GEO-NET

LiDAR performance verification at GEO-NET's own 200 m mast

- Verification report according to IEC 61400-50-2
- Excellent wind conditions, fast process
- Good accessibility near Hannover
- Time-optimized overall packages for measurement, verification, turbulence, and AEP assessments

Reference mast equipment

+ 16 Anemometers First Class Advanced X
+ 8 Wind vanes First Class
+ 4 Ultrasonic Anemometers
+ Precise temperature profile measurement

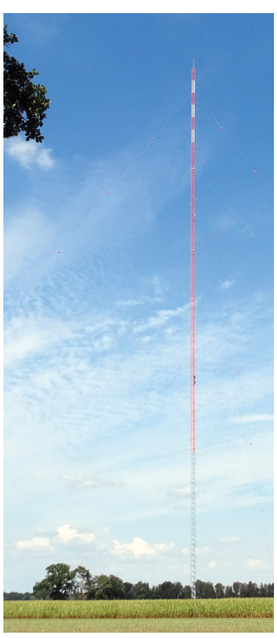
... at 8 measuring levels from 60 – 200 m

NEW! LiDAR performance verification

New !!! 200 m LiDAR performance verification by GEO-NET

LiDAR and SoDAR wind measurements can significantly reduce uncertainties in wind resource assessments and even completely replace measurements with met masts. To ensure traceability to international standards, the performance of the individual LiDAR device must be verified with a measurement mast equipped with calibrated cup anemometers.

The measuring principle of a LIDAR is completely different compared to an anemometer, which is used to measure power curves according to current guidelines. To achieve bankability of the LiDAR-measurement, MEASNET and IEC 61400-50-2 require the devices to be regularly checked against a reference wind measurement mast. Modern wind turbines are available with hub heights of 170 m and higher, but until now suitable reference masts at the corresponding height have been mostly missing. With the new reference mast from GEO-NET, the measurement uncertainties can be determined accurately by verification even at high hub heights – thus the uncertainties in the yield assessment can be reduced. Our offered services include the conduction of the performance verification according to IEC 61400-50-2 including the complete handling from delivery to the report. Further services are planning and conducting wind measurement campaigns and preparation of bankable AEP reports.



Our reference mast offers:

- + Site conditions which comply with IEC 61400-50-2
- + Measuring heights from 60 – 200 m, equipped with a total of 16 anemometers, four 3D ultrasonic anemometers and other high-quality measuring technology
- + Good wind conditions (Northern Germany)
- + Free wind flow from all sectors
- + No wind turbine test field in the relevant radius, no disturbing influences from neighboring turbines
- + Good accessibility, central location
- + No wind farm planning in the vicinity

Benefit from our know-how to achieve lower uncertainties.

DAkkS Deutsche Akkreditierungsstelle D-PL-11132-01-00

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