

Wind power

# Cold climate test site

Get in touch with us:

**Mikko Tiihonen**

+358 40 354 3693

[mikko.tiihonen@vtt.fi](mailto:mikko.tiihonen@vtt.fi)

**Tuomas Jokela**

+358 40 846 6497

[tuomas.jokela@vtt.fi](mailto:tuomas.jokela@vtt.fi)



**VTT** beyond the obvious

[www.vttresearch.com](http://www.vttresearch.com)



VTT test site in northern Finland offers perfect place for verification of cold climate capable equipment. Site offers a multitude of installation possibilities in and on wind turbines, in 40 meter mast and on the ground. Electricity, internet, surveillance camera(s) and even warm shelter for visiting staff are available. VTT has been involved in the cold climate field tests at Olostunturi since 1998. There is long term data available of wind speed, air pressure, air temperature and icing conditions.



- Location: Olostunturi – Muonio Finland, Lat. 67.5 N & Long. 23.5 E
- Altitude: 510 meters ASL, about 200 meters above surroundings
- Owner of the site: Tunturituuli Oy
- Wind turbines at the site: 5 x Bonus 0.6 MW



- Winter season 6 months, from November to April
- During season temperature mostly between  $-5^{\circ}\text{C}$  and  $-15^{\circ}\text{C}$
- Occasional temperatures of  $+0^{\circ}\text{C}$  and below  $-20^{\circ}\text{C}$
- 800 hours of meteorological icing per season
- 3000 hours of instrumental icing per season
- During the winter snowbanks drift and snow strongly packs onto all ground based objects
- Mean wind speed 7,3 m/s

