

## Implementation of the ULAT Project : Quasi-Real Time Monitoring of Lightning and Weather in the Philippines

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Monitoring and understanding thunderstorms are key components for mitigating the disasters by torrential rainfall and typhoons. The integration of lightning data has the potential to provide short term forecasts of thunderstorms, further meteorological studies, and supplement disaster risk response strategies. This presents the activities and updates on the Understanding Lightning and Thunderstorm for Extreme Weather Monitoring and Information Sharing in the Philippines (ULAT) Project, which is led by Hokkaido University and other Japanese institutes and ASTI/DOST in the Philippines supported by the Japan International Cooperation Agency (JICA) and Japan Science and Technology Agency (JST). The ULAT Project is aimed at the following: a) establishment of a dense network of lightning and weather detectors in Metro Manila and nearby municipalities in order to provide thunderstorm “now-casting” and supplement weather-related research and disaster response studies and strategies; b) establishment of a ground receiving station for the direct reception of the satellite imagery and utilization of existing ground receiving facilities in order to develop effective observation methods by comparing 3D structures of thunderclouds from satellite images with lightning/precipitation data; c) establishment of a methodology for short term forecasts; and d) development of software for sharing information on short term forecast weather to concerned agencies. At the presentation, we will show the updated status of this project and will show the initial results derived from this project.

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