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Monitoring sea level fluctuation in South Aegean

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The complexity of the geological setting of the South Aegean is well-known, among the scientific community. The subduction zone coupled with the latest unrest of the Santorini volcano, as well as the particular morphology of the earth's surface and seabed pose a poorly understood source of tsunami hazard.

A sparse network of tide gauges that operate in the area for varying periods of time is strengthened by the establishment of new sensors at carefully selected locations, by the Institute of Geodynamics of the National Observatory of Athens, and the Dionyssos Satellite Observatory and the Laboratory of Higher Geodesy of the National Technical University of Athens. These new instruments, aided by a rather dense network of GNSS receivers, provide a more concrete basis for the development, testing and evaluation of a near real-time model of the sea level changes in the area.

Moreover, integration with various other sensors allows to understand and assess the level of tsunami risk in the area.