

Usage of GRUAN data:
Discussion on metrics to support
sites in making the case for
(continued) GRUAN participation

Provide year-to-year traceability of GRUAN's impact within the climate community through:

- Scientific case studies of the added value resulting from the use of GRUAN data products
- The number of GRUAN projects funded through national or international funding agencies
- The number of peer reviewed publications in which GRUAN data have been used
- Data downloads

Completeness of radiosonde humidity observations based on the Integrated Global Radiosonde Archive

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“[...] the IGRA ID codes of the GRUAN sites appearing in the IGRA-RS station list are underlined in Table S1; of course, other **GRUAN sites performing only research measurements are not part of IGRA.**” (p. 611)

Dataset includes Vaisala RS92 soundings of the following GRUAN sites:

- BAR - Barrow (US), 2009-01-01 to present
- BEL - Beltsville (US), 2012-10-16 to present
- BOU - Boulder (US), 2011-06-15 to present
- CAB - Cabauw (NL), 2011-01-01 to present
- LAU - Lauder (NZ), 2012-12-11 to present
- LIN - Lindenberg (DE), 2008-12-01 to present
- MAN - Manus (PG), 2011-01-01 to 2014-07-06
- NAU - Nauru (NR), 2011-01-01 to 2013-08-26
- NYA - Ny-Alesund (NO), 2006-05-20 to present
- PAY - Payeme (CH), 2012-09-23 to present
- POT - Potenza (IT), 2011-02-23 to present
- SGP - Lamont (US), 2009-01-01 to present
- SOD - Sodankylä (FI), 2010-09-10 to present
- TAT - Tateno (JP), 2009-12-14 to present

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The Data Citation Index (DCI) helps researchers start where discoveries begin

The *Data Citation Index* provides a single point of access to quality research data from repositories across disciplines and around the world. In this index, descriptive records are created for data objects and linked to literature articles in the *Web of Science*. As data citation practices increase, the resource aims to provide a clearer picture of the full impact of research output, as well as to act as a significant tool for data attribution and discovery.

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The Research Data Archive is managed by the Data Engineering and Curation Section of the Computational and Information Systems Laboratory at the National Center for Atmospheric Research in Boulder, Colorado. The National Center for Atmospheric Research is sponsored by the National Science Foundation. Any opinions, findings, and conclusions or recommendations expressed in this material do not necessarily reflect the views of the National Science Foundation.

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International Surface Pressure Databank (ISPDv2)

ds132.0 | DOI: 10.5065/D6SQ8XDW

For assistance, contact Thomas Cram (303-497-1217).

Description

Data Access

Documentation

Software

Help with this page: RDA dataset description page video tour

Data Citations: ? This dataset has been cited **1** time.

▼ Published works that cited this dataset:

2015

Hersbach, H., C. Peubey, A. Simmons, P. Berrisford, P. Poli, and D. Dee, 2015: ERA-20CM: a twentieth-century atmospheric model ensemble. *Q.J.R. Meteorol. Soc.*, **141**, 2350-2375, <https://doi.org/10.1002/qj.2528>

Abstract: The International Surface Pressure Databank (ISPD, Cram et al. 2015) is the world's largest collection of pressure observations. It has been gathered through international cooperation with data recovery facilitated by the ACRE Initiative and the other contributing organizations and assembled under the auspices of the GCOS Working Group on Surface Pressure and the WCRP/GCOS Working Group on Observational Data Sets for Reanalysis by NOAA Earth System Research Laboratory (ESRL), NOAA's National Climatic Data Center (NCDC), and the Climate Diagnostic Center (CDC) of the University of Colorado's

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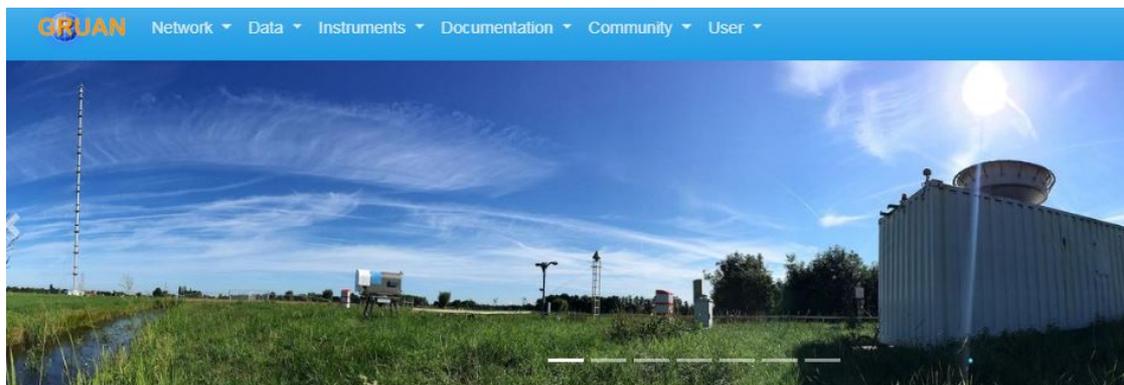
- A 'collection of datasets' that are grouped under a doi-number.
- Could be an option for all datasets from one GRUAN site.
- Could be an option to have here the collection of all doi-numbers related to the RS41 product, for example.
- Each dataset would have Michael Sommer and the Lead Centre as authors, and additionally the site representative as co-author.

Thus, the institution supporting the site would benefit from the data citation.

- There are several ways of organizing the data according to the individual needs of a data network: for example, Pangaea is the data repository for BSRN.
- Pangaea is hosted by AWI: we could discuss with AWI if GRUAN data could be stored with long-term commitment with AWI support (with no financial requests to GRUAN).
- But: how would other institutions feel about their (paid for) data being hosted on another institution's data repository?

Issues:

- Are users legally obliged to register? If not, how to track?
- We could set up a web portal (like NASA's): but it's a big job. Michael can do it, but hasn't got the time.
- NCEI use an ftp server; but can't log usage.



We have options

- Data Citation Index / NCAR Data Repository / Pangaea
- Employing DOIs allows tracking of data use, and ultimately metrics of citations, user groups, and the impact of the data on science progress.
- **But:**
- How much?
- What time framework is realistic (ASAP ...)?
- Are there other metrics / options that the GRUAN community can share?

