

Storm Analysis



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Company Details

Ref: MO19

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F.A.O.

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Full Report

Location	Grid Reference	Date	Event Start	Event End
March	TL 407 975	8 th August 2014	0800GMT/8 th	0300GMT/9 th

Return Period of Most Significant Event (yrs)

31* (Thirty One)

Rainfall Type

Convective (Showers) ~~Dynamic (Frontal)~~

Rainfall Amount

Data Source	mm
Ingham Radar – 2km resolution	66.6

Most Significant Amount

mm	Duration
62.1	14 hours (from 1200GMT/8th)

Return Periods for Standard Durations Ingham Rainfall Radar

Amount (mm)	Duration	Years
11.1	15 mins	3*
15.1	30 mins	4*
23.5	60 mins	9*

Confidence: **HIGH**

Event at: **March**

Date of event: **8th August**

Rainfall Stations used in assessment.

Station	Distance (miles) & Direction		07/08/	08/08/	09/08/1		
March Sewage Works	2.3	ENE	2.6	65.6	4.4		
Ingham Radar – 2km	-	-	1.3	65.3	0.0 ¹		

Rainfall measurements in mm

Table represents daily 24hr totals from 0900GMT on the date shown

¹ = a 15 hour total from 0900GMT/8th

Opinions and conclusions on likely significance of the event

Rainfall Event in the March area on Friday 8th August

Overnight, showery rain pushed across Northern Ireland, and later parts of north-west Scotland. Elsewhere, it was largely dry with clear spells, and isolated mist or fog patches developed in the south towards dawn. It was a cool night for many for the time of year, especially in the north. Any mist and fog patches soon cleared through the morning, and the showery rain across north-western parts moved eastwards, becoming locally heavy in places. Some heavy showers developed across eastern parts of England in the morning as well, these gradually moved northwards. Showers also started to develop across more central and northern parts of England into the afternoon, where they become more intense and widespread, with some very heavy, thundery downpours. Showery rain in the north-west continued eastwards, clearing Northern Ireland and spreading into other parts of Scotland. There were some drier and brighter spells in places through the day, these mainly across south-west England, West Midlands, Wales and Northern Ireland later. Into the evening, another area of showery rain spread from the south across some central-southern areas, and then south-east England and East Anglia. By midnight, there was still an area of rain, heavy at times across the south-east and east of the country, and showery rain affecting coastal parts of north-east England and south-east Scotland, as well as Aberdeenshire. Otherwise it was largely dry.

The nearest rainfall station to the incident site at March is located at March Sewage Works a little over 2 miles away. This station recorded a daily rainfall total on the 8th August (0900-0900GMT) of 65.6mm.

Data from the Ingham Rainfall Radar, 2km resolution, provided an estimated 24 hour total (0900-0900GMT) for the March incident site on the 8th August of 65.3mm. Hourly totals from the Radar provided a 16 hour total of 65.3mm from 1100GMT/8th with a highest hourly total of 21.3mm from 1200GMT/8th.

To provide guidance on how unusual the rainfall may have been in the March area on the 8th August 2014, return periods were calculated for various events based on data from the Ingham Rainfall Radar. The highest return period obtained for this event was 31* years.

Prepared by	Date
Richard Brooks	29 th October

It is not always the case that the nearest available data site is the most representative of the incident site.

*The return period assigned to this radar rainfall value is calculated in accordance with the method described in the Flood Estimation Handbook (FEH). The FEH method used to determine return periods is based on analysis of rain gauge data only. Hence, this return period estimate is for guidance only. © Crown Copyright Met Office