

The Meisei Radiosonde Appendix

(for RS-11G and iMS-100 radiosondes)



Vaisala RS92

RS-11G

iMS-100

Technical details of RS-11G and iMS-100 were reported at [ICM-7](#):

pres_307. The Meisei sonde data product - Progress and plans - (N. Kizu)

Nobuhiko Kizu (Observations Department, JMA, Japan)

Eriko Kobayashi and Syunsuke Hoshino

(Aerological Observatory (Tateno), JMA, Japan)

Takuji Sugidachi, Kensaku Shimizu, and Ryota Maeda

(Meisei Electric Co. Ltd., Japan)

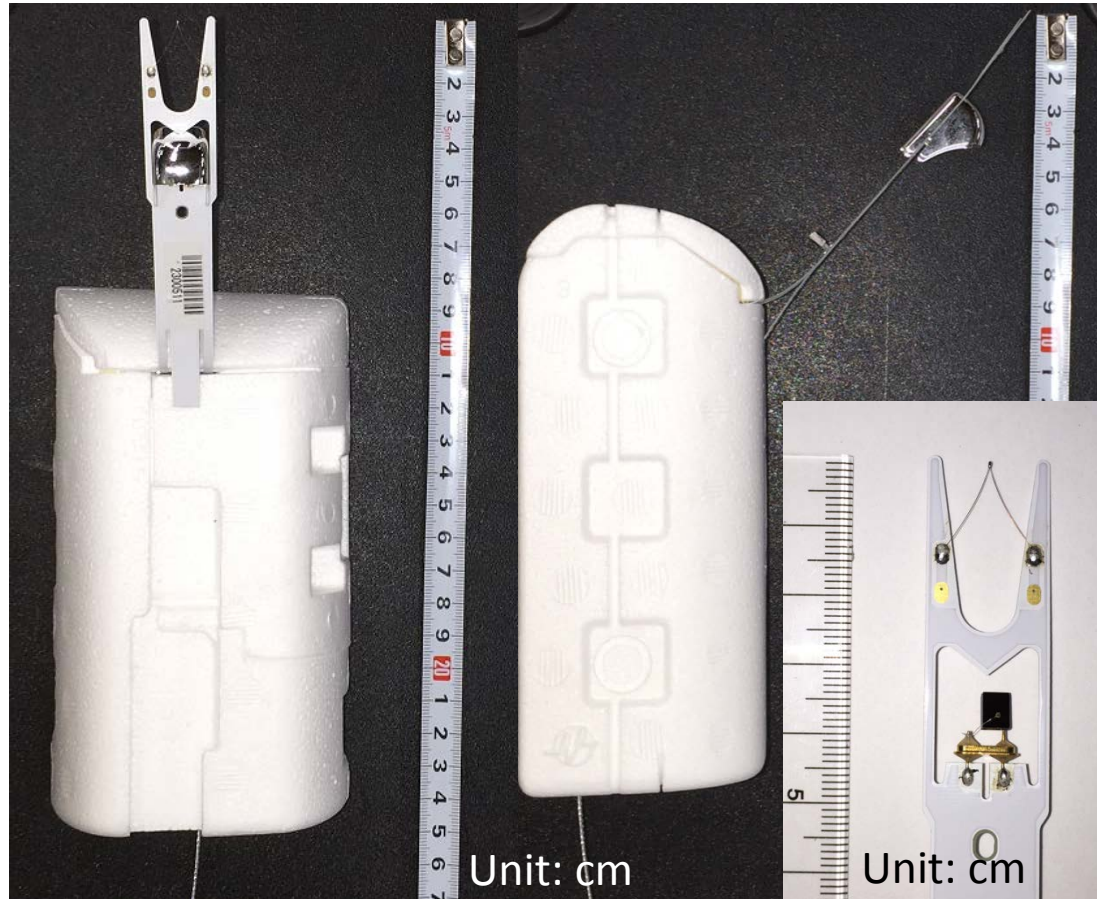
Masatomo Fujiwara (Hokkaido University, Japan)

ICM-8, Boulder, USA (Tuesday 26 April 2016)

Radiosonde soundings at Tateno

- 1921: Upper air sounding started at Tateno
- 1944: Radiosonde sounding started at Tateno
- . . . (several instrumental changes)
- 1992 – 2009: **Meisei RS2-91**
- Dec 2009 – July 2013: **Vaisala RS92**
 - (RS2-91 – RS92 comp. flights: Dec 2009 – Oct 2010; see Kobayashi et al., J. Meteorol. Soc. Jpn., 2012)
- July 2013 – present: **Meisei RS-11G**
 - (RS92 – RS-11G comp. flights: July 2013 – present; manuscript being prepared)

Meisei RS-11G



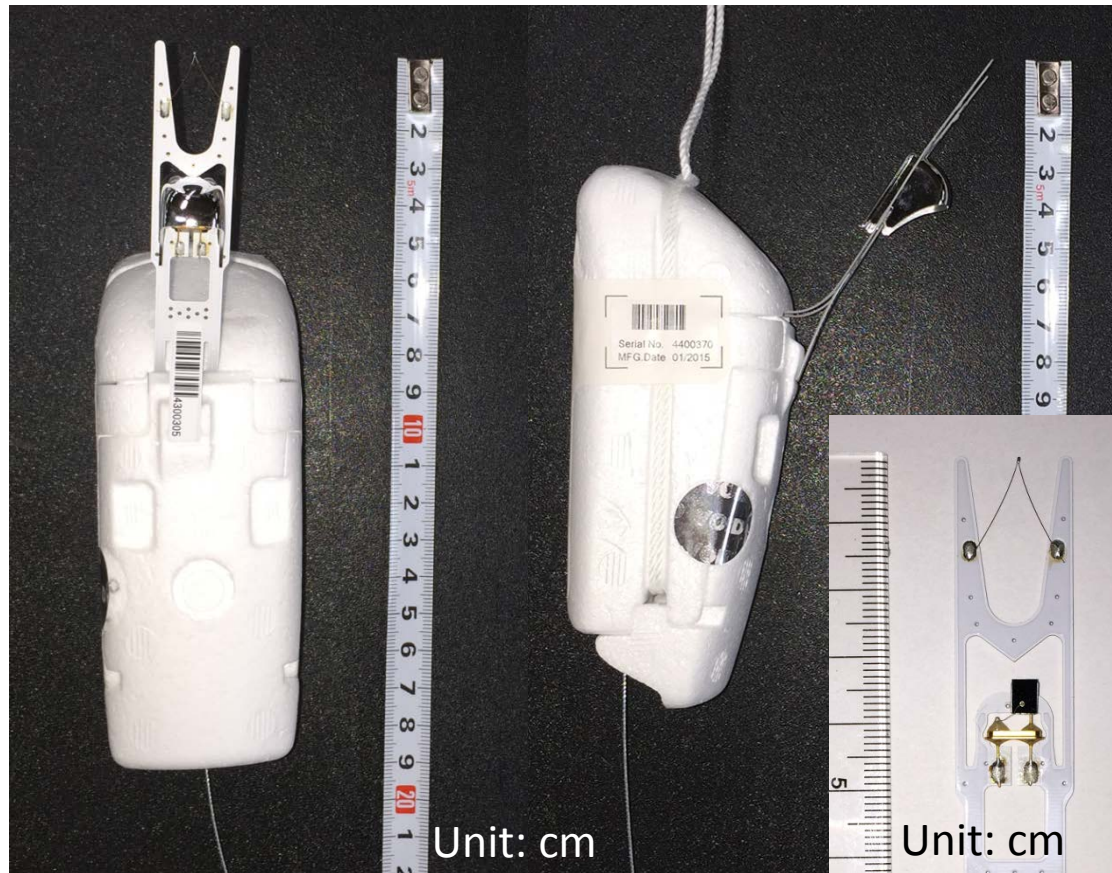
Sensors: thermistor, capacitive RH sensor, and a GPS receiver (gph, P, and winds)

Mass: 85 gram including one CR-123A battery (3 V)

Can be connected with various external instruments (e.g., CFH, FLASH-B, MTR, CPS, CO₂, etc.)

Released in 2012

Meisei iMS-100



Sensors: thermistor, capacitive RH sensor, and a GPS receiver (gph, P, and winds)

Mass: **38 gram** including one CR-123A battery (3 V)

Dedicated thermistor for measuring the RH sensor temp.; no input port for external sensors

Released in 2014

Technical document contents (1/4)

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Note: Tateno will create RS-11G GDP

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The current draft:

72 pages of text, 10 tables, 64 figures, . . . with 9 appendixes with their own figures/tables.

Current activities and near-future plans

- The current status of the document:
 - We completed second round of checks by all coauthors
- We will use part of the document to prepare a journal paper manuscript (for AMT)
- We will use part of the document to prepare the GRUAN TD (as one of the radiosonde appendixes)
- Comparison flights (among RS-11G, iMS-100, MTR, RS92, CFH, etc.) are still being made at Tateno and other sites → the results will be included in the above manuscripts and/or published separately