

# Synthesis of CMIP6 modeling group summaries

General agreement with new CMIP6 structure; connection between modeling groups and MIPs viewed favorably and **must be done**; most groups have discussed MIPs and have an initial assessment of interest in specific MIPs; prioritization of DECK and endorsed MIPs with tiers generally viewed as helpful

Biggest CMIP6 constraints: people, computer resources, storage

Many groups will have a medium resolution (~1 to 2 degree atm, about 1 to 0.5 degree ocean) and high resolution (~0.5 to 0.25 degree atm, ~1 to 0.25 degree ocn) model versions, with coupled carbon cycle and chemistry usually in the lower res versions

A mix of high top and low top versions

Most new model versions 2014-2016; start runs 2015-2017

# Synthesis of modeling group summaries:

## Suggestions for CMIP6:

AMIP runs: start either 1850 or 1950 and run to 2014?

Instantaneous 4XCO<sub>2</sub>: single 150 year run or three 50 year runs?

***Radiative forcing needed!!!*** (especially for aerosols)

What is MIP timeline? (the initial endorsement process ends mid-2015, but what about new MIPs?); are there deadlines for modeling groups to complete MIPs?

Reduce the data request? How is data request decided?

Maybe run single forcing runs from 1950 to present? (or at least 1900 to present?) (an issue for DAMIP?)

# Synthesis of modeling group summaries:

## Suggestions for CMIP6 (continued)

Difficult to run DECK with high resolution models

Multiple ensembles easier to run than multiple experiments

New forcings available? historical end of 2015; future late 2016

Solar constant and volcanic aerosols for pre-industrial?

(e.g. background volcanic aerosols?)

Need to harmonize experiments across MIPs to avoid direct overlap and/or very similar experiments run for different MIPs

Have a table on a web page with all the MIPs listed, noting which ones have been endorsed and how many modeling groups are intending to run each (included the ones not yet endorsed)

