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Review

A review of Ghana's solar energy potential

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Appendix A

Table S1. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Salaga, Ghana.

	Average Daily Insolation (kWh m^{-2})					
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	1.14	3.46	3.37	1.14	5.47	5.76
Feb	1.37	3.40	2.77	1.37	5.63	5.79
Mar	1.40	3.62	2.03	1.40	5.85	5.90
Apr	1.72	3.72	1.55	1.50	5.82	5.74
May	2.31	3.75	1.36	1.36	5.74	5.54
Jun	2.38	3.29	1.35	1.35	5.23	5.02
Jul	2.11	3.09	1.35	1.35	4.83	4.67
Aug	1.65	2.76	1.29	1.29	4.43	4.33
Sep	1.37	3.08	1.55	1.34	4.83	4.81
Oct	1.27	3.58	2.52	1.27	5.58	5.72
Nov	1.16	3.70	3.30	1.16	5.56	5.84
Dec	1.11	3.17	3.20	1.11	4.90	5.18
Year	1.58	3.38	2.13	1.30	5.32	5.36

Table S2. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Bawku, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	0.78	3.89	4.07	0.78	5.97	6.51
Feb	0.98	4.29	3.36	0.98	6.40	6.76
Mar	1.24	4.15	2.23	1.24	6.43	6.53
Apr	1.63	4.09	1.51	1.42	6.35	6.23
May	2.30	4.19	1.31	1.31	6.36	6.07
Jun	2.53	3.64	1.45	1.45	6.02	5.72
Jul	2.29	3.36	1.52	1.52	5.58	5.36
Aug	1.74	3.12	1.46	1.45	5.02	4.90
Sep	1.35	3.53	1.73	1.33	5.50	5.49
Oct	1.20	4.04	2.85	1.20	6.12	6.35
Nov	0.86	4.06	3.86	0.86	5.98	6.46
Dec	0.73	3.84	4.24	0.73	5.75	6.33
Year	1.47	3.85	2.46	1.19	5.95	6.05

Table S3. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Bole, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	1.15	3.55	3.37	1.15	5.38	5.68
Feb	1.28	3.71	2.91	1.28	5.79	5.98
Mar	1.43	3.52	2.02	1.43	5.75	5.79
Apr	1.69	3.45	1.48	1.45	5.61	5.53
May	2.36	3.85	1.36	1.36	5.89	5.68
Jun	2.46	3.40	1.40	1.40	5.42	5.21
Jul	2.06	2.82	1.38	1.38	4.71	4.56
Aug	1.61	2.48	1.36	1.36	4.15	4.08
Sep	1.29	3.19	1.61	1.28	4.85	4.86
Oct	1.26	3.54	2.51	1.26	5.61	5.75
Nov	1.11	3.35	3.12	1.11	5.31	5.58
Dec	1.14	2.98	3.00	1.14	4.67	4.92
Year	1.57	3.32	2.12	1.30	5.26	5.29

Table S4. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Bolgatanga, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	0.64	4.45	4.42	0.64	6.19	6.83
Feb	0.85	4.69	3.45	0.85	6.45	6.85
Mar	1.08	4.54	2.21	1.07	6.45	6.57
Apr	1.41	4.57	1.27	1.16	6.40	6.27
May	2.19	4.64	1.02	1.02	6.43	6.10
Jun	2.61	4.30	1.15	1.15	6.05	5.67
Jul	2.31	3.90	1.26	1.26	5.64	5.35
Aug	1.61	3.43	1.29	1.28	4.94	4.80
Sep	1.14	3.95	1.67	1.12	5.41	5.43
Oct	0.97	4.58	2.91	0.97	6.17	6.45
Nov	0.81	4.32	3.99	0.81	6.09	6.61
Dec	0.74	4.15	4.45	0.74	5.90	6.52
Year	1.37	4.29	2.42	1.01	6.01	6.12

Table S5. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Navrongo, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	0.79	3.97	4.15	0.79	6.00	6.57
Feb	0.96	4.28	3.43	0.96	6.48	6.86
Mar	1.28	3.93	2.18	1.27	6.12	6.20
Apr	1.54	4.14	1.47	1.36	6.44	6.32
May	2.28	4.27	1.31	1.31	6.50	6.21
Jun	2.56	3.82	1.41	1.41	6.13	5.81
Jul	2.30	3.63	1.41	1.41	5.77	5.50
Aug	1.64	3.23	1.36	1.35	5.04	4.91
Sep	1.38	3.67	1.75	1.36	5.50	5.49
Oct	1.15	4.19	2.94	1.15	6.27	6.52
Nov	0.74	4.11	4.03	0.74	6.14	6.69
Dec	0.62	4.01	4.51	0.62	5.94	6.61
Year	1.44	3.93	2.49	1.15	6.02	6.14

Table S6. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Tamale, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	1.17	3.29	3.24	1.17	5.22	5.51
Feb	1.27	3.50	2.87	1.27	5.73	5.94
Mar	1.45	3.60	2.11	1.45	5.89	5.94
Apr	1.64	3.51	1.49	1.44	5.76	5.67
May	2.15	3.54	1.31	1.31	5.54	5.34
Jun	2.33	3.23	1.36	1.36	5.21	4.99
Jul	2.11	2.97	1.40	1.40	4.90	4.73
Aug	1.60	2.88	1.26	1.26	4.41	4.31
Sep	1.36	2.99	1.60	1.35	4.72	4.71
Oct	1.28	3.24	2.33	1.28	5.08	5.20
Nov	1.11	3.52	3.20	1.11	5.39	5.68
Dec	1.15	2.89	3.04	1.15	4.72	4.98
Year	1.55	3.26	2.10	1.29	5.21	5.24

Table S7. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Wa, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	1.00	3.81	3.70	1.00	5.64	6.04
Feb	1.10	4.13	3.17	1.10	6.17	6.46
Mar	1.36	3.91	2.19	1.36	6.22	6.28
Apr	1.65	3.87	1.50	1.44	6.03	5.93
May	2.27	3.95	1.40	1.40	6.05	5.82
Jun	2.49	3.56	1.39	1.39	5.72	5.46
Jul	2.14	3.09	1.39	1.39	5.03	4.84
Aug	1.72	2.79	1.48	1.48	4.68	4.59
Sep	1.35	3.50	1.71	1.34	5.25	5.25
Oct	1.27	3.59	2.66	1.27	5.79	5.96
Nov	1.03	3.62	3.46	1.03	5.67	6.03
Dec	1.00	3.40	3.60	1.00	5.24	5.63
Year	1.53	3.60	2.30	1.27	5.62	5.69

Table S8. Average daily insolation in kWh m^{-2} for 6-characteristic surfaces for Yendi, Ghana.

Average Daily Insolation (kWh m^{-2})						
	Vertical Walls Facing					
Month	**North**	**East**	**South**	**West**	**Horiz.**	**Tilted**
Jan	1.25	2.99	2.93	1.25	4.79	5.02
Feb	1.40	3.35	2.70	1.40	5.41	5.57
Mar	1.45	3.49	2.07	1.45	5.72	5.77
Apr	1.63	3.44	1.47	1.44	5.46	5.38
May	2.19	3.53	1.36	1.36	5.43	5.23
Jun	2.24	3.00	1.41	1.41	4.97	4.78
Jul	2.02	3.05	1.26	1.26	4.63	4.46
Aug	1.55	2.85	1.29	1.29	4.39	4.30
Sep	1.34	3.33	1.60	1.32	5.10	5.09
Oct	1.29	3.29	2.30	1.29	5.16	5.27
Nov	1.19	3.30	3.04	1.19	5.11	5.36
Dec	1.06	2.90	2.99	1.06	4.55	4.83
Year	1.55	3.21	2.03	1.31	5.06	5.08