Table S1. Statistical indices of root mean square error (RMSE), correlation coefficient (R), mean absolute error (MAE), and mean bias error (MBE) for BP and BPGA models across different climatic zones.

Season	Climate Zone	RMSE (mm d^{-1})				R				MAE (mm d^{-1})				MBE (mm d^{-1})			
		$BP_{0.5}$	$BP_{0.7}$	$GABP_{0.5}$	$GABP_{0.7}$	$BP_{0.5}$	$BP_{0.7}$	$GABP_{0.5}$	$GABP_{0.7}$	$BP_{0.5}$	$BP_{0.7}$	$GABP_{0.5}$	$GABP_{0.7}$	$BP_{0.5}$	$BP_{0.7}$	$GABP_{0.5}$	$GABP_{0.7}$
Spring	TC	1.06	0.84	0.57	0.62	0.74	0.83	0.93	0.91	0.29	0.22	0.12	0.13	0.02	−0.04	0.00	0.00
	TM	1.01	1.12	0.7	0.91	0.84	0.79	0.92	0.88	0.31	0.3	0.15	0.21	−0.06	−0.05	−0.03	−0.03
	MP	0.77	0.7	0.45	0.52	0.72	0.82	0.91	0.88	0.22	0.2	0.11	0.13	0.04	−0.09	0.00	−0.03
	STM	0.65	0.71	0.33	0.43	0.89	0.89	0.97	0.96	0.27	0.24	0.11	0.14	0.09	0.08	0.04	0.05
	TPM	0.59	0.66	0.26	0.44	0.88	0.86	0.98	0.94	0.19	0.21	0.08	0.15	0.08	0.08	0.03	0.10
Summer	TC	0.95	0.84	0.59	0.58	0.6	0.59	0.81	0.8	0.15	0.13	0.09	0.09	0.01	−0.01	0.03	0.02
	TM	0.94	0.9	0.56	0.64	0.69	0.64	0.88	0.83	0.17	0.19	0.11	0.13	0.03	0.04	0.01	0.03
	MP	0.65	0.57	0.34	0.39	0.67	0.64	0.89	0.86	0.14	0.12	0.07	0.09	−0.02	0.05	0.00	0.01
	STM	0.64	0.85	0.3	0.44	0.9	0.81	0.97	0.95	0.14	0.19	0.06	0.1	−0.04	−0.06	−0.04	−0.07
	TPM	0.48	0.56	0.29	0.42	0.92	0.87	0.98	0.94	0.1	0.13	0.07	0.1	−0.04	−0.06	−0.06	−0.08
Autumn	TC	1.07	0.86	0.41	0.49	0.68	0.88	0.95	0.93	0.72	0.52	0.2	0.29	0.31	0.13	0.13	0.26
	TM	0.95	0.98	0.49	0.79	0.73	0.78	0.9	0.84	0.55	0.62	0.26	0.44	0.02	0.32	0.15	0.37
	MP	0.67	0.54	0.44	0.42	0.86	0.87	0.91	0.92	0.3	0.26	0.2	0.18	0.2	0.14	0.16	0.15
	STM	0.77	0.69	0.41	0.39	0.8	0.77	0.92	0.91	0.29	0.32	0.15	0.14	0.05	0.09	0.07	0.04
	TPM	0.64	0.7	0.4	0.46	0.82	0.81	0.93	0.91	0.22	0.23	0.14	0.16	0.05	−0.06	0.02	−0.02
Winter	TC	0.89	0.53	0.15	0.19	0.81	0.68	0.91	0.93	2.15	1.35	0.27	0.46	−1.63	−0.83	−0.04	0.39
	TM	0.83	0.71	0.27	0.37	0.19	0.54	0.84	0.75	1.15	0.94	0.27	0.34	0.02	−0.28	0.02	0.11
	MP	0.58	0.78	0.27	0.27	0.54	0.37	0.85	0.84	0.42	0.7	0.18	0.18	−0.12	0.17	0.09	0.07
	STM	0.71	0.51	0.33	0.33	0.36	0.65	0.76	0.86	0.59	0.35	0.18	0.18	0.18	0.05	0.02	0.08
	TPM	0.65	0.65	0.35	0.4	0.63	0.62	0.85	0.82	0.29	0.28	0.11	0.17	0.07	0.16	0.01	0.06

Note: TC, temperate continental zone; TM, temperate monsoon zone; MP, mountain plateau zone; STM, subtropical monsoon zone; TPM, tropical monsoon zone.
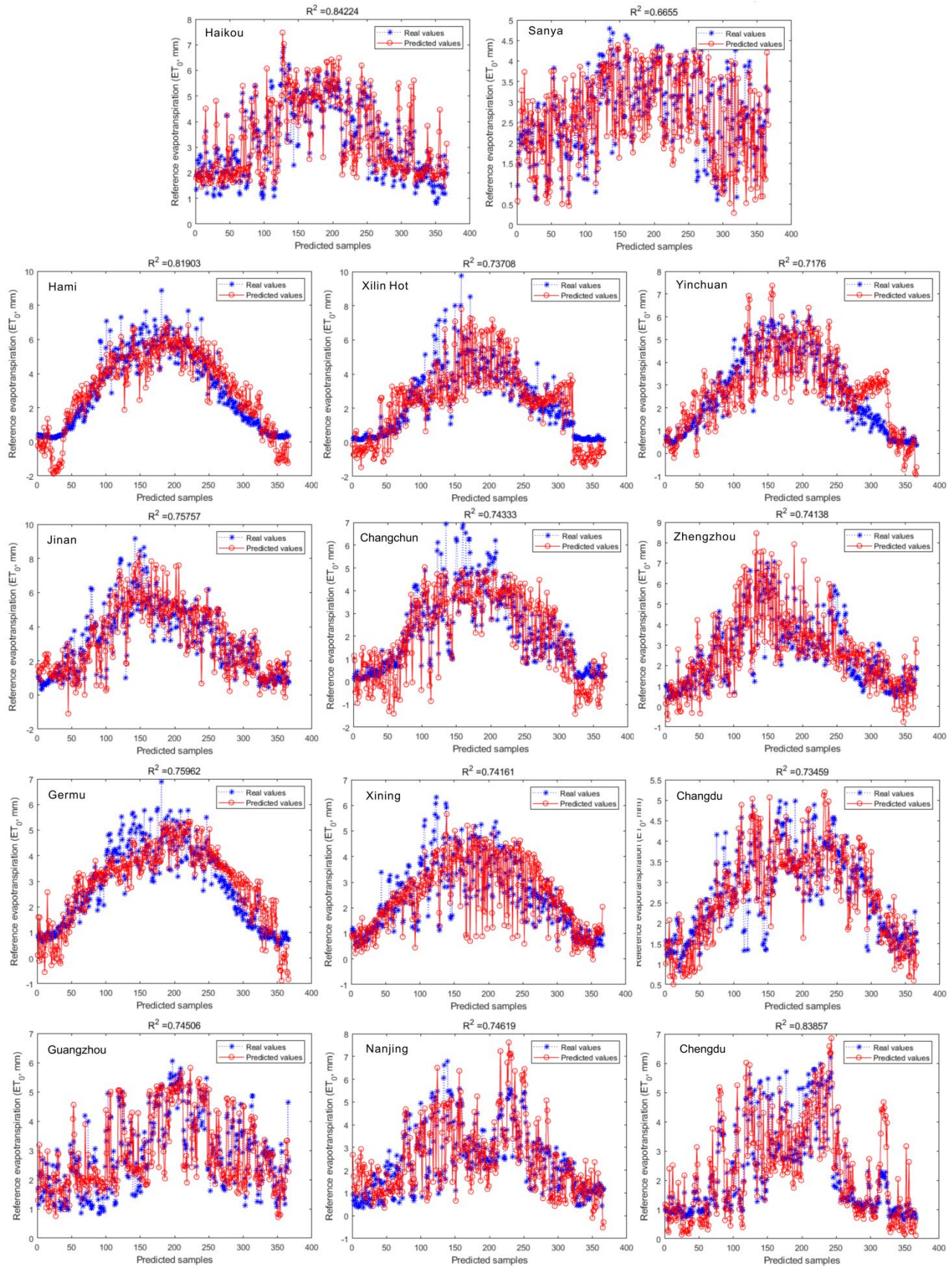
Figure S1. Comparison of daily ET₀ estimates from BP₀.₅ model in testing phase to ET₀ estimates from FAO PM equation.
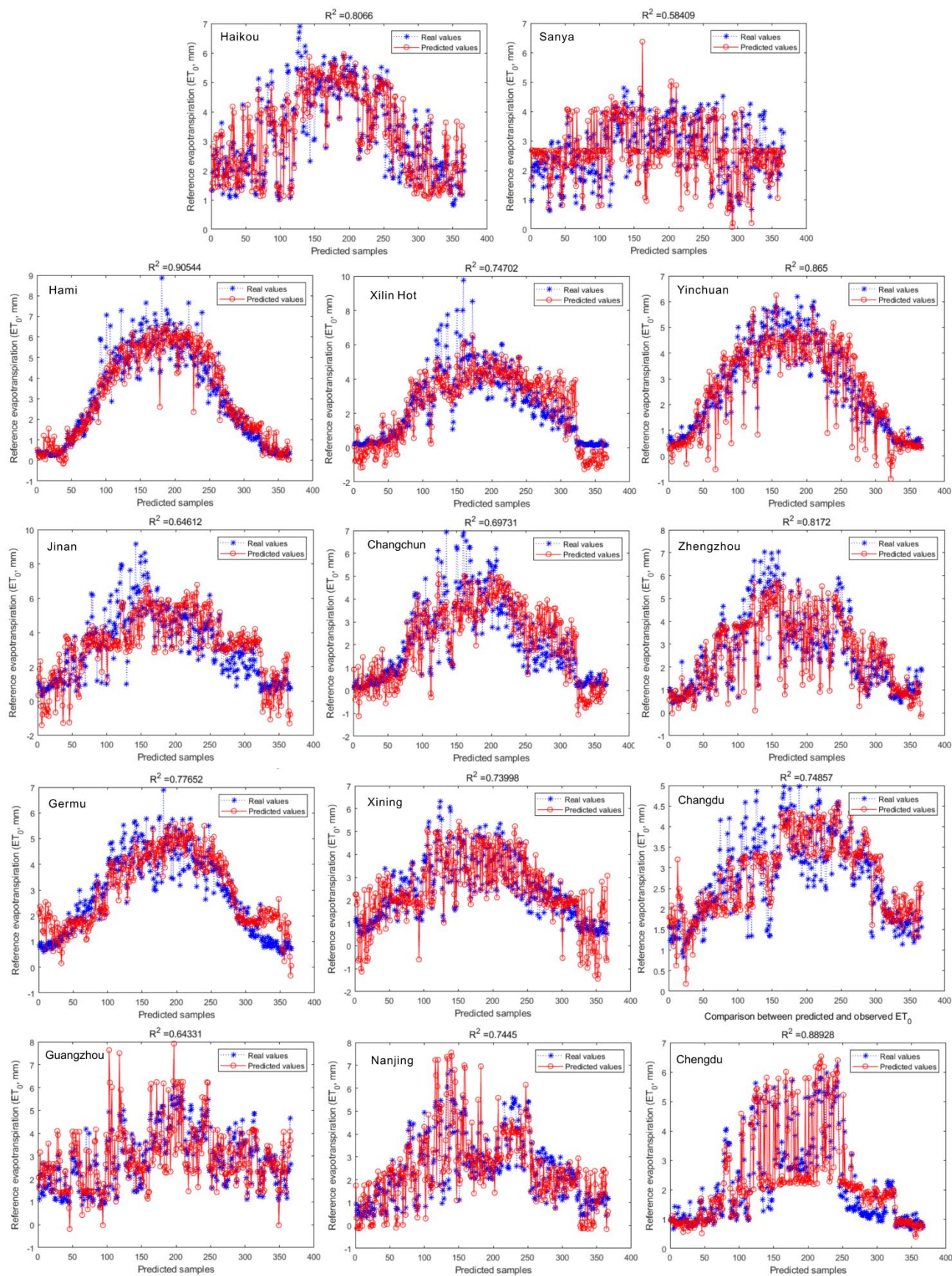
Figure S2. Comparison of daily ET$_0$ estimates from BP$_{0.7}$ model in testing phase to ET$_0$ estimates from FAO PM equation.
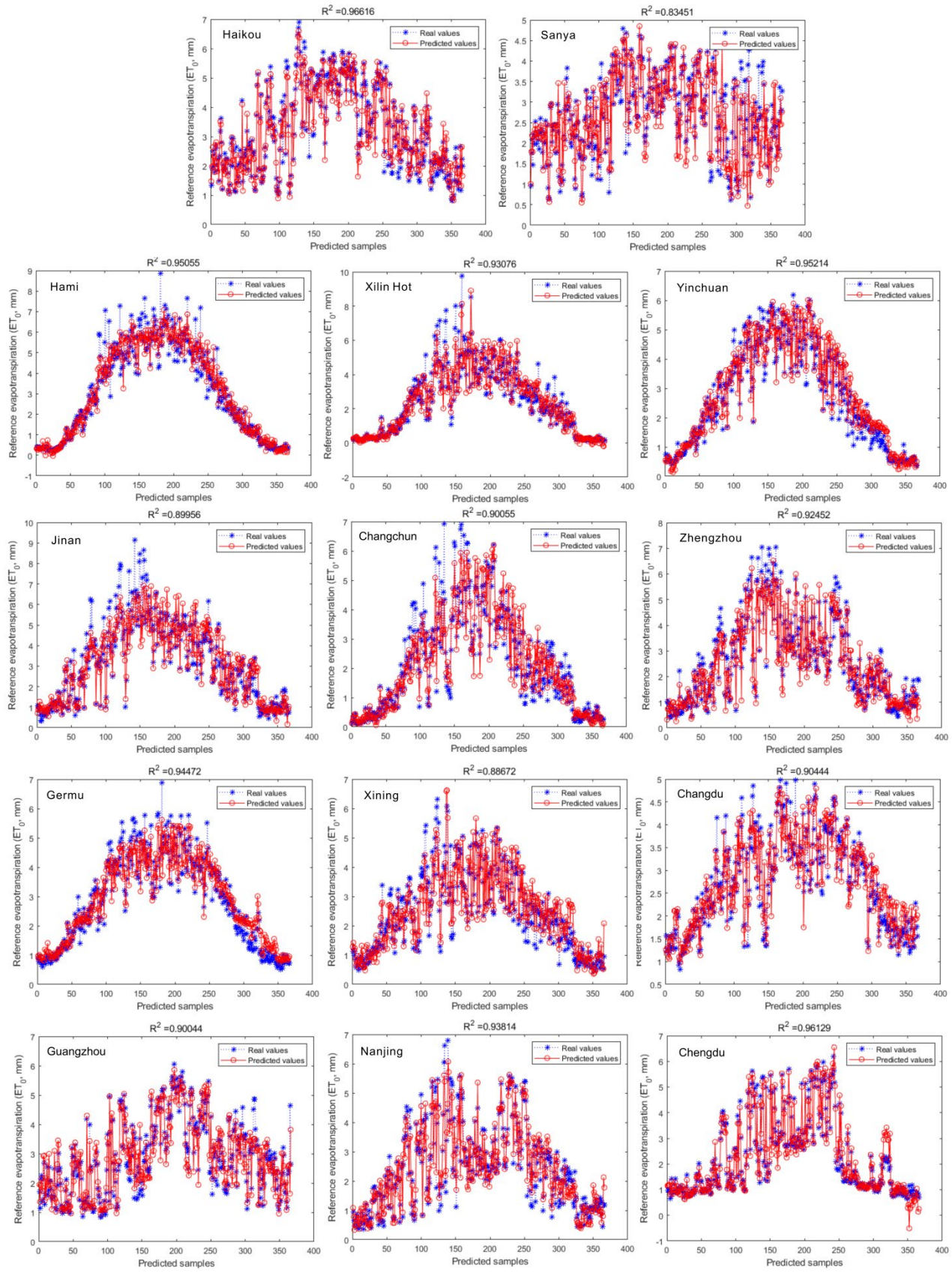
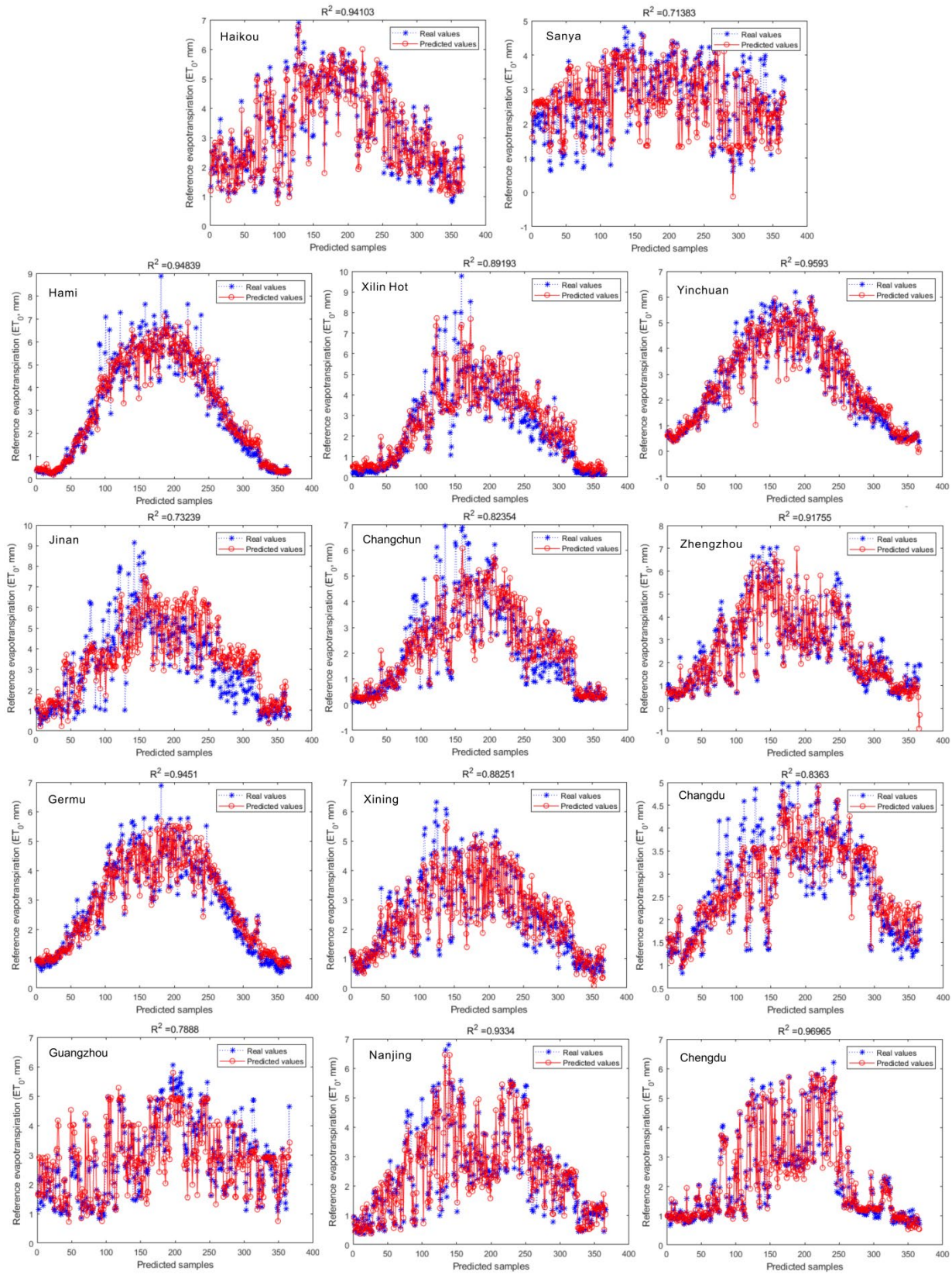**Figure S3.** Comparison of daily ET$_0$ estimates from GABP$_{0.5}$ model in testing phase to ET$_0$ estimates from FAO PM equation.

Figure S4. Comparison of daily ET_0 estimates from $GABP_{0.7}$ model in testing phase to ET_0 estimates from FAO PM equation.