

**Table S1.** Training performance of short-term ET<sub>0</sub> forecasting models in each geographic region. Bold characters indicate better results among the models.

Model's Name	Inputs Variables	Northern			Central			Southern			Eastern		
		r	MAE	RMSE									
LSTM (T, R <sub>s</sub> )	T, R <sub>s</sub>	0.710	1.18	1.52	0.693	0.86	1.16	0.713	0.97	1.29	0.742	0.96	1.27
LSTM (T, RH)	T, RH	0.648	1.29	1.64	0.569	1.02	1.32	0.423	1.34	1.66	0.616	1.17	1.49
LSTM (T, R <sub>s</sub> , RH)	T, R <sub>s</sub> , RH	0.723	<b>1.14</b>	<b>1.49</b>	<b>0.712</b>	<b>0.83</b>	<b>1.13</b>	<b>0.728</b>	<b>0.94</b>	<b>1.26</b>	0.743	<b>0.95</b>	1.27
CNN-LSTM (T, R <sub>s</sub> )	T, R <sub>s</sub>	0.619	1.35	1.69	0.600	0.98	1.29	0.627	1.09	1.43	0.653	1.12	1.43
CNN-LSTM (T, RH)	T, RH	0.566	1.43	1.78	0.511	1.07	1.38	0.327	1.39	1.74	0.577	1.23	1.54
CNN-LSTM (T, R <sub>s</sub> , RH)	T, R <sub>s</sub> , RH	<b>0.724</b>	1.16	<b>1.49</b>	0.711	0.84	<b>1.13</b>	0.722	0.95	1.27	<b>0.745</b>	0.96	<b>1.26</b>