



ATLAS

AMETEK
MEASUREMENT, COMMUNICATIONS
& TESTING

Weather Summary January 2020 Phoenix, Arizona

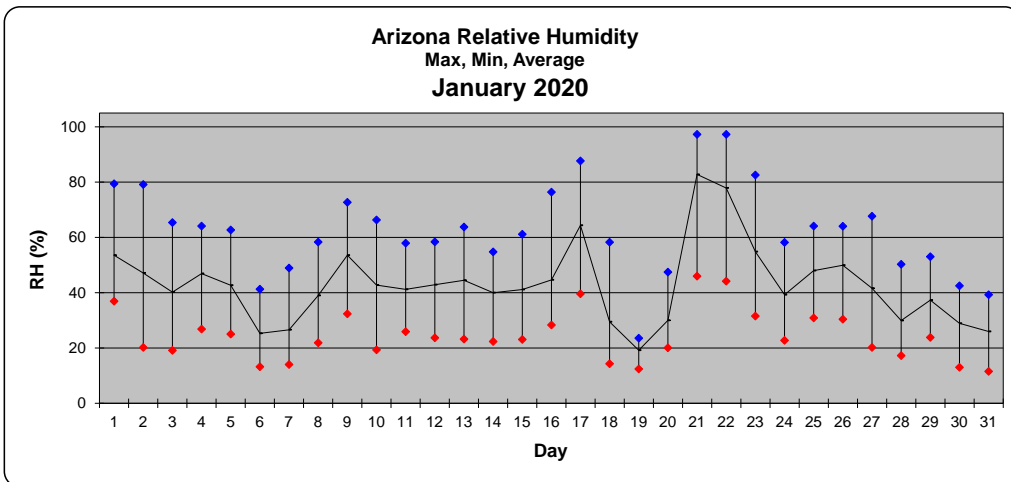
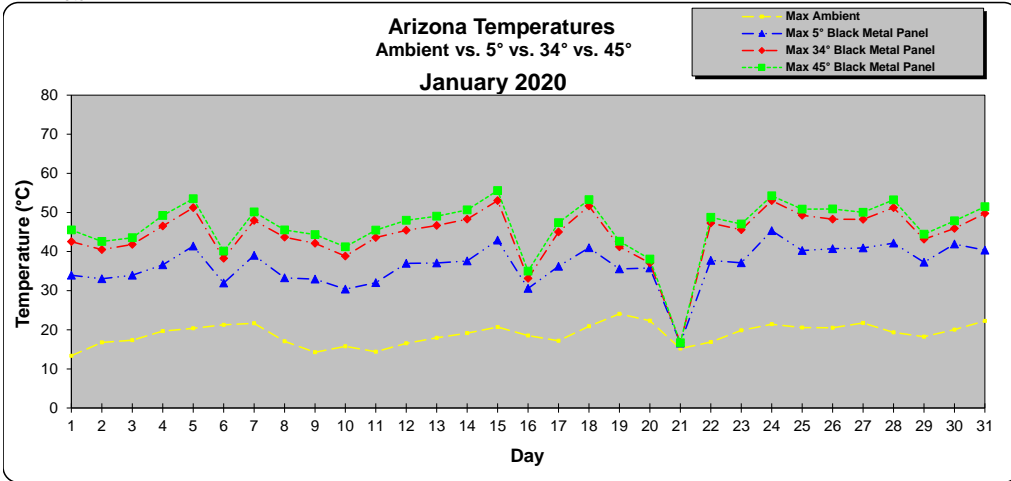
WEATHERING SERVICES GROUP

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

Month	Temperature Summary												Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity			Wind Speed		Wind Direction	Rainfall
January	(° 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	13	4	8	34	0	10	43	1	12	46	1	12	79	37	54	6.9	1.6	28°	0.0
2	17	3	10	33	0	11	40	1	13	43	1	14	79	20	47	9.1	2.3	8°	0.0
3	17	6	10	34	3	12	42	4	14	44	4	15	65	19	40	11.0	2.5	36°	0.0
4	20	5	11	37	2	13	47	3	16	49	3	17	64	27	47	6.5	1.6	25°	0.0
5	20	6	13	41	2	15	51	3	18	54	3	18	63	25	43	8.6	2.3	45°	0.0
6	21	10	14	32	7	15	38	8	17	40	8	18	41	13	25	12.4	3.8	26°	0.0
7	22	9	14	39	6	15	48	7	17	50	7	18	49	14	27	12.9	3.3	34°	0.0
8	17	6	11	33	2	13	44	2	15	46	2	16	58	22	39	6.8	1.6	50°	0.0
9	14	5	9	33	3	11	42	3	12	44	3	13	73	32	54	12.8	1.9	31°	0.0
10	16	5	10	30	1	11	39	1	13	41	2	14	66	19	43	8.2	2.5	11°	0.0
11	14	3	8	32	1	10	44	2	13	45	2	14	58	26	41	6.9	1.9	40°	0.0
12	17	4	9	37	0	12	45	1	14	48	1	15	58	24	43	7.7	1.9	30°	0.0
13	18	4	10	37	1	12	47	2	15	49	2	16	64	23	45	6.3	1.9	46°	0.0
14	19	6	11	38	3	13	48	4	16	51	4	16	55	22	40	6.0	1.9	37°	0.0
15	21	7	13	43	5	14	53	6	16	56	6	16	61	23	41	8.6	2.3	31°	0.0
16	19	8	13	31	5	13	33	5	13	35	5	14	76	28	45	5.3	1.5	34°	0.0
17	17	6	11	36	2	13	45	3	16	47	3	17	88	40	64	6.7	1.2	349°	0.0
18	21	8	13	41	6	16	52	6	18	53	6	18	58	14	29	11.2	3.2	26°	0.0
19	24	12	17	36	10	18	41	11	20	43	11	20	24	12	19	13.3	4.9	26°	0.0
20	22	15	17	36	14	18	37	14	19	38	14	19	47	20	30	11.1	2.9	25°	0.0
21	15	10	11	17	9	12	17	9	12	17	9	12	97	46	83	3.0	0.8	211°	1.8
22	17	7	11	38	5	14	47	5	17	49	5	17	97	44	78	5.5	1.0	220°	0.3
23	20	6	13	37	4	15	46	4	17	47	4	18	83	32	55	11.0	2.3	30°	0.0
24	21	10	15	45	7	17	53	8	18	54	8	19	58	23	39	8.7	2.6	36°	0.0
25	21	7	14	40	5	16	49	5	19	51	5	20	64	31	48	6.6	1.7	38°	0.0
26	21	8	14	41	5	17	48	6	19	51	6	20	64	30	50	5.4	1.6	20°	0.0
27	22	9	15	41	5	18	48	6	20	50	6	21	68	20	42	9.3	1.9	353°	0.0
28	19	8	14	42	6	16	51	6	18	53	7	19	50	17	30	9.8	2.4	33°	0.0
29	18	9	13	37	7	15	43	7	16	44	7	17	53	24	37	11.2	2.0	4°	0.0
30	20	9	13	42	6	15	46	6	16	48	6	17	42	13	29	12.7	3.5	20°	0.0
31	22	10	15	40	7	16	50	7	18	51	7	19	39	12	26	14.3	3.2	21°	0.0
Monthly Avg.	19	7	12	37	5	14	44	5	16	46	5	17	63	24	43	8.9	2.3	62°	2.0
Monthly Total																			2.0
YTD [†] Avg.	19	7	12	37	5	14	44	5	16	46	5	17	63	24	43	8.9	2.3	62°	2.0
YTD [†] Total																			2.0

† 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)

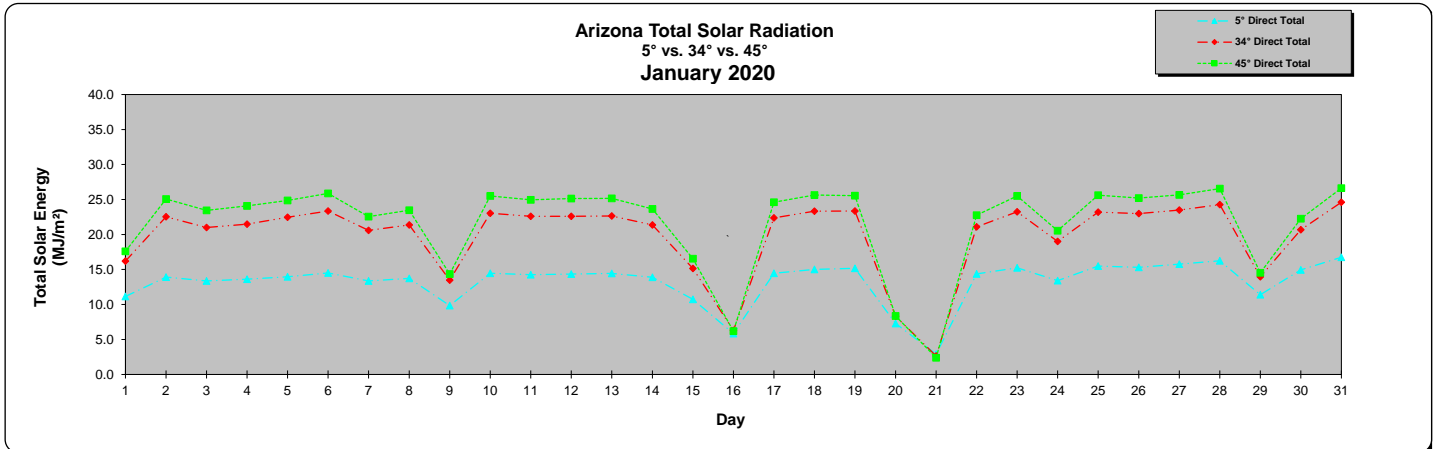
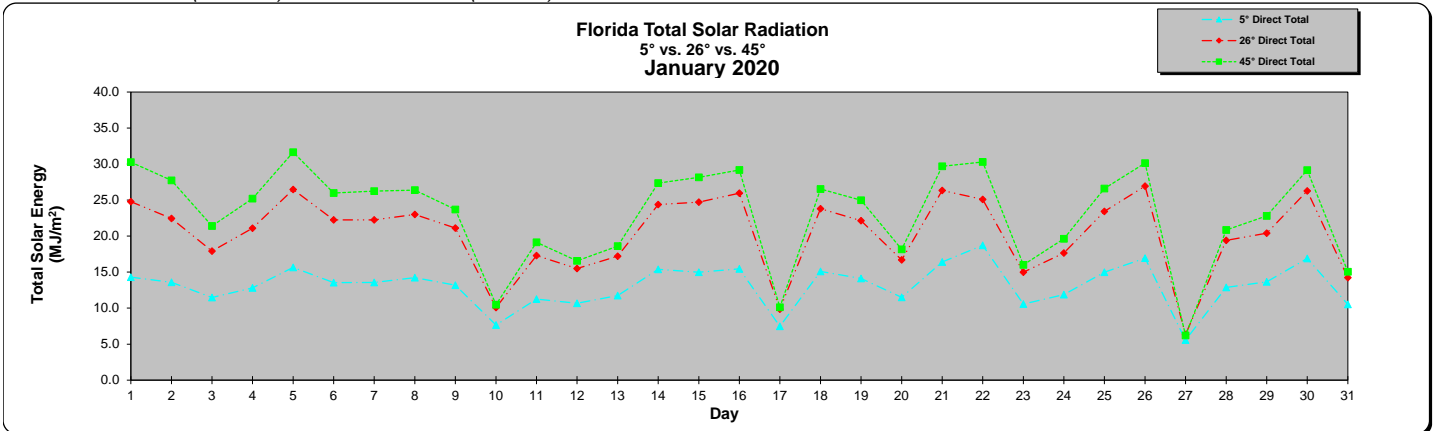
Phoenix, Arizona

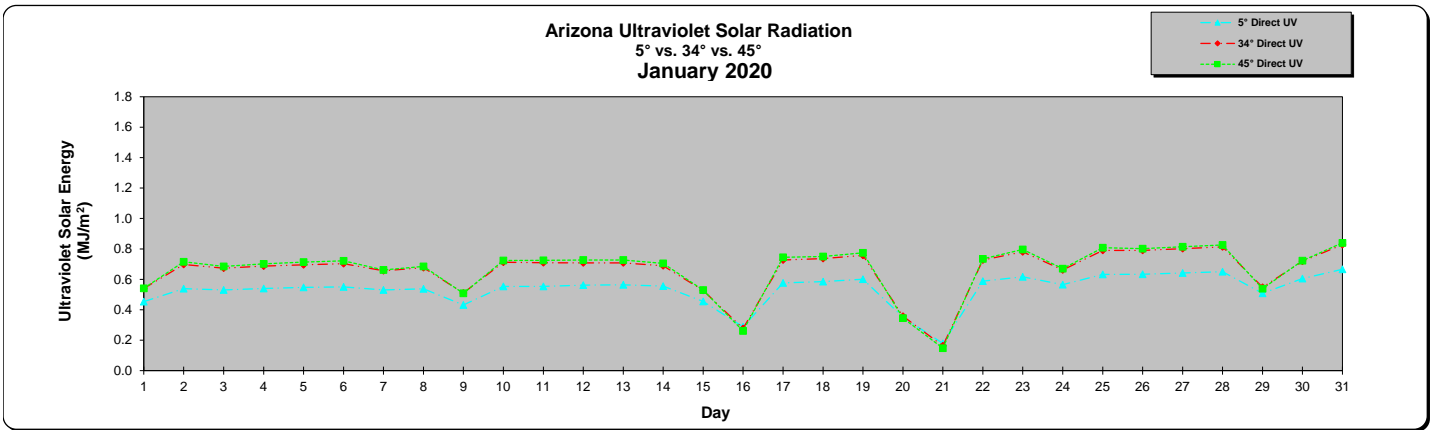
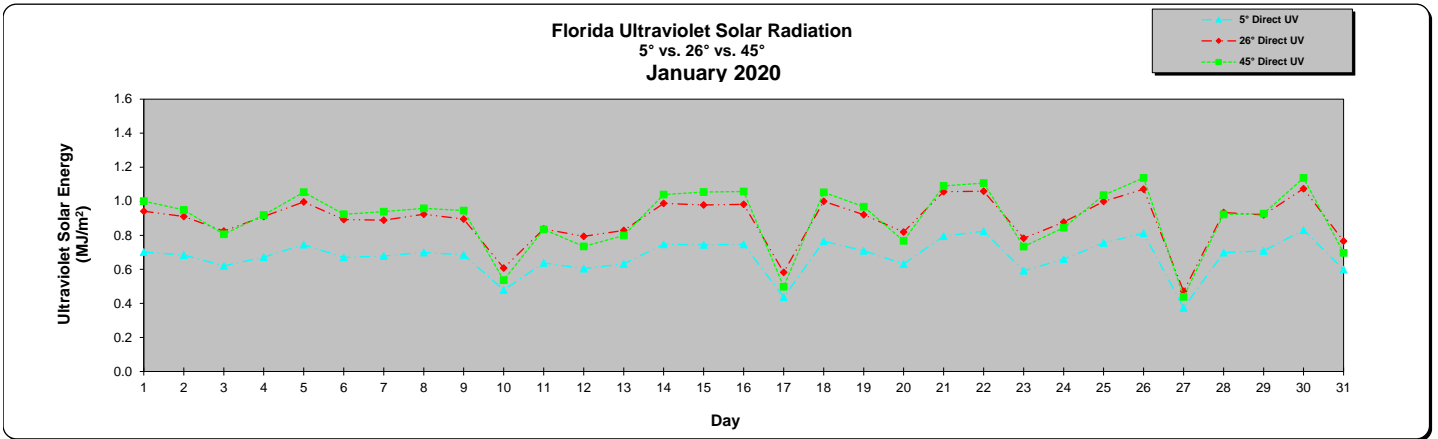
Month	Solar Radiation Summary											
	Total Solar Radiation (MJ/m ²)						Ultraviolet Solar Radiation (MJ/m ²)					
	Direct			Underglass			Direct			Underglass		
	5°	26°	45°	5°	26°	45°	5°	26°	45°	5°	26°	45°
1	14.3	24.8	30.3	14.1	19.2	18.4	0.70	0.94	1.00	0.61	0.56	0.52
2	13.6	22.5	27.7	13.4	17.7	16.7	0.68	0.91	0.95	0.59	0.53	0.49
3	11.5	17.9	21.4	11.1	13.9	13.0	0.62	0.82	0.81	0.54	0.46	0.42
4	12.8	21.1	25.2	13.0	16.6	15.7	0.67	0.91	0.92	0.59	0.52	0.49
5	15.7	26.5	31.6	15.1	20.7	19.9	0.75	1.00	1.05	0.65	0.59	0.55
6	13.5	22.2	26.0	13.1	17.4	16.4	0.67	0.89	0.92	0.58	0.52	0.48
7	13.6	22.2	26.3	12.8	17.3	16.5	0.68	0.89	0.94	0.58	0.52	0.48
8	14.2	23.0	26.4	13.9	18.1	17.2	0.70	0.92	0.96	0.60	0.54	0.49
9	13.2	21.1	23.7	13.0	16.6	15.5	0.69	0.90	0.95	0.58	0.52	0.48
10	7.7	10.1	10.5	7.4	7.9	6.6	0.48	0.61	0.54	0.40	0.31	0.26
11	11.3	17.3	19.1	10.9	13.6	12.5	0.64	0.84	0.83	0.54	0.47	0.42
12	10.7	15.5	16.6	10.1	12.0	10.8	0.60	0.79	0.73	0.52	0.42	0.37
13	11.7	17.2	18.6	11.3	13.6	12.1	0.63	0.83	0.80	0.54	0.46	0.40
14	15.4	24.4	27.3	14.6	19.0	17.8	0.75	0.99	1.04	0.64	0.57	0.53
15	15.0	24.7	28.2	14.4	19.3	18.2	0.74	0.98	1.05	0.64	0.58	0.53
16	15.5	26.0	29.2	15.0	19.9	18.8	0.75	0.98	1.06	0.64	0.58	0.54
17	7.5	9.8	10.1	7.3	7.8	6.6	0.44	0.58	0.50	0.38	0.30	0.25
18	15.1	23.8	26.5	14.5	18.6	17.2	0.77	1.00	1.05	0.65	0.58	0.53
19	14.1	22.1	25.0	13.2	17.2	16.1	0.71	0.92	0.97	0.60	0.53	0.48
20	11.5	16.7	18.2	10.7	13.0	11.6	0.63	0.82	0.77	0.53	0.44	0.38
21	16.4	26.3	29.7	15.7	20.6	19.2	0.80	1.06	1.09	0.69	0.61	0.57
22	18.7	25.1	30.3	15.9	20.8	19.5	0.82	1.06	1.11	0.69	0.62	0.57
23	10.6	15.0	16.0	10.2	11.7	10.3	0.59	0.78	0.73	0.51	0.42	0.37
24	11.9	17.7	19.6	11.5	13.9	12.5	0.66	0.88	0.84	0.57	0.48	0.43
25	15.0	23.4	26.6	14.2	18.1	17.0	0.76	1.00	1.04	0.65	0.57	0.53
26	16.9	26.9	30.1	16.2	20.9	19.5	0.81	1.07	1.14	0.70	0.62	0.58
27	5.6	6.3	6.2	5.3	5.0	3.9	0.37	0.47	0.44	0.31	0.22	0.17
28	12.9	19.4	20.8	12.8	15.1	13.5	0.70	0.93	0.92	0.61	0.52	0.46
29	13.7	20.4	22.8	13.3	15.9	14.5	0.71	0.92	0.93	0.60	0.52	0.46
30	16.9	26.3	29.2	16.1	20.4	18.7	0.83	1.07	1.14	0.70	0.62	0.57
31	10.5	14.2	15.1	10.0	10.9	9.5	0.60	0.77	0.70	0.50	0.40	0.34
Monthly Total	406.7	630.0	714.3	390.1	492.7	455.9	20.95	27.53	27.91	17.90	15.59	14.11
YTD ¹ Total	406.7	630.0	714.3	390.1	492.7	455.9	20.95	27.53	27.91	17.90	15.59	14.11

Month	Solar Radiation Summary															EMMAQUA™	
	Total Solar Radiation (MJ/m ²)						Ultraviolet Solar Radiation (MJ/m ²)						Total	UV			
	Direct			Underglass			Direct			Underglass			(MJ/m ²)				
	5°	34°	45°	5°	34°	45°	5°	34°	45°	5°	34°	45°					
1	11.1	16.2	17.6	8.7	13.6	15.2	0.45	0.54	0.54	0.33	0.40	0.40	0	0.00			
2	13.9	22.5	25.1	10.6	19.1	21.9	0.54	0.70	0.72	0.39	0.52	0.53	181	3.61			
3	13.4	21.0	23.4	10.3	17.9	20.5	0.53	0.67	0.69	0.38	0.50	0.51	128	2.90			
4	13.6	21.5	24.1	10.4	18.4	21.1	0.54	0.69	0.70	0.39	0.51	0.52	158	3.44			
5	14.0	22.5	24.9	10.6	19.0	21.7	0.55	0.70	0.71	0.39	0.52	0.53	174	3.58			
6	14.5	23.4	25.9	11.0	19.8	22.6	0.55	0.70	0.72	0.40	0.53	0.54	0	0.00			
7	13.4	20.6	22.6	10.3	17.5	19.8	0.53	0.66	0.66	0.38	0.48	0.49	0	0.00			
8	13.7	21.4	23.5	10.6	18.1	20.7	0.54	0.68	0.69	0.39	0.50	0.51	135	2.99			
9	9.8	13.5	14.3	8.1	11.7	12.9	0.43	0.51	0.51	0.32	0.38	0.38	57	1.40			
10	14.5	23.0	25.5	11.1	19.5	22.3	0.55	0.71	0.72	0.40	0.54	0.54	172	3.59			
11	14.3	22.6	25.0	11.0	19.1	22.0	0.55	0.71	0.73	0.41	0.54	0.54	179	3.63			
12	14.3	22.6	25.0	11.0	19.2	22.0	0.56	0.71	0.73	0.41	0.54	0.54	0	0.00			
13	14.4	22.6	25.2	11.1	19.2	22.1	0.56	0.71	0.73	0.41	0.54	0.54	178	3.60			
14	13.9	21.4	23.7	10.8	18.2	20.8	0.56	0.69	0.71	0.40	0.52	0.52	159	3.36			
15	10.7	15.2	16.5	8.5	13.0	14.3	0.46	0.53	0.53	0.33	0.39	0.39	85	1.72			
16	5.9	6.3	6.2	4.9	5.2	5.4	0.29	0.28	0.26	0.21	0.20	0.19	0	0.00			
17	14.5	22.4	24.6	11.1	19.0	21.6	0.58	0.73	0.75	0.41	0.55	0.55	171	3.57			
18	15.0	23.3	25.7	11.6	19.7	22.5	0.59	0.74	0.75	0.42	0.55	0.55	150	3.36			
19	15.2	23.4	25.6	11.8	19.8	22.5	0.60	0.76	0.77	0.43	0.57	0.57	0	0.00			
20	7.3	8.3	8.4	6.0	7.0	7.3	0.35	0.36	0.35	0.26	0.26	0.24	0	0.00			
21	2.9	2.7	2.4	2.5	2.2	2.1	0.18	0.16	0.15	0.13	0.12	0.10	0	0.00			
22	14.4	21.1	22.8	11.5	17.7	20.2	0.59	0.73	0.73	0.42	0.54	0.54	0	0.00			
23	15.2	23.2	25.5	11.9	19.8	22.5	0.62	0.78	0.80	0.45	0.58	0.59	158	3.60			
24	13.4	19.0	20.5	10.6	16.0	17.9	0.57	0.66	0.67	0.41	0.49	0.48	0	0.00			
25	15.5	23.2	25.6	12.1	19.8	22.6	0.63	0.79	0.81	0.46	0.59	0.59	179	4.04			
26	15.3	23.0	25.2	12.0	19.5	22.3	0.63	0.79	0.80	0.46	0.59	0.59	169	3.94			
27	15.8	23.5	25.7	12.4	20.0	22.7	0.64	0.80	0.81	0.46	0.60	0.60	184	4.10			
28	16.2	24.3	26.6	12.7	20.5	23.3	0.65	0.81	0.83	0.47	0.61	0.61	188	4.18			
29	11.4	14.0	14.5	9.3	11.9	12.8	0.51	0.55	0.54	0.37	0.41	0.39	0	0.00			
30	15.0	20.7	22.3	11.8	17.6	19.5	0.61	0.72	0.72	0.44	0.54	0.53	0	0.00			
31	16.8	24.6	26.6	13.3	20.9	23.4	0.67	0.83	0.84	0.49	0.62	0.62	28	0.35			
Monthly Total	409.2	612.7	670.2	319.4	520.1	588.4	16.59	20.37	20.65	11.99	15.21	15.23	2833	60.97			
YTD ¹ Total	409.2	612.7	670.2	319.4	520.1	588.4	16.59	20.37	20.65	11.99	15.21	15.23	2832.79	60.97			

¹ Year To Date

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



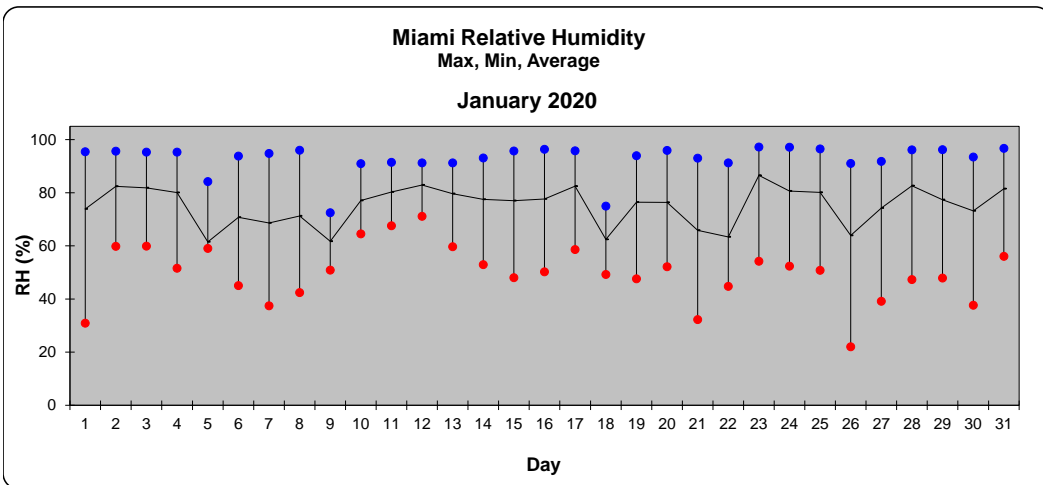
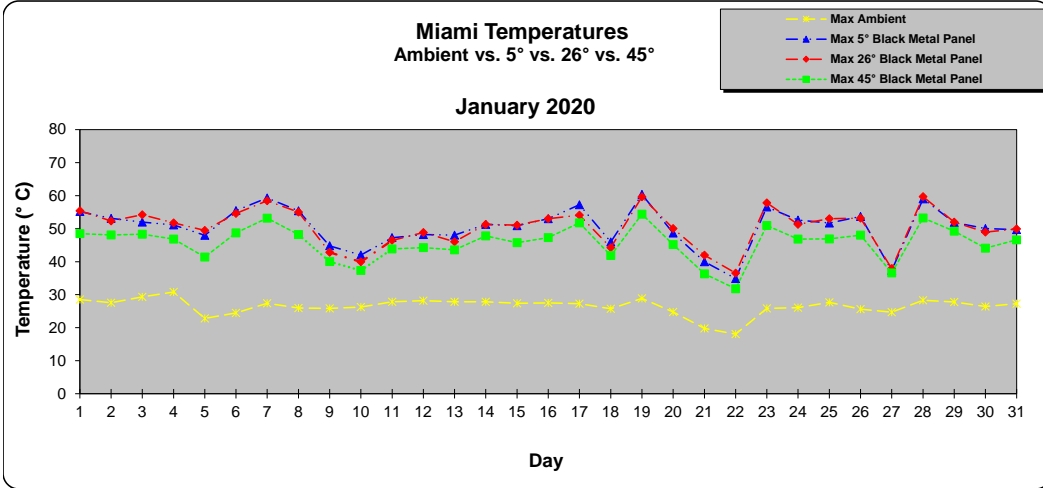


Latitude 25° 34' North, Longitude 80° 28' West, Elevation 2 (m)

AWSG		Temperature Summary												Climate Summary					
Month	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity			Wind Speed		Wind Direction	Rainfall
January	° 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	29	14	19	55	11	25	55	11	25	49	11	22	95	31	74	10.4	0.0	187°	0.0
2	28	15	22	53	13	26	52	13	26	48	13	24	96	60	82	17.2	0.0	252°	0.0
3	29	20	25	52	18	27	54	18	27	48	17	26	95	60	82	19.4	0.0	300°	0.0
4	31	20	25	51	20	28	52	19	28	47	19	27	95	52	80	27.7	0.0	163°	0.3
5	23	13	17	48	11	23	49	11	23	41	11	20	84	59	61	16.2	1.4	161°	0.0
6	24	11	17	55	9	21	55	9	21	49	9	19	94	45	71	13.6	0.0	194°	0.0
7	27	12	19	59	9	23	58	9	23	53	9	21	95	37	69	14.0	0.0	172°	0.0
8	26	11	18	55	8	23	55	8	23	48	8	20	96	42	71	21.6	0.0	190°	0.0
9	26	20	23	45	19	26	43	19	26	40	18	25	72	51	62	30.2	4.6	262°	0.0
10	26	23	24	42	22	25	40	22	25	37	21	25	91	65	77	31.6	8.2	269°	0.5
11	28	23	25	47	21	27	46	21	27	44	20	26	91	68	80	26.2	1.8	286°	1.0
12	28	23	25	48	21	27	49	20	27	44	20	26	91	71	83	26.2	1.4	281°	0.3
13	28	22	24	48	20	27	46	20	27	44	20	26	91	60	80	26.6	2.1	267°	0.3
14	28	19	24	51	17	28	51	17	28	48	17	26	93	53	78	20.5	0.0	262°	0.0
15	27	16	21	51	13	25	51	13	25	46	13	23	96	48	77	19.8	0.0	234°	0.0
16	28	15	21	53	13	26	53	13	26	47	13	23	96	50	78	15.8	0.0	224°	0.0
17	27	16	21	57	14	23	54	14	22	52	14	22	96	59	82	24.8	0.0	211°	3.0
18	26	21	23	46	18	26	44	18	26	42	18	25	75	49	62	30.2	3.6	273°	0.0
19	29	15	22	60	12	26	60	12	26	54	12	24	94	48	76	15.1	0.0	232°	0.0
20	25	14	20	49	11	23	50	11	23	45	11	22	96	52	76	14.0	0.0	162°	0.0
21	20	8	14	40	6	18	42	6	18	36	6	16	93	32	66	21.2	1.8	157°	0.0
22	18	3	11	35	2	14	37	2	15	32	1	13	91	45	63	21.9	3.2	151°	0.0
23	26	13	18	57	12	21	58	12	21	51	12	21	97	54	87	16.2	0.0	187°	1.0
24	26	15	20	53	13	24	51	13	23	47	13	22	97	52	81	16.5	0.0	220°	0.0
25	28	13	20	52	11	24	53	11	25	47	10	22	97	51	80	14.7	0.0	154°	0.0
26	26	10	16	54	8	21	53	8	22	48	8	19	91	22	64	12.9	0.0	172°	0.0
27	25	11	18	37	8	18	38	8	19	37	8	19	92	39	74	14.4	0.0	160°	0.0
28	28	14	20	59	12	24	60	12	24	53	12	23	96	47	83	11.8	0.0	186°	0.0
29	28	13	20	52	10	24	52	10	24	49	10	23	96	48	77	22.6	0.0	118°	0.0
30	26	13	21	50	10	25	49	10	25	44	10	23	93	38	73	17.6	0.0	135°	0.0
31	27	12	20	50	10	22	50	10	22	47	9	22	97	56	81	28.5	0.0	242°	18.5
Monthly Avg.	26	15	20	50	13	24	50	13	24	46	13	22	93	50	75	20.0	0.9	208°	
Monthly Total																			24.9
YTD[†] Avg.	26	15	20	50	13	24	50	13	24	46	13	22	93	50	75	20.0	0.9	208°	
YTD[†] Total																			24.9

[†] Year To Date

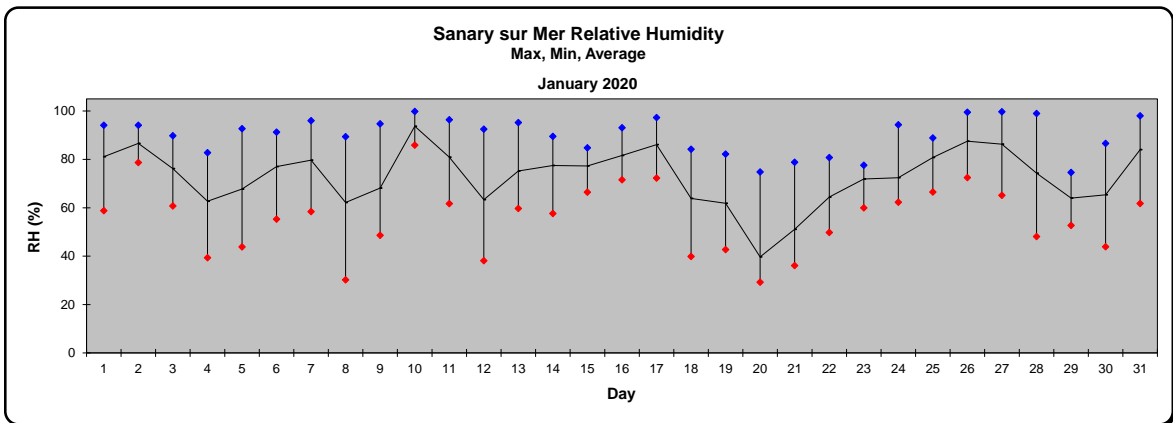
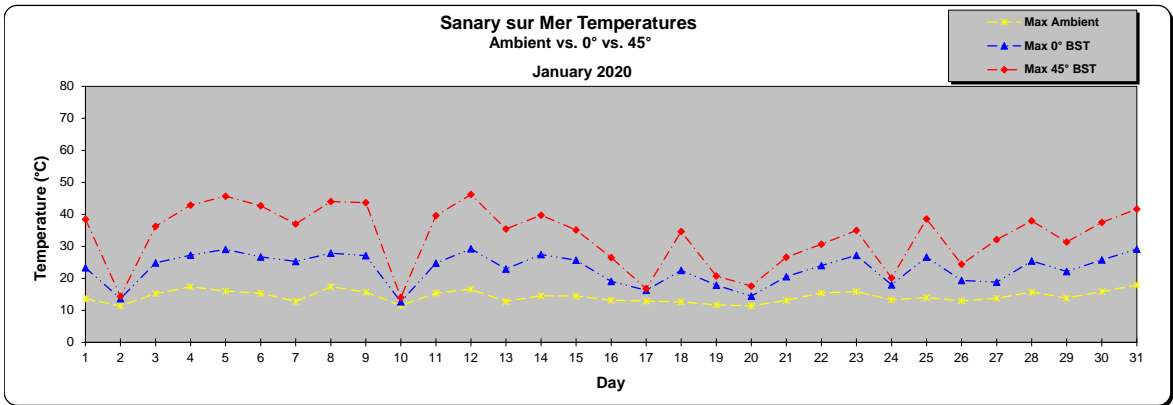
Note:



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 (m/s)		Wind Direction	Rainfall (mm)		
	Max	Min	Avg	0°			45°			0°			45°			0°			45°			Max	Min	Avg	Max	Avg	360°/0°=N	Total		
January	14	5	8	23	3	8	38	3	13	22	2	8	34	*	11	24	2	8	39	3	12	94	59	81	3.6	0.6	358°	0.0		
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	360°/0°=N	Total		
1	14	5	8	23	3	8	38	3	13	22	2	8	34	*	11	24	2	8	39	3	12	94	59	81	3.6	0.6	358°	0.0		
2	11	6	9	14	3	8	14	4	9	14	3	8	14	*	8	14	3	8	14	3	8	94	79	87	2.1	0.3	26°	0.0		
3	15	8	11	25	5	12	36	6	13	23	5	12	30	*	11	25	5	12	36	5	13	90	61	76	6.0	0.8	306°	0.0		
4	17	7	11	27	4	11	43	5	16	27	4	11	40	*	14	28	4	11	44	4	15	83	39	63	4.9	0.7	355°	0.0		
5	16	6	10	29	3	11	46	4	16	28	3	11	42	*	15	29	3	11	45	3	15	93	44	68	2.6	0.6	48°	0.0		
6	15	6	10	27	4	11	43	5	16	25	4	10	39	*	14	26	4	10	42	4	15	91	55	77	3.6	0.6	54°	0.0		
7	13	6	9	25	4	10	37	5	12	24	4	9	34	*	11	26	4	9	37	4	11	96	58	80	2.8	0.4	51°	0.0		
8	17	7	11	28	4	11	44	5	16	27	3	11	41	*	15	28	3	11	44	4	15	89	30	62	2.9	0.6	34°	0.0		
9	16	7	10	27	4	11	44	5	16	26	4	11	40	*	14	28	3	11	44	4	15	95	49	68	3.3	1.1	43°	0.0		
10	12	7	10	13	5	9	14	6	10	13	5	9	13	*	9	14	4	9	14	5	10	100	86	94	4.0	0.8	38°	0.3		
11	15	7	10	25	4	10	40	5	15	24	4	10	34	*	13	26	4	10	40	4	14	96	62	81	3.4	0.7	13°	0.0		
12	17	6	11	29	3	11	46	4	16	28	3	11	43	*	14	30	3	11	46	3	15	93	38	63	3.4	0.7	28°	0.0		
13	13	5	9	23	2	9	35	3	11	22	1	9	31	*	10	24	1	9	35	2	10	95	60	75	6.4	1.2	61°	0.0		
14	15	8	11	27	5	11	40	6	13	27	5	11	37	*	12	28	5	11	41	5	12	90	58	78	4.1	1.1	64°	0.0		
15	15	10	12	26	7	12	35	8	13	26	7	12	33	*	12	27	7	12	39	7	13	85	66	77	4.8	1.2	73°	0.0		
16	13	8	11	19	6	10	27	7	11	20	6	10	27	*	11	21	6	10	29	6	11	93	72	82	4.3	1.1	63°	0.0		
17	13	8	11	16	6	10	17	7	11	17	7	10	16	*	10	17	6	10	17	7	10	97	72	86	7.6	1.3	77°	0.0		
18	13	4	8	22	1	7	35	1	10	21	0	7	29	*	9	24	0	7	36	0	10	84	40	64	10.0	1.2	298°	0.0		
19	12	5	9	18	1	8	21	2	9	17	1	8	21	*	8	18	1	8	22	1	9	82	43	62	5.4	1.0	51°	0.0		
20	11	7	10	14	5	9	18	5	10	15	5	10	16	*	9	15	5	10	18	5	10	75	29	40	12.1	3.1	79°	0.0		
21	13	7	11	21	5	10	27	6	11	19	5	10	23	*	10	21	6	10	27	5	11	79	36	51	10.6	3.3	87°	0.0		
22	15	10	13	24	8	13	31	9	15	22	8	13	27	*	14	24	9	13	30	9	14	81	50	64	10.4	3.4	77°	0.0		
23	16	12	13	27	10	14	35	11	15	25	11	14	31	*	14	27	10	14	34	11	15	78	60	72	10.4	2.5	83°	0.0		
24	13	10	12	18	9	12	20	10	12	18	9	12	20	*	12	18	9	12	20	9	12	94	62	72	8.2	1.7	74°	0.0		
25	14	10	11	27	7	12	39	8	14	25	7	12	35	*	13	27	7	12	38	8	14	89	67	81	5.0	1.0	78°	0.0		
26	13	7	10	19	6	10	24	7	11	19	6	10	23	*	10	20	6	10	24	6	10	100	73	88	6.0	1.2	63°	0.0		
27	14	5	10	19	3	10	32	4	12	22	3	10	27	*	11	24	3	10	32	3	12	100	65	86	4.4	0.7	296°	0.0		
28	16	7	11	25	5	12	38	6	15	24	5	12	33	*	13	27	5	12	39	5	14	99	48	74	7.6	1.3	294°	0.0		
29	14	8	10	22	4	11	31	5	13	20	4	10	25	*	11	23	4	10	31	4	12	75	53	64	8.3	1.4	285°	0.0		
30	16	7	11	26	4	12	38	4	14	25	3	12	33	*	13	27	3	12	39	3	14	87	44	65	5.1	0.6	293°	0.0		
31	18	8	12	29	6	13	42	7	18	27	6	13	36	*	16	30	6	13	41	6	17	98	62	84	4.3	0.6	22°	0.0		
Monthly Avg.	14	7	10	23	5	11	33	6	13	22	5	11	30	*	12	24	5	11	33	5	12	90	55	73	5.7	1.2	122°	0.3		
Monthly Total																														
YTD [†] Avg.	14	7	10	23	5	11	33	6	13	22	5	11	30	*	12	24	5	11	33	5	12	90	55	73	5.7	1.2	122°	0.3		
YTD [†] Total																														

[†] Year To Date

Note: *No data available



Solar Radiation Summary
January 2020

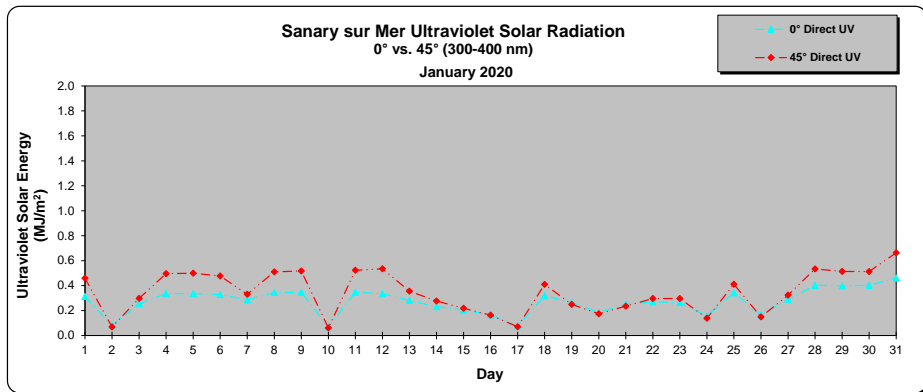
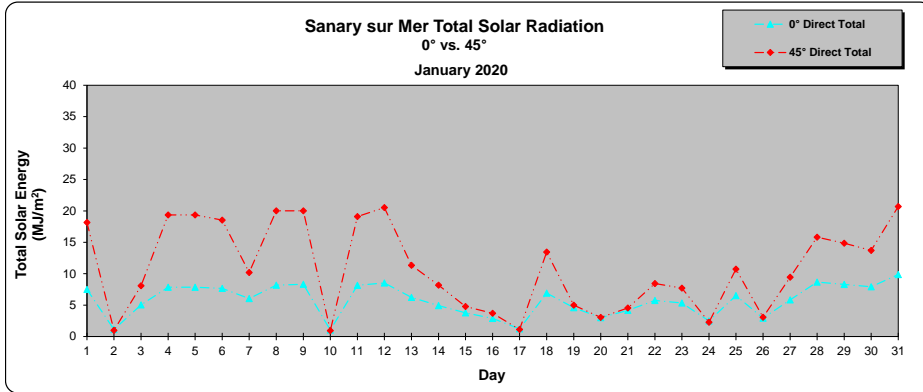
Sanary sur Mer, France

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

AWSG	Solar Radiation Summary						
	Month	Total Solar Radiation (MJ/m ²)		Ultraviolet Solar Radiation (MJ/m ²)			
		Direct		295-385 nm		300-400 nm	
January	0°	45°	0°	45°	0°	45°	
Day	0°	45°	0°	45°	0°	45°	
1	7.5	18.2	*	*	0.31	0.46	
2	1.1	1.0	*	*	0.08	0.07	
3	5.0	8.1	*	*	0.26	0.30	
4	7.9	19.4	*	*	0.34	0.50	
5	7.8	19.4	*	*	0.34	0.50	
6	7.7	18.5	*	*	0.33	0.48	
7	6.0	10.2	*	*	0.29	0.33	
8	8.2	20.0	*	*	0.35	0.51	
9	8.3	20.0	*	*	0.35	0.52	
10	1.0	0.9	*	*	0.07	0.06	
11	8.2	19.1	*	*	0.35	0.52	
12	8.5	20.5	*	*	0.34	0.54	
13	6.2	11.4	*	*	0.28	0.36	
14	4.9	8.2	*	*	0.23	0.28	
15	3.8	4.8	*	*	0.20	0.22	
16	2.9	3.7	*	*	0.17	0.16	
17	1.2	1.1	*	*	0.07	0.07	
18	6.9	13.4	*	*	0.32	0.41	
19	4.6	5.0	*	*	0.26	0.25	
20	3.0	3.1	*	*	0.19	0.17	
21	4.2	4.5	*	*	0.25	0.24	
22	5.7	8.4	*	*	0.27	0.30	
23	5.3	7.7	*	*	0.26	0.30	
24	2.5	2.3	*	*	0.16	0.14	
25	6.5	10.7	*	*	0.34	0.41	
26	2.9	3.1	*	*	0.16	0.15	
27	5.8	9.4	*	*	0.29	0.32	
28	8.7	15.8	*	*	0.40	0.53	
29	8.3	14.9	*	*	0.40	0.51	
30	7.9	13.7	*	*	0.40	0.51	
31	9.9	20.7	*	*	0.46	0.66	
Monthly Total	178.6	337.2	*	*	8.50	10.77	
YTD [†] Total	178.6	337.2	*	*	8.50	10.77	

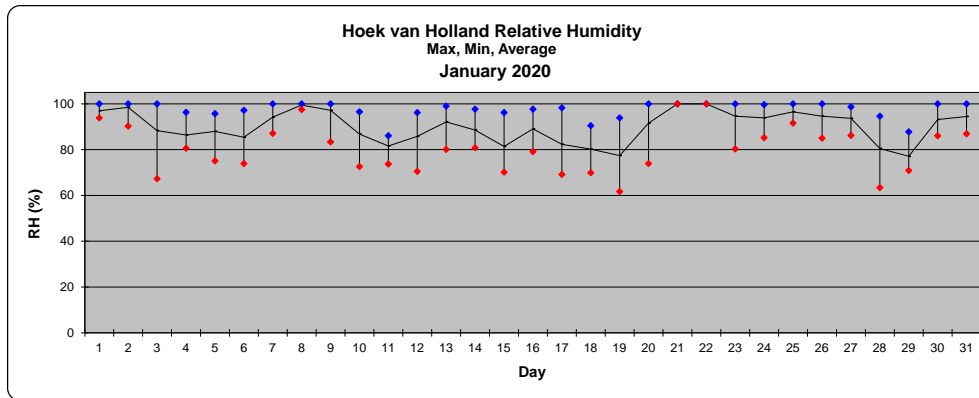
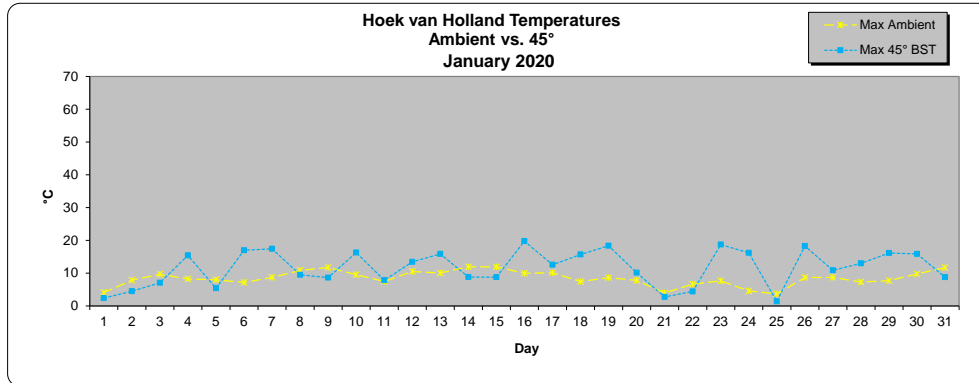
[†] Year To Date Total Solar Radiation - (290-3000 nm) Ultraviolet Solar Radiation - (295-385 nm) or (300-400 nm).

Note: * No data available



AWSG	Temperature Summary						Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (°C)			Relative Humidity			Wind Speed		Wind Direction	Rainfall
Month	°C			45 °			%			(m/s)		360°/0° = N	(mm)
January	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	4	2	3	2	-3	-1	100	94	97	7.9	3.0	113°	0.0
2	8	2	4	5	-2	1	100	90	99	11.0	5.3	151°	0.0
3	10	7	8	7	2	5	100	67	88	12.6	6.3	106°	2.3
4	8	7	8	15	2	5	96	81	86	12.6	6.0	54°	0.0
5	8	6	7	5	2	4	96	75	88	8.4	3.4	2°	0.0
6	7	5	6	17	0	4	97	74	85	9.4	5.0	47°	0.5
7	9	6	7	17	1	4	100	87	94	15.2	5.6	37°	0.0
8	11	8	9	10	5	6	100	98	100	12.9	4.8	15°	1.8
9	12	8	11	9	5	8	100	83	97	12.9	6.3	95°	3.0
10	10	6	8	16	-1	4	97	73	87	11.2	4.0	85°	2.0
11	7	5	7	8	1	3	86	74	82	12.9	6.6	58°	0.0
12	11	6	8	13	2	5	96	71	86	14.0	6.9	98°	0.3
13	10	5	7	16	1	5	99	80	92	15.2	6.4	56°	0.0
14	12	8	10	9	4	7	98	81	89	17.9	9.3	200°	3.3
15	12	7	10	9	2	6	96	70	81	17.6	8.0	193°	2.0
16	10	5	8	20	0	6	98	79	89	9.9	4.5	146°	0.0
17	10	7	9	13	3	6	98	69	82	15.7	6.1	183°	1.3
18	7	5	6	16	1	3	91	70	80	10.0	5.2	258°	0.5
19	9	4	6	18	-2	4	94	62	77	12.6	4.0	340°	0.3
20	8	3	6	10	-5	1	100	74	92	4.2	1.8	199°	0.0
21	4	1	2	3	-3	-1	100	100	100	6.5	3.2	167°	0.3
22	7	3	5	4	-1	2	100	100	100	4.8	1.9	176°	0.0
23	8	2	6	19	-5	3	100	80	95	2.9	1.0	112°	0.0
24	5	3	3	16	-1	1	100	85	94	7.1	3.1	158°	0.0
25	4	2	3	1	-1	0	100	92	97	7.4	3.3	143°	0.0
26	9	2	5	18	-1	3	100	85	95	10.1	4.3	142°	1.8
27	9	6	8	11	2	5	99	86	94	12.5	5.3	165°	10.9
28	7	5	6	13	0	3	95	63	81	15.5	7.4	221°	5.8
29	8	6	7	16	1	5	88	71	77	14.5	7.7	237°	0.3
30	10	6	8	16	2	5	100	86	93	14.8	7.1	182°	1.0
31	12	8	10	9	4	7	100	87	95	14.4	6.8	196°	0.0
Monthly Avg.	8	5	7	12	1	4	97	80	90	11.4	5.1	140°	
Monthly Total													37.3
YTD¹ Avg.	8	5	7	12	1	4	97	80	90	11.4	5.1	140°	
YTD¹ Total													37.3

¹ 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

January 2020

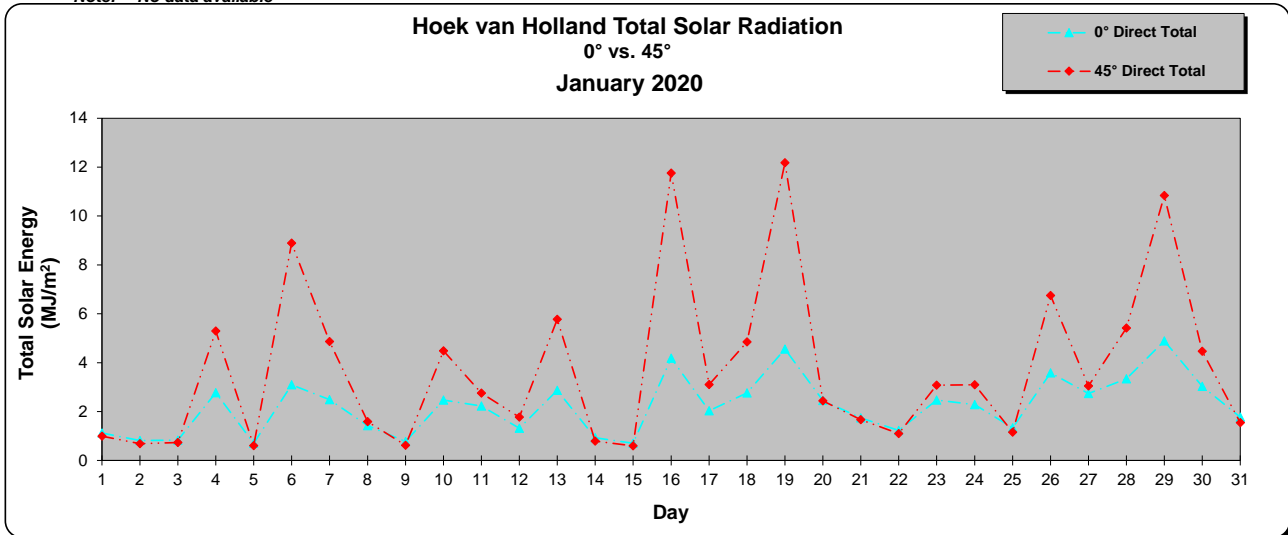
Hoek van Holland, The Netherlands

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

AWSG	Solar Radiation Summary	
Month	Total Solar Radiation (MJ/m ²)	
January	Direct	
Day	0°	45°
1	1.1	1.0
2	0.8	0.7
3	0.8	0.7
4	2.8	5.3
5	0.7	0.6
6	3.1	8.9
7	2.5	4.9
8	1.4	1.6
9	0.8	0.6
10	2.5	4.5
11	2.2	2.8
12	1.3	1.8
13	2.9	5.8
14	0.9	0.8
15	0.7	0.6
16	4.2	11.8
17	2.0	3.1
18	2.8	4.9
19	4.6	12.2
20	2.5	2.4
21	1.7	1.7
22	1.2	1.1
23	2.5	3.1
24	2.3	3.1
25	1.3	1.2
26	3.6	6.8
27	2.7	3.0
28	3.3	5.4
29	4.9	10.8
30	3.0	4.5
31	1.8	1.5
Monthly Total	68.9	116.9
YTD[†] Total	68.9	116.9

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

Note: * No data available





ATLAS

WEATHERING SERVICES GROUP



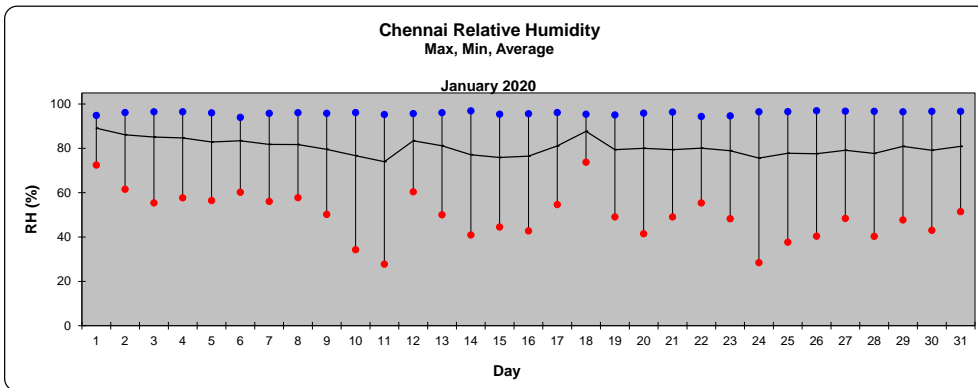
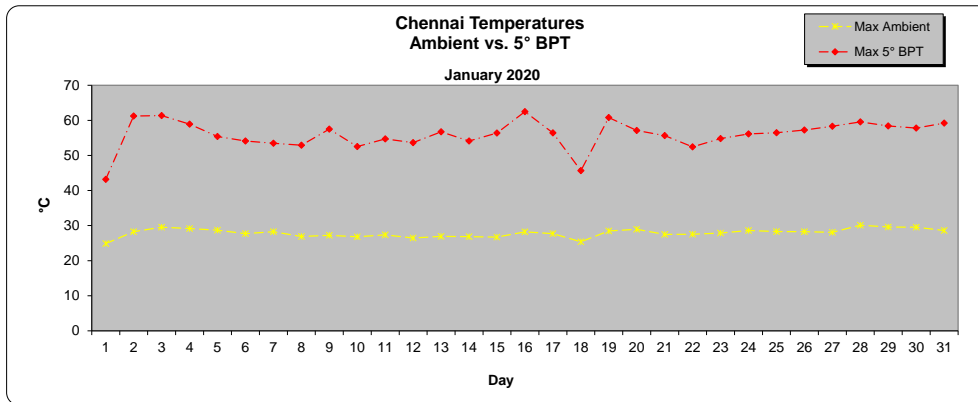
Weather Summary January 2020 Chennai, India

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
January	° C			5 °			%			(m/s)		360°/70° = N	(mm)
Day	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	25	19	21	43	22	26	95	73	89	4.5	0.7	15°	8.9
2	28	19	23	61	21	29	96	62	86	3.0	0.6	14°	0.0
3	30	20	23	61	22	30	97	55	85	3.3	0.6	356°	0.0
4	29	21	24	59	22	31	97	58	85	2.8	0.6	343°	0.0
5	29	21	24	55	22	30	96	56	83	4.3	0.6	83°	0.0
6	28	21	23	54	22	29	94	60	83	5.9	1.0	13°	0.0
7	28	20	23	53	21	29	96	56	82	6.7	0.9	32°	0.0
8	27	18	22	53	18	28	96	58	82	4.5	0.8	14°	0.0
9	27	17	21	58	18	29	96	50	80	3.2	0.7	355°	0.0
10	27	17	21	53	18	27	96	34	77	6.3	0.8	355°	0.0
11	27	17	21	55	17	28	95	28	74	4.8	0.8	343°	0.0
12	26	17	21	54	19	26	96	60	83	4.9	0.8	350°	0.0
13	27	16	21	57	17	27	96	50	81	3.3	0.7	6°	0.0
14	27	15	20	54	16	27	97	41	77	3.6	0.7	9°	0.0
15	27	15	20	56	16	27	95	45	76	5.4	0.8	352°	0.0
16	28	17	21	62	17	29	96	43	76	3.3	0.7	4°	0.0
17	28	17	22	56	18	29	96	55	81	4.9	1.0	14°	0.0
18	25	20	22	46	21	26	95	74	88	4.2	0.7	11°	5.3
19	28	19	23	61	20	31	95	49	79	5.3	0.8	27°	0.0
20	29	18	22	57	19	29	96	42	80	4.9	0.8	352°	0.0
21	28	17	21	56	19	28	96	49	79	5.4	0.9	352°	0.0
22	28	17	22	52	18	28	94	55	80	6.7	1.0	358°	0.0
23	28	18	22	55	19	29	95	48	79	4.5	0.9	6°	0.0
24	29	16	21	56	16	28	97	28	76	4.7	0.8	349°	0.0
25	28	15	20	56	15	29	97	38	78	3.2	0.7	347°	0.0
26	28	15	21	57	16	29	97	40	78	3.4	0.6	354°	0.0
27	28	15	21	58	16	29	97	48	79	3.1	0.5	79°	0.0
28	30	16	22	60	17	30	97	40	78	3.2	0.5	47°	0.0
29	30	17	22	58	18	30	97	48	81	3.0	0.5	49°	0.0
30	30	17	22	58	18	30	97	43	79	3.2	0.6	317°	0.0
31	29	17	22	59	18	30	97	51	81	3.6	0.6	44°	0.0
Monthly Avg.	28	18	22	56	19	29	96	50	80	4.3	0.7	173°	
Monthly Total													14.2
YTD [†] Avg.	28	18	22	56	19	29	96	50	80	4.3	0.7	173°	
YTD [†] Total													14.2

[†] Year To Date

Note: * Data Unavailable



**Solar Radiation Summary
January 2020
Chennai, India**

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

Month	Solar Radiation Summary		
	Total Solar Radiation (MJ/m ²)	Ultraviolet Solar Radiation (MJ/m ²)	
January	Direct	295-385 nm	300-400 nm
Day	5°	5°	
1	9.3	0.52	0.58
2	13.5	0.67	0.75
3	14.8	0.71	0.80
4	17.3	0.77	0.85
5	15.8	0.72	0.81
6	13.5	0.65	0.72
7	19.4	0.86	0.97
8	18.2	0.76	0.85
9	20.5	0.86	0.96
10	20.46	0.87	0.98
11	21.7	0.91	1.02
12	13.3	0.60	0.67
13	16.8	0.71	0.79
14	20.6	0.80	0.90
15	19.2	0.82	0.91
16	22.2	0.92	1.03
17	19.4	0.84	0.94
18	7.0	0.41	0.45
19	20.3	0.89	0.99
20	21.5	0.90	1.01
21	19.9	0.86	0.96
22	16.1	0.72	0.81
23	19.0	0.81	0.90
24	22.4	0.91	1.02
25	22.8	0.94	1.05
26	23.2	0.96	1.07
27	21.7	0.90	1.00
28	21.4	0.90	1.00
29	21.8	0.93	1.04
30	22.7	0.95	1.06
31	21.4	0.90	1.00
Monthly Total	577.0	24.97	27.88
YTD¹ Total	577.0	24.97	27.88

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

Note:

