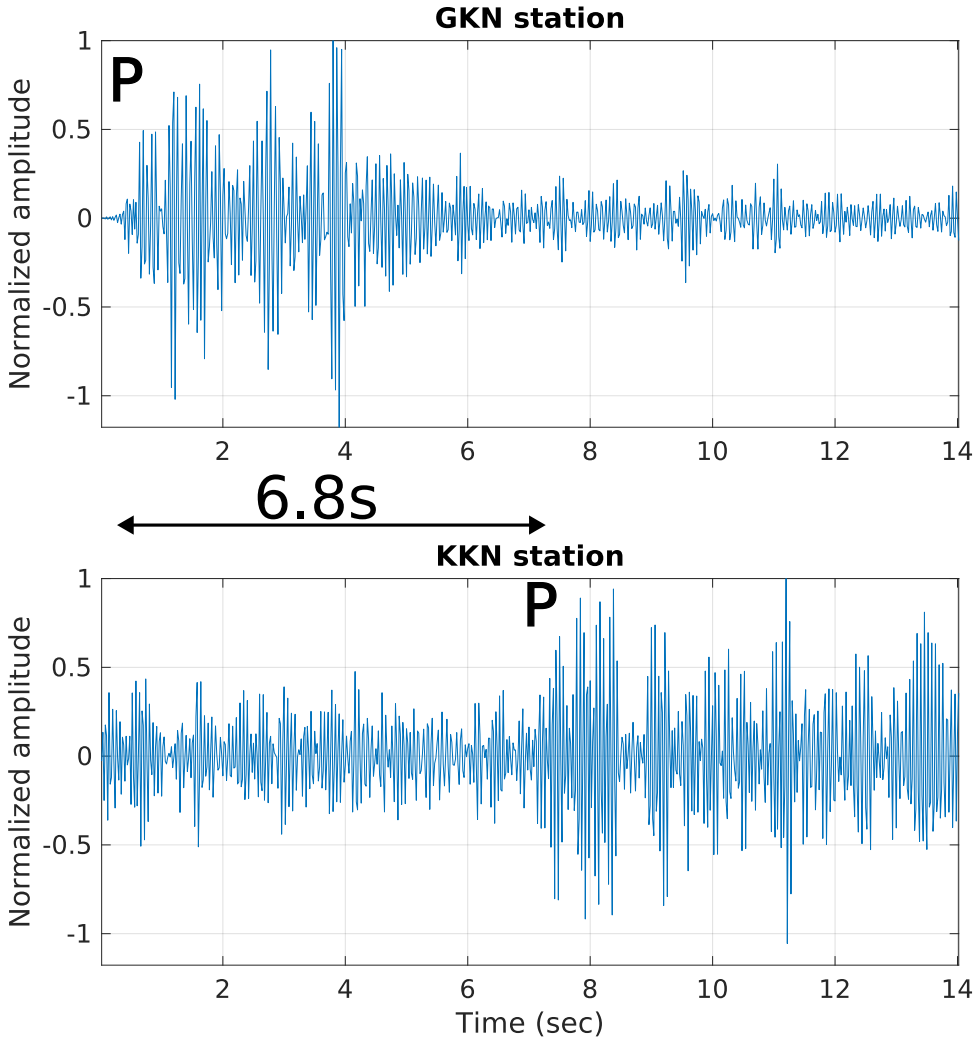

Fig. S1 Normalized recordings of the GKN and KKN station 28s seconds before the Gorkha earthquake filtering at high frequencies (f¿14Hz). There was an event occurring before the mainshock that has the same difference of P-wave arrival times of 6.8s than the Gorkha earthquake between GKN and KKN stations.

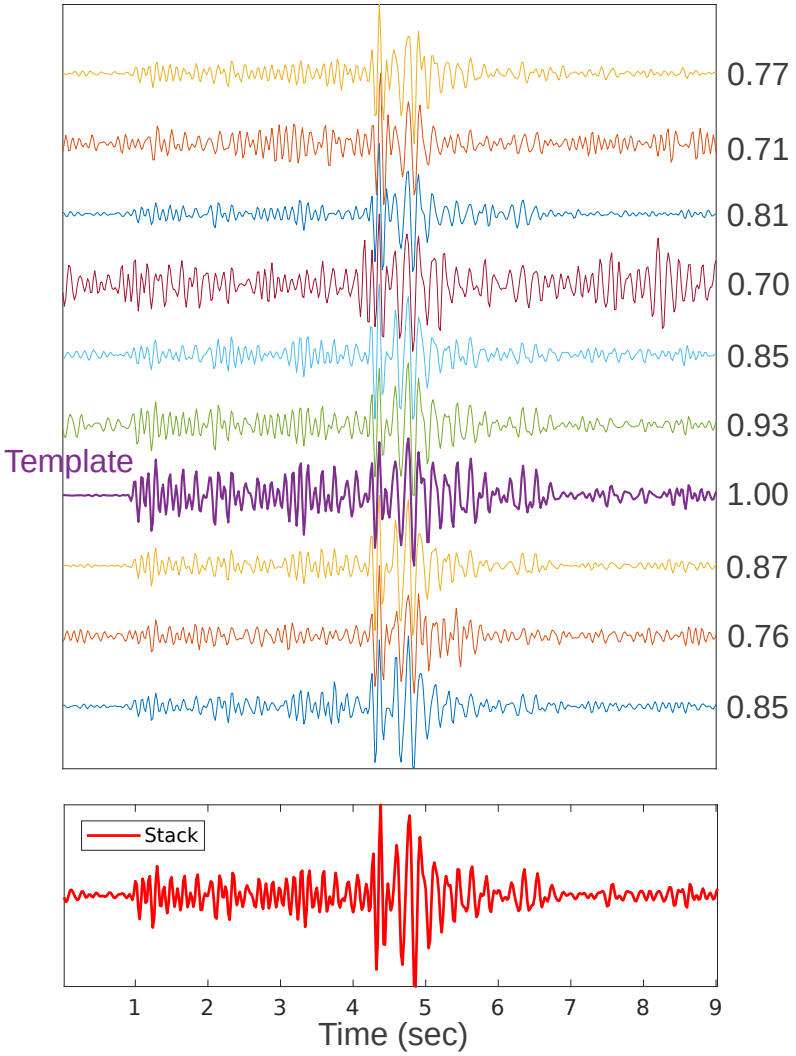

Fig. S2 Example of earthquakes detected. Note that the template has detected itself (purple waveform). The correlation value between the template and the detections is given on the right side. Bottom: stack of the newly detected earthquakes.

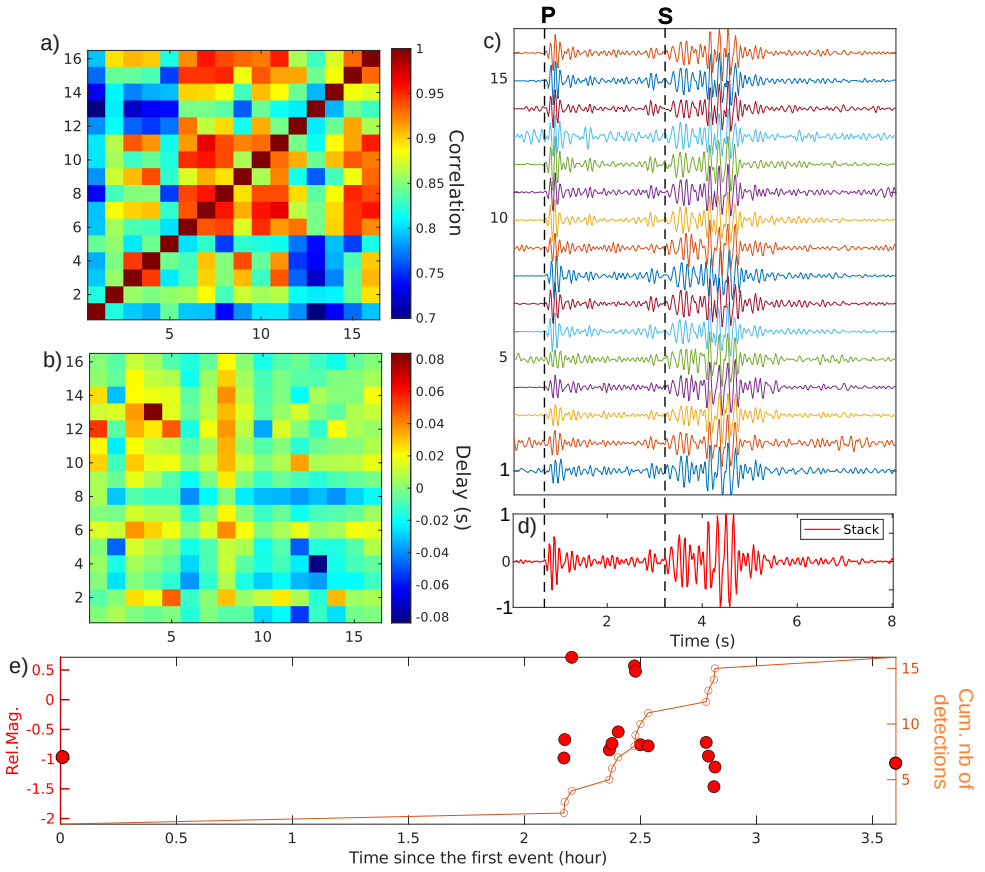

Fig. S3 Group of 16 earthquakes detected during 3.5 hours in period 2, on February 21 2010. a) Cross-correlation matrix between the earthquakes b) delay matrix; c) waveforms of the detected earthquakes with their stack at the bottom, d) cumulative number and relative magnitude of events with time with the zero at the occurrence of the first event of the swarm.

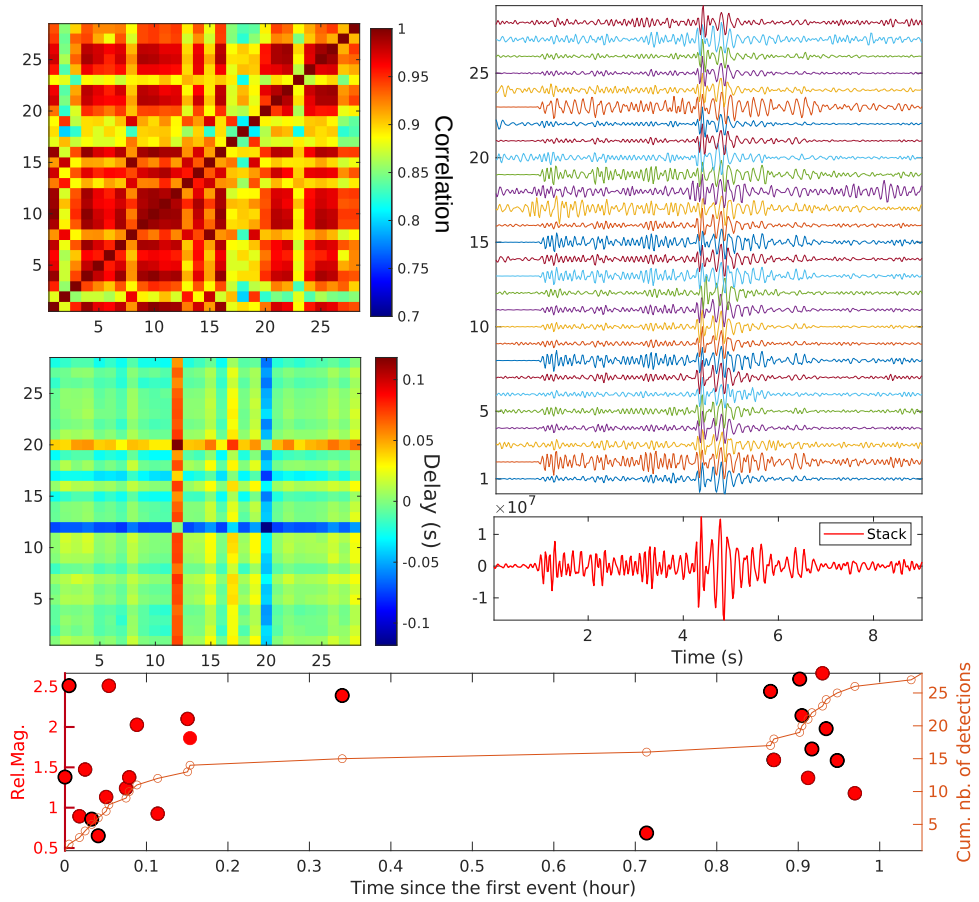

Fig. S4 Same as S3 for period 4 that corresponds to a large swarm of 30 earthquakes occurring in just one hour on the 19/03/2014 between 00h35 and 01h39, mainly detected by three templates.

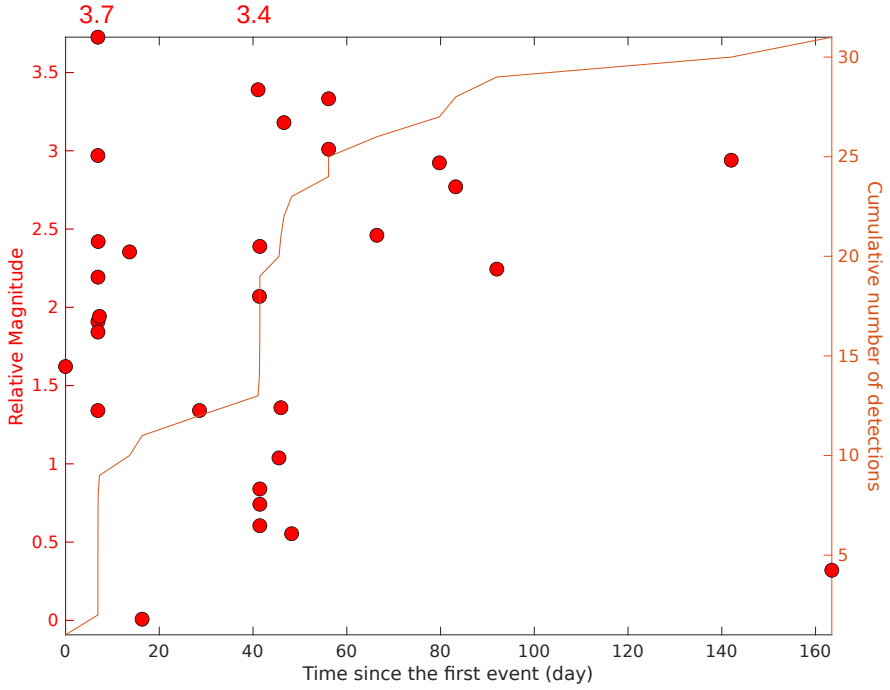

Fig. S5 Same as S3 for period 5 from 05/04/2014 to 26/08/2014. The first mainshock has a magnitude of 3.7 and occurs on April 13, 2014, triggering 12 earthquakes. The second has a magnitude of 3.4 and occurs on May 17, 2014, triggering a sequence of 20 aftershocks.

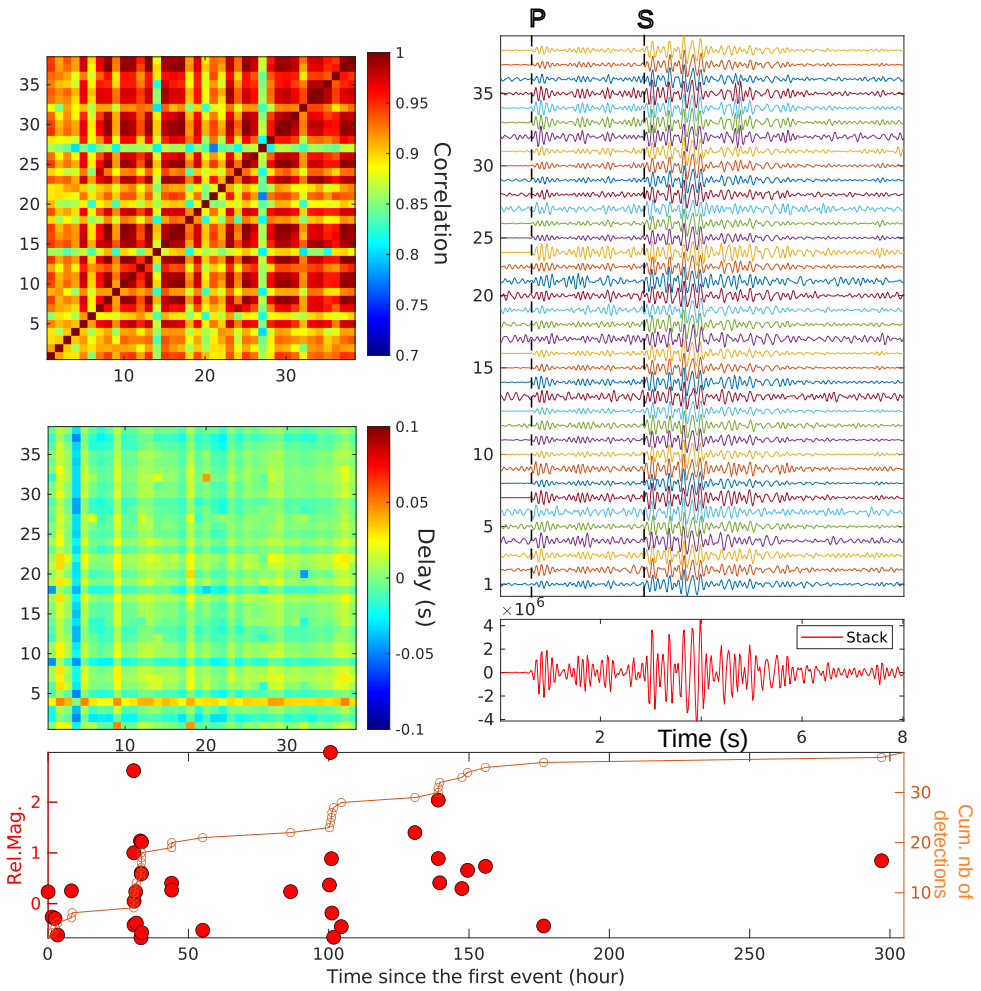

Fig. S6 Same as S3 for the 38 earthquakes occurring from the 20/03/2015 to the 02/04/2015, detected by two, very close by, templates.