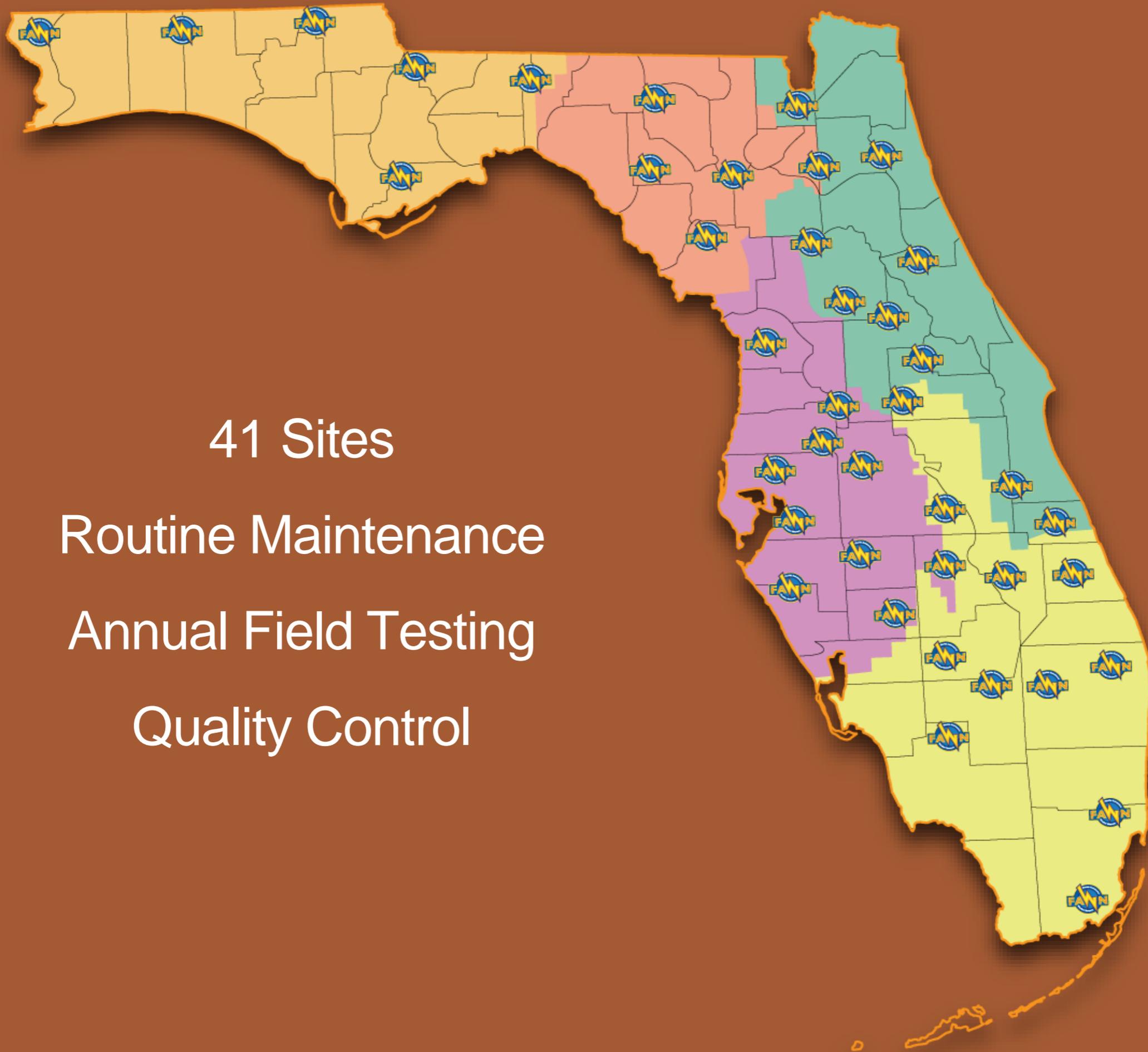




Weather Data and Tools for Florida Citizens

Rick Lusher
FAWN Director



41 Sites

Routine Maintenance

Annual Field Testing

Quality Control



Latest Observations

Graphic Weather Data

NWS Forecast

RADAR

My Florida Farm Weather

FAWN Freeze Alert System

Receive weather alerts on your phone and/or by email

Tweets

Follow

FAWN
@UF_FAWN

2h

SEABRING wind sensor is intermittent; all other sites & sensors are working & reporting

Temperature

Wet Bulb Temp

Daily Min Temp

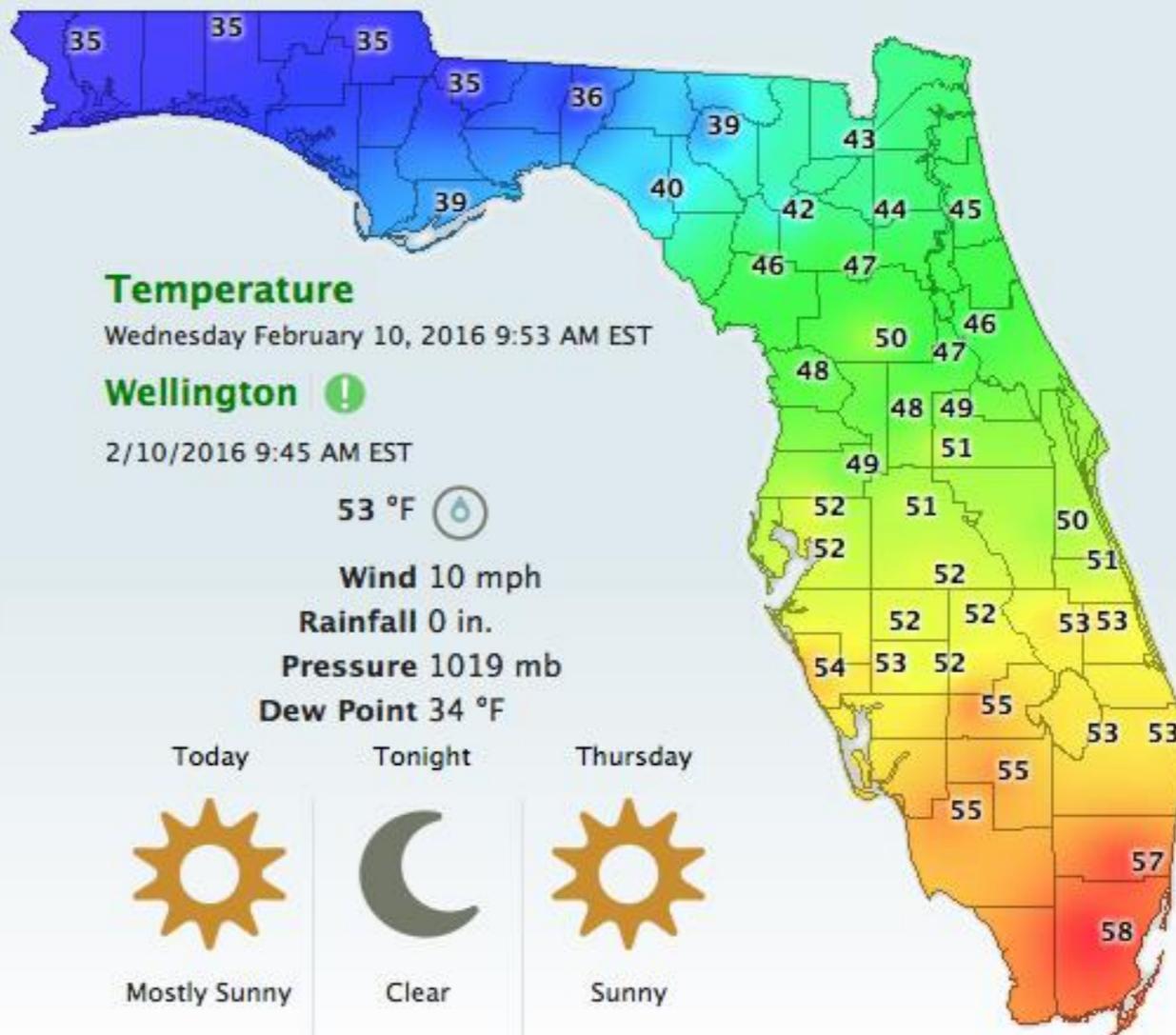
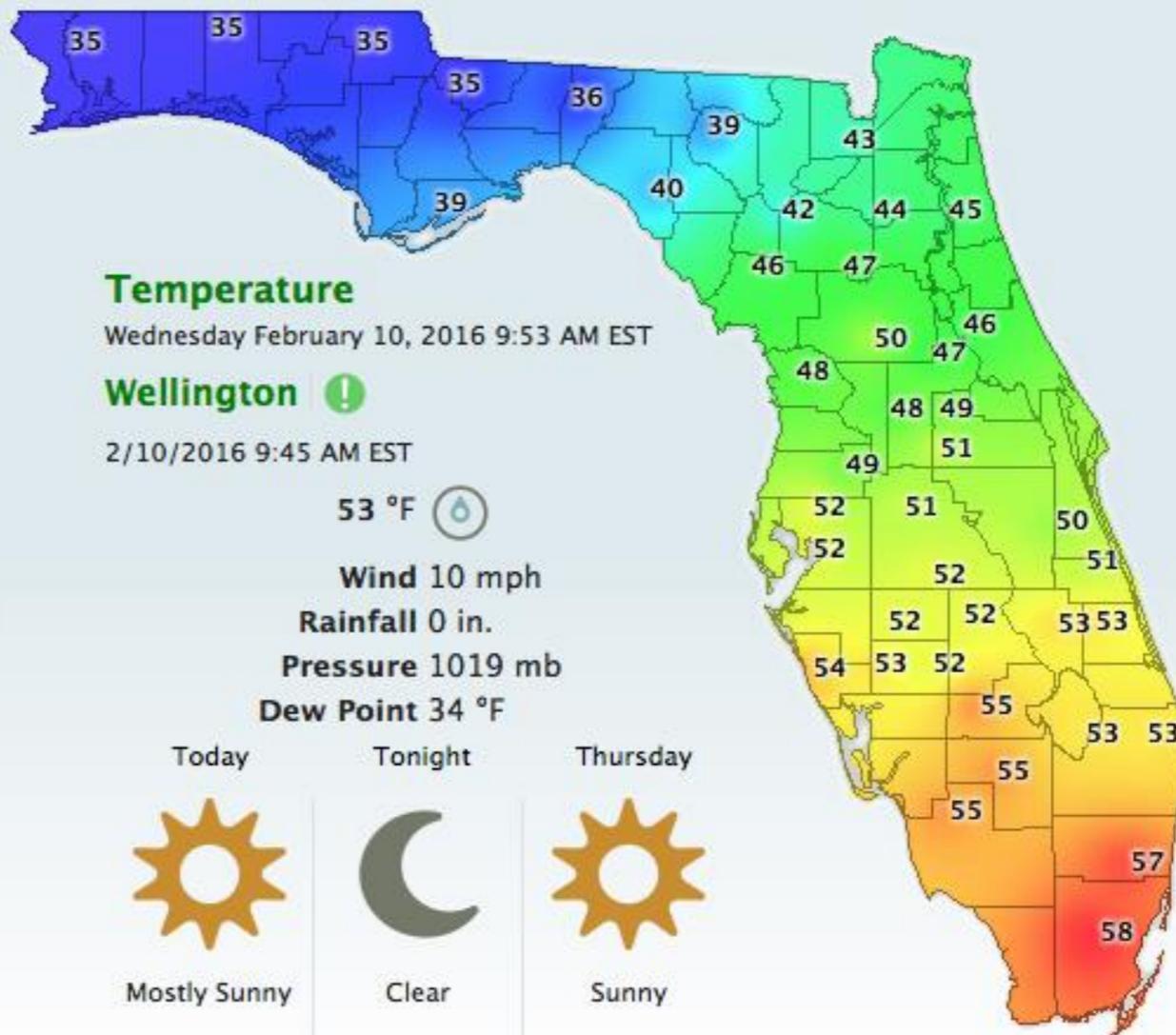
Daily Avg Temp

Daily ET

Daily Total Rain

Weekly Total Rain

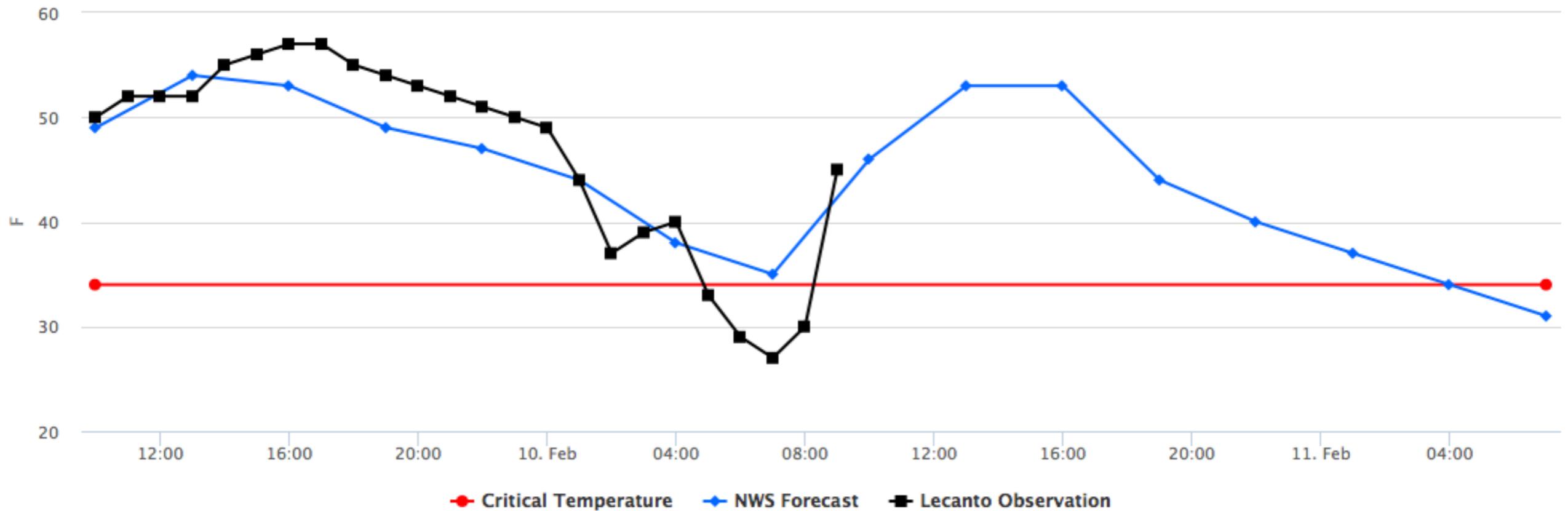
FCST Min Temp



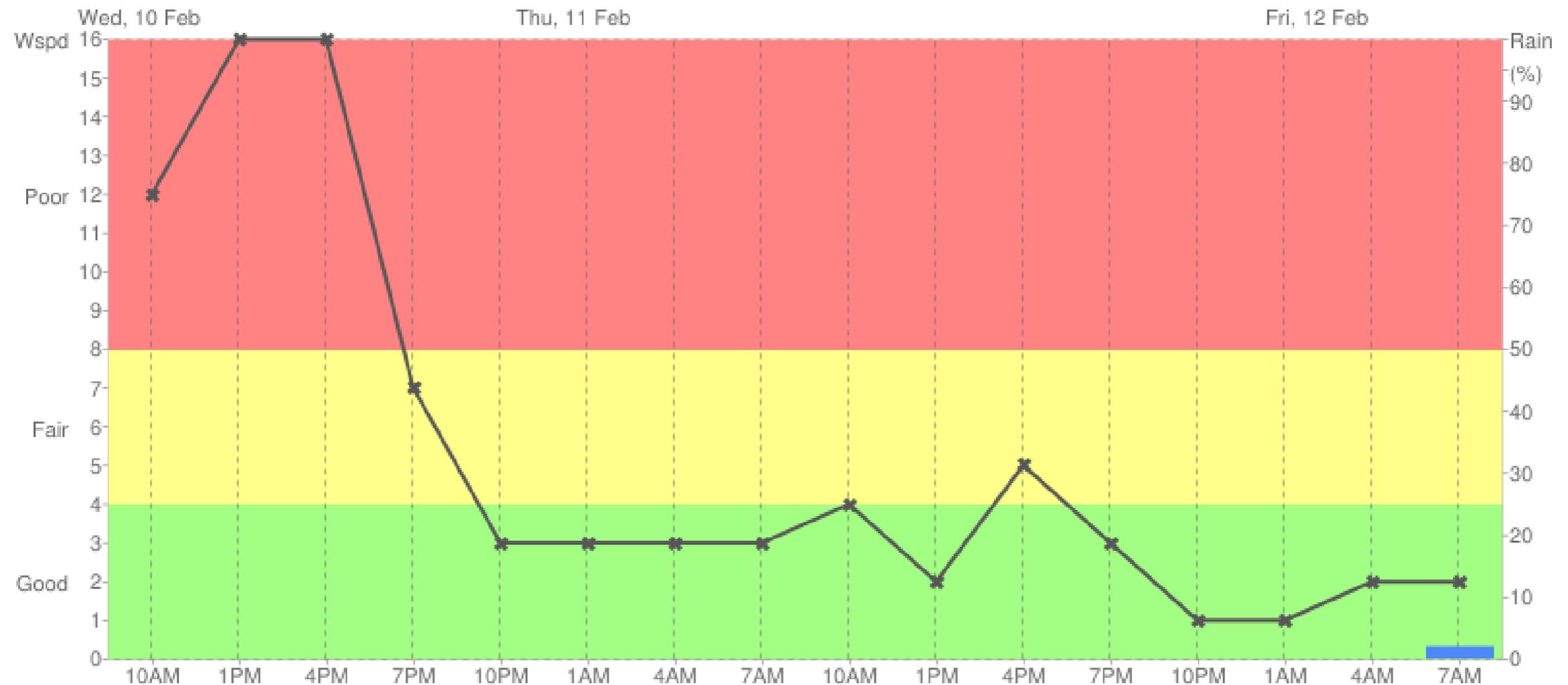
Forecast Tracker

The Forecast Tracker plots the current and forecasted temperature on a graph to show how well these values "track" each other, and if critical levels are likely over the next 24 hours.

Forecast Date:Feb 09 2016 09:00:00, Eff Date:Feb 09 2016 10:00:00



Current Time : Wed, 10 Feb 2016 13:35:27 EST FAWN Station: Lecanto



Time	Conditions for Application	Wind Speed	Rain	Relative Humidity	Inversion*
FAWN conditions @ <input type="text" value="Lecanto"/> <input type="button" value="Go"/>					
13:30 pm	Poor	13 mph 298°	0"	45%	-3°F

Tree Row Distances	Between-Row: <input type="text" value="10"/> ft (10 - 40) In-Row: <input type="text" value="6"/> ft (4 - 30)
Emitter	Diameter: <input type="text" value="5"/> ft (1 - 25) Rate: <input type="text" value="5"/> gals/hr (1 - 30) Pattern: <input type="text" value="360"/> deg (0 - 360) System Efficiency: <input type="text" value="85"/> % (50 - 100)
Other Variables	Soil Type (Field Capacity): <input type="text" value="Apopka (.09)"/> Irrigation Depth: <input type="text" value="36"/> in. Irrigation Trigger Depth: <input type="text" value="6"/> in. FAWN Station: <input type="text" value="Wellington"/> ET: 0.0752"

Create Schedule

Irrigation Schedule for 2/12/2016 to 2/26/2016

Irrigate every **2 days** for **0 hours and 47 minutes** . During this period...

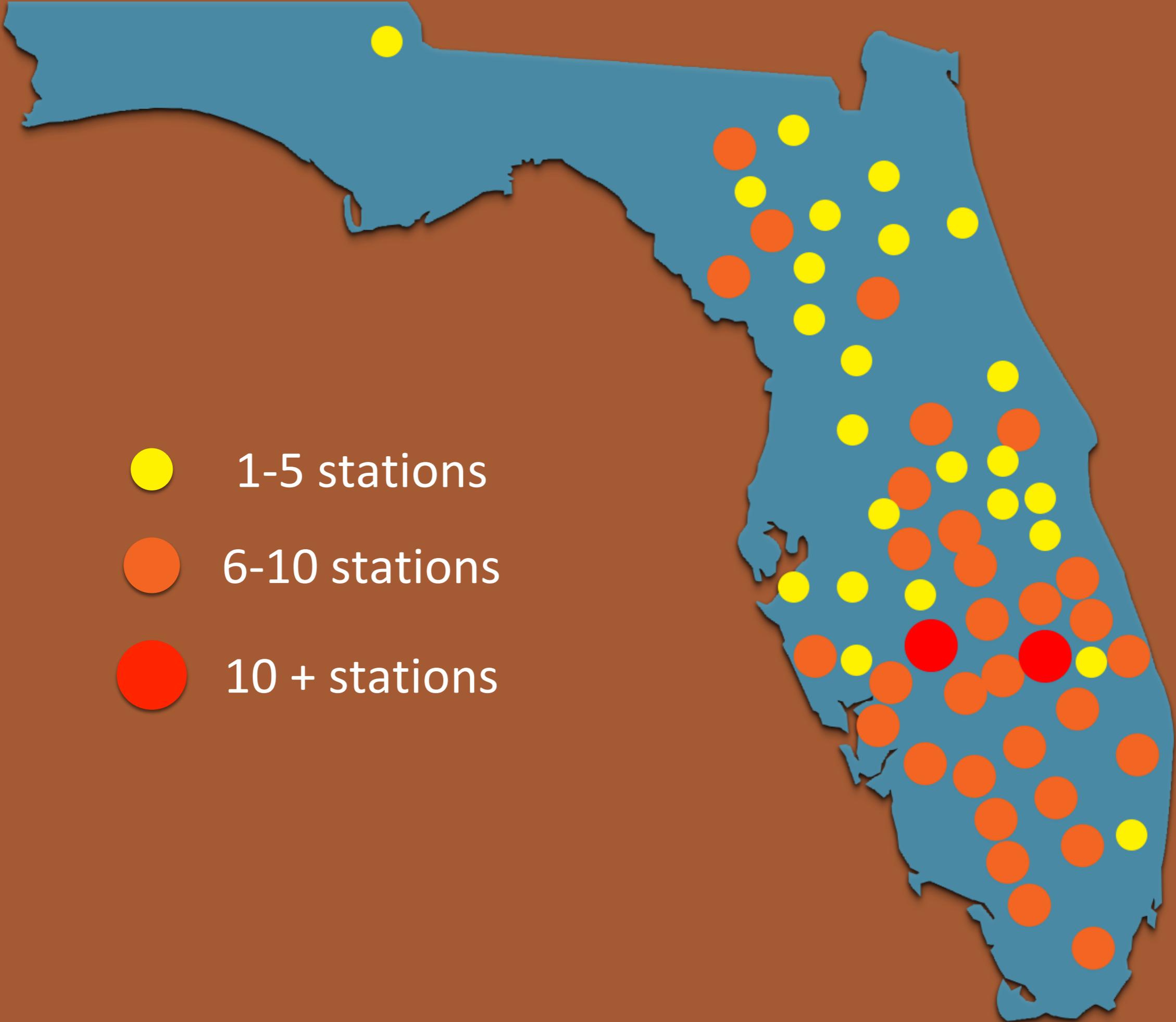
...if it rains:	< 1/4"	1/4" to 1/2"	1/2" to 3/4"	3/4" to 1"	> 1 "
...then delay irrigation:	1 day	2 days	2 days	2 days	2 days

My Florida Farm Weather

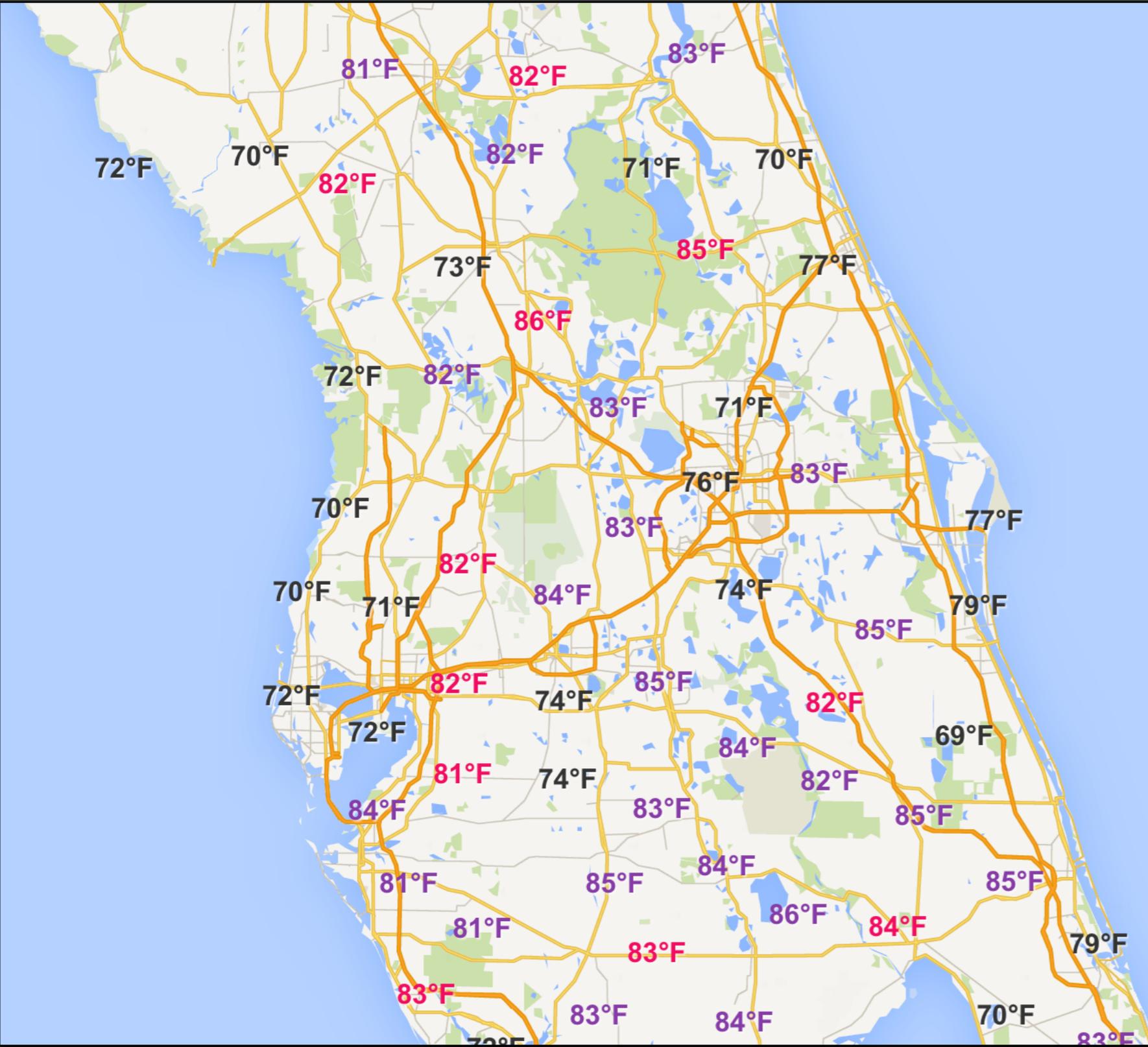


On-site data
Cold Protection
Irrigation Scheduling





- 1-5 stations
- 6-10 stations
- 10 + stations



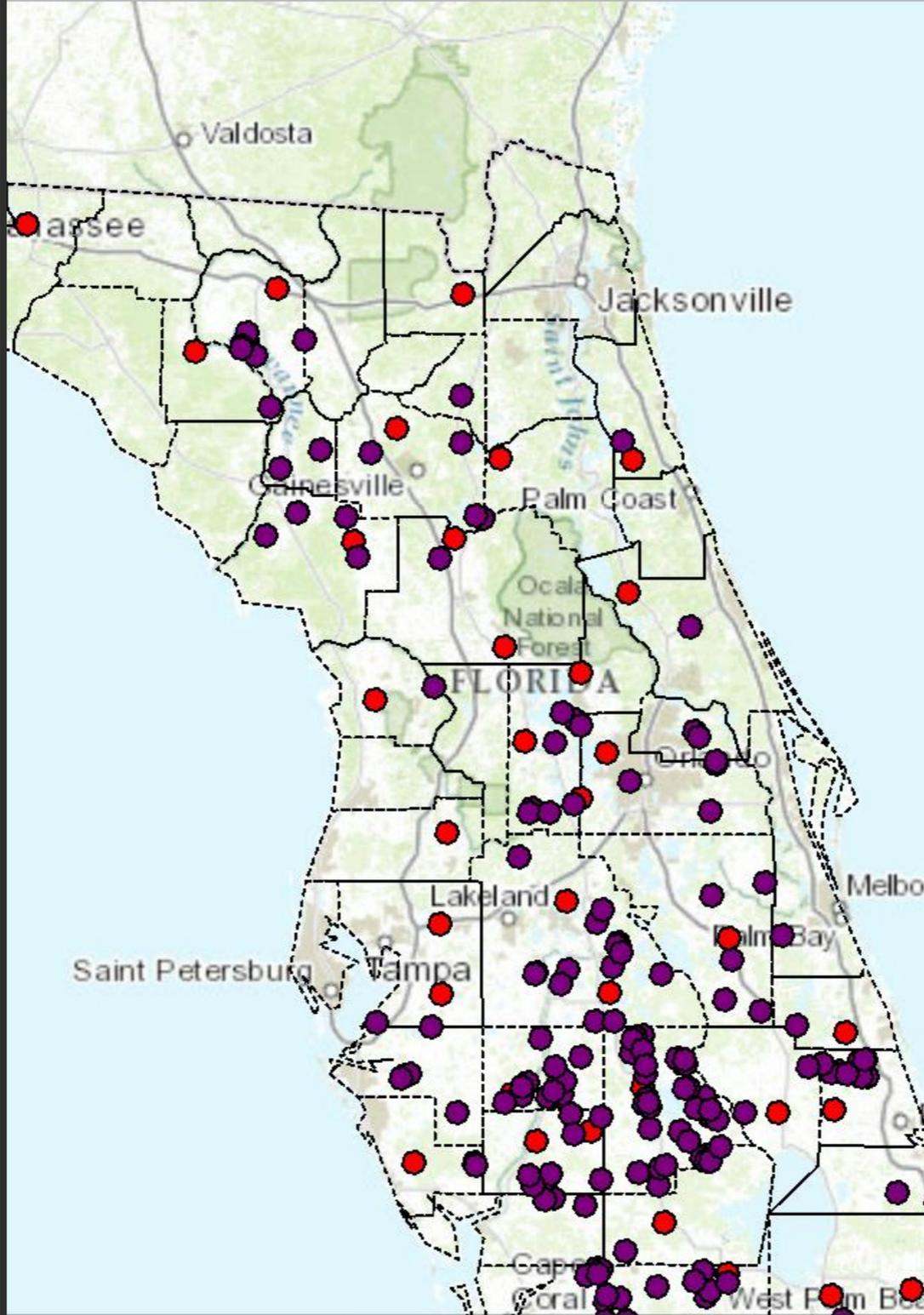
Enter Grower Name

Station Name ▾

Locate Station

- Please select source station. Zoom in to see more stations
- Fawn**
 - NOAA**
 - Grower**
 - Manual**

🔍 Search Station





UF/IFAS Water Conservation Projects

Dr. Kelly Morgan

Professor, Crop Nutrient and Irrigation Management

Florida Without Oranges

A disease is decimating the citrus industry, leading some to wonder what's next for parts of the Sunshine State.



Sam Wimborne/Reuters

Current situation and HLB questions



SITUATION

- HLB incidence approaching 100%, and increasing in young groves
- USDA crop estimate lower than last season (lowest since the 1960s)
- Drop occurring on all varieties in all regions

QUESTION

Do citrus trees with HLB require more water?

Current Projects

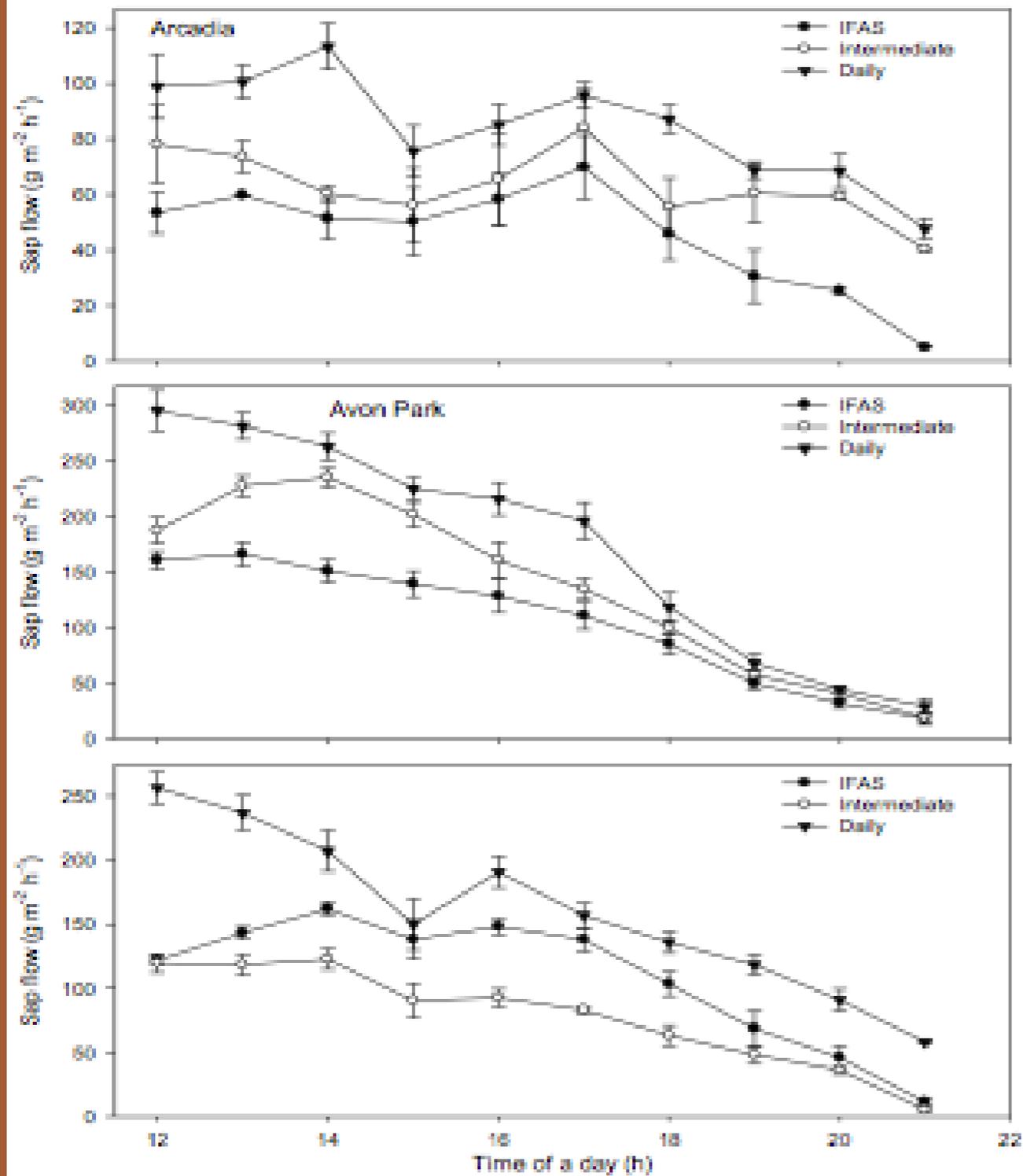
- Demonstration of Improved Citrus Irrigation Using Soil Balance Methods and Soil Moisture Sensors with Automated Irrigation Pump Starts - *Completed November 2014*
- Irrigation Scheduling to Address Water Demand of Greening- Infected Citrus Trees – *Completed October 2015*
- Determination of Differences in Water Requirements for Greening Infected Citrus Trees and Healthy Citrus Trees – *Complete November 2015*



Project Results

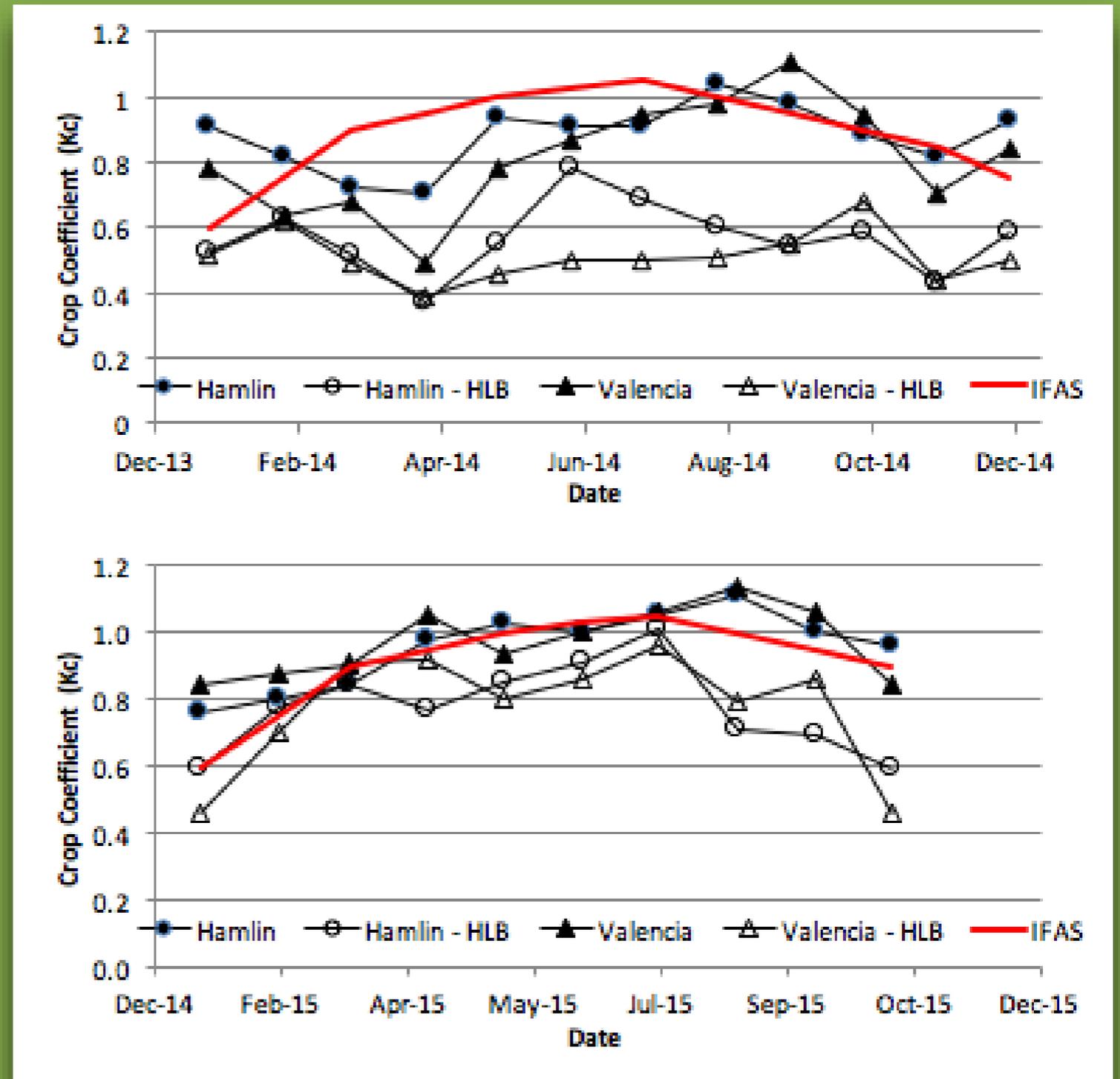
- FAWN weather data (ET) is collected by the CWMS program.
- CWMS modified to collect irrigation runtimes and rainfall from Motorola irrigation control system, reducing data input requirements.
- Average soil moisture for the 4, 8, 12 and 18 inch depths ranged from 0.08 to 0.13 cm^3/cm^3 with the lowest values during the dry months and the highest values during the rainy season.
- Measured soil moisture not significantly different than simulated soil moisture for either 2012/2013 or 2013/2014.

Water Uptake Measurements

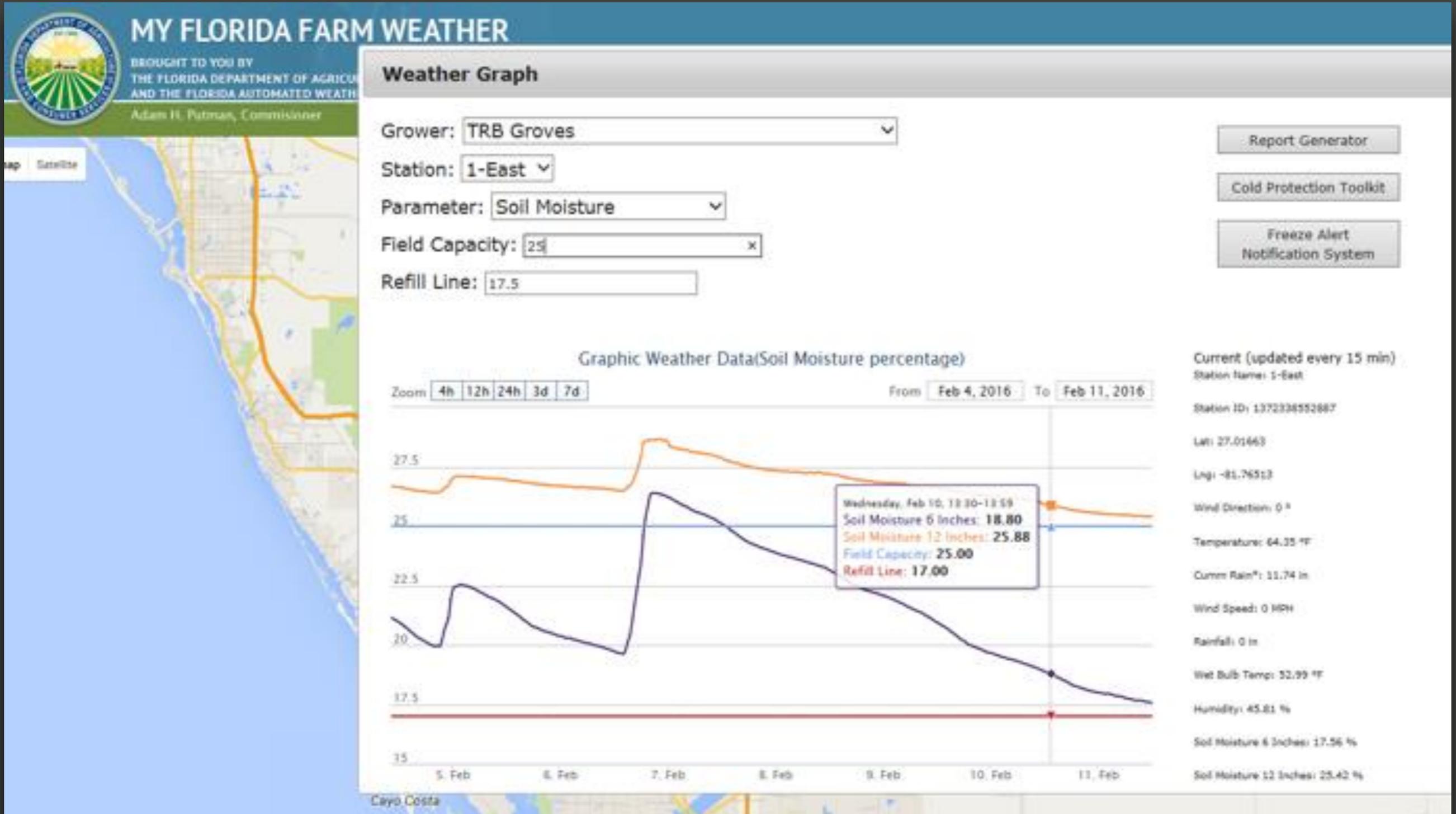


Crop Coefficient (K_c)

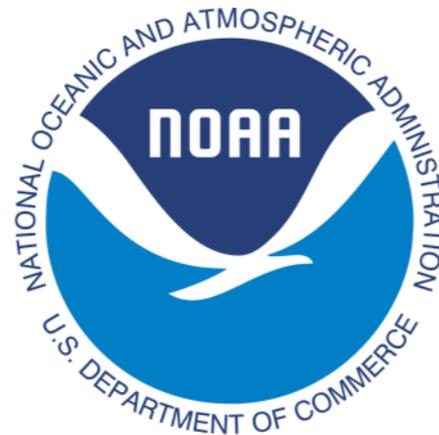
- Patterns of K_c similar for infected and non-infected trees
- Non-infected tree K_c similar to those found to field trees prior to greening
- Infected trees consistently lower K_c
- 35.2% in 2014 and 20.8% in 2015



On-Farm Soil Moisture



Special Thanks!



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www.myfawn.com