



## **Earth Science applications in EGEE**

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The ES community with its variety of disciplines has not yet adopted the Grid technology. Some reasons are the lack of awareness and knowledge about Grid, the perceived complexity of the Grid middleware and finally technical barriers related to data policies, different environments or access to data centres. To deal with this is to provide examples of applications that already provided results while pointing out also their Grid requirements.

The applications already ported on EGEE are from different ES disciplines like atmospheric chemistry, climate, hydrology, seismology domains. Grid provides more computing resources to the user and is also a way of sharing data, and algorithm. EGEE is very suitable as it will be shown for intensive data processing and production, statistical approach, job on alert, simulation and modelling. Several applications have addressed risk assessment and management for flood, fire and pesticides. The interface between ES environment and Grid middleware is not always simple for many applications and developments. There persist significant gaps due to complex computing protocols in ES. The ES Grid-“cluster” has addressed this problem and proposed solutions or new developments.