

METEOROLOGICAL OFFICE

ESTIMATED SOIL MOISTURE DEFICIT OVER GREAT BRITAIN

AT 0900 GMT ON 28 SEPTEMBER 1977

Between the issue of the previous bulletin (14 September 1977) and 22 September the weather over Great Britain was predominantly dry, apart from well scattered outbreaks of light rain and drizzle over eastern Scotland on 14th and eastern England on 15th, 18th, 19th and 21st. On 23 September unsettled weather affected south west England and south Wales, whilst the rest of the country remained generally dry. This unsettled weather spread to virtually the whole of Great Britain on 24th, ending a spell of three weeks without measurable rain in some areas. The weather over Great Britain for the remainder of the period (25th to 27 September) was generally unsettled, although much of southern and eastern England was dry on 26th. Thunderstorms occurred in parts of eastern England on 25th. The wettest days generally over England and Wales were 24th and 25th, with 27 September being the wettest day over Scotland. Falls of 15 mm or more occurred at Culdrose, Cornwall (20 mm) on 23rd, St Catherines Point, Isle of Wight (18 mm) on 24th, Watnall, Nottinghamshire (23 mm) on 25th and Eskdalemuir, Dumfries (16 and 38 mm) on 26th and 27 September respectively.

Over virtually the whole of Great Britain deficits were steadily increasing until 24 September (23 September in south west England). From 24th until the end of the period deficits decreased in most areas, more especially over Scotland, Wales and western parts of England, although small increases continued over parts of eastern England. Areas previously at field capacity over Scotland have been enlarged and much of the upland areas of the Lake District, north and south Wales and Dartmoor have returned to field capacity. Over parts of Hampshire, Wiltshire, Avon and Dorset composite land use deficits are still below average. Over the remainder of England and the whole of Wales deficits are near to or above average for the end of September and well above over a large part of northern England. Deficits range from approximately 58 mm above average over Cheshire and south Lancashire to approximately 28 mm below average over west Hampshire and Dorset. The largest deficits are at Squires Gate, Lancashire (120 and 131 mm respectively, for both short rooted vegetation and composite land use).

RATES OF SUBSCRIPTION: £10.00 per season (post free)

Apply to: Director-General  
Meteorological Office, Met O 8c  
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Bracknell  
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Issued 29 September 1977

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# ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.)

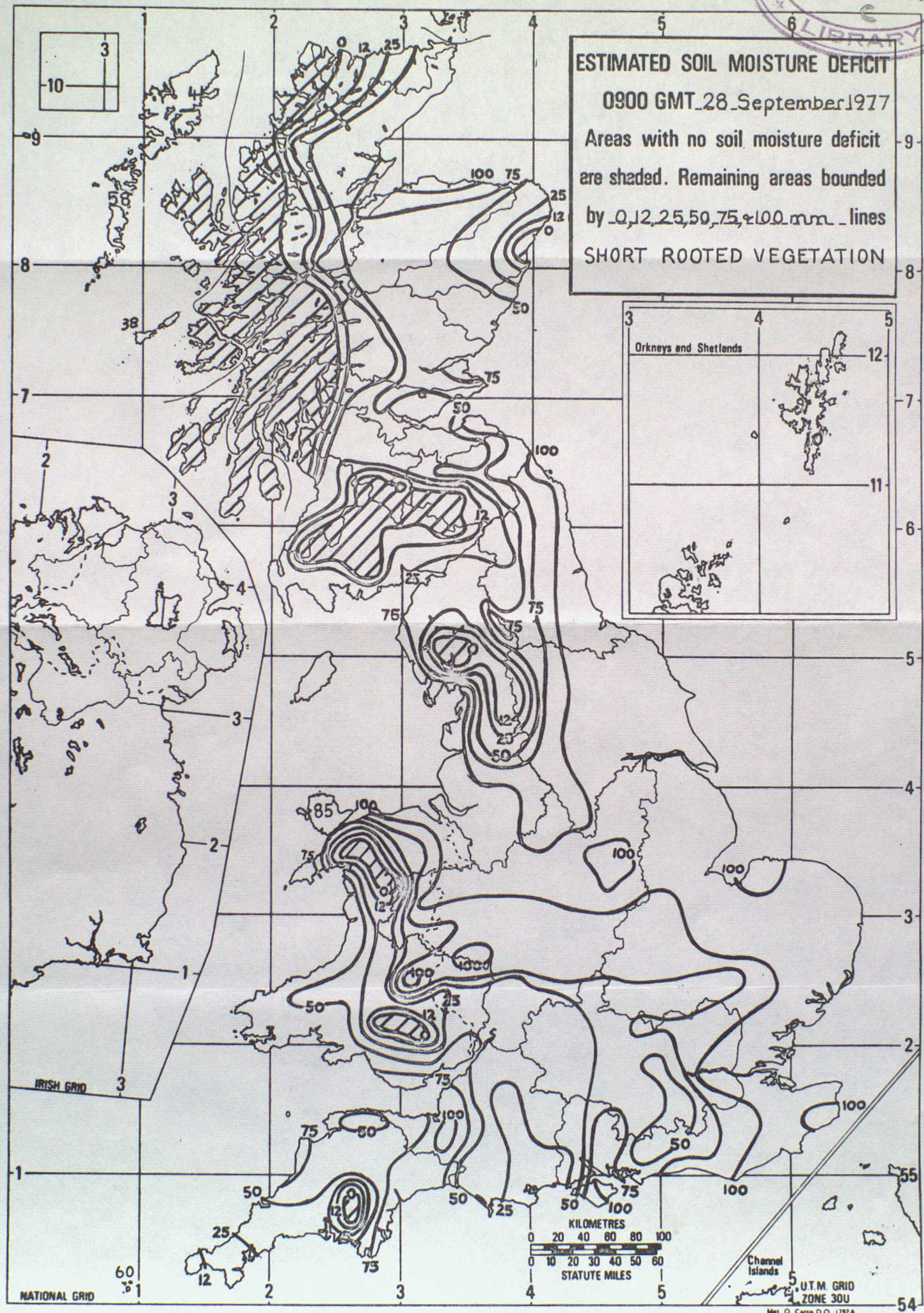
AT 09 GMT ON 28 SEPT 1977

River Area	Estimated Areal S.M.D. MM	Change during the Week Ending 28 SEP 77 MM	09 GMT on 21 SEP 77 MM
Northumbrian	83.4	- 6.7	+ 5.2
Yorkshire	96.4	- 1.8	+ 4.3
Trent	101.5	- 3.8	+ 6.3
Lincolnshire	119.8	+ 0.4	+ 3.9
Welland and Nene	102.4	+ 3.6	+ 6.2
Great Ouse	88.8	+ 4.6	+ 5.1
Norfolk and Suffolk	115.5	+ 3.8	+ 3.2
Essex	110.8	+ 2.4	+ 7.9
Lee Division	99.0	+ 2.0	+ 14.6
Thames Conservancy	66.0	+ 0.5	+ 8.8
London Area	79.1	+ 0.9	+ 10.4
Kent	103.1	+ 9.0	+ 8.2
Sussex	84.8	+ 6.6	+ 10.1
Hampshire	45.9	- 8.2	+ 8.3
Isle of Wight	113.2	- 5.9	+ 10.9
Upper Thames	42.2	- 3.1	- 0.8
Avon and Dorset	33.2	- 3.9	+ 3.8
Devon	66.8	- 14.2	+ 9.9
Cornwall	42.0	- 18.0	+ 11.1
Somerset	58.1	- 6.3	+ 4.2
Bristol Avon	48.5	- 4.8	+ 2.2
Severn	67.5	- 2.0	+ 3.5
Wye	73.2	- 6.2	+ 9.3
Usk	53.2	- 10.8	+ 9.0
Glamorgan	54.7	- 13.1	+ 9.7
South West Wales	55.5	- 8.4	+ 14.4
Gwynedd	49.5	- 9.8	+ 8.6
Dee and Clwyd	63.5	- 7.1	+ 8.7
Mersey and Weaver	91.4	- 3.1	+ 11.3
Lancashire	55.1	- 3.8	+ 4.6
Cumbria	43.4	- 12.8	+ 16.0

NB Apart from normal changes these differences also reflect retrospective adjustments after receipt of additional data.



**ESTIMATED SOIL MOISTURE DEFICIT**  
0900 GMT 28 September 1977  
Areas with no soil moisture deficit are shaded. Remaining areas bounded by 0, 12, 25, 50, 75, & 100 mm lines  
SHORT ROOTED VEGETATION





**ESTIMATED SOIL MOISTURE DEFICIT**

**0900 GMT 28 September 1977**

Areas with no soil moisture deficit are shaded. Remaining areas bounded by 0, 12, 25, 50, 75, 100 & 125 millines

**COMPOSITE LAND USE**

