



# Site diary – site photos and further meta-data

**Michael Sommer**

*GRUAN Lead Centre, DWD*

13<sup>th</sup> GRUAN Implementation and Coordination Meeting (ICM-13)

Virtual, Session 4, 18 November 2021

# What are site photos?

## ➤ Goal & task & description → GRUAN-TN-9

This Technical Note outlines the generic steps required to ensure that a long term site photographic record is maintained in support of the documented reference-quality data. The aim is to **establish a long-term visual record** against which any unaccounted for variability in data measurement can be assessed.

## ➤ Current way → gruan.info (FTP)

## ➤ Example → NYA (2021-09-08)



South



West



North



East

# Available site photos



Site	2021	2020	2019	2018	2017
BOU	X	X			
LAU	X		X		
LIN	X			X	
MTS	X	X		X	
NYA	X	X	X	X	X
POT		X			
REU		X			
SGP		X			
SNG		X			
SOD				X	
SYO	X	X	X	X	
TAT	X	X	X	X	X
TEN		X			
TRP		X			



- Why where so few site photos uploaded?
  - Reminder from LC was missing
  - Upload using FTP not user-friendly enough?
- All site photos available at LC → better access required
- Sometimes a bit more information would be helpful
  - Providing of other material, e.g. documents, other photos, meta-data
  - Documentation of changes

→ An extended and more user-friendly solution is needed.

now  
available

- Web-based viewer & editor → as part of GRUAN website
  - All information can immediately be downloaded
- Collecting information related to sites & measurement systems
- Site description → **time changeable** (meta-data & documents & photos)
  - → Systems
- System description → **time changeable** (meta-data & documents & photos)
  - → Instrument views & changes
- Instrument view → **as diary entry** (meta-data & documents & photos)
- Instrument change → **as diary entry** (meta-data & documents & photos)



Sites Systems Views & Descriptions

## List of GRUAN sites

Describe and document the sites with their measuring systems

Key	Name	Option	Measurement Systems / Instruments	ZIP
ALC	Alice Springs	→ 2021-01-01	ALC-RS-01	
BAR	Barrow	+	BAR-GN-01 (UTQI) , BAR-RS-01 (manual) , BAR-RS-02 (auto)	
BEL	Beltsville	→ 2021-01-01	BEL-GN-01 (DCHU) , BEL-RS-01	
BOU	Boulder	→ 2021-01-01	BOU-GN-01 (P041) , BOU-GN-02 (TMS3) , BOU-RS-01	
CAB	Cabauw	+	CAB-GN-01 (CBW1) , CAB-RS-01 (De Bilt)	
DAR	Darwin	+	DAR-GN-01 (SA39) , DAR-RS-01	
DLG	Dolgoprudny	+	DLG-RS-01	
DVS	Davis	+	DVS-RS-01	
GRA	Graciosa	+	GRA-GN-01 (ENAO) , GRA-RS-01	
GVN	Neumayer	+	GVN-RS-01	
HKO	Hong Kong	+	HKO-RS-01 (auto) , HKO-RS-02 (manual)	
LAU	Lauder	→ 2021-01-01	LAU-GN-01 (LDRZ) , LAU-RS-01 (Lauder) , LAU-RS-02 (Invercargill)	
LIN	Lindenberg	→ 2021-01-01	LIN-GN-01 (LDB0) , LIN-GN-02 (LDB2) , LIN-RS-01 (manual)	
MAQ	Macquarie Island	+	MAQ-RS-01	

Overview & description

Measurements systems

Download



# Site diary – List of measurement systems



## List of measurement systems in GRUAN

Describe the measuring systems and document views and changes

Key	Name	Description	Instrument View	Instrument Change	ZIP
ALC-RS-01	<a href="#">Alice Springs radiosonde launch site</a>	→ <a href="#">2021-01-01</a>	+	+	
BAR-GN-01	<a href="#">GNSS Site UTQI</a>	→ <a href="#">2021-01-01</a>	+	+	
BAR-RS-01	<a href="#">Barrow radiosonde launch site</a>	→ <a href="#">2021-01-01</a>	+	+	
BAR-RS-02	<a href="#">Barrow autolauncher system</a>	→ <a href="#">2021-01-01</a>	+	+	
BEL-GN-01	<a href="#">GNSS Site DCHU</a>	+	+	+	
BEL-RS-01	<a href="#">Beltsville Radiosonde Launch Site</a>	+	+	+	
BOU-GN-01	<a href="#">GNSS Site P041</a>	+	+	+	
BOU-GN-02	<a href="#">GNSS site TMS3</a>	+	+	+	
BOU-RS-01	<a href="#">Marshall Radiosonde Launch Site</a>	+	+	+	
CAB-GN-01	<a href="#">GNSS Site CBW1</a>	+	+	+	
CAB-RS-01	<a href="#">De Bilt Radiosonde Launch Site</a>	+	+	+	
DAR-GN-01	<a href="#">GNSS Site SA39</a>	+	+	+	

Overview & description

View & change

Download



# Site diary – Site & system overview



## Site overview: Ny-Ålesund (NYA)

AWIPEV Research Base

Site description from 2021-01-01 (last update: 2021-05-26)

**Affiliation:** Alfred Wegener Institute (AWI), Helmholtz Centre for Polar and Marine Research

**Latitude:** 78.92 °N

**Longitude:** 11.93 °E

**Altitude:** 5 m

**Location:** [Google Map](#)

**UTC time offset:** +01:00

**Topography:** mountainous landscape

**Climate:** arctic

**Description:** Ny-Ålesund on the west coast is one of the world's northernmost human settlements and is situated at a fjord surrounded by glaciers, moraines, rivers, mountains, and a typical tundra system.

**Author:** Marion Maturilli

**Version summary:** Initial description

General description

Measurement systems / Instruments

NYA-GN-01 - GNSS Site NYA2

NYA-RS-01 - Ny-Ålesund Radiosonde Launch Site

Measurement systems of site

Documents

Photos / Pictures

General photos & docs

## System overview: Ny-Aalesund Radiosonde Launch Site (NYA-RS-01, site NYA)

System description from 2017-12-11 (last update: 2021-05-26)

**Affiliation:** AWI

**Principal Investigator:** Marion Maturilli

**Latitude:** 78.92301 °N

**Longitude:** 11.92271 °E

**Altitude:** 15.67 m

**Location:** [Google Map](#)

**Author:** Marion Maturilli

Instrument Views +

- 2020-06-18 - Vegetation cycle (Radiosonde, FPH and ECC launch site - East Platform)
- 2019-05-03 - Vegetation cycle (Radiosonde, FPH and ECC launch site - West Platform)
- 2018-10-01 - Vegetation cycle (Views around balloon house and observatory)
- 2018-05-07 - Vegetation cycle (Views around balloon house and observatory)
- 2017-05-30 - Vegetation cycle (Views around balloon house and observatory)
- 2016-10-10 - Vegetation cycle (Views around balloon house and observatory)
- 2016-02-27 - Vegetation cycle (Views around balloon house and observatory)
- 2015-05-28 - Vegetation cycle (Views around balloon house and observatory)

Instrument views

Instrument changes

Instrument Changes +

Documents

Photos / Pictures

← Back to "Site List"

← Back to "Site overview"



General  
description

Documents

Photos  
(with comments)

## Instrument view ( system NYA-RS-01 )

Instrument view from 2020-06-18 (last update: 2021-05-26)



**Summary:** Radiosonde, FPH and ECC launch site - East Platform  
**Rationale:** Vegetation cycle  
**Description:** Seasonal variation of snow cover and solar radiation conditions. Instrument not dependent upon field of view.  
**Author:** Marion Maturilli

### Documents

### Photos / Pictures



[← Back to "System overview"](#)

- More consequent documentation of GRUAN sites required
- New site diary available as beta version
- Documentation of site diary is not available yet
- Two to three GRUAN sites as beta user wanted

Please contact us to be a beta user  
of GRUAN site diary!

→ [gruan.lc@dwd.de](mailto:gruan.lc@dwd.de)