

T3.1-P24. Re-establishment of IMS Hydroacoustic Station HA03, Robinson Crusoe Island, Chile.

Water column hydrophone stations of the CTBT International Monitoring System (IMS) are typically comprised of two triplets of moored hydrophones deployed on opposite sides of an island. Once deployed, the systems relay underwater acoustic waveforms in the band 1 – 100 Hz in real time to CTBTO via a shore based satellite link. The re-establishment of hydrophone station HA03 at Robinson Crusoe Island (670 km west of the Chilean mainland) is presented here. The station was destroyed in February 2010 by a Tsunami induced by an 8.8 magnitude earthquake. After a major engineering and logistical undertaking, HA03 was completed and returned back in operation in March 2014. Examples of data acquired by HA03 are also presented. These include hydroacoustic signals from the 1 April 2014 magnitude 8.2 earthquake in Northern Chile, bursting underwater bubbles from a submarine volcano near the Mariana Islands (15,000 Km away from the station), and vocalizations from the numerous marine mammals which transit in the vicinity of HA03.

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