Underwater Hazard Detection with the CZMIL Airborne System

Dr Joong Yong Park, software development manager at Optech, will present a paper at the OCEANS'14 conference being held in Taipei, Taiwan, from 7 to 10 April 2014. The conference is being organised by the Marine Technology Society (MTS) and the Institute of Electrical and Electronic Engineers (IEEE).

Agencies and organisations interested in <u>environmental monitoring</u> and <u>submerged object detection</u> should attend Dr Park's presentation on *Using Lidar Waveforms to Detect Environmental Hazards through Visualization of the Water Column*. In his presentation, Dr Park will describe the techniques that the <u>Optech CZMIL HydroFusion</u> workflow software uses to interpret Lidar bathymetry data from the airborne <u>Optech Coastal Zone Mapping and Imaging Lidar (CZMIL)</u>, including full-waveform data analysis and 3D voxelised image cube generation. These techniques enable CZMIL to map oil spills, detect underwater objects one-metre cubed and larger, and visualise submerged pipe leaks from the air, making it a tool for rapidly assessing environmental damage, searching for floating debris, and detecting navigation hazards.

About OCEANS'14

The OCEANS Conferences in Asia are a series of international conferences with the goals of bridging the distance between scientists and engineers and advancing the interdisciplinary fields of ocean science and technology. The conference theme of OCEANS REGENERATION speaks to the need to promote scientific methods and research to address environmental concerns about the preservation and betterment of our living oceans.

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