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# The EURO4M web based Climate Indicator Bulletin environment

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The CIB environment developed in the EURO4M project is able to run recipes on delivered data to create maps, plots or graphs. A recipe is a text document containing a description of how a map, plot or graph is generated, and can include example graphs (used as provenance metadata). The recipes are developed by the Climate scientists and included in the environment. Once included, the environment can automatically generate maps, plots and graphs. These can be used and adjusted by the CIB editor to create a CIB.

## EURO4M Project

The European Reanalysis and Observations for Monitoring (EURO4M) project is a EU funded project that provides timely and reliable information about the state and evolution of the European climate. It combines observations from satellites, ground-based stations and results from comprehensive model-based regional reanalyses. By closely monitoring European climate, climate variability and change can be better understood and predicted. EURO4M is an important building block for GMES (Global Monitoring for Environment and Security), the European initiative for the establishment of a European capacity for Earth Observation.

## Climate Indicator Bulletin (CIB)

### Purpose:

- Efficiently compile the larger scale picture of weather/climate extremes, complementing information from the national services
- Integrated data product & service based on Essential Climate Variables (ECVs)

### Audience:

- Policy makers, decision makers, professional users

### Requirements:

- User-oriented (i.e. in relation to a question, policy, decision, or activity)
- Easy to understand, non-technical
- Near real-time
- Electronic documents and web portal
- Easy to make using OGC web services like WMS and WCS

## OPeNDAP, OGC services

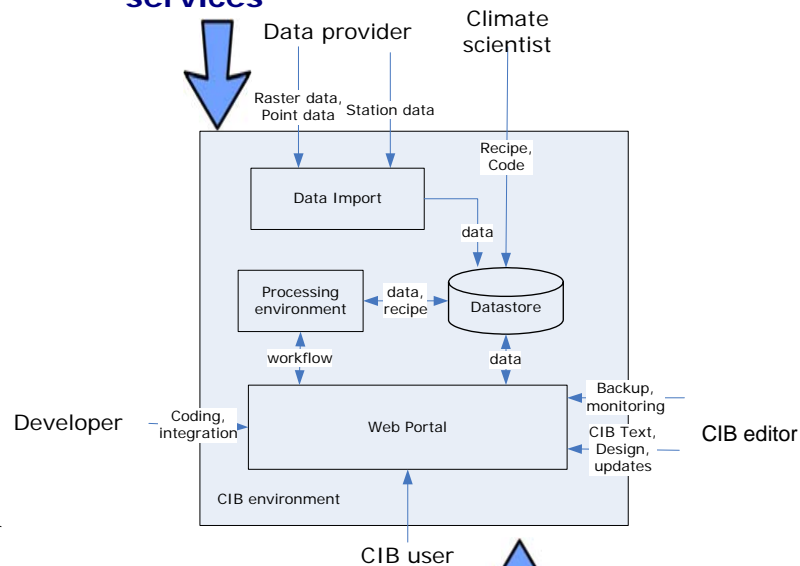


Figure 2: CIB environment overview



## CIB environment

### Stakeholder Context

The CIB environment stakeholders are identified and described. The stakeholders are involved in the development by providing requirements and testing the prototype environment (see figure 1).

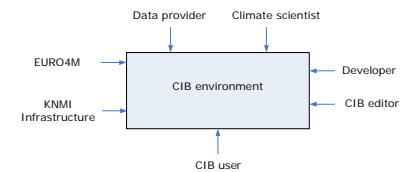


Figure 1: CIB Context diagram

### Technical solution

The CIB consists of 4 main components (see figure 2):

- Web portal, based on OGC services and Media Wiki
- Processing environment
- Data import, based on OPeNDAP and OGC services
- Data storage

### Prototype CIB

As prototype CIB the 'European Mean Temperature' is created using the prototype environment. Based on this experience the User Requirements Document and prototype will be refined.

