

# Geohabitats mapping of the continental shelf of Tamandaré (PE), Brazil

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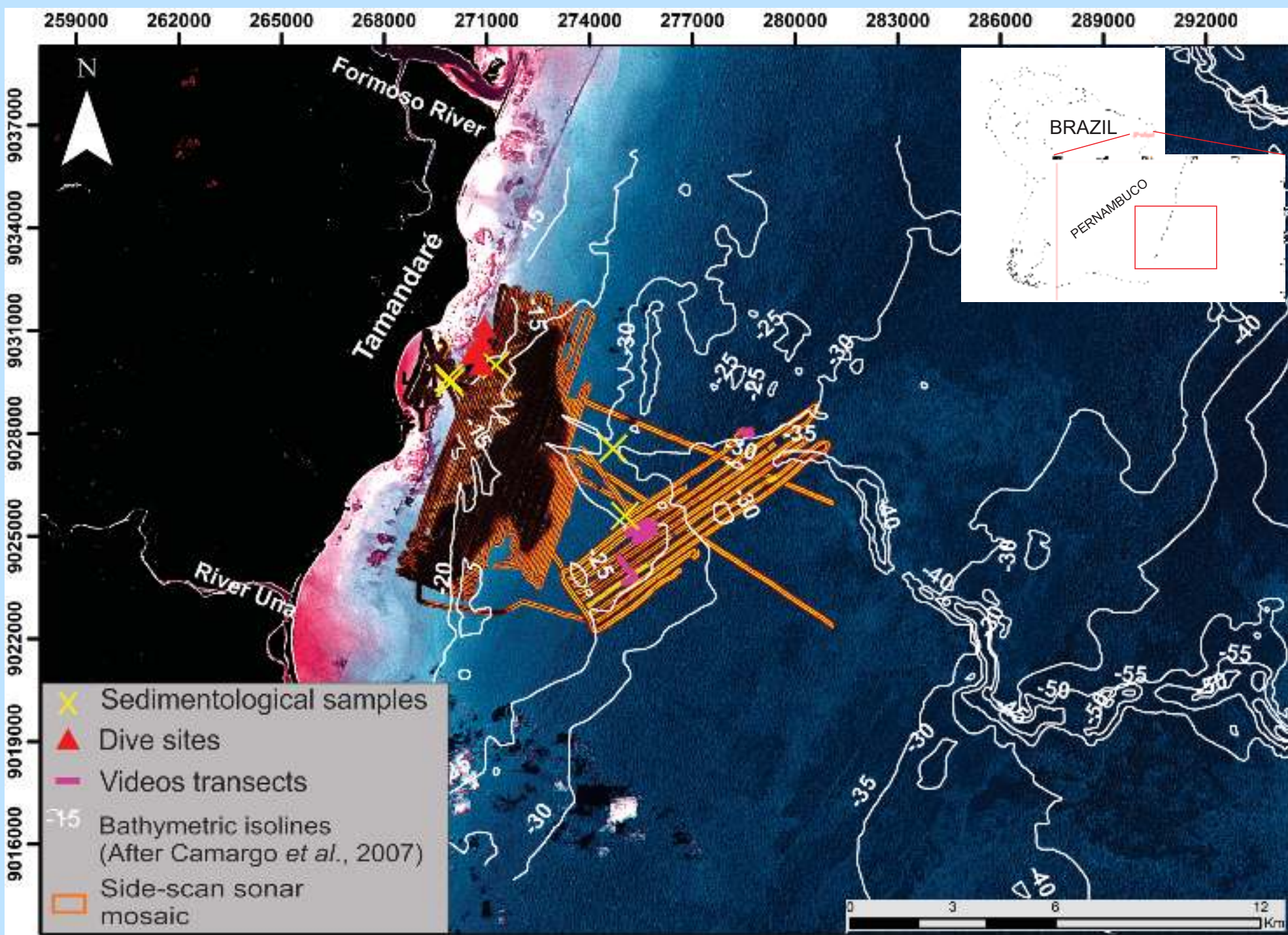
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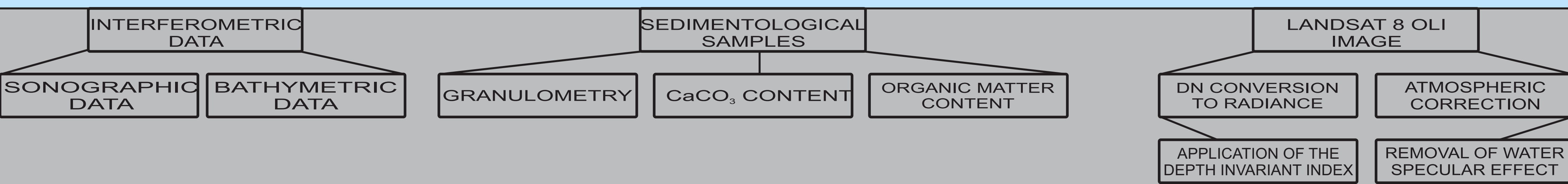
## STUDY AREA



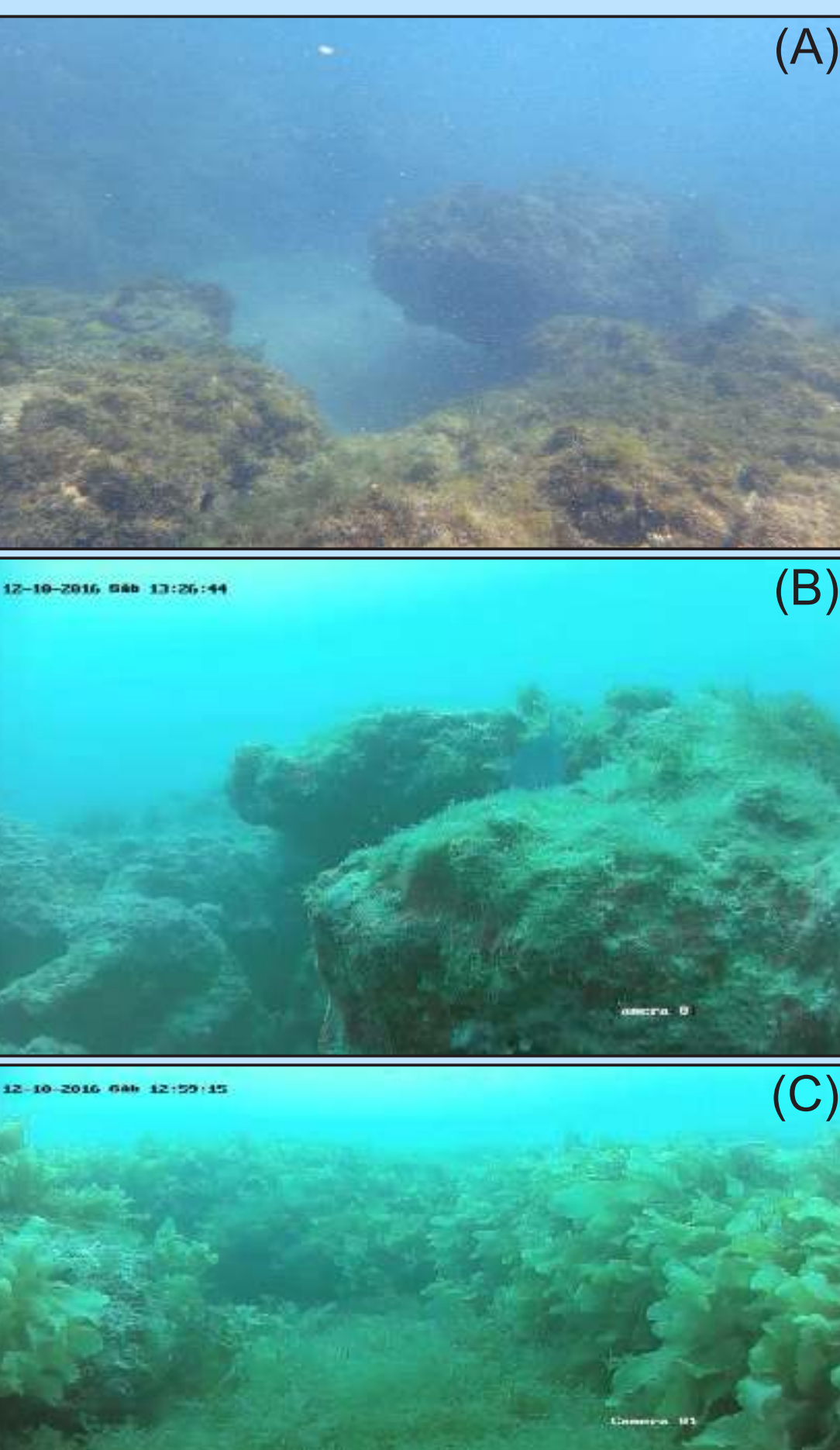
1. Study area location and data sets.

- Comprises 135 km<sup>2</sup> along the continental shelf off the Tamandaré Bay and is limited by the Formoso River (north) and Una River (south);
- This shelf is narrow with approximately 35 km of width, with shallow shelf edge at depths up to 90 m, has a general gentle slope, has mixed carbonate and siliciclastic sedimentation, and has warm high - salinity water (Manso et al., 2003).
- The Tamandaré area presents a wet tropical weather (Koppen, 1984), prevailing winds of SE direction during the winter and E direction during the summer and is dominated by actions of semidiurnal mesotide (Muehe, 2006).
- It is in within a Marine Protected Area;
- Densely populated area;
- High economic importance system (fisheries and tourism);
- Despite it's importance, there is no detailed geohabitat mapping in the area;
- Provide the basis to contribute with the protected area.

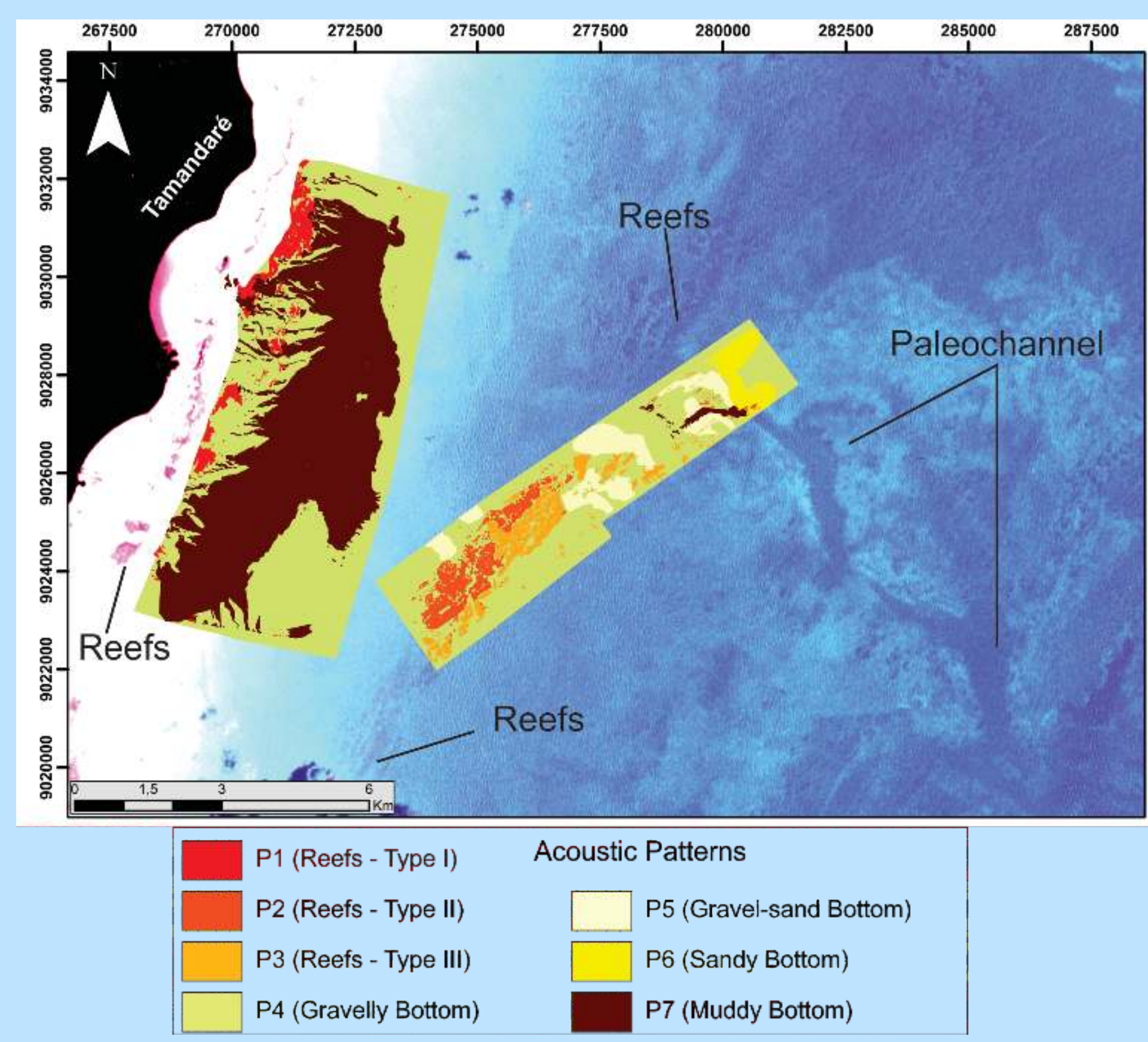
## MATERIALS AND METHODS



## RESULTS



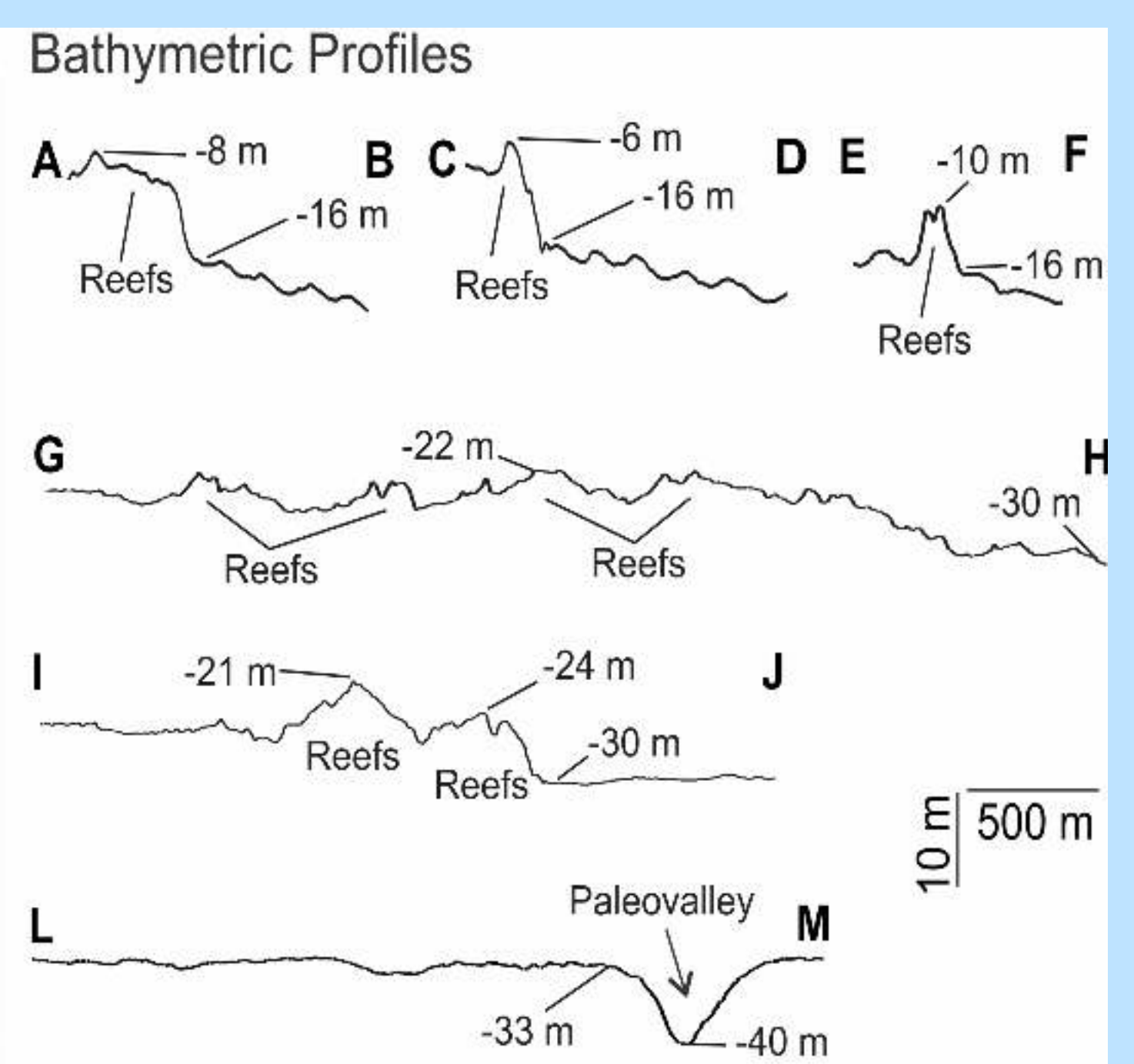
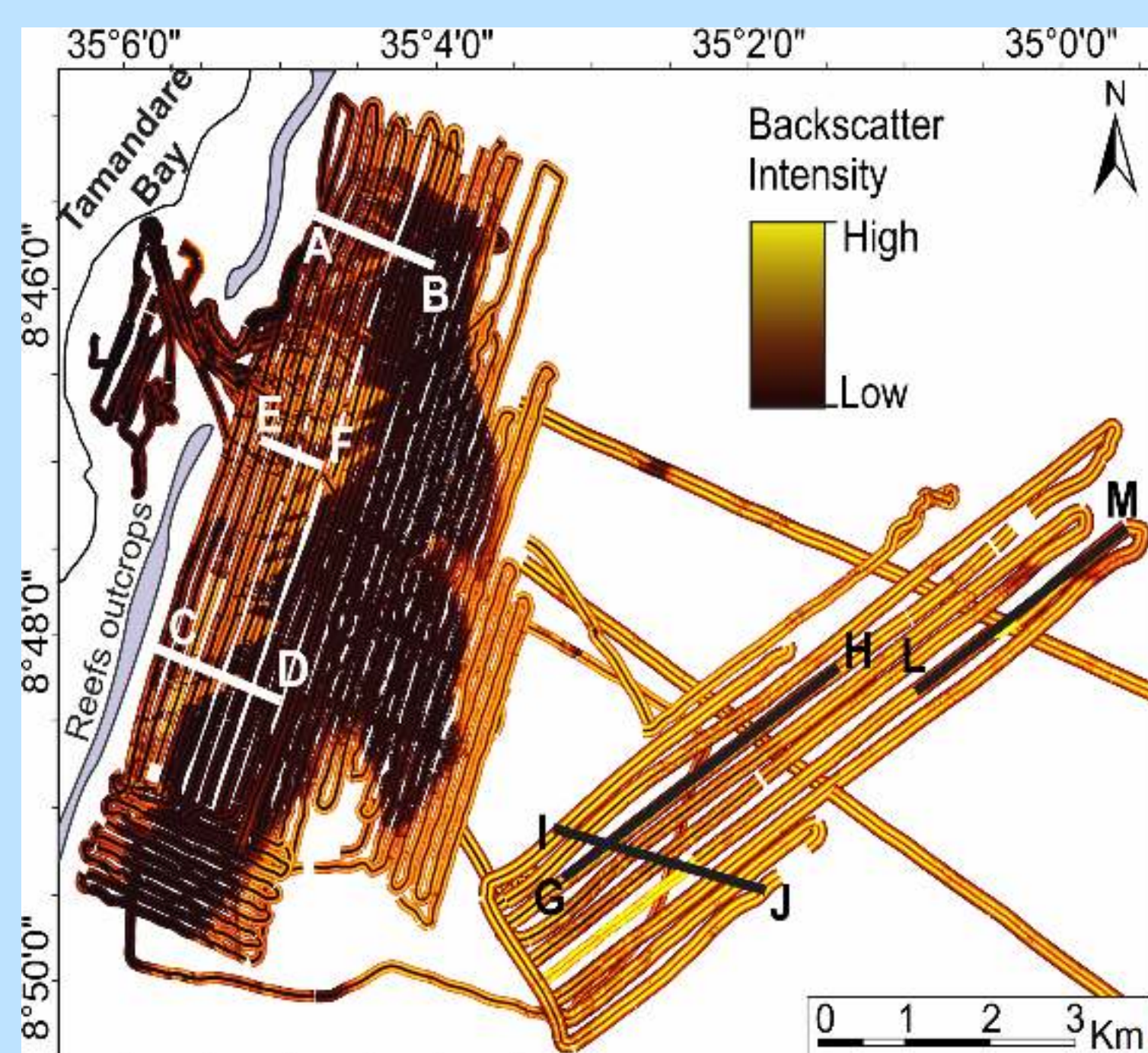
BACKSCATTER PATTERNS	DESCRIPTION	INTERPRETATION	
P1	High backscatter, rough and heterogeneous texture, oriented almost N-S	Reefs - Type I	
P2	Moderate backscatter, rough and (but less than P1), heterogeneous texture, oriented NE-SW	Reefs - Type II	
P3	Moderate backscatter, smooth texture and oriented NE-SW	Reefs - Type III	
P4	High backscatter, smooth and homogeneous texture	Gravelly Bottom	
P5	Low backscatter, smooth and homogeneous texture	Sandy Bottom	
P6	Moderate backscatter, smooth and homogeneous texture	Gravel-Sand Bottom	
P7	Low backscatter, smooth and homogeneous texture and interdigitated distribution	Muddy Bottom	



3. Sonographic patterns.

4. Map of acoustic backscatter patterns.

2. Underwater photos of reefs. (A) near shore reefs; (B) submerged reefs covered by lower algal mats with some patches covered by calcareous incrustating algae; (C) submerged reefs covered by leaf brown algae such as sargassum sp and dictyopteris sp.



5. Bathymetric profiles on reef features and paleochannel.

## ACKNOWLEDGMENTS

