

Project of Strategic Interest NEXTDATA

Principal Investigator: Valter Maggi

Authors: Valter Maggi (DISAT-UNIMIB), Mattia de Amicis (DISAT-UNIMIB), Matteo Mattavelli

(DISAT-UNMIB)

D2.4.D (dicembre 2018): Archivio fisico di carote di ghiaccio, presso l'EuroCold Laboratory dell'Università di Milano Bicocca

In the Eurocold Lab, at the University of Milano-Bicocca, is stored all the ice cores drilled inside the NextData project and the other ice cores drilled before but used for the regional studies.

There are four sites investigated during the project. Two in the Italian glaciers, Lys Glacier at the Colle del Lys (Monte Rosa Goroup, Valle d'Aosta) and Mandrone Glacier at Pian di Neve (Adamello Group, Lombardy-Trentino border). Two ice cores drilled in the ice caves, ice deposits located in karst caves, the Leupa Cave on Kanin Mountain (Friuli Venezia Giulia) and the Schellemberger ice cave, south of Bavaria (Germany).

On the figure 1 the location of all the ice core drilled in the Great Alpine Region, and in orange the sites where the ice cores were stored in the EuroCold Lab.

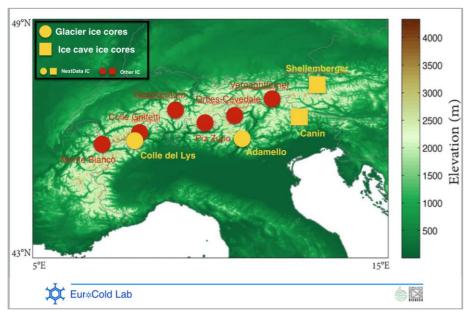


FIG 1

The list of ice core stored is:

Code	Massif	Site	Year	Тор	Bottom	Age
CdL 96	Alps Monte Rosa	Colle del Lys	1996	1996	1954	42
CdL 00/1	Alps Monte Rosa	Colle del Lys	2000	2001	1999	2
CdL 03/1	Alps Monte Rosa	Colle del Lys	2003	2003	1933	70
CdL 12/1	Alps Monte Rosa	Colle del Lys	2012	2012	2002	10
CdL 14/1	Alps Monte Rosa	Colle del Lys	2014	2014	2005	9
ADA 15	Alps Adamello	Pian di Neve	2015	2015	2013	2
ADA 16	Alps Adamello	Pian di Neve	2016	2016	1930	86
Kanin	Alps Monte Kanin	Leupa cave	2014	NS	NS	2000~
Schel/1	Alps Unterberg	Schellemberger IC	2014	2015	1965	50

All the ice core processing was done in the Eurocold Lab at University of Milano Bicocca where are ready facilities for managing samples and cores.

In figure 2 the ice core inspection done by transmitted light for evaluate differences in the firn/ice facies, define the ice layers and other special layers as volcanic or dust.

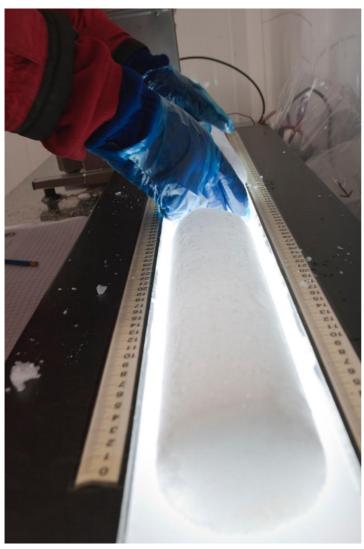


FIG. 2

In figure 3 is shown an ice core drilled at Colle del Lys in the spring 2012, during the starting of the NextData Activities

