

# Sea surface temperature retrieved from Microwave Imager

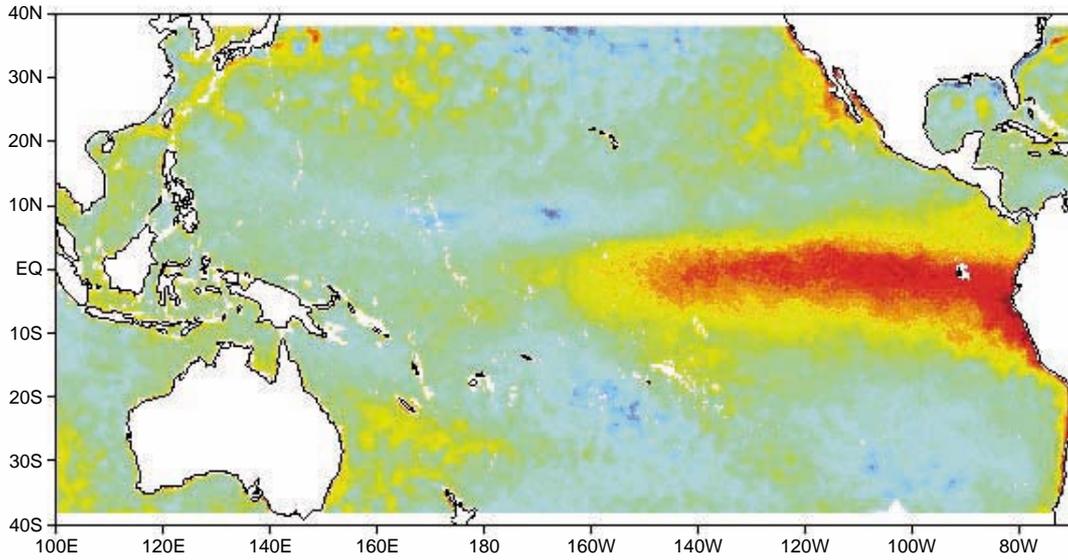
**NASDA**  
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**CRL**  
COMMUNICATIONS RESEARCH LABORATORY



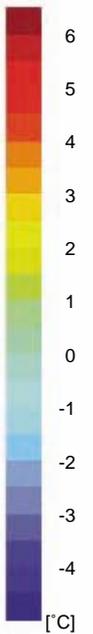
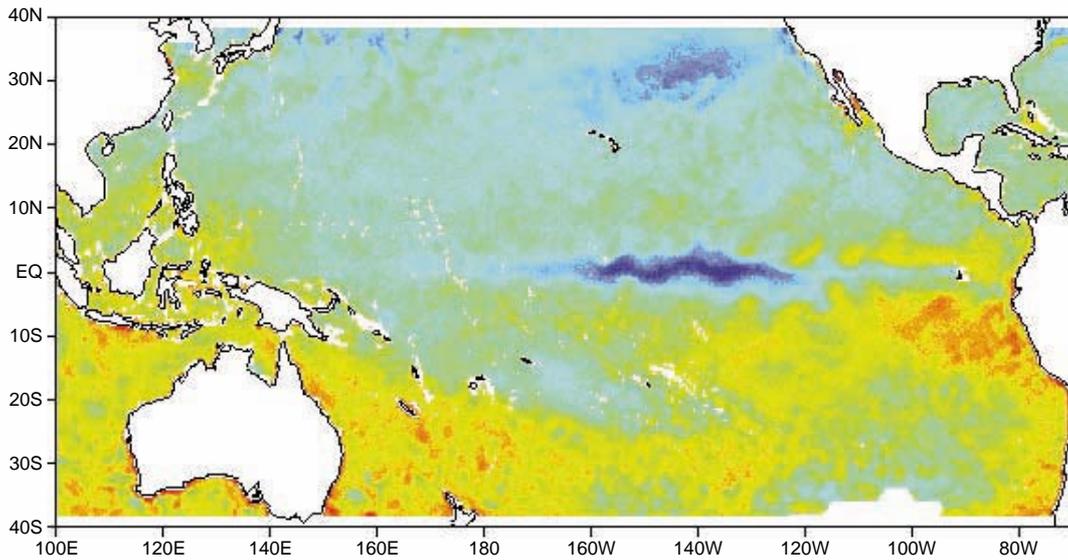
TRMM Earth View



Dec. 8-31, 1997



Jul. 11-20, 1998



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TRMM Microwave Imager (TMI) aboard TRMM (Tropical Rainfall Measuring Mission ) offers new applications to different research area by using 10GHz data. Retrieving sea surface temperature (SST) from 10GHz data is one of them. SST by TMI will be available in ocean areas with SST larger than 10°C in spite of the cloud existing, and will be able to retrieve the distribution of SST every few days.

The upper figure shows the difference of SST by TMI in Dec.1997 and the climate value by the Japan Meteorological Agency, which shows an extension of high SST area in the eastern equatorial Pacific indicated by yellow or red and shows a strong El niño.

The figure below also shows the difference of SST in July 1998, which shows that the strong El niño disappears and a low temperature (blue) area in SST appears which is an opposite status as a possible La Niña.

TMI SST is expected to be used for studies for unusual weather mechanism, improvement of weather forecast, and monitoring of ocean and fishery conditions.