

Table S1. Description of Baseline Surface Radiation Network (BSRN) stations used to evaluate surface longwave radiation models.

Short name	Latitude (°)	Longitude (°)	Elevation (m)	Surface type
ASP	-23.798	133.888	547	desert
BAR	71.323	-156.607	8	polar
BER	32.3008	-64.766	8	island
BIL	36.605	-97.516	317	continent
BON	40.0667	-88.3667	213	continent
BOS	40.125	-105.237	1689	continent
BRB	-15.601	-47.713	1023	continent
BUD	47.4291	19.1822	139.1	continent
CAB	51.9711	4.9267	0	continent
CAR	44.083	5.059	100	continent
CNR	42.816	-1.601	471	continent
COC	-12.193	96.835	6	island
DAA	-30.6667	23.993	1287	continent
DOM	-75.1	123.383	3233	polar
DRA	36.626	-116.018	1007	desert
DWN	-12.424	130.8925	32	coast
FLO	-27.6047	-48.5227	11	coast
FPE	48.3167	-105.1	634	continent
FUA	33.5822	130.3764	3	coast
GCR	34.2547	-89.8729	98	continent
GUR	28.4249	77.156	259	continent
HOW	22.5535	88.3064	51	continent
ISH	24.3367	124.1644	5.7	island
LAU	-45.045	169.689	350	continent
LIN	52.21	14.122	125	continent
LRC	37.1038	-76.3872	3	coast

LYU	22.037	121.5583	324	island
MNM	24.2883	153.9833	7.1	island
NEW	-32.8842	151.7289	18.5	coast
PAL	48.713	2.208	156	continent
PAR	5.806	-55.2146	4	coast
PAY	46.815	6.944	491	continent
PSU	40.72	-77.9333	376	continent
PTR	-9.068	-40.319	387	continent
RUN	-20.9014	55.4836	116	island
SAP	43.06	141.3286	17.2	coast
SEL	15.784	-91.9902	602	continent
SXF	43.73	-96.62	473	continent
TAM	22.7903	5.5292	1385	desert
TAT	36.0581	140.1258	25	coast
TIK	71.5862	128.9188	48	polar
TIR	13.0923	79.9738	36	coast
TOR	58.254	26.462	70	continent
