

## Abstract

The central part of Catalonia encloses a big salt formation known as the "Conca Potásica". The area is quite wide (about 70 x 30 km). This geologic formation develops several subsidence, especially in the areas buried by surface and sub-surface mining. The subsidence has been noticeable in some areas, with displacements up to 1 m in recent years (second half of the XX century). The Department of Geotechnical Engineering and Geosciences has been involved in the design and implementation of a "light" network of vertex in order to monitor with GPS the behaviour of the whole area in the years to come.

By now, we have the full set of data corresponding to the first epoch of measurements, december 2007 (about 36 stations, with 16-20 hours of observables logging).

The main goal of this Thesis Degree Work ("Tesina") is to process the data with several GPS softwares and strategies, in order to verify the integrity of the data and the reliability of the monitoring setup.