



## WORLD WEATHER WATCH

Instruments and  
Methods of Observation Programme

Commission for Instruments and  
Methods of Observation

# *CIMO Newsletter*

<http://www.wmo.int/web/www/CIMO/newsletters.html>

## May 2005

The CIMO Newsletter is intended as a complementary means of keeping informed all CIMO members and getting them involved in the work of the Commission, by reporting regularly on its activities as well as on other related organizational matters, meetings, publications, etc. Readers are encouraged to provide their comments.

In order to keep the list of CIMO members in WMO Publication No. 5 up-to-date, we urge WMO Member countries to inform the Secretariat promptly of changes concerning the designation of their members to the CIMO. Thank you.

## HIGHLIGHTS

### WMO Laboratory Intercomparison of Rainfall Intensity Gauges

The WMO Laboratory Intercomparison of Rainfall Intensity Gauges was launched, simultaneously, in September 2004, in the laboratories of the Royal Netherlands Meteorological Institute, Météo-France and the Italian Met Service (University of Genoa). The selected 19 pairs of instruments from 18 manufacturers were divided into three groups, with each group being tested for a period of about three months in each of the laboratories, in order to obtain a high degree of confidence in the results. The first phase of tests had successfully concluded by 15 February and the second by 15 May 2005. The third and last phase is expected to end by mid-2005. The chairman of the International Organizing Committee, the Project and Site managers met on 17 January 2005 to assess outcome of the first phase and to adapt the Procedures for Data Analysis and Processing and Presentation of the Results based on the experience from the first phase. For details consult CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/intercomparisons.html>

### WMO Field Intercomparison of Rainfall Intensity Gauges

Consultations are going on with the Italian Air Force Centre of Aeronautical Experimentation (RESMA), a possible host of the WMO Field Intercomparison of Rainfall Intensity Gauges in their testing ground in Vigna di Valle, Italy. The evaluation of the infrastructure and technical support available at the test ground was successful. Given the opportunity, an ad-hoc meeting of the members of the International Organizing Committee (IOC) for surface-based intercomparison was held in Bucharest, during TECO-2005, together with the representatives of RESMA. The final decision of the IOC on the suitability of the Vigna di Valle test ground is pending the climatological statistics of the site that should be prepared by the end of May by RESMA.

### WMO Intercomparison of High Quality Radiosonde Systems

The WMO Intercomparison of High Quality Radiosonde Systems, held in Vacoas, Mauritius, 1-27 February 2005, was vital for the worldwide and regional homogeneity of upper-air measurements. Six operational radiosonde systems (Vaisala, Sippican, Modem, MEISEI Electric Co., Graw Radiosondes and Meteolabor) participated in the intercomparison, which consisted of 62 successful comparison flights. In addition Sippican MKII, 3 thermistor radiosondes were flown to provide a daytime "working reference" for temperature and the Snow-white chilled mirror hygrometer as a "working reference" for dewpoint/relative humidity. The objectives were met; the project team is analyzing the results and preparing a final report. The preliminary report is available on the CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/reports.html>

## **Tenth International Pyrheliometer Comparison**

The tenth International Pyrheliometer Comparison (IPC-X) and conjoint Regional Pyrheliometer Comparisons (RPC) will be held from 26 September to 14 October 2005 in the World Radiation Centre (WRC), Davos, Switzerland.

The invitation to IPC-X was distributed to Members and institutions concerned on 15 February 2005, see CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/intercomparisons.html>. So far, 48 participants have been registered, representing 16 Regional Radiation Centres, 22 National Radiation Centres and 5 other institutions.

## **Radiosonde monitoring statistics**

The Rapporteur on the Radiosonde compatibility has completed the upper-air monitoring statistics for 2004. These include a table of bias and standard deviations at 100 hPa and 100-30 hPa levels for 00 and 12 UTC and also summary plots for the 2004 statistics for all radiosonde designs and upper-air stations. See details on the CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/monitoring.html>

## **TECO-2005 and METEOREX-2005**

The WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2005) and the Exhibition on Meteorological Instruments, Related Equipment and Services (METEOREX-2005) were hosted by the National Meteorological Administration (NMA) in Bucharest, Romania, from 4 to 7 May 2005. 254 experts from 71 countries participated and discussed 146 papers and posters on the subject theme of *"The Role of Instruments in the Earth Observation Systems"*.

TECO-2005 papers and posters were published, on CD-ROM, as Instruments and Observing Methods (IOM) Report No. 82, WMO/TD-No. 1265. A copy was provided to every participant, it is available on the WMO website (<http://www.wmo.int/web/www/IMOP/publications-IOM-series.html>), and will also be sent to the Permanent Representatives of WMO Members. The powerpoint presentations made during the conference are posted on the Netherlands KNMI website: <http://www.knmi.nl/samenw/geoss/wmo/TECO2005/ppt/>.

At METEOREX-2005, 64 manufacturers presented their products and new technical solutions for measurements and observing systems. It offered a unique opportunity for the exchange of experience and knowledge to experts of Meteorological Services and representatives of the private instrument sector. METEOREX-2005 also provided a welcome opportunity to enhance the collaboration between instrument manufacturers and their Association of Hydro-Meteorological Equipment Industry (HMEI), and WMO.

WMO provided financial support to 54 participants based on the priorities agreed to by the TECO-2005 coordination committee.

Both TECO/METEOREX-2005 events went very smoothly thanks to the arrangements made and the hard work carried out by Dr Ion Sandu, General Director of the NMA and Permanent Representative of Romania with WMO, and his staff, particularly Ms Elisabeta Cserwid and Ms Julia Blidaru, who laboured long hours and provided a pleasant work atmosphere. The facilities as well as the warm hospitality extended to all participants were highly appreciated.

TECO/METEOREX-2005 took place while the Romanian Government, and specifically the NMHS, had to mitigate a significant flood that affected large areas of the country. This put an additional burden on the host, and the excellent support provided to the WMO events deserves therefore special recognition.

## **CIMO MEETINGS**

### **Expert Team on Remote Sensing Upper-Air Technology and Techniques**

The first session of the Expert Team on Remote Sensing Upper-Air Technology and Techniques (ET-RS UAT&T) was held in Geneva, 14-17 March 2005. In response to the need for greater collaboration, both

from within and outside of WMO, the ET requested and received participation of stakeholders in instruments and techniques.

The ET was tasked by CIMO to review the ground-based remote sensing technologies and techniques used in upper-air monitoring, their accuracies and potential for future integration. Details contained in the final report present information on member approaches used to calibrate and validate instrument performance. In addition, information relating to various approaches to the integration of complementary instruments is provided by the various meteorological services participating in the ET meeting. More details can be found in the Final Report: <http://www.wmo.int/web/www/I/MOP/reports.html>

### **Management Group**

The second session of the CIMO Management Group (CIMO-MG) was held in Bucharest, Romania, 2-3 May 2005. The CIMO-MG evaluated the progress achieved in the work programmes of the expert teams. It expressed its satisfaction with the work done so far, overcoming the expectations, especially when the Fourteenth WMO Congress was not able to allocate any financial resources to WMO instrument intercomparisons.

The CIMO-MG reviewed the working structure of CIMO as stated in Resolutions 1, 2 and 3 (CIMO-XIII) and agreed on adjustments needed to ensure the continuing effective management of CIMO expert teams and to address specific issues related to the Natural Disaster Prevention and Mitigation (NDPM) Programme, the Global Earth Observing System of Systems (GEOSS) and the Quality Management (QM) Framework.

The CIMO-MG therefore decided: (a) to include in the composition of the CIMO-MG, a coordinator on GEOSS and a coordinator on NDPM; (b) to designate a new co-chairperson of OPAG-SURFACE, in replacement of Dr Carolin Richter and; (c) to establish a Rapporteur on QM. In this regard, the acting president approved new resolutions on behalf of the Commission. The CIMO Members will be informed of these changes by a separate letter, including the names of the selected experts.

Dr. Carolin Richter (Germany) resigned from her position as co-chair of the OPAG-SURFACE due to her new responsibilities in the German Ministry of Transport, Building and Housing. The CIMO-MG took the opportunity to congratulate Dr Richter on her new assignment and expressed its gratitude for her contribution and all the work done towards the Commission.

The CIMO-MG reviewed the CIMO Activity Plan and discussed in detail the status of the WMO Intercomparisons, Flexible Upper-Air Systems, CIMO Guide and IOM Reports. It also considered the development of GEO/GEOSS and WMO NDPM Programme and WMO QMF and agreed upon the way to interact with these programmes.

The CIMO-MG discussed the organizational aspects of the next CIMO Session, TECO and METEOREX. In the absence of an official invitation from WMO Members, the Technical Conference (TECO-2006) and the Fourteenth CIMO Session are therefore tentatively scheduled to be held respectively from 5 to 7, and from 8 to 14 December 2006, at the WMO HQ in Geneva. The METEOREX would not be organized on this occasion due to the proximity of another exhibition (METEOHYDEX) organized alongside the Fifteenth WMO Congress in May 2007.

## **TRAINING AND CAPACITY BUILDING**

### **Training Workshop on Metrology for the RICs**

At the kind invitation of the Permanent Representative of France with WMO, the WMO Training Workshop on Metrology for the Regional Instrument Centres (RICs) will be held in Trappes, France, from 17 to 21 October 2005. The aim of the Workshop is to train the operational staff of the RICs in basic metrology principles, measurements techniques and calibration of basic instruments and on how to conduct tests and intercomparisons. The Workshop will have both theoretical and practical lessons. The theory will be conducted in a classroom and the practical part will be performed at the well-equipped laboratories of Météo-France in Trappes. WMO will arrange for lecturers and training materials for the Workshop according to the Preliminary Programme. In addition, every participant will be invited to prepare country presentations on activities of their respective RIC in the last five years. After completion of the Workshop, the participants are expected to provide, in turn, training

at country level and report on the outcome to the WMO Secretariat. For more details see CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/meetings.html>

### Evaluation of the RICs

CIMO-XIII and the CIMO Management Group requested to further strengthen the services of the Regional Instrument Centres (RICs), especially those in developing countries, to better assist Members of the Region in providing services as defined in their Terms of Reference (TORs). In this regard, an evaluation of the RICs should be carried out, against the agreed criteria, and proposals for their further strengthening should be developed.

A well qualified expert from the RIC in Trappes (France) is developing evaluation criteria and is conducting evaluation visits to RICs in Alger (Algeria), Cairo (Egypt), Nairobi (Kenya), Gaborone (Botswana), Buenos Aires (Argentina), Bridgetown (Barbados), San José (Costa Rica) and Manila (Philippines). The visits will last until the end of 2005.

### Training Workshop on Upper-air Observations for RA III (South America)

At the kind invitation of the Permanent Representative of Argentina with WMO, a Training Workshop on Upper-Air Observations for RA III (South America) is tentatively planned in Buenos Aires, Argentina, in May 2006. The exact date is yet to be decided.

The Workshop is aimed at improving the knowledge and skills of senior operational personnel in charge of the national upper-air networks. Simultaneous interpretation will be provided in English and Spanish. It is expected that around 20 participants from National Meteorological Services of the Region will take part in it. The Workshop will have both theoretical and practical lessons. The theory will be conducted in a classroom and the practical part will be performed at the site of a well equipped nearby Upper-air station. WMO will arrange for lecturers and training material for the Workshop according to the Provisional Programme. Four manufacturers showed their interest to take part in the Workshop and would provide their ground systems for the practical part of the training.

### NEWSLETTER NOTE

The Newsletter will be issued at least twice a year and will be distributed by e-mail to CIMO members and affiliates, including the Hydro-Meteorological Equipment Industry Association (HMEI) and the International Bureau of Weights and Measures (BIPM), provided that the e-mail addresses are known to the Secretariat.

The contents of this Newsletter may be forwarded to other persons interested in contributing to the work of CIMO, or interested in receiving information on its activities.

Information on the implementation of the World Weather Watch/ Instruments and Methods of Observation Programme as well as on the work of the Commission for Instruments and Methods of Observation, is regularly posted on the WWW website at:

[www.wmo.int/web/www/www.html](http://www.wmo.int/web/www/www.html), under the IMOP link.

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