



Status of Radiosonde fundamental technical document

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Radiosonde fundamental document: status

Deutscher Wetterdienst
 Wetter und Klima aus einer Hand

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• Intention of the document:

Relevant non-type-specific information concerning the operation of radiosondes and the management of the data in GRUAN

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• Document status:

Except of small additions, no substantial progress; manuscript essentially in the condition as presented at ICM-11



Radiosonde fundamental document: Outlook

- There is extensive *existing* documentation that will be used as basis for completion of the fundamental document
- → Extraction/use of universal (not type-specific) contents about radiosondes
 - RS41 TD (for data product-related contents), also TD for Meisei RS-11G and iMS-100
 - Description of laboratory experiments (**AMT paper** on radiation error)
 - Further GRUAN documentation



Radiosonde fundamental document: Outlook

- From the upcoming RS41-TD:
 - Data management
(data collection, file formats, processing centres, processing, archiving, data distribution)
 - Concepts/description of basic experiments for sensor characterisation
(humidity time-lag, temperature radiation error)
 - Pre-launch procedures including design and evaluation of manufacturer-independent ground checks



- Rigging:
 - **GRUAN-TD-7, v1.0 (2019-01-25):**
“Multiple-payload Radiosonde Sounding Configurations for Determining Best-Practice Guidance for GRUAN Sites”
Rigging configurations for multiple-payload radiosonde soundings in GRUAN or used during recent international radiosonde inter-comparison campaigns
 - **GRUAN-TN-7, v1.0 (2016-08-12):**
“Rigging Recommendations For Dual Radiosonde Soundings”
Recommendations for the payload configuration for performing dual soundings with two radiosondes
 - Lindenberg currently gaining experience with test flights for the WMO intercomparison campaign (rigs with 10 radiosondes)

Radiosonde fundamental document: Outlook

- Contributions/ideas very welcome
- Contributions from additional authors to distribute the work-load are even more welcome