

MET ÉIREANN



CLIMATOLOGICAL NOTE No. 11

**2008 SUMMER RAINFALL
IN IRELAND**

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551.577.2(417)

GLASNEVIN HILL, DUBLIN 9
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Introduction

The summer of 2008 saw many parts of the country affected by heavy rain and flooding. Rainfall totals were above normal everywhere and were more than twice the average in the east and southeast of the country.

This report contains an analysis of data from approximately 150 rainfall stations. For most of these rainfall stations the rain depth is measured once a day at 0900UTC, a smaller number of synoptic stations (13) record rainfall on an hourly basis or less. The locations of the stations used in this report and the length of the rainfall records considered are shown in Figure 1. The length of station records used varied between 4 and 68 years.

Data for each of the stations is included in tables in Appendices I, II and III. Appendix I contains the monthly and seasonal total for each station, percent of 1961-1990 normal values (if available), the maximum daily rainfall in the given month or season and the number of rain days (a rain day is a day with ≥ 0.2 mm of rain). Appendix II ranks the total monthly and seasonal rainfall for the length of the station record, including year of the maximum fall and most recent year when the 2008 total was exceeded. Appendix III ranks the maximum daily fall for each month and the summer season for the length of the station record, including date of the maximum daily fall and most recent date when the 2008 maximum daily fall was exceeded. The tables are arranged by province in the following order: Munster, Leinster, Connacht and Ulster. Within each province counties are listed alphabetically.

The report begins with an overview of summer 2008, followed by a month-by-month analysis of rainfall. Two case studies are included, the exceptional rainfall events in the Newcastlewest area on July 31st and the north Kildare and north Dublin areas on August 9th.

Rainfall recording:

In this study rainfall depths are analysed from approximately 150 rainfall stations, these are divided into two categories.

Synoptic Weather stations Reports from synoptic weather stations are made every hour on the hour of basic weather parameters including rainfall, wind speed and direction, temperature, humidity and air pressure. A smaller number of automatic stations record rainfall at intervals of less than one hour.

Climatological and rainfall stations This is a denser network of stations which record a more limited selection of data, rainfall and in some cases maximum and minimum temperatures, usually once per day at 0900UTC. These data are communicated to Met Éireann by post at the end of each month.

Note: Observations are made in UTC (Universal Coordinated Time), equivalent to GMT. This means that during Irish Summer Time, one hour must be added to UTC to get local time. UTC is used throughout this report.

Rainfall is measured in millimetres (mm). Unless otherwise stated, all data used in this report is 24hr 0900-0900UTC; this can give rise to some apparent anomalies, e.g. the 0900-0900 total for Dublin Airport on 9th August 2008 is 68.3mm whereas the 0000-2400 total is 76.2mm.

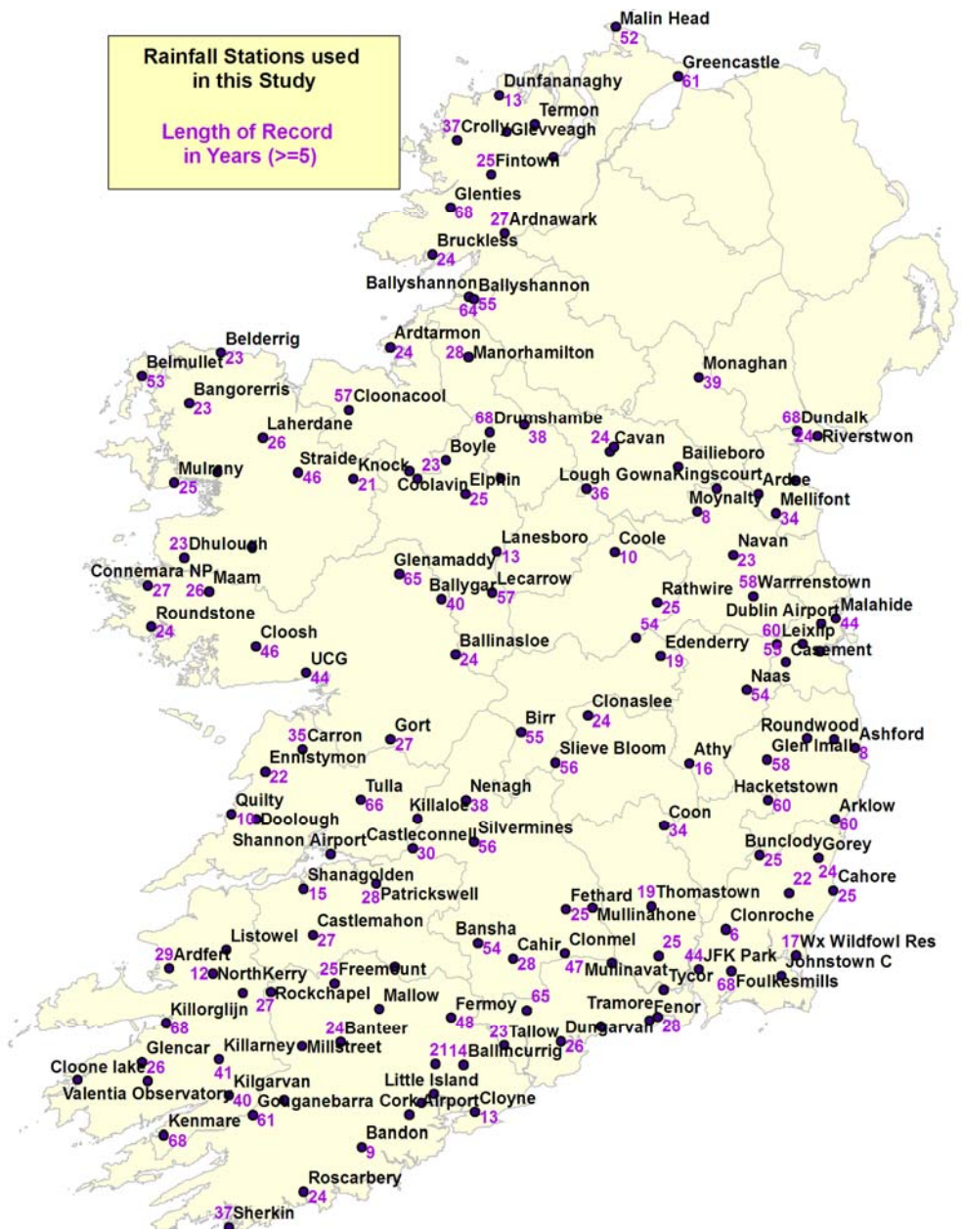
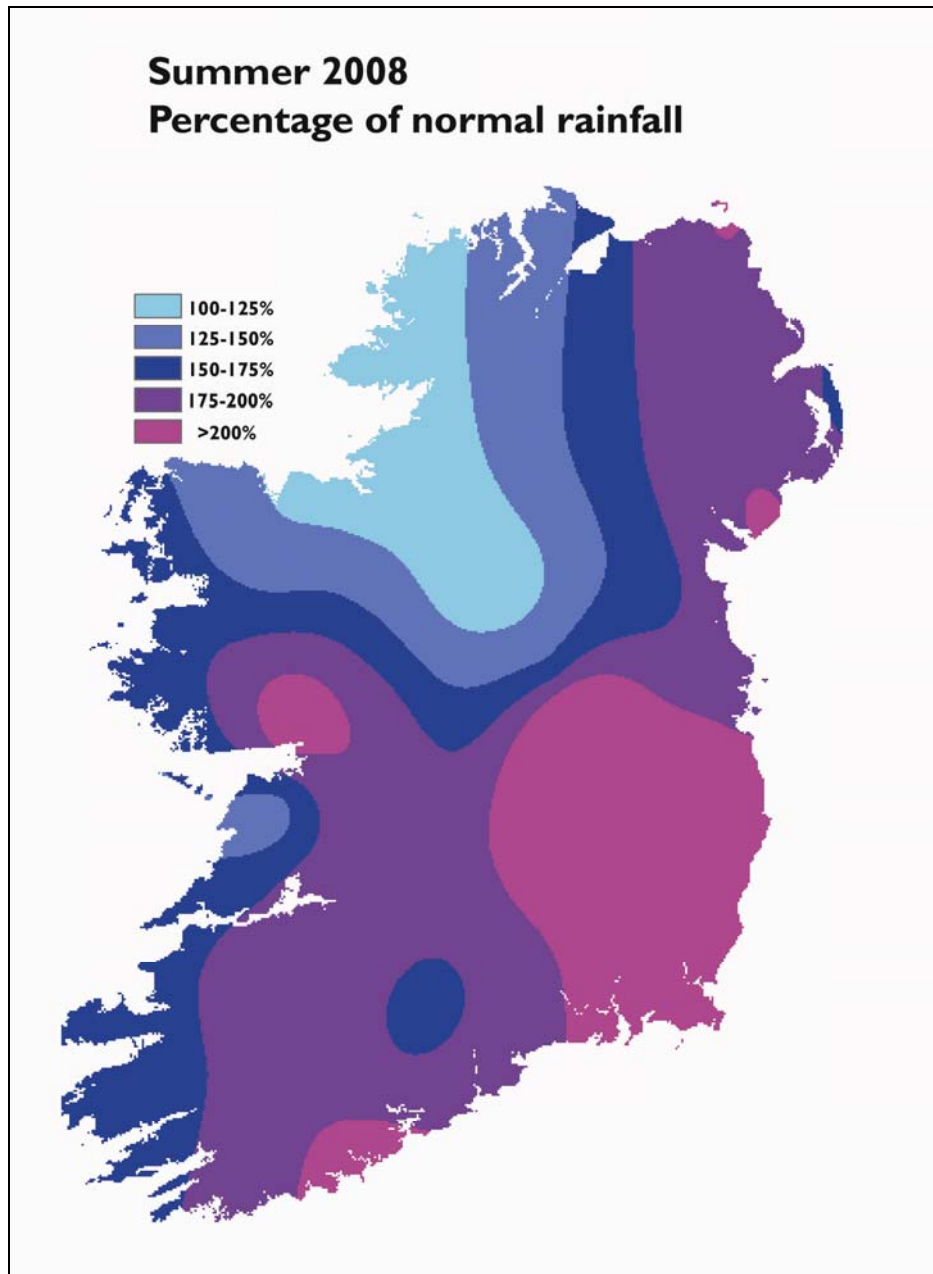


Figure 1. Locations of Rainfall stations used in this study and length of record

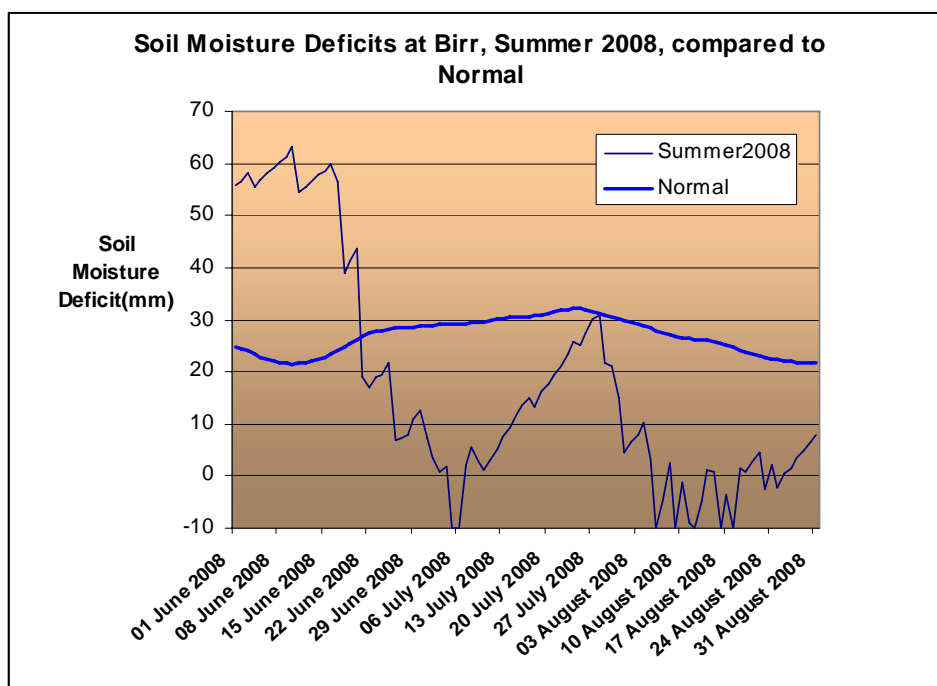
Summer 2008

Rainfall totals were above normal everywhere and were more than twice normal in the east and southeast of the country. Except for a few parts of the west and northwest, each of the summer months was wetter than normal. There were some exceptionally heavy daily falls throughout the season, particularly in the period from late July to mid-August. Severe flooding was reported in west Limerick on July 31st, in the north Kildare and Dublin regions on August 9th and in other areas between August 12th and 16th.



Rainfall was recorded over some parts of the country on each day between July 28th and August 21st. Between 49 and 78 raindays (days with 0.2mm or more rainfall) were recorded for the 3-month period, compared with the normal range for summer of between 38 and 55 raindays. This led to a situation where the soil was near to saturation for much of the time, meaning that the ground had no capacity to soak up large amounts of rainfall. The Soil Moisture Deficit (SMD) can be used as an indication of how much rainfall the ground can absorb before it becomes saturated. Soil Moisture Deficits for

Birr are shown below, compared to normal values. For much of July and almost all of August values were 20mm below normal.



Notable features of Summer Rainfall

A daily fall of 90mm was recorded at Castlemahon, Co. Limerick, on July 31st, while Belderrig, Co. Mayo, measured 102mm on August 13th; Dublin Airport's 00-24hr fall of 76mm on August 9th was its second highest daily fall for summer on record, the highest having occurred in June 1993. A 60-minute fall of 38.4mm at Shannon Airport on the 6th was the highest for any month in the station's 63-year history.

Figure 2a shows the maximum daily fall during summer 2008 and its date of occurrence for the summer season where the maximum daily fall was over 25mm, while figure 2b gives the ranking for the summer total and daily maximum value. For most stations, the summer total ranked in the top 3 for the length of the station record.

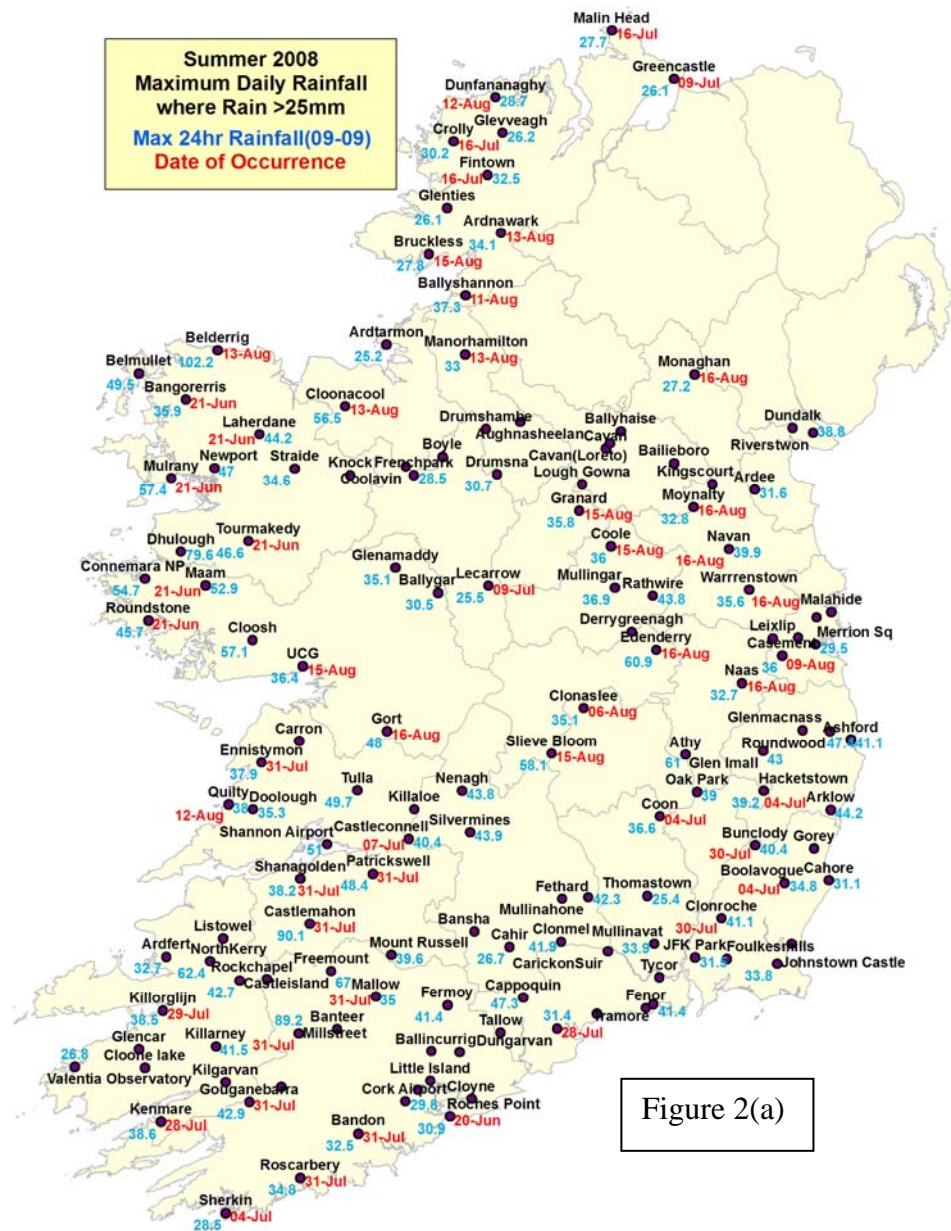
Example- Castlemahon in Co. Limerick had its highest summer 2008 daily rainfall total of 90.1mm on 31st July (fig 2a), this was its highest ever summer daily rainfall and its second highest summer rainfall total (fig 2b) in 27 years of record.

(Where some values are not shown because of clutter, please refer to tables in the appendices)

Climate change

This summer's rainfall was caused by a succession of unstable low pressure centres moving slowly across the country. The summer weather of 2008, though unusual, was far from unprecedented. Similar summers in the past were those of 1986, 1985 and 1958.

Climate change predictions for rainfall in the summer season are for a 10-15% decrease in rainfall in the 2020-2060 timeframe, which might seem at odds with summer 2008; there are also predictions of more frequent intense rainfall events. The extreme rainfall experienced during the summer of 2008 cannot be attributed to climate change. The totals recorded fit within the range of natural variability, which is greater than the global warming 'signal' at our geographic location.



June

Rainfall totals were above normal almost everywhere, with around twice the normal June rainfall measured in the south and southeast of the country. Relatively little rain was measured between the 7th and 16th, but some heavy falls were recorded at other times. Many stations recorded their wettest day of the month on the 21st, when a band of heavy rain was followed by widespread thunderstorms; 50mm of rain was measured on this day in some places. Thundery showers were again recorded on the 26th. Between 14 and 27 raindays were measured (days with 0.2 mm or more rainfall), greater than the normal for June of between 13 and 17.

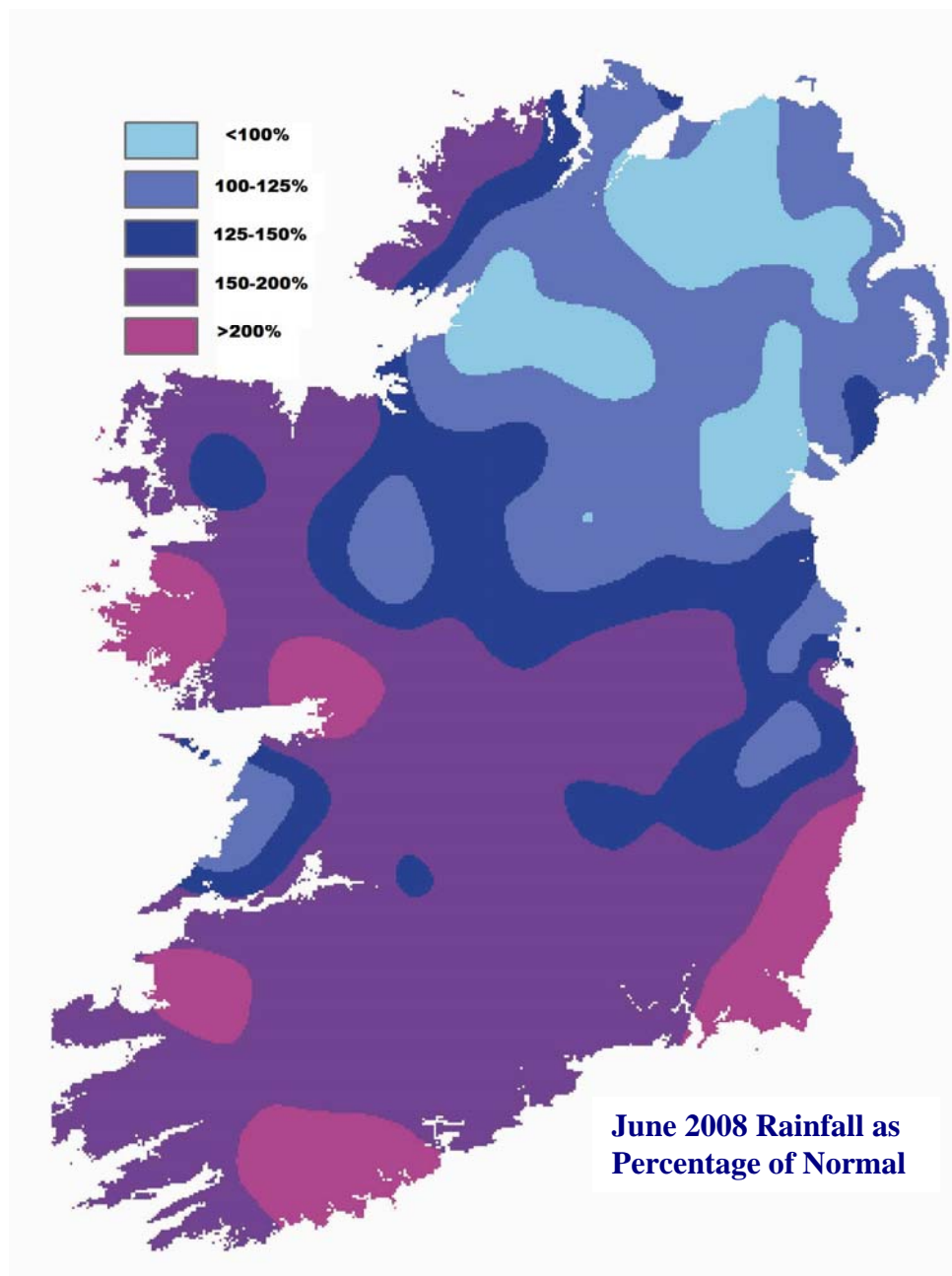
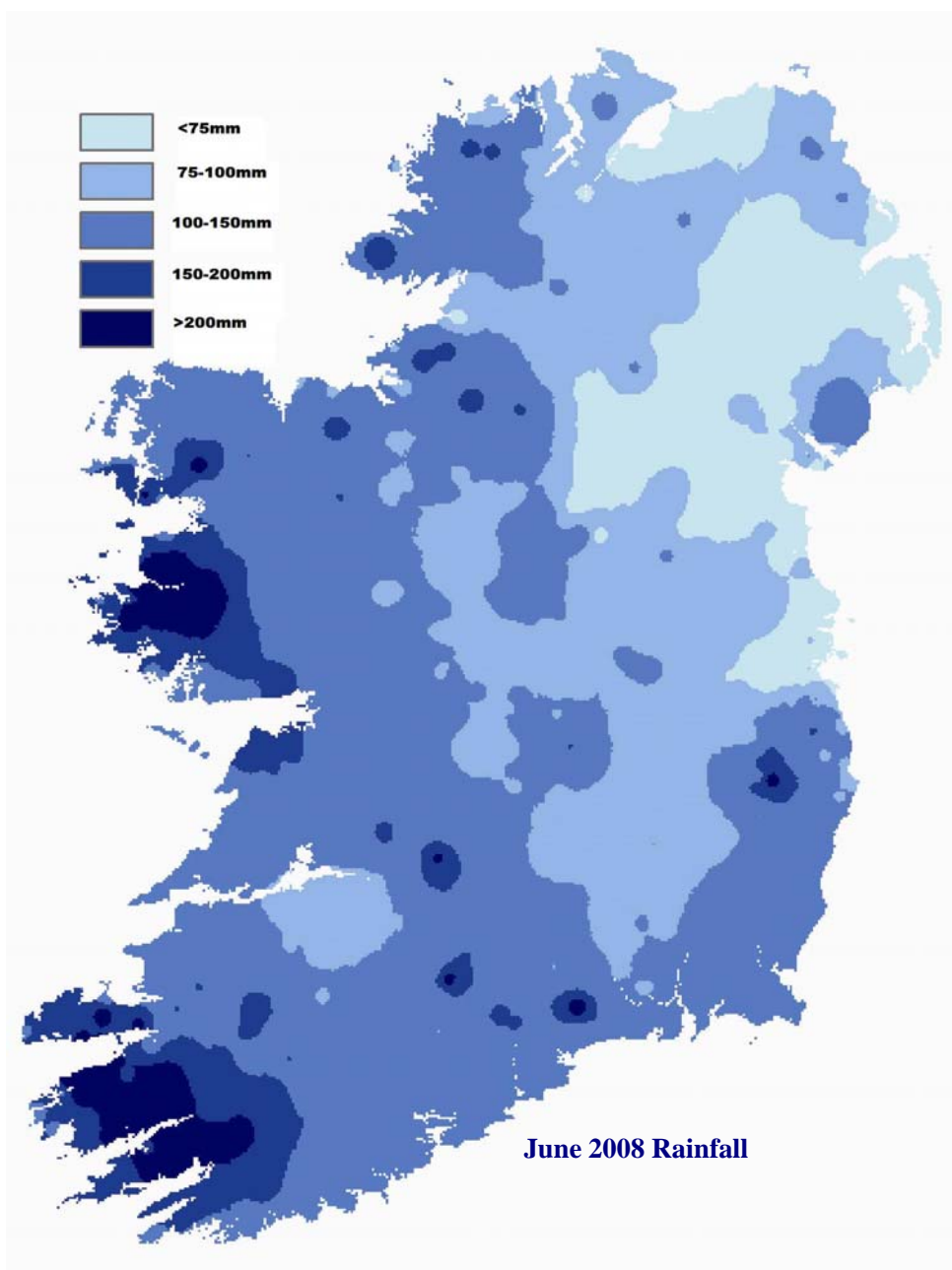
Notable features of June Rainfall

In the northwest it was the wettest June on record in some places, with many stations recording their greatest June daily rainfall.

Figure 3a shows the maximum daily fall and date of occurrence for the month where this was over 25mm, while Figure 3b gives the ranking for the June total and daily maximum value. Except in the north and east, rainfall totals for June ranked in the top 10, with some stations in the west recording their wettest ever June.

Example- In Mayo, Belmullet recorded its wettest ever June day on the 21st and its third wettest June ever in over 50 years of recording, while Belderring had its wettest June day and greatest June total rainfall in 23 years of record. In Galway, Connemara National Park had its wettest June day and wettest June in 27 years of record, while Roundstone recorded its highest daily maximum and second highest monthly total in 24 years of record.

(Where some values are not shown because of clutter, please refer to tables in the appendices)



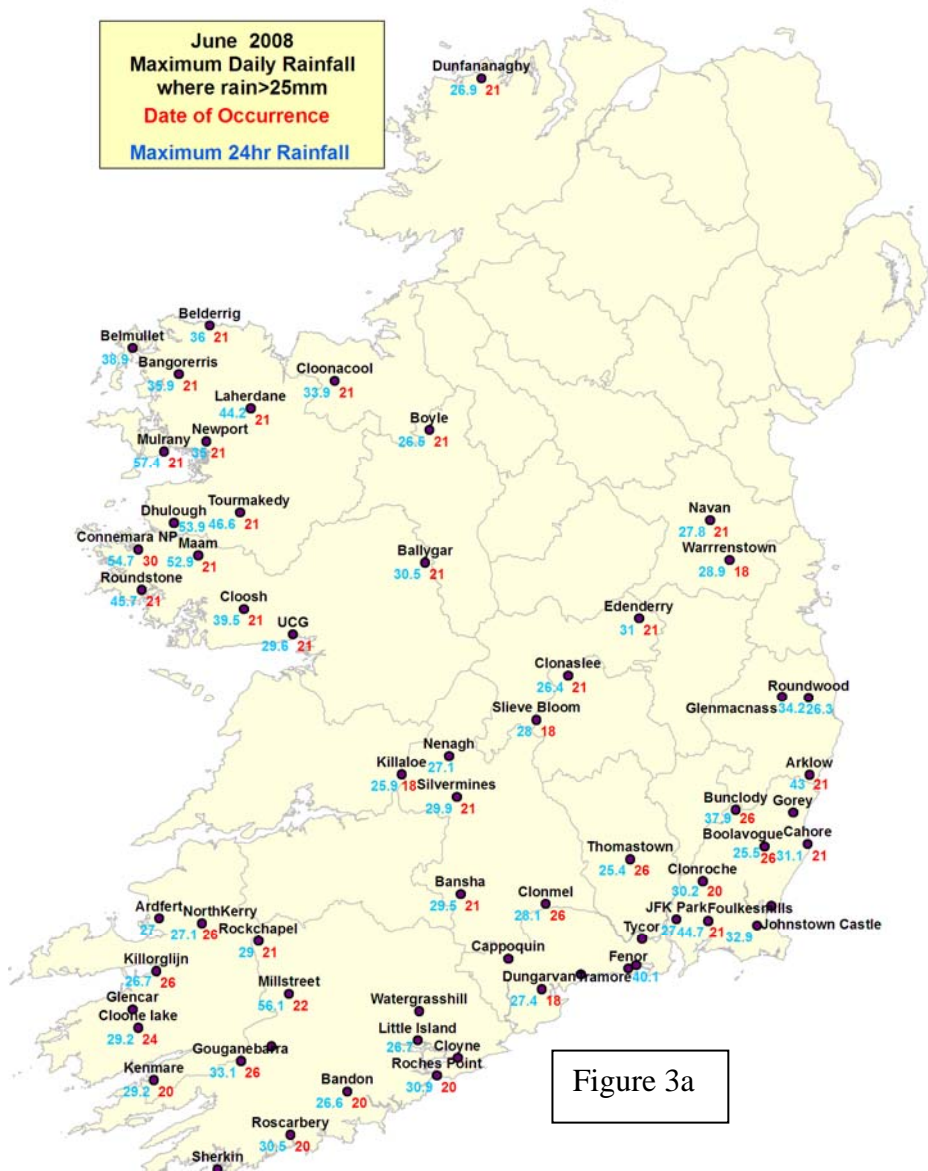


Figure 3a

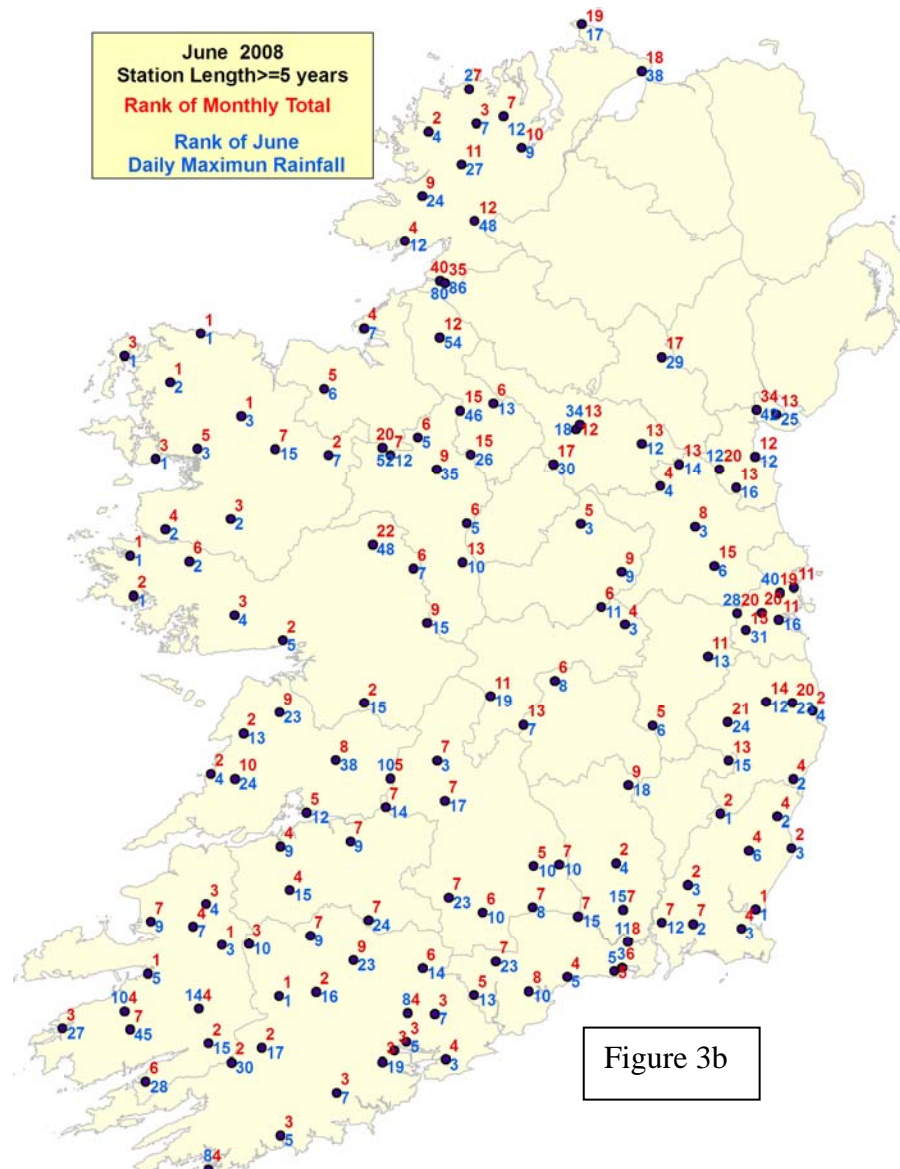


Figure 3b

July

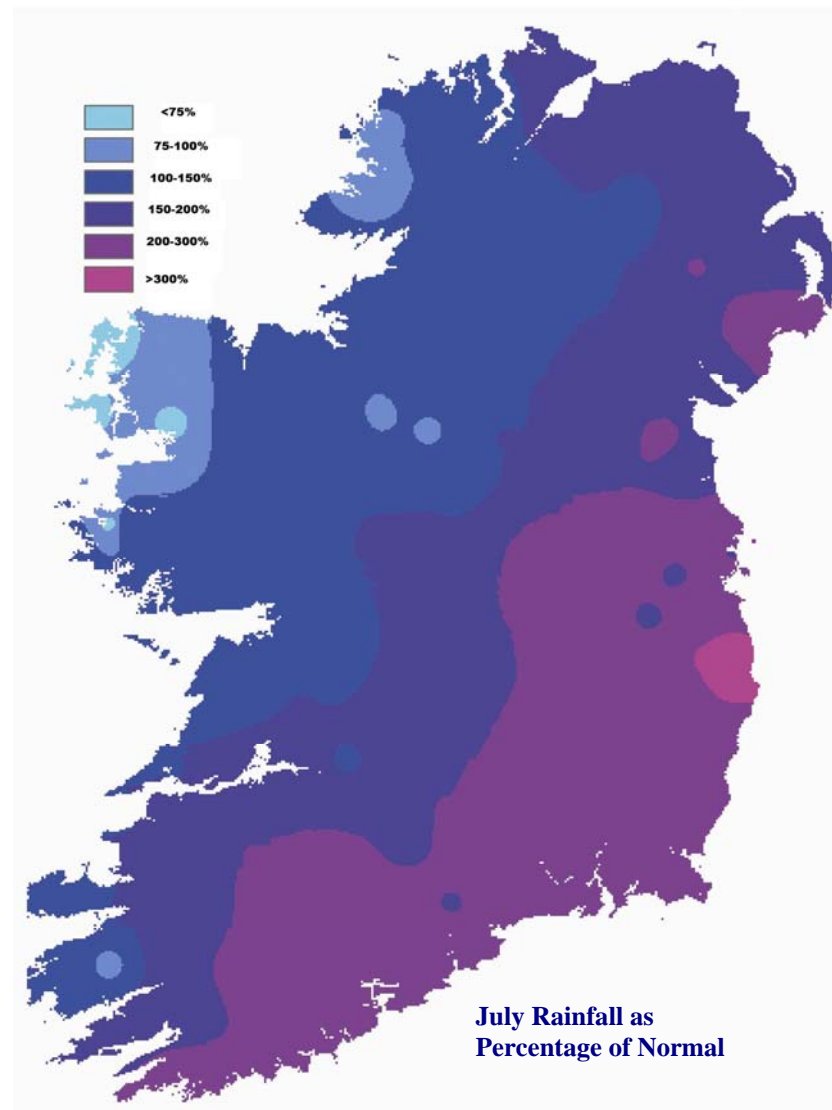
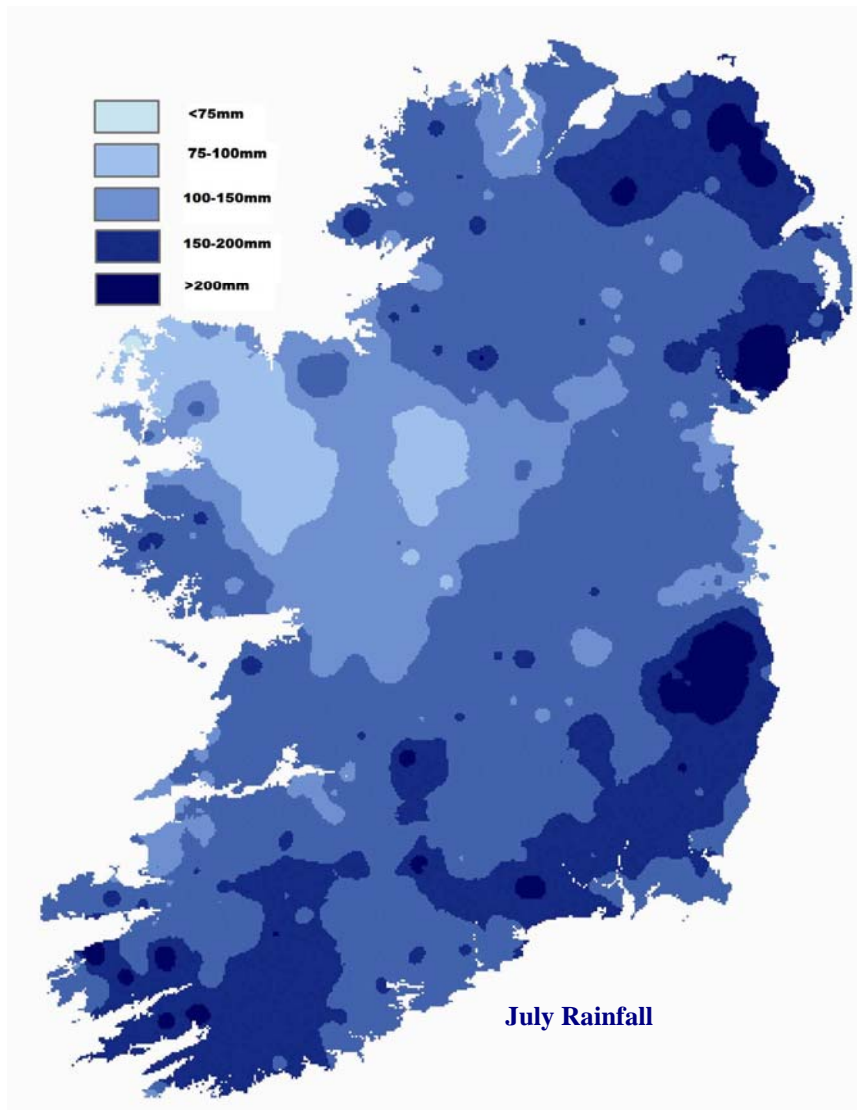
July rainfall totals were near normal in parts of the northwest, but it was an exceptionally wet month over most of Leinster and Munster, where rainfall totals for the month were more than twice the July normal. Heaviest daily falls this month were in the periods 1st to 6th and 28th to 31st. Late on the 31st, exceptionally heavy rain caused significant flooding in parts of County Limerick. Between 15 and 23 raindays were recorded (days with 0.2 mm or more rainfall), greater than the normal for July of between 13 and 18.

Notable features of July Rainfall

The most notable aspect of the rainfall in July was the extreme rainfall which occurred between the 28th and 31st.

Figure 4a shows the maximum daily fall and date of occurrence for the month where the daily rainfall was above 25mm, while Figure 5b gives the ranking for the July total and daily maximum value. Except in the west and northwest, rainfall totals for July ranked in the top 10. From Figure 4b it is clear that many stations in Munster and south Leinster recorded their highest ever July daily rainfall values, and for many stations the month of July was also the wettest on record.

(Where some values are not shown because of clutter, please refer to tables in the appendices)



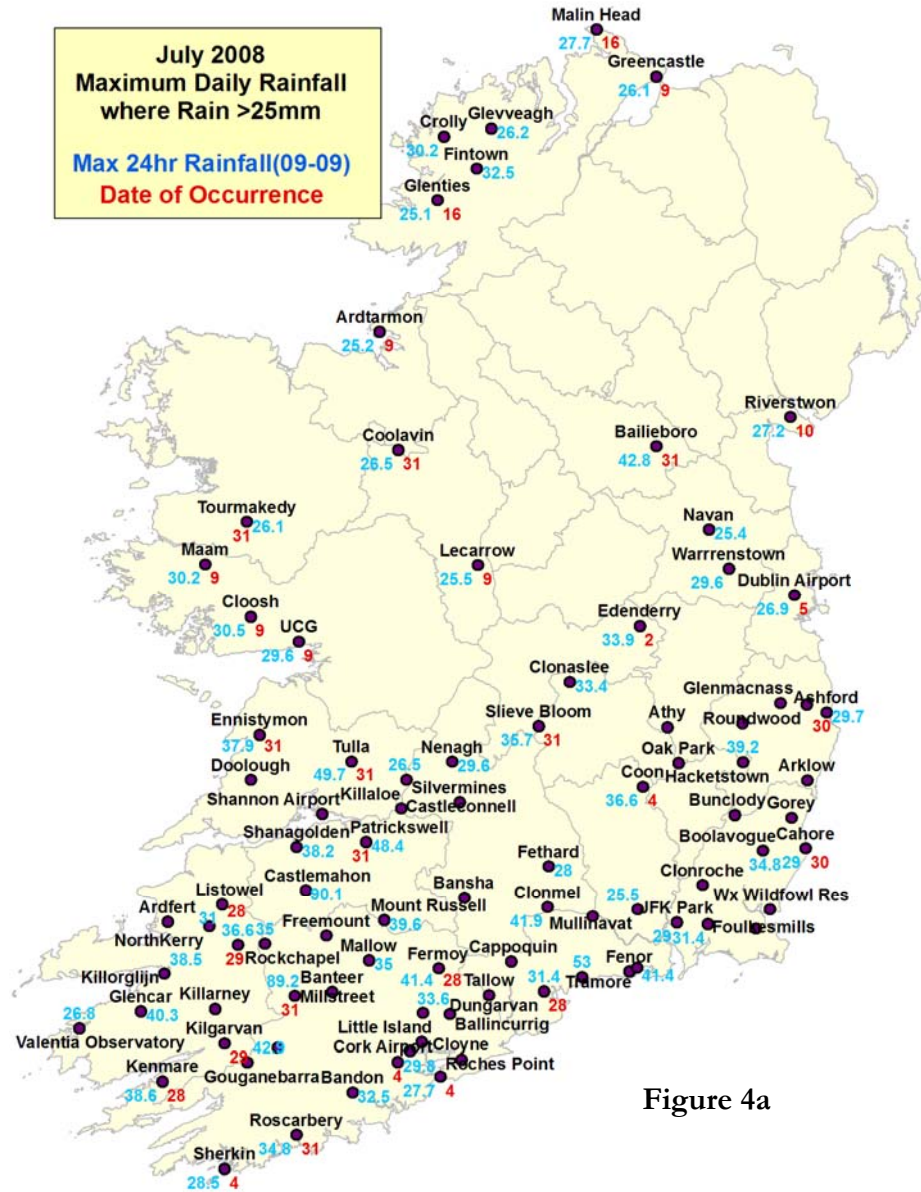


Figure 4a

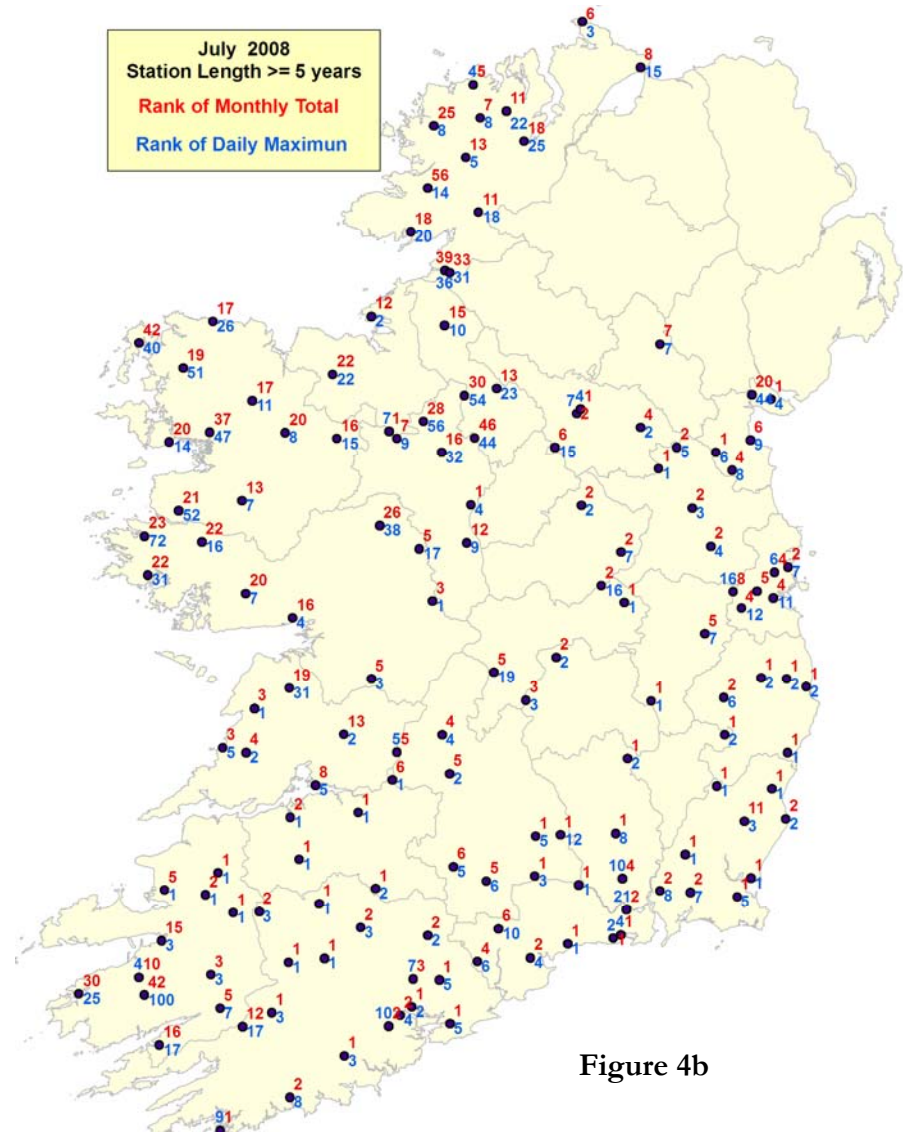


Figure 4b

Case Study- July 31st 2008

Early July was cool and unsettled, a period of warmer and relatively settled weather developed in mid-July, but the weather became unsettled again towards the end of the month. Rainfall totals for the 27th, 28th and 29th were between 25mm and 35mm in the Limerick area, bringing soils close to saturation. The overall result is that there was little or no capacity in the soil to absorb excessive amounts of rainfall.

During the evening of the 31st, an extreme rainfall event took place in the Newcastlewest area of County Limerick, which caused severe flooding in the Arra Catchment. A depression moved northwards over Ireland during the afternoon and evening; the associated occlusion initially moved northwards, and then became slow-moving over the midwest, bringing exceptionally heavy falls of rain to the west Limerick area.

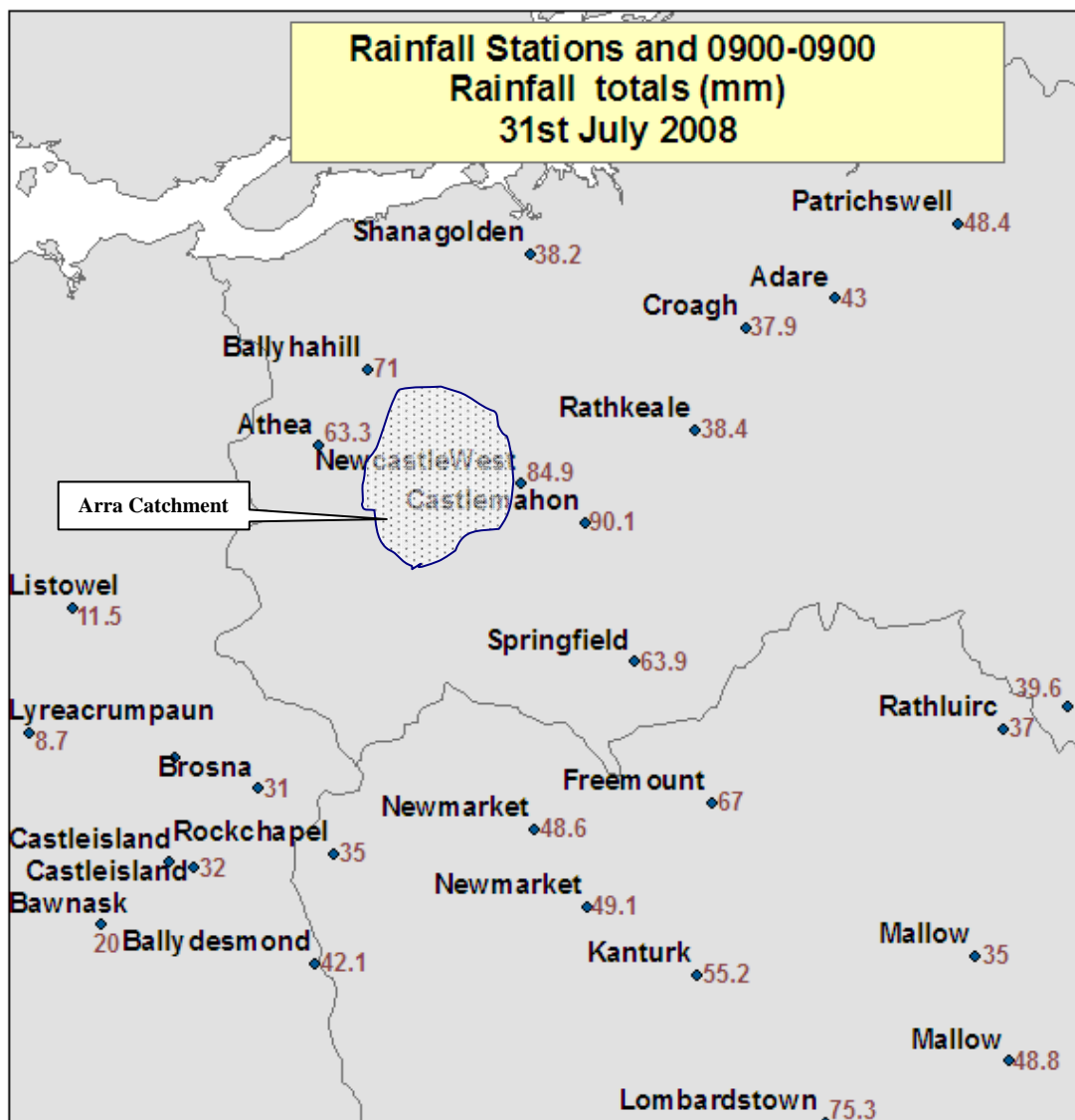


Figure 5
Rainfall totals 31st July 2008

Analysis of rainfall totals on July 31st

24-hour rainfall totals from rainfall stations in the area surrounding Newcastlewest are shown in figure 5. Coverage in the Arra catchment is poor. However, it was possible to combine the rainfall measurements with data from the weather radar at Shannon Airport, and using geostatistical methods to produce an estimate of rainfall totals on a 1km grid; this is shown in figure 6.

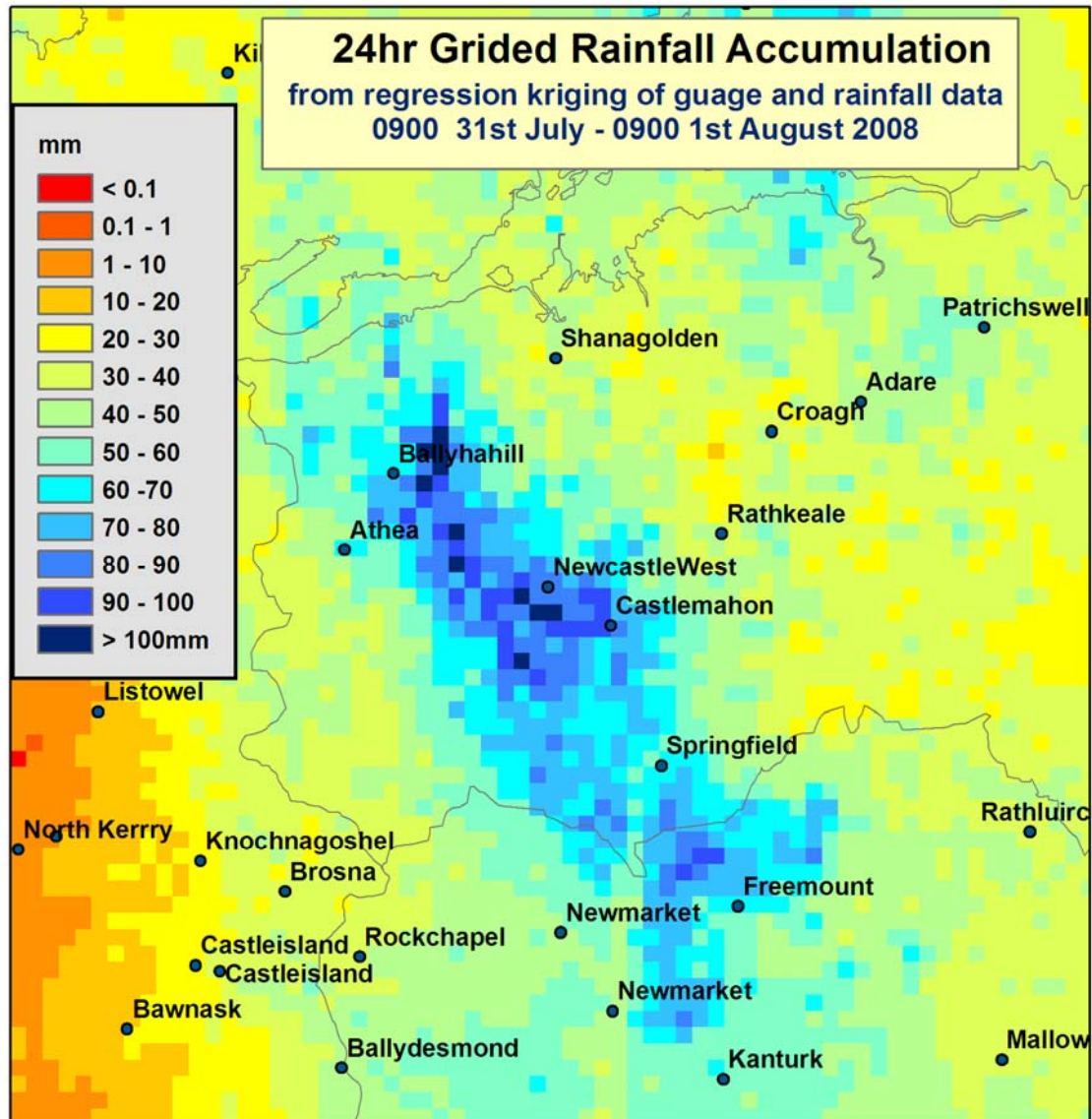


Figure 6
Rainfall totals Derived from radar data 31st July 2008

From the data used to generate figure 6, the maximum 24-hour grid point rainfall was 111mm, with 11 grid points having rainfall totals over 100mm, 28 having values between 90 and 100mm, 68 between 80 and 90mm, 164 between 70 and 80mm, 191 between 60 and 70 mm and 455 between 50 and 60mm.

Estimation of rainfall rates

Most of the stations in the main study area take rainfall readings once every 24 hours. The station at Freemount Water Works is equipped with a tipping-bucket rain recorder. From this it has been possible to estimate the start and end time of the most intense rainfall and to apportion the 24-hour rainfall totals to sub-24 hour durations. Freemount recorded 67mm in the 09-09 period, all of which fell in a 14-hour period from approx 1115UTC on 31st to 0115UTC on August 1st; the period of most intense rainfall lasted 7 hours, from 1730UTC until 0030UTC approx, during which time it is estimated that 63mm fell.

This leads to the following estimates of rainfall for 7-hour and 14-hour durations for rainfall stations nearest the flooding event, and for the maximum rainfall depth from the gridded rainfall field, Table 1.

Location	Easting	Northing	Rainfall 14-hour	Rainfall 7-hour
Athea	115100	135900	63.3	59.5
Castlemahon	131500	131200	90.1	84.7
NewcastleWest	127500	133800	84.9	79.8
Freemount	139300	113900	67.0	63.0
Springfield	134600	122600	63.9	60.1
Ballyhahill	118100	140600	71.0	66.8
Grid Point Maximun	127000	132000	111	104.4

Table 1

Estimation of extreme rainfall return periods and rarity estimates

Met Éireann have recently completed a study, **Estimation of Point Rainfall Frequencies**, funded by the OPW as part of the Flood Studies Update. This enables the production of estimates of rainfall depths for various return periods and duration for any location in Ireland. This depth duration frequency model can be used with confidence for return periods of 250 years for durations of less than 24 hours, and return periods of 500 years for durations of 24 hours or more. The model can also be used to calculate rarity estimates, i.e. with a given rainfall and duration, calculate the return period.

Note: The return period is the average number of years between years with one or more rainfalls exceeding a specified value of the rainfall.

Rainfall return periods for the actual rainfalls recorded and those calculated are shown in Table 2 for durations of 7, 14 and 24hrs. As previously stated, the model can be used with confidence for return periods up to 250 years for durations of less than 24 hours. In some instances the model return periods exceeded this value, but nonetheless it was considered that some use could be made of the data. The following approach was adopted: if the model gave return periods between 250 and 350 years, it is indicated by >250yr, between 350 and 600 years by >>250yr, and for model results greater than 600 years by >>>250yr.

Location	Easting	Northing	Duration 24hrs	Return Period	Duration 14hrs	Return Period	Duration 7hr	Return Period
Athea	115100	135900	63.3	10yrs	63.3	25yrs	59.5	56.0
Castlemahon	131500	131200	90.1	241yrs	90.1	>>250	84.7	>>>250
NewcastleWest	127500	133800	84.9	45yrs	84.9	>>250	79.8	>250
Freemount	139300	113900	67.0	9yrs	67.0	19yrs	63.0	38.0
Springfield	134600	122600	63.9	13yrs	63.9	34yrs	60.1	80.0
Ballyhahill	118100	140600	71.0	28yrs	71.0	74yrs	66.8	166.0
Max GridPoint	127000	132000	111	198yrs	111	>>250	104.4	>>>250

Table 2

Conclusions:

The analysis of the data has shown that rainfall totals in the order of 60-100mm occurred over an area of approximately 450km² in west County Limerick and northwest County Cork, with approximately 95% of the rain falling in a 7-hour period. Return period analysis suggests that totals for 24 hours had return periods up to 250 years, while amounts for 7-hour durations had return periods of well in excess of 250 years for totals in excess of 70mm, which are estimated to have occurred over an area of approx 175 km².

August

August rainfall totals were above normal everywhere, the third successive month of wetter than normal weather. More than twice the normal August totals were recorded in parts of the east, northeast and midlands, while some stations recorded over three times the normal. The number of raindays recorded during the month (days with 0.2mm or more rainfall) was also well above normal; there were between 20 and 30 raindays at stations this month compared with the August average number of between 14 and 19.

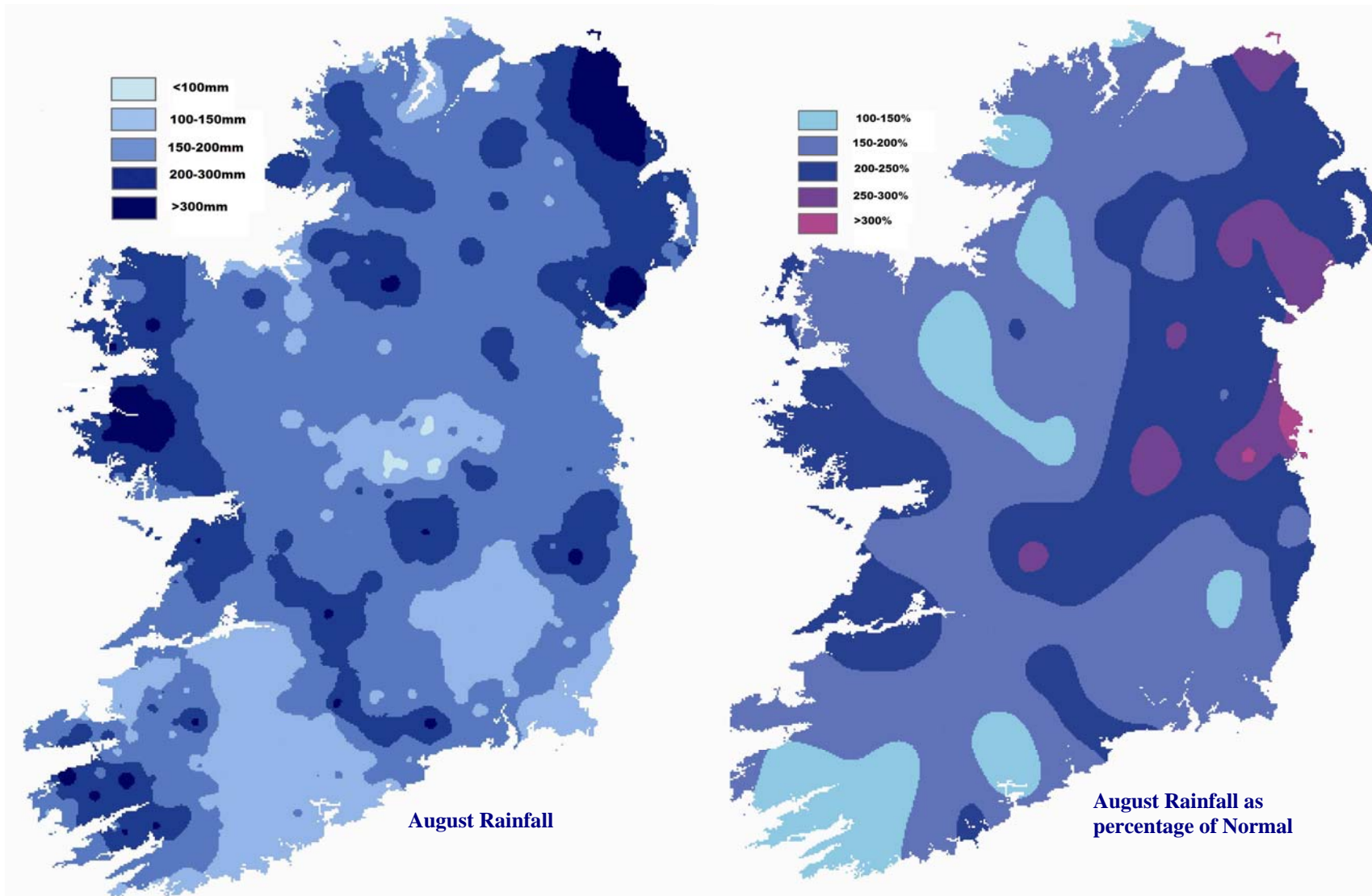
Notable Features of August Rainfall

It was the wettest August on record at a number of stations, including Dublin (Phoenix Park), where rainfall records began in 1837. Birr had its wettest August since 1917, while Dublin Airport had both its highest monthly total (190mm) and highest one-day (00-24hr) fall (76.2mm on the 9th) for August since the station opened in 1941. Among other exceptional rainfall events this month, a 60-minute fall of 38.4mm at Shannon Airport on the 6th was the highest for any month in the station's 63-year history.

Flooding was reported in many areas. The heavy rain in the north Kildare and north Dublin areas is the subject of a separate case study. On the 13th, the highest recorded rainfall in the summer months occurred at Belderrig in Co Mayo (102mm), with many other locations in the northwest reporting in excess of 50mm. There were widespread media reports of flooding. Flooding was also reported from Carlow on the 16th, but amounts of rainfall around that date, while large, were not particularly excessive.

Figure 7a shows the maximum daily fall and date of occurrence for the month where the daily rainfall was above 25mm, while Figure 7b gives the ranking for the August total and daily maximum value. For many stations the monthly total ranked in the top 5, with many having their wettest August on record, and some also their highest daily fall.

(Where some values are not shown because of clutter, please refer to tables in the appendices)



Case study- August 9th 2008

Development of Heavy Rainfall on 9th August 2008

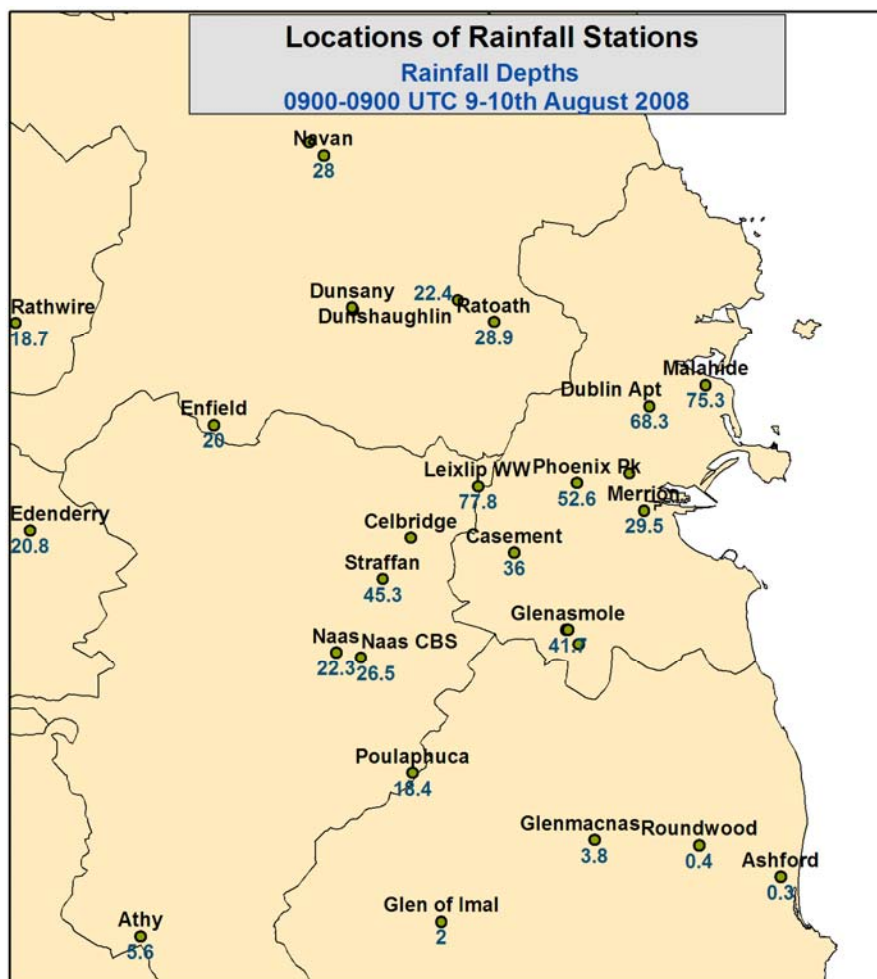
A cold front moved eastwards over Ireland on August 9th, a very unstable airmass immediately behind the cold front facilitated the development of thunderstorms in the east of Ireland following the frontal passage. Outbreaks of rain had affected the area earlier in the day from approx 0300 to 0800 UTC, bringing estimated totals of 6-8mm.

During the early afternoon, convective rain developed in the midlands. From about 1330UTC onwards, a thunderstorm cell developed over west Offaly, then spread to north Kildare and eventually covered most of county Dublin and south Meath. By 1600, Met Eireann stations at Dublin Airport and Casement Aerodrome were reporting thunderstorms with very heavy rain. Further bursts of heavy rain continued in the Dublin-Kildare-south Meath area until about 2230. Large rainfall amounts were recorded, with Dublin Airport recording its largest daily fall for August (76.2mm) and its second highest daily fall ever. There were widespread reports of flooding in the north Kildare and north Dublin areas.

The weather conditions leading up to the heavy rainfall event were unsettled, with spells of rain or showers most days. This led to a situation where soils were saturated or close to saturation. Heavy rainfall (25-35mm) occurred on August 6th.

Analysis of rainfall totals on August 9th

The spatial coverage of rainfall stations is shown in Figure 8, along with the 24-hour totals from 0900UTC on 9th to 0900UTC on 10th.



This coverage is not sufficient to provide for a spatial analysis, as rainfall totals varied considerably over relative short distances. However, further information on the spatial rainfall distribution can be obtained from the weather radar at Dublin Airport. This is then combined with the actual rainfall readings to produce the gridded rainfall field shown in Figure 9:

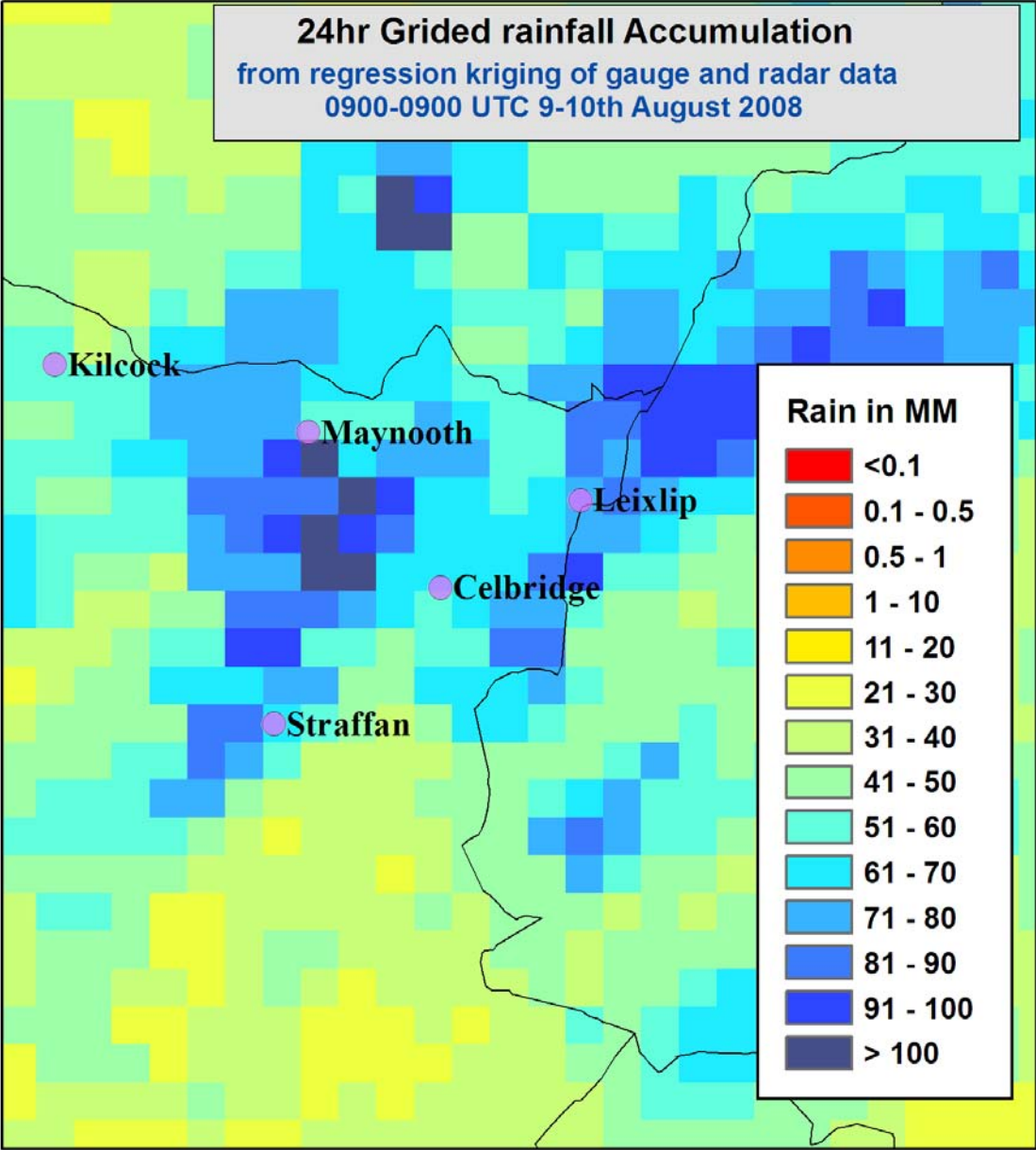


Figure 9
 Rainfall totals Derived from radar data 9th August 2008

Recorded rainfall intensities

Met Éireann stations at Dublin Airport, Casement Aerodrome and Phoenix Park report rainfall totals every minute. At other locations, rainfall values are recorded once per day at 0900UTC. From analysis of the minute-by-minute readings at the three Met Éireann locations, the major rainfall episode began at 1500UTC approx and ended at 2000UTC approx. Rainfall amounts

recorded outside of this period amounted to less than 1mm, and are regarded as not significant in terms of the overall rainfall amounts.

Analysis of the rainfall patterns from 0900UTC on the 8th to 0900UTC on the 9th show that all of the rainfall during this period fell between 0000 and 0900UTC on the 9th, and was sufficient to bring the Soil Moisture Deficits of all soils to saturation before the major rainfall event.

The total rainfall for the 00-24hr period on the 9th is effectively the sum of the rainfall totals for the two 24-hour periods ending at 0900UTC on the 9th and 10th.

Further analysis of the data led to the conclusion that the totals recorded in the 0900-0900 period actually fell within a 5-hour period, and the totals recorded in the 0000-2400 period fell within an 18-hour period.

Table 3 shows the 5-hour and 18-hour rainfall amounts corresponding to the 24-hour rainfall totals ending at 0000UTC on the 10th and 0900UTC on the 10th respectively.

Location	Duration			
	easting	northing	5hr (total 09-09)	18hr (total 00-24)
Naas	289600	219500	26.5	36
Celbridge (Ardglass)	294300	230900	73.6	81.6
Naas CBS	287300	220000	22.3	30.3
Straffan (Turnings)	291700	227000	45.3	53.3
Dublin Botanic Gdns	315000	237000	50.6	57.4
Casement Aerodrome	304100	229500	35.8	40.9
Leixlip (Water Works)	300700	235800	77.8	85.8
Glenasmole	309200	222200	41.7	48.6
Enfield	275700	241600	20	29.3
Dublin Airport	316900	243400	68.3	76.2
Phoenix Park	310000	236100	52.6	58.8

Table 3

The figure of 76.2mm recorded at Dublin Airport is the highest 24-hour total in August at that station since records began there in 1941, having previously been exceeded only once, in June 1993.

Table 4 gives a breakdown of shorter-duration rainfalls for three Met Éireann weather stations, together with a recording station operated by South Dublin County Council near Lucan.

Location	Maximum Rainfall (mm) for different durations 9th August 2008													
	1min	5min	10min	15min	30min	1hr	2hr	3 hr	4hr	5hr	6hr	12hr	18hr	24hr
Dublin Airport	1.4	4.9	8.3	12.4	19.0	35.9	44.3	48.0	53.8	67.6	67.7	67.7	76.2	76.2
Phoenix Park	1.6	6.7	12.5	15.4	20.6	33.5	38.8	42.8	45.4	52.1	52.3	52.3	58.7	58.7
Casement Aerodrome	1.7	5.2	8.0	10.2	13.9	19.6	23.5	27.5	28.6	33.5	33.5	33.5	40.9	40.9
Lucan	1.9*	8.9*	17	23*	28	43	56	63	70	84	85	86	93	93

Table 4

* estimated values

From the sub-hourly readings it was possible to estimate a maximum rainfall rate of between 100 and 130mm/hr, which was sustained for a period of approximately 5 minutes between 1515 and 1530UTC, depending on the location.

Estimation of extreme rainfall return periods and rarity estimates.

Estimates of return period rainfalls were calculated using the methods previously discussed

	easting	northing	Duration 18hrs		Duration 5hrs	
			Rainfall	Return period	Rainfall	Return period
Naas	289600	219500	36	2	26.5	3.3
Celbridge (Ardglass)	294300	230900	81.6	48	73.6	156
Naas CBS	287300	220000	30.3	2	22.3	2
Straffan (Turnings)	291700	227000	53.3	8	45.3	36
Dublin Botanic Gdns	315000	237000	57.4	14	50.6	49
Casement Aerodrome	304100	229500	40.9	3	35.8	7
Leixlip (Water Works)	300700	235800	85.8	59	77.8	190
Glenasmole	309200	222200	48.6	2	41.7	4
Enfield	275700	241600	29.3	2	20	2
Dublin Airport	316900	243400	76.2	43	68.3	237
Phoenix Park	310000	236100	58.8	12	52.6	40
Lucan	304000	238000	92.8	104	84	>>250

From analysis of the gridded rainfall fields, it is apparent that rainfall amounts varied greatly over short distances. Return periods were also calculated for maximum rainfall totals as derived from the gridded fields, in some cases the return periods were greatly in excess of 250 years.

Conclusions:

The analysis of the data has shown that rainfall on August 9th varied greatly over short distances. Intensities to 120-130mm/hr were recorded over durations of 5 minutes approximately, 20-30% of the rain fell within the first 15 minutes of the event, 30 to 40% of the rain fell within the first 30 minutes and 50 -60% of the rain fell within the first 60 minutes. Maximum rainfall totals of 100+mm occurred over small areas. Return periods became larger after 30 minutes duration and increased up to the most extreme return periods which were for the 5-hour duration, which in some instances exceeded the 250-year outer limit of the model.

Appendix I
Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days
MUNSTER

	June 2008					July 2008					August 2008					Summer 2008				
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days
CORK																				
Mallow	101.3	169	17.5	26	20	148.6	270	35.0	31	14	117.0	158	20.5	6	20	366.9	194	35.0	31-Jul	54
Rockchapel	180.0	n/a	29.0	21	24	185.7	n/a	35.0	31	21	329.8	n/a	71.1	12	30	695.5	n/a	71.1	12-Aug	75
Ballyvourney	150.2	203	26.8	20	16	181.9	256	55.2	31	19	133.7	132	26.7	12	24	465.8	189	55.2	31-Jul	59
Gouganebarra	236.5	204	33.1	26	20	185.8	159	42.9	31	18	215.6	134	39.6	15	29	637.9	162	42.9	31-Jul	67
Sherkin	113.6	186	26.2	20	14	147.4	254	28.5	4	13	115.9	130	19.3	8	21	376.9	181	28.5	04-Jul	48
Fermoy	98.2	158	22.1	21	18	120.1	218	41.4	28	18	107.4	141	20.6	15	22	325.7	169	41.4	28-Jul	58
Cork Airport	138.5	204	24.1	21	16	148.1	228	29.8	4	18	163.6	182	18.9	15	28	450.2	202	29.8	04-Jul	62
Roscarbery	122.0	n/a	30.5	20	15	140.5	n/a	34.8	31	10	132.3	n/a	31.1	8	16	394.8	n/a	34.8	31-Jul	41
Cork (Clover)	113.0	192	22.7	20	16	157.0	275	33.9	4	15	110.8	144	13.5	17	22	380.8	197	33.9	04-Jul	53
Bandon	126.1	n/a	26.6	20	14	143.1	n/a	32.5	31	17	122.8	n/a	24.5	15	22	392.0	n/a	32.5	31-Jul	53
Watergrasshill	127.4	n/a	26.1	21	16	136.4	n/a	28.6	28	17	150.2	n/a	23.1	15	23	414.0	n/a	28.6	28-Jul	56
Freemount	93.2	n/a	21.1	21	19	186.0	n/a	67.0	31	17	116.0	n/a	19.6	12	23	395.2	n/a	67.0	31-Jul	59
Ballincurrig	133.3	n/a	24.7	18	16	153.7	n/a	33.6	28	16	159.0	n/a	32.0	15	20	446.0	n/a	33.6	28-Jul	52
Cloyne	110.3	n/a	27.4	18	13	124.6	n/a	27.2	28	18	142.8	n/a	27.8	15	22	377.7	n/a	27.8	15-Aug	53
Banteer	129.2	n/a	20.5	26	19	191.0	n/a	53.8	31	19	142.2	n/a	29.2	12	22	462.4	n/a	53.8	31-Jul	60
Little Island	103.1	n/a	26.7	18	9	147.6	n/a	36.0	28	13	116.4	n/a	20.3	15	19	367.1	n/a	36.0	28-Jul	41
Millstreet	154.2	n/a	56.1	22	16	223.6	n/a	89.2	31	21	138.9	n/a	26.2	12	27	516.7	n/a	89.2	31-Jul	64
CLARE																				
Shannon Airport	110.8	176	22.1	18	22	100.8	177	38.0	31	18	176.6	215	51.0	6	25	388.2	192	51.0	06-Aug	65
Doolough	106.4	n/a	17.4	26	19	137.3	n/a	35.3	31	18	188.3	n/a	30.0	12	30	432.0	n/a	35.3	31-Jul	67
Tulla	116.0	163	15.4	21	20	115.3	158	49.7	31	18	161.8	169	16.6	9	27	393.1	164	49.7	31-Jul	65
Ennistymon	149.1	n/a	22.1	21	22	118.0	n/a	37.9	31	18	195.2	n/a	21.0	9	27	462.3	n/a	37.9	31-Jul	67
Carron	126.3	134	20.3	21	22	98.0	101	17.0	31	22	256.4	184	31.9	16	30	480.7	146	31.9	16-Aug	74
Quilty	102.5	n/a	19.6	21	18	81.4	n/a	20.5	9	21	168.7	n/a	38.0	12	28	352.6	n/a	38.0	12-Aug	67
Killaloe	127.6	n/a	25.9	18	20	116.7	n/a	26.5	31	19	208.0	n/a	30.5	9	27	452.3	n/a	30.5	09-Aug	66
LIMERICK																				
Patrickswell	96.8	n/a	23.3	21	16	133.9	n/a	48.4	31	16	101.5	n/a	11.3	15	28	332.2	n/a	48.4	31-Jul	60
Castlemahon	100.4	n/a	16.0	18	16	182.8	n/a	90.1	31	17	110.5	n/a	16.7	12	22	393.7	n/a	90.1	31-Jul	55
Mount Russell	122.3	n/a	17.8	1	25	183.7	n/a	39.6	31	25	171.9	n/a	24.6	12	26	477.9	n/a	39.6	31-Jul	76
Castleconnell	105.3	146	21.0	18	22	103.7	144	40.4	7	17	151.7	158	22.0	8	27	360.7	150	40.4	07-Jul	66
Shanagolden	100.0	n/a	22.0	18	24	119.2	n/a	38.2	31	20	144.5	n/a	22.7	13	27	363.7	n/a	38.2	31-Jul	71

Appendix I
Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days

MUNSTER

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	
KERRY																					
Valentia	147.8	185	23.7	30	18	92.8	127	26.8	29	22	181.7	164	25.5	17	28	422.3	160	26.8	29-Jul	68	
Kenmare	174.3	183	29.2	20	20	146.4	157	38.6	28	21	162.8	122	29.1	9	26	483.5	151	38.6	28-Jul	67	
Killorglin	134.1	192	26.7	26	20	113.9	152	38.5	29	19	158.0	170	31.0	12	24	406.0	171	38.5	29-Jul	63	
Kilgarvan	150.6	184	24.1	26	21	135.3	167	35.6	29	18	155.0	140	26.2	12	24	440.9	161	35.6	29-Jul	63	
Ardfert	101.0	n/a	27.0	18	20	101.1	n/a	31.3	29	19	156.2	n/a	32.7	12	26	358.3	n/a	32.7	12-Aug	65	
Cloone lake	212.9	157	29.2	24	19	104.3	79	17.1	10	27	225.2	119	46.6	17	29	542.4	118	46.6	17-Aug	75	
NorthKerry	154.1	n/a	27.1	26	21	160.4	n/a	41.6	29	19	257.0	n/a	62.4	12	24	571.5	n/a	62.4	12-Aug	64	
Listowel	100.4	n/a	23.0	18	20	124.2	n/a	31.0	28	20	204.3	n/a	37.5	12	27	428.9	n/a	37.5	12-Aug	67	
Killarney	150.2	190	25.0	26	19	142.3	185	37.7	29	18	152.8	154	41.5	12	26	445.3	175	41.5	12-Aug	63	
Glencar	186.0	n/a	31.8	26	22	108.6	n/a	40.3	29	20	181.4	n/a	25.7	12	27	476.0	n/a	40.3	29-Jul	69	
Castleisland	145.1	n/a	22.2	18	22	171.7	n/a	36.6	29	21	206.1	n/a	42.7	12	28	522.9	n/a	42.7	12-Aug	71	
WATERFORD																					
Cappoquin	154.9	180	27.5	21	16	163.4	197	35.8	28	20	241.1	206	47.3	15	23	559.4	196	47.3	15-Aug	59	
Fenor	109.9	n/a	33.6	20	14	159.6	n/a	44.9	28	18	165.1	n/a	26.9	8	22	434.6	n/a	44.9	28-Jul	54	
Tramore	117.4	n/a	40.1	20	16	170.7	n/a	41.4	28	19	173.3	n/a	22.9	8	24	461.4	n/a	41.4	28-Jul	59	
Dungarvan	112.3	n/a	27.4	18	15	149.2	n/a	31.4	28	16	127.1	n/a	22.0	15	20	388.6	n/a	31.4	28-Jul	51	
Stradbally	126.9	n/a	35.5	20	19	193.2	n/a	53.0	28	16	177.3	n/a	27.5	15	25	497.4	n/a	53.0	28-Jul	60	
Tycor	111.8	186	27.7	18	15	139.1	248	23.9	31	18	155.2	196	24.6	11	20	406.1	208	27.7	18-Jun	53	
Tallow	119.3	n/a	23.2	18	16	129.5	n/a	27.9	4	17	112.5	n/a	30.5	15	23	361.3	n/a	30.5	15-Aug	56	
Silvermines	149.8	158	29.9	21	22	173.8	185	43.9	31	25	230.0	190	28.0	8	27	553.6	179	43.9	31-Jul	74	
Bansha	151.6	178	29.5	21	16	145.5	187	37.9	5	21	219.6	209	33.5	15	23	516.7	193	37.9	05-Jul	60	
Clonmel	99.4	171	28.1	26	17	148.0	251	41.9	31	20	139.6	189	26.4	20	22	387.0	203	41.9	31-Jul	59	
Nenagh	95.5	177	27.1	18	22	90.7	171	29.6	31	13	171.8	253	43.8	6	23	358.0	205	43.8	06-Aug	58	
Mullinahone	100.8	n/a	21.0	26	16	149.9	n/a	19.7	2	17	173.6	n/a	42.3	15	20	424.3	n/a	42.3	15-Aug	53	
Cahir	100.8	n/a	24.5	26	14	84.1	n/a	23.8	31	16	115.6	n/a	26.7	15	22	300.5	n/a	26.7	15-Aug	52	
CarickonSuir	110.7	n/a	22.3	20	16	166.2	n/a	35.7	4	18	156.7	n/a	39.4	15	24	433.6	n/a	39.4	15-Aug	58	
Fethard	106.4	n/a	22.1	21	17	145.8	n/a	28.0	4	21	150.3	n/a	44.0	15	25	402.5	n/a	44.0	15-Aug	63	

Appendix I
 Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days
LEINSTER

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	
CARLOW																					
Hacketstown	98.2	147	24.3	21	13	170.9	280	39.2	4	14	138.5	156	29.1	16	18	407.6	188	39.2	04-Jul	45	
DUBLIN																					
Dublin Airport	76.4	136	14.9	21	17	111.5	223	26.9	5	19	192.4	271	68.3	9	23	380.3	215	68.3	09-Aug	59	
Malahide	67.7	130	16.3	18	18	92.3	196	20.1	5	20	211.6	326	75.3	9	23	371.6	227	75.3	09-Aug	61	
Phoenix Pk	72.4	127	14.4	21	18	102.7	205	22.1	5	18	189.7	260	52.6	9	23	364.8	203	52.6	09-Aug	59	
Casement	70.5	133	15.9	18	17	101.7	216	22.1	5	15	175.0	254	36.0	9	20	347.2	205	36.0	09-Aug	52	
Merrion Sq	82.8	162	23.9	18	17	107.8	251	21.6	5	16	149.0	233	29.5	9	22	339.6	215	29.5	09-Aug	55	
KILDARE																					
Naas	91.7	150	23.5	18	21	99.4	184	24.5	30	18	154.3	220	32.7	16	21	345.4	187	32.7	16-Aug	60	
Leixlip	65.2	123	15.6	21	16	90.5	181	18.6	30	16	215.1	307	87.4	9	18	370.8	214	87.4	09-Aug	50	
Athy	84.7	n/a	19.6	21	17	159.4	n/a	61.0	31	13	134.1	n/a	22.6	16	19	378.2	n/a	61.0	31-Jul	49	
KILKENNY																					
Coon	104.1	153	18.6	18	17	186.2	286	36.6	4	19	147.8	176	35.6	15	22	438.1	202	36.6	04-Jul	58	
Thomastown	116.1	n/a	25.4	26	16	137.8	n/a	20.4	30	17	110.2	n/a	22.5	15	19	364.1	n/a	25.4	26-Jun	52	
Mullinavat	108.4	n/a	23.4	18	12	141.8	n/a	25.5	31	15	200.4	n/a	33.9	16	21	450.6	n/a	33.9	16-Aug	48	
LAOIS																					
Clonaslee	113.3	n/a	26.4	21	20	147.0	n/a	33.4	4	18	244.5	n/a	35.1	6	25	504.8	n/a	35.1	06-Aug	63	
Slieve Bloom	115.4	152	28.0	18	20	141.0	186	35.7	31	19	224.4	224	58.1	15	28	480.8	191	58.1	15-Aug	67	
LONGFORD																					
Granard	92.9	n/a	17.2	21	26	117.5	n/a	21.7	2	24	172.7	n/a	35.8	15	27	383.1	n/a	35.8	15-Aug	77	
LOUTH																					
Dundalk	62.3	92	15.5	21	16	94.5	155	15.7	3	19	196.7	237	46.7	11	24	353.5	167	46.7	11-Aug	59	
Ardee	56.9	98	20.8	21	14	125.8	237	18.7	30	19	166.9	226	31.6	6	21	349.6	189	31.6	06-Aug	54	
Mellifont	84.3	126	23.1	21	18	98.4	154	22.6	30	19	185.6	213	24.9	16	22	368.3	169	24.9	16-Aug	59	
Castlebellingham	55.2	n/a	17.8	21	14	68.5	n/a	14.4	30	17	133.4	n/a	24.3	16	22	257.1	n/a	24.3	16-Aug	53	
Riverstown	64.9	n/a	16.2	21	16	148.8	n/a	27.2	10	22	217.3	n/a	38.8	11	28	431.0	n/a	38.8	11-Aug	66	

Appendix I
Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days
LEINSTER

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	
MEATH																					
Warrenstown	90.7	144	28.9	18	20	128.8	230	29.6	29	18	175.6	225	35.6	16	21	395.1	201	35.6	16-Aug	59	
Kingscourt	63.7	97	21.3	21	17	117.4	186	22.5	29	20	185.7	221	37.0	11	22	366.8	172	37.0	11-Aug	59	
Navan	77.9	n/a	27.8	21	17	123.9	n/a	25.4	3	18	175.2	n/a	39.9	16	19	377.0	n/a	39.9	16-Aug	54	
Moynalty	70.9	n/a	22.1	21	21	138.5	n/a	24.3	30	19	206.6	n/a	32.8	16	22	416.0	n/a	32.8	16-Aug	62	
OFFALY																					
Derrygreenagh	102.3	165	24.1	21	19	146.0	252	21.7	2	18	210.7	267	40.8	15	25	459.0	231	40.8	15-Aug	62	
Birr	90.2	161	18.4	18	18	100.6	171	19.9	31	16	171.6	220	17.9	16	26	362.4	188	19.9	31-Jul	60	
Edenderry	112.0	n/a	31.0	21	23	157.2	n/a	33.9	2	19	260.6	n/a	60.9	16	21	529.8	n/a	60.9	16-Aug	63	
WESTMEATH																					
Coole	71.5	n/a	17.7	21	21	119.7	n/a	21.4	5	20	137.0	n/a	36.0	15	20	328.2	n/a	36.0	15-Aug	61	
Rathwire	93.3	n/a	23.3	21	22	143.1	n/a	22.5	30	21	199.0	n/a	43.8	16	20	435.4	n/a	43.8	16-Aug	63	
WEXFORD																					
Foulkesmills	129.7	216	44.7	21	17	143.5	247	31.4	30	15	139.6	166	20.5	11	20	412.8	204	44.7	21-Jun	52	
Johnstown C	137.0	225	37.2	20	18	160.6	282	37.5	30	16	144.8	174	28.8	11	20	442.4	220	37.5	30-Jul	54	
Cahore	115.5	n/a	31.1	21	17	128.2	n/a	29.0	30	18	128.4	n/a	28.9	16	20	372.1	n/a	31.1	21-Jun	55	
Gorey	128.1	n/a	45.3	21	13	192.7	n/a	60.1	30	13	160.1	n/a	43.2	16	19	480.9	n/a	60.1	30-Jul	45	
Bunclody	149.6	n/a	37.9	26	17	213.5	n/a	40.4	30	16	144.0	n/a	20.4	16	18	507.1	n/a	40.4	30-Jul	51	
JFK Park	115.4	196	27.0	20	17	160.8	282	29.0	30	16	153.0	187	31.5	11	21	429.2	217	31.5	11-Aug	54	
BooLavogue	115.7	n/a	25.5	26	13	168.5	n/a	34.8	4	14	189.6	n/a	27.5	11	17	473.8	n/a	34.8	04-Jul	44	
Wx Wildfowl	139.4	n/a	38.6	20	18	150.3	n/a	32.3	30	17	135.2	n/a	31.9	11	20	424.9	n/a	38.6	20-Jun	55	
Clonroche	140.5	n/a	30.2	20	17	184.9	n/a	41.1	30	20	194.6	n/a	32.2	16	23	520.0	n/a	41.1	30-Jul	60	
WICKLOW																					
Arklow	146.9	258	43.0	21	14	156.1	295	44.2	30	17	184.7	240	39.1	16	22	487.7	261	44.2	30-Jul	53	
Roundwood	87.2	136	26.3	21	16	199.1	406	47.4	30	14	156.0	184	40.3	16	20	442.3	223	47.4	30-Jul	50	
Glenmacnass	113.0	128	34.2	21	16	240.1	312	55.5	4	17	246.1	210	44.9	16	20	599.2	212	55.5	04-Jul	53	
Glen Imall	100.7	126	21.1	21	21	170.4	216	34.6	30	22	212.4	202	43.0	16	27	483.5	183	43.0	16-Aug	70	
Ashford	97.8	n/a	22.9	21	19	121.9	n/a	29.7	30	16	154.8	n/a	41.1	16	21	374.5	n/a	41.1	16-Aug	56	

Appendix I
Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days

CONNACHT

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	
GALWAY																					
Cloosh	162.1	178	39.5	21	22	96.4	113	30.5	9	21	277.6	212	57.1	15	28	536.1	175	57.1	15-Aug	71	
Connemara NP	209.0	218	54.7	30	24	60.6	66	8.8	1	16	292.8	222	47.6	13	28	562.4	176	54.7	30-Jun	68	
Roundstone	173.5	n/a	45.7	21	24	68.7	n/a	15.0	9	22	211.8	n/a	29.8	15	28	454.0	n/a	45.7	21-Jun	74	
Gort	148.6	169	20.8	25	22	105.1	118	24.9	31	19	220.0	183	48.0	16	31	473.7	159	48.0	16-Aug	72	
Ballygar	102.2	153	30.5	21	23	103.4	167	16.4	3	20	136.1	148	21.3	15	25	341.7	155	30.5	21-Jun	68	
Ballinasloe	92.1	n/a	16.4	21	20	94.4	n/a	23.9	6	13	136.3	n/a	18.6	8	26	322.8	n/a	23.9	06-Jul	59	
Glenamaddy	85.6	121	15.2	21	21	82.1	126	15.8	4	17	138.1	148	35.1	15	26	305.8	134	35.1	15-Aug	64	
UCG	194.7	260	29.6	21	20	84.2	124	29.6	9	17	240.2	238	36.4	15	27	519.1	213	36.4	15-Aug	64	
Maam	224.1	n/a	52.9	21	23	93.8	n/a	30.2	9	26	374.7	n/a	50.8	13	29	692.6	n/a	52.9	21-Jun	78	
LEITRIM																					
Drumshambo	109.3	132	14.9	21	21	96.4	129	14.1	5	19	175.5	169	33.4	15	29	381.2	145	33.4	15-Aug	69	
Manorhamilton	95.4	104	9.9	22	26	103.0	110	20.8	9	28	171.4	134	33.0	13	30	369.8	118	33.0	13-Aug	84	
Aughnasheelan	129.8	135	21.8	21	21	93.2	115	15.9	9	22	181.1	148	36.7	15	29	404.1	135	36.7	15-Aug	72	
MAYO																					
Newport	127.3	145	35.0	21	25	62.0	70	15.0	31	21	218.9	179	47.0	13	27	408.2	137	47.0	13-Aug	73	
Belmullet	127.6	190	38.9	21	19	44.3	65	12.7	29	22	192.1	204	49.5	13	25	364.0	159	49.5	13-Aug	66	
Mulrany	142.3	n/a	57.4	21	21	80.3	n/a	22.0	31	22	214.7	n/a	46.6	13	28	437.3	n/a	57.4	21-Jun	71	
Bangorerris	137.8	n/a	35.9	21	25	58.5	n/a	9.5	21	20	170.1	n/a	33.6	13	25	366.4	n/a	35.9	21-Jun	70	
Doolough	227.3	n/a	53.9	30	26	106.5	n/a	17.5	1	26	402.8	n/a	79.6	13	31	736.6	n/a	79.6	13-Aug	83	
Straide	106.3	154	21.8	21	25	74.4	118	22.9	31	20	159.1	158	34.6	13	25	339.8	146	34.6	13-Aug	70	
Laherdane	155.2	n/a	44.2	21	22	64.2	n/a	19.5	31	14	183.7	n/a	37.5	15	25	403.1	n/a	44.2	21-Jun	61	
Belderrig	138.4	n/a	36.0	21	27	80.2	n/a	13.6	31	24	250.8	n/a	102.2	13	28	469.4	n/a	102.2	13-Aug	79	
Tourmakedy	150.9	n/a	46.6	21	17	79.1	n/a	26.1	31	19	207.4	n/a	45.5	13	26	437.4	n/a	46.6	21-Jun	62	
Knock	153.3	n/a	23.3	21	27	80.0	n/a	16.2	9	22	178.0	n/a	36.7	13	28	411.3	n/a	36.7	13-Aug	77	
ROSCOMMON																					
Drumsna	91.8	128	17.1	19	24	56.8	92	13.7	5	21	160.4	172	30.7	15	28	309.0	136	30.7	15-Aug	73	
Lecarrow	91.9	141	25.0	21	26	95.7	154	25.5	9	18	127.3	150	17.5	15	26	314.9	149	25.5	09-Jul	70	
Boyle	108.9	147	26.5	21	22	57.0	81	9.4	5	15	195.3	203	37.7	6	24	361.2	151	37.7	06-Aug	61	
Elphin	96.3	n/a	11.6	21	25	64.3	n/a	11.1	3	22	145.9	n/a	22.7	11	29	306.5	n/a	22.7	11-Aug	76	
Frenchpark	104.3	n/a	18.7	21	21	94.3	n/a	19.3	31	20	152.0	n/a	28.5	15	27	350.6	n/a	28.5	15-Aug	68	
Lanesboro	88.1	n/a	20.5	21	20	79.9	n/a	20.0	3	15	152.3	n/a	22.9	15	27	320.3	n/a	22.9	15-Aug	62	

Appendix I

Monthly and summer season total rainfalls, % of normal, day of maximum monthly and summer rainfall, number of rain days

CONNACHT

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	Total mm	% 6190	Max daily	Day	Rain days	
SLIGO																					
Ardtarmon	106.3	n/a	22.9	5	21	84.2	n/a	25.2	9	21	106.6	n/a	19.1	15	25	297.1	n/a	25.2	09-Jul	67	
Cloonacool	164.7	168	33.9	21	25	125.3	129	22.8	31	26	214.3	153	56.5	13	31	504.3	151	56.5	13-Aug	82	
Coolavin	83.4	114	11.3	21	22	90.2	141	26.5	31	17	133.7	136	29.1	15	27	307.3	131	29.1	15-Aug	66	

ULSTER

	June 2008					July 2008					August 2008					Summer 2008					
	Total mm	% 6190	Max daily	Day		Total mm	% 6190	Max daily	Day		Total mm	% 6190	Max daily	Day		Total mm	% 6190	Max daily	Day		
CAVAN																					
Bailieboro	84.0	115	22.3	21	16	126.6	181	42.8	31	21	236.3	257	45.1	16	27	446.9	190	45.1	16-Aug	64	
Lough Gowna	69.1	100	13.4	21	24	95.2	151	16.1	2	22	154.2	177	28.0	15	27	318.5	145	28.0	15-Aug	73	
Cavan	66.7	n/a	17.3	21	20	115.3	n/a	18.5	2	20	166.1	n/a	25.2	16	25	348.1	n/a	25.2	16-Aug	65	
Cavan(Loreto)	60.2	n/a	11.5	21	24	110.0	n/a	22.6	3	23	167.9	n/a	25.9	16	25	338.1	n/a	25.9	16-Aug	72	
DONEGAL																					
Glenties	132.2	150	21.4	21	27	74.9	77	25.1	16	15	159.0	130	26.1	15	28	366.1	119	26.1	15-Aug	70	
Greencastle	89.1	125	15.8	22	24	137.9	189	26.1	9	23	170.8	178	20.4	3	26	397.8	166	26.1	09-Jul	73	
Malin Head	74.8	115	18.9	21	24	125.8	175	27.7	16	20	123.2	134	19.5	11	23	323.8	141	27.7	16-Jul	67	
Termon	116.5	151	19.0	21	26	95.5	115	15.4	16	21	171.1	166	20.7	15	25	383.1	146	20.7	15-Aug	72	
Letterkenny	88.5	126	19.6	21	24	70.6	105	11.7	9	22	130.6	163	19.7	12	25	289.7	134	19.7	12-Aug	71	
Crolly	143.2	165	24.6	21	26	105.4	97	30.2	16	22	204.9	161	20.7	12	30	453.5	140	30.2	16-Jul	78	
Fintown	115.3	n/a	15.5	21	26	131.9	n/a	32.5	16	22	221.1	n/a	28.5	11	28	468.3	n/a	32.5	16-Jul	76	
Dunfananaghy	78.3	n/a	26.9	21	16	96.5	n/a	25.0	16	21	130.5	n/a	28.7	12	25	305.3	n/a	28.7	12-Aug	62	
Glenveagh	169.8	n/a	21.5	21	26	123.5	n/a	26.2	16	23	185.6	n/a	20.6	15	25	478.9	n/a	26.2	16-Jul	74	
Ballyshannon	67.2	91	8.7	24	22	77.5	106	17.4	9	25	159.9	162	37.3	11	28	304.6	124	37.3	11-Aug	75	
Ardnawark	104.6	94	12.5	24	25	129.9	112	22.6	16	27	243.3	159	34.1	13	30	477.8	126	34.1	13-Aug	82	
Bruckless	121.9	n/a	18.7	21	26	83.5	n/a	19.0	9	22	163.3	n/a	27.8	15	25	368.7	n/a	27.8	15-Aug	73	
Ballyshannon	70.9	90	8.7	21	23	85.8	111	17.5	9	22	139.9	133	24.2	11	30	296.6	114	24.2	11-Aug	75	
MONAGHAN																					
Monaghan	65.2	102	15.1	21	21	96.5	166	22.7	30	20	162.2	198	27.2	16	27	323.9	159	27.2	16-Aug	68	

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

MUNSTER

name	Record length	June 2008			July 2008			August 2008			Summer 2008		
		rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Ra nk	Last exceeded	Max year
CORK													
Mallow	68	9	2007	1955	2	1956	1956	11	2004	1946	3	1997	1946
Rockchapel	27	3	1998	1985	2	1988	1988	1		2008	1		2008
Ballyvourney	61	2	1982	1982	1		2008	14	2004	1986	2	1997	1997
Gouganearra	61	2	1998	1998	12	1994	1950	16	2004	1985	5	1997	1950
Sherkin	37	4	1998	1982	1		2008	11	1999	1986	2	1986	1986
Fermoy	48	6	2007	1982	2	1980	1980	11	2004	1997	3	1997	1986
Cork Airport	48	3	2007	1982	2	1975	1975	6	2004	1997	1		2008
Roscarbery	24	3	1998	1987	2	1988	1988	9	2004	1997	4	1998	1986
Cork (Clover H)	34	3	2007	1982	2	1975	1975	8	2004	1997	1		2008
Bandon	9	3	2007	2003	1		2008	3	2004	2004	1		2008
Watergrasshill	21	4	2007	1990	3	1994	1992	5	2004	1997	2	1997	1997
Freemount	25	7	2007	1991	1		2008	6	2004	1997	2	1997	1997
Ballincurragh	14	3	2007	2003	1		2008	4	2004	1997	1		2008
Cloyne	13	4	2007	1997	1		2008	4	2004	1997	1		2008
Banteer	24	2	2007	2007	1		2008	7	2004	1997	2	1997	1997
Little Island	10	3	2007	2003	1		2008	3	2004	2004	1		2008
Millstreet	23	1		2008	1		2008	3	2004	1997	1		2008
CLARE													
Shannon Airport	68	5	1966	1966	8	1995	1995	3	1997	1997	2	1997	1997
Doolough	27	10	1998	1982	4	2007	1988	4	1997	1985	2	1985	1985
Tulla	66	8	1987	1947	13	2007	1960	6	1997	1985	2	1985	1985
Ennistymon	22	2	1998	1998	3	1998	1988	2	1992	1992	2	1998	1998
Carron	35	9	1998	1982	19	2007	1988	2	1985	1985	3	1988	1985
Quilty	10	2	2007	2007	3	2003	2003	1		2008	1		2008
Killaloe	26	5	1997	1987	5	2007	1988	2	1985	1985	3	1997	1985
Foulkesmills	68	7	2007	1947	2	1988	1988	10	1997	1946	2	2007	2007
LIMERICK													
Patrickswell	28	7	2003	1997	1		2008	6	2007	1997	3	1997	1985
Castlemahon	27	4	1997	1997	1		2008	6	2004	1997	2	1997	1997
Mount Russell	25	7	2007	1997	1		2008	4	2004	1997	2	1997	1997
Castleconnell	30	7	1998	1987	6	2007	1988	4	1997	1997	3	1997	1985
Shanagolden	15	4	2007	1997	2	2007	2007	2	1997	1997	2	1997	1997

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

MUNSTER

		June 2008			July 2008			August 2008			Summer 2008		
	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Ra nk	Last exceeded	Max year
KERRY													
Valentia	68	3	2007	1998	30	2006	1950	6	1997	1985	3	1985	1950
Kenmare	68	6	2007	2003	16	2003	1994	16	2004	1986	7	1998	1945
Killorglin	68	1		2008	15	2007	1960	8	1997	1992	1		2008
Kilgarvan	40	2	1998	1998	5	1995	1995	9	2004	1986	3	1998	1988
Ardfert	29	7	2002	1982	5	1995	1980	4	1992	1985	3	1992	1985
Cloone lake	60	7	2007	1985	42	2007	1950	19	2004	1986	14	1998	1950
NorthKerry	12	4	2007	1998	2	2007	2007	1		2008	1		2008
Listowel	8	3	2007	2002	1	1985	2008	1		2008	1		2008
Killarney	41	4	2007	1997	3	1995	1995	9	2004	1985	3	1997	1992
Glencar	26	4	2007	1998	10	2007	1988	6	1997	1985	7	1998	1985
Castleisland	11	1		2008	1		2008	1		2008	1		2008
TIPPERARY													
Silvermines	56	7	2007	1982	5	1988	1953	3	1997	1985	2	1997	1997
Bansha	54	7	2007	1955	6		1960	6	2004	1958	3	1997	1958
Clonmel	47	7	2007	1982	1		2008	6	2004	1986	2	1997	1997
Nenagh	38	7	2007	1982	4	2007	1980	2	1997	1997	2	1997	1997
Mullinahone	29	7	2007	1982	1		2008	3	1997	1986	1		2008
Cahir	28	6	2007	1982	5	2007	1988	8	2004	1985	4	2007	1986
CarickonSuir	26	7	2007	1986	1		2008	3	1997	1986	2	1997	1997
Fethard	25	5	2007	1986	1		2008	3	1997	1986	2	1997	1997
WATERFORD													
Cappoquin	65	7	2007	1106	6	1995	1956	4	1997	1997	1	1997	1997
Fenor	28	5	2007	1107	1		2008	2	1997	1997	1		2008
Tramore	28	6	2007	1207	1		2008	3	1997	1997	1		2008
Dungarvan	26	8	2007	1407	2	1988	1988	7	2004	1997	4	2007	1986
Stradbally	16	4	2007	1807	1		2008	2	1997	1997	2	1997	1997
Tycor	68	8	2007	1812	2	1988	1988	7	1997	1997	2	1997	1997
Tallow	23	5	2007	6406	4	2007	1988	9	2004	1997	4	2007	1986

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

LEINSTER

	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Rank	Last exceeded	Max year
CARLOW													
Hacketstown	60	13	2007	1998	1		2008	9	1997	1985	2	1958	1958
DUBLIN													
Dublin Airport	68	19	2007	1958	4	2007	1960	1		2008	2	1958	1958
Malahide	44	11	2007	1993	2	2007	2007	1		2008	1		2008
Phoenix Pk	68	20	2007	1958	5	2007	1960	1		2008	3	2007	1958
Casement	55	15	2007	1993	4	2007	2007	1		2008	3	2007	1958
Merrion Sq	61	11	2007	1958	4	2007	1960	2	1986	1986	3	2007	1958
KILDARE													
Naas	54	11	2007	1993	5	2007	2007	1		2008	3	2007	1958
Athy	16	5	2007	1998	1		2008	2	1997	1997	1		2008
Leixlip	60	20	2007	1958	8	2007	1958	1		2008	2	1958	1958
KILKENNY													
Coon	34	9	2007	1998	1		2008	5	2004	1997	1		2008
Thomastown	19	2	2007	2007	1		2008	4	2007	1997	1		2008
Mullinavat	25	7	2007	2007	4		2008	3	1997	1997	2	1997	1997
LAOIS													
Clonaslee	24	6	2003	1997	2	2007	2007	1		2008	1		2008
Slieve Bloom	56	13	2007	1998	3	2000	1960	2	1985	1985	1		2008
LONGFORD													
Granard	4	2	2007	2007	2	2007	2007	1		2008	1		2008
LOUTH													
Dundalk	68	34	2007	1958	20	2007	1993	2	1956	1956	4	2007	1956
Ardee	41	20	2007	1998	1		2008	1		2008	1		2008
Mellifont	34	13	2007	2007	4	2007	2007	1		2008	2	2007	2007
Castlebellingham	24	12	2007	1998	6	2007	1985	1		2008	3	2007	1985
Riverstown	24	13	2007	1998	1		2008	1		2008	1		2008
MEATH													
Warrenstown	58	15	2007	1958	2	1960	1960	1		2008	2	1958	1958
Kingscourt	28	13	2007	1982	2		1985	1		2008	1		2008
Navan	23	8	2007	2007	2	2007	2007	1		2008	1		2008
Moynalty	8	4	2007	2007	1		2008	1		2008	1		2008

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

LEINSTER

		June 2008			July 2008			August 2008			Summer 2008		
	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Rank	Last exceeded	Max year
OFFALY													
Derrygreenagh	54	6	1998	1982	2	1960	1960	1		2008	1		2008
Birr	55	11	2007	1998	5	1980	1960	2	1985	1985	1		2008
Edenderry	19	4	1998	1998	1		2008	1		2008	1		2008
WESTMEATH													
Coole	10	5	2007	2007	2	2007	2007	4		2008	2	2007	2007
Rathwire	25	9	2007	1998	2	2007	2007	1		2008	1		2008
WEXFORD													
Johnstown C	68	4	2007	2007	1		2008	6	1997	1997	2	1997	1997
Cahore	25	2	1997	1997	2	2007	2007	3	1997	1997	2	1997	1997
Gorey	24	4	2007	2007	1		2008	3	1997	1997	1		2008
Bunclody	25	2	1998	1998	1		2008	5	2004	1997	1		2008
JFK Park	44	7	2007	1982	2	1988	1988	3	1997	1997	2	1997	1997
Booavogue	22	4	2007	2007	11		2008	2	1997	1997	1		2008
Wx Wildfowl	17	1		2008	1		2008	2	1997	1997	2	1997	1997
Clonroche	6	2	2007	2007	1		2008	1		2008	1		2008
WICKLOW													
Arklow	60	4	2007	1958	1		2008	3	1997	1997	1		2008
Roundwood	68	20	2007	1958	1		2008	6	1997	1986	3	1986	1958
Glenmacnass	44	14	2007	1982	1		2008	3	1986	1986	1		2008
Glen Imall	58	21	2007	1958	2	1953	1953	2	1985	1985	2	1958	1958
Ashford	8	2	2007	2007	1		2008	1		2008	1		2008

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

CONNACHT

		June 2008			July 2008			August 2008			Summer 2008		
	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Rank	Last exceeded	Max year
GALWAY													
Cloosh	46	3	1998	1998	20	2007	1980	2	1985	1985	1		2008
Connemara NP	27	1		2008	23	2007	1994	2	1985	1985	1		2008
Roundstone	24	2	1998	1998	22	2007	1994	3	1992	1985	2	1998	1998
Gort	27	2	1998	1998	5	2007	1988	2	1985	1985	2	1985	1985
Ballygar	40	6	2007	1998	5	2007	1988	3	1986	1985	2	1986	1986
Ballinasloe	24	9	2007	1998	3	2007	1988	4	1997	1985	2	1985	1985
Glenamaddy	65	22	2007	1955	26	2007	1950	4	1992	1985	10	2007	1945
UCG	44	2	1998	1998	16	2007	2007	1		2008	1	1998	2008
Maam	26	6	2007	1998	22	2007	1988	2	1985	1985	2	1985	1985
LEITRIM													
Drumshambo	68	15	2004	1945	30	2007	1942	6	1992	1942	7	2007	1950
Manorhamilton	28	12	2004	1985	15	2007	1981	1	1992	1985	8	2002	1985
Aughnasheelan	38	6	1998	1986	13	2007	1974	4		1985	6		1985
MAYO													
Newport	50	5	2002	1980	37	2007	2007	3	1998	1985	5	1998	1961
Belmullet	53	3	2002	2002	42	2007	1988	3	1992	1992	2	1992	1992
Mulrany	25	3	2002	1998	20	2007	1988	6	1999	1998	5	1998	1985
Bangorerris	23	1		2008	19	2007	1988	4	2000	1992	3	1998	1992
Dhulough	23	4	2002	2002	21	2007	1988	1		2008	3	1998	1988
Straide	46	7	2002	1991	20	2007	1997	5	1992	1985	2	1985	1985
Laherdane	26	1		2008	17	2007	1998	3	1986	1985	2	1985	1985
Belderrig	23	1		2008	17	2007	2001	1		2008	1		2008
Tourmakedy	22	3	2002	2002	13	2007	1988	3	1992	1992	2	1992	1992
Knock	21	2	1993	1993	16	2007	1997	2	1992	1992	1		2008
ROSCOMMON													
Drumsna	68	15	2004	1955	46	2007	1950	2	1985	1985	11	1992	1943
Lecarrow	57	13	2007	1955	12	2007	1953	6	1992	1985	5	2007	1956
Boyle	38	6	2004	2002	28	2007	2007	2	1985	1985	3	1986	1985
Elphin	25	9	2007	1998	16	2007	2007	4	1992	1985	5	2007	1985
Frenchpark	23	7	2007	2002	7	2007	2007	3	1992	1986	2	2007	2007
Lanesboro	13	6	2007	1998	4	2007	2007	1		2008	2	2007	2007

Appendix II

Station record length, rank of monthly and summer rainfall totals, year of maximum total and most recent year 2008 total exceeded

CONNACHT

		June 2008			July 2008			August 2008			Summer 2008		
	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Rank	Last exceeded	Max year
SLIGO													
Ardtarmon	24	4	2002	2002	12	2007	2007	8	2000	1992	5	2007	1985
Cloonacool	57	5	2004	1955	22	2007	1960	6	1992	1985	4	1985	1958
Coolavin	46	20	2007	1982	11	2007	2007	7	1992	1985	7	2007	1967

ULSTER

		June 2008			July 2008			August 2008			Summer 2008		
	Record length	rank	Last exceeded	Max year	rank	Last exceeded	Max year	rank	Last exceeded	Max year	Rank	Last exceeded	Max year
CAVAN													
Bailieboro	36	13	2007	1998	4	2007	1974	1		2008	1		2008
Lough Gowna	36	17	2007	1998	6	2007	2007	4	1999	1985	5	2007	1985
Cavan	25	12	2007	1998	2	1997	1997	3	1992	1985	1		2008
Cavan(Loreto)	24	13	2007	1998	1		2008	1	1985	1985	1		2008
DONEGAL													
Glenties	68	9	2002	2002	56	2007	1950	17	1998	1985	23	2007	1942
Greencastle	61	18	2007	1990	8	1998	1950	5	1992	1992	7	1998	1950
Malin Head	52	19	2007	1958	6	1998	1985	12	2005	1985	3	1998	1985
Termon	37	7	2007	2004	11	2007	2007	2	1985	1985	2	2007	2007
Letterkenny	31	10	2007	1991	18	2007	1998	3	1992	1992	5	1992	1985
Crolly	37	2	2002	2002	25	2007	1985	5	1998	1985	3	1998	1985
Fintown	25	11	2004	2002	13	2007	1993	5	1998	1985	6	1998	1985
Dunfananaghy	13	7	2004	2002	5	2007	1997	2	1998	1998	3	1998	1997
Glenveagh	13	3	2004	2002	7	2007	1998	2	1998	1998	2	1998	1998
Ballyshannon	64	40	2007	1965	39	2007	1954	4	1992	1985	14	2007	1946
Ardnawark	27	12	2004	2002	11	2007	2007	3	1992	1985	5	1998	1985
Bruckless	24	4	2002	2002	18	2007	1997	7	2000	1985	6	1998	1985
Ballyshannon	55	35	2004	1965	33	2007	1960	9	2005	1985	15	1998	1956
MONAGHAN													
Monaghan	39	17	2007	1971	7	2007	1985	2	1985	1985	3	2007	1985

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

MUNSTER

	Record Length	June 2008			July 2008			August 2008			Summer 2008		
		Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
CORK													
Mallow	68	23	19-Jun-07	17-Jun-82	3	23-Jul-05	23-Jul-05	31	04-Aug-07	11-Aug-46	12	04-Aug-07	11-Aug-46
Rockchapel	27	10	22-Jun-04	30-Jun-88	3	23-Jul-05	17-Jul-95	1		12-Aug-08	1	23-Jul-05	12-Aug-08
Ballyvourney	61	17	19-Jun-07	17-Jun-82	3	23-Jul-05	23-Jul-05	24	04-Aug-07	05-Aug-86	5	04-Aug-07	17-Jun-82
Gouganebarra	61	30	25-Jun-04	30-Jun-73	17	08-Jul-06	29-Jul-94	32	09-Aug-04	05-Aug-86	52	08-Jul-06	05-Aug-86
Sherkin	37	8	29-Jun-03	17-Jun-82	9	23-Jul-05	11-Jul-97	34	04-Aug-07	30-Aug-98	27	04-Aug-07	30-Aug-98
Fermoy	48	14	29-Jun-05	11-Jun-93	2	13-Jul-68	04-Jul-08	29	04-Aug-07	02-Aug-71	11	04-Aug-07	17-Jun-82
Cork Airport	48	19	19-Jun-07	17-Jun-82	10	23-Jul-05	10-Jul-75	52	04-Aug-07	16-Aug-64	38	04-Aug-07	10-Jul-75
Roscarbery	24	5	29-Jun-03	17-Jun-98	8	23-Jul-05	23-Jul-05	14	04-Aug-07	30-Aug-98	19	04-Aug-07	30-Aug-98
Cork (Clover H)	34	16	19-Jun-07	17-Jun-82	4	23-Jul-05	23-Jul-05	53	04-Aug-07	22-Aug-99	15	04-Aug-07	23-Jul-05
Bandon	9	7	19-Jun-07	09-Jun-03	3	23-Jul-05	23-Jul-05	6	04-Aug-07	04-Aug-07	10	04-Aug-07	23-Jul-05
Watergrasshill	21	8	19-Jun-07	09-Jun-03	7	23-Jul-05	23-Jul-05	21	04-Aug-07	03-Aug-97	25	04-Aug-07	23-Jul-05
Freemount	25	9	20-Jun-07	22-Jun-04	1		31-Jul-08	9	04-Aug-07	03-Aug-97	1	04-Aug-07	31-Jul-08
Ballincurrig	14	7	19-Jun-07	09-Jun-03	5	23-Jul-05	23-Jul-05	9	04-Aug-07	03-Aug-97	14	04-Aug-07	23-Jul-05
Cloyne	13	3	25-Jun-04	09-Jun-03	5	23-Jul-05	23-Jul-05	9	04-Aug-07	22-Aug-99	15	04-Aug-07	22-Aug-99
Banteer	24	16	30-Jun-07	09-Jun-03	1		31-Jul-08	14	04-Aug-07	05-Aug-86	4	04-Aug-07	05-Aug-86
Little Island	10	5	19-Jun-07	19-Jun-07	2	23-Jul-05	23-Jul-05	6	05-Aug-07	14-Aug-01	7	05-Aug-07	23-Jul-05
Millstreet	23	1		22-Jun-08	1		31-Jul-08	5	30-Aug-97	03-Aug-97	6	30-Aug-97	31-Jul-08
CLARE													
Shannon Airport	68	12	22-Jun-04	17-Jun-82	5	27-Jul-00	13-Jul-45	2	11-Aug-46	11-Aug-46	2	22-Jun-04	11-Aug-46
Doolough	27	24	20-Jun-07	17-Jun-82	2	17-Jul-99	17-Jul-99	6	02-Aug-98	05-Aug-86	11	20-Jun-07	17-Jun-82
Tulla	66	38	19-Jun-07	02-Jun-87	2	13-Jul-45	13-Jul-45	58	04-Aug-07	11-Aug-46	2	04-Aug-07	13-Jul-45
Ennistymon	22	13	22-Jun-04	17-Jun-98	1		31-Jul-08	13	23-Aug-05	22-Aug-98	4	23-Aug-05	17-Jun-98
Carron	35	23	19-Jun-07	22-Jun-04	31	08-Jul-06	17-Jul-95	12	02-Aug-98	04-Aug-97	21	19-Jun-07	04-Aug-97
Quilty	10	4	20-Jun-07	20-Jun-07	5	08-Jul-06	17-Jul-99	1		12-Aug-08	3	20-Jun-07	17-Jul-99
Killaloe	26	10	19-Jun-07	04-Jun-85	5	16-Jul-03	17-Jul-95	9	04-Aug-97	03-Aug-97	17	19-Jun-07	03-Aug-97
LIMERICK													
Patrickswell	28	9	30-Jun-03	20-Jun-97	1		31-Jul-08	41	14-Aug-07	03-Aug-97	2	14-Aug-07	03-Aug-97
Castlemahon	27	15	22-Jun-04	17-Jun-82	1		31-Jul-08	20	04-Aug-07	03-Aug-97	1	04-Aug-07	31-Jul-08
Mount Russell	25	24	19-Jun-07	30-Jun-92	2	23-Jul-05	05-Jul-88	21	04-Aug-07	04-Aug-97	12	04-Aug-07	04-Aug-97
Castleconnell	30	14	09-Jun-03	05-Jun-87	1		07-Jul-08	16	11-Aug-07	20-Aug-83	4	11-Aug-07	20-Aug-83
Shanagolden	15	9	20-Jun-07	29-Jun-03	1		31-Jul-08	4	04-Aug-07	03-Aug-97	3	04-Aug-07	03-Aug-97

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

MUNSTER

	Record Length	June 2008			July 2008			August 2008			Summer 2008		
		Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
KERRY													
Valentia	68	27	20-Jun-07	09-Jun-03	25	08-Jul-06	06-Jul-57	20	20-Aug-01	05-Aug-86	60	20-Jun-07	05-Aug-86
Kenmare	68	28	30-Jun-07	20-Jun-85	17	23-Jul-05	29-Jul-94	37	21-Aug-04	05-Aug-86	47	30-Jun-07	05-Aug-86
Killorglin	68	5	22-Jun-04	17-Jun-82	3	04-Jul-72	04-Jul-72	9	05-Aug-86	28-Aug-53	8	22-Jun-04	28-Aug-53
Kilgarvan	40	15	25-Jun-04	17-Jun-82	7	23-Jul-05	23-Jul-05	21	04-Aug-07	05-Aug-86	17	04-Aug-07	05-Aug-86
Ardfert	29	9	22-Jun-04	17-Jun-82	1	25-Jul-07	29-Jul-08	3	21-Aug-92	05-Aug-86	8	22-Jun-04	05-Aug-86
Cloone lake	60	45	30-Jun-07	08-Jun-96	100	25-Jul-07	29-Jul-94	26	07-Aug-04	05-Aug-86	45	25-Jul-07	05-Aug-86
NorthKerry	12	7	22-Jun-04	22-Jun-04	1		29-Jul-08	1		12-Aug-08	1	22-Jun-04	12-Aug-08
Listowel	8	4	22-Jun-04	22-Jun-04	1		28-Jul-08	1		12-Aug-08	1	22-Jun-04	12-Aug-08
Killarney	41	14	22-Jun-04	17-Jun-82	3	23-Jul-05	23-Jul-05	4	17-Aug-99	05-Aug-86	9	23-Jul-05	05-Aug-86
Glencar	26	10	30-Jun-07	09-Jun-03	4	23-Jul-05	23-Jul-05	24	07-Aug-04	05-Aug-86	10	30-Jun-07	05-Aug-86
Castleisland	11	3	22-Jun-04	22-Jun-04	1		29-Jul-08	1		12-Aug-08	2	22-Jun-04	22-Jun-04
TIPPERARY													
Silvermines	56	17	19-Jun-07	05-Jun-97	2	28-Jul-56	28-Jul-56	23	04-Aug-07	03-Aug-97	10	04-Aug-07	03-Aug-97
Bansha	54	23	20-Jun-07	29-Jun-05	5	25-Jul-78	11-Jul-61	22	04-Aug-07	03-Aug-97	35	04-Aug-07	03-Aug-97
Clonmel	47	8	19-Jun-07	19-Jun-07	3	16-Jul-03	16-Jul-03	16	18-Aug-04	03-Aug-97	11	19-Jun-07	03-Aug-97
Nenagh	38	3	19-Jun-07	19-Jun-07	4	22-Jul-05	26-Jul-80	4	04-Aug-97	03-Aug-97	4	19-Jun-07	03-Aug-97
Mullinahone	29	10	19-Jun-07	09-Jun-92	12	23-Jul-05	16-Jul-87	3	03-Aug-97	03-Aug-97	4	19-Jun-07	03-Aug-97
Cahir	28	10	19-Jun-07	20-Jun-86	6	16-Jul-03	21-Jul-96	10	04-Aug-07	04-Aug-97	22	04-Aug-07	04-Aug-97
CarickonSuir	26	15	19-Jun-07	22-Jun-04	1		04-Jul-08	4	31-Aug-98	03-Aug-97	1	19-Jun-07	03-Aug-97
Fethard	25	10	19-Jun-07	19-Jun-07	5	16-Jul-03	25-Jul-85	3	03-Aug-97	03-Aug-97	4	19-Jun-07	03-Aug-97
WATERFORD													
Cappoquin	65	23	19-Jun-07	16-Jun-83	10	16-Jul-03	01-Jul-95	12	14-Aug-01	11-Aug-46	21	19-Jun-07	11-Aug-46
Fenor	28	5	19-Jun-07	19-Jun-07	2	16-Jul-03	16-Jul-03	13	04-Aug-07	03-Aug-97	4	04-Aug-07	03-Aug-97
Tramore	28	3	19-Jun-07	19-Jun-07	4	24-Jul-05	24-Jul-05	19	05-Aug-07	25-Aug-86	8	05-Aug-07	25-Aug-86
Dungarvan	26	10	19-Jun-07	02-Jun-84	4	16-Jul-03	16-Jul-03	21	04-Aug-07	25-Aug-86	20	04-Aug-07	25-Aug-86
Stradbally	16	5	19-Jun-07	22-Jun-04	1		28-Jul-08	7	04-Aug-07	03-Aug-97	4	04-Aug-07	03-Aug-97
Tycor	68	11	19-Jun-07	30-Jun-89	21	23-Jul-05	27-Jul-88	33	04-Aug-07	03-Aug-97	42	04-Aug-07	03-Aug-97
Tallow	23	13	19-Jun-07	09-Jun-03	6	23-Jul-05	16-Jul-03	14	04-Aug-07	05-Aug-86	18	04-Aug-07	05-Aug-86

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

LEINSTER

	Record Length	June 2008			July 2008			August 2008			Summer 2008		
		Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
CARLOW													
Hacketstown	60	15	02-Jun-07	25-Jun-58	2	12-Jul-61	12-Jul-61	14	18-Aug-06	25-Aug-86	10	30-Jun-89	25-Aug-86
DUBLIN													
Dublin Airport	68	40	22-Jun-07	11-Jun-93	6	28-Jul-05	15-Jul-45	2	25-Aug-86	25-Aug-86	3	30-Jun-03	11-Jun-93
Malahide	44	24	19-Jun-07	11-Jun-93	7	16-Jul-07	15-Jul-73	1		09-Aug-08	1	16-Jul-07	09-Aug-08
Phoenix Pk	68	45	22-Jun-07	11-Jun-93	11	28-Jul-05	03-Jul-92	3	25-Aug-86	25-Aug-86	6	22-Jun-07	25-Aug-86
Casement	55	31	22-Jun-07	11-Jun-93	12	28-Jul-05	15-Jul-73	5	25-Aug-86	25-Aug-86	8	11-Jun-93	11-Jun-93
Merrion Sq	61	16	02-Jun-07	11-Jun-93	11	29-Jul-05	27-Jul-58	11	17-Aug-04	25-Aug-86	20	30-Jun-03	25-Aug-86
KILDARE													
Naas	54	13	19-Jun-07	11-Jun-93	7	06-Jul-07	25-Jul-85	6	04-Aug-07	04-Aug-07	15	04-Aug-07	11-Jun-93
Athy	16	6	02-Jun-07	02-Jun-07	1		31-Jul-08	9	05-Aug-07	05-Aug-01	1	05-Aug-07	31-Jul-08
Leixlip	54	13	19-Jun-07	11-Jun-93	7	06-Jul-07	25-Jul-85	1		09-Aug-08	15		09-Aug-08
KILKENNY													
Coon	34	18	19-Jun-07	22-Jun-04	2	25-Jul-85	25-Jul-85	7	25-Aug-86	25-Aug-86	9	19-Jun-07	25-Aug-86
Thomastown	19	4	19-Jun-07	19-Jun-07	8	18-Jul-03	13-Jul-95	13	03-Aug-97	21-Aug-92	16	19-Aug-07	03-Aug-97
Mullinavat	25	15	19-Jun-07	29-Jun-03	10	23-Jul-05	30-Jul-00	9	03-Aug-97	13-Aug-85	12	19-Jun-07	03-Aug-97
LAOIS													
Clonaslee	24	8	22-Jun-04	22-Jun-04	2	31-Jul-91	31-Jul-91	5	14-Aug-01	14-Aug-01	9	22-Jun-04	22-Jun-04
Slieve Bloom	56	7	22-Jun-04	11-Jun-93	3	03-Jul-00	03-Jul-00	3	25-Aug-86	02-Aug-84	5	22-Jun-04	02-Aug-84
LONGFORD													
Granard	4	1		21-Jun-08	1		02-Jul-08	1		15-Aug-08	1		15-Aug-08
LOUTH													
Dundalk	68	42	14-Jun-07	09-Jun-66	44	27-Jul-07	02-Jul-55	2	15-Aug-70	15-Aug-70	4	27-Jul-07	15-Aug-70
Ardee	41	12	22-Jun-04	20-Jun-97	6	20-Jul-03	25-Jul-85	5	05-Aug-96	05-Aug-96	6	22-Jun-04	05-Aug-96
Mellifont	34	16	13-Jun-07	22-Jun-82	8	28-Jul-05	10-Jul-87	11	18-Aug-06	25-Aug-86	25	13-Jun-07	25-Aug-86
Castlebellingham	24	12	13-Jun-07	20-Jun-97	9	13-Jul-07	25-Jul-85	7	22-Aug-04	25-Aug-86	15	13-Jul-07	25-Jul-85
Riverstown	24	25	14-Jun-07	12-Jun-98	4	31-Jul-06	18-Jul-93	7	22-Aug-04	25-Aug-94	12	14-Jun-07	25-Aug-94
MEATH													
Warrenstown	58	6	27-Jun-03	11-Jun-93	4	25-Jul-85	31-Jul-72	3	04-Aug-99	25-Aug-86	7	27-Jun-03	25-Aug-86
Kingscourt	28	14	22-Jun-04	22-Jun-04	5	28-Jul-96	28-Jul-96	4	18-Aug-04	18-Aug-04	5	18-Aug-04	28-Jul-96
Navan	23	3	22-Jun-04	11-Jun-93	3	03-Jul-92	10-Jul-87	4	04-Aug-99	05-Aug-89	4	22-Jun-04	05-Aug-89
Moynalty	8	4	12-Jun-07	11-Jun-93	1		30-Jul-08	1		16-Aug-08	3	12-Jun-07	12-Jun-07

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

LEINSTER

	Record Length	June 2008			July 2008			August 2008			Summer 2008		
		Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
OFFALY													
Derrygreenagh	54	11	22-Jun-04	11-Jun-93	16	08-Jul-07	10-Jul-60	3	05-Aug-96	02-Aug-84	4	08-Jul-07	02-Aug-84
Birr	55	19	22-Jun-04	11-Jun-93	19	22-Jul-98	31-Jul-91	32	14-Aug-07	02-Aug-84	52	14-Aug-07	02-Aug-84
Edenderry	19	3	20-Jun-97	11-Jun-93	1		02-Jul-08	1		16-Aug-08	1	20-Jun-97	16-Aug-08
WESTMEATH													
Coole	10	3	12-Jun-07	22-Jun-04	2	10-Jul-01	10-Jul-01	1		15-Aug-08	1	12-Jun-07	15-Aug-08
Rathwire	25	9	22-Jun-04	28-Jun-86	7	18-Jul-07	20-Jul-03	3	25-Aug-86	02-Aug-84	4	18-Jul-07	02-Aug-84
WEXFORD													
Foulkesmills	68	2	26-Jun-86	26-Jun-86	7	13-Jul-01	25-Jul-78	43	19-Aug-07	03-Aug-97	7	19-Aug-07	03-Aug-97
Johnstown C	68	3	02-Jun-07	25-Jun-58	5	13-Jul-01	13-Jul-01	19	22-Aug-04	03-Aug-97	12	02-Jun-07	07-Aug-42
Cahore	25	3	22-Jun-04	10-Jun-97	2	27-Jul-88	27-Jul-88	7	08-Aug-02	03-Aug-97	9	22-Jun-04	25-Aug-86
Gorey	24	2	10-Jun-93	10-Jun-93	1		30-Jul-08	3	03-Aug-97	25-Aug-86	3	03-Aug-97	25-Aug-86
Bunclody	25	1		26-Jun-08	1		30-Jul-08	19	14-Aug-07	03-Aug-97	5	14-Aug-07	13-Aug-85
JFK Park	44	12	19-Jun-07	22-Jun-04	8	24-Jul-05	30-Jul-00	13	04-Aug-07	03-Aug-97	23	04-Aug-07	09-Jun-66
Boolavogue	22	6	02-Jun-07	22-Jun-04	3	05-Jul-06	05-Jul-06	9	04-Aug-07	03-Aug-97	8	04-Aug-07	31-Aug-88
Wx Wildfowl Res	17	1		20-Jun-08	1		30-Jul-08	3	05-Aug-97	03-Aug-97	3	05-Aug-97	03-Aug-97
Clonroche	6	3	02-Jun-07	22-Jun-04	1		30-Jul-08	2	22-Aug-04	22-Aug-04	1	02-Jun-07	22-Jun-04
WICKLOW													
Arklow	60	2	25-Jun-58	25-Jun-58	1		30-Jul-08	6	05-Aug-97	25-Aug-86	5	05-Aug-97	25-Aug-86
Roundwood	68	23	22-Jun-04	25-Jun-58	2	15-Jul-73	15-Jul-73	12	22-Aug-04	25-Aug-86	17	22-Aug-04	25-Aug-86
Glenmacnass	44	12	19-Jun-07	22-Jun-04	2	15-Jul-73	15-Jul-73	9	22-Aug-04	25-Aug-86	9	19-Jun-07	25-Aug-86
Glen Imall	58	24	02-Jun-07	25-Jun-58	6	20-Jul-00	31-Jul-91	5	18-Aug-06	16-Aug-63	9	02-Jun-07	16-Aug-63
Ashford	8	4	02-Jun-07	29-Jun-03	2	28-Jul-05	28-Jul-05	1		16-Aug-08	1	02-Jun-07	16-Aug-08

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

CONNACHT

	Record Length	June 2008			July 2008			August 2008			Summer 2008		
		Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
GALWAY													
Cloosh	46	4	22-Jun-04	29-Jun-92	7	18-Jul-07	22-Jul-80	2	05-Aug-86	05-Aug-86	4	18-Jul-07	29-Jun-92
Connemara NP	27	1		30-Jun-08	72		22-Jul-97	2	05-Aug-86	05-Aug-86	1	25-Jul-07	30-Jun-08
Roundstone	24	1		21-Jun-08	31	15-Jul-07	29-Jul-94	6	31-Aug-98	19-Aug-87	3	15-Jul-07	19-Aug-87
Gort	27	15	22-Jun-04	21-Jun-85	3	21-Jul-07	17-Jul-95	2	05-Aug-86	05-Aug-86	2	21-Jul-07	05-Aug-86
Ballygar	40	7	13-Jun-07	28-Jun-86	17	25-Jul-07	31-Jul-78	22	04-Aug-07	15-Aug-70	18	04-Aug-07	15-Aug-70
Ballinasloe	24	15	22-Jun-04	28-Jun-86	1		06-Jul-08	14	04-Aug-07	05-Aug-96	11	04-Aug-07	05-Aug-96
Glenamaddy	65	48	20-Jun-07	03-Jun-44	38	21-Jul-07	27-Jul-56	6	05-Aug-86	25-Aug-49	11	21-Jul-07	25-Aug-49
UCG	44	5	19-Jun-07	26-Jun-66	4	19-Jul-07	19-Jul-07	6	22-Aug-94	15-Aug-70	10	19-Jul-07	19-Jul-07
Maam	26	2	08-Jun-91	08-Jun-91	16	18-Jul-07	25-Jul-98	7	08-Aug-00	05-Aug-88	10	18-Jul-07	05-Aug-88
LEITRIM													
Drumshambo	68	46	28-Jun-07	28-Jun-86	54	26-Jul-07	05-Jul-76	7	05-Aug-96	15-Aug-70	15	26-Jul-07	05-Jul-76
Manorhamilton	28	54	28-Jun-07	28-Jun-86	10	17-Jul-03	11-Jul-84	5	17-Aug-05	18-Aug-85	6	28-Jun-07	11-Jul-84
Aughnasheelan	38	13	28-Jun-07	28-Jun-86	23	09-Jul-07	10-Jul-84	6	25-Aug-99	05-Aug-96	9	09-Jul-07	28-Jun-86
MAYO													
Newport	50	3	22-Jun-04	22-Jun-04	47	25-Jul-07	13-Jul-61	5	02-Aug-98	02-Aug-98	7	25-Jul-07	13-Jul-61
Belmullet	53	1		21-Jun-08	40	08-Jul-06	11-Jul-61	2	25-Aug-77	25-Aug-77	2	08-Jul-06	25-Aug-77
Mulrany	25	1		21-Jun-08	14	18-Jul-98	18-Jul-98	4	25-Aug-99	25-Aug-99	2	25-Aug-99	25-Aug-99
Bangorerris	23	2	22-Jun-04	22-Jun-04	51	25-Jul-07	12-Jul-97	3	02-Aug-98	21-Aug-92	5	25-Jul-07	12-Jul-97
Dhulough	23	2	22-Jun-04	22-Jun-04	52	25-Jul-07	27-Jul-91	1		13-Aug-08	1	25-Jul-07	13-Aug-08
Straide	46	15	22-Jun-04	30-Jun-88	8	18-Jul-98	10-Jul-97	7	06-Aug-99	15-Aug-70	9	22-Jun-04	15-Aug-70
Laherdane	26	3	22-Jun-04	22-Jun-04	11	16-Jul-07	18-Jul-98	5	06-Aug-99	05-Aug-86	4	16-Jul-07	15-Nov-86
Belderrig	23	1		21-Jun-08	26	31-Jul-07	10-Jul-01	1		13-Aug-08	1	31-Jul-07	13-Aug-08
Tourmakedy	22	2	22-Jun-04	22-Jun-04	7	18-Jul-07	18-Jul-98	3	24-Aug-99	21-Aug-92	5	18-Jul-07	21-Aug-92
Knock	21	7	20-Jun-07	09-Jun-93	15	08-Jul-07	18-Jul-98	1		13-Aug-08	3	08-Jul-07	09-Jun-93
ROSCOMMON													
Drumsna	68	26	22-Jun-04	16-Jun-55	44	16-Jul-07	05-Jul-76	12	05-Aug-96	05-Aug-96	24	16-Jul-07	16-Jun-55
Lecarrow	57	10	22-Jun-04	12-Jun-66	9	28-Jul-79	13-Jul-67	33	04-Aug-07	15-Aug-70	28	04-Aug-07	15-Aug-70
Boyle	38	5	22-Jun-04	25-Jun-87	56	25-Jul-07	28-Jul-96	2	05-Aug-86	05-Aug-86	4	25-Jul-07	28-Jul-96
Elphin	25	35	20-Jun-07	12-Jun-07	32	20-Jul-07	10-Jul-01	10	23-Aug-04	05-Aug-86	25	20-Jul-07	05-Aug-86
Frenchpark	23	12	19-Jun-07	22-Jun-04	9	19-Jul-07	19-Jul-07	5	22-Aug-04	05-Aug-86	10	19-Jul-07	05-Aug-86
Lanesboro	13	5	13-Jun-07	13-Jun-07	4	18-Jul-07	20-Jul-03	2	05-Aug-96	05-Aug-96	7	18-Jul-07	05-Aug-96

Appendix III

Station record length, rank of monthly and summer daily maxima, date of highest maximum, most recent date 2008 maximum exceeded

CONNACHT

		June2008			July2008			August 2008			Summer 2008		
	Record Length	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
SLIGO													
Ardtarmon	24	7	24-Jun-97	28-Jun-86	2	10-Jul-97	10-Jul-97	14	11-Aug-07	02-Aug-98	11	11-Aug-07	28-Jun-86
Cloonacool	57	6	22-Jun-04	22-Jun-04	22	09-Jul-07	13-Jul-67	2	15-Aug-70	15-Aug-70	2	09-Jul-07	15-Aug-70
Coolavin	46	52	19-Jun-07	25-Jun-82	7	10-Jul-01	14-Jul-67	9	12-Aug-89	15-Aug-70	19	19-Jun-07	15-Aug-70

ULSTER

		June2008			July2008			August 2008			Summer 2008		
	Record Length	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max	Rank	Last Exceeded	Date Max
CAVAN													
Bailieboro	36	12	22-Jun-04	22-Jun-04	2	27-Jul-85	27-Jul-85	4	11-Aug-07	06-Aug-99	5	11-Aug-07	06-Aug-99
Lough Gowna	36	30	13-Jun-07	28-Jun-86	15	02-Jul-07	07-Jul-77	7	18-Aug-06	05-Aug-96	11	02-Jul-07	05-Aug-96
Cavan	25	18	29-Jun-05	11-Jun-93	7	28-Jul-06	28-Jul-00	9	18-Aug-04	05-Aug-96	14	28-Jul-06	05-Aug-96
Cavan(Loreto)	24	34	13-Jun-07	11-Jun-93	4	28-Jul-00	28-Jul-00	8	18-Aug-06	05-Aug-96	11	13-Jun-07	05-Aug-96
DONEGAL													
Glenties	68	24	29-Jun-05	29-Jun-05	14	16-Jul-95	12-Jul-68	25	09-Aug-00	15-Aug-70	39	29-Jun-05	15-Aug-70
Greencastle	61	38	27-Jun-07	23-Jun-04	15	21-Jul-03	13-Jul-50	31	06-Aug-07	24-Aug-60	35	06-Aug-07	13-Jul-50
Malin Head	52	17	23-Jun-04	23-Jun-04	3	09-Jul-87	09-Jul-87	23	17-Aug-05	05-Aug-96	10	17-Aug-05	05-Aug-96
Termon	37	12	12-Jun-07	10-Jun-87	22	12-Jul-07	01-Jul-97	16	08-Aug-00	15-Aug-85	30	12-Jul-07	10-Jun-87
Letterkenny	31	9	12-Jun-07	23-Jun-04	25	15-Jul-07	28-Jul-00	17	17-Aug-05	05-Aug-86	28	15-Jul-07	28-Jul-00
Crolly	37	4	23-Jun-04	28-Jun-86	8	08-Jul-06	21-Jul-75	33	28-Aug-05	15-Aug-87	18	08-Jul-06	15-Aug-87
Fintown	25	27	12-Jun-07	19-Jun-99	5	24-Jul-04	26-Jul-87	11	07-Aug-98	23-Aug-94	13	12-Jun-07	26-Jul-87
Dunfananaghy	13	2	23-Jun-04	23-Jun-04	4	09-Jul-02	09-Jul-02	3	31-Aug-97	05-Aug-96	6	23-Jun-04	09-Jul-02
Glenveagh	13	7	21-Jun-06	23-Jun-04	8	09-Jul-07	01-Jul-97	9	28-Aug-05	31-Aug-97	17	09-Jul-07	23-Jun-04
Ballyshannon	64	80	28-Jun-07	22-Jun-85	36	15-Jul-07	31-Jul-79	2	15-Aug-70	15-Aug-70	3	15-Jul-07	15-Aug-70
Ardnawark	27	48	28-Jun-07	22-Jun-04	18	08-Jul-07	03-Jul-07	7	13-Aug-01	15-Aug-87	10	08-Jul-07	15-Aug-87
Bruckless	24	12	29-Jun-05	13-Jun-02	20	25-Jul-07	17-Jul-03	10	16-Aug-00	15-Aug-87	15	25-Jul-07	17-May-02
Ballyshannon	55	86	18-Jun-06	12-Jun-64	31	15-Jul-07	31-Jul-79	19	11-Aug-07	15-Aug-70	36	11-Aug-07	15-Aug-70
MONAGHAN													
Monaghan	39	29	14-Jun-07	12-Jun-07	7	03-Jul-05	25-Jul-85	9	31-Aug-05	05-Aug-96	16	14-Jun-07	25-Jul-85

