Task Team 1 (Radiosonde) progress report 01/2012

(Submitted by Masatomo Fujiwara)

Summary and Purpose of Document

Progress report from the task team 1 (Radiosonde) covering period from 09/2011 till 01/2012.
Task Team progress report for January 2012 – Radiosonde

SUMMARY

Review of the WMO Intercomparison report has been done. Some other tasks were in progress. One of the two co-chair positions is still vacant; a new person came to the Lead Centre in January 2012 as the replacement of Immler, and at ICM4 we will ask him to participate in the team (the WG-ARO co-chairs suggested us to proceed slowly).

PROGRESS ON TASKS REPORTED ON THE PREVIOUS REPORT

Task (1): Review of the WMO Intercomparison report
Main Contact: Miloshevich and Philipona  Due Date: End of 2011  Status: Document done
Milestone: Lessons from the WMO report are summarized, and review is made from the GRUAN viewpoints
Progress: Review document is created; will ask WG-ARO etc. for comments
Issues: Will this be a GRUAN Technical Document (TD)?

Task (2): RS92 pre-launch procedure
Main Contact: Fujiwara  Due Date: ICM-4  Status: under work
Milestone: Review of the pre-launch ground-check/ground-calibration procedures
Progress: Immler and Miloshevich prepared a document as TD5; review will be made within the task team soon.
Issues: Missing perspective in TD5 is to gather information from all relevant GRUAN sites. This task will be relevant to the issue on the GRUAN surface observation requirement.

Task (3): RS92 data product document
Main Contact: Fujiwara  Due Date: ---  Status: partly done?
Milestone: Lead Centre prepares a document, TD4
Progress: TD4 had been prepared, and review was made by some WG-ARO members
Issues: TD4 is a simple documentation on the file format, information content, etc.
We need another document to describe the detailed information how the “GRUAN RS92 data product” is created and to explain the uncertainty estimation method for this product. For this purpose, we will also need a project to intercompare Vaisala RS92 data product and GRUAN product or even to validate the GRUAN product. Lead Centre will lead these projects, and our task team will review them or even participate in them.

Task (4): Use of descent data and control descent
Main Contact: Philopona, Hurst et al.  Due Date: ICM4  Status: Under work
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. Brief report and offline discussion will be made at ICM4

Task (5): Multi sounding configuration
Main Contact: Jauhiainen  Due Date: ICM4  Status: Under work
Milestone: Recommendation for the multi sounding configuration is made for GRUAN
Progress: A questionnaire will be sent to several researchers/engineers very soon to gather the information on their multi-sounding experiences
Issues: Need more time to prepare a document and to review it within the team

Task (6): RS92 auto-launcher influence
Main Contact: Kivi et al. Due Date: ICM4 Status: Under work
Milestone: Influence/effects of using the auto-launcher system is documented
Progress: Information is being summarized at Sodankyla (Kivi), Potenza (Madonna), and Tateno (Kizu)
Issues: Report will be made at ICM4 in the site report session; offline discussion will be made for a summary document.

Task (7): Chilled-mirror hygrometer data product document
Main Contact: Voemel, Hurst, Philipona, Fujiwara Due Date: End of 2011
Status: Under work
Milestone: A GRUAN Technical Document is prepared, which include the information on the uncertainty estimation method
Progress: A document is being prepared.
Issues: Hurst will have a time slot for presentation at ICM4; offline discussion will be made at ICM4.

Task (8): Time-lag correction issues (including intercomparisons) for RS92 RH measurements
Main Contact: Fujiwara, Kats, Miloshevich Due Date: End of 2011
Status: Not yet started
Milestone: Various time-lag correction schemes will be compared to create the best correction scheme for GRUAN
Progress: Not yet started
Issues: This task is considered to be included/merged in the task on RS92 data product document (see Task (3)). We also need representatives for the GRUAN correction and the Vaisala correction to make the RH intercomparison to be complete. (Note: For future reference, the comparison method will need to consider whether the time-lag correction is done before or after other corrections such as T and RH radiation corrections.)