



Morje potrebuje naš glas
The sea deserves our voice

30 let
Sredozemskega akcijskega načrta
14. redno zasedanje pogodbenic Konvencije
o varstvu morskega okolja in obalnih
območij Sredozemlja in njenih protokolov
Portorož, Slovenija, 8. - 11. november 2005

30 years
Mediterranean Action Plan
14th Ordinary Meeting of the
Contracting Parties to the Convention
for the Protection of the Marine
Environment and the Coastal Regions of
the Mediterranean and its Protocols
Portorož, Slovenia, 8 - 11 November 2005



TIDE GAUGE STATION KOPER

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The traditional tide gauge Koper established in 1958 has been upgraded to modern tide gauge together with meteorological and GPS station. The new structure is equipped with new instruments, including radar and GPS. Together with absolute gravimetry in the vicinity and satellite altimetry calibration tide gauge will offer new generation of sea level data.

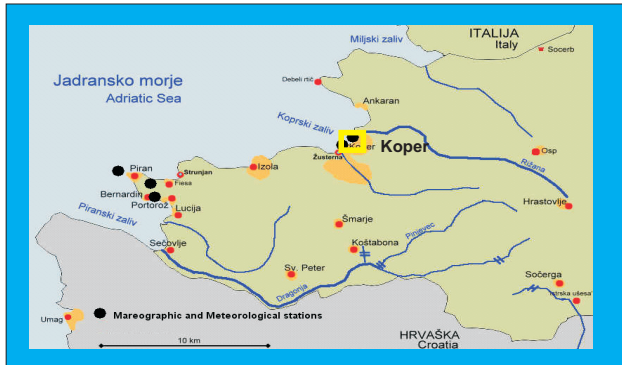
Upgrading of tide gauge is the response to contemporary demands for research and forecasting of phenomena as sea level trend, tectonic movements, sea shore floods, tsunamis, etc.

Up to date principle of sea level measurement:

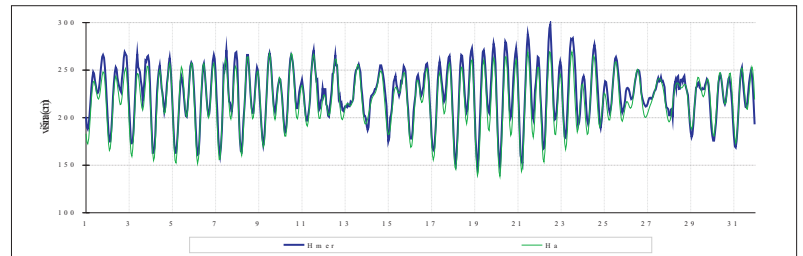
Co-location of tide gauge with GPS and occasional absolute gravimetry in the vicinity enables the separation of sea level changes from the tectonic movements.

The system comprise measurements of:

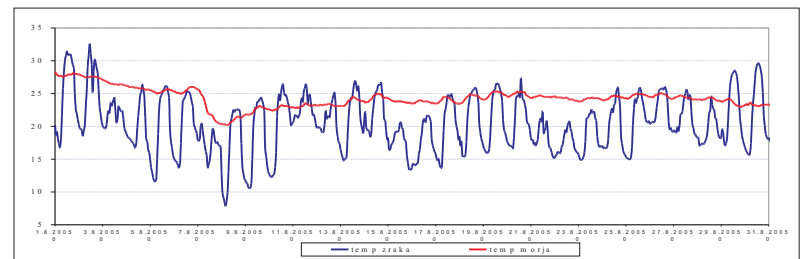
- sea level,
- sea temperature,
- meteorological data: wind velocity and direction, air pressure, air temperature, humidity and
- geodetic measurements: continuous GPS, absolute gravimetric campaigns, leveling.



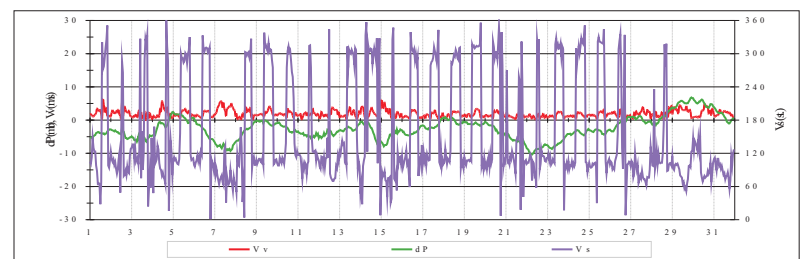
Sea level



Sea and air temperature



Meteorological data: wind direction and velocity, air pressure



Technical characteristics of the station:

The structure is adapted to specific demands of use. It is founded on piles in stable sea bedrock. Special arrangement for geodesy measurements (carbonic port of antenna with minimal temperature deformation) enables good quality of geodetic measurements. The station is also protected against weather exposure.

Tide gauge data availability and its distribution:

The data of continuous measurements are collected at tide gauge in half an hour files or higher frequencies. Near real time data from the station are available at national and international centres with low lateness.

The station was designed during EUFP5 ESEAS RI project and is a part of European Sea Level Service ESEAS operational network.



GPS antenna Leica



Radar level measurement instrument Krohne



Float-operated Thalimedes shaft encoder Ott