

Lidar Fact Sheet: Galveston County, Texas

Overview

The Galveston County lidar data set was received from the Texas Water Development Board (TWDB). It was reviewed by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center at a macro level, which involves checking for format and point characteristics in about 5% of the tiles. In addition, the entire data set is reviewed to establish that bare-earth processing and proper classification of the points has been performed. This review does not include accuracy or data-processing (e.g., bare-earth quality, flightline mismatch, feature removal) assessments.

Data Attributes

The Texas county data were delivered as bare-earth processed data sets. However, no accuracy or qualitative assessment information was provided. The data were flown and processed to meet Federal Emergency Management Agency (FEMA) flood mapping standards (root mean square error of 18.5 centimeters in open, bare terrain). Point spacing is nominally on the order of 1.5 to 2.0 meters. For full metadata, follow this link: www.csc.noaa.gov/crs/tcm/ldartdat/metatemplate/tx2006_galveston_template.html

Review Results

According to the macro review, the data set on average appears to be of good quality. This overall determination is a qualitative assessment of the results from the reviews listed below. No accuracy assessment was performed.

Tile Review

Some minor formatting issues were noted: 1) no flightline source information and 2) a low number of second returns. Water was, for the most part, classified as “unclassified,” which is acceptable; however, it does not conform to the American Society for Photogrammetry and Remote Sensing (ASPRS) standard of class 9 for water values.

Bare Earth Point Density Review

The major data issue appears to be at the southeastern portion of the county where water was poorly classified and there is a low bare-earth point density (Figure 1). Along the bay side of Galveston Island, a few areas appear to lack data. Additionally, a strip on the western edge of the county has lower bare-earth point density and appears to be a processing and data-collection attribute.

For More Information

NOAA Coastal Services Center
Coastal Remote Sensing Program
(843) 740-1200 • www.csc.noaa.gov/crs/



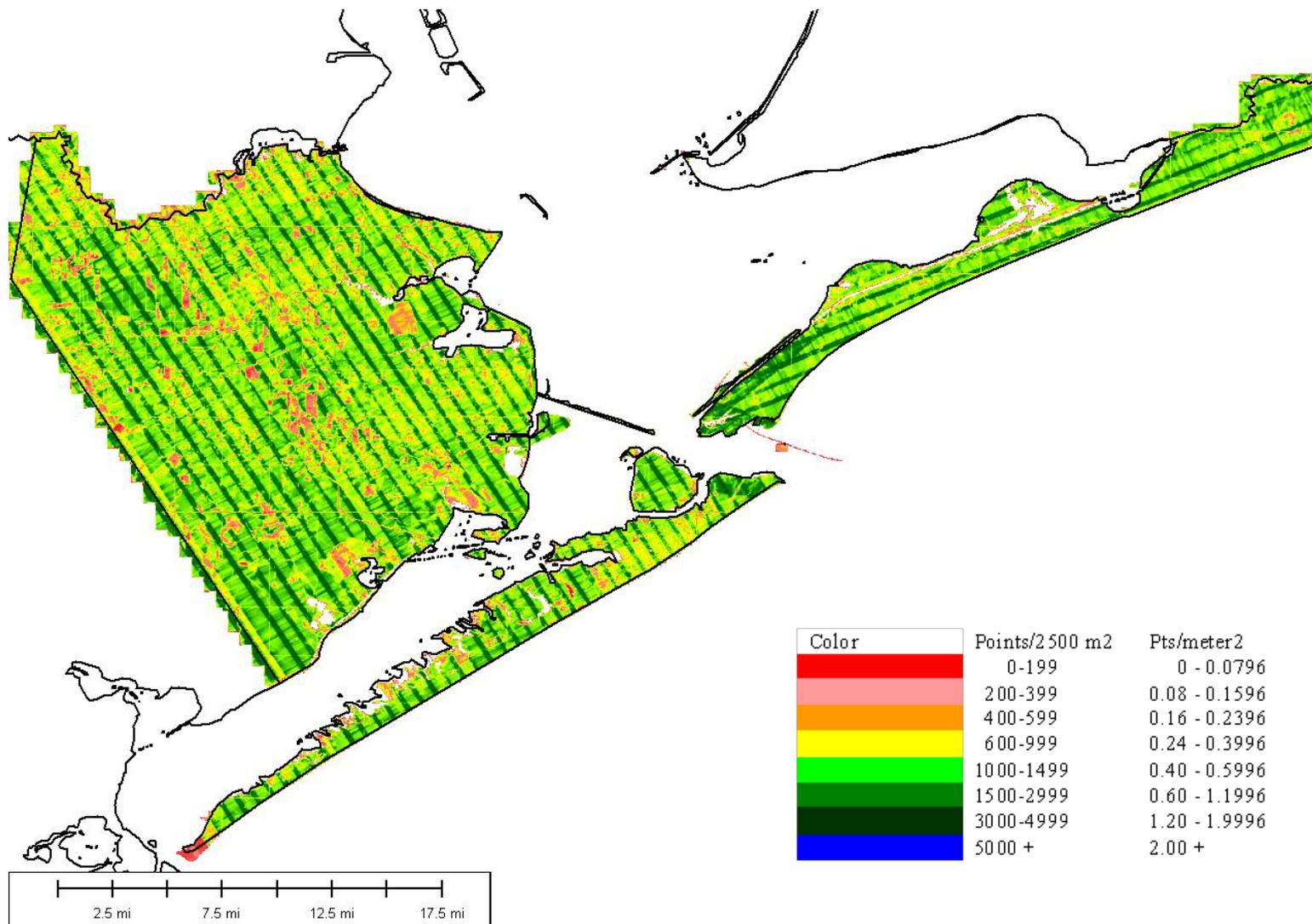


Figure 1. Bare-earth point count density (pts/2500 square meters) in Galveston County.