



## **The NextData Project: a national Italian system for the retrieval, storage, access and diffusion of environmental and climate data from mountain and marine areas**

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Mountains are sentinels of climate and environmental change and many marine regions provide information on past climate variations. The Project of Interest NextData will favour the implementation of measurement networks in remote mountain and marine areas and will develop efficient web portals to access meteorological and atmospheric composition data, past climate information from ice and sediment cores, biodiversity and ecosystem data, measurements of the hydrological cycle, marine reanalyses and climate projections at global and regional scale. New data on the present and past climatic variability and future climate projections in the Alps, the Himalaya-Karakoram, the Mediterranean region and other areas of interest will be obtained and made available. The pilot studies conducted during the project will allow for obtaining new estimates on the availability of water resources and on the effects of atmospheric aerosols on high-altitude environments, as well as new assessments of the impact of climate change on ecosystems, health and societies in mountain regions. The system of archives and the scientific results produced by the NextData project will provide a unique data base for research, for environmental management and for the estimate of climate change impacts, allowing for the development of knowledge-based environmental and climate adaptation policies.