

Table G-3: Grum Climate Station - Daily and Monthly Average Temperature

Month	Day	Monthly	Grum Daily Air Temperature 2010 (°C)																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
January	Average	-12.97	-24.97	-27.39	-27.41	-22.07	-18.42	-12.81	-9.99	-6.18	-10.20	-17.66	-22.61	-23.00	-20.91	-11.63	-9.41	-5.86	-4.47	-6.99	-6.13	-5.28	-4.66	-6.81	-8.31	-10.83	-12.21	-13.44	-13.43	-9.69	-9.89	-9.16	-10.11
	Max	-3.45	-23.73	-24.64	-25.08	-18.51	-16.20	-10.21	-8.46	-3.63	-4.47	-13.19	-21.45	-21.95	-16.95	-9.14	-7.63	-3.45	-3.58	-5.69	-3.46	-3.73	-3.52	-5.92	-7.46	-9.51	-11.33	-11.61	-11.01	-8.17	-8.84	-8.61	-7.88
	Min	-29.28	-26.50	-29.28	-29.11	-25.24	-20.28	-17.05	-11.58	-8.18	-14.32	-21.16	-24.02	-24.49	-23.41	-16.66	-11.09	-8.56	-5.45	-8.90	-7.34	-7.27	-6.70	-7.64	-9.95	-11.80	-13.22	-14.36	-15.25	-12.71	-11.22	-10.51	-11.63
February	Average	-7.52	-11.08	-13.30	-21.23	-20.93	-11.42	-4.70	-2.61	-4.14	-8.34	-11.07	-12.01	-8.41	-7.29	-4.22	-3.07	-5.70	-3.42	-3.67	-3.37	-1.34	-3.57	-5.97	-7.36	-8.68	-9.51	-4.35	-4.97	-4.82	n/a	n/a	n/a
	Max	5.84	-9.30	-10.06	-18.15	-16.99	-7.05	-2.32	-0.53	-1.69	-5.82	-8.67	-8.16	-5.58	-3.96	-3.11	0.30	-3.81	-2.10	-1.61	1.35	5.84	1.67	-0.22	-2.81	-6.48	-7.25	-1.94	-1.84	-2.65	n/a	n/a	n/a
	Min	-23.66	-13.15	-17.47	-23.66	-23.64	-16.08	-6.21	-3.97	-7.37	-10.68	-13.18	-14.89	-10.60	-9.30	-5.38	-5.18	-7.26	-5.26	-5.13	-5.48	-5.52	-7.06	-9.35	-11.76	-10.93	-11.05	-6.77	-6.90	-6.30	n/a	n/a	n/a
March	Average	-6.82	-1.68	-0.62	-4.44	-5.60	-7.99	-3.77	-9.39	-10.94	-5.29	-9.68	-6.94	-7.28	-7.07	-3.71	-2.00	-4.73	-7.55	-7.28	-9.35	-10.03	-17.36	-14.94	-14.34	-12.03	-9.13	-8.51	-2.95	-0.59	-2.11	-1.77	-2.24
	Max	3.83	1.02	2.34	-2.65	-2.38	-6.22	-1.08	-5.96	-8.36	-1.62	-6.99	-3.21	-5.78	-3.89	0.03	1.32	0.53	-3.66	-2.54	-7.00	-6.47	-11.16	-9.54	-12.36	-9.58	-4.50	-4.23	1.63	3.83	3.80	3.22	3.14
	Min	-23.07	-3.84	-3.00	-6.35	-8.46	-10.54	-6.43	-13.38	-16.02	-7.87	-12.11	-9.35	-10.23	-10.40	-6.63	-4.92	-8.72	-11.05	-10.45	-11.56	-18.30	-23.07	-19.50	-17.41	-14.13	-12.59	-12.90	-6.90	-3.32	-6.55	-6.77	-6.37
April	Average	0.38	-3.78	-3.44	-2.06	-2.40	-3.10	-1.73	-6.35	-7.18	-6.46	-5.31	-3.69	-0.76	-1.20	2.21	3.58	1.48	2.83	4.51	6.19	7.85	1.02	0.05	-0.29	0.93	3.96	4.56	4.65	5.37	6.73	3.21	n/a
	Max	11.67	-0.97	0.79	1.95	1.96	0.74	2.34	-0.96	-4.42	-3.68	-0.76	1.96	4.13	1.43	6.35	7.09	6.21	5.16	6.95	11.03	11.67	3.03	2.72	2.97	5.11	7.71	7.74	9.25	9.99	11.09	6.27	n/a
	Min	-10.90	-6.01	-6.95	-5.99	-6.41	-6.73	-5.36	-10.90	-10.43	-9.68	-9.93	-8.93	-4.99	-4.15	-1.79	-0.63	-4.61	0.05	2.99	2.03	3.29	-0.68	-2.60	-3.19	-3.63	0.15	1.27	0.23	1.04	2.33	0.18	n/a
May	Average	6.91	3.13	0.90	1.76	1.81	2.51	3.60	3.26	2.54	1.56	2.93	4.20	4.06	1.90	4.11	6.03	3.21	7.13	10.40	7.49	5.34	7.60	8.51	9.60	10.50	11.58	12.98	13.95	14.71	15.93	16.39	14.63
	Max	20.52	6.73	2.24	4.00	6.35	5.32	6.44	6.78	5.35	4.79	6.22	7.71	6.89	3.93	9.41	9.44	7.27	12.82	14.87	9.84	9.78	10.67	14.01	12.39	14.36	15.03	16.86	18.00	18.27	20.52	20.24	18.78
	Min	-2.96	-1.22	-0.24	0.17	-2.96	-1.31	0.22	-1.31	-0.62	-0.84	-0.45	0.04	1.98	-1.23	-1.23	3.57	-0.49	0.47	6.06	3.37	1.74	5.37	2.88	6.17	6.24	6.61	8.74	9.19	10.73	10.11	11.16	8.92
June	Average	9.62	14.19	13.70	10.89	5.74	7.08	7.93	9.16	9.12	9.27	9.96	9.92	6.46	4.97	5.72	10.58	9.00	9.73	9.29	10.04	12.99	13.15	11.89	8.96	10.16	10.41	11.09	10.30	8.82	8.91	9.18	n/a
	Max	18.35	17.21	18.35	16.29	7.86	8.61	10.61	12.59	12.02	14.14	12.39	12.61	8.54	7.69	9.81	15.96	11.56	13.89	11.98	14.40	16.60	16.18	16.17	10.91	13.22	14.74	15.50	14.27	12.84	13.81	14.27	n/a
	Min	2.49	10.59	8.24	5.02	3.60	4.69	5.67	6.65	6.01	4.62	7.90	7.56	4.38	3.34	2.49	4.62	6.85	5.92	6.73	5.00	8.04	10.88	7.36	6.73	7.39	4.26	5.03	7.06	6.24	3.97	6.63	n/a
July	Average	11.55	8.60	10.19	9.92	8.30	10.45	11.53	12.42	14.54	15.70	14.02	8.09	9.16	13.05	9.88	8.91	9.10	9.53	12.30	13.89	13.74	10.51	10.34	8.69	7.69	11.13	14.07	15.67	13.65	15.15	14.42	
	Max	21.64	11.49	14.03	11.37	11.02	13.10	16.46	16.07	19.87	21.25	15.74	12.18	15.77	18.39	11.65	13.39	12.14	13.04	17.26	20.62	18.12	13.43	13.53	10.51	10.18	15.68	20.24	21.64	16.80	20.05	21.12	18.91
	Min	3.20	6.70	7.75	8.40	5.64	7.44	7.82	9.58	9.11	6.31	11.43	5.11	3.20	5.74	7.30	5.98	7.15	5.26	6.82	5.49	9.80	7.41	8.44	6.72	5.74	6.57	5.27	7.54	8.20	4.82	7.82	9.42
August	Average	10.81	15.70	15.86	17.32	18.43	16.57	13.24	10.15	9.55	11.78	12.10	9.81	11.49	13.56	14.83	15.77	18.50	14.89	9.32	5.83	5.78	4.85	6.03	7.60	5.86	6.15	4.84	6.00	7.82	8.21	9.23	7.91
	Max	25.27	20.68	19.60	22.68	25.27	20.59	15.72	13.98	12.50	17.12	17.03	13.92	16.95	18.38	18.76	23.76	23.59	17.52	11.40	6.91	7.50	6.75	9.76	10.99	9.06	9.01	10.42	10.72	12.69	13.63	12.67	12.40
	Min	0.43	10.49	12.12	10.77	10.36	12.20	10.89	5.45	7.91	6.49	8.63	7.49	5.25	6.13	10.83	6.80	11.50	12.79	7.37	4.77	4.00	3.02	2.37	4.47	3.99	3.19	0.96	0.43	2.55	0.83	6.51	4.57
September	Average	4.03	6.52	4.62	4.68	6.55	5.45	6.14	7.72	9.80	7.39	6.67	5.69	6.80	6.82	6.80	7.54	6.50	5.55	5.13	2.69	2.03	2.63	-0.55	-3.84	-4.37	-0.37	3.00	0.21	-3.68	2.77	3.95	n/a
	Max	14.31	9.96	6.13	6.04	10.98	9.00	10.29	14.31	13.82	9.58	8.93	9.37	11.37	11.07	10.38	12.89	11.70	11.61	7.14	8.27	8.91	7.68	1.66	-2.15	-2.90	2.62	4.37	2.56	-0.40	6.29	6.56	n/a
	Min	-6.66	3.96	2.76	3.56	2.51	1.07	3.18	0.69	6.88	5.39	3.59	1.86	2.85	2.86	3.73	2.83	1.12	-0.80	2.28	-3.74	-4.70	-3.04	-3.99	-5.12	-6.34	-3.77	1.50	-4.18	-6.66	-0.38	1.56	n/a
October	Average	-2.17	6.62	4.09	0.93	1.48	-0.77	1.92	-0.85	-1.20	-0.93	0.17	-1.15	-3.36	-0.92	-2.27	-4.44	-4.19	-2.60	0.37	-0.78	-2.66	-6.02	-6.12	-6.60	-4.93	-5.47	-4.12	-3.09	-5.24	-2.92	-5.90	-6.18
	Max	8.74	8.74	6.85	3.99	4.23	1.52	3.28	2.62	3.05	1.63	1.77	1.03	-0.52	1.05	-0.82	-0.57	-1.56	-1.14	3.53	0.44	1.24	-0.62	-2.44	-5.05	-3.90	-5.10	-2.05	-2.23	-3.95	-1.00	-1.68	-3.32
	Min	-11.23	5.02	1.06	-4.14	-2.35	-3.06	0.76	-6.97	-6.60	-3.00	-1.30	-3.16	-8.57	-2.09	-5.27	-6.25	-3.94	-1.01	-2.94	-5.01	-11.11	-10.18	-8.16	-5.68	-5.98	-5.17	-4.49	-6.37	-4.34	-11.23	-9.56	
November	Average	-9.52	-4.66	0.51	-2.32	0.08	-3.84	-4.93	-5.72	-7.81	-11.58	-8.72	-8.01	-3.29	-0.44	-7.00	-11.09	-15.40	-20.25	-16.40	-13.72	-12.27	-15.39	-21.41	-9.29	-7.67	-4.40	-10.00	-14.07	-18.29	-11.20	-17.04	n/a
	Max	3.12	-2.34	3.12	0.35	1.29	-0.94	-3.37	-4.89	-3.76	-2.99	-4.30	-6.07	-0.43	1.52	-3.01	-6.26	-13.07	-16.43	-13.86	-11.85	-11.27	-11.62	-18.31	-5.36	-1.62	-2.10	-6.35	-11.07	-14.85	-9.99	-10.53	n/a
	Min	-27.02	-6.49	-2.84	-3.72	-2.21	-9.32	-5.88	-7.00	-12.97	-15.72	-12.01	-9.70	-6.28	-2.37	-9.64	-16.25	-17.43	-24.20	-19.52	-17.86	-13.73	-19.07	-27.02	-15.02	-11.76	-6.62	-12.90	-18.57	-23.64	-14.67	-20.87	n/a
December	Average	-18.58	-24.16	-27.22	-24.43	-11.47	-3.58	-6.66	-13.53	-14.95	-18.32	-21.78	-22.17	-20.26	-21.40	-23.07	-20.78	-19.87	-20.02	-21.43	-21.10	-20.98	-23.21	-19.71	-17.16	-18.00	-14.18	-18.71	-19.23	-19.85	-16.08	-10.86	
	Max	-2.16	-21.05	-22.79	-18.91	-5.00	-2.16	-2.61	-9.79	-13.97	-16.05	-20.54	-20.67	-18.27	-19.66	-21.08	-19.70	-17.97	-17.26	-18.66	-18.40	-17.47	-20.75	-17.39	-18.10	-14.94	-15.10	-11.36	-17.02	-17.37	-16.33	-14.22	-6.00
	Min	-29.25	-28.40	-29.25	-28.47	-21.49	-4.99	-10.80	-15.98	-15.74	-20.24	-22.89	-23.14	-22.53	-25.31	-25.51	-23.16	-21.74	-22.75	-24.96	-23.30	-24.53	-27.26	-27.94	-21.76	-19.51	-21.52	-17.40	-22.64	-21.60	-24.17	-17.32	-14.22

Table G-4: 2010 Grum Climate Station - Monthly Average and Cumulative Precipitation (mm)

Month	Monthly Avg. Precip. (mm)	Monthly Cumulative Precip. (mm)	Grum Daily Precip. (mm)																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
January	0.68	21.00	0.2	0	0.1	0	0.1	0.1	1.4	3	2.2	2.1	4.5	0.5	-0.3	-																	

Grum Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column 'V', while raw instrument numbers are seen in -201

-201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SollHF	SollTZ	SollT3	SollW	SnoD	Precip	Precip (rev)
365	1/1/2010 0:00	2400	-26.24	77.3	2.07	346	-39.4	-10	-7.72	-7.75	0.049	0.203	300.9	0
1	1/1/2010 1:00	100	-26.48	77.4	1.304	348.5	-16.3	-9.96	-8.79	-7.81	0.049	0.204	300.9	0
1	1/1/2010 2:00	200	-25.49	77.7	1.213	339.3	-28.92	-9.73	-8.86	-7.85	0.049	0.203	300.9	0
1	1/1/2010 3:00	300	-25.9	77.5	1.454	340.1	-35.88	-9.56	-8.92	-7.91	0.048	0.203	300.9	0
1	1/1/2010 4:00	400	-26.44	77.3	1.92	344.7	-39.02	-9.54	-8.97	-7.97	0.048	0.202	300.9	0
1	1/1/2010 5:00	500	-26.47	77.2	1.782	344.8	-39.46	-9.59	-9.02	-8.02	0.048	0.198	300.9	0
1	1/1/2010 6:00	600	-26.53	77.5	1.363	344.3	-23.58	-9.58	-9.08	-8.07	0.048	0.202	300.9	0
1	1/1/2010 7:00	700	-25.81	77.8	1.16	341	-14	-9.11	-9.13	-8.11	0.048	0.201	300.9	0
1	1/1/2010 8:00	800	-24.7	78.6	0.725	343.5	-4.228	-9.48	-9.18	-8.16	0.048	0.204	300.9	0
1	1/1/2010 9:00	900	-24.34	79.2	0.095	290.6	-7.08	-9.11	-9.22	-8.2	0.048	0.205	300.9	0
1	1/1/2010 10:00	1000	-24.07	79.5	0.141	330.8	-6.294	-8.71	-9.26	-8.25	0.048	0.204	300.9	0
1	1/1/2010 11:00	1100	-24.85	79.2	0.65	201.7	-4.76	-8.89	-9.28	-8.29	0.048	0.201	300.9	0
1	1/1/2010 12:00	1200	-24.76	79.3	0.141	193.1	-5.12	-8.08	-9.3	-8.33	0.048	0.204	300.9	0
1	1/1/2010 13:00	1300	-24.31	79.3	0.482	183.2	-7.83	-7.84	-9.31	-8.36	0.048	0.202	301	0.1
1	1/1/2010 14:00	1400	-24.19	79.3	0.372	211.3	-10.66	-7.6	-9.31	-8.39	0.048	0.198	301	0.1
1	1/1/2010 15:00	1500	-23.73	79.5	0.426	285.4	-11.27	-7.4	-9.31	-8.41	0.048	0.199	301	0.1
1	1/1/2010 16:00	1600	-24.71	79	0.325	193	-7.55	-7.24	-9.31	-8.43	0.048	0.204	301	0.1
1	1/1/2010 17:00	1700	-24.29	79.5	0.293	297.3	-9.52	-7.09	-9.3	-8.45	0.048	0.205	301	0.1
1	1/1/2010 18:00	1800	-24.71	79	0.391	267.3	-14.38	-7.09	-9.3	-8.47	0.048	0.207	301	0.2
1	1/1/2010 19:00	1900	-24.75	78.6	1.081	313.4	-24.01	-7.25	-9.3	-8.48	0.048	0.206	301	0.2
1	1/1/2010 20:00	2000	-25.04	78.6	1.157	318.6	-18.9	-7.47	-9.3	-8.49	0.048	0.207	301	0.2
1	1/1/2010 21:00	2100	-24.47	78.6	1.156	319.1	-13.47	-7.75	-9.3	-8.5	0.048	0.207	301	0.2
1	1/1/2010 22:00	2200	-24.23	78.4	1.156	314.1	-13.24	-7.92	-9.32	-8.51	0.048	0.207	301	0.2
1	1/1/2010 23:00	2300	-24.58	78.1	1.358	323	-19.08	-7.94	-9.34	-8.53	0.048	0.208	301	0.2
2	1/2/2010 0:00	2400	-24.64	77.7	1.797	338.1	-17.75	-7.72	-9.36	-8.54	0.048	0.207	301	0.2
2	1/2/2010 1:00	100	-25.77	77.7	1.504	313.8	-24.5	-7.71	-9.38	-8.56	0.048	0.208	301	0.2
2	1/2/2010 2:00	200	-25.31	77.5	1.247	321.3	-24.01	-7.76	-9.4	-8.58	0.048	0.207	301	0.2
2	1/2/2010 3:00	300	-25.74	77.1	1.813	321.8	-28.01	-7.86	-9.43	-8.6	0.048	0.207	301	0.2
2	1/2/2010 4:00	400	-26.83	77.5	1.265	322.7	-28.73	-8.18	-9.45	-8.62	0.048	0.201	301	0.2
2	1/2/2010 5:00	500	-27.21	77.6	1.223	331.5	-30.18	-8.44	-9.49	-8.64	0.048	0.206	301	0.2
2	1/2/2010 6:00	600	-27.54	77.2	1.695	335.3	-30.94	-8.82	-9.53	-8.66	0.048	0.204	301	0.2
2	1/2/2010 7:00	700	-27.51	77.1	1.022	330	-28.81	-9.08	-9.58	-8.69	0.048	0.207	301	0.2
2	1/2/2010 8:00	800	-28.07	76.5	1.063	339.3	-30.31	-9.4	-9.63	-8.71	0.048	0.203	301	0.2
2	1/2/2010 9:00	900	-28.07	76.5	1.005	331.2	-27.55	-9.38	-9.69	-8.75	0.048	0.204	301	0.2
2	1/2/2010 10:00	1000	-28.46	76.8	1.863	343	-31.82	-9.55	-9.74	-8.79	0.048	0.201	301	0.2
2	1/2/2010 11:00	1100	-28.55	76.4	2.095	343.8	-30.52	-9.69	-9.8	-8.82	0.048	0.206	301	0.2
2	1/2/2010 12:00	1200	-27.85	76.1	1.353	326.1	-29.5	-9.76	-9.87	-8.86	0.048	0.203	301	0.2
2	1/2/2010 13:00	1300	-27.43	75.1	1.543	343.8	-30.47	-9.78	-9.93	-8.9	0.048	0.204	301	0.2
2	1/2/2010 14:00	1400	-26.26	75.1	1.009	335.5	-40.53	-9.77	-9.98	-8.94	0.048	0.203	301	0.2
2	1/2/2010 15:00	1500	-25.69	75.2	0.887	298.5	-45.57	-9.72	-10.04	-8.99	0.048	0.2	301	0.2
2	1/2/2010 16:00	1600	-25.33	75.1	1.441	329	-36.4	-9.8	-10.07	-9.01	0.048	0.203	301	0.2
2	1/2/2010 17:00	1700	-27.83	75.9	1.436	321.6	-27.98	-9.79	-10.14	-9.07	0.048	0.204	301	0.2
2	1/2/2010 18:00	1800	-28.12	76.8	1.353	332.6	-28.31	-9.78	-10.18	-9.12	0.048	0.202	301	0.2
2	1/2/2010 19:00	1900	-28.6	75.9	1.054	333.4	-27.63	-9.79	-10.23	-9.16	0.048	0.205	301	0.2
2	1/2/2010 20:00	2000	-29.06	76	1.17	321.8	-26.46	-9.78	-10.27	-9.21	0.047	0.201	301	0.2
2	1/2/2010 21:00	2100	-29.28	75.3	1.313	334.4	-27.02	-10.11	-10.32	-9.23	0.047	0.206	301	0.2
2	1/2/2010 22:00	2200	-28.82	75.9	1.582	339.3	-27.14	-10.19	-10.37	-9.27	0.047	0.203	301	0.2
2	1/2/2010 23:00	2300	-28.86	75.7	1.491	341.1	-26.96	-10.19	-10.42	-9.31	0.047	0.206	301	0.2
3	1/3/2010 0:00	2400	-28.9	75.1	1.078	339.3	-27.14	-10.18	-10.48	-9.36	0.047	0.201	301	0.2
3	1/3/2010 1:00	100	-28.77	75.9	1.529	338.2	-27.14	-10.18	-10.53	-9.4	0.047	0.207	301	0.2
3	1/3/2010 2:00	200	-28.34	76.1	1.444	336.1	-25.91	-10.19	-10.58	-9.44	0.047	0.203	301	0.2
3	1/3/2010 3:00	300	-28.19	76.1	1.39	331.3	-23.05	-10.19	-10.63	-9.48	0.047	0.205	301	0.2
3	1/3/2010 4:00	400	-27.89	76	1.082	330.3	-21.53	-10.07	-10.67	-9.52	0.047	0.206	301	0.2
3	1/3/2010 5:00	500	-28.14	76	1.147	327.1	-22.39	-9.98	-10.72	-9.56	0.047	0.207	301	0.2
3	1/3/2010 6:00	600	-28.73	75.4	0.588	245	-21.75	-10.14	-10.76	-9.6	0.047	0.206	301	0.2
3	1/3/2010 7:00	700	-29.11	75.1	0.736	318.6	-24.04	-10.33	-10.81	-9.64	0.047	0.206	301	0.2
3	1/3/2010 8:00	800	-28.8	75.2	0.878	324.6	-23.63	-10.4	-10.85	-9.69	0.047	0.205	301	0.2
3	1/3/2010 9:00	900	-28.92	75	1.021	317.8	-22.27	-10.52	-10.89	-9.72	0.047	0.203	301	0.2
3	1/3/2010 10:00	1000	-29.09	74.9	0.953	331.3	-23.75	-10.5	-10.93	-9.76	0.047	0.203	301	0.2
3	1/3/2010 11:00	1100	-28.4	75.8	0.519	309.7	-23.51	-10.39	-10.97	-9.8	0.047	0.208	301	0.2
3	1/3/2010 12:00	1200	-28.1	75.6	0.818	328.5	-24.5	-10.4	-11.01	-9.84	0.047	0.204	301	0.2
3	1/3/2010 13:00	1300	-28.65	76.4	1.079	282.1	-29.26	-10.41	-11.05	-9.87	0.047	0.203	301	0.2
3	1/3/2010 14:00	1400	-26.24	75.9	1.002	324.6	-25.92	-10.25	-11.08	-9.9	0.047	0.202	301	0.2
3	1/3/2010 15:00	1500	-25.45	76.6	0.915	335.3	-29.96	-10.07	-11.11	-9.94	0.047	0.202	301	0.2
3	1/3/2010 16:00	1600	-25.08	76.7	0.514	264.4	-30.25	-9.81	-11.14	-9.98	0.047	0.203	301	0.2
3	1/3/2010 17:00	1700	-25.72	76.1	0.86	284.2	-29.92	-9.77	-11.15	-9.99	0.047	0.202	301	0.2
3	1/3/2010 18:00	1800	-26.8	77	0.578	323.8	-20.68	-9.78	-11.18	-10.04	0.047	0.207	301	0.2
3	1/3/2010 19:00	1900	-26.54	77.2	0.816	318.2	-19.99	-9.78	-11.2	-10.07	0.047	0.204	301	0.2
3	1/3/2010 20:00	2000	-26.06	77.7	0.828	316	-22.43	-9.61	-11.22	-10.09	0.047	0.207	301	0.2
3	1/3/2010 21:00	2100	-25.9	78.1	1.023	321.2	-21.8	-9.61	-11.24	-10.1	0.047	0.201	301	0.2
3	1/3/2010 22:00	2200	-25.86	77.5	0.884	313.1	-19.14	-9.59	-11.26	-10.14	0.047	0.208	301	0.2
3	1/3/2010 23:00	2300	-25.41	77.8	0.809	302.4	-18.33	-9.57	-11.27	-10.17	0.047	0.209	301	0.2
3	1/4/2010 0:00	2400	-25.24	77.9	0.882	327.7	-18.9	-9.38	-11.29	-10.19	0.047	0.206	301	0.2
4	1/4/2010 1:00	100	-24.98	78.5	1.493	339.3	-19.23	-9.38	-11.31	-10.21	0.047	0.201	301	0.2
4	1/4/2010 2:00	200	-24.58	78.7	1.213	334.6	-18.69	-9.11	-11.32	-10.23	0.047	0.205	301	0.2
4	1/4/2010 3:00	300	-24.16	79.2	1.115	334.9	-19.55	-8.96	-11.33	-10.26	0.047	0.206	301	0.2
4	1/4/2010 4:00	400	-24.25	79	1.104	315.2	-18.61	-8.77	-11.34	-10.28	0.047	0.206	301	0.2
4	1/4/2010 5:00	500	-24.5	79	0.856	311	-17.31	-8.76	-11.36	-10.29	0.047	0.205	301	0.2
4	1/4/2010 6:00	600	-24.24	79.4	1.166	338.3	-17.15	-8.74	-11.37	-10.31	0.047	0.206	301	0.2
4	1/4/2010 7:00	700												



Grun Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column 'V', while rain instrument numbers are seen in -201

-201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SollHF	SollTZ	SollT3	SollW	SnoD	Precip	Precip (rev)
7	1/7/2010 0:00	100	-9.68	60.95	1.805	186	-24.12	-3.3	-10.15	-9.79	0.048	0.21	301.4	0.5
7	1/7/2010 2:00	200	-10.69	65.18	1.716	195.6	-16.02	-3.129	-10.13	-9.77	0.047	0.21	301.5	0.6
7	1/7/2010 4:00	300	-11.64	69.74	1.147	311.3	-26.66	-3.129	-10.07	-9.75	0.047	0.207	301.5	0.6
7	1/7/2010 6:00	400	-11.2	72.8	1.163	321.3	-27.26	-3.191	-10.05	-9.71	0.048	0.203	301.5	0.6
7	1/7/2010 8:00	500	-11.58	76.3	1.146	333.6	-32.73	-3.345	-10.03	-9.69	0.048	0.21	301.5	0.6
7	1/7/2010 10:00	600	-10.74	76.7	1.271	241.5	-8.4	-3.547	-10.01	-9.67	0.048	0.21	301.5	0.6
7	1/7/2010 12:00	700	-10.41	78.5	0.969	167.7	-15.04	-3.411	-10.0	-9.66	0.048	0.21	301.5	0.6
7	1/7/2010 14:00	800	-10.22	81.5	1.022	164.1	-25.05	-3.346	-10	-9.64	0.048	0.21	301.5	0.6
7	1/7/2010 16:00	900	-10.91	84.9	2.989	171.5	-25.63	-3.308	-9.98	-9.63	0.048	0.209	301.5	0.6
7	1/7/2010 18:00	1000	-9.45	84.6	2.104	184.2	-7.77	-3.323	-9.97	-9.61	0.048	0.211	301.4	0.5
7	1/7/2010 20:00	1100	-8.21	84.7	0.93	160.3	-15.04	-3.398	-9.95	-9.6	0.048	0.209	301.4	0.5
7	1/7/2010 22:00	1200	-9.96	86.8	2.969	175.6	-5.251	-3.617	-9.93	-9.58	0.048	0.211	301.5	0.6
7	1/7/2010 14:00	1400	-10.2	87.7	2.68	185.3	-6.898	-2.182	-9.9	-9.57	0.048	0.208	301.5	0.6
7	1/7/2010 15:00	1500	-10.17	87.8	2.773	180.1	1.136	-1.803	-9.86	-9.55	0.048	0.209	301.5	0.6
7	1/7/2010 16:00	1600	-10.57	89.5	3.039	176	5.199	-1.58	-9.82	-9.53	0.048	0.208	301.6	0.7
7	1/7/2010 17:00	1700	-9.83	92.4	2.962	177.8	5.519	-1.357	-9.77	-9.51	0.048	0.208	302.7	1.8
7	1/7/2010 18:00	1800	-8.46	92.5	2.596	174.9	2.94	-1.238	-9.72	-9.48	0.048	0.215	303.3	2.4
7	1/7/2010 19:00	1900	-8.83	92.4	3.084	178.3	1.463	-1.002	-9.67	-9.45	0.048	0.228	303.6	2.7
7	1/7/2010 20:00	2000	-9.21	92.5	2.85	172.4	3.603	-0.834	-9.63	-9.42	0.048	0.225	303.4	2.5
7	1/7/2010 21:00	2100	-8.83	92.5	2.797	180.2	-2.058	-0.791	-9.58	-9.39	0.048	0.228	303.1	2.2
7	1/7/2010 22:00	2200	-9.17	92.4	2.561	199.7	-2.11	-0.637	-9.53	-9.35	0.048	0.225	303	2.1
7	1/7/2010 23:00	2300	-8.77	92.8	2.044	187	3.22	-0.686	-9.48	-9.32	0.048	0.225	302.8	1.9
7	1/8/2010 0:00	2400	-8.19	92.3	2.067	171.4	2.27	-0.677	-9.47	-9.29	0.048	0.225	302.6	1.7
8	1/8/2010 1:00	100	-7.89	93.3	1.235	186.3	-6.475	-0.628	-9.30	-9.25	0.048	0.226	302.4	1.5
8	1/8/2010 2:00	200	-8	93	1.195	251.1	-8.7	-0.644	-9.34	-9.22	0.048	0.224	302.4	1.5
8	1/8/2010 3:00	300	-7.88	93.5	1.422	140.8	-3.135	-0.667	-9.3	-9.18	0.048	0.225	302.4	1.5
8	1/8/2010 4:00	400	-7.68	93.3	1.016	246	-12.17	-0.827	-9.26	-9.15	0.048	0.227	302.4	1.5
8	1/8/2010 5:00	500	-9.34	1.261	135.3	-1.793	-0.823	-0.23	-9.12	-0.048	0.225	302.4	1.5	
8	1/8/2010 6:00	600	-7.32	93.6	1.518	174	3.09	-0.828	-9.19	-0.09	0.048	0.225	302.5	1.6
8	1/8/2010 7:00	700	-6.988	94	0.8	247.8	2.187	-0.631	-9.15	-0.05	0.048	0.228	302.9	2
8	1/8/2010 8:00	800	-6.586	94.1	0.506	196.7	-0.014	-0.499	-9.11	-0.02	0.048	0.231	303.2	2.3
8	1/8/2010 9:00	900	-6.941	93.8	0.966	189.8	0.286	-0.411	-9.08	-0.01	0.048	0.233	303.5	2.6
8	1/8/2010 10:00	1000	-6.925	93.9	0.451	336.7	-1.109	-0.225	-9.04	-0.96	0.048	0.235	303.7	2.8
8	1/8/2010 11:00	1100	-6.42	94.3	0.403	68.24	-0.149	-0.209	-8.99	-8.93	0.048	0.243	304.3	3.4
8	1/8/2010 12:00	1200	-6.304	94.3	0.417	6.18	-1.868	-0.209	-8.95	-8.9	0.048	0.249	304.8	3.9
8	1/8/2010 13:00	1300	-6.34	94.5	0.34	304	-8.38	-0.198	-8.91	-8.86	0.048	0.251	305.1	4.1
8	1/8/2010 14:00	1400	-5.963	94.4	0.969	332.5	-6.584	-0.01	-8.87	-8.83	0.048	0.253	305.3	4.4
8	1/8/2010 15:00	1500	-6.031	94.3	0.903	179.3	-8.16	0	-8.83	-8.8	0.048	0.252	305.3	4.4
8	1/8/2010 16:00	1600	-6.169	94.5	0.914	327.5	-9.43	0	-8.79	-8.77	0.048	0.253	305.3	4.4
8	1/8/2010 17:00	1700	-6.05	92.6	0.296	271.4	2.23	-0.27	-8.75	-8.72	0.048	0.253	305.3	4.4
8	1/8/2010 18:00	1800	-3.75	94.4	2.865	304.7	-11.8	0	-8.71	-8.7	0.048	0.253	305.3	4.4
8	1/8/2010 19:00	1900	-3.633	92.7	3.128	302.9	-12.22	0	-8.67	-8.67	0.049	0.253	305.3	4.4
8	1/8/2010 20:00	2000	-3.899	92.7	4.68	304.1	-11.49	0	-8.64	-8.64	0.049	0.243	305.3	4.4
8	1/8/2010 21:00	2100	-4.128	92.6	4.138	295.1	-12.95	0.027	-8.6	-8.58	0.049	0.246	305.4	4.5
8	1/8/2010 22:00	2200	-4.346	91.9	3.532	295.1	-7.83	0.208	-8.56	-8.57	0.049	0.241	305.4	4.5
8	1/8/2010 23:00	2300	-4.365	91.3	2.279	295.1	-6.817	0.209	-8.52	-8.54	0.049	0.241	305.6	4.7
8	1/9/2010 0:00	2400	-4.468	90.1	2.816	300.1	-8.16	0.34	-8.48	-8.51	0.049	0.239	305.6	4.7
8	1/9/2010 1:00	100	-4.594	89.2	2.654	298.3	-7.63	0.44	-8.47	-8.47	0.049	0.242	305.6	4.7
8	1/9/2010 2:00	200	-5.647	88.4	2.004	285.6	-0.394	0.417	-8.4	-8.44	0.049	0.242	305.6	4.7
8	1/9/2010 3:00	300	-8.27	91.4	1.055	177.1	5.582	0.399	-8.36	-8.41	0.049	0.24	305.7	4.8
8	1/9/2010 4:00	400	-8.2	93.8	1.014	257.3	-8.26	0.217	-8.33	-8.37	0.049	0.247	306	5.1
8	1/9/2010 5:00	500	-9.2	1.253	0.523	0.523	0.193	0.523	0.193	0.523	0.049	0.252	306.3	5.7
8	1/9/2010 6:00	600	-7.95	91.8	0.878	287.6	4.669	0.003	-8.26	-8.31	0.049	0.251	306.6	5.7
8	1/9/2010 7:00	700	-10.55	92.2	0.751	151.9	3.733	0	-8.23	-8.28	0.049	0.251	306.6	5.7
8	1/9/2010 8:00	800	-11.07	91.6	0.64	186.7	-0.153	-8.21	-8.25	0.049	0.251	306.6	5.7	
8	1/9/2010 9:00	900	-10.35	92.1	0.817	189.7	1.333	-0.267	-8.18	-8.23	0.049	0.249	306.6	5.7
8	1/9/2010 10:00	1000	-10.91	92.1	0.644	318.1	-0.86	-0.411	-8.16	-8.21	0.049	0.249	306.6	5.7
8	1/9/2010 11:00	1100	-9.88	92	0.409	174	-0.272	-0.503	-8.14	-8.17	0.049	0.25	306.6	5.7
8	1/9/2010 12:00	1200	-9.92	92.2	0.334	262.7	-4.282	-0.626	-8.12	-8.15	0.049	0.251	306.7	5.8
8	1/9/2010 13:00	1300	-9.7	91.8	0.488	187	-8.55	-0.626	-8.1	-8.12	0.049	0.25	306.7	5.8
8	1/9/2010 14:00	1400	-9.08	91.6	0.313	184.3	-1.83	-0.626	-8.08	-8.08	0.049	0.249	307	6.1
8	1/9/2010 15:00	1500	-10.43	91.4	0.306	163.3	-9.94	-0.626	-8.06	-8.06	0.049	0.252	307.1	6.2
8	1/9/2010 16:00	1600	-11.46	90.2	1.064	214.4	0.907	-0.626	-8.04	-8.06	0.049	0.252	307.1	6.2
8	1/9/2010 17:00	1700	-12.35	90.1	0.41	156.6	-0.726	-0.638	-8.03	-8.04	0.049	0.256	307.6	6.7
8	1/9/2010 18:00	1800	-12.91	89.8	0.619	162.2	-2.248	-0.638	-8.01	-8.02	0.049	0.266	307.6	6.7
8	1/9/2010 19:00	1900	-13.29	89.2	0.395	174.3	2.503	-0.867	-7.99	-8	0.049	0.261	307.6	6.7
8	1/9/2010 20:00	2000	-14	88.7	0.586	165.7	1.509	-1.043	-7.98	-7.98	0.049	0.25	307.9	7
8	1/9/2010 21:00	2100	-14.32	88.5	0.331	171.4	0.469	-1.102	-7.97	-7.96	0.049	0.269	307.9	7
8	1/9/2010 22:00	2200	-14.91	88.2	0.365	220.4	-3.246	-1.252	-7.95	-7.95	0.049	0.266	307.9	6.9
8	1/9/2010 23:00	2300	-15.51	89.1	0.416	251.7	4.391	-1.256	-7.94	-7.93	0.049	0.247	307.8	6.9
8	1/10/2010 0:00	2400	-13.19	89.6	0.873	305.9	-4.379	-1.428	-7.93	-7.91	0.049	0.257	307.9	7
10	1/10/2010 1:00	100	-13.74	88.7	2.75	307.8	0.418	-1.457	-7.92	-7.9	0.049	0.242	307.9	7
10	1/10/2010 2:00	200	-13.94	87.9	1.937	313.3	-3.928	-1.41	-7.89	-7.88	0.049	0.241	307.8	6.9
10	1/10/2010 3:00	300	-16.44	86.7	0.648	215.9	1.814	-1.419	-7.91	-7.87	0.049	0.242	307.8	6.9
10	1/10/2010 4:00	400	-16.32	87	0.874	307.4	-1.074	-1.46	-7.9	-7.86	0.049	0.243	307.8	6.9
10	1/10/2010 5:00	500	-16.2	87.4	0.909	254.9	-2.554	-1.463	-7.9	-7.85	0.049	0.247	307.8	6.9
10	1/10/2010 6:00	600	-16.4	86.7	0.417	202.6	0.866	-1.417	-7.89	-7.84	0.049	0.247	307.8	6.9
10	1/10/2010 7:00	700	-16.79	86.5	0.395	241.1	-0.552	-1.669	-7.89	-7.83	0.049	0.247	307.9	7
10	1/10/2010 8:00	800	-16.49	86.7	0.467	323.7	0.84							



Grum Meteorological Data

January 1, 2010 - December 31, 2010



Grum Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column 'V', while raw instrument numbers are seen in -201

-201

118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SollHF	SollT2	SollT3	Soll W	SnoD	Precip (rev)	
13	1/13/2010 2:00	200	-23.28	80.7	0.918	153.4	-2.708	-2.34	-7.65	-7.48	0.049	0.389	315.1	14.2
13	1/13/2010 3:00	300	-23.07	80.7	1.365	178.3	-1.161	-2.493	-7.65	-7.47	0.049	0.388	315.1	14.2
13	1/13/2010 4:00	400	-22.75	81.1	0.693	191.6	-0.391	-2.5	-7.65	-7.47	0.049	0.387	315.1	14.2
13	1/13/2010 5:00	500	-23.4	81.1	1.481	172.1	-0.385	-2.5	-7.65	-7.47	0.049	0.386	315.1	14.2
13	1/13/2010 6:00	600	-23.04	80.7	2.128	184.9	-0.289	-2.5	-7.65	-7.46	0.049	0.385	315.1	14.2
13	1/13/2010 7:00	700	-23.1	80.9	0.808	328	-3.018	-2.507	-7.65	-7.46	0.049	0.386	315.1	14.2
13	1/13/2010 8:00	800	-22.39	81.3	1.579	186.7	-0.278	-2.667	-7.65	-7.46	0.049	0.384	315.1	14.2
13	1/13/2010 9:00	900	-22.71	82.1	0.986	212.7	-0.913	-2.789	-7.65	-7.46	0.049	0.384	315.1	14.2
13	1/13/2010 10:00	1000	-22.21	81.7	0.682	220.6	-2.288	-2.708	-7.65	-7.45	0.049	0.384	315.1	14.2
13	1/13/2010 11:00	1100	-21.84	81.9	0.872	216.6	-1.918	-2.708	-7.65	-7.45	0.049	0.384	315.1	14.2
13	1/13/2010 12:00	1200	-21.57	82.1	1.434	190.7	-3.32	-2.711	-7.65	-7.45	0.049	0.382	315.1	14.2
13	1/13/2010 13:00	1300	-22.3	82.3	2.04	223.6	-2.711	-2.711	-7.65	-7.45	0.049	0.381	315.1	14.2
13	1/13/2010 14:00	1400	-20.53	83.1	1.212	200.3	-17.11	-2.712	-7.65	-7.44	0.049	0.38	315	14.1
13	1/13/2010 15:00	1500	-18.73	84.2	1.315	174.2	-13.62	-2.713	-7.64	-7.44	0.049	0.379	315	14.1
13	1/13/2010 16:00	1600	-19.59	83.6	1.373	186.3	-8.21	-2.712	-7.64	-7.44	0.049	0.381	315	14.1
13	1/13/2010 17:00	1700	-19.68	83.4	1.958	182.5	1.463	-2.712	-7.64	-7.44	0.049	0.38	315	14.1
13	1/13/2010 18:00	1800	-19.03	84.8	1.512	205.7	-3.732	-2.712	-7.64	-7.43	0.049	0.379	315	14.1
13	1/13/2010 19:00	1900	-18.38	85.1	1.187	200	-1.892	-2.712	-7.63	-7.43	0.049	0.379	315	14.1
13	1/13/2010 20:00	2000	-17.93	85.3	1.216	200.6	0.034	-2.713	-7.63	-7.43	0.049	0.379	314.9	14
13	1/13/2010 21:00	2100	-17.11	86.1	0.9	187.5	-0.195	-2.712	-7.63	-7.43	0.049	0.377	315	14.1
13	1/13/2010 22:00	2200	-16.95	86	0.796	251.7	1.161	-2.616	-7.62	-7.42	0.049	0.371	314.9	14
13	1/13/2010 23:00	2300	-17.34	86	0.909	188.4	-2.456	-2.504	-7.61	-7.42	0.049	0.372	314.8	13.9
13	1/14/2010 0:00	2400	-16.66	86.5	0.674	232.7	-1.207	-2.504	-7.61	-7.42	0.049	0.372	314.8	13.9
14	1/14/2010 1:00	100	-15.1	87.1	0.768	215.3	-0.567	-2.71	-7.61	-7.41	0.049	0.37	314.7	13.8
14	1/14/2010 2:00	200	-14.59	88.1	0.533	325.5	-0.663	-3.302	-7.59	-7.4	0.049	0.37	314.7	13.8
14	1/14/2010 3:00	300	-14.01	88.7	0.583	230.1	-0.306	-2.295	-7.58	-7.4	0.049	0.368	314.6	13.7
14	1/14/2010 4:00	400	-13.54	89.9	0.855	318	-1.867	-2.288	-7.57	-7.39	0.049	0.368	314.5	13.6
14	1/14/2010 5:00	500	-13.5	89.5	0.561	212.2	-0.754	-2.105	-7.56	-7.38	0.049	0.367	314.4	13.6
14	1/14/2010 6:00	600	-12.43	89.9	0.628	335.3	-1.076	-2.086	-7.55	-7.38	0.049	0.366	314.3	13.4
14	1/14/2010 7:00	700	-11.91	90.3	0.533	314.6	-0.959	-2.042	-7.54	-7.37	0.049	0.365	314.2	13.3
14	1/14/2010 8:00	800	-11.51	90.5	0.631	265.5	-0.282	-1.878	-7.52	-7.36	0.049	0.367	314.3	13.4
14	1/14/2010 9:00	900	-11.27	90.7	0.949	314.4	-1.172	-1.877	-7.51	-7.35	0.049	0.367	314.3	13.4
14	1/14/2010 10:00	1000	-11.84	90.8	0.984	236.4	-0.086	-1.771	-7.51	-7.35	0.049	0.367	314.3	13.4
14	1/14/2010 11:00	1100	-11.6	90.3	0.931	233.8	1.039	-1.669	-7.49	-7.34	0.049	0.366	314.4	13.5
14	1/14/2010 12:00	1200	-11.5	90.7	1.124	189.8	-5.562	-1.669	-7.47	-7.33	0.049	0.365	314.5	13.6
14	1/14/2010 13:00	1300	-10.56	91.2	1.269	169	-1.757	-1.625	-7.46	-7.32	0.049	0.367	314.7	13.8
14	1/14/2010 14:00	1400	-9.83	91.3	1.502	172.6	-1.822	-1.461	-7.44	-7.31	0.049	0.367	314.7	13.8
14	1/14/2010 15:00	1500	-9.37	91.4	1.549	188.8	-8.21	-1.46	-7.42	-7.3	0.049	0.363	314.7	13.8
14	1/14/2010 16:00	1600	-10.12	91.4	1.346	197.3	-8.16	-1.46	-7.41	-7.29	0.049	0.361	314.8	13.9
14	1/14/2010 17:00	1700	-10.89	91.1	1.561	204.6	-2.893	-1.46	-7.39	-7.28	0.049	0.364	314.8	13.9
14	1/14/2010 18:00	1800	-10.84	91.1	1.312	195.6	-1.657	-1.46	-7.37	-7.27	0.049	0.364	314.8	13.9
14	1/14/2010 19:00	1900	-10.51	91.9	1.297	186.2	-5.991	-1.382	-7.35	-7.25	0.049	0.362	314.8	13.9
14	1/14/2010 20:00	2000	-9.51	92	1.421	188.7	1.745	-1.402	-7.34	-7.24	0.049	0.36	314.8	13.9
14	1/14/2010 21:00	2100	-8.88	91.6	1.636	184	1.702	-1.44	-7.32	-7.23	0.05	0.36	314.7	13.8
14	1/14/2010 22:00	2200	-9.21	92.8	1.238	182.7	-2.192	-1.44	-7.31	-7.23	0.05	0.359	314.7	13.8
14	1/14/2010 23:00	2300	-9.14	92.5	2.513	168.1	-1.04	-1.415	-7.29	-7.2	0.05	0.358	314.7	13.8
14	1/15/2010 0:00	2400	-8.86	92.3	1.923	173.4	2.924	-1.368	-7.27	-7.19	0.05	0.356	314.8	13.9
15	1/15/2010 1:00	100	-8.85	91.9	0.893	189.3	-2.085	-1.38	-7.25	-7.17	0.05	0.356	314.9	14
15	1/15/2010 2:00	200	-8.51	92.1	1.21	197.3	-1.921	-1.351	-7.24	-7.16	0.05	0.351	314.9	14
15	1/15/2010 3:00	300	-10.17	91.9	0.805	182.8	-0.643	-1.329	-7.23	-7.15	0.05	0.351	314.9	14
15	1/15/2010 4:00	400	-10.31	91.4	1.149	180.8	1.974	-1.274	-7.21	-7.14	0.05	0.351	314.9	14
15	1/15/2010 5:00	500	-10.82	91.4	1.233	175.1	-2.567	-1.257	-7.2	-7.12	0.05	0.334	315	14.1
15	1/15/2010 6:00	600	-10.83	91.8	1.567	192.1	-0.815	-1.256	-7.18	-7.11	0.05	0.334	315	14.1
15	1/15/2010 7:00	700	-10.37	91.3	1.767	192.2	2.899	-1.327	-7.17	-7.11	0.05	0.339	315.1	14.2
15	1/15/2010 8:00	800	-11.09	91.2	1.527	192.1	-3.311	-1.458	-7.16	-7.09	0.05	0.359	315.1	14.2
15	1/15/2010 9:00	900	-10.45	91.5	1.125	192.1	-0.438	-1.46	-7.14	-7.07	0.05	0.351	315.1	14.2
15	1/15/2010 10:00	1000	-9.81	92.2	1.072	141.8	-1.138	-1.478	-7.13	-7.06	0.05	0.353	315.1	14.2
15	1/15/2010 11:00	1100	-9.84	92	1.088	160.4	0.578	-1.653	-7.12	-7.05	0.05	0.348	315.2	14.3
15	1/15/2010 12:00	1200	-9.88	91.9	0.824	184.9	-3.207	-1.669	-7.11	-7.04	0.05	0.347	315.2	14.3
15	1/15/2010 13:00	1300	-9.44	92.2	0.93	174.6	-0.907	-1.668	-7.1	-7.03	0.05	0.347	315.2	14.3
15	1/15/2010 14:00	1400	-9.03	92.3	0.637	192.2	-8.64	-1.588	-7.09	-7.02	0.05	0.347	315.3	14.4
15	1/15/2010 15:00	1500	-8.65	92	0.485	222.7	-0.877	-1.588	-7.08	-7.01	0.05	0.346	315.3	14.4
15	1/15/2010 16:00	1600	-8.85	92.5	0.069	321.9	-10.26	-1.46	-7.07	-6.997	0.05	0.347	315.5	14.6
15	1/15/2010 17:00	1700	-8.94	92.5	0.769	312.6	-2.524	-1.46	-7.06	-6.986	0.05	0.337	315.7	14.8
15	1/15/2010 18:00	1800	-8.38	92.9	1.872	326.1	-2.639	-1.406	-7.04	-6.976	0.05	0.345	315.8	14.9
15	1/15/2010 19:00	1900	-8.24	92.8	2.681	330	-0.56	-1.403	-7.03	-6.971	0.05	0.354	315.8	14.9
15	1/15/2010 20:00	2000	-8.53	92.5	2.744	325.3	-0.96	-1.247	-7.02	-6.955	0.05	0.357	315.9	15
15	1/15/2010 21:00	2100	-8.24	92.7	2.477	327.3	-1.83	-1.062	-7.01	-6.945	0.05	0.359	316	15.1
15	1/15/2010 22:00	2200	-7.63	92.6	2.289	315.4	-1.63	-1.043	-6.996	-6.933	0.05	0.359	316	15.1
15	1/15/2010 23:00	2300	-7.21	92.7	1.427	232.7	-1.497	-1.043	-6.983	-6.921	0.05	0.362	316.1	15.2
15	1/16/2010 0:00	2400	-8.02	92.5	1.063	245.4	1.307	-1.043	-6.973	-6.913	0.05	0.362	316.1	15.1
16	1/16/2010 1:00	100	-7.91	92.9	1.04	81.8	-1.527	-1.041	-6.963	-6.902	0.05	0.362	316.1	15.2
16	1/16/2010 2:00	200	-7.61	92.7	1.271	153.8	0.445	-1.013	-6.951	-6.892	0.05	0.36	316.1	15.2
16	1/16/2010 3:00	300	-7.8	92.8	1.247	140	1.921	-1.021	-6.941	-6.891	0.05	0.361	316.1	15.2
16	1/16/2010 4:00	400	-8.56	91.8	0.827	149.5	-1.782	-0.982	-6.932	-6.874	0.05	0.36	316.2	15.3
16	1/16/2010 5:00	500	-7.7	88	2.584	76.3	-10.41	-1.01	-6.92	-6.863	0.05	0.361	316.2	15.3
16	1/16/2010 6:00	600	-7.41	87.3	1.869	97.9	-10.94	-1.04	-6.908	-6.852	0.05			



Grum Meteorological Data
January 1, 2010 - December 31, 2010



Grum Climate Station - 2010 data
Note: Cumulative precipitation is calculated in column 'V', while raw instrument numbers are seen in

-201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SollHF	SollTZ	SollT3	Soll W	SnoD	Precip	Precip (rev)
19	1/19/2010 0:00	300	-6.644	93.7	4.167	107.7	-5.923	-1.043	-6.231	-6.176	0.05	0.357	319.8	18.9
19	1/19/2010 4:00	400	-6.675	93.8	3.268	124.6	-6.991	-1.043	-6.221	-6.171	0.05	0.357	319.9	19
19	1/19/2010 8:00	500	-6.600	93.6	2.906	126.2	-7.056	-1.046	-6.207	-6.165	0.05	0.356	319.9	19
19	1/19/2010 12:00	600	-6.534	93.5	1.317	126.6	-18.37	-0.87	-6.194	-6.158	0.051	0.356	319.9	19
19	1/19/2010 16:00	700	-7.34	93.2	0.962	153	-30.83	-0.834	-6.183	-6.152	0.05	0.353	319.9	19
19	1/19/2010 20:00	800	-6.833	91.1	2.083	78.7	-42.39	-0.834	-6.17	-6.143	0.05	0.353	319.9	19
19	1/19/2010 24:00	900	-6.735	90.2	2.188	84.6	-34.08	-0.834	-6.158	-6.134	0.05	0.353	319.9	19
19	1/19/2010 0:00	1000	-6.335	89.1	2.045	75.8	-30.45	-0.834	-6.141	-6.114	0.05	0.348	319.9	19
19	1/19/2010 4:00	1100	-6.544	89	1.605	98.5	-41.38	-0.834	-6.131	-6.114	0.05	0.353	319.9	19
19	1/19/2010 8:00	1200	-6.215	88.2	1.416	129.8	-41.8	-0.834	-6.121	-6.106	0.05	0.351	319.9	19
19	1/19/2010 12:00	1300	-5.117	85.3	1.995	141	-64.58	-0.835	-6.11	-6.095	0.05	0.348	319.9	19
19	1/19/2010 16:00	1400	-4.662	78.4	2.306	125.5	-38.3	-0.899	-6.099	-6.084	0.051	0.348	319.9	19
19	1/19/2010 20:00	1500	-3.84	75.6	3.026	128.7	-36.3	-1.04	-6.097	-6.08	0.051	0.348	319.9	19
19	1/19/2010 24:00	1600	-4.088	75.8	3.453	121.5	-32.5	-1.042	-6.093	-6.074	0.051	0.347	319.9	19
19	1/19/2010 0:00	1700	-4.945	77.3	1.814	108.2	-57.72	-1.043	-6.088	-6.065	0.051	0.351	319.9	19
19	1/19/2010 4:00	1800	-6.655	83.3	2.631	78.5	-51.13	-1.048	-6.083	-6.057	0.051	0.348	319.8	18.9
19	1/19/2010 8:00	1900	-6.224	82.9	3.164	89.9	-52.84	-1.084	-6.077	-6.049	0.051	0.351	319.9	19
19	1/19/2010 12:00	2000	-5.984	83	2.195	80.1	-40.38	-1.134	-6.074	-6.042	0.05	0.352	319.9	19
19	1/19/2010 16:00	2100	-6.212	84.6	2.151	101.5	-36.48	-1.183	-6.071	-6.037	0.05	0.351	319.9	19
19	1/19/2010 20:00	2200	-6.691	86	1.33	107.2	-32.22	-1.231	-6.068	-6.031	0.051	0.352	319.9	19
19	1/19/2010 24:00	2300	-6.975	88.7	1.49	152.2	-29.1	-1.25	-6.066	-6.028	0.051	0.35	319.9	19
19	1/20/2010 0:00	2400	-7.11	90.7	1.315	154.5	-15.11	-1.251	-6.063	-6.024	0.051	0.349	319.9	19
19	1/20/2010 4:00	100	-6.034	87.7	1.392	143.7	-11.94	-1.251	-6.059	-6.018	0.051	0.349	319.9	19
19	1/20/2010 8:00	200	-7.02	92	1.244	145.9	-15.63	-1.251	-6.051	-6.014	0.051	0.349	319.9	19
19	1/20/2010 12:00	300	-7.27	94	0.825	182.2	-16.07	-1.251	-6.053	-6.011	0.051	0.347	320	19.1
19	1/20/2010 16:00	400	-7.16	94	1.372	144.6	-12.86	-1.251	-6.051	-6.007	0.051	0.35	320	19.1
19	1/20/2010 20:00	500	-6.954	94.4	2.513	135.9	-2.583	-1.251	-6.047	-6.003	0.051	0.351	320.1	19.2
19	1/20/2010 0:00	600	-6.667	94.7	3.864	94.1	-5.508	-1.251	-6.041	-5.997	0.051	0.351	320.1	19.2
19	1/20/2010 4:00	700	-5.409	94.6	4.075	112.8	-8.35	-1.251	-6.035	-5.992	0.051	0.351	320.1	19.2
19	1/20/2010 8:00	800	-5.722	95.2	4.585	111.1	-1.672	-1.247	-6.032	-5.988	0.051	0.35	320.1	19.2
19	1/20/2010 12:00	900	-5.697	94.8	4.382	108.2	-2.115	-1.116	-6.027	-5.985	0.051	0.35	320.1	19.2
19	1/20/2010 16:00	1000	-5.758	94.8	4.316	85.4	-3.352	-1.043	-6.02	-5.98	0.051	0.349	320.1	19.2
19	1/20/2010 20:00	1100	-5.985	93.9	3.318	104.6	-10.81	-1.043	-6.011	-5.974	0.051	0.348	320.1	19.2
19	1/20/2010 24:00	1200	-5.227	90.4	3.348	132.4	-7.65	-0.98	-6.001	-5.967	0.051	0.348	320.1	19.2
19	1/20/2010 0:00	1300	-5.06	88.7	4.246	126.8	-0.805	-0.834	-5.991	-5.961	0.051	0.347	320.1	19.2
19	1/20/2010 4:00	1400	-4.312	83.1	4.481	118.7	-13.36	-0.834	-5.98	-5.956	0.051	0.346	320.1	19.2
19	1/20/2010 8:00	1500	-4.331	83.8	4.313	125.4	-10.73	-0.741	-5.966	-5.942	0.051	0.345	320.1	19.2
19	1/20/2010 12:00	1600	-3.728	80.4	3.805	125.3	-37.97	-0.625	-5.951	-5.94	0.051	0.344	320.1	19.2
19	1/20/2010 16:00	1700	-4.325	82.9	4.169	137	-40.26	-0.625	-5.937	-5.931	0.051	0.344	320.1	19.2
19	1/20/2010 20:00	1800	-4.485	84.2	4.812	115.4	-35.09	-0.625	-5.92	-5.92	0.051	0.343	320.2	19.3
19	1/20/2010 24:00	1900	-3.947	82.8	5.536	97.1	-25.09	-0.619	-5.886	-5.887	0.051	0.344	320.1	19.2
19	1/20/2010 0:00	2000	-3.749	81.6	3.73	99.1	-19	-0.625	-5.871	-5.885	0.051	0.343	320.1	19.2
19	1/20/2010 4:00	2100	-3.812	82.7	3.686	100.5	-24.65	-0.625	-5.857	-5.873	0.051	0.343	320.1	19.2
19	1/20/2010 8:00	2200	-3.923	84.1	3.923	112.8	-20.21	-0.625	-5.844	-5.861	0.051	0.343	320.1	19.2
19	1/21/2010 0:00	2400	-3.665	81.6	3.899	111.6	-17.09	-0.625	-5.829	-5.851	0.051	0.342	320.1	19.2
19	1/21/2010 4:00	100	-4.397	85	3.634	130	-27.35	-0.625	-5.817	-5.841	0.051	0.342	320.1	19.2
19	1/21/2010 8:00	200	-4.58	84.5	3.014	135.1	-32.37	-0.626	-5.805	-5.829	0.051	0.342	320.1	19.2
19	1/21/2010 12:00	300	-4.791	87.91	3.251	125.3	-19.21	-0.626	-5.791	-5.815	0.051	0.342	320.1	19.2
19	1/21/2010 16:00	400	-3.519	80.9	3.513	115	-5.228	-0.625	-5.779	-5.807	0.051	0.341	320.1	19.2
19	1/21/2010 20:00	500	-3.755	82.3	2.564	126.7	-5.248	-0.625	-5.766	-5.795	0.051	0.341	320.1	19.2
19	1/21/2010 0:00	600	-3.666	81.6	3.143	129.6	-5.368	-0.625	-5.754	-5.785	0.051	0.341	320.1	19.2
19	1/21/2010 4:00	700	-3.674	81.8	2.904	147.9	-5.623	-0.625	-5.743	-5.773	0.051	0.341	320.1	19.2
19	1/21/2010 8:00	800	-3.744	82.3	2.683	147.9	-5.305	-0.559	-5.731	-5.763	0.051	0.34	320.1	19.2
19	1/21/2010 12:00	900	-4.271	85.2	2.071	160.6	-4.698	-0.42	-5.718	-5.753	0.051	0.34	320.1	19.2
19	1/21/2010 16:00	1000	-4.215	84.8	1.612	158.4	-5.173	-0.417	-5.705	-5.741	0.051	0.34	320.1	19.2
19	1/21/2010 20:00	1100	-4.264	84.4	1.888	149	-5.307	-0.417	-5.693	-5.73	0.051	0.34	320.1	19.2
19	1/21/2010 24:00	1200	-4.053	83.8	1.507	174	-6.336	-0.417	-5.679	-5.719	0.051	0.339	320.1	19.2
19	1/21/2010 0:00	1300	-4.384	84.5	2.375	158.3	-4.689	-0.417	-5.665	-5.709	0.051	0.339	320.1	19.2
19	1/21/2010 4:00	1400	-4.662	86.5	2.038	179.1	-7.7	-0.408	-5.651	-5.697	0.051	0.339	320.1	19.2
19	1/21/2010 8:00	1500	-5.058	92.3	1.552	191.7	-2.036	-0.314	-5.636	-5.686	0.051	0.338	320.4	19.5
19	1/21/2010 12:00	1600	-4.153	91.8	1.214	142.7	-2.231	-0.314	-5.621	-5.671	0.051	0.338	320.4	19.5
19	1/21/2010 16:00	1700	-4.752	93.4	2.077	145.1	-4.016	-0.21	-5.608	-5.662	0.051	0.339	320.8	19.9
19	1/21/2010 20:00	1800	-5.2	93.3	2.338	139.5	-7.48	-0.21	-5.594	-5.651	0.051	0.34	320.8	19.9
19	1/21/2010 24:00	1900	-5.48	92.9	2.341	158.8	-5.965	-0.209	-5.58	-5.638	0.051	0.34	320.8	19.9
19	1/21/2010 0:00	2000	-4.955	92.4	1.564	162.8	-4.845	-0.209	-5.565	-5.627	0.051	0.34	320.8	19.9
19	1/21/2010 4:00	2100	-6.418	94.7	1.222	163.3	-8.19	-0.209	-5.552	-5.613	0.051	0.34	320.8	19.9
19	1/21/2010 8:00	2200	-6.622	94.7	1.415	142.3	-10.48	-0.209	-5.538	-5.6	0.051	0.34	320.8	19.9
19	1/21/2010 12:00	2300	-6.701	94.7	1.275	159.1	-3.923	-0.249	-5.525	-5.587	0.051	0.339	320.8	19.9
19	1/22/2010 0:00	2400	-6.322	94.7	1.288	180.2	-5.095	-0.249	-5.512	-5.574	0.051	0.339	320.8	19.9
19	1/22/2010 4:00	100	-6.699	94.3	1.065	195.8	-5.268	-0.417	-5.501	-5.563	0.051	0.339	320.8	19.9
19	1/22/2010 8:00	200	-6.744	94.4	0.921	187.5	-5.001	-0.417	-5.492	-5.553	0.051	0.338	320.8	19.9
19	1/22/2010 12:00	300	-6.622	94.1	0.73	203.6	-4.855	-0.417	-5.482	-5.543	0.051	0.338	320.8	19.9
19	1/22/2010 16:00	400	-6.835	94.2	0.791	195.3	-4.352	-0.417	-5.471	-5.532	0.051	0.338	320.8	19.9
19	1/22/2010 20:00	500	-7.02	94.1	0.488	221.7	-4.35	-0.421	-5.466	-5.523	0.051	0.338	320.8	19.9
19	1/22/2010 0:00	600	-6.694	94	0.903	122.7	-4.608	-0.519	-5.458	-5.513	0.051	0.338	320.8	19.9
19	1/22/2010 4:00	700	-6.89	94	0.851	134.7	-2.646	-0.619	-5.451	-5.503	0.051	0.338	320.8	19.9
19	1/22/2010 8:00	800	-6.89	94.8	0.851	134.7	-2.6							



Grum Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column "V", while raw instrument numbers are seen in

-201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SoilHF	SoilT2	SoilT3	Soil W	SnoD	Precip	Precip (rev)
25	1/25/2010 4:00	400	-11.9	73.8	6.677	112	-53.52	-3.106	-5.331	-5.2	0.052	0.31	321	20.1
25	1/25/2010 5:00	500	-12	73.9	6.322	116.7	-55.22	-3.334	-5.35	-5.209	0.052	0.31	320.9	20
25	1/25/2010 6:00	600	-11.97	74.1	7.09	115.9	-56.54	-3.506	-5.37	-5.219	0.052	0.311	320.9	20
25	1/25/2010 7:00	700	-11.95	74.1	6.696	122.3	-56.31	-3.638	-5.386	-5.228	0.051	0.307	320.9	20
25	1/25/2010 8:00	800	-12.05	74.3	6.581	111.4	-56.77	-3.755	-5.402	-5.238	0.051	0.306	320.9	20
25	1/25/2010 9:00	900	-12.12	74.1	6.584	112	-57.6	-3.756	-5.417	-5.247	0.052	0.307	320.9	20
25	1/25/2010 10:00	1000	-12.24	74.1	7.06	112.4	-58.63	-3.801	-5.431	-5.257	0.051	0.306	320.9	20
25	1/25/2010 11:00	1100	-12.39	73.8	6.576	116	-58.11	-3.941	-5.446	-5.265	0.051	0.305	320.9	20
25	1/25/2010 12:00	1200	-11.97	71.4	7.82	112	-70.2	-3.963	-5.459	-5.274	0.051	0.305	321	20.1
25	1/25/2010 13:00	1300	-11.64	69.29	7.52	113.4	-78.9	-3.963	-5.472	-5.282	0.051	0.305	321	20.1
25	1/25/2010 14:00	1400	-11.39	67.56	7.37	111.8	-83.5	-3.963	-5.486	-5.292	0.051	0.303	321	20.1
25	1/25/2010 15:00	1500	-11.33	67.52	7.44	111.4	-82.9	-3.963	-5.499	-5.304	0.051	0.298	321	20.1
25	1/25/2010 16:00	1600	-11.46	67.91	6.67	117.7	-76.6	-3.963	-5.51	-5.313	0.051	0.294	321	20.1
25	1/25/2010 17:00	1700	-11.98	70.6	6.684	121.4	-70.3	-3.913	-5.52	-5.322	0.051	0.292	321	20.1
25	1/25/2010 18:00	1800	-12.88	74.6	6.249	118.8	-57.58	-3.79	-5.529	-5.329	0.051	0.298	321	20.1
25	1/25/2010 19:00	1900	-13.12	75.2	6.738	111.7	-57.39	-3.755	-5.537	-5.337	0.051	0.295	321	20.1
25	1/25/2010 20:00	2000	-13.09	74.5	7.24	112.5	-57.77	-3.755	-5.547	-5.344	0.051	0.299	321	20.1
25	1/25/2010 21:00	2100	-13.04	73.7	7.06	104.4	-58.31	-3.864	-5.556	-5.353	0.051	0.302	321	20.1
25	1/25/2010 22:00	2200	-13.11	73.8	6.602	107.7	-56.74	-3.952	-5.562	-5.36	0.051	0.3	320.9	20
25	1/25/2010 23:00	2300	-13.21	74.2	5.663	111.5	-51.22	-3.948	-5.58	-5.368	0.051	0.302	320.9	20
25	1/26/2010 0:00	2400	-13.34	74.4	5.855	111	-54.87	-3.873	-5.594	-5.377	0.051	0.298	320.9	20



Grum Meteorological Data
January 1, 2010 - December 31, 2010



Grum Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column 'V', while row instrument numbers are seen in

-201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SoilHF	SoilT2	SoilT3	Soil W	SnoD	Precip	Precip (rev)
26	1/26/2010 1:00	100	-13.49	74.5	6.534	109	-54.96	-3.885	-5.609	-5.386	0.051	0.3	320.9	20
26	1/26/2010 2:00	200	-13.61	73.7	6.16	91.8	-55.58	-3.891	-5.624	-5.395	0.051	0.301	320.9	20
26	1/26/2010 3:00	300	-13.64	72.8	5.603	87	-54.33	-3.876	-5.659	-5.405	0.051	0.301	320.9	20
26	1/26/2010 4:00	400	-13.80	73.5	5.977	101.6	-52.18	-3.755	-5.684	-5.415	0.051	0.299	320.9	20
26	1/26/2010 5:00	500	-13.96	73.6	5.72	99.4	-51.13	-3.616	-5.672	-5.426	0.051	0.298	320.9	20
26	1/26/2010 6:00	600	-14.06	74.4	5.75	101.7	-50.45	-3.547	-5.687	-5.438	0.051	0.301	320.9	20
26	1/26/2010 7:00	700	-14.17	74.4	5.384	108.4	-49.13	-3.547	-5.703	-5.45	0.051	0.299	320.8	19.9
26	1/26/2010 8:00	800	-14.28	74.4	5.719	108.8	-48.67	-3.578	-5.719	-5.462	0.051	0.299	320.9	20
26	1/26/2010 9:00	900	-14.36	74.3	5.856	107	-47.5	-3.547	-5.734	-5.474	0.051	0.301	320.8	19.9
26	1/26/2010 10:00	1000	-14.3	73.5	5.456	107.1	-46.17	-3.547	-5.75	-5.485	0.051	0.301	320.8	19.9
26	1/26/2010 11:00	1100	-14.17	72.6	5.721	107.3	-45.59	-3.547	-5.766	-5.496	0.051	0.299	320.8	19.9
26	1/26/2010 12:00	1200	-13.99	69.42	5.432	115.3	-47.28	-3.547	-5.779	-5.507	0.051	0.298	320.8	19.9
26	1/26/2010 13:00	1300	-12.37	66.43	6.493	118.7	-58.95	-3.546	-5.79	-5.518	0.051	0.299	320.8	19.9
26	1/26/2010 14:00	1400	-11.97	65.36	6.129	122	-73.8	-3.551	-5.801	-5.529	0.051	0.299	320.8	19.9
26	1/26/2010 15:00	1500	-11.93	65.64	5.197	125.7	-73.4	-3.674	-5.813	-5.541	0.051	0.297	320.8	19.9
26	1/26/2010 16:00	1600	-11.61	64.94	5.289	118.1	-69.67	-3.578	-5.822	-5.552	0.051	0.299	320.7	19.8
26	1/26/2010 17:00	1700	-12.33	67.99	4.45	130.4	-59.58	-3.546	-5.83	-5.563	0.051	0.3	320.7	19.8
26	1/26/2010 18:00	1800	-13.56	73.4	3.951	131.3	-46.08	-3.546	-5.836	-5.573	0.051	0.301	320.8	19.9
26	1/26/2010 19:00	1900	-13.72	74.8	4.107	137.1	-44.04	-3.543	-5.841	-5.583	0.051	0.301	320.8	19.9
26	1/26/2010 20:00	2000	-13.56	74.5	3.647	137.6	-43.53	-3.441	-5.848	-5.591	0.051	0.301	320.7	19.8
26	1/26/2010 21:00	2100	-13.51	74.5	3.731	133.3	-44.13	-3.447	-5.853	-5.599	0.051	0.301	320.7	19.8
26	1/26/2010 22:00	2200	-13.72	75.5	3.816	141.9	-42.88	-3.537	-5.859	-5.607	0.051	0.301	320.7	19.8
26	1/26/2010 23:00	2300	-13.73	75.8	4.393	136.9	-43.67	-3.547	-5.866	-5.612	0.051	0.3	320.7	19.8
27	1/27/2010 0:00	2400	-13.99	74.9	3.029	141.8	-41.02	-3.547	-5.875	-5.621	0.051	0.299	320.7	19.8
27	1/27/2010 1:00	100	-14.36	78.5	3.445	153	-38.63	-3.547	-5.884	-5.627	0.051	0.299	320.7	19.8
27	1/27/2010 2:00	200	-14.11	78.4	3.066	146.6	-38	-3.547	-5.894	-5.635	0.051	0.301	320.7	19.8
27	1/27/2010 3:00	300	-14	79.1	3.345	149.2	-35.48	-3.547	-5.905	-5.642	0.051	0.3	320.7	19.8
27	1/27/2010 4:00	400	-14.07	80.3	3.512	154.4	-35.04	-3.572	-5.916	-5.649	0.051	0.301	320.7	19.8
27	1/27/2010 5:00	500	-15.25	83.4	3.217	173.3	-34.97	-3.704	-5.928	-5.659	0.051	0.299	320.7	19.8
27	1/27/2010 6:00	600	-14.76	83.4	3.079	162.3	-33.8	-3.755	-5.939	-5.667	0.051	0.301	320.7	19.8
27	1/27/2010 7:00	700	-14.32	83.7	3.55	161.4	-35.51	-3.755	-5.948	-5.675	0.051	0.299	320.7	19.8
27	1/27/2010 8:00	800	-15.07	85.1	2.642	173.8	-35.24	-3.755	-5.96	-5.684	0.051	0.302	320.7	19.8
27	1/27/2010 9:00	900	-14.41	84.8	2.884	175.2	-36.24	-3.751	-5.971	-5.692	0.051	0.301	320.7	19.8
27	1/27/2010 10:00	1000	-15.25	86.2	2.429	188.7	-16.24	-3.755	-5.982	-5.701	0.051	0.3	320.7	19.8
27	1/27/2010 11:00	1100	-14.62	85.7	2.865	177.2	-19.9	-3.755	-5.992	-5.708	0.051	0.299	320.7	19.8
27	1/27/2010 12:00	1200	-14.13	83.8	2.228	195.9	-41.24	-3.755	-6.003	-5.716	0.051	0.298	320.7	19.8
27	1/27/2010 13:00	1300	-13.98	83.2	2.838	185.1	-69.99	-3.754	-6.009	-5.723	0.051	0.297	320.7	19.8
27	1/27/2010 14:00	1400	-12.28	75.7	2.529	176.8	-72.2	-3.576	-6.015	-5.729	0.051	0.296	320.7	19.8
27	1/27/2010 15:00	1500	-11.66	73.2	2	187.5	-70.2	-3.546	-6.021	-5.737	0.051	0.295	320.7	19.8
27	1/27/2010 16:00	1600	-11.37	74.2	2.113	174.2	-62.72	-3.478	-6.025	-5.743	0.051	0.297	320.7	19.8
27	1/27/2010 17:00	1700	-12.41	82.4	2.058	183.2	-40.81	-3.547	-6.028	-5.75	0.051	0.297	320.7	19.8
27	1/27/2010 18:00	1800	-13.45	87.5	2.046	168.4	-34.7	-3.338	-6.029	-5.757	0.051	0.3	320.7	19.8
27	1/27/2010 19:00	1900	-11.89	87.2	2.448	170.3	-29.07	-3.304	-6.039	-5.76	0.051	0.299	320.7	19.8
27	1/27/2010 20:00	2000	-11.01	87.2	2.103	151.4	-28.6	-3.154	-6.049	-5.763	0.051	0.298	320.7	19.8
27	1/27/2010 21:00	2100	-11.99	87.1	1.984	161.8	-28.26	-3.072	-6.052	-5.767	0.051	0.298	320.7	19.8
27	1/27/2010 22:00	2200	-12.2	87.4	2.64	171	-36.69	-3.129	-6.035	-5.772	0.051	0.297	320.7	19.8
27	1/27/2010 23:00	2300	-12.45	88.5	3.144	194.8	-20.27	-3.129	-6.039	-5.775	0.051	0.3	320.7	19.8
27	1/28/2010 0:00	2400	-12.71	89.5	2.908	168.6	-22.61	-3.129	-6.042	-5.778	0.051	0.298	320.7	19.8
28	1/28/2010 1:00	100	-14.1	88.1	3.512	154.4	-35.04	-3.572	-6.044	-5.78	0.051	0.301	320.7	19.8
28	1/28/2010 2:00	200	-11.14	88.1	3.124	129.9	-34.22	-3.129	-6.048	-5.784	0.051	0.3	320.7	19.8
28	1/28/2010 3:00	300	-10.61	87.8	3.739	127.1	-38.06	-3.129	-6.048	-5.787	0.051	0.299	320.7	19.8
28	1/28/2010 4:00	400	-10.29	87.1	4.273	126.8	-38.54	-3.12	-6.05	-5.791	0.051	0.298	320.7	19.8
28	1/28/2010 5:00	500	-9.76	85.4	4.756	125.4	-47.85	-3.129	-6.051	-5.793	0.051	0.298	320.7	19.8
28	1/28/2010 6:00	600	-9.74	85.5	5.307	115.7	-50.42	-2.92	-6.059	-5.795	0.051	0.299	320.7	19.8
28	1/28/2010 7:00	700	-9.87	86.6	5.429	108.5	-51.4	-2.92	-6.047	-5.797	0.051	0.299	320.8	19.9
28	1/28/2010 8:00	800	-9.91	85.5	5.846	110.4	-48.58	-2.789	-6.042	-5.798	0.051	0.297	320.9	20
28	1/28/2010 9:00	900	-9.95	85.5	5.378	106.2	-52.21	-2.711	-6.036	-5.799	0.051	0.3	321.1	20.1
28	1/28/2010 10:00	1000	-9.97	84.5	5.844	103.2	-60.31	-2.531	-6.037	-5.798	0.051	0.301	321.1	20.1
28	1/28/2010 11:00	1100	-9.74	86.1	4.793	103.6	-31.79	-2.479	-6.018	-5.797	0.051	0.301	321.5	20.6
28	1/28/2010 12:00	1200	-9.4	84.9	4.524	100.9	-40.2	-2.295	-6.008	-5.793	0.051	0.299	321.6	20.7
28	1/28/2010 13:00	1300	-9.11	85.6	4.494	109.4	-4.27	-2.234	-5.995	-5.799	0.051	0.299	321.7	20.8
28	1/28/2010 14:00	1400	-8.95	83.6	4.819	112.1	-38.1	-2.085	-5.982	-5.804	0.051	0.298	321.7	20.8
28	1/28/2010 15:00	1500	-8.69	82.9	5.079	105.8	-36.62	-2.029	-5.966	-5.798	0.051	0.317	321.7	20.8
28	1/28/2010 16:00	1600	-8.17	80.7	5.035	104.1	-63.05	-1.877	-5.95	-5.774	0.051	0.306	321.7	20.8
28	1/28/2010 17:00	1700	-8.61	83.4	4.091	123.5	-62.44	-1.877	-5.934	-5.766	0.051	0.303	321.7	20.8
28	1/28/2010 18:00	1800	-8.61	85.3	3.951	117.9	-62.81	-1.877	-5.938	-5.761	0.051	0.3	321.8	20.9
28	1/28/2010 19:00	1900	-8.97	85.7	3.793	115.7	-47.36	-1.876	-5.902	-5.751	0.051	0.301	321.8	20.9
28	1/28/2010 20:00	2000	-9.08	86.6	4.147	116.2	-47.22	-1.877	-5.888	-5.742	0.051	0.302	321.8	20.9
28	1/28/2010 21:00	2100	-9	85.6	4.328	117.6	-47.13	-1.877	-5.878	-5.733	0.051	0.303	321.8	20.9
28	1/28/2010 22:00	2200	-8.97	87.1	3.877	141.6	-45.71	-1.877	-5.871	-5.726	0.051	0.301	321.8	20.9
28	1/28/2010 23:00	2300	-8.83	88.3	3.426	135.5	-44.73	-2.086	-5.865	-5.72	0.051	0.301	321.8	20.9
28	1/29/2010 0:00	2400	-9.89	88.1	3.456	142.5	-43.18	-2.133	-5.861	-5.713	0.051	0.3	321.8	20.9
29	1/29/2010 1:00	100	-9.74	86.9	4.012	149.9	-44.98	-2.294	-5.859	-5.708	0.051	0.3	321.8	20.9
29	1/29/2010 2:00	200	-9.78	86.3	4.477	131.4	-45.84	-2.124	-5.847	-5.704	0.051	0.3	321.8	20.9
29	1/29/2010 3:00	300	-10.21	87.6	4.005	144.1	-43.73	-2.426	-5.856	-5.7	0.051	0.3	321.8	20.9
29	1/29/2010 4:00	400	-10.38	87	3.998	143.6	-38.39	-2.503	-5.856	-5.697	0.051	0.298	321.8	20.9

Grum Climate Station - 2010 data

Note: Cumulative precipitation is calculated in column "V", while raw instrument numbers are seen in -201 118.8

327.2

Julian Day	Date	Hr	Tair	RH	WindV	WindD	NetRad	SoilHF	SoilTZ	SoilT3	Soil W	SnoD	Precip	Precip (rev)
31	1/31/2010 7:00	700	-11.52	90.7	1.622	159	1.539	-2.086	-5.627	-5.516	0.051	0.298	322.7	21.8
31	1/31/2010 8:00	800	-11.56	90.4	1.267	160.7	0.988	-1.984	-5.626	-5.514	0.051	0.298	322.7	21.8
31	1/31/2010 9:00	900	-11.63	90.6	0.789	159.4	-0.062	-1.877	-5.622	-5.511	0.051	0.297	322.7	21.8
31	1/31/2010 10:00	1000	-11.59	90.8	0.22	173.7	1.52	-1.877	-5.619	-5.507	0.051	0.297	322.7	21.8
31	1/31/2010 11:00	1100	-11.21	91.6	0.848	170.1	2.885	-1.877	-5.614	-5.503	0.051	0.297	322.7	21.8
31	1/31/2010 12:00	1200	-8.25	92.8	2.338	307.3	-2.395	-1.852	-5.608	-5.498	0.051	0.298	322.7	21.8
31	1/31/2010 13:00	1300	-7.88	93	2.907	306.8	-1.127	-1.672	-5.601	-5.494	0.051	0.297	322.7	21.8
31	1/31/2010 14:00	1400	-8.37	92.8	2.188	299.1	0.387	-1.668	-5.596	-5.49	0.051	0.297	322.7	21.8
31	1/31/2010 15:00	1500	-8.55	92.4	2.918	291.7	-0.617	-1.505	-5.59	-5.487	0.051	0.297	322.7	21.8
31	1/31/2010 16:00	1600	-8.55	92.4	2.265	283.5	-1.177	-1.46	-5.582	-5.482	0.051	0.297	322.7	21.8
31	1/31/2010 17:00	1700	-8.75	92.5	2.042	274.1	-1.458	-1.324	-5.574	-5.479	0.051	0.298	322.7	21.8
31	1/31/2010 18:00	1800	-8.81	92.5	2.022	302.2	-3.678	-1.251	-5.565	-5.475	0.051	0.297	322.7	21.8
31	1/31/2010 19:00	1900	-9.09	92.3	1.806	289.2	-3.42	-1.251	-5.555	-5.469	0.051	0.297	322.8	21.9
31	1/31/2010 20:00	2000	-9.29	92.2	2.272	321.1	-2.666	-1.251	-5.546	-5.463	0.051	0.297	322.8	21.9
31	1/31/2010 21:00	2100	-9.77	92	1.944	314.7	-4.89	-1.251	-5.537	-5.457	0.051	0.296	322.8	21.9
31	1/31/2010 22:00	2200	-10.34	91.5	1.506	329.8	-18.68	-1.251	-5.53	-5.452	0.051	0.297	322.8	21.9
31	1/31/2010 23:00	2300	-10.11	91.6	1.678	323	-17.98	-1.251	-5.522	-5.445	0.051	0.297	322.8	21.9
31	2/1/2010 0:00	2400	-10.38	91.2	0.742	83.8	-12.8	-1.251	-5.515	-5.439	0.051	0.296	322.8	21.9
32	2/1/2010 1:00	100	-10.97	91	0.353	126.2	-10.76	-1.251	-5.51	-5.433	0.051	0.296	322.8	21.9
32	2/1/2010 2:00	200	-11.32	90.8	0.665	120	-11.45	-1.252	-5.507	-5.427	0.051	0.296	322.8	21.9
32	2/1/2010 3:00	300	-11.43	90.8	0.52	335.4	-10.65	-1.408	-5.504	-5.421	0.051	0.296	322.8	21.9
32	2/1/2010 4:00	400	-11.69	90.6	0.735	329.8	-6.7	-1.46	-5.503	-5.416	0.051	0.296	322.8	21.9
32	2/1/2010 5:00	500	-11.54	90.7	0.379	256.6	-6.295	-1.505	-5.504	-5.413	0.051	0.296	322.8	21.9
32	2/1/2010 6:00	600	-11.91	90.3	0.801	328.9	-5.459	-1.668	-5.507	-5.409	0.051	0.295	322.8	21.9
32	2/1/2010 7:00	700	-13.06	89.4	1.094	327.7	-5.585	-1.669	-5.512	-5.409	0.051	0.296	322.8	21.9
32	2/1/2010 8:00	800	-13.15	89.5	0.84	334.5	-3.786	-1.669	-5.516	-5.407	0.051	0.297	322.8	21.9
32	2/1/2010 9:00	900	-12.53	89.9	0.398	344.2	-2.497	-1.669	-5.522	-5.406	0.051	0.296	322.8	21.9
32	2/1/2010 10:00	1000	-12.25	90	0.281	347.4	-7.29	-1.725	-5.527	-5.407	0.051	0.294	322.9	22
32	2/1/2010 11:00	1100	-11.97	90.3	0.133	325.1	0.158	-1.858	-5.532	-5.407	0.051	0.294	323	22.1
32	2/1/2010 12:00	1200	-11.53	90.6	0.103	163.6	-3.564	-1.877	-5.537	-5.409	0.051	0.293	323.2	22.3
32	2/1/2010 13:00	1300	-11.25	90.7	0.252	169.8	-10.48	-1.877	-5.542	-5.411	0.051	0.29	323.4	22.5
32	2/1/2010 14:00	1400	-10.75	91.1	0.236	175.2	-20.88	-1.876	-5.545	-5.413	0.051	0.287	323.4	22.5
32	2/1/2010 15:00	1500	-10.28	91.6	0.191	183.5	-24.37	-1.751	-5.546	-5.414	0.051	0.296	323.4	22.5
32	2/1/2010 16:00	1600	-9.97	91.1	0.397	195.6	-11.77	-1.669	-5.544	-5.413	0.051	0.294	323.3	22.4
32	2/1/2010 17:00	1700	-10.2	91.5	0.472	231.1	-10.37	-1.669	-5.541	-5.414	0.051	0.298	323.4	22.5
32	2/1/2010 18:00	1800	-10.24	91	0.449	262.3	-2.428	-1.669	-5.537	-5.414	0.051	0.303	323.9	23