

# Examination of Eastern Ship Shoal Using Geophysical and Geological Methods

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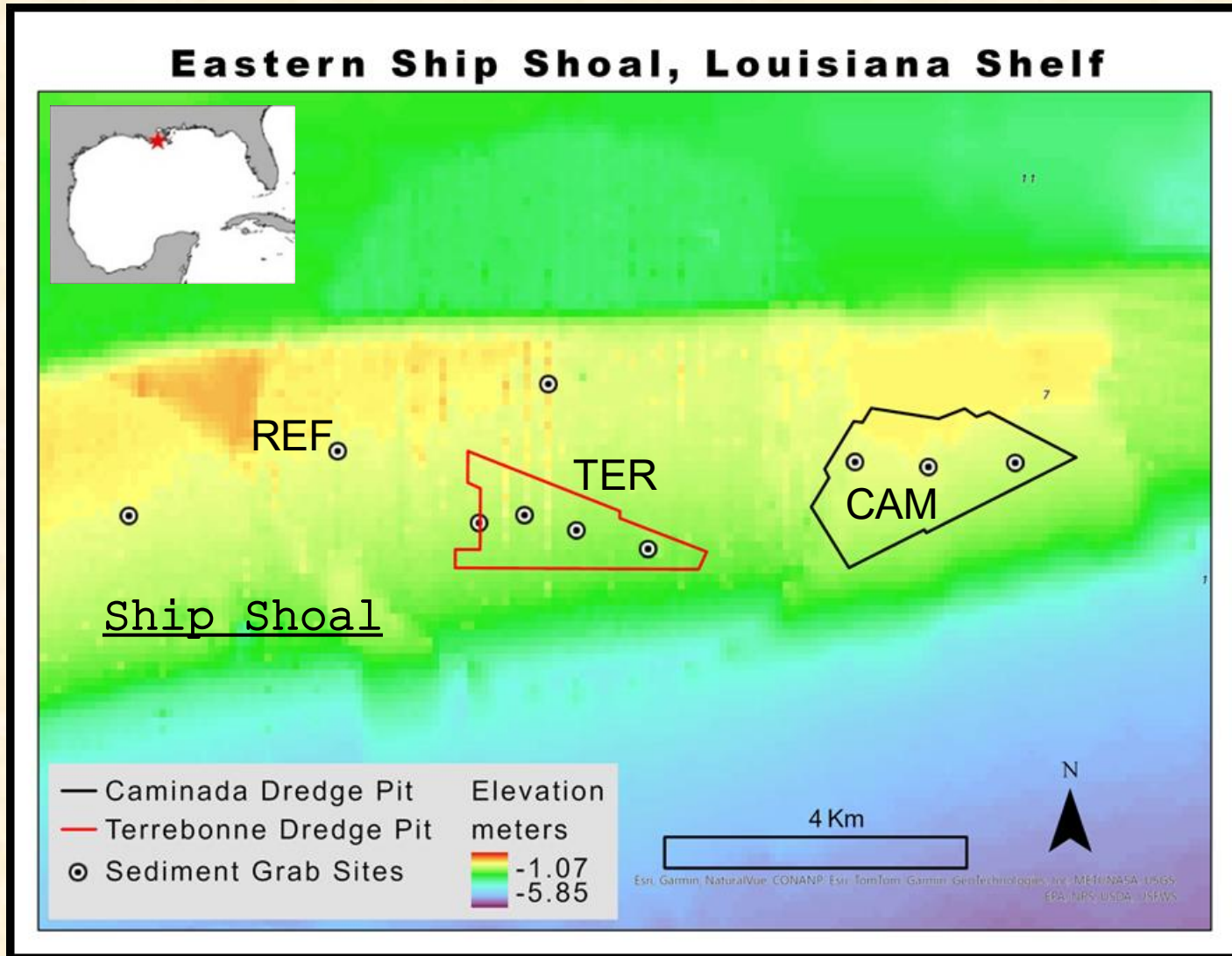
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4 Skidaway Institute of Oceanography, Savannah, GA, USA

5 Virginia Institute of Marine Sciences, Gloucester Point, VA, USA

# Study Site:



- Ship Shoal, a transgressive marine shoal
- Located approximately 15 km south of the Louisiana barrier islands of Timbalier Bay

Terrebonne Dredge Pit – TER  
Caminada Dredge Pit – CAM  
Reference Sites – REF

# Sediment Distribution:

- **Sand**
  - Coast
  - Shoal
- **Mud**
  - Shelf

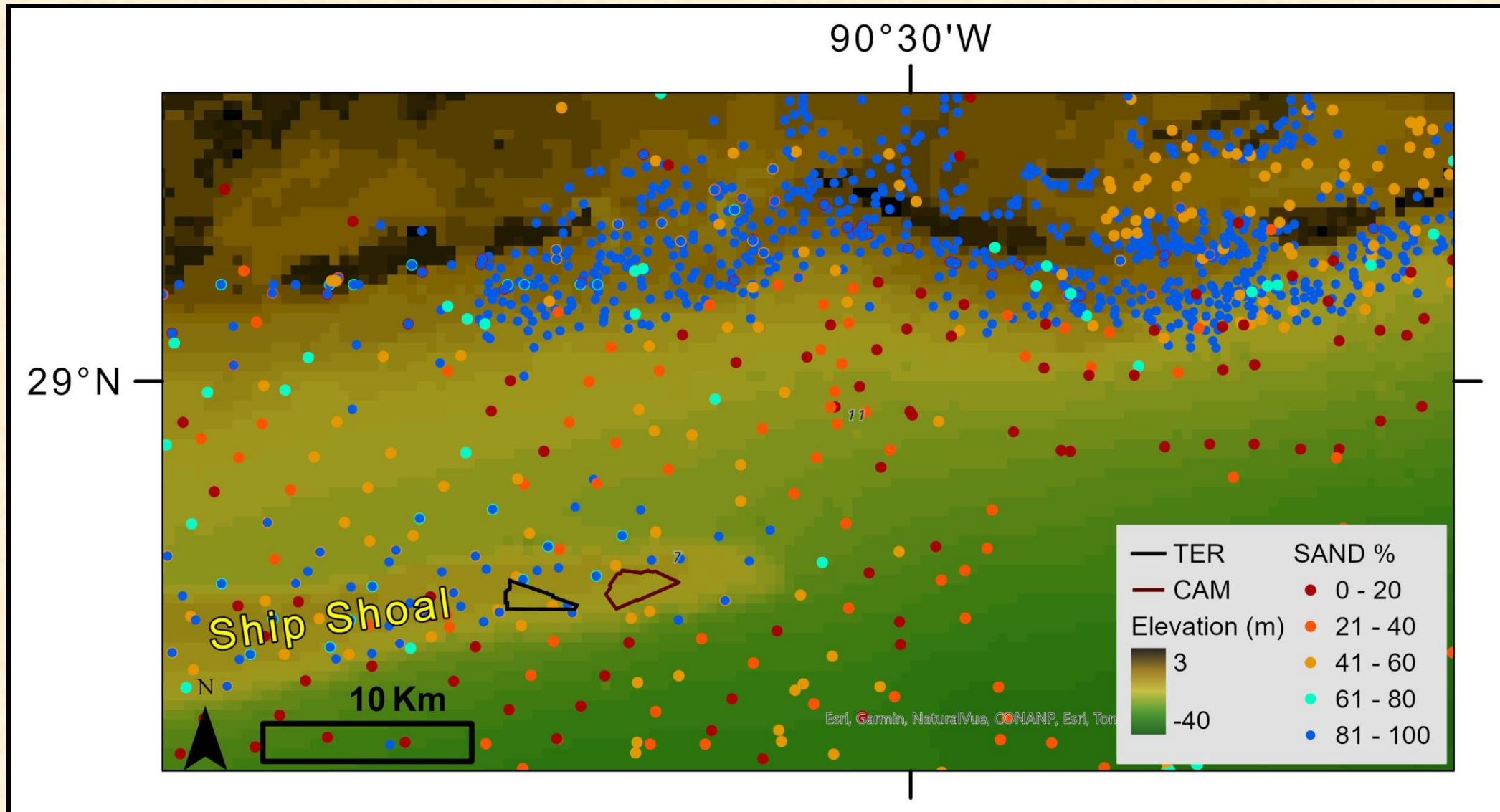


Figure generated using ArcGIS Pro with data from GEBCO 2024 and usSEABED.



## • **Geophysical Collection**

- EdgeTech 4600
  - Bathymetry
  - SideScan Sonar



Caminada: 2018 and 2021  
Terrebonne: 2020 and 2022

# **Methods:**

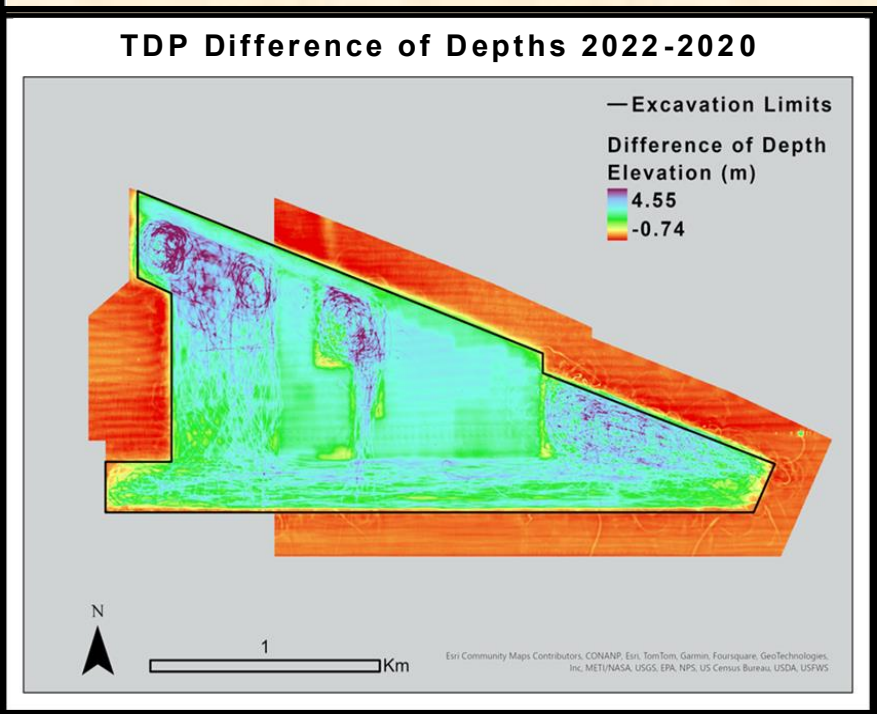
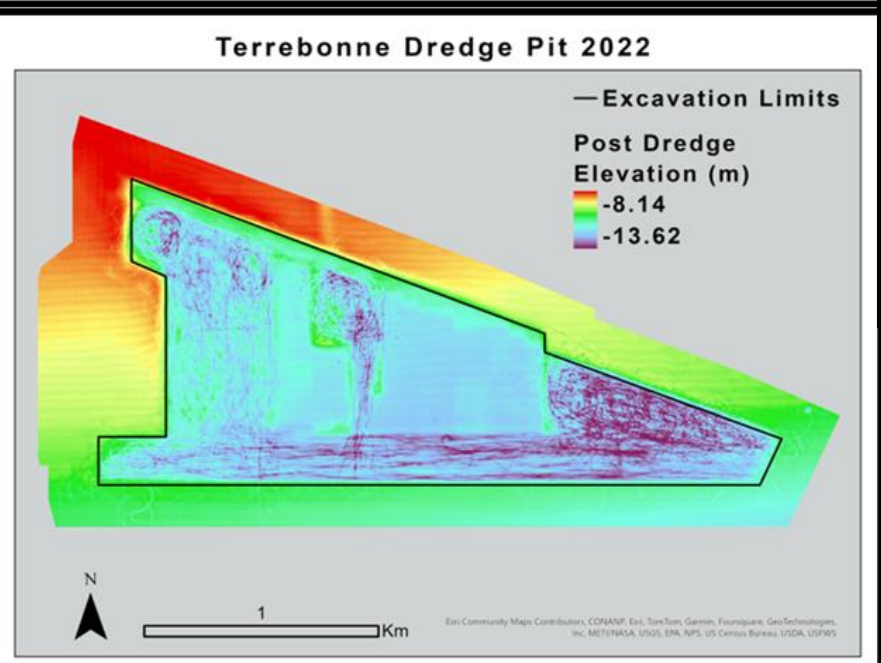
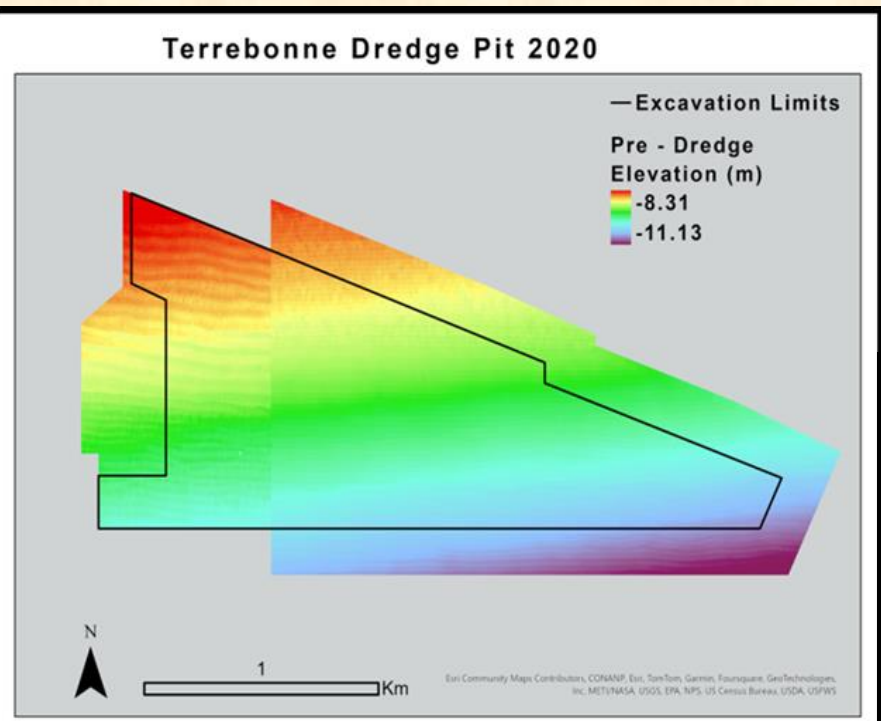
## • **Geological Collection**

- Triplicates
  - 0 – 1 cm
  - 0 – 5 cm



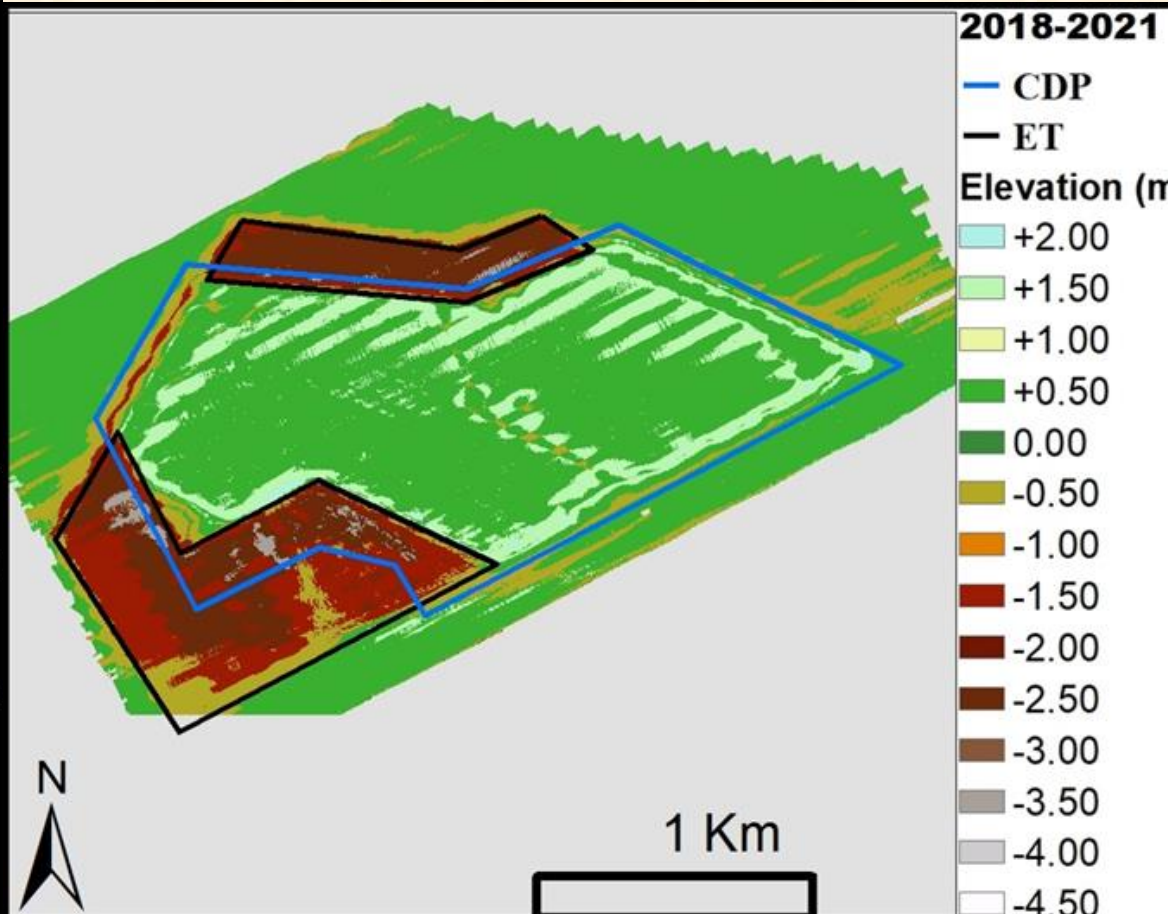
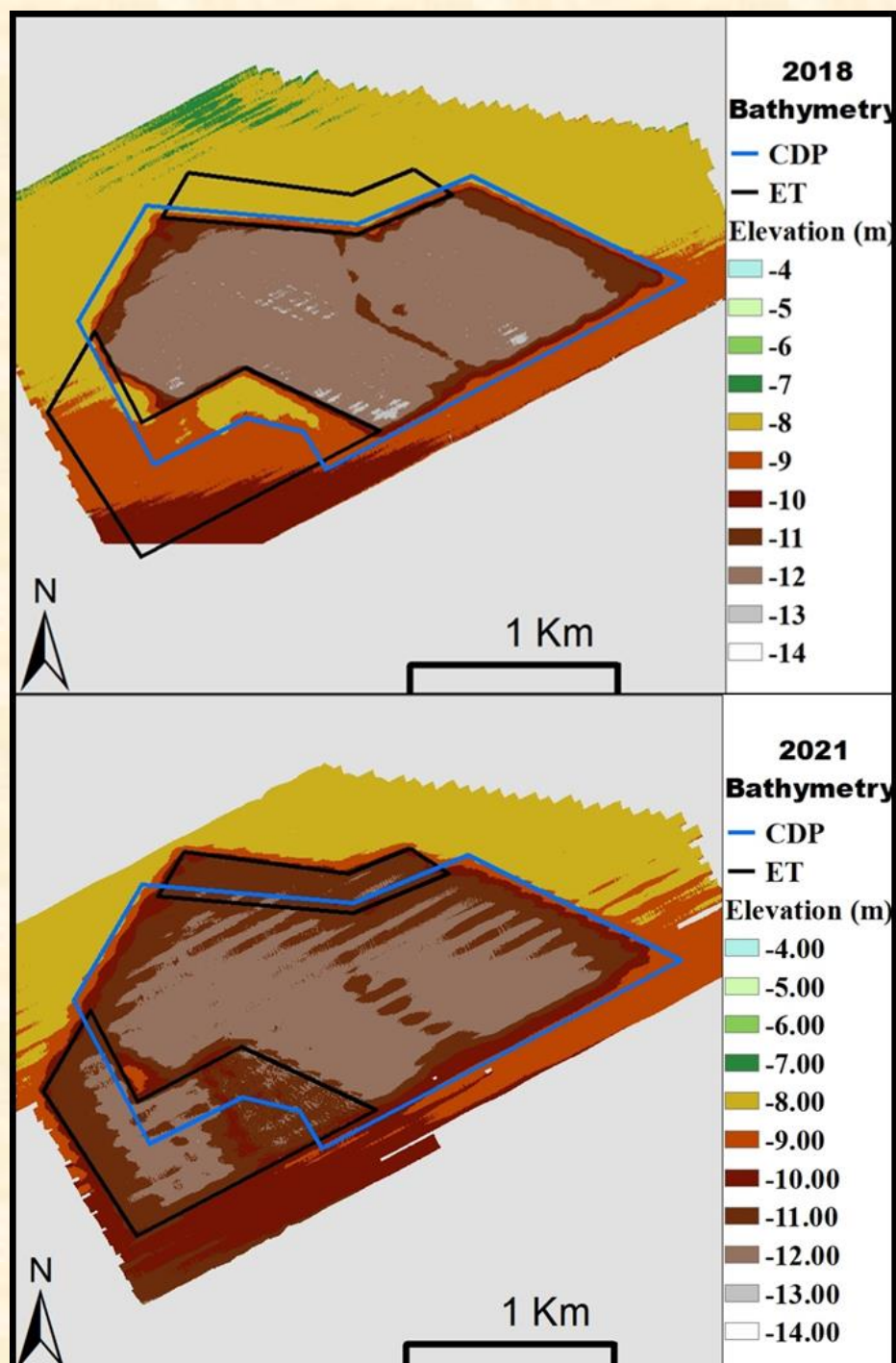
Sampling Trips: Six (6) trips  
between Nov. 2020 and Oct.  
2023.

# Terrebonne Dredge Pit:



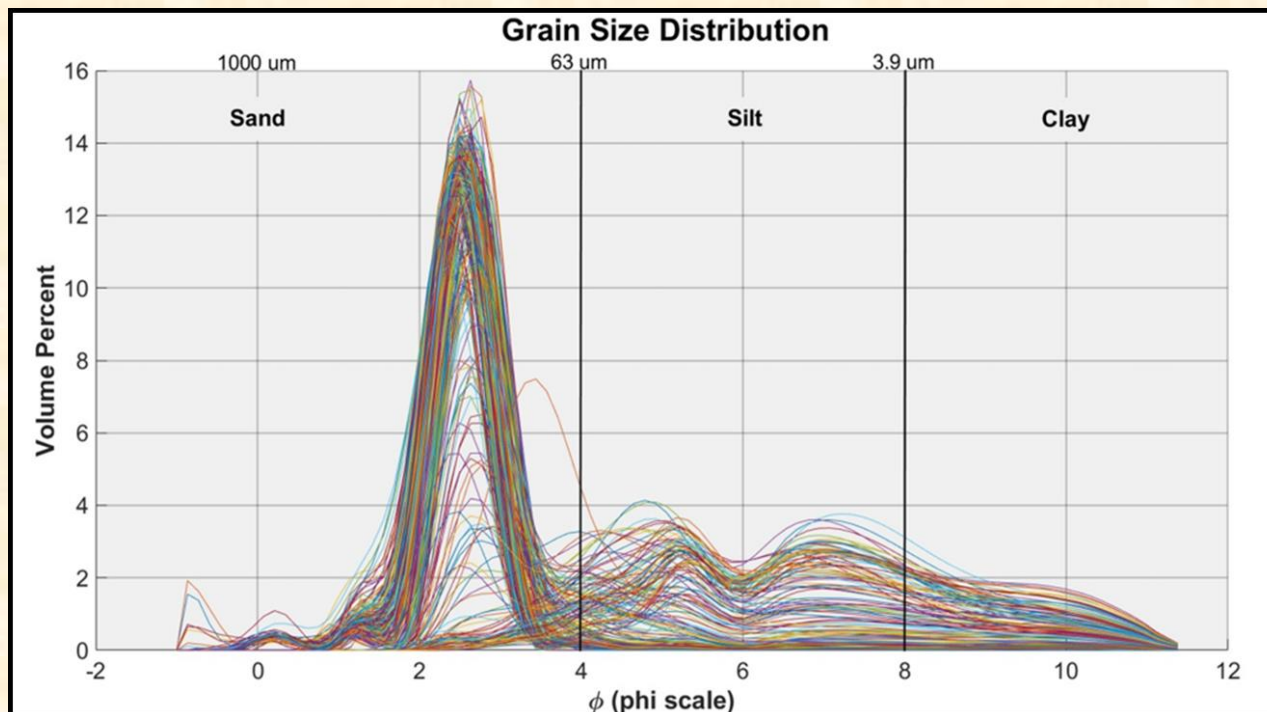


# Caminada Dredge Pit:

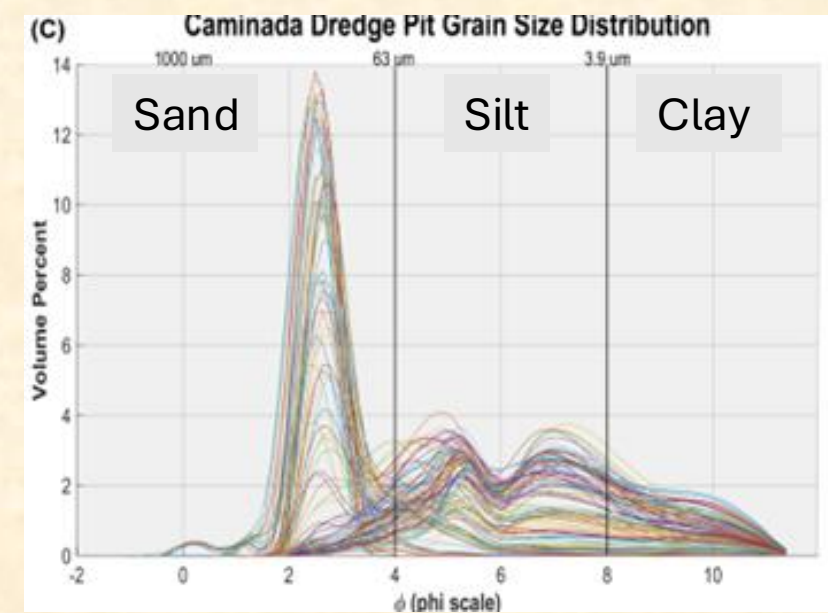
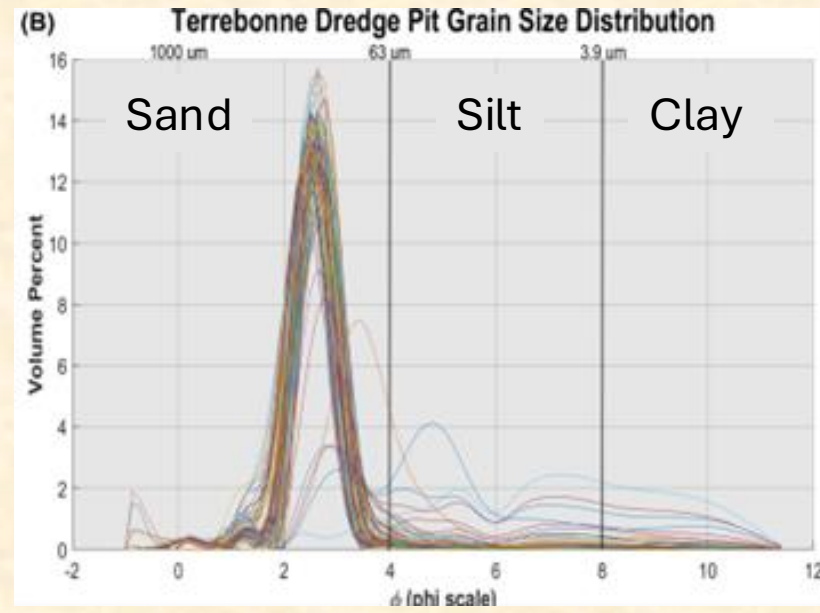
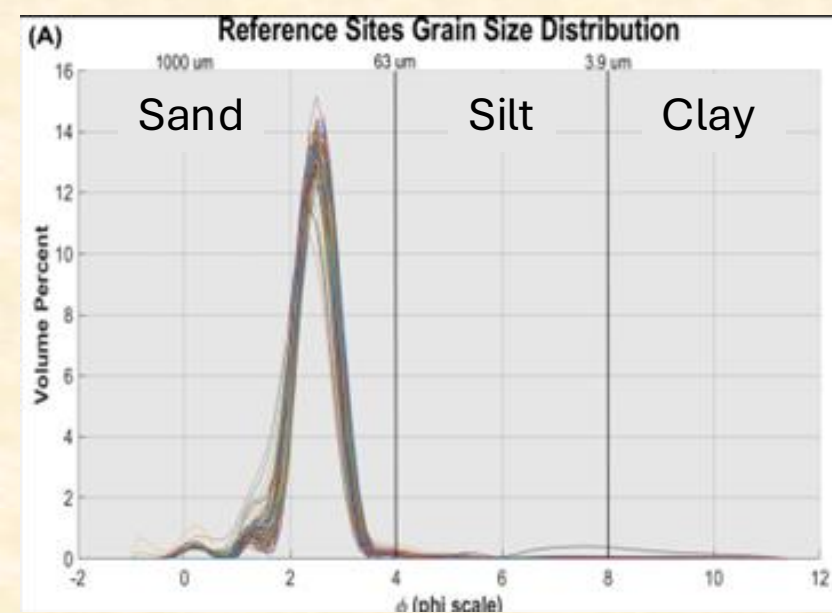


Fix  
these

# Grain Size Analysis:

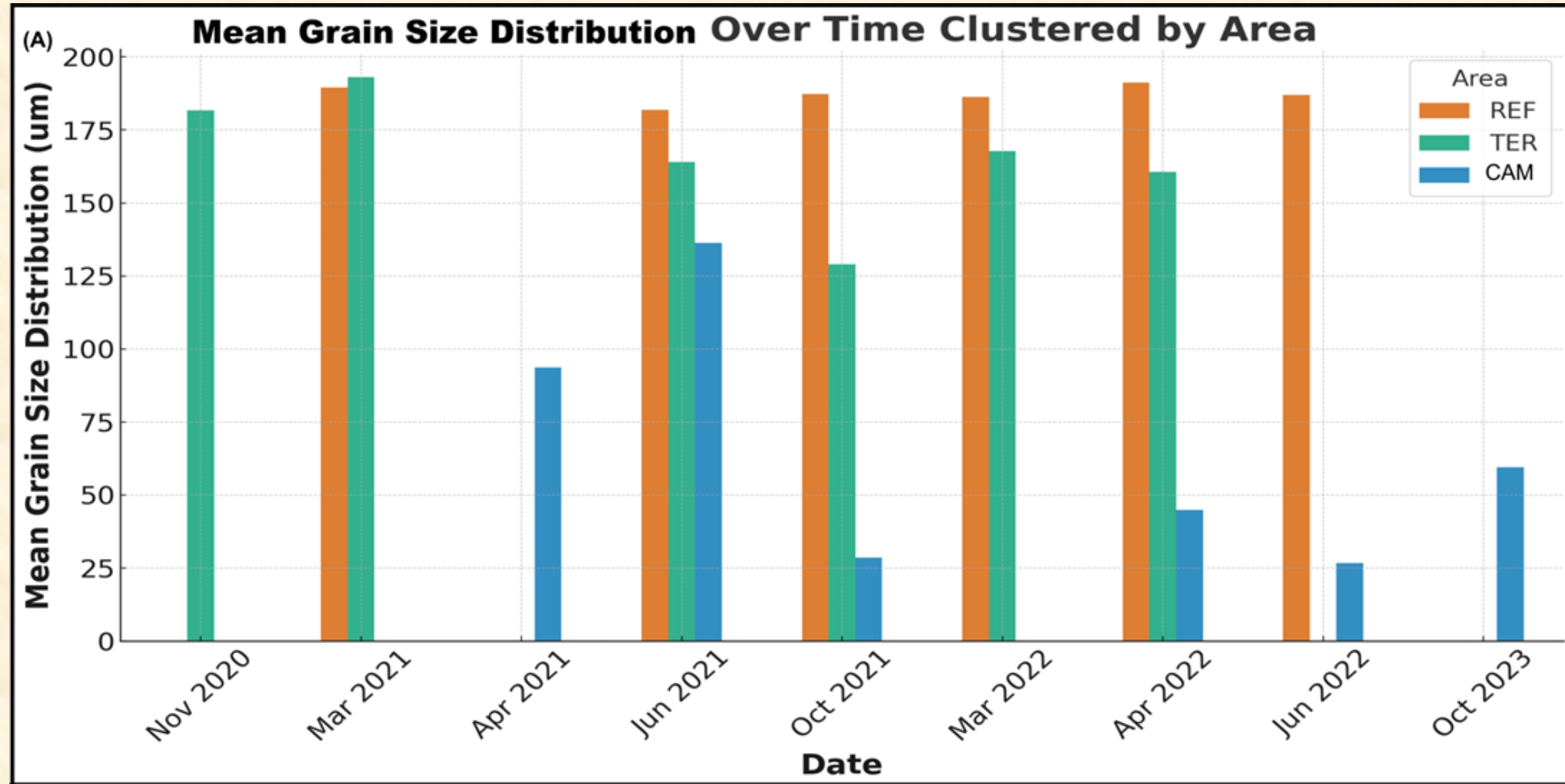


REF	TER	CAM	TOTAL
99	108	106	313



# Temporal Comparison:

- **REF:** Stability
- **TER:** Decrease
- **CAM:** Variable





# Thank You For Your Time

Questions? I'm happy to discuss further.

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"Responses of Ecological Function of the Ship Shoal Biological Communities Subjected to  
Dredging"