El Ecuador ha sido, es y será
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ARMADA DEL ECUADOR
INSTITUTO OCEANOGRÁFICO
Guayaquil

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NATIONAL REPORT OF ECUADOR

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1. Scope of Report

The Oceanographic Institute of Ecuador (INOCAR) is an Ecuadorian Navy Research Center of oceanography and hydrographic sciences and is responsible for the installation and maintenance of tide gauges stations as well as acquisition, processing, archiving, prognostics and published of sea level data.

2. Tide gauges networks in Ecuador

Actually, there are 11 operational tide gauges stations in Ecuador, as you see in figure 1 and table 1; it gives the location of these stations. All of these tide gauges stations belong to INOCAR

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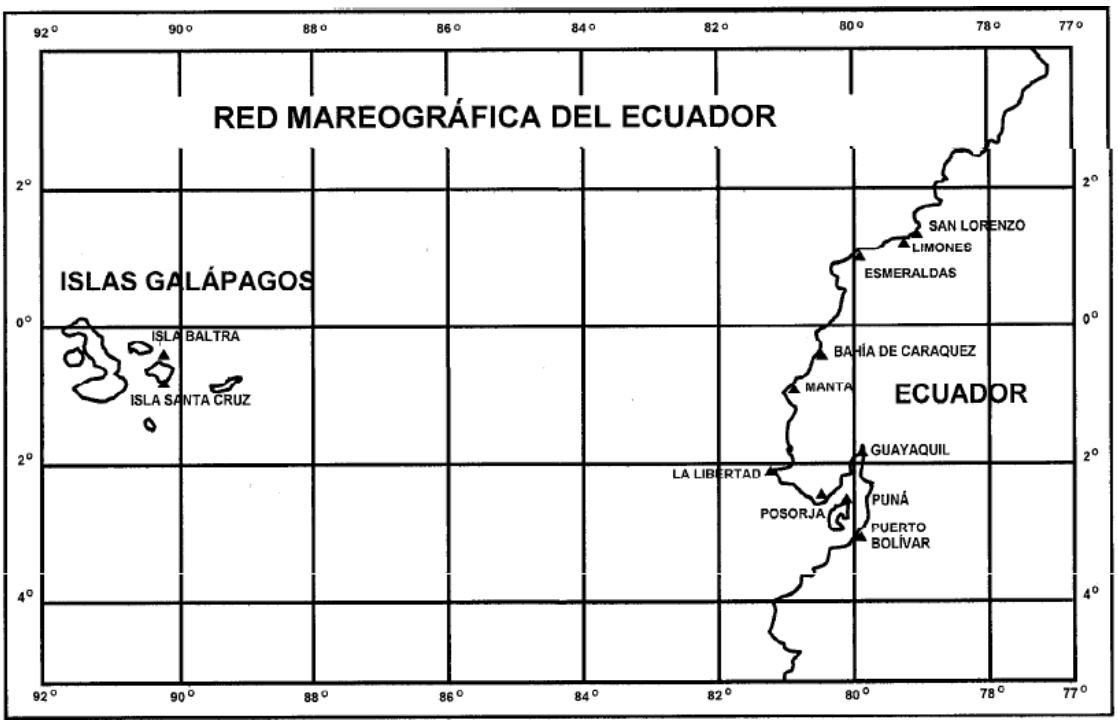

Figure 1.- Location of tide gauges stations in Ecuador.

Table 1.- Geography and UTM coordinates of tide gauges stations in Ecuador

PLACE		COORDINATES (WGS-84)			
		GEOGRAPHY		UTM (ZONE 17)	
		LATITUDE	LONGITUDE	NORTH	EAST
1	San Lorenzo	01° 17' 40" N	078° 50' 15" W	0143174	740628
2	Limones (Valdez)	01° 14' 55" N	078° 58' 47" W	0138092	724792
3	Esmeraldas	00° 59' 27" N	079° 38' 46" W	0109557	650586
4	Bahía de Caráquez	00° 36' 26" S	080° 25' 22" W	9932973	564212
5	Manta	00° 55' 53" S	080° 43' 18" W	9897075	530971
6	La Libertad	02° 13' 04" S	080° 54' 23" W	9754872	510422
7	Posorja	02° 42 '00" S	080° 14' 41" W	9701549	583940
8	Puerto Nuevo	02° 16' 42" S	079° 54' 44" W	9748113	620967
9	Puna	02° 44 '05" S	079° 54' 43" W	9697689	620948
10	Puerto Bolívar	03° 15' 35" S	080° 00' 05" W	9639641	610942
11	Isla Baltra	00° 26" 06" S	090° 17' 06" W	9951865	802217

3. List of Tide Gauges Sites and Technical Specifications

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Guayaquil

A List of tide gauge sites with some details about gauge technology and sampling interval can be found in table 2. In Ecuador, there is no equipment use of GPS Technology yet.

Table 2.- Technical specification of tide gauges equipment

STATION	DATA LOGGER EQUIPMENT	MARK	AVAILABILITY BY TELEMETRY (MODEM)
1 Limones	GS-98	STEVENS	N/A
2 San Lorenzo	AXSYS-MPU + SDI-12	STEVENS	N/A
3 Esmeraldas	AXSYS-MPU + SDI-12	STEVENS	2000
4 Bahía de Caráquez	GS-98	STEVENS	2005
5 Manta	GS-98	STEVENS	2002
6 La Libertad	GS-98	STEVENS	2000
7 Puerto Nuevo	GS-98	STEVENS	N/A
8 Posorja	GS-98	STEVENS	2003
9 Puna	GS-98	STEVENS	2003
10 Puerto Bolívar	GS-98	STEVENS	2005
11 Baltra	AXSYS-MPU + SDI-12	STEVENS	2008

4. Available Data:

All the following tide gauges stations have data series each hour from their installation until 2000 year. Table 3 indicates the date which is the information available for each tide station.

Table 3.- Date of data availability

Station Name	Data Inteval since 2000 year each 5 minuts	Data Availability since
1 Limones	Each 5 minuts	01- Jan- 2002
2 San Lorenzo	Each 10 minuts	01- Jan - 2002
3 Esmeraldas	Each 5 minuts	01- Jan - 1979
4 Bahía de Caráquez	Each 5 minuts	01- Jan - 1980
5 Manta	Each 5 minuts	01- Jan - 1973
6 La Libertad	Each 5 minuts	01- Oct - 1948
7 Puerto Nuevo	Each 5 minuts	01- Jan - 1975
8 Posorja	Each 5 minuts	01- Jan - 1984
9 Puna	Each 5 minuts	01- Jan - 1980
10 Puerto Bolívar	Each 5 minuts	01- Jan - 1970

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11 Baltra	Each 5 minuts	01- Jan - 1972

5. Sources of Further Information

Forecast Tide Data can be found at www.inocar.mil.ec

If you need a serial data of any tide station please contact us at inocar@inocar.mil.ec