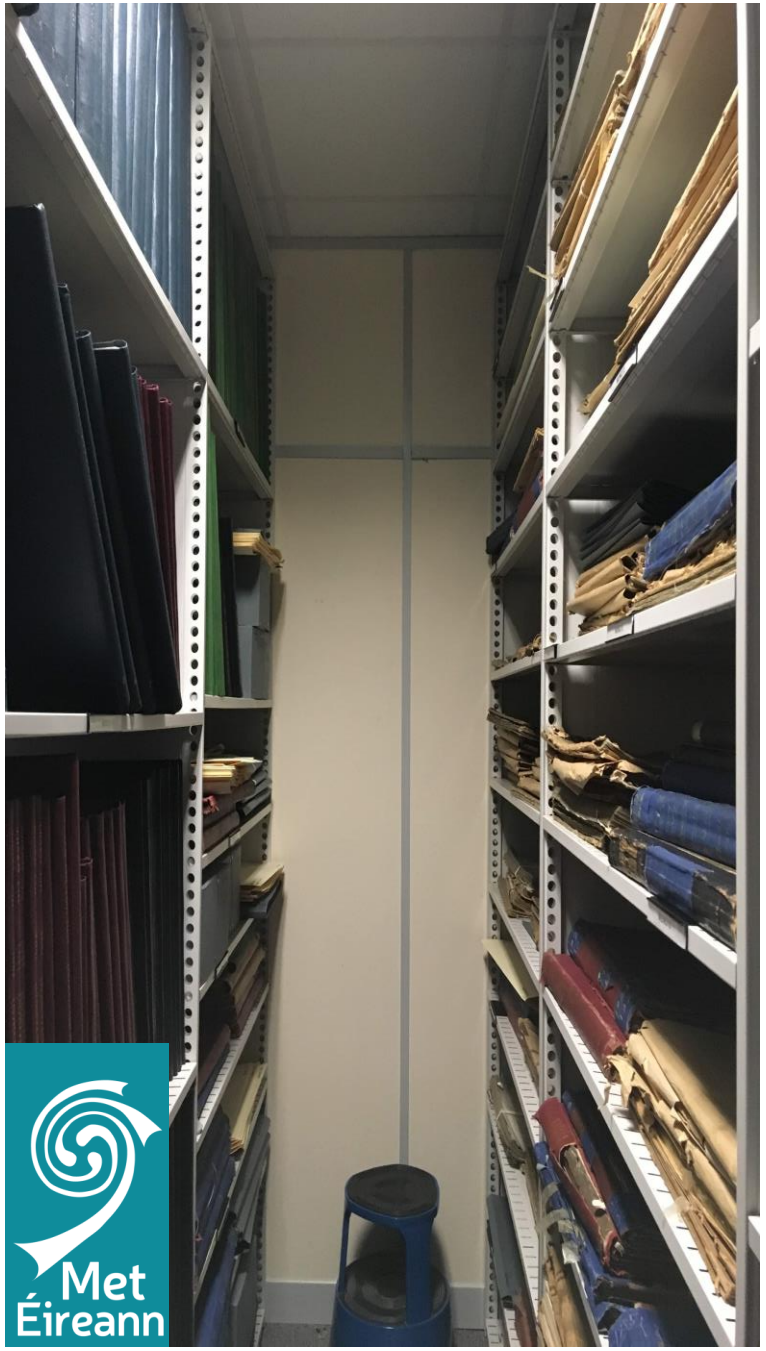
An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Climate Data Rescue in Ireland

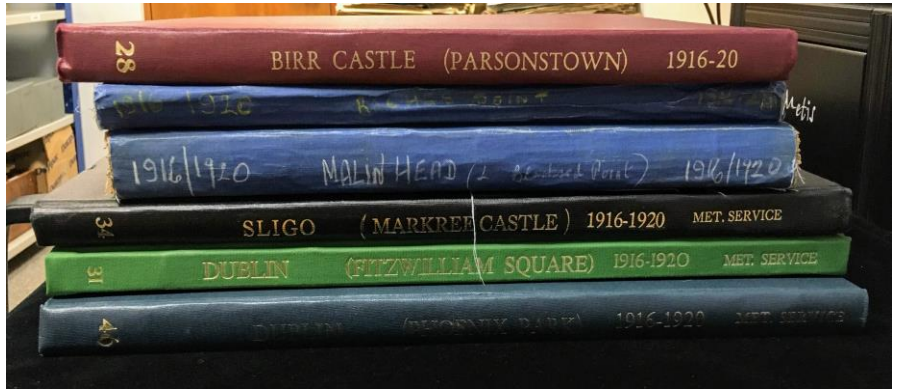
Ciara Ryan
Climate Services Division
Met Éireann

Met Éireann



National Climate Archive

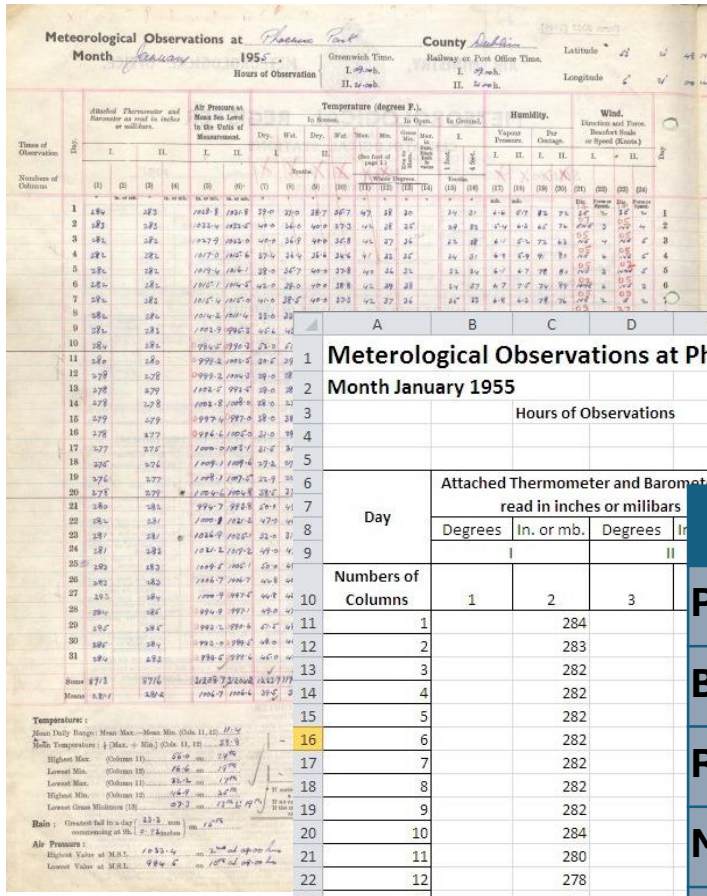
- Catalogued handwritten records with observations of multiple parameters taken several times a day
- Continuous observations dating back to 1829 (Phoenix Park, Malin Head, Markree Castle, Roches Point, Birr Castle..)
- Weather diaries - earliest copy by The Duke of Ormonde (kept by John Kevan) for observations taken during 1682-83.
- Station metadata (station files, inspection and maintenance reports)
- Other collections including Army medical camp records

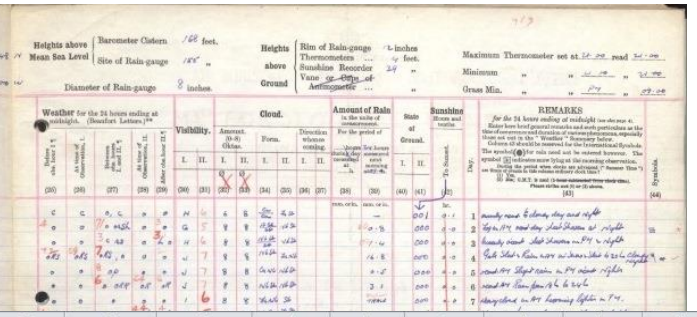


Other examples of past and current weather rescue projects, and related work

- MÉ-MU; Initial daily and monthly rainfall data rescue project – 144 stations across Ireland (1.32 million observations)
- MÉ-MU; Army Medical Department meteorological observations 1866-1875 at seven locations
- MÉ-MU; Glenam, Clonmel, Co. Tipperary collection of daily observations taken by Lydia Grubb 1867-1911
- MÉ-MU-DCU; Loop Head Lighthouse observations taken every four hours 1930-1937 (1932 missing)
- MÉ-MU; Digitisation of historical snow observations across the Greater Dublin Region
- MÉ-MU; Project to identify historical climate records held by archives, public bodies, private estate etc.
- MÉ-UCG; Maximum and minimum air temperature- 12 long-term and 21 short-term stations (1831-1968).
- Identification and digitisation of temperature and rainfall required for the evaluation of Ireland's national weather records
- A large amount of monthly rainfall data which was transcribed as part of the UK RR project has recently been processed to be included in the development of the long-term monthly rainfall grids for Ireland
- MÉ-UCD; Professional scanning of climate manuscripts to be used in ML-OCR Masters project
- Internship - Evaluation of Transkribus as a tool for transcription of historical weather records
- MÉ-CSO: Transcription of climate manuscripts

Transcription of the long-term station registers in collaboration with the CSO


Meteorological Observations at Phoenix Park County Dublin
Month January 1955
Hours of Observation
Greenwich Time. I. 09 mh. II. 21 mh.
Railway or Post Office Time. I. 09 mh. II. 21 mh.
Latitude 53° 21'
Longitude 6° 21'



	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						Temperature (degrees F.)		
7		Degrees	In. or mb.	Degrees	In									
8		I		II										
9	Numbers of Columns	1	2	3										
10	1		284											
11	2		283											
12	3		282											
13	4		282											
14	5		282											
15	6		282											
16	7		282											
17	8		282											
18	9		282											
19	10		284											
20	11		280											
21	12		278											
22	13		278											
23	14		278											
24	15		279											

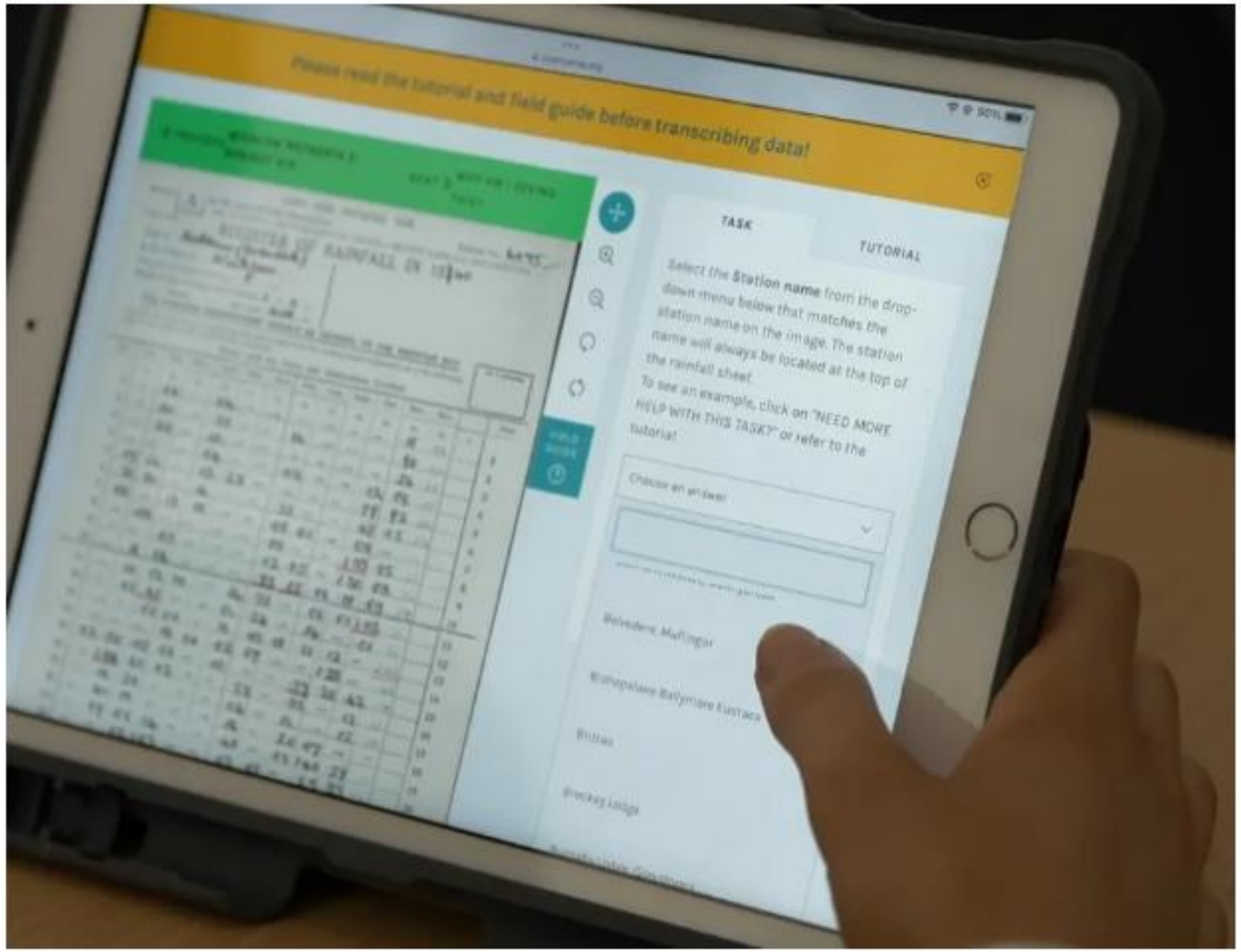
It takes approx 6 hours to rescue 1 station month

130 years by 12 months by 6 hours = 9,360 person hours for Phoenix Park series

Station	CSO	MÉ	Current work
Phoenix Park	1829-1959	1829-1960	Checking double entry
Blacksod	1884-1956	1884-1957	
Roches Point	1873-1956		
Malin Head	1885-1955	1885-1956	
Valentia	1873-1914		
Birr Castle	1872-1951	1872-1901	ongoing
Fitzwilliam Square	1911-1930		
Markree Castle	1869-1940		

Met Éireann

Challenges in historical weather rescue.. And potential innovative solutions: Citizen Science



- Online citizen science project developed using the Zooniverse platform
- Upload images of the historical rainfall records (daily rainfall)
- 763 stations (1860s-1950s)
- Invite people to volunteer to transcribe the data
- Participants choose the location of the station

- Video tutorials
- Live project updates
- Progress trackers for participants
- Educational material
- Discussion forum
- FAQs

THE IRISH TIMES

Met Éireann seeks weather enthusiasts for major new rain project

Digitisation of historic rainfall data can be done from sofa and kitchen tables anywhere in the world

researchers study changing rainfall patterns and improve the accuracy of climate

Launched 14th October..

Irish Independent

Met Éireann calling for volunteers to digitise 3.5 million historic weather records

The Irish Weather Rescue project are aiming to digitise 3.5m handwritten weather observations

Volunteers will be provided with detailed instructions as to how to transcribe the weather observations.

Deirdre Barry
Yesterday at 05:30

Met Éireann is calling on the public to help rescue millions of historic weather observations currently held in handwritten paper records, as part of the events planned to mark Climate Action Week.

The Irish Weather Rescue project are aiming to digitise 3.5m handwritten weather observations, from 763 stations across the country.

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rom 763 stations and
s into digital format.

hers study changing

story, unlocking data
natologist Ciara Ryan, of

Department of Housing, Local Government and Heritage's post

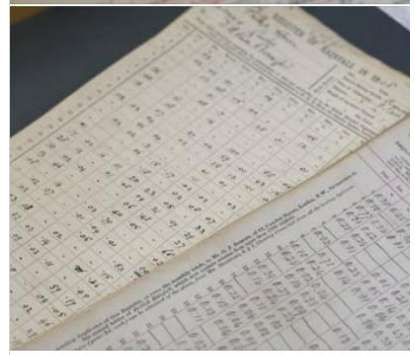
Department of Housing, Local Government and Heritage
1d ·

Become a citizen scientists by taking part in an online data rescue project

Met Éireann has opened a historic weather transcription project to all and is calling on the public to help rescue millions of historic weather observations currently held in handwritten paper records.

The Irish Weather Rescue Project aims to digitise 3.5 million historic rainfall observations from 763 stations across Ireland. Members of the public are invited to transcribe the Rainfall Registers Series that dates from 1864 to 1951 which is held in the National Climate Archive, managed by Met Éireann.

Read more: https://bit.ly/4hdKX1Y
Get involved: https://bit.ly/4ogBqti



319

Like

Most relevant

Síle B. Fee
99 words for rain and one for sun

Home

Met Éireann opens historic weather transcription project to all

By Darryl Armitage
Journalist

Published 14th Oct 2025, 00:05 BST | Updated 14th Oct 2025, 10:54 BST

Volunteers Sought to Transcribe 3.5 Million Irish Weather Observations

Climate · Mark Dunphy · 14 October 2025

Met Éireann is inviting members of the public to take part in a nationwide citizen science initiative aimed at rescuing millions of historic weather records.

The Irish Weather Rescue Project, launched to coincide with Climate Action Week, seeks to digitise 3.5 million rainfall observations recorded between 1864 and 1951. These entries, currently stored in handwritten Rainfall Registers at the National Climate Archive, span 763 stations across the country.

The project offers volunteers a chance to transcribe these records online, helping to preserve a vital part of Ireland's climate history. According to Met Éireann, the digitised data will provide researchers with a clearer picture of long-term rainfall patterns and support the verification of

MET ÉIREANN CALLS ON PUBLIC TO HELP SAVE IRELAND'S HISTORIC WEATHER RECORDS

PADRAIG CONLON 14 OCT 2025

Before satellites and supercomputers, Ireland's weat
notebooks by farmers, teachers and lighthouse keep

THE IRISH Sun · Irish Sun

RECORD RESCUE 'You can contribute from your sofa' – Met Eireann issue plea for volunteers in historic weather project

The work will help experts better understand climate change

Luke Martin
Published: 22:22, 14 Oct 2025

MET Eireann is calling on members of the public to take part in a new weather project – and it can be done from "anywhere in the world".

The forecaster is asking the public to help rescue millions of historic weather observations currently held in handwritten paper records.

IRISH WEATHER RESCUE STATISTICS

VIEW MORE STATS

Keep track of the progress you and your fellow volunteers have made on this project.
Every click counts! Join Irish Weather Rescue's community to complete this project and help researchers produce important results. Click "View more stats" to see even more stats.

19%

Percent complete

By the numbers

790
Volunteers

21,419
Classifications

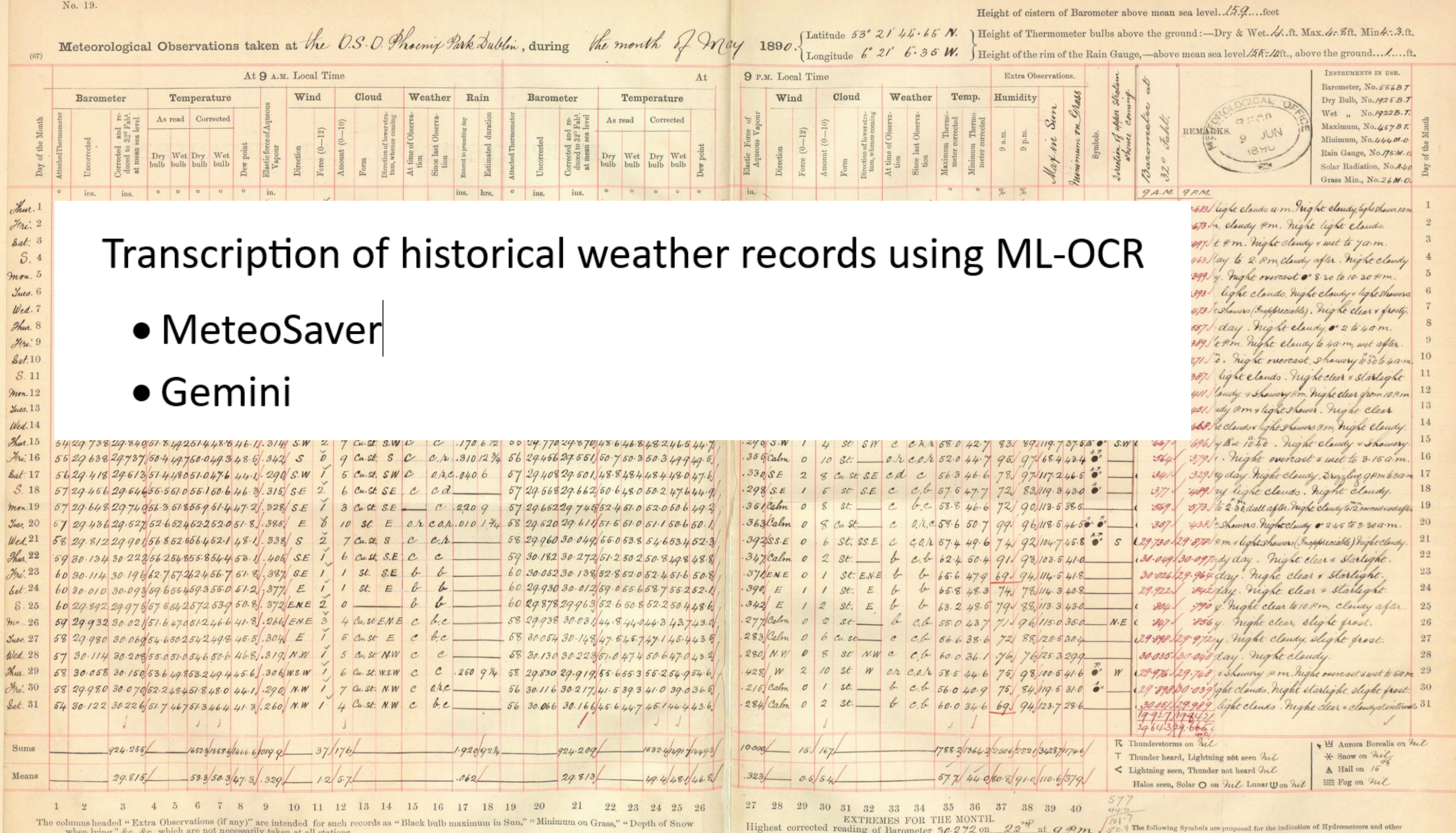
22,078
Subjects

4,109
Completed subjects

GAISCE
CHALLENGE
PARTNER

Transcription of historical weather records using ML-OCR

- MeteoSaver
- Gemini



National Framework for Irish Data Rescue (NFIDR)

Recent discussions with other organisations and universities to establish a NFIDR

- To ensure that all historic Irish weather observations are digitised, accessible and safeguarded for current and future generations.
- Better coordinate of Irish data rescue activities
- To avoid duplication of efforts
- To share knowledge about data rescue methods
- To promote beneficial collaborations across organisations

Met Éireann