

Readme for Radiosonde Data obtained onboard the R/V Mirai during pre-YMC

Revised: January 13, 2022

Drafted: January 23, 2017

<< Basic Information >>

Radiosonde type : Vaisala RS92-SGPD (201 times) & RS41-SGP (16 times)
Processor : Vaisala MW41 (software: ver. 2.2.1)
Ground Check : Vaisala GC25 (for T/RH)
 Vaisala PTB330 for pressure
Sounding mode : Operational mode (auto editing)
Original data archive : ASCII files are archived every 1 second as Vaisala FLEDT (floating-point EDT), whose RH values are recorded with two decimal places of precision.
Balloon : Totex TA-200
Observation period : Nov. 21, 2015, 0000Z - Dec. 18, 2015, 0000Z

<< Processing Level >>

Level-0 Original
Level-1 Same as original except for their format
Level-2 Only apparent erroneous data have been removed.
Level-3 Additional corrections have been made. This information is provided in the header (Remarks).
Level-4 Same as Level-3 except for their format (5 hPa interval from 1000 hPa to 80 hPa in addition to the surface value, etc.).

<< Data Format >>

Level-2/3

Header	Line-01	Project ID
	Line-02	Launch site/ID
	Line-03	Location in deg-E, deg-N, height in meter
	Line-04	Actual Launch Time in UTC
	Line-05	Nominal Launch Time in UTC
	Line-06	Serial Number / Radiosonde Type
	Line-07	Ground station software
	Line-08-11	Remarks

Data

Following parameters are archived every 1 second as (f7.1, 2f8.2, 2x, 7f7.1, f8.0)

Time in second

Longitude in degree East

Latitude in degree North

Pressure in hPa
Temperature in degree C
Dewpoint temperature in degree C
Relative Humidity with respect to water in %
Zonal wind component in m/sec
Meridional wind component in m/sec
Mixing ratio in g/kg
Height in meters

Level-4

Data

Following parameters are stored every 5hPa from 1000hPa to 80hPa in addition to the surface as (2f8.2, 2x, 11f7.1, f8.0)

Longitude in degree East
Latitude in degree North
Pressure in hPa
Temperature in degree C
Dewpoint temperature in degree C
Relative Humidity with respect to water in %
Zonal wind component in m/sec
Meridional wind component in m/sec
Mixing ratio in g/kg
Specific Humidity ratio in g/kg
Potential temperature in K
Equivalent potential temperature in K
Saturated equivalent potential temperature in K
Height in meters

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