Supplementary materials

Testing the predictive power of b value for Italian seismicity

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Seismicity maps

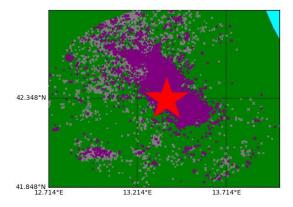


Figure 1. The map of the seismicity selected by the blind algorithm for L'Aquila earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

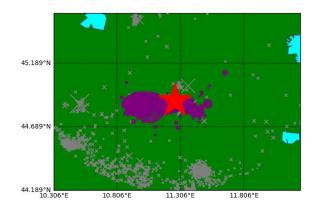


Figure 2. The map of the seismicity selected by the blind algorithm for Finale Emilia earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

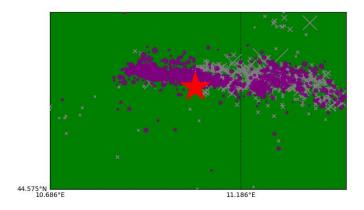


Figure 3. The map of the seismicity selected by the blind algorithm for Mirandola earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

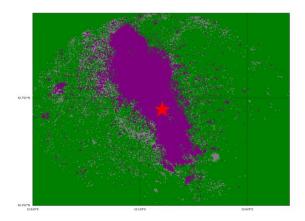


Figure 4. The map of the seismicity selected by the blind algorithm for Amatrice earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

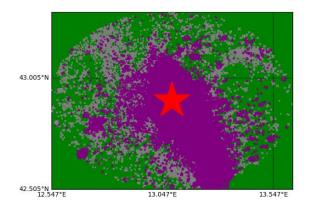


Figure 5. The map of the seismicity selected by the blind algorithm for Amatrice aftershock. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

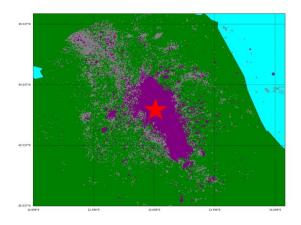


Figure 6. The map of the seismicity selected by the blind algorithm for Norcia earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

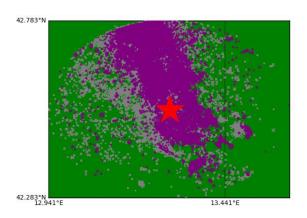


Figure 7. The map of the seismicity selected by the blind algorithm for Capitignano earthquake. The red star is the mainshock. Violet circles are the aftershocks and grey crosses are the earthquakes defining the background activity.

Kolmogorov-Smirnov test

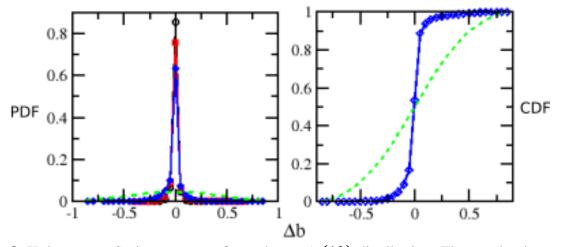


Figure 8. Kolmogorov-Smirnov test performed on a $(p(\Delta b)$ distribution. The p-value is computed from this maximum distance D between the cumulative frequency distributions, here is D=0.31. Therefore the distribution cannot be considered Gaussian.