

Review 2

First, I would like to congratulate the authors on their work to providing a comprehensive review of storm surge forecasting methods in the northern Adriatic Sea. The background information on the physics of the flooding behind Venice also provides good foundation for the readers to understand the problem and appreciate the methods that are available. The review is thorough and covers multiple facets of storm surge forecasting both in a regional and local level. However, I believe that a few more inputs would improve the manuscript to help provide more information to readers. With that said, I would recommend this paper for publication after minor revisions.

We thank the reviewer for the positive evaluation of our manuscript and for the precious recommendations. Below we detail how we are going to integrate these comments.

1. It is stated in the manuscript that a reliable meteorological forecast is an important factor. It would be interesting to see your approach on quantifying uncertainty coming from the forecasts themselves and how big that uncertainty is in relation to others (for instance model uncertainty)

This important question has to be resolved by the meteorological community. We will search for existing information that would indicate the inherent uncertainty of the meteorological data. We will discuss this point also in the discussion section where the review can make recommendations for further research and action.

2. In relation to the first question, have you done comparisons between the different forecasts? Or are there a previous studies providing the levels of uncertainties of different forecasts for north Adriatic region?

This is one of the important points that a forecasting system has to provide. The only published data on this is the i-Storms initiative that uses multi-model ensemble forecasting that allows an assessment on uncertainty. We will stress this point more thoroughly in the discussion.

3. Another interesting input to the paper would be the comparison in performance of the forecast based on numerical models versus forecast based on data-driven models, from former studies.

Some papers exist that provide an analysis of the score of various forecast systems. We will insert these findings into the manuscript and discuss them there.

4. Is a long-term storm surge forecast of interest to this paper? If yes, how useful are the global climate models for that? In terms of the spatial and temporal resolution, and level of uncertainty?

The implication of the impact of climate change on the frequency and strength of storm surges on the Venice lagoon has already been discussed in other papers published by authors of this manuscript. We will insert some of these findings into the discussion section of the manuscript.