EGEE'09 - Uniting our strengths to realise a sustainable European grid



Contribution ID: 102

Type: Poster

EnviroGRIDS - Gridifying the Black Sea catchment to support its sustainable development

Project(s) or EGEE activity presenting the demo or poster (project or activity names only)

EnviroGRIDS

Special requirements other than the set up mentioned in the CfA text.

None

Abstract

The Black Sea Catchment is recognized for its ecologically unsustainable development and inadequate resource management. The 4-year timeframe FP7-funded EnviroGRIDS project (start: April 2009, 27 partners) will address these issues by developing a Spatial Data Infrastructure (SDI) targeting this region which will be linked to the EGEE infrastructure. A large catalogue of environmental data sets (e.g. landuse, hydrology, climate) will be gathered and used to perform distributed spatially-explicit simulations to build scenarios of key environmental changes. A high resolution (sub-catchment spatial and daily temporal resolution) water balance model will be applied to the entire Black Sea catchment using the Soil Water Assessment Tool (SWAT) on the Grid. SWAT modules for uncertainty and sensitivity analysis on SWAT will also be gridified using the well established Ganga job management and submission tool for front-end job management.

Author: Dr MAIER, Andrew (CERN)

Co-authors: LEHMANN, Anthony (Climatic Change and Climate Impacts, EnviroSpace group, University of Geneva, Switzerland and UNEP/DEWA/GRID-Europe, Châtelaine, Switzerland); Dr GORGAN, Dorian (Technical University of Cluj-Napoca, Romania); Dr GIULIANI, Gregory (Climatic Change and Climate Impacts, EnviroSpace group, University of Geneva, Switzerland and UNEP/DEWA/GRID-Europe, Châtelaine, Switzerland); Dr RAY, Nicolas (Climatic Change and Climate Impacts, EnviroSpace group, University of Geneva, Switzerland and UNEP/DEWA/GRID-Europe, Châtelaine, Switzerland and UNEP/DEWA/GRID-Europe, Châtelaine, Switzerland and UNEP/DEWA/GRID-Europe, Châtelaine, Switzerland)

Presenter: Dr MAIER, Andrew (CERN)