Observations and their Analysis for WCRP/COPES

WCRP

World Climate Research Programme

Ke[illegible]ren[illegible]rth

Chair

WCRP Observation and Assimilation Panel

WCRP: WMO/IOC/ICSU

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WCRP Observations and Assimilation Panel (WOAP)

- **Chair: Kevin Trenberth**
- **WOAP activities:**
- WOAP identifies climate observational requirements;
- Helps optimize observations;
- Provides a forum and focal point for WCRP observational issues;
- Promotes and coordinates analysis, reprocessing, reanalysis and assimilation;
- Promotes and coordinates information and data management activities, including web sites.

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WOAP

WOAP is primarily sponsored by WCRP but is also co-sponsored by GCOS,

*WOAP is a **coordination Panel** in WCRP*
Preferred channel for interactions GCOS and WCRP
AOPC and OOPC are also co-sponsored by WCRP
WOAP helps to coordinate GCOS panels and issues
WOAP serves to help with GEOSS workplans.

Achievements, actions, issues

Much material and background docs on WOAP website

Last mtg: Sept-Oct 2008

WOAP-III meeting

NCAR, Boulder, Co, USA, 28 Sep-1 Oct 2008

Key Agenda items

- Reports from WCRP groups
- Coordination with GEOSS and GEO
  - Outlines of activities of AOPC, OOPC, TOPC
- Space matters and interaction with space agencies
- In situ issues
- Data activities
- Reanalysis in support of climate research
  - Single domain & coupled reanalysis and links to climate model assessment and development; observational datasets for reanalysis
- Dataset reprocessing

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SPARC: Current and near-future activities

Christian von Savigny (IUP Bremen) on behalf of SPARC
with input from Norm McFarlane, Elham Farahani,
William Randel and Cornelius Schiller

Outline:

Highlights of current and near-future SPARC activities

- New SPARC water vapour initiative
- Stratospheric temperature trends
- SPARC limb working group
- SPARC IPY activity
- General assembly

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Issue arising out of SPARC presentation

- **From the SPARC Report, WOAP identified the anticipated gap regarding satelite ozone & other chemical species profile observations as an issue of concern:**

- **Recommendation:** As part of its continuing dialogue with CEOS, WOAP should draw attention to the intermediate-term gap in the monitoring of ozone and related species.

WOAP-III: MAJOR CONCERNS and ISSUES

Climate data records

- Continuity and homogeneity of observations, especially from space
- Need for **reprocessing** of records
  - But not in a piecemeal fashion
  - Agreement on algorithms: coordination among groups
  - Includes evaluation and assessment or results
- Need for **reanalysis** to produce global gridded fields

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Interactions with GCOS

- Attended the GCOS SC meeting Oct 2008
- GCOS has prepared a progress report on implementing the GCOS Implementation plan
- Participated in GCOS meeting Feb 2009 on preparing an update to the GCOS implementation plan

Interactions with GEO

GEOSS will not be successful if it does not establish a global observation system that helps "improve our understanding of the Earth's climate system and the ability to predict climate change, and to mitigate and adapt to climate change and variability" (GEOSS 10-Year Implementation Plan Reference Document, p.61).

- WCRP receives many communications from GEO related to GEOSS.
- Some relate to the GEO 2009-2011 workplan

Recommendation 4.7

from WOAP-III

The JSC and GSC should jointly request GEO to provide vital enhancement of global monitoring by

(i) promoting data sharing across all nations,

(ii) developing international standards and regulations for the consistent monitoring of ECVs and related variables, and

(iii) encouraging all nations to support environmental monitoring systems.

Report from the WOAP Task Group on Data Management

Norm McFarlane, outgoing TGDM chair

SPARC International Project Office, Toronto, Canada

Howard Cattle, incoming TGDM chair, and Nico Caltabiano

International CLIVAR Project Office, National Oceanography Centre, Southampton, UK

Bob Keeley, incoming TGDM vice chair

Integrated Science Data Management, Department of Fisheries and Oceans Canada

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TGDM survey

- Designed to ascertain:
  a) Data information management practices of projects
  b) Identify project or sub-project data centres
  c) Regional or special purpose datasets assembled to serve the needs of specific sub-projects or tasks within core projects
  d) Global datasets (including model output)
  e) Links to datasets
- Limited to documenting archived data currently generally accessible
- SPARC datasets included

SPARC and WOAP

Key points:

- **Gap in satellite ozone and trace gas profile measurements - WOAP action with CEOS?**
- **ECVs - does SPARC need to engage?**
- **Reanalysis?**
- **Reprocessing of stratospheric datasets/SPARC data initiative**
- **Are there any SPARC data management issues that need to be addressed?**