

## Utilizing new special information techniques based on the understanding of mountain science

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The brittleness of Japanese mountain has long been pointed that causes significant difficulties in forecasting sediment disasters in the mountain area. Abundant ground water brought by the pluvial climate and the brittle bedrocks occasionally cause serious sediment disasters such as deep-seated landslide. At the same time, it underlies the tremendous biodiversity of Japanese mountains. Understanding the both diversities of ecosystem and subsurface environment in Japanese mountains will be a critical important subject to utilization and conservation of Japanese mountains based on understanding its nature. The high spatial resolution vegetation and terrain data produced by the new sensing technologies such as airborne LiDAR and the visualization techniques will bring about great progress in this new field.

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