Supplementary Materials

In this supplementary material, we include the β-parameter values of the BRDF model for each band at each site.

Table S1. β-parameter values of BRDF model for each band of the four sites in RadCalNet.

β- parameter	Blue	Green	Red	NIR	SWIR1	SWIR2
			GONA			
β_0	0.1942	0.2449	0.3312	0.4279	0.4198	0.2836
β_1	0.0309	0.0179	0.0067	0.0198	–0.0282	–0.0216
β_2	–0.0174	0.0586	0.0795	0.1322	0.0003	–0.2014
β_3	56.6231	–117.0817	–7.1729	170.7997	–61.2838	82.8315
β_4	1.5762	–5.2964	1.5704	11.0030	–3.9000	6.3157
β_5	0.0619	0.0293	0.0274	0.0327	–0.0540	–0.0038
β_6	1.1216	–0.7590	–1.3644	3.7047	–5.0462	–10.8533
β_7	25.1113	–48.0963	1.7053	85.2478	–26.8172	47.7926
β_8	–0.0579	0.1071	0.4681	–0.1385	–0.1159	0.3586
β_9	–0.0391	0.4654	1.9513	–0.4718	–0.8497	1.6585
β_{10}	0.4856	–0.2212	–0.2746	1.1603	–0.9299	–1.6689
β_{11}	0.0173	–0.0622	–0.0857	–0.1830	0.0341	0.2788
β_{12}	–0.0552	–0.0369	–0.0402	–0.0339	0.0326	–0.0097
β_{13}	–0.5006	0.3527	0.1162	–1.0007	0.5655	0.4092
β_{14}	–1.1041	1.8216	0.3375	–3.9876	3.5967	3.7535
			BSCN			
β_0	0.2100	0.2466	0.2941	0.3329	0.4578	0.4275
β_1	0.1414	0.0820	0.0808	0.0754	0.0208	0.0221
β_2	0.0565	0.0172	0.0673	0.0196	–0.1232	–0.0148
β_3	–33.3577	–43.0226	–57.6669	–36.6507	–32.0074	–64.9839
β_4	–1.0939	–2.8762	–1.9833	–1.0056	–5.0487	–3.4685
β_5	–0.1502	–0.1190	–0.0832	–0.0493	–0.0888	–0.0654
β_6	1.3747	1.5968	0.0446	–0.9570	–1.8404	–3.2720
β_7	–13.4629	–20.1913	–22.9393	–15.6485	–21.0909	–27.4112
β_8	0.1059	0.0344	0.1057	0.0880	0.2114	0.3107
β_9	0.1873	–0.1326	0.2468	0.1011	0.5802	1.0331
β_{10}	0.4094	0.4310	0.0645	–0.1209	–0.2982	–0.8318
β_{11}	–0.1001	–0.0932	–0.1046	–0.0298	–0.0172	–0.0704
β_{12}	0.1786	0.1253	0.1191	0.1034	0.0716	0.0593
β_{13}	–0.1656	–0.1745	–0.1485	–0.1617	0.2618	0.3193
β_{14}	–0.8201	–0.9938	–0.6905	–0.6658	0.6949	0.9119
			RVUS			
β_0	0.4369	0.4352	0.4765	0.5300	0.4471	0.3686
β_1	–0.0845	–0.0907	–0.0879	–0.0506	–0.0888	–0.1053
β_2	0.8082	0.5720	0.5603	0.6313	0.1764	0.1225
β_3	–492.0854	–1081.4238	–577.8887	–483.1813	–1400.6257	–1406.6570
β_4	–30.4916	–72.8282	–38.4486	–30.9730	–97.9369	–97.6660
β_5	–0.0983	–0.0388	–0.0529	–0.1044	0.0560	0.0595
β_6	–0.1700	–5.4076	–3.7345	1.1586	–15.9721	–25.4322
β_7	–240.9016	–556.4975	–294.5386	–241.7216	–736.5707	–736.1198
β_8	0.5498	0.7023	0.3726	0.3474	0.5661	0.3305
β_9	1.4747	2.1700	0.8324	0.6919	1.6659	0.8030
β_{10}	–0.9294	–1.9235	–1.3597	–0.0185	–4.3131	–6.9448

β_{11}	–0.7381	–0.5003	–0.5082	–0.5478	–0.0925	–0.0975
β_{12}	–0.0099	–0.0277	–0.0150	0.0307	–0.0534	–0.0753
β_{13}	0.7370	1.3011	0.8403	0.4125	2.1459	2.7950
β_{14}	1.3922	3.9522	2.2388	0.6376	7.5803	10.0859
LCFR (winter and spring)						
β_0	0.1732	0.1547	0.1818	0.2407	0.3953	0.2463
β_1	0.1139	0.0731	0.0952	–0.0695	0.0520	0.0360
β_2	–0.1454	–0.2535	–0.2743	0.1938	–0.0853	–0.1615
β_3	–166.9405	–335.8937	–127.4251	–275.4070	–28.7870	42.0968
β_4	–12.2237	–26.6966	–7.9157	–27.9834	2.3551	9.1422
β_5	–0.1396	–0.2110	–0.3571	0.1881	–0.5281	–0.3527
β_6	–10.3153	1.7055	14.6080	12.8559	11.6643	1.3564
β_7	–90.3189	–190.4231	–66.5719	–178.2133	–3.1975	40.3630
β_8	–0.5930	–0.0120	0.6243	1.1102	–0.5027	–0.1163
β_9	–2.3934	–0.1572	2.1094	4.7086	–1.5253	–0.1927
β_{10}	–2.4431	0.4045	4.1773	1.5874	2.7972	–0.1582
β_{11}	0.0225	0.1108	0.0974	–0.0233	–0.1282	–0.0048
β_{12}	0.1808	0.1903	0.2853	–0.1203	0.3159	0.2268
β_{13}	0.6245	0.0352	–0.9160	0.2884	–1.2462	0.1221
β_{14}	2.4121	–0.0351	–3.2822	–0.5359	–4.8672	–0.1094
LCFR (summer and autumn)						
β_0	0.1121	0.1211	0.0754	0.2279	0.1699	0.1006
β_1	0.0326	–0.0055	0.0357	0.1267	–0.1990	–0.0861
β_2	–0.2210	–0.2482	–0.5671	–0.5409	–0.8146	–0.5823
β_3	13.9829	377.2091	–6.9885	–338.2802	241.2931	54.3164
β_4	1.9037	28.4906	–0.8263	–22.4589	19.0073	5.3180
β_5	–0.0351	–0.0932	0.0716	0.0459	0.1832	0.2198
β_6	–0.0023	7.9535	14.1269	–4.5146	10.5600	9.8906
β_7	9.4409	205.2955	–9.4838	–176.4434	130.9474	30.7915
β_8	–0.2826	–0.6519	–0.2770	0.6572	–1.3553	–1.8502
β_9	–1.1519	–2.8682	–2.1237	1.7057	–5.4539	–7.3037
β_{10}	0.0907	2.0337	2.7281	–1.4361	2.6910	2.2921
β_{11}	0.1800	0.1428	0.5607	0.4688	0.7610	0.5970
β_{12}	0.0494	0.0480	0.0726	0.1847	–0.1617	–0.0827
β_{13}	–0.1585	–1.1664	–1.0181	1.0244	–1.7114	–1.7591
β_{14}	–0.6853	–4.7292	–5.2700	3.0660	–6.7345	–7.0850