

# Tephrochronological study for the correlation of early Pleistocene sediments between Tokyo and Boso Peninsula, central Japan

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Two all cores from boring conducted at Akatsuka Park of Itabashi Ward (coreA) and at Haginaka Park of Ota Ward (coreH) were reexamined. Mineral composition, shapes of volcanic glass shard, refractive indices of volcanic glass and heavy minerals and chemical composition of volcanic glass of several tephra layers from these cores were determined. As a result, it is revealed that five tephra layers are correlative with the key tephra layers in the Kazusa Group of the Boso Peninsula. A-22 tephra (from core A) is identified as U8 tephra in the Umegase Formation, and A-16 tephra (from core A) as O18 tephra in the Otadai Formation. H-27, H-7 and H-2 tephtras (from core H) are identified as Kd21, Kd24 and Kd25 tephtras in the Kiwada Formation, respectively. Thus, these results indicate that the the sediments (mostly marine origin) approximately -50m and -100m depth in the north of central Tokyo are correlated with the Umegase Formation and Otadai Formation, respectively, and the sediments (mostly marine origin) -50 to -100m depth in the south of central Tokyo is correlated with the Kiwada Formation.

Comparing of sedimentary facies and thickness between the sediments under the central Tokyo with the Kazusa Group in the Boso Peninsula, it is suggested that the Kazusa Group in the Boso Peninsula is hemipelagic sediment accumulated in the subsiding fore arc basin, called the Kazusa Trough, and sediments of the cores are formed on continental shelf.