

Late Miocene to Pleistocene caldera volcanoes and gravity anomalies in the 1:200,000 Nikko quadrangle, NE Japan

Takahiro Yamamoto[1], Masao Komazawa[2]

[1] GSJ, [2] Geological Survey of Japan

The 1:200,000 Nikko quadrangle, located in the southern part of the NE Honshu arc, has been compiled by GSJ. After 10 Ma, this quadrangle region was uplifted and caldera-forming felsic volcanisms began. The about 20 calderas are 4 to 20 km in diameter and filled by thick pyroclastic flow deposits, intercalated caldera collapse breccia, and overlying post-caldera lacustrine sediments. Most calderas have prominent low gravity anomalies corresponding to several-km-deep subsidences. However, some resurgent calderas own high or ambiguous anomalies. It is plausible that plutonic bodies have intruded into such resurgent calderas.