Stanford

Yudong Sun

Postdoctoral Scholar, Geophysics

Curriculum Vitae available Online

Bio

BIO

Yudong's study areas are earthquake physics, numerical modeling, InSAR, glaciology, and geodynamics. He specializes in numerical simulations of earthquake cycles and dynamic ruptures, integrating models with observations and laboratory experiments. He has published papers covering topics including back-propagating ruptures, slow slip events, fault roughness, deformation of glaciers, and lithospheres.

PROFESSIONAL EDUCATION

- Bachelor of Science, University of Science and Technology of China , Geophysics (2017)
- Master of Science, University of Science and Technology of China , Geophysics (2020)
- PhD, Massachusetts Institute of Technology , Geophysics and Siesmology (2026)

STANFORD ADVISORS

- Paul Segall, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Back-Propagating Earthquakes on Simple Faults** *AGU ADVANCES*
  Sun, Y., Cattania, C.
  2026; 7 (1)
- **Propagation of Slow Slip Events on Rough Faults: Clustering, Back Propagation, and Re-Rupturing** *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*
  Sun, Y., Cattania, C.
  2025; 130 (2)
- **Disintegration and Buttressing Effect of the Landfast Sea Ice in the Larsen B Embayment, Antarctic Peninsula** *GEOPHYSICAL RESEARCH LETTERS*
  Sun, Y., Riel, B., Minchew, B.
  2023; 50 (16)
- **Incorporating Full Elastodynamic Effects and Dipping Fault Geometries in Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS)** *BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA*
  Erickson, B. A., Jiang, J., Lambert, V., Barbot, S. D., Abdelmeguid, M., Almquist, M., Ampuero, J., Ando, R., Cattania, C., Chen, A., Dal Zilio, L., Deng, S., Dunham, et al
  2023; 113 (2): 499-523