

## Estimation of Subsurface Structure Using Receiver Function at Seismograph Observatory Site in Tottori Prefecture

\*Tatsuya Noguchi<sup>1</sup>, Hayato Nishikawa<sup>2</sup>, Shohei Yoshida<sup>1</sup>, Takao Kagawa<sup>1</sup>

1.Department of Management of Social Systems and Civil Engineering, Civil Engineering Course Graduate School of Engineering, Tottori University, 2.National Institute of Technology, Maizuru College

In this study, subsurface structures of strong ground motion observation sites in Tottori Prefecture were estimated from receiver functions at seismograph observatory sites. PS-P times were obtained from receiver functions of observation data and parameter of existing underground model (J-SHIS model etc.). The PS-P times were compared with both results at each site and subsurface structure models were estimated by adjusting the layer thickness of initial model. Theoretical receiver functions were calculated from subsurface structure by using Haskell matrix and subsurface structure models were estimated by comparison of both receiver function.

Keywords: Receiver function, Subsurface structure, Seismograph observatory site, Tottori Prefecture