RTL dating of AT tephra

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Tephra is used as a very useful tool to identify ages of Quaternary samples. There are few methods to date tephra in the age range of last 50,000 years, and radiocarbon dating is most useful method in this age range.

However, radiocarbon dating can't determine ages of over 50,000 years. Therefore, we must use other dating methods to determine ages of over 50,000 years. We take note of RTL method. RTL method is a kind of TL(Thermo luminescence) methods.

Aira-Tn (AT) tephra, which is one of the principal widespread tephra in Japan. We use samples of AT tephra to check the reliability of RTL method.

The ages of AT tephra are cross-checked between RTL method and radiocarbon method.

The dating results by these two methods of AT tephra samples taken from Ito pyroclastic flow layer, will be reported.