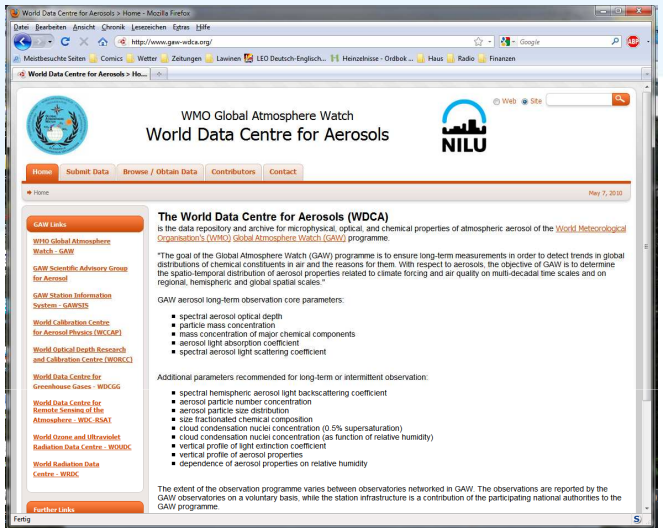
WDCA Current Status (May 2010)

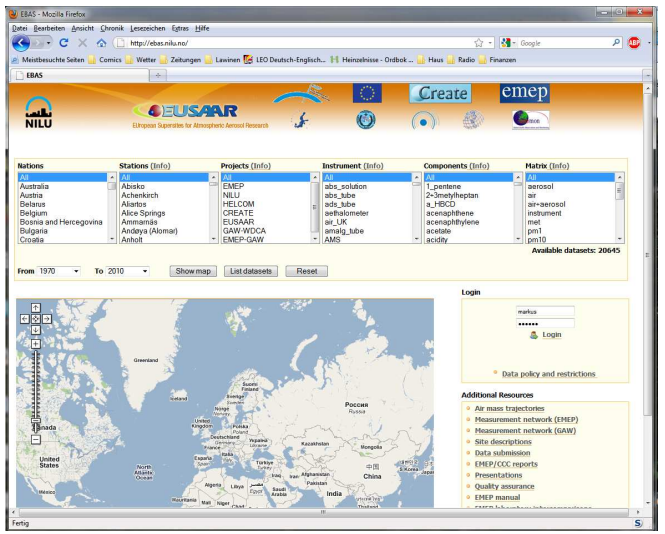
M. Fiebig

NILU

The WDCA has moved!

- WDCA moved from JRC to NILU by 1 January 2010.
- Now at: www.gaw-wdca.org (please update links).
- WDCA data is now hosted jointly with CLRTAP-EMEP data in relational database EBAS (http://ebas.nilu.no).
- Data are distiguished by network association (stricter GAW QA).
- Data is searchable on the web.
- Data availability may be visualised with map tool.
- User selected data (parameter, time range) may be plotted and downloaded.





Work on Improved QA Procedures

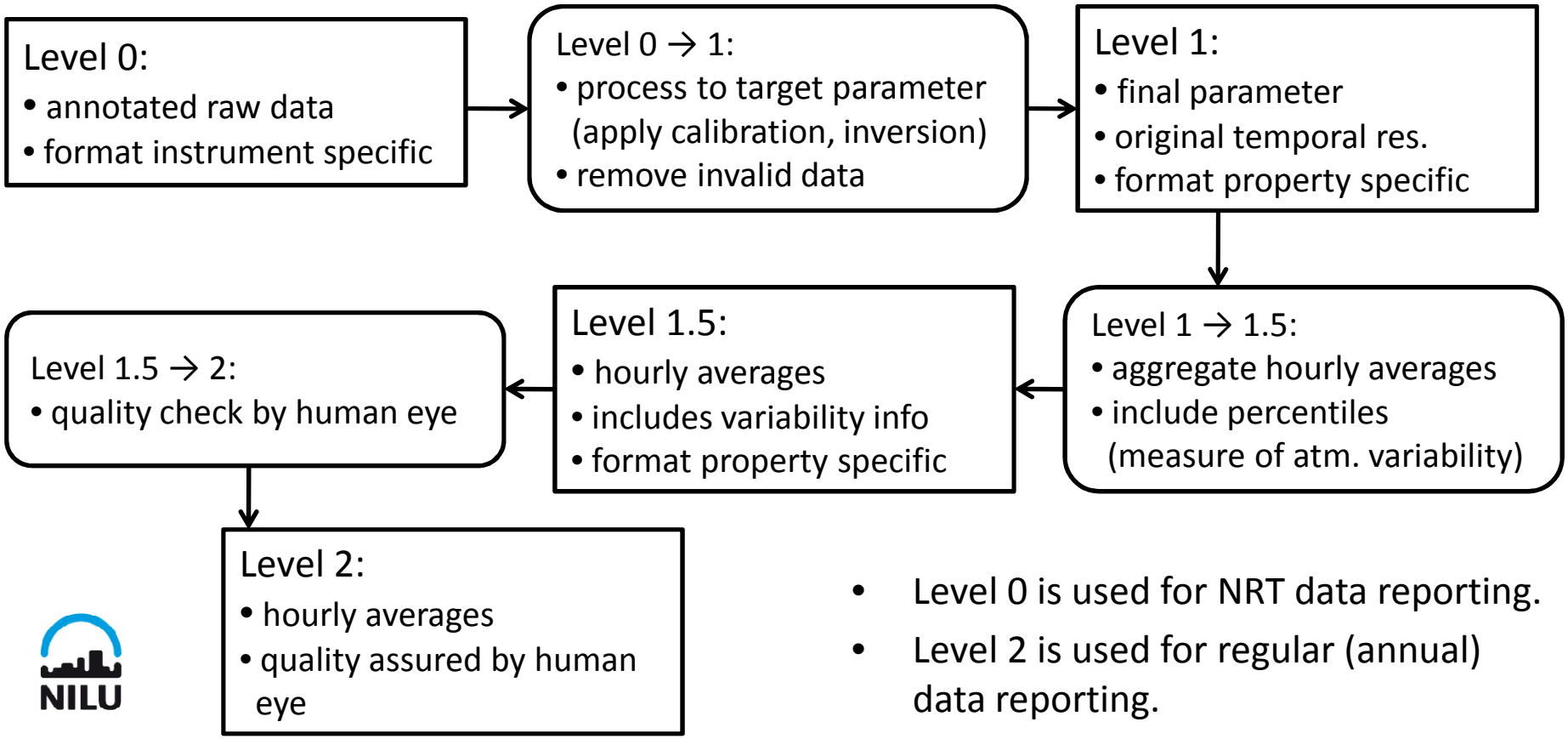
- The GAW aerosol programme benefits from an EU-funded infrastructure project (European Supersites for Atmospheric Aerosol Research, EUSAAR), including most European GAW stations.
- Project funds activities like definition of best practices for instrument operation and data processing for GAW aerosol core variables (aerosol optical depth, aerosol scattering coefficient, aerosol absorption coefficient, particle number size distribution).
- For establishing traceability to the source, data levels (similar to satellite data) were defined, togther with processing steps between the levels (instrument specific).
- Overlap between GAW aerosol community and project participants lead to quick adoption of procedures.
- BUT: data formats used by the previous WDCA (NARSTO) are still accepted.

NILU

Data Formats Used for Regular and NRT Data Collection

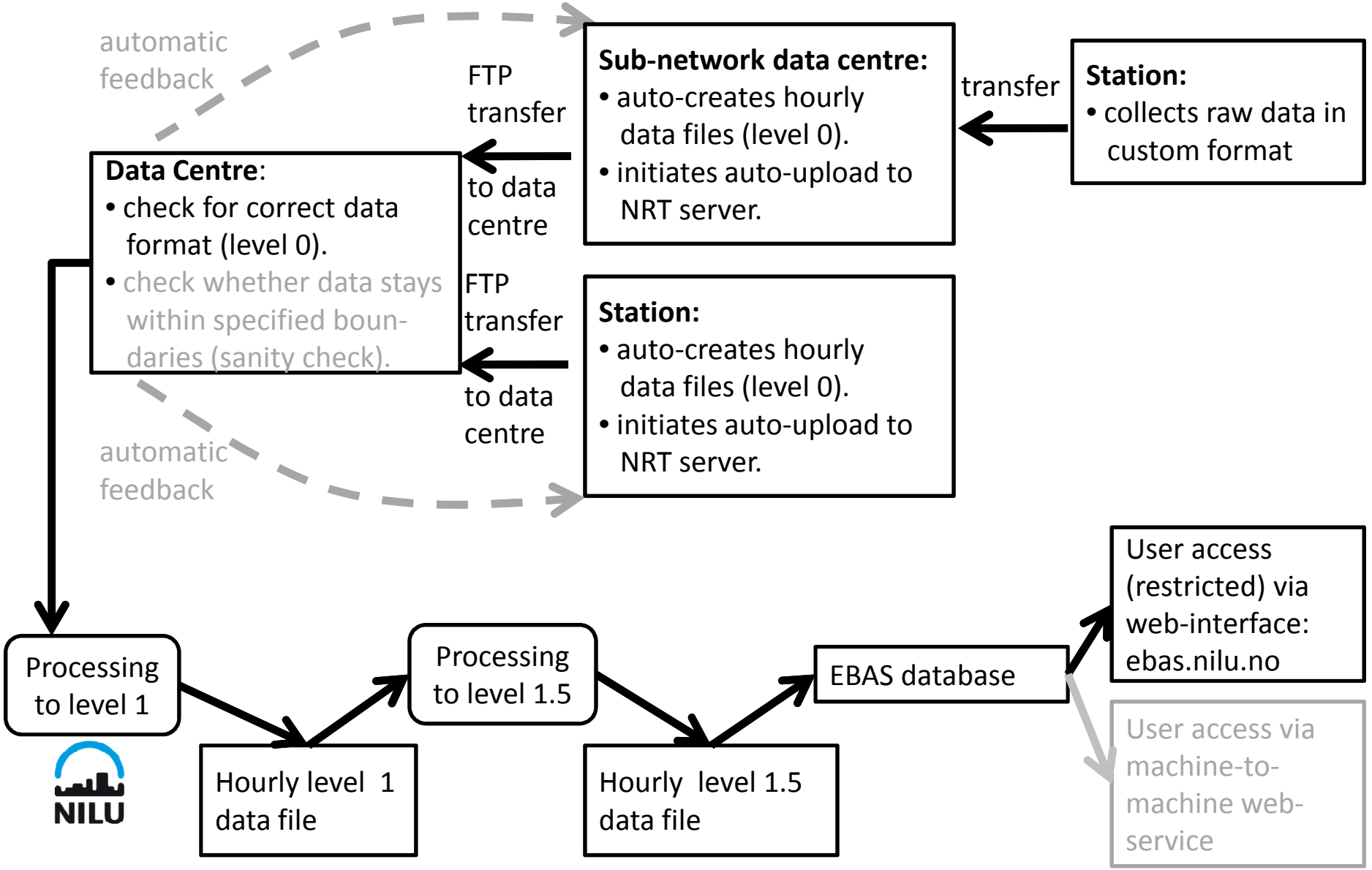
4 data levels and pertaining file formats have been defined:

- All format definitions use EBAS NASA-Ames format: NASA-Ames 1001 format with additional specifications accomodating GAW required metadata (ASCII based, user friendly).
- Format is generic and easily adapted to new parameters / instruments.

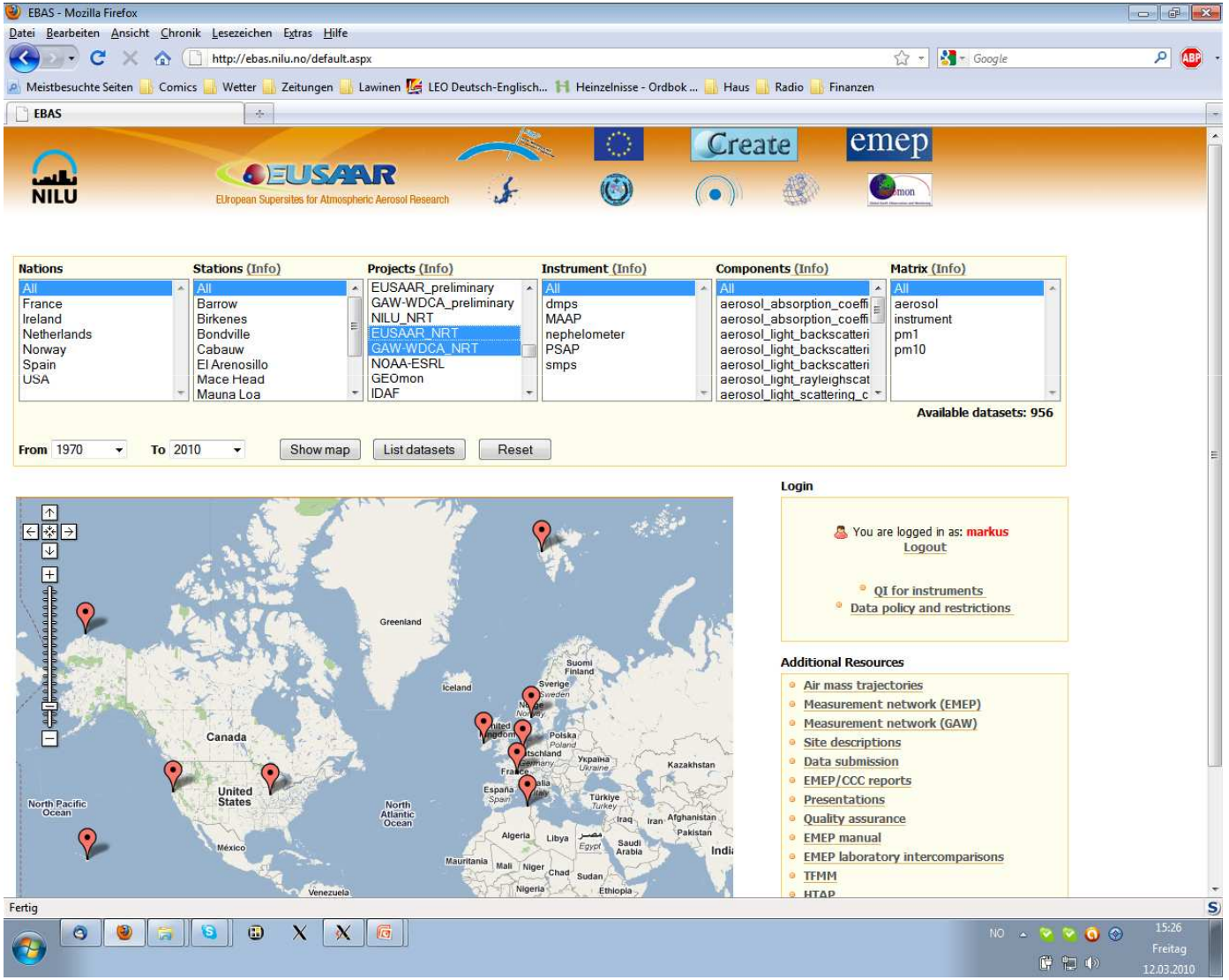


- Level 0 is used for NRT data reporting.
- Level 2 is used for regular (annual) data reporting.

New Feature: NRT Data Collection

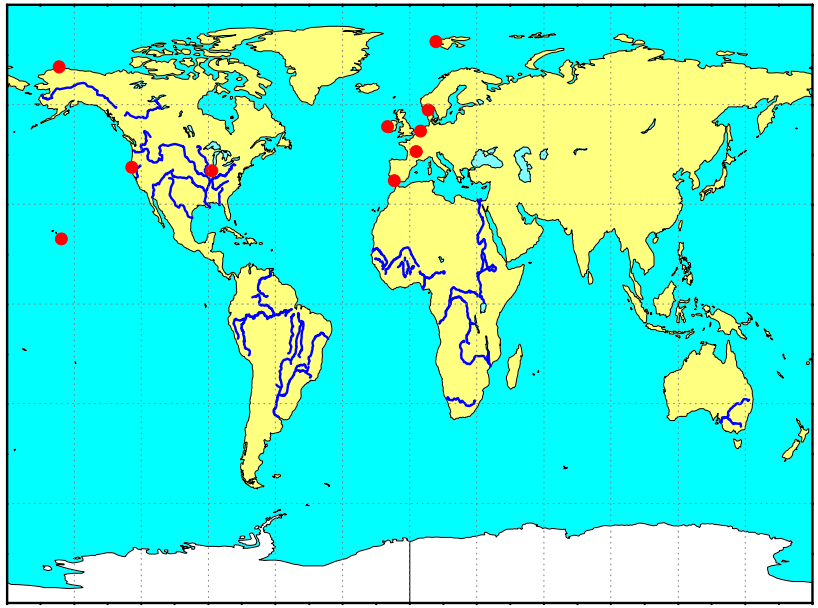


The WDCA and EUSAAR NRT web interface

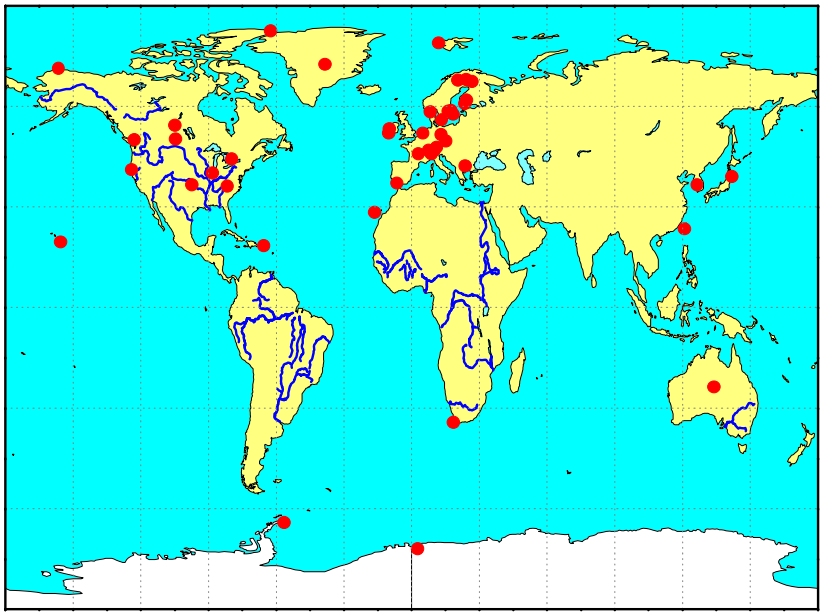


NILU

WDCA NRT Geographical Coverage



Today:
10 stations covering Western Europe and North America



Within 1 year:
≈40 stations distributed globally

Not all stations cover all parameters

Example 1: NRT Data of Particle Size Distributiona at Birkenes (Norway)

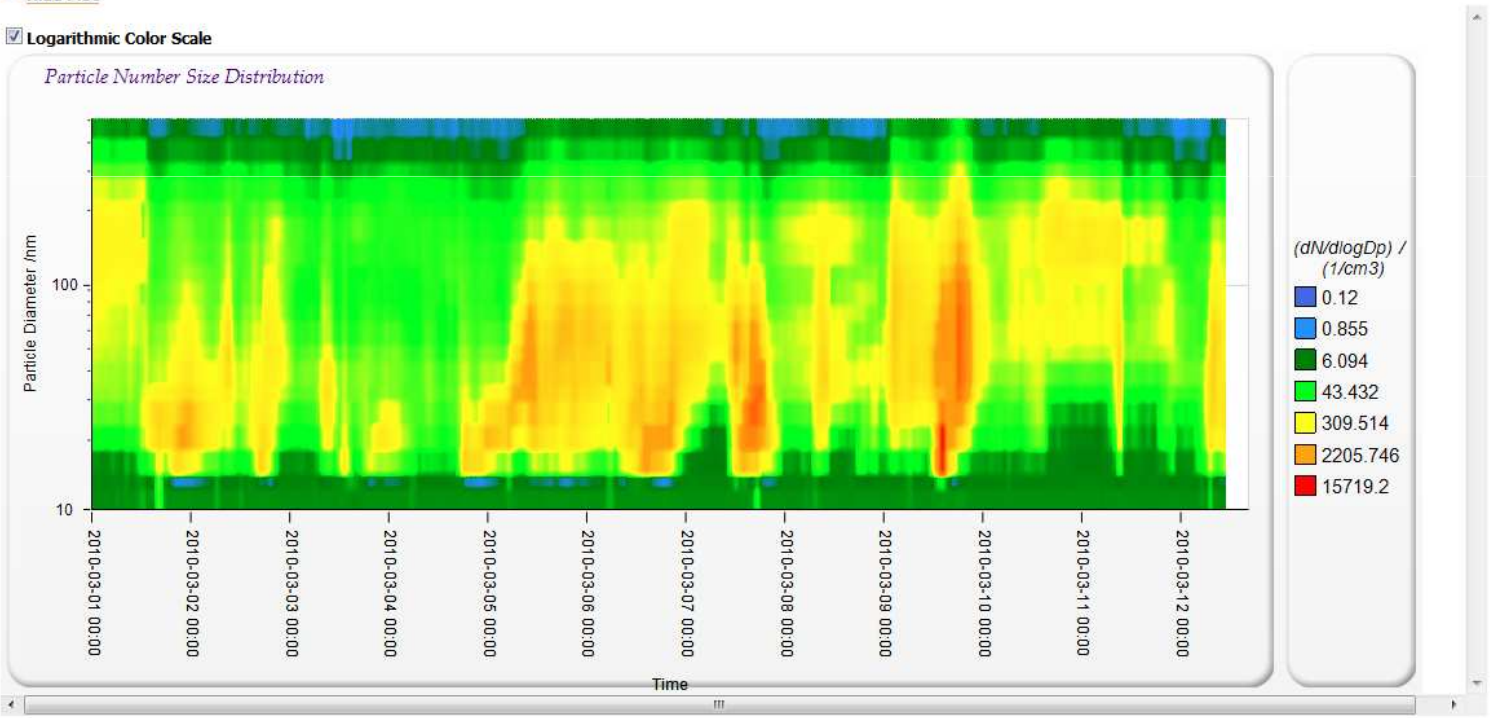
Plot as single parameter

EMEP-code:	NO0001R	**Station:**	Birkenes	**Country:**	Norway
Instrument:	dmps	**Component:**	particle_number_size_distribution	**Matrix:**	pm10
Unit:	1/cm3	**Projects:**		**Data Originator:**	Lunder, Chris
Start Date:	2009-11-06	**End Date:**	2010-03-12		

Remarks:

Hide Plot

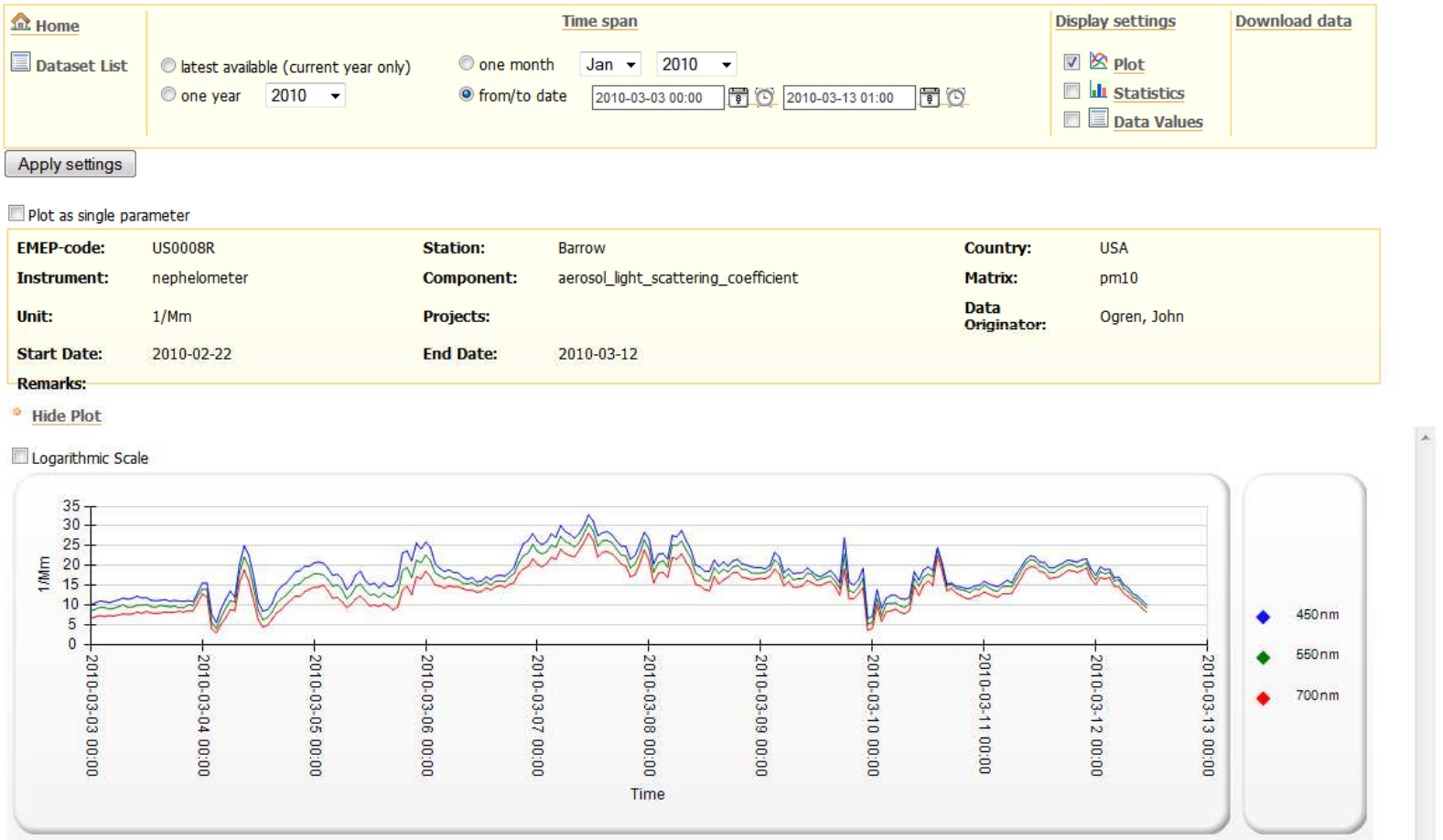
Logarithmic Color Scale



Show Statistics

Fertig

Example 2: NRT Data of Particle Scattering Coefficient at Barrow (Alaska)



Next Steps on WDCA Roadmap

- Import remaining legacy data, support providers resubmitting legacy data.
- Improve functionality of web-interface:
  - Improved data download functionality
  - Improved support/visibility of metadata
- Increase number of NRT sites
- Implement aerosol asymmetry parameter retrieval as added-value product.
- Include further networks providing aerosol depth data (Australia)
- Showcase (educational) for NRT data on WDCA homepage.

NILU