DynVar – Diagnostic MIP Dynamics and Variability of the Stratosphere - Troposphere System

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Persistent biases in forecast and climate prediction systems hinder our ability to model circulation changes, both in seasonal forecasting and in climate projections. DynVarMIP is a CMIP6 endorsed Model Intercomparison Project (MIP), which proposes a set of diagnostics to enable a mechanistic approach to confront model biases and understand the underlying causes behind circulation changes. DynVarMIP primarily addresses CMIP6 key science questions on the origin and consequences on systematic models biases in the context of atmospheric dynamics; with a focus on: tropical – extratropical connections, storm tracks, polar vortex and sea ice variability. DynVarMIP data request is subdivided in three groups: (1) Atmospheric variability across scales, (2) Atmospheric TEM (Transformed Eulerian Mean) zonal momentum budget, and (3) Atmospheric heat budget; and will include management of daily and monthly model outputs form the CMIP6 DECK experiments.

DynVarMIP: http://www.sparcdynvar.org/storage/DynVarMIP.pdf