Abstract

In order to prevent lightning strike damages in smart societies, we are researching lightning strike control and charging technology using drones. In addition to lightning-proof drones, we use technology that predicts lightning-onset points several minutes in the future to capture lightning strikes with high accuracy and guide them to charging devices. We aim to put this technology to practical use by 2030.

Features

- Optimizing drone spacings allows to induct lightnings any place without having to connect all the wires.
- Protects a large area efficiently by flying drones in optimal point based on lightning point prediction.

Application Scenarios

- Prevents lightning damage to various infrastructures
- Prevents lightning strikes on spectators, staff, facilities, etc. at outdoor events

Roadmaps

- We will proceed with R&D in lightning-proof drones, chargers, lightning strike position prediction, etc. In 2022, lightning control experiments in the natural environment will be started.

Collaboration Partners

- GIFU UNIVERSITY, HOKKAIDO UNIVERSITY

Exhibitors

- NIPPON TELEGRAPH AND TELEPHONE CORPORATION