

International CLIVAR Climate of the 20th Century Project

International CLIVAR Climate of the 20th Century (C20C) Project

Sixth Workshop Program (revised 24 October)

School of Earth Sciences, University of Melbourne
Corner Elgin and Swanston Streets, Melbourne

TUESDAY 5 NOVEMBER 2013

- 0900-0930 C20C Workshop Goals and Introductions – Chris Folland
Welcoming Remarks from University of Melbourne –
Local arrangements – David Karoly
- **SESSION 1 NEW CORE C20C PROJECT ON DETECTION AND ATTRIBUTION**
(chair: David Karoly)
 - 0930-1010 The new Hadley Centre system for attribution of extreme events:
development and first studies. -- N. Christidis
 - 1010-1030 COFFEE
 - 1030-1110 First results and future plans of the C20C Detection and Attribution
Project. -- D. Stone
 - 1110-1140 Limited evidence of an anthropogenic role in 2011-12 extreme rainfall
over SE Australia. -- A. King
 - **SESSION 2 AIR-SEA FEEDBACKS AND ATMOSPHERIC NOISE**
(Chair: Carsten Fredericksen)
 - 1140-1220 Weather Noise C20C Core Project: Progress and Prospects. -- E. Schneider
 - 1220-1250 The Roles Of Air-Sea Coupling and Atmospheric Weather Noise in Low
Frequency Climate Variability. -- H. Chen (Schneider)
 - **LUNCH 1250-1420**
 - **SESSION 3 PRECIPITATION VARIATIONS**
(chair: Peter Baines)
 - 1420-1450 Centennial-scale Changes in Large-Scale Precipitation in Observations and
Models. -- P. Arkin
 - 1450-1520 COFFEE and MELBOURNE CUP VIEWING
 - 1520-1540 SST forcing of Australian rainfall trends. -- J. Arblaster
 - 1540-1610 Factors Affecting the Interannual Variability of Global Land-Based
Rainfall. -- P. Baines
 - 1610-1640 Regional Structure of the Indian Monsoon: Observations, Reanalysis, and
Simulation. -- B. Cash
 - 1640-1710 Multidecadal variability of North China aridity and its relationship to PDO
during 1900-2010. -- Q. Cheng

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WEDNESDAY 6 NOVEMBER 2013

- SPECIAL PRESENTATION – HADISST2 (chair: Chris Folland)
 - 0830-0930 Sea-Surface Temperature in HadISST.2.1.0.0: The Met Office Hadley Centre Sea Ice and Sea-Surface Temperature data set. -- J. Kennedy
- SESSION 3 PRECIPITATION VARIATIONS (continued) (chair: Phil Arkin)
 - 0930-1000 Global Precipitation Change and Long-Term Climate Variability during the 1900-2010 Period. -- G. Gu
 - 1000-1020 COFFEE
 - 1020-1050 Change in the Precipitation Intensity over East Asia and Tropical Cyclone Frequency in the 228-year Simulations by a Global Atmospheric Model with 60-km Grid Size. -- T. Nakaegawa
 - 1050-1120 Teleconnections, Trends and Predictive Characteristics of Australian Seasonal Rainfall: Observations and CMIP5 models. – C. Fredericksen
- SESSION 4 ATMOSPHERIC CIRCULATION VARIATIONS, MECHANISMS AND EFFECTS ON SURFACE (chair: Ed Schneider)
 - 1120-1200 The summer NAO – current understanding and future plans. -- C. Folland
 - 1200-1230 Possible Interactions Between Arctic Sea Ice Variability and the Summer North Atlantic Oscillation (SNAO). -- J. Jeong
- LUNCH 1230-1400
 - 1400-1430 20th Century Changes and Future Projections in the Annual Cycle of the Southern Hemisphere Circulation, Storm Tracks and Australian Rainfall. -- C. Fredericksen
 - 1430-1500 The Modes of Interannual Variability of Southern Hemisphere Atmospheric Circulation in CMIP5 Models: Assessment and Projected Changes. -- S. Grainger
 - 1500-1530 The Role of Moist Processes in Response of Shortwave Cloud Radiative Forcing to El Niño Warming. -- L. Li
 - 1530-1550 COFFEE
 - 1550-1620 Understanding Recent Tropical Expansion and its Impacts. -- C. Lucas
 - 1620-1650 Tropical Cyclone frequency and climate change: Projections from CMIP5 models. -- K. Tory and J. McBride (presenter)
- POSTER VIEWING (with refreshments) 1650-1800

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THURSDAY 7 NOVEMBER 2013

- SPECIAL PRESENTATION – HADISST2 SEA ICE (chair: Chris Folland)
 - 0845-0930 Sea-ice Concentrations in HadISST.2.1.0.0: The Met Office Hadley Centre Sea Ice and Sea-Surface Temperature Data Set. -- J. Kennedy
- SESSION 4 ATMOSPHERIC CIRCULATION VARIATIONS, MECHANISMS AND EFFECTS ON SURFACE (continued)
 - 0930-1000 Effects of Large Volcanic Eruptions on Global Summer Climate and East Asian Monsoon Changes: A Multi-Model Comparison. -- T. Zhou
 - 1000-1030 An Analysis of the Behaviour of Westerly Jets in Global Reanalyses. -- L. Rikus
 - 1030-1050 COFFEE
- SESSION 5 EXTREMES (chair: Claudia Tebaldi)
 - 1050-1120 HadISD: Sub-daily data for studying extreme events. -- R. Dunn
 - 1120-1150 Projections of heat waves over Australia in the CESM model. -- S. Perkins
 - 1150-1220 A New CLIVAR initiative. -- S. Perkins
- LUNCH 1220-1400
- BREAKOUT GROUPS (POSTERS AVAILABLE)
 - 1400-1415 Introduction by C. Folland
 - 1415-1630 Breakout Groups:
 - a. Detection and Attribution - D. Stone (chair)
 - b. Atmospheric Circulation - C. Fredericksen (chair)
 - c. Precipitation – P. Arkin (chair)
 - d. Running Climate Models: AGCM, CGCM, special experiments – E. Schneider (chair)
 - e. Extremes in C20C - S. Perkins (chair)
 - 1630-1730 Initial Reports from Breakouts
 - 1900 Workshop dinner, Universal Restaurant, 139 Lygon Street, Carlton

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FRIDAY 8 NOVEMBER 2013

0830-1030	Breakouts (coffee available)
1030-1130	Final Reports
1130-1200	Wrap-up and Adjourn
1300-	Workshop Excursion (Optional excursion to Melbourne zoo or Healesville native animal sanctuary)

POSTERS

- Can We Attribute Australia's Record 2010-2012 Rainfall to a Particular Cause? - S. Lewis
- The Land-Sea Temperature Contrast in Natural Variability. - N. Tyrell
- Evaluation of HadAM3P Simulations in the Australian Region. - M. Black
- Summer North Atlantic Oscillation (SNAO) Variability During the Last Millennium - H. Linderholm
- Multidecadal Variability of North China Aridity and its Relationship to PDO During 1900-2010. – C. Qian
- Non-stationary Australasian Teleconnections. - A. Gallant
- A Near-Global Modified Climate Extremes Index for Observations and Global Climate Models. - A. Dittus