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GLOBAL CLIMATE OBSERVING
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**11th GRUAN Implementation-
Coordination Meeting (ICM-11)**

Session 7

Singapore

20 - 24 May 2019

GRUAN Site Report for La Réunion

(Submitted by Stephanie Evan)

Summary and Purpose of this Document

Report from the GRUAN site La Réunion for the period January to December 2018.

Overview

Réunion Island has three measurement sites: the Maïdo observatory on the western part of the island (2160 m ASL), Gillot Airport (northern part of the island, 10 m ASL) and the University of La Réunion in Saint-Denis (northern part of the island, 80 m ASL). Although weekly ozonesondes (using M10 radiosonde and EN-SCI ECC ozonesonde) are launched from Gillot as part of SHADOZ and NDACC, and M10/CFH sondes are launched from the Maïdo Observatory on a campaign basis, the data has not being formally transmitted to GRUAN yet. Someone at Maïdo observatory will handle it in 2019.

Change and change management

No changes

Resourcing

At the moment, there is no long-term plan to cover the cost of monthly CFH launches in La Réunion. ACTRIS-FR (the french component of the European ACTRIS (Aerosols, Clouds, and Trace gases Research InfraStructure) research infrastructure has supported one CFH in 2018. The CONCIERTO ANR Project has financed 2 launches in 2018, and will finance 10 launches in 2019.

Operations

Currently we are not using the RSLaunchClient to submit the M10/ozone data from the weekly SHADOZ ozonesonde launch. We have to work with Le Sirta in Paris and the GRUAN Lead Centre to decide on the data stream for the M10 radiosonde. A standard humidity chamber has been received late 2018. The chamber will be used to test the M10 radiosondes, which are used for the weekly ozonesonde launch at Gillot.

Site assessment and certification

Most likely in 2020

GRUAN-related research

Stephanie Evan was awarded in July 2017 a Young Researcher grant by ANR (the french National Research Agency). The ANR JCJC CONCIERTO (CONvection, CIRus and tropical Tropopause layer

over the Indian Ocean) project aims to further our understanding of how deep convection and cirrus clouds affect the composition of the Tropical Tropopause Layer (TTL, 14-19km) in the Southern Hemisphere. The ANR CONCIERTO project has funded two balloon-sonde measurements of water vapor (CFH), aerosol (COBALD) and ozone in 2018. CONCIERTO has also funded 8 balloon-sonde launches at the Maïdo Observatory in 2019. The Lead Centre will collaborate in the CONCIERTO field campaign and 15 launches of RS92-RS41 and M10 are scheduled in January 2019 to improve the solar radiation correction on the RS41 sondes. ETH-Zürich will collaborate in the CONCIERTO campaign with the visit of Frank Wienhold.

WG-GRUAN interface

None

Items for ICM-11 plenary discussions

Status on the development of new water vapor instruments?

Other archiving centers

The data (M10+Ozone) from the weekly ozone sondes performed at Gillot (near the airport in Saint-Denis in the north of the island) are submitted to NDACC and SHADOZ. The water vapor data from the Raman Lidar at the Maïdo Observatory should be submitted to NDACC in the near-future.

Participation in campaigns

As described previously, the CONCIERTO campaign started in 2018 and will continue until March 2019. The GRUAN Lead Centre (visit of Susanne Meier) will collaborate in the field campaign and assist with RS92/RS41 and CFH launches. ETH-Zürich (visit of Frank Wienhold) will collaborate with the COBALD measurements, and assist with CFH launches. A scanning cloud radar from the University of Leeds will also be deployed during the CONCIERTO campaign.

Future plans



GRUAN Site Report for LaReunion (REU), 2018

Reported time range is Jan 2018 to Dec 2018

Created by the Lead Centre

Version from 2019-05-09

1 General GRUAN site information

Object	Value
Station name	LaReunion
Unique GRUAN ID	REU
Geographical position	-21.0797 °S, 55.3831 °E, 2165.0 m
Operated by	UNIV-REUNION Univers de La Réunion
Main contact	Evan, Stephanie
WMO no./name	-
Operators	currently 5, changes +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Name	Type	Setups	Measurements
REU-RS-01	Radiosonde Launch Site (Maïdo)	Sounding Site	4	0

1.2 General comments from Lead Centre

1.2.1 General

No operational dataflow to GRUAN LC so far.

2 System: Radiosonde Launch Site (Maïdo) (REU-RS-01)

Object	Value
System name	Radiosonde Launch Site (Maïdo)
Unique GRUAN ID	REU-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-21.0797 °S, 55.3831 °E, 2164.6 m
Operated by	UNIV-REUNION Univers de La Réunion
Instrument contact	Evan, Stephanie
Started at	-
Defined setups	4 (MALICCA-1, CFH, MORGANE, CONCIERTO)
Possible streams	CFH, COBALD, ECC, IMET-1, M10, RS41, RS92

2.1 Lead Centre comments

2.1.1 Dataflow

No operational radiosonde dataflow to GRUAN LC as yet.