

Hurricane Milton

October 2024

USDA NASS Disaster Monitoring Team
Report last updated: October 23, 2024



Hurricane Milton Event Summary

- Hurricane Milton was a Category 3 storm that made landfall on Wednesday, October 9, 2024 near Siesta Key, FL.
- At peak intensity, the hurricane was the fifth-most intense Atlantic hurricane on record.
- The hurricane caused a tornado outbreak, heavy precipitation, and strong winds throughout the state.
- Hurricane Milton made landfall in Florida just two weeks after Hurricane Helene devastated the same region.

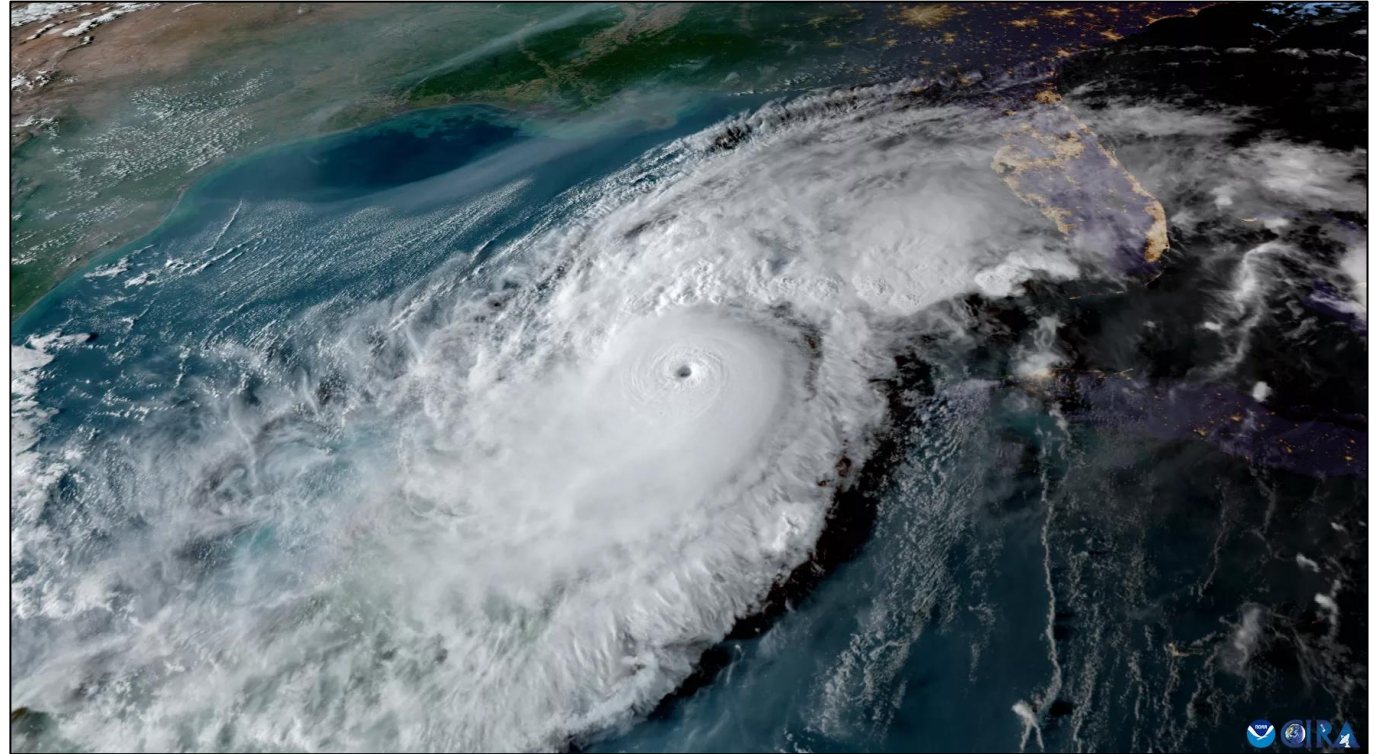
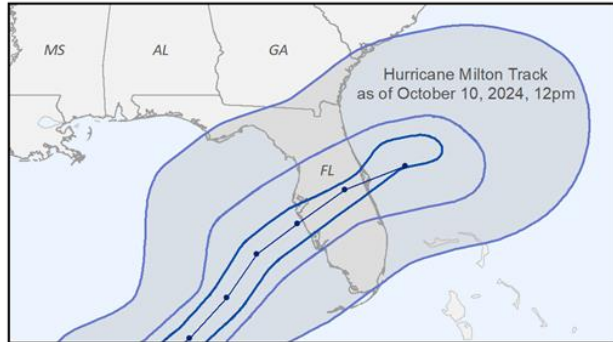


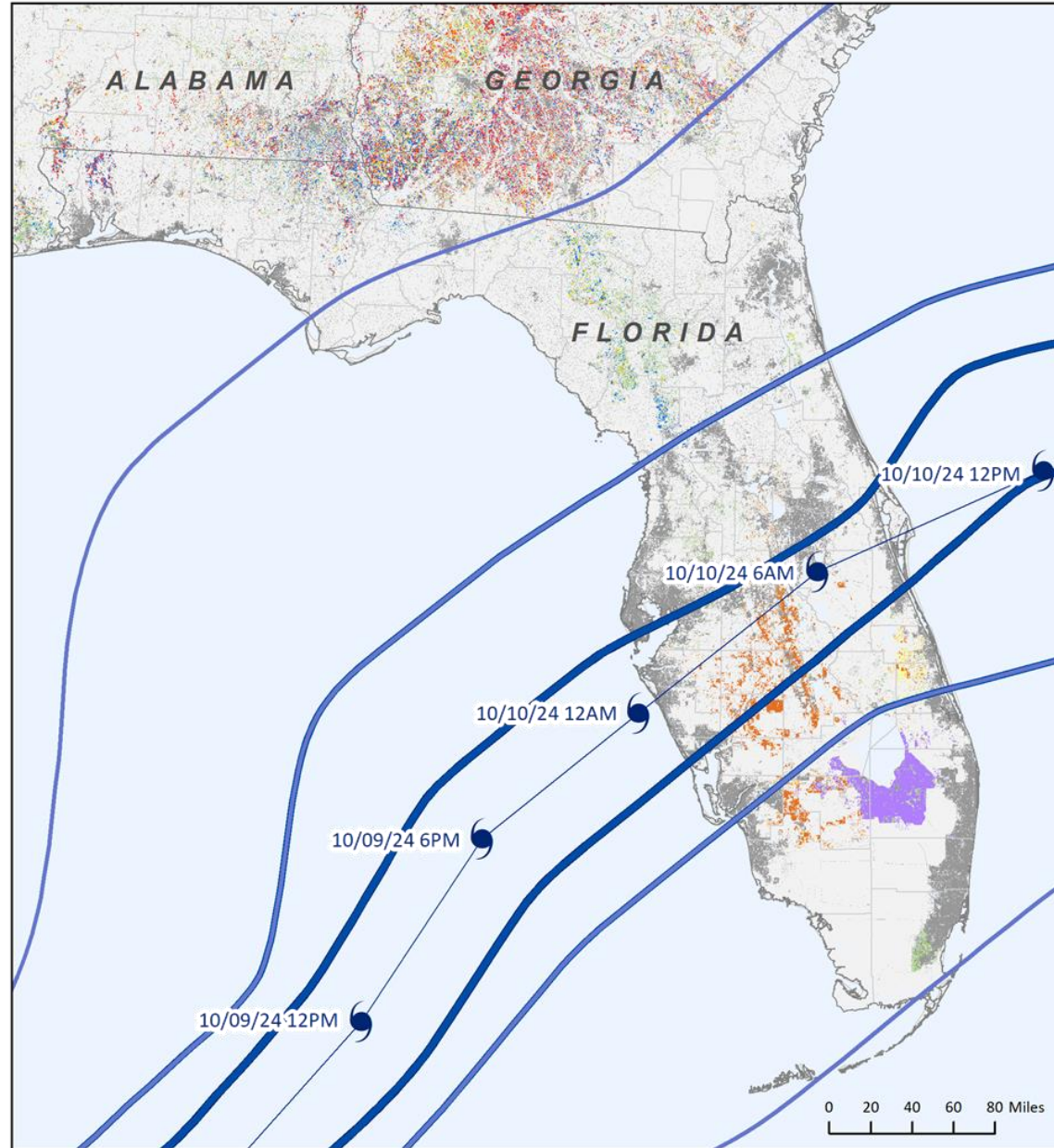
Photo Source: [National Environmental Satellite, Data, and Information Service](https://www.noaa.gov/)



Florida				
Crop Type	Statewide Total Acres	Percent within 64+ knots	Percent within 50+ knots (includes 50-63, 64+ knots)	Percent within 34+ knots (includes 34-49, 50-63, 64+ knots)
Avocados	3,900	0.01%	0.09%	99.99%
Citrus	20,100	14.11%	83.25%	99.84%
Corn	90,000	0.06%	0.29%	61.96%
Cotton	89,000	0.00%	0.14%	5.67%
Oranges	278,300	42.77%	79.23%	100.00%
Peanuts	160,000	0.02%	1.60%	39.01%
Sugarcane	407,600	0.03%	0.60%	100.00%

Hurricane preliminary best track wind swath data obtained from the NOAA National Hurricane Center on October 10, 2024 at 12pm. Total statewide acres based on 2023 NASS official estimates for planted acres (corn, cotton, and peanuts), harvested acres (sugarcane - sugar and seed), and bearing acres (avocados, oranges, and other citrus excluding oranges). Percentages based on raw pixel counts from the 2023 Cropland Data Layer and are not official NASS estimates. Estimates of potential cropland affected by hurricane winds may be different than these estimates indicate.

- Hurricane Track
- Windspeed 64+ knots
- Windspeed 50-63 knots
- Windspeed 34-49 knots
- Avocados
- Citrus
- Corn
- Cotton
- Oranges
- Peanuts
- Sugarcane
- Other Cropland
- Developed
- Other Land
- Water



Total Precipitation: 09 Oct 2024

Period ending 7 AM EST 09 Oct 2024

(Map graphic created 11 Oct 2024)

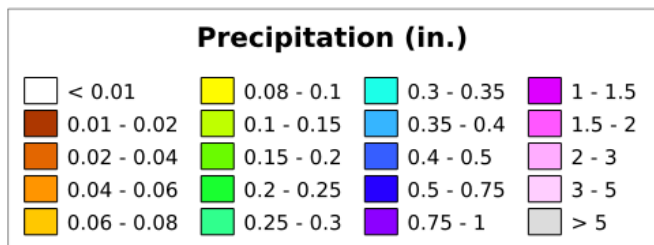
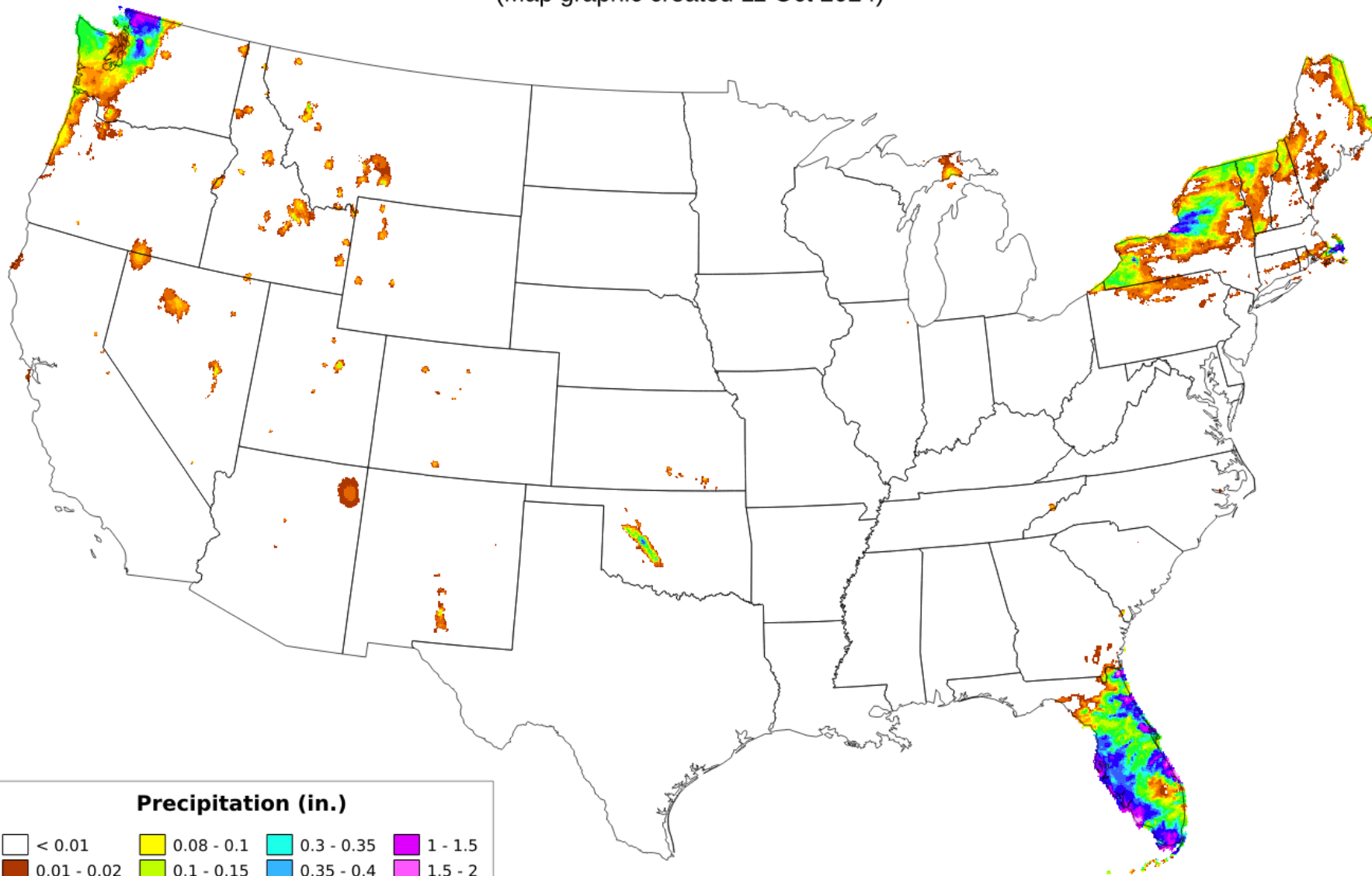


Image Source: [PRISM Climate Group at Oregon State University](#)

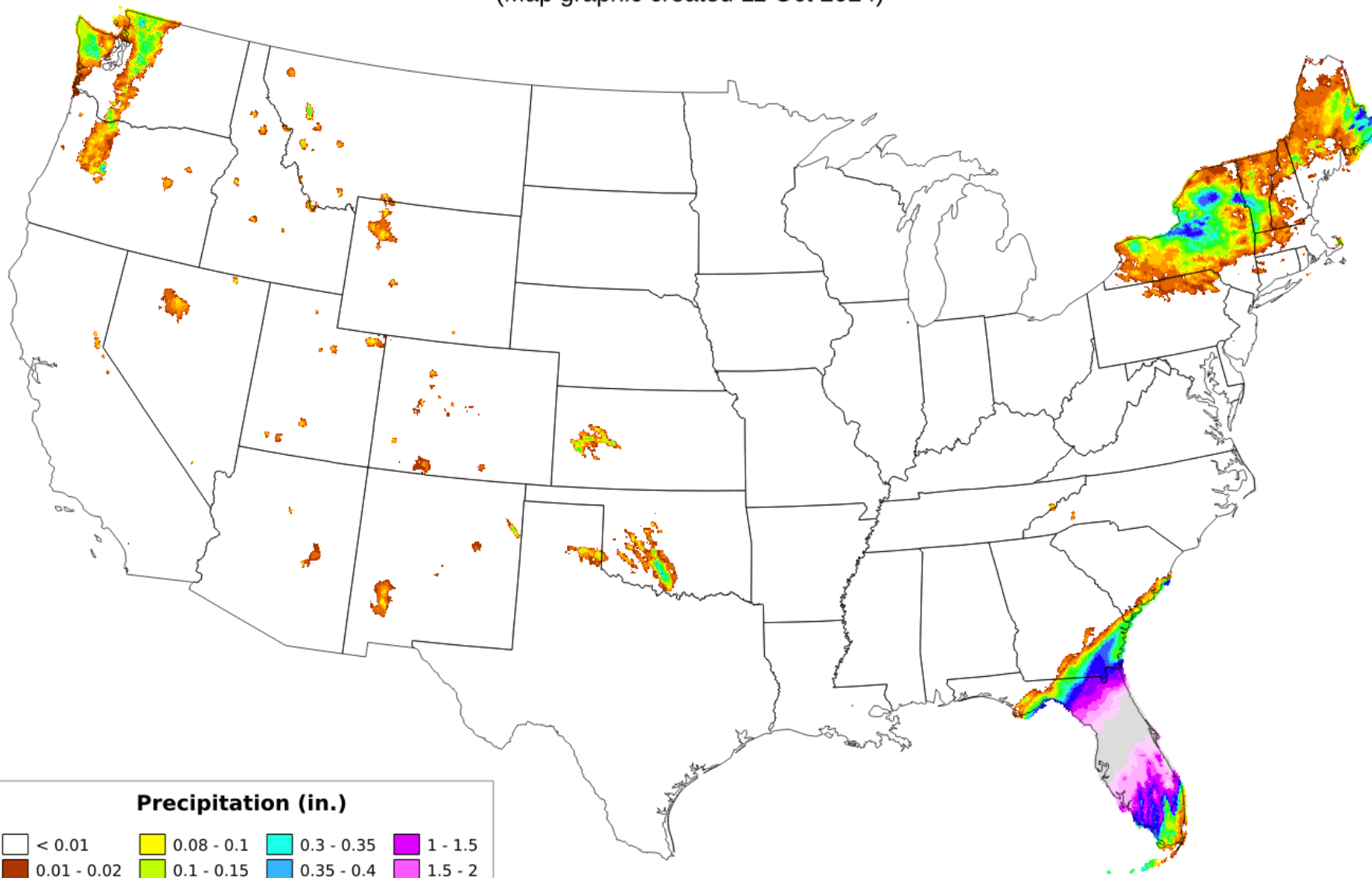
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Total Precipitation: 10 Oct 2024

Period ending 7 AM EST 10 Oct 2024

(Map graphic created 11 Oct 2024)



Precipitation (in.)			
< 0.01	0.08 - 0.1	0.3 - 0.35	1 - 1.5
0.01 - 0.02	0.1 - 0.15	0.35 - 0.4	1.5 - 2
0.02 - 0.04	0.15 - 0.2	0.4 - 0.5	2 - 3
0.04 - 0.06	0.2 - 0.25	0.5 - 0.75	3 - 5
0.06 - 0.08	0.25 - 0.3	0.75 - 1	> 5



Image Source: [PRISM Climate Group at Oregon State University](#)

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Total Precipitation: 11 Oct 2024

Period ending 7 AM EST 11 Oct 2024

(Map graphic created 15 Oct 2024)

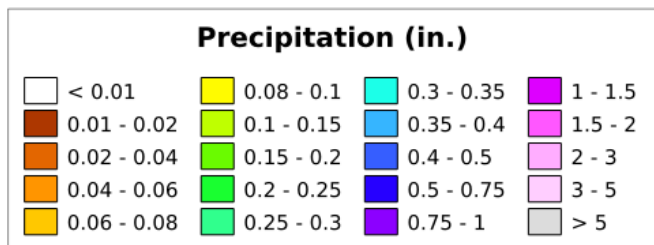
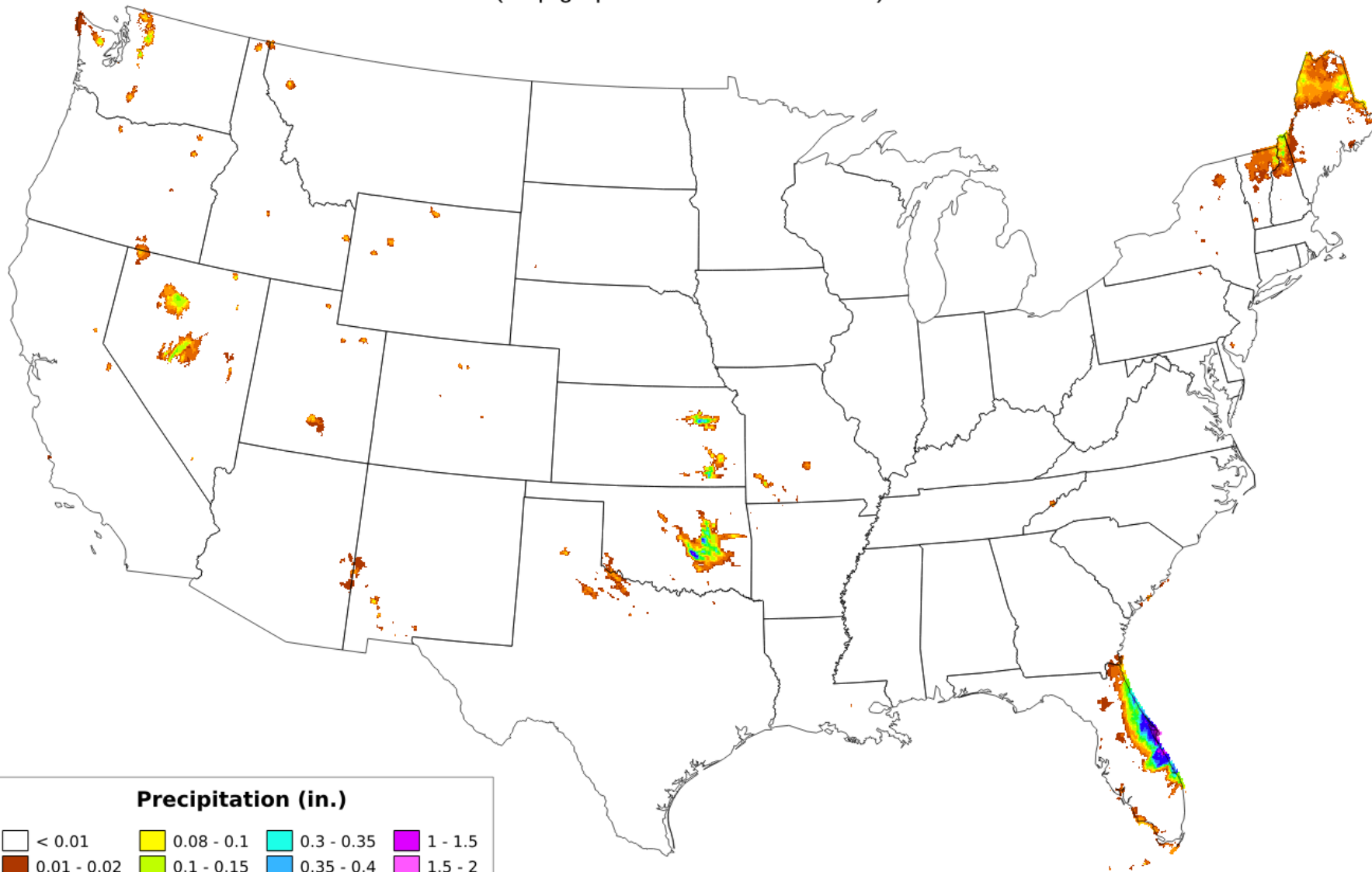


Image Source: [PRISM Climate Group at Oregon State University](#)

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Daily Precipitation Totals Florida, October 9-11, 2024

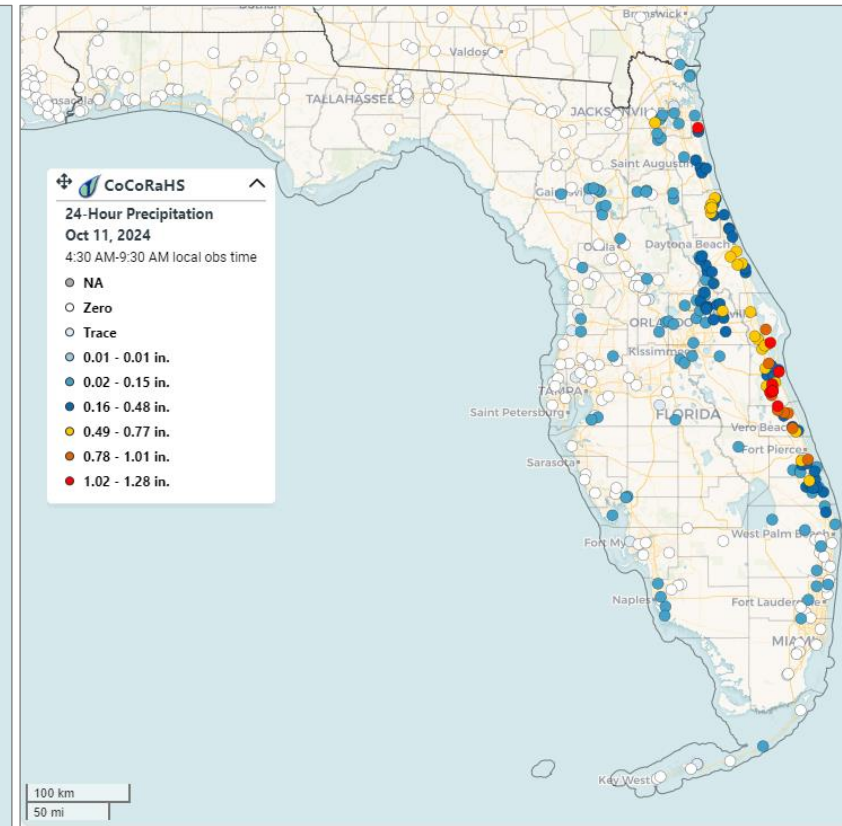
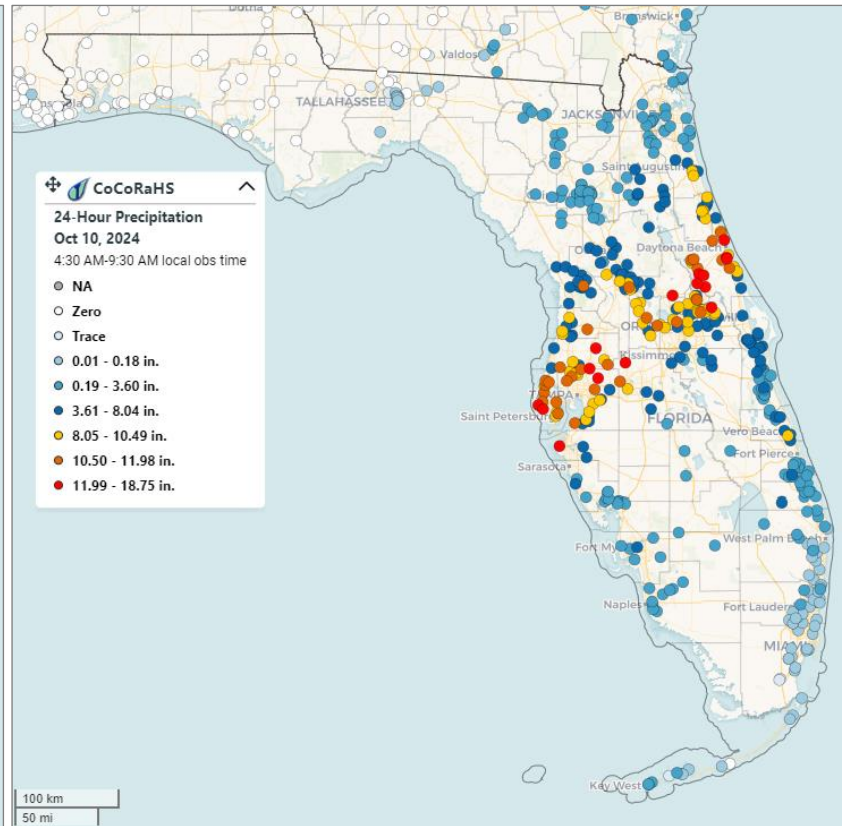
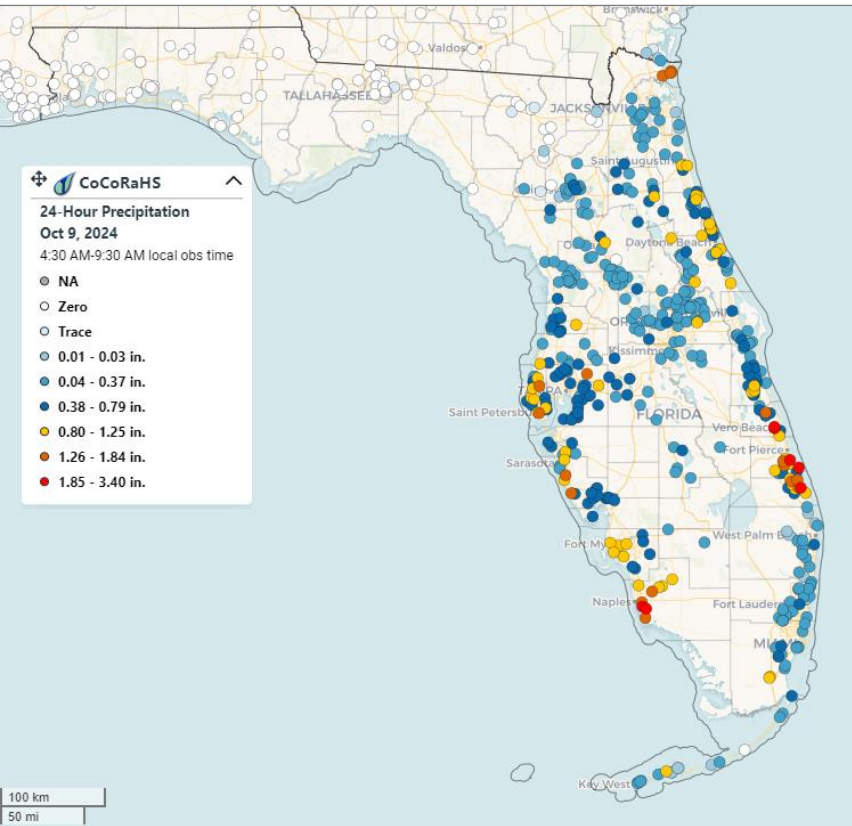


Image Source: [CoCoRaHS Maps](#)



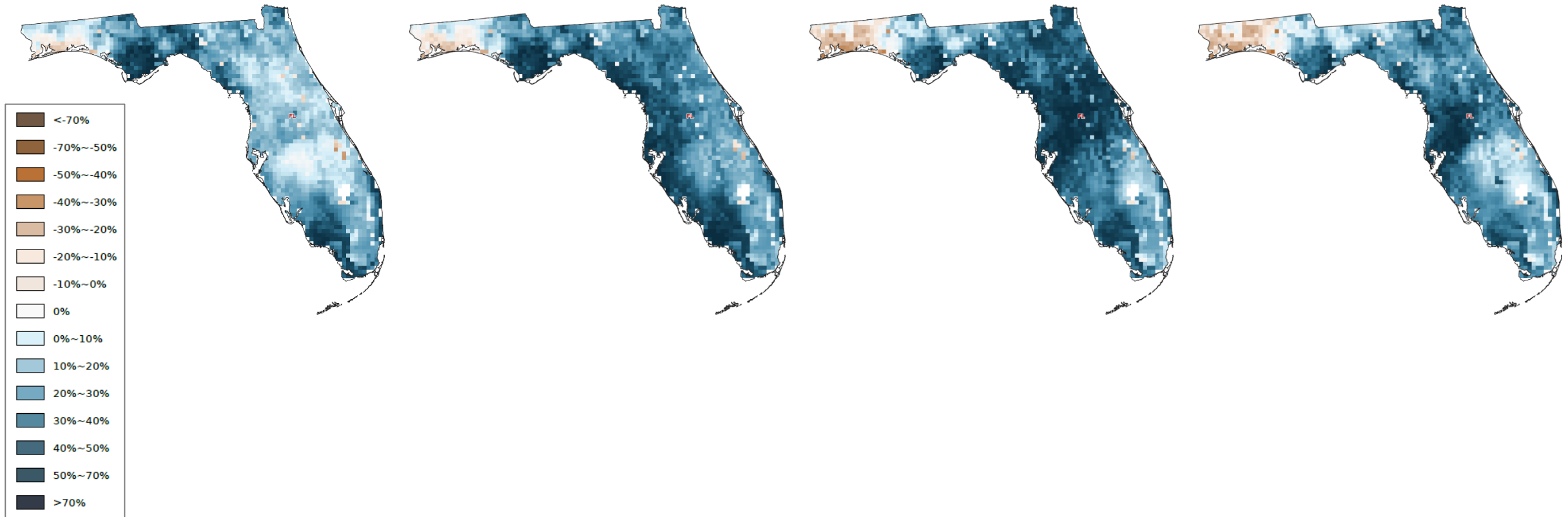
Daily Top-Soil Moisture Anomaly Florida, October 8-11, 2024

October 8, 2024

October 9, 2024

October 10, 2024

October 11, 2024

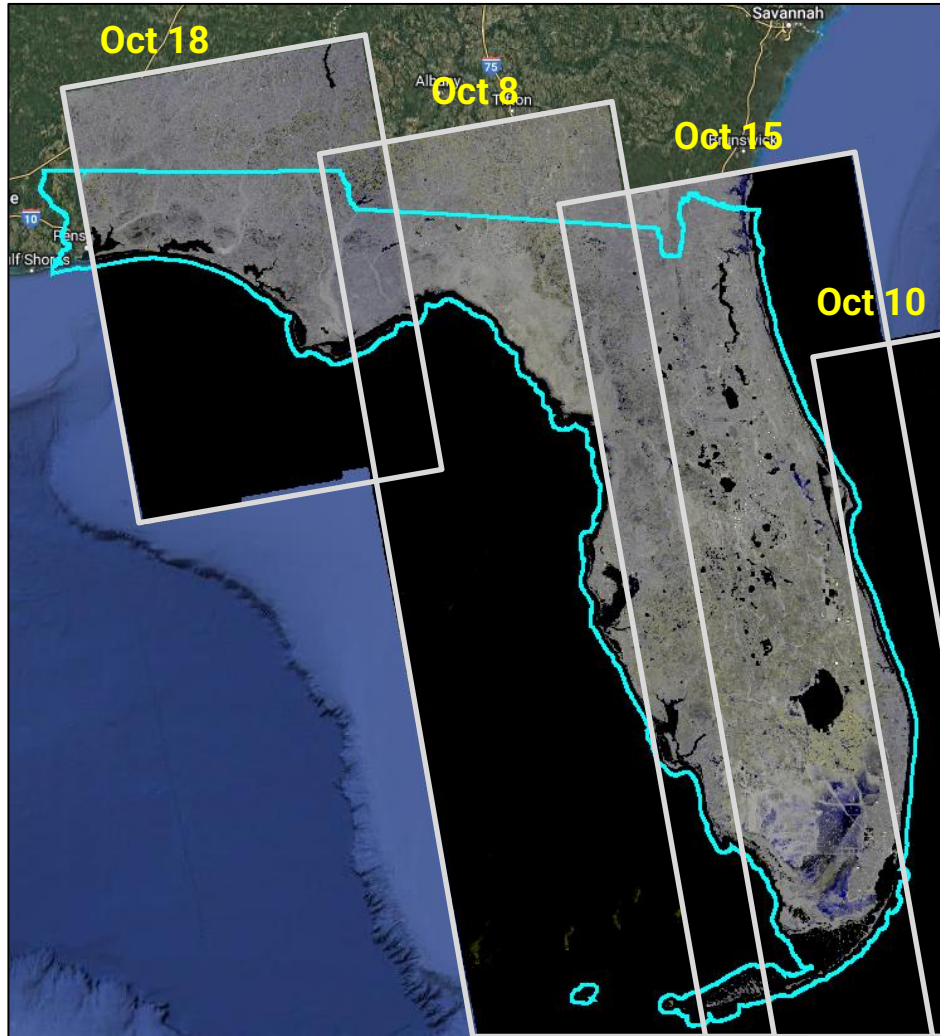


Soil Moisture Anomaly is a measure of deviation of the current soil moisture value from the "normal" soil moisture level, which is represented by a historical average soil moisture value (from 2015 to current). **Top-Soil** (surface soil) is defined as the top 6 inches.

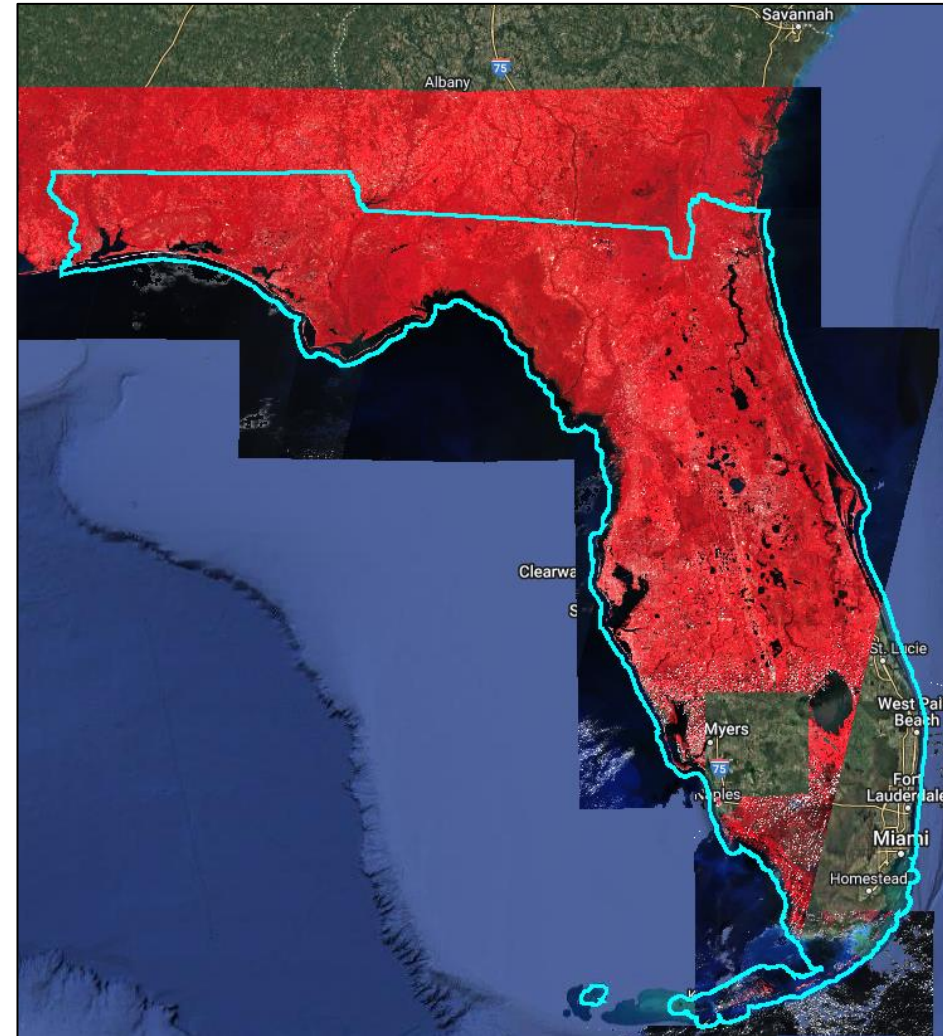
Data Source: [Crop-CASMA](#)



Satellite Image Coverage as of October 18, 2024 for Hurricane Milton Inundated Areas



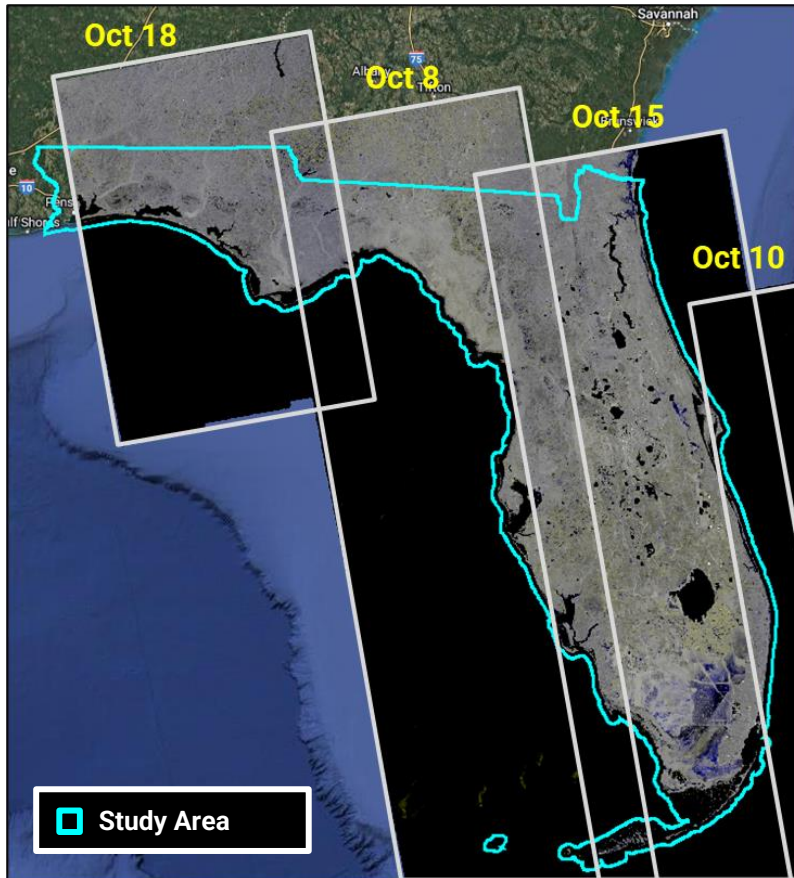
Sentinel-1 SAR image coverage
(October 8-18, 2024)



Sentinel-2 and Landsat 8/9 image coverage
(median composite October 8-15, 2024)



Satellite Image Coverage as of October 18, 2024 for Hurricane Milton Inundated Areas



Reference Dates (before inundation): 07/01/24 to 10/01/24
Assessment Dates (after inundation): 10/08/24 to 10/18/24

Percent of Crop Acres Inundated by Hurricane Milton October 2024 Florida

Crop Type	Total Statewide Acres	Minimal Percent Inundated [†]
Avocados***	3,900	1.45%
Citrus (not including Oranges)****	20,100	0.52%
Oranges***	278,300	1.22%
Strawberries*	14,200	0.41%
Sugarcane**	407,600	1.67%
Total (selected commodities)	724,100	1.34%

*Acres Planted, NASS 2023

**Acres Harvested, NASS 2023

***Acres Bearing, NASS 2023

****Acres Bearing, not including oranges, NASS 2023

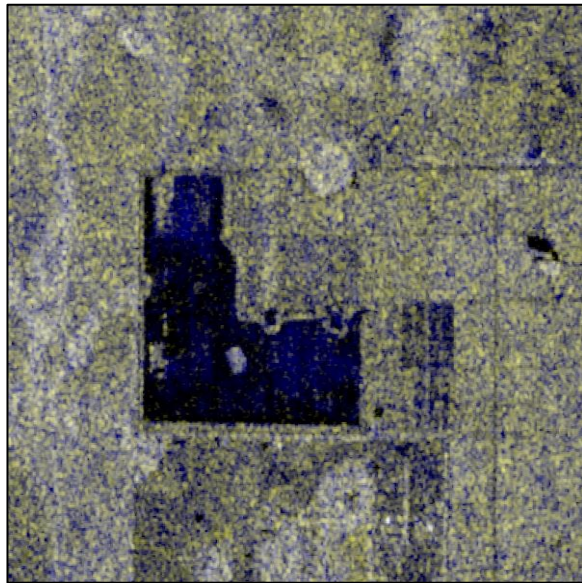
[†]Percent of acres impacted based on 1) all available post-event image acquisitions as of October 18, 2024, and 2) raw pixel counts from the 2023 CDL which are not official NASS estimates. Therefore, the amount of cropland affected by storm inundation may be much higher than these estimates indicate.



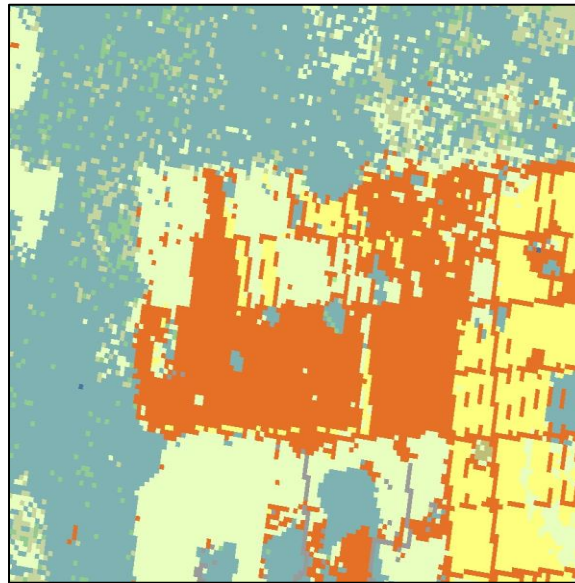
Hendry County, Florida



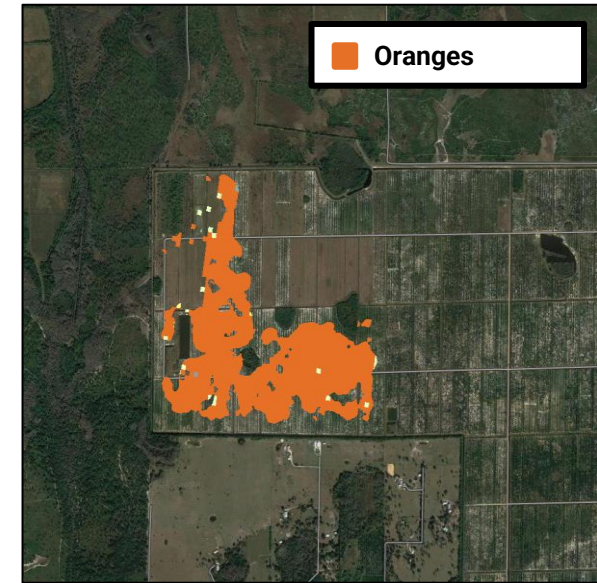
Sentinel-2 image before event (median composite of Jul 1 – Oct 1, 2024)



Anomaly detected from Sentinel-1 SAR image acquired between Oct 8-18, 2024



CDL 2023



Inundated cropland

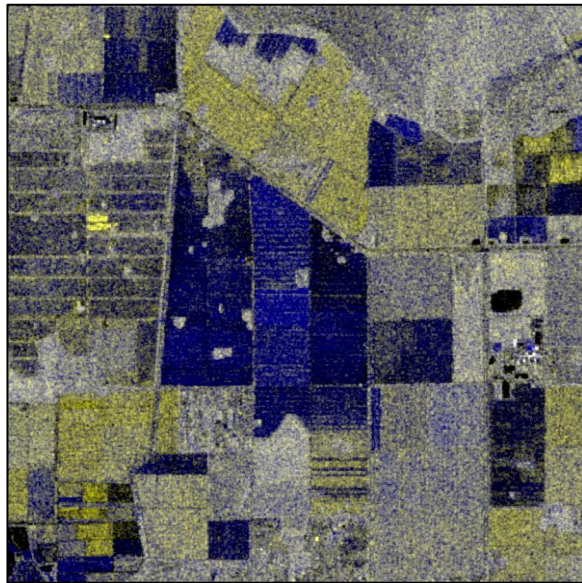




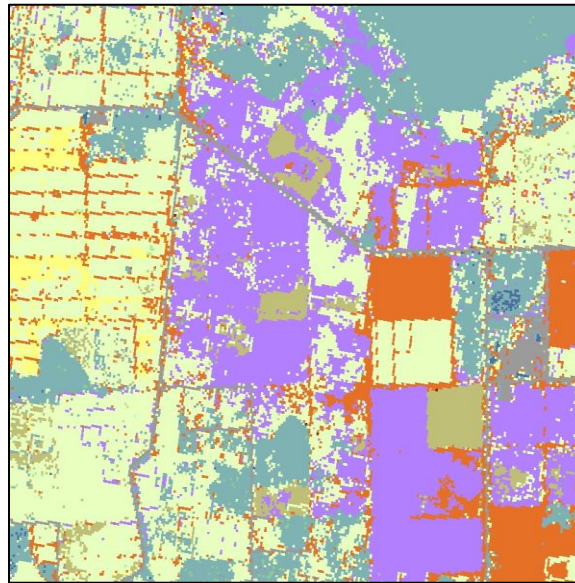
Hendry County, Florida



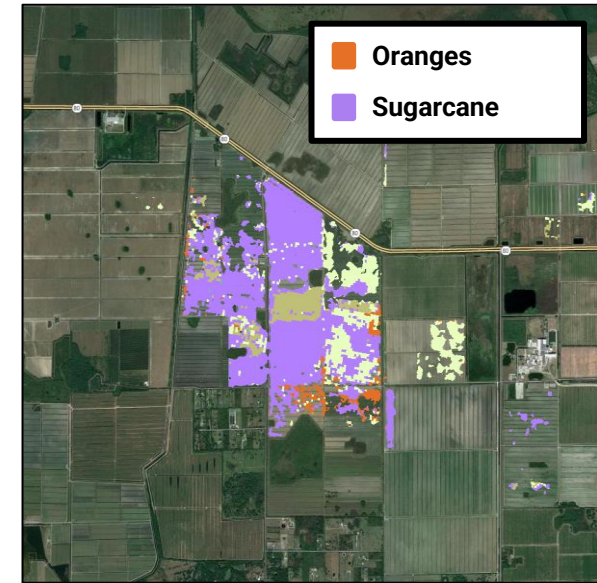
Sentinel-2 image before event (median composite of Jul 1 – Oct 1, 2024)



Anomaly detected from Sentinel-1 SAR image acquired between Oct 8-18, 2024



CDL 2023

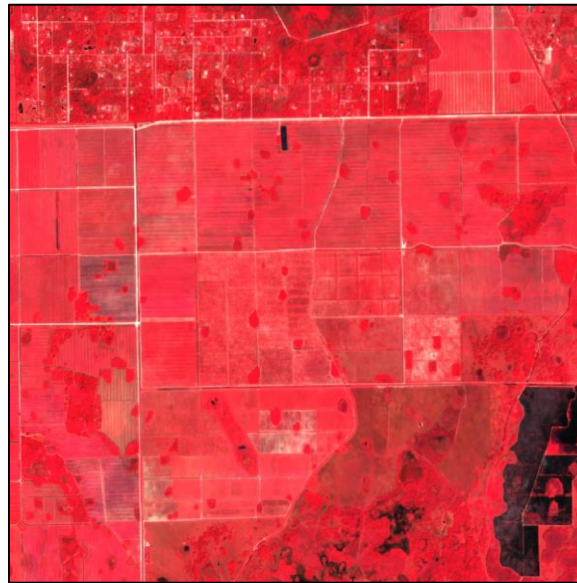


Inundated cropland

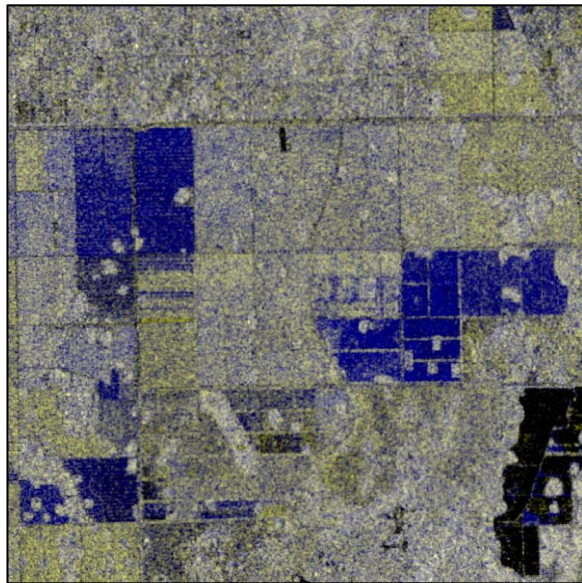




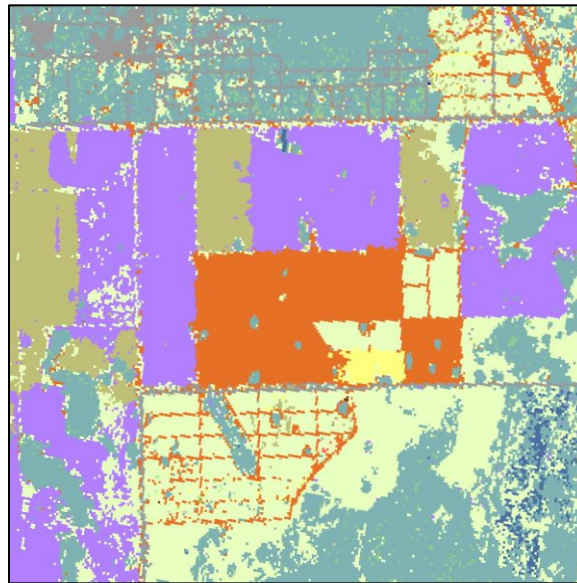
Hendry County, Florida



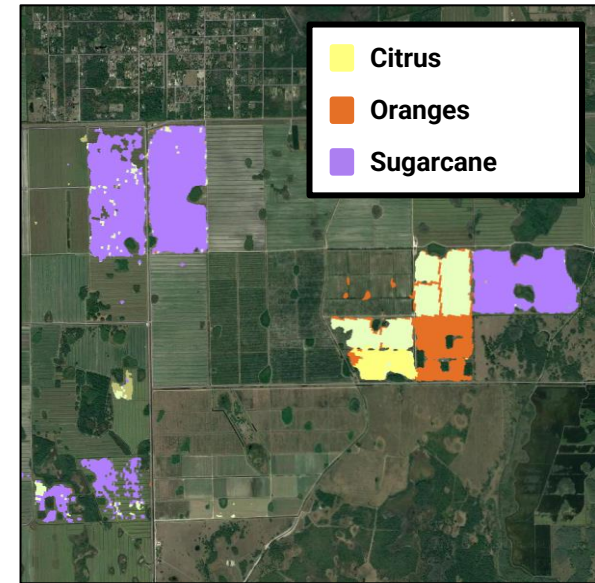
Sentinel-2 image before event (median composite of Jul 1 – Oct 1, 2024)



Anomaly detected from Sentinel-1 SAR image acquired between Oct 8-18, 2024



CDL 2023



Inundated cropland

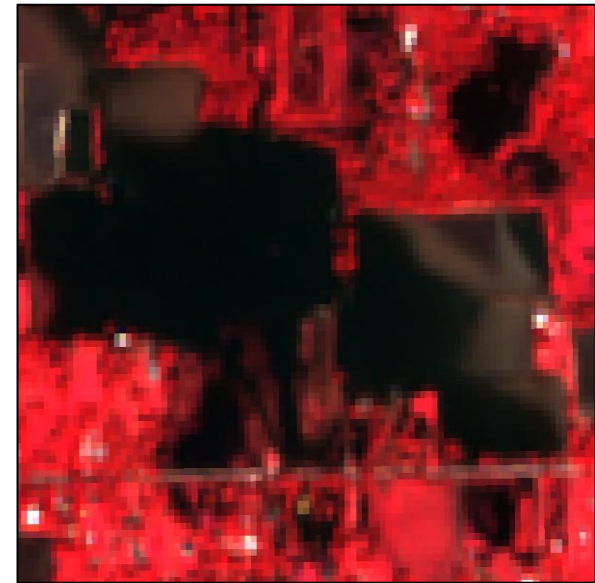




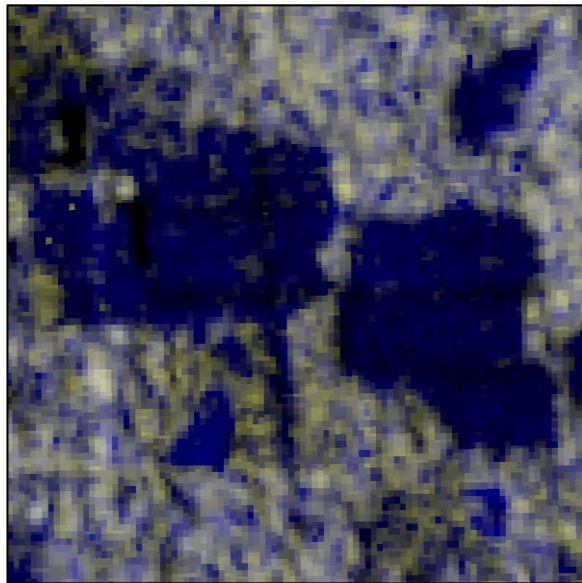
Hillsborough County, Florida



Sentinel-2 image before event (median composite of Jul 1 – Oct 1, 2024)



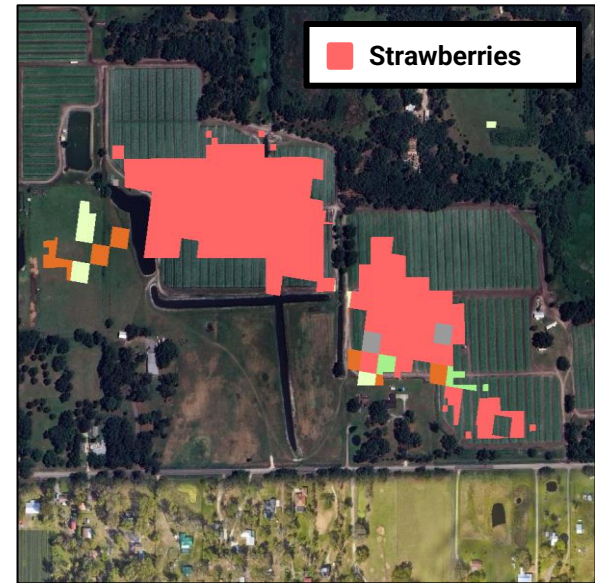
Sentinel-2 image after event (median composite of Oct 8-15, 2024)



Anomaly detected from Sentinel-1 SAR image acquired between Oct 8-18, 2024



CDL 2023

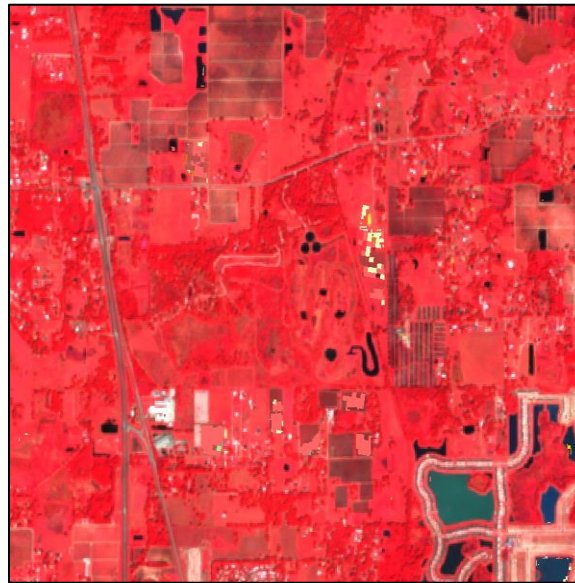


Inundated cropland

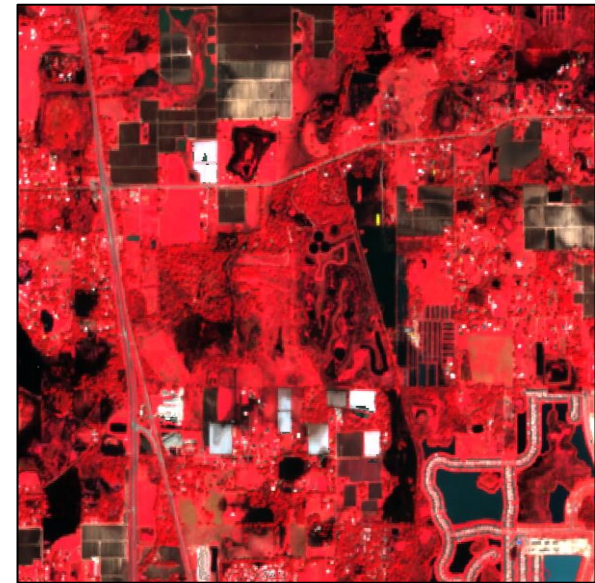




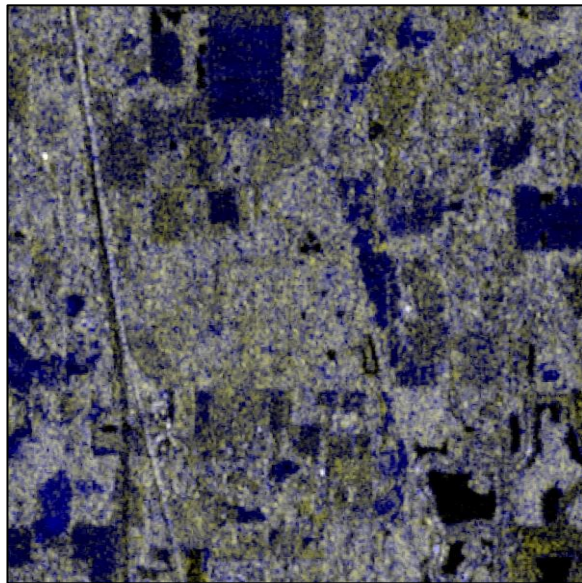
Hillsborough County, Florida



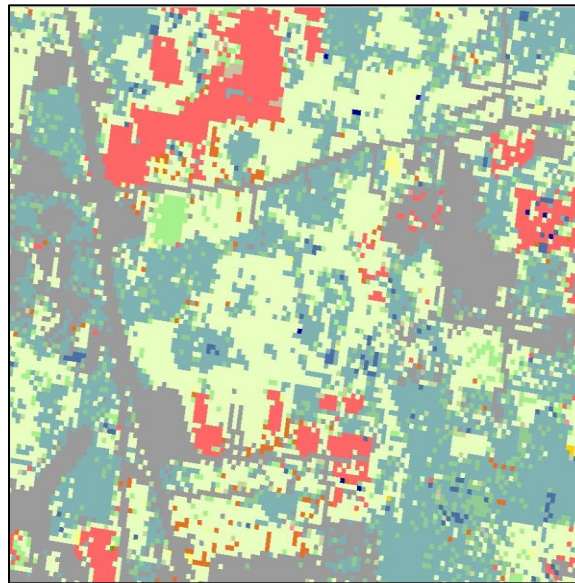
Sentinel-2 image before event (median composite of Jul 1 – Oct 1, 2024)



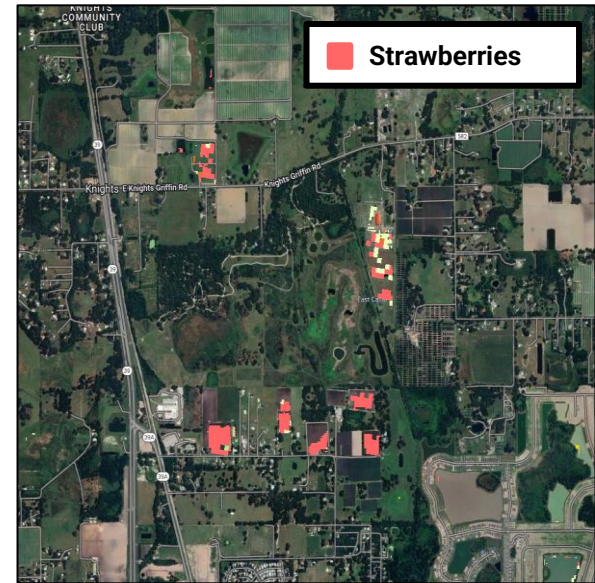
Sentinel-2 image after event (median composite of Oct 8-15, 2024)



Anomaly detected from Sentinel-1 SAR image acquired between Oct 8-18, 2024



CDL 2023



Inundated cropland

