

METEOROLOGICAL OFFICE

ESTIMATED SOIL MOISTURE DEFICIT AND POTENTIAL
EVAPOTRANSPIRATION OVER GREAT BRITAIN

SOIL MOISTURE DEFICIT AT 0900 GMT ON 26 OCTOBER 1977

Between the issue of the previous bulletin (12 October 1977) and 18 October the weather over Great Britain was mainly dry. From 19th to 24 October it became generally unsettled in all areas, the only exceptions being 22nd, when rainfall was mostly confined to western districts and 23rd, when much of southern England (except the South West) was mainly dry. Except over north west Scotland, the last day of the period (25 October) was dry over the whole country. Thunderstorms occurred in parts of southern England on 20th and 21st. The wettest day over England and Wales was 20th, with 23rd being the wettest day over Scotland. Falls of 15mm or more occurred at Kew, Surrey (31 mm) on 20th, Eskdalemuir, Dumfries (30 mm) on 23rd and Benbecula, Western Isles (18 mm) on 25 October.

During the first week of the period (12th to 25 October) deficits over Great Britain were generally increasing, although with evaporation now being lower than during the summer these increases were relatively small. For the remainder of the period deficits generally decreased over the whole country as a result of the unsettled weather during the second week. During the period as a whole there was an overall decrease in deficits over most of Great Britain, with areas previously at field capacity generally being enlarged and with parts of Dorset returning to field capacity. Over most of England and Wales composite land use deficits (where they still exist) are generally above average for the end of October and well above over much of the eastern half of England, although parts of Hampshire, Avon and Dorset still have deficits below average. The largest deficits are at Shoeburyness (119 and 129 mm respectively, for both short rooted vegetation and composite land use).

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

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Issued on 27 October 1977

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ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.)
AT 09 GMT ON 26 OCTOBER 1977

River area	Estimated Areal	Change during the week ending 09 GMT on	
	S.M.D. mm	26 October 1977 mm	19 October 1977 mm
Northumbrian	57.7	- 5.8	+3.6
Yorkshire	77.4	- 6.2	+2.8
Trent	81.8	- 7.9	+2.9
Lincolnshire	114.3	- 4.8	+2.4
Welland and Nene	90.6	- 6.4	+2.6
Great Ouse	77.5	- 8.7	+3.1
Norfolk and Suffolk	109.0	- 6.0	+3.1
Essex	104.9	- 7.7	+2.8
Lee Division	80.6	-13.7	+2.9
Thames Conservancy	50.9	- 9.8	+3.4
London Area	52.4	-19.3	+6.6
Kent	97.1	- 7.2	+4.8
Sussex	67.7	-11.0	+3.4
Hampshire	27.8	- 7.9	+2.3
Isle of Wight	98.1	- 9.5	+3.9
Upper Thames	35.6	- 5.1	+2.0
Avon and Dorset	14.8	- 7.0	+1.0
Devon	57.9	- 8.3	+4.3
Cornwall	23.4	- 4.5	+3.7
Somerset	44.2	- 8.7	+2.5
Bristol Avon	38.9	- 4.5	+2.4
Severn	52.8	- 4.8	+2.7
Wye	52.3	- 6.6	+0.3
Usk	35.5	- 6.9	-0.6
Glamorgan	30.0	- 9.0	+1.0
South West Wales	8.9	- 8.9	+1.3
Gwynedd	20.7	-10.7	+1.8
Dee and Clwyd	46.3	- 4.8	+2.9
Mersey and Weaver	48.4	-12.2	+4.3
Lancashire	21.4	- 9.3	+1.0
Cumbria	7.3	- 5.0	+2.0

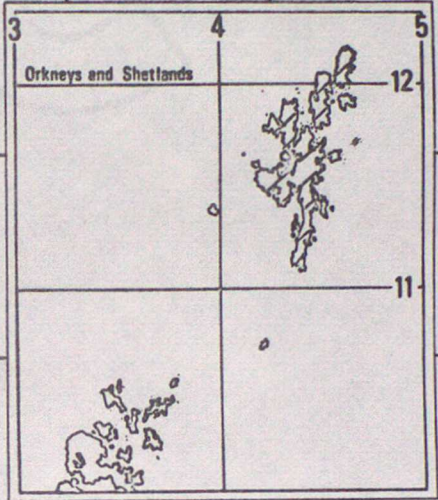
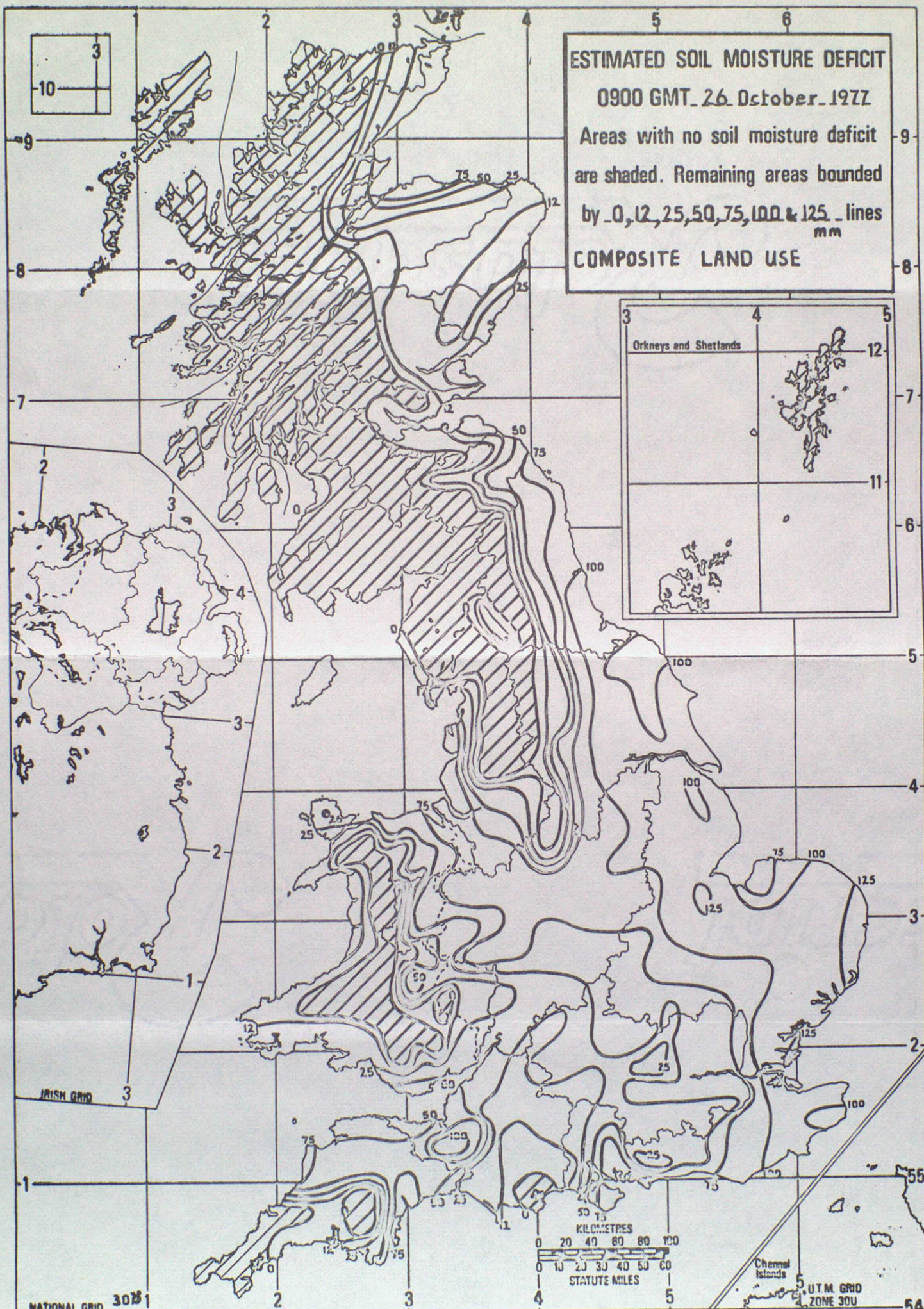
N.B. Apart from normal changes these differences also reflect retrospective adjustments after receipt of additional data.

ESTIMATED SOIL MOISTURE DEFICIT

0900 GMT 26 October 1977

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

COMPOSITE LAND USE



NATIONAL GRID 3081

UTM GRID
ZONE 30U
Mk O Carta D.O. 1237A

ESTIMATED SOIL MOISTURE DEFICIT

0900 GMT. 26 October 1977

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

SHORT ROOTED VEGETATION

