

Bringing non-RS92 sondes into GRUAN

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ICM-6
10 March 2014



**GCOS
Reference
Upper-
Air
Network**

GRUAN Technical Note 1

Establishing Data Products For New Radiosondes in GRUAN

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Publisher
GRUAN Lead Centre

Number & Version
GRUAN-TN-1
Rev. 1.0 (2013-07-08)

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