



ATLAS

WEATHERING SERVICES GROUP

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



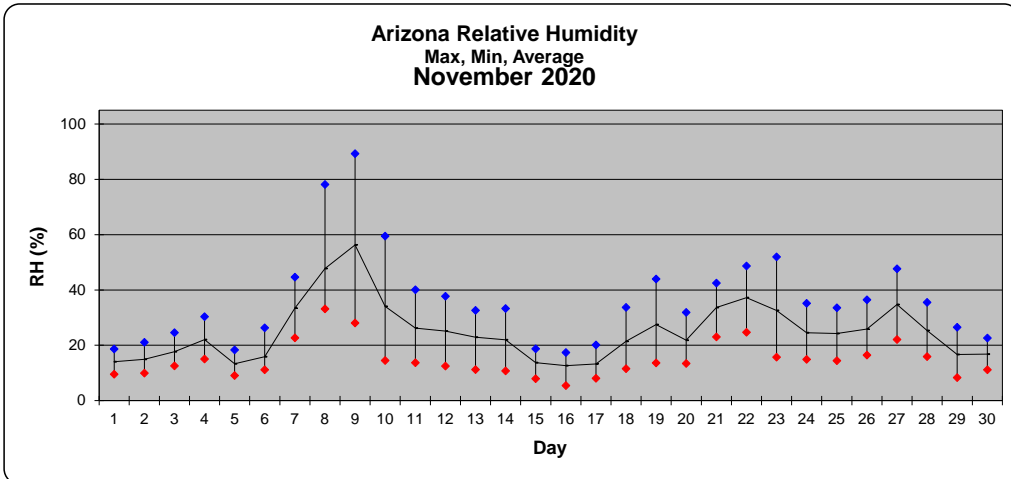
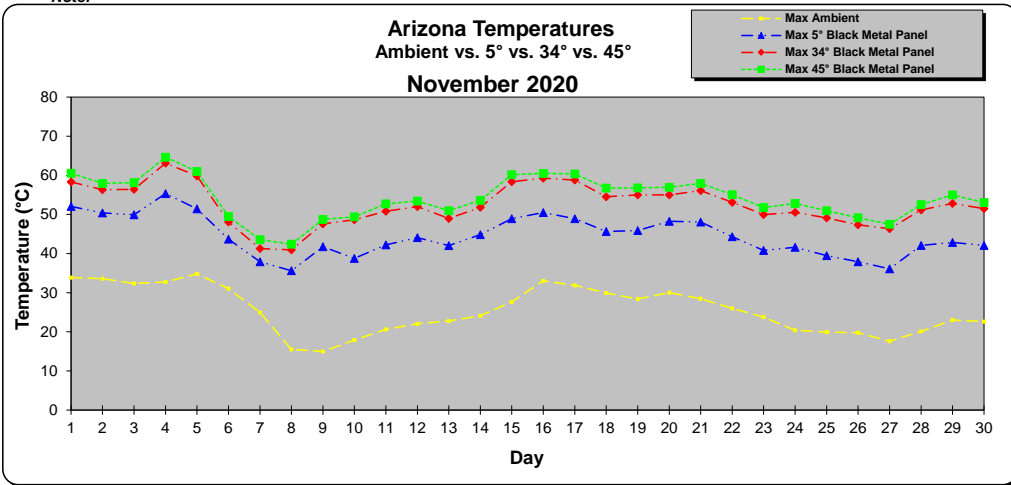
Weather Summary

November 2020

Phoenix, Arizona

AWSG		Temperature Summary												Climate Summary					
Month	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity			Wind Speed		Wind Direction	Rainfall
November	(° 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	34	23	28	52	20	30	58	20	31	61	20	32	19	10	14	9.8	2.7	55°	0.0
2	34	22	27	50	18	29	56	19	30	58	19	31	21	10	15	8.0	2.1	55°	0.0
3	32	21	26	50	17	28	56	18	29	58	18	30	25	13	18	8.1	2.4	30°	0.0
4	33	19	25	55	17	28	63	17	30	65	17	30	30	15	22	8.5	2.5	43°	0.0
5	35	24	28	51	22	30	60	22	32	61	22	32	18	9	13	10.4	3.2	51°	0.0
6	31	22	26	44	20	26	48	20	26	50	20	26	26	11	16	8.3	1.7	86°	0.0
7	25	12	20	38	9	21	41	10	22	44	10	22	45	23	33	12.5	2.6	219°	0.0
8	16	6	12	36	2	13	41	3	14	42	3	15	78	33	48	14.0	2.2	204°	1.5
9	15	4	9	42	1	12	48	2	14	49	2	15	89	28	56	8.8	1.2	108°	0.5
10	18	5	11	39	3	13	49	4	15	49	4	16	60	15	34	9.4	2.4	20°	0.0
11	21	7	13	42	6	16	51	6	18	53	6	19	40	14	26	8.1	2.2	40°	0.0
12	22	8	14	44	6	17	52	6	19	53	6	20	38	13	25	7.3	2.0	41°	0.0
13	23	10	15	42	6	18	49	7	20	51	7	21	33	11	23	6.9	1.9	47°	0.0
14	24	8	16	45	5	18	52	6	20	54	6	21	33	11	22	7.1	1.7	24°	0.0
15	28	14	20	49	11	21	58	12	23	60	12	24	19	8	14	11.4	3.0	32°	0.0
16	33	18	24	51	16	25	59	16	27	61	16	28	17	5	13	11.5	3.3	34°	0.0
17	32	18	24	49	16	26	59	17	28	60	17	29	20	8	13	9.4	2.6	37°	0.0
18	30	15	22	46	12	24	55	13	26	57	13	27	34	12	21	5.3	1.7	61°	0.0
19	28	14	21	46	11	23	55	12	25	57	12	26	44	14	27	5.8	1.7	55°	0.0
20	30	16	22	48	14	24	55	15	26	57	15	27	32	13	22	7.1	1.8	31°	0.0
21	28	18	22	48	15	24	56	16	26	58	16	27	43	23	34	7.5	1.8	42°	0.0
22	26	16	21	44	13	22	53	14	23	55	14	23	49	25	37	6.1	1.5	56°	0.0
23	24	11	17	41	7	18	50	8	20	52	8	21	52	16	33	7.7	1.3	82°	0.0
24	20	7	14	42	4	15	51	5	17	53	5	18	35	15	25	8.4	1.7	37°	0.0
25	20	7	13	39	4	15	49	5	18	51	5	19	34	14	24	6.9	2.0	43°	0.0
26	20	7	12	38	4	14	47	4	17	49	4	18	36	16	26	5.9	1.6	48°	0.0
27	18	6	12	36	3	13	46	3	15	48	3	16	48	22	35	10.0	2.6	36°	0.0
28	20	9	13	42	6	15	51	7	17	53	7	18	36	16	25	12.0	3.0	30°	0.0
29	23	10	15	43	6	17	53	7	19	55	7	20	27	8	17	11.8	2.9	39°	0.0
30	23	11	16	42	8	17	51	8	19	53	9	20	23	11	17	10.3	2.8	45°	0.0
Monthly Avg.	25	13	19	44	10	20	52	11	22	54	11	23	37	15	25	8.8	2.2	58°	2.0
Monthly Total																			
YTD [†] Avg.	31	17	24	54	15	28	57	15	29	57	15	29	42	16	28	8.9	2.0	109°	205.0
YTD [†] Total																			

[†] Year To Date
Note:



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

Miami, Florida

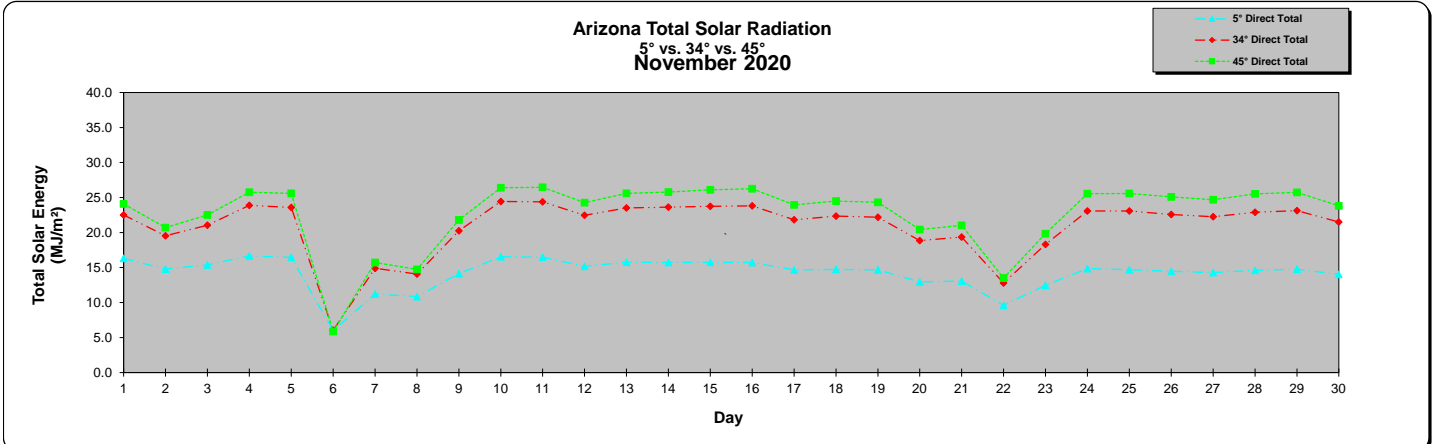
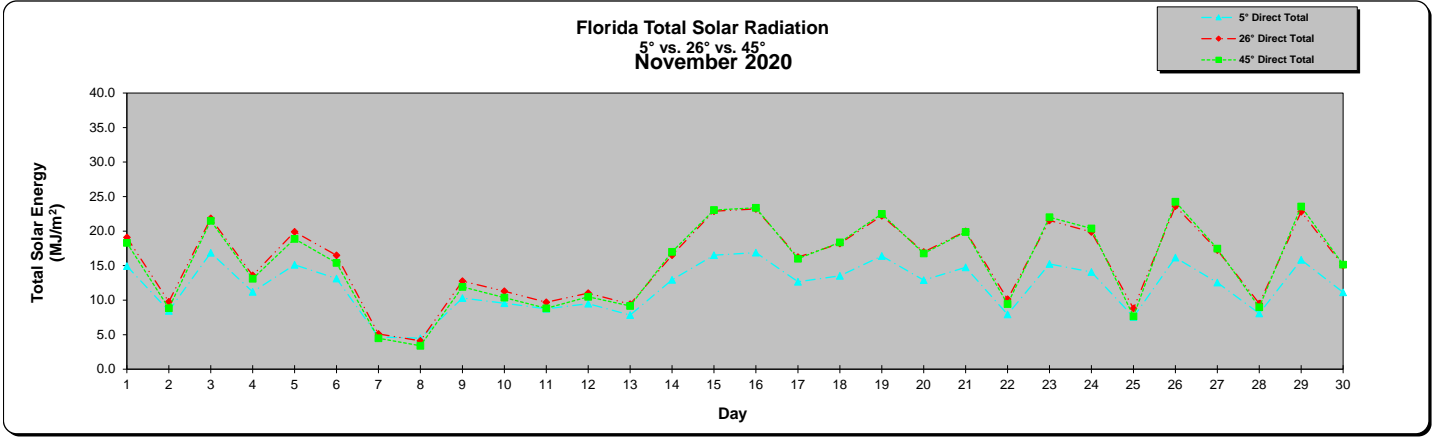
Latitude 33° 54' North, Longitude 112° 08' West, Elevation 610 (m)

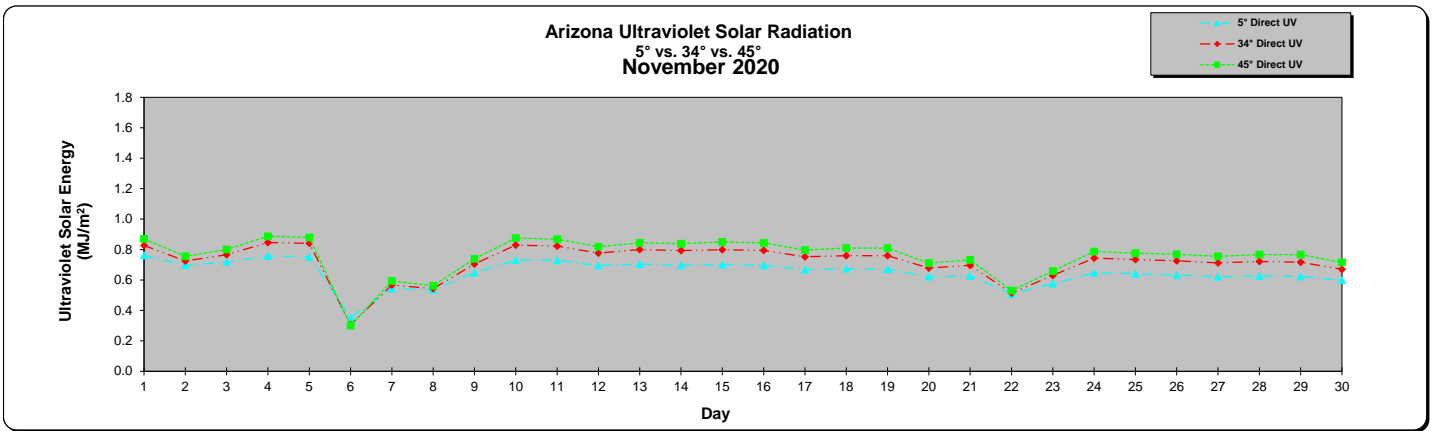
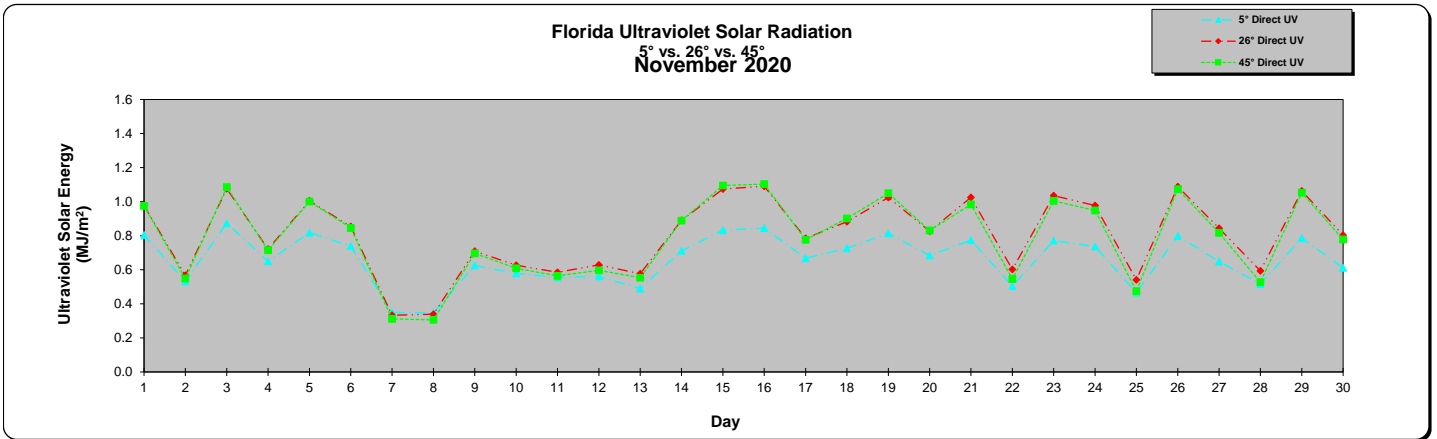
Phoenix, Arizona

AWSG	Solar Radiation Summary															Solar Radiation Summary																	
	Month	Total Solar Radiation (MJ/m2)									Ultraviolet Solar Radiation (MJ/m ²)						Total Solar Radiation (MJ/m2)									Ultraviolet Solar Radiation (MJ/m ²)						EMMAQUA™	
		November	Direct			Unglass			Direct			Unglass			Direct			Unglass			Direct			Unglass			Total	UV					
			5°	26°	45°	5°	26°	45°	5°	26°	45°	5°	26°	45°	5°	34°	45°	5°	34°	45°	5°	34°	45°										
1	14.9	19.1	18.3	11.3	15.0	16.4	0.80	0.98	0.98	0.45	0.64	0.61	16.3	22.5	24.1	13.4	19.9	22.0	0.76	0.83	0.87	0.52	0.64	0.61	118	3.05							
2	8.5	9.8	8.8	6.4	7.6	7.8	0.53	0.57	0.55	0.25	0.37	0.40	14.8	19.5	20.7	12.1	17.2	18.8	0.70	0.73	0.76	0.47	0.55	0.53	0	0.00							
3	16.9	21.8	21.5	12.6	17.4	19.1	0.87	1.08	1.09	0.50	0.70	0.66	15.4	21.1	22.5	12.5	18.4	20.4	0.72	0.77	0.80	0.49	0.59	0.57	119	2.85							
4	11.2	13.6	13.1	8.1	10.6	11.3	0.65	0.72	0.72	0.32	0.47	0.48	16.7	23.9	25.8	13.5	20.9	23.4	0.76	0.85	0.89	0.52	0.65	0.63	177	4.29							
5	15.1	19.9	18.9	11.9	15.6	17.1	0.82	1.00	1.00	0.46	0.65	0.63	16.5	23.6	25.6	13.4	20.9	23.2	0.75	0.84	0.88	0.51	0.64	0.62	152	3.82							
6	13.1	16.5	15.4	10.5	12.8	13.6	0.74	0.85	0.85	0.38	0.55	0.55	6.0	6.0	5.9	5.1	5.3	5.3	0.35	0.31	0.30	0.24	0.23	0.20	0	0.00							
7	4.7	5.1	4.5	3.8	3.8	3.5	0.35	0.33	0.31	0.14	0.22	0.26	11.2	14.9	15.7	9.3	13.1	14.3	0.54	0.57	0.59	0.37	0.44	0.42	52	1.15							
8	4.5	4.1	3.4	3.4	3.8	3.3	0.35	0.34	0.31	0.14	0.22	0.27	10.8	14.1	14.7	9.0	12.3	13.3	0.54	0.54	0.56	0.37	0.42	0.40	0	0.00							
9	10.3	12.8	11.9	8.3	10.1	10.8	0.63	0.71	0.70	0.32	0.46	0.48	14.1	20.2	21.8	11.2	17.5	19.5	0.65	0.71	0.74	0.44	0.55	0.54	40	1.17							
10	9.6	11.3	10.4	7.4	8.9	9.2	0.58	0.63	0.61	0.27	0.41	0.43	16.5	24.6	26.4	13.1	21.2	23.9	0.73	0.83	0.88	0.50	0.64	0.64	116	3.03							
11	8.7	9.7	8.8	6.4	7.7	7.8	0.56	0.59	0.57	0.25	0.38	0.41	16.5	24.4	26.5	13.0	21.1	23.9	0.73	0.82	0.87	0.50	0.63	0.63	177	4.32							
12	9.5	11.0	10.5	6.6	9.0	9.5	0.56	0.63	0.60	0.29	0.41	0.44	15.2	22.5	24.3	12.2	19.5	22.1	0.69	0.78	0.82	0.48	0.60	0.59	147	3.67							
13	7.8	9.4	9.2	5.4	7.9	8.6	0.49	0.58	0.55	0.28	0.38	0.40	15.8	23.5	25.6	12.6	20.5	23.3	0.70	0.80	0.84	0.48	0.62	0.61	181	4.23							
14	12.9	16.5	17.0	9.7	13.7	15.4	0.71	0.89	0.89	0.44	0.58	0.56	15.7	23.6	25.8	12.6	20.6	23.4	0.70	0.79	0.84	0.48	0.61	0.61	180	4.14							
15	16.5	22.9	23.1	13.7	18.2	20.7	0.83	1.07	1.09	0.52	0.70	0.64	15.8	23.8	26.1	12.6	20.8	23.6	0.70	0.80	0.85	0.48	0.62	0.61	0	0.00							
16	16.9	23.2	23.4	14.0	18.6	20.9	0.85	1.09	1.10	0.52	0.71	0.65	15.7	23.8	26.3	12.5	20.8	23.7	0.70	0.79	0.84	0.47	0.61	0.60	131	3.20							
17	12.7	16.2	16.0	10.5	12.8	14.0	0.67	0.78	0.78	0.35	0.51	0.39	14.7	21.8	23.9	11.8	19.1	21.7	0.67	0.75	0.80	0.45	0.58	0.57	156	3.73							
18	13.5	18.2	18.4	11.2	14.4	16.2	0.73	0.88	0.90	0.41	0.57	0.44	14.7	22.4	24.5	11.8	19.5	22.2	0.67	0.76	0.81	0.45	0.59	0.58	173	3.95							
19	16.4	22.2	22.5	17.7	17.6	19.8	0.81	1.02	1.05	0.48	0.67	0.50	14.7	22.2	24.3	11.8	19.4	22.2	0.67	0.76	0.81	0.45	0.59	0.58	173	4.02							
20	12.9	17.0	16.8	7.8	13.4	14.9	0.68	0.83	0.83	0.38	0.54	0.42	13.0	18.9	20.4	10.4	16.4	18.5	0.62	0.68	0.71	0.42	0.52	0.51	23	0.44							
21	14.8	20.0	19.9	8.0	15.6	17.9	0.77	1.03	0.98	0.46	0.63	0.42	13.1	19.4	21.0	10.6	17.0	19.1	0.63	0.70	0.73	0.42	0.53	0.52	119	2.93							
22	7.9	10.1	9.4	3.8	7.7	8.3	0.50	0.60	0.55	0.24	0.36	0.38	9.6	12.8	13.5	7.9	11.2	12.2	0.51	0.51	0.53	0.34	0.39	0.37	0	0.00							
23	15.2	21.6	22.0	8.9	17.1	19.4	0.77	1.04	1.00	0.46	0.63	0.69	12.5	18.3	19.8	10.0	15.9	18.0	0.58	0.63	0.66	0.39	0.48	0.48	0	0.00							
24	14.1	19.9	20.4	9.3	15.8	18.1	0.74	0.98	0.95	0.43	0.60	0.65	14.8	23.1	25.5	11.7	20.2	23.0	0.65	0.74	0.79	0.44	0.58	0.58	182	3.96							
25	7.6	8.8	7.7	4.3	6.6	6.6	0.47	0.54	0.47	0.21	0.32	0.33	14.7	23.1	25.6	11.7	20.1	23.0	0.64	0.73	0.78	0.44	0.57	0.57	173	3.82							
26	16.2	23.6	24.3	10.8	18.5	21.4	0.80	1.09	1.07	0.49	0.67	0.74	14.5	22.6	25.1	11.5	19.7	22.6	0.63	0.73	0.77	0.43	0.56	0.56	0	0.00							
27	12.6	17.2	17.5	7.4	13.6	15.4	0.65	0.84	0.82	0.37	0.51	0.56	14.3	22.3	24.7	11.3	19.4	22.2	0.62	0.71	0.76	0.42	0.55	0.55	0	0.00							
28	8.1	9.5	9.0	4.2	7.4	7.7	0.52	0.59	0.53	0.23	0.35	0.36	14.6	22.9	25.5	11.5	20.0	22.9	0.63	0.72	0.77	0.42	0.56	0.56	0	0.00							
29	15.8	22.8	23.6	11.0	18.1	20.9	0.79	1.06	1.05	0.48	0.66	0.73	14.8	23.1	25.7	11.6	20.4	23.4	0.62	0.72	0.77	0.42	0.56	0.56	0	0.00							
30	11.1	15.0	15.1	7.9	10.2	13.6	0.61	0.80	0.78	0.36	0.49	0.54	14.0	21.5	23.8	10.9	18.9	21.5	0.60	0.67	0.72	0.41	0.52	0.52	108	2.41							
Monthly Total	359.9	468.9	460.5	262.5	369.2	409.4	19.82	24.15	23.66	10.91	15.34	14.99	426.7	626.0	681.1	342.3	547.1	616.4	19.45	21.56	22.71	13.20	16.61	16.32	2698	64.19							
YTD [†] Total	5674.3	6344.2	5899.6	4813.0	5048.3	4549.4	290.25	310.71	270.17	231.20	212.24	159.31	7336.2	7936.0	7785.6	6191.7	6754.8	6834.1	348.86	330.09	331.84	241.42	247.70	226.64	41756.67	1268.27							

[†] Year To Date

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



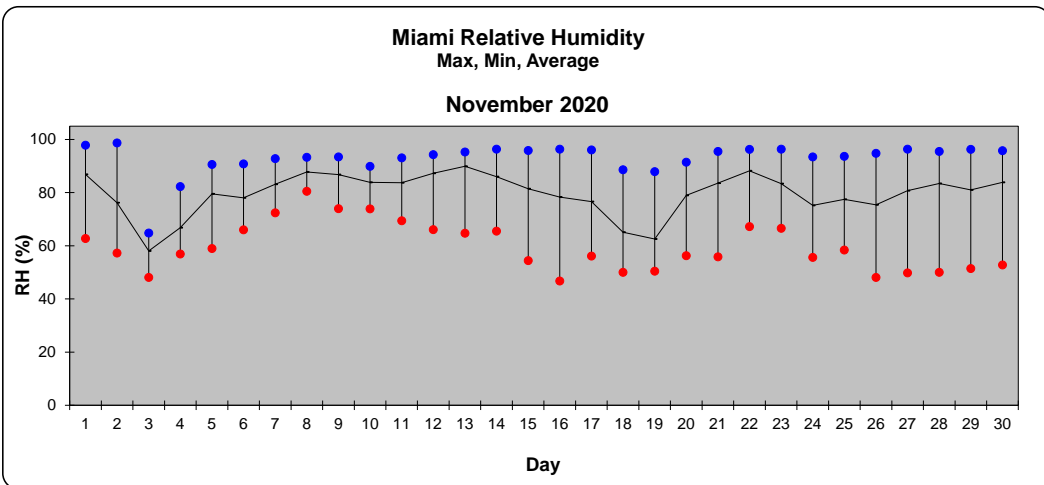
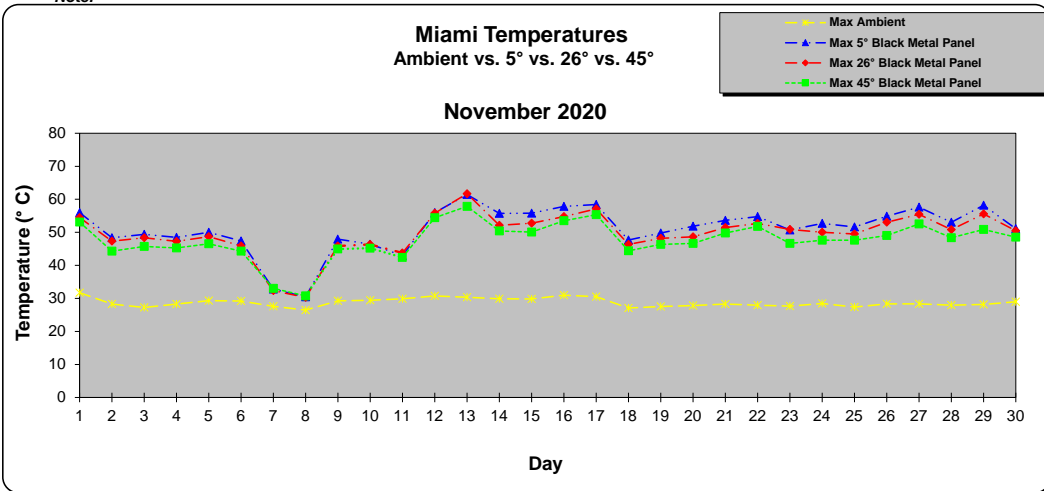


Latitude 25° 34' North, Longitude 80° 28' West, Elevation 2 (m)

Month	Temperature Summary												Climate Summary						
	Ambient Temperature (° C)			Black Metal Panel Temperature (ASTM G179) (° C)									Relative Humidity (%)			Wind Speed (m/sec)		Wind Direction (360°/0°=N)	Rainfall (mm)
November	5 °			26 °			45 °												
Day	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Min	Avg.	Max	Avg.	Avg.	Total
1	32	22	26	56	21	30	54	21	30	53	21	29	98	63	87	17.6	0.0	117°	18.3
2	28	23	25	48	21	26	47	21	26	44	21	26	99	57	76	23.4	0.0	115°	0.0
3	27	22	24	49	20	27	48	20	27	46	19	26	65	48	58	27.0	2.5	55°	0.0
4	28	23	25	48	21	27	47	21	27	45	21	26	82	57	67	29.5	2.8	62°	0.3
5	29	24	26	50	22	29	49	22	29	47	22	28	91	59	80	26.6	1.4	75°	6.1
6	29	23	26	47	21	28	46	21	28	44	21	28	91	66	78	28.8	0.3	77°	1.8
7	28	22	25	33	21	25	32	21	25	33	21	25	93	72	83	30.2	2.5	78°	38.1
8	26	24	25	30	23	24	30	23	24	31	23	24	93	81	88	38.1	4.6	72°	37.1
9	29	23	26	48	23	28	46	23	28	45	23	28	94	74	87	34.2	6.1	103°	37.8
10	29	23	27	46	22	28	46	22	28	45	22	28	90	74	84	27.0	0.0	115°	5.6
11	30	23	26	43	22	28	44	22	28	42	22	28	93	69	84	24.8	2.5	146°	14.2
12	31	23	26	56	22	28	56	22	28	54	22	28	94	66	87	15.8	0.0	171°	13.5
13	30	23	25	61	22	27	62	22	27	58	22	27	95	65	90	9.3	0.0	165°	0.8
14	30	22	25	56	20	29	52	20	28	50	20	27	96	66	86	15.4	0.0	102°	9.4
15	30	21	25	56	19	30	53	19	30	50	19	28	96	54	81	13.6	0.0	94°	0.3
16	31	19	25	58	17	30	55	17	29	54	17	28	96	47	78	16.2	0.0	83°	0.0
17	31	20	25	58	18	28	57	18	27	55	18	27	96	56	77	18.0	0.0	69°	0.0
18	27	19	23	48	18	26	46	17	26	44	17	25	89	50	65	27.0	1.4	98°	0.0
19	28	21	24	50	18	27	48	18	27	46	18	26	88	50	63	28.4	2.5	61°	0.0
20	28	20	23	52	19	26	49	18	26	47	18	25	92	56	79	23.4	0.7	58°	5.6
21	28	21	24	54	19	28	51	19	27	50	18	26	96	56	84	20.5	0.0	97°	16.0
22	28	20	23	55	18	25	53	18	25	52	17	24	96	67	88	18.3	0.0	116°	0.3
23	28	20	23	51	18	27	51	18	27	47	18	25	96	67	83	15.8	0.0	238°	0.0
24	28	19	23	53	17	27	50	17	26	48	17	25	94	56	75	21.9	0.0	106°	0.0
25	27	21	24	52	18	24	50	18	24	48	18	24	94	58	77	20.5	1.4	90°	5.3
26	28	17	23	55	14	27	53	14	27	49	13	25	95	48	75	17.2	0.0	93°	0.0
27	28	17	23	58	15	27	55	15	26	53	15	25	96	50	81	12.9	0.0	92°	0.0
28	28	19	23	53	18	25	51	18	25	48	18	25	96	50	83	10.0	0.0	113°	0.0
29	28	18	22	58	16	28	56	16	27	51	15	25	96	51	81	16.2	0.0	110°	0.0
30	29	18	23	51	16	25	50	16	25	49	15	24	96	53	84	19.8	0.0	219°	7.6
Monthly Avg.	29	21	24	51	19	27	50	19	27	48	19	26	93	60	80	21.6	1.0	106°	217.9
Monthly Total																			
YTD [†] Avg.	31	21	25	53	19	29	54	19	29	54	19	29	93	53	77	19.9	0.4	196°	1895.6
YTD [†] Total																			

[†] Year To Date

Note:





ATLAS
WEATHERING SERVICES GROUP



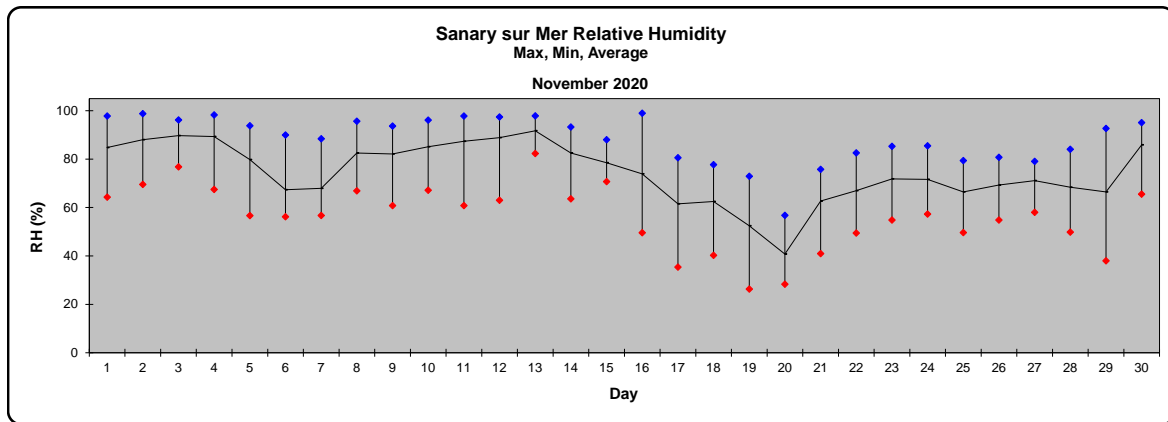
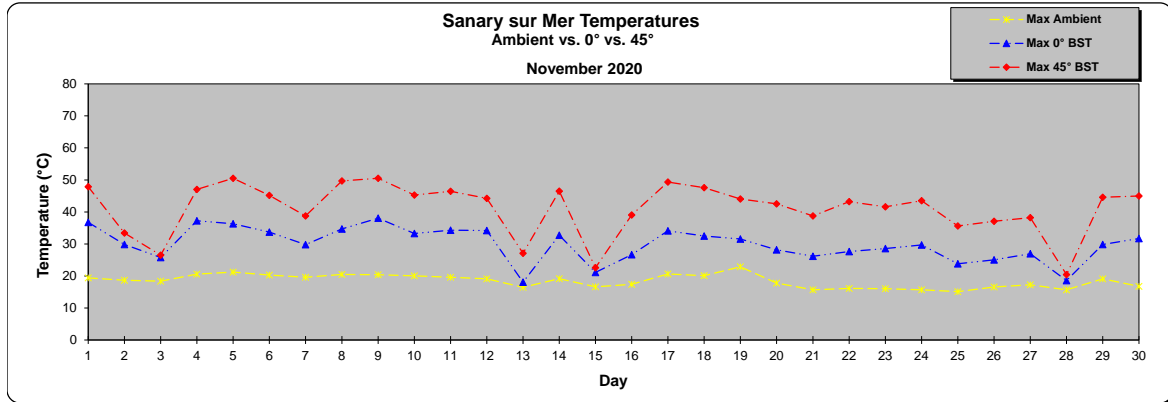
Latitude 43° 08' North, Longitude 05° 49' East, Elevation 110 (m)

Weather Summary
November 2020
Sanary sur Mer, France

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)			
	°C			0°			45°			0°			45°			0°			45°					360°/0°=N				
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	°	Total
1	19	11	14	37	9	16	48	9	18	35	9	15	43	6	16	38	9	16	49	9	17	98	64	85	3.8	0.5	351°	0.0
2	19	11	15	30	9	17	33	10	17	30	9	17	33	0	17	32	9	17	36	9	17	99	70	88	2.1	0.4	44°	0.0
3	18	11	16	26	9	16	27	10	17	26	9	16	26	8	16	27	9	16	26	9	16	96	77	90	2.9	0.3	333°	0.0
4	21	10	14	37	8	15	47	9	17	36	8	15	44	8	16	39	8	15	49	8	17	98	67	89	2.9	0.4	38°	0.0
5	21	12	16	36	9	17	51	10	22	35	9	17	47	-6	20	36	9	17	49	10	21	94	57	80	3.2	0.7	39°	0.0
6	20	12	17	34	10	18	45	10	21	32	9	18	41	9	20	35	9	18	45	10	20	90	56	67	7.0	1.7	81°	0.0
7	20	14	17	30	13	17	39	14	19	28	13	17	36	9	18	30	14	17	40	14	18	88	57	68	7.6	2.6	87°	0.5
8	21	15	17	35	13	18	50	14	20	36	14	18	46	7	19	38	14	18	49	14	20	96	67	83	7.4	1.8	85°	2.0
9	20	13	16	38	11	17	51	12	20	37	11	17	47	-10	19	39	11	17	51	11	20	94	61	82	3.7	0.8	65°	0.0
10	20	12	15	33	10	16	45	10	20	31	10	16	39	-6	18	35	10	16	45	10	19	96	67	85	4.5	0.7	356°	0.0
11	20	10	14	34	8	15	46	9	17	36	8	15	46	2	16	39	8	15	51	9	17	98	61	87	3.4	0.6	50°	0.0
12	19	12	15	34	10	16	44	11	18	35	10	16	44	2	17	38	10	16	49	11	17	97	63	89	3.3	0.8	54°	0.0
13	16	13	14	18	11	14	27	11	15	18	11	14	24	8	14	20	11	14	26	11	15	98	82	92	3.6	0.9	56°	0.8
14	19	13	15	33	11	16	47	11	20	31	10	16	42	10	19	32	11	16	45	11	19	93	64	83	5.4	1.1	79°	0.0
15	17	14	15	21	12	15	23	12	16	21	12	15	21	12	15	22	12	15	22	12	16	88	71	79	6.1	1.6	83°	0.0
16	17	9	14	27	6	14	39	7	17	26	6	14	34	-3	15	28	6	14	39	6	16	99	50	74	8.0	0.8	310°	6.1
17	21	9	14	34	6	15	49	7	20	33	6	15	47	-4	18	34	6	14	48	6	19	81	35	62	3.9	0.6	44°	0.0
18	20	10	14	32	7	15	48	8	19	31	7	15	44	0	17	33	7	15	47	7	19	78	40	62	3.2	0.9	24°	0.0
19	23	9	15	32	6	15	44	7	19	30	6	15	40	-10	16	32	6	15	44	6	18	73	26	52	7.6	1.3	288°	0.0
20	18	9	13	28	6	13	43	7	18	27	6	13	40	-26	15	29	5	13	42	6	17	57	28	41	8.4	1.3	309°	0.0
21	16	7	11	26	4	11	39	5	14	25	4	11	35	-12	11	27	3	11	39	4	14	76	41	63	3.8	0.8	24°	0.0
22	16	7	11	28	4	12	43	5	16	26	4	11	40	-33	12	28	4	12	43	4	15	83	49	67	4.4	1.0	38°	0.0
23	16	7	10	29	4	10	42	4	14	27	3	10	36	-18	11	31	3	10	43	3	13	85	55	72	4.5	0.8	9°	0.0
24	16	7	11	30	4	11	44	4	14	29	3	11	40	-12	12	32	3	11	43	4	13	86	57	72	5.6	1.1	69°	0.0
25	15	9	12	24	6	12	36	7	14	23	6	12	31	-4	12	25	6	12	36	6	13	79	50	66	7.6	1.5	73°	0.0
26	17	11	14	25	9	14	37	10	17	23	9	14	32	4	16	24	8	14	35	9	16	81	55	69	7.2	1.8	78°	0.0
27	17	12	14	27	9	15	38	10	17	25	9	15	34	7	16	26	9	15	37	9	16	79	58	71	7.7	2.2	81°	0.0
28	16	13	15	19	11	14	20	12	15	18	12	14	19	6	14	19	12	14	21	12	14	84	50	68	9.6	2.7	74°	0.3
29	19	10	14	30	7	14	45	8	19	29	7	14	42	4	17	31	7	14	45	7	18	93	38	66	5.4	0.9	29°	0.0
30	17	8	12	32	5	13	45	6	16	30	5	12	42	5	15	32	5	13	45	5	16	95	66	86	4.8	0.8	55°	0.0
Monthly Avg.	18	11	14	30	8	15	41	9	18	29	8	15	38	-1	16	31	8	15	41	8	17	88	56	75	5.3	1.1	110°	
Monthly Total																												9.7
YTD [†] Avg.	22	13	17	40	10	21	46	11	22	37	10	20	41	9	20	41	10	20	46	10	21	85	43	64	5.9	1.1	174°	
YTD [†] Total																												336.0

[†] Year To Date

Note: *No data available

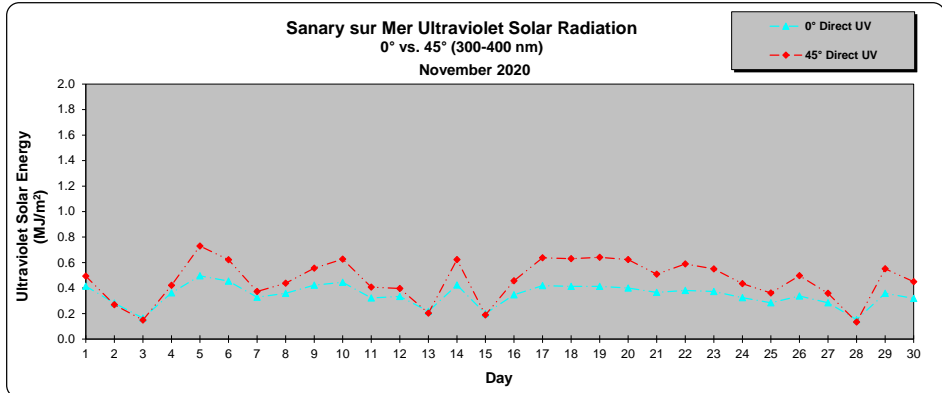
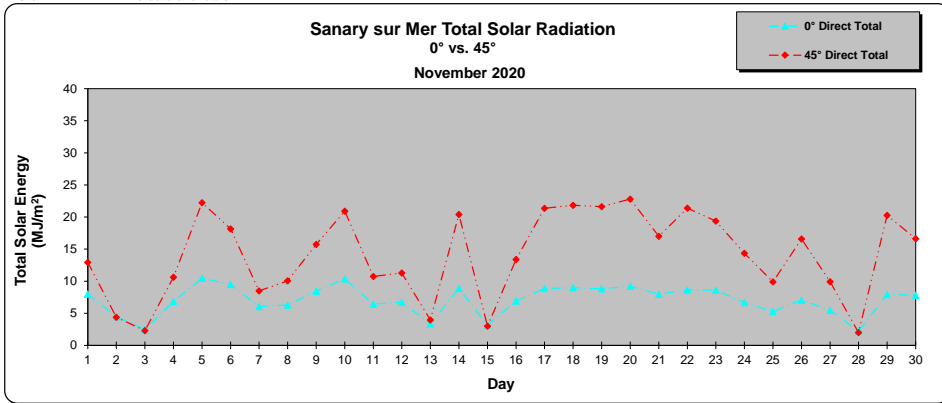


**Solar Radiation Summary
November 2020
Sanary sur Mer, France**

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

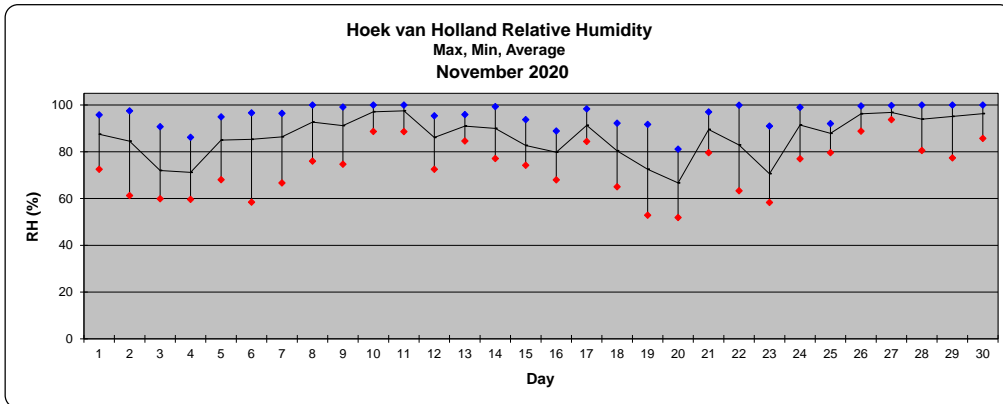
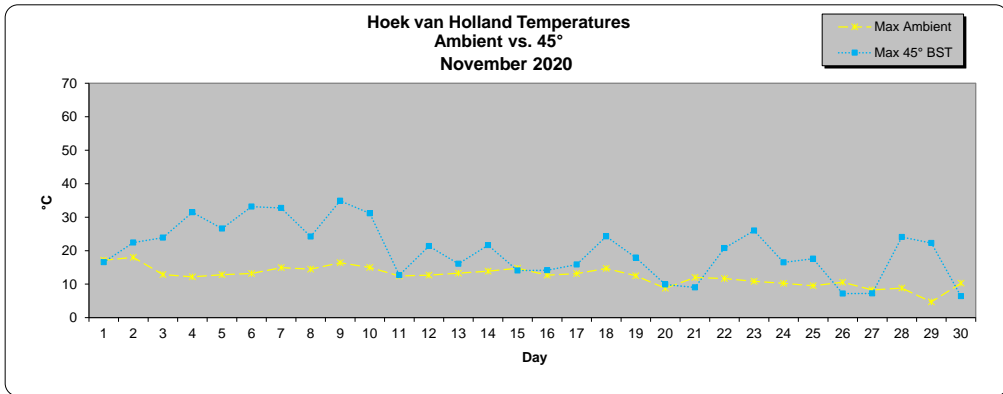
AWSG Solar Radiation Summary						
Month	Total Solar Radiation (MJ/m ²)		Ultraviolet Solar Radiation (MJ/m ²)			
November	Direct		295-385 nm		300-400 nm	
Day	0°	45°	0°	45°	0°	45°
1	8.0	12.9	0.32	0.38	0.42	0.49
2	4.5	4.4	0.22	0.21	0.28	0.27
3	2.5	2.3	0.13	0.11	0.16	0.15
4	6.9	10.6	0.28	0.32	0.36	0.42
5	10.5	22.2	0.38	0.56	0.50	0.73
6	9.5	18.2	0.35	0.47	0.46	0.62
7	6.0	8.5	0.25	0.28	0.33	0.37
8	6.3	10.1	0.27	0.33	0.36	0.44
9	8.4	15.7	0.32	0.42	0.42	0.56
10	10.4	20.9	0.34	0.48	0.45	0.63
11	6.4	10.7	0.25	0.31	0.32	0.41
12	6.7	11.3	0.25	0.30	0.33	0.40
13	3.4	4.0	0.17	0.15	0.22	0.20
14	8.9	20.4	0.32	0.48	0.42	0.62
15	3.2	3.0	0.15	0.14	0.20	0.19
16	6.9	13.4	0.27	0.35	0.35	0.46
17	8.9	21.4	0.32	0.49	0.42	0.64
18	9.0	21.8	0.32	0.48	0.41	0.63
19	8.8	21.6	0.32	0.49	0.41	0.64
20	9.2	22.8	0.31	0.48	0.40	0.62
21	8.0	17.0	0.28	0.39	0.37	0.51
22	8.7	21.4	0.29	0.45	0.38	0.59
23	8.6	19.4	0.28	0.42	0.37	0.55
24	6.7	14.4	0.25	0.33	0.33	0.44
25	5.3	9.9	0.22	0.28	0.29	0.36
26	7.1	16.6	0.26	0.38	0.34	0.50
27	5.5	9.9	0.22	0.27	0.29	0.36
28	2.2	2.0	0.12	0.10	0.15	0.13
29	7.9	20.3	0.27	0.42	0.36	0.55
30	7.8	16.6	0.24	0.34	0.32	0.45
Monthly Total	211.9	423.6	7.93	10.60	10.41	13.93
YTD¹ Total	5648.5	6606.0	84.97	92.35	297.58	308.67

¹ 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)
November	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	17	11	14	17	7	10	96	73	88	15.1	6.7	170°	0.8
2	18	13	16	22	8	13	98	61	85	15.9	8.1	193°	0.5
3	13	8	11	24	3	8	91	60	72	16.5	6.6	209°	2.5
4	12	7	10	31	-1	10	86	60	71	9.7	3.6	270°	0.0
5	13	7	9	27	-1	7	95	68	85	4.5	1.7	178°	0.0
6	13	5	9	33	-2	8	97	58	85	5.2	1.2	68°	0.0
7	15	3	8	33	-3	7	96	67	86	4.4	1.2	76°	0.0
8	14	5	10	24	-1	7	100	76	93	3.9	1.2	81°	0.3
9	16	8	12	35	3	11	99	75	91	4.5	1.1	102°	0.0
10	15	10	12	31	4	10	100	89	97	4.2	1.4	139°	1.8
11	12	10	11	13	6	8	100	89	98	8.0	2.8	139°	0.3
12	13	10	11	21	5	8	95	73	86	11.9	4.8	178°	5.1
13	13	8	11	16	3	7	96	85	91	9.8	4.3	162°	0.0
14	14	10	12	22	5	9	99	77	90	11.6	4.9	152°	1.8
15	15	9	13	14	5	9	94	74	83	14.6	7.2	160°	9.1
16	13	10	11	14	6	8	89	68	80	13.3	6.3	212°	0.0
17	13	10	12	16	6	9	98	84	91	13.5	6.4	184°	1.8
18	15	11	13	24	6	12	92	65	80	12.7	6.5	163°	0.0
19	12	8	10	18	2	7	92	53	73	15.4	6.9	270°	1.8
20	9	6	8	10	1	4	81	52	67	10.8	4.3	232°	0.0
21	12	7	10	9	3	6	97	80	90	11.7	5.9	181°	0.0
22	12	10	11	21	4	8	100	63	83	9.9	4.6	244°	5.3
23	11	8	9	26	2	8	91	58	71	7.7	3.8	219°	0.0
24	10	7	8	16	3	5	99	77	91	8.4	4.8	155°	0.0
25	10	5	8	18	0	5	92	80	88	8.4	4.2	149°	0.0
26	11	7	9	7	3	6	100	89	96	6.3	1.9	5°	3.6
27	8	5	7	7	0	3	100	94	97	4.4	1.4	41°	1.3
28	9	3	6	24	-1	4	100	81	94	6.2	1.9	60°	0.0
29	5	0	3	22	-7	1	100	77	95	5.9	1.6	65°	0.0
30	10	1	5	6	-5	1	100	86	96	11.5	4.8	181°	5.1
Monthly Avg.	12	7	10	20	2	7	96	73	86	9.5	4.1	155°	
Monthly Total													40.9
YTD¹ Avg.	16	10	13	30	4	13	93	60	78	10.4	4.2	170°	
YTD¹ Total													771.4

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

November 2020

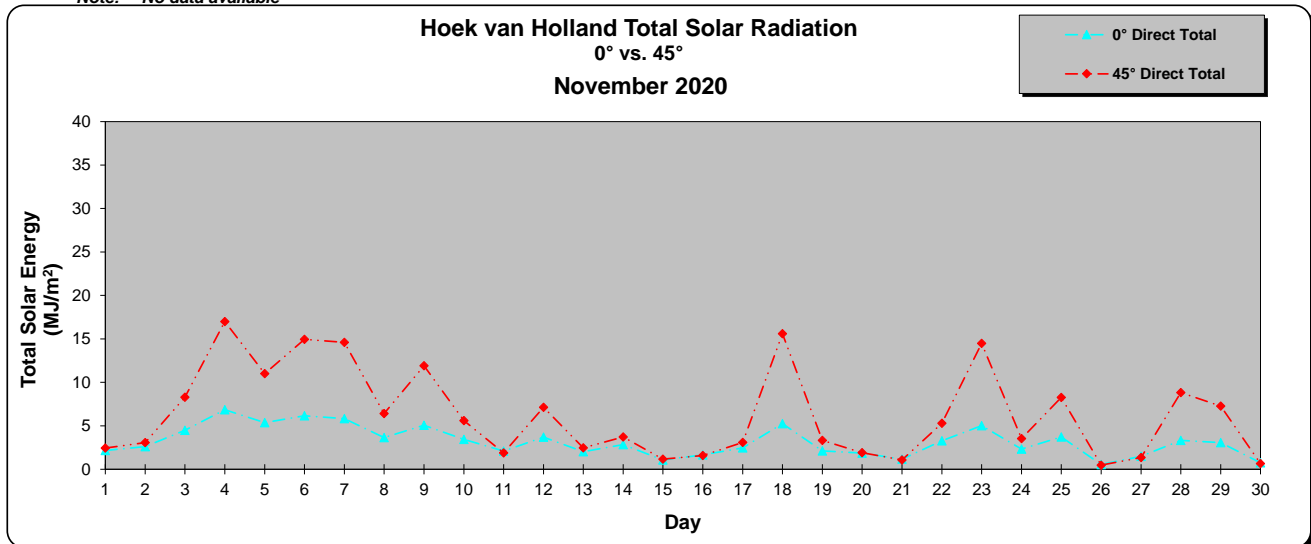
Hoek van Holland, The Netherlands

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

AWSG		Solar Radiation Summary	
Month	Total Solar Radiation (MJ/m ²)		
November	Direct		
Day	0°	45°	
1	2.2	2.5	
2	2.6	3.1	
3	4.5	8.3	
4	6.9	17.0	
5	5.4	11.0	
6	6.2	14.9	
7	5.8	14.6	
8	3.7	6.4	
9	5.1	11.9	
10	3.4	5.6	
11	2.1	1.9	
12	3.7	7.1	
13	2.0	2.5	
14	2.8	3.7	
15	1.1	1.2	
16	1.6	1.6	
17	2.5	3.1	
18	5.3	15.6	
19	2.1	3.3	
20	1.9	1.9	
21	1.2	1.1	
22	3.3	5.3	
23	5.0	14.5	
24	2.3	3.5	
25	3.7	8.3	
26	0.6	0.5	
27	1.5	1.4	
28	3.3	8.8	
29	3.1	7.3	
30	0.7	0.6	
Monthly Total	95.4	188.4	
YTD[†] Total	4060.8	4920.5	

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

Note: * No data available

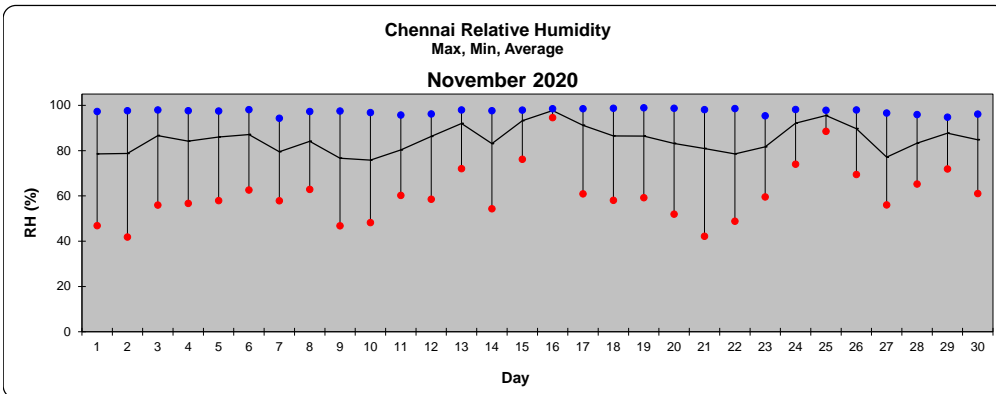
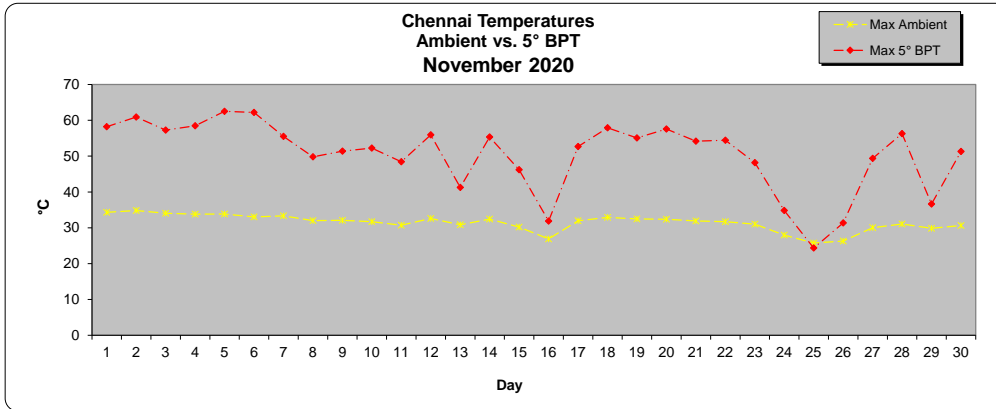


Latitude 12° 35' North, Longitude 79° 48' East Elevation 45 (m)

AWSG	Temperature Summary						Climate Summary						
	Ambient Temperature			Black Metal Panel Temperature (ASTM G179) (°C)			Relative Humidity			Wind Speed		Wind Direction	Rainfall
Month	° C			5 °			%			(m/s)		360°/0°= N	(mm)
November	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Avg	Avg	Total
1	34	22	28	58	20	32	97	47	79	4.5	0.6	356°	0.0
2	35	24	28	61	22	32	98	42	79	4.7	0.6	12°	0.0
3	34	24	28	57	22	30	98	56	87	4.5	0.6	349°	8.4
4	34	26	29	58	24	32	98	57	84	6.3	0.8	345°	0.0
5	34	26	28	63	24	31	98	58	86	3.8	0.8	357°	0.8
6	33	26	28	62	24	31	98	63	87	3.8	0.7	9°	1.5
7	33	26	29	56	24	31	94	58	79	5.9	1.2	3°	0.0
8	32	25	28	50	22	29	97	63	84	4.8	1.1	358°	1.0
9	32	23	27	51	20	29	98	47	77	5.5	1.1	353°	0.3
10	32	20	26	52	17	29	97	48	76	4.5	0.9	341°	0.0
11	31	23	26	48	20	27	96	60	80	6.3	1.2	332°	0.0
12	33	24	27	56	22	30	96	59	86	4.5	1.0	356°	0.0
13	31	24	27	41	23	27	98	72	92	4.3	0.8	5°	0.0
14	32	25	28	55	23	31	98	54	83	7.6	1.2	356°	0.0
15	30	25	27	46	23	28	98	76	93	5.4	1.0	4°	0.0
16	27	24	25	32	23	24	99	95	98	3.2	0.7	13°	118.6
17	32	24	26	53	22	28	99	61	91	6.7	0.9	360°	8.4
18	33	24	27	58	22	31	99	58	87	6.3	0.9	17°	0.5
19	32	25	28	55	23	30	99	59	86	5.4	0.8	12°	0.0
20	32	24	27	58	21	31	99	52	83	4.3	0.8	358°	0.0
21	32	21	26	54	18	29	98	42	81	4.3	0.8	348°	0.0
22	32	21	26	54	18	29	99	49	79	5.4	0.8	348°	0.0
23	31	23	27	48	21	28	95	60	82	5.0	1.1	346°	0.0
24	28	24	25	35	22	25	98	74	92	7.2	1.5	334°	19.3
25	26	22	24	24	21	23	98	89	96	9.4	2.8	323°	40.0
26	26	22	24	31	20	24	98	69	90	9.7	3.1	262°	84.6
27	30	23	27	49	21	29	97	56	77	4.0	1.0	329°	0.5
28	31	25	28	56	23	30	96	65	83	4.5	0.9	46°	0.0
29	30	25	26	37	23	25	95	72	88	3.7	1.2	2°	0.0
30	31	25	27	51	22	28	96	61	85	5.0	1.4	354°	0.0
Monthly Avg.	31	24	27	50	22	29	97	61	85	5.3	1.1	233°	
Monthly Total													283.8
YTD ¹ Avg.	32	22	26	59	22	32	93	47	75	5.1	0.9	176°	
YTD ¹ Total													953.6

¹ Year To Date

Note: * Data Unavailable



**Solar Radiation Summary
November 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)	
November	Direct	295-385 nm	300-400 nm
Day	5°	5°	
1	19.6	0.90	1.00
2	19.9	0.94	1.05
3	14.6	0.72	0.80
4	17.7	0.92	1.03
5	15.7	0.86	0.96
6	14.8	0.86	0.96
7	7.6	0.41	0.45
8	13.4	0.68	0.76
9	19.5	0.93	1.03
10	19.19	0.91	1.02
11	11.5	0.66	0.74
12	17.0	0.94	1.05
13	8.2	0.53	0.60
14	17.6	0.95	1.06
15	9.6	0.61	0.68
16	1.9	0.17	0.19
17	14.2	0.78	0.88
18	19.2	1.01	1.12
19	16.3	0.90	1.00
20	19.7	1.01	1.13
21	22.0	1.06	1.18
22	20.5	1.00	1.11
23	12.5	0.69	0.77
24	5.1	0.35	0.39
25	1.0	0.12	0.13
26	5.7	0.41	0.45
27	7.2	0.41	0.46
28	6.5	0.36	0.40
29	1.0	0.06	0.06
30	13.1	0.70	0.78
Monthly Total	391.7	20.81	23.23
YTD¹ Total	6312.3	281.83	314.61

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

Note:

