

Magmagenesis of the Middle Miocene Granites on the outer zone of southwestern Japan : Evidence for a slab melting

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We determined REE patterns for single grain zircon separated from five Miocene granitic plutons ; Yakushima, Ashizurimisaki, Osuzuyama, Ichifusa and Ookueyama, in the outer zone of southwestern Japan to study the possibility of their slab melting origin. Variation in (Gd/Yb)_{CN} values these five granitic plutons suggests to reflect the different chemical characteristics of a partially melted slab that had been metamorphosed in different degrees during its subduction.

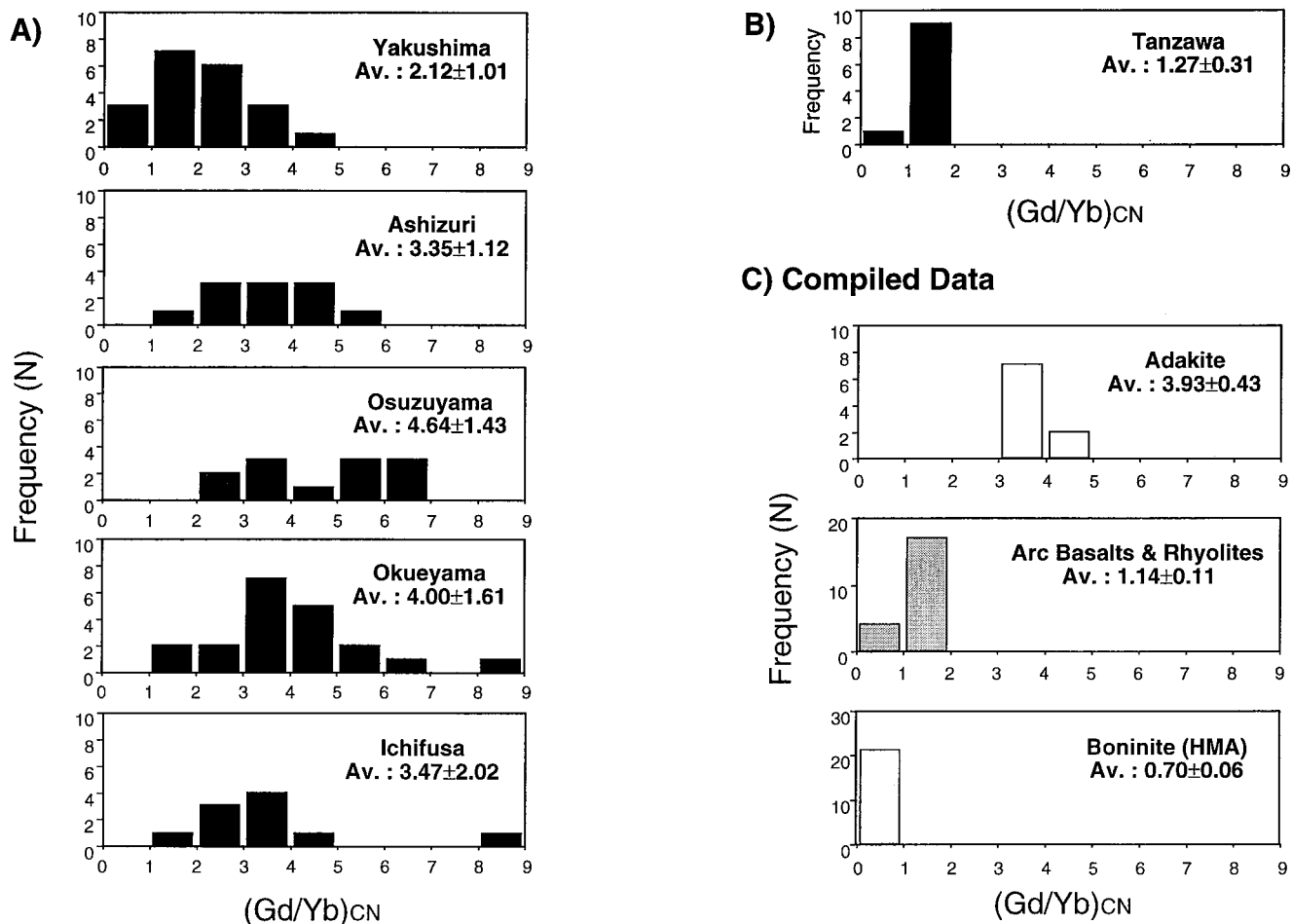


Fig. Histograms of Leedey normalized Gd/Yb values of the granitic melts in the outer zone of southwestern Japan.