

i2MON - Monitoring Platform

Online User Workshop

7. December 2021

Development of an Initial Integrated Monitoring System

- Development of an integrated web-based information system
- Enhancement of the data base to cover new data types and formats
- Enhancement of data visualization incorporating InSAR and laserscanning point clouds
- Project platform with partner and end-user access

Sensors Data Sources



Geotechnical Sensors

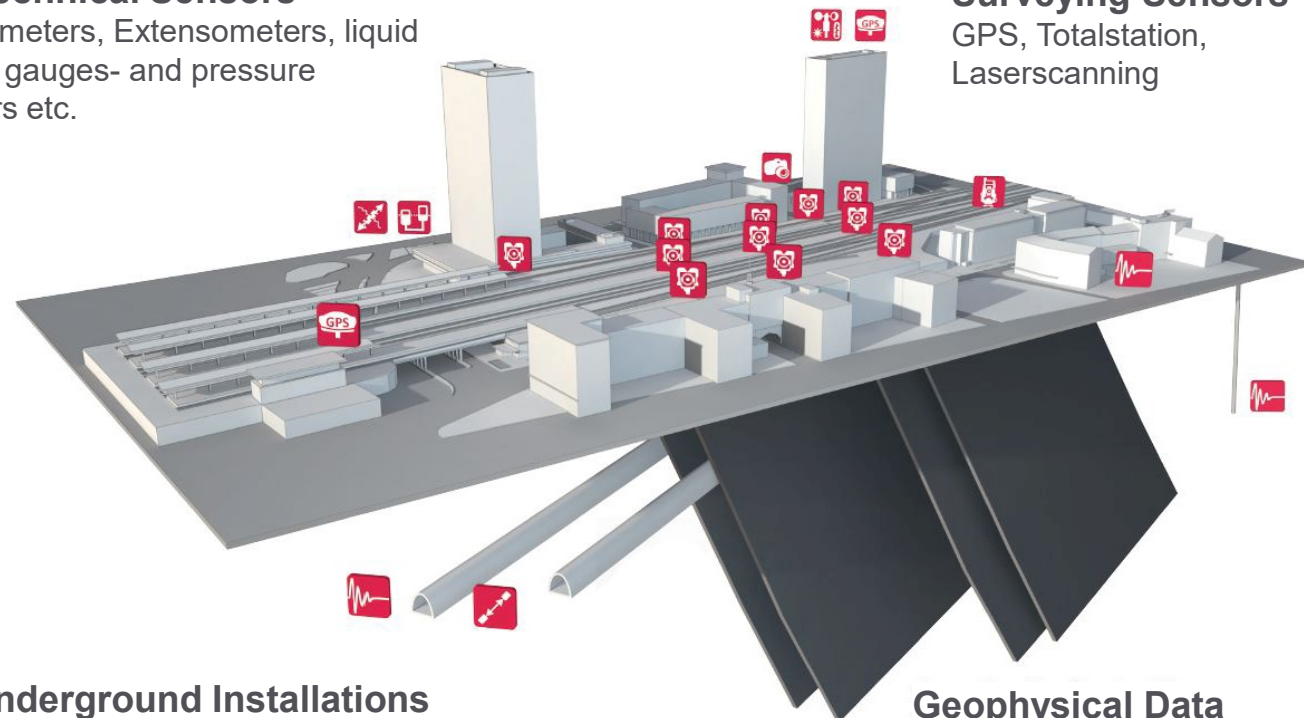
Inclinometers, Extensometers, liquid levels, gauges- and pressure sensors etc.

Multimedia Information

Cameras, Microphones

Surveying Sensors

GPS, Totalstation, Laserscanning



Underground Installations

Tunnel driving - blasting works, surveying, ATEX measuring systems

Geophysical Data

Geophones for vibration monitoring, seismology



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Data Platform

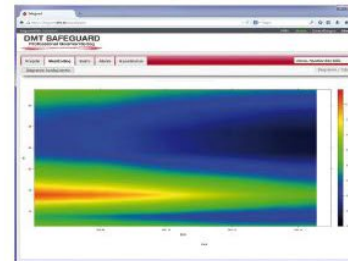
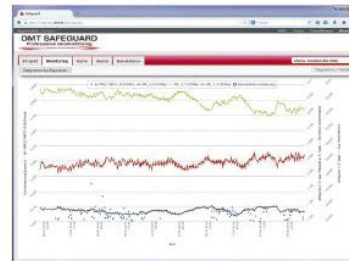


Visualization
Analysis

Flexible data integration (format, type, manufacturer)



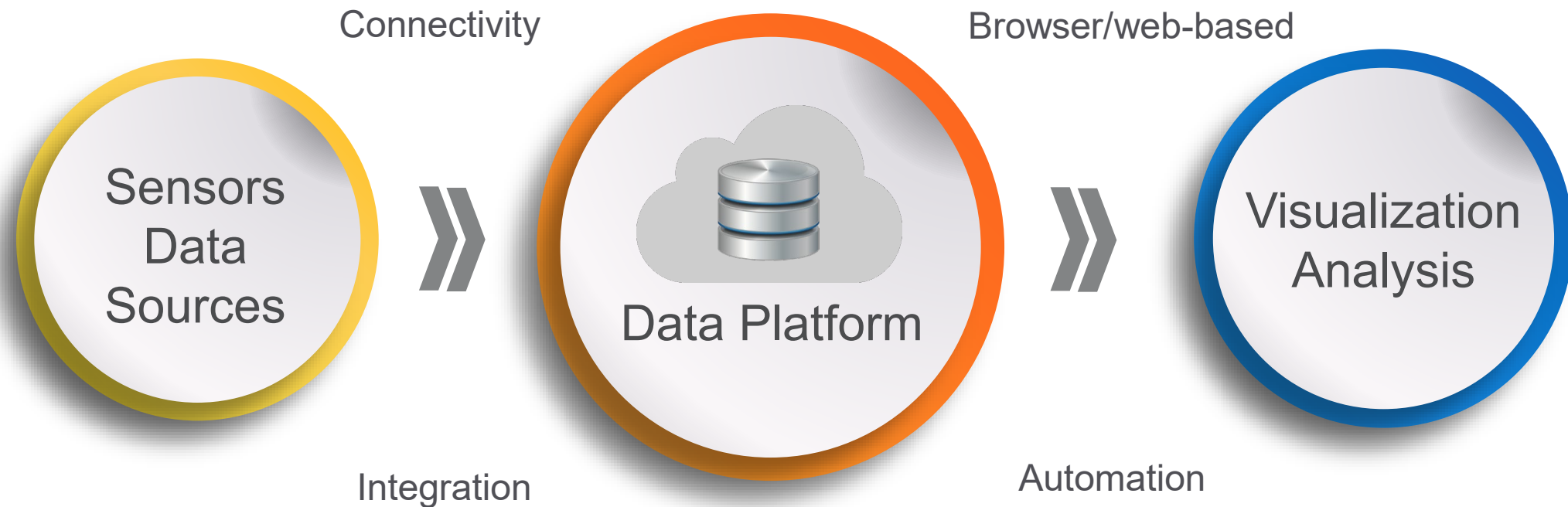
Data storage and management



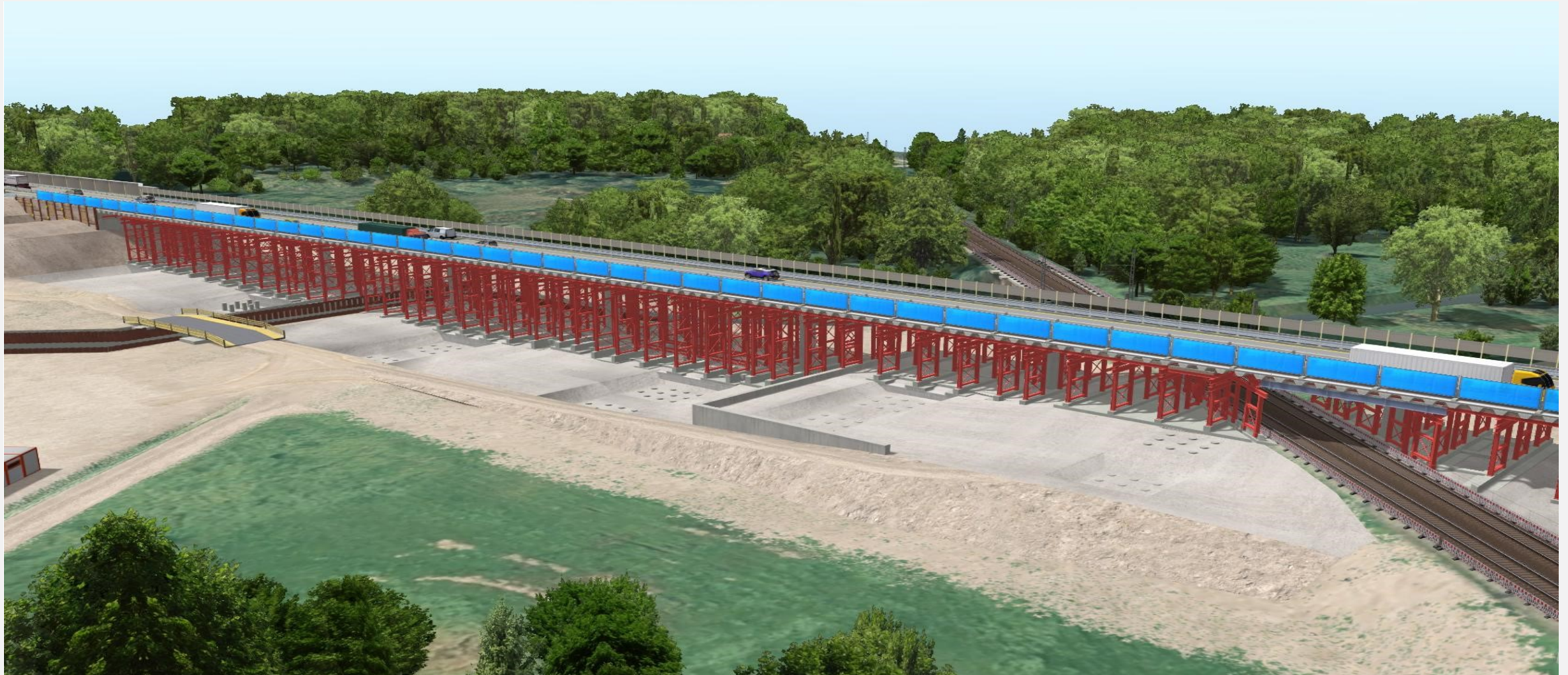
Online - Visualization

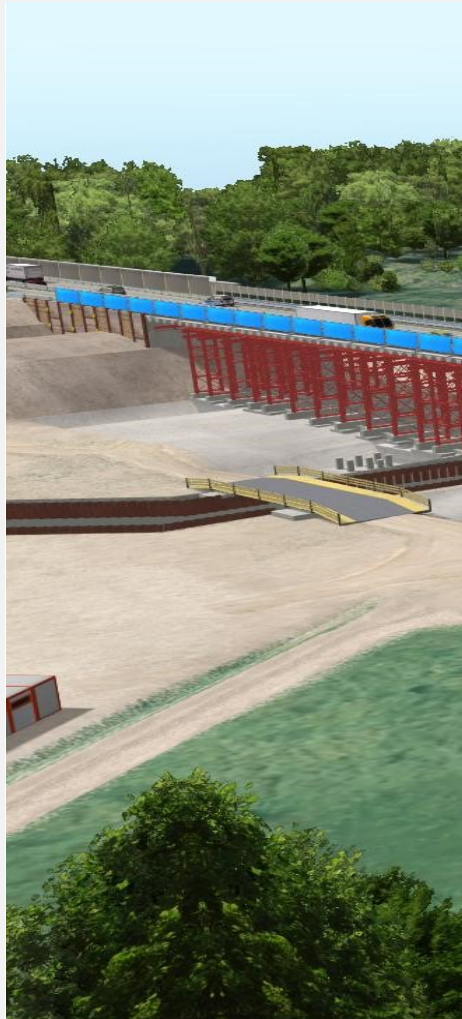


Alarming und Support



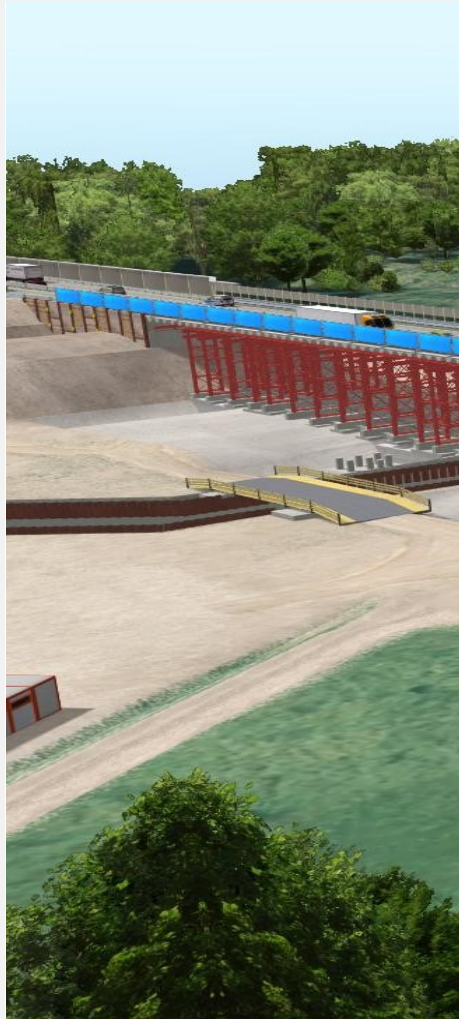
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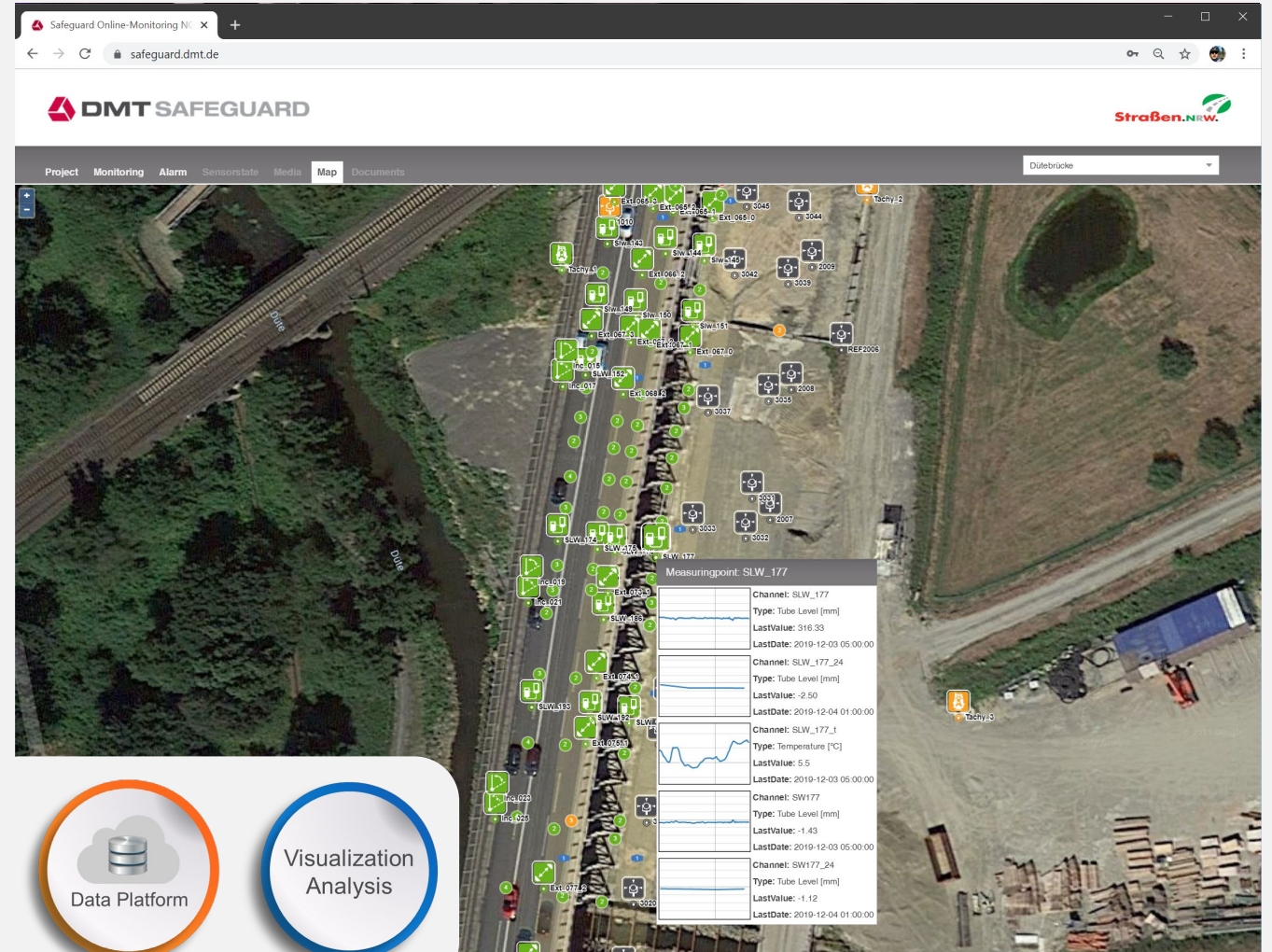


Sensors
Data
Sources

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Sensoren
Online





Connectivity

Advanced device management control, diagnostics and analysis for distributed sensor networks



Tables

Create data tables that are available from raw and calculated metrics for easy viewing, comparison, export and reporting



Maps

Sensor data in geospatial context, direct integration of GIS services



Warning

User-defined, multi-level threshold values and notifications (text message, e-mail, push)



Charts

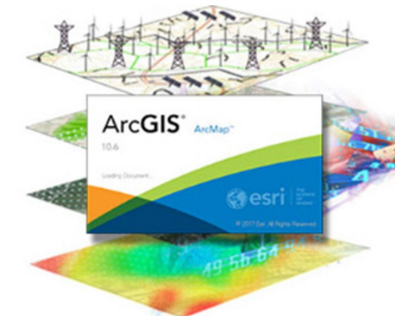
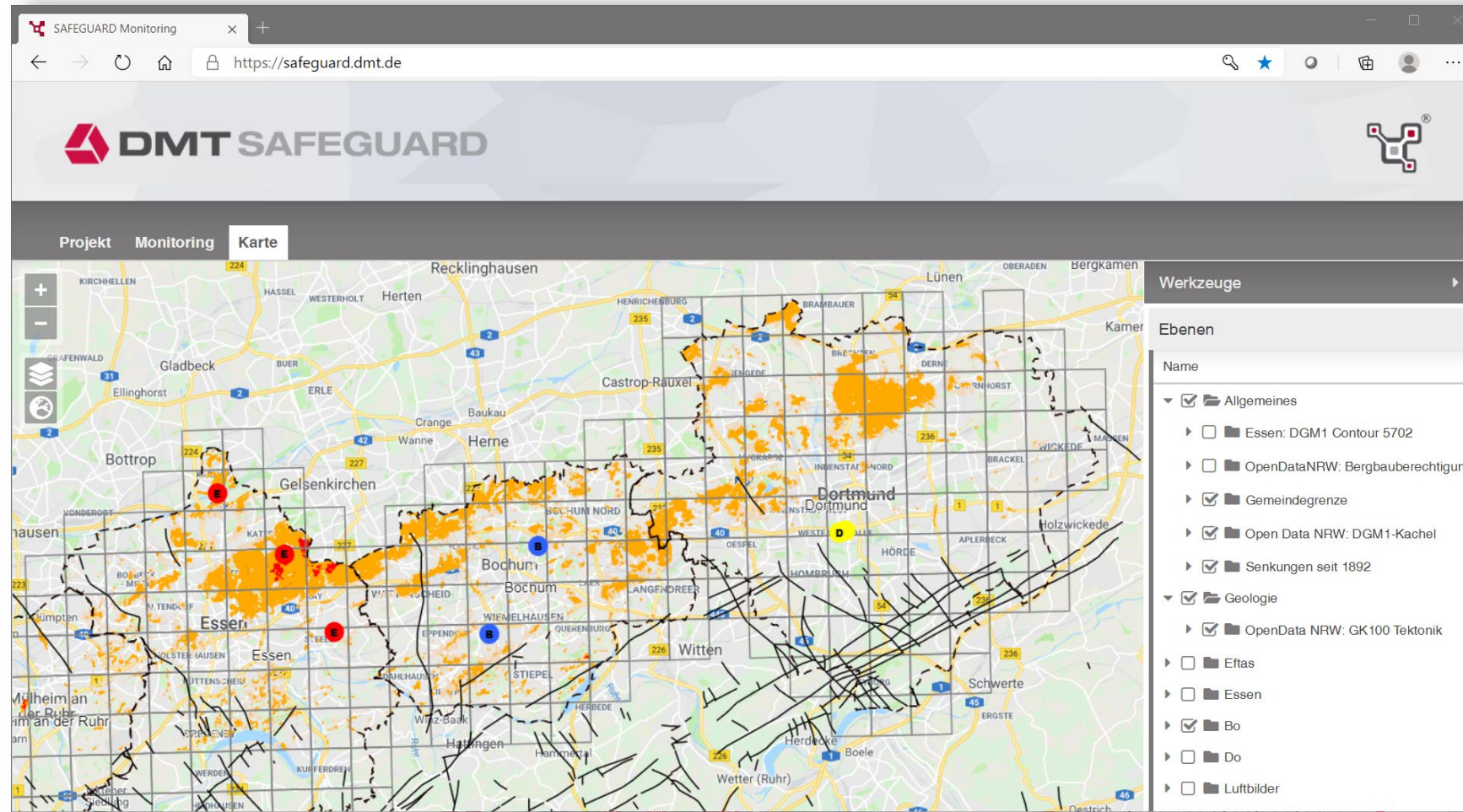
Powerful visualizations with customized time series, bar charts, distribution graphs etc.



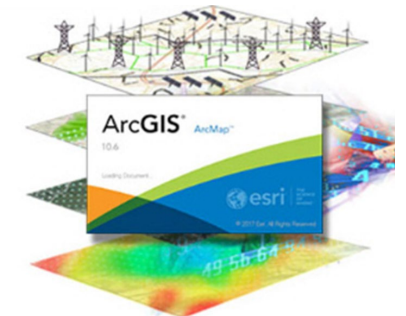
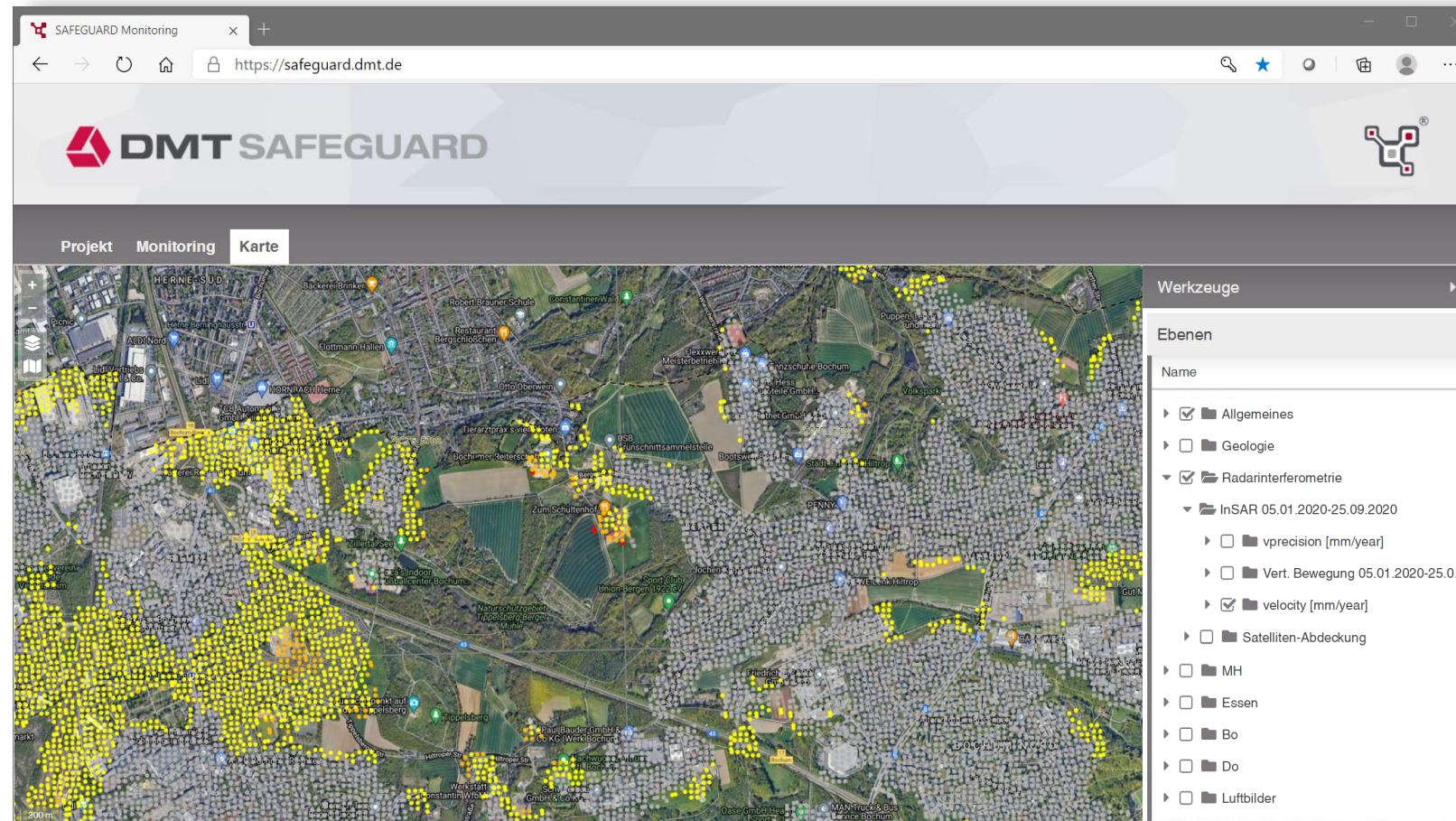
Documents

Import of critical documents, photos, inspection records and event data to demonstrate project progress and performance.

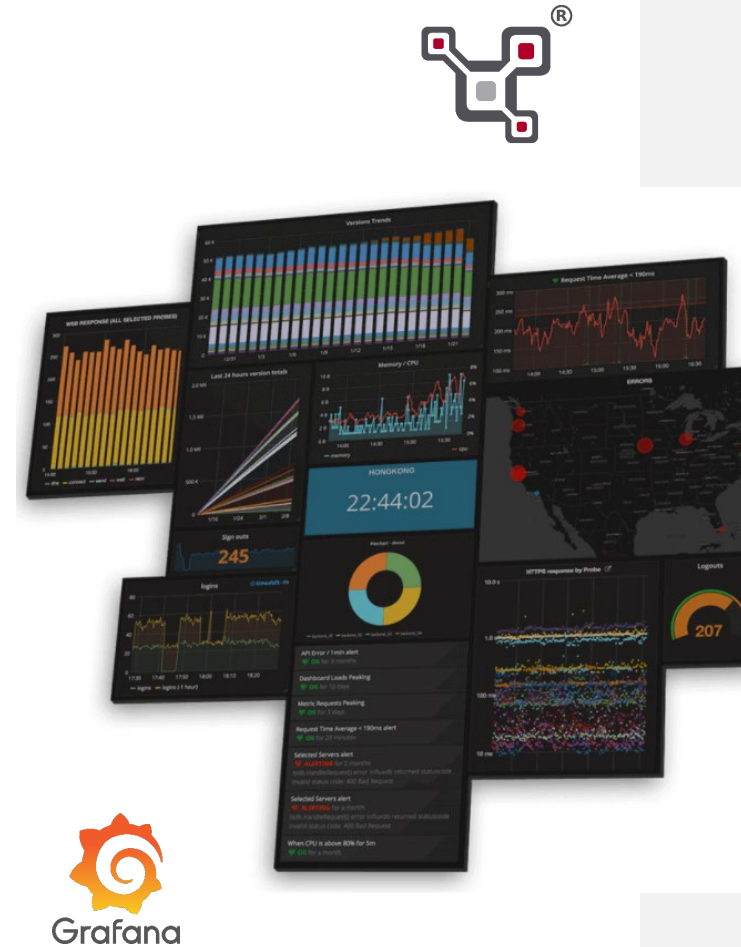
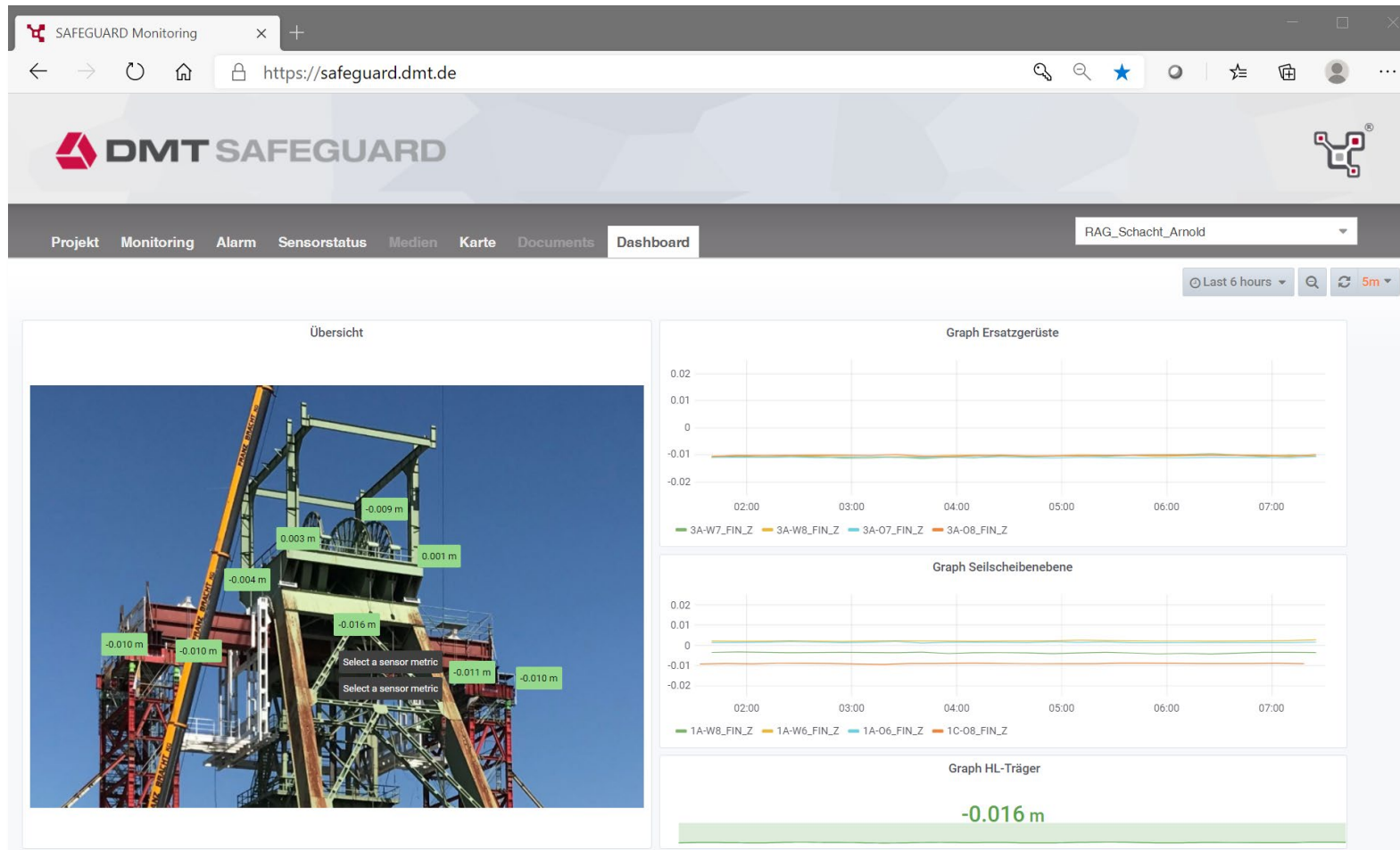
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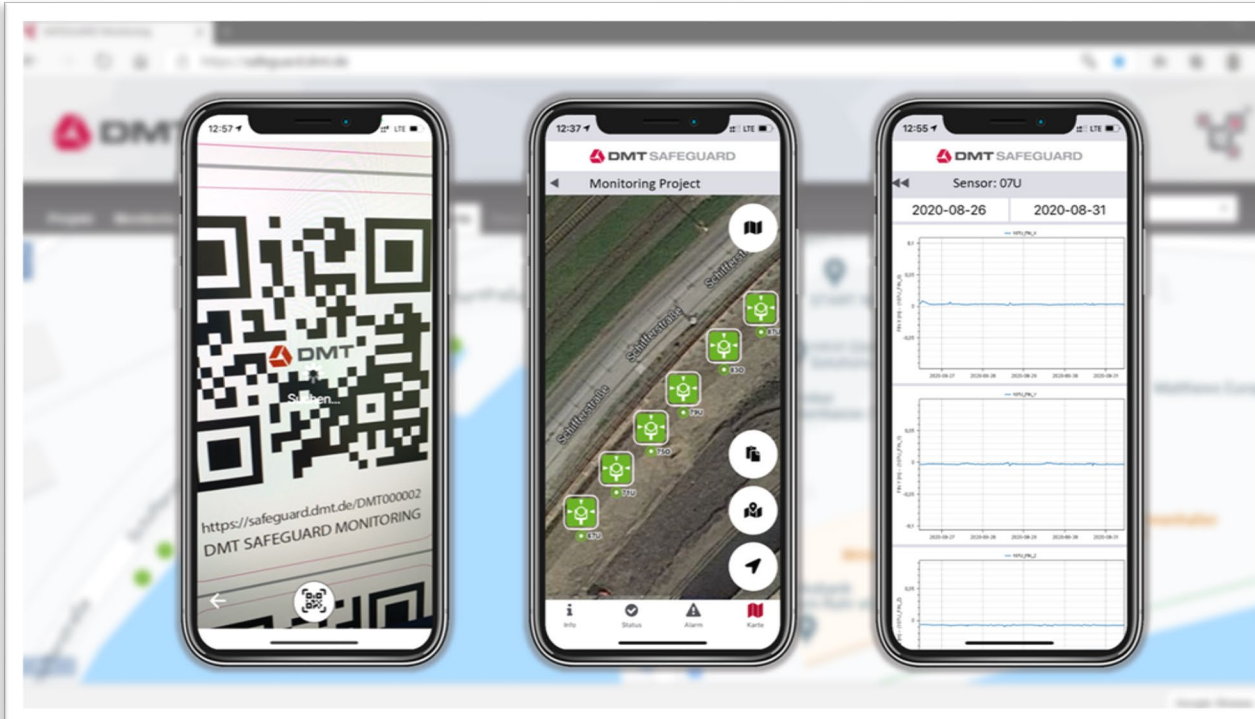
DMT SAFEGUARD - Monitoring Platform



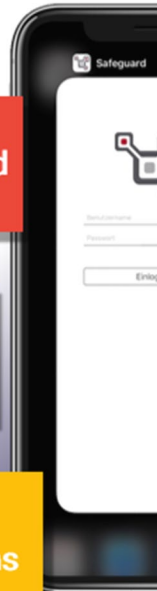
SENSOR INVENTORY
with QR-code scanner

SMARTPHONE APP
for Android and iOS

SITE OBSERVATION LOG
with location, photo and
observation notes



The image shows three smartphones displaying the DMT SAFEGUARD app interface. The first phone shows a QR code scanner with the DMT logo and a URL. The second phone shows a monitoring project map with sensor locations. The third phone shows sensor data graphs for a specific sensor (07U) over a time period (2020-08-26 to 2020-08-31).



MOBILE ACCESS
to monitoring data and
system status

ORIENTATION ON SITE
with location-based
sensor lists

INSTANT ALERTS
with push-notifications

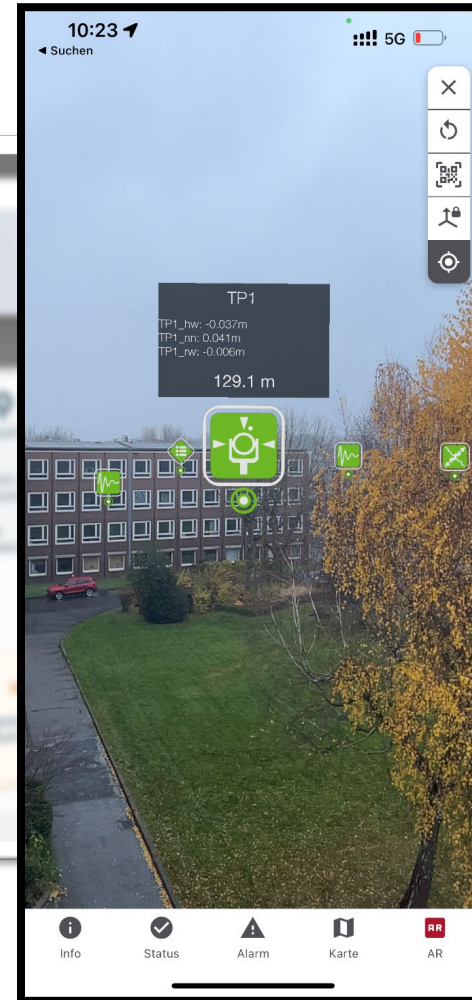
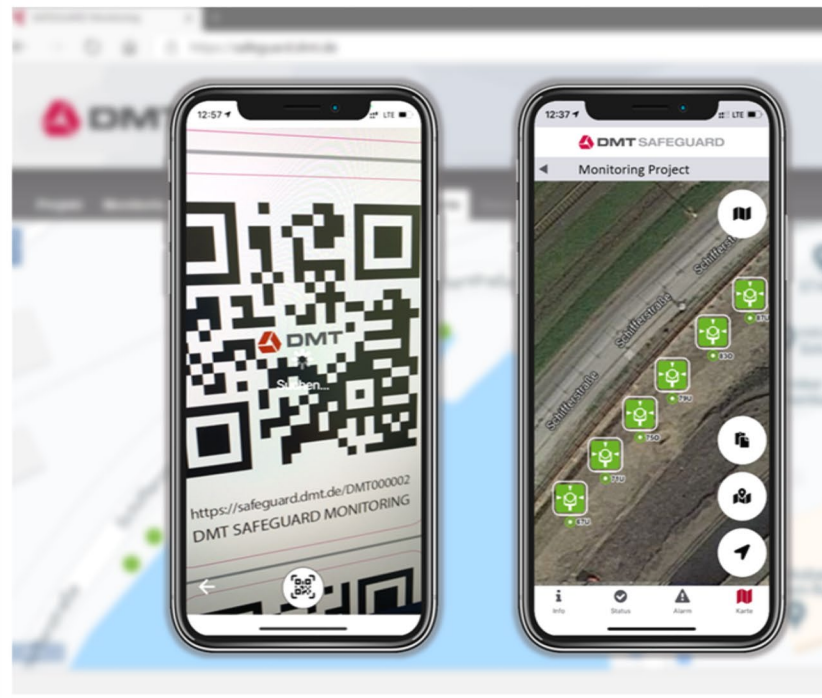
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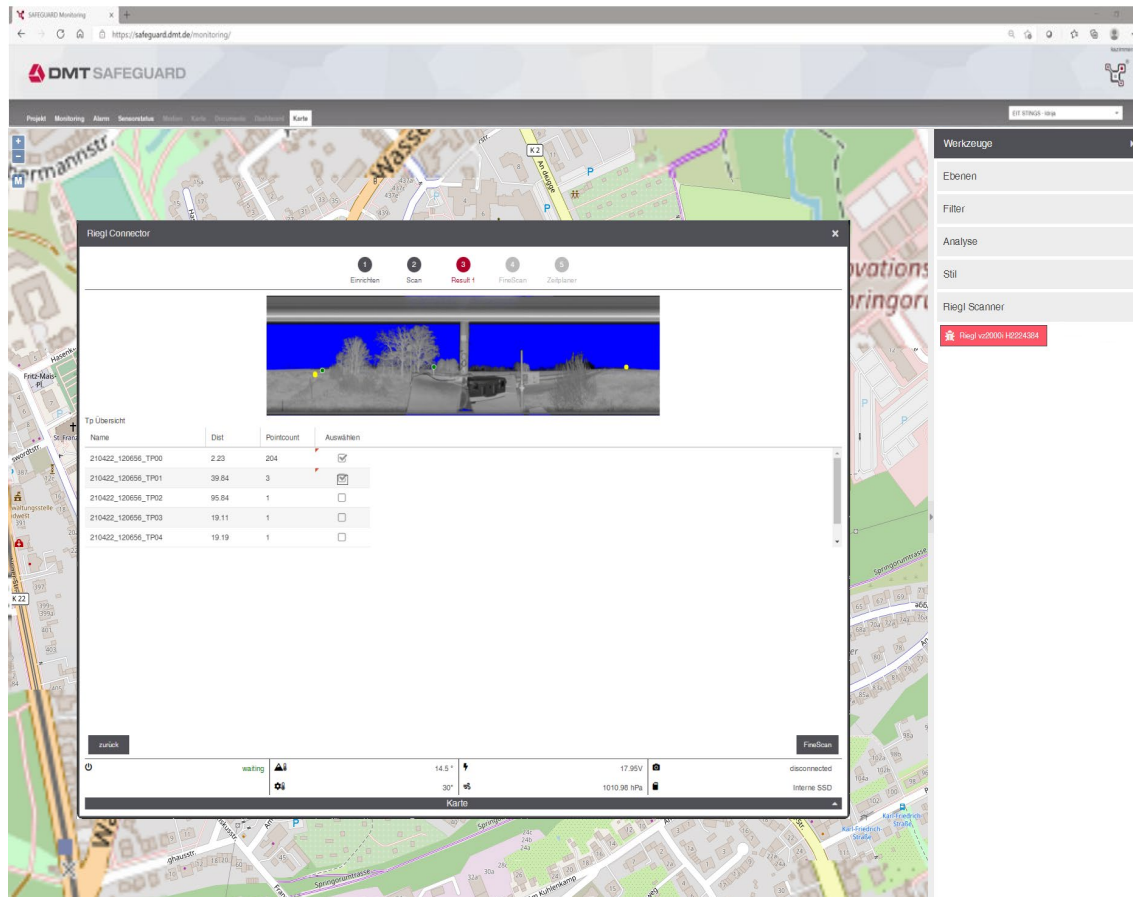


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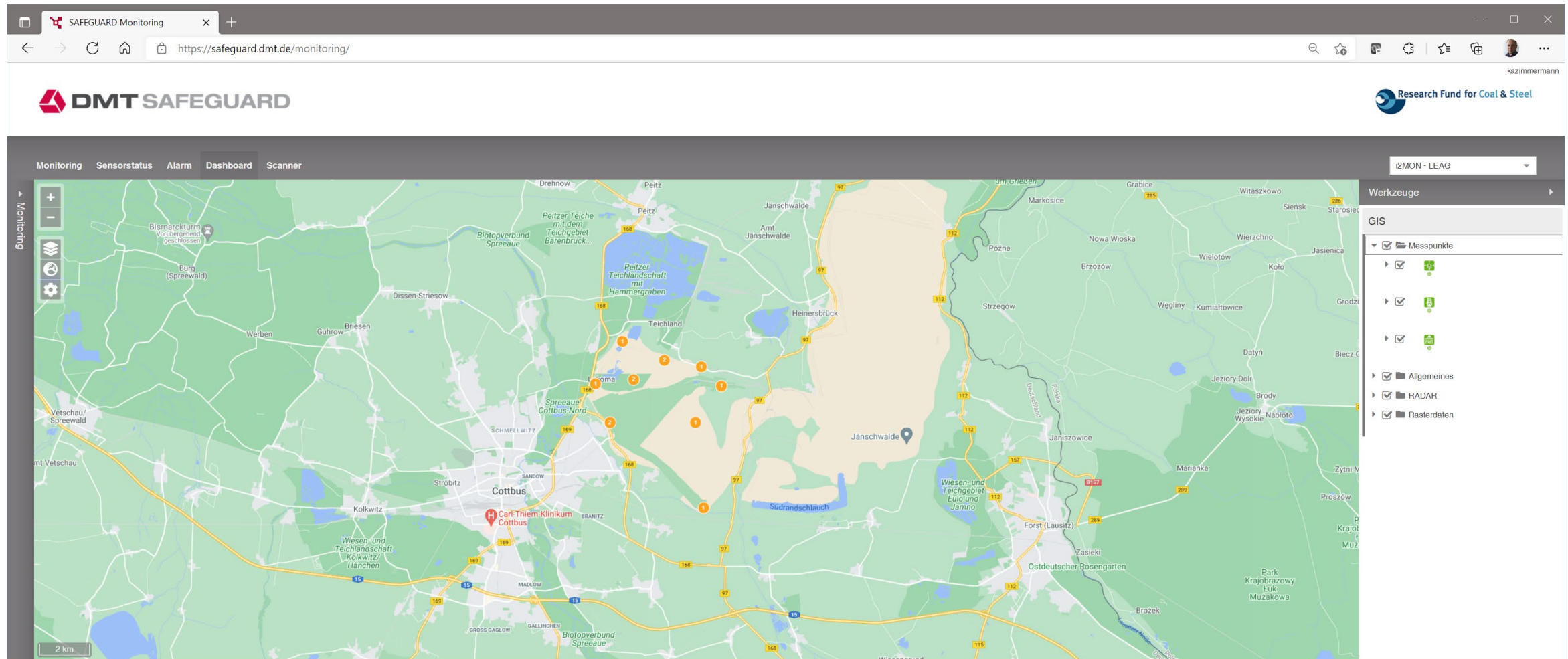
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SAFEGUARD Monitoring

https://safeguard.dmt.de/monitoring/

kazimmermann

DMT SAFEGUARD

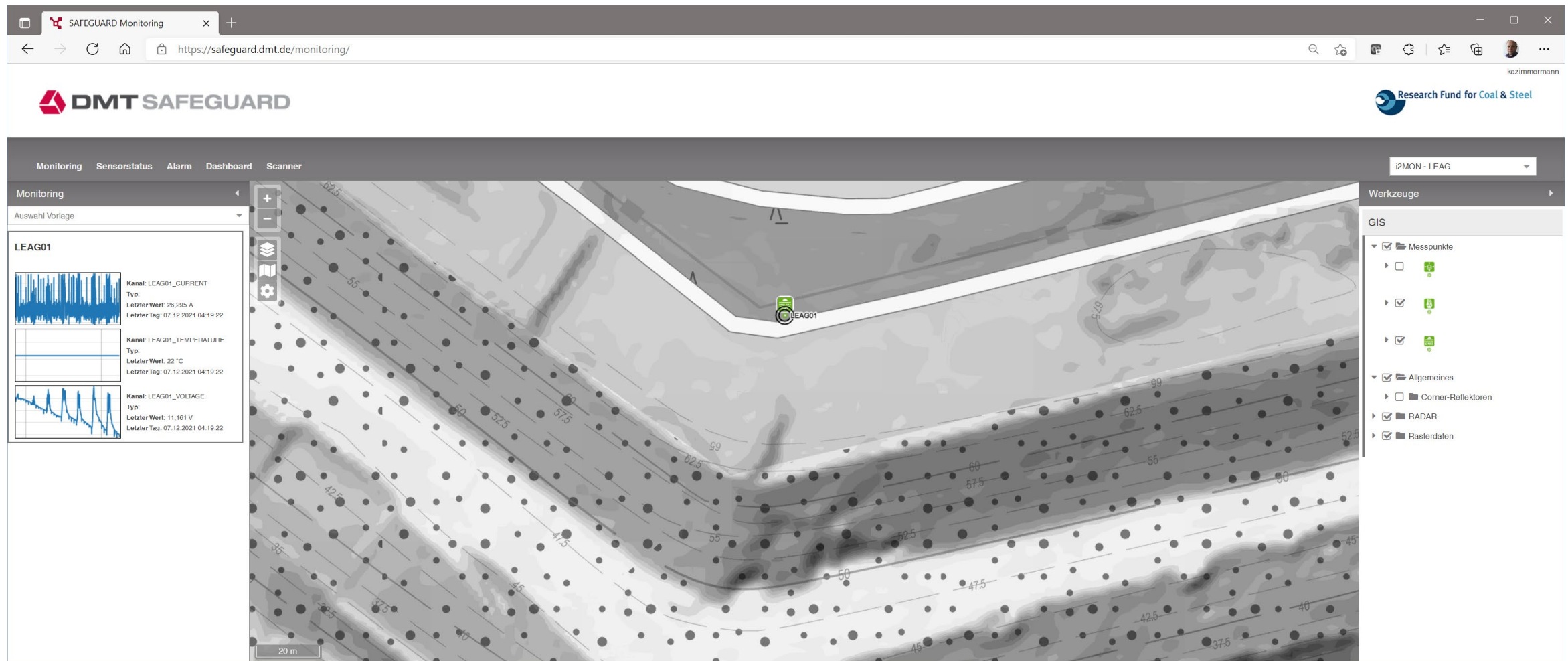
Research Fund for Coal & Steel

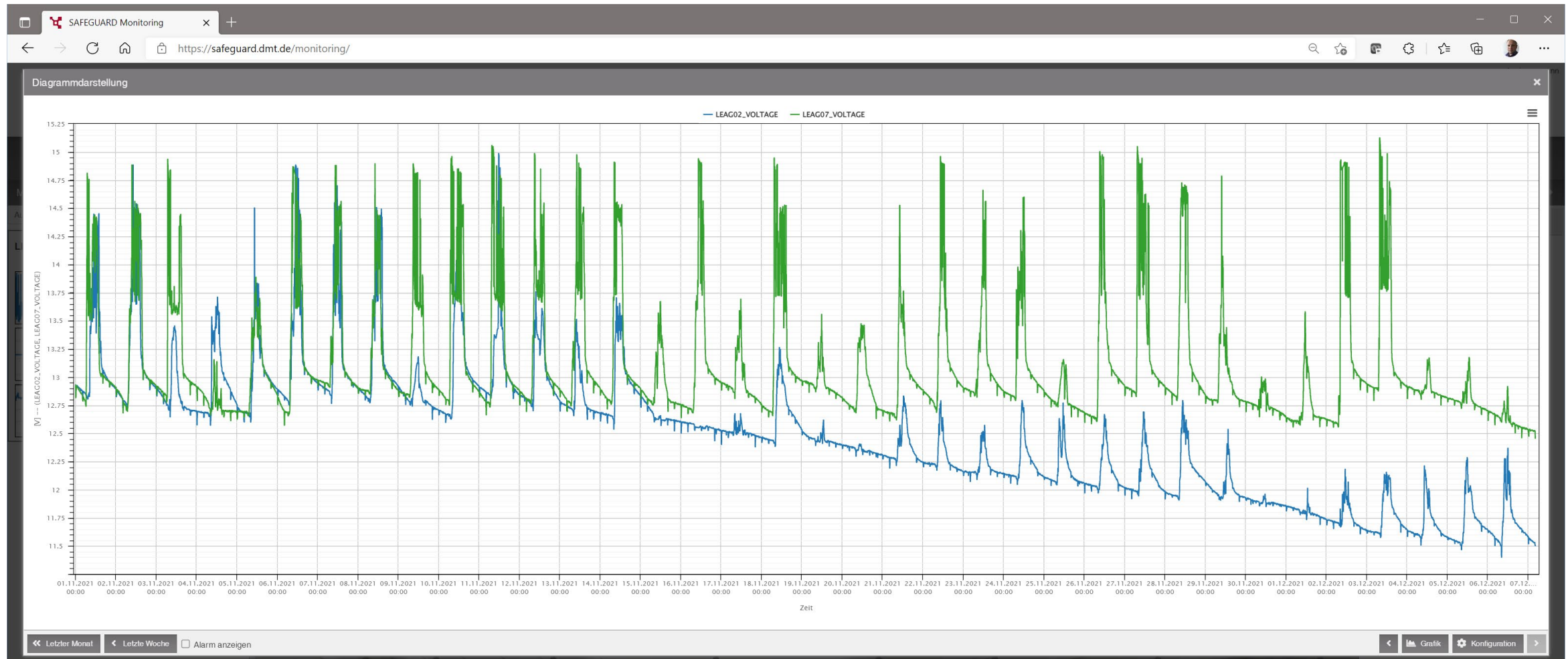
Monitoring Sensorstatus Alarm Dashboard Scanner

i2MON - LEAG

Kanal	Messpunktname	Typ	Letzter Zeitstempel	Letzter Wert	Zeitspanne	Status ↓
LEAG01_VOLTAGE	LEAG01		07.12.2021 05:19:22	11.1610	2 hrs	Ok
LEAG02_CURRENT	LEAG02		07.12.2021 05:19:02	-30.6480	2 hrs	Ok
LEAG02_TEMPERATURE	LEAG02		07.12.2021 05:19:02	22.0000	2 hrs	Ok
LEAG02_VOLTAGE	LEAG02		07.12.2021 05:19:02	11.5030	2 hrs	Ok
LEAG05_CURRENT	LEAG05		07.12.2021 05:17:21	-15.3350	2 hrs	Ok
LEAG05_TEMPERATURE	LEAG05		07.12.2021 05:17:21	22.0000	2 hrs	Ok
LEAG05_VOLTAGE	LEAG05		07.12.2021 05:17:21	12.4260	2 hrs	Ok
LEAG06_CURRENT	LEAG06		07.12.2021 05:19:21	-20.9600	2 hrs	Ok
LEAG06_TEMPERATURE	LEAG06		07.12.2021 05:19:21	22.0000	2 hrs	Ok
LEAG06_VOLTAGE	LEAG06		07.12.2021 05:19:21	12.5010	2 hrs	Ok
LEAG07_CURRENT	LEAG07		07.12.2021 05:19:31	-27.6790	2 hrs	Ok
LEAG07_TEMPERATURE	LEAG07		07.12.2021 05:19:31	22.0000	2 hrs	Ok
LEAG07_VOLTAGE	LEAG07		07.12.2021 05:19:31	12.4760	2 hrs	Ok
LEAG08_CURRENT	LEAG08		07.12.2021 05:19:41	-18.6160	2 hrs	Ok
LEAG08_TEMPERATURE	LEAG08		07.12.2021 05:19:41	29.5100	2 hrs	Ok
LEAG08_VOLTAGE	LEAG08		07.12.2021 05:19:41	12.4800	2 hrs	Ok
LEAG03_CURRENT	LEAG03		09.09.2021 07:08:51	-23.4600	89 days	Inaktiv
LEAG03_TEMPERATURE	LEAG03		09.09.2021 07:08:51	29.5100	89 days	Inaktiv
LEAG03_VOLTAGE	LEAG03		09.09.2021 07:08:51	12.7560	89 days	Inaktiv
LEAG04_CURRENT	LEAG04		11.06.2021 15:27:31	-2.9910	179 days	Inaktiv
LEAG04_TEMPERATURE	LEAG04		11.06.2021 15:27:31	22.0000	179 days	Inaktiv
LEAG04_VOLTAGE	LEAG04		11.06.2021 15:27:31	9.1630	179 days	Inaktiv

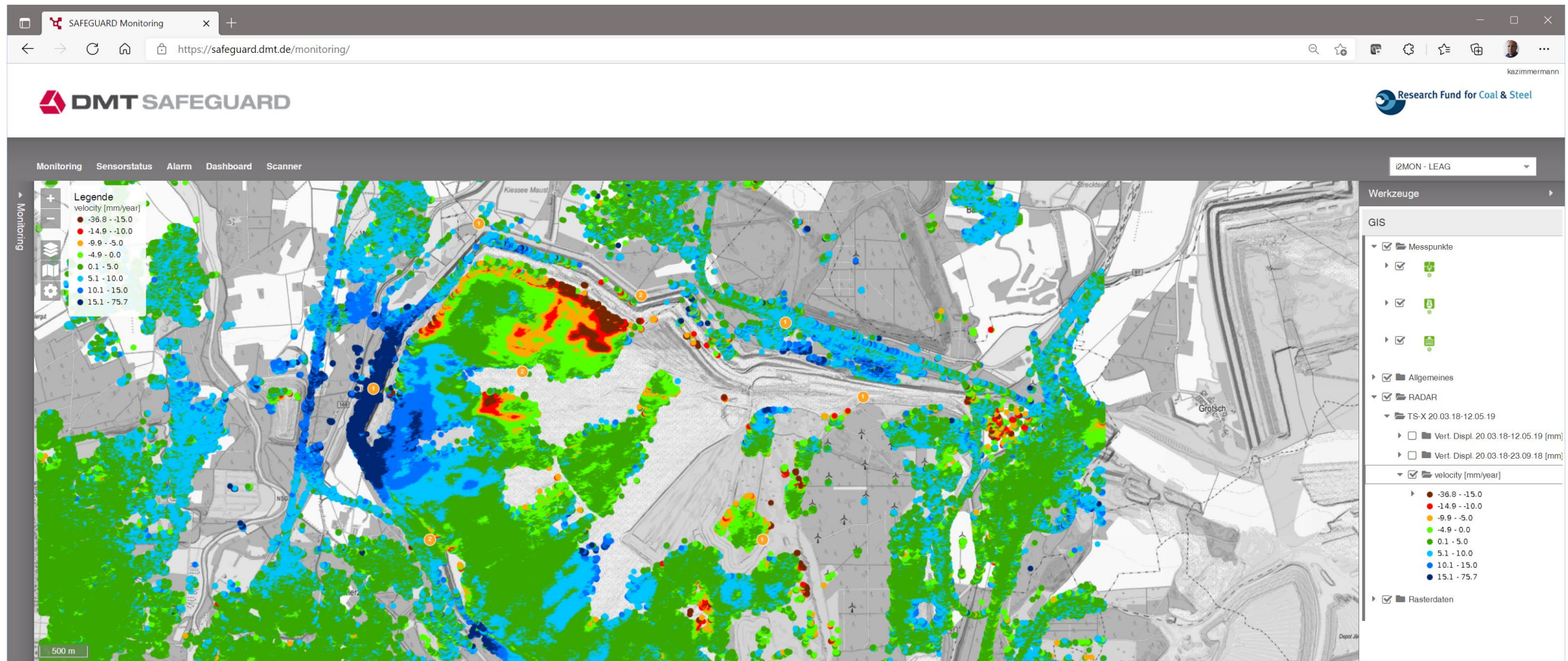
Anzahl Einträge: 107

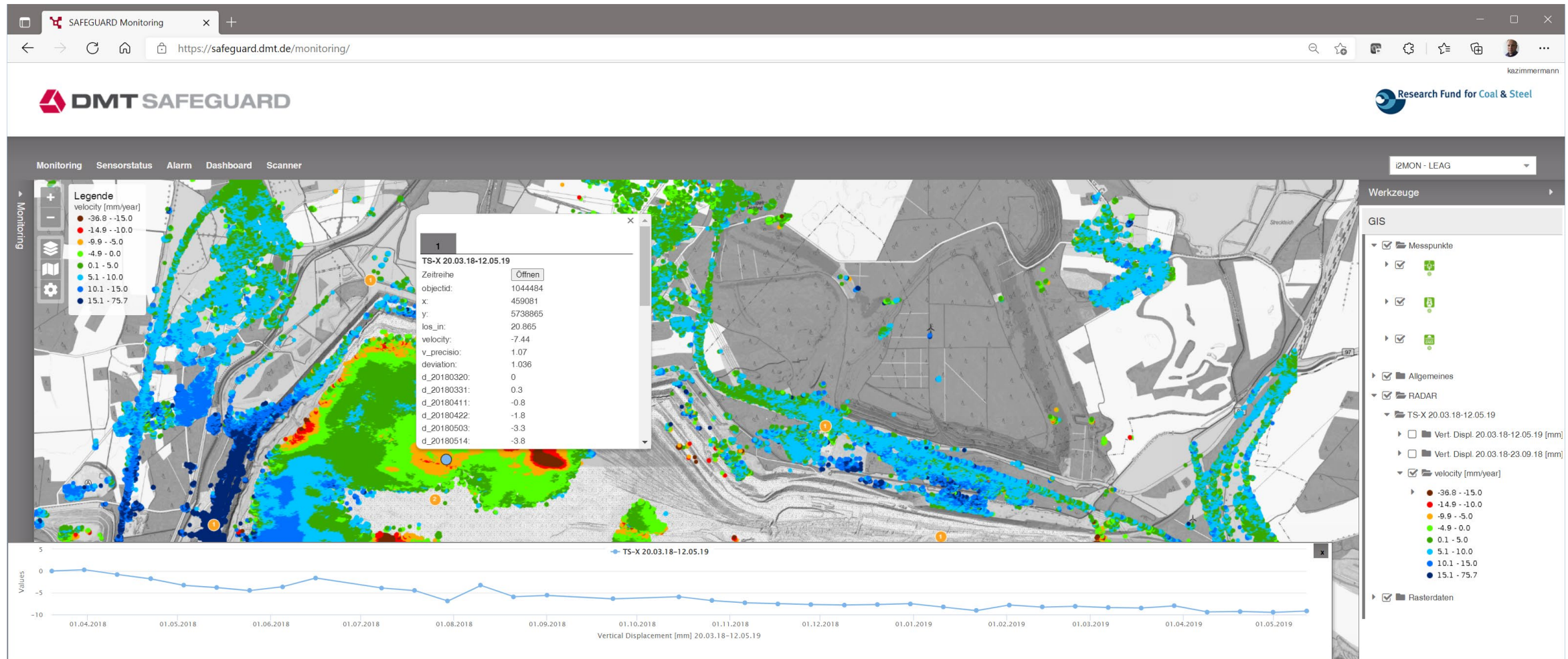


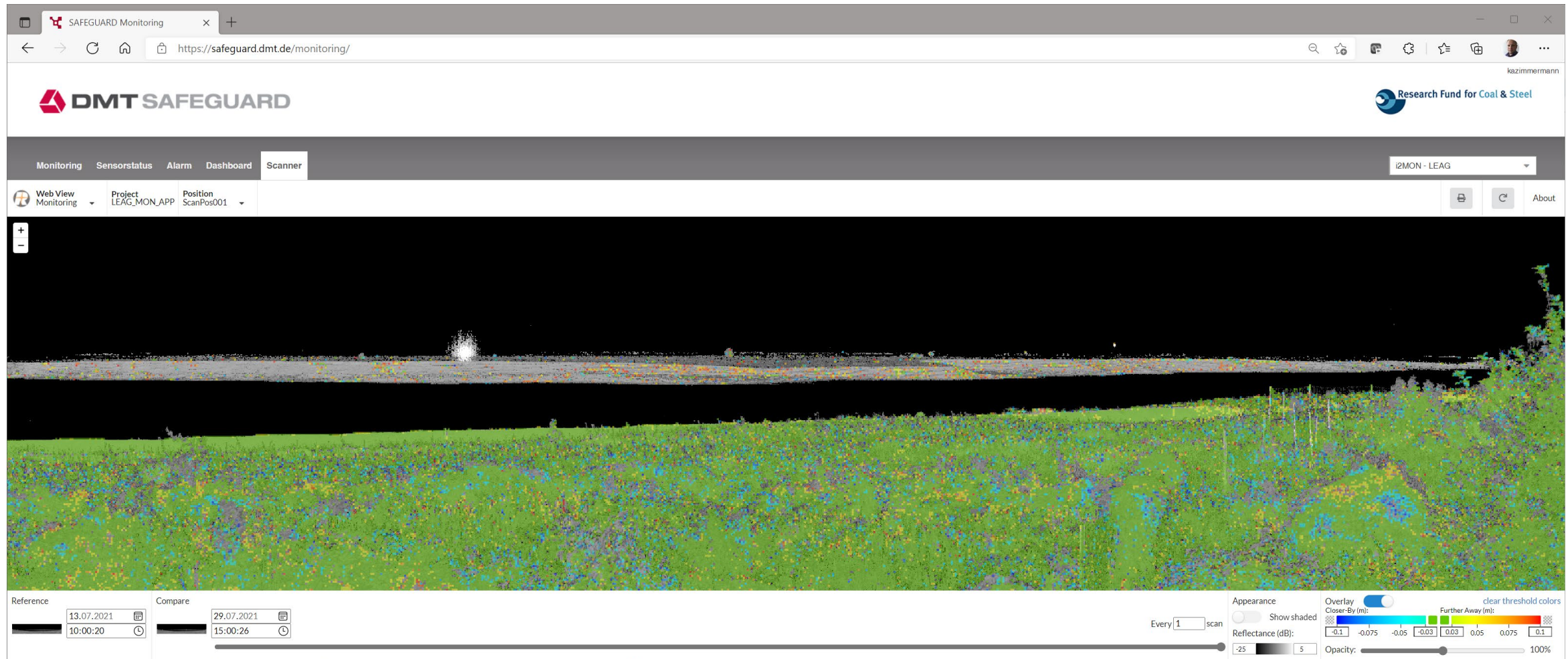


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Thank you!

Q&A