

TABLE 7. RMSD, MAD and Correlation (Corr) for MAM temperature over California

RMSD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	1.776	2.212	2.297	2.164	2.033	2.344	2.686
varres-CESM 0.125d	1.727	1.841	2.145	1.883	1.908	2.214	2.287
WRF 27km	1.945	2.062	2.433	1.863	1.991	2.366	2.541
WRF 9km	3.114	2.065	3.060	1.568	1.801	2.969	2.293
uniform CESM 0.25d	2.680	2.112	3.059	2.404	2.674	3.099	2.631

MAD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	-0.859	1.308	-0.813	0.681	-0.819	-0.608	1.350
varres-CESM 0.125d	-1.261	0.983	-1.274	0.328	-1.202	-1.052	0.952
WRF 27km	-1.066	0.745	-1.020	0.117	-0.942	-0.818	0.788
WRF 9km	-2.516	1.259	-2.530	0.604	-1.312	-2.305	1.227
uniform CESM 0.25d	-1.191	0.417	-1.139	-0.212	-1.398	-0.938	0.458

Corr	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	0.997	0.963	0.995	0.963	0.990	0.994	0.942
varres-CESM 0.125d	0.998	0.975	0.996	0.972	0.993	0.995	0.959
WRF 27km	0.996	0.959	0.994	0.968	0.991	0.994	0.937
WRF 9km	0.993	0.971	0.994	0.983	0.994	0.993	0.962
uniform CESM 0.25d	0.993	0.960	0.990	0.949	0.984	0.989	0.938

TABLE 8. RMSD, MAD and Correlation (Corr) for SON temperature over California

RMSD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	1.591	3.866	2.065	2.788	1.777	2.088	3.837
varres-CESM 0.125d	1.212	3.906	1.652	2.851	1.524	1.900	3.797
WRF 27km	1.665	3.022	2.111	1.784	1.663	2.059	3.060
WRF 9km	2.262	3.788	2.574	2.322	1.285	2.402	3.615
uniform CESM 0.25d	2.605	3.344	2.970	2.789	2.464	2.999	3.444

MAD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	0.122	3.303	-0.353	1.766	-0.240	0.102	3.063
varres-CESM 0.125d	0.394	3.439	-0.126	1.908	-0.048	0.353	3.134
WRF 27km	0.181	2.044	-0.295	0.507	-0.739	0.158	1.807
WRF 9km	-1.412	3.310	-1.931	1.779	-0.673	-1.451	3.004
uniform CESM 0.25d	-0.187	2.415	-0.655	0.877	-0.826	-0.205	2.175

Corr	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	0.998	0.950	0.996	0.975	0.994	0.996	0.951
varres-CESM 0.125d	0.999	0.957	0.998	0.978	0.996	0.997	0.961
WRF 27km	0.997	0.949	0.996	0.982	0.995	0.996	0.948
WRF 9km	0.996	0.953	0.996	0.986	0.997	0.996	0.959
uniform CESM 0.25d	0.993	0.956	0.992	0.965	0.989	0.991	0.952

TABLE 9. RMSD, MAD and Correlation (Corr) for DJF temperature over California

RMSD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	1.959	2.751	2.196	2.015	1.742	2.253	2.700
varres-CESM 0.125d	1.633	2.302	2.035	1.840	1.747	2.089	2.318
WRF 27km	1.699	2.756	2.106	1.734	1.537	2.033	2.665
WRF 9km	1.876	2.753	2.324	1.865	1.324	2.169	2.625
uniform CESM 0.25d	2.979	2.072	3.339	2.500	3.211	3.310	2.408

MAD	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	-0.549	2.108	-0.984	0.977	-0.920	-0.774	1.836
varres-CESM 0.125d	-0.723	1.678	-1.178	0.541	-1.202	-0.978	1.345
WRF 27km	-0.075	2.027	-0.510	0.895	-0.620	-0.302	1.759
WRF 9km	-1.049	2.214	-1.504	1.077	-0.594	-1.301	1.880
uniform CESM 0.25d	-1.862	-0.010	-2.293	-1.142	-2.616	-2.085	-0.280

Corr	UW		PRISM			Daymet	
	T_{max}	T_{min}	T_{max}	T_{min}	T_{avg}	T_{max}	T_{min}
varres-CESM 0.25d	0.989	0.856	0.988	0.925	0.978	0.987	0.856
varres-CESM 0.125d	0.993	0.900	0.991	0.941	0.979	0.989	0.898
WRF 27km	0.992	0.842	0.987	0.931	0.982	0.988	0.838
WRF 9km	0.990	0.859	0.987	0.942	0.987	0.988	0.870
uniform CESM 0.25d	0.980	0.922	0.977	0.885	0.926	0.976	0.893

TABLE 10. RMSD, MAD, MRD, Correlation (Corr) for precipitation over California

MAM	CPC				UW				PRISM				DAYMET			
	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr
varres-CESM 0.25d	0.542	0.279	0.264	0.981	0.589	0.193	0.265	0.968	0.733	0.083	0.290	0.952	0.553	0.067	0.235	0.971
varres-CESM 0.125d	0.554	0.291	0.267	0.979	0.579	0.217	0.263	0.970	0.678	0.124	0.274	0.958	0.551	0.103	0.238	0.972
WRF 27km	0.448	-0.183	0.209	0.975	0.587	-0.269	0.234	0.970	0.808	-0.378	0.274	0.960	0.675	-0.396	0.271	0.968
WRF 9km	2.143	1.370	0.881	0.966	1.991	1.295	0.783	0.971	1.809	1.203	0.693	0.974	1.924	1.182	0.680	0.967
uniform CESM 0.25d	0.601	0.182	0.254	0.971	0.611	0.096	0.259	0.964	0.725	-0.014	0.275	0.953	0.621	-0.030	0.246	0.963
JJA	CPC				UW				PRISM				DAYMET			
	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr
varres-CESM 0.25d	0.138	-0.017	0.361	0.903	0.138	-0.008	0.359	0.905	0.188	-0.038	0.401	0.860	0.147	0.018	0.422	0.885
varres-CESM 0.125d	0.153	-0.006	0.388	0.889	0.148	0.005	0.375	0.897	0.180	-0.022	0.394	0.866	0.167	0.034	0.474	0.866
WRF 27km	0.213	0.010	0.587	0.850	0.186	0.019	0.515	0.892	0.210	-0.011	0.527	0.855	0.202	0.045	0.596	0.879
WRF 9km	1.013	0.644	2.518	0.853	1.000	0.654	2.654	0.881	0.963	0.628	2.304	0.890	1.040	0.684	3.135	0.847
uniform CESM 0.25d	0.177	-0.034	0.471	0.835	0.179	-0.025	0.467	0.837	0.228	-0.055	0.491	0.788	0.198	0.002	0.576	0.780
SON	CPC				UW				PRISM				DAYMET			
	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr	RMSD	MAD	MRD	Corr
varres-CESM 0.25d	0.536	0.346	0.338	0.984	0.579	0.323	0.351	0.966	0.591	0.212	0.321	0.954	0.467	0.188	0.259	0.974
varres-CESM 0.125d	0.381	-0.054	0.223	0.969	0.471	-0.067	0.260	0.956	0.550	-0.165	0.266	0.959	0.494	-0.194	0.258	0.964
WRF 27km	0.382	-0.271	0.247	0.982	0.506	-0.294	0.278	0.971	0.707	-0.405	0.324	0.968	0.618	-0.431	0.331	0.974
WRF 9km	1.851	1.297	1.091	0.960	1.779	1.283	1.065	0.964	1.599	1.185	0.911	0.969	1.671	1.158	0.874	0.962
uniform CESM 0.25d	0.365	0.022	0.214	0.972	0.479	-0.001	0.271	0.955	0.587	-0.112	0.270	0.954	0.491	-0.137	0.250	0.964