

Figure S1. Map of the central Apennines showing all the seismic stations available (black) from the Italian National Seismic Network (INSN) and of the Mediterranean Very Broadband Seismographic Network (*MedNet*); the ones selected in this study are marked in red.



Figure S2. Data availability from January 2016 to April 2017 (blue dots) for all the stations of Figure S1. Red asterisks mark the 28 stations selected for this analysis.



Figure S3. Relative velocity variations measured from 20-day stacking of hourly CC of ambient noise recorded by the 28 stations shown in red in Figure S1. Colours represent the number of station pairs considered in the computation, vertical bars indicate the uncertainties of the measurements. The vertical red lines highlight the time of occurrence of the four Mw>=5.5 mainshocks as in Figure 2.