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.

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

Description of Abidjan and San Pedro stations

Map of tide gauges network in Cote d’Ivoire

[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 pre-installation 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.