

EXTRAIT

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Appendice No. 11.

Surface Temperature Observations at  
Coningbeg Lightship on the South Coast of Ireland.

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IN a previous number of the *Rapports et Procès-Verbaux*. Volume XXXV, Rapport Atlantique 1923, a summary was given of the surface temperature observations taken at "Coningbeg" lightship, (52°02'N., 6°40'W., 29 fathoms) between 1904 and 1915. These observations, discontinued in April 1915, were resumed in November 1924 and are still continued. In the new series the temperatures were taken, as before, in a bucket of surface water, but the time of observation was altered to correspond with the routine of the Meteorological Office, readings being made at day-break and at 4.0 p.m. G.M.T. instead of, as previously, at half flood.

Ten- or eleven-day averages have been calculated for the readings during the period 1925—1937, each month being divided into three periods, 1st to 10th, 11th to 20th, 21st to end of month, the mean of the a.m. and p.m. readings being taken as the temperature for the day. On two occasions, February 1st to 15th, 1927, and August 27th to September 12th, 1928, when the records were incomplete, their place has been supplied, separately for a.m. and p.m. readings, by interpolation between the preceding and following periods of the years in question. On four occasions abnormal readings, probably due to clerical errors, have been omitted.

Table 1.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Mean Temp. for 1904—1915	8.56	7.93	7.73	8.35	9.74	11.63	13.09	14.05	14.07	13.38	11.47	9.67
Mean Temp. for 1925—1937	8.66	8.12	7.97	8.53	10.01	11.97	13.49	14.29	14.49	13.49	11.50	9.76
1925	9.08	8.51	7.96	8.45	9.60	12.25	13.47	13.84	13.85	13.23	11.38	8.94
1926	8.16	8.23	8.43	8.89	10.17	11.89	14.50	14.74	15.12	13.99	11.10	9.55
1927	8.45	7.88	8.22	8.73	9.97	11.37	13.10	14.36	14.18	13.27	11.48	9.73
1928	8.18	8.18	8.20	8.54	9.99	11.75	13.18	14.40	14.70	14.02	11.92	10.00
1929	8.52	8.43	8.34	8.79	10.22	11.85	13.52	13.78	14.83	13.38	11.40	9.81
1930	8.48	7.83	7.93	8.53	9.58	12.33	13.04	13.33	14.03	12.90	11.16	9.69
1931	8.39	7.57	7.14	8.21	9.97	11.87	12.95	13.55	13.66	13.19	11.76	10.66
1932	9.57	8.73	8.12	8.38	9.72	12.06	13.07	14.38	14.54	13.14	11.38	9.58
1933	8.52	7.72	7.97	8.74	10.51	12.23	14.25	15.31	15.56	14.42	11.93	9.79
1934	8.49	7.99	7.60	7.96	9.55	11.97	14.14	14.36	14.11	13.12	10.62	10.16
1935	9.44	8.56	8.34	8.87	10.20	12.17	14.02	14.98	14.55	13.04	11.14	9.13
1936	8.22	7.65	7.66	8.38	10.03	11.75	13.12	14.02	14.74	13.64	11.58	9.90
1937	9.03	8.31	7.66	8.45	10.69	12.19	13.05	14.68	14.54	13.99	12.59	9.91

Mean Monthly Temperatures, averages of a.m. and p.m. readings

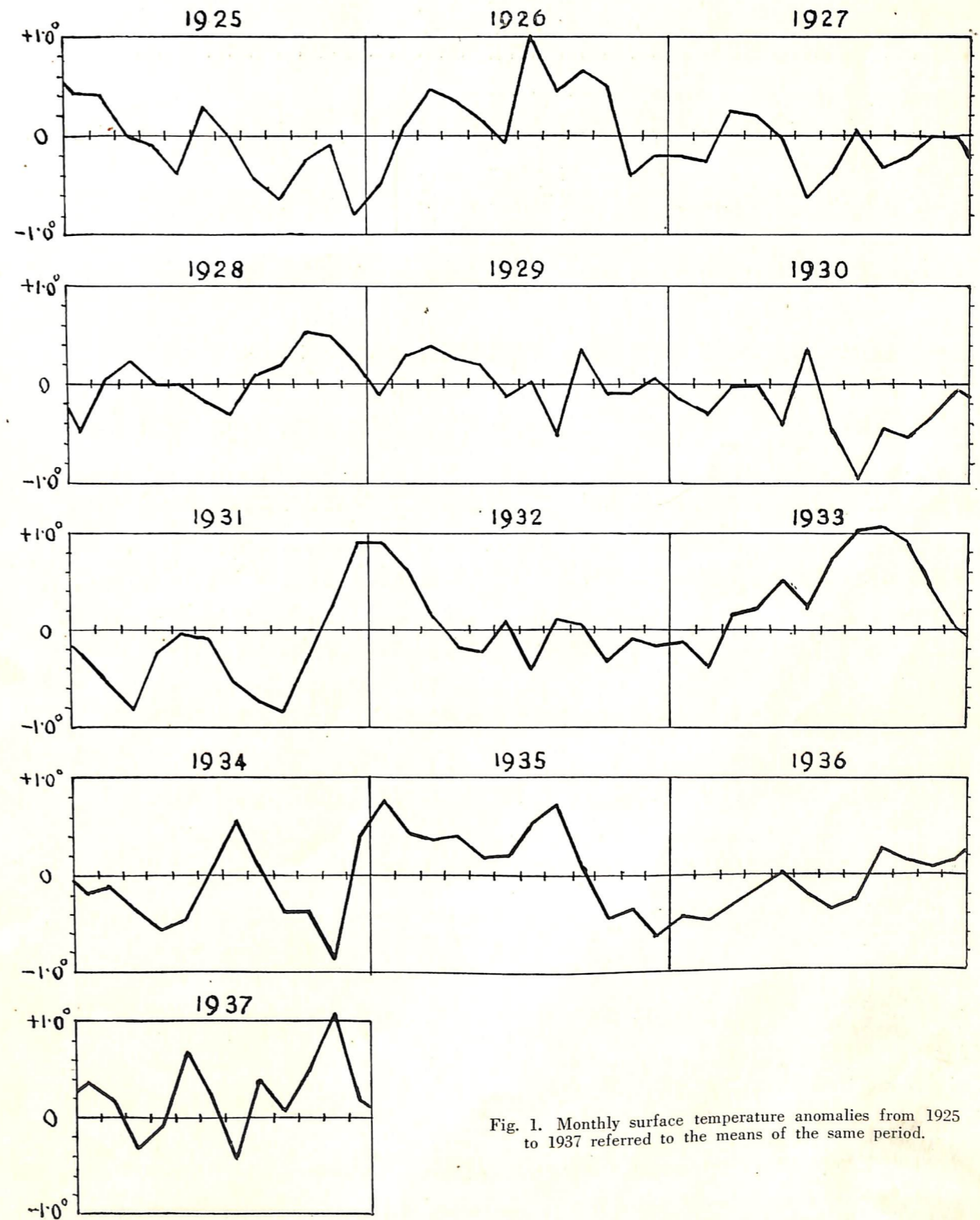


Fig. 1. Monthly surface temperature anomalies from 1925 to 1937 referred to the means of the same period.

Table of average monthly excess of p.m. over a.m. readings for whole period 1925—1937. (Table 3.)

As the purpose of this paper is merely to put on record a summary of the 1925—1937 readings (not included in the *Bulletin Hydrographique* owing to the absence of salinities) for comparison with those taken in 1904—1915 no discussion of the results is needed.

<sup>1)</sup> In the table of mean monthly temperatures for 1904—1915 published in the *Bulletin Atlantique* for 1923, p. 25, the mean monthly temperatures for the months January to May and December for the period 1904—1906 were, by a clerical error, substituted for those of the period 1904—1915. The true figures are those now given.

Attention was called to this error in the *Bulletin Atlantique* for 1926. (Rapp. et Proc.-Verb., Vol. XLIV).

The observations have been summarized in the following tables and graphs:—

Table of mean monthly temperatures, average of a.m. and p.m. readings, for each year from 1925 to 1937, with averages of mean monthly temperatures for the periods 1925—1937 and 1904—1915<sup>1)</sup>. (Table 1.)

Graph of monthly surface temperature anomalies for each year from 1925 to 1937 referred to the means of the same period. (Fig. 1.)

Graph of mean surface temperatures, ten-day periods for 1925—1937 and for 1904—1915. (Fig. 2.)

Table of temperature anomalies, ten-day periods, for each year from 1925—1937 referred to means of same period, with ten-day means of a.m. and p.m. readings for 1925—1937. (Table 2.)

Table 3.

Average monthly excess of p.m. over a.m. readings for the period 1925—1937.

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
.05	.07	.19	.25	.39	.59	.55	.47	.30	.12	.06	.06

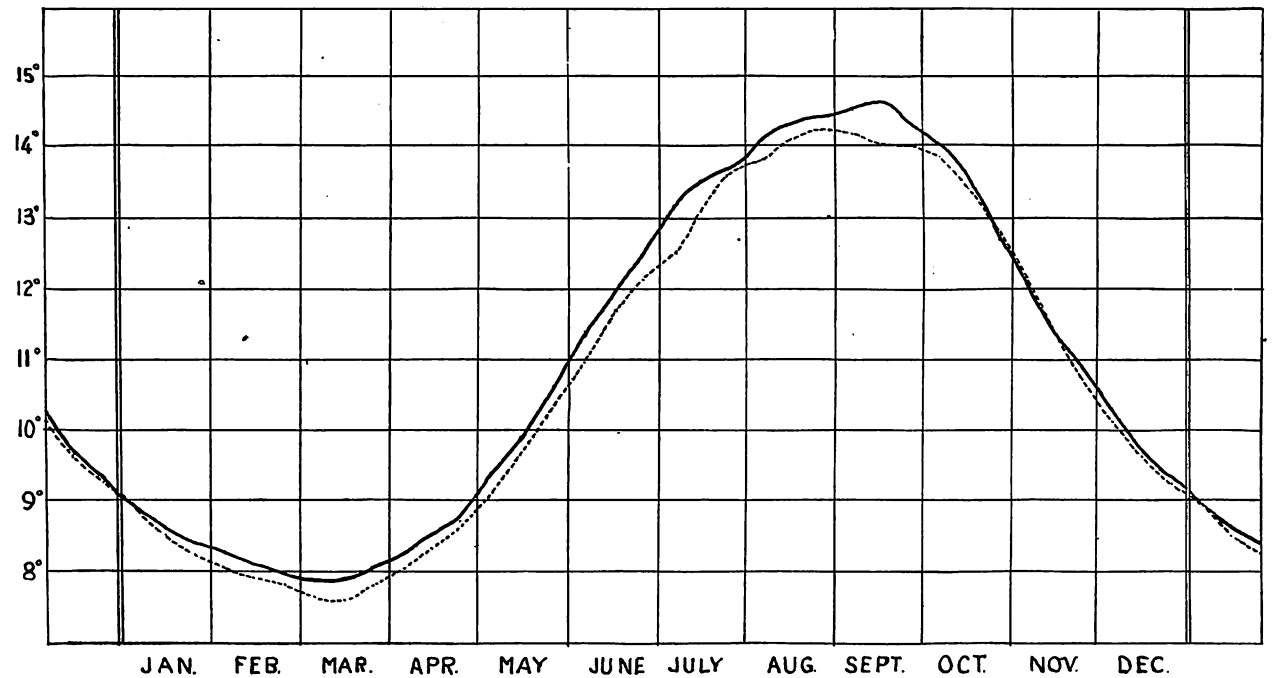


Fig. 2. Mean Surface Temperatures, ten-day periods, for 1926—1937, thick line, and for 1904—1915, dotted line.

Date	Mean 10 day a.m. temperature 1925—1937.	Mean 10 day p.m. temperature 1925—1937.	Mean of a.m. and p.m. temperatures 1925—1937.	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Jan. 5	8.92	8.97	8.94	+1.10	-.66	+.03	-.53	-.08	-.26	-.29	+.91	-.04	-.24	+.92	-.21	+.30
Jan. 15	.60	.65	.62	+.47	-.54	-.20	-.52	-.20	-.09	-.20	+.62	-.04	-.18	+.91	-.52	+.46
Jan. 25	.37	.42	.40	+.72	-.27	-.43	-.36	-.13	-.17	-.30	+.1.01	-.39	-.07	+.52	-.57	+.37
Feb. 5	.22	.32	.27	+.57	-.11	-.36	-.25	+.30	-.46	-.37	+.1.09	-.20	-.08	+.37	-.62	+.13
Feb. 15	.09	.13	.11	+.35	+.06	-.25	+.01	+.18	-.19	-.56	+.30	-.32	-.05	+.57	-.37	+.21
Feb. 25	7.96	.02	7.99	+.24	+.36	-.11	+.41	+.43	-.27	-.72	+.44	-.69	-.26	+.36	-.43	+.22
Mar. 5	.81	7.98	.90	+.05	+.42	+.18	+.50	+.25	+.05	-.72	+.12	-.25	-.23	+.33	-.50	-.23
Mar. 15	.82	8.01	.91	+.13	+.70	+.27	+.04	+.29	-.09	-.93	+.13	+.18	-.29	+.24	-.34	-.30
Mar. 25	.98	.18	8.08	-.19	+.29	+.32	+.16	+.49	-.05	-.82	+.22	+.08	-.58	+.55	-.08	-.36
Apr. 5	8.17	.40	.28	+.19	+.31	+.20	+.06	+.42	-.02	-.34	-.02	+.33	-.84	+.24	-.15	-.26
Apr. 15	.39	.62	.51	+.05	+.35	+.21	+.04	+.21	-.07	-.14	+.05	+.05	-.52	+.30	-.26	-.13
Apr. 25	.66	.95	.81	-.10	+.41	+.17	-.09	+.14	+.09	-.50	+.25	-.36	-.36	+.47	-.36	+.13
May 5	9.24	9.61	9.42	-.33	+.03	-.02	+.16	+.10	-.01	-.54	-.32	+.23	-.24	+.61	+.13	+.25
May 15	.77	10.18	.97	-.38	-.16	-.04	+.07	+.41	-.80	+.12	-.30	+.60	-.65	+.71	+.17	+.91
May 25	10.46	.84	10.65	-.54	+.60	-.08	-.30	+.11	-.49	+.28	-.27	+.66	-.51	-.02	-.26	+.88
June 5	11.17	11.69	11.43	-.35	-.26	-.47	+.02	-.07	+.49	+.42	+.04	+.82	-.10	+.16	-.87	+.10
June 15	.73	12.32	12.03	+.1.05	-.16	-.62	-.27	-.37	+.61	-.32	-.29	+.06	+.43	-.04	-.85	+.62
June 25	12.21	.77	.49	+.09	+.14	-.74	-.44	+.04	-.05	-.43	+.46	-.15	-.27	+.43	-.10	+.10
July 5	.93	13.50	13.21	+.26	+.1.27	-.21	-.69	+.21	+.18	-.65	-.20	+.51	+.85	+.40	+.05	-.92
July 15	13.28	.83	.56	-.18	+.1.48	-.51	-.38	+.67	-.87	-.36	+.81	+.59	+.46	+.71	-.80	-.26
July 25	.44	.97	.70	-.15	+.27	+.54	+.14	+.80	-.61	-.24	+.1.18	+.63	+.63	+.47	-.37	+.13
Aug. 5	.82	14.40	14.11	-.84	+.59	+.64	-.11	-.34	-.98	-.79	-.05	+.1.09	+.18	+.93	-.74	+.42
Aug. 15	14.15	.51	.33	-.17	+.36	-.02	+.34	-.25	-.00	-.65	-.17	+.94	+.10	+.58	-.37	+.31
Aug. 25	.18	.66	.42	-.34	+.41	-.39	+.15	-.93	-.90	-.77	+.51	+.1.04	-.06	+.58	+.30	+.44
Sept. 5	.34	.72	.53	-.50	+.46	-.02	+.16	+.35	-.50	-.1.09	+.11	+.1.03	-.56	+.10	+.28	+.20
Sept. 15	.45	.78	.62	-.72	+.70	-.44	+.24	+.30	-.36	-.82	+.19	+.1.05	-.23	+.12	+.16	-.26
Sept. 25	.25	.46	.35	-.71	+.75	-.51	+.20	+.35	-.54	-.60	+.17	+.1.10	-.39	+.06	+.28	+.19
Oct. 5	13.94	.10	.02	-.48	+.91	-.51	+.38	+.05	-.65	-.26	-.30	+.1.14	-.38	+.35	+.07	+.35
Oct. 15	.53	13.61	13.57	-.43	+.54	-.19	+.66	-.22	-.59	-.25	-.29	+.97	-.33	+.54	+.13	+.52
Oct. 25	12.77	12.90	12.83	+.17	+.11	+.08	+.61	-.12	-.48	-.33	+.41	+.74	-.36	+.42	+.29	+.67
Nov. 5	.04	.19	.11	+.24	-.18	+.29	+.34	+.07	-.44	+.16	-.44	+.34	-.1.22	+.43	+.29	+.1.11
Nov. 15	11.39	11.45	11.42	-.09	-.31	-.27	+.64	+.32	-.32	+.31	+.12	+.48	-.44	+.01	+.1.06	+.1.06
Nov. 25	10.89	.01	10.95	-.48	-.69	-.05	+.31	-.03	+.34	+.34	+.03	+.48	-.55	+.19	+.1.13	+.1.13
Dec. 5	.24	10.32	.28	-.63	+.27	+.27	+.11	+.25	-.20	+.59	-.43	+.02	-.64	+.01	+.52	+.52
Dec. 15	9.65	9.71	9.68	-.90	-.03	+.06	+.30	+.35	-.04	+.1.10	-.37	+.42	-.70	+.06	-.21	+.52
Dec. 25	.29	.35	.32	-.94	-.28	-.42	+.30	+.45	+.04	+.1.01	+.25	+.68	-.56	+.36	+.13	+.13

Table 2.

Temperature Anomalies in .01°C. referred to mean for the period January 1925—December 1937.



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