

ETL Scientists Receive DoC Silver Medals

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Four ETL scientists recently received Department of Commerce Silver Medals in a ceremony held last week in Washington, D.C. .

James Churnside along with William G. Pichel, NESDIS, were given a group medal for *development of a technique to detect ghostnets in the open ocean using satellites and aircraft*. Tons of lost and abandoned fishing nets (ghostnets), drift in the oceans, killing fish, marine mammals, sea birds, and turtles. These nets may become entangled in coral reefs, where they destroy the coral as they continue to kill protected species. Searching the entire ocean for ghostnets is too costly to be practical, so the recipients developed a technique to search more effectively. Information from satellite instruments locates regions of the ocean where the currents would bring floating debris together. An instrumented aircraft sent to those regions locates and identifies debris.

Robert Banta, Raul Alvarez, and Lisa Darby along with eight colleagues from the Aeronomy Lab were given a group medal for *the discovery of a previously unrecognized major factor that causes ozone pollution in the Houston, Texas area*. They discovered that leaks of reactive gases from the petrochemical refineries prevalent in the region are a much larger factor than had been expected. Because of the improved scientific understanding gained through the team's research, Texas air quality managers altered their policy approach to more effectively target the root causes of the region's poor air quality. An independent economic analysis estimated that the application of the revised air quality management plan instead of the original plan will save 65,000 jobs and \$10B for the state by the year 2010.