

ERBE Radiative Fluxes and ISCCP Cloud Amounts/Heights

**R. Cess, W. Lin, M. Zhang & M. Sun
Marine Sciences Research Center
SUNY at Stony Brook**

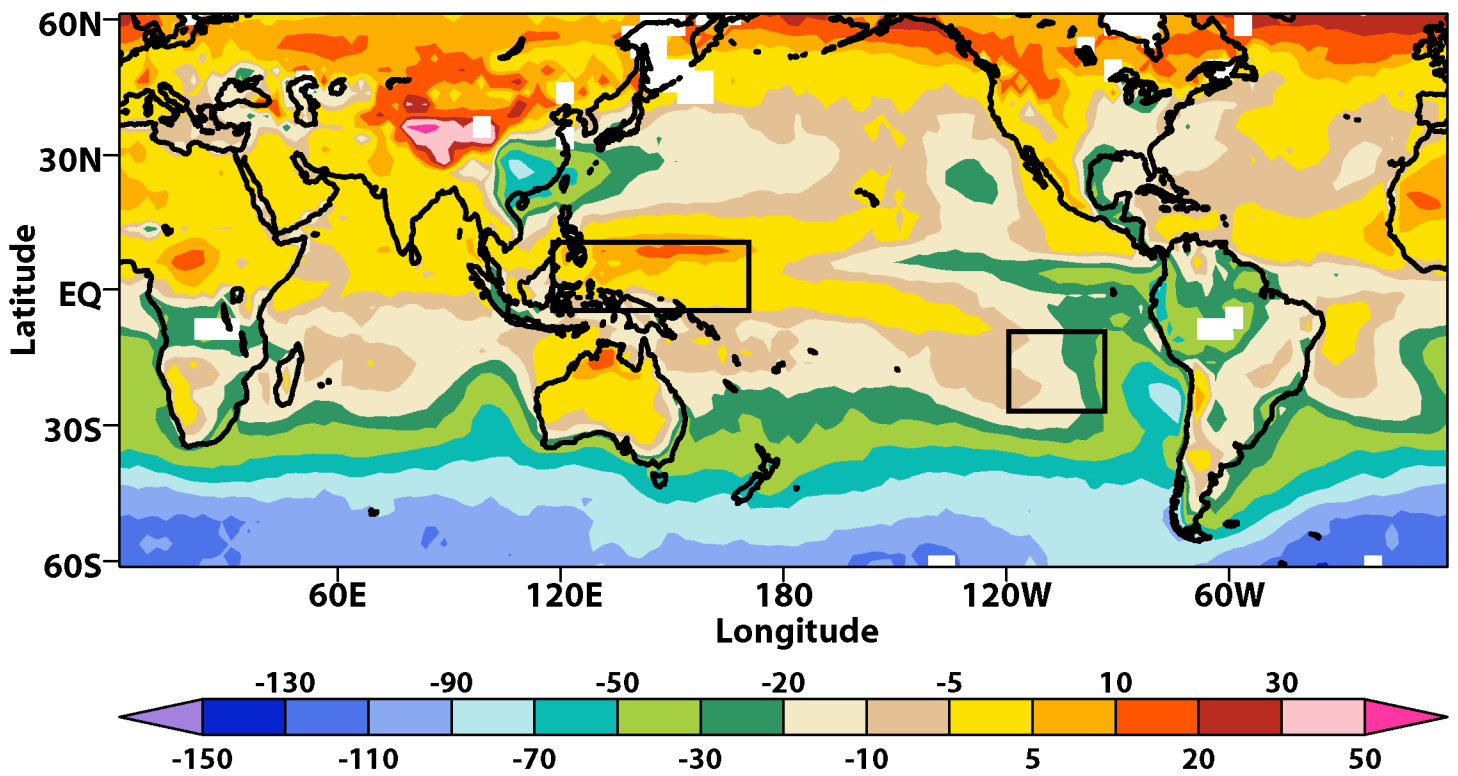
**29th CERES Science Team Meeting
Hampton, VA
November 17-18, 2003**

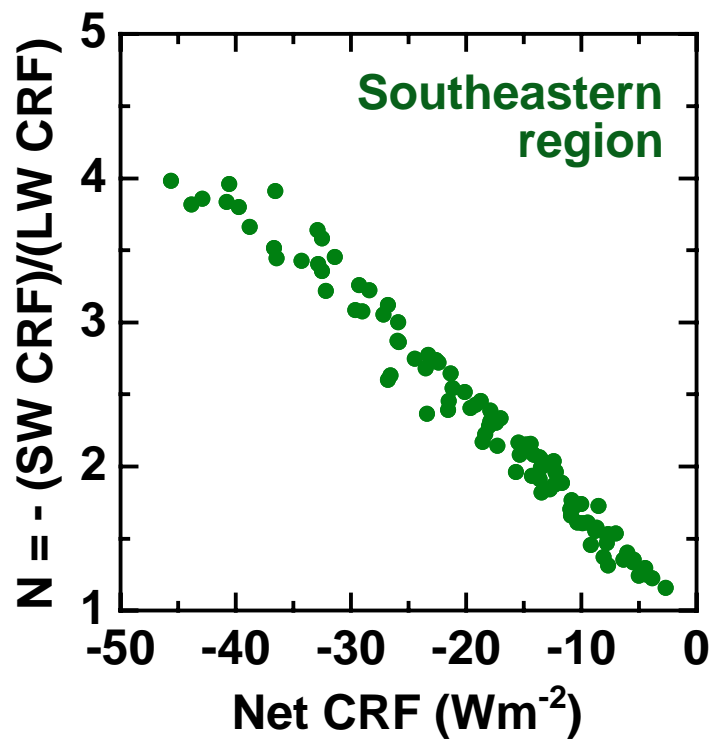
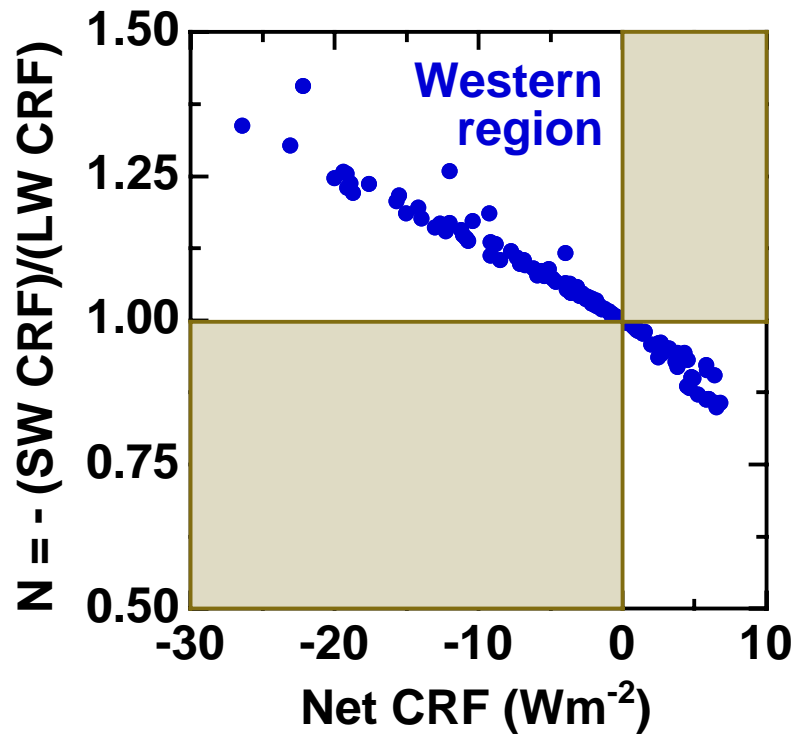
Data

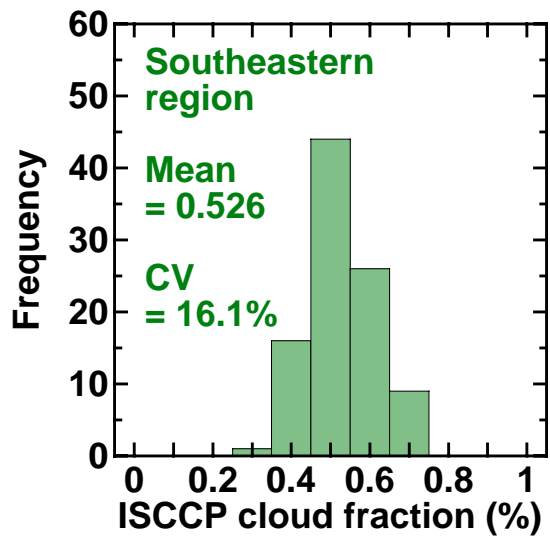
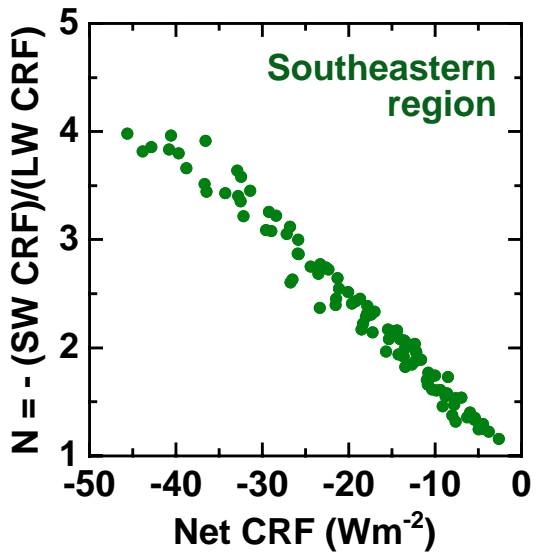
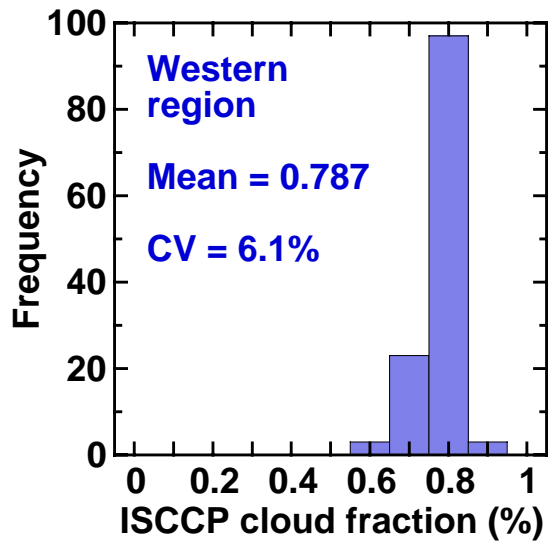
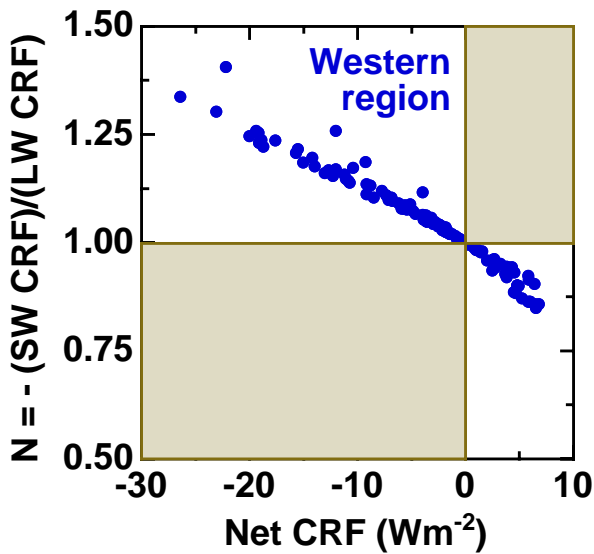
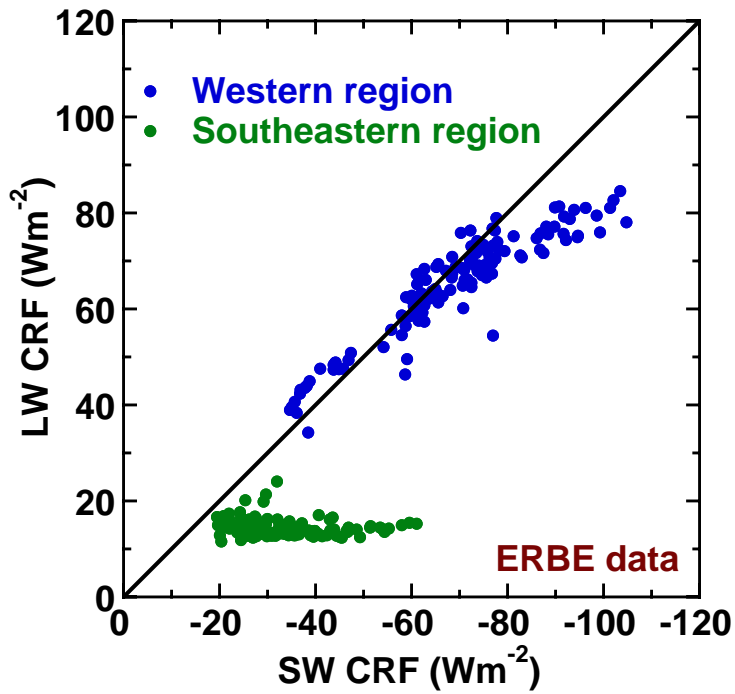
ERBE: Gridded data ($2.5^{\circ} \times 2.5^{\circ}$) consisting of DJF means averaged over five years (1985-1989).

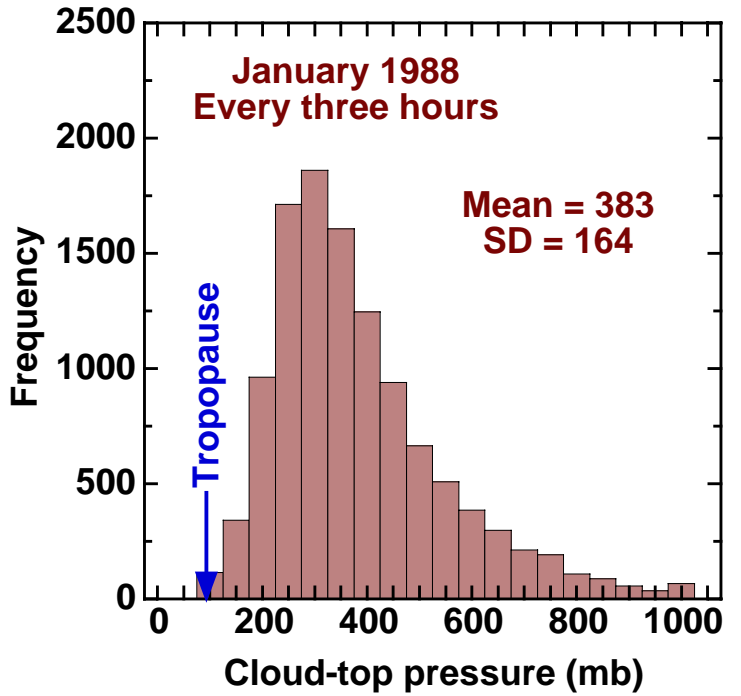
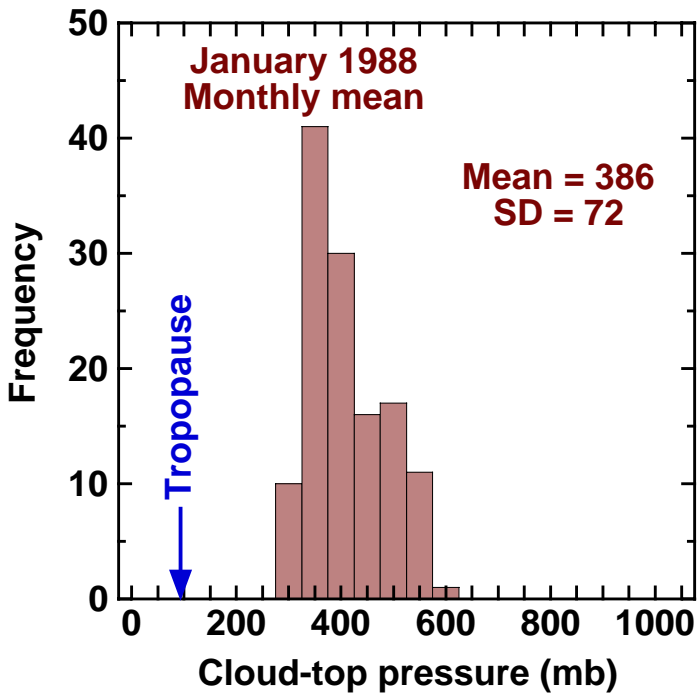
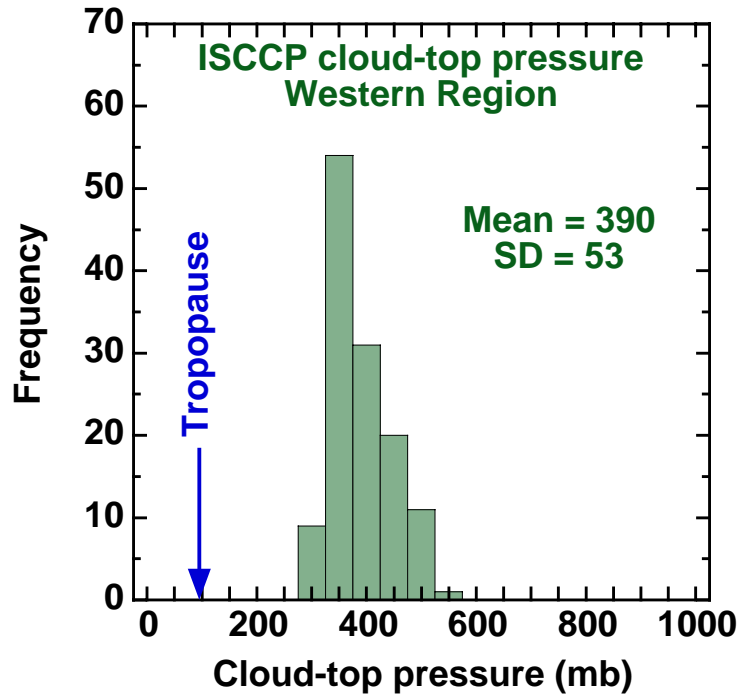
ISCCP: The same as the above for cloud amount and cloud-top pressure, plus every-three-hour data for January 1988.

Net CRF (Wm^{-2})

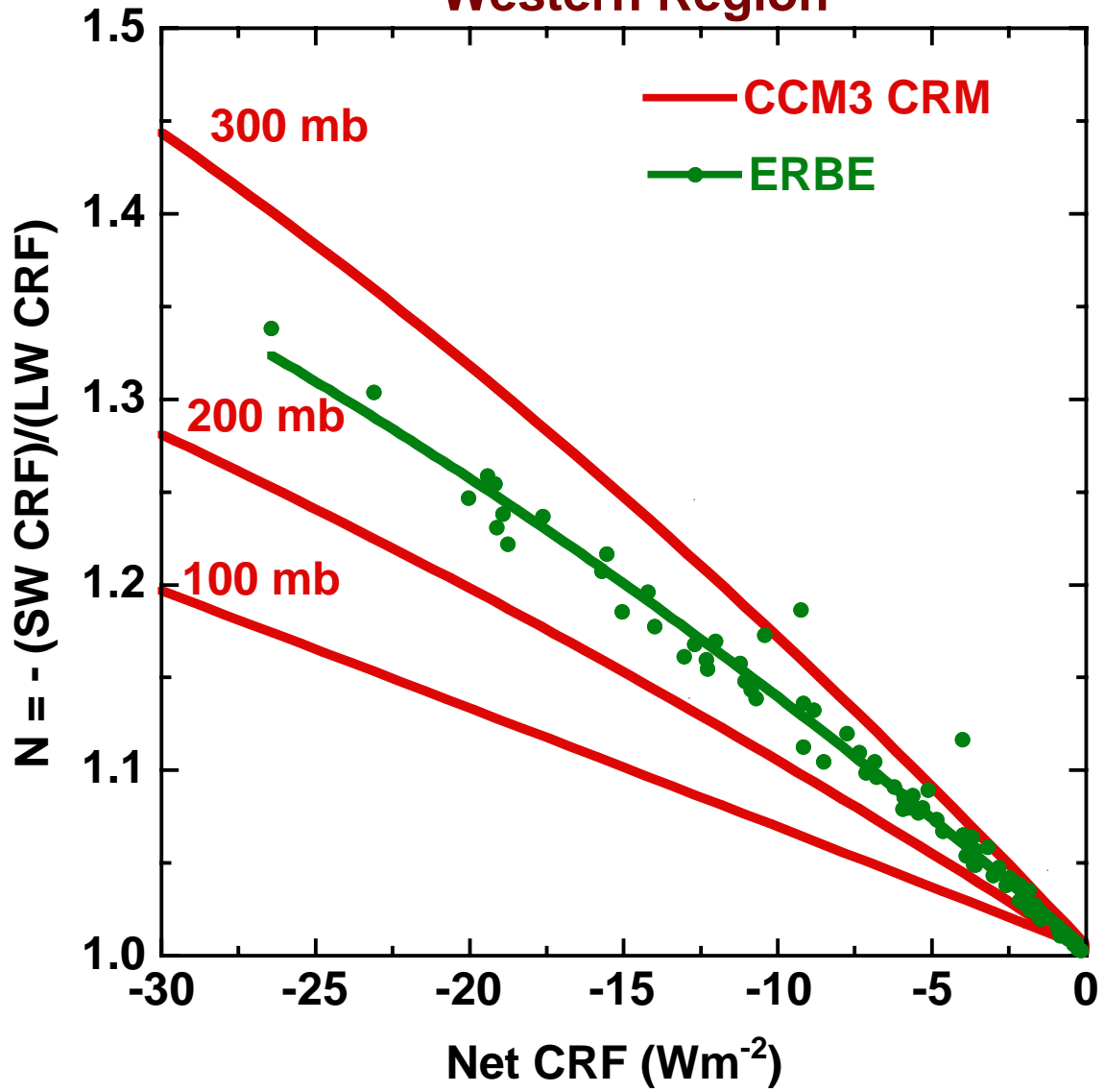








Western Region



Two Interesting Studies

Hartmann, Moy and Fu [2001]: Implemented every three hourly ISCCP cloud-top pressures, plus other input data for the tropical western Pacific, into a radiative transfer model and obtained TOA SW and LW radiative fluxes that were in good agreement with ERBE.

Taotao Qian [2003]: Implemented monthly-mean HIRS cloud-top pressures, plus other input data for the tropical western Pacific, into a radiative transfer model and obtained TOA SW and LW radiative fluxes that were in good agreement with ERBE.

TOGA COARE ARRAY
11/1992 - 02/1993

