Grounded Source Airborne EM survey in Bandai Volcano

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An airborne survey is suitable for investigation of volcano because it easily measure everywhere, even difficult entering place. But, it has some disadvantages such as less accuracy and limited depth of investigation. We developed GREATEM (Grounded Electrical-source Airborne Transient EM) survey system to increase the penetration depth to 1000m depths.

Bandai Volcano is an andestic stratovolcano with 1819m high and located in the central north of Fukushima prefecture, north-east Japan. Bandai Volcano erupted on July 1888. It blew off Sho-bandai located at the northern crater wall and formed a hoofed shape collapse wall. Many geological and geophysical surveys (DIGEM type AEM, MT, drill holes, etc.) have been performed at the volcano to investigate volcano structure and mechanism of the collapse. Here we reported the result of the GREATEM survey and comparison of the results and existed data.