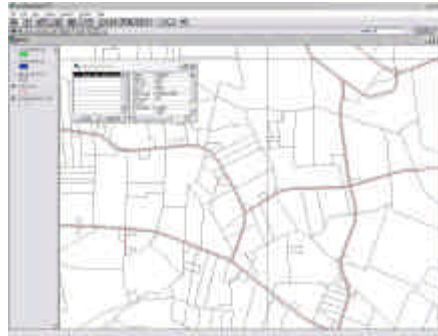


GeoData Corp & GIS

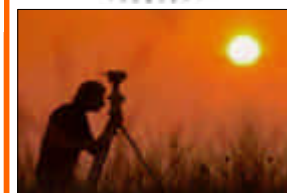
GeoData Corp. was recently selected to upgrade Sampson County's E-911 center line GIS system. GeoData has been working with the County for over eight years to help maintain and update this system. The latest updates will involve modifying their existing roads to match the new and improved digital orthophotos while maintaining their current range geocoded link. This process of geocoding center line roads will help dispatch operators more quickly locate incoming calls. The County has benefited from the recent data acquired through the NC State Flood Plain Mapping program by utilizing the LIDAR to help generate their new digital orthophotos. GeoData integrated the 246 new roads within the county to create updated large E-911 (36" x 64") wall maps which are displayed at all County Emergency Response stations. The project includes new revised map books to be placed in all response vehicles. We look forward to continuing work with Sampson County's E-911 Department.



SOUTH CAROLINA REQUIRES LICENSING FOR PHOTOGRAMMETRIST IS VIRGINIA NEXT?

Pursuant to the revisions of the South Carolina General Statute c.049, and effective July 1, 2004, all South Carolina photogrammetric work is required to be signed and sealed by a South Carolina licensed Professional Photogrammetric Surveyor. The change in the law has allowed persons with the requisite experience and education to apply to

...effective July 1, 2004, all South Carolina photogrammetric work is required to be signed and sealed...



be grandfathered in as a Professional Photogrammetric Surveyor, and requires firms providing photogrammetric services to be registered as professional companies. GeoData's president James M Salmons, PLS, PPS (Professional Photogrammetric Surveyor) recently became a licensed Professional Photogrammetric Surveyor and Rodney Hough, PLS in North Carolina is in the process of submitting his application. This means that we at GeoData will continue to deliver to our clients the high quality photogrammetric services that they have come to expect. We will continue to stay current on any changes that affect how we perform our work and will make every effort to keep our clients informed and up to date. In Virginia, the ASPRS Potomac Region has recently submitted a letter to the Board for Professional and Occupational Regulation with their recommendations on licensing. The licensing board is in the process of reviewing the issue of licensing photogrammetrists. Public meetings are currently being held to discuss the issue. It is expected that legislation will be presented to Virginia's legislative body sometime early next spring.



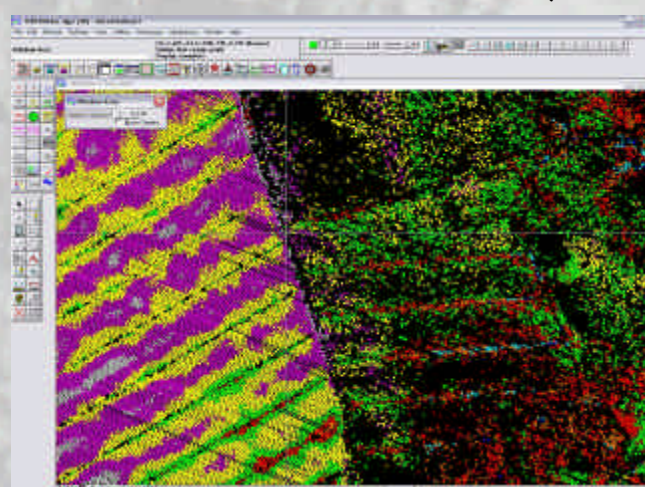
Review

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LIDAR CREATES NEW CONSIDERATIONS OF DEM ACCURACIES

North Carolina has been extremely fortunate to be the first Cooperating Technical State (CTS). Through the Federal Emergency Management Agency's (FEMA's) Cooperating Technical Community partnership initiative, the State has assumed primary ownership and responsibility of the Flood Insurance Rate Maps for all North Carolina communities as part of the National Flood Insurance Program. The project includes conducting flood hazard analysis and producing updated, digital FIRMs (DFIRMS). In this process, new up to date Digital Elevation Models (DEM's) were produced. The State has chosen to use a relatively new technology called Light Detection And Ranging or LIDAR to produce updated DEM's. Once the data is complete, it becomes available to the public. With this data also comes responsibility for its use.

The new technology of LIDAR creates new considerations of DEM accuracies. What can be expected from the data? Will it produce accuracies comparable to conventional photogrammetric mapping for 1' contours at National Map Accuracy Standards? Or how about 2' contours? Of course there are many variables to consider. There



PICTURE OF LIDAR WITH POINTS COLOR CODED FOR ELEVATION

are numerous types of users and user requirements which require flexibility and/or generalized standards. "The National Digital Elevation Program or NDEP was established to promote the exchange of accurate digital land elevation data among government, private, and non-profit sectors and the academic community and to establish standards and guidance that will benefit all users." Their web address is www.ndep.gov. The NDEP has developed "Guidelines for Digital Elevation Data DRAFT v0.3". In Section 1.3.8.2, "Relationship Between Horizontal Resolution and Vertical Accuracy", the NDEP Technical Subcommittee related

the vertical accuracy of mass points collected with LIDAR as follows:

- Maps compiled at 1 inch = 100 feet with 1-foot contours are comparable to DEM's with post spacing of 1 meter
- Maps compiled at 1 inch = 200 feet with 2-foot contours are comparable to DEM's with post spacing of 2 meters
- Maps compiled at 1 inch = 500 feet with 5-foot contours are comparable to DEM's with post spacing of 5 meters
- Maps compiled at 1 inch = 1000 feet with 10-foot contours are comparable to DEM's with post spacing of 10 meters
- Maps compiled at 1 inch = 2000 feet with 20-foot contours are comparable to DEM's with post spacing of 20 meters.

North Carolina's eastern river basins were collected at a 5 meter post spacing. Post spacing is the interval of the measurements. This would place the data in the 1"=500' with 5' contour accuracy range. However, if supplemented with breaklines and verified with conventional photogrammetric or surveying methods, the same data may be able to produce a 2' contour accuracy data set.



GeoData Corp is experienced working with LIDAR. Specifically, GeoData Corp's President, James M. Salmons, P.L.S., P.P.S. served on the North Carolina's State's CTS Committee representing the ASPRS State Chapter. GeoData has incorporated the newly collected LIDAR in many of its projects. Last year, the North Carolina Department of Transportation requested GeoData Corp to incorporate LIDAR into one of its Preliminary Highway Mapping Projects and report on the amount of additional editing and supplementing of breaklines needed to bring the DEM data set to NCDOT's standards. If you are interested in the application of LIDAR for your next project, contact James Salmons at GeoData Corp TOLL FREE at 1-800-966-4627.

FLYING SEASON IS JUST AHEAD

Now is the time to contact GeoData to schedule your aerial photography. Let us get your flight-lines laid out while the leaves are falling. Once the trees are bare the cameras can capture clear images of the terrain that you will need for a picture perfect project! Remember flying season only lasts until about the end of March, when good ole Mother Nature bursts into bloom.

