

Fission track ages of Neogene Yato Formation in Oiso Hill, Kanagawa Prefecture, central Japan

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Fission track dating was carried out for zircon samples from the Neogene tuffaceous deposits in the Oiso Hill, Kanagawa Prefecture, central Japan. The Neogene strata, corresponding stratigraphically to the Miura Group, are divided into the Yato Formation, Tsurugizawa Formation, Takatoriyama Formation, and Oiso Formation. The geological ages and correlation of those formations have been controversial because of lack of available biostratigraphic and radiometric ages. Recently, calcareous nannofossils of CN10 was reported from the Yato Formation at Mt. Takatori, and planktonic foraminifers of late Miocene to early Pliocene were also found from the clastic rocks corresponding to the Yato Formation at the Umesawa coastal area (Odawara, 2009, Odawara et al., 2009). Zircon fission track ages were determined for the tuff interbedded in the Yato Formation at Mt. Takatori, and for the tuffaceous sandstone at the Umesawa coastal area. Two fission track ages of the former were obtained as 8.3 ± 0.7 Ma and 5.9 ± 0.8 Ma, and one of the latter as 6.3 ± 0.6 Ma. These data are consistent with the microfossil ages previously reported.

Keywords: Oiso Hills, Yato Formation, Fission track age