



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

Doc. 5.15  
(29.IX.2022)

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

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Session 5

La Réunion

28 November - 02 December 2022

## GRUAN Site Report for Melbourne

*(Submitted by Andrew Winchester)*

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### **Summary and Purpose of this Document**

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

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## **Overview**

Upper Air BUFR data not currently sent to GRUAN.

## **Change and change management**

No changes

## **Resourcing**

Frostpoint hygrometer soundings not currently funded.

## **Operations**

Melbourne Airport is not using the RsLaunchClient to submit data, as with all other Bureau sites. No frostpoint hygrometer soundings as they are not currently funded. The site launches two flights per day at 23Z, both with 350 g balloons. Burst heights very occasionally reach 10 hPa (350 g balloons), with a mean around 15.7 hPa. Currently a semi automated launching system (RBL Bureau design) which is planned to be replaced with a Vaisala AS41 in the next 2-4 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**

GUAN

## **Participation in campaigns**

None

## **Future plans**

Full automation of the station is planned to occur in 2-4 years, with an auto launcher (Vaisala AMBLS AS41) being installed at a soon to be selected site. Once this occurs there will be no possibility of frostpoint hygrometer soundings using the auto launcher, however they can be performed at nearby Broadmeadows site, where ozone soundings are currently performed.



# GRUAN Site Report for Melbourne (MEL), 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	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	Tully, Matthew
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 dataflow to GRUAN LC has been established yet.

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

<b>Object</b>	<b>Value</b>
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	Tully, Matthew
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)

<b>Object</b>	<b>Value</b>
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	Tully, Matthew
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.