

GRUAN ICM-6 actions status and IP actions

Peter Thorne

ICM-6 actions review

- Total actions:
- Completed: IIII III
- Superseded: III
- Partially completed: IIII IIII IIII IIII
- Not started / in doubt: IIII

- Action: GRUAN report synthesizing the four white papers developed through the GRUAN network expansion workshop. Circulation of 1st draft to author team
- Owner: Greg Bodeker
- Due: April 2014
- Status: Report is now published. Action closed

- Action: Co-chairs to provide desired metrics on data usage / impact metrics to extent possible
- Owner: WG Chairs
- Due: May 2014
- Status: Delivered to Lead Centre. Action closed

- Action: Responses to requests from sites for letters from WG-GRUAN / GCOS to be actioned. Letters to be drafted and sent. Letters requested in site reports or at ICM-6
- Owner: WG-GRUAN chairs, Lead Centre, GCOS Secretariat
- Due: May 2014
- Status: Only Potenza followed up. Letter drafted twice but never sent from secretariat. Superseded?

- Action: A document detailing the operational challenges related to multi-payload soundings submitted either to peer reviewed literature (first choice) or to WG-GRUAN for review as a GRUAN report
- Owner: TT radiosondes
- Due: June 2014
- Status: In progress (a draft ready for being circulated within an expanded co-author list, 2 Sep 2014). Date changed from 30-June-14 to 31-Dec-14

- Action: Prepare plan for GRUAN launch activity at WMO congress and report plan to GRUAN community at ICM-7
- Owner: WG-GRUAN, Lead Centre, Lars Peter Riishojgaard
- Due: June 2014
- Status: In progress. Needs a further redraft still. Greg is lead. See later talk.

- Action: Define necessary steps to undertake transition from RS-92 to RS-41.
- Owner: TT-Sites, Lead Centre, HMEI, WIGOS project officer, GCOS Implementation Manager
- Due: June 2014
- Status: In progress. Talk scheduled at ICM-7

- Action: TT and WG terms of reference to be revised by chairs and submitted to AOPC for approval to incl. inter-alia discussion around scientific coordinator role
- Owner: TT and WG Chairs
- Due: June 2014
- Status: Done, adopted and posted. Action closed

- Action: To close the feedback loop for instrument and processing performance, TT sites to summarize how they wish to receive near real-time feedback.
- Owner: TT sites
- Due: June 2014
- Status: Done. Action closed.

- Action: Establish closer working ties between tropical GRUAN sites and SHADOZ sites - short report on how to establish greater linkages
- Owner: Greg Bodeker
- Due: June 2014
- Status: Done. Action closed.

- Action: Prepare public outreach material. This includes updating the GRUAN brochure
- Owner: Greg Bodeker
- Due: June 2014
- Status: Brochure draft under review

- Action: Submitted BAMS article on the next steps in GRUAN including network expansion and some highlights. Greg Bodeker to contact BAMS editor. Paper to be submitted to ensure publication in time for WMO congress
- Owner: WG-GRUAN, Greg Bodeker
- Due: Sept 2014
- Status: Paper submitted. Action closed.

- Action: TD omnibus of all things RS-92. Lead Centre to send everything to Bodeker Scientific for collation and editing. Gaps to be identified and Lead Centre will try to address the gaps. Greg Bodeker and Peter Thorne to determine how to accommodate updates.
- Owner: Greg Bodeker, Lead Centre
- Due: Sept 2014
- Status: Superseded. Discussions with Lead Centre led to proposal to instead have a radiosonde omnibus with per instrument technical annexes. To be discussed at ICM-7. How to accommodate updates has been addressed and published as TN#2

- Action: Technical documentation completed for frostpoint hygrometer measurements
- Owner: Lead Centre, Task Team radiosondes
- Due: Sept 2014
- Status: Partially met. Talk will update on progress and work still required. Propose that with Holger's move this be transferred to sole responsibility of TT radiosondes

- Action: A short GRUAN report detailing the process implemented to provide feedback of observation minus background fields to the GRUAN Lead Centre
- Owner: David Tan and Lead Centre
- Due: Oct 2014
- Status: well-advanced. There has been a lot of (technical) work at Ecmwf to prepare and serve the feedback data via a user-friendly web-interface (with batch access also possible, e.g. via python scripts). In Q1/Q2 of 2015 I would like Lead Centre to start experimenting with the accessing (pulling) the feedback. Will they have resources to do so? There will also be a learning curve for how to analyse and interpret the results - will complement Gaia-clim. Request reset the due date to Jun 2015

- Action: Sites reporting either TEMP or not reporting on the GTS / WIS to work with Lead Centre, WIGOS and HMEI to ensure GRUAN sonde launches are sent as 2s resolution BUFR. Briefly report progress and issues to ICM-7. Data flowing through WIS as BUFR high vertical resolution for as many sites as possible.
- Owner: Lead Centre, TT sites, WIGOS project office, GCOS Implementation Manager, HMEI
- Due: Oct 2014
- Status: Some progress. Details of how to start this process have been shared with LC.

- Action: An assessment of the advantages and disadvantages of manual vs. autosonde launches written up and submitted to the peer reviewed literature
- Owner: Task Team Radiosondes
- Due: Nov 2014
- Status: Open

- Action: Each site to produce a proposal of how they will document by photos seasonal and long term site changes (regular e.g. quarterly from stated locations / daily webcam shotsetc. as appropriate to their specific case, and ‘on change’). Proposals collated and documented for WG-GRUAN review and feedback
- Owner: Task Team Sites
- Due: Nov 2014
- Status: Generic proposal received from TT sites chairs. Specific plans still required from each site.

- Action: Technical documentation for GRUAN Lidar stream (Lidar Guide) submitted for review by WG-GRUAN
- Owner: Task Team Ancillary Measurements
- Due: Dec 2014
- Status: In progress

- Action: Microwave radiometer technical documentation (Microwave Guide) submitted for review by WG-GRUAN
- Owner: Task Team Ancillary Measurements
- Due: Dec 2014
- Status: In progress. Task under GAIA-CLIM WP2. Reset date to 2016

- Action: FTIR technical documentation (FTIR Guide) submitted for review by WG-GRUAN
- Owner: Task Team Ancillary Measurements
- Due: Dec 2014
- Status: In progress. Task under GAIA-CLIM WP2. Reset date to 2016

- Action: Manuscript(s) detailing operational considerations for controlled descents for frostpoint hygrometers submitted to a journal or detailed in a GRUAN Report
- Owner: Task Team radiosondes
- Due: Dec 2014
- Status: In progress. Change date to June 2015

- Action: Manuscript describing the derivation of uncertainty estimates for GNSS-PW measurements submitted to a peer reviewed journal
- Owner: Task Team GNSS-PW
- Due: Dec 2014
- Status: In progress. Funding secured to complete this in 2015. Move to Sept 2015

- Action: In collaboration with partner networks, assess the relevance and tractability of the full suite of remaining GRUAN target variables defined in GCOS112 in the context of measurement capabilities and measurement programmes underway in partner networks. GRUAN report identifying potential target data streams and partners
- Owner: WG-GRUAN Chairs, Lead Centre, TT ancillary measurements, TT site representatives
- Due: Dec 2014
- Status: Not done. Resolving other actions more important.

- Action: Develop frostpoint hygrometer data products. Guidance needs to account for operation of CFH, NOAA FPH. Paper submitted to a peer reviewed journal.
- Owner: Lead Centre, Task Team Radiosondes
- Due: Dec 2014
- Status: Partially met. Independent ground check developed for CFH but final analysis and write up still pending. Move to Sept 2015. With Holger's move suggest this comes under sole auspices TT radiosondes

- Action: Develop a GRUAN ozonesonde data product in consultation with NDACC and GAW. Completed technical documents
- Owner: Greg Bodeker, Lead Centre, Herman Smit
- Due: Jan 2015
- Status: No progress. Need to find a new workable solution. Greg has been working with Anne Thompson to find someone available to assist. Funding is available.

- Action: Lead Centre to report on data usage / impact metrics (following recommendations from #2) to extent possible
- Owner: Lead Centre
- Due: Mar 2015
- Status: LC has started to compile a list of GRUAN-related publications/presentations. Listed authors: LC, GB, PT, Calbet. Will send a chaser for more input
- This may now be green Ruud?

- Action: Revise the RS-92 data stream based upon feedback received - revised version 3 release including qc flags vectors and data in different vectors (good, questionable, missing), including implementation of performance feedback.
- Owner: Lead Centre, Task Team Radiosondes
- Due: Mar 2015
- Status: Partially met. Current v3 candidate will be discussed in detail at ICM-7

- Action: Perform demonstration study of SASBE at time of satellite overpass based on a realistic set of assumptions about the availability and collocation of sondes and ancillary measurements. Focus is on temperature and water vapour
- Owner: Task Team ancillary measurements
- Due: Mar 2015
- Status: In progress

- Action: Instigate a user review group to meet on a biennial basis. User review group terms of reference drafted and agreed to by WG-GRUAN for subsequent consideration by AOPC
- Owner: WG Chairs
- Due: Mar 15
- Status: AOPC requested this be stayed so it has been closed as an item of business.

- Action: Develop GRUAN data product and processing stream for Modem radiosondes. First draft of technical document describing processing streams for all Modem radiosondes
- Owner: CNRS, Lead Centre, TT radiosondes
- Due: Mar 2015
- Status: In progress, see later talk

- Action: Determine the status of BSRN and reengage with GRUAN. Report back to WG on BSRN status and whether their measurements are reference quality and if not what we would need to do extra. Invite someone to ICM-7 from BSRN. GRUAN representation at BSRN meeting in September
- Owner: Richard Querel
- Due: Mar 2015
- Status: There was an email exchange but nothing substantive resulted. One action arising from it through conversation with Tom is to make a detailed comparison of the current networks to better understand them. i.e. Some use identical hardware and processing pipelines (TCCON), whereas NDACC is a mixed bag relative to that. Knowing more about how the networks operate, standardise, etc., will help GRUAN interact with them.

- Action: Develop an advanced 'template document' for non-RS92 radiosondes for later distribution to specific users
- Owner: Lead Centre, Task Team radiosondes
- Due: Mar 2015
- Status: Superseded by the suggestion for radiosonde omnibus with per instrument technical annexes. Retired.

- Action: Develop a GRUAN GNSS-PW product. Technical documentation completed for GNSSPW measurements (GNSS-PW Guide)
- Owner: Task Team GNSS-PW
- Due: Mar 2015
- Status: In progress

- Action: Pedagogical paper on appropriate propagation of uncertainties and generic code – paper draft available for comment
- Owner: Greg Bodeker
- Due: Mar 2015
- Status: Paper submitted to AMT. Action closed

- Action: Reports from WG and GRUAN community members on efforts to further contributory site set. Single page write ups for each site by selected GRUAN leads at ICM-7 (list of sites and contact points in main report) and also reports on phone calls
- Owner: WG-GRUAN, Lead Centre, ICM-6 participants
- Due: Mar 2015
- Status: Partially met pending receipt of written reports and their presentation

IP

- Before going through IP plant an idea (will circle back)
- IP is increasingly dated (even though only 2 years old)
- Things have happened since (GAIA-CLIM etc.)
- New Lead Centre group need to have co-ownership
- So ... should we refresh the IP? Do we NEED an IP?

IP 2015-2016 items

- Develop a GRUAN ozonesonde data product
- Define the ozonesonde data collection client requirement, identify the central data processing facility, and initiate data flow
- Define the GNSSPW data collection client requirement, identify the central data processing facility, and initiate data flow
- Finalize the outputs resulting from the GRUAN Network Expansion Workshop. [Chase sites]

- Define the new radiosonde data streams data collection client requirement, identify the central data processing facility, and initiate data flow.
- Define the microwave radiometer data collection client requirement, identify the central data processing facility, and initiate data flow.
- Extend trend sensitivity studies to stratospheric water vapour

- Define the FTIR data collection client requirement, identify the central data processing facility, and initiate data flow.
- Define the Lidar data collection client requirement, identify the central data processing facility, and initiate data flow.
- Define the Frostpoint hygrometer data collection client requirement, identify the central data processing facility, and initiate data flow.

- Process all current and interim new applicant sites through the GRUAN certification process
- Organize side Event on GRUAN at 2015 WMO Congress.
- Determine how best to work with NDACC and GAW to bring in measurements of aerosol properties into GRUAN.
- Periodic science review of network expansion priorities and progress.

Circling back

- My view is we make little practical use of IP, we pay more attention to annual work plans that allow flexibility in planning
- But, perhaps IP gives credibility / is useful to some
- If we want to keep having an IP I believe we should refresh to:
 1. Reflect current status which is distinct from what current IP assumed it would be
 2. Reflect various funded efforts
 3. Give new Hd LC (and LC staff) ownership of the plan.
 4. Perhaps less specific more programmatic?