Weekly rainfall and river flow summary

Weekly bulletin: Wednesday 27 December 2023 to Tuesday 2 January 2024

Summary: It has been a very wet week across England, with the wettest conditions in the north-west. River flows increased at all but one of sites we report on and the majority of sites were classed as exceptionally high for the time of year.

Rainfall

It has been a very wet week, with the wettest conditions in north-west England. Rainfall totals for the week ranged from 46 mm in the north-east to 98 mm in the north-west. (Table 1, Figure 1). Rainfall totals for December ranged from 147% of the long term average (LTA) in the south-east to 193% in the north-east. January rainfall totals to date range from 25% of the LTA in the south-west to 53% in the east (Table 1).

River flow

River flows increased at all but one of the sites we report on compared to the previous week, with river flows at all sites classed as above normal or higher. 43 sites (80% of the total) were classed as exceptionally high for the time of year, 8 sites (15% of the total) were classed as notably high and 2 sites (4%) were classed as above normal. (Figure 2).

Outlook

A largely fine day is expected on Thursday with sunny periods for many areas with showers along the south coast. There will be the chance of a few showers on Friday, these being mainly in west and central England. Thereafter, high pressure builds over the weekend bringing generally dry weather, often cloudy with some sunny intervals. Conditions turn colder into Sunday and the settled conditions across England continue into Monday and Tuesday.

Geographic regions	Latest Week: 27 Dec to 2 Jan 2024	Latest month to date: Jan 2024		Last month: Dec 2023		Last 3 months: Oct to Dec 2023		Last 6 months: Jul to Dec 2023		Last 12 months: Jan to Dec 2023	
	Total (mm)	Total (mm)	% LTA	Total (mm)	% LTA	Total (mm)	% LTA	Total (mm)	% LTA	Total (mm)	% LTA
north-west	98	35	30	228	185	536	144	1,010	148	1,522	127
north-east	75	28	35	158	193	420	176	723	161	1,045	125
central	73	34	51	138	191	364	183	592	157	916	127
east	46	27	53	92	166	290	176	484	152	746	124
south-east	47	23	32	112	147	378	171	592	151	954	130
south-west	73	29	25	187	158	505	156	828	152	1,334	131
England	66	29	36	145	172	403	166	677	153	1,045	127

Table 1 Latest rainfall summary information (Source: Met Office © Crown Copyright, 2023)[1]

[1] Notes: LTA = long term average rainfall for 1961 – 1990.Data for the current month are calculated using MORECS (Met Office Rainfall and Evaporation Calculation System); data for past months are provisional values from the National Climate Information Centre (NCIC). The data are rounded to the nearest millimetre or percent (except when values are less than 1).Recorded amounts of rainfall are likely to be underestimated during snow events.

Rainfall

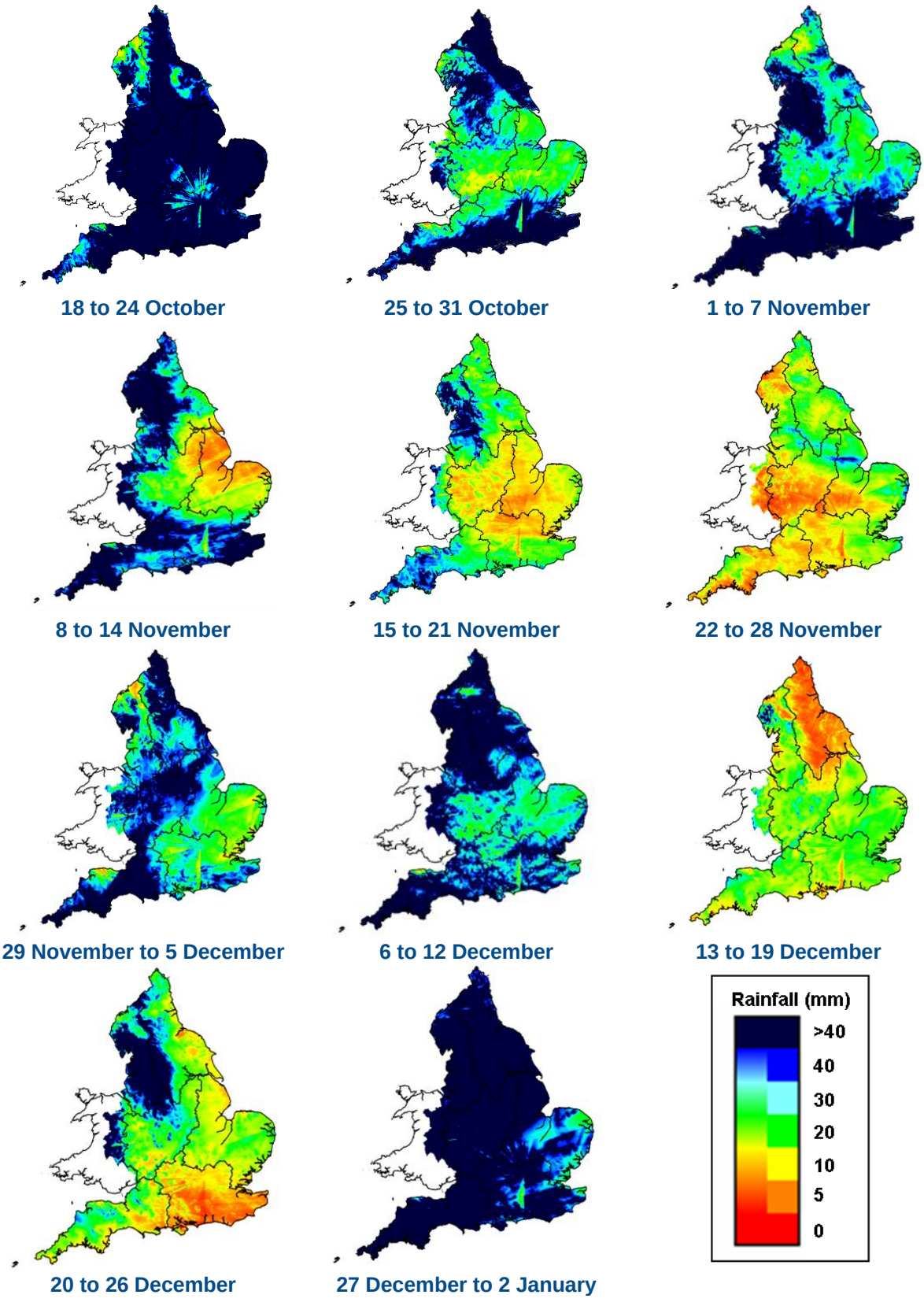
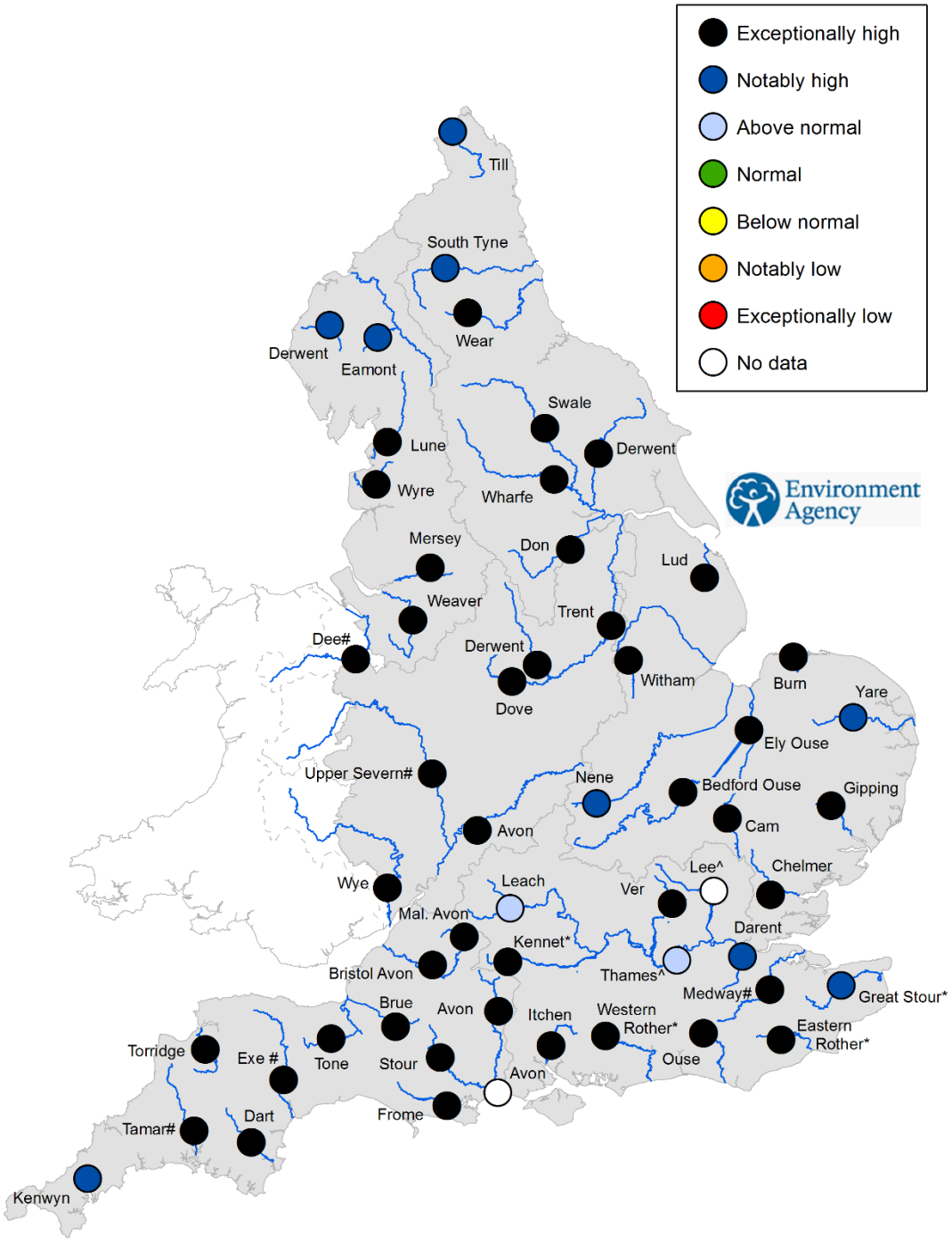


Figure 1 Weekly precipitation across England and Wales for the past 11 weeks. UKPP radar data (Source: Met Office © Crown Copyright, 2023). Note: Images may sometimes include straight lines originating from the centre of the radar, resulting from tall trees and buildings located near the radar installation affecting its performance. This does not reflect actual conditions on the ground. Crown copyright. All rights reserved. Environment Agency, 100024198, 2023.

River flow



^ 'Naturalised' flows are provided for the River Thames at Kingston and the River Lee at Feildes Weir.

* Flows may be currently overestimated at these sites so the data should be treated with caution

Flows may be impacted at these sites by water releases from upstream reservoirs.

Figure 2 Latest daily mean river flow, relative to an analysis of historic daily mean flows, classed by flow percentile for the same time of year[2] (Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2023[3].

[2]Flow percentiles describe the percentage of time that a particular flow has been equalled or exceeded compared to the historic flow record for that site for the time of year. Flow percentiles presented relate to an analysis for the time of year and not a whole year.

[3]The flow sites in this report are indicator sites providing a National overview and a subset of a wider flow monitoring network.

River flow categories

Exceptionally high	Value likely to fall within this band 5% of the time
Notably high	Value likely to fall within this band 8% of the time
Above normal	Value likely to fall within this band 15% of the time
Normal	Value likely to fall within this band 44% of the time
Below normal	Value likely to fall within this band 15% of the time
Notably low	Value likely to fall within this band 8% of the time
Exceptionally low	Value likely to fall within this band 5% of the time

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