

ECSN Annual Report 2004

Prepared by the ECSN Manager, January 2005

General remarks

The EUMETNET Council has decided to continue the ECSN Programme for a third phase of three years, starting on 1 January 2004. MeteoSwiss will remain the Responsible Member with Dr. Walter Kirchhofer as Programme Manager.

The Chairman of the ECSN Advisory Committee and the ECSN Manager invited the ECSN Project Leaders to an informal Consulting Meeting to Offenbach, 14-16 June 2004. In a sense of a preparatory approach for the coming ECSN Advisory Committee Meeting in Dublin, the status of the actual projects and the implementation of new project activities have been discussed.

The 9th ECSN Advisory Committee (EAC) Meeting has taken place in Dublin, Ireland, 8-10 September 2004. The ECSN Manager, Walter Kirchhofer, thanked the organizers of Met Eireann, especially Mr. Tom Sheridan, for their invitation and for their kind hospitality. It was an interesting and fruitful meeting, also with regard to new activities.

The main achievements can be listed as follows:

- The project "Generate Climate Monitoring Products" (GCMP) was terminated with a Final Report. In order to enhance the number of participating Members, it was decided to keep the GCMP project going on a quasi operational mode. A follow-up project "EuroCLIS" will be launched soon by DWD.
- The project „Climate Atlas of Europe“, based on

climatological normals for the period 1971-2000, is completed. A CD-ROM in a French and in an English version of the software has been prepared and sent to all the participating countries to make further use of this important climatological information.

- Within the European Integrated Project "ENSEMBLES", the project "Development of daily high-resolution gridded observational datasets for Europe" started on 1 September 2004.

- New project activities, as EuroCLIS and EUROGRID, have been initiated. The idea of a EUROGRID project is to create and to promote a rational and a quality assured climatological production of high resolution gridded data, based on information from the European National Meteorological and Hydrological Services (NMHSs).

The first combined Conference "EMS/ECAC" has taken place in Nice, 26-30 September 2004. The scientific part of ECAC-2004 was managed by the ECAC Advisory Board (EAB) and the Conveners. EAB has organized three Planning Meetings, in Berlin, in Toulouse and in Nice. The Call for Papers for ECAC-2004 was a success. About 250 papers have been submitted and selected by the conveners. Thanks to the efficient work done by the conveners and by the EMS Secretariat, ECAC-2004 was, with respect to climatology and its application, a success.

On the basis of a questionnaire, launched by EUMETNET, ECSN is recognised as an important Programme. Each component of ECSN is under a different phase of development and has reached a

different level of achievement. The degree of completion can be evaluated as 80% for ECSN. All Programmes suffer from limited participation from their Members. It is suggested that ECSN improves the transfer of knowledge and promotes its activities in order to enhance the number of participating NMSs. It could take the lead in the organization of technical workshops and training sessions in areas related to climatology.

European Climate Assessment & Dataset (KNMI)

The main objective of this project is to realize a sustainable operational system for data gathering, archiving, quality control, analysis and dissemination, in order to have a platform and a basis to prepare the next European Climate Assessment Report in 2006.

Following the document that describes the technical work of the ECA&D project and its infrastructure, prototypes were developed for the operational database and for the new web-interface. KNMI has tested all these prototypes. The results of these tests were promising and clearly illustrate the advantage of the new website. The automated updating procedure of daily ECA series with GTS synoptical data turned out to work well. Furthermore, automated procedures for placing quality control flags to the daily data were developed, tested and implemented.

The new website <http://www.eca.knmi.nl> was formally launched and presented at the European Conference on Applied Climatology in Nice, September 2004. The new website features improved access to the daily station series and provides a much more complete overview of the results of the trend analyses that have been performed with the aid of indices of extremes. In addition, the results

of the quality control procedures and homogeneity tests that have been applied to all series are better presented.

To minimize time gaps in data series and to extend the data series until present, synoptical messages are used as exchanged over the Global Telecommunication System. This daily extension of the series, in combination with full automation of statistical procedures, gives the visitor of the website the functionality to download data series and to create time series plots and trend maps for indices of extremes that are very up-to-date.

ECA&D is involved in a related activity called ENSEMBLES. This FP6 project of EU held its kick-off with a meeting in Hamburg on 15 and 16 September 2004. ENSEMBLES is a major research project with a total of 72 partners, including most meteorological services in Western Europe (the UK Met Office is the overall co-ordinator of ENSEMBLES). The project covers climate change modelling and prediction on time scales from seasons to decades, as well as model validation using observational datasets. KNMI and MeteoSwiss participate in the workpackage WP5.1, which aims at developing a daily resolution gridded dataset for Europe on the basis of a network of daily station data. This activity can only be successful if it builds upon the dataset developed in ECA&D. In that respect we do see ENSEMBLES as a good starting point for a new EUROGRID initiative of ECSN. To be successful we need the support of all ECSN members to contribute additional station series in order to obtain a denser network. Note, that these additional station series are only used for gridding purposes and they will not be released or made public like the other ECA&D data.

Generate Climate Monitoring Products (DWD)

The project Generate Climate Monitoring Products (GCMP) was completed in the last quarter of 2003, the Final Report has been prepared and distributed in 2004.

The report explains the objectives and the achievements of the project, gives an analysis of the results and makes suggestions how to further develop the established structures, e.g. how to carry on with the GCMP Web site.

The envisaged goal of creating an appropriate Internet platform for dissemination of climate monitoring products, generated by the participating European National Meteorological and Hydrological Services, was reached by the development of the quasi operational GCMP web site in its existing form. This clearly structured system provides relevant climate monitoring information for the European region in a timely and continuous way.

So, with the completion of the project a quasi operational Internet platform is at hand, accessible under the URL <http://www.gcmp.dwd.de>, displaying European and national climate monitoring products timely and freely available to the other NMHSs and to the public.

After completion of the project Generate Climate Monitoring Products and the distribution of the Final Report, as well as in view of the results attained and the experiences gained, it was recognized that a logical further step would be the transformation of the project into a fully operational system for the co-ordination, collection and dissemination of standardized climate monitoring products for the European region.

In this context it should be noted that an extension of the group of European NMHSs contributing to the system would be highly appreciated.

Climate Atlas of Europe (Météo-France)

The project „Climate Atlas of Europe“, based on climatological normals for the period 1971-2000, is completed. A CD-ROM in a French and in an English version of the software has been prepared, containing the dataset from nearly 700 European weather stations, including also instructions for installation and information about necessary configuration. The source programmes are also included and instructions to translate them into any other language than English or French. A pair of CD-ROMs have been sent to all the participating countries to make further use of this information, as to make copies and translations into further national languages if needed.

The “Climate Atlas of Europe” will contain monthly normals for precipitation, temperature, wind and sunshine duration as well as additional statistical information for these parameters and for the occurrence of phenomena such as fog, thunderstorm, hail and snow.

As agreed at the start of the project, all participating countries are allowed to use this product as well as the database freely, including for commercial purposes. The reason for that is that climatological normals are considered nearly everywhere as public information.

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