

Colombian National Report
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Colombian Sea Level Network: Current Status

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1. Introduction

Act 99 of 1993 gave rise to the National Environmental System (SINA), which integrates guidelines, rules, activities, resources, programs and institutions to implement the general environmental principles.

To give technical and scientific support to agencies that make up the SINA, Act 99 created the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM) as a public corporation under the Ministry of Environment. It started its work on March 1st 1995.

The IDEAM is responsible for generating knowledge and produce and supply environmental data and information in addition to studies, research, inventory, monitoring and managing the information used to justify the decision-making on environmental policy and to provide the foundation for environmental management of the territory, the management, use and exploitation of natural resources biophysical of the country.

The IDEAM, directs and coordinates the environmental information system, which includes observing systems, information, databases and models on the environment and natural resources.

The Oceanographic and Hydrographic Research Center (CIOH) from the General Maritime Directorate (DIMAR), has been actively participating in the Working Groups.

2. Sea Level Stations in Colombia

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Location	Latitude	Longitude	Institution that operates the station	Status*	Sea Level Sensor Description	Measuring other variables	Period of record
Cartagena. Muelle CIOH.	10°23'29" N	75°32'13"W	IDEAM's equipment operated by the CIOH	EX	Mechanic Floater	IDEAM's synoptic weather station at 500 meters	1995-2009
SAN ANDRES	12° 33`N	81° 46`W	IDEAM	EX	Optical Sensor	Automatic	1996-2009
I.DEL ROSARIO	10°11'0.32"N	75°40'0.16"W	IDEAM	EX	Optical Sensor	Automatic	1989-2009
CAPURGANÁ	8°30'58.4"N	77°19'41.7"W	IDEAM	EX	Optical Sensor	Automatic	1995-2009
JUANCHACO	3°55'30.4"N	77°19'41.7"W	IDEAM	EX	Optical Sensor	Automatic	2004-2009
BUENAVENTURA	3°53'24.9"N	77°03'43.8"W	IDEAM	EX	Optical Sensor	Automatic	1951-2009
TUMACO	1°49'09"N	78°43'48.5"W	IDEAM	EX	Optical Sensor	Automatic	1951-2009

* Please rank status in accordance with the following information:

OP Operational (according minimal requirements).

OP+RT Operational with real time transmission.

EX Existent Station.

PL Planned Station.

PL+RT Planned Station with real time transmission.



Figure 1. Colombian Gauges Network

3. Data Stream

Today Colombia has not established a specific data stream into the Global Sea Level Observing System (GLOSS) program.

4. Future Plans

As a result of different institutional efforts to achieve an optimal level on observation and monitoring sea level, have been developing efforts to acquire two

capacities are currently non-existent as the Tsunami Warning Center and the National Sea Level Network.

4.1 National Tsunami Warning Center (CNAT)

Project whose first phase is focused on the initiation activities that aim to generate basic skills on equipment and primary facilities to operate a Tsunami Warning Center.

It provides for the initial acquisition of 02 gauges to be installed on Gorgona Island and Tumaco and training for the equipment. Moreover raises the acquisition and installation of auxiliary equipment that enables the display of information from gauges of seismic events nationally and in general in the Pacific Ocean, information and data exchange, backup support for electrical equipment, locally, nationally and internationally communications, analysis and information processing. Likewise, acquisition and installation of computational tools as CISN DISPLAY V1, TIDE TOOL V6.11 and TSUNAMI TRAVEL TIME.

4.2 National Sea Level Network

Whereas in Colombia there are several institutions whose interest leads to the need for sea level information, provides for criteria unification and standards establishment that allow join the efforts of all these institutions into a single National Sea Level Network.

For this is absolutely essential get support staff expert on the sea level issue that could lead to a national workshop with the participation of technical representatives of each of these institutions.