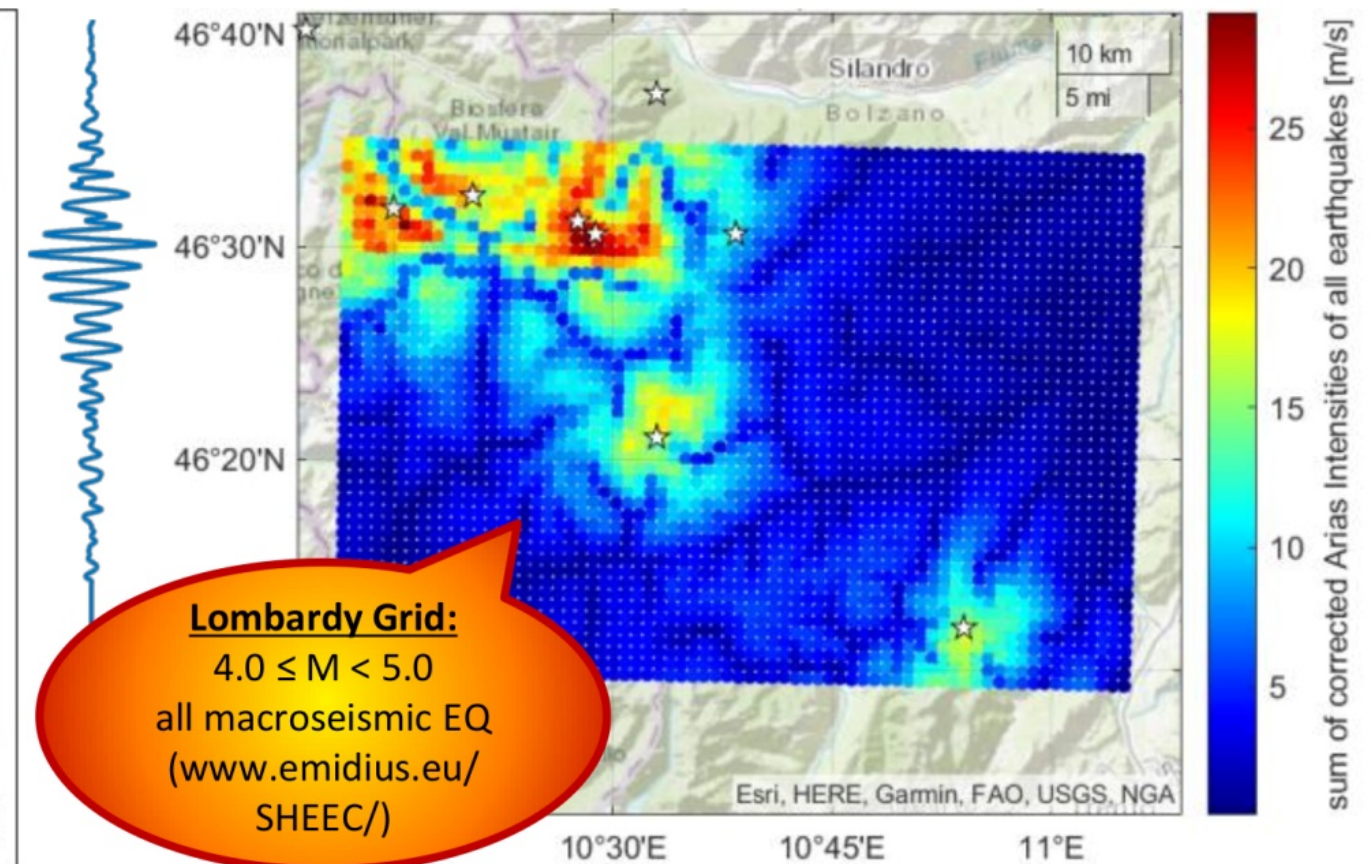
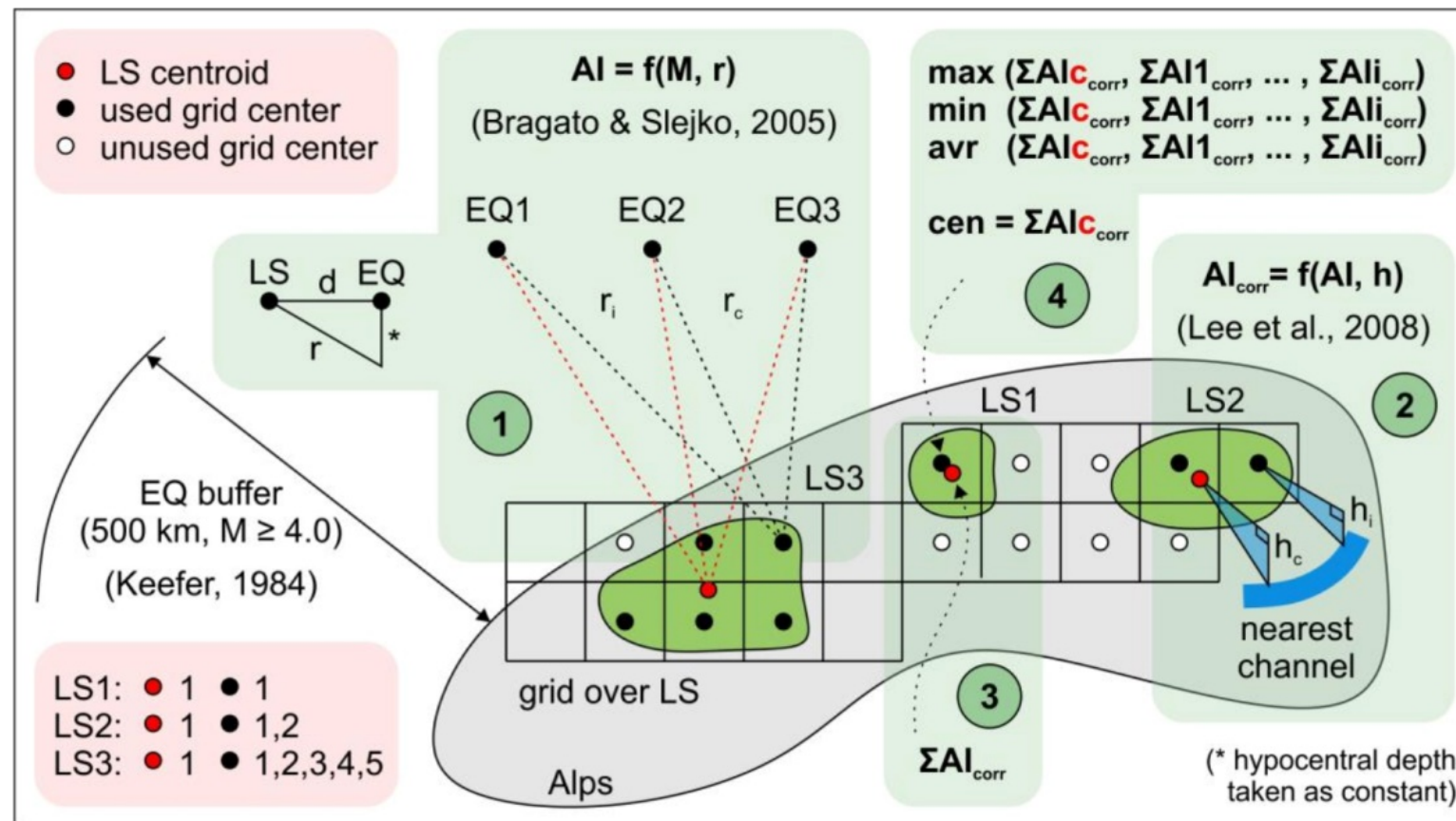


Quantifying the seismogenic impact on mass movements in the Alps in terms of Arias Intensity

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$$\log_{10}(AI) = -5.25 + (3.83 - 0.380 \cdot M) \cdot M + (-5.20 + 0.01390 \cdot M^3) \cdot \log_{10}(r)$$

Bragato & Slejko (2005)

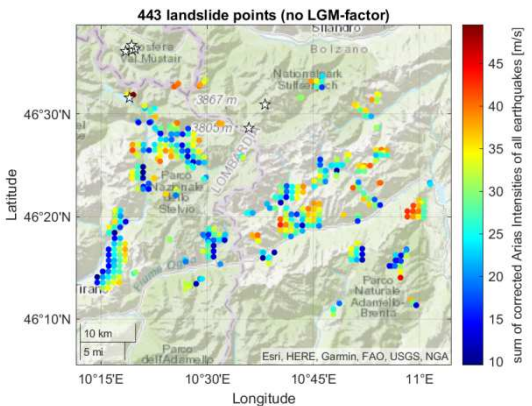
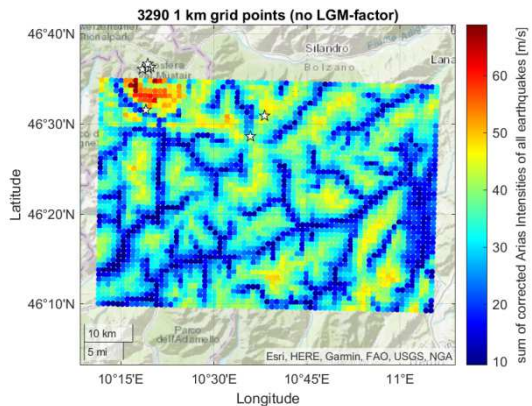
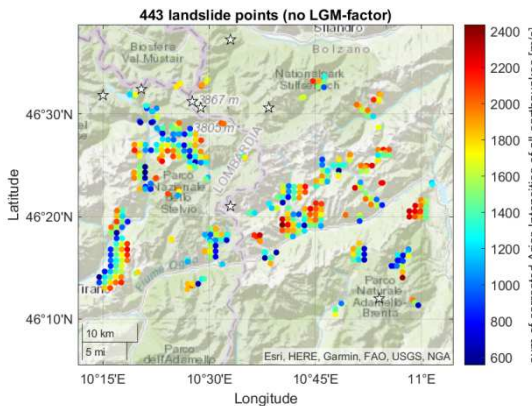
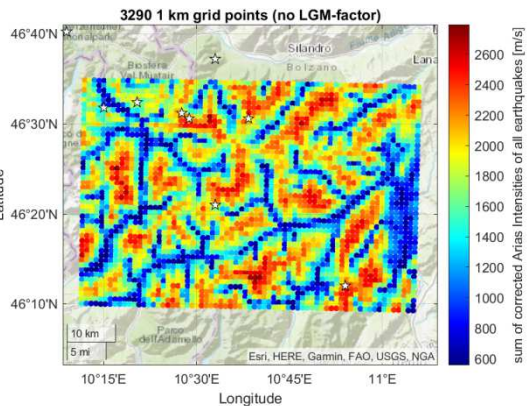
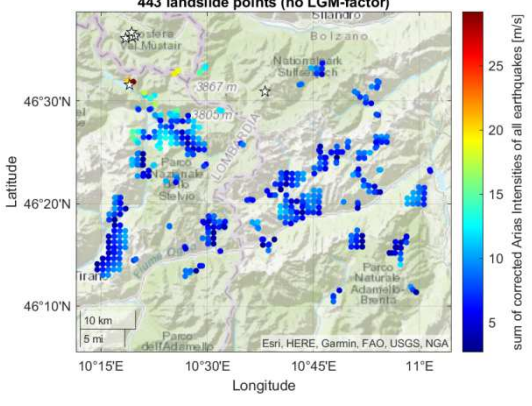
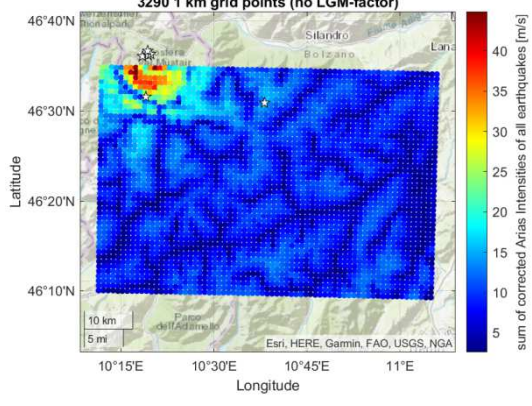
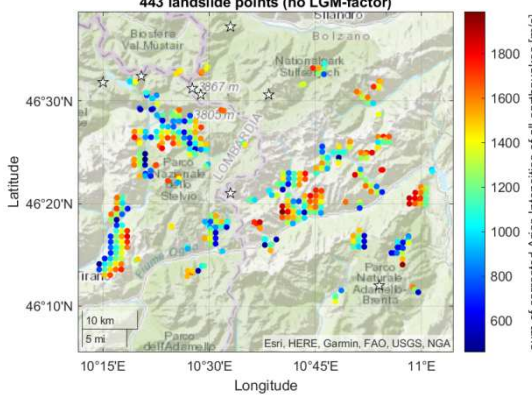
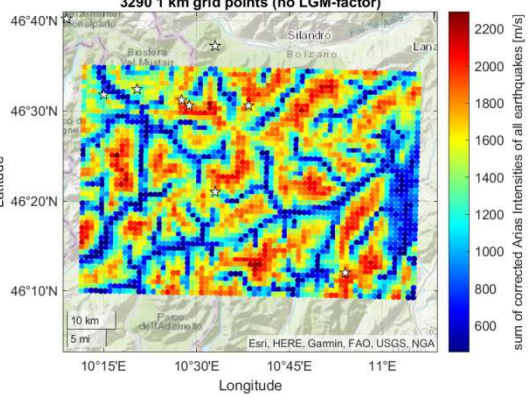
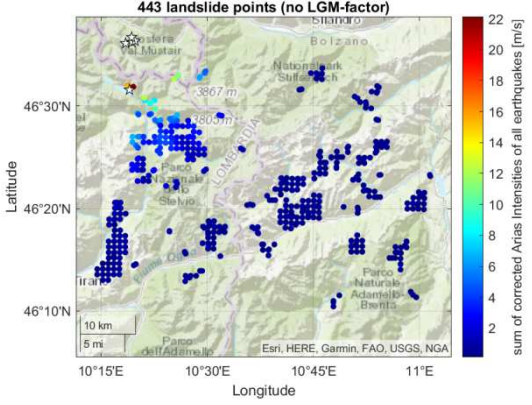
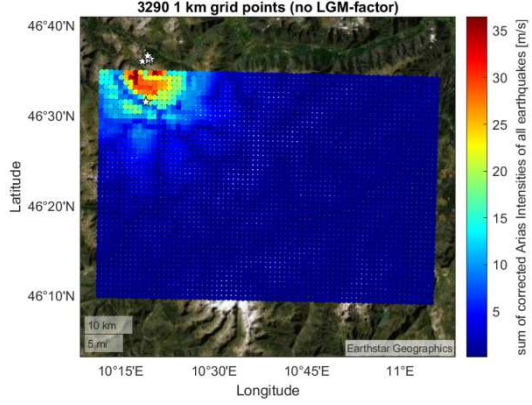
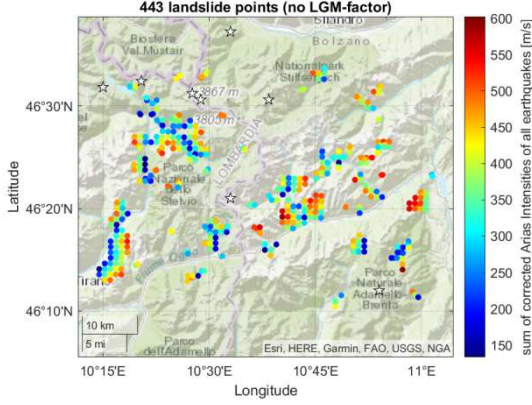
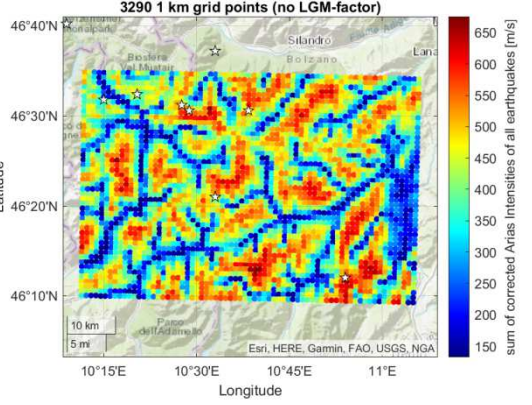
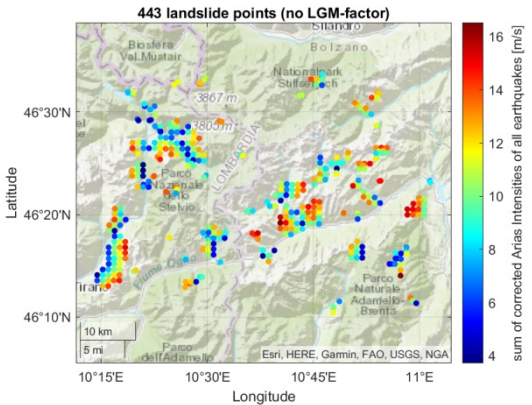
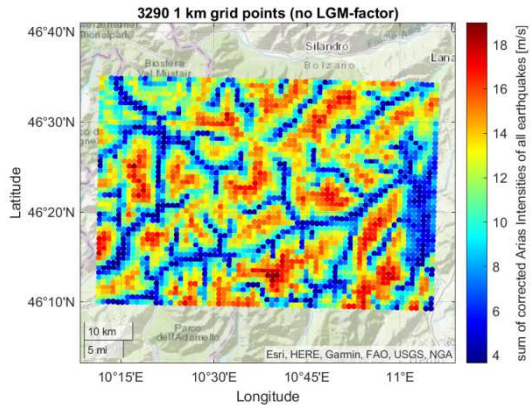
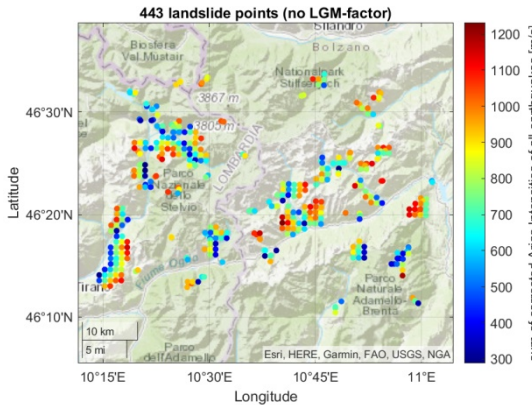
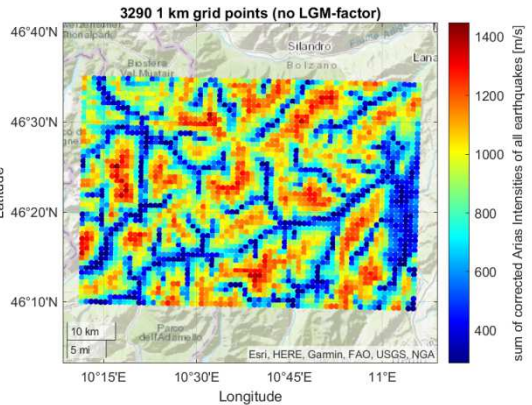
$$AI_{corr} = \left(\sqrt{\frac{h}{93.8}} + 0.287 + 0.464 \right) \cdot AI$$

Lee et al. (2008)

Keefer D. K., 1984. Landslides caused by earthquakes. Geological Society of America Bulletin, vol. 95(4).

Lee C. T., Huang C. C., Lee J. F., Pan K. L., Lin M. L., Dong J. J., 2008. Statistical approach to earthquake-induced landslide susceptibility. Engineering Geology, vol. 100(1-2).

Bragato P. L., Slejko D., 2005. Empirical Ground-Motion Attenuation Relations for the Eastern Alps in the Magnitude Range 2.5-6.3. Bulletin of the Seismological Society of America, vol. 95(1).

INSTRUMENTAL		TEST	MACROSEISMIC	
landslides	grid	landslide vs. grid	landslides	grid
		filter 1: $M \geq 4.0$ filter 2: < all all > < 2074 EQ 3810 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < 1979-2019 1400-2000 > < 1853 EQ 3541 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < 1985-2005 1600-2000 > < 1059 EQ 3321 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < biggest biggest > < 1 EQ 1 EQ >		

INSTRUMENTAL		TEST	MACROSEISMIC	
grid (WITH AI correction)	grid (NO AI correction)	with AIc vs. no AIc	grid (WITH AI correction)	grid (NO AI correction)
		filter 1: $M \geq 4.0$ filter 2: < all all > < 2074 EQ 3810 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < 1979-2019 1400-2000 > < 1853 EQ 3541 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < 1985-2005 1600-2000 > < 1059 EQ 3321 EQ >		
		filter 1: $M \geq 4.0$ filter 2: < biggest biggest > < 1 EQ 1 EQ >		

INSTRUMENTAL		TEST	MACROSEISMIC	
landslide	grid	low M vs. high M (sep.)	landslide	grid
		filter 1: $4.0 \leq M < 5.0$ filter 2: < all all > < 1896 EQ 2869 EQ >		
		filter 1: $5.0 \leq M < 6.0$ filter 2: < all all > < 160 EQ 879 EQ >		
		filter 1: $6.0 \leq M < 7.0$ filter 2: < all all > < 18 EQ 60 EQ >		
none	none	filter 1: $7.0 \leq M < \text{end}$ filter 2: < all all > < 0 EQ 2 EQ >		

INSTRUMENTAL		TEST	MACROSEISMIC	
landslide	grid	low M vs. high M (cum.)	landslide	grid
		filter 1: $4.0 \leq M < 5.0$ filter 2: < all all > < 1896 EQ 2869 EQ >		
		filter 1: $4.0 \leq M < 6.0$ filter 2: < all all > < 2056 EQ 3748 EQ >		
		filter 1: $4.0 \leq M < 7.0$ filter 2: < all all > < 2074 EQ 3808 EQ >		
non change	non change	filter 1: $4.0 \leq M < \text{end}$ filter 2: < all all > < 2074 EQ 3810 EQ >		