

The application of IN-YOU-ZU for a topographic interpretation

Ryuichi Sekoguchi[1]; Yukihide Akiyama[1]; Hiroshi Kobayashi[1]; Junichi Takanuki[1]

[1] Aero Asahi Corporation

The IN-YOU-ZU is one of methods to express the three-dimensional topographic features.

The topographic features are constituted by various ups and downs whose textures are complex in even small area.

But when looking them carefully, we notice that in spite of their magnitude of relief, gradient and elevation, they seem like a continuum of many waves overlapping on each other, viz. the relief is a wave having various amplitudes and wavelengths.

Therefore, it becomes possible to emphasize the relief using a polarity and a magnitude of the wave and then easy to analyze and interpret a complex topographic feature.

Fig.01 shows an example of IN-YOU-ZU, in which the volcanic mountain region of northwest part of Kantou district is vividly revealed.

There exist two typical stratovolcanoes, Mt. Akagi and Mt. Haruna, like as atwin.

Although their topographies have been considerably dissected by radially flowing alluvial streams, it is easy to recognize such a fundamental volcanic features as crater floor, lava flow and pyroclastic flow from a capability of IN-YOU-ZU to emphasize their topographical characteristics.

IN-YOU-ZU is a brand new method for three dimensional topographic analysis.
It is need more studies of many other cases to refine its capability.

