Lower Pleistocene tephrochronology of the Kiwada Formation in Kazusa Group in Tama, Boso and Choshi areas, central Japan

Takehiko Suzuki[1]; Masanori Murata[2]

[1] Dept. of Geography, Tokyo Metropolitan Univ.; [2] Dept of Geography,Tokyo Metropolitan Univ

The lower to middle Pleistocene Kazusa Group building hills and distributing under the Kanto Plain (KP) of central Japan is key marine sediments for reconstruction of Quaternary landform development of KP. Many studies aiming to establish the stratigraphy of Kazusa Group in several areas and correlations between the areas were carried out. By tephrochronological method, recent studies clarified detailed stratigraphy and correlation, and the necessity of reexamination on tephrostratigraphy arose. In this study, we show the revised tephrostratigraphy of the middle part of Kiwada Formation in the Kazusa Group and its correlative sediments in and around KP. Negata-Yurigaoka Tephra redefined here crops out at Anazawa Shrine (type locality) in the northwest part of Tama Hills (TH). This tephra is correlative to Yurigaoka 2nd Tephra in the central part of TH. Takano (1994) defined Yurigaoka 2nd Tephra as a marker tephra which locates above Negata Tephra. However, characteristic properties of glass shards in these tephras indicates Yurigaoka 2nd Tephra in the central part of TH is identical with Negata Tephra of Anazawa Shrine in the northwest part of TH. Takano (1994) defined and described Yuki Tephra and Yamaguchi-Pink Tephra between Yurigaoka 2nd Tephra and Negata Tephra. In this study, we concluded that the stratigraphic positions of these two tephra are below Negata-Yurigaoka Tephra and above newly redefined Yomiuri Tephra. Yomiuri Tephra crops out at a new exposure near Anazawa Shrine and is correlative to Negata Tephra defined by Takano (1994) in the central part of TH. Some tephras shown above are correlated tephras in Kiwada Formation of the Kazusa Group of Boso, and in Inubo Group of Choshi area. Calcareous nannofossil biostratigraphic positions in Choshi area indicate that ages of these tephras are between 1.65-1.45Ma.