

Characteristics of magnetic anomalies on a high-resolution aeromagnetic anomaly map of Fuji Volcano

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Geological Survey of Japan, AIST has compiled a high-resolution aeromagnetic anomaly map of Fuji Volcano (in press), based on the data by two aeromagnetic surveys in 2003 and 2007 through latest data processing. The magnetic anomalies of the volcano are affected by terrain magnetized strongly in the present Earth's magnetic field as expressed on previous regional maps but more detailed information can be seen. For instance, apparent magnetic anomalies are dominant on the northwest and southeast slopes of the volcano, corresponding to chains of lateral craters and some lava flows. Some magnetic high chains are also apparent over the northeastern middle slope, corresponding to the Takamarubi lava flow but long-wavelength ones close to Lake Yamanaka can be treated as an extension of regional magnetic highs from the Tanzawa Mountains. The most significant characteristic is conspicuous magnetic anomalies with a pair of highs and lows elongated in an east-west direction resides over the eastern flank of the volcano as far as the altitude approximately 1,300 m above sea level, suggesting a buried volcanic structure exists there.

Keywords: Fuji Volcano, aeromagnetic anomaly map, magnetic anomaly