

Zenith Polarimetric Doppler Cloud Radar¹

High-tech low-cost solution for synergistic ground-based, airborne, and shipborne platforms

Evaluation of high resolution regional weather prediction models



Scanner compatible design for future upgrade

Ka- and W-band configurations

Calibration of meteorological radars, including airborne and spaceborne systems

Microphysical retrievals

Scanning Polarimetric Doppler Cloud Radar¹

Fog nowcast

Ice shape and orientation

Rain drop size distribution

Boundary layer characterization

Lightning detection



Solar scan antenna measurements

Propagation effects for satellite links

Qualitatively new precipitation estimation

Weather nowcast

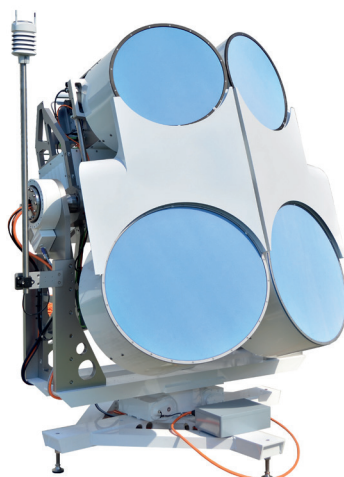
Wind retrieval

Hydrometeor classification

Dual Frequency 35/94 GHz Polarimetric Doppler Cloud Radar²

Advanced detection of supercooled liquid

Accurate profiling of liquid water content



Improved ice characterization

Attenuation-based precipitation estimation

¹ Single polarization version is available upon request

² Zenith configuration can be implemented



Advantages

Verified calibration accuracy

Low cost

Powerful rain mitigation system

High sensitivity

Hydrophobic radomes

High range resolution

Small form factor

High Doppler resolution

Company based production chain

High electromagnetic compatibility

Stable signal shape

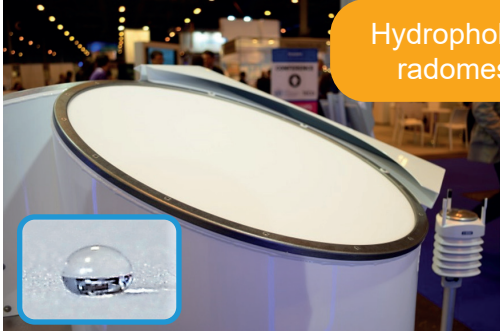
Small blind zone

No high voltages


Low noise temperature

Efficient thermal insulation

Integrated weather station

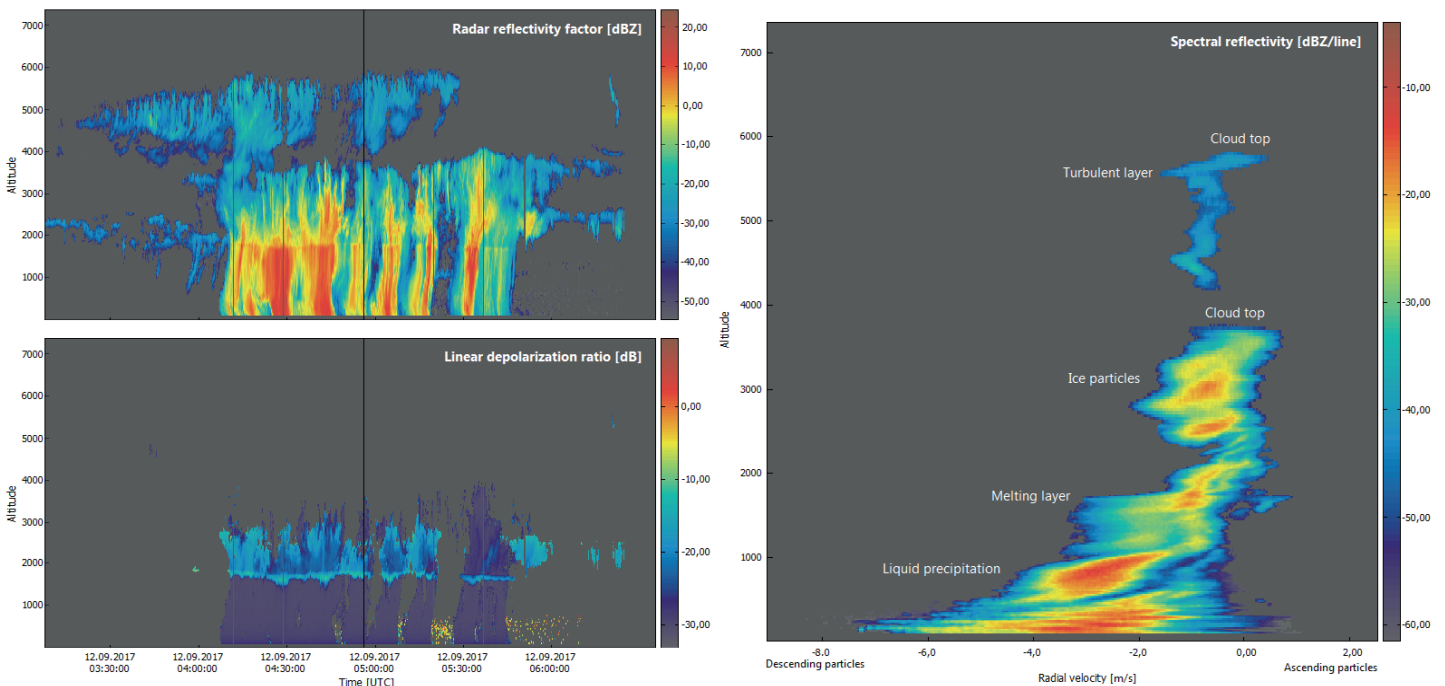


proved ± 1 dB absolute calibration



Embedded passive channel

Measurement Example (W-Band Radar, LDR-Mode)



For more details and observations please refer to the extended brochure.