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A web-based tool for exploring and visualizing GHG emissions from transportation and their uncertainties: the Copernicus Online Computation of Anthropogenic emission Uncertainties (COCAU).

Hugo Merly[1], Thierno Doumbia[1], Catherine Liousse[1], Marc Guevara[2], and Claire Granier[1,3]
[1]Laboratoire d'Aérologie, Université de Toulouse, CNRS/UPS, Toulouse, France
[2]Barcelona Supercomputing Center, Barcelona, Spain
[3]NOAA Chemical Sciences Laboratory CIRES/University of Colorado, Boulder, CO, USA

Several global and regional inventories have been developed in recent years, but none of them provide information on the uncertainties of the emissions. As part of the CAMS EvOlution project (CAMEO), we have developed a tool to evaluate the uncertainties of emissions from transportation in different countries around the world. This tool, the Copernicus Online Computation of Anthropogenic Emission Uncertainties (COCAU), is a web-based platform for exploring greenhouse gas (GHG) emissions and their uncertainties, with a focus on the transportation sector. Built with modern online technologies, COCAU enables users to filter and visualize emissions data interactively. The emissions are calculated based on emission factors and activity data collected through the CO2MVS Research on Supplementary Observations European project (CORSO) ensuring scientific rigor and reliability. This tool allows users to display emissions at various scales, from country-level to regional-level. We will discuss the COCAU tool and the data used to calculate the uncertainties, and present its features, such as customizable charts, interactive maps, and downloadable datasets in JSON and CSV formats, offering a comprehensive and interactive view of emissions data.