

## Spatial distribution of Musashino Gravel in Tokyo using an automated program analyzing geological sequence from a vast number of boring data.

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Musashino Gravel is one of the supporting ground in the Musashino upland spreading in the western Tokyo, and revealing its spatial distribution is significant from an engineering point of view.

In this study, we use a new system, an 'automated program analyzing geological sequence' (Hori et al., 2018) from a vast number of boring data and GIS program.

Recently, according to Endo et al. (2018), division of the Musashino uplands has been revised, and subdivision of the Musashino surface has been proposed. Also, in the Funatsu et al. (2018), the inclination angle the top surface of the Musashino Gravel is suggested.

The elevation values of the upper and lower surface of Musashino Gravel, by 'automated program' (Hori et al., 2018) were mapped to show paleo-topography with 50m mesh.

When the upper surface of the Musashino Gravel was shown by a contour map, it was possible to clearly distinguish ridges and valleys from unevenness of contour lines. Among them, the valley topography is similar to the shape of rivers that currently flow on Musashino surface.

On the Kodaira surface (M1a) by Endo et al. (2018), the contour interval is wide and flat. The Meguro-dai surface (M1b) is gentle in the west, which is high, at the altitude of 27 m, but in other aspects the border was 30 m in altitude.

On the other hand, the bottom surface contour map of the Musashino Gravel seem that, the valley continues to the west side. But the top surface can be seen that the valley was buried by the Musashino Gravel at the west zone. Other than that there is not much difference between the topography such as valley on the top surface and bottom surface.

When comparing the obtained features with the topographic classification by Endo et al. (2018), the distribution in thickness of Musashino Gravel and the top and bottom surface contour maps are corresponded well.

Keywords: Musashino gravel layer, Musashino platform, automated program analyzing geological sequence, Borehole data

