Historical sea-level observations in Italy: potential data sources

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Sea-level records in Italy date back at least to the 18th century, but the history of modern observations started in the mid-19th century. During over a century a very variable number of stations was operational, mostly between 10 and 30. Different agencies were in charge of one or more tide gauge stations, and real national networks were only active in 1896-1922 and from 1986 onwards. Many tide gauge data and metadata have never been published and survive in several archives.

Military Geographic Institute (I. G. M.), Florence
1872-1922: 22 TGs

Except for the last few decades, the data collection, analysis and publication have often been made irregularly. Moreover, lots of charts and data were reported to have been lost because of the lack of proper preservation. Major known archives are those of:
- the Geographic Military Institute, whose data cover the whole Italian coastlines in the 1872-1922 period, and
- the former ‘Magistrato alle Acque’ in Venice, with observations mainly made in the Adriatic Sea and the Venice Lagoon.

Local archives holding comparatively little amounts of data are located in:
- the Hydrographic Institute of the Italian Navy in Genoa,
- at CNR-ISMAR, Trieste, and
- the University of Trieste.

Hydrographic Office of former ‘Magistrato alle Acque’, Venice
1909 - ~1954: ~11 TGs (Adriatic coast), ~25 TGs (lagoons)

CNR, Institute of Marine Sciences, Trieste
Trieste, 1905-1938

Survey of ‘R.N. Marsiglì’, Strait of Messina
November 1922 - June 1923: 2 TGs

TG data analysed in the framework of a CIESM activity
Sfax 1917-18, Bizerte 1918, La Goulette 1922-23, Malta 1929

Survey of ‘R.N. Magnaghi’, Red Sea, October 1923 - May 1924: 11 TGs