Coordinated Energy and Water-cycle Observations Project

The new CEOP was established as a merger of the „old“ CEOP and the former GHP.

The „old“ CEOP: Coordinated Enhanced Observing Period
Coordinated Enhanced Observing Period
Three Unique Capabilities

A Well Organized Data Archive System

Model Output Data Archiving Center at the World Data Center for Climate, Max-Planck Institute for Meteorology of Germany

In-Situ Data Archiving Center at NCAR (National Center for Atmospheric Research) of USA

Data Integrating/Archiving Center at University of Tokyo and JAXA of Japan
BALTEX Reference Sites for CEOP

Sodankylä (FMI)
67.4N/26.7E
B. Tammelin

Norunda (Lund University)
60.1N/17.5E
A. Lindroth

Lindenberg (DWD)
52.2N/14.1E
F. Beyrich

Cabauw (KNMI)
52.1N/5.2E
F. Bosveld
The new CEOP was established as a merger of the old CEOP and the former GHP.

The "old" CEOP: *Coordinated Enhanced Observing Period*

The former GHP: GEWEX Hydrometeorological Panel (basically CSEs)

The "new" CEOP:

*Coordinated Energy and Water-cycle Observations Project*

includes the former GHP and CSEs (now RHPs), the old CEOP, and much more!

CEOP chairs:
Toshio Koike (ever since),
Ron Stewart (interim 2008-09), probably followed by Dennis Lettenmair in 2010

Note: CEOP has so far NO science advisory or steering panel!
Global Model
NWPCs/ACs
NCEP,JMA
ECPC,BoM
UKMO,CMC
ECMWF
CPTEC
NCMWF
EPSON MET
GMAO GLDAS

Regional Model
cold
monsoon

A Project of Projects
cross-cutting

Land Surface Model/LDAS
high elevation
semi-arid
isotope
extreme

Reference Sites
River basins

WDC-C
MPI-M

NCAR/EOL
UT&JAXA

Global Dataset Projects

DATA INTEGRATION & ANALYSIS
Centralized System U. Tokyo
Distributed System WTF-CEOP

Societal Benefits

Satellite data
CEOS
JAXA
NASA
ESA
NOAA
EUMETSAT
WGISS
WGCV
BALTEX engagements in CEOP (past 2 years)

BALTEX as a RHP, annual meeting, reporting, call conferences: H-J Isemer

Reference site contributions (Sodankylä, Lindenberg, Cabauw); Data delivery, meetings, call conferences: F. Beyrich (DWD-MOL) and a group of site managers

Inter Continental Transferability Study (ICTS); Regional model performance intercomparison: B. Rockel (GKSS), C. Jones (SMHI)

World Climate Data Centre Contributions (MPIfM Hamburg, M. Lautenschlager et al) indirect

Extremes Cross-cut; Workshop presentations only; H. von Storch, O. Christensen, H-J Isemer

Limited BALTEX activities at present

No action in WEBS, Cold Regions, Isotopes, HAP, …
The new CEOP is being criticized, *e.g.* by the GEWEX SSG

- no clear obvious science strategy, diversity of actions
- too big
- lacks coordination
- role of RHPs unclear, how do they contribute to solving global issues (the „G“ in GEWEX)?
- a stronger coordination of RHPs activities towards solving global issues (??)
- what is the unique contribution of CEOP to GEWEX and WCRP?

Note: CEOP has so far NO science advisory or steering panel!
At the recent CEOP meeting several GEWEX SSG members were present and asked strong questions concerning regional high resolution datasets, which, indeed, has been one of the motivations for the RHPs to provide for use in the frame of CEOP-GEWEX. These questions were also directed towards BALTEX. I felt a bit uncomfortable with sometimes no convincing answers at hand.

The issues of land hydrology, water budget closure at regional catchment scale, catchment wide energy budgets and the impacts of climate change to the latter continue to be key topics in GEWEX. The appointment of Dennis Lettenmair as new CEOP co-chair highlights the land surface hydrology topic for CEOP.

Increasingly, some of the above core GEWEX topics seem to move to the fringes of BALTEX Phase II, maybe for good reasons. Also, many ongoing, particularly hydrological initiatives and projects in the Baltic Sea region’s countries are not running under the BALTEX umbrella. In BALTEX, the active participation of key hydrologists and projects has diminished during recent years.

I like to add that at least some RHPs seem to be not very happy with the situation in CEOP. This is a personal assumption based on off-line discussions I had in Melbourne.
My ad-hoc conclusion:
BALTEX may need to reconsider its role as a RHP in CEOP/GEWEX.

Options for actions include:

1. Rapid (3 to 6 months) fulfilment of some CEOP/GEWEX requests/requirement concerning energy and water budget data sets, including synthesis reports and the like.

2. Business as usual directed to CEOP/GEWEX.

3. BALTEX abandons to claim the RHP status within CEOP/GEWEX.
RHP Data Sets for CEOP / GEWEX
RHP Data Sets for CEOP / GEWEX

A basic rationale for the RHPs:
- provide gridded regional continental-scale high quality data sets to validate global GEWEX products.

One of the core GEWEX concepts!

Implementation: RHPs provide regional datasets to CEOP-GEWEX data centres for free and unrestricted delivery via GEWEX data portals.

NO BALTEX contribution so far!!

Candidate datasets may include:
- BALTRAD products,
- the Rubel precipitation data set,
- MESAN gridded dataset or follow-up products,
- useful subset of the BALTEX data centre contents (runoff, soil moisture, ..)
- other model or re-analysis products

BALTEX had promised a first WEBS dataset including errors bars for 2007!!