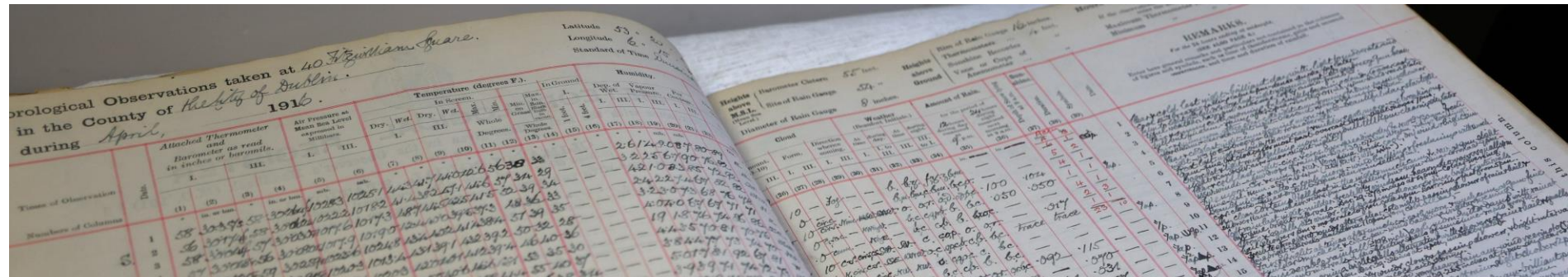




An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreacht  
Department of Housing,  
Local Government and Heritage



## Climate Data Rescue in Ireland



Ciara Ryan  
Climate Services Division  
Met Éireann

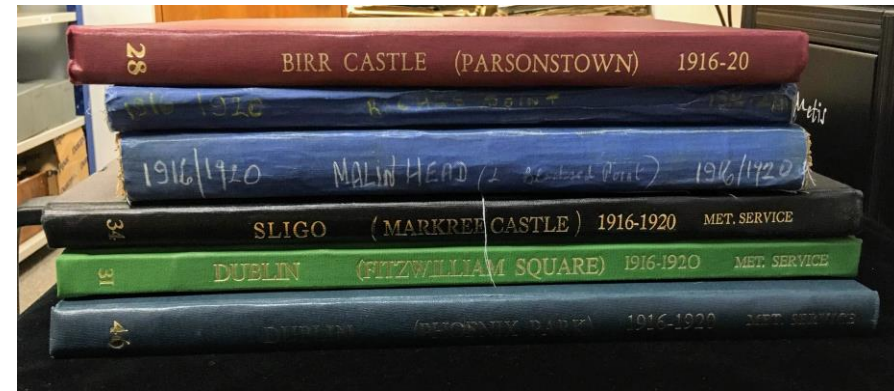






## National Climate Archive

- 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

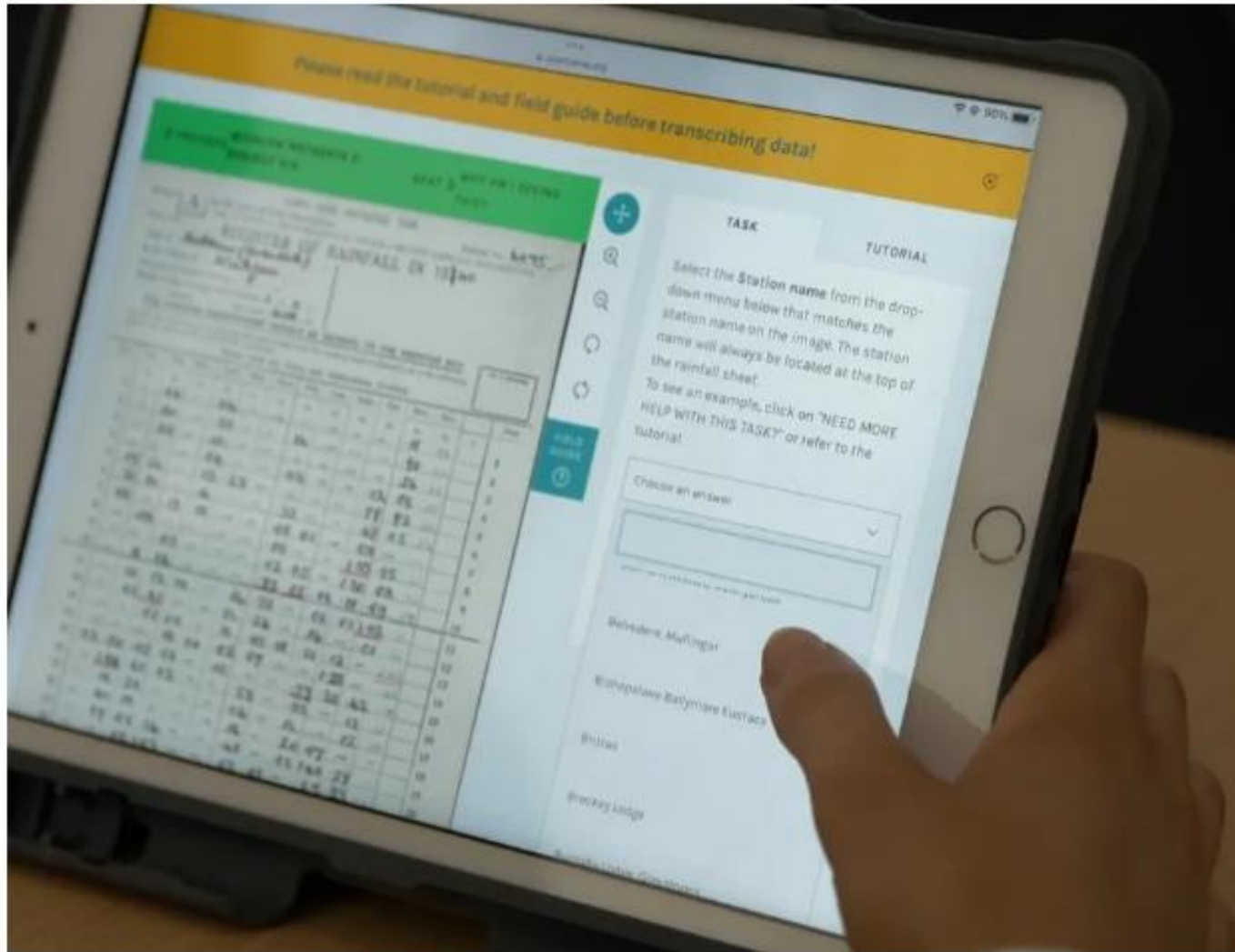
- MÉ-MU; Initial daily and monthly rainfall data rescue project – 144 stations across Ireland (1.32 million observations)
- MÉ-MU; Army Medical Department meteorological observations 1866-1875 at seven locations
- MÉ-MU; Glenam, Clonmel, Co. Tipperary collection of daily observations taken by Lydia Grubb 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										County Dublin									
Month January 1955										Greenwich Time, I. 09.00h, II. 12.00h									
Hours of Observation										Latitude 53° 21' N Longitude 6° 21' W									
Air Pressure at Mean Sea Level in the State of Measurement										Temperature (degrees F.)									
In Shade, Dry Bulb, Wet Bulb, Mean, Max, Min										Humidity, Direction and Force, Barometer Reading, State of Sky, Amount of Rain, Cloud, Visibility, Wind, Remarks									
Time of Observation										Weather for the 24 hours ending at midnight, (Direction, Latency, etc.)									
Number of Observations										Remarks									
1	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	A	B	C	D	E	F	G	H	I	J
2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	1	2	3	4	5	6	7	8	9	10
3	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	11	12	13	14	15	16	17	18	19	20
4	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	21	22	23	24	25	26	27	28	29	30
5	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	31	32	33	34	35	36	37	38	39	40
6	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	41	42	43	44	45	46	47	48	49	50
7	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	51	52	53	54	55	56	57	58	59	60
8	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	61	62	63	64	65	66	67	68	69	70
9	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	71	72	73	74	75	76	77	78	79	80
10	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	81	82	83	84	85	86	87	88	89	90
11	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	91	92	93	94	95	96	97	98	99	100
12	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	101	102	103	104	105	106	107	108	109	110
13	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	111	112	113	114	115	116	117	118	119	120
14	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	121	122	123	124	125	126	127	128	129	130
15	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	131	132	133	134	135	136	137	138	139	140
16	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	141	142	143	144	145	146	147	148	149	150
17	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	151	152	153	154	155	156	157	158	159	160
18	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	161	162	163	164	165	166	167	168	169	170
19	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	171	172	173	174	175	176	177	178	179	180
20	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	181	182	183	184	185	186	187	188	189	190
21	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	191	192	193	194	195	196	197	198	199	200
22	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	201	202	203	204	205	206	207	208	209	210
23	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	211	212	213	214	215	216	217	218	219	220
24	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	221	222	223	224	225	226	227	228	229	230
25	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	231	232	233	234	235	236	237	238	239	240
26	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	241	242	243	244	245	246	247	248	249	250
27	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	251	252	253	254	255	256	257	258	259	260
28	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	261	262	263	264	265	266	267	268	269	270
29	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	271	272	273	274	275	276	277	278	279	280
30	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	281	282	283	284	285	286	287	288	289	290
31	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	291	292	293	294	295	296	297	298	299	300
32	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	301	302	303	304	305	306	307	308	309	310
33	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	311	312	313	314	315	316	317	318	319	320
34	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	321	322	323	324	325	326	327	328	329	330
35	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	331	332	333	334	335	336	337	338	339	340
36	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	341	342	343	344	345	346	347	348	349	350
37	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	351	352	353	354	355	356	357	358	359	360
38	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	361	362	363	364	365	366	367	368	369	370
39	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	371	372	373	374	375	376	377	378	379	380
40	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	381	382	383	384	385	386	387	388	389	390
41	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	391	392	393	394	395	396	397	398	399	400
42	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	401	402	403	404	405	406	407	408	409	410
43	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	411	412	413	414	415	416	417	418	419	420
44	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	421	422	423	424	425	426	427	428	429	430
45	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	431	432	433	434	435	436	437	438	439	440
46	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	441	442	443	444	445	446	447	448	449	450
47	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	451	452	453	454	455	456	457	458	459	460
48	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	461	462	463	464	465	466	467	468	469	470
49	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	471	472	473	474	475	476	477	478	479	480
50	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	481	482	483	484	485	486	487	488	489	490
51	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	491	492	493	494	495	496	497	498	499	500
52	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	501	502	503	504	505	506	507	508	509	510
53	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	511	512	513	514	515	516	517	518	519	520
54	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	521	522	523	524	525	526	527	528	529	530
55	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	531	532	533	534	535	536	537	538	539	540
56	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	541	542	543	544	545	546	547	548	549	550
57	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	551	552	553	554	555	556	557	558	559	560
58	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	561	562	563	564	565	566	567	568	569	570
59	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	571	572	573	574	575	576	577	578	579	580
60	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	581	582	583	584	585	586	587	588	589	590
61	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	591	592	593	594	595	596	597	598	599	600
62	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	601	602	603	604	605	606	607	608	609	610
63	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	611	612	613	614	615	616	617	618	619	620
64	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	621	622	623	624	625	626	627	628	629	630
65	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	631	632	633	634	635	636	637	638	639	640
66	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	641	642	643	644	645	646	647	648	649	650
67	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	651	652	653	654	655	656	657	658	659	660
68	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	661	662	663	664	665	666	667	668	669	670
69	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18.0	671	672	673	674	675	676	677	678	679	680
70	18.0	28.2	18.0	28.2	18.0	28.2	18.0	28.2	18										

## 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



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



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.

Department of Housing, Local Government and Heritage's post

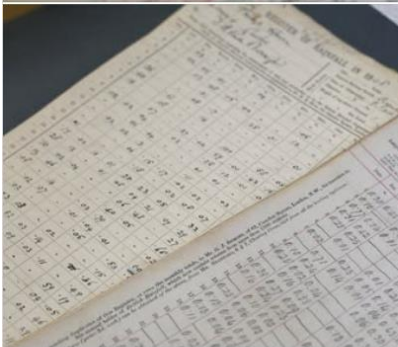
Department of Housing, Local Government and Heritage 1d ·

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/4hdKXIY>  
Get involved: <https://bit.ly/4ogBqti>



319 Like

Most relevant

Sile 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

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

PADRAIG CONLON 14 OCT 2025



Before satellites and supercomputers, Ireland's weather was recorded by farmers, teachers and lighthouse keepers



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.

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



## 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.



### By the numbers

790

Volunteers

22,078

Subjects

21,419

Classifications

4,109

Completed subjects





1890. { Latitude  $53^{\circ} 21' 44.65$  N.  
Longitude  $6^{\circ} 21' 6.35$  W.

Height of Thermometer bulbs above the ground:—Dry & Wet.  $4\frac{1}{2}$  ft. Max.  $4\frac{1}{2}$  ft. Min  $4\frac{1}{2}$  ft.  
Height of the rim of the Rain Gauge,—above mean sea level  $55\frac{1}{2}$  ft., above the ground...  $4\frac{1}{2}$  ft.

EXTREMES FOR THE MONTH.  
Highest corrected reading of Barometer 30.272 on 22<sup>nd</sup> at 9 P.M.  $\sqrt{101.7}$   
50.9 The following Symbols are proposed for the indication of Hydrometeors and other



## 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