



RESIF-SI : an information system to collect, archive and distribute French seismological and geodetic data

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The RESIF (Réseau Sismologique Français) project aims to completely renovate the French permanent and temporary seismic and geodetic networks together with the distribution of associated data. The project has just been funded through a French EQUIPEX grant for a period of 10 years. RESIF will be a significant contribution to EPOS (European Plate Observing System) that has recently integrated into the ESFRI Roadmap.

A first goal of RESIF is to build a single antenna for the observation of Earth deformation at all time scales. This presentation focus on the second task of RESIF, the information system (RESIF-SI). RESIF-SI is in charge of the validation, distribution and archiving of all French seismic and geodetic data. RESIF-SI is starting with the integration of seismic data. Integration of geodesy data should start in about three years, based on ongoing EPOS developments and the definition of new international standards. RESIF is expected to produce 20TB of seismic data per year. These data will be integrated into RESIF-SI through a distributed system which will collect, distribute and archive, French seismological and geodetic data to provide researchers with high quality data for analysis and interpretation. The RESIF-SI architecture is organized in two levels based on existing resources provided by the RESIF partners Four observatories/research laboratories (Paris, Strasbourg, Nice and Grenoble) and the CEA. will be in charge of collecting and validating seismic data. A national center, hosted by the University of Grenoble, will be in charge of archiving and distributing the data. Data from the permanent RESIF antenna will be freely available via standard request tools in real-time or near real-time via a unified French data portal and integrated into European and Worldwide data exchange systems. Data from field experiments using the RESIF portable equipment will also be freely available, with a standard distribution delay.