

# International Climate of the Twentieth Century Project

---

<http://www.iges.org/c20c/>

## Newsletter – May 2013 - Announcement of 6<sup>th</sup> Workshop

The International CLIVAR Climate of the 20<sup>th</sup> Century Project (C20C) continues to operate as a volunteer cooperative of climate research groups worldwide that conduct numerical experiments with global climate models according to prescribed protocols that are determined by the group. The project is now preparing for its 6<sup>th</sup> Workshop, which will be held in Melbourne, Australia during 5-8 November 2013 – please see below for particulars. A number of other updates on C20C data sets, publications, and sub-projects are also provided below including the new high resolution HadISST2 sea surface temperature and sea ice data set.

- **6<sup>th</sup> C20C Workshop – Melbourne, Australia – 5-8 Nov. 2013 (SAVE THE DATE!)**

The 6<sup>th</sup> Workshop of the International CLIVAR Climate of the 20<sup>th</sup> Century Project (C20C) will be held 5-8 November 2013 in Melbourne, Australia. The meeting is being hosted by the School of Earth Sciences at Melbourne University:

School of Earth Sciences, University of Melbourne  
Corner of Elgin and Swanston Streets  
Parkville, VIC 3010 Australia

The meeting will be held in the Fritz Loewe lecture theatre. Morning and afternoon tea breaks will be provided by the main sponsor, the Australian Research Council (ARC) Centre of Excellence for Climate System Science (<http://climatescience.org.au/>), for which the C20C project is grateful. There is no registration fee. The Workshop will begin at approximately 0900 on Tuesday, 5 November and adjourn at approximately 1230 on Friday, 8 November, followed by a half-day excursion on Friday afternoon for which the details are still being determined. The Workshop will be organized around the sub-projects (see below for a list of sub-projects). We will be seeking an updated report on each of these themes in advance of the meeting.

A block of hotel rooms is being arranged for Workshop participants at the Parkville and Carlton Hotels:

Naughton's Parkville Hotel (<http://parkvillehotel.com.au/>)  
Vibe Hotel Carlton (<http://www.vibehotels.com.au/hotels/victoria/melbourne/carlton/vibe-carlton/>)  
The lodging cost is nominally about \$170 per night; however, the local organizers are negotiating a reduced group rate. A Workshop web site will be developed soon to provide up-to-date information – an update will be sent with hotel and other information.

It should be noted that the Melbourne Cup (<http://melbournecup.com/>), a popular horse-racing event in the city) will be held on Tuesday, 5 November 2013, so the city will be busy with a carnival atmosphere and hotel rooms difficult to obtain – C20C participants should book their hotel rooms as soon as possible to ensure lodging.



**Met Office  
Hadley Centre  
Fitzroy Rd  
Exeter, Devon EX1 3PB  
United Kingdom**

**Center for Ocean-Land-  
Atmosphere Studies  
4041 Powder Mill Rd, #302  
Calverton, MD 20705  
United States**



- **HadISST2**

The HadISST2 SST and sea ice analysis for 1850-2009 is presented as an ensemble of ten realisations (the sea ice has only one realization, but has been combined separately with each of the ten SST ensemble members). This is the number agreed at the Beijing workshop in 2010. A daily version is available that has been interpolated to a 0.25 degree daily grid by combining the 1 degree monthly SST anomaly analysis with a 0.25 degree daily climatology. For all ten members combined, this represents of the order 1.5 TBytes of data. A version on a 1-degree monthly grid is also available, but this would need to be interpolated to daily values by AGCM users. To interpolate the SST to daily values, the Hadley Centre has used cubic interpolation instead of the “Taylor method” – this results in a more consistent spread in the ensemble of the daily data. No further manipulation of the data is needed by users. The HadISST2 sea ice analysis makes use of a simple linear interpolation (not compatible with the Taylor method). The Hadley Centre has also produced a further ten members for 1961-2009 based on a 1-degree pentad SST anomaly analysis; this is also available on a 0.25 degree daily grid. Updates through 2010 are currently in progress.

Two papers describing the HadISST2.1.0.0 analysis are almost ready for submission and a third is in the late stages of drafting. HadISST2 data will be made publicly available once the papers have been accepted. In advance of the acceptance of the papers, Chris Folland has suggested that, initially, one ensemble member be made available to the C20C community on the 0.25-degree daily grid. The Hadley Centre will select a member and make that member available to those who wish to be early users of HadISST2. Users are encouraged to use the whole ensemble, but special data access arrangements will need to be arranged for that, once the data have been peer reviewed. Users wishing to make early use of HADISST2 data should contact Nicola Rayner directly ([nick.rayner@metoffice.gov.uk](mailto:nick.rayner@metoffice.gov.uk)).

Another relevant development is that under the Attribution and Detection sub-project, a suite of AGCM integrations will be started around the end of 2013 at high horizontal (T216, approximately 60 Km) and vertical resolution (L85 up to the lower mesosphere) forced with selected members of HadISST2 and with parallel versions with anthropogenic influences removed. This model, HadGAM3, will be a major discussion topic in Melbourne. Other related projects in the Hadley Centre are running the coupled version of the model at the same resolution with a 0.25 x 0.25 degree ocean model which, with other models, may eventually provide a powerful tool for C20C studies. Advantages of the coupled version of the model, HadGEM3, over some other contemporary models that can be readily used in ensembles of long integrations are discussed by Scaife et al (2011), *Geophys. Res. Lett.*, 38, L23703, doi:10.1029/2011GL049573.

The Summer North Atlantic Oscillation C20C sub-project now has long term funding from the Swedish Research Council as well as Hadley Centre support, and will work closely with Detection and Attribution sub-project. Finally, the Weather Noise sub-project has recently published a major paper in Climate Dynamics (Chen et al, 2013) and

further work is underway to explore the utility of AGCMs versus CGCMs relevant to C20C type experimental designs.

- **Publications**

The list of C20C-related papers has been updated. Please see

[http://www.iges.org/c20c/C20C\\_related\\_papers\\_Apr2013.pdf](http://www.iges.org/c20c/C20C_related_papers_Apr2013.pdf)

for the latest list. Please let Jim Kinter ([kinter@cola.iges.org](mailto:kinter@cola.iges.org)) know if you have corrections or additions to this list. Please be sure to include a statement in the acknowledgments of any paper submitted that it is related to the C20C project (guidelines for this are posted here: [http://www.iges.org/c20c/proper\\_citation.pdf](http://www.iges.org/c20c/proper_citation.pdf)).

- **Sub-Projects**

A series of C20C sub-projects was defined at the 5<sup>th</sup> C20C Workshop:

- HadISST
- Precipitation Trends
- Attribution and Detection
- Summer North Atlantic Oscillation
- Weather Noise
- Mid-Latitude Predictability

The background for the creation of these sub-projects can be found in the workshop report that appeared some time ago in *CLIVAR Exchanges*:

[http://eprints.soton.ac.uk/204197/1/98857\\_NOC\\_Clivar\\_Exchanges\\_A4\\_44pp.HR\\_FINAL.PDF](http://eprints.soton.ac.uk/204197/1/98857_NOC_Clivar_Exchanges_A4_44pp.HR_FINAL.PDF)

Reports for several of these sub-projects are posted on the C20C web site:

<http://www.iges.org/c20c/sub-project-reports.html>. In particular, the HadISST will be released as version 2 – further information about HadISST2 is given above. Other projects can be suggested in Melbourne as long as there is someone to lead them.

Jim Kinter and Chris Folland

May 2013