



The 4th Atmospheric Circulation Reconstructions over the Earth
(ACRE) Workshop,
in conjunction with EC FP7 EURO4M and ERA-CLIM plus AHRC
Historic Weather

KNMI, De Bilt, The Netherlands,
21st-23rd September 2011



ERA-CLIM



Co-convenors: Rob Allan (Met Office Hadley Centre, UK), Gil Compo (NOAA ESRL/CIRES, CDC, US) and Albert Klein Tank (KNMI, Netherlands)

The 4th Atmospheric Circulation Reconstructions over the Earth (ACRE) Workshop, in conjunction with EC FP7 EURO4M and ERA-CLIM plus AHRC *Historic Weather*

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The 4th ACRE Workshop will bring together the ACRE community and its partners to discuss the results of activities in the three interlinked areas that define the initiative: data, reanalyses, and user needs. It provides a venue for assessing ACRE's progress in the efficient use of the products it is both producing and facilitating with its international partners.

This meeting will be held in conjunction with two new European Commission Seventh Framework Programme (FP7) projects using historical data and reanalyses: European Reanalysis and Observations for Monitoring (EURO4M) and European Re-Analysis of global CLIMate observations (ERA-CLIM) plus the UK Arts and Humanities Research Council (AHRC) *Historic Weather* Network project, the European Environment Agency (EEA) and WMO Data Rescue (DARE). Overall, this will not only help to forge strong linkages among ACRE, ERA-CLIM, EURO4M, *Historic Weather*, the EEA and WMO DARE, but expose these projects/bodies to the wider ACRE community that brings together climate scientists, social scientists, the humanities community, educators and policy makers.

The workshop will also showcase ACRE's ongoing developments in the areas of citizen science, massive-scale data handling and web-based open platform capabilities, state-of-the-art high-resolution visualisations of data, metadata, data images and reanalyses products. The successful development of this technology is crucial to making the full impact of the output and outreach from the international ACRE initiative as user friendly, tailored and shaped as possible.

Previous ACRE Workshops and Meetings:

1st ACRE Workshop: [Reanalyses Data, Historical Reanalyses & Climate Applications](#)
(MeteoSwiss, Zurich, Switzerland 23- 25 June 2008)

2nd ACRE Workshop:: [Shaping an ongoing road map for ACRE](#)
(O'Reilly's Rainforest Retreat, Lamington National Park, Queensland, Australia, 1-3 April, 2009)

ACRE Working Group 1: [Data and Data Visualisation planning meeting](#).
(Bologna, Italy, 27-29 May 2009)

ACRE Data and Data Visualisation meeting
(Met Office, Exeter, UK, 15-17 September 2009)

3rd ACRE Workshop: [Reanalysis and Applications](#)

(Linked to the **US Workshop on the evaluation of recent reanalyses and steps towards an integrated Earth System Analysis**)
(Baltimore Sheraton Inner Harbour, Baltimore, USA, 3-5 November 2010)

Agenda

Day 1 – 21st September

8.30 Registration

DATA – Chairs – Albert Klein Tank, Aryan van Engelen, Gil Compo

9.00 Welcome from the local host (Hein Haak, KNMI Director of Research)

9.10 ACRE & ACRE WG 1 Report: Data Rescue – Rob Allan (ACRE, UK)

9.30 ACRE Chile: Chile and the South-east Pacific Ocean – Clive Wilkinson (RECLAIM/CRU, UEA, UK) & Jorge Guzman (SPRI/ACRE Chile)

9.50 **Morning Tea**



10.20 ACRE Pacific – Drew Lorrey (NIWA, New Zealand)



10.40 ACRE India & ACRE Africa – Rob Allan (ACRE, UK)

11.00 ACRE SE Asia – Fiona Williamson (UEA, UK)

11.20 ACRE China – Robert Bickers (Historical Studies, University of Bristol, UK)



11.40 **Discussion of Morning Sessions Day 1**

12.00 **Lunch – including EURO4M and ERA-CLIM WG1 side event meeting**



13.00 ACRE WG 5 Report: Non-instrumental and Documentary Data – Dennis Wheeler/Catharine Ward (Sunderland University, UK)

13.20 Digitization and analysis of national and overseas historical climate records in the Netherlands – Theo Brandsma (KNMI, Netherlands)

13.40 The Surface Temperature Initiative: Building a Land Surface Temperature Program for the 21st Century – Kate Willett, (Met Office Hadley Centre, Exeter, UK)

14.00 Citizen Science: Old Weather – Philip Brohan (ACRE & Met Office Hadley Centre, UK)

14.30 The International Environmental Data Rescue Organisation (IEDRO) - Tom Ross (IEDRO, US)

14.50 International Surface Pressure Databank (ISPD) – Russ Vose (NOAA NCDC, US)

15.10 **Afternoon Tea**



15.30 Rescue of Historical US Marine Data in Support of Marine Ecology – Catherine Marzin (NOAA Marine Sanctuaries, US)



15.50 International Comprehensive Ocean-Atmosphere Data Set (ICOADS) – Scott Woodruff (NOAA ESRL, US)

16.10 German initiative: Rescue of world-wide historical climate data - Birger Tinz (DWD, Germany)

16.30 AAA project : French historical climate and weather observations rescue co-funded by BNP Paribas Foundation– Sylvie Jourdain (Météo-France)

16.50 EURO4M & ERA-CLIM WG1 side meetings and report to ACRE – Phil Jones (CRU, UEA, UK) & Stefan Bronnimann (University of Bern, Switzerland)

17.10 Data Support for Climate Research from NCAR – Steve Worley (NCAR/UCAR, US)

17.30 IEDRO data rescue funding experiences - Penny Paugh (IEDRO, US)

17.50 **Discussion of Afternoon Sessions Day 1**

19.00 Workshop dinner in Utrecht

Day 2 – 22nd September

REANALYSES - Chairs – Philip Brohan, Russ Vose, Ben Giese

- 8.40 ACRE WG 3 Report: Verification and Validation – Gil Compo (NOAA ESRL/CIRES, CDC, US)
- 9.00 ACRE-facilitated 20CR and the Sparse Input Reanalysis for Climate Applications (SIRCA) – Gil Compo (NOAA ESRL/CIRES, CDC, US)
- 9.20 Developing Ocean-Atmosphere Reanalyses for Climate Applications (OARCA) – Ben Giese (TAMU, US) and Gil Compo (NOAA ESRL/CIRES, CDC, US)
- 9.40 ERA-CLIM – Dick Dee (ECMWF, UK)
- 10.00 **Morning Tea** 
- 10.30 Reanalysis of surface observations in ERA-CLIM - Hans Hersbach (ECMWF, UK)
- 10.50 Data quality feedback information from reanalysis - Paul Poli (ECMWF, UK)
- 11.10 EURO4M - Dale Barker (Met Office, UK)

DOWNSCALING

- 11.30 ACRE WG 2 Report: Downscaling – David Hein (Met Office, UK)
- 11.50 PRECIS 1894 Thames Flooding Study – David Hein (Met Office, UK)
- 12.10 Paleoclimate Tracers – Kei Yoshimura (AORI, University of Tokyo, Japan) 

USERS AND LINKAGES

- 12.30 ACRE WG 4 Report: User Requirements and Applications – Roger Stone (USQ, Australia)
- 12.50 **Lunch including *Historic Weather* side event meeting** 
- Delivery:**
- 14.10 Web tools – Gil Compo (NOAA ESRL/CIRES, US)
- 14.30 MO-TSB-IBM Open Platform & ACRE – David Hein (Met Office, UK)
- Output:**
- 14.50 20CR Storminess – Gregor Leckebusch (University of Birmingham, UK)
- 15.10 **Afternoon Tea** 
- 15.30 Hail propensity in Queensland – Roger Stone (USQ, Australia)
- 15.50 Extremes – Xiaolan Wang (Environment Canada) 
- 16.10 Floods and Droughts – Ben Cook (LDEO/NASA GISS, US)
- 16.30 Extra-tropical storminess in the 20th Century– Russ Vose (NOAA NCDC, US)
- 16.50 Stochastic Processes – Prashant Sardeshmukh (NOAA ESRL/CIRES, CDC, US)
- 17.10 ENSO, SPCZ and TCs – Drew Lorrey (NIWA, New Zealand) 
- Outreach:**
- 17.30 International Centre for Earth Simulation (ICES) – Bob Bishop (ICES Foundation, Switzerland)
- 17.50 The HMS Plover Project – Kevin Wood (NOAA/PMEL, US) 
- 18.10 **Discussion of Day 2**

Day 3 – 23rd September

USERS AND LINKAGES – Chairs - Roger Stone, Lorna Hughes, Scott Woodruff

Outreach (continued):

- 9.00 EURO4M Climate Information Bulletins – Ge Verver (KNMI, Netherlands)
9.20 UK National Maritime Museum (NMM) – Fiona Romero (NMM, UK)

Linkages:

- 9.40 The SEARCH Project – David Karoly (University of Melbourne, Australia)



10.00 Morning Tea



- 10.20 Collaborating with the research powerhouse of the Southern Hemisphere: Australia – Rado Faletic (FEAST, Australia)
- 10.40 Climate data used for EEA assessments - Blaz Kurnik (EEA)
- 11.00 A global dataset of the self-calibrating Palmer Drought Severity Index - Gerard van der Schrier (KNMI, Netherlands), Phil Jones (CRU, UEA, UK) and Keith Briffa (CRU, UEA, UK)
- 11.20 The ARCdoc project – Dennis Wheeler (Sunderland University, UK)
- 11.40 The International Best Track Archive for Climate Stewardship (IBTrACS) – Russ Vose (NOAA NCDC, US)
- 12.00 The Development of an Enhanced Tropical Cyclone Tracks Database for the Southwest Pacific from 1840-2009 – Howard Diamond (US GCOS Office & WDCM, US)
- 12.20 CCI/CLIVAR/JCOMM Expert Team on Climate Change Detection and Indices (ETCCDI) – Albert Klein Tank (KNMI, Netherlands)
- 12.40 ARC Opportunities: Climate and Weather Risk Management – Roger Stone (USQ, Australia)
- 13.00 Lunch including *Historic Weather* side event meeting



- 14.40 The SPHERE project - Clive Wilkinson (RECLAIM/CRU, UEA, UK)
- 15.00 Met Office Hazard Centre – Paul Davies (Met Office, UK)
- 15.20 Centre for World Environmental History (CWEH) – Vinita Damodaran (CWEH, Sussex University, UK)
- 15.40 *Historic Weather* e-Research approaches to historic weather data: sources, collaborations and methodologies for researching environmental change, side event meeting report to ACRE - Lorna Hughes (University of Wales Chair in Digital Collections, National Library of Wales, UK)

- 16.00 **DISCUSSION – Rob Allan, Gil Compo, Albert Klein Tank**

VENUE:

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