

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

Doc. 1.10 (16.VI.2021)

Session 1

13th GRUAN Implementation-Coordination Meeting (ICM-13)

Virtual

15 November - 19 November 2021

GRUAN Site Report for Neumayer

(Submitted by Lead Centre)

Summary and Purpose of this Document

Report from the GRUAN site Neumayer for the period January to December 2020.



GRUAN Site Report for Neumayer (GVN), 2020

Reported time range is Jan 2020 to Dec 2020 Created by the Lead Centre

Version from 2021-04-27

1 General GRUAN site information

| Object | Value |
|-----------------------|---|
| Station name | Neumayer |
| Unique GRUAN ID | GVN |
| Geographical position | -70.6500 °S, -8.2500 °W, 43.0 m |
| Operated by | AWI Alfred-Wegener-Institut für Polarforschung, part of: HELMHOLTZ Helmholtz-Gemeinschaft |
| Main contact | Schmithüsen, Holger |
| WMO no./name | 89002 NEUMAYER |
| Operators | currently 4, changes +0 / -0 |
| Sounding Site | 1 |

1.1 General information about GRUAN measurement systems

| System | Name | Type | Setups | Measurements |
|---------------|---------------------------------|---------------|--------|--------------|
| 0) (1) (20 0) | | 0 " 0" | | |
| GVN-RS-01 | Neumayer Radiosonde Launch Site | Sounding Site | 3 | 312 |

1.2 General comments from Lead Centre

No comments from Lead Centre.

2 System: Neumayer Radiosonde Launch Site (GVN-RS-01)

| Object | Value |
|-----------------------|--|
| System name | Neumayer Radiosonde Launch Site |
| Unique GRUAN ID | GVN-RS-01 |
| System type | Sounding Site (RS - Radiosonde) |
| Geographical position | -70.6500 °S, -8.2500 °W, 43.0 m |
| Operated by | AWI Alfred-Wegener-Institut für Polarforschung, part of: HELMHOLTZ Helmholtz-Gemeinschaft |
| Instrument contact | Schmithüsen, Holger |
| Started at | 1982-02-01 |
| Defined setups | 3 (ROUTINE, OZONE, DUAL) |
| Possible streams | ECC, RS41, RS92 |

2.1 Lead Centre comments

2.1.1 Change management

Regularly twin soundings were performed with Vaisala RS92-SGP and RS41-SGP until August 2020.

2.1.2 Dataflow

Sonde dataflow to the GRUAN LC is operational since March 2020.

Currently, the dataflow includes streams of the Vaisala RS41-SGP, RS92-SGP and ECC Ozone sonde. All launches are promptly submitted using the RsLaunchClient.

2.2 GRUAN data products

| | Product | Version | Soundings | Available | Distributed | |
|--------------------|--------------------|---------|-----------|-----------|-------------|--|
| | | | received | at LC | by NCEI | |
| 2.2. | 2.2.1 Stream: ECC | | | | | |
| | ECC | | 53 | 53 | | |
| 2.2. | 2.2.2 Stream: RS41 | | | | | |
| | RS41 | | 312 | 312 | | |
| | RS41-GCA | 001 | | 303 | | |
| | RS41-RAW | 001 | | 312 | | |
| | RS41-EDT | 001 | | 311 | | |
| | RS41-GDP-ALPHA | 003 | | 58 | | |
| | RS41-GDP-ALPHA | 004 | | 90 | | |
| | RS41-GDP-BETA | 001 | | 309 | | |
| | RS41-GDP-BETA | 002 | | 82 | | |
| 2.2.3 Stream: RS92 | | | | | | |
| | RS92 | | 27 | 27 | | |
| | RS92-INT | 001 | | 27 | | |
| | RS92-RAW | 002 | | 27 | | |
| | RS92-EDT | 001 | | 27 | | |
| | RS92-GDP | 002 | | 27 | | |

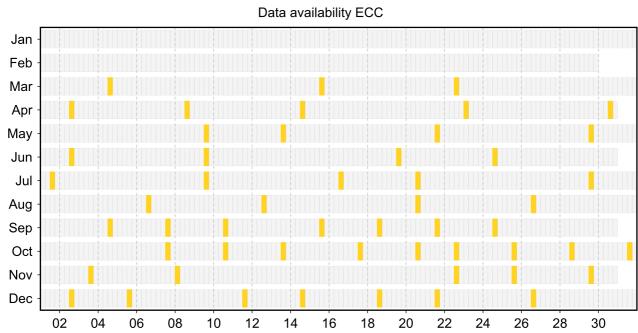
2.3 Availability of data products

Available (green): All steps of data processing have been successfully completed. The data product file is available at LC (e.g. files that didn't pass QA/QC or uncertified GRUAN data products) and/or at NCEI (a certified GRUAN data product file that did pass QA/QC).

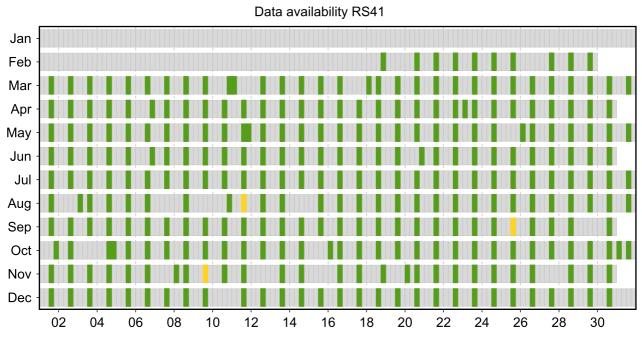
Unprocessed (yellow): The manufacturer-produced file with raw measurement data has been successfully converted into a GRUAN-standardized raw data format (NetCDF). The GRUAN data processing has not been performed or was aborted. Reasons for this may be a still missing GRUAN data processor or a processing-software error.

Original (red): The original, manufacturer-produced, raw data file is available (e.g. MWX data file) but was not converted into a GRUAN-standardized raw data format (NetCDF). Reasons for this may be missing data conversion software, a software error, or a corrupt data file.

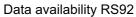
2.3.1 Stream: ECC

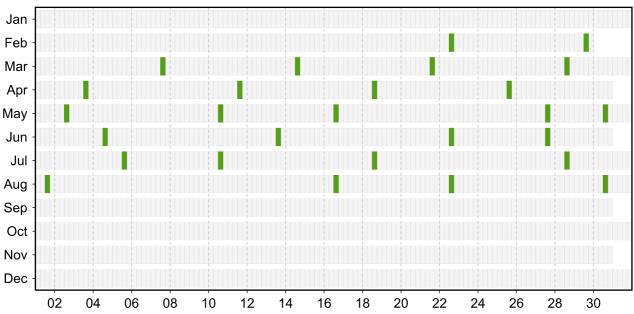


2.3.2 Stream: RS41



2.3.3 Stream: RS92





2.4 Instrument combinations of GVN-RS-01

Count Instrument combination

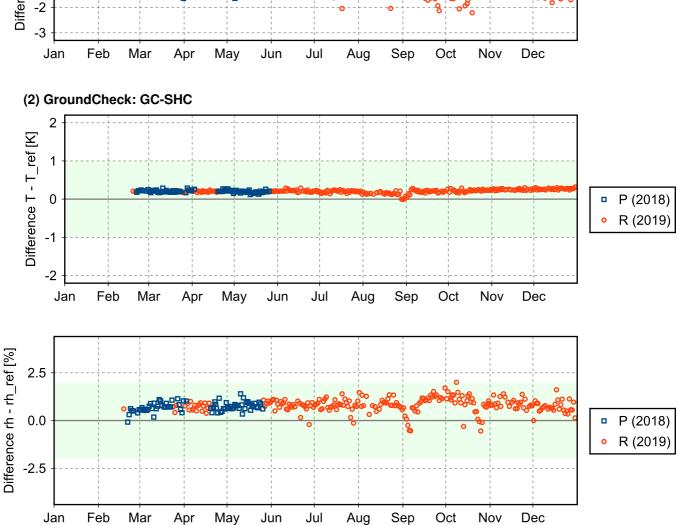
53 ECC, RS41

232 RS41

27 RS41, RS92

2.5 Instrument ground check

2.5.1 Stream: RS41



(3) GroundCheck: GC-SHELTER

Feb

Jan

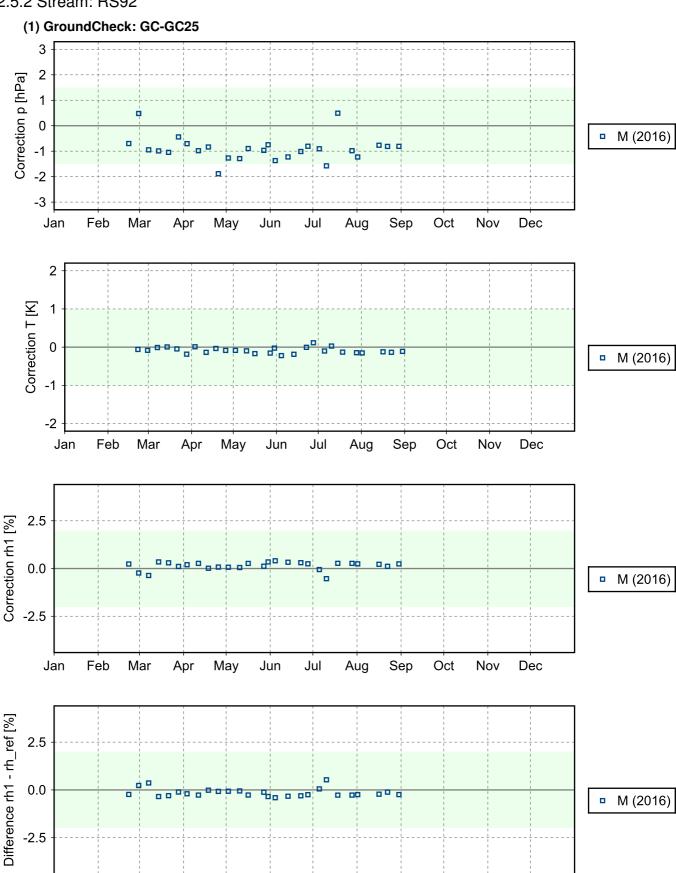
Mar

May

Apr

Jun

2.5.2 Stream: RS92



Aug

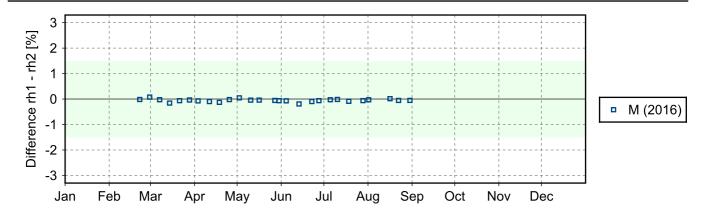
Sep

Oct

Dec

Nov

Jul



2.6 Measurement events

