

Wind Resource Assessment

Windflow Technology Ltd performed their own wind prospecting as well as providing wind resource assessment services to others. With his involvement in this, Francis:

- Designed custom anemometry mountings to minimise flow distortion and conform to IEC standards, including assessment of terrain effects for conformity with power curve certification requirements.
- Assisted with set-up of monitoring stations
- Developed Visual Basic and Excel-based analytical tools, also using WeatherPro and PC208W to process data for desired outputs such as
 - frequency distribution, Weibull curves
 - energy capture
 - wind shear, turbulence intensity, gust factor
 - long-term mean wind speed prediction, using MCP (Measure-Correlate-Predict) method
 - uncertainty
- Set up processing and reporting templates for interim and final wind resource assessments and produced reports for internal use and external clients.

