

図 20 横浜での気象モデル WRF の計算値と観測データにおける気温の比較
 緑点：気象モデル、青線：観測値

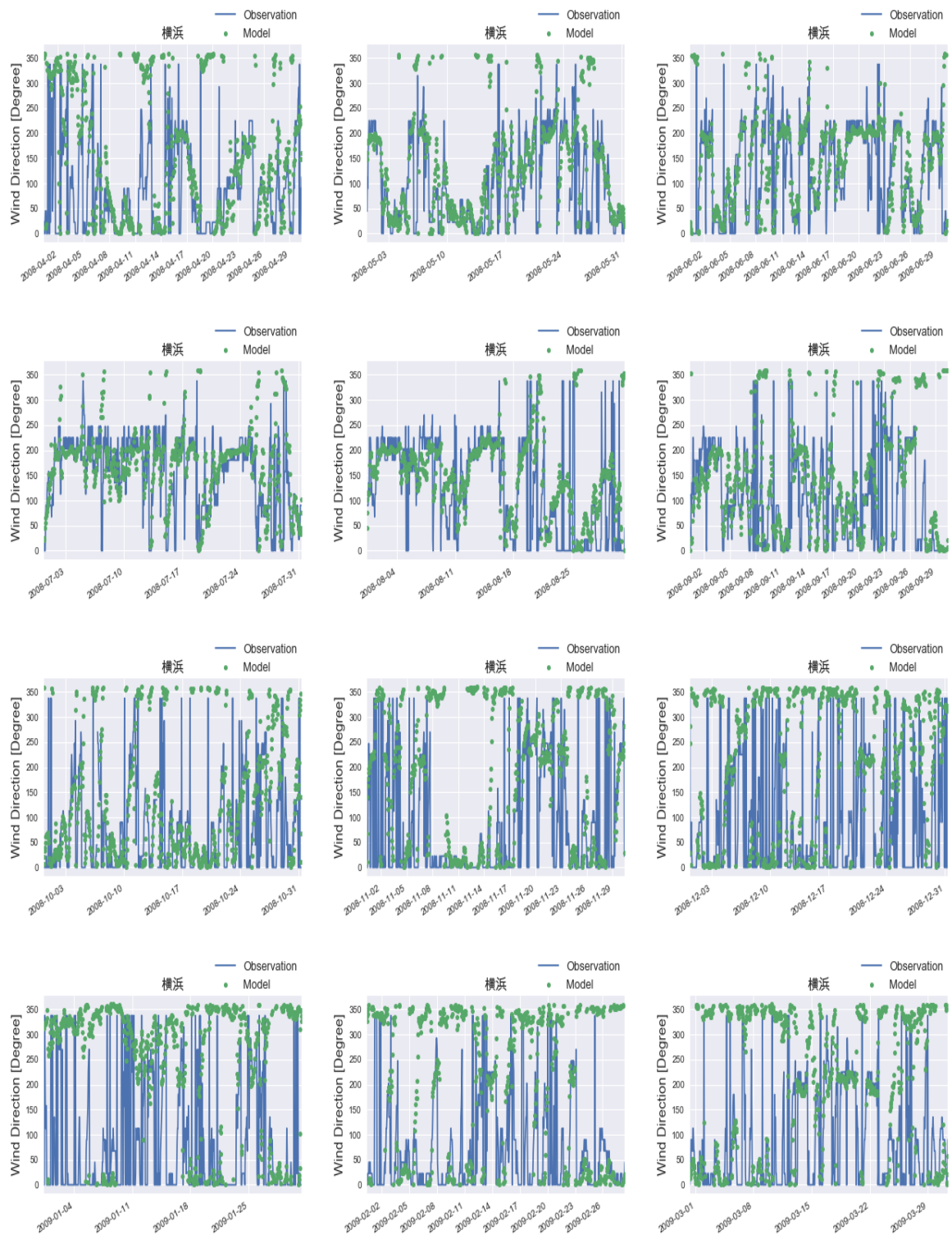


図 21 横浜での気象モデル WRF の計算値と観測データにおける風向の比較
 緑点：気象モデル、青線：観測値

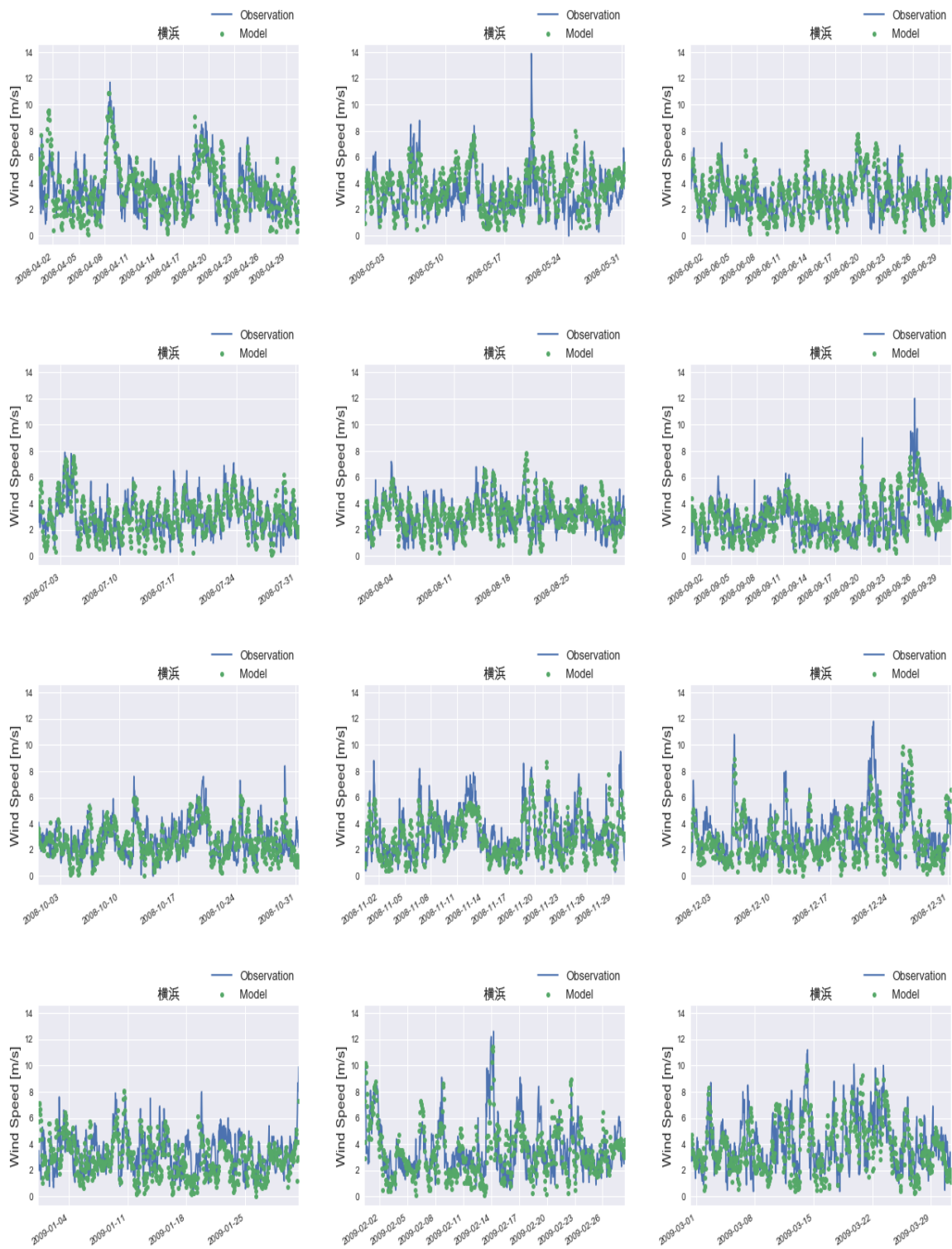


図 22 横浜での気象モデル WRF の計算値と観測データにおける風速の比較
 緑点：気象モデル、青線：観測値

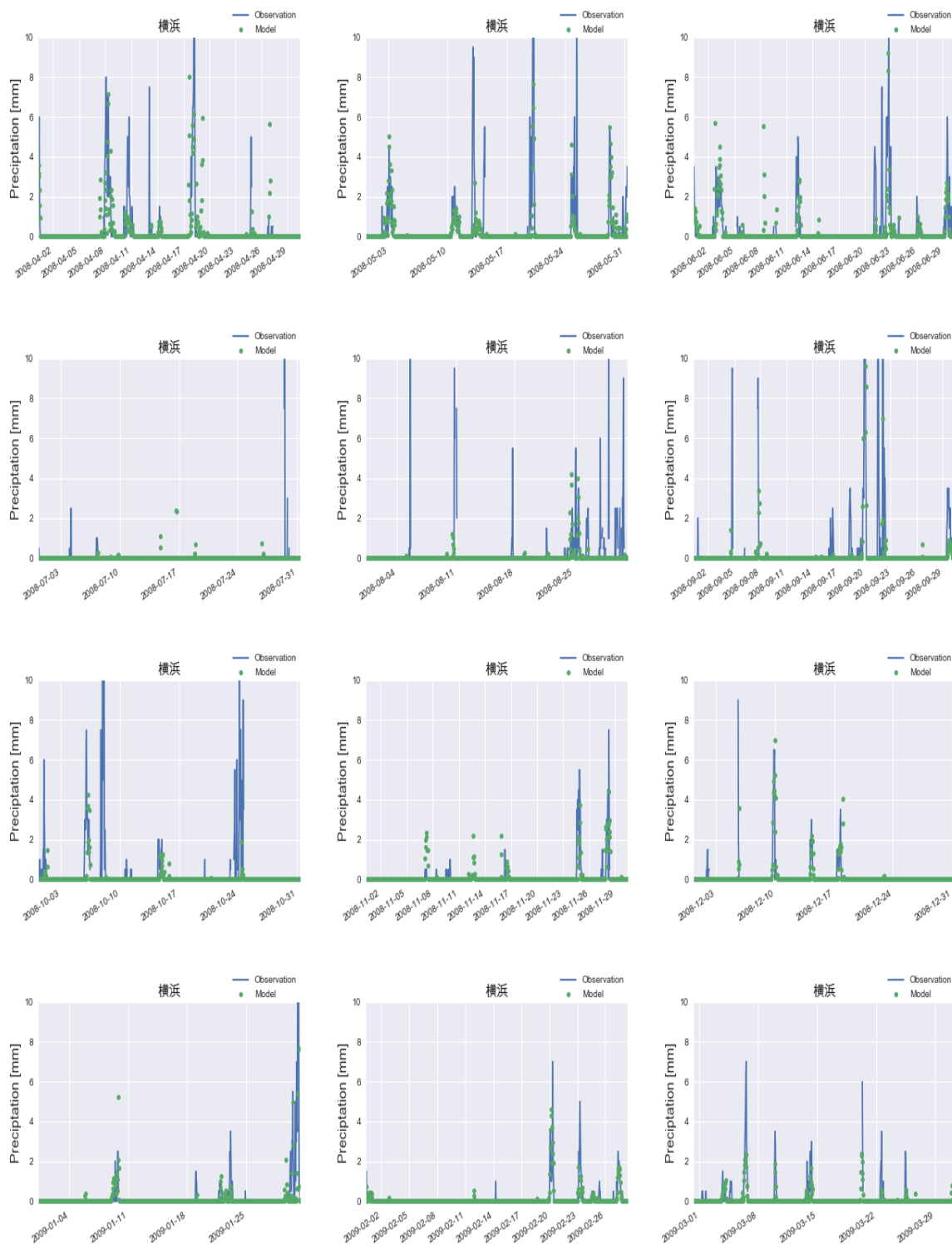


図 23 横浜での気象モデル WRF の計算値と観測データにおける降雨量の比較
 緑点：気象モデル、青線：観測値

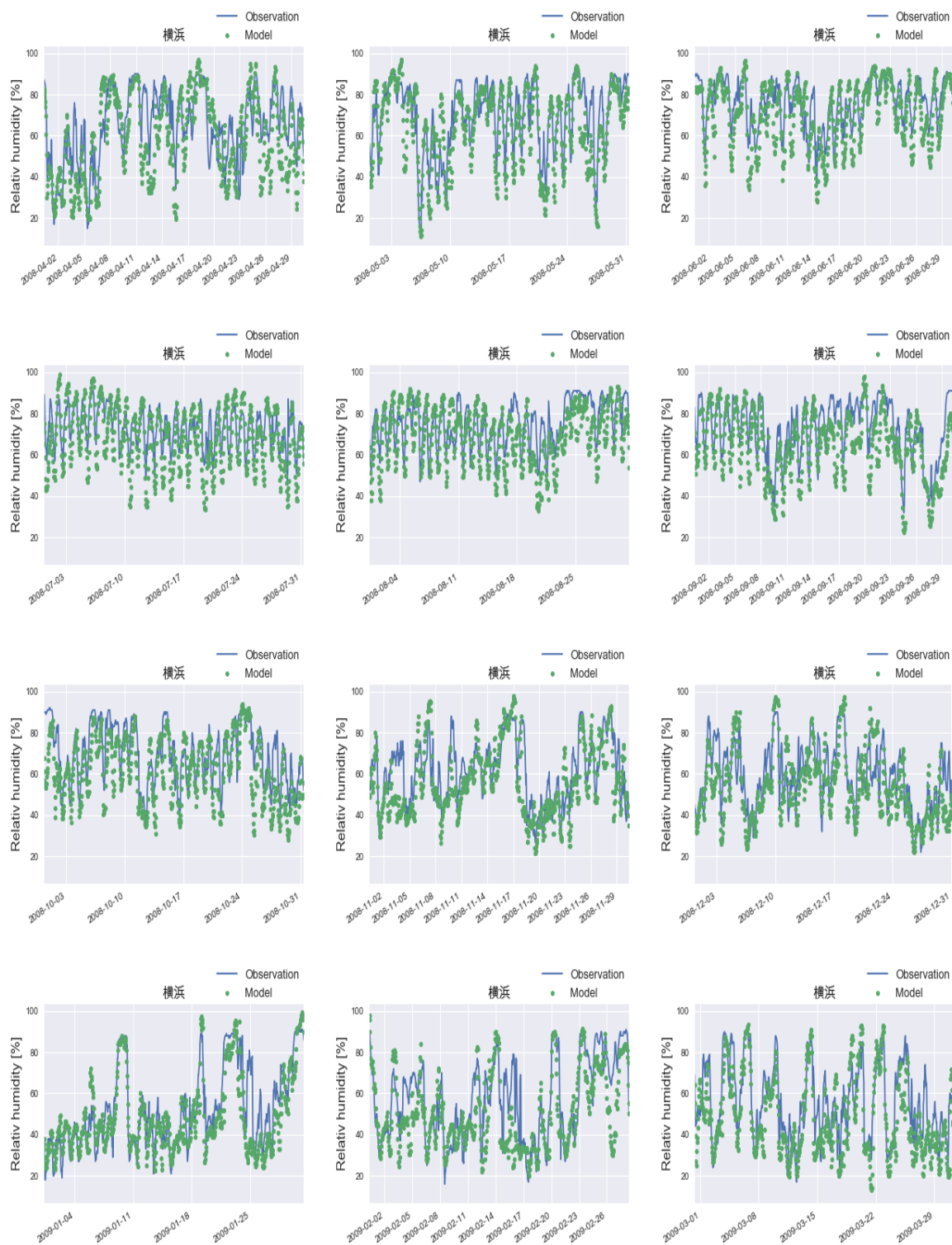


図 24 横浜での気象モデル WRF の計算値と観測データにおける相対湿度の比較
 緑点：気象モデル、青線：観測値

表 20 横浜における気温の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	14.260000	14.583004	1.022651	0.022651	0.099968	0.099968	0.851649
2008	5	18.046505	18.925031	1.048681	0.048681	0.070385	0.070385	0.928951
2008	6	20.656528	21.727610	1.051852	0.051852	0.069461	0.069461	0.872769
2008	7	26.377419	27.114048	1.027927	0.027927	0.051704	0.051704	0.894866
2008	8	26.483468	27.617977	1.042838	0.042838	0.070224	0.070224	0.806142
2008	9	23.908194	24.820478	1.038158	0.038158	0.055702	0.055702	0.918154
2008	10	19.028360	19.726266	1.036677	0.036677	0.060337	0.060337	0.867083
2008	11	12.971667	13.426547	1.035067	0.035067	0.080598	0.080598	0.922432
2008	12	9.652688	9.069887	0.939623	-0.060377	0.121505	0.121505	0.930158
2009	1	6.740188	5.879196	0.872260	-0.127740	0.186617	0.186617	0.873047
2009	2	7.817560	7.560379	0.967102	-0.032898	0.167051	0.167051	0.883067
2009	3	9.731317	9.919130	1.019300	0.019300	0.112762	0.112762	0.934265
ALL	ALL	16.357922	16.751281	1.024047	0.024047	0.080052	0.008813	0.980107

表 21 横浜における風向の統計値

YEAR	MONTH	0	1	2	3	4	5	6	7	8
2008	4	22.53129	32.96245	19.61057	8.62309	3.89430	3.75522	4.45063	3.19889	0.97357
2008	5	25.70659	40.51144	16.95828	6.32571	4.30686	2.82638	1.48048	1.07672	0.80754
2008	6	22.53129	38.66481	18.21975	7.37135	4.31154	2.92072	3.33797	1.66898	0.97357
2008	7	23.55316	36.20458	19.24630	9.55585	3.90310	2.28802	1.74966	2.01884	1.48048
2008	8	19.67655	37.19677	15.90296	8.08625	4.58221	4.98652	5.39084	3.50404	0.67385
2008	9	20.72323	31.71071	20.44506	9.73574	8.20584	1.52990	3.47705	2.78164	1.39082
2008	10	25.00000	33.37838	15.81081	7.56757	4.86486	3.78378	3.64865	3.91892	2.02703
2008	11	25.83333	35.00000	13.47222	8.19444	5.69444	4.86111	3.19444	2.63889	1.11111
2008	12	21.77419	30.51075	17.33871	9.13978	6.58602	4.43548	4.16667	4.70430	1.34409
2009	1	19.62366	28.89785	19.75806	12.63441	8.06452	4.83871	2.28495	2.82258	1.07527
2009	2	21.87500	31.69643	18.45238	9.52381	4.46429	5.20833	4.61310	2.82738	1.33929
2009	3	23.28398	37.01211	15.07402	7.26783	4.44145	3.49933	3.76851	4.17227	1.48048
ALL	ALL	22.67947	34.49931	17.51257	8.66484	5.28121	3.73800	3.45222	2.94925	1.22314

表 22 横浜における風速の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	3.617778	3.551271	0.981617	-0.018383	0.319860	0.319860	0.691753
2008	5	3.234812	3.682174	1.138296	0.138296	0.352025	0.352025	0.623869
2008	6	2.897361	3.148176	1.086567	0.086567	0.313069	0.313069	0.669403
2008	7	3.026075	3.021159	0.998375	-0.001625	0.298722	0.298722	0.670616
2008	8	3.056855	3.143569	1.028367	0.028367	0.286283	0.286283	0.577630
2008	9	2.915994	2.888628	0.990615	-0.010175	0.347919	0.347919	0.629695
2008	10	2.741263	2.657191	0.969331	-0.030669	0.355869	0.355869	0.542259
2008	11	3.337639	3.048788	0.913457	-0.086543	0.339078	0.339078	0.635778
2008	12	3.261022	2.786768	0.854569	-0.145431	0.403073	0.403073	0.592028
2009	1	3.365323	2.930544	0.870806	-0.129194	0.409408	0.409408	0.382254
2009	2	3.537798	3.288796	0.929617	-0.070383	0.378230	0.378230	0.590652
2009	3	4.065141	3.807584	0.936642	-0.062564	0.336345	0.336345	0.607275
ALL	ALL	3.253060	3.161893	0.971975	-0.028012	0.345567	0.161519	0.609338

表 23 横浜における降雨量の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	1.240642	0.322135	0.259652	-0.119003	0.862701	0.862701	0.567699
2008	5	1.360619	0.245106	0.180143	-0.448946	0.786390	0.786390	0.563010
2008	6	0.944444	0.211797	0.224256	-0.331557	0.914905	0.914905	0.420320
2008	7	0.476190	-0.755615	-1.586792	-0.138907	1.827208	1.827208	-0.021169
2008	8	0.959799	0.050407	0.052519	-0.830346	1.033291	1.033291	-0.001213
2008	9	1.492188	0.323008	0.216466	-0.212161	1.114733	1.114733	0.431656
2008	10	1.732394	0.055809	0.032215	-0.847837	0.924959	0.924959	0.036232
2008	11	0.688034	0.111665	0.162296	-0.157640	0.910807	0.910807	0.612475
2008	12	0.936047	0.110637	0.118196	-0.075366	0.665329	0.665329	0.637292
2009	1	1.127820	0.174813	0.155001	-0.193567	0.766180	0.766180	0.798776
2009	2	0.561475	0.084094	0.149773	-0.201197	0.675299	0.675299	0.611044
2009	3	0.615385	0.076956	0.125053	-0.497865	0.813500	0.813500	0.646660
ALL	ALL	1.061608	0.082505	0.077717	-0.391427	0.913665	0.989300	0.388409

表 24 横浜における相対湿度の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	64.57639	58.12571	0.90011	-0.09989	0.19682	0.19682	0.71390
2008	5	70.00806	64.40546	0.91997	-0.08003	0.13339	0.13339	0.82492
2008	6	76.04167	70.22439	0.92350	-0.07650	0.10924	0.10924	0.82613
2008	7	73.21237	67.98418	0.92859	-0.07141	0.11606	0.11606	0.80890
2008	8	75.54032	69.49043	0.91991	-0.08009	0.11900	0.11900	0.70563
2008	9	72.85972	64.48364	0.88504	-0.11496	0.13782	0.13782	0.80723
2008	10	69.26210	61.45472	0.88728	-0.11272	0.13979	0.13979	0.76905
2008	11	61.16250	56.02427	0.91599	-0.08401	0.15805	0.15805	0.73707
2008	12	58.61694	53.90807	0.91967	-0.08033	0.16421	0.16421	0.76066
2009	1	53.02016	49.45145	0.93269	-0.06731	0.14216	0.14216	0.85492
2009	2	56.23214	49.98236	0.88886	-0.11114	0.19824	0.19824	0.72619
2009	3	55.65995	49.03094	0.88090	-0.11910	0.18285	0.18285	0.80729
ALL	ALL	65.55788	59.59652	0.90907	-0.09093	0.14682	0.03496	0.81191

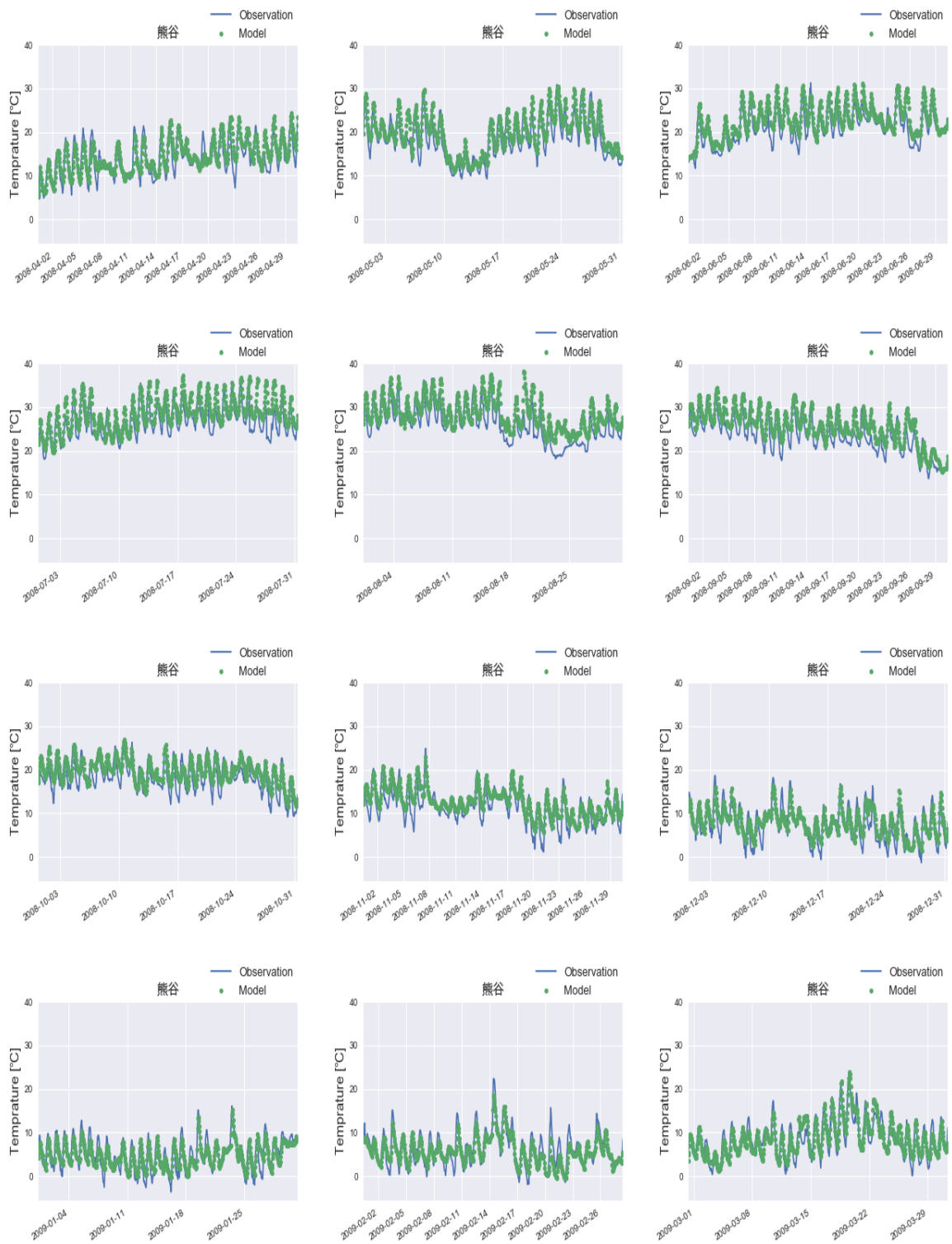


図 25 熊谷での気象モデル WRF の計算値と観測データにおける気温の比較
 緑点：気象モデル、青線：観測値

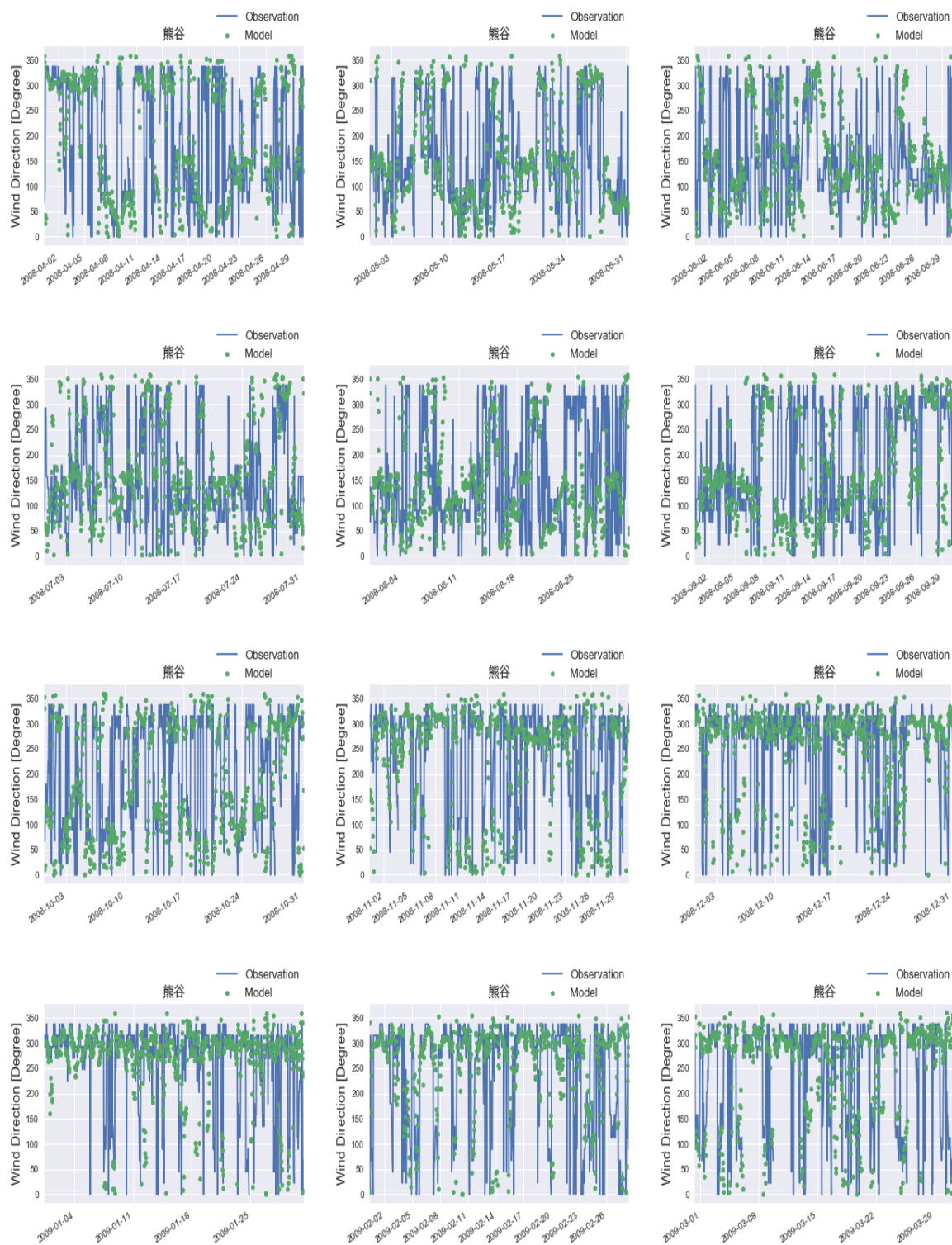


図 26 熊谷での気象モデル WRF の計算値と観測データにおける風向の比較
 緑点：気象モデル、青線：観測値

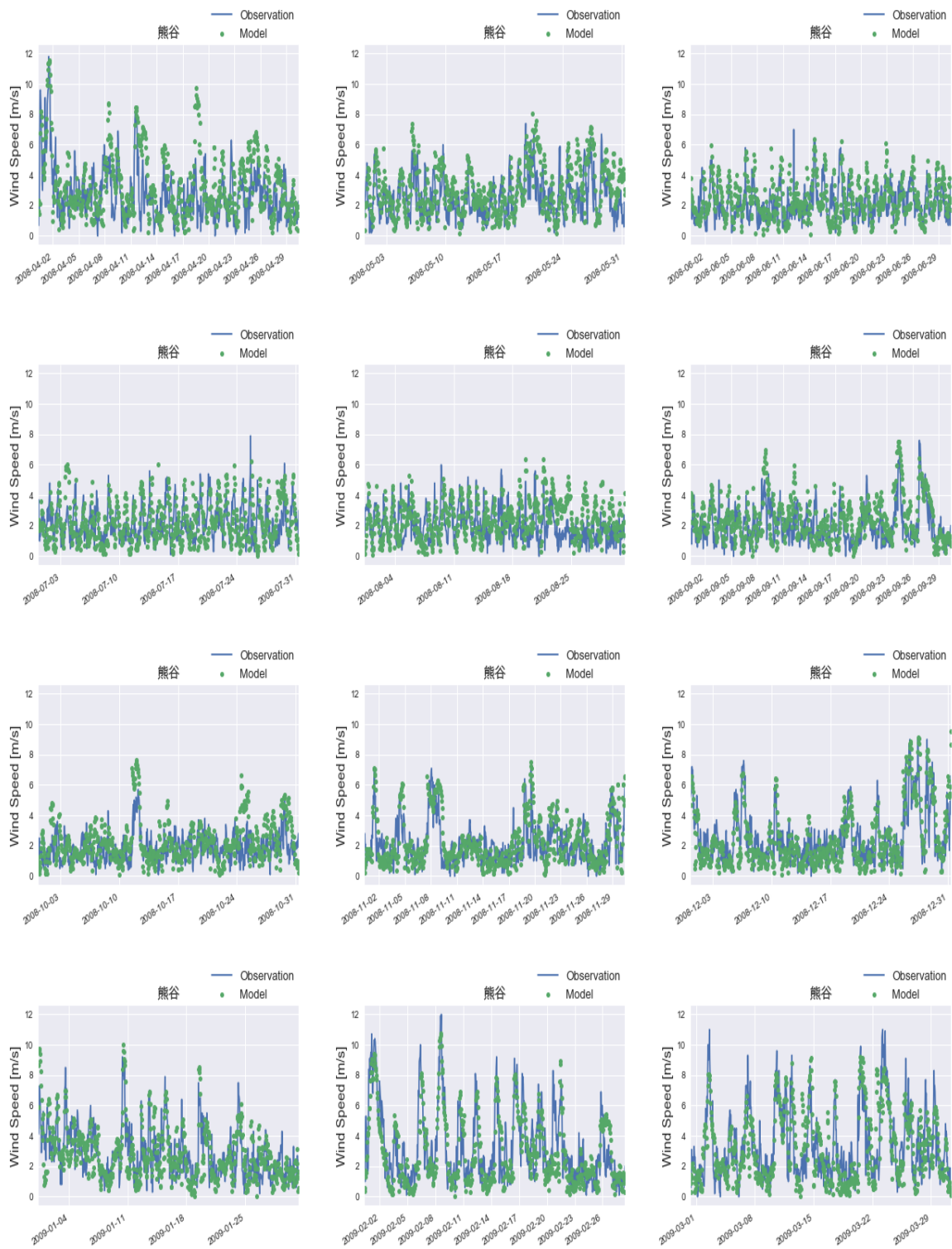


図 27 熊谷での気象モデル WRF の計算値と観測データにおける風速の比較
 緑点：気象モデル、青線：観測値

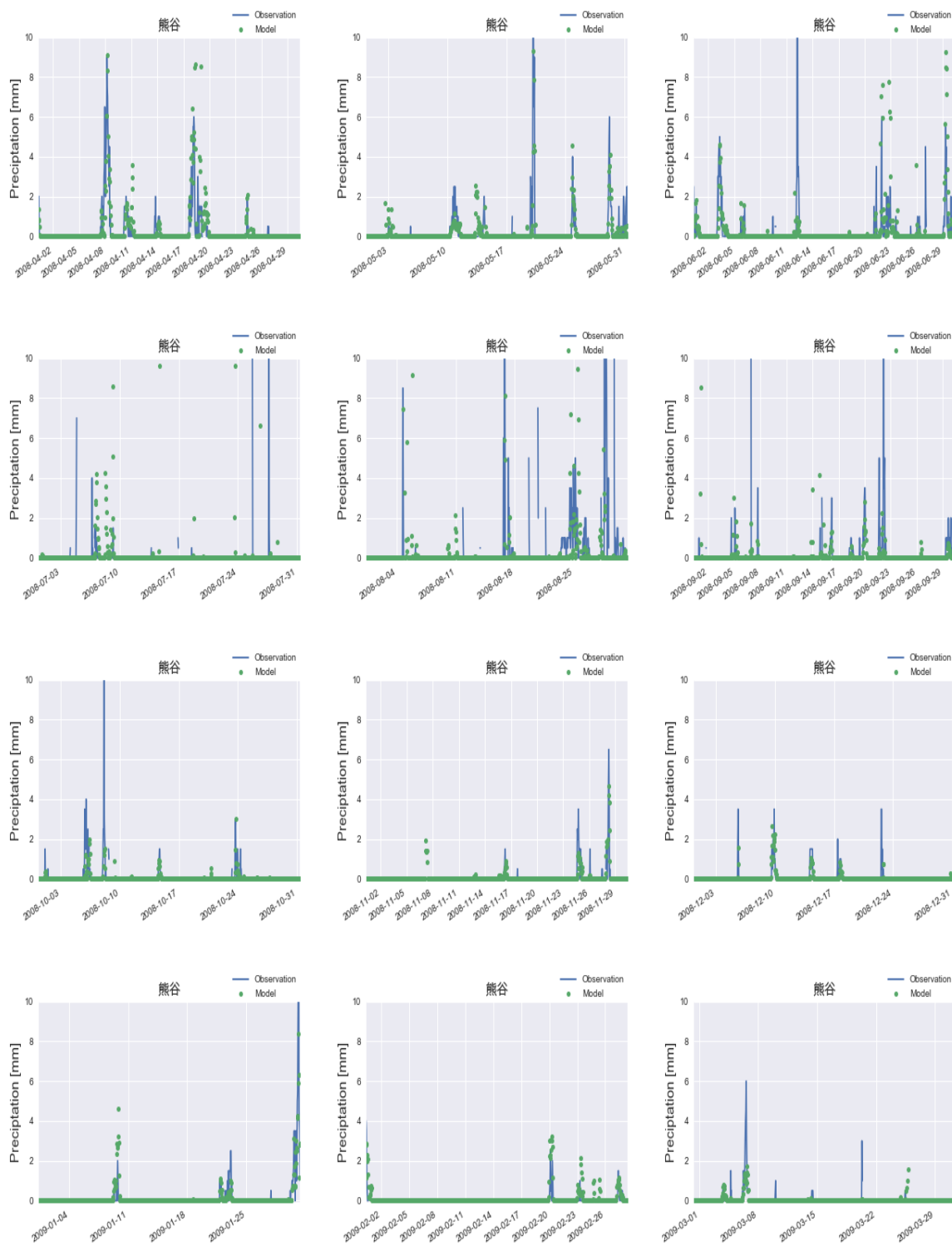


図 28 熊谷での気象モデル WRF の計算値と観測データにおける降雨量の比較
 緑点：気象モデル、青線：観測値

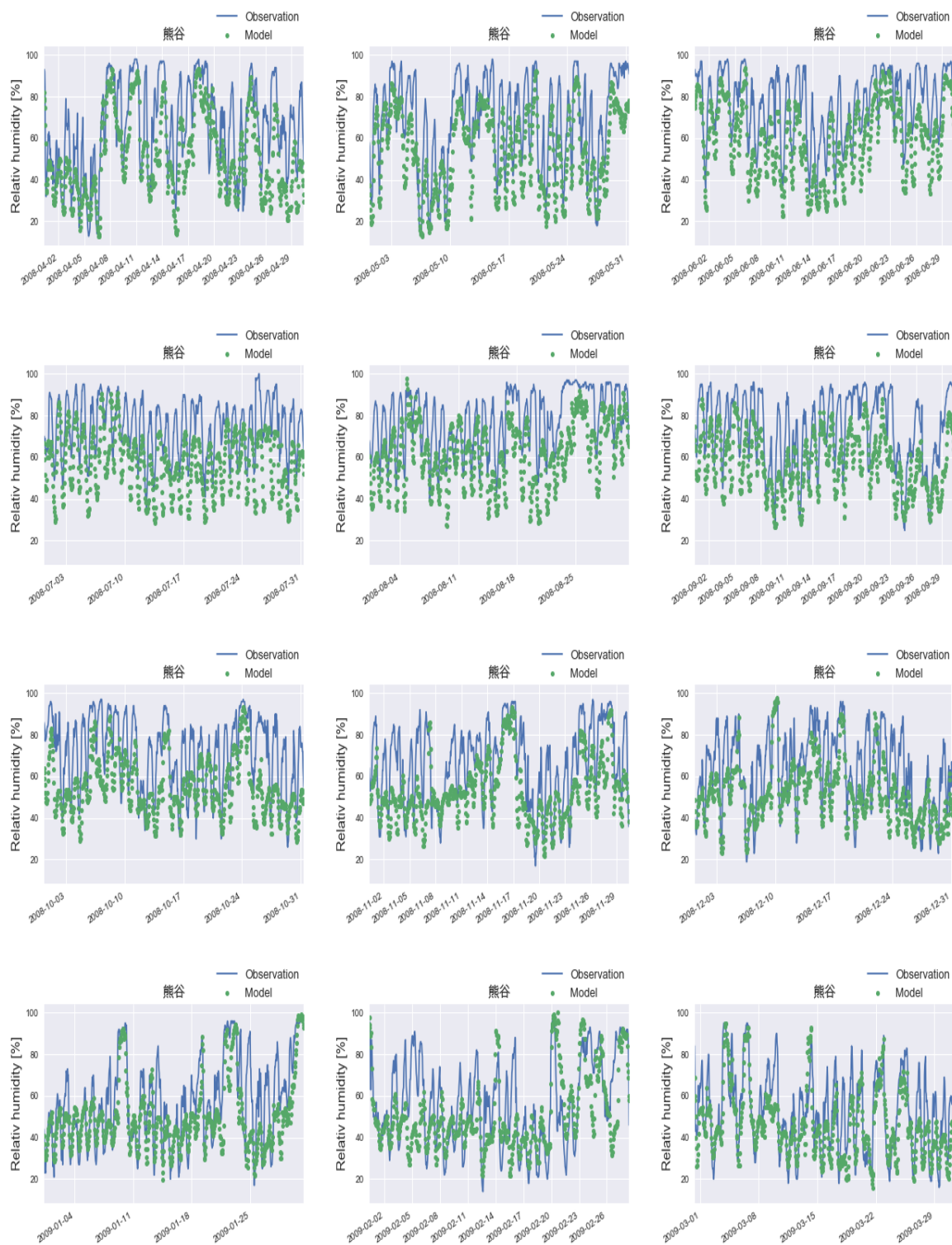


図 29 熊谷での気象モデル WRF の計算値と観測データにおける相対湿度の比較
 緑点：気象モデル、青線：観測値

表 25 熊谷における気温の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	14.16833	14.81015	1.04530	0.04530	0.11478	0.11478	0.87064
2008	5	18.27715	19.73405	1.07971	0.07971	0.10556	0.10556	0.92228
2008	6	21.42528	23.13881	1.07998	0.07998	0.09088	0.09088	0.88557
2008	7	26.78226	28.80993	1.07571	0.07571	0.08587	0.08587	0.83469
2008	8	26.23602	28.60975	1.09048	0.09048	0.10022	0.10022	0.83948
2008	9	23.43264	25.45762	1.08642	0.08642	0.09825	0.09825	0.90026
2008	10	18.14435	19.56449	1.07827	0.07827	0.11017	0.11017	0.83839
2008	11	11.32806	12.60578	1.11279	0.11279	0.15548	0.15548	0.87966
2008	12	7.26478	7.85447	1.08117	0.08117	0.21995	0.21967	0.87251
2009	1	4.96465	4.84303	0.97550	-0.02450	0.28349	0.27370	0.88233
2009	2	6.12232	5.74243	0.93795	-0.06205	0.25569	0.25376	0.86787
2009	3	8.58051	8.72663	1.01703	0.01703	0.17977	0.17977	0.89206
ALL	ALL	15.61588	16.72211	1.07084	0.07084	0.12079	0.01793	0.97369

表 26 熊谷における風向の統計値

YEAR	MONTH	0	1	2	3	4	5	6	7	8
2008	4	18.30986	24.92958	18.02817	11.54930	10.28169	5.63380	4.36620	5.49296	1.40845
2008	5	16.44205	28.97574	17.65499	10.24259	10.10782	5.25606	4.31267	4.44744	2.56065
2008	6	14.48468	26.32312	17.68802	11.00279	9.05292	8.63510	5.98886	4.73538	2.08914
2008	7	13.72813	23.68775	15.20861	15.61238	9.69044	7.80619	6.59489	4.97981	2.69179
2008	8	11.62162	19.18919	16.62162	14.86486	7.70270	8.37838	8.37838	9.05405	4.18919
2008	9	15.08380	23.74302	15.92179	12.43017	7.26257	8.10056	7.82123	5.86592	3.77095
2008	10	14.17004	26.85560	16.05938	11.74089	8.77193	5.93792	7.55735	5.66802	3.23887
2008	11	20.02821	29.76023	16.92525	11.42454	7.19323	5.92384	4.09027	2.67983	1.97461
2008	12	22.89973	31.57182	14.09214	8.26558	5.96206	5.42005	5.01355	3.92954	2.84553
2009	1	20.75472	37.73585	13.34232	8.62534	4.71698	4.71698	4.58221	4.17790	1.34771
2009	2	23.46786	29.44694	14.49925	11.80867	5.97907	5.38117	4.48430	3.28849	1.64425
2009	3	24.28765	29.85075	12.21167	6.24152	5.69878	6.10583	6.64858	6.64858	2.30665
ALL	ALL	17.89776	27.67375	15.68064	11.14302	7.70821	6.44457	5.83573	5.10052	2.51580

表 27 熊谷における風速の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	2.695000	3.316025	1.230436	0.230436	0.556496	0.556496	0.539056
2008	5	2.511694	3.072284	1.223192	0.223192	0.505051	0.505051	0.507357
2008	6	2.133889	2.395348	1.122527	0.122527	0.464919	0.464919	0.423598
2008	7	2.220833	2.213780	0.996824	-0.003176	0.498791	0.498791	0.349431
2008	8	1.993414	2.436219	1.222134	0.222134	0.576081	0.576081	0.266160
2008	9	2.016250	2.405519	1.193066	0.193066	0.509241	0.509241	0.560649
2008	10	1.872984	2.249228	1.200880	0.200880	0.562259	0.562259	0.382361
2008	11	2.162222	2.364023	1.093330	0.093330	0.478168	0.478168	0.634235
2008	12	2.559274	2.538578	0.991913	-0.008087	0.387056	0.387056	0.782132
2009	1	2.829570	2.745321	0.970226	-0.029774	0.374619	0.374619	0.672658
2009	2	3.198512	2.884489	0.901822	-0.098178	0.364443	0.364443	0.795864
2009	3	3.406720	3.293877	0.966876	-0.033124	0.372188	0.372188	0.732977
ALL	ALL	2.463037	2.658140	1.079213	0.079213	0.460506	0.252812	0.630935

表 28 熊谷における降雨量の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	0.98396	0.37447	0.38058	0.40304	0.94774	0.94774	0.54958
2008	5	0.86010	0.20077	0.23342	-0.23360	0.70769	0.70769	0.79618
2008	6	0.91071	0.29446	0.32333	0.12446	1.27203	1.27203	0.22385
2008	7	0.78972	-0.72686	-0.92040	-0.26270	1.59836	1.59836	-0.06704
2008	8	1.60841	0.64258	0.39952	-0.00319	1.72856	1.72856	-0.00507
2008	9	0.84795	0.13621	0.16063	-0.50423	1.07857	1.07857	0.05847
2008	10	0.60800	0.04703	0.07736	-0.58430	0.83699	0.83699	0.42753
2008	11	0.48515	0.07535	0.15532	0.03792	0.80180	0.80180	0.76005
2008	12	0.70667	0.04821	0.06822	-0.36223	0.72309	0.72309	0.44737
2009	1	0.92683	0.16609	0.17920	0.03316	0.68763	0.68763	0.84809
2009	2	0.24306	0.07892	0.32470	1.76606	2.00457	2.00457	0.55015
2009	3	0.51250	0.03588	0.07000	-0.43559	0.88802	0.88802	0.49982
ALL	ALL	0.88889	0.11356	0.12775	-0.05692	1.17514	2.33708	0.10304

表 29 熊谷における相対湿度の統計値

YEAR	MONTH	Ave(Obs)	Ave(Model)	Ratio	NMB	NME	NRMSE	R
2008	4	64.568056	50.505441	0.782205	-0.217795	0.243033	0.243033	0.797388
2008	5	69.110215	54.493735	0.788505	-0.211495	0.224940	0.224940	0.863868
2008	6	75.686111	58.812295	0.777055	-0.222945	0.224761	0.224761	0.852498
2008	7	74.224462	57.112301	0.769454	-0.230546	0.233278	0.233278	0.767592
2008	8	78.184140	62.012616	0.793161	-0.206839	0.213452	0.213452	0.715380
2008	9	73.495833	57.246384	0.778907	-0.221093	0.227367	0.227367	0.805923
2008	10	70.952957	54.830818	0.772777	-0.227223	0.243082	0.243082	0.709772
2008	11	65.636111	52.588468	0.801212	-0.198788	0.223625	0.223625	0.762066
2008	12	63.098118	51.388193	0.814417	-0.185583	0.213659	0.213659	0.757228
2009	1	57.919355	50.202238	0.866761	-0.133239	0.186797	0.186797	0.787490
2009	2	56.303571	50.720352	0.900837	-0.099163	0.236794	0.236794	0.625618
2009	3	52.372312	46.095468	0.880150	-0.119850	0.190958	0.190958	0.801301
ALL	ALL	66.848744	53.849161	0.805537	-0.194463	0.222547	0.067358	0.780878