



The CARIPANDA project: Climate change and water resources in the Adamello Natural Park of Italy

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The three years (2007-2009) CARIPANDA project funded by the Cariplo Foundation of Italy is aimed to evaluate scenarios for water resources in the Adamello natural Park of Italy in a window of 50 years or so (until 2050). The project is led by Ente Parco Adamello and involves Politecnico di Milano, Università Statale di Milano, Università di Brescia, and ARPA Lombardia as scientific partners, while ENEL hydropower Company of Italy joins the project as stake holder. The Adamello Natural Park is a noteworthy resource in the Italian Alps. The Adamello Group is made of several glacierized areas (c. 24 km²), of both debris covered and free ice types, including the widest Italian Glacier, named Adamello, spreading on an area of about c. 18 km². Also the Adamello Natural Reserve, covering 217 km² inside the Adamello Park and including the Adamello glaciers, hosts a number of high altitude safeguarded vegetal and animal species, the safety of which is a primary task of the Reserve. Project's activity involves analysis of local climate trend, field campaigns on glaciers, hydrological modelling and remote sensing of snow and ice covered areas, aimed to build a consistent model of the present hydrological conditions and of the areas. Then, properly tailored climate change projections for the area, obtained using local data driven downscaling of climate change projections from GCMs model, are used to infer the likely response to expected climate change conditions. With two years in the project now some preliminary findings can be highlighted and some preliminary trend analysis carried out. The proposed poster provides a resume of the main results of the project insofar, of interest as a benchmark for similar ongoing and foregoing projects about climate change impact on European mountainous natural areas.