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Information Technology - Data Management; University of Houston Researchers Describe Advances in Data Management (Whose Data Is It Anyway? Lessons in Data Management and Sharing from Resurrecting and Repurposing Lidar Data for Archaeology Research in Honduras)

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2020 JUN 2 (VerticalNews) -- By a News Reporter-Staff News Editor at Information Technology Newsweekly -- New study results on data management have been published. According to news reporting originating from the University of Houston by VerticalNews correspondents, research stated, "As a response to Hurricane Mitch and the resulting widespread loss of life and destruction of Honduran infrastructure in 1998, the United States Geological Survey (USGS) conducted the first wide-area airborne lidar topographic mapping project in Central America. The survey was executed by the **Bureau of Economic Geology** at the University of Texas at Austin (BEG) in 2000, and it was intended to cover 240 square kilometers distributed among 15 flood-prone communities throughout Honduras."

The news reporters obtained a quote from the research from University of Houston: "The original data processing produced basic digital elevation models at 1.5-meter grid spacing which were used as inputs for hydrological modeling. The USGS published the results in a series of technical reports in 2002. The authors became interested in this dataset in 2013 while searching for geospatial data that would provide additional context and comparative references for an archaeological lidar project conducted in 2012 in the Honduran Mosquitia. After multiple requests to representatives from the USGS and BEG, we found various types of processed data in personal and institutional archives, culminating in the identification of 8-mm magnetic tapes that contained the original point clouds. Point clouds for the 15 communities plus a test area centered on the Maya site of Copan were recovered from the tapes (16 areas totaling 700 km2). These point clouds have been reprocessed by the authors using contemporary software and methods into higher resolution and fidelity products. Within these new products, we have identified and mapped multiple archaeological sites in proximity to modern cities, many of which are not part of the official Honduran site registry."

According to the news editors, the research concluded: "Besides improving our understanding of ancient Honduras, our experiences dealing with issues of data management and access, ethics, and international collaboration have been informative. This paper summarizes our experiences in the hope that they will contribute to the discussion and development of best practices for handling geospatial datasets of archaeological value."

For more information on this research see: Whose Data Is It Anyway? Lessons in Data Management and Sharing from Resurrecting and Repurposing Lidar Data for Archaeology Research in Honduras. Journal of Computer Applications in Archaeology, 2020,3(1). (Journal of Computer Applications in Archaeology - https://journal.caa-international.org/). The publisher for Journal of Computer Applications in Archaeology is Ubiquity Press.

A free version of this journal article is available at https://doi.org/10.5334/jcaa.51.

Our news journalists report that more information may be obtained by contacting Juan C. Fernandez-Diaz, University of Houston and National Center for Airborne Laser Mapping.

Keywords for this news article include: University of Houston, Information Technology, Information and Data Management.

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