Active faults and topographic surfaces on the stereoscopic topographic map

IMAIZUMI, Toshifumi; MIYAOCHI, Takahiro; KAGOHARA, Kyoko; OKADA, Shinsuke; SHIRASAWA, Michio; YOKOYAMA, Ryuzo; SASAKI, Tatsuya

1Graduated School of Science, Tohoku University, 2Graduated School of Science, Chiba University, 3Faculty of Education, Yamaguchi University, 4International Research Institute of Disaster Science, Tohoku University, 5Yokoyama Geo-Spatial Information Lab., 6OYO Corporation, Database Business Department

Thematic topographic maps have developed by the progress in analysis using digital elevation model (DEM) and have made clear representation possible.

We made digital stereoscopic topographic maps in scale 1:25,000, by using 5m mesh DEM data arranged by Geospatial Information Authority of Japan (GSI). These 3D maps have same information, mode, scale and interval 10m contour, comparing to Quadrangle topographic sheet map.

We demonstrated the overlapping active fault line (Nakata and Imaizumi, edit 2002) on these 3D maps, in order to easily interpretation of the location of fault line, fault feature, evidence of faulting and displacement of faulting from professional and educational viewpoints.

Keywords: Active fault, Topographic surface, Stereoscopic topographic map, Interpretation of topographic map