

## NASA Extends TRMM Operations Through 2004 Hurricane Season

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NASA will extend operation of the **Tropical Rainfall Measuring Mission** (TRMM) through the end of 2004, in light of a recent request from the National Oceanic and Atmospheric Administration (NOAA). The extension, to be undertaken jointly with <u>NASA's</u> TRMM partner, the Japan Aerospace Exploration Agency (JAXA), will provide data during another storm season in the U.S. and Asia.

TRMM has yielded significant scientific research data over the last seven years to users around the globe. In addition, TRMM data has aided NOAA, other government agencies, and other users in their operational work of monitoring and predicting rainfall and storms, as well as in storm research. Launched in 1997, TRMM was originally designed as a three-year research mission. Following four years of extending TRMM, NASA and JAXA recently announced a decision to decommission TRMM, and proceed with a safe, controlled deorbit. Options for safe reentry become increasingly limited the longer TRMM is operated, as it is already more than 3 years beyond design life.

"NASA is committed to working with our partner agencies to help them carry out their mission. We have decided to extend TRMM through this year's hurricane season in our effort to aid NOAA in capturing another full season of storm data," said Dr. Ghassem Asrar, Deputy Associate Administrator of NASA's Science Mission Directorate. "The United States is a leader in Earth remote sensing, and NASA is proud of our role in building that leadership. Our work in partnership with NOAA and international partners such as JAXA is an important part of the world's



scientific research on global precipitation and weather. TRMM has been a valuable part of that legacy and we look to our follow-on missions to continue to reap great public benefit," he added.

TRMM is the first satellite to measure rainfall over the global tropics, allowing scientists to study the transfer of water and energy among the global atmosphere and ocean surface that form the faster portions of the Earth's climate system. Because TRMM's radar enables it to "see through" clouds, it allows weather researchers to make the equivalent of a CAT-scan of hurricanes and helps weather forecasters to use TRMM data to improve prediction of severe storms.

"TRMM has proven helpful in complementing the other satellite data used by NOAA's National Weather Service in its operations," said Retired Air Force Brig. Gen. David L. Johnson, Director of NOAA's National Weather Service.

JAXA welcomes and supports the decision to extend TRMM. The extension will be of benefit to the worldwide science and research communities. NASA and JAXA look forward to continuing their close collaboration beyond TRMM through establishment of a new advanced capability for the measurement of precipitation globally with the Global Precipitation Measurement Mission (GPM). GPM will use an extensive ground validation network to further improve the accuracy of its measurements compared to those made by TRMM.

NASA and NOAA have asked the National Academy of Sciences to convene a workshop next month to advise NASA and NOAA on the best use of TRMM's remaining spacecraft life; the overall risks and benefits of the TRMM mission extension options; the advisability of transfer of operational responsibility for TRMM to NOAA; any requirement for a follow-on operational satellite to provide comparable TRMM data; and optimal use of GPM, a follow-on research spacecraft to TRMM, planned



for launch by the end of the decade.

"It's important to note that we are able to extend TRMM for this brief period and are vigilant in maintaining our requirement for a safe, controlled re-entry and deorbit of the spacecraft," said Asrar. "We also welcome the opportunity to receive advice from the National Academy of Sciences next month on the best use of TRMM's remaining spacecraft life, TRMM re-entry risk, and the best use of our upcoming next-generation research spacecraft, GPM," he added

NASA and NOAA will work with the National Academy of Sciences to share with the public outcomes from next month's workshop.

For more information about TRMM on the Internet, visit: <a href="mailto:trmm.gsfc.nasa.gov/">trmm.gsfc.nasa.gov/</a>

Source: NASA

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