

On the fracture assessment of coastal area

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The fracture investigation, analysis, and assessment in the coastal area is the important with higher priority. The coastal area is a target of the geological disposal of high level nuclear waste and CO₂ as the greenhouse effect gas, where there are many electric power plant and other industrial factories. The source data of the subsurface in the coastal area are, in turn, not much available these days. In the case of land exploration, coast is one of the limited border where the survey stops. Topographic maps issued by Geographical Survey Institute and geological maps issued by National Institute of Advanced Industrial Science and Technology do not extend the content toward into the marine area with maintaining the same accuracy. In another case, the exploration of ocean area may stop in front of the coast. The marine geology maps are frequently lack of the coastal information. There are few exceptional cases to suggest the continued geology between land and marine areas, because the accuracy of the land area is mostly better than those of the marine area. The past archived data around coastal area are fragmented and scattered in organizations of national and others. Our group confirmed some of the archived source data which have already included in the publications through some Government Ministries. We are setting up some metadata based on the international standard, ISO19115-2003, for the coastal subsurface fractures and the assessment, then discussing future strategy for the possibly available and interoperable database. Some organizations did compile published data around coastal area. The public organization should participate such compilation and partly open their source data for the potential demands from societies for the fracture assessment of coastal area.