Climate Risk
Management & Water
Units
Institute for
Environment &
Sustainability

Joint Research Center

TP 122, Via Enrico Fermi 2749
I-21027 Ispra/Italy

Phone: +39 0332 78 6013 (P. Salamon)
Fax: +39 0332 78 6653

GLOBAL RUNOFF
DATA CENTRE

In the
Federal Institute of Hydrology

Am Mainzer Tor 1   P.O. Box 20 02 53
56068 Koblenz   56002 Koblenz
Germany   Germany

Phone: +49-261-1306-5224
Fax: +49-261-1306-5722

E-Mail: looser@bafg.de
Internet: http://grdc.bafg.de

Cooperation Agreement between the

Global Runoff Data Centre (GRDC)
and the
Climate Risk Management & Water Units,
Institute for Environment & Sustainability, JRC

Topic of Research Proposal

The aim of the co-operation is to utilize data series of observed historic discharge available at GRDC to calibrate and validate the hydrological model (LISFLOOD) used for the Global Flood Awareness System (GloFAS) as well as the global water resource modelling system.

Short Title

Development and Improvement of the Global Flood Awareness System and the global water resources modeling system.

Research Project Summary

At the Climate Risk Management and Water Units of the Institute of Environment and Sustainability, Joint Research Center (JRC), we are building and testing a global scale river

flow forecasting and water resources modeling system. The primary objective of the research is to develop and evaluate a global hydrologic modeling system that can be used for flow forecasting of the world's major rivers or for assessing global water resources. For this purpose, ground discharge observations (such as the GRDC archives) are crucial for calibration and validation of the model. The current project extends over the next 2 years, but we also expect that our research on the global flood forecasting and water resources modeling system will continue over a long time. Our results will sequentially be published in international journals, and, when published, we will include the GRDC data source in the citations and acknowledgements.

Cooperation, Deliverables and Products

1. The JRC's Climate Risk Management & Water Units are equal partners in this co-operation with GRDC. Therefore, data delivered by GRDC will be stored and jointly used by both units.
2. The JRC's Climate Risk Management & Water Units will coordinate requests for data updates to reduce the frequency and avoid duplicate requests.
3. GRDC provides - on short notice - the requested relevant daily (if available) and monthly discharge data sets free of charge. The monthly data sets for which also daily data are available are flagged by a parameter which indicates how many days were used to generate the respective monthly value.

Use of data and products

1. The JRC's Climate Risk Management & Water Units accept and respect the data policy of GRDC and in particular the User Declarations which form part of this Agreement and which will be signed separately.
2. The JRC's Climate Risk Management & Water Units are free to use, publish and distribute the results of the research project under the provision that the original data source and authors are cited in full and provided item 1 is not violated. In conference papers, department reports, journal publications, personal website presentation etc. that are written during the course of the project, reference will be made to the original data source in the final *References*, *Literature* or *Bibliography* section or chapter, as signed in the user declaration.
3. The parties to this Cooperation Agreement shall not be liable for indirect or consequential damages, such as loss of profit, income or like.
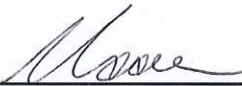
Costs

1. There will be no costs charged by GRDC for the extraction, handling and transfer of the GRDC data sets.

Time Frame

Project start: June 2015
Project end: December 2017

Dates and Signatures

_2015-06-22_   _22/06/2015_

Ulrich Looser   Dr. Peter Salamon
Head GRDC   Climate Risk Management Unit
Federal Institute of Hydrology   Institute for Env. & Sust.
Germany   Joint Research Center
                                                     Via Enrico Fermi 2749
                                                     21027 Ispra
                                                     Italy