



Supplement of

A three-quantile bias correction with spatial transfer for the correction of simulated European river runoff to force ocean models

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959 **Supplementary Material**

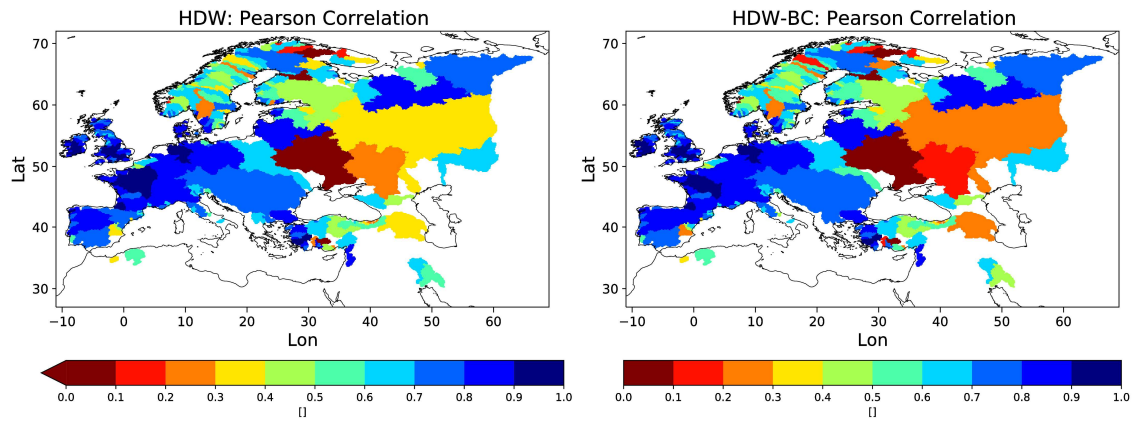
960 **Table S1:** Various metrics (see Sect. 2.7) of the simulated salinity time series in 6 m
 961 depth compared with the SSS data of Droghei et al. (2018) at the locations of the
 962 stations *Deutsche Bucht* and *EMS* for 2011-2018 and at *Deutsche Bucht* for 2013.

Metric	2011-2018				2013	
	<i>Deutsche Bucht</i>		<i>EMS</i>		<i>Deutsche Bucht</i>	
	HDW	HDW-BC	HDW	HDW-BC	HDW	HDW-BC
Bias [%]	-3	-2.2	-1.1	-0.7	-3.9	-2.6
Variability ratio [%]	135.5	117.1	130.4	116.7	132.7	116.2
Normalized RMSE [%]	23.2	18.7	25.6	22.9	50.8	36.9
Centered RMSE	1.01	0.89	0.91	0.84	0.78	0.70
Correlation	0.14	0.21	0.25	0.26	0.16	0.22

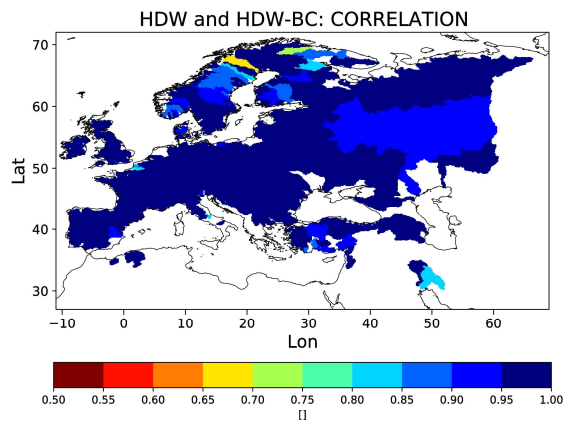
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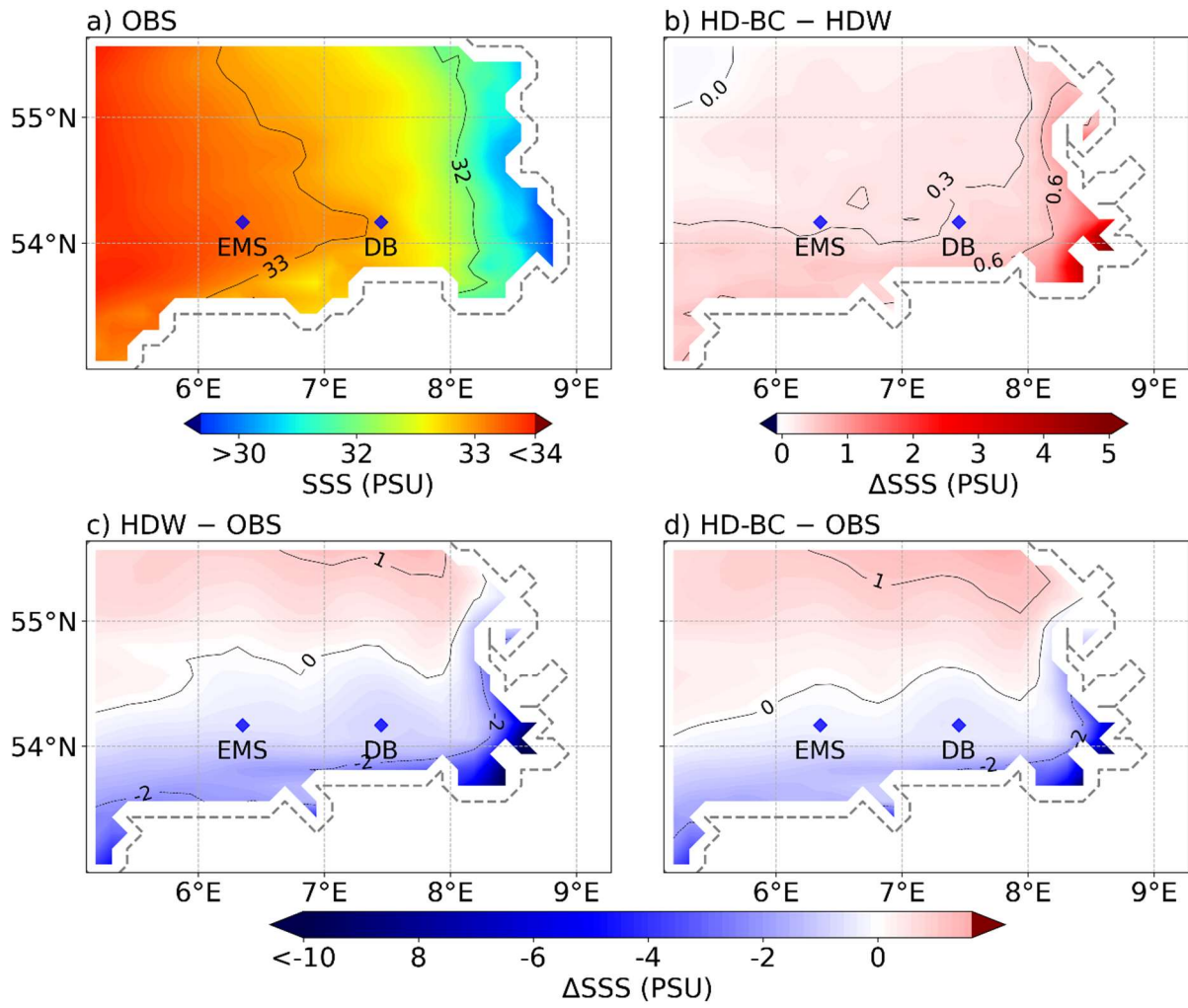
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Figure S1: Correlation of a) HDW and b) HDW-BC with observations as well as c) HDW with HDW-BC from 1979-2014.

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975 **Figure S2.** Same as Figure 13, but with SSS averages calculated over the period June 2013.

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