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ECCAD : Emissions of Atmospheric Compounds and Compilation of Ancillary Data

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There is considerable uncertainty in estimating surface emissions of atmospheric compounds for the recent past and up to now, no single data set exists which would describe the geographical and temporal distribution of emissions for all species relevant to air quality, atmospheric composition change and climate change in a comprehensive and consistent manner. We will describe the ECCAD project, which has two major goals. The first goal is to provide scientific users with an easy access to a large number of existing datasets on surface emissions of atmospheric compounds at the global and regional scales. We are also providing access to ancillary data required to quantify surface emissions. The other goal is to provide data manipulation tools as well as statistical information over the different regions (climatic regions, continents, oceans, OECD regions, etc.). These tools allow an easy identification of each dataset characteristicss and differences between the datasets. Visualization tools are also provided, and the users can download the data of interest. The data in ECCAD are currently used in different international projects. The most recent addition to the database include the emissions developed in support of the IPCC AR5 report, and the data used in the MACC and CITYZEN European projects. The emissions are provided as gridded data at a 0.5 or 1° spatial resolution. Time periodicity and temporal coverage periods vary among the datasets from one year to up to 150 years.
The database will be described, and examples of the tools will be presented. We will also provide information on the access to the datasets.