Side event on the implementation of Climate Watch System (CWS) in WMO-RA-VI.
Organized at the occasion of the European Conference for Applied Climatology, 10-14 September 2012 in Lodz, Poland

Convenor: Karolin Eichler
Chaired by: Anahit Hovsepyan

Date & Time: 12 September 2012: 08:30 - 13:30

Participants:

Omar Baddour (WMO)
Marina Baldi (Italy)
Manola Brunet (Spain)
Ernesto Rodriguez Camino (Spain)
J.P. Ceron (France)
Karolin Eichler (WMO)
Karsten Friedrich (Germany)
Hilppa Gregow (Finland)
Anahit Hovsepyan (Armenia)
Filipe Lucio (GFCS Office, WMO)
Dragan Mihic (Serbia)
Anna Mikalsen (GCOS)
Helga Nitsche (Germany)
Asunción Pastor (Spain)
Goran Pejanovic (Serbia)
Reija Ruuhlea (Finland)
Serhat Sensoy (Turkey)
Aryan van Engelen (Netherlands)

Anahit Hovsepyan Co-chair of the RA-VI Working Group on Climate and Hydrology (RAVI-WGCH) opened the session and welcomed the participants. She recalled the outcomes of the first workshop on CWS which was organized in Offenbach, Germany 25 - 28 October 2010. She mentioned that Finland, Turkey and Serbia had indicated that they were interested in carrying national demonstration projects on CWS by their NMHSs. She also presented the various climate activities undertaken by the WG, particularly those which will promote and facilitate the implementation of CWS, e.g. RCCs, Data Rescue and RCOFs.

Omar Baddour welcomed the participants on behalf WMO and briefed the participants on the history, concept and consistence of the WMO Climate Watch System. He underlined the key challenges impeding the quick implementation of CWS, i.e. climate data exchange and the existing gaps in the definitions and tools for quasi-real time monitoring of climate extremes. He emphasized that CWS will be an integral part of the GFCS activities. He informed on the Commission for Climatology Task Team which is working on the definition of extreme weather and climate events.
He also indicated that WMO secretariat plan for 2012-2015 includes continuing support to CWS activities.

Hilppa Gregow from FMI provided the status of a CWS demonstration project in Finland focusing

on seasonal forecast of the Baltic Sea ice during the winter aiming at warning ice breakers well in advance. FMI is providing this information to LUOVA which is the platform of EWS in Finland and could also be used to issue CWs.

Goran Pejanovic informed on the climate monitoring activities in Serbia covering examples of extreme event monitoring in the period 2010-2012. He described the extreme cold conditions which affected Serbia in winter 2012. Summer 2012 was the hottest on record. He mentioned the use of ECMWF forecasts for SPI3 for Agriculture and SPI6 for hydrology.

Serhat Sensoy described several activities related to Meteorological Warnings at the Turkish State Meteorological Service (TSMS) including for forest fires, surface dust concentration, frost warning, extreme event assessment and statistical analysis. He mentioned also TSMS activities on climate indices in Turkey for the Eastern Mediterranean countries. He also talked about seasonal forecast studies which are regularly issued at the Eastern Mediterranean Climate Center as a node of WMO RA VI RCC Node.

Karsten Friedrich presented RA-VI RCC-CM ongoing efforts to build a data base on hazards including category, duration, severity and impact. He presented a case study of the heat wave which affected Russia in 2010 and of the drought conditions in Central Europe in spring 2011 and what was possible to be done to help its monitoring and watch. He emphasized that monitoring is very important when model skill is not permitting reliable LR forecasts. He presented the climate watch activity initiation at RCC in the current summer with launching a series of advisories and updates for the heat wave which affected SEE starting in mid July. These advisories and updates were sent to all participants of the CWS workshop in Germany 2010. He concluded that this activity demonstrated a good success story on CW implementation at RCC. However he emphasized the need for a follow-up at national level and suggested to designate focal points on CWS in the countries.

Aryan van Engelen informed the participants on the ongoing initiatives on Data Rescue and Climate assessment in different regions with the support of KNMI, ETCCDI and WMO. He informed about the ongoing consultations with WMO secretariat for developing an international collaborative efforts on Data Rescue and climate assessment (ICA&D) building on the various regional and sub-regional initiatives like ECA&D, MEDARE, SACA&D, LACA&D and WA-DARE.

Manola Brunet provided a presentation on MEDARE and its contribution to CWS. She underlined that monitoring climate extreme events needs a historical context and therefore MEDARE, which aims to build regional high quality long term climate series through Data Rescue and homogenization, will serve this purpose for a large part of Europe and Northern Africa. She described current MEDARE activities and working groups and workshops. EURO4M funded a project to digitize old climate records in Algeria, Cyprus, Libya, Jordan. She briefed on the ongoing Commission for Climatology activities in developing standard national climate monitoring products based on area monthly averages of climate indices and information on extreme events.

Filipe Lucio, head of the GFCS Office, presented the GFCS in the context of CWS and indicated that DARE is one of the fast-track projects proposed in the draft Implementation Plan of the GFCS. He emphasized the need for integrating socio-economic data in the data bases. This will need standardization and inter-operability of such data bases. He shared examples of case studies on climate services that are having real benefits for decision-making. He informed that a publication named Climate Exchange is on the way for release. It includes exemplars of climate services which were provided by nearly 80 countries worldwide. It will be published at the occasion of the Extra-Ordinary Congress session in October 2012.

Anna Mikalsen from GCOS Secretariat informed about the availability of climate observations for the CWS. In this context, she presented the GCOS reporting mechanism to the UN Framework Convention on Climate Change (UNFCCC), as well as examples of GCOS observing networks, the GCOS climate monitoring principles and the guidelines for the generation of ECV data sets and products. She emphasized the need for making ECV data available through international data

centres and how helpful GCOS national coordinators and committees can be in coordinating climate observation activities from various entities within a country. To date, the data centre landscape is very heterogeneous, even within domains. A great need for exchange of data persists in particular within the terrestrial domain, e.g. for hydrological information.

Recommendations:

1- Monitoring extreme events and providing timely analysis of their extent and intensity is very important for the Early Warning agencies. Monthly to Seasonal forecasts should be also used when it is possible to issue them with an acceptable skill (Example of FMI). It was also noted that in the absence of sufficient forecast skill of the seasonal forecast, medium range to monthly forecasts can be very helpful in providing good prospects on the evolution and cessation of the extreme events once they are fully established.
2- Establish a coordination mechanism through, e.g. teleconference or Skype to coordinate with NMHSs climate watch bulletins like the ones produced by RCC-CM during this summer.
3- Establishment of CWS national focal points at NMHSs. The focal points network will be useful in liaising between RCC-CM on one had and the NMHSs and its national users on the other hand for the provision of climate watches and collecting user requirements and feedbacks.
4- The RA-VI WG on Climate and Hydrology with the help of RCC-CM should develop a brief guidance (two-three pages maximum) to assist NMHS in implementing national CWS. This can be built on the Experience of RCC-CM and the lessons learned from the national demonstration projects.