

Solar Variation in Five-Minute Meteorological Data at the Rush and York NYS Mesonet Stations

Highlighted Cells Represent a Difference Between Successive 5-Minute Periods Greater than Half the Maximum Observed Solar Radiation

Date/Time	Rush NYS Mesonet Station							York NYS Mesonet Station						
	Temperature Deg F	Wind Speed MPH	Wind Direction R_Direction	Insolation [W/m^2]	Insolation Delta	Insolation % of Max Delta	Temperature Deg F	Wind Speed MPH	Wind Direction R_Direction	Insolation [W/m^2]	Insolation Delta	Insolation % of Max Delta		
2017-07-18 10:00:00 EDT	71.5	5.2	238	624	11	1%	72	3.9	139	629	12	1%		
2017-07-18 10:05:00 EDT	71.6	4.9	242	634	10	1%	72.5	4.4	154	642	13	1%		
2017-07-18 10:10:00 EDT	71.9	6	221	646	12	1%	72.8	4.5	145	653	11	1%		
2017-07-18 10:15:00 EDT	72.1	4.5	225	642	4	0%	73.5	3.8	144	667	14	1%		
2017-07-18 10:20:00 EDT	72.2	3.5	215	662	20	2%	73.2	4.5	165	681	14	1%		
2017-07-18 10:25:00 EDT	72.8	4.3	216	657	5	0%	73.9	4.5	154	691	10	1%		
2017-07-18 10:30:00 EDT	72.7	3.8	212	694	37	4%	74.2	5.5	146	706	15	1%		
2017-07-18 10:35:00 EDT	73.1	3.8	224	698	4	0%	74.8	5.3	138	719	13	1%		
2017-07-18 10:40:00 EDT	73.5	3.1	229	705	7	1%	74.7	4.7	153	730	11	1%		
2017-07-18 10:45:00 EDT	73.7	4.2	210	714	9	1%	75.3	4.8	152	751	21	2%		
2017-07-18 10:50:00 EDT	73.9	5.2	214	725	11	1%	75.3	4	172	756	5	0%		
2017-07-18 10:55:00 EDT	74.4	3.8	232	735	10	1%	76.3	3	180	813	57	5%		
2017-07-18 11:00:00 EDT	74.9	4.8	244	747	12	1%	76.8	3	128	869	56	5%		
2017-07-18 11:05:00 EDT	75.3	2.7	184	758	11	1%	77.2	1.8	159	886	17	2%		
2017-07-18 11:10:00 EDT	75.2	4.3	187	761	3	0%	76.6	2.9	326	686	200	18%		
2017-07-18 11:15:00 EDT	75.4	3.8	206	775	14	1%	75.8	2.9	311	389	297	27%		
2017-07-18 11:20:00 EDT	76.2	2.6	190	793	18	2%	76	1.2	350	929	540	50%		
2017-07-18 11:25:00 EDT	75.6	5.3	216	805	12	1%	77.3	3.4	0	733	196	18%		
2017-07-18 11:30:00 EDT	75.8	3.3	189	814	9	1%	76	1.7	353	538	195	18%		
2017-07-18 11:35:00 EDT	76.7	2.3	161	838	24	2%	76.8	3.4	325	565	27	2%		
2017-07-18 11:40:00 EDT	76.5	4.1	212	865	27	3%	76.9	3.6	252	881	316	29%		
2017-07-18 11:45:00 EDT	76.6	4.4	209	909	44	4%	75.7	5.2	246	206	675	62%		
2017-07-18 11:50:00 EDT	76.9	4.3	215	956	47	5%	75.4	2.3	225	618	412	38%		
2017-07-18 11:55:00 EDT	76.9	3.1	220	782	174	17%	77.6	2.5	156	918	300	28%		
2017-07-18 12:00:00 EDT	77.1	4.2	248	841	59	6%	78.6	4.2	8	806	112	10%		
2017-07-18 12:05:00 EDT	76.4	5.4	266	214	627	62%	77.8	6.3	306	595	211	20%		
2017-07-18 12:10:00 EDT	75.6	3.9	255	262	48	5%	75.9	5.3	295	382	213	20%		
2017-07-18 12:15:00 EDT	76.1	3	218	784	522	51%	77.6	3.1	323	891	509	47%		
2017-07-18 12:20:00 EDT	77.1	2.3	176	874	90	9%	77.6	2.1	297	598	293	27%		
2017-07-18 12:25:00 EDT	77.8	3.4	178	876	2	0%	77	2.8	298	513	85	8%		
2017-07-18 12:30:00 EDT	78.6	2.5	225	907	31	3%	77.4	7	273	908	395	37%		
2017-07-18 12:35:00 EDT	78.2	2.6	248	838	69	7%	78.1	5.2	294	972	64	6%		
2017-07-18 12:40:00 EDT	76.6	6.2	274	197	641	63%	78.4	4.4	231	996	24	2%		
2017-07-18 12:45:00 EDT	76.1	3.9	307	285	88	9%	79.2	2.9	222	980	16	1%		
2017-07-18 12:50:00 EDT	77.8	1.8	244	954	669	66%	78.8	4.8	283	942	38	4%		
2017-07-18 12:55:00 EDT	78.9	1.8	66	906	48	5%	77.6	5.5	279	526	416	38%		
2017-07-18 13:00:00 EDT	79.2	4.2	279	926	20	2%	78.2	4.6	250	980	454	42%		
2017-07-18 13:05:00 EDT	78.2	3.8	267	940	14	1%	78.1	4.7	238	916	64	6%		
2017-07-18 13:10:00 EDT	78.3	3.9	257	934	6	1%	78.5	2.7	215	902	14	1%		
2017-07-18 13:15:00 EDT	77.9	3.2	265	556	378	37%	78.5	3.1	244	912	10	1%		
2017-07-18 13:20:00 EDT	77.7	3.7	307	851	295	29%	79.1	3.3	286	963	51	5%		
2017-07-18 13:25:00 EDT	78.7	2.9	310	958	107	11%	78.2	4.3	261	325	638	59%		
2017-07-18 13:30:00 EDT	78.8	1.3	350	963	5	0%	78.2	2.1	273	893	568	52%		
2017-07-18 13:35:00 EDT	79.5	4.9	232	939	24	2%	79.4	3.7	292	974	81	7%		
2017-07-18 13:40:00 EDT	78.8	4.5	223	1019	80	8%	79.6	5.1	274	908	66	6%		
2017-07-18 13:45:00 EDT	79.2	3.8	207	973	46	5%	78.8	3.8	302	518	390	36%		
2017-07-18 13:50:00 EDT	79.3	3	249	969	4	0%	79.4	2.6	304	947	429	40%		
2017-07-18 13:55:00 EDT	79.3	2.6	215	961	8	1%	79.5	4.8	221	982	35	3%		
2017-07-18 14:00:00 EDT	79.7	6.9	252	979	18	2%	79.5	2.7	217	949	33	3%		
2017-07-18 14:05:00 EDT	79.7	5.1	247	893	86	8%	78.8	2.1	218	290	659	61%		
2017-07-18 14:10:00 EDT	80.1	5.6	241	953	60	6%	78.1	2.6	331	264	26	2%		
2017-07-18 14:15:00 EDT	79.6	6.6	278	947	6	1%	79.9	1.1	27	871	607	56%		
2017-07-18 14:20:00 EDT	79.7	4.4	275	822	125	12%	80.6	1.9	262	992	121	11%		
2017-07-18 14:25:00 EDT	79	2.7	357	167	655	64%	80.8	3.9	342	987	5	0%		
2017-07-18 14:30:00 EDT	77.9	4.4	302	178	11	1%	80.2	4.8	254	956	31	3%		
2017-07-18 14:35:00 EDT	78.2	4.9	301	715	537	53%	80.4	3.8	206	889	67	6%		
2017-07-18 14:40:00 EDT	79.3	6.6	282	855	140	14%	80.3	3.1	190	953	64	6%		
2017-07-18 14:45:00 EDT	78.8	7.6	256	435	420	41%	81.2	2.7	203	939	14	1%		
2017-07-18 14:50:00 EDT	79.2	5	274	754	319	31%	81	3.8	288	952	13	1%		
2017-07-18 14:55:00 EDT	79.6	4.9	244	844	90	9%	80.1	7	303	427	525	49%		
2017-07-18 15:00:00 EDT	80	4	243	836	8	1%	78.7	4.5	313	264	163	15%		
2017-07-18 15:05:00 EDT	79.9	4.1	202	829	7	1%	79.5	2.5	265	749	485	45%		
2017-07-18 15:10:00 EDT	79	6.4	237	173	656	64%	80.2	1.8	206	839	90	8%		
2017-07-18 15:15:00 EDT	78.2	4	251	446	273	27%	81.2	3.1	37	852	13	1%		
2017-07-18 15:20:00 EDT	79.7	2.2	226	620	174	17%	81.3	3.9	257	877	25	2%		
2017-07-18 15:25:00 EDT	79.8	3.7	204	468	152	15%	80.6	3.8	243	726	151	14%		
2017-07-18 15:30:00 EDT	79	5.2	270	608	140	14%	80.1	1.2	230	303	423	39%		
2017-07-18 15:35:00 EDT	79.5	5.2	288	454	154	15%	81	2.8	348	856	553	51%		

Solar Variation in Five-Minute Meteorological Data at the Rush and York NYS Mesonet Stations

Highlighted Cells Represent a Difference Between Successive 5-Minute Periods Greater than Half the Maximum Observed Solar Radiation

Date/Time	Rush NYS Mesonet Station							York NYS Mesonet Station						
	Temperature Deg F	Wind Speed MPH	Wind Direction R_Direction	Insolation [W/m^2]	Insolation Delta	Insolation % of Max Delta	Temperature Deg F	Wind Speed MPH	Wind Direction R_Direction	Insolation [W/m^2]	Insolation Delta	Insolation % of Max Delta		
2017-07-18 15:40:00 EDT	78.7	2.4	265	168	286	28%	80.9	4.5	249	833	23	2%		
2017-07-18 15:45:00 EDT	78.4	2.1	282	220	52	5%	81.5	2.6	166	821	12	1%		
2017-07-18 15:50:00 EDT	79.6	0.6	71	639	419	41%	82.1	2.3	17	799	22	2%		
2017-07-18 15:55:00 EDT	80.4	4.7	236	708	69	7%	81.4	4.3	303	813	14	1%		
2017-07-18 16:00:00 EDT	79.1	4.4	232	410	298	29%	81.5	6.1	284	776	37	3%		
2017-07-18 16:05:00 EDT	79.2	4.6	263	248	162	16%	81	3.7	281	758	18	2%		
2017-07-18 16:10:00 EDT	79.2	5.4	235	671	423	42%	81.3	6.1	300	757	1	0%		
2017-07-18 16:15:00 EDT	80.4	4.4	236	730	59	6%	81.6	4.1	327	731	26	2%		
2017-07-18 16:20:00 EDT	79.4	3.5	195	227	503	49%	81.3	2.7	350	700	31	3%		
2017-07-18 16:25:00 EDT	79.3	2.7	180	389	162	16%	81.4	4.4	323	681	19	2%		
2017-07-18 16:30:00 EDT	80.5	3.6	277	750	361	35%	80.9	4.9	341	365	316	29%		
2017-07-18 16:35:00 EDT	80.7	1.9	251	717	33	3%	80.1	3.1	356	388	23	2%		
2017-07-18 16:40:00 EDT	80.7	3.8	316	692	25	2%	81.6	1.4	1	615	227	21%		
2017-07-18 16:45:00 EDT	79.6	4.7	325	297	395	39%	80.8	1.5	315	329	286	26%		
2017-07-18 16:50:00 EDT	79.6	3.6	322	587	290	28%	80.4	4.5	285	613	284	26%		
2017-07-18 16:55:00 EDT	80.4	3	320	657	70	7%	80.7	6	284	509	104	10%		
2017-07-18 17:00:00 EDT	80.8	3.4	323	644	13	1%	80.5	5.6	285	590	81	7%		
2017-07-18 17:05:00 EDT	80.3	5.5	340	616	28	3%	80.8	4.2	325	555	35	3%		
2017-07-18 17:10:00 EDT	79.9	3.5	354	601	15	1%	81	4.7	306	588	33	3%		
2017-07-18 17:15:00 EDT	79.7	4.6	349	594	7	1%	80.8	4.8	320	540	48	4%		
2017-07-18 17:20:00 EDT	79.5	3.2	19	492	102	10%	80.8	6	313	545	5	0%		
2017-07-18 17:25:00 EDT	79.2	3.2	351	336	156	15%	80.9	6.2	341	534	11	1%		
2017-07-18 17:30:00 EDT	78.4	5.3	30	473	137	13%	80.8	5.8	315	505	29	3%		
2017-07-18 17:35:00 EDT	78.6	5	26	340	133	13%	80.5	6.2	320	476	29	3%		
2017-07-18 17:40:00 EDT	78.5	5.5	27	512	172	17%	80.2	6.9	311	467	9	1%		
2017-07-18 17:45:00 EDT	78.5	6.4	30	473	39	4%	80.2	7.4	317	481	14	1%		
2017-07-18 17:50:00 EDT	78.5	5.4	20	533	60	6%	80.3	7	329	430	51	5%		
2017-07-18 17:55:00 EDT	78.5	4.6	35	405	128	13%	79.8	5.7	334	359	71	7%		