

EuCLIS – a web based European Climate Information System

P. Bissolli

German Meteorological Service, Dep. Climate Monitoring, Germany

(peter.bissolli@dwd.de / Phone: +49 69 8062 0)

The German Meteorological Service (Deutscher Wetterdienst) is presently developing a European climate information system (EuCLIS). The aim of this system is to distribute climate monitoring information of the area of the WMO Region VI (Europe and the Middle East) via the web. EuCLIS will be the successor of the already existing platform GCMP (Generate Climate Monitoring Products) which emerged from a project of the ECSN (European Climate Support Network). A variety of products is envisaged such as

- national maps of monthly and daily means, climate normals and anomalies of monthly means for several climate elements,
- corresponding maps for the whole area of the WMO Region VI or at least a large part of it,
- text descriptions of significant weather events (e.g. exceptional heat waves, floods, storms),
- the WMO RA VI Bulletin, a compilation of texts and diagrams contributed by many countries of the WMO Region VI, issued once a year.

The National Meteorological and Hydrological Services within the WMO Region VI are encouraged to provide national climate monitoring products (maps, diagrams, texts) on their own web servers as far as available. These products will be collected and distributed by the EuCLIS platform which will be hosted by the German Meteorological Service. Some products for the whole WMO Region VI will be generated by the German Meteorological Service itself, using various data sources available there (Satellite Application Facility on Climate Monitoring of EUMETSAT, Global Precipitation Climatology Centre, synoptical data submitted via the Global Telecommunication System), but also from European projects (e.g. ECSN projects) and other data providers.

In future, EuCLIS will be expected to have several upgrades compared to GCMP, e.g.

- an improved web technology (web portal technology, an own administration tool for each contributing country, more automatisation, an improved navigation, search functions etc.),
- an extension of the range of products (hopefully more contributing countries, additional climate elements etc.),
- an improvement of quality of the products for the whole Region (higher spatial resolution, improved data basis and quality control, improved spatial interpolation techniques using GIS technology etc.).

The presentation gives an overview of the present and the envisaged future state of the EuCLIS system, its components, the technical infrastructure, metadata standards, spatial interpolation methods, examples of already existing products and further planned activities of regional climate monitoring at the German Meteorological Service. Later on, EuCLIS is also foreseen being an exchange platform of a future Regional Climate Centre of the WMO for all National Meteorological and Hydrological Services.