

# Supporting Information for “Seasonal shift in storm surges at Brest revealed by extreme value analysis”

Markus Reinert<sup>1,2</sup>, Lucia Pineau-Guillou<sup>1</sup>, Nicolas Raillard<sup>3</sup>,

Bertrand Chapron<sup>1</sup>

<sup>1</sup>IFREMER, CNRS, IRD, UBO, Laboratoire d’Océanographie Physique et Spatiale, UMR 6523, IUEM, Brest, France

<sup>2</sup>Leibniz Institute for Baltic Sea Research Warnemünde, 18119 Rostock, Germany

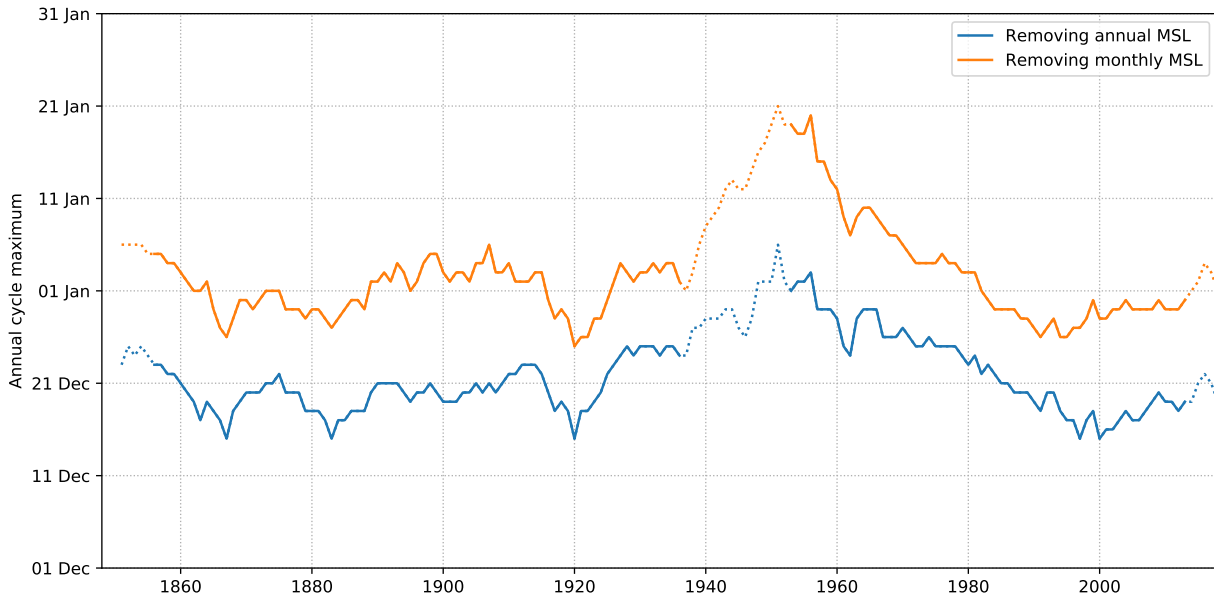
<sup>3</sup>IFREMER, Laboratoire Comportement des Structures en Mer, Brest, France

## Contents of this file

1. Figure S1

## Description

This file provides Fig. S1, supporting the Discussion of the above-mentioned article. Figure S1 shows again the graph of Fig. 3 of the main article and compares it with a graph calculated by a similar analysis. While the main analysis uses skew surge levels relative to an annual mean sea level (MSL), this supplementary analysis uses skew surge levels relative to monthly MSLs. The two graphs in Fig. S1 are thus obtained in the same way, apart from how the surge levels were calculated from the sea level record. They show similar evolutions, thus both methods support our conclusions.



**Figure S1.** Date of the year when the highest extreme surge is expected, with respect to the location parameter  $\mu$ , after removing annual (blue) or monthly (orange) mean sea level in the computation of skew surge levels.