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Session 4

Task Team progress report for March 2014 – Radiosonde

(Submitted by Masatomo Fujiwara/ Rolf Philipona)

Summary and Purpose of Document

Progress report from the task team Radiosonde.

Task Team progress report for March 2014 – Radiosonde

SUMMARY

We have currently 9 tasks, some of which are ongoing and some are not yet started.

Here is the current member list:

Name	Affiliation	Status
Masatomo Fujiwara	Faculty of Environmental Earth Science, Hokkaido University, Japan	co-chair, member of WG-ARO
Rolf Philipona	MeteoSwiss, Switzerland	co-chair
Ruud Dirksen	GRUAN Lead Centre, DWD, Germany	
Frank Schmidlin	USA	
Alexander Kats	Central Aerological Observatory/KOMET, Russia	
Hannu Jauhiainen	The Association of Hydro-Meteorological Equipment Industry, Finland	HMEI representative
Michael Hicks	Howard University, USA	
Larry Miloshevich	MILO-Scientific, USA	
Rigel Kivi	Finnish Meteorological Institute, Finland	
Nobuhiko Kizu	Japan Meteorological Agency, Japan	
LI Wei	China Meteorological Administration, China	

PROGRESS ON CURRENT TASKS

Task: *Assess time lag in RS92 humidity corrections, comparing the GRUAN processing to other published approaches.*

Main Contact: *Ruud Dirksen with assistance from Michael Sommer, Larry Miloshevich, Masatomo Fujiwara and Alexander Kats*
Due Date: *25-Feb-2014*
Status: *Ongoing*
Milestone: *Manuscript describing the results of the humidity time lag assessment submitted to a journal.*
Progress: *Test calculations were made by Larry Miloshevich. Will be restarted after finishing the paper describing the GRUAN RS92 data product.*
Issues: *Waiting for the GRUAN Lead Centre for further actions.*

Task: *Assess the effects of the use of auto-launchers compared to manual launches on measurement uncertainty estimates for radiosondes.*

Main Contact: *Rigel Kivi & Nobuhiko Kizu*

Due Date: *30-Nov-2014*
Status: *Ongoing*
Milestone: *Publication in the peer reviewed literature.*
Progress: *Information has been summarized at Sodankyla (Kivi), Potenza (Madonna), and Tateno (Kizu)*
Issues: *None*

Task: *Assess controlled descent mechanisms for balloon payloads and issues around use of descent data*

Main Contact: *Rolf Philipona, Dale Hurst and Masatomo Fujiwara*
Due Date: *30-Jun-14. Presentation at ICM-6. 30-Jun-14. (31-Dec-2014 for a document adoptable across GRUAN)*
Status: *Ongoing*
Milestone: *Manuscript(s) detailing operational considerations for controlled descents submitted to a journal or detailed in a GRUAN Report. If deemed applicable, a technical document that supports the adoption of controlled descent across GRUAN.*
Progress: *Regular descent sounding is made at Boulder and Lauder. Some experiments were made at Lindenberg, Payerne, NCAR (and under a tropical project named SOWER).*
Issues: *Still in the experimental phase.*

Task: *Assess multi-payload launch configurations for GRUAN usage.*

Main Contact: *Hannu Jauhiainen and Masatomo Fujiwara*
Due Date: *30-Jun-2014*
Status: *Ongoing*
Milestone: *Document detailing the issues surrounding multi-payload soundings to be drafted and submitted either to peer reviewed literature (first choice) or to WG-GRUAN for review as a TD*
Progress: *A questionnaire sheet was sent (and re-sent) to several groups, and some responses have been received*
Issues: *Need some more time to prepare a draft for circulation within the GRUAN community for comments*

Task: *Define the non-RS92 data collection client requirement, identify the central data processing facility, and initiate data flow.*

Main Contact: *Holger Vömel, Michael Sommer, Rolf Philipona, Lead Center, Radiosonde task team*
Due Date: *1-Sep-2015*
Status: *Ongoing*
Milestones: *Assessments of non-RS92 data collection client requirements. Data flow through NCDC portal*
Progress: *First tests with RS-Launch client to submit non-RS92 data to the Lead Center. Built up of data processing facility and data files with final*

product and uncertainties of each parameter for non-RS92 radiosondes.

Issues: *Submission of Meteolabor radiosonde data in preparation.*

Task: *Develop a UT/LS water vapour data product supported by appropriate technical documentation. The technical documentation must account for operation of CFH, NOAA FPH, Snow White and possibly FLASH-B.*

Main Contact: *Holger Vömel, Rolf Philipona, Masatomo Fujiwara and Dale Hurst*
Due Date: *1-Mar-2014*
Status: *Ongoing*
Milestone: *Technical documentation completed for frostpoint hygrometer measurements*

Main Contact: *Holger Vömel, and Dale Hurst*
Due Date: *1-Mar-2015*
Status: *Ongoing*
Milestone: *Peer reviewed publication on frost point hygrometer GRUAN data product submitted.*

Task: *Define the frostpoint hygrometer data collection client requirement, identify the central data processing facility, and initiate data flow.*

Main Contact: *Holger Voemel, Lead Centre, Radiosonde task team*
Due Date: *1-Sep-2015*
Status: *Not yet started*
Milestone: *Data flow through NCDC portal*

Main Contact: *Radiosonde task team*
Due Date: *1-Dec-2015*
Milestone: *Assessment of data usage, issues and potential improvements for this data stream*
Progress: *Not yet started*

Task: *Finalize the definition of GRUAN data products for RS92 radiosondes: Technical document describing pre-launch procedure (TD5)*

Main Contact: *Ruud Dirksen and Masatomo Fujiwara*
Due Date: *25-Feb-2014*
Status: *Ongoing*
Milestone: *Review of the pre-launch ground-check/ground-calibration procedures*
Progress: *A questionnaire sheet was sent to the relevant GRUAN sites in August 2012*
Issues: *There is a preliminary version of TD5 whose missing perspective is to consider the current practice at the relevant GRUAN sites. The questionnaire is for this purpose.*

Task: *Define the ozone sonde data collection client requirement, identify the central data processing facility, and initiate data flow.*

Main Contact:	*Holger Voemel, Lead Centre Radiosonde task team*
Due Date:	30-Jun-2015
Status:	Not yet started
Milestone:	*Data flow through NCDC portal*

Main Contact:	*Radiosonde task team*
Due Date:	*30-Jun-2017*
Status:	*Not yet started*
Milestone:	*Assessment of data usage, issues and potential improvements for this data stream*