On the features of electric signals associated with the arrival of seismic wave

Hideki Murakami[1]; Mamoru Yamada[2]; Takesi Nakayama[3]

[1] Natural Environmental Sci.,Kochi Univ; [2] RCSVDM Nagoya Univ.; [3] none

Some examples of electric and magnetic field variations in association with earthquakes have been reported recently as a seismic dynamo effect. We reported the features of electric signals at Kakegwa associated with the arrival of seismic wave of 2004 southeast off Kii-peninsula earthquake (M6.9,M7.4). The horizontal and vertical electric field variations were observed with the arrival of seismic wave. The electric field variations corresponding to the S-wave arrival were clear and of the order of 10ˆ-6 - 10ˆ-7V/m. The horizontal electric variations at 8m depths were larger than that at 24m depths. These electric signals appeared before 0.5 seconds or simultaneous with the arrival of the S-wave.