

**Sixth Short Course on Sea Level Data Quality Control, Analysis and Applications
for the Tsunami and other Coastal Hazards Warning System for the Caribbean and
Adjacent Regions (CARIBE-EWS)**

26 February - 2 March 2018

Mexico City, Mexico

Report on Tide Gauge and Sea Level Monitoring Station at Port Royal,
Kingston Jamaica.

Romayne Robinson

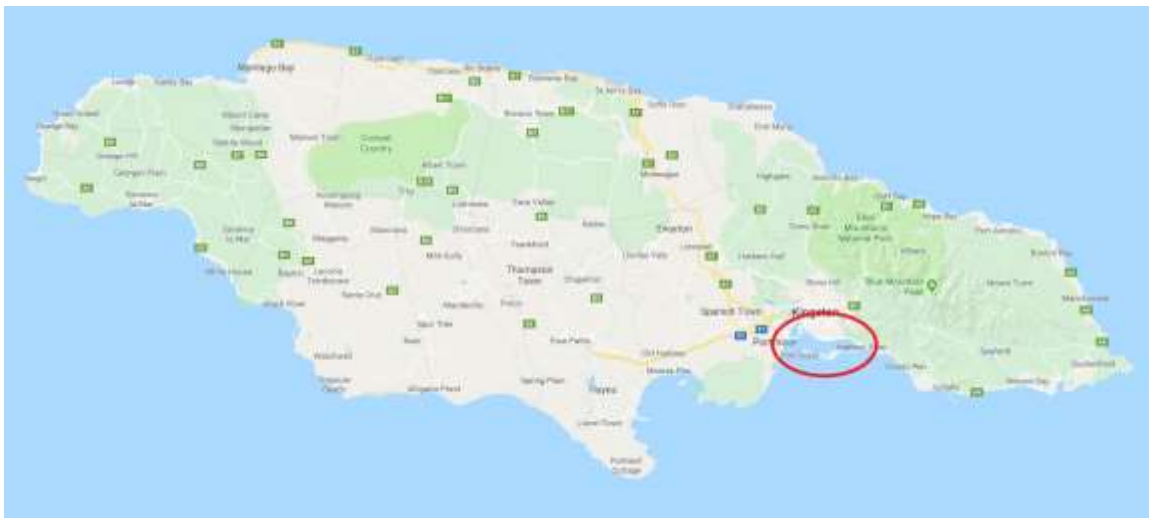
Meteorologist

National Meteorological Service

65 3/4 Half-Way-Tree Road Kingston 10

Jamaica

Geography of the Area around the Gauge



Map above shows the island of Jamaica and the parish of Kingston, circled in red.



Map above shows the area of Port Royal where the Tide Gauge is located.



Map above shows precise location of the Gauge, using red 4-Point star

METADATA on Port Royal Tide Gauge

Name	Port Royal
Installation Date	May 7, 2015
Specific Location (host)	Jamaica Defense Force Marine Post
Call Identifier	PTRO
Operated by	National Meteorological Service, Jamaica <i>datarequest@metservice.gov.jm</i>
Geographical Coordinate Location	Latitude: 17.934614
	Longitude: -76.845598
Connection and Transmission	GTS Global Telecommunication System
Sensors on board	Pressure (prs) sampled every 1 min
	Radar (rad) sampled every 1 min
	Power level (bat) sampled every 5 min

Data collected by Port Royal is transmitted to the IOC Sea Level Monitoring Facility and hosted on their website, under the direct link

<http://www.ioc-sealevelmonitoring.org/station.php?code=ptro>



Map above shows two Met. stations used to help correlate Tide Gauge data

Chart of downtime by Month, since installation

	2015	2016	2017	2018
		JAN	JAN	JAN
		FEB	FEB	FEB
		MAR	MAR	
		APR	APR	
MAY		MAY	MAY	
JUN		JUN	JUN	
JUL		JUL	JUL	
AUG		AUG	AUG	
SEP		SEP	SEP	
OCT		OCT	OCT	
NOV		NOV	NOV	
DEC		DEC	DEC	

Images of the Station and Location

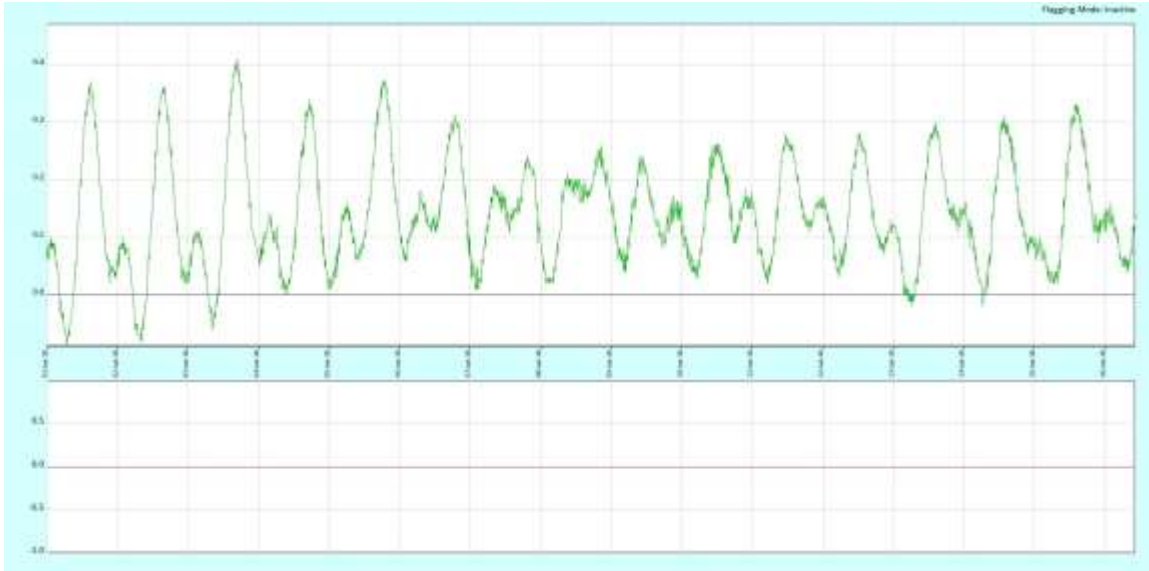




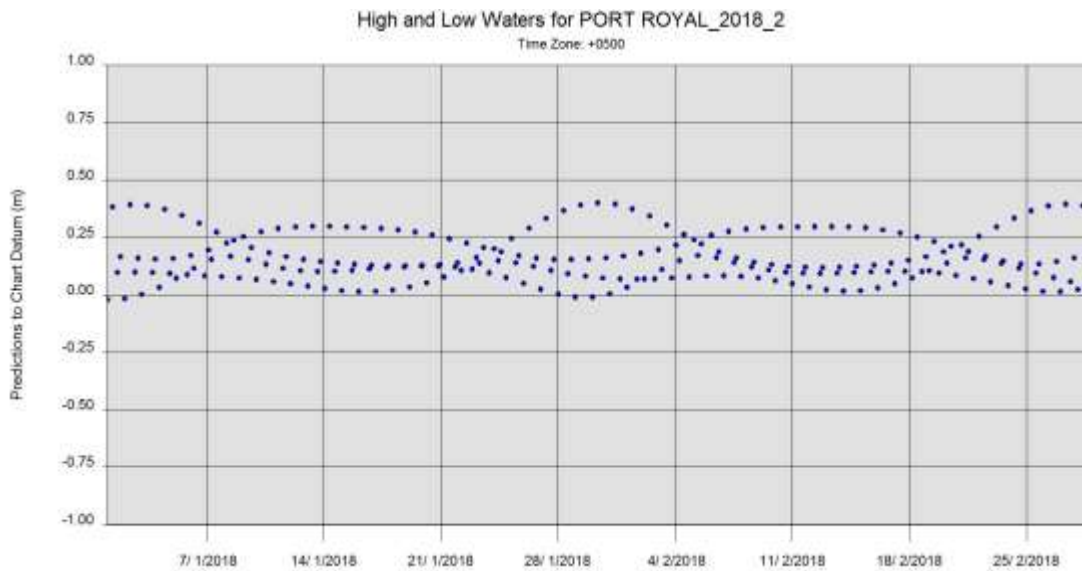




Assessing earthquake of January 10



Graph shows tide data from January 1 to 31



Graph shows high and low tide data from January 7 to February 25



Sandeep Shenoy @hitech_guru · Jan 10

Little damage as magnitude-7.6 quake hits in sea north of Honduras - wlbz2.com/news/nation-wo... #Earthquake #TsunamiWarning #Caribbean #Honduras #Mexico #Jamaica #Tsunami #Weather



Sandeep Shenoy @hitech_guru · Jan 10

Tsunami advisory canceled after 7.6-magnitude earthquake strikes near Honduras - sfgate.com/world/article/... #Earthquake #TsunamiWarning #Caribbean #Honduras #Mexico #Jamaica #Tsunami #Weather

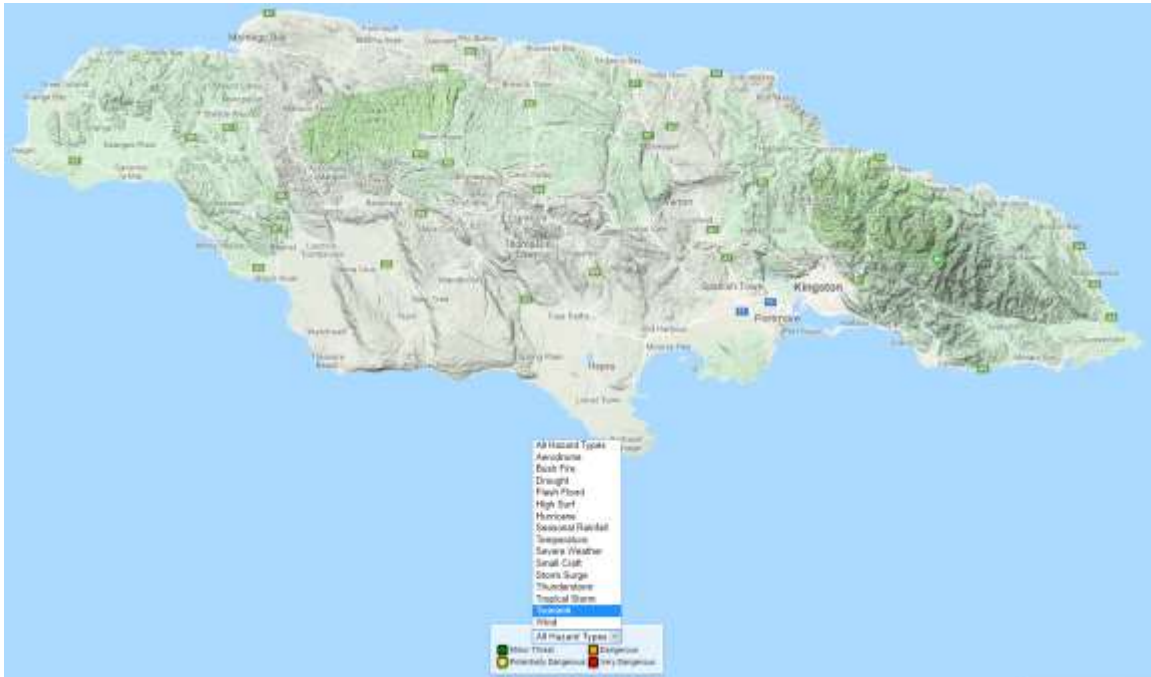


Tsunami advisory canceled after 7.6-magnitude earthquake strikes n...

A tsunami advisory was issued for the Caribbean after an earthquake with a preliminary magnitude of 7.6 struck near Honduras on Tuesday.

sfgate.com

In the Future



<https://alert.metservice.gov.jm>

Map above contains the SmartAlert software for automatic issuance of Tsunami Warnings, for specific coastlines across Jamaica.

SMARTALERT is an editable software, which runs in Windows and is fed model data through GFS, NAM and ECMWF. The Met Office is aiming to connect the data from the Tide Gauge to the SMARTALERT system, to provide automatic warnings for tsunamis, storm surge and small craft / high surf.



Morant Point Lighthouse, projected site of new Tide Gauge Installation

THANK YOU

*Romayne Robinson
Meteorologist
National Meteorological Service
65 3/4 Half-Way-Tree Road Kingston 10
Jamaica*

