



Bringing non-RS92 sondes into GRUAN

Holger Vömel, GRUAN Lead Center DWD Meteorological Observatory Lindenberg

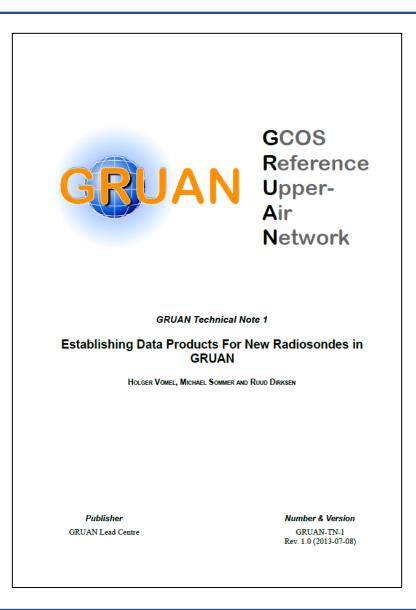
> ICM-6 10 March 2014





Technical Note TN-1







www.gruan.org

Meteorological Observatory Lindenberg





Distributed to a number of manufacturers and sites Work with Philipona on Meteolabor sonde Work with Haeffelin on Modem sonde

Roadmap to frostpoint data stream Roadmap to ozone sonde data stream







From manufacturer:

- Measurement range
- Range for which the sensor was calibrated
- Calibration accuracy and its dependencies of the calibration range
- Time resolution of the data transmission, i.e. of the raw data and of the final processed data
- Accuracy, precision, repeatability, or uncertainty (Clarify, which uncertainty description is provided by the manufacturer)
- Time lag constants and their dependences on temperature and other parameters
- Is a recalibration required as part of the launch preparation? If so, describe.
- Deficiencies in documentation of manufacturer identified by institution: What is missing or insufficient? Are further actions planned to improve this situation?







From site:

- Tests of a limited number of sondes in an environmental chamber using reference sensors
- Tests of a larger number of sondes at relaxed conditions
- Test of the production variability
- Dual launches with a GRUAN accepted sonde







Combine information for processing and uncertainties:

- Calibration
- Time-lag
- Radiation error
- Additional corrections

Define

Pre-launch checks



