

Supplementary material to Climate Change Impacts on Soil Erosion and Sediment Delivery to German Federal Waterways: A Case Study of the Elbe Basin

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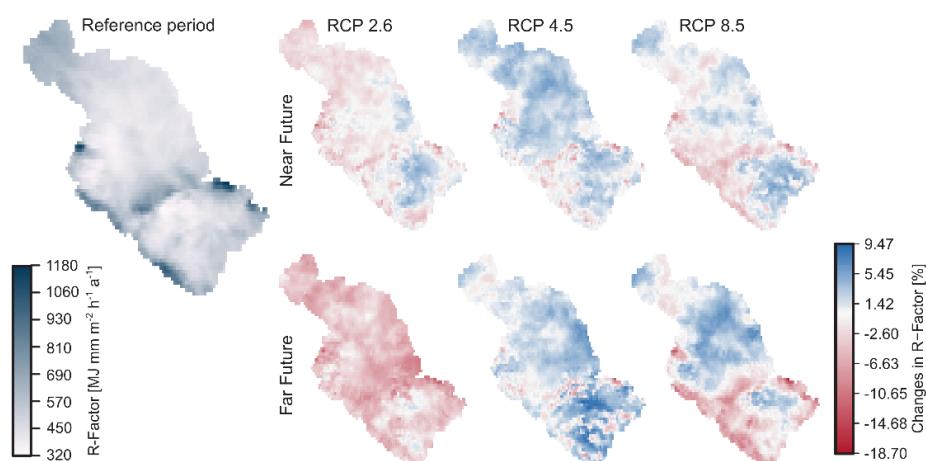


Figure S1. Projected changes in rainfall erosivity for the near future (2031–2060) and the far future (2071–2100) with respect to the reference period 1971–2000. The figures show the 15th percentile of all simulations in the German Weather Service's reference ensemble for the emission scenarios RCP 2.6, 4.5 and 8.5.

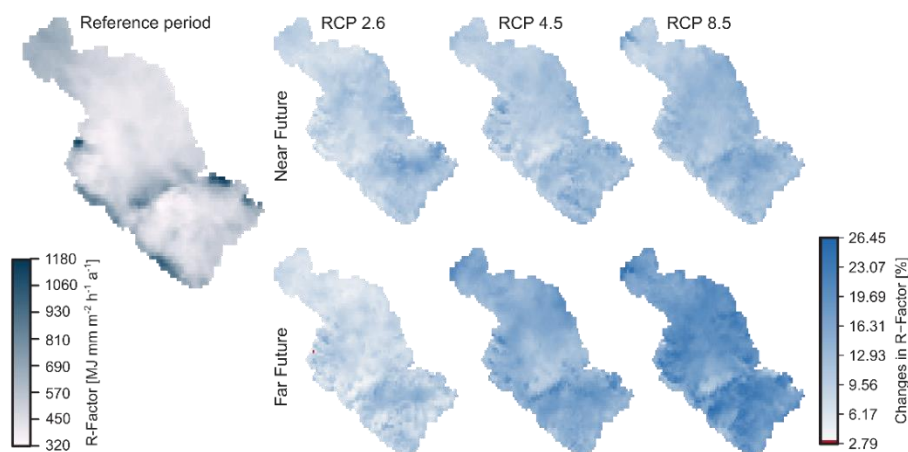


Figure S2. Projected changes in rainfall erosivity as in Figure S1 but for the 85th percentile of climate simulations.

Table S1. List of ensemble members included in the German Weather Service (DWD) reference ensemble v2018. Listed are the Global Climate Model (GCM) and Regional Climate Model (RCM). Models marked with “x” are members of the CORDEX EUR11 ensemble and models marked with “+” belong to the ReKliEs-De ensemble. Source: www.dwd.de/ref-ensemble [access: 18/07/2022, in German].

GCM	RCM	RCP 2.6	RCP 4.5	RCP 8.5
ICHEC-EC-EARTH	KNMI-RACMO22E	-	x	x
MOHC-HadGEM2-ES	KNMI-RACMO22E	x	x	x
ICHEC-EC-EARTH	KNMI-RACMO22E	x	x	x
IPSL-IPSL-CM5A-MR	SMHI-RCA4	-	x	x
ICHEC-EC-EARTH	SMHI-RCA4	x	x	x
MOHC-HadGEM2-ES	SMHI-RCA4	x	x	x
MPI-M-MPI-ESM-LR	SMHI-RCA4	x	x	x
CCCma-CanESM2	CLMcom-CCLM4-8-17	-	-	+
ICHEC-EC-EARTH	CLMcom-CCLM4-8-17	x	x	x
MOHC-HadGEM-ES	CLMcom-CCLM4-8-17	-	x	x
MPI-M-MPI-ESM-LR	CLMcom-CCLM4-8-17	x	x	x
MIROC-MIROC5	CLMcom-CCLM4-8-17	x	-	+
ICHEC-EC-EARTH	GERICS-REMO2015	-	-	+
MOHC-HadGEM-ES	GERICS-REMO2015	-	-	+
CCCma-CanESM2	GERICS-REMO2015	-	-	+
MIROC-MIROC5	GERICS-REMO2015	-	-	+
ICHEC-EC-EARTH	UHOH-WRF361H	-	-	+
MOHC-HadGEM-ES	UHOH-WRF361H	-	-	+
MPI-M-MPI-ESM-LR	UHOH-WRF361H	+	-	+
MPI-M-MPI-ESM-LR	MPI-CSC-REMO2009	x	x	x
MPI-M-MPI-ESM-LR	MPI-CSC-REMO2009	x	x	x