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Hands-on Space Education and Outreach (8)

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PRECIPITATION EDUCATION: SHARING THE EXCITEMENT OF THE GLOBAL  
PRECIPITATION MEASUREMENT MISSION WITH MULTIPLE AUDIENCES

**Abstract**

The Global Precipitation Measurement (GPM) mission celebrated its 5th anniversary on Feb. 27, 2019. GPM is an international network of satellites that provide the next-generation global observations of rain and snow. Building upon the success of the Tropical Rainfall Measuring Mission (TRMM), the GPM concept centers on the deployment of a “Core” satellite carrying an advanced radar / radiometer system to measure precipitation from space and serve as a reference standard to unify precipitation measurements from a constellation of research and operational satellites. Through improved measurements of precipitation globally, the GPM mission is helping to advance our understanding of Earth’s water and energy cycle, improve forecasting of extreme events that cause natural hazards and disasters, and extend current capabilities in using accurate and timely information of precipitation to directly benefit society.

In this session, participants will learn how the science, technology, and applications related to this mission have been shared with the public across a wide variety of settings. They will follow the progression of how the GPM mission “story” has been told and see many of the diverse products that have been developed to share this “story”. These products include a dedicated “Precipitation Education” website, videos, interactive activities such as making a 3D printed model of a storm using GPM data and building LEGO models that depict storms using these data, an anime style comic book, hands-on activities that demonstrate the amount of freshwater on Earth as well as enabling participants to build “precipitation towers” to see how much precipitation falls on cities around the U.S.

They will hear about lessons learned, Best Practices to use to reach out to They will have the opportunity to do several hands-on activities that demonstrate some of the concepts being shared with audiences of all ages. There will be time for some discussion about how to determine which concepts to build upon when developing outreach resources for a variety of audiences.