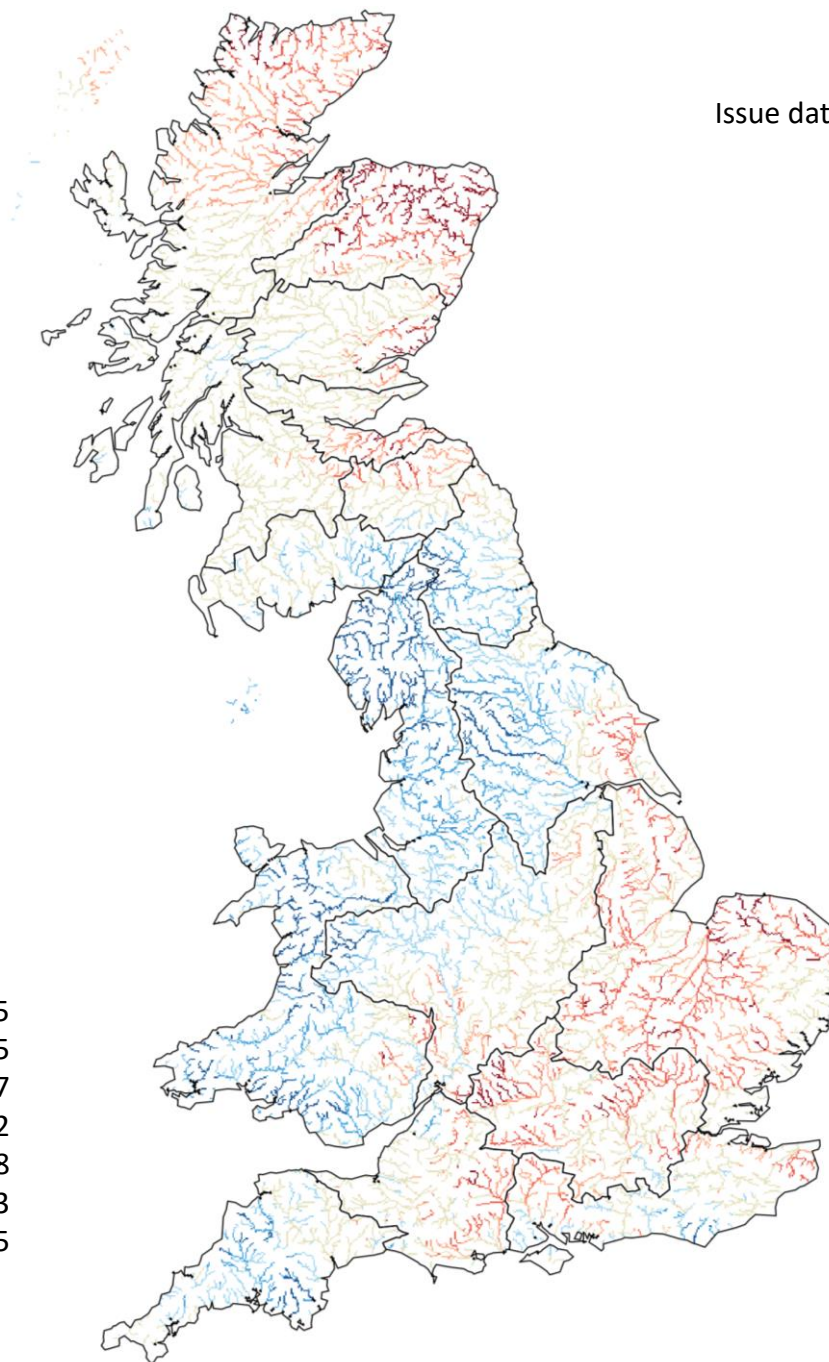
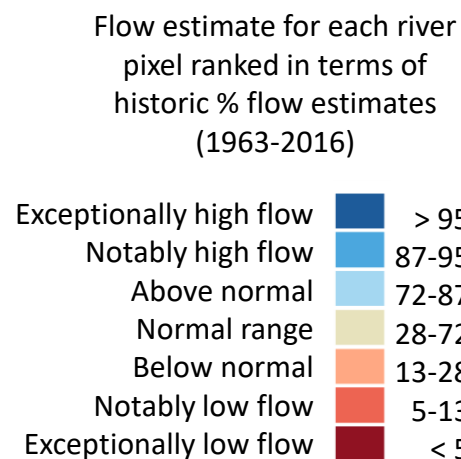


This map shows the simulated monthly mean flow across Great Britain for last month, ranked in terms of 54 years of historical flow estimates (1963 – 2016).

Issue date: 02.10.2025

These flows are produced by the 1km resolution Grid-to-Grid (G2G) hydrological model, which is run up to the end of each calendar month using observed rainfall and MORECS potential evaporation as input.

Note that the G2G model provides estimates of natural flows.



October 2025

Current Daily Simulated Subsurface Water Storage Conditions

Based on subsurface water storage estimated for 30 September 2025

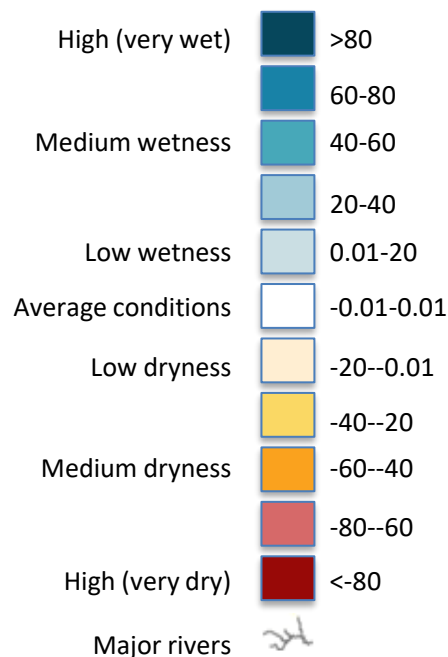
Issue date: 02.10.2025

These maps are based on Grid-to-Grid (G2G) hydrological model simulated subsurface water storage (water in the soil and groundwater), expressed as an anomaly from the historical monthly mean. To highlight areas that are particularly wet or dry, the storage anomaly is presented relative to historical extremes. Rainfall in WET areas with high positive relative wetness could result in flooding in the coming days/weeks. Areas of negative relative wetness indicate locations which are particularly DRY, and little or no rain in these areas could potentially lead to (or prolong) a drought. Maps of soil moisture only are available on the next page.

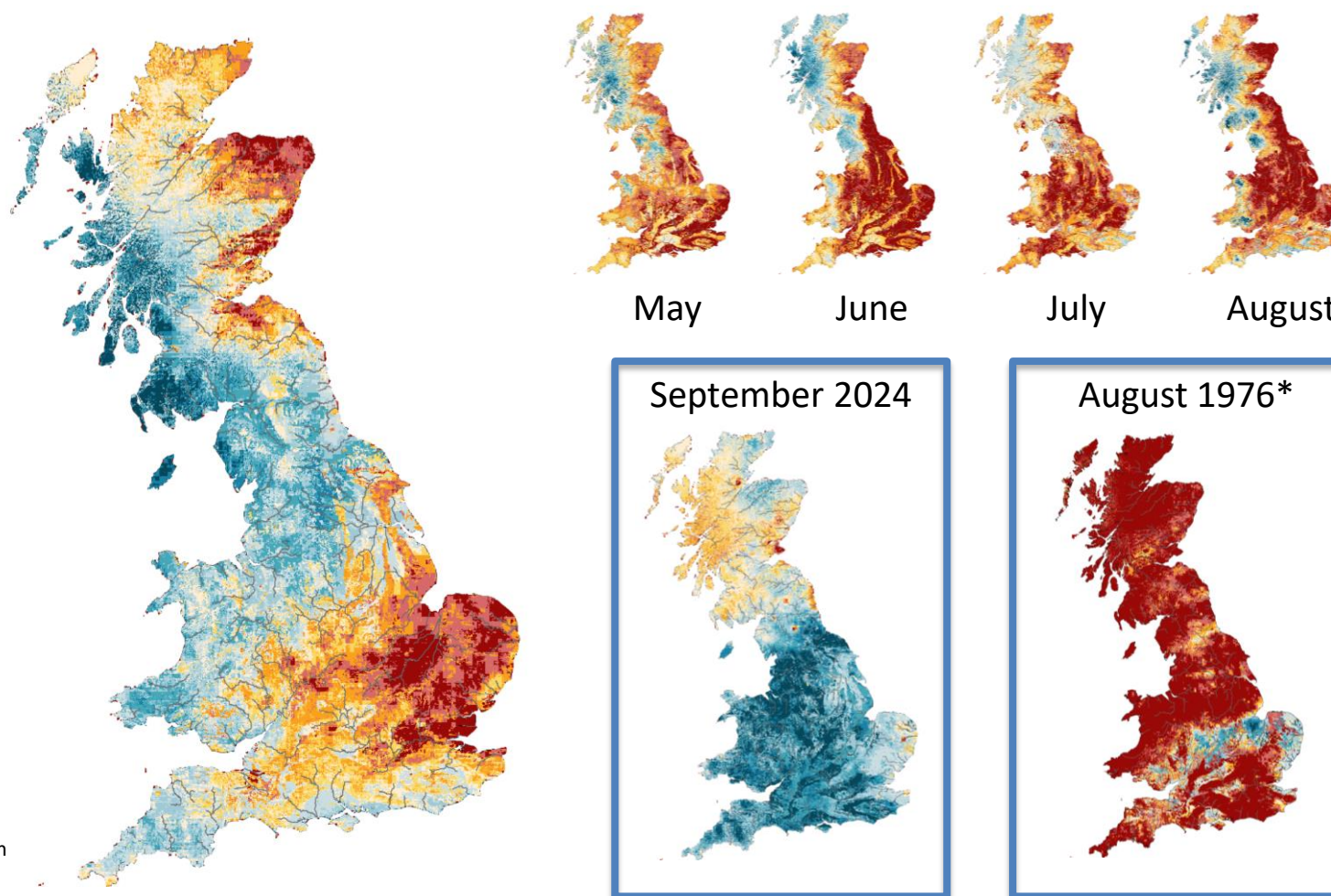
SUMMARY: Subsurface water stores have been replenished by last month's rainfall, leading to wet conditions in central and western areas of the country, but remain dry in central England and north Scotland, and very dry in eastern areas of England and Scotland.

Relative wetness

Water storage anomaly as a % of maximum (positive wetness) or minimum (negative wetness) storage anomaly (zero indicates average value)



Labels refer to estimated storage on final day of named month



October 2025

CURRENT CONDITIONS

Current Daily Simulated Soil Moisture Conditions

Based on soil moisture estimated for 30 September 2025

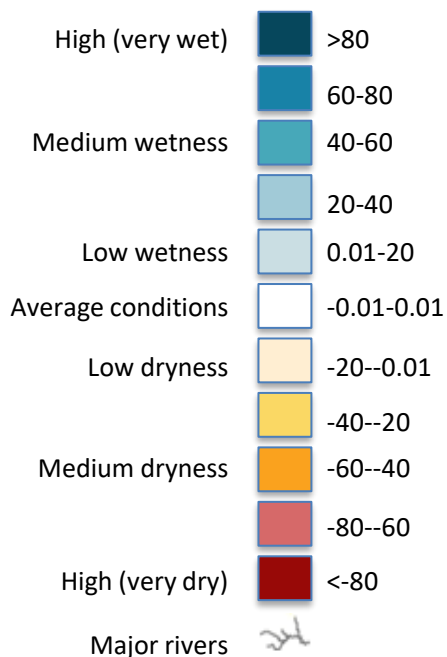
Issue date: 02.10.2025

These maps are based on Grid-to-Grid (G2G) hydrological model simulated soil moisture, expressed as an anomaly from the historical monthly mean. To highlight areas that are particularly wet or dry, the soil moisture anomaly is presented relative to historical extremes. These maps are not a forecast; rather an indication of current conditions. Soil moisture will often look similar to total storage (shown on the previous slide), since total storage comprises both soil moisture and storage in the saturated zone.

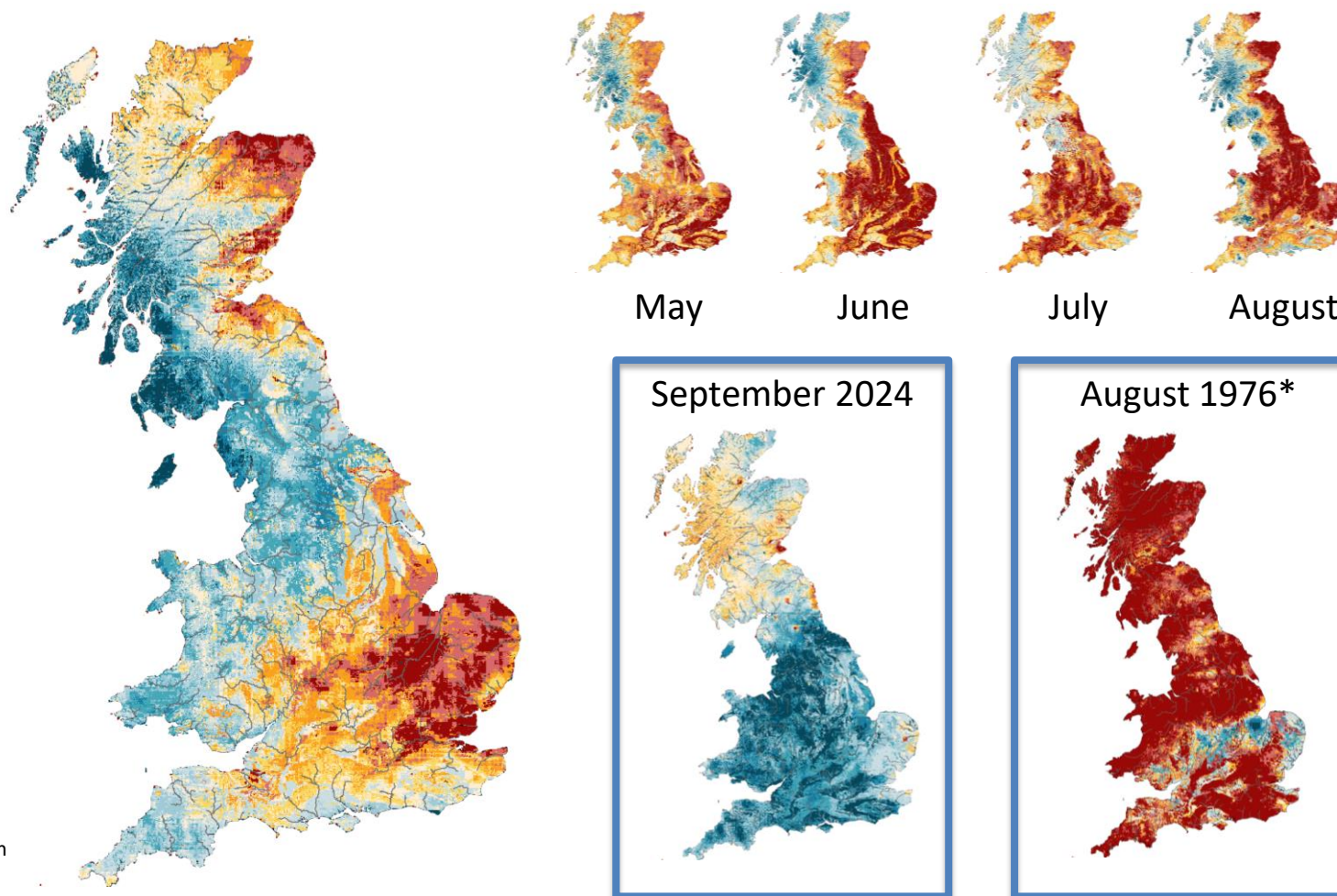
SUMMARY: Soil water stores have been replenished by last month's rainfall, leading to wet conditions in central and western areas of the country, but remain dry in central England and north Scotland, and very dry in eastern areas of England and Scotland.

Relative wetness

Soil moisture anomaly as a % of maximum (positive wetness) or minimum (negative wetness) storage anomaly (zero indicates average value)



Labels refer to estimated storage on final day of named month



Estimate of Additional Rainfall Required to Overcome Dry Conditions

Based on subsurface water storage estimated for 30 September 2025

Issue date: 02.10.2025

These maps show the Grid-to-Grid (G2G) hydrological model simulated subsurface water storage, expressed as an anomaly from the historical monthly mean (1981-2010), presented on a 1km grid and as regional means. Subsurface storage deficits, i.e. where the subsurface water storage anomaly is less than zero, are highlighted in red/pink.

The subsurface storage deficit (mm) can be interpreted as an estimate of additional rainfall that would be required in future months to overcome dry conditions (i.e. rainfall in addition to what is expected on average). Regional mean values of additional rainfall required are provided in the table below.

Regional estimate of additional rainfall required (mm)

SCOTLAND

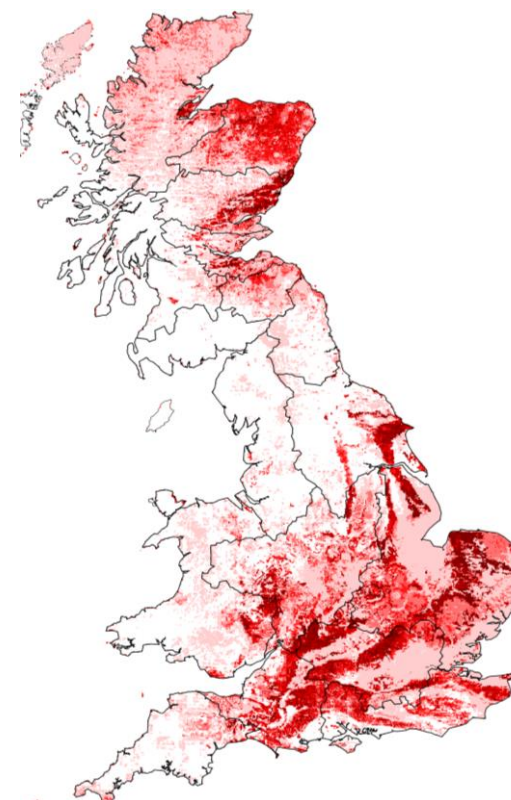
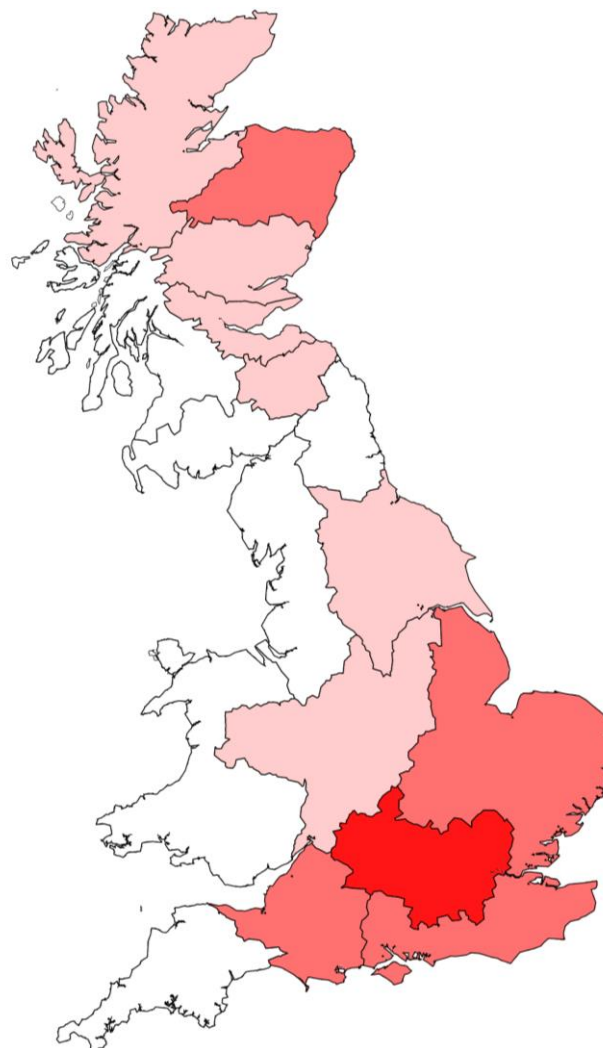
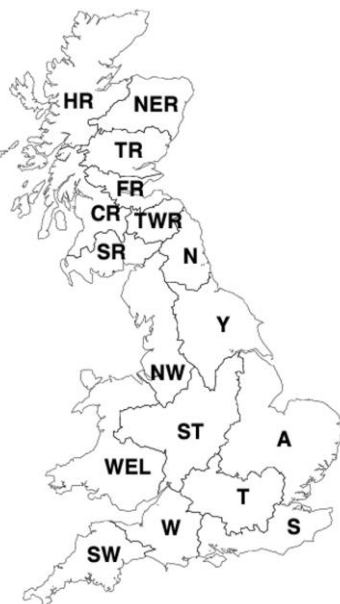
12	HR	Highlands Region
47	NER	North East Region
24	TR	Tay Region
22	FR	Forth Region
0	CR	Clyde Region
14	TWR	Tweed Region
0	SR	Solway Region

ENGLAND

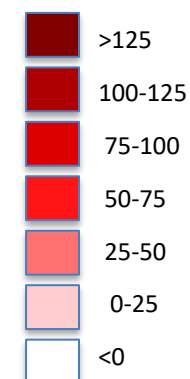
0	N	Northumbria
0	NW	North West
2	Y	Yorkshire
18	ST	Severn Trent
46	A	Anglian
51	T	Thames
40	W	Wessex
27	S	Southern
0	SW	South West

WALES

0	WEL	Welsh
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Water storage deficit
(anomaly; mm)



Return Period of Rainfall Required to Overcome Dry Conditions

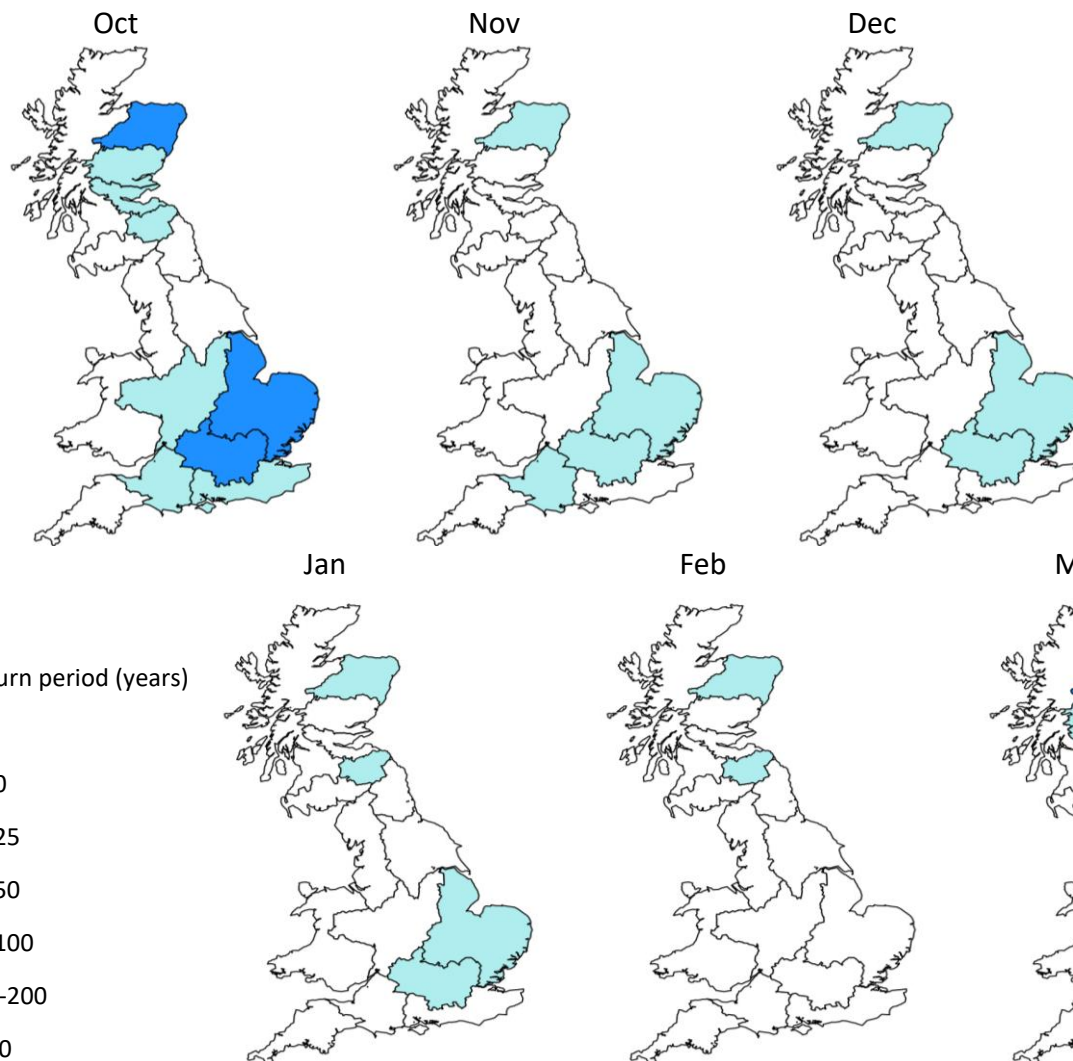
Period: October 2025 - March 2026

Issue date: 02.10.2025

These maps show the return period of the rainfall required to overcome dry conditions simulated using the Grid-to-Grid (G2G) hydrological model. The maps are coloured according to the return period of accumulated rainfall required to overcome the estimated current subsurface water storage deficit in the specified month. Areas with no storage deficit are shown in white. Note that this slide cannot be used as a drought forecast.

SUMMARY: Many regions have significant subsurface deficits which will require unusually high (>5-year return period) rainfall to recover over the next few months.

The storage deficits in eastern Scotland are unusually persistent. Unless the winter rainfall here is higher than normal, any remaining storage deficit will likely persist well into 2026.



SCOTLAND

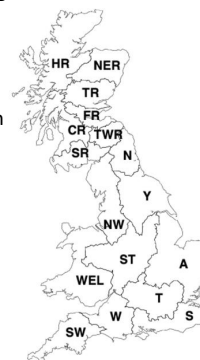
HR Highlands Region
NER North East Region
TR Tay Region
FR Forth Region
CR Clyde Region
TWR Tweed Region
SR Solway Region

ENGLAND

N Northumbria
NW North West
Y Yorkshire
ST Severn Trent
A Anglian
T Thames
S Southern
W Wessex
SW South West

WALES

WEL Welsh



Rainfall amount (Probability)

Low (Likely) >20%

<20%

<10%

<4%

High (Less likely) <2%

<1%

Extreme (Unlikely) <0.5%

Return period (years)

<5

5-10

10-25

25-50

50-100

100-200

>200