U-Pb carbonate dating as a tool to unravel complex fault evolution: an example from the central Southern Alps (Italy)

Rocca M. *1, Zanchetta S. 1, Gasparrini M. 2 Mangenot X. 3, Berra F. 2, Deschamps P. 4, Guihou A. 4 & Zanchi A. 1

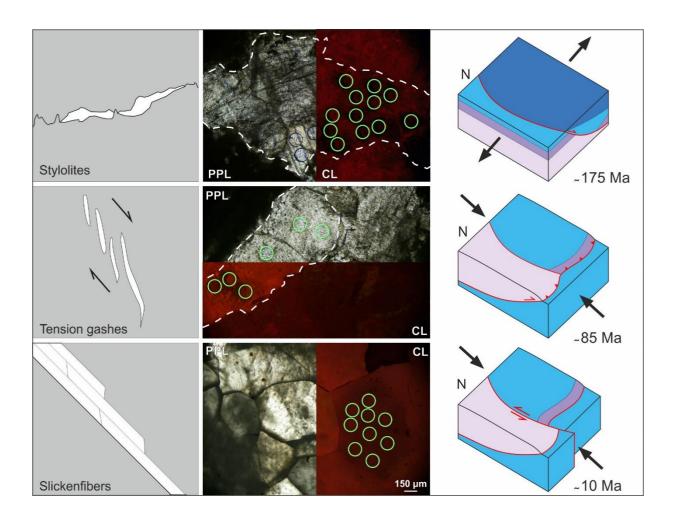
Università degli Studi di Milano-Bicocca, Italy

Università degli Studi di Milano, Italy

H-Expertise Services, France

Aix Marseille Univ, CNRS, IRD, INRAE, CEREGE, France

The timing of upper crustal fault zones has long been inferred based solely on indirect constraints, until the advent of *in situ* U-Pb dating of carbonates. The successful application of this method relies on careful microstructural and geochemical analyses. This approach has been applied to syn-kinematic carbonates along the Amora Fault, a growth fault of the Italian central Southern Alps that underwent a complex evolutional history since the Early Jurassic.



^{*} Corresponding email: m.rocca@campus.unimib.it