

GRUAN Task Team 1 - Radiosonde Progress Report for January 2013

Masatomo Fujiwara and Rolf Philipona

Current members of TT-1 Radiosonde

Name	Affiliation	Status
Masatomo Fujiwara	Faculty of Environmental Earth Science, Hokkaido University, Japan	co-chair, member of WG-ARO
Rolf Phillipona	MeteoSuisse, 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	

- *Francis J. Schmidlin retired in October 2012, but agreed to continue to be within the task team.*
- *Joseph Facundo retired in January 2013 and was removed from the member list; but is still reachable through Howard Diamond and Belay Demoz.*
- *Carl Bower retired in July 2012 and was removed from the member list.*

PROGRESS ON TASKS

Task: *Review of the WMO Intercomparison report*

Main Contact: *Miloshevich and Philipona*

Due Date: *2012*

Status: *finished*

Milestone: *Lessons from the WMO report are summarized, and review is made from the GRUAN viewpoints. Will be a GRUAN report.*

Progress: *Published as GRUAN Report #2.*

Issues: *None*

WORLD METEOROLOGICAL ORGANIZATION

INSTRUMENTS AND OBSERVING METHODS

REPORT No. 107

WMO INTERCOMPARISON OF HIGH QUALITY RADIOSONDE SYSTEMS

Yangjiang, China, 12 July - 3 August 2010

J. Nash (United Kingdom)
T. Oakley (United Kingdom)
H. Vömel (Germany)
LI Wei (China)



**GCOS
Reference
Upper-
Air
Network**

GRUAN Report 2

***GRUAN Radiosonde Task Team Review Report on the
2010 WMO Radiosonde Intercomparison***

**LARRY MILOSHEVICH, MASATOMO FUJIWARA, ROLF PHILIPONA, AND
THE RADIOSONDE TASK TEAM**

Task: *RS92 pre-launch procedure (TD5)*

Main Contact: *Dirksen, Miloshevich, Fujiwara*

Due Date: *August 2012 (originally)*

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. Expected to be completed by*

December 2012. Need some more time.

Task: *Time-lag correction issues (including intercomparisons) for RS92 RH measurements*

Main Contact: *LC (Dirksen, Sommer), Miloshevich, Kats, Fujiwara*

Due Date: *A paper submitted to a journal by August 2013*

Status: *Started*

Milestone: *Various time-lag correction schemes will be compared to create the best correction scheme for GRUAN*

Progress: *Test calculations were made by Larry Miloshevich.*

Issues: *Waiting for the GRUAN Lead Centre for further actions.*

Task: *Multi sounding configuration*

Main Contact: *Jauhiainen*

Due Date: *drafted by August 2013*

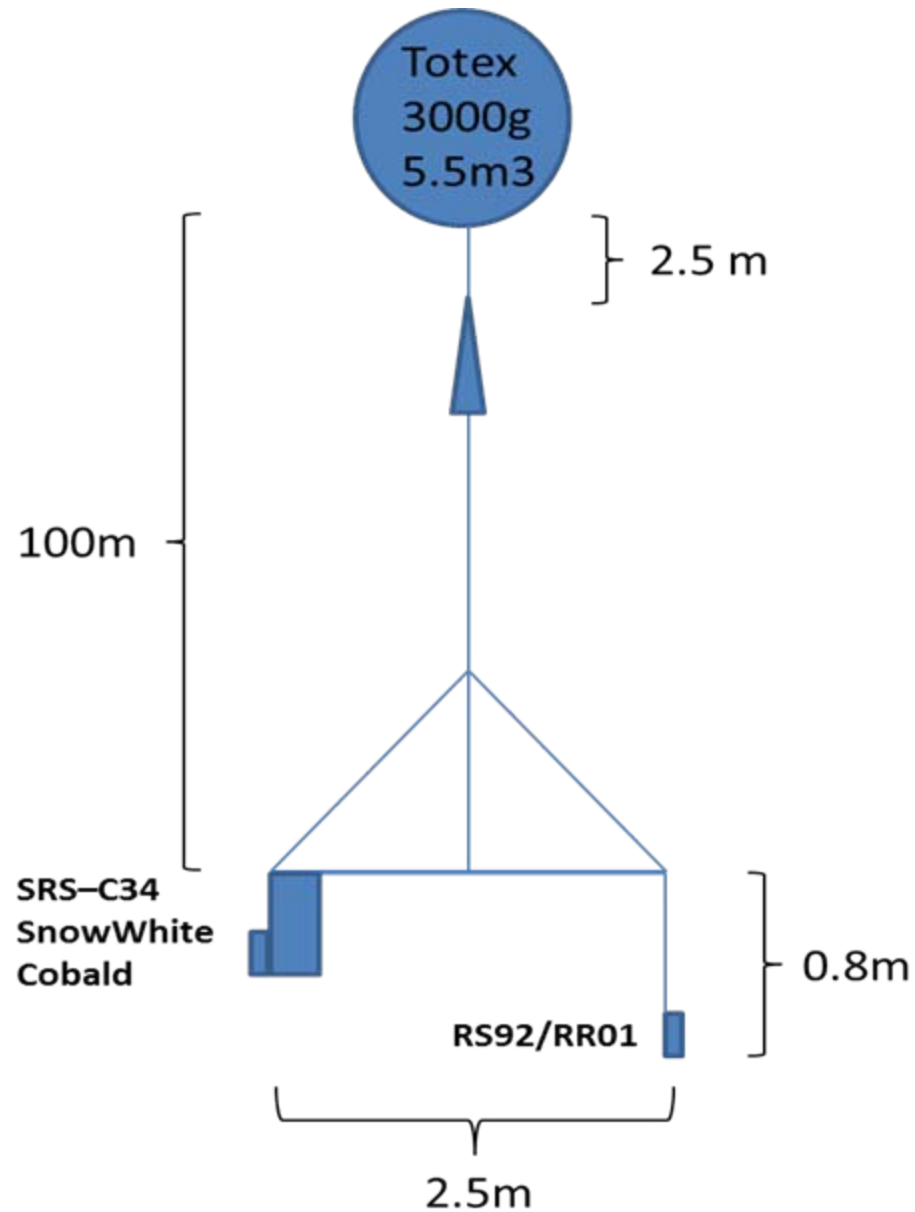
Status: *Ongoing*

Milestone: *Recommendation for the multi sounding configuration is made for GRUAN*

Progress: *A questionnaire sheet was sent (and re-sent) to several groups, and some responses have been received*

Issues: *Need some more time to receive more responses*

Questionnaire sheet was sent to several groups



Task: *Use of descent data and controlled descent*

Main Contact: *Philipona, Hurst et al.*

Due Date: *Presentation and discussion at ICM-5 (Manuscript by December 2013)*

Status: *Ongoing*

Milestone: *The use of descent data and controlled descent for GRUAN sounding is discussed in a document*

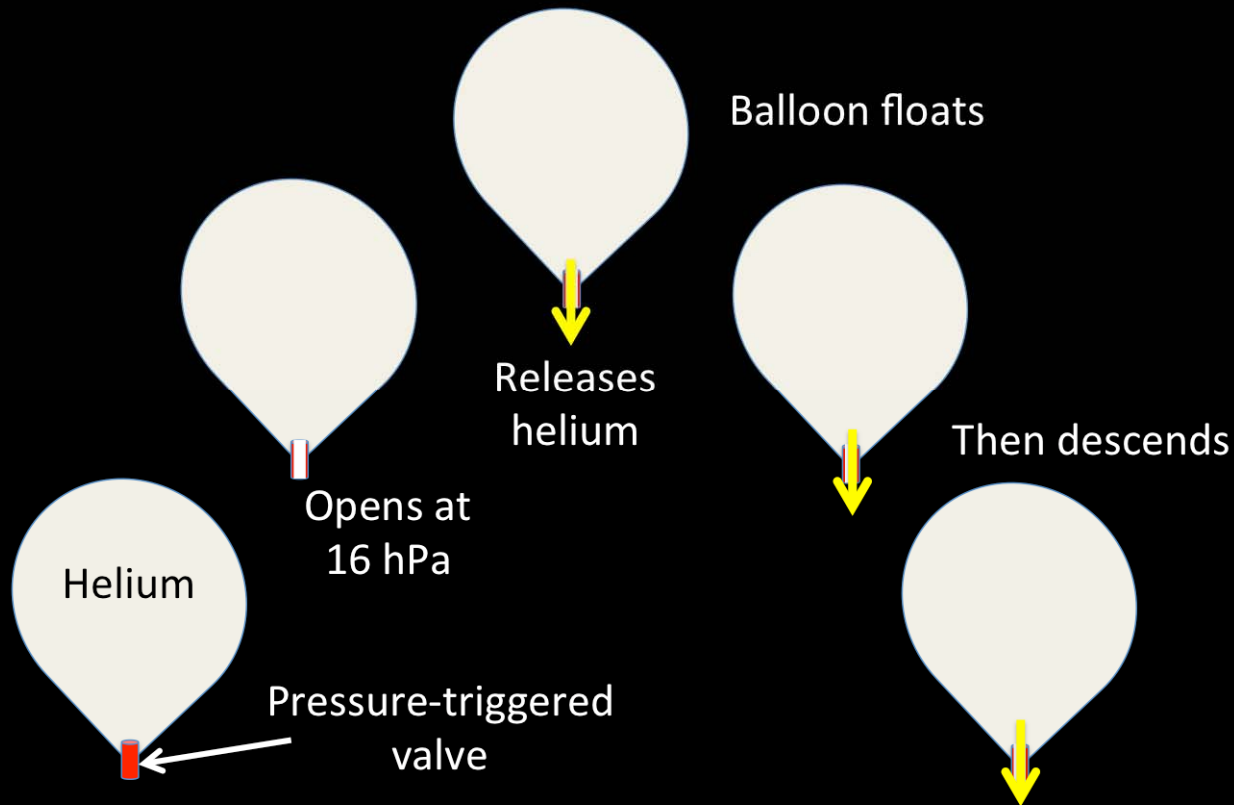
Progress: *Regular descent sounding is made at Boulder and Lauder. Some experiments were made at Lindenberg, Payerne, NCAR (and under a tropical project named SOWER).*

Issues: *Still in the experimental phase.*

Double Ballons

Valve System *or*

Simple Valve System for NOAA FPH



Task: *RS92 auto-launcher influence*

Main Contact: *Kivi, Madonna, Kizu*

Due Date: *A journal paper submitted by August 2013*

Status: *Ongoing*

Milestone: *Influence/effects of using the auto-launcher system is documented*

Progress: *Information has been summarized at Sodankyla (Kivi), Potenza (Madonna), and Tateno (Kizu)*

Issues: *None*

Task: *Chilled-mirror hygrometer data product document*

Main Contact: *LC (Voemel), Hurst, Philipona, Fujiwara*

Due Date: *TD by March 2014*

Status: *Ongoing*

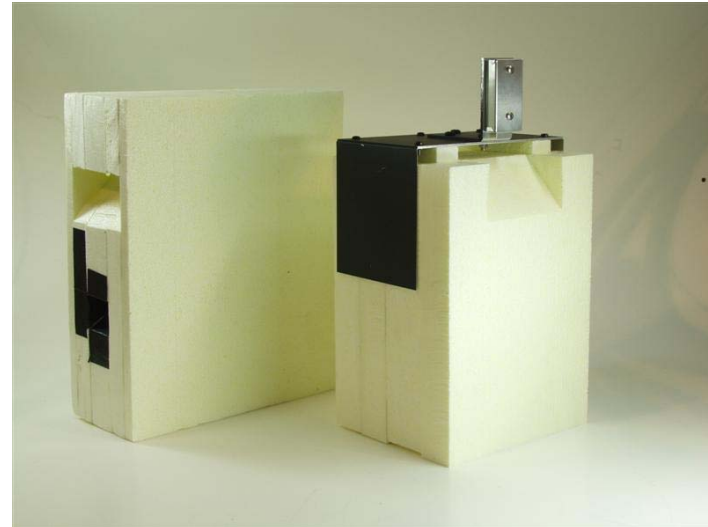
Milestone: *A GRUAN Technical Document is prepared (for CFH, NOAA-FPH, and Snow White), which include the information on the uncertainty estimation method*

Progress: *Works are being made by each group*

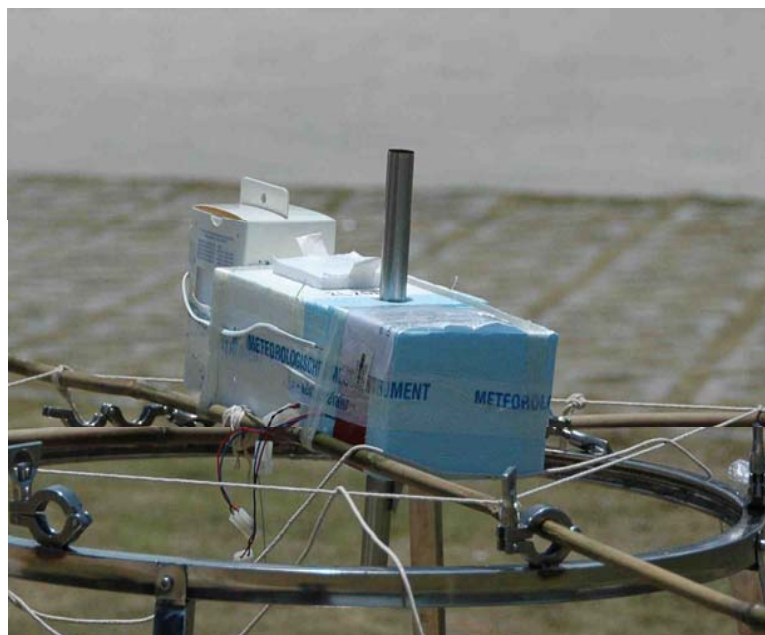
Issues: *None*

Chilled-mirror hygrometers

SW



CFH



FPH



Task Team side meeting: TT-Radiosonde and TT-Ancillary Measurements

Tuesday 16:30

Agenda:

- Goals of Radiosonde and AM measurements within GRUAN

- Comparisons: Radiosondes - AM

- Uncertainty reporting: Radiosondes – AM

- Intercomparison Campaigns: What will be done? What is the benefit?