Lidar Fact Sheet:
Jackson County, Texas

Overview

The Jackson 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_jackson_template.html

Review 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 tile review and the bare earth point density (ground density map or GDM) review. No accuracy assessment was performed.

Tile Review

There is a reoccurring formatting or possibly data storage issue, which has been noted in other Texas data. The issue is classification of the first of two returns (i.e., the highest return from a single pulse) as ground points; it is fundamentally incorrect. While it may not have any relation to the actual data accuracy, it renders all return information suspect. Additionally, water is not classified—nor was there any apparent attempt to do so.

Bare Earth Point Density Review

There is a distinct difference between the northeastern portion of the county and the main portion of the county in terms of ground point densities; the northeastern portion has a consistently higher density. There are also some lower density tiles in the central-northern portion of the county that indicate some tile-specific processing. The striping in water clearly indicates a lack of water classification. Additionally, at the time of this review, there are a few missing and corrupt tiles.

For More Information

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

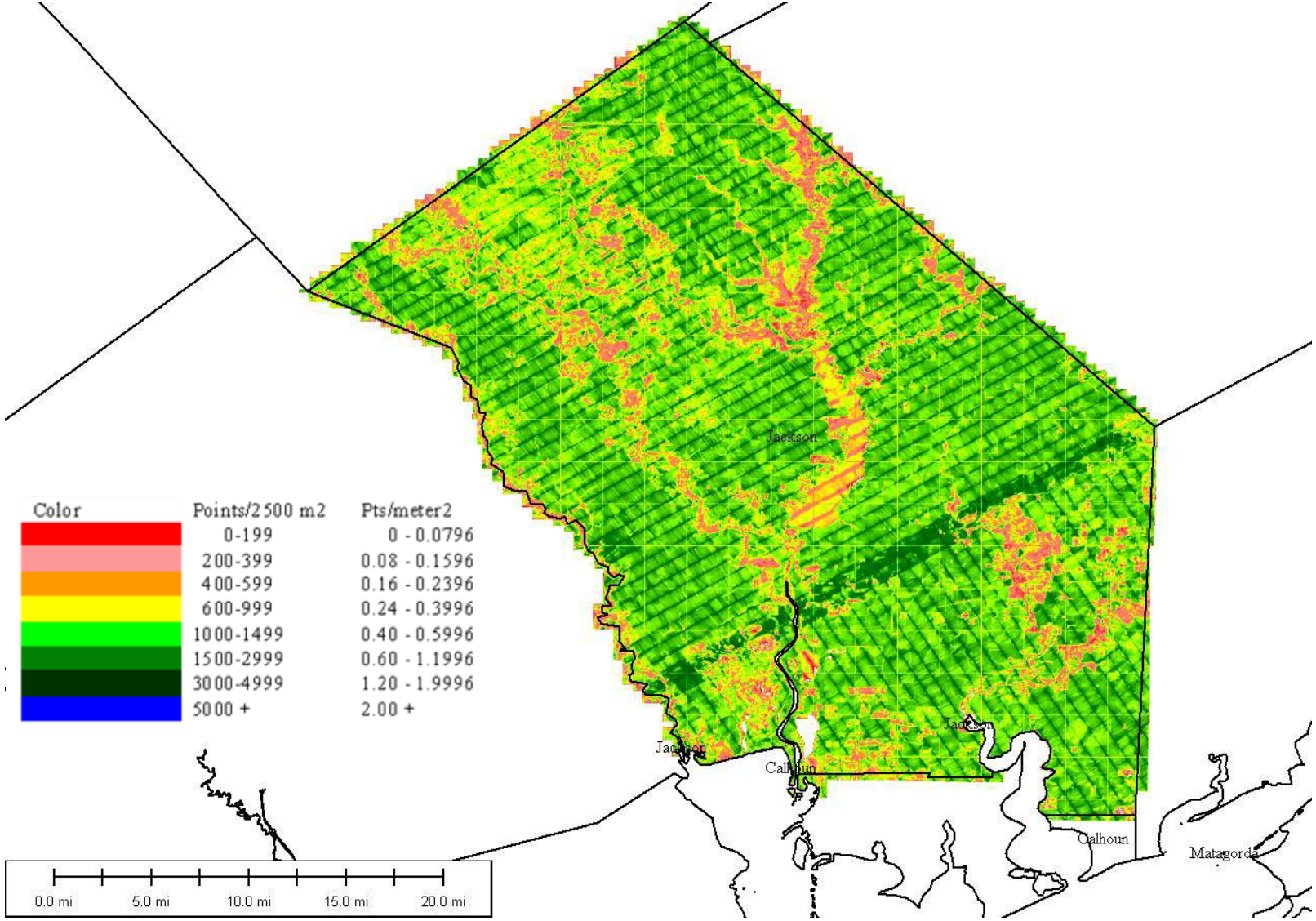

Figure 1. Bare-earth point count density (pts/2500 square meters) in Jackson County.