

# Update on work to improve monitoring of usage of GRUAN products

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Thursday 18th November, 2021, session 4 - 6

## GCOS doc 171, the GRUAN Guide (p. 101)

**Quantitative performance indicators that may serve to provide year-to-year traceability of GRUAN's impact within the climate community include:**

- 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

Dirksen, R. J., Sommer, M., Immler, F. J., Hurst, D. F., Kivi, R., and Vömel, H. (2014)

## **Reference quality upper-air measurements: GRUAN data processing for the Vaisala RS92 radiosonde**

Atmos. Meas. Tech., 7, 4463-4490  
doi:10.5194/amt-7-4463-2014.

- 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 - Payerne (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

From: <https://www.gruan.org/data/data-products/gdp/rs92-gdp-2>

Ferreira, A. P., Nieto, R., and Gimeno, L. (2019)

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

Earth Syst. Sci. Data, 11, 603–627

<https://doi.org/10.5194/essd-11-603-2019>.

“[...] GRUAN sites performing only research measurements are not part of IGRA.”  
(p. 611)

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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**, 2350-2378. <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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- ❑ Data sets are grouped under a DOI
- ❑ Could be an option for all data sets from one GRUAN site
  - E.g. an option to locate here the collection of all DOIs related to the RS41 product
- ❑ Each dataset would have, for example, 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**

- ❑ It is planned to publish the GRUAN-processed MOSAiC data on the PANGAEA data portal as an example for potential publication of other GRUAN data sets.
  - Data will be published only in the final GDP version
- ❑ Thus, once the Beta version of RS41 processing is completed and a GRUAN data product of the MOSAiC data is produced, we will store it on PANGAEA.
- ❑ Michael Sommer is participating in a PANGAEA workshop and outcomes will be fed back to the GRUAN community accordingly.
- ❑ Are there any other metrics / options that may contribute to the monitoring of usage of GRUAN products?

**Thank you**