

# Hurricane Ian

Assessment Period: September 28 – October 1, 2022

Publication Date: October 7, 2022

USDA NASS

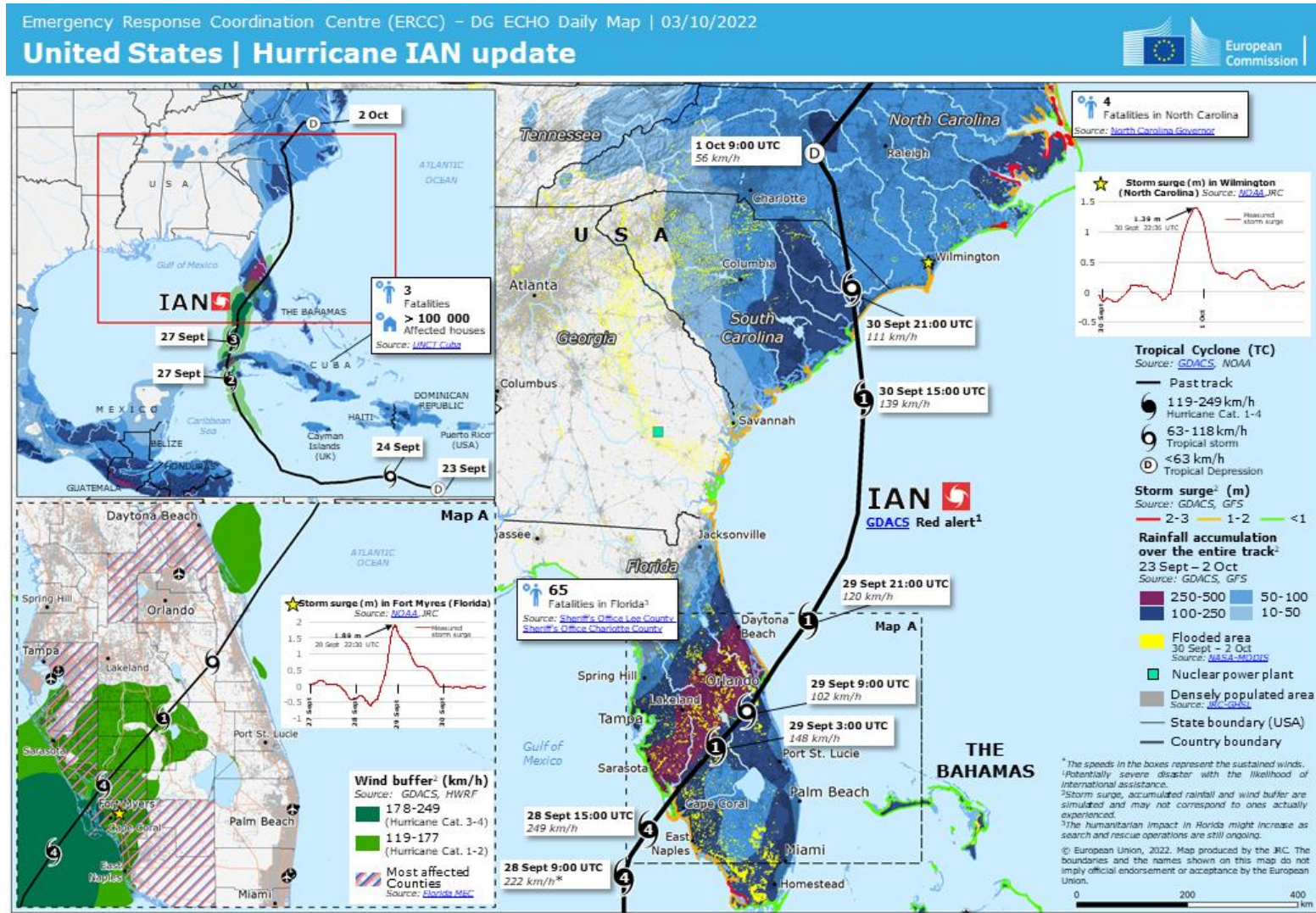
Disaster Monitoring Team



# Event Summary

- **Event:** Hurricane Ian (Category 4 Atlantic Hurricane)
  - <https://www.agri-pulse.com/articles/18318-hurricane-ians-damage-to-farms-still-being-assessed>
- **Location:** Southeastern United States (primarily Florida and South Carolina)
- **Timeframe:** Late September 2022
  - Hurricane Ian made landfall in Florida on September 28, 2022
  - Hurricane Ian made landfall in South Carolina on September 30, 2022

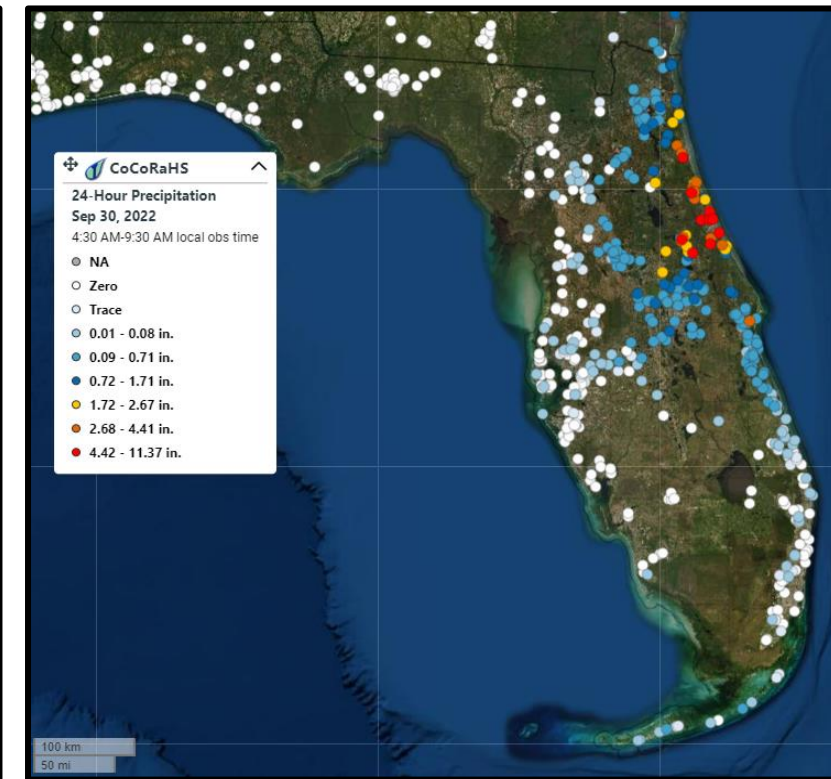
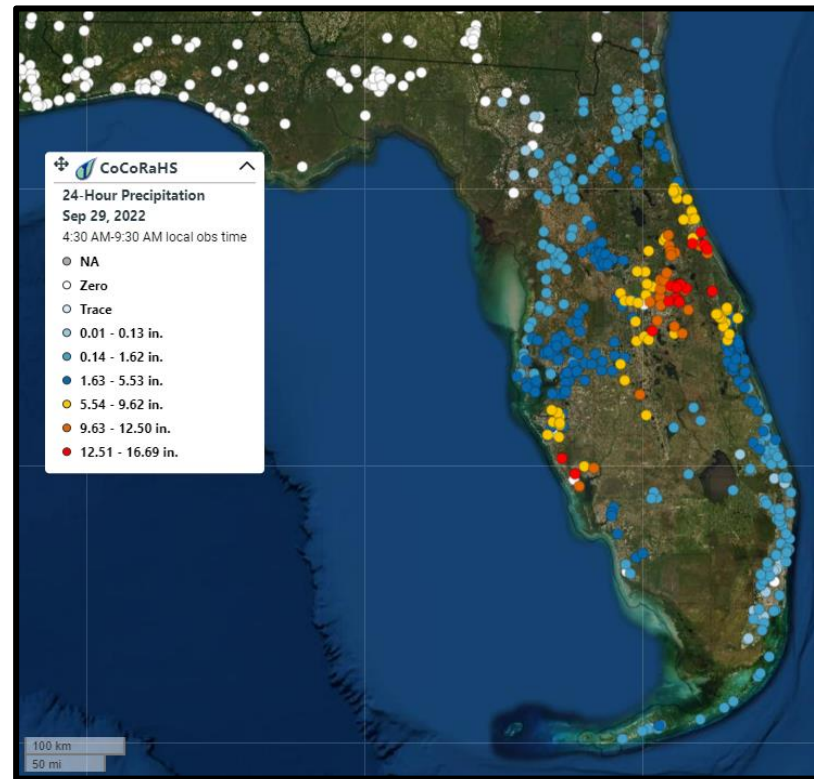
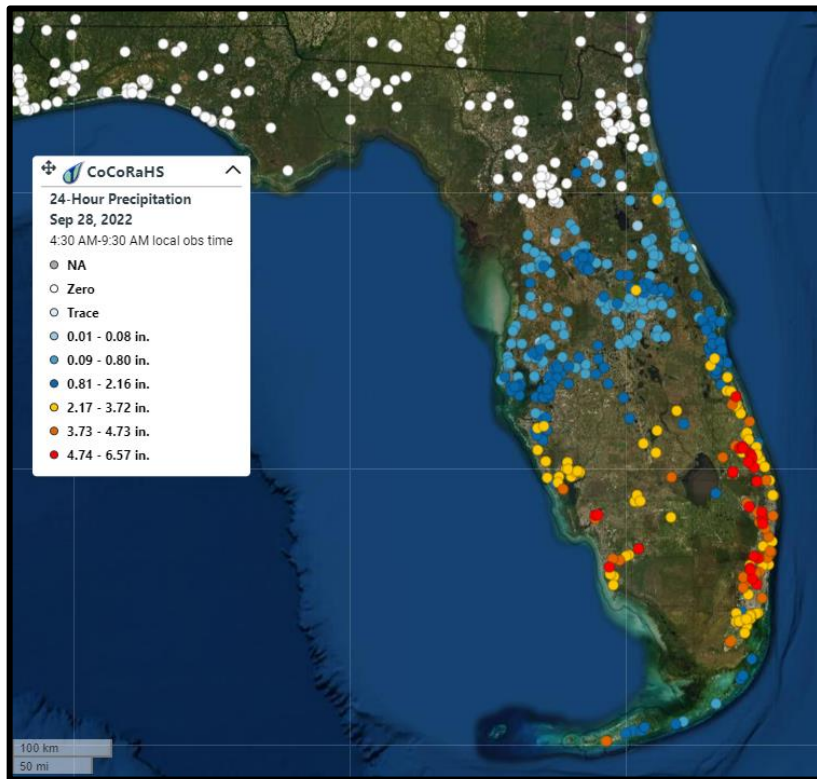
# Event Summary



<https://www.gdac.org/report.aspx?eventtype=TC&eventid=1000923>

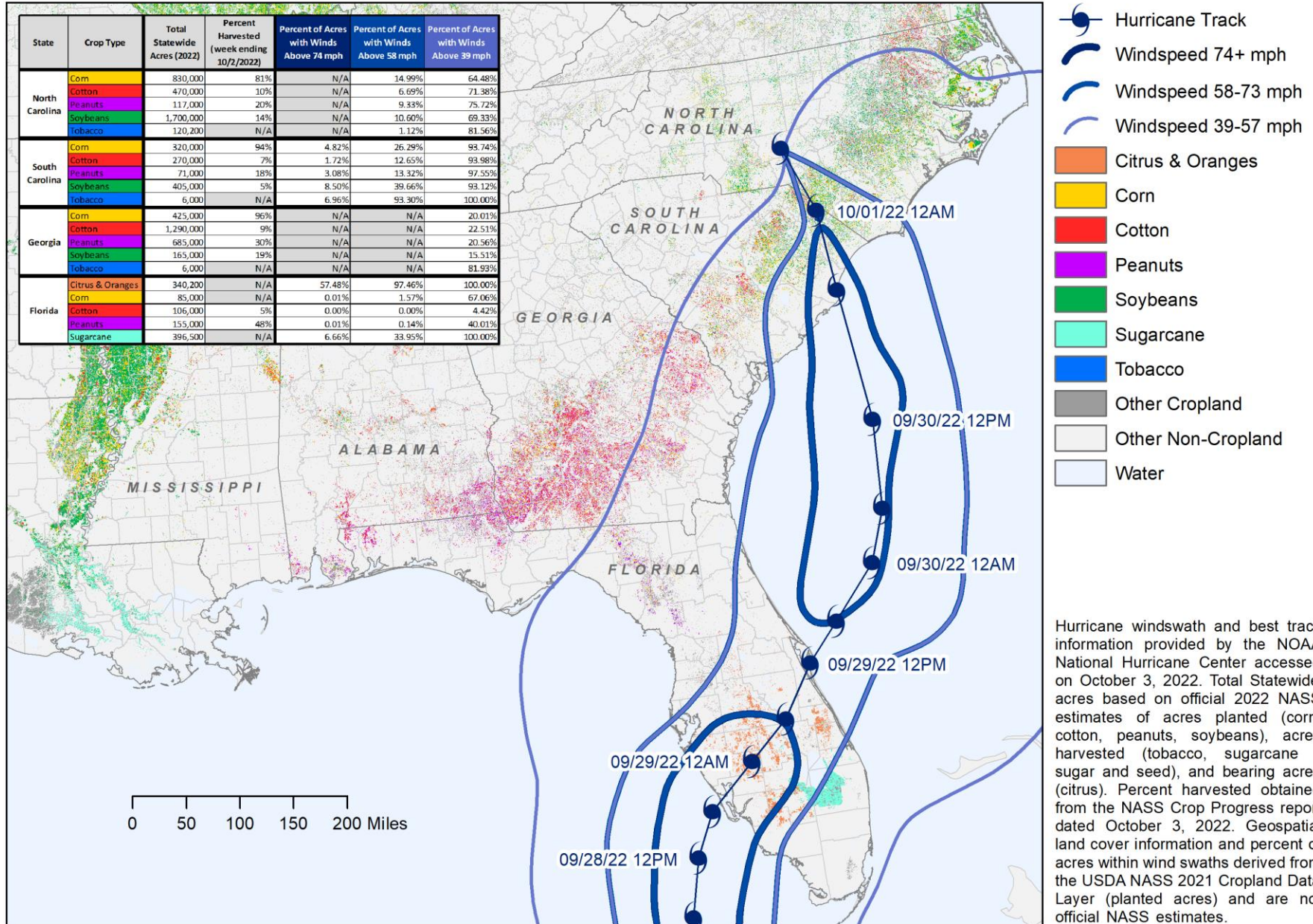


# CoCoRaHS 24-Hour Precipitation (28-30 Sep)





# Agriculture Affected by Wind from Hurricane Ian - September 2022



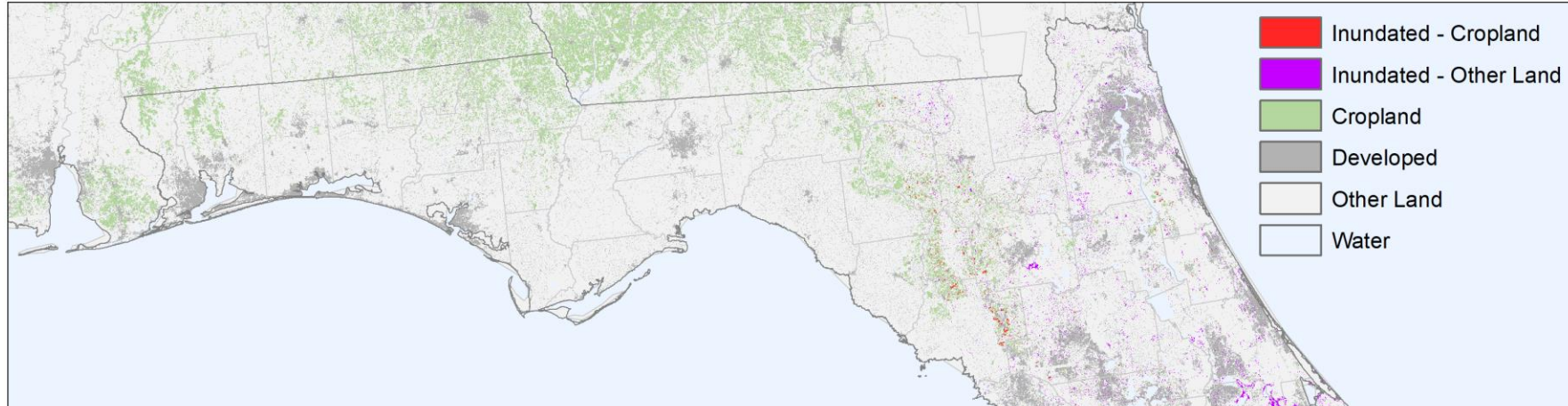
State	Crop Type	Total Statewide Acres (2022)	Percent Harvested (week ending 10/2/2022)	Percent of Acres with Winds Above 74 mph	Percent of Acres with Winds Above 58 mph	Percent of Acres with Winds Above 39 mph
North Carolina	Corn	830,000	81%	N/A	14.99%	64.48%
	Cotton	470,000	10%	N/A	6.69%	71.38%
	Peanuts	117,000	20%	N/A	9.33%	75.72%
	Soybeans	1,700,000	14%	N/A	10.60%	69.33%
	Tobacco	120,200	N/A	N/A	1.12%	81.56%
South Carolina	Corn	320,000	94%	4.82%	26.29%	93.74%
	Cotton	270,000	7%	1.72%	12.65%	93.98%
	Peanuts	71,000	18%	3.08%	13.32%	97.55%
	Soybeans	405,000	5%	8.50%	39.66%	93.12%
	Tobacco	6,000	N/A	6.96%	93.30%	100.00%
Georgia	Corn	425,000	96%	N/A	N/A	20.01%
	Cotton	1,290,000	9%	N/A	N/A	22.51%
	Peanuts	685,000	30%	N/A	N/A	20.56%
	Soybeans	165,000	19%	N/A	N/A	15.51%
	Tobacco	6,000	N/A	N/A	N/A	81.93%
Florida	Citrus & Oranges	340,200	N/A	57.48%	97.46%	100.00%
	Corn	85,000	N/A	0.01%	1.57%	67.06%
	Cotton	106,000	5%	0.00%	0.00%	4.42%
	Peanuts	155,000	48%	0.01%	0.14%	40.01%
	Sugarcane	396,500	N/A	6.66%	33.95%	100.00%

Total Statewide acres based on official 2022 NASS estimates of acres planted (corn, cotton, peanuts, soybeans), acres harvested (tobacco, sugarcane - sugar and seed), and bearing acres (citrus). Percent Harvested obtained from the NASS Crop Progress report dated October 3, 2022. Percent of crops affected derived from 2021 Cropland Data Layer.



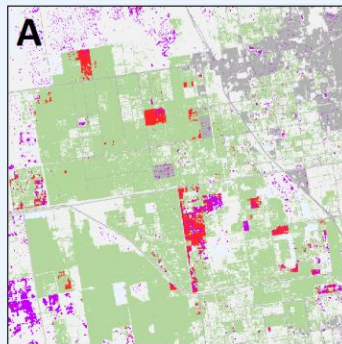


# Agriculture Affected by Hurricane Ian Flooding in Florida: September 2022

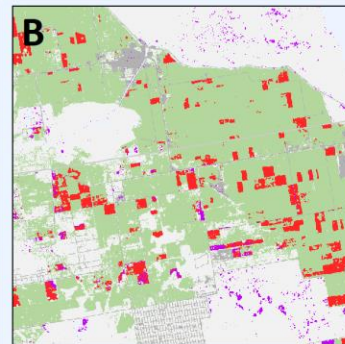


Inundation data derived from Sentinel-1A SAR satellite data dated October 2, 2022, and Sentinel-2 MSI data dated September 30 and October 2, 2022. The Sentinel-2 data were used for both calibration and validation. Geospatial land cover information provided by the USDA NASS 2021 Cropland Data Layer and are not official NASS estimates. Total Florida acres based on official 2022 NASS estimates of acres planted (corn, cotton, peanuts), acres harvested (sugarcane - sugar and seed), and bearing acres (citrus). Percent harvested obtained from the NASS Crop Progress report dated October 3, 2022.

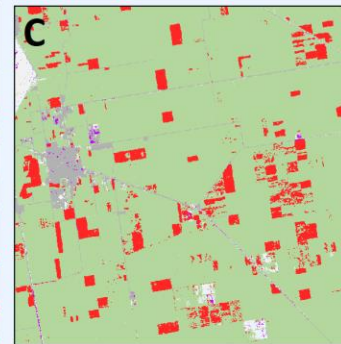
Crop Type	Florida Acres (2022)	Percent Harvested (week ending 10/2/2022)	Percent of Acres Inundated
Citrus & Oranges	340,200	N/A	2.95%
Corn	85,000	N/A	3.32%
Cotton	106,000	5%	0.15%
Peanuts	155,000	48%	2.83%
Sugarcane	396,500	N/A	8.31%



Zoom A shows inundation in Indian River County, FL and Saint Lucie County, FL. Inundated cropland includes oranges and other citrus (2021 CDL) in this area.



Zoom B shows inundation in Glades County and Hendry County, FL. Inundated cropland includes oranges, sugarcane, and fallow/ idle fields (2021 CDL) in this area.



Zoom C shows inundation in Palm Beach County, FL. Inundated cropland includes sugarcane and fallow/ idle fields (2021 CDL) in this area.

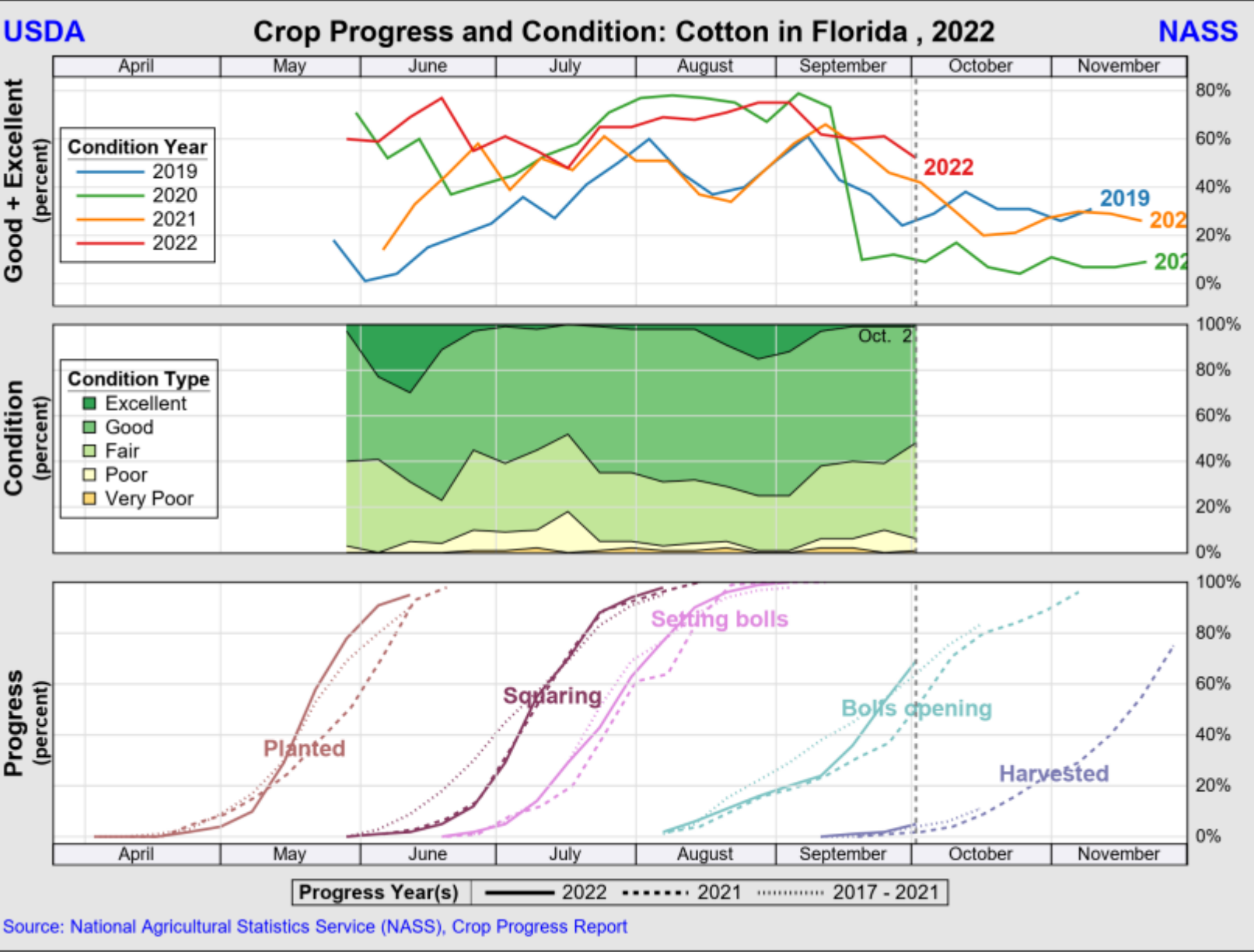


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Total statewide acres based on official 2022 NASS estimates of acres planted (corn, cotton, peanuts), acres harvested (sugarcane - sugar and seed), and bearing acres (citrus). Percent harvested obtained from the NASS Crop Progress report dated October 3, 2022. Percent of crops affected derived from 2021 Cropland Data Layer.

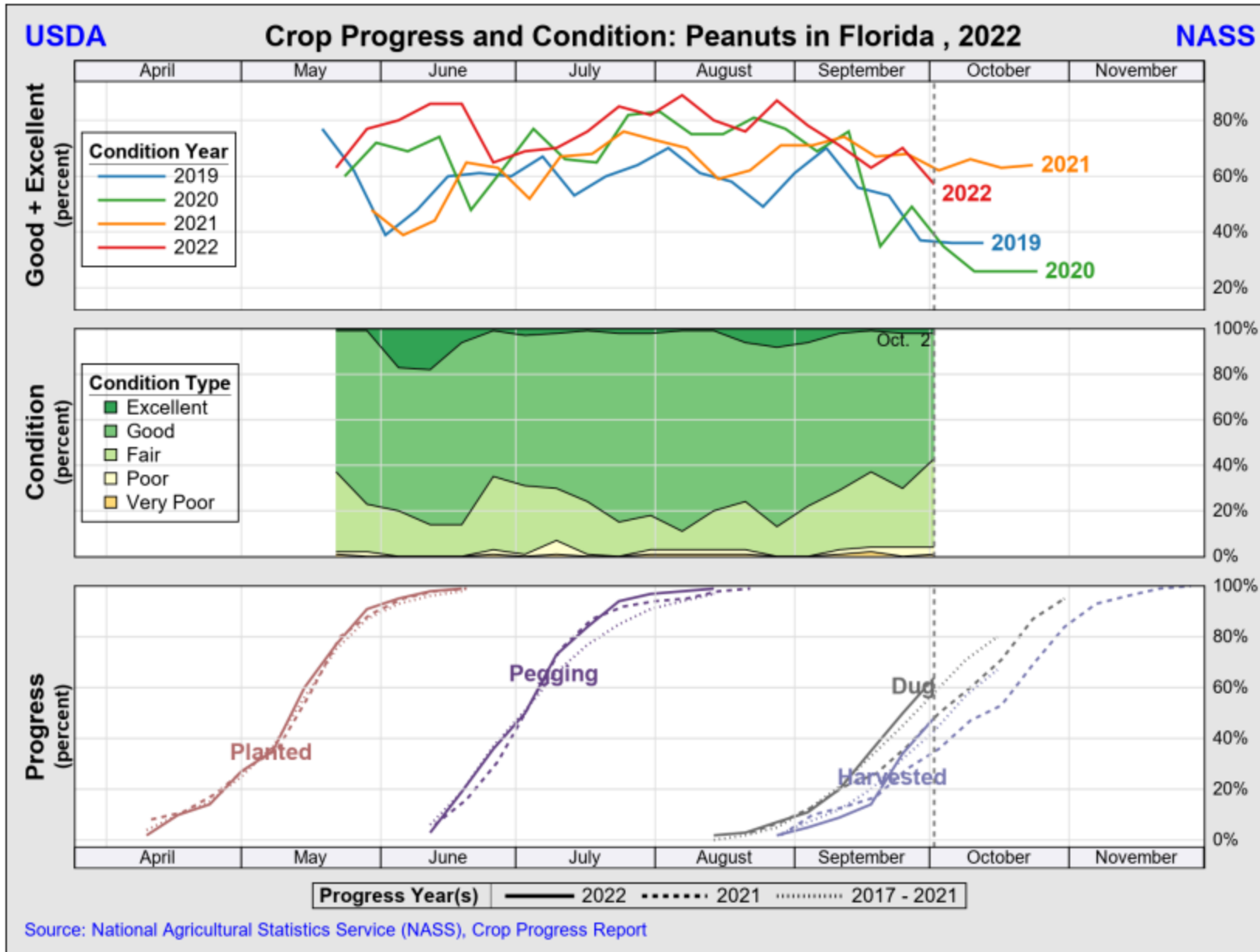






[https://www.nass.usda.gov/Charts and Maps/Crop Progress & Condition/2022/index.php](https://www.nass.usda.gov/Charts_and_Maps/Crop_Progress_&_Condition/2022/index.php)






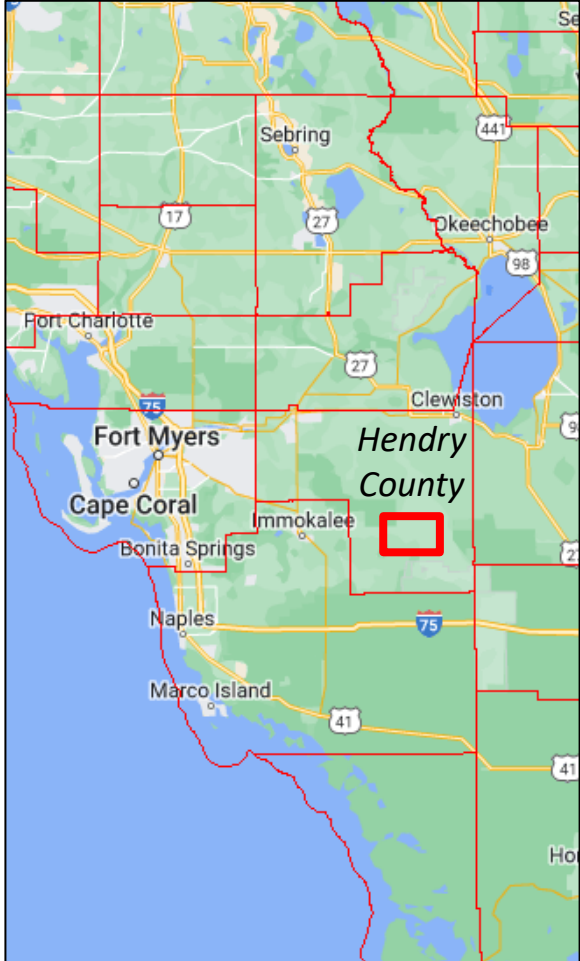
[https://www.nass.usda.gov/Charts and Maps/Crop Progress & Condition/2022/index.php](https://www.nass.usda.gov/Charts_and_Maps/Crop_Progress_&_Condition/2022/index.php)



# Inundation Example

Hendry County, FL  
Crops of Interest: Oranges

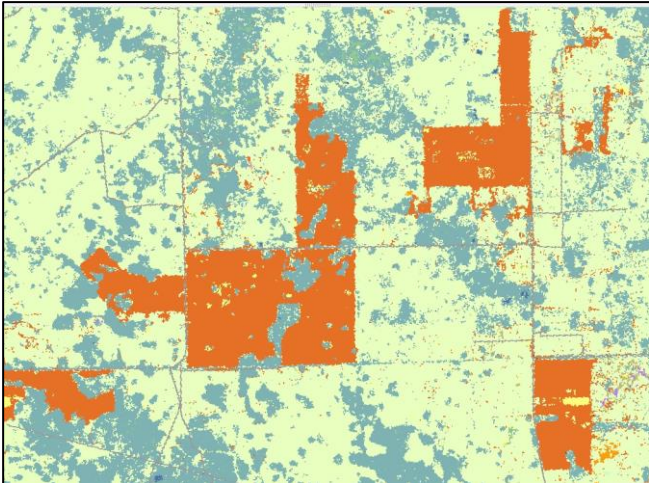
 Oranges



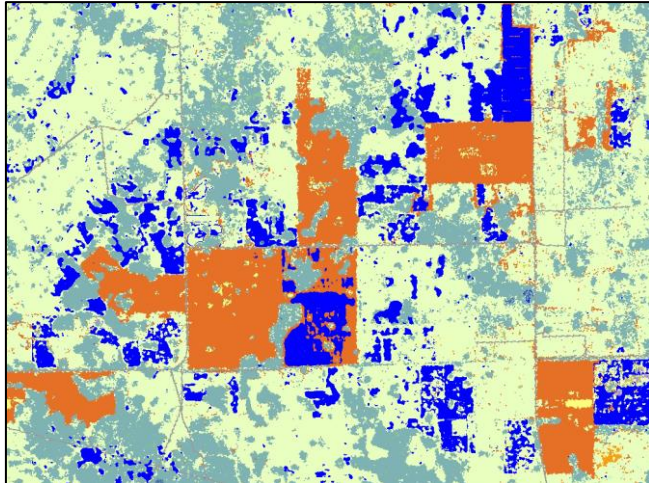
Sentinel-2 Before Event



Sentinel-2 After Event (9/30/22)



2021 CDL



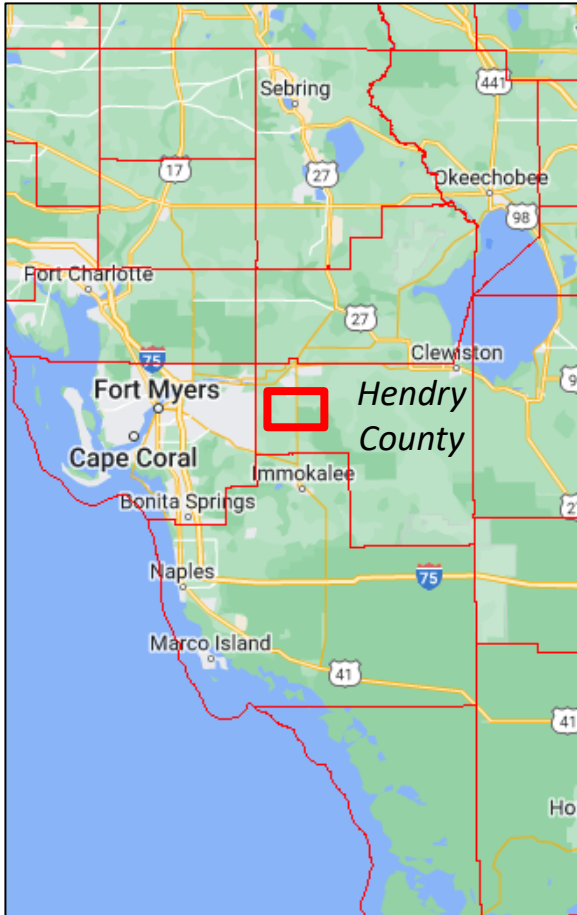
2021 CDL with Inundation Layer  
(Blue)



# Inundation Example

Hendry County, FL  
Crops of Interest: Oranges & Sugarcane

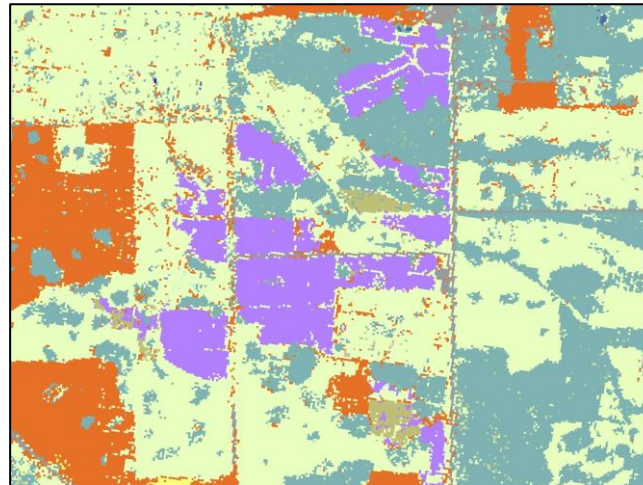
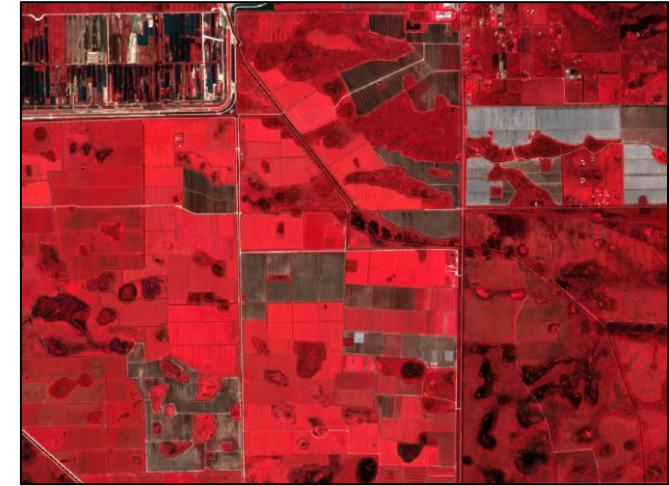
- Oranges
- Sugarcane



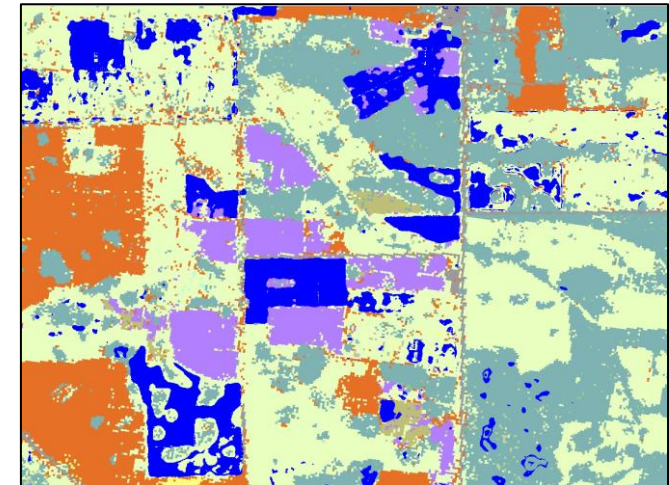
Sentinel-2 Before Event



Sentinel-2 After Event (9/30/22)



2021 CDL

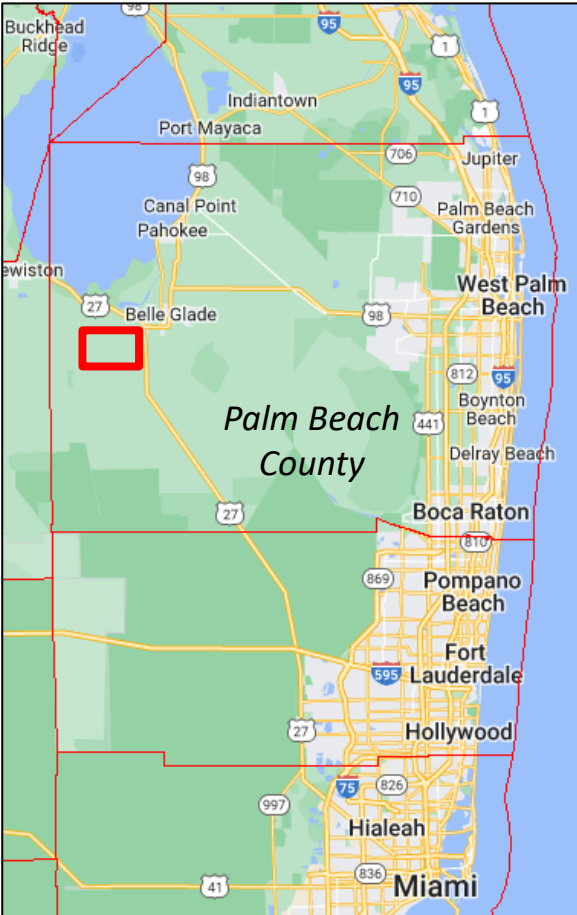




2021 CDL with Inundation Layer  
(Blue)



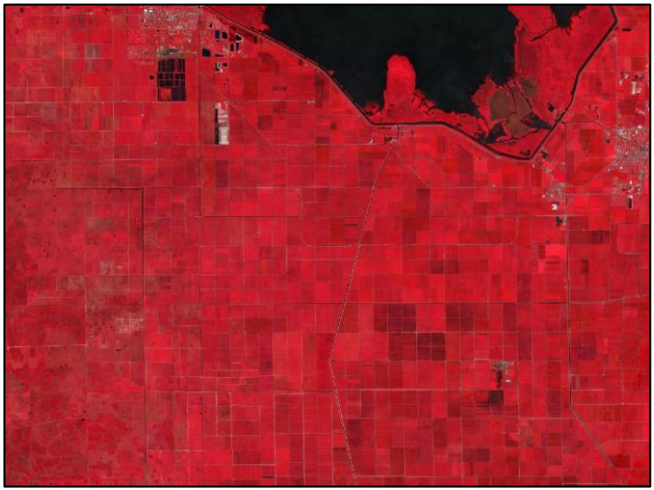
# Inundation Example

Palm Beach County  
Crops of Interest: Sugarcane &  
Fallow/Idle Fields

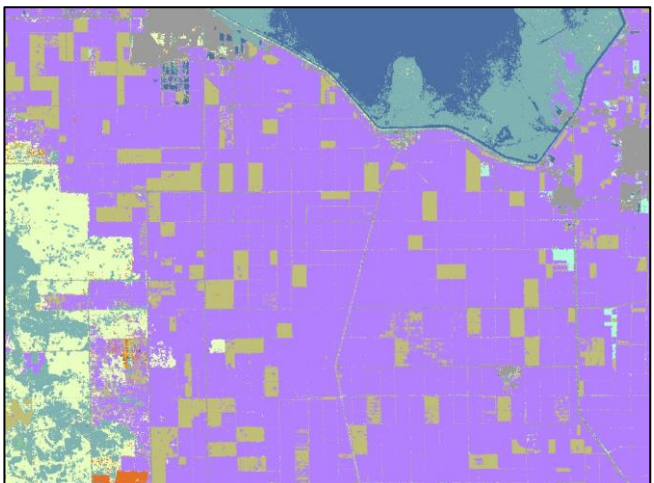
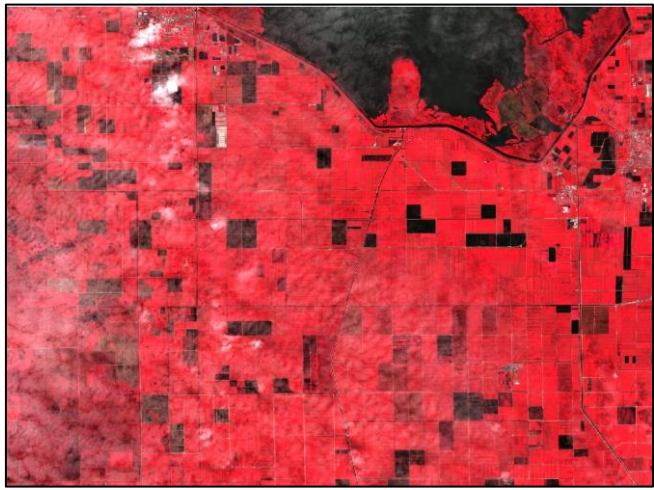


-  Sugarcane
-  Fallow/Idle Fields

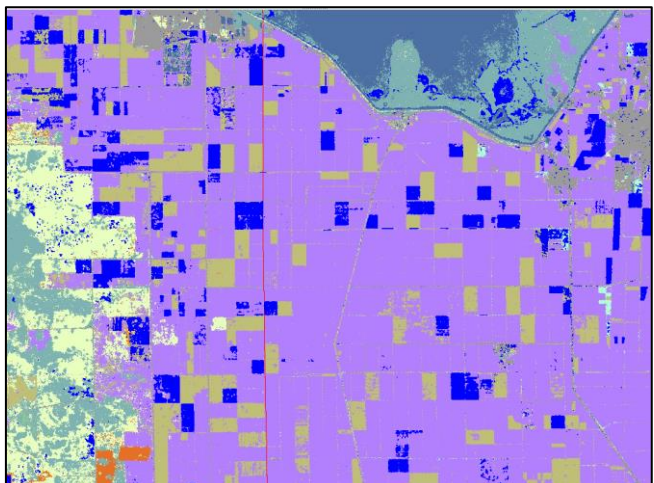
Sentinel-2 Before Event



Sentinel-2 After Event (9/30/22)



2021 CDL



2021 CDL with Inundation Layer  
(Blue)



