MEANS AND EXTREMES OF SEA TEMPERATURE BY THE NORWEGIAN COAST

BY

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1. Foreword.

This paper comprises mainly the climatological statistics of the observations of sea-surface temperature at a selected number of meteorological stations, mostly lighthouse stations, along the Norwegian coast. It is a part of the series of the new climatological tables for Norway.

The material is, however, added to by some observations of sea temperature apart from those at the meteorological stations.

A. Dannevig, manager of the Hatchery of the Norwegian State, Flödevigen, Arendal, and *C. Dons*, manager of the zoological collection at Trondheim Museum, have kindly sent us sea-surface temperatures, for which we are much indebted.

J. Eggvin, consultant at the oceanographical branch of the Norwegian Directorate of Fisheries, has imparted the valuable temperature observations at various depths from their 4 permanent oceanographical stations off the Norwegian coast. For this kindliness we are most grateful. This temperature material is dealt with in supplement I and in the figures 22—25.

In supplement II the observations of sea-surface temperature at a few meteorological coastal stations in Iceland, and at Thorshavn on the Faroe Islands, have been included.

This work has been carried out on the promptings of *Th. Hesselberg* and *B. J. Birkeland*. I am much indebted for their valuable advice.

I also wish to express my sincerest thanks to mrs. *Dagny Peterkin* for having translated this paper into English.

2. Older Tables of Sea-surface Temperatures.

In 1867 some lighthouse stations along the Norwegian coast started observing sea-surface temperature. The first grouping of these observations was undertaken by *H. Mohn* in the paper: "*Température de la mer entre l'Island, l'Ecosse et la Norvège.*" *Institut météorologique de Norvège, Christiania 1870.* Here Mohn has used the observations of sea-surface temperature at 9 lighthouse stations for the years 1867—69. He has calculated the monthly means and the means of the four seasons, and plotted the results on charts. In his comprehensive work: "*The Norwegian North-Atlantic Expedition 1876—78, XVIII, The North Ocean, its Depths, Temperature and Circulation*", *Christiania 1887,* Mohn has given an account of the temperature in the Norwegian Sea, and for the surface temperature he has availed himself of the observations from the lighthouse stations along the Norwegian coast. On page 90 is presented the monthly and annual difference of sea surface minus air temperature. The table comprises 9 stations. On page 98 a table of the mean tempeature for March, August and the year for 11 stations is given. The results have also been plotted on charts (fig. XVI, XVII, XXVIII, XXIX).

Later a paper on sea-surface temperature has been published by *Aksel S. Steen*:[1]) Steen has used the observations of sea temperature at 8 meteorological coastal stations for the years 1874—1903. Not all stations have been operating the whole period, but by comparison with neighbouring stations, the mean temperature for the years 1874—1903 has been calculated for all of them. For these he has also given the departure of the mean temperature from that of the 30-year period for each month and year.

The present paper includes all observations of sea-surface temperature from our meteorological coastal stations, so that we get the whole material uniformly presented. The temperature records may then serve for studying possible temperature fluctuations and possible relations between the sea-surface temperature and the other meteorological elements, e.g. temperature and wind.

3. The Material.

As mentioned above, in 1876 some lighthouse stations along the Norwegian coast started observing sea-surface temperature. In 1868, 8 stations were making these observations. A few new stations were soon added, but some were shortly after given up, with the result that in the period 1878—1920, 7 stations only were measuring sea temperature. In 1920 more sea temperature stations were set up, but again some of them were discontinued shortly afterwards. In the spring 1940, 13 stations were observing sea temperature. Of these only 3 (Torungen, Hellisøy and Ona) have unbroken records of sea temperature from 1868, and the computation of the mean temperatures for the selected normal period 1871—1930, is therefore based on these stations. The years of observation for each station are, however, given in the station list (p. 38).

When a single monthly mean in a series is missing, this has been replaced by graphical interpolation by means of neighbouring stations. This usually gives a satisfactory result, as the sea-surface temperature by experience varies uniformly over extensive coastal areas. This uniform variation allows us also critically to test the material for each station as regards bad observations. This has been carried into effect everywhere, and evidently wrong monthly means have been replaced by interpolated values. The graphical interpolation has also been used in cases when observations for several months, or even years, are missing in an otherwise very long series. The most important of these interpolations are here mentioned separately. Interpolated values are marked with a star in the tables.

Utsira has daily observations of sea temperature from July 1867—May 1903. From June 1903—December 1908 the observations have been made more irregularly, about 5—7 per month. The monthly means from June 1903—December 1908 have been checked and partly corrected by means of observations from Torungen and Hellisøy. The missing monthly means from January 1909—December 1911 have been determined by graphical interpolation by means of Torungen and Hellisøy.

For *Andenes* it has been very difficult to reconstruct a homogeneous series. The sea temperature is here measured in very shallow water, and for this reason the observations are not very representative. Moreover, the observations have for a long period been carried out very badly. Andenes has daily observations of sea temperature from July 1867—July 1888. From December 1867—July 1875 the observations were made at 14 hours, but otherwise at 8 hours as usual. The observations from December 1867—July 1875 have been reduced from 14^h to 8^h. As probable values for the difference between the sea temperature at 14^h and at 8^h for Andenes, the following are given (see p. 8):

Andenes. Sea-surface Temperature. Probable Difference between 14^h and 8^h.

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.4	0.3	0.2	0.1	0.1

[1]) «Havoverflatens temperatur ved Norges kyst» (The sea-surface temperature by the Norwegian coast), Archiv for Matematik og Naturvidenskab B. XXIX nr. 12, Kristiania 1908.

From August 1888—June 1907 the observations were made every other day, and for the period August 1890—June 1907 they were given only to the nearest degree. As regards sea temperature, however, these two facts seem to have little effect on the right monthly means. But Andenes has, in the period mentioned, had a poor observer. In winter for example, were sea temperatures several times reported lower than — 1.9° C. These low sea temperatures are evidently caused by the fact that the observer has pulled the thermometer out of the water before reading it, so that it shows a temperature between that of the sea and the wet-bulb temperature. Hence we have critically compared the observations of sea temperature at Andenes with that at Nordøyan and Gjesvær. The annual series 1888—1896 we have been able to use partly, even though evidently wrong monthly means had to be replaced by interpolated values. The annual series 1897—1907 we have, however, had to omit altogether. To set up a 60-year mean 1871—1930 for Andenes, we have interpolated the temperature sums for each month for the years 1897—1907 by means of Nordøyan and Gjesvær. The years of comparison used for this interpolation are 1908—30 for Nordøyan and 1908—25 for Gjesvær. In addition it seems that a break of homogeneity has taken place for Andenes. That is to say, since 1929 the annual mean is higher, and the yearly amplitude smaller than before as compared to neighbouring stations (see p. 12). This seems to indicate that the observations of sea temperature have been made in a different way or in a different place with greater depth of water. This change is connected with the exchange of observer in the autumn 1929.

Gjesvær started observing sea temperature in 1877, but until February 1881 a very poor thermometer with a changeable correction was used, and the first observations have therefore been omitted. From August 1888—June 1891 the observations were made somewhat irregularly, and the monthly means for this period have been checked and partly corrected by means of Andenes. It seems that Gjesvær has had an unreliable observer from 1909—1925, and evidently wrong monthly means for this period have been replaced by interpolated values. The observations from Gjesvær are, however, hardly homogeneous, as the fluctuations of the yearly amplitude do not harmonize with those of the remaining sea temperature stations (see p. 12).

The thermometers used for the observations of sea-surface temperature have mostly been of the same type as those used for observing air temperature, that is, they are graduated in fifths of degrees Centigrade. The stations have been furnished with thermometers from the Norwegian Meteorological Institute, and through inspections the Institute has kept the correction. up-to-date. In the present paper we have seen to that the right corrections have been applieds We will here mention one of the more important of these altered corrections. By inspection of Ona in 1923, it was found that the thermometer used for sea temperatures had a large negative correction, and when sent to the Meteorological Institute, the following corrections were found:

Temperature	0°–6°	7°–11°	12°–16°	16°–20°	21°–23°
Correction.......	—0.4°	—0.5°	—0.6°	—0.7°	—0.8°

This thermometer has been used with certainty from January 1909, but in comparison with neighbouring stations, this large correction seems unlikely for the whole period 1909—1923. We have therefore applied corrections according to a likely sliding scale with increasing values.

Observations of sea temperature have mostly been made once a day. From their commencement until New Year 1931, the hour of observation has mostly been at 8^h, but since that year it has been at 14^h only. (Flødevigen and Trondheimsfjorden have, however, been observing all the time at 9^h.) In Northern Norway the sea temperature is observed in the forenoon during the season of obscuration. This does not, however, influence the monthly mean, as the daily temperature range is very small in winter.

The first years after their set up, a few stations also observed sea temperature at 14^h and 19^h, in addition to the 8^h observations. The monthly means for this space of time have been computed from the 8^h observation only in order to avoid inhomogeneity in the series. Some stations have changed the hour of observation from 8^h to 14^h during the years 1928—30. The monthly means have been corrected for the influence of this change. All monthly means from 1867—1930 given in table XVI of this paper, and all normals computed for the period 1871—1930 in table II, are accordingly representing means of the 8^h observations (with exception of the stations of the Norwegian Directorate of Fisheries).

With the change of the observation from 8^h to 14^h, a small break of homogeneity has appeared in the observations of sea-surface temperature, mainly in the warm season of the year. To be able to compare the observations of sea temperature after 1931 with earlier observations, one must therefore know the difference between the 14^h means and the 8^h means for each station. We will here impart our present knowledge of this diurnal difference at our sea temperature stations.

The first years after their set up, *Torungen*, *Lista* and *Hellisøy* observed sea temperature at 8^h as well as at 14^h. As seen from the above table, the diurnal variation is very dependent on local conditions. *Lista* has very shallow water, and accordingly large differences during the 6 summer months. *Hellisøy* has deep waters, and the differences may serve as likely values for the western coast. As the sea at *Torungen* is also omparatively deep, it is surprising that such large differences have been found here. These differences are probably wrong, in any case they are too large compared to later observations.

Sea Temperature. Observed Differences between 14^h and 8^h.

Station	Years of obs.	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Torungen	1867—75	0.2	0.3	0.7	1.0	1.2	1.3	1.4	1.4	0.7	0.4	0.3	0.1	0.8
Lista	1867—74	0.2	0.3	1.3	1.5	1.9	2.1	2.2	2.0	1.0	0.8	0.5	0.3	1.2
Hellisöy	1867—69	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.2

By comparing the observations from Torungen and Hellisøy before and after 1930, the result seems to be that the differences of sea-surface temperature between 14^h and 8^h apparently have the same values for both stations. Comparison between Torungen and Flødevigen (the Hatchery of the State), which has observed at 9^h since 1919, also gives the same result.

To obtain reliable values for the difference between the mean sea temperature at 14^h and 8^h, we must observe sea temperatures at both hours for each station. These comparative observations were started on 1. Oct. 1943. In the following table is given the provisional result of the observations from the years 1944—46. The values in the table are somewhat adjusted.

Observations of sea-surface temperature are made by hauling up a bucket or pail of sea water from ¼—½ m below the sea-surface. The thermometer is then stirred until it has adjusted itself. The observer is instructed to read the thermometer while it is still in the water.

Sea-surface Temperature. Probable Differences between 14^h and 8^h.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Ferder	0.0	0.1	0.3	0.4	0.6	0.6	0.6	0.4	0.2	0.1	0.0	0.0	0.28
Torungen	0.2	0.3	0.6	0.8	0.9	0.8	0.7	0.7	0.5	0.4	0.2	0.2	0.52
Hellisöy	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.15
Ona	0.1	0.1	0.1	0.2	0.2	0.4	0.5	0.4	0.2	0.2	0.1	0.1	0.22
Myken	0.0	0.1	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.2	0.1	0.1	0.24
Skrova	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.1	0.1	0.0	0.19
Sørvågen	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.4	0.3	0.2	0.1	0.0	0.31
Skomvær	0.1	0.2	0.4	0.6	0.9	0.9	0.8	0.6	0.4	0.3	0.3	0.2	0.48
Ingöy	0.1	0.2	0.3	0.4	0.6	0.6	0.6	0.4	0.3	0.2	0.1	0.1	0.32

It cannot be denied, however, that some observers have not always obeyed this rule and most likely slipped the thermometer directly into the sea from the shore.

When the winter is very cold, Ferder is surrounded by ice, and has occasionally measured sea temperatures lower than — 1.9° C. These low temperatures are most likely caused by the thermometer being placed in ice slush. This ice slush contains salt, and works like a freezing mixture. It has also happened that the observer has read the thermometer after it has been pulled out of the water. The observed temperature is then between that of the sea-surface and the wet-bulb temperature. In this way it is explicable that Andenes and Ingøy some years have sea temperatures lower than — 1.9° C in winter. (Along the coast of Northern Norway the sea is not covered with ice.) Such low temperatures have been replaced by — 1.9° C or omitted, and the corresponding monthly means have been corrected or interpolated by means of neighbouring stations.

One cannot expect that the sea-surface temperature at our coastal stations in Norway will harmonize well with the sea-surface temperature in the open sea outside. Owing to the conveyance of freshwater, the coastal water has strongly marked layers of lighter water in the surface, which adds to the stability. By this the vertical circulation is encumbered, and the radiation accordingly has a stronger influence on the sea-surface temperature along the coast. The yearly amplitude of the sea-surface temperature is therefore much greater by the Norwegian coast than in the open sea outside.[1] [2]

Owing to the Baltic stream, the conveyance of freshwater is greatest by the coast of Skager Rack. Northwards the coastal streams are gradually mixed with salter water. The stability of the coastal water is therefore greatest by the coast of Skager Rack, and is gradually decreasing northwards. The radiation has accordingly greater influence on the sea-surface temperature by the southern than by the northern coast of Norway. What is said here, concerns even deeper waters. At our coastal stations we have in addition the influence of the smaller depths. The smaller the depth, the thinner are the available layers of water during the cooling down in autumn and winter. At stations with very shallow water, the ground has also a direct influence on the sea-surface temperature by the coast.

Owing to the moderated vertical circulation and to the partially prevented advection close to the coast, the wind has also a great influence on the sea-surface temperature.[2][3]

The effect of the wind is varying with the seasons, and is usually different in the outer skerries from that in the fjords and close to the coast. The effect of the wind is also varying with the direction of the coastline.

In the Yearbook of the Norwegian Meteorological Institute for 1876, a description of the older meteorological stations is found. We will here only mention the best situated stations for measuring sea-surface temperature. By a good situation is only implied that the station is freely situated on the coast with comparatively deep water outside, so that the temperature observations are representative for the corresponding coastal region.

The station Myken has the best representativeness. One might expect that Skomvær should be still better situated as a sea temperature station, but this does not seem to be confirmed by the observations. The sea temperature at Skomvær seems to be too low as compared to that at Myken, epecially in the 6 winter months. It has not been possible to determine whether this is due to the observation place at Skomvær being locally influenced, or if it is caused by local currents along the Lofoten.

Well situated for sea temperature observations are also Utsira, Slåtterøy, Hellisøy, Kråkenes, Ona and Jan Mayen. Moderately good representativeness have Ferder, Flødevigen, Torungen, Lindesnes, Trondheimsfjorden, Sula, Nordøyan, Sørvågen, Loppa, Fruholmen, Sværholt and Makkaur. In winter the observation place on Bjørnøya is locally somewhat cooled down. The remaining sea temperature stations are rather strongly influenced by local conditions.

The observations of sea-surface temperature by the Norwegian coast are published every year since 1874 in the Yearbook of the Norwegian Meteorological Institute ("Jahrbuch des Norwegischen Meteorologischen Instituts"). In the yearbooks 1874—1921 are also given the monthly extremes, since 1922 only the monthly and annual means.

[1] See e.g. Mohn loc. cit. fig. XXIX.

[2] *Helland Hansen und Nansen:* Temperaturschwankungen des Nordatlantischen Ozeans und in der Atmosphäre. Videnskabsselskapets skrifter I. mat. naturvidenskap. Klasse, 1916 no 9, Kristiania 1917 S. 113.

[3] *J. Eggvin:* The Movements of a Cold Water Front. Report on Norwegian Fishery and Marine Investigations, Vol. VI, No. 5, p. 63.

4. Station List.

Table I (p. 38) gives a list of 44 stations which have observed sea-surface temperature. The numbers added, are referring to the international serial succession in the station list of the work on air temperature.[1]) 6 of the stations do not belong to the Meteorological Institute, namely Flødevigen, Trondheimsfjorden and the 4 oceanographical stations of the Directorate of Fisheries (see Foreword and p. 23). The records for Andenes are divided into two series: Andenes I and II, as the observations since 1929 are not homogeneous with the earlier observations. As is evident from the column of observation years, most of the stations have observed sea temperature for a short series of years only. The observation years indicate which annual series have been used for this work. The Austrian observations during the Polar-year 1882—83 on Jan Mayen were made on the north-western side of the island (station 70° 59.8′ N, 8° 28.1′ W), while the later Norwegian observations have been made on the south-eastern side of the island.

5. The Yearly Variation of Sea-surface Temperature.

The chosen period for the normals in this work is 1871—1930. Only 3 stations, Torungen, Hellisøy and Ona have, however, unbroken records for the whole period. For these 3 stations only, it is possible to compute the normal values directly. For the remaining sea temperature stations, the normals must be found according to an indirect method. By comparing the records of sea temperature with those of the neighbouring stations, it appears that the sea-surface temperature by the coast varies uniformly from month to month over extensive coastal areas. We are therefore encouraged to use the same difference method as by the computation of the air temperature normals. The reliability of this mode of computation is dealt with in a later section (p. 15).

The problem in computing the sea temperature normals for northern Norway is, that no homogeneous temperature records for the whole period are available north of Ona. Andenes has indeed records for the whole period, but those for the period 1897—1907 had to be omitted. To compute the 60-year mean for Andenes, we have interpolated the temperature sums for each month of the years 1897—1907 by means of Nordøyan and Gjesvær. The difference method has been used, and the years of comparison are 1908—30 for Nordøyan, and 1908—25 for Gjesvær. These normal values for Andenes have then been used for computing the normals of sea-surface temperature by the northern coast of Norway.

In computing the normal values of sea temperature, the difference method has here predominantly been applied in the way that each monthly mean has been reduced to the normal series by means of the anomalies of the stations of comparison. The mean of the normal series then makes the normal value. The approximate constancy of the values in the normal series is accordingly a control of the homogeneity of the series, and likewise a test of the reliability of the reduction method.

In computing the normal values of air temperature by means of the difference method, a reduction factor[1]) has been applied. As the simultaneous fluctuations of sea temperature have different values for the two stations of comparison, a reduction factor has also been applied when computing the sea temperature normals. As reduction factor the ratio between the mean departures from the normals of the two stations of comparison should actually have been used.[2]) The anomalies, however, we do not know until the normals have been computed. On the proposition of *Mohn,*[3]) the ratio between the yearly amplitudes of both stations is therefore used instead. From table VI (p. 42), it is evident that this method gives a good approximation for the sea temperatures by the coast. In computing the sea temperature normals, we have predominantly used two stations of comparison, one north and one south of the station in question. As seen from section 9 (p. 15), this gives a better result than that obtained by

[1]) *B.J.Birkeland:* Mittel und Extreme der Lufttemperatur, Geofysiske Publikasjoner Vol. XIV No. 1 (1936) S. 41.

[1]) See *B. J. Birkeland* loc. cit. p. 22.

[2]) *Wild:* Temp. Verhältn. d. Russ. Reiches (1881) Text, S. 293.

[3]) *Klimatabeller for Norge* I, s. 14. Norsk Met. Aarbog 1867, s. XX.

Sea Temperature. Yearly Amplitude.
Departure from 60-Year Mean (1871—1930).

	Torungen	Utsira	Hellisöy	Ona	Prestöy	Nordöyan	Andenes I	Andenes II	Gjesvær
1871—1930	14.15	10.64	9.10	8.48	10.45	9.02	10.51	8.9	7.65
1871—75	0.93	0.82	0.36	0.16	0.75		0.27		
76—80	1.35	0.98	1.00	0.68	0.53		0.09		
81—85	0.21	0.52	—0.14	0.66	1.05		0.05		1.25
86—90	—0.19	—0.24	—0.24	—0.56	—0.85		—0.05		1.17
91—95	0.47	0.18	—0.24	0.00		0.36	—0.21		—0.31
1896—1900	0.45	—0.56	—0.90	—0.04		—0.52	—0.5*		—0.17
1901—05	—0.05	—0.70	—0.50	—0.60		—0.46	—0.5*		—0.15
06—10	—0.33	—0.78	—0.86	—1.00		—0.52	—0.4*		—1.17
11—15	0.29	0.42	0.34	—0.02		0.34	1.15		0.25
16—20	0.61	0.26	0.70	0.56		0.14	0.49		1.63
21—25	—0.35	—0.42	0.14	0.32		1.02	0.97		—0.09
26—30	0.77	0.22	0.96	0.34		0.52	0.13		
31—35	0.71		0.40	0.92		1.08		0.54	
36—40	1.79		1.54	1.54		1.84		1.64	

Sea Temperature. Yearly Amplitude.
Ratio between Neighbouring Stations.

	Torungen / Utsira	Utsira / Hellisöy	Hellisöy / Ona	Ona / Prestöy	Ona / Nordöyan	Prestöy / Andenes I	Nordöyan / Andenes I	Nordöyan / Andenes II	AndenesI / Gjesvær
1871—1930	1.33	1.17	1.07	0.81	0.94	1.00	0.86	1.01	1.37
1871—75	1.32	1.21	1.09	0.77		1.04			
76—80	1.33	1.15	1.10	0.83		1.04			
81—85	1.29	1.25	0.98	0.80		1.09			1.19
86—90	1.34	1.17	1.12	0.82		0.92			1.19
91—95	1.35	1.22	1.04		0.90		0.91		1.40
1896—1900	1.45	1.23	0.97		1.00		0.85*		1.34*
1901—05	1.42	1.16	1.09		0.92		0.86*		1.34*
06—10	1.40	1.20	1.10		0.88		0.84*		1.56*
11—15	1.30	1.17	1.12		0.90		0.80		1.48
16—20	1.35	1.11	1.08		0.99		0.83		1.19
21—25	1.35	1.11	1.05		0.88		0.87		1.52
26—30	1.37	1.08	1.14		0.92		0.90		
31—35			1.01		0.93			1.07	
36—40			1.06		0.92			1.03	

using one station of comparison only. Simultaneously with the computation of the normals, a survey has been made of the homogeneity of the sea temperatures. As mentioned above, the computation of normals by means of the difference method is in itself a control of the homogeneity. For stations with long series of observation, we have in addition examined the homogeneity by means of the 5-year means.

As the sea temperature stations have no fixed arrangement for the observation of sea temperature, it is possible that the observation place has been changed in the course of years without influencing the annual means appreciably. It is to be expected, however, that such a change is more easily traced on the yearly amplitude, and we have therefore also examined the homogeneity of the sea temperature by means of the yearly amplitude. In so doing, the 5-year means have mostly been used.

For stations with long series, the above tables are giving the yearly amplitude, partly as departure from the 60-year mean, partly as ratio between neighbouring stations.

For Andenes it seems that a break of homogeneity has taken place about 1929, as the yearly amplitude after this time is considerably smaller than before compared to those of the neighbouring stations. We have therefore placed the observations for Andenes after 1929 in a new series, Andenes II, and computed new normal values for this series.

The sea temperature records at Gjesvær do not harmonize very well with those at Andenes. From the above table it is seen that the ratio of the yearly amplitude at Andenes to that at Gjesvær is somewhat fluctuating. Now it is, owing to the geographical situation, difficult to draw any parallel between the sea temperatures at Gjesvær and those at Andenes, and it has therefore not been possible to determine whether the observations of sea temperature at Gjesvær are homogeneous or not.

Otherwise the observations of sea-surface temperature for the various stations harmonize well, and the homogeneity seems on the whole to be in order. From the above tables we see that the ratio between the yearly amplitudes of the sea temperature for neighbouring stations is approximately constant. This is in agreement with the anomalies of the sea temperature being approximately proportional to the yearly amplitudes (see p. 10 and 14).

The computed means for the normal period 1871—1930 are grouped in table II. For Björnöya and Jan Mayen, however, no reduction has been made, and the mean values for these stations are representing the means of the observed years. From table II it is evident that the southern part of the western coast on an average has the highest sea-surface temperature. The annual mean is gradually decreasing northwards along the coast, but the individual stations may show some irregularities depending on their local situation.

The monthly means of the sea-surface temperature for the normal period 1871—1930 have been used for drawing isotherm-charts for the sea surface by the coast (fig. 1—16, p. 74). In so doing, the computed monthly means for the 4 oceanographical stations of the Norwegian Directorate of Fisheries have also been used (see later p. 27).

The rendering in detail of the course of the isotherms in the skerries is foregone. The network of stations is namely too scarce to show the irregular local variations of sea temperature in the skerries, and for this reason the isotherms here are only roughly drawn. We have, however, endevoured to render the course of the sea temperature isotherms for a fairly broad zone outside the coast. This extrapolation, extending from the coast out over the sea, is perhaps somewhat uncertain but has even so been included in the figures. The monthly extrapolation has been made in the following way. In July and August the isotherms outside the coast may be fairly accurately ascertained in comparison with the coastal stations. The changes from month to month are then extrapolated by means of the changes from month to month at the utmost situated sea temperature stations, especially those of the Norwegian Directorate of Fisheries off the coast. The data in fig. 13—16 have been computed from the data in fig. 1—12.

The computation of the periodic yearly extremes (table III) has also been based on the monthly means of the normal period. Corrections, however, must be applied. The monthly means are namely integral values, whereas we need daily temperatures. The simplest is to calculate the temperature for the middle day of the month from the monthly mean, and for this Kleiber's method has been used.[1]) The data in table III have been computed from daily temperatures calculated in this way. The maxima and minima and their time of occurrence have been computed by means of *Mohn's*[2]) parabola formula.

The yearly variation of the sea-surface temperature by the coast is, in addition to the

[1]) *Hann-Süring:* Lehrbuch der Meteorologie, 4. Ausg. (1926), S. 102.

[2]) The Norw. North Polar Expedition 1893—96. Scientific Results. Vol. VI, p. 469. See also B. J. Birkeland loc. cit. p. 14.

geographical situation, highly dependent on the local situation of the station. The yearly amplitude is decreasing, and the times of occurrence of the extremes are delayed with increasing distance from the coast line, and with the increase of depth and circulation of the water at the observation place. From table III we therefore also get an impression of the representativeness of each station.

The *periodic maximum of the sea-surface temperature* is in the first place determined by the incoming radiation. The greatest maximum by the coast occurs in the Oslofjord. From there the maximum is decreasing around the coast of Lindesnes and northwards. With the *periodic minimum of the sea temperature* it is quite different. The yearly minimum keeps highest by Stadt and the adjacent waters. The minimum is from there decreasing in the direction of the Swedish border as well as northwards. But the decrease is very small from Stadt northwards to the North Cape.

The periodic maximum of the sea-surface temperature occurs earliest in the Oslofjord (in the end of July). From there, westwards and northwards along the coast to Stadt, the time of the maximum is gradually delayed. From Stadt and northwards the maximum occurs in the end of August.

The time of occurrence for the periodic minimum of sea temperature is chiefly in the first half of March at the stations by the western and northern coast of Norway. The stations with poorer representativeness have the minimum in the beginning of the month, whereas the stations with better representativeness have the minimum about the middle of March. Outside the coast of northern Norway the minimum is reached in the end of March or in the beginning of April. Along the coast of Skager Rack the minimum occurs in the end of February and in the beginning of March.

The yearly amplitude is on the whole decreasing from the Oslofjord westwards and northwards along the coast. The table shows many irregularities, depending on the local situation of the stations.

In table IV are given the constants in the trigonometrical series of the yearly variation for stations with long series of observation. The constants in the trigonometrical series must be computed from equidistant temperatures.[1]) These equidistant temperatures are derived from the temperatures of the middle day of the month (see above p. 12), by interpolation. The trigonometrical series are presented by 6 terms, but as the amplitudes of the last terms are only insignificant, it is adequate to use only 2 or 3 of them in the series.

6. Difference of Sea-surface minus Air Temperature.

In table V the difference of sea-surface minus air temperature for each month and for the year is given for each station. The temperatures refer to the period 1871—1930. For Björnöya and Jan Mayen, the differences have been calculated from the means of sea temperature in table II (p. 39), and the means of air temperature 1912—30.[2])

From table V it is evident that for the greater part of the year the sea-surface temperature is higher than the air temperature by the coast. The greatest positive difference of sea- minus air temperature chiefly occurs in December, but is somewhat delayed northwards. In southern Norway the greatest positive difference is found in November and December, whereas in northern Norway it is found in December and partly in January. On Björnöya and Jan Mayen this difference is greatest in March. In winter the difference of sea- minus air temperature is increasing somewhat northwards. Calculated from the monthly means, the greatest difference in southern Norway is from 3—4° C, in northern Norway from 4—7° C and on Björnöya from 7—8° C. As a local peculiarity is mentioned that the difference seems to be somewhat smaller by the coast of Möre than by the western coast elsewhere.

In summer the sea-surface temperature is mostly somewhat lower than the air temperature. Calculated from the monthly means the difference is not great, generally between 0° and 2° C. This difference is most pronounced by the coast of Finmark and on Björnöya. The time of occurrence of the greatest negative difference of sea-

[1]) *Hann-Süring:* Lehrbuch der Meteorologie, 4. Ausg. (1926), S. 780.

[2]) See *B. J. Birkeland,* loc. cit. Tab. III S. 65.

minus air temperature is also somewhat delayed northwards. In southern Norway this chiefly occurs in May—June, in northern Norway in July. The annual mean of sea-surface temperature is considerably higher than the air temperature by the coast, and the difference is increasing towards the north.

7. The Mean Departure (d) of the Monthly and Annual Means from the 60-Year Normal Mean.

For a selected number of sea temperature stations the mean departure of the monthly and annual means have been computed, and the result grouped in table VI. Actually we should only have used long series to obtain completely uniform material. Owing to the small number of long series, however, we have added stations with shorter series to the table. These shorter series have since 1920 all a higher temperature than the mean for the normal period. We have therefore not been able to use the departures from the normal means, but have availed ourselves of the departures from the means of the observed years. These years have been added to the right in the table.

From table VI it is seen that the mean departure (d) generally has a distinct yearly variation. The greatest values are in the 6 summer months, mostly in July—August, and the smallest values in the 6 winter months, mostly in March—April. This fact is due to the stability in the upper layers being greatest in summer and smallest in March—April. Only a few stations show irregularities and have no distinct yearly variation. The stations by the coast of Skager Rack show two maxima: February and June—July, and two minima: April—May and September—October.

To the right in table VI we have computed the mean, d_{12}, of the mean anomalies of the twelve months and the ratio of d_{12} to the yearly amplitude A. Here A is not taken from the monthly means of the normal period, but from the monthly means of the observed years. The ratio $\frac{d_{12}}{A}$ is approximately constant and is generally ranging between 0.07 and 0.08. At any rate the variations of the ratio $\frac{d_{12}}{A}$ are considerably smaller than those of the mean departure d_{12}, and this justifies the application of the reduction factor by the computation of normals (see above p. 10).

8. The Probable Error (R) of the 60-Year Normal Means.

From the mean departure (d) we can, by the rule of probabilities, compute the so called probable error (R) from the formula

$$R = \frac{0.845}{\sqrt{n-1}} \cdot d$$

where n denotes the number of years in the normal period. Although this formula is actually only applicable when observations for the whole normal period are at disposal, it is also generally used for stations with shorter series of observations, which are reduced to the normal period. And in table VII the probable error of the 60-year mean has been computed for stations with long as well as with shorter series of observation.

For shorter series of observation, however, the above formula may be illusory. Certainly, the mean departure, d, is soon nearly approaching a constant value with increasing length of the series of observation (e.g. whether we compute d from 20 years or from 60, usually makes little difference), but by the reduction to the normal period by means of neighbouring stations, the possibility for another error presents itself.

If N denotes the normal temperature mean, t the individual monthly and annual mean, the equation for the reduction (without reduction factor) is expressed by:

$$N_1 = N_2 + \frac{1}{m} \Sigma (t_1 - t_2)$$

where the indexes 1 and 2 denote the reduced station and the station of comparison respectively, and m denotes the number of observed years for the reduced station. The probable error in N_2 we term R_2 and the probable error in $\frac{1}{m} \Sigma (t_1 - t_2)$ we term $R_\triangle$. The probable error in N_1 is then determined by $R_r = \sqrt{R_2{}^2 + R_\triangle{}^2}$. Here $R_2 = \frac{0.845}{\sqrt{n-1}} d_2$ and

$R_\triangle = \frac{0.845}{\sqrt{m-1}} d_\triangle$. By employing a reduction factor, $R_\triangle$ is somewhat diminished.

In table VII the probable error is computed from the formula $R_1 = \frac{0.845}{\sqrt{n-1}} d_1$. When $d_2 > d_1$, or when $R_\triangle$ is comparatively great, then R_r becomes $> R_1$ and R_1 has no meaning. In the following section are given some examples of the relation between R_1 and R_r at various sea temperature stations by the coast.

The probable error, R, of a many-year mean of a station is a theoretical quantity depending on the variability of the element in question, and has nothing to do with the erroneous means caused by systematic errors in the actual observations. By the probable error, R, is only implied that from several individually independent many-year means of a station, about one half has a smaller departure, and the other half a greater departure from the general mean than R. The formula for the probable error is also based on the assumption that no change of climate has taken place.

9. The Reliability of the Computation of Normals by Means of the Difference Method.

In section 5 is mentioned how the mean sea-surface temperatures for the normal period 1871—1930 have been computed. We will here examine the reliability of the computation of normals more minutely. By so doing, we avail ourselves of the same method as is customary for the air temperature.

Wild's Method.

For stations with observations for the whole, or nearly the whole period, we have calculated the departures of the 5-year means from the normal value, and computed the mean departure. Now Wild's method consists in reducing each 5-year mean to the normal period by means of a station of comparison according to the difference method. From this normal series are further determined the means, departures and the mean departure. Now if only the mean departure of a normal series is smaller than the mean departure of the not reduced series, then the reduction may be considered justified.

To obtain the mean departure of the normal series it is, however, not necessary to compute the normal series itself. It is sufficient to make up the difference series between the reduced station and the station of comparison. If N denotes the mean temperature of the normal period, t the 5-year means, $\triangle$ the departures of the 5-year means from the normal value N, d the mean value of $\triangle$, T the reduced 5-year means of the normal series, D the mean departure of T from N, and the indexes 1 and 2 denote the reduced station and the station of comparison respectively, the mode of calculation is as follows:

$$d_1 = \frac{1}{n}\sum_1^n |t_1 - N_1| = \frac{1}{n}\sum_1^n |\triangle_1|,$$

$$T_1 = t_1 - \triangle_2,$$

$$\frac{1}{n}\sum_1^n T_1 = \frac{1}{n}\sum_1^n t_1 - \frac{1}{n}\sum_1^n \triangle_2 = \frac{1}{n}\sum_1^n t_1 = N_1,$$

$$D_1 = \frac{1}{n}\sum_1^n |T_1 - N_1| = \frac{1}{n}\sum_1^n |t_1 - N_1 - \triangle_2| = \frac{1}{n}\sum_1^n |\triangle_1 - \triangle_2|.$$

If this calculation results in $D_1 < d_1$, the reduction of series 1 to the normal period by means of series 2 is justified.

We will now show some examples on this method of comparison. Each month and the year have been calculated separately, but we are here only giving the result for the year and for the mean of the twelve months before and after the reduction.

Mean departure (1871—1930) of the 5-year means.

Torungen.

Not reduced		Reduced by means of Utsira.			
Monthly mean	The year	Monthly mean	The year		
d_{12}	d	D_{12}	D	$\frac{D_{12}}{d_{12}}$	$\frac{D}{d}$
0.38	0.22	0.28	0.17	0.74	0.80

Utsira.

Not reduced					
		Reduced by means of Torungen.			
0.35	0.22	0.28	0.17	0.80	0.80
		Reduced by means of Hellisøy.			
		0.24	0.14	0.68	0.64
		Reduced by means of $\frac{T+H}{2}$			
		0.22	0.13	0.63	0.59

Hellisöy.

Not reduced. Monthly mean	Not reduced. The year	Reduced. Monthly mean	Reduced. The year		
d_{12}	d	D_{12}	D	$\frac{D_{12}}{d_{12}}$	$\frac{D}{d}$
		Reduced by means of Utsira.			
0.32	0.19	0.24	0.14	0.75	0.74
		Reduced by means of Ona.			
		0.27	0.12	0.84	0.63
		Reduced by means of $\frac{U+O}{2}$			
		0.20	0.10	0.63	0.53

Ona.

Not reduced.					
		Reduced by means of Hellisöy.			
0.27	0.11	0.27	0.12	1.00	1.09
		Reduced by means of Prest.+Nord.			
		0.30	0.16	1.11	1.45
		Reduced by means of $\frac{H+(P+N)}{2}$			
		0.22	0.09	0.82	0.82

Prestöy+Nordöyan.

Not reduced.					
		Reduced by means of Ona.			
0.32	0.19	0.30	0.16	0.94	0.84
		Reduced by means of Andenes.			
		0.32	0.20	1.00	1.05
		Reduced by means of $\frac{O+A}{2}$			
		0.25	0.13	0.78	0.68

Andenes.

Not reduced.					
		Reduced by means of Prest.+Nord.			
0.35	0.23	0.32	0.20	0.91	0.87
		Reduced by means of Gjesvær.			
		0.41	0.19	1.17	0.83
		Reduced by means of $\frac{(P+N)+G}{2}$			
		0.30	0.13	0.86	0.57

Only stations with long series of observation have been used for the above reductions. As these stations are very far apart, the mutual reductions to the normal period are of changing quality. In the above examples the results are better for southern than for northern Norway, where the distances between the stations are greater.

The sea temperature stations have different local situations by the coast, and this complicates the mutual comparison of the stations. For neighbouring stations the simultaneous departures from the normals may thus have opposite sign, although they mostly only differ in numerical value. By the normal reduction one must therefore make use of a reduction factor. In the above examples, however, the reduction factor has not been applied. As an example on which consequence this may have, let us mention the reduction of Hellisöy and Ona by means of one another. In reducing Hellisöy by means of Ona, an improvement is obtained, but in reducing Ona by means of Hellisöy, this is not the case. This apparent contradiction is due to Hellisöy having greater departures than Ona. By introducing a reduction factor, the reduction is improved for both stations.

From the above examples it is evident that the normal reduction everywhere is improved by using two stations of comparison, one south and one north of the reduced station.

The normal computation is chiefly used for shorter series. In these cases the stations of comparison are not so distant from the reduced station, and the reductions give better results. We will here examine the reliability of the reduction to the normal period in another way.

Mohn's Method.

If t denotes the individual monthly or annual mean, N the mean temperature of the normal period, and if the indexes 1 and 2 indicate the reduced station and the station of comparison respectively, the equation for the reduction (without reduction factor) is given by:

$$N_1 = N_2 + \frac{1}{m} \Sigma (t_1 - t_2),$$

where m denotes the observed years of the reduced station. Let further R_2 denote the probable error in N_2 and $R_\triangle$ the probab e error in $\frac{1}{m} \Sigma (t_1 - t_2)$, then the probable error in N_1 is expressed by:

$$R_r = \sqrt{R_2{}^2 + R^2{}_\triangle}$$

We term the mean of the not reduced series M_1 and let $R_1\,(m)$ denote the probable error in M_1. If $R_r < R_1\,(m)$, then the reduction to the normal period of series 1 by means of series 2 is justified.

Examples.

Ferder (1928—42, 15 years) reduced by means of Torungen.

	Jan.	July	Year
$R_\triangle$	0.06	0.08	0.04
R_2	0.13	0.13	0.06
R_r	0.14	0.15	0.07
R_1 (15)	0.29	0.28	0.16
R_1 (60)	0.14	0.13	0.08

Slåtterøy (1924—39, 16 years) reduced by means of Hellisöy.

	Jan.	July	Year
$R_\triangle$	0.05	0.06	0.02
R_2	0.06	0.14	0.04
R_r	0.08	0.15	0.04
R_1 (16)	0.15	0.23	0.10
R_1 (60)	0.08	0.12	0.05

Myken (1923—42, 20 years) reduced by means of Ona.

	Jan.	July	Year
$R_\triangle$	0.05	0.12	0.03
R_2	0.06	0.10	0.04
R_r	0.08	0.16	0.05
R_1 (20)	0.11	0.22	0.09
R_1 (60)	0.06	0.12	0.05

Ingøy (1923—42, 20 years) reduced by means of Andenes.

	Jan.	July	Year
$R_\triangle$	0.09	0.11	0.04
R_2	0.09	0.09	0.05
R_r	0.13	0.14	0.06
R_1 (20)	0.14	0.16	0.09
R_1 (60)	0.08	0.09	0.05

From the above examples it is seen that R_r everywhere is smaller than $R_1(m)$. The difference is greater in southern than in northern Norway, and accordingly the reduction to the normal period gives a better result in southern than in northern Norway. This was also confirmed by the previous method of investigation.

In the above examples only one station of comparison has been used, and no reduction factor has been applied. By using two stations of comparison and by introducing a reduction factor, the reduction is improved.

For the years 1920—40 there is in addition a particular detail, which makes the reduction to the normal period more justified. The sea-surface temperature during these years has namely been very high, and the difference of the mean of these years minus the general mean is considerably greater than the computed probable error $R_1(m)$.

In the lowest row of the examples the probable error R_1 (60) from table VII (p. 43) has been determined too. R_1 (60) is computed from the formula $\frac{0.845}{\sqrt{59}} d_1$, where d_1 is the average departure from the mean of the observed years. From the examples we can in general say that R_r is in good agreement with R_1 (60) in southern Norway. In northern Norway, on the other hand, R_r is mostly somewhat greater than R_1 (60), owing to the large distances between the stations.

10. Extreme Monthly and Annual Means.

(The Extreme Range (S).)

Table VIII and IX present the highest and lowest monthly and annual sea temperature means respectively, for a selected number of sea temperature stations. The numbers added in the tables indicate the observed years for each station. In table X the difference of the highest minus the lowest monthly and annual mean has been calculated. This difference is termed the extreme range (S) of the monthly and annual mean. From table X it is evident that the extreme range of the monthly means shows a distinct yearly variation. The greatest temperature range is found in the 6 summer months, the smallest in the 6 winter months. This is in agreement with the yearly variation of the mean departure d (see p. 14).

11. The Ratio of the Extreme Range (S) to the Mean Departure (d).

In table XI the stations are arranged according to the number of observed years. The mean temperature range S_{12} of the twelve months is calculated for each station. In the second column, d_{12} from table VI is repeated. Here d denotes the mean departure of the monthly means from the mean value of the observed years, and d_{12} is the mean of the twelve months. From table XI we see that the ratio $\sigma_{12} = S_{12}/d_{12}$ increases with the number of observed years. We have also included the ratio $\sigma_y = S/d$ for the annual values. The relation between σ_y and the number of observed years is, however, somewhat irregular.

σ's dependence on the number of observed years is more distinctly shown by grouping together the stations with approximately the same number of years, and computing the mean. This is done in the below table.

Number of stations	Observed years	σ_{12}	σ_y
6	14	4.27	4.27
6	22	4.75	4.31
3	50	5.69	5.86
4	73.5	5.88	5.47

For stations with long series of observation, the observed years have been divided into groups of 10, 20 etc., and σ calculated. The result is given in the following table.

σ. (empirical).

Station	10	20	30	40	50	60
Torungen	3.85	4.52	4.89	5.19	5.50	5.59
Utsira	3.69	4.48	5.00	5.32	5.59	5.70
Hellisöy	–	–	5.10	–	–	5.89
Ona	3.78	4.63	4.96	5.20	5.47	5.59
Nordöyan	3.82	4.69	5.28	5.67	–	–
Andenes	3.52	4.44	5.16	5.30	5.54	5.75
Mean	3.73	4.53	5.06	5.34	5.52	5.70

σ's dependence on the number of observed years may also be derived from the calculation of probabilities, assuming that the investigated quantity (here the monthly mean) is a statistical variable. The relation $\sigma = \sigma(n)$ is, however, dependent on the frequency-distribution of the quantity in question.

Under the assumption of a Maxwellian distribution, *J. Bartels*[1]) has deduced a function $\sigma = \sigma(n)$. The theoretical values computed by Bartels, however, seem somewhat large as compared to the empirical σ-values computed from the temperature and pressure data. *B. J. Birkeland* and the writer[2]) have adopted a theoretical expression for extreme values from *G. Th. Fechner:* "Kollektivmasslehre" (Leipzig 1897, S. 322), which agrees very well with the empirical values obtained from the temperature and pressure data. This term for extremes also assumes a Maxwellian frequency-distribution and is based on a simple reasoning, which will here be expressed in another way.

Let ε denote any positive departure from the arithmetic mean of a group of quantities, and let μ denote the standard deviation. We presume that the departures are obeying the Maxwellian function of distribution:

$$w(\varepsilon) = \frac{2h}{\sqrt{\pi}} e^{-h^2\varepsilon^2}$$

where

$$h = \frac{1}{\mu\sqrt{2}}.$$

From this follows that

$$W_1(u) = \int_0^u w(\varepsilon)\, d\varepsilon = \frac{2h}{\sqrt{\pi}} \int_0^u e^{-h^2\varepsilon^2} d\varepsilon$$

indicates the probability of any departure being smaller than U.

By substituting $h\varepsilon = \omega$ and $hU = \Omega$,

$$W_1(u) = \frac{2}{\sqrt{\pi}} \int_0^{\Omega} e^{-\omega^2} d\omega = \Theta(\Omega).$$

Here is

$$W_1(\infty) = \frac{2}{\sqrt{\pi}} \int_0^{\infty} e^{-\omega^2} d\omega = 1.$$

The probability of m departures simultaneously being smaller than U, then becomes

$$W_m(u) = [W_1(u)]^m = \Theta^m(\Omega).$$

This equation also expresses the probability of the *greatest* of the m departures being smaller than U. The greatest of the m departures (the maximum departure) is then a new statistical variable, of which the probable function of distribution is given by

$$\frac{d\,W_m(u)}{d\,u} = m\, W_1^{m-1}(u)\, w(u).$$

The probability of the greatest of the m departures being larger than U is

$$W_m(\infty) - W_m(u) = 1 - \Theta^m(\Omega).$$

1) *J. Bartels:* Die Schwankungsweite als Funktion der Beobachtungsdauer. Met. Zeitschr. 1928, S. 489.

2) *B. J. Birkeland und E. Frogner:* Die extreme Variabilität der Lufttemperatur. Met. Zeitschr. 1935, S. 349.

If now Ω_c is determined by

$$\Theta^m (\Omega_c) = 1 - \Theta^m (\Omega_c)$$

it expresses that U_c is the central value in the probable distribution of the maximum departures.

U_c is then determined by

$$\Theta (\Omega_c) = \sqrt[m]{\frac{1}{2}}$$

where $\Theta (\Omega) = \frac{2}{\sqrt{\pi}} \int_0^{\Omega} e^{-\omega^2} d\omega$ and $U_c = \frac{1}{h} \cdot \Omega_c$.

We presume having n observations of a quantity with symmetrical distribution on both sides of the mean value. The greatest positive and negative departure as the central values in their probable distribution are then determined by

$$\Theta (\Omega_c) = \sqrt[\frac{2}{n}]{\frac{1}{2}},$$

and $\pm U_c = \pm \mu \sqrt{2}\, \Omega_c = \pm 1.25\, d \sqrt{2} \cdot \Omega_c$.

The extreme range then becomes

$$S = 2\, U_c = 2\, \mu \sqrt{2} \cdot \Omega_c$$

and

$$\sigma = s/d = 2.5 \sqrt{2} \cdot \Omega_c.$$

Ω_c may be determined from the $\theta(t)$ tables, and we get the following tabular relation between σ and n.

σ. (theoretical).

n	0	1	2	3	4	5	6	7	8	9
10	3.79	3.90	4.01	4.10	4.18	4.26	4.33	4.40	4.46	4.52
20	4.58	4.63	4.68	4.73	4.78	4.82	4.86	4.90	4.94	4.97
30	5.01	5.04	5.07	5.11	5.14	5.16	5.19	5.22	5.25	5.27
40	5.30	5.32	5.35	5.37	5.39	5.41	5.44	5.46	5.48	5.50
50	5.52	5.54	5.55	5.57	5.59	5.61	5.62	5.64	5.66	5.67
60	5.69	5.71	5.72	5.74	5.75	5.77	5.78	5.79	5.81	5.82
70	5.83	5.85	5.86	5.87	5.89	5.90	5.91	5.92	5.93	5.95
80	5.96	5.97	5.98	5.99	6.00	6.01	6.02	6.03	6.04	6.05
90	6.06	6.07	6.08	6.09	6.10	6.11	6.12	6.13	6.14	6.15
100	6.16	6.17	6.18	6.18	6.19	6.20	6.21	6.22	6.23	6.24
n = ...	110	120	130	140	150	160	170	180	190	
σ = ...	6.24	6.32	6.39	6.45	6.51	6.57	6.62	6.67	6.71	
n = ...	200	300	400	500	600	700	800	900	1000	
σ = ...	6.75	7.08	7.31	7.48	7.62	7.73	7.83	7.92	7.99	

It appears that the distribution of the monthly means of various meteorological elements (air temperature, sea-surface temperature, pressure) only show a slight asymmetry around the normal mean of a longish annual series. Assuming that no change of climate has taken place during the years in question, the asymmetry is not systematic, so that it disappears by determining the means for more stations. By so doing, we also get good agreement between the empirical and theoretical σ-values. This agreement for the monthly means of the sea-surface temperature is evident from comparison between the above tables of σ (see p. 18 and 19).

12. Monthly and Annual Extremes.

With the exception of a few stations, the means of the extremes have not been reduced to the normal period, but set up for the observed years. The mean extreme values have also been calculated separately before and after 1930, as the hour of observation since 1930 has been changed from 8^h to 14^h.

In tables XII, XIII and XIV are presented the mean monthly and annual maxima, minima and their differences respectively.

The monthly maximum is highest in July—August, and mostly lowest in March. The yearly amplitude of the monthly maximum is decreasing from the Oslofjord northwards along the coast.

The monthly minimum is lowest in February—March and highest in August, and has also a decreasing yearly amplitude northwards.

The difference between the mean monthly extremes expresses also the mean inter-monthly temperature variations. These inter-monthly variations show a yearly march with its maximum in June, partly in July, and its minimum in February—March—April.

For a few stations the absolute extremes are also given (table XV). It is here examined how these absolute yearly extremes harmonize with those which may be determined theoretically by the above expression for extreme values (p. 18). For this purpose we consider the groups of annual maxima and minima. The absolute extremes are the greatest maximum and the lowest minimum of these groups.

Extreme Sea-surface Temperatures. (8^h).

	Mean	d	$^1/_2\,\sigma$	Greatest value		Lowest value	
				Theoretical	Empirical	Theoretical	Empirical
Torungen 55 years							
An. max.	18.1°	1.12	2.81	21.3	22.2	14.9	15.4
» min.	— 0.8	0.78	2.81	1.4	1.5		Freez. point
Flødevigen 25 years							
An. max.	19.2	1.33	2.41	22.4	22.5	16.0	15.9
Utsira. 53 years.							
An. max.	16.4	1.15	2.78	19.6	20.0	13.2	13.6
» min.	2.4	0.90	2.78	4.9	4.4	—0.1	0.4
Hellisöy. 60 years.							
An. max.	15.5	1.15	2.84	18.8	18.1	12.2	12.8
» min.	3.2	0.78	2.84	5.4	5.0	1.0	0.9
Ona. 62 years.							
An. max.	14.0	1.11	2.86	17.2	16.4	10.8	11.4
» min.	3.5	0.60	2.86	5.2	5.0	1.8	1.8
Nordöyan. 40 years.							
An. max.	14.5	1.32	2.65	18.0	18.0	11.0	11.0
» min.	2.6	0.51	2.65	4.0	3.8	1.2	1.0

From the above table it appears that the annual minimum for Utsira and the annual maxima for Hellisöy and Ona do not show quite as extreme values as the theoretical ones. But the distribution is approximately symmetrical. The annual maxima for Torungen and Utsira, however, show a slight asymmetry, and the absolute maxima are a little greater than the theoretical values. Otherwise the empirical and the theoretical values harmonize well.

For asymmetric distributions, the above theoretical determination of the extreme values is failing in its above form. With some modification, however, the Maxwellian function of distribution may also be applied to asymmetric distributions.[1]) Instead of the arithmetic mean, we start from the most frequent value as zero, and regard the

[1]) See G. Th. Fechner loc. cit. p. 336.

curve of distribution on both sides of this value as two distinct Maxwellian curves of distribution.

With the most frequent value as zero, let n' denote the number of positive departures with mean value d', and n'' the number of negative departures with mean value d''.

The greatest positive departure U_c' (as central value in its probable distribution), is then determined by

$$\Theta(\Omega_c') = \sqrt[n']{\frac{1}{2}},$$

$$U_c' = 1.25\, d' \sqrt{2} \cdot \Omega_c'$$

and the greatest negative departure U_c'' by

$$\Theta(\Omega_c'') = \sqrt[n'']{\frac{1}{2}}$$

$$U_c'' = -1.25\, d'' \sqrt{2} \cdot \Omega_c''.$$

By using the above table for $\sigma = \sigma(n)$, one must bear in mind that $\frac{U_c'}{d'} \left(\frac{U_c''}{d''}\right)$ is equal to half the σ, which corresponds to $n = 2n'$ $(2n'')$.

The difficulty of treating the material in this way is due to the fact that the empirical determination of the most frequent value is somewhat uncertain when the number of investigated quantities is not very great.

Th. Hesselberg has shown that the frequency-distribution of various meteorological quantities may be presented with good approximation by combined Maxwellian distributions.[1])

E. J. Gumbel has deduced a function for extreme values with a very asymmetric probability-distribution.[2]) Only a short extract of his results will be given here.

If $w(x)$ is the probability-distribution of an unlimited statistical variable x, and $W(x)$ the probability of the variable being smaller than x, is

$$W(x) = \int_{-\infty}^{x} w(x)\, dx, \quad w(x) = \frac{d\,W(x)}{dx}.$$

We term $\tilde{\omega}$ the probable highest value of a number N of the variable x. Assuming that N is great enough for the relation

$$\frac{w^{(\nu)}(\tilde{\omega})}{w(\tilde{\omega})} \rightarrow (-1)^{\nu} \left[\frac{w(\tilde{\omega})}{1 - W(\tilde{\omega})}\right]^{\nu}$$

to be valid for all $\nu \gtrless N$, Gumbel has deduced that the greatest of the N values has the probability-distribution

$$v(x) = \alpha\, e^{-y-e^{-y}}$$

$$\text{where } \alpha = N \cdot w(\tilde{\omega}) = \frac{w(\tilde{\omega})}{1 - W(\tilde{\omega})}$$

and $y = \alpha(x - \tilde{\omega})$.

The mean value $\bar{\omega}$ and the most probable value $\tilde{\omega}$ in the distribution $v(x)$ have the relation

$\bar{\omega} = \tilde{\omega} + \frac{\gamma}{\alpha}$ where $\gamma = 0.577217$, is Euler's constant.

The parameter α in the distribution $v(x)$ is also determined by

$$\alpha^2 = \frac{\pi^2}{6\mu^2}$$

where μ is the standard deviation from the mean value:

$$\mu^2 = \int_{-\infty}^{+\infty} (x - \bar{\omega})^2\, w(x)\, dx.$$

Having N_1 series, the maximum values of which are obeying the probability-distribution $v(x)$, Gumbel's theory further gives:

$$p(x) = \alpha \cdot N_1 \cdot e^{-y-N_1 e^{-y}} = \alpha e^{-(y - \ln N_1) - e^{-(y - \ln N_1)}}$$

as the probability-distribution of the greatest of the maximum values in the N_1 series.

The most probable value $\tilde{\omega}_1$ in the distribution $p(x)$ is determined by $\tilde{y}_1 = \ln N_1$, also

$$\tilde{\omega}_1 = \tilde{\omega} + \frac{\tilde{y}_1}{\alpha} = \tilde{\omega} + \frac{1}{\alpha} \ln N_1 = \bar{\omega} + \frac{1}{\alpha}(\ln N_1 - \gamma).$$

The probable distribution of the smallest of the maximum values is given by:

$$q(x) = \alpha N_1 [1 - e^{-e^{-y}}]^{N_1 - 1} e^{-y-e^{-y}}.$$

The most probable value ${}_1\tilde{\omega}$ in the distribution $q(x)$, is determined by

[1]) *Th. Hesselberg:* Die Verwendung des Maxwellschen Verteilungsgesetzes auf meteorologische Häufigkeitskurven. Geofysiske Publikasjoner. Vol. XIII. No. 9. Oslo 1943.

[2]) *E. J. Gumbel:* Les plus grands âges en Suisse. Journal de statistique et Revue économique suisse, 70ème année, fasc. 4, 1934.

E. J. Gumbel: Le più alte età in Svezia. Giornale dell'Istuto Italiano degli attuari, anno VI. no 4, Ottobre 1935, Roma.

$$N_1 - 1 = [1 - e^{-e^{-_1y}}]\,[e^{-e^{-_1y}} - 1]$$

where

$$_1\tilde{\omega} = \tilde{\omega} + \frac{_1\tilde{y}}{\alpha} = \overline{\omega} + \frac{1}{\alpha}\,(_1\tilde{y} - \gamma).$$

The following table gives the differences $\tilde{\omega}_1 - \overline{\omega}$ and $_1\tilde{\omega} - \bar{\omega}$ for various values of N_1 when $d = 1$, also $\frac{1}{\alpha} = 0.77970 \cdot 1.25 = 0.9746$.

N_1	$\frac{1}{\alpha}\ln N_1$	$\frac{1}{\alpha}\,_1\tilde{y}$	$\tilde{\omega}_1 - \overline{\omega}$	$_1\tilde{\omega} - \overline{\omega}$	$\tilde{\omega}_1 - {}_1\tilde{\omega}$ (The extreme (range))
5	1.57	—0.65	1.01	—1.21	2.22
10	2.24	—0.95	1.68	—1.51	3.19
20	2.91	—1.15	2.36	—1.71	4.07
30	3.31	—1.26	2.75	—1.82	4.57
40	3.60	—1.34	3.03	—1.90	4.93
50	3.81	—1.39	3.25	—1.95	5.20
60	3.99	—1.43	3.43	—1.99	5.42
70	4.14	—1.46	3.58	—2.02	5.60
80	4.27	—1.49	3.71	—2.05	5.76
90	4.38	—1.51	3.82	—2.08	5.90
100	4.49	—1.53	3.92	—2.10	6.02
110	4.58	—1.55	4.02	—2.11	6.13
120	4.67	—1.57	4.10	—2.13	6.24
130	4.74	—1.58	4.18	—2.14	6.33
140	4.82	—1.60	4.25	—2.16	6.41
150	4.88	—1.61	4.32	—2.17	6.49
200	5.16	—1.66	4.60	—2.22	6.82
300	5.56	—1.73	5.00	—2.29	7.29
400	5.84	—1.78	5.28	—2.34	7.61
500	6.06	—1.81	5.50	—2.37	7.87
600	6.26	—1.83	5.70	—2.40	8.09
700	6.39	—1.86	5.82	—2.42	8.24
800	6.52	—1.88	5.95	—2.44	8.39
900	6.63	—1.89	6.07	—2.45	8.52
1000	6.73	—1.90	6.17	—2.47	8.64

From the columns $\tilde{\omega}_1 - \overline{\omega}$ and $_1\tilde{\omega} - \overline{\omega}$ it is seen that the asymmetry is comparatively small for small N_1 values, but that it increases with N_1.

The distribution of the maximum values $v(x) = \alpha e^{-y-e^{-y}}$ deduced by Gumbel, is the probable "summit-distribution" of a group of quantities, the number of which is very great. It is thus evident that the maxima of the monthly means of the meteorological elements cannot have this distribution $v(x)$, as the monthly means do not result as maximum values of a statistical variable.

It is natural to think that the annual extreme values of a meteorological element might obey Gumbel's distribution of maximum values, but this is generally not the case. *Niels Aall Barricelli* has been engaged in this problem.[1]) His theoretical argumentation for the deviation from Gumbel's distribution of maximum values, however, is in my opinion not real. The annual maximum value is the greatest value in the group of daily maximum values, and these are also subject to the yearly variation. The reason for the annual maximum values not obeying Gumbel's distribution of maximum values, is in my opinion that the number of N from which the annual maximum results, is too small for the distribution of maximum values having the form $v(x) = \alpha e^{-y-e^{-y}}$. It might therefore be expected that the smaller the yearly variation of the meteorological element, the better would the annual extreme values obey Gumbel's distribution of maximum values. This seems also to be confirmed by Barricelli's examples.

Barricelli has, however, set up a distribution of maximum values, which is combining Gumbel's asymmetric distribution and the symmetric Maxwellian distribution, as he has superimposed the first distribution on the latter. By variation in the ratio of the parameter of Gumbel's distribution to that of the Maxwellian, the resultant-distribution varies between both component-distributions. Barricelli has also succeeded in finding a criterion for this ratio. As such criterion may be used the ratio $\frac{\mu_2}{\mu}$, where μ and μ_2 are the standard deviation from the mean value of the series, with annual and bi-annual values respectively.

13. The Variation of Sea-surface Temperature 1867—1945.

In table XVI are given the temperature series of monthly and annual means for a selected number of sea temperature stations. To fill in the scanty station net are also included a few shorter series. Interpolated monthly means are indicated by a star.

The 5-year means have been calculated for all stations and presented in table XVII. For stations with long series the 5-year means for the 4 seasons of the year have also been calculated.

[1]) *Niels Aall Barricelli:* Les plus grands et les plus petits maxima ou minima annuels d'un variable climatique. Archiv for Math. og Naturv. B. XLVI nr. 6. Oslo 1943.

The results are graphically presented in fig. 17—21. As the hour of observation since 1930 has been changed from 8h to 14h, the curves, with the exception of that for the winter season, have been closed with the year 1930. The 5-year means 1896—1905 for Andenes have been interpolated, and the curve for these years has been drawn with dotted lines. Fig. 17—21 give a brief survey of the variation of sea-surface temperature 1871—1930.

Through the harmony of sea temperature observations at neighbouring stations, one also gets an impression of the homogeneity of the sea temperature observations. Concerning this homogeneity, we refer to the before mentioned examination of homogeneity (p. 11).

For stations with long series, the 30-year means for the periods 1871—1900 and 1901—30 have been calculated (table XVIII). In table XIX the differences between the means of these two periods have been set up. Only for Torungen, Utsira, Hellisöy and Ona both 30-year means have been determined directly from the observations. For Nordöyan, Andenes and Gjesvær the 30-year means have been determined by interpolation and are therefore less reliable.

Supplement I.

Sea Temperature Stations of the Norwegian Directorate of Fisheries.

On the initiative of consultant *J. Eggvin*, the Norwegian Directorate of Fisheries has in the years 1935—36 set up 4 permanent oceanographical stations off the Norwegian coast. The geographical situation of the stations is given in the station list, p. 38.

The stations Eggum and Ingöy are situated on the banks in the open sea more than 3 nautical miles from the shore. Sognesjöen and Skrova have a more sheltered position by the coast. The observations have mostly been made every 14 days and comprise temperature observations and samples of sea water for all standard depths, from the surface to the bottom of the sea. The observations are very good. The temperatures are given to two places of decimals.

By favour of Mr. Eggvin, the temperature observations of these oceanographical stations have been sent to the Meteorological Institute.

The temperature material has been dealt with in such a manner, that the observations have been grouped by the month, and the monthly means calculated. As the observations have only been carried out every 14 days, the monthly means can only be determined approximately. The best method would be to draw an approximate curve of the yearly variation for each depth, and determine each monthly mean by areas-calculation. For great depths with only small and slow temperature variation this method is accurate, but for small depths it is difficult to reconstruct the temperature curve from observations made every 14 days. Owing to this, and to the wearisome work in calculating the areas, we have kept away from this method and simply determined the monthly means for all depths as means of the temperature readings. When the observations are distributed in one half of a month, the mean has been computed with a correction. The result is found in the following tables.

Sea Temperature.

Sognesjöen. Means 1935—43.

Depth.	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1 m	5.6	4.8	**4.1**	5.1	7.6	10.6	**15.3**	15.2	13.3	11.0	9.0	6.9	9.0
10 ,,	5.8	4.9	**4.2**	5.0	7.0	9.3	12.5	**14.1**	13.4	11.3	9.2	7.1	8.6
25 ,,	6.1	5.1	**4.6**	5.0	6.1	7.8	9.4	11.8	**12.3**	11.4	9.7	7.4	8.1
50 ,,	6.9	5.5	**5.3**	5.7	6.5	7.2	7.3	8.7	**11.0**	10.9	9.8	8.2	7.8
100 ,,	8.0	7.6	7.1	**6.9**	7.1	7.0	7.1	7.1	7.5	8.2	8.5	**8.7**	7.6
200 ,,	**8.0**	7.9	7.6	7.1	7.0	**6.8**	**6.8**	7.0	7.1	7.3	7.4	7.9	7.3
300 ,,	**8.1**	8.0	7.5	7.1	7.0	6.8	**6.7**	6.9	7.0	7.2	7.3	7.9	7.3

Skrova.

Means 1937—43.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1 m	4.5	3.5	**2.6**	3.3	5.1	8.7	**13.0**	12.8	11.1	8.9	7.2	5.5	7.2
10 „	4.5	3.5	**2.7**	3.3	4.9	8.3	11.4	**12.4**	11.0	9.0	7.4	5.7	7.0
25 „	4.7	3.6	**2.9**	3.4	4.5	6.9	8.7	10.3	**10.7**	9.3	7.6	5.9	6.5
50 „	4.9	4.3	**3.5**	3.9	4.7	5.5	6.7	7.9	9.3	**9.8**	8.1	6.3	6.2
100 „	6.7	5.9	5.7	**5.3**	5.6	5.6	5.6	5.7	6.1	8.4	**8.5**	7.7	6.4
200 „	6.6	**6.9**	6.8	6.4	6.5	6.5	6.3	6.3	**6.2**	6.3	6.3	6.4	6.5
300 „	6.5	6.6	**6.7**	6.6	6.6	6.6	6.5	6.5	6.5	**6.5**	6.5	6.5	6.6

Eggum.

Means 1935—43.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1 m	5.3	4.5	**3.9**	4.1	5.7	8.0	11.0	**11.5**	10.6	9.0	7.8	6.5	7.3
10 „	5.3	4.6	**4.0**	4.1	5.4	7.5	9.3	**11.1**	10.4	9.0	7.9	6.6	7.1
25 „	5.5	4.7	**4.1**	4.2	5.2	7.1	8.4	9.8	**10.2**	9.1	7.9	6.7	6.9
50 „	5.7	4.8	4.4	**4.3**	5.0	6.2	7.4	8.3	**9.5**	9.1	7.9	6.8	6.6
100 „	6.4	5.2	4.9	**4.8**	5.4	5.9	6.3	6.5	7.1	**8.5**	8.2	7.3	6.4
200 „	7.2	6.6	6.1	**6.0**	**6.0**	6.3	6.4	6.6	6.8	7.1	**7.7**	**7.7**	6.7

Ingöy.

Means 1936—43.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1 m	5.1	4.2	**3.5**	3.7	4.6	6.3	8.9	**9.4**	8.9	7.8	6.8	5.9	6.3
10 „	5.1	4.2	**3.6**	3.8	4.5	6.0	7.7	**9.1**	8.8	7.8	6.9	5.9	6.1
25 „	5.1	4.3	**3.6**	3.8	4.4	5.7	7.1	8.2	**8.7**	7.9	7.0	5.9	6.0
50 „	5.2	4.5	**3.9**	3.9	4.4	5.3	6.5	7.7	**8.3**	8.0	7.1	6.1	5.9
100 „	5.3	4.8	**4.2**	4.3	4.6	5.2	6.0	6.8	7.4	**7.7**	7.2	6.2	5.8
200 „	5.8	5.3	4.7	**4.6**	4.6	5.2	5.6	6.1	6.4	**7.1**	6.9	6.5	5.7
300 „	5.8	5.3	4.9	**4.6**	4.7	5.1	5.1	5.5	5.4	**6.5**	6.3	6.2	5.5

These tables confirm the well known fact that the yearly amplitude of the sea temperature is decreasing with increasing depth, and the time of occurrence of the yearly periodic extremes is delayed downwards. Otherwise the stations show numerical differences. A more comprehensive view of the temperature distribution is obtained by isopleth diagrams with the season as abscissa and the depth as ordinate (fig. 22—25).

The stations Sognesjöen and Skrova have a more sheltered position than Eggum and Ingöy, and they accordingly show a great difference in the vertical temperature distribution from the latter two stations. Sognesjöen and Skrova have in winter as well as in summer greater vertical temperature gradients in the upper layers than Eggum and Ingöy.

Sognesjöen seems to have a boundary level at about 100 m depth, and Skrova one at about 200 m. Above this boundary level the yearly temperature amplitude varies a great deal with depth, and the time of occurrence of the yearly periodic extremes is delayed downwards. Below the boundary level, however, the yearly periodic temperature amplitude, as well as the time of occurrence of the extremes, only show a slight variation with depth. This phenomenon is most likely due to the fact that Sognesjöen and Skrova are sheltered by submarine ridges at the mentioned depths.

From the yearly variation at 200 m depth by Eggum and 300 m depth by Ingöy, it seems to appear that the bottom-water at both places partly originate from advection from the sea outside, and only partly is influenced by the vertical exchange in the coastal stream. This is particularly indicated by the monthly means April—August for Eggum, and September—December for Ingöy.

By Sognesjöen the periodic minimum of

the surface temperature occurs in the middle of March. At 100 m depth the minimum is delayed until the middle of April. Below 100 m the minimum chiefly occurs in July. The temperature maximum in the surface layer is reached in the end of July. Downwards the maximum is considerably delayed: At 100 m the maximum does not occur until the beginning of December, and below 100 m it chiefly occurs in January the following year.

Skrova has the periodic minimum in the surface layer in the middle of March. At 100 m depth the minimum occurs in the middle of April, at 200 m depth not until the beginning of September and at 200—300 m depth in September—December. The temperature in the surface layer reaches its maximum in the end of July, at 100 m depth in November, at 200 m depth not until February the following year and at 200—300 m depth in February—March.

By Eggum and Ingöy the yearly periodic extremes are transmitted fairly quickly from the surface to the bottom, by Ingöy even quicker than by Eggum. The minimum in the surface layer occurs at both places in the end of March. By Eggum the minimum near the bottom (200 m depth) is reached in the beginning of May, by Ingöy at 200 m depth in the middle of April, and near the bottom (300 m depth) in the end of April. The maximum in the surface layer occurs by Eggum as well as by Ingöy in the middle of August, by Eggum at 200 m depth in the end of November, and by Ingöy at 300 m depth in the end of October.

To obtain accurate knowledge of the stability of the sea water one must also, apart from the temperature, know the salinity at the various depths. We have no statement of the distribution of salinity here, but from the thermo-isopleths in fig. 22—25 it appears that the stability in the coastal stream along the Norwegian coast is decreasing northwards. The yearly temperature variation is most quickly transmitted downwards by the coast of Ingöy in the north.

From the thermo-isopleths and from the above tables of temperature means at various depths, the approximate values for the vertical temperature gradients can be seen. In the following tables the vertical temperature gradients between each depth have been calculated more accurately, to two places of decimals, having at all depths availed ourselves of simultaneous observations. The gradient has been designated as positive when the temperature decreases downwards.

Vertical Temperature Gradients in the Sea.

Sognesjöen. Means 1935—43.

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	—0.22	—0.08	—0.08	0.09	0.59	1.32	**2.84**	1.13	—0.05	**—0.31**	—0.17	—0.17
10— 25 ,,	—0.26	—0.15	—0.40	0.05	0.85	1.54	**3.07**	2.21	1.04	—0.14	**—0.54**	—0.32
25— 50 ,,	**—0.86**	—0.42	—0.71	—0.77	—0.33	0.59	2.15	**3.12**	1.35	0.56	—0.17	—0.75
50—100 ,,	—1.10	**—2.06**	—1.87	—1.18	—0.64	0.17	0.18	1.59	**3.46**	2.64	1.47	—0.48
100—200 ,,	—0.02	—0.37	**—0.41**	—0.14	0.10	0.18	0.32	0.17	0.46	0.96	1.07	0.76
200—300 ,,	**—0.04**	**—0.04**	0.02	—0.02	0.00	0.00	**0.08**	0.06	0.01	0.06	**0.08**	0.03

Skrova. Means 1937—43.

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	—0.06	—0.02	—0.09	0.02	0.18	0.38	**1.60**	0.50	0.08	—0.16	—0.16	**—0.20**
10— 25 ,,	—0.14	—0.09	—0.24	—0.10	0.39	1.36	**2.66**	2.10	0.28	**—0.26**	—0.16	—0.14
25— 50 ,,	—0.22	**—0.76**	—0.53	—0.53	—0.16	1.42	2.04	**2.38**	1.45	—0.49	—0.50	—0.43
50—100 ,,	—1.81	—1.61	**—2.27**	—1.38	—0.94	—0.10	1.10	2.12	**3.16**	1.36	—0.43	—1.40
100—200 ,,	0.05	—0.93	—1.02	**—1.10**	—0.91	—0.92	—0.75	—0.55	—0.07	2.14	**2.18**	1.29
200—300 ,,	0.10	**0.21**	0.09	—0.23	—0.08	—0.06	—0.16	—0.21	**—0.24**	—0.18	—0.19	—0.05

Eggum. Means 1935—43.

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	—0.08	—0.06	—0.09	0.01	0.28	0.48	**1.68**	0.41	0.21	—0.01	—0.07	**—0.12**
10— 25 ,,	**—0.16**	—0.07	—0.15	—0.08	0.18	0.48	0.96	**1.30**	0.17	—0.08	—0.02	—0.08
25— 50 ,,	—0.19	—0.13	**—0.26**	—0.10	0.25	0.90	0.94	**1.47**	0.64	—0.02	—0.04	—0.06
50—100 ,,	**—0.70**	—0.43	—0.56	—0.53	—0.39	0.33	1.12	1.79	**2.44**	0.61	—0.27	—0.51
100—200 ,,	—0.85	**—1.35**	—1.15	—1.25	—0.69	—0.47	—0.16	—0.07	0.28	**1.43**	0.47	—0.39

Ingöy. Means 1936—43.

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	—0.03	—0.04	—0.07	**—0.08**	0.11	0.22	**1.24**	0.38	0.07	—0.05	—0.02	0.00
10— 25 ,,	—0.05	—0.05	—0.08	—0.06	0.07	0.36	0.57	**0.82**	0.12	—0.05	**—0.14**	—0.04
25— 50 ,,	—0.07	—0.20	**—0.28**	—0.11	—0.03	0.36	**0.60**	0.53	0.41	—0.10	—0.09	—0.12
50—100 ,,	—0.09	**—0.40**	—0.30	—0.31	—0.15	0.08	0.50	**0.91**	**0.91**	0.24	—0.09	—0.15
100—200 ,,	—0.50	**—0.47**	—0.46	—0.31	—0.05	0.04	0.37	0.68	**0.96**	0.62	0.27	—0.27
200—300 ,,	—0.01	0.01	**—0.25**	—0.04	—0.09	0.13	0.55	0.64	**0.99**	0.60	0.66	0.24

To give an idea of the variability of the vertical temperature gradient, we have in the following table calculated the average departures of the gradient from the corresponding mean for each month.

Vertical Temperature Gradient in the Sea. Mean Departures.

Sognesjöen (1935—43).

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	±0.14	±0.09	**±0.05**	±0.08	±0.26	±0.38	**±1.02**	±0.47	±0.44	±0.28	±0.18	±0.11
10— 25 ,,	0.16	**0.15**	0.35	0.20	0.51	0.79	**1.24**	0.91	1.19	0.43	0.27	0.20
25— 50 ,,	0.27	**0.18**	0.29	0.51	0.32	0.37	0.69	**1.52**	0.96	0.69	0.25	0.30
50—100 ,,	0.35	0.77	0.42	0.64	0.42	**0.27**	0.32	0.64	**1.21**	0.88	0.55	0.40
100—200 ,,	0.20	0.15	0.34	0.25	0.26	0.21	0.30	0.12	0.30	**0.62**	0.54	**0.14**
200—300 ,,	0.06	0.03	0.06	0.08	0.04	**0.03**	0.05	0.13	0.09	0.06	**0.15**	0.09

Skrova. (1937—43).

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	±0.10	±0.08	**±0.06**	**±0.06**	±0.09	±0.18	**±0.57**	±0.42	±0.22	±0.17	±0.10	±0.09
10— 25 ,,	0.13	0.22	0.18	**0.09**	0.20	0.39	0.72	**1.32**	0.32	0.20	0.12	0.11
25— 50 ,,	**0.06**	0.18	0.35	0.29	0.18	0.48	**1.38**	0.46	1.00	0.37	0.23	0.31
50—100 ,,	0.64	0.64	1.04	0.43	0.63	0.53	0.85	**1.26**	1.11	1.01	0.76	**0.41**
100—200 ,,	0.69	0.84	0.98	0.62	0.40	**0.25**	0.40	0.42	0.56	0.98	**1.15**	0.93
200—300 ,,	0.12	0.13	**0.08**	**0.40**	0.14	0.28	0.20	0.32	0.34	0.09	0.14	0.14

Eggum. (1935—43).

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	±0.08	**±0.07**	±0.12	±0.07	±0.21	±0.29	**±0.76**	±0.38	±0.20	±0.14	±0.10	±0.19
10— 25 ,,	0.17	**0.07**	0.11	0.07	0.14	0.34	**0.43**	0.35	0.16	0.12	0.11	0.11
25— 50 ,,	0.17	0.12	0.17	0.11	0.46	0.27	0.11	**0.62**	0.22	**0.07**	0.15	0.06
50—100 ,,	0.36	0.30	**0.23**	0.28	0.29	0.37	0.44	0.51	**0.64**	0.41	0.24	0.12
100—200 ,,	**0.16**	0.51	0.57	0.40	0.42	0.23	0.25	0.18	0.46	**0.70**	0.36	0.29

Ingöy. (1936—43).

Layer	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1— 10 m	±0.04	±0.03	±0.07	±0.11	±0.15	±0.30	±**0.42**	±0.30	±0.14	±**0.02**	±0.05	±0.13
10— 25 ,,	0.06	0.06	0.07	**0.05**	0.17	0.19	0.22	**0.24**	0.17	0.07	0.08	0.15
25— 50 ,,	0.12	0.18	0.15	0.14	0.08	0.28	0.25	**0.46**	0.34	0.08	**0.11**	0.12
50—100 ,,	0.08	0.23	0.17	0.21	0.08	0.16	0.26	**0.39**	0.30	0.13	**0.06**	0.20
100—200 ,,	0.14	0.25	**0.11**	0.24	0.08	0.13	0.29	0.25	**0.43**	0.16	0.31	0.29
200—300 ,,	0.23	0.23	0.18	0.10	0.14	0.16	0.12	0.23	0.19	**0.33**	**0.33**	0.26

Common for all 4 stations is that the vertical temperature gradient in the uppermost layers shows little variability in autum, winter and spring, and great variability in summer.

The before mentioned boundary levels which appear from the termo-isopleths for Sognesjöen and Skrova, are also perceptible from the variation of the vertical temperature gradient. By Sognesjöen the variation is great between 50 and 100 m, and this indicates that the boundary level lies between these depths. By Skrova it seems that the boundary level varies appreciably from time to time, or that a thicker variation layer exists. The variation of the temperature gradient is thus great between 50—100 m as well as between 100—200 m. The advective addition to the bottom-water by Eggum and Ingöy from the sea outside, apart from the vertical exchange in the coastal stream, is also confirmed by the variation of the vertical temperature gradient.

We have also tried to reduce the monthly means of the sea temperature at 1 m depth for the 4 oceanographical stations of the Directorate of Fisheries to the normal period 1871—1930 for surface temperatures at the sea temperature stations of the Meteorological Institute. The difficulty of the reduction is due to the fact that it is hard to find any suitable station of comparison. For Sognesjöen, Hellisöy is a good station of comparison. Skrova and Eggum have been compared to Skomvær, and Ingöy to the meteorological station of the same name. Especially for Ingöy, the result of the comparison is uncertain, as the meteorological station is so situated that the sea temperature observations are locally very much influenced, and the horizontal temperature gradient in the surface close to the coast is large. It may perhaps seem strange to reduce good temperature observations at sea by means of less good observations by the coast. It appears, however, that the temperature variations in the surface layer mostly harmonize in sign, although they differ in numerical value.

The reduction to the normal period 1871—1930 has been carried out by using the temperature differences between corresponding observations at the compared stations. A reduction factor must, however, be applied, and as such a factor the ratio between the yearly amplitudes of the compared stations has been used.

In spring, summer and autumn the diurnal temperature variation in the sea surface layer is perceptible and complicates the comparison. The sea temperature observations at the meteorological stations have been made at 14^h since 1930. The reduction to the 8^h normal values are made by means of the calculated differences between 14^h and 8^h (p. 8). We do not know at which hour of the day the observations at the oceanographical stations of the Directorate of Fisheries have been made, but most likely it is about noon, and not at any appointed hour. We have not made any reduction for the diurnal variation at these stations. The calculated normal values at 1 m depth at the oceanographical stations therefore refer to the normal values for the average observation hour, and not for 8^h. This difference is particularly noticeable in summer for Sognesjöen, Skrova and Eggum as compared to the normal values for Hellisöy and Skomvær.

Sea Temperature at 1 m Depth. Reduced Normal Values 1871—1930.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Sognesjöen	5.4	4.7	**4.3**	5.2	7.6	10.8	**14.2**	14.0	13.0	10.5	8.7	6.5	8.7
Skrova	4.6	3.7	**2.8**	3.4	4.9	8.5	12.3	**12.4**	10.8	8.6	7.1	5.5	7.0
Eggum	5.4	4.7	**4.1**	4.2	5.2	7.5	10.5	**11.1**	10.2	8.7	7.6	6.4	7.1
Ingöy	4.9	4.2	**3.6**	**3.6**	4.3	6.3	8.4	**9.0**	8.5	7.4	6.5	5.6	6.0

To give a numerical expression for the reliability of the above normal values, we have calculated the probable error R of the mean difference between the compared stations. R has been computed from the term $R = \frac{0.845}{\sqrt{n-1}} d$, where d is the average departure from the mean of the mentioned differences, and n is the number of the years of comparison.

Probable error R.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean
Hellisöy—Sognesjöen	±0.06	±0.09	±0.12	±0.09	±0.12	±0.16	±0.14	±0.17	±0.16	±0.12	±0.13	±0.07	±0.12
Skomvær—Skrova	0.10	0.21	0.19	0.14	0.16	0.14	0.16	0.24	0.11	0.21	0.27	0.16	0.17
Skomvær—Eggum	0.11	0.21	0.14	0.12	0.18	0.19	0.25	0.13	0.09	0.13	0.21	0.19	0.16
Ingöy met.—Ingöy ocean	0.21	0.28	0.12	0.17	0.13	0.30	0.29	0.26	0.12	0.13	0.13	0.39	0.21

From this table it is seen that the differences between Hellisöy and Sognesjöen in winter have been very accurately determined. In summer they are a little more variable. The differences between the sea temperature at the meteorological and the oceanographical station at Ingöy show greater variability, but the normal values are somewhat more accurately determined than the above values for the probable error. In computing the normals for the oceanographical station, the reduction factor 0.4 has namely been applied to the departures from the normal value of the meteorological station.

To compare the reductions with one another, we will in the following table set up the differences between the means (M_n) of the observed years and the reduced normal values M_{60} (1871—1930). Certainly, the observed years are not quite the same, and the dates of observation are also varying at the 4 stations, but this does not influence the comparison appreciably.

$M_n - M_{60}$.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Sognesjöen	0.2	0.1	—0.2	—0.1	0.0	—0.2	1.1	1.2	0.3	0.5	0.3	0.4	0.3
Skrova	—0.1	—0.2	—0.2	—0.1	0.2	0.2	0.7	0.4	0.3	0.3	0.1	0.0	0.2
Eggum	—0.1	—0.2	—0.2	—0.1	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.2
Ingøy	0.2	0.0	—0.1	0.1	0.3	0.0	0.5	0.4	0.4	0.4	0.3	0.3	0.2

The following tables contain the absolute highest and the absolute lowest observed sea temperatures for each layer. During the period 1935—43 there have been very warm as well as very cold years. The total variation is therefore considerable for these years and is probably also representative for longer series.

Sognesjöen (1935—43).

Absolute maximum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dce.
1 m	7.0	6.5	5.5	6.4	9.9	13.7	**17.3**	**17.3**	**17.3**	12.0	12.0	8.9
10 ,,	7.6	6.5	5.6	6.1	8.9	12.5	15.4	17.2	**17.5**	12.9	12.0	8.9
25 ,,	8.0	6.9	6.0	6.1	7.7	11.4	13.2	14.9	**15.4**	12.8	12.0	10.1
50 ,,	8.9	7.8	6.9	7.7	7.7	8.1	9.4	13.8	**14.0**	12.1	12.0	10.9
100 ,,	8.7	8.1	8.3	7.9	7.8	7.7	7.6	7.8	9.0	10.7	**11.1**	9.9
200 ,,	8.6	8.4	8.3	7.9	7.6	7.4	7.5	7.5	7.6	8.2	8.3	**8.8**
300 ,,	**8.6**	8.5	8.3	7.8	7.6	7.5	7.5	7.7	7.8	8.2	8.5	**8.6**

Sognesjøen (continued.)

Absolute minimum.

Depth	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	3.5	3.5	**1.9**	3.7	5.3	7.8	11.4	13.1	9.7	8.7	7.8	5.5
10 ,,	3.7	3.6	**1.9**	3.2	5.0	7.1	7.4	10.4	9.6	9.3	8.2	5.6
25 ,,	3.7	3.6	**2.6**	3.0	4.4	6.2	6.3	7.2	8.6	9.5	8.4	5.7
50 ,,	3.8	3.8	**3.1**	3.3	5.0	6.0	6.1	6.6	6.8	8.3	8.6	6.0
100 ,,	7.0	6.5	**3.4**	5.5	5.7	5.8	6.4	6.6	6.6	7.0	7.3	7.4
200 ,,	7.1	7.5	6.7	6.1	5.9	**5.5**	**5.5**	5.9	6.2	6.6	6.9	7.1
300 ,,	7.2	7.5	6.6	6.2	5.9	**5.4**	5.5	5.7	6.2	6.5	6.6	7.1

Skrova (1937—43).

Absolute maximum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	6.5	5.0	4.1	4.3	7.5	10.8	15.9	**16.3**	12.8	11.4	8.4	6.5
10 ,,	6.3	5.0	4.1	4.3	7.5	10.6	15.1	**16.1**	12.8	11.3	8.4	6.8
25 ,,	6.3	5.0	4.3	4.3	5.7	7.9	11.3	**12.9**	12.4	11.4	8.5	7.1
50 ,,	6.9	6.5	4.4	5.5	6.2	6.8	9.8	**12.1**	12.0	11.3	9.5	7.8
100 ,,	8.3	8.0	7.3	6.8	6.9	6.5	6.8	6.7	6.6	**10.3**	10.1	9.7
200 ,,	**7.3**	**7.3**	**7.3**	**7.3**	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.0
300 ,,	7.2	**7.4**	7.3	7.1	7.2	7.0	7.1	7.2	7.2	7.2	7.2	7.2

Absolute minimum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	3.1	2.2	**1.1**	2.1	3.3	5.3	10.6	10.4	8.2	6.7	5.6	3.3
10 ,,	3.1	2.3	**1.2**	2.1	3.3	5.3	8.9	10.5	7.9	6.8	6.1	4.2
25 ,,	3.3	2.5	**1.5**	2.1	2.9	4.2	6.4	7.7	7.0	7.2	6.0	4.2
50 ,,	3.8	2.8	**1.6**	2.2	3.1	3.7	5.2	5.5	6.4	8.3	6.2	5.2
100 ,,	5.5	3.3	**3.0**	3.8	4.2	4.3	4.2	4.9	5.5	5.8	6.9	5.6
200 ,,	5.8	6.1	6.1	**4.1**	5.4	5.2	5.2	4.7	4.7	5.4	5.3	5.6
300 ,,	5.8	5.9	6.0	6.0	6.0	6.0	5.9	6.0	5.9	**5.7**	5.9	5.7

Eggum (1935—43).

Absolute maximum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	6.7	5.8	4.8	5.1	7.6	9.8	**14.1**	13.5	12.4	11.6	9.1	8.6
10 ,,	6.7	5.8	4.8	5.2	7.5	9.4	11.2	**13.3**	12.4	11.5	9.1	8.5
25 ,,	6.9	5.8	5.0	5.3	7.2	8.8	9.9	**12.2**	**12.2**	11.4	9.1	8.6
50 ,,	6.9	6.0	5.5	5.4	6.1	7.1	9.6	10.9	**11.7**	11.3	9.1	8.6
100 ,,	7.7	6.2	6.1	5.6	6.4	6.5	7.1	7.5	9.7	**10.0**	9.5	8.9
200 ,,	8.1	7.3	6.8	6.9	7.1	7.1	7.1	7.2	7.2	7.9	8.6	**8.7**

Absolute minimum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	3.8	3.8	3.1	**2.9**	3.8	5.4	9.4	9.5	8.9	6.4	7.0	4.9
10 ,,	4.1	3.9	3.1	**2.9**	3.9	5.4	8.2	9.3	8.8	6.8	7.0	4.9
25 ,,	4.1	4.1	3.1	**3.0**	3.9	5.3	6.7	8.5	8.6	7.2	7.0	5.2
50 ,,	3.9	4.1	3.1	**3.0**	4.0	4.7	5.9	6.4	7.6	7.2	7.0	4.8
100 ,,	5.4	4.1	**3.7**	**3.7**	4.2	4.8	5.3	5.3	5.5	7.0	7.1	5.5
200 ,,	6.4	5.2	5.0	**4.7**	4.8	5.1	5.1	5.1	5.8	6.3	7.0	6.9

Ingöy (1936—43).

Absolute maximum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	6.6	4.9	4.6	4.6	5.3	8.0	**11.7**	11.2	10.3	9.2	8.8	7.4
10 ,,	6.7	5.0	4.5	4.6	5.1	7.4	9.7	**10.8**	10.0	9.3	8.8	7.4
25 ,,	6.7	5.2	4.8	4.6	5.4	6.9	8.0	**10.3**	10.1	9.4	8.8	7.4
50 ,,	6.9	5.4	5.1	4.8	5.4	6.2	7.3	9.6	**10.0**	9.4	8.8	7.4
100 ,,	6.6	5.7	5.3	5.3	5.6	6.6	6.9	8.2	**9.2**	8.6	8.8	7.2
200 ,,	7.2	6.6	6.0	5.6	5.6	6.1	6.3	6.7	7.7	7.9	**8.0**	7.6
300 ,,	7.0	6.0	6.2	5.3	5.4	6.0	6.0	6.2	6.8	**7.9**	7.5	7.3

Absolute minimum.

Depth	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 m	3.5	3.4	**2.3**	3.0	3.4	3.7	7.2	7.8	6.5	6.5	5.2	4.2
10 ,,	3.6	3.4	**2.5**	3.0	3.4	3.8	6.7	8.0	6.5	6.5	5.2	4.5
25 ,,	3.7	3.5	**2.4**	3.0	3.3	3.8	6.2	7.0	6.9	6.8	5.4	4.2
50 ,,	4.1	3.6	**2.7**	3.0	3.3	3.9	5.5	7.0	6.8	6.9	5.4	4.7
100 ,,	3.9	3.7	**3.0**	3.2	3.4	4.0	5.2	5.4	6.0	6.8	5.4	5.0
200 ,,	4.5	4.1	3.4	**2.8**	3.6	3.9	5.0	5.6	5.1	6.4	5.9	5.3
300 ,,	4.9	3.9	4.1	**3.4**	3.8	3.9	4.5	4.5	3.6	5.3	4.7	5.1

Supplement II.

To complete the sea temperature series by the Norwegian coast, we have here included the sea temperature series for Vestmannaeyjar, Stykkishólmur and Papey in Iceland, and for Thorshavn on the Faroe Islands. The temperature data we have partly taken from "Dansk Meteorologisk Aarbog", partly from "Vedráttan". Missing monthly means have been replaced by us by interpolated values. These are marked with a star. The observations at Thorshavn are discontinued in 1925. The remaining series have been closed with 1938, as the later publications have not been available.

The monthly means have been set up directly from the publications without any critical examination of the material. To our knowledge there has only been one break of homogeneity in the observations, namely at Vestmannaeyjar. The place of observation was on September 17th 1921 transferred to the lighthouse on the southern coast of the island. This transfer brought about a small increase in the monthly means in winter and a slight decrease in the monthly means in summer. The observations at Vestmannaeyjar before and after 1922, we have termed Vestmannaeyjar I and II respectively. The stated many-year means for Vestmannaeyjar I (1881—1930), Stykkishólmur (1876—1925), Papey (1876—1930) and Thorshavn (1876—1925) have been calculated directly from the mentioned years, though for Vestmannaeyjar I with a small correction for the years 1922—30 on account of the new observation place. The mean (1874—1926) for Vestmannaeyjar II is the same as that published in "Vedráttan" March 1927.

Apart from the series of monthly sea temperature means, we are also giving the average departure of the monthly means as well as the 5-year means.

Monthly and Annual Means.

Sea-Surface Temperature.

Vestmannaeyjar I.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1881—1930	4.5	4.6	5.0	6.2	7.8	9.4	10.8	10.7	9.1	7.1	5.5	4.8	7.1
1877							10.7	11.2	**10.6**	7.0	5.1	3.8	
78	4.1	5.0	4.9	6.6	8.4	10.7	11.5	11.4	9.0	6.1	4.3	2.5	7.0
79	5.1	4.4	4.2	6.4	7.7	9.8	11.3	11.4	9.1	7.5	6.1	5.1	7.3
80	5.0	4.4	6.5	7.6	9.0	10.6	**12.5**	**13.1**	10.4	7.0	5.0	2.4	7.8
1881	3.1	2.5	**2.2**	6.1	8.3	9.6	11.0	10.9	9.9	7.2	6.2	5.0	6.8
82	4.6	4.1	3.8	5.8	7.3	9.2	11.1	10.2	8.4	7.8	4.5	3.9	6.7
83	5.1	4.5	4.6	6.3	7.4	9.4	11.1	11.2	9.4	7.2	5.0	4.5	7.1
84	4.1	4.7	5.8	6.8	7.0	8.6	10.5	10.3	8.9	6.0	4.7	4.3	6.8
85	4.8	**2.4**	3.7	5.7	7.4	8.4	**9.4**	9.8	8.4	5.8	5.2	4.0	6.3
1886	2.6	3.9	5.0	5.4	7.6	9.1	10.2	9.6	8.6	7.0	5.0	2.6	6.4
87	3.3	3.7	4.1	5.2	6.5	9.0	10.1	9.4	**7.5**	6.0	**2.7**	**1.5**	5.8
88	3.0	3.4	2.8	5.3	**5.1**	**6.6**	9.6	**9.3**	8.1	6.2	4.5	4.1	**5.7**
89	3.6	2.7	5.1	6.2	9.0	10.0	11.7	11.4	9.4	7.8	5.8	4.4	7.3
90	4.0	4.9	4.7	6.7	9.0	9.8	11.4	10.5	9.5	6.7	4.8	4.9	7.2
1891	4.4	4.6	3.0	6.3	7.4	10.1	11.6	10.6	8.4	7.2	5.1	4.0	6.9
92	**2.4***	2.6	4.2	6.0	7.0	8.8	9.9	10.4	8.0	6.4	4.8	3.8	6.2
93	4.0	4.8	4.9	6.4	8.4	10.1	11.5	12.0	9.4	6.7	4.5	3.7	7.2
94	4.4	4.0	5.1	7.6	8.5	9.8	11.7	11.2	9.5	7.5	6.2	4.0	7.5
95	3.1	5.2	4.8	5.9	8.6	**10.9**	12.0	12.0	9.8	6.1	5.5	4.4	7.4
1896	4.2	5.5	4.7	6.5	8.0	9.5	10.8	10.2	8.5	**5.0**	5.2	5.2	6.9
97	4.1	3.8	5.1	6.9	7.6	10.0	10.8	11.3	9.3	7.1	5.8	5.2	7.3
98	4.9	3.4	4.4	6.3	7.5	9.9	11.0	10.3	8.7	7.4	4.8	4.2	6.9
99	4.2	5.0	4.3	6.0	8.4	9.9	10.9	11.2	8.4	6.0	4.8	3.8	6.9
1900	4.6	3.4	4.0	6.0	7.5	10.2	11.3	11.7	9.4	5.6	5.2	4.6	7.0
1901	4.7	4.9	5.3	5.6	8.6	9.8	10.7	10.0	9.2	6.3	5.5	3.6	7.0
02	3.0	4.1	4.4	5.1	7.3	9.1	10.5	10.8	9.3	8.1	6.8	5.6	7.0
03	4.3	4.6	4.7	**5.0**	7.5	8.8	10.5	10.1	8.9	6.8	5.0	4.5	6.7
04	4.5	3.9	5.0	5.6	7.6	10.2	11.2	11.9	10.1	6.4	4.4	4.7	7.1
05	4.6	3.6	5.2	5.7	7.8	9.8	10.5	10.4	9.0	7.0	5.7	5.3	7.1
1906	5.2	3.7	4.5	5.5	6.2	9.2	10.1	10.3	9.6	7.8	6.1	4.4	6.9
07	4.5	3.9	4.8	6.9	8.0	9.5	10.6	10.5	8.6	6.6	5.5*	5.8	7.1
08	5.3	4.0	5.2	6.0	7.2	8.6	10.9	10.1	9.1	8.2	6.8	5.7	7.3
09	4.7	5.4	5.2	7.1	7.8	10.3	11.4	10.3	9.0	6.9	6.0	4.2	7.4
10	4.8	5.0	5.6	5.8	7.3	9.0	10.9	11.2	9.7	8.0	5.3	5.6	7.4
1911	4.3	4.7	5.4	5.9	7.5	9.8	10.2	11.1	9.2	7.7	5.5	6.0	7.3
12	5.9	4.8	5.7	6.7	8.9	10.4	11.9	10.3	9.4	7.9	5.6	4.4	7.6
13	5.7	4.9	4.4	6.6	8.3	9.6	10.3	10.0	8.2	7.6	5.7	4.7	7.2
14	5.2	4.4	4.6	5.8	6.7	8.5	10.1	10.6	9.1	7.7	5.2	5.2	6.9
15	5.2	4.8	4.8	5.3	7.5	9.7	10.8	11.2	9.1	8.7	**7.1**	4.7	7.4
1916	5.1	5.1	5.1	6.2	8.3	10.3	10.7	10.7	9.3	7.7	6.2	4.3	7.4
17	5.3	6.1	5.7	5.1	7.7	9.8	11.1	11.9	9.8*	6.0*	3.8*	3.0*	7.1
18	2.7	5.3	5.9	6.0	8.0	8.8	10.0	10.3	8.5	7.3	5.6	5.4	7.0
19	4.8	5.5	4.5	5.9	7.7	9.4	10.3	9.9	8.9	7.0	5.3	4.3	7.0
20	4.1	4.6	5.2	5.9	7.6	9.7	10.7	10.2	9.4	8.7	**7.1**	5.9	7.4
1921	5.1	**6.4**	4.9	6.2	7.1	8.4	10.2	10.1	8.5	7.4	6.0	5.8	7.2

Vestmannaeyjar II.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1874—1926	5.0	5.1	5.2	6.1	7.7	9.4	10.3	10.5	9.2	7.4	5.8	5.0	7.2
1922	5.3	5.9	6.3	6.4	7.7	8.8	10.2	10.9	8.8	7.7	6.2	6.1	7.5
23	5.0	6.0	6.9	7.4	7.8	9.0	9.6	10.3	8.9	7.2	5.5	5.2	7.4

Monthly and Annual Means.

Sea-Surface Temperature.

Vestmannaeyjar II. (Continued.)

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1924	6.1	5.8	5.2	6.4	7.6	9.4	11.1	11.0	9.8	7.9	6.9	6.3	7.8
25	5.9	5.3	5.8	6.4	8.0	9.6	9.8	10.6	9.3	7.4	6.7	5.2	7.5
1926	6.0	6.4	6.3	7.5	8.5	9.5	10.7	10.5	9.4	6.6	6.1	6.1	7.8
27	5.5	6.2	6.7	6.8	7.8	9.5	10.8	11.5	10.5	8.4	6.7	6.2	8.1
28	6.1	6.2	6.9	7.6	8.7	10.1	10.9	11.3	10.3	8.4	7.1	6.4	8.3
29	6.4	**6.7**	**7.6**	7.7	8.2	9.9	10.8	11.0	9.9	7.2	6.3	6.4	8.2
30	6.1	6.2	5.5	7.4	9.0	9.1	10.8	11.3	10.4	8.4	6.1	6.1	8.0
1931	5.8	4.8	6.0	6.9	8.2	8.8	10.4	11.3	10.1	7.8	6.9	6.4	7.8
32	5.6	6.5	6.5	6.2	8.6	10.2	11.6	11.4	9.6	7.7	6.4	6.7	8.1
33	6.2	5.1	6.7	7.2	**9.1**	10.2	11.7	11.7	10.3	8.3	7.0	**7.3**	**8.4**
34	6.5	6.0	6.3	7.5	8.0	9.7	11.1	11.7	10.5	7.8	6.6	6.8	8.2
35	**6.8**	5.4	6.8	7.1	8.8	9.8	10.8	11.0	10.6	8.5	**7.2**	6.2	8.3
1936	5.7	5.8	6.8	7.7	8.6	9.7	11.9	11.6	10.4	**9.2**	**7.2**	5.4	8.3
37	6.2	5.7	6.1	**7.8**	8.4	9.8	10.7	10.6	9.8	7.9	6.6	6.4	8.0
38	6.0	6.2	6.4	6.7	7.9								
Stykkishólmur.													
1876—1930	1.0	0.5	0.6	1.9	4.9	8.3	10.4	10.6	9.1	6.5	3.7	1.9	5.0
1873						8.6	9.1	10.5	8.8	**3.8**	1.6	—0.6	
74	—1.3*	—0.8	0.7	1.4	2.3	7.8	10.6	10.9	7.9	4.4	3.1	1.6	4.1
75	—0.2	0.6	3.2	5.2	7.0	7.9	10.0	10.4	9.1	6.4	4.6	**4.1**	5.7
1876	**3.3**	1.9	0.5	**—1.1**	3.4	**5.7**	9.4	10.2	8.5	7.0	**5.8**	**4.1**	4.9
77	1.7	1.3	0.5	0.7	4.5	8.4	10.2	11.7	**10.8**	7.7	4.3	3.7	5.5
78	3.1	2.7	0.7	1.0	**3.7**	9.9	12.3	11.9	8.5	6.2	5.0	3.8	5.7
79	2.5	0.4	0.9	2.7	6.2	8.9	10.5	10.3	8.8	6.4	4.6	3.3	5.5
80	1.8	1.3	1.4	2.6	6.5	**10.4**	**13.3**	**12.4**	10.4	6.5	2.6	**—0.7**	5.7
1881	—0.5	—0.7	—1.3*	2.1	5.7	8.1	10.9	10.7	10.5	7.7	4.9	2.5	5.1
82	1.0	—0.7*	—1.0*	—0.2	**1.6**	6.4	**8.7**	9.5	8.1	7.2	4.5	2.3	4.0
83	0.9	1.6	2.5	3.4	6.3	9.3	10.4	11.0	10.3	8.4	5.1	2.9	6.0
84	0.9	0.6	1.8	2.6	5.3	8.2	9.9	10.5	9.3	6.9	3.5	3.0	5.2
85	2.5	—0.7*	0.0	2.9	4.7	7.3	9.5	10.1	8.7	6.4	2.2	0.2	4.5
1886	0.3	—0.4	0.5	1.1	4.1	7.4	9.4	9.7	8.4	6.5	4.4	2.4	4.5
87	1.1	1.3	0.9	0.8	2.8	7.3	9.6	9.8	9.6	7.1	3.1	2.3	4.6
88	2.3	**3.4**	3.2	2.1	3.8	6.5	10.4	10.6	9.1	3.9	3.2	3.1	5.1
89	3.2	3.1	—0.5*	0.6	5.0*	8.0*	10.7	10.1	8.9	6.5	4.9	3.0	5.3
90	1.5	1.4	0.3	1.1	4.8	7.4	10.3	10.8	9.7	7.9	4.9	3.5	5.3
1891	2.3	1.3	0.3	2.3	5.4	9.8	11.8	11.5	9.5	6.8	3.8	0.5	5.5
92	—0.6	—1.3	1.2	1.5	3.5	6.4	8.8*	9.7*	7.8*	6.5*	3.2*	**—0.7***	**3.8***
93	0.2*	—0.8*	—1.3*	2.9*	5.8*	9.0*	12.2*	11.5*	9.0*	5.0*	2.6*	**—0.7***	4.6*
94	1.1*	—1.1*	0.1*	4.0*	6.4*	9.2*	11.6*	11.6*	10.7*	5.7*	3.5	1.2	5.3*
95	—0.6	0.3	1.4	1.6	5.7	9.3	11.1	11.0	9.2	5.3	3.8	1.8	5.0
1896	0.6	1.3	0.0	2.4	5.5	8.3	10.3	10.6	8.7	4.3	2.7	2.1	4.7
97	1.0	—0.4	0.9	2.6	4.6	8.0	9.8	10.1	8.8	6.3	3.7	1.6	4.8
98	1.1	—0.8	—0.5	1.7	4.5	8.2	10.0	9.4	8.6	6.6	2.8	0.2	4.3
99	—0.9	—0.7	—0.4	0.3	4.0	7.9	9.6	10.4	8.9	5.0	**1.4**	0.7	3.9
1900	—0.3	**—1.8**	—0.2	1.2	3.5	8.4	10.8	11.3	9.5	4.9	2.4	0.8	4.2
1901	0.8	0.4	1.0	0.2	4.9	8.3	9.8	10.6	9.1	5.6	3.6	1.2	4.6
02	—1.6	**—1.8**	—1.3	—0.5	4.5	7.6	10.7	10.4	9.5	7.8	3.9	3.6	4.4
03	0.1	—0.3	—0.8	0.9	4.2	7.9	10.5	8.9	7.9	6.1	3.2	1.0	4.1
04	0.6	—1.3	0.1	1.7	4.4	8.5	10.7	11.1	9.2	6.1	3.3	0.8	4.6
05	0.5	—0.3	1.0	2.3	5.5	9.4	10.7	10.3	8.5	6.6	4.3	2.4	5.1

Monthly and Annual Means.

Sea-Surface Temperature.

Stykkishólmur. (Continued.)

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1906	1.9	—0.3	0.0	2.4	3.7	8.3	9.5	10.5	9.5	7.4	4.1	1.4	4.9
07	0.5	**—1.8**	—0.8	1.3	4.7	7.4	9.6	9.8	8.1	5.5	3.5	2.4	4.2
08	2.0	0.3	0.2	3.2	5.4	8.7	11.9	10.9	9.0	7.9	5.4	2.3	5.6
09	1.0	1.4	0.5	3.6	5.6	9.5	11.2	11.1	9.3	5.6	3.4	—0.1	5.2
10	—0.7	—1.5	0.3	1.0	3.6	7.2	10.2	10.8	9.5	6.8	2.8	1.9	4.3
1911	0.6	0.2	0.0	2.4	5.0	9.2	10.2	10.1	8.6	6.5	3.4	3.1	4.9
12	1.5	—1.1	—0.3	2.2	6.4	10.3	11.2	9.6	8.9	7.3	3.9	1.0	5.1
13	0.8	0.6	0.3	2.4	5.9	8.0	10.6	10.9	9.0	6.4	3.2	1.5	5.0
14	1.2	—0.9	**—1.4**	0.2	3.8	7.0	9.2	10.4	8.7	6.9	3.9	1.0	4.2
15	0.7	—0.4	—0.7	1.7	5.7	8.4	9.9	11.0	10.1	8.4	**5.8**	2.3	5.2
1916	1.4	0.5	1.2	0.4	3.1	8.8	10.8	12.0	10.1	8.4	5.6	1.3	5.3
17	1.4	2.8	3.1	1.2	5.2	8.5	12.1	12.0	9.5	5.2	2.4	—0.1	5.3
18	**—1.7**	—0.2	2.1	2.5	**7.3**	9.2	10.4	11.4	9.9	6.7	4.8	3.7	5.5
19	1.9	1.8	0.3	2.3	3.7	6.3	10.4	10.8*	9.7*	6.6*	4.0*	2.0*	5.0
20	—0.1*	0.1	1.4	2.0	4.6	7.3	8.8	9.7	9.0	**9.0**	4.8	2.2	4.9
1921	0.3	1.7	0.1	1.1	4.1	7.2	**8.7**	**8.5**	**7.3**	4.7	3.7	2.9	4.2
22	2.0	1.5	1.7	2.5	4.8	7.7	9.8	10.6	8.1	6.5	3.7	3.7	5.2
23	0.9	0.7	2.9	4.9	5.5	8.2	9.9	9.7	7.6	4.9	2.7	0.7	4.9
24	1.0	1.5	—0.5	1.4	4.3	8.8	9.7	10.0	7.8	5.7	4.5	2.5	4.7
25	1.1	—0.3	1.3	2.0	5.2	8.5	10.2	10.7	9.4	6.4	4.3	1.3	5.0
1926	0.5	1.7	0.2	3.9	6.2	8.9	10.9	10.7	8.3	5.3	2.1	2.1	5.1
27	0.0	1.3	2.4	3.5	5.9	9.1	11.4	10.7	8.9	6.2	3.7	3.0	5.5
28	1.6	0.8	2.3	3.9	7.0	9.3	10.9	11.6	10.7	8.2	4.4	2.5	**6.1**
29	3.2	2.9	**4.9**	**5.3**	5.8	8.9	11.4	11.0	9.2	5.5	2.8	2.2	**6.1**
30	0.0	1.6	0.7	2.3	5.8	7.7	10.7	10.0	9.5	6.3	2.0	2.3	4.9
1931	0.7	—0.1	0.0	3.3	6.2	8.4	9.8	11.2	10.5	7.7	4.9	2.9	5.5
32	1.0	3.0	2.6	1.5	5.3	9.0	10.0	11.0	9.3	6.6	4.0	2.7	5.5
33	2.6	—0.2	0.8	2.4	5.9	9.1	11.1	11.5	10.0	6.8	5.3	**5.2**	5.9
34	2.8	3.1	1.1	2.7	4.7	8.7	10.6	10.2	9.0	6.6	3.6	2.4	5.5
35	2.9	0.0	0.7	2.1	6.5	8.6	10.1	10.7	8.7	6.2	3.7	1.6	5.2
1936	—0.7	—1.5	—0.9	2.7	6.2	8.9	10.9	11.0	9.5	7.9	4.6	0.7	5.0
37	0.8	0.3	—0.7	2.1	5.1	8.3	9.8	10.5	8.9	6.3	3.8	2.6	4.8
38	2.1	1.5	1.8	3.3	5.0								

Papey.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1876—1930	1.0	0.7	0.8	1.7	3.2	5.0	6.3	6.8	6.2	4.6	2.8	1.6	3.4
1873								7.7	6.4	3.2	1.2	0.5	
74	—1.4	—1.0	—0.8	1.1	3.4	5.1	5.5	6.3	6.0	4.1	2.8	1.3	2.7
75	1.7	1.2	2.2	3.5	4.8	6.4	8.1	8.2	7.7	6.2	3.0	2.7	4.6
1876	2.6	1.9	0.9	0.4	2.4	5.0	7.1	7.6	7.0	5.4	4.2	3.0	4.0
77	1.0	0.4	1.0	1.9	4.4	6.0	6.5	7.4	7.0	4.3	2.5	1.1	3.6
78	—0.1	0.5	0.1	0.5	2.1	4.8	5.8	6.7	6.1	4.2	1.0	—1.0	2.6
79	—0.1	—0.3	—0.4	0.8	2.9	3.9	4.6	6.0	5.4	4.5	2.9	2.3	2.7
80	1.9	2.2	2.5	4.2	5.1	6.5	8.1	8.4	8.1	5.2	2.5	—0.1	4.6
1881	—1.4	—1.7	**—1.8**	**—1.0**	0.9	2.8	4.1	4.9	5.9	4.5	4.0	2.9	2.0
82	2.3	2.1	1.0	0.9	0.2	**0.9**	3.3	4.6	4.6	4.5	1.3	0.5	2.2
83	1.3	1.9	1.8	2.2	3.3	5.3	5.8	6.9	6.3	4.3	3.2	1.5	3.7
84	0.9	0.9	2.4	3.5	4.3	6.0	6.3	7.2	7.4	5.2	3.8	2.5	4.2
85	2.4	—0.6	—0.5	0.9	2.5	3.7	5.3	6.5	5.8	3.9	2.8	1.1	2.8
1886	—0.9	0.1	0.2	0.7	2.5	3.6	5.0	5.5	5.2	4.2	2.3	—0.3	2.3
87	0.6	0.3	0.3	0.6	3.3	4.0	4.2	**2.7**	**2.7**	1.6	**—0.1**	**—1.7**	1.5

Monthly and Annual Means.

Sea-Surface Temperature.

Papey. (Continued.)

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1888	—0.4	—1.3	—1.5	—0.6	0.1	2.2	4.4	5.0	4.7	**1.5**	1.4	1.0	1.4
89	0.1	—1.2	—0.4	0.7	2.2	4.2	6.5	6.9	6.3	5.8	4.0	2.8	3.2
90	1.8	2.8	1.0	3.0	4.6	6.0	7.2	7.7	6.8	4.3	2.5	2.1	4.2
1891	1.3	2.4	—0.6	1.2	2.2	3.9	5.9	6.7	5.5	4.4	2.9	0.4	3.0
92	—1.0	**—1.9**	—1.3	—0.7	**—0.4**	1.4	**2.7**	3.7	3.6	2.0	1.3	—1.1	**0.7**
93	—0.7	0.2	0.2	2.1	2.9	5.3	6.6	6.9	5.7	3.6	1.2	0.2	2.9
94	0.6	—0.2	0.3	2.5	3.5	6.4	6.7	7.4	7.9	6.1	4.8	2.7	4.1
95	—0.1	0.5	0.4	0.5	3.6	4.9	6.6	6.6	6.4	3.9	2.8	1.4	3.1
1896	0.1	2.0	0.6	1.9	4.4	5.0	6.1	6.9	6.2	3.0	1.8	2.0	3.3
97	0.2	—0.1	0.9	2.7	4.5	6.9	7.5	7.4	6.8	4.5	2.8	1.9	3.8
98	1.4	—0.1	0.4	1.9	4.2	5.9	8.0	7.9	6.8	5.6	3.1	1.7	3.9
99	1.1	0.8	0.0	1.0	3.7	5.8	7.8	8.1	6.7	4.7	2.8	2.2	3.7
1900	1.7	—0.1	0.4	1.9	3.5*	4.9	5.4	7.0	6.1	4.3	3.5	2.5	3.4
1901	2.5	1.6	1.8	1.6	5.1	6.4	7.4	7.1	7.1	4.2	2.9	1.0	4.1
02	—0.3	—1.2	—1.1	—0.9	1.5	3.4	4.9	6.4	5.3	4.2	3.4	3.5	2.4
03	1.9	1.4	1.5	2.1	3.8	5.6	5.9	6.4	6.3	4.3	2.0	1.6	3.6
04	1.2	0.9	1.6	2.5	4.1	6.6	6.9	6.5	7.1	5.0	2.1	1.3	3.8
05	0.7	—0.3	1.3	1.7	3.6	6.5	7.0	7.7	7.2	3.9	2.2	1.7	3.6
1906	1.3	0.3	0.5	2.2	2.1	4.4	5.9	5.5	5.8	4.3	2.1	0.4	2.9
07	0.7	—0.3	0.1	1.6	2.4	3.2	4.3	5.1	5.1	3.2	1.8	2.3	2.5
08	1.4	0.0	1.2	2.6	3.3	5.2	6.5	6.2	6.1	6.3	3.8	2.2	3.7
09	1.3	1.5	0.6	2.4	3.1	5.9	7.2	7.1	7.1	4.9	2.8	0.5	3.7
10	0.3	0.2	1.6	1.6	2.3	3.7	5.3	5.8	5.5	5.2	1.9	2.0	3.0
1911	1.0	0.3	1.0	1.5	2.4	4.3	5.9	6.3	5.7	4.3	2.2	2.5	3.1
12	2.0	—0.2	1.4	2.6	4.8	6.2	7.9	7.4	7.4	5.8	2.5	0.9	4.1
13	1.7	2.0	0.6	2.0	3.7	5.2	7.6	7.8	7.4	5.7	3.9	1.8	4.1
14	1.6	0.5	0.1	0.9	2.4	4.7	5.1	5.7	5.0	4.1	1.5	1.1	2.7
15	1.3	0.5	—0.4	1.2	3.2	5.0	6.2	6.5	4.9	6.3	**5.9**	1.2	3.5
1916	1.6	1.5	1.1	1.9	3.3	5.7	7.4	7.8	6.6	5.2	3.4	0.7	3.8
17	1.0	0.9	1.8	0.2	3.1	4.8	6.3	6.4	5.9	2.7	1.0	—0.8	2.8
18	**—1.8**	—1.2	—0.3	0.1	1.6	3.5	5.3	6.6	4.6	4.5	3.0	2.2	2.3
19	1.1	0.4	—0.9	0.5	2.4	5.6	6.9	7.2	6.5	4.4	1.6	1.5	3.1
20	—0.3	—0.2	0.0	0.6	2.4	5.1	6.0	7.1	6.2	5.6	4.0	3.5	3.3
1921	1.6	2.2	1.4	2.4	4.1	6.6	6.6	7.3	6.3	4.2	2.4	2.0	3.9
22	1.1	2.2	2.5	2.6	3.8	5.3	6.5	7.0	5.9	5.3	3.1	2.9	4.0
23	1.0	1.8	2.8	3.7	4.3	6.0	6.9	7.6	6.4	4.8	1.8	0.8	4.0
24	1.7	1.0	0.1	1.5	3.0	4.9	6.2	6.4	5.5	5.2	4.1	3.1	3.6
25	2.9	1.1	1.1	1.8	3.2	5.7	7.0	7.9	6.8	5.4	3.9	1.6	4.0
1926	1.7	2.6	1.7	3.2	4.2	5.7	**9.0**	8.2	7.0	4.2	3.7	1.8	4.4
27	0.9	1.6	1.6	2.3	3.7	5.6	7.4	8.3	7.6	5.3	3.6	3.2	4.3
28	1.9	1.7	2.5	3.7	**6.0**	6.3	7.9	8.1	8.2	6.6	4.1	2.7	5.0
29	3.1	**3.5**	**4.8**	**4.7**	4.9	6.5	8.4	**9.2**	8.1	5.5	3.9	3.6	**5.5**
30	2.3	2.5	1.6	2.7	4.7	6.7	8.0	7.9	7.8	6.3	2.6	2.9	4.7
1931	1.7	0.5	0.3	1.8	2.7	5.0	7.4	8.3	8.3	6.6	**5.9**	3.9	4.4
32	2.0	3.3	2.4	2.0	4.3	6.9	6.9	8.0	5.7	4.3	3.7	2.8	4.4
33	**3.6**	0.9	1.7	2.4	4.1	**7.4**	8.3	9.0	**8.5**	6.0	4.6	**4.7***	5.1
34	2.7	2.7	2.2	3.3	4.8	6.5	8.3	8.1	8.0	5.4	3.4	3.2	4.9
35	2.6	0.4	1.6	2.2	4.6	5.7	7.2	8.6	7.8	5.8	4.6	2.9	4.5
1936	0.6	0.6	1.4	2.9	5.8	6.8	7.8	8.6	8.3	**6.7**	4.0	1.8	4.6
37	2.5	1.8	0.8	2.9	4.5	6.8	7.8	8.9	7.6	6.5	4.0	3.4	4.8
38	2.3	1.8	2.4	3.9	4.6								

Monthly and Annual Means.

Sea-Surface Temperature.

Thorshavn.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1876—1925	5.7	5.4	5.5	6.4	7.5	9.0	10.1	10.4	10.0	8.9	7.5	6.4	7.7
1876	**7.1**	5.8	4.8	**5.3**	7.0	8.5	9.4	10.2	9.2	9.2	7.6	6.5	7.6
77	5.2	5.4	5.5	6.3	7.4	9.0	10.1	10.7	10.1	8.8	7.7	6.6	7.7
78	5.6	6.0	5.6	6.9	7.9	9.6	10.8	11.0	10.4	9.5	7.0	5.2	8.0
79	**4.4**	5.0	4.7	5.9	7.0	8.8	9.7	10.5	9.6	8.8	7.4	6.7	7.4
80	6.5	5.9	6.2	7.5	8.1	9.8	10.8	11.5	**11.1**	9.0	6.8	**4.9**	8.2
1881	**4.4**	4.5	4.6	5.5	7.3	8.5	9.9	10.0	10.0	9.1	8.3	6.9	7.4
82	6.5	6.2	5.7	6.2	7.8	9.4	10.7	11.3	10.1	**9.8**	7.9	6.2	8.2
83	6.1	6.1	5.8	6.8	8.2	9.8	10.8	11.6	10.3	9.1	7.2	6.4	8.2
84	5.7	5.6	**6.5**	**7.9**	8.4	9.4	11.1	**11.7**	10.6	8.9	7.6	6.6	8.3
85	6.3	5.6	5.6	6.6	7.4	8.6	9.8	10.1	9.8	8.0	7.1	5.6	7.5
1886	4.6	**4.4**	5.1	6.6	7.3	8.6	9.5	9.8	9.6	9.0	7.7	5.6	7.3
87	5.2	5.9	5.7	5.9	7.5	9.4	9.6	9.7	9.5	7.9	**6.2**	5.2	7.3
88	5.7	**4.4**	**4.2**	**5.3**	**6.3**	8.6	9.2	9.5	9.5	**7.5**	6.5	6.5	**6.9**
89	6.1	4.6	4.5	5.7	7.9	9.8	10.7	10.9	10.2	9.4	8.4	7.1	7.9
90	6.4	6.2	6.2	7.0	**9.0**	9.3	10.1	10.5	10.8	9.4	7.9	6.9	8.3
1891	6.0	6.3	5.4	6.4	7.4	9.3	10.2	10.5	10.0	9.4	8.1	6.2	7.9
92	5.5	4.8	5.3	6.1	**6.3**	8.4	9.9	10.3*	9.4	7.8	6.9	6.1	7.2
93	5.8	5.5	5.6	7.4	8.9	**10.1**	10.6	11.3	10.2	8.8	7.0	5.8	8.1
94	5.6	5.3	5.7	7.4	8.3	9.9	**11.3**	10.8	10.7	9.5	**8.6**	7.5	**8.4**
95	**4.4**	4.8	5.5	6.7	8.5	9.8	10.4	10.5	10.4	8.6	7.5	6.1	7.8
1896	5.5	**6.5**	6.2	7.3	8.8	9.4	10.7	10.8	10.3*	8.2	7.5	6.7	8.2
97	5.4	5.1	5.6	6.5	7.2	9.1	10.0	10.5	10.1	9.1*	7.9*	6.8*	7.8
98	6.2	5.3	5.0	6.3	7.3	8.8	9.8	10.2	10.0	9.4	7.7	6.4	7.7
99	5.3	5.5	5.3	5.7	7.1	9.0	10.5	10.7	10.1	9.0	7.8	6.8	7.7
1900	6.1	5.1	5.3	6.4	7.5	9.0	10.2	10.7	10.7	8.8	7.9	6.8	7.9
1901	6.2	5.1	6.0	6.1	8.5	9.5	10.8	10.9	10.7	9.3	7.6	6.4	8.1
02	5.6	4.8	5.5	6.4	7.0	8.3	9.4	9.6	10.6	8.8	8.2	6.9	7.6
03	5.4	5.4	5.5	5.7	**6.3**	8.5	9.5	9.8	9.4	8.5	7.2	5.8	7.3
04	5.7	5.1	5.3	6.1	7.1	8.8	10.4	10.3	10.0	8.7	7.3	5.9	7.6
05	5.4	5.2	5.6	5.7	7.1	9.0	9.9	10.2	9.8	8.2	7.0	6.3	7.5
1906	5.8	4.9	4.7	6.0	**6.3**	9.1	9.3	10.0	9.8	8.6	7.8	6.1	7.4
07	5.4*	4.6*	5.5	6.4	7.7	**7.8**	**8.5**	**9.2**	**8.9**	8.3	7.1	6.4	7.2
08	6.1	5.5	5.4	6.2	7.1	8.6	10.1	10.4	9.8	9.6	8.2	7.3	7.9
09	6.0	6.0	5.5	6.7	7.4	9.0	10.0	10.3	10.0	8.7*	7.3	6.1	7.8
10	5.3	4.7	5.8	6.0	7.3	8.8	9.8	10.3	10.0	9.3	7.1	6.4	7.6
1911	5.5	5.4	5.5	6.4	7.8	8.9	10.0	11.0	10.2	9.1	7.4	6.9	7.8
12	6.1	5.6	6.2	7.0	8.2	9.3	10.3	10.3	10.0	9.0	7.6	6.3	8.0
13	5.9	5.8	5.9	6.8	8.1	9.0	10.2	10.7	10.3	9.4	8.2	6.9	8.1
14	6.4	6.0	5.9	6.8	7.3	9.1	9.7	10.4	10.3	9.3	8.0	6.4	7.9
15	5.9	5.6	5.6	6.0	7.3	8.8	9.6	10.0	9.7	9.1	7.6	5.9	7.6
1916	5.8	5.8	5.5	6.1	7.3	8.5	9.8	10.2	9.9	8.9	8.0	6.5	7.7
17	5.8	5.4	5.6	5.5	6.9	8.9	10.3	10.2	10.0	8.2	6.9	5.5	7.4
18	4.5	5.3	5.6	6.4	7.9	9.1	9.9	10.5	9.4	8.5	7.5	7.0	7.6
19	6.0	5.3	4.9	5.7	7.5	9.1	10.5	10.3	9.8	8.6	6.8	5.8	7.5
20	5.2	5.2	5.4	6.0	7.2	9.3	9.8	10.3	10.0	9.7	8.5	**7.6**	7.8
1921	6.5	6.2	5.9	7.1	7.7	9.0	10.1	10.1	9.7	8.9	7.5	7.0	8.0
22	5.7	5.8	6.2	6.4	7.5	9.0	9.9	10.2	9.6	8.6	7.3	6.8	7.8
23	6.0	5.9	**6.5**	7.0	7.6	8.5	10.0	10.4	9.6	8.4	6.8	5.6	7.7
24	5.6	5.7	5.2	5.9	7.3	8.6	10.4*	10.7	10.5	9.0*	7.8	6.6*	7.8
25	6.4	5.5	5.5										

Average Departure (d) from the Many-Year Mean.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Vestmannaeyjar I (1881—1930)	±0.77	**±0.86**	±0.72	±0.55	±0.54	±0.54	**±0.47**	±0.56	±0.51	±0.60	±0.70	±0.82	±0.37
Stykkishólmur (1876—1930)	0.86	**1.11**	0.97	1.01	0.91	0.81	0.73	**0.62**	0.63	0.83	0.81	1.03	0.44
Papey (1876—1930)	0.84	1.01	0.93	0.97	0.99	**1.03**	1.02	0.87	0.85	**0.81**	0.87	0.96	0.71
Thorshavn (1876—1925) ...	0.44	0.43	0.35	0.46	**0.49**	0.37	0.42	0.38	**0.34**	0.38	0.42	0.46	0.26

5-Year Means.

Vestmannaeyjar I.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1881—1930	4.51	4.58	4.96	6.24	7.77	9.45	10.79	10.72	9.11	7.09	5.50	4.75	7.11
1881—85	4.34	3.64	4.02	6.14	7.48	9.04	10.62	10.48	9.00	6.80	5.12	4.34	6.74
86—90	3.30	3.72	4.34	5.76	7.44	8.90	10.60	10.04	8.62	6.74	4.56	3.50	6.48
91—95	3.66	4.24	4.40	6.44	7.98	9.94	11.34	11.24	9.02	6.78	5.22	3.98	7.04
1896—1900	4.40	4.22	4.50	6.34	7.80	9.90	10.96	10.94	8.86	6.22	5.16	4.60	7.00
1901—05	4.22	4.22	4.92	5.40	7.76	9.54	10.68	10.64	9.30	6.92	5.48	4.74	6.98
06—10	4.90	4.40	5.06	6.26	7.30	9.32	10.78	10.48	9.20	7.50	5.94	5.14	7.22
11—15	5.26	4.72	4.98	6.06	7.78	9.60	10.66	10.64	9.00	7.92	5.82	5.00	7.28
16—20	4.40	5.32	5.28	5.82	7.86	9.60	10.56	10.60	9.18	7.34	5.60	4.58	7.18

Vestmannaeyjar II.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1874—1926	5.0	5.1	5.2	6.1	7.7	9.4	10.3	10.5	9.2	7.4	5.8	5.0	7.2
1921—25	5.58	5.98	5.86	6.54	7.62	9.04	10.10	10.54	9.08	7.52	6.26	5.72	7.48
26—30	6.02	6.34	6.60	7.40	8.44	9.62	10.80	11.12	10.10	7.80	6.46	6.24	8.08
31—35	6.18	5.56	6.46	6.98	8.54	9.74	11.12	11.42	10.22	8.02	6.82	6.68	8.16

Stykkishólmur.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1876—1930	0.96	0.46	0.62	1.95	4.89	8.25	10.43	10.59	9.09	6.46	3.75	1.90	4.95
1876—80	2.48	1.52	0.80	1.18	4.86	8.66	11.14	11.30	9.40	6.76	4.46	2.84	5.46
81—85	0.96	0.30	0.40	2.16	4.72	7.86	9.88	10.36	9.38	7.32	4.04	2.18	4.96
86—90	1.68	1.76	0.88	1.14	4.10	7.32	10.08	10.20	9.14	6.38	4.10	2.86	4.96
91—95	0.5*	—0.3*	0.3*	2.5*	5.4*	8.7*	11.1*	11.6*	9.2*	5.9*	3.4*	0.4*	4.8*
1896—1900	0.30	—0.48	—0.04	1.64	4.42	8.16	10.10	10.36	8.90	5.42	2.60	1.08	4.38
1901—05	0.08	—0.66	0.00	0.92	4.70	8.34	10.48	10.26	8.84	6.44	3.66	1.80	4.56
06—10	0.94	—0.38	0.04	2.30	4.60	8.22	10.48	10.62	9.08	6.64	3.84	1.58	4.84
11—15	0.96	—0.32	—0.42	1.78	5.36	8.58	10.22	10.40	9.06	7.10	4.04	1.78	4.88
16—20	0.58	1.00	1.62	1.68	4.78	8.02	10.50	11.18	9.64	7.18	4.32	1.82	5.20
21—25	1.06	1.02	1.10	2.38	4.78	8.08	9.66	9.90	8.04	5.64	3.78	2.22	4.80
26—30	1.06	1.66	2.10	3.78	6.14	8.78	11.60	10.80	9.32	6.30	3.00	2.42	5.54
31—35	2.00	1.16	1.04	2.40	5.72	8.76	10.32	10.92	9.50	6.78	4.30	2.96	5.52

5-Year Means.

Papey.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1876—1930	1.00	0.73	0.75	1.66	3.19	5.01	6.31	6.78	6.24	4.59	2.77	1.59	3.38
1876—80	1.06	0.94	0.82	1.56	3.38	5.24	6.42	7.22	6.72	4.72	2.62	1.06	3.50
81—85	1.10	0.52	0.58	1.30	2.24	3.74	4.96	6.02	6.00	4.48	3.02	1.70	2.98
86—90	0.24	0.14	—0.08	0.88	2.54	4.00	5.46	5.56	5.14	3.48	2.02	0.78	2.52
91—95	0.02	0.20	—0.20	1.12	2.36	4.38	5.70	6.26	5.82	4.00	2.60	0.72	2.76
1896—1900	0.90	0.50	0.46	1.88	4.06	5.70	6.96	7.46	6.52	4.42	2.80	2.06	3.62
1901—05	1.20	0.48	1.02	1.40	3.62	5.70	6.42	6.82	6.60	4.32	2.52	1.82	3.50
06—10	1.00	0.34	0.80	2.08	2.64	4.48	5.84	5.94	5.92	4.78	2.48	1.48	3.16
11—15	1.52	0.62	0.54	1.64	3.30	5.08	6.54	6.74	6.08	5.24	3.20	1.50	3.50
16—20	0.32	0.28	0.34	0.66	2.56	4.94	6.38	7.02	5.96	4.48	2.60	1.42	3.06
21—25	1.66	1.66	1.58	2.40	3.68	5.70	6.64	7.24	6.18	4.98	3.06	2.08	3.90
26—30	1.98	2.38	2.44	3.32	4.70	6.16	8.14	8.34	7.74	5.58	3.58	2.84	4.78
31—35	2.52	1.56	1.64	2.34	4.10	6.30	7.62	8.40	7.66	5.62	4.44	3.50	4.66

Thorshavn.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1876—1925	5.72	5.43	5.52	6.37	7.54	9.04	10.07	10.44	10.02	8.87	7.54	6.37	7.74
1876—80	5.76	5.62	5.36	6.38	7.48	9.14	10.16	10.78	10.08	9.06	7.30	5.98	7.78
81—85	5.80	5.60	5.64	6.60	7.82	9.14	10.46	10.94	10.16	8.98	7.62	6.34	7.92
86—90	5.60	5.10	5.14	6.10	7.60	9.14	9.82	10.08	9.92	8.64	7.34	6.26	7.54
91—95	5.46	5.34	5.50	6.80	7.88	9.50	10.48	10.68	10.14	8.82	7.62	6.34	7.88
1896—1900	5.70	5.50	5.48	6.44	7.58	9.06	10.24	10.58	10.24	8.90	7.76	6.70	7.86
1901—05	5.66	5.12	5.58	6.00	7.20	8.82	10.00	10.16	10.10	8.70	7.46	6.26	7.62
06—10	5.72	5.14	5.38	6.26	7.16	8.66	9.54	10.04	9.70	8.90	7.50	6.46	7.58
11—15	5.96	5.68	5.82	6.60	7.74	9.02	9.96	10.48	10.10	9.18	7.76	6.48	7.88
16—20	5.46	5.40	5.40	5.94	7.36	8.98	10.06	10.30	9.82	8.78	7.54	6.48	7.60
21—25	6.0	5.8	5.9	6.6	7.6	8.9	10.0	10.3	9.9	8.7	7.5	6.4	7.82

TABLES.

Table I. **Station List.**

Station	Latitude	Longitude	Years of Observation
No.			
10. Ferder	59° 02′N	10° 32′E	1927—1943
Flödevigen	58 26	8 45	1919—1942
107. Torungen	58 24	8 48	1867—1942
120. Lindesnes I	57 59	7 03	1868—1875
121. Lindesnes II (Lillehavn)	58 00	7 05	1924—1941
123. Lista	58 06	6 34	1867—1877
131. Vibberodden	58 25	5 59	1924—1930
141. Utsira	59 18	4 53	1867—1931
166. Slåtteröy	59 54	5 04	1924—1940
175. Hellisöy	60 45	4 43	1867—1943
207. Kråkenes	62 02	4 59	1928—1943
208. Rundöy	62 23	5 38	1921—1930
215. Ona	62 52	6 33	1868—1943
Trondheimsfjorden	63 26	10 21	1894—1906, 1932—1943
225. Titran	63 40	8 19	1921—1930
225b. Sula	63 51	8 28	1933—1943
252. Villa	64 33	10 41	1867—1872
254. Nordöyan	64 48	10 33	1891—1943
255. Prestöy	64 47	11 07	1872—1890
265. Myken	66 46	12 29	1922—1943
272. Tranöy	68 11	15 37	1922—1924
277. Lødingen	68 19	15 39	1922—1926
278b. Reine	67 56	13 09	1869—1871
282. Sörvågen	67 53	13 01	1923—1932
285. Skomvær	67 25	11 53	1921—1943
290. Nyksund	69 00	15 01	1923—1925
291a. Andenes I	69 19	16 07	1867—1896, 1908—1929
291b. Andenes II	69 19	16 07	1929—1943
297. Navaren	69 19	18 33	1927—1928, 1930—1931
306. Loppa	70 20	21 27	1923—1932
309. Fruholmen	71 06	23 59	1867—1875
310. Ingöy	71 04	24 09	1922—1943
312. Gjesvær	71 06	25 22	1881—1925
314. Sværholt	70 57	26 41	1922—1932
320. Makkaur	70 42	30 05	1926—1932
331. Björnöya	74 28	19 17	1924—1932
333. Akselöy	77 42	14 50	1898—1899
343. Jan Mayen	70 59	8 20	1882—1883, 1922—1923 1929—36

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Sognesjöen	61° 01′.4N	4° 50′.5E	1935—1943
Skrova	68 07.5	14 39.4	1937—1943
Eggum	68 22.8	13 38.7	1935—1943
Ingöy	71 09.5	24 05.0	1936—1943

Table II. **Mean Values of Sea-Surface Temperature (1871—1930), 8^h.**

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Number of Years of Observation
10.	Ferder	2.0	**1.1**	1.5	4.5	9.3	14.4	**17.1**	17.0	14.4	10.6	7.0	3.9	8.6	15
	Flödevigen (surface)	2.3	**1.4**	1.6	4.3	8.9	13.3	**16.0**	15.9	13.9	10.5	6.7	4.3	8.3	19
	» (1 m depth)	2.8	**1.8**	1.9	4.4	8.8	13.0	15.8	**16.0**	14.2	11.0	7.3	4.8	8.5	24
107.	Torungen	2.5	**1.4**	**1.4**	3.8	8.2	12.7	15.4	**15.7**	13.7	10.5	7.1	4.4	8.1	75
120.	Lindesnes I	4.2	3.2	**2.8**	4.6	7.7	11.0	14.0	**14.9**	13.9	11.1	8.2	6.0	8.5	7
121.	Lindesnes II (Lillehavn)	3.7	**2.6**	2.8	4.9	8.5	11.0	14.1	**15.1**	14.0	11.3	8.2	5.7	8.5	17
123.	Lista	3.7	2.8	**2.6**	5.0	8.2	11.9	**14.8**	**14.8**	13.0	10.1	6.8	4.8	8.2	10
131.	Vibberodden	3.1	2.7	**2.5**	4.7	7.9	10.8	13.9	**14.5**	13.0	10.2	7.3	4.9	8.0	6
141.	Utsira	5.1	4.2	**4.0**	5.3	8.2	11.4	14.0	**14.6**	13.4	10.9	8.4	6.5	8.8	64
166.	Slåtteröy	5.3	4.5	**4.2**	5.0	7.7	10.9	13.0	**13.9**	13.3	11.3	9.0	6.9	8.7	16
175.	Hellisöy	5.5	4.7	**4.3**	5.0	7.2	10.2	12.5	**13.4**	12.9	10.8	8.7	6.8	8.5	75
207.	Kråkenes	5.4	4.7	**4.4**	5.3	7.3	9.7	11.9	**13.1**	12.4	10.4	8.3	6.5	8.3	14
208.	Rundöy	3.5	**3.1**	4.3	6.7	9.3	11.8	**13.7**	**13.7**	12.0	8.8	6.2	4.3	8.1	9
215.	Ona	5.1	4.5	**4.3**	5.1	7.0	9.5	11.9	**12.7**	12.2	10.3	8.1	6.3	8.1	74
	Trondheimsfjorden	4.3	**3.8**	4.0	4.9	7.4	11.1	**14.0**	13.2	11.0	8.7	6.7	5.0	7.8	25
225.	Titran	3.1	**2.9**	3.4	5.2	7.6	10.6	**13.0**	12.8	10.7	7.9	5.7	4.9	7.2	9
225b.	Sula	4.4	**3.8**	3.9	5.2	7.2	10.0	12.4	**12.4**	11.3	9.3	7.0	5.5	7.7	9
252.	Villa	2.6	**2.0**	2.3	4.6	7.7	10.7	13.0	**13.3**	11.1	8.0	4.9	3.3	7.0	5
254.	Nordöyan	4.1	3.7	**3.5**	4.4	6.3	9.3	12.3	**12.5**	10.9	8.9	6.9	5.2	7.3	52
255.	Prestöy	2.8	**2.2**	2.7	4.4	7.5	10.7	12.6	**12.7**	10.7	7.5	5.2	3.5	6.9	18
265.	Myken	4.9	4.6	**4.2**	4.6	5.6	8.3	11.6	**11.8**	10.6	9.1	7.4	5.9	7.4	20
272.	Tranöy	3.0	2.7	**2.4**	3.4	5.5	8.2	**11.1**	**11.1**	9.4	7.8	5.4	3.8	6.2	2
277.	Lödingen	1.2	**1.0**	1.5	2.5	5.2	9.0	**12.0**	11.8	8.9	5.2	3.9	2.0	5.4	4
278b.	Reine	3.8	3.1	**2.9**	3.9	5.9	8.6	11.0	**11.6**	10.2	8.0	5.9	4.6	6.6	2
282.	Sörvågen	3.5	2.8	**2.5**	3.0	5.2	8.7	11.6	**12.0**	9.5	7.0	5.6	4.3	6.3	9
285.	Skomvær	4.4	3.8	**3.3**	4.1	5.6	7.9	10.2	**10.6**	9.2	7.8	6.5	5.3	6.6	21
290.	Nyksund	3.8	2.9	**2.6**	3.2	5.1	7.2	10.1	**10.5**	9.1	7.4	5.8	4.7	6.0	2
291a.	Andenes I	1.1	**0.5**	0.7	2.7	5.6	8.6	10.8	**11.0**	8.8	5.6	3.3	1.7	5.0	51
291b.	Andenes II	2.1	1.6	**1.4**	2.5	4.9	7.8	10.2	**10.5**	8.8	6.4	4.3	3.1	5.3	13
297.	Navaren	2.1	1.2	1.1	3.1	6.2	9.6	**12.4**	11.6	8.2	5.4	4.0	2.8	5.6	2
306.	Loppa	2.9	**2.0**	**2.0**	2.5	3.6	6.5	9.8	**9.9**	7.9	6.3	4.4	3.4	5.1	9
309.	Fruholmen	3.0	2.6	**2.1**	2.9	3.7	5.8	8.2	**8.5**	8.0	6.5	5.4	3.9	5.0	8
310.	Ingöy	1.2	**0.5**	**0.5**	1.6	3.9	6.9	**9.1**	9.0	7.0	5.0	3.3	2.1	4.2	20
312.	Gjesvær	1.3	**0.9**	**0.9**	1.9	3.6	6.1	8.2	**8.5**	7.2	5.2	3.4	2.1	4.1	45
314.	Sværholt	2.9	2.2	**2.0**	2.3	3.4	5.9	8.8	**9.2**	7.5	5.9	4.6	3.6	4.9	10
320.	Makkaur	2.4	1.6	**1.5**	1.9	2.8	4.7	7.4	**8.0**	7.3	5.9	4.0	3.1	4.2	6

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Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Number of Years of Observation
Sognesjöen	5.4	4.7	**4.3**	5.2	7.6	10.8	**14.2**	14.0	13.0	10.5	8.7	6.5	8.7	9
Skrova	4.6	3.7	**2.8**	3.4	4.9	8.5	**12.3**	12.4	10.8	8.6	7.1	5.5	7.0	7
Eggum	5.4	4.7	**4.1**	4.2	5.2	7.5	10.5	**11.1**	10.2	8.7	7.6	6.4	7.1	8
Ingöy	4.9	4.2	**3.6**	**3.6**	4.3	6.3	8.4	**9.0**	8.5	7.4	6.5	5.6	6.0	8

Mean Values of the observed Years.

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Number of Years of Observation
331.	Björnöya (1924—32)	—1.8	—1.8	**—1.9**	—1.7	—0.8	0.5	2.0	2.9	2.5	1.2	—0.7	—1.2	—0.2	8
333.	Akselöy, Spitsbergen (1898—99)	—1.9	—1.7	—1.4	—1.4	—1.1	0.0	4.2			0.4	—0.8	—2.0		1
343.	Jan Mayen (1882—83, 1922—23, 1929—36)	—0.6	—0.9	**—1.0**	—0.7	0.3	1.7	3.7	**4.7**	4.0	2.2	0.6	0.0	1.2	9

Table III.

Periodic Yearly Extremes and Amplitudes.

The Time of Occurrence of 5°, 10°, of the Mean and of the Extremes.

Mean Values 1871—1930, 8^{h}.

Station	Mean	Date	Date	Max.	Date	Min.	Date	Ampl.	5°		10°	
									Date	Date	Date	Date
No.												
10. Ferder	8.6	11—5	2—11	17.6	28—7	1.0	22—2	16.6	19—4	6—12	20—5	19—10
Flödevigen (surface)	8.3	12—5	2—11	16.4	30—7	1.3	25—2	15.1	20—4	7—12	23—5	20—10
» 1 m depth	8.5	14—5	5—11	16.2	4—8	1.6	28—2	14.6	20—4	13—12	25—5	24—10
107. Torungen	8.1	15—5	6—11	16.0	4—8	1.1	1—3	14.9	24—4	9—12	28—5	20—10
121. Lindesnes II	8.5	16—5	12—11	15.2	14—8	2.5	25—2	12.7	17—4	26—12	3—6	28—10
141. Utsira	8.8	22—5	10—11	14.8	11—8	3.9	4—3	10.9	10—4	19—1	2—6	27—10
166. Slåtteröy	8.7	26—5	19—11	14.0	19—8	4.1	11—3	9.9	16—4	25—1	7—6	2—11
175. Hellisöy	8.5	29—5	19—11	13.5	20—8	4.3	12—3	9.2	17—4	3—2	13—6	28—10
207. Kråkenes	8.3	29—5	15—11	13.2	23—8	4.4	10—3	8.8	7—4	2—2	20—6	22—10
215. Ona	8.1	30—5	16—11	12.8	20—8	4.2	8—3	8.6	13—4	21—1	21—6	20—10
Trondheimsfjorden	7.8	20—5	30—10	14.3	24—7	3.8	21—2	10.5	18—4	15—12	6—6	29—9
225b. Sula	7.7	22—5	7—11	12.8	30—7	3.7	27—2	9.1	12—4	29—12	15—6	4—10
254. Nordöyan	7.3	26—5	8—11	12.8	4—8	3.4	6—3	9.4	26—4	22—12	22—6	30—9
255. Prestöy	6.9	10—5	24—10	13.0	2—8	2.2	17—2	10.8	22—4	19—11	8—6	22—9
265. Myken	7.4	6—6	15—11	12.0	3—8	4.2	17—3	7.8	29—4	12—1	28—6	29—9
282. Sörvågen	6.3	26—5	31—10	12.3	5—8	2.5	13—3	9.8	14—5	29—11	29—6	10—9
285. Skomvær	6.6	29—5	14—11	10.8	7—8	3.2	13—3	7.6	4—5	26—12	11—7	2—9
291a. Andenes I	5.0	10—5	23—10	11.3	4—8	0.4	20—2	10.9	10—5	23—10	4—7	31—8
291b. Andenes II	5.3	20—5	1—11	10.7	5—8	1.3	6—3	9.4	17—5	5—11	11—7	29—8
306. Loppa	5.1	1—6	4—11	10.2	1—8	1.8	1—3	8.4	31—5	5—11	18—7	16—8
309. Fruholmen	5.0	4—6	24—11	8.5	11—8	2.0	13—3	6.5	4—6	24—11		
310. Ingöy	4.2	19—5	30—10	9.4	30—7	0.3	2—3	9.1	27—5	16—10		
312. Gjesvær	4.1	22—5	3—11	8.7	6—8	0.7	3—3	8.0	2—6	19—10		
314. Sværholt	4.9	4—6	8—11	9.4	5—8	2.0	13—3	7.4	4—6	8—11		
320. Makkaur	4.2	8—6	12—11	8.1	14—8	1.5	6—3	6.6	8—6	12—11		

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1 m Depth.

Sognesjöen	8.7	28—5	15—11	14.7	28—7	4.2	11—3	10.5	13—4	31—1	8—6	23—10
Skrova	7.0	4—6	17—11	12.7	2—8	2.7	19—3	10.0	18—5	2—2	27—6	28—9
Eggum	7.1	11—6	29—11	11.2	12—8	4.0	28—3	7.2	12—5	31—1	5—7	20—9
Ingöy	6.0	11—6	2—12	9.1	16—8	3.5	1—4	5.6	1—6	12—1		

Table IV. **Yearly Variation. Constants in the Trigonometrical Series.**

$$t = a_0 + a_1 \sin(A_1 + x) + a_2 \sin(A_2 + 2x) + a_3 \sin(A_3 + 3x) + a_4 \sin(A_4 + 4x) + a_5 \sin(A_5 + 5x) + a_6 \sin(A_6 + 6x) \qquad x = 0 \text{ for the Beginning of the Year.}$$

Mean Values (1871—1930), 8^h.

	Torungen	Utsira	Hellisöy	Ona	Nordöyan	Prestöy	Gjesvær
a_0	8.12	8.86	8.53	8.11	7.37	6.91	4.12
a_1	7.34	5.32	4.56	4.28	4.50	5.35	3.84
a_2	0.96	0.77	0.66	0.57	0.92	0.90	0.73
a_3	0.15	0.06	0.09	0.03	0.23	0.07	0.09
a_4	0.03	0.01	0.07	0.02	0.11	0.05	0.04
a_5	0.03	0.02	0.04	0.06	0.07	0.09	0.03
a_6	0.00	0.01	0.01	0.01	0.01	0.05	0.01
A_1	229° 25.'8	223° 49.'6	216° 9.'4	217° 55.'5	224° 41.'7	238° 0.'2	228° 35.'4
A_2	63° 53.'2	42° 28.'0	30° 23.'0	16° 18.'3	34° 7.'9	18° 38.'9	34° 15.'3
A_3	357° 46.'8	20° 42.'0	330° 38.'5	351° 15.'2	213° 56.'3	56° 49.'3	188° 20.'6
A_4	307° 35.'7	326° 35.'0	170° 1.'3	26° 11.'3	351° 44.'7	227° 11.'2	353° 7.'8
A_5	172° 10.'0	98° 39.'5	308° 29.'9	231° 52.'2	193° 36.'2	346° 37.'9	240° 0.'0
A_6	0°	0°	0°	0°	0°	0°	180°

Table V. **Mean Difference of Sea Surface minus Air Temperature (1871—1930).**

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
No.													
10. Ferder	2.5	2.2	1.2	0.4	**0.0**	0.2	0.5	1.3	1.8	2.7	**3.4**	3.3	1.6
107. Torungen	2.5	1.9	0.5	—0.8	**—1.2**	—1.1	—0.9	0.2	1.3	2.6	3.3	**3.5**	1.0
120. Lindesnes I	3.2	2.6	1.3	—0.2	—1.1	**—1.4**	—1.1	—0.1	1.3	2.7	3.4	**3.8**	1.4
121. Lindesnes II	2.7	1.8	0.8	—0.5	—1.4	**—2.9**	—1.9	—0.3	1.1	2.8	**3.6**	3.5	0.9
123. Lista	**2.6**	2.0	0.7	—0.2	**—1.0**	—0.5	—0.1	0.1	0.5	1.8	2.0	2.5	0.9
131. Vibberodden	1.3	1.9	0.2	—0.4	—1.2	**—1.5**	—0.6	0.2	0.6	1.7	**2.6**	2.3	0.6
141. Utsira	2.8	2.5	1.7	0.7	**0.3**	**0.3**	0.7	1.1	1.8	2.6	3.2	**3.3**	1.8
166. Slåtteröy	3.0	2.7	1.7	0.1	—0.4	**—0.5**	—0.4	0.3	1.6	3.1	**4.0**	3.8	1.6
175. Hellisöy	3.0	2.7	1.7	0.0	**—0.8**	**—0.8**	—0.7	0.1	1.5	2.7	**3.6**	**3.6**	1.4
207. Kråkenes	3.4	2.9	2.1	0.4	—0.6	**—1.9**	—1.5	0.1	1.7	3.1	**4.1**	3.8	1.5
208. Rundöy	1.2	1.0	1.4	1.4	0.9	0.4	**0.2**	0.7	1.1	1.2	**1.6**	1.4	1.0
215. Ona	2.3	2.1	1.5	0.4	—0.1	**—0.3**	**—0.3**	0.2	1.4	2.4	**3.0**	2.8	1.3
225. Titran	1.3	1.6	1.6	0.9	0.7	0.8	0.7	**0.5**	**0.5**	1.0	1.8	**2.8**	1.2
225b. Sula	2.9	2.7	2.5	1.3	0.9	**0.8**	1.0	0.9	1.6	2.6	3.2	**3.7**	2.0
252. Villa	2.5	2.5	1.5	0.7	0.5	0.2	**0.0**	0.4	1.2	2.1	2.1	**3.0**	1.4
254. Nordöyan	3.3	3.5	2.6	0.9	—0.1	**—0.4**	—0.1	0.1	1.0	2.7	3.7	**4.2**	1.8
255. Prestöy	2.6	2.7	1.8	0.6	0.3	0.3	**—0.3**	0.0	0.8	1.4	2.3	**2.8**	1.3
265. Myken	4.2	4.6	3.5	1.6	—0.1	**—0.3**	**—0.3**	— 0.2	1.6	3.3	4.5	**4.7**	2.3
272. Tranöy	3.8	3.8	3.2	1.7	0.0	—1.1	—0.9	**—1.4**	0.2	2.5	3.9	**4.3**	1.7
277. Lödingen	3.0	**3.7**	3.5	1.4	0.2	—0.3	**—0.6**	—0.2	0.8	1.5	3.4	**3.7**	1.7
282. Sörvågen	3.3	3.2	2.6	1.2	0.2	0.1	**—0.4**	0.2	1.3	2.2	3.4	**3.5**	1.7
285. Skomvær	3.1	3.2	2.5	1.6	0.7	0.2	**—0.2**	**—0.2**	0.7	2.1	3.2	**3.4**	1.7
290. Nyksund	3.8	3.4	3.0	1.3	0.0	**—1.0**	—0.7	—0.7	0.9	3.1	4.0	**4.6**	1.8
291a. Andenes I	2.2	2.4	2.2	1.7	1.2	0.8	0.5	**0.4**	1.2	2.0	2.4	**2.7**	1.6
291b. Andenes II	3.2	3.5	2.9	1.5	0.5	0.0	**—0.1**	**—0.1**	1.2	2.8	3.4	**4.1**	1.9
297. Navaren	7.5	6.7	4.9	3.2	1.5	0.2	**—0.2**	0.4	1.3	4.3	7.1	**7.8**	3.7
306. Loppa	4.4	4.2	4.2	2.4	—0.1	**—1.5**	—1.3	—0.9	0.8	3.0	3.9	**5.0**	2.0
309. Fruholmen	5.5	5.3	5.0	3.7	0.9	—0.4	**—0.9**	**—0.9**	1.6	4.0	5.5	**6.2**	3.0

Mean Difference of Sea Surface minus Air Temperature (1871—1930).

Table V. (cont.)

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
310. Ingöy	3.5	3.2	3.1	2.0	1.1	0.7	0.2	**—0.2**	0.5	2.3	3.3	**3.9**	2.0
312. Gjesvær	4.7	4.8	3.9	2.3	0.8	—0.8	**—1.8**	—1.5	0.7	3.1	4.4	**5.0**	2.1
314. Sværholt	**6.7**	6.4	5.3	2.8	0.6	—1.0	**—1.5**	—1.0	0.5	3.5	5.5	6.6	2.9
320. Makkaur	**7.4**	6.4	5.8	3.0	0.6	—1.7	**—2.8**	—1.6	0.8	4.4	5.5	7.0	2.9
The Oceanographic Stations of the Directorate of Fisheries.													
Skrova	4.8	4.6	3.2	1.3	—0.1	**—0.3**	0.1	0.7	2.2	3.7	4.6	**5.1**	2.5
Eggum	5.6	5.1	4.3	2.2	0.4	**—0.4**	—0.2	0.1	1.5	3.8	5.0	**5.8**	2.8
Ingöy	6.7	6.4	5.8	4.0	1.7	0.3	**—0.2**	0.0	1.7	4.4	6.2	**6.9**	3.7
Mean Values of the Observed Years.													
331. Björnöya	6.0	6.5	**7.7**	5.5	1.4	—1.0	**—2.5**	—1.1	0.3	2.5	4.2	5.4	2.9
343. Jan Mayen	4.5	4.7	**5.3**	3.1	1.6	—0.6	**—1.0**	—0.7	0.6	2.3	3.4	4.7	2.3

Table VI. **The Mean Departure (d) of the Monthly and Annual Means from the 60-Year Normal Mean.**

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Mean of the Months d_m	Yearly Temp. Ampl. A	$\frac{d_m}{A}$	Years of Observation
10.	Ferder	1.24	1.32	1.15	1.03	0.73	**1.34**	1.22	1.13	0.88	**0.68**	0.81	1.27	0.73	1.07	16.6	0.065	1928—1942
107.	Torungen	1.16	**1.24**	1.02	0.82	0.89	0.91	1.14	0.97	**0.65**	0.73	0.73	1.01	0.51	0.94	14.3	0.066	1871—1930
121.	Lindesnes II	1.21	1.51	1.02	**0.73**	0.83	**1.56**	1.16	1.03	0.79	0.74	0.81	1.00	0.64	1.03	13.1	0.079	1924—1941
141.	Utsira	0.66	0.78	0.63	**0.55**	0.66	0.77	1.01	**1.16**	0.81	0.70	0.64	0.69	0.38	0.76	10.6	0.072	1871—1930
166.	Slåtteröy	0.69	0.72	0.83	0.56	0.70	0.95	1.06	**1.28**	1.02	0.69	**0.46**	0.72	0.48	0.81	10.6	0.076	1924—1940
175.	Hellisöy	0.59	0.66	0.55	**0.52**	0.59	0.72	1.24	**1.38**	0.77	0.64	0.56	**0.52**	0.40	0.73	9.1	0.080	1871—1930
207.	Kråkenes	0.65	0.82	0.59	0.64	0.62	0.87	1.04	1.29	**1.31**	0.80	**0.51**	0.53	0.59	0.81	9.7	0.084	1929—1942
215.	Ona	0.56	0.54	**0.50**	**0.50**	0.58	0.69	0.89	**1.11**	0.85	0.65	0.62	0.58	0.39	0.67	8.4	0.080	1871—1930
	Trondheimsfjorden	0.67	0.51	**0.46**	0.47	0.82	**1.06**	0.84	0.91	1.04	0.84	0.64	0.65	0.43	0.74	10.4	0.071	1894—1906, 1932—1943
254.	Nordöyan	0.58	0.52	0.48	**0.43**	0.66	0.82	**1.11**	0.97	0.72	0.68	0.72	0.72	0.38	0.70	9.0	0.078	1891—1930
255.	Prestöy	0.82	0.74	**0.66**	0.76	0.87	0.91	0.80	**1.06**	0.82	0.90	0.79	0.68	0.50	0.82	10.5	0.078	1871—1890
265.	Myken	0.56	0.58	0.55	**0.36**	0.53	0.80	**1.12**	0.81	0.90	0.69	0.61	0.60	0.45	0.68	8.8	0.077	1923—1942
285.	Skomvær	0.60	0.56	**0.50**	0.57	0.61	0.69	**0.88**	0.85	0.80	0.86	0.70	0.66	0.49	0.69	8.1	0.085	1921—1942
291a.	Andenes I	0.78	0.86	**0.93**	**0.70**	0.76	0.81	0.84	0.78	0.83	0.84	0.79	0.85	0.46	0.81	10.5	0.077	1871—1896, 1908—1929
291b.	Andenes II	0.83	**0.88**	0.85	0.64	**0.60**	0.61	0.61	0.83	0.79	0.71	0.71	0.83	0.49	0.74	10.1	0.074	1929—1942
306.	Loppa	0.56	0.49	**0.30**	0.48	0.49	0.57	**0.82**	0.52	**0.30**	0.49	0.60	0.68	0.22	0.52	8.0	0.065	1923—1932
310.	Ingöy	0.68	**0.52**	0.56	0.61	0.72	0.70	**0.81**	0.74	0.54	0.76	0.80	0.60	0.46	0.67	9.5	0.071	1923—1942
312.	Gjesvær	0.80	0.73	0.85	0.70	0.70	0.83	**0.93**	0.70	0.68	0.68	**0.67**	0.75	0.45	0.75	7.6	0.099	1881—1925
314.	Sværholt	0.50	0.45	**0.37**	0.46	0.45	0.67	**0.74**	0.58	0.39	0.54	0.53	0.47	0.23	0.51	7.4	0.069	1922—1932

Table VII. **The Probable Error (R) of the 60-Year Normal Means.**

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	±0.14	±0.15	±0.13	±0.11	±0.08	±0.15	±0.13	±0.15	±0.10	±0.07	±0.09	±0.14	±0.08
107.	Torungen	0.13	0.14	0.11	0.09	0.10	0.10	0.13	0.11	0.07	0.08	0.08	0.11	0.06
121.	Lindesnes II	0.13	0.17	0.11	0.08	0.09	0.17	0.13	0.11	0.09	0.08	0.09	0.11	0.07
141.	Utsira	0.07	0.09	0.07	0.06	0.07	0.08	0.11	0.13	0.09	0.08	0.07	0.08	0.04
166.	Slåtteröy	0.08	0.08	0.09	0.06	0.08	0.10	0.12	0.14	0.11	0.08	0.05	0.08	0.05
175.	Hellisöy	0.06	0.07	0.06	0.06	0.06	0.08	0.14	0.15	0.08	0.07	0.06	0.06	0.04
207.	Kråkenes	0.07	0.09	0.06	0.07	0.07	0.10	0.11	0.14	0.14	0.09	0.06	0.06	0.06
215.	Ona	0.06	0.06	0.06	0.06	0.06	0.08	0.10	0.12	0.09	0.07	0.07	0.06	0.04
254.	Nordöyan	0.06	0.06	0.05	0.05	0.07	0.09	0.12	0.11	0.08	0.07	0.08	0.08	0.04
255.	Prestöy	0.09	0.08	0.07	0.08	0.10	0.10	0.09	0.12	0.09	0.10	0.09	0.07	0.06
265.	Myken	0.06	0.06	0.06	0.04	0.06	0.09	0.12	0.09	0.10	0.08	0.07	0.07	0.05
285.	Skomvær	0.07	0.06	0.06	0.06	0.07	0.08	0.10	0.09	0.09	0.09	0.08	0.07	0.05
291a.	Andenes I	0.09	0.09	0.10	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.05
291b.	Andenes II	0.09	0.11	0.09	0.07	0.07	0.07	0.07	0.09	0.09	0.08	0.08	0.09	0.05
310.	Ingöy	0.08	0.06	0.06	0.07	0.08	0.08	0.09	0.08	0.06	0.08	0.09	0.07	0.05
312.	Gjesvær	0.09	0.08	0.09	0.08	0.08	0.09	0.10	0.08	0.07	0.07	0.07	0.08	0.05

Table VIII. **Highest Monthly and Annual Means.**

No.	Station	Years of Observation	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	1927—1943	4.5	3.4	4.0	6.2	11.2	18.3	19.6	20.2	17.5	12.7	9.4	6.5	10.1
107.	Torungen	1867—1942	5.3	4.1	4.2	6.1	11.9	15.9	18.5	19.1	16.4	12.3	9.5	6.9	9.4
121.	Lindesnes II	1923—1941	6.7	5.4	5.6	6.7	11.4	14.5	16.9	18.9	17.0	13.5	10.8	7.5	10.0
141.	Utsira	1867—1931	6.9	6.2	6.2	6.6	10.1	13.9	16.7	17.0	15.5	12.6	9.8	8.1	9.9
166.	Slåtteröy	1924—1940	6.9	6.2	5.7	6.5	9.4	14.1	16.8	17.1	16.1	13.0	11.1	8.6	10.0
175.	Hellisöy	1867—1943	7.2	6.4	5.9	6.6	8.7	12.8	16.2	16.4	16.6	13.1	11.0	8.9	9.8
207.	Kråkenes	1928—1943	6.8	6.3	5.4	6.4	9.4	12.4	14.9	16.0	15.6	12.3	10.0	8.1	9.6
215.	Ona	1868—1943	7.0	5.8	5.5	6.9	9.3	11.5	14.5	15.5	14.8	12.4	9.7	7.7	9.3
	Trondheimsfj.	1893—1906 1932—1943	5.5	5.0	5.6	6.8	9.6	13.5	17.0	16.2	14.1	11.1	8.4	7.2	9.4
254.	Nordöyan	1891—1943	6.4	5.1	4.9	5.9	9.0	12.1	15.5	15.8	14.2	11.2	8.9	7.8	8.8
255.	Prestöy	1871—1890	4.9	3.7	4.2	5.8	9.1	12.8	14.9	15.1	13.2	10.3	7.4	5.0	7.9
265.	Myken	1922—1943	6.8	5.6	5.4	5.5	8.0	10.6	15.1	15.7	13.1	11.0	9.5	7.5	8.9
285.	Skomvær	1921—1943	6.2	5.1	4.8	5.4	7.9	9.8	12.6	13.5	11.5	10.0	8.5	7.0	8.0
291a.	Andenes I	1867—1896 1908—1929	3.6	2.9	3.1	4.5	7.5	11.1	13.0	13.1	11.3	8.2	5.2	4.1	6.2
291b.	Andenes II	1929—1943	3.7	3.1	2.8	4.9	7.2	9.6	12.8	13.3	12.0	9.1	6.4	4.6	6.8
306.	Loppa	1923—1932	4.5	3.5	2.8	3.7	5.1	7.9	12.1	11.7	9.0	8.0	6.0	5.4	6.3
310.	Ingöy	1922—1943	3.0	1.6	1.8	3.8	6.1	9.2	11.5	11.5	9.3	7.3	5.7	4.0	5.6
312.	Gjesvær	1881—1925	3.5	2.5	2.7	3.4	5.3	8.8	10.4	10.3*	9.5	7.6	5.2	4.2*	5.1
314.	Sværholt	1922—1932	4.4	3.5	3.3	3.5	4.9	7.8	10.7	10.6	9.2	7.4	6.4	4.8	5.8

Table IX. **Lowest Monthly and Annual Means.**

No.	Station	Years of Observation	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	1927—1943	—0.9	—1.6	—1.0*	1.9*	8.2	12.0	14.3	15.5	13.2	9.9	5.8	1.5	7.8
107.	Torungen	1867—1942	—0.5	—1.5	—0.9	1.0	6.1	10.0	12.9	13.4	11.9	8.8	4.3	1.2	7.0
121.	Lindesnes II	1923—1941	0.0	—0.6	0.9	3.2	6.5	8.7	11.3	13.9	11.9	10.5	7.2	2.5	7.7
141.	Utsira	1867—1931	2.9	1.5	1.9	4.0	5.7	8.1	11.4	11.5	10.9	8.8	6.7	4.4	7.7
166.	Slåtteröy	1924—1940	3.7	2.9	2.2	3.6	6.1	8.9	11.4	12.8*	10.7*	9.9	8.3	5.8	8.1
175.	Hellisöy	1867—1943	3.3*	1.9	2.3	3.5	5.3	7.8	9.6	9.2	10.0	8.6	7.2	5.1	7.6
207.	Kråkenes	1928—1943	3.9	3.2	3.1	4.0	6.8	9.0	10.7	11.6	8.9	9.0	7.5	5.6	7.4
215.	Ona	1868—1943	3.5	2.6	2.6	3.4	5.6	7.9	9.9	10.1	9.9	8.2	6.5	4.9	7.0
	Trondheimsfj.	1893—1906 1932—1943	2.9	3.2	3.0	3.7	5.8	9.1	12.0	11.6	9.2	6.6	5.4	3.4	6.9
254.	Nordöyan	1891—1943	1.5*	1.5	2.2	2.9	4.7	7.6	9.8	10.5	9.0	6.8	5.1	3.4	6.3
255.	Prestöy	1871—1890	0.4	0.2	1.0	2.7*	5.6	9.5	9.7	10.4	8.7	6.1	3.9	1.9	5.8
265.	Myken	1922—1943	3.8	3.5	3.0	3.9	5.2	7.2	10.0	11.3	9.4	7.7	6.4	4.7	7.0
285.	Skomvær	1921—1943	3.0	2.5	2.1	2.8	5.1	6.7	8.9	9.7	8.4	6.4	5.0	3.9	6.2
291a.	Andenes I	1867—1896 1908—1929	—1.0	—1.4	—1.1	0.3	3.2	6.6	8.5	9.3*	6.6*	3.0	1.4	—1.0*	3.8
291b.	Andenes II	1929—1943	0.4	—0.2	—0.1	1.9	4.3	7.3	10.2	10.1	8.2	5.5	3.7	1.7	4.8
306.	Loppa	1923—1932	2.6	1.4	1.5	1.8	3.3	5.0	9.0	9.2	7.7	5.7	4.1	3.1	5.0
310.	Ingöy	1922—1943	0.0	—1.1	—0.8	0.7	2.9	5.3	8.0	8.2	6.5	3.7	2.0	0.7	3.6
312.	Gjesvær	1881—1925	—1.1*	—1.0	—1.2	—0.4	0.8	4.0	5.6	6.9	5.5	3.3	1.7	0.3	2.5
314.	Sværholt	1922—1932	2.0	1.8	1.6	1.8	3.2	5.0	7.7	8.2	7.3	5.1	3.1	2.9	4.7

Table X. **Difference between the Highest and Lowest Monthly and Annual Means.**
(The Extreme Range S.)

No.	Station	Years of Observation	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	1927—1943	5.4	5.0	5.0	4.3	3.0	**6.3**	5.3	4.7	4.3	**2.8**	3.6	5.0	2.3
107.	Torungen	1867—1942	5.8	5.6	5.1	5.1	5.8	**5.9**	5.6	5.7	4.5	**3.5**	5.2	5.7	2.4
121.	Lindesnes II	1923—1941	**6.7**	6.0	4.7	3.5	4.9	5.8	5.6	5.0	5.1	**3.0**	3.6	5.0	2.3
141.	Utsira	1867—1931	4.0	4.7	4.3	**2.6**	4.4	**5.8**	5.3	5.5	5.6	3.8	3.1	3.7	2.2
166.	Slåtteröy	1924—1940	3.2	3.3	3.5	2.9	3.3	5.2	**5.4**	4.3	5.4	3.1	**2.8**	**2.8**	1.9
175.	Hellisöy	1867—1943	3.9	4.5	3.6	**3.1**	3.4	5.0	6.8	**7.2**	6.6	4.5	3.8	3.8	2.2
207.	Kråkenes	1928—1943	2.9	3.1	**2.3**	2.4	2.6	3.4	4.2	4.4	**6.7**	3.3	2.5	2.5	2.2
215.	Ona	1868—1943	3.5	3.2	2.9	3.5	3.7	3.6	4.6	**5.4**	4.9	4.2	3.2	**2.8**	2.3
	Trondheimsfj.	1893—1906 1932—1943	2.6	**1.8**	2.6	3.1	3.8	4.4	**5.0**	4.6	4.9	4.5	3.0	3.8	2.5
254.	Nordöyan	1891—1943	4.9	3.6	**2.7**	3.0	4.3	4.5	**5.7**	5.3	5.2	4.4	3.8	4.4	2.5
255.	Prestöy	1871—1890	4.5	3.5	3.2	**3.1**	3.5	3.3	**5.2**	4.7	4.5	4.2	3.5	**3.1**	2.1
265.	Myken	1922—1943	3.0	2.1	2.4	**1.6**	2.8	3.4	**5.1**	4.4	3.7	3.3	3.1	2.8	1.9
285.	Skomvær	1921—1943	3.2	**2.6**	2.7	**2.6**	2.8	3.1	3.7	**3.8**	3.1	3.6	3.5	3.1	1.8
291a.	Andenes I	1867—1896 1908—1929	4.6	4.3	4.2	4.2	4.3	4.5	4.5	**3.8**	4.7	**5.2**	**3.8**	**5.2**	2.4
291b.	Andenes II	1929—1943	3.3	3.3	2.9	3.0	2.9	**2.3**	2.6	3.2	**3.8**	3.6	2.7	2.9	2.0
306.	Loppa	1923—1932	1.9	2.1	1.3	1.9	1.8	2.9	**3.1**	2.5	**1.3**	2.3	1.9	2.3	1.3
310.	Ingöy	1922—1943	3.0	2.7	**2.6**	3.1	3.2	**3.9**	3.5	3.3	2.8	3.6	3.7	3.3	2.0
312.	Gjesvær	1881—1925	4.6	3.5	3.9	3.8	4.5	**4.8**	**4.8**	**3.4**	4.0	4.3	3.5	3.9	2.6
314.	Sværholt	1922—1932	2.4	**1.7**	**1.7**	**1.7**	**1.7**	2.8	3.0	2.4	1.9	2.3	**3.3**	1.9	1.1

Table XI. **The Ratio of the Extreme Range (S) to the Mean Departure (d).**
(The Mean Value of the Months (S_{12}) and the Value of the Year (S_y.)

Station	Number of Years of Observation	S_{12}	d_{12}	S_{12}/d_{12}	S_y	d_y	S_y/d_y
No.							
306. Loppa	10	2.11	0.52	4.06	1.3	0.22	5.90
314. Sværholt	11	2.23	0.51	4.37	1.1	0.23	4.79
291b. Andenes II	14	3.04	0.74	4.11	2.0	0.49	4.08
207. Kråkenes	16	3.36	0.81	4.15	2.2	0.59	3.73
10. Ferder	17	4.56	1.07	4.27	2.3	0.73	3.15
166. Slåtteröy	17	3.77	0.81	4.66	1.9	0.48	3.96
121. Lindesnes II	19	4.91	1.03	4.77	2.3	0.64	3.60
255. Prestöy	20	3.86	0.82	4.71	2.1	0.50	4.20
265. Myken	22	3.14	0.68	4.62	1.9	0.45	4.23
310. Ingöy	22	3.22	0.67	4.81	2.0	0.46	4.35
285. Skomvær	23	3.15	0.69	4.57	1.8	0.49	3.67
Trondheimsfjorden	26	3.68	0.74	4.97	2.5	0.43	5.81
312. Gjesvær	45	4.08	0.75	5.44	2.6	0.45	5.78
291a. Andenes I	51	4.44	0.81	5.48	2.4	0.46	5.22
254. Nordöyan	53	4.32	0.70	6.16	2.5	0.38	6.58
141. Utsira	65	4.40	0.76	5.79	2.2	0.38	5.79
107. Torungen	76	5.29	0.94	5.64	2.4	0.51	4.71
215. Ona	76	3.79	0.67	5.66	2.3	0.39	5.89
175. Hellisöy	77	4.68	0.73	6.42	2.2	0.40	5.50

Table XII. **Mean Monthly and Annual Maxima.**
1871—1930 (8h)

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
No.													
107. Torungen	4.9	3.4	**3.2**	5.8	11.5	15.8	**17.6**	17.2	15.3	12.7	9.4	6.9	18.1
141. Utsira	6.2	5.3	**4.9**	6.8	10.3	13.5	15.6	**15.9**	14.6	12.6	10.0	7.8	16.3
175. Hellisöy	6.5	5.5	**5.0**	6.1	9.3	12.7	14.6	**15.0**	14.2	12.4	10.2	8.1	15.5
215. Ona	5.9	5.2	**4.9**	6.0	8.4	11.0	13.2	**1[illegible].7**	13.2	11.6	9.3	7.3	14.0
291a. Andenes I	2.9	**2.4**	**2.4**	4.4	7.9	11.0	**12.8**	12.7	10.8	8.5	5.2	3.8	13.3
Shorter Series (8h)													
Flödevigen[1]), surface (1924—43)	4.7	3.5	**3.4**	6.7	12.6	16.5	**19.1**	18.8	16.8	13.7	9.8	7.1	19.6
» 1 m depth (1919—1943)	5.5	4.0	**3.9**	6.8	12.4	16.1	**18.7**	18.4	16.1	13.4	10.1	7.6	19.2
120. Lindesnes I (1868—1875)	6.0	5.2	**5.0**	6.6	9.9	14.3	**17.6**	**17.6**	15.7	13.2	10.5	7.7	18.2
121. Lindesnes II (1924—1930)	6.4	**4.8**	5.0	7.3	11.8	14.5	**17.7**	**17.7**	16.0	13.4	10.9	8.0	18.4
123. Lista[2]) (1867—1877)	**5.6**	**5.6**	**5.6**	8.3	11.7	17.4	**19.0**	18.9	16.2	12.9	9.7	7.1	19.9
131. Vibberodden (1924—1930)	5.2	**4.3**	4.5	6.9	10.8	13.3	**17.5**	17.1	15.0	12.5	9.5	7.2	17.8
166. Slåtteröy (1924—1930)	6.3	5.3	**4.6**	6.2	9.7	13.2	15.7	**16.7**	14.9	13.0	12.0	8.4	16.8
Trondheimsfjorden[1]) (1894—06)	5.4	**4.7**	5.1	6.5	9.9	14.2	**16.7**	15.4	12.4	9.9	8.1	6.1	16.9
225. Titran (1921—1930)	4.8	**4.4**	5.2	7.2	9.9	12.5	**15.6**	14.9	13.3	10.4	7.4	6.0	15.9
254. Nordöyan (1891—1930)	5.0	4.4	**4.3**	5.4	8.0	11.5	**14.0**	13.7	12.1	10.1	8.0	6.3	14.5
255. Prestöy (1872—1890)	4.7	**4.0**	**4.0**	6.1	10.2	13.7	**15.1**	14.4	12.7	9.8	7.5	5.2	15.3
265. Myken (1922—1930)	5.9	5.6	**5.3**	5.5	7.8	10.7	14.3	**14.4**	12.2	10.5	8.3	7.0	14.9
282. Sörvågen (1923—1932)	5.6	**4.5**	4.6	4.8	7.8	11.6	**15.0**	**15.0**	11.8	9.2	7.3	6.8	15.7
285. Skomvær (1921—1930)	5.8	5.1	**4.8**	5.5	7.5	10.4	12.4	**13.3**	11.1	9.2	7.9	6.7	13.5
306. Loppa (1923—1932)	4.3	3.4	**3.1**	3.6	5.6	9.7	**12.4**	12.0	9.5	7.8	6.1	5.3	12.7
309. Fruholmen (1867—1875)	4.6	3.9	**3.3**	3.9	4.8	7.5	**9.6**	9.5	8.6	7.2	6.0	4.4	9.8
310. Ingöy (1922—1930)	3.5	3.0	**2.3**	3.9	7.5	10.7	**12.7**	12.3	9.3	7.1	4.9	4.2	12.8
312. Gjesvær (1881—1925)	2.5	2.0	**1.8**	3.2	5.1	8.0	9.7	**9.8**	8.5	6.6	4.9	3.4	10.3
314. Sværholt (1922—1932)	4.3	3.7	**3.2**	3.7	5.4	9.0	11.9	**12.2**	9.3	7.3	5.9	5.0	12.7
320. Makkaur (1926—1932)	**3.3**	2.4	**2.2**	2.9	4.1	6.2	9.4	**10.0**	8.4	6.9	5.1	3.6	10.1

[1]) 9h. [2]) 14h.

Table XII (cont.).

Mean Monthly and Annual Maxima.
1931—40 (14h)

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	4.7	**3.3**	3.4	8.2	14.0	19.0	**20.7**	**20.7**	17.7	13.7	9.9	6.8	21.8
107.	Torungen	5.7	4.6	**3.1**	6.3	12.1	15.6	**19.1**	19.0	16.8	12.2	10.1	6.6	20.0
121.	Lindesnes II	6.8	5.6	**5.2**	7.6	13.2	16.8	19.1	**19.4**	17.2	13.9	10.6	8.7	20.1
166.	Slåtteröy	6.6	5.5	**5.3**	6.8	10.6	13.8	16.1	**17.3**	14.8	12.8	10.5	8.5	17.6
175.	Hellisöy	6.9	5.7	**5.3**	6.5	10.2	13.1	16.0	**16.4**	15.2	12.8	10.5	8.6	16.9
207.	Kråkenes	7.0	5.7	**5.4**	7.1	10.2	12.6	15.5	**16.4**	14.3	12.1	9.8	8.2	16.5
215.	Ona	6.3	5.4	**5.0**	6.7	9.6	12.6	14.7	**15.5**	14.2	11.7	9.2	7.6	15.6
254.	Nordöyan	5.9	**5.0**	5.1	6.1	10.0	13.1	**16.5**	15.9	14.0	11.4	8.8	7.0	16.6
265.	Myken	6.4	5.7	**5.2**	5.9	8.6	11.5	**14.8**	14.4	12.9	10.8	8.8	7.2	15.2
285.	Skomvær	6.2	5.3	**5.1**	6.5	8.7	11.0	**14.4**	13.5	12.0	10.0	8.4	7.2	14.6
291b.	Andenes II	4.3	3.0	**2.9**	4.8	8.0	10.4	12.8	**13.0**	11.6	7.9	6.5	5.2	13.2
310.	Ingöy	3.8	**2.8**	**2.8**	4.5	7.1	11.2	**13.4**	12.6	9.9	7.4	5.8	5.2	13.6

Table XIII.

Mean Monthly and Annual Minima.
1871—1930 (8h).

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107.	Torungen	0.3	**—0.3**	—0.2	1.8	5.3	9.0	12.6	**13.8**	11.8	7.9	4.5	1.9	—0.8
141.	Utsira	3.9	**2.9**	**2.9**	4.0	6.3	9.4	12.1	**13.4**	11.8	9.1	6.8	4.9	2.5
175.	Hellisöy	4.4	3.8	**3.6**	4.1	5.5	7.8	10.2	**11.5**	11.1	9.0	7.0	5.5	3.2
215.	Ona	4.3	3.9	**3.7**	4.3	5.8	8.1	10.3	**11.7**	11.1	9.0	6.9	5.3	3.5
291a.	Andenes I	—0.8	**—1.0**	—0.9	0.6	3.4	6.5	9.3	**9.7**	6.8	3.4	1.6	—0.2	—1.6

Shorter Series (8h).

No.	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	Flödevigen,[1]) surface (1924—43)	0.4	**0.0**	0.3	2.0	6.3	9.3	12.8	**14.6**	12.6	7.8	4.8	2.1	—0.6
	» 1 m depth (1919—43)	0.9	**0.3**	0.7	2.6	6.3	8.7	12.4	**14.5**	12.5	8.5	5.0	2.7	—0.3
120.	Lindesnes I (1868—1875)	2.5	2.0	**1.7**	3.9	6.2	7.6	11.0	**12.8**	12.4	9.8	6.2	4.2	1.3
121.	Lindesnes II (1924—1930)	1.8	**0.7**	1.1	3.2	6.2	6.9	9.8	**12.1**	11.9	9.2	6.1	3.2	0.0
123.	Lista (1867—1877)	1.0	**0.6**	1.3	3.4	5.3	7.4	10.1	**11.2**	9.8	7.1	3.7	0.1	—0.6
131.	Vibberodden (1924—1930)	1.2	**0.4**	1.0	3.4	5.2	6.8	10.0	**12.2**	10.7	7.5	5.3	1.8	—0.6
166.	Slåtteröy (1924—1930)	4.5	**3.3**	**3.3**	4.1	6.2	8.4	11.1	**12.4**	**12.4**	10.1	8.0	5.9	2.7
	Trondheimsfjord[1])(1894—1906)	2.7	**2.6**	3.0	4.0	5.9	8.8	**11.6**	11.0	9.4	6.6	4.7	3.2	2.1
225.	Titran (1921—1930)	1.1	**0.6**	1.5	3.5	5.4	8.6	11.1	**11.8**	8.2	4.8	2.8	1.2	—0.5
254.	Nordöyan (1891—1930)	3.4	3.0	**2.9**	3.6	5.0	7.4	10.6	**11.2**	9.7	7.5	5.8	4.2	2.6
255.	Prestöy (1872—1890)	1.4	**0.9**	1.2	2.7	5.0	8.7	10.7	**11.3**	9.0	5.6	2.7	1.9	0.6
265.	Myken (1922—1930)	3.8	**3.3**	3.5	4.1	4.9	7.1	10.5	**11.7**	9.8	7.8	6.0	4.4	3.0
282.	Sörvågen (1923—1932)	1.1	**0.4**	0.8	1.5	3.7	6.3	8.9	**10.0**	7.6	4.7	2.8	1.8	—0.2
285.	Skomvær (1921—1930)	2.7	1.8	**1.5**	2.5	4.2	6.2	8.5	**9.8**	7.6	4.9	4.3	3.2	1.1
306.	Loppa (1923—1932)	2.0	**1.4**	**1.4**	1.9	2.9	4.4	8.4	9.0	7.2	4.9	3.3	2.8	1.1
309.	Fruholmen (1867—1875)	1.5	**0.8**	1.0	1.8	2.7	4.6	6.7	**7.6**	7.0	5.3	3.8	2.2	0.5
310.	Ingöy (1922—1930)	—0.6	**—1.5**	—1.1	—0.3	2.4	4.8	7.7	**8.1**	5.8	3.2	1.2	—0.1	—1.8
312.	Gjesvær (1881—1925)	—0.2	**—0.5**	**—0.5**	0.5	2.0	4.2	6.5	**7.2**	5.5	3.6	1.9	0.7	—1.0
314.	Sværholt (1922—1932)	1.8	**0.9**	1.1	1.5	2.8	4.5	7.3	**8.3**	6.5	4.5	3.4	2.4	0.6
320.	Makkaur (1926—1930)	1.8	**1.3**	1.5	1.6	2.6	3.9	6.2	**7.6**	6.9	4.7	3.1	2.8	1.0

[1]) 9h.

Tab. XIII (cont.).

Mean Monthly and Annual Minima.

1931—40 (14h).

No. Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10. Ferder	0.5	0.4	**0.2**	2.8	7.2	12.0	15.8	**15.9**	13.2	8.2	5.6	1.8	—0.7
107. Torungen	1.0	**0.2**	**0.2**	1.9	5.7	8.6	12.0	**14.7**	12.0	8.2	5.0	2.0	—0.3
121. Lindesnes II	1.9	1.5	**1.4**	3.2	6.4	7.4	10.7	**13.1**	11.6	8.9	6.4	3.8	0.5
166. Slåtteröy	4.7	4.1	**3.8**	4.7	6.7	9.3	12.4	**13.6**	11.6	10.0	8.2	5.7	3.5
175. Hellisöy	5.1	4.1	**4.0**	4.7	6.2	8.5	11.3	**12.6**	11.8	9.6	7.9	6.1	3.8
207. Kråkenes	4.7	4.2	**3.9**	5.6	6.5	8.5	10.2	**12.5**	11.4	9.2	7.6	5.9	3.5
215. Ona	4.6	4.1	**3.8**	4.2	6.3	8.6	11.0	**12.8**	11.4	9.1	7.3	5.7	3.7
254. Nordöyan	2.2	**1.9**	2.1	3.8	5.6	8.0	10.3	**12.0**	10.2	7.4	5.5	3.5	1.2
265. Myken	4.1	3.8	**3.4**	3.9	5.7	7.5	10.3	**11.9**	10.0	8.1	6.6	5.1	3.3
285. Skomvær	2.6	2.0	**1.7**	3.0	5.1	6.9	9.0	**10.1**	8.5	7.0	5.7	3.8	1.4
291b. Andenes II	0.6	0.3	**0.1**	1.4	4.2	6.4	9.2	**10.4**	7.1	5.4	3.6	1.9	—0.3
310. Ingöy	—0.9	**—1.3**	—1.2	0.2	3.1	5.1	7.5	**8.6**	6.0	3.3	1.6	0.5	—1.6

Table XIV.

Difference between the Mean Extremes.

1871—1930 (8h).

No. Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107. Torungen	4.6	3.7	**3.4**	4.0	6.2	**6.8**	5.0	**3.4**	3.5	4.8	4.9	5.0	18.8
141. Utsira	2.3	2.4	**2.0**	2.8	4.0	**4.1**	3.5	2.5	2.8	3.5	3.2	2.9	13.8
175. Hellisöy	2.1	1.7	**1.4**	2.0	3.8	**4.9**	4.4	3.5	3.1	3.4	3.1	2.6	12.3
215. Ona	1.6	1.3	**1.2**	1.7	2.6	**2.9**	**2.9**	2.1	2.1	2.5	2.4	2.0	10.5
291a. Andenes I	3.7	3.4	3.3	3.8	**4.5**	**4.5**	3.5	**3.0**	4.0	5.1	3.6	4.0	14.9

Shorter Series (8h).

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Flödevigen,[1]) surface (1924—43)	4.3	3.5	**3.1**	4.7	6.3	**7.2**	6.3	4.2	4.2	5.9	5.0	5.0	20.2
» 1 m depth (1919—43)	4.6	3.7	**3.2**	4.2	6.1	**7.4**	6.3	3.9	3.6	4.9	5.1	4.9	19.5
120. Lindesnes I (1868—1875)	3.5	3.2	3.3	**2.7**	3.7	**6.7**	6.6	4.8	3.3	3.4	4.3	3.5	16.6
121. Lindesnes II (1924—1930)	4.6	4.1	**3.9**	4.1	5.6	7.6	**7.9**	5.6	4.1	4.2	4.8	4.8	18.4
131. Vibberodden (1924—1930)	4.0	3.9	**3.5**	**3.5**	5.6	6.5	**7.5**	4.9	4.3	5.0	4.2	5.4	18.4
166. Slåtteröy (1924—1930)	1.8	2.0	**1.3**	2.1	3.5	**4.8**	4.6	4.3	2.5	2.9	4.0	2.5	14.1
Trondheimsfjord[1]) (1894—1906)	2.7	**2.1**	**2.1**	2.5	4.0	**5.4**	5.1	4.4	3.0	3.3	3.4	2.9	14.8
225. Titran (1921—1930)	**3.7**	3.8	**3.7**	**3.7**	4.5	3.9	4.5	3.1	5.1	**5.6**	4.6	4.8	16.4
254. Nordöyan (1891—1930)	1.6	**1.4**	**1.4**	1.8	3.0	**4.1**	3.4	2.5	2.4	2.6	2.2	2.1	11.9
255. Prestöy (1872—1890)	3.3	3.1	**2.8**	3.4	**5.2**	5.0	4.4	3.1	3.7	4.2	4.8	3.3	14.7
265. Myken (1922—1930)	2.1	2.3	1.8	**1.4**	2.9	3.6	**3.8**	2.7	2.4	2.7	2.3	2.6	11.9
282. Sörvågen (1923—1932)	4.5	4.1	3.8	**3.3**	4.1	5.3	**6.1**	5.0	4.2	4.5	4.5	5.0	15.9
285. Skomvær (1921—1930)	3.1	3.3	3.5	**3.0**	3.3	**4.2**	3.9	3.5	3.5	4.3	3.6	3.5	12.4
306. Loppa (1923—1932)	2.3	2.0	**1.7**	**1.7**	2.7	**5.3**	4.0	3.0	2.3	2.9	2.8	2.5	11.6
309. Fruholmen (1867—1875)	3.1	3.1	2.3	2.1	2.1	**2.9**	**2.9**	1.9	**1.6**	1.9	2.2	2.2	9.3
310. Ingöy (1922—1930)	4.1	4.5	**3.4**	4.2	5.1	**5.9**	5.0	4.2	3.5	3.9	3.7	4.3	14.6
312. Gjesvær (1881—1925)	2.7	2 5	**2.3**	2.7	3.1	**3.8**	3.2	2.6	3.0	3.0	3.0	2.7	11.3
314. Svæ rholt (1922—1932)	2.5	2.8	**2.1**	2.2	2.6	4.5	**4.6**	3.9	2.8	2.8	2.5	2.6	12.1
320. Makkaur (1926—1932)	1.5	1.1	**0.7**	1.3	1.5	2.3	**3.2**	2.4	1.5	2.2	2.0	0.8	9.1

[1]) 9h.

Difference between the Mean Extremes.

Table XIV (cont.) *1931—40 (14h).*

No	Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
10.	Ferder	4.2	**2.9**	3.2	5.4	6.8	**7.0**	4.9	4.8	4.5	5.5	4.3	5.0	22.5
107.	Torungen	4.7	4.4	**2.9**	4.4	6.4	7.0	**7.1**	4.3	4.8	4.0	5.1	4.6	20.3
121.	Lindesnes II	4.9	4.1	**3.8**	4.4	6.8	**9.4**	8.4	6.3	5.6	5.0	4.2	4.9	19.6
166.	Slåtteröy	1.9	**1.4**	1.7	2.1	3.9	**4.5**	3.7	3.7	3.2	2.8	2.3	2.8	14.1
175.	Hellisöy	1.8	1.6	**1.3**	1.8	4.0	4.6	**4.7**	3.8	3.4	3.2	2.6	2.5	13.1
207.	Kråkenes	2.3	**1.5**	**1.5**	**1.5**	3.7	4.1	**5.3**	3.9	2.9	2.9	2.2	2.3	13.0
215.	Ona	1.7	1.3	**1.2**	2.5	3.3	**4.0**	3.7	2.7	2.8	2.6	1.9	1.9	11.9
254.	Nordöyan	3.7	3.1	3.0	**2.3**	3.4	**5.1**	4.2	3.9	3.8	4.0	3.3	3.5	15.4
265.	Myken	2.3	1.9	**1.8**	2.0	2.9	4.0	**4.5**	2.5	2.9	2.7	2.2	2.1	11.9
285.	Skomvær	3.6	3.3	3.4	3.5	3.6	4.1	**5.4**	3.4	3.5	3.0	2.7	3.4	13.2
291b.	Andenes II	3.7	2.7	2.8	3.2	3.8	4.0	3.6	2.6	**4.5**	**2.5**	2.9	3.3	13.5
310.	Ingöy	4.7	4.1	4.0	4.3	4.0	**6.1**	5.9	4.0	**3.9**	4.1	4.2	4.7	15.2

Table XV. **Absolute Extremes (8h).**

No. Station	1. Max.		2. Max.		3. Max.		1 Min.		2. min.		3. Min.	
107. Torungen (1876—1930)	22.°2	26/7 — 25	21°.7	31/7 — 01	20°.6	17/8 — 80	Freezing p.		Freezing p.		Freezing p.	
Flødevigen (1919—43)	22.5*	July 1925	21.6	July 1933	21.6	Aug. 1938	— 1°.5	Febr.1940	— 1°.4	March 1923 Febr. 1922	— 1°3	March 1937 Febr. 1929
120. Lindesnes I (1868—75)	20.9	26/7 — 72	19.8	20/8 — 68	18.7	7/8 — 70	— 1.0	93,24/1 — 75	0.0	12/2 — 70	0.0	14,24/2 — 71
141. Utsira (1867—1903, 1912—30)	20.0	14/7 — 72	19.0	31/7 — 25	18.9	21/7 — 14	0.4	4/3 — 89	0.6	11/2 — 71	0.7	17/3 — 88 20/1 — 17
175. Hellisøy (1871—1930)	18.1	30/7 — 25	17.9	14/7 — 72	17.8	9/8 — 27	0.9	27/1 — 17	0.9	18,19/2 — 00	1.5	1/3 — 86
215. Ona (1868—1930)	16.4	11/7 — 27	16.2	11/8 — 25	16.2	5/7, 30/8 — 30	1.8	9/2 — 95	2.0	4/3 — 81	2.1	4/3 — 88
Trondh.fj. (1894—1906)	20.1	July 1901	18.9	July 1903	18.1	Aug. 1906	1.0	Jan. 1906	1.2	March 1899	1.3	Jan. 1895
254. Nordøyan (1891—1930)	18.0	22,23/7 — 25	17.8	19,20/7 — 30	17.4	2,3/8 — 24	1.0	18-21/2 — 00	1.2	20/1, 28/2 — 29	1.4	6-14/3 — 93
282. Sörvågen (1923—32)	18.3	21/7 — 30	17.8	1/8 — 24	16.7	7/7 — 25	— 1.6	11/2 — 28	— 1.1	21/2 — 26	— 0,5	28/2 — 23
306. Loppa (1903—32)	14.6	10,12/7 — 30	14.0	31/7 — 3/8 — 27			— 0.5	20/1 — 24	1.0	Febr.— April 1926	1.0	17,18/3 — 27
314. Sværholt (1922—32)	15.0	9/8 — 29	14.0	14/8 — 32	13.4	10/7, 22/8 — 30	— 1.4	24/1, 5/2 — 29	0.8	29/3 — 30	0.8	3/3 — 23
320. Makkaur (1926—32)	12.2	8/8 — 27					0.4	13/4 — 26				

1931—44 (14h).

No. Station	1. Max.		2. Max.		3. Max.		1 Min.		2. min.		3. Min.	
10. Ferder	23°.9	10/8 — 38	22°.9	9/7 — 33	22°.8	23/6 — 36	Freezing p.	Jan.-March 1942	Freezing p.	Febr.1941	Freezing p.	Febr 1940 March 1937
107. Torungen	22.4	9/7 — 33	21.4	7/8 — 37	21.3	15/8 — 38	Freezing p.	Jan.-March 1942	Freezing p.	Jan. 1941	Freezing p.	Febr. 1940 — 1937
121. Lindesnes II	22.0	5/8 — 37	22.0	14/8 — 38	21.8	1/8 — 41	Freezing p.	Jan.-March 1942	Freezing p.	Febr.1941	Freezing p.	Febr. 1940
175. Hellisøy	19.1	31/7 — 41	18.9	2/9 — 39	18.5	11/8 — 38	1°.3	15,16/3 — 37	1°.7	28/2 — 31	1°.8	March-April 1942
207. Kråkenes	19.4	12/8 — 38	18.0	29/7 — 41	17.4	Aug.-Sept. 1939	2.0	3/2 — 40	2.1	27,28/1 — 42	2.1	31/3 — 37
215. Ona	18.6	10/8 — 38	17.2	31/7 — 41	16.3	9/8 — 34	1.2	26/1 — 42	2.3	18,20/2 — 40	2.6	2,4/2 — 41
265. Myken	18.6	30/7 — 41	18.4	9/8 — 34	16.8	27/7 — 37	1.8	4/4 — 44	2.0	13,14/3 — 42	2.3	5-7,22/1 — 41 5/3 — 33
285. Skomvær	17.1	22/7 — 34	17.0	23/7 — 41	16.3	29/7 — 32	— 0.6	20/2 — 33	0.2	17/1 — 40 10/3 — 37	0.4	26/2 — 42

Table XVI.

Monthly and Annual Means.

10. **Ferder.** 1927—45.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.0	1.1	1.5	4.5	9.3	14.4	17.1	17.0	14.4	10.6	7.0	3.9	8.6
1927									15.0	10.3	5.9	**1.5**	
28	0.8	1.2	1.4	3.9	9.7	**12.0**	**14.3**	**15.5**	14.0	10.0	7.3	5.2	7.9
29	1.9	—0.3	1.6	3.5	**8.2**	12.6	15.8	**15.5**	14.3	11.2	7.8	6.2	8.2
30	**4.5**	2.1	2.0	5.2	10.3	15.5	18.6	18.7	14.6	11.4	8.9	5.0	9.7
14^h													
1931	2.1	0.8	1.0	3.9	9.6	13.0	16.3	16.9	**13.2**	10.6	7.6	4.8	8.3
32	4.3	2.7	1.9	5.0	10.0	14.5	18.3	18.9	15.5	10.7	6.5	5.2	9.5
33	3.1	1.9	1.6	5.5	10.3	**18.3**	**19.6**	17.6	16.3	12.1	8.3	2.2	9.7
34	3.2	3.1	3.6	5.5	10.8	14.7	18.7	18.4	16.1	**12.7**	8.2	**6.5**	**10.1**
35	3.4	**3.4**	2.6	5.7	10.2	14.8	18.8	18.1	15.0	11.6	8.2	3.5	9.6
1936	1.9	1.2	1.2	4.7	**11.2**	17.0	19.3	18.4	15.0	10.3	7.8	6.0	9.5
37	3.7	—0.7	—0.1	4.4	**11.2**	14.7	19.0	**20.2**	15.8	12.1	8.4	2.6	9.3
38	1.5	2.0	**4.0**	**6.2**	9.2	13.2	17.2	19.4	15.5	12.3	**9.4**	5.5	9.6
39	1.2	2.4	3.0	5.3	10.7	14.7	16.9	19.4	**17.5**	10.3	6.5	3.0	9.2
40	1.5	—0.2*	0.0	2.8	10.0	17.1	18.2	16.9	**13.2**	**9.9**	6.3	4.0	8.3
1941	**—0.9**	**—1.6**	—0.6	2.7	8.7	14.9	19.4	18.0	14.7	11.0	**5.8**	3.0	7.9
42	—0.1	—1.1*	**—1.0***	**1.9***	8.7	12.5	16.7	16.4	14.1	11.1	8.0	6.1	**7.8**
43	1.3	2.3	4.0	6.1	10.9	15.5	17.9	17.3	15.2	11.7	8.0	4.9	9.6
44	4.2	2.6	2.9	4.7	8.9	13.5	18.5	19.2	15.5	11.3	7.7	4.8	9.5
45	2.5	0.6	2.9	6.5	10.1	14.9	19.5	18.4	15.6	11.7	8.2	5.2	9.7

Flödevigen. 1919—43.

9^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.8	1.8	1.9	4.4	8.8	13.0	15.8	16.0	14.2	11.0	7.3	4.8	8.5
1919	2.9	0.5	2.0	4.4	11.2	12.9	16.7	14.5	13.4	10.9	4.3	3.2	8.1
20	2.2	2.5	3.3	5.3	9.3	14.4	15.4	15.8	13.8	10.6	7.4	4.5	8.7
1921	4.3	2.9	4.5	6.9	10.7	13.7	14.5	15.1	13.6	11.5	7.0	5.3	9.2
22	3.4	—0.3	1.8	3.4	6.9	12.4	14.9	15.2	13.8	9.6	6.9	5.0	7.8
23	4.5	1.8	0.7	4.2	7.7	10.6	14.4	14.7	12.8	10.9	7.6	3.7	7.8
24	0.3	1.0	0.4	3.0	6.6	11.5	14.4	15.7	14.4	11.6	8.6	6.4	7.8
25	5.4	4.2	2.8	5.5	9.8	12.9	18.6	17.4	14.1	10.5	6.4	4.2	9.3
1926	2.6	0.2	2.7	5.1	9.4	14.1	17.1	17.0	14.1	10.4	7.3	5.2	8.8
27	4.3	2.7	3.2	4.9	7.7	10.4	16.9	17.2	14.9	11.2	7.1	1.8	8.5
28	2.2	2.0	1.6	4.3	9.1	10.8	13.0	14.7	14.0	10.6	8.0	6.3	8.0
29	1.6	0.2	2.6	3.9	8.4	11.4	14.8	14.6	14.4	11.4	7.9	6.1	8.1
30	4.6	1.9	2.5	5.3	9.7	13.8	17.7	17.3	14.3	11.5	8.8	5.9	9.4
1931	3.3	1.5	1.0	3.7	8.3	11.1	15.0	16.7	13.6	10.8	7.5	5.5	8.2
32	4.5	3.5	1.9	4.8	9.2	13.7	17.0	17.7	15.0	10.5	7.1	5.5	9.2
33	3.2	3.0	1.9	5.4	9.6	16.4	17.5	16.2	15.6	11.7	7.8	3.6	9.3
34	4.0	4.4	3.8	5.0	9.1	13.2	16.9	16.6	15.3	12.7	8.8	6.7	9.7
35	3.9	4.2	2.8	5.1	9.6	12.8	15.8	16.7	14.1	11.4	7.7	4.2	9.0
1936	3.0	1.5	1.3	4.1	10.4	14.9	17.5	17.3	14.7	11.0	7.7	6.6	9.2
37	3.5	0.1	—0.3	3.0	9.1	12.8	17.4	19.3	15.0	12.3	8.9	4.1	8.8
38	2.2	3.3	5.1	6.4	8.9	12.1	15.9	18.0	15.0	12.3	9.7	5.4	9.5
39	1.9	3.9	3.4	5.1	10.0	12.6	15.4	17.9	16.9	10.3	6.9	4.7	9.1
40	2.8	0.4	1.0	2.5	9.3	14.9	15.9	15.8	12.4	10.0	6.6	5.4	8.1
1941	—0.2	—0.6	0.0	2.5	7.6	13.3	17.7	16.6	14.7	11.7	6.6	4.9	7.9
42	1.5	0.0	—0.1	1.7	8.0	11.9	14.8	15.6	14.5	11.5	8.7	6.5	7.9
43	1.8	3.6	4.4	5.8	9.5	14.2	16.8	16.4					

Table XVI.

Monthly and Annual Means.

107. **Torungen.** 1867—1942.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.5	1.4	1.4	3.8	8.2	12.7	15.4	15.7	13.7	10.5	7.1	4.4	8.1
1867							14.2	16.3	14.2	10.6	7.6	3.6	
68	0.0	2.7	2.8	4.8	9.6	12.9	17.5	18.4	14.5	10.9	7.4	5.1	8.9
69	2.6	3.9	1.1	4.9	8.6	12.2	14.5	15.2	13.8	10.9	6.8	3.3	8.2
70	1.7	—0.5	0.6	4.0	8.3	12.1	15.6	17.0	12.4	10.0	6.8	2.2	7.5
1871	0.5	—0.7	1.7	3.1	7.8	13.2	15.0	16.0	13.9	9.2	6.2	4.6	7.5
72	3.8	1.8	2.0	4.2	8.2	14.2	**18.5**	17.2	15.1	11.8	8.6	4.0	9.1
73	4.2	2.3	2.1	4.8	7.8	13.4	16.0	15.8	14.9	11.4	7.7	6.1*	8.9
74	4.6*	3.0*	2.6	5.1	8.3	12.2	16.1	15.3	13.9	11.7	8.1	3.2	8.7
75	0.2	0.1	—0.1	4.2	8.6	12.6	16.3	17.1	15.0	10.3	5.5	3.4	7.8
1876	2.1	1.1	0.7	3.3	8.2	12.6	15.2	15.5	13.6	10.4	6.8	1.3	7.6
77	0.4	0.6	0.7	2.4	6.4	11.2	14.6	15.4	12.5	10.4	7.9	5.6	7.3
78	2.5	2.6	2.8	5.6	9.7	13.1	16.1	17.2	15.2	12.0	7.3	2.9	8.9
79	0.9	—0.5	1.2	2.6	8.0	12.1	15.6	16.7	13.9	11.0	6.2	3.4	7.6
80 /	1.7	2.2	2.4	4.4	8.2	13.4	15.9	**18.7**	**16.2**	10.2	6.5	4.5	8.7
1881	0.6	—1.1	—0.5	1.6	7.1	11.9	14.5	14.4	13.3	9.3	7.0	5.3	**7.0**
82	4.9	3.9	**4.2**	5.9	9.1	13.6	16.3	17.0	14.9	11.1	6.4	2.5	9.2
83	0.7	1.7	0.9	3.5	7.5	14.2	16.6	15.8	14.3	11.3	8.4	5.8	8.4
84	3.6	3.0	1.7	4.7	8.0	11.8	16.7	17.5	16.0	**12.3**	8.1	5.0	9.0
85	1.9	1.1	2.1	4.1	7.9	11.6	15.4	15.5	12.5	9.4	5.6	4.6	7.6
1886	2.8	0.2	—0.6	3.3	7.3	11.6	13.9	15.1	14.1	11.0	8.2	6.0	7.7
87	3.1	3.1	2.6	4.0	8.5	12.6	14.3	14.7	12.7	9.8	6.2	3.8	7.9
88	2.0	0.0	**—0.9**	**1.0**	6.6	12.2	14.6	14.0	13.1	9.7	6.4	4.7	**7.0**
89	3.4	1.1	0.0	3.1	**11.9**	12.1	15.2	15.0	13.3	9.8	7.5	4.5	8.1
90	4.0	2.6	2.8	4.4	10.0	11.6	13.5	14.9	14.2	11.2	7.7	3.0	8.3
1891	1.2	2.9	2.0	3.5	7.5	13.0	16.2	16.0	13.6	11.6	7.7	5.9	8.4
92	2.7	1.7	0.8	4.2	7.6	12.8	15.1	14.9	13.4	9.7	7.5	4.1	7.9
93	1.0	—0.7	1.1	4.1	9.2	13.9	16.5	16.7	13.7	11.3	7.6	5.7	8.3
94	3.1	2.7	2.5	5.7	8.4	12.5	16.3	15.2	13.2	9.0	6.4	5.2	8.4
95	1.6	**—1.5**	0.2	3.5	10.8	13.0	14.1	14.8	13.9	10.3	6.7	4.0	7.6
1896	1.6	2.5	1.6	3.5	9.5	**15.5**	16.0	16.1	13.7	10.1	6.7	2.8	8.3
97	0.4	1.5	1.0	3.1	8.0	12.8	14.9	16.8	14.1	10.7	7.6	4.4	7.9
98	4.5	3.3	1.5	3.9	7.4	12.0	13.7	13.8	12.9	10.4	7.1	6.0	8.0
99	2.9	1.7	2.1	3.9	7.6	12.8	16.4	15.9	13.1	10.7	8.6	4.9	8.4
1900	0.9	—0.8	—0.3	1.9	6.4	13.2	14.4	16.3	13.9	10.8	7.1	5.5	7.4
1901	2.8	—0.2	0.2	3.3	9.8	12.7	18.0	16.2	14.0	11.7	7.5	5.0	8.4
02	3.6	1.1	0.5	3.3	6.7	12.3	13.5	13.6	**11.9**	8.9	6.1	2.2	**7.0**
03	1.4	2.6	2.9	4.2	8.1	14.2	14.6	14.5	12.8	9.6	7.5	3.7	8.0
04	2.2	0.4	—0.3	2.7	7.0	12.9	13.8	15.1	13.9	10.7	7.5	4.7	7.6
05	4.2	3.2	1.9	3.2	7.8	13.8	15.8	14.5	12.9	**8.8**	5.4	4.4	8.0
1906	2.3	2.5	2.0	3.8	8.6	13.3	14.7	15.0	13.5	10.4	7.9	5.7	8.3
07	3.0	0.6	2.0	4.2	7.8	11.8	14.6	**13.4**	13.1	11.6	7.3	3.8	7.8
08	4.0	**4.1**	1.5	3.9	7.8	13.7	16.7	15.9	13.7	11.4	7.1	5.5	8.8
09	3.9	1.3	—0.4	2.8	7.2	12.4	14.4	14.8	13.4	12.2	7.0	4.7	7.8
10	3.4	2.1	2.6	5.1	9.4	14.5	16.4	16.8	14.6	11.1	6.2	4.4	8.9
1911	3.8	2.7	2.5	5.0	10.3	14.6	15.4	17.6	14.3	9.2	7.2	4.6	8.9
12	2.5	0.1	2.2	4.8	8.4	12.7	17.2	16.2	13.1	10.1	6.6	5.7	8.3
13	3.3	1.9	3.4	4.3	8.5	11.3	15.0	14.9	14.0	10.5	**9.0**	**6.7**	8.6
14	3.2	4.0	2.5	4.5	8.5	13.9	17.6	17.6	15.1	11.0	6.2	5.7	9.2
15	2.0	1.5	0.7	3.8	8.0	12.2	15.0	16.1	13.6	9.2	4.4	2.3	7.4
1916	2.5	2.3	0.4	3.3	8.0	11.5	16.0	15.7	13.2	9.9	6.8	4.2	7.8
17	0.4	—1.0	—0.5	1.2	6.5	13.1	16.0	16.8	13.8	10.2	7.3	4.2	7.3
18	1.4	0.0	—0.3	3.1	8.9	10.2	14.0	15.4	12.3	10.4	7.5	4.4	7.3

Table XVI.

Monthly and Annual Means.

107. **Torungen.** 1867—1942. (Cont.).

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1919	2.4	0.3	1.1	3.1	9.4	11.9	16.4	14.0	12.8	9.7	4.3	2.5	7.3
20	1.6	2.0	3.0	4.5	8.3	13.7	15.0	15.1	13.2	9.7	7.8	4.4	8.2
1921	3.8	2.5	3.9	6.1	10.0	13.2	14.0	14.6	12.8	10.9	7.1	5.0	8.7
22	3.7	—0.9	1.3	3.0	6.5	11.8	14.3	14.9	13.3	8.9	6.7	5.0	7.4
23	3.8	1.6	0.4	3.5	7.2	10.2	13.9	14.3	12.5	10.3	7.1	2.7	7.3
24	—0.1	0.1	0.1	2.5	6.1	11.2	14.1	15.5	14.3	11.4	8.2	6.6	7.5
25	5.3	4.1	2.2	4.6	9.1	12.2	18.1	17.1	13.7	10.3	6.3	2.9	8.8
1926	2.0	—0.4	2.1	4.4	8.8	13.7	16.9	16.6	13.7	10.0	6.9	4.7	8.3
27	4.3	2.4	2.9	4.0	7.0	10.0	16.6	17.2	15.0	10.7	6.5	1.2	8.2
28	2.1	1.7	1.2	4.2	9.4	11.4	12.9	14.4	13.4	10.1	7.4	5.5	7.8
29	1.0	—0.2	1.9	3.4	8.0	11.8	14.5	14.4	13.6	11.1	8.1	6.3	7.8
30	4.8	1.8	2.1	5.3	9.5	14.2	17.5	17.3	13.9	11.3	8.4	5.6	9.3
14h													
1931	2.8	1.5	0.4	2.8	7.6	10.7	14.9	16.3	12.6	10.2	8.0	5.0	7.7
32	4.6	2.5	1.2	4.2	8.6	12.8	16.7	17.5	14.5	10.6	6.9	5.3	8.8
33	3.5	2.4	1.5	4.6	9.3	15.9	17.3	16.1	15.3	12.0	7.4	2.9	9.0
34	4.1	3.8	3.4	4.6	8.5	12.9	16.8	16.4	15.2	12.3	8.1	6.9	9.4
35	3.5	3.5	2.2	4.3	9.0	12.4	15.9	16.7	14.2	10.8	8.0	3.7	8.7
1936	2.5	1.3	0.7	3.4	10.0	14.5	17.8	17.0	14.3	9.9	7.6	6.8	8.8
37	4.3	—0.3	—0.7	2.8	9.0	13.0	17.1	19.1	14.6	12.0	8.2	3.3	8.5
38	1.9	2.5	4.3	5.8	8.4	11.8	15.4	17.8	15.0	11.9	9.5	6.0	9.2
39	1.6	3.6	2.8	4.3	9.7	12.5	15.3	17.8	16.4	9.9	7.0	4.0	8.7
40	2.1	0.4	0.8	2.3	8.7	14.9	15.8	15.5	12.3	9.7	6.3	4.9	7.8
1941	—0.5	—0.9	—0.3	2.2	7.2	13.3	17.3	16.1	13.9	11.0	6.6	4.1	7.6
42	1.0*	—0.5*	—0.6*	1.4	8.0	12.2	14.8	15.5	14.2	11.3	8.4	6.6	7.7

121. **Lindesnes II.** 1923—41.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	3.7	2.6	2.8	4.9	8.5	11.0	14.1	15.1	14.0	11.3	8.2	5.7	8.5
1923											8.3	4.4	
24	2.1	2.6	1.4	4.0	6.5	9.8	12.2	15.3	14.0	11.8	9.3	7.5	8.0
25	6.7	5.2	3.3	5.2	9.6	10.5	16.9	15.3	13.0	10.6	8.0	4.6	9.1
1926	3.2	0.8	3.3	4.9	9.0	11.8	14.9	15.5	13.8	10.8	7.9	6.0	8.5
27	4.9	3.2	3.4	5.0	7.4	9.3	15.8	16.4	14.9	11.8	7.6	2.5	8.5
28	3.5	2.7	1.7	4.5	8.7	8.7	11.3	13.9	13.8	11.2	8.7	6.8	8.0
14h													
1929	2.1	0.4	4.0	5.7	8.8	10.4	13.4	14.5	14.1	11.6	8.9	7.1	8.4
30	5.8	2.9	3.9	6.0	9.9	13.8	16.5	17.3	14.8	12.1	9.1	6.5	9.9
1931	3.7	2.0	2.3	4.2	9.4	9.5	14.1	16.7	13.4	10.5	7.9	6.3	8.3
32	5.6	4.7	3.3	5.4	9.5	12.6	15.1	16.8	14.6	10.9	7.9	6.3	9.4
33	3.7	2.7	1.7	5.4	8.9	14.3	15.3	14.9	15.3	10.9	7.2	5.0	8.8
34	5.1	5.3	4.5	5.2	8.5	12.5	15.6	16.4	16.3	13.5	9.9	7.2	10.0
35	5.1	5.3	3.8	5.9	10.2	12.8	14.4	16.3	14.9	12.5	9.2	5.2	9.6
1936	4.0	2.5	3.0	5.3	11.4	14.5	16.5*	16.3*	14.4*	10.5*	8.5	7.5	9.5
37	4.9	1.3	0.9	4.4	9.4	12.2	16.3	18.9	14.6	12.5	8.8	4.7	9.1
38	3.6	4.1	5.6	6.7	8.8	10.6	15.2	17.4	14.7	13.1	10.8	6.7	9.8
39	3.2	5.4	3.9	5.4	10.0	10.5	15.0	17.6	17.0	11.0	7.6	5.3	9.3
40	3.0	0.4	2.2	3.3	8.2	12.7	14.0	14.9	11.9	10.5	7.4	5.9	7.9
1941	0.0	—0.6	1.5	3.2	7.6	10.3	16.6	15.3	14.4	11.5	7.2	5.6	7.7

Table XVI.

Monthly and Annual Means.

141. Utsira. 1867—1931.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.1	4.2	4.0	5.3	8.2	11.4	14.0	14.6	13.4	10.9	8.4	6.5	8.8
1867								15.0	14.0	10.3	8.0	5.8	
68	3.6	4.5	4.3	5.2	8.3	12.0	13.8	16.5	14.0	11.1	8.4	7.0	9.1
69	5.1	5.6	4.6	5.8	7.9	8.9	11.9	13.7	12.1	10.6	7.8	6.2	8.4
70	4.5	3.4	4.6	5.2	8.0	10.9	13.3	16.3	11.6	10.6	8.5	5.8	8.6
1871	4.6	2.2	3.8	4.9	7.5	11.3	14.3	14.6	13.2	10.3	7.3	5.6	8.3
72	5.7	4.2	3.6	5.4	8.0	13.2	15.7	15.6	14.4	**12.6**	9.3	6.5	9.5
73	6.1	4.3	4.5	5.9	7.8	11,3	15.0	15.1	14.2	11.4	9.2*	8.0	9.4
74	6.2	5.5	5.0	6.2	9.3	10.6	13.9	15.0	13.7	12.1	9.8	5.1	9.4
75	4.1	2.7	3.9	6.3	8.7	12.1	15.9	15.9	14.9	11.6	7.8	6.1	9.2
1876	5.2	4.1	3.7	4.7	7.1	11.7	14.2	14.8	14.1	12.1	7.3	5.3	8.7
77	3.8	3.0	3.0	4.7	8.1	11.0	13.9	15.5	12.9	10.4	9.4	7.5	8.6
78	5.5	5.4	5.6	6.5	**10.1**	12.1	14.4	15.9	14.9	12.3	8.7	5.8	9.8
79	3.9	3.9	3.2	5.2	7.8	12.2	14.7	16.0	14.6	11.6	8.5	6.8	9.0
80	5.9	4.5	5.0	6.2	7.9	12.6	14.7	16.4	15.4	10.8	7.3	6.4	9.4
1881	4.3	3.0	2.7	4.8	8.0	10.5	13.8	13.8	13.6	10.6	8.8	7.7	8.5
82	6.0	5.5	**6.2**	6.4	9.2	12.3	15.9	15.6	15.2	12.2	8.4	6.1	**9.9**
83	5.4	4.4	3.1	5.5	7.3	10.3	16.0	16.2	14.8	11.8	**9.8**	7.8	9.4
84	6.4	5.3	4.5	6.2	8.8	11.0	14.8	16.2	**15.5**	12.3	8.4	7.7	9.8
85	5.2	5.2	4.8	6.1	8,4	10.7	14.2	15.3	13.2	10.2	7.9	7.0	9.0
1886	5.4	3.4	2.6	5.7	8.3	11.5	13.4	14.8	12.9	10.8	9.0*	6.9	8.7
87	5.9	5.8*	5.0*	5.7*	8.5*	11.4*	12.9*	13.4*	12.8*	10.0	7.4	6.0	8.7
88	5.1	3.4	**1.9**	**4.0**	7.0	11.3	13.9	13.4	12.2	**8.8**	7.0	5.3	7.8
89	4.2	3.1	2.5	4.3	8.5	**13.9**	11.6	13.6	12.4	11.1	8.8	6.6	8.4
90	5.5	4.4	4.6	6.0	10.0	10.8	12.2	13.4	12.4	9.8	8.6	5.8	8.6
1891	3.9	4.2	4.3	5.0	7.8	11.1	14.9	15.4	13.5	11.4	9.2	6.8	9.0
92	5.5	4.7	3.7	4.8	7.0	10.3	12.4	12.6	12.8	10.4	9.1	5.7	8.2
93	3.8	3.5	4.2	5.8	8.2	10.8	15.0	15.1	11.9	11.5	7.9	7.2	8.7
94	5.0	4.8	4.7	6.2	8.5	12.1	15.6	15.5	12.4	10.0	8.1	7.1	9.2
95	4.3	2.5	3.5	4.5	8.4	12.3	13.2	15.2	13.6	10.9	8.5	5.9	8.6
1896	5.5	5.1	4.1	5.4	8.8	12.2	13.8	14.9	13.5	11.0	8.7	6.4	9.1
97	4.1	3.5	3.9	4.4	7.0	11.2	14.2	16.2	14.3	11.6	8.9	6.5	8.8
98	5.9	5.2	3.9	5.0	7.4	11.1	**11.4**	11.8	13.2	11.4	8.2	7.2	8.5
99	5.7	4.7	4.3	5.2	8.3	11.1	15.0	12.9	13.0	11.0	**9.8**	6.6	9.0
1900	4.7	**1.5**	3.4	4.5	6.7	11.6	14.3	14.2	11.8	10.3	8.9	7.2	8.3
1901	5.8	4.0	4.2	4.9	8.4	10.8	14.6	15.9	14.1	11.6	8.0	6.5	9.1
02	6.2	4.5	4.4	4.5	7.4	11.9	14.2	**11.5**	**10.9**	8.9	7.4	5.4	8.1
03	4.8*	4.7*	4.8*	5.2	8.1	11.6	13.5*	14.0	13.4	11.0	8.0*	6.3	8.8
04	5.5*	2.8*	3.0*	5.0*	8.0*	11.4	13.3*	14.3*	14.0*	11.5*	8.4*	7.0*	8.7*
05	6.2*	5.7	4.7	4.7*	7.6*	12.8*	14.6*	15.1	13.4	9.1*	7.7	7.0	9.0
1906	5.8	4.6*	4.4	5.6*	8.6	12.1	14.0	15.1	13.7	11.3	9.4	6.9	9.3
07	5.4	4.8	5.1	6.3	8.6	11.0	13.4	12.9	11.6	11.3	8.3	4.6	8.6
08	4.9	5.1	3.9	5.1	8.1	11.4	13.8	14.3	13.2	12.0	9.0	6.8	9.0
09	5.5*	4.4*	3.7*	5.0*	7.6*	11.0*	13.0*	13.2*	13.7*	12.0*	9.0*	6.0*	8.7*
10	4.7*	4.3*	4.1*	5.4*	8.6*	13.0*	12.8*	16.0*	14.2*	10.9*	7.0*	6.0*	8.9*
1911	5.0*	4.7*	4.4*	5.2*	9.0*	13.0*	13.5*	16.0*	13.8*	10.0*	8.0*	6.3*	9.1*
12	4.5	4.0	4.4	5.6	7.9	10.9	15.3	15.7	12.7	10.7	7.7	7.2	8.9
13	5.4	4.7	4.7	5.5	8.3	12.0	12.5	12.9	14.0	11.6	**9.8**	**8.1**	9.1
14	6.0	**6.2**	4.6	6.1	7.9	11.8	**16.7**	**17.0**	14.3	10.9	8.4	6.8	9.7
15	5.4	4.1	3.8	5.8	8.4	10.3	12.9	15.6	13.0	10.5	7.2	**4.4**	8.4
1916	4.6	4.1	3.1	4.8	8.3	10.2	13.7	13.3	12.7	10.0	8.6	7.0	8.4
17	**2.9**	3.9	3.2	4.6	7.4	12.0	12.9	16.4	14.4	11.2	9.4	6.6	8.7
18	4.5	3.7	3.1	4.9	9.6	11.0	13.0	15.1	12.3	11.4	9.2	7.1	8.7

Table XVI.

Monthly and Annual Means.

141. **Utsira.** 1867—1931. (Cont.).

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1919	4.9	2.8	3.5	4.7	9.0	10.8	13.7	12.9	12.5	10.0	**6.7**	4.5	8.0
20	3.7	3.6	4.0	5.3	8.5	12.3	14.9	13.7	12.9	11.3	8.6	6.3	8.8
1921	5.4	4.9	5.3	**6.6**	9.3	11.5	11.5	13.2	12.7	11.8	7.9	7.5	9.0
22	4.9	4.1	4.3	4.3	**5.7**	11.3	13.1	13.8	13.2	9.8	7.1	6.5	8.2
23	5.4	4.0	3.4	4.4	7.0	**8.1**	12.2	12.2	11.7	10.4	8.0	5.2	**7.7**
24	4.0	3.2	3.1	4.2	6.6	10.0	13.3	15.6	14.3	11.6	9.3	7.9	8.6
25	**6.9**	5.9	4.0	5.6	8.8	11.2	16.1	16.4	12.8	10.0	8.0	5.7	9.3
1926	4.8	3.6	4.1	5.3	8.6	13.2	15.1	13.6	13.1	10.4	8.7	6.2	8.9
27	5.7	4.9	4.4	5.3	7.1	10.5	14.9	15.7	14.5	11.0	8.0	5.2	8.9
28	4.9	4.1	3.2	5.4	10.0	9.6	11.8	13.8	12.3	9.8	8.0	6.6	8.3
29	4.9	2.0	4.2	5.9	8.3	10.6	12.7	13.1	12.1	10.5	8.9	7.2	8.4
30	6.3	3.6	4.3	6.0	8.9	**13.9**	16.2	16.3	13.4	11.2	8.2	6.0	9.5
1931	4.5	3.7	2.5	4.2	6.7	10.0	13.0	13.7	12.0	9.4	7.5	5.3	**7.7**

166. **Slåtteröy.** 1924—40.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.3	4.5	4.2	5.0	7.7	10.9	13.0	13.9	13.3	11.3	9.0	6.9	8.7
1924	**3.7**	4.5	3.4	**3.6**	**6.1**	9.7	12.7	15.2	14.2	11.9	10.0	8.3	8.6
25	**6.9**	6.0	4.6	5.1	8.8	10.5	15.0	15.8	12.8	10.8	8.9	6.4	9.3
1926	4.7	**2.9**	3.9	5.0	7.5	12.6	14.0	13.5	13.3	11.1	9.0	7.1	8.7
27	6.2	5.0	4.1	5.1	6.8	9.6	13.2	16.4	14.5	11.5	8.8	**5.8**	8.9
28	4.5	4.2	3.2	4.6	7.7	**8.9**	**11.4**	13.0	13.2	11.3	9.2	7.7	8.2
14h													
1929	5.7	3.3	4.6	6.3	7.8	10.3	12.6	13.2	13.2	11.5	9.6	7.8	8.8
30	6.8	4.9	4.9	5.7[1]	9.3[1]	12.9[1]	16.0[1]	15.4[1]	14.8	12.1	9.5	7.6	**10.0**
1931	5.2	3.6	2.6	4.5	7.1	10.6	13.2	13.5	11.5	**9.9**	8.7	6.6	**8.1**
32	6.0	5.7	5.2	5.7	8.7	11.5	13.8	15.4	13.1	10.8	**8.3**	5.9	9.2
33	5.4	4.9	4.2	5.4	8.5	**14.1**	16.0	14.0	14.7	10.8	9.1	7.4	9.5
34	6.4	**6.2**	**5.7**	5.7	7.8	11.0	14.2	15.6	15.3	12.8	9.6	**8.6**	9.9
35	6.7	6.1	5.1	5.7	8.1	11.4	14.7	13.8	14.1	11.8	9.8	7.4	9.6
1936	5.3	4.7	4.9	5.9	**9.4**	11.9	**16.8**	16.0	14.5	10.4	9.2	7.6	9.7
37	6.2	4.0	**2.2**	4.4	9.1	11.3	14.5	**17.1**	14.0	12.4	9.5	6.0	9.2
38	5.2	5.0	5.6	**6.5**	7.9	10.9	13.5	16.6	13.4	**13.0**	**11.1**	8.3	9.8
39	5.5	4.8	5.7	5.5	8.6	10.9	13.3	**17.1**	**16.1**	11.2	9.1	6.7	9.5
40	5.2	4.4	4.6	5.2*	8.0*	11.6*	14.5*	**12.8***	**10.7***	10.5*	8.8*	6.9*	8.6*

[1] 8h.

Table XVI.

Monthly and Annual Means.

175. **Hellisöy.** 1867—1945.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.5	4.7	4.3	5.0	7.2	10.2	12.5	13.4	12.9	10.8	8.7	6.8	8.5
1867									13.7	10.0	8.0	6.5	
68	4.8	4.8	4.6	5.4	7.9	11.0	11.7	15.5	13.7	11.4	8.7	7.8	8.9
69	6.1	5.7*	4.7*	5.6	7.3	8.3	11.1	12.6	12.2	10.9	8.6	6.4	8.3
70	5.0	4.4	4.6	5.4	7.5	10.2	11.4	13.2	11.2	10.0	8.4	6.2	8.1
1871	5.5	3.8	4.4	5.3	6.9	9.9	14.2	14.4	12.9	10.5	8.1	6.1	8.5
72	6.6	5.1	4.5	5.2	7.8	**12.8**	14.3	12.7	14.4	12.3	9.4	7.2	9.4
73	6.5	5.0	5.0	6.0	7.5	11.4	14.8	15.2	14.2	11.1	9.4	**8.2**	9.5
74	6.9	6.1	**5.7**	6.2	8.0	10.2	13.7	13.6	12.8	11.5	9.4	6.1	9.2
75	4.9	3.2	4.7	5.6	7.4	10.7	13.1	14.6	13.9	11.1	9.0	6.7	8.7
1876	5.9	4.6	4.1	4.1	5.7	10.3	12.6	13.3	13.0	11.0	7.9	6.1	8.2
77	4.5	3.5	2.9	4.1	**5.3**	9.1	12.4	14.3	11.7	9.8	8.9	6.8	7.8
78	5.9	5.2	5.3	6.1	8.6	10.6	11.8	14.3	14.2	12.2	9.5	6.9	9.2
79	5.4	3.7	3.8	4.6	7.1	10.0	13.7	14.9	13.2	11.0	8.1	6.1	8.5
80	5.5	5.0	4.7	5.1	6.9	10.5	12.2	14.5	**15.2**	10.6	7.6	6.1	8.7
1881	4.7	4.0	3.2	**3.6**	6.4	9.2	11.8	11.8	12.8	10.3	8.0	7.2	7.8
82	6.0	5.6	**5.7**	5.9	7.8	11.6	14.9	13.9	14.5	**12.4**	9.1	6.2	9.5
83	6.0	5.0	4.5	4.7	6.3	9.9	13.6	14.6	14.0	11.8	9.4	8.0	8.9
84	**7.2**	5.9	4.9	5.6	7.2	11.2	15.1	15.4	14.8*	11.8*	8.6*	6.8*	9.5
85	5.4	5.3	4.7	5.6	7.7	9.2	11.3	11.9	11.7	9.7	8.1	6.8	8.1
1886	5.4	4.5	**2.5**	4.7	6.8	10.4	12.1	12.8	12.5	11.5	**10.1**	7.7	8.4
87	6.7	6.2	5.2	5.7	7.5	9.9	11.5	12.0	12.7	10.2	8.2	6.8	8.6
88	5.7	4.7	3.4	4.0	6.0	9.1	10.8	12.0	12.8	**8.6**	7.6	6.5	**7.6**
89	5.6	4.4	2.8	4.0	7.8	**12.8**	10.4	11.0	12.3	11.1	9.3	7.1	8.2
90	6.0	4.9	5.0	5.6	8.6	9.9	11.0	13.4	12.9	10.9	9.2	7.0	8.7
1891	5.1	4.7	4.8	5.3	7.2	9.8	14.3	14.4	13.3	11.6	9.7	7.3	9.0
92	5.4	4.9	4.4	4.9	6.3	9.0	10.6	11.0	12.6	10.8	8.9	6.5	7.9
93	4.4	4.5	3.9	5.5	8.5	10.5	13.5	12.8	**10.1**	10.3	8.4	7.3	8.3
94	4.6	5.0	5.2	6.0*	7.5*	11.0*	14.0*	14.0*	12.0*	10.1	8.2	6.7	8.7
95	4.8	3.4	4.1	5.0	7.8	10.5	12.1	15.0	13.3	10.7	8.7	6.4	8.5
1896	4.9	5.5	4.7	4.7	6.9	10.2	11.5	12.2	12.1	9.9	8.2	6.0	8.1
97	4.5	4.1	3.9	4.7	6.4	10.3	12.3	15.7	13.3	11.7	9.4	6.4	8.6
98	6.2	5.4	4.7	4.9	7.0	10.4	**9.6**	11.7	12.6	11.0	8.9	7.0	8.3
99	5.7	5.1	4.8	5.3	7.5	10.6	13.7	11.4	12.5	9.9	9.6	6.8	8.6
1900	5.0	**1.9**	4.3	4.6	5.8	10.1	11.0	12.0	12.0	10.3	8.8	7.3	7.8
1901	6.0	4.5	4.4	4.9	7.1	10.4	14.0	15.4	13.3	11.7	8.6	7.1*	9.0
02	6.1*	4.7	4.5	4.1	6.6	10.5	10.1	**9.2**	10.9	10.0	8.3	6.3	**7.6**
03	5.3	4.8	4.9	5.3	7.4	9.0	12.5	13.6	12.9	10.9	8.8	7.4	8.6
04	5.7	3.7	3.0	4.6	6.7	9.6	11.9	12.7	13.5	11.6	8.7	7.3	8.3
05	6.4	5.6	5.2	4.3	6.6	10.9	13.4	14.1	12.8	9.4	8.1	6.8	8.6
1906	5.3	4.5	4.7	5.2	6.8	10.7	12.7	14.0	13.0	11.4	9.3	7.4	8.8
07	5.9	5.1	4.9	5.3	6.6	10.1	10.6	11.0	11.5	11.2	9.3	6.9	8.2
08	5.9	5.7	4.8	5.5	7.2	10.7	12.6	12.0	12.6	12.1	9.5	7.2	8.8
09	6.0	5.3	4.2	4.6	7.0	9.7	11.2	11.4	12.0	11.8	9.0	7.2	8.3
10	5.6	4.9	4.2	4.9	7.6	11.1	10.0	15.6	13.8	10.5	8.2	6.5	8.6
1911	5.5	5.0	4.4	5.1	7.8	11.3	12.2	14.1	12.5	10.6	8.4	7.6	8.7
12	5.2	4.8	4.6	4.9	7.1	10.3	14.1	15.3	12.2	10.6	8.2	6.9	8.7
13	5.6	5.3	4.6	5.1	7.8	10.3	10.1	10.4	13.2	11.4	9.6	7.7	8.4
14	6.5	**6.4**	4.7	5.2	7.1	9.7	15.0	**16.2**	13.6	10.3	8.9	6.4	9.2
15	5.5	4.4	4.0	4.9	6.7	8.9	10.7	13.5	12.2	10.7	7.6	**5.1**	7.8
1916	4.5	3.8	2.7	4.2	7.3	9.5	12.4	12.2	12.0	9.7	8.5	6.8	7.8
17	**3.3***	3.3	3.9	4.7	7.2	11.1	11.3	15.2	14.4	11.4	9.6	7.4	8.6
18	5.6	4.7	3.6	4.5	7.7	9.8	11.7	14.9	12.1	11.2	9.9	7.8	8.6

Table XVI. **Monthly and Annual Means.**

175. **Hellisøy.** 1867—1945. (Cont.).

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1919	5.7	4.5	4.3	4.5	8.1	9.4	10.5	11.5	11.9	10.0	**7.2**	5.2	7.7
20	4.1	4.2	4.0	5.1	7.8	10.3	14.3	13.7	12.8	11.1	8.9	6.5	8.6
1921	5.4	5.0	5.2	**6.6**	8.0	9.2	10.9	12.3	12.1	10.7	7.7	7.4	8.4
22	5.6	4.2	4.4	4.6	6.1	9.7	12.4	12.4	12.5	9.4	7.6	6.3	7.9
23	5.7	4.2	3.7	4.2	6.7	**7.8**	12.3	12.9	11.8	10.6	7.8	6.3	7.8
24	4.2	4.2	3.7	3.7	6.1	8.9	12.5	14.6	13.8	11.5	9.4	8.0	8.4
25	6.9	5.8	4.7	5.4	8.5	10.3	14.4	15.7	12.6	9.9	8.2	6.0	9.0
1926	4.7	3.6	3.8	5.3	7.4	**12.8**	14.3	13.4	12.5	10.3	8.6	6.6	8.6
27	5.8	4.8	4.4	4.7	6.5	9.4	13.3	16.0	14.1	10.8	8.8	6.2	8.7
28	4.7	4.3	3.5	4.5	7.4	8.8	11.3	12.9	12.9	10.9	8.7	7.4	8.1
29	6.0	4.3	4.3	6.0	7.5	9.8	11.9	12.8	12.7	10.9	9.4	7.9	8.6
30	7.0	4.7	4.5	5.6	**8.7**	12.7	**15.8**	15.6	14.4	11.9	9.2	7.5	**9.8**
14^h													
1931	5.6	4.1	2.8	4.0	6.6	9.3	12.6	12.2	10.3	9.4	8.4	6.6	7.7
32	6.1	5.8	5.1	5.6	8.3	10.3	13.5	15.0	12.9	10.6	8.8	7.2	9.1
33	6.2	5.3	4.4	5.4	8.3	12.7	15.8	14.6	14.6	12.3	9.4	7.7	9.7
34	6.7	6.3	5.6	5.7	7.3	9.8	13.2	15.4	15.1	12.6	9.6	8.7	9.7
35	6.8	5.8	5.3	5.6	7.6	10.6	13.7	13.5	14.0	11.6	9.7	7.1	9.3
1936	5.4	4.5	4.8	6.0	8.4	10.8	**16.2**	15.8	14.1	11.2	8.9	7.6	9.5
37	6.5	4.7	2.4	4.2	8.4	11.0	14.4	**16.4**	14.2	12.0	9.5	6.2	9.2
38	5.6	5.0	5.3	6.4	7.5	10.2	12.9	16.3	13.3	**13.1**	**11.0**	**8.9**	9.6
39	6.3	5.2	**5.9**	5.7	8.0	10.2	12.8	16.2	**16.6**	10.9	8.7	7.2	9.5
40	5.3	4.6	4.9	5.3	7.6	10.9	14.3	11.8	**10.0**	9.9	8.4	6.7	8.3
1941	5.0	3.7	2.9	4.2	6.5	9.9	14.3	15.5	12.2	11.1	8.2	6.4	8.3
42	4.5	3.3	**2.3**	**3.5**	6.2	9.2	11.8	13.6	13.6	10.9	9.4	7.4	8.0
43	6.0	5.6	5.8	5.9	8.1	12.3	11.5	13.9	13.8	11.8	9.5	7.4	9.3
44	6.9	6.4	6.0	6.0	7.2	9.9	13.5	14.1	13.3	11.7	9.1	6.7	9.2
45	4.8	4.1	4.8*	6.0*	7.9*	11.5	14.4	14.2	13.1	12.1	10.3	7.9	9.3

207. **Kråkenes.** 1928—45.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.4	4.7	4.4	5.3	7.3	9.7	11.9	13.1	12.4	10.4	8.3	6.5	8.3
1928								12.5	12.2	9.9	8.1	6.9	
29	5.9	4.2	4.2	5.3	7.5	9.4	**10.7**	12.0	12.2	10.3	8.6	7.1	8.1
30	6.2	5.2	4.5	6.0	8.6	**12.4**	**14.9**	15.4	14.1	11.6	8.4	6.5	9.5
14^h													
1931	5.2	**3.9**	**3.5**	4.5	7.0	**9.0**	11.8	**11.6**	**8.9**	**9.0**	**7.5**	6.5	**7.4**
32	5.7	5.6	5.1	5.7	8.2	9.4	12.5	14.4	12.7	9.8	8.4	7.1	8.7
33	6.2	5.1	4.8	5.4	8.1	12.3	14.8	14.6	14.3	11.7	8.9	7.3	9.5
34	6.5	**6.3**	**5.4**	**6.4**	7.6	9.8	12.9	15.7	14.5	**12.3**	9.1	8.1	**9.6**
35	**6.8**	5.9	5.1	6.2	7.6	10.1	13.7	14.1	13.6	11.3	9.0	7.3	9.2
1936	5.6	4.4	4.7	**6.4**	9.0	11.0	14.6	15.7	14.0	10.6	8.5	7.3	9.3
37	6.3	4.9	3.9	4.6	8.1	10.6	13.6	15.4	13.4	11.4	9.1	**5.6**	8.9
38	5.3	5.0	5.3	6.0	7.5	10.4	13.0	**16.0**	12.3	11.9	**10.0**	**8.1**	9.2
39	6.4	5.5	5.4	6.0	8.3	10.0	12.3	15.5	**15.6**	10.2	8.3	6.5	9.2
40	4.7	3.4	4.6	5.8	**9.4**	10.9	12.6	12.1	9.8	9.4	8.2	6.4	8.1
1941	4.7	3.5	3.9	4.8	7.0	9.3	13.9	14.9	13.0	10.5	**7.5**	6.5	8.3
42	**3.9**	**3.2**	**3.1**	**4.0**	**6.8**	**9.0**	11.2	13.0	13.3	10.8	9.2	6.9	7.9
43	5.2	5.3	5.4	5.9	7.9	11.7	10.6	12.9	13.7	11.3	9.8	7.0	8.9
44	6.5	5.9	6.3	6.2	7.2	10.4	13.1	13.1	11.5	11.2	8.7	6.6	8.9
45	5.2	4.1	4.9*	6.3*	8.0*	11.0*	14.0*	14.2*	12.4*	11.2*	9.6*	7.4*	9.0*

Table XVI.

Monthly and Annual Means.

215. **Ona.** 1868—1945.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.1	4.5	4.3	5.1	7.0	9.5	11.9	12.7	12.2	10.3	8.1	6.3	8.1
1868				5.0	6.9	9.9	12.6	14.0	12.4	9.9	8.0	5.8	
69	5.7	5.2	3.9	4.5	6.1	7.9	10.6	11.2	10.7	9.0	**6.5**	6.1	7.3
70	4.0	3.4	3.3	3.6	6.2	9.4	11.6	12.9	11.6	8.7	8.0	5.6	7.4
1871	4.5	3.2	3.8	3.8	6.1	8.4	12.4	13.6	11.9	**8.2**	7.2	5.4	7.4
72	5.0	4.5	4.9	5.3	7.0	10.5	13.2	10.4	11.8	10.8	9.1	6.9	8.3
73	5.9	4.4	4.3	5.1	6.6	10.7	13.4	14.2	13.0	10.0	8.4	7.0	8.6
74	5.9	4.9	4.6	5.6	6.8	9.5	12.1	12.9	12.3	10.6	7.9	5.1	8.2
75	4.0	4.1	3.9	4.8	7.2	9.9	13.2	12.4	12.7	10.8	8.4	6.3	8.1
1876	5.7	4.7	4.0	5.2	6.7	9.7	12.4	12.6	11.5	10.8	8.0	5.4	8.1
77	4.5	3.2*	2.9*	3.7	5.7	8.4	11.6	11.6	11.1	8.9	8.0	6.8	7.2
78	5.3	5.0	4.3	5.8	8.4	10.3	12.2	12.2	12.9	11.5	8.6	5.9	8.5
79	3.9	3.7	3.7	4.4	6.1	8.6	11.1	14.7	13.7	10.5	7.4	5.8	7.8
80	5.0	4.9	4.5	5.6	6.9	9.3	11.5	14.1	14.7	11.3	6.7	5.1	8.3
1881	**3.6**	**2.8**	2.8	**3.4**	**5.6**	8.4	11.9	12.7	12.7	10.5	7.9	6.6	7.4
82	5.9	4.9	4.4	5.0	7.5	10.1	13.3	**15.3**	13.3	**12.4**	8.1	5.3	8.8
83	4.6	4.6	4.7	5.5	7.7	9.4	11.3	13.3	14.0	10.8	9.1	7.3	8.5
84	**7.0**	**5.8**	**5.5**	6.1	7.5	8.9	11.9	15.1	**14.8**	11.5	8.8	6.2	9.1
85	5.5	5.1	5.0	5.6	7.1	9.0	11.5	11.7	10.1	9.6	7.4	5.7	7.8
1886	4.4	4.1	3.9	4.9	6.2	9.6	11.5	12.3	12.3*	10.1	9.1	6.2	7.9
87	4.8	5.7	5.1	5.0	7.0	8.8	11.4	11.7	11.8	9.9	6.9	5.2	7.8
88	4.4	3.2	**2.6**	4.2	6.1	8.6	10.1	10.7	11.1	8.9	7.2	6.4	**7.0**
89	5.1	3.8	3.2	4.2	6.8	11.4	11.8	11.5	11.1	10.3	9.0	6.9	7.9
90	5.9	5.1	4.7	6.0	**8.9**	10.3	11.3	12.9	12.3	10.8	8.6	6.9	8.6
1891	5.0	5.1	4.2	5.3	7.2	8.6	11.6	13.7	12.9	11.2	8.9	6.7	8.4
92	5.4	4.6*	4.5	5.4	6.6	8.3	10.0	11.0	11.2	10.7	9.0	5.9	7.7
93	4.4	3.1	3.9	5.2	7.5	10.3	10.9	12.0	12.0	9.7	7.5	6.0	7.7
94	5.4	5.2	5.2	**6.9**	7.9	11.3	13.5	12.9	11.7	9.1	7.6	7.1	8.7
95	4.2	**2.8**	4.0	5.5	8.4	10.5	12.2	13.6	12.9	10.5	7.5	**4.9**	8.1
1896	4.0	4.9	4.4	5.7	6.7	9.5	12.1	11.9	11.1	10.2	8.2	6.5	7.9
97	5.0*	4.6*	4.3	5.0	**5.6**	8.9	12.2	14.0	12.2	10.2	8.6	6.1	8.1
98	5.2	4.5	4.2	5.6	8.4	10.5	12.2	12.3	12.6	10.6	8.1	6.1	8.4
99	4.0	4.4	4.0	4.7	6.2	9.6	13.4	12.9	11.9	9.9	8.0	6.2	7.9
1900	4.6	3.3	3.2	4.3	6.2	9.2	10.1	11.2	11.1	10.0	7.1	5.3	7.1
1901	4.8	5.5	5.1	5.3	7.4	10.5	12.9	13.3	12.5*	10.2*	7.3*	6.1	8.4
02	5.6	4.4	4.5	6.5	8.2	9.5	10.2	**10.1**	**9.9**	8.9	8.1	5.8	7.6
03	4.8	5.1	4.8	5.2	7.0	8.9	10.3	12.8	12.7	10.2	8.6	6.2	8.1
04	5.9	4.4	3.7	4.9	6.7	9.2	11.4	12.2	11.9	11.2	8.5	6.5	8.0
05	5.3	5.1	5.0	5.2	7.1	10.3	13.2	14.1	13.1	8.8	6.6	6.9	8.4
1906	4.9	4.6	4.2	5.2	6.8	9.6	12.7	13.7	12.5	10.9	9.1	6.8	8.4
07	5.6	4.7	4.7	5.8	7.2	9.5	12.4	11.2	10.6	10.8	9.2	6.7	8.2
08	5.7	5.3	4.2	5.8	7.9	10.3	11.3	12.6	11.5	11.8	9.3	7.4	8.6
09	5.4	4.3	3.6	5.7	7.1	9.4	10.9	11.0	10.7	10.1	7.9	5.7	7.6
10	5.6	4.3	4.6	5.3	7.5	10.6	10.5	10.2	12.9	10.3	7.6	6.4	8.0
1911	5.4	4.8	4.2	5.0	7.4	9.8	12.2	14.3	12.3	9.9	7.5	6.7	8.3
12	5.9	4.8	4.9	5.1	6.9	9.1	13.0	14.4	11.6	9.5	7.9	6.7	8.3
13	5.4	5.0	4.8	5.5	7.3	9.1	**9.9**	11.2	11.2	11.3	**9.7**	7.4	8.2
14	5.7	6.2	5.1	5.8	6.6	9.7	13.6	14.0	13.8	10.7	8.6	6.5	8.9
15	5.3	4.7	4.2	4.5	5.9	8.1	10.1	11.6	11.7	9.8	8.0	4.8	7.4
1916	4.6	4.4	3.5	4.4	6.4	8.8	12.4	12.2	11.1	8.9	7.8	6.9	7.6
17	4.5	3.8	3.5	4.1	6.4	10.9	11.6	14.0	14.1	10.9	8.8	6.5	8.3
18	4.7	5.2	4.7	5.2	7.1	9.7	12.0	13.4	12.2	10.5	9.2	7.4	8.4
19	5.7	4.2	3.6	4.4	7.6	10.2	11.3*	11.4*	11.2*	9.5	6.7	5.6	7.6
20	4.4	3.8	4.2	4.8	6.9	9.5	13.5	13.7	12.2	11.3	9.2	7.1	8.4

Table XVI. **Monthly and Annual Means.**

215. **Ona.** 1868—1945. (Cont.).

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1921	6.1	4.9	5.1	5.9	7.6	9.0	10.7	11.4	11.2	10.3	7.4	6.8	8.0
22	5.1	4.5	4.8	5.0	6.5	8.7	11.4	12.4	11.7	9.7	7.3	6.0	7.8
23	5.3	4.0	4.2	5.2	6.5	**7.9**	10.9	12.5	11.7	9.9	7.8	6.1	7.7
24	4.9	4.1	3.2	4.1	6.1	8.0	11.6	14.3	13.6	11.1	8.7	**7.7**	8.1
25	6.8	5.4	4.4	5.6	7.7	10.1	13.7	15.1	12.7	9.4	7.3	5.5	8.6
1926	4.6	4.3	4.0	5.0	6.8	9.4	12.4	13.3	11.8	9.8	8.0	6.6	8.0
27	5.1	4.8	4.7	5.1	6.1	9.1	13.3	14.8	13.6	10.5	7.5	6.1	8.4
28	4.7	4.2	4.0	4.8	6.7	8.6	10.7	11.8	11.7	9.8	8.4	7.0	7.7
29	5.4	4.0	4.7	5.0	7.3	9.9	11.3	11.9	12.3	10.2	8.3	7.2	8.1
30	6.2	5.2	4.8	5.5	8.1	**11.5**	**14.5**	14.5	14.3	11.7	8.6	6.8	**9.3**
14h													
1931	5.2	4.4	3.9	4.6	6.5	8.3	11.3	12.3	10.0	8.6	7.3	6.6	7.4
32	5.6	5.5	4.6	5.7	7.7	9.4	12.0	13.8	12.5	9.7	8.1	6.9	8.5
33	6.0	4.7	4.5	5.4	7.7	11.3	14.2	14.6	14.2	11.1	8.4	7.1	9.1
34	6.0	5.8	5.1	6.2	8.1	10.2	13.4	15.3	14.3	11.6	8.4	7.1	**9.3**
35	5.7	5.1	4.6	5.6	7.2	10.0	12.6	13.7	12.8	10.4	8.3	6.7	8.6
1936	5.2	4.2	4.2	5.1	**9.3**	11.4	14.1	15.0	13.9	10.2	8.2	6.8	9.0
37	5.4	4.1	4.3	5.1	7.9	11.2	13.4	14.3	13.3	10.9	8.8	5.5	8.7
38	4.9	4.7	5.2	5.5	7.2	10.0	13.2	**15.5**	12.5	11.6	9.6	**7.7**	9.0
39	5.9	5.7	5.2	5.8	8.5	10.8	12.4	14.9	14.7	10.5	8.1	6.2	9.1
40	4.4	3.0	3.9	5.1	9.2	11.3	12.0	12.1	10.3	9.2	7.7	6.2	7.9
1941	4.0	3.1	3.5	4.8	7.1	9.2	13.4	14.4	12.9	10.2	6.7	5.9	7.9
42	**3.5**	**2.6**	3.1	4.6	6.3	9.4	11.5	13.2	12.7	10.4	8.3	6.1	7.6
43	4.6	5.0	5.2	5.6	7.7	11.4	13.0	12.2	12.8	11.1	9.1	6.9	8.7
44	5.7	4.9	5.0	5.8	7.4	10.6	12.2	12.5	11.2	10.7	7.9	6.2	8.3
45	4.1	3.8	4.8	6.1	7.7	10.7	14.2	14.1	11.9	10.8	9.1	6.5	8.6

Trondheimsfjorden. 1893—1906, 1932—1943.

9h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.3	3.8	4.0	4.9	7.4	11.1	14.0	13.2	11.0	8.7	6.7	5.0	7.8
1893											5.6	4.5	
94	3.3	4.0	4.4	5.9	8.4	11.5	15.8	13.1	9.6	7.6	**5.4**	4.8	7.8
95	3.6	3.5	3.9	5.2	9.4	12.5	14.0	12.5	11.0	8.7	6.8	4.4	8.0
1896	4.4	3.4	3.5	5.7	8.0	11.0	14.6	13.8	10.5	9.5	6.1	4.6	7.9
97	4.2	3.3	3.6	5.0	8.5	11.5	13.8	13.8	11.3	8.7	7.3	5.3	8.0
98	4.8	3.3	4.5	5.5	8.0	11.3	13.4	12.7	10.2	8.2	6.6	4.7	7.8
99	3.6	**3.2**	3.3	**3.7**	6.2	9.6	14.2	**11.6**	10.4	7.4	5.9	**3.4**	**6.9**
1900	4.0	4.2	4.1	4.5	**5.8**	10.3	12.4	12.6	9.7	6.7	5.8	5.0	7.1
1901	3.7	**3.2**	3.5	4.9	7.5	**13.5**	**17.0**	14.4	12.6	10.5	7.2	4.9	8.6
02	4.8	3.7	4.2	5.4	8.6	12.1	13.1	11.8	**9.2**	**6.6**	6.2	4.5	7.5
03	4.2	4.0	4.2	5.0	8.3	11.5	14.3	13.0	11.6	8.6	7.0	5.3	8.1
04	5.0*	4.4	4.3	5.1	7.2	10.5	**12.0**	13.1	11.0	8.6	6.3	4.7	7.7
05	3.4	3.4	4.4	5.6	7.6	12.8	14.3	13.7	11.1	7.5	5.9	4.6	7.9
1906	**2.9**	3.8	3.3	4.8	7.1	11.7	13.8	13.9	11.0	8.7	6.8	4.6	7.7
1932	4.1	3.5	**3.0**	4.8	7.6	9.7	14.6	14.2	11.4	8.3	6.0	5.2	7.7
33	5.2	4.5	5.0	5.1	8.3	12.6	14.8	14.2	13.3	9.6	6.4	5.4	8.7
34	5.2	4.4	4.5	6.1	7.4	11.6	16.0	14.9	13.4	**11.1**	**8.4**	6.3	9.1
35	5.2	4.5	4.2	5.4	7.0	10.5	13.7	13.8	11.7	9.1	7.9	6.2	8.3

Table XVI.

Monthly and Annual Means.

Trondheimsfjorden. 1893—1906, 1932—1943. (Cont.).

9h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1936	5.3	4.3	4.1	4.7	9.0	13.4	15.7	14.2	12.4	8.5	6.4	6.1	8.7
37	**5.5**	4.8	**5.6**	**6.8**	**9.6**	12.5	15.4	**16.2**	12.7	10.3	7.6	5.4	**9.4**
38	4.7	4.7	4.2	4.6	6.6	**9.1**	14.6	15.7	12.3	9.4	7.9	**7.2**	8.4
39	**5.5**	**5.0**	4.7	5.7	8.4	9.5	14.4	15.7	**14.1**	9.7	7.3	5.5	8.8
40	3.9	3.5	4.4	5.5*	9.5*	12.4*	13.7*	12.0*	9.2*	7.6*	6.4	4.5	7.7*
1941	3.2	3.4	3.8	4.7	7.3	**9.1**	15.3	13.8	10.2	8.6	5.8	4.4	7.5
42	3.5	3.5	3.3	5.0	7.0	10.8	13.1	13.4	10.9	9.1	7.0	4.0	7.6
43	4.4	4.8	4.5	4.8	7.1	10.4	14.4	13.0	11.8	9.5	7.3	6.1	8.2

254. **Nordöyan.** 1891—1945.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.1	3.7	3.5	4.4	6.3	9.3	12.3	12.5	10.9	8.9	6.9	5.2	7.3
1891	4.3	4.8	2.9	4.5	7.0	8.4	12.7	11.8	11.2	10.6	7.9	6.3	7.7
92	4.3	3.3	3.5	4.3	5.7	8.3	10.2	10.6	9.4	8.2	7.8	5.7	6.8
93	**2.5**	2.3	**2.2**	3.7	6.3	9.5	11.7	10.9	9.1	8.2	6.7	5.5	6.6
94	4.3	3.7	4.0	**5.9**	7.7	11.0	14.5	11.4	9.7	8.1	6.0	5.1	7.6
95	3.9	2.8	2.6	4.4	**8.4**	10.6	13.0	13.2	11.1	9.1	6.2	4.6	7.5
1896	4.5	4.3	3.9	4.7	6.2	9.4	11.6	11.9	10.1	8.5	6.1	4.7	7.2
97	4.2	3.5	2.7	4.1	7.2	8.6	11.8	13.4	10.7	9.0	7.8	6.2	7.4
98	5.6	4.2	3.7	4.1	6.3	10.9	12.0	12.1	10.8	8.3	6.4	4.9	7.4
99	4.8	4.1	4.2	4.9	5.5	8.9	14.0	11.3	10.6	8.6	7.3	5.1	7.4
1900	4.0	**1.6**	2.9	4.0	5.0	9.7	10.5	11.1	9.6	**6.8**	6.6	5.4	6.4
1901	4.9	4.3	3.8	4.4	6.7	10.2	13.7	13.3	12.7	10.7	7.4	5.6	8.1
02	4.7	4.0	3.1	3.7	5.4	**7.6**	**9.8**	**10.5**	**9.0**	7.2	6.2	4.6	**6.3**
03	4.3	4.3	4.2	4.3	6.0	8.5	10.2	12.1	11.1	9.0	7.7	6.2	7.3
04	4.8	2.7	3.3	4.5	5.5	8.1	10.1	11.5	11.0	9.3	6.8	4.4	6.8
05	3.7	3.8	3.5	4.0	6.3	10.6	12.5	13.3	11.2	8.7	5.9	4.5	7.3
1906	3.2	3.2	3.3	3.7	5.9	8.7	12.1	13.1	11.2	9.4	6.7	4.8	7.1
07	3.2	2.9	3.7	5.0	6.0	10.6	11.6	**10.5**	9.3	9.1	7.4	5.1	7.0
08	4.0	3.4	3.1	4.2	5.7	8.9	11.6	12.7	11.1	9.3	7.3	5.9	7.3
09	4.6	4.0	3.1	4.4	**4.7**	8.8	12.1	11.3	10.3	9.1	6.9	4.9	7.0
10	3.7	3.6	3.8	4.3	5.8	9.1	12.1	11.9	10.8	8.9	5.7	5.0	7.1
1911	4.0	3.4	3.4	4.3	6.3	8.9	11.9	13.4	11.1	8.6	7.1	5.8	7.4
12	4.7	3.7	3.8	4.5	5.6	9.4	13.2	13.9	10.4	8.1	6.1	5.3	7.4
13	4.3	4.6	3.8	4.8	7.0	8.6	11.4	12.2	11.0	9.2	**8.9**	**7.8**	7.8
14	4.5	4.1	3.9	4.9	6.0	9.1	14.2	13.3	12.4	9.6	7.3	5.8	7.9
15	3.8	4.0	3.7	4.4	5.5	7.7	11.8	12.6	10.3	7.8	6.5	**3.4**	6.8
1916	3.4	4.0	3.7	3.8	6.1	9.8	13.5	11.7	10.3	7.7	6.5	4.8	7.1
17	3.3	3.6	2.6	**2.9**	5.0	10.4	12.1	14.1	11.9	9.3	8.4	7.3	7.6
18	4.9	3.7	4.2	4.8	6.6	9.2	13.5	13.4	10.8	9.1	7.8	6.0	7.8
19	5.0	4.1	3.5	4.1	7.1	10.2	12.4	11.7	10.5*	8.0	**5.1**	3.7	7.1
20	3.1	3.7	4.2	5.2	7.5	8.6	12.5	12.4	11.8	10.2	7.8	6.0	7.8
1921	3.9	3.1	3.5	5.8	7.9	8.6	10.0	11.9	9.9	7.9	5.4	3.9	6.8
22	2.8	3.0	3.6	4.8	7.0	10.2	13.1	13.0	12.1	8.9	6.7	4.6	7.5
23	4.2	3.5	3.7	4.7	6.0	7.7	11.9	12.9	10.8	9.1	7.1	5.4	7.3
24	3.8	3.5	2.4	3.6	6.3	8.9	13.2	**15.3**	**13.5**	**11.2**	8.7	6.6	8.1
25	**6.4**	4.7	3.8	4.9	7.3	10.2	14.9	14.1	12.6	8.1	6.1	4.0	8.1

Table XVI. **Monthly and Annual Means.**

254. **Nordøyan.** 1891—1945. (Cont.).

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1926	3.8	**3.7**	4.2	4.7	6.7	9.3	11.6	13.4	10.8	8.9	7.0	5.5	7.5
27	4.0	4.0	4.1	4.5	6.5	9.8	14.1	14.2	11.0	9.2	5.6	3.8	7.6
28	3.3	3.1	3.5	4.3	6.8	7.7	10.5	12.3	10.4	8.1	6.5	5.2	6.8
29	3.7	2.4	4.0	3.9	7.1	9.7	11.4	11.6	10.7	8.6	7.2	5.6	7.2
30	5.2	4.6	**4.4**	5.5	7.4	**11.4**	**15.5**	14.0	11.4	10.1	7.7	6.0	**8.6**
14^h													
1931	3.8	2.9	3.4	4.7	7.6	**7.5**	12.8	11.9	9.6	7.5	5.4	4.4	6.8
32	4.4	4.4	3.5	5.1	7.4	9.9	13.8	13.4	11.7	8.7	6.7	6.0	7.9
33	5.0	3.6	3.4	4.7	7.8	**12.1**	13.1	14.1	13.2	9.6	6.8	5.7	8.3
34	5.3	**5.1**	4.3	5.4	8.3	9.8	13.5	**15.8**	**14.2**	10.5	8.1	5.7	**8.8**
35	4.2	3.8	3.7	5.4	6.7	9.8	12.6	13.6	11.3	9.1	7.2	5.9	7.8
1936	2.5	**1.5**	3.6	4.4	**9.0**	11.6	13.5	13.4	12.6	9.2	7.3	6.2	7.9
37	4.4	3.0	2.6	6.5	8.6	10.4	15.0	15.0	11.9	7.8	6.9	3.5	8.0
38	3.9	4.6	**4.9**	5.3	7.1	10.5	13.0	14.7	12.7	10.9	8.7	6.4	8.5
39	4.9	**5.1**	4.2	4.8	8.1	10.2	13.2	15.2	13.5	9.7	7.2	5.2	8.4
40	2.9	1.8	3.4	4.4*	8.4*	11.5*	13.3	12.0	10.4	8.5	6.1	4.6	7.3
1941	**1.9**	1.9	2.8	4.0	6.8	9.7	13.7*	13.7*	10.9*	8.6*	5.6*	4.0*	6.9
42	2.2*	1.7*	2.2*	4.0*	6.3*	9.8*	12.3*	12.8*	11.5	9.3	6.6	4.4	6.9
43	2.9	3.5	4.3	4.7	7.2	11.5	12.8	12.3	11.7	9.7	7.9	6.2	7.9
44	4.6	4.3	3.5	4.4	6.9	11.4	13.1	12.4	11.4	9.5	7.4	5.3	7.8
45	2.8	2.9	3.6	5.1	7.5	10.1	13.9	14.2	11.1	8.3	7.3	5.6	7.7

255. **Prestöy.** 1871—90.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.8	2.2	2.7	4.4	7.5	10.7	12.6	12.7	10.7	7.5	5.2	3.5	6.9
1871	1.8*	**0.2***	2.5*	**2.7***	6.5*	9.9*	12.8*	12.7*	10.2*	6.8*	4.0*	2.7*	6.1*
72	2.8*	2.4*	2.5*	4.6*	7.7*	11.0*	13.7	11.8	**8.7**	7.5	5.0	2.4	6.7
73	3.1	1.9	1.6	3.8	6.8	11.4	14.0	13.8	11.8	7.7	6.2	4.2	7.2
74	3.6	2.9	2.8	4.2	6.8	**9.5**	11.7	11.4	10.6	9.0	5.4	2.0*	6.7
75	1.5*	1.6	2.2	3.2	7.3	10.6*	12.8	11.5	9.9	7.9	6.1	4.3	6.6
1876	3.4	2.5	3.5	4.7	6.4	10.5*	12.8*	12.6	11.1	7.4	4.5	3.5	6.9
77	2.2	2.3	2.0	3.3	6.3	9.8	12.7	12.3	9.6	6.4*	5.3*	3.8*	6.3
78	3.1*	2.6*	2.2*	4.8*	8.5*	11.6*	12.6	12.0	10.9*	8.7*	5.0*	2.5*	7.0*
79	1.8*	1.3*	2.1*	3.7*	6.5	9.6	12.1	14.9	11.4	7.4	**3.9**	2.9*	6.5
80	3.0*	2.3*	2.6	4.5	7.1	11.1	12.5	14.1	12.3	**6.1**	4.3	**1.9**	6.8
1881	**0.4**	**0.2**	**1.0**	3.0	6.4	11.1	13.1	12.9	11.4	6.6	4.1	3.4	6.1
82	4.2	2.3	2.7	4.5	8.4	12.6	**14.9**	**15.1**	12.1	9.8	4.5	2.1	7.8
83	2.9	2.9	3.2	**5.8**	**9.1**	**12.8**	14.5	13.6	11.6	8.3	5.7	4.4	**7.9**
84	4.0	2.8	3.8	5.1	7.5	10.0*	12.8	14.9	**13.2**	**10.3**	6.5	3.5	**7.9**
85	3.0	3.6	**4.2**	5.7	8.7	10.3	13.4	12.8	10.3	6.4	5.1	4.3	7.3
1886	2.2	2.5	3.1	5.7	8.1	12.2	13.5	14.0	10.9	7.8	6.6	3.4	7.5
87	3.6	3.3	2.5	4.1	7.2	9.6	11.6	11.6	10.8	6.7	5.3	3.5	6.6
88	3.8	1.6	2.0	3.2	**5.6**	9.9	**9.7**	**10.4**	9.7	6.3	4.1	3.5	**5.8**
89	2.3	1.4	1.5	3.8	8.6	12.6	12.4	11.6	10.2	8.4	**7.4**	**5.0**	7.1
90	**4.9**	**3.7**	3.8	4.7	8.7	11.5*	12.0*	12.9*	11.0*	7.4*	5.8*	4.0*	7.5

Table XVI.

Monthly and Annual Means.

265. Myken. 1922—45.

14^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8^h)	4.9	4.6	4.2	4.6	5.6	8.3	11.6	11.8	10.6	9.1	7.4	5.9	7.4
1922				5.0	6.6	9.1	13.2	13.2	11.0	9.1	6.7	**4.7**	
23	4.6	4.2	4.4	5.0	6.3	7.6	**10.0**	11.9	10.0	9.2	7.4	5.5	7.2
24	4.6	4.5	3.9	**3.9**	**5.2**	**7.2**	12.7	13.8	11.9	10.8	8.2	6.7	7.8
25	**6.8**	5.4	3.9	5.3	6.4	9.5	13.5	13.5	11.8	8.9	**6.4**	4.8	8.0
1926	3.9	4.2	4.2	4.6	6.0	8.6	11.0	13.1	10.6	8.7	7.2	5.8	7.3
27	4.4	4.5	4.2	4.7	6.0	8.3	13.7	13.2	11.5	9.3	6.5	5.2	7.6
28	4.5	4.4	4.5	4.7	6.0	7.8	10.6	12.1	10.4	8.5	7.1	6.6	7.3
29	5.0	4.3	4.9	4.4	6.1	9.2	11.0	**11.3**	10.6	9.4	7.7	6.6	7.5
30	6.1	5.3	4.8	**5.5**	6.9	9.8	**15.1**	13.7	11.5	9.7	8.2	6.2	8.6
1931	4.8	4.2	4.2	4.8	6.4	7.7	11.0	11.7	**9.4**	**7.7**	6.5	5.4	**7.0**
32	5.3	5.3	4.6	4.8	6.3	8.8	12.0	12.5	10.9	8.7	6.9	6.7	7.7
33	5.9	4.3	3.7	4.5	6.6	**10.6**	12.4	13.0	12.5	10.1	7.6	6.5	8.1
34	6.0	5.5	5.0	5.0	7.1	9.3	14.0	**15.7**	**13.1**	**11.0**	8.1	6.5	**8.9**
35	5.5	5.3	4.8	5.1	6.0	8.2	11.7	12.7	11.1	9.5	7.9	6.7	7.9
1936	5.0	4.2	4.0	4.5	**8.0**	9.9	13.2	12.8	12.3	9.6	7.7	6.8	8.2
37	5.9	4.2	3.4	5.1	7.4	9.4	14.0	14.2	11.7	10.2	8.2	5.0	8.2
38	4.9	5.3	5.2	5.1	6.4	9.8	13.5	13.6	12.5	10.7	**9.5**	**7.5**	8.7
39	5.3	**5.6**	**5.4**	**5.5**	6.8	9.1	12.8	13.6	12.6	10.0	7.8	6.1	8.4
40	4.9	3.6	3.5	4.5	7.5	10.5	11.9	11.5	9.9	8.9	6.9	6.0	7.5
1941	4.9	3.6	**3.0**	4.0	6.0	8.3	13.8	13.5	10.1	8.6	6.5	5.0	7.3
42	4.6	**3.5**	**3.0**	4.1	5.6	9.1	12.1	12.2	10.5	9.7	7.3	5.9	7.3
43	**3.8**	4.2	4.9	5.0	6.7	10.3	13.1	12.6	11.2	9.5	8.1	7.2	8.0
44	5.9	4.8	3.5	3.9	6.2	9.6	11.5	11.7	10.4	9.2	7.4	5.9	7.5
45	4.3	3.5	3.7	5.3	6.8	9.2	12.9	13.6	10.5	8.2	7.8	6.4	7.7

285. Skomvær. 1921—45.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.4	3.8	3.3	4.1	5.6	7.9	10.2	10.6	9.2	7.8	6.5	5.3	6.6
1921	4.4	3.8	3.7	5.3	6.1	7.4	9.3	10.6	9.0	7.2	5.5	5.1	6.4
22	3.6	3.7	2.7	4.0	6.2	9.0	10.5	12.2	9.3	7.5	**5.0**	**3.9**	6.5
23	4.1	2.9	3.8	3.5	5.7	**6.7**	9.1	10.6	9.1	7.8	6.7	4.4	**6.2**
24	4.3	3.0	2.4	3.3	**5.1**	7.8	10.6	12.3	11.1	9.3	7.3	5.6	6.8
25	**6.2**	4.4	3.1	4.9	5.9	8.8	11.5	12.5	10.2	7.1	5.2	**3.9**	7.0
1926	4.1	3.6	3.3	3.9	5.6	7.9	9.2	10.8	8.6	6.9	6.5	5.0	6.3
27	3.5	3.7	3.3	4.2	5.6	7.5	11.4	11.9	9.6	6.9	5.6	4.7	6.5
28	4.5	3.8	3.4	4.0	5.5	7.5	9.1	10.5	8.9	6.8	5.5	5.7	6.3
29	4.0	3.7	3.6	**2.8**	5.2	8.1	**8.9**	**9.7**	9.1	7.6	7.1	6.1	6.3
30	5.4	4.4	3.6	4.9	6.4	8.9	**12.6**	12.6	9.1	7.5	6.7	5.8	7.3
14^h													
1931	4.0	4.0	2.8	4.9	6.7	7.7	10.7	10.6	**8.4**	**6.4**	5.9	5.0	6.4
32	4.6	3.9	3.6	4.9	6.7	8.7	11.4	11.3	9.2	7.7	6.6	6.4	7.1
33	5.3	3.3	3.3	4.1	6.6	**9.8**	11.3	11.8	10.9	8.9	7.1	5.9	7.4
34	5.9	4.7	4.3	4.7	7.0	8.8	12.1	**13.5**	**11.5**	9.9	7.8	6.3	**8.0**
35	5.0	4.2	4.1	5.0	5.9	7.9	10.5	11.6	10.3	8.4	7.3	5.8	7.2
1936	4.1	3.3	3.6	4.5	**7.9**	9.1	10.9	11.0	10.7	8.7	7.1	6.0	7.2
37	5.0	3.0	3.2	**5.4**	7.0	9.2	12.3	12.6	10.6	9.0	7.4	5.2	7.5
38	4.6	4.3	4.4	4.6	6.4	8.9	11.5	12.1	11.4	**10.0**	**8.5**	**7.0**	7.8

Table XVI. **Monthly and Annual Means.**

285. **Skomvær.** 1921—45. (Cont.).

14^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1939	4.7	**5.1**	**4.8**	5.0	6.7	8.4	11.3	11.8	10.5	8.1	7.1	5.4	7.4
40	3.7	2.9	2.8	4.0	7.3	9.2	10.4	9.9	8.8	8.0	6.1	5.6	6.6
1941	4.2	2.9	2.9	3.6	5.6	7.4	11.3	12.3	9.0	6.7	6.4	4.3	6.4
42	**3.0**	**2.5**	**2.1**	3.9	5.3	7.7	9.9	10.4	9.4	8.8	6.9	4.7	6.2
43	4.8	4.3	4.7	4.6	6.2	8.7	10.7	11.0	10.0	8.5	7.4	6.6	7.2
44	4.7	3.9	3.1	3.4	5.4	8.7	12.4	11.4	10.3	8.5	6.7	5.7	7.0
45	3.6	4.0	3.9	4.9	6.8	8.8	10.9	11.4	9.5	7.1	6.3	5.1	6.9

291 a. **Andenes I.** 1867—96, 1908—29.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.1	0.5	0.7	2.7	5.6	8.6	10.8	11.0	8.8	5.6	3.3	1.7	5.0
1867							**8.5**	10.2	8.0	5.5	1.8	—0.5	
68	—0.7	—0.5	0.7	3.0	5.7	8.2	9.7	11.4	8.2	5.5	3.6	1.4	4.7
69	2.4	1.3	1.0	2.4	5.3	8.3	9.7	10.1	7.7	4.1	1.8	0.0	4.5
70	0.3	—0.4	0.9	2.1	4.2	6.7	9.8	11.1	9.0	3.9	**1.3**	0.5	4.1
1871	1.1	—1.2	1.1	2.0	5.1	8.2	11.0	9.9	7.4	5.6	2.3	1.2	4.5
72	1.1	1.0	0.5	3.9	6.0	**10.8**	11.0	10.9	8.0	4.7	1.8	0.1	5.0
73	0.9	0.9	0.3	2.4	6.2	9.5	12.1	12.1	9.4	5.6	4.0	2.1	5.5
74	1.7	1.4	1.2	3.0	4.8	8.3	9.8	11.1	8.4	6.3	3.7	0.8	5.0
75	0.1	0.1	1.1	1.9	6.2	8.6	11.2	11.5	7.9	5.4	3.3	2.4	5.0
1876	2.6	2.0	0.5	2.4	4.7	9.8	12.0	10.9	9.3	6.0	3.2	0.5	5.3
77	0.4	—0.6	—0.4	2.2	5.3	7.8	10.1	10.4	8.3	4.8	4.0	3.2	4.6
78	2.6	1.5	0.0	2.4	6.7	9.9	11.3	10.3	9.0	6.8	2.1	1.2	5.3
79	0.7	0.0	0.7	2.1	4.6	8.2	11.0	11.9	9.6	6.4	4.3	1.8	5.1
80	2.1	1.3	1.6	1.6	5.0	8.2	10.2	11.9	9.7	4.4	3.3	0.8	5.0
1881	**—1.0**	—1.1	—0.2	0.8	**3.2**	**6.6**	9.6	10.2	9.3	6.6	3.6	2.2	4.2
82	1.4	0.4	0.2	2.3	5.1	8.4	11.5	12.5	10.6	7.9	4.1	2.1	5.5
83	0.9	1.3	1.7	3.8	6.3	10.3	12.3	12.5	9.8	5.9	4.0	2.2*	5.9
84	1.3	**2.9**	**3.1**	3.1	6.0	9.3	11.9	12.6	10.7	6.3	**5.2**	2.6	**6.2**
85	2.7	1.8	1.1	3.0	3.4	8.0	10.0	10.3	9.0	4.5	2.6	1.7	4.8
1886	—0.1	1.4	2.1	3.1	6.0	9.3	11.6	12.4	8.4	6.6	**5.2**	1.9	5.7
87	1.5	2.7	1.8	3.2	5.5	7.1	9.2	11.4	9.0*	5.1	2.4*	0.8*	5.0
88	0.8	—0.9*	—1.0*	2.2	4.5	6.7	9.1	10.2	7.1	**3.0**	2.2	1.3	**3.8**
89	0.5	—1.0	**—1.1***	2.3*	5.7	9.9	10.7	10.1	8.0	6.5	3.8	3.0	4.9
90	2.6	1.2	1.9	3.3*	6.5*	9.3*	9.8*	11.6*	9.8*	4.4*	2.8*	2.3	5.5
1891	1.6	1.8	1.4	3.2	5.8*	7.3	11.3	11.0	7.9*	6.0	3.0	3.2	5.3
92	0.8	0.2*	1.2	2.7	5.5	7.5	9.4	**9.3***	8.0	5.2	4.1	1.3	4.6
93	—0.4	—1.0*	—0.6	1.2	4.4*	8.0	9.6*	10.0	**6.6***	4.8	**1.4***	1.3*	**3.8**
94	2.0	0.4	0.7	**4.5**	6.3	**10.8**	12.4*	10.8*	7.6*	4.7*	2.8*	1.2*	5.4
95	0.8	0.2	—0.5	2.2	6.9	9.4	10.4*	10.5	7.8	5.1*	3.9	2.9	5.0
1896	2.4	1.4	2.2	2.7	5.5	7.8	11.9	10.1	8.8	4.5	2.4	2.1	5.2
Mean 1897—1907	1.2*	0.2*	0.6*	2.5*	5.4*	8.5*	10.0*	10.2*	8.5*	5.5*	3.4*	1.5*	4.8*
1908	1.2	—0.8	0.3	3.0	5.3	8.0	10.8	10.2	7.5	7.2	2.9*	1.9	4.8
09	1.8	0.8	—0.9	2.7	4.5	8.1	10.4	10.2	8.5	5.8*	1.8*	1.1*	4.6
10	1.0*	1.3*	1.6*	2.8	6.7	8.6	10.3	10.2	7.8	5.4	1.8	1.1	4.9

Table XVI. **Monthly and Annual Means.**

291a. **Andenes I.** 1867—96, 1908—29. (Cont.).

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1911	1.6	0.6	0.7	2.4	5.8	8.1	10.3	11.4	9.5	4.8	3.0	2.8	5.1
12	1.0	**—1.4**	0.6	1.9	5.8	9.0	10.5	11.3	7.9	4.4	3.3	0.5	4.6
13	0.7	0.5	0.6	3.1	6.3	7.9	11.1	11.3	9.3	4.8	4.1	1.5	5.1
14	1.3	0.4	0.6	3.1	5.1	8.8	11.5	12.4	9.8	6.3	3.6	2.4	5.4
15	—0.5	—1.2	—0.7	2.1	4.7	7.8	10.5	10.8	8.2	5.7	2.5	**—1.0***	4.1
1916	—0.3	0.2	**—1.1**	2.1	4.9	8.4	11.6	10.7	8.4	3.6	3.4	0.7	4.4
17	0.4	—0.6	**—1.1**	**0.3**	3.6	7.4	9.1	10.8	8.8	5.3	3.9	1.3	4.1
18	—0.9	0.5	1.8	2.8	5.4	8.8	12.3	11.2	8.5	5.4	4.8	1.7	5.2
19	0.8	—0.4	—0.3	1.3	6.0	9.3	11.0	10.9	9.0	4.5	1.7	0.1	4.5
20	0.6	0.5	1.6	3.8	6.7	7.9	11.2*	11.4*	10.0*	6.5*	5.1	**4.1**	5.8
1921	0.2	0.5	2.0	4.2*	6.5	8.7	10.6	11.3	8.5	5.0	3.0	1.3	5.2
22	0.2	0.3	0.0	3.7	**7.5**	10.1	**13.0**	13.0	10.4	7.0	3.4	0.8	5.8
23	0.8	0.3	2.2	4.1	7.1	8.3	10.0	9.9	8.2	5.4	3.0	1.6	5.1
24	1.0	—0.2	—0.5	2.1	5.4	7.9	11.6	12.6	10.2	**8.2**	5.0	3.3	5.6
25	**3.6**	1.6	0.0	4.1	7.3	10.3	12.8	**13.1**	**11.3**	5.8	3.2	0.8	6.2
1926	0.7	0.1	1.7	2.5	5.6	8.5	10.8	11.0	8.1	4.8	3.5	1.3	4.9
27	—0.3	1.4	1.2	2.6	5.2	8.1	11.9	12.4	8.9	4.9	3.1	2.4	5.2
28	1.5	1.6	2.6	2.9	5.6	9.1	10.7	11.1	9.1	5.2	2.7	2.4	5.4
29	1.5	1.0	2.3	2.2	6.0	8.9	10.4	10.5	9.5*	5.6*	4.0*	3.0*	5.4

291 b. **Andenes II.** 1929—45.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.1	1.6	1.4	2.5	4.9	7.8	10.2	10.5	8.8	6.4	4.3	3.1	5.3
1929									9.5	6.4	5.0	4.4	
30	3.5	2.7	2.3	**4.9**	7.0	**9.6**	**12.8**	**13.3**	10.6	6.8	4.7	3.3	**6.8**
14^h													
1931	1.9	1.3	1.6	3.7	6.1	8.0	**10.2**	10.6	**8.2**	6.1	4.3	3.8	5.5
32	2.6	**3.1**	2.2	3.1	5.7	8.5	11.1	11.0	8.8	6.1	4.5	**4.6**	5.9
33	**3.7**	1.5	1.5	2.7	5.9	9.5	11.3	10.9	10.0	**7.3**	5.3	4.4	6.2
34	**3.7**	2.2	1.9	3.2	6.0	8.2	11.8	13.2	**12.0**	7.9	6.0	**4.3**	6.7
35	3.0	2.0	2.7	3.8	4.8	7.6	10.3	11.4	9.3	6.1	4.4	3.8	5.8
1936	1.8	0.9	0.8	2.7	**7.2**	9.5	11.2	12.0	9.6	6.9	5.2	4.2	6.0
37	3.0	0.3	0.5	3.8	6.3	8.3	11.9	12.8	10.5	7.6	5.3	1.9	6.0
38	2.5	2.9	2.4	3.3	5.6	9.5	12.1	12.1	10.8	**9.1**	**6.4**	4.5	**6.8**
39	1.9	2.8	**2.8**	3.5	5.7	8.2	11.0	12.1	9.9	6.8	5.1	2.8	6.0
40	1.8	0.4	**—0.1**	**1.9**	6.6	8.8	10.3	**10.1**	9.0	7.0	3.8	2.8	5.2
1941	1.1	**—0.2**	0.7	2.0	**4.3**	**7.3**	11.0	11.8	8.7	**5.5**	**3.7**	**1.7**	**4.8**
42	**0.4**	0.4	**—0.1**	2.2	4.6	8.2	10.3	10.9	8.9	6.6	5.3	3.2	5.1
43	0.7	2.0	2.2	2.7	5.3	8.8	11.4	11.2	9.9	6.8	5.3	4.3	5.9
44	2.9	3.0	2.1	2.7	5.4	9.2	10.7	10.9	9.1	7.2	4.9	3.7	6.0
45	2.0	1.1	1.9	4.0	5.9	8.5	11.1	12.2	9.5	5.9	4.4	2.4	5.7

Table XVI.

Monthly and Annual Means.

306. **Loppa.** 1923—32.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.9	2.0	2.0	2.5	3.6	6.5	9.8	9.9	7.9	6.3	4.4	3.4	5.1
1923		**1.4**	2.2	2.9	4.6	6.6	9.7	**9.2**	**7.7**	**5.7**	4.2	**3.1**	
24	**2.6**	1.9	**1.5**	**1.8**	3.4	5.9	10.4	10.9	**9.0**	**8.0**	**6.0**	5.0	5.5
25	4.0	2.8	2.5	**3.7**	4.6	7.8	10.7	10.4	8.6	6.6	4.5	**3.1**	5.8
1926	**2.6**	1.8	1.9	**1.8**	**3.3**	6.6	8.9	10.1	7.9	6.1	4.6	4.0	**5.0**
27	2.8	2.4	2.5	2.6	3.5	6.4	**12.1**	**11.7**	8.3	6.1	4.2	3.9	5.5
28	3.2	2.4	2.5	2.8	4.2	6.9	9.9	10.4	8.5	5.9	**4.1**	3.4	5.4
29	2.7	2.2	2.5	2.5	3.9	6.4	**9.0**	9.9	8.2	6.7	5.5	**5.4**	5.4
30	**4.5**	**3.5**	2.7	3.6	**5.1**	**7.9**	11.7	11.0	8.7	7.0	5.4	4.6	**6.3**
14^h													
1931	3.8	3.0	**2.8**	3.1	4.4	**5.0**	10.0	10.0	8.4	6.3	5.2	4.5	5.5
32	3.3	2.9	2.7	3.0	4.3	6.8	10.8	10.8	8.1	6.3			

310. **Ingöy.** 1922—44.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.2	0.5	0.5	1.6	3.9	6.9	9.1	9.0	7.0	5.0	3.3	2.1	4.2
1922	0.9*	0.6	0.2	2.2	5.7	8.9	11.4	9.8	8.1	6.2	3.9	1.8	5.0
23	1.1	0.8	**1.8**	2.0	4.4	6.4	8.5	**8.2**	6.7	4.3	**2.0**	1.8	4.0
24	1.0	—0.6	—0.4	**0.7**	3.6	**5.3**	8.8	9.3	7.7	6.7	4.8	3.0	4.2
25	**3.0**	**1.6**	0.3	2.8	5.0	8.2	10.3	9.6	7.9	5.1	2.7	1.4	5.0
1926	1.1	0.2	0.3	1.0	3.3	6.2	**8.0**	8.4	6.9	4.5	3.2	2.0	3.8
27	0.5	0.9	0.9	2.0	4.1	7.8	11.3	**11.5**	7.7	5.2	2.7	2.3	4.7
28	1.5	1.0	1.8	2.5	5.3	7.8	10.5	10.2	7.9	3.9	2.2	2.4	4.8
29	0.8	1.5	0.7	1.0	4.7	7.3	9.3	9.4	8.0	5.3	3.9	3.4	4.6
30	**3.0**	1.1	0.3	2.0	5.4	8.0	11.3	10.5	7.7	5.5	4.0	2.3	5.1
14^h													
1931	1.6	0.4	0.6	2.5	4.4	6.6	9.6	9.4	6.9	4.5	3.5	2.8	4.4
32	1.4	0.8	0.6	2.2	4.7	7.4	9.4	9.8	7.6	4.7	3.2	3.0	4.6
33	2.4	0.7	0.6	2.0	4.8	8.6	9.9	10.6	8.2	5.7	4.3	2.4	5.0
34	2.3	1.1	1.2	1.7	5.4	7.2	12.0	10.9	9.5	6.4	4.6	**4.0**	5.5
35	2.0	0.7	1.6	2.7	4.1	7.2	9.4	10.4	7.2	4.7	4.3	2.7	4.8
1936	**0.0**	0.3	0.2	2.0	5.6	8.4	10.1	9.9	7.8	5.6	4.1	3.1	4.8
37	2.0	0.5	0.4	**3.8**	**6.1**	7.5	**11.5**	10.9	8.6	6.9	4.4	2.8	5.4
38	1.2	1.3	1.1	2.6	5.0	**9.2**	10.8	10.3	**9.3**	**7.3**	**5.7**	3.7	**5.6**
39	1.9	1.1	1.7	2.7	5.1	7.5	10.5	10.3	7.6	5.4	4.3	2.5	5.0
40	1.6	0.5	0.0	1.0	5.8	7.7	9.2	8.7	7.8	4.9	3.2	1.9	4.4
1941	0.2	**—1.1**	—0.2	1.1	**2.9**	6.3	10.0	10.1	**6.5**	**3.7**	2.7	**0.7**	**3.6**
42	0.3	—0.2	**—0.8**	1.1	3.0	6.4	9.7	8.9	6.8	4.6	3.0	2.6	3.8
43	0.6	0.4	0.8	2.2	4.6	7.3	9.7	9.9	7.8	4.9	3.8	2.9	4.6
44	2.0	1.6	1.2	1.6	4.8	8.4	9.3	8.8	7.8				

Table XVI.

Monthly and Annual Means.

312. **Gjesvær.** 1881—1925.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.3	0.9	0.9	1.9	3.6	6.1	8.2	8.5	7.2	5.2	3.4	2.1	4.1
1881	**—1.1***	**—1.0**	**—1.2**	**—0.4**	**0.8**	**4.0**	6.4	7.9	6.0	5.1	**1.7**	2.1	**2.5**
82	0.5	0.2	—0.6	1.4	3.8	6.2	9.1	9.9	8.8	6.7	3.7	1.5	4.3
83	1.1	1.6	0.2	2.8	4.5	8.4	8.5	8.7	6.9	4.2	4.0	2.0	4.4
84	1.9	1.4	2.1	1.4	3.6	6.6	8.5	9.1	7.6	5.6	3.5	**0.3**	4.3
85	0.4	—0.1	—0.5	1.6	3.3	5.8	8.6	8.9	6.8	3.7	2.5	**0.3**	3.4
1886	—1.0	0.1	0.9	1.4	4.0	6.7	10.2	10.0	7.7	6.3	3.9	1.5	4.3
87	1.5	2.0	0.4	1.5	4.6	6.6	8.7	8.7	7.7	4.1	1.8	0.4	4.0
88	—0.8	—0.6	**—1.2**	0.4	3.1	5.2	7.7	8.0	**5.5**	**3.3**	1.9	0.6	2.8
89	—0.1	—0.4	—0.2	1.5	4.2	7.3*	8.3	8.7	7.3*	5.8	3.5	1.5	4.0
90	0.8*	**2.5**	1.9*	2.5*	4.6	7.3	8.8	9.1	8.5*	5.0*	2.8*	2.7	4.7
1891	1.3*	2.0*	0.6*	2.5*	3.5*	4.8*	7.9	7.7	5.9	5.3	2.6	2.4	3.9
92	1.9	2.0	**2.7**	3.1	3.9	5.9	7.9	8.2	7.0	5.0	3.7	0.8	4.3
93	0.2	0.0	—0.8	0.4	2.4	4.2	7.0	7.5	5.8	4.7	1.9	1.2	2.9
94	1.7	1.2	1.5	**3.4**	4.9	**8.8**	9.8	9.7	7.1	4.6	3.2	1.4	4.8
95	0.9	0.8	0.0	1.7	3.9	6.4	7.3	7.6	6.7	5.1	4.2	3.9	4.0
1896	1.6	1.2	1.3	1.9	4.9	6.9	10.1	9.3	7.8	5.2	2.8	2.5	4.6
97	1.9	0.5	0.9	2.8	4.9	5.9	7.2	7.9	7.3	6.0	3.8	2.1	4.3
98	2.1	0.7	0.2	2.8	4.4	6.3	8.1	8.6	8.3	6.5	4.4	2.4	4.6
99	1.7	1.0	—0.1	0.7	1.9	4.8	7.2	7.5	7.5	5.2	4.0	2.9	3.7
1900	1.7	0.8	0.5	1.6	2.9	4.8	5.8	**6.9**	5.9	4.9	4.2	2.2	3.5
1901	2.5	0.7	0.8	2.0	3.4	5.8	8.1	8.6	8.0	**7.6**	4.7	2.6	4.6
02	0.5	0.2	—0.1	0.7	2.8	4.8	6.3	7.5	6.0	3.4	3.1	2.8	3.2
03	1.2	0.7	1.9	2.4	4.1	6.1	7.1	7.7	6.6	4.5	3.3	3.0	4.0
04	2.5	1.1	1.1	2.3	3.7	6.4	7.9	8.4	7.3	5.6	3.1	1.8	4.3
05	1.2	0.8	1.1	1.1	3.4	5.7	7.8	8.8	7.5	4.4	2.9	2.0	3.9
1906	1.2	0.4	—0.2	1.0	2.9	5.3	7.9	7.1	6.3	4.5	3.5	2.0	3.5
07	1.1	0.6	1.2	2.3	3.0	6.0	7.2	7.1	5.9	5.1	4.1	1.8	3.8
08	1.5	1.3	1.5	2.3	2.9	5.7	7.8	8.6	6.9	4.4	3.1	2.5	4.0
09	2.4	2.4	1.6	1.1	2.8	4.9	6.8	7.9	7.0*	5.3*	2.6*	1.5*	3.9
10	1.1*	1.7*	1.9*	2.0*	4.5	6.8	8.0	7.7	7.0	5.0*	2.5*	2.0*	4.2
1911	1.9*	1.2*	1.5*	1.8*	3.8	5.5	7.3	7.8	7.4	5.2	4.8	4.1	4.4
12	2.0*	0.5*	0.8*	2.0	3.6	5.2	**5.6**	8.0	6.5	4.4	3.2	2.3	3.7
13	2.0	1.3*	2.2	2.8	2.5	5.5	8.3	9.0	7.6	5.0	3.8	2.2	4.4
14	1.0	0.2	0.6	2.5	4.0	6.2	7.8	9.0	7.9	5.2	2.8	2.0	4.1
15	0.8	—0.6	—0.7	1.6	2.8	6.2	9.3	8.3	6.7	5.5	3.1	1.4	3.7
1916	—0.3	—0.3	—0.8	0.8	3.0	5.3	8.5	8.1	7.7	4.0*	3.0*	0.5*	3.3
17	—0.3	—0.6	—0.1	1.0	2.8	5.2	8.8	9.9	5.7	4.2	2.9	1.3	3.4
18	0.5	—0.2	1.2	2.2	3.9	6.6	9.5	7.4	6.4	5.6	3.8	2.7	4.1
19	2.0	0.7*	0.5*	1.1*	4.0	7.8	9.4	8.7	7.1	5.3	3.3	1.2	4.3
20	—0.4	0.2	1.9	2.8	4.3	7.7	10.0	9.1	7.1	5.5	5.0	4.0	4.8
1921	2.0	2.0	2.0	3.0	**5.3**	6.9	9.5	9.2	6.6	4.7	3.2	2.0	4.7
22	1.3	0.6	1.0	2.3	4.8	6.5	8.7	8.8	8.1	6.0	4.3	3.8	4.7
23	2.7	2.0	2.6	3.3	4.1	5.6	7.4	8.2	7.3	5.5*	4.0*	3.0	4.6
24	2.4	1.2	1.3	2.5	3.7	4.8	6.8	9.5	8.7	6.9	**5.2**	**4.2***	4.8
25	**3.5**	2.4	2.0	1.8	2.9	5.1	**10.4**	**10.3***	**9.5**	6.9	4.1*	2.2*	**5.1**

Table XVI.

Monthly and Annual Means.

314. Særholt. 1922—32.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.9	2.2	2.0	2.3	3.4	5.9	8.8	9.2	7.5	5.9	4.6	3.6	4.9
1922		**1.8**	**1.6**	2.1	4.4	**7.8**	**10.7**	9.9	**9.2**	7.3	5.5	3.8	
23	2.6	2.1	2.8	**3.5**	4.2	5.7	8.8	**8.2**	**7.3**	6.0	5.0	4.4	5.0
24	3.4	2.5	1.9	2.1	3.6	**5.0**	8.4	10.0	8.1	**7.4**	**6.4**	**4.8**	5.3
25	**4.4**	**3.5**	2.0	2.8	3.8	6.5	9.7	9.4	7.9	6.2	4.8	3.3	5.4
1926	2.6	2.2	2.1	2.0	3.3	6.1	**7.7**	8.7	7.5	5.9	5.0	3.4	**4.7**
27	2.9	2.9	2.2	2.6	**3.2**	5.5	10.3	10.4	7.8	6.3	4.3	3.7	5.2
28	3.2	2.7	**3.3**	2.8	3.7	5.7	9.4	9.9	8.1	**5.1**	**3.1**	**2.9**	5.0
29	**2.0**	**1.8**	2.2	**1.8**	4.1	6.1	8.7	9.3	7.6	5.7	4.5	4.0	4.8
30	3.8	3.1	2.6	3.3	**4.9**	7.2	10.3	**10.6**	8.4	6.2	5.0	3.6	**5.8**
14h													
1931	3.0	2.2	2.2	3.2	4.8	5.7	9.7	9.9	7.6	5.5	4.9	4.5	5.3
32	3.3	2.2	1.9	2.7	3.8	7.1	9.1	10.4	7.5	5.4	4.5	4.3	5.2

343. Jan Mayen.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1882							2.5	2.8	1.5	1.3	0.4	—1.3	} 0.0
83	—1.7	—1.6	—1.7	—1.5	—1.2	0.3	3.0						
1922							2.5*	4.4	2.9	1.9	—0.3	—0.7	} 0.7
23	—1.3	—1.2	—0.7	—0.2	0.1	1.0							
1929							3.5	4.4	3.3	1.0	0.2	0.6	
30	—0.3	—0.1	—1.0	0.0	0.3	2.2	5.0	6.5	5.6	3.3	0.9	1.0	2.0
1931	—0.1	—0.4	—0.9	0.3	1.0	2.4	3.9	3.9	4.0	2.0	1.7	0.2	1.5
32	—0.5	—0.4	—0.9	—0.7	1.0	2.1	4.3	5.7	4.1	1.7	0.2	0.0	1.4
33	0.5	—0.8	—0.7	—0.5	0.7	2.8	4.6	5.8	4.8	2.9	1.0	0.1	1.8
34	—0.9	—1.4	—1.1	—1.6	—0.3	1.8	3.7	5.0	5.9	4.6	0.7	0.3	1.4
35	0.3	—0.4	—0.5	—1.0	0.4	1.3	3.0	3.7	4.0	1.4	0.7	—0.2	1.1
1936	—1.7	—1.6	—1.7	—0.8	0.9	1.8	4.3	5.2	3.9	2.4	0.8		

Table XVII.

5-Year Means.

107. Torungen.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.54	1.43	1.45	3.80	8.24	12.65	15.45	15.68	13.72	10.49	7.08	4.45	8.08
1871—75	2.66	1.30	1.66	4.28	8.14	13.12	16.38	16.28	14.56	10.88	7.22	4.26	8.40
76—80	1.52	1.20	1.56	3.66	8.10	12.48	15.48	16.70	14.28	10.80	6.94	3.54	8.02
81—85	2.34	1.72	1.68	3.96	7.92	12.62	15.90	16.04	14.20	10.68	7.10	4.64	8.24
86—90	3.06	1.40	0.78	3.16	8.86	12.02	14.30	14.74	13.48	10.30	7.20	4.40	7.80
91—95	1.92	1.02	1.32	4.20	8.70	13.04	15.64	15.52	13.56	10.38	7.18	4.98	8.12
1896—1900	2.06	1.64	1.18	3.26	7.78	13.26	15.08	15.78	13.54	10.54	7.42	4.72	8.00
1901—05	2.84	1.42	1.04	3.34	7.88	13.18	15.14	14.78	13.10	9.94	6.80	4.00	7.80
06—10	3.32	2.12	1.54	3.96	8.16	13.14	15.36	15.18	13.66	11.34	7.10	4.82	8.32
11—15	2.96	2.04	2.26	4.48	8.74	12.94	16.04	16.48	14.02	10.00	6.68	5.00	8.48
16—20	1.66	0.72	0.74	3.04	8.22	12.08	15.48	15.40	13.06	9.98	6.74	3.94	7.58
21—25	3.30	1.48	1.58	3.94	7.78	11.72	14.88	15.28	13.32	10.36	7.08	4.44	7.94
26—30	2.84	1.06	2.04	4.26	8.54	12.22	15.68	15.98	13.92	10.64	7.46	4.66	8.28
14h													
1931—35	3.70	2.74	1.74	4.10	8.60	12.94	16.32	16.60	14.36	11.18	7.68	4.76	8.72
36—40	2.48	1.50	1.58	3.72	9.16	13.34	16.28	17.44	14.52	10.68	7.72	5.00	8.60

141. Utsira.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.12	4.16	4.01	5.30	8.17	11.44	13.97	14.65	13.37	10.93	8.40	6.46	8.84
1871—75	5.34	3.78	4.16	5.74	8.26	11.70	14.96	15.24	14.08	11.60	8.68	6.26	9.16
76—80	4.86	4.18	4.10	5.46	8.20	11.92	14.38	15.72	14.38	11.44	8.24	6.36	9.10
81—85	5.46	4.68	4.26	5.80	8.34	10.96	14.94	15.42	14.46	11.42	8.66	7.26	9.32
86—90	5.22	4.02	3.32	5.14	8.46	11.78	12.80	13.72	12.54	10.10	8.16	6.12	8.44
91—95	4.50	3.94	4.08	5.26	7.98	11.32	14.22	14.76	12.84	10.84	8.56	6.54	8.74
1896—1900	5.18	4.00	3.92	4.90	7.64	11.44	13.74	14.00	13.16	11.06	8.90	6.78	8.74
1901—05	5.70	4.34	4.22	4.86	7.90	11.70	14.04	14.16	13.16	10.42	7.90	6.44	8.74
06—10	5.26	4.64	4.24	5.48	8.30	11.70	13.40	14.30	13.28	11.50	8.54	6.06	8.90
11—15	5.26	4.74	4.38	5.64	8.30	11.60	14.18	15.44	13.56	10.74	8.22	6.56	9.04
16—20	4.12	3.62	3.38	4.86	8.56	11.26	13.64	14.28	12.96	10.78	8.50	6.30	8.52
21—25	5.32	4.42	4.02	5.02	7.48	10.42	13.24	14.24	12.94	10.72	8.06	6.56	8.56
26—30	5.32	3.64	4.04	5.58	8.58	11.56	14.14	14.50	13.08	10.58	8.36	6.24	8.80

Table XVII.

5-Year Means.

175. Hellisöy.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.54	4.67	4.32	5.00	7.19	10.23	12.48	13.42	12.88	10.84	8.72	6.85	8.51
1871—75	6.08	4.64	4.86	5.66	7.52	11.00	14.02	14.10	13.64	11.30	8.96	6.86	9.06
76—80	5.44	4.40	4.16	4.80	6.72	10.10	12.54	14.26	13.46	10.92	8.40	6.40	8.48
81—85	5.86	5.16	4.60	5.08	7.08	10.22	13.34	13.52	13.56	11.20	8.64	7.00	8.76
86—90	5.88	4.94	3.78	4.80	7.34	10.42	11.16	12.24	12.64	10.46	8.88	7.02	8.30
91—95	4.86	4.50	4.48	5.34	7.46	10.16	12.90	13.44	12.26	10.70	8.78	6.84	8.48
1896—1900	5.26	4.40	4.48	4.84	6.72	10.32	11.62	12.60	12.50	10.56	8.98	6.70	8.28
1901—05	5.90	4.66	4.40	4.64	6.88	10.08	12.38	13.00	12.68	10.72	8.50	6.98	8.42
06—10	5.74	5.10	4.56	5.10	7.04	10.46	11.42	12.80	12.58	11.40	9.06	7.04	8.54
11—15	5.66	5.18	4.46	5.04	7.30	10.10	12.42	13.90	12.74	10.72	8.54	6.74	8.56
16—20	4.64	4.10	3.70	4.60	7.62	10.02	12.04	13.50	12.64	10.68	8.82	6.74	8.26
21—25	5.56	4.68	4.34	4.90	7.08	9.18	12.50	13.58	12.56	10.42	8.14	6.80	8.30
26—30	5.64	4.34	4.10	5.22	7.50	10.70	13.32	14.14	13.32	10.96	8.94	7.12	8.76
14h													
1931—35	6.28	5.46	4.64	5.26	7.62	10.54	13.76	14.14	13.38	11.30	9.18	7.46	9.10
36—40	5.82	4.80	4.66	5.52	7.98	10.62	14.12	15.30	13.64	11.42	9.30	7.32	9.22
41—45	5.44	4.62	4.36	5.12	7.14	10.56	13.10	14.26	13.20	11.52	9.30	7.16	8.82

215. Ona.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.12	4.50	4.26	5.12	6.99	9.52	11.88	12.74	12.22	10.30	8.12	6.32	8.10
1871—75	5.06	4.22	4.30	4.92	6.74	9.80	12.86	12.70	12.34	10.08	8.20	6.14	8.12
76—80	4.88	4.30	3.88	4.94	6.76	9.26	11.76	13.04	12.78	10.60	7.74	5.80	7.98
81—85	5.32	4.64	4.48	5.12	7.08	9.16	11.98	13.62	12.98	10.96	8.26	6.22	8.32
86—90	4.92	4.38	3.90	4.86	7.00	9.74	11.22	11.82	11.72	10.00	8.16	6.32	7.84
91—95	4.88	4.16	4.36	5.66	7.52	9.80	11.64	12.64	12.14	10.24	8.10	6.12	8.12
1896—1900	4.56	4.34	4.02	5.06	6.62	9.54	12.00	12.46	11.78	10.18	8.00	6.04	7.88
1901—05	5.28	4.90	4.62	5.42	7.28	9.68	11.60	12.50	12.02	9.86	7.82	6.30	8.10
06—10	5.44	4.64	4.26	5.56	7.30	9.88	11.56	11.74	11.64	10.78	8.62	6.60	8.16
11—15	5.54	5.10	4.64	5.18	6.82	9.16	11.76	13.10	12.12	10.24	8.34	6.42	8.22
16—20	4.78	4.28	3.90	4.58	6.88	9.82	12.16	12.94	12.16	10.22	8.34	6.70	8.06
21—25	5.64	4.58	4.34	5.16	6.88	8.74	11.66	13.14	12.18	10.08	7.70	6.40	8.04
26—30	5.20	4.50	4.44	5.08	7.00	9.70	12.44	13.26	12.74	10.40	8.16	6.74	8.30
14h													
1931—35	5.70	5.10	4.54	5.50	7.44	9.84	12.70	13.94	12.76	10.28	8.10	6.88	8.58
36—40	5.16	4.34	4.56	5.32	8.42	10.94	13.02	14.36	12.94	10.48	8.48	6.48	8.74
41—45	4.38	3.88	4.32	5.38	7.24	10.26	12.86	13.28	12.30	10.64	8.22	6.32	8.22

Table XVII.

5-Year Means.

254. Nordöyan.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.14	3.66	3.52	4.38	6.32	9.33	12.29	12.54	10.94	8.88	6.89	5.24	7.34
1891—95	3.86	3.38	3.04	4.56	7.02	9.56	12.42	11.58	10.10	8.84	6.92	5.44	7.24
1896—1900	4.62	3.54	3.48	4.36	6.04	9.50	11.98	11.96	10.36	8.24	6.84	5.26	7.16
1901—05	4.48	3.82	3.58	4.18	5.98	9.00	11.26	12.14	11.00	8.98	6.80	5.06	7.16
06—10	3.74	3.42	3.40	4.32	5.62	9.22	11.90	11.90	10.54	9.16	6.80	5.14	7.10
11—15	4.26	3.96	3.72	4.58	6.08	8.74	12.50	13.08	11.04	8.66	7.18	5.62	7.46
16—20	3.94	3.82	3.64	4.16	6.46	9.64	12.80	12.66	11.06	8.86	7.12	5.56	7.48
21—25	4.22	3.56	3.40	4.76	6.90	9.12	12.62	13.44	11.78	9.04	6.80	4.90	7.56
26—30	4.00	3.56	4.04	4.58	6.90	9.58	12.62	13.10	10.86	8.98	6.80	5.22	7.54
14h													
1931—35	4.54	3.96	3.66	5.06	7.56	9.82	13.16	13.76	12.00	9.08	6.84	5.54	7.92
36—40	3.72	3.20	3.74	5.08	8.24	10.84	13.60	14.06	12.22	9.22	7.24	5.18	8.02
41—45	2.88	2.86	3.28	4.44	6.94	10.50	13.16	13.08	11.32	9.08	6.96	5.10	7.44

255. Prestöy.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.82	2.25	2.70	4.39	7.50	10.73	12.64	12.70	10.66	7.52	5.25	3.49	6.89
1871—75	2.53	1.80	2.32	3.70	7.02	10.48	13.00	12.24	10.24	7.78	5.34	3.12	6.66
76—80	2.70	2.20	2.48	4.20	6.96	10.52	12.54	13.18	11.06	7.20	4.60	2.92	6.70
81—85	2.90	2.36	2.98	4.82	8.02	11.36	13.74	13.86	11.72	8.28	5.18	3.54	7.40
86—90	3.36	2.50	2.58	4.30	7.64	11.16	11.84	12.10	10.52	7.32	5.84	3.88	6.90

291a. Andenes I.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.10	0.50	0.74	2.66	5.57	8.60	10.77	11.00	8.78	5.55	3.32	1.70	5.02
1871—75	0.98	0.44	0.84	2.64	5.66	9.08	11.20	11.10	8.22	5.52	3.02	1.32	5.00
76—80	1.68	0.84	0.48	2.14	5.26	8.78	10.92	11.08	9.18	5.68	3.38	1.50	5.06
81—85	1.06	1.06	1.18	2.60	4.80	8.52	11.06	11.62	9.88	6.24	3.90	2.16	5.32
86—90	1.06	0.68	0.74	2.82	5.64	8.46	10.08	11.14	8.46	5.12	3.28	1.86	4.98
91—95	0.96	0.32	0.44	2.76	5.78	8.60	10.62	10.32	7.58	5.16	3.04	1.98	4.82
1896—1900	1.4*	0.3*	0.8*	2.5*	5.4*	8.4*	10.3*	10.2*	8.6*	5.4*	3.3*	1.6*	4.9*
1901—05	1.5*	0.3*	0.7*	2.5*	5.4*	8.3*	9.9*	10.3*	8.7*	5.3*	3.3*	1.5*	4.8*
06—10	1.0*	0.3*	0.4*	2.8*	5.3*	8.5*	10.4*	10.1*	7.9*	6.0*	2.7*	1.4*	4.7*
11—15	0.82	—0.22	0.36	2.52	5.54	8.32	10.78	11.44	8.94	5.20	3.30	1.24	4.86
16—20	0.12	0.04	0.18	2.06	5.32	8.36	11.04	11.00	8.94	5.06	3.78	1.58	4.80
21—25	1.16	0.50	0.74	3.64	6.76	9.06	11.60	11.98	9.72	6.28	3.52	1.56	5.58
26—30	1.16	1.12	1.86	3.04	6.02	9.00	11.44	11.76	9.30	5.44	3.44	2.28	5.52

Table XVII.

5-Year Means.

312. Gjesvær.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.28	0.91	0.88	1.85	3.64	6.10	8.21	8.53	7.17	5.18	3.39	2.12	4.10
1881—85	0.56	0.42	0.00	1.36	3.20	6.20	8.22	8.90	7.22	5.06	3.08	1.24	3.78
86—90	0.08	0.72	0.36	1.46	4.10	6.62	8.74	8.90	7.34	4.90	2.78	1.34	3.96
91—95	1.20	1.20	0.80	2.22	3.72	6.02	7.98	8.14	6.50	4.94	3.12	1.94	3.98
1896—1900	1.80	0.84	0.56	1.96	3.80	5.74	7.68	8.04	7.36	5.56	3.84	2.42	4.14
1901—05	1.58	0.70	0.96	1.70	3.48	5.76	7.44	8.20	7.08	5.10	3.42	2.44	4.00
06—10	1.46	1.28	1.20	1.74	3.22	5.74	7.54	7.68	6.62	4.86	3.16	1.96	3.88
11—15	1.54	0.52	0.88	2.14	3.34	5.72	7.66	8.42	7.22	5.06	3.54	2.40	4.06
16—20	0.30	—0.04	0.54	1.58	3.60	6.52	9.24	8.64	6.80	4.92	3.60	1.94	3.98
21—25	2.34	1.64	1.78	2.58	4.16	5.78	8.56	9.20	8.04	6.00	4.16	3.04	4.78

10. Ferder.

14h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8h)..	2.0	1.1	1.5	4.5	9.3	14.4	17.1	17.0	14.4	10.6	7.0	3.9	8.6
1931—35	3.22	2.38	2.14	5.12	10.18	15.06	18.34	17.98	15.22	11.54	7.76	4.44	9.44
36—40	1.96	0.94	1.62	4.68	10.46	15.34	18.12	18.86	15.40	10.98	7.68	4.22	9.18
41—45	1.40	0.56	1.64	4.38	9.46	14.26	18.40	17.86	15.02	11.36	7.54	4.80	8.90

Flödevigen (Surface).

9h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.3	1.4	1.6	4.3	8.9	13.3	16.0	15.9	13.9	10.5	6.7	4.3	8.3
1926—30	2.50	0.96	2.20	4.58	8.92	12.32	16.16	16.04	14.08	10.42	7.12	4.40	8.32
31—35	3.26	2.94	2.08	4.72	9.24	13.70	16.66	16.72	14.52	10.82	7.26	4.66	8.86
36—40	2.12	1.30	1.74	4.12	9.58	13.78	16.56	17.54	14.58	10.66	7.38	4.84	8.70

Flødevigen (1 m Depth.)

9h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.8	1.8	1.9	4.4	8.8	13.0	15.8	16.0	14.2	11.0	7.3	4.8	8.5
1921—25	3.58	1.92	2.04	4.60	8.34	12.22	15.36	15.62	13.74	10.82	7.30	4.92	8.38
26—30	3.06	1.40	2.52	4.70	8.86	12.10	15.90	16.16	14.34	11.02	7.82	5.06	8.56
31—35	3.78	3.32	2.28	4.80	9.16	13.44	16.44	16.78	14.72	11.42	7.78	5.10	9.08
36—40	2.68	1.84	2.10	4.22	9.54	13.46	16.42	17.66	14.80	11.18	7.96	5.24	8.94

120. Lindesnes I.

8h	Jan	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.2	3.2	2.8	4.6	7.7	11.0	14.0	14.9	13.9	11.1	8.2	6.0	8.5
1871—75	4.42	3.04	3.24	5.22	7.76	11.68	15.02	15.28	14.50	11.46	8.22	5.86	8.82

Table XVII.

5-Year Means.

121. Lindesnes II.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	3.7	2.6	2.8	4.9	8.5	11.0	14.1	15.1	14.0	11.3	8.2	5.7	8.5
1926—30	3.86	1.96	3.18	5.10	8.56	10.56	14.14	15.32	14.16	11.42	8.42	5.74	8.54
14^h													
1931—35	4.64	4.50	3.12	5.22	9.30	12.34	14.90	16.22	14.90	11.66	8.42	6.00	9.22
36—40	3.74	2.74	3.12	5.02	9.56	12.10	15.40	17.02	14.52	11.52	8.62	6.02	9.12

166. Slåtteröy.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	5.3	4.5	4.2	5.0	7.7	10.9	13.0	13.9	13.3	11.3	9.0	6.9	8.7
1926—30	5.58	4.06	4.14	5.34	7.82	10.86	13.44	14.30	13.80	11.50	9.22	7.20	8.90
14^h													
1931—35	5.94	5.30	4.56	5.40	8.04	11.72	14.38	14.46	13.74	11.22	9.10	7.18	9.26
36—40	5.48	4.58	4.60	5.50	8.60	11.32	14.52	15.92	13.74	11.50	9.54	7.10	9.36

207. Kråkenes.

14^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8^h) ..	5.4	4.7	4.4	5.3	7.3	9.7	11.9	13.1	12.4	10.4	8.3	6.5	8.3
1931—35	6.08	5.36	4.78	5.64	7.70	10.12	13.14	14.08	12.80	10.82	8.58	7.26	8.88
36—40	5.66	4.64	4.78	5.76	8.46	10.58	13.22	14.94	13.02	10.70	8.82	6.78	8.94
41—45	5.10	4.40	4.72	5.44	7.38	8.28	12.56	13.62	12.78	11.00	8.96	6.88	8.60

225 b. Sula.

14^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8^h)..	4.3	3.8	3.9	5.2	7.2	10.0	12.4	12.4	11.3	9.3	7.0	5.5	7.7
1936—40	4.12	3.68	3.92	5.68	8.78	11.34	13.58	14.20	12.30	9.80	7.34	5.54	8.38
41—45	3.40	3.22	4.20	5.48	7.62	10.68	13.20	13.16	11.46	9.60	7.26	5.38	7.88

Trondheimsfjorden.

9^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.3	3.8	4.0	4.9	7.4	11.1	14.0	13.2	11.0	8.7	6.7	5.0	7.8
1896—1900	4.20	3.48	3.80	4.88	7.30	10.74	13.68	12.90	10.42	8.10	6.34	4.60	7.54
1901—05	4.22	3.74	4.12	5.20	7.84	12.08	14.14	13.20	11.10	8.36	6.52	4.80	7.96
36—40	4.98	4.46	4.60	5.46	8.62	11.38	14.76	14.76	12.14	9.10	7.12	5.74	8.60

Table XVII.

5-Year Means.

265. Myken.

14h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8h)..	4.9	4.6	4.2	4.6	5.6	8.3	11.6	11.8	10.6	9.1	7.4	5.9	7.4
1926—30	4.78	4.54	4.52	4.78	6.20	8.74	12.28	12.68	10.92	9.12	7.34	6.08	7.66
31—35	5.50	4.92	4.46	4.84	6.48	8.92	12.22	13.12	11.40	9.40	7.40	6.36	7.92
36—40	5.20	4.58	4.30	4.94	7.22	9.74	13.08	13.14	11.80	9.88	8.02	6.28	8.20
41—45	4.70	3.92	3.62	4.46	6.26	9.30	12.68	12.72	10.54	9.04	7.42	6.08	7.56

282. Sörvågen.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	3.5	2.8	2.5	3.0	5.2	8.7	11.6	12.0	9.5	7.0	5.6	4.3	6.3
1926—30	3.60	2.86	2.80	2.98	5.64	9.18	12.14	13.12	9.82	6.88	5.66	4.98	6.64

285. Skomvær.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	4.4	3.8	3.3	4.1	5.6	7.9	10.2	10.6	9.2	7.8	6.5	5.3	6.6
1921—25	4.52	3.56	3.14	4.20	5.80	7.94	10.20	11.64	9.74	7.78	5.94	4.58	6.58
26—30	4.30	3.84	3.44	3.96	5.66	7.98	10.24	11.10	9.06	7.14	6.28	5.46	6.54
14h													
1931—35	4.96	4.02	3.62	4.72	6.58	8.58	11.20	11.76	10.06	8.26	6.94	5.88	7.27
36—40	4.42	3.72	3.76	4.70	7.06	8.96	11.28	11.48	10.40	8.76	7.24	5.84	7.30
41—45	4.06	3.52	3.34	4.08	5.86	8.26	11.04	11.30	9.64	7.92	6.74	5.28	6.74

291 b. Andenes II.

14h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930) (8h)..	2.1	1.6	1.4	2.5	4.9	7.8	10.2	10.5	8.8	6.4	4.3	3.1	5.3
1931—35	2.98	2.02	1.98	3.30	5.70	8.36	10.94	11.42	9.66	6.70	4.90	4.18	6.02
36—40	2.20	1.46	1.28	3.04	6.28	8.86	11.30	11.82	9.96	7.48	5.16	3.24	6.00
41—45	1.42	1.26	1.36	2.72	5.10	8.40	10.90	11.40	9.22	6.40	4.72	3.06	5.50

306. Loppa.

8h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.9	2.0	2.0	2.5	3.6	6.5	9.8	9.9	7.9	6.3	4.4	3.4	5.1
1926—30	3.16	2.46	2.42	2.66	4.00	6.84	10.32	10.62	8.32	6.36	4.76	4.26	5.52

Table XXII.

5-Year Means.

310. Ingöy.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	1.2	0.5	0.5	1.6	3.9	6.9	9.1	9.0	7.0	5.0	3.7	2.1	4.2
1926—30	1.38	0.94	0.80	1.70	4.56	7.42	10.08	10.00	7.64	4.88	3.20	2.48	4.60
14^h													
1931—35	1.94	0.74	0.92	2.22	4.68	7.40	10.06	10.22	7.88	5.20	3.98	2.98	4.86
36—40	1.34	0.74	0.68	2.42	5.52	8.06	10.42	10.02	8.22	6.02	4.34	2.80	5.04

314. Særholt.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.9	2.2	2.0	2.3	3.4	5.9	8.8	9.2	7.5	5.9	4.6	3.6	4.9
1926—30	2.90	2.54	2.48	2.50	3.84	6.12	9.28	9.78	7.88	5.84	4.38	3.52	5.10

320. Makkaur.

8^h	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Normal (1871—1930)	2.4	1.6	1.5	1.9	2.8	4.7	7.4	8.0	7.3	5.9	4.0	3.1	4.2
1926—30	2.50	1.80	1.78	2.00	3.18	4.94	8.00	8.70	7.72	5.80	3.92	3.30	4.46

343. Jan Mayen.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1931—35	—0.1	—0.7	—0.8	—0.7	0.6	2.1	3.9	4.8	4.6	2.5	0.9	0.1	1.4

Table XVIII a. **30-Year Means (1871—1900).**

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107. Torungen	2.26	1.38	1.36	3.75	8.25	12.76	15.46	15.84	13.94	10.60	7.18	4.42	8.10
141. Utsira	5.09	4.10	3.97	5.36	8.15	11.52	14.17	14.81	13.58	11.08	8.53	6.55	8.92
175. Hellisöy	5.56	4.67	4.39	5.08	7.14	10.37	12.60	13.36	13.01	10.86	8.77	6.80	8.55
215. Ona	4.94	4.34	4.16	5.09	6.95	9.55	11.91	12.71	12.29	10.34	8.08	6.11	8.04
254. Nordöyan	4.17	3.63	3.43	4.33	6.30	9.44	12.28	12.36	10.83	8.83	6.86	5.23	7.30
291a. Andenes I	1.19	0.61	0.74	2.57	5.43	8.65	10.69	10.91	8.66	5.53	3.23	1.74	5.00
312. Gjesvær	1.11	0.91	0.65	1.74	3.62	6.18	8.16	8.46	7.08	5.16	3.23	1.85	4.01

Table XVIII b. **30-Year Means (1901—30).**

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107. Torungen	2.82	1.47	1.53	3.84	8.22	12.55	15.43	15.52	13.51	10.38	6.98	4.47	8.06
141. Utsira	5.16	4.23	4.05	5.24	8.19	11.37	13.77	14.49	13.16	10.79	8.26	6.36	8.76
175. Hellesöy	5.52	4.67	4.26	4.92	7.24	10.09	12.35	13.49	12.75	10.82	8.67	6.90	8.47
215. Ona	5.31	4.67	4.37	5.16	7.03	9.50	11.86	12.78	12.14	10.26	8.16	6.53	8.15
254. Nordöyan	4.11	3.69	3.63	4.43	6.32	9.22	12.28	12.72	11.05	8.95	6.92	5.25	7.38
291a. Andenes I	1.02	0.38	0.73	2.74	5.71	8.56	10.85	11.09	8.91	5.57	3.40	1.68	5.05
312. Gjesvær	1.45	0.91	1.11	1.96	3.66	6.02	8.26	8.60	7.26	5.21	3.55	2.40	4.20

Table XVIII c. **60-Year Means (1871—1930).**

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107. Torungen	2.54	1.43	1.45	3.80	8.24	12.65	15.45	15.68	13.72	10.49	7.08	4.45	8.08
141. Utsira	5.12	4.16	4.01	5.30	8.17	11.44	13.97	14.65	13.37	10.93	8.40	6.46	8.84
175. Hellisöy	5.54	4.67	4.32	5.00	7.19	10.23	12.48	13.42	12.88	10.84	8.72	6.85	8.51
215. Ona	5.12	4.50	4.26	5.12	6.99	9.52	11.88	12.74	12.22	10.30	8.12	6.32	8.10
254. Nordöyan	4.14	3.66	3.52	4.38	6.32	9.33	12.29	12.54	10.94	8.88	6.89	5.24	7.34
291a. Andenes I	1.10	0.50	0.74	2.66	5.57	8.60	10.77	11.00	8.78	5.55	3.32	1.70	5.02
312. Gjesvær	1.28	0.91	0.88	1.85	3.64	6.10	8.21	8.53	7.17	5.18	3.39	2.12	4.10

Table XIX. **Difference between 30-Year Means (1901—30) and (1871—1900).**

Station	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
107. Torungen	0.56	0.09	0.17	0.09	—0.03	—0.21	—0.03	—0.32	—0.43	—0.22	—0.20	0.05	—0.04
141. Utsira	0.07	0.13	0.08	—0.12	0.04	—0.15	—0.40	—0.32	—0.42	—0.29	—0.27	—0.19	—0.16
175. Hellisöy	—0.04	0.00	—0.13	—0.16	0.10	—0.28	—0.25	0.13	—0.26	—0.04	—0.10	0.10	—0.08
215. Ona	0.37	0.33	0.21	0.07	0.08	—0.05	—0.05	—0.07	—0.15	—0.08	0.08	0.42	0.11
254. Nordöyan	—0.06	0.06	0.20	0.10	0.02	—0.22	0.00	0.36	0.22	0.12	0.06	0.02	0.08
291a. Andenes I	—0.17	—0.23	—0.01	0.17	0.28	—0.09	0.16	0.18	0.25	0.04	0.17	—0.06	0.05
312. Gjesvær	0.34	0.00	0.46	0.22	0.04	—0.16	0.10	0.14	0.18	0.05	0.22	0.55	0.19

Sea-Surface Isotherms.

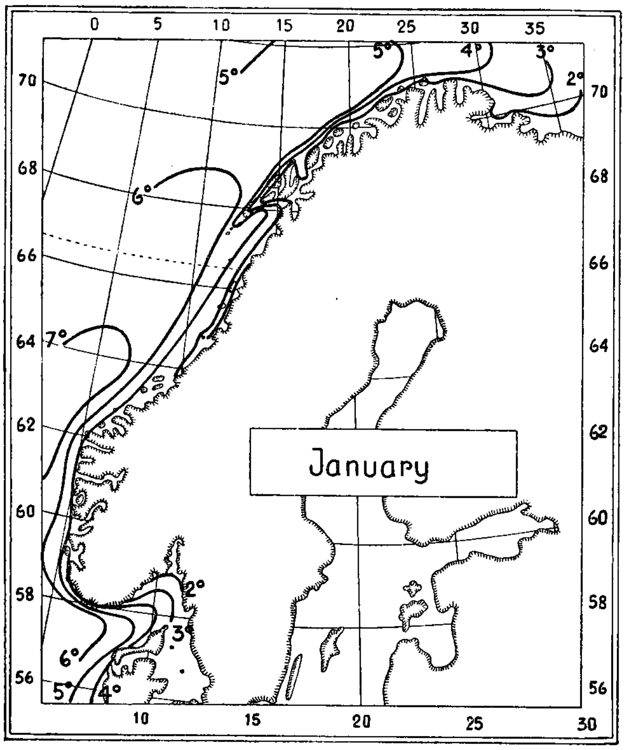


Fig. 1.

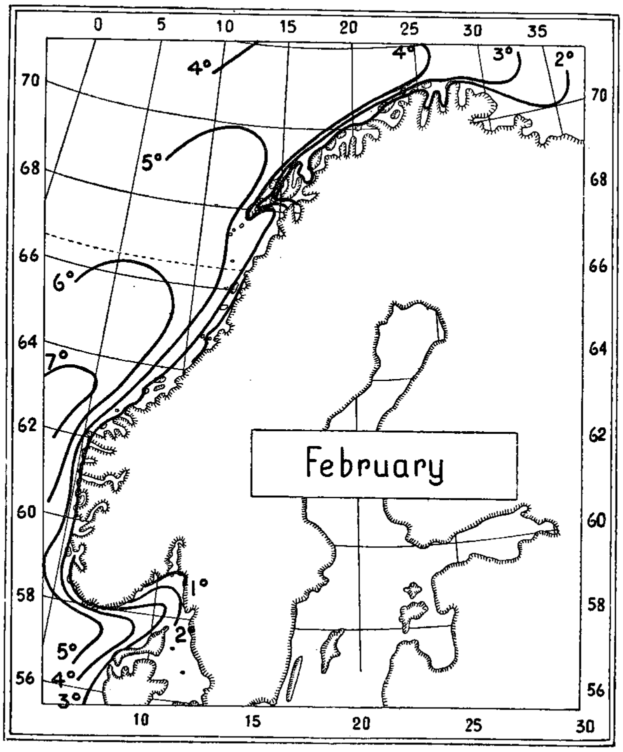


Fig. 2.

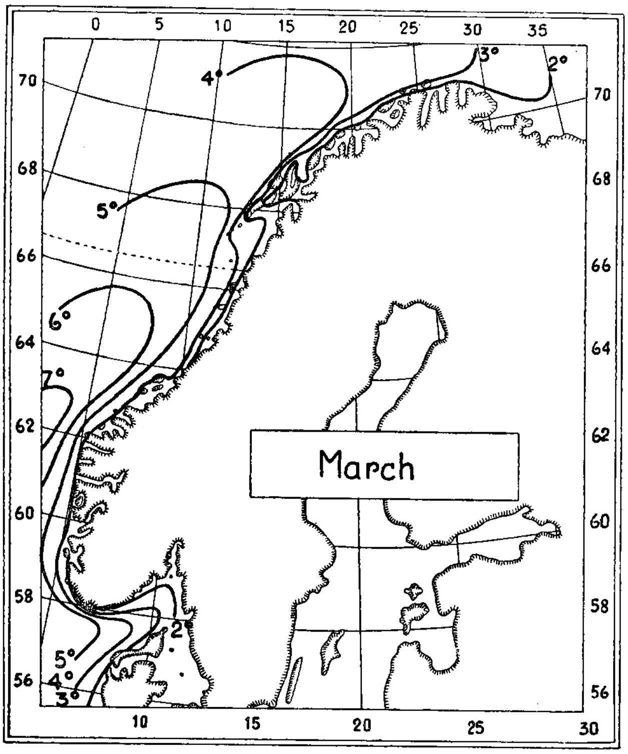


Fig. 3.

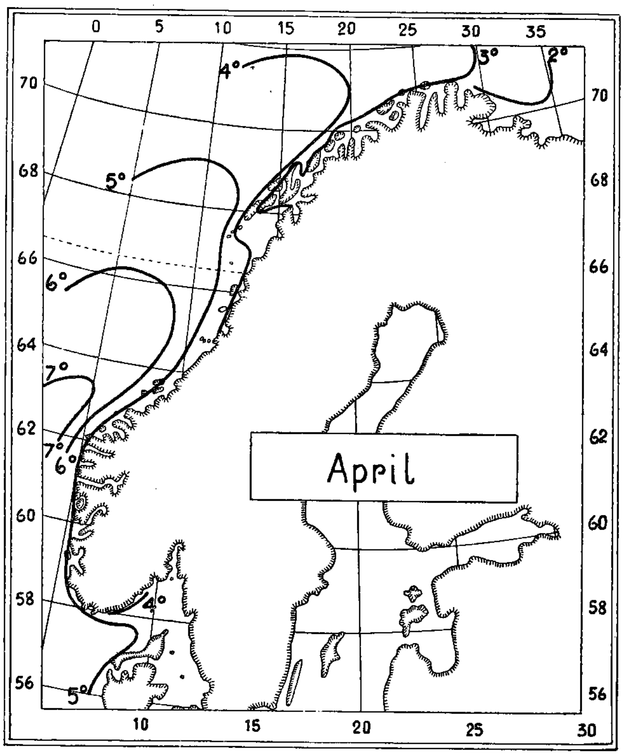
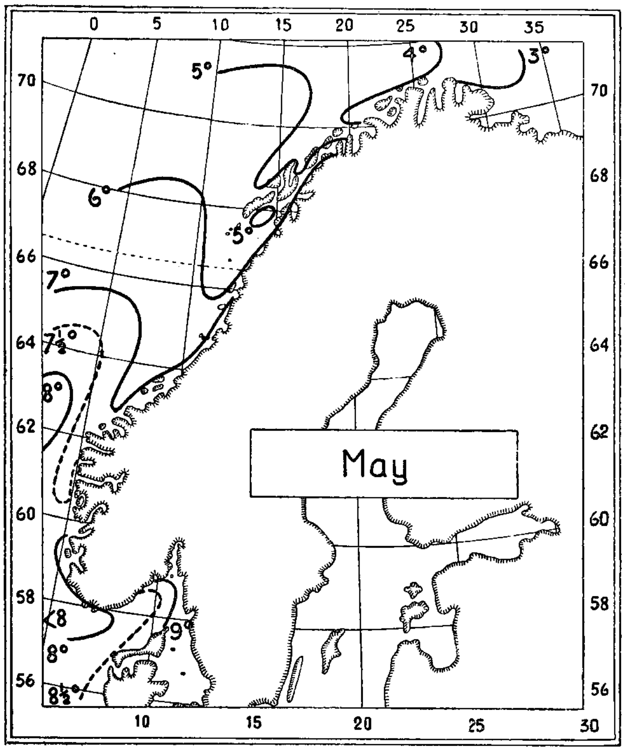


Fig. 4.

Sea-Surface Isotherms.



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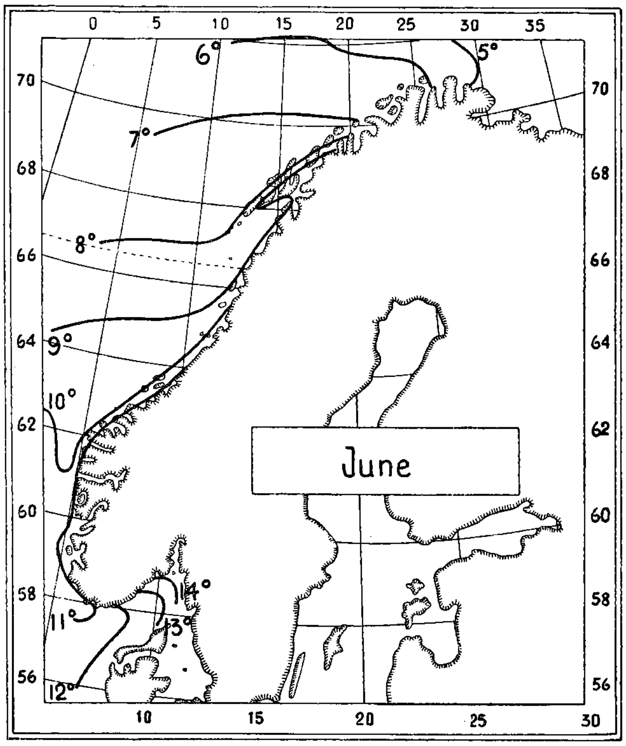

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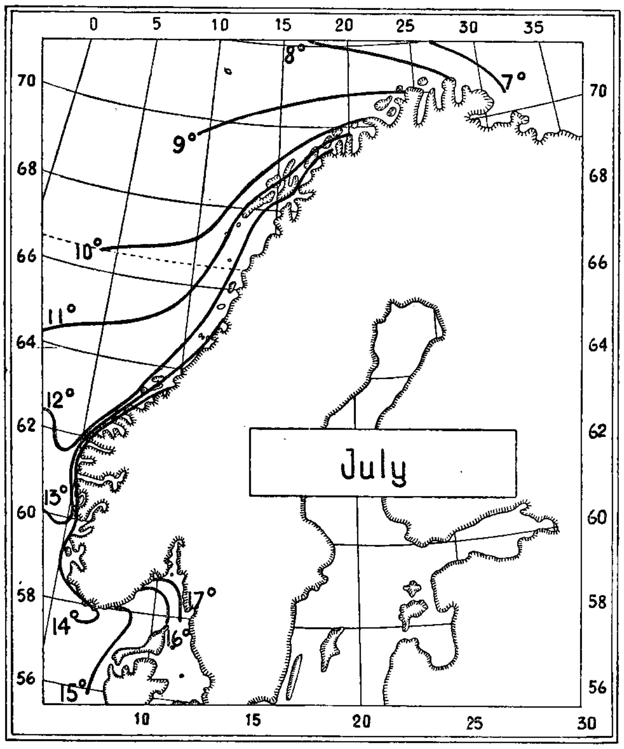

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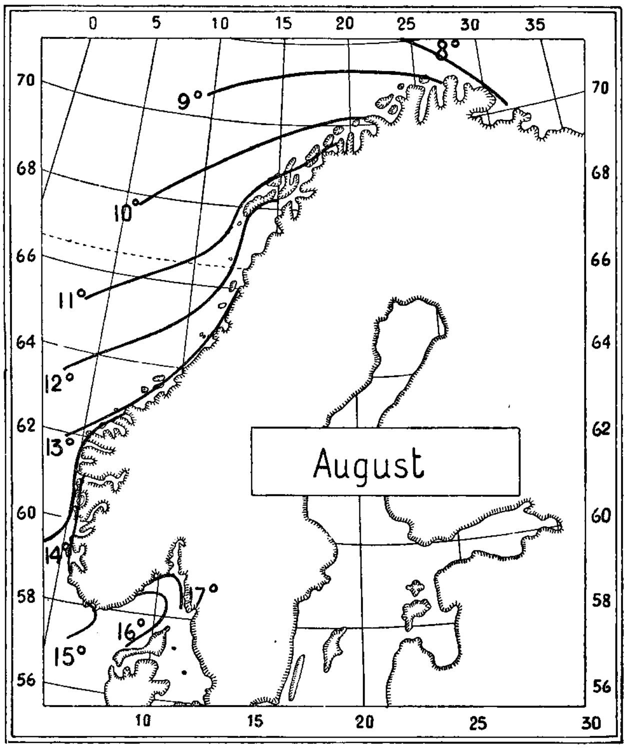
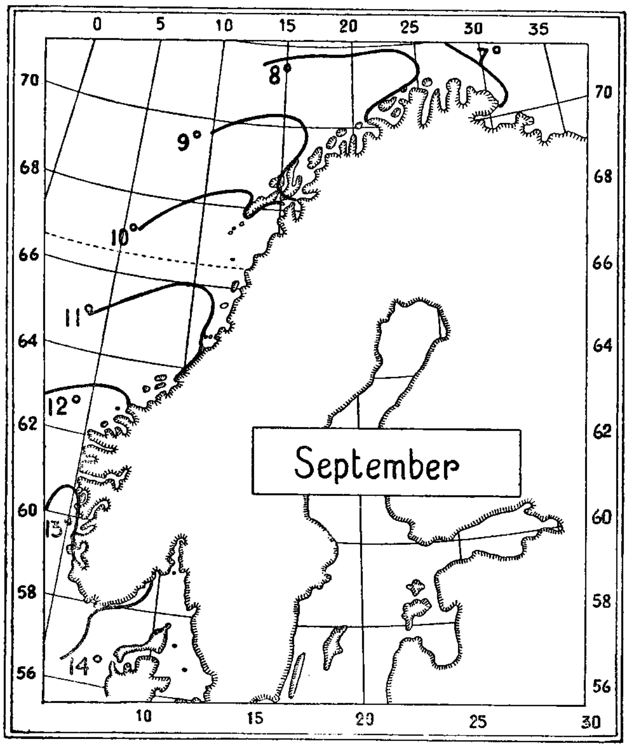


Fig. 8.

Sea-Surface Isotherms.



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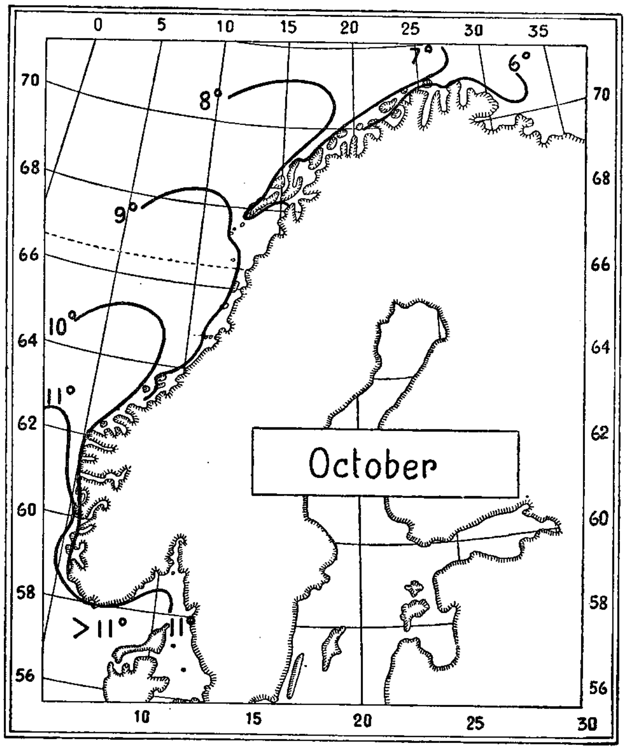

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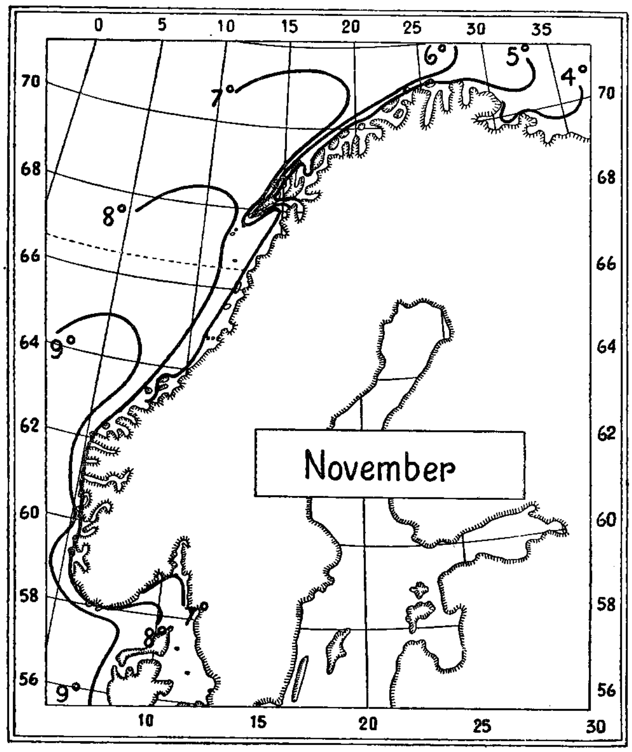

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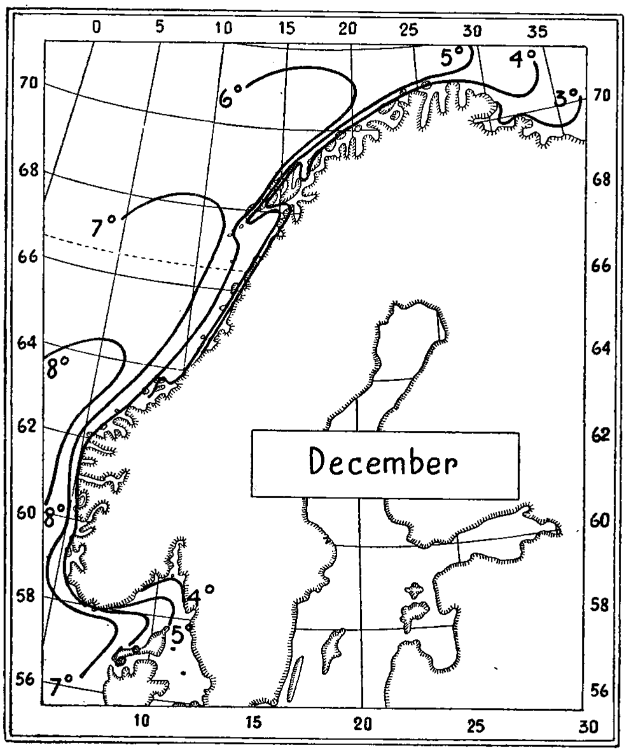
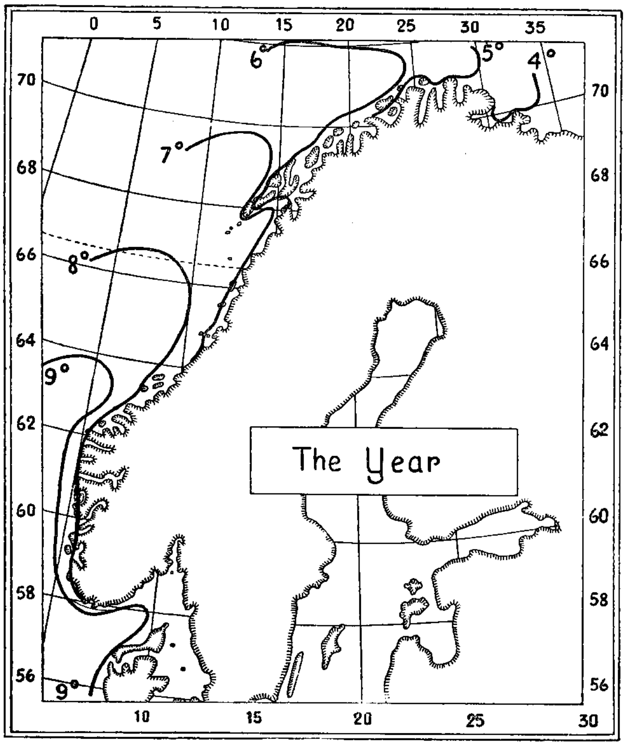


Fig. 12.

Sea-Surface Isotherms.



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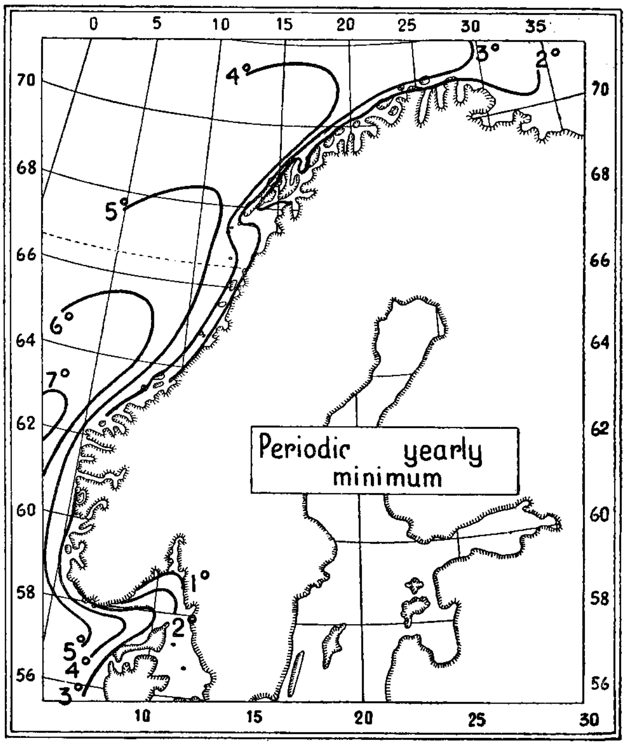


Fig. 14.

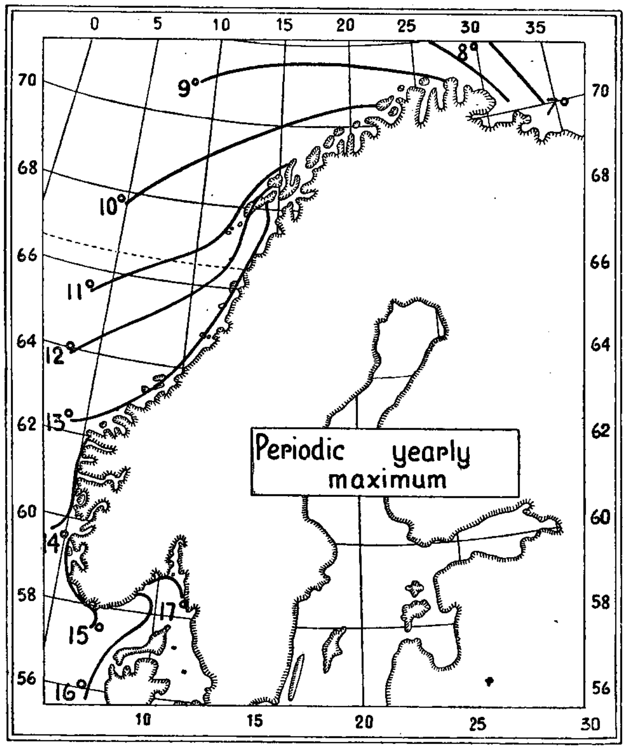


Fig. 15.

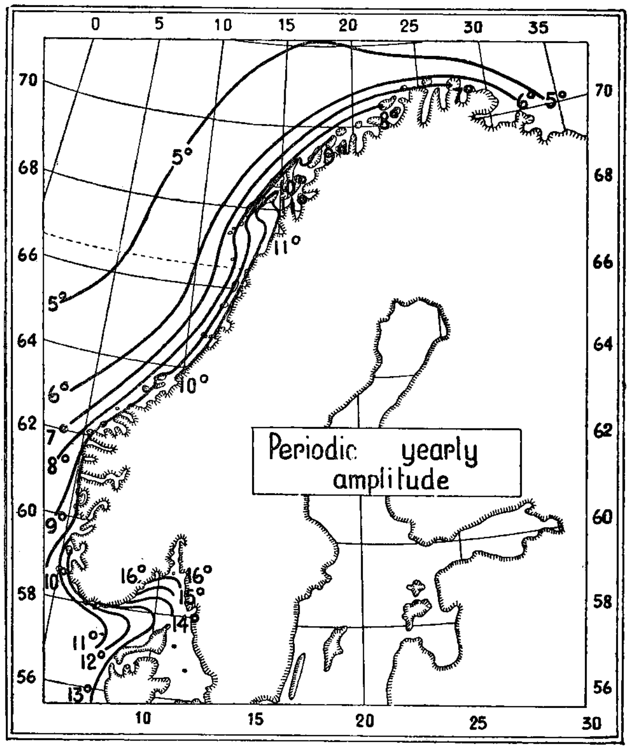


Fig. 16.

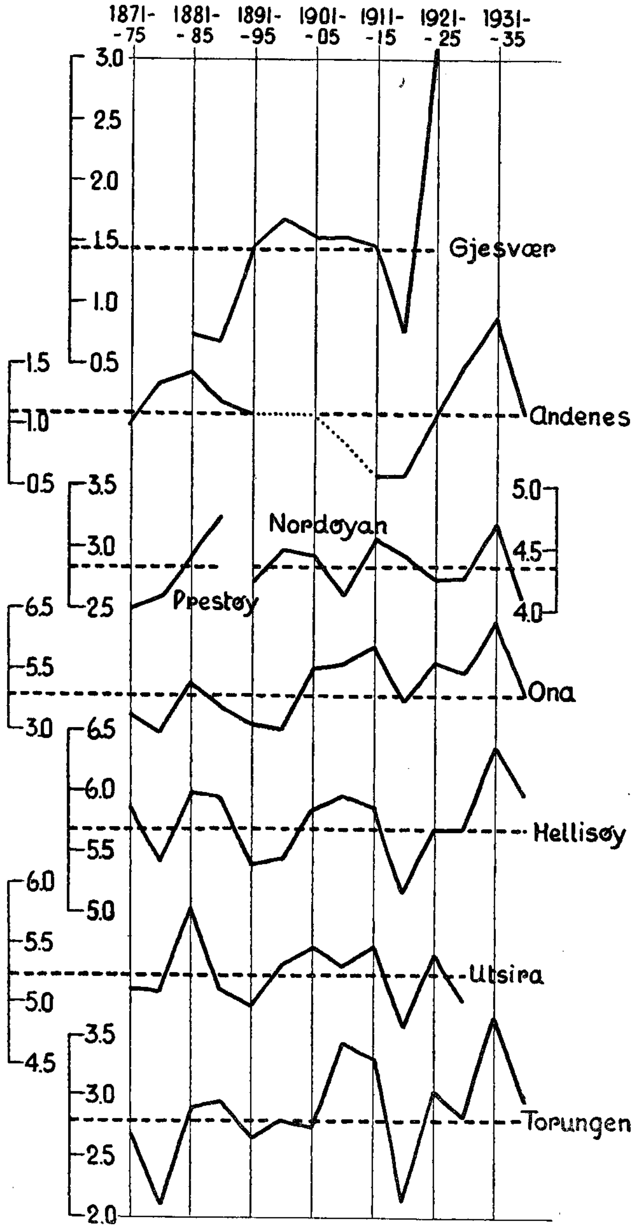


Fig. 17. Variation of Sea-Surface Temperature.
Winter: Dec.—Febr.

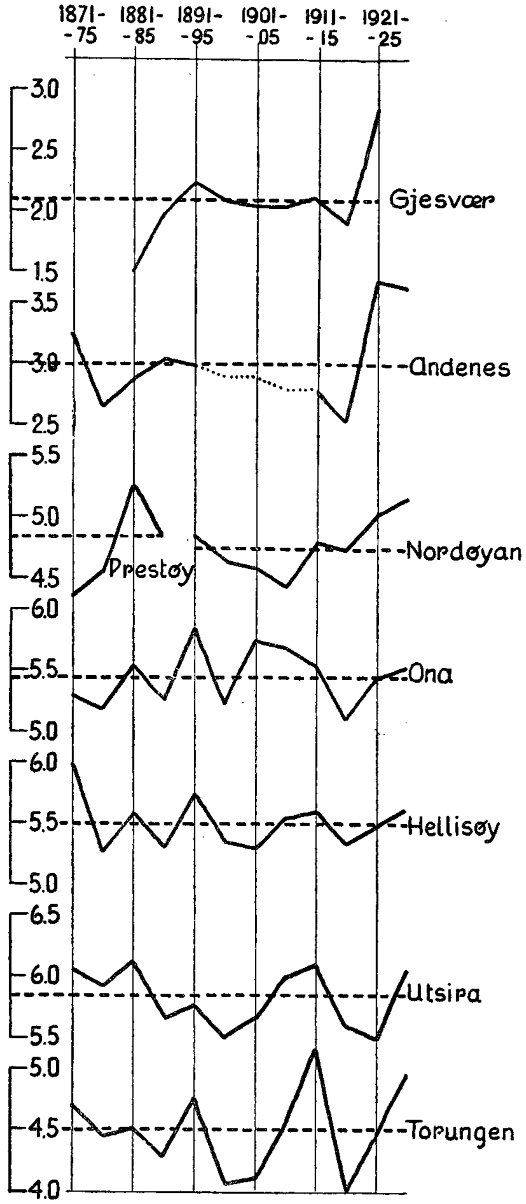


Fig. 18. Variation of Sea-Surface Temperature
Spring: March—May.

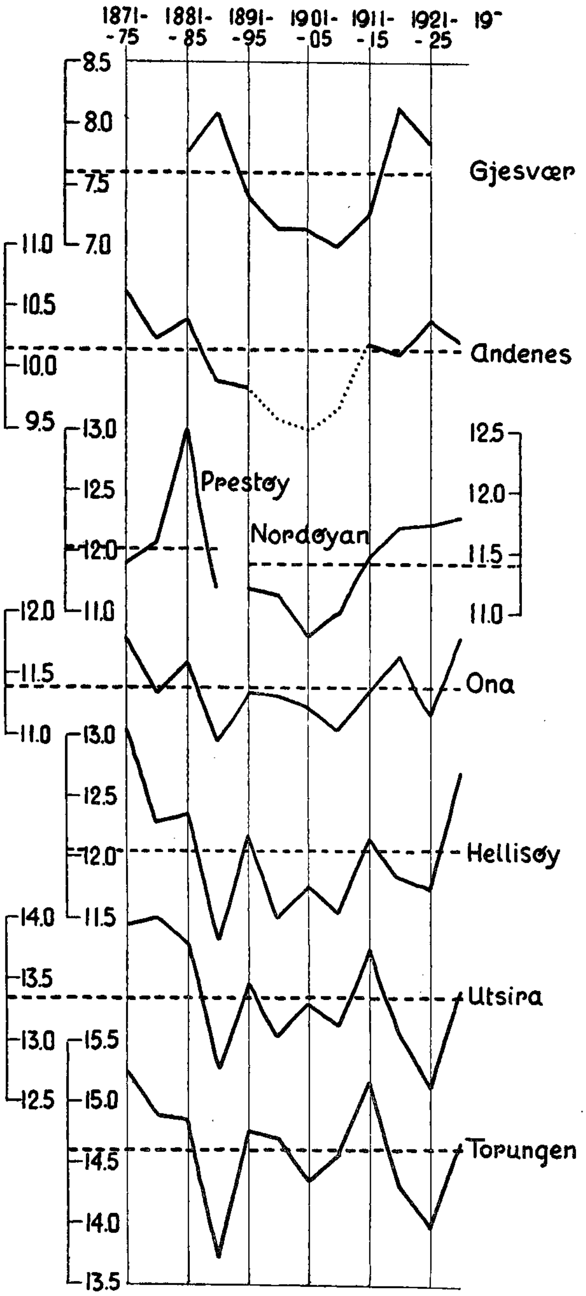


Fig. 19. Variation of Sea-Surface Temperature.
Summer: June—Aug.

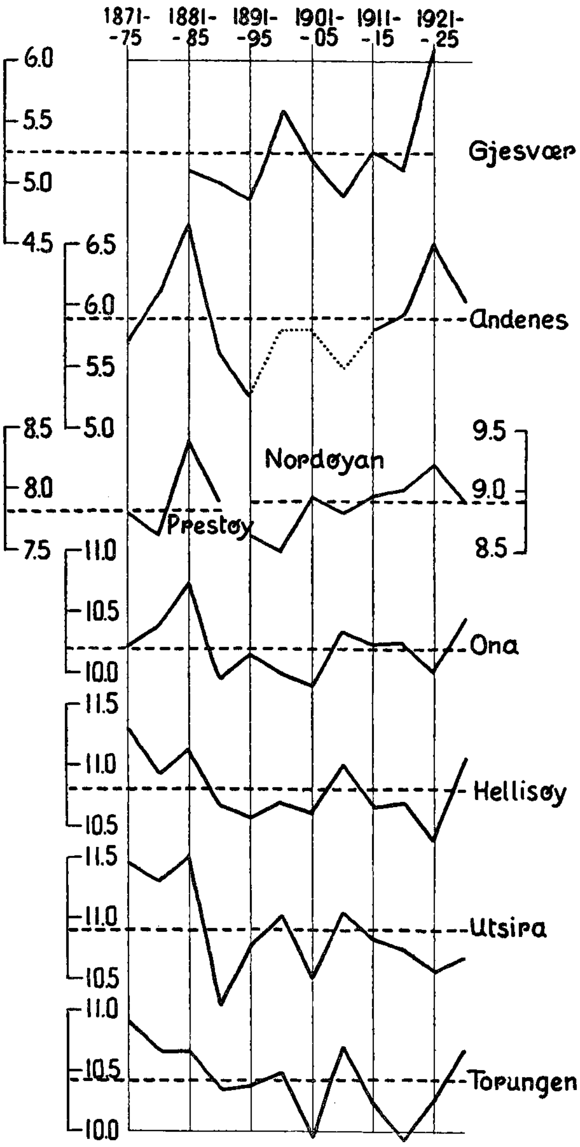


Fig. 20. Variation of Sea-Surface Temperature.
Autumn: Sept.—Nov.

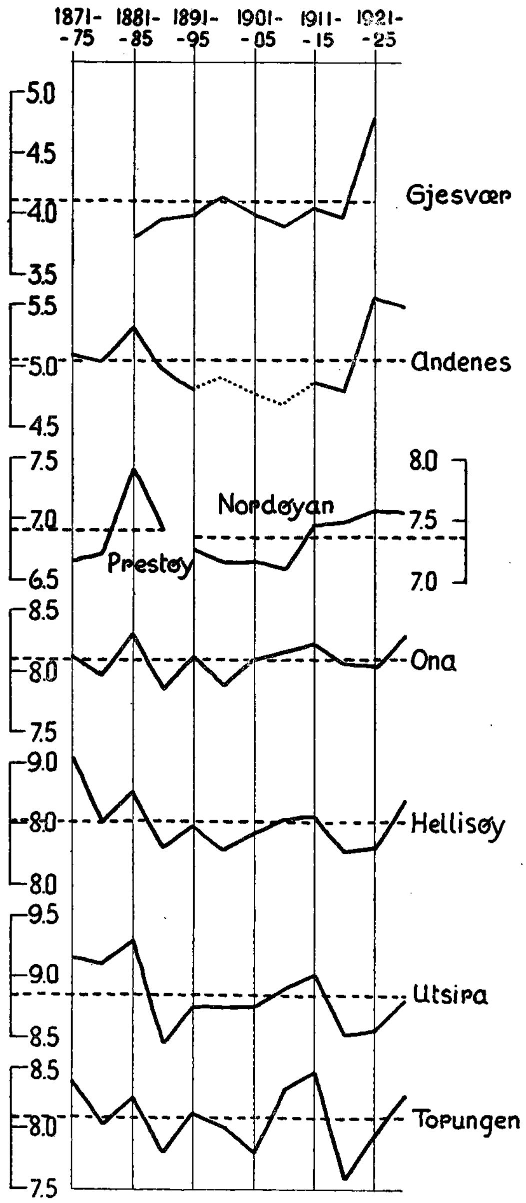
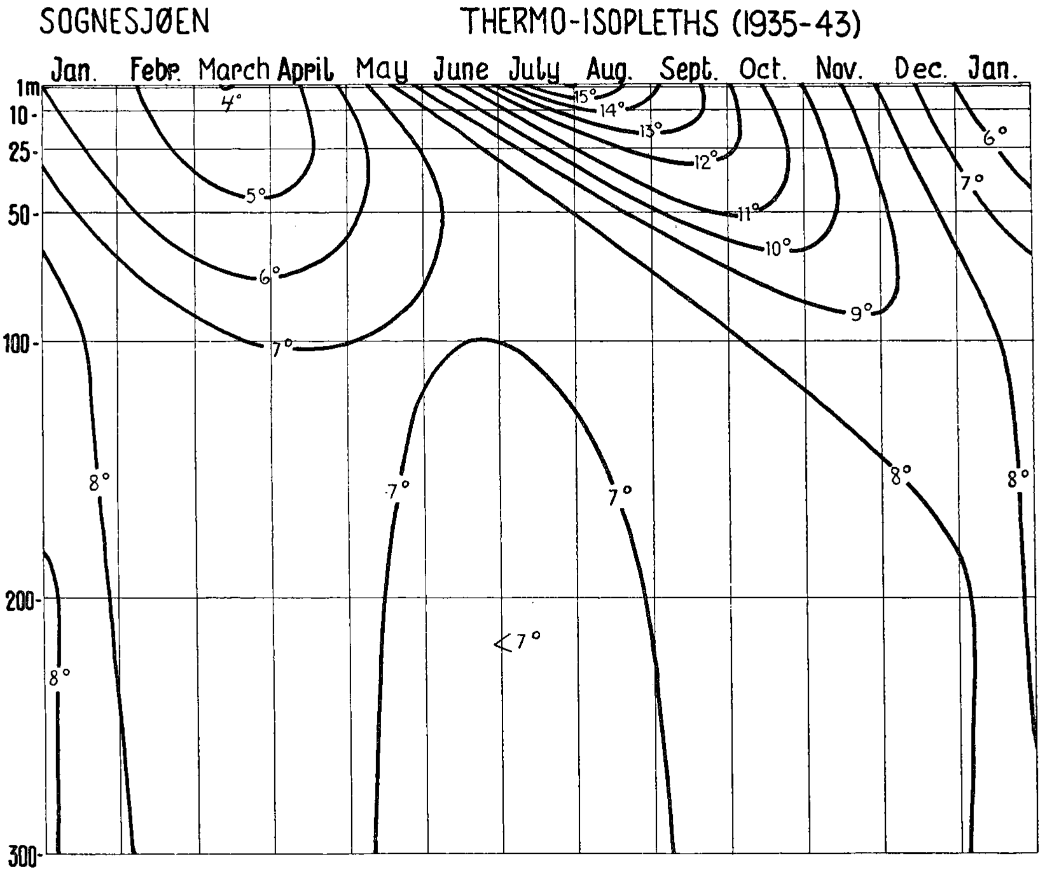


Fig. 21. Variation of Sea-Surface Temperature. Mean of the Year.


SOGNESJØEN
THERMO-ISOPLETHS (1935-43)
Jan. Febr. March April May June July Aug. Sept. Oct. Nov. Dec. Jan.
1m
10
25
50
100
200
300
4°
5°
6°
7°
8°
9°
10°
11°
12°
13°
14°
15°
6°
7°
8°
7°
7°
8°
8°
<7°
8°

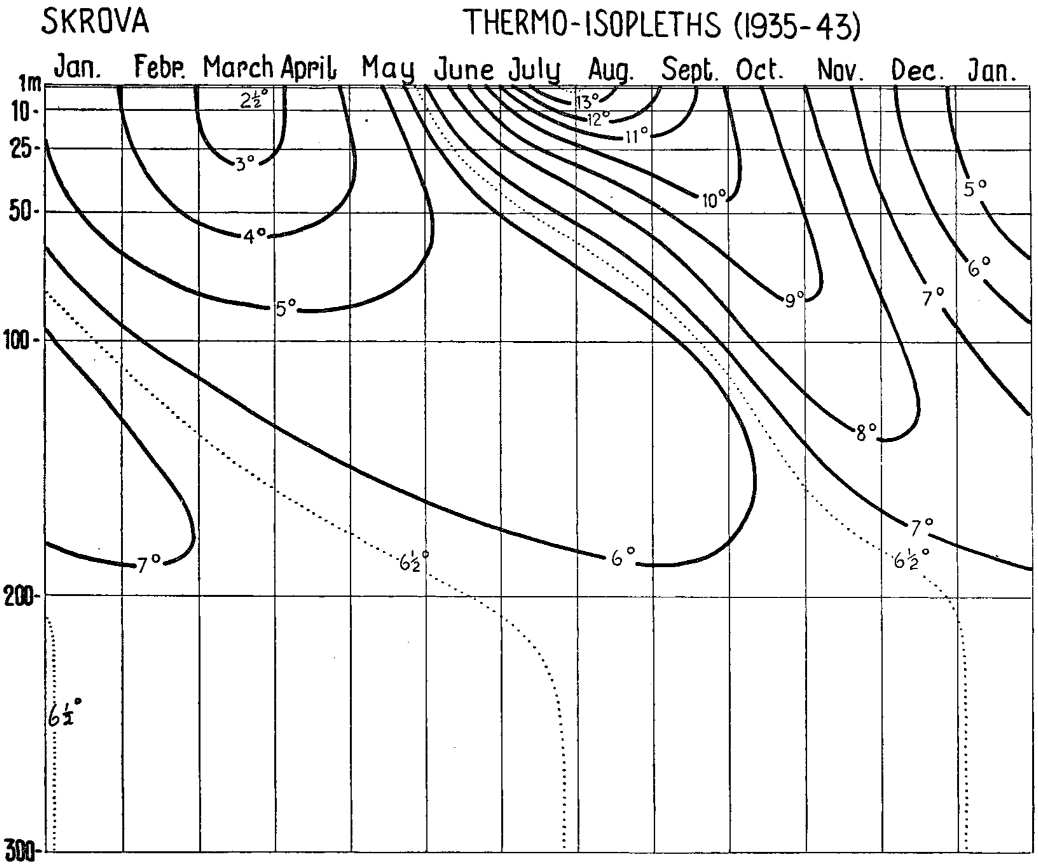

SKROVA
THERMO-ISOPLETHS (1935-43)
Jan. Febr. March April May June July Aug. Sept. Oct. Nov. Dec. Jan.
1m
10
25
50
100
200
300
2½°
3°
4°
5°
13°
12°
11°
10°
9°
8°
5°
6°
7°
7°
6½°
7°
6½°
6°
6½°

Fig. 22 and 23.

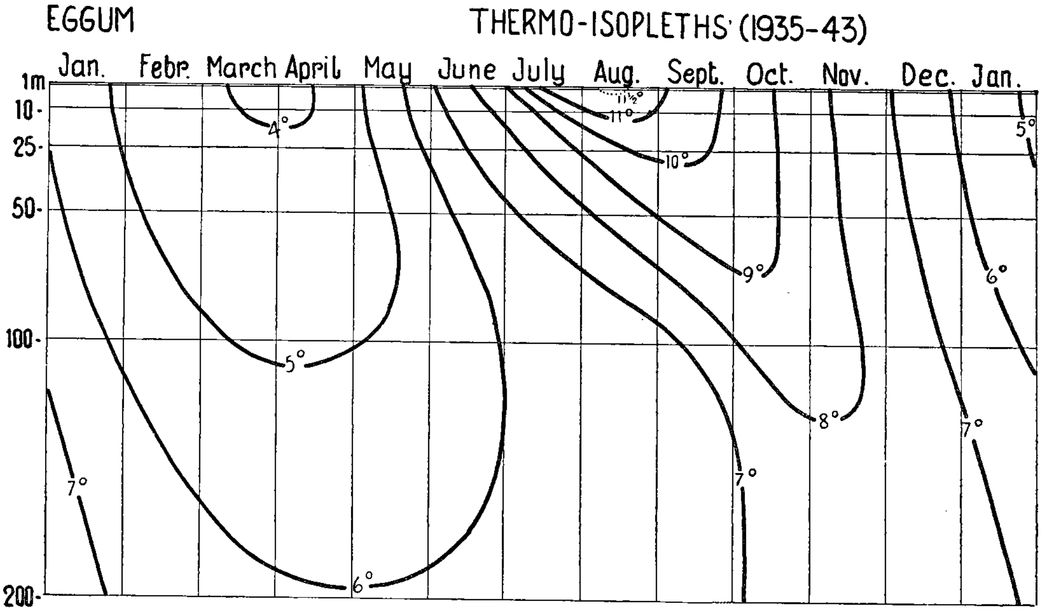


Fig. 24.

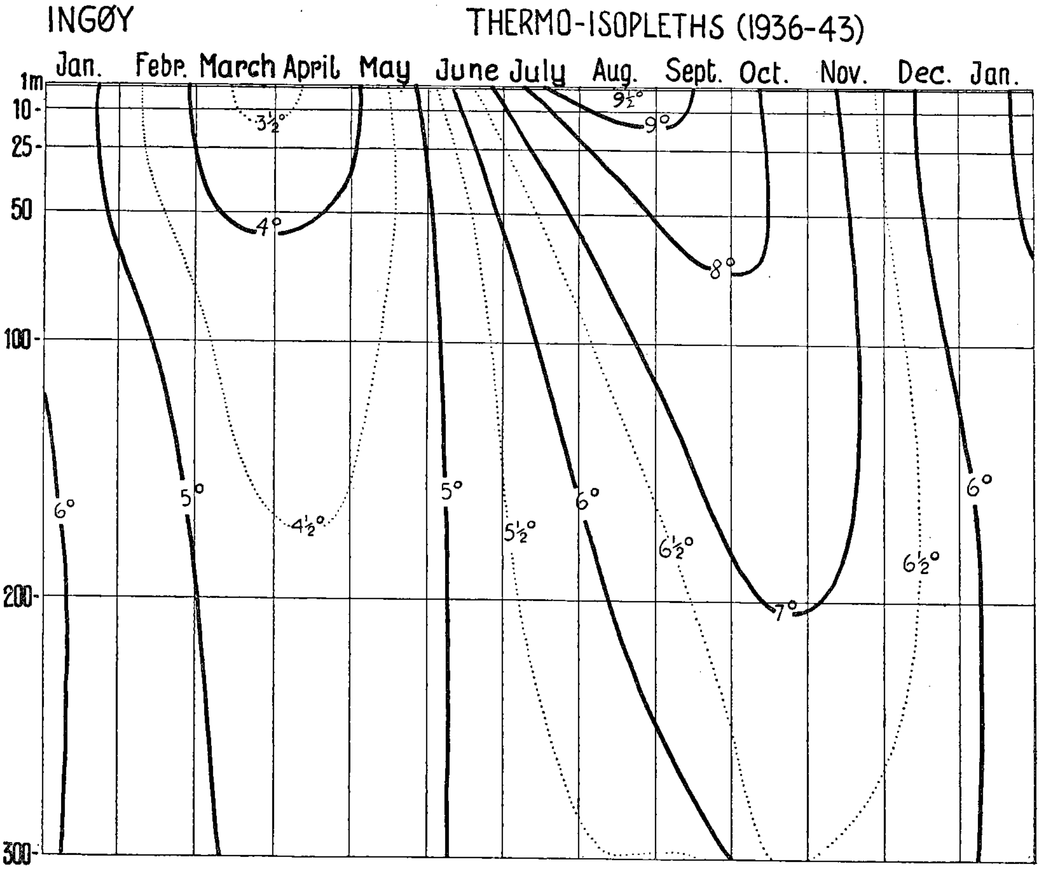


Fig. 25.

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