

Interactive comment on “Are tidal predictions a good guide to future extremes? – a critique of the Witness King Tides Project” by John Hunter

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I thank Phil Watson for his comments. However, I feel that he has missed the main points of the manuscript, which are not to misrepresent the objectives of the Witness King Tides ("WKT") project by criticising its scientific output. Rather, I state that WKT has "the aim of indicating the flooding that may occur routinely with sea-level rise" (page 1, lines 10-11) and my purpose is to "indicate regions of the world where WKT should perform well and others where it would not (Abstract, lines 2-3). I do not criticise WKT for any lack of rigorous or quantifiable scientific output.

As indicated in the Conclusions, I (a) show regions of the world where WKT may be successful "in the sense that the day of highest predicted tide for the year would

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yield an observed level comparable with the maximum observed level for the year" (Page 16, lines 7-9), (b) suggest that local tide-gauge records should be analysed prior to initiating a WKT project in order to assess its likely success, and (c) suggest an alternative approach which is "to photograph every high tide of the year and pick, in retrospect, the images which show the highest sea level using the camera of a smartphone, suitably programmed to take photos at the required times and to transmit them to a central repository" (Page 16, lines 13-15); this could form the basis of an alternative citizen-science project.

I agree with Phil that the primary motive of WKT is "to raise public awareness about the prospect of predicted sea level rise from climate change and how that might impact local landscapes". However, my manuscript hopefully serves as a warning that WKT should be planned with care and with due cognisance of a possible unintended consequence - namely, that a strong negative storm surge on the day of a WKT project could yield photos that are so underwhelming as to suggest to the general public that the impact of sea-level will be minimal. This is my biggest fear about WKT projects that are planned without a good understanding of the local regime of tides and storm surges.

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