



## **What tools does Europe have to encourage community building in the geosciences, and how well do they work?**

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Our roots take us back to being hunter-gatherers. We gathered food and jealously guarded it with our lives. Geoscientists have not evolved from this attitude. The data that we have gives us an advantage over our rivals. It allows us to keep our research teams alive - to feed our PhD students and research associates. We do not like to lose this advantage.

This is very different to many other science domains where sharing results is essential. Most notable is the field of particle physics, where for years scientists have used open archives for their data so that new discoveries can be made. Paleontologists, entomologists etc. also like to share their specimens via museum collections, web exchange etc..

EC directives such as the INSPIRE directive on data, the Berlin declaration do allow us to move forward. What European science research agencies do not do well enough is to enforce the release of data. This requires obligations, but also research councils providing the resources required for archiving and open access publication. Some agencies (surveys, satellite operators) require data to add-value and sell the products in order to be viable.

Astronomers and planetary scientists and to a lesser extent oceanographers, understand the importance of "big science" to sell their research to funding agencies and to the public in general. Hydrologists, geologists, geophysicists respectively still work on the catchment, mountain range, and continental margin scale. There are too few large geoscience initiatives in Europe - they are costly and we have to get multi-national agreements in place before we can engage. The US, China, Russia, India and other large nations have the advantage of being able to implement nationally and with large

expensive projects. Our national pride still comes before, and gets in the way of, European action. As an example, we only have one carbon sequestration demonstration project in Europe. Despite the current US policy on climate change, they have more than 5 projects moving forward.

We need a European Science Co-ordinating Agency, with a strong geosciences component, fast. The ESF could have, could it still (?) provide this resource.