Coastal Zone 2003

Workshop Outline

LIDAR Surveys for Coastal Hazards and Resource Mapping

July 14, 2003

Section 7.0 - Application Demonstration – conducting surveys along the Texas Gulf Coast

- 7.1 Coastal GPS network
- 7.2 Ocean shoreline survey
- 7.3 Marsh survey
- 7.4 Ground survey

Section 8.0 - Processing Data

- 8.1 GPS base station solutions - two week delay for precise ephemerides
- 8.2 GPS aircraft trajectory solutions
- 8.3 Inertial navigation solutions (INS)
- 8.4 Calibration and bias estimation
- 8.5 Generation of all-point datasets (x,y,z, and intensity)
- 8.6 Geoid correction
- 8.7 Data editing
- 8.8 Gridding and image generation

Section 9.0 - Application Demonstration - extracting a shoreline from lidar data

Section 10.0 - Data Classification

- 10.1 Sample from one commercially available software package
- 10.2 Description of data classification research at UT Austin
- 10.3 Examples
  - 10.3.1 Copan Ruinas, Honduras
  - 10.3.2 Austin, Texas
  - 10.3.3 Matagorda Island, Texas

Section 11.0 – Select Application

Section 12.0 - Question and answer period and time to look at posters