

Difference between North-South and East-West components of ELF magnetic disturbances associated with lightning detected at Kawatabi, Osaki, Miyagi, Japan

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In the record of 0.1-20 Hz Extremely Low Frequency (ELF) magnetic variations observed by using two sets of induction magnetometers for NS and EW components, there found cases where broadband disturbances were present only in one of the two components. Intense disturbance was found in EW component in 6 out of 8 events found at Kawatabi, in the absence of NS disturbances. It would suggest the orientation of the source lightning near the observation site.

Keywords: ELF, lightning, magnetic variation, East-West, induction magnetometer, direction

