



Grant agreement no. 243964

QWeCI

Quantifying Weather and Climate Impacts on Health in Developing Countries

M1.2.a: Furnish database on hard disk to African partners

Start date of project: 1st February 2010

Duration: 42 months

Lead contractor : UOC
Coordinator of milestone : Prof. Andreas H. Fink
 Dr. Volker Ermert

Evolution of milestone

Due date : M15
Date of first draft : M20
Start of review : M20
Milestone accepted : M20

| | | |
|---|---|----|
| Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013) | | |
| Dissemination Level | | |
| PU | Public | PU |
| PP | Restricted to other programme participants (including the Commission Services) | |
| RE | Restricted to a group specified by the consortium (including the Commission Services) | |
| CO | Confidential, only for members of the consortium (including the Commission Services) | |

Introduction

The alpha version of the QWeCI atmospheric database was released on M15 (April 2011) of the QWeCI project (see deliverable D1.2a of work package 1.2). The atmospheric database of the QWeCI project can be entered via a web portal (see <http://qweci.uni-koeln.de>), which is integrated into the web-based Java framework of work package 5.1. Short profiles, the originator of the data, metadata, as well as the data files of different datasets are included in the atmospheric database.

The atmospheric database consists in its alpha version of altogether eight different datasets. The database contains daily and monthly reports from weather stations, daily and monthly satellite gauge combined estimates of precipitation from the **Global Precipitation Climatology Project (GPCP)**, and data from two different re-analyses from the **European Centre for Medium-range Weather Forecasts (ECMWF)**. In the near future, further datasets will be added to the atmospheric database on the web.

The different datasets of the QWeCI atmospheric database can be either downloaded from a public accessible FTP server (free access via <ftp://ftp.uni-koeln.de/institute/qweci>) or via a password protected FTP service (restricted access via <ftp://qweci.uni-koeln.de>). Downloadable are the data files, example graphics of the data, the XML file of the dataset, as well as supporting files.

Allocation of the database on hard disk

In Africa, a fast and convenient access to the internet is not always possible. In fact, most countries in Africa lack a fast internet connection, which would enable the download of large datasets like the **ECMWF 40 Year Re-Analysis (ERA-40)**. For this reason, the various datasets of the atmospheric database, including their metadata as **eXtensible Markup Language (XML)** files, were transferred to seven hard disks. The seven African partners of the QWeCI project in Senegal, Ghana, Malawi, Kenya, and South Africa were finally furnished at the ICTP Summer School 2011 in Trieste on “Climate Impacts Modeling for Developing Countries: Water, Agriculture, and Health” with these hard disks. This will ensure their direct access to the data. Note that this milestone was delayed due to the fact that the hard disks must be handed over physically, which was only possible at the Summer School in Trieste.

The following data sets were transferred to the hard disks:

- GSOD: Federal climate complex Global Surface summary of Day version 7 (Open access)
- GHCN: Global Historical Climatology Network version 2 (Open access)
- GMet: Historical Meteorological time series from Ghana (Restricted access)
- ERA-40: ECMWF 40 year Re-Analysis (Restricted access)
- ERA-Interim: ECMWF Interim Re-Analysis (Restricted access)
- GPCP v1.1 1dd: Global Precipitation Climatology Project 1° daily (version 1.1) (Open access)
- GPCP v2.2 Global Precipitation Climatology Project 2.5° monthly (version 2.2) (Open access)
- SYNOP: Synoptic reports from the DWD archive (Restricted access)

- MIDAS: Weather reports from the Met Office Integrated Data Archive System (restricted access)
- TRMM 3B42 V6: Tropical Rainfall Measuring Mission 0.25° 3-hourly (version 3B42 V6) (restricted access)
- TRMM 3B43 V6: Tropical Rainfall Measuring Mission 0.25° monthly (version 3B43 V6) (restricted access)
- NCEP-1: NCEP/NCAR Reanalysis 1 (open access)

It is foreseen that in the forthcoming months newly and updated data sets will be included into the atmospheric database. Note that the status of the handed out hard disks will be always updated at meetings such as the annual QWeCI meeting.

QWeCI Partners furnished with hard disks

Every African Partner of the QWeCI project was furnished with a 500 TB hard disk including the data sets as well as metadata of the QWeCI atmospheric database. The following table identifies the representatives of the African partners, who received the hard disks:

| <u>Partner</u> | <u>Country</u> | <u>Recipient</u> |
|-----------------------|-----------------------|-------------------------|
| CSE | Senegal | Jacques-Andre Ndione |
| KNUST | Ghana | Sammy Tay |
| ILRI | Kenya | Bernard Bett |
| IPD | Senegal | Ibrahima Dia |
| UCAD | Senegal | Abdoulaye Deme |
| UNIMA | Malawi | Maya Nkoloma |
| UP | South Africa | Jane Olwoch |