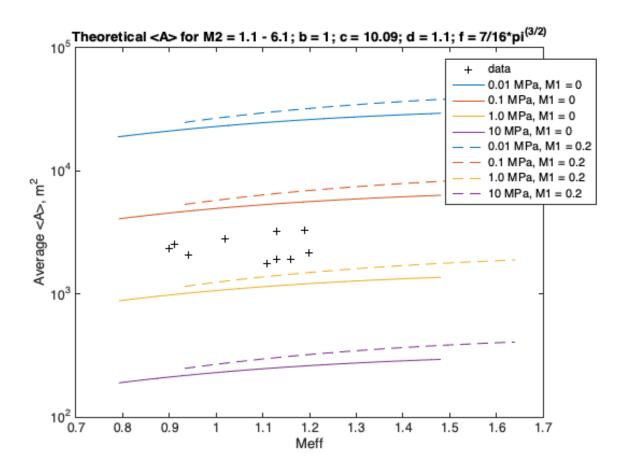
## Electronic supplement to the paper Growth of earthquake clusters by

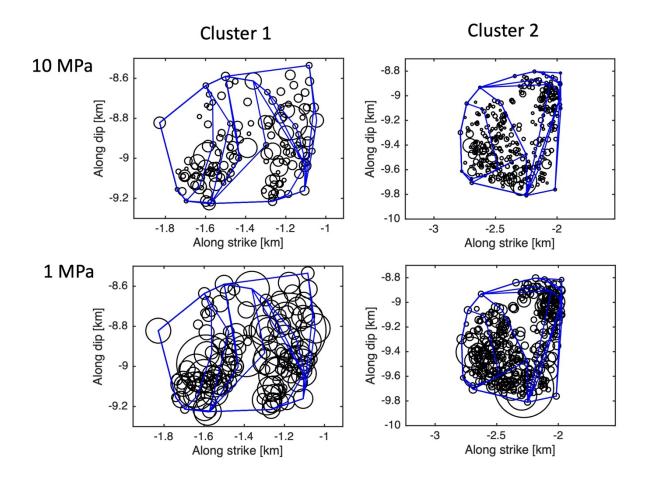
Tomas Fischer and Sebastian Hainzl, Frontiers of Earth Science, 2021



**Figure S1**. Dependance of the theoretical average rupture area  $\langle A \rangle$  (curves) obtained by Eq. (6) on the minimum magnitude  $M_1$ . Full lines show the theoretical average rupture area  $\langle A \rangle$  for  $M_1$ =0 and dashed lines for  $M_1$ =0.2. Line color indicates the stress drops of 0.01 MPa (blue), 0.1 MPa (red), 1 MPa (yellow), and 10 MPa (violet). The following constants were used in Eq. (6): b = 1.0, c = 1.09, d = 1.1 and f = 7/16 pi^(3.2).

Crosses indicate the measured average rupture area for Cluster 1 for the extending equidistant windows that included from 10 to 100% of events.

The maximum magnitude  $M_2$  has been increased from 1.1 to 6.1 so that the theoretical effective magnitudes cover the range of measured effective magnitudes. The corresponding effective magnitude  $\langle M_{eff} \rangle$  on the horizontal axis in was obtained by Eqs. (9) and (4).



**Figure S2.** Growth of the two analyzed clusters showing the average rupture areas estimated by Eq. (5) considering static stress drop of 10 and 1 MPa.