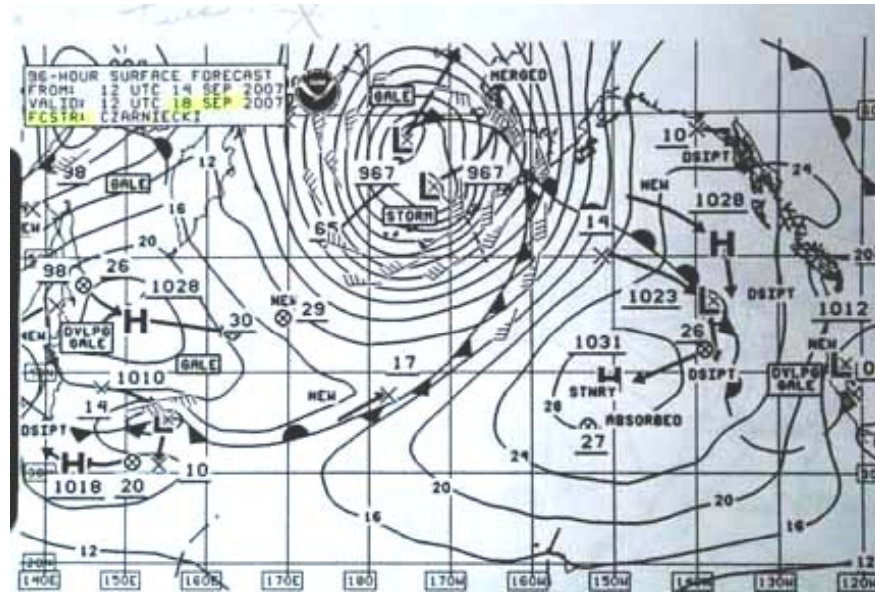


2008 Crop Weather Outlook

June 2008



Dr. Elwynn Taylor

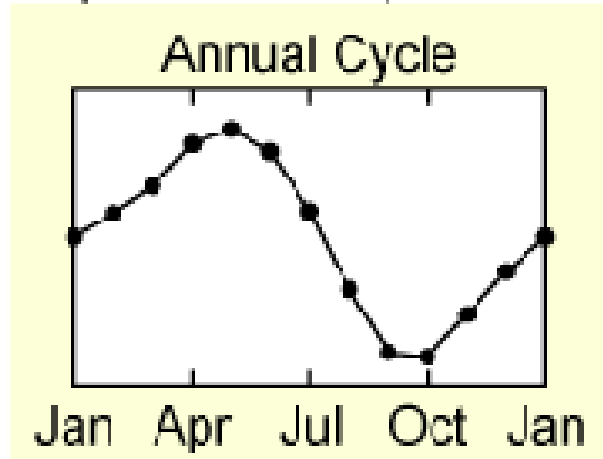
Extension Climatologist

Office Phone: (515) 294-1923

E-mail: setaylor@iastate.edu

Web Site: www.extension.iastate.edu/weather

Atmospheric Carbon Dioxide Measured at Manua Loa, Hawaii



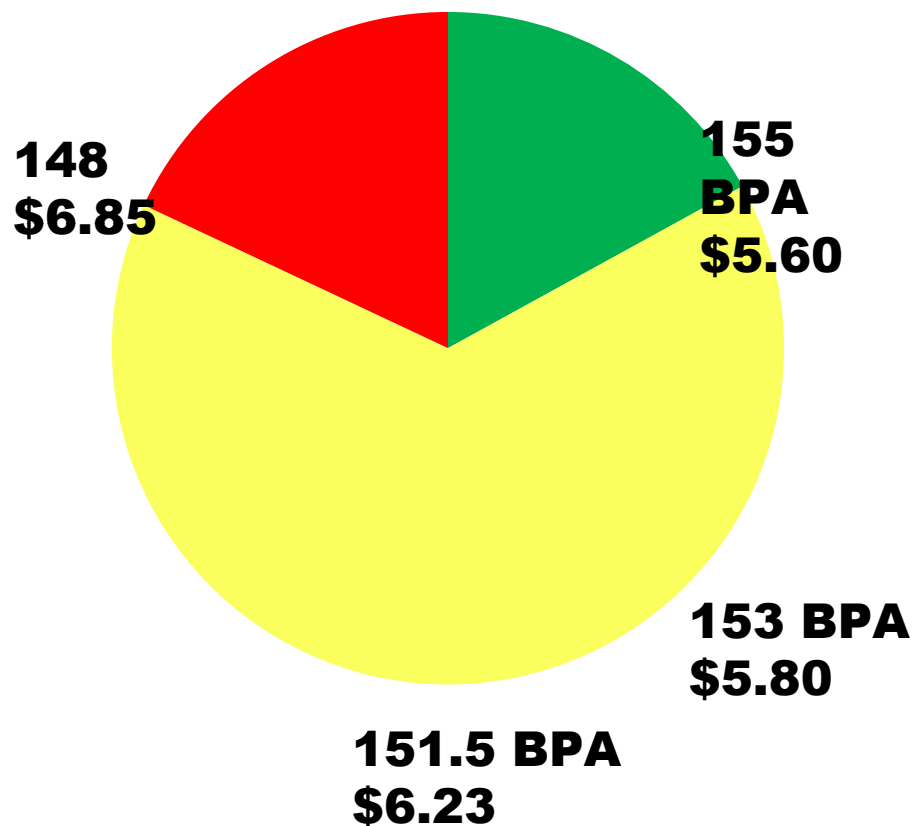
Carbon dioxide concentration (ppmv)

390
380
370
360
350
340
330
320
310

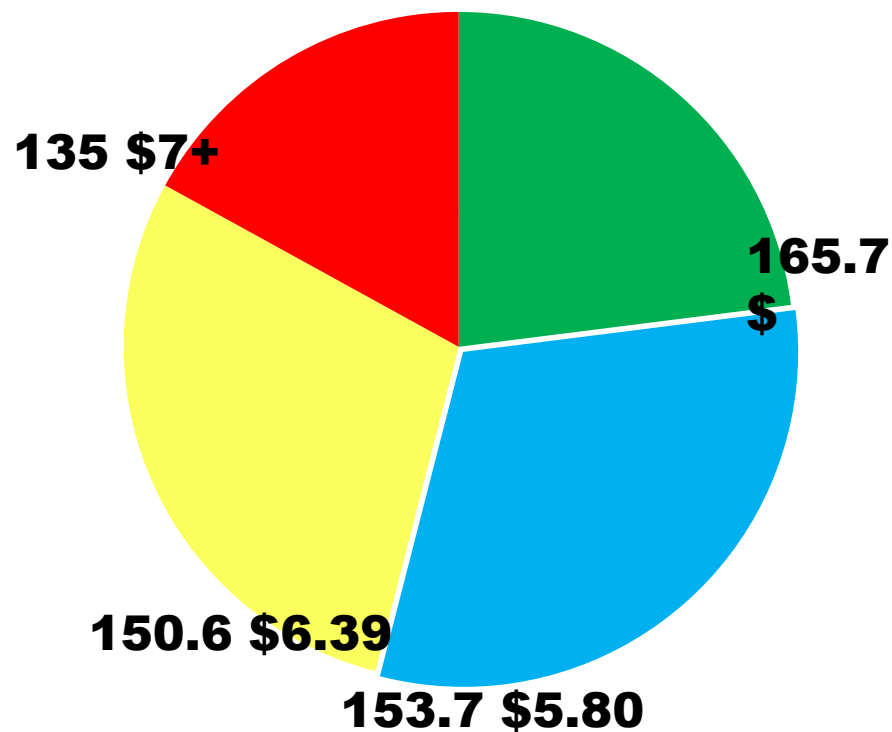
1960 1970 1980 1990 2000

Non-Biased U.S. Corn Yield Risk

Wisner May 2008

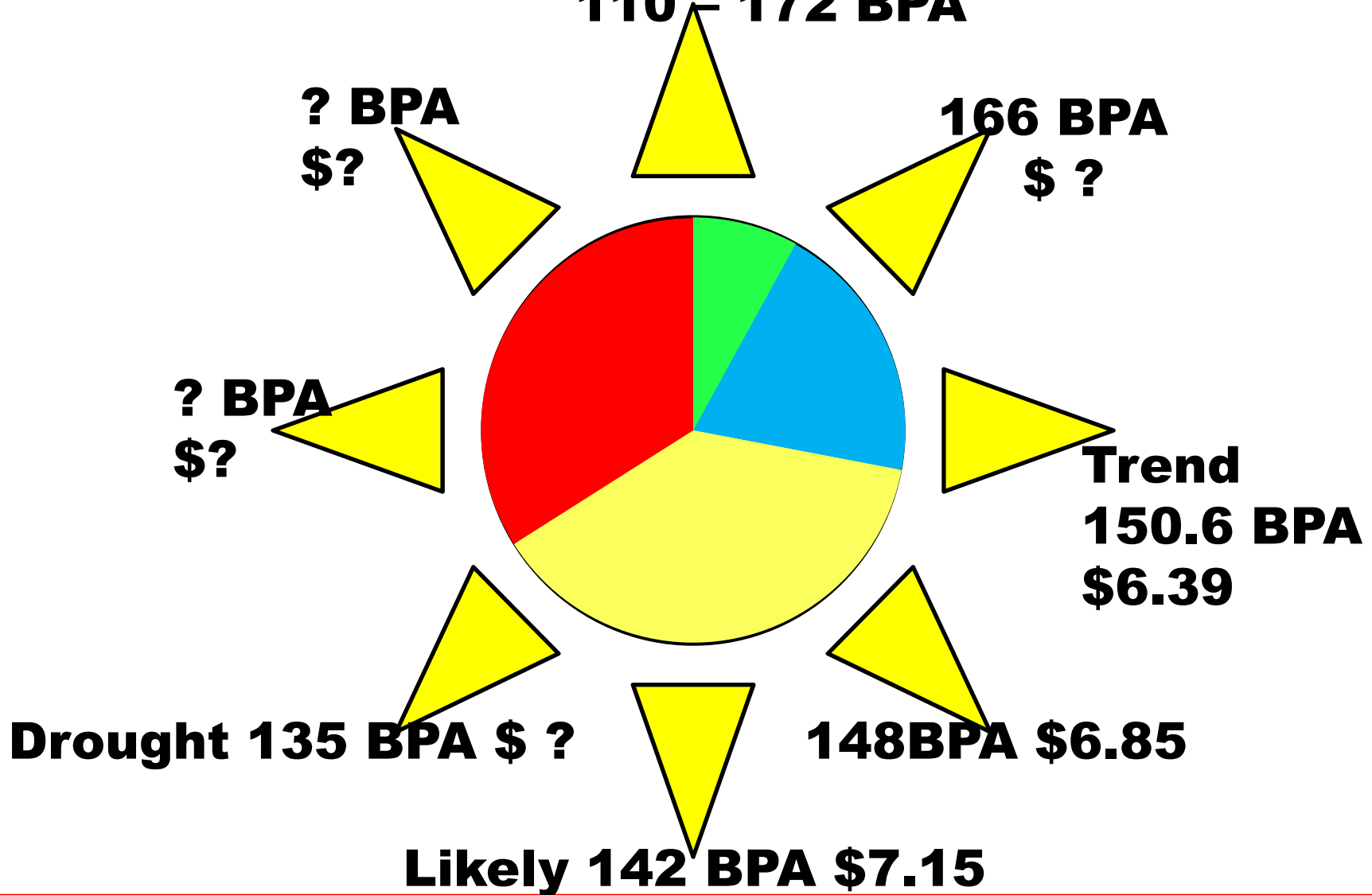


Taylor May 2008



Uncharted Waters

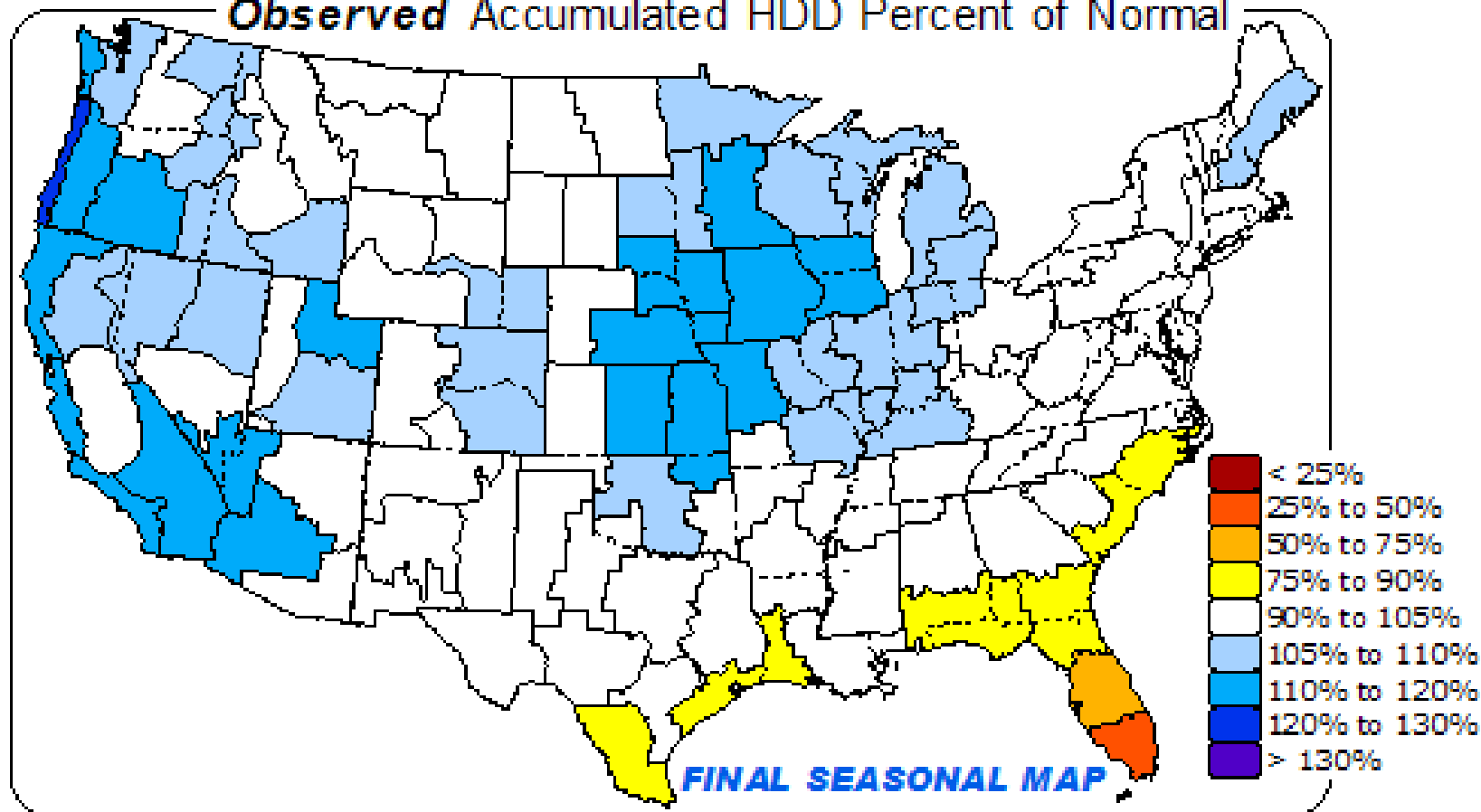
110 - 172 BPA



Heating Degree Day (HDD) Statistics -- SEASONAL TOTAL

November 1, 2007 - March 31, 2008

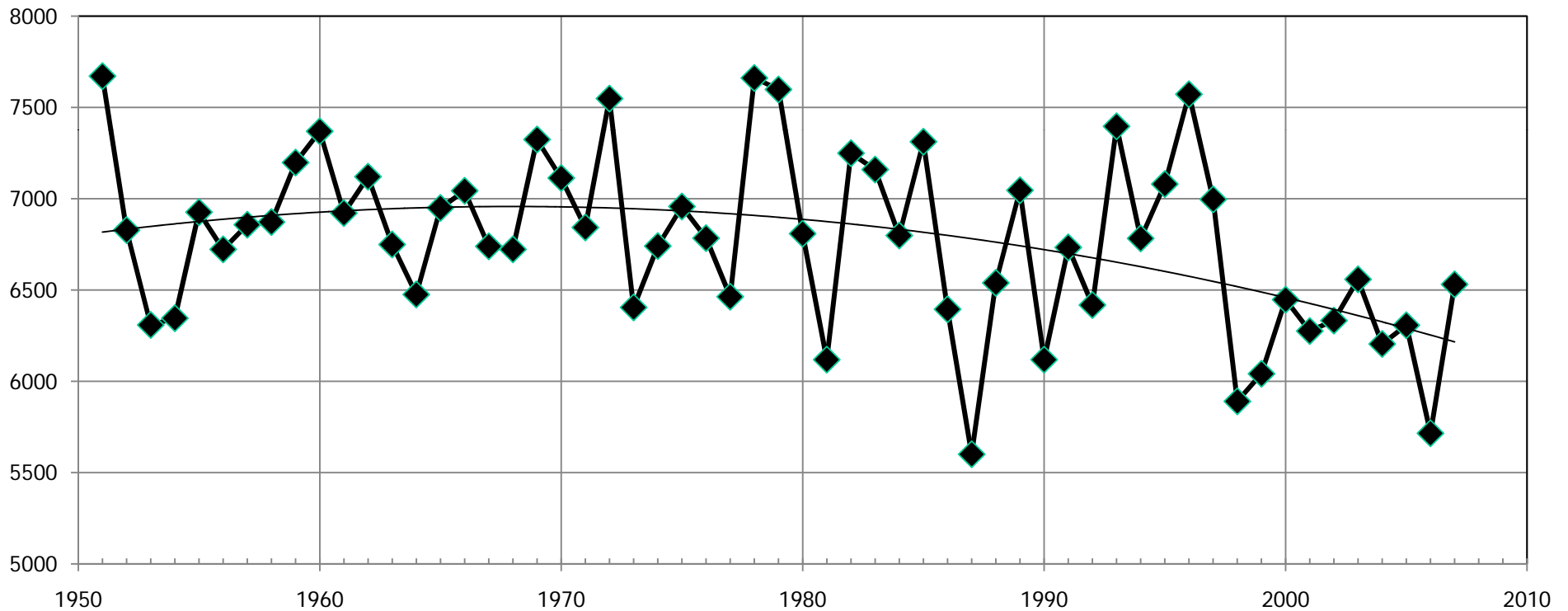
Observed Accumulated HDD Percent of Normal



Winter 2007-8 had above average heating demand in much of the US.

Ames HDD 1951-2007

Annual Heating Degree Days
Ames, IA 1951-2007



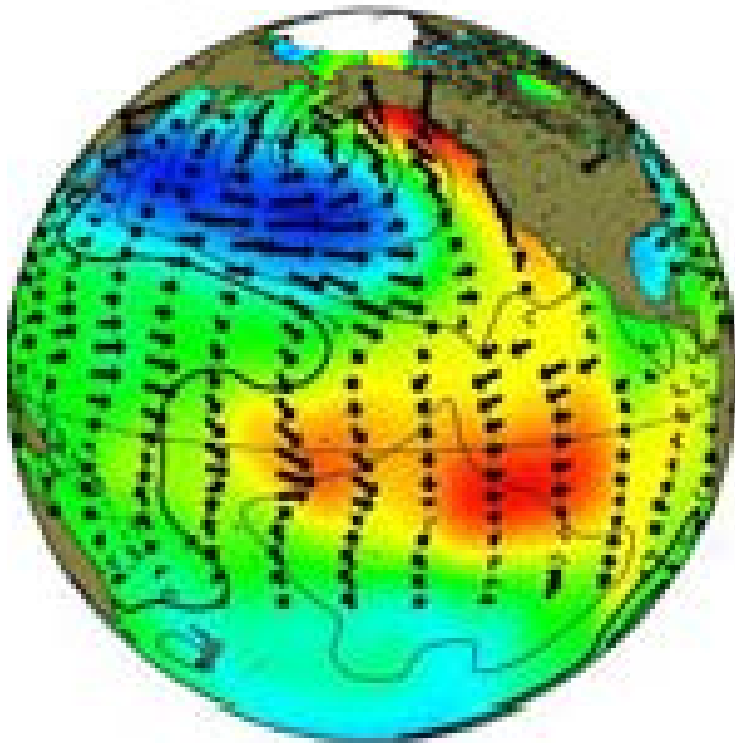
Climate is Changing

- During the next 16 years the Climate becomes increasingly harsh.
- To know is to be prepared
- We Know the Risk
- We can Manage Risk.

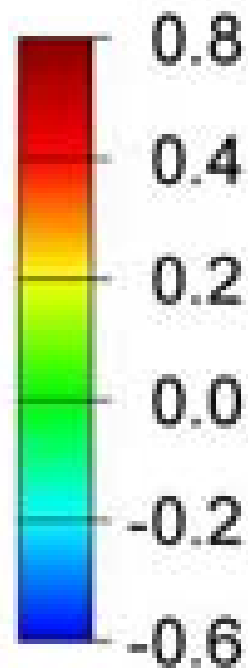
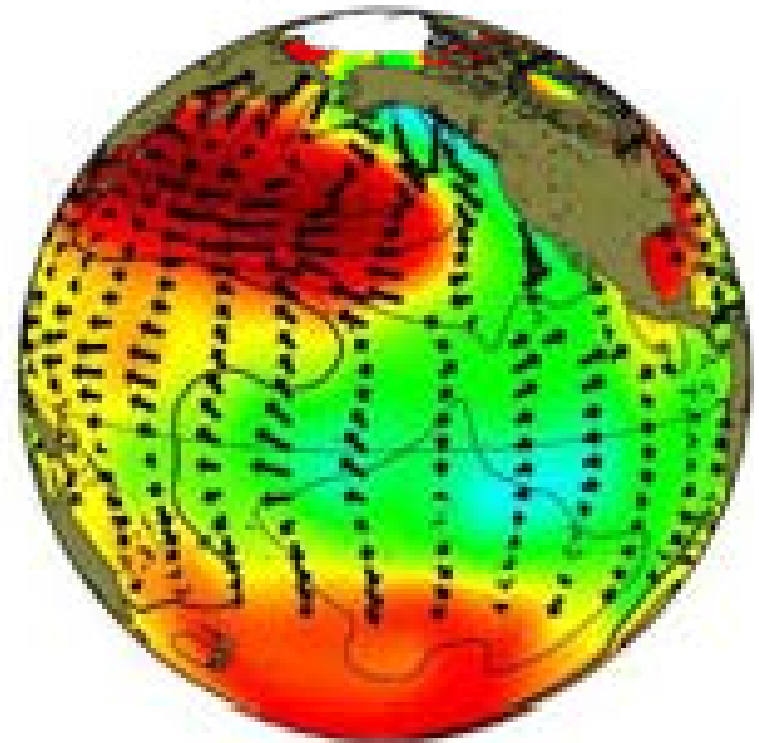
PDO

Pacific Decadal Oscillation

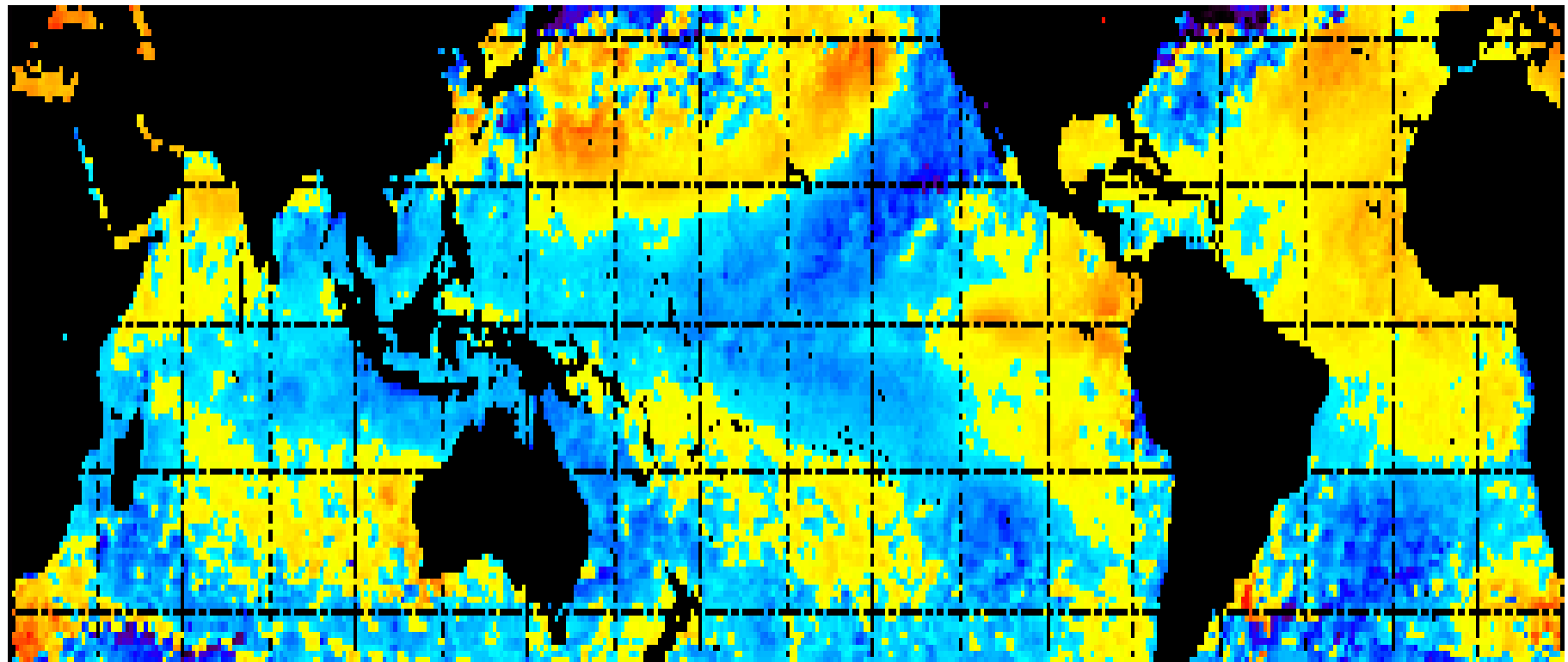
positive phase



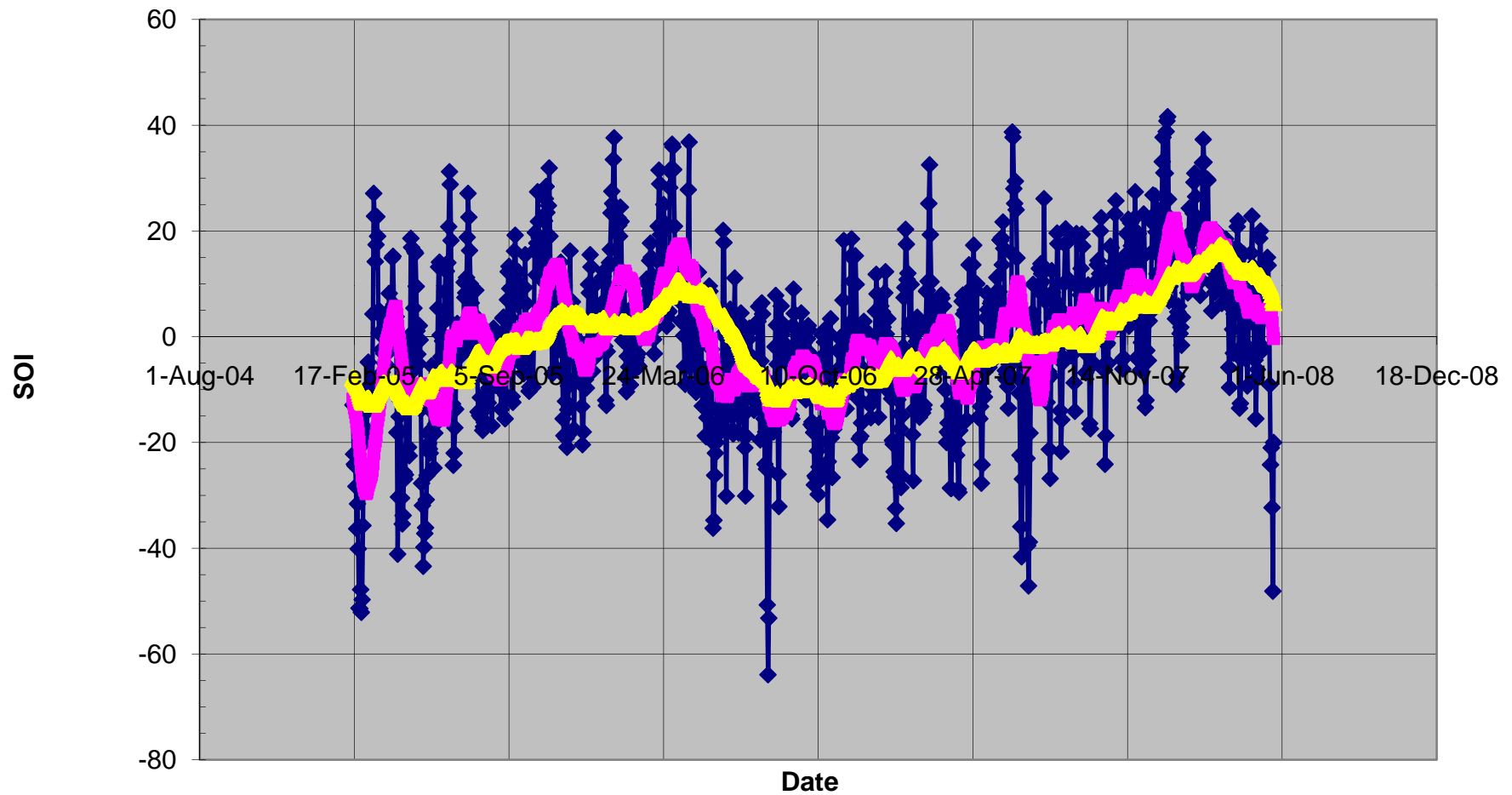
negative phase



NOAA/NESDIS SST Anomaly (degrees C), 5/29/2008



SOI 22 Jan., 2005 - 21 May, 2008

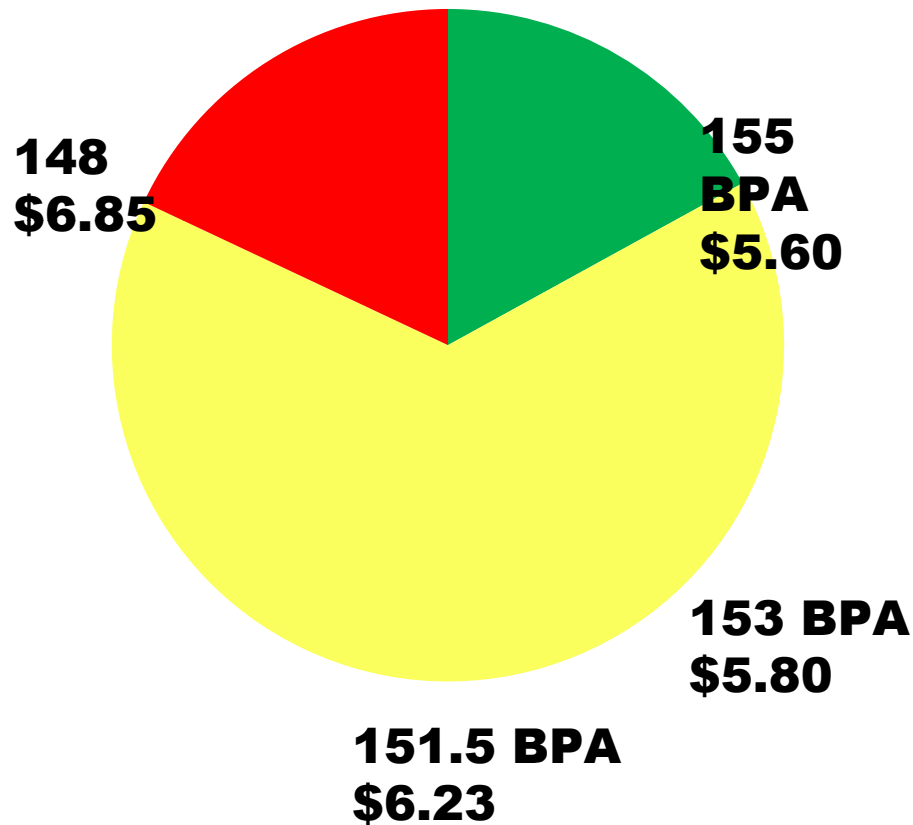


90-Day SOI (22 Jan., 2005 - 21 May, 08) SOI 0.65

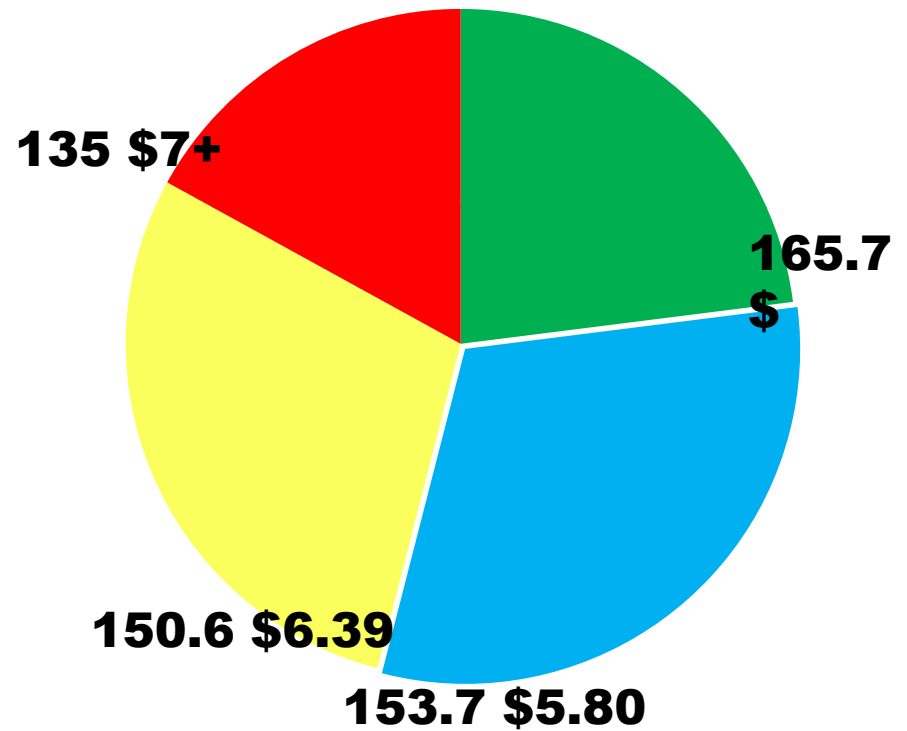


Non-Biased U.S. Corn Yield Risk

Wisner May 2008

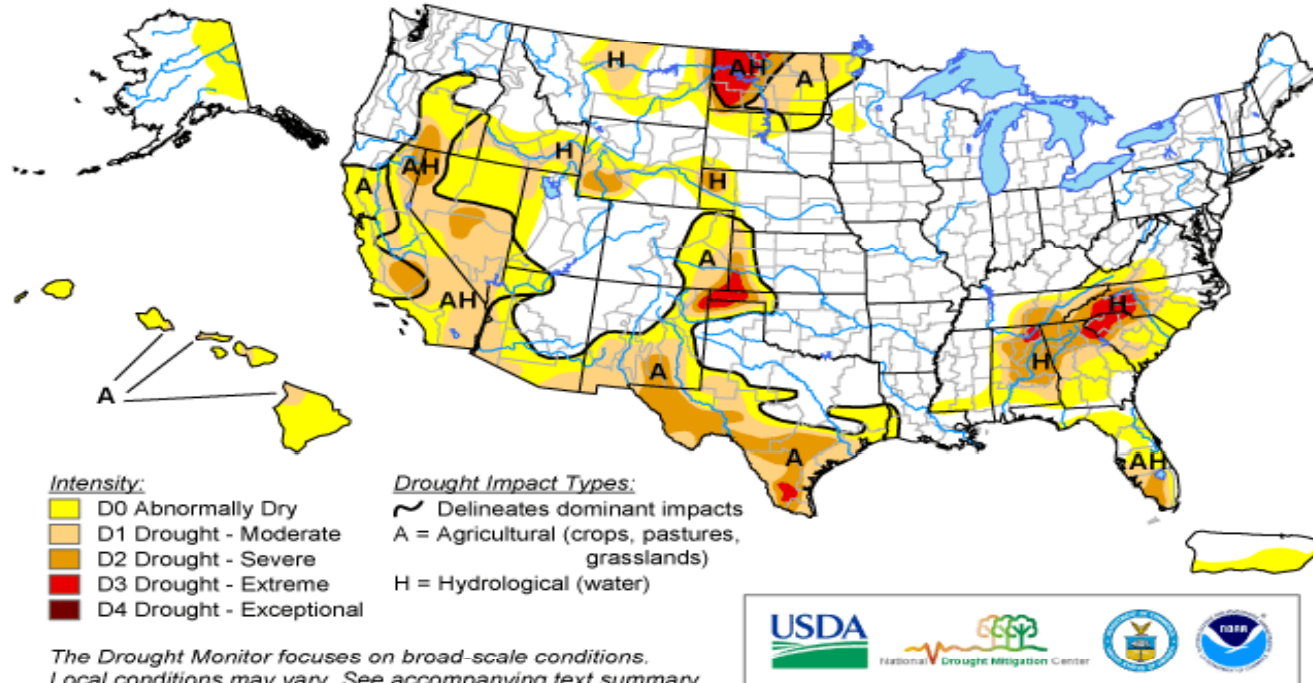


Taylor May 2008



U.S. Drought Monitor

May 27, 2008
Valid 8 a.m. EDT



Released Thursday, May 29, 2008
Author: David Miskus, JAWF/CPC/NOAA

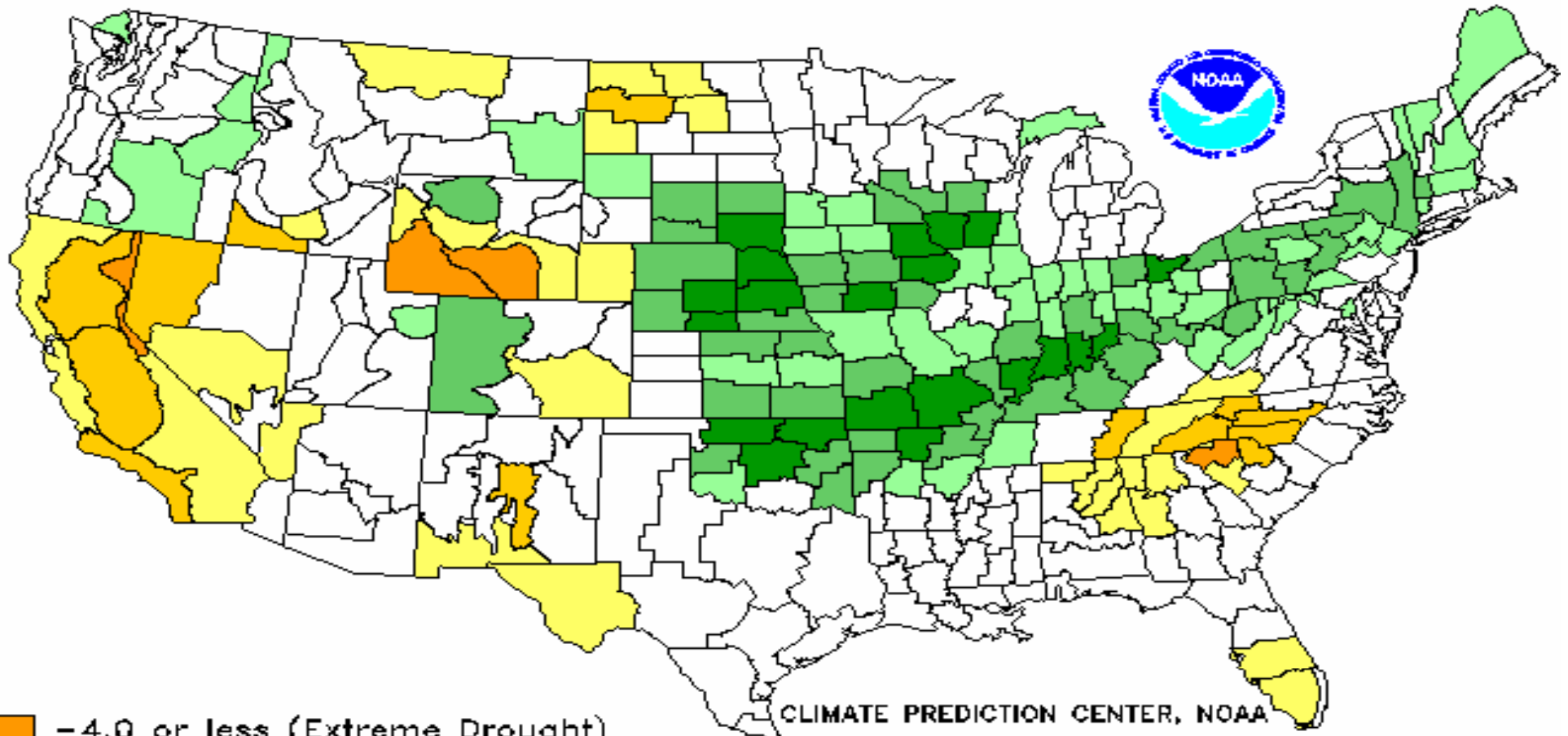
Monitors:
Rainfall, Temperature, Lake levels, River flows, Satellite surface moisture, Well levels

The Monitor is NOT always meaningful for Agriculture.

(No Subsoil Data)

IOWA STATE UNIVERSITY
University Extension

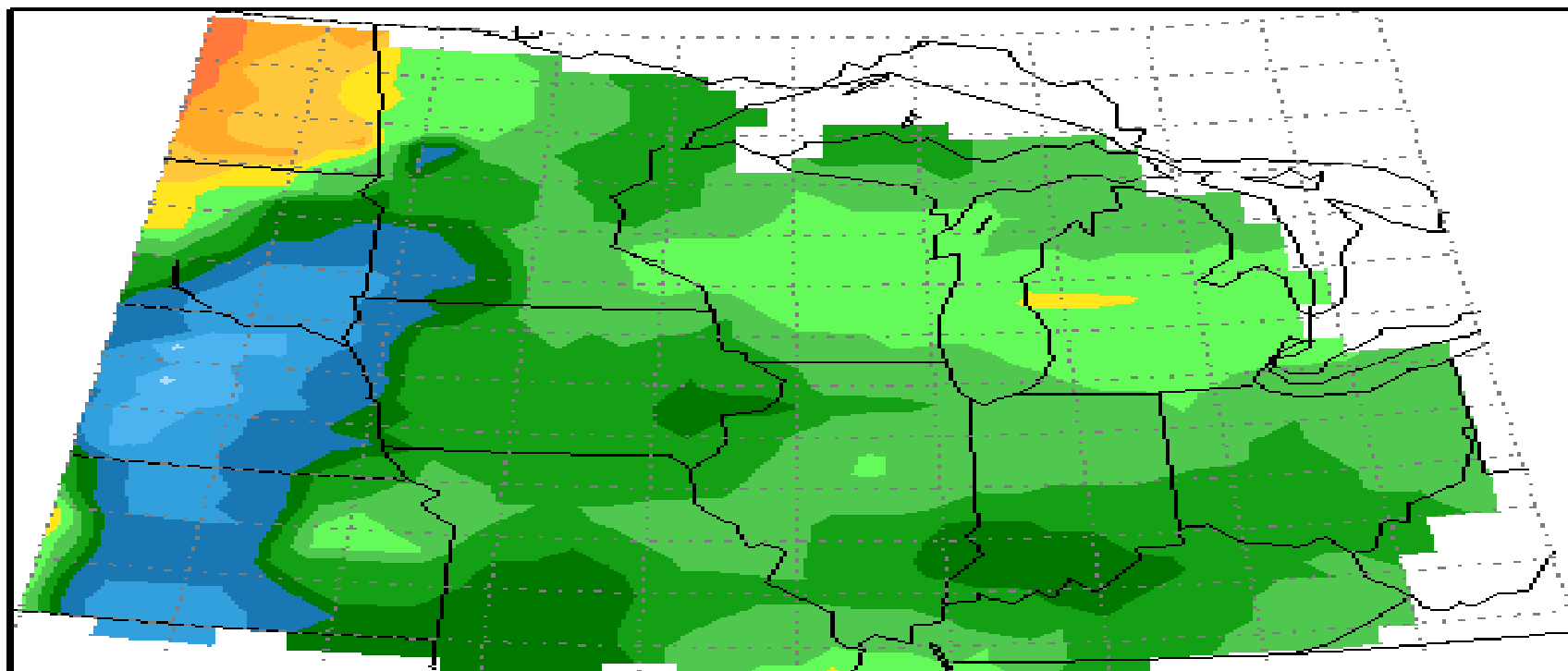
Drought Severity Index by Division
Weekly Value for Period Ending 24 MAY 2008
Long Term Palmer



- 4.0 or less (Extreme Drought)
- 3.0 to -3.9 (Severe Drought)
- 2.0 to -2.9 (Moderate Drought)
- 1.9 to +1.9 (Near Normal)

- +2.0 to +2.9 (Unusual Moist Spell)
- +3.0 to +3.9 (Very Moist Spell)
- +4.0 and above (Extremely Moist)

**Current Soil Moisture Deviation (%), Depth = 0-72
May-12-2008**

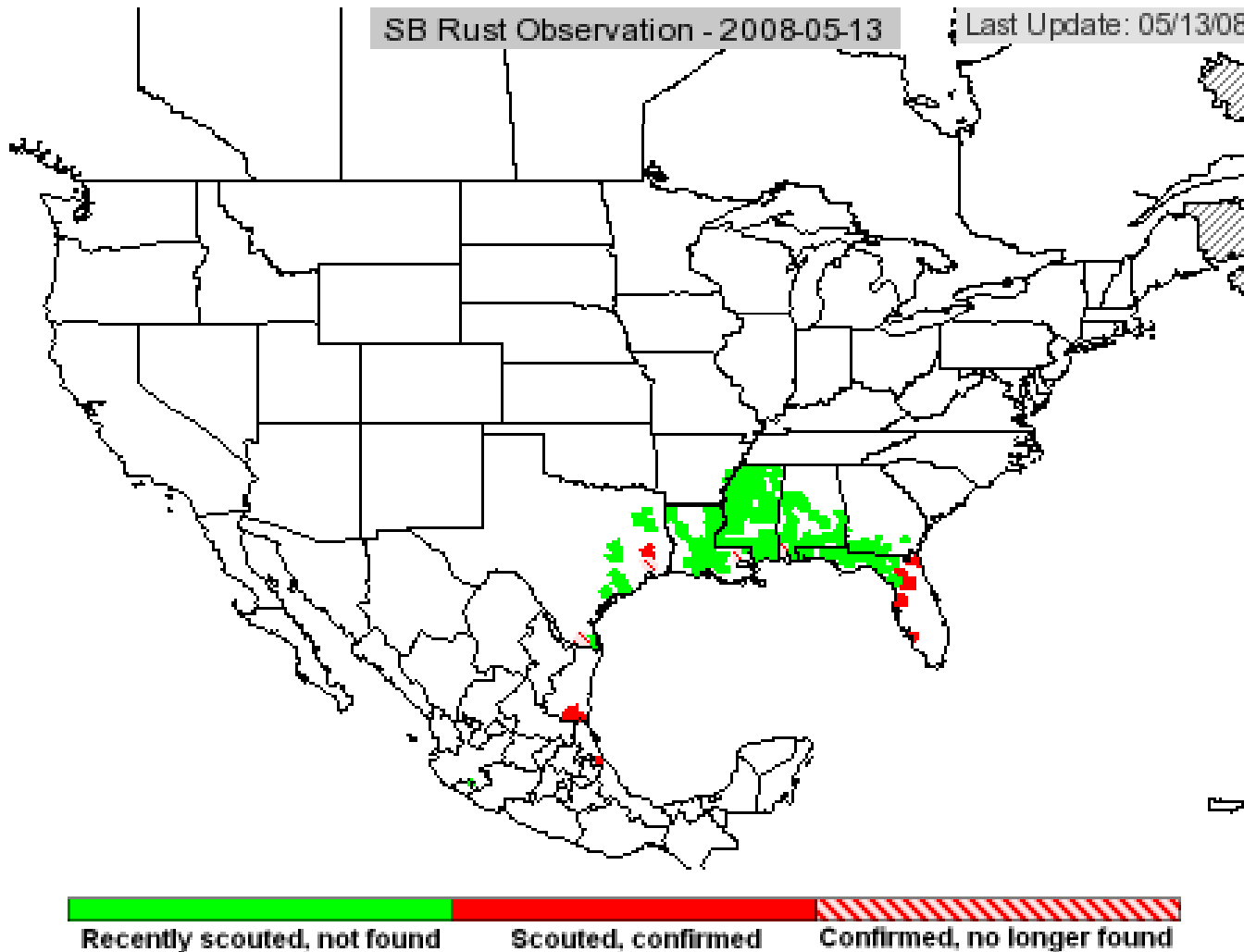


**Midwestern Regional Climate Center
Illinois State Water Survey
Champaign, Illinois**

Growing Degree Days

gdd Mason City, IA 2008





Soy Rust over wintering in TX

2008 Indicators & Impacts

- Benner (18-year) Cycle
- + Subsoil moisture
- La Nina possible
- Too wet spring
- Dry “West” possible
- Wide-spread Corn belt drought likely as SE U.S. experienced dry conditions in much of 2007.
Summer energy demands may expected to be excessive.

Yield likely to be below trend:

Corn 142 - 148+ Soy 37 (rust?)