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Non-universal critical exponents in earthquake complex networks

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### Highlights

- A time-based complex network approach is used to study seismic data sets.
- Two data sets are used, one containing a major earthquake, the other not.
- The networks are scale-free, and critical exponents  $\gamma$  (for connectivity),  $\delta$  (betweenness centrality) and  $\eta$  (relating connectivity and betweenness centrality) are found.
- Data sets satisfy  $\delta > (\gamma + 1)/2$ , but  $\delta$  is not universal.

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