



Grant agreement no. 243964

QWeCI

Quantifying Weather and Climate Impacts on Health in Developing Countries

Milestone 1.2.b – Final documented database transferred into the AMMA database

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Duration: 42 months

Lead contractor : UoC
Coordinator of milestone : Prof Dr Andreas H. Fink
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Evolution of milestone

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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 version 1.0 of the QWeCI atmospheric database was released on M30 (July 2012) of the QWeCI project (see deliverable D1.2c 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 data sets are included in the atmospheric database.

The atmospheric database consists in version 1.0 of altogether fourteen different data sets. The database contains daily and monthly reports from weather stations, data from Automated Weather Stations (AWSs), daily and monthly satellite gauge combined estimates of precipitation from the Global Precipitation Climatology Project (GPCP), and data from three different re-analyses from the European Centre for Medium-range Weather Forecasts (ECMWF) and the United States National Center for Environmental Prediction (NCEP) and National Center for Atmospheric Research (NCAR). In the future, further data sets could be principally added to the atmospheric database on the web.

Version 1.0 of the QWeCI atmospheric database comprises the following data sets:

- **GSOD**: Federal climate complex Global Surface summary of Day version 7 (Open access)
- **SYNOP**: Synoptic reports from the DWD archive (Restricted access)
- **MIDAS**: Met Office Integrated Data Archive System land surface stations data (Restricted access)
- **GHCN**: Global Historical Climatology Network version 2 (Open access)
- **GMet**: Historical Meteorological time series from Ghana (Restricted access)
- **KuPTiS**: Kumasi Precipitation Time Series (Restricted access)
- **OwabiAWS**: Owabi Automatic Weather Station data (Restricted access)
- **ERA-40**: ECMWF 40 year Re-Analysis (Restricted access)
- **ERA-Interim**: ECMWF Interim Re-Analysis (Restricted access)
- **NCEP-1**: NCEP/NCAR Reanalysis 1 (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)
- **TRMM 3B42 V6 (derived)**: Tropical Rainfall Measuring Mission and other satellite daily precipitation estimate 3B42 Version 6 (derived) (Restricted access)
- **TRMM 3B43 V6**: Tropical Rainfall Measuring Mission and other satellite monthly precipitation estimate 3B43 Version 6 (Restricted access)

The different data sets 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 data set, as well as supporting files.

Transfer of the KuPTiS and OwabiAWS data sets to the AMMA database

The African Monsoon Multidisciplinary Analysis (AMMA) project developed a widely used atmospheric database. This database comprises a great amount and large variety of data. AMMA foresees to provide the numerous data sets to the research community. Like the QWeCI atmospheric database, the AMMA database includes detailed metadata of the data sets and utilized standardized data formats. Remarkable is the fact that the AMMA database is mirrored since 2008 in Niamey/Niger.

In order to ensure the access of the QWeCI measurements to the research community, the specific data sets produced by the QWeCI project were transferred to the AMMA database. This means that the KuPTiS and OwabiAWS data sets are additionally included and are made accessible via the AMMA database. Note that other QWeCI atmospheric measurements outside from Ghana were not provided to the QWeCI atmospheric database.

Laurence Fleury is responsible and leading the further development of the AMMA database (AMMA: African Monsoon Multidisciplinary Analysis). For this reason Laurence Fleury was contacted on 01 June 2012 with regard to the transfer of the KuPTiS and OwabiAWS data sets to the AMMA database. Laurence Fleury provided a response on 21 June 2012 and stated that there is an interest for the AMMA database users regarding the KuPTiS and OwabiAWS data. There was no issue regarding the transfer of the two data sets.

In order to transfer the data the AMMA file transfer protocol (ftp) facility (ftp medias3.mediasfrance.org) was used. After the final update of the KuPTiS and OwabiAWS data sets, the data was transferred on 10 July 2012 to the ftp server of the AMMA database using compressed tar-files. In addition, the metadata was included in the tar-files via an eXtensible Markup Language (XML) file.

Concerning the data policy aspects, the AMMA data and publication policy will be applied for the access of the data. The data download procedure includes a mail to inform the data provider. Collaboration is encouraged and a co-signature or acknowledgment is imposed in case of any publication. Moreover, it is possible to add a specific acknowledgment sentence for each data set. It is part of the metadata and it is sent to the data user together with the downloaded files.

In summary, the following data sets were transferred to the AMMA database:

- KuPTiS: Kumasi Precipitation Time Series (Restricted access)
- OwabiAWS: Owabi Automatic Weather Station data (Restricted access)

These data sets will be accessible online via the AMMA database user interface at <http://database.amma-international.org>.