EURO4M
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Minutes secretary
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Attachement(s)

Minutes EURO4M

Subject	Minutes of 5th General Assembly meeting EURO4M
Place and date of meeting	Exeter, UK, 25-27 March 2014

Participants:

Met Office: Rob Allan, Dale Barker, Jemma Davie, Lizzie Good, Peter Jermey, Adam Maycock, Richard Renshaw,
University of Bonn: Liselotte Bach, Christian Ohlwein (1)
Meteo France: Eric Bazile, Francois Besson, Mathieu Coustau, Cornel Soci
SMHI: Madeleine Benderyd, Per Dahlgren, Tomas Landelius, Esbjörn Olsson, Per Undén
KNMI: Else van den Besselaar, Albert Klein Tank, Karin van der Schaft
NMA-RO: Roxana Bojariu
DWD: Michael Borsche, Andrea Kaiser-Weiss, Frank Kaspar, Jennifer Lenhardt, Jan Keller (1)
URV: Manola Brunet
Meteo Swiss: Christoph Frei, Christoph , Heike Kunz, David Masson
ECMWF: Manuel Fuentes, Richard Mladek
UEA: Ian Harris, Phil Jones
Norwegian Met. Inst.: Christian Lussana, Ole Einar Tveito

Advisory Board
EEA: Blaz Kurnik
ECMWF: Adrian Simmons

EU Representative: Florence Beroud
EU Reviewer: Mikko Strahlendorff

[1] Hans-Ertel-Center for Weather Research, Climate Monitoring Branch, Germany

This meeting is the concluding meeting of the EURO4M project and the kick-off meeting of the follow-on project UERRA. All presentations given during the meeting can be found on the EURO4M website.

Welcome by Dale Barker who introduces Julia Slingo, the Chief Scientist at the Met Office for a short word of welcome. Richard Renshaw continues with some announcements about the logistics of the meeting.

Albert Klein Tank, the project coordinator, welcomes all participants to this final meeting of EURO4M. He thanks the Met Office for hosting this meeting. Albert recalls how at the start of the project four years ago the partners were split in different groups but that these groups are much more integrated now. The aim of the project was clear from the start: describe climate variability and change at the European scale, and place high-impact extreme events in an historical context . For this purpose, reference historical ECV data sets were developed as an ensemble from different sources. In cooperation with users, so-called climate indicator bulletins were produced. The intention is that both the bulletins and the data sets will feed into the future Copernicus Climate Change Service.

Phil Jones presents an overview of what has been achieved in WP1: Regional observation data sets. Efforts to digitize early series of pressure and rainfall from North Africa and the Near East have been successful. The data were not only digitized but also corrected and adjusted and made available to other projects. Unfortunately present-day data have not been received except for Libya. This activity lead by URV will continue in UERRA project. The Alpine dataset has been developed and published by MeteoSwiss. A European solar radiation dataset has been developed by DWD for the period 1983-2011. The integrated EURO4M global precipitation data set developed by DWD has been validated against other global precipitation datasets (e.g. GPCP, TRMM, ERA-Interim). MO has developed a sunshine duration data set at very high resolution based on the SEVERI instrument. Also estimates of maximum and minimum temperature from the SEVERI instrument are available. Finally, KNMI shows the regional temperature anomaly for the past winter (DJF 2013/4) wrt 1961-90. This is not a typical temperature response map to a positive NAO! The switch from the warm north to the cooler south is much further south.

The EU officer Ms. Florence Beraud asks what the plans on updating the different datasets are. This depends on which dataset. Update policies are generally dependent on the dataset and on available project funding. Some will be updated even after the project has finished (partly in UERRA) but some will not. It is agree that the final EURO4M project report will pay particular attention to this question.

Dale Barker presents an overview for WP2: Regional reanalysis. He describes the new reanalysis capabilities built and datasets delivered. The research indicates the importance of a good model, high resolution, advanced DA, assimilation of wide-ranging observations and statistical downscaling. Various issues need further study. Nevertheless, EURO4M provides a solid base for UERRA and for Copernicus.

Christoph Frei presents the evaluation results of the EURO4M reanalyses. A number of conclusions are drawn:
- RA reproduce primary regional patterns of ECVs with richer and eventually more realistic spatial variations than previously existing continental datasets.
- RAs can have errors: bias and random, misplacements, frequency distributions. The magnitude of errors can be comparable to that of a global reanalysis and may be relevant for applications.
- Downscaling is an effective means of reducing biases and random errors in model-based RA.
- Improvement strongly depends on density of station data. DS accuracy is heterogeneous.
- Accessibility to station data remains key requisite for reliable climate datasets.
- Grid spacing != Resolution
- Encouraging for the use of RA in climate applications (e.g. climate monitoring)

Jennifer Lenhardt explains user involvement in EURO4M. Outreach was organized using E-learning, discussion sessions and two video podcasts. Material was prepared to demonstrate the EURO4M products and services. Two workshops were organized to support user feedback and dissemination of EURO4M products and services. For all data sets a factsheet or user guide is available describing the content, characteristics and availability of the data set.

Albert Klein Tank continues on EURO4M outreach, and details the legacy for Copernicus and the hand-over to UERRA. Besides the website, video podcasts, CIBs, data portals and many scientific papers, EURO4M was presented at a series of conferences, workshops and meetings. A special reanalysis session was organized jointly with ERA-CLIM at the EMS/ECAM conference in Reading, UK, 9-13 September 2013. EURO4M has also contributed to www.reanalysis.org. Finally, a second article about EURO4M in the European policy magazine "Pan European Networks: Science & Technology (August, 2013)" was published.
In the context of the future Copernicus Climate Change Service, an overarching coordination activity has been established for the following projects: ERA-CLIM2 (Dick Dee, ECMWF), UERRA (Per Undén, SMHI), QA4ECV (Folkert Boersma, KNMI), CLIPC (Martin Juckes, STFC), and EUCLEIA (Peter Stott, Met Office).

Albert thanks the members of the Advisory Board for their support during the past 4 years. They present their preliminary feedback on the project. Adrian Simmons (formerly ECMWF) repeats his earlier words that this is a good project, well conceived, well managed, well implemented (to date). The project is a good complement to ERA-CLIM from the viewpoint of the products sets, from the viewpoint of the benefit each can bring to the other. Some timing issues with regard to optimising this benefit exist, but a good basis for inter-project communication at the working level, and opportunities to formalise this at joint meetings, presentations at each other's assemblies and so on exists. The opportunity should be taken to engage in the development process for the GMES climate service, ideally with a common view of how the global- and European-focused components should jointly contribute.

Advisory Board member Blaz Kurnik presents the EEA perspective indicating that the information coming from EURO4M is important for EEA to be able to inform end users in the form of reports, climate adapt and indicators.

The third member of the Advisory Board, Velina Pendolovska from DG-Clima, was not available to join the meeting.

The EU reviewer Mikko Strahlendorff continues indicating that we promised to do several different things and that we have accomplished those mostly in time. Some of the datasets came a bit late in the project and that made it not so easy for the user workshops. But it is logical this happened. He stresses the importance of the fact that some products are transformed into operational climate services. For example, it would be good to think how we can have a service in place to produce a CIB in days instead of weeks or months after an event. It is a challenge for the technical system. But congratulations with this.

The EU officer Florence Beraud, who replaces the project officer Stijn Vermoote comments: the specialist have spoken, members of the Advisory Board. And if they are happy, I am happy. Obviously this has been a very useful project. It has been a good coordinated project. The partners have learned to work together which is one of the objectives of FP7 projects. There is a lot of legacy from this project. Even if you know about it you have to tell it those people who can use that or help you use it. It is very important that what you have found out from all of your work, whether related to user liaison, technical aspects or data availability or access are collected in the final report. That way the Copernicus program will be able to use these lessons.

In the following session more detailed scientific presentations were given by the following EURO4M scientists:
David Masson on monitoring and analysis of long-term precipitation variations in the Alpine region.
Manola Brunet on data rescue work over the Southern and Eastern parts of the Mediterranean Basin.

Peter Jermey on the new high resolution MO regional reanalysis.
Tomas Landelius on the 2D-downscaling with MESAN.
Cornel Soci on lessons learned of four years of European surface reanalysis with MESCAN
Jennifer Lenhardt (for Joerg Trentmann) on evaluation of regional reanalysis against satellite data.
Mathieu Cousteau-Guilhou on SURFEX off-line experiments driven by MESCAN over Europe.
Ian Harris on UEA datasets and data input for the reanalyses.
Roxana Bojariu on applications for Romania.
Lizzie Good on the MO satellite surface temperature and sunshine data

In his elaborated feedback from the EU-project reviewer session Mikko Strahlendorff comments on several aspects of the work:

- climate statistics and reanalysis systems are complex and need considerable resource investments before they are able to deliver – so first off all WELL DONE!
- regional reanalysis is useful
- the evaluation heavily used precipitation to show the skill - other variables deserved equal emphasis
- reanalysis should especially be needed for climate impacts depending on several variables
- evaluations discovered many shortcomings in reanalysis as well as in the in situ and satellite data sets
- this makes a nice list of work to be done
- downscaling seems to enable quick-fix before a more robust system is in place
- CIB main customer group is extreme events analysis
- for big attention requires a close to real-time production or new insights to event cause
- adaptation analysis is likely to become the most valuable Copernicus climate application
- adaptation usually is a regional or local issue – high resolution is an imminent requirement
- overarching need to spread the data as easily and widely as possible
- progresses on data policy are promising, but …
- make clear recommendations on your view how the Copernicus Climate Change Service should evolve

Finally, Albert Klein Tank and Karin van der Schaft report on the state of affairs of the deliverables, the reporting and some financial announcements. All de deliverables have been received by the project office but have not yet been submitted. This will be done directly after this meeting so that all deliverables are completed before April 1. The financial guidelines for the final period have been sent to the financial persons of the partners. Everybody who (since the last Certificate of Financial Statement) will, for a second time, receive more than EUR 375.000,- of EC contribution will have to submit again a CFS. The financial forms (Form C and if needed CFS) are due on **30 April 2013.**

This concludes the final meeting of the EURO4M project. Good luck in the follow-on project UERRA !

Thank you all !!!