

## Comment on **essd-2022-218**

Giuseppe M.R. Manzella (Editor)

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Editor comment on "Reanalyses of Maskelyne's tidal data at St. Helena in 1761" by Philip L. Woodworth and John M. Vassie, Earth Syst. Sci. Data Discuss.,  
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The paper proposes an analysis of historical data that can help to understand changes in the characteristics of the tides over the centuries (if changes are occurring). The critical analysis of historical data is very well done and the methods used to verify the reliability of the data and their current value are exhaustive.

There are some missing details on 'methodologies and technologies' that may be added to satisfy the reader's curiosity.

In the introduction one could have expected a brief presentation of why tidal characteristics can change (lines 30 - 33) and whether the reasons for the changes are measurable over a period of a few hundred years.

Line 78: ... **agreed consistently to better than half an inch (12 mm)**. Considering that the tidal movements are of lesser amplitude than those due to wave movements and other high frequency coastal movements, I wonder that short waves, spray, shower ... may have influenced the measurement reading. May be the pole was in a sheltered place. Are there any indications in the original manuscript or in other works by Maskelyne?

Line 112: ... **times set down are exact to the minute** It would be useful to know the type of clock used exactly to the minute and what is the meaning of '**apparent time**' in figure 1.

Line 492: ... **several measurements that Maskelyne flagged as suspect** Is it possible to add more details on how Maskelyne flagged 'suspect' data?

It is a pity that some documents are available only in English libraries. Their on line availability would have fascinated many readers to the subjects of historical oceanography.

However, the article represents an excellent example of revisiting and processing historical data