A lightning observation network in Kansai using a LF broadband digital interferometer

Satoru Yoshida1, Yuji Takayanagi1, Ting Wu1, Tomoo Ushio1, Zen Kawasaki1

1 Osaka University

We have been designing and developing a LF broadband digital interferometer (DITF) that detect electromagnetic (EM) waves associated with cloud-to-ground and intracloud discharges, and locate the EM wave sources. We have been building up a lightning observation network consisting of a LF DITF around Osaka. The observation network covers the areas from Kobe to Nara. In this presentation we compare the results with radar data and discuss the initiation of lightning discharges.

Keywords: lightning, monitoring, remote sensing