Task Team on Radiosonde
Progress Report December 2022-March 2024

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Christoph von Rohden (GRUAN LC, DWD, Germany),
and the Task Team Radiosonde members

General Tasks of the Task Team Radiosondes

- Provide guidelines on how to obtain the best possible, reference quality data from radiosoundings

- Survey performance of radiosondes, in particular in inter-comparisons

- Sensor characterisation

- Evaluate radiosonde data products on the basis of the GRUAN specifications

- Review uncertainty analyses and correction algorithms

- Draw conclusions on the suitability of radiosondes, specific sensors, procedures, and algorithms for the network

- Promote scientific efforts for assessing and improving radiosondes

- Recommendations for ensuring long-term stability of radiosonde records

- Recommend or define pre-launch checks, launch procedures, collection of metadata to be followed by sites

Task Team Members

Name	Affiliation	Status
Masatomo Fujiwara	Hokkaido University, Japan	Co-chair
Christoph von Rohden	GRUAN Lead Centre, DWD, Germany	Co-chair
Frank Schmidlin *	NASA, USA (retired)	Core member
Hannu Jauhiainen	Association of Hydro-Meteorological Equipment Industry; Vaisala, Finland	HMEI representative, Associate member
Rigel Kivi	Finnish Meteorological Institute (FMI)	Core member
Masami Iwabuchi	Japan Meteorological Agency (JMA)	Core member
Yang Rongkang *	China Meteorological Administration (CMA)	Core member
Sergey Kurnosenko *	Scientific Software Consultant, USA	Core member
Jean-Charles Dupont	Institut Pierre-Simon Laplace (IPSL), France	Core member
Bruce Ingleby	ECMWF, UK	Core member
David Edwards	Met Office, UK	Core member
Gonzague Romanens	Meteoswiss, Switzerland	Core member
Frédéric Vogt *	Meteoswiss, Switzerland	Core member

* About to leave the TT-RS:

- Frédéric Vogt   (New position; no longer direct involved with GRUAN)
- Yang Rongkang   (Changed the field of activity within CMA)
- Sergey Kurnosenko   (Busy in his current position)
- Frank Schmidlin   (Retired from NASA in 2020)

→ *Thank you very much for your contributions to GRUAN and the Task Team Radiosonde!*

- Communication with some colleagues to recruit as new members on the TT-RS

HP4: Justification for high ascent attainment

- Analysis of the additional benefits of high-altitude attainment, with focus on radiosondes

- Extensive task; Lead: M. Fujiwara;
Various parties involved, TT-RS, other TTs, and the wider GRUAN community (currently ~19 authors);
TT-RS online meeting May 2023

- **Status**:

  - Paper draft largely completed; essentially one paragraph needs to be written

  - Current title: *"Justification for high ascent attainment for balloon radiosonde soundings at GRUAN and other sites"*

  - An intensive internal review process has already been ongoing

  - Submission in the next few months (AMT)

  - Presentation on the latest contents and current status at ICM-15 (M. Fujiwara)

TT-RS involvement in other tasks

- **A7**: Ozonesonde GDP progression:

  Status: No recent contribution from the side of the TT radiosonde. The TT-RS is open for discussion at any time.

- **B8:** Metrological closure of GNSS and radiosonde GDPs:

  Status: Progressing with a number of issues still to be resolved. Led by TT-GNSS. TT-RS willing to help. A joint meeting involving TT-GNSS and TT-RS might be helpful.

- **C1:** Radiosonde Fundamental Technical Document

  Status: No progress

  – To be discussed whether the document is fundamentally useful and, if so, what priorities should be set (in support of existing documents)

  – Should be a collaborative effort.
  Authorship currently with the Lead Centre;
  LC willing to provide strong support, but given LC's scope of subjects, other parties need to be involved to take the project forward

TT-RS involvement in UAII 2022

- Several members of the TT were highly involved in the WMO UAII 2022 Intercomparison campaign in terms of organization, preparation, implementation, evaluation of the results, reporting, reviewing, and professional support in various ways.
  (F. Vogt, G. Romanens, D. Edwards, B. Ingleby, C. von Rohden)