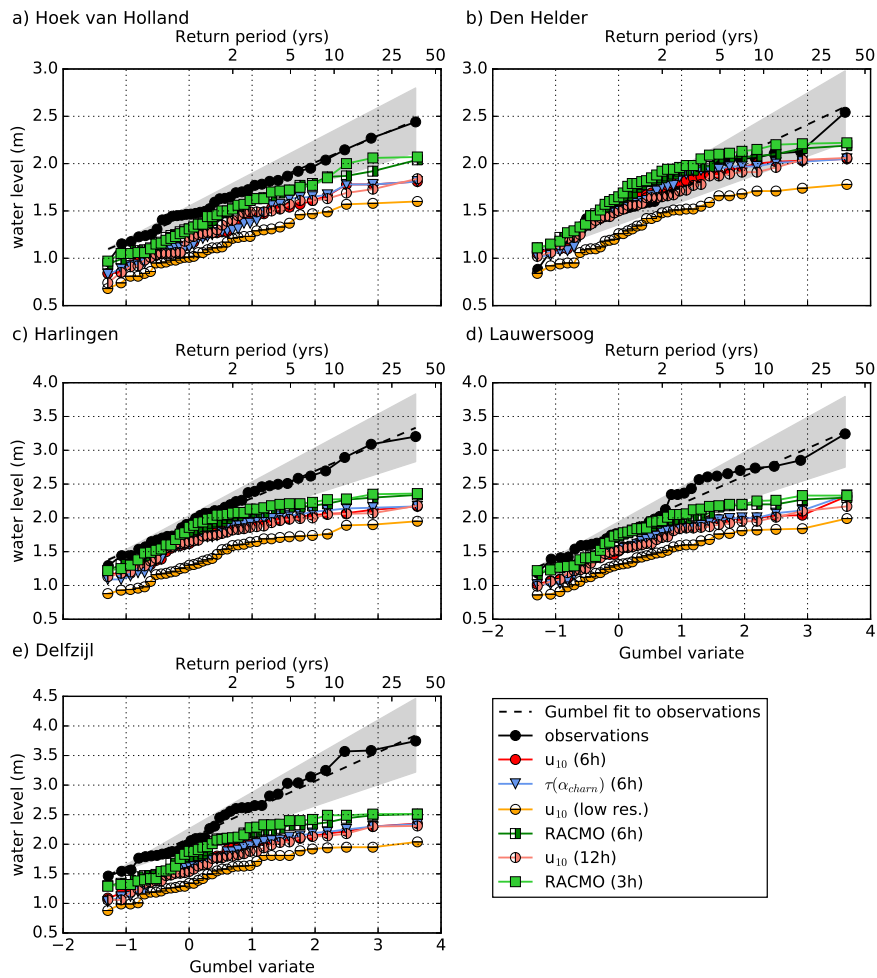
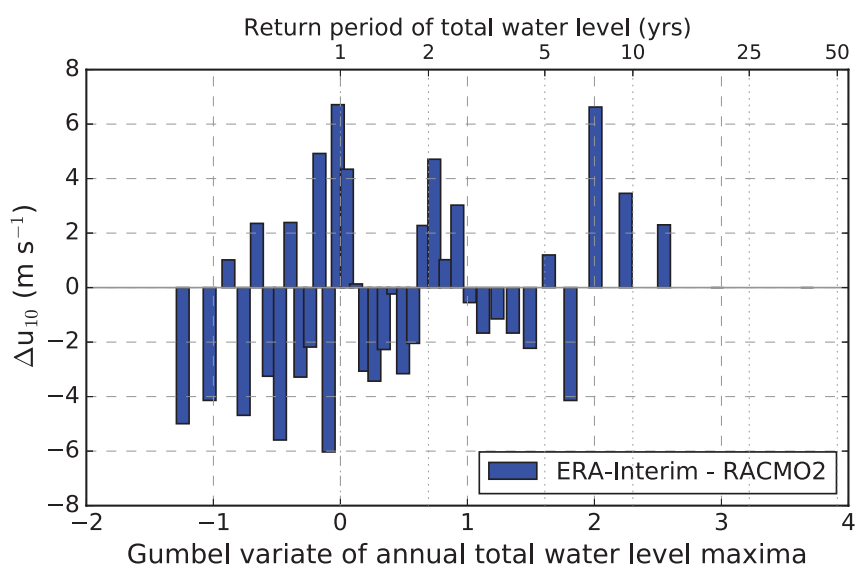


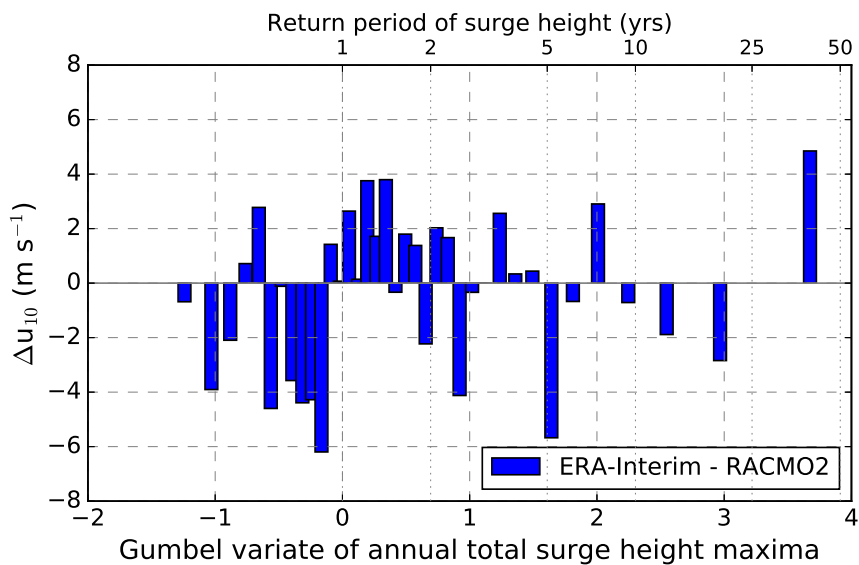
**Fig. S1** Location and data availability at stations along the Dutch coast taken into account. The five stations chosen for detailed assessment in this study are marked with '\*'.  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65



**Fig. S2** As Figure 4 and 8 but for annual maximum skew surge (difference between the maximum in the astronomical tide and the actual measured maximum total water level in each tidal cycle).



**Fig. S3** Difference in mean 10-m wind speed over 4.6°E - 7.4°E and 53.3°N - 55.3°N in ERA-Interim and RACMO2 during the 36 annual maximum total water level events at Hoek van Holland. The x-axis and return period refer to the annual maximum water levels as seen in Figure 4a of each event. Values above zero are events where ERA-Interim wind speeds exceed those of RACMO2. Zero values indicate equal mean wind speeds in ERA-Interim and RACMO2, while negative values occur for events where ERA-Interim wind speeds are lower than those in RACMO2.



**Fig. S4** As Figure S3 but for annual maximum surge height events at Hoek van Holland.