Radiosondes Sounding System

> ⚠️ **Attention:**
>
> The system is operated by staff from the German weather service (DWD). Scientific co-use is possible according to prior agreement with AWI Logistics and Principal Investigator of the Polarstern Meteorological Observatory (Holger Schmithüsen). Helium is calculated to supply one 600 gramm balloon per day. If additional radio sonde ascents are planned, the user has to organize the additional sondes, balloons and helium.
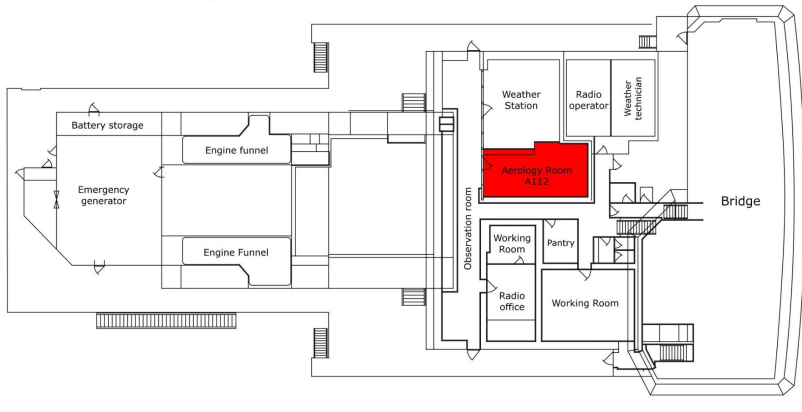
Summary

The radiosonde sounding system gathers meteorological data (pressure, temperature, humidity, wind, position) from a mandatory radiosonde.

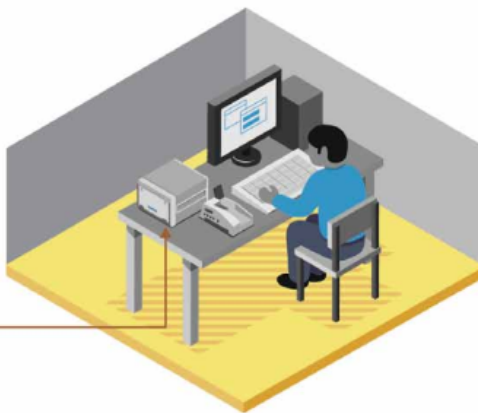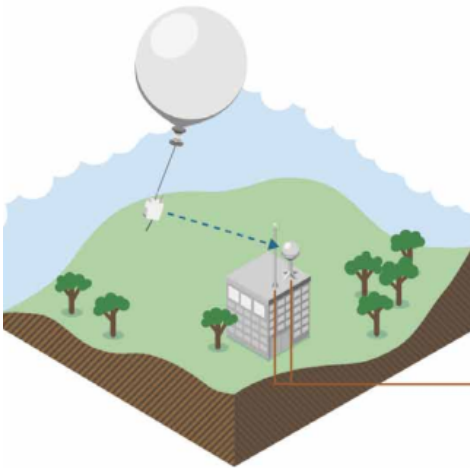|	
Manufacturer	Vaisala
Model	
Serial No.	n/a
Type	radiosonde
REGISTRY-Link	REGISTRY (4200)

schematic drawing of Polarstern deck A

location of aerology room A112 (neutron & myon detectors, disdrometer electronics,
water vapour analyzer, DigiCora radiosonde receiving station, wave radar system WaMoS)

Radiosonde receiving station DigiCora MW31

Radiosonde antenna

Contacts

Name	Institution	Role
Bernd Loose	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Engineer In Charge
Holger Schmithüsen	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Data Provider
Alfred Wegener Institute for Polar and Marine Research	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Owner
Marion Maturilli	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Editor
Loretta Preis	Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research	Device Contact

Components

Name	Model	Serial Number	REGISTRY-Link
DigiCORA Sounding System MW41	MW41	n/a	REGISTRY (4145)
RS41-SGP Radiosonde	RS41-SGP	n/a	REGISTRY (4146)

Position

Info	no xyz-position given, antenna located on upper observation deck, receiving station located in A112
X	0.0 (no description given)
Y	0.0 (no description given)
Z	0.0 (no description given)

Data logging, storage and archiving

Logged parameters

Parameter	O2ARegistry Output Type	Unit
Atmospheric Temperature	temperature	K
Relative Humidity	relative humidity	%
pressure	pressure	hPa
wind speed	wind speed	m/s
wind direction	wind direction	deg

Central geographical ship's position and time standard

Rawdata storage on board

Data archiving on land

Documentation

- Radiosondes Sounding Station DigiCora MW41 datasheet (Factsheet, 3 MB)

- RS41-SGP Data Sheet (Factsheet, 100 kB)