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The Alpine Integrated CGPS Network EU Project

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The Alpine Integrated GPS Network for Continental Deformation project, operative since May 2004, is funded by the EU Alpine Space III-B Programme and involves several research and environmental institutions standing within the Alpine Space.

The aim of the project is to build up a high-performance transnational space geodetic network of continuous GPS (CGPS) receivers in the Alps and a number of campaign sub-networks. The Geodetic Alpine Integrated Network (GAIN) will consist of more than 35 CGPS and will be the first ever installed transnational geodetic network across the Alps.

The GAIN CGPS array, within the millimeter-per-year precision, will allow to quantify the crustal deformation at the scale of the whole mountain range. Densified subnetworks in some test areas will monitor transient deformation across known seismogenic faults. Some pilot initiatives within the project will be dedicated to the monitoring of atmospheric humidity and landslides.

The project will promote transnational co-operation in the field of space geodesy applied to natural hazards.