

The Point Density Map to verify the quality of airborne laser scanner DEM.

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Airborne laser scanner (ALS) technology has proved to be a cost-effective and efficient means to capture the high-resolution elevation data over large areas in a short period of time. ALSDEM (Airborne Laser Scanner Digital Elevation Model) is generated from the obtained random ground data by ALS. It is thought that the accuracy of ALSDEM depends on the distribution of the measurement point. The accuracy of DEM will influence the terrain analysis and numerical simulation.

We designed the Point Density Map to verify quality of ALSDEM. The Point Density Map is a thematic map that totals the measurement point for each unit area. After considering the distribution of the measurement point, the user should examine an appropriate lattice interval. Moreover, it is necessary to refrain making of the lattice interval narrow ALSDEM without showing the measurement condition.