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effort to utilize the infrasound observation network data for reducing damage from convective storms and lightning

In order to understand regional infrasound sources and improve the accuracy of the discrimination for the nuclear test, the development of the infrasound monitoring system with a low-cost and compact size has been started and the portable infrasound observation kit by using the nano-resolution digital quarts resonator sensor (Paroscientific, Inc., USA) was developed in 2011. Until now, in order to limit damage caused when a disaster strikes associated with explosive volcanos, tsunamis, snow avalanches, convective storms and lightning, several portable kits have been deployed in array configuration in Japan. In the summer and early fall every year, many thunderstorms occur and pass near the infrasound station and many interesting infrasound signals associated with these thunderstorms are detected by the infrasound observation network. In this presentation, we would demonstrate the signal generation mechanism by comparing the information obtained from X band multiparameter radar with the characteristics of these infrasound signals.

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