



Tide gauge datum continuity at Brest since 1711: France's longest sea-level record

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The issue of a possible tide gauge datum discontinuity at Brest, caused by the bombing of the city in August 1944, is discussed. This issue is very important, as many scientists have used this long record to derive a long-term sea level trend estimate for use within global sea level rise studies. A detailed analysis of historical leveling information, and comparison of sea level data between adjacent stations, proved to be worthwhile, even beyond this initial scope of the study: it led to an accurate datum connection between recently rediscovered 18th century sea level data (back to 1711) and those of the present day. The study provides additional evidence that the onset of recent rapid sea level rise most likely took place in the late 19th century, in agreement with the nearby Liverpool sea-level record and with independent results from sediment cores collected in salt marshes located in both hemispheres.