

CCRI 2005 GRANT

HABITAT MAPPING OF THE WEST COAST OF PUERTO RICO

José A. Rivera

Under contract to:

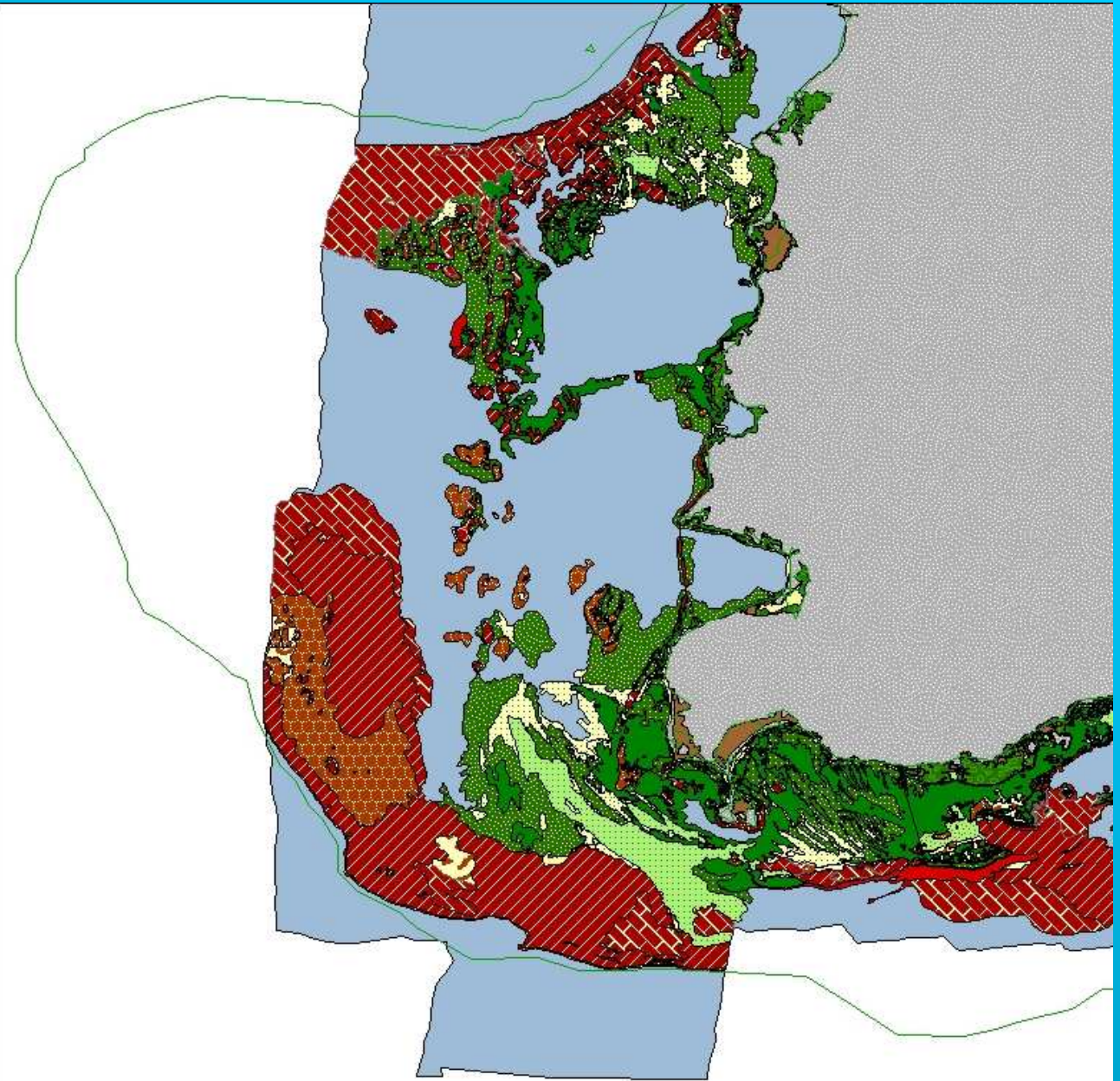
NOAA Fisheries, SEFSC

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Benthic Habitats





TOWED TRANSDUCER



ELECTRO-
CONDUCTING
WINCH



SIGNAL ACQUISITION



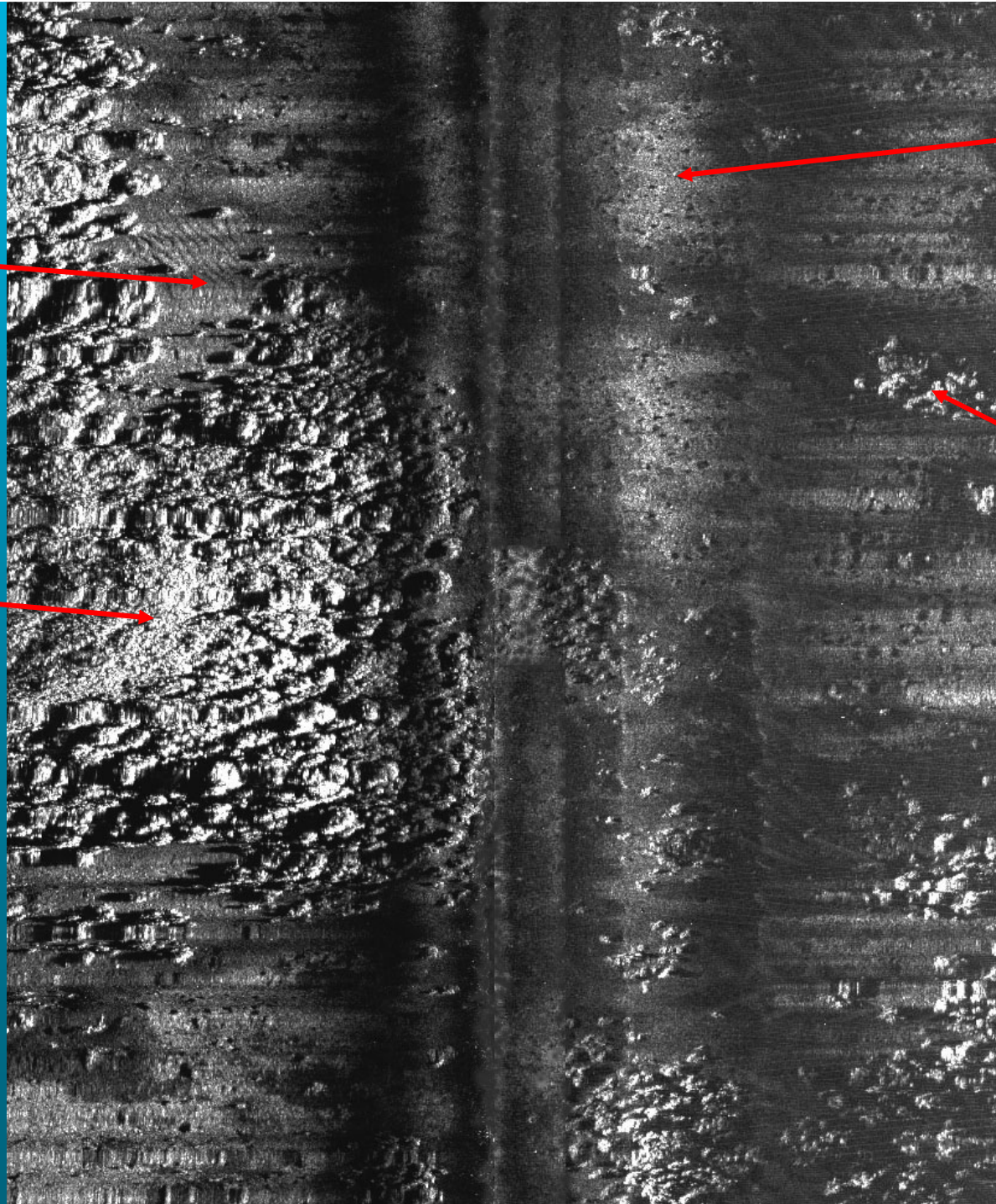
NAVIGATION

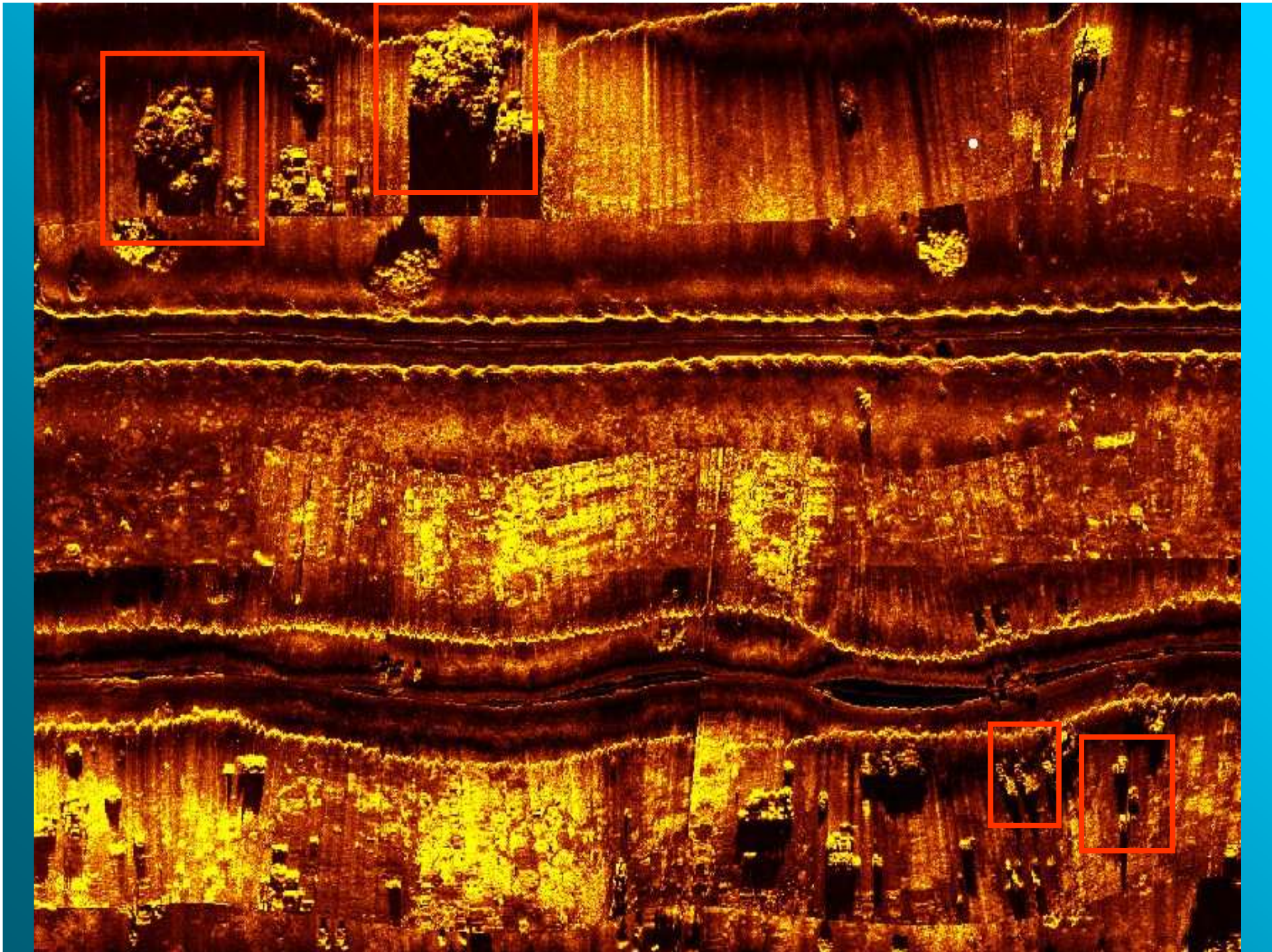
Sand ripples

Reef

Sand/algal
plain

Patch reef
with dark
Halophila
halo

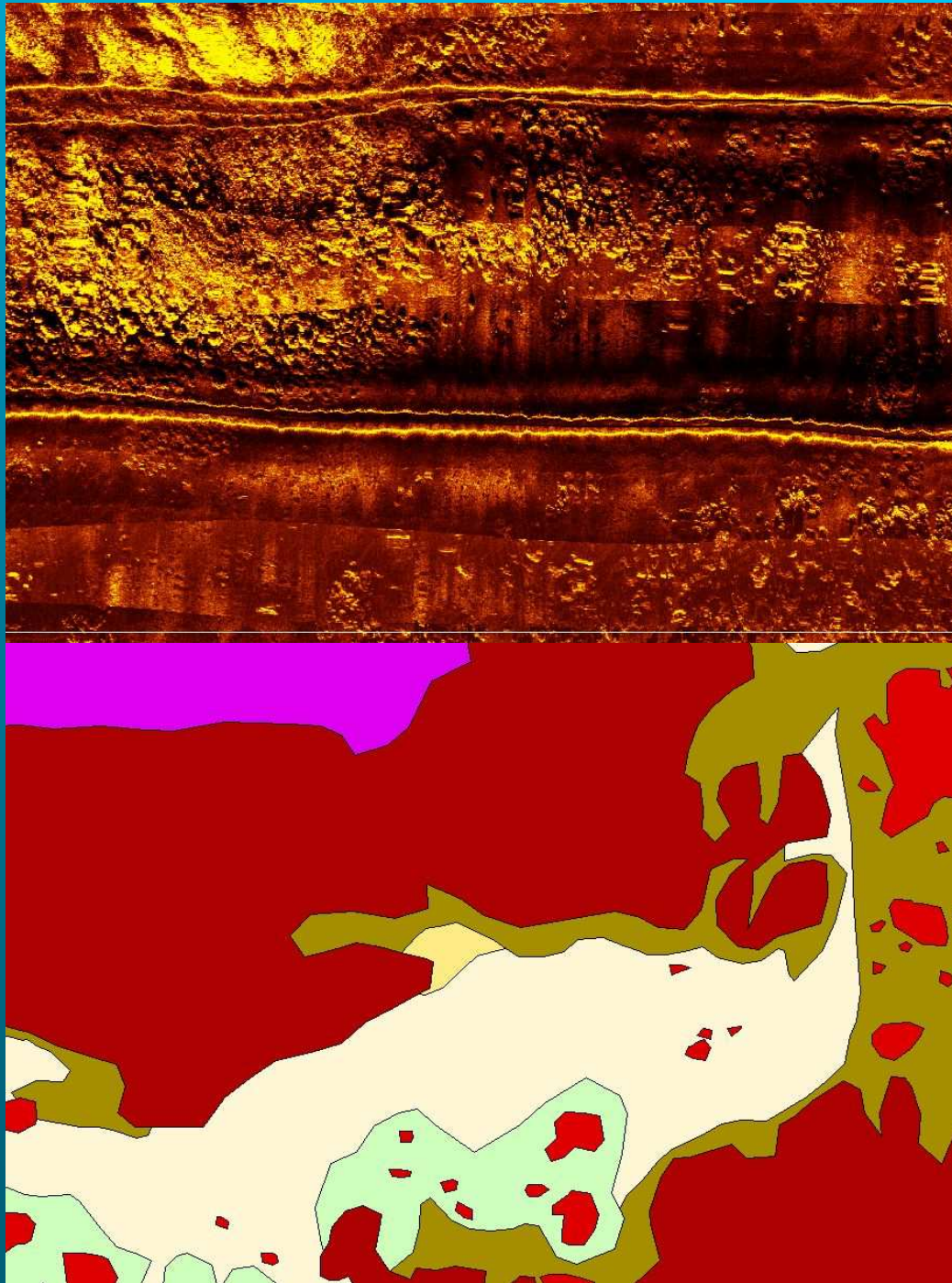




Habitat Types from Side Scan Sonar

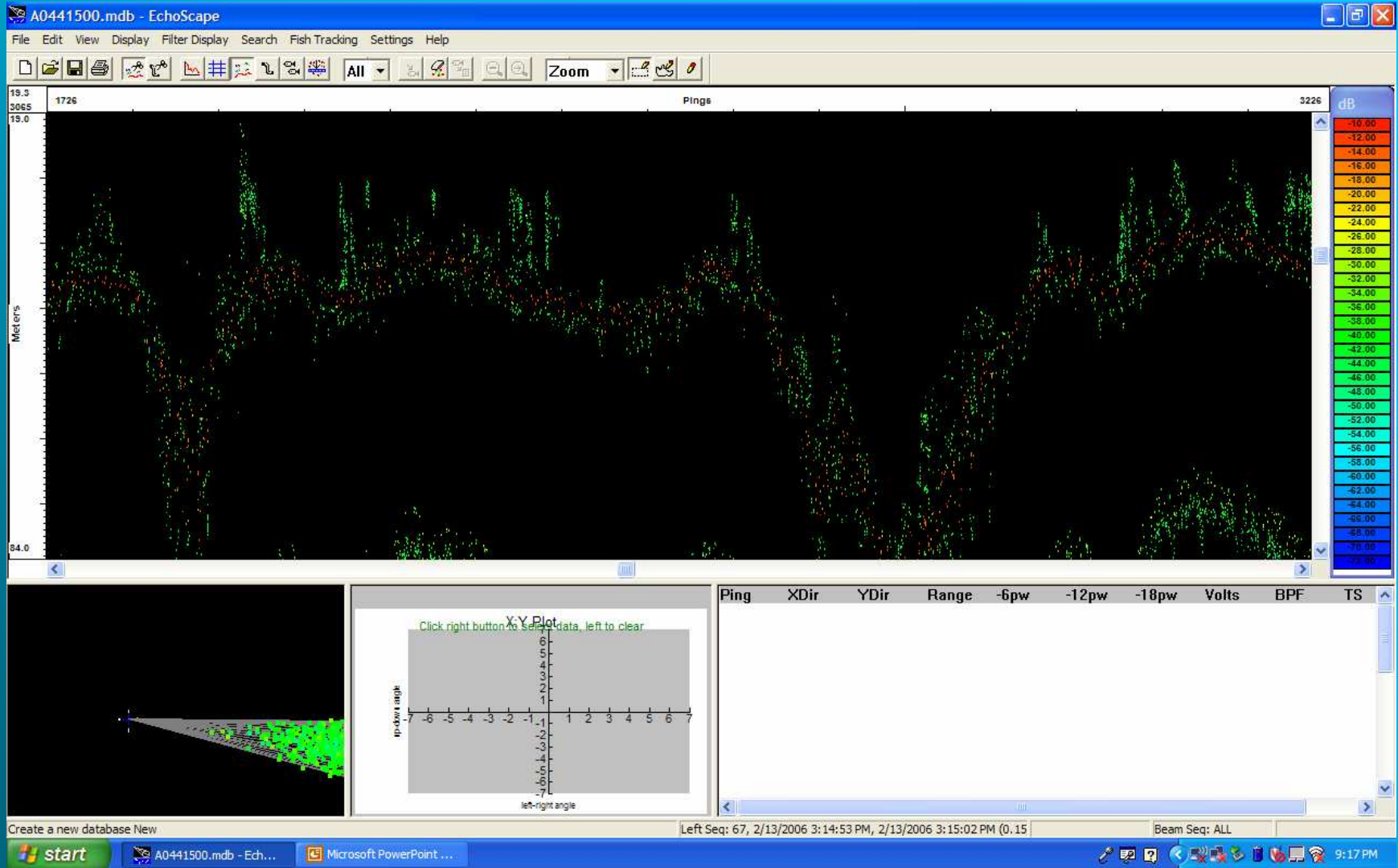
- Mixed/continuous corals
- Coral patch
- Coral limestone
- Gorgonian patch
- Gorgonian plains
- Elevated gorgonians
- Dense grass
- Sparse grass
- Grass and invertebrates
- Dense algae on sand
- Sparse algae on sand
- Algae on silt
- Sand no-ripple
- Sand ripple
- Sand fine
- Mud bare
- Mud with invertebrates
- Mud reef

100 m

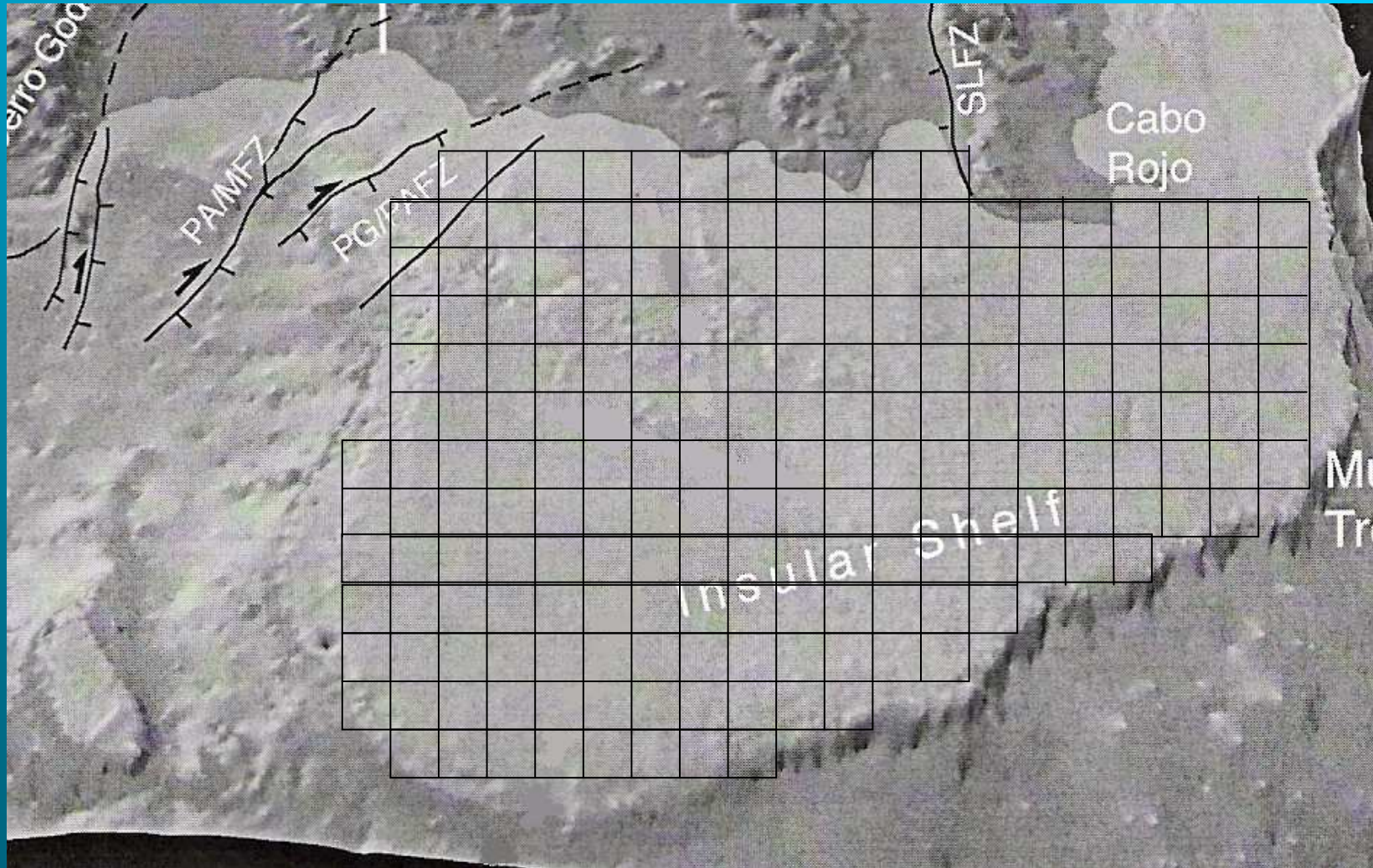


	continuous_corals
	coral_limestone
	gorgonian_patch
	coral_patch
	corals_patch_halo
	elevated_gorgonians
	gorgonian_plain
	deep_algae
	shallow_algae
	dense_algae
	sparse_algae
	dense_grass
	grass_invertebrates
	grass_sparse
	sand_invertebrates
	sand_noripple
	sand_ripple
	fine_sand
	mud_bare
	mud_reef
	mud_invertebrates

MCD



Area to be Mapped



Cabo Rojo Shelf Area = 193, 1nm²

<u>Swath (m)</u>	<u>nm²/day</u>	<u>Total days</u>
100	.8	154
200	3	64
300	4.5	43
400	6	32

Status of Main Tasks

- Obtain previously collected SSS data; assess quality for habitat mapping
 - Trip to US scheduled for March, 2006.
- Loan or lease SSS
 - Sonars located at NOAA and UNC-Wilmington
 - Inspection trip scheduled for March, 2006.
- Begin SSS data collection
 - April, 2006 (Weather dependent)
 - Boat and crew identified
- Begin process SSS data to obtain habitat maps
 - May, 2006.