



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

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

Session 5

La Réunion

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GRUAN Site Report for Macquarie Island

(Submitted by Andrew Winchester)

Summary and Purpose of this Document

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

Overview

Upper Air BUFR data not currently sent to GRUAN.

Change and change management

No changes

Resourcing

Frostpoint hygrometer soundings not currently funded.

Operations

Macquarie Island is not using the RsLaunchClient to submit data, as with all other Bureau sites. No frostpoint hygrometer soundings as they are not currently funded. MI performs 2 flights daily 1 x 800g flight at 23Z, and 1 x 500g flight at 11Z. There is also a weekly ozonesonde using 1200g balloons. Burst heights regularly reach 3-5hPa with 800g balloons, with an overall median of 16hPa. Currently a manual release system with no plans to change this in coming years.

Covid-19

No noticeable effects

Site assessment and certification

Unsure primarily due to problems with data transfer and use of RsLaunchClient. Bureau security will not permit the use of RsLaunchClient on our systems. We could provide the .mwx files for each sounding however unclear whether there is benefit in this, given there would be no attached meta data from the RsLaunchClient software.

GRUAN-related research

None

WG-GRUAN interface

None

Other archiving centres

GRUAN

Participation in campaigns

None

Future plans

Macquarie Island station rebuild is in planning stage however at this stage we do not know how or if this will affect the upper air program.



GRUAN Site Report for Macquarie Island (MAQ), 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	Macquarie Island
Unique GRUAN ID	MAQ
Geographical position	-54.4994 °S, 158.9369 °E, 6.0 m
Operated by	BOM Australian Bureau of Meteorology
Main contact	Tully, Matthew
WMO no./name	94998 MACQUARIE ISLAND
Operators	currently 0, changes +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Name	Type	Setups	Measurements
MAQ-RS-01	Macquarie Island radiosonde launch site	Sounding Site	2	0

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC has been established yet.

Older radiosonde data files are already stored at GRUAN LC.

1.2.2 Request

Due to the prolonged absence of data submission to the Lead Centre, this site is considered a silent site. Following the silent-site policy discussed at ICM-13, the site is requested to take the necessary steps to establish an operational data flow. In this regard, the establishment of an operational data stream for the radiosoundings has the highest priority, followed by data submission of GNSS water vapor measurements.

2 System: Macquarie Island radiosonde launch site (MAQ-RS-01)

Object	Value
System name	Macquarie Island radiosonde launch site
Unique GRUAN ID	MAQ-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-54.4994 °S, 158.9369 °E, 6.0 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Tully, Matthew
Started at	-
Defined setups	2 (ROUTINE, OZONE)
Possible streams	RS92

2.1 Lead Centre comments

2.1.1 Dataflow

No dataflow of radiosonde measurements to LC has been established yet.

Vaisala RS92 raw data files of routine flights from 2012 to 2017 are stored at GRUAN LC. These data will be imported to GRUAN archive in 2022.