



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

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**15th GRUAN Implementation-
Coordination Meeting (ICM-15)**

Session 5

Bern

11 March - 15 March 2024

GRUAN Site Report for Melbourne

(Submitted by Andrew Winchester)

Summary and Purpose of this Document

Report from the GRUAN site Melbourne for the period January 2022 to December 2023.

Overview

Melbourne Airport is currently performing 2 soundings a day at 23Z and 11Z, however due to internal security issues we are unable to provide the required data to GRUAN.

Change and change management

Vaisala RS41-SG radiosondes have been in use since 2019 with no foreseeable change, however we are likely to move to the RS41-SGE (biosonde) by the end of 2024. There are plans to automate the station by installing a Vaisala AS41 in 2024-25 at a new site, after which there will be no staff on station. There will be a comparison period of minimum 30 days between the two sites.

Resourcing

Station to be automated in 2024-25. Currently funded to release 2 radiosondes a day.

Operations

The 23Z and 11Z flights both use 350g balloons and reach heights 15-20 hPa regularly in summer, dropping to 20-40 hPa in winter months. The Bureau is unlikely to perform frostpoint hygrometer soundings due to both funding and resources (station automation). At this stage we are not using RsLaunchClient due to internal security restrictions.

Covid-19

NIL impact

Site assessment and certification

NA

GRUAN-related research

NIL

WG-GRUAN interface

NIL. I have forwarded requests to management to properly support the GRUAN network however at this stage we do not have the ability to submit data that meets GRUAN requirements.

Other archiving centres

GUAN

Participation in campaigns

NIL

Future plans

Automation of the balloon launches using AS41



GRUAN Site Report for Melbourne (MEL), 2022

Reported time range is Jan 2022 to Dec 2022

Created by the Lead Centre

Version from 2024-03-01

1 General GRUAN site information

Object	Value
Station name	Melbourne
Unique GRUAN ID	MEL
Geographical position	-37.6655 °S, 144.8321 °E, 113.4 m
Operated by	BOM Australian Bureau of Meteorology
Main contact	Winchester, Andrew
WMO no./name	94866 MELBOURNE AIRPORT
Operators	currently 0, changes +0 / -0
Sounding Site	2

1.1 General information about GRUAN measurement systems

System	Name	Type	Setups	Measurements
MEL-RS-01	Melbourne Airport radiosonde launch site	Sounding Site	1	0
MEL-RS-02	Broadmeadows radiosonde launch site	Sounding Site	1	0

1.2 General comments from Lead Centre

1.2.1 General

No operational data stream has been established yet.

1.2.2 Request

In view of the prolonged absence of data submission to the Lead Centre, the site is encouraged to take the necessary steps to establish an operational data flow. In this regard, establishing a data stream for the radiosoundings has priority, followed by data submission of GNSS water vapor measurements.

2 System: Melbourne Airport radiosonde launch site (MEL-RS-01)

Object	Value
System name	Melbourne Airport radiosonde launch site
Unique GRUAN ID	MEL-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-37.6655 °S, 144.8321 °E, 113.4 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Winchester, Andrew
Started at	-
Defined setups	1 (ROUTINE)
Possible streams	RS92

2.1 Lead Centre comments

2.1.1 Dataflow

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

3 System: Broadmeadows radiosonde launch site (MEL-RS-02)

Object	Value
System name	Broadmeadows radiosonde launch site
Unique GRUAN ID	MEL-RS-02
System type	Sounding Site (RS - Radiosonde)
Geographical position	-37.6914 °S, 144.9589 °E, 110.0 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Winchester, Andrew
Started at	-
Defined setups	1 (OZONE)
Possible streams	RS92

3.1 Lead Centre comments

3.1.1 Dataflow

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



GRUAN Site Report for Melbourne (MEL), 2023

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Created by the Lead Centre

Version from 2024-03-01

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1.1 General information about GRUAN measurement systems

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MEL-RS-02	Broadmeadows radiosonde launch site	Sounding Site	1	0

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Instrument contact	Winchester, Andrew
Started at	-
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Unique GRUAN ID	MEL-RS-02
System type	Sounding Site (RS - Radiosonde)
Geographical position	-37.6914 °S, 144.9589 °E, 110.0 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Winchester, Andrew
Started at	-
Defined setups	1 (OZONE)
Possible streams	RS92

3.1 Lead Centre comments

3.1.1 Dataflow

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