

Integration Of Argos-3 Pmts Well On Its Way

The integration of the new generation of Argos-3 compatible terminals called Platform Messaging Transceiver (PMT) is in full swing. Argos system operator Collecte Localisation Satellites (CLS) and drifter manufacturers Clearwater, Pacific Gyre, Metocean and Marlin Yug are currently producing innovative Argos-3 PMT-equipped drifters for use by the Data Buoy Cooperation Panel, with buoy deployments scheduled in the first quarter of this year.

Designed as a modem that communicates with the entire Argos satellite constellation, the PMT should seduce the oceanographic community, says Michel Guigue, Argos-3 PMT project manager. "Argos-3 and the PMT offer interesting new features. It is a real revolution. Until now, Argos was a one-way communication system, but thanks to the new Argos-3 PMTs it is evolving into a two-way system. As a result, users will be able to transmit at least ten times more data, control their platforms remotely by sending commands such as switching ON/OFF or even modify a sensor sampling rate."

He adds: "Our 30 years of experience in this field have resulted in this exciting evolution towards the new two-way capabilities. The PMT offers great flexibility, as users simply configure the corresponding protocols to use the PMT as a classical one-way PTT or to upgrade it to two-way and optimized data collection."

Michel Guigue continues, "The two-way capability of the Argos-3 PMT will improve the cost, the consumption and lifetime as well as the size of Argos platforms. Floats for example will see their surface time dramatically reduced, which is a major breakthrough for this application."

The new PMT is indeed able to automatically receive information broadcasts and set up rendezvous with satellites to transmit data when they are in view. Its data collection is secured thanks to data reception acknowledgement by the satellite.

The PMT has not only seduced manufacturers but also several users. The Japan Agency for Marine-Earth Science and Technology (JAMSTEC), for example, is currently developing an Argos-3-equipped CO2 buoy. Next to that, the Instituto Canario de Ciencias Marinas - ICCM- (Canaries, Spain) is currently integrating a PMT into a moored buoy for real time monitoring of meteorological and oceanographic parameters for long-time series in open ocean at the ESTOC site (European Station for Time Series in the Ocean at the Canary Islands) under the framework of -Red ACOMAR Canarias- and -EUROSITES- projects.

<http://www.cls.fr/>

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