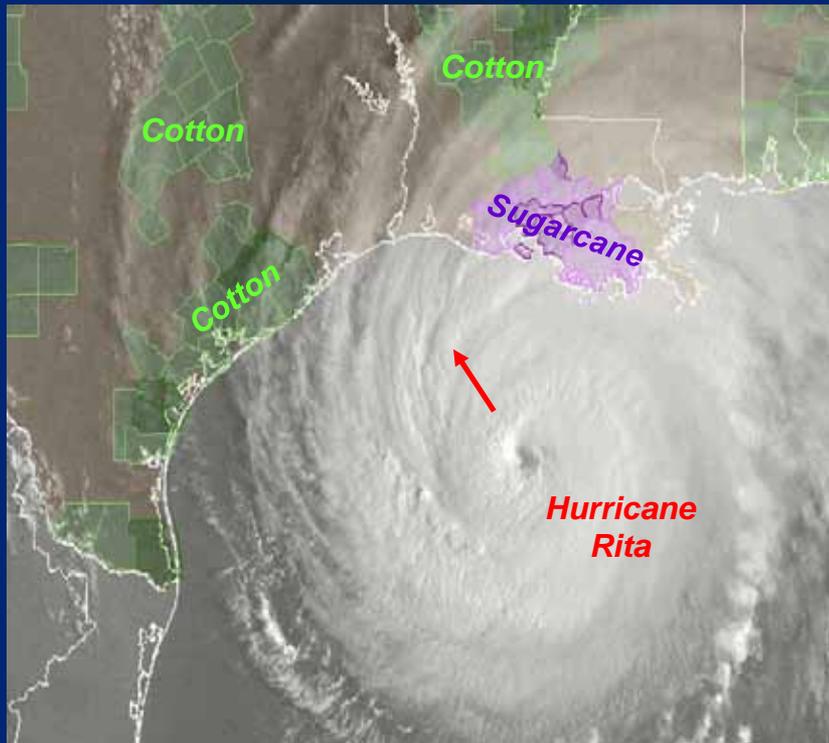


# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

*Integrating Agricultural and Meteorological Data  
for USDA Decision Makers*



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World Agricultural Outlook Board

# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## NOAA/USDA Joint Agricultural Weather Facility

Volume 90, No. 20 <http://www.usda.gov/oc/waab/jawf/wwcb.html> May 20, 2003

### WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE  
National Agricultural Statistics Service  
and World Agricultural Outlook Board

**Total Precipitation (Inches)**  
MAY 11 - 17, 2003

**HIGHLIGHTS**  
May 11 - 17, 2003  
*Highlights provided by USDA WAOB*

**T**he demarcation between wet and dry conditions remained extremely sharp across the **South Central States**, stretching southeastward from the **southern Plains** to the **central Gulf Coast**. South of the line, hot, breezy, mostly dry weather hastened winter wheat maturation and maintained stress on emerging summer crops across the **southern Plains** and **western Gulf Coast region**. The dry region was centered on **Texas**, where weekly temperatures averaged as much as 8°F above normal and May 18 temperatures soared to 100°F or higher as far north as the northern panhandle. Just to the north and east, however, excessive wetness further delayed spring fieldwork and

*(Continued on page 9)*

**Contents**

Water Supply Outlook for the Western U.S.	2
June and Summer (June-August) Outlooks	4
May 13 Drought Monitor & Pan Evaporation Map	5
Crop Moisture Maps	6
Weather Data for Mississippi and the Missouri Bootheel & Soil Temperature Map	7
Extreme Maximum & Minimum Temperature Maps	8
Temperature Departure Map	9
Growing Degree Day Maps	10
National Weather Data for Selected Cities	11
National Agricultural Summary	14
Crop Progress and Condition Tables	15
State Agricultural Summaries	16
May 19 ENSO Update	26
International Weather and Crop Summary & April Temperature/Precipitation Maps	27
Corrected March 2003 South American Maps	43
Subscription Information	44

- Mission – collect global weather and agricultural information to determine weather impacts on crops and livestock
- NOAA Climate Prediction Center meteorologists quality control, map, and analyze global meteorological data
- USDA World Agricultural Outlook Board meteorologists prepare agricultural weather assessments for USDA decision makers
- Products disseminated via the WWCB



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# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## NOAA/USDA Joint Agricultural Weather Facility



- When hurricanes threaten, special crop weather assessments prepared for Secretary of Agriculture and top staff
  - Before a storm – products warn of potential threats to U.S. agriculture
  - After a storm – products help identify impacted areas, estimate losses, develop assistance programs

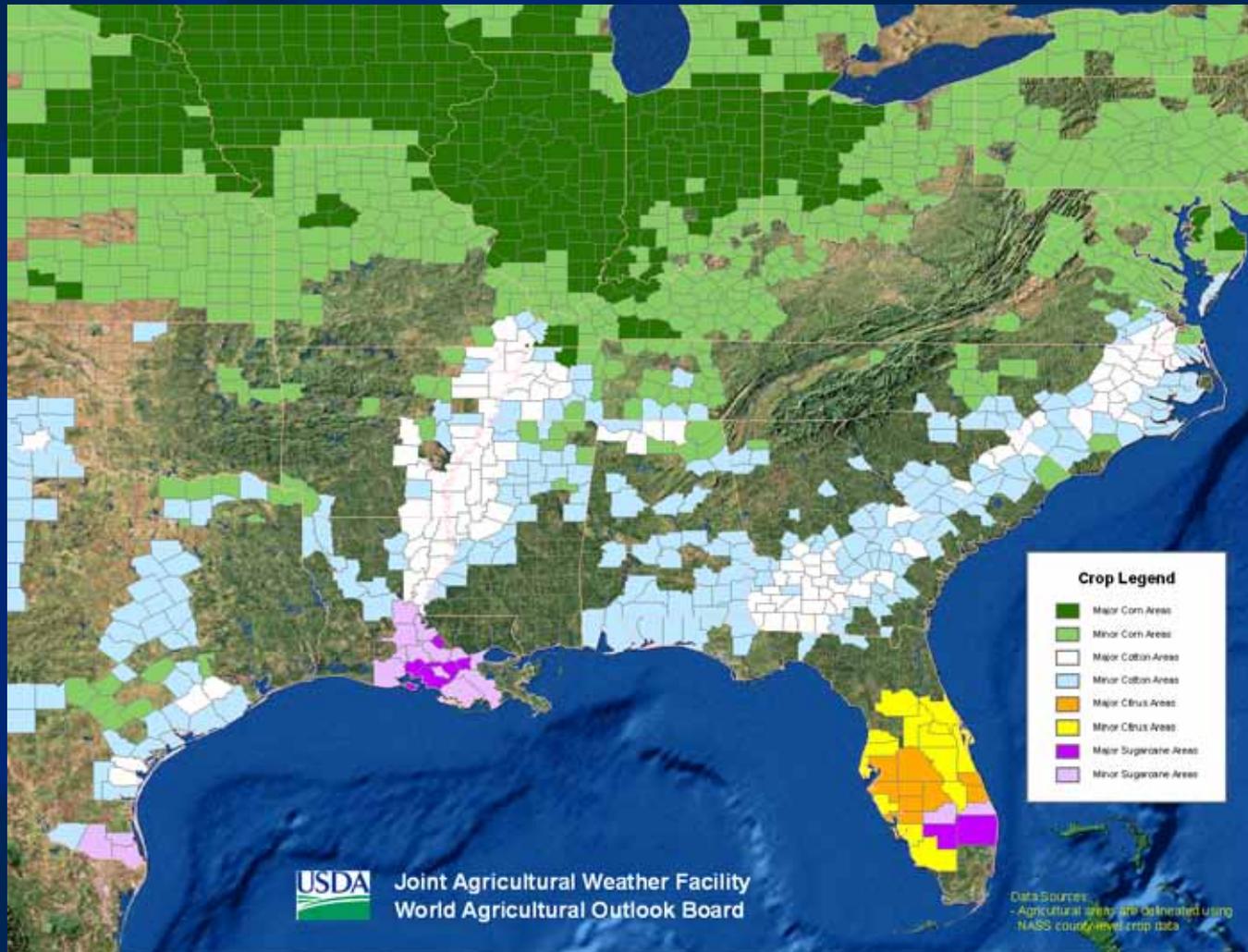


- GIS used to overlay NOAA data and analyses on USDA agricultural maps
  - NHC storm track forecasts/uncertainty
  - NWS wind/rainfall measurements
  - NASS crop acreage/livestock data



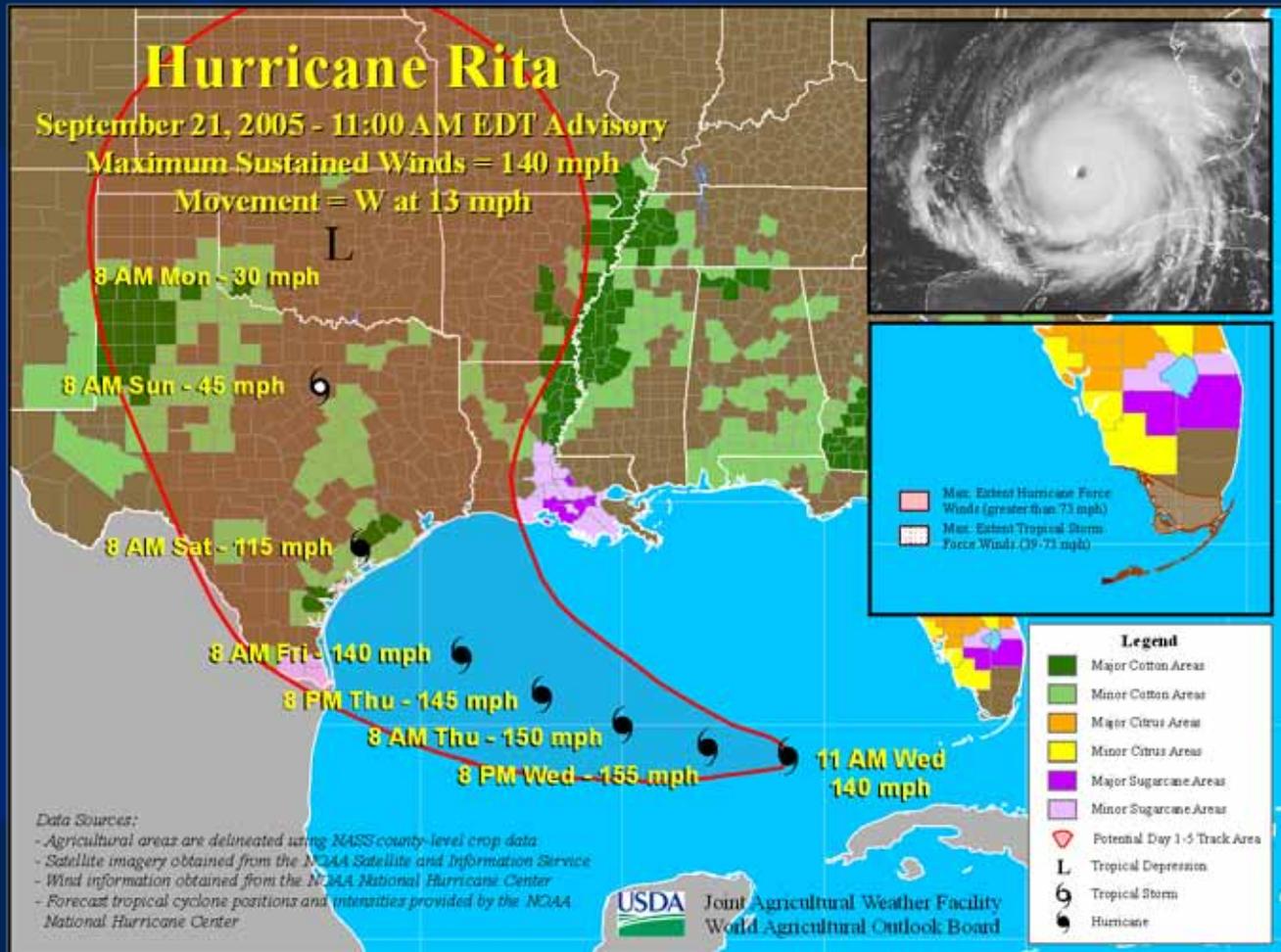
# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## *Vulnerable Agricultural Areas*



# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## Forecast Maps



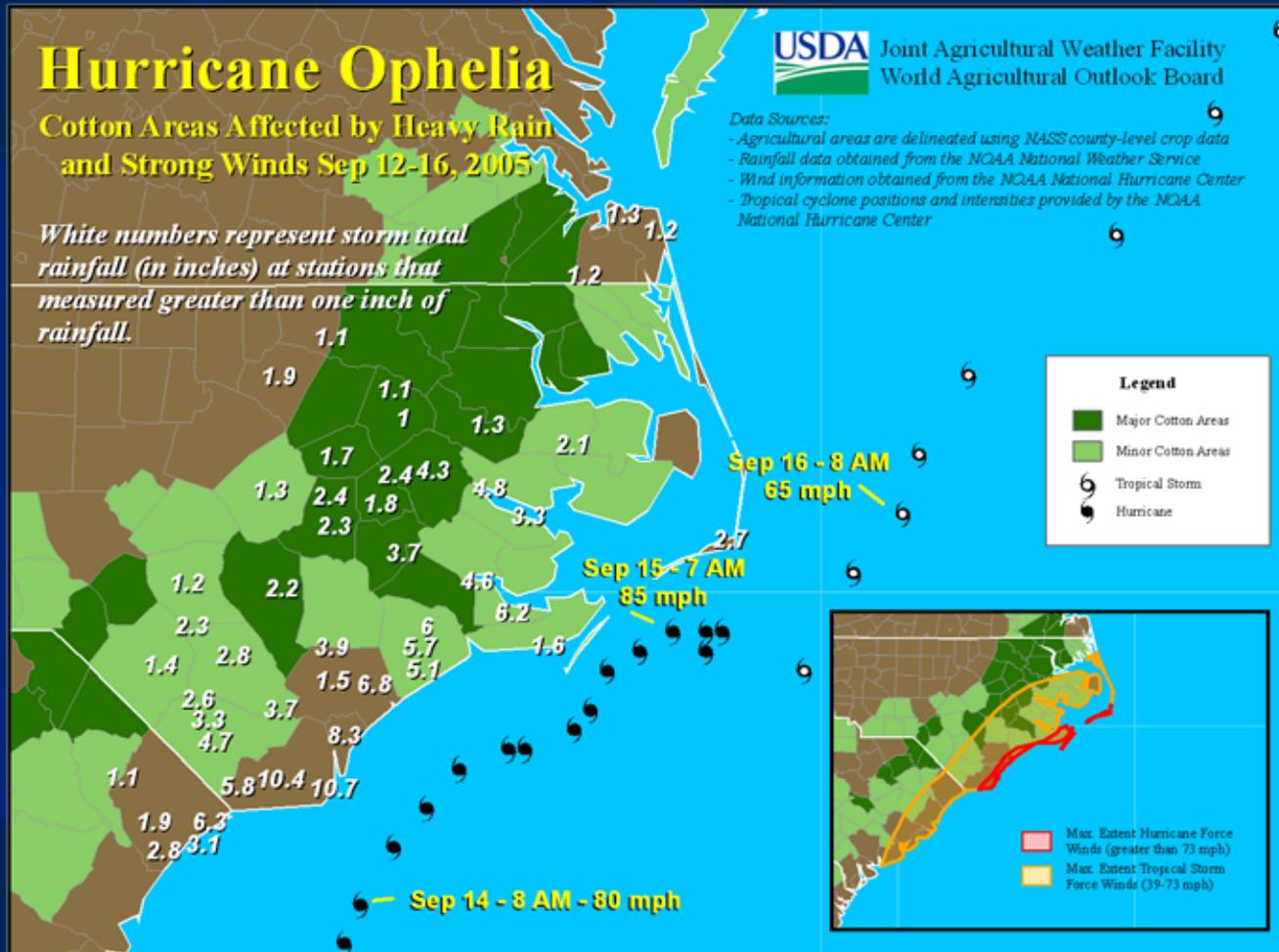
# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## Forecast Maps



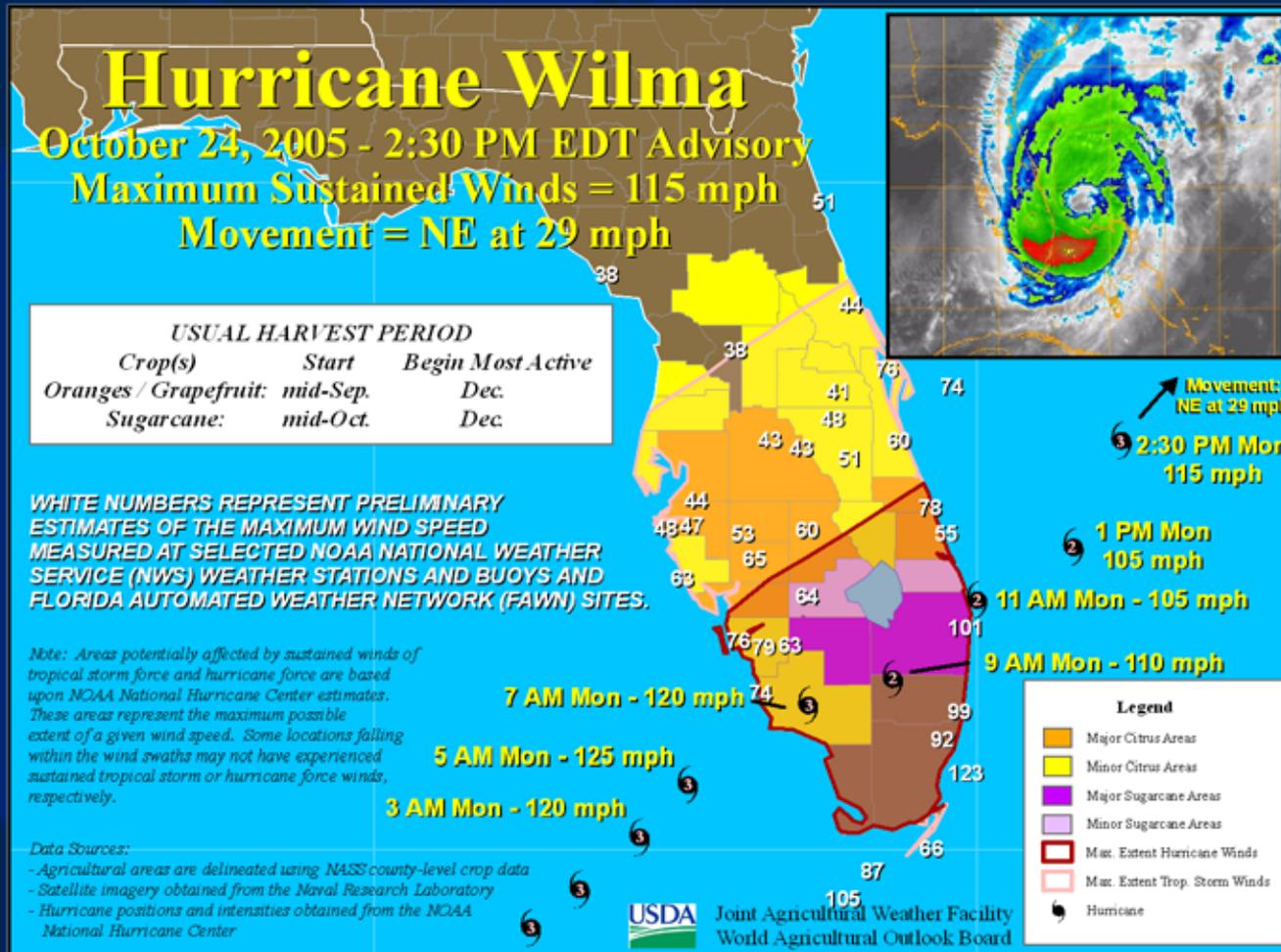
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## Rainfall Analyses



# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## Wind Analyses



# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## USDA Feedback



- Special crop weather assessments well received by USDA decision makers
- Success of these products credited to the high quality data and analyses provided by NHC, NWS, and NASS
- Expanded suite of operational hurricane-related products in a GIS-compatible format would be welcomed
- NHC/NWS products in GIS format help maintain accuracy of crop weather products that incorporate these data



# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## Summary

### 1. Thank you NHC/NWS!

#### Products help USDA:

- assess potential threats to agriculture
- identify impacted areas
- estimate losses
- disburse aid

### 2. Consider GIS-compatible formats.

Facilitate agricultural weather assessments and help maintain consistency among products



# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

Thank You !



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# MONITORING HURRICANE THREATS TO U.S. AGRICULTURE

## Hurricane Impacts on Agriculture in 2005



- **Significant damage**
  - Citrus (Wilma)
  - Sugarcane (Rita, Wilma)
  - Vegetables/Nursery crops (Wilma)
  - Timber (Katrina)
  - Infrastructure
- **Other agricultural concerns**
  - Cotton
  - Corn
  - Soybeans
  - Livestock
- **USDA response**
  - Financial aid

