Three-dimensional temperature variations in a fossil subduction zone resolved by RSCM thermometry (Tauern Window, Eastern Alps)

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Study area: Central Tauern Window, Eastern Alps

Local structure: Isoclinal sheath fold nappe
Raman spectroscopy on carbonaceous matter (RSCM) gives metamorphic peak-temperatures reached in the central Tauern Window
Projection of RSCM data to cross-sections

Iso-peak temperature contours show a sheath-like pattern, mimics the fold geometry!

This indicates sheath-folding of the contours.

Groß et al., submitted
Generalized peak-T patterns:

Subduction-dominated pattern displays sheath-like geometry.

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Development of folded peak-T contours (red, orange and yellow lines) by formation of a sheath nappe fold during exhumation.

Groß et al., submitted
Appendix A: Overprinting patterns

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