Introducing GRUAN Online Tools

New possibilities of reporting

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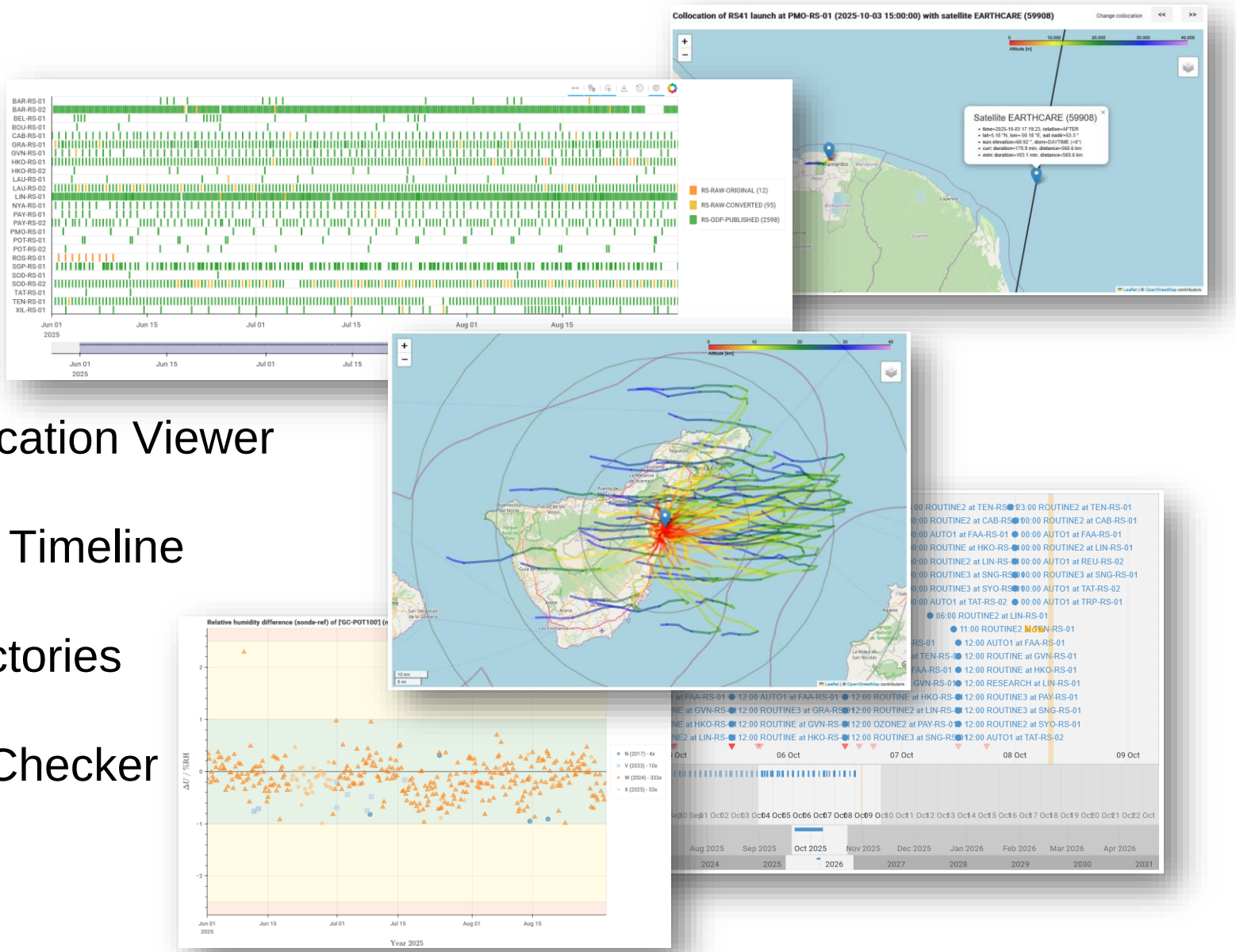
Session 3, 17 November 2025

Outline

- Introduction
- Site Reports
- Data Viewer
- Satellite Collocation Viewer
- Measurement Timeline
- Balloon Trajectories
- Data Stream Checker
- Access



Introduction

- More advanced reporting capabilities became necessary
- Important reasons are:
  - More regular and more often reports of data flow
  - Better insight into the GRUAN (meta-)data archive
  - Many different interests within the GRUAN community (sites, PC, users, …)
  - Many requests to LC to provide information about status of …
- Extensive research and selection of a suitable technical solution
  - Check possibilities, handling, extensibility, availability, costs, …
- Development and provision of online tools
- **BETA test phase is starting now**

Online tools – General handling

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Login to online tools

Hide/show sidebar

Menu to other tools

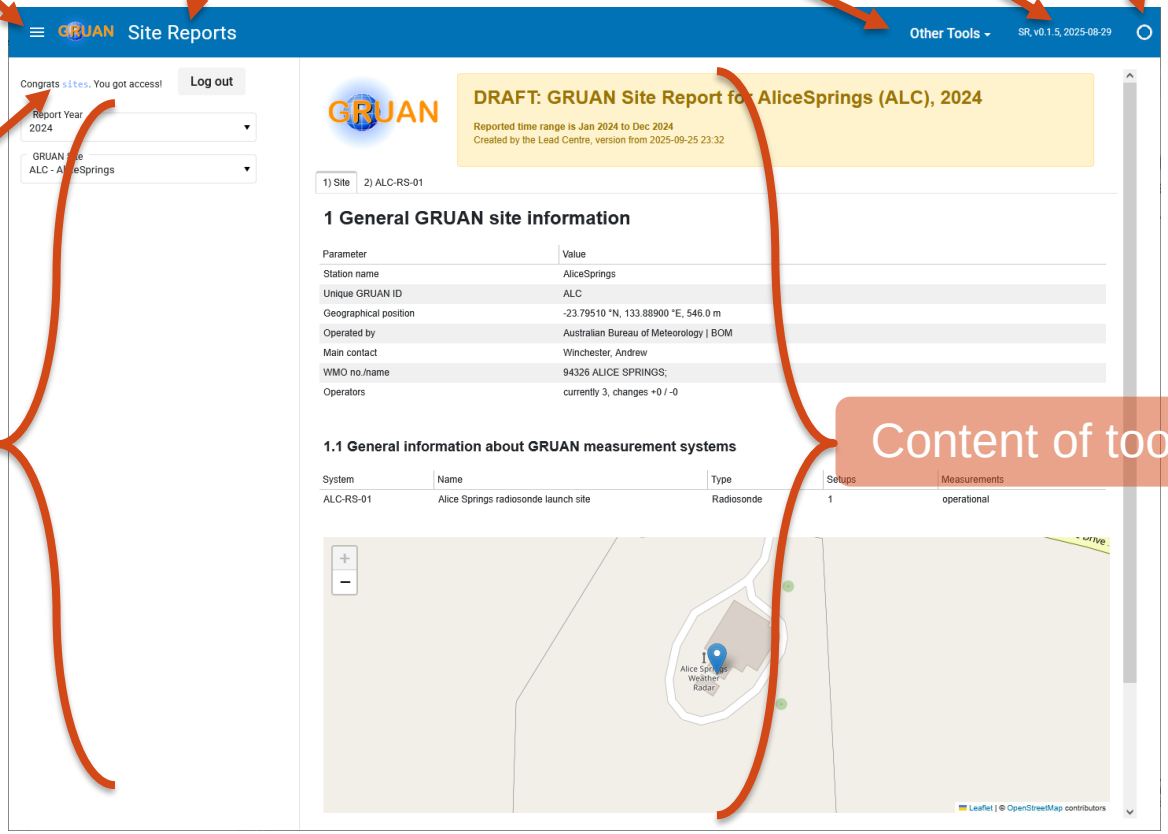
Busy marker

Name of tool

Version of tool

User info and logout

Sidebar with main functions of tool



Content of tool

Site Reports

- Replication of original yearly GRUAN Site Report documents (PDF)
- Several improvements:
  - Interactive plots with more detailed information
- All years from 2010 to 2025 are available
- Regularly reproduced with current status of data archive
  - Including older years
  - That means → reports contain old measurements which are uploaded recently
- Updated unregularly (e.g. quarterly)

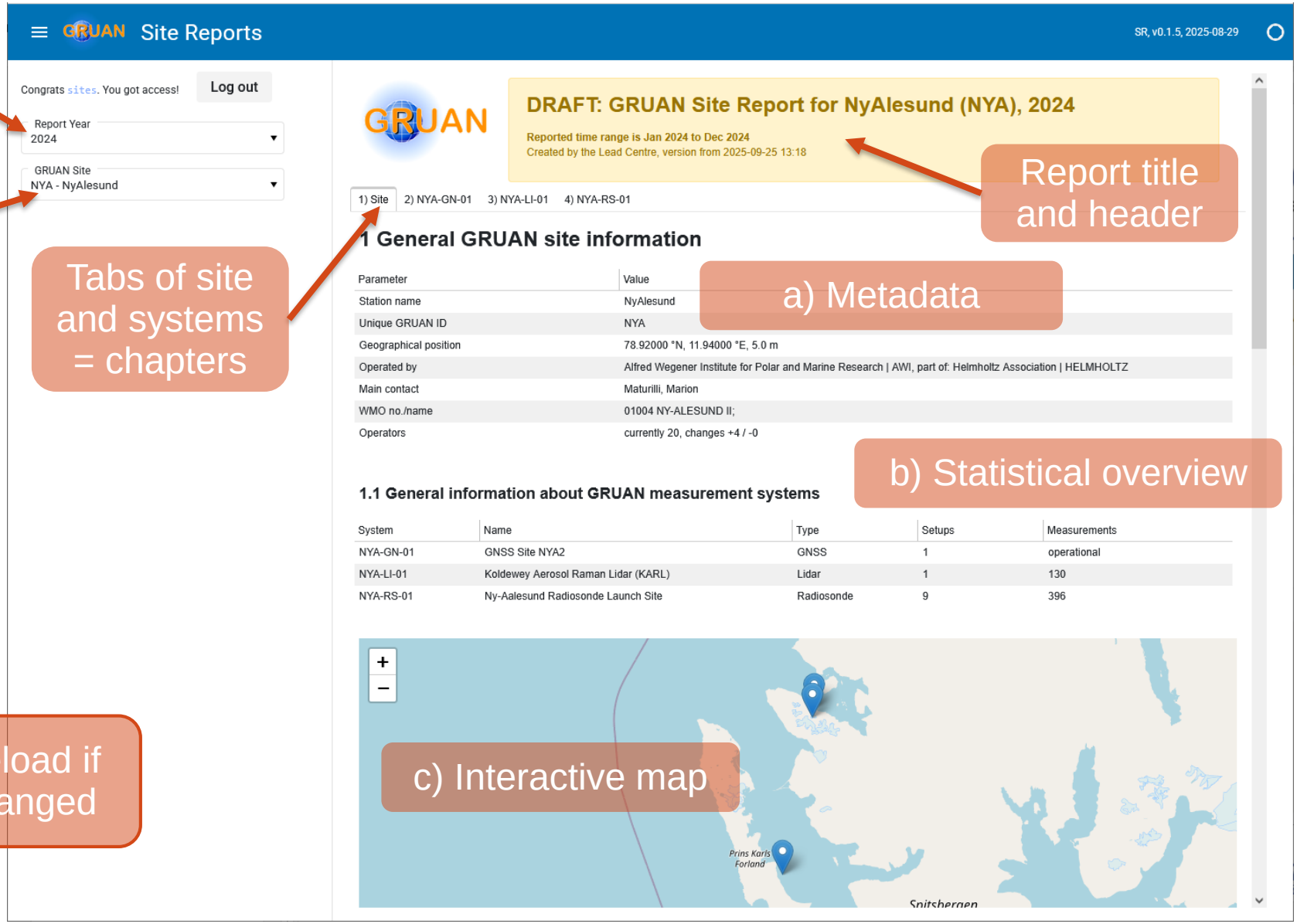
Site Reports – General

Report year

GRUAN site

Tabs of site and systems = chapters

Automatic reload if selection changed



Report title and header

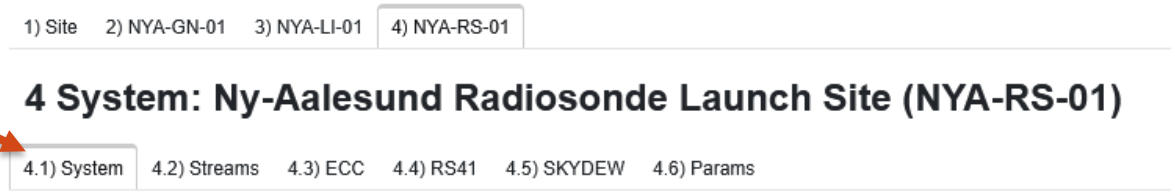
a) Metadata

b) Statistical overview

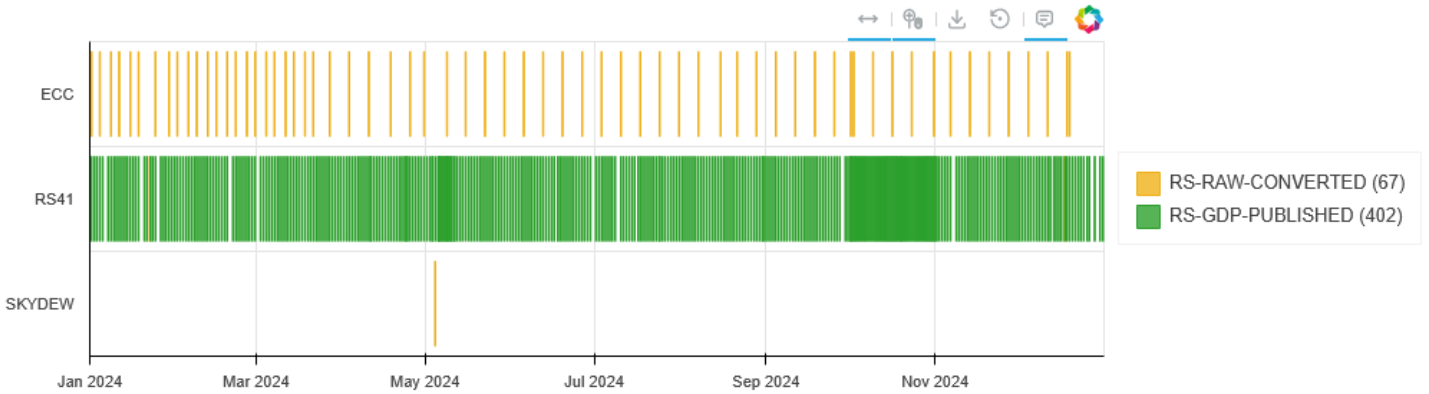
c) Interactive map

Site Reports – System details

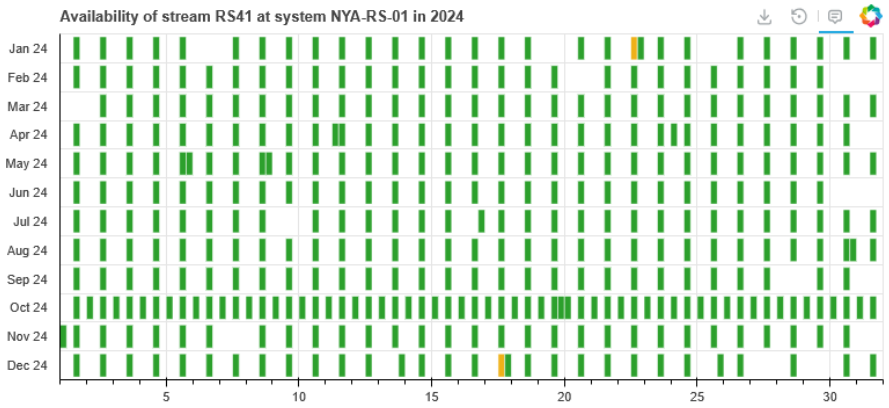
Tabs of system and streams = subchapters



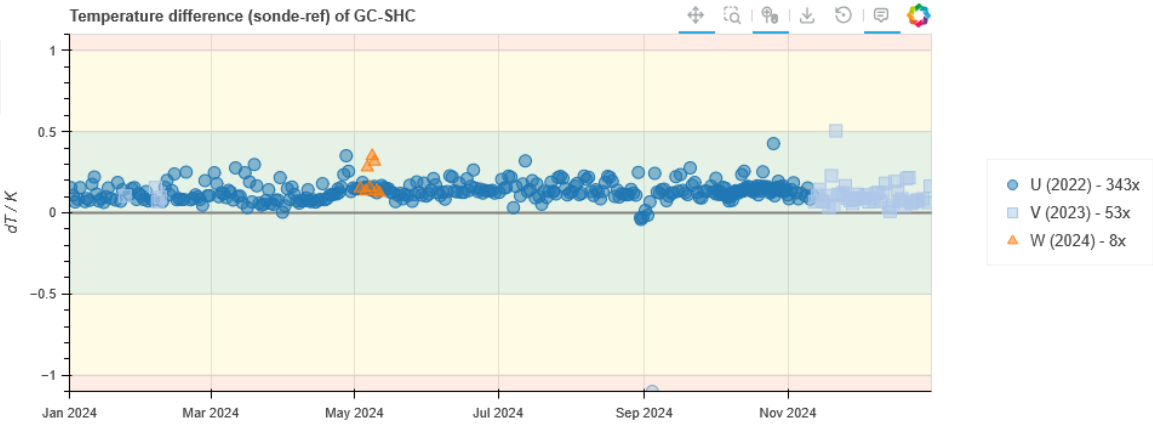
a) Stream overview



b) Stream detail



c) Details of ground checks & more



All plots are interactive: zoom, pan, tooltip, …

Data Viewer

- Viewer for specific measurement-related meta-data, e.g.
  - Ground check results
  - Important parameters of radiosonde launches
- Simple assessment, as in the site reports (using thresholds)
- Full time range (approx. since 2004)
- Daily updates

Data Viewer – General

Choose site(s) or system(s)

Choose source: GC, launch

Choose stream(s) = sonde model

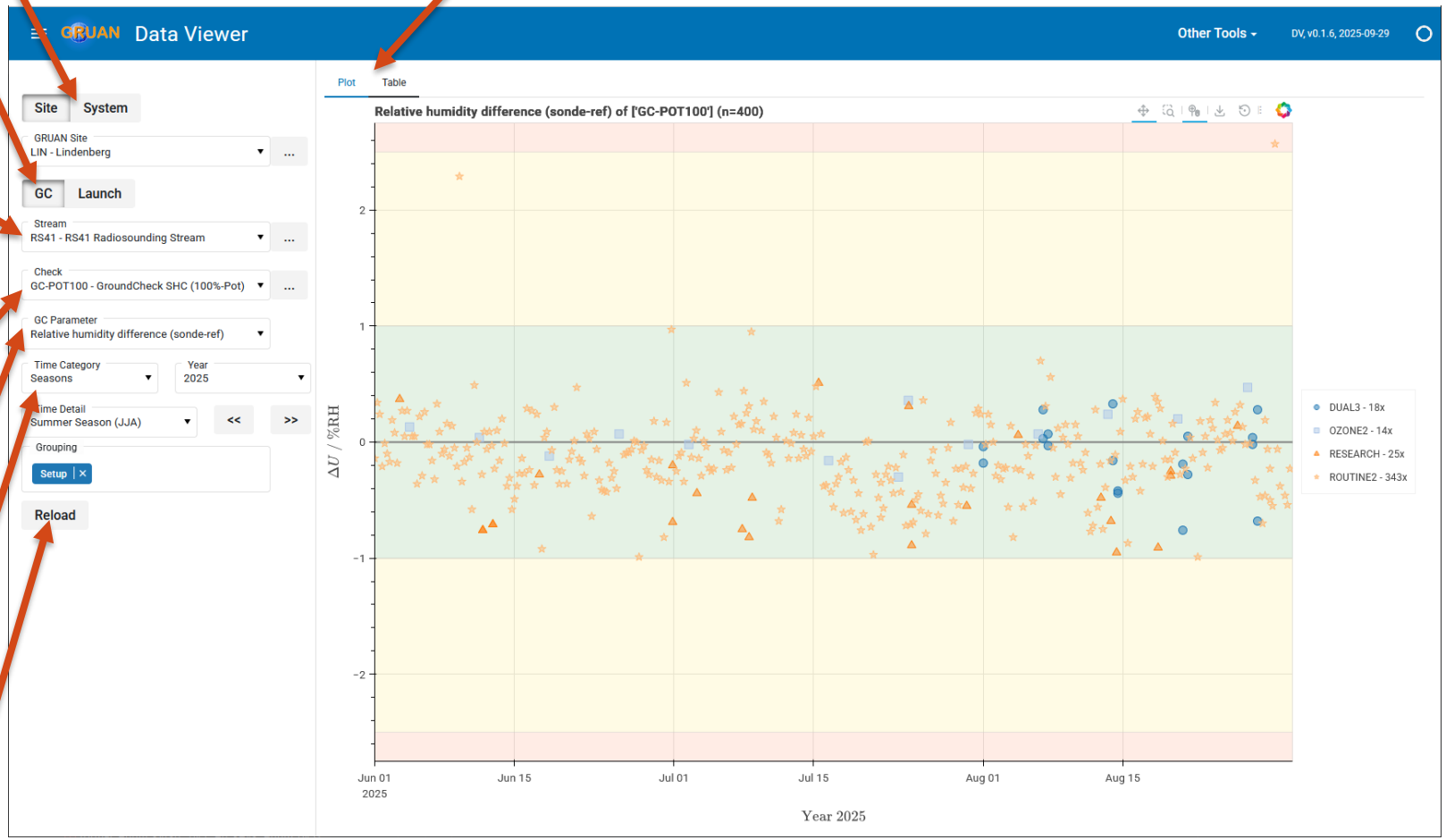
Choose checks(s)

Choose parameter

Choose time period

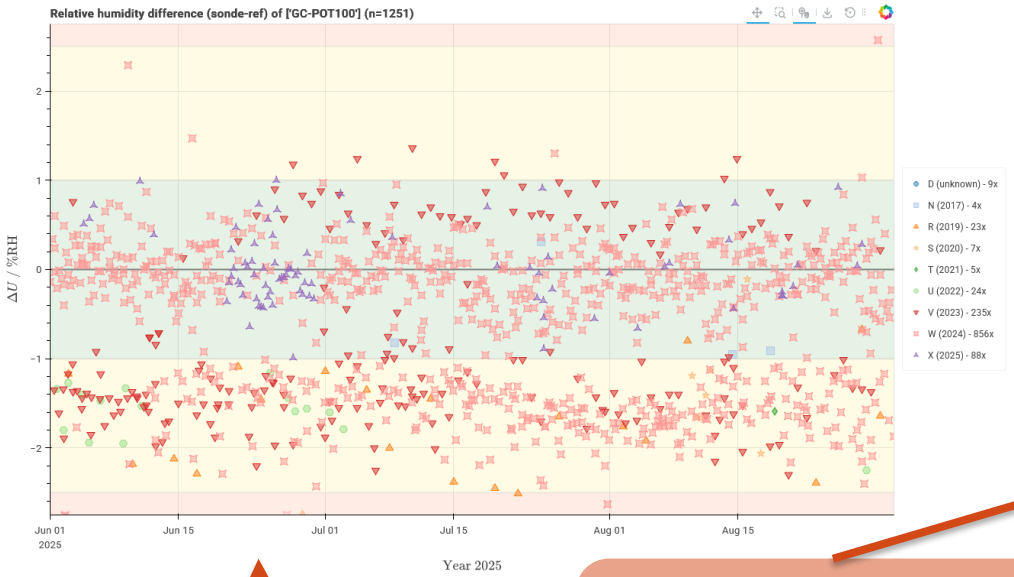
Reload using new selections

Choose view mode: plot, table

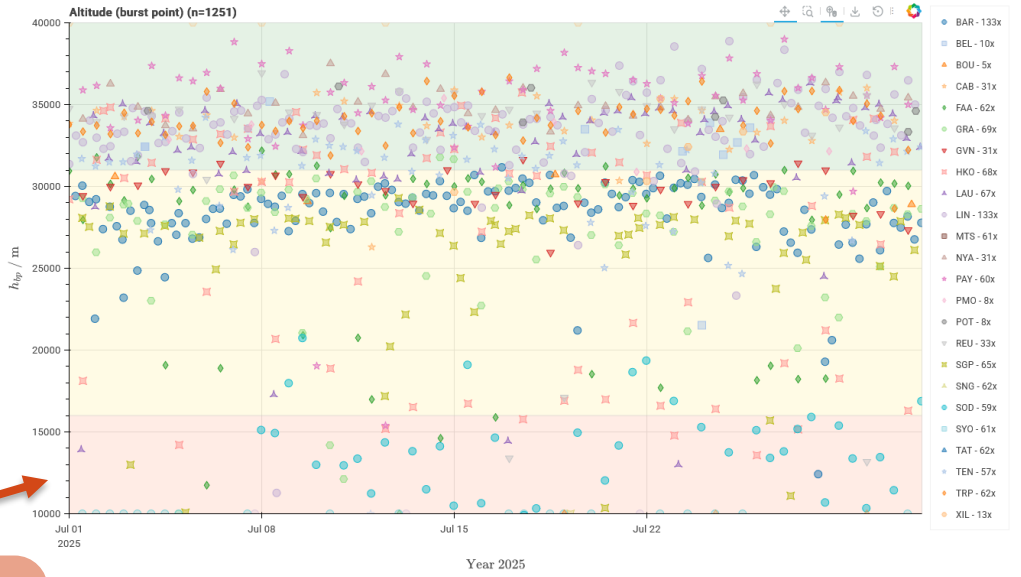


Data Viewer – Examples

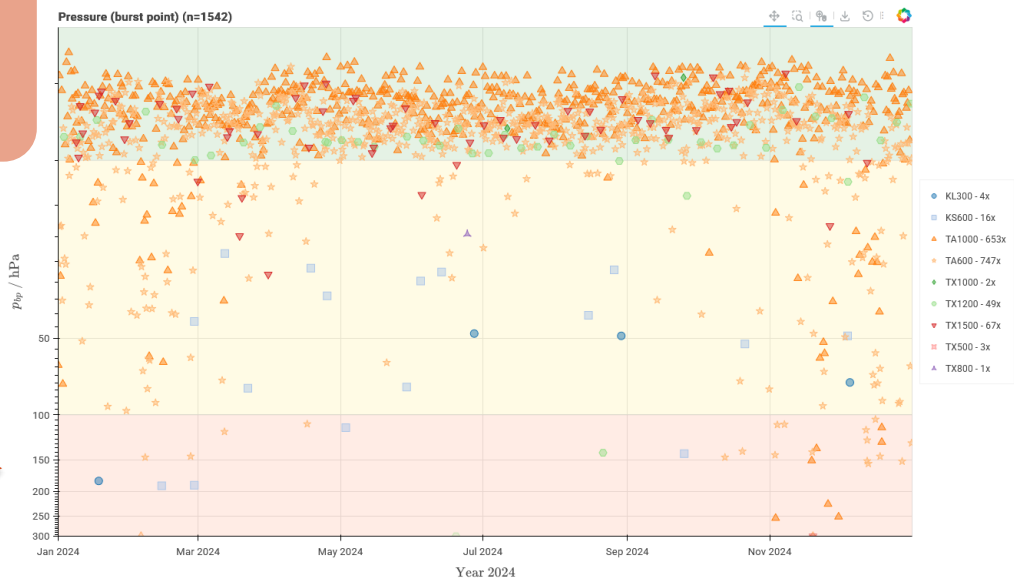
Deutscher Wetterdienst
Wetter und Klima aus einer Hand



ΔRH of RS41 in SHC, one season, any site, grouped by SN



Burst point altitude, one month, any site, grouped by site



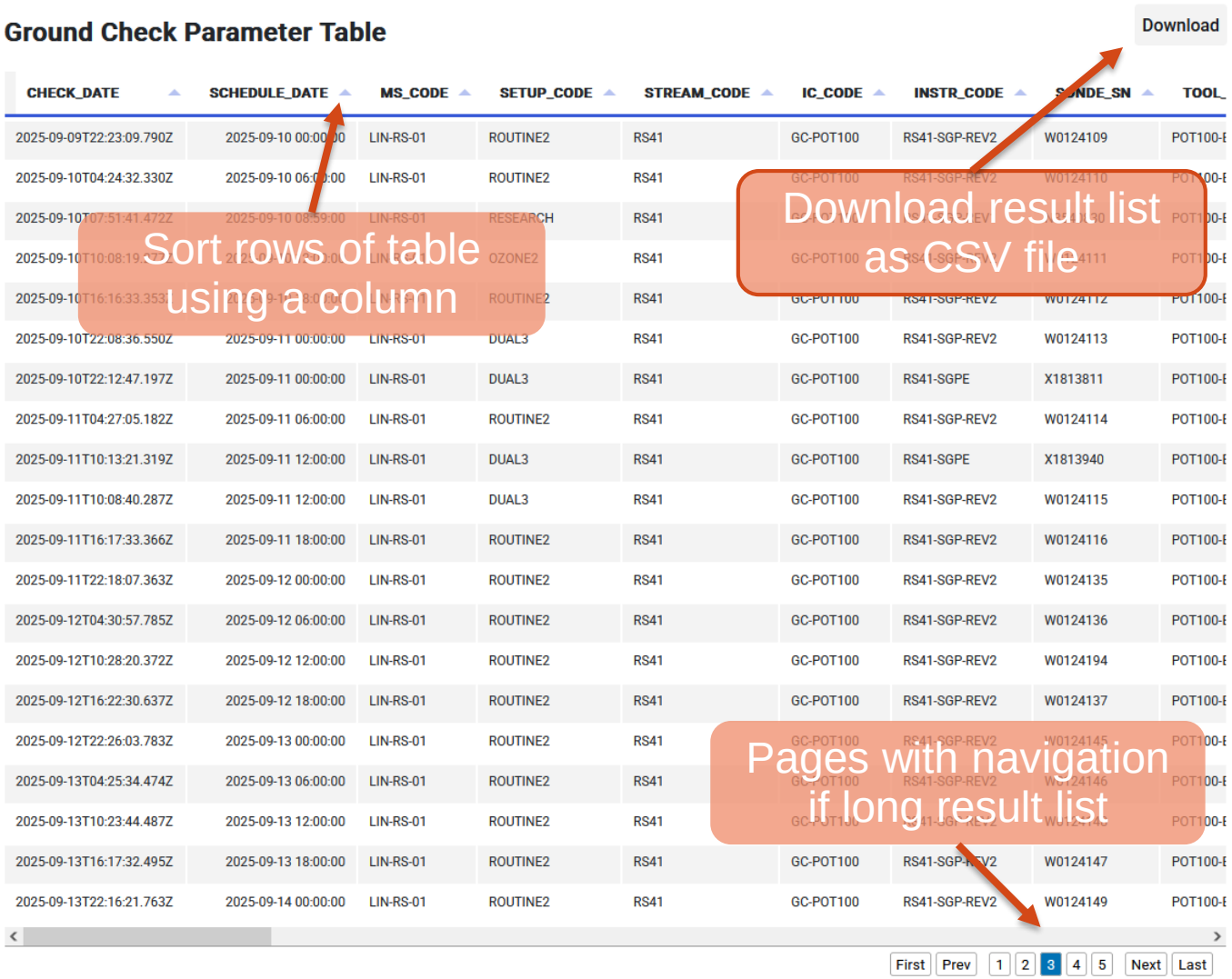
Burst point pressure, one year, site LIN, grouped by balloon

Data Viewer – Tables (GC & launch)

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Columns (GC)

CHECK_DATE
SCHEDULE_DATE
MS_CODE
SETUP_CODE
STREAM_CODE
IC_CODE
INSTR_CODE
SONDE_SN
TOOL_CODE
TOOL_SN
TEMP_SONDE
TEMP_REF
TEMP_REF_STDDEV
TEMP_CORR_SONDE
TEMP_DIFF_SONDE_REF
PRESS_SONDE
PRESS_REF
PRESS_REF_STDDEV
PRESS_CORR_SONDE
PRESS_DIFF_SONDE_REF
RH_SONDE
RH_REF
RH_CORR_SONDE
RH_DIFF_SONDE_REF
RH_S1
RH_CORR_S1
RH_DIFF_S1_REF
RH_S2
RH_CORR_S2
RH_DIFF_S2_REF
RH_DIFF_S1_S2
SN_GROUP



CHECK_DATE	SCHEDULE_DATE	MS_CODE	SETUP_CODE	STREAM_CODE	IC_CODE	INSTR_CODE	SONDE_SN	TOOL_
2025-09-09T22:23:09.790Z	2025-09-10 00:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124109	POT100-E
2025-09-10T04:24:32.330Z	2025-09-10 06:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124110	POT100-E
2025-09-10T07:51:41.472Z	2025-09-10 08:59:00	LIN-RS-01	RESEARCH	RS41	GC-POT100	RS41-SGP-REV2	W0124130	POT100-E
2025-09-10T10:08:19.2[illegible]	2025-09-10 [illegible]	LIN-RS-01	OZONE2	RS41	GC-POT100	RS41-SGP-REV2	W0124111	POT100-E
2025-09-10T16:16:33.353[illegible]	2025-09-10 [illegible]	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124112	POT100-E
2025-09-10T22:08:36.550Z	2025-09-11 00:00:00	LIN-RS-01	DUAL3	RS41	GC-POT100	RS41-SGP-REV2	W0124113	POT100-E
2025-09-10T22:12:47.197Z	2025-09-11 00:00:00	LIN-RS-01	DUAL3	RS41	GC-POT100	RS41-SGPE	X1813811	POT100-E
2025-09-11T04:27:05.182Z	2025-09-11 06:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124114	POT100-E
2025-09-11T10:13:21.319Z	2025-09-11 12:00:00	LIN-RS-01	DUAL3	RS41	GC-POT100	RS41-SGPE	X1813940	POT100-E
2025-09-11T10:08:40.287Z	2025-09-11 12:00:00	LIN-RS-01	DUAL3	RS41	GC-POT100	RS41-SGP-REV2	W0124115	POT100-E
2025-09-11T16:17:33.366Z	2025-09-11 18:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124116	POT100-E
2025-09-11T22:18:07.363Z	2025-09-12 00:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124135	POT100-E
2025-09-12T04:30:57.785Z	2025-09-12 06:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124136	POT100-E
2025-09-12T10:28:20.372Z	2025-09-12 12:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124194	POT100-E
2025-09-12T16:22:30.637Z	2025-09-12 18:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124137	POT100-E
2025-09-12T22:26:03.783Z	2025-09-13 00:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124145	POT100-E
2025-09-13T04:25:34.474Z	2025-09-13 06:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124146	POT100-E
2025-09-13T10:23:44.487Z	2025-09-13 12:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124[illegible]	POT100-E
2025-09-13T16:17:32.495Z	2025-09-13 18:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124147	POT100-E
2025-09-13T22:16:21.763Z	2025-09-14 00:00:00	LIN-RS-01	ROUTINE2	RS41	GC-POT100	RS41-SGP-REV2	W0124149	POT100-E

Columns (launch)

SCHEDULE_DATE
BALLOON_NUMBER
VERSION
MS_CODE
SETUP_CODE
BALLOON_CODE
PARACHUTE_CODE
UNWINDER_CODE
RIG_CODE
SONDE_CODE
LP_ALT
LP_DATE
LP_LAT
LP_LON
LP_PRESS
LP_TEMP
LP_RH
TP_ALT
TP_DATE
TP_LAT
TP_LON
TP_PRESS
TP_TEMP
TP_RH
BP_ALT
BP_DATE
BP_LAT
BP_LON
BP_PRESS
BP_RH
BP_TEMP
POS_LAT_SOUTH
POS_LAT_NORTH
POS_LON_WEST
POS_LON_EAST
WC_PRESS
WC_RH
WC_TEMP
WC_WDIR
WC_WSPEED
WC_CLOUDS_SYS
WC_COMMENT
WC_CLOUDS_TXT
SUN_TIMEOFDAY
SUN_DAYTIME
SUN_NIGHTTIME

Satellite Collocation Viewer

- Collocations between radiosonde measurements and satellites
- Long list of satellites (> 50)
- Precalculated results (use of external service)
  → https://sips.ssec.wisc.edu/orbnav#/tools/overspot
- Use of real radiosonde trajectories (time & location)
- Radiosonde measurements since 2020 (more will be available later)
- Collocations within 1000 km and ±3 hours (longer time maybe later)
- Daily updates

Satellite Collocation Viewer – General

Choose site(s) or system(s)

Choose view mode: plot, table, map

Choose priority: min. distance or duration

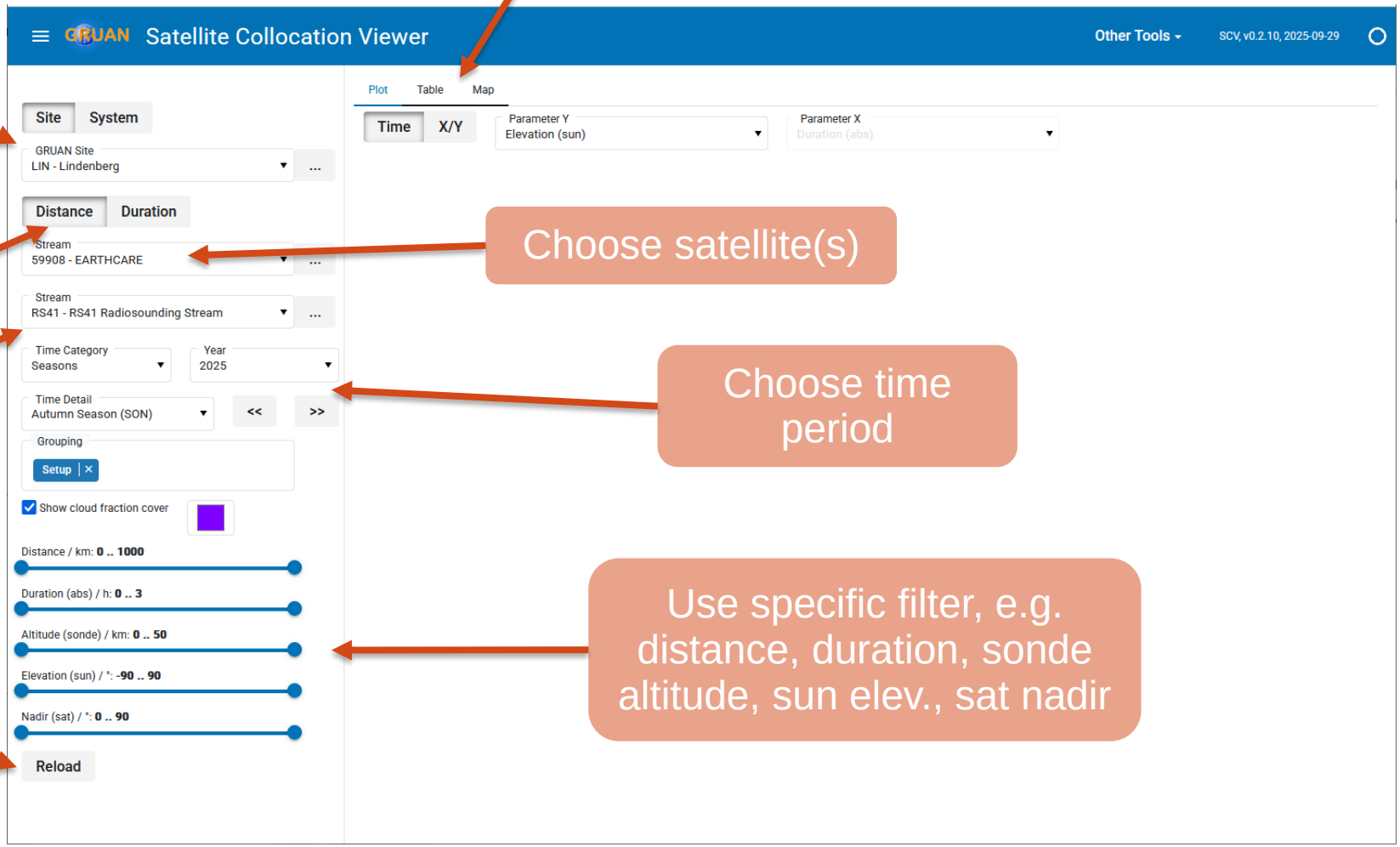
Choose satellite(s)

Choose sonde(s)

Choose time period

Reload using new selections

Use specific filter, e.g. distance, duration, sonde altitude, sun elev., sat nadir



Satellite Collocation Viewer – Plot

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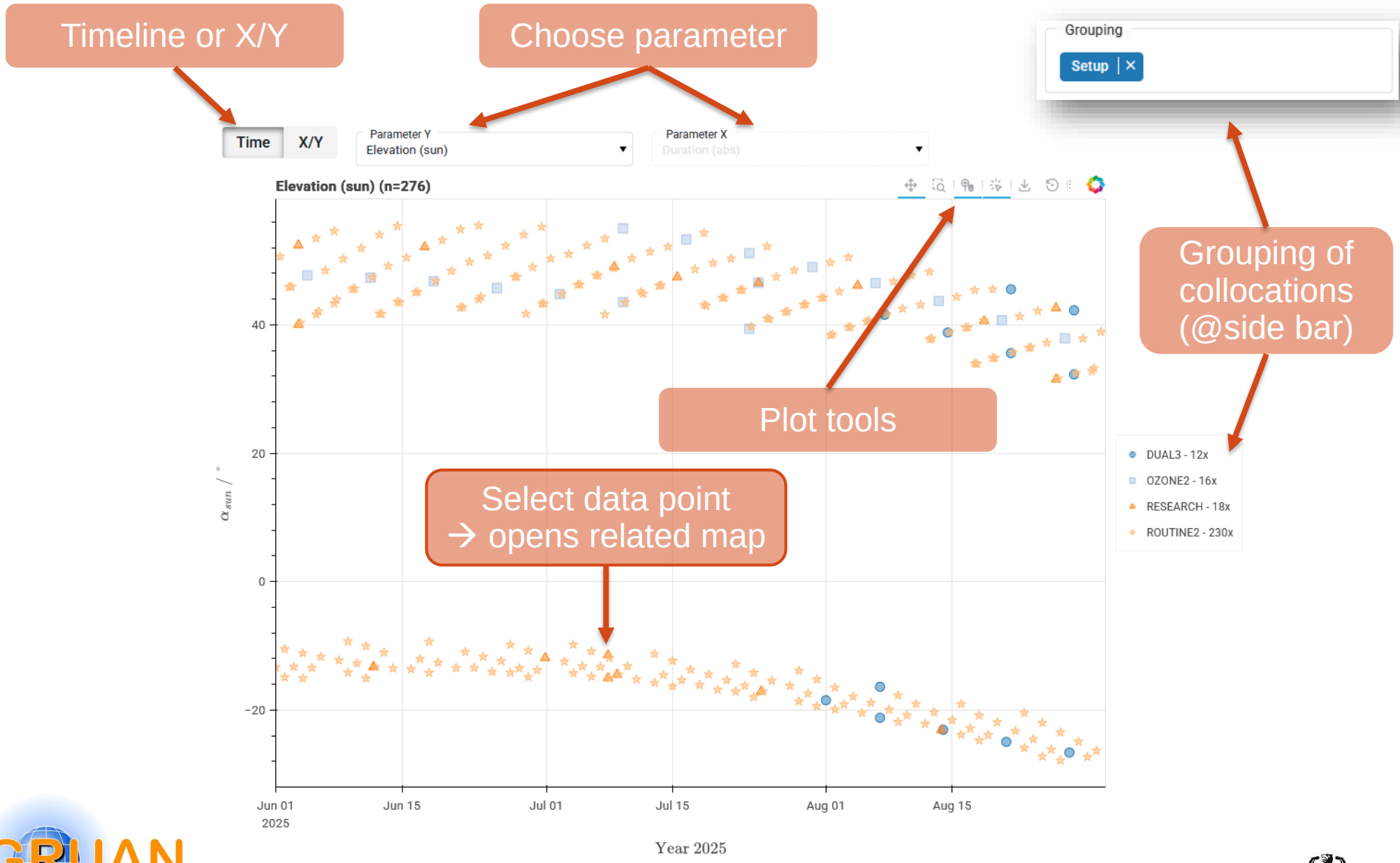
Wetter und Klima aus einer Hand



Satellite Collocation Viewer – Table

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Satellite Collocation Table (n=276) ← Length of result list

Download

Download result list as CSV file

MS_CODE	SCHEDULE_DATE	SETUP_CODE	INTERNAL_CODE	SAT_NAME	STREAM_CODE	DISTANCE	DURATION_ABS	
LIN-RS-01	2025-06-01 00:00:00	ROUTINE2	605	EARTHCARE	RS41	126.2	6,366.12	DI
LIN-RS-01	2025-06-01 12:00:00	ROUTINE2	607	EARTHCARE	RS41	383.1	4,796.2	DI
LIN-RS-01	2025-06-02 00:00:00	ROUTINE2	609	EARTHCARE	RS41	638.6	1,158.867	DI
LIN-RS-01	2025-06-02 00:00:00	ROUTINE2	609	EARTHCARE	RS41	814.1	8,821.133	DI
LIN-RS-01	2025-06-02 12:00:00	ROUTINE2	611	EARTHCARE	RS41	251.9	10,700.366	DI
LIN-RS-01	2025-06-02 18:00:00	ROUTINE2	612	EARTHCARE	RS41	249.9	10,408.954	BC
LIN-RS-01	2025-06-03 00:00:00	ROUTINE2	613	EARTHCARE	RS41	3.7	3,503.423	DI
LIN-RS-01	2025-06-03 18:00:00	ROUTINE2	616	EARTHCARE	RS41	899.6	7,998.711	BC
LIN-RS-01	2025-06-04 00:00:00	ROUTINE2	617	EARTHCARE	RS41	846.4	1,863.211	DI
LIN-RS-01	2025-06-04 00:00:00	ROUTINE2	617	EARTHCARE	RS41	620.9	8,132.789	DI
LIN-RS-01	2025-06-04 12:00:00	RESEARCH	LG2025_23_MGGr	EARTHCARE	RS41	581.0	4,250.207	DI
LIN-RS-01	2025-06-04 12:00:00	RESEARCH	LG2025_23_MGGr	EARTHCARE	RS41	928.8	8,338.207	BC
LIN-RS-01	2025-06-04 12:00:00	OZONE2	619	EARTHCARE	RS41	63.3	10,498.964	DI
LIN-RS-01	2025-06-05 00:00:00	ROUTINE2	621	EARTHCARE	RS41	183.1	602.442	DI
LIN-RS-01	2025-06-05 12:00:00	ROUTINE2	623	EARTHCARE	RS41	3,222.5	DI	
LIN-RS-01	2025-06-05 12:00:00	ROUTINE2	623	EARTHCARE	RS41	6,426.5	BC	
LIN-RS-01	2025-06-05 18:00:00	ROUTINE2	624	EARTHCARE	RS41	727.7	8,665.563	BC

Select data row → opens related map

Pages with navigation if long result list

First Prev 1 2 3 4 5 Next Last

Columns

MS_CODE
SCHEDULE_DATE
SETUP_CODE
INTERNAL_CODE
SAT_NAME
STREAM_CODE
DISTANCE
DURATION_ABS
CLOSEST
SAT_TIMING
SAT_TIMESTAMP
SAT_NADIR
SUN_ELEVATION
SONDE_TIMESTAMP
SONDE_POS_LAT
SONDE_POS_LON
SONDE_POS_ALT
LAUNCH_TIMESTAMP
LAUNCH_POS_LAT
LAUNCH_POS_LON
LAUNCH_POS_ALT
BURST_TIMESTAMP
BURST_POS_LAT
BURST_POS_LON
BURST_POS_ALT
SONDE_FILE_NAME

Satellite Collocation Viewer – Map

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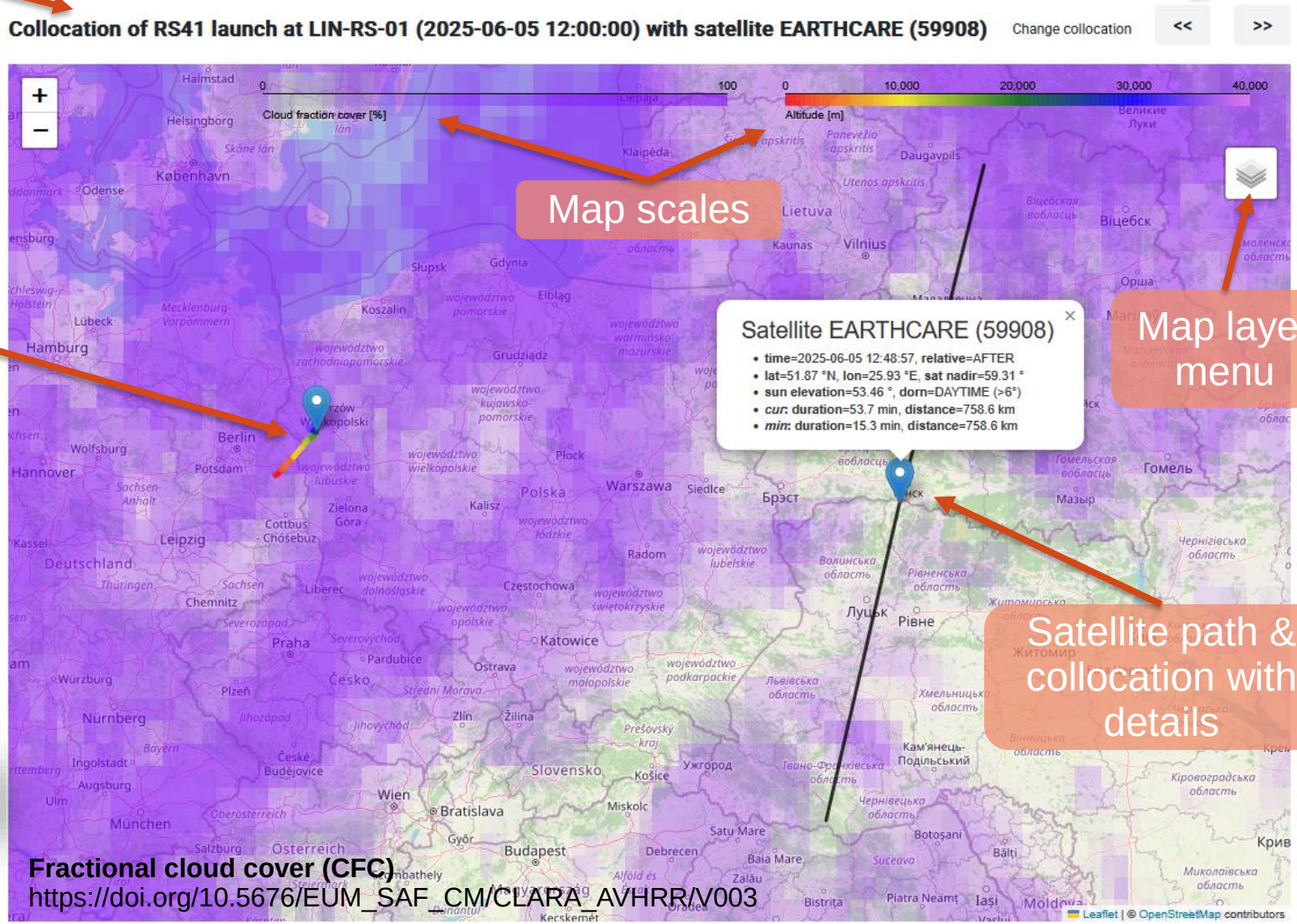
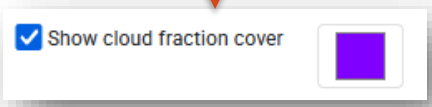
Wetter und Klima aus einer Hand

Title of selected collocation

Navigate between results



Enable cloud cover of day (@side bar)



Measurement Timeline

- Detailed insight into the GRUAN Meta-data base (GMDB)
- Measurement events of RS and LI (GN will be available later)
- Meta-data of measurement events, e.g. about
  - Event itself, equipment, instrument checks
  - Data files, product files, processing tasks
  - Streams, collocations
- Mini-map with trajectory (if radiosonde)
- Full time range (approx. since 2004)
- Daily updates

Measurement Timeline – General

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Wetter und Klima aus einer Hand

Choose type: RS, LI, GN

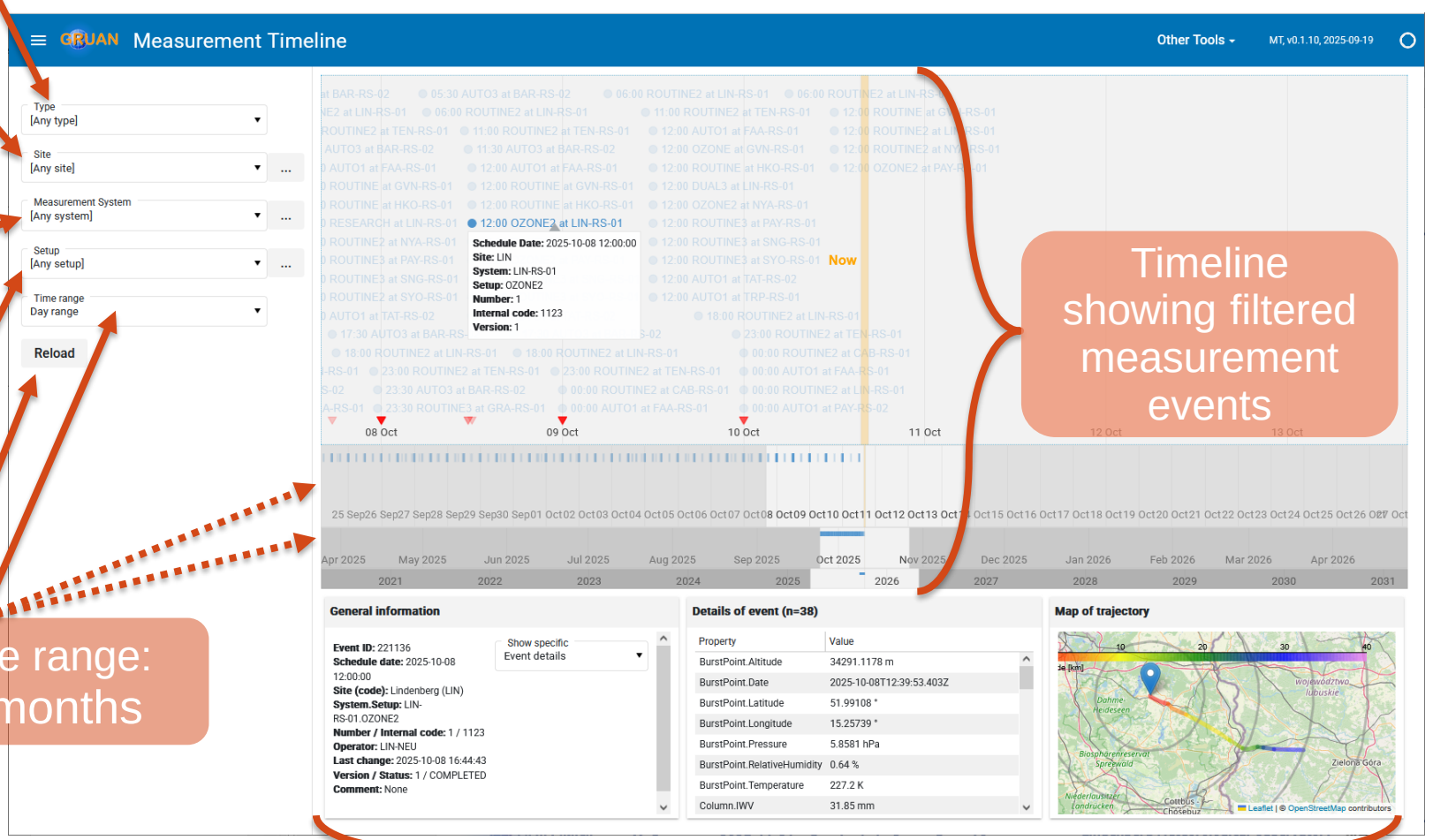
Choose site(s)

Choose system(s)

Choose setup(s)

Reload using new selections

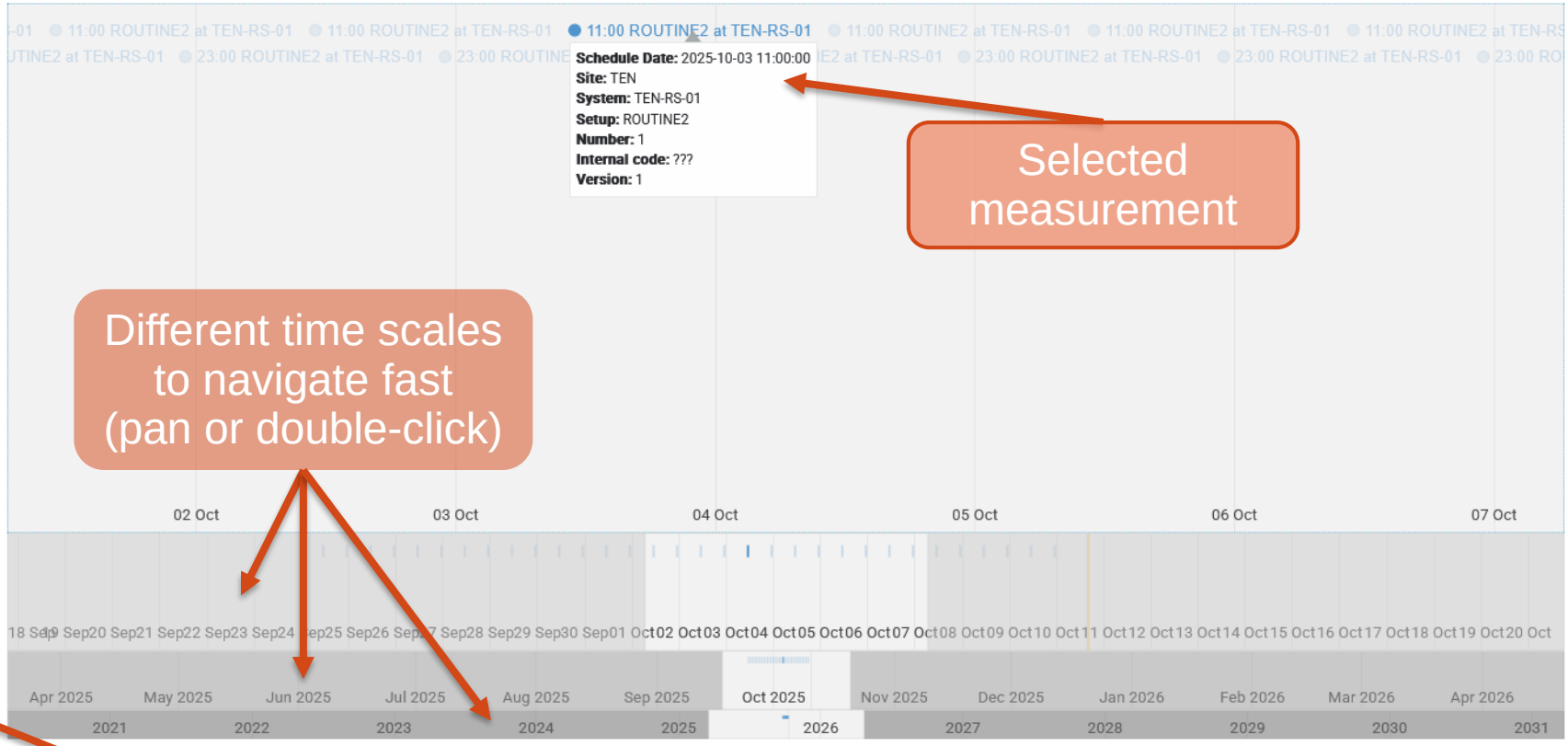
Select time range: days or months



Timeline showing filtered measurement events

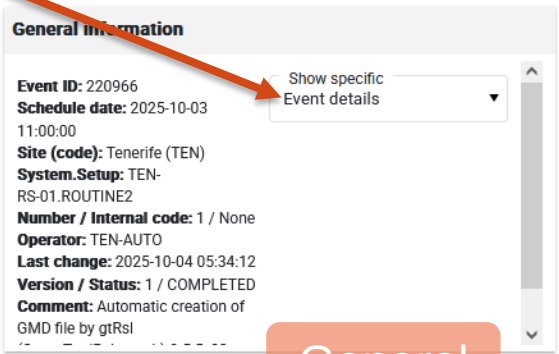
Details of selected measurement

Measurement Timeline – Handling

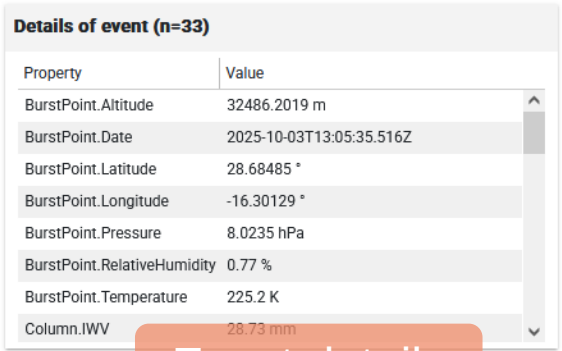


Specific details

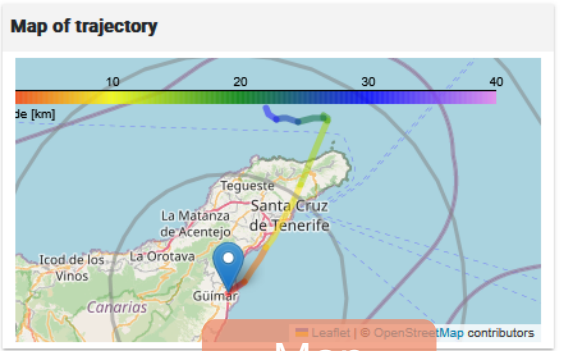
- Event
- Equipment
- Instrument checks
- Data files
- Product files
- Processing tasks
- Streams
- Collocations



General



Event details



Map

Measurement Timeline – Details

Equipment

List of equipment (n=7)

#	Name	Type
0	DC-MW41 (N34501, MW41-1_001)	DPS (GROUND)
1	DC-RI41-B (N2920017, RI41-1_001)	CheckTool (GROUND)
2	TA500 (none)	Balloon (LAUNCH)
3	TP-088 (none)	Parachute (LAUNCH)
4	UW-V55-4 (none)	Unwinder (LAUNCH)
5	SOLO (none)	Rig (LAUNCH)
6	RS41-SGP-REV2 (W3420160)	Sonde (LAUNCH)

List of details (n=19)

Property	Value
MEA ID	1701429
Instrument	RS41-SGP-REV2 (Sonde)
Serial Number	W3420160
Assembly Code	None (None)
Assembly Group	LAUNCH
Operator	None
CoverColour	white
CoverMaterial	styrofoam

Instrument checks

List of instrument checks (n=1)

Date	Check	Tool	Instrument
2025-10-03 10:56:23	GC-RI41	DC-RI41-B (N2920017)	RS41-SGP-REV2 (\

List of details (n=9)

Property	Value
SIC ID	351035
Check Date	2025-10-03T10:56:23
Instrument Check	GC-RI41
Check Tool	DC-RI41-B (N2920017)
Checked Instrument	RS41-SGP-REV2 (W3420160)
Operator	None
CorrPressure	2.244 hPa
RefPressure	1009.15 hPa

Data files

List of uploaded files (n=2)

Name	Size	Type
SPTF_20251003_111513.mwx	15.41 MB	MWX
TEN-RS-01_0_ROUTINE2_001_20251003T110000_1.(	0.00 MB	GMD

List of details (n=5)

Property	Value
AF ID	1533925
File Type	MWX
File Size	15.407 MB
MD5 Hash	9B4E4CC416B028115479144B69FB77EA
Last Change	2025-10-04T05:34:12

Product files

List of product files (n=3)

Product	Size	Type	Instrument
RS41-EDT.1	0.27 MB	GNC-DATA	RS41-SGP-REV2 (W3420160)
RS41-GDP.1	3.80 MB	GNC-DATA	RS41-SGP-REV2 (W3420160)
RS41-RAW.1	13.61 MB	GNC-RAW	RS41-SGP-REV2 (W3420160)

List of details (n=9)

Property	Value
PI ID	957300
Product	RS41-GDP.1
Level	2
File Name	TEN-RS-01_2_RS41-GDP_001_20251003T1
File Type	GNC-DATA
File Size	3.798 MB
File Revision	1
MD5 Hash	5307E153582B3AE07EE3B4E3AB0A6603

Processing tasks

List of processing tasks (n=14)

Date	Processing	Status
2025-10-04 05:39	CONVERT-MWX-RS41.1	FINISHED
2025-10-04 05:39	MARK-STREAM-RS41.1	FINISHED
2025-10-04 05:43	TRANSFER-PRODUCT-TO-RAW.1	FINISHED
2025-10-04 05:54	CREATE-RS41-EDT.1	FINISHED
2025-10-04 05:54	COMPUTE-RS41-RELEASE.1	FINISHED
2025-10-04 05:59	PLOT-RS41-RELEASE.1	FINISHED
2025-10-04 05:59	[illegible]	FINISHED
2025-10-04 05:59	TRANSFER-PRODUCT-TO-RAW.1	FINISHED

List of details (n=7)

Property	Value
PT ID	3214159
Processing	COMPUTE-RS41-RELEASE.1
Status	FINISHED
Priority	NORMAL
Specific Runs	1
Schedule Date	2025-10-04T05:49:29
Last Run Date	2025-10-04T05:54:42

Streams

List of stream items (n=1)

Stream	Instrument	Last OK	First Error
RS41	RS41-SGP-REV2 (W3420	RS-GDP-PUBLISHE	none

List of steps (n=11)

#	Rule	Status	Group	Error?
3	RS41 Marked (MWX)	OKAY	RS-LAUNCH	
4	RS41 Marked (DIGICORA)	ERROR	RS-LAUNCH	
5	RS41 MWX Raw Data File	OKAY	RS-RAW-ORIGINAL	
6	RS41 DIGICORA Raw Data F	ERROR	RS-RAW-ORIGINAL	
7	RS41 GNC-RAW Converting	OKAY	RS-RAW-CONVERTED	
8	RS41 GNC-RAW Converting	ERROR	RS-RAW-CONVERTED	
9	RS41-GDP.1 Processing	OKAY	RS-GDP-PROCESSING	
10	RS41-GDP.1 published at DE	OKAY	RS-GDP-PUBLISHED	

Collocations

List of collocations (n=42)

Satellite	Distance [km]	abs(Duration) [h]	Closest	Sat Timing
AQUA	2.2	2.97	DISTANCE	AFTER
AQUA	7.3	2.68	DURATION	AFTER
ARCTIC WEATHER	416.9	0.76	DISTANCE	DURING
ARCTIC WEATHER	428.3	0.02	DURATION	DURING
EARTHCARE	575.1	2.66	BOTH	AFTER
FENGYUN 3A	867.4	2.03	BOTH	AFTER
[illegible]	[illegible]	[illegible]	DISTANCE	BEFORE
FENGYUN 3B	265.7	1.79	DURATION	BEFORE

List of details (n=15)

Property	Value
Colloc ID	29588136
Satellite	EARTHCARE (59908)
Is Closest Distance	Yes
Is Closest Duration	Yes
Distance	575.1 km
Distance (min)	575.1 km
Duration (abs)	2.66 h
Duration (abs, min)	2.66 h

Balloon Trajectories

- Balloon trajectories (from launch to burst)
- Overview about drift distances and directions
- Visualising the difference between vertical profile and trajectories
- Radiosonde measurements since 2020 (more will be available later)
- Daily updates

Balloon Trajectories – General

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

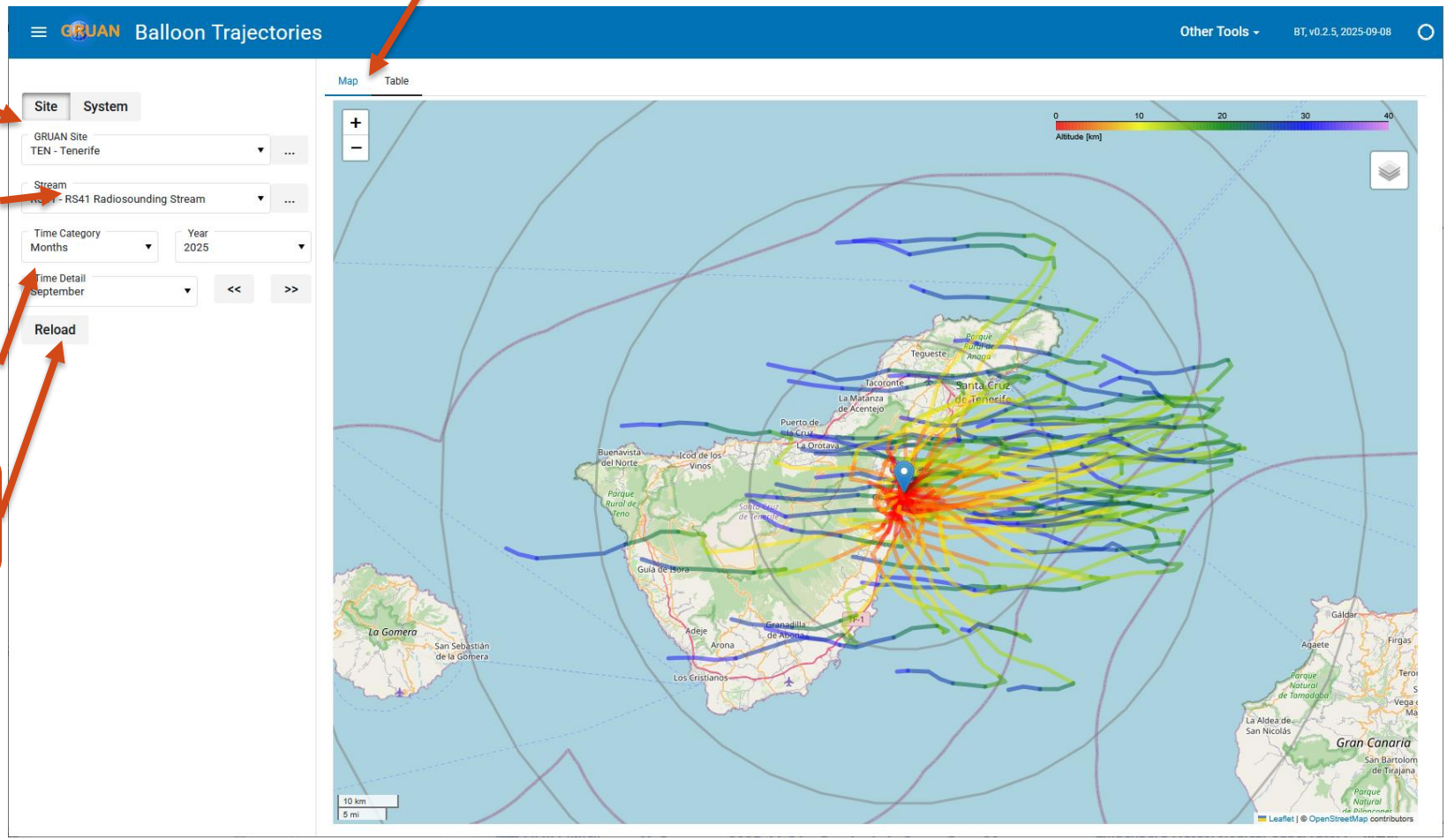
Choose site(s) or system(s)

Choose view mode: map, table

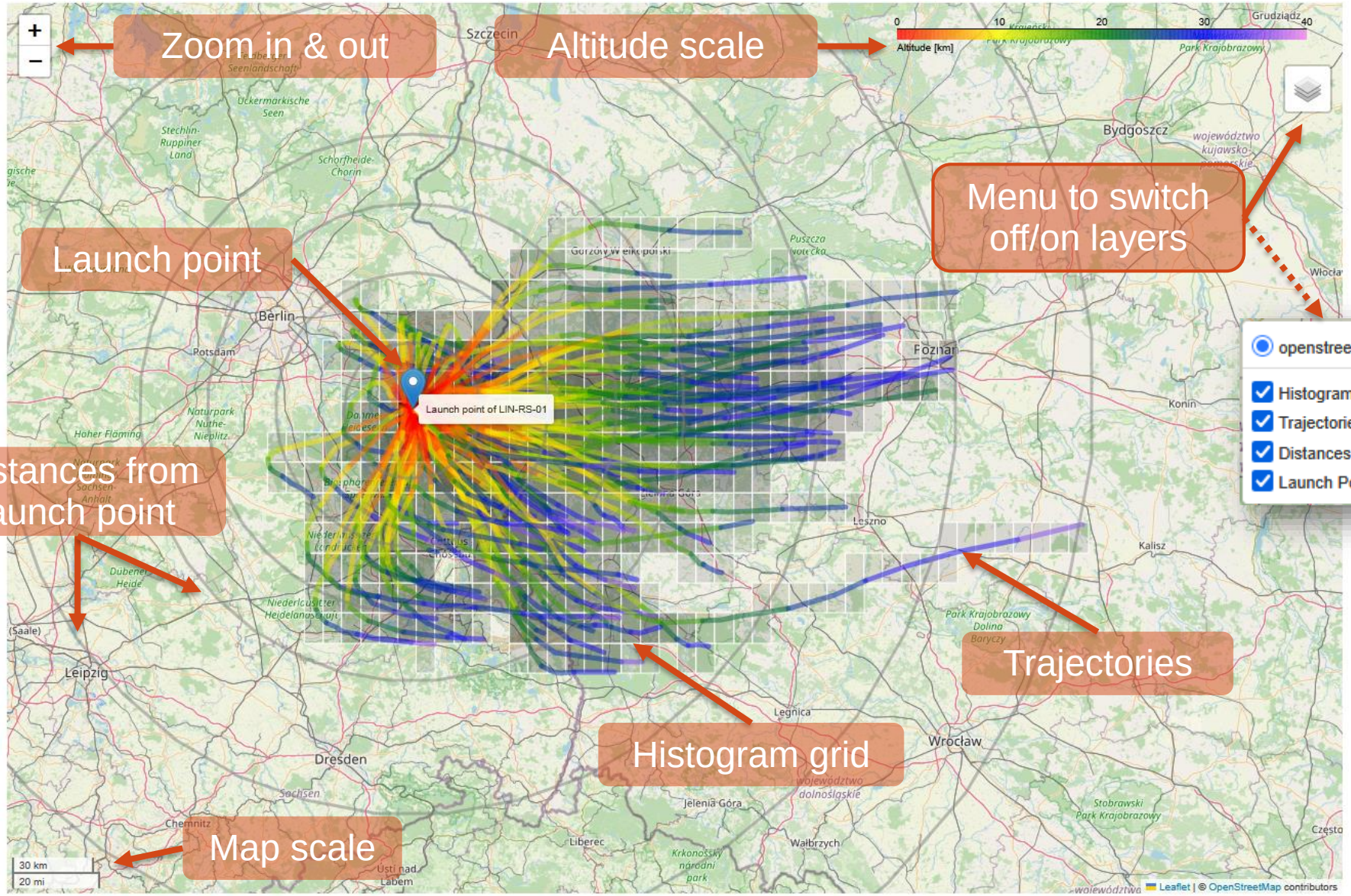
Choose stream(s) = sonde model

Choose time period

Reload using new selections



Balloon Trajectories – Map



Balloon Trajectories – Table

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Balloon Trajectory Table

Download

SCHEDULE_DATE	MS_CODE	SETUP_CODE	STREAM_CODE	SONDE_START_DATE	SONDE_END_DATE	SONDE_END_ALT	TRAJ_ID	ME_ID
2025-08-10 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-09 23:20:10	2025-08-10 00:58:17	30,107.81	79,769	217,095
2025-08-10 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-10 11:20:03	2025-08-10 13:01:22	[illegible]	[illegible]	[illegible]096
2025-08-11 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-10 23:20:03	2025-08-11 00:53:14	[illegible]	[illegible]	217,121
2025-08-11 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-11 11:20:04	2025-08-11 13:15:41	26,040.91	79,793	217,122
2025-08-12 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-11 23:19:56	2025-08-12 00:50:41	30,784.97	79,810	217,153
2025-08-13 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-12 23:20:10	2025-08-13 00:44:55	27,870.37	79,832	217,173
2025-08-13 06:00:00	HKO-RS-02	OZONE	RS41	2025-08-13 05:23:26	2025-08-13 07:09:23	31,976.99	80,127	217,588
2025-08-13 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-13 11:20:04	2025-08-13 12:59:53	32,809.45	79,833	217,174
2025-08-14 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-13 23:20:10	2025-08-14 01:09:27	28,710.18	79,852	217,200
2025-08-15 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-14 23:20:08	2025-08-15 00:43:46	28,367.33	79,871	217,224
2025-08-15 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-15 11:20:10	2025-08-15 12:50:47	28,806.04	79,872	217,225
2025-08-16 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-15 23:20:09	2025-08-16 00:35:02	25,693.31	79,882	217,245
2025-08-16 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-16 11:20:09	2025-08-16 13:07:06	34,838.97	79,904	217,266
2025-08-17 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-16 23:20:05	2025-08-17 00:44:16	30,139.63	79,905	217,267
2025-08-17 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-17 11:20:04	2025-08-17 11:47:05	9,207.51	79,906	217,268
2025-08-18 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-17 23:20:01	2025-08-18 00:44:04	27,364.83	79,923	217,301
2025-08-18 12:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-18 12:14:40	2025-08-18 12:50:45	12,290.46	79,924	217,302
2025-08-19 00:00:00	HKO-RS-01	ROUTINE	RS41	2025-08-18 23:20:07	2025-08-19 00:56:37	31,234.73	79,946	217,327

Download result list as CSV file

Columns

SCHEDULE_DATE
MS_CODE
SITE_NAME
ME_CODE
ME_VERSION
SETUP_CODE
INTERNAL_CODE
STREAM_CODE
SONDE_START_DATE
SONDE_START_LAT
SONDE_START_LON
SONDE_START_ALT
SONDE_END_DATE
SONDE_END_LAT
SONDE_END_LON
SONDE_END_ALT
TRAJ_ID
ME_ID

Pages with navigation if long result list

First Prev 1 2 3 4 Next Last

Data Stream Checker

- Insight into the status of the GRUAN data flow
- It is based on the data streams → e.g. radiosonde models
- Streams of RS and LI (GN will be available later)
- Daily updates

Data Stream Checker – General

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Choose type: RS, LI, GN

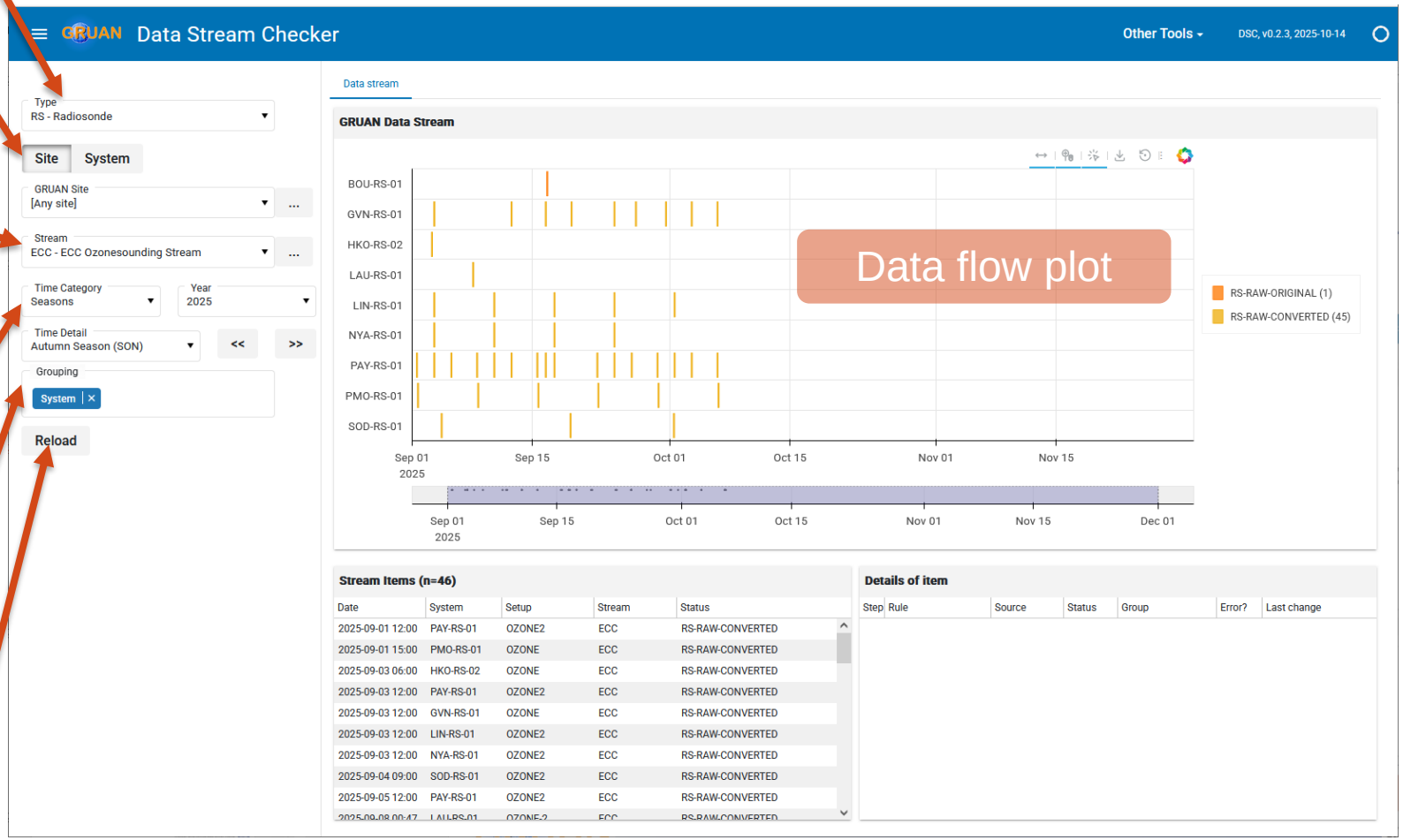
Choose site(s) or system(s)

Choose stream(s) = sonde model

Choose time period

Choose grouping e.g. systems

Reload using new selections



Data flow plot

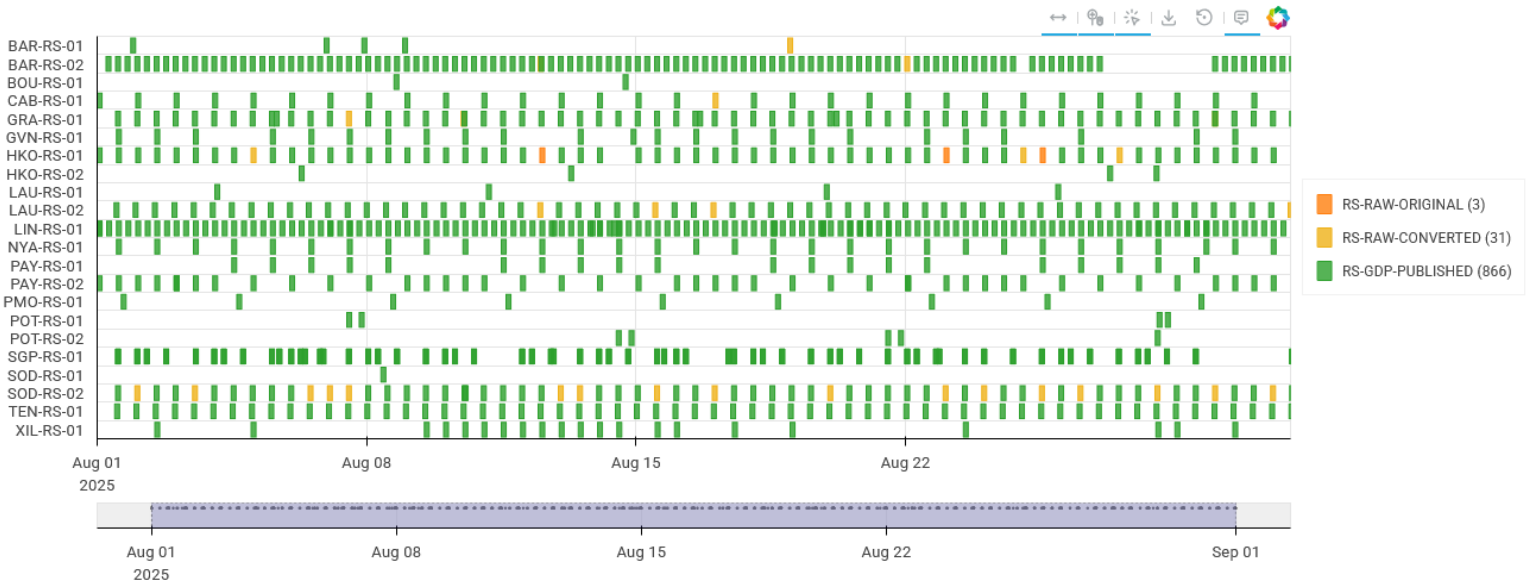
List of items

Details of item

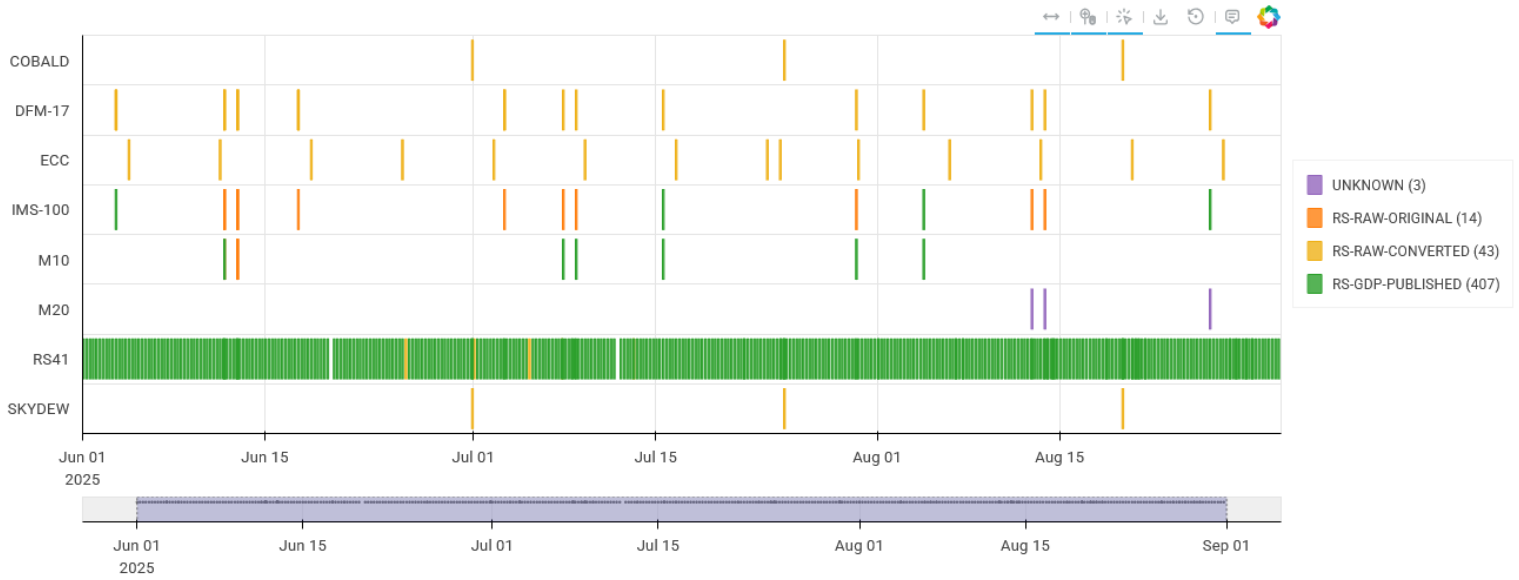
Data Stream Checker – Examples

Deutscher Wetterdienst
Wetter und Klima aus einer Hand

Stream RS41, any system, one month



System LIN-RS-01, any stream, one season



Provision of GRUAN online tools

- Main server → **https://panel.gruan.info** ← Routine server
  - Site Reports → https://panel.gruan.info/**app_site_reports**
  - Login → https://panel.gruan.info/**login**
- Test server → **https://panel-test.gruan.info** ← Test server
  - Data Viewer → https://panel-test.gruan.info/**app_data_viewer**
  - Satellite Collocation Viewer → https://panel-test.gruan.info/**app_sat_colloc_viewer**
  - Measurement Timeline → https://panel-test.gruan.info/**app_measurement_timeline**
  - Balloon Trajectories → https://panel-test.gruan.info/**app_balloon_trajectories**
  - Data Stream Checker → https://panel-test.gruan.info/**app_data_stream_checker**
  - Login → https://panel-test.gruan.info/**login**

All online tools will finally be available at routine server after BETA test.

Access to BETA test

- Official BETA test of GRUAN online tools starts now
- Special user account → *will be deactivated after BETA test*
  - Username: betatest
  - Password: icm-16
- What should be tested?
  - Is server proper dimensioned? → load from many users
  - Meets the requirements? → functionality, speed, up-to-dateness, …
  - Missing functions? → feature requests
- **LC is awaiting feedback from all test users** → gruan.lc@dwd.de
- Proper user management will follow

Summary

- New online tools are available now
- Official BETA test phase is starting now
- Development is ongoing…

  → **There will be changes, optimisations and extensions in future.**

Thank you for your attention.