Task Team Radiosonde

Progress Report March 2016

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and the Task Team Radiosonde

ICM-8, Boulder, USA, April 2016

2. Members

Name	Affiliation	Status
Masatomo Fujiwara	Hokkaido University, Japan	Co-chair
Rolf Philipona	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; Vaisala, Finland	HMEI representative
Micheal Hicks	**NOAA/NWS/OOS, USA**	
Larry Miloshevich	MILO-Scientific, USA	
Rigel Kivi	Finnish Meteorological Institute, Finland	
Nobuhiko Kizu	Japan Meteorological Agency, Japan	
LI Wei	China Meteorological Administration, China	
Yang RongKang	**China Meteorological Administration, China**	
Martial Haeffelin	**Institut Pierre Simon Laplace, France**	

3. Updates of the Tasks

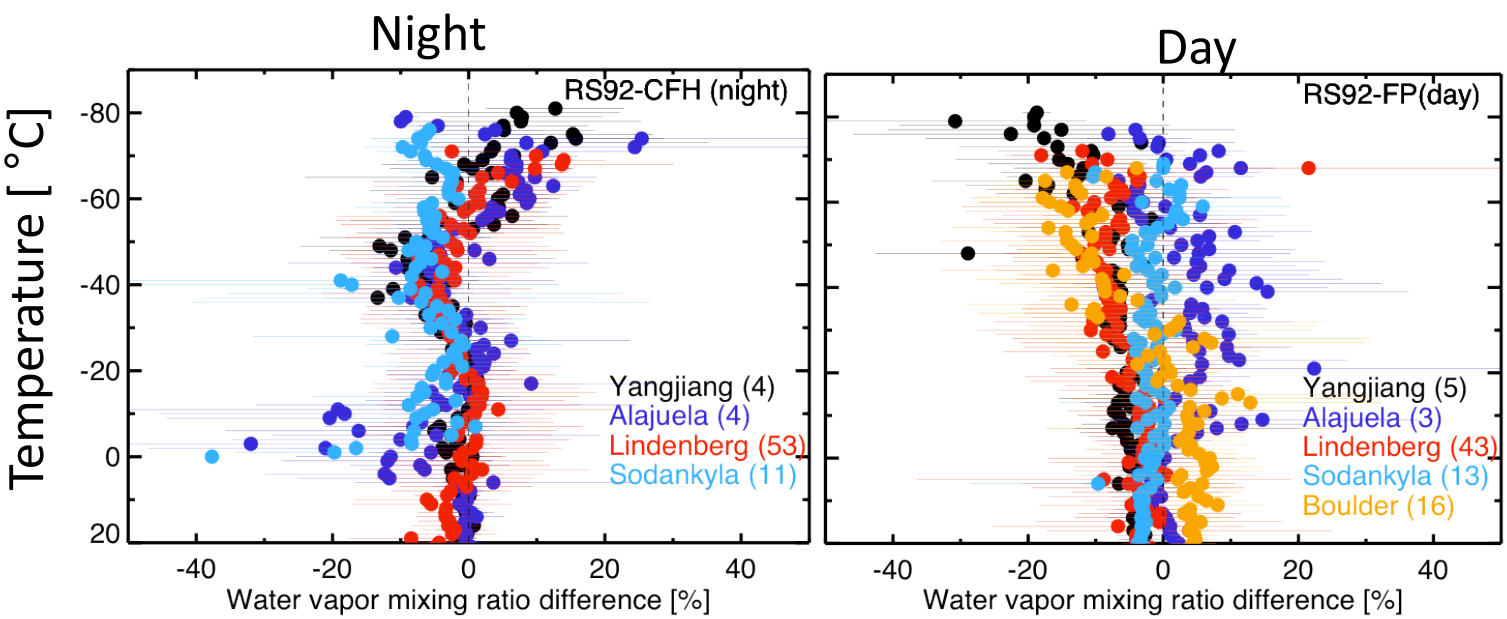
1. *RS92 RH time lag corrections*
2. *Auto-launchers versus manual launches*
3. *Controlled descent assessment*
4. *Multi-payload launch configurations*

5. *Non-RS92 regular sondes (Meteolabor, Modem, Meisei, etc.)*
6. *Water vapour sondes*
7. *GRUAN data product for RS92*
8. *Ozonesondes*

(1) RS92 RH Time Lag Corrections

- R. Dirksen (lead), L. Miloshevich, M. Fujiwara et al.
- Intercomparison of GRUAN and other (e.g., Miloshevich's) RS92 RH time lag correction methods
- Started in late 2014, after the publication of Dirksen et al. (AMT, 2014) on description of the GRUAN Vaisala RS92 data product version 2

Example: GRUAN RS92 data product versus cryogenic frostpoint hygrometer data



(2) Auto-launchers vs. Manual Launches

- Rigel Kivi (lead), Nobuhiko Kizu, Fabio Madonna
- Assess the effects of the use of auto-launchers compared to manual launches on measurement uncertainty estimates for radiosondes
- Analyze data from Sodankylä, Tateno, and Potenza
- Ongoing

Sodankylä

(3) Controlled Descent Assessment

- Rolf Philipona (lead), Dale Hurst and Masatomo Fujiwara
- Assess controlled descent mechanisms for balloon payloads and issues around use of descent data
- A paper has been written by:

Andreas Kräuchi1**, Rolf Philipona**2**, Gonzague Romanens**2**,**

Dale F. Hurst3,4**, Emrys G. Hall**3,4**, and Allen F. Jordan**3,4

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2 Federal Office of Meteorology and Climatology MeteoSwiss, Aerological Station, 1530 Payerne, Switzerland

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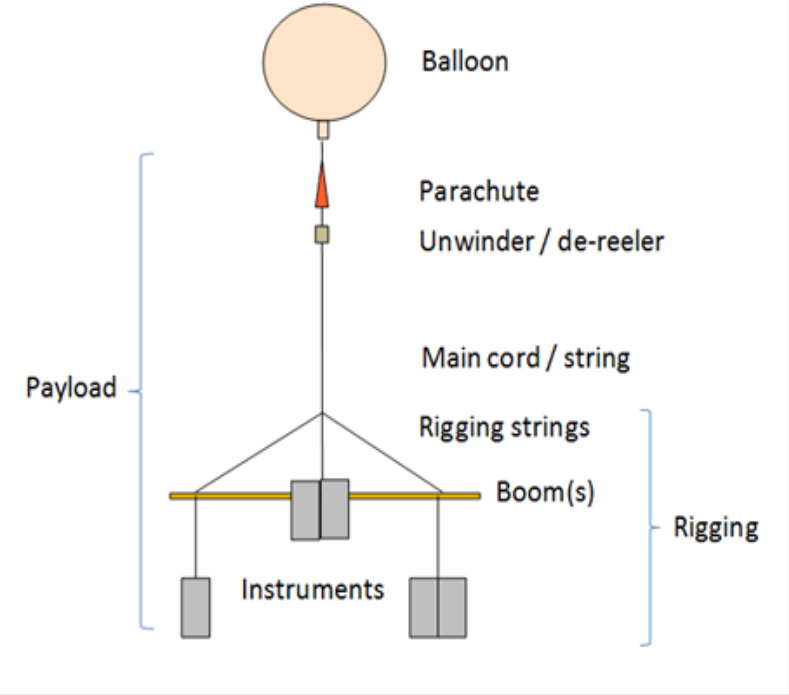
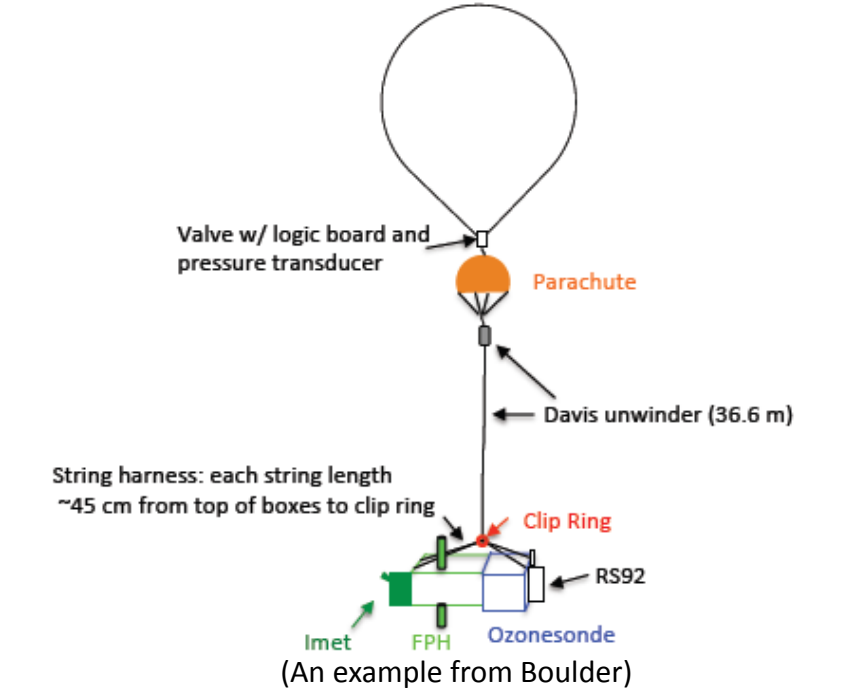
available at http://www.atmos-meas-tech.net/9/929/2016/

Presentation on Wednesday 13:00 – 13:30 Dale Hurst and Rolf Philipona

(4) Multi-payload Launch Configurations

- Hannu Jauhiainen (lead), Masatomo Fujiwara et al.
- Assess multi-payload launch configurations for GRUAN usage.
- Draft manuscript being prepared; various options and their pros and cons described
- Issue: Can we make single recommendation? TD or AMT?





(An example from Boulder)

Other Tasks

(5) Non-RS92 Regular Sondes (Meteolabor, Modem, Meisei, etc.)

- Define the non-RS92 data collection client requirement, identify the central data processing facility, and initiate data flow.
- Technical documents being prepared

Meteolabor SRS-C34

Modem M10

Meisei iMS-100

Other tasks

(6) Water Vapour Sondes

- Technical document and data collection client for frostpoint hygrometers (CFH, FPH, Snow White) and other hygrometers (e.g., FLASH-B)

(7) GRUAN Data Product for RS92

- Finalize the definition (e.g., pre-launch procedure, TD5); mostly led by LC

(8) Ozonesondes

- Task Team Radiosonde will support the activity