

Update on WOAP

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with input from Michael Manton & other WOAP members

Program for Climate Model Diagnosis and Intercomparison (PCMDI)

Lawrence Livermore National Laboratory

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Outline

- What is WOAP?
- Action plan on surface fluxes
- WOAP-sponsored workshop
- Reanalysis
- Transition of WOAP

WCRP Observation and Analysis Panel

- Michael Manton, chair
- Charge: Help coordinate and organize WCRP observational activities
- Will transition to the WCRP Data Council

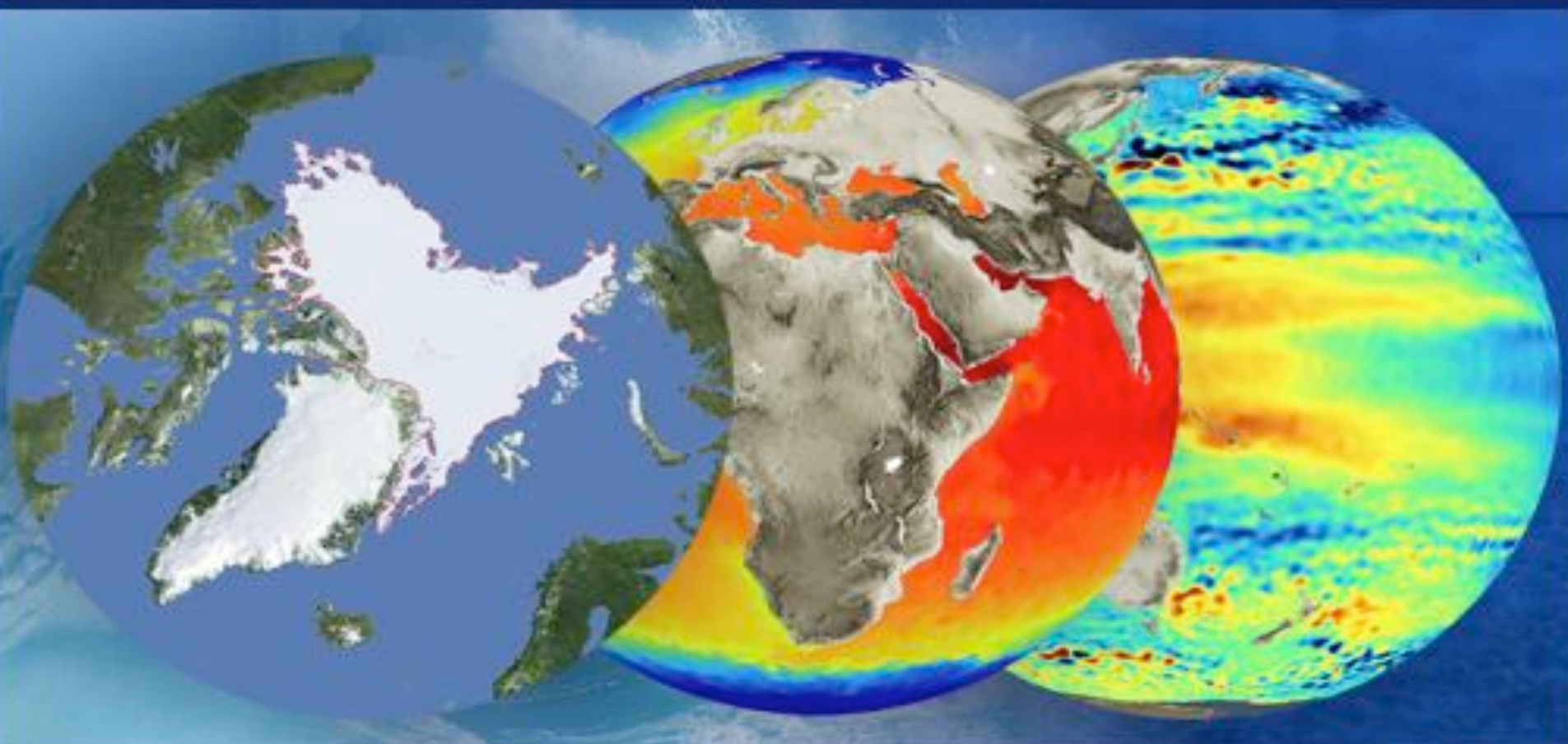
JSC asked WOAP to write an "Action Plan for WCRP Research on Surface Fluxes"

- Participants:
 - ▶ Mark Bourassa, Andy Brown, Carol Anne Clayson, Han Dolman, Albert Fischer, Christoph Garbe, Sarah Gille, Sergey Gulev, Keith Haines, Elizabeth Kent, Eric Lindstrom, Michael Manton (Convenor), Vladimir Ryabinin, Sonia Seneviratne, Adrian Simmons, Konrad Steffen, Toste Tanhua, Kathy Tedesco, Maciej Telszewski, Michael Tjernstrom, Kevin Trenberth, Brian Ward, Scott Woodward
- Common topics include:
 - estimation of the accuracies of fluxes at different space and time scales
 - the evaluation of flux products
 - the evaluation of model-based (including reanalysis) fluxes.
- Handle through joint workshops involving all relevant groups

Recommendations

- TOPC asked to summarise characteristics of land-based observational networks and recommend actions to optimise:
 - the spatial distribution of reference sites
 - the consistency of measurements and data handling
 - the promotion of multi-variable sites.
- WOAP should set priority tasks on evaluation of global flux datasets and establish short-term task groups
- WCRP should promote support for production and systematic evaluation of global climate datasets
- Continuation of SURFA by WGNE is encouraged
- Evaluation of model datasets (including reanalysis) should be handled as for global flux datasets; ie through task groups
- WOAP should place priority on surface flux issues and promote collaboration

→ WOAP - WORKSHOP ON EVALUATION OF SATELLITE-RELATED GLOBAL CLIMATE DATASETS



18-20 April 2011 | ESA - ESRIN | Frascati (Rome) Italy

Scientific Committee

- Mike Manton (Uni Monash, Chair)
- Han Dolman (Uni Amsterdam)
- Jeff Key (NOAA)
- Chris Kummerow (CSU)
- Jörg Schulz (EUMETSAT)
- Adrian Simmons (ECMWF)
- Detlef Stammer (Uni Hamburg)
- Bill Westermeyer (GCOS)
- Pierre-Philippe Mathieu (ESA)

Objectives

- Evaluate some ECV datasets against the *GCOS Guidelines*
- Provide a framework for future evaluation of global climate datasets
- Assess value of establishing an inventory of the status of ECV datasets
- Consider atmosphere, ocean, and terrestrial domains

My interpretation:

- Provide guidance on the accuracy/value of existing observational datasets and criteria on which to evaluate future datasets.

WOAP proposed to (established?) a WOAP reanalysis task group.

- Global reanalysis requires major investments
- International cooperation is essential to optimise each investment
- Many efforts on datasets relevant to reanalysis, including WOAP Task Group on Data for Reanalysis
- Potential for common global dataset
- Potential for coordinated scheduling
- Potential for consistent output

Terms of Reference for WOAP Reanalysis Task Group

- Review data holdings
- Promote standards
- Ensure maintenance of dataset catalogue
- Promote dataset production and maintenance
- Promote common global dataset for reanalysis
- Promote cooperation on scheduling
- Promote consistent output and access

Membership from groups producing reanalyses and other interested parties

- Representatives from groups such as
 - WOAP
 - ECMWF
 - JMA
 - GMAO
 - NCEP
 - NCAR
 - NCDC
 - ESRL
 - UKMO
 - EUMETSAT

**4th World Climate Research Programme
International Conference on
Reanalyses**

7-11 May 2012

Silver Spring, Maryland, USA

Objectives

- To share understanding of the major challenges facing reanalyses: the changing observing system and integrated earth system
- To assess the state of the disciplinary atmospheric, ocean and land reanalyses, including the needs of the research community for weather, ocean, hydrology and climate reanalyses
- To reviewing the new developments in reanalyses, models and observations.

Deadlines

- Abstract submission: 6 January 2012
- Early bird registration: 13 February 2012
- Hotel reservation: 13 March 2012.

Task Group on Observations (2010-11) plans demise of WOAP (i.e., transition to WCRP Data Council)

- Members of the task group:
 - Sarah Gille (Chair)
 - Mike Bosilovich (WOAP Reanalysis)
 - Veronica Eyring (Modelling Council Task Group)
 - Colin Jones (CORDEX)
 - Michaela Haegglin (SPARC)
 - Jeff Key (CLIC)
 - Toshio Koike (WCRP Information System)
 - Chris Kummerow (GEWEX)
 - Michael Manton (WOAP)
 - Norm McFarlane (Exec. Sec.)
 - Adrian Simmons (GCOS)
 - Karl Taylor (CLIVAR).

Terms of Reference of WCRP Data Council

- Promote research using sustained observations and data from process studies across the WCRP
- Promote assessment of the adequacy of sustained observations and derived products to support climate research
- Promote assessment of gaps in the global observing system
- Promote coordinated assessment and comparison of climate-data products, including those from reanalyses
- Promote research for continuing improvement in the processing and reprocessing of fundamental climate data records
- Promote development of mechanisms for archival of, access to and analysis of data, and associated meta data, across the research community
- Promote standards for product generation, including global and regional reanalyses
- Promote a coordinated approach to reanalysis across all domains
- Promote scientific development of coupled assimilation
- Work with the Modelling Council to promote effective use of observations with models.

Operation of Data Council

- Council will meet annually, likely out of phase with GCOS panels
- Council will promote action within existing programs or by establishing task groups
- Membership
 - Chair and vice-chair (both independent)
 - Representative from each of the four projects (designated individuals; e.g. GSOP representative from CLIVAR)
 - Representative of SOLAS (and other pertinent groups that are jointly sponsored by WCRP)
 - Representative from each of the three GCOS panels (chairs or their nominees)
 - Representative of Modelling Council
 - Representative of IGBP
 - Representatives of CEOS and CGMS
 - Other international agencies and satellite coordinating bodies may participate as observers.

