

Questionnaire

We would be grateful if you could provide the following information:

1. PRIMARY INFORMATION	
Contact Name Address Tel/Fax/E-mail	Dr. Fabio Raicich CNR-ISMAR, Sezione di Trieste Viale Romolo Gessi 2 I-34123 Trieste, Italy +39 040 305617 / +39 040 308941 / fabio.raicich@itt.ts.cnr.it
Location of the historic measurements (station name, country name, if possible latitude/longitude) If possible a local map should be provided showing the location of the measurements within a port or harbour (we realise that sometimes the exact location may no longer be known).	Trieste, Italy 45°38'50.0"N / 13°45'33.9"E
Start and end dates of the measurements	1859: first measurements; 1862-89: irregular measurements; 1890-1900: annual means only; 1901-1904: monthly means; 1905-14: hourly data on original tables (except 1912, monthly means only), no charts; 1915-16: interruption; 1917-Dec. 1924 and Jun. 1926-Jan 12, 2001: charts only; Jan 13, 2001-present: charts and digital record.
Are existing (i.e. probably later) data already available in computer form from this site? If so, for what dates?	1905-11, 1913-14 (no charts) and 1939-Jan 12, 2001 (charts exist): hourly data from hand-written tables; Jan 13, 2001-present: hourly data from digital record.
Is this site a GLOSS station, or are there existing data from this site in the PSMSL, UHSLC or other international data banks? (We can enter this field if necessary from our knowledge of GLOSS, PSMSL and UHSLC)	No GLOSS station. Monthly and annual data in PSMSL data bank.

2. SUPPLEMENTARY INFORMATION	
Type of charts. Manufacturer of the charts. Approximate size (cm x cm or inch x inch).	Ott provided for several years its own charts. No detailed information on other manufacturers (note: Pagan is a local manufacturer). Fuess gauge: 71.2 cm x 32.6 cm (time axis x height axis) Ott gauge: 49.5 cm x 52.0 cm Pagan gauge: 43.5 cm x 37.7 cm
Manufacturer and description of the gauge itself.	All float gauges Seibt-Fuess (1917-1984): daily chart Büsum-Ott (1966-present): daily chart Pagan (1961 and 1985 - present): weekly chart
Scale factor (i.e. ratio of sea level in the ocean to that on the chart)	1/10
Chart replacement frequency (e.g. daily, weekly)	Daily charts replaced daily or weekly (variable with time). Weekly charts always weekly.
Quality of charts (e.g. Is the pen trace thin and distinct, which is good, or fat or smudged, which is bad? Is the paper deteriorating? How much high-frequency variability is there in the pen trace from waves,	Old charts (prior to 1960 approx.): with few exceptions, well readable thin color pencil trace superimposed by hand on silver writing point trace. The hand-written trace filters out

harbour activity or seiching).	high frequency oscillations (period approx. < 5 minutes). Modern charts: well legible ink-pen trace, generally thin; sometimes thick with strong wind (Bora) when the stilling well hole was too large.
How often were checks made on the gauge by a local observer?	Every time charts are replaced.
Is there corresponding data available from tide pole readings? How frequent were they (e.g. daily, weekly) and are how are those readings recorded (e.g. in a book, marked on the chart)	No tide pole. At every chart replacement direct readings using: a paper strip containing silver nitrate (?) approx. until 1980; afterwards, a metal flexible meter coupled to an electric circuit.
Is there other detailed knowledge of the relationship between the zero of the chart readings, tide gauge zero, tide pole zero, heights of nearby benchmarks etc.?	Charts report highs and lows, and times of their occurrence, in centimetres relative to tide gauge zero. Relationships with nearby geodetic benchmarks are available.

Please provide as much as possible other background information and send replies to this questionnaire to Liz Bradshaw either by email (elizb@bodc.ac.uk), fax (+44 151 652 3950) or post to:

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Many thanks once again for your time and interest in this.