

WMO/IOC/UNEP/ICSU GLOBAL CLIMATE OBSERVING SYSTEM (GCOS)

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Session 5

15th GRUAN Implementation Coordination Meeting (ICM-15) Bern 11 March - 15 March 2024

Task Team Progress Report for February 2024 – Sites

(Submitted by Richard Querel and Marion Maturilli)

Summary and Purpose of this Document

Progress report from the task team on Sites Intercommunication and Reporting.

Task Team Structure

TT-Sites Members (as of 2024-02-02)

From https://www.gruan.org/network/task-teams/tt-sites

Code	Name	Contact
BEL	Beltsville, USA	Belay B. Demoz
BOU	Boulder, USA	Elizabeth Asher
CAB	Cabauw, Netherlands	Arnoud Apituley
DLG	Dolgoprudny, Russia	Nadeschda Krestyanikova
НКО	Hong Kong, China	Jason Lam
LAU	Lauder, New Zealand	Richard Querel (co-chair)
LIN	Lindenberg, Germany	Ruud Dirksen
MTS	Minamitorishima, Japan	HISAMITSU Junji
NYA	Ny-Ålesund, Norway	Marion Maturilli (co-chair)
PAY	Payerne, Switzerland	Gianni Martucci
РМО	Paramaribo, Suriname	Ankie Piters
РОТ	Potenza, Italy	Marco Rosoldi
REU	Réunion Island, France	Stephanie Evan
ROS	Ross Island, Antarctica (NZ, US)	Richard Querel (co-chair)
SNG	Singapore	Gavin Yeap
SOD	Sodankyl, Finland	Rigel Kivi
SYO	Syowa, Antarctica (JP)	IJIMA Osamu
ТАТ	Tateno, Japan	KAWAGUCHI Toshiyuki
TEN	Tenerife, Spain	Miguel Hernndez Martínez de la Peña
TRP	Trappes Palaiseau, France	Jean-Charles Dupont
XIL	Xilinhot, China	Luo Hao Wen
	ARM Sites, USA	Evan Keeler
	Australian sites	Andrew Winchester
GVN	Neumayer, Antarctica (DE)	Holger Schmithüsen
	Dakar, Senegal	Seydi Ababacar Ndiaye

Progress on the main tasks

(The task list is from "ANNEX 3: Agreed ICM-14 Actions" of the GCOS 250 report on ICM-14, https://www.gruan.org/documentation/gcos-wmo)

Task HP2

HP2: R23 Replacement: (a) By end of December 2022 check with manufacturers for availability of test instruments (b) Test flights with dry ice / ethanol CFH instruments at a midlatitude site. (BOU/LIN) (c) Test flights with dry ice / ethanol CFH instruments at a tropical site. (REU/Costa Rica) (d) Test flights with dry ice / ethanol CFH instruments at a high-latitude site. (SOD) (e) Report at ICM15

Progress & Issues: A telecon was organized with sites to discuss their progress with non-R23 FPH/CFH flights. Progress is being made testing the alternative options. Lindenberg have been flying the Skydew instrument. Ethanol+dry ice FPH & LN2 CFH flight tests have been performed at tropical and midlatitude locations.

Task HP3

HP3: Standard Humidity Chamber (SHC): Submit paper to justify the use of the SHC in terms of the data quality and the benefits and including need for standardisation of operating procedures. Complete TN to describe procedural requirements (e.g. operational procedure; quality of the applied references in the SHC).

Progress & Issues: The LC are leading the paper writing effort. An outline is to be presented at ICM15. Technical note and guidance for operators will be in separate documents.

Task A7

A7: Ozonesonde GDP progression: Standardise ground checks, pump efficiency measurement checks, continue on GRUAN TD and processing algorithm.

Progress & Issues: Ongoing discussions with Holger on this. The aim being to define a quantitative ECC ground check to help identify potential biases.

Task B1

B1: RS92-RS41 Parallel soundings database augmentation with ancillary data: Technical Note for sites with guidance revised by end of Jan 2023, reviewed by sites by end of April, published summer 2023, and then initial submissions by ICM-15.

Progress & Issues: TT Sites has provided feedback to the Technical Note in 2022. In summer 2023, a final draft was sent to all GRUAN site managers by David Smyth with the intention to have this version accepted unless further feedback was received.

Task B4

B4: GRUAN data usage hosting, serving and tracking: Lead Centre and Secretariat to continue to explore data hosting options that may enforce better citation, DOIs and data usage tracking.Progress & Issues: TT Sites has not been involved in related discussions since ICM-14.

Task B5

B5: Data policy for development versions of GDPs: Produce a Technical Note describing / formalizing a data policy for consideration and adoption by sites

Progress & Issues: TT Sites has not been involved in related discussions since ICM-14.

Task B6

B6: Silent stations Technical Note to be prepared on protocol to identify and engage with sites. Note prepared by March 2023, reviewed by TT sites by September 2023, fully adopted by ICM-15 and process initiated for longest standing silent sites

Progress & Issues: Does not involve entire TT Sites, but single stations in direct interaction with LC.

Task B7

B7: Resolve data reporting for sites unable to use RSlaunchclient: Ongoing discussions to find an acceptable technical solution that does not put too much onus on the Lead Centre on an ongoing basis.

Progress & Issues: Does not involve entire TT Sites, but single stations in direct interaction with LC.

Task B8

B5: GRUAN Sites: Sites certification and recertification which should be completed before/by the next ICM. (a) BOU, LAU, PAY, POT, SGP, SNG, SOD

Progress & Issues: TT Sites has contributed to the certification process in terms of review within the frame of WG GRUAN.

Further Items

At the last ICM, TT-Sites chaired a breakout discussion group on the use of Hydrogen v. Helium for filling balloons and giving guidance to sites transitioning from one gas to the other. SOPs and documentation were collated and can be provided to sites upon request.

A discussion about the EUMETSAT targeted, funded, radiosonde launches we also held. Sites were surveyed on their interest in participating and responses were collected about their estimated costs for launching balloons and any site-specific issues they might have at their locations (i.e. long lead time for getting additional consumables, no flexibility with launch times, etc.). Telecons were held over the year to continue this discussion with the LC, GRUAN Co-chairs, and representatives from GCOS and EUMETSAT.