



METEOROLOGICAL OFFICE

ESTIMATED SOIL MOISTURE DEFICIT OVER GREAT BRITAIN

SOIL MOISTURE DEFICIT AT 0900 GMT ON 4 AUGUST 1982

The predominant feature of the weather over Great Britain during the last fortnight has been an area of high pressure which remained over or close to Scotland for the first 10 days of the period. This brought generally dry weather to all parts of Great Britain, apart from a few light showers over eastern districts and small amounts of rain in northwest Scotland. On 30 July however, a thundery trough moved north from France bringing rain and thunderstorms to southern England and South Wales. Over the next two days this trough continued to move north with rain and scattered thunderstorms affecting northern England and Scotland. Behind the trough scattered thunderstorms developed in the very warm humid air circulating around a thundery low over France. This pattern persisted for the remainder of the period bringing locally heavy falls of rain to some places, although from reports received so far these amounts are not as large as in the storms which affected Devon and Dorset in the middle of July.

Among the reports of heavy rainfall received so far are the following:

30 July: 21.6 mm fell in 24 hours starting 0900 GMT at Liphook (Hampshire)
31 July: 26.4 mm fell in 24 hours starting 0900 GMT at Whithorn (Dumfries)
2 August: 27.0 mm fell in 24 hours starting 0900 GMT at Trawsfynydd (North Wales)
3 August: 21.0 mm fell in 24 hours starting 0900 GMT at Lyneham (Wiltshire)

The wettest day generally over England and Wales during the period was 30 July with a general value of 3.6 mm, although most of the rain fell in the southern half of England. Over Scotland the wettest day generally was 1 August, although the general value was only 3.4 mm.

Nowhere in Great Britain had more than the average rainfall during the last fortnight with most places having less than 50% of average. The exceptions being those places which had heavy rain in the thunderstorms of the last few days. Individual reports range from 92% of average at Bedford, to no rain at Lossiemouth and Glenlivet (Grampian), Brynamman (South Wales) and Hartland Point (Devon).

Over the whole of Great Britain soil moisture deficits have been increasing steadily throughout the period. In most River Areas of England and Wales areal land use deficits are now near or above average, the only exceptions being Hampshire, Devon and Cornwall, which still have deficits below average. Over all Eastern River Areas together with Mersey and Weaver and Cumbria deficits are now higher than they were before the unsettled weather of June.

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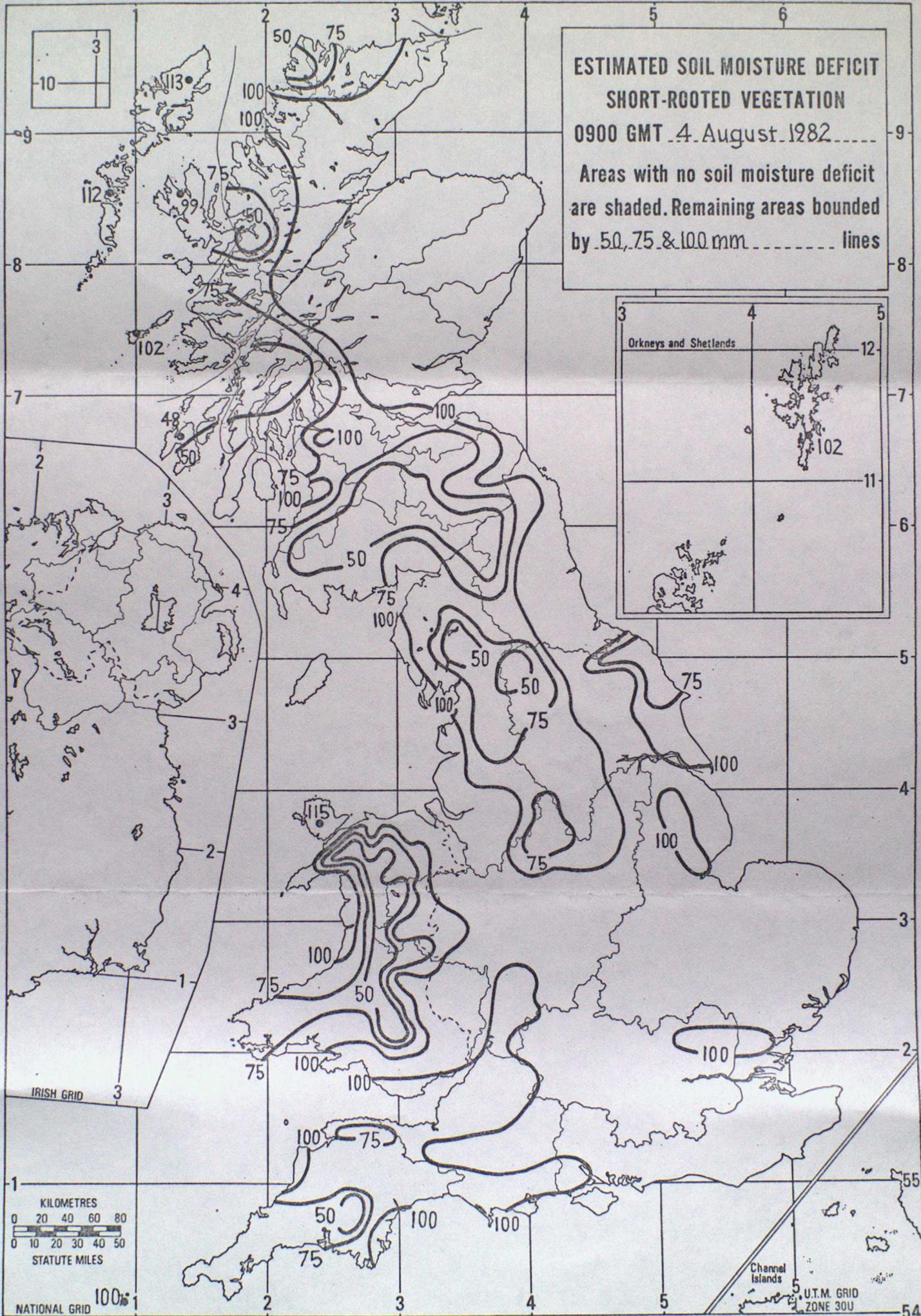
Issued 5 August 1982

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ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.) AT 09 GMT ON 4 AUGUST 1982

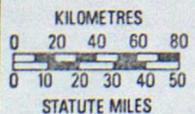
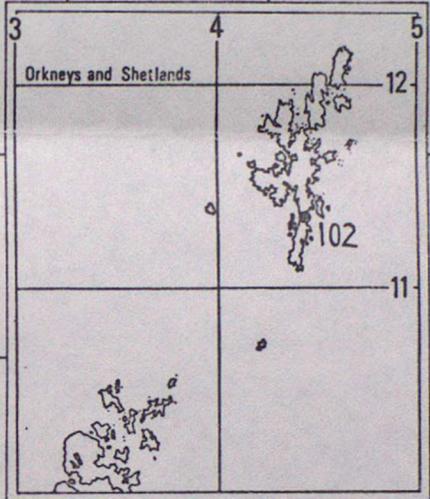
RIVER AREA	AREAL LAND USE ESTIMATED S.M.D. mm	CHANGE DURING THE WEEK ENDING 09 GMT ON	
		4 August 1982 mm	28 July 1982 mm
NORTHUMBRIAN	83.0	+ 9.8	+ 16.7
YORKSHIRE	82.0	+ 9.4	+ 9.5
TRENT	86.8	+ 8.3	+ 14.8
LINCOLNSHIRE	106.2	+ 11.4	+ 11.9
WELLAND AND NENE	108.1	+ 7.1	+ 14.1
GREAT OUSE	105.4	+ 8.4	+ 11.2
NORFOLK AND SUFFOLK	115.3	+ 9.7	+ 5.2
ESSEX	119.6	+ 3.7	+ 7.6
LEE DIVISION	97.9	+ 7.4	+ 12.2
THAMES CONSERVANCY	89.0	+ 3.6	+ 9.6
LONDON AREA	101.9	+ 1.2	+ 11.9
KENT	119.2	- 0.3	+ 5.6
SUSSEX	105.8	+ 4.3	+ 7.1
HAMPSHIRE	88.5	+ 6.9	+ 12.0
ISLE OF WIGHT	96.5	+ 5.4	+ 9.4
UPPER THAMES	95.2	+ 4.4	+ 6.9
AVON AND DORSET	86.1	+ 2.0	+ 13.0
DEVON	73.9	+ 9.5	+ 14.7
CORNWALL	52.2	+ 8.4	+ 15.0
SOMERSET	80.6	+ 6.9	+ 14.1
BRISTOL AVON	85.3	+ 1.2	+ 14.3
SEVERN	79.4	+ 5.2	+ 12.3
WYE	87.4	+ 8.0	+ 12.2
USK	81.5	+ 5.6	+ 12.6
GLAMORGAN	74.2	+ 4.9	+ 16.5
SOUTH WEST WALES	73.3	+ 11.3	+ 17.6
GWYNEDD	67.2	+ 3.0	+ 14.8
DEE AND CLWYD	68.3	+ 1.5	+ 17.0
MERSEY AND WEAVER	82.7	+ 8.2	+ 18.1
LANCASHIRE	60.8	+ 10.0	+ 11.5
CUMBRIA	66.6	+ 8.6	+ 18.7

NB APART FROM NORMAL CHANGES THESE DIFFERENCES ALSO REFLECT RETROSPECTIVE ADJUSTMENTS AFTER RECEIPT OF ADDITIONAL DATA.



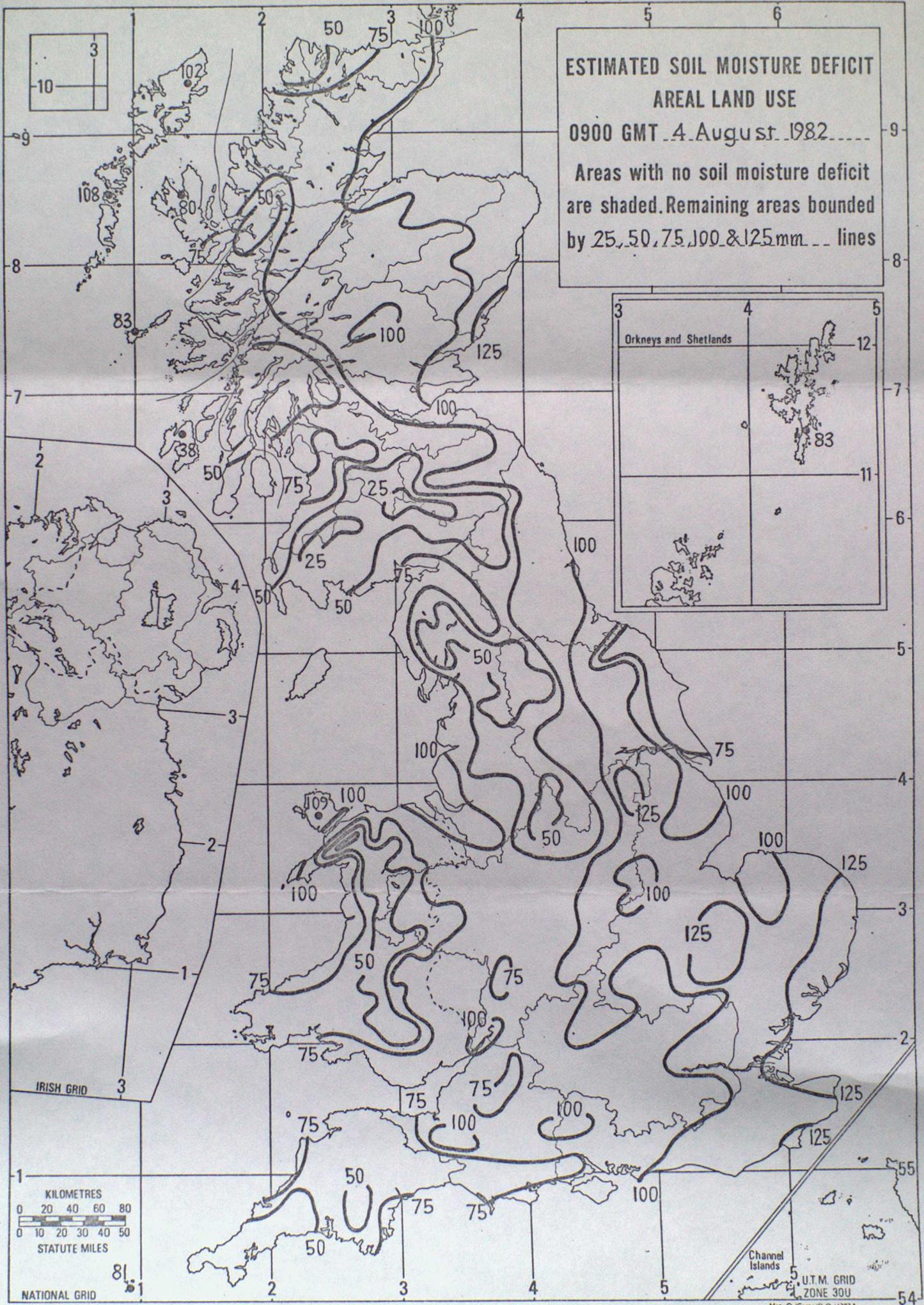
**ESTIMATED SOIL MOISTURE DEFICIT
SHORT-ROOTED VEGETATION**
0900 GMT 4 August 1982

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



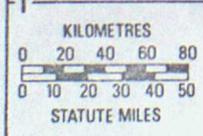
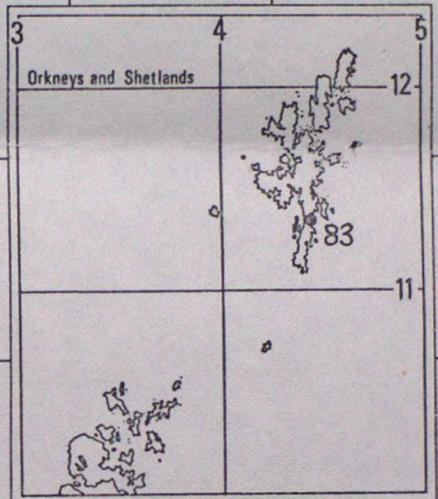
NATIONAL GRID 100:1

Channel Islands
U.T.M. GRID
ZONE 30U
Met. O./Carto/D.O./1197A



**ESTIMATED SOIL MOISTURE DEFICIT
AREAL LAND USE**
0900 GMT 4 August 1982

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



IRISH GRID
NATIONAL GRID

Channel Islands
U.T.M. GRID
ZONE 30U