

SCG062-P05

## Room:Convention Hall

Time:May 26 16:15-18:45

## Shallow seismic profiling across the Sakata Uplift, the eastern margin of the Sea of Japan

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The Sakata-oki uplifts with the strike of NNE-SSW, are located to the off-coast of Sakata, the eastern margin of the Sea of Japan, and are believed to be anticlines of fault-related folds whose causative fault is active and dipping to west. We obtained five seismic profiles across the uplifts to reveal the shallow fault-related structure. We used a boomer as acoustic seismic source, and received reflected acoustics with 12-channel streamer. Each seismic profile is about 16 km long, and the profiles are about 6 km away from the neighbors. Fault-related structures were commonly identified on all profiles, but the structure varies along the strike of the uplifts. On the two profiles of the northern profiles, uplift with the width of about 500 m was identified at the sea bottom. Well-developed fault-related structure was also identified on one of the profiles. Flexure was found below the uplift, and a layer boundary in the hanging wall was clearly inclined to the flexure. On the two southern profiles, flexure was commonly identified on the sea bottom.

Keywords: seismic profiling, Sataka-oki Uplifts, eastyern margin of the Sea of Japan, flexure