Supporting information for

Investigating seismicity rates with Coulomb failure stress models caused by pore pressure and thermal stress from operating a geothermal well doublet in a generic subsurface fault and layer structure of the Netherlands

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Supplementary Figures S1-S3

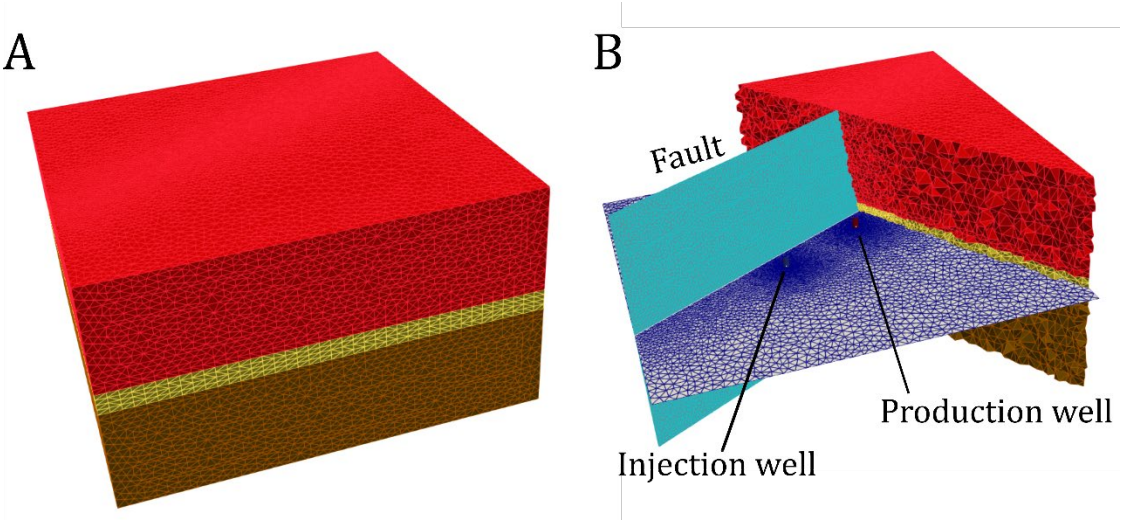

Figure S1. Snapshot of the mesh used for our simulations. (A) outside view with the three horizontal layers representing the simplified Zechstein, Slochteren (reservoir) and Limburg formations. (B) Inside view with the planar fault and the well doublet.

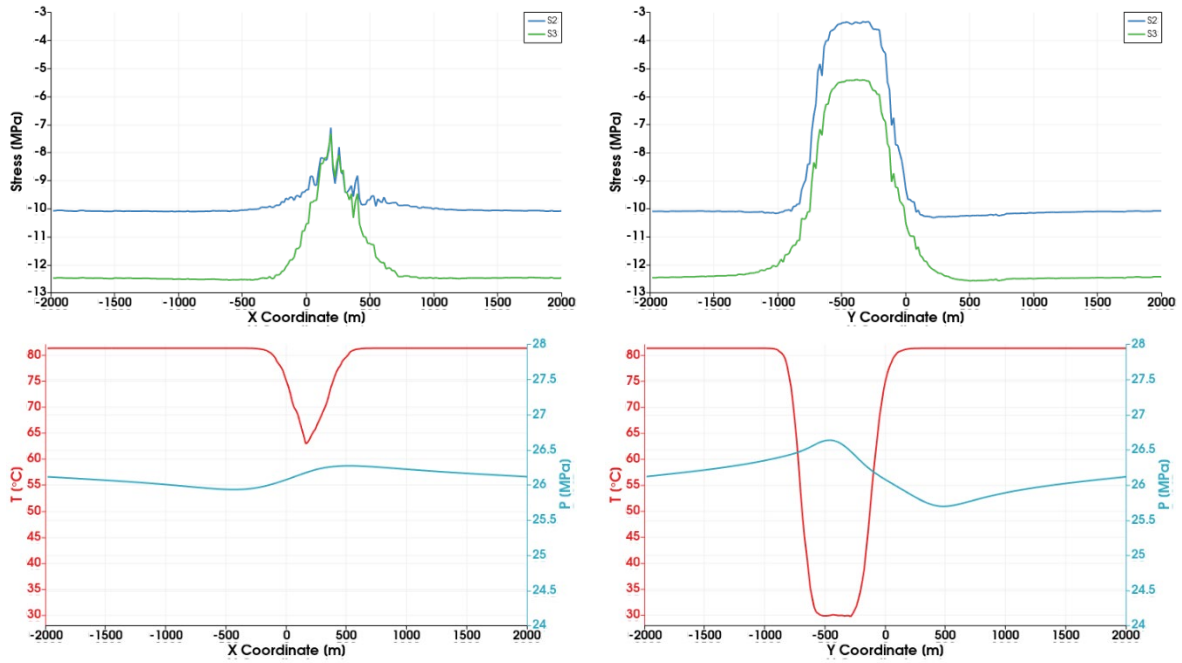

Figure S2. Effective stresses, pore pressure and temperature along the x and y axes (parallel with σ_3 and σ_2, respectively) at the end year 30.

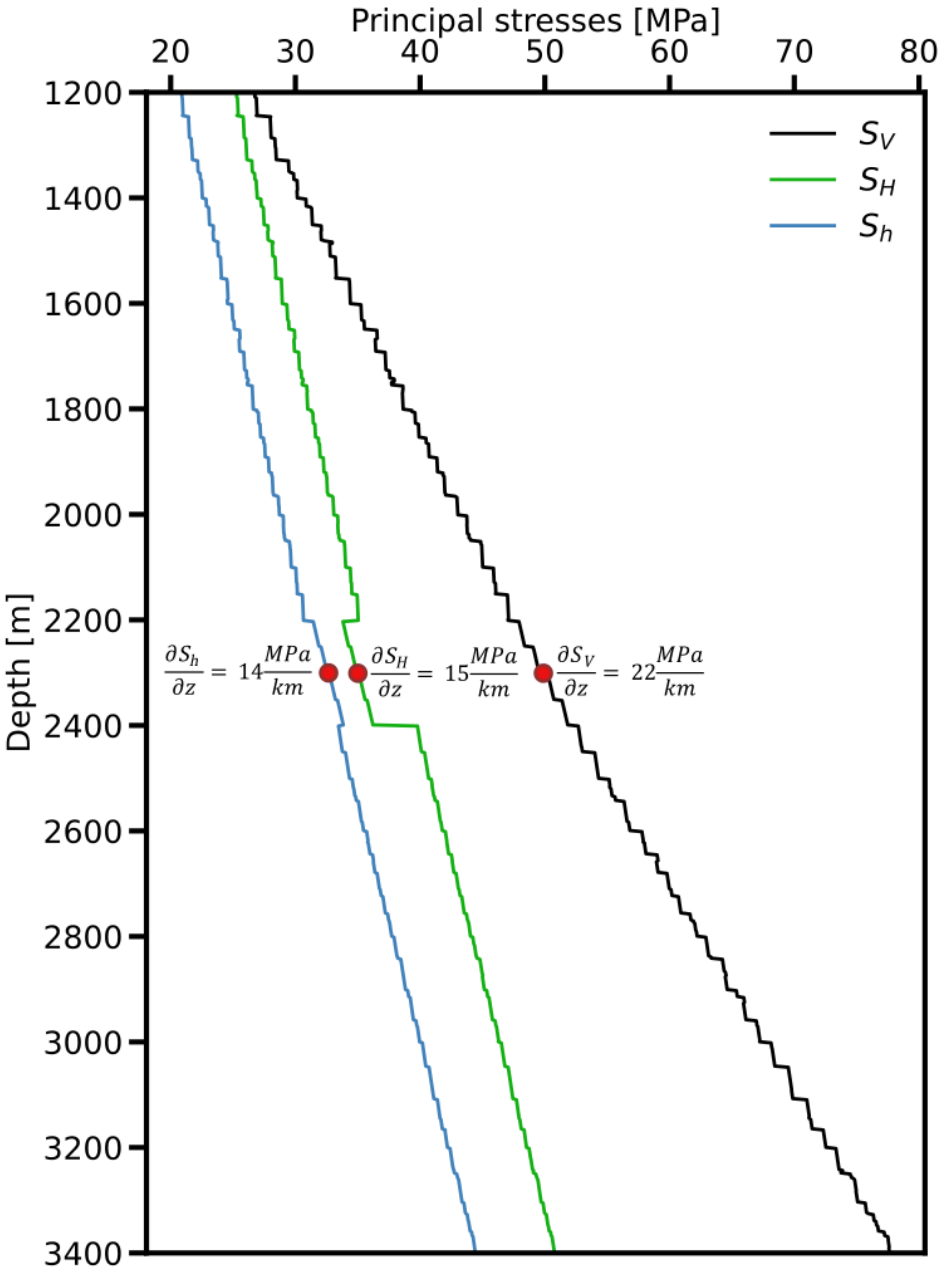

Figure S3. Total stresses along a vertical line in the middle of the model domain (x = 0, y = 0). The initial stress state of the model was calibrated based on the principal stress gradients along the z-axis at z = -2300 m. S_V: vertical stress (maximum principal stress); S_H: maximum horizontal stress (intermediate principal stress); S_h: minimum horizontal stress (minimum principal stress).