

¹ FEniCS-SZ: two-dimensional modeling of the thermal structure of subduction zones

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Software

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⁷ Summary

⁸ Plate tectonics ... subduction zones ... volcanoes, earthquakes,... metamorphism temperature control ([van Keken & Wilson, 2023](#))

¹⁰ Statement of need

¹¹ FEniCS-SZ is cool and is based on Wilson & van Keken (2023).

¹² FEniCS-SZ is intended also for classroom use and augments the FEniCSX Tutorial ([Dokken, 2023](#)).

State of the field

Software design

¹⁶ Research impact statement

¹⁷ AI usage disclosure

¹⁸ No information or code was harmed by AI.

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²³ References

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²⁵ van Keken, P. E., & Wilson, C. R. (2023). An introductory review of the thermal structure of subduction zones: I—motivation and selected examples. *Progress in Earth and Planetary Science*, 10(1), 42.

- ²⁸ Wilson, C. R., & van Keken, P. E. (2023). An introductory review of the thermal structure of
²⁹ subduction zones: II—numerical approach and validation. *Progress in Earth and Planetary
30 Science*, 10(1), 1–29.

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