

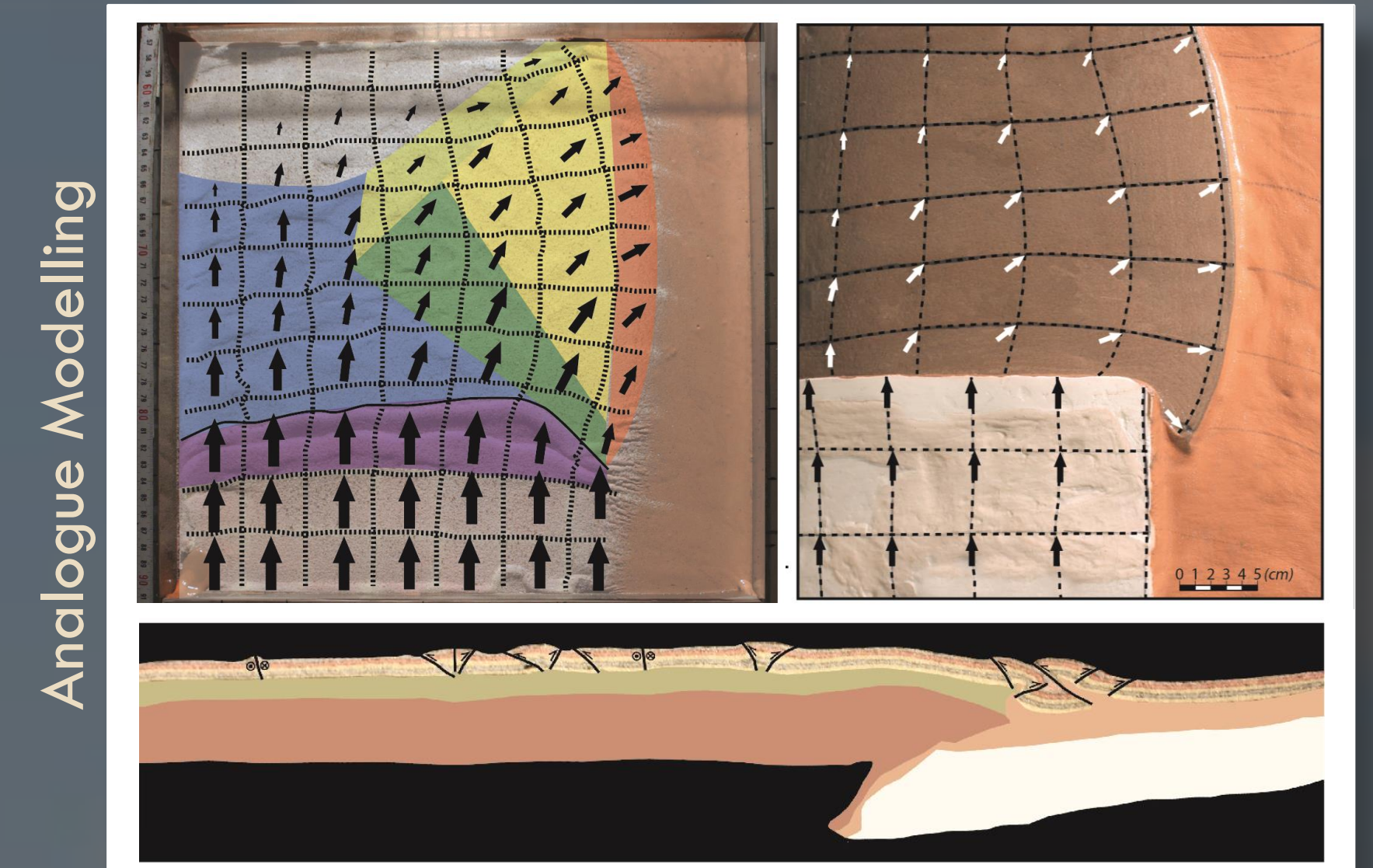
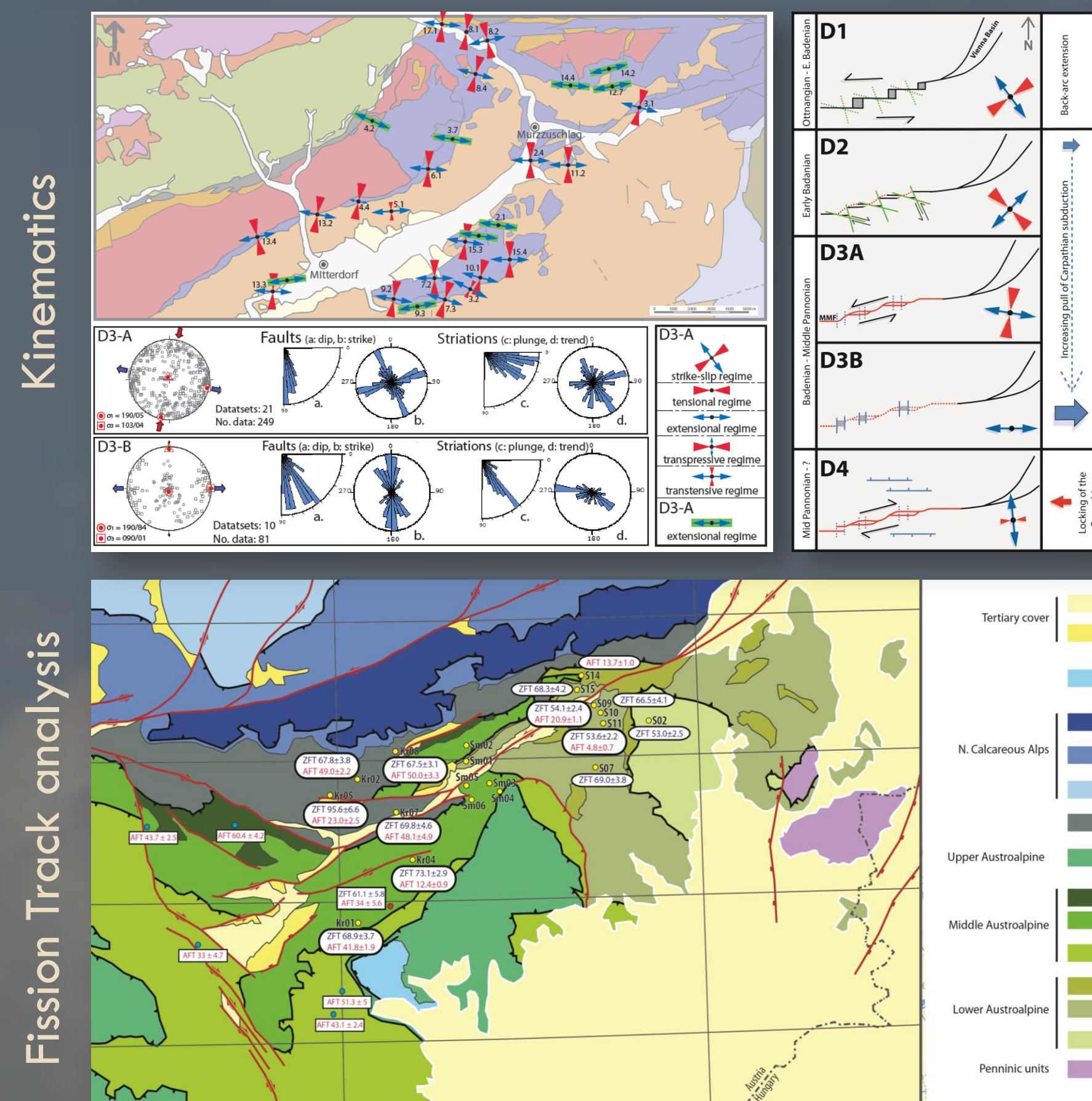
Alps-Adria interactions and their implications for the evolution of the Alpine lithosphere

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My **PhD research** focusses on the interactions between the Eastern Alps, Pannonian Basin, Dinarides and Adria. By a **multidisciplinary approach** I aim to get novel insights on the large scale lithospheric and tectonic processes of the region. By using different methodologies, a feedback loop is obtained to specific regions of interest, as seen on this poster.

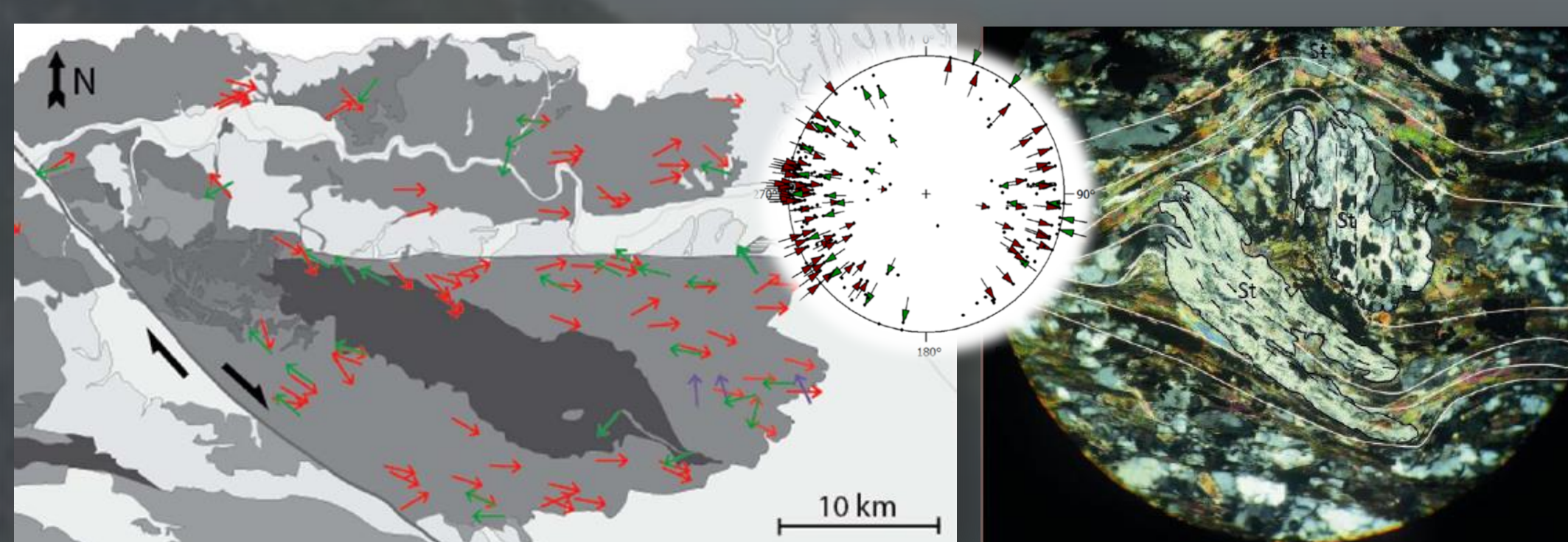


Eastern Alps: lateral extrusion and lithosphere processes

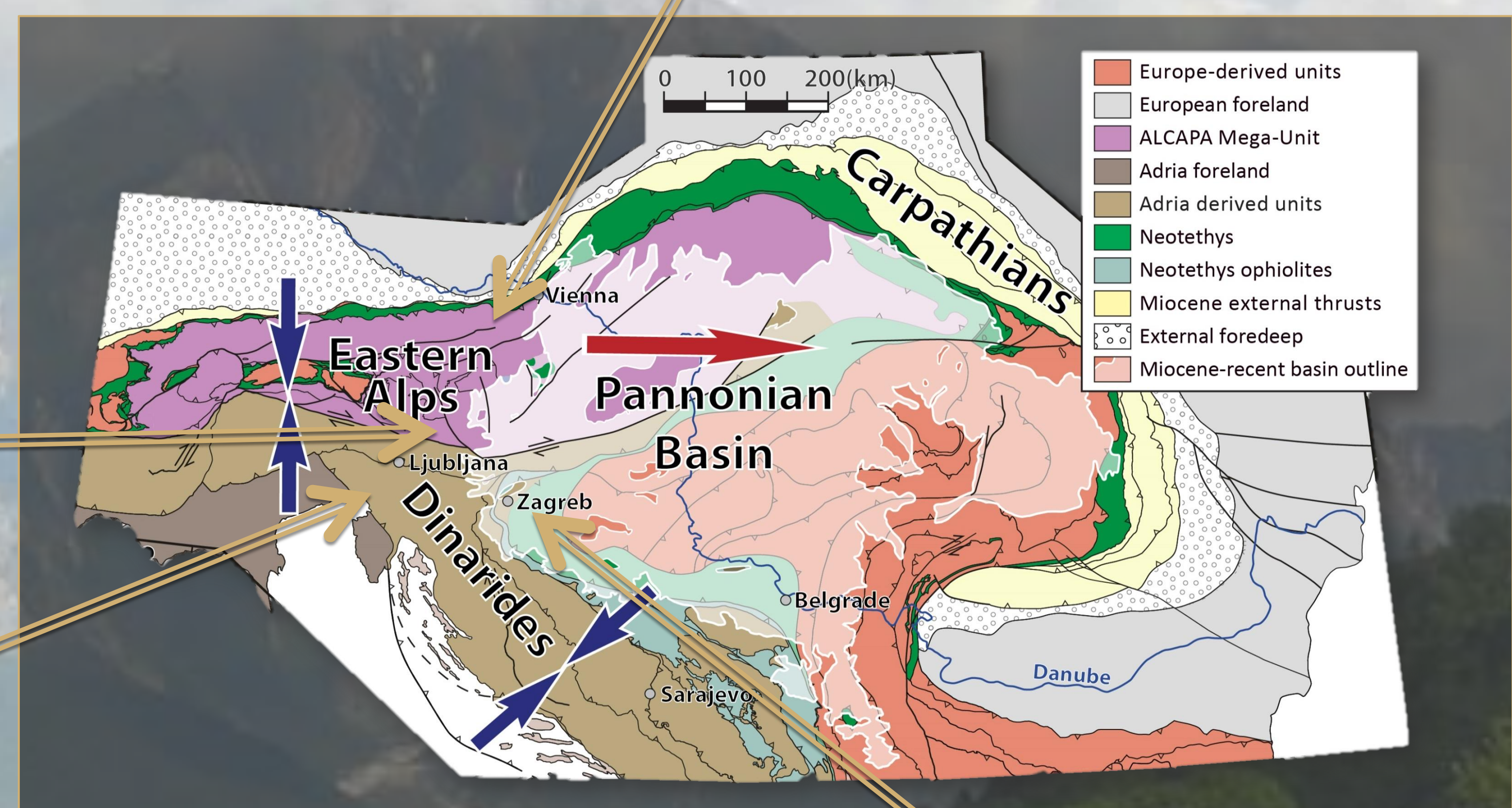
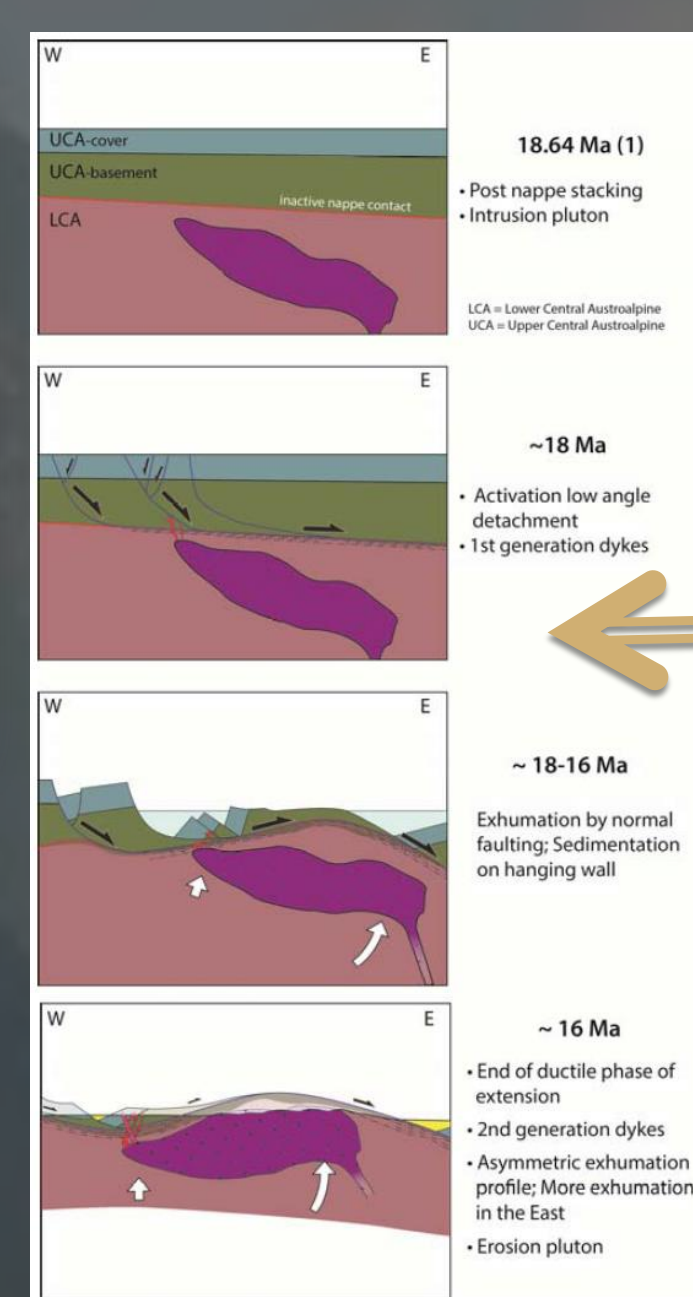


This research topic focusses on the tectonic evolution of the Eastern Alps during the Miocene to recent times. During this time **lateral extrusion** occurs coeval with indentation and Pannonian Basin extension. From the kinematics, low temperature geochronology and analog modelling we aim to constrain the Alpine lithospheric processes during the last 20Ma

Eastern Alps - Pannonian Basin transitions



The **Pohorje Pluton** has been exhumed during the lateral escape of the Eastern Alps and opening of the Pannonian Basin. What mechanism has accommodated the exhumation and what tectonic implications can we derive from this structural evolution? Approach: Field study, microstructural and petrological analysis. Work performed together with a Master student: T. de Bie



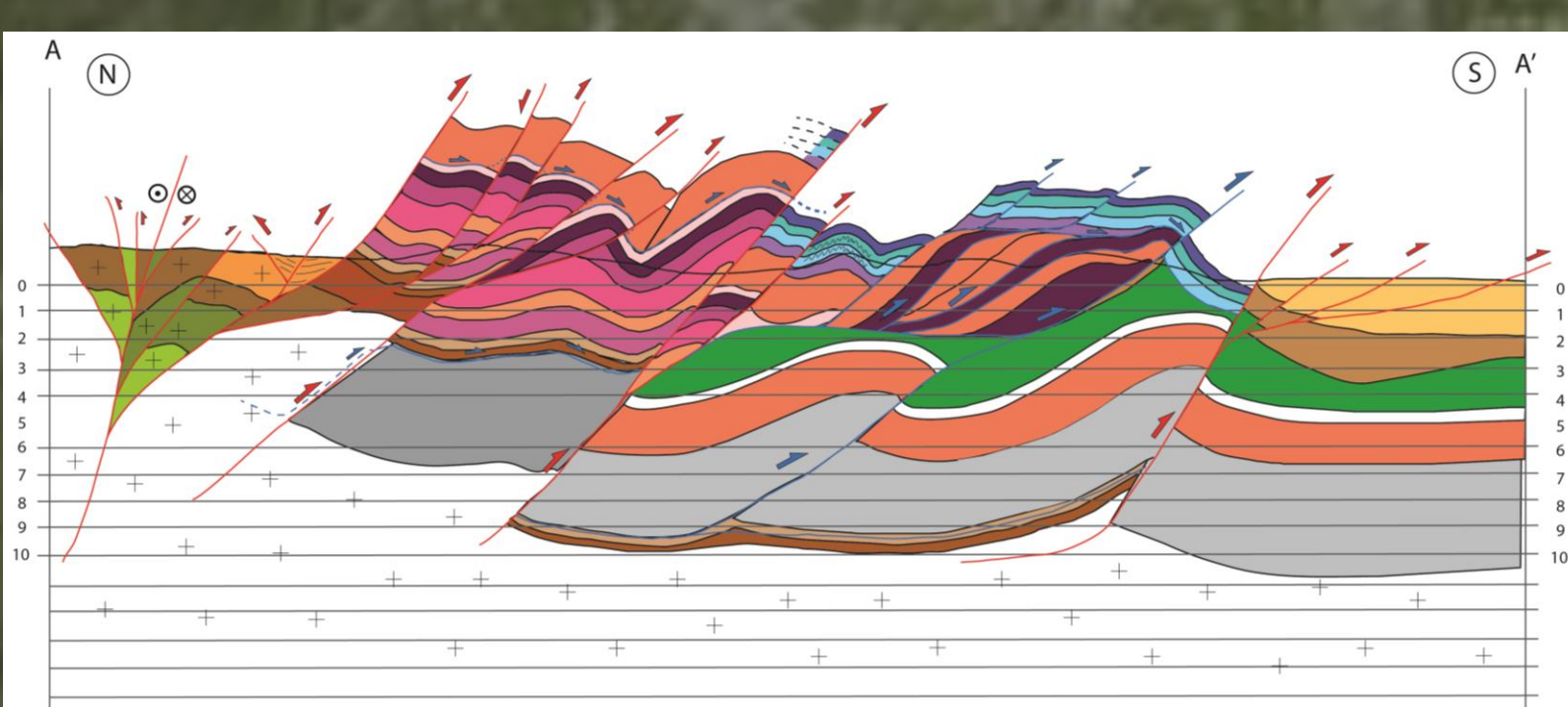
Southern Alps: Adria tectonics

The **Southern Alps** reflect a complex tectonic evolution: Dinaridic and Alpine related structures are superposed and subsequently overprinted by wrenching in response to lateral extrusion. New kinematic insights are used to re-evaluate the amount of shortening and clarify the paleogeography of the greater Alpine-Dinaridic-Carpathian realm.

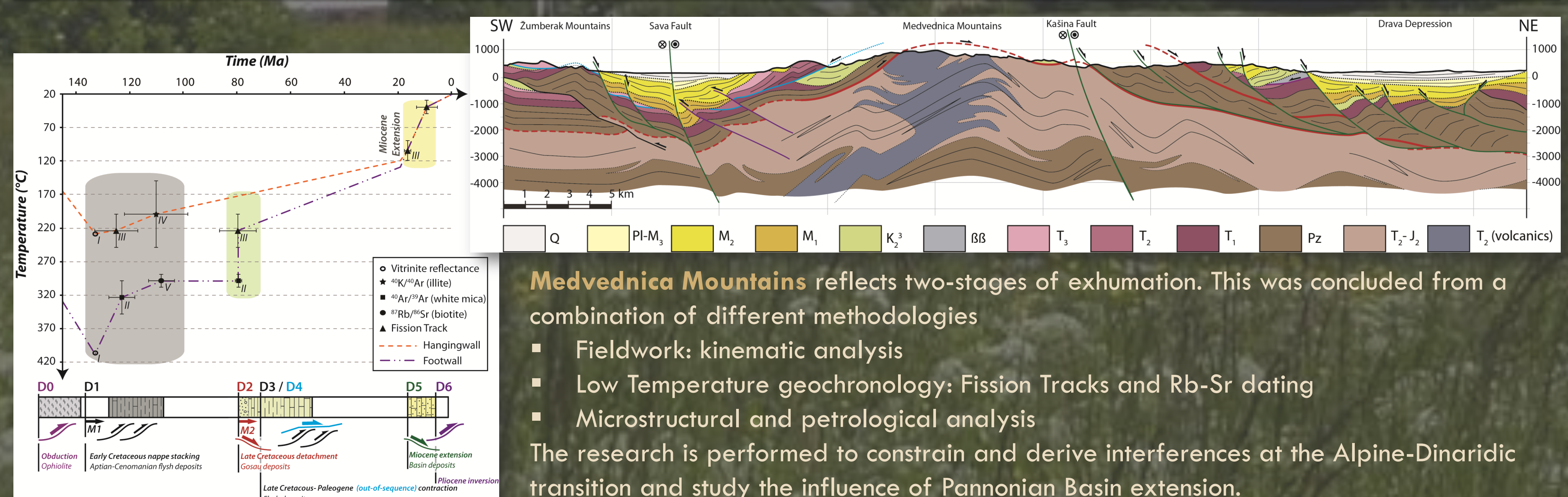
Research approach:

- Field study: lithological and structural analysis
- Cross-section reconstruction and balancing

Work performed in combination with 2 Master students: D. Engelen & A. Smits



Dinarides - Pannonian Basin transitions



Medvednica Mountains reflects two-stages of exhumation. This was concluded from a combination of different methodologies

- Fieldwork: kinematic analysis
- Low Temperature geochronology: Fission Tracks and Rb-Sr dating
- Microstructural and petrological analysis

The research is performed to constrain and derive interferences at the Alpine-Dinaridic transition and study the influence of Pannonian Basin extension.

Why do a PhD?

- The opportunity to fully engage in a specific topic.
- Freedom in leading your own research.
- Flexibel working hours but requires dedicated work.
- Travelling: field work, conferences, workshops
- Teaching opportunities: assisting/lecturing in courses, joining fieldworks, superviding BSc and MSc projects.

How to get a PhD?

- Apply to specific PhD vacancies
- Build a network in the academic scene: let people know you want to do a PhD
- Show your capabilities and dedication during your MSc thesis.

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I started my Phd in March 2012 and will finish in February 2016. I have three supervisors: Ernst Willingshofer, Dimitrios Sokoutis and Liviu Matenco. My Promotors are Prof. Sierd Cloetingh and Prof. Paul Andriessen.

Facts: I spent ~20 weeks in the field, went to 5 conferences, joined 3 PhD courses, supervised 10 Bachelor students and 4 Master students, assisted in 3 courses and I am now working very hard to publish papers and write my PhD thesis.