

Third review of “Importance of non-stationary analysis for assessing extreme sea levels under sea level rise”

Around line 45. Nice explanation overall. I do think there is an overuse of brackets that hamper the reading. I would separate out the sampling methods (peaks over threshold and block maxima) from the extreme value distributions (GEV, PP, GPD).

Line 57. Isn't the comparison of different detrending techniques another objective?

Around lines 80. *We resampled all data recorded after 1989 to an hourly resolution with different Pugh filters.* Did you use more than one filter to resample the data? If not, which one did you use? Please, think about reproducibility.

Line 90. Typo

Line 157. where = $x + y$. Is this a typo?

Lines 173-174. *We used 1990-2019 hourly data from for Venice and 1968-2016 for Marseille (record length of 30 years for both stations).* Are these the years you have used to calculate the tidal coefficients? Please, indicate.

Line 183. What do these numbers mean?

Line 226. I don't understand Cheng et al 2014 reference here. You are talking about what you did.

Line 256. *When, where*

Results section is surprisingly short.

Line 304 to 308. Is this information based on your analysis? What results are you using to claim these conclusions?

Line 368- 369. *Overall, we show that using different methods allows to critically examine strengths and weaknesses of each method and to critically evaluate the results to drive the choice of the method that best fits the specific case.* This is the objective of the present paper, right? I would remove the sentence from your paper. What valuable information are you providing by saying this?