Status of CMIP5

Arun Kumar
18 July 2012
Coupled Model Intercomparison Project – Phase 5

• Led by WCRP/Working Group on Coupled Modeling (WGCM)

• Provide input to the IPCC Assessment Report 5 (AR5) – 2013

• Various modeling groups to perform a subset of model simulations

• Data distributed via Earth System Grid (ESG)
Better understanding of the climate system and model behavior

Comparison with past observations or climate projections
Initialized Decadal Predictions


30-year hindcast & prediction ensembles: initialized 1960, 1980 & 2005

AMIP

increase ensemble sizes from O(3) to O(10) members

alternative initialization strategies

100-yr "control" & 1% CO₂

hindcasts without volcanoes

prediction with 2010 Pinatubo-like eruption

atmos. chemistry &/or aerosols &/or regional air quality

additional predictions initialized in all years from 1960-present
Special Issues of CLVAR Exchanges

Physical Ocean Fields in CMIP5

Stephen Griffies\(^1\) and Gokhan Danabasoglu\(^2\)

1. NOAA Geophysical Fluid Dynamics Lab, USA
2. NCAR, USA
CORDEX - COordinated Regional climate Downscaling Experiment

CORDEX domains

- NARCCAP
- CLARIS
- ENSEMBLES
- RCMIP
CMIP5 Status & Schedule

• July 31, 2012: By this date papers must be submitted for publication to be eligible for assessment by AR5 WG1

• March 15, 2013: By this date papers cited by AR5 WG1 must be published or accepted (with proof, for example, by a letter of confirmation from the editor)

• http://esgf.org/wiki/Cmip5Status/ArchiveView
## CMIP5 Status & Schedule

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<th>Summary</th>
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<tbody>
<tr>
<td><strong>Modeling centers</strong></td>
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<td><strong>Models</strong></td>
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Possible Issues to Discuss

• Data Availability

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<thead>
<tr>
<th>CMEP 2011 Awards</th>
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<tr>
<td>Analysis of Climate Model Simulations for the IPCC Fifth Assessment Report</td>
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• Inter comparison of CMIP3 & CMIP5 in the context of regional climate over the US... Activity going on as part of NOAA/CPO/MAPP program