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Brief Summary

I am working on ultra-high temperature metamorphism and metasomatism of granulite rocks from Central Australia, studying the feedback mechanisms between deformation and metamorphism. Intraplate tectonics are thought to be responsible for reworking the Reynolds Range during the Alice Springs Orogeny (450-300 Ma), after a tectonically quiet period of ca. 1.200 million years. Strain localization on major shear zones is of particular interest as conventional plate boundary tectonics do not apply to intra-continental Orogenies. Pre-existing structural heterogeneities, a far field compressive stress field carried by a strong lithosphere and/or fluid-rock interactions may have caused such strain localization. My research investigates how metamorphic reactions during fluid-rock interaction can explain strain localization during the Alice Springs Orogeny.

Education: MSc and BSc in Earth Structure and Dynamics (Geology), Utrecht University, NL

Research interests: HT Metamorphism, fluid-rock alteration and deformation feedbacks, monazite

Thesis title: Fluid-rock interactions and feedback mechanisms between metasomatism/metamorphism and deformation in Central Australia

Supervisors: Prof. Andrew Putnis, A/Prof. Chris Clark, Dr. Tom Raimondo & Dr. Andreas Beinlich

Conferences: 2017 EGU (Vienna) -2016 EGU (Vienna).

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