



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

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The Emissions of atmospheric Compounds & Compilation of Ancillary Data (ECCAD) database provides a user-friendly access to surface emissions and ancillary data, i.e. data on land use, active fires, burned areas, population, etc. ECCAD is the emissions database of the GEIA (Global Emissions Initiative) project. 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 a large diversity of datasets, which provide global and regional surface emissions for a large set of chemical compounds, at a 0.5x0.5 or 1x1 degree resolution. A new version of ECCAD is being developed allowing to handle any resolution grid and geographical coverage.

ECCAD provides detailed metadata for each of the datasets, including information on references, how to cite the datasets when used, the 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.

ECCAD has currently more than 1200 users originating from more than 70 countries. The project 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. They include a regridding tool, arithmetic expressions to combine different maps, new tools for temporal profiles analysis, and comparisons of data at different scales. An online module to calculate biomass burning emissions is being improved and will 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 through the website: <http://eccad.pole-ether.fr>