

Comparison of climatological atmospheric fields in the upper stratosphere and lower mesosphere between multiple reanalysis data

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Several kinds of meteorological reanalysis data have been used for climate and atmospheric science studies. Their accuracy and reality depend on the forecast model and data assimilation method used therein, but they have never been quantitatively evaluated. In order to overcome this problem, the SPARC Reanalysis Intercomparison Project (S-RIP), which is a coordinated activity to compare all reanalysis data sets, was established in 2012. We performed comparison of climatological atmospheric fields in the upper stratosphere and lower mesosphere between multiple reanalysis data. In this presentation, we will show the temperature, zonal wind, and Eulerian- and Lagrangian-mean meridional circulation from several kinds of reanalyses and their comparison.

Key words: reanalysis, upper stratosphere and lower mesosphere, S-RIP, meridional circulation