

# **GNSS PW Task Team Progress Report for ICM-15**

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## The GNSS TT (as in February 2024)

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George Liu	Hong Kong Polytechnic University, HK
Olivier Bock	IGN, FR

# The GNSS TT has worked on topics listed on the GRUAN Master Action Item list re-scheduled after ICM-14:

## **A6 GNSS-PW data product serving (netcdf files)**

*GFZ to progress provision of a netCDF format version of the GNSS GDP*

The data converter is technically ready for GNSS GDP. The question (thus far) has been in negotiating and fixing technical requirements. A common practice in software development and implementation is to deliver a beta-product and starting a test phase for getting feedback from users' community. If necessary, minor changes will be made and delivered a final product v1.0. In course of time new (downwards compatible) versions can be delivered. The current status and outlook will be presented at the ICM-15. **Status: it should be closed**

## **B8 Metrological closure of GNSS-PW and radiosondes**

*For GRUAN sites that perform both GNSS-IWV measurements and radiosoundings, Analyse the comparison of the GRUAN data products (and their respective uncertainties) for these data streams to establish whether metrological closure is attained.*

A lot of practical work is done (before and after ICM-14) with joint forces from GFZ, LC, TUT, MetOffice, IGN. Claiming or defining a metrological closure between GNSS and RS PW needs additional scientific efforts. More detailed overview about the progress, outlook and supporting projects will be given in oral presentations by Galina Dick, Tzvetan Simeonov and Olivier Bock.

**Status: in progress**

# GRUAN GNSS data processing (as in February 2024):

## 1) Stations in routine processing:

<b>cbw1</b>	(Cabauw)
<b>ena0</b>	(ENAO, Graciosa)
<b>hubc</b>	(Beltsville)
<b>ldb2</b> and <b>lin0</b>	(Lindenberg)
<b>ldrz</b>	(Lauder)
<b>nya2</b>	(NyAlesund)
<b>paye</b>	(Payerne)
<b>sctb</b>	(Scott Base)
<b>sgpo</b>	(SGPO, Billings)
<b>sms1</b>	(Singapore) - GNSS receiver has been renamed starting from July 19, 2022 old name mss1
<b>soda + sodf</b>	(Sodankyla)
<b>tfeg</b>	(Tenerife)
<b>tskb</b>	(Tsukuba, for Tateno)
<b>utqi</b>	(Barrow)

## 2) Stations on the waiting list:

- \* Xilin Hot (**XIL**): no contact
- \* Paramaribo (**PMO**): GNSS hardware is transported by KLMI to Paramaribo by ship, GFZ will help to install GNSS as soon as hardware will arrive to Paramaribo.
- \* Dakar: no contact
- \* Hong Kong (**HKO**): Hong Kong Observatory plans to install GNSS. MarkusRamatschi is in contact with **HKO**.
  
- \* Potenza (**POT**): some issues with RINEX data flow
- \* Trappes/Palaiseau (**TRP**): no contact
- \* La Reunion (**REU**): GNSS will be in processing soon
- \* Australia: no data
- \* Dolgoprudnyj: no contact

# Plans, ideas, open issues, ...

Revising TT work (ToR under discussion, joint efforts on tasks at ICM action list)

Revising technical documentation (TD6)

Improvement of GNSS data flow and quality management overview (for GRUAN GNSS GDP users) – GNSS section on GRUAN web-page

Connections to related initiatives (C3S), International Association of Geodesy (IAG)

GNSS sites' maintenance (still actual). Not all (mostly none) GRUAN GNSS sites belong to national or continental geodetic networks -- they (potentially) miss regular technical surveillance. A lot, but not everything can be done remotely.

Who maintains or who should maintain GRUAN GNSS sites, is it or will it get regulated?

Thank you for your attention!