

**NOTES FROM THE FIFTH FORMAL COORDINATED ENERGY AND WATER-CYCLE OBSERVATIONS  
PROJECT (CEOP) TELECONFERENCE ON EUROPE-NEESPI-AFRICA REGIONAL HYDROCLIMATE  
PROJECTS AND REFERENCE SITE ISSUES HELD ON  
11 MAY 2010  
Final DRAFT, 31 May 2010**

## 1. INTRODUCTION

The 5<sup>th</sup> Europe-NEESPI-Africa RHP and Reference Sites Teleconference related to the Coordinated Energy and Water-Cycle Observations Project (CEOP) took place on Tuesday 11 May at 13:00 UTC.

The issues that were discussed on the subject conference call included:

- (i) Outcomes of the GEWEX SSG Meeting in India, January 2010
- (ii) The Pan-GEWEX Meeting and The 4<sup>th</sup> CEOP Annual Meeting in Seattle, August 2010
- (iii) Overview of all site data at CEOP Reference Site Data Archive;
- (iv) RHP/Reference Site data providers/managers reports;

### Participants

The participants were:

Toshio Koike	Tokyo, Japan, CEOP Co-Chair
Dennis Lettenmaier	Seattle, Washington, USA; CEOP Co-Chair
Hans-Joerg Isemer	Representing BALTEX RHP and CEOP Data Management
Fred Bosveld	The Netherlands, BALTEX Cabauw site representative
Frank Beyrich	Lindenberg, Germany, BALTEX Lindenberg site representative
Philippe Drobinski	France, HyMeX Representative
Pasha Groisman	USA, Representing NEESPI RHP
Gianni Tartari	Italy, Representing CEOP_HE group and Italian reference sites
Elisa Vuillermoz	Italy, Representing CEOP_HE group and Italian reference sites
Roberta Toffolon	Italy, Representing CEOP_HE group and Italian reference sites
Sam Benedict	San Diego, California, USA; CEOP International Coordination Function
Petra Koudelova	Tokyo, Japan; CEOP International Coordination Function

Drs Steve Williams (Boulder, Colorado, USA; CEOP Data Management), Esko Kyrö (Finland; FMI representative), Timo Ryyppo (Sodankylä, Finland; Sodankylä site manager), and Charles Wrench (UK, Chilbolton site representative) responded to the announcements but were not available for the call. Nevertheless, Dr. Wrench provided a written update on the Chilbolton site in advance. Dr. Thierry Lebel (Representing AMMA RHP) was not available for the call.

## 2. NEXT CONFERENCE CALL

The next, **6<sup>th</sup> CEOP Europe-NEESPI-Africa RHP and Reference Sites Teleconference** is proposed to take place on **Tuesday 7 September 2010, at 13:00 UTC**. **Koudelova/Benedict** have the **action (A1)** to inform the group of the details of the next call nearer to the time of the call and to coordinate the origination of the call (**action A1a**).

## 3. CEOP AND CEOP DATA GROUP GENERAL ISSUES

### 3.1 WCRP and GEWEX related issues

(3.1a) **Koike and Lettenmaier** reported on the **GEWEX SSG meeting in New Delhi, India in January** and advised the group that Dr. Kevin Trenberth had been appointed new Chair of the SSG. They voiced that the CEOP data component was very well acknowledged at the SSG meeting and in particular the high quality and long-term reference site data was recognized as crucial for the science and thus continuation of this CEOP activity was considered as highly desirable.

(3.1b) **Koike** reiterated that at the 3<sup>rd</sup> Annual CEOP Meeting in Melbourne in August 2009, CEOP took commitment of developing **10-year dataset** that is especially needed for climate projection studies focusing on climate model uncertainties as well as for intensive integrated studies in regions that involve RHPs and isotope and modeling groups. The CEOP 10-year dataset should include in-situ as well as satellite data and

added will be data from other projects like the FLUXNET and IGBP iLEAPS data. The goal for this year is to prepare the 10-year dataset for 10 sites selected among CEOP and FLUXNET sites. In this respect, **Koike** advised the group that a request had been sent to the FLUXNET community to nominate suitable sites.

It was emphasized that this task will require special effort on unifying the data format, time interval, variable names, etc. and also to assure metadata interoperability. As the first step, the data group has **action A2** to nominate the suitable sites from the CEOP as well as FLUXNET network.

**Koike** also pointed out that strong support on this task was expected from the European sites, namely Lindenberg, Cabauw, and Sodankyla. In this context, the exact timing of this 10-year period was brought up indicating that certain difficulties and additional work may be associated with backfilling the data for the pre-CEOP years and thus period 2003 – 2012 might be preferable for the site managers. However, observations for the year 2000 and 2001 are important for the CMIP5 climate output validation and thus the CEOP 10-year dataset should cover these years. Lindenberg and Cabauw reference site representatives Drs. **Beyrich** and **Bosveld** took **action A3** to investigate the possibilities of processing the 2000 – 2002 data according to the CEOP standards and will advise the group of the results. It was also proposed and agreed that a questionnaire be circulated inquiring about ability of individual CEOP reference site to contribute to the 10-year dataset and about possible difficulties with backfilling the data for pre-CEOP years. **Benedict and Koudelova** have **action A3a** to coordinate with **Williams** preparation and circulating of such questionnaire.

**Lettenmaier** emphasized the importance of a data value-adding process through using the observation data for model evaluations and the importance of the links with RHPs.

(3.1c) The group was advised that the **4<sup>th</sup> CEOP Annual Meeting** would be held as part of the 2<sup>nd</sup> Pan-GEWEX meeting that will take place in **Seattle, USA, 23 – 27 August 2010**. According to the updated Pan-GEWEX agenda, two full-day sessions on Tuesday 24<sup>th</sup> and Wednesday 25<sup>th</sup> August are designated for each panel (including CEOP, GRP, and GMPP) and one CEOP evening session on Thursday 26 August has been added on the CEOP request. In addition, one day for panel interaction is scheduled on Thursday 26 August. Further information including logistics details can be found at the meeting website at: <http://www.gewex.org/2010pangewex/home.html>. The participants on the call were encouraged to consider their participation in this event.

(3.1d) It was reiterated that new mailing lists were created using the NCAR Mailman service that with intention to facilitate the CEOP groups communication and material distribution. The address for the Europe- Africa RHP and Reference Site group is: [ceop-rs-europeafrica@eol.ucar.edu](mailto:ceop-rs-europeafrica@eol.ucar.edu) and include all the site representatives of European, NEESPI, and African sites. To add/remove a person to/from the list, request should be made to Steve Williams or Petra Koudelova and Sam Benedict.

(3.1e) **Benedict** advised the group of the request from GEWEX addressed to the GEWEX panels and their subprojects for providing information of capacity building activities. The CEOP component leaders present at the call were asked to kindly respond to this GEWEX request by 14 May 2010.

## 4. RHP and Reference Site Reports

### 4.1 Summary status of the reference site archive at NCAR/EOL

(4.1a) **Williams** was not available for the call but Loehrer provided a written summary of the current status of the CEOP reference site data archive for the Europe-NEESPI-Africa region:

(i) BALTEX Cabauw - FLX, SFC, and TWR now complete through 2008. There is a minor issue with the STM data and we are awaiting a response. They are working through a format issue with the SONDE data for 2007 on.

(ii) BALTEX Lindenberg - All data sets now complete through 2008.

(iii) BALTEX Sodankyla - SFC, STM and SONDE now complete through 2008. TWR has dew point issue, awaiting revised version. No FLX data submitted yet after 2004.

(4.1b) It was further reiterated that it would be desirable to update the metadata information of individual sites and asked the **site representatives** to review the information that is available through the Data

Management website at: <http://www.eol.ucar.edu/projects/ceop/dm/insitu/sites/> and update it if necessary (**action A4**).

#### 4.2 HyMeX RHP report by Philippe Drobinski

(4.2a) **Drobinski** voiced that HyMeX had not been registered as an official GEWEX/CEOP RHP and inquired what steps they should undertake to finalize the procedure. It was recommended that HyMeX provide their Implementation and Science plan to the GEWEX SSG about 6 weeks prior to the Pan-GEWEX meeting in August (i.e. by mid-July) and also prepare a presentation for the GEWEX SSG session of the Pan-GEWEX meeting on Friday 27 August.

(4.2b) **Drobinski** further reported that representatives of the three HyMeX sites nominated for CEOP had been working on finalizing the data format. The status is as follows:

- Italian site: Datasets of observation from 2003 with time interval of 30 minutes are available and will be converted to the CEOP format by the site managers in the near future. Only issue is a number of gaps in observation but if appropriately flagged, it should be compliant with the CEOP standards. The whole package of the data will be sent at once and the details will be communicated with Williams.

- French site: Meteo France agreed to provide meteorological data from the area of the nominated reference site (~ 100x100 km) because the CEOP data policy is in concert with the Meteo France data policy. Hydrological data and soil moisture observation (12 stations) will be provided by OHM-CV. The data will be converted to the CEOP format and merged (meteorological and hydrological data) by the site managers and sent to Williams in the near future.

- Israel site: Samples of datasets from two (out of three) sites have been sent to Williams for confirmation of data format and it has been approved. Higher temporal resolution data (30 min.) are being negotiated with the data providers. Also work is advancing on preparing metadata for these sites.

(4.2c) **Drobinski** also reiterated that the **4<sup>th</sup> HyMeX Workshop** would take place in Bologna, Italy from 8 through 10 June 2010, at the CRN facilities and acknowledged the planned participation of CEOP representatives including poster contribution of Dr. Toru Tamura from UT. He felt that it might be productive if representatives of the Italian CEOP-HE group attend this event since the Italian site managed by the CEOP-HE group is located in the HyMeX area and closer cooperation between this site and the HyMeX Italian site(s) would be beneficial for both sides as well as for CEOP. **Tartari, Vuillermoz, and Toffolon** agreed with this and will consider their participation in the HyMeX workshop. Consequently after the call, e-mail communication between the two groups has been initiated and participation of the CEOP-HE representative (Dr. Tartari) in the HyMeX workshop confirmed.

#### 4.3 BALTEX RHP by Frank Beyrich and Hans-Joerg Isemer

(4.3a) The 6<sup>th</sup> Scientific Conference on BALTEX will be held in Poland, 14 – 18 June 2010 and the title is: Changing Water, Energy and Biogeochemical Cycles in the Baltic Sea Basin. The conference is organized jointly with the NEESPI RHP and several papers related to the CEOP work will be presented including the keynote talk on the BALTEX CEOP reference sites by Frank Beyrich.

(4.3b) The BALTEX Assessment Report on Climate Change was published in 2008 and efforts to publish a revised version of the report have been initiated. The leading committee is now being prepared that will involve scientists should stay strictly apolitical. The new report is envisioned to be published in 2012.

(4.3c) **Beyrich** also advised the group of the EMS (European Meteorological Society) conference that will take place in Switzerland 13 – 17 September 2010 and will include a session on atmospheric measurement from local to regional scale at which Steve Williams has scheduled a keynote talk on CEOP data component.

#### 4.4 BALTEX: Lindenberg by Frank Beyrich

**Beyrich** reported that the Lindenberg datasets through 2008 had been finalized and submitted to the NCAR archive and were available on-line.

#### 4.5 BALTEX: Cabauw by Fred Bosveld

**Bosveld** reported that the Cabauw datasets through 2008 had been finalized and submitted to the NCAR archive and were available on-line. Minor issues with the STM data were being resolved. **Bosveld** further

voiced that regarding the ancillary datasets from the Cabauw site that are also requested by CEOP, he was negotiating with other partners of The Cesar (Cabauw experimental site for atmospheric research) Consortium. He will inform Williams and the group about the results of these discussions in due course.

#### 4.6 BALTEX: Sodankylä by Esko Kyro – written input

SFC, STM and SONDE data now complete through 2008. TWR data had dew point issue and it is being revised. Regarding the flux data it is being reprocessed and should be finished in a few weeks.

#### 4.7 NEESPI by Pasha Groisman

(4.7a) **Groisman** reiterated that a great effort was being made to collect various permafrost data in the Northern Russia of the NEESPI region and that the data was being submitted to the Cooperative Arctic Data and Information Service (CADIS) of NCAR that supports the Arctic Observing Network (AON). Also, the **tower site Zotino in Siberia** that had been established through international efforts of the project ZOTTO has been working since 2009 and has agreed to provide the data to CEOP. **Groisman** will confirm that the site representatives contacted Williams on this matter (**action A5**). In addition, NEESPI has established closer collaboration with the local Hydrometeorological Center of Russia that may result in provision of further data including tower observations. This activity is led by the German NEESPI group.

(4.7b) **Groisman** also voiced that number of scientists from Belarus and Russia would participate in the BALTEX scientific conference presenting roughly 35 papers and acknowledged financial support provided by Germany, Poland, and Sweden without which the scientists from Belarus and Russia could not attend the event.

(4.7c) An international summer school in Tomsk, Siberia, will be organized under the auspices of NEESPI that is supposed to produce a set of research papers.

#### 4.8 Others: Italy and African sites of the CEOP-HE group by Gianni Tartari Roberta Toffolon and Elisa Vuillermoz

(4.8a) **Tartari** advised the participants that the CEOP-HE team, which was regularly participating in the CEOP Asia-Pacific calls, had decided to also join the Europe-NEESPI-Africa group's conference calls because of the CEOP-HE reference sites in Italy and Africa. They feel it beneficial to have this opportunity to communicate with other European and African site representatives.

(4.8b) **Toffolon** mentioned that their reference Italian site included three observation stations located in Italian mountains (Monte Pino, Monte Cimone, and a glacier station) and was included in the CEOP group of "Ohters" sites that are not associated with any RHP. The documentation of the stations as well as the data have been sent to the NCAR archive.

(4.8c) **Vuillermoz** voiced that they had completed the application form for the African sites and were awaiting confirmation of acceptance these sites by CEOP. When they receive confirmation (email is sufficient), the procedure for preparing the site documentation and beginning data submission will be initiated. **Benedict** took **action A6** to check the status of the application form and assure the confirmation is sent to the CEOP-HE group as soon as possible.

#### 4.9 Others: Chilbolton by Charles Wrench – written input

The plans for implementing a new flux observation arrangement at Chilbolton have been delayed by bad weather and staff shortages due to illness. All the components are available but actual settings had to be postponed.

#### 4.10 AMMA

**Benedict** reiterated that negotiations with the AMMA community had advanced and CEOP had received a formal letter expressing AMMA's interest in contributing their data to the CEOP database. In addition, the AMMA data is being used for CEOP studies through the AMMA data gateway.