GEODYN, EXP-07-2009
A Geodynamic facility at LSC

The LSC is located in one of the most active seismic areas in Western Europe, at the Pyrenean range which marks the limit between the European plate and the Iberian microplate. Therefore, the LSC site is particularly suitable to host an advanced geodynamical facility.

The Geodyn project will implement an observational infrastructure consisting of a broad band seismometer, a strong motion accelerometer, two laser extensometers inside the tunnel and two GPS stations at the surface, with the aim of monitoring continuously seismic activity and site deformations.

Management of the geophysical equipments will be done in cooperation between expert teams from the Institute of Earth Sciences J. Almera –CSIC (seismics), the University of Salerno, Italy (laser interferometers) and the University of Barcelona (surface GPS).

The geophysical data obtained with this infrastructure will allow to develop advanced studies of different geodynamic phenomena, both at local, regional and global scales.

On the other hand, the Canfranc data will be integrated in regional and European networks and databases, within large scale projects currently on-going as Topo-Iberia and Topo-Europe, as well as the starting programme EPOS (*ESFRI road map*), thus ensuring widespread scientific access to this Canfranc geodynamic facility.