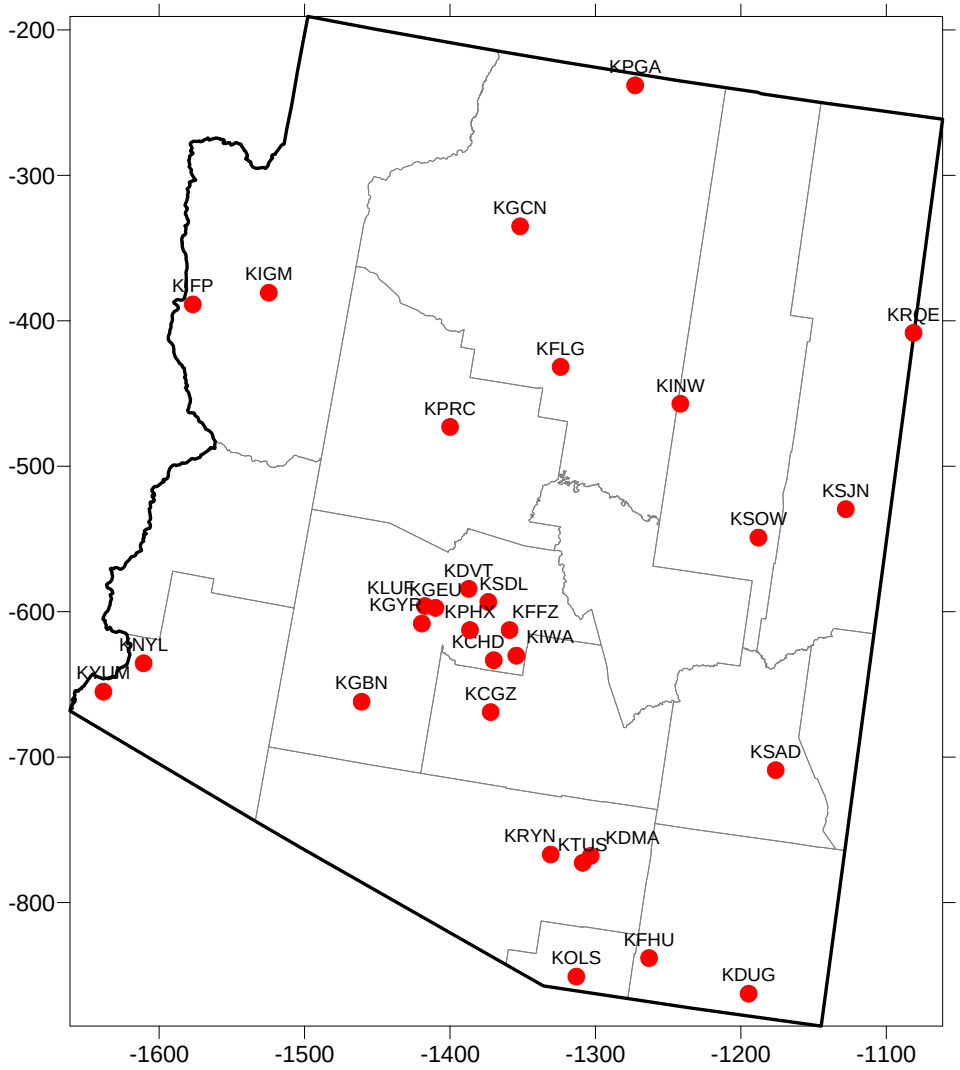


Arizona Met Stations

Table 1: Temperature Bias (K) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	1.39	1.81	1.08	0.72	0.26	0.10	0.06	-0.09	0.45	1.32	1.65	1.49	0.85
AZ-KCHD	0.96	1.60	0.37	0.07	0.24	0.14	0.38	0.25	0.45	0.85	1.80	1.56	0.72
AZ-KDMA	0.17	0.75	0.39	-0.20	-0.70	-0.39	1.31	0.02	0.49	0.67	0.86	0.88	0.35
AZ-KDUG	0.05	0.11	-0.22	-0.73	-1.32	-0.62	0.82	0.29	-0.45	-0.27	0.19	0.26	-0.16
AZ-KDVT	-0.19	0.65	-0.37	-0.81	-0.70	-1.37	-0.83	-0.59	-0.58	-0.11	0.16	0.51	-0.35
AZ-KFFZ	1.44	2.00	0.45	0.19	0.16	-0.39	0.28	0.02	-0.04	0.88	1.53	2.02	0.71
AZ-KFHU	-1.07	-0.90	-0.84	-1.20	-1.30	-0.54	1.19	-0.22	0.08	-0.34	-0.64	-0.79	-0.55
AZ-KFLG	1.17	0.22	0.99	0.64	1.06	1.27	1.23	1.26	1.50	1.25	1.20	1.18	1.08
AZ-KGBN	0.61	0.69	-0.28	-1.03	-1.38	-1.38	-1.69	-1.06	-0.54	0.06	0.68	1.08	-0.35
AZ-KGCN	1.97	1.07	1.08	0.90	1.77	0.33	1.98	2.16	2.54	1.19	1.45	1.78	1.52
AZ-KGEU	0.80	1.25	0.10	-0.23	-0.76	-1.27	-0.65	-0.54	-0.41	0.14	0.70	0.80	-0.01
AZ-KGYR	1.40	1.76	0.37	-0.17	-0.18	-0.96	-0.52	-0.60	-0.69	0.02	0.74	1.45	0.22
AZ-KIFP	-0.40	-0.21	-0.70	-1.30	-1.63	-2.01	-2.13	-2.19	-2.19	-0.95	-0.96	-0.30	-1.25
AZ-KIGM	1.78	1.57	1.41	0.67	0.36	-0.10	0.54	0.34	0.51	0.74	1.03	2.15	0.92
AZ-KINW	2.35	1.17	0.94	0.70	0.79	0.79	0.93	0.90	0.78	1.18	1.48	1.89	1.16
AZ-KIWA	0.05	1.01	0.47	0.46	0.12	-0.14	-0.24	-0.43	-1.18	-0.27	0.48	-0.35	0.00
AZ-KLUF	1.16	1.68	0.61	0.50	-0.05	-0.55	-0.28	-0.49	-0.14	1.18	1.54	1.44	0.55
AZ-KNYL	-1.92	-2.52	-2.32	-2.15	-2.45	-1.65	-0.39	-0.10	0.00	-0.23	-0.11	-0.26	-1.18
AZ-KOLS	0.66	0.94	0.46	0.02	-0.50	0.20	1.90	0.47	1.32	1.16	1.06	1.01	0.73
AZ-KPGA	1.35	0.37	0.08	0.09	0.33	-0.22	0.87	0.60	-0.06	0.23	0.38	1.50	0.46
AZ-KPHX	0.78	1.29	0.22	0.18	0.05	-0.12	0.12	0.12	0.44	1.16	1.53	1.35	0.59
AZ-KPRC	1.07	0.54	0.51	0.39	0.37	0.14	0.60	0.50	0.58	0.28	0.72	1.10	0.57
AZ-KRQE	2.51	-1.20	0.64	0.33	0.79	0.73	1.15	1.50	1.46	1.09	1.73	1.47	1.02
AZ-KRYN	-1.03	0.98	0.39	-0.53	-0.69	-0.32	0.73	0.04	0.59	0.70	0.78	1.07	0.23
AZ-KSAD	1.62	1.49	0.78	-0.10	-0.08	0.23	1.36	0.46	0.53	1.06	1.10	1.97	0.87
AZ-KSDL	0.59	1.20	-0.17	-0.46	-0.66	-1.17	-0.59	-0.66	-0.58	0.59	0.98	1.41	0.04
AZ-KSJN	1.65	0.33	0.66	0.16	0.34	-0.02	0.47	0.57	0.81	0.92	1.33	1.44	0.72
AZ-KSOW	0.33	-0.50	0.08	-0.05	0.28	0.07	0.80	0.66	0.39	0.72	0.97	0.68	0.37
AZ-KTUS	-0.18	0.44	-0.07	-0.61	-1.15	-0.89	0.77	-0.35	0.07	0.35	0.45	0.55	-0.05

Table 2: Temperature Error (K) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	1.25	2.12	1.05	1.69	1.55	1.16	0.87	1.98	1.47	1.68	1.49	2.36	1.56
AZ-KCHD	1.49	0.76	0.74	1.69	0.91	2.36	0.74	2.86	2.16	1.19	1.56	1.72	1.52
AZ-KDMA	1.04	1.38	1.61	1.38	0.83	2.20	0.81	1.70	1.42	1.23	1.86	2.32	1.48
AZ-KDUG	1.03	2.57	3.03	2.37	1.50	1.99	1.49	2.97	1.48	1.80	1.54	3.53	2.11
AZ-KDVT	0.89	1.46	1.60	2.21	1.47	0.62	1.27	1.61	1.00	0.97	0.96	1.43	1.29
AZ-KFFZ	3.10	1.48	0.83	1.33	1.39	1.02	0.90	2.31	1.20	1.01	1.15	2.48	1.52
AZ-KFHU	0.85	1.48	2.04	1.84	1.16	0.54	0.72	2.17	1.78	1.30	1.38	1.32	1.38
AZ-KFLG	3.28	2.85	1.57	1.12	2.20	2.26	1.65	1.82	2.74	3.08	3.99	1.92	2.37
AZ-KGBN	1.44	1.43	1.20	2.71	1.25	0.97	1.36	5.72	1.84	1.39	NA	2.47	1.98
AZ-KGCN	6.92	4.32	1.77	1.34	1.30	1.77	4.15	1.32	2.60	3.16	4.10	4.59	3.11
AZ-KGEU	1.30	1.09	0.74	2.15	1.32	0.77	1.36	4.72	1.39	0.75	0.95	1.30	1.49
AZ-KGYR	2.24	1.03	0.87	2.05	1.25	0.77	1.15	4.41	1.67	0.67	1.19	1.69	1.58
AZ-KIFP	0.93	1.64	1.06	2.17	2.11	3.02	2.48	2.63	2.20	2.07	1.77	1.71	1.98
AZ-KIGM	1.86	1.80	1.82	1.21	1.74	1.68	1.69	3.02	1.43	1.62	0.78	5.21	1.99
AZ-KINW	4.33	1.88	1.51	2.27	2.42	2.64	2.15	2.31	2.08	2.01	1.84	4.58	2.50
AZ-KIWA	1.62	1.26	1.53	1.99	1.03	1.52	0.86	2.57	2.59	1.06	0.91	1.73	1.56
AZ-KLUF	2.57	1.63	0.68	1.77	1.60	1.16	1.00	3.05	0.73	1.34	NA	2.64	1.65
AZ-KNYL	2.53	2.69	2.04	3.40	2.99	1.47	0.96	3.87	1.07	1.41	1.35	1.24	2.09
AZ-KOLS	2.17	2.11	2.25	1.76	1.73	1.76	1.45	1.73	1.96	2.50	2.73	3.76	2.16
AZ-KPGA	1.53	1.61	1.39	0.65	1.25	1.46	0.92	2.82	1.94	1.19	2.01	3.09	1.66
AZ-KPHX	1.20	1.26	0.67	1.53	0.72	0.86	0.60	2.37	1.76	0.99	1.62	1.34	1.24
AZ-KPRC	1.98	1.35	0.97	1.25	1.21	1.28	1.61	2.10	2.71	1.45	0.88	2.88	1.64
AZ-KRQE	2.30	3.05	1.54	1.99	2.24	2.05	2.48	2.08	1.46	2.78	2.68	5.66	2.53
AZ-KRYN	1.21	1.83	1.79	1.61	1.67	1.06	1.90	2.26	0.81	1.41	1.45	1.91	1.58
AZ-KSAD	1.30	2.06	1.52	2.21	2.45	1.07	1.71	1.96	1.11	2.23	2.19	4.92	2.06
AZ-KSDL	0.86	0.95	1.60	1.95	1.05	0.77	1.58	1.48	1.00	1.49	0.80	3.30	1.40
AZ-KSJN	3.76	1.90	1.31	1.58	2.30	2.65	1.63	1.58	3.04	1.02	2.69	4.21	2.31
AZ-KSOW	4.07	2.38	1.53	1.29	1.17	2.32	1.44	1.37	1.50	2.03	1.34	2.82	1.94
AZ-KTUS	1.21	1.29	2.17	2.06	1.23	1.29	1.20	1.64	1.47	1.20	1.06	2.27	1.51

Table 3: Humidity Bias (g/kg) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	-0.48	-1.03	-0.31	-0.08	0.13	-1.06	-0.08	0.77	-0.36	0.30	0.20	-0.15	-0.18
AZ-KCHD	-0.49	-1.45	-0.41	0.06	0.07	-0.91	-0.40	0.28	-0.10	0.11	-0.34	-0.81	-0.37
AZ-KDMA	-0.52	-0.97	-0.36	0.04	-0.10	-0.92	-1.87	-0.60	-0.42	0.43	-0.11	-0.56	-0.50
AZ-KDUG	0.11	0.06	0.26	0.34	0.32	-0.18	-1.20	-0.70	0.60	0.97	0.54	-0.13	0.08
AZ-KDVT	-0.51	-1.37	-0.35	0.18	0.52	-0.35	-0.08	0.50	-0.03	0.40	0.00	-0.67	-0.15
AZ-KFFZ	-0.14	-0.88	-0.12	0.15	0.26	-0.67	-0.52	0.20	0.03	0.50	0.03	-0.49	-0.14
AZ-KFHU	-0.21	-0.37	-0.07	0.02	-0.02	-0.70	-1.90	-0.92	0.46	0.62	0.04	-0.27	-0.28
AZ-KFLG	0.49	0.37	0.12	0.23	0.16	-0.21	-0.25	-0.37	0.13	0.55	0.29	0.12	0.14
AZ-KGBN	-1.06	-1.48	-0.32	0.39	0.33	-0.49	-0.47	-0.05	-0.30	0.14	-0.27	-0.79	-0.36
AZ-KGCN	0.51	0.21	-0.05	0.13	0.03	-0.18	-0.37	-0.44	-0.07	0.33	0.28	0.20	0.05
AZ-KGEU	-0.84	-1.49	-0.70	-0.12	0.30	-0.36	-0.82	-0.52	-0.65	-0.23	-0.49	-0.89	-0.57
AZ-KGYR	-0.96	-1.80	-1.00	-0.35	0.21	-0.49	-0.42	0.36	-0.42	-0.32	-0.06	-0.92	-0.51
AZ-KIFP	-0.25	-0.49	-0.22	-0.08	-0.17	-0.28	-0.75	-0.23	-0.22	-0.48	-0.69	-0.60	-0.37
AZ-KIGM	-0.31	-0.54	-0.53	-0.11	-0.04	0.06	-0.79	-0.42	0.04	0.02	-0.15	-0.42	-0.27
AZ-KINW	0.22	-0.14	0.25	0.35	0.29	-0.11	0.08	-0.28	0.62	0.86	0.50	-0.01	0.22
AZ-KIWA	-0.68	-1.69	-0.49	0.08	0.01	-0.82	-0.08	0.33	-0.47	0.24	-0.36	-1.51	-0.45
AZ-KLUF	-0.95	-1.58	-0.74	-0.30	0.02	-0.93	-1.42	-0.28	-0.86	-0.52	-0.58	-1.25	-0.78
AZ-KNYL	-0.36	-0.66	-0.59	-0.40	-0.23	-1.15	-0.98	-0.44	-1.20	-0.52	-0.60	-0.52	-0.64
AZ-KOLS	-0.18	-0.33	0.02	0.13	0.05	-0.82	-2.13	-0.75	-0.38	0.43	0.18	-0.22	-0.33
AZ-KPGA	0.20	-0.09	0.15	0.12	0.16	0.06	0.02	-0.18	0.14	0.03	0.00	-0.17	0.04
AZ-KPHX	-0.70	-1.60	-0.64	-0.16	0.11	-0.76	-0.72	-0.12	-0.72	-0.29	-0.37	-1.01	-0.58
AZ-KPRC	NA	-0.27	-0.06	0.02	0.01	-0.48	-1.07	-0.78	-0.34	0.16	-0.07	-0.16	-0.28
AZ-KRQE	0.65	0.17	0.26	0.34	0.23	-0.08	0.01	-0.06	0.33	0.56	0.56	0.28	0.27
AZ-KRYN	-0.18	-1.10	-0.35	0.04	0.22	-0.54	-1.40	-0.58	-0.46	0.53	-0.06	-0.55	-0.37
AZ-KSAD	-0.05	-0.35	0.19	0.36	0.15	0.06	-0.97	0.08	-0.07	0.65	0.43	-0.45	0.00
AZ-KSDL	-0.55	-1.23	-0.48	-0.13	0.19	-0.94	-0.46	0.28	-0.47	-0.09	-0.49	-1.08	-0.45
AZ-KSJN	0.32	0.09	0.31	0.26	0.03	-0.25	-0.14	-0.26	-0.04	0.37	0.13	0.04	0.07
AZ-KSOW	-0.02	-0.17	0.04	0.19	-0.05	-0.55	-0.26	-0.40	-0.04	0.06	-0.07	-0.12	-0.12
AZ-KTUS	-0.38	-0.80	-0.15	0.22	0.21	-0.48	-1.00	-0.12	0.12	0.66	0.07	-0.44	-0.17

Table 4: Humidity Error (g/kg) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	0.84	1.26	0.61	0.77	0.95	1.48	1.54	1.53	1.33	0.88	0.80	0.91	1.08
AZ-KCHD	0.78	1.50	0.62	0.59	0.81	1.23	1.18	1.54	1.18	0.86	0.96	1.20	1.04
AZ-KDMA	0.82	1.24	0.67	0.47	0.72	1.43	2.08	1.54	1.21	0.84	0.72	0.87	1.05
AZ-KDUG	0.58	0.54	0.46	0.45	0.63	1.10	1.63	1.42	1.40	1.18	0.90	0.78	0.92
AZ-KDVT	0.79	1.42	0.59	0.52	0.81	1.02	1.50	1.85	1.36	0.65	0.75	1.06	1.03
AZ-KFFZ	0.77	1.02	0.49	0.55	0.82	1.13	1.38	1.54	1.06	0.89	0.87	0.98	0.96
AZ-KFHU	0.68	0.79	0.49	0.40	0.63	1.31	2.06	1.74	1.21	0.97	0.69	0.72	0.97
AZ-KFLG	0.60	0.58	0.40	0.42	0.55	0.74	1.12	1.51	1.10	0.69	0.66	0.50	0.74
AZ-KGBN	1.23	1.54	0.58	0.76	0.89	1.05	1.42	1.95	1.40	0.78	0.69	1.11	1.12
AZ-KGCN	0.63	0.50	0.40	0.30	0.51	0.64	1.30	1.47	1.16	0.59	0.68	0.53	0.73
AZ-KGEU	0.99	1.55	0.80	0.64	0.74	1.02	1.49	1.58	1.39	0.75	1.02	1.20	1.10
AZ-KGYR	1.21	1.84	1.14	0.73	0.80	1.15	1.25	1.75	1.42	0.81	0.88	1.20	1.18
AZ-KIFP	0.67	0.64	0.43	0.35	0.47	0.59	1.37	1.62	1.03	0.60	0.87	0.80	0.79
AZ-KIGM	0.67	0.68	0.63	0.37	0.44	0.47	1.45	1.58	1.08	0.39	0.59	0.67	0.75
AZ-KINW	0.60	0.46	0.42	0.44	0.61	0.79	1.16	1.41	1.06	0.93	0.73	0.47	0.76
AZ-KIWA	0.92	1.73	0.75	0.58	0.99	1.32	1.38	1.91	1.41	0.81	0.94	1.65	1.20
AZ-KLUF	1.08	1.63	0.87	0.75	0.87	1.36	1.92	1.89	1.58	0.97	0.95	1.44	1.28
AZ-KNYL	0.78	0.83	0.79	0.78	1.07	1.72	1.94	2.05	2.33	0.82	0.88	0.87	1.24
AZ-KOLS	0.65	0.83	0.45	0.43	0.65	1.36	2.34	1.57	1.24	1.01	0.75	0.78	1.01
AZ-KPGA	0.47	0.42	0.38	0.28	0.49	0.47	1.18	1.04	0.80	0.44	0.58	0.45	0.58
AZ-KPHX	0.94	1.67	0.82	0.71	0.85	1.29	1.59	1.86	1.53	0.94	0.96	1.30	1.21
AZ-KPRC	NA	0.48	0.38	0.38	0.51	0.83	1.47	1.81	1.20	0.55	0.60	0.54	0.80
AZ-KRQE	0.71	0.45	0.46	0.44	0.55	0.63	1.24	1.21	1.04	0.83	0.65	0.48	0.72
AZ-KRYN	0.55	1.30	0.61	0.45	0.61	1.16	1.90	1.61	1.34	0.86	0.74	0.82	1.00
AZ-KSAD	0.64	0.61	0.43	0.47	0.70	0.93	1.57	1.48	1.19	0.90	0.76	0.78	0.87
AZ-KSDL	0.81	1.30	0.71	0.61	0.78	1.32	1.46	1.74	1.41	0.87	0.98	1.33	1.11
AZ-KSJN	0.64	0.45	0.48	0.39	0.55	0.78	1.11	1.20	0.87	0.76	0.52	0.49	0.69
AZ-KSOW	0.48	0.53	0.43	0.42	0.56	0.86	1.06	1.22	0.90	0.74	0.52	0.55	0.69
AZ-KTUS	0.76	1.12	0.60	0.49	0.72	1.24	1.59	1.48	1.18	0.92	0.73	0.83	0.97

Table 5: Wind Direction Bias (deg.) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	33.15	20.53	16.02	9.37	-58.41	-3.86	16.20	-31.34	41.27	-4.15	6.89	-0.41	3.77
AZ-KCHD	-11.79	42.31	26.23	24.61	-12.96	-12.91	-14.17	6.50	50.93	-13.56	43.99	-1.44	10.65
AZ-KDMA	-4.86	7.67	-30.10	-3.78	-21.95	-7.20	-16.53	-7.02	3.70	3.40	20.97	-7.07	-5.23
AZ-KDUG	-29.46	3.75	-6.78	-6.12	-6.32	18.30	-23.77	-8.29	2.28	53.13	-9.92	-35.12	-4.03
AZ-KDVT	15.75	-14.62	12.69	0.08	-5.75	23.33	12.47	0.07	17.84	-28.24	-7.84	-1.73	2.00
AZ-KFFZ	17.50	30.33	-17.61	-3.64	40.34	-56.31	19.56	103.54	64.63	1.61	-33.99	-19.00	12.25
AZ-KFHU	-12.05	0.22	12.05	38.20	-19.76	-15.73	17.45	-22.78	4.98	3.49	37.96	-16.32	2.31
AZ-KFLG	-5.85	-39.89	5.84	5.47	8.74	23.86	-11.73	-22.27	23.85	-12.46	16.61	14.25	0.54
AZ-KGBN	-2.92	-17.79	-55.15	5.56	-16.16	-7.96	-11.30	-25.97	29.14	30.05	NA	-60.79	-12.12
AZ-KGCN	-2.17	32.00	1.22	1.26	0.57	25.69	34.78	4.26	2.95	-4.87	-22.25	-16.92	4.71
AZ-KGEU	12.32	-110.07	-0.18	5.82	69.12	26.41	56.44	47.31	37.67	22.76	36.18	NA	18.53
AZ-KGYR	0.31	8.01	-22.17	-4.55	-42.71	12.74	10.08	-5.49	25.34	NA	1.29	NA	-1.72
AZ-KIFP	-25.14	-38.30	-4.27	13.71	18.35	12.98	10.29	-11.47	41.00	15.90	7.24	-42.18	-0.16
AZ-KIGM	-15.25	12.70	11.18	9.41	1.39	10.12	5.27	-32.84	-1.51	-14.51	-7.76	-69.97	-7.65
AZ-KINW	-9.45	32.56	3.35	40.56	38.46	-6.54	11.62	26.69	-0.95	5.11	17.36	-30.31	10.71
AZ-KIWA	29.14	5.31	-21.43	16.03	-9.37	16.47	15.09	-18.07	4.82	7.95	15.10	-16.05	3.75
AZ-KLUF	8.84	-53.06	1.87	-0.23	-40.15	51.95	21.27	-15.04	16.94	0.59	NA	7.32	0.03
AZ-KNYL	-47.12	-17.57	-12.65	-30.75	5.83	19.03	15.77	-30.75	-7.89	20.16	-20.46	0.66	-8.81
AZ-KOLS	26.37	2.18	5.62	7.51	14.14	-3.66	-5.22	19.22	31.48	10.97	3.51	17.46	10.80
AZ-KPGA	-10.73	-2.32	17.75	10.76	-14.32	-27.69	-41.92	-12.11	5.08	-12.89	-20.67	10.84	-8.19
AZ-KPHX	11.28	1.66	27.01	7.59	-14.83	22.74	2.18	24.27	13.19	-17.65	12.01	15.11	8.71
AZ-KPRC	9.54	9.23	15.29	8.46	3.42	-2.85	26.46	-51.36	-31.61	19.16	23.46	1.88	2.59
AZ-KRQE	3.66	29.12	-0.60	15.95	10.57	-1.30	19.78	-13.62	-13.24	21.73	-8.47	-81.95	-1.53
AZ-KRYN	-1.88	-19.45	33.19	7.25	13.20	-0.87	4.27	-10.69	-22.40	23.00	27.15	-4.68	4.01
AZ-KSAD	8.73	-45.97	20.14	-14.80	-30.67	4.55	1.80	-14.04	-6.80	-29.95	-4.76	-40.00	-12.65
AZ-KSDL	17.84	8.29	43.59	-4.49	1.94	11.21	9.81	-20.93	25.67	-45.64	34.98	-43.73	3.21
AZ-KSJN	56.26	-6.72	5.03	18.65	10.25	-6.53	19.62	-23.28	-12.53	5.99	47.22	-10.74	8.60
AZ-KSOW	4.93	1.86	2.96	5.11	2.06	1.27	-19.03	-4.11	14.84	35.60	-15.30	-1.24	2.41
AZ-KTUS	-18.89	-4.98	-10.44	2.87	-14.82	-6.51	-19.53	-2.48	-3.13	-10.66	0.58	-8.69	-8.06

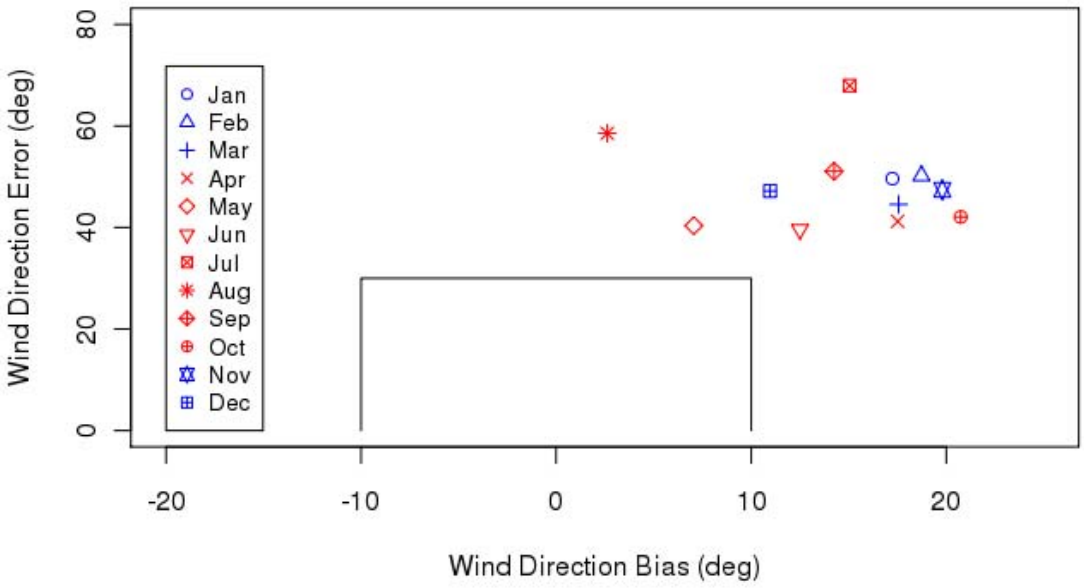
Table 6: Wind Direction Error (deg.) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	33.15	60.34	48.14	16.50	89.34	62.75	27.62	95.32	41.27	51.32	48.06	60.03	52.82
AZ-KCHD	51.00	51.99	42.73	24.61	39.52	39.89	46.74	90.97	50.93	79.48	43.99	81.04	53.57
AZ-KDMA	40.95	17.19	32.90	23.86	31.39	40.23	37.38	36.35	16.65	20.61	33.25	27.30	29.84
AZ-KDUG	36.37	32.98	46.54	21.37	35.83	46.17	54.13	78.56	20.80	71.61	32.61	39.41	43.03
AZ-KDVT	26.66	47.67	51.05	19.92	40.65	48.02	23.95	68.94	27.83	37.14	18.60	19.83	35.86
AZ-KFFZ	29.99	91.07	53.01	15.61	43.92	73.07	24.67	103.54	64.63	31.99	37.92	103.68	56.09
AZ-KFHU	23.43	9.99	21.09	38.51	51.82	15.73	30.11	99.71	18.14	21.10	41.41	29.45	33.37
AZ-KFLG	32.89	45.14	18.75	9.33	19.69	101.13	22.71	29.94	30.10	29.94	67.09	14.25	35.08
AZ-KGBN	20.18	33.98	65.46	10.19	23.94	61.58	20.08	91.05	37.64	66.15	NA	70.88	45.56
AZ-KGCN	37.62	42.50	18.64	10.35	11.71	57.82	35.36	51.65	19.16	30.73	56.38	29.31	33.44
AZ-KGEU	32.44	110.07	13.79	13.29	70.06	39.68	56.44	68.35	37.67	22.76	36.18	NA	45.52
AZ-KGYR	28.94	34.23	24.85	12.17	42.71	16.74	18.06	96.83	32.34	NA	1.29	NA	30.82
AZ-KIFP	27.96	80.55	31.20	28.47	24.06	17.73	17.09	21.57	63.17	27.21	10.56	42.18	32.65
AZ-KIGM	35.31	64.59	32.46	16.51	17.79	60.84	21.29	44.79	35.75	25.75	20.36	91.15	38.88
AZ-KINW	54.60	39.42	36.04	40.56	39.76	47.96	21.69	40.39	28.56	23.71	25.70	39.35	36.48
AZ-KIWA	52.38	20.36	47.01	24.09	45.09	47.83	45.06	70.71	14.98	44.16	29.11	27.81	39.05
AZ-KLUF	27.34	82.25	42.44	42.44	68.67	70.53	34.96	67.12	28.10	40.63	NA	16.54	47.37
AZ-KNYL	47.12	54.87	22.77	43.95	56.44	49.66	39.72	54.11	59.62	74.91	29.40	34.86	47.29
AZ-KOLS	72.46	29.98	21.68	12.49	37.49	38.28	32.89	54.08	57.06	57.57	56.63	44.71	42.94
AZ-KPGA	64.31	50.80	44.15	22.92	33.57	70.88	56.08	40.75	29.84	45.70	96.08	10.84	47.16
AZ-KPHX	33.00	42.32	70.42	25.32	69.07	40.40	38.56	69.70	23.30	43.58	29.64	33.16	43.21
AZ-KPRC	20.68	21.30	23.42	24.46	23.44	68.26	50.66	56.37	33.04	42.30	31.23	40.60	36.31
AZ-KRQE	59.95	106.65	27.78	20.86	28.79	84.34	68.80	48.25	48.09	78.37	21.02	158.75	62.64
AZ-KRYN	9.94	22.23	41.19	8.67	25.55	15.95	4.27	10.69	48.98	23.33	29.42	24.91	22.09
AZ-KSAD	28.54	61.15	26.97	36.51	44.47	40.40	31.47	61.04	20.33	63.42	23.58	47.68	40.46
AZ-KSDL	45.35	44.89	54.59	13.55	43.86	43.20	24.17	70.40	27.14	49.59	73.37	54.59	45.39
AZ-KSJN	72.50	41.94	8.57	19.89	28.08	55.58	31.58	36.61	36.20	21.27	48.81	63.49	38.71
AZ-KSOW	26.65	61.72	11.86	8.86	12.63	53.64	34.09	16.50	62.02	40.09	15.91	30.51	31.21
AZ-KTUS	49.45	25.47	46.09	18.13	33.87	14.23	31.19	46.37	15.52	29.62	27.25	22.00	29.93

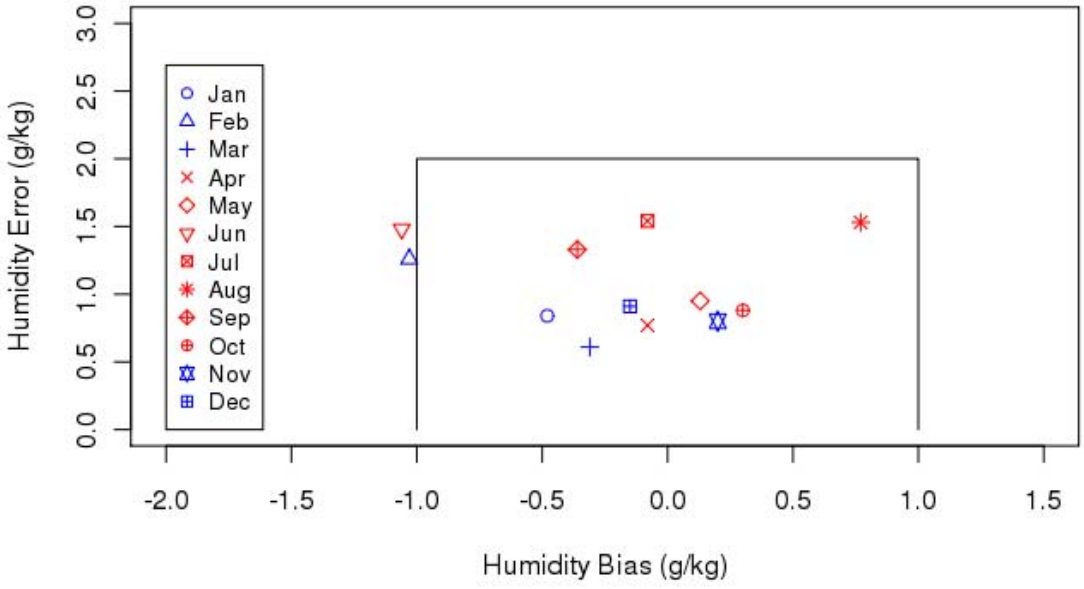
Table 7: Wind Speed RMSE (m/s) for 2008 WRF by Month and by Station for Arizona in the 4km Domain.

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
AZ-KCGZ	1.97	1.67	1.35	2.07	1.22	1.85	1.75	1.50	1.62	1.44	1.37	0.95	1.56
AZ-KCHD	2.90	1.48	1.40	1.77	1.65	2.28	2.43	1.75	1.50	1.91	1.75	1.88	1.89
AZ-KDMA	1.60	1.38	1.53	1.58	1.57	2.15	1.01	1.27	2.37	1.02	1.02	1.21	1.48
AZ-KDUG	1.71	1.55	3.07	2.38	2.10	2.09	1.84	2.30	1.61	1.46	1.24	1.10	1.87
AZ-KDVT	2.42	1.47	1.42	1.98	1.91	3.49	1.43	3.24	2.95	1.34	0.96	1.78	2.03
AZ-KFFZ	2.28	2.44	1.73	1.33	2.79	3.01	2.76	1.60	1.65	2.45	1.76	2.76	2.21
AZ-KFHU	1.75	2.20	0.76	3.63	1.77	0.98	1.53	1.94	2.02	1.36	1.54	1.07	1.71
AZ-KFLG	2.01	1.06	2.09	2.11	1.91	2.29	1.95	1.71	1.69	1.78	2.33	2.63	1.96
AZ-KGBN	1.76	1.82	2.05	1.37	2.58	1.61	2.03	2.70	0.47	2.05	NA	1.32	1.80
AZ-KGCN	1.15	2.45	3.52	4.24	1.90	2.90	1.59	2.12	1.77	2.61	1.23	1.92	2.28
AZ-KGEU	2.17	NA	1.16	2.30	1.41	1.68	1.51	2.14	1.52	0.84	0.82	NA	1.56
AZ-KGYR	1.86	2.00	1.73	2.08	NA	2.31	2.09	3.07	1.11	NA	NA	NA	2.03
AZ-KIFP	2.32	3.92	1.70	2.22	1.99	1.55	2.01	2.34	1.75	1.57	3.07	3.11	2.30
AZ-KIGM	1.58	1.08	1.62	2.82	1.78	2.22	2.92	3.83	1.79	2.06	1.61	1.09	2.03
AZ-KINW	2.38	2.00	2.62	2.70	1.59	3.03	1.72	1.90	1.71	1.68	0.95	1.92	2.02
AZ-KIWA	1.98	1.53	1.11	1.80	1.85	4.07	1.94	2.64	2.67	1.67	1.05	1.01	1.94
AZ-KLUF	2.01	1.77	1.98	2.81	1.60	2.18	1.95	2.45	1.48	1.46	NA	1.64	1.94
AZ-KNYL	1.82	2.15	1.43	1.99	2.88	2.11	1.30	2.95	3.23	2.35	2.98	2.27	2.29
AZ-KOLS	2.90	1.20	1.56	1.77	1.14	1.76	0.86	1.97	4.50	0.85	1.66	0.78	1.75
AZ-KPGA	1.92	1.15	2.81	3.47	1.46	2.72	2.18	3.08	1.48	0.62	1.64	0.96	1.96
AZ-KPHX	2.82	2.08	1.89	1.91	1.26	2.10	1.91	1.62	1.51	1.57	1.46	1.14	1.77
AZ-KPRC	1.51	1.76	1.92	2.13	1.67	2.34	1.49	1.83	1.88	1.40	1.40	0.79	1.68
AZ-KRQE	2.88	1.13	2.82	3.05	1.57	2.54	1.89	1.69	2.53	1.46	3.65	2.97	2.35
AZ-KRYN	3.13	2.11	1.23	2.33	2.44	3.54	NA	NA	3.37	1.60	1.59	1.90	2.32
AZ-KSAD	1.08	1.02	1.90	1.83	2.52	2.18	2.10	2.31	1.66	1.25	2.84	2.16	1.90
AZ-KSDL	2.66	1.01	1.04	1.68	1.00	3.93	1.36	2.64	3.50	0.51	1.14	0.47	1.75
AZ-KSJN	2.87	1.79	2.10	2.63	1.99	3.79	1.64	1.86	2.25	1.21	1.87	0.97	2.08
AZ-KSOW	3.77	0.82	1.45	2.18	1.95	1.95	1.16	2.55	1.68	1.61	1.50	2.49	1.93
AZ-KTUS	2.04	1.79	1.26	1.41	1.68	2.95	0.99	1.68	2.38	1.02	0.74	1.24	1.60

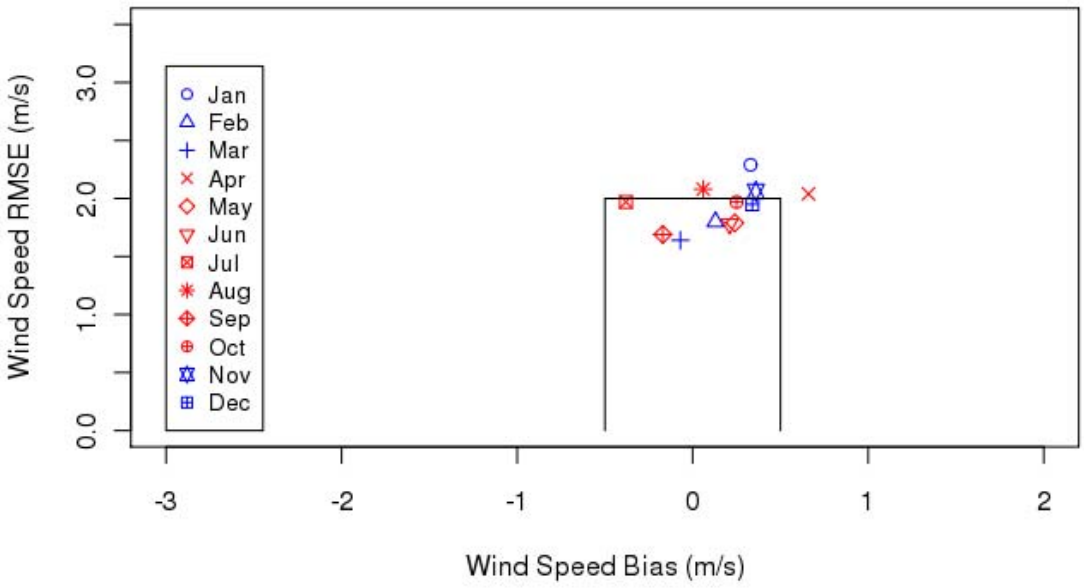
AZ-KCGZ 04km Wind Direction Performance Comparison



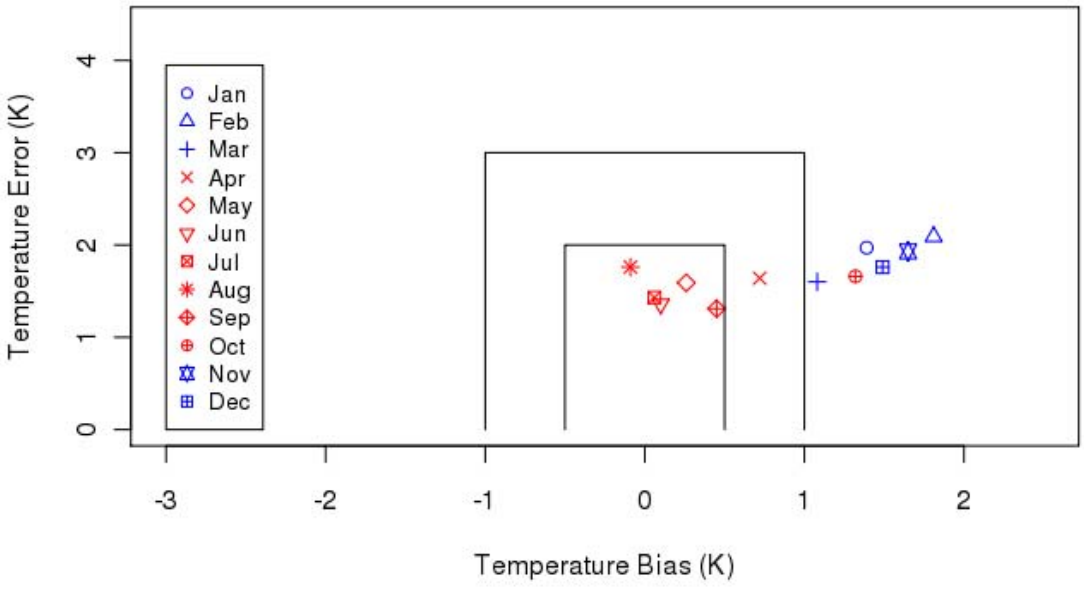
AZ-KCGZ 04km Humidity Performance Comparison



AZ-KCGZ 04km Wind Speed Performance Comparison



AZ-KCGZ 04km Temperature Performance Comparison



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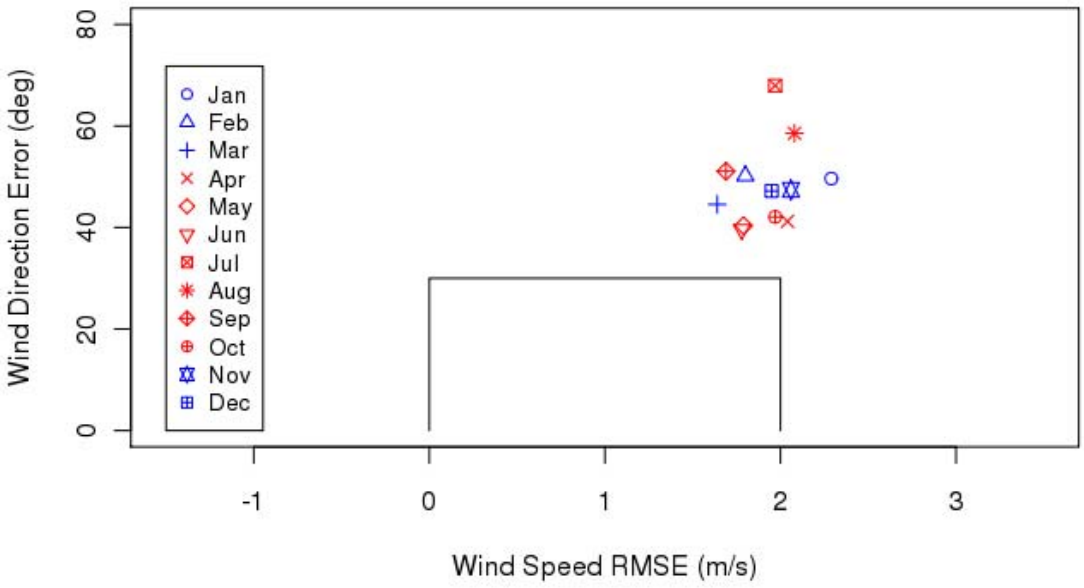
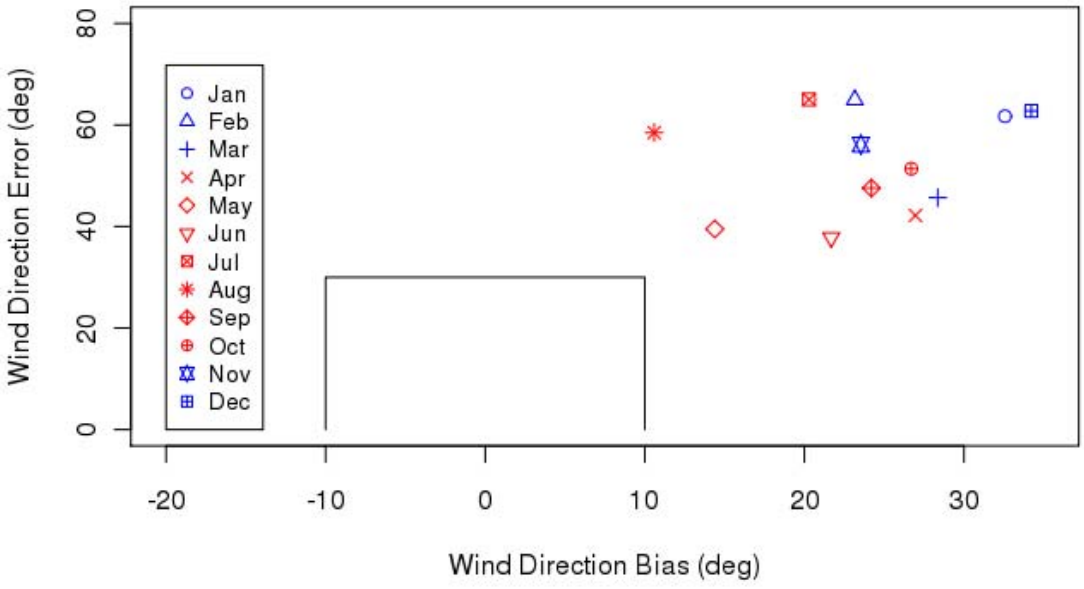
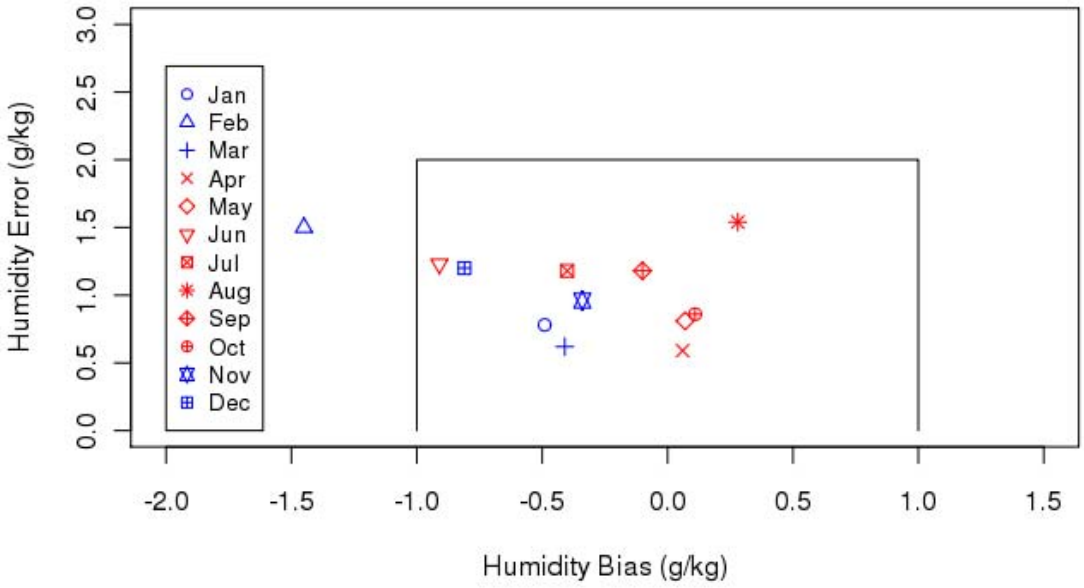


AZ-KCHD 04km Wind Direction Performance Comparison



AZ-KCHD 04km Humidity Performance Comparison



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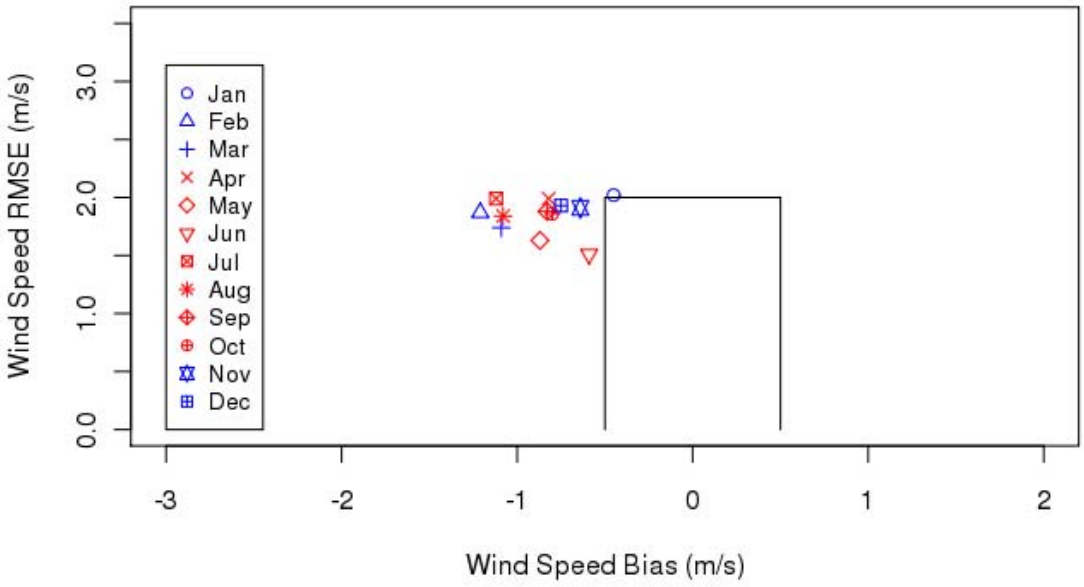
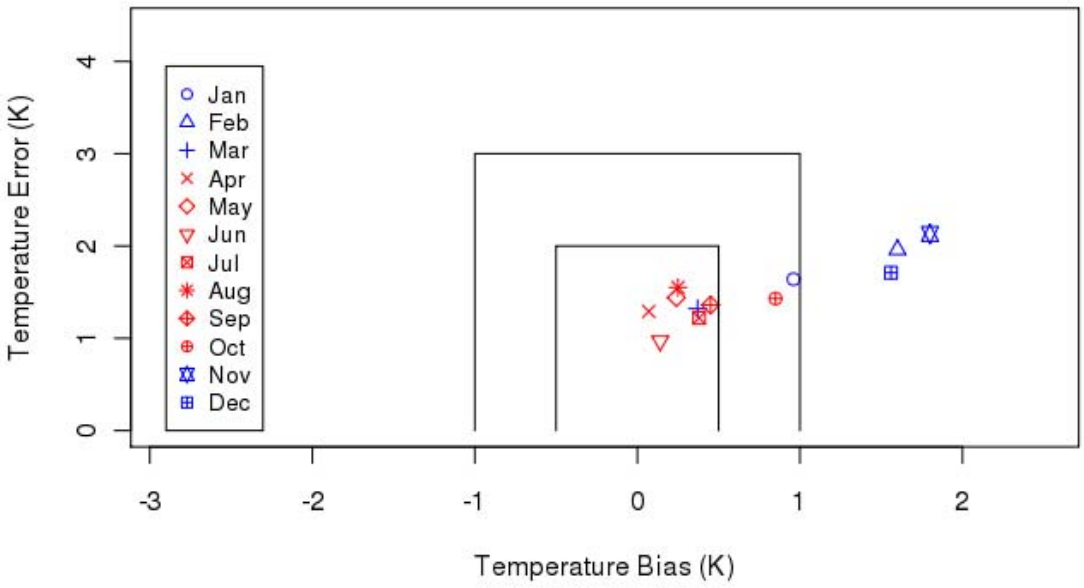


AZ-KCHD 04km Temperature Performance Comparison



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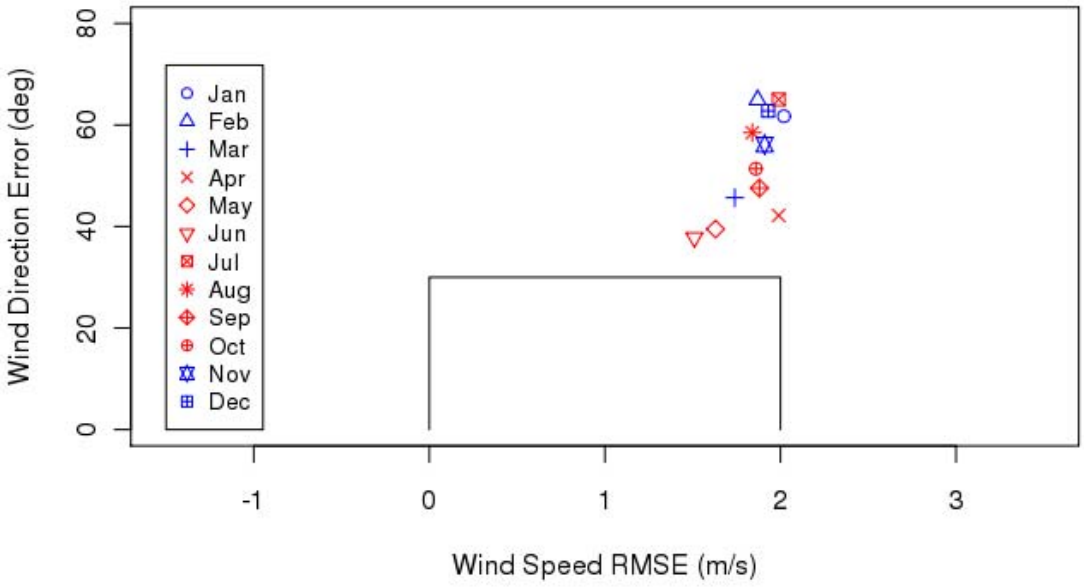
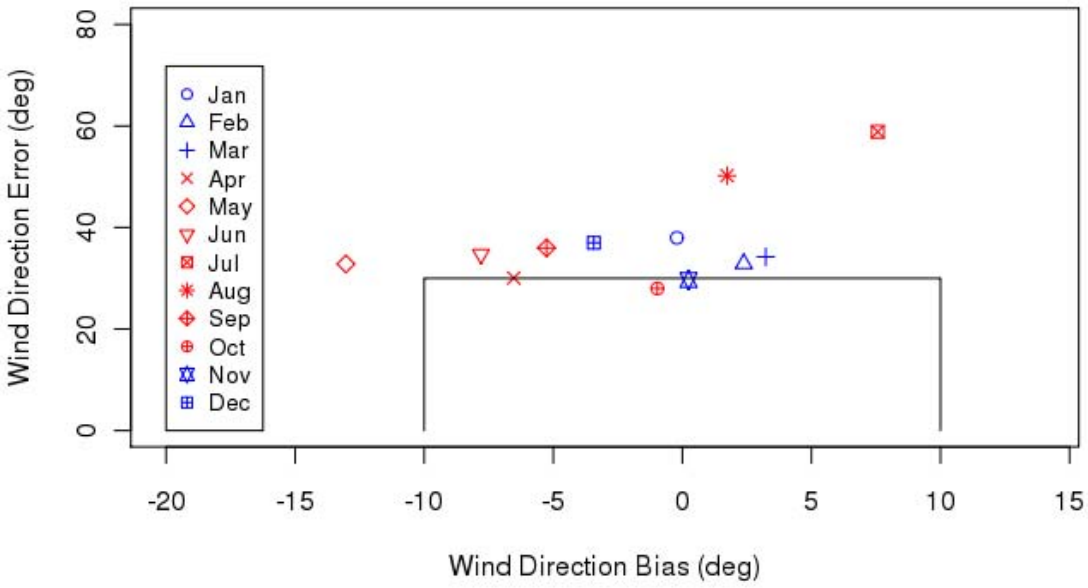


AZ-KDMA 04km Wind Direction Performance Comparison



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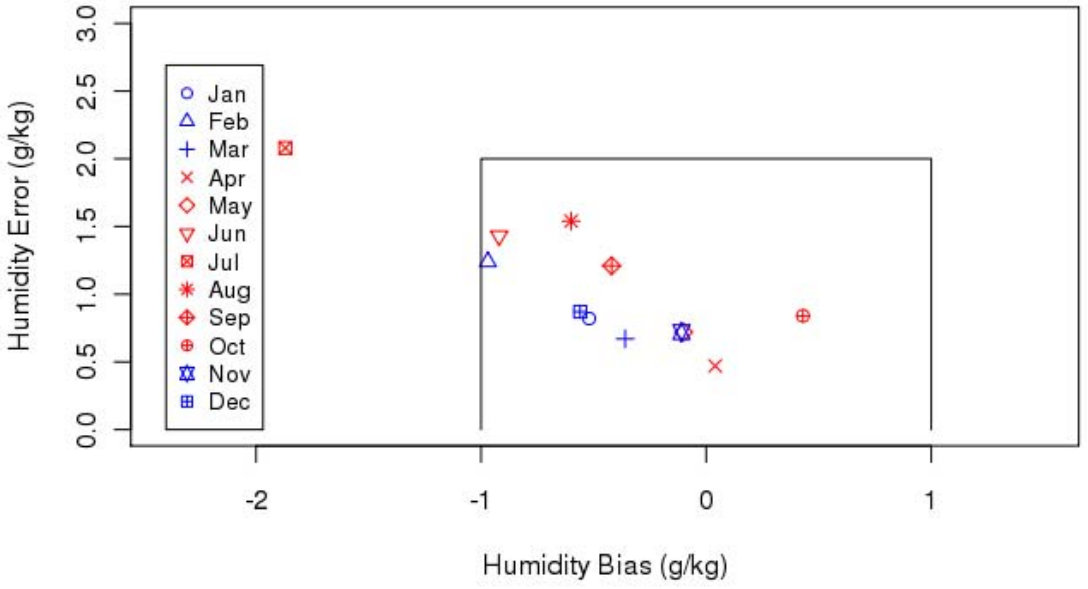

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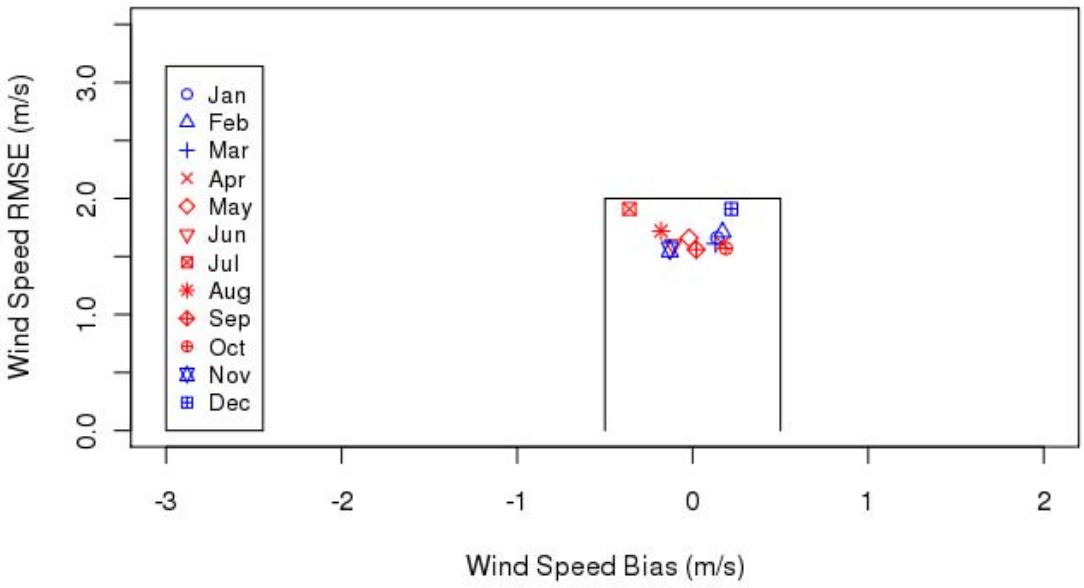
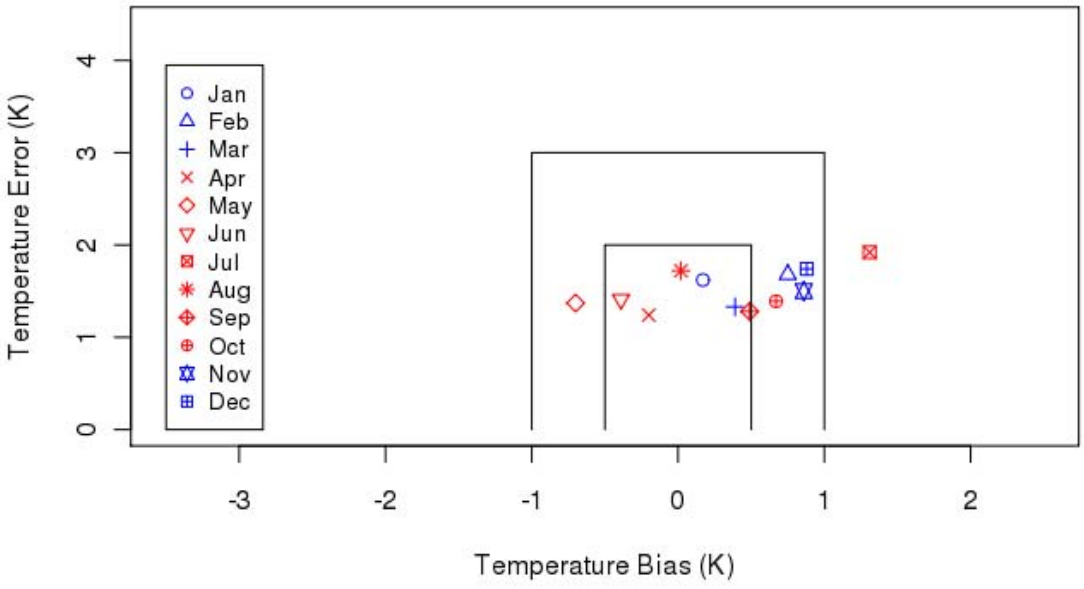
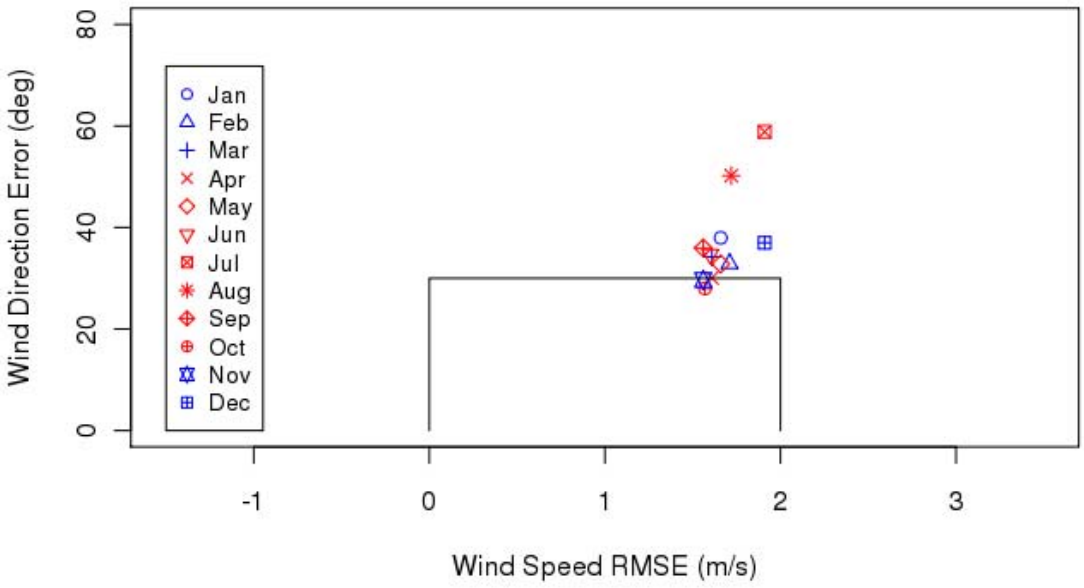


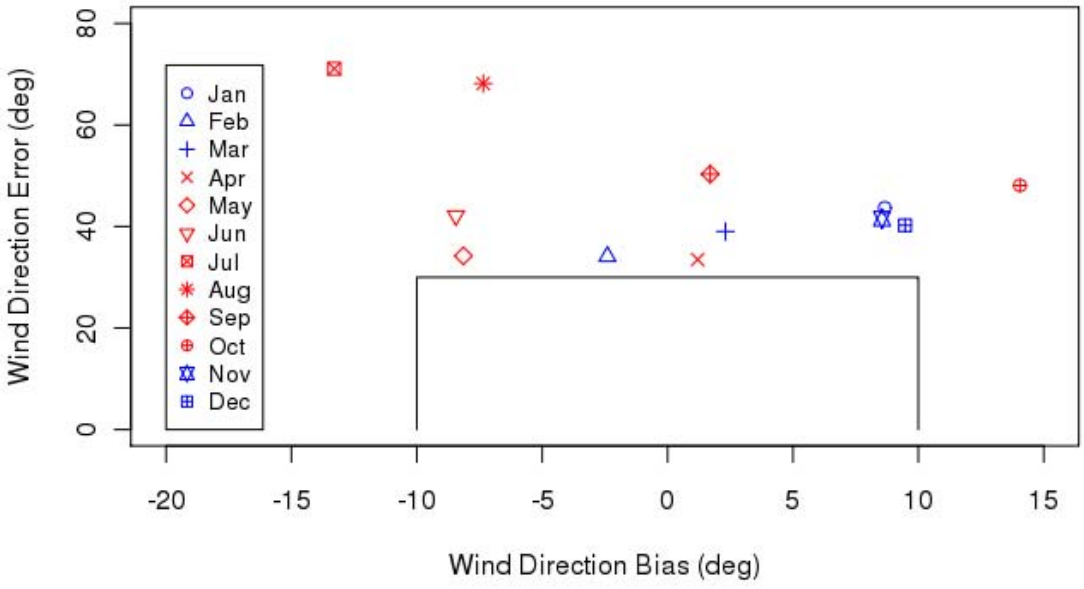
AZ-KDMA 04km Temperature Performance Comparison



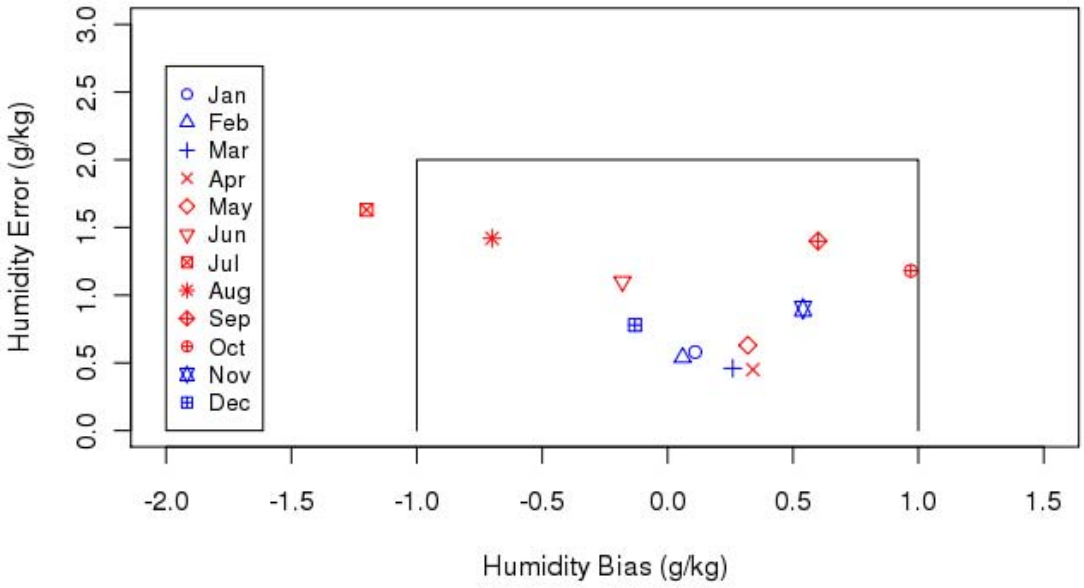
AZ-KDMA 04km Wind Performance Comparison



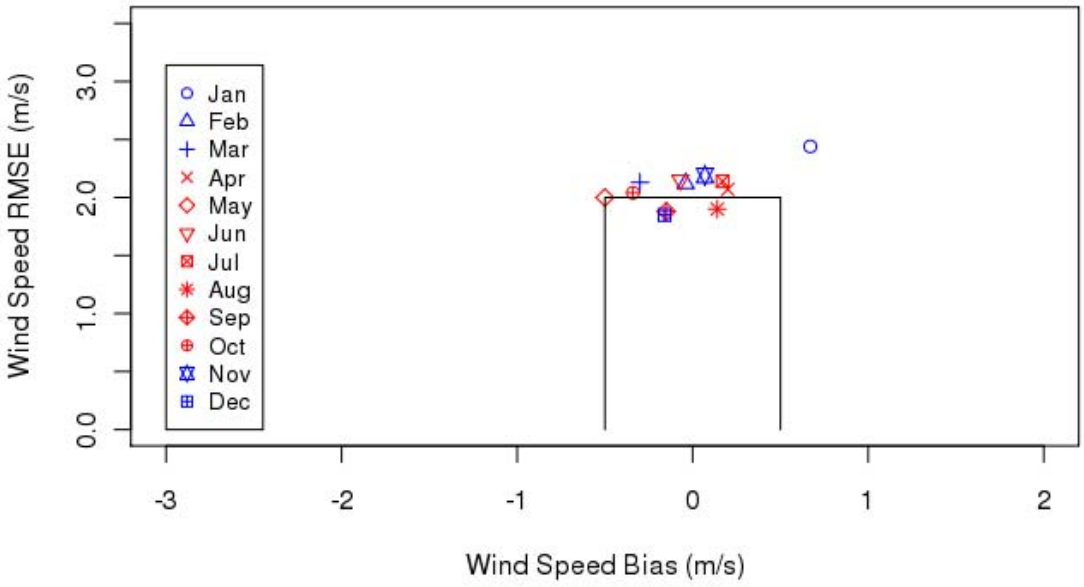
AZ-KDUG 04km Wind Direction Performance Comparison



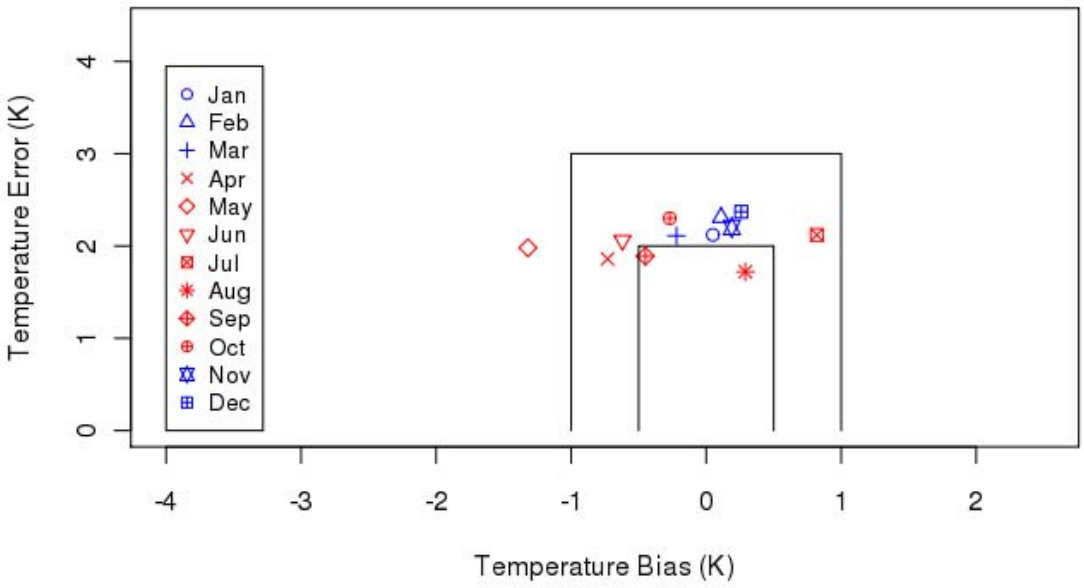
AZ-KDUG 04km Humidity Performance Comparison



AZ-KDUG 04km Wind Speed Performance Comparison



AZ-KDUG 04km Temperature Performance Comparison



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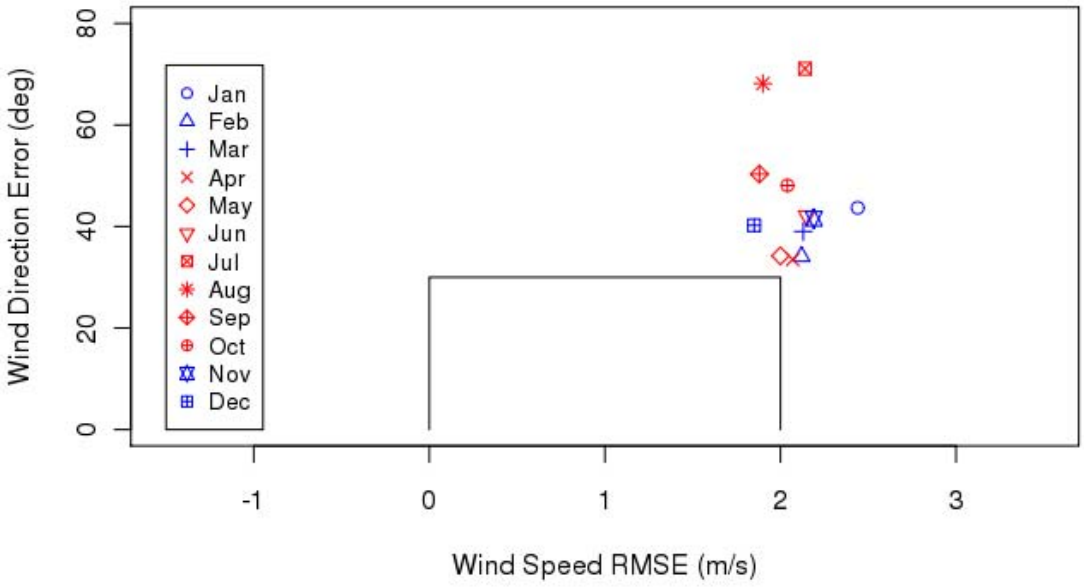
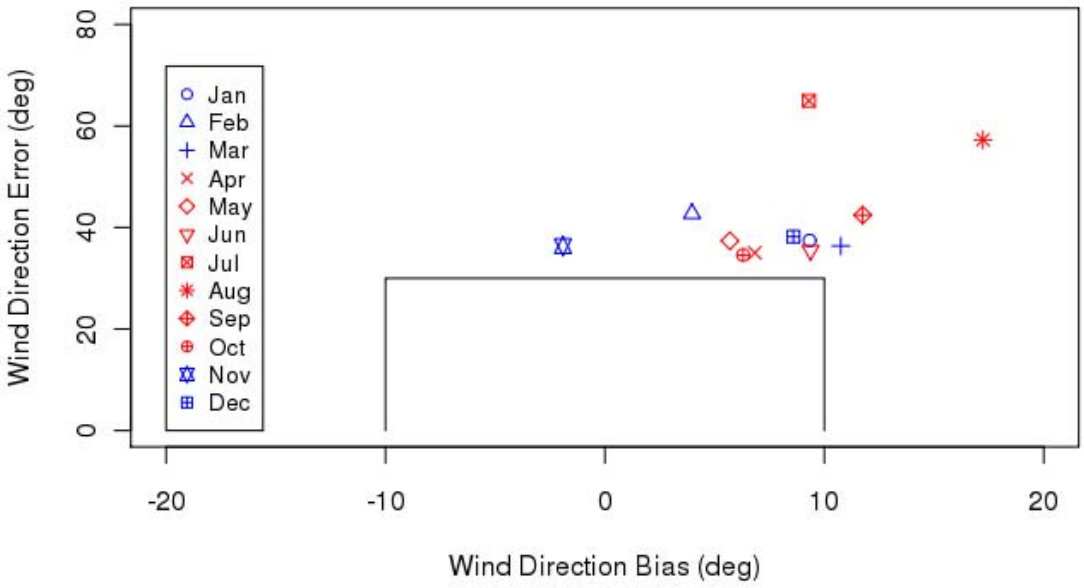


AZ-KDVT 04km Wind Direction Performance Comparison



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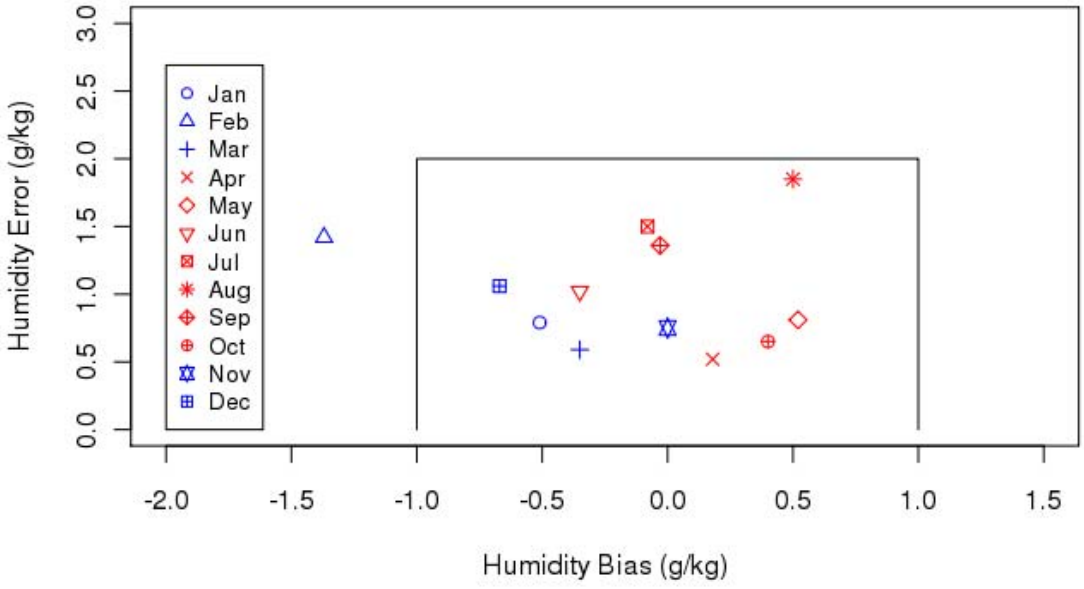

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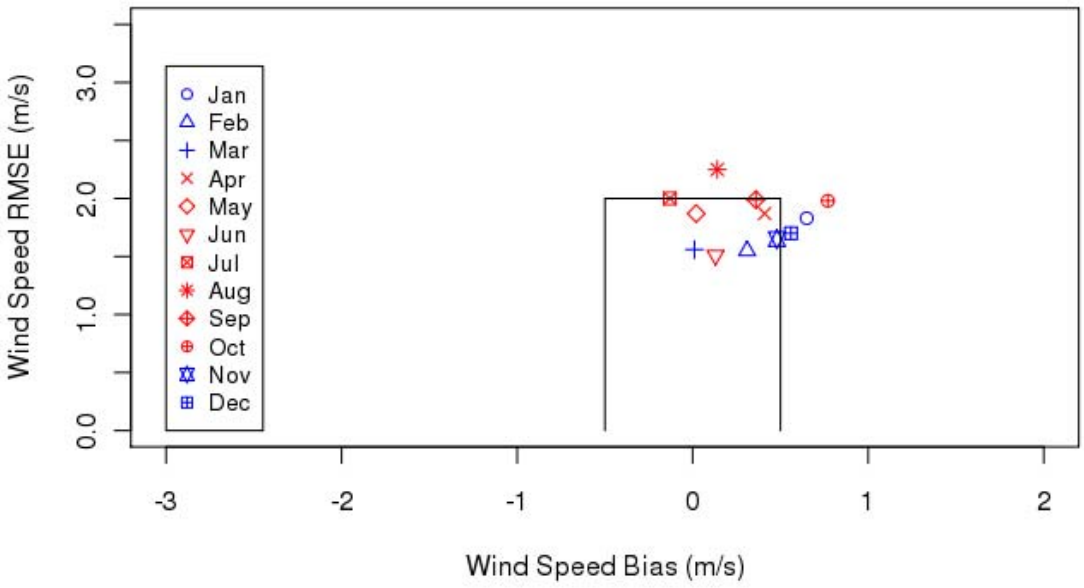
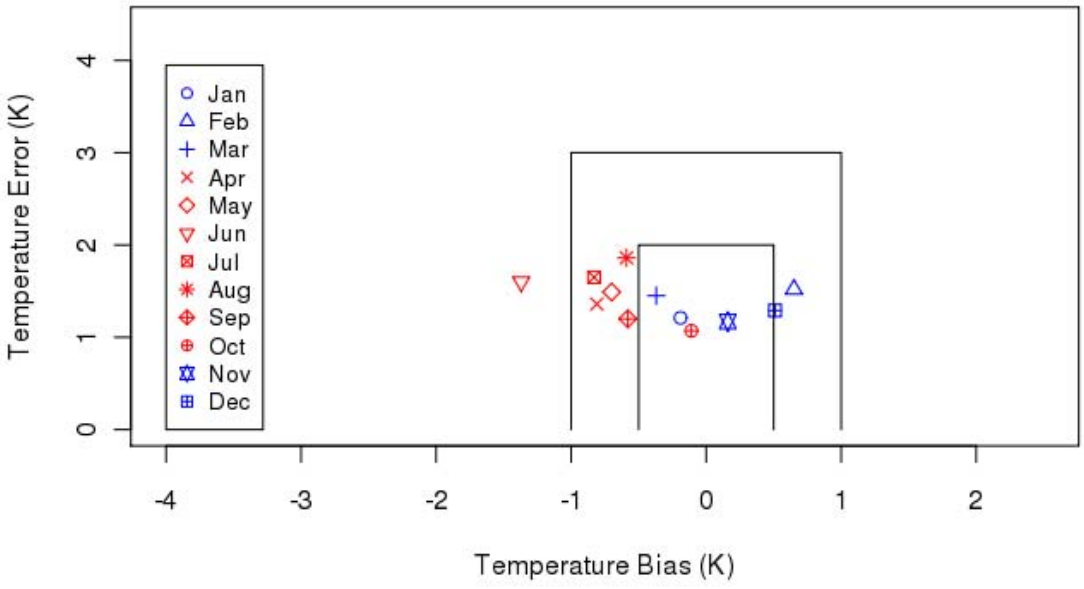
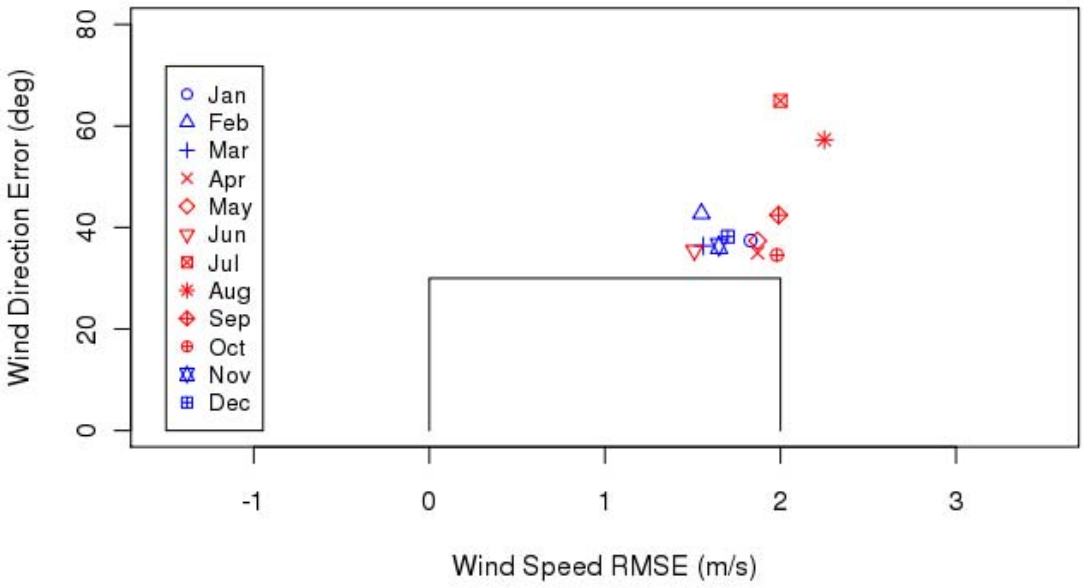


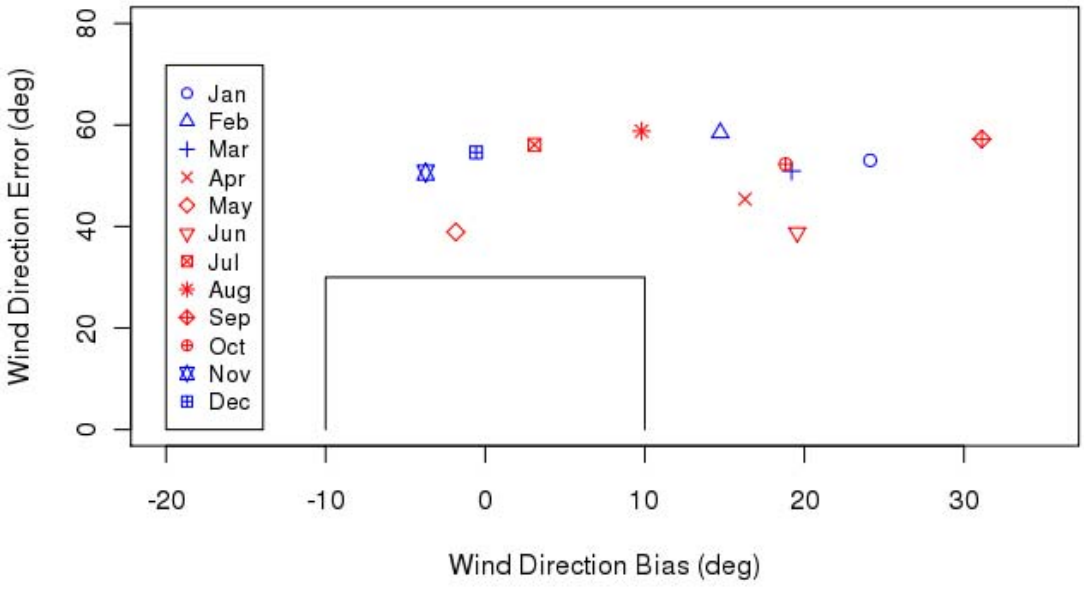
AZ-KDVT 04km Temperature Performance Comparison



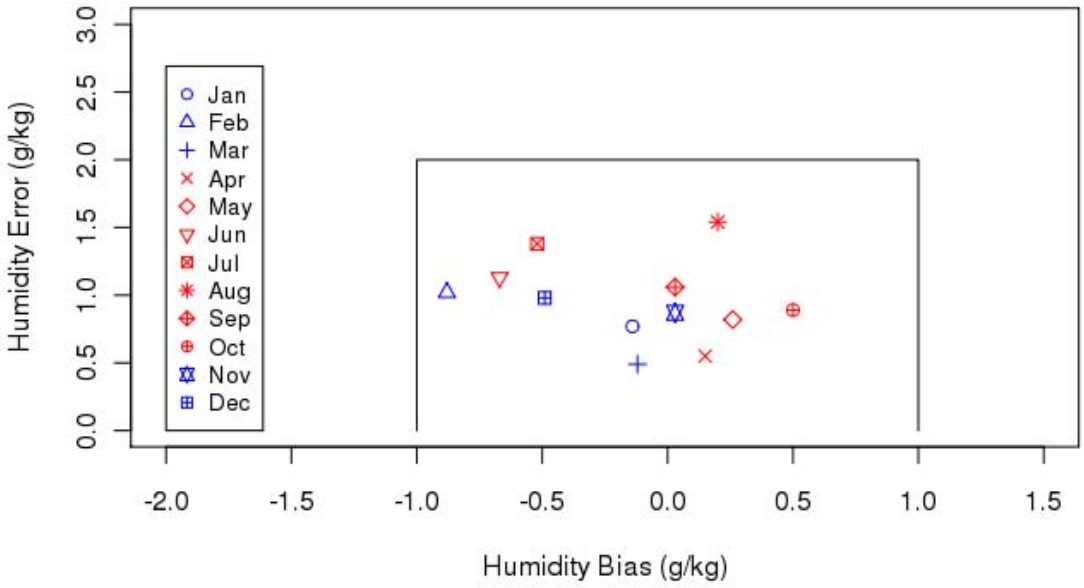
AZ-KDVT 04km Wind Performance Comparison



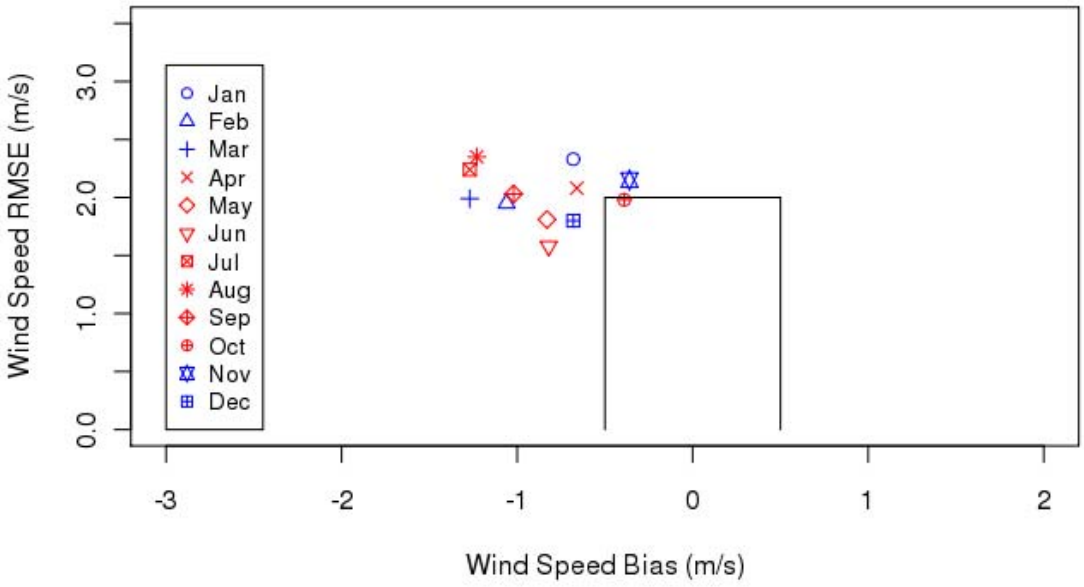
AZ-KFFZ 04km Wind Direction Performance Comparison



AZ-KFFZ 04km Humidity Performance Comparison



AZ-KFFZ 04km Wind Speed Performance Comparison



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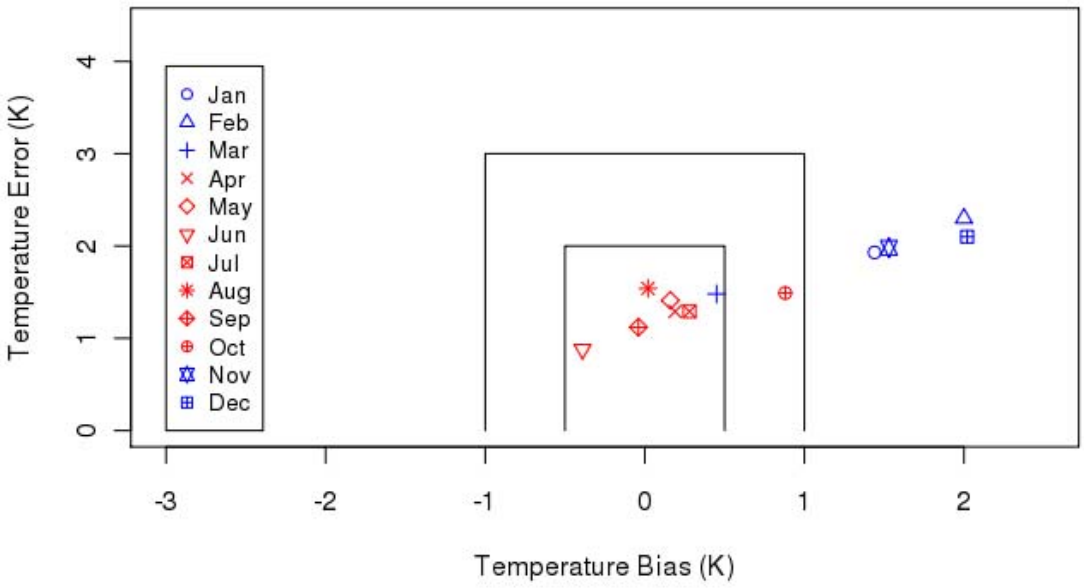

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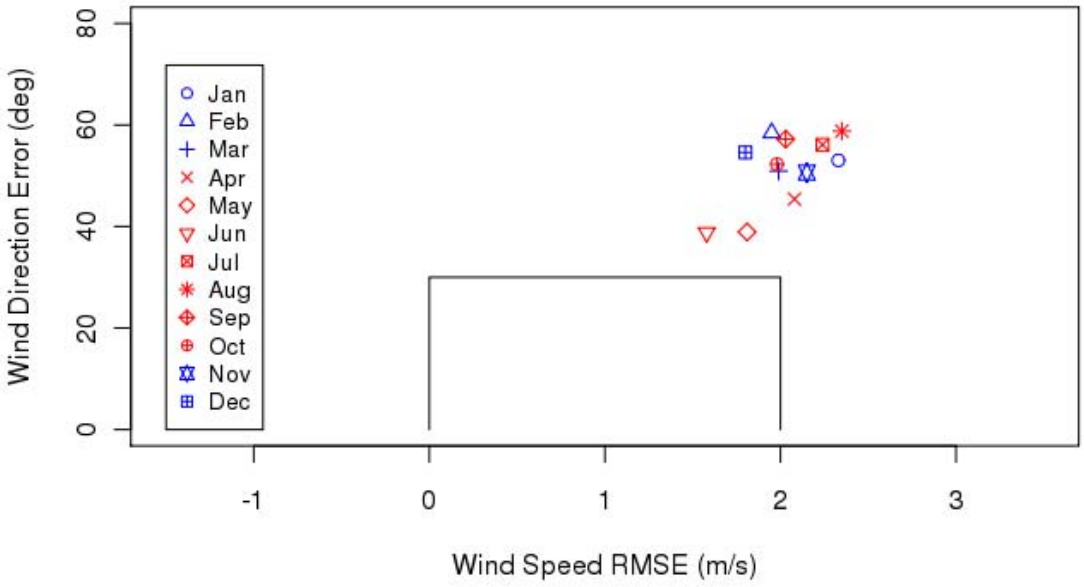
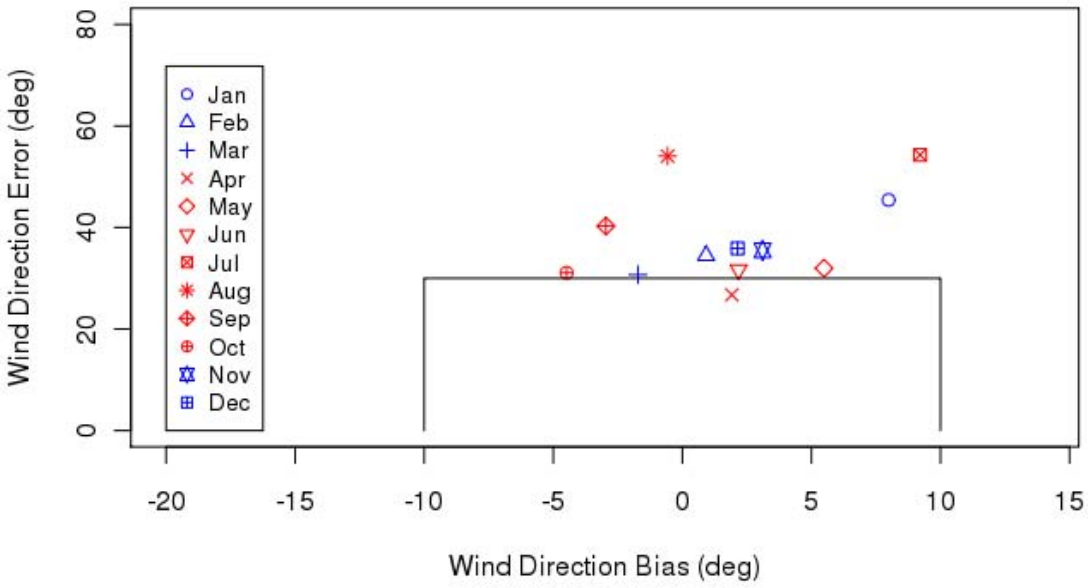
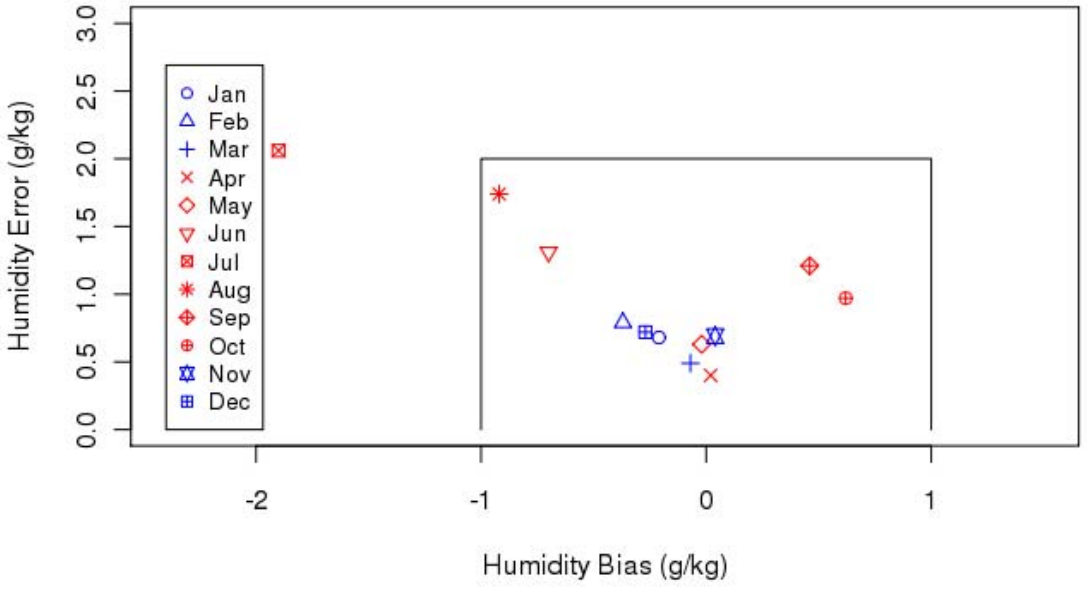


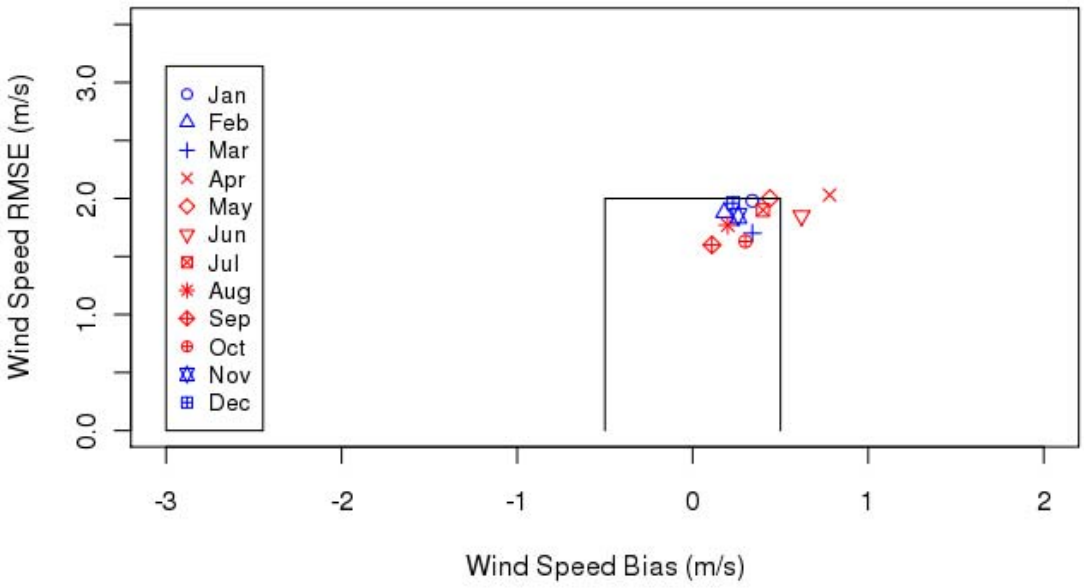
AZ-KFHU 04km Wind Direction Performance Comparison



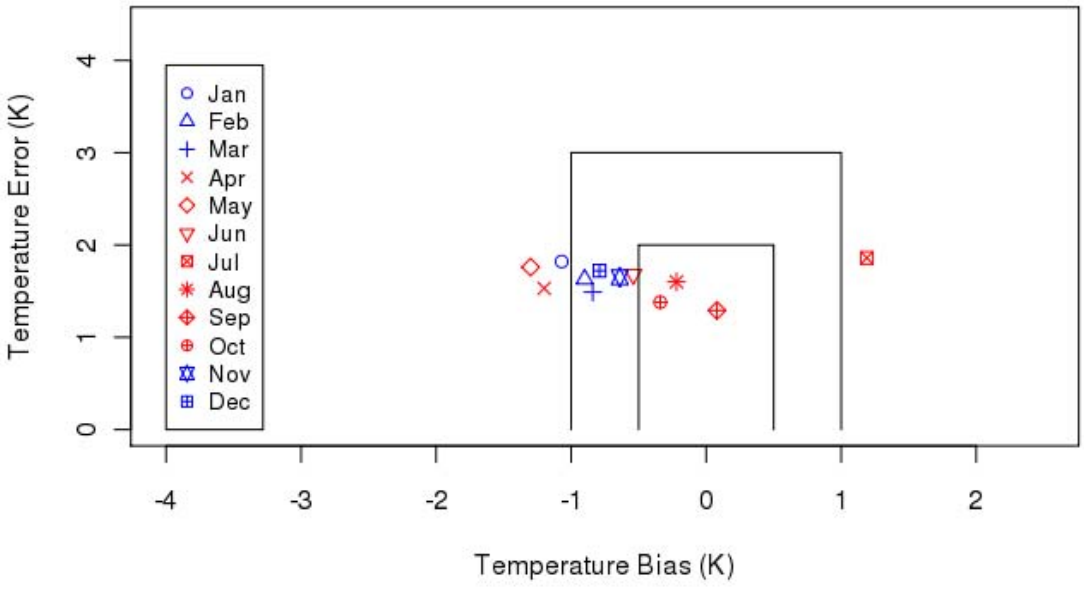
AZ-KFHU 04km Humidity Performance Comparison



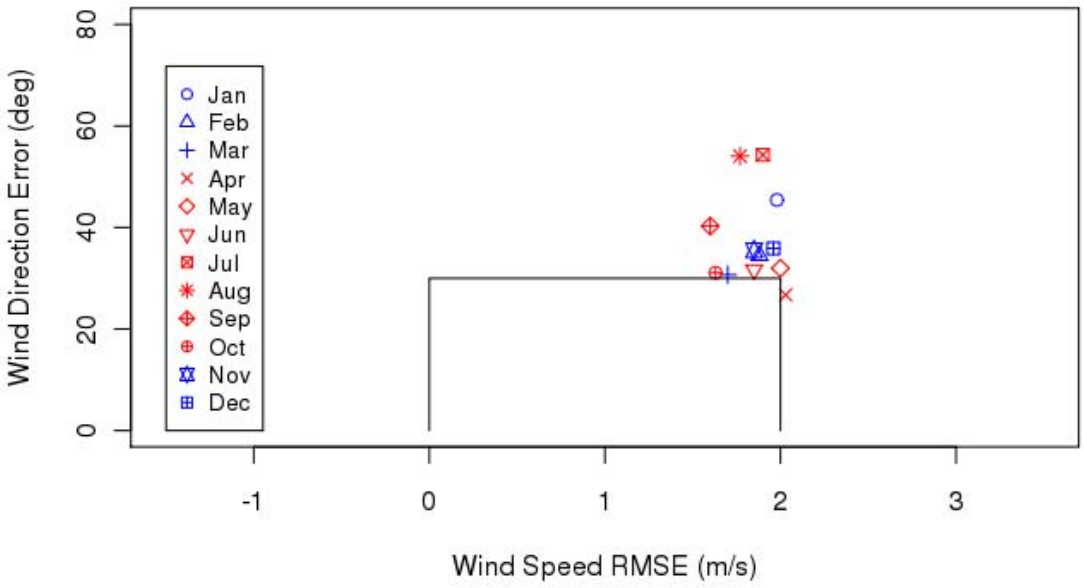
AZ-KFHU 04km Wind Speed Performance Comparison



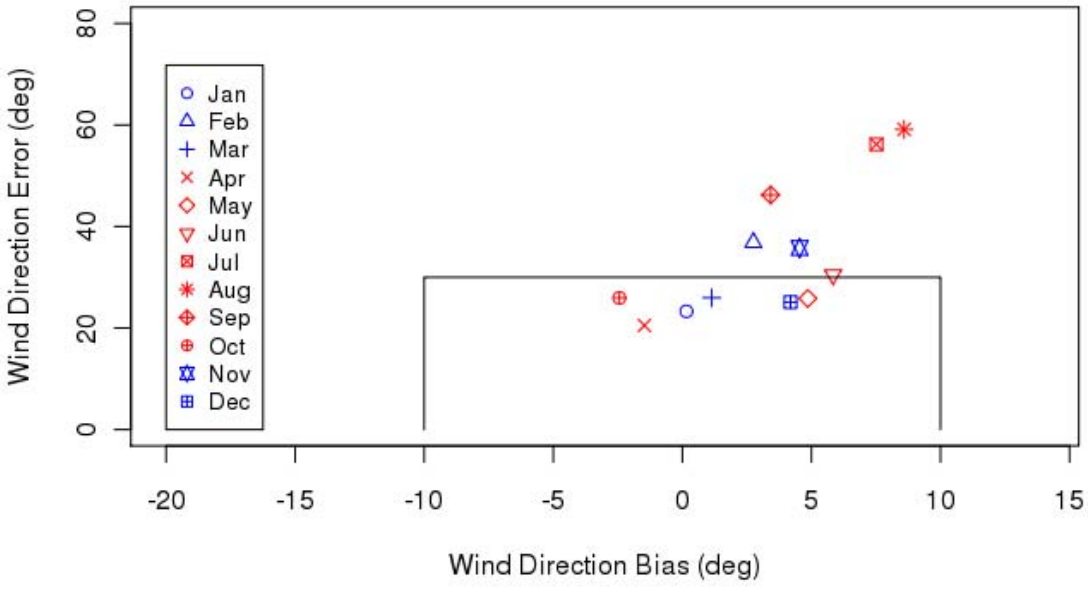
AZ-KFHU 04km Temperature Performance Comparison



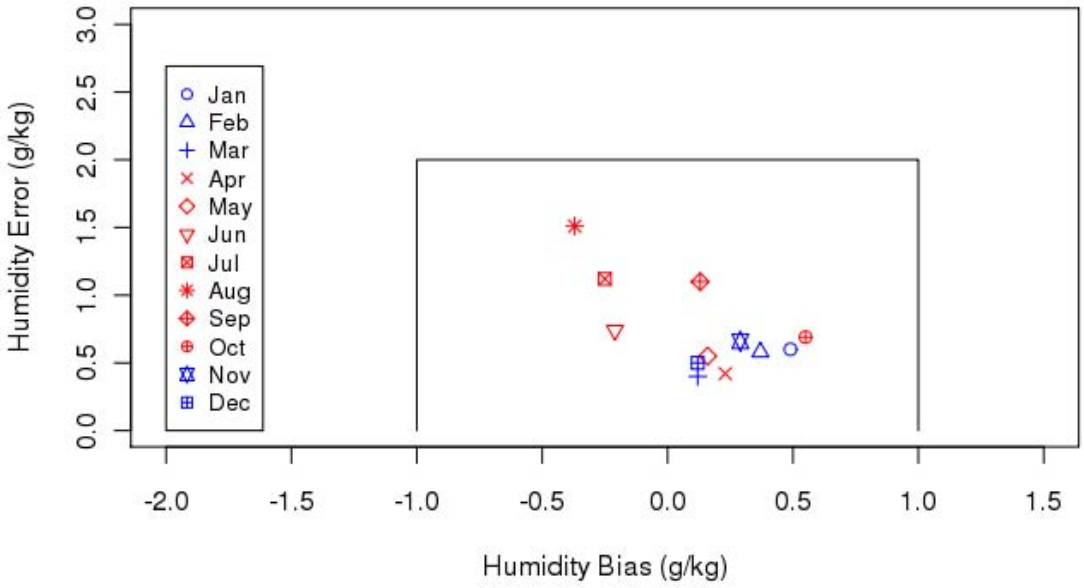
AZ-KFHU 04km Wind Performance Comparison



AZ-KFLG 04km Wind Direction Performance Comparison



AZ-KFLG 04km Humidity Performance Comparison



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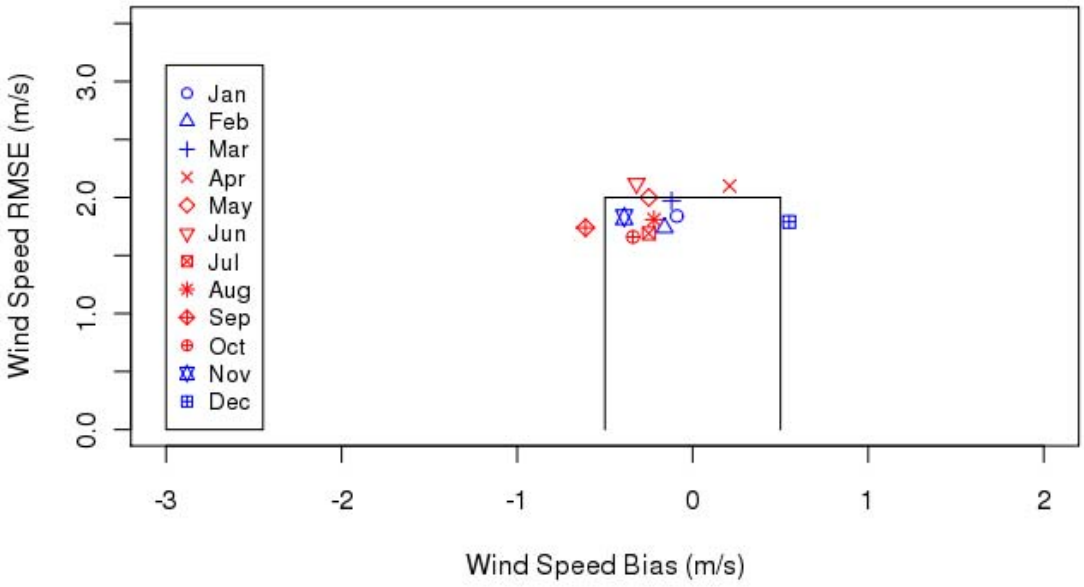

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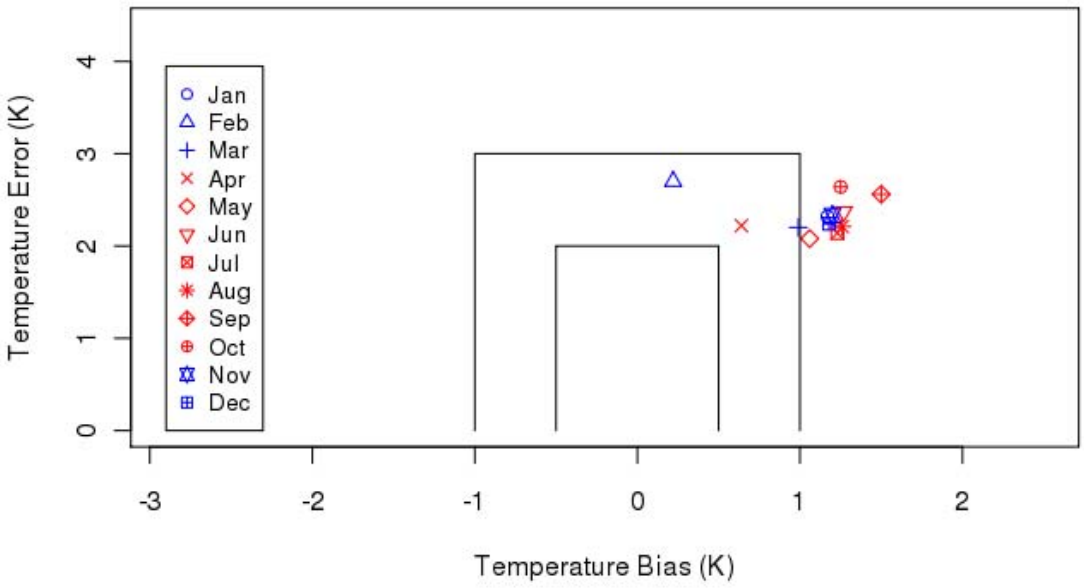

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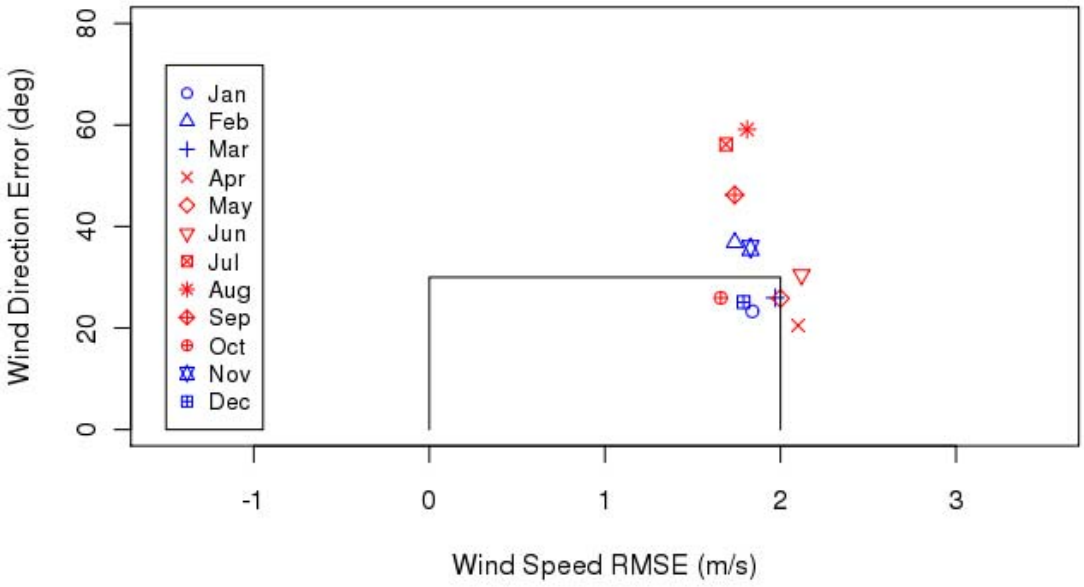
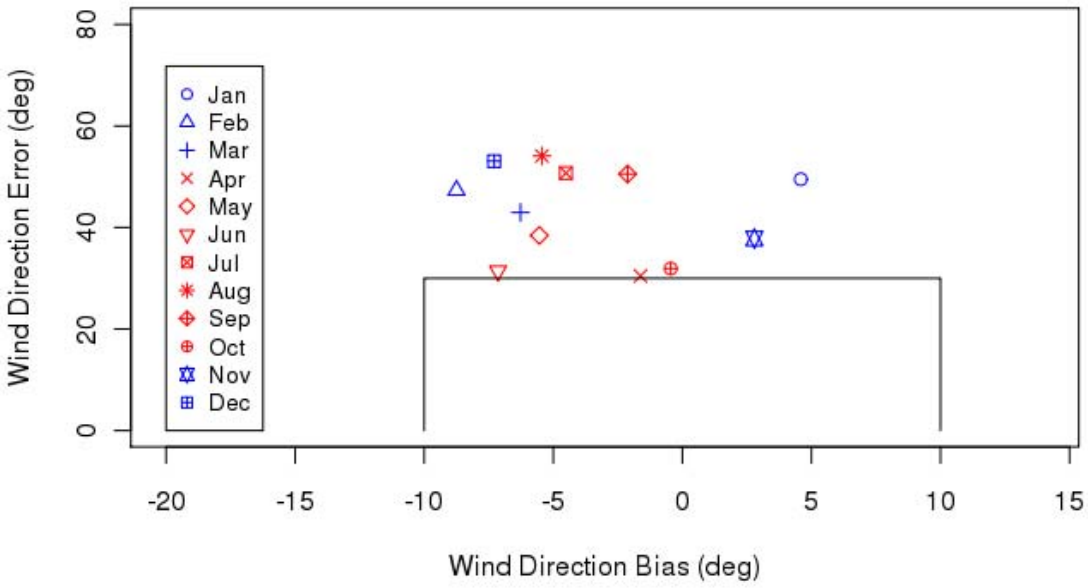
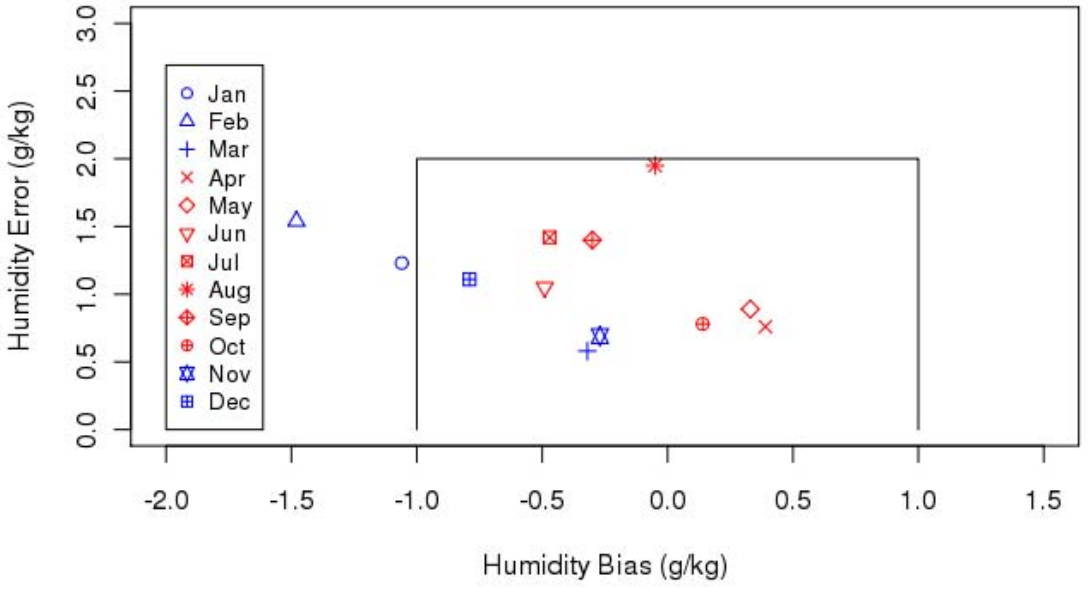


AZ-KGBN 04km Wind Direction Performance Comparison



AZ-KGBN 04km Humidity Performance Comparison



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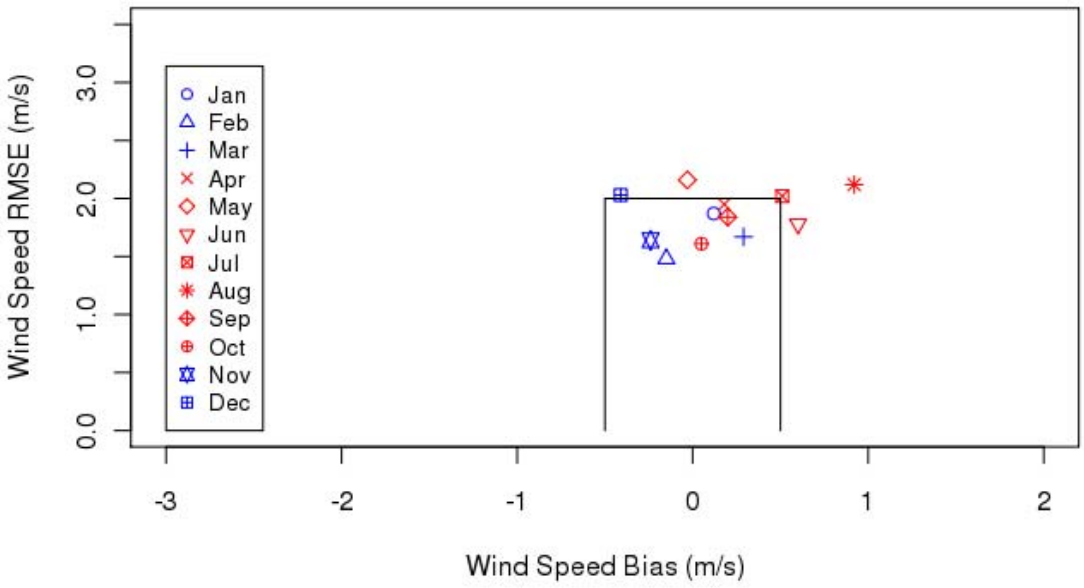
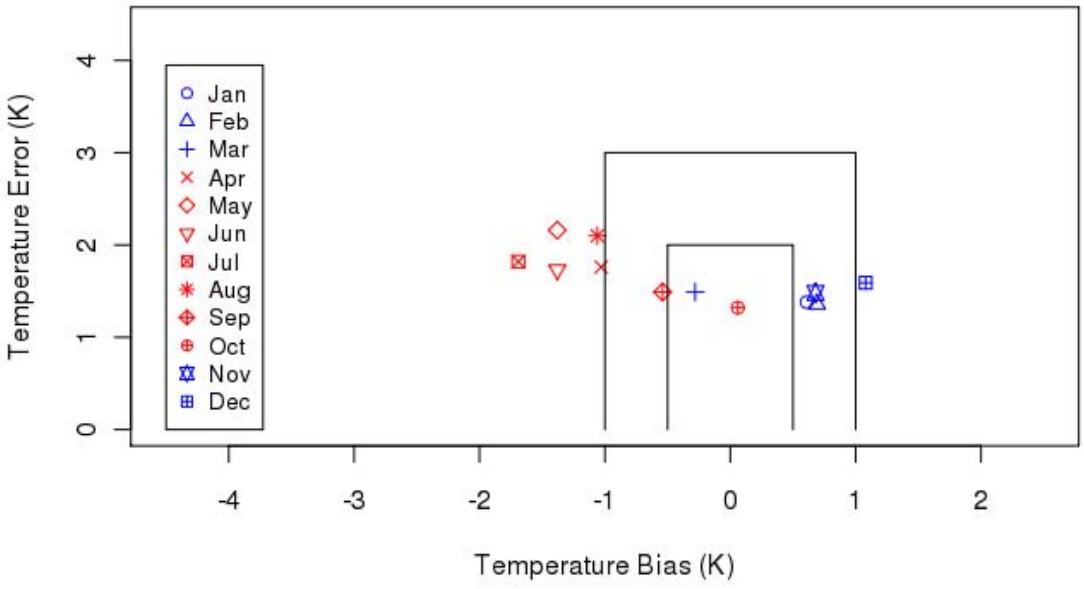


AZ-KGBN 04km Temperature Performance Comparison



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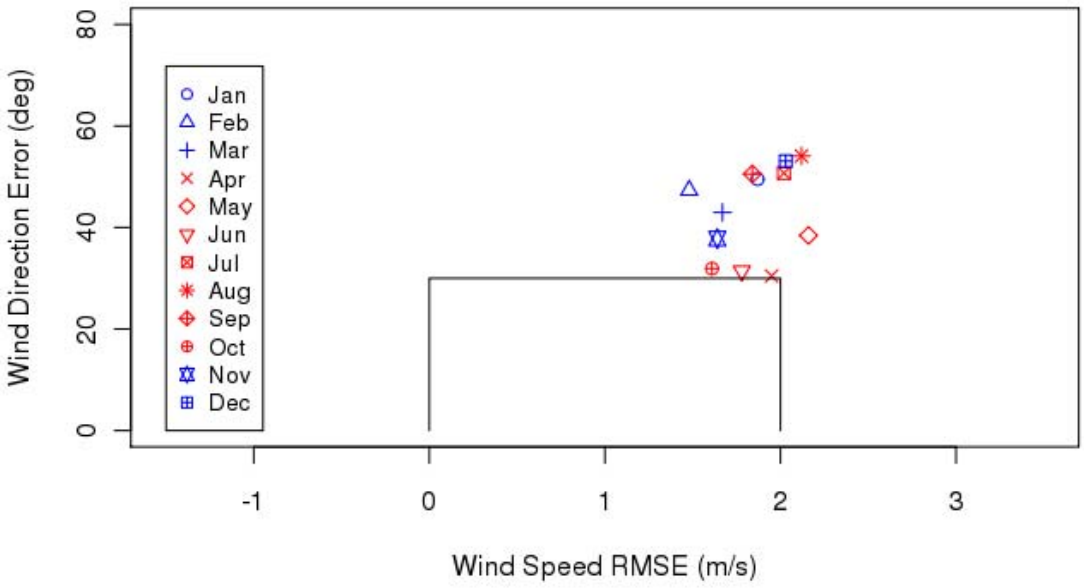

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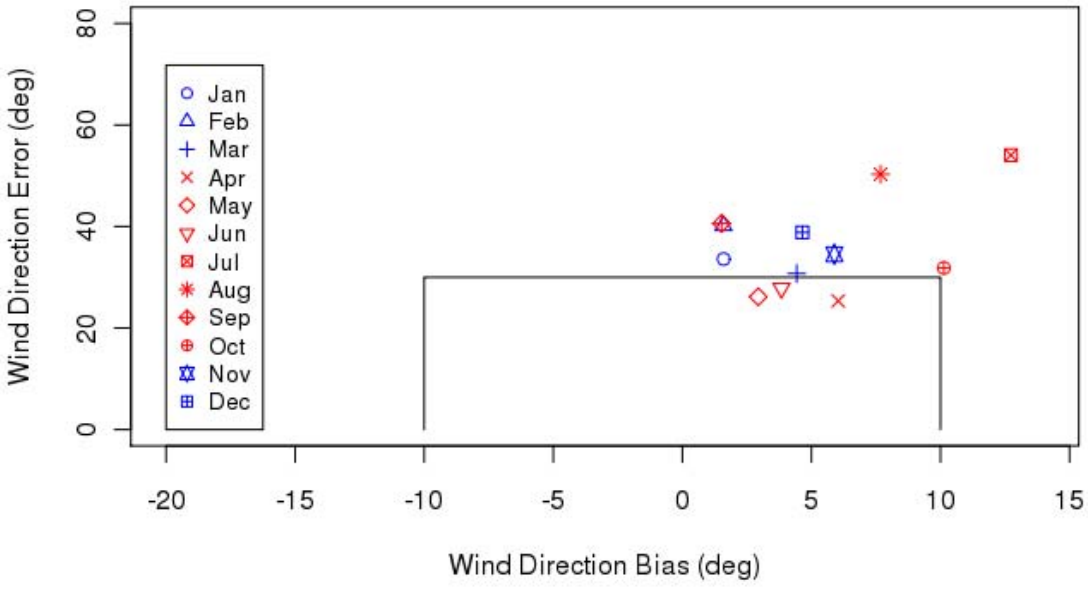
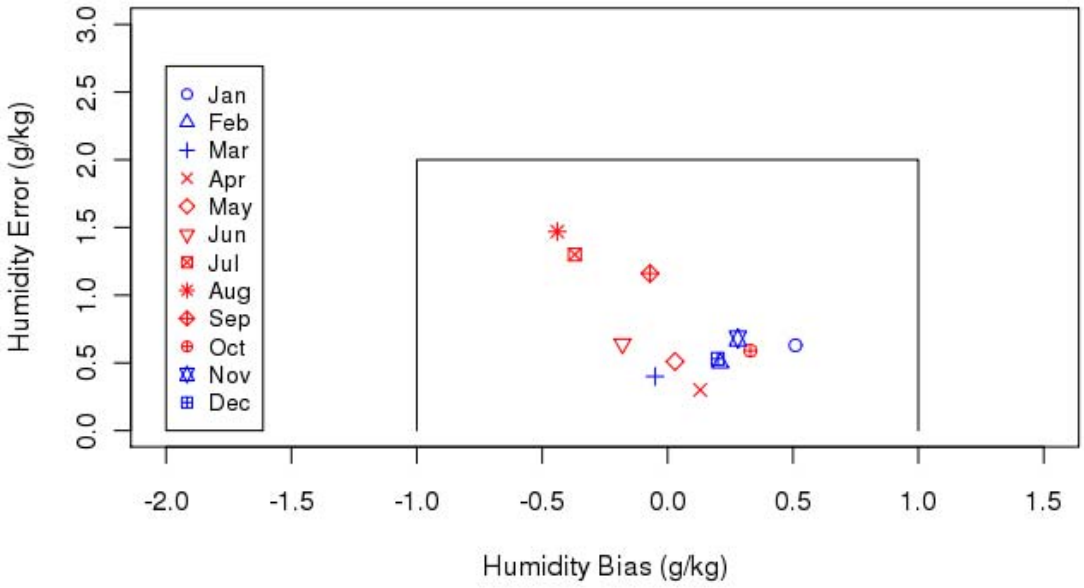


AZ-KGCN 04km Humidity Performance Comparison



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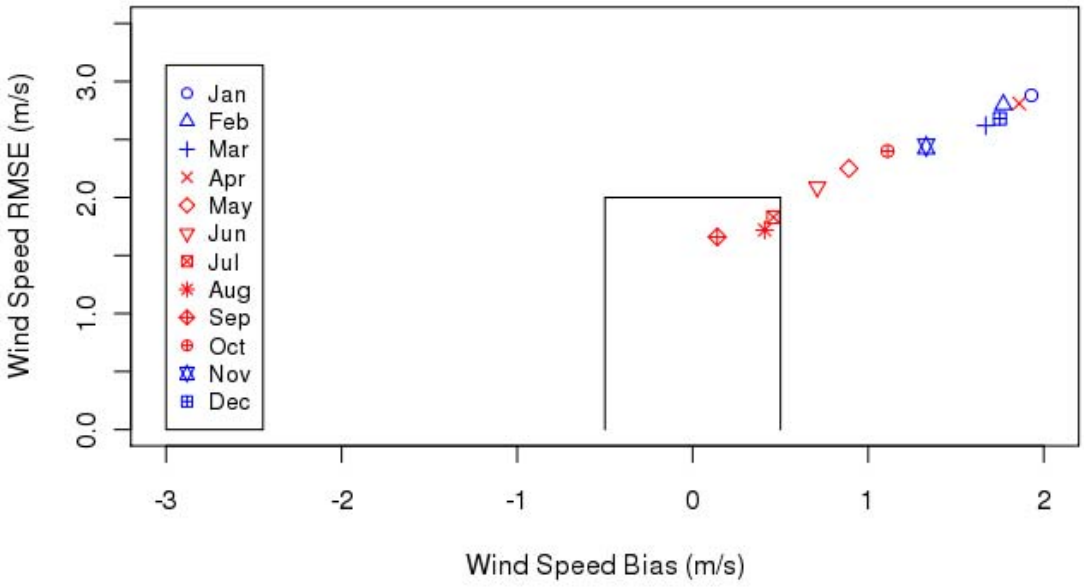

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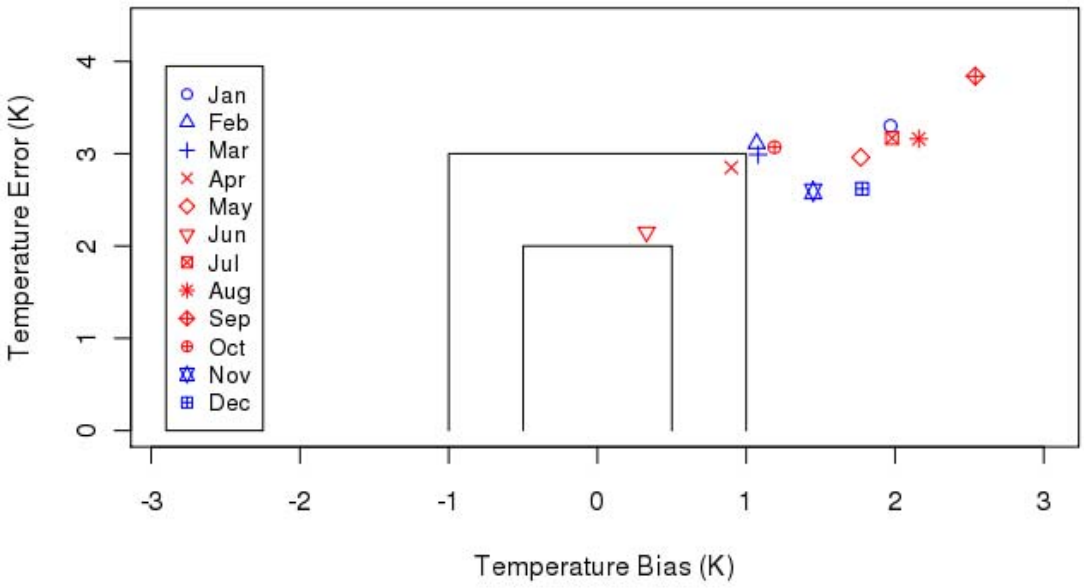

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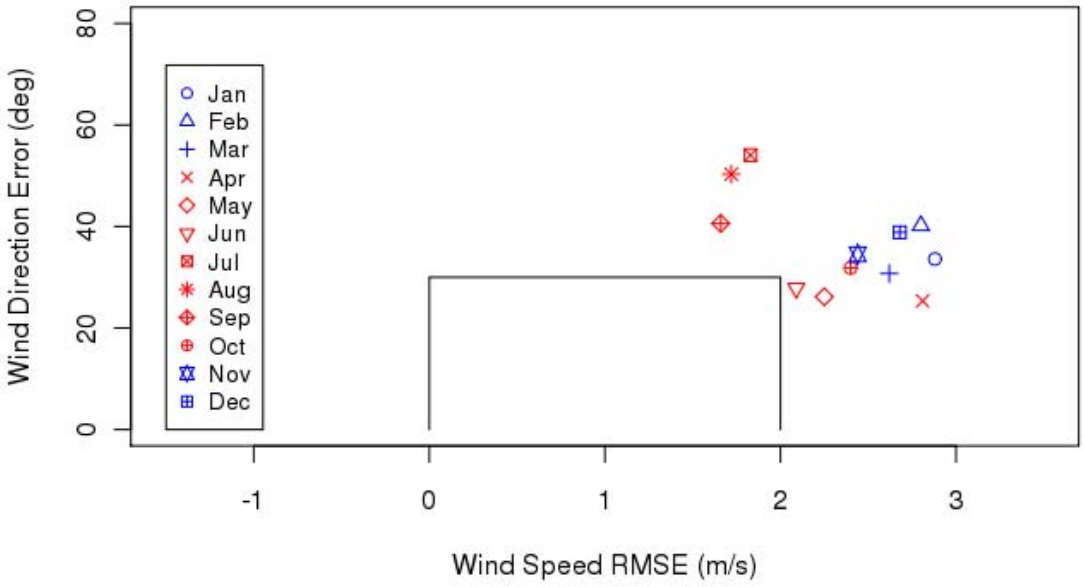

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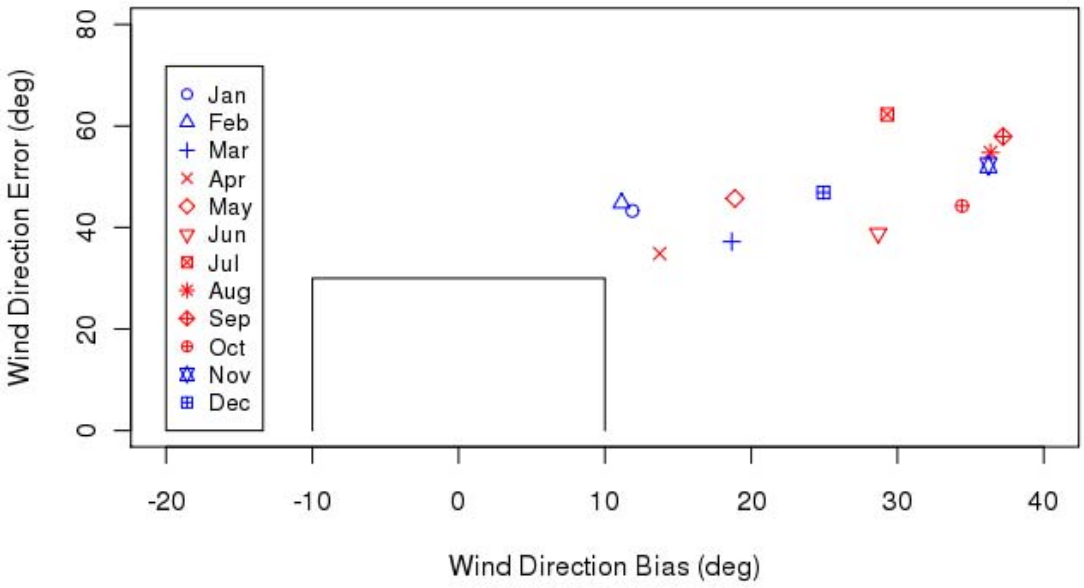

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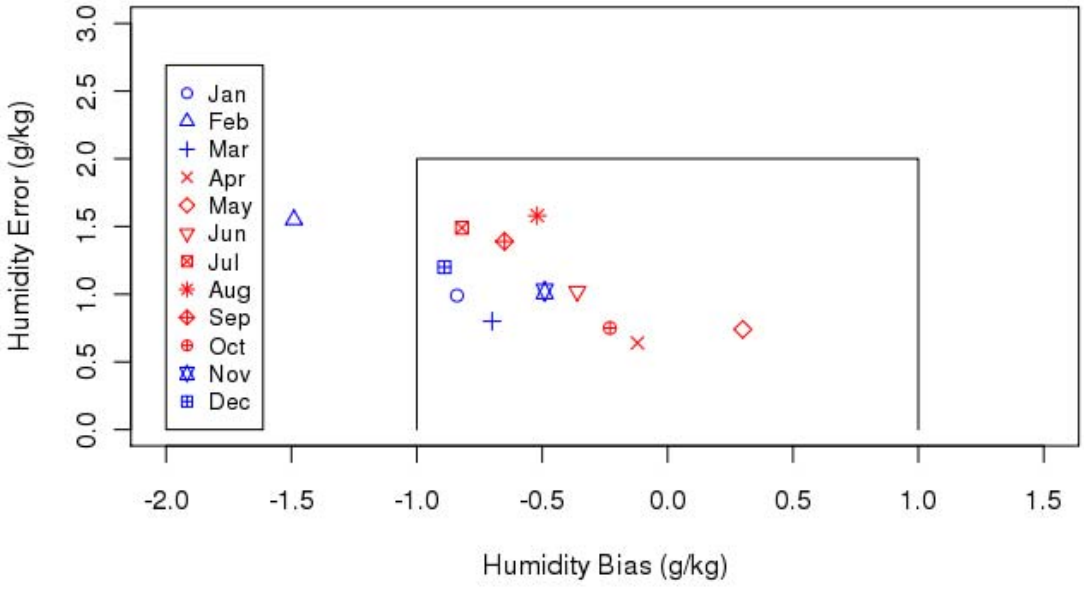

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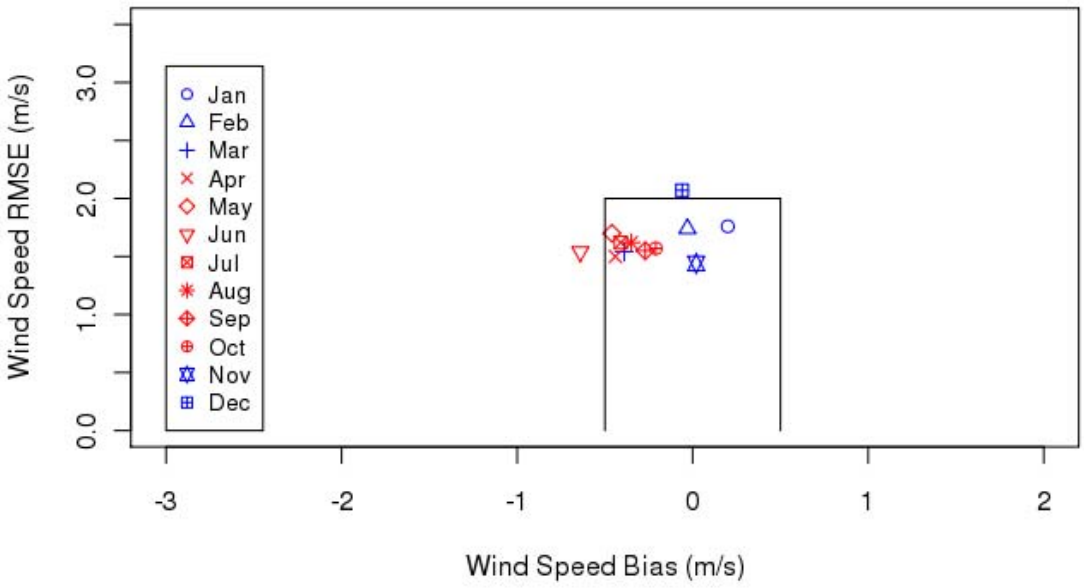

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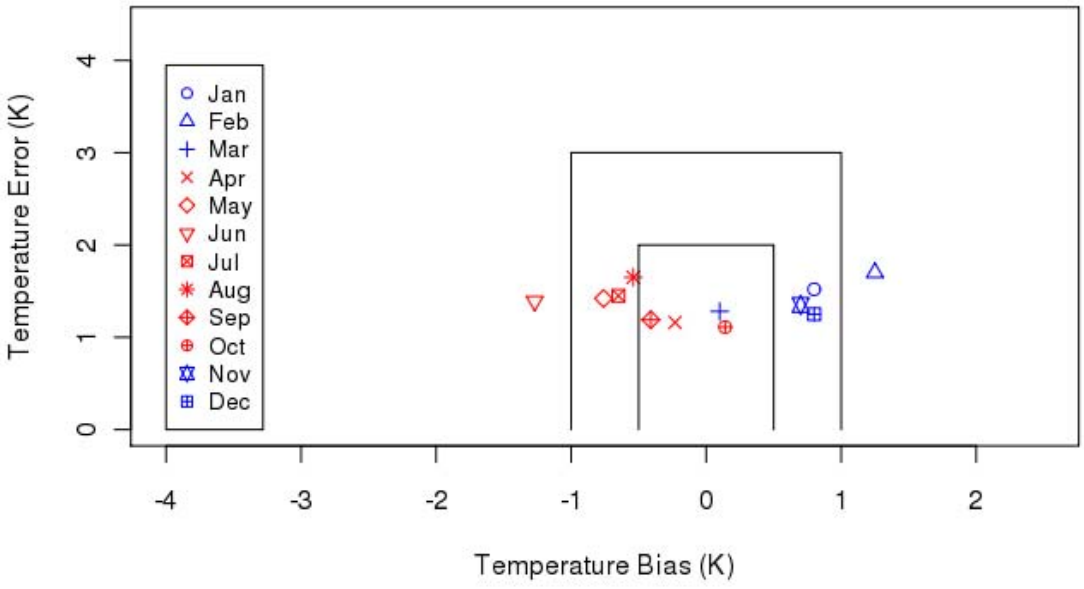

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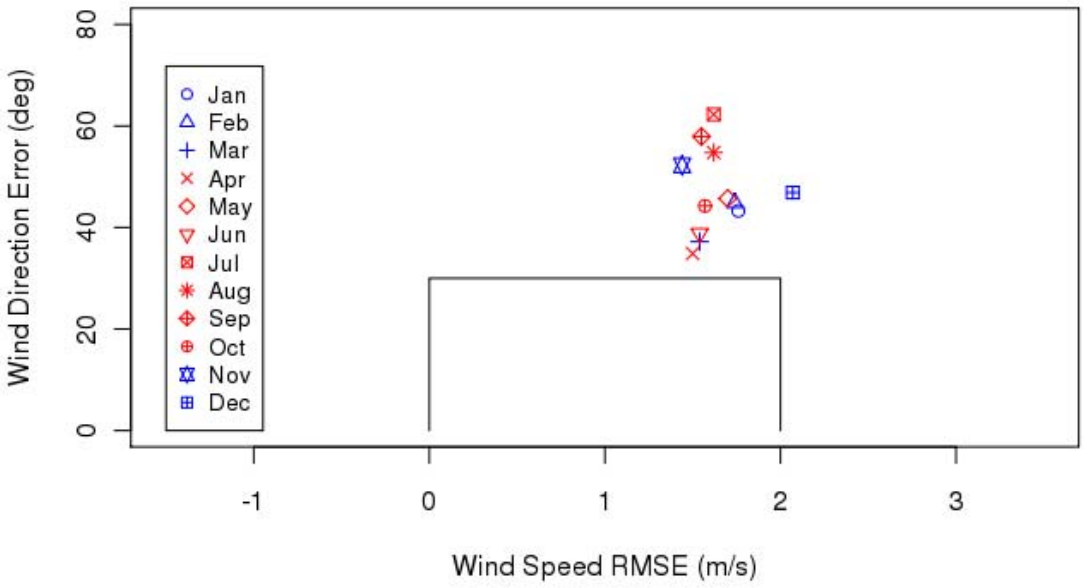
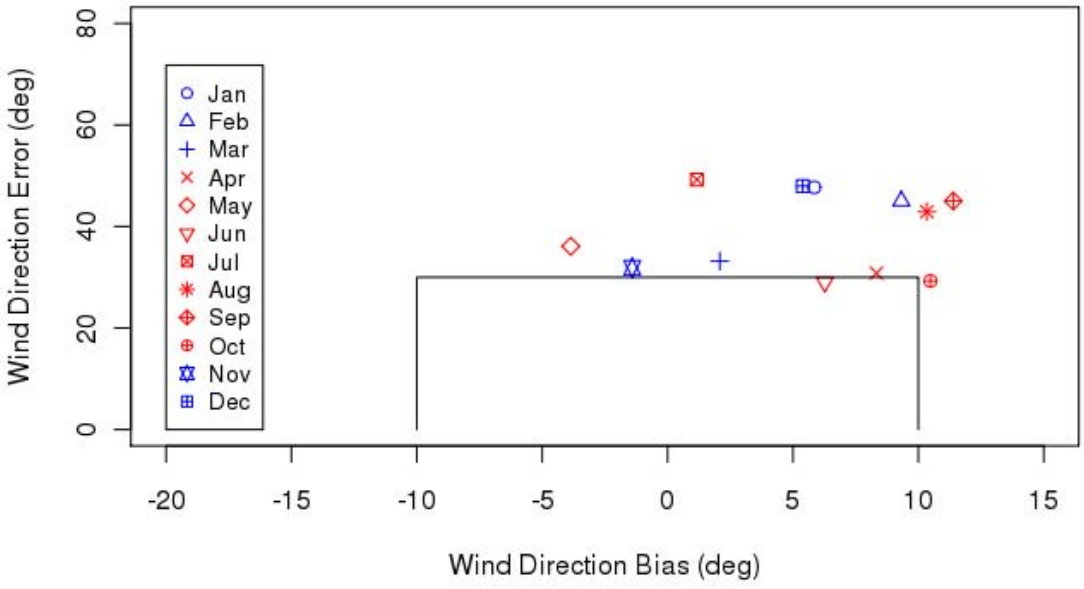


AZ-KGYR 04km Wind Direction Performance Comparison



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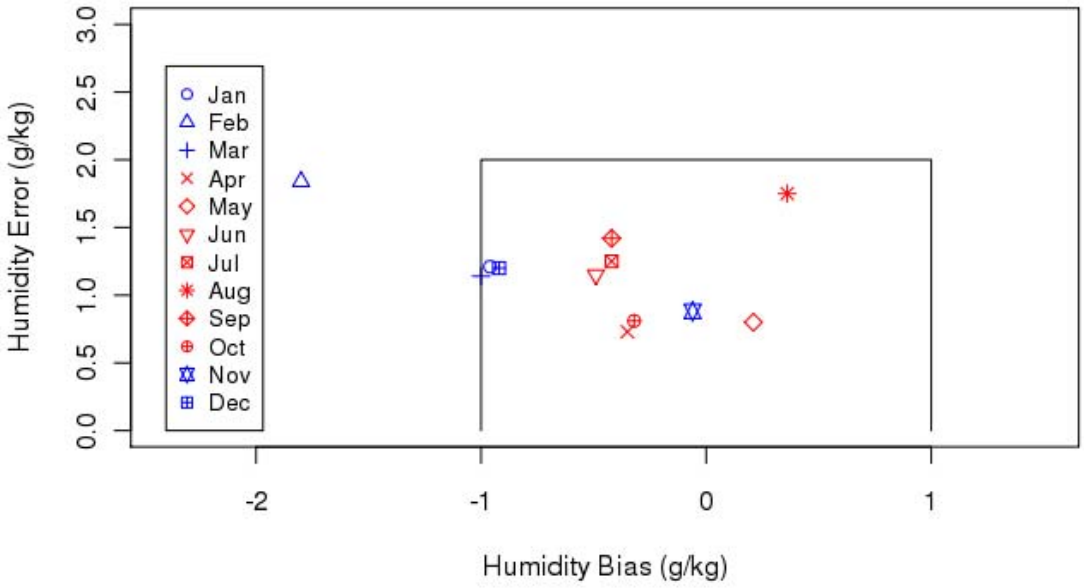

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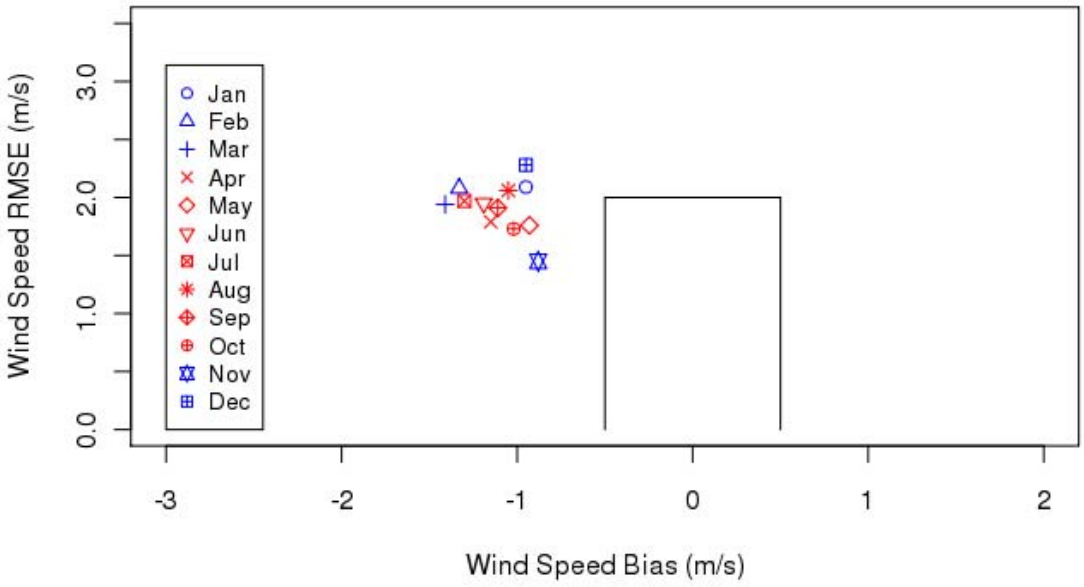
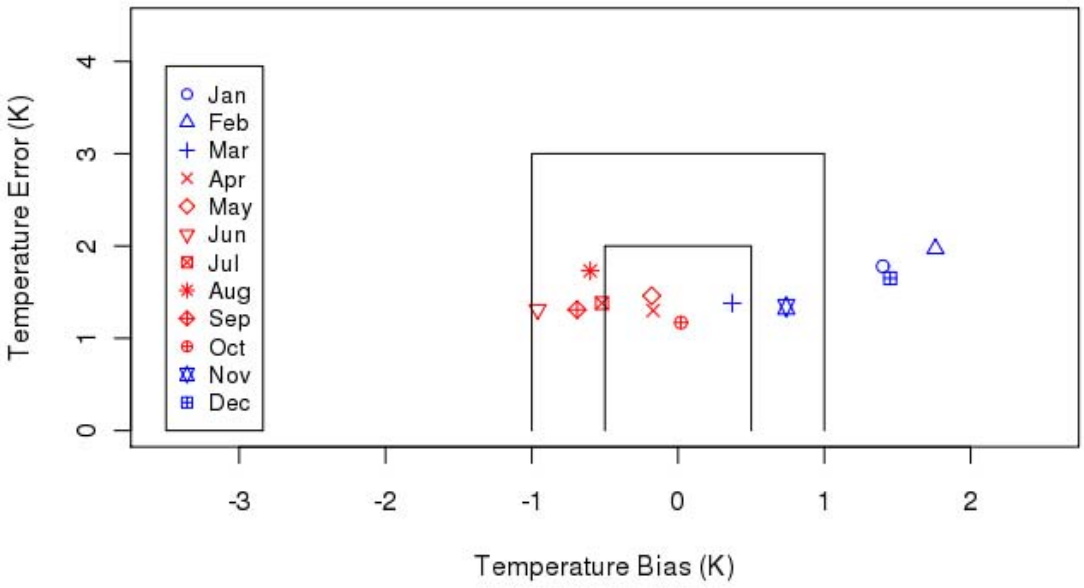


AZ-KGYR 04km Temperature Performance Comparison



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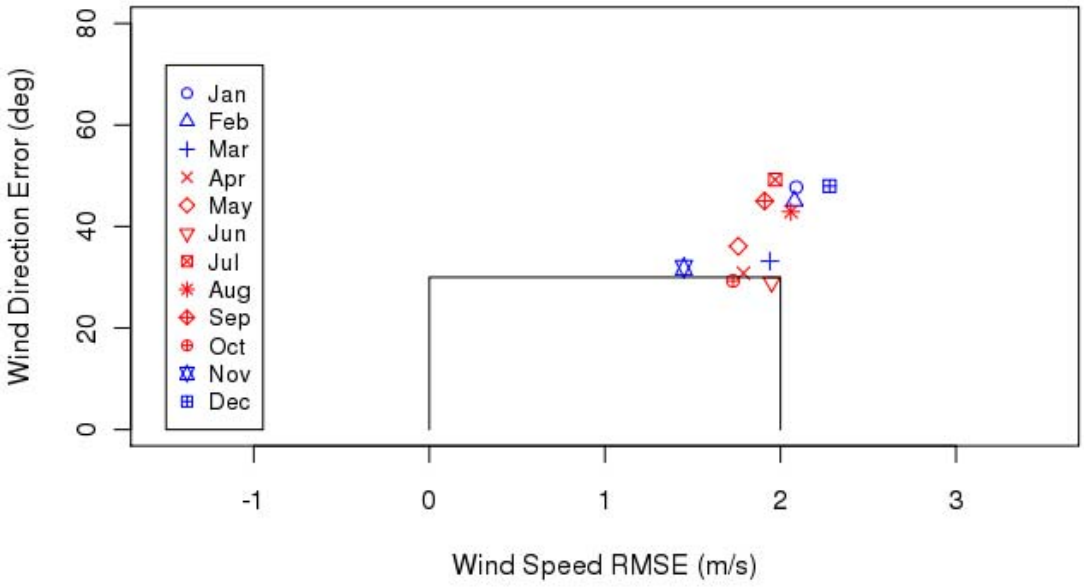
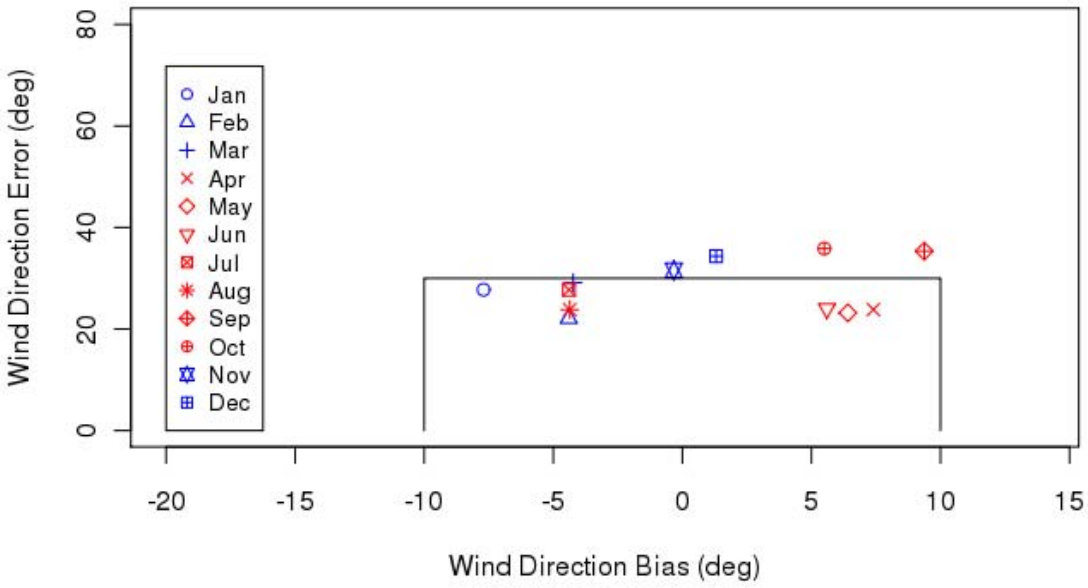


AZ-KIFP 04km Wind Direction Performance Comparison



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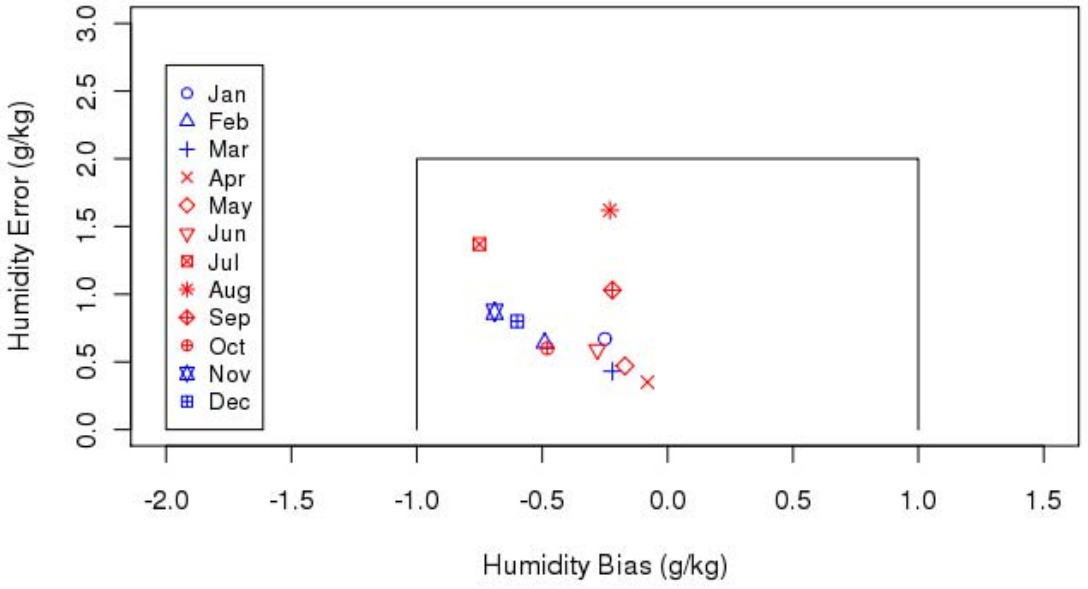

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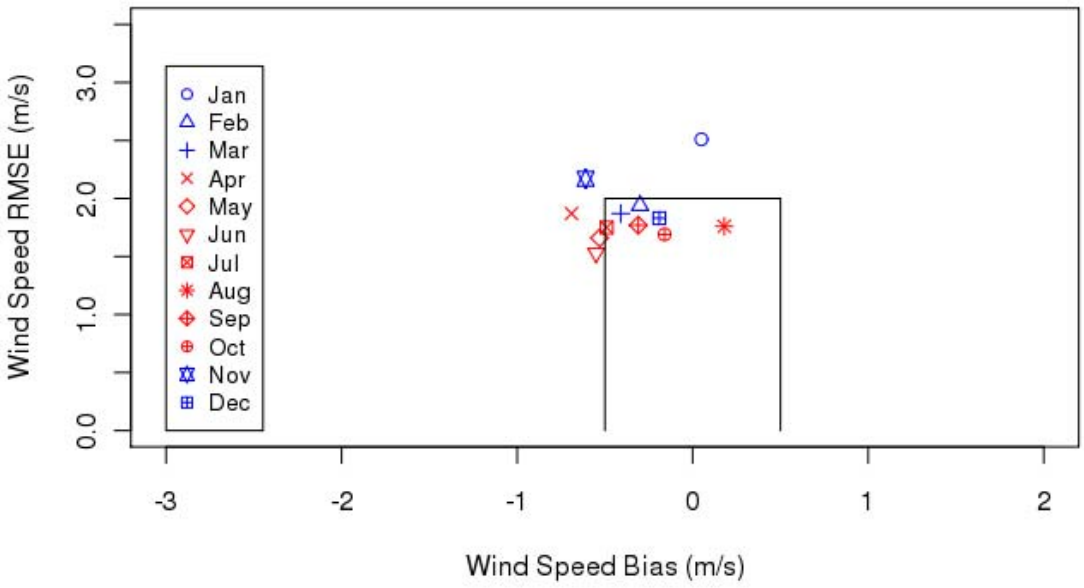
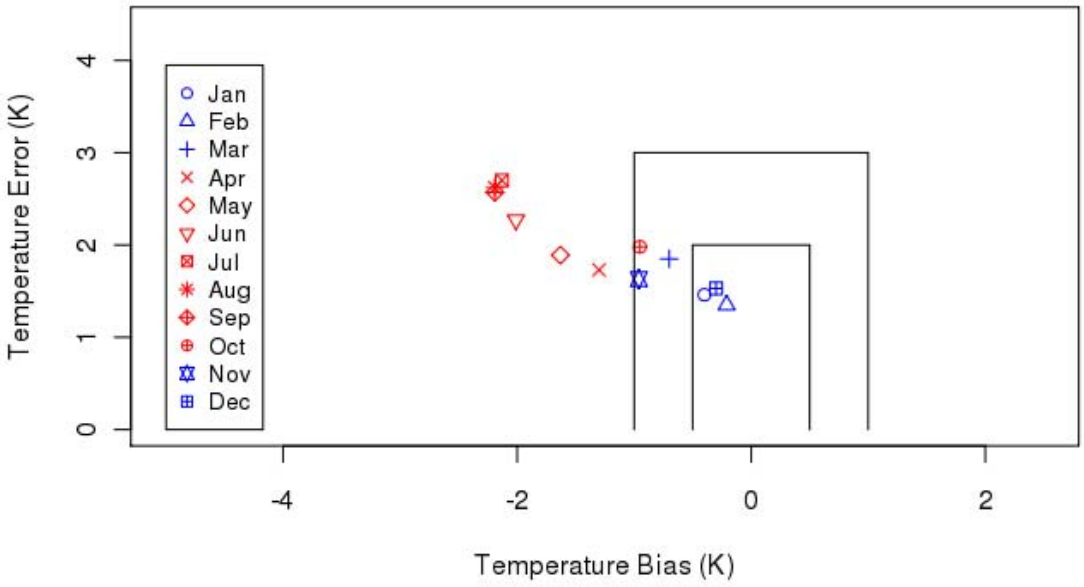


AZ-KIFP 04km Temperature Performance Comparison



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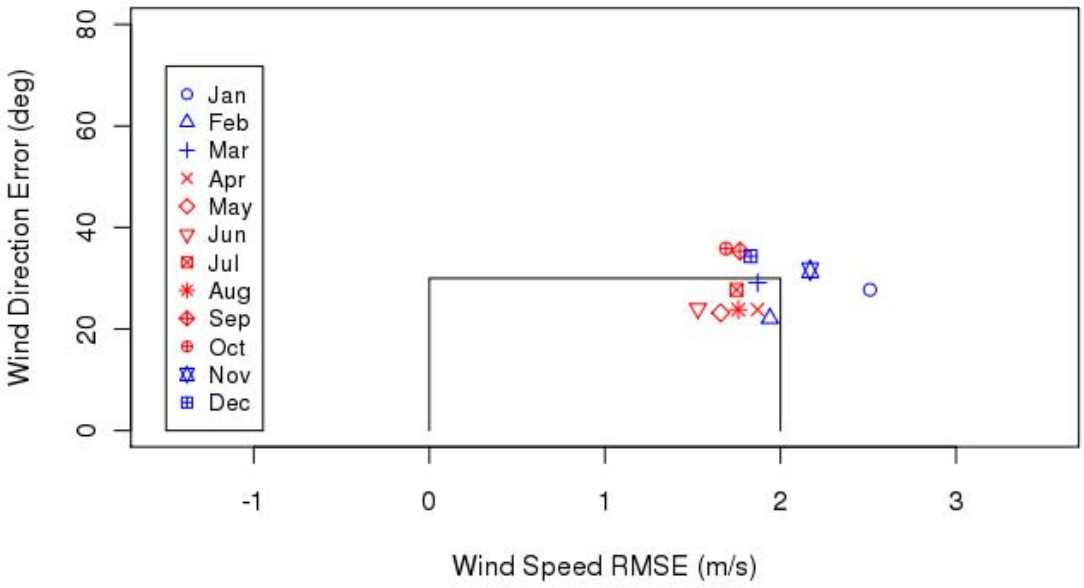

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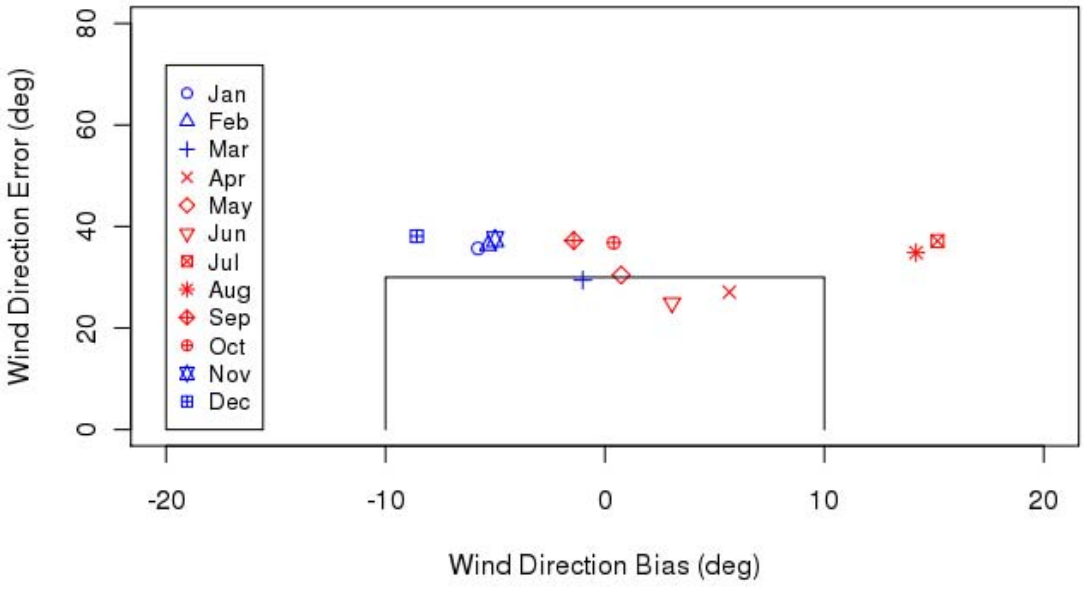
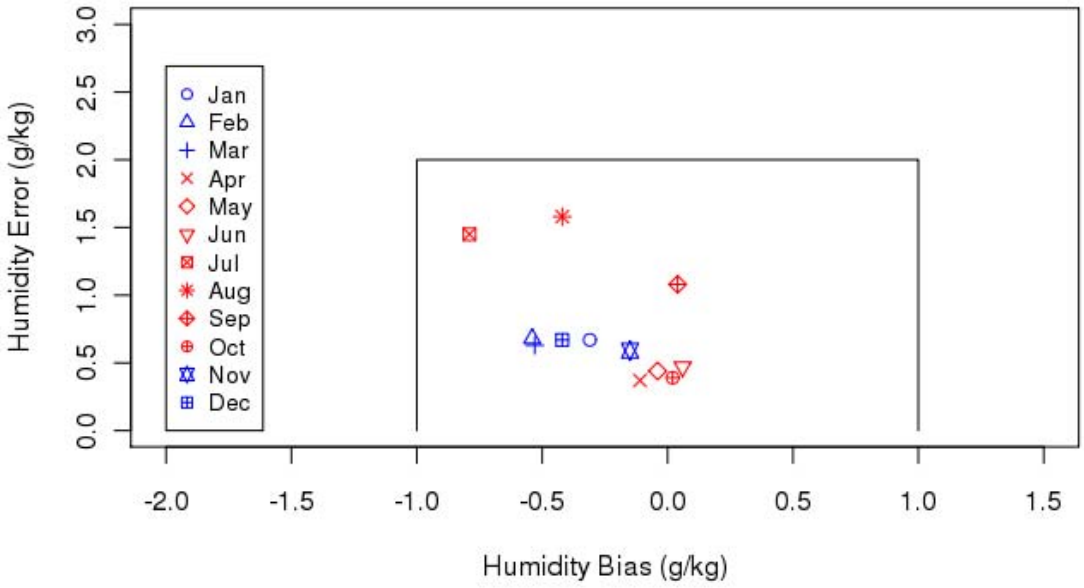


AZ-KIGM 04km Humidity Performance Comparison



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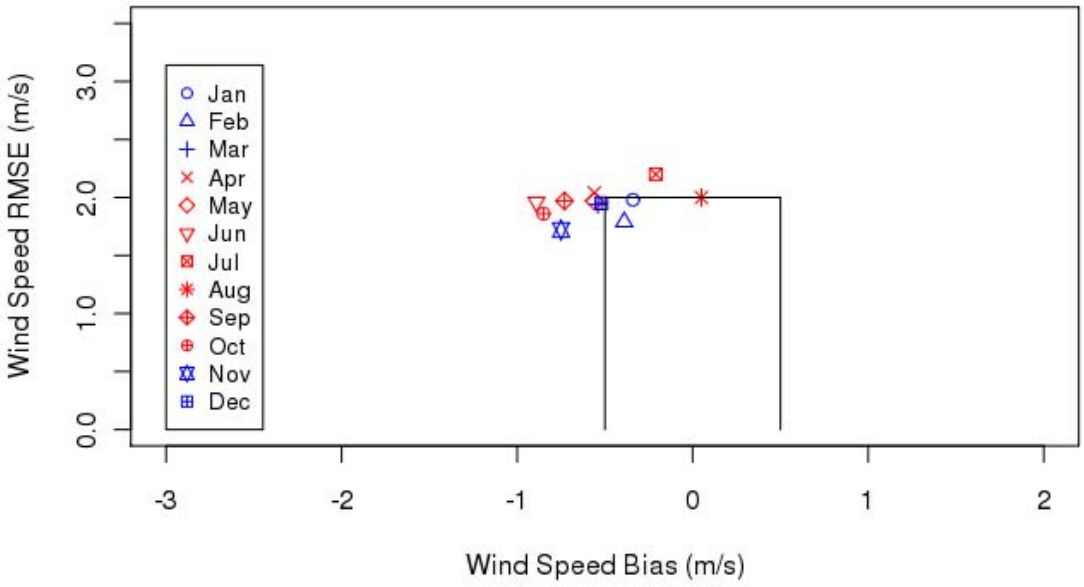
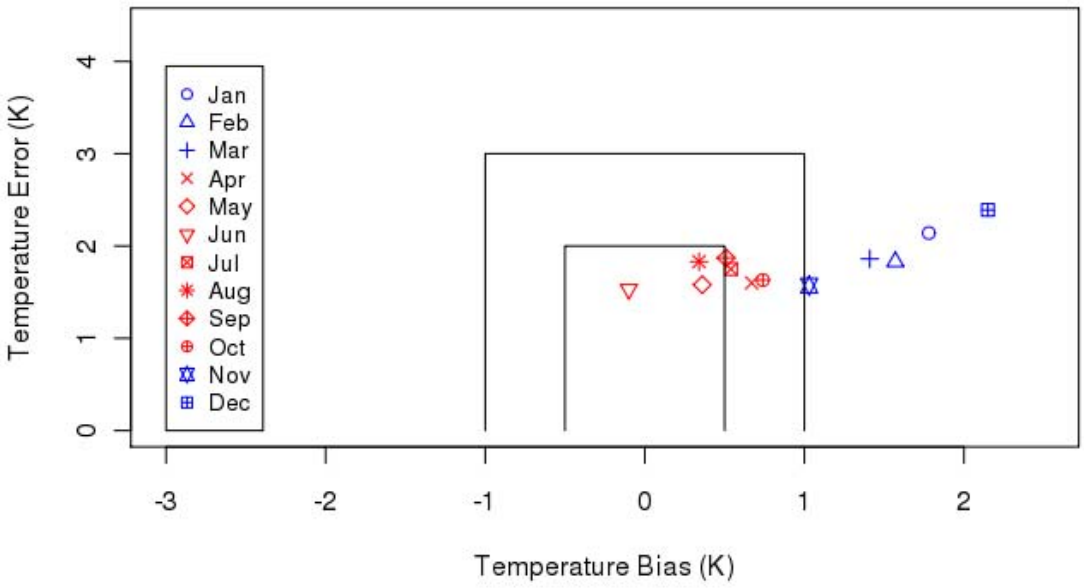


AZ-KIGM 04km Temperature Performance Comparison



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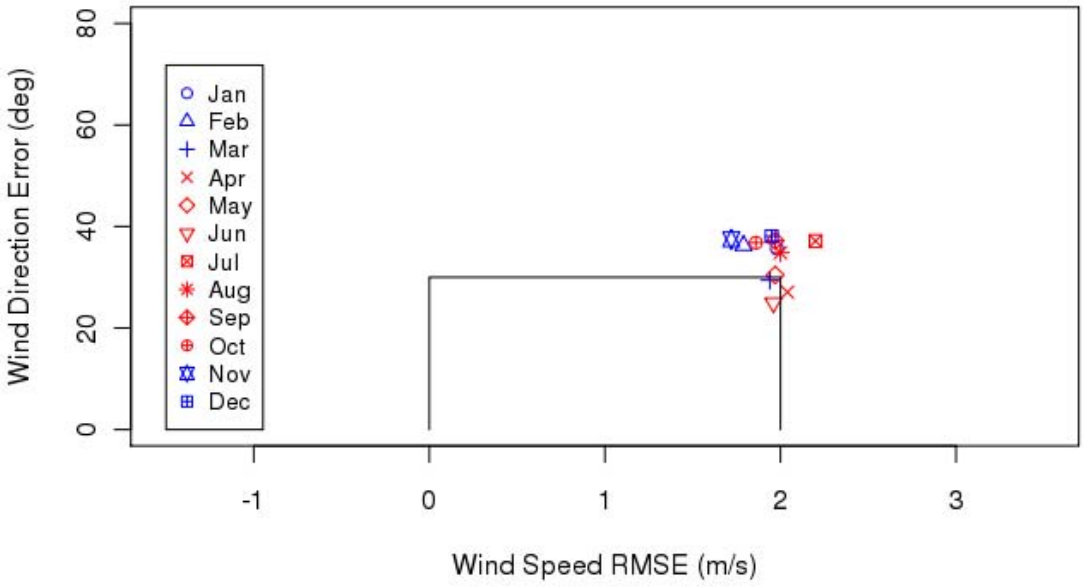
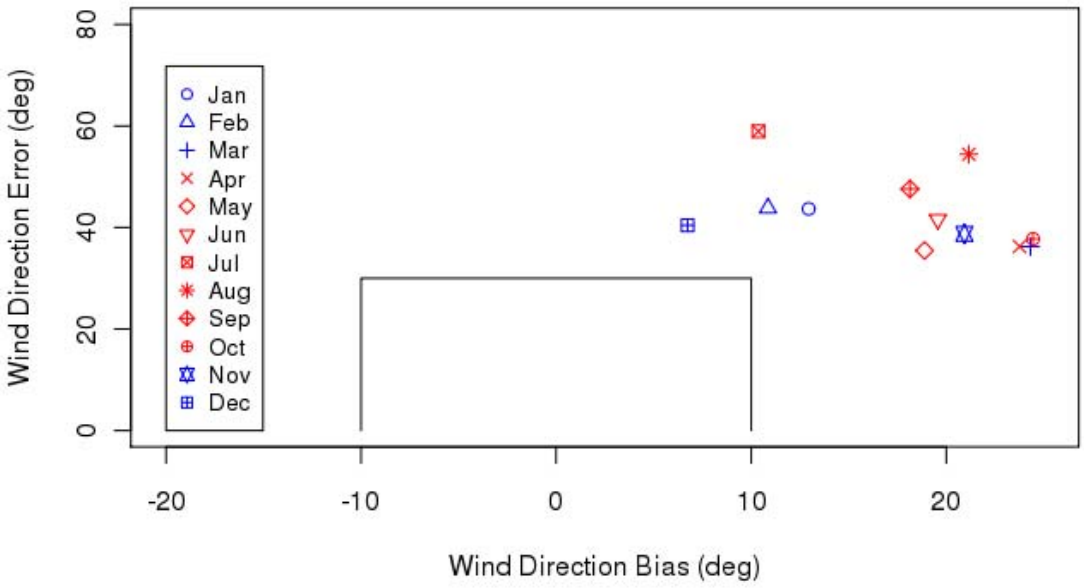
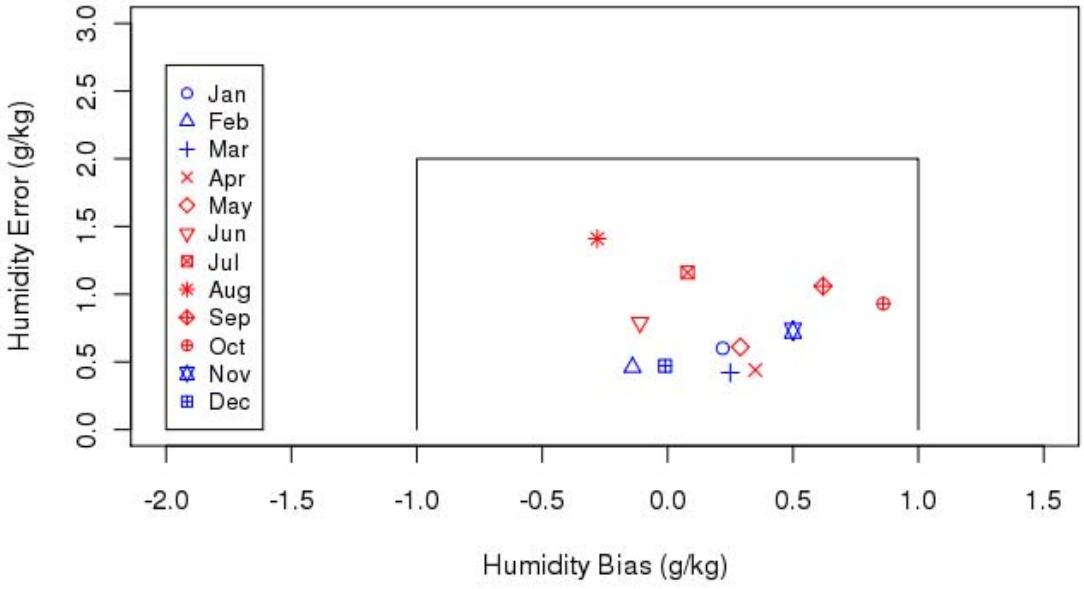


AZ-KINW 04km Wind Direction Performance Comparison



AZ-KINW 04km Humidity Performance Comparison



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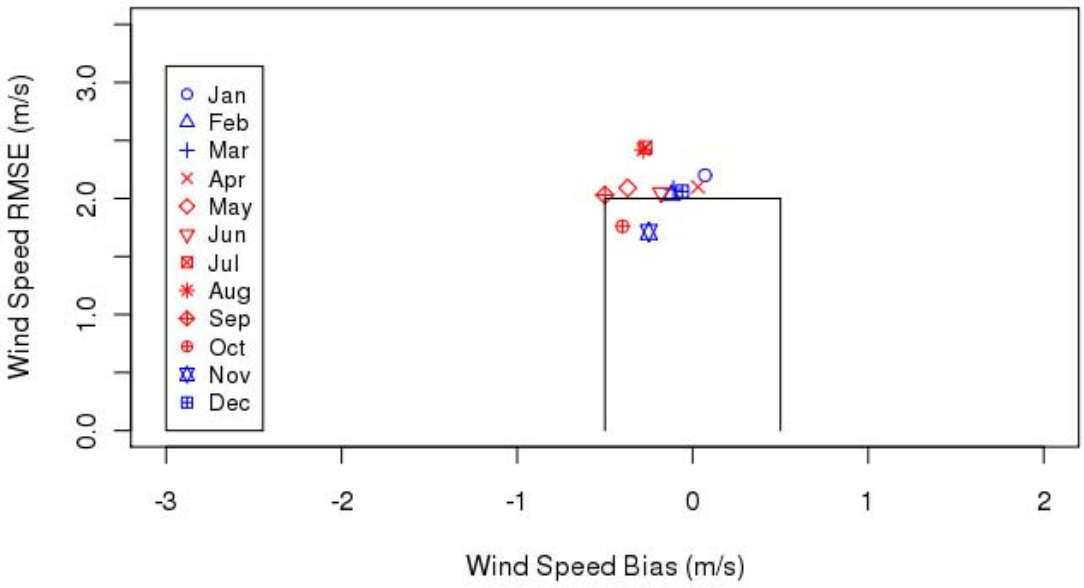
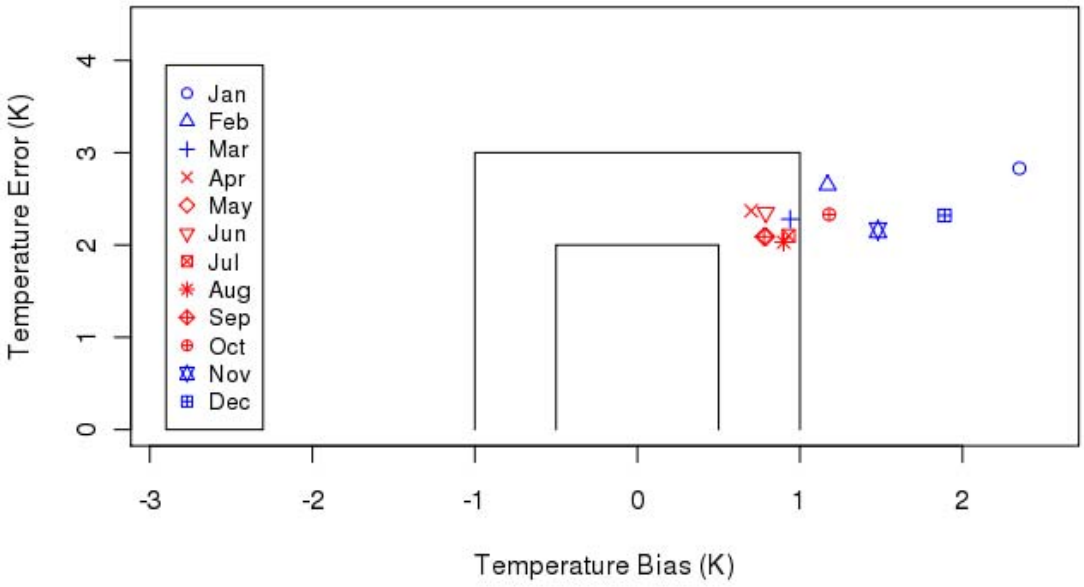


AZ-KINW 04km Temperature Performance Comparison



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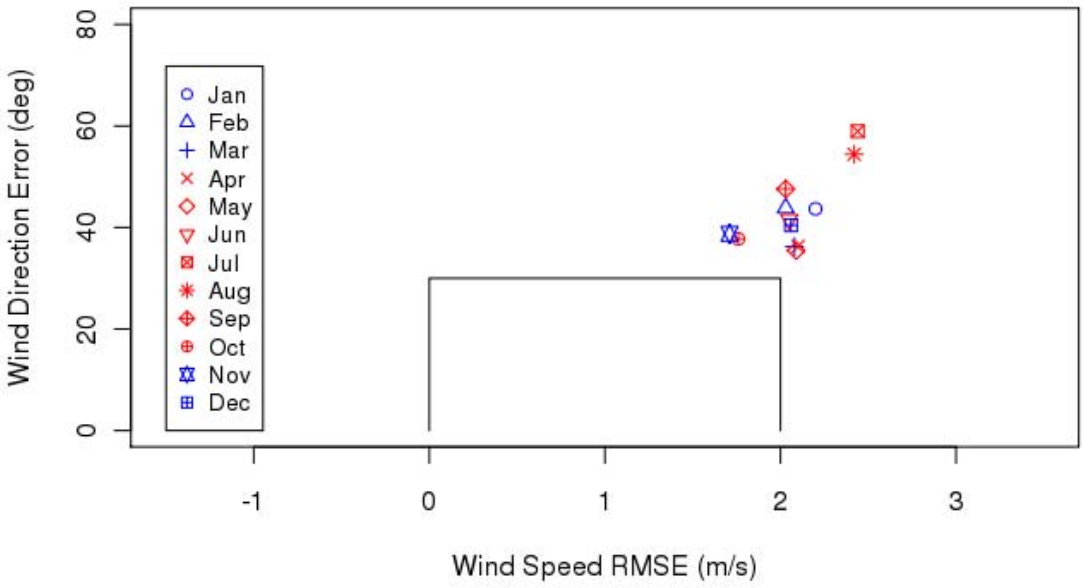
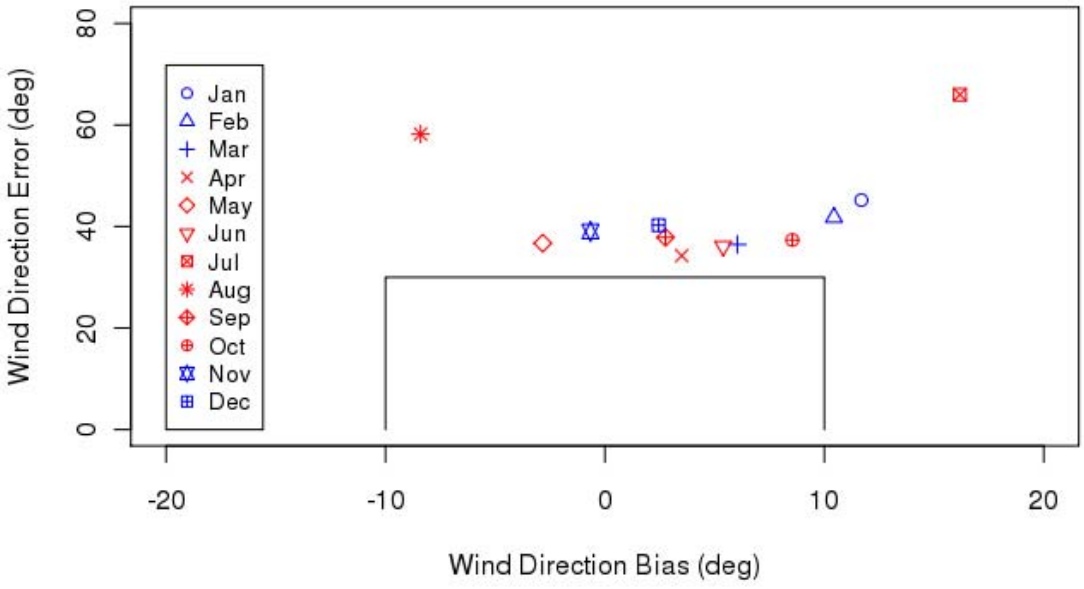
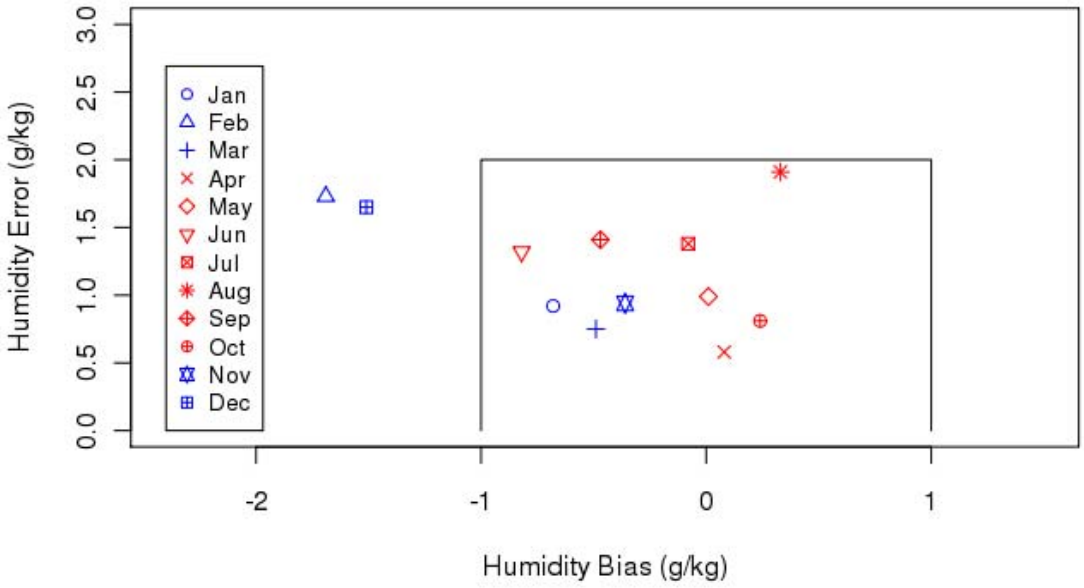


AZ-KIWA 04km Wind Direction Performance Comparison



AZ-KIWA 04km Humidity Performance Comparison



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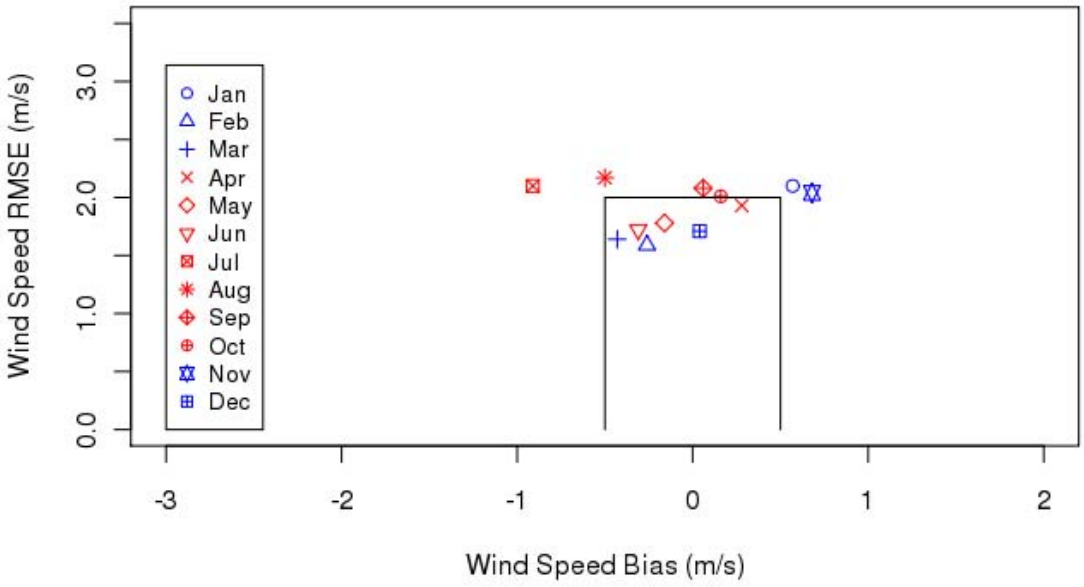
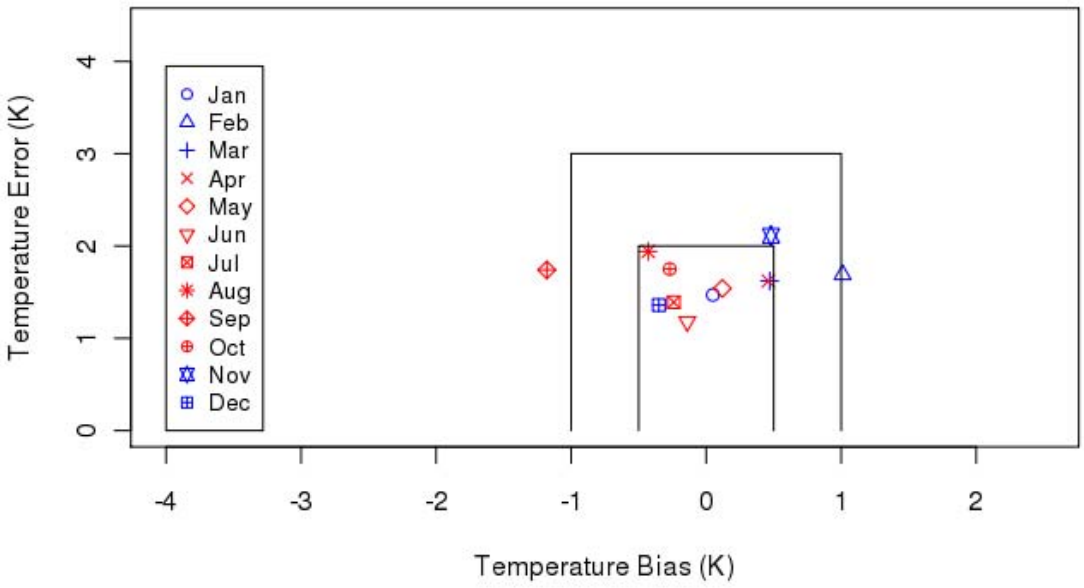
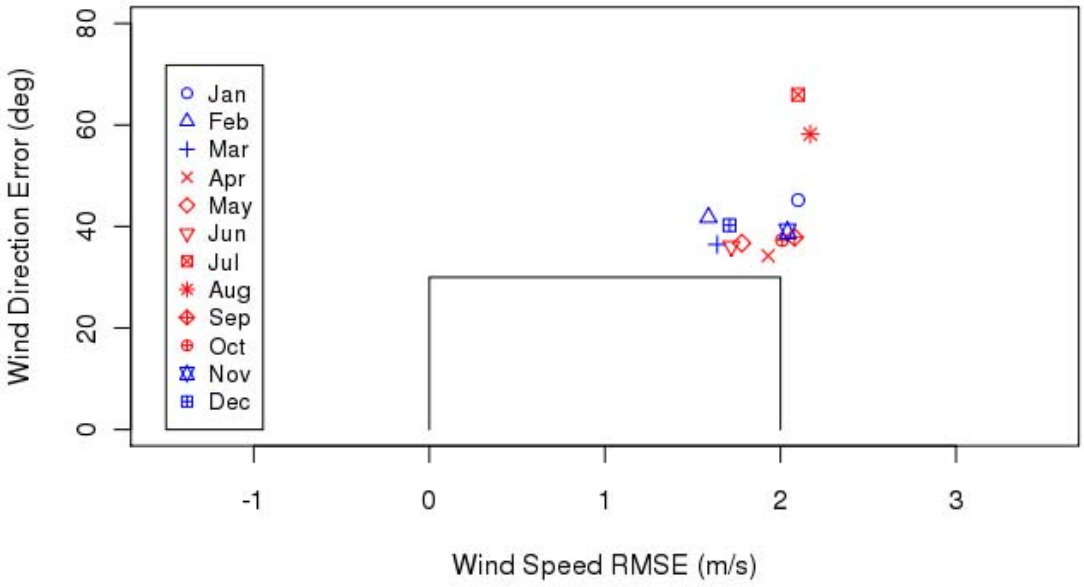


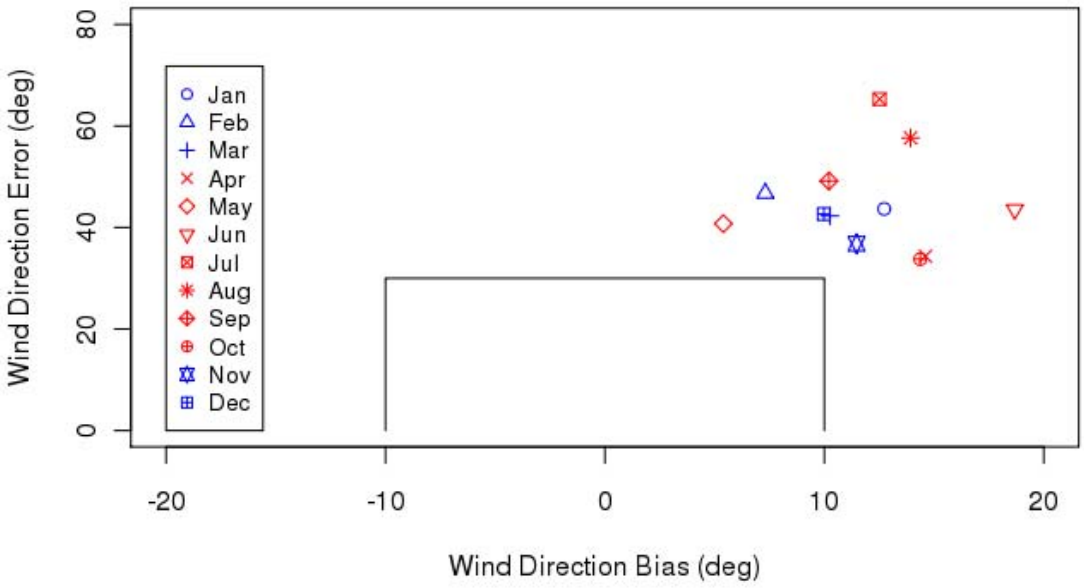
AZ-KIWA 04km Temperature Performance Comparison



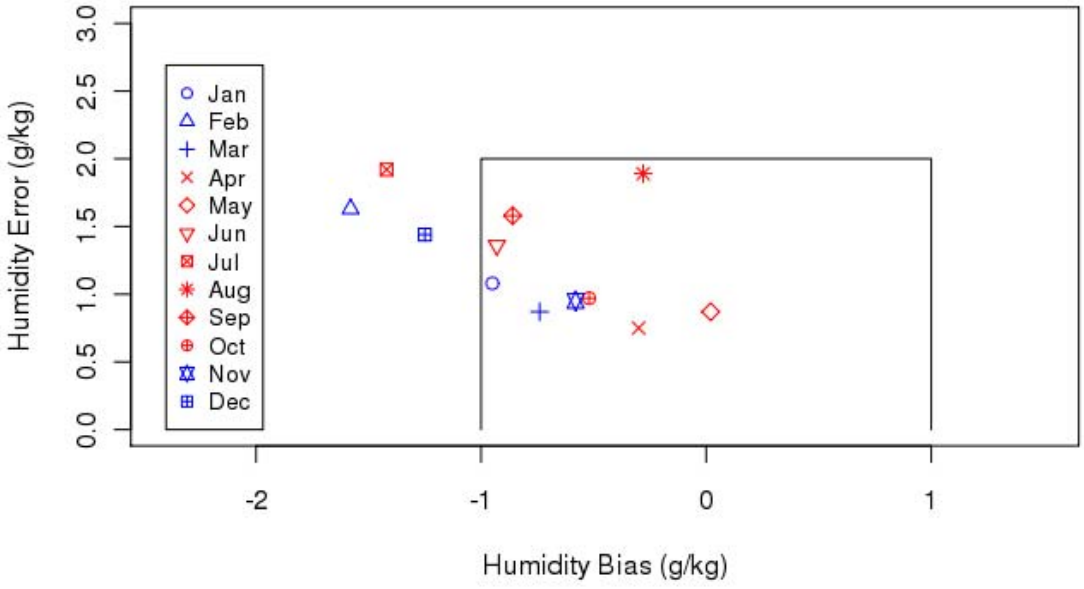
AZ-KIWA 04km Wind Performance Comparison



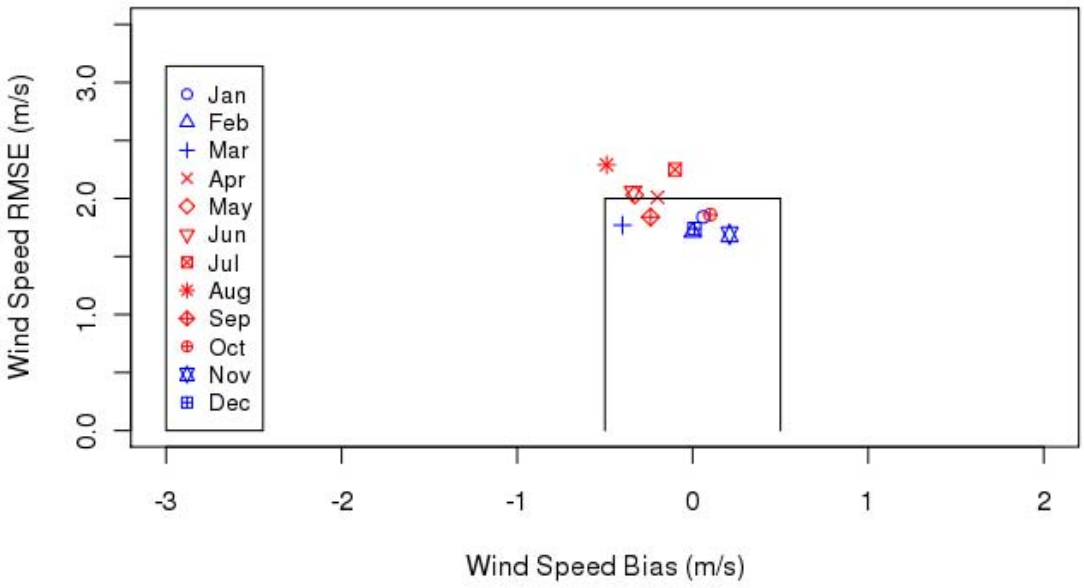
AZ-KLUF 04km Wind Direction Performance Comparison



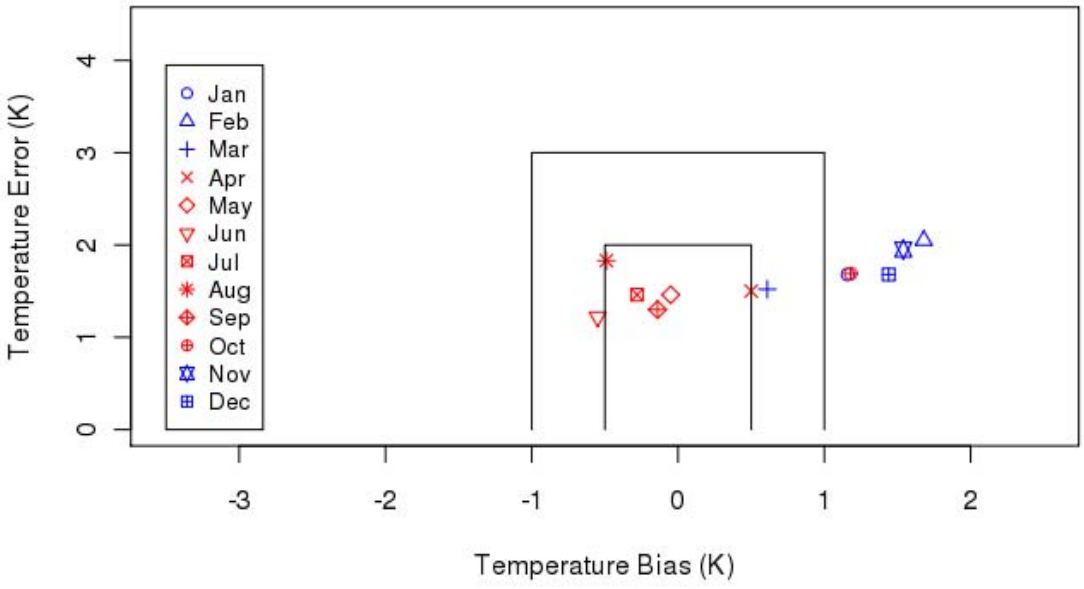
AZ-KLUF 04km Humidity Performance Comparison



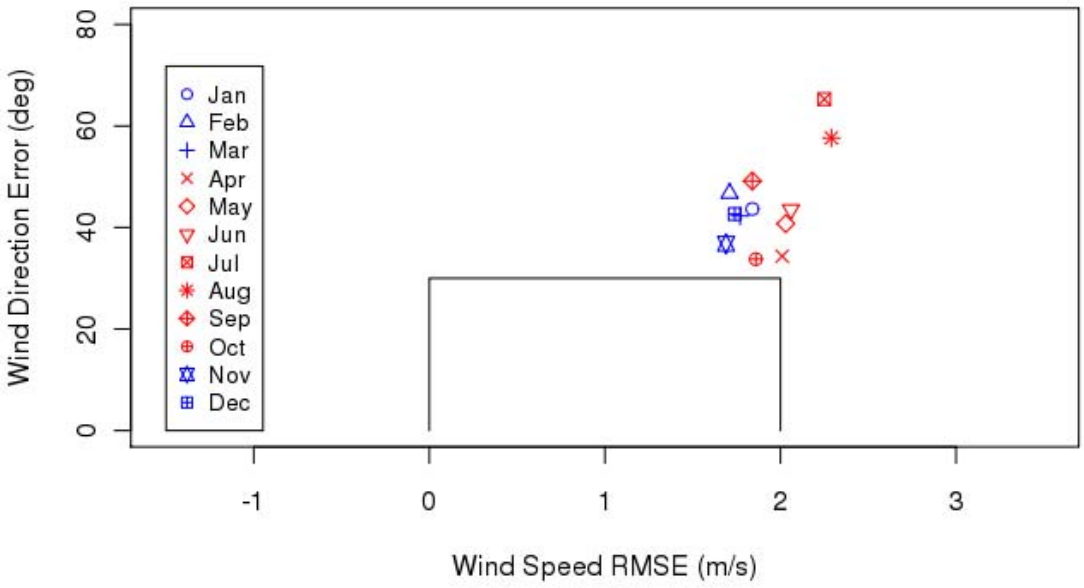
AZ-KLUF 04km Wind Speed Performance Comparison



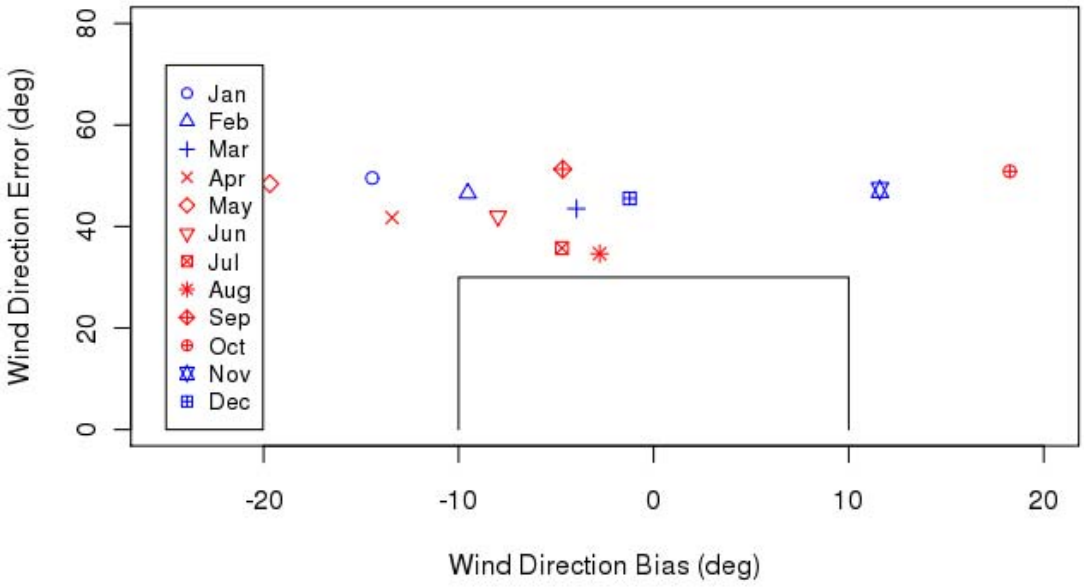
AZ-KLUF 04km Temperature Performance Comparison



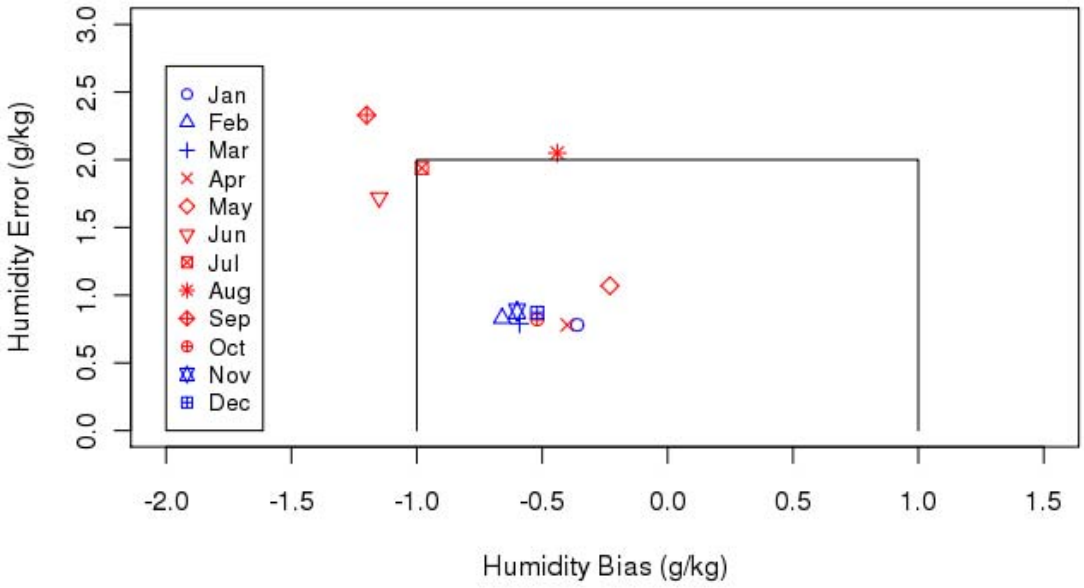
AZ-KLUF 04km Wind Performance Comparison



AZ-KNYL 04km Wind Direction Performance Comparison



AZ-KNYL 04km Humidity Performance Comparison



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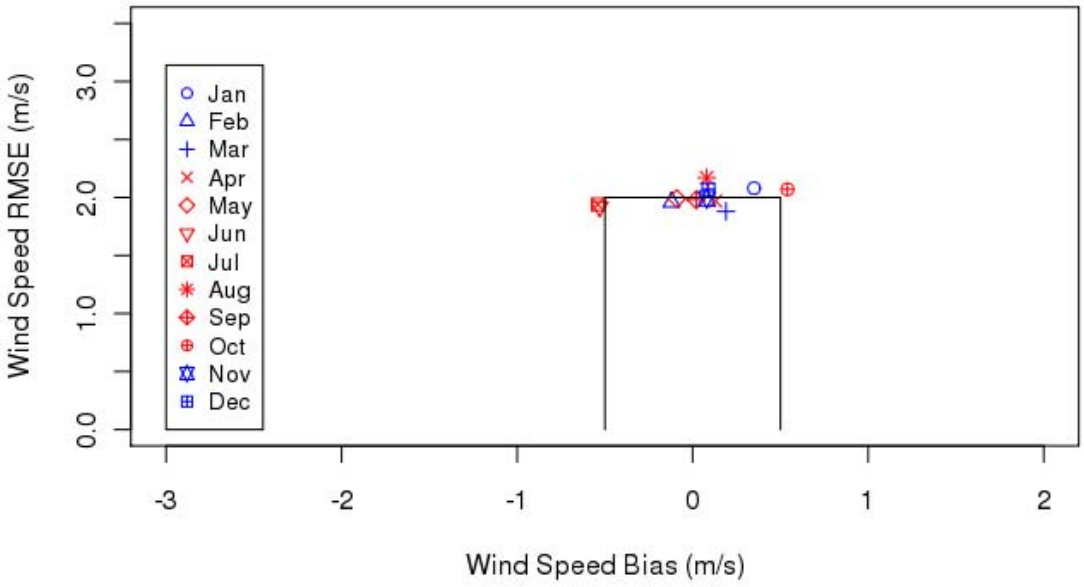
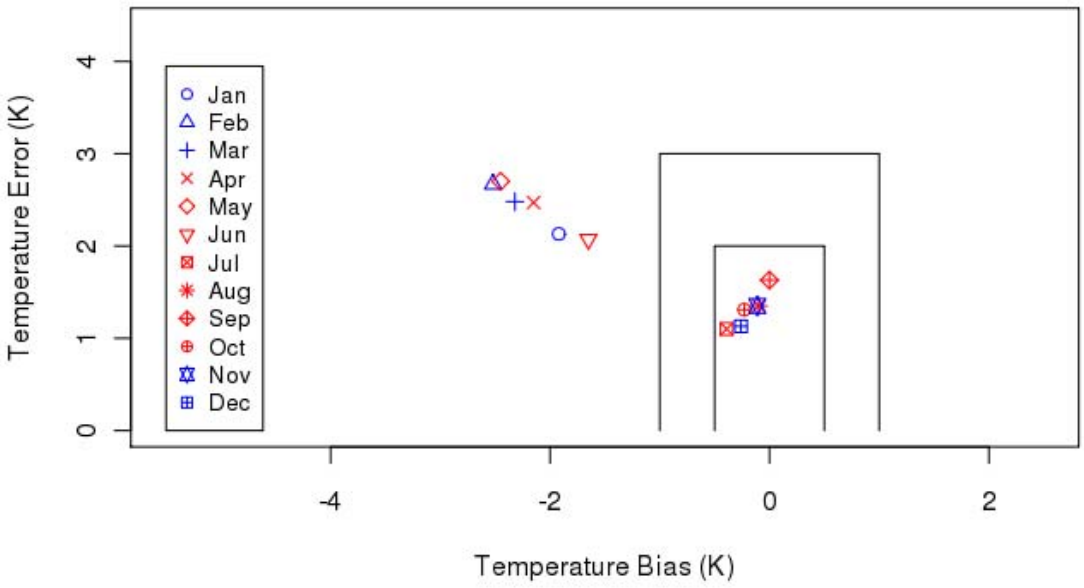


AZ-KNYL 04km Temperature Performance Comparison



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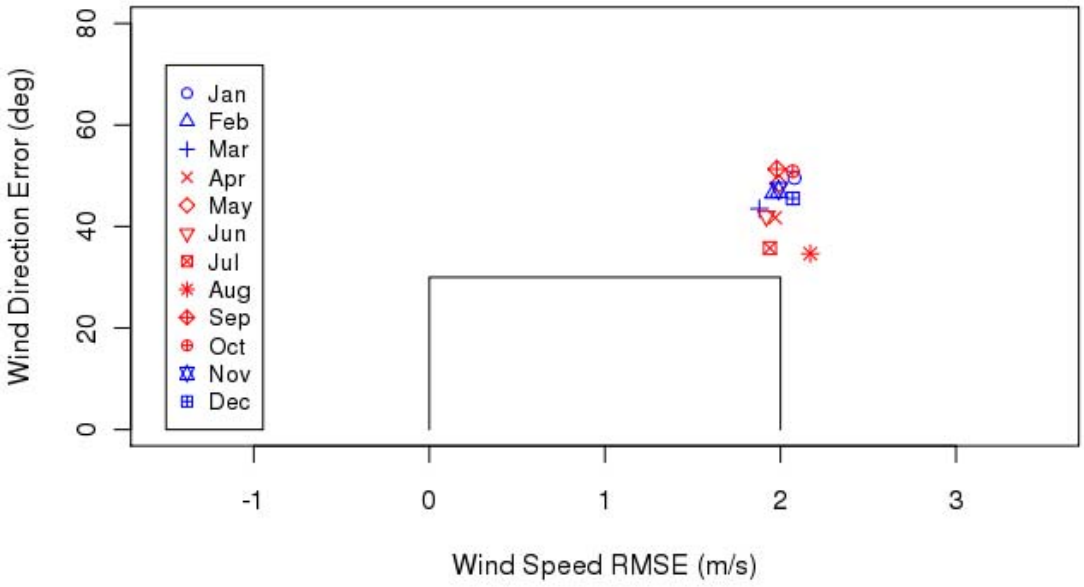
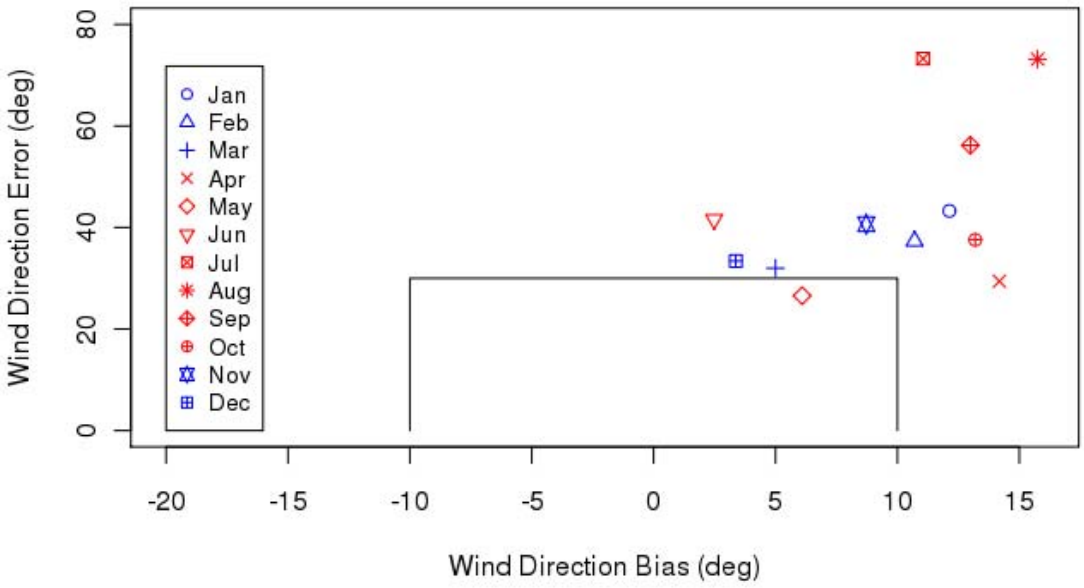
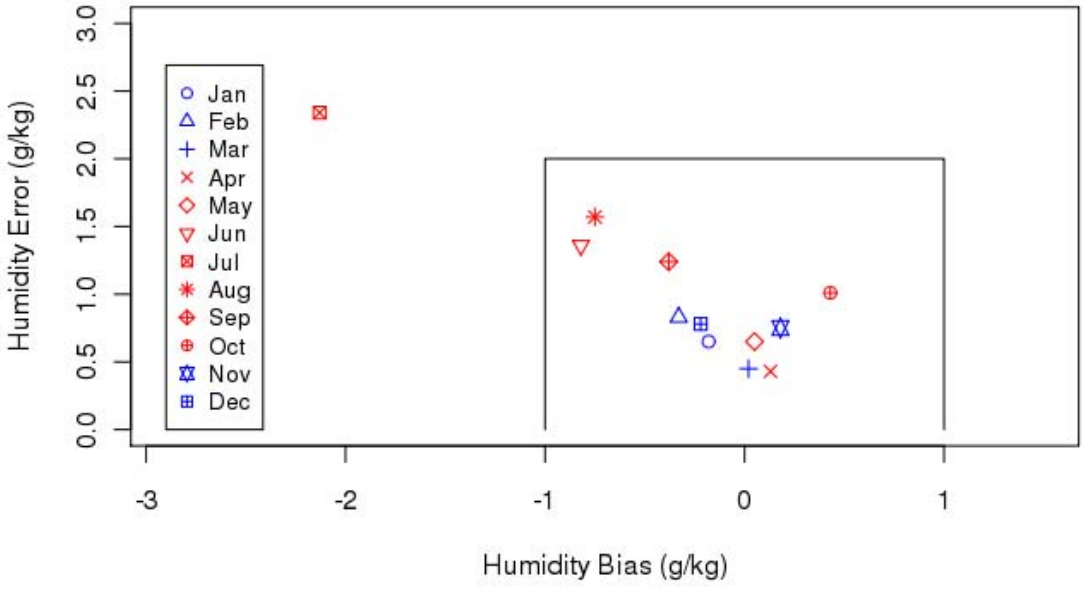


AZ-KOLS 04km Wind Direction Performance Comparison



AZ-KOLS 04km Humidity Performance Comparison



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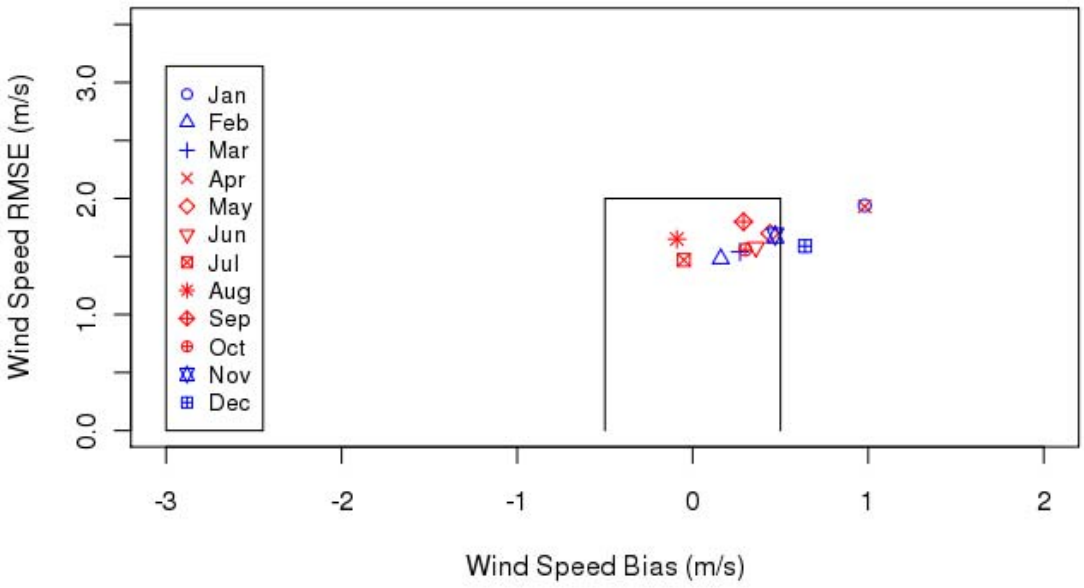
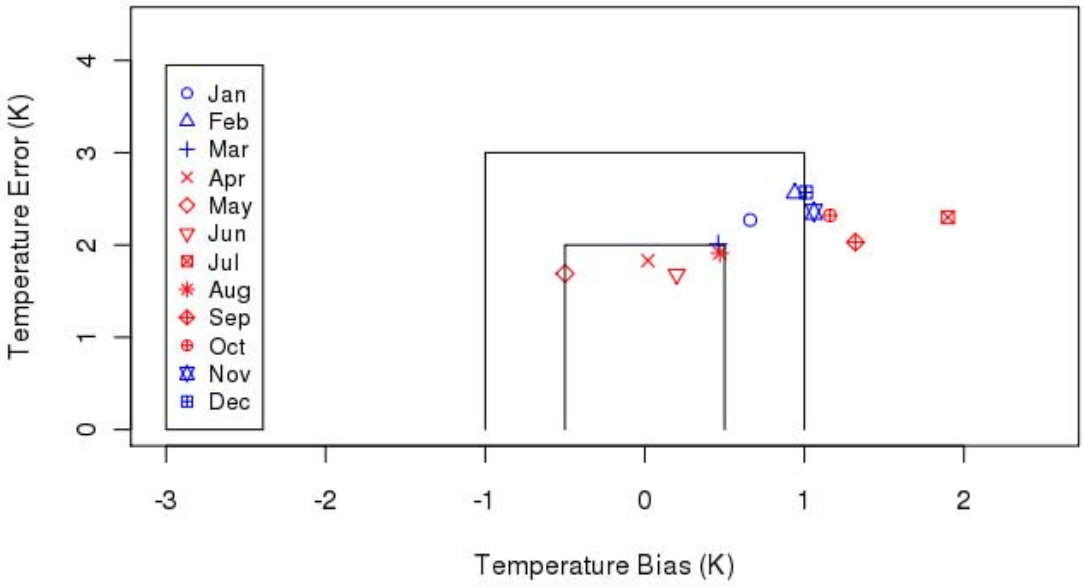


AZ-KOLS 04km Temperature Performance Comparison



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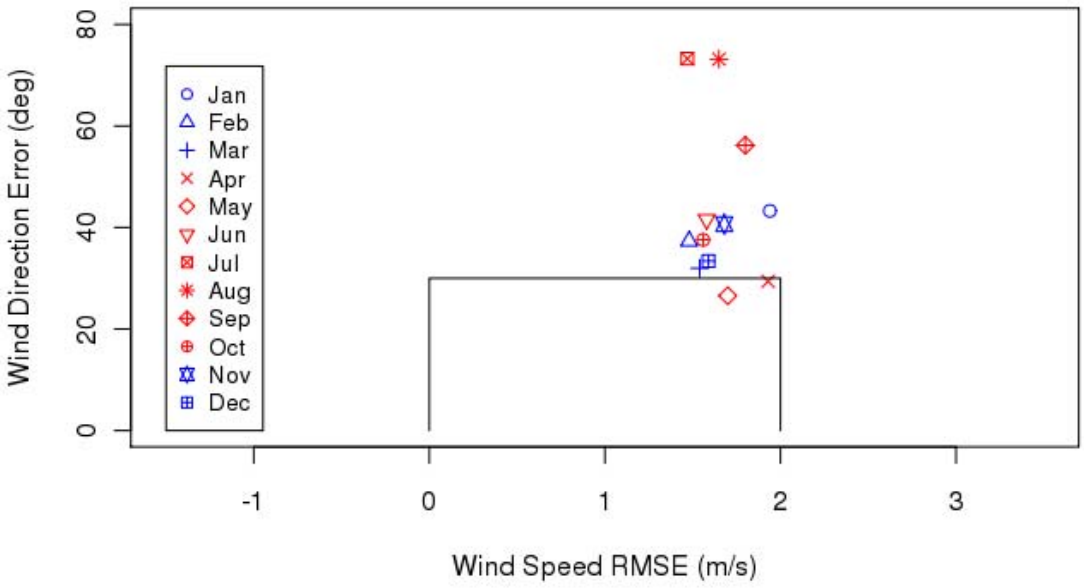
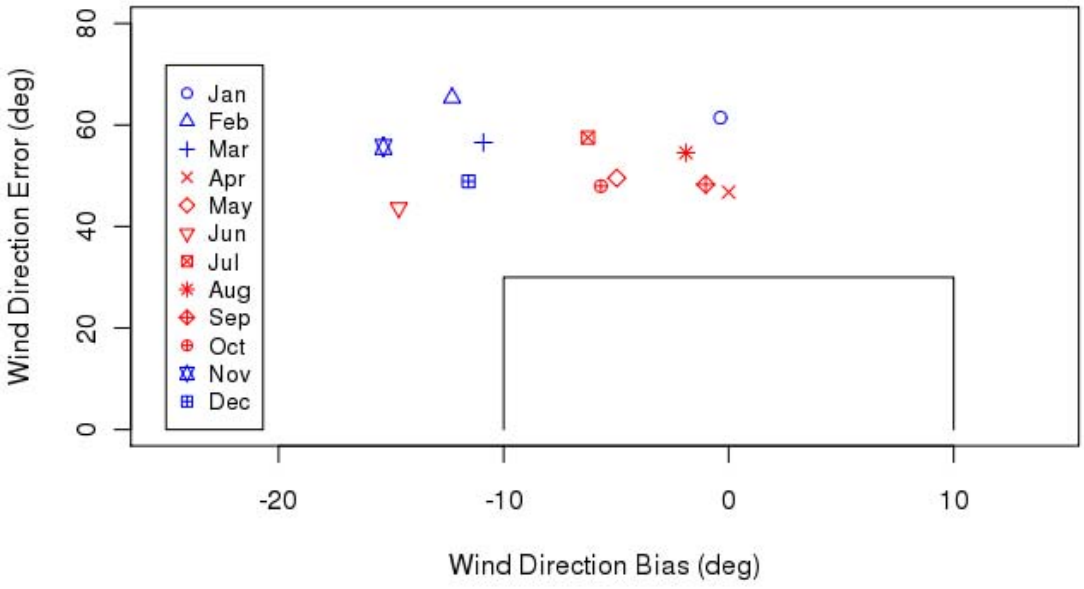
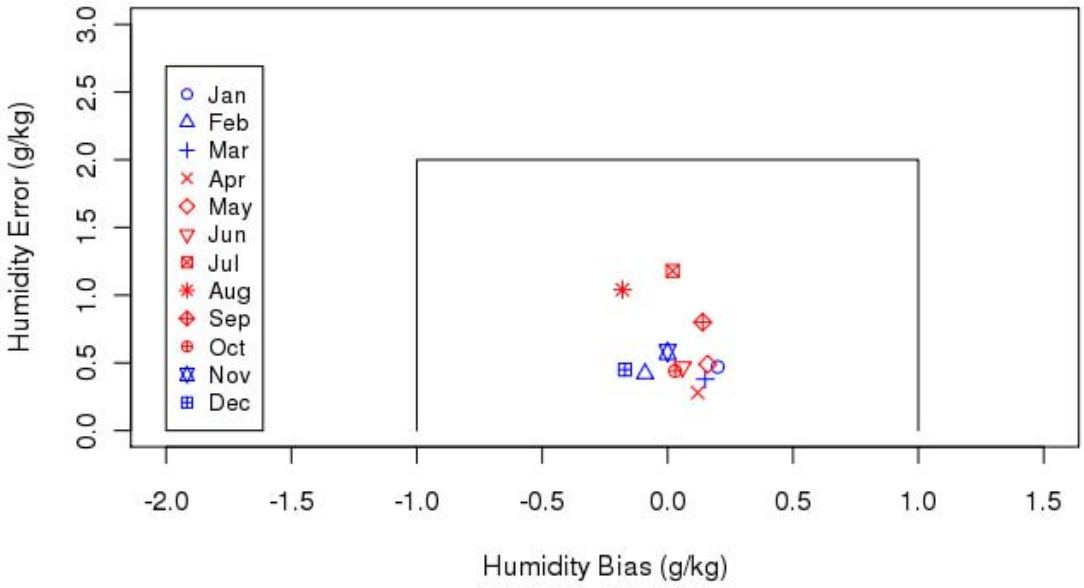


AZ-KPGA 04km Wind Direction Performance Comparison



AZ-KPGA 04km Humidity Performance Comparison



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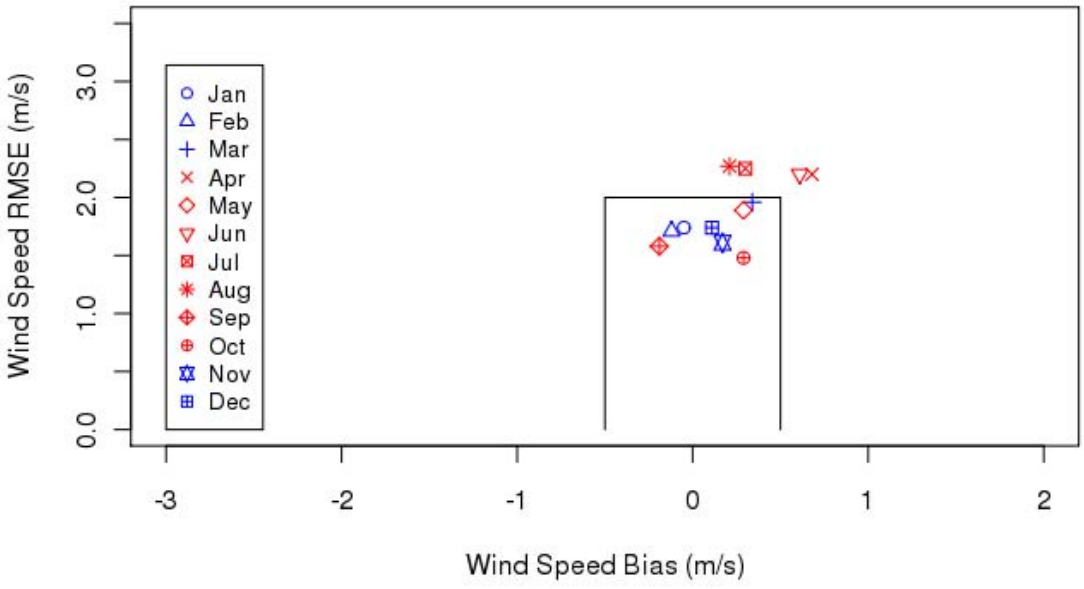
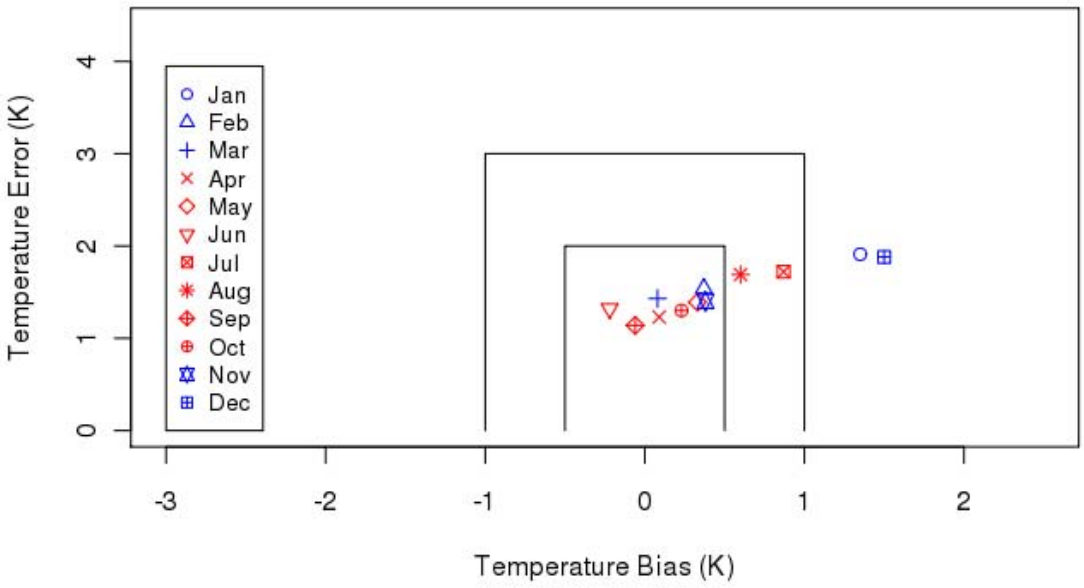


AZ-KPGA 04km Temperature Performance Comparison



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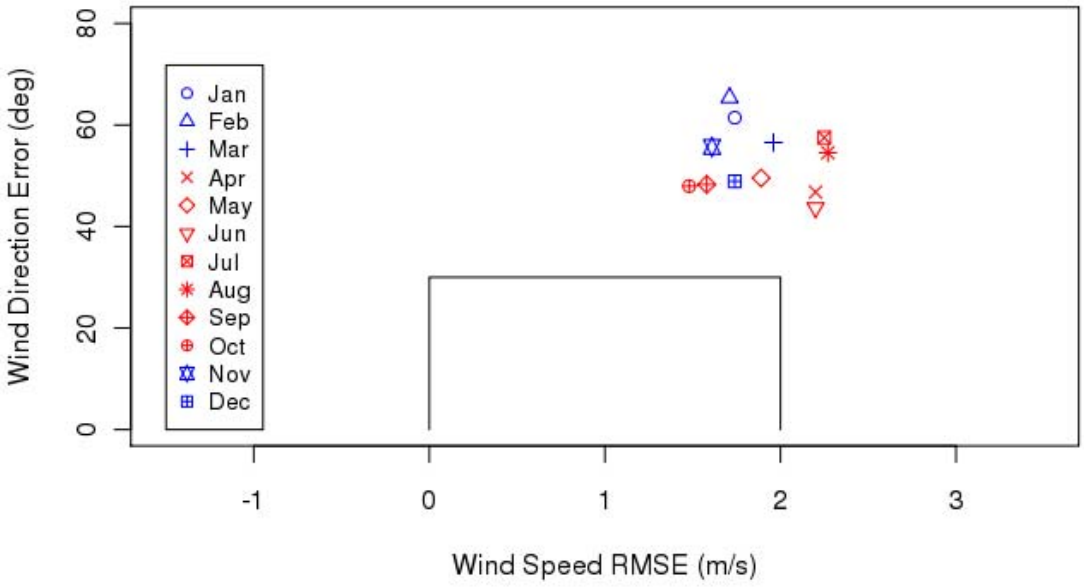
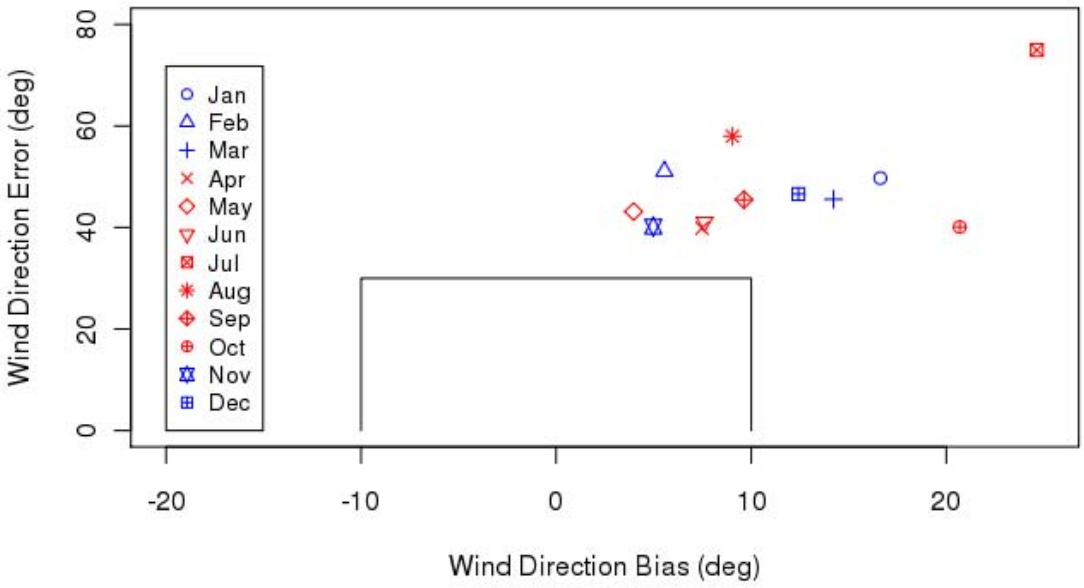
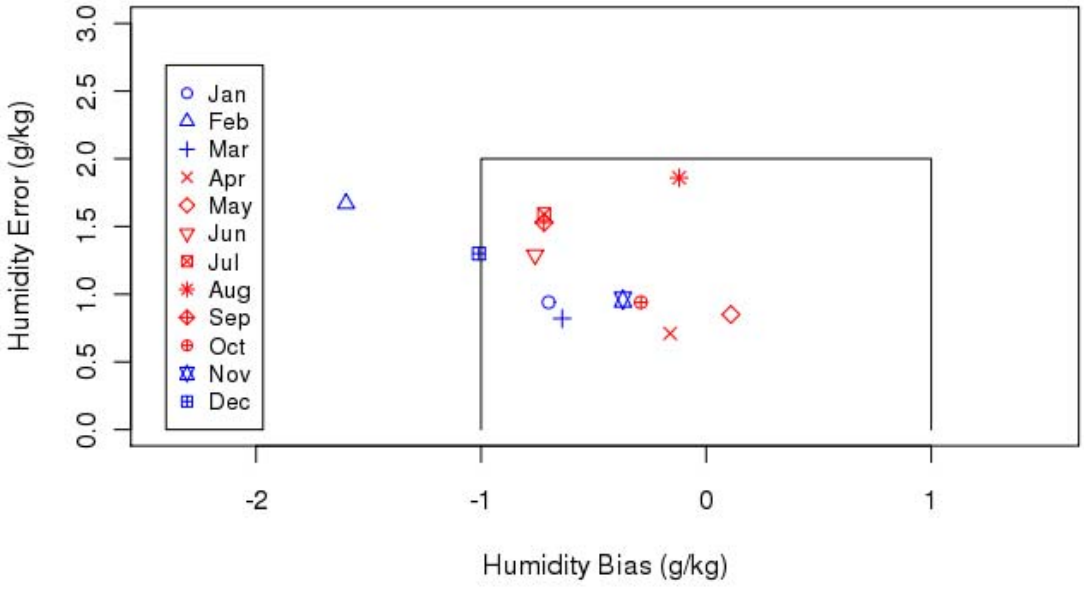


AZ-KPHX 04km Wind Direction Performance Comparison



AZ-KPHX 04km Humidity Performance Comparison



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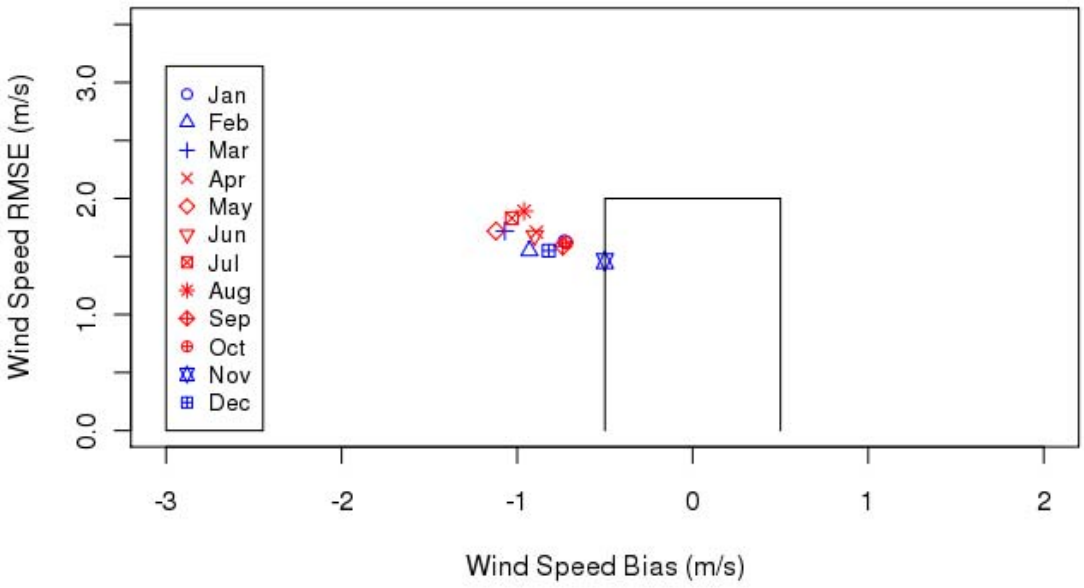
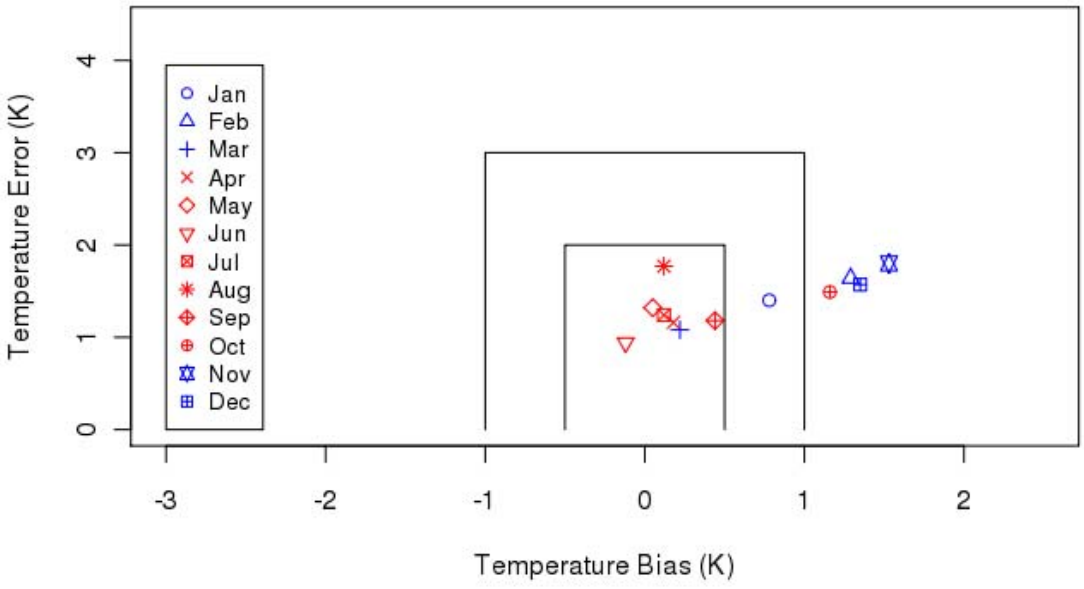


AZ-KPHX 04km Temperature Performance Comparison



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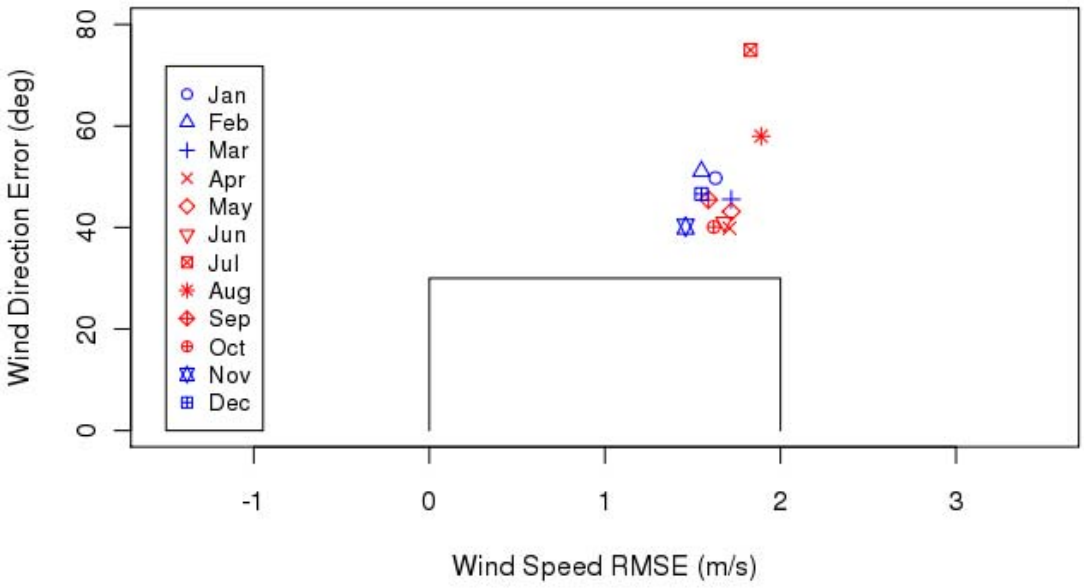
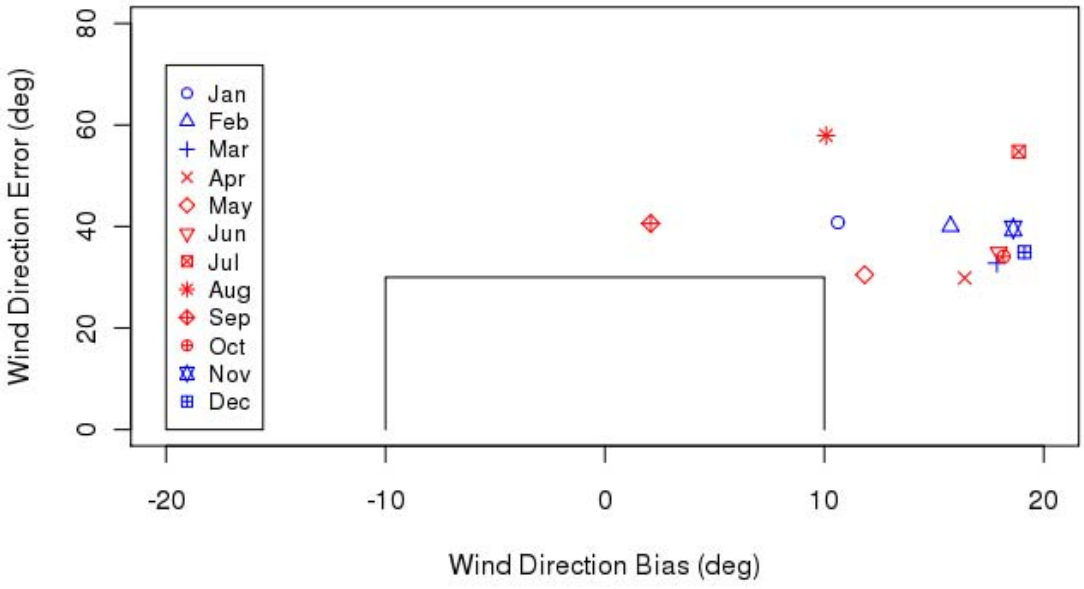
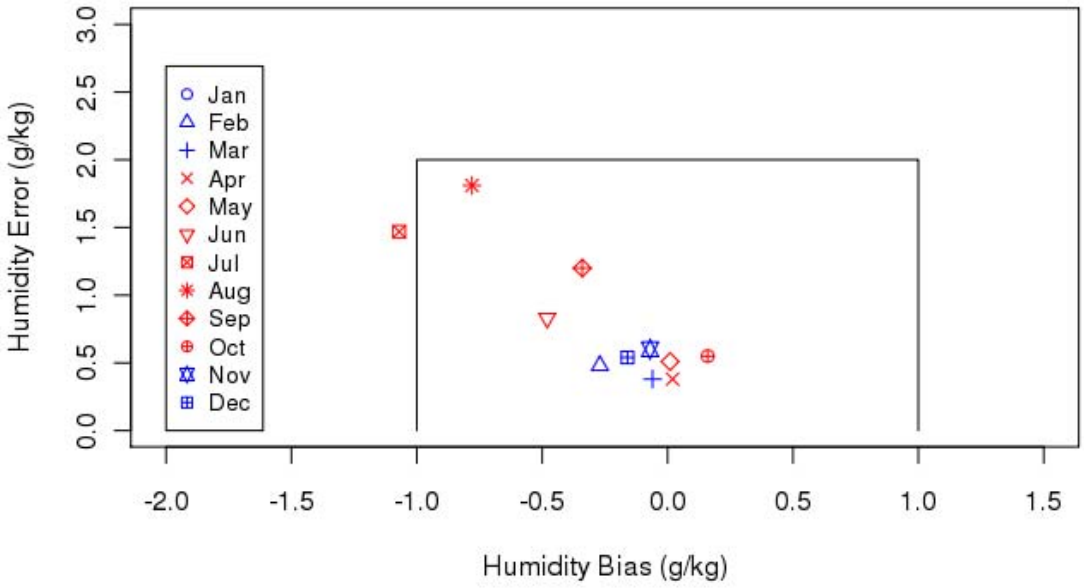


AZ-KPRC 04km Wind Direction Performance Comparison



AZ-KPRC 04km Humidity Performance Comparison



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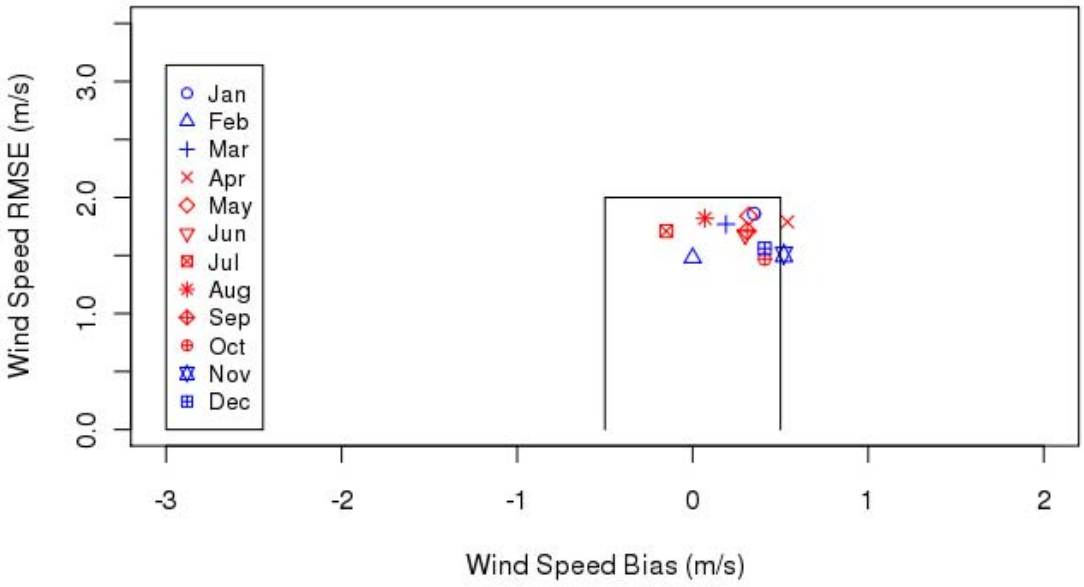

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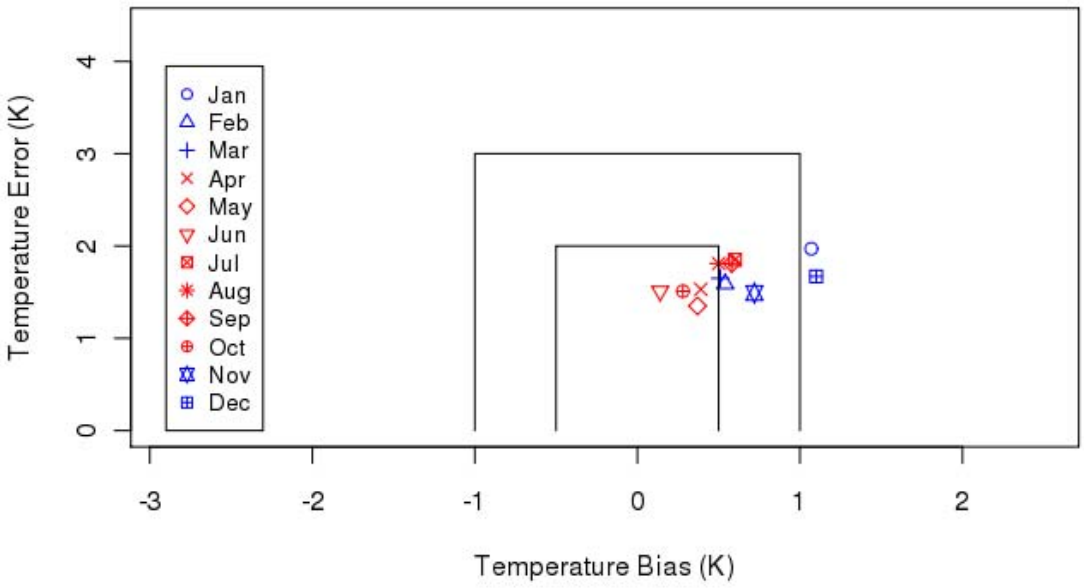

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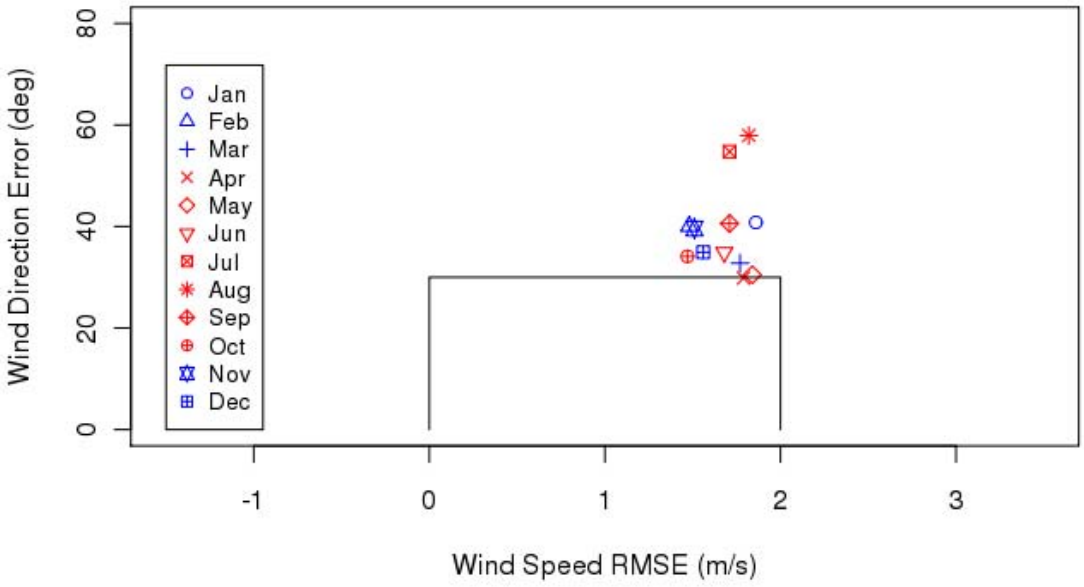

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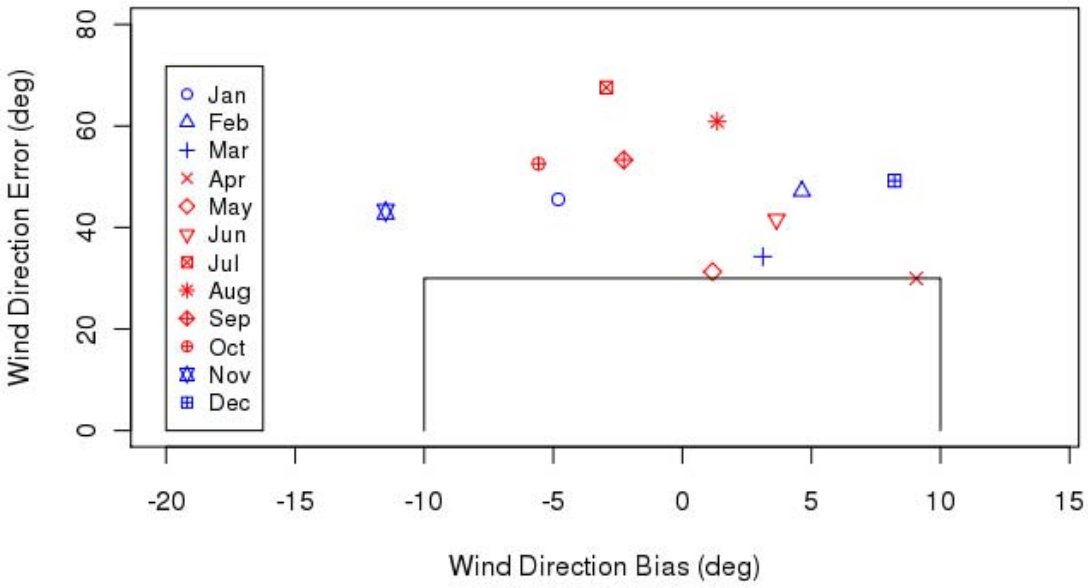

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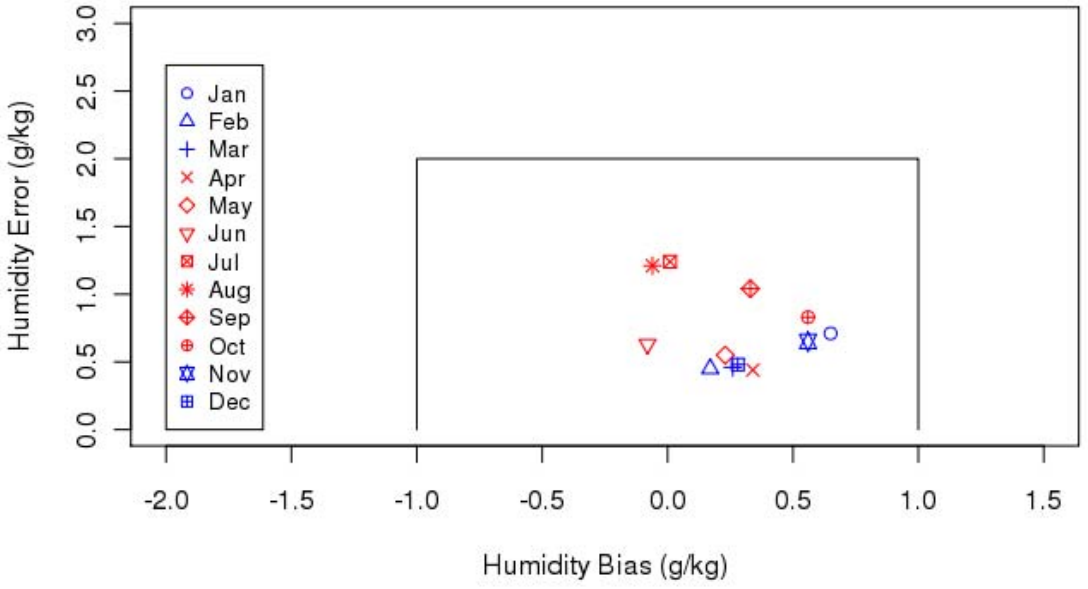

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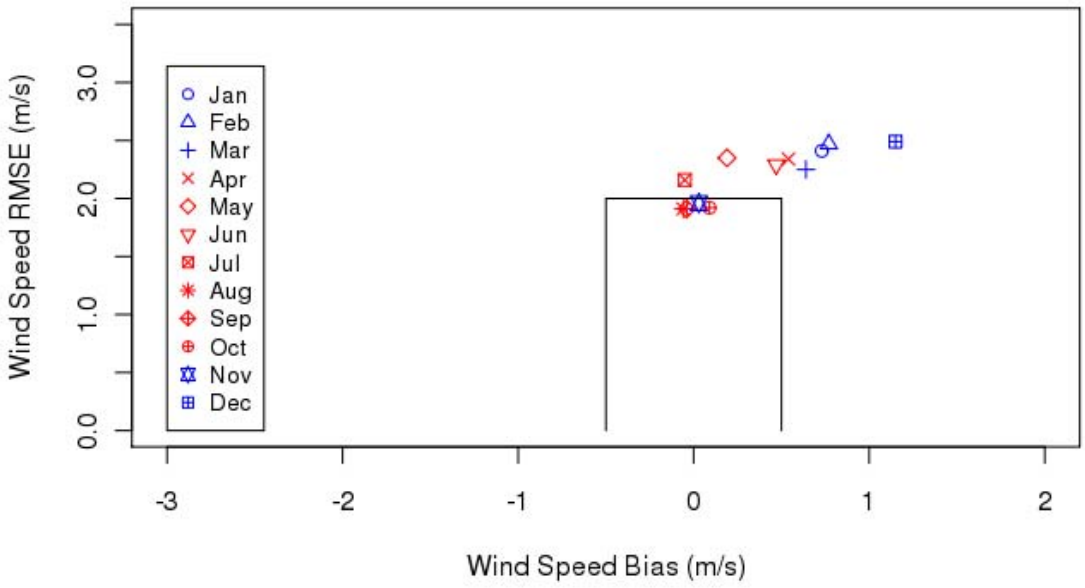
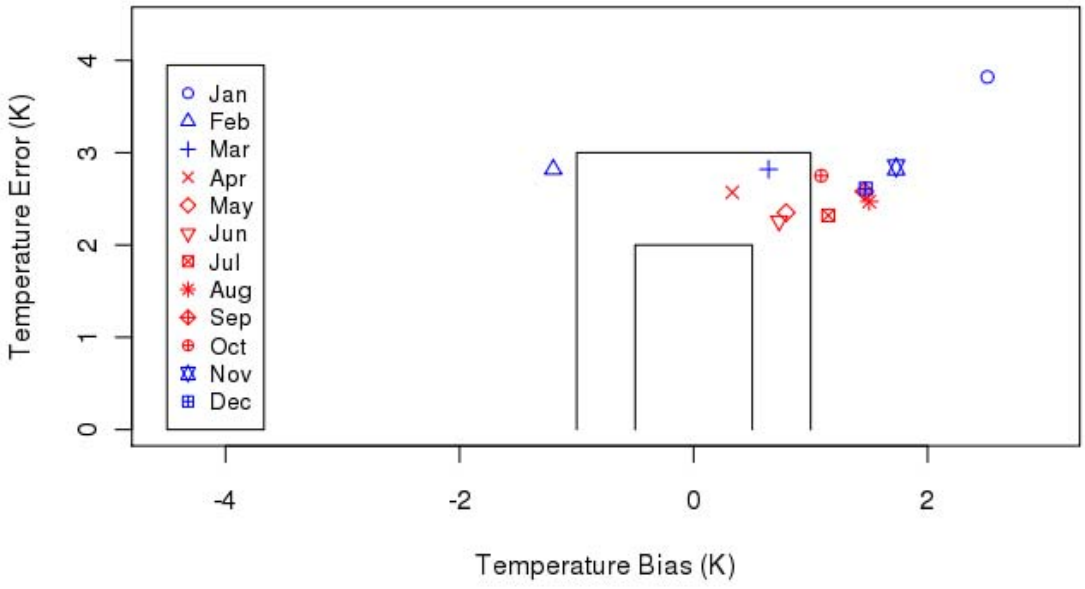


AZ-KRQE 04km Temperature Performance Comparison



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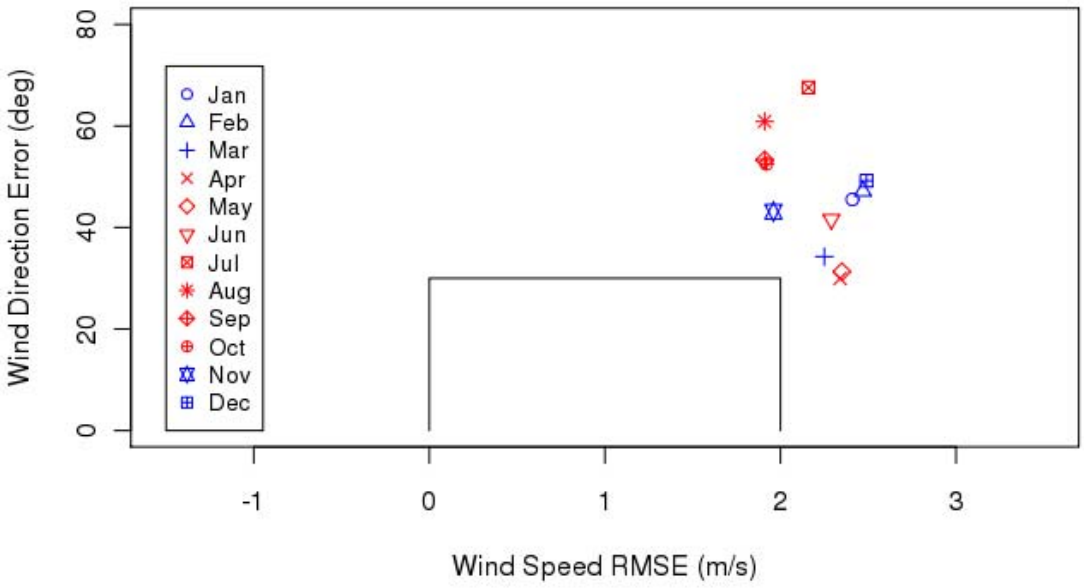

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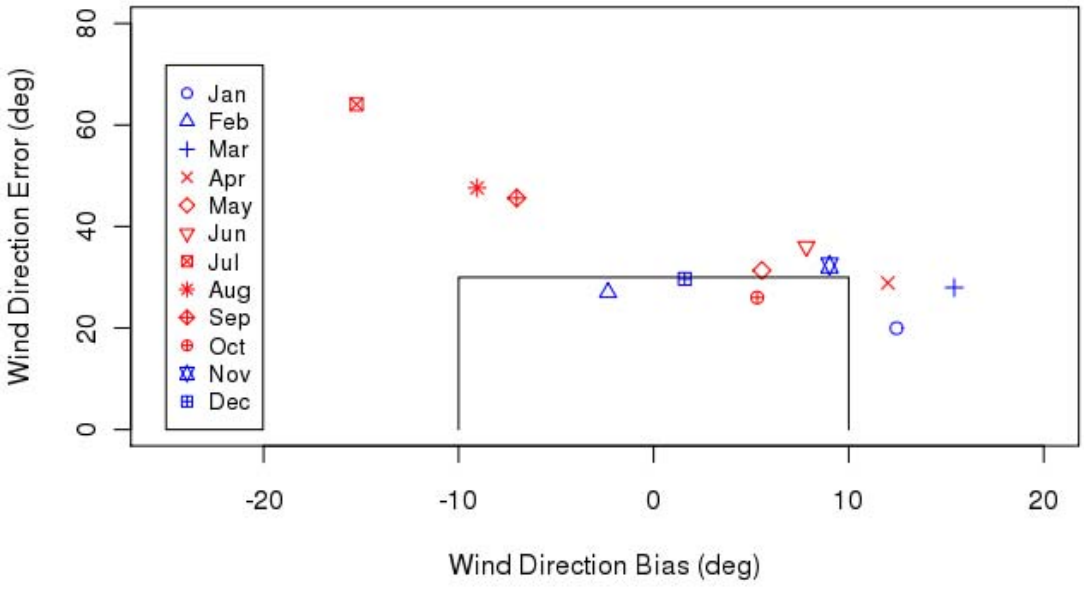

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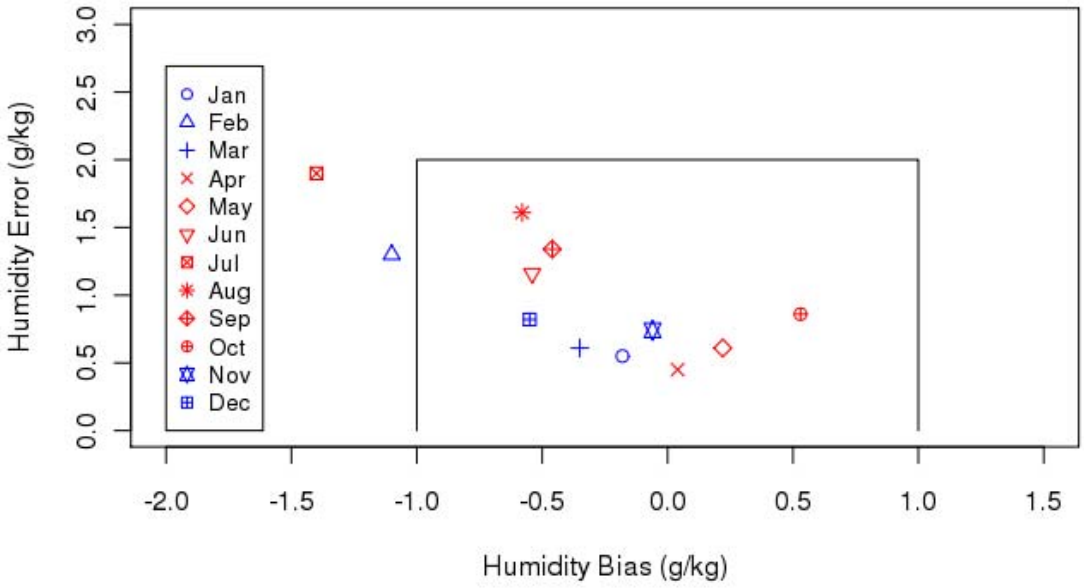

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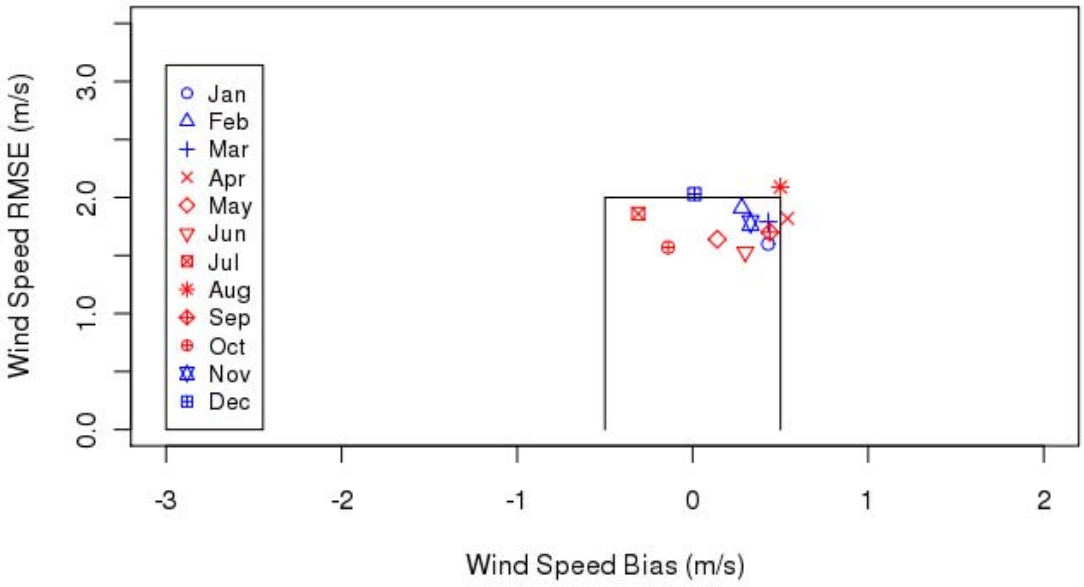
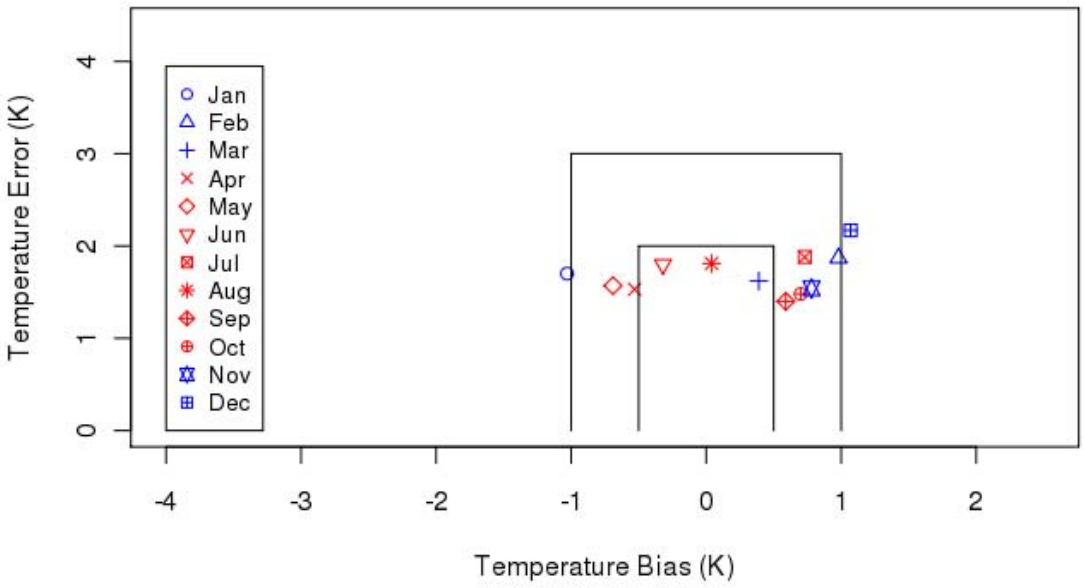


AZ-KRYN 04km Temperature Performance Comparison



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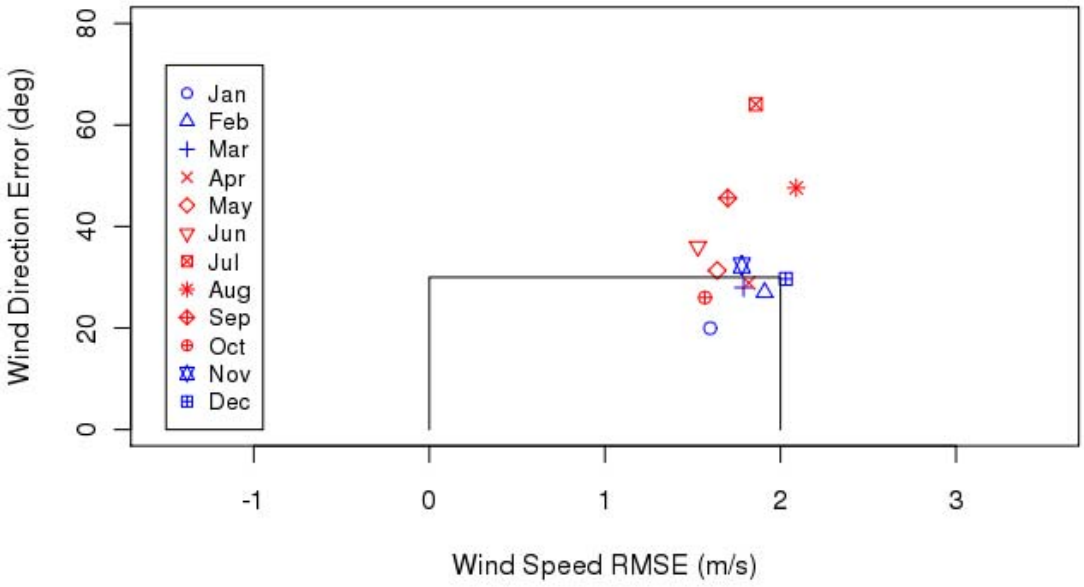

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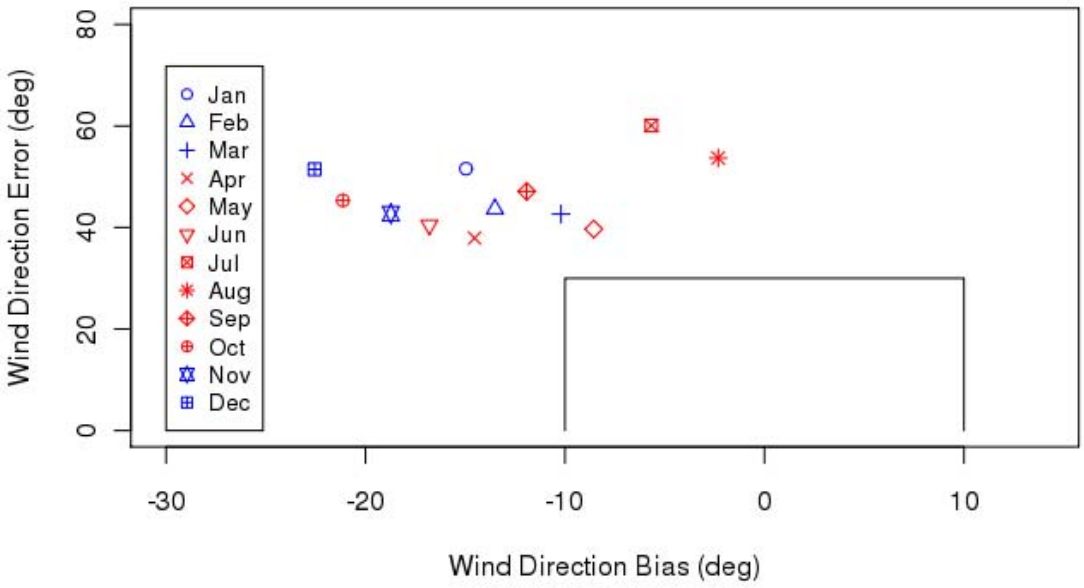
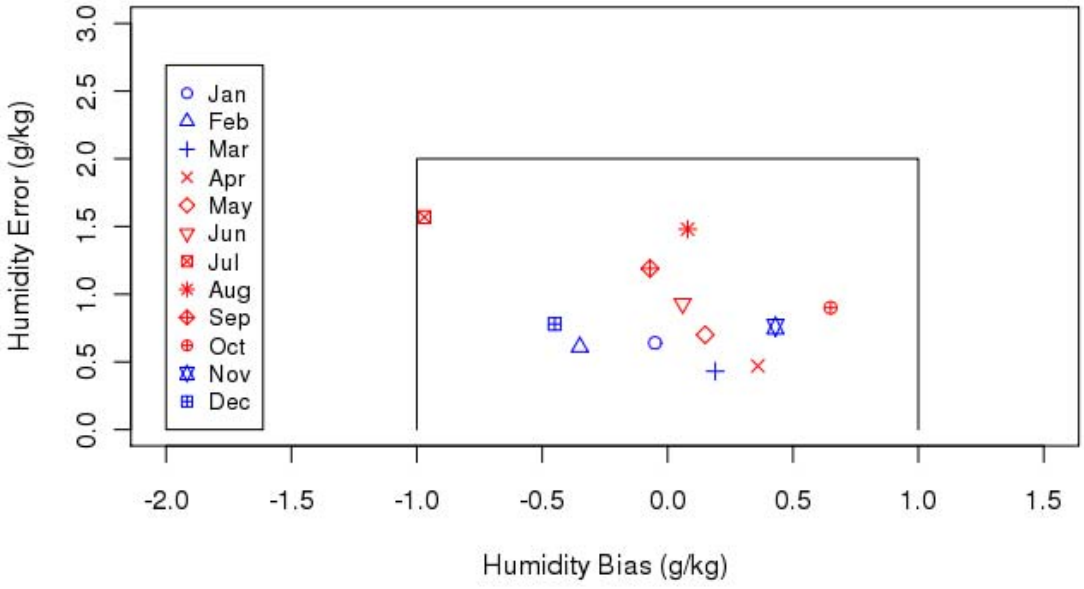


AZ-KSAD 04km Humidity Performance Comparison



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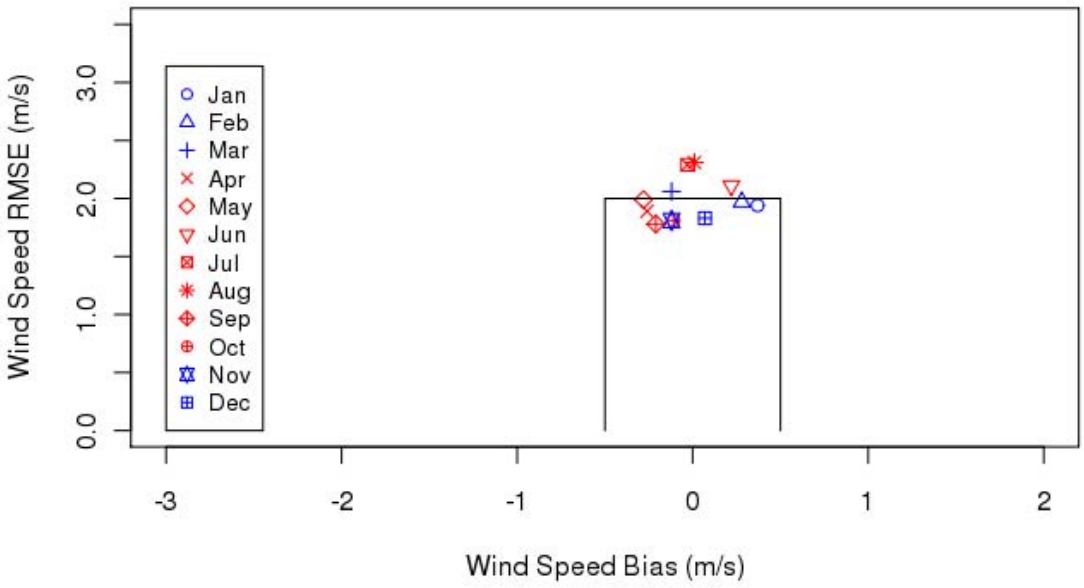
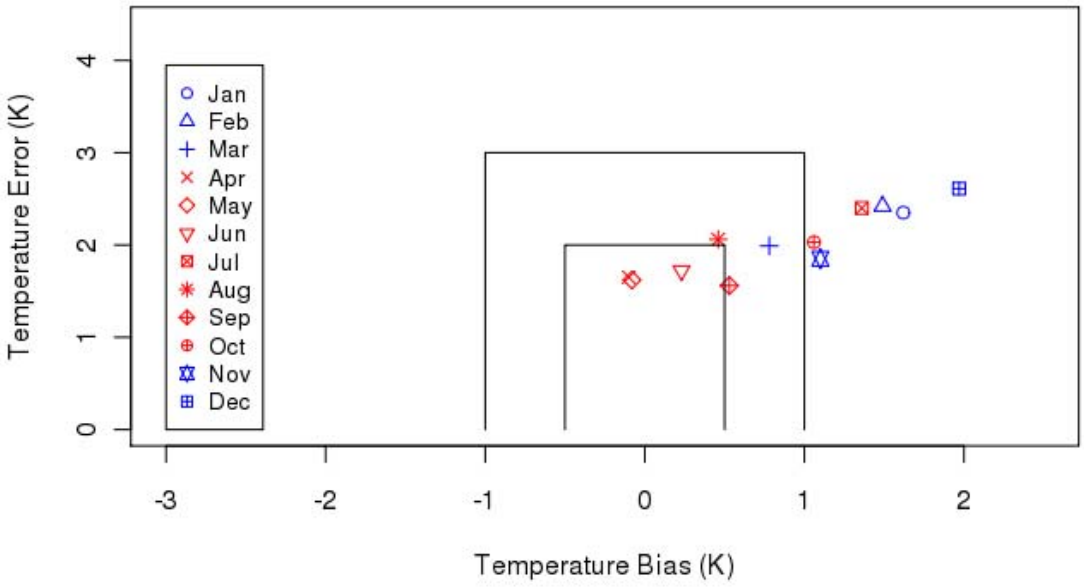


AZ-KSAD 04km Temperature Performance Comparison



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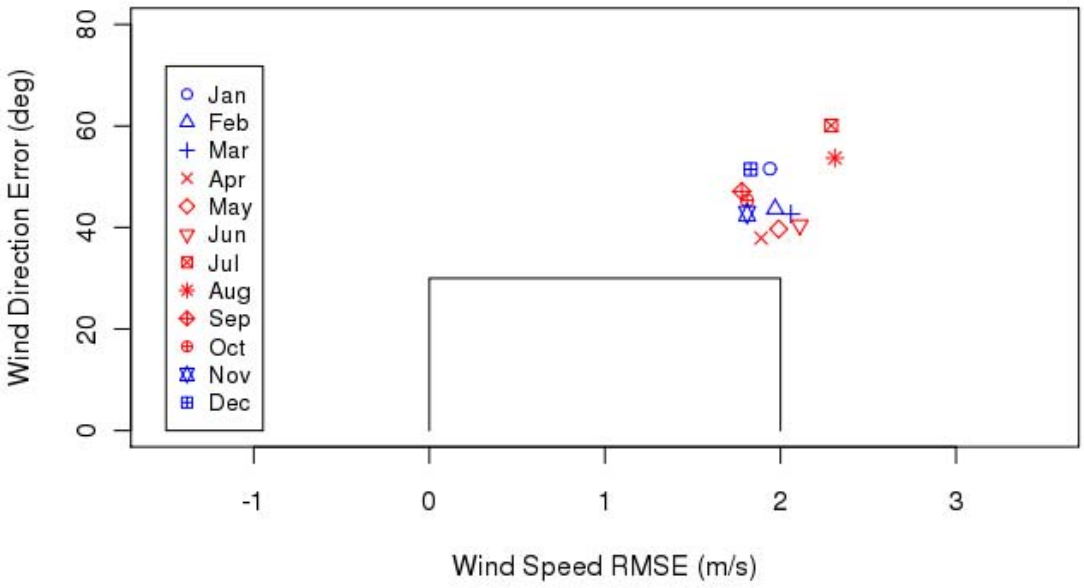
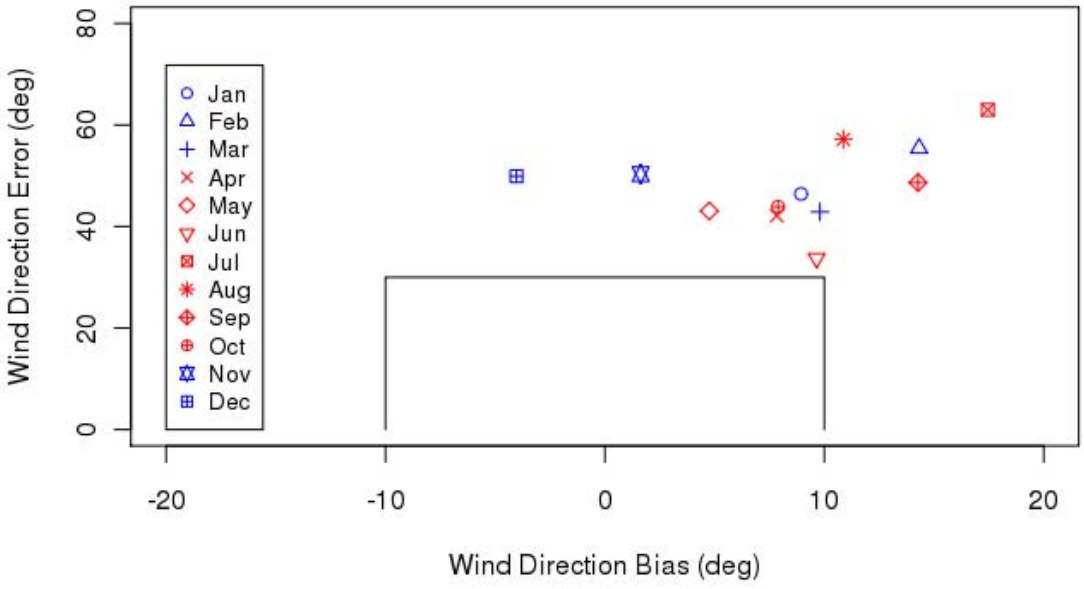
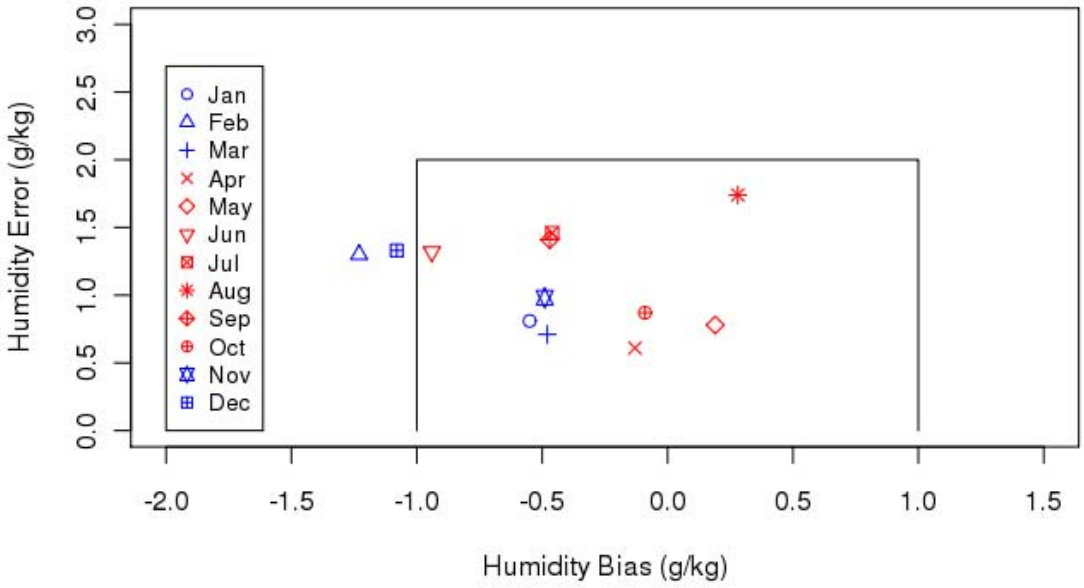


AZ-KSDL 04km Wind Direction Performance Comparison



AZ-KSDL 04km Humidity Performance Comparison



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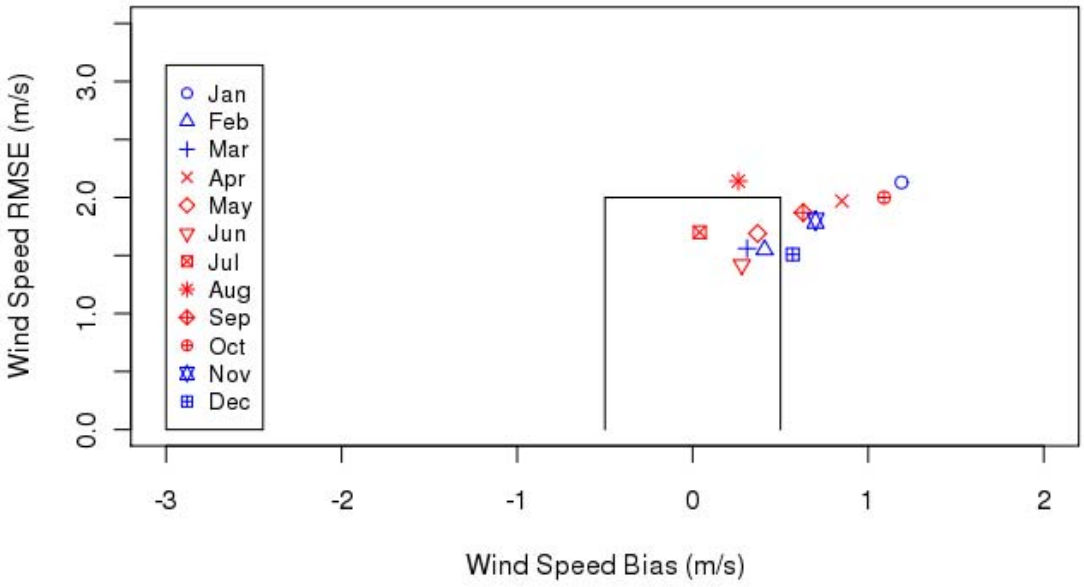
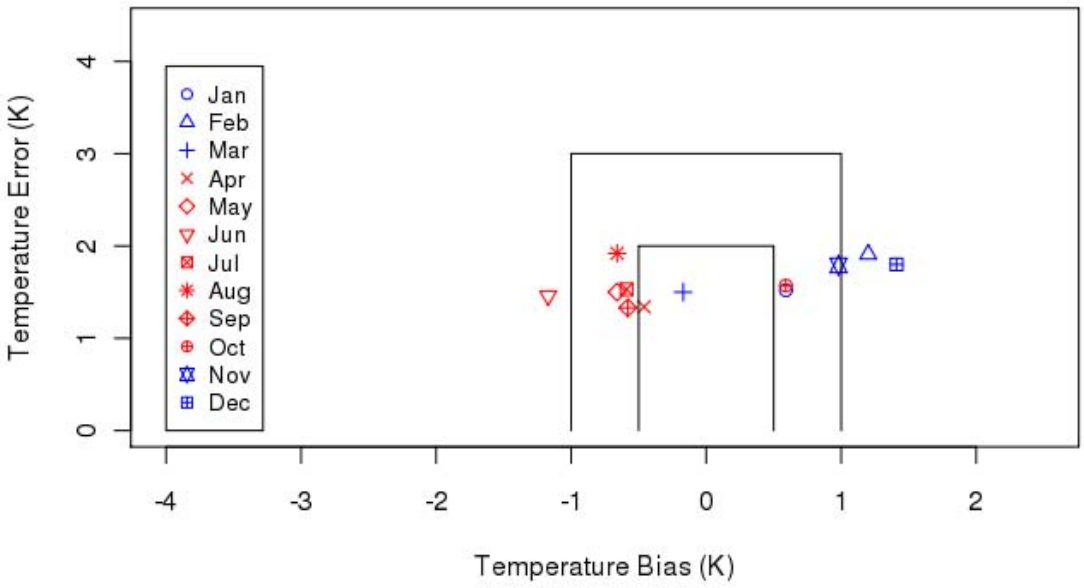


AZ-KSDL 04km Temperature Performance Comparison



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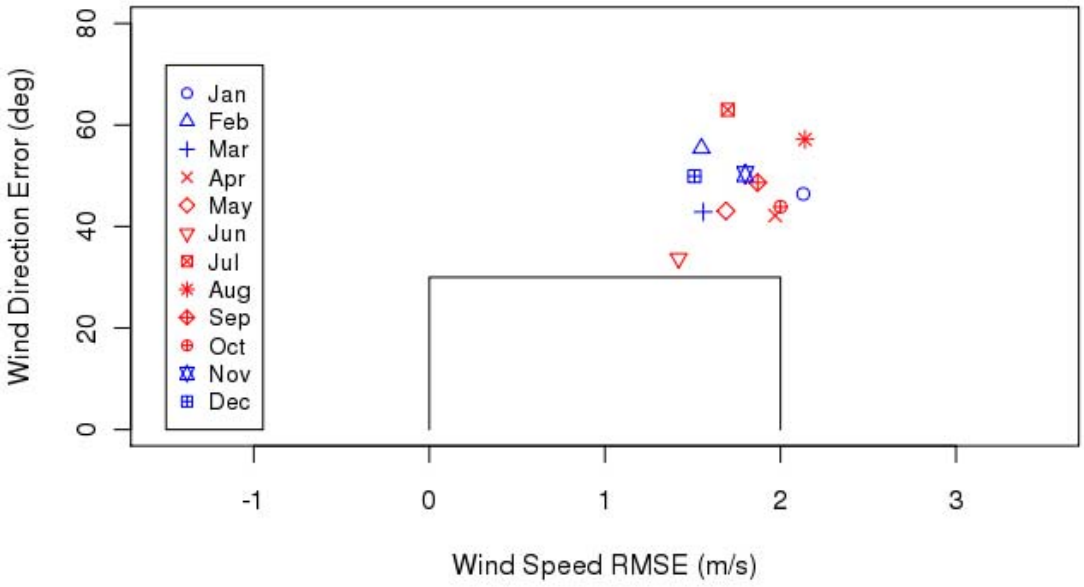
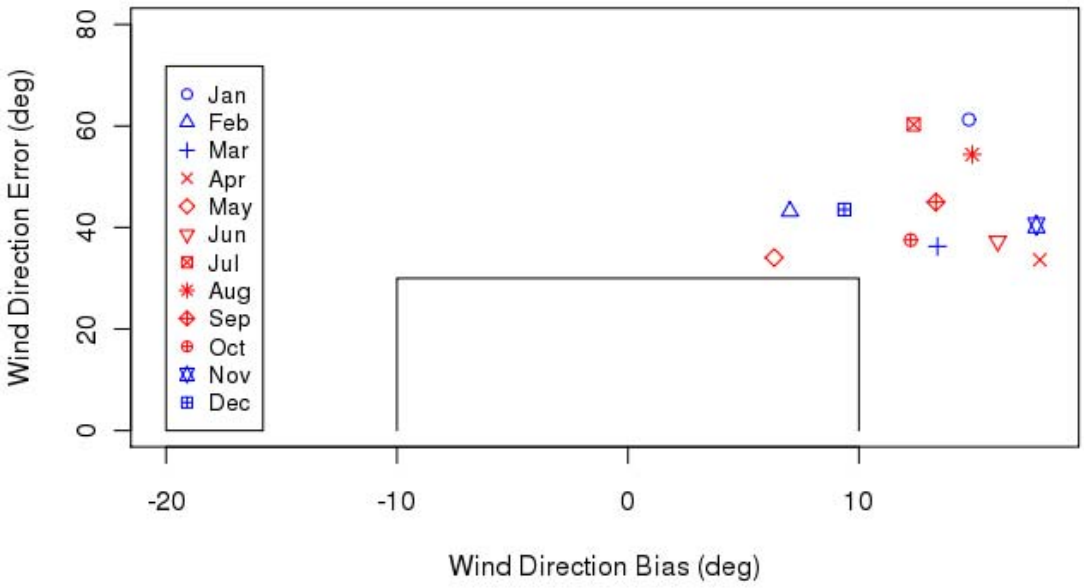


AZ-KSJN 04km Wind Direction Performance Comparison



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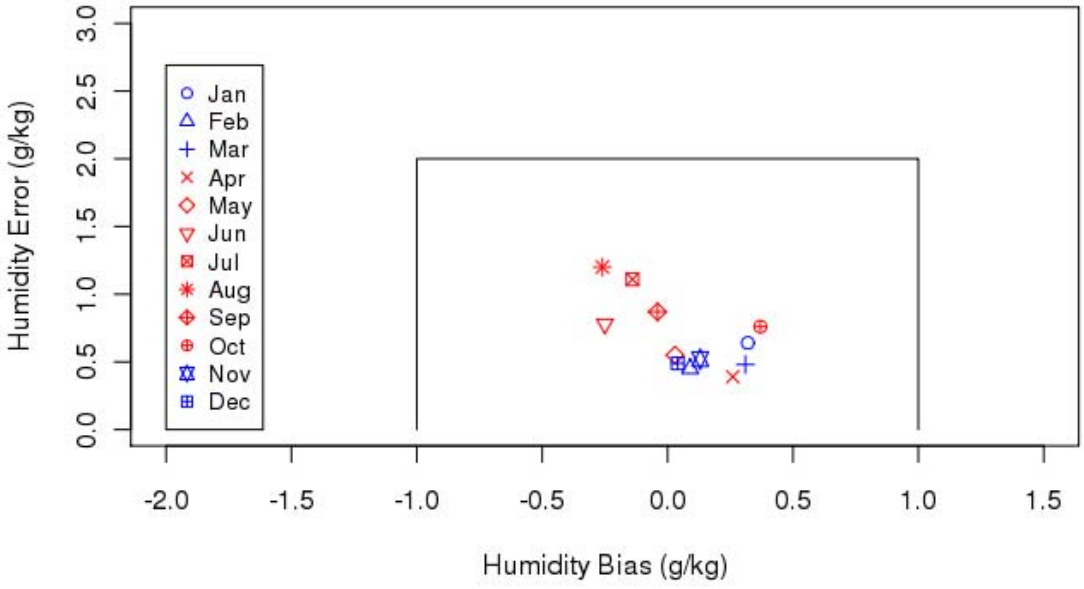

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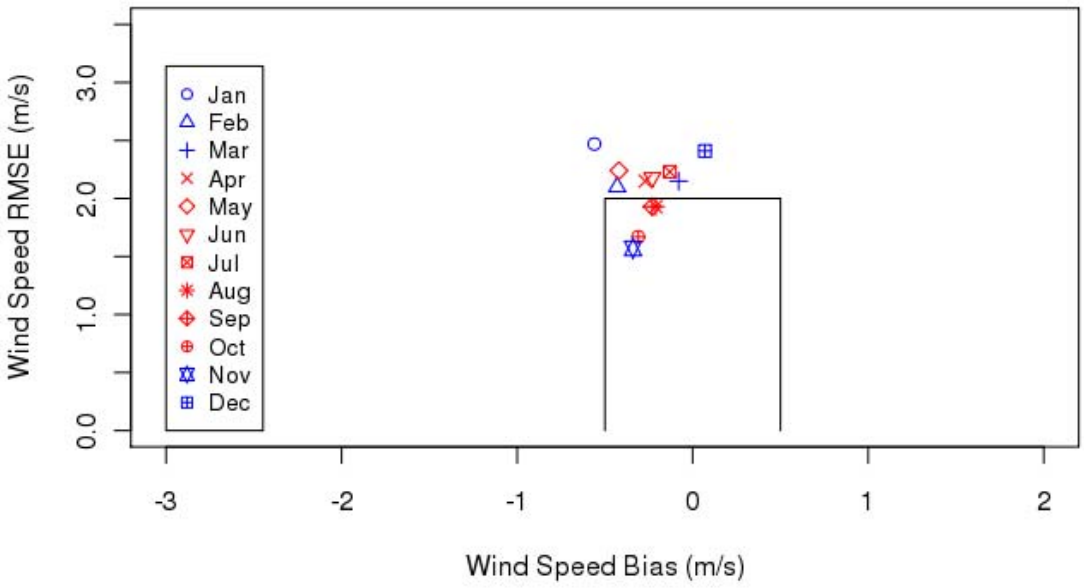

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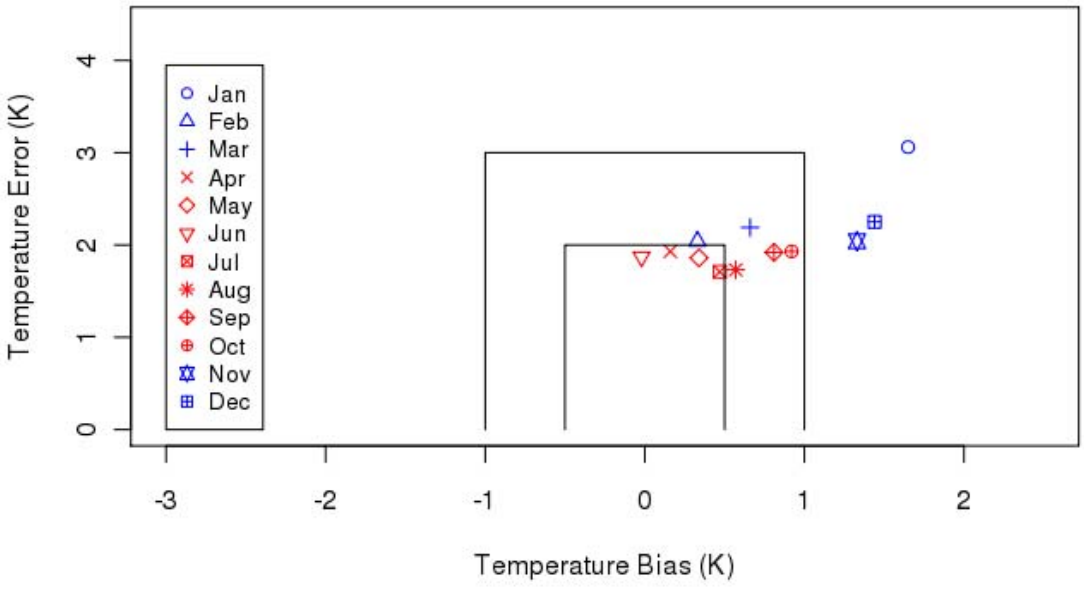

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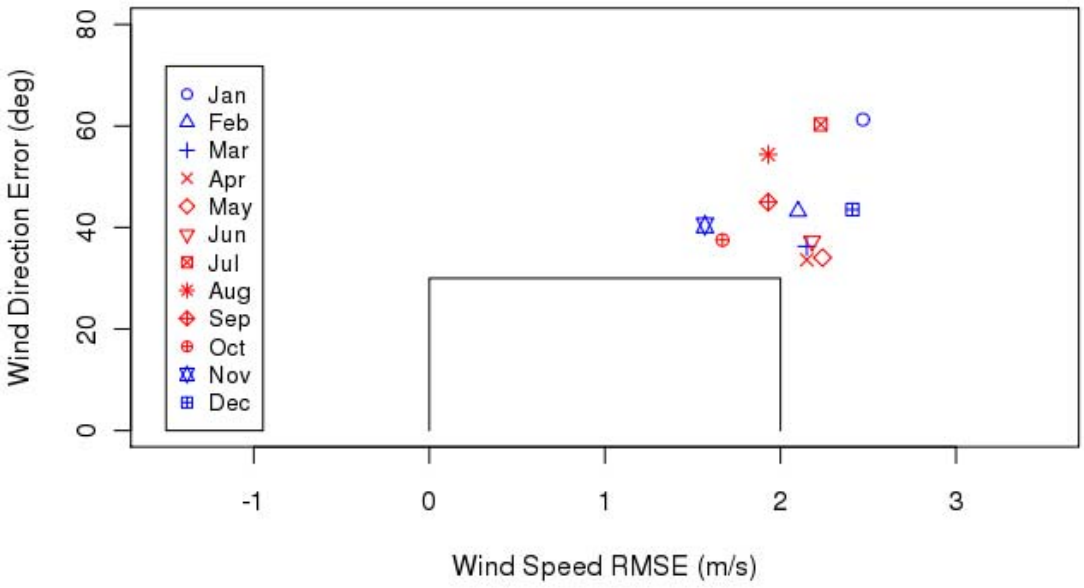
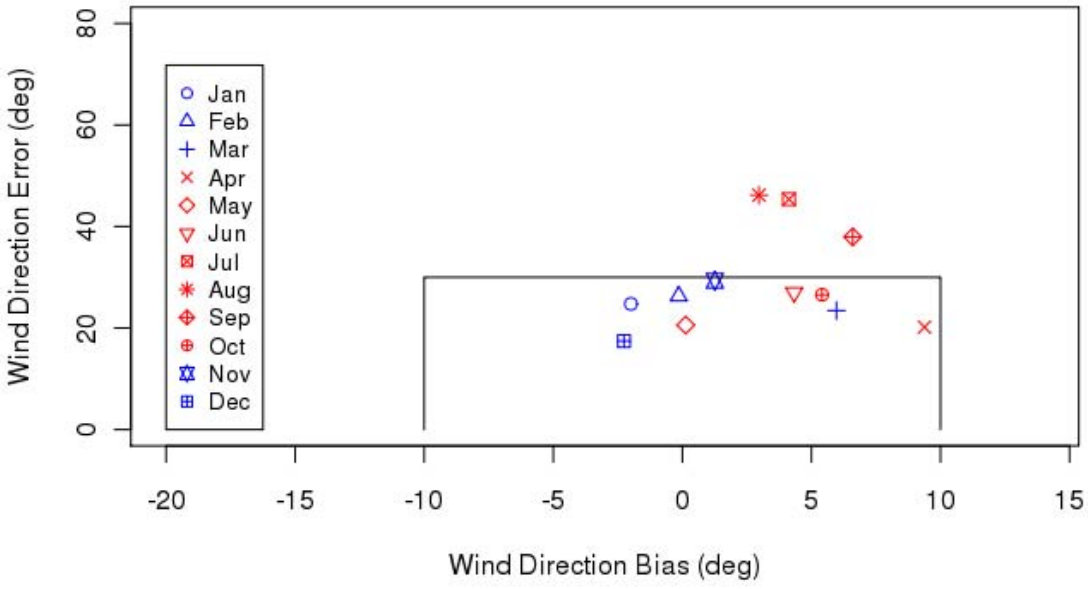
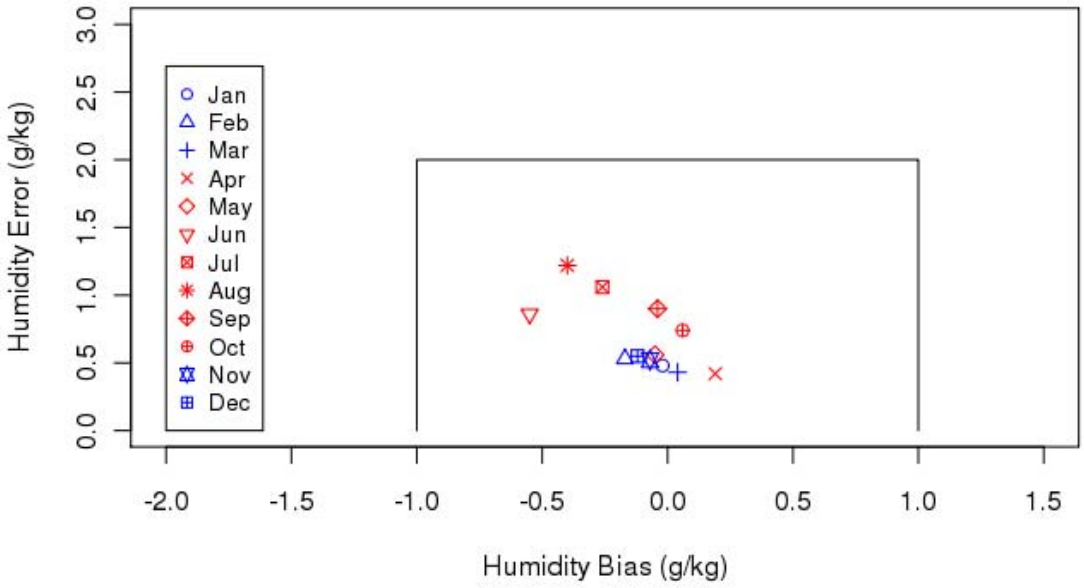


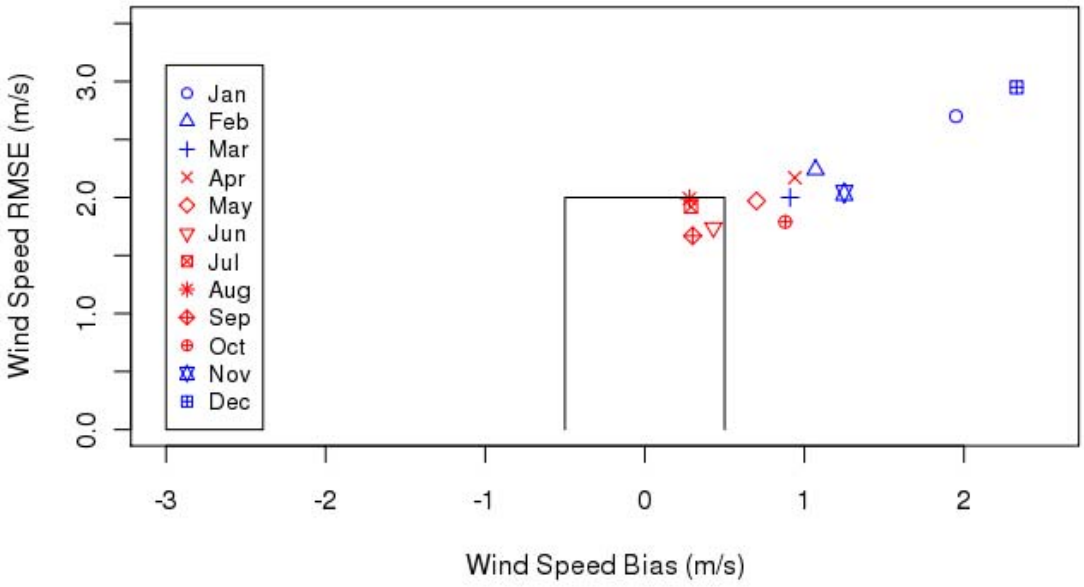
AZ-KSOW 04km Wind Direction Performance Comparison



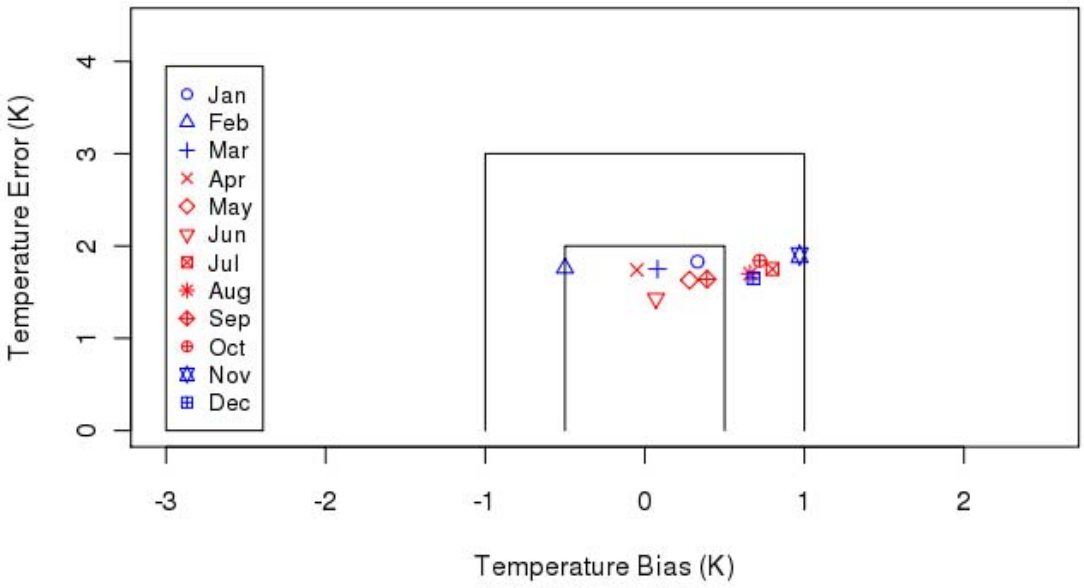
AZ-KSOW 04km Humidity Performance Comparison



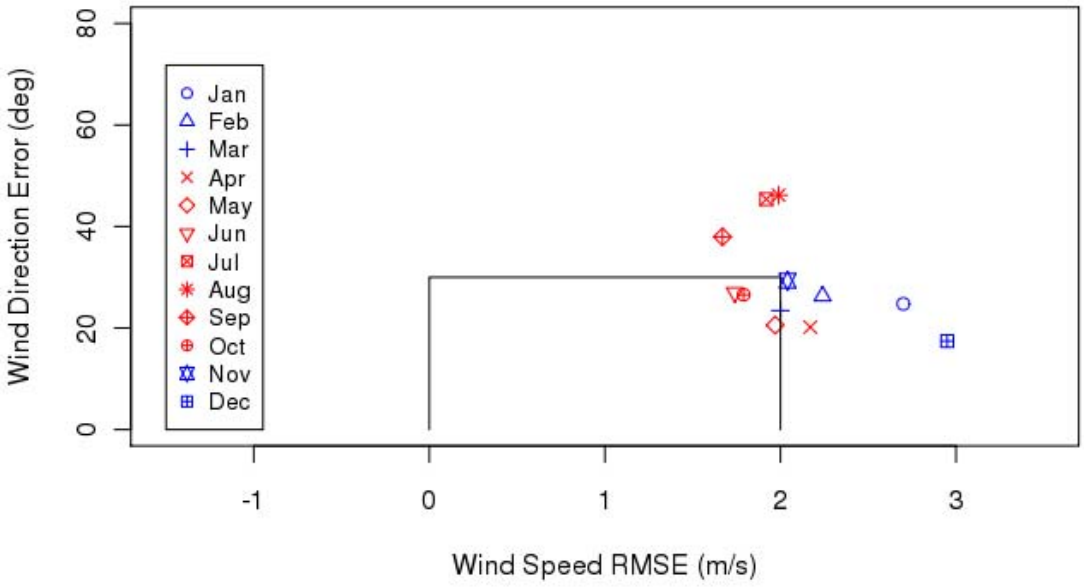
AZ-KSOW 04km Wind Speed Performance Comparison



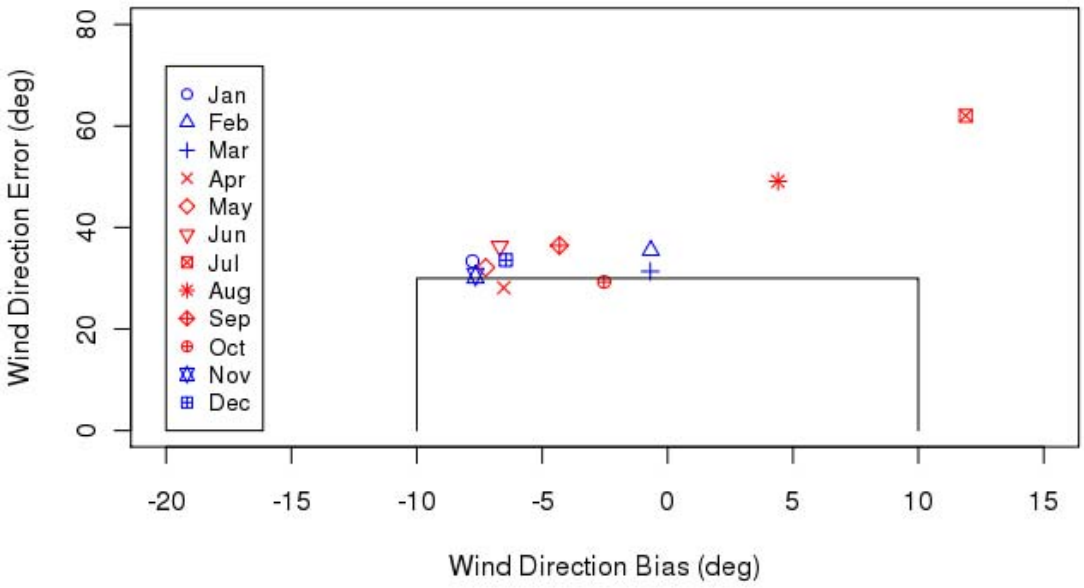
AZ-KSOW 04km Temperature Performance Comparison



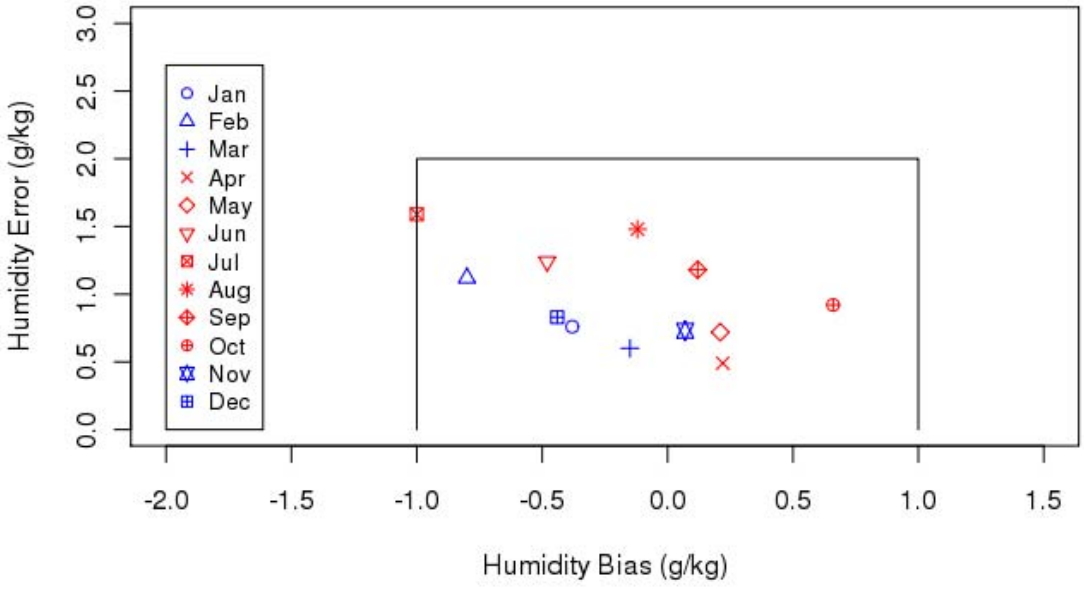
AZ-KSOW 04km Wind Performance Comparison



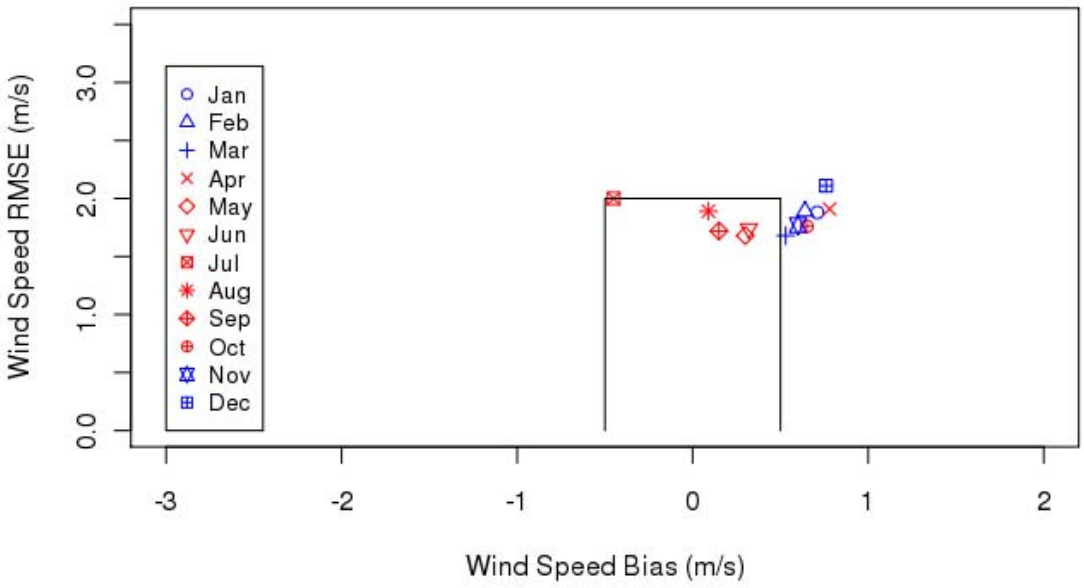
AZ-KTUS 04km Wind Direction Performance Comparison



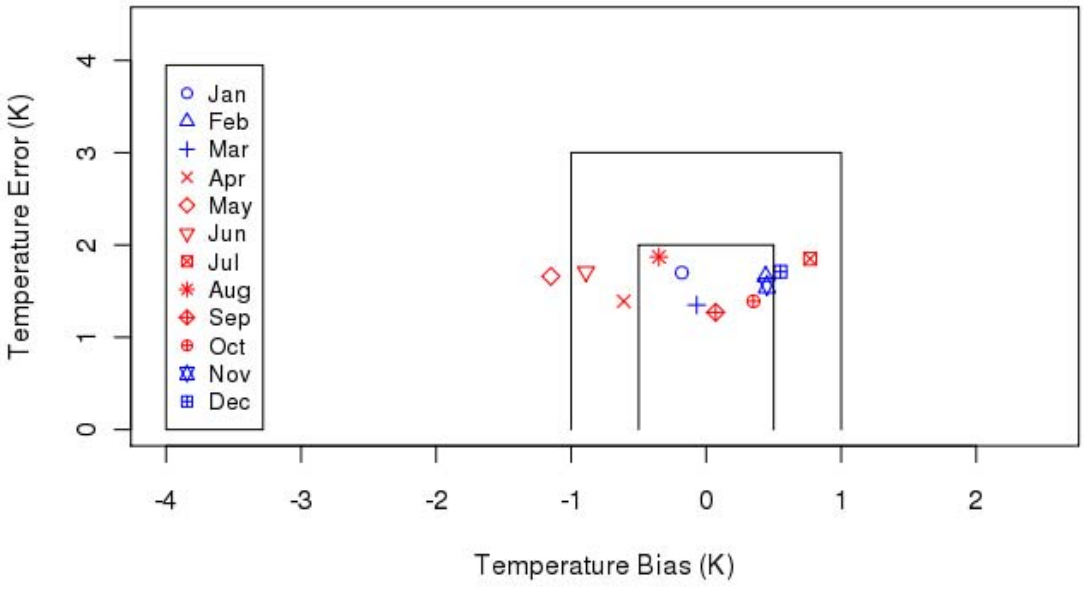
AZ-KTUS 04km Humidity Performance Comparison

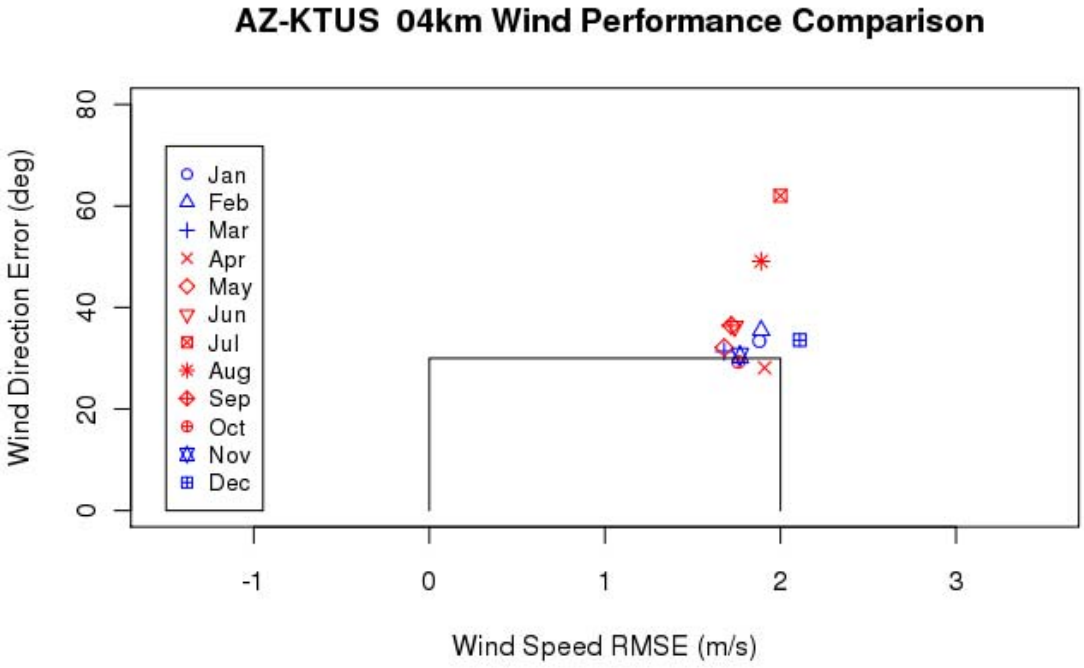


AZ-KTUS 04km Wind Speed Performance Comparison



AZ-KTUS 04km Temperature Performance Comparison




AZ-KTUS 04km Wind Performance Comparison
Wind Direction Error (deg)
0
20
40
60
80
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
-1
0
1
2
3
Wind Speed RMSE (m/s)