West-Central Florida Coastal Transect # 6: Anna Maria Island

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Introduction

A limited part of the Panhandle of Florida Coastal Barrier Study Area was targeted within the study area, due to the geographic limitations of the study area (Figure 14). In addition, the location of the Anna Maria Island transect is constrained by the extent of the littoral drift system and the fact that the microwave imaging data are based on coastal morphology.

Methods

Shoreface and nearshore descriptions of barrier islands are based on the collections of the Florida Institute of Shoreface and Nearshore Geology and the University of South Florida. The terms used in this report are those of the Florida Institute of Shoreface and Nearshore Geology.

Geologic History and Morphodynamics of Barrier Islands

Recent studies on the modern Gulf coast of Florida have identified several areas of high-resolution study, including the Florida Keys, the Florida Everglades, and the Florida Panhandle. The Florida Keys have been studied in detail by Barnard et al. (1997), and the Florida Everglades have been studied in detail by Davis et al. (1994). The Florida Panhandle has been studied in detail by Gelzenbaum et al. (1997) and Brooks et al. (1997).

Anna Maria Island

The Anna Maria Island is a transitional island located in the northwestern most region of the study area (Figure 14). The island extends from the north end of the island to the south end of the island, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Location map

The Location map shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Side-scan sonar data

The Side-scan sonar data shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Seismic-profile data

The Seismic-profile data shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Transect cross-section A-D

The Transect cross-section A-D shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Core Data

The Core Data shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

Barrier-Island Cores and Transect

The Barrier-Island Cores and Transect shows the location of the Anna Maria Island transect (transect B-C) within the study area. The transect is located in the northwestern most region of the study area, and is approximately 10 km wide. The island is comprised of a series of low, sandy ridges, with a series of small, sandy beaches.

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Data references:

List of west-Florida coastal transect series maps (1 sheet each)

Cruise tracks in red with yellow highlight indicating vibracore data that supports the seismic profile shown below the transect. The transect across the north end of the island is the first transect south of the Tampa Bay ebb-tidal delta. The transect across the north end of the island is the first transect south of the Tampa Bay ebb-tidal delta.