



## **Formaldehyde column over Europe from GOME: model validation and proxy for biogenic emissions over Europe**

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We analyse formaldehyde (HCHO) column data retrieved from GOME for a number of years over the European continent. Formaldehyde is an important intermediate oxidation product of VOC of anthropogenic and biogenic origin. We compare GOME column with ground-based and aircraft campaigns observations and with model simulations. Preliminary results suggest that the formaldehyde column over Europe is underestimated by the state-of-the-art chemistry and transport model GEOS-CHEM with respect to GOME column, possibly indicating biases in model VOC emissions. The HCHO column could be also used to improve the emission inventory of isoprene (a major biogenic VOC) on the European continent, at least in Eastern Europe where the isoprene contribution to the HCHO column seems to be predominant and a clear relation between HCHO column and isoprene emissions can be established.