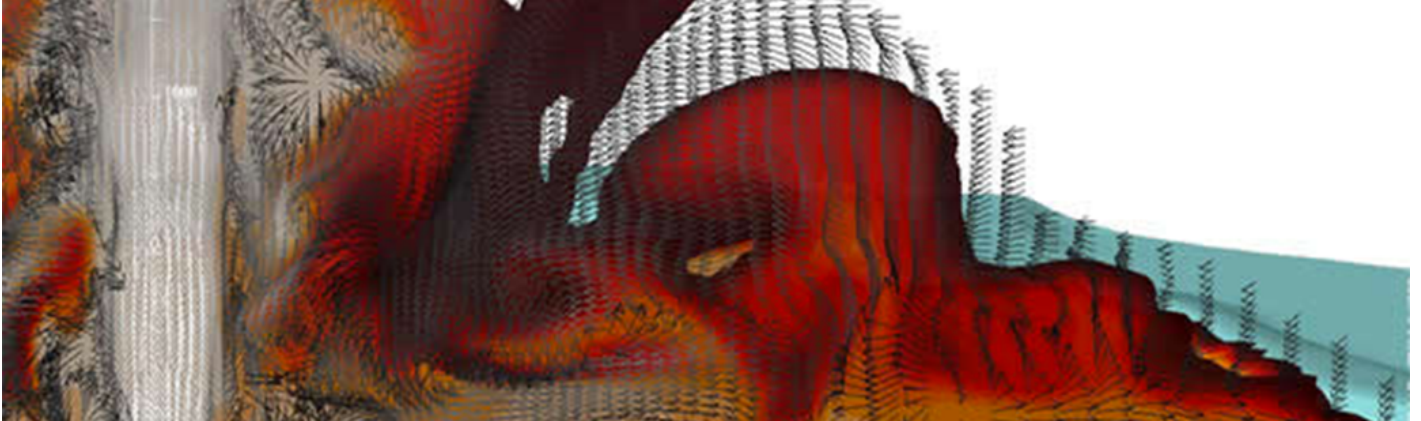


EPOS for integrated data provision



The impact of EPOS is not limited to the access of multidisciplinary data, which already represents a challenging goal for the entire solid Earth science. Data mining and data archiving is only a first step in the EPOS construction. Easy-to-find data and data products as well as tools for visualization, processing and analysis provide the best way to sustain an integrated approach to research and drive science forward, expanding the range of feasible research. These services will be designed and partly implemented during the EPOS Implementation Phase.

Geoscientists are generating products through their research activities (such as maps, Earth models, earthquake source models, lava flow simulations...) and most of these new data products can be further integrated and made accessible through the EPOS platform. In this way, geoscientists become new data product providers and will be involved in EPOS both as users and as providers.

The new e-science opportunities and the ICT innovation will facilitate users' accountability and traceability to preserve data by adopting appropriate and shared access data policies.

Once the EPOS integrated services will be operational, the new e-infrastructure will further facilitate sharing the outcomes of research, not solely by linking data to publications by guaranteeing data traceability and re-use, but also in convincing scientists to share the products of their investigations (that is, generating new data products). The impact of this collaborative platform for scientific research is still unexplored.

Building a research infrastructure as a platform for discovery will facilitate collaborations between Earth and IT scientists. The perspectives guaranteed by this federated approach to data provision for science have a global relevance and impact going beyond the Earth science and IT communities.

Last, but not least, the next generation of scientists must be trained in developing data intensive applications and modelling. This will be promoted by using the new opportunities provided by e-science innovation (we named "Computational Earth Science, CES" in EPOS IP).