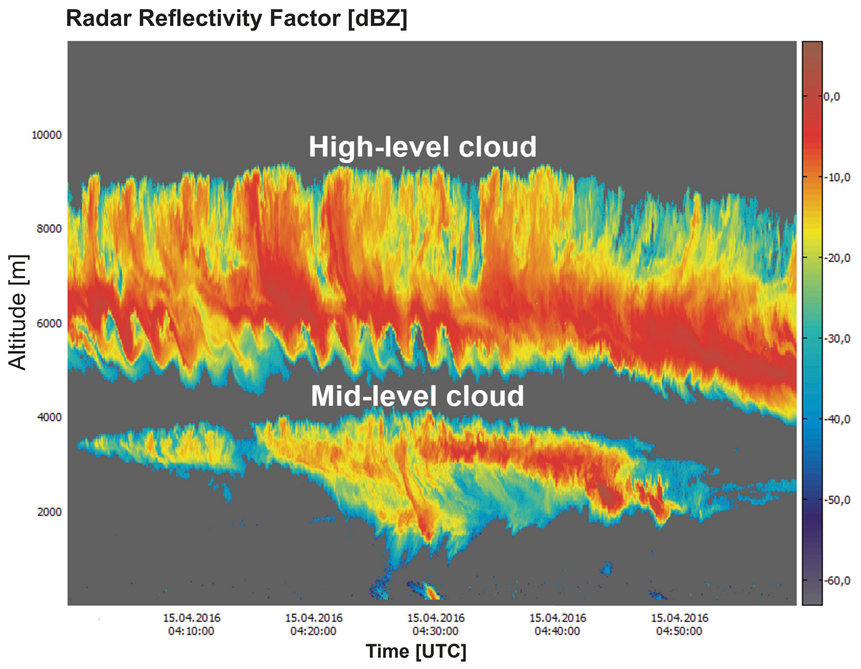
Radiometer Physics
A Rohde & Schwarz Company

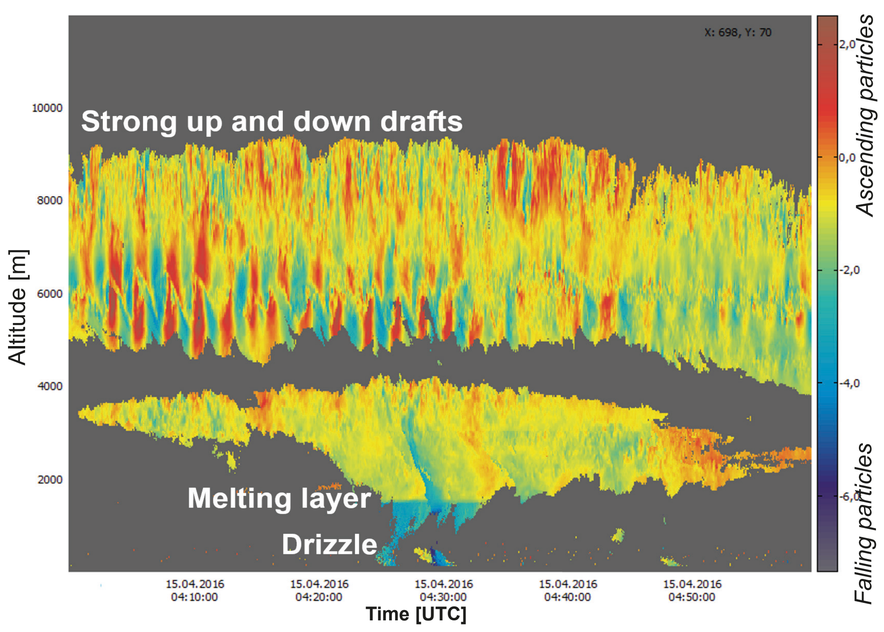
Novel Product Line
FMCW Cloud Radars

94 GHz Cloud Radar with Doppler and Polarimetric Capabilities

- **Low cost** cloud radar with embedded 89 GHz passive channel
- Frequency modulated continuous wave (FMCW) technology
- Solid state transmitter with 1.5 W continuous power
- Range resolution down to 1 m
- Rain/snow mitigation system with dew blower (4000 m^3/hr)
- High sensitivity (-45 dBZ @ 5 km, 30 m resolution, 1.7 s averaging)
- Small size and low weight
- Built-in weather station

Observation Example

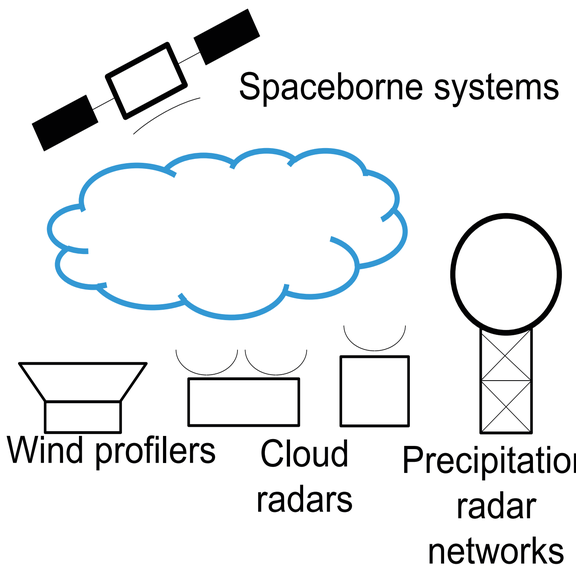




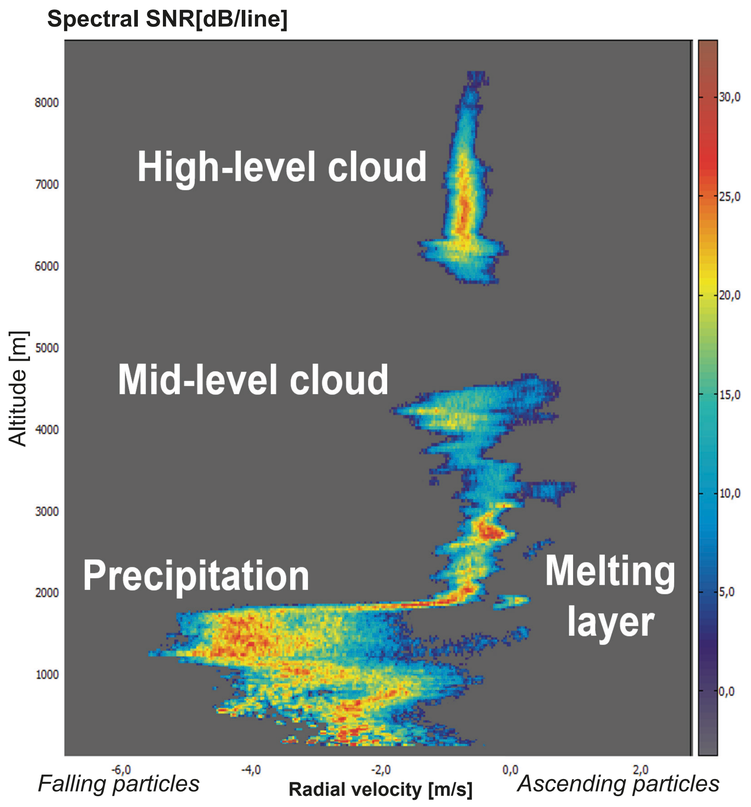
High resolution Doppler spectra represent valuable information for quantitative precipitation estimates and characterization of cloud particles.

A high spatial resolution is of benefit for tracking an evolution of a particle's population from cloud top to cloud bottom.

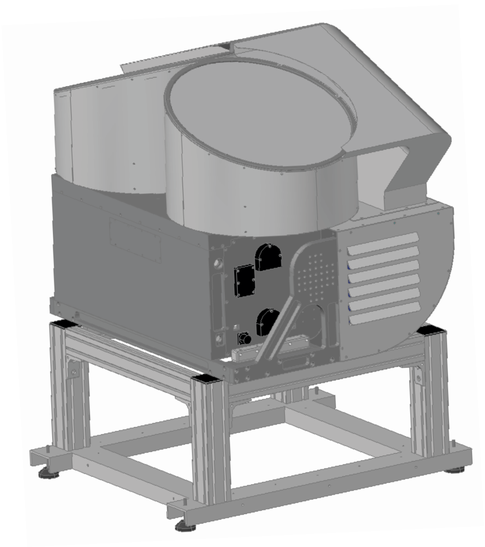
Applications



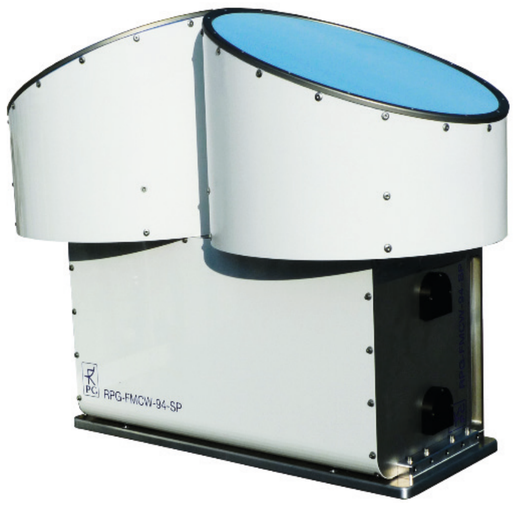
As the radar is absolutely calibrated with the same technique as passive radiometers, it can be used to calibrate radar systems of other types. Having nearly the same frequency as many satellite-based cloud radars, the RPG-FMCW-94 is a good reference for data evaluation.



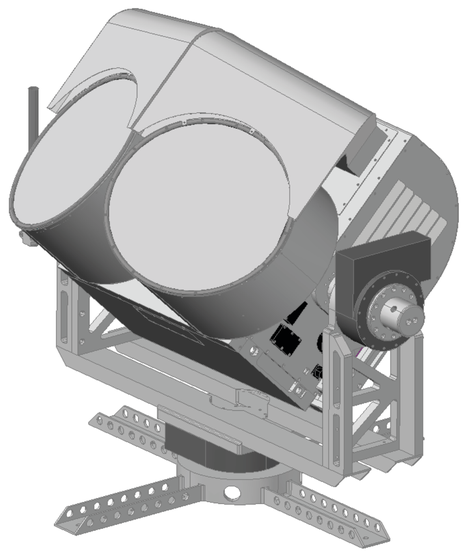
Configurations



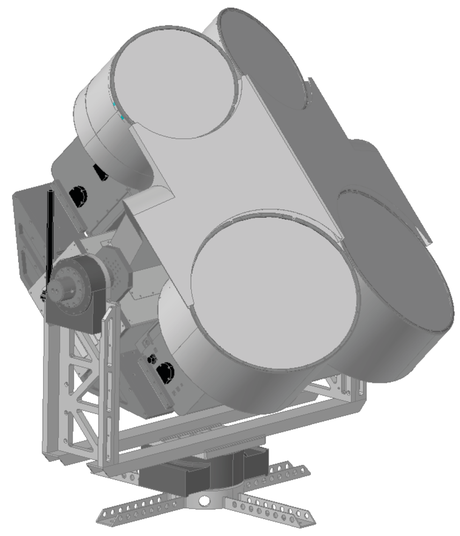
Vertically pointed single-pol or LDR-mode



Mobile version



Scanning single-pol or STAR-mode



Dual wavelength platform

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Please refer to our extended brochure for technical specification and detailed list of applications.

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