

Earth Science Activity On Grid

Earth Science Grid Partners:

Western and Eastern Europe, Russia and Turkey, 9 Virtuals Organisations.

Participants and/or actors in the most important Earth Science organisations

The central figure is a globe showing global connectivity, with lines connecting various research centers and organizations. Surrounding the globe are ten research areas, each with a sub-diagram and a data visualization:

- Climate - GReIC**: CMCC (Italy), IPSL (France), Univ Cantabria (Spain), SCAI (Germany). Diagram shows a network of nodes (e.g., GMRC DAIS, VOMS, GridPP) connected via P2P and Metadata Provider Data Provider paths.
- Flood**: EMA (France), IISAS (Slovakia), SRI (Ukraine). Diagram shows a flood map for Normanton area, Queensland, Australia derived from RADARSAT-2 14-17 Feb 2009 (SRI).
- Biodiversity**: BRGM (France), Footways(France),JKI (Germany). Climatology, crop, soil, pesticides Scenarios. Diagram shows a close-up of a field of tall grass.
- Climate - El Niño**: Univ. Cantabria (Spain). Diagram shows SST anomalies and perturbation maps over South America.
- Meteorology**: Greece: AUTH, IASA, NOA; SRI (Ukraine), GCRAS (Russia). Diagram shows a map of atmospheric pressure or temperature anomalies from IASA.
- Geosciences- Geocluster**: CGGVeritas -France: DSI-IRD, Geoazur, IPGP, IPGS, ISTEP, Sisyphe, UBO, Univ. lausanne (CH). Diagram shows seismic waveforms or geological cross-sections.
- Seismology**: AUTH (Greece), IPGP (France), AUTH (Greece), Bogaziçi Univ. (Turkey), Univ. Patras (Greece), INFP (Romania). Diagram shows a seismic wavefield or stress tensor plot from E. Clévidé - IPGP.
- Pollution**: IPP-BAS (Bulgaria), IASA (Greece), EnvVO-SEEGRID. Diagrams show ozone concentration maps for basic and 50% reduction scenarios.
- Hydrology**: CRS4 (Italy), Univ. Genève (CH), Univ. Neuchâtel(CH),INHGA (Romania), Institute for Water Resources "Jaroslav Černí", Belgrade and CSASA at University of Kragujevac, Serbia. Diagram shows a map of forecasting seawater intrusion in a coastal aquifer from J. Kerrou Univ. Neuchâtel.
- Geospatial platform**: IMAA(Italy), INFN(Italy), EMA (France), Univ. do Minho(Portugal). Diagram shows the CYCLOPS Platform interface.

Success Stories:

Springer - Earth Science Informatics, Special Issue « Grid Computing in Geosciences » with 12 papers 2, 1-2, pp139, 2009

5PhDs, several proceedings of conferences and workshops

Since 2008, 2 Sessions about Grid and Earth Science and a booth at EGU

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