



Post-orogenic exhumation history by low-temperature thermochronology in Central Galicia (Cantabrian Mountains, NW Spain)

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The study area of the recent presentation is located in Central Galicia, NW Spain, which was affected by three major tectonic events: 1) the Variscan orogeny that ended in the Late Paleozoic, 2) Mesozoic rifting related to the Pangea break-up leading to the opening of the Atlantic Ocean and the Bay of Biscay, and 3) limited convergence between Iberia and Eurasia since Middle Eocene times.

The presented data is part of the study by Grobe et al. (Abstract-No. EGU2010-1214) and aims to quantify the complex post-orogenic history of cooling, denudation, and long-term landscape evolution of Central Galicia. Thermochronological data (apatite fission-track) were combined with t-T path modelling using the software code HeFTy©.

The data set comprises five samples with apatite fission-track ages that range from 115.2 (5.9) Ma to 154.6 (11.6) Ma. The presentation also considers thermochronological data (apatite fission-track and U/(Th-He) ages from Grobe et al. (subm./EGU2010-1214).

Dominated by a major NE-SW trending post-Variscan fault system the study area is separated in at least two blocks by the Lugo fault. Thermochronological data, however, suggest a more differentiated tectonic evolution.