9. The Next Generation Easy-to-Deploy (ETD) Tsunami Assessment Buoy

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Abstract: This paper addresses the first commercial operations of the next-generation tsunami assessment system. Over the last five years, NOAA's Pacific Marine Environmental Laboratory (PMEL) developed a next-generation Easy-to-Deploy (ETD) Deep-ocean Assessment and Recording of Tsunamis (DART®) buoy system. Through a technology transfer and license agreement, Science Applications International Corporation (SAIC) produced the first commercial ETD DART® systems in 2010. SAIC ETD DARTs® have been deployed in the Coral Sea on August 27, 2010 and in the Tasman Sea on April 8, 2011. System performance has been exceptional at both locations despite challenging environmental conditions. The Coral Sea system has weathered the impact of a category five cyclone and has detected several tsunami events including the trans-Pacific Honshu tsunami since that time. The ETD DART® is designed to be deployed by small and fast response vessels, requires fewer trained personnel and only minutes of deployment time. The SAIC ETD DART has been certified fully operational and is now an important new technology available to support the global tsunami detection network.