



Lead Centre report for 2016-2017

Ruud Dirksen,

GRUAN Lead Center

DWD Meteorological Observatory Lindenberg



4 new candidate sites:

- Tenerife
- Graciosa (Azores)
- Syowa, Minamitorishima

GCOS Reference Upper-Air Network



- Recently certified:
Beltsville
- Under review:
Tateno, Lamont (SGP)
Lindenberg (recertification)
- In total
 - 26 sites
 - 9 GRUAN-certified sites

- Vaisala
 - Software testing
 - Discussion GRUAN interface
- ETH Zürich, IITM (India), StratoClim2016 Campaign (RS92-RS41)
- CAO Moscow, FLASH-B instrument
- NWS-Sterling (cooperation/coordination sensor characterization)
- Sasha Kats (visiting scientist, analysis RS41 data)
- Visitors
 - Masatomo Fujiwara (GRUAN matters)
 - Fabien Carminati (GAIA-CLIM)
 - Andrea Merlone (Meteomet)

- December 2016
- Discussion continuation GRUAN cooperation. (Reorganisation at observatory)



- May 2017
- Measurement campaign (UTLS, CFH & COBALD)
- Discussion GRUAN cooperation
 - Data flow from Sirta and Reunion



- RsLaunchClient
Various updates; running without problems
- New GRUAN data processor & RS92 data product version 3 in preparation. (presentations Wednesday morning & Thursday afternoon)



Network ▾

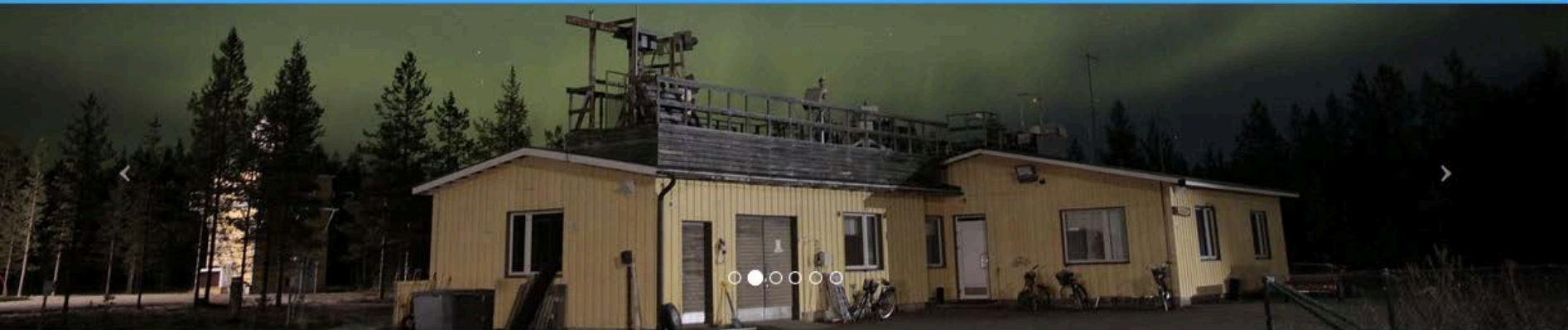
Data ▾

Instruments ▾

Documentation ▾

Community ▾

User ▾



GRUAN



GCOS Reference Upper-Air Network

The climate reference network

The Global Climate Observing System (GCOS) Reference Upper-Air Network ([GRUAN](#)) is an international reference observing [network](#), designed to fill an important gap in the current global observing system. GRUAN measurements will provide long-term, high-quality [climate data records](#) from the surface, through the troposphere, and into the stratosphere.

- Extensive research program for RS41
- Laboratory experiments (radiation, calibration, time lag)
- Dual soundings with RS41/RS92 and CFH
- Network-wide effort (session on Tuesday)
- Paper in preparation
- ARM proposal (“RIVAL”) submitted



- Data stream RS-11G & SRS-C34 established
- Numerous GRUAN-related papers (15) and presentations



Atmos. Meas. Tech., 7, 4463–4490, 2014
www.atmos-meas-tech.net/7/4463/2014/
doi:10.5194/amt-7-4463-2014
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Reference quality upper-air measurements: GRUAN data processing for the Vaisala RS92 radiosonde

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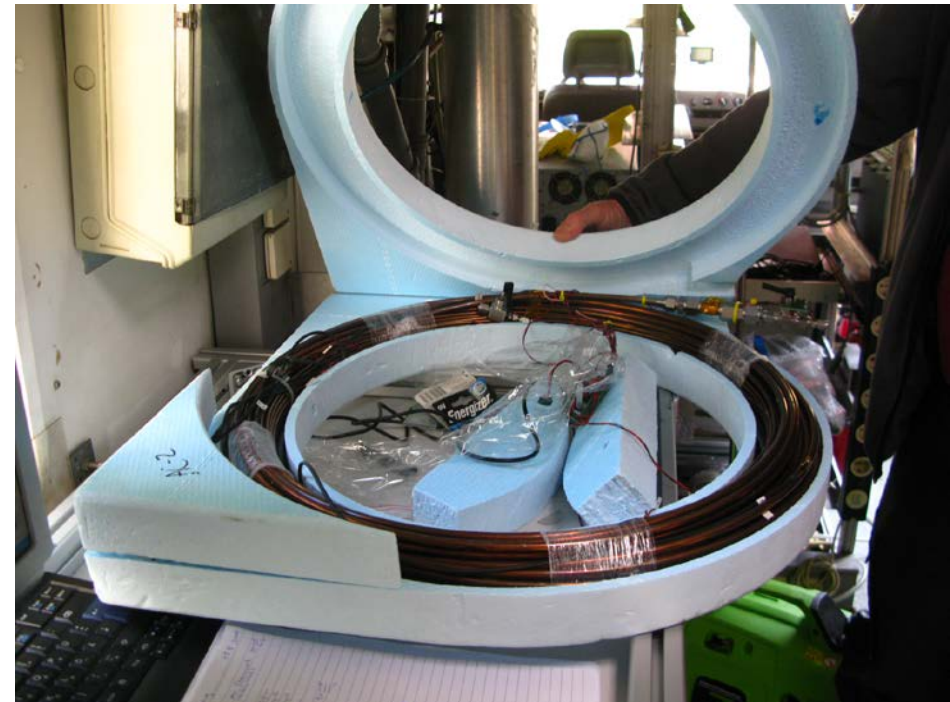
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- Vaisala radiosondes (Lead Centre)
- Meisei radiosonde (Kizu)
- Meteolabor Radiosonde (Philipona)
- Modem Radiosonde (Haeffelin)
- Frostpoint (Vömel)
- GNSS (Lead Centre & GFZ)
- Lidar (Leblanc)
- MWR (Cimini)

- FLASH-B (calibration setup, performance testing)
- Particle replicator
- Aircore



Questions

Deutscher Wetterdienst
Wetter und Klima aus einer Hand



Schulz & Partner

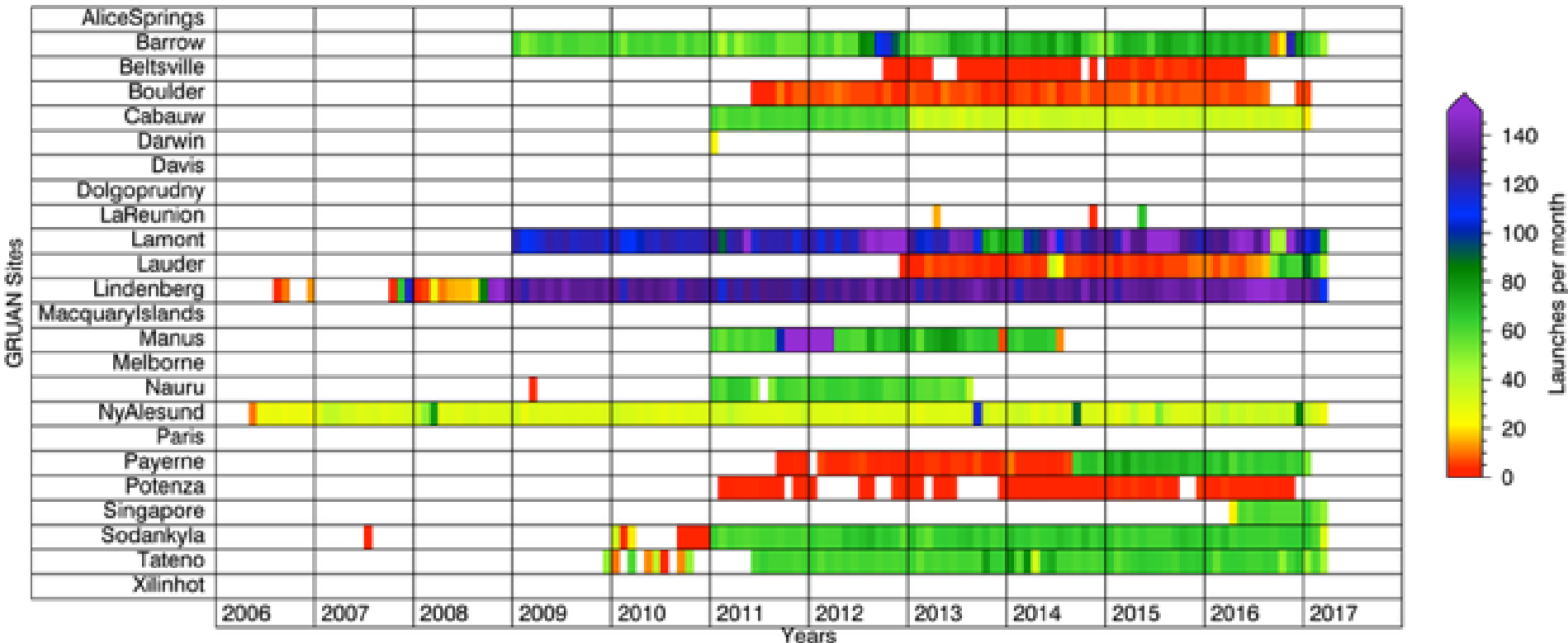
- Redesigned SHC can be ordered, price ~2800 euro
- Adapters for RS41, RS92, M10, etc ~250 euro

- FLASH-B (calibration setup, performance testing)
- Particle replicator
- Aircore



Detailed GRUAN data reports sent to sites

GRUAN Radiosonde Launches (total: 59509)



(→ presentation GRUAN data flow Wednesday morning)