



# NATIONAL REPORT ON SEA LEVEL OBSERVING ACTIVITIES

# **COTE D'VOIRE**

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## Ivorian tide gauges status

The Ivorian tide gauges are installed at Abidjan and San Pedro ports for basically practical applications. This includes coastal engineering, in which sea level data are needed as instantaneous levels, as well as statistics of extreme levels over long periods. Short-term measurements are needed for ship movements in harbors and ports, and for the operation of sluices and barrages.

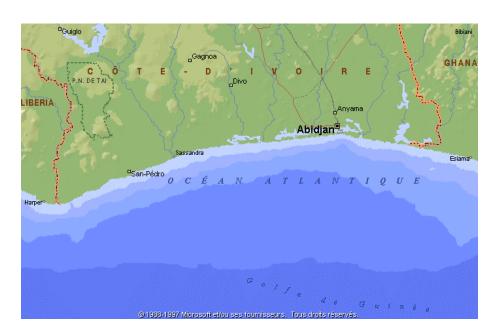
Five float tide gauges were initially installed in Abidjan and one in San Pedro ports. Only two float tide gauges are now operational in Abidjan port (Vridi canal and Quai Nord) and one in San Pedro port.

Tide predictions are based provided by SHOM and are based on Abidjan float tide gauge.

Station Name	Location Lat Lon		Responsible Organisation	Type of gauge/ Manufacturer	Data span	Mode of Transmission	Remarks
Abidjan - Apponte ment	05 15'N	04 W	Port Autonome d'Abidjan	A OTT	1951	Non real time	Paper form – many gaps
San Pedro	4°4'00"N	6°6'37''W	Port Autonome de San Pedro	A OTT	1986	Non real time	Numeric form - many gaps

Description of Abidjan and San Pedro stations

## Map of tide gauges network in Cote d'Ivoire



Location of the tide gauge stations along the Ivorian coast.

### Technology employed in the Cote d'Ivoire tide gauge network

The Ivorian network is based on the old stilling well gauge technology (AOTT). It becomes difficult to find spares for the maintenance of such equipment now.



Tide gauge housing at San Pedro

#### Overview of the data availability / Addresses of the data banks

San Pedro: Data are available in numeric format from 1986 to 2002 and from 2005 up to now at San

Pedro Hydrographical Department, see address above for contact).

Abidjan: sparse data are available on University of Hawaii Sea Level Center

http://uhslc.soest.hawaii.edu/uhslc/htmld/0230A.html

Data from 1990 up to now is available on paper form at Abidjan hydrographical Department. A digitization of these data started this year.

#### **Conclusion and recommendations**

Abidjan Hydrographical Department has acquired two pressures gauges and the preinstallation started this year. Four technicians have received a training course for the installation and maintenance of the equipment (EOPM tide recorder, manufacturer VAISALA oyj). The installation of the equipment will take place in 2009. The installation of this new equipment could improve the tide predictions and contribute significantly to the understanding of the relationship between sea level and sea surface temperature anomalies observed along the Ghanaian and Ivoirian coasts. It is desirable to install the same equipment at San Pedro port.





Components of the EOPM tide recorder