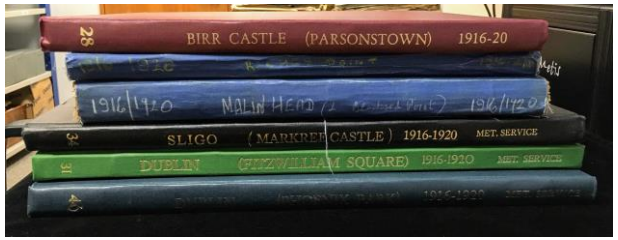
Met Éireann's Data Rescue Collaborations and Archives

Mary Curley



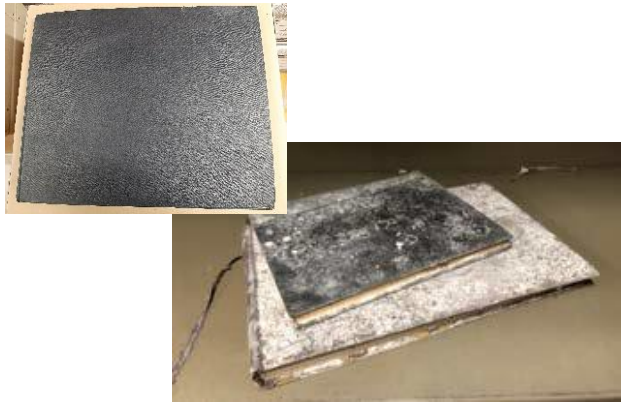
An Roinn Tithío
Pleanála agus Ri
Department of H
Planning and Lo

An Roinn Tithíochta,
Pleanála agus Rialtais Áitiúil
Department of Housing,
Planning and Local Government

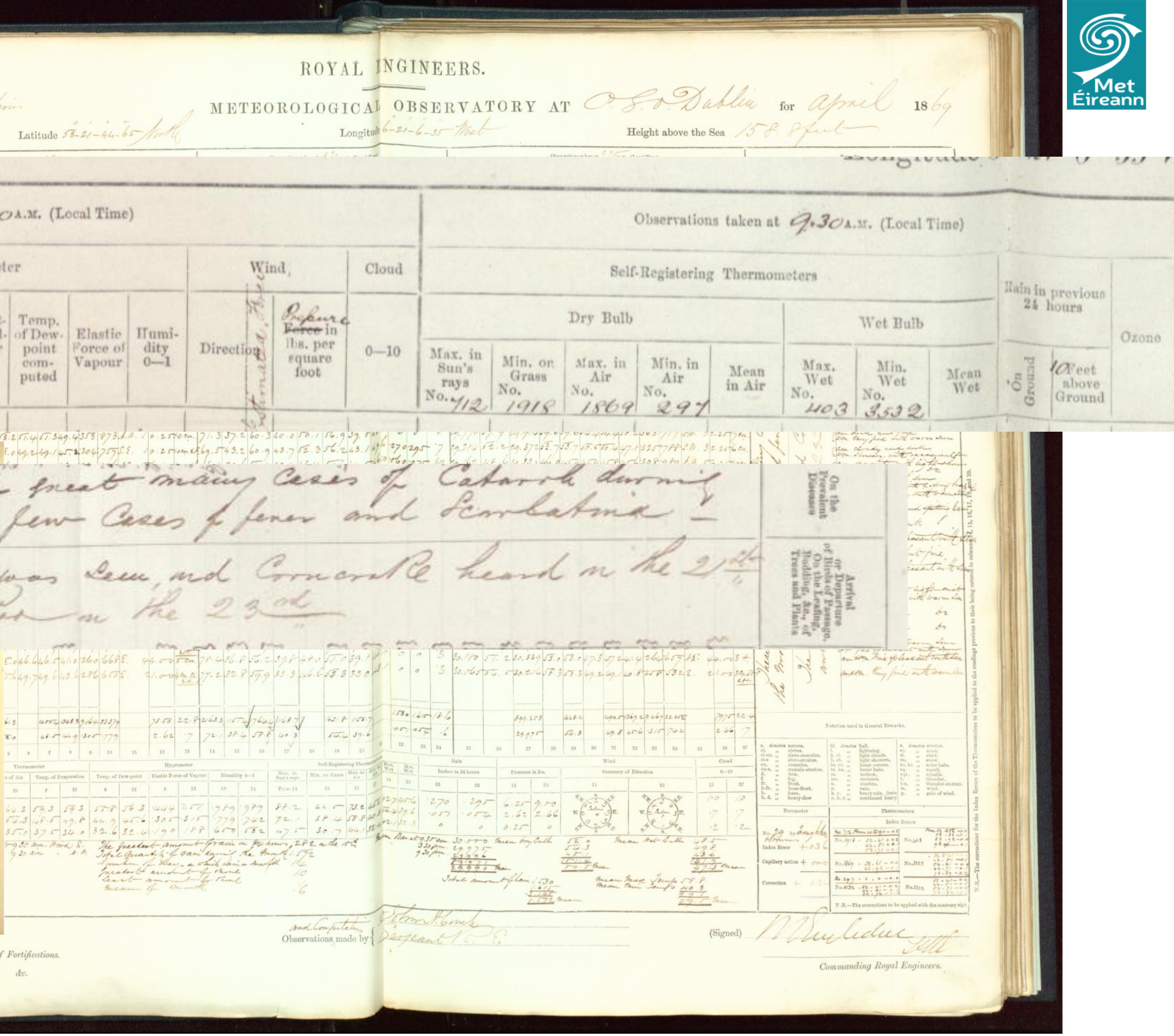
Met Éireann Archive

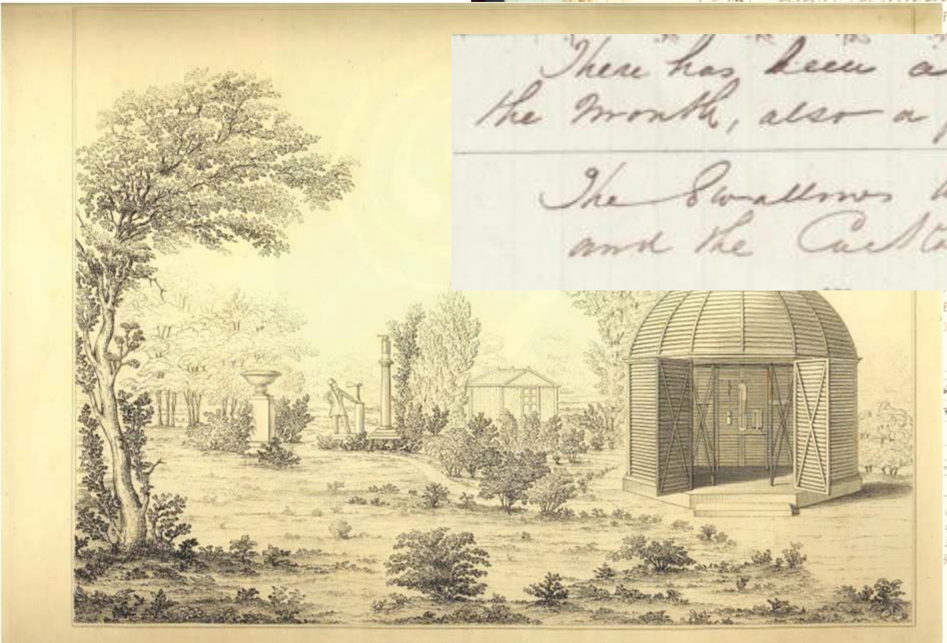
The archive holds

- Catalogued handwritten records back to 1834 (Phoenix Park)
- Copies of diaries held by other archives dating back to 1734
- In 2019 approximately 150 previously undocumented manuscripts were found at a number of locations
- Further data has been found in recent years;
  - Army medical records
  - Agricultural statistics of the weather



Met Éireann

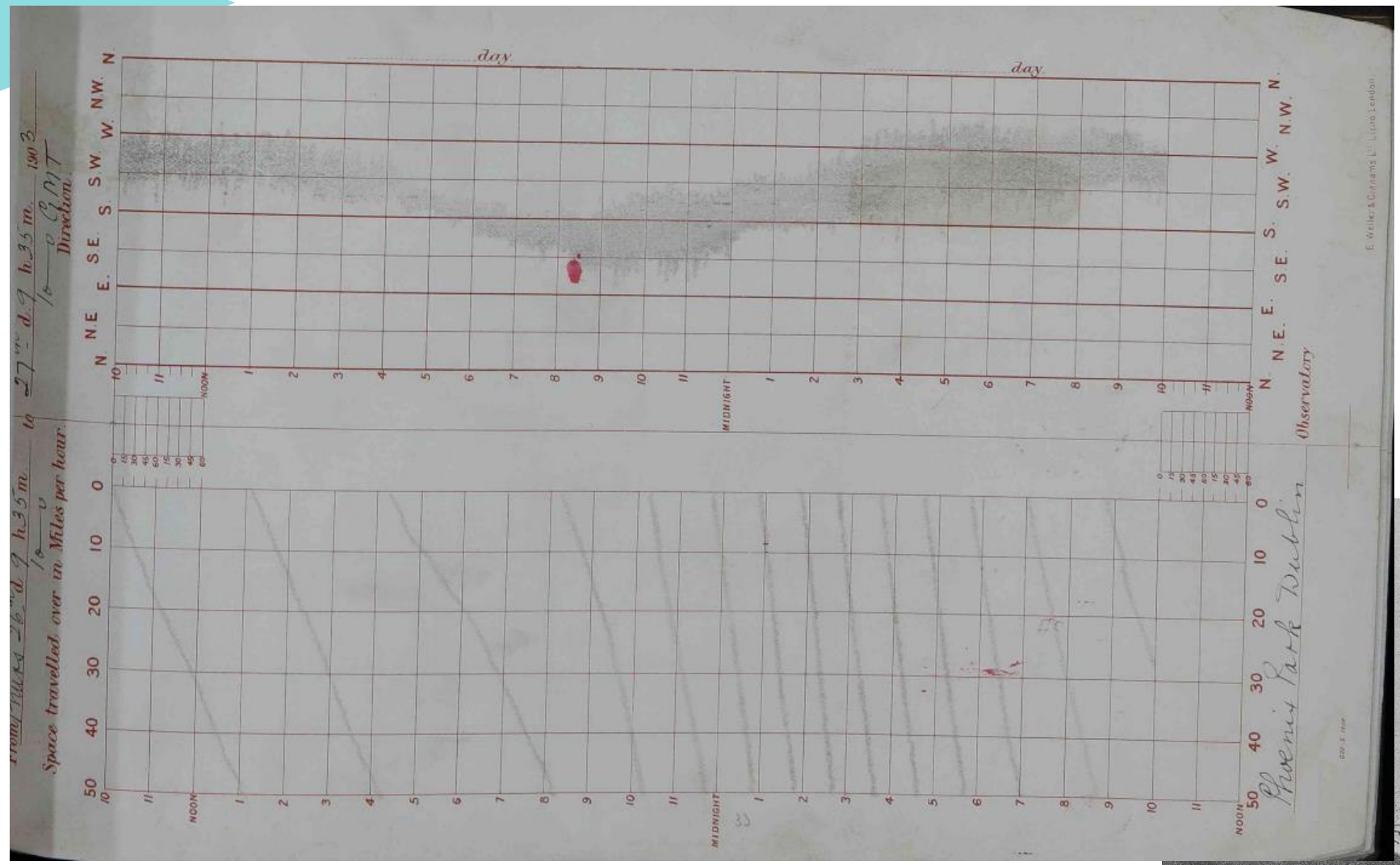




THE METEOROLOGICAL OBSERVATORY.

An Roinn Tithíochta,
Pleanála agus Rialtais Áitiúil
Department of Housing,
Planning and Local Government

Storm Ulysses February 1903



Met Éireann

No. 21. TABULATED HOURLY VALUES OF THE ANEMOGRAPH at Phœnix Park, Dublin for February 1903. No. 9

Date	SUNDAY, 22				MONDAY, 23				TUESDAY, 24				WEDNESDAY, 25				THURSDAY, 26				FRIDAY, 27				SATURDAY, 28				...Date
	Velocity.			Direction.	Velocity.			Direction.	Velocity.			Direction.	Velocity.			Direction.	Velocity.			Direction.	Velocity.			Direction.	Velocity.			Direction.	
HOURS. G.M.T.	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	Uncorrected.	Correction for friction.	Corrected.	E. = 8 S. = 16 W. = 24 N. = 32	HOURS. G.M.T.
	miles.	m.	miles.		miles.	m.	miles.		miles.	m.	miles.		miles.	m.	miles.		miles.	m.	miles.		miles.	m.	miles.		miles.	m.	miles.		
1 a.m.	11		·	20	17		·	20	13		·	19	14		·	20	15		·	21	52		·	18	1		·	23	1 a.m.
2 "	16		·	20	17		·	22	15		·	18	13		·	20	15		·	20	53		·	18	1		·	23	2 "
3 "	19		·	19	17		·	22	20		·	18	14		·	19	15		·	21	55		·	20	0		·	23	3 "
4 "	17		·	19	12		·	22	21		·	18	20		·	19	14		·	21	50		·	22	0		·	23	4 "
5 "	17		·	19	15		·	22	23		·	18	20		·	19	12		·	21	47		·	22	1		·	23	5 "
6 "	11		·	21	12		·	21	26		·	18	19		·	19	13		·	21	41		·	22	0		·	23	6 "
7 "	6		·	20	15		·	21	27		·	18	17		·	19	14		·	22	34		·	23	0		·	23	7 "
8 "	4		·	20	15		·	21	31		·	18	17		·	19	16		·	22	28		·	23	1		·	23	8 "
9 "	3		·	18	17		·	21	36		·	18	18		·	19	14		·	22	25		·	23	2		·	23	9 "
10 "	9		·	15	17		·	22	42		·	19	17		·	19	17		·	22	20		·	23	4		·	23	10 "
11 "	24		·	19	16		·	22	46		·	20	20		·	18	15		·	22	21		·	22	10		·	19	11 "
Noon	27		·	19	19		·	22	42		·	19	27		·	18	16		·	22	22		·	23	11		·	24	Noon
1 p.m.	27		·	20	15		·	22	31		·	19	21		·	19	16		·	22	17		·	24	16		·	24	1 p.m.
2 "	22		·	20	18		·	22	17		·	20	20		·	20	16		·	22	16		·	25	16		·	24	2 "
3 "	20		·	20	18		·	24	16		·	21	14		·	20	18		·	21	14		·	24	15		·	24	3 "
4 "	17		·	22	12		·	23	21		·	20	20		·	20	13		·	20	13		·	24	16		·	24	4 "
5 "	15		·	22	12		·	22	21		·	20	16		·	19	11		·	18	9		·	24	17		·	24	5 "
6 "	15		·	20	14		·	22	25		·	20	14		·	17	11		·	17	5		·	23	10		·	23	6 "
7 "	16		·	22	10		·	22	19		·	20	15		·	15	0		·	15	3		·	23	7		·	22	7 "
8 "	13		·	22	10		·	21	18		·	20	27		·	17	7		·	15	1		·	23	11		·	20	8 "
9 "	15		·	22	9		·	20	12		·	21	28		·	18	22		·	14	2		·	23	14		·	20	9 "
10 "	13		·	22	10		·	20	17		·	19	30		·	19	30		·	15	1		·	23	10		·	18	10 "
11 "	14		·	22	13		·	19	17		·	19	20		·	23	34		·	15	3		·	23	11		·	17	11 "
Midn.	14		·	22	12		·	19	15		·	19	14		·	21	42		·	16	2		·	23	17		·	18	Midn.
Sums ...	365 ✓				342 ✓				571 ✓				455 ✓				419 ✓				534 ✓				191 ✓				Sums
Means																													Means

Note.—The causes of all omissions of the hourly values to be stated on the "Remark" lines below. First and second columns of each day to be left blank when the hourly velocity exceeds 10 miles. The daily sums of the uncorrected velocities to be given.

An Roinn Tithíochta,
Pleanála agus Rialtais Áiti
Department of Housing,
Planning and Local Gover

Meteorological Observations at Markree Castle County Sligo

Month July 1922 Standard of Time in Remarks Column is G.M.T.

Hours of Observation I. = 9 h. m. Greenwich Time, i.e., 10 h. m. by the Clock.
II. = 21 h. m. „ „ i.e., 22 h. m. „ „

ADDITIONAL NOTES.

From the 10th to 16th I could not take any reading at the 21h owing to the danger of being under fire
The Max & Min was read the following morning at the 9h

Section **A** for the entry of Daily Observations. FOR OFFICIAL USE.

AIR MINISTRY.—METEOROLOGICAL OFFICE.—BRITISH RAINFALL ORGANIZATION.

Form 1090.

REGISTER OF RAINFALL IN 1931.

Kept at Boyle

in the County of Roscommon

Diameter of Funnel of Gauge 5 in.

Height of top of Gauge above Ground 1 ft. — in.

,, Ground ,, Sea Level 200 ft.

400

THE MORNING MEASUREMENT IS CREDITED TO THE PREVIOUS DAY.

An observer who does not conform to this rule should insert the reading made on January 1st of the following year in the space on the right of this paragraph.

Jan. 1, following.

Please read the Notes and Instructions Overleaf.

Date	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Date
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
1	—	·06	—	·78	—	—	·08	—	·35	·18	·13	·11	1
2	—	—	·09	—	—	1·30	·05	—	·68	—	·65	·41	2
3	—	·07	—	—	—	·08	·02	—	·14	·01	·26	·02	3
4	·83		·11	·32	·03	—	—	—	·02	·06	·04	—	4
5	—	·18	·14	·54	—	·70	·15	—	—	·06	·58	·31	5
6	—	·01	—	·01	·23	·15	·11	—	—	·25	—	·02	6
7	—	·20	—	—	·24	·40	·05	·41	—	·05	—	·07	7
8	·08	·04	—	—	—	·52	·02	—	—	·16	·07	·04	8
9	·02	·34	—	—	·60	·28	—	·27	—	·16	·30	·01	9
10	·02	·21	—	—	·19	·21	·01	·06	—	·06	·08	—	10
11	·25	·26	—	·30	—	·18	·42	·04	·60	—	·24	—	11
12	·25	·49	·11	·03	·11	·01	·03	—	—	·26	·01	—	12
13	—	—	·03		·22	·28	·28	—	·11	—	·24	—	13
14	·12	·27	—	·10	·06	·24	·07	·33	·04	—	—	—	14
15	·03	·31	—	—	—	·28	·02	·38	—	—	—	·01	15
16	·12	·23	—	·30	—	·02	·18	·54	·24	—	·11	—	16
17	·05	·01	—	—	—	·08	·12	·65	—	—	·68	—	17
18	·15	·06	·01	·06	—	·63	·09	—	—	—	·02	—	18
19	·33	·04	·20	—	—	·01	·05	·80	—	—	·06	—	19
20	·02	·23	·03	—	—	·09	·07	—	—	—	·10	—	20
21	—	·10	·01			·06	·02						21
22	·13	—	—	·14	·14	·05	·24	—	—	—	·18	·25	22
23	·28	·06	—	·09	·35	·03	·05	—	—	—	·40	·25	23
24	·13	·06	—	·27	·09	—	·14	—	—	—	·07	—	24
25	·21	·37	—	·05	—	·01	·03	—	—	—	·50	·13	25
26	·09	—	—	—	·25	—	·11	—	—	—	·15	—	26
27	·19	·11	·08	—	·32	—	·23	—	—	—	·09	·10	27
28	·13	·19	·55	—	·45	—	·05	—	—	·25	·43	·23	28
29	·09	—	·11	—	·32	·08	·02	—	·18	·07	—	·22	29
30	·60	×	·13	—	·32	·02	—	—	·10	·15	·02	·06	30
31	·14	×	·63	×	—	×	·14	—	×	—	×	·08	31
TOTAL	4·26	3·90	2·23 3·02	3·02 3·92	3·92 5·74	5·41 2·85	2·85	3·48	2·46	1·72	5·41	2·32	YEAR'S TOTAL 41·28
Days with ·01 in. or more.	23	23	14	13	16	24	28	9	10	13	24	17	214
Days with ·04 in. or more.	19	21	10	11	15	18	20	9	9	12	21	13	178

40-9999

(Signed) [P.T.O.

Form 1090. **B** Monthly Summary. **C** Particulars of Station.

*** The following register of monthly totals &c., is required if daily or weekly values are not given on the other side.

RAINFALL IN 1931.

At Boyle

In the County of Roscommon

Rain Gauge: Diameter of Funnel 5 in. — Height of Top above Ground 1 ft. — in. — Height of Ground above Sea Level 200 ft.

Month.	Total Depth.	Greatest Fall in 24 hours.		Number of Days with ·01 in. or more	Number of Days with ·04 in. or more
	Inches.	Inches.	Date.		
JAN.	2·26	·60	8th	12	9
FEB.	3·88	1·20	18th	11	11
MAR.	·20	·10	20th	2	2
APRIL	·83	·22	7th	8	7
MAY	1·84	·40	7th	10	8
JUNE	2·15	·30	16th	12	12
JULY	3·22	·60	27th	14	13
AUG.	4·83	·77	30th	24	20
SEPT.	1·10	·31	17th	11	8
OCT.	4·38	·94	5th	30	23
NOV.	3·20	·46	19th	30	23
DEC.	7·39	1·17	6th	27	26
Total	37·48			191	162

Signature J. Jordan

Every observer is requested to fill in this section and also the space for notes as far as possible:—

Name and Address to which any inquiry relating to this register should be sent:—

J. Jordan
Boyle Co. Roscommon

Hour of observation by the clock—in Winter 9 a.m. in Summer 9 a.m.

Nearest Railway Station Boyle Distance ½ mile Direction from gauge N.E.

Nearest Parish Church at Boyle Distance 200 yds. Direction from gauge S.

Nature of objects nearest to gauge	Tree	about 50 ft		
Heights of objects	50 ft			
Distances ..	100 yds.			
Directions from gauge ..	N.W.			

If gauge has been moved during the year state—

Date of move — Distance — Direction —

Indicate pattern of gauge in use by deleting those sketches of cross sections of gauges which do not represent it. If the pattern is different from any of these please make a sketch of it. (Good gauges to use are those marked **A** and **B**.)

If the gauge is of a self-registering or self-recording type please give particulars.

If you know of any record of rainfall not quoted in **British Rainfall,** please give the observer's name and address:—

NOTES ON EXCEPTIONAL RAINFALL OF THE YEAR.

In giving particulars of falls of unusual intensity it is desirable that answers to the following questions be supplied:—

(a) Is it known that the gauge was empty at the beginning of the measured rainfall?
(b) What note was made of the times of beginning and end of this fall?
(c) When was the measurement made?

D INSTRUCTIONS.

1. Rules for measuring the rainfall and for correctly recording the measurements are given in "Rules for Rainfall Observers," to be obtained gratis from The Director, Meteorological Office, Air Ministry, London, W.C.2, or from The Superintendent, Meteorological Office, 6, Drumsheugh Gardens, Edinburgh.

2. In filling up the register on the reverse side the following rules should be observed. Those rules which apply also to the summary form above are printed in *italic type*:—

(a) *Rain should be measured each morning, preferably at 9 a.m., Greenwich Mean Time. The measurement is to be credited to the previous day and should be entered in the register at the time of observation. Thus the entry for January 1st is the rainfall for the 24 hours following 9 a.m. on January 1st; it is therefore the amount measured on January 2nd. 9 a.m. Greenwich Mean Time is 10 a.m. by the clock during Summer Time Period.*

(b) *The raingauge should be visited every morning without exception.* When there has been no precipitation the entry in the register should be a dash— (not '00). The entry "trace" or "tr" is to be made in the two following cases, (A) and (B).

(A) When there is less than ·005 in. of water in the gauge and the observer knows that this is not the result of a drop or two draining from the sides of the can after emptying the rainwater out of it at a previous time of observation, i.e., the observer must be reasonably certain that there has actually been precipitation since the preceding measurement. If the observer knows that the precipitation has been in the form of dew or wet fog this may be noted.

(B) The observer knows definitely from his own observation that some rain (or other form of precipitation such as snow, hail, sleet or drizzle) has fallen since the preceding observation, and yet finds no water in the gauge. This happens sometimes especially in dry, warm weather, without the gauge being even damp, the small amount of rain having evaporated before it got into the receiving can.

(c) *On some measures there is graduation marked ·005; this graduation is to show the limit between the amounts which count as ·01 and those which are mere "traces."* An entry ·005 is not to be made in the register.

(d) If the morning observation has to be omitted for one day or more, the days covered by the next reading should be indicated by a bracket. Thus $\left.\begin{matrix}17\\18\end{matrix}\right\}$ ·14 would show that the reading on the morning of the 18th day of the month was ·14 in.

(e) *The total rainfall for the month is found by addition. The addition should always be done a second time as a check.* The check is of special importance when the total has already been found in another copy of the register.

(f) *The "number of days with ·01 in. or more" includes all the days with any rain except those for which the entry is "trace." The "number of days with ·04 in. or more" includes all the days with any rain except those for which the entries are trace, ·01, ·02, or ·03.*

(g) If observations are not available for every day during the month the spaces for the number of days with rain should be left blank.

(h) The heaviest daily fall for each month should be underlined.

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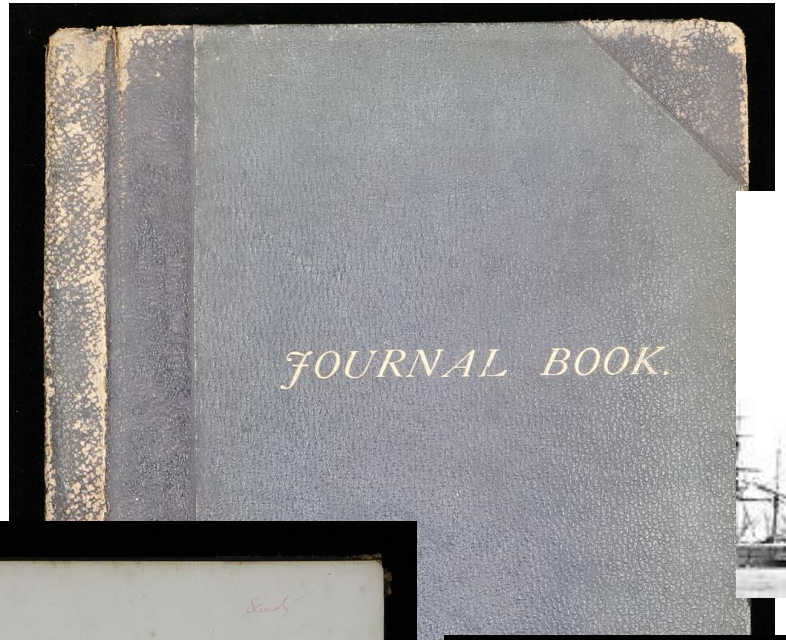
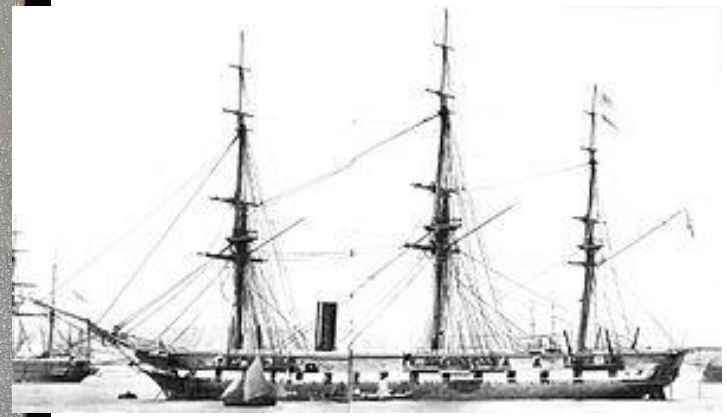
(164) Wt.2398/185/162 14,000 5/29. Gp. 119/110.

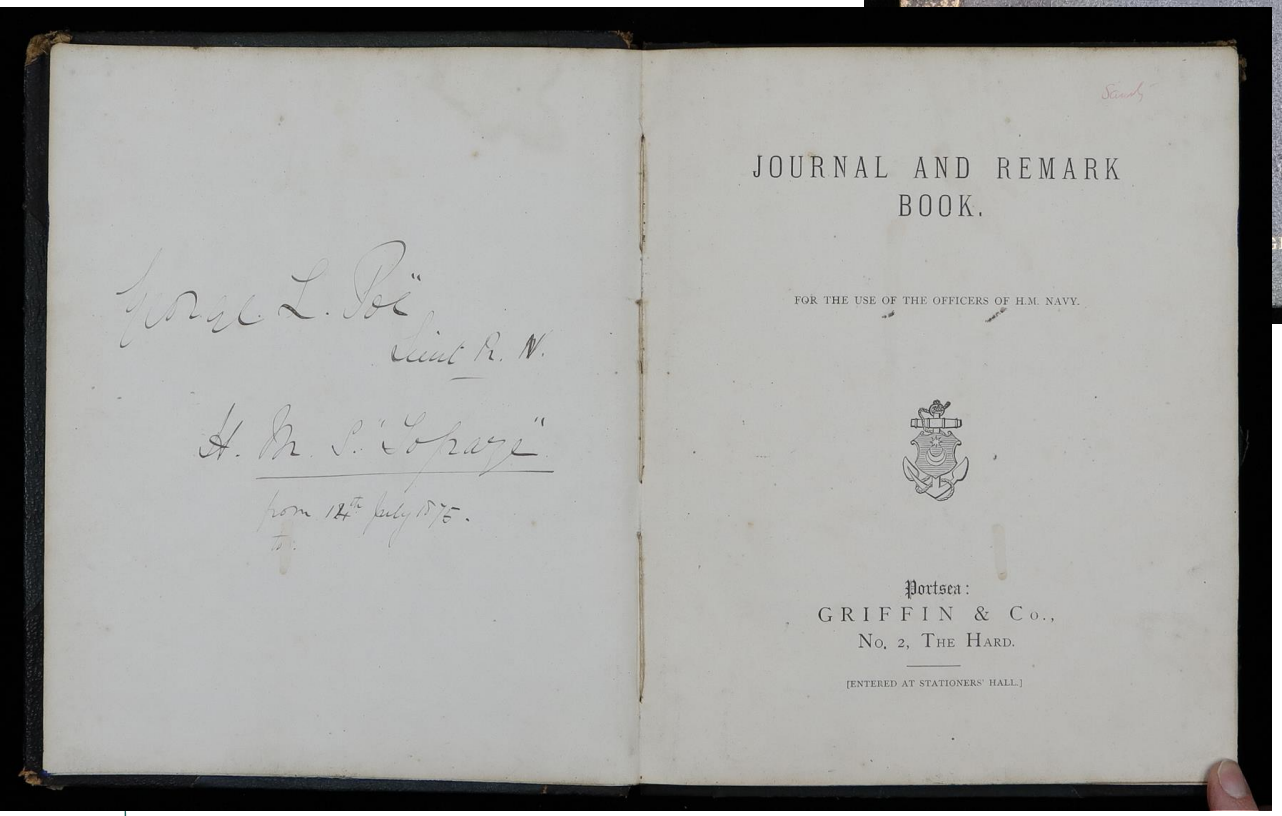
40-9999

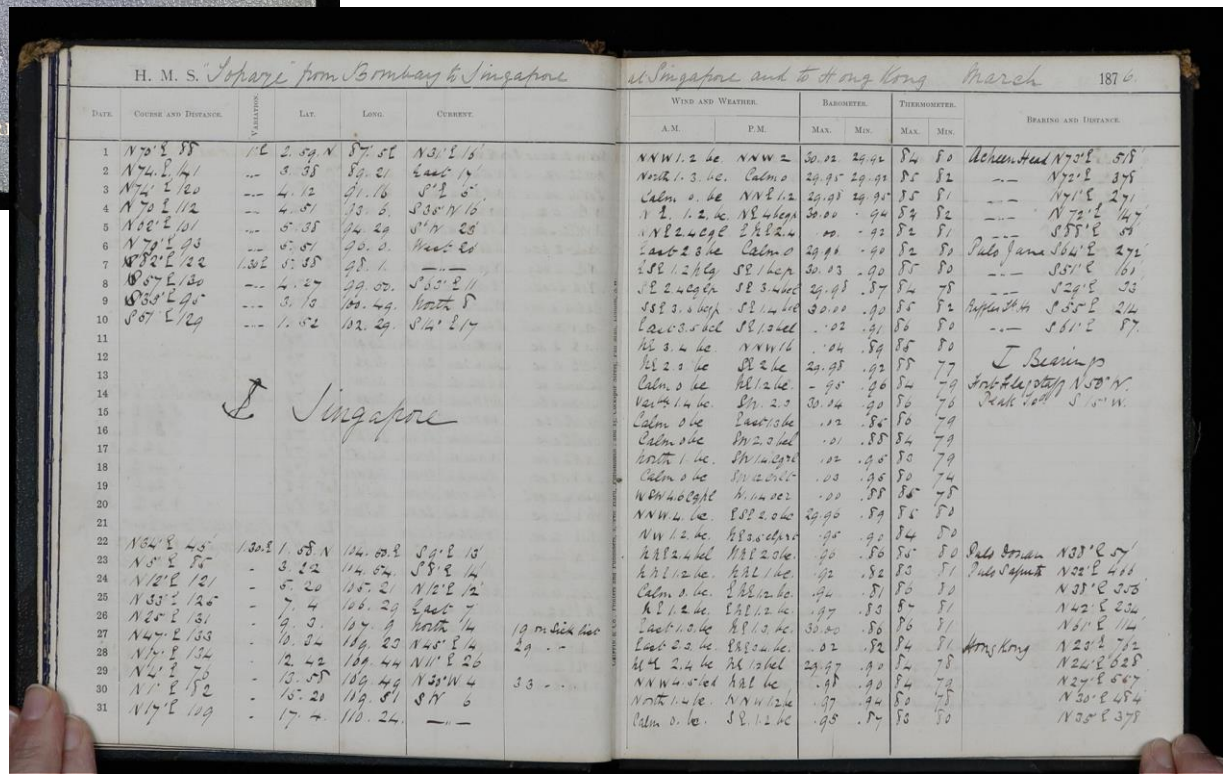
H.M.S. Topaze log

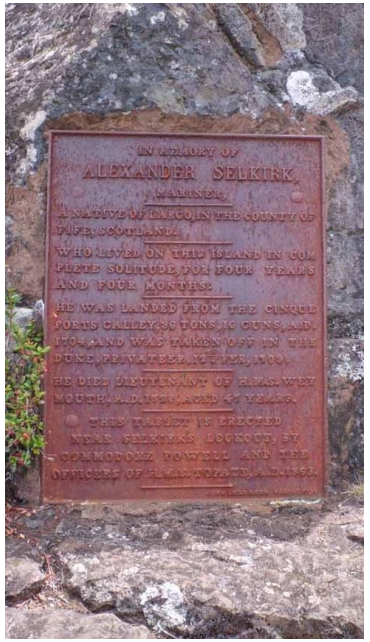
Launched 12 May 1858, Devonport
Commissioned 11 June 1859
Decommissioned 28 June 1878
Fate Sold on 14 February 1884 and broken up at Charlton











HMS Topaze was a 51-gun Liffey-class wooden screw frigate of the Royal Navy.

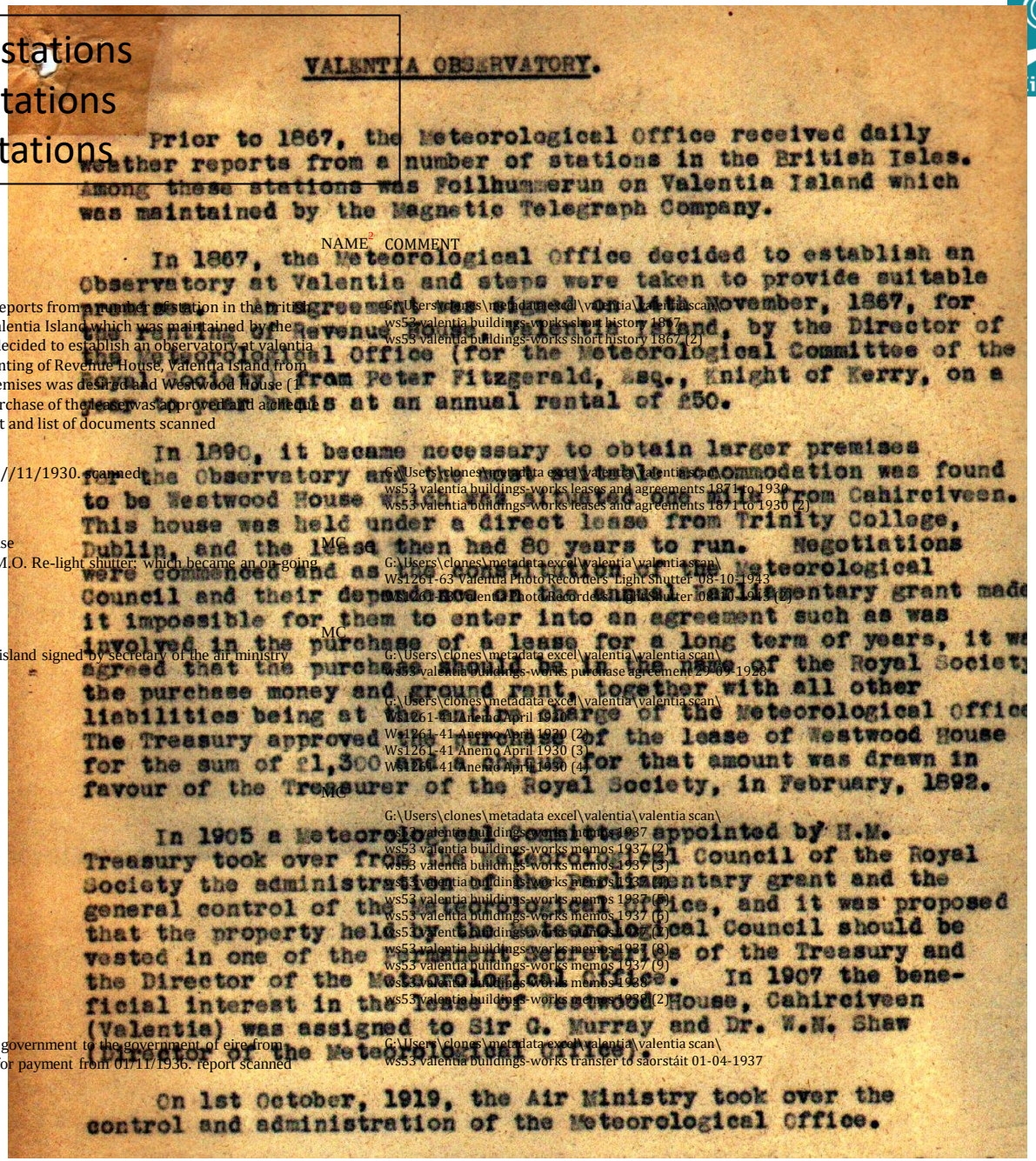
Her crew assisted in the building of the Race Rocks Lighthouse in British Columbia, Canada, and laid a bronze tablet in 1868 at the Juan Fernández Islands commemorating the stay of marooned sailor Alexander Selkirk.

The voyage to Easter Island in 1868 saw the crew remove the two moai Hoa Hakananai'a and Moai Hava and ship them to Britain.[3] Hoa Hakananai'a was found in November 1868 by officers and crew from the Topaze. When first seen, it was buried up to about half its height or even more. It was dug out, dragged down on a sledge, and rafted out to the ship. The Admiralty offered the moai to Queen Victoria, who proposed that they should be given to the British Museum.

Metadata rescue

- Synoptic stations
- Climate stations
- Rainfall stations

DATE	Date end	TYPE OF INFO[1]	element	INFORMATION	NAME[2]	COMMENT
1866			station	Station opened on Valentia Island		
1867		ws 53	station	Prior to 1867 the Met Office received daily weather reports from a number of station in the britis isles. Among these stations was Foilhummerun on Valentia Island which was maintained by the nagnetic telegraph company. In 1867 the met office decided to establish an observatory at valentia and an agreement was signed 14/11/1967 for the renting of Revenue House, Valentia Island from Peter Fitzgerald Knight of Kerry. In 1890 a larger premises was desired and Westwood House (1 mile from Cahirciveen) was most suitable and the purchase of the leaser was approved and a cheque for £1300 was drawn in February 1892. Full report and list of documents scanned		G:\Users\clones\metadata excel\valentia\valentia scan\ ws53 valentia buildings-works short history 1867 ws53 valentia buildings-works short history 1867 (2)
17/06/1871	07/11/1930	ws 53	station	list of leases and agreements from 17/06/1871 to 07//11/1930. scanned		G:\Users\clones\metadata excel\valentia\valentia scan\ ws53 valentia buildings-works leases and agreements 1871 to 1930 ws53 valentia buildings-works leases and agreements 1871 to 1930 (2)
06/03/1905		n	anemo	Robinson cup anemo mounted on roof of westwood house	MC	
27/10/1898		WS1261/63 Photographic Recorders	Light Shutter	Extract from letter of 27/10/1898 from J.cullum to the M.O. Re-light shutter: which became an on-going problem. Scanned		G:\Users\clones\metadata excel\valentia\valentia scan\ Ws1261-63 Valentia Photo Recorders Light Shutter 08-10-1943 Ws1261-63 Valentia Photo Recorders Light Shutter 08-10-1943 (2)
01/11/1916		n	anemo	Dines pressure tube anemo installed	MC	
29/09/1928		ws53	station	purchase agreement for meteorological station valentia island signed by secretary of the air ministry london. (From report dated 16/01/1939) scanned		G:\Users\clones\metadata excel\valentia\valentia scan\ ws53 valentia buildings-works purchase agreement 29-09-1928
April. 1930		ws1261/41	anemo	Delivery lists		G:\Users\clones\metadata excel\valentia\valentia scan\ Ws1261-41 Anemo April 1930 Ws1261-41 Anemo April 1930 (2) Ws1261-41 Anemo April 1930 (3) Ws1261-41 Anemo April 1930 (4)
01/01/1932		n	anemo	New pressure tube anemo installed	MC	
12/08/1937	23/01/1939	ws53	station	Memos 1937-1939 scanned for records.		G:\Users\clones\metadata excel\valentia\valentia scan\ ws53 valentia buildings-works memos 1937 ws53 valentia buildings-works memos 1937 (2) ws53 valentia buildings-works memos 1937 (3) ws53 valentia buildings-works memos 1937 (4) ws53 valentia buildings-works memos 1937 (5) ws53 valentia buildings-works memos 1937 (6) ws53 valentia buildings-works memos 1937 (7) ws53 valentia buildings-works memos 1937 (8) ws53 valentia buildings-works memos 1937 (9) ws53 valentia buildings-works memos 1938 ws53 valentia buildings-works memos 1938 (2)
01/04/1937		ws53	station	Valentia observatory was transferred from his majestys government to the government of eire from 01/04/1937. the latter government taking over liability for payment from 01/11/1936. report scanned		G:\Users\clones\metadata excel\valentia\valentia scan\ ws53 valentia buildings-works transfer to saorstáit 01-04-1937



VALENTIA OBSERVATORY.

Prior to 1867, the Meteorological Office received daily weather reports from a number of stations in the British Isles. Among these stations was Foilhummerun on Valentia Island which was maintained by the Magnetic Telegraph Company.

In 1867, the Meteorological Office decided to establish an Observatory at Valentia and steps were taken to provide suitable premises. An agreement was signed on 14th November, 1867, for the renting of Revenue House, Valentia Island, by the Director of the Meteorological Office (for the Meteorological Committee of the Royal Society) from Peter Fitzgerald, Esq., Knight of Kerry, on a lease of 21 years at an annual rental of £50.

In 1890, it became necessary to obtain larger premises for the Observatory and accommodation was found to be Westwood House, a mile and a half from Cahirciveen. This house was held under a direct lease from Trinity College, Dublin, and the lease then had 80 years to run. Negotiations were commenced and as the Meteorological Council and their dependence on Parliamentary grant made it impossible for them to enter into an agreement such as was involved in the purchase of a lease for a long term of years, it was agreed that the purchase should be in the name of the Royal Society the purchase money and ground rent, together with all other liabilities being at the charge of the Meteorological Office. The Treasury approved of the purchase of the lease of Westwood House for the sum of £1,300 and a cheque for that amount was drawn in favour of the Treasurer of the Royal Society, in February, 1892.

In 1905 a Meteorological Committee appointed by H.M. Treasury took over from the Meteorological Council of the Royal Society the administration of the Parliamentary grant and the general control of the Meteorological Office, and it was proposed that the property held by the Meteorological Council should be vested in one of the Permanent Secretaries of the Treasury and the Director of the Meteorological Office. In 1907 the beneficial interest in the lease of Westwood House, Cahirciveen (Valentia) was assigned to Sir G. Murray and Dr. W.N. Shaw (Director of the Meteorological Office).

On 1st October, 1919, the Air Ministry took over the control and administration of the Meteorological Office.

Rescuing Ireland's Climate and Rainfall Data

Data Rescue initiatives:

1. Rainfall Data Rescue involving 3rd level students in Maynooth University "Integrating Data Rescue into the classroom"
2. Maximum and Minimum Temperature Data Rescue at Galway University (NUIG)
3. Full climate journals with the Central Statistics Office
4. Other data rescue projects

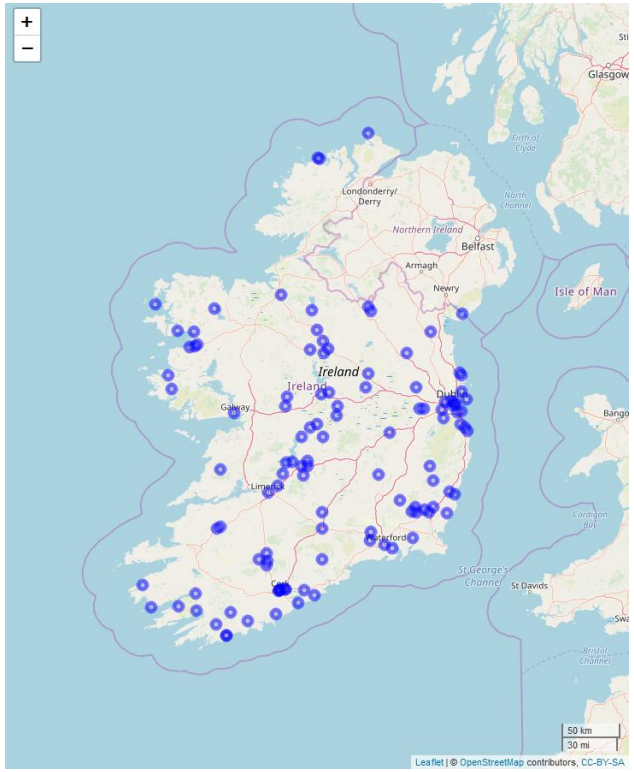
Data Rescue: Integrating Data Rescue into the Classroom

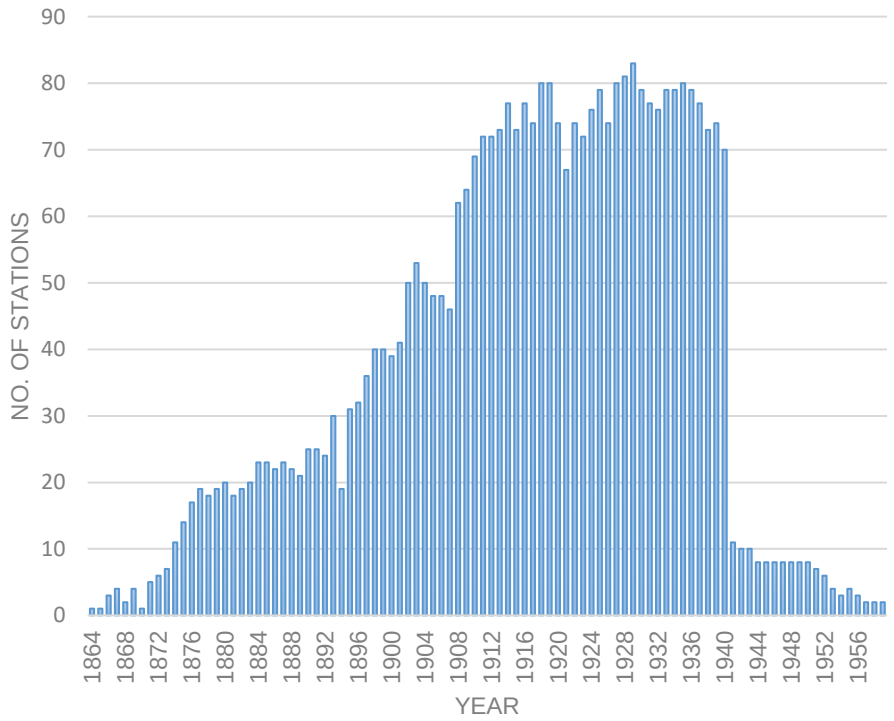
Collaboration between Met Éireann and Maynooth University, Ciara Ryan Ph.D. student (now a meteorologist in Met Éireann.

An award winning project to rescue daily rainfall data.

Data Rescue: Integrating Data Rescue into the Classroom

3,616 station years of rainfall data (1.32 million daily values) transcribed from 1864 to 1856





Rainfall has been rescued from 114 sites

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

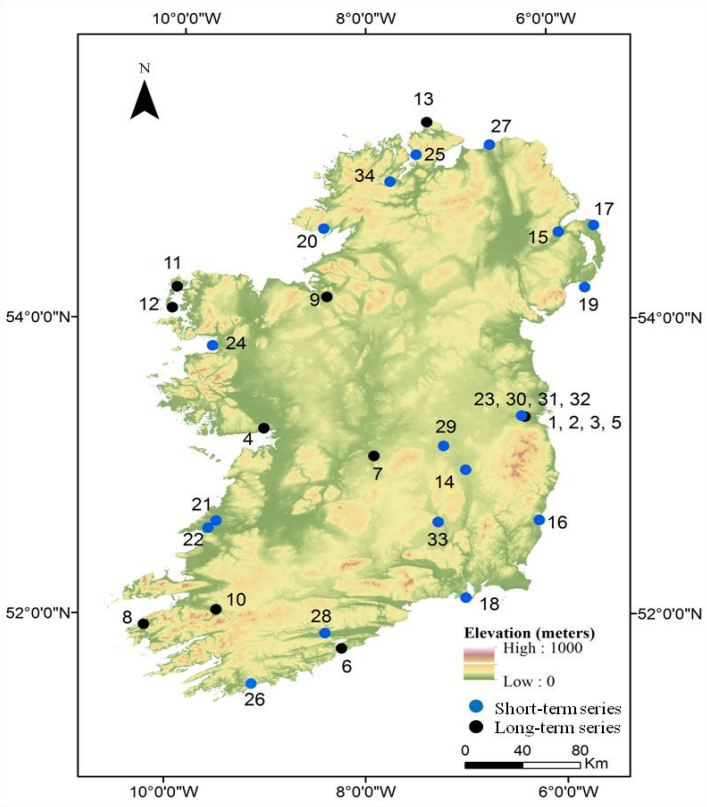
Maynooth University
National University of Ireland Maynooth

ICARUS
Irish Climate Analysis and Research Units

IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn

Rescuing Long-term Maximum and Minimum Air Temperature Series

12 long and 21 short term series were rescued from 1831 to 1968.
97,000 daily maximum and minimum values transcribed for

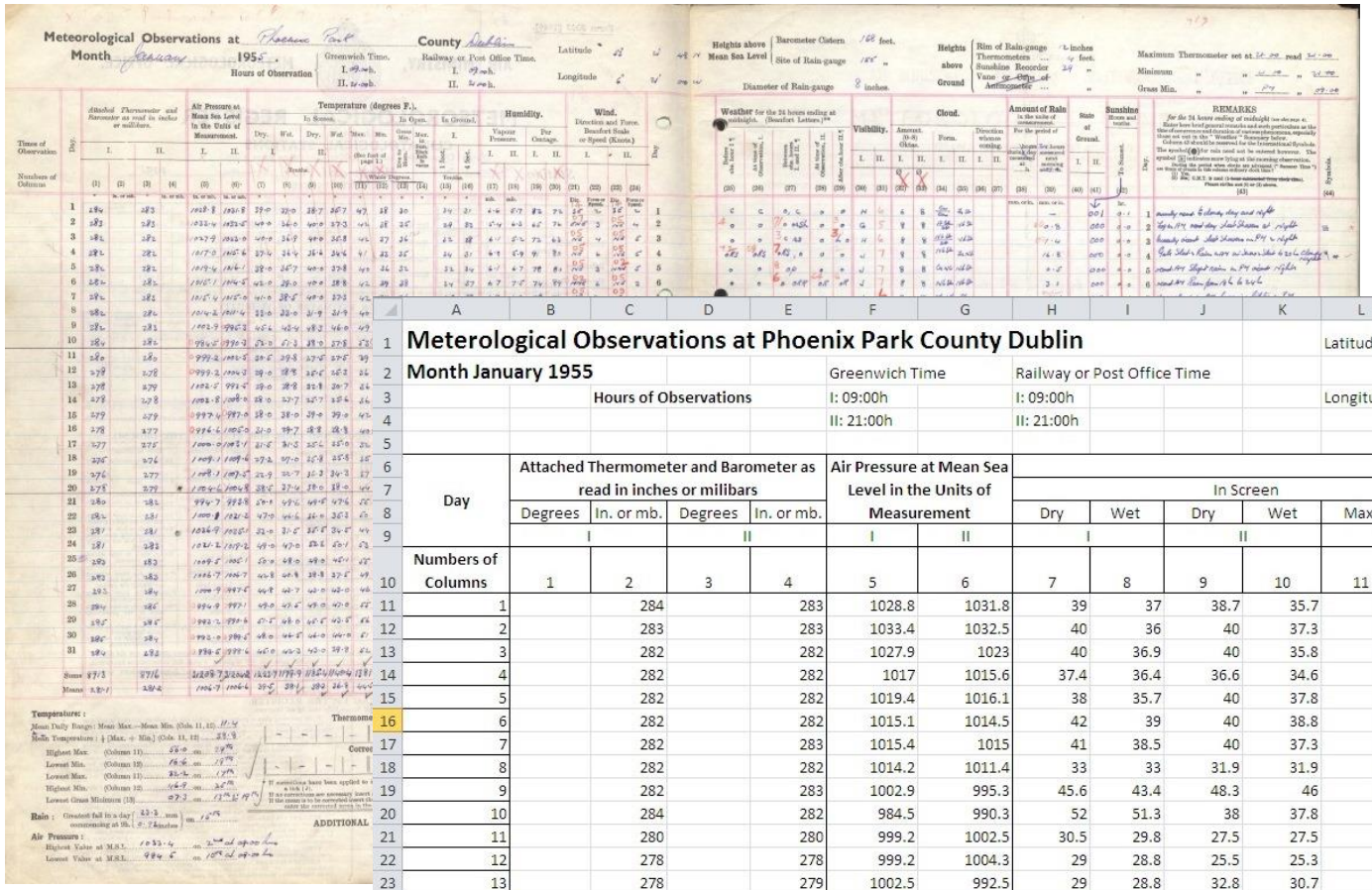


Carla Mateus

The data was rescued from multiple sources, ~76% was rescued from the Met Éireann archive.

Rescuing Full Weather Journals

Partnership with Central Statistics Office



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	**Meterological Observations at Phoenix Park County Dublin**											Latitude	53°	21'
2	**Month January 1955**					Greenwich Time		Railway or Post Office Time						
3			Hours of Observations			I: 09:00h		I: 09:00h				Longitude	6°	21'
4						II: 21:00h		II: 21:00h						
5														
6	Day	Attached Thermometer and Barometer as read in inches or milibars				Air Pressure at Mean Sea Level in the Units of Measurement		Temperature (degrees F.)						
7								In Screen						In G
8		Degrees	In. or mb.	Degrees	In. or mb.			Dry	Wet	Dry	Wet	Max.	Min.	Grass Min.
9		I		II		I	II	I		II				Evening To Morning
10	Numbers of Columns	1	2	3	4	5	6	7	8	9	10	11	12	13
11	1		284		283	1028.8	1031.8	39	37	38.7	35.7	47	38	30
12	2		283		283	1033.4	1032.5	40	36	40	37.3	42	38	35
13	3		282		282	1027.9	1023	40	36.9	40	35.8	42	37	36
14	4		282		282	1017	1015.6	37.4	36.4	36.6	34.6	41	33	35
15	5		282		282	1019.4	1016.1	38	35.7	40	37.8	40	36	32
16	6		282		282	1015.1	1014.5	42	39	40	38.8	42	39	38
17	7		282		283	1015.4	1015	41	38.5	40	37.3	42	37	36
18	8		282		282	1014.2	1011.4	33	33	31.9	31.9	40	31	23
19	9		282		283	1002.9	995.3	45.6	43.4	48.3	46	49	32	28
20	10		284		282	984.5	990.3	52	51.3	38	37.8	53	38	45
21	11		280		280	999.2	1002.5	30.5	29.8	27.5	27.5	39	27	20
22	12		278		278	999.2	1004.3	29	28.8	25.5	25.3	36	24	9
23	13		278		279	1002.5	992.5	29	28.8	32.8	30.7	36	20	7
24	14		278		278	1002.8	1008	28	27.7	25.7	25.6	36	24	11
25	15		279		279	997.4	987	38	38	39	39	42	24	14

Rescuing Full Weather Journals

Station	Years	1st Key	2nd Key
Phoenix Park	1829-1959	✓	✓
Blacksod Bay	1884-1956	✓	✓
Roches Point	1873-1956	✓	X
Malin Head	1885-1955	✓	✓
Valentia	1873-1914	✓	X
Birr Castle	1872-1951	✓	X
Fitzwilliam Square	1911-1930	✓	X
Markree Castle	1869-1940	✓	X

It takes approximately 6 hours to rescue 1 station month

Army Medical Meteorological Observations 1866-1875

- Mary Curley & Ciara Ryan, Climate Services
- Maynooth University, MSc in Climate Change, full class project.

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

Maynooth University
National University of Ireland Maynooth

Athlone Military Hospital

Curragh Military Hospital

Templemore Military Hospital

Limerick Military Hospital

Buttevant Military Hospital

Fermoy Military Hospital

Cork Military Hospital

Army Medical Department—Statistical Branch.

W. O. Form 848.

Meteorological Observations taken at Curragh Camp, during the Month of February 1866; Latitude 53° 8′ 57″.2 Longitude 6° 48′ 51″.7; Height above the Sea 350 Feet

Day of Week	Day of Month	At 9h. A.M., Local Time: Reading of Barometer (509 / 40 in.)	Attached Therm. °	Dry Bulb Therm. (1094) °	Wet Bulb Therm. (1094) °	Wind: By estimation Direction	Force 0—12	By Robinson's Anemometer. Miles	Amount of Cloud 0—10	Ozone Scale Dr. Moffat	At 3h. P.M., Local Time: Reading of Barometer (509 / 40 in.)	Attached Therm. °	Dry Bulb Therm. (1094) °	Wet Bulb Therm. (1094) °	Wind: By estimation Direction	Force 0—12	By Robinson's Anemometer Miles	Amount of Cloud 0—10	Ozone Scale Dr. Moffat	At 9h. A.M., Local Time: Reading of Self-registering Thermometers *: Max. in Air (3323) °	Min. in Air (2122) °	Diff. or Range of Temp. °	Mean of Max. and Min. or approximate mean Temperat. °	Max. in Sun's Rays (3404) °	Min. on Grass (2109) °	Rain fallen in previous 24 hours: On the Ground in.	2 Ft. above Ground in.	GENERAL REMARKS
Th	1	28·554	46	47·5	47·3	W.S.W	"	"	6	6	28·572	48	49·7	49·1	S.S.W	"	"	10	2	37·0	40·0	11·0	45·50	68·0	35·4	·075	·065	A.M. Fine P.M. Cloudy & Rain
F	2	28·952	44	41·8	41·2	West	"	"	3	5	29·164	46	42·9	41·0	W.N.W	"	"	4	2	46·6	38·7	7·9	42·65	76·0	35·0	·180	·165	" " Fine " " Fine. Showery
S	3	28·936	41	37·0	36·5	West	"	"	8	6	29·178	41	41·9	39·2	W.N.W	"	"	4	3	48·6	37·2	11·4	42·90	55·0	28·0	·595	·525	" " Cloudy, Rain & Hail " " Fine
S	4	29·204	41	48·9	48·2	S.W	"	"	10	7	29·134	47	47·1	46·0	West	"	"	10	3	53·5	34·0	19·5	43·75	70·5	29·5	·160	·135	" " Cloudy. Gale " " Cloudy & Rain
M	5	29·458	39	40·5	39·6	S.S.W	"	"	4	7	29·302	44	47·3	46·2	S.S.W	"	"	10	2	52·7	35·6	17·1	44·15	62·4	30·6	·050	·040	" " Fine " " Cloudy & Rain, Gale
T	6	29·222	44	45·9	45·3	W.S.W	"	"	5	6	29·154	48	51·5	49·6	S.S.W	"	"	10	2	52·6	42·4	10·2	47·50	66·2	35·3	·050	·025	" " Fine " " Cloudy, hazy Rain Quit Rain
W	7	28·918	44	41·0	39·8	W.S.W	"	"	8	8	29·088	43	44·5	42·0	West	"	"	5	2	45·0	39·8	5·2	42·40	61·0	35·4	·430	·415	" " Rain " " Fine. Rain Rain Quit Rain
Th	8	29·346	36	36·7	36·0	S.W	"	"	5	7	29·432	42	43·4	40·1	West	"	"	8	2	47·2	30·9	16·3	39·05	63·5	28·9	·280	·245	" " Fine & Frost " " Dull, Rain Rain, Sleet
F	9	29·016	43	46·3	45·9	S.S.W	"	"	5	6	29·018	47	46·4	41·8	S.S.W	"	"	4	1	49·9	35·9	14·0	42·90	73·2	32·0	·105	·085	" " Fine " " Dull. Showery
S	10	28·726	39	38·8	38·2	South	"	"	5	6	28·672	43	45·5	42·1	S.W	"	"	8	2	46·8	35·9	10·9	41·35	59·0	32·3	·020	·060	" " Fine " " Dull. Showery
S	11	28·508	36	35·1	35·0	S.S.E	"	"	10	5	28·492	40	41·1	39·8	S.S.W	"	"	10	1	42·0	32·8	9·2	37·40	57·0	29·9	·060	·050	" " Cloudy " " Cloudy
M	12	28·998	34	33·4	32·2	S.W	"	"	2	5	29·008	41	38·6	35·9	West	"	"	3	1	47·2	28·7	18·5	37·95	67·5	25·5	·000	·000	" " Fine & Frost " " Fine. Snow Rain
T	13	29·254	33	26·5	26·1	S.S.W	"	"	5	5	29·260	35	35·1	34·9	S.W	"	"	4	1	40·2	23·5	16·7	31·85	50·0	20·2	·000	·000	" " Fine & Frost " " Fine
W	14	28·736	37	40·4	40·0	South	"	"	10	6	28·698	39	40·5	39·6	S.W	"	"	10	2	44·4	25·6	18·8	35·00	64·5	28·0	·070	·058	" " Cloudy & Rain " " Cloudy Rain & Hail
Th	15	29·008	37	33·9	33·7	S.S.W	"	"	4	6	28·832	37	33·8	33·2	S.S.E	"	"	10	2	43·9	30·8	13·1	37·35	55·0	26·8	·200	·190	" " Fine & Frost " " Cloudy. Rain & Sleet
F	16	28·952	38	35·4	35·0	South	"	"	6	7	29·044	42	41·4	38·3	S.W	"	"	5	1	46·8	32·0	14·8	39·40	73·9	29·0	·080	·055	" " Fine " " Fine. Hail & Rain
S	17	29·508	33	30·8	30·6	S.S.W	"	"	2	5	29·580	38	36·5	33·0	S.S.W	"	"	3	1	37·9	27·0	10·9	32·45	65·0	24·2	·000	·000	" " Fine & Frost " " Fine. Snow Rain
S	18	29·570	30	26·1	25·9	South	"	"	4	4	29·548	36	35·6	33·4	W.S.W	"	"	3	1	38·5	22·5	16·0	30·50	60·2	17·8	·000	·000	" " Fine Frost Fogy " " Fine
M	19	29·520	32	33·3	32·2	South	"	"	10	5	29·532	35	36·6	36·3	S.S.W	"	"	10	2	37·6	24·1	13·5	30·85	50·0	22·4	·000	·000	" " Cloudy " " Cloudy & Rain
T	20	29·666	33	32·7	31·6	North	"	"	4	4	29·718	41	39·9	35·8	N.N.W	"	"	2	1	41·2	27·0	14·2	34·10	66·0	24·2	·050	·048	" " Fine & Frost " " Fine
W	21	29·918	32	29·9	28·7	South	"	"	2	4	29·814	41	41·9	38·9	S.S.W	"	"	3	1	47·0	24·9	22·1	35·95	72·6	19·6	·000	·000	" " Fine Frost Fogy " " Fine. Rain Sleet
Th	22	29·534	43	46·8	45·4	W.N.W	"	"	5	6	29·560	47	48·9	44·7	W.N.W	"	"	4	2	49·2	32·7	16·5	40·95	65·0	28·0	·053	·040	" " Fine " " Fine
F	23	29·136	43	43·8	40·7	West	"	"	3	7	29·272	45	42·9	40·2	N.W	"	"	4	2	47·0	41·5	5·5	44·25	77·0	34·0	·075	·050	" " Fine. Rain " " Fine. Rain Sleet
S	24	29·460	35	35·7	35·0	S.W	"	"	4	6	29·268	40	41·5	40·6	S.S.W	"	"	10	3	43·0	28·9	14·1	35·95	61·9	26·1	·120	·110	" " Fine & Frost " " Cloudy & Rain
S	25	28·890	37	35·4	34·8	S.S.W	"	"	2	7	28·774	41	40·5	37·0	S.S.W	"	"	5	1	41·5	32·0	10·5	37·25	73·2	29·0	·155	·130	" " Fine " " Fine. Showery
M	26	28·760	32	26·9	25·3	South	"	"	3	6	28·870	43	42·9	38·0	S.E	"	"	4	2	45·6	23·0	22·6	34·30	82·5	20·3	·000	·000	" " Fine & Frost " " Fine. Hail Sleet
T	27	29·074	34	32·4	31·7	N.E	"	"	4	6	29·208	36	35·9	33·0	N.E	"	"	6	3	38·0	27·0	11·0	32·50	60·1	24·2	·000	·000	" " Fine Frost Fogy " " Fine. Hail & Snow
W	28	29·038	29	29·2	28·3	North	"	"	3	6	29·046	34	31·4	30·2	E.N.E	"	"	4	1	33·8	22·5	11·3	28·15	63·2	20·9	·000	·000	" " Fine & Frost " " Fine. Snow Rain
"	29																											
"	30																											
"	31																											
Sums		845·882	1045	1032·1	1009·2	"	"	"	142	164	846·238	1160	1162·2	10999	"	"	"	146	49	1259·7	876·9	382·8	1068·30	1813·2	767·5	2·830	2·480	
Means		29·159									29·157	41	41·5	393						44·9	31·3	13·6	38·7	64·7	27·4			
Index errors & capillarity		− ·38	37	36·8	36·0	"	"	"	5·07	5·85	− ·38				"	"	"	6·29	1·75									
Correction for Temp.		+ ·20									+ ·33																	
Means Corrected		29·175	37	36·8	36·0	"	"	"	5·07	5·85	29·156	41	41·5	393	"	"	"	6·29	1·75	44·9	31·3	13·6	38·1	64·7	27·4			
Number of Column..		1	2	3	4	5	6	7	8		10	11	12	13	14	15	16	17	18		20	21	22	23	24			

Thunder-storms occurred on
Thunder was heard, but Lightning was not seen on
Lightning was seen, but Thunder was not heard on
Solar Halos were seen on
Lunar Halos were seen on
Aurora Borealis was seen on
Remarkable Rain fell on
Snow fell on
Hail fell on
Fog prevailed on

* The number of each thermometer must be inserted at the head of the column containing the observations made with it.

Signed H. Henry A. Blake
Sergeant Army Hosp. Corps

F & T 200 3—65

Investigating Ireland's highest and lowest temperatures

Agricultural statistics of the weather

- Killarney
- Waterford
- Mount Trenchard, Limerick
- Kilkenny Castle
- Birr Castle
- Dundrum
- Fitzwilliam Square
- Kingstown
- Currygrane, Edgeworthstown
- Markree Castle
- Brooklodge, Fermanagh

- Derry (from Stations of the Second Order publication)
- Mullaghmore (from the Daily Weather Report)

**recently rescued 1880-1895*

Upcoming projects

- Daily precipitation data rescue project-citizen science
- Re-assessment of Ireland monthly and annual records for:
  - Temperature
  - Precipitation
  - Wind
  - Atmospheric pressure
  - Sunshine
- Beyond 2022 www.virtualtreasury.ie
  - AI OCR Transkribus

The Treasury re-imagines and reconstructs through digital technologies the Public Record Office of Ireland, a magnificent archive destroyed on June 30th, 1922, in the opening engagement of the Civil War.

Virtual Record Treasury of Ireland
Maoinchiste Annála Samhalta na hÉireann

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

Further investigations

- Data from lighthouses around Ireland
- Other historical data
  - Army records – e.g. the Curragh camp
  - Diaries in private collections

  - And…….

THE FROST OF JANUARY 1881 OVER THE BRITISH ISLES.

By WILLIAM MARIOTT, F.M.S., Assistant Secretary. (Plates VI,-IX.)

[Read February 16TH 1881.]

Buncrana
Rathmullan
Markree Castle
Mullaghmore
Enniscoe
Galway(NUIG)
Ballinasloe
Twyford
Parsonstown
Dublin (Phoenix Park)
Monkstown
Killaloe
Ennis
Valentia
Blackrock
Cork
Roches Point
St Mullins
Waterford

19 locations recording maximum and minimum temperature.

Location of data from 10 stations unknown

https://doi.org/10.1002/qj.4970073805

* *Columns highlighted in blue, location of data unknown at present*

Met Éireann

An Roinn Tithíochta,
Pleanála agus Rialtais Áitiúil
Department of Housing,
Planning and Local Government

Finally……

None of this work would be possible without

- the assistance of staff and students at various organisations and volunteers who transcribed the records (Patricia McGrath and Aoife O'Mullane)

- the observers who meticulously recorded the weather over the years.