



Proceedings of the Royal Society B - Climate, immigration and speciation shape terrestrial and aquatic biodiversity in the European Alps

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Luiz and many colleagues from Eawag, WSL, NMBE and the IEE discuss the relative contribution of immigration, speciation and extinction to the assembly of biodiversity in island-like habitats. They detect biogeographic and genetic signatures associated with two mechanisms, namely (i) a glacial species pump where isolation in glacial refugia accelerates allopatric speciation and (ii) adaptive radiation in underused adaptive zones during ice-free periods.

A high proportion of the endemic Alpine biodiversity is very young making it very vulnerable to climate change. The mechanisms and consequences of species loss will likely differ for different species groups with different evolutionary history.

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