

Lidar Fact Sheet: Aransas and Refugio Counties, Texas

Overview

The data sets for Aransas and Refugio Counties were received from the Texas Water Development Board (TWDB). They were reviewed by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center at the macro level, which involves checking for format and point characteristics for approximately 5% of the tiles. In addition, the entire data set is reviewed to establish that bare-earth processing and proper classification of 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 acquisition occurred in 2006; multiple returns were recorded for each laser pulse along with an intensity value for each return. The data were 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 1.4 meters. For full metadata, follow this link: www.csc.noaa.gov/crs/tcm/ldartdat/metatemplate/tx2006_aransas_refugio_template.html

Review Results

After the limited review, the data set on average appears to be of fair quality. This determination is based on the issues listed in the sections below. Again, no accuracy assessment was performed.

Tile Review

The Aransas and Refugio Counties lidar data are complete and for the most part appear to be of fair quality. The issues determined in this review are as follows:

1. Ground classified points are listed as return one of two returns.
2. Classification of water: for the most part, water points are classified as “Unclassified,” which is acceptable; however, this does not conform to the American Society for Photogrammetry and Remote Sensing (ASPRS) standard of Class 9. The user should be aware that, in many tiles, water points have been classified as “Ground.”
3. There is no flightline source information.

Bare Earth Point Density Review

Figure 1 below depicts the bare-earth point density per 2,500 square meter cell and per square meter. The issues determined in this review are as follows:

1. Areas offshore have water points classified as bare earth. This can be seen in the number of salmon-colored cells that occur offshore.
2. Also of note are the dark green cells that follow particular flightlines in the eastern part of the data set. The points in these flightlines may have been classified differently than points in the rest of the data set. This may be a result of data-processing differences.
3. Red areas (low bare-earth point density) correspond to vegetated/forested areas, as would be expected.

For More Information

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



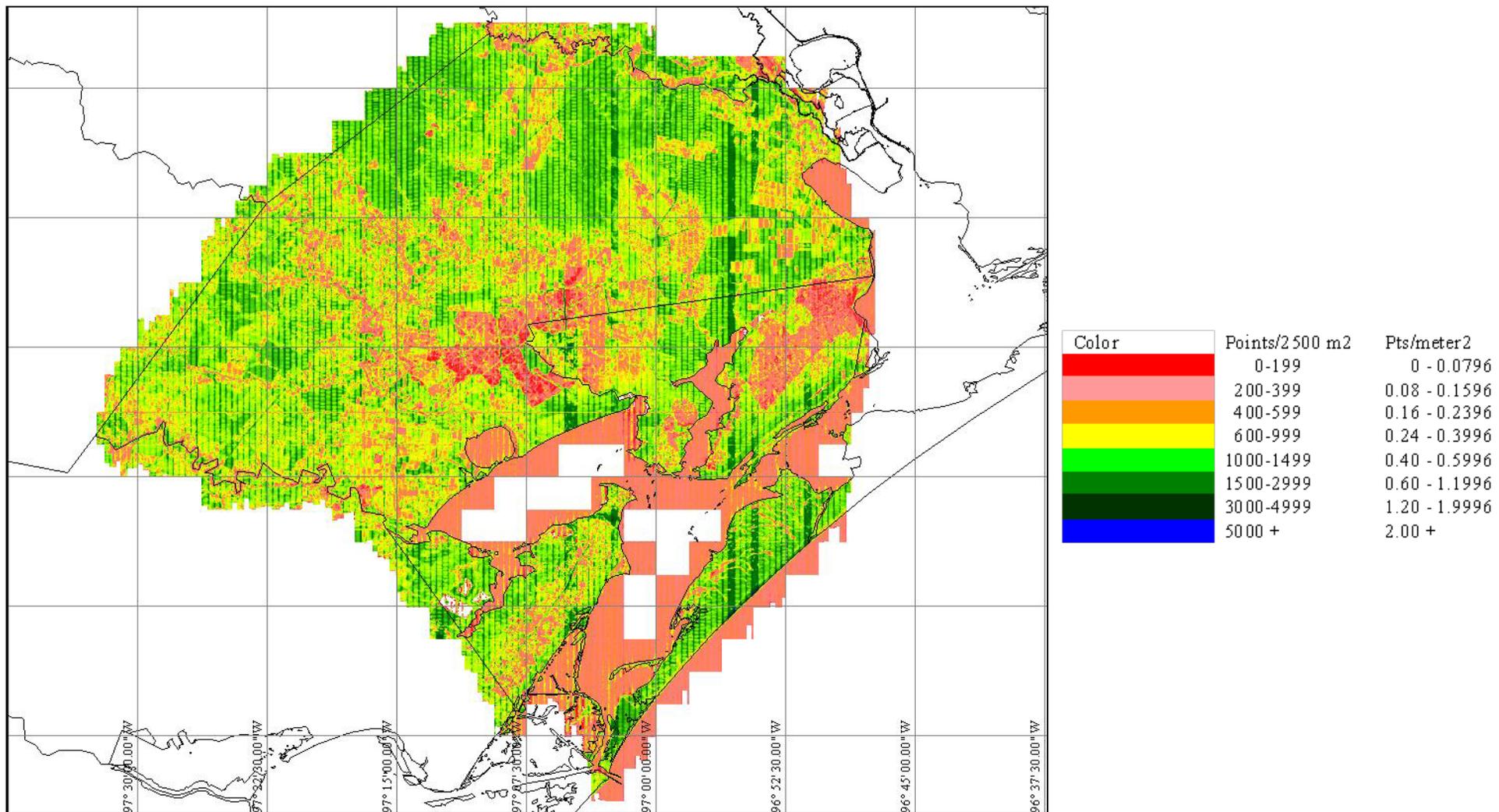


Figure 1. Bare-earth point count density (pts/2500 square meters) in Aransas and Refugio Counties.