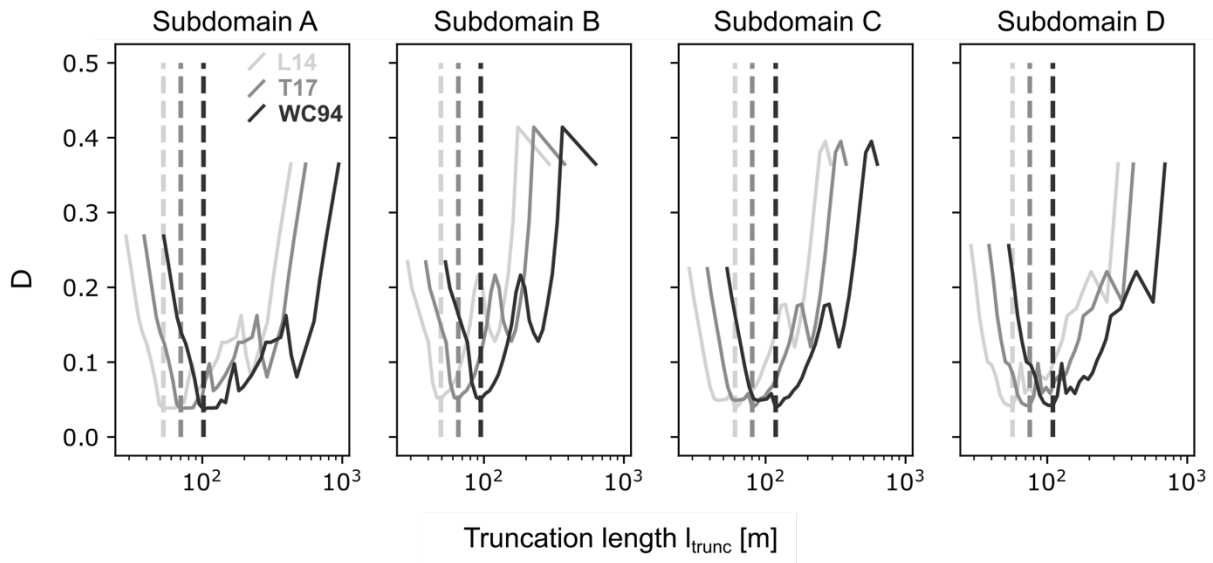


Figure S1: Kolmogorov-Smirnov plots of the individual fault trace maps from the four different locations to define the optimal truncation length l_{trunc} , indicated by the solid vertical lines. Note that for the 1:10 scale fault trace map at location D, we manually adjusted l_{trunc} due to the non-detected global minimum (dashed vertical line).



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Figure S2: Kolmogorov-Smirnov plots of the earthquake rupture size distributions from the four subdomains A-D to define the optimal truncation length l_{trunc} , indicated by the dashed vertical lines. The different scales of grey denote the used empirical $M_w - A_R$ scaling laws from Leonard (2014) (L14), Thingbaijam et al. (2017) (T17), and Wells and Coppersmith (1994) (WC94).