

Supplement of Hydrol. Earth Syst. Sci., 22, 4125–4143, 2018
<https://doi.org/10.5194/hess-22-4125-2018-supplement>
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Supplement of

Multimodel assessment of climate change-induced hydrologic impacts for a Mediterranean catchment

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		Precipitation				Temperature			
REF	ERC	0.996	0.994	0.984	ERC	1	1	0.998	
	0.985	ERE	0.988	0.995	1	ERE	1	0.999	
	0.996	0.981	ERM	0.967	1	1	ERM	0.999	
	0.910	0.926	0.923	HRC	0.999	0.999	0.999	HRC	
FUT	ERC	0.991	0.984	0.984	ERC	0.999	1	0.990	
	0.987	ERE	0.994	0.97	0.999	ERE	1	0.988	
	0.985	0.995	ERM	0.982	1	0.999	ERM	0.990	
	0.944	0.953	0.960	HRC	0.996	0.994	0.995	HRC	

Table S1: Results of the analysis of agreement for mean monthly precipitation (left) and temperature (right) among the four climate models (ERC = ECH-RCA, ERE = ECH-REM, ERM = ECH-RMO, HRC = HCH-RCA) for the reference (REF, 1971-2000) and future (FUT, 2041-2070) periods. Correlation values are represented below the diagonal, while bias is reported above the diagonal.

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		REF					FUT				
ERC	CAT	0.811	0.697	0.848	0.958	CAT	0.330	0.293	0.475	0.438	
	0.885	SWA	0.877	0.992	0.885	0.810	SWA	0.985	0.864	0.907	
	0.897	0.946	TOP	0.833	0.836	0.881	0.928	TOP	0.785	0.888	
	0.918	0.939	0.993	TRI	0.898	0.920	0.945	0.982	TRI	0.844	
	0.864	0.969	0.877	0.880	WAS	0.823	0.974	0.914	0.939	WAS	
ERE	CAT	0.769	0.660	0.884	0.981	CAT	0.477	0.428	0.702	0.767	
	0.854	SWA	0.939	0.907	0.850	0.673	SWA	0.985	0.827	0.837	
	0.951	0.937	TOP	0.755	0.756	0.875	0.932	TOP	0.748	0.782	
	0.958	0.941	0.987	TRI	0.913	0.861	0.914	0.987	TRI	0.936	
	0.805	0.953	0.840	0.860	WAS	0.675	0.973	0.917	0.909	WAS	
ERM	CAT	0.646	0.527	0.765	0.801	CAT	0.206	0.202	0.335	0.264	
	0.817	SWA	0.858	0.972	0.891	0.708	SWA	0.999	0.814	0.940	
	0.949	0.942	TOP	0.820	0.859	0.842	0.950	TOP	0.795	0.942	
	0.948	0.925	0.988	TRI	0.948	0.819	0.962	0.987	TRI	0.833	
	0.699	0.968	0.870	0.857	WAS	0.698	0.980	0.946	0.950	WAS	
HRC	CAT	0.890	0.751	0.933	0.945	CAT	0.098	0.105	0.179	0.146	
	0.889	SWA	0.885	0.993	0.938	0.810	SWA	0.997	0.732	0.906	
	0.980	0.916	TOP	0.867	0.901	0.807	0.994	TOP	0.758	0.934	
	0.982	0.923	0.993	TRI	0.959	0.840	0.969	0.979	TRI	0.821	
	0.868	0.970	0.891	0.906	WAS	0.790	0.978	0.962	0.910	WAS	

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Table S2: Results of the analysis of agreement for mean monthly discharge between the five hydrologic models (CAT = CATHY, SWA = SWAT, TOP = TOPKAPI, TRI = tRIBS, WAS = WASIM) for the reference (REF, 1971-2000) and future (FUT, 2041-2070) periods. Correlation values are represented below the diagonal, while bias is reported above the diagonal.

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		REF					FUT				
ERC	CAT	0.029	0.016	0.011	0.012	CAT	0.038	0.020	0.019	0.015	
	0.729	SWA	0.689	0.214	0.644	0.749	SWA	0.666	0.203	0.635	
	0.947	0.905	TOP	0.281	0.824	0.959	0.902	TOP	0.220	0.866	
	0.659	0.984	0.856	TRI	0.155	0.579	0.946	0.772	TRI	0.137	
	0.759	0.964	0.916	0.960	WAS	0.747	0.946	0.887	0.954	WAS	
ERE	CAT	0.031	0.019	0.013	0.010	CAT	0.039	0.021	0.017	0.012	
	0.769	SWA	0.713	0.231	0.569	0.747	SWA	0.692	0.221	0.547	
	0.961	0.904	TOP	0.344	0.671	0.951	0.906	TOP	0.272	0.727	
	0.656	0.967	0.821	TRI	0.137	0.592	0.955	0.800	TRI	0.123	
	0.718	0.948	0.868	0.967	WAS	0.694	0.936	0.867	0.966	WAS	
ERM	CAT	0.032	0.018	0.014	0.014	CAT	0.043	0.023	0.023	0.020	
	0.756	SWA	0.683	0.202	0.669	0.756	SWA	0.683	0.212	0.679	
	0.964	0.899	TOP	0.259	0.860	0.956	0.904	TOP	0.226	0.939	
	0.655	0.967	0.825	TRI	0.156	0.594	0.950	0.779	TRI	0.167	
	0.790	0.974	0.916	0.952	WAS	0.770	0.955	0.904	0.950	WAS	
HRC	CAT	0.031	0.018	0.012	0.012	CAT	0.041	0.020	0.023	0.016	
	0.752	SWA	0.709	0.225	0.640	0.810	SWA	0.639	0.168	0.616	
	0.959	0.901	TOP	0.324	0.780	0.976	0.902	TOP	0.153	0.903	
	0.651	0.970	0.821	TRI	0.161	0.673	0.938	0.782	TRI	0.106	
	0.723	0.952	0.883	0.949	WAS	0.750	0.909	0.840	0.962	WAS	

Table S3: Results of the analysis of agreement for mean monthly soil water content between the five hydrologic models (CAT = CATHY, SWA = SWAT, TOP = TOPKAPI, TRI = tRIBS, WAS = WASIM) for the reference (REF, 1971-2000) and future (FUT,

35 2041-2070) periods. Correlation values are represented below the diagonal, while bias is reported above the diagonal.

	REF					FUT				
ERC	CAT	0.648	0.918	0.896	0.972	CAT	0.484	0.786	0.803	0.846
	0.218	SWA	0.821	0.842	0.728	0.271	SWA	0.795	0.763	0.749
	0.873	0.597	TOP	0.998	0.980	0.850	0.659	TOP	0.998	0.992
	0.977	0.389	0.950	TRI	0.967	0.988	0.391	0.917	TRI	0.993
	0.184	0.868	0.628	0.383	WAS	0.045	0.792	0.544	0.195	WAS
ERE	CAT	0.659	0.920	0.883	0	CAT	0.522	0.829	0.817	0
	0.144	SWA	0.818	0.865	0.714	0.113	SWA	0.785	0.784	0.684
	0.874	0.521	TOP	0.994	0.978	0.848	0.535	TOP	0.999	0.978
	0.978	0.312	0.949	TRI	0	0.985	0.256	0.922	TRI	0
	-0.215	0.761	0.269	-0.013	WAS	-0.296	0.707	0.239	-0.130	WAS
ERM	CAT	0.610	0.898	0.869	0.958	CAT	0.422	0.733	0.762	0
	0.273	SWA	0.815	0.839	0.747	0.001	SWA	0.745	0.683	0.689
	0.877	0.647	TOP	0.998	0.984	0.801	0.512	TOP	0.992	0.970
	0.98	0.43	0.947	TRI	0.970	0.987	0.133	0.880	TRI	0.967
	0.184	0.906	0.623	0.366	WAS	-0.005	0.832	0.572	0.145	WAS
HRC	CAT	0.678	0.921	0.889	0.983	CAT	0.375	0.691	0.726	0
	0.111	SWA	0.829	0.86	0.729	0.147	SWA	0.739	0.662	0.676
	0.866	0.533	TOP	0.996	0.97	0.793	0.671	TOP	0.988	0.965
	0.977	0.297	0.948	TRI	0.947	0.989	0.266	0.870	TRI	0.955
	0.055	0.834	0.526	0.260	WAS	-0.107	0.773	0.480	0.036	WAS

40 Table S4: Results of the analysis of agreement for mean monthly actual evapotranspiration between the five hydrologic models (CAT = CATHY, SWA = SWAT, TOP = TOPKAPI, TRI = tRIBS, WAS = WASIM) for the reference (REF, 1971-2000) and future (FUT, 2041-2070) periods. Correlation values are represented below the diagonal, while bias is reported above the diagonal.