Parameter Study on Near Fault Strong Ground Motion Considering Randomness of Faulting Process

*Junpei Kaneda[1], Yoshiaki Hisada[1]

1. Kogakuin University

During the 2016 Kumamoto earthquake, the near fault strong ground motions in Mashiki City showed that the EW components (closet to the fault normal direction) were dominant over the NS components. This was probably caused by the combined effects of the upward directivity pulse (e.g., Miyatake (2016)) and the fling step (e.g., Hisada et.al. (2016)). On the other hand, the near fault strong ground motion in Nishihara Village also showed the dominant EW components, which was caused by the fling step, but did not showed the forward directivity pulse. This may be caused by the complex faulting process, and/or the complex underground structures, which prevents the generation of directivity pulses (e.g., Hisada et.al. (2016)). In order to confirm these phenomena, we carried out the parameter studies based on the recipe for strong motion prediction method. We will present the detail results on the conference.

Keywords: Near Fault Strong Ground Motion, Directivity Pulse, Randomness of Faulting Process

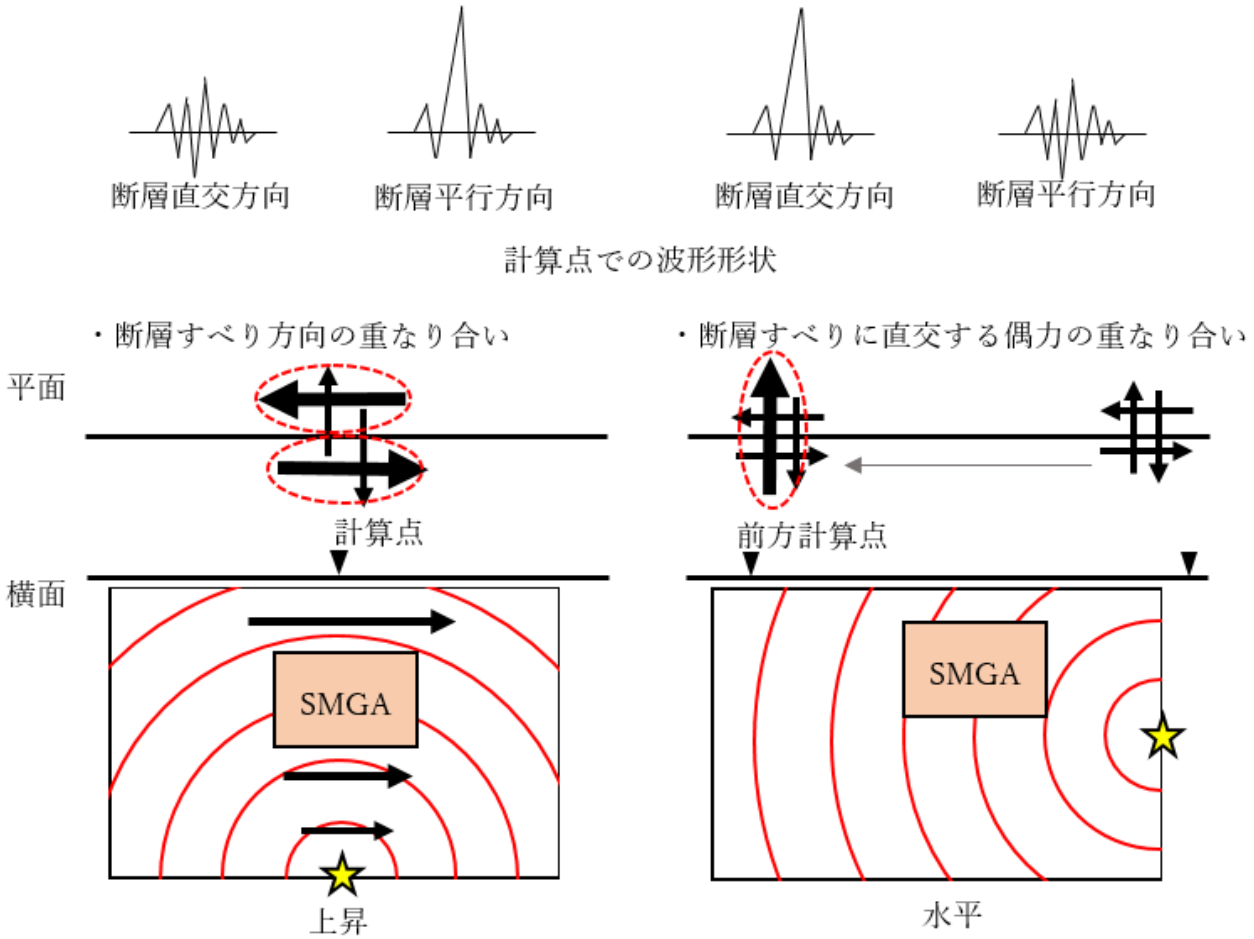

図 1 伝播特性と指向性パルス発生の概念図(宮武(2016)を参照)

