

Windspeed Database

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Background

The Department of Trade and Industry wind speed database is available from this website. It contains estimates of the annual mean wind speed throughout the UK.

The data is the result of an air flow model that estimates the effect of topography on wind speed. There is no allowance for the effect of local thermally driven winds such as sea breezes or mountain/valley breezes. The model was applied with 1km square resolution and takes no account of topography on a small scale or local surface roughness (such as tall crops, stone walls or trees), both of which may have a considerable effect on the wind speed. The data can only be used as a guide and should be followed by on-site measurements for a proper assessment.

Each value stored in the database is the estimated average for a 1km square at either 10m, 25m or 45m above ground level (agl). The database uses the Ordnance Survey grid system for Great Britain and the grid system of the Ordnance Survey of Northern Ireland.

UK Wind Speed Database

There are three ways of accessing the database:

[1 Interactive on-line](#)

[2 Download database with retrieval program](#)

[3 Download database for import into GIS](#)

Disclaimer

The DTI wind speed data is provided free of charge and is not warranted as suitable for any particular purpose or use. The user shall assume full responsibility for their use of the data.

More information on the wind speed database can be found in the following reports:

- Estimation of the UK Wind Energy Resource using Computer Modelling Techniques and Map Data: A pilot study, ETSU R-17, K Newton, SF Burch
- Estimation of the UK Wind Energy Resource using Computer Modelling Techniques Report on Phase I: Optimisation of the methodology, ETSU WN7053, SF Burch, K Newton, 1988
- Computer Modelling of the UK Wind Energy Resource: Phase II Application of the methodology, ETSU WN7054, SF Burch, M Makari, K Newton, F Ravenscroft, J Whittaker, 1992
- Computer Modelling of the UK Wind Energy Resource: Overview Report, ETSU WN7055, SF Burch, F Ravenscroft, 1992
- Assessment of the Accuracy of the DTI's Database of UK Wind Speeds, ETSU W/11/00401/REP, J Halliday, M Anderson, J Palutikof, S Watson, P Dunbabin, J Bunn, M Dukes, I Surguy, 1995
- UK Onshore Wind Energy Resource, ETSU R-99, F Brocklehurst, 1997

These reports can be borrowed from British Library via your local library. You can access the British Library Catalogue online by [clicking here](#).