



Access to Emissions Distributions and Related Ancillary Data through the ECCAD database

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During the past few years, the ECCAD (Emissions of atmospheric Compounds & Compilation of Ancillary Data) database was developed in order to provide a user-friendly access to surface emissions and ancillary data, i.e. data on land use, active fires, burned areas, population, etc. This database and the emissions portal of the GEIA (Global Emissions Initiative) project have been merged. ECCAD is a sub-project of the ETHER French Atmospheric Chemistry Data Centre (CNES and CNRS, <http://www.pole-ether.fr>).

The ECCAD database includes currently a large diversity of datasets, which provide global and regional surface emissions for a large set of chemical compounds. All the data are provided at a 0.5x0.5 or 1x1 degree resolution.

ECCAD provides detailed metadata on each of the datasets, including information on complete references and methodology, and links to the original inventories. Several tools are provided for the visualization of the data, for computing global and regional totals and for an interactive spatial and temporal analysis. The data can be downloaded as interoperable NetCDF CF-compliant files, i.e. the data are compatible with many other client interfaces and can be downloaded through requests as geographical coverage or geo-referenced maps.

ECCAD has currently more than 700 users originating from more than 30 countries. ECCAD benefits from this large international community of users to expand the number of emission datasets made available.

The ECCAD database and the web interface are in continuous development: new tools are being built to improve the analysis and comparison of emissions and ancillary data. These new tools include a regridding tool, arithmetic expressions to combine different maps, interactive selection of scale values, and new tools for temporal profiles analysis. Comparisons of data at different scales is also in development. An online module to calculate biomass burning emissions is being improved, and will also be extended to anthropogenic emissions.

The presentation will provide information on all the datasets available within ECCAD, as well as examples of the analysis work that can be done online from the database. All the datasets, associated metadata, tools and download can be achieved from the ECCAD website: <http://eccad.pole-ether.fr>