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Coordination Meeting (ICM-9)**

Session 7

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GRUAN Site Report for Alice Springs, Davis, Darwin, Macquarie Island, Melbourne

(Submitted by Matt Tully)

Summary and Purpose of this Document

Report from the GRUAN site Alice Springs, Davis, Darwin, Macquarie Island, Melbourne for the period March 2016 to April 2017.



GRUAN Site Report for Alice Springs, Davis, Darwin, Macquarie Island, Melbourne (ALC, DVS, DAR, MAQ, MEL)

Reporting for the period March 2016 to April 2017

Date: 6-June-2017

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Overview

Upper Air programmes have continued at all five sites using the Vaisala RS92 radiosonde.

At present the RSLaunchClient is not being used.

The schedule of RS92 launches is currently twice a day (00Z and 12Z) at all sites except Alice Springs, which is now once a day (00Z) four days a week only. Some wind-only flights are also flown at all stations.

Weekly ozonesonde flights have continued at Melbourne and Macquarie Island, and weekly ozonesonde flights have resumed at Darwin since November 2016.

The Darwin TCCON FTIR instrument was relocated from the former ARM site (now closed) to the nearby Berrimah radar site.

Change and change management

A staged transition from the RS92 to RS41 radiosonde has now begun in the Australian upper-air network, however not yet at any of the candidate GRUAN sites. This transition will take place over the next 6-12 months. Darwin and Melbourne are currently scheduled for late 2017.

Resourcing

NIL

Operations

In September 2016 an announcement was made that the station base at Macquarie Island was to be closed. This decision was reversed a few days later by the Minister for the Environment, subsequently followed by the announcement of a new station (see below).

Site assessment and certification

No sites have yet been certified but discussions have commenced with the WG (in the expectation that the sites would not immediately be compliant).

GRUAN-related research

NIL

WG-GRUAN interface

It would be helpful if WG-GRUAN could send a letter of encouragement to the Australian PR thanking her for efforts to date and encouraging further progress (and attendance at ICMs!).

Items for ICM-9 plenary discussions

NIL

Future plans

As above, the transition from the RS92 to RS41 radiosonde is planned for the next 6-12 months at the five stations.

A series of comparison flights (dual soundings) is planned for the second half of 2017, at both Darwin (tropical) and Melbourne (mid-latitude).

It is hoped to commence monthly frost point hygrometer flights at two stations in 2018.

In the near future the Alice Springs station will be totally de-staffed, currently scheduled for 2018-19, following installation of an automated balloon launcher. It may be necessary to replace Alice Springs with Brisbane in the list of candidate GRUAN sites.

The Macquarie Island station is to be totally rebuilt over the next five years. It is expected that an automated balloon launcher will be installed at some point in the next few years, however this may well be in conjunction with a conventional balloon shed.



GRUAN Station Report for AliceSprings (ALC), 2016/17

Reported time range is Mar 2016 to Apr 2017

Created by the Lead Centre

Version from 2017-06-06

1 General GRUAN station information

Info	Value
Station name	AliceSprings
Unique GRUAN ID	ALC
Geographical position	-23.7951 °S, 133.8890 °E, 546.0 m
Operated by	BOM Australian Bureau of Meteorology
Main contact	Tully, Matthew
WMO no./name	94326 ALICE SPRINGS
Operators	current 0, change +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Type	Setups	Measurements	As scheduled
ALC-RS-01	Sounding Site	1	0	0.00 %

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC so far.

2 System: Alice Springs radiosonde launch site (ALC-RS-01)

Info	Value
System name	Alice Springs radiosonde launch site
Unique GRUAN ID	ALC-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-23.7951 °S, 133.8890 °E, 546.0 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 radiosonde dataflow to GRUAN LC as yet.



GRUAN Station Report for Darwin (DAR), 2016/17

Reported time range is Mar 2016 to Apr 2017

Created by the Lead Centre

Version from 2017-06-06

1 General GRUAN station information

Info	Value
Station name	Darwin
Unique GRUAN ID	DAR
Geographical position	-12.4300 °S, 130.8900 °E, 30.0 m
Operated by	BOM Australian Bureau of Meteorology
Main contact	Tully, Matthew
WMO no./name	94120 DARWIN
Operators	current 0, change +0 / -0
Sounding Site	1
GNSS	1

1.1 General information about GRUAN measurement systems

System	Type	Setups	Measurements	As scheduled
DAR-GN-01	GNSS	0	not operational	not scheduled
DAR-RS-01	Sounding Site	1	0	0.00 %

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC so far.

2 System: GNSS Site SA39 (DAR-GN-01)

Info	Value
System name	GNSS Site SA39
Unique GRUAN ID	DAR-GN-01
System type	GNSS (GN - GNSS)
Geographical position	-12.4246 °S, 130.8916 °E, 84.9 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Tully, Matthew
Started at	-
Defined setups	-
Possible streams	-

2.1 Lead Centre comments

2.1.1 Dataflow

No GNSS dataflow to GRUAN LC as yet.

3 System: Darwin radiosonde launch site (DAR-RS-01)

Info	Value
System name	Darwin radiosonde launch site
Unique GRUAN ID	DAR-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-12.4239 °S, 130.8925 °E, 30.4 m
Operated by	BOM Australian Bureau of Meteorology
Instrument contact	Tully, Matthew
Started at	-
Defined setups	1 (ROUTINE)
Possible streams	RS92

3.1 Lead Centre comments

3.1.1 Dataflow

No radiosonde dataflow to GRUAN LC as yet.



GRUAN Station Report for Davis (DVS), 2016/17

Reported time range is Mar 2016 to Apr 2017

Created by the Lead Centre

Version from 2017-06-06

1 General GRUAN station information

Info	Value
Station name	Davis
Unique GRUAN ID	DVS
Geographical position	-68.5744 °S, 77.9672 °E, 18.0 m
Operated by	BOM Australian Bureau of Meteorology
Main contact	Tully, Matthew
WMO no./name	89571 DAVIS
Operators	current 0, change +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Type	Setups	Measurements	As scheduled
DVS-RS-01	Sounding Site	2	0	0.00 %

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC so far.

2 System: Davis radiosonde launch site (DVS-RS-01)

Info	Value
System name	Davis radiosonde launch site
Unique GRUAN ID	DVS-RS-01
System type	Sounding Site (RS - Radiosonde)
Geographical position	-68.5744 °S, 77.9672 °E, 18.0 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 radiosonde dataflow to GRUAN LC as yet.



GRUAN Station Report for Macquarielsland (MAQ), 2016/17

Reported time range is Mar 2016 to Apr 2017

Created by the Lead Centre

Version from 2017-06-06

1 General GRUAN station information

Info	Value
Station name	Macquarielsland
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	current 0, change +0 / -0
Sounding Site	1

1.1 General information about GRUAN measurement systems

System	Type	Setups	Measurements	As scheduled
MAQ-RS-01	Sounding Site	2	0	0.00 %

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC so far.

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

Info	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 radiosonde dataflow to GRUAN LC as yet.



GRUAN Station Report for Melbourne (MEL), 2016/17

Reported time range is Mar 2016 to Apr 2017

Created by the Lead Centre

Version from 2017-06-06

1 General GRUAN station information

Info	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	current 0, change +0 / -0
Sounding Site	2

1.1 General information about GRUAN measurement systems

System	Type	Setups	Measurements	As scheduled
MEL-RS-01	Sounding Site	1	0	0.00 %
MEL-RS-02	Sounding Site	1	0	0.00 %

1.2 General comments from Lead Centre

1.2.1 General

No dataflow to GRUAN LC so far.

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

Info	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	Tully, Matthew
Started at	-
Defined setups	1 (ROUTINE)
Possible streams	RS92

2.1 Lead Centre comments

2.1.1 Dataflow

No radiosonde dataflow to GRUAN LC as yet.

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

Info	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	Tully, Matthew
Started at	-
Defined setups	1 (OZONE)
Possible streams	RS92

3.1 Lead Centre comments

3.1.1 Dataflow

No radiosonde dataflow to GRUAN LC as yet.