Tokyo Lightning Mapping Array

*Namiko Sakurai[1], Yasushi Uji[1], Shingo Shimizu[1], Koyuru Iwanami[1], Shin-Ichi Suzuki[1], Takeshi Maesaka[1], Kenichi Shimose[1], Kaori Kieda[1], Daniel Rodeheffer[2], William Rison[2], Paul Krehbiel[2]

1. National Research Institute For Earth Science and Disaster Resilience, 2. New Mexico Institute of Mining and Technology

The National research Institute for Earth Science and Disaster Resilience, Japan (NIED) has dense observation network in the Tokyo Metropolitan area to observe the lifecycle of Cb which often brings lightning, torrential rainfall, gust, and hail. The observation network consistes of two X-band polarimetric radars, five Ka-band cloud radars, three Doppler lidars, and ten micro-wave radiometeres. We have newly deployed a lightning mapping array in the Tokyo Metropolitan area. Named the Tokyo Lightning Mapping Array (TOKLMA), it consists of 12 sites that can obtain total lightning data. 8 LMA sensors were deployed in March 2017 and the other sensors will be installed by the end of March 2018. This paper will introduce TOKLMA and report preliminary results.

Keywords: lightning

