

Problem Solving Environment for Flood Forecasting¹

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ABSTRACT

Flood forecasting using numerical weather models is a computationally-intensive and complex task requiring cooperation of many experts in different areas. To enable this cooperation in a comfortable way, a part of the CrossGrid project is aimed towards developing a flood-forecasting, Grid-based environment. This Problem Solving Environment (PSE) consists mainly of a set of coupled simulation models, a storage system for configuration files, model codes and datasets, a WWW portal with collaboration tools and a powerful Computational Grid,

provided by the partners in the CrossGrid.

This paper describes prototype of this PSE, targeting mainly the coupled simulation models (simulation cascade), the portal and the Virtual Organization supposed to use the system.

Keywords: Problem Solving Environment, Flood Forecasting, Grid Computing, Collaboration, Portal.

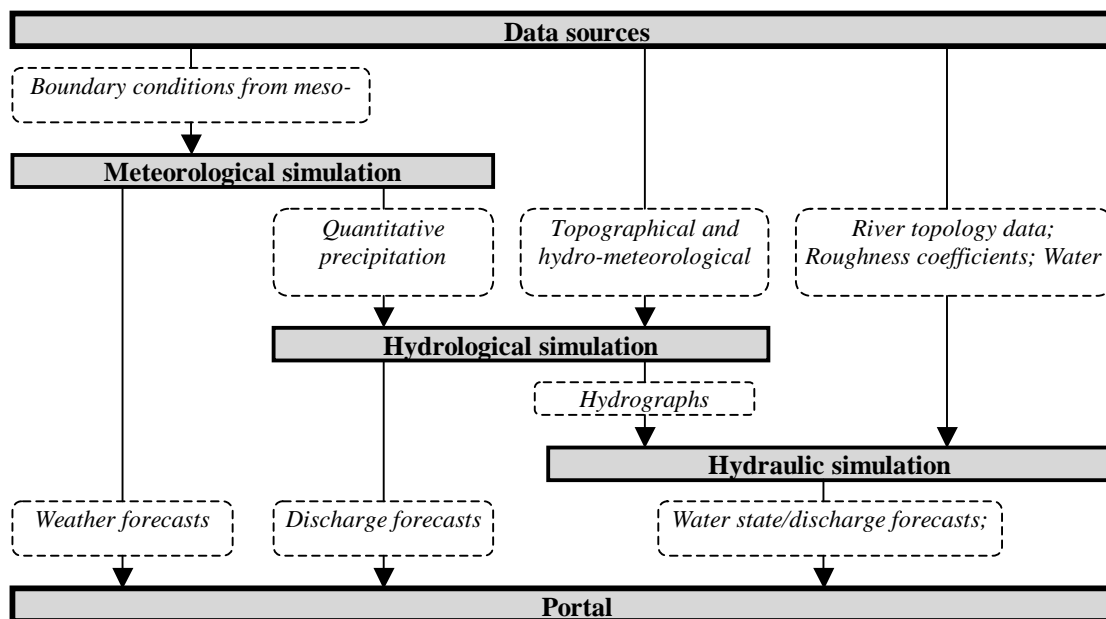


Fig. 1 Cascaded simulation scheme

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