



Climate Change impacts in the Drôme department (southeastern France): the GICC-DECLIC Project (2010-2012)

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The national DECLIC (“Drôme: Eau, CLimat Impacts liés aux Changements”) project, coordinated at LTHE (Grenoble-France) has begun in beginning of 2010 and is financed by the national GICC-2 program. This project deals with the climatic variability and the interactions in the Drôme’s low mountain range. The main goal is to initiate an operational partnership between academics (three research laboratories LTHE, PACTE and ESPACE) and the involved Territorial Agencies, to define potential climate changes and future adaptations. Analyses will concern especially the climatic variations observed during the last 50 years at the administrative scale (namely the “Département” in the French organization), and their significant impacts on the current and future water resources, i.e. pluviometric regimes, quality of the snow coverage, flow stream variations, availability of the resources. The express request from the local administrators concerns mainly the variations of plant productivity (forests and agriculture), and mainly those due to isolated or recurrent drought periods (productivity, biomass, phenology, use of water resources). DECLIC project also concerns interactions between climatic variations and departmental tourist activities, in connection with water resources (consumption and quality). The final objective is to write a « green paper » about adaptation strategies on climate change for policies.

The whole study will lean at first on a diagnostic study of climatic time-series and to various environmental data. One step will also use regional modelling of the impact of the climate on water resources. Besides geostatistic modelling, another methodology will use a simplified physical model that gives the benefit to take into account explicitly the topography at fine scale.