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The atmospheric chemistry box model CAABA/MECCA-4.0

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We present version 4.0 of the atmospheric chemistry box model CAABA/MECCA which now includes a number of new features: skeletal mechanism reduction; the MOM chemical mechanism for terpenes and aromatics; an option to include reactions from The Master Chemical Mechanism (MCM) and other chemical mechanisms; updated isotope tagging; new and updated photolysis modules (RADJIMT, JVAL). Another new feature can be used when MECCA is connected to a global model: coexisting multiple chemistry mechanisms (Polymecca/CHEMGLUE). Additional changes have been implemented to make the code more user-friendly and to facilitate the analysis of the model results. Like earlier versions, CAABA/MECCA-4.0 is a community model published under the GNU General Public License.