

The structure of Byoubu-yama fault - Reflected wave analysis of Vibroseis seismic source -

Makoto OKUBO[1], Harumi Aoki[1], Ryuji Ikeda[2], Yoshimi Sasaki[3], Fumihito Yamazaki[4], Yasuhiro Asai[1], Toshiyuki Tanaka[1], Takeshi Ikawa[5], Masazumi Onishi[5], Shigeru Ino[5]

[1] TRIES, [2] NIED, [3] Faculty of Educ., Gifu Univ., [4] Res. Ctr. Seismol. & Volcanol., Nagoya Univ., [5] JGI

<http://www.tries.gr.jp>

We made a seismic survey of the Byoubu-yama fault, a great active fault in Tono, Gifu prefecture. Reflection and refraction surveys were made along a 24km long route across the Byoubu-yama and the Ena-san faults. Most of the route lies in the mountain area and the sediments have been estimated too thin to find good reflectors from the geological maps. Contrary to our unfavorable estimation, we were successful in getting clear reflectors down to the depth of about 20km. On shallow reflection records, southward dipping thrusts are evident on both of the active faults, Byoubu-yama and Ena-san. On deep reflection records, folding structure is recognized at depths of 4-5km. There are more deeper reflectors at depths of 15-20km, suggesting the boundary between the upper and the lower crusts.