

Thermal history of the Mino Belt using fission track method

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The Mino Jurassic accretionary complex shows low-grade metamorphic facies, although it is older than the Shimanto Belt of equivalent facies. The purpose of this study is to understand what type of tectonic movements and exhumation had occurred in the Mino Belt using the technique of fission track thermochronology. Twenty-seven zircon dating, ten apatite dating and zircon track length measurement are successfully done. FT-ZR ages are roughly classified into two groups, namely about 60 Ma and >80 Ma. Younger FT-ZR ages of 60 Ma indicate thermal effect either by the Ryoke Belt or nearby granite. The FT-ZR ages of >80 Ma are interpreted to indicate the time of exhumation through closure temperatures of each system. Obtained FT-AP ages are about 60 Ma exactly younger than FT-ZR ages.