

a vast scientific literature describes the ventilation mechanisms of these caves and the consequent thermal variations. Conversely, the lack of appreciable air circulation is considered by cavers as a clue to not extended cave, i.e. not interesting. However, from the biological point of view, in NW Italy the caves with single entrance are the most interesting: their more protected environment host many more endemic species.

In a cave, a few dozen meters from the entrance the stability of climatic parameters is so high that their variability becomes comparable with that of a 30-years climatic series. Therefore we could use the multiannual variations of the caves for know climatic trends. They would be much more representative of the traditional climatic indicators, and above all they would be abundant even in low-altitude areas, free of glaciers.

The climatic study of caves with single entrance

temperatures, humidity, thermal exchanges