



WORLD WEATHER WATCH

Instruments and
Methods of Observation ProgrammeCommission for Instruments and
Methods of Observation*CIMO Newsletter*<http://www.wmo.int/web/www/CIMO/newsletters.html>**SEPTEMBER 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**EC-LVII - IMOP and CIMO****Major Outcomes of EC-LVII (Geneva, 21 June- 1 July 2005)
with respect to the
Instruments and Methods of Observation Programme and CIMO**

The Acting President of CIMO, Dr Ray Canterford, presented the work of the Commission experts during the past year. He included the major findings of the reference radiosonde intercomparison in Mauritius and the work towards generic interoperable ground systems. EC was extremely interested in this and other work carried out for IMOP and there was a great deal of debate on several issues. As a result:

The Council:

- Agreed that a solution should be found to provide partial support for the future intercomparisons from the regular budget thus avoiding undue dependence on extrabudgetary resources from manufacturers;
- Requested the Secretary-General to finalize the results of the current intercomparisons as soon as possible and make them available to Members, private instrument sector and scientific community, and to initiate follow-up actions aimed at synchronizing the current practices and plans of the manufacturers concerned with the results of the intercomparisons, such as the omission of pressure sensors in selected GPS-based radiosonde designs (in order to save the cost);
- Requested the Secretary-General to consider implementation of the WMO intercomparisons, which are essential for the WMO Programmes demanding accurate and homogenous measurements in accordance with the CIMO Plan, namely, the WMO Field Intercomparisons of Rainfall Intensity Gauges and the WMO Combined Intercomparison of Thermometer Screens/Shields in conjunction with Humidity Measuring Instruments;
- Requested the Secretary-General to facilitate organization of intercomparisons in different climatic regions. This would assist in identifying appropriate instruments for these climatic regions and specific conditions, e.g. suitable pressure and other sensors for use under hurricane conditions;

- Requested CIMO, in collaboration with CHy and the Association of the Hydro-Meteorological Equipment Industry (HMEI), to include intercomparisons of other meteorological and hydrological instruments, such as those for measuring visibility, solid precipitation, small weather radars, stream flow and water level, in the future plans for intercomparisons;
- Requested CIMO to encourage research and development on new instruments and methods of observation with regard to the atmospheric gases, greenhouse gases, atmospheric physics and composition, aerosols, solid precipitation, visibility and biological parameters and actively carry out intercomparison experiments of those instruments in order to expand their operational fields and enhance their association with GEOSS.
- Requested the Secretary-General to strengthen the capacities of Members and those of the Regional Instrument Centres (RICs) in observing practices and calibration of instruments through training workshops, such as Training Workshops on Upper-Air Observations and Training Workshops on Instrument Calibrations to be conducted in all Regions. The Council also requested the Secretary-General to continue the evaluation of the RICs and to develop proposals to strengthen their operational and capacity building functions and services. It also requested that a survey be carried out to ascertain the capacity of Members' NMHSs in the areas of calibration and maintenance.
- Requested the president of CIMO, Dr Ray Canterford, to seek active collaboration with relevant international programmes and organizations, such as EUMETNET, COST, BIPM and ISO on CIMO activities.
- Requested the Secretary-General to publish the electronic version of the *WMO Guide to Instruments and Methods of Observation* in English on a CD-ROM and the WMO Website in mid-2006 and its hardcopy version in late 2006. The Council also requested the Secretary-General to arrange for the translation into other WMO languages, as decided by Cg-XIV, in the course of 2007.
- Requested the Secretary-General, in collaboration with the China Meteorological Administration (CMA), to provide Web access to the Instrument Catalogue.
- Requested the Secretary-General to regularly inform Members of new developments and changes concerning new observing systems.
- Debated the forced need to replace certain radiosonde systems in the upper-air network, requested the Secretary-General to take specific short-term and medium term actions.

PROGRAMME ACTIVITIES

Intercomparisons

Laboratory RI Gauges

The WMO Laboratory Intercomparison of Rainfall Intensity (RI) 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 19 pairs of instruments from 18 manufacturers were tested in each of the laboratories.

At the Extraordinary meeting of the laboratories involved in the WMO Laboratory Intercomparison of RI Gauges, De Bilt, the Netherlands, 13 September 2005, the ET-IOC chairman announced the successful end of the intercomparison. The meeting agreed on procedures to create a reference intercomparison database, it discussed the Data policy and early preparation of intercomparison results. It also agreed on the layout and on responsibilities of individuals in drafting the Final report of the intercomparison. The Project manager has the overall responsibility for drafting the Final report, which is subject to an approval by the Chairman of the Expert Team on Surface-Based Instrument Intercomparisons and Calibration Methods (ET on SBII&CM) and the

Chairman of the International Organizing Committee on Surface-Based Instrument Intercomparisons (IOC on SBII). The draft report will be presented to the ET-IOC meeting, Geneva, 5-9 December 2005 and the publication of the Final report is expected by the end of 2005. For details consult CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/reports.html>

Field RI Instruments

Following the announcement of the basic availability of the "Italian Air Force Centre of Aeronautical Experimentation (RESMA)" in Vigna di Valle (Italy), for hosting the *WMO Field Intercomparison of RI Instruments* and the corresponding invitation of the Director of the Centre, the assessment of the testing facilities and the required support was done by WMO/CIMO experts on 20 April 2005. Further, in response to the request of the CIMO experts, RESMA prepared a study on the precipitation climatology of the test site. The study was reviewed by the experts and the site was approved by the chairperson of the ET-IOC on SBII.

The Extraordinary meeting of the laboratories involved in the WMO Laboratory Intercomparison of RI Gauges, De Bilt, the Netherlands, 13 September 2005, agreed on the timetable of the WMO Field intercomparison of RI Instruments and the Permanent Representative of Italy with WMO was requested to reconfirm hosting the intercomparison taking into account the current planning. According to this plan, the intercomparison should start on 1 July 2006. For details see the Final report of the Extraordinary meeting: <http://www.wmo.int/web/www/IMOP/reports.html>

Temperature/Humidity

Considering the priority given to arctic and tropical regions, at least two test sites will be necessary: One in an arctic region and one in tropical or desert regions, the main interest being warm temperature and high solar radiation, as a combination of different conditions, e.g. warm/hot humid region, warm/hot dry region, cold region.

During the EC-LVII, Canada offer to participate in and possibly host the WMO intercomparison in the Arctic. ET-IOC chairman made unofficial consultations with Algeria to host the intercomparison in Chardafia, starting from 15 November 2006. The upcoming meeting of the EC-IOC on SBII, Geneva, 5-9 December 2005, will discuss plans and preparations for the *WMO Combined Intercomparison of Thermometer Screens/Shields in conjunction with Humidity Measuring Instruments*.

IPC-X

The Tenth International Pyrheliometer Comparison (IPC-X) and conjoint Regional Pyrheliometer Comparisons (RPC) started on 26 September and will last until to 14 October 2005 in the World Radiation Centre (WRC), Davos, Switzerland. 51 participants have been registered, representing 17 Regional Radiation Centres, 24 National Radiation Centres and 5 other institutions. For more details see CIMO/IMOP website: <http://www.wmo.int/web/www/IMOP/intercomparisons.html>.

Väisälä Awards

The Professor Dr Vilho Väisälä Awards nominations are now invited for:

- ❖ The 20th Professor Dr Vilho Väisälä Award for an Outstanding Research Paper on Instruments and Methods of Observation (2006); and
- ❖ The 1st Professor Dr Vilho Väisälä Award for the Development and Implementation of the Instruments and Methods of Observation" (2006).

The awards are made on a biennial basis with a cash prize of US\$ 10 000 each. The deadline for application is 30 November 2005. For more information, including guidelines, see:

http://www.wmo.int/web-en/awards_vaisala.html

OPEN PROGRAM AREA GROUPS

CIMO-MG

Chairman: Ray P. Canterford r.canterford@bom.gov.au
Vice-chairman: John Nash john.nash@metoffice.com

CIMO-MG II

At its second session, held in May 2005, the CIMO Management Group (CIMO-MG) considered the continuing need to ensure the effective management of the work of the Commission and the need to cooperate and to contribute to the new established programmes. The report of the session can be seen on the web at:

<http://www.wmo.int/web/www/IMOP/reports.html>

DPM and GEOSS

CIMO-MG II considered the need for CIMO to contribute to the development of both WMO's Natural Disaster Prevention and Mitigation Programme (DPM) and the Global Earth Observing System of Systems (GEOSS). The Group decided to establish within the CIMO-MG structure, the DPM and GEOSS Coordinators. Mr Rainer Dombrowsky (USA), a member of the CIMO-MG, agreed to serve as coordinator for both DPM and GEOSS.

Co-chair, OPAG-SURFACE

The Group was informed that Dr Carolin Richter (Germany) has resigned as CIMO-MG member and as Co chairperson of the OPAG-SURFACE due to a new assignment in Germany. Consequently the Group agreed to replace Dr. Richter by Mr Karl-Heinz Klapheck (Germany).

We take this opportunity to thank Carolin for her valuable contribution to the work of the programme and of the commission, and to wish Karl-Heinz every success in his new assignment.

OPAG-SURFACE

Co-chairs:
Jitze VAN DER MEULEN (A1) jitze.van.der.meulen@knmi.nl
Michel LEROY (A2) michel.leroy@meteo.fr
Klaus BEHRENS (A3) klaus.behrens@dwd.de

ET-SBII&CM and IOC-SBII

The second session of the Joint Expert Team on Surface-Based Instrument Intercomparisons and Calibration Methods (ET on SBII&CM) and the International Organizing Committee on Surface-based Instrument Intercomparisons (IOC-SBII), is tentatively planned in Geneva from 5 to 9 December 2005

The meeting will discuss the Final report of the WMO Laboratory Intercomparison of Rainfall Intensity Gauges and preparations for the WMO Field Intercomparison of Rainfall Intensity Instruments; as well as preparations for the WMO Combined Intercomparison of Thermometer Screens/Shields in conjunction with Humidity Measuring Instruments.

ET-MR&ACM

The first session of the Expert Team on Meteorological Radiation and Atmospheric Composition Measurements is tentatively planned in Davos, Switzerland from 6 to 10 February 2006.

The meeting will review the Final report of the IPC-X, operational practice associated with total ozone, UV and aerosol optical depth measurements. It will discuss the further development of a World Standard Group of absolute long-wave radiometers and will review and audit the Infrared Radiometer Calibration Center (IRC) established at World Radiation Center (WRC) in Davos in 2004.

OPAG-UPPER-AIR**Co-chairs:**Rainer DOMBROWSKY (B1) rainer.dombrowsky@noaa.govJohn NASH (B2) john.nash@metoffice.comAlexei IVANOV (B3) ivanov.cao@mail.ru**ET-UASI and IOC-UASI**

The second session of the Joint Expert Team on Upper-Air Systems Intercomparisons (ET-UASI) and the International Organizing Committee on Upper-Air Instrument Intercomparisons (IOC-UASI) is tentatively planned in Geneva from 21 to 23 November 2005. The meeting will discuss the Final report of the WMO Intercomparison of High Quality Radiosonde Systems, held in Vacoas, Mauritius, 1-27 February 2005.

OPAG-CAPACITY BUILDING**Co-chairs:**Eliphaz BAZIRA (C1) bazirae@yahoo.comHeng ZHOU (C2) cmanet@sina.comRussell STRINGER (C3) r.stringer@bom.gov.au**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. For more details see CIMO/IMOP website:

<http://www.wmo.int/web/www/IMOP/meetings.html>

Evaluation visits to RICs

A well qualified expert from the RIC in Trappes (France) conducted evaluation visits to RICs in Alger (Algeria), Cairo (Egypt), Manila (Philippines), San José (Costa Rica), Gaborone (Botswana), Nairobi (Kenya) and Buenos Aires (Argentina). The visit to RIC in Bridgetown (Barbados) is planned in October 2005.

The analysis of RICs and proposals for their strengthening will be presented to the CIMO Expert Team on RICs and CIMO-MG by the end of 2005.

Upper-Air Training Workshop, RA III

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, from 15 to 19 May 2006. 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.

OTHER EVENTS**China International Exhibition**

The Third China International Exhibition on Technology and Equipment of Meteorology Science and Hydrology and the Fourth China International Forum and Exhibition on Lightning Protection Technology are being co-sponsored by the China Meteorological Administration, the Chinese Meteorological Society and WMO. They will be held from 26 to 28 October 2005 in Shanghai, China. For more information, including registration forms, see: <http://www.wmo.int/web/www/IMOP/IMOP-home.html>.

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 , under the IMOP link.

Contact us

Contact at WMO Secretariat on CIMO/IMOP related matters

Dr Miroslav Ondráš, WWW/GOS/Senior Scientific Officer MOndras@wmo.int

Ms Imelda de Chavez, WWW/GOS Senior Secretary IdeChavez@wmo.int

Ms Sary Vargas, WWW Web Editor SVargas@wmo.int

Tel.: +(41 22) 730 8409; 730 8091 - Fax: +(41 22) 730 8021