

Supplementary Data to Recent morphologic evolution of the German Wadden Sea

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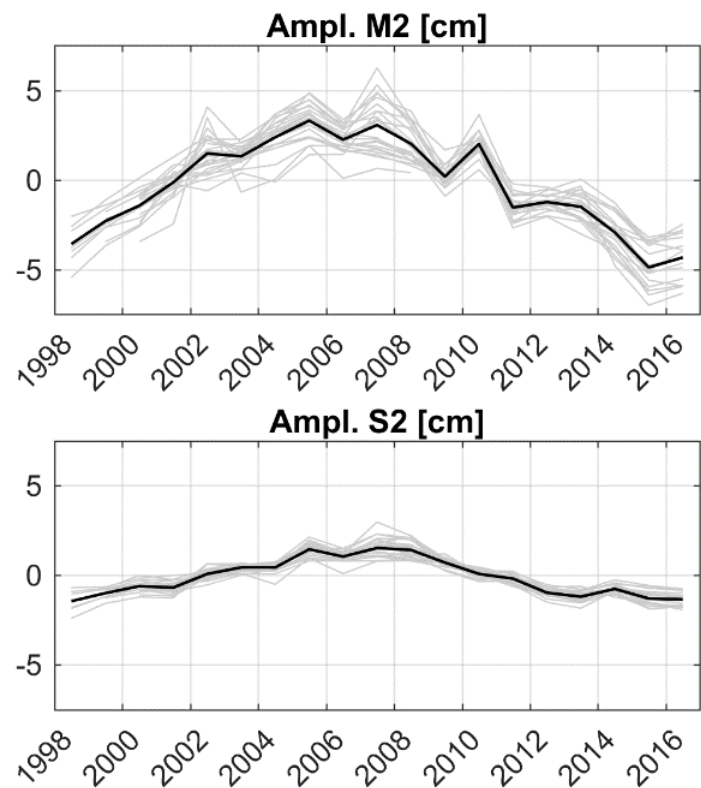


Figure A-1. Yearly average variance of the M2 and S2 amplitude for the considered time period. Amplitudes are calculated for the full year. The analysis is based on waterlevels (temporal resolution: 1 min) provided by the BAFG²⁵ and the Portal Nordseeküste²⁶.The data was processed and plotted using Matlab R2016b.

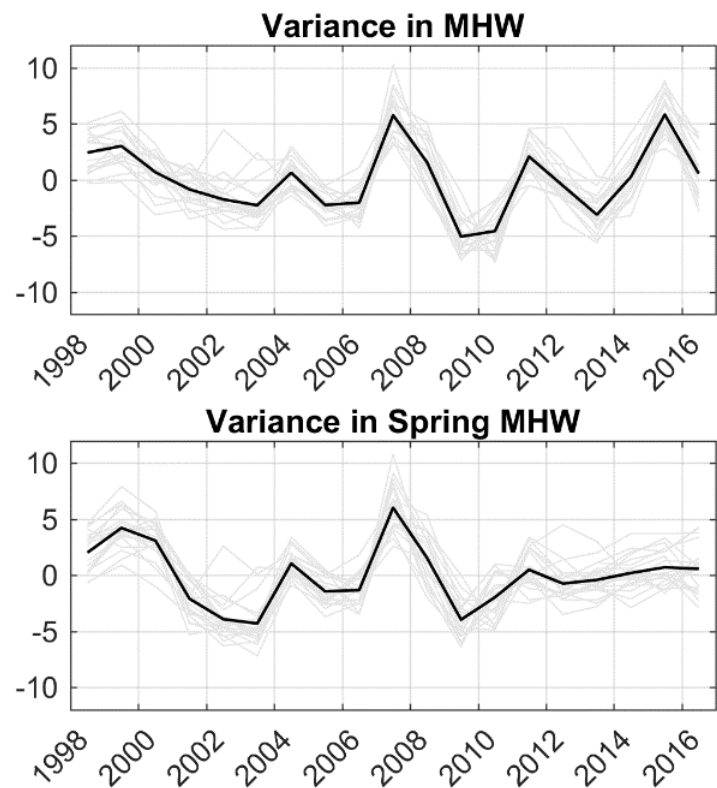


Figure A-2. Changes in MHW and MHW (spring tide only) averaged for 20 tidal gauges in the German Bight. The analysis is based on MHW values provided by the BAFG²⁵ and the Portal Nordseeküste²⁶. The data was processed and plotted using Matlab R2016b.

Table A-1 Average trends of MHW [A] and spring MHW [SP]. Given is also the standard deviation, the min/max, as well as the number of gauges considered in this analysis. The trends are based on an analysis of MHW values provided by the BAFG²⁵ and the Portal Nordseeküste²⁶.

		EMS		EFWS		JWE		EMB		NFWS	
full/spring	[F]/[SP]	F	SP	F	SP	F	SP	F	SP	F	SP
avg. inc.	[mm/yr]	0.1	-1.2	1.4	0.4	0.8	0.0	-0.3	-1.3	0.6	0.0
std.dev.	[mm/yr]	0.5	0.5	2.5	2.4	1.4	1.5	1.4	1.2	1.2	1.4
min	[mm/yr]	-0.7	-1.8	-0.3	-1.4	-1.3	-1.9	-1.0	-2.4	-1.2	-1.9
max	[mm/yr]	0.5	-0.9	3.2	2.1	2.3	1.9	1.8	0.4	2.0	1.8
count		3		2		5		4		6	

Table A-2. Changes in intertidal (subtidal) sediment (channel) volume, mean height (depth), and area for each basin/region. The greyscale of the dots and error bars indicate the coverage (and thereby the uncertainty) of the data. Red lines indicate linear fit to the data based on the weights/coverage, rates are given in the individual figures. The data for the analysis origins from the AufMod project¹⁵ provided by the Federal Maritime and Hydrographic Agency. The data was processed and plotted, using ArcGIS 10.4, Matlab R2016b, and CorelDraw 2017.

