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A Trajectory-mapped ozone dataset from Ozonesondes, Aircraft and Satellites for the Stratosphere and Troposphere (TOASST)

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A global three-dimensional (i.e. latitude, longitude, month) dataset for tropospheric and stratospheric ozone, derived from ozonesonde data using a trajectory-mapping interpolation method that takes into account global atmospheric transport, has previously been presented [Tarasick et al., 2010; Liu, G., et al., 2013; Liu, J., et al., 2013]. Here we apply the same techniques to ozone data from several other sources, the MOZAIC-IAGOS aircraft program, and the ACE-FTS and SAGE satellite instruments. The resulting datasets are compared, where they overlap, to provide an assessment of the quality of the resulting data products. They are also combined, with modest adjustments, to produce a composite dataset.

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