

Airborne Bathymetric LiDAR and Coastal Zone Management in French Polynesia

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SUMMARY

Airborne bathymetric LiDAR has been used across the Pacific region by Australian, New Zealand and French authorities for coastal zone management and nautical charting since the early 1990's. Advances to systems since this time have improved the cost effectiveness, speed, depth, accuracy and flexibility of projects.

The current generation of Airborne Bathymetric LiDAR sensors are utilised by operators with dual configuration and associated positioning equipment. The Fugro configuration of the Riegl VQ-820-G and Fugro LADS sensor was used in May 2015 for a coastal zone program in French Polynesia.

The coastal program aims at producing a continuous reference digital elevation model of land-sea interface along the coastal fringe. These precise datasets across all French territories, will provide an increased knowledge and ability to manage these coastal zones...

This paper will review the challenges of working in remote locations in the SW Pacific whilst maintaining the standards for the coastal program and charting standards.

ALB is a cost effective and reliable tool to capture the shallow water and coastal topography interface, whilst capturing, processing and providing data to required standards. With much of the world's oceans unsurveyed, ALB will continue to help governments, charting agencies and citizens to create more informed and up to date decisions.