Overview and visualisation of time series of ACTRIS data in EBAS

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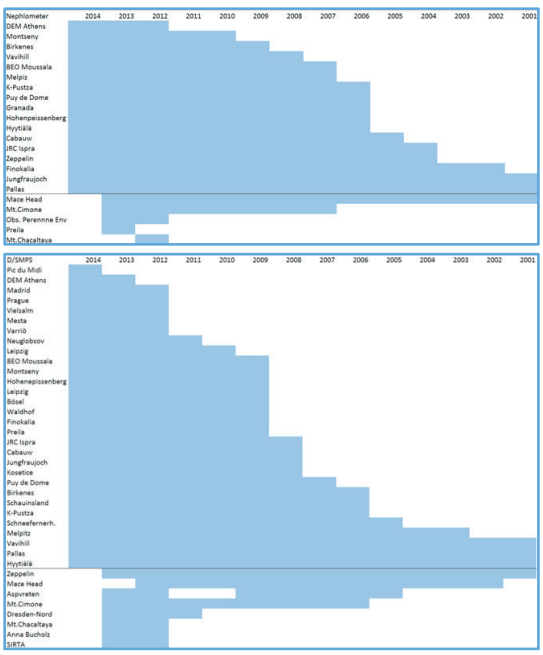

The EMEP dataBASe established in it's first version in 1979, has now been operating at NILU for more than 35 years, last 10 years as online version. The database contains atmospheric monitoring data from a wide range of projects and monitoring programmes, such as EMEP, ACTRIS, GAW-WDCA, GAW-WDCGG and AMAP. EBAS is the final long-term archive of these data.

The EBAS data are provided open accessible and free of charge for visualisation and download through a dedicated web portal, http://ebas.nilu.no

EBAS offers specialised products and tools associated with in-depth analysis of ACTRIS trace gas and aerosol near-surface data. These services have been developed in ACTRIS and other projects, with new templates and tools for data submission, quality assurance, and improved plotting tools currently being provided within the course of ACTRIS-2.

The data management in EBAS handles ACTRIS data from more than 40 European sites, with approximately 150 different atmospheric variables from 24 instruments and methodologies.

We here present the ideas for a data summary report, describing and visualising the ACTRIS data time series in EBAS.

The objectives of the data summary report, which itself is an official deliverable in ACTRIS-2; D10.2: "First summary of the ACTRIS data offered by the ACTRIS Data Centre" in Month 16 will be as follows:

1. Detailed documentation of the archived data. The overall visualisation of ACTRIS data from EBAS reveal the need for appropriate observation data and associated metadata.
2. To faciliate use of archived data. The overall activities of EBAS is responding to the demands of data originators, scientific communities, and the public.

The report will be the formatted result of the database archive and will contain database related information and technical details on

- Database definitions,
- Database parameters,
- Metadata and data submission means,
- Contact details for data contributors,
- Data policy and credits for use,
- Visualisation of time series.

Figure 1: (panel a-d) Summary of the lenght of time series delivered by stations operating Nephelometer, D/SMPS, Filter Absorption Photometer, VOC and NO_x instruments, respectively. For VOC and NO_x parameters the EMEP time series are taken in as light blue bars. Note that times series might be longer, but the start is set to 2001 in this figure.

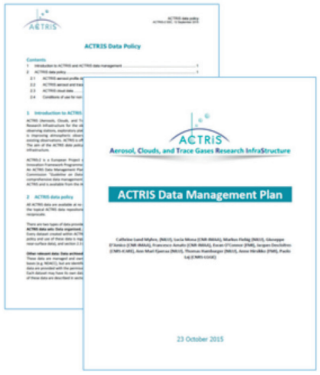

Figure 2: The deliverable will be in form of a written report.

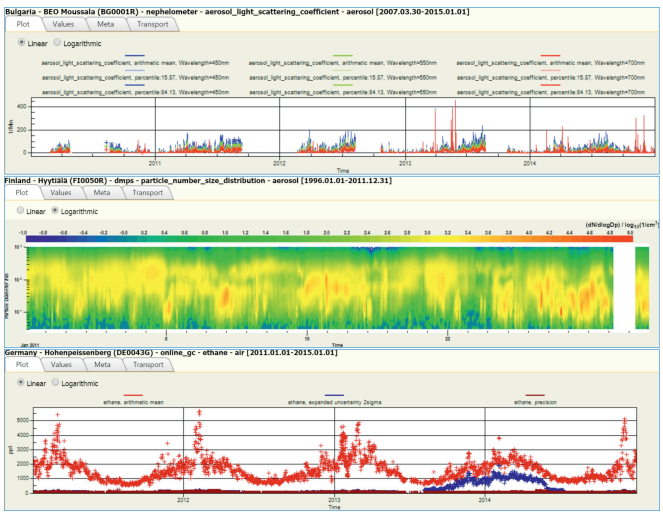

Figure 3: (panel a-c) Examples of visualisation of time series in EBAS

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