

ECSN Annual Report 2001

Prepared by the ECSN Manager, January 2002

General remarks

The EUMETNET Council has designated MeteoSwiss as Responsible Member for the EUMETNET-ECSN Programme, starting on 1 January 2001, with Dr. Walter Kirchhofer as Programme Manager.

The EUMETNET Council expressed thanks to INM and to J.-A. Lopez, the former Programme Manager, for their work during the last three years.

The ECSN Advisory Committee (EAC) elected Volker Vent-Schmidt as new Chairman of EAC, and thanked Bjorn Aune for his long acting as Chairman of EAC.

A Contract to establish the terms and conditions by which MeteoSwiss will discharge the tasks of Responsible Member of the EUMETNET-ECSN Programme was written and signed individually between MeteoSwiss and the National Meteorological Services supporting the ECSN Programme.

For the future, the attention of ECSN should be drawn to the necessity of focussing on a limited number of priority actions to permit allocation of enough financial and human resources to the projects. The ECSN Manager submitted his proposals for a working plan, a time table and his recommendations in order to revitalize the project activities for the period 2001-2003. He invited the project leaders to support the recommended actions and to review the long running projects concerning their content, their financial and human resources. On this basis the number of projects has been reduced.

The third ECSN-Workshop on Climate Databases has taken place in Langen, Germany, 12-13 November 2001, focussing on climate data exchange and data quality. Since the EUMETNET project UNIDART (Uniform Data Request Interface) is considered to be a suitable project to develop an infrastructure for a border-crossing exchange of climate data, UNIDART was the main discussion topic.

The workshop was a success. All participants were up-dated on the actual state of the climate data management in Europe and professional contacts among experts have been intensified. We proposed that ECSN should collaborate very closely with UNIDART. Therefore a list of requirements has been prepared for the realisation of the pilot phase and further steps of UNIDART.

The Royal Meteorological Institute of Belgium is organizing the Fourth European Conference on Applied Climatology "ECAC-2002". The conference will take place in Brussels, 21-25 October 2002. The core-members of the International Organizing Committee (IOC) had a first preparation meeting in Brussels on September 6th, 2001.

At the thirteenth Session of the WMO Commission for Climatology (CCI) in Geneva, 21 to 30 November 2001, a part of the session was devoted to scientific lectures where we had the privilege to get the possibility to inform the delegates about the main activities of the EUMETNET ECSN Programme.

European Climate Assessment (KNMI)

In the European Climate Assessment (ECA) pro-

ject the temperature and the precipitation climate is analysed for WMO Region VI, putting particular emphasis on changes in daily extremes. ECA aims at applying uniform analysis methodologies to daily observational series from as many European meteorological stations as possible. So far, 34 countries participate in the ECA project and a preliminary version of the ECA dataset contains data from over 200 stations. The ECA project focuses on the twentieth century from 1901 to 2000. Respecting the data policies of the participating countries, a selection of the daily series in the ECA dataset is made available to the public on a CD-ROM and through the Internet (from URL: <http://www.knmi.nl/samenw/eca>). Station history metadata, like information on measuring instruments and station surroundings could not yet be included. The release of an elaborated update of the ECA dataset is planned for 2002.

The final report of this ECA project phase is in preparation. The publication will follow in spring 2002. The scientific parts will be published sequentially in international scientific journals.

Climate Databases (DNMI)

A closer collaboration among the member NMSs on developing and running climate databases could have many advantages for the European climate services. The project arranged one workshop in 1999 and had planned a new one this year which could not be held. The project has also tried to establish a Web-based contact system for the project members, but very little progress was made on that for technical and other reasons. The ECSN Advisory Committee decided to transform the actual project into some basic activity with a more specific mandate. A new activity could be in the topic Data Exchange. With the intensified handling of the topic Data Exchange the ECSN

may help to arrange a simplified and standardized European data policy.

Generate Climate Monitoring Products (DWD)

The status of the project Generate Climate Monitoring Products (GCMP) has been reviewed and a proposal was elaborated concerning the continuation of the project up to the end of the year 2003 according to a refined work plan. The proposal was submitted to the EUMETNET Council and approved at its meeting in October 2001.

It is obvious that European Meteorological Services should provide first hand information about climate variation and derived products for monitoring purposes. With this in mind the project GCMP was started, aiming at developing, generating and distributing standardized climate monitoring products on a monthly as well as on an annual basis. Monthly mean temperatures and anomalies, precipitation and anomalies, satellite cloud cover, and quite a number of other example products are already contained in the clearly structured mechanism on a test version of the GCMP Web pages (see URL: <http://www.gcmp.dwd.de>). On the basis of a questionnaire ECSN NMHSs were asked to nominate focal points and to send proposals for enhanced contributions for incorporation in the project Web pages. The success of the project is very much dependent on the active participation.

Climate Atlas of Europe (Meteo-France)

The project Climate Atlas of Europe is established for a duration of three years, starting on 1 January 2001. All 18 EUMETNET countries have signed the contract, as well as Hungary. Following a letter sent to a number of non EUMETNET countries, offering them to join the project, positive replies were received from Slovenia, Czech Republic, Slovakia and Bulgaria.

The Atlas will contain monthly normals for precipitation, temperature, wind and sunshine duration and additional statistical information for these parameters and for the occurrence of phenomena such as fog, thunderstorm, hail and snow. The computation period will be 1971-2000, and the target spatial density will be about one station per 5000 square kilometres. In a first step the Atlas will be made available without maps. Maps can be added at a later stage.

The Atlas will be implemented as a CD-ROM database with visualization tools. A version for Web access will also be developed. This information will not be submitted to any restriction concerning distribution and use.

GIS in Climatological Applications (ZAMG)

National Meteorological Services are facing in their work many problems which can be solved easier with the application of Geographic Information Systems (GIS) tools. Substantial advances in deriving information of various kinds from different sources have been achieved until now.

The ECSN activity in this field has pushed forward a new action in the framework of COST, namely COST-719: The Use of GIS in Support of Climate Monitoring, Climate Data Quality Control and Climate Information. Because of the existing similarities between the two projects, the ECSN Advisory Committee has decided to integrate the ECSN activities into the COST-719 project. Therefore the ECSN project Geographic Information Systems in Climatological Application was terminated with a Final Report and followed up by COST-719.

Drought investigations (OMSZ)

The project was established for a duration of three years, starting on 1 January 1999. The objectives were the follow ones:

- Evaluation and use of different drought indices;
- Analyse long drought index series;
- Study of thresholds of drought indices;
- Calculate the spatial distribution of drought indices on different time scales;
- Recommendation of drought indices.

The project could not be carried permanently by a scientist. Therefore great time delays resulted. In addition, drought is not a very important issue in Europe, and recently it was treated also in the context of IPCC. That is why the ECSN Advisory Committee has decided to complete this project with a Final Report by the end of 2001.

ECSN climate Dataset (KNMI and DNMI)

Closely related to the project European Climate Assessment is the ECSN Climate Dataset (ECD) project. This project has started in April 2001 and will continue until May 2002. The main objective of the ECD project is the preparation and the distribution of climate datasets on daily amount of precipitation and daily temperature (minimum, mean, maximum) for the period 1901-2000 via CD-ROM and Internet for as many as possible European countries.

With the production of a CD-ROM and a Web application the ECD project has arrived at the first stage (see URL: <http://www.knmi.nl/samenw/e.cd>). This first version of ECD is attended by only a minimum set of metadata. Furthermore, the Java application has only a limited set of functions to interact with the data. In spite of these intermediary positive results still a lot of work has to be done to realize the main goals of the project.

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