



RESIF national datacentre : new features and upcoming evolutions

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RESIF is a nationwide french project aimed at building an high quality system to observe and understand the inner earth. The goal is to create a network throughout mainland France comprising 750 seismometers and geodetic measurement instruments, 250 of which will be mobile, to enable the observation network to be focussed on specific investigation subjects and geographic locations.

The RESIF data distribution facility is operated by Université Joseph Fourier (Grenoble, France), as a part of Grenoble Observatory datacentre. Implementation is on its way since two years.

Data from french broadband permanent network, strong motion permanent network, and mobile seismological antenna are freely accessible as realtime streams and continuous validated data, along with instrumental metadata, delivered using widely known formats and requests tools.

Status and new features of the datacentre will be presented, eg:

- New data and datasets : the number of permanent stations rose by over 40 % percent in one year and the RESIF archive now includes past data (down to 1995) and data from new networks. Data from mobile experiments prior to 2011 is progressively released, and data from new mobile experiments in the Alps and in the Pyrenean mountains is progressively integrated.
- Data services : FDSN webservices and connection to European Integrated Data Archive have been implemented and deliver data and metadata. Details about latest improvements will be provided.
- Computing infrastructures : the Observatory datacentre is now connected to Grenoble University High Performance Computing facility. A typical use-case will be shown, performing intensive computing on RESIF data through the computing grid. Furthermore, the presentation will include updates about the Observatory storage and virtualization facilities, providing highly available data services to end-users.