S1   Additional figures of fits to data

These Figures (Fig. S1–S6) are as Fig. 7 in the manuscript, but for different thresholds for the POT data and using WAM (instead of SWAN) as the primary wave hindcast. For an explanation of the different data sets (SWAN-χ^2, WAM-filtered etc.), please see Table 1 in the manuscript.
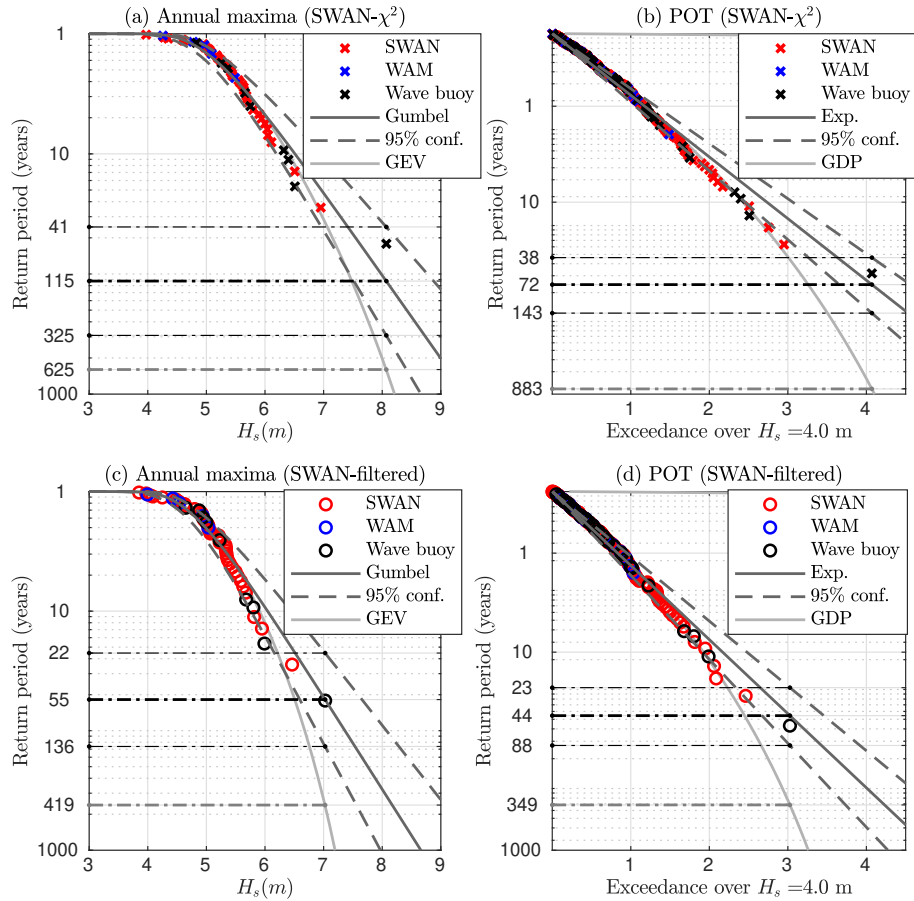
Figure S1: Fits to annual maxima and POT values (threshold $u = 4.0$ m) of the SWAN data. The top panels are fits to the original observations and model values with an added synthetic χ^2-variability. The bottom panels are fits to the original model data and low-pass filtered observations. In the top panels this single realisation of added χ^2-variability has purposefully been chosen to closely match the ensemble averages in Table 3 of the manuscript.
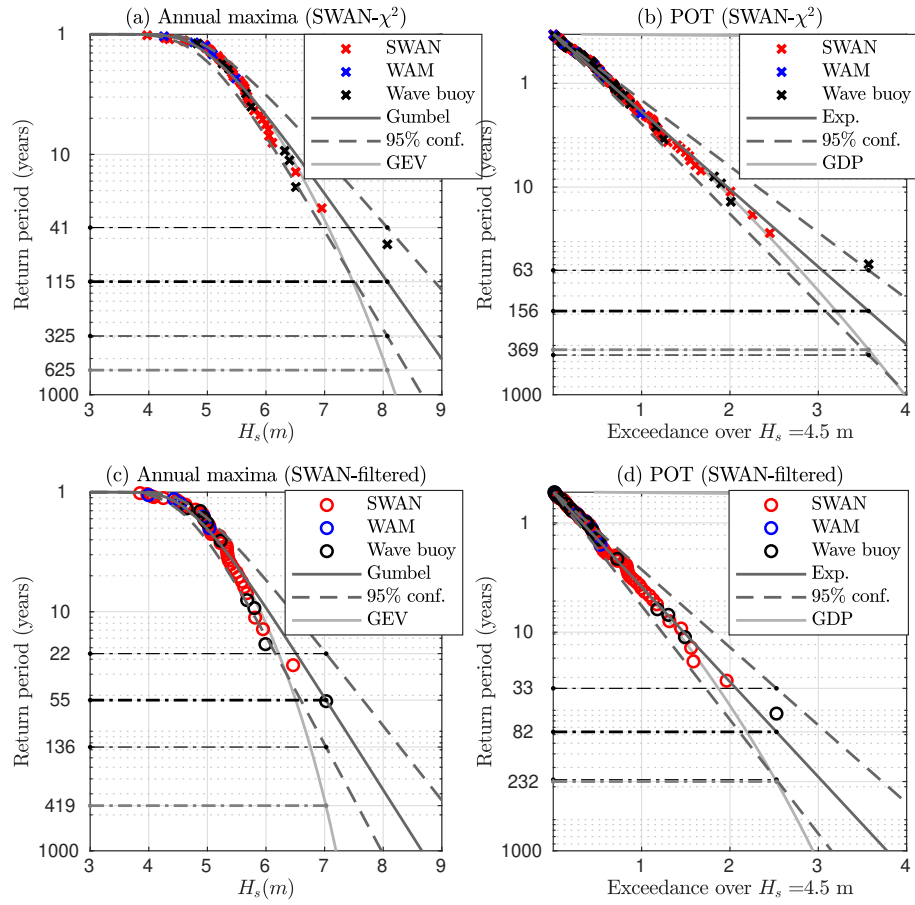
Figure S2: As for Figure S1 but with a threshold of $u =4.5$ m. This figure is identical to Fig. 7 in the manuscript.
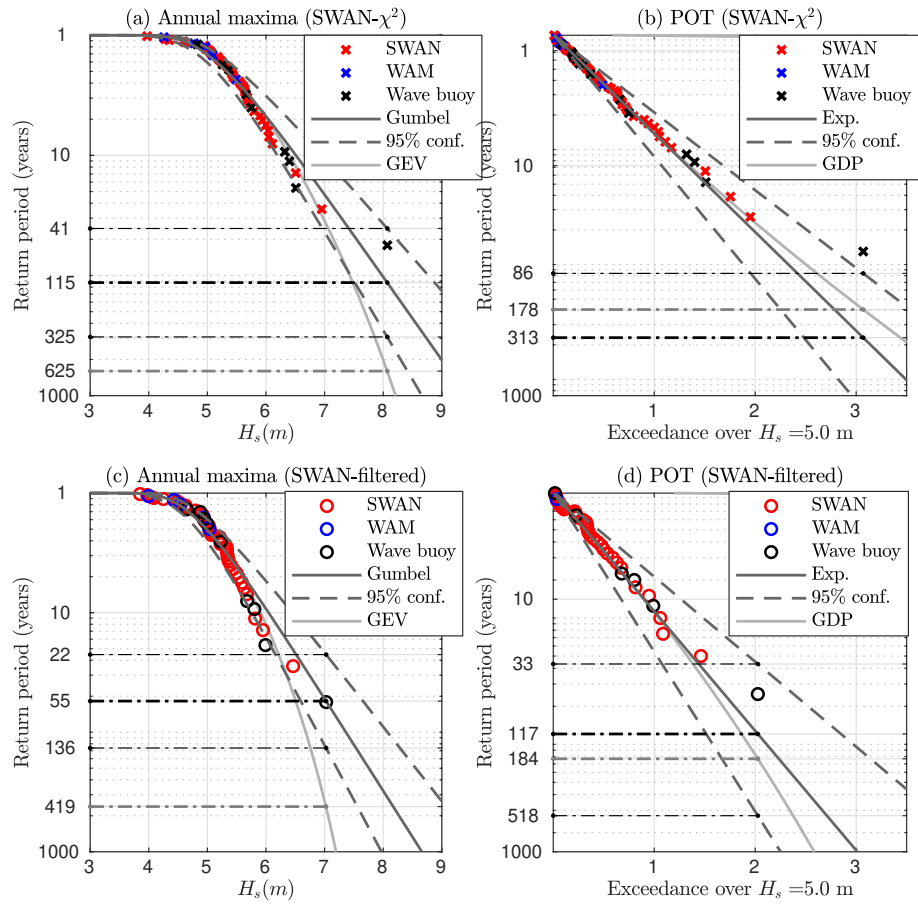
Figure S3: As for Figure S1 but with a threshold of $u = 5.0$ m.
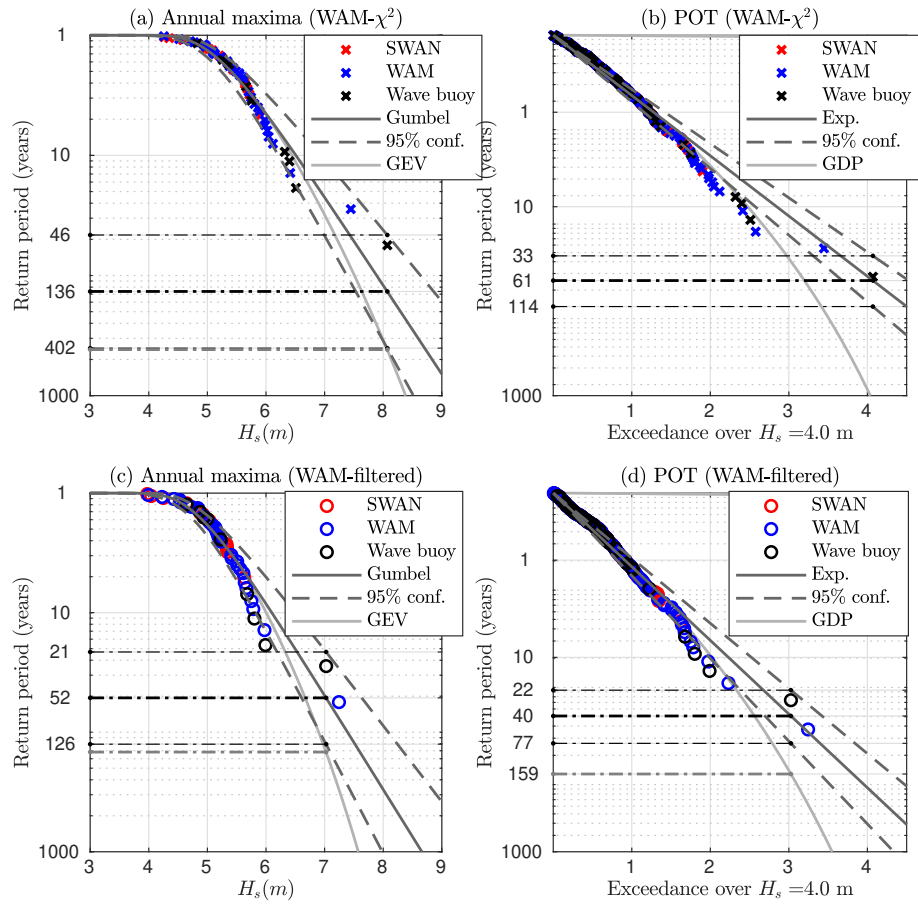
Figure S4: As for Figure S1 but for WAM data.
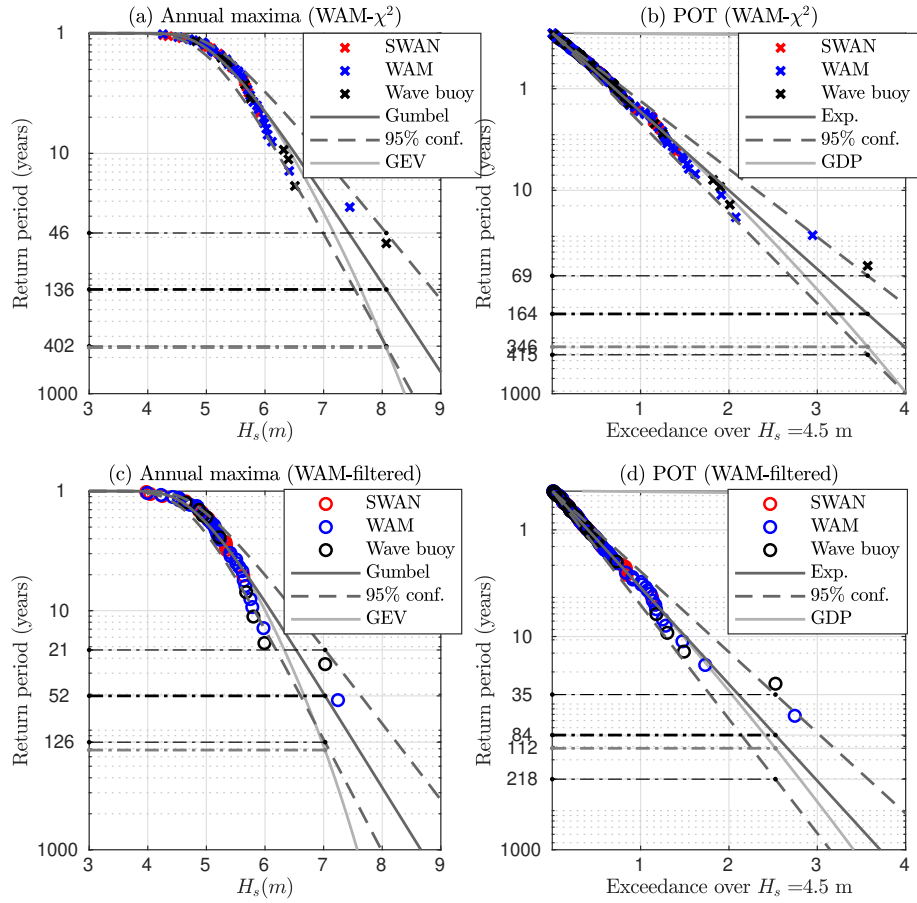
Figure S5: As for Figure S1 but for WAM data and with a threshold of $u = 4.5$ m.
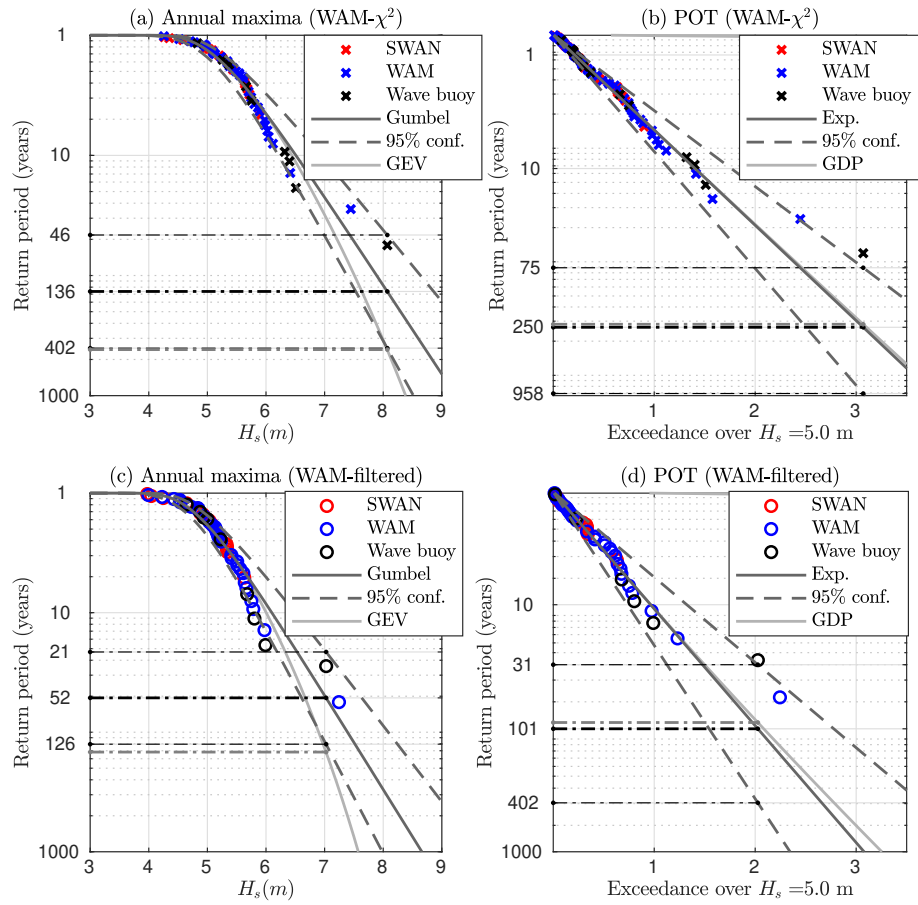
Figure S6: As for Figure S1 but for WAM data and with a threshold of $u = 5.0$ m.