

Lidar Fact Sheet

Jefferson County, Texas

Overview

The Jefferson 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. The review does not include accuracy or data-processing (e.g., bare-earth quality, flightline mismatch, feature removal) assessments.

Data Set Attribute Information

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_jefferson_template.html

Results

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

Tile Review

Some formatting issues were noted: 1) no flightline source information, 2) some noisy two-return data, and 3) the majority of ground points were first of two (i.e., first of many) returns. These issues all appeared to be systematic, which, although not necessarily affecting accuracy, raises flags about overall data quality. Returns from water are largely classified as ground. High values also remain in the data set, although correctly classified (unclassified).

Bare Earth Point Density Review

There appears to be a “tile”-specific level of classification as evidenced by the bare-earth point densities (color variations; Figure 1). Aside from the tile-specific classification and remaining water points, the bare-earth process appears to be complete with no holidays or systematic low-density areas.

The largest issue is the lack of proper return-number information, which raises flags about the accuracy of the data.

For More Information

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



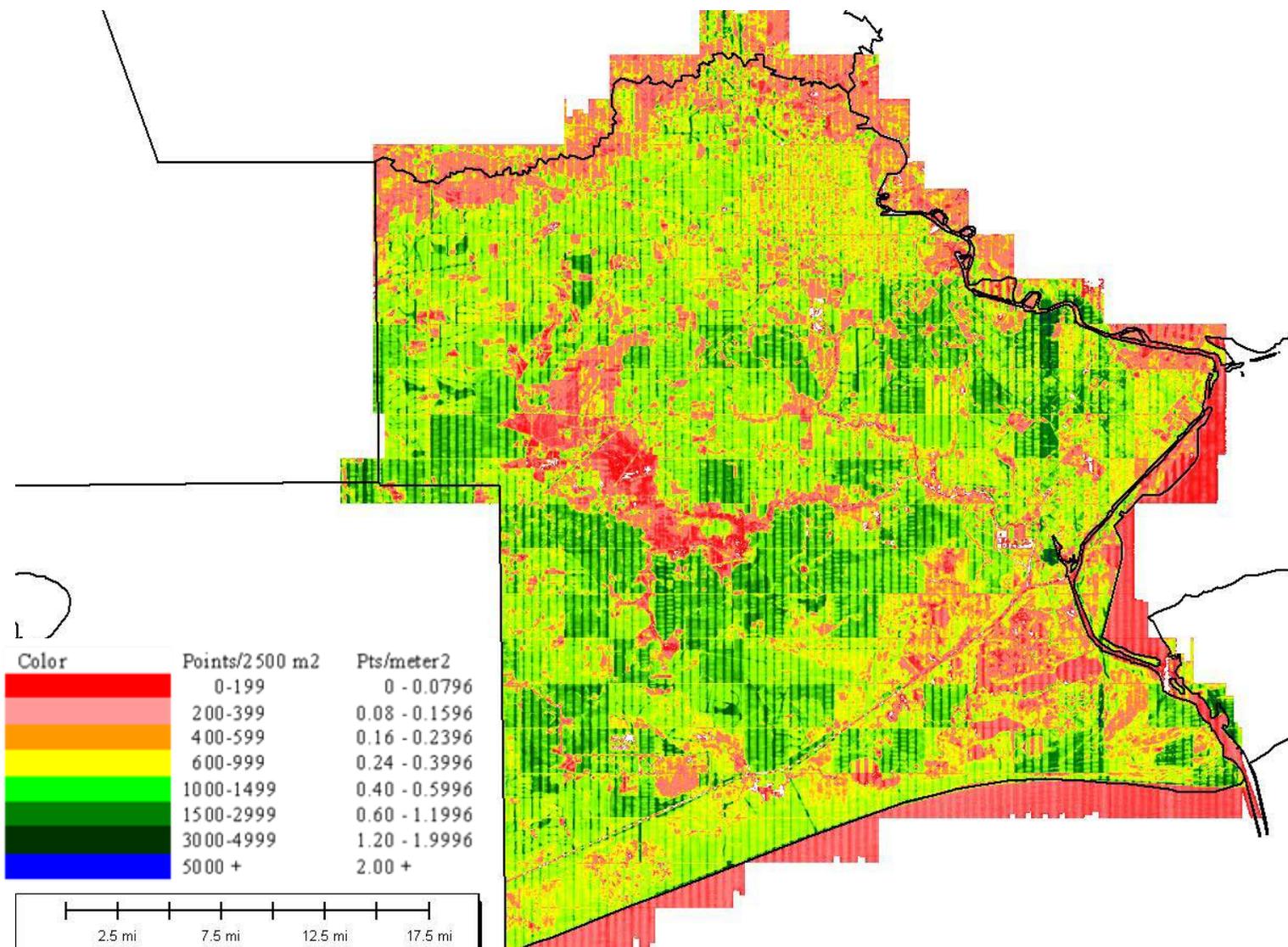


Figure 1. Bare-earth point count density (pts/2500 square meters) in Jefferson County.