The propagation characteristics of quasi-long period seismic ground motion by the dense south Kanto seismic network

Yasushi Ishihara[1], Masanori Saito[2], Masayuki Kikuchi[3], Yoshiko Yamanaka[4]

[1] Sci,Yokohama City Univ, [2] Faculty of Sci., Yokohama City Univ., [3] ERI, Univ. Tokyo, [4] ERI, Univ. of Tokyo

http://www.seis.yokohama-cu.ac.jp

The high dense seismic network is powerful tool to research the heterogeneous seismic wave propagation.
The south Kanto region stands on the thick sediment layer
and the networks record the long period (7-10sec) and long duration seismic motions.
we pursued the long period seismic wave packets from the source to the networks and identified two surface wave groups by the Rayleigh
wave seimograms. The first group is normal direct-path surface wave generated from the source.
The large amplitude of Love wave is observed immediately
after the first group pass and is followed by the second Rayleigh wave phase.
We concluded that the most dominant horizontal phase is secondary generated by the sediment/basement interaction.