



ATLAS

WEATHERING SERVICES GROUP

Latitude 33° 54' North, Longitude 112° 08' West, Elevation 610 (m)

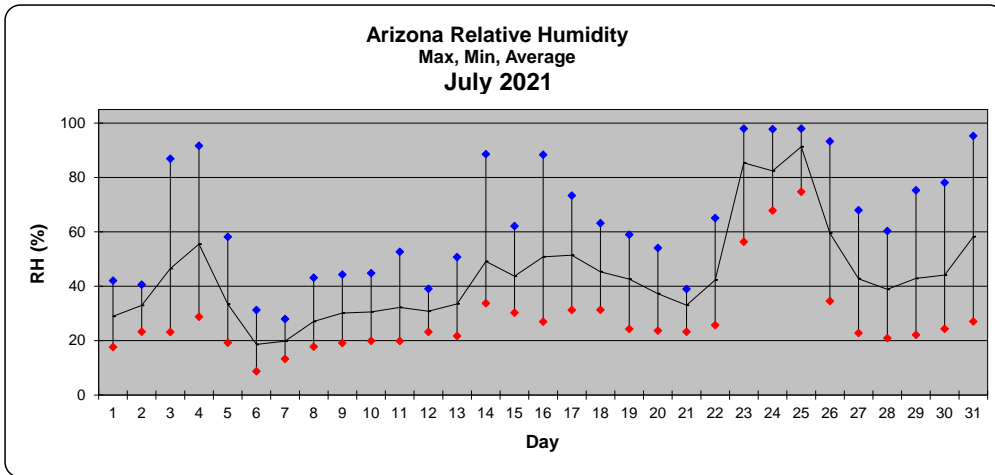
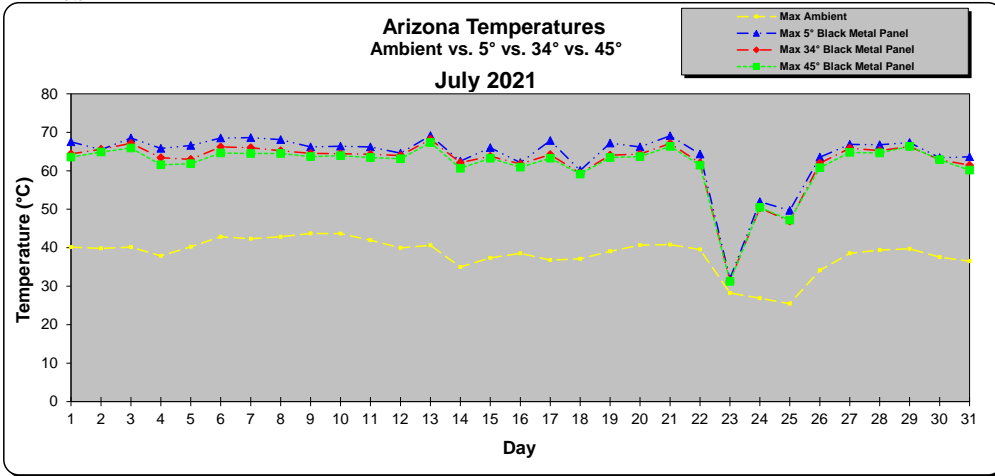


Weather Summary July 2021 Phoenix, Arizona

Month	Temperature Summary												Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity			Wind Speed		Wind Direction	Rainfall
July	(° C)			5°			34°			45°			(%)			m/sec		360°/0° = N	(mm)
Day	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Avg.	Avg.	Total
1	40	26	33	68	24	40	64	25	39	64	25	39	42	18	29	10.1	2.3	334°	0.0
2	40	29	34	65	26	39	66	27	39	65	27	39	41	23	33	8.5	1.8	167°	0.0
3	40	24	31	69	23	35	67	23	34	66	23	34	87	23	47	16.9	1.8	336°	7.1
4	38	24	31	66	22	37	63	22	36	62	22	36	92	29	56	6.8	1.3	214°	0.0
5	40	28	34	67	26	39	63	26	39	62	26	39	58	19	33	7.9	1.4	187°	0.0
6	43	28	35	69	24	41	66	24	40	65	25	40	31	9	19	10.2	1.7	182°	0.0
7	42	30	36	69	26	41	66	27	41	64	27	41	28	13	20	8.1	1.6	192°	0.0
8	43	29	37	68	26	43	65	26	42	64	26	42	43	18	27	7.9	1.5	192°	0.0
9	44	30	37	66	28	43	65	28	42	64	28	42	44	19	30	8.9	1.8	179°	0.0
10	44	31	36	66	29	41	64	29	41	64	30	41	45	20	31	17.4	2.2	190°	0.0
11	42	27	35	66	25	40	64	26	39	63	26	39	53	20	32	12.9	1.6	236°	0.0
12	40	30	35	65	26	41	64	27	40	63	27	40	39	23	31	7.9	1.7	196°	0.0
13	41	28	35	69	26	40	68	27	40	67	27	40	51	22	34	10.4	2.0	196°	0.0
14	35	22	30	62	21	36	62	21	35	61	21	35	89	34	49	14.8	1.8	157°	8.4
15	37	27	31	66	26	36	64	26	35	63	27	35	62	30	44	11.4	2.3	357°	0.0
16	39	22	30	62	21	36	62	21	36	61	22	36	88	27	51	15.8	2.2	58°	11.9
17	37	25	30	68	23	35	64	23	34	63	24	34	73	31	51	7.0	1.3	217°	0.3
18	37	27	32	60	25	37	59	25	37	59	25	37	63	31	45	11.3	2.0	37°	0.0
19	39	28	33	67	27	39	64	27	38	63	28	38	59	24	43	7.3	1.7	266°	0.0
20	41	29	35	66	28	41	64	28	41	64	29	41	54	24	37	8.6	1.9	308°	0.0
21	41	31	35	69	30	40	67	30	40	66	30	40	39	23	33	10.0	2.5	31°	0.0
22	40	26	33	64	22	38	62	22	38	61	23	38	65	26	42	13.1	1.8	228°	1.0
23	28	21	24	32	21	24	31	21	24	31	21	24	98	56	85	8.6	1.4	85°	39.4
24	27	21	24	52	21	27	50	21	27	51	21	27	98	68	82	5.5	1.5	160°	11.9
25	25	21	23	50	21	24	47	21	24	47	21	24	98	75	91	4.9	1.0	83°	21.6
26	34	22	28	64	20	35	62	21	34	61	21	34	93	35	60	5.4	1.5	46°	0.3
27	39	24	32	67	23	38	66	23	38	65	23	38	68	23	43	8.7	2.0	98°	0.0
28	39	27	33	67	24	40	65	24	39	65	24	39	60	21	39	10.5	1.4	317°	0.0
29	40	25	32	67	22	37	66	22	37	66	23	37	75	22	43	19.0	2.1	52°	0.0
30	38	25	31	63	22	37	63	22	37	63	22	37	78	24	44	7.5	1.8	73°	0.0
31	37	23	29	64	22	36	61	22	35	60	22	35	95	27	58	7.4	1.7	248°	0.0
Monthly Avg.	38	26	32	64	24	37	62	24	37	61	25	37	65	28	44	10.0	1.8	181°	
Monthly Total																			101.9
YTD [†] Avg.	29	16	22	53	13	26	54	13	26	55	14	27	47	19	32	9.3	2.0	121°	
YTD [†] Total																			260.6

[†] Year To Date

Note:



Latitude 25° 34' North, Longitude 80° 28' West, Elevation 2 (m)

Miami, Florida

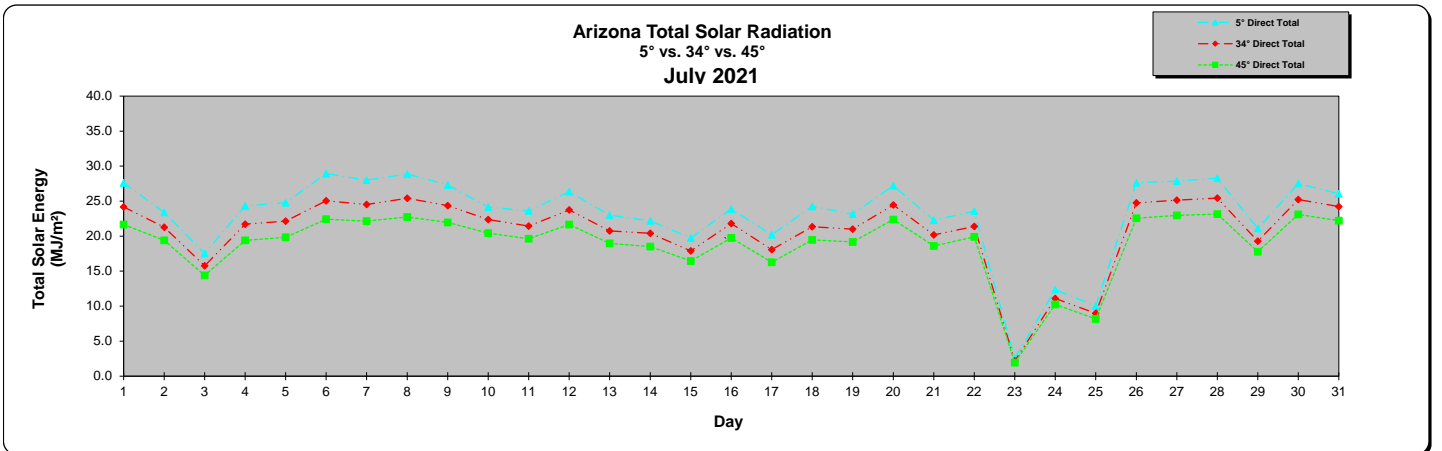
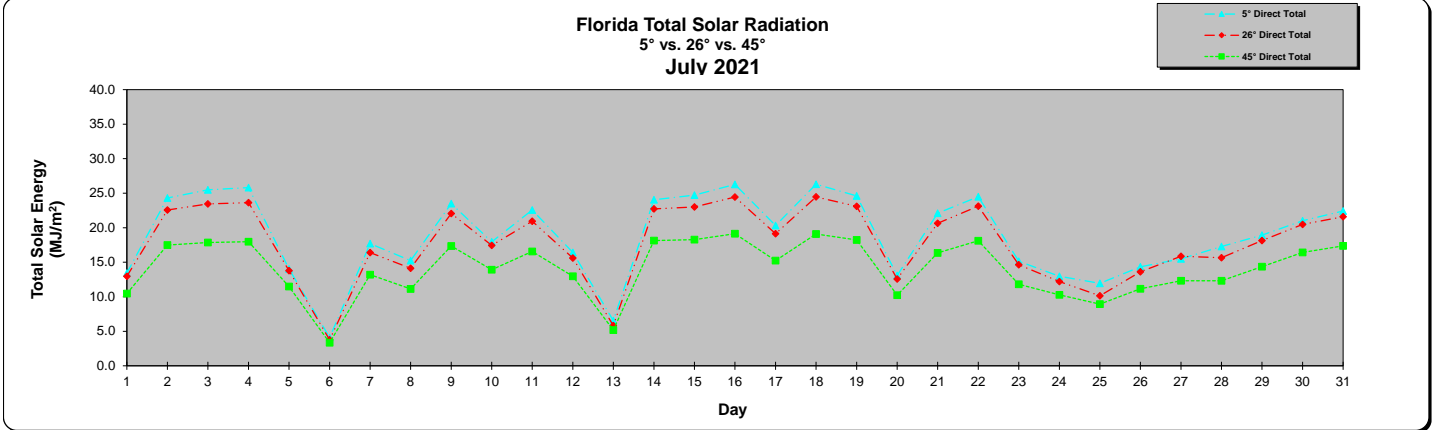
Latitude 33° 54' North, Longitude 112° 08' West, Elevation 610 (m)

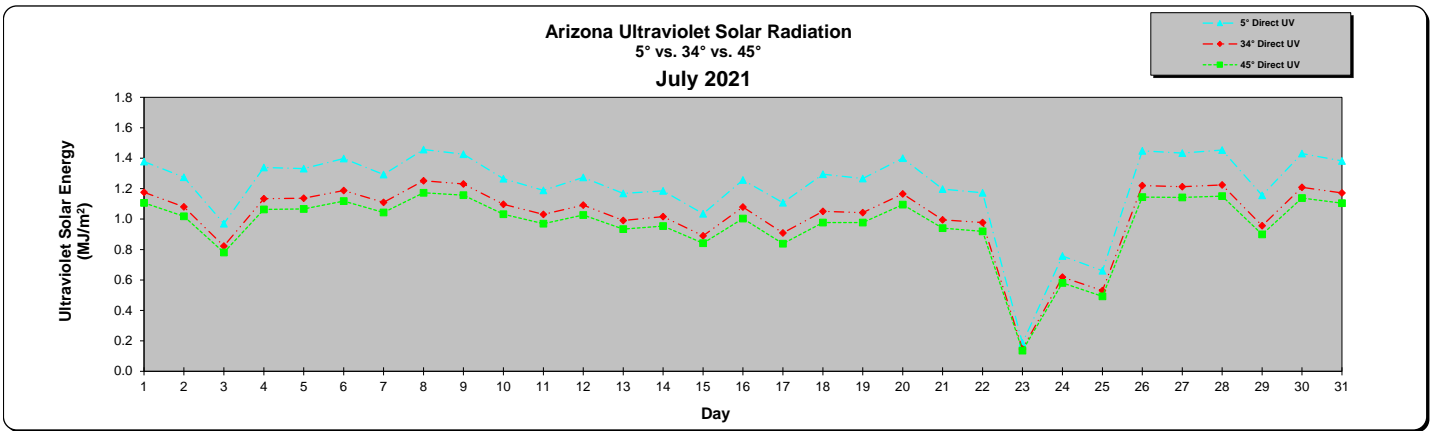
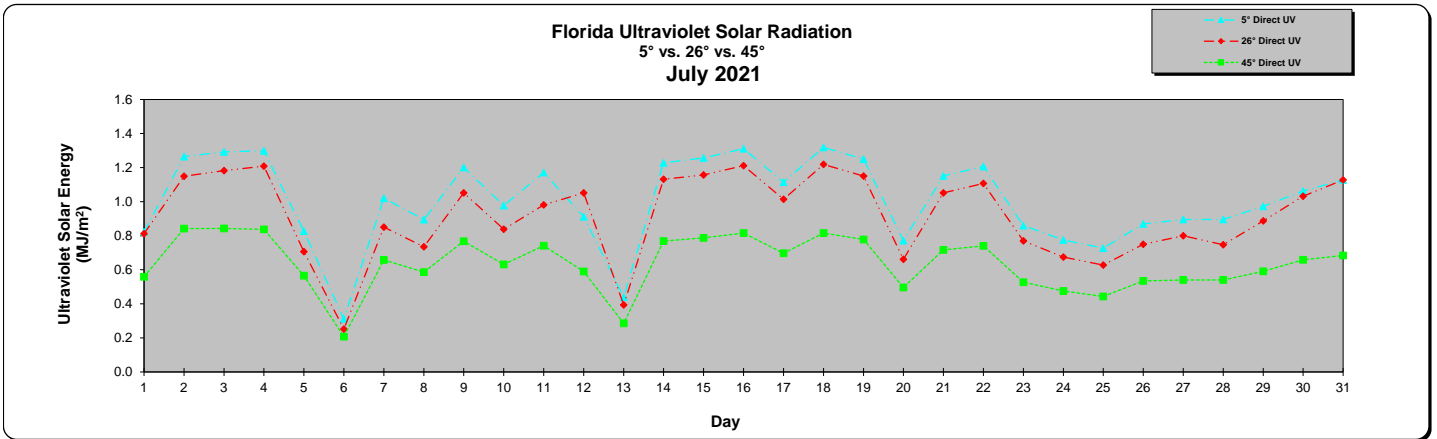
Solar Radiation Summary													
Month	Total Solar Radiation (MJ/m ²)						Ultraviolet Solar Radiation (MJ/m ²)						
	Direct			Underglass			Direct			Underglass			
	5°	26°	45°	5°	26°	45°	5°	26°	45°	5°	26°	45°	
1	13.4	13.0	10.5	10.7	10.0	8.8	0.82	0.81	0.56	0.51	0.46	0.35	
2	24.3	22.6	17.5	19.3	17.9	14.7	1.26	1.15	0.84	0.78	0.71	0.56	
3	25.5	23.4	17.9	20.5	18.9	15.0	1.29	1.18	0.84	0.78	0.73	0.56	
4	25.8	23.6	18.0	20.7	19.2	15.2	1.30	1.21	0.84	0.79	0.75	0.56	
5	14.0	13.8	11.5	11.3	11.1	9.8	0.83	0.71	0.57	0.50	0.46	0.37	
6	4.1	3.8	3.3	3.3	3.0	2.9	0.31	0.25	0.21	0.18	0.16	0.12	
7	17.7	16.4	13.2	14.0	12.8	10.9	1.02	0.85	0.66	0.60	0.57	0.43	
8	15.2	14.1	11.1	11.9	11.0	9.1	0.89	0.73	0.59	0.53	0.46	0.38	
9	23.5	22.1	17.3	18.6	17.5	14.5	1.20	1.05	0.77	0.72	0.67	0.53	
10	17.9	17.4	13.9	14.4	13.8	11.8	0.98	0.84	0.63	0.59	0.59	0.43	
11	22.6	20.9	16.6	17.9	16.8	13.7	1.17	0.98	0.74	0.71	0.63	0.51	
12	16.4	15.6	13.0	13.1	12.6	11.0	0.91	0.85	0.59	0.56	0.53	0.41	
13	6.6	5.8	5.2	5.1	4.8	4.3	0.44	0.39	0.29	0.27	0.27	0.18	
14	24.0	22.7	18.1	19.1	18.3	15.1	1.23	1.13	0.77	0.75	0.73	0.54	
15	24.7	23.0	18.3	19.5	18.6	15.1	1.26	1.16	0.79	0.77	0.75	0.55	
16	26.3	24.4	19.1	20.8	19.6	15.8	1.31	1.21	0.82	0.80	0.79	0.58	
17	20.3	19.1	15.2	16.3	15.3	12.6	1.11	1.01	0.70	0.67	0.67	0.48	
18	26.3	24.5	19.1	20.7	19.6	15.9	1.32	1.22	0.82	0.80	0.80	0.58	
19	24.6	23.1	18.2	19.2	18.4	15.2	1.25	1.15	0.78	0.76	0.75	0.56	
20	13.1	12.6	10.2	10.2	9.8	8.7	0.77	0.66	0.50	0.47	0.43	0.35	
21	22.1	20.6	16.3	17.4	16.5	13.8	1.15	1.05	0.72	0.69	0.68	0.51	
22	24.5	23.1	18.1	19.4	18.5	15.0	1.21	1.11	0.74	0.71	0.72	0.53	
23	15.2	14.6	11.8	12.1	11.4	9.8	0.86	0.77	0.53	0.50	0.50	0.37	
24	13.0	12.2	10.3	10.4	9.7	8.6	0.78	0.68	0.48	0.46	0.44	0.33	
25	11.9	10.1	8.9	9.4	8.5	7.2	0.73	0.63	0.44	0.42	0.41	0.30	
26	14.3	13.6	11.2	11.3	10.7	9.4	0.87	0.75	0.53	0.52	0.49	0.38	
27	15.5	15.9	12.3	12.5	12.7	10.6	0.90	0.80	0.54	0.56	0.53	0.39	
28	17.3	15.7	12.3	13.9	12.7	10.6	0.90	0.75	0.54	0.56	0.49	0.39	
29	18.9	18.1	14.4	15.2	14.3	12.1	0.97	0.89	0.59	0.61	0.58	0.44	
30	21.0	20.5	16.4	17.4	16.7	14.5	1.06	1.03	0.66	0.70	0.69	0.55	
31	22.4	21.6	17.4	18.3	17.7	14.8	1.13	1.13	0.68	0.72	0.72	0.57	
Monthly Total	582.5	548.1	436.6	463.9	438.5	366.3	31.23	28.33	19.73	18.97	18.18	13.77	
YTD ¹ Total	3886.6	4182.8	3675.6	3169.1	3333.3	3128.4	205.82	233.91	198.62	130.82	144.80	119.50	

Solar Radiation Summary																		
Month	Total Solar Radiation (MJ/m ²)						Ultraviolet Solar Radiation (MJ/m ²)						EMMAQUA™					
	Direct			Underglass			Direct			Underglass			Total	UV				
	5°	34°	45°	5°	34°	45°	5°	34°	45°	5°	34°	45°	5°	34°	45°	Total	UV	
1	27.6	24.2	21.7	23.7	20.8	19.0	1.38	1.18	1.11	0.93	0.85	0.72	158	5.35				
2	23.4	21.3	19.4	20.1	18.2	17.1	1.28	1.08	1.02	0.85	0.78	0.66	0	0.00				
3	17.5	15.8	14.4	14.9	13.4	12.6	0.97	0.82	0.78	0.64	0.58	0.50	0	0.00				
4	24.3	21.7	19.4	20.8	18.4	17.2	1.34	1.13	1.06	0.90	0.82	0.70	0	0.00				
5	24.8	22.2	19.8	21.3	18.9	17.6	1.33	1.14	1.07	0.89	0.82	0.70	0	0.00				
6	28.9	25.0	22.4	24.7	21.3	19.5	1.40	1.19	1.12	0.94	0.84	0.72	167	5.76				
7	28.0	24.5	22.1	23.9	21.0	19.4	1.29	1.11	1.04	0.87	0.80	0.67	146	4.91				
8	28.9	25.4	22.7	24.8	21.7	19.9	1.46	1.25	1.17	0.99	0.90	0.76	181	6.95				
9	27.3	24.4	22.0	23.8	21.0	19.4	1.43	1.23	1.16	0.96	0.89	0.75	156	6.14				
10	24.2	22.4	20.4	20.6	19.1	18.0	1.27	1.10	1.03	0.83	0.78	0.66	0	0.00				
11	23.6	21.4	19.6	20.2	18.4	17.3	1.19	1.03	0.97	0.79	0.73	0.63	116	4.24				
12	26.3	23.7	21.7	23.3	20.1	18.8	1.27	1.09	1.03	0.84	0.78	0.67	108	3.57				
13	23.0	20.7	19.0	19.2	17.4	16.4	1.17	0.99	0.93	0.77	0.70	0.60	0	0.00				
14	22.2	20.4	18.5	19.0	17.3	16.4	1.19	1.02	0.95	0.79	0.73	0.63	0	0.00				
15	19.7	17.9	16.5	16.8	15.2	14.3	1.04	0.89	0.84	0.69	0.63	0.54	39	1.29				
16	23.9	21.8	19.8	20.3	18.4	17.4	1.26	1.08	1.00	0.84	0.77	0.68	0	0.00				
17	28.0	24.5	22.1	23.9	21.0	19.4	1.29	1.11	1.04	0.87	0.80	0.67	146	4.91				
18	24.3	21.4	19.5	20.0	17.8	16.6	1.30	1.05	0.98	0.85	0.76	0.64	0	0.00				
19	23.2	21.0	19.2	19.4	17.8	16.9	1.27	1.04	0.98	0.84	0.77	0.65	0	0.00				
20	27.2	24.5	22.4	22.9	20.8	19.5	1.40	1.17	1.10	0.93	0.86	0.72	0	0.00				
21	22.3	20.2	18.6	18.8	17.3	16.3	1.20	1.00	0.94	0.80	0.74	0.62	0	0.00				
22	23.6	21.4	19.9	20.1	18.5	17.5	1.17	0.98	0.92	0.79	0.74	0.61	0	0.00				
23	2.5	2.2	1.9	2.1	1.8	1.7	0.19	0.15	0.14	0.12	0.11	0.09	0	0.00				
24	12.4	11.1	10.3	10.4	9.4	9.0	0.76	0.62	0.58	0.51	0.46	0.39	0	0.00				
25	10.0	9.0	8.2	8.5	7.5	7.2	0.66	0.53	0.49	0.44	0.40	0.33	0	0.00				
26	27.6	24.8	22.6	23.4	21.1	19.8	1.45	1.22	1.14	0.98	0.91	0.76	0	0.00				
27	27.9	25.1	23.0	23.7	21.6	20.4	1.43	1.21	1.14	0.97	0.91	0.76	174	6.91				
28	28.3	25.4	23.2	23.9	21.6	20.4	1.45	1.22	1.15	0.98	0.92	0.76	180	7.08				
29	21.1	19.3	17.8	17.9	16.5	15.7	1.16	0.96	0.90	0.78	0.72	0.60	0	0.00				
30	27.5	25.2	23.1	23.5	21.6	20.5	1.43	1.21	1.14	0.97	0.92	0.76	151	6.15				
31	26.1	24.2	22.2	22.3	20.7	19.9	1.38	1.17	1.11	0.94	0.89	0.75	0	0.00				
Monthly Total	717.7	645.5	587.2	610.1	549.6	515.9	37.59	31.76	29.83	25.15	23.13	19.56	1574	58.34				
YTD ¹ Total	4685.7	4839.8	4677.4	3957.1	4139.5	4121.7	226.76	212.53	208.11	156.17	156.17	142.09	21206.19	672.36				

¹ Year To Date

Note: Total Solar Radiation - (290-3000 nm) Ultraviolet Solar Radiation - (295-385 nm).

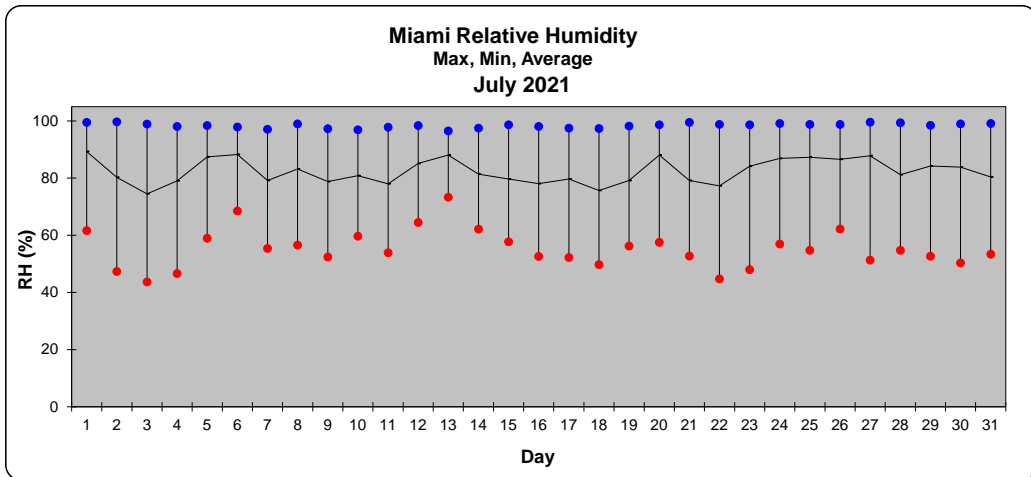
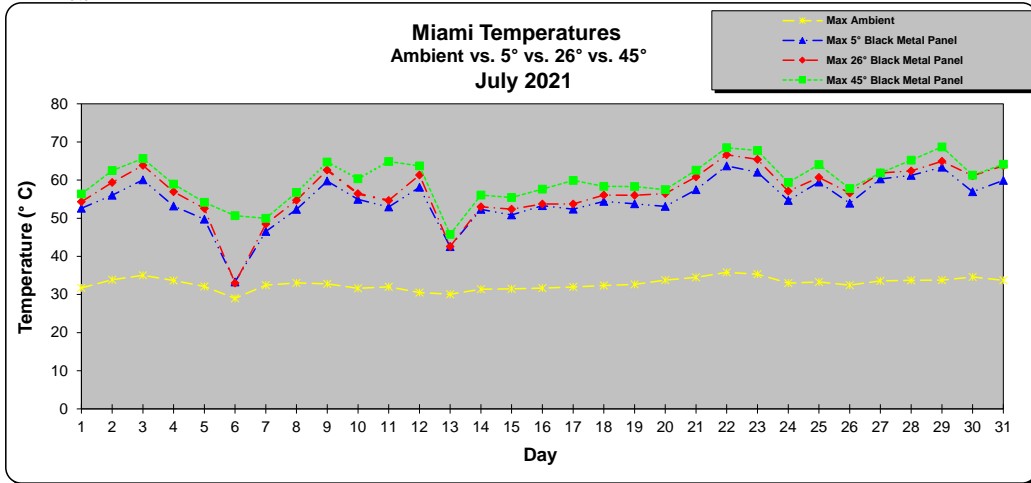




Latitude 25° 34' North, Longitude 80° 28' West, Elevation 2 (m)

Month	Temperature Summary												Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity			Wind Speed		Wind Direction	Rainfall
July	° C			5 °			26 °			45 °			%			m/sec		360°/0°=N	(mm)
Day	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Avg.	Avg	Total
1	32	22	26	53	21	29	54	21	29	56	9	31	100	62	89	4.4	0.0	146°	0.3
2	34	22	27	56	21	32	59	21	33	63	18	38	100	47	80	4.5	0.0	169°	0.8
3	35	23	29	60	22	33	64	22	34	66	25	40	99	44	74	5.1	0.0	235°	0.0
4	34	24	29	53	22	33	57	22	34	59	25	37	98	47	79	5.0	0.0	154°	0.0
5	32	24	27	50	23	29	53	23	29	54	10	29	98	59	87	5.8	0.0	108°	13.5
6	29	24	27	33	23	27	33	23	27	51	13	31	98	69	88	5.6	0.3	115°	1.5
7	32	25	28	47	24	32	48	24	32	50	24	33	97	55	79	4.2	0.3	130°	0.0
8	33	23	27	52	22	30	55	22	30	57	24	34	99	57	83	4.8	0.0	120°	0.8
9	33	23	28	60	22	32	63	22	33	65	26	38	97	52	79	4.4	0.0	102°	0.0
10	32	22	27	55	21	30	56	21	30	60	14	33	97	60	81	5.0	0.0	116°	4.6
11	32	22	27	53	21	31	55	21	31	65	23	41	98	54	78	5.9	0.0	105°	6.6
12	30	23	26	58	23	30	61	23	30	64	4	33	98	65	85	8.3	0.0	92°	11.2
13	30	24	26	43	22	27	43	23	27	46	5	26	97	73	88	5.5	0.0	86°	11.2
14	31	23	27	52	22	32	53	22	32	56	17	35	98	62	81	5.9	0.0	89°	3.0
15	31	24	28	51	22	32	52	22	32	55	12	35	99	58	80	5.8	0.0	100°	0.0
16	32	23	27	53	22	32	54	22	32	58	1	37	98	53	78	5.5	0.0	99°	1.8
17	32	24	27	52	23	31	54	22	31	60	5	33	98	52	80	4.8	0.0	114°	0.0
18	32	24	28	54	22	33	56	22	33	58	25	35	97	50	76	5.7	0.0	100°	0.0
19	33	24	28	54	23	32	56	23	33	58	25	35	98	56	79	4.9	0.0	102°	0.0
20	34	24	27	53	23	29	56	23	29	57	9	35	99	58	88	5.5	0.0	131°	17.3
21	35	23	28	58	23	33	61	22	34	63	25	40	100	53	79	3.8	0.0	131°	0.3
22	36	23	29	64	22	34	67	22	35	68	25	38	99	45	77	4.7	0.0	130°	0.0
23	35	25	28	62	23	31	65	23	31	68	24	35	99	48	84	5.1	0.0	181°	1.5
24	33	24	27	55	21	29	57	21	30	59	5	34	99	57	87	7.4	0.0	192°	14.0
25	33	23	26	59	22	29	61	22	29	64	12	31	99	55	87	5.9	0.0	159°	36.8
26	32	23	27	54	22	29	57	22	29	58	9	29	99	62	87	5.0	0.0	133°	11.4
27	34	23	27	60	22	30	62	22	30	62	6	30	100	51	88	6.4	0.0	148°	89.2
28	34	23	27	61	22	31	62	22	31	65	21	33	99	55	81	5.7	0.0	168°	7.6
29	34	23	27	63	22	31	65	22	31	69	21	33	99	53	84	5.9	0.0	139°	9.9
30	35	23	27	57	22	32	61	22	32	61	22	33	99	50	84	3.9	0.0	135°	0.0
31	34	23	28	60	22	33	64	22	33	64	23	34	99	53	80	4.8	0.0	119°	0.0
Monthly Avg.	33	23	27	55	22	31	57	22	31	60	16	34	98	55	82	5.3	0.0	131°	
Monthly Total																			243.1
YTD [†] Avg.	30	19	24	52	17	28	54	17	28	54	17	29	95	52	78	15.3	0.6	99°	785.8
YTD [†] Total																			785.8

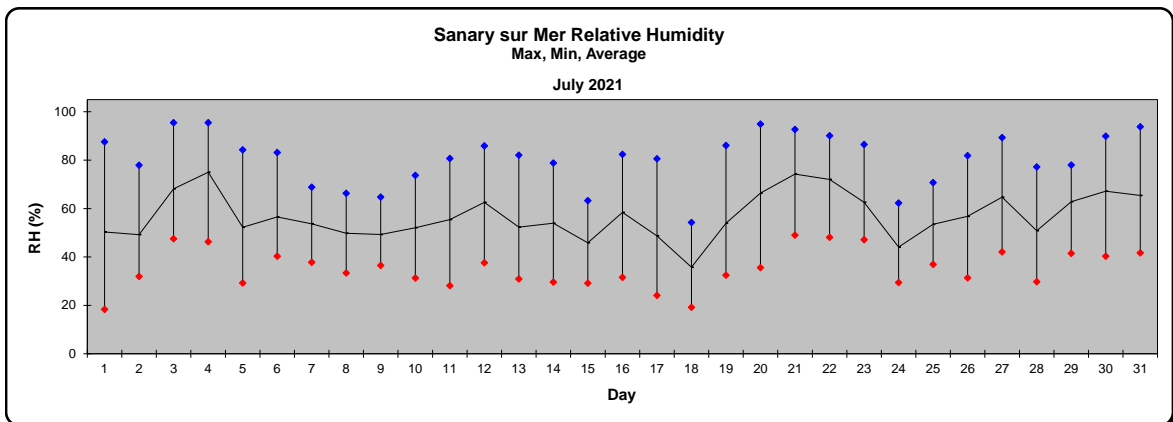
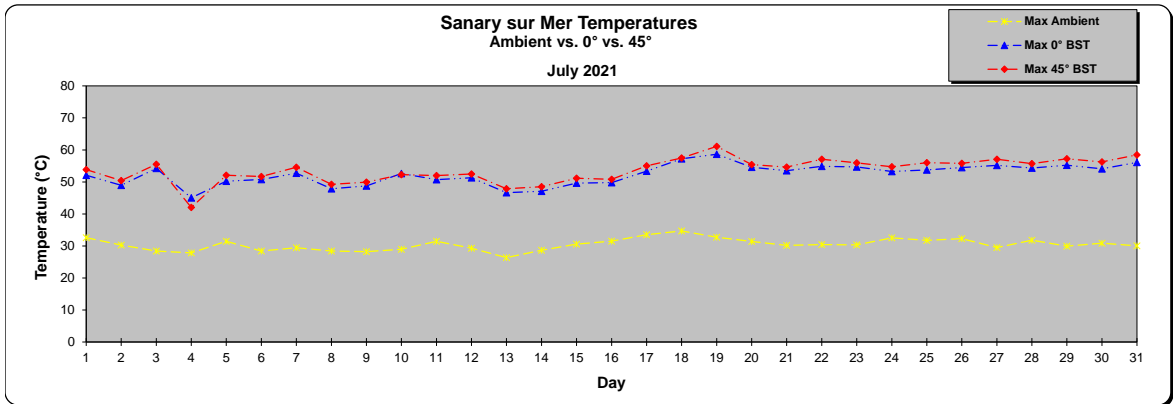
[†] Year To Date
Note:



Month	Temperature Summary																		Climate Summary										
	Ambient Temperature			Black Standard Temperature BST (°C)						Black Panel Temperature BPT (°C)						Black Metal Panel Temperature (ASTM G179) (°C)						Relative Humidity			Wind Speed		Wind Direction	Rainfall	
	°C			0°			45°			0°			45°			0°			45°			%			(m/s)		360°/0°=N	(mm)	
Day	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total	
1	33	17	23	52	14	29	54	14	28	48	14	27	48	13	26	55	14	29	55	14	28	88	18	50	9.0	1.3	273°	0.0	
2	30	18	25	49	15	30	50	15	30	45	15	29	44	15	28	51	15	30	51	16	30	78	32	49	7.0	1.1	268°	0.0	
3	28	20	24	54	18	30	56	18	30	50	18	29	50	17	28	55	18	31	56	18	30	96	48	68	4.3	0.8	203°	0.0	
4	28	18	22	45	16	25	42	16	24	43	16	28	43	15	23	50	16	28	49	17	25	96	46	75	4.4	0.7	269°	0.0	
5	31	19	25	50	17	30	52	17	30	45	17	28	45	17	27	52	17	30	52	17	30	84	29	52	6.6	1.2	276°	0.0	
6	28	20	24	51	18	31	52	17	30	46	17	28	46	17	28	50	17	30	52	18	30	83	40	57	7.4	1.6	92°	0.0	
7	29	19	24	53	17	31	55	17	30	49	16	28	48	16	28	55	17	28	55	17	30	69	38	54	4.5	0.8	262°	0.0	
8	28	19	24	48	18	27	49	18	26	45	17	26	45	17	25	51	18	27	51	18	27	66	33	50	6.8	1.1	277°	0.0	
9	28	17	23	49	14	28	50	14	27	44	14	26	44	13	25	52	14	28	52	14	27	65	37	49	7.5	1.4	270°	0.0	
10	29	17	23	53	13	30	52	14	29	49	13	28	47	13	27	54	13	30	53	14	29	74	31	52	5.7	0.9	251°	0.0	
11	31	18	24	51	16	30	52	16	29	46	16	27	46	15	27	53	13	30	53	16	29	81	28	55	6.9	1.2	271°	0.0	
12	29	20	24	51	18	30	52	18	30	48	18	28	48	17	28	53	18	30	53	18	30	86	38	63	7.5	1.4	90°	0.0	
13	26	18	21	47	14	26	48	16	26	42	15	24	42	15	24	48	13	27	48	16	26	82	31	52	9.5	2.0	275°	0.3	
14	29	16	22	47	14	27	49	14	26	42	14	25	42	14	24	50	14	27	51	14	27	79	30	54	9.8	1.9	265°	0.0	
15	31	19	24	50	17	29	51	17	29	45	18	27	45	17	27	51	17	29	53	18	29	63	29	46	9.0	1.6	271°	0.0	
16	32	17	23	50	15	29	51	15	28	46	15	27	45	14	26	52	15	28	52	15	28	82	32	58	7.3	1.1	245°	0.0	
17	34	18	25	53	15	31	55	15	31	48	15	29	48	14	28	55	15	31	56	16	31	81	24	49	6.9	1.0	270°	0.0	
18	35	20	28	57	17	34	57	17	33	54	17	32	53	16	31	59	17	34	58	18	34	54	19	36	5.8	0.9	262°	0.0	
19	33	21	27	59	19	32	61	18	32	56	18	30	55	18	30	60	18	35	62	19	32	86	33	54	5.4	0.8	122°	0.0	
20	31	20	25	55	18	32	55	18	32	50	18	30	51	17	29	56	18	32	57	18	32	95	36	66	4.4	0.8	219°	0.0	
21	30	19	24	53	17	31	55	17	31	50	17	29	49	16	28	55	17	31	56	17	31	93	49	74	3.8	0.8	220°	0.0	
22	30	19	25	55	17	32	57	17	31	50	16	30	51	16	29	56	17	32	58	17	32	90	48	72	3.6	0.7	188°	0.0	
23	30	20	25	55	18	32	56	18	32	49	17	30	50	17	30	54	18	32	56	18	32	87	47	63	5.2	1.1	85°	0.0	
24	33	21	27	53	18	32	55	18	32	48	18	30	49	18	30	54	18	31	55	19	32	62	29	44	8.1	1.8	93°	0.0	
25	32	21	26	54	19	32	56	19	32	50	19	30	51	18	30	57	19	32	59	19	32	71	37	53	4.4	0.8	266°	0.0	
26	32	21	26	55	18	32	56	18	32	49	18	30	51	17	29	55	18	32	57	18	32	82	31	57	4.5	0.9	224°	0.0	
27	29	21	25	55	18	31	57	18	31	50	18	29	51	17	29	57	18	31	58	18	31	89	42	65	4.8	0.9	127°	0.0	
28	32	20	26	54	17	31	56	17	31	50	16	30	51	16	29	56	17	31	56	17	31	77	30	51	5.7	0.9	272°	0.0	
29	30	20	25	55	18	32	57	18	32	51	17	30	52	17	29	55	18	32	57	18	32	78	41	63	4.5	0.9	204°	0.0	
30	31	20	25	54	17	31	56	17	31	49	17	29	50	16	29	55	17	31	57	18	31	90	40	67	4.2	0.8	242°	0.0	
31	30	19	25	56	17	31	58	17	31	52	17	29	52	16	29	60	19	33	60	17	31	94	42	65	4.1	0.8	255°	0.0	
Monthly Avg.	30	19	24	52	17	30	54	17	30	48	16	28	48	16	28	54	17	30	55	17	30	81	35	57	6.1	1.1	223°	0.0	
Monthly Total																													0.3
YTD [†] Avg.	21	11	16	46	13	24	48	13	24	45	14	24	44	12	22	49	13	24	50	13	24	84	41	63	6.3	1.2	177°	277.1	
YTD [†] Total																													

[†] Year To Date

Note: *No data available



**Solar Radiation Summary
July 2021**

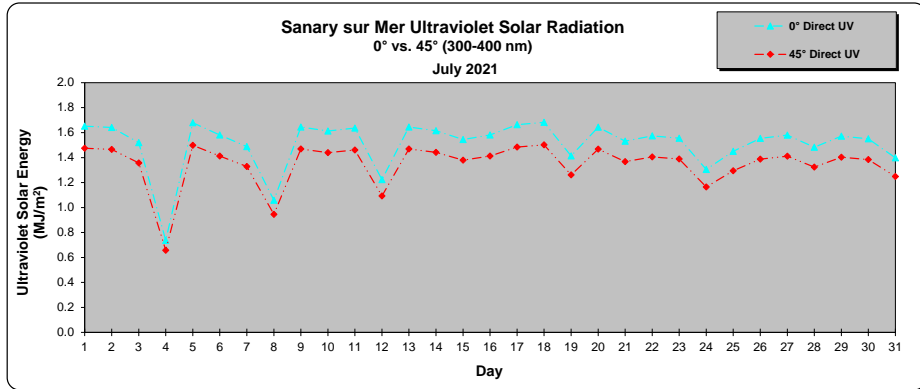
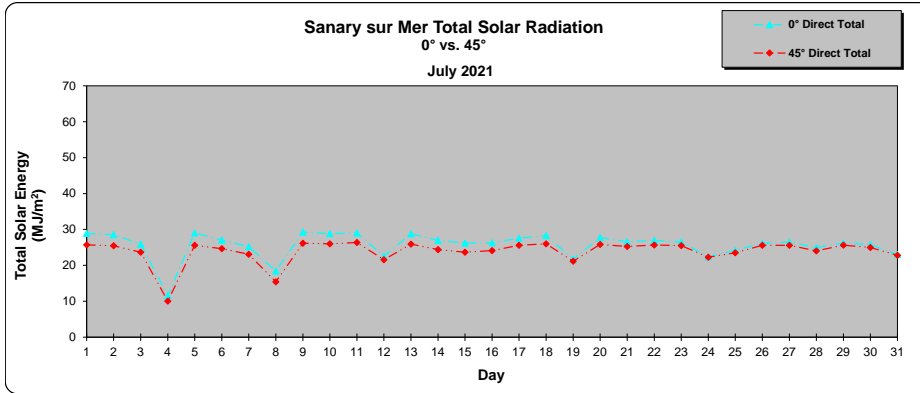
Sanary sur Mer, France

Latitude 43° 08' North, Longitude 05° 49' East, Elevation 110 (m)

Month	Solar Radiation Summary					
	Total Solar Radiation (MJ/m ²)		Ultraviolet Solar Radiation (MJ/m ²)			
	Direct		295-385 nm		300-400 nm	
Day	0°	45°	0°	45°	0°	45°
1	28.9	25.7	1.26	1.12	1.65	1.48
2	28.5	25.5	1.25	1.12	1.64	1.47
3	25.9	23.7	1.16	1.03	1.52	1.36
4	11.6	10.1	0.56	0.50	0.74	0.66
5	29.0	25.6	1.28	1.14	1.68	1.50
6	27.0	24.6	1.20	1.07	1.58	1.41
7	25.2	23.1	1.13	1.01	1.49	1.33
8	18.4	15.4	0.81	0.72	1.06	0.95
9	29.3	26.2	1.25	1.12	1.65	1.47
10	28.8	26.0	1.23	1.10	1.61	1.44
11	29.0	26.4	1.25	1.11	1.64	1.46
12	22.5	21.6	0.93	0.83	1.22	1.09
13	28.8	25.9	1.25	1.12	1.65	1.47
14	27.0	24.4	1.23	1.10	1.62	1.44
15	26.2	23.7	1.18	1.05	1.54	1.38
16	26.3	24.1	1.20	1.07	1.58	1.41
17	27.6	25.6	1.27	1.13	1.66	1.49
18	28.3	26.0	1.28	1.14	1.68	1.50
19	21.8	21.2	1.08	0.96	1.41	1.26
20	27.7	25.8	1.25	1.12	1.64	1.47
21	26.6	25.3	1.17	1.04	1.53	1.37
22	27.0	25.7	1.20	1.07	1.57	1.41
23	26.5	25.5	1.18	1.06	1.56	1.39
24	22.4	22.3	0.99	0.89	1.30	1.17
25	24.2	23.5	1.10	0.99	1.45	1.30
26	26.2	25.6	1.18	1.06	1.55	1.39
27	26.5	25.6	1.20	1.07	1.58	1.41
28	25.0	24.1	1.13	1.01	1.48	1.32
29	26.3	25.6	1.20	1.07	1.57	1.40
30	25.8	25.0	1.18	1.05	1.55	1.38
31	23.0	22.8	1.06	0.95	1.40	1.25
Monthly Total	797.3	741.3	35.63	31.81	46.82	41.80
YTD[†] Total	3772.6	4205.0	184.87	192.84	180.91	183.71

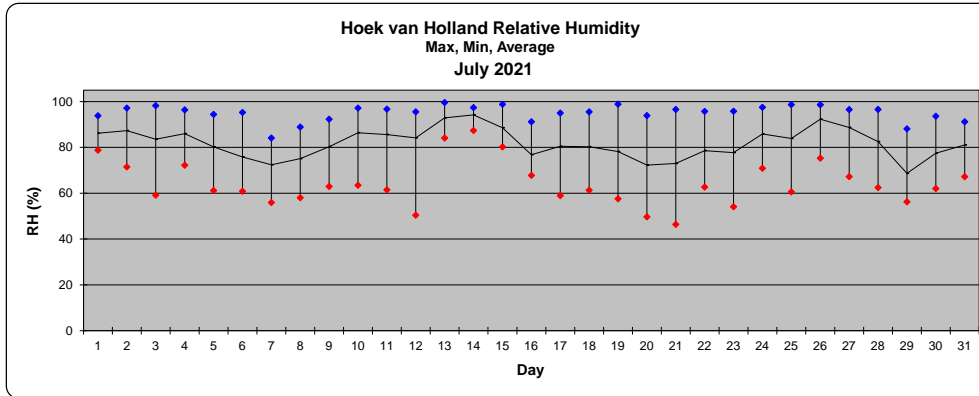
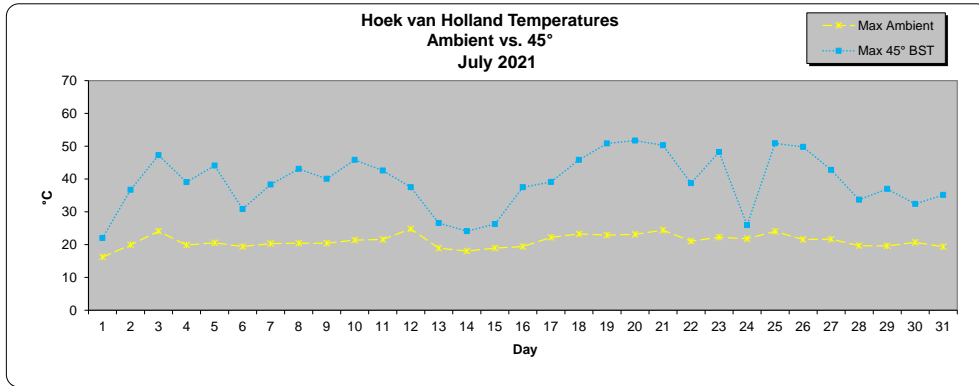
[†] Year To Date Total Solar Radiation - (290-3000 nm) Ultraviolet Solar Radiation - (295-385 nm) or (300-400 nm).

Note:



Month	Temperature Summary						Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (°C)			Relative Humidity			Wind Speed		Wind Direction	Rainfall
July	°C			45 °			%			(m/s)		360°/0°= N	(mm)
Day	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	16	13	15	22	10	13	94	79	86	8.5	4.9	266°	0.3
2	20	14	16	37	8	17	97	72	87	6.4	2.8	275°	0.0
3	24	13	18	47	7	19	98	59	84	6.8	1.5	90°	0.0
4	20	15	18	39	9	17	96	72	86	4.5	1.9	184°	1.5
5	21	15	17	44	11	19	94	61	80	7.4	3.2	161°	10.2
6	19	16	18	31	12	18	95	61	76	18.4	6.5	169°	1.3
7	20	16	18	38	11	20	84	56	72	8.7	3.8	186°	0.0
8	20	14	18	43	8	22	89	58	75	5.9	2.6	210°	0.0
9	20	14	17	40	7	19	92	63	80	5.6	2.2	211°	0.0
10	21	14	17	46	8	18	97	63	86	4.8	1.6	82°	4.6
11	22	15	18	43	10	19	97	62	86	5.4	1.7	307°	4.3
12	25	15	19	37	9	19	96	50	84	6.3	1.5	28°	9.7
13	19	16	18	27	12	16	100	84	93	10.0	4.0	339°	0.0
14	18	16	17	24	13	15	97	87	94	11.3	5.4	318°	0.0
15	19	16	17	26	13	17	99	80	89	13.6	6.1	334°	0.0
16	19	16	17	37	12	19	91	68	77	9.8	4.6	334°	0.0
17	22	15	19	39	10	22	95	59	81	8.1	3.4	345°	0.0
18	23	15	19	46	9	23	96	61	80	7.8	2.4	312°	0.0
19	23	14	19	51	9	21	99	58	78	6.5	1.8	17°	0.0
20	23	12	18	52	6	23	94	50	72	6.1	1.7	15°	0.0
21	24	14	20	50	8	24	97	46	73	5.6	1.9	10°	0.0
22	21	15	18	39	9	20	96	63	79	7.9	3.2	350°	0.0
23	22	12	17	48	6	18	96	54	78	7.5	2.2	31°	0.0
24	22	15	18	26	10	16	98	71	86	7.5	2.1	51°	2.8
25	24	17	20	51	13	23	99	61	84	5.4	2.1	117°	3.3
26	22	16	18	50	11	19	99	75	92	5.8	2.0	286°	8.4
27	22	16	18	43	12	17	97	67	89	9.8	3.7	174°	10.4
28	20	16	18	34	12	17	97	63	83	14.8	6.3	179°	0.0
29	20	14	18	37	10	20	88	56	69	11.9	5.9	215°	5.3
30	21	15	17	32	10	16	94	62	78	14.1	5.4	168°	5.6
31	19	16	18	35	12	18	91	67	81	16.5	5.9	230°	2.0
Monthly Avg.	21	15	18	39	10	19	95	64	82	8.7	3.4	193°	
Monthly Total													69.6
YTD[†] Avq.	13	7	10	28	1	10	93	62	80	9.6	3.8	201°	
YTD[†] Total													474.2

[†] Year To Date For Pollution (SO2, Nox, O3) visit www.lml.rivm.nl
Note: = 5 year average



North Sea Corrosion Test Centre

Solar Radiation Summary

July 2021

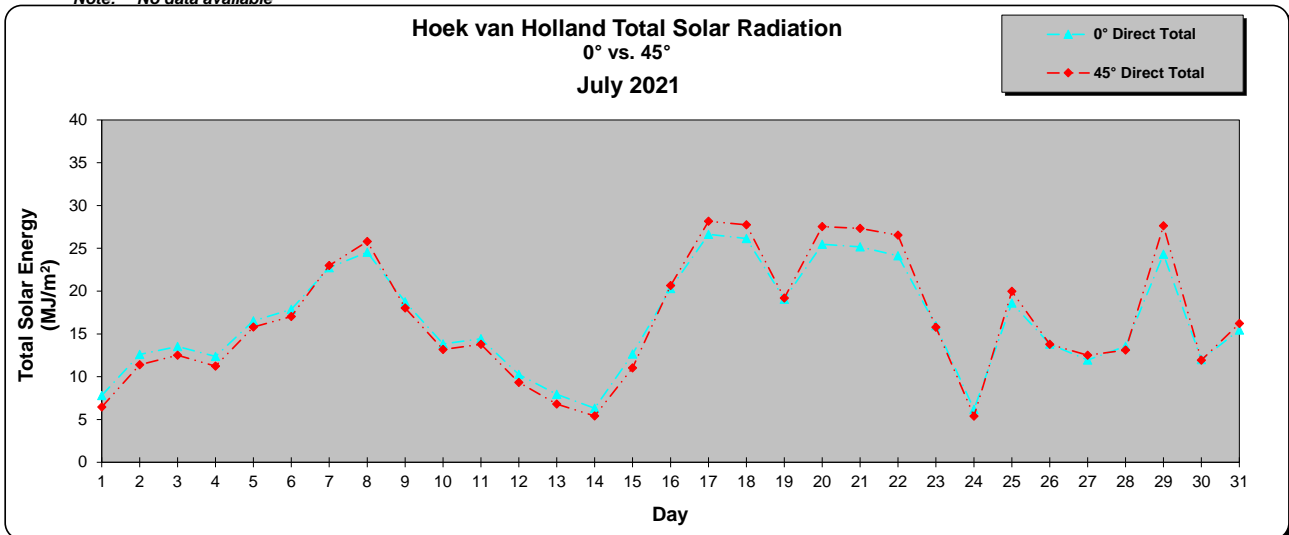
Hoek van Holland, The Netherlands

Latitude 51° 57' North, Longitude 04° 10' East Elevation 6 (m)

AWSG	Solar Radiation Summary	
Month	Total Solar Radiation (MJ/m ²)	
July	Direct	
Day	0°	45°
1	7.8	6.5
2	12.6	11.4
3	13.5	12.5
4	12.4	11.2
5	16.5	15.8
6	17.9	17.0
7	22.7	23.0
8	24.6	25.8
9	18.7	18.0
10	13.8	13.2
11	14.4	13.8
12	10.3	9.3
13	7.9	6.8
14	6.3	5.4
15	12.6	11.0
16	20.3	20.6
17	26.6	28.2
18	26.1	27.8
19	19.0	19.2
20	25.5	27.5
21	25.2	27.3
22	24.1	26.6
23	16.0	15.8
24	6.2	5.4
25	18.6	20.0
26	13.8	13.8
27	12.0	12.5
28	13.6	13.1
29	24.3	27.6
30	12.0	11.9
31	15.5	16.2
Monthly Total	510.7	514.3
YTD[†] Total	2692.8	3157.3

[†] Year To Date Total Solar Radiation - (290-3000nm)

Note: * No data available

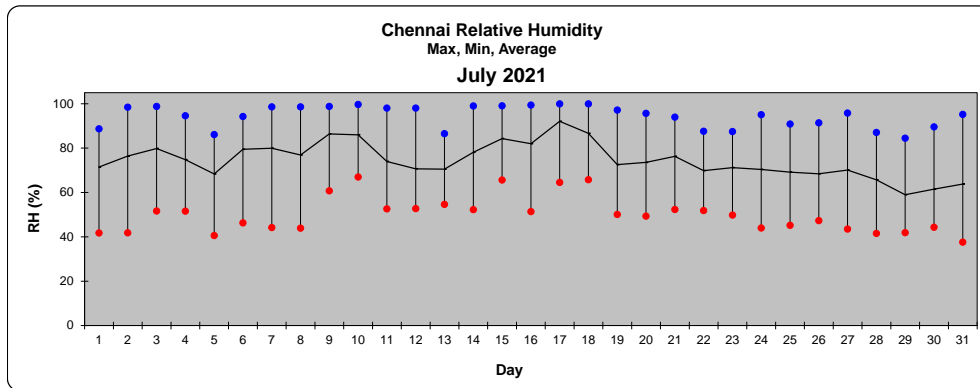
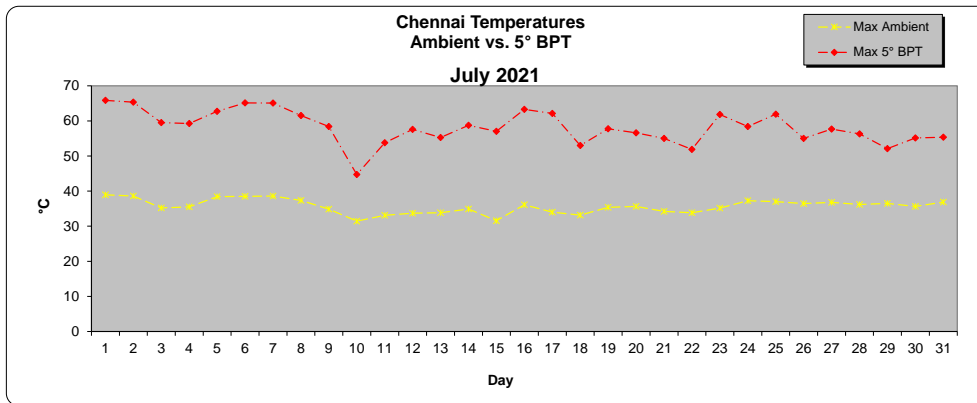


Latitude 12° 35' North, Longitude 79° 48' East Elevation 45 (m)

Month	Temperature Summary						Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (°C)			Relative Humidity			Wind Speed		Wind Direction	Rainfall
July	°C			5°			%			(m/s)		360°/70° = N	(mm)
Day	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	39	26	31	66	23	35	89	42	71	5.4	1.1	216°	0.0
2	39	25	30	65	23	35	99	42	76	4.3	1.0	269°	10.4
3	35	25	29	60	23	34	99	52	80	3.2	0.8	235°	0.3
4	36	26	30	59	24	35	95	52	75	4.7	1.0	267°	0.0
5	38	25	31	63	23	35	86	41	68	5.3	1.5	273°	0.0
6	39	26	30	65	23	34	94	46	79	3.5	0.8	232°	5.8
7	39	25	30	65	23	35	99	44	80	8.0	0.8	190°	17.5
8	37	25	30	62	23	35	99	44	77	4.0	1.0	284°	5.1
9	35	24	28	58	22	31	99	61	86	5.9	1.0	230°	14.5
10	31	25	28	45	23	29	100	67	86	3.9	0.7	228°	1.3
11	33	26	29	54	24	32	98	53	74	4.0	0.9	235°	3.8
12	34	27	30	58	25	33	98	53	71	5.3	0.9	232°	0.0
13	34	27	30	55	25	32	87	55	71	6.2	1.3	231°	0.0
14	35	26	29	59	23	32	99	52	78	5.3	0.9	235°	6.4
15	32	25	28	57	23	31	99	66	84	4.8	0.8	228°	7.1
16	36	25	29	63	24	33	99	51	82	5.4	0.8	260°	32.3
17	34	24	27	62	23	31	100	65	92	5.5	0.6	231°	53.1
18	33	24	28	53	22	31	100	66	87	5.2	1.0	247°	46.5
19	35	26	31	58	24	35	97	50	73	6.5	1.2	236°	0.0
20	36	26	30	57	23	34	96	49	74	4.9	1.0	252°	0.0
21	34	26	29	55	24	32	94	52	76	4.5	0.9	242°	0.8
22	34	27	30	52	25	31	88	52	70	5.9	1.4	233°	0.3
23	35	26	30	62	24	33	88	50	71	5.9	1.0	241°	0.0
24	37	26	31	58	23	35	95	44	70	5.2	0.9	250°	0.0
25	37	27	31	62	24	36	91	45	69	4.0	1.0	235°	0.0
26	36	28	32	55	25	33	91	47	68	4.5	0.9	272°	0.3
27	37	26	31	58	23	35	96	44	70	4.7	1.0	239°	0.0
28	36	26	31	56	23	35	87	42	66	5.9	1.1	240°	0.0
29	36	26	32	52	24	35	85	42	59	5.7	1.2	253°	0.0
30	36	27	31	55	25	34	90	44	61	5.3	1.1	234°	0.8
31	37	25	31	55	22	34	95	38	64	4.4	1.3	264°	3.0
Monthly Avg.	36	26	30	58	24	33	94	50	74	5.1	1.0	242°	
Monthly Total													209.0
YTD [†] Avg.	35	25	29	59	22	32	97	45	76	4.7	0.9	155°	
YTD [†] Total													462.0

[†] Year To Date

Note: * Data Unavailable





ATLAS

WEATHERING SERVICES GROUP



Solar Radiation Summary July 2021

Chennai, India

Latitude 12° 35' North, Longitude 79° 48' East Elevation 45 (m)

AWSG Solar Radiation Summary			
Month	Total Solar Radiation (MJ/m ²)	Ultraviolet Solar Radiation (MJ/m ²)	
July	Direct	295-385 nm	300-400 nm
Day	5°	5°	
1	22.2	0.94	1.05
2	25.2	1.07	1.20
3	20.5	0.91	1.02
4	22.5	0.97	1.08
5	25.7	1.10	1.23
6	21.1	0.90	1.01
7	22.5	0.96	1.07
8	25.8	1.11	1.24
9	14.2	0.68	0.76
10	8.84	0.48	0.54
11	15.2	0.75	0.84
12	16.6	0.80	0.89
13	15.1	0.73	0.82
14	17.9	0.85	0.95
15	15.5	0.77	0.86
16	20.3	0.93	1.04
17	13.9	0.69	0.77
18	15.1	0.74	0.82
19	25.5	1.10	1.23
20	23.3	1.01	1.13
21	15.5	0.73	0.81
22	14.3	0.69	0.77
23	17.6	0.82	0.91
24	25.1	1.04	1.16
25	23.9	1.03	1.15
26	24.3	1.06	1.18
27	24.7	1.04	1.17
28	24.8	1.06	1.18
29	20.6	0.90	1.01
30	19.9	0.89	0.99
31	24.4	1.01	1.13
Monthly Total	621.8	27.75	30.98
YTD¹ Total	4375.8	197.14	222.91

¹ Year To Date Total Solar Radiation - (290-3000nm)

Note:

