

**WORLD METEOROLOGICAL
ORGANIZATION**



**ORGANISATION MÉTÉOROLOGIQUE
MONDIALE**

COMMISSION FOR CLIMATOLOGY
OFFICE OF THE PRESIDENT

COMMISSION DE CLIMATOLOGIE
BUREAU DU PRÉSIDENT

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Notre réf.: CLPA/CCA/CCI

GENEVA, 6 August 2010

Annex: 1

Subject: Circular Letter No. 1 of the President of CCI

Dear Colleagues and Friends,

I am pleased to send you the first circular letter of the current intersessional period. There is so much going on in CCI that I can't hope to list them all and still expect readers to stay awake to the end. So this circular letter will only attempt to give you a general sense of CCI activities and at the same time provide you with information on some of the climate issues we are addressing that might be of most widespread interest.

Yours sincerely,

(Thomas C. Peterson)
President
Commission for Climatology

To: Members of the Commission for Climatology
Members of the CCI Management Group and OPACEs

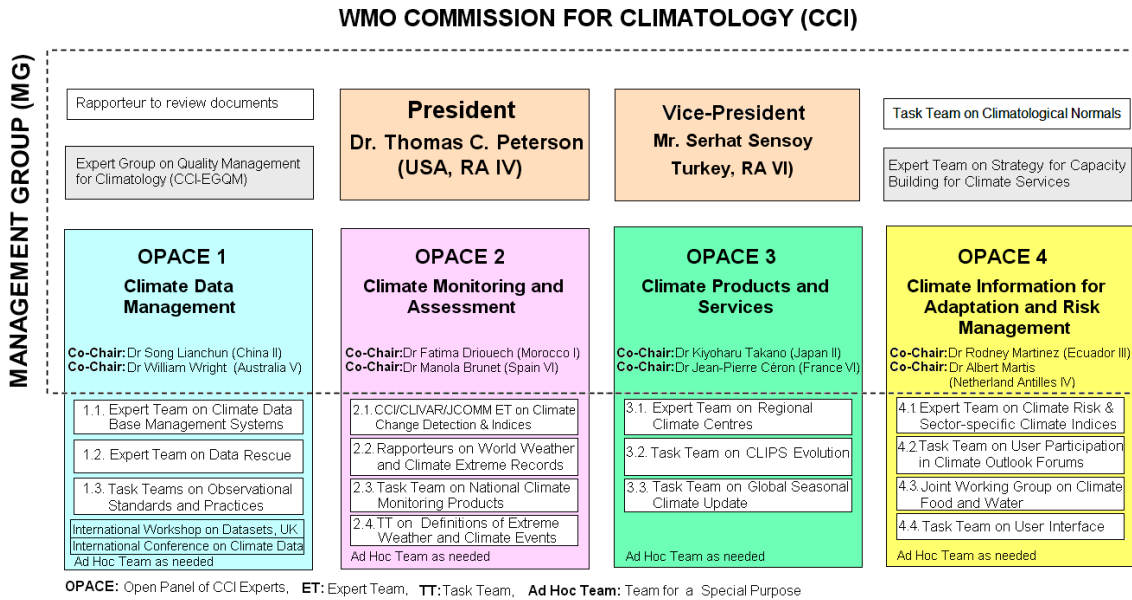
cc: Presidents of technical commissions)
Presidents of regional associations)
Chairpersons of regional associations' working groups) (for information)
and regional associations' rapporteurs dealing with)
CCI-related matters)

WORLD METEOROLOGICAL ORGANIZATION

CLPA/CL, ANNEX

1. Getting CCI organized and moving

The meeting of the full Commission for Climatology was held in February 2010. At that time the CCI Management Group (MG) was formalized with the President, Vice-President, and 8 Co-Chairs of the four Open Panels of CCI Experts (OPACEs) selected. It turns out that I am the only member of the current MG that was also a member of the previous MG. So I was quite pleased to see how productive we¹ were during the MG meeting in May. At that time almost all team members were selected from the list of 214² volunteers from 54 countries who are members of the different panels (OPACEs). Following the MG meeting the 8 OPACE Co-Chairs and the Vice-President (who chairs the Expert Group on Quality Management for Climatology) have been notifying members of their Expert Teams, Task Teams, Rapporteurs, etc. of their roles. Below is a figure we³ created that shows the current CCI structure. Expert teams and rapporteurs are expected to last the full four years but task teams are dissolved once their task is accomplished and new teams formed when the need arises. Also, we have found that OPACE Co-Chair led teleconferences to be effective ways to get CCI teams moving.



¹ We in this case being the CCI MG.

² Looking at the number of volunteers by WMO Region, from greatest to least, they are: Europe 65, Asia 51, Africa 41, South-west Pacific 26, North and Central America plus the Caribbean 25, and South America 6. As the O in OPACE stands for Open, please note that new volunteers can be added to the list at any time.

³ We in this case means CCI's Vice-President Serhat Sensoy from the Turkish State Meteorological Service.

2. CCI and the WMO Executive Council

The WMO Executive Council (EC) meeting was a new and unique experience for me. Never before have I seen so many people pay such detailed attention to a 10 cm thick series of documents. It was important to EC members to not only to get the general point correct but the exact nuance of the language as well because these words guide WMO activities for the next year. I'll only mention two of the CCI related items. CCI was asked to provide WMO Members guidance on how to contribute to the annual state of the climate report, which we⁴ are happy to do. The second is the request from EC to WMO Members (countries) to stop transmitting the monthly upper air summary reports for radiosonde stations called CLIMAT TEMPs. We⁵ make so many climate-related requests of national meteorological services that it seems important to let them know when something they are doing is no longer needed. CLIMAT TEMP reports were started in the 1960s to aid season forecasts. The science has progressed since the 1960s and all groups using radiosonde data for climate purposes adjust the data to remove inhomogeneities and the science is very clear that nighttime radiosondes need different homogeneity adjustments than daytime soundings because of the improvements in how those instruments respond to direct sunlight. So over the last several years we⁶ have been working hard to get the CLIMAT TEMP requirement dropped and with this EC it finally was. I should note, though, that regular monthly surface CLIMAT messages are the mainstay of global climate monitoring activities. Indeed, EC also recommended meteorological service increase the number of their stations sending out CLIMAT messages⁷.

3. Volunteers are the life blood of CCI

With so much effort focusing on formation of teams and writing of work plans, it is easy to lose track of the human aspect of CCI. It is not the process or titles that accomplishes CCI tasks but individuals. So to highlight the importance of volunteers and to let you know a bit more about the MG, let me introduce you to the two Co-Chairs of OPACE 2, Manola Brunet



⁴ We in this case really means the CCI Expert Team on National Climate Monitoring which has added this request to their Terms of Reference.

⁵ We in this case means the entire climate community.

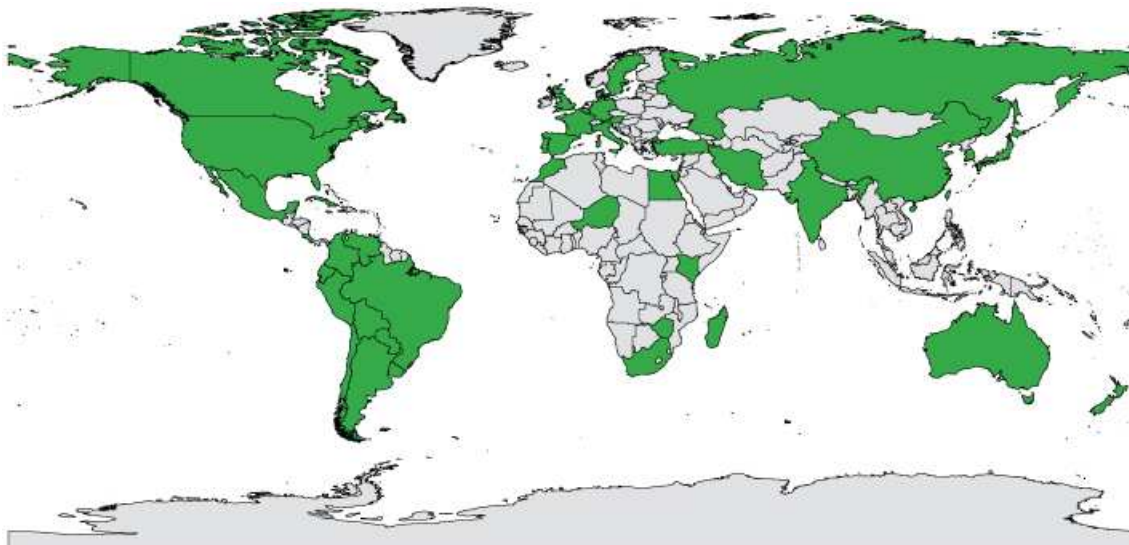
⁶ We in this case means primarily the GCOS Atmospheric Observation Panel on Climate (AOPC) and CCI including me personally as a member of both – though I resigned from the GCOS AOPC after being elected President as I'm sure the CCI Presidency will keep me busy enough.

⁷ That is, increase the Regional Basic Climate Network (RBCN).

and Fatima Driouech. Manola is the Director of the Centre for Climate Change at the University Rovira I Virgili in Tarragona, Spain while Fatima is the Head of Climate Studies Service at the Direction de la Météorologie nationale of Morocco and is currently a lead author on the IPCC's 5th Assessment Report (AR5). They first met several years ago in the 2005 GCOS Regional workshop for the Mediterranean Basin when Manola was just nominated Co-Chair of CCI OPAG 2 and Fatima would become a member of the Expert Team on Climate Monitoring. So they were already working well together before CCI XV teamed them up to lead OPACE 2. At the MG meeting in May they created a work plan for OPACE 2 and split the duties. Manola is providing guidance to their Rapporteurs on Weather Records and the Task Team on Definitions of Extreme Weather and Climate Events while Fatima guides their Task Team on National Climate Monitoring Products. They share the CCI responsibility for the Joint CCI/CLIVAR/JCOMM Expert Team on Climate Change Detection and Indices. Manola has considerable experience with this team as she has been an instructor at their extremes workshops in Central America, Central Africa and Mexico.

4. Annual State of the Climate report

Every year WMO comes out with a short, 13 page, state of the climate report shortly after the end of the year (www.wmo.int/pages/publications/showcase/). In addition, the *Bulletin of the American Meteorological Society* releases a major peer-reviewed report on the same topic. This latter report is far more in depth with last year's report running over 200 pages, with over 300 authors from 48 countries shown below in dark green.

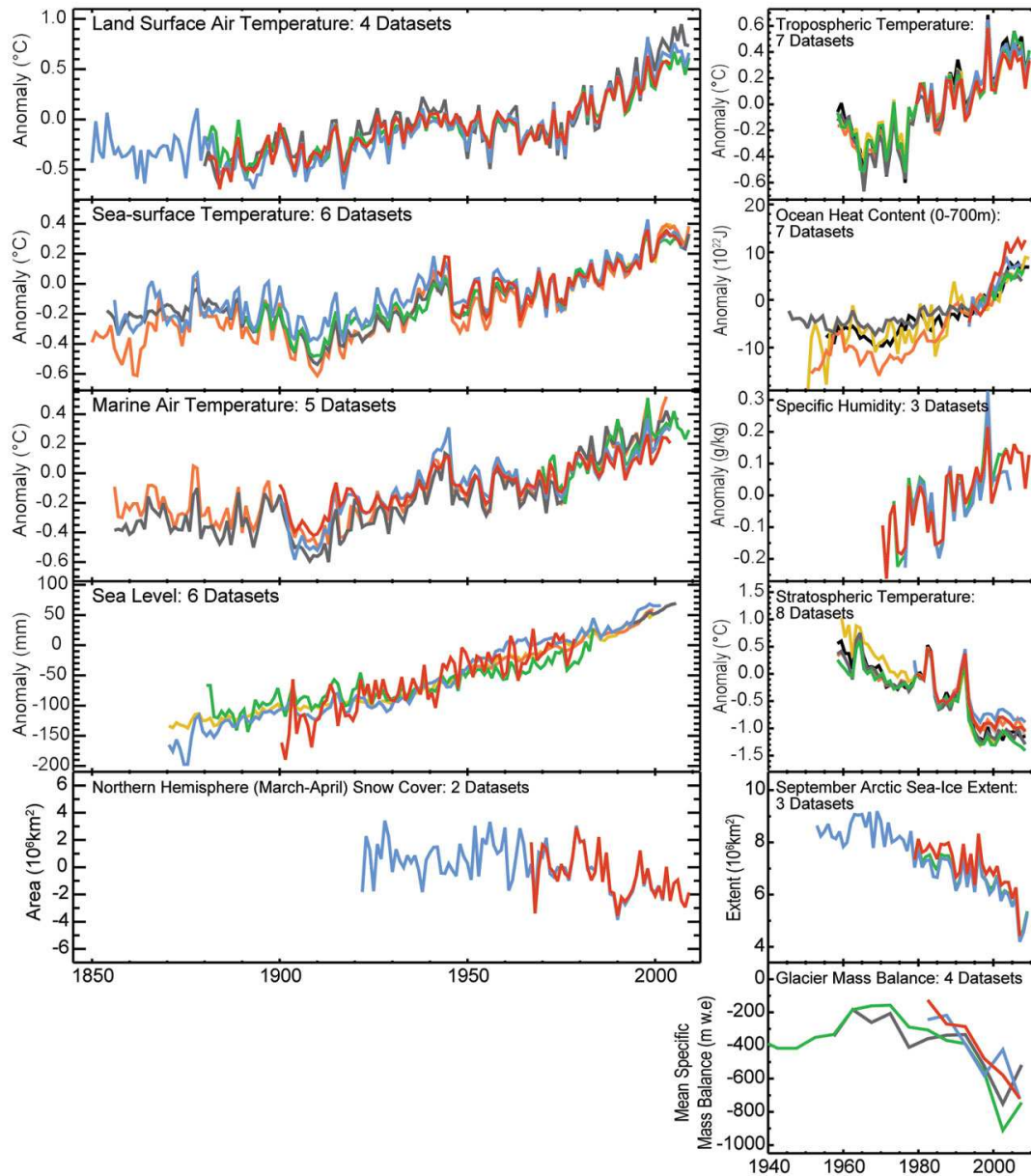


If you are from one of the countries not highlighted in the figure above and are interested in contributing to this annual report, please let us⁸ know. You can view the full report via www.ncdc.noaa.gov/bams-state-of-the-climate/2009.php.

⁸ Us in this case primarily means Derek Arndt (Derek.Arndt@noaa.gov) of NOAA's National Climatic Data Center in the U.S. While Derek has referred to me as the Editor in Chief Emeritus of this report, he is the current leader. He is also a member of the CCI Task Team on National Climate Monitoring Products.

5. Climate Science

One interesting little analysis we⁹ did for the *State of the Climate in 2009* was compile all the time series for 11 different key physical indicators of a warming world. As shown in the figure below, every single time series of every single index supports anthropogenic global warming, from land surface temperature (going up) to glacier mass balance (going down). Each of the individual time series can be accessed through www.ncdc.noaa.gov/bams-state-of-the-climate/2009-time-series.



⁹ While I am a co-author on this section, we in this case primarily means John Kennedy of the UK Met Office. John is also the co-lead of the CCI Task Team on National Climate Monitoring Products.

6. IPCC and CCI

IPCC presents interesting challenges and opportunities for CCI. One of the challenges is that many CCI volunteers are also lead authors on the IPCC AR5. In fact, 3 out of 4 CCI members of one team are IPCC lead authors! Given the rigorous selection process for IPCC, this is additional confirmation of the high quality of CCI volunteers but it also presents a significant additional demand on their time. As contributing to the IPCC is a high end use of much of the information and work that CCI undertakes, from data rescue in OPACE 1 to adaptation and risk management in OPACE 4, the close working relationship with IPCC will help make sure CCI contributions to improving all aspects of global climatology have practical importance.

7. Key upcoming activities

In early September the U.K.'s Surface Temperature Grand Challenge meeting will be held in Exeter, UK. This was discussed in February and CCI XV strongly supported it. I will be chairing day 3 of the 3 day meeting and expect CCI will play an active role in the work that the meeting will instigate. The CCI Vice-President, Serhat Sensoy of the Turkish State Meteorological Service, will be giving the welcoming address at the early September Satellite Application Facility on Climate Monitoring Third User Workshop in Rostock, Germany. In late September I'll be participating in the GCOS Steering Committee meeting. The preparations for the special issue of the journal *Climate Research* based on the papers presented at the technical workshop immediately preceding CCI XV is moving along nicely. We¹⁰ are currently evaluating what may be a new world record in weight of a hailstone. And we¹¹ are making plans for a hands-on workshop on extremes for South America.

In early 2011, WMO will send out a call for the 2001-2010 decade of **World Weather Records** (WWR). As we¹² wrote in IPCC (www.ipcc.ch/publications_and_data/ar4/wg1/en/ch1s1-3-2.html), WWR has been the core of all global surface temperature data sets since the first version was initiated following a 1923 resolution by the predecessor of WMO. For every decade since then, WWR has compiled monthly values of temperature, precipitation and pressure observations from many thousands of stations around the world. Given all the scrutiny global temperatures have received in the last few years, it is more important than ever for this decade's compilation of

¹⁰ We in this case are the two CCI Rapporteurs on extreme records, Randy Cervany of Arizona State University in the U.S. and José Luis Stella of the Argentine National Meteorological Service. Please stay tuned to <http://wmo.asu.edu/> for developments in this evaluation.

¹¹ We in this case is Rodney Martinez, Co-Chair of OPACE 4 and the Centro Internacional para la Investigación del Fenómeno de el Niño (CIIFEN) in Guayaquil, Ecuador where Rodney works, with assistance from the Joint CCI/CLIVAR/JCOMM Expert Team on Climate Change Detection and Indices. CIIFEN is hosting the workshop which is tentatively scheduled for late 2010 or early 2011.

¹² Officially we in this case is all the authors, including me, of IPCC Working Group I Chapter 1, but this was one of the sections which I wrote.

WWR to have as many participating countries/stations as possible because we¹³ want WWR to truly represent the whole world.

8. CCI Presidency: More work and more fun than anticipated

The amount of work that comes with the CCI Presidency can grow faster than the weeds in my garden. For example, I have been invited to so many meetings already that if I tried to attend them all I'm afraid that, like Odysseus, when I returned home at the end of my term only my dog would recognize me. On the other hand, the CCI MG and the individuals at the Secretariat that I deal with on a day to day basis are simply fantastic. Each has key abilities that CCI is fortunate to be able to harness.

The issues we deal with are not only fascinating but crucially important. These are issues with life and death implications. For example, if your town was in a severe drought, I'm sure you would want your national meteorological and hydrological service to effectively manage their precipitation data (OPACE 1), use these data to monitor the drought in real time (OPACE 2) and appraise you of its changing severity, have accurate local conditions feed into and improve seasonal forecasts (OPACE 3), and proactively manage the risk of continuing drought (OPACE 4). As my Ph.D. advisor was fond of saying, this is "highly non-trivial."

¹³ We in this case means the entire global climate community including anyone who has ever looked at a graph of a global surface temperature time series.