

Takoradi Tide Gauge

Site of Gauge:

The tide gauge is located at Takoradi harbour, in a tide gauge hut belonging to the Western Region Survey Department.

Summary:

Station Name:	Takoradi
Country:	Ghana
Latitude of measuring point:	04° 53' 04.4" N
Longitude of measuring point:	01° 44' 42.1" W
Time Reference:	GMT (hours 00-23)
Contributor:	Survey of Ghana
Observational period:	4 January 2007 to 30 April 2010

Instrumentation:

Primary Channel:	OTT Kalesto Radar Sensor
Secondary Channels:	2 x OTT ODS4-K Pressure Sensors

Datum Information:

Data from start of series until May 2009 refer to local Chart Datum. After this, the station was relocated. The station started operating again in January 2010, but to a different, yet to be established, datum.

Benchmarks:

Benchmark	Description
TGBM GCS BM H4	Main benchmark. Marker on tide gauge, close to radar mount
HB TAK 3	Benchmark roughly 10m to the right of the tide gauge
SG1	Benchmark roughly 10m to the left of the tide gauge
SG2	Near the TKTG GNSS station
SGN1	Between tide gauge and harbour entrance, close to a large building
TKTG	Takoradi Tide Gauge GNSS station – 30m from tide gauge
SGN9	At harbour entrance
SGN3	On entrance of roundabout from the harbour
SGW346	In centre of roundabout
GPS4C	Auxilliary marker of TKRD, close to church

SGWH1	Pillar in front of Survey Department of Ghana office
SGN4	On left side of stairs of Survey Department of Ghana office
GPS1_Roof	Marker in roof near TKRD
GPS2_Roof	Marker in edge of roof near TKRD
TKRD	GNSS station on roof of Survey Department of Ghana office

Datum Relationships:

Chart Datum = 3.086m below TGBM GCS BM H4

Chart Datum = 3.292m below HB TAK 3

Chart Datum = 3.357m below SG1

Chart Datum = 3.415m below SG2

Chart Datum = 3.297m below SGN1

Chart Datum = 6.067m below TKTG

Chart Datum = 4.179m below SGN9

Chart Datum = 24.943m below SGN3

Chart Datum = 25.042m below SGW346

Chart Datum = 28.288m below GPS4C

Chart Datum = 30.427m below SGWH1

Chart Datum = 30.642m below SGN4

Chart Datum = 34.451m below GPS1_Roof

Chart Datum = 34.427m below GPS2_Roof

Chart Datum = 36.755m below TKRD

Quality Assessment

All data have been compared with the current Harmonic Constants library, and residuals checked. Records have been visually inspected for spikes, datum shifts and timing errors.

A datum shift occurs at the start of 2010 (see above).

Large gaps appear in the data over the following intervals

Missing data start (dd/mm/yyyy HH:MM)	Missing data end (dd/mm/yyyy HH:MM)
25/01/2007 08:47	29/01/2007 08:31
17/07/2007 21:17	24/07/2007 15:22
14/08/2007 15:20	08/10/2007 17:32
19/10/2007 07:04	24/01/2008 16:27
19/04/2009 01:48	25/05/2009 08:02
29/05/2009 21:35	22/01/2010 18:32

