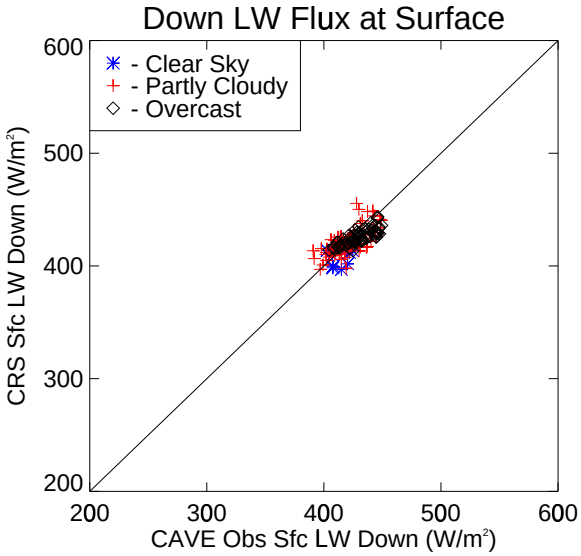
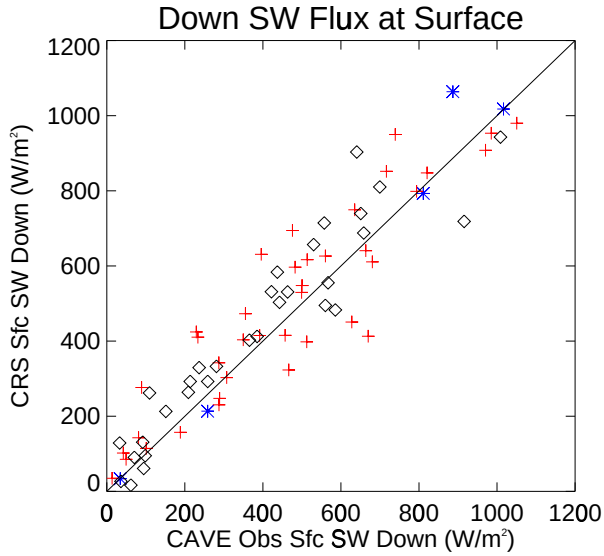
Manus/TWP (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	424.00	153.00	1.83	9.50	9.64	10.96	9.12	9.64
LW Up Sfc	472.24	155.00	-0.29	31.06	30.96	--------	--------	--------
SW Dn Sfc	437.28	74.00	-35.99	100.16	105.79	-177.75	-141.76	105.79
SW Up Sfc	92.42	75.00	67.62	50.31	84.09	--------	--------	--------
LW Up TOA	240.54	154.00	1.97	4.67	5.05	-38.00	-39.92	5.03
SW Up TOA	214.56	75.00	0.34	14.03	13.94	133.58	133.24	13.94

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	413.68	11.00	5.59	9.38	10.55	--------	--------	1.01
LW Up Sfc	476.28	11.00	4.09	46.05	44.10	--------	--------	--------
SW Dn Sfc	601.49	5.00	-22.89	88.17	82.12	-29.92	7.02	-14.19
SW Up Sfc	118.13	5.00	92.80	73.68	113.82	--------	--------	--------
LW Up TOA	287.82	11.00	3.98	3.29	5.07	--------	--------	-0.32
SW Up TOA	79.48	5.00	-0.03	4.14	3.71	--------	--------	11.85

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

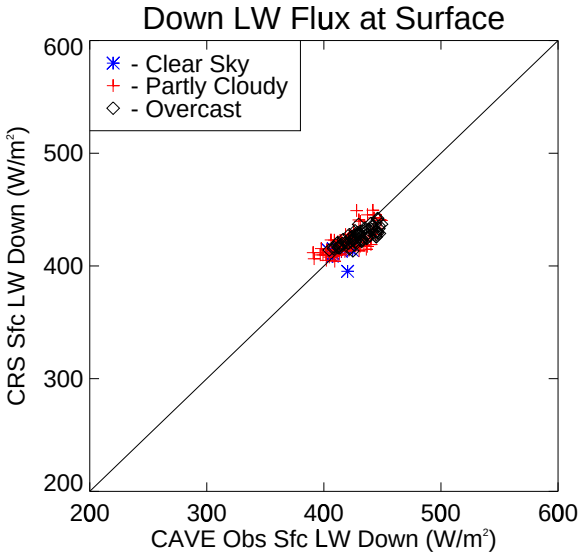
Overcast VIRS

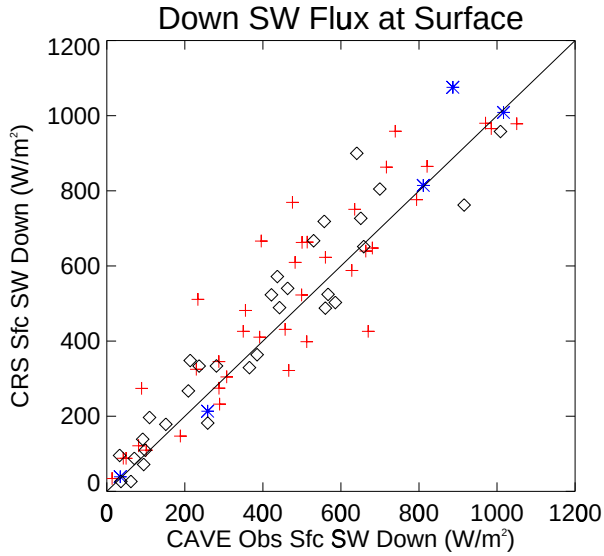
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	430.47	67.00	4.39	7.75	8.85	15.84	11.45	8.85
LW Up Sfc	467.83	68.00	-5.02	27.46	27.71	--------	--------	--------
SW Dn Sfc	381.84	31.00	-44.16	88.56	97.67	-278.07	-233.91	97.67
SW Up Sfc	84.94	31.00	60.87	51.24	79.04	--------	--------	--------
LW Up TOA	199.05	66.00	-0.41	3.69	3.68	-77.73	-77.28	3.64
SW Up TOA	307.07	31.00	-0.01	10.04	9.88	223.79	223.81	9.88

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

Manus/TWP (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	424.00	153.00	1.56	9.01	9.12	10.32	8.76	9.12
LW Up Sfc	472.24	155.00	-0.28	31.00	30.90	--------	--------	--------
SW Dn Sfc	437.28	74.00	-40.41	101.64	108.74	-178.10	-137.69	108.74
SW Up Sfc	92.42	75.00	67.62	50.09	83.95	--------	--------	--------
LW Up TOA	240.54	154.00	2.67	9.28	9.63	-37.65	-40.26	9.57
SW Up TOA	214.56	75.00	4.11	33.15	33.18	134.00	129.89	33.18

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	413.68	11.00	1.67	9.90	9.59	--------	--------	0.50
LW Up Sfc	476.28	11.00	3.78	45.66	43.70	--------	--------	--------
SW Dn Sfc	601.49	5.00	-28.68	91.74	86.92	-33.04	4.36	-6.69
SW Up Sfc	118.13	5.00	93.54	74.68	114.94	--------	--------	--------
LW Up TOA	287.82	11.00	6.36	6.26	8.72	--------	--------	-0.16
SW Up TOA	79.48	5.00	7.32	6.37	9.27	--------	--------	5.69

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

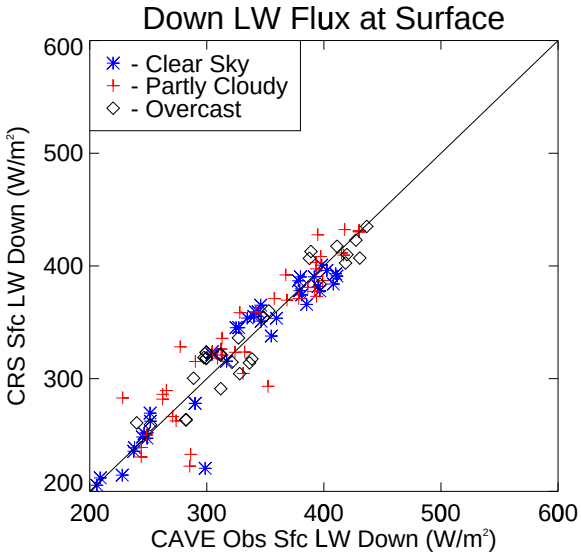
Overcast VIRS

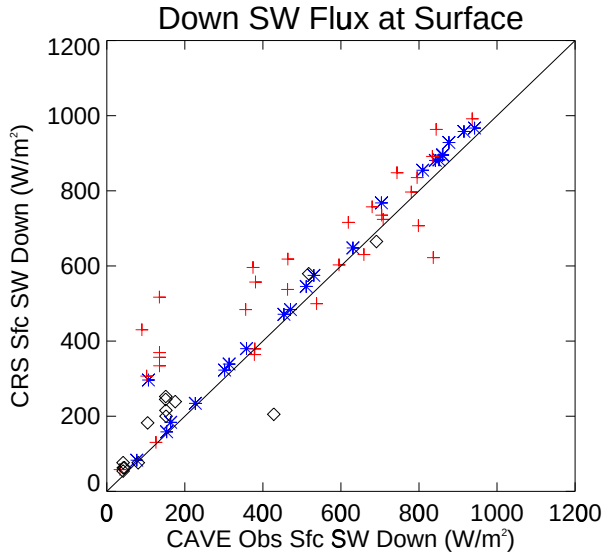
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	430.47	67.00	4.13	7.57	8.57	15.85	11.71	8.57
LW Up Sfc	467.83	68.00	-5.02	27.45	27.71	--------	--------	--------
SW Dn Sfc	381.84	31.00	-34.86	86.79	92.23	-278.08	-243.21	92.23
SW Up Sfc	84.94	31.00	61.45	50.80	79.21	--------	--------	--------
LW Up TOA	199.05	66.00	0.94	9.12	9.10	-77.74	-78.57	8.98
SW Up TOA	307.07	31.00	-8.40	30.83	31.47	223.79	232.19	31.47

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

E01-Larned (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	334.62	111.00	-0.97	20.35	20.28	20.17	20.47	21.36
LW Up Sfc	417.07	101.00	0.66	22.14	22.04	--------	--------	--------
SW Dn Sfc	446.91	66.00	-56.54	97.62	112.17	-175.19	-118.65	112.17
SW Up Sfc	90.70	66.00	4.27	25.00	25.17	--------	--------	--------
LW Up TOA	246.02	113.00	0.72	5.18	5.21	-23.04	-23.76	5.21
SW Up TOA	239.32	66.00	-2.51	14.05	14.17	91.41	93.92	14.17

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	325.76	39.00	1.19	18.29	18.09	--------	--------	0.66
LW Up Sfc	437.56	34.00	5.48	10.25	11.49	--------	--------	--------
SW Dn Sfc	543.69	22.00	-35.91	37.61	51.37	-32.10	-3.80	-14.62
SW Up Sfc	109.44	22.00	7.05	19.54	20.35	--------	--------	--------
LW Up TOA	277.04	41.00	1.12	2.50	2.71	--------	--------	-0.39
SW Up TOA	145.15	22.00	0.37	0.79	0.86	--------	--------	6.36

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	289.72	6.00	-2.35	14.38	13.33	--------	--------	1.17
LW Up Sfc	409.67	6.00	13.49	5.39	14.36	--------	--------	--------
SW Dn Sfc	516.91	6.00	-20.89	11.86	23.53	29.22	-50.11	-17.28
SW Up Sfc	115.50	6.00	24.55	22.07	31.76	--------	--------	--------
LW Up TOA	274.30	6.00	0.46	2.33	2.18	--------	--------	-0.60
SW Up TOA	138.83	6.00	0.56	0.81	0.93	--------	--------	9.26

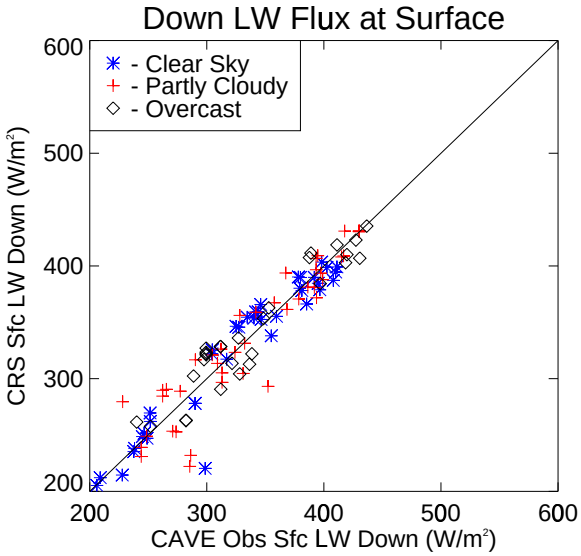
Overcast VIRS

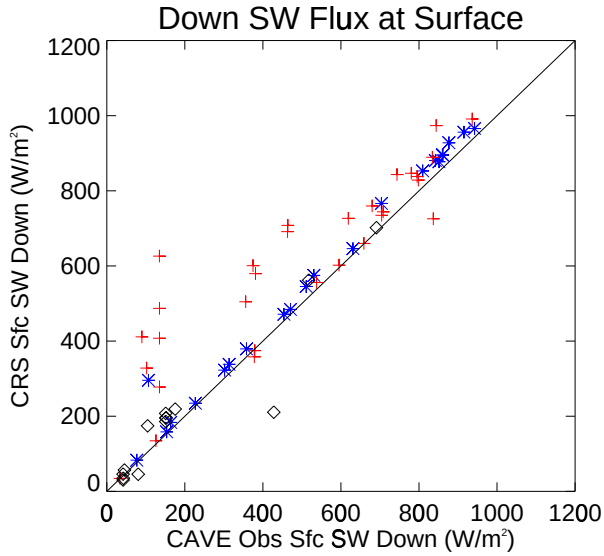
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	339.53	29.00	-1.25	16.87	16.63	41.70	42.96	16.63
LW Up Sfc	375.68	28.00	-4.51	11.95	12.57	--------	--------	--------
SW Dn Sfc	198.15	14.00	-24.40	80.11	80.96	-260.99	-236.59	80.96
SW Up Sfc	41.17	14.00	3.51	16.29	16.08	--------	--------	--------
LW Up TOA	200.41	29.00	0.75	2.78	2.83	-55.84	-56.59	2.83
SW Up TOA	304.99	14.00	-2.12	4.02	4.41	185.22	187.34	4.41

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	341.81	6.00	-6.70	14.90	15.16	54.62	61.32	15.16
LW Up Sfc	366.15	6.00	-16.24	15.45	21.51	--------	--------	--------
SW Dn Sfc	157.15	6.00	-9.07	21.28	21.44	-286.25	-277.18	21.44
SW Up Sfc	32.81	6.00	3.32	9.59	9.37	--------	--------	--------
LW Up TOA	216.20	6.00	-0.28	2.38	2.19	-41.88	-41.60	2.19
SW Up TOA	334.51	6.00	-1.91	5.37	5.26	218.22	220.14	5.26

E01-Larned (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	334.62	111.00	-0.14	19.74	19.66	19.80	19.28	20.78
LW Up Sfc	415.98	102.00	1.44	23.57	23.50	--------	--------	--------
SW Dn Sfc	446.91	66.00	-65.91	107.27	125.20	-174.90	-109.00	125.20
SW Up Sfc	90.70	66.00	3.64	25.62	25.69	--------	--------	--------
LW Up TOA	246.02	113.00	0.78	8.26	8.26	-23.02	-23.80	8.26
SW Up TOA	239.32	66.00	5.39	27.44	27.76	92.29	86.90	27.76

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	325.76	39.00	0.20	18.04	17.80	--------	--------	0.66
LW Up Sfc	433.79	35.00	6.71	14.33	15.64	--------	--------	--------
SW Dn Sfc	543.69	22.00	-35.17	37.46	50.76	-31.48	-3.69	-14.54
SW Up Sfc	109.44	22.00	7.67	19.11	20.18	--------	--------	--------
LW Up TOA	277.04	41.00	0.99	5.62	5.64	--------	--------	-0.39
SW Up TOA	145.15	22.00	1.05	2.27	2.46	--------	--------	6.35

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	289.72	6.00	-2.56	14.86	13.80	--------	--------	1.17
LW Up Sfc	409.67	6.00	8.86	9.66	12.50	--------	--------	--------
SW Dn Sfc	516.91	6.00	-20.95	11.86	23.58	29.16	-50.11	-17.22
SW Up Sfc	115.50	6.00	25.13	19.90	31.01	--------	--------	--------
LW Up TOA	274.30	6.00	-0.60	1.56	1.54	--------	--------	-0.62
SW Up TOA	138.83	6.00	1.15	2.85	2.85	--------	--------	9.25

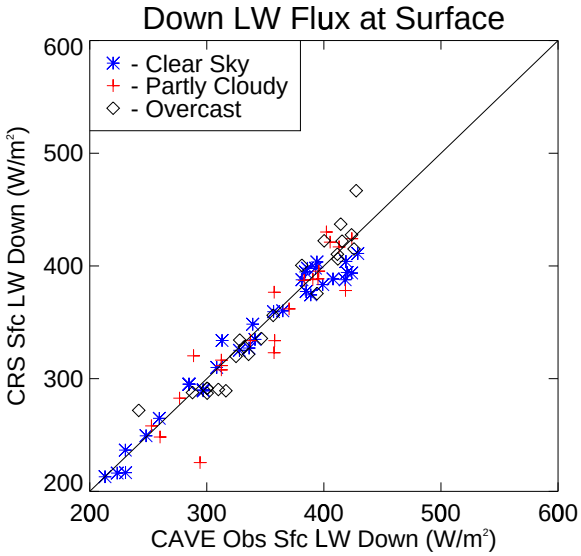
Overcast VIRS

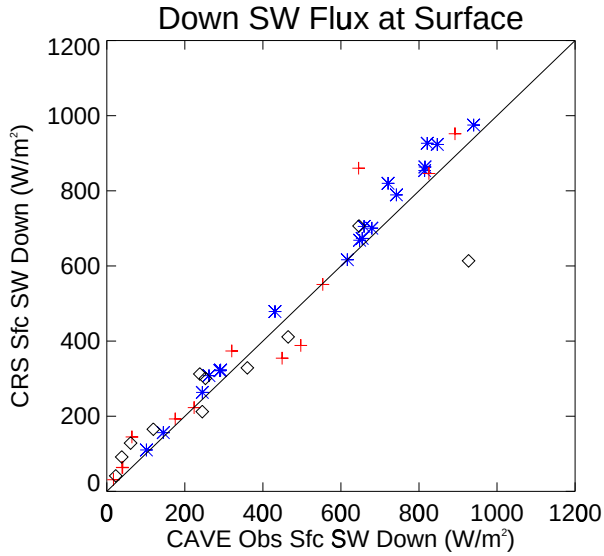
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	339.53	29.00	-2.22	17.63	17.46	41.69	43.91	17.46
LW Up Sfc	375.68	28.00	-4.53	11.95	12.57	--------	--------	--------
SW Dn Sfc	198.15	14.00	-6.58	70.88	68.62	-260.99	-254.42	68.62
SW Up Sfc	41.17	14.00	6.41	14.37	15.26	--------	--------	--------
LW Up TOA	200.41	29.00	4.04	7.32	8.25	-55.84	-59.87	8.25
SW Up TOA	304.99	14.00	-17.26	21.66	27.08	185.22	202.47	27.08

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	341.81	6.00	-10.11	13.93	16.24	54.63	64.74	16.24
LW Up Sfc	366.15	6.00	-16.29	15.43	21.53	--------	--------	--------
SW Dn Sfc	157.15	6.00	4.60	17.64	16.74	-286.26	-290.86	16.74
SW Up Sfc	32.81	6.00	5.65	5.43	7.51	--------	--------	--------
LW Up TOA	216.20	6.00	1.77	9.23	8.61	-41.88	-43.65	8.61
SW Up TOA	334.51	6.00	-13.65	25.24	26.78	218.22	231.87	26.78

E02-Hillsboro (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	346.47	79.00	2.62	16.93	17.03	23.12	20.50	17.03
LW Up Sfc	409.07	76.00	-3.00	15.40	15.59	--------	--------	--------
SW Dn Sfc	426.11	45.00	-23.18	71.99	74.87	-129.26	-106.08	74.87
SW Up Sfc	85.38	45.00	10.55	18.10	20.78	--------	--------	--------
LW Up TOA	252.49	81.00	2.02	4.15	4.60	-15.50	-17.52	4.60
SW Up TOA	213.71	45.00	-4.10	31.99	31.90	79.45	83.56	31.90

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	337.26	34.00	3.56	12.74	13.05	--------	--------	0.60
LW Up Sfc	430.58	32.00	-5.86	16.82	17.56	--------	--------	--------
SW Dn Sfc	550.77	20.00	-39.15	27.75	47.59	-62.87	23.72	-14.34
SW Up Sfc	111.43	20.00	9.56	10.78	14.20	--------	--------	--------
LW Up TOA	279.31	35.00	2.26	3.67	4.27	--------	--------	-0.37
SW Up TOA	144.54	20.00	0.41	0.90	0.96	--------	--------	5.39

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

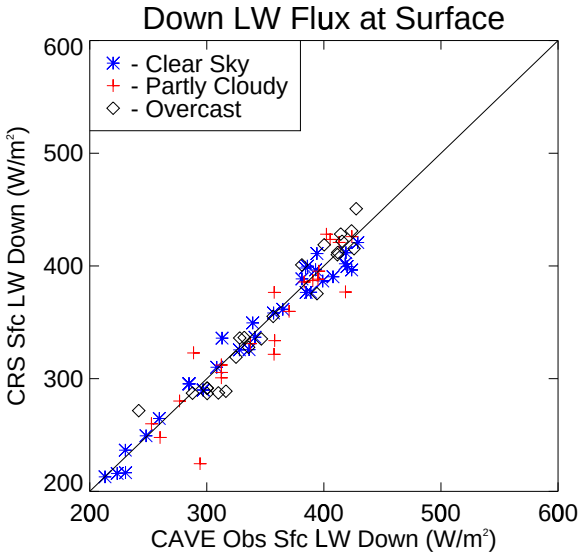
Overcast VIRS

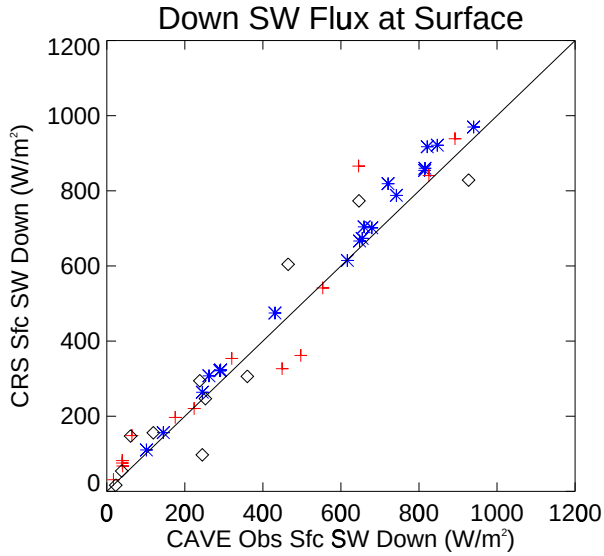
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	355.94	23.00	-0.10	16.79	16.42	47.44	47.54	16.42
LW Up Sfc	384.01	23.00	-4.17	12.47	12.89	--------	--------	--------
SW Dn Sfc	306.88	11.00	5.77	111.41	106.38	-359.03	-364.81	106.38
SW Up Sfc	58.51	11.00	10.86	25.97	27.03	--------	--------	--------
LW Up TOA	209.32	24.00	2.53	4.62	5.18	-46.98	-49.51	5.18
SW Up TOA	409.06	11.00	-24.43	60.79	62.90	261.32	285.75	62.90

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	335.48	5.00	3.45	7.34	7.42	75.69	72.24	7.42
LW Up Sfc	343.73	5.00	-10.69	12.71	15.60	--------	--------	--------
SW Dn Sfc	98.85	5.00	-46.63	17.96	49.32	-462.36	-415.73	49.32
SW Up Sfc	16.14	5.00	-6.99	4.42	8.03	--------	--------	--------
LW Up TOA	215.88	5.00	-0.16	2.96	2.65	-32.87	-32.71	2.65
SW Up TOA	458.51	5.00	-0.86	3.88	3.57	325.87	326.72	3.57

E02-Hillsboro (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	346.47	79.00	2.19	16.27	16.31	22.32	20.13	16.31
LW Up Sfc	409.07	76.00	-1.48	12.77	12.78	--------	--------	--------
SW Dn Sfc	426.11	45.00	-25.97	65.85	70.10	-128.59	-102.63	70.10
SW Up Sfc	85.38	45.00	10.69	16.54	19.54	--------	--------	--------
LW Up TOA	252.49	81.00	3.91	7.95	8.81	-15.02	-18.92	8.81
SW Up TOA	213.71	45.00	-1.58	23.07	22.87	80.15	81.74	22.87

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	337.26	34.00	1.67	11.60	11.55	--------	--------	0.58
LW Up Sfc	430.58	32.00	-1.65	11.20	11.15	--------	--------	--------
SW Dn Sfc	550.77	20.00	-37.66	26.43	45.62	-61.58	23.92	-14.24
SW Up Sfc	111.43	20.00	11.11	10.05	14.81	--------	--------	--------
LW Up TOA	279.31	35.00	3.45	7.99	8.60	--------	--------	-0.37
SW Up TOA	144.54	20.00	1.98	2.06	2.82	--------	--------	5.41

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

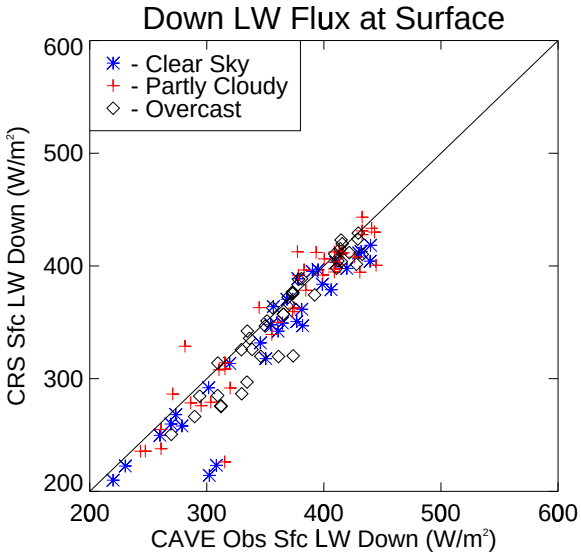
Overcast VIRS

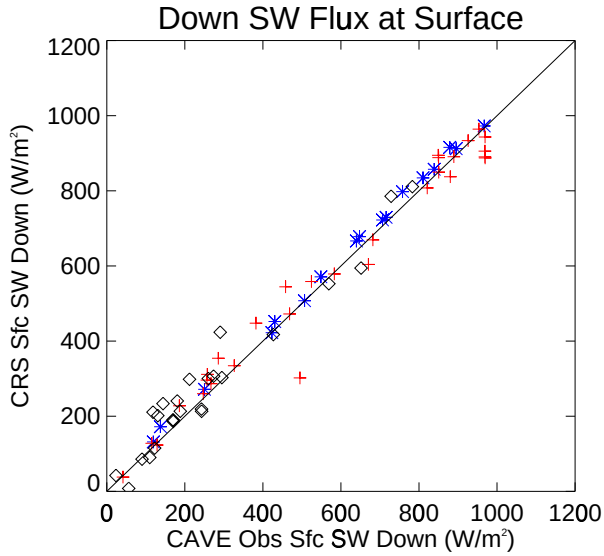
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	355.94	23.00	0.29	14.78	14.46	47.40	47.11	14.46
LW Up Sfc	384.01	23.00	-4.16	12.51	12.92	--------	--------	--------
SW Dn Sfc	306.88	11.00	-13.54	89.61	86.51	-359.03	-345.50	86.51
SW Up Sfc	58.51	11.00	7.53	18.73	19.38	--------	--------	--------
LW Up TOA	209.32	24.00	6.23	8.57	10.45	-46.99	-53.22	10.45
SW Up TOA	409.06	11.00	-13.01	41.34	41.51	261.32	274.33	41.51

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	335.48	5.00	0.51	6.69	6.01	75.63	75.13	6.01
LW Up Sfc	343.73	5.00	-10.73	12.66	15.60	--------	--------	--------
SW Dn Sfc	98.85	5.00	-25.22	38.50	42.68	-462.36	-437.14	42.68
SW Up Sfc	16.14	5.00	-3.52	6.00	6.42	--------	--------	--------
LW Up TOA	215.88	5.00	2.55	8.10	7.68	-32.87	-35.41	7.68
SW Up TOA	458.51	5.00	-18.56	21.52	26.73	325.87	344.43	26.73

E03-LeRoy (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	362.60	115.00	11.27	20.05	22.93	32.19	20.92	22.93
LW Up Sfc	415.40	110.00	-0.71	12.35	12.31	--------	--------	--------
SW Dn Sfc	475.01	72.00	-12.19	46.72	47.97	-144.58	-132.38	47.97
SW Up Sfc	90.89	72.00	13.22	19.98	23.85	--------	--------	--------
LW Up TOA	244.68	117.00	1.25	3.12	3.35	-24.56	-25.81	3.35
SW Up TOA	250.55	72.00	1.96	9.68	9.81	107.82	105.86	9.81

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	353.03	31.00	18.07	21.67	27.94	--------	--------	0.65
LW Up Sfc	437.62	27.00	-2.29	12.59	12.57	--------	--------	--------
SW Dn Sfc	604.39	17.00	-20.04	11.78	23.07	-39.20	19.16	-14.48
SW Up Sfc	111.55	17.00	8.51	18.16	19.57	--------	--------	--------
LW Up TOA	278.47	32.00	1.07	2.08	2.31	--------	--------	-0.37
SW Up TOA	147.08	17.00	0.32	0.72	0.77	--------	--------	5.70

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	316.33	3.00	13.90	6.82	14.97	--------	--------	0.41
LW Up Sfc	401.52	3.00	6.45	5.08	7.67	--------	--------	--------
SW Dn Sfc	440.39	3.00	-17.01	16.05	21.48	-18.54	1.53	-10.85
SW Up Sfc	75.25	3.00	1.24	31.53	25.78	--------	--------	--------
LW Up TOA	276.21	3.00	0.80	1.49	1.46	--------	--------	-0.23
SW Up TOA	118.63	3.00	0.50	0.57	0.68	--------	--------	5.33

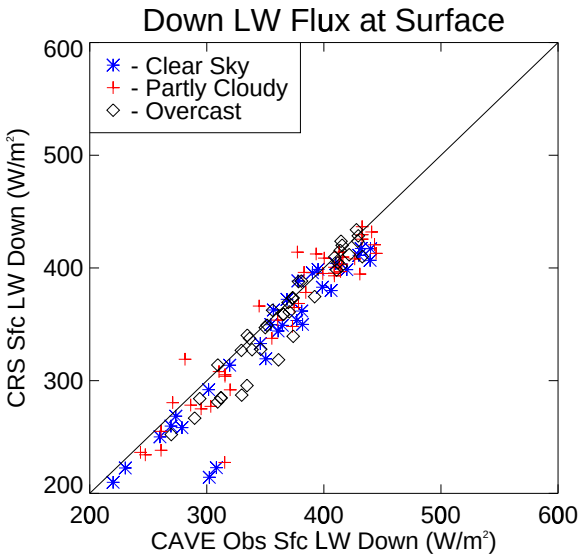
Overcast VIRS

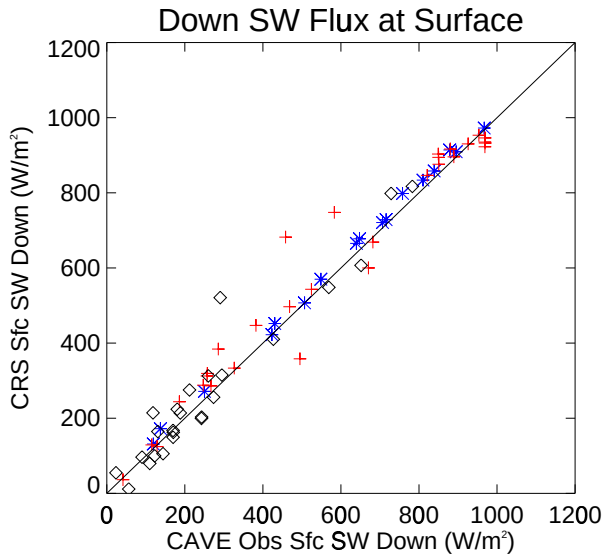
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	366.16	41.00	10.79	16.38	19.45	49.15	38.36	19.45
LW Up Sfc	391.57	41.00	-1.62	12.69	12.64	--------	--------	--------
SW Dn Sfc	266.08	25.00	-23.20	47.22	51.75	-332.09	-308.89	51.75
SW Up Sfc	54.64	25.00	9.35	15.43	17.78	--------	--------	--------
LW Up TOA	198.83	41.00	1.47	3.35	3.62	-63.11	-64.58	3.62
SW Up TOA	391.25	25.00	4.30	8.04	8.98	251.30	247.00	8.98

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	377.58	16.00	6.46	12.07	13.35	51.58	45.12	13.35
LW Up Sfc	399.96	16.00	-9.63	12.98	15.83	--------	--------	--------
SW Dn Sfc	192.27	16.00	-27.38	53.46	58.56	-421.74	-394.36	58.56
SW Up Sfc	38.75	16.00	4.40	11.56	12.03	--------	--------	--------
LW Up TOA	185.51	16.00	-0.08	2.29	2.22	-81.59	-81.51	2.22
SW Up TOA	458.15	16.00	4.43	9.45	10.17	318.09	313.66	10.17

E03-LeRoy (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	362.60	115.00	11.48	18.86	22.01	31.73	20.25	22.01
LW Up Sfc	413.56	112.00	0.77	13.30	13.26	--------	--------	--------
SW Dn Sfc	475.01	72.00	-18.97	55.19	57.99	-144.25	-125.28	57.99
SW Up Sfc	90.89	72.00	13.58	19.36	23.54	--------	--------	--------
LW Up TOA	244.68	117.00	1.67	5.94	6.15	-24.30	-25.97	6.15
SW Up TOA	250.55	72.00	7.72	24.09	25.14	109.02	101.31	25.14

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	353.03	31.00	17.31	21.64	27.44	--------	--------	0.64
LW Up Sfc	432.96	28.00	-0.58	9.89	9.73	--------	--------	--------
SW Dn Sfc	604.39	17.00	-19.50	11.80	22.61	-38.74	19.24	-14.43
SW Up Sfc	111.55	17.00	9.51	17.85	19.76	--------	--------	--------
LW Up TOA	278.47	32.00	1.23	4.17	4.29	--------	--------	-0.37
SW Up TOA	147.08	17.00	1.30	1.40	1.88	--------	--------	5.71

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	316.33	3.00	13.55	6.48	14.54	--------	--------	0.40
LW Up Sfc	401.52	3.00	5.72	4.59	6.84	--------	--------	--------
SW Dn Sfc	440.39	3.00	-16.84	15.83	21.22	-18.40	1.56	-10.81
SW Up Sfc	75.25	3.00	2.95	30.86	25.37	--------	--------	--------
LW Up TOA	276.21	3.00	0.76	2.05	1.84	--------	--------	-0.23
SW Up TOA	118.63	3.00	2.11	1.60	2.48	--------	--------	5.37

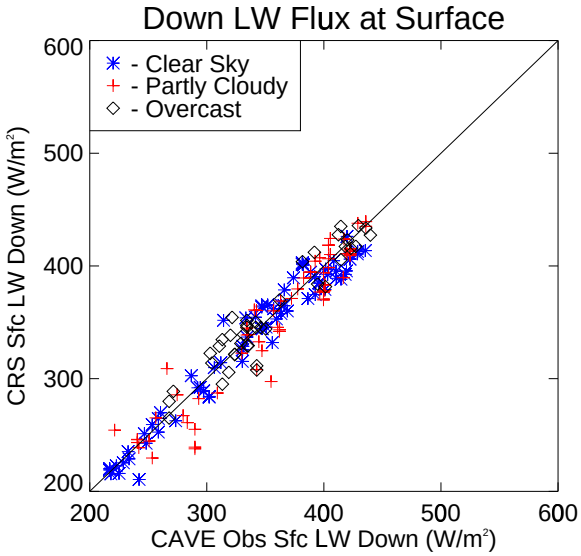
Overcast VIRS

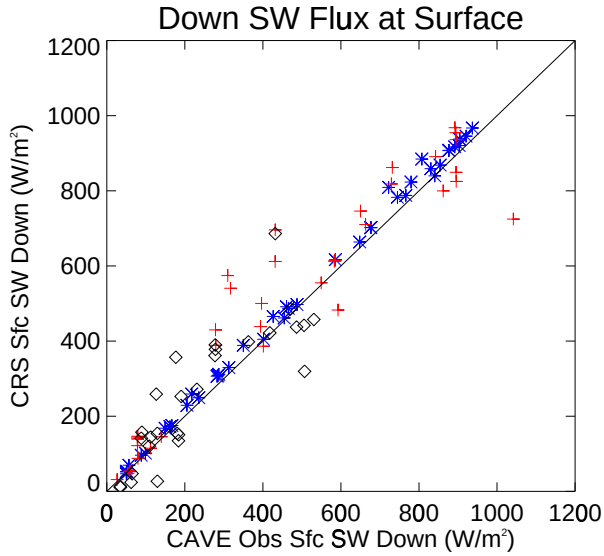
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	366.16	41.00	9.39	14.41	17.05	49.10	39.71	17.05
LW Up Sfc	391.57	41.00	-1.64	12.66	12.61	--------	--------	--------
SW Dn Sfc	266.08	25.00	-14.20	60.20	60.67	-332.09	-317.90	60.67
SW Up Sfc	54.64	25.00	10.84	15.15	18.38	--------	--------	--------
LW Up TOA	198.83	41.00	2.17	7.42	7.64	-63.12	-65.29	7.64
SW Up TOA	391.25	25.00	-4.25	27.58	27.36	251.30	255.56	27.36

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	377.58	16.00	3.80	9.96	10.36	51.56	47.76	10.36
LW Up Sfc	399.96	16.00	-9.68	12.91	15.81	--------	--------	--------
SW Dn Sfc	192.27	16.00	-17.50	71.20	71.13	-421.75	-404.25	71.13
SW Up Sfc	38.75	16.00	6.00	12.81	13.78	--------	--------	--------
LW Up TOA	185.51	16.00	-1.09	6.97	6.84	-81.58	-80.49	6.84
SW Up TOA	458.15	16.00	-3.37	31.73	30.90	318.09	321.45	30.90

E04-Plevna (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	347.91	188.00	2.58	16.11	16.27	18.66	15.72	17.04
LW Up Sfc	423.08	172.00	0.96	16.98	16.96	--------	--------	--------
SW Dn Sfc	411.96	111.00	-29.18	75.81	80.91	-143.23	-114.04	80.91
SW Up Sfc	74.15	113.00	-3.97	14.93	15.38	--------	--------	--------
LW Up TOA	250.92	190.00	0.31	4.08	4.08	-20.91	-21.21	4.08
SW Up TOA	228.88	113.00	3.19	11.08	11.49	91.29	88.10	11.49

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	335.67	77.00	2.18	13.73	13.82	--------	--------	0.55
LW Up Sfc	441.17	68.00	5.18	18.14	18.73	--------	--------	--------
SW Dn Sfc	498.72	44.00	-23.05	18.02	29.13	-50.92	27.87	-13.23
SW Up Sfc	91.07	46.00	-5.10	11.43	12.40	--------	--------	--------
LW Up TOA	278.00	79.00	0.59	3.18	3.22	--------	--------	-0.34
SW Up TOA	136.87	46.00	0.50	0.79	0.93	--------	--------	5.60

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	298.28	9.00	4.04	11.16	11.27	--------	--------	0.84
LW Up Sfc	406.60	9.00	10.73	12.69	16.08	--------	--------	--------
SW Dn Sfc	478.15	9.00	-20.82	9.60	22.70	8.19	-29.01	-14.64
SW Up Sfc	88.55	9.00	2.14	10.91	10.50	--------	--------	--------
LW Up TOA	275.59	9.00	0.00	1.77	1.67	--------	--------	-0.38
SW Up TOA	132.04	9.00	0.91	0.79	1.18	--------	--------	7.23

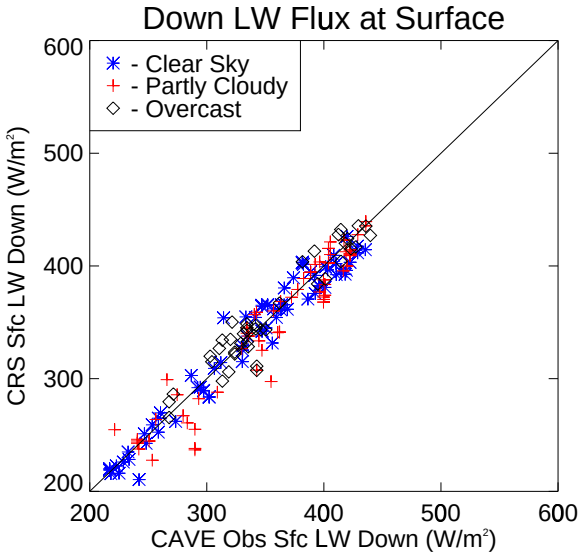
Overcast VIRS

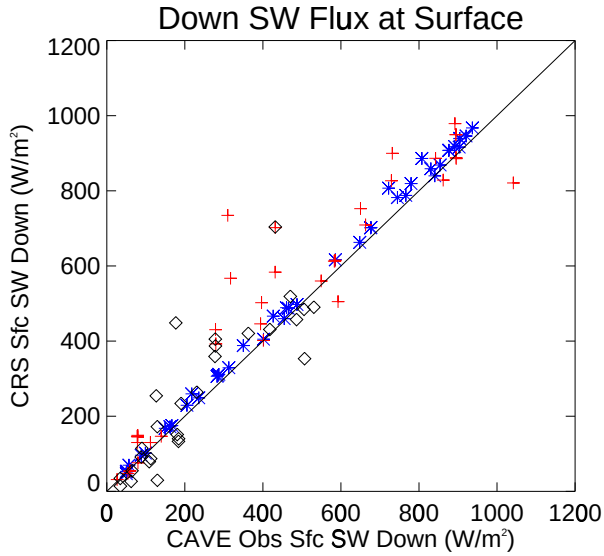
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	354.27	41.00	-2.75	14.96	15.03	39.24	41.99	15.03
LW Up Sfc	389.05	41.00	-8.62	13.95	16.25	--------	--------	--------
SW Dn Sfc	238.37	28.00	-18.69	89.22	89.58	-372.79	-354.10	89.58
SW Up Sfc	41.07	28.00	-1.10	14.35	14.13	--------	--------	--------
LW Up TOA	193.79	41.00	0.79	2.81	2.88	-69.12	-69.90	2.88
SW Up TOA	427.98	28.00	4.02	13.83	14.16	280.88	276.86	14.16

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	369.15	13.00	-2.14	11.16	10.93	54.85	56.99	10.93
LW Up Sfc	387.53	13.00	-18.63	12.86	22.36	--------	--------	--------
SW Dn Sfc	132.25	13.00	-25.53	77.22	78.46	-517.43	-491.90	78.46
SW Up Sfc	21.65	13.00	-3.64	11.67	11.79	--------	--------	--------
LW Up TOA	202.68	13.00	-0.47	2.00	1.98	-61.41	-60.94	1.98
SW Up TOA	542.16	13.00	1.94	8.74	8.62	391.33	389.39	8.62

E04-Plevna (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	347.91	188.00	2.92	15.87	16.10	18.40	15.12	16.87
LW Up Sfc	422.39	173.00	-0.20	17.00	16.95	--------	--------	--------
SW Dn Sfc	411.96	111.00	-35.24	79.26	86.41	-143.06	-107.82	86.41
SW Up Sfc	74.15	113.00	-3.47	14.49	14.84	--------	--------	--------
LW Up TOA	250.92	190.00	-0.35	6.34	6.33	-21.21	-20.86	6.33
SW Up TOA	228.88	113.00	9.15	18.73	20.77	92.73	83.57	20.77

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	335.67	77.00	1.69	13.70	13.72	--------	--------	0.55
LW Up Sfc	439.17	69.00	2.69	16.66	16.75	--------	--------	--------
SW Dn Sfc	498.72	44.00	-22.82	17.99	28.93	-50.73	27.91	-13.18
SW Up Sfc	91.07	46.00	-4.03	11.55	12.11	--------	--------	--------
LW Up TOA	278.00	79.00	0.01	5.44	5.40	--------	--------	-0.34
SW Up TOA	136.87	46.00	1.53	2.06	2.55	--------	--------	5.62

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	298.28	9.00	3.78	11.63	11.60	--------	--------	0.83
LW Up Sfc	406.60	9.00	6.86	11.67	12.97	--------	--------	--------
SW Dn Sfc	478.15	9.00	-20.88	9.69	22.79	8.13	-29.01	-14.52
SW Up Sfc	88.55	9.00	4.30	9.50	9.93	--------	--------	--------
LW Up TOA	275.59	9.00	-1.01	2.50	2.56	--------	--------	-0.40
SW Up TOA	132.04	9.00	2.96	2.53	3.80	--------	--------	7.28

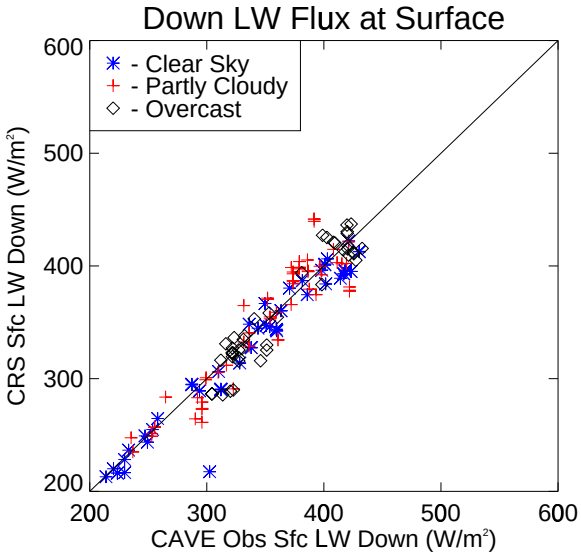
Overcast VIRS

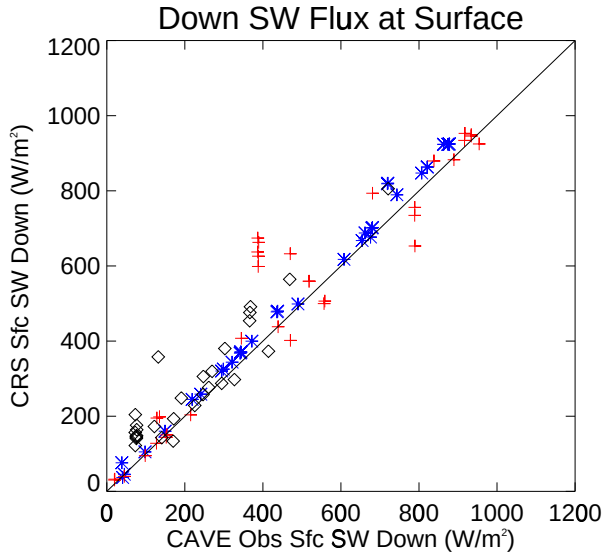
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	354.27	41.00	-2.38	13.99	14.02	39.24	41.62	14.02
LW Up Sfc	389.05	41.00	-8.61	13.96	16.26	--------	--------	--------
SW Dn Sfc	238.37	28.00	-23.74	94.19	95.49	-372.80	-349.05	95.49
SW Up Sfc	41.07	28.00	-2.24	15.04	14.94	--------	--------	--------
LW Up TOA	193.79	41.00	0.47	6.58	6.52	-69.11	-69.58	6.52
SW Up TOA	427.98	28.00	7.19	26.91	27.39	280.88	273.68	27.39

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	369.15	13.00	-2.85	9.14	9.24	54.85	57.70	9.24
LW Up Sfc	387.53	13.00	-18.65	12.84	22.36	--------	--------	--------
SW Dn Sfc	132.25	13.00	-15.11	95.08	92.59	-517.43	-502.33	92.59
SW Up Sfc	21.65	13.00	-1.90	14.75	14.30	--------	--------	--------
LW Up TOA	202.68	13.00	0.32	4.65	4.48	-61.42	-61.73	4.48
SW Up TOA	542.16	13.00	-6.57	28.17	27.85	391.33	397.90	27.85

E05-Halstead (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	348.71	154.00	3.57	18.33	18.62	24.84	20.84	19.38
LW Up Sfc	412.00	147.00	-4.67	15.50	16.14	--------	--------	--------
SW Dn Sfc	414.59	98.00	-43.83	69.52	81.88	-167.05	-123.21	81.88
SW Up Sfc	80.53	98.00	6.72	16.69	17.92	--------	--------	--------
LW Up TOA	251.17	163.00	1.41	3.39	3.66	-19.65	-21.07	3.66
SW Up TOA	231.56	98.00	-0.63	13.87	13.81	97.41	98.05	13.81

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	335.23	52.00	8.86	15.76	17.95	--------	--------	0.56
LW Up Sfc	427.94	49.00	-8.72	19.29	20.99	--------	--------	--------
SW Dn Sfc	508.60	35.00	-32.21	23.48	39.67	-54.13	21.91	-13.32
SW Up Sfc	98.55	35.00	7.52	8.84	11.51	--------	--------	--------
LW Up TOA	280.61	60.00	2.19	3.32	3.95	--------	--------	-0.34
SW Up TOA	132.93	35.00	0.30	0.71	0.76	--------	--------	5.70

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

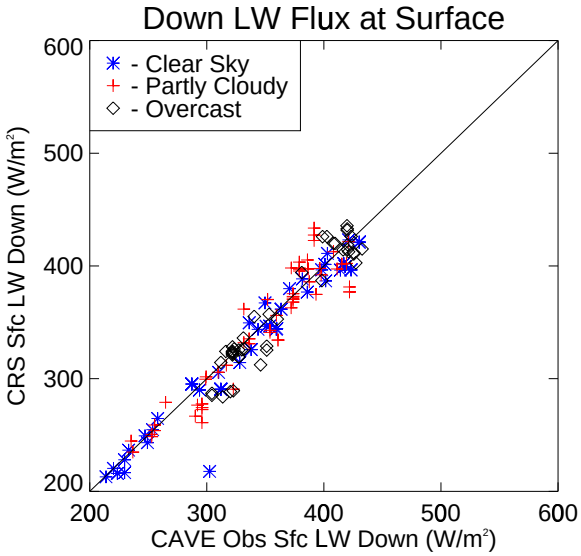
Overcast VIRS

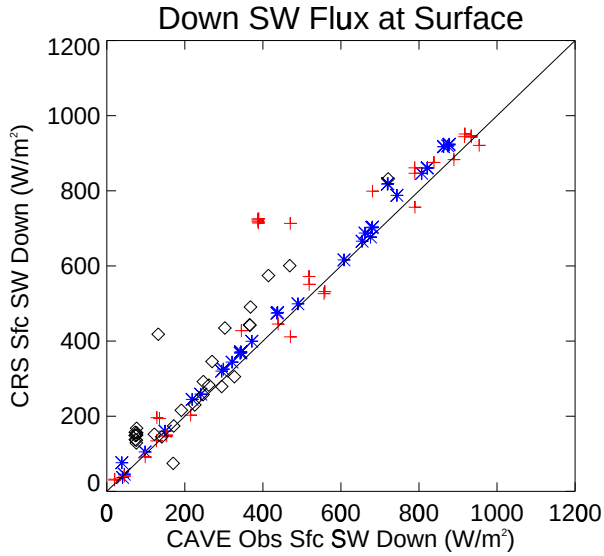
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	363.55	44.00	3.09	15.25	15.39	50.00	46.91	15.39
LW Up Sfc	387.31	44.00	-7.23	12.99	14.74	--------	--------	--------
SW Dn Sfc	223.57	29.00	-58.16	56.68	80.52	-403.27	-345.11	80.52
SW Up Sfc	43.11	29.00	-0.35	13.75	13.51	--------	--------	--------
LW Up TOA	202.08	44.00	0.98	2.91	3.04	-59.65	-60.64	3.04
SW Up TOA	411.44	29.00	-3.08	23.02	22.83	272.42	275.49	22.83

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	347.03	18.00	0.39	11.64	11.32	62.68	62.28	11.32
LW Up Sfc	367.49	18.00	-11.88	11.90	16.58	--------	--------	--------
SW Dn Sfc	156.66	18.00	-65.86	56.09	85.49	-430.55	-364.69	85.49
SW Up Sfc	29.14	18.00	-3.54	11.83	12.03	--------	--------	--------
LW Up TOA	198.68	18.00	-0.05	1.92	1.86	-57.94	-57.88	1.86
SW Up TOA	424.99	18.00	1.62	4.42	4.59	294.86	293.25	4.59

E05-Halstead (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	348.71	154.00	4.54	16.92	17.46	24.36	19.40	18.28
LW Up Sfc	412.00	147.00	-4.93	13.63	14.45	--------	--------	--------
SW Dn Sfc	414.59	98.00	-54.22	83.60	99.29	-166.57	-112.35	99.29
SW Up Sfc	80.53	98.00	6.08	17.68	18.61	--------	--------	--------
LW Up TOA	251.17	163.00	1.87	7.64	7.84	-19.57	-21.44	7.84
SW Up TOA	231.56	98.00	7.97	22.13	23.41	98.37	90.41	23.41

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	335.23	52.00	7.52	15.21	16.84	--------	--------	0.55
LW Up Sfc	427.94	49.00	-8.33	13.58	15.81	--------	--------	--------
SW Dn Sfc	508.60	35.00	-31.19	22.67	38.37	-53.25	22.05	-13.24
SW Up Sfc	98.55	35.00	8.83	8.65	12.27	--------	--------	--------
LW Up TOA	280.61	60.00	2.57	6.61	7.04	--------	--------	-0.35
SW Up TOA	132.93	35.00	1.62	1.81	2.41	--------	--------	5.71

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	--------
SW Up Sfc	--------	--------	--------	--------	--------	--------	--------	--------
LW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------
SW Up TOA	--------	--------	--------	--------	--------	--------	--------	--------

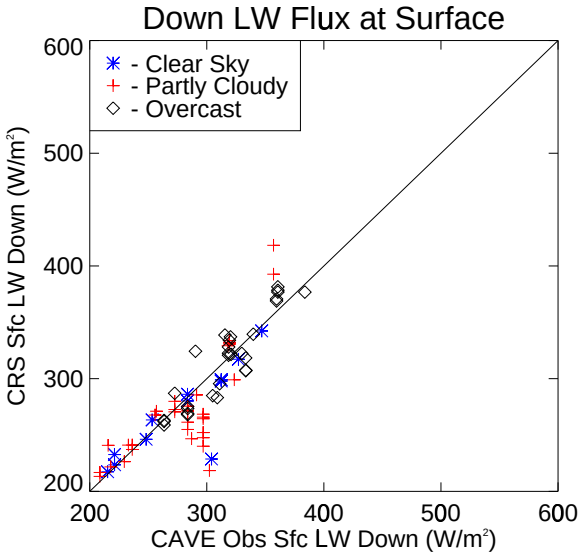
Overcast VIRS

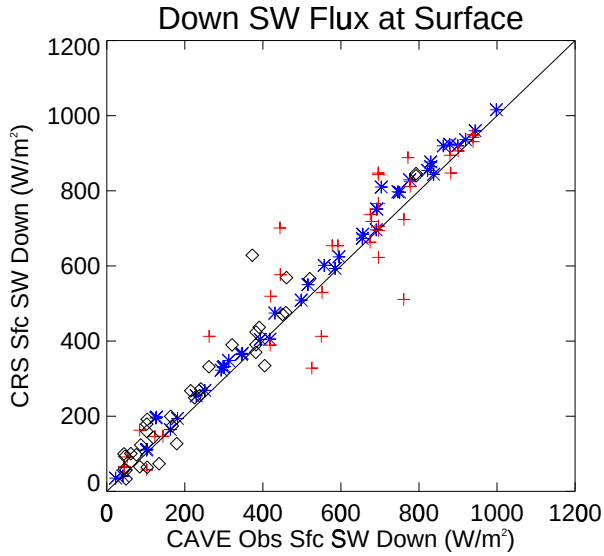
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	363.55	44.00	3.89	15.07	15.40	50.00	46.11	15.40
LW Up Sfc	387.31	44.00	-7.22	13.01	14.75	--------	--------	--------
SW Dn Sfc	223.57	29.00	-63.46	69.07	92.92	-403.27	-339.81	92.92
SW Up Sfc	43.11	29.00	-1.37	15.43	15.23	--------	--------	--------
LW Up TOA	202.08	44.00	2.66	9.43	9.69	-59.67	-62.33	9.69
SW Up TOA	411.44	29.00	-0.33	23.46	23.05	272.42	272.74	23.05

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	347.03	18.00	0.84	10.96	10.68	62.69	61.85	10.68
LW Up Sfc	367.49	18.00	-11.88	11.88	16.57	--------	--------	--------
SW Dn Sfc	156.66	18.00	-61.14	73.77	94.22	-430.55	-369.41	94.22
SW Up Sfc	29.14	18.00	-2.85	13.53	13.46	--------	--------	--------
LW Up TOA	198.68	18.00	-0.72	8.96	8.73	-57.96	-57.24	8.73
SW Up TOA	424.99	18.00	-3.70	24.72	24.31	294.86	298.57	24.31

E06-Towanda (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	294.48	78.00	4.47	23.06	23.34	38.83	34.45	23.20
LW Up Sfc	406.52	211.00	0.95	13.80	13.80	--------	--------	--------
SW Dn Sfc	447.68	120.00	-27.72	61.74	67.44	-149.23	-121.51	67.44
SW Up Sfc	90.81	120.00	15.92	19.11	24.81	--------	--------	--------
LW Up TOA	245.01	222.00	0.36	4.06	4.07	-22.55	-22.91	4.07
SW Up TOA	235.04	120.00	1.50	13.25	13.28	98.29	96.79	13.28

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	280.09	13.00	8.27	21.86	22.57	--------	--------	0.56
LW Up Sfc	425.90	70.00	4.22	12.19	12.81	--------	--------	--------
SW Dn Sfc	517.43	44.00	-29.65	22.84	37.26	-46.32	16.68	-14.27
SW Up Sfc	105.74	44.00	15.84	16.37	22.65	--------	--------	--------
LW Up TOA	279.97	74.00	1.29	2.79	3.06	--------	--------	-0.33
SW Up TOA	133.18	44.00	0.41	0.85	0.93	--------	--------	5.99

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	0.62
LW Up Sfc	407.05	7.00	7.86	5.98	9.62	--------	--------	--------
SW Dn Sfc	484.15	7.00	-18.73	15.76	23.74	-6.59	-12.14	-14.00
SW Up Sfc	96.64	7.00	18.70	27.63	31.69	--------	--------	--------
LW Up TOA	277.72	7.00	0.83	1.27	1.44	--------	--------	-0.30
SW Up TOA	123.66	7.00	0.79	0.82	1.09	--------	--------	6.30

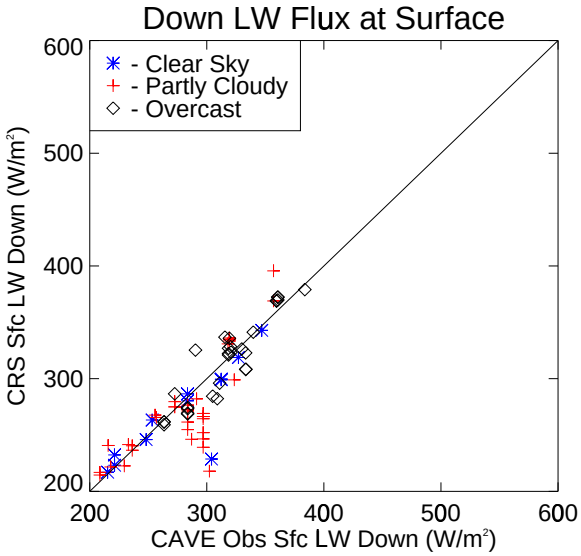
Overcast VIRS

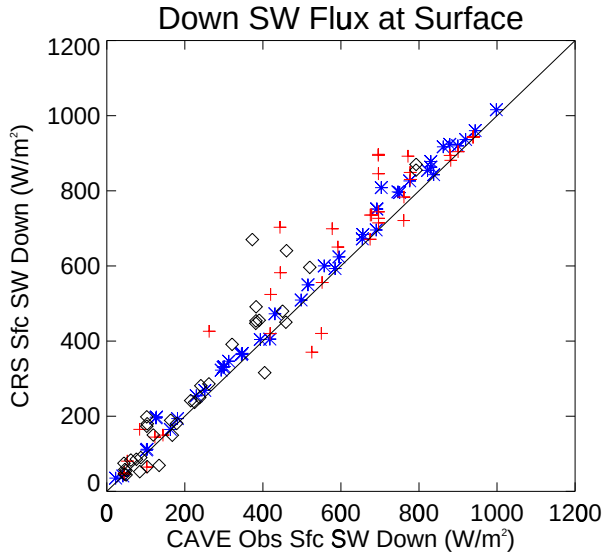
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	316.62	30.00	0.09	15.95	15.68	52.95	52.86	15.68
LW Up Sfc	383.29	62.00	-3.81	12.60	13.07	--------	--------	--------
SW Dn Sfc	250.35	36.00	-31.85	55.53	63.34	-338.84	-306.99	63.34
SW Up Sfc	51.35	36.00	9.00	12.57	15.31	--------	--------	--------
LW Up TOA	196.61	62.00	0.19	2.84	2.83	-63.08	-63.27	2.83
SW Up TOA	381.21	36.00	1.93	5.30	5.57	247.59	245.66	5.57

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	330.47	10.00	-6.11	7.52	9.40	62.30	68.42	9.40
LW Up Sfc	369.79	16.00	-10.40	8.27	13.13	--------	--------	--------
SW Dn Sfc	108.26	16.00	-25.65	42.52	48.51	-418.99	-393.34	48.51
SW Up Sfc	20.95	16.00	1.56	7.73	7.65	--------	--------	--------
LW Up TOA	197.04	16.00	-0.11	2.38	2.31	-61.42	-61.31	2.31
SW Up TOA	442.63	16.00	1.76	6.65	6.68	315.87	314.11	6.68

E06-Towanda (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	294.48	78.00	5.18	21.73	22.20	38.80	33.72	22.06
LW Up Sfc	406.52	211.00	1.06	13.64	13.65	--------	--------	--------
SW Dn Sfc	447.68	120.00	-36.09	60.96	70.62	-149.02	-112.93	70.62
SW Up Sfc	90.81	120.00	16.25	17.72	23.99	--------	--------	--------
LW Up TOA	245.01	222.00	0.04	7.04	7.02	-22.56	-22.60	7.02
SW Up TOA	235.04	120.00	8.77	19.86	21.63	99.74	90.97	21.63

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	280.09	13.00	8.03	21.78	22.42	--------	--------	0.55
LW Up Sfc	425.90	70.00	5.18	11.98	12.98	--------	--------	--------
SW Dn Sfc	517.43	44.00	-29.26	22.57	36.79	-46.00	16.74	-14.19
SW Up Sfc	105.74	44.00	17.17	15.88	23.26	--------	--------	--------
LW Up TOA	279.97	74.00	1.61	4.26	4.53	--------	--------	-0.33
SW Up TOA	133.18	44.00	1.69	2.00	2.60	--------	--------	6.02

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	--------	--------	--------	--------	--------	--------	--------	0.61
LW Up Sfc	407.05	7.00	9.15	6.54	10.97	--------	--------	--------
SW Dn Sfc	484.15	7.00	-18.63	15.72	23.64	-6.52	-12.12	-13.87
SW Up Sfc	96.64	7.00	20.54	25.47	31.27	--------	--------	--------
LW Up TOA	277.72	7.00	1.36	1.69	2.08	--------	--------	-0.29
SW Up TOA	123.66	7.00	2.56	2.88	3.69	--------	--------	6.34

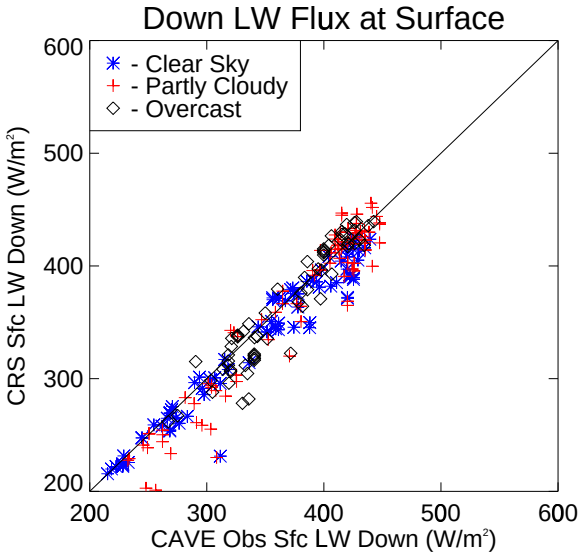
Overcast VIRS

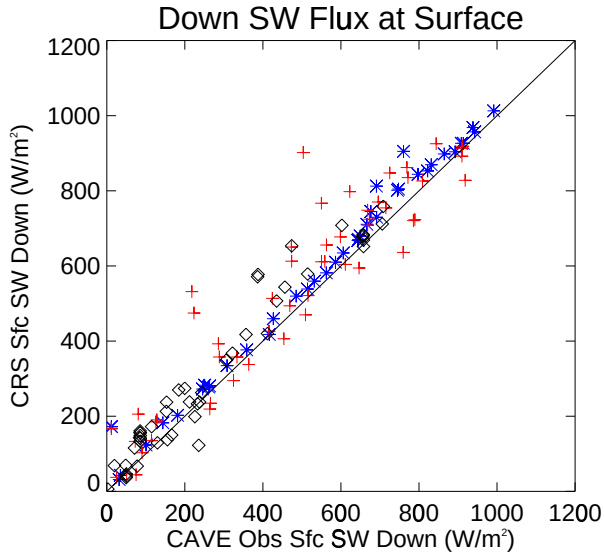
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	316.62	30.00	0.74	14.66	14.43	52.96	52.22	14.43
LW Up Sfc	383.29	62.00	-3.80	12.61	13.08	--------	--------	--------
SW Dn Sfc	250.35	36.00	-37.42	67.40	76.27	-338.84	-301.41	76.27
SW Up Sfc	51.35	36.00	8.16	11.64	14.08	--------	--------	--------
LW Up TOA	196.61	62.00	-0.11	9.07	9.00	-63.08	-62.97	9.00
SW Up TOA	381.21	36.00	5.02	26.97	27.06	247.59	242.57	27.06

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	330.47	10.00	-5.90	5.63	7.96	62.33	68.24	7.96
LW Up Sfc	369.79	16.00	-10.40	8.28	13.13	--------	--------	--------
SW Dn Sfc	108.26	16.00	-18.65	38.70	41.86	-418.99	-400.34	41.86
SW Up Sfc	20.95	16.00	2.56	6.83	7.09	--------	--------	--------
LW Up TOA	197.04	16.00	-0.78	7.62	7.42	-61.42	-60.65	7.42
SW Up TOA	442.63	16.00	-5.10	23.92	23.71	315.87	320.97	23.71

E07-Elk_Falls (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	359.35	240.00	7.65	18.14	19.65	25.48	17.86	19.61
LW Up Sfc	421.19	224.00	0.28	18.70	18.66	--------	--------	--------
SW Dn Sfc	427.71	142.00	-45.67	71.12	84.31	-158.25	-112.58	84.31
SW Up Sfc	85.33	142.00	8.81	19.06	20.94	--------	--------	--------
LW Up TOA	248.09	253.00	0.69	4.08	4.13	-24.41	-25.11	4.13
SW Up TOA	230.50	142.00	1.53	5.40	5.59	93.70	92.17	5.59

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	339.64	83.00	10.23	15.78	18.72	--------	--------	0.56
LW Up Sfc	423.48	73.00	-2.80	17.18	17.29	--------	--------	--------
SW Dn Sfc	540.30	41.00	-39.22	38.72	54.78	-53.65	14.43	-15.35
SW Up Sfc	106.69	41.00	11.73	18.53	21.74	--------	--------	--------
LW Up TOA	277.88	94.00	1.02	2.47	2.66	--------	--------	-0.34
SW Up TOA	138.98	41.00	0.44	0.81	0.91	--------	--------	6.18

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	332.09	2.00	29.29	18.79	32.17	--------	--------	0.39
LW Up Sfc	414.23	2.00	-12.92	8.64	14.29	--------	--------	--------
SW Dn Sfc	547.43	2.00	-17.05	5.72	17.52	-13.99	-3.06	-8.17
SW Up Sfc	102.62	2.00	16.20	21.33	22.13	--------	--------	--------
LW Up TOA	295.76	2.00	2.88	2.44	3.35	--------	--------	-0.21
SW Up TOA	128.31	2.00	0.93	1.43	1.38	--------	--------	3.41

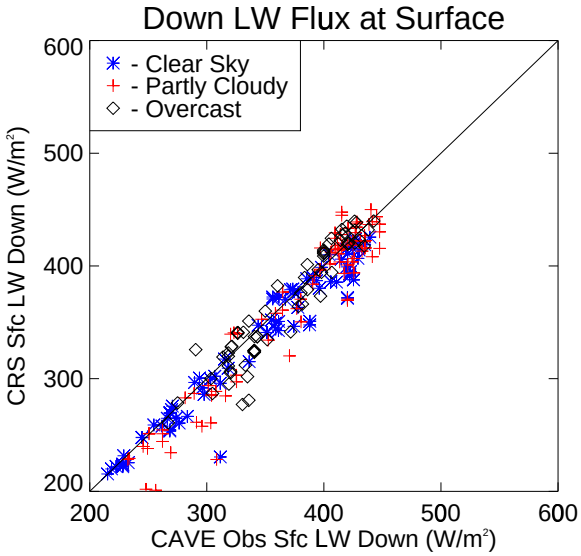
Overcast VIRS

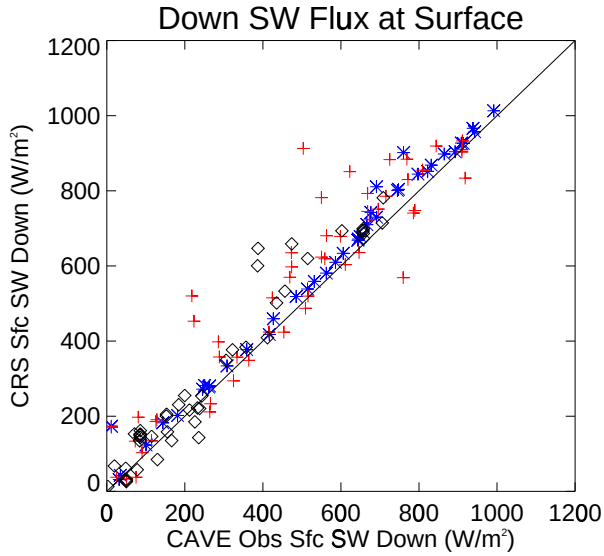
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	366.60	69.00	3.39	17.07	17.29	42.00	38.61	17.29
LW Up Sfc	396.58	69.00	-6.56	12.96	14.44	--------	--------	--------
SW Dn Sfc	275.84	47.00	-41.05	54.98	68.15	-308.00	-266.95	68.15
SW Up Sfc	56.83	47.00	5.89	14.56	15.56	--------	--------	--------
LW Up TOA	191.21	69.00	0.23	3.73	3.71	-72.99	-73.22	3.71
SW Up TOA	357.25	47.00	1.66	5.30	5.51	219.92	218.26	5.51

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	362.97	25.00	2.59	14.49	14.43	49.01	46.43	14.43
LW Up Sfc	388.84	25.00	-11.26	9.40	14.55	--------	--------	--------
SW Dn Sfc	224.98	25.00	-36.88	31.34	47.99	-341.70	-304.82	47.99
SW Up Sfc	45.79	25.00	3.90	15.35	15.54	--------	--------	--------
LW Up TOA	185.55	25.00	-0.94	3.03	3.11	-77.89	-76.96	3.11
SW Up TOA	382.93	25.00	1.63	2.77	3.17	246.85	245.22	3.17

E07-Elk_Falls (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	359.35	240.00	7.49	17.80	19.28	25.19	17.73	19.24
LW Up Sfc	421.19	224.00	0.95	18.90	18.88	--------	--------	--------
SW Dn Sfc	427.71	142.00	-47.84	74.95	88.69	-158.11	-110.26	88.69
SW Up Sfc	85.33	142.00	9.56	18.26	20.55	--------	--------	--------
LW Up TOA	248.09	253.00	0.46	7.56	7.55	-24.29	-24.75	7.55
SW Up TOA	230.50	142.00	4.07	16.67	17.10	94.75	90.68	17.10

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	339.64	83.00	9.70	15.71	18.38	--------	--------	0.55
LW Up Sfc	423.48	73.00	-1.31	16.02	15.96	--------	--------	--------
SW Dn Sfc	540.30	41.00	-38.84	38.50	54.36	-53.33	14.49	-15.27
SW Up Sfc	106.69	41.00	13.04	18.11	22.14	--------	--------	--------
LW Up TOA	277.88	94.00	1.26	3.84	4.02	--------	--------	-0.34
SW Up TOA	138.98	41.00	1.68	1.92	2.54	--------	--------	6.21

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	332.09	2.00	27.96	17.22	30.50	--------	--------	0.37
LW Up Sfc	414.23	2.00	-11.79	10.09	13.78	--------	--------	--------
SW Dn Sfc	547.43	2.00	-16.68	5.54	17.13	-13.70	-2.98	-8.07
SW Up Sfc	102.62	2.00	17.23	18.41	21.60	--------	--------	--------
LW Up TOA	295.76	2.00	3.47	3.06	4.09	--------	--------	-0.20
SW Up TOA	128.31	2.00	1.98	4.20	3.57	--------	--------	3.43

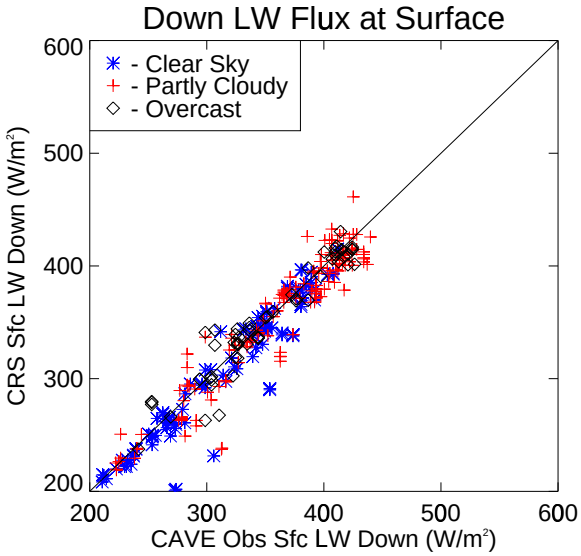
Overcast VIRS

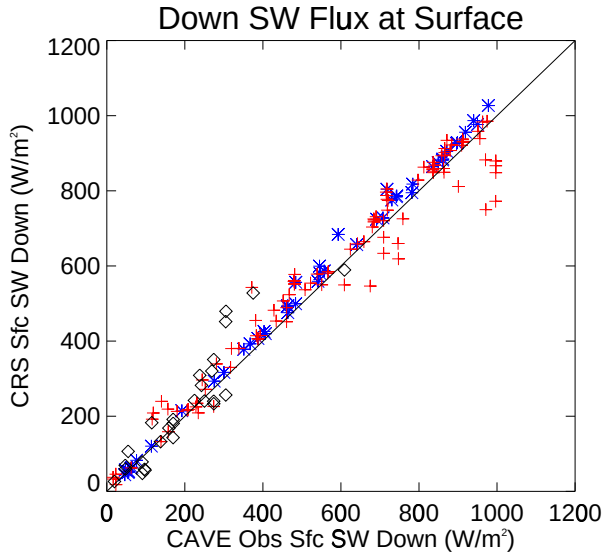
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	366.60	69.00	2.27	16.56	16.60	41.98	39.72	16.60
LW Up Sfc	396.58	69.00	-6.58	12.96	14.45	--------	--------	--------
SW Dn Sfc	275.84	47.00	-40.07	62.87	73.99	-308.00	-267.93	73.99
SW Up Sfc	56.83	47.00	6.01	14.57	15.61	--------	--------	--------
LW Up TOA	191.21	69.00	-1.42	9.93	9.96	-72.98	-71.56	9.96
SW Up TOA	357.25	47.00	0.69	19.61	19.42	219.92	219.23	19.42

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	362.97	25.00	0.43	13.11	12.85	49.01	48.58	12.85
LW Up Sfc	388.84	25.00	-11.30	9.39	14.57	--------	--------	--------
SW Dn Sfc	224.98	25.00	-31.28	34.11	45.77	-341.70	-310.42	45.77
SW Up Sfc	45.79	25.00	4.83	14.24	14.77	--------	--------	--------
LW Up TOA	185.55	25.00	-3.20	7.43	7.96	-77.88	-74.68	7.96
SW Up TOA	382.93	25.00	-2.86	16.96	16.87	246.85	249.72	16.87

E08-Coldwater (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	344.58	313.00	4.94	17.70	18.35	19.93	15.00	18.32
LW Up Sfc	432.89	287.00	10.49	28.34	30.18	--------	--------	--------
SW Dn Sfc	510.44	182.00	-18.24	53.33	56.22	-102.75	-84.51	56.22
SW Up Sfc	105.65	182.00	14.97	23.32	27.65	--------	--------	--------
LW Up TOA	256.43	318.00	1.64	5.81	6.03	-16.56	-18.20	6.03
SW Up TOA	212.68	182.00	1.48	15.20	15.23	66.56	65.08	15.23

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	315.29	104.00	7.69	17.54	19.08	--------	--------	0.60
LW Up Sfc	416.68	91.00	6.41	11.98	13.53	--------	--------	--------
SW Dn Sfc	516.71	49.00	-25.90	20.90	33.14	-32.19	6.29	-12.48
SW Up Sfc	107.43	49.00	10.02	10.16	14.20	--------	--------	--------
LW Up TOA	274.63	106.00	0.82	2.26	2.40	--------	--------	-0.34
SW Up TOA	137.11	49.00	0.21	0.53	0.56	--------	--------	4.84

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	298.22	7.00	5.29	6.85	8.26	--------	--------	0.56
LW Up Sfc	408.37	7.00	4.41	11.56	11.57	--------	--------	--------
SW Dn Sfc	531.01	7.00	-22.88	13.06	25.88	-9.16	-13.72	-12.84
SW Up Sfc	121.16	7.00	16.38	16.63	22.48	--------	--------	--------
LW Up TOA	277.33	7.00	-0.79	2.89	2.79	--------	--------	-0.36
SW Up TOA	146.98	7.00	0.41	0.65	0.73	--------	--------	4.90

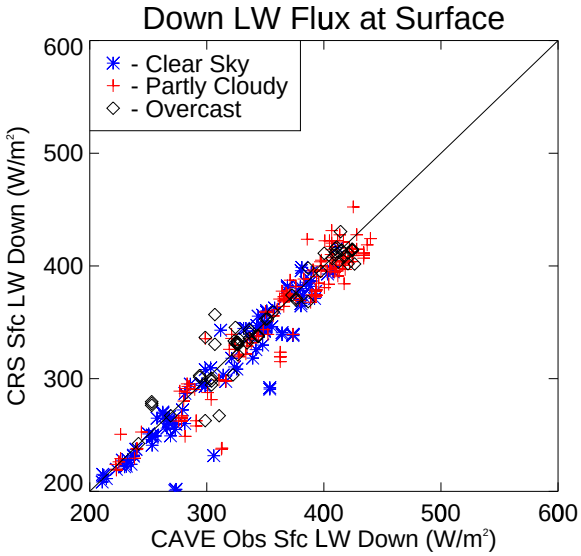
Overcast VIRS

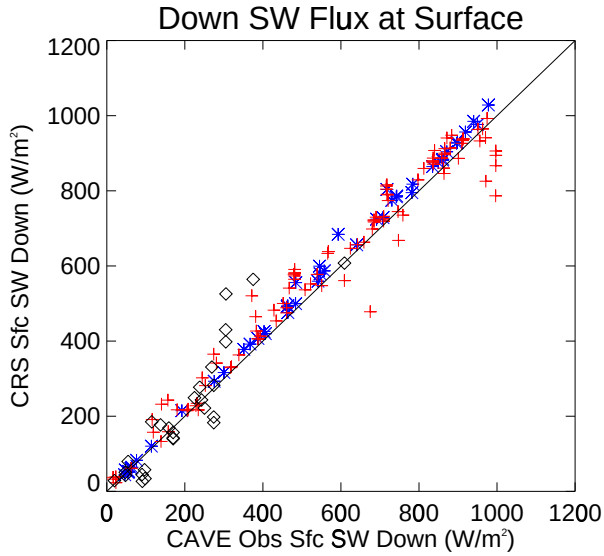
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	351.07	60.00	-0.62	15.01	14.90	41.04	41.66	14.90
LW Up Sfc	381.37	58.00	-10.85	10.09	14.76	--------	--------	--------
SW Dn Sfc	200.53	27.00	-22.60	61.08	64.05	-372.78	-350.18	64.05
SW Up Sfc	41.87	27.00	4.94	10.25	11.20	--------	--------	--------
LW Up TOA	197.21	60.00	0.69	2.77	2.84	-62.95	-63.64	2.84
SW Up TOA	401.78	27.00	-3.85	24.83	24.67	263.44	267.30	24.67

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	334.70	11.00	-3.25	7.39	7.76	69.31	72.57	7.76
LW Up Sfc	348.55	11.00	-16.25	12.92	20.39	--------	--------	--------
SW Dn Sfc	114.41	11.00	-11.07	32.20	32.64	-361.18	-350.11	32.64
SW Up Sfc	23.05	11.00	2.51	4.37	4.87	--------	--------	--------
LW Up TOA	204.06	11.00	-0.37	2.68	2.58	-47.17	-46.80	2.58
SW Up TOA	392.99	11.00	-1.28	12.18	11.68	269.16	270.44	11.68

E08-Coldwater (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	344.58	313.00	5.49	17.08	17.91	19.54	14.07	17.88
LW Up Sfc	432.44	288.00	11.33	30.39	32.39	--------	--------	--------
SW Dn Sfc	510.44	182.00	-23.46	52.43	57.30	-102.44	-78.98	57.30
SW Up Sfc	105.65	182.00	15.75	21.83	26.87	--------	--------	--------
LW Up TOA	256.43	318.00	1.46	8.46	8.57	-16.59	-18.05	8.57
SW Up TOA	212.68	182.00	6.63	22.30	23.21	67.99	61.36	23.21

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	315.29	104.00	7.39	17.69	19.09	--------	--------	0.59
LW Up Sfc	416.60	91.00	3.27	12.58	12.93	--------	--------	--------
SW Dn Sfc	516.71	49.00	-25.83	20.82	33.04	-32.13	6.30	-12.46
SW Up Sfc	107.43	49.00	10.62	9.71	14.32	--------	--------	--------
LW Up TOA	274.63	106.00	-0.10	4.02	4.00	--------	--------	-0.34
SW Up TOA	137.11	49.00	0.77	1.65	1.81	--------	--------	4.86

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	298.22	7.00	5.51	7.45	8.83	--------	--------	0.56
LW Up Sfc	408.37	7.00	-2.63	9.02	8.76	--------	--------	--------
SW Dn Sfc	531.01	7.00	-23.18	13.52	26.35	-9.43	-13.76	-12.80
SW Up Sfc	121.16	7.00	17.15	15.79	22.54	--------	--------	--------
LW Up TOA	277.33	7.00	-2.80	4.14	4.74	--------	--------	-0.38
SW Up TOA	146.98	7.00	1.13	2.02	2.19	--------	--------	4.93

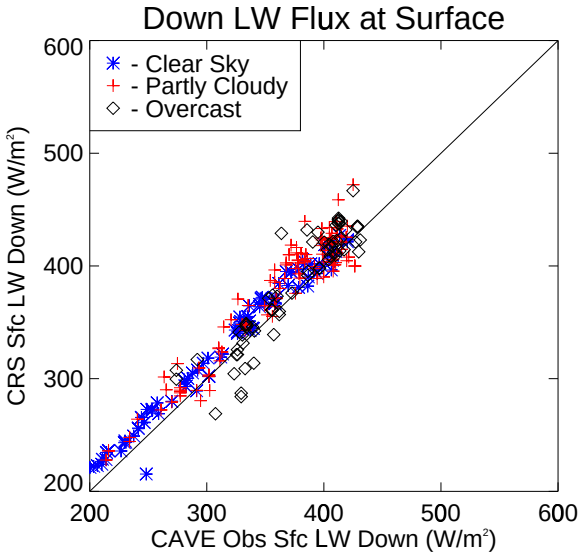
Overcast VIRS

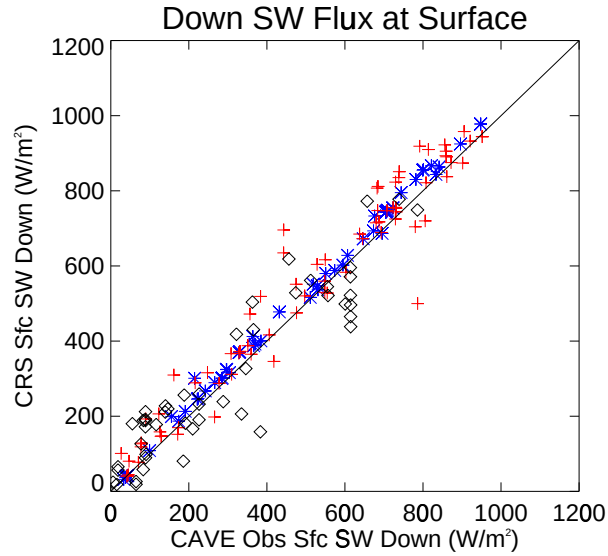
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	351.07	60.00	-0.80	15.25	15.14	41.04	41.84	15.14
LW Up Sfc	381.37	58.00	-10.86	10.10	14.77	--------	--------	--------
SW Dn Sfc	200.53	27.00	-15.99	74.37	74.71	-372.78	-356.79	74.71
SW Up Sfc	41.87	27.00	6.08	11.72	13.01	--------	--------	--------
LW Up TOA	197.21	60.00	2.39	7.39	7.70	-62.96	-65.35	7.70
SW Up TOA	401.78	27.00	-10.56	23.69	25.53	263.44	274.00	25.53

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	334.70	11.00	-5.87	7.47	9.24	69.30	75.17	9.24
LW Up Sfc	348.55	11.00	-16.29	12.92	20.42	--------	--------	--------
SW Dn Sfc	114.41	11.00	9.14	30.85	30.80	-361.18	-370.32	30.80
SW Up Sfc	23.05	11.00	5.96	4.08	7.12	--------	--------	--------
LW Up TOA	204.06	11.00	0.19	5.07	4.83	-47.17	-47.36	4.83
SW Up TOA	392.99	11.00	-17.31	11.57	20.52	269.16	286.47	20.52

E09-Ashton (ARM) Tuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	346.87	284.00	-12.56	15.15	19.66	2.94	15.52	19.66
LW Up Sfc	431.65	274.00	2.34	16.54	16.67	--------	--------	--------
SW Dn Sfc	436.87	188.00	-24.83	63.53	68.05	-137.74	-112.92	68.05
SW Up Sfc	87.30	191.00	8.52	17.20	19.15	--------	--------	--------
LW Up TOA	252.16	332.00	1.36	4.90	5.08	-20.37	-21.73	5.08
SW Up TOA	228.14	191.00	1.60	17.50	17.53	90.87	89.27	17.53

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	317.15	107.00	-12.80	9.01	15.63	--------	--------	0.55
LW Up Sfc	426.64	99.00	2.39	15.27	15.38	--------	--------	--------
SW Dn Sfc	467.44	62.00	-26.50	18.15	32.04	-45.29	18.80	-13.41
SW Up Sfc	98.73	65.00	8.75	13.26	15.80	--------	--------	--------
LW Up TOA	275.47	127.00	0.82	2.69	2.81	--------	--------	-0.33
SW Up TOA	131.56	65.00	0.37	0.63	0.73	--------	--------	5.29

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	269.48	9.00	-13.45	5.18	14.31	--------	--------	0.45
LW Up Sfc	378.01	9.00	2.50	5.82	6.03	--------	--------	--------
SW Dn Sfc	294.78	9.00	-21.12	6.33	21.94	-21.04	-0.08	-11.16
SW Up Sfc	64.53	9.00	5.70	9.41	10.55	--------	--------	--------
LW Up TOA	266.72	9.00	0.91	1.69	1.84	--------	--------	-0.20
SW Up TOA	101.30	9.00	1.09	0.49	1.19	--------	--------	5.13

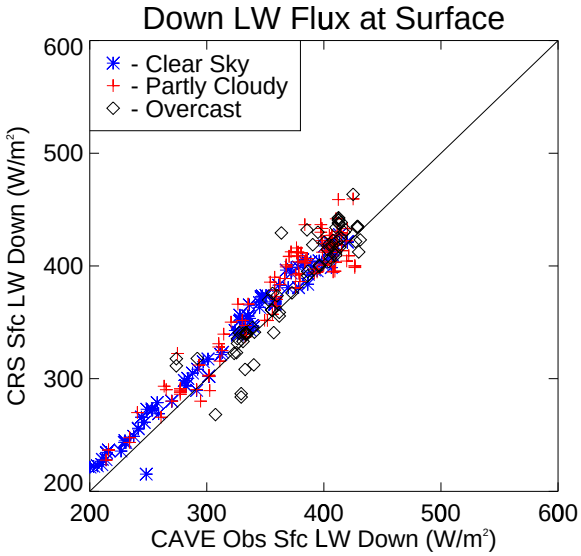
Overcast VIRS

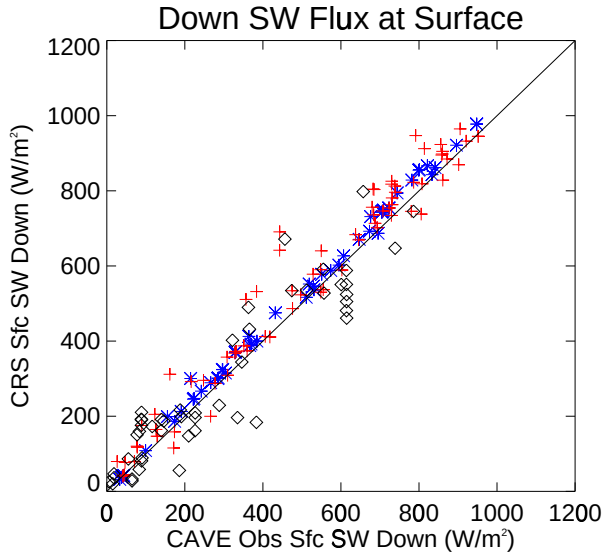
	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	374.98	68.00	-8.24	19.50	21.04	30.58	38.82	21.04
LW Up Sfc	415.15	68.00	-6.31	10.88	12.51	--------	--------	--------
SW Dn Sfc	294.78	49.00	-8.53	86.52	86.06	-339.62	-331.09	86.06
SW Up Sfc	58.35	49.00	9.01	19.86	21.62	--------	--------	--------
LW Up TOA	200.32	86.00	0.85	4.17	4.23	-65.53	-66.38	4.23
SW Up TOA	409.92	49.00	3.68	13.15	13.52	268.31	264.63	13.52

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	353.92	20.00	-5.25	8.56	9.86	53.74	58.99	9.86
LW Up Sfc	375.09	20.00	-10.19	10.00	14.10	--------	--------	--------
SW Dn Sfc	124.53	20.00	-45.30	77.67	88.23	-418.82	-373.52	88.23
SW Up Sfc	23.63	20.00	-2.47	14.19	14.05	--------	--------	--------
LW Up TOA	210.56	20.00	0.01	4.03	3.93	-48.93	-48.94	3.93
SW Up TOA	430.48	20.00	1.70	3.39	3.71	300.14	298.44	3.71

E09-Ashton (ARM) Untuned CRS





All Sky

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	346.87	284.00	-12.61	14.99	19.57	2.79	15.42	19.57
LW Up Sfc	432.12	273.00	1.14	16.32	16.33	--------	--------	--------
SW Dn Sfc	436.87	188.00	-25.46	58.59	63.74	-137.52	-112.06	63.74
SW Up Sfc	87.30	191.00	9.76	16.66	19.27	--------	--------	--------
LW Up TOA	252.16	332.00	1.59	8.12	8.26	-20.53	-22.12	8.26
SW Up TOA	228.14	191.00	2.98	18.50	18.69	92.07	89.10	18.69

Clear Sky VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	317.15	107.00	-13.19	8.93	15.91	--------	--------	0.55
LW Up Sfc	427.91	98.00	0.06	11.96	11.90	--------	--------	--------
SW Dn Sfc	467.44	62.00	-26.20	18.08	31.75	-45.05	18.84	-13.36
SW Up Sfc	98.73	65.00	9.86	12.96	16.20	--------	--------	--------
LW Up TOA	275.47	127.00	0.48	4.38	4.38	--------	--------	-0.33
SW Up TOA	131.56	65.00	1.43	1.96	2.41	--------	--------	5.31

Clear Sky VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Dir Bias Obs-CRS	Dif Bias Obs-CRS	AOT Frc Clr-Prs
LW Dn Sfc	269.48	9.00	-13.98	4.75	14.68	--------	--------	0.44
LW Up Sfc	378.01	9.00	2.90	6.17	6.50	--------	--------	--------
SW Dn Sfc	294.78	9.00	-20.98	6.36	21.82	-20.94	-0.04	-11.03
SW Up Sfc	64.53	9.00	8.54	8.67	11.82	--------	--------	--------
LW Up TOA	266.72	9.00	1.15	2.12	2.30	--------	--------	-0.20
SW Up TOA	101.30	9.00	3.78	1.38	4.00	--------	--------	5.20

Overcast VIRS

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	374.98	68.00	-8.88	19.50	21.29	30.57	39.46	21.29
LW Up Sfc	415.15	68.00	-6.32	10.88	12.52	--------	--------	--------
SW Dn Sfc	294.78	49.00	-0.58	83.61	82.75	-339.62	-339.03	82.75
SW Up Sfc	58.35	49.00	10.22	19.08	21.47	--------	--------	--------
LW Up TOA	200.32	86.00	1.82	10.20	10.30	-65.52	-67.34	10.30
SW Up TOA	409.92	49.00	-3.50	28.84	28.76	268.31	271.81	28.76

Overcast VIRS & L/AA

	Obs Mean	N	Bias Obs-CRS	Std Dev	RMS	Obs Frc All-Clr	Mod Frc All-Clr	Forcing RMS
LW Dn Sfc	353.92	20.00	-6.05	4.69	7.58	53.71	59.76	7.58
LW Up Sfc	375.09	20.00	-10.20	10.02	14.12	--------	--------	--------
SW Dn Sfc	124.53	20.00	-26.09	71.76	74.66	-418.82	-392.73	74.66
SW Up Sfc	23.63	20.00	0.49	13.24	12.91	--------	--------	--------
LW Up TOA	210.56	20.00	-0.41	9.34	9.12	-48.93	-48.53	9.12
SW Up TOA	430.48	20.00	-15.17	22.81	26.92	300.14	315.31	26.92