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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Methodology for Earthquake Rupture Rate estimates of fault networks: example for the Western Corinth Rift, Greece" *by* Thomas Chartier et al.

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It is indeed necessary and important task to propose a methodology to compute earthquake rate of the faults in the network for consideration in multiple fault segments rupture. This paper is scientific sounded and well presented. The methodology presented in this paper was tested on the Western Corinth Rift, Greece (WCR), which is in normal fault system regime. And, it is more distributed with moderate size earthquakes (M5.5∼6.5) historically. If it is possible, it would be good to discuss the pro and con of the methodology proposed in this paper to other faulting system, e.g. strike-slip or reverse. Or, this methodology might be limited only to the normal fault system, if so, why? As it is more in consideration of moderate size events, rather than other system,

which might giving larger Mmax as up to M>7 or larger?

Comments 1. The paper adopted the magnitude determination using Wells and Coppersmith (1994). This scaling is more scaled from strike-slip events from California. Is it also capable to the normal fault? Or, maybe to consider the fault area – magnitude relationship, which is more widely considered now in PSHA? Or, this cab be use din the logic tree. 2. The study in the Corinth Rift zone in a normal faulting system, historical events more in moderate earthquakes, what the implication this study can infer to other faulting system, as the strike-slip fault or collision fault system. 3. Terminology in using the words "subduction plane" in Table 2. What does that mean? Subduction zone interface events?

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