



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

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**14th GRUAN Implementation-
Coordination Meeting (ICM-14)**

Session 5

La Réunion

28 November - 2 December 2022

GRUAN Site Report for Paramaribo

(Submitted by Ankie Piters)

Summary and Purpose of this Document

Report from the GRUAN site Paramaribo for the period January to December 2021.

Overview

Paramaribo is a GRUAN candidate station. Data submission was in preparation during 2021. Data submission started in October 2022. Routine data consist of ozonesonde+radiosonde measurements (once a week), and an additional radiosonde (once a week). A GNSS instrument installation is foreseen in the near future.

Change and change management

A Standard Humidity Chamber was purchased. Calibration with the SHC is performed since 20 December 2021. The website of the station has a new URL: <https://www.knmiprojects.nl/projects/paramaribo-atmospheric-observatory>

Resourcing

No resource challenges.

Operations

In 2021 15% of the ozonesonde+radiosonde combination did not reach 10 hPa, and 97% of the radiosondes. Larger balloons are planned for the radiosondes to improve these statistics. Due to logistic problems the launch frequency had to be reduced to 70% in 2021.

Covid-19

There were no Covid-related issues in 2021.

Site assessment and certification

Regular data submission started in October 2022. Next steps in the certification process can be taken.

GRUAN-related research

n/a

WG-GRUAN interface

n/a

Other archiving centers

NDACC, SHADOZ, WOUDC, BSRN

Participation in campaigns

n/a

Future plans

- Datastream will be further automated
- GNSS instrument will be installed (2022/2023)
- Historic data will be submitted



GRUAN Site Report for Paramaribo (PMO), 2021

Reported time range is Jan 2021 to Dec 2021

Created by the Lead Centre

Version from 2022-11-15

1 General GRUAN site information

Object	Value
Station name	Paramaribo
Unique GRUAN ID	PMO
Geographical position	5.8100 °N, -55.2100 °W, 4.0 m
Operated by	MDS Meteorologische Dienst Suriname
Main contact	Piters, Ankie
WMO no./name	0-20008-0-PMO Paramaribo
Operators	currently 0, changes +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Name	Type	Setups	Measurements
PMO-RS-01	Paramaribo Radiosonde Launch Site	Sounding Site	6	81

1.2 General comments from Lead Centre

No comments from Lead Centre.

2 System: Paramaribo Radiosonde Launch Site (PMO-RS-01)

Object	Value
System name	Paramaribo Radiosonde Launch Site
Unique GRUAN ID	PMO-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	5.8056 °N, -55.2144 °W, 3.0 m
Operated by	MDS Meteorologische Dienst Suriname
Instrument contact	Piters, Ankie
Started at	1999-09-02
Defined setups	6 (OZONE2, OZONE3, OZONE4, OZONE, SUNRISE, SUNSET)
Possible streams	ECC, RS41, RS92

2.1 Lead Centre comments

2.1.1 Dataflow

Operational dataflow of radiosonde measurement data to the GRUAN LC since September 2022. The dataflow includes radiosoundings with Vaisala RS41-SG and ECC Ozone. All data are transmitted using the GRUAN tool gtRsl.

2.2 GRUAN data products

Product	Version	Soundings received	Available at LC	Distributed by NCEI
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2.2.1 Stream: ECC

ECC		41	41	
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2.2.2 Stream: RS41

RS41		81	81	
RS41-RAW	001		81	
RS41-EDT	001		57	
RS41-GDP	001		79	

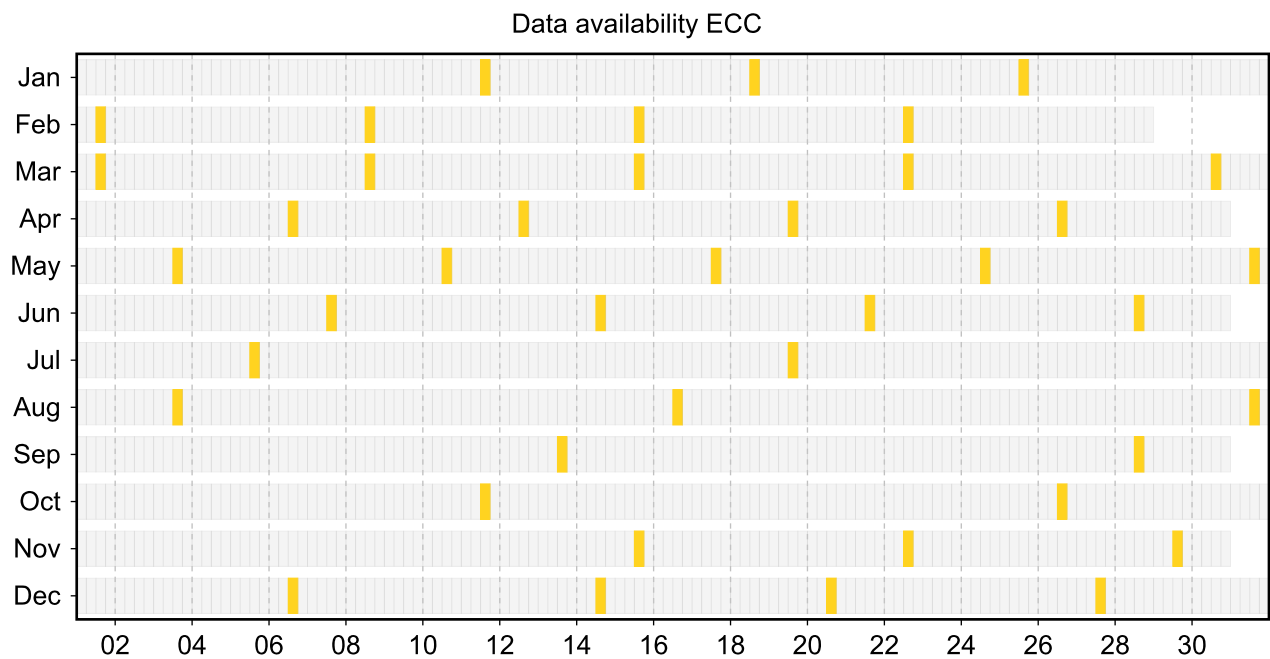
2.3 Availability of data products

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).

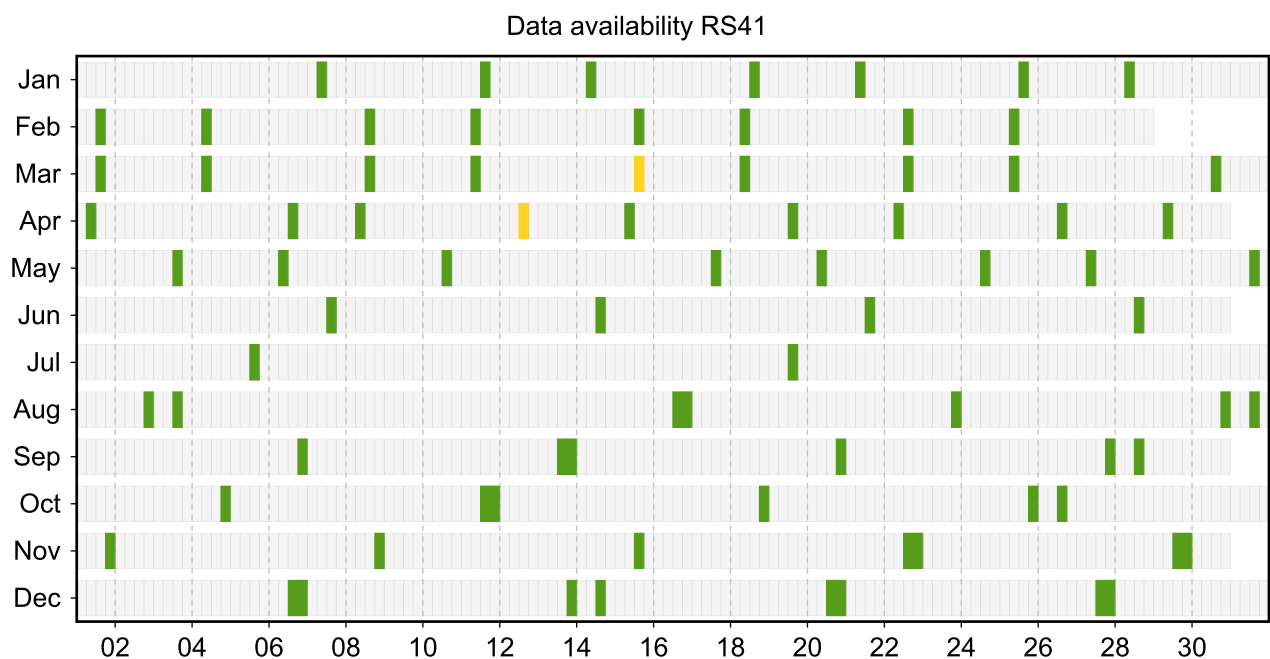
Unprocessed (yellow): The manufacturer-produced file with raw measurement data has been successfully converted into a GRUAN-standardized raw data format (NetCDF). The GRUAN data processing has not been performed or was aborted. Reasons for this may be a still missing GRUAN data processor or a processing-software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



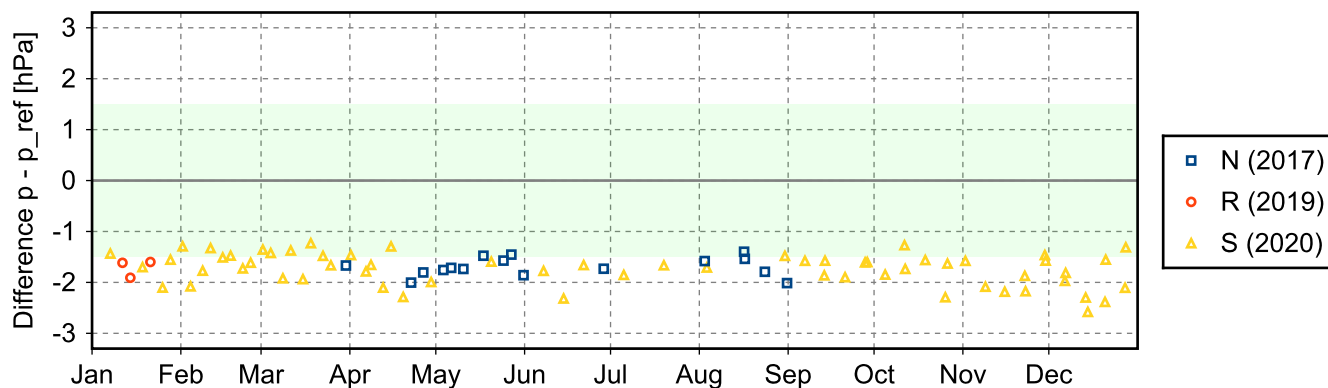
2.4 Instrument combinations of PMO-RS-01

Count	Instrument combination
41	ECC, RS41
40	RS41

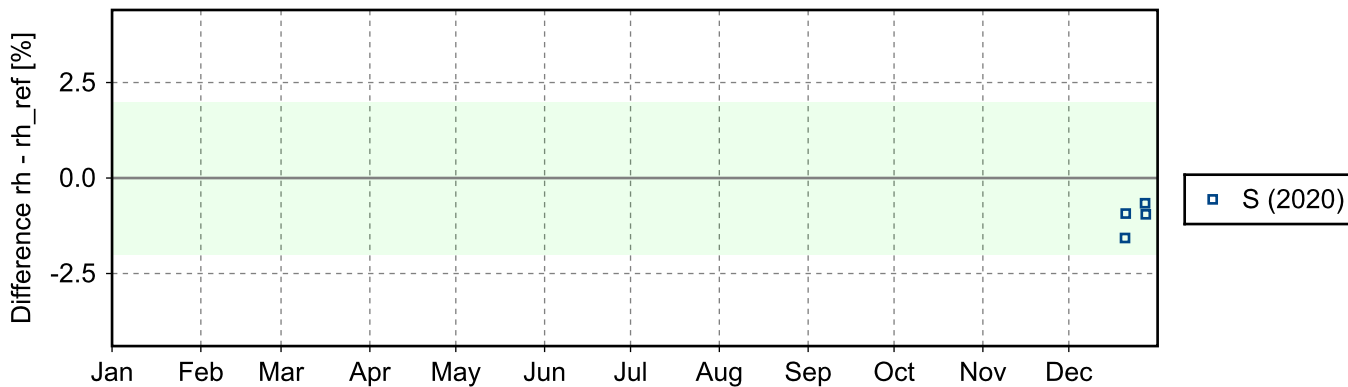
2.5 Instrument ground check

2.5.1 Stream: RS41

(1) GroundCheck: GC-RI41



(2) GroundCheck: GC-SHC



2.6 Measurement events

