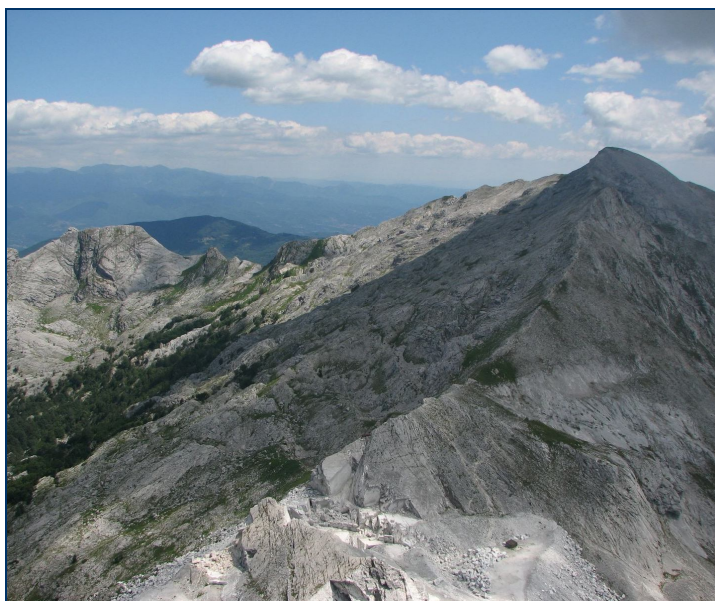


<b>location</b>	
region	Tuscany
province	Lucca
municipality	Minucciano
sector	Tambura
toponym/locality	Carcaraia
<b>interest</b>	
scientific interest	hypogean karst phenomena hydrogeology
contextual interest	hiking (speleology)
interest evaluation	representative
level of interest	international
<b>conservation status</b>	
characteristic/condition	good
risk of natural deterioration	non-existent
risk of anthropogenic deterioration	non-existent



### **geological and environmental description**

Abisso Paolo Roversi belongs to the karst area of Carcaraia, situated on Mt. Tambura (1895 m) northern side. Hypogean phenomena are concentrated in this area of the Apuan Alps, characterized by more than 150 explored cavities and some complex karst Systems, for an overall length of underground passages of more than 50 km.

Abisso Roversi outer opening is situated at 1710 m a.s.l., at the core of a doline-like depression. It is located near the mountain range main watershed, in the stretch between Mt. Tambura peak and Passo della Focolaccia (about 1645 m). Abisso Roversi has a linear extension of 4200 metres, but its main feature is the remarkable height differences, amounting to 1350 m a.s.l. (100 m of positive difference and 1250 m of negative one). In particular, the abyss vertical wells reach terminal siphons at the bottom, at 460 m a.s.l. not far away from the phreatic base level, situated at around 350 m. Most of the cavity has a vadose origin, with wells following vertical fractures inside the dolomite Marble formation. These descending elements are also characterized by a single vertical 310-m deep environment (black hole or Mandini well), which is one of the largest in the world. The cave has also elements with a horizontal course allegedly evolved from ancient tunnels of phreatic origins. These elements are characterized by cave-in and rooms of remarkable dimensions (the largest measures 50 x 80 x 50 m).

The colours of the torrent flowing inside Abisso Roversi testify to the link between the cave and the source of the river Frigido in Forno di Massa. In other words, Mt. Tambura underground water emerges after flowing underground for about 4.5 km (beeline distance).

### **description of the level of interest**

The level of international interest in this karst cavity stems especially from its huge height differences. Abisso Roversi is the deepest cave in Italy and ranks twentieth in the world list (data updated in September 2010).

An added value is given by underground water flowing towards superficial watershed, linking inland side recharge areas to coastal side karst springs.