EMS Annual Meeting Abstracts
Vol. 11, EMS2014-594, 2014
14th EMS / 10th ECAC

Operationalizing a transferrable open source climate information service - lessons from the Indonesian-German DATCLIM project

Gerhard Rappold (1), Edwin Aldrian (2), Irfan Arif (1), Martin Dresen (3), Mohammad Fadli (4), Mona Thiele (1), Boris Orlowsky (5), Antoyo Setyadipratikto (2), Till Sterzel (5), Widada Sulistya (2), and Ariyanto Yohanes Wibowo (1)

(1) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), (2) Badan Meteorologie Klimatologi dan Geofisika (BMKG), (3) geoSYSnet, (4) PT Inteligensi Risiko, (5) Climate Babel

Developing web-based climate information services for climate adaptation and monitoring in vulnerable low-and middle income countries binds substantial project resources, calling for services with extensible and transferrable designs-

By showcasing the products of the DATACLIM project (Data and Information Management on Adaptation to Climate Change) in Indonesia, we introduce a customizable and extensible open source-climate information system. This service for sector-based support for Indonesian authorities is transferrable to comparable environments that need to manage and provide climate data and information.

Behind the scenes, the extensible and open source package iki.ClimDex includes routines for over 40 state-of-the-art climate indices calculated from rescued historical Indonesian climate data. Further routines on quality control and data series visualization complement the toolbox.
Climate information can be explored using a customizable Dashboard. Going beyond static time series and standard map visualization features; the Dashboard hosts a variety of products and features for Indonesian public services and stakeholders to employ according to their project needs.

The features include, but are not restricted to, managing climate data and metadata within a flexible database architecture, graphical display and comparison of climate information and adaptable mapping tools. The system especially provides a detailed access rights to particular users to a) tailor suits the services and b) provide detailed control over the ownership rights. Particular emphasis has been put on an explorative stakeholder-driven linkage of climate indices to sector-based needs, e.g. in agriculture.

Driven by a wealth of partnerships in Indonesia and Germany, DATACLIM shows how a climate information system designed to make rescued data on Indonesian climate heritage useful for climate adaptation and monitoring can save resources and add value for projects in a similar context – based on its open-source architecture and transferability.

Acknowledgement:
The DATACLIM Project was funded by the International Climate Initative of the German Federal Ministry for the Environment, Nature Conservation, Buildings and Nuclear Safety.