

SUPPLEMENTARY MATERIALS FOR

ANALYSIS OF STRESS CHANGES ON THE POSO FAULT CAUSED BY LARGE INLAND EARTHQUAKES: CASE STUDY OF THE 2017 MW 6.6 POSO AND THE 2018 MW 7.5 PALU-DONGGALA EARTHQUAKES

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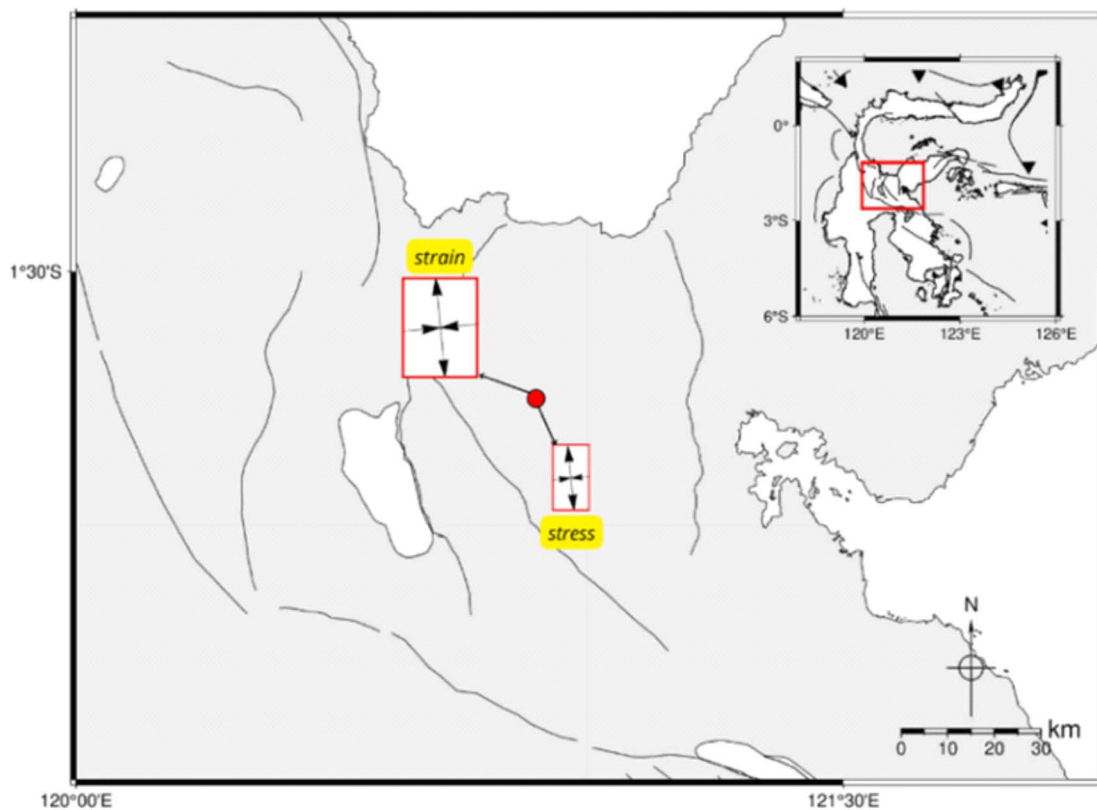


Figure S1. The point observation of strain rate used to calculate tectonic stress rate indicated by red circle. The red boxes near the red circle are the azimuth of strain and stress from calculated eigenvectors. The inset box shows the Island of Sulawesi with the focus study area indicated by red box.

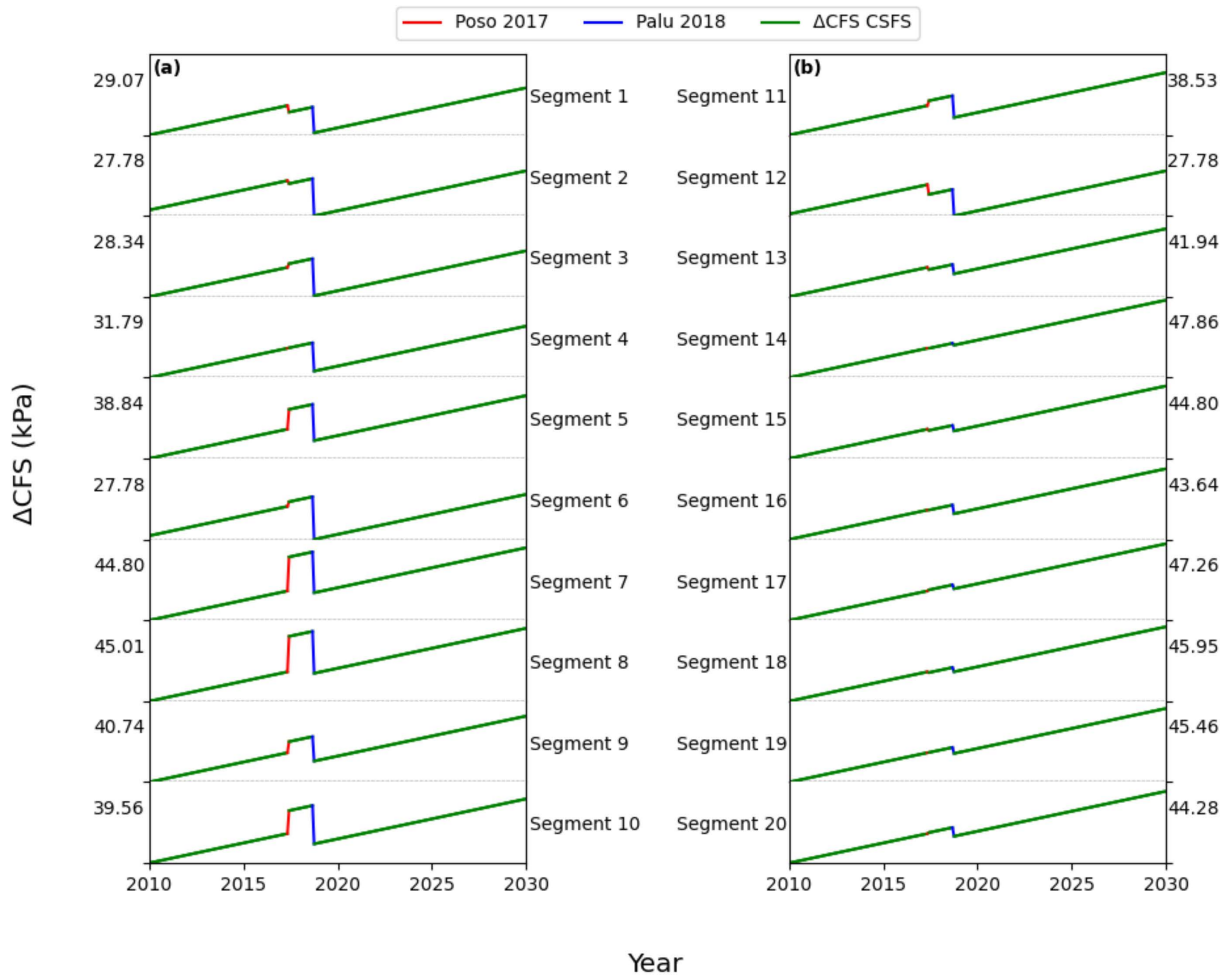


Figure S2. ΔCFS time function on each Poso fault segment using $\mu' = 0.1$ and dip = 25° , (a) for segment 1-10 and (b) for segment 11-20. Coseismic changes in CFS due to the occurrence of the 2017 Poso and the 2018 Palu-Donggala earthquakes (blue and red lines, respectively) as well as the tectonic stress rate (green) around Central Sulawesi Fault System (CSFS) are indicated. The absolute value of the range of change in CFS from these sources, accumulated over 20 years for each segment is indicated on the left of (a) and the right of (b).

Stress Changes on the Poso Fault from 2017 Poso and 2018 Palu-Donggala Earthquakes

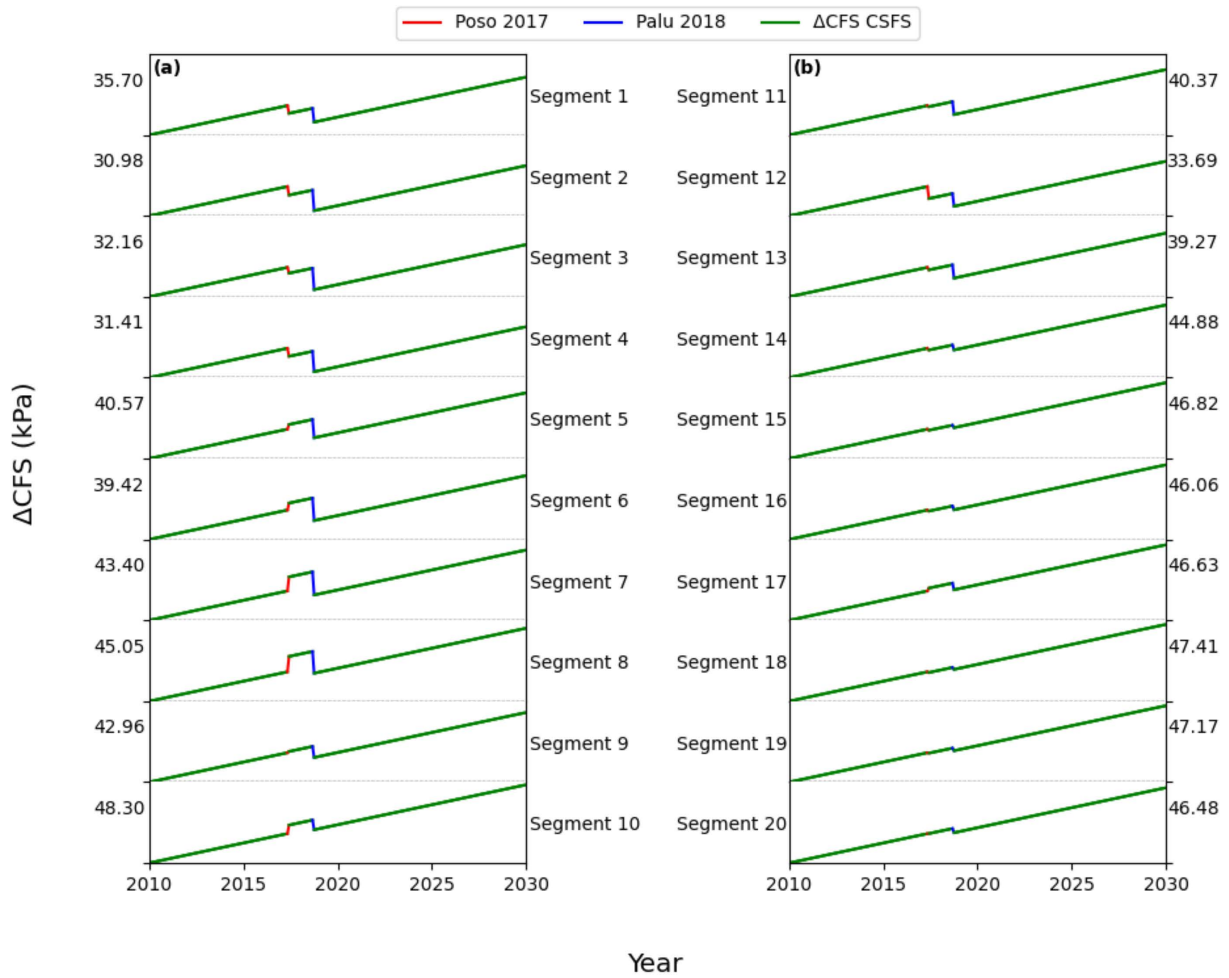


Figure S3. ΔCFS time function on each Poso fault segment using $\mu' = 0.4$ and dip = 45° , (a) for segment 1-10 and (b) for segment 11-20. Coseismic changes in CFS due to the occurrence of the 2017 Poso and the 2018 Palu-Donggala earthquakes (blue and red lines, respectively) as well as the tectonic stress rate (green) around Central Sulawesi Fault System (CSFS) are indicated. The absolute value of the range of change in CFS from these sources, accumulated over 20 years for each segment is indicated on the left of (a) and the right of (b).

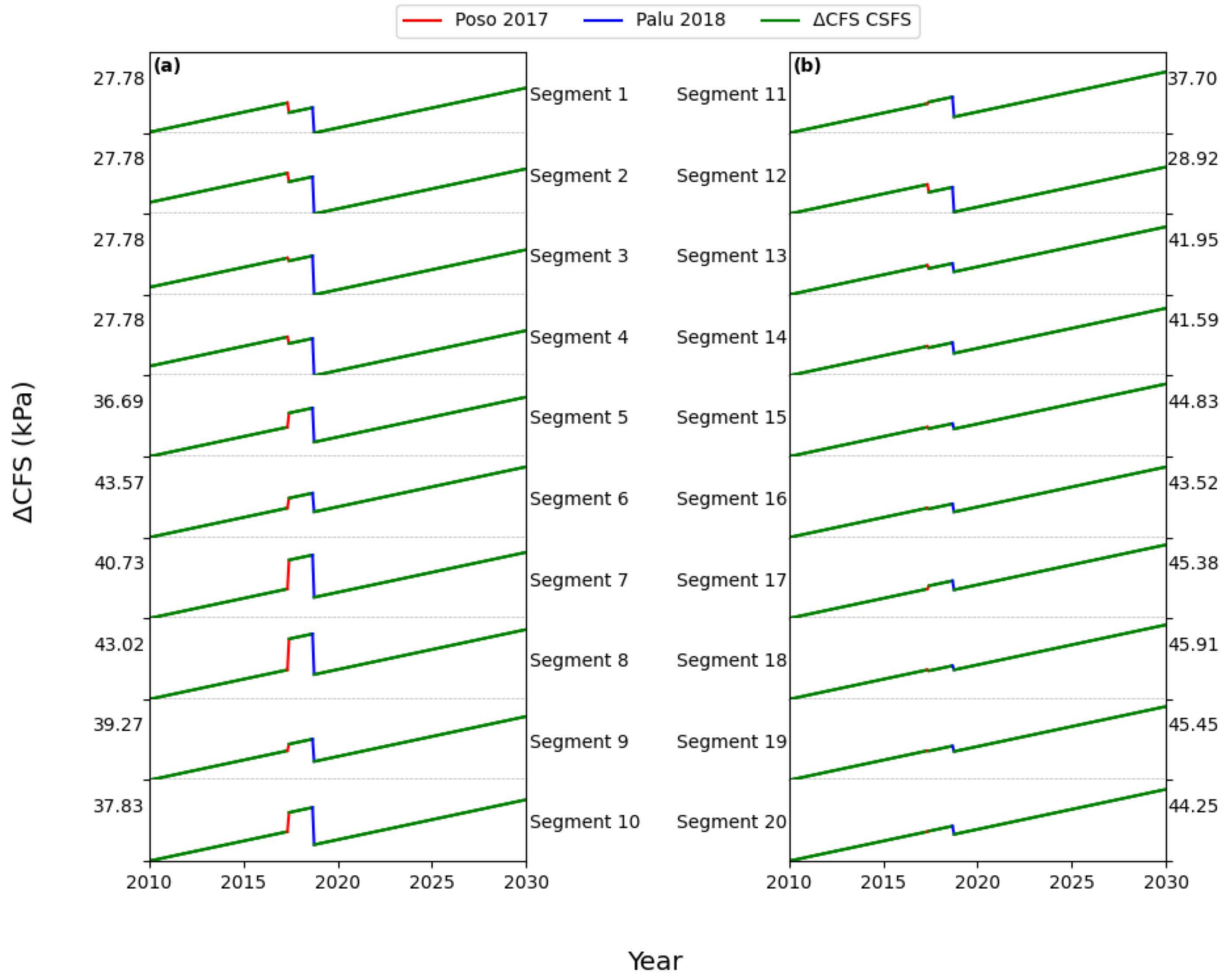


Figure S4. ΔCFS time function on each Poso fault segment using $\mu' = 0.1$ and dip = 45° , (a) for segment 1-10 and (b) for segment 11-20. Coseismic changes in CFS due to the occurrence of the 2017 Poso and the 2018 Palu-Donggala earthquakes (blue and red lines, respectively) as well as the tectonic stress rate (green) around Central Sulawesi Fault System (CSFS) are indicated. The absolute value of the range of change in CFS from these sources, accumulated over 20 years for each segment is indicated on the left of (a) and the right of (b).