MEASUREMENT OF POLLUTANTS IN THE SNOW DEPOSITIONS OF K2 AND EVEREST (NORTH SIDE)


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The study of the Himalayan snow deposition started on 2000 (Pumori) with the collection of snow samplings at different altitudes. The geographic isolation of Himalaya and Karakorum supplies a significant background of the xenobiotic pollutants concentration in the atmospheric depositions and an important instrument to evaluate the atmospheric processes connected to the transportation, allowing to identify the origin of the chemical species and the trace compounds.

The study involves macroconstituents, acidifying species, trace metals and some organic micropollutants present in the sub-surfacial snow layer. As final target this study will contribute to verify the real importance of the Himalaya and Karakorum range such as barrier to the northern diffusion of pollutants produced in the Asian subcontinent, producing the Atmospheric Brown Cloud (ABC) phenomenon.

These results will be compared with the measurements of the alpine snow depositions.