

S2-08

**Extreme Weather Bulletin and Emergency Observation/Mapping  
Activities of the Manila Observatory**

May Celine Thelma M. Vicente – Laboratory Head, Geomatics for Environment and Development,  
Manila Observatory  
Faye Abigail T. Cruz – Laboratory Head, Regional Climate System, Manila Observatory  
Ma. Flordeliza P. del Castillo – Senior RS-GIS Specialist, Geomatics for Environment  
Jezleer T. Montajes – Senior RS-GIS Specialist, Geomatics for Environment and Development, Manila  
Observatory  
Francia B. Avila – Manila Observatory  
Julie Mae B. Dado – Manila Observatory

The Manila Observatory (MO) is a non-profit research institution with studies focusing on atmospheric and earth sciences. In response to the needs of various partner organizations, MO prepares and issues extreme weather bulletins (EWB) to consolidate forecast information on extreme weather events, particularly tropical cyclones (TC), and the associated potential risks to vulnerable areas. The EWB together with local situation reports or news trigger the emergency observation/mapping (EO/M) activities that assess the impacts of the TC in areas of interest (AOIs). Examples of this work for TC events in 2021 will be presented. However, the EWB may still be improved with broad GIS-based TC and hydrometeorological risk maps. In addition, the semi-automation of the EO/M procedure can generate high-quality maps and timely spatial analyses of emergencies before, during, and post-disaster. These enhancements will be addressed in a new project that will explore workflows and methodologies for EO/M optimization on the Microsoft Planetary Computer, using a test case scenario based on previous EWBs and EO/M.