



Supplementary Materials

Table S1. Description of forest structure by category and class from Korea Forest Service's The 6th Forest Type Map.

Category	Class	Value/description
DBH	B1	DBH of 6 cm or less
	B2	DBH from 7 cm to 18 cm
	B3	DBH from 19 cm to 30 cm
	B4	DBH of 31 cm or over
Age	A1	Aged 1 to 10 years
	A2	Aged 11 to 20 years
	A5	Aged 21 to 30 years
	A4	Aged 31 to 40 years
	A5	Aged 41 to 50 years
	A6	Aged 51 to 60 years
	A7	Aged 61 to 70 years
	A8	Aged 71 to 80 years
	A9	Aged 81 years or over
Density	D1	Tree coverage of 50% or less
	D2	Tree coverage of 51% to 70%
	D3	Tree coverage of 71% or over

Table S2. List and coordinate of 23 Automatic Mountain Meteorology Observation System (AMOS) stations of Korea Forest Service for which the representativeness of Calibration/Validation sites was evaluated. Distance/dissimilarity (GL: geographical location, CL: climate, FC: forest composition, FS: forest structure VI: vegetation index) and heterogeneity index (HI) are calculated by operating 8 Cal/Val sites in the grid where each AMOS is located.

Site	Coordinate		Distance/dissimilarity					HI
	Latitude	Longitude	GL	CL	FC	FS	VI	
As01	35.1828	129.0244	0.916	0.434	0.424	0.018	0.057	1.850
As02	35.4098	126.9664	0.484	0.444	0.460	0.413	0.029	1.829
As03	35.8495	127.8189	0.712	0.327	0.475	0.196	0.040	1.749
As04	36.4872	127.6390	0.512	0.290	0.614	0.327	0.006	1.749
As05	35.6716	129.1241	0.694	0.205	0.458	0.171	0.078	1.606
As06	37.2668	126.9245	0.232	0.386	0.743	0.090	0.027	1.477
As07	37.9569	128.5888	0.214	0.293	0.480	0.440	0.021	1.447
As08	34.8888	126.7863	0.238	0.353	0.554	0.220	0.052	1.417
As09	36.4111	129.3185	0.360	0.304	0.582	0.125	0.046	1.416
As10	34.6162	127.7676	0.498	0.190	0.424	0.192	0.061	1.365
As11	35.4013	127.7810	0.674	0.377	0.244	0.035	0.012	1.341
As12	36.6892	127.0166	0.304	0.360	0.532	0.094	0.029	1.319
As13	36.8669	127.3414	0.398	0.240	0.500	0.074	0.085	1.296
As14	37.7519	128.7705	0.168	0.286	0.471	0.275	0.092	1.293
As15	36.4672	128.5834	0.450	0.282	0.324	0.132	0.068	1.256
As16	34.4614	126.2665	0.191	0.362	0.604	0.072	0.024	1.253
As17	36.3257	126.7783	0.201	0.301	0.676	0.022	0.024	1.223
As18	38.1998	128.1163	0.273	0.272	0.363	0.286	0.026	1.221
As19	37.0931	128.4723	0.171	0.131	0.401	0.429	0.063	1.196
As20	35.3274	126.4062	0.447	0.205	0.224	0.046	0.004	0.926
As21	34.6852	127.0068	0.204	0.104	0.539	0.021	0.024	0.893
As22	37.5938	127.0428	0.094	0.177	0.482	0.041	0.031	0.825
As23	38.1646	127.1399	0.167	0.045	0.136	0.064	0.085	0.498

Table S3. Mean distance/dissimilarity (GL: geographical location, CL: climate, FC: forest composition, FS: forest structure VI: vegetation index) and mean heterogeneity index (HI) in forests in South Korea for the coordinates of additional Calibration/Validation sites selected by the add-on planning process and for the current group of eight Cal/Val sites in operation and for each add-on iteration.

Period	Coordinate		Mean distance/dissimilarity					Mean HI
	Latitude	Longitude	GL	CL	FC	FS	VI	
Current group			0.376	0.255	0.435	0.099	0.051	1.216
Op01	35.5542	127.7375	0.261	0.223	0.435	0.098	0.050	1.066
Op02	33.3625	126.5458	0.261	0.222	0.435	0.094	0.049	1.061
Op03	37.4958	130.8708	0.260	0.222	0.430	0.093	0.049	1.054
Op04	35.2375	129.1875	0.231	0.218	0.428	0.091	0.044	1.012
Op05	35.4125	126.4125	0.226	0.217	0.419	0.090	0.044	0.996
Op06	35.8958	128.6625	0.202	0.213	0.404	0.090	0.043	0.952
Op07	35.3375	127.7542	0.197	0.210	0.400	0.089	0.043	0.939
Op08	36.4042	129.4125	0.188	0.206	0.400	0.077	0.042	0.912
Op09	38.1208	128.4625	0.181	0.206	0.396	0.076	0.042	0.899
Op10	35.0542	126.8625	0.175	0.203	0.391	0.071	0.036	0.876
Op11	36.6625	127.2875	0.161	0.197	0.389	0.069	0.034	0.850
Op12	33.5125	126.4875	0.161	0.196	0.388	0.068	0.034	0.848
Op13	36.2875	126.7875	0.159	0.193	0.387	0.068	0.034	0.841
Op14	33.3625	126.5875	0.159	0.193	0.387	0.067	0.034	0.839
Op15	35.8375	128.0708	0.153	0.189	0.359	0.066	0.030	0.798
Op16	33.3375	126.6625	0.153	0.189	0.359	0.063	0.030	0.795
Op17	37.4625	128.5625	0.152	0.189	0.359	0.063	0.030	0.794
Op18	34.8208	128.6208	0.149	0.187	0.352	0.061	0.029	0.779
Op19	35.1375	127.6208	0.147	0.186	0.351	0.060	0.029	0.773
Op20	36.5542	128.3458	0.137	0.177	0.348	0.060	0.026	0.748
Op21	34.0542	127.3208	0.137	0.177	0.348	0.059	0.026	0.747
Op22	36.7042	129.1625	0.132	0.172	0.347	0.059	0.025	0.735
Op23	37.5375	126.6875	0.132	0.171	0.342	0.058	0.025	0.728
Op24	35.7875	129.2208	0.128	0.168	0.336	0.058	0.025	0.715
Op25	35.7042	127.1458	0.123	0.166	0.335	0.057	0.024	0.706