

Wrap up session

Peter Thorne (in a flameproof
jacket)

Proposed action owners in **BOLD**

Session 2

- Review of work plan actions in GCOS-121 not covered elsewhere.
- 1. Evaluate radiation corrections.
- 8. QC/QA procedures.
- 12. Siting options -2010

Session 2

- GRUAN Implementation Plan
- Felt to be useful not just in answering framework convention demands.
- June 09 realistic for a high level document.
- 4-6 member writing team from meeting to be identified, and doc reviewed by whole **WG** and lead centre. (John D ...)

Initial thoughts as to IP items (non-exhaustive. Credit: Dian)

- Data dissemination
- Site / instrument certification
- Manual
- Site selection (agreements with other networks?)
- Formal launch event
- Learning lessons from sites thus far
- Instigation of expert teams
- Collocation issue resolution
- Observing strategy
- Actions to ensure long-term institutional support

Session 3

- Recognise that we are not starting from scratch. Need to learn lessons from candidate sites experience.
- Possible action: Analysis of candidate station series with aim of learning lessons about what has / hasn't worked. Eventually published in peer-reviewed literature (JAOT?). Needs coordinator and buy in from writing team and sites. ARM has someone looking at timeseries behaviour. **WG**

What is a GRUAN measurement? (1)

- Confusion
- A benchmark measurement would be known absolutely (e.g. Keeling curve) and be firmly traceable to SI standards.
- Reference quality is an observation with a comprehensive uncertainty estimate attached. Uncertainty traced to absolute or relative standards. Eventual aim is to minimise the uncertainty.

What is a GRUAN measurement? (2)

- Understand the instrument before deployment
- Undertake rigorous in-the-field QC/QA
- Calculate a comprehensive error budget estimate
- Compare to an independent measurement and its comprehensive error budget
- Instigate expert teams to audit the process
- (Reference is an observation with a comprehensive uncertainty estimate attached! Uncertainty traced to absolute or relative standards)

What is a GRUAN measurement? (3)

- Flesh out slide (2) without re-inventing the wheel to define a procedure for acceptance of any observation as a GRUAN observation – use current protocols/resources wherever possible [Who? By when?]
- Concentrate on in-situ obs as a case study [**LC**, By when?]
- Establish a process to manage change and optimize intercomparisons [session at ICM-2; preparation of a position paper, **LC**, WG, sites]
- (Reference is an observation with a comprehensive uncertainty estimate attached! Uncertainty traced to absolute or relative standards)

Session 4: Site reports

- Recognise not enough time this time around, will be more time set aside in next ICM.
- Establish and maintain an inventory of sites and their capabilities, using a common template [**LC**; Oct 2009?]
- Communication within GRUAN community:
 - Address immediate site questions [**LC**, with help from Sec/WG; late April 2009]
 - Instigate efficient open communication platform (website?, wiki?, FAQ?) [**LC**, WG, stations; position paper by ICM-2]
- Importance of addressing the collocation issue before network expansion; position paper for ICM-2, any volunteers?

Session 5: Data dissemination

- Lead Centre model covers things well – hitting all the right points. Needs substantial work on details.
- Need to formalise the links to ARM and NCDC to work out most optimal cost-effective way forwards. SPARC / BADC not considered thus far as partners. [**LC**, WG]
- More formal plan that links the efforts needed – final working proposal to be considered at ICM-2 (longer session!). [**LC**, ARM, NCDC, WG, stations?]

Session 6: Raobs intercomparison

- Some lead centre staff and technically competent members of WG to try to partake in 2010 intercomparison (self-funded) [**WG**, List August 2009]
- Formal involvement in management of process. **Holger** proposed.
- Need to foster participation of research quality sondes. [**WG**, LC]
- Joint expert team on analysis required. [**WG** to nominate members by Sep 2009]

Session 7: Manual of operations

- Adopt skeleton (**everyone**, now)
- **LC**, WMO (WIGOS-PP resource?), WG, sites to perform gap analysis on existing documentation. [ICM-2; summary document -> session]

WIGOS-PP

- Agreement that we should scope GRUAN becoming a WIGOS-PP
- Tie to development of IP which we need to do anyway. Submit all or part of this IP to be a WIGOS-PP in June 09, being mindful to minimise chance of fail and maximise benefits [Decision: **WG**, LC]

Next meeting

- 3 days felt to be too short? Propose 4 days?
- Hosted by either Payerne (Switzerland) or WMO Geneva, with site visit to Payerne
- Date: 22-25 February or 1-4 March 2010
- Standing meeting organisers: WG chair, GCOS sec, Head LC, site nominee