Bulk inclusion dating: a geochronological tool to date low grade metamorphism

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Phase relations sample A

-ilmenite
-quartz + chlorite
-chloritoid
-chlorite
-white mica + chlorite

Hollinetz et al., in prep.
Thermodynamic modeling of Sample A + garnet-bearing sample B
Peak conditions: 490°C 0.7 GPa

Bulk inclusion laser-ablation ICPMS U-Pb date of chloritoid rim in Sample A

116.7 ± 9.1 Ma
MSWD = 1.5
n = 79

Hollinetz et al., in prep.
CONCLUSION

We documented micro-zircon in a greenschist facies metamorphic chloritoid-bearing schist.

Results of bulk inclusion dating of zircons enclosed in chloritoid rim provide evidence for lower Cretaceous metamorphism at $117 \pm 9$ Ma in the upper part of the Austroalpine Unit.

Hollinetz et al., in prep.