



Weather, Climate and Water Information in Agricultural Applications



Pai-Yei Whung, Ph.D.

Director

Office of International Research Programs

Agricultural Research Service, USDA, U.S.A.



Agriculture

- Commodities and livestock
- Forestry
- Fisheries (e.g. Aquaculture)



Weather, Climate and Water Information

- Agricultural Applications
 - Agricultural Production Management System
 - Crop planning
 - Water use efficiency – improved irrigation scheduling
 - **Agricultural Risk Assessment**
 - Early warning for pest control; Giant Grain Borer
 - Risk assessment for the spread of plant diseases; citrus canker, wheat stem rust



A Success Story

- A joint weather facility between NOAA and USDA; Joint Agricultural Weather Facility (JAWF) that provides
 - Short-term tactical agricultural weather products
 - Long-term strategic agricultural weather products (e.g. supply/demand estimate)
- Partner with National Drought Mitigation Center to produce U.S. Drought Monitor



Requirements

- Case sensitive, but in general
- T^o, precipitation, humidity, wind speed and direction, soil moisture, soil temperature
- 7-day, 14-day, 1-month, seasonal
- Local scale resolution

And,

Let us work together!!