GRUAN Technical Documents for Radiosondes



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Outline



- → The issue
- Proposed format
- → Tasks
- → Start of discussion



The issue



- → Goal: an instrument-specific TD (see GRUAN-TN-2)
 - Comprehensive documentation about the instrument in the context of GRUAN
- → We need technical documentation for **ALL** radiosonde types
 - RS92, SRS-C34, RS-11G, M10, DFM-09, RS41, ...
- → But ~75 % (or more) is always the same, e.g.
 - Recommended pre-launch procedures, launch setups, ...
 - Important sensor characteristics/errors, e.g. time-lag, radiation bias, ...
 - Algorithms to correct data, estimate uncertainties
 - Measurement: reference, scheduling, quality control, ...
 - Relevant meta-data, GRUAN data flow (incl. used tools)
- → We should not repeat same facts again and again.



Proposed format



- → One general TD for radiosondes (→ GRUAN-TD-2)
 - Describe all general aspects (incl. background)
 - Define explicit gaps (or docking points) to fill separately
 - Provide examples to concretise separately
- → A separate TD for each RS type as a "subsidiary" document to the general TD
 - Describe aspects specific to certain RS type
 - Fill gaps
 - Concretise facts



Structure of general TD



- → Proposal from GRUAN-TN-2 (a good starting point)
 - Introduction
 - Instrumentation
 - Reference measurements
 - Measurement uncertainty
 - Measurement scheduling
 - Data management
 - Post-processing analysis and feedback
 - Quality management
 - Site assessment and certification
 - Appendices
 - References



RS type-specific "subsidiary" TDs

Proposed themes

- Description of ground system (hardware & software & configuration)
- Description of radiosonde type (hardware incl. sensors)
- Realised experiments with results (lab & open air)
- Used processing algorithms & data product
- Validation of data product
- References

→ Do not include ...

- General radiosounding facts
- Site-specific facts
- What is already written in general TD



Tasks for general TD

→ Assemble teams

- Team of editors → 3 from LC & TT Radiosondes
- GRUAN Document Curator → assist editors
- Team of authors → from LC, TT Radiosondes, external → Who?

→ First steps

- Adapt the document structure for radiosondes
- Define the work packages
- Allocate the work packages to authors
- Define the interface to the RS type-specific "subsidiary" TDs

→ Define a time schedule

- Start in April 2015
- Reviewable version at ICM-8



Conclusion



- → One general TD for radiosondes
- → Assembling teams of editors / authors
- → One separate TD for each RS type as a "subsidiary" document to the general TD

Your thoughts?

