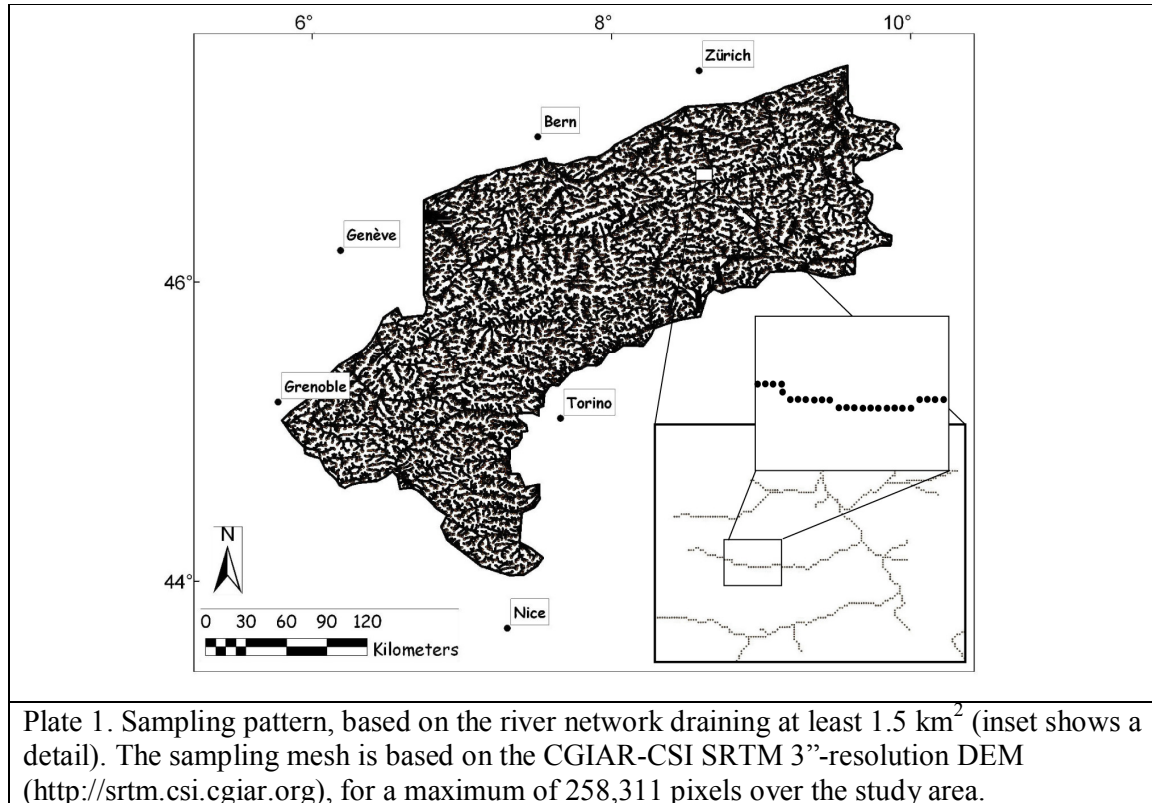1   **APPENDIX**

2   A1: Maps used in the study of correlations between long-term exhumation trends and present-day

3   forcing parameters (Table 1, appendices A1, A2 and A3), and in the cross-sections (Figure 3).

4

Plate 1. Sampling pattern, based on the river network draining at least 1.5 km^2 (inset shows a detail). The sampling mesh is based on the CGIAR-CSI SRTM 3"-resolution DEM (http://srtm.csi.cgiar.org), for a maximum of 258,311 pixels over the study area.
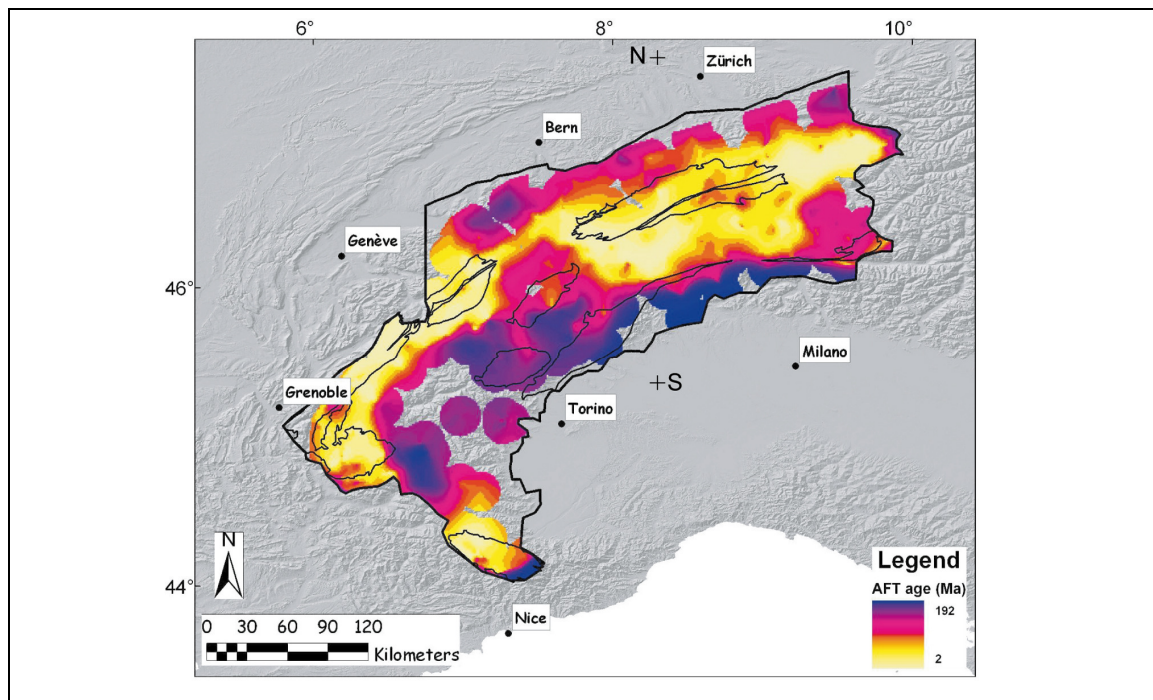
5

Plate 2. Interpolated apatite fission track (AFT) age, after Vernon et al. (2008). N-S: location of cross-section shown in Figure 3
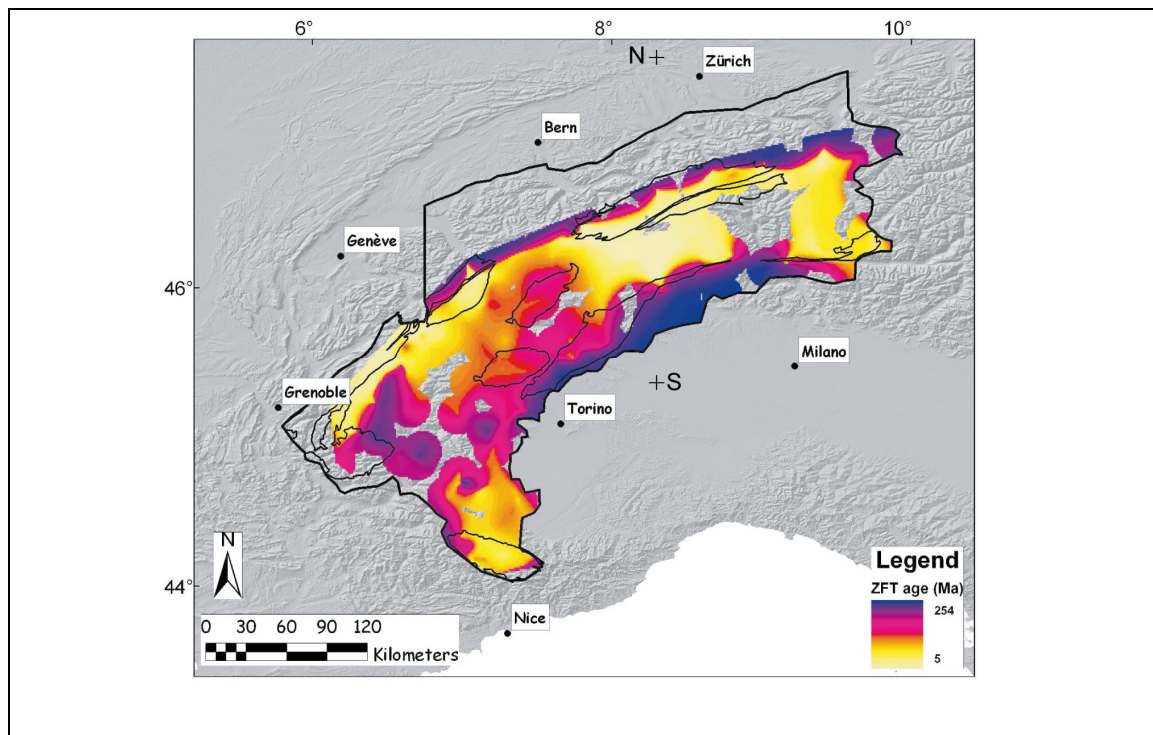
6
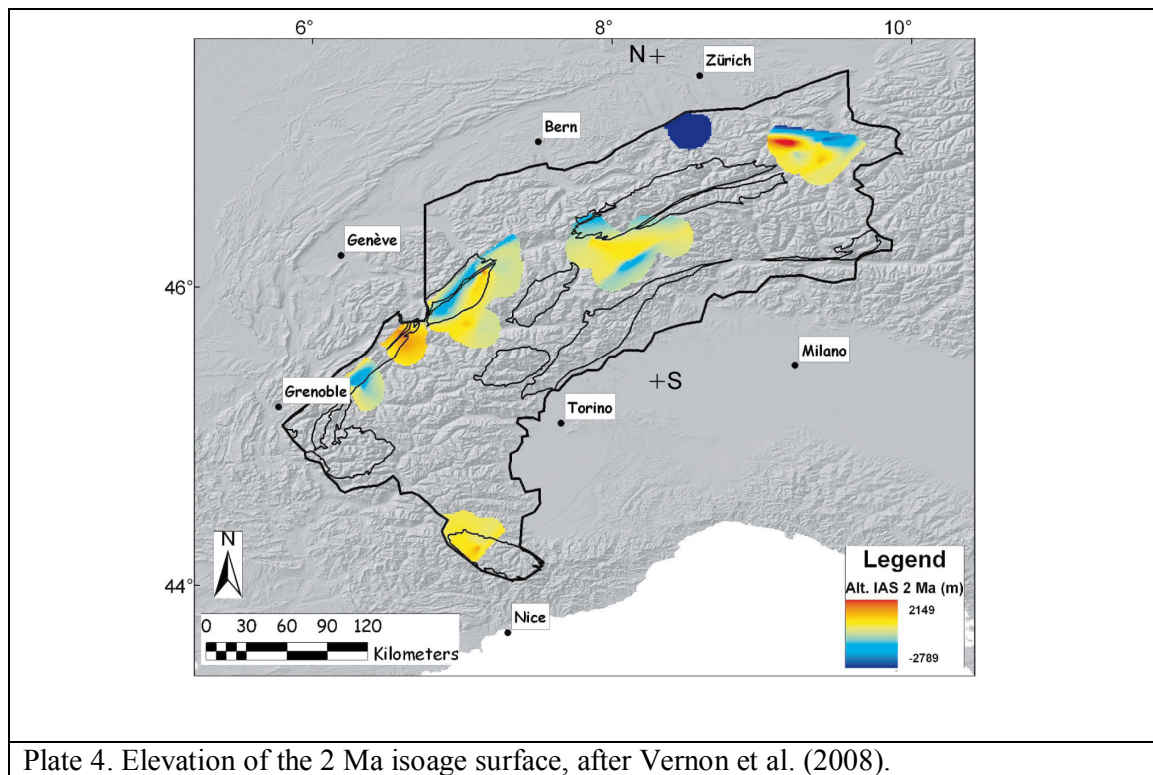

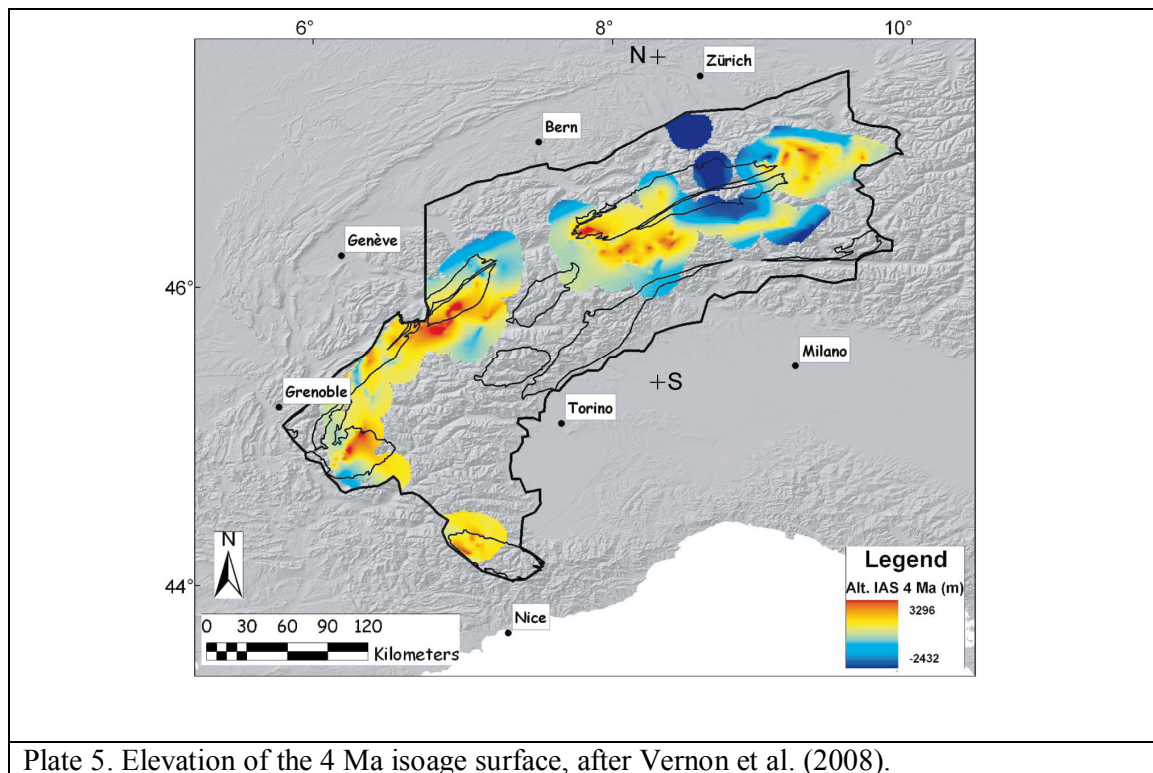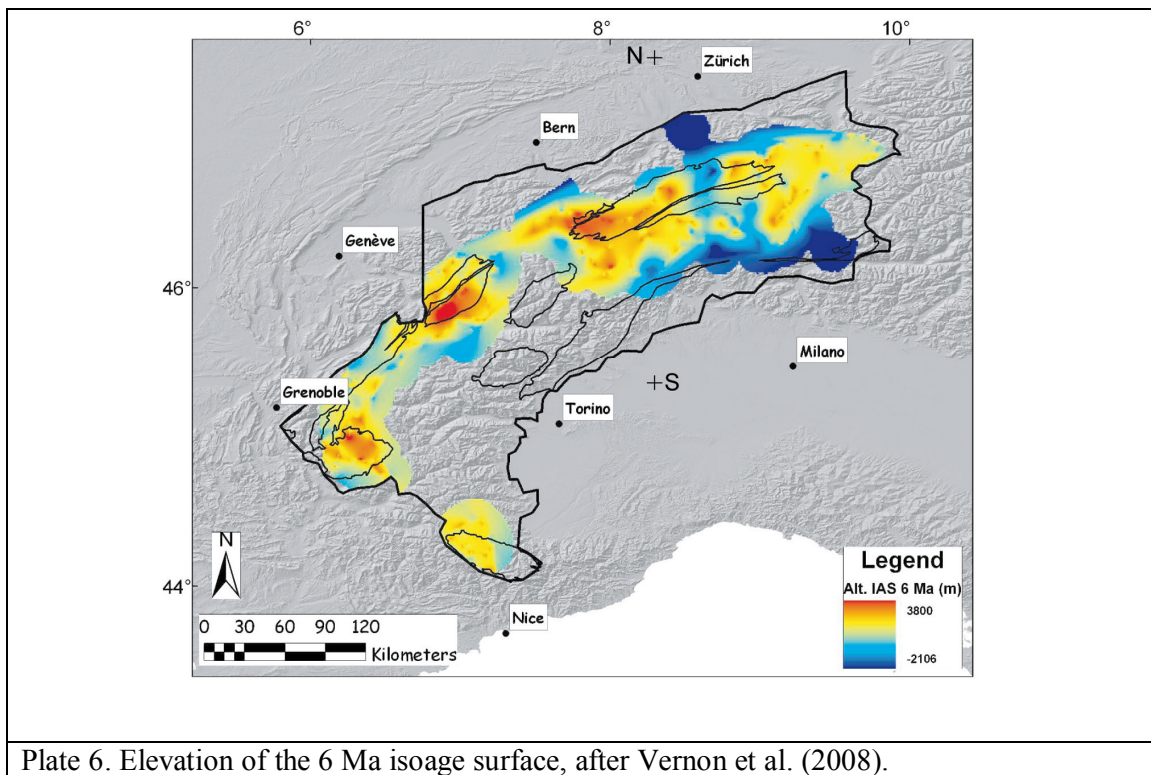Plate 3. Interpolated zircon fission track (ZFT) age after Vernon et al. (2008).

7

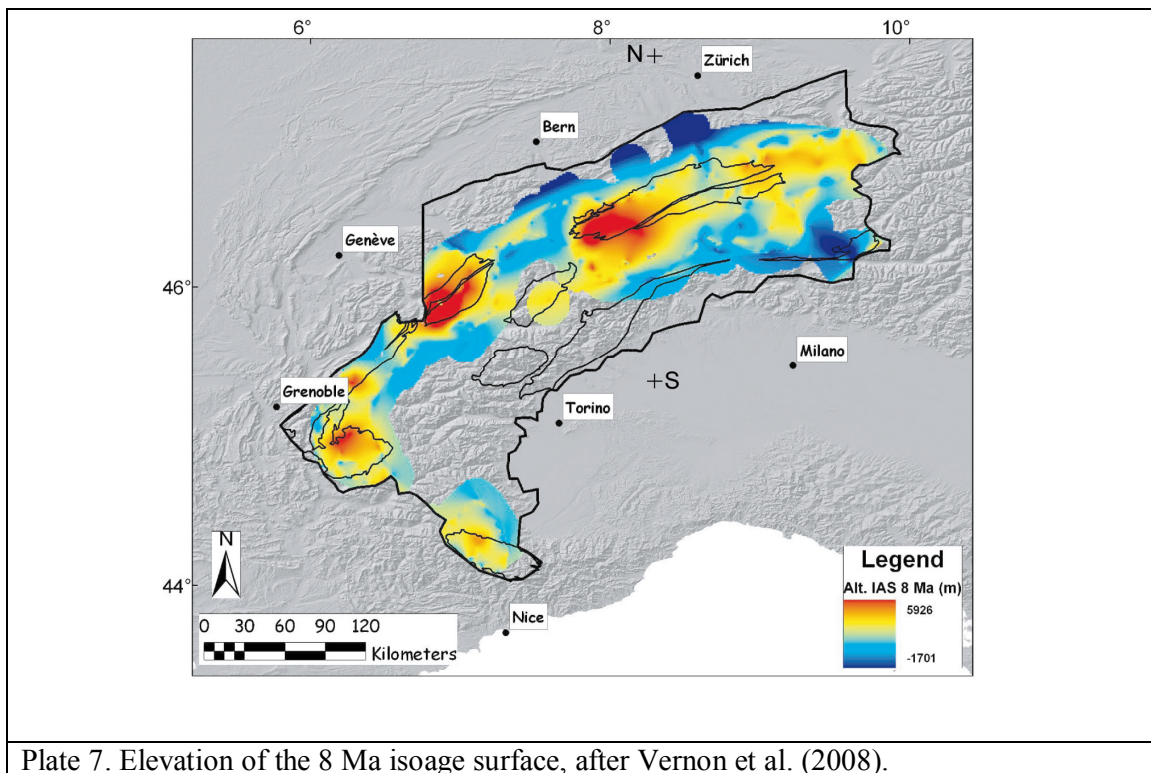Plate 4. Elevation of the 2 Ma isoage surface, after Vernon et al. (2008).

8

Plate 5. Elevation of the 4 Ma isoage surface, after Vernon et al. (2008).

9

Plate 6. Elevation of the 6 Ma isoage surface, after Vernon et al. (2008).

10

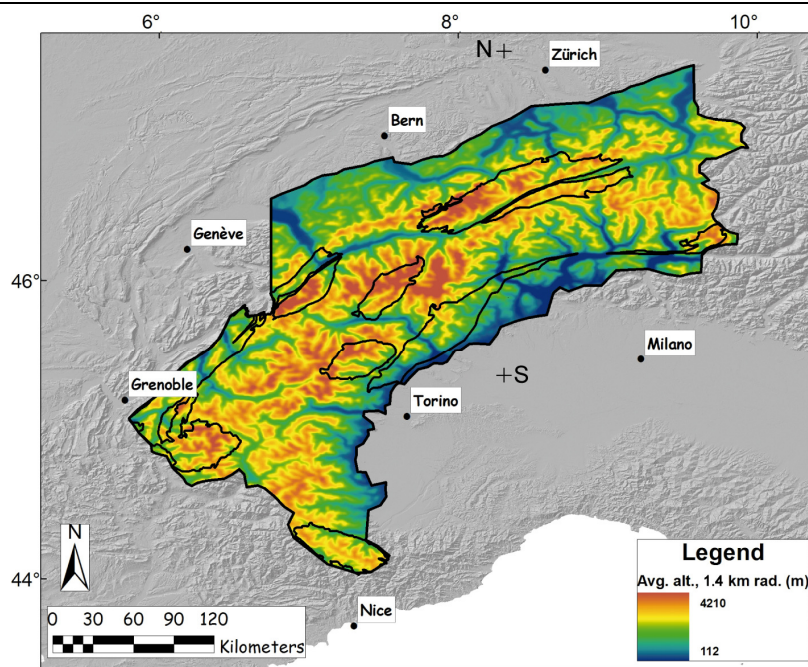
Plate 7. Elevation of the 8 Ma isoage surface, after Vernon et al. (2008).

11

Plate 8. Mean elevation in a 1.4 km radius, calculated using the DEM obtained from the CGIAR-CSI SRTM 3"-resolution database (http://srtm.csi.cgiar.org).
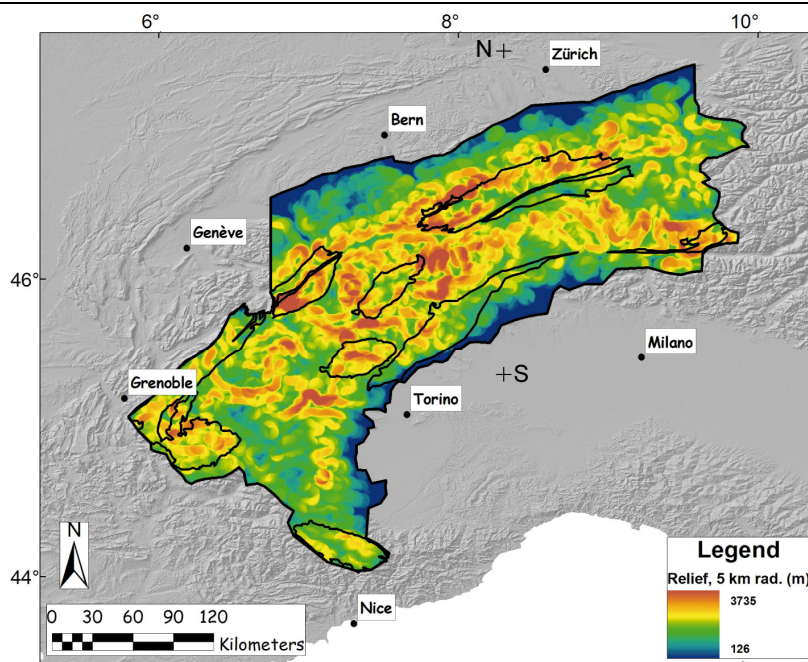
12

Plate 9. Relief (difference between maximum and minimum elevation) in a 5 km radius, calculated using the DEM obtained from the CGIAR-CSI SRTM 3"-resolution database (http://srtm.csi.cgiar.org).
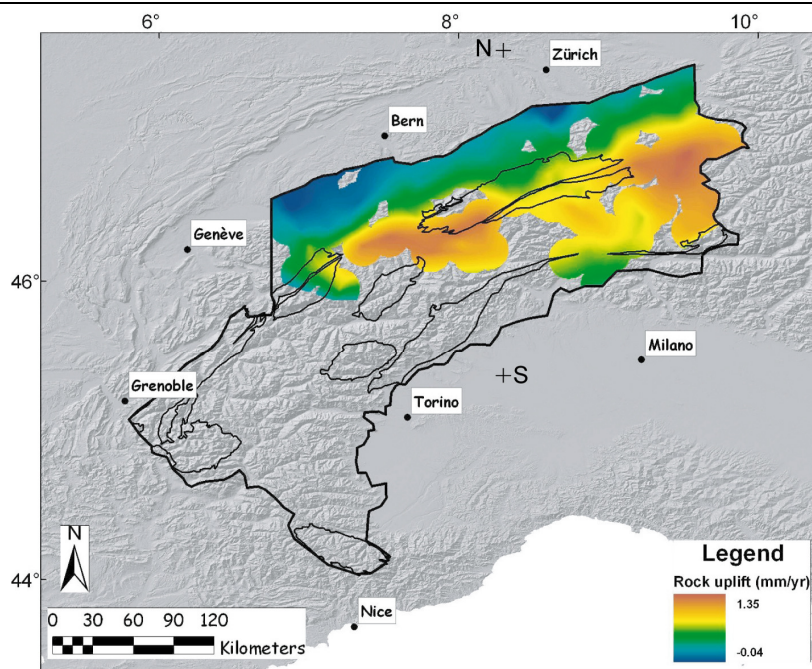
13

Plate 10. Annual uplift rate measured by geodesy, from the Swiss Federal Office of Topography (SwissTopo) geodetic database (Schlatter, 2007).
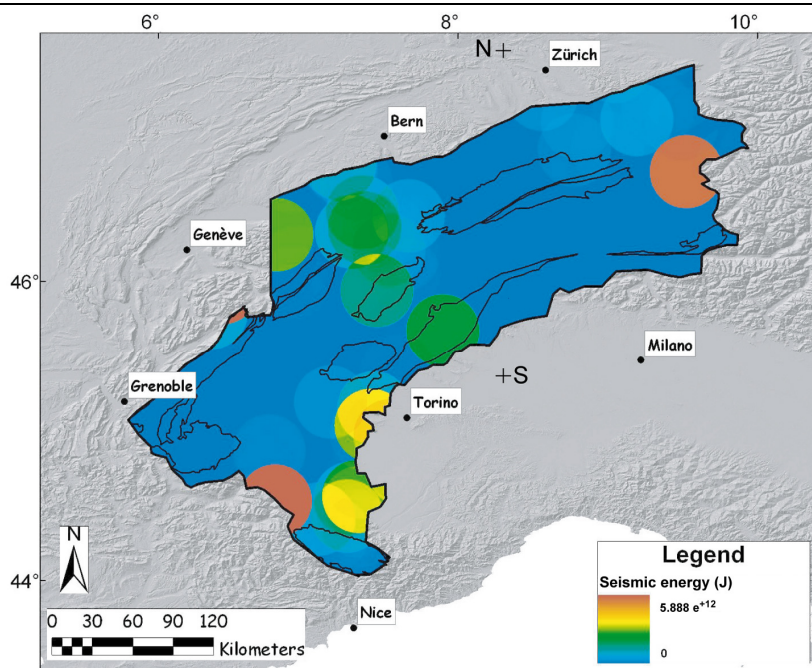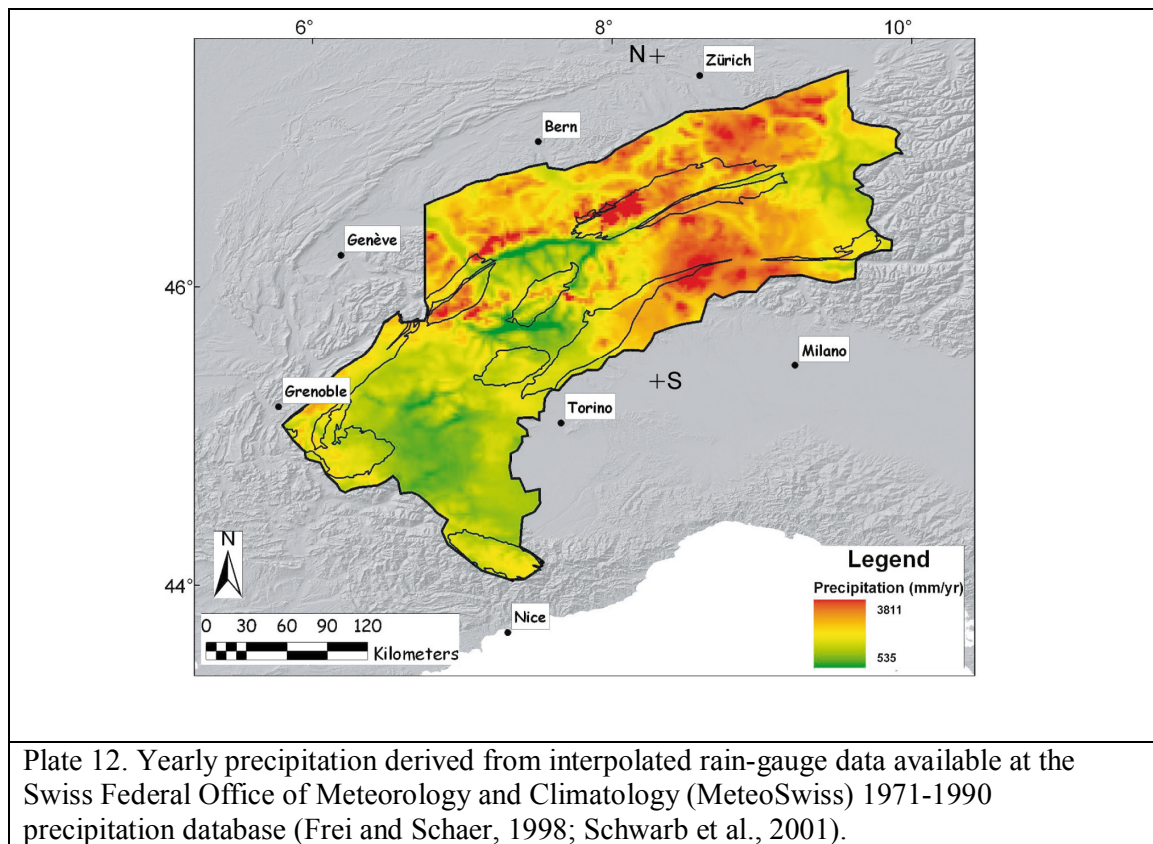
14

Plate 11. Cumulated seismic energy released, using the earthquake database in Delacou et al. (2004), for the record over the 1959-2000 period for which the focal mechanism is known.

15

Plate 12. Yearly precipitation derived from interpolated rain-gauge data available at the Swiss Federal Office of Meteorology and Climatology (MeteoSwiss) 1971-1990 precipitation database (Frei and Schaer, 1998; Schwarb et al., 2001).

16

Plate 13. Annual cumulated flow derived from the precipitation record (Plate 12) and the river network. This calculation neglects the effect of local precipitation recycling due to evapo-transpiration.

17

Plate 14. Average annual unit stream power, calculated from the annual cumulated flow (Plate 13) and the local DEM slope.
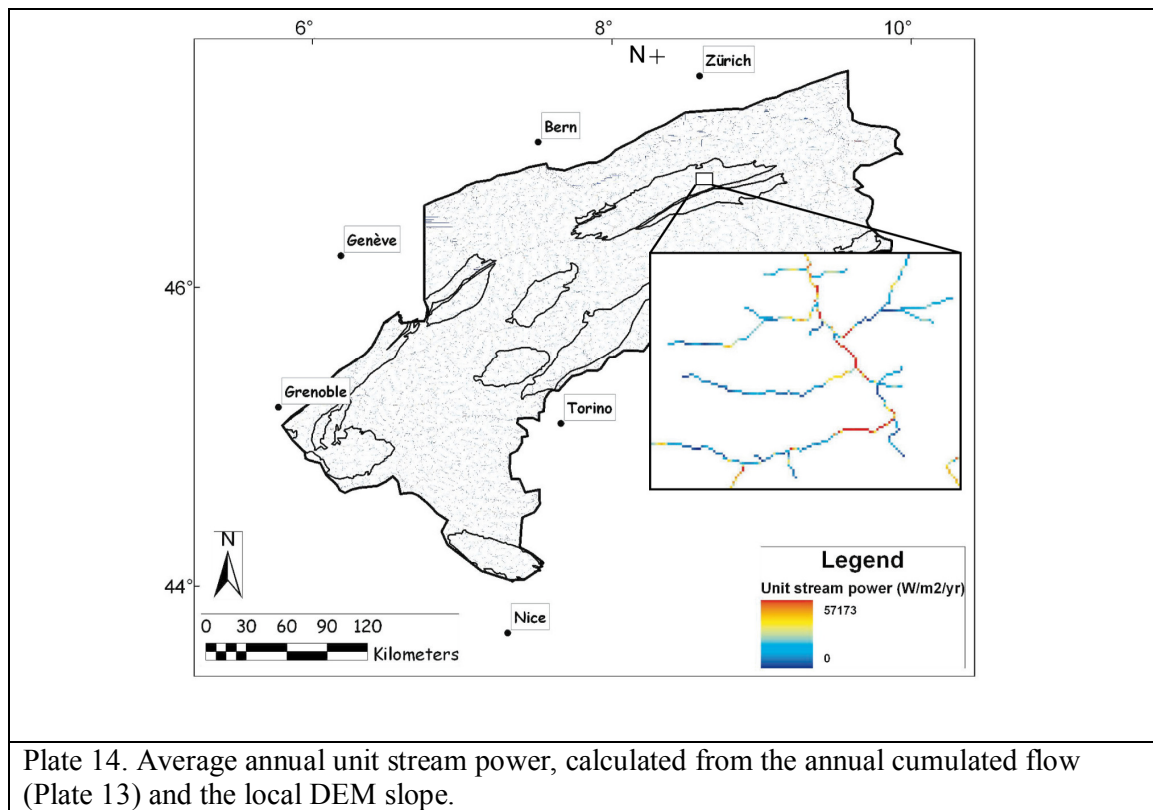
18

19   A2: Table of Kendall τ-b correlation coefficients between different control parameters

20

	Rock uplift	Precipitation	Cumulated flow	Stream power	Seismic energy	Relief (5 km)
Precipitation	-0.207					
Cumulated flow	0.004	0.045				
Stream power	0.192	0.016	0.335			
Seismic energy	-0.067	-0.251	-0.049	-0.061		
Relief (5 km)	0.397	-0.056	-0.022	0.219	-0.083	
Mean elevation	0.248	-0.036	-0.191	0.076	-0.013	0.284

21   A3: Table of Kendall τ-b correlation coefficients between different measures of long-term

22   exhumation

23

	AFT Age	2 Ma iso-age surface elevation	4 Ma iso-age surface elevation
2 Ma iso-age surface elevation	-0.153		
4 Ma iso-age surface elevation	-0.317	0.406	
Distance between 4-2 Ma iso-age surfaces	-0.325	-0.060	0.535

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