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The MPI-Mainz UV/VIS Spectral Atlas of Gaseous Molecules of Atmospheric Interest

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Measurements from satellites can be used to obtain global concentration maps of atmospheric trace constituents. Critical parameters needed in the analysis of the satellite data are the absorption cross sections of the observed molecules. Here, we present the MPI-Mainz UV/VIS Spectral Atlas, which is a large collection of more than 5000 absorption cross section and quantum yield data files in the ultraviolet and visible (UV/VIS) wavelength region for gaseous molecules and radicals primarily of atmospheric interest. The data files contain results of individual measurements, covering research of almost a whole century. To compare and visualize the data sets, multicoloured graphical representations have been created. The Spectral Atlas is available on the internet at http://www.uv-vis-spectral-atlas-mainz.org. It has been completely overhauled and now appears with improved browse and search options, based on PostgreSQL, Django and Python database software. The web pages are continuously updated.