	-3.303	-3.026
1959	-2.930	....	....	-2.852	-2.830	-2.901	-2.942	-2.901	-2.897	-2.902	-2.943	(-2.898)	-2.900

## ALEUTIAN ISLANDS

MASSACRE BAY, ATTU												Unit : 1 foot	
1959	5.46	5.33	5.08	5.23	5.18	5.11	(5.02)	5.31	5.36	5.39	5.51	5.47	(5.29)
1960	5.72	5.61	5.15	5.08	5.06	5.03	5.14	5.26	(5.39)	5.30	5.21	5.73	5.31
<b>SWEeper COVE, ADAK</b>													
1959	5.56	5.54	5.33	5.30	5.30	5.20	5.15	5.35	5.61	5.82	5.95	5.71	5.48
1960	5.91	5.73	5.15	5.20	5.19	5.20	5.17	5.38	5.23	5.48	5.51	(5.85)	5.42
<b>UNALASKA</b>													
1959	5.89	....	....	....	....	5.22	....	....	5.63	5.75	6.24	6.03	....
1960	5.97	5.91	5.19	5.39	5.39	5.35	5.28	5.35	5.43	5.69	5.72	6.22	5.57

## ALASKA

WOMANS BAY, KODIAK												Unit : 1 foot	
1959	9.91	9.53	9.76	9.34	9.27	9.40	9.55	9.50	9.78	9.81	9.97	10.17	9.67
1960	9.76	9.76	9.49	9.65	9.45	9.47	9.42	9.48	9.60	10.01	9.94	10.11	9.68
<b>SEWARD</b>													
1959	11.46	11.13	11.22	10.71	10.52	10.73	10.93	10.91	11.35	11.30	11.64	12.06	11.16
1960	....	....	....	11.14	10.87	10.91	....	....	11.24	....	11.72	11.88	....
<b>SITKA</b>													
1959	10.44	10.12	10.25	9.69	9.60	9.85	9.78	9.86	10.02	10.04	10.13	10.69	10.04
1960	10.37	10.27	10.08	10.14	9.94	9.74	9.66	9.72	9.78	10.29	10.52	10.39	10.08
<b>SKAGWAY</b>													
1959	13.52	13.77	14.25	13.61	13.54	14.09	14.50	14.30	14.25	13.78	14.04	14.72	14.03
1960	14.35	14.00	13.50	13.86	13.79	14.02	14.06	14.23	14.26	14.51	(14.65)	(14.47)	14.14
<b>KETCHIKAN</b>													
1959	14.68	14.41	14.44	13.94	13.82	14.18	13.89	13.95	14.34	14.30	14.32	14.97	14.27
1960	14.55	14.39	14.33	14.43	14.27	(13.95)	(13.90)	(13.93)	(14.16)	14.52	14.70	14.46	14.30

## CANADA (PACIFIC COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>PRINCE RUPERT</b>													
													Unit : 1 foot
1959	13.001	12.723	12.776	12.254	12.267	12.602	12.316	12.323	12.670	12.597	12.582	13.207	12.619
1960	12.904	12.770	12.714	12.780	(12.662)	(12.324)	12.306	12.290	12.208	12.769	12.997	12.871	12.643
1961	13.190	13.266	13.156	12.336	12.381	12.527	12.117	12.243	12.244	12.634	12.712	12.794	12.630

## ALERT BAY

1959	10.021	9.814	9.433	9.151	9.113	9.272	9.002	9.113	9.445	9.333	9.202	9.661	9.378
1960	9.735	9.660	9.464	9.535	9.465	9.035	8.986	9.109	9.030	9.356	9.654	9.671	9.391
1961	9.992	10.045	10.028	9.176	9.247	9.191	9.067	9.169	9.102	9.181	9.347	9.541	9.421

## POINT ATKINSON

1959	9.333	9.162	8.649	8.522	8.603	8.749	8.662	8.703	8.926	8.730	8.565	8.836	8.796
1960	8.909	8.934	8.737	8.780	8.774	8.550	8.615	8.637	8.536	8.752	8.908	8.849	8.748
1961	9.157	9.302	9.267	8.527	8.723	8.789	8.731	8.761	8.655	8.640	8.770	8.940	8.853

## VANCOUVER

1959	8.495	8.376	7.871	7.697	7.783	7.946	7.866	7.869	8.109	7.951	7.839	8.087	7.989
1960	8.156	8.150	7.921	7.968	7.933	7.765	7.830	7.844	7.712	7.920	8.222	8.160	7.964
1961	8.476	8.521	8.494	7.694	7.890	7.976	7.916	7.926	7.828	7.773	7.852	8.102	8.036

## TOFINO (CLAYOQUOT')

1959	7.659	7.470	6.877	6.678	6.593	6.748	6.573	6.652	6.960	6.883	6.802	7.227	6.924
1960	7.322	7.240	6.972	7.085	6.958	6.545	6.532	6.696	6.734	6.988	7.462	7.417	6.995
1961	7.765	7.707	7.736	6.704	6.874	6.743	6.706	6.757	6.701	6.728	6.933	7.159	7.040

## FULFORD HARBOUR

1960	7.622	7.579	7.356	7.383	7.302	7.127	7.237	7.232	7.196	7.317	7.619	7.522	7.374
1961	7.810	7.908	7.883	7.128	7.274	7.324	7.288	7.321	7.231	7.167	7.316	7.494	7.427

## VICTORIA

1959	6.740	6.592	6.057	5.894	5.892	5.986	5.916	5.977	6.234	6.119	5.968	6.287	6.136
1960	6.338	6.363	6.147	6.155	6.076	5.775	5.864	5.880	5.862	6.018	6.308	6.303	6.090
1961	6.590	6.691	6.690	5.872	6.005	5.968	5.943	6.023	5.941	5.868	6.043	6.268	6.157

## UNITED STATES (PACIFIC COAST)

<b>NEAH BAY</b>														
1959	....	....	....	....	....	6.17	6.28	6.03	(6.05)	6.59	6.46	6.35	6.78	....
1960	6.82	6.68	6.51	6.74	6.52	5.98	5.98	6.11	6.10	6.39	6.82	6.78	6.45	

## SEATTLE

1959	14.88	14.83	14.32	14.29	14.11	14.23	14.20	14.19	14.40	14.35	14.29	14.55	14.39
1960	14.63	14.64	14.43	14.45	14.33	14.44	14.05	14.15	14.11	14.22	14.48	14.51	14.34

## CRESCENT CITY

1959	7.84	8.00	7.14	7.03	7.01	7.11	7.36	7.45	7.53	7.41	7.34	7.60	7.40
1960	7.77	7.52	7.46	7.19	(7.16)	7.22	7.29	7.27	7.47	7.34	7.54	7.65	7.41

## SAN FRANCISCO

1959	9.10	9.20	8.57	8.76	8.61	8.66	8.99	9.05	9.06	9.09	8.87	8.94	8.91
1960	8.95	8.79	8.65	8.41	8.40	8.80	8.82	8.81	8.92	8.77	8.83	8.84	8.75

## AVILA

1958	5.91	5.80	5.83	5.58	5.77	5.74	5.96	6.20	6.27	6.29	6.03	6.15	5.96
1959	6.00	6.12	5.77	5.75	5.57	5.78	6.04	6.14	6.13	6.26	6.00	6.08	5.97
1960	5.97	....	....	....	....	....	....	....	....	6.09	....	....	....

## LOS ANGELES

1959	6.79	6.79	6.59	6.40	6.45	6.62	6.72	6.84	6.93	7.00	6.66	6.82	6.72
1960	6.53	6.26	6.34	6.27	6.38	6.47	6.63	6.65	6.77	6.67	6.56	6.57	6.51

## SAN CLEMENTE ISLAND

1959	....	....	....	....	5.29	5.49	5.40	....	....	....	....	....	....
1960	....	5.31	5.33	....	....	....	5.59	5.51	5.58	5.49	5.47	....	....

## MEAN SEA LEVEL DATA (1959-1961)

## UNITED STATES (PACIFIC COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>LA JOLLA</b>													
1959	7.04	6.96	6.75	6.67	6.73	6.92	7.10	7.21	7.25	7.26	7.05	7.19	7.01
1960	6.82	(6.57)	(6.64)	6.61	6.71	6.67	6.79	6.86	6.96	6.94	(6.86)	6.79	6.77
<b>SAN DIEGO</b>													
1959	6.65	6.62	6.40	6.39	6.42	6.58	6.70	6.82	6.94	6.97	6.64	6.80	6.66
1960	6.46	6.21	6.28	6.25	6.32	6.41	6.62	6.62	6.74	6.61	6.55	6.54	6.47
<b>MEXICO (PACIFIC COAST)</b>													
<b>ENSENADA</b>													
1959	....	5.386	5.221	5.222	5.230	5.402	5.517	5.658	5.756	5.751	5.455	5.644	(5.477)
1960	5.231	5.101	5.115	5.162	5.147	5.273	5.444	5.473	5.578	5.442	5.317	5.363	5.304
1961	5.378	5.178	5.053	5.075	5.024	5.173	....	....	5.505	5.395	5.257	4.600	(4.694)
<b>LA PAZ</b>													
1959	5.780	5.702	5.585	5.609	5.665	5.865	6.095	6.267	6.442	6.387	6.068	5.875	5.945
1960	5.561	5.428	5.449	5.452	5.584	5.676	5.910	6.088	6.270	6.185	5.914	5.823	5.778
1961	5.544	....	....	....	....	....	....	....	....	....	....	5.650	....
<b>GUAYMAS</b>													
1959	7.868	7.749	7.576	8.010	7.956	8.523	8.572	8.602	8.805	8.447	7.766	7.659	8.128
1960	7.307	7.146	7.353	7.518	7.849	8.275	8.557	8.537	8.539	8.296	7.668	7.488	7.878
1961	7.502	7.528	7.446	7.611	7.871	8.176	8.582	8.462	8.480	8.071	7.514	7.632	7.906
<b>TOPOLOBAMPO</b>													
1959	5.229	5.057	5.033	5.288	5.138	5.840	5.778	5.951	6.007	5.877	5.116	5.045	5.446
1960	4.724	4.488	4.849	4.905	5.104	5.494	5.818	5.784	5.851	5.596	4.977	4.914	5.209
1961	4.947	5.011	4.805	4.978	5.354	5.507	5.915	5.735	5.728	5.422	....	....	(5.340)
<b>MAZATLAN</b>													
1959	7.351	(7.178)	6.998	7.092	7.028	7.641	7.570	7.778	7.774	7.702	7.208	7.068	7.366
1960	6.855	6.736	6.762	6.811	6.917	7.205	7.617	7.515	7.647	7.533	7.208	7.022	7.152
1961	7.044	7.034	6.726	6.775	7.149	7.372	....	....	7.397	7.347	6.818	6.998	(7.066)
<b>SOCORRO ISLAND</b>													
1959	0.881	0.877	0.937	0.926	0.940	1.021	....	....	....	....	....	....	....
<b>MANZANILLO</b>													
1959	7.028	6.961	6.827	6.811	6.840	7.239	7.085	7.279	7.287	7.273	....	....	(7.063)
1960	....	....	....	....	....	....	....	....	7.099	7.193	6.668	6.855	....
1961	6.853	6.780	6.443	6.415	6.742	6.830	7.281	7.097	7.153	6.965	6.625	6.826	6.834
<b>ACAPULCO</b>													
1959	4.687	4.631	4.525	4.599	4.463	4.783	4.722	4.898	4.895	4.826	4.567	4.551	4.679
1960	4.466	4.328	4.162	4.310	4.228	4.647	4.846	4.799	4.742	4.933	4.285	4.550	4.524
1961	4.556	4.422	4.249	4.156	4.583	4.593	4.900	4.760	4.818	4.617	4.318	4.601	4.548
<b>PUERTO ANGEL</b>													
1961	....	....	....	....	....	....	....	....	....	....	4.946	5.306	....
<b>SALINA CRUZ</b>													
1959	4.357	4.727	4.404	4.451	4.681	4.613	4.557	4.932	4.681	4.612	4.141	4.179	4.528
1960	4.245	4.031	3.942	....	4.314	4.676	4.821	4.674	4.592	4.763	4.028	4.112	(4.382)
1961	4.007	4.141	4.221	4.102	4.610	4.557	4.735	4.697	4.609	4.302	3.918	4.480	4.365
<b>GUATEMALA</b>													
<b>SAN JOSE</b>													
1960	5.30	5.20	5.14	5.18	5.34	5.59	5.42	5.37	5.20	5.33	4.86	4.80	5.23
<b>EL SALVADOR</b>													
<b>LA UNION (CUTUCO)</b>													
1948	9.75	9.68	9.70	9.61	9.75	9.82	9.98	9.83	9.88	9.74	9.72	9.59	9.75
1949	9.76	9.58	9.53	(9.37)	9.75	9.79	9.81	9.79	9.87	9.86	9.71	9.74	9.71

## EL SALVADOR

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>LA UNION (CUTUCO) (Cont'd)</b>													
1950	9.64	9.38	(9.35)	(9.44)	9.66	9.81	9.76	9.73	9.61	9.79	9.59	(9.50)	9.60
1951	....	....	9.51	9.58	10.08	....	....	10.21	10.01	....	9.91	9.85	....
1952	9.58	9.32	9.45	9.44	9.64	9.82	9.81	9.84	9.82	9.74	9.64	9.65	9.65
1953	(9.49)	(9.88)	(9.77)	(9.75)	9.98	10.15	10.00	9.98	9.93	9.81	9.71	9.68	9.84
1954	9.62	9.28	9.34	9.56	(9.72)	9.86	9.94	9.80	9.79	9.58	9.64	9.47	9.63
1955	(9.60)	(9.68)	(9.63)	9.66	9.80	9.67	9.74	9.78	9.71	9.69	9.62	9.56	9.68
1956	9.48	9.68	9.56	9.75	9.95	10.02	9.90	9.86	9.81	9.80	9.66	9.62	9.76
1957	9.67	9.59	9.74	9.98	10.14	10.36	10.36	10.24	10.02	10.10	10.17	10.06	10.04
1958	10.16	9.87	9.75	9.88	9.95	10.02	10.05	10.02	10.10	9.90	9.94	9.80	9.95
1959	10.01	9.86	9.79	8.77	9.84	9.90	9.82	9.94	9.98	10.10	10.07	9.69	9.90
1960	9.57	9.64	9.41	9.54	9.77	10.03	9.99	9.95	9.88	9.99	9.67	9.62	9.76

## COSTA RICA (PACIFIC COAST)

<b>PUNTARENAS</b>													Unit : 1 foot
1941	8.77	....	....	....	....	8.73	8.65	8.90	9.00	(8.99)	8.94	8.94	9.06
1942	8.67	8.38	8.30	8.50	8.60	8.46	8.57	8.57	8.49	8.50	8.50	8.44	8.50
1943	8.69	8.52	8.38	8.32	8.76	9.01	9.02	9.15	8.70	8.48	8.44	8.64	8.68
1944	8.43	8.40	8.45	8.56	8.74	8.73	8.83	8.50	8.68	8.58	8.54	8.75	8.60
1945	8.49	8.17	8.15	8.29	8.48	8.81	8.85	8.64	8.73	8.58	8.69	8.58	8.54
1946	8.66	8.58	8.45	8.55	8.65	8.66	8.72	8.76	8.87	8.75	8.73	9.10	8.71
1947	8.76	8.63	8.43	8.41	8.48	8.48	8.61	8.89	8.64	8.72	9.54	8.82	8.62
1948	8.81	8.67	8.53	8.52	8.58	8.62	8.81	8.62	8.66	8.76	8.71	8.90	8.68
1949	8.93	8.66	8.56	8.39	8.73	8.80	8.71	8.97	8.82	8.63	8.70	8.67	8.71
1950	8.62	8.24	8.24	8.35	8.60	8.81	8.66	8.74	8.39	8.72	8.72	8.62	8.56
1951	8.39	8.66	8.65	8.57	9.31	9.32	9.06	9.05	8.90	9.01	9.10	9.03	8.92
1952	8.85	8.49	8.30	8.42	8.68	9.05	9.04	9.18	9.09	8.97	9.12	9.18	8.86
1953	8.96	9.12	8.91	8.90	9.12	9.21	9.21	9.11	8.83	9.01	9.14	9.15	9.06
1954	9.09	8.77	8.89	8.48	8.81	8.85	8.93	8.77	8.82	8.77	8.76	9.00	8.83
1955	8.73	8.77	8.60	8.73	8.87	8.66	8.77	8.88	8.68	8.87	8.72	8.72	8.75
1956	8.60	8.66	8.77	8.91	9.07	9.10	9.10	8.97	9.06	9.04	8.90	8.99	8.93
1957	9.07	8.84	8.86	9.25	9.35	9.51	9.45	9.34	9.05	9.32	9.52	9.62	9.26
1958	9.52	9.40	8.99	9.15	9.00	9.19	9.29	9.28	9.11	9.31	9.37	9.33	9.25
1959	9.46	9.27	9.17	9.11	9.15	9.24	9.14	9.36	9.31	9.32	9.49	9.52	9.30
1960	9.41	8.95	8.83	8.95	9.17	9.31	9.38	9.19	8.92	9.20	9.18	9.30	9.15

## QUEPOS

1957	....	....	....	....	....	....	9.68	9.62	9.48	9.51	9.67	9.74	....
1958	9.78	9.56	9.21	9.29	9.31	9.27	9.47	(9.36)	(9.30)	9.27	9.41	9.42	9.39
1959	9.57	9.45	9.21	9.15	9.22	9.33	9.32	9.39	9.38	9.31	9.47	9.41	9.35
1960	9.32	9.20	9.08	9.04	9.27	9.33	9.40	9.43	9.29	9.33	9.20	9.39	9.27

## PANAMA (PACIFIC COAST)

## PUERTO ARMUELLES

<b>PUERTO ARMUELLES</b>													Unit : 1 foot
1951	(7.29)	7.63	7.46	7.60	8.09	8.15	7.83	7.93	(7.76)	7.86	8.06	7.89	7.80
1952	7.73	7.42	7.26	7.30	7.46	7.67	7.64	7.62	7.65	7.70	7.74	7.82	7.58
1953	7.77	7.81	7.60	7.58	7.66	7.86	7.78	7.70	7.61	7.64	7.76	7.81	7.72
1954	7.70	7.26	7.27	7.29	7.42	7.61	7.58	7.71	7.57	7.56	7.59	7.48	7.50
1955	....	....	....	....	....	....	....	7.54	7.61	7.53	7.54	7.60	....
1956	7.57	7.63	7.48	7.66	7.81	7.80	7.80	7.78	7.72	7.67	7.60	7.62	7.68
1957	7.70	7.61	7.59	7.84	7.88	8.10	8.12	7.99	7.87	7.81	8.19	8.18	7.91
1958	8.11	7.82	7.53	7.59	7.76	7.69	7.89	7.77	7.85	7.75	7.75	7.89	7.78
1959	8.00	7.81	7.57	7.53	7.57	7.63	7.67	7.80	7.85	7.85	7.96	7.83	7.76
1960	7.79	7.62	7.37	7.37	7.57	7.74	7.76	7.68	7.63	7.69	(7.60)	(7.73)	7.63

## BALBOA

1949	2,646	2,427	2,209	2,272	2,809	2,974	3,028	2,980	3,029	3,102	3,028	2,778	2,774
1950	2,446	2,135	2,151	2,262	2,965	3,169	3,002	3,016	3,081	3,249	3,210	2,805	2,791
1951	2,465	2,556	2,312	2,685	3,389	3,447	3,074	3,176	3,243	3,269	3,230	3,098	2,995
1952	2,532	2,172	2,242	2,282	2,908	3,096	3,033	3,073	3,191	3,106	3,210	3,161	2,834
1953	2,793	2,765	2,477	2,671	3,139	3,301	3,212	3,179	3,188	3,368	3,158	3,181	3,036
1954	2,695	2,092	2,340	2,527	3,008	3,185	3,088	3,031	3,129	3,210	3,215	3,019	2,878
1955	2,728	2,659	2,273	2,644	2,899	3,063	3,029	3,134	3,230	3,370	3,141	3,071	2,937
1956	2,492	2,718	2,401	2,749	3,121	3,270	3,106	3,028	3,150	3,241	3,035	2,998	2,942
1957	2,724	2,568	2,626	2,805	3,292	3,435	3,363	3,211	3,269	3,391	3,647	3,442	3,148

## MEAN SEA LEVEL DATA (1959-1961)

## PANAMA (PACIFIC COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>BALBOA (cont'd)</b>													
1958	2.157	2.823	2.683	2.624	3.141	3.198	3.306	3.161	3.251	3.339	3.282	3.194	3.013
1959	2.988	2.569	2.451	2.696	2.815	3.131	2.985	3.087	3.118	3.387	3.309	3.030	2.964
1960	2.951	2.759	2.319	2.643	3.115	3.294	3.242	3.331	3.115	3.262	3.206	3.201	2.953
1961	2.700	2.149	2.283	2.427	2.975	3.068	3.135	3.124	3.085	3.151	3.181	3.087	2.864

## NAOS ISLAND

1949	....	....	....	....	12.88	13.08	13.10	13.11	13.21	13.27	13.18	12.94	....
1950	12.56	12.24	12.31	12.39	13.10	13.30	13.13	13.14	13.21	13.33	13.33	12.92	12.91
1951	12.54	12.69	12.42	12.76	13.48	13.51	13.17	13.26	13.33	13.37	13.28	13.14	13.08
1952	12.69	12.31	12.34	12.43	12.99	13.23	13.11	13.14	13.23	13.20	13.34	13.23	12.94
1953	12.91	12.95	12.60	12.75	13.22	13.39	13.27	13.23	13.25	13.47	13.27	13.29	13.13
1954	12.88	12.28	12.45	12.61	13.13	13.26	13.15	13.11	13.22	13.24	13.25	13.08	12.97
1955	12.83	12.77	12.37	12.75	12.95	13.14	13.09	13.16	13.24	13.33	13.20	13.17	13.00
1956	12.59	12.85	12.56	12.87	13.20	13.35	13.15	13.11	13.22	13.27	13.07	13.05	13.02
1957	12.76	12.67	12.69	12.95	13.34	13.48	13.52	13.24	13.37	13.33	13.64	13.48	13.21
1958	13.24	12.78	12.83	12.76	13.22	13.28	13.41	13.29	13.37	13.38	13.35	13.28	13.18
1959	13.17	12.66	12.56	12.78	12.86	13.18	13.00	13.23	13.23	13.47	13.39	13.18	13.06
1960	13.02	12.88	12.42	12.75	13.22	13.37	13.35	13.39	13.26	13.36	13.44	13.32	13.15

## PANAMA (CANAL ZONE)

1949	2.060	2.089	2.080	1.967	2.102	2.042	2.124	2.175	2.017	2.218	2.465	2.246	2.132
1950	2.130	2.191	2.017	2.009	2.060	2.054	2.190	2.154	2.116	2.152	2.432	2.391	2.158
1951	2.119	2.199	2.041	2.143	2.152	2.188	2.058	2.086	2.028	2.188	2.119	2.112	2.119
1952	2.065	2.076	1.934	1.952	2.106	1.964	2.006	2.013	2.198	2.375	2.204	2.246	2.095
1953	2.160	1.995	2.056	1.984	2.032	2.066	1.970	2.265	2.222	2.093	2.325	2.358	2.127
1954	2.175	2.248	2.145	2.185	2.085	1.938	2.037	2.024	2.202	2.178	2.333	2.331	2.157
1955	2.149	2.306	2.093	2.088	2.232	2.076	2.070	2.123	2.143	2.342	2.329	2.259	2.184
1956	2.280	2.021	2.088	2.157	2.216	2.088	1.968	2.136	2.344	2.213	2.291	2.122	2.160
1957	2.074	2.086	1.925	1.938	2.006	2.232	2.214	2.317	2.265	2.407	2.468	2.432	2.197
1958	2.332	2.218	2.128	2.246	2.160	2.062	2.161	2.239	2.330	2.324	2.184	2.175	2.213
1959	2.223	1.956	2.063	2.265	2.176	2.005	2.158	2.195	2.352	2.210	2.269	2.297	2.181
1960	2.212	2.283	2.301	2.189	2.155	2.191	2.230	2.282	2.257	2.220	2.307	2.354	2.248
1961	2.328	2.165	2.178	2.118	2.213	2.137	2.159	2.314	2.253	2.364	2.245	2.249	2.227

## COLOMBIA (PACIFIC COAST)

1941	(8.94)	(9.04)	(8.76)	(8.99)	(9.10)	8.98	9.18	9.29	9.31	9.33	9.30	9.38	9.13
1942	8.83	8.66	8.67	8.97	9.03	9.08	9.08	9.04	9.09	9.13	9.12	9.03	8.98
1943	9.00	8.54	8.42	8.67	9.09	9.29	9.13	8.93	8.97	9.04	9.08	8.91	8.92
1944	8.60	8.45	8.56	8.76	9.03	9.06	9.10	8.99	8.94	9.07	9.01	8.97	8.88
1945	8.59	8.38	8.19	8.40	8.87	9.27	9.02	8.94	9.04	8.87	9.01	8.98	8.80
1946	8.89	8.50	8.24	8.60	9.05	(9.09)	(8.81)	(8.89)	(8.89)	(9.00)	(9.03)	(9.17)	(8.85)
1947	....	....	....	....	....	....	....	....	....	....	....	....	(8.86)
1948	(8.97)	(8.72)	8.70	8.76	9.00	(8.96)	(8.98)	(8.94)	(8.95)	(9.00)	(9.11)	9.02	(8.93)
1949	8.85	8.55	8.24	8.35	8.86	8.89	8.84	8.90	8.91	8.99	8.97	(8.78)	8.76
1950	(8.64)	8.36	8.21	8.56	8.98	9.10	8.97	8.87	8.96	(9.11)	(9.15)	(8.78)	8.81
1951	(8.65)	8.80	8.48	8.81	(9.39)	9.36	9.02	(9.10)	(9.13)	9.10	9.16	(9.08)	9.01
1952	....	....	....	8.36	8.76	....	....	....	....	....	....	....	....
1953	8.87	8.81	....	....	9.15	9.15	9.08	9.09	9.27	9.18	9.23	....	....
1954	8.93	8.28	8.51	8.54	9.06	9.04	....	....	9.01	9.14	8.95	....	....
1955	8.76	8.78	8.37	8.92	9.31	8.96	(8.91)	9.00	8.93	8.98	9.01	8.98	8.91
1956	....	....	....	9.14	9.14	9.17	9.06	9.04	9.12	8.66	8.85	9.00	....
1957	(8.85)	8.66	8.66	8.98	9.30	9.43	9.38	9.18	9.16	9.17	9.49	9.39	9.14
1958	9.23	8.80	8.72	8.76	9.03	9.06	9.19	9.11	9.23	9.09	9.13	9.13	9.04
1959	9.25	8.78	8.67	8.81	8.94	9.02	9.04	9.08	9.13	9.18	9.28	9.15	9.03
1960	9.01	8.88	8.54	8.71	9.15	9.18	9.15	9.11	9.04	8.99	9.12	9.08	9.00

## TUMACO

1953	10.04	10.19	10.05	10.04	10.30	10.39	10.32	10.17	10.18	10.36	10.24	10.13	10.20
1954	10.02	9.61	9.68	9.87	10.09	10.19	10.12	10.03	10.02	9.39	10.12	10.07	9.98
1955	10.02	10.03	9.65	10.01	10.08	10.18	10.08	10.09	10.03	9.95	9.96	9.93	10.00
1956	9.78	10.02	9.81	10.07	10.18	10.24	10.14	10.00	10.09	10.03	9.99	9.94	10.02
1957	9.99	9.98	9.97	10.26	10.46	10.54	10.43	10.27	10.23	10.25	10.55	10.50	10.28

## COLOMBIA (PACIFIC COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>TUMACO (Cont'd)</b>													
1958	(10.38)	(10.01)	(9.93)	10.03	10.22	10.25	10.34	10.27	10.24	10.26	10.20	10.25	10.20
1959	10.40	10.11	9.99	10.09	10.15	10.21	10.18	10.20	10.20	10.26	10.29	10.30	10.20
1960	10.16	10.07	9.82	9.93	10.23	10.30	10.20	10.18	10.13	10.11	10.21	10.19	10.13

## ECUADOR

SAN CRISTOBAL (1)													Unit : 1 foot	
1960	6.59	6.70	6.71	6.62	6.65	6.73	6.65	6.56	6.62	6.45	6.54	6.68	6.63	
<b>SAN CRISTOBAL (2)</b>														
1958	....	211	210	206	205	203	205	200	200	....	....	....	....	Unit : 1 cm.
<b>LA LIBERTAD</b>														
1948	....	....	....	....	....	....	....	....	....	....	....	....	....	Unit : 1 foot
1949	....	....	....	....	....	....	8.57	....	....	8.33	8.36	8.43	8.51	....
1950	8.37	8.41	8.46	8.34	8.51	8.64	8.50	8.32	8.29	8.39	8.47	8.56	8.44	....
1951	8.57	8.75	8.62	8.75	9.11	9.03	8.71	8.62	8.69	8.80	8.73	8.56	8.75	....
1952	8.58	8.44	8.41	8.37	8.56	8.70	8.51	8.56	8.51	8.63	8.69	8.65	8.55	....
1953	8.66	9.00	9.00	8.68	8.85	8.91	(8.75)	8.65	8.64	8.64	(8.63)	8.55	8.75	....
1954	8.61	8.52	8.41	8.49	8.63	8.69	8.56	8.59	8.52	8.53	8.51	8.51	8.55	....
1955	8.69	8.87	8.59	8.70	8.55	8.54	8.44	8.39	8.46	8.43	8.41	8.49	8.55	....
1956	8.54	8.91	8.62	8.82	8.80	(8.70)	8.87	8.55	8.55	8.56	(8.46)	(8.39)	8.65	....
1957	8.32	9.06	9.03	9.16	9.15	(9.12)	9.01	8.72	8.69	8.87	9.17	9.08	8.95	....
1958	9.12	8.91	8.70	8.79	8.74	8.77	8.76	8.64	8.62	8.70	8.61	8.59	8.75	....
1959	8.86	8.83 <sup>f</sup>	8.84	8.77	8.51	8.67	8.58	8.60	8.63	8.65	8.60	8.67	8.68	....
1960	8.63	8.56	8.45	8.59	8.81	8.61	8.61	8.55	8.55	8.59	8.55	8.62	8.59	....

## PERU

TALARA														Unit : 1 foot	
1942	(5.82)	(5.83)	(5.73)	5.73	5.58	5.53	5.43	5.45	5.43	5.42	5.43	5.37	5.56		
1943	5.80	5.95	5.81	5.78	5.87	5.93	5.75	5.56	5.51	5.35	5.47	5.46	5.69		
1944	(5.57)	5.71	5.87	5.81	5.73	5.72	5.71	5.45	5.53	5.44	5.38	5.41	5.61		
1945	5.66	5.73	5.59	5.54	5.66	5.99	5.75	5.71	5.54	5.63	5.58	5.45	5.65		
1946	5.64	5.80	5.62	5.76	(5.70)	(5.61)	5.68	5.49	5.50	5.43	5.50	5.74	5.62		
1947	5.71	5.78	5.74	5.60	5.52	(5.68)	(5.48)	5.45	5.35	5.45	(5.54)	5.62	5.58		
1948	5.94	5.94	5.83	5.73	5.66	5.56	5.56	5.40	5.33	5.41	5.42	5.43	5.60		
1949	5.87	5.91	5.81	5.61	5.64	5.50	5.43	5.36	5.29	5.27	5.24	5.32	5.52		
1950	5.41	5.48	5.54	5.53	5.63	5.52	5.47	5.43	5.38	5.46	5.40	5.41	5.47		
1951	5.64	5.80	5.78	5.82	6.03	(6.02)	5.51	5.49	5.54	5.51	5.60	5.53	5.69		
1952	5.59	5.57	5.51	5.51	5.55	5.59	5.46	(5.55)	(5.45)	(5.55)	(5.45)	(5.55)	5.53		
1953	5.57	6.03	6.02	5.84	5.95	5.86	5.68	5.69	5.60	5.55	5.58	5.58	5.75		
1954	5.65	5.52	5.56	5.53	5.54	5.61	5.51	5.45	5.50	5.42	5.56	5.49	5.53		
1955	5.63	5.78	5.62	5.70	5.54	5.49	5.39	5.38	5.37	5.28	5.23	5.36	5.48		
1956	5.51	5.85	5.84	5.77	5.69	5.60	5.57	5.50	5.46	5.40	5.36	5.31	5.57		
1957	5.67	6.07	6.13	6.29	6.18	6.10	(5.95)	5.71	(5.58)	5.64	5.93	6.05	5.94		
1958	6.08	5.92	(5.78)	(5.88)	5.83	5.76	5.68	5.44	5.53	5.47	5.49	5.54	5.70		
1959	5.81	6.01	5.90	5.83	5.83	5.79	5.51	5.66	5.57	5.66	(5.78)	5.59	5.74		
1960	5.70	5.72	5.59	5.62	5.61	5.73	5.64	(5.58)	(5.52)	5.46	5.59	5.55	5.61		

## CHIMBOLE

1955	6.82	7.00	7.04	6.97	6.85	6.74	6.64	6.58	6.62	6.58	6.66	6.60	6.76	
1956	6.75	7.04	7.04	7.04	6.95	6.97	6.83	6.70	6.63	6.60	6.65	6.60	6.82	
1957	6.88	7.30	7.31	7.50	7.43	7.21	7.23	7.09	6.97	6.86	7.02	7.25	7.17	
1958	7.46	7.37	7.19	7.18	7.14	7.05	7.04	6.86	6.85	6.95	6.73	6.93	7.06	
1959	6.98	(7.14)	(7.15)	7.19	6.79	6.97	6.79	6.78	6.88	6.84	6.86	6.80	6.93	
1960	6.87	7.03	7.08	7.01	7.07	7.16	6.74	6.77	6.60	6.25	6.47	6.68	6.81	

## MEAN SEA LEVEL DATA (1959-1961)

## PERU

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>CALLAO</b>													
													Unit : 1 foot
1942	8.76	8.77	8.72	8.72	8.58	8.54	8.45	8.38	8.36	8.39	8.44	8.43	8.55
1943	8.71	8.80	8.78	8.78	8.83	8.87	8.67	8.53	8.47	8.40	8.47	8.48	8.65
1944	8.56	8.80	8.79	8.82	8.79	8.77	8.70	8.55	8.50	8.43	8.44	8.52	8.64
1945	8.55	8.62	8.64	8.64	8.72	8.76	8.60	8.47	8.48	8.35	8.49	8.45	8.56
1946	8.66	8.69	8.69	8.78	8.72	8.63	8.63	(8.43)	(8.45)	(8.40)	8.47	8.65	8.60
1947	8.67	8.76	8.68	8.62	8.57	8.66	8.42	8.41	8.35	8.43	8.49	8.52	8.55
1948	8.58	8.80	8.74	8.59	8.70	8.49	8.64	8.43	8.42	8.45	8.53	8.52	8.57
1949	8.79	8.86	8.86	8.49	8.60	8.42	8.39	8.42	8.26	8.32	8.42	8.37	8.52
1950	8.47	8.49	8.57	8.59	8.58	8.54	8.42	8.42	8.30	8.29	8.39	8.43	8.46
1951	8.53	8.74	8.76	8.78	8.97	9.02	8.68	8.60	8.53	8.54	8.52	8.57	8.69
1952	8.67	8.70	8.67	8.72	8.72	8.61	8.52	8.53	8.42	8.50	8.47	8.56	8.59
1953	8.58	8.95	8.85	8.87	8.83	8.77	8.64	8.67	8.55	8.49	8.40	8.49	8.67
1954	8.53	8.51	8.57	8.53	8.54	8.55	8.39	8.35	8.35	8.27	8.50	8.43	8.46
1955	8.54	8.61	8.70	8.63	8.51	8.49	8.42	8.26	8.27	8.18	8.27	8.33	8.43
1960	5.73	5.86	5.68	5.80	5.71	5.81	5.63	5.65	5.58	5.65	5.66	5.69	5.70
<b>LA PUNTA (CALLAO)</b>													
1954	(5.75)	5.73	5.79	5.75	5.76	5.77	5.61	5.57	5.57	5.49	5.72	5.65	5.68
1955	5.76	5.83	5.92	5.85	5.73	5.71	5.64	5.48	5.49	5.40	5.49	5.55	5.65
1956	5.75	5.93	5.91	5.89	5.76	5.74	(5.58)	5.66	5.60	5.50	(5.55)	5.56	5.70
1957	5.79	6.15	6.20	6.34	6.29	6.19	(6.01)	5.84	(5.71)	5.79	5.91	(6.09)	6.03
1958	6.28	6.16	6.00	5.99	5.96	5.93	5.88	5.64	5.61	5.64	5.72	5.78	5.88
1959	6.02	6.07	6.07	5.96	5.79	5.82	5.72	5.71	5.51	5.63	5.69	5.70	5.81
<b>SAN JUAN</b>													
1958	4.06	3.98	3.83	3.87	3.80	3.67	3.71	3.43	3.60	3.57	3.58	3.79	3.74
1959	3.83	3.85	3.89	3.73	3.61	3.60	3.54	3.56	(3.58)	(3.62)	3.66	3.69	3.68
1960	3.69	3.87	3.69	3.77	3.74	3.65	3.52	3.52	3.49	3.63	(3.68)	3.73	3.67
<b>MATARANI</b>													
1941	....	....	....	....	4.01	3.88	3.84	3.99	3.94	4.03	3.99	4.20	4.01
1942	4.11	4.07	4.00	4.05	3.94	3.81	3.80	3.70	3.75	3.83	3.88	3.81	3.90
1943	4.03	3.92	4.06	3.98	4.15	(4.16)	(3.90)	(3.78)	(3.80)	(3.80)	(3.84)	(3.84)	(3.95)
1944	(3.93)	(4.05)	(4.02)	4.00	3.95	3.93	3.89	3.74	3.76	3.78	3.76	3.87	3.89
1945	3.92	(3.97)	(4.08)	4.07	4.12	4.08	3.74	3.71	3.60	3.63	3.75	3.69	3.86
1946	3.83	3.87	3.84	(3.90)	3.99	3.94	(4.04)	(3.78)	(3.88)	(3.80)	(3.89)	(4.00)	3.90
1947	(4.00)	4.02	(4.02)	(4.00)	3.87	3.94	3.81	3.75	3.70	3.73	3.82	3.93	3.88
1948	4.05	4.03	4.02	3.88	3.94	3.73	3.77	3.63	3.62	3.66	3.76	3.86	3.83
1949	4.14	4.03	4.05	3.71	3.99	(3.78)	(3.67)	(3.70)	(3.46)	3.60	3.65	3.66	3.79
1950	3.78	3.76	3.80	3.85	3.84	3.67	3.56	3.54	3.58	3.51	3.68	3.78	3.70
1951	3.80	(3.96)	3.86	3.87	4.13	4.01	3.80	3.77	(3.75)	3.76	3.81	3.78	3.86
1952	3.87	4.02	3.92	3.86	3.84	3.82	3.64	3.76	3.65	....	....	....	....
1953	....	....	....	....	....	....	....	....	....	....	....	....	....
1954	....	....	....	3.77	3.87	3.76	3.64	3.56	3.60	3.51	3.80	3.68	...
1955	4.01	3.94	4.05	3.80	3.84	3.71	3.65	3.52	3.50	3.48	3.61	3.71	3.73
1956	3.81	3.90	3.81	3.86	3.75	3.75	3.58	3.69	3.61	3.64	3.67	3.68	3.73
1957	3.87	3.97	4.15	4.19	4.19	4.02	3.85	3.83	3.66	3.87	3.89	4.01	3.96
1958	4.27	4.15	4.08	3.97	4.05	(3.92)	(3.86)	(3.62)	3.71	3.77	3.79	3.92	3.93
1959	4.04	4.13	4.08	3.93	3.81	4.04	3.74	3.79	3.80	3.87	3.82	3.90	3.91
1960	3.80	3.96	3.73	4.03	3.87	3.94	3.74	(3.78)	3.68	3.80	3.80	3.92	3.84
<b>CHILE</b>													
<b>ARICA</b>													
													Unit : 1 metre
1956	1.620	1.531	1.568	1.595	1.574	1.584	1.484	1.489	1.484	1.497	1.531	1.530	1.541
1957	1.613	1.617	1.652	1.642	1.688	1.656	1.597	1.578	1.549	1.607	1.678	1.660	1.628
1958	1.775	1.722	1.816	1.697	1.744	1.672	1.654	1.579	1.652	1.609	1.671	1.681	1.678
1959	1.724	1.724	1.697	1.669	1.630	1.618	1.617	1.653	1.630	1.667	1.687	1.739	1.671
1960	1.677	1.697	1.674	1.752	1.742	1.728	1.699	1.678	1.599	1.666	1.659	1.673	1.687
1961	1.725	1.711	1.737	1.703	1.713	1.634	1.586	1.631	1.604	1.667	1.637	1.692	1.670
<b>IQUIQUE</b>													
													Unit : 1 metre
1959	0.985	0.966	0.983	0.968	0.915	0.927	0.912	0.904	0.900	0.910	0.912	0.944	0.936

## CHILE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>*ANTOFAGASTA</b>													
1956	0.735	0.749	0.726	0.721	0.714	0.711	0.669	0.651	0.673	0.682	0.709	0.680	0.702
1957	0.744	0.767	0.791	0.849	0.829	0.783	0.778	0.723	0.704	0.728	0.828	0.805	0.777
1958	0.872	0.790	0.813	0.757	0.807	0.782	0.797	0.711	0.738	0.722	0.763	0.773	0.777
1959	0.820	0.801	0.796	0.780	0.721	0.736	0.728	0.717	0.750	0.731	0.746	0.778	0.759
1960	0.759	0.745	0.725	0.739	0.723	0.753	0.702	0.702	0.663	0.696	0.719	0.847	0.726 †
1961	0.871	0.855	0.806	0.821	0.844	0.748	0.807	0.846	0.789	0.800	0.766	0.822	0.815
<b>CALDERA</b>													
1956	1.163	1.202	1.138	1.166	1.136	1.122	1.093	1.079	1.057	1.070	1.113	1.141	1.123
1957	1.186	1.226	1.119	1.208	1.255	1.207	1.192	1.148	1.149	1.136	1.197	1.199	1.185
1958	1.284	1.187	1.276	1.185	1.265	1.242	1.224	1.107	1.105	1.122	1.178	1.182	1.196
1959	1.218	1.217	1.195	1.129	1.186	1.182	1.192	1.171	1.178	1.151	1.161	1.196	1.181
1960	1.196	1.195	1.174	1.200	1.183	1.181	1.128	1.050	1.092	1.119	1.144	1.210	1.156
1961	1.195	1.223	1.199	1.165	1.198	1.095	1.112	1.211	1.098	1.137	1.143	1.199	1.165
<b>COQUIMBO</b>													
1960	....	....	....	0.889	0.901	0.886	0.848	0.850	0.804	0.856	0.858	0.920	....
1961	0.893	0.925	0.914	0.879	0.905	0.884	0.839	0.860	....	....	....	....	....
<b>VALPARAISO</b>													
1956	0.785	0.832	0.774	0.768	0.776	0.765	0.774	0.752	0.729	0.722	0.759	0.796	0.769
1957	0.823	0.813	0.801	0.790	0.847	....	....	0.866	0.760	0.763	0.919	0.907	(0.829)
1958	0.964	0.923	0.957	0.844	1.061	0.860	0.926	0.851	0.857	0.839	0.860	0.823	0.897
1959	0.896	0.923	0.857	0.850	0.791	0.896	0.896	0.830	0.815	0.815	0.823	0.873	0.855
1960	0.856	0.855	0.876	0.873	0.902	0.855	0.835	0.824	0.794	0.784	0.842	0.918	0.851
1961	0.866	0.920	0.864	0.847	0.879	0.836	0.838	0.874	0.766	0.827	0.824	0.894	0.853
<b>JUAN FERNANDEZ</b>													
1957	....	....	....	....	....	....	....	....	....	....	1.219	....	....
1958	....	1.283	1.355	....	....	....	1.373	1.242	1.186	1.193	1.218	1.241	....
<b>TALCAHUANO</b>													
1956	1.794	1.805	1.822	1.813	1.838	1.812	1.868	1.805	1.747	1.728	1.766	1.803	1.800
1957	1.847	1.865	1.841	1.822	1.962	1.819	1.883	1.817	1.783	1.743	1.824	1.881	1.841
1958	1.898	1.775	2.089	1.797	1.890	1.917	1.928	1.821	1.799	1.748	1.777	1.753	1.849
1959	1.820	1.849	1.774	1.840	1.774	1.855	1.940	1.815	1.795	1.785	1.787	1.801	1.820
1961	0.932	0.958	0.919	0.876	0.957	0.959	0.972	1.075	0.922	0.851	0.860	0.916	0.933
<b>d PUERTO MONTT</b>													
1957	....	....	....	....	....	....	....	....	....	....	5.430	5.440	....
1958	5.438	5.394	5.452	5.382	5.501	5.519	5.580	5.442	5.443	5.426	5.451	5.440	5.456
1959	5.458	5.487	5.446	5.444	5.400	5.492	5.440	5.460	5.421	5.418	5.513	5.492	5.456
<b>TIERRA DEL FUEGO - CALETA PERCY</b>													
1961	....	....	....	....	....	....	....	....	....	1.258	1.266	1.277	....
<b>PUNTA ARENAS</b>													
1956	1.493	1.556	1.586	1.382	1.434	1.539	1.514	1.422	1.479	1.433	1.485	1.406	1.477
1957	1.456	1.446	1.615	1.364	1.521	1.388	1.448	1.350	1.471	1.463	1.478	1.544	1.462
1958	1.662	1.388	1.397	1.499	1.461	1.550	1.590	1.624	1.501	1.530	1.546	1.443	1.516
1959	1.338	1.425	1.380	1.204	1.372	1.350	1.384	1.436	1.465	1.380	1.466	1.486	1.390
1960	1.505	1.491	1.471	1.544	1.529	1.470	1.576	1.538	1.444	1.534	1.581	1.534	1.518
1961	1.610	1.615	1.555	1.464	1.535	....	....	1.303	1.323	1.369	1.476	1.524	(1.148)
<b>ISLA DE PASCUA</b>													
1957	0.351	0.342	0.331	0.310	0.318	0.323	0.293	0.308	0.323	0.264	0.288	0.340	0.316
1958	0.388	0.411	0.434	0.447	0.417	0.337	0.409	0.367	0.315	0.381	0.368	0.426	0.393
<b>SOUTH GEORGIA</b>													
<b>KING EDWARD POINT</b>													Unit : 1 foot
1957	....	....	....	....	....	....	....	3.03	2.78	2.64	3.16	2.87	3.18
1958	3.22	3.15	3.08	3.11	3.21	3.03	2.92	3.02	2.83	3.79	3.04	3.16	3.05

\* Due to earth movements the datum fell by 0.061 m in December 1960

† To original datum

d Datum changed. See Table A

## MEAN SEA LEVEL DATA (1959-1961)

## SOUTH GEORGIA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
KING EDWARD POINT (Cont'd)													
1959	3.21	3.29	2.93	3.18	3.09	2.99	3.13	3.01	2.87	2.75	3.29	3.14	3.07
ARGENTINA													
USHUAIA													
Unit : 1 foot													
1958	1.239	0.960	0.974	1.088	0.997	1.089	1.025	1.116	1.010	1.017	1.014	0.923	1.038
1959	1.056	1.144	1.067	0.885	1.063	0.954	0.963	1.010	1.030	0.943	1.068	1.076	1.022
COMODORO RIVADAVIA													
1959	3.062	3.153	3.118	3.094	....	....	....	....	....	....	....	....	....
PUERTO MADRYN													
1958	3.081	3.116	2.997	2.983	3.038	3.027	2.957	2.936	2.879	2.917	2.951	2.982	2.989
1959	3.028	3.098	2.998	2.987	2.955	2.920	2.976	2.943	2.907	2.914	3.081	3.025	2.986
PIRAMIDE													
1958	3.083	3.000	2.967	2.996	3.033	3.050	2.985	2.945	2.885	2.915	2.975	2.997	2.986
1959	3.041	3.034	3.018	3.028	3.008	2.948	3.032	2.993	2.917	2.939	2.992	2.988	2.995
ROSALES													
1958	2.497	2.542	2.498	2.390	2.404	2.520	2.411	2.421	2.416	2.420	2.459	2.504	2.457
1959	2.540	2.582	2.419	2.453	2.387	2.394	2.427	2.392	2.348	2.390	....	....	....
QUEQUEN													
1958	1.054	1.112	0.989	0.987	0.964	1.014	0.923	(0.945)	(0.829)	0.851	0.920	....	0.963
1959	1.015	1.096	1.011	1.034	0.950	0.920	0.985	0.923	0.801	0.905	0.944	0.977	0.963
MAR DEL PLATA (PUERTO)													
1958	1.004	1.095	0.919	0.939	0.944	0.968	0.895	0.922	0.834	0.859	0.939	0.984	0.938
1959	0.031	1.122	1.028	1.065	0.974	0.880	0.957	0.939	0.834	0.930	1.020	1.037	0.985
MAR DEL PLATA (CLUB)													
1958	1.067	1.128	0.995	0.976	0.992	1.005	0.930	0.953	0.889	0.908	0.954	1.007	0.984
1959	1.043	1.126	1.020	1.027	0.938	0.907	0.988	0.961	0.858	0.880	0.951	0.962	0.972
SAN CLEMENTE													
1958	1.149	1.214	....	....	....	1.115	1.012	1.057	0.964	1.014	....	....	....
RIO SANTIAGO													
1958	1.027	1.136	0.963	0.933	0.988	0.867	0.885	0.962	0.885	0.909	1.007	1.035	0.966
1959	1.002	1.094	1.045	....	....	0.840	(1.047)	0.970	0.849	1.097	1.072	1.091	....
BUENOS AIRES													
1958	0.899	1.007	0.830	0.805	0.839	0.741	0.780	0.834	0.769	0.781	0.879	0.921	0.840
1959	0.888	0.987	0.924	1.286	0.857	0.755	0.909	0.829	0.719	1.022	0.893	0.914	0.915
PALERMO													
1958	0.921	1.036	0.865	0.836	0.863	0.752	....	....	....	....	....	....	....
1959	....	....	....	....	....	....	....	0.846	0.710	1.025	0.914	0.909	....
ISLA MARTIN GARCIA													
1958	0.890	0.940	0.802	0.774	0.820	0.678	0.722	0.858	0.742	0.772	0.862	0.937	0.816
1959	0.871	0.999	0.964	1.533	1.189	0.891	1.006	0.881	0.775	1.062	0.940	0.847	0.997
BRAZIL													
IMBITUBA, SANTA CATARINA													
Unit : 1 foot													
1948	....	....	....	....	....	....	....	....	....	6.95	6.72	7.40	7.29
1949	7.38	7.48	7.42	7.70	7.58	7.41	7.44	7.50	7.11	7.27	7.20	7.51	7.42
1950	7.71	7.32	7.58	7.51	7.76	7.28	7.55	7.52	7.40	7.28	7.35	7.38	7.47
1951	7.41	7.53	7.80	7.73	7.69	7.17	7.43	7.16	7.32	7.40	7.29	6.95	7.41
1952	7.29	7.47	7.14	7.96	7.43	7.88	7.42	7.31	7.59	7.39	7.50	7.68	7.50
1953	7.43	7.42	7.49	7.63	7.41	7.46	7.54	7.05	7.17	7.38	7.45	7.33	7.40
1954	7.56	7.59	7.64	7.36	7.82	7.66	7.53	7.44	7.48	7.36	7.74	7.58	7.56
1955	7.39	7.50	7.67	7.67	7.77	7.84	7.86	7.20	7.08	7.44	7.20	7.25	7.49
1956	7.51	7.69	7.35	7.62	7.80	7.72	7.59	7.09	7.27	7.00	7.32	7.60	7.46

## BRAZIL

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>IMBITUBA, SANTA CATARINA (Cont'd)</b>													
1957	7.34	7.80	7.60	7.59	7.04	7.55	7.53	7.41	7.56	7.21	6.98	7.31	7.41
1958	7.53	7.83	7.60	7.78	7.77	7.55	7.24	7.49	7.15	7.51	7.39	7.44	7.52
1959	7.41	7.73	7.55	7.65	7.80	7.76	7.52	7.68	7.45	7.29	7.36	7.51	7.56
1960	7.38	7.41	7.46	7.82	8.09	7.62	7.40	7.25	7.50	7.35	7.57	7.77	7.55
<b>RIO DE JANEIRO</b>													
1949	....	....	....	....	....	....	....	....	....	4.99	5.01	5.19	....
1950	5.51	5.21	5.32	5.41	5.48	4.94	5.12	5.24	5.33	5.18	5.15	5.18	5.26
1951	5.18	5.41	5.52	5.75	5.55	4.99	5.44	5.31	5.32	5.38	5.14	4.95	5.33
1952	5.20	5.32	5.07	5.63	5.47	5.70	5.15	5.14	5.37	5.26	5.31	5.53	5.35
1953	5.05	5.29	5.25	5.40	5.07	5.15	5.21	4.93	4.98	5.15	5.30	5.14	5.16
1954	5.23	5.22	5.39	5.12	5.55	5.32	5.22	5.11	5.10	5.13	5.30	5.29	5.25
1955	5.19	5.06	5.23	5.33	5.38	5.49	5.53	5.16	4.99	5.24	5.02	5.08	5.22
1956	5.24	5.21	5.30	5.47	5.61	5.40	5.28	4.88	4.85	4.77	5.19	5.34	5.21
1957	5.33	5.69	5.70	5.62	5.08	5.28	5.18	5.02	5.36	5.19	4.90	5.16	5.29
1958	5.13	5.37	5.46	5.41	5.60	5.31	4.84	4.60	4.46	4.78	(4.54)	4.58	5.01
1959	4.63	4.99	5.05	....	....	....	....	....	....	....	....	....	....
1960	....	....	....	....	....	....	....	....	5.37	5.07	4.95	5.32	....
<b>CANAVIEIRAS</b>													
1952	4.55	4.62	4.72	4.80	4.91	4.75	4.81	4.70	4.75	4.64	4.67	4.78	4.72
1953	4.55	4.60	4.72	(4.80)	(4.70)	4.72	4.71	4.55	4.61	4.63	4.70	4.71	4.67
1954	4.57	4.72	(4.93)	5.07	4.98	4.74	4.72	4.84	4.58	4.57	4.80	(4.75)	4.77
1955	4.65	4.81	4.81	5.00	4.76	4.88	4.74	4.70	4.64	4.88	5.01	4.99	4.82
1956	4.70	4.86	4.89	4.94	5.00	4.84	4.73	4.75	4.64	4.68	4.90	4.97	4.82
1957	4.78	4.73	5.25	5.06	5.08	4.96	4.93	4.65	4.71	4.71	4.62	4.66	4.84
1958	4.70	4.87	4.73	5.02	4.96	4.88	4.73	4.77	4.78	4.83	4.69	4.67	4.80
1959	4.82	4.74	4.81	4.79	4.98	4.95	4.85	4.80	4.73	4.85	4.84	4.84	4.83
1960	4.95	5.08	5.27	5.20	5.20	4.83	4.90	4.79	4.74	4.69	4.89	4.97	4.96
<b>SALVADOR</b>													
1949	4.22	4.34	4.36	4.58	4.53	4.29	4.31	4.17	4.11	4.07	4.15	4.02	4.26
1950	4.13	4.32	4.54	4.42	4.53	4.42	4.27	4.18	4.16	4.05	4.23	(4.25)	4.29
1951	(4.24)	4.31	4.37	4.63	4.65	4.31	4.28	4.08	4.00	4.04	4.04	(4.00)	4.25
1952	4.15	4.28	4.25	4.44	4.52	4.30	4.38	4.24	4.25	4.25	4.31	4.29	4.30
1953	4.22	4.15	4.26	4.38	(4.30)	4.33	4.51	4.56	4.24	4.19	4.21	4.12	4.29
1954	4.26	4.30	4.51	4.62	4.54	4.37	4.28	4.22	4.12	4.17	4.19	4.25	4.32
1955	4.23	4.33	4.39	4.47	4.39	4.32	4.26	4.20	4.21	4.33	4.21	4.27	4.30
1956	4.28	4.40	4.45	4.40	4.50	4.37	4.25	4.17	4.11	4.21	4.40	4.13	4.31
1957	4.17	4.23	4.15	4.32	4.34	4.20	4.46	4.48	4.46	4.52	4.43	4.51	4.36
1958	4.25	4.40	4.31	4.43	4.40	4.56	4.43	4.36	4.37	4.40	4.32	4.34	4.38
1959	4.42	4.42	4.40	4.25	4.48	4.52	4.34	4.32	4.17	4.29	4.23	4.30	4.34
1960	4.31	4.36	4.34	4.57	4.71	4.43	4.46	4.31	4.24	4.19	4.32	4.46	4.39
<b>RECIFE</b>													
1948	....	....	....	....	....	....	....	....	....	4.60	4.53	4.67	....
1949	4.89	4.67	4.72	(4.79)	(4.88)	4.86	4.78	4.78	(4.75)	4.58	4.64	4.75	4.76
1950	4.95	4.96	5.03	5.03	5.11	5.03	5.08	4.90	4.78	4.70	4.64	4.75	4.91
1951	4.59	4.78	4.70	4.78	5.01	4.94	4.86	4.66	4.60	4.51	4.26	4.45	4.68
1952	4.51	4.61	4.61	4.74	4.90	4.67	4.61	4.61	4.48	4.55	4.59	4.75	4.64
1953	4.84	4.61	4.69	4.70	4.65	4.70	4.67	4.60	4.49	4.44	4.31	4.36	4.59
1954	4.40	4.55	4.67	4.75	4.79	4.73	4.65	4.57	4.57	4.49	4.51	4.59	4.61
1955	4.61	4.65	4.73	4.79	4.75	4.61	4.72	4.53	4.45	4.58	4.44	4.52	4.62
1956	4.60	4.72	4.66	4.73	4.94	4.65	4.62	4.56	4.39	4.34	4.51	4.26	4.58
1957	4.34	4.46	4.66	4.79	4.75	5.03	4.66	4.59	4.50	4.44	4.48	4.52	4.60
1958	4.59	4.66	4.52	4.73	4.90	4.72	4.66	4.59	4.64	4.65	4.52	4.42	4.63
1959	4.67	4.71	4.67	4.59	4.79	4.73	4.69	4.63	4.44	4.50	4.60	4.54	4.63
1960	4.48	4.63	4.71	4.83	4.95	4.63	4.36	4.61	4.60	4.60	4.58	4.76	4.65
<b>FORTALEZA</b>													
1948	....	....	....	....	....	....	....	....	....	5.75	5.71	5.72	....
1949	5.73	5.68	5.65	5.65	5.69	5.59	5.65	5.73	6.02	5.98	6.03	6.14	5.80
1950	6.07	6.12	6.02	6.09	6.09	6.04	5.99	5.95	6.00	6.03	6.05	6.07	6.04
1951	5.95	5.97	5.99	6.02	6.08	5.93	5.97	6.02	6.03	6.09	6.10	6.09	6.02
1952	6.05	6.09	6.15	6.04	6.08	6.01	6.04	6.14	6.02	6.12	6.11	6.10	6.08
1953	6.11	6.07	6.15	6.09	6.16	6.12	6.15	6.24	6.32	6.33	6.30	6.33	6.20
1954	6.29	6.27	6.34	6.36	6.36	6.17	6.25	6.26	6.23	6.23	6.24	6.35	6.28

## BRAZIL

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>FORTALEZA (Cont'd)</b>													
1955	6.33	6.37	6.25	6.29	5.97	5.84	6.00	6.11	6.14	6.22	6.24	6.21	6.16
1956	6.28	6.17	5.98	(6.16)	6.18	6.16	6.23	6.37	6.49	6.48	6.53	6.37	6.28
1957	6.45	6.35	6.45	6.38	6.54	6.43	6.62	6.55	6.63	6.67	(6.40)	(6.14)	6.47
1958	6.11	6.22	6.23	6.38	....	....	....	....	....	....	....	....	....
1960	5.19	5.37	5.20	5.26	5.14	5.26	5.30	5.39	5.36	5.34	5.27	5.25	5.28
<b>SALINOPOLIS</b>													
1949	....	....	....	....	....	....	....	....	....	....	10.81	10.88	....
1950	10.91	....	....	....	....	....	....	....	....	....	....	....	....
1951	....	11.24	11.12	....	....	....	....	....	11.05	10.99	10.74	10.99	....
1952	11.06	11.43	11.49	11.33	11.00	10.82	10.90	10.94	(11.16)	11.18	10.87	10.81	11.08
1953	10.97	10.98	(11.09)	11.12	10.82	10.63	10.66	10.97	10.95	10.92	10.87	10.85	10.90
1954	10.74	10.97	10.84	11.29	11.21	10.94	11.10	11.24	11.19	11.15	10.85	10.74	11.02
1955	10.89	11.03	11.21	11.32	10.85	10.64	10.74	11.09	11.08	11.13	10.90	10.87	10.98
1956	10.91	11.20	....	....	....	....	....	....	....	....	....	....	....
<b>BELEM</b>													
1949	4.67	4.97	5.02	5.19	4.80	4.51	4.40	4.60	4.88	4.78	4.52	4.59	4.74
1950	4.53	4.86	5.18	(5.20)	4.93	5.01	4.70	4.55	4.83	4.78	4.75	4.76	4.84
1951	4.71	4.76	5.06	4.88	4.67	4.24	4.31	4.63	4.70	(4.72)	4.62	4.68	4.67
1952	4.61	4.96	5.25	5.08	4.73	4.41	4.47	4.63	4.85	4.86	4.71	4.62	4.77
1953	(4.79)	4.71	4.90	4.98	4.78	4.39	4.39	4.77	4.77	4.71	4.67	4.57	4.70
1954	4.61	4.93	4.99	5.06	4.72	4.37	4.48	4.75	4.81	4.67	4.52	4.42	4.69
1955	4.64	4.80	4.86	4.93	4.60	4.34	4.37	4.59	4.77	4.73	4.55	4.52	4.64
1956	4.79	4.69	4.96	5.06	4.91	4.54	4.43	4.58	4.81	4.75	4.65	4.54	4.73
1957	4.81	5.03	5.39	5.62	4.96	4.49	4.60	4.63	4.75	4.76	4.71	4.63	4.86
1958	4.67	5.07	5.04	5.02	4.76	4.61	4.52	4.62	4.84	4.90	4.66	(4.44)	4.76
1959	4.75	4.92	5.32	5.16	4.91	4.46	4.43	4.58	4.75	4.67	4.51	4.58	4.75
1960	4.76	5.08	5.48	5.22	4.72	4.42	4.34	4.64	4.84	4.80	4.65	4.63	4.80
<b>VENEZUELA</b>													
<b>PUERTO DE HIERRO</b>													
Unit : 1 foot													
1959	3.76	....	3.49	3.76	3.93	3.94	4.04	4.25	4.42	4.28	4.28	4.14	(4.03)
1960	3.87	3.96	3.92	3.82	3.91	4.01	4.13	4.36	4.38	4.31	4.19	4.21	4.09
1961	3.91	3.77	3.63	3.71	3.71	3.75	4.08	4.19	4.22	4.36	4.41	4.06	3.98
<b>CUMANA</b>													
1959	3.11	2.75	2.87	3.27	3.38	3.07	3.14	3.23	3.46	3.48	3.54	3.31	3.22
1960	3.06	3.43	3.29	3.27	3.39	3.37	3.32	3.36	3.63	3.53	3.46	3.53	3.39
1961	3.15	3.04	3.06	3.22	3.17	3.08	3.34	3.37	3.53	3.73	3.79	3.31	3.32
<b>LA GUAYRA</b>													
1959	3.81	3.44	3.56	4.02	4.08	3.82	3.87	4.02	4.12	4.18	4.25	4.07	3.94
1960	3.74	4.21	4.09	4.09	4.12	4.09	4.03	4.08	4.31	4.29	4.20	4.26	4.12
1961	3.81	3.76	3.74	3.94	3.92	3.78	4.03	4.01	4.19	4.44	4.43	3.97	4.00
<b>AMUAY</b>													
1959	4.14	3.67	4.07	4.48	4.54	4.35	4.30	4.48	4.72	4.83	4.68	4.49	4.40
1960	4.07	4.38	4.20	4.36	4.42	4.60	4.58	4.57	4.89	4.91	4.74	4.61	4.53
1961	4.41	4.14	4.23	4.35	4.36	4.31	4.45	4.65	4.84	5.07	4.99	4.53	4.53
<b>MALECON</b>													
1959	....	....	....	....	....	....	....	....	2.93	3.06	3.06	2.63	....
1960	2.23	2.50	2.30	2.55	2.67	2.77	3.11	2.93	3.22	3.29	2.61	2.84	2.75
1961	2.35	....	....	....	....	....	....	....	....	....	....	....	....
<b>PUNTA DIABLO</b>													
1959	....	....	....	....	....	....	....	....	2.99	3.39	3.19	2.81	....
1960	2.35	2.83	2.68	2.77	3.05	3.14	2.96	2.93	3.08	2.97	2.75	3.12	2.89
1961	2.19	....	....	....	....	....	....	....	....	....	....	....	....

## COLOMBIA (CARIBBEAN COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>RIOHACHA</b>													
1953	(4.56)	4.34	4.45	4.71	5.02	5.11	(4.64)	4.78	5.12	5.05	5.04	4.88	4.81
1954	4.24	4.71	4.70	4.78	4.97	4.90	4.77	4.73	5.23	5.41	5.03	4.69	4.85
1955	4.64	4.69	4.35	4.46	4.89	4.86	4.79	5.00	5.22	5.56	4.95	4.59	4.83
1956	4.67	4.34	4.44	4.57	4.79	4.67	4.28	4.63	5.12	5.13	5.11	4.36	4.68
1957	4.04	4.27	4.41	4.24	4.52	4.88	4.38	4.58	....	....	4.95	....	....
1958	....	4.29	4.41	....	....	4.23	4.60	4.93	4.97	4.54	4.21	....	....
1959	4.17	3.56	4.39	4.74	4.75	4.52	4.47	4.62	4.97	5.07	4.90	4.65	4.57
1960	4.33	4.75	4.54	4.73	4.81	4.93	4.87	4.78	4.99	5.09	4.87	4.76	4.79

## CARTAGENA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
1949	0.48	0.53	0.75	0.63	0.81	0.83	0.76	0.96	0.89	1.12	1.27	0.82	0.82
1950	0.54	0.73	0.68	0.60	0.74	0.92	0.85	0.97	(1.00)	(1.08)	1.21	1.05	0.86
1951	0.65	0.68	0.55	0.86	0.94	0.94	0.82	0.87	0.95	1.15	0.99	0.74	0.85
1952	0.57	0.84	0.69	0.63	0.95	0.90	0.83	0.90	1.23	1.42	1.06	0.97	0.92
1953	0.75	0.59	0.68	0.73	0.85	0.91	0.62	0.90	1.12	1.04	1.09	1.05	0.86
1954	(0.63)	0.76	0.75	0.80	0.91	0.85	0.84	0.89	1.20	1.29	1.13	0.80	0.90
1955	0.76	0.96	0.71	0.67	0.97	0.93	0.85	1.01	1.11	1.36	1.09	0.89	0.94
1956	0.87	0.62	0.70	0.87	1.04	0.92	0.71	0.87	1.27	1.16	1.21	0.78	0.92
1957	0.47	0.73	0.70	0.68	0.78	1.10	0.92	1.07	1.20	1.33	1.20	1.10	0.94
1958	1.06	0.91	0.85	0.97	1.02	0.97	0.93	1.11	1.29	1.24	1.07	0.86	1.02
1959	(0.84)	0.60	0.79	1.04	0.94	0.88	0.93	0.96	1.21	1.18	1.12	0.97	0.96
1960	0.80	1.04	0.98	1.03	1.00	1.09	1.07	1.11	1.27	1.21	1.09	1.05	1.06

## COSTA RICA (CARIBBEAN COAST)

## PUERTO LIMON

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Unit : 1 foot
1948	....	....	....	....	....	....	....	....	....	3.66	3.69	3.69	3.61
1949	3.48	3.53	3.42	3.33	3.50	3.46	3.55	(3.60)	(3.48)	(3.63)	3.70	3.56	3.52
1950	3.56	3.58	3.44	3.45	3.50	3.60	3.57	3.55	3.60	3.63	3.63	3.46	3.55
1951	3.54	3.51	3.72	....	....	....	3.43	3.75	....	....	3.51	....	....
1952	....	....	....	....	....	....	3.50	3.53	3.64	3.84	3.55	3.58	....
1953	3.53	3.42	3.50	3.45	3.45	3.43	3.27	3.61	3.61	3.45	3.76	3.86	3.53
1954	3.53	3.57	3.63	3.62	3.50	3.49	3.31	3.32	3.63	3.57	3.53	3.39	3.51
1955	3.57	3.77	3.48	3.48	3.65	3.54	3.42	3.56	3.63	3.73	3.64	3.54	3.58
1956	3.62	3.39	3.42	3.60	3.58	3.31	3.30	3.61	3.79	3.56	3.73	3.57	3.54
1957	3.38	3.44	3.39	3.24	3.44	3.59	3.52	3.61	3.57	3.70	3.69	3.64	3.52
1958	3.63	3.44	3.46	3.57	3.55	3.40	3.50	3.64	3.71	3.65	3.41	3.45	3.53
1959	3.53	3.40	3.40	3.74	3.52	3.38	3.50	3.63	3.64	3.51	3.63	3.50	3.53
1960	3.46	3.64	(3.56)	3.48	3.43	3.53	3.63	3.62	3.68	3.57	3.60	3.73	3.58

## HONDURAS

## PUERTO CASTILLA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Unit : 1 foot
1955	....	....	....	....	....	....	....	....	....	1.57	1.69	1.38	1.34
1956	1.05	0.96	0.98	1.05	1.20	1.23	1.05	1.24	1.60	1.67	1.52	1.10	1.22
1957	0.97	1.02	1.31	1.08	1.32	1.37	1.28	1.46	1.61	2.03	1.66	1.50	1.38
1958	1.19	1.28	1.28	1.11	1.18	1.24	1.09	1.37	1.56	1.80	1.40	1.44	1.33
1959	1.20	1.09	1.32	1.27	1.20	1.14	1.15	1.18	1.50	1.70	1.49	1.30	1.30
1960	1.19	1.31	1.21	1.13	1.28	1.28	1.31	1.39	1.54	1.58	1.60	1.56	1.36

## LA CEIBA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Unit : 1 foot
1960	2.61	2.62	2.57	2.49	(2.54)	2.54	2.69	2.56	2.83	2.91	2.84	2.86	2.67

## PUERTO CORTES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Unit : 1 foot
1948	(4.10)	3.89	4.00	3.94	3.92	(3.84)	4.06	4.19	4.42	4.34	4.11	3.83	4.05
1949	3.78	3.90	3.80	3.94	3.86	3.90	3.88	4.04	4.21	4.23	4.19	3.89	3.97
1950	3.75	3.73	3.74	3.81	3.88	3.86	4.19	4.14	4.25	4.35	4.18	4.00	3.99
1951	3.70	3.69	3.84	3.83	3.88	4.11	4.10	4.17	4.38	4.28	4.16	(4.03)	4.01
1952	3.85	3.86	3.80	4.01	4.01	4.03	4.12	4.21	4.39	4.44	4.10	4.04	4.07
1953	3.66	3.68	3.86	3.78	4.18	4.10	3.95	4.25	4.42	4.19	4.25	3.99	4.03
1954	3.92	3.81	3.95	4.07	4.17	4.18	4.10	4.19	4.42	4.26	4.23	4.04	4.11
1955	3.88	3.95	3.93	3.96	4.03	4.20	4.18	4.28	4.48	4.53	4.33	4.20	4.16
1956	3.89	3.96	3.98	4.03	4.21	4.27	4.18	4.32	4.62	4.58	4.38	4.06	4.21
1957	3.98	4.07	4.26	4.11	4.25	4.29	4.35	4.55	4.58	4.85	4.61	4.32	4.35
1958	4.06	4.06	4.24	4.14	4.15	4.30	4.34	4.54	4.67	4.82	4.43	4.33	4.34
1959	4.15	4.16	4.29	(4.27)	(4.25)	4.27	4.33	4.37	4.60	4.74	4.46	4.16	4.34

## MEAN SEA LEVEL DATA (1959-1961)

## HONDURAS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>PUERTO CORTES (Cont'd)</b>													
1960	4.22	4.21	4.20	4.12	4.28	4.28	4.43	4.53	4.55	4.64	4.55	4.48	4.38

## BARBADOS

													Unit : 1 foot
ST. JAMES													
1958	2.65	2.70	2.83	3.29	3.18	3.06	2.89	3.08	3.09	3.10	2.83	2.63	2.944
1959	2.54	2.50	2.71	2.93	3.40	3.16	3.17	3.12	(2.40)	3.02	2.97	2.76	2.890
1960	2.89	2.86	2.83	3.11	3.21	3.30	....	....	....	....	....	....	....

## PUERTO RICO

													Unit : 1 foot
MAQUEYES ISLAND													
1955	3.39	3.44	3.48	3.59	3.60	3.65	3.80	3.87	3.82	3.76	3.71	3.72	3.65
1956	3.56	3.48	3.48	3.43	(3.60)	(3.70)	(3.80)	3.92	4.02	4.09	3.88	3.69	3.72
1957	3.66	3.70	3.64	3.68	3.84	3.81	3.88	3.95	4.01	4.18	3.99	3.66	3.83
1958	3.53	3.51	3.59	3.65	3.66	3.65	3.77	3.84	3.89	3.92	3.94	3.76	3.73
1959	(3.61)	3.55	3.62	(3.61)	3.60	3.59	3.66	3.72	3.89	3.94	3.92	3.79	3.71
1960	3.75	3.79	3.74	3.63	3.75	3.71	3.92	4.10	4.04	4.11	(4.02)	3.80	3.86

## DOMINICAN REPUBLIC

													Unit : 1 foot
PUERTO PLATA													
1949	....	....	....	....	3.23	3.26	3.35	3.57	3.64	3.68	3.57	3.32	....
1950	3.03	3.06	3.07	3.08	3.17	3.12	3.21	3.35	3.45	3.58	3.50	3.21	3.24
1951	3.02	2.96	3.06	3.09	3.26	3.25	3.31	3.40	3.58	3.57	3.34	3.14	3.25
1952	3.04	3.03	3.03	3.07	3.12	3.20	3.10	3.28	3.44	3.41	3.57	3.37	3.22
1953	3.20	3.03	3.12	3.20	3.23	3.43	3.35	3.47	3.61	3.63	3.57	3.39	3.34
1954	3.26	3.36	3.32	3.19	3.40	3.34	3.35	3.39	3.41	3.43	3.48	3.28	3.35
1955	3.18	3.15	3.22	3.48	3.45	3.37	3.46	3.52	3.54	3.64	3.48	3.54	3.42
1956	3.37	3.31	3.34	3.25	3.39	3.36	3.28	3.37	3.62	3.72	3.68	3.27	3.41
1957	3.36	3.56	3.57	3.48	3.63	3.69	3.75	3.56	3.62	3.97	3.59	3.40	3.60
1958	3.32	3.31	3.54	3.41	3.35	3.34	3.29	3.43	3.60	3.71	3.52	3.59	3.45
1959	3.49	3.26	3.46	3.44	3.43	3.61	3.54	3.65	3.74	3.88	3.77	3.63	3.57

## CIUDAD TRUJILLO

													Unit : 1 foot
1949	....	....	....	2.91	3.21	3.22	3.27	3.60	3.50	3.54	3.49	3.23	3.33
1950	2.89	2.98	3.02	3.24	3.31	3.08	3.19	3.36	3.40	3.48	3.43	3.16	3.21
1951	2.88	2.94	3.01	3.10	3.30	3.22	3.35	3.44	3.58	3.50	3.35	3.30	3.25
1952	3.13	3.04	3.07	3.14	3.22	3.22	3.23	3.32	3.50	3.48	3.60	3.38	3.28
1953	3.26	3.14	3.21	3.31	3.42	3.63	3.65	(3.70)	(3.70)	(3.64)	3.55	3.22	3.45
1954	3.27	3.32	3.27	3.25	3.43	....	3.48	3.52	3.40	....	....	....	3.37

## TARAHONA

													Unit : 1 foot
1954	....	....	....	....	....	....	....	....	....	2.64	2.67	2.47	....
1955	2.25	2.36	2.51	2.67	2.58	2.55	2.68	2.64	2.67	2.69	2.69	2.62	2.58
1956	2.46	2.50	2.46	2.39	2.52	2.53	2.53	2.60	2.77	2.79	2.71	2.76	2.59
1957	2.63	2.65	2.58	2.56	2.67	2.71	2.80	2.65	2.67	2.90	2.73	2.50	2.67
1958	2.34	2.40	2.50	2.45	2.52	2.52	2.54	2.56	2.70	2.67	2.62	2.60	2.54
1959	2.49	2.34	2.44	2.44	2.50	2.55	2.56	2.62	2.77	2.94	2.77	2.60	2.59

## HAITI

													Unit : 1 foot
PORTE AU PRINCE													
1949	....	....	....	....	3.07	3.10	3.27	3.47	3.47	3.41	3.35	3.13	....
1950	3.02	2.90	2.86	(3.02)	2.98	3.04	3.16	3.16	3.12	3.23	3.29	2.96	3.06
1951	2.78	2.82	2.90	2.91	2.97	3.06	3.19	3.31	3.38	3.29	3.13	2.98	3.06
1952	2.82	2.79	2.89	2.81	2.93	2.96	3.01	3.07	3.18	3.24	3.35	3.19	3.02
1953	3.05	2.93	2.99	3.04	3.15	3.24	3.30	3.44	3.43	3.40	3.35	3.08	3.20
1954	3.11	3.10	3.13	3.17	3.17	3.15	3.31	3.26	3.23	3.22	3.27	3.06	3.18
1955	2.90	2.88	3.15	3.29	3.26	3.23	3.36	3.27	3.33	3.41	3.32	3.32	3.23
1956	3.05	3.24	3.23	3.16	3.26	(3.23)	3.21	3.28	(3.46)	3.51	3.45	3.09	3.26
1957	3.22	3.38	3.30	3.32	3.43	3.45	3.64	3.42	3.43	3.65	3.42	3.17	3.40
1958	3.01	3.02	3.22	3.20	3.12	3.19	3.30	3.23	3.37	3.48	3.38	3.24	3.24
1959	3.22	3.08	3.26	3.28	3.35	3.35	3.39	3.46	3.52	3.63	3.48	3.35	3.36
1960	3.41	3.34	3.28	3.47	3.41	3.41	3.45	3.73	3.68	3.64	3.49	3.29	3.47

## MEXICO (GULF COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>PROGRESO</b>													
1959	4.085	3.830	3.995	4.098	3.096	4.086	3.779	3.871	4.372	4.665	4.538	4.018	4.036
1960	4.001	4.160	3.967	3.855	3.862	3.760	3.889	3.946	4.499	4.324	4.078	4.083	4.036
1961	3.999	4.030	3.982	3.943	3.873	3.675	3.833	4.145	4.822	4.797	4.866	4.443	4.200
<b>CIUDAD DEL CARMEN</b>													
1959	5.478	5.064	5.267	5.256	4.998	5.014	4.632	4.785	5.348	5.704	5.545	5.061	5.179
1960	5.096	5.227	5.043	5.013	4.982	4.876	4.904	5.028	5.675	5.448	5.370	5.309	5.164
1961	5.211	5.104	5.086	5.120	4.881	4.683	4.930	5.197	5.820	5.869	5.824	5.347	5.256
<b>COATZACOALCOS</b>													
1959	6.464	6.269	6.248	6.321	6.030	6.156	6.015	6.450	6.802	7.090	6.857	....	(6.427)
1961	....	....	....	....	....	....	6.617	6.886	7.271	7.524	....	....	....
<b>ALVARADO</b>													
1959	5.181	4.942	5.185	5.088	5.022	5.186	4.875	5.127	5.449	5.744	5.605	4.859	5.188
1960	5.010	5.118	4.938	4.859	4.798	4.827	5.420	5.466	5.960	5.303	5.254	5.259	5.184
1961	5.034	5.018	5.035	4.976	4.788	4.770	5.259	5.510	5.954	5.871	5.761	5.291	5.272
<b>VERACRUZ</b>													
1959	4.717	4.669	4.831	4.870	4.766	4.712	4.425	4.674	5.037	5.253	5.054	4.523	4.794
1960	4.640	4.752	4.645	4.574	4.573	4.564	4.659	4.758	5.160	4.899	4.852	4.878	4.830
1961	4.618	4.628	4.739	4.709	4.578	4.454	4.744	4.916	5.479	5.318	5.168	4.946	4.858
<b>TUXPAN</b>													
1959	....	....	....	....	....	....	3.961	4.170	4.380	4.657	4.386	....	(4.311)
1960	4.086	4.145	4.045	4.000	4.053	4.086	4.254	4.266	4.684	4.432	4.385	4.419	4.238
1961	4.174	4.039	4.082	4.096	4.015	4.016	4.297	4.433	5.015	4.890	4.930	4.473	4.372
<b>TAMPICO</b>													
1959	1.468	1.456	1.486	1.530	1.541	1.684	1.280	1.465	1.707	2.128	1.766	1.279	1.566
1960	1.433	1.398	1.327	1.302	1.284	1.333	1.364	1.573	2.114	1.813	1.700	1.699	1.528
d 1961	5.839	5.807	5.842	5.770	5.783	5.895	6.220	6.428	7.030	6.733	6.674	6.247	6.189

## CUBA - WEST INDIES

HAVANA													
Unit : 1 foot													
1952	4.81	5.02	4.98	4.96	5.06	5.09	5.13	4.88	5.02	4.98	4.65	4.83	4.95
1953	4.83	4.74	4.73	5.16	5.44	5.20	4.96	5.06	5.08	4.86	4.78	4.52	4.95
1954	4.56	4.58	4.87	5.02	5.13	5.07	5.09	5.14	5.25	5.33	4.93	4.75	4.98
1955	4.53	4.67	4.77	4.82	4.94	5.16	5.26	5.15	5.30	5.25	5.13	4.99	5.00
1956	4.85	4.73	4.71	5.01	5.14	5.06	4.97	5.06	5.30	5.11	4.91	4.79	4.97
<b>GIBARA</b>													
1952	3.77	....	....	....	....	....	4.09	4.19	4.31	....	4.06	3.99	....
1953	3.99	3.86	3.85	(4.22)	4.44	4.51	4.19	4.27	4.32	4.25	4.12	3.87	4.16
1954	3.86	3.89	4.05	4.13	4.34	4.33	4.29	4.43	4.36	4.54	4.30	4.07	4.22
1955	3.87	3.88	3.88	3.93	4.10	4.25	4.35	4.38	4.40	4.43	4.22	4.11	4.15
1956	4.06	3.75	3.82	4.01	4.16	4.17	4.04	4.19	4.43	4.32	4.30	3.99	4.10
1957	3.84	3.97	4.25	3.96	4.13	4.34	4.55	4.58	4.80	4.79	4.29	4.13	4.30
<b>GUANTANAMO BAY</b>													
*1944	2.17	2.19	2.25	2.31	2.49	2.64	2.62	2.58	2.65	2.61	2.46	(2.28)	2.44
*1945	(2.24)	2.21	2.21	2.14	2.32	2.40	2.58	2.50	2.53	2.66	2.53	2.31	2.39
*1946	2.30	2.22	....	....	....	....	....	....	....	....	....	....	....
*1947	....	....	....	2.40	2.41	2.37	2.41	2.54	2.70	2.69	2.57	2.42	....
*1948	2.34	2.29	2.30	2.23	2.44	2.67	2.57	2.58	2.73	2.69	2.56	2.46	2.49
*1949	2.30	2.19	2.21	2.30	2.49	2.45	2.29	2.40	2.66	2.73	2.60	2.46	2.42
*1950	2.05	2.16	2.14	2.32	2.37	2.29	2.30	2.60	2.40	2.36	2.46	2.27	2.31
*1951	2.02	1.92	2.10	2.16	2.31	2.27	2.34	2.55	2.53	2.51	2.30	2.15	2.26
1952	2.10	2.23	(2.13)	(2.11)	(2.26)	2.28	2.37	2.34	2.44	2.48	2.26	2.30	2.27
1953	2.27	2.14	2.11	2.39	2.52	2.50	2.40	2.42	2.53	2.48	2.37	2.13	2.36
1954	2.13	2.13	2.29	2.36	2.48	2.43	2.51	2.53	2.49	2.67	2.44	2.30	2.40
1955	2.10	2.15	2.15	2.28	2.39	2.45	2.56	2.55	2.63	2.64	2.52	2.52	2.41
1956	(2.41)	(2.21)	2.29	2.31	2.43	2.39	2.34	2.43	2.61	2.58	2.58	2.25	2.40

\*To replace values previously published in Publication Scientifique N° 12.

d. Datum changed. See Table A

## MEAN SEA LEVEL DATA (1959-1961)

## CUBA - WEST INDIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>GUANTANAMO BAY (Cont'd)</b>													
													Unit : 1 foot
1957	2.20	2.32	2.45	2.36	2.35	2.57	2.78	2.75	2.91	2.93	2.62	2.39	2.55
1958	2.30	2.34	2.46	2.49	2.36	2.34	2.49	2.62	2.74	2.80	2.58	2.52	2.50
1959	2.43	2.21	2.37	2.36	2.27	2.38	***	***	***	***	***	***	***
1960	2.33	2.39	2.45	2.31	2.39	2.45	2.41	2.74	2.84	2.78	2.53	2.44	2.50
<b>CASILDA</b>													
1952	2.34	2.53	2.49	2.51	2.65	2.70	2.75	2.65	2.76	2.80	2.49	(2.45)	2.59
1953	(2.48)	2.43	2.41	2.71	2.95	2.95	2.74	2.78	2.92	2.75	2.50	2.29	2.66
1954	2.29	2.28	2.51	2.67	2.80	2.76	2.77	2.82	2.83	2.91	2.61	2.44	2.64
1955	2.27	2.35	2.40	2.52	2.66	2.76	2.90	2.85	2.89	2.87	2.72	2.58	2.65
1956	2.52	2.38	2.40	2.53	2.72	2.71	(2.63)	(2.69)	2.86	2.80	2.55	2.38	2.60
<b>UNITED STATES (GULF COAST)</b>													
<b>GALVESTON</b>													
													Unit : 1 foot
1959	3.98	4.22	4.03	4.34	4.73	4.60	4.31	4.62	4.81	4.80	4.19	4.01	4.39
1960	4.11	4.01	4.07	4.22	4.29	4.32	4.19	4.50	4.76	4.58	4.45	4.36	4.32
<b>EUGENE ISLAND</b>													
1959	2.50	2.65	2.77	2.96	3.30	3.22	2.98	3.14	3.33	3.27	(2.78)	2.62	(2.96)
1960	2.71	2.79	2.66	3.00	3.01	(3.14)	3.02	3.27	(3.35)	3.16	2.83	2.74	2.97
<b>BAYAU RICAUD</b>													
1959	4.71	4.81	4.87	5.02	5.28	5.31	5.08	5.34	5.49	5.49	5.03	4.83	5.11
1960	***	***	***	***	***	5.22	5.17	5.39	5.56	5.37	5.07	4.95	***
<b>PLATFORM "A", HUMBLE OIL</b>													
1959	8.58	8.61	8.67	9.00	9.19	9.21	9.05	9.31	9.46	9.46	9.04	8.84	9.04
1960	8.92	8.84	8.77	9.00	9.05	9.28	9.32	9.45	9.69	9.47	9.18	8.99	9.16
<b>PENSACOLA</b>													
1959	8.48	8.49	8.61	8.84	9.03	9.17	9.07	9.16	9.31	9.41	8.87	8.61	8.92
1960	8.64	8.62	8.54	8.82	8.71	9.07	9.06	9.21	9.31	9.15	8.80	8.61	8.88
<b>St.PETERSBURG</b>													
1959	4.00	4.02	4.13	4.18	4.29	4.52	4.48	4.55	4.68	4.77	4.30	4.16	4.34
1960	4.17	4.06	3.93	4.03	4.26	4.47	4.72	4.59	4.59	4.65	4.26	4.06	4.32
<b>KEY WEST (NAVAL BASE)</b>													
1959	5.06	4.84	4.92	5.01	5.22	5.27	5.19	5.19	5.38	5.58	5.58	5.27	5.21
1960	5.17	5.00	4.93	5.04	5.15	5.36	5.37	5.43	5.48	5.67	5.42	5.17	5.27
<b>BERMUDA</b>													
<b>PAGET ISLAND</b>													
													Unit : 1 foot
1958	3.23	3.11	3.18	3.01	2.87	3.26	3.71	2.95	3.65	3.62	3.30	3.31	3.267
1959	2.73	2.95	3.63	2.71	3.10	3.88	3.51	3.29	2.40	2.95	3.26	2.59	3.083
1960	2.73	3.24	3.15	***	***	***	3.30	3.09	2.92	3.22	2.81	3.16	***
1961	(3.02)	3.06	2.52	2.52	3.04	3.09	***	***	***	***	***	***	***
<b>St.GEORGES</b>													
1959	4.19	4.37	4.62	4.10	4.50	4.89	4.92	4.80	3.85	4.36	4.70	4.17	4.46
1960	4.32	4.65	4.72	4.46	4.54	4.45	4.86	4.63	***	***	***	***	***
<b>MIAMI BEACH</b>													
1959	3.47	3.31	3.37	3.40	3.52	3.71	3.48	3.48	3.78	4.06	4.18	3.79	3.63
1960	3.71	3.49	3.42	3.53	3.72	3.83	3.73	3.69	4.13	4.20	3.90	3.74	3.76
<b>MAYPORT</b>													
1959	3.68	3.60	3.67	3.68	3.80	4.03	3.90	3.78	4.36	4.50	4.54	4.07	3.97
1960	4.01	3.75	3.94	3.82	4.04	4.18	4.11	4.21	4.92	4.79	4.27	3.96	4.17

## UNITED STATES (ATLANTIC COAST)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
<b>FORT PULASKI</b>													
1959	6.59	6.62	6.50	6.58	6.77	7.10	6.88	6.81	(7.39)	7.53	7.40	7.00	(6.93)
1960	6.98	6.72	6.79	6.81	7.00	7.18	7.13	7.14	7.73	7.55	6.99	(6.72)	7.06
<b>CHARLESTON</b>													
1959	4.97	4.99	5.00	5.06	5.23	5.50	5.38	5.21	5.79	5.85	5.74	5.34	5.34
1960	5.39	5.15	5.15	5.15	5.44	5.61	5.58	5.56	6.08	6.00	5.38	5.15	5.47
<b>MYRTLE BEACH</b>													
1959	6.90	(6.75)	(6.84)	(7.04)	(7.00)	7.22	7.17	7.06	7.59	7.61	7.38	7.07	(7.14)
1960	7.12	6.86	6.82	6.88	7.16	7.35	7.42	7.29	7.74	7.62	7.07	6.85	7.18
<b>WILMINGTON</b>													
1959	4.36	4.20	4.50	4.74	4.54	4.73	4.79	4.66	4.80	5.07	4.93	4.56	4.66
1960	4.77	5.02	4.69	----	----	4.85	----	----	----	----	----	----	----
<b>HAMPTON ROADS</b>													
1959	4.68	4.66	4.85	5.19	4.84	5.22	4.97	5.30	5.46	5.59	5.34	5.16	5.10
1960	5.15	5.08	5.23	5.27	5.58	5.50	5.32	5.64	5.72	5.65	5.21	4.87	5.35
<b>BALTIMORE</b>													
1959	3.95	4.01	4.23	4.74	4.54	4.59	4.82	5.01	4.96	5.04	4.54	4.45	4.57
1960	4.38	4.30	4.16	4.77	5.12	5.07	4.95	5.08	5.17	4.88	4.62	3.93	4.70
<b>ATLANTIC CITY</b>													
1959	(6.10)	(6.10)	6.28	6.67	(6.38)	(6.74)	6.58	6.83	6.84	6.91	6.57	6.66	(6.56)
1960	6.70	6.54	6.68	6.71	7.06	6.92	6.61	6.79	6.82	6.97	6.48	6.12	6.70
<b>SANDY HOOK (FORT HANCOCK)</b>													
1959	4.07	4.08	4.43	4.72	4.44	4.79	4.64	4.94	4.85	4.99	4.63	4.71	4.61
1960	(4.70)	(4.50)	(4.66)	4.80	5.05	5.00	4.91	5.08	5.11	5.03	4.62	4.28	4.81
<b>NEW YORK</b>													
1959	5.04	4.95	5.26	5.66	5.26	5.61	5.52	5.66	5.69	5.82	5.47	5.59	5.46
1960	5.62	5.34	5.46	5.58	5.73	5.89	5.75	5.90	6.03	5.84	5.52	5.17	5.65
<b>WILLETS POINT (FORT TOTTEN)</b>													
1959	8.23	8.22	8.56	8.85	8.50	8.93	8.74	8.99	8.88	9.01	8.62	8.72	8.69
1960	(8.60)	8.71	8.83	8.82	9.09	9.07	8.91	9.08	9.10	9.08	8.65	8.38	8.86
<b>NEW LONDON (STATE PIER)</b>													
1959	4.46	4.33	4.65	4.84	4.59	4.90	4.70	4.96	4.87	5.02	4.83	4.86	4.75
1960	4.73	4.82	4.86	4.99	5.05	5.10	5.00	5.10	5.06	5.09	4.79	4.53	4.93
<b>NEWPORT</b>													
1959	3.07	2.91	3.12	3.28	3.12	3.46	3.27	3.53	3.44	3.54	3.34	3.38	3.29
1960	3.35	3.38	3.44	3.42	3.62	3.60	3.57	3.59	3.56	3.60	3.38	3.15	3.47
<b>BOSTON</b>													
1959	8.27	8.03	8.27	8.42	8.28	8.51	8.23	8.51	8.46	8.58	8.37	8.46	8.37
1960	8.48	8.71	8.61	8.49	8.65	8.67	8.55	8.57	8.53	8.59	8.42	8.28	8.54
<b>PORTRLAND</b>													
1959	13.27	12.99	13.20	(13.35)	(13.20)	(13.45)	13.17	13.41	13.30	13.44	13.29	13.33	(13.28)
1960	13.34	13.69	13.43	13.54	13.67	13.52	13.39	13.48	13.33	13.44	13.31	13.14	13.44
<b>BAR HARBOR</b>													
1959	(8.89)	(8.65)	(8.82)	8.84	8.72	8.99	8.78	8.99	8.82	8.98	8.83	8.98	(8.86)
1960	8.86	9.28	9.13	9.09	(9.16)	(9.02)	(8.90)	(9.03)	8.97	9.04	8.94	8.78	9.02
<b>EASTPORT</b>													
1959	14.35	14.09	14.25	14.31	14.11	14.30	14.12	14.29	14.21	14.34	14.28	14.45	14.26
1960	14.38	14.65	14.62	14.49	14.52	(14.53)	(14.33)	14.37	14.30	14.35	14.35	14.15	14.42

## CANADA (ATLANTIC AND NORTH COASTS)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean
ST. JOHN, N. B.													
1959	14.559	14.062	14.225	14.537	14.422	14.479	14.169	14.284	14.273	14.407	14.451	14.682	14.379
1960	14.576	14.593	14.629	14.857	15.064	14.702	14.511	....	....	....	....	14.220	....
1961	14.160	14.086	14.257	14.620	14.896	14.479	14.285	14.191	14.124	14.433	14.429	14.498	14.372
HALIFAX													
1959	4.268	3.941	4.063	3.736	3.729	3.883	3.690	3.966	3.923	4.101	3.966	4.110	3.948
1960	4.322	4.362	4.290	4.036	4.041	3.967	3.794	3.894	3.954	4.135	3.999	3.989	4.065
1961	4.191	4.034	4.189	4.249	3.873	3.698	3.794	3.745	3.842	4.092	4.363	4.331	4.033
CHARLOTTETOWN													
1959	5.677	5.242	5.312	4.963	4.931	5.030	5.114	5.246	5.258	5.368	5.212	5.399	5.229
1960	....	....	....	....	....	....	5.383	5.352	5.288	5.485	5.324	5.442	....
1961	5.748	5.542	5.532	5.567	5.258	5.331	5.221	5.196	5.203	5.310	5.484	5.744	5.428
FATHER POINT													
1959	7.199	6.980	7.278	7.284	7.290	7.575	7.401	7.404	7.328	7.385	7.609	7.439	7.348
1960	7.335	7.759	....	....	....	....	....	....	....	....	....	7.551	....
1961	7.359	7.310	7.489	7.414	7.542	7.508	7.390	7.174	7.201	7.459	7.501	....	7.395
QUEBEC													
1959	7.674	7.559	8.157	8.979	8.625	8.866	8.075	8.490	8.364	8.316	8.525	8.579	8.351
1960	8.624	9.227	9.140	9.587	9.906	8.877	8.515	8.165	8.144	8.328	8.058	7.732	8.692
HARRINGTON													
1959	3.830	3.584	3.629	3.315	3.355	3.481	3.339	3.369	....	3.651	3.508	3.631	(3.517)
1960	3.686	3.418	3.398	3.426	3.314	3.336	3.521	3.653	3.505	3.781	3.691	3.616	3.529
1961	3.800	3.417	3.375	3.405	3.289	3.439	3.442	3.396	3.460	3.654	3.626	3.741	3.504
ST. JOHN'S, Newfoundland													
1959	2.906	2.875	2.651	2.435	2.542	2.476	....	2.308	2.485	2.604	2.387	2.737	(2.582)
1960	3.017	2.838	2.632	2.717	2.092	2.290	2.442	2.224	2.468	2.603	2.570	3.057	2.579
CHURCHILL													
1959	8.262	7.907	7.509	7.684	7.752	8.428	8.174	8.079	8.383	8.235	8.309	7.812	8.044
1960	7.865	7.676	7.271	7.694	8.313	8.244	8.251	....	....	....	....	....	....
1961	....	....	....	....	....	....	....	....	7.824	7.730	....	7.707	....
RESOLUTE													
1959	3.330	3.686	3.101	2.981	3.005	3.220	3.568	3.384	3.558	3.404	3.261	3.304	3.317
1961	....	....	....	....	....	....	....	3.482	3.275	3.139	2.961	3.110	....
ANTARCTICA													
BAHIA ESPERANZA													
Unit : 1 mètre													
1958	....	....	....	....	....	....	....	....	....	....	....	2.014	....
1959	2.064	2.008	1.977	2.058	2.102	1.945	1.948	1.823	1.713	1.414	1.949	2.087	1.924
ALMIRANTE BROWN													
1957	....	....	....	....	....	....	....	....	....	1.292	1.189	1.212	....
1958	1.273	1.178	1.186	1.310	1.258	1.299	1.109	1.238	1.251	1.217	1.251	(2.236)	1.234
MELCHIOR													
1957	....	....	....	....	....	....	....	1.400	1.093	1.221	1.255	1.140	1.148
1958	1.205	1.09 <sup>c</sup>	1.169	1.261	1.122	1.265	1.217	1.295	1.272	1.268	....	....	....
1959	1.114	1.143	1.316	1.245	1.405	1.254	1.285	1.391	1.369	1.189	1.279	....	(1.272)
ILE DES PÉTRELS													
1957	....	....	....	....	....	-5.627	-5.703	-5.731	-5.736	-5.654	-5.687	....	....

## TABLE C

ANNUAL MEAN HEIGHTS OF SEA LEVEL

COUNTRY	UNIT	STATION	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961.
British Isles	1 foot	Blyth					*0.062	+ 0.042	+ 0.060	7.502	7.497	7.634
France (West Coast)	1 cm	Dunkerque Boulogne Le Havre Cherbourg Le Conquet St Jean de Luz	0.055	-0.094	-0.100	0.119	0.215	+ 0.116	+ 0.226	0.272	-0.116	0.140
								+ 0.116	+ 0.068	0.140	0.309	
France (South Coast)	1 cm	Port Vendres Sète Port-de-Bouc Martigues Villefranche						+ 0.030	+ 0.034	0.079	0.024	
		Ajaccio Bonifacio Bastia						+ 0.124	+ 0.120	0.162		
Corsica	1 cm	Sfax					-0.014	+ 0.020	-0.147			
		Sousse La Goulette					*-0.400	+ 0.366	-0.402			
Tunisia	1 cm	Bône N° 2 Alger Oran					0.097	+ 0.289	0.300			
		Casablanca Agadir						+ 0.149	0.070			
Morocco	1 cm	Tamatave	0.038				* 0.015	+ 0.012	0.025			
Madagascar								+ 0.034				
Canada (Pacific Coast)	1 foot	Caufield	8.88	8.72	8.48	8.69	8.78	8.48	8.72	8.50	8.68	..
			1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
			8.60	8.75	8.64	8.86	8.86	8.80	8.84	8.91	8.68	8.74
			1957	1958	1959	1919-20	1920-21	1944	1945	1946		
			8.87	9.01	8.80							
			1953	1954	1955	1956	1957	1958	1959			
	1 foot	Fulford Harbour	7.39	7.45	7.23	7.30	7.42	7.62	7.42			

\* To replace values previously published in Publication Scientifique N° 19  
 † To replace values previously published in Publication Scientifique N° 20

## ALPHABETICAL INDEX

---

- Aarhus, 18  
Aberdeen, 20  
Aburatsubo, 30  
Acapulco, 39  
Aden, 27  
Agadir, 54  
Ajaccio, 54  
ALASKA, 37  
Albany, W.A., 35  
Alert Bay, 38  
Alesund, 14  
ALEUTIAN ISLANDS, 37  
Alger, 54  
ALGERIA, 54  
Alicante, 23  
Almirante Brown, 53  
Alvarado, 50  
Amherst, 29  
Amuay, 47  
ANDAMAN ISLANDS, 29  
Angra do Heroismo, 25  
Antalya, 24  
ANTARCTICA, 53  
Antofagasta, 44  
Apra Harbour, Guam, 36  
ARABIA, 27  
ARGENTINA, 45  
Arica, 43  
Asamushi, 33  
Ashdod, 25  
Atlantic City, 52  
AUSTRALASIA, 33  
Avila, 38  
Ayukawa, 30  
AZORES, 25
- Bahia Esperanza, 53  
Bakar, 23  
Baltimore, 52  
Barahona, 49  
BARBADOS, 49  
Bar Harbour, 52  
Bastia, 54  
Bayau Rigaud, 51  
Balboa, 40  
Ballina, 34  
Belem, 47  
Belfast, 22  
Bergen, 14  
BERMUDA, 51  
Bhaunagar, 27  
Birkenhead (Alfred Dock), 21  
Bjorn, 16  
Blyth, 54  
Bodø, 14  
Bombay (Apollo Bandar), 27  
Bone N° 2, 54  
Bonifacio, 54  
Boston, 52
- Boulogne, 54  
BRAZIL, 45  
Brest, 22  
Brisbane, 34  
BRITISH ISLES, 19, 54  
Broce, 24  
Brønnøysund, 14  
Brouwershaven, 19  
Buenaventura, 41  
Buenos Aires, 45  
Bunbury, W.A., 35  
BURMA, 29  
Busum, 18
- Cairns, 33  
Calcutta (Garden Reach), 28  
Caldera, 44  
Callao, 43  
Camp Cove, N.S.W., 35  
CANADA (Atlantic and North Coasts), 53  
CANADA (Pacific Coast), 38, 54  
CANARY ISLANDS, 25  
Canavieiras, 46  
Canton Island, 36  
Cape Chelyuskin, 13  
Cape Schmidt, 13  
Cape Sorrell, 35  
Cape Zhelaniya, 13  
Capo Passero, 23  
CAROLINE ISLANDS, 36  
Cartagena, 48  
Casablanca, 25, 54  
Cascais, 22  
Casilda, 51  
Caulfeild, 54  
Cebu, 33  
CHAGOS ARCHIPELAGO, 27  
CHANNEL ISLANDS, 22  
Charleston, 52  
Charlottetown, 53  
Cherbourg, 54  
CHILE, 43  
Chi Ma Wan, 29  
Chimbote, 42  
CHINA, 29  
Chittagong (Juldia Point), 29  
Chittagong (Patenga Point), 28  
Chittagong (Sadarghat), 28  
Chittagong (T.M. Compound), 29  
Choshi, 30  
Christmas Island, 37  
Churchill, 53  
Ciudad del Carmen, 50  
Ciudad Trujillo, 49  
Coatzacoalcos, 50  
Cochin, 28  
Coff's Harbour, 34  
COLOMBIA (Caribbean Coast), 48  
COLOMBIA (Pacific Coast), 41

- Comodoro Rivadavia, 45  
 Coquimbo, 44  
 CORSICA, 54  
 COSTA RICA (Caribbean Coast), 48  
 COSTA RICA (Pacific Coast), 40  
 Crescent City, 38  
 Cristobal, 41  
 CUBA - West Indies, 50  
 Cumana, 47  
 Cuxhaven, 18
- Dakar, 25  
 Darwin, 33  
 Davao, 33  
 Degerby, 17  
 Delfzijl, 19  
 Den Helder, 19  
 DENMARK, 17  
 Devonport, 21  
 Diamond Harbour, 28  
 Diego Garcia, 27  
 DOMINICAN REPUBLIC, 49  
 Douglas, 21  
 Dover, 21  
 Draghallan, 16  
 Dublin, 22  
 Dubrovnik, 24  
 Dunkerque, 54
- Eastport, 52  
 ECUADOR, 42  
 Eden, N.S.W., 35  
 EL SALVADOR, 39  
 Eniwetok, 36  
 Ensenada, 39  
 Ereglisi, 24  
 Esbjerg, 18  
 Eugene Island, 51  
 Evenskjaer, 13
- Father Point, 53  
 FINLAND, 16  
 Fishguard, 21  
 Fortaleza, 46  
 Fort Pulaski, 52  
 FRANCE, 22  
 FRANCE (South Coast), 54  
 FRANCE (West Coast), 54  
 Fredericia, 18  
 Frederikshavn, 18  
 Fremantle, W.A., 36  
 Fulford Harbour, 38, 54  
 Furuogrund, 16
- Galveston, 51  
 Gedser, 17  
 Genova, 23  
 GERMANY (North Sea), 18  
 GHANA, 26  
 Gibara, 50
- GIBRALTAR, 22  
 Gibraltar, 22  
 GILBERT ISLANDS, 36  
 Gladstone, 34  
 Goree, 25  
 Goteborg, 15  
 Grand Port, 27  
 Grindavik, 13  
 Guantanamo Bay, 50  
 GUATEMALA, 39  
 Guaymas, 39
- Hachinohe, 30  
 Haifa Port, 24  
 HAITI, 49  
 Hakodate, 30  
 Halifax, 53  
 Hamina/Fredrikshamn, 17  
 Hammerfest, 13  
 Hampton Roads, 52  
 Hanasaki, 30  
 Hanko/Hango, 17  
 Harlingen, 19  
 Harrington, 53  
 Harstad, 13  
 Harwich, 20  
 Havana, 50  
 HAWAIIAN ISLANDS, 36  
 Heimsjø, 14  
 Heligoland, 18  
 Hellevoetsluis, 19  
 Helsinki/Helsingfors, 17  
 Hercegnovi, 24  
 Hermanus, 26  
 Heysham, 21  
 Hilbre, 21  
 Hilo, 37  
 Hirtshals, 18  
 Hobart, 35  
 Hoek van Holland, 19  
 Holyhead, 21  
 HONDURAS, 48  
 Honolulu, 37  
 Hong Kong, 29  
 Hornbaek, 17  
 Horta, 25  
 Hosojima, 32  
 ICELAND, 13  
 Ijmuiden, 19  
 Ile des Petrels, 53  
 ILES DE LA SOCIETE, 37  
 Imbituba, Santa Catarina, 45  
 Immingham, 20  
 INDIA, 27  
 Invergordon, 20  
 Iquique, 43  
 Iskenderun, 24  
 Isla de Pascua, 44  
 Isla Martin Garcia, 45  
 ISRAEL, 24  
 ITALY (East Coast), 23  
 ITALY (West Coast), 23  
 Ito, 31

- Iwasaki, 33  
 Izmir, 24
- Jaffa Port, 24  
 Johnston Island, 36  
**JAMAICA**, 32  
**JAPAN** (Kyushu), 32  
**JAPAN** (Hokkaido), 30  
**JAPAN** (Honshu - East Coast), 30  
**JAPAN** (Honshu-West Coast), 32  
**JAPAN** (Inland Sea), 31  
**JAPAN** (Shikoko), 32  
**JAPAN** (Nansei Shotō), 32  
 Jolo, 33  
 Juan Fernandez, 44
- Kabelvag, 14  
 Kahului, 37  
 Kainan, 31  
 Kaliningrad, 17  
 Kandla, 27  
 Karachi (Manora), 27  
 Karumba, 34  
 Kashinen/Kasko, 16  
 Kashiwazaki, 32  
 Kemi, 16  
 Ketchikan, 37  
 Key West (Naval Base), 51  
 King Edward Point, South Georgia, 44  
 Kjølsdal, 14  
 Klagshamn, 15  
 Knysna, 26  
 Kobe, 31  
 København, 17  
 Kochi, 32  
 Komatsushima, 31  
 Korsør, 17  
 Kristiansund, N., 14  
 Kungsholmsfort, 15  
 Kushimoto, 31  
 Kushiro, 30  
 Kwajalein, 36  
 La Ceiba, 48  
 La Coruna, 22  
 Lagos, 22  
 La Goulette, 54  
 La Guayra, 47  
 La Jolla, 39  
 La Libertad, 42  
 Landsort, 15  
 La Paz, 39  
 La Punta (Callao), 43  
 Larne, 22  
 La Union (Cutuco), 39  
 Le Conquer, 54  
 Legaspi, 33  
 Le Havre, 54  
 Leith, 20  
 Lerwick, 19  
**LINE ISLANDS**, 37  
 Liverpool (Princes Pier), 21  
 Lord Howe Island, 34  
 Los Angeles, 38
- Los Angeles, 38  
 Lowestoft, 20  
 Luderitz, 26
- Maatsuyker Island, 35  
 Macau-Siac, 29  
 Mackay, 34  
**MADAGASCAR**, 27, 54  
 Madras, 28  
 Maizuru, 32  
 Malecon, 47  
 Malin Head, 22  
 Mali Ston, 24  
 Malø, 14  
 Mangalore, 28  
**Manila**, 33  
 Mantyluoto, 17  
 Manzanillo, 39  
 Maqueyes Island, 49  
**Mar del Plata** (Puerto), 45  
**Mar del Plata** (Club), 45  
**MARIANAS ISLANDS**, 36  
**MARSHALL ISLANDS**, 36  
 Martigues, 54  
 Massacre Bay, 37  
 Matarani, 43  
 Matavai, 37  
 Matsuyama, 31  
**MAURITIUS**, 27  
 Mayport, 51  
 Mazatlan, 39  
 Melchior, 53  
 Mellum Plate, 19  
 Mera, 30  
**MEXICO** (Gulf Coast), 50  
**MEXICO** (Pacific Coast), 39  
 Miami Beach, 51  
 Midway Island, 36  
 Milford Haven, 21  
 Millport, 21  
 Miyako, 30  
 Miyazu, 32  
 Moen Island, 36  
 Mokuoloe Island, 37  
 Mommark, 18  
 Monbetsu, 30  
**MOROCCO**, 25, 54  
 Mosjøen, 14  
 Mossel Bay, 26  
 Moulmein, 29  
 Murmansk, 13  
 Myrtle Beach, 52
- Nagaeva Bay, 29  
 Nagoya, 31  
 Naos Island, 41  
 Narvik, 13  
 Nawiliwili, 37  
 Naze, 32  
 Neah Bay, 38  
 Nedre Gavle, 16  
 Nedre Sodertalje, 16

- NETHERLANDS, 19  
 Nevlunghavn, 15  
 NEW CALEDONIA, 36  
 Newcastle, N.S.W., 35  
 New London (State Pier), 52  
 Newlyn, 21  
 Newport, 52  
 New York, 52  
 Nezugaseki, 33  
 Norfolk Island, 34  
 NORWAY, 13  
 Nosy-Be, 27  
 Noumea, 36
- Ocean, 36  
 Olands n Udde, 15  
 Ominato, 33  
 Onahama, 30  
 Oran, 54  
 Oscarsborg, 15  
 Oshoro, 30  
 Oslo, 14  
 Oulu/Uleaborg, 16
- Paget Island, 51  
 PAKISTAN (East), 28  
 PAKISTAN (West), 27  
 Palermo, 45  
 PANAMA (Canal Zone), 41  
 PANAMA (Pacific Coast), 40  
 Pensacola, 51  
 PERU, 42  
 Petropavlovsk, 29  
 PHILIPPINE ISLANDS, 33  
 PHENIX ISLANDS, 36  
 Pietarsaari/Jakobstad, 16  
 Piramide, 45  
 Platform "A", Humble Oil, 51  
 Point Atkinson, 38  
 Ponta Delgada, 25  
 Port au Prince, 49  
 Port Blair, 29  
 Port de Bouc, 54  
 Port Elizabeth, 26  
 Port Hedland, W.A., 36  
 Port Kembla, N.S.W., 35  
 Port MacDonnel, 35  
 Port Moresby, 33  
 Port Nolloth, 26  
 Port Tuapse, 24  
 Portland, 52  
 Porto Corsini, 23  
 PORTUGAL, 22  
 Port Vendres, 54  
 Prince Rupert, 38  
 Progreso, 50  
 Puerto Angel, 39  
 Puerto Armuelles, 40  
 Puerto Castilla, 48  
 Puerto Cortes, 48  
 Puerto de Hierro, 47  
 Puerto Limon, 48
- Puerto Madryn, 45  
 Puerto Montt, 44  
 Puerto Plata, 49  
 PUERTO RICO, 49  
 Punta Diablo, 47  
 Puntarenas, 40  
 Punta Arenas, 44
- Quebec, 53  
 Quepos, 40  
 Quequen, 45
- Raahe/Brahestad, 16  
 Ramsgate, 20  
 Rangoon, 29  
 Ratan, 16  
 Rauma/Raumo, 17  
 Recife, 46  
 Resolute, 53  
 Rio de Janeiro, 46  
 Riohacha, 48  
 Rio Santiago, 45  
 Robben Island, 26  
 Rødbyhavn, 17  
 Rosales, 45  
 Rovinj, 23  
 Russkaya Gavan, 13
- Sakai, 32  
 Salina Cruz, 39  
 Salinopolis, 47  
 Salvador, 46  
 San Clemente, 45  
 San Clemente Island, 38  
 San Cristobal, Ecuador, 42  
 San Diego, 39  
 Sandy Hook, (Fort Hancock), 52  
 San Francisco, 38  
 San Jose, 39  
 San Juan, 43  
 Santa Cruz das Flores, 25  
 Santa Cruz de Tenerife, 25  
 Sasebo, 32  
 Saugor, 28  
 Scarborough, 20  
 Seattle, 38  
 SENEGAL, 25  
 Sète, 54  
 Seward, 37  
 Sfax, 54  
 Sheerness, 20  
 Shimizu, 31  
 Shimonoseki, 32  
 SICILY, 23  
 Simons Bay, 26  
 Sitka, 37  
 Skagway, 37  
 Slipshavn, 18  
 Smogen, 15  
 Socorro Island, 39  
 Sousse, 54

- SOUTH AFRICA, 26  
 Southend, 20  
 South Georgia, 44  
 SOVIET UNION (Arctic Coast), 13  
 SOVIET UNION (Baltic Coast), 17  
 SOVIET UNION (Black Sea), 24  
 SOVIET UNION (Pacific Coast), 29  
 SPAIN(North Coast), 22  
 SPAIN (South and East Coast), 23  
 Split Harbour, 23  
 Split rt Marjana, 23  
 Stavanger, 15  
 St. Georges, 51  
 St. Helier, 22  
 St. James, 49  
 St. Jean de Luz, 54  
 St. John, N.B., 53  
 St. John's, Newfoundland, 53  
 St. Petersburg, 51  
 Stockholm, 15  
 Stompneus Bay, 26  
 Stornoway, 21  
 Stromstad, 15  
 Swansea, 21  
 SWEDEN, 15  
 Sweeper Cove, Adak, 37  
 Sydney (Fort Denison), 35
- Table Bay Harbour (Duncan Dock), 26  
 Tacloban, Leyte, 33  
 Takamatsu, 31  
 Takoradi, 26  
 Talara, 42  
 Talcahuano, 44  
 Tamatave, 54  
 Tampico, 50  
 Tannowa, 31  
 Thevenard, 35  
 Terschelling, 19  
 Tierra del Fuego-Caleta Percy, 44  
 Tilbury, 20  
 Tofino (Clayoquot), 38  
 Tokuyama, 32  
 Tokyo, 30  
 Tonoura, 32  
 Topolobampo, 39  
 Tosa-Shimizu, 32  
 Townsville, 34  
 Trabzon, 24  
 Travemunde,  
 Tregde, 15  
 Trieste, 23  
 Tromsø, 13  
 Trondheim, 14  
 Tumaco, 41  
 TUNISIA, 54  
 TURKEY, 24  
 Turku/Abö, 17  
 Tuxpan, 50  
 Tynemouth, 20
- Uchiura, 31  
 Ugolnaja Bay, 29  
 Unalaska, 37  
 UNITED STATES (Atlantic Coast), 52  
 UNITED STATES (Gulf Coast), 51  
 UNITED STATES (Pacific Coast), 38  
 Uno, 31  
 Ushuaia, 45  
 Uwajima, 32
- Vaasa/Vasa, 16  
 Valpariso, 44  
 Vancouver, 38  
 Varberg, 15  
 Vardø, 13  
 VENEZUELA, 47  
 Veracruz, 50  
 Veraval, 27  
 Victoria, 38  
 Villefranche, 54  
 Visakhapatnam, 28  
 Vlissingen, 19
- Wajima, 32  
 Wakayama, 31  
 WAKE ISLAND, 36  
 Wake Island, 36  
 Walvis Bay, 26  
 Wilhelmshaven, 19  
 Willets Point (Fort Totten), 52  
 Williamstown, 35  
 Wilmington, 52  
 Womans Bay, Kodiak, 37
- Ystad, 15  
 YUGOSLAVIA, 23  
 Yuzhno Kurilsk, 29
- Zierikzee, 19

## I U G G MONOGRAPHS

- Nº 1 - Seismicity of Europe, by M. Bath (\$ 0,30, 2/6, NF 1,50)
- Nº 2 - The International Union of Geodesy and Geophysics : its scientific role, its international character, its organization (out of print)
- Nº 3 - Symposium on Atmospheric Ozone, Oxford, 20-25 July 1959 (\$ 0,40, 3/-, NF 2,00)
- Nº 4 - Symposium on Radiation, Oxford, July 1959 (\$ 0,40, 3/-, NF 2,00)
- Nº 5 - Antarctic Symposium, Buenos Aires, November 1959 (\$ 1,00, 7/6, NF 5,00)
- Nº 6 - Commission Séismologique Européenne, Réunion d'Alicante, 27-31 Octobre 1959 (\$ 0,40, 3/-, NF 2,00)
- Nº 7 - The July 1959 Events and Associated Phenomena (\$ 2,50, 18/-, NF 12,50)
- Nº 8 - Zonal Harmonic Analysis of the Northern Hemisphere Geostrophic Wind Field, by J. Van Mieghem (\$ 1,00, 7/6, NF 5,00)
- Nº 9 - Seismicity of Europe, Part II, by V. Karnik (\$ 0,40, 3/-, NF 2,00)
- Nº 10 - Symposium on the Radiant Energy in the Sea, Edited by N. Jerlov (\$ 2,50, 18/-, NF 12,50)
- Nº 11a - Instruction Manual on World Magnetic Survey, by E. H. Vestine, (\$ 0,30, 2/6, NF 1,50)
- Nº 11b - Manuel d'Opérations pour le Levé Magnétique Mondial, par E. H. Vestine, (\$ 0,30, 2/6, NF 1,50)
- Nº 12 - Symposium on Geophysical Aspects of Cosmic Rays, Helsinki, July 1960 (\$ 3,00, 21/-, NF 15,00)
- Nº 13 - Catalogue of Published Mean Sea Level Data (1807-1958) I A P O Publication Scientifique Nº 23 (\$ 0,60, 5/-, NF 3,00)
- Nº 14 - Report of the Meeting on the International Seismological Summary, Paris, July 1961 (\$ 0,40, 3/-, NF 2,00)
- Nº 15 - Report of the UNESCO Seismological Survey Mission to South East Asia 1961 (\$ 0,40, 3/-, NF 2,00)
- Nº 16 - International Conference on Cloud Physics, Australia, September 1961 (\$ 1,00, 7/6, NF 5,00)
- Nº 17 - Report of the UNESCO Seismological Survey Mission to South America 1961 (\$ 0,40, 3/-, NF 2,00)
- Nº 18 - Report of the UNESCO Seismological Survey Mission to the Mediterranean and Middle East 1962 (\$ 0,60, 5/-, NF 3,00)
- Nº 19 - Symposium on Atmospheric Ozone, Arosa, 14-19 August 1961 (\$ 1,00, 7/6, NF 5,00)
- Nº 21 - Monthly and Annual Mean Sea Level Data 1959-1961 I A P O Publication Scientifique Nº 24 (\$ 1,00, 7/6, NF 5,00)
- Nº 22 - Investigations of the Earth's Crust, Paris, March 1962 (\$ 0,80, 6/0, NF 4,00)

---

## IN PREPARATION

- Nº 20 - Symposium on Radioactive Tracers in Oceanography, Hawaii August 1961
- Nº 23 - Seismicity of Europe, Part III, by V. Karnik
- Nº 24 - Tsunami Symposia, Tenth Pacific Science Congress, Honolulu August 1961

OCE  
LIB