



Monitoring vertical displacements of TGBM using GNSS measurements and their connection to the permanent GNSS stations in Israel

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Research purpose

- Connection of tide gauges to the permanent GNSS stations in Israel.
- Establishment of three-dimensional geodetic network for the Tide Gauge Benchmarks (TGBM) using GNSS measurements.
- Monitoring vertical displacements of TGBM.
- Connection of Red Sea (Eilat) to Mediterranean Sea using GNSS measurements.

IMPLEMENTATION METHODS

- Static GNSS measurement of TGBM points will be performed in few campaigns over few years.
- These points are located near the tide gauges in five sites: Acre, Tel Aviv, Ashdod, Ashkelon and Eilat.
- In each campaign all TGBM points will be measured simultaneously with long time sessions by GNSS receivers.
- The first campaign was already performed in December 2010.



IMPLEMENTATION METHODS (cont.)

- Vector solution and adjustments of network composed of TGBM points and the permanent GNSS stations using scientific software.
- The analysis of results for vertical displacements' examination of TGBM points between different measurement campaigns.



