RESIF - EPOS: a French integrated Antenna for the Observation of Earth Deformation

H. Pedersen (1,2) and R RESIF Working Group (2)
(1) University of Grenoble, Observatoire de Grenoble, LGIT, Grenoble Cedex, France (helle.pedersen@obs.ujf-grenoble.fr),
(2) Cnrs - insu

RESIF - EPOS (Réseau Sismologique Français) will be a significant contribution to EPOS (European Plate Observing System) that has recently integrated into the ESFRI Roadmap. Through this project we intend to completely renovate the French permanent and temporary seismic and geodetic networks with the aim of building a single antenna for the observation of earth deformation at all time scales. In metropolitan France, the present broadband and short period regional seismic networks will be merged and extended to obtain a regular grid of 50 broadband (10Hz-120s) stations and 120 intermediate period (30Hz-40s) stations with higher station density in the seismically most active areas. The already extensive French accelerometric network will also integrate RESIF. The very long period earth deformation will be measured by permanent GPS stations. Data from the permanent RESIF antenna will be freely available via standard request tools in real-time or near real-time via the unified French data portal FOSFORE and integrated into European and Worldwide data exchange systems. The portable seismic, GPS and gravimeter equipment will be strongly increased to obtain a pool of approximately 350 instruments (GPS, intermediate band and broadband seismic). Data from field experiments using the RESIF portable equipment will also be freely available, with a standard distribution delay.