



ASTA Annual Meeting

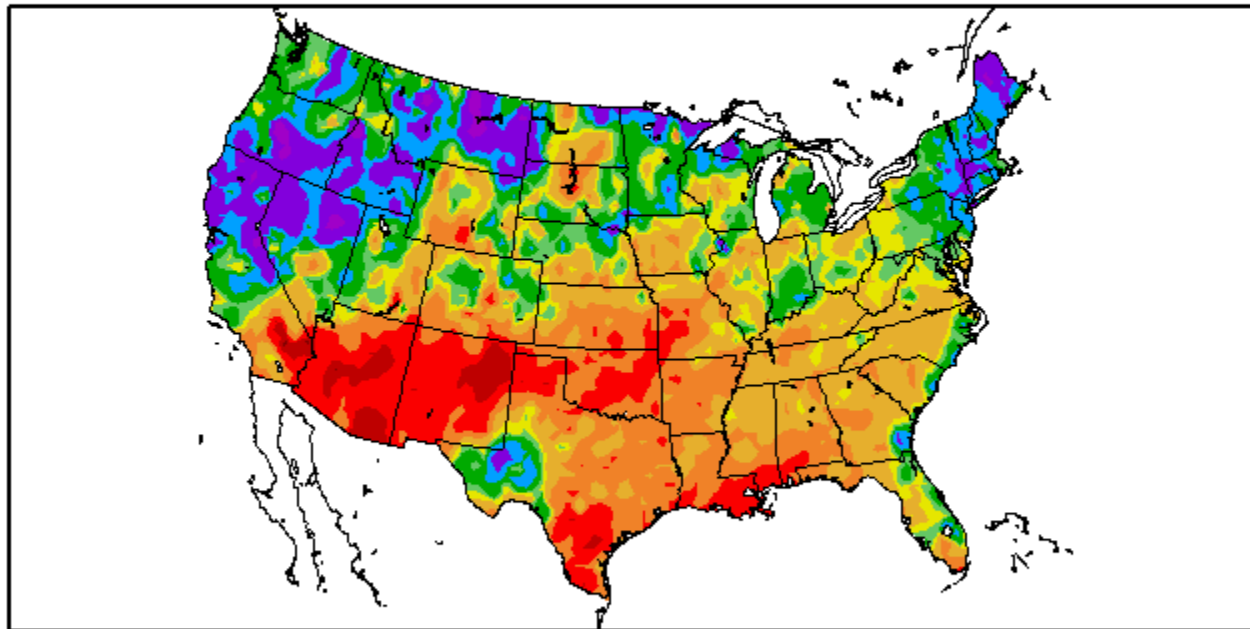
May 8-11, 2006

The Weather Factor

Mark Russo



Percent of Normal Precipitation (%)
10/1/2005 - 4/25/2006

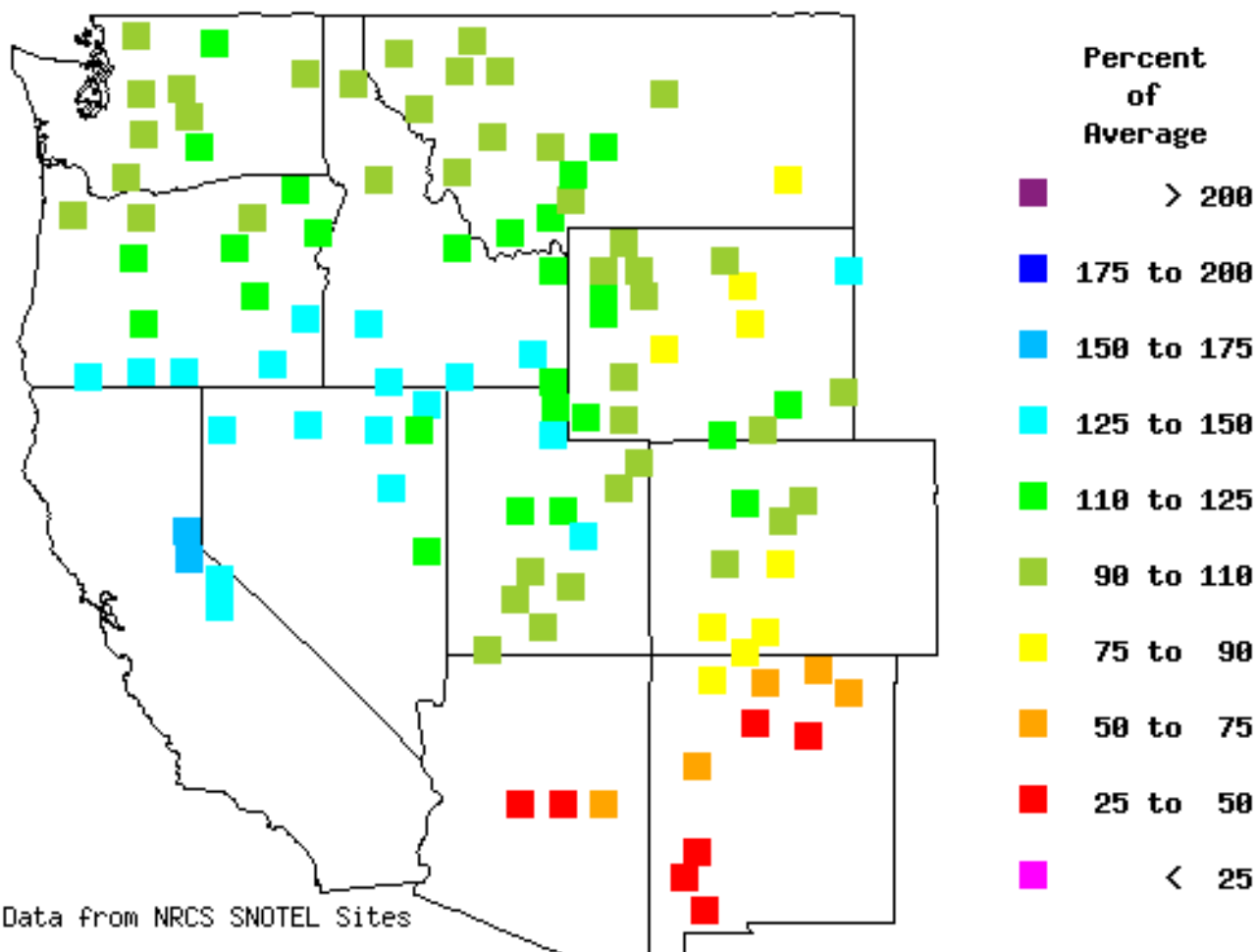


Generated 4/26/2006 at HPRCC using provisional data.

NOAA Regional Climate Centers

Basin Average Precipitation. (% of Average.)

OCTOBER 1 , 2005 thru APRIL 25 , 2006



Report Date:

APRIL 25 , 2006

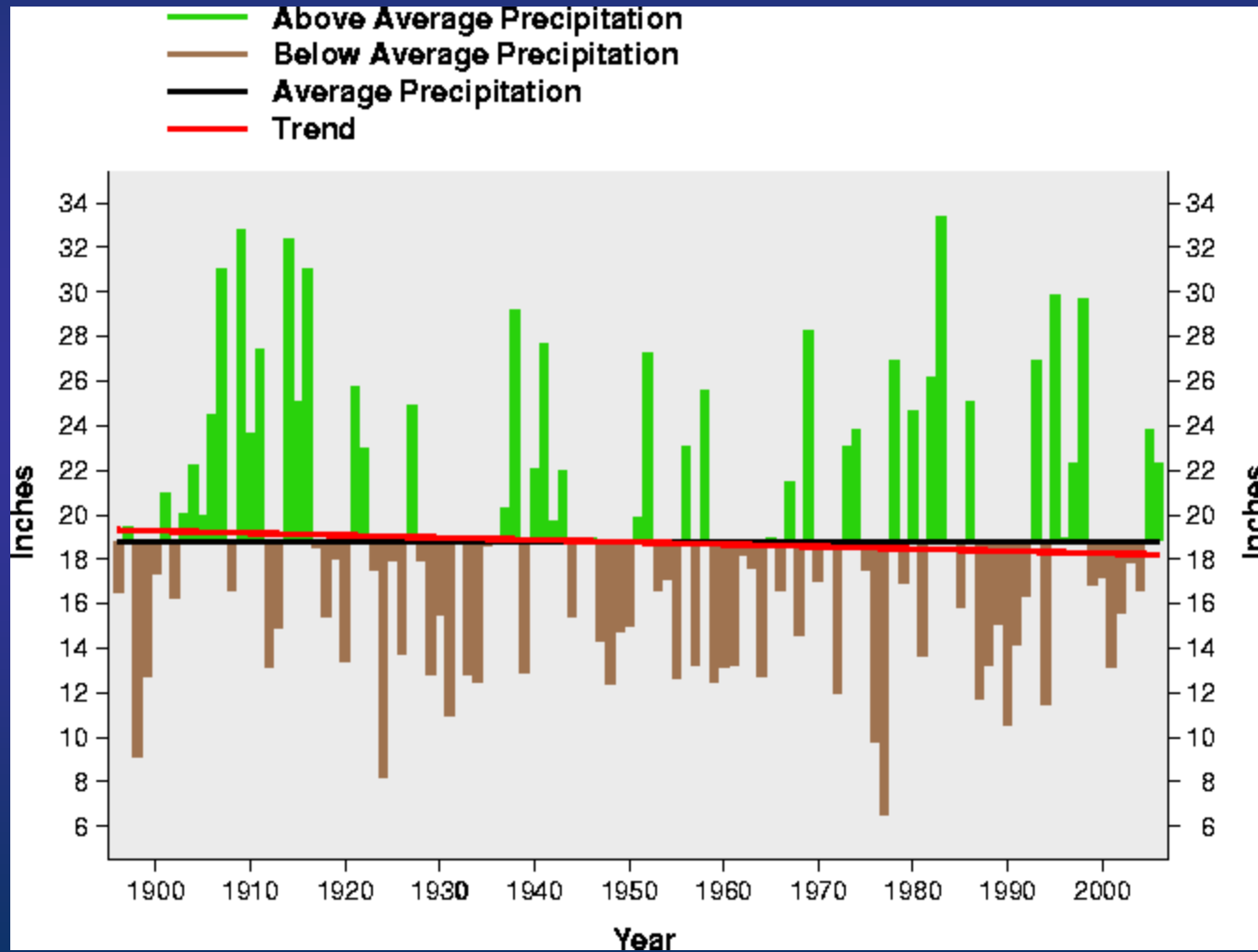
Provisional Data
Based on Mountain Data from NRCS SNOTEL Sites

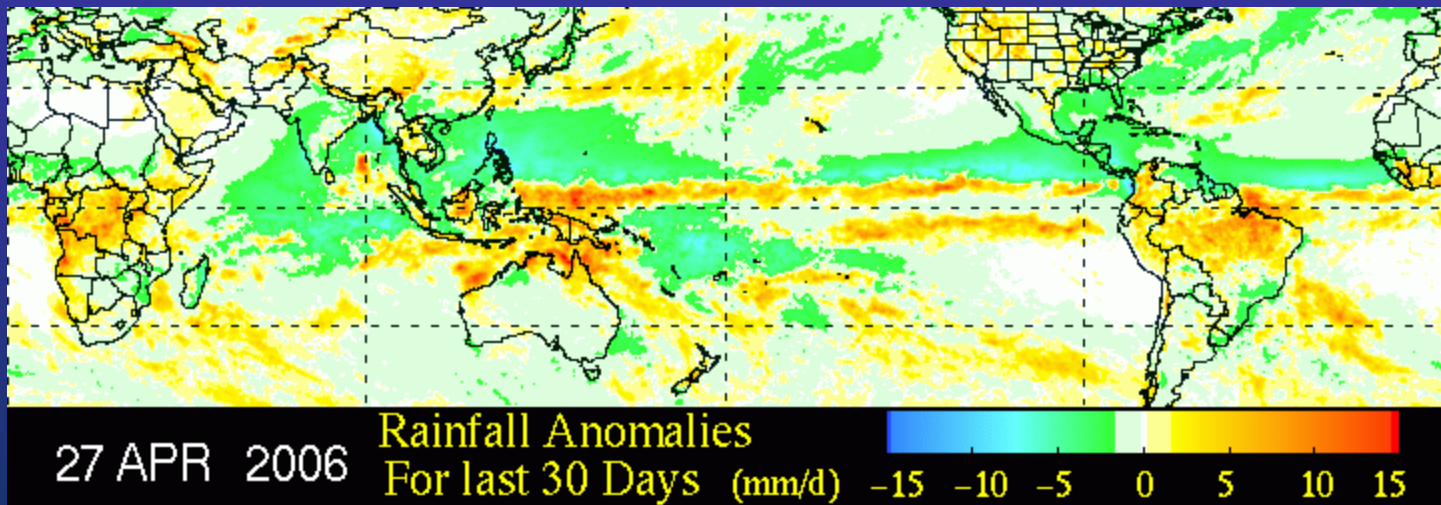
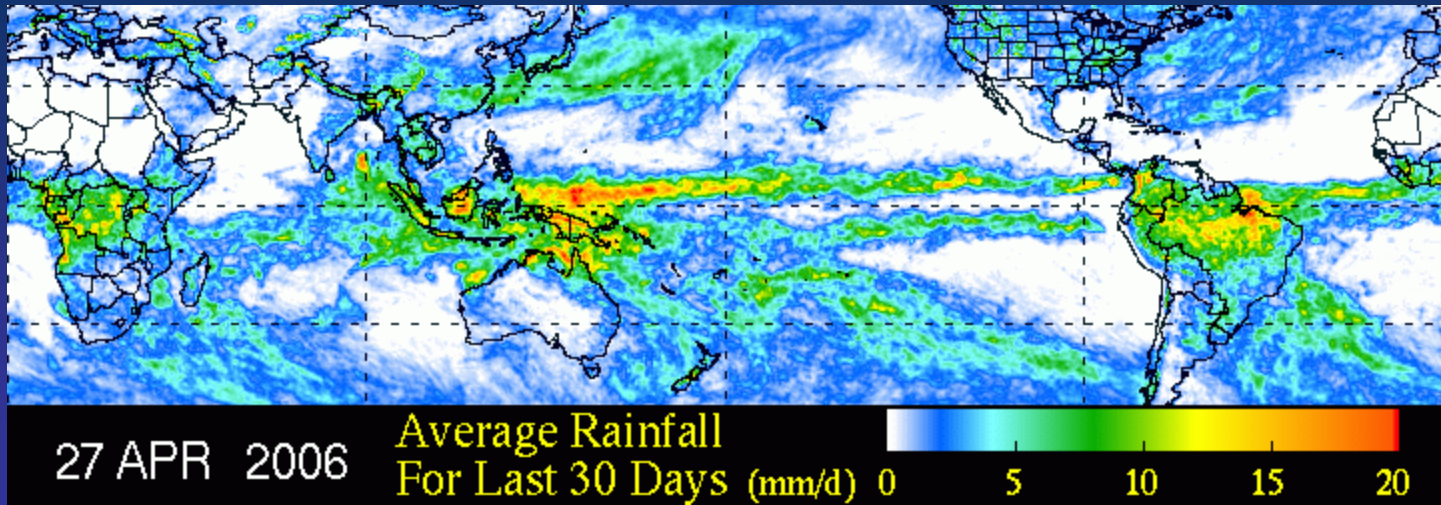
Data provided by
Water and Climate Center
National Resource Conservation Service
Portland, Oregon

Western Regional Climate Center
Desert Research Institute
Reno, Nevada

California Oct-Mar Precipitation

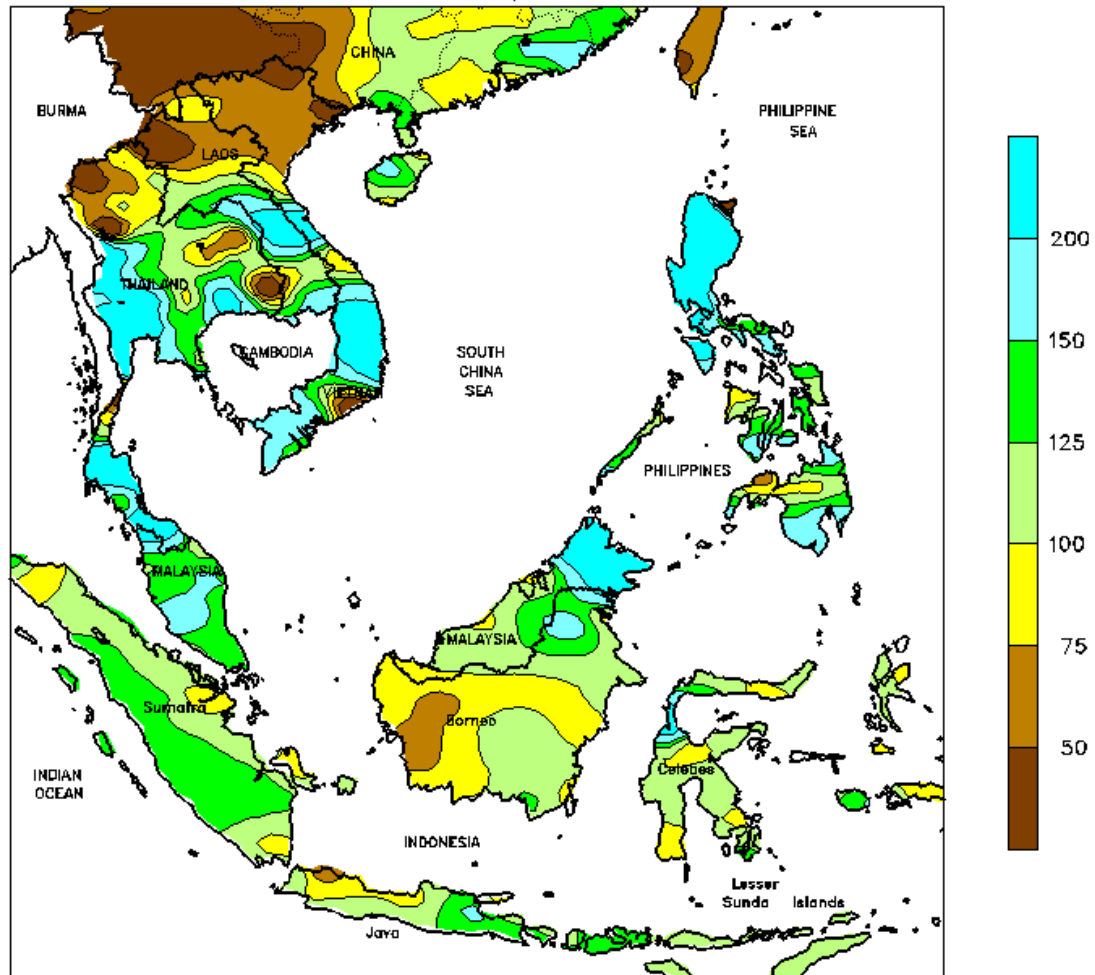
1895/96 – 2005/06





Data Source: NASA TRMM

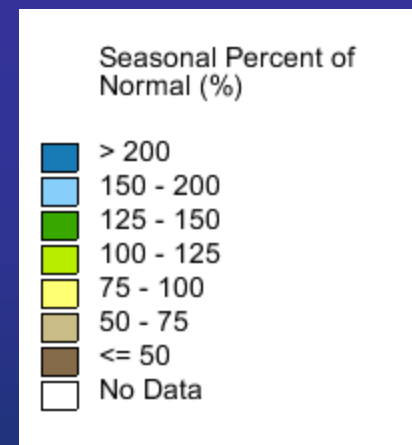
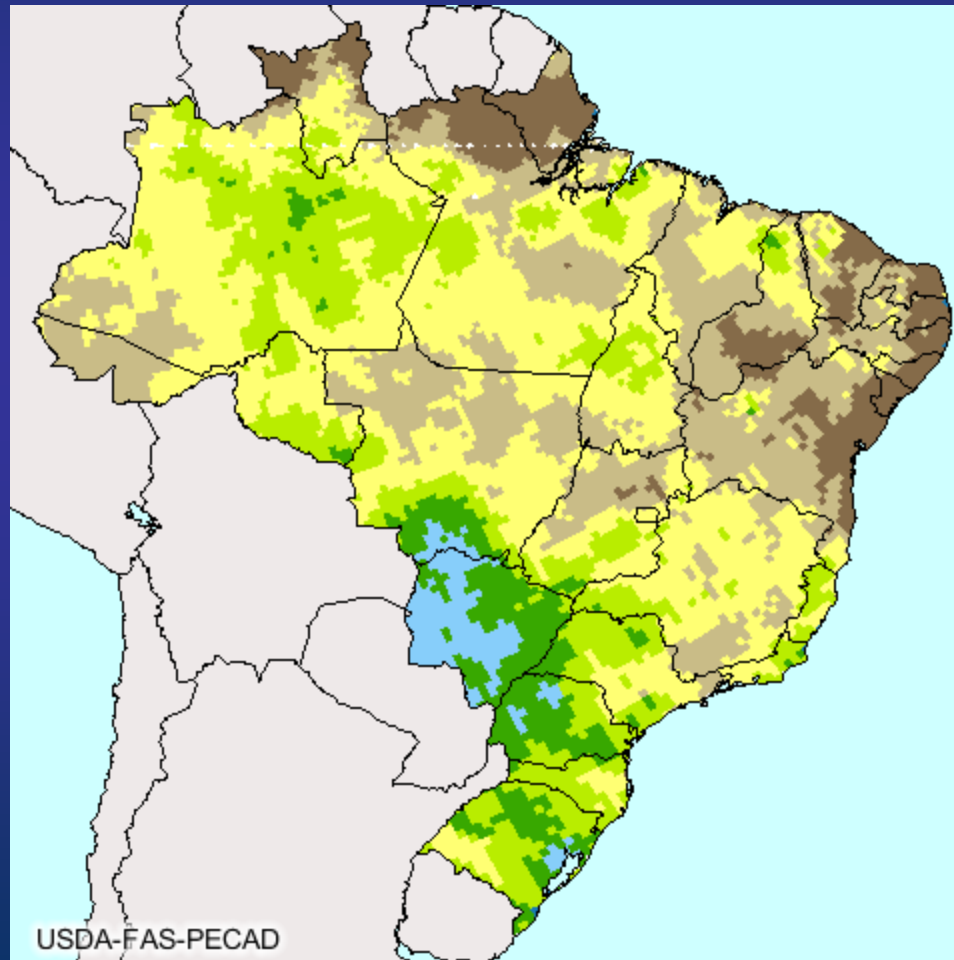
SOUTHEAST ASIA
Percent of Normal Precipitation
JAN 1 - MAR 31, 2006



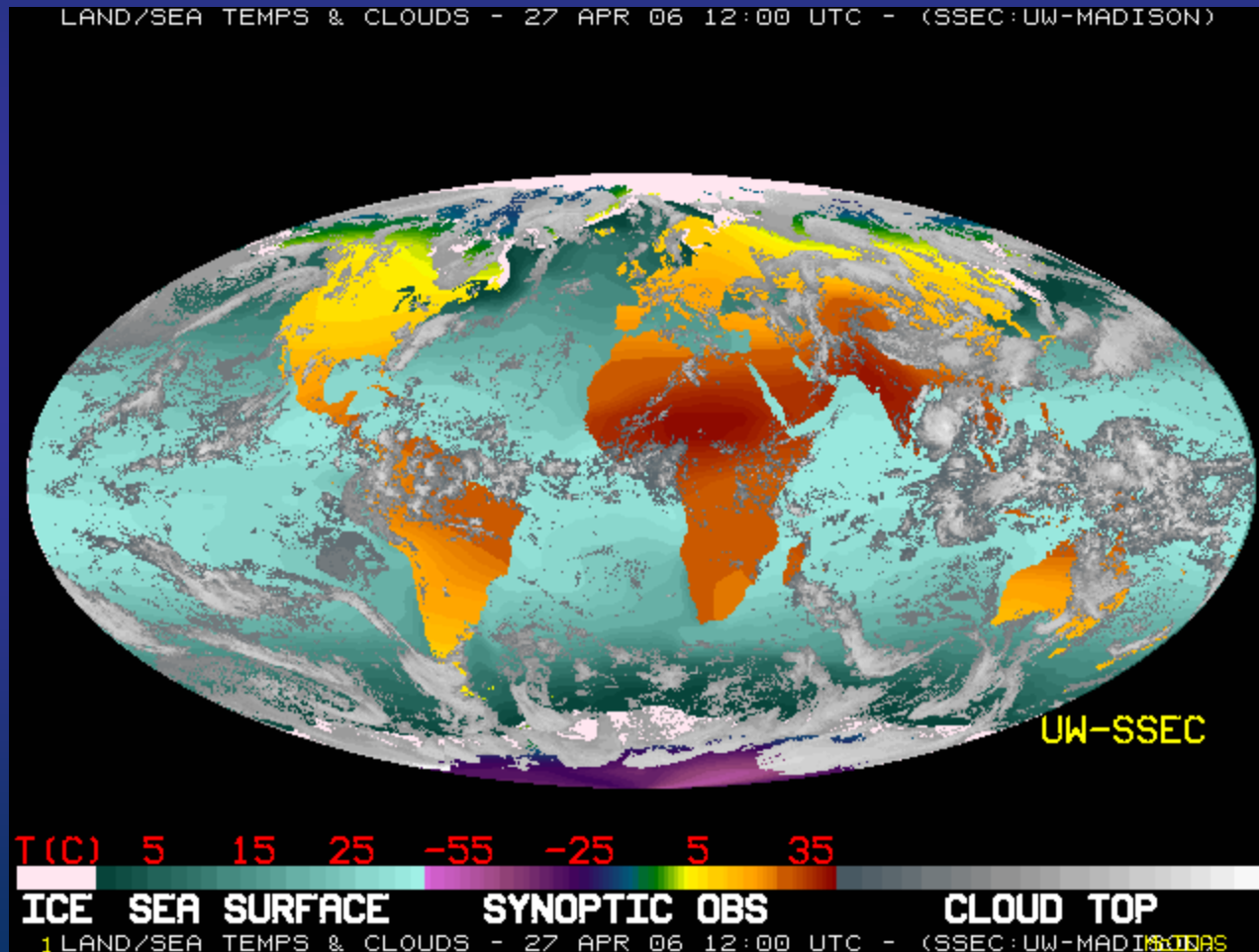
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



Brazil Percent of Normal Rainfall Sep 05 - present

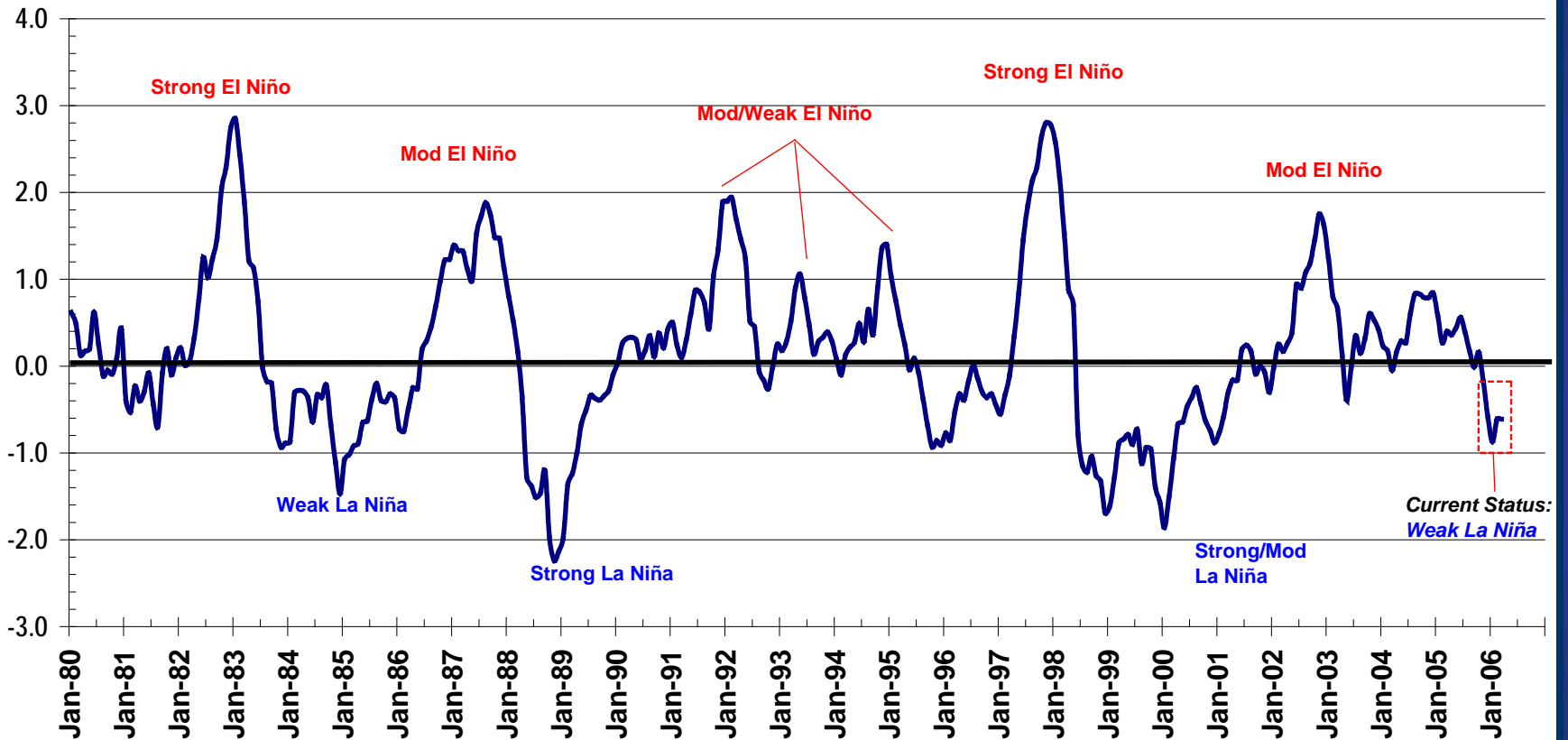


Current Atmospheric and Oceanic Variables



Eastern Equatorial Pacific Sea-Surface Temperature Anomalies

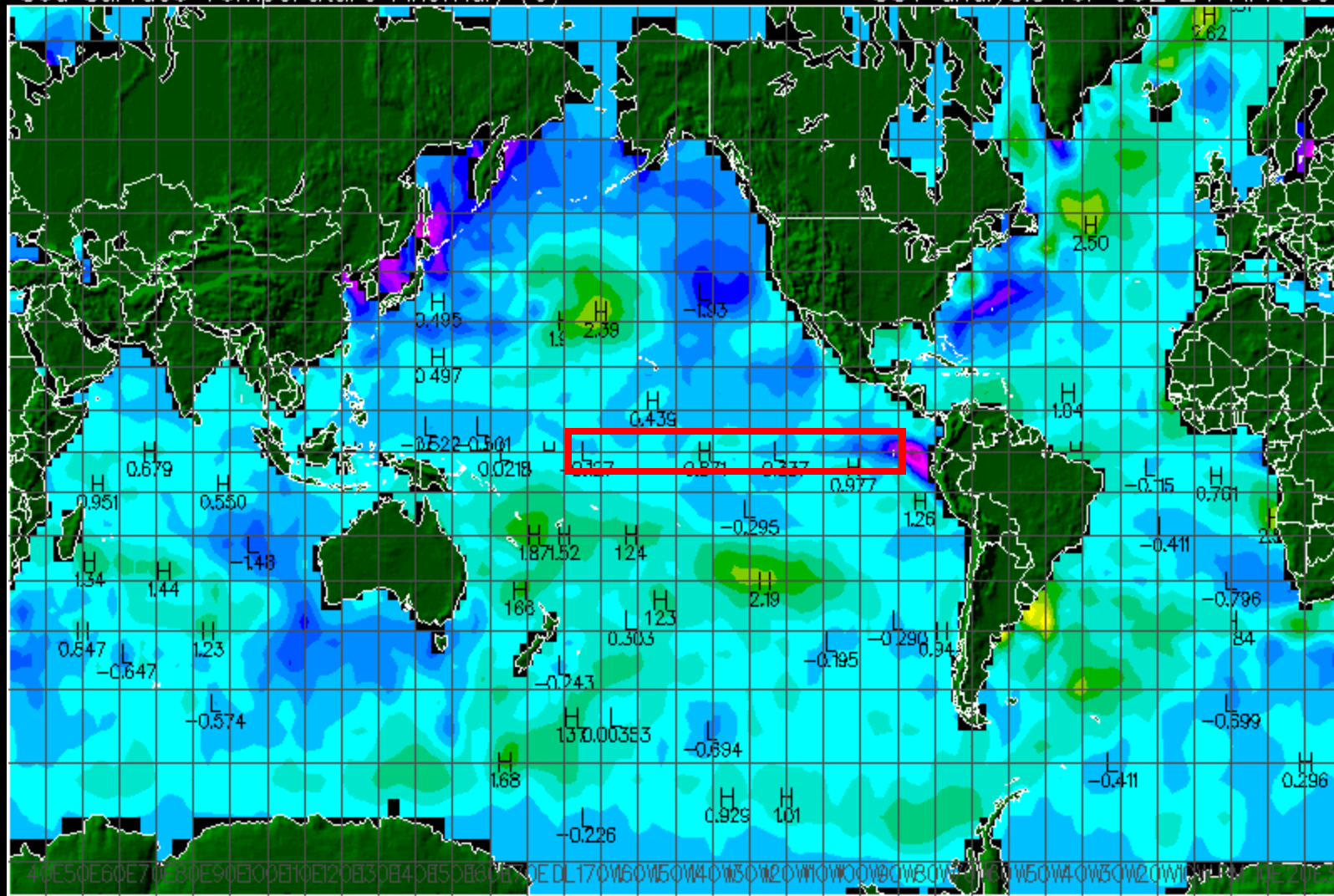
as of April 12, 2006



DATA: NINO 3.4 REGION FROM NOAA/CPC

Sea Surface Temperature Anomaly (C)

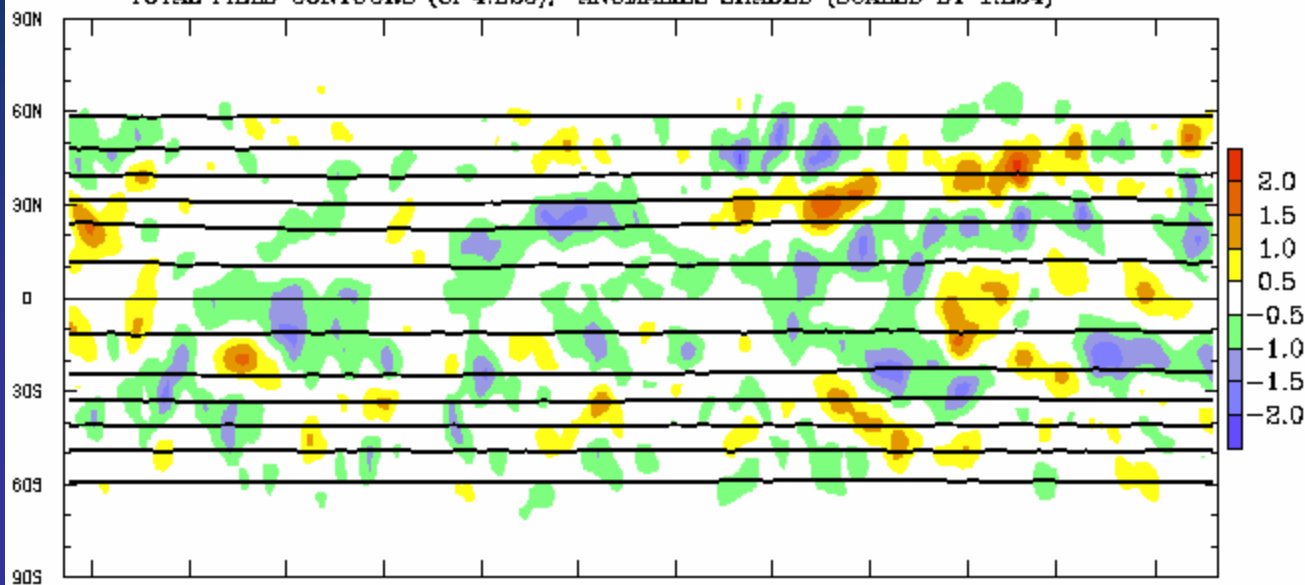
SST analysis for 00Z 24 APR 06



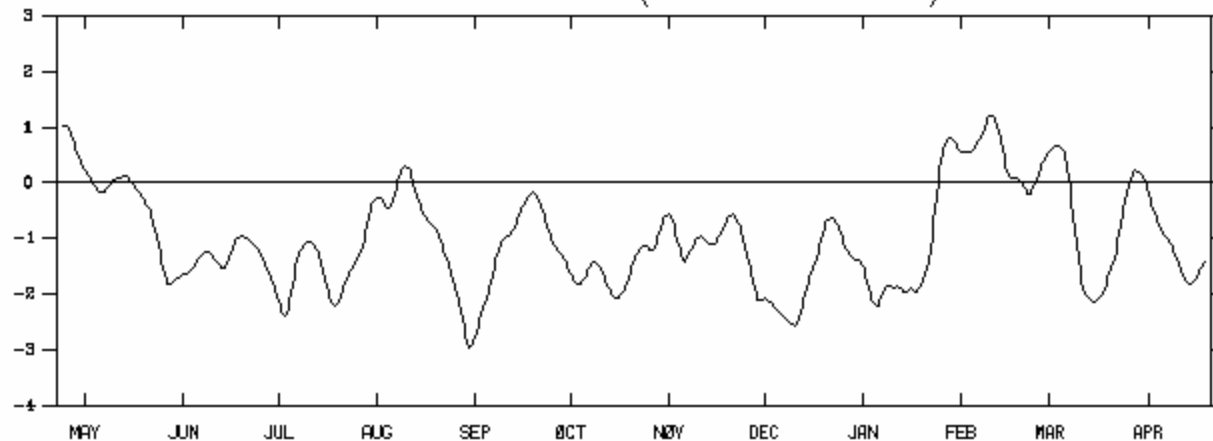
-5.0 -4.5 -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.50 0 0.50 1.0 1.5 2.0

VERTICAL AND ZONAL INTEGRAL OF
TOTAL ATMOSPHERIC ANGULAR MOMENTUM

FROM REANALYSIS U WIND, SIGMA LEVEL DATA
TOTAL FIELD CONTOURS (CI 4.E25), ANOMALIES SHADED (SCALED BY 1.E24)



GLOBAL AAM ANOM (SCALED BY 1.E25)

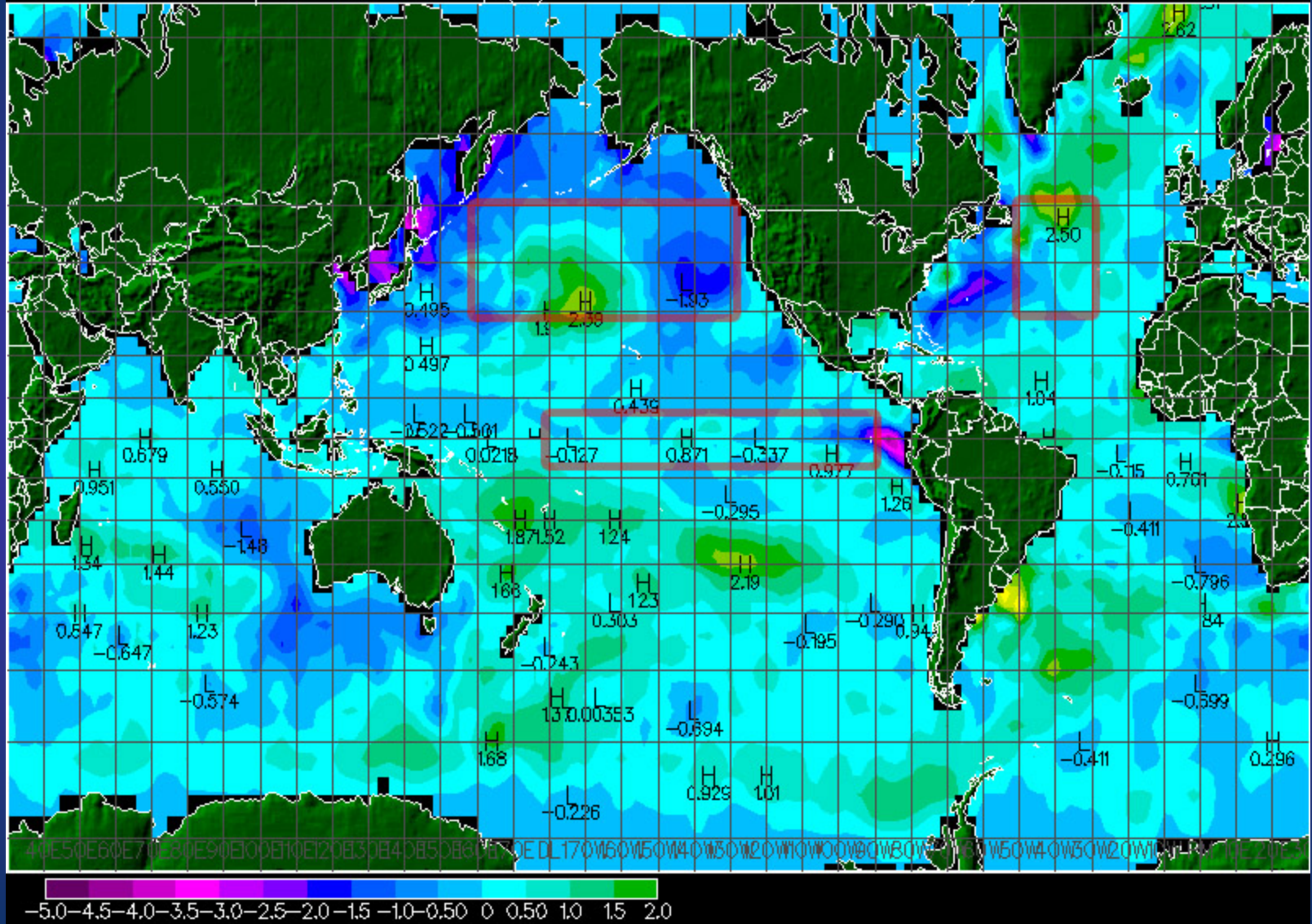


2005-2006

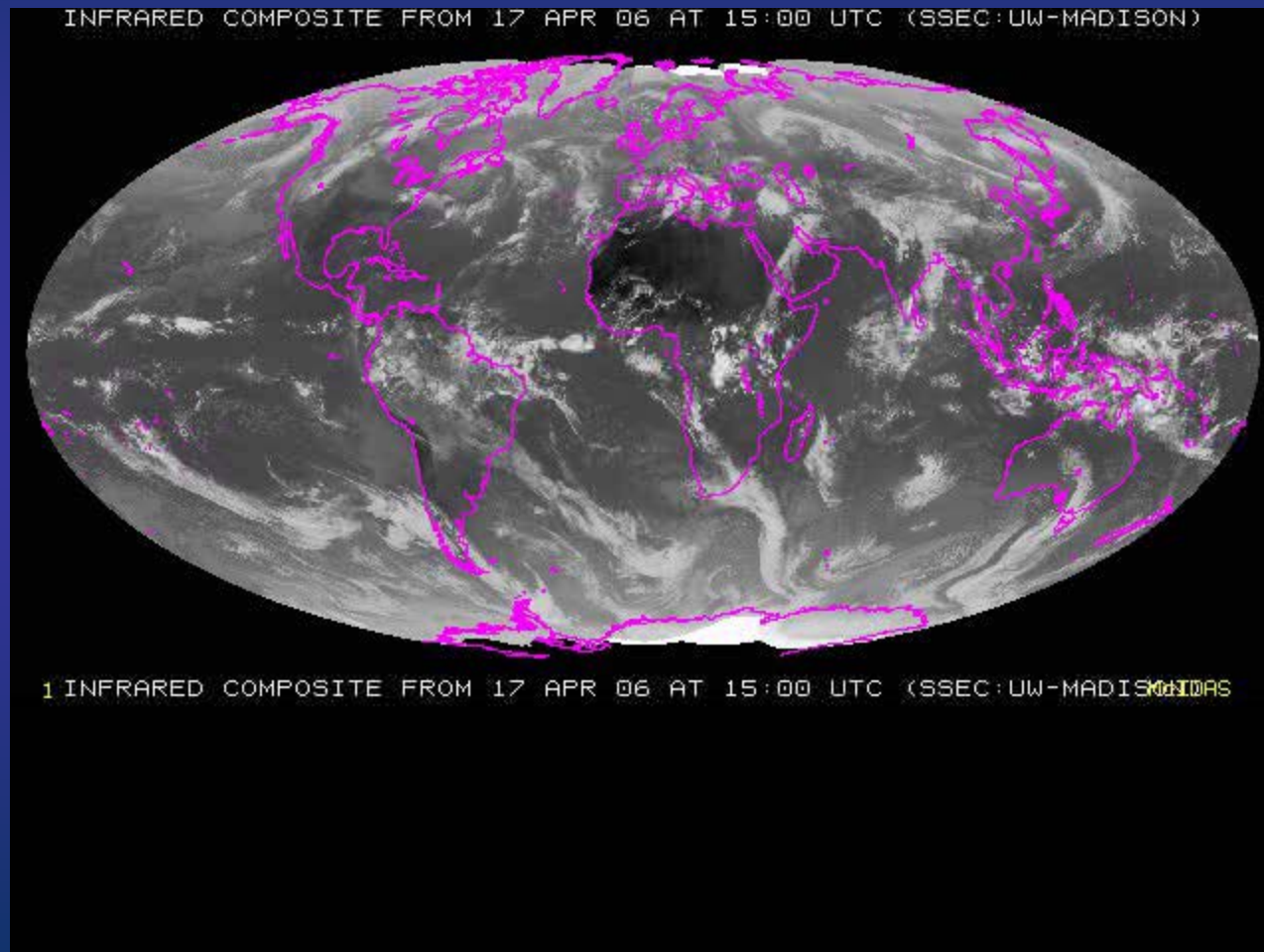
BASE PERIOD 1/68-12/97

Sea Surface Temperature Anomaly (C)

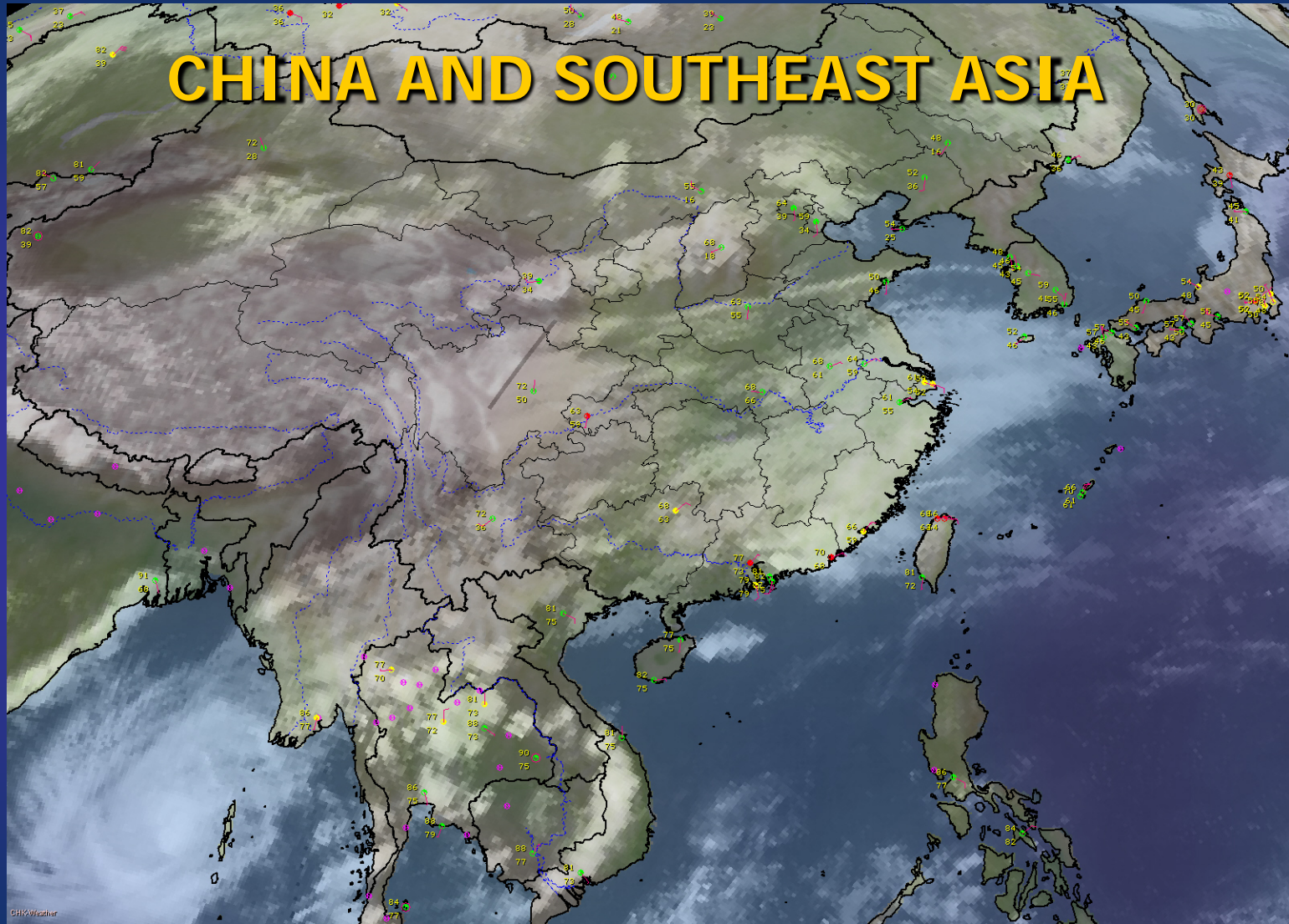
SST analysis for 00Z 24 APR 06



The Impacts

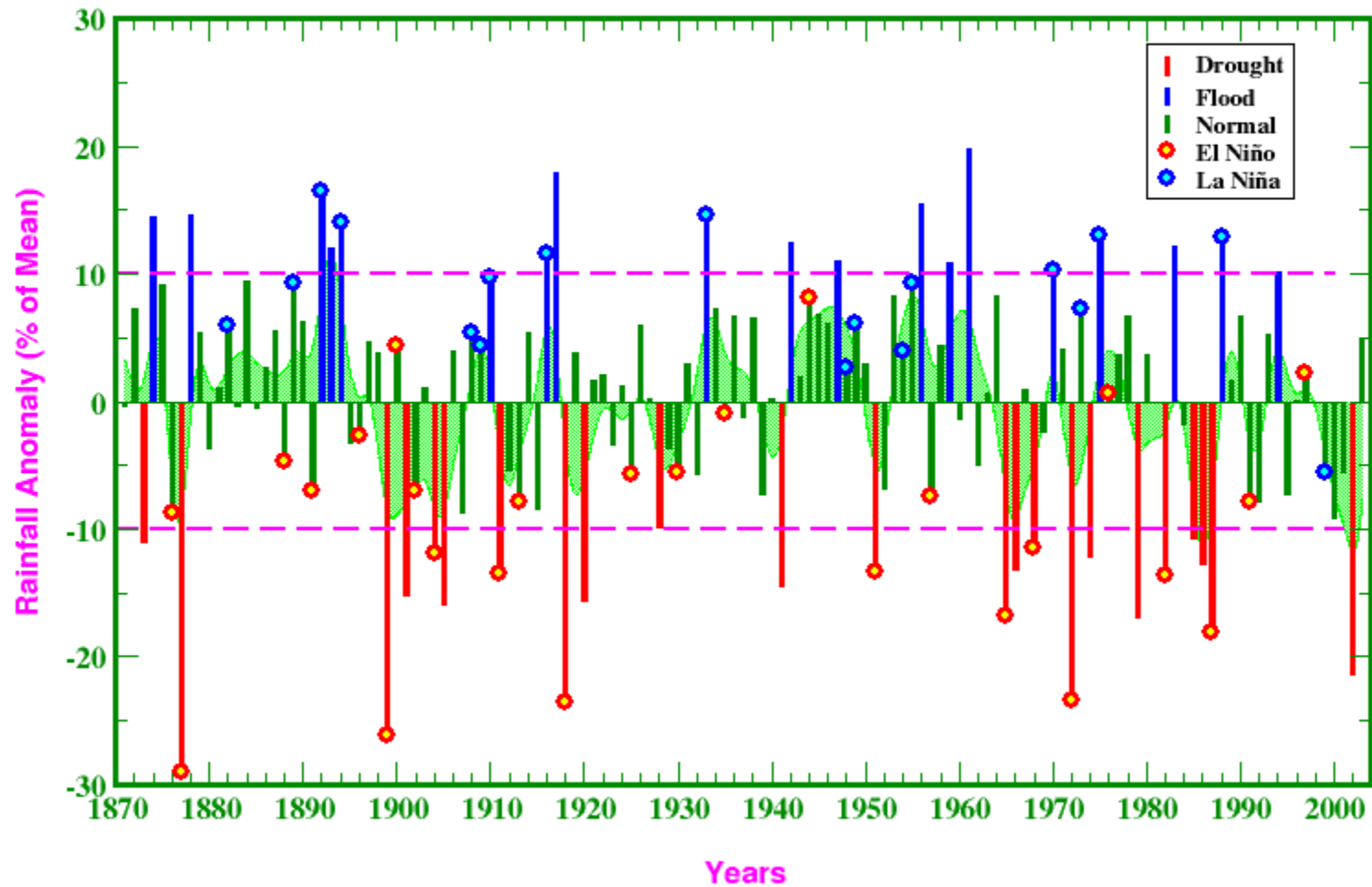


CHINA AND SOUTHEAST ASIA

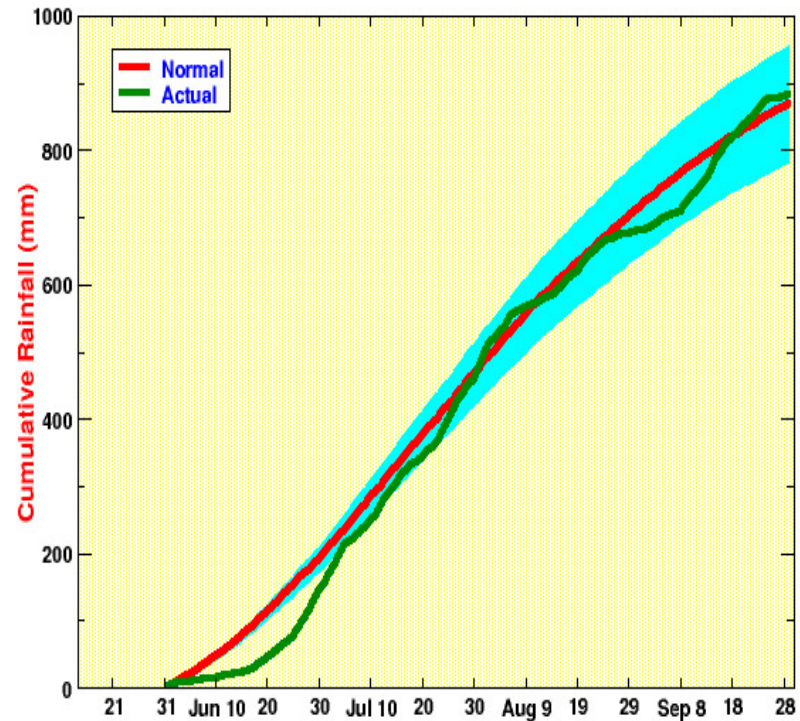
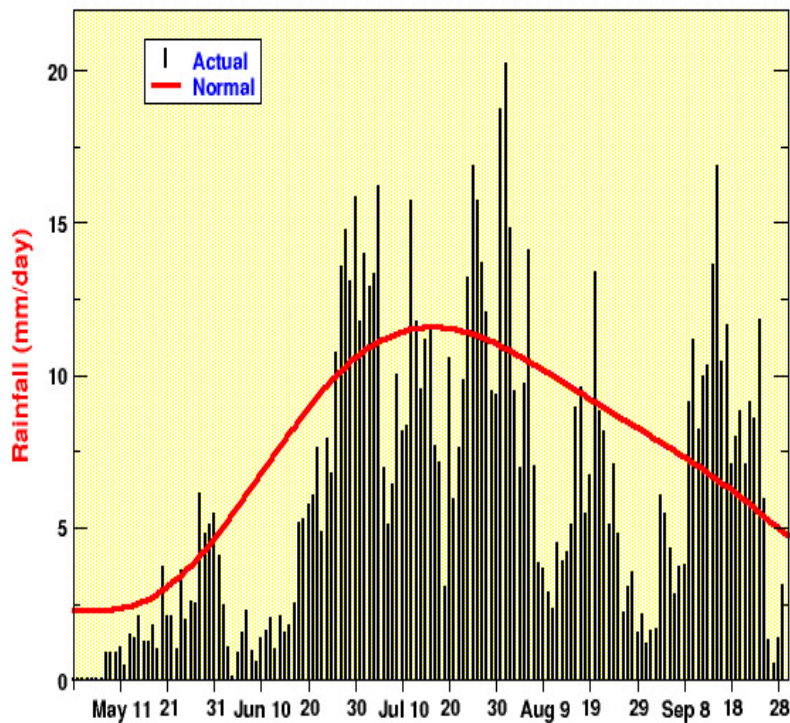


All-India Summer Monsoon Rainfall, 1871-2003

(Based on IITM Homogeneous Indian Monthly Rainfall Data Set)

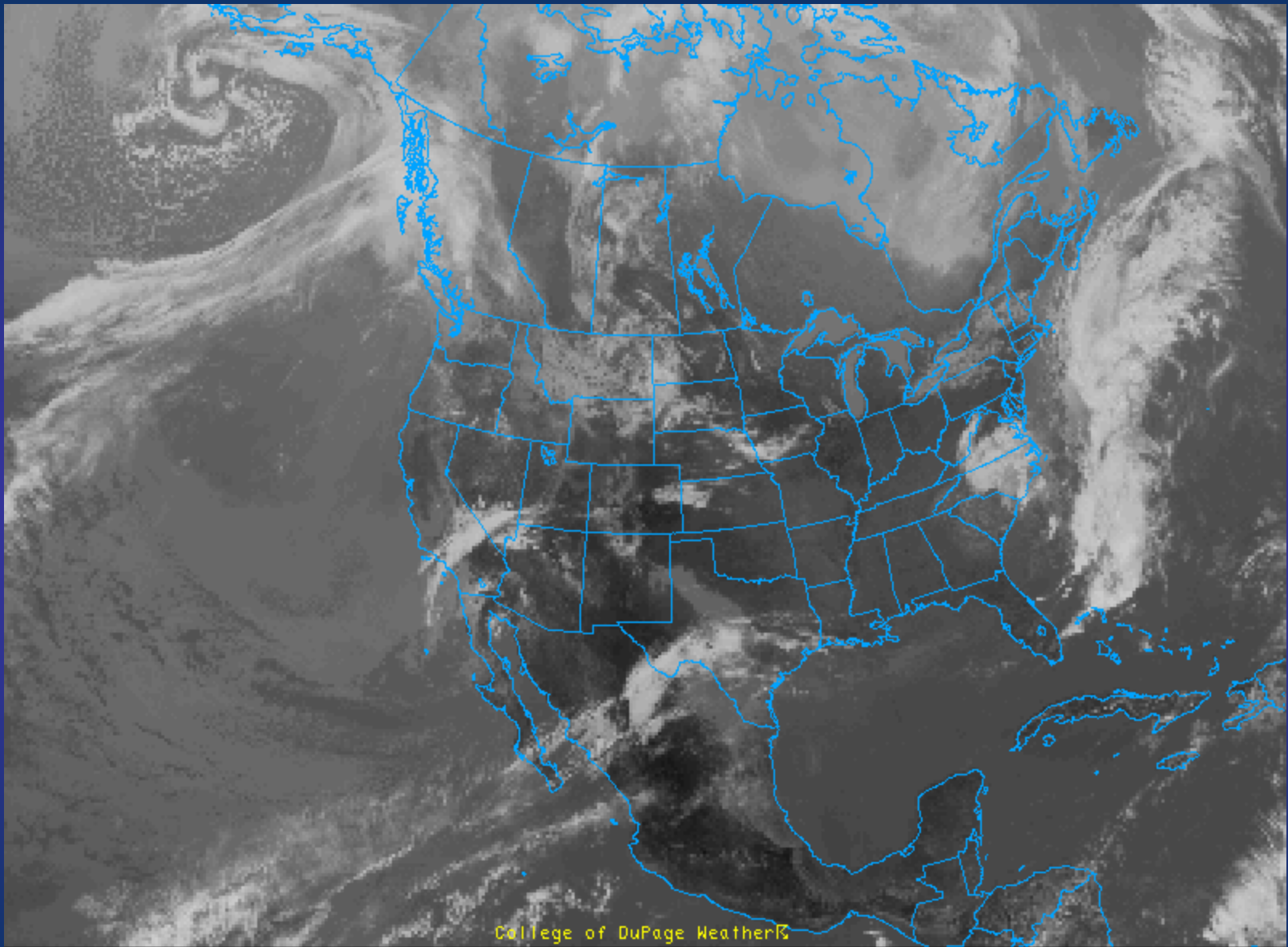


DAILY EVOLUTION OF 2005 ALL-INDIA SUMMER MONSOON RAINFALL



These charts are based on area-weighted mean using the real-time reports from 53 stations well-spread over India, as published in the Daily Weather Summaries issued by the India Meteorological Department.

Charts prepared by *K. Rupa Kumar & J.V. Revadekar*



College of DuPage Weather

GOES INFRARED SATELLITE 27 APR 06 17:15

2006 Weather Factors

- Western US Water Supplies: Adequate
- Brazil had normal summer rainfall
- La Nina-like atmospheric circulations/patterns
- No major issues with Asian monsoon
 - China
 - India
 - Vietnam
 - Indonesia
- Increased odds for heightened West Pac tropical cyclone activity
- Dryness risks in northern China and Europe



A few comments on Energy....

2005

Rita
23 September

Dennis
10 July

Katrina
28 August

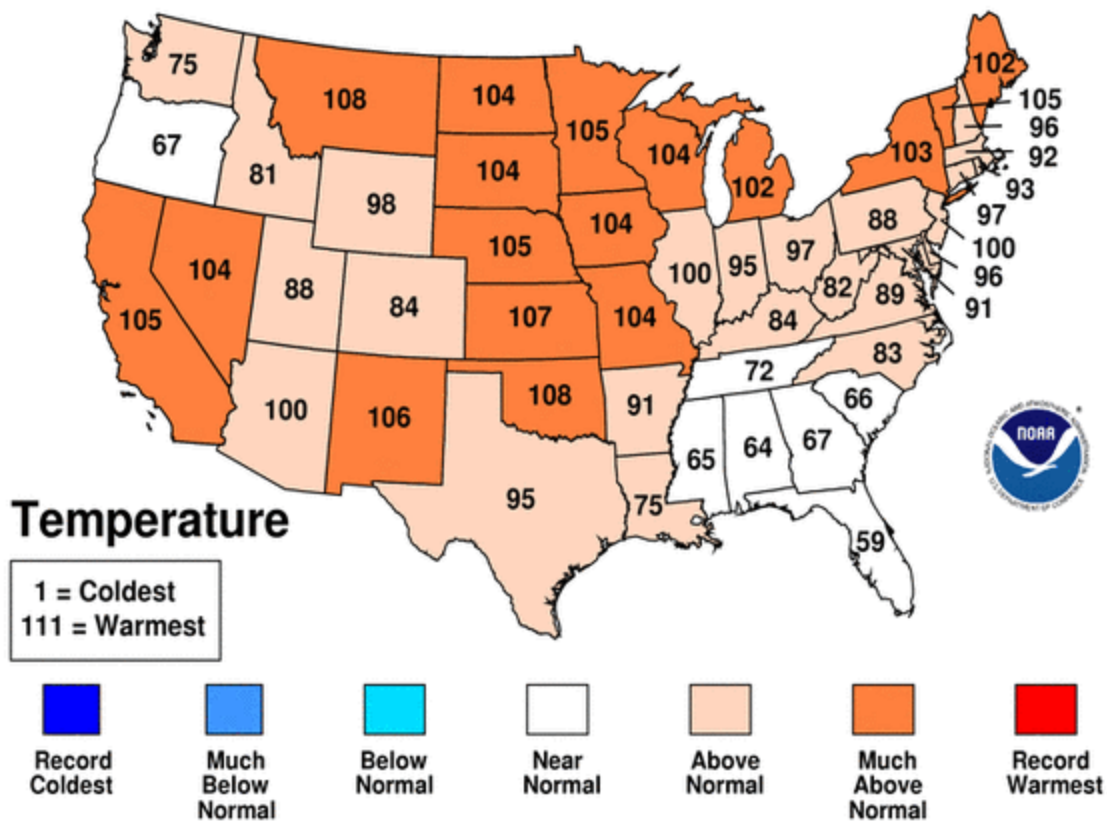
Wilma
21 October

Emily
17 July



Dec 2005-Feb 2006 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



Energy Weather Factors

- Active Atlantic Basin Hurricane Season = increased risk of U.S. energy production disruptions
- Hotter than normal summer = higher power generation, higher nat gas for power generation, higher gasoline demand for auto a/c
- Not to the extremes as last year
- U.S. will have another cold winter soon



2006 ASTA Annual Meeting

Q & A



ASTA Annual Meeting

May 8-11, 2006

Thank you!