

Update of Tateno, Minamitorishima and Syowa

- Session 7, 25 April 2018 -

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(JMA)

Outline

Activity

1. Tateno
2. Minamitorishima
3. Syowa
4. New Sounding Central System

Concern

1. Comparison
2. Utilization

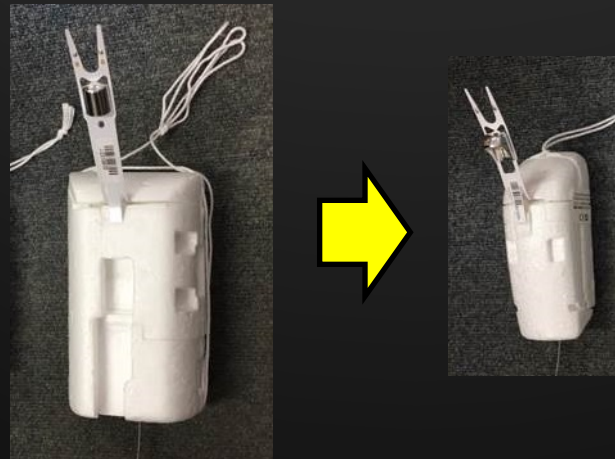
Tateno



Photo by Masami Iwabuchi

Changes

- Switch from RS-11G to iMS-100
(13 SEP. 2017)
- Start SHC for iMS-100
(13 SEP. 2017)



GPS soundings in Tateno

Routine

The yellow color is changes from ICM-9.

1. RS-11G (single) : twice a day (before 12 SEP. 2017)
2. **iMS-100 (single) : twice a day (after 13 SEP. 2017)**
3. RS92-SGP (single) : once a week (summer only)
4. Ozonesonde (single) : once a week

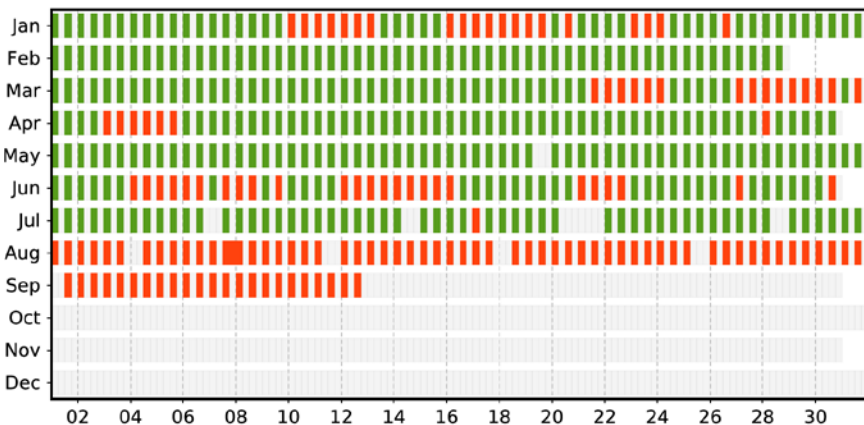
Comparison

1. RS92-SGP – RS-11G : once a week (before 23 June 2017)
2. **RS92-SGP – iMS-100 : once a week (after 15 Sep. 2017)**
3. RS-11G – iMS-100 : 60 times
4. **RS92-SGP – RS41-SG : 10 times**
5. **CFH – RS-11G – iMS-100 : twice a year**
6. **MTR – RS92-SGP – RS-11G – iMS-100 : twice a year**

GPS soundings in Tateno

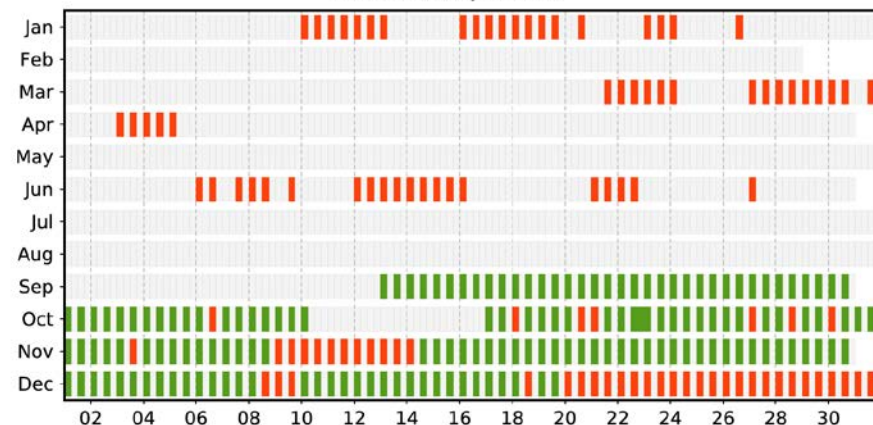
RS-11G

Data availability RS-11G



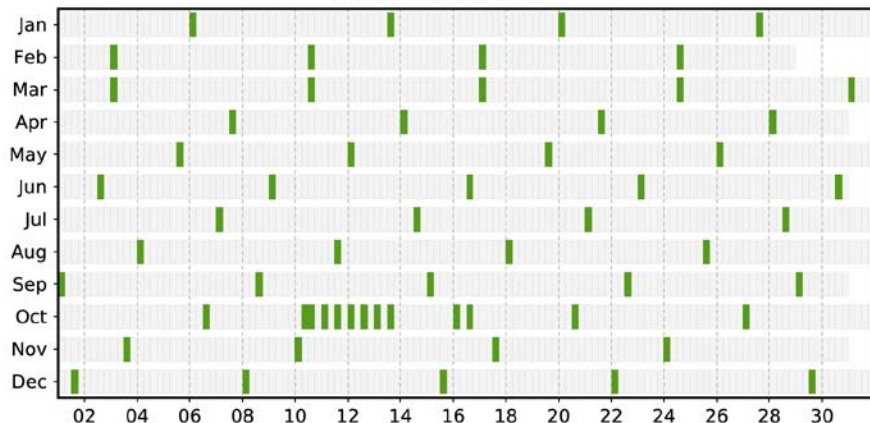
iMS-100

Data availability iMS-100



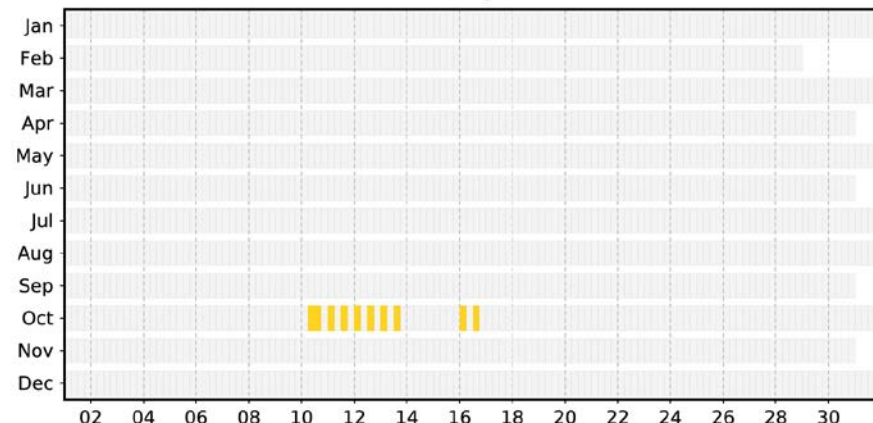
RS92-SGP

Data availability RS92



RS41-SG

Data availability RS41



Future plan

- Switch from RS92-SGP to RS41-SGP
(early 2019)
- Start sending ozonesonde data to GRUAN
(pending)
- Start sending RINEX data to GRUAN
(pending)

Minamitorishima

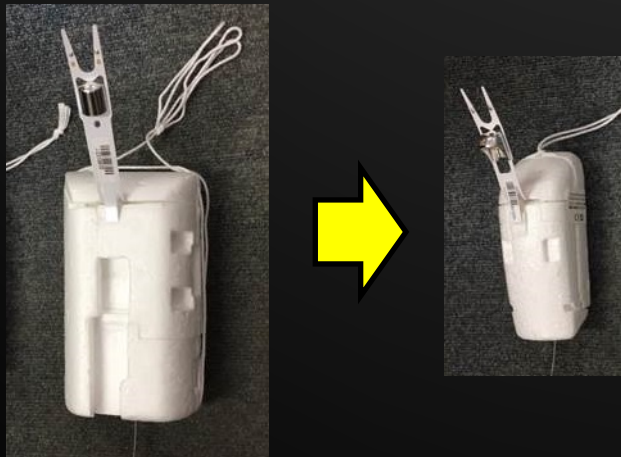


Photo by Masami Iwabuchi

Change

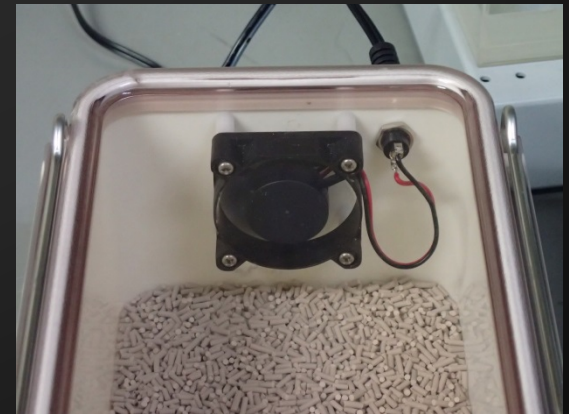
Minamitorishima

- Participation in GRUAN
(20 June 2017)
- Switch from RS-11G to iMS-100
(3 Sept. 2017)
- Start SHC for iMS-100
(1 Jan. 2018)

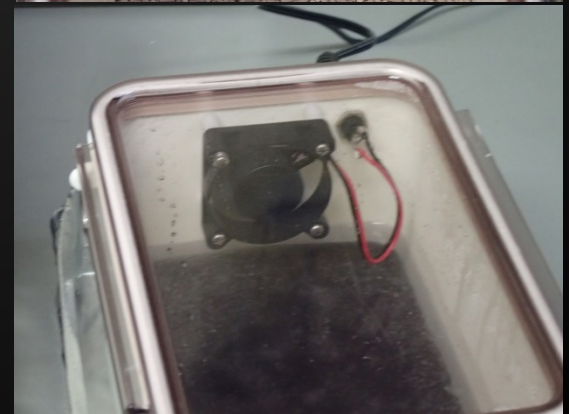


SHC:
0% and 100% humidity ground check

0%
molecular sieve



100(95~98)%
water



GPS soundings in Minamitorishima

The yellow color is changes from ICM-9.

Routine

1. RS-11G (single) : twice a day (before 2 Sept 2017)
2. **iMS-100 (single) : twice a day (after 3 Sept. 2017)**

Future plan

- Start sending gpssonde soundings data to GRUAN
(pending)
- Start sending RINEX data to GRUAN
(pending)

Syowa



Photo by Masami Iwabuchi

Change

Syowa

- Participation in GRUAN
(20 June 2017)
- Start SHC for RS-11G
(20 Mar. 2018)
- Switch from RS-06G to RS-11G
(20 Mar. 2018)



SHC:

0% and 100% humidity ground check



GPS soundings in Syowa

The yellow color is changes from ICM-9.

Routine

1. RS-06G (single) : twice a day (before 20 Mar. 2018)
2. **RS-11G (single) : twice a day (after 20 Mar. 2018)**
3. Ozonesonde (single) : once a week

Comparison

1. **CFH – RS-11G (Several times)**
2. **MTR – RS-11G (Several times)**

Future plan

- Start sending gpssonde soundings data to GRUAN
(early 2019)
- Start sending RINEX data to GRUAN
(pending)
- Start sending ozonesonde data to GRUAN
(pending)

New Central System

Aerological Observation in JMA

- 8 manual launch sites (Meisei iMS-100) (Tateno also uses RS92-SGP.)
- 4 auto launch sites (Vaisala RS41-SG) (with Additional Grand Check)
- 4 auto launch sites (Meisei iMS-100)
- 1 manual launch site (Meisei RS-11G) (Syowa)

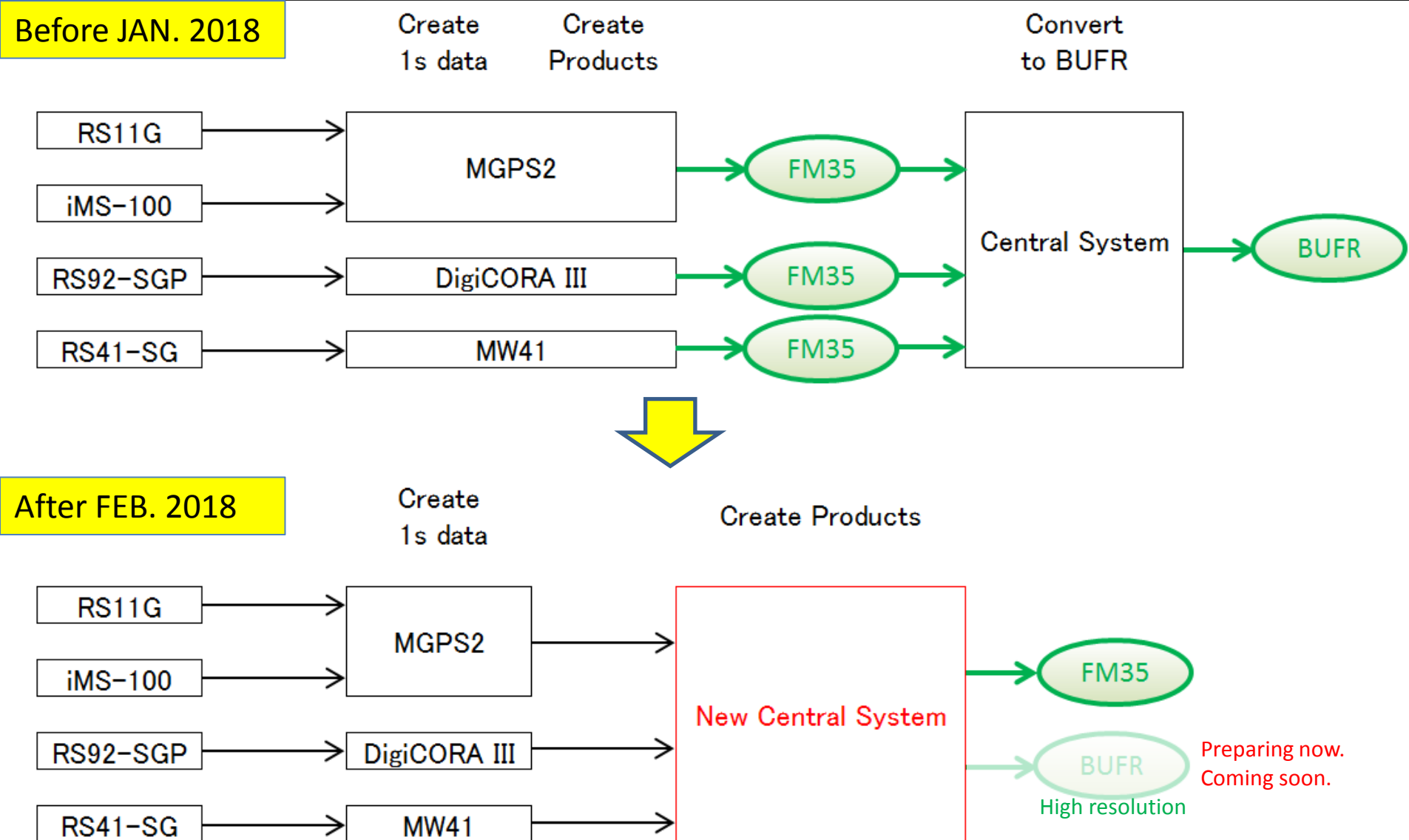


New Central System

The yellow color is changes from ICM-9.

Change

- JMA updated a sounding central system for 16 observatories. (except Syowa)



Future plan

- Start sending of high resolution BUFR (except Syowa) (mid 2018)
- Start sending of Descent-BUFR (except Syowa) (undecided)
- Start sending of High resolution BUFR including GRUAN headers (except Syowa) (undecided)

Concern

Comparison

1. What type and number of comparison are required at minimum as a GRUAN site? Is it clearly stated?
 - Due to cost problems, personnel issue and safety issue, it is required to minimize comparison.
2. RS-11G is used only in Syowa, but is there an obligation to conduct comparative observation of RS-11G?

Utilization

1. How to use the GRUAN data to people outside GRUAN community?
2. Should we do activities to increase users?