

ABSTRACT
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**Moulins and Contact Caves in the Gornergletscher (Switzerland):
Morphology and hydrology**

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The Gornergletscher is located in the mountain group of M. Rosa (Swiss Alps). The ablation zone is relatively flat and a few fractured; this morphological condition allows the surface drainage of meltwater. Supraglacial streams often plunge down into moulins that feed directly the englacial drainage. Repetitive investigations, since 1985, have allowed surveying more than 40 moulins and contact caves; some of them have been explored to the englacial water table (from – 30 to –140 m). The life of the moulins ranges from 3 to 5 years and it depends on the local ice flow rate: the faster the movement, the shorter the life period. Field observations suggest that an important role in controlling the development and the geometry of moulins is played by the level of englacial