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Title: AMPR/SSMI Data Comparisons

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Significant Accomplishments for the Past Year:

The AMPR was flown during CAPE and STORMFEST, during which some good data were gathered. Significant instrument noise problems were encountered in both deployments which appear to be temperature related. These are being fixed before the TOGA COARE deployment. New calibration loads have also been manufactured for the TOGA COARE configuration. Eric Smith at FSU had been analyzing the AMPR data and has written a journal article to be submitted early this summer. The emphasis of his work is on the interpretation of low resolution microwave data from space, based upon what we have learned from the high-resolution AMPR signatures.

Focus of Current Research and Plans for Next Year:

The AMPR is being thoroughly checked out before the TOGA COARE deployment. New calibration loads have been completed, and will be integrated this summer. Because they were designed to exactly replace the existing loads, this is a low risk modification. While a new data system has been designed, the existing data system is also being thoroughly checked out since it will likely be the primary system that will be used for COARE.

Publications:

Galliano, J.A., and R.H. Platt, 1990: Advanced Microwave Precipitation Radiometer (AMPR) for Remote Observation of Precipitation. Final Report, NASA Contract NAS8-37142.