

Supplementary file S4

Motti simulation background data for Lapland.

Table S4. Motti simulation background data for Lapland. The fertility classes according to Table 2 are: 2 is fertile, 3 is medium-fertile, 4 is medium-poor and 5 is poor. Main tree species are: 1 is Scots pine (*Pinus sylvestris* L.) and 2 is Norway spruce (*Picea abies* (L.) Karst.). Abbreviations for the forest attributes are: stem number (N_s), basal area (BA), basal area-weighted mean height (Hg), basal area-weighted mean diameter (Dg) and dominant height (Hdom).

Fertility class	Main species	Year	Age	N _s (ha ⁻¹)	BA (m ² ha ⁻¹)	Hg (m)	Dg (cm)	Hdom (m)	Stem volume (m ³ ha ⁻¹)	Sawlog volume (m ³ ha ⁻¹)	Pulpwood volume (m ³ ha ⁻¹)	Residue wood volume (m ³ ha ⁻¹)	Total yield (m ³ ha ⁻¹)	Stand mortality (m ³ ha ⁻¹)	Stem wood (kg ha ⁻¹)	Residue wood (kg ha ⁻¹)	Living branches (kg ha ⁻¹)	Dead branches (kg ha ⁻¹)	Leaves (kg ha ⁻¹)	Stumps (kg ha ⁻¹)	Coarse roots > 2 mm (kg ha ⁻¹)	Fine roots (kg ha ⁻¹)
2	2	0	60	1473	20.5	11.5	16.4	11.5	113	29.8	70.7	12.6	113.0	0.0	38.5	5.1	15.9	2.1	11.7	4.6	19.0	0.8
2	2	5	65	1426	24.4	12.6	17.8	12.6	147	52.0	84.3	10.7	146.9	0.0	52.3	4.3	19.1	2.7	13.5	5.7	23.4	1.1
2	2	10	70	1368	28.3	13.7	19.2	13.7	184	73.4	102.1	8.5	184.0	0.0	67.4	3.4	22.1	3.2	15.1	7.0	27.8	1.4
2	2	15	75	1301	31.8	14.8	20.6	14.8	223	108.8	105.7	8.2	222.7	0.0	82.3	3.3	24.9	3.8	16.5	8.2	32.2	1.6
2	2	20	80	1231	34.7	15.9	21.9	15.9	260	146.9	105.2	7.7	259.8	0.0	96.6	3.1	27.2	4.3	17.5	9.3	36.0	1.9
2	2	25	85	1159	37.3	16.9	23.1	16.9	297	191.3	99.4	6.0	296.6	0.0	111.3	2.4	29.4	4.7	18.4	10.4	39.6	2.2
2	2	30	90	1089	39.6	17.9	24.3	17.9	333	228.3	98.8	5.5	332.6	0.0	125.1	2.2	31.3	5.2	19.1	11.4	43.0	2.4
2	2	35	95	1022	41.6	18.9	25.5	18.9	367	274.0	88.2	5.0	367.1	0.0	138.3	2.0	32.9	5.6	19.6	12.4	46.0	2.6
2	2	40	100	960	43.3	19.8	26.7	19.8	400	311.5	84.0	4.6	400.1	0.0	150.7	1.8	34.4	5.9	20.0	13.3	48.8	2.9
2	2	45	105	903	44.8	20.7	27.8	20.7	431	351.0	76.0	4.2	431.2	0.0	162.5	1.6	35.8	6.2	20.3	14.2	51.3	3.1
2	2	50	110	852	46.1	21.6	28.9	21.6	461	390.3	66.4	3.9	460.6	0.0	173.5	1.5	37.0	6.5	20.5	15.0	53.6	3.3
3	2	0	60	1642	19.2	12.7	15.9	12.7	121	30.7	78.1	11.9	120.7	0.0	41.5	4.9	13.9	2.3	10.7	4.3	17.8	0.7
3	2	5	65	1579	22.4	13.7	17.1	13.7	151	47.1	91.0	13.1	151.2	0.0	52.9	5.3	16.3	2.8	12.2	5.2	21.2	0.9
3	2	10	70	1508	25.5	14.8	18.3	14.8	184	79.9	92.9	10.8	183.6	0.0	66.4	4.4	18.6	3.2	13.5	6.1	24.7	1.2
3	2	15	75	1431	28.3	15.7	19.5	15.7	217	96.9	109.6	10.6	217.0	0.0	79.3	4.3	20.7	3.7	14.7	7.1	28.0	1.4
3	2	20	80	1353	30.6	16.7	20.5	16.7	249	131.3	109.2	8.4	248.9	0.0	92.6	3.4	22.5	4.1	15.6	7.9	30.9	1.6
3	2	25	85	1278	32.7	17.7	21.5	17.7	280	170.7	101.9	7.8	280.4	0.0	105.0	3.1	24.2	4.6	16.4	8.7	33.7	1.9
3	2	30	90	1205	34.5	18.6	22.5	18.6	311	193.9	110.2	7.1	311.2	0.0	117.1	2.9	25.7	4.9	17.0	9.5	36.3	2.1
3	2	35	95	1138	36.2	19.5	23.5	19.5	341	233.3	101.1	6.6	341.0	0.0	128.7	2.6	27.0	5.3	17.6	10.2	38.7	2.3
3	2	40	100	1075	37.7	20.3	24.5	20.3	369	267.7	95.7	6.0	369.5	0.0	139.9	2.4	28.3	5.6	18.0	10.9	40.9	2.5
3	2	45	105	1018	38.9	21.1	25.4	21.1	397	302.4	88.7	5.5	396.7	0.0	150.4	2.2	29.4	5.9	18.4	11.6	42.9	2.7
3	2	50	110	965	40.1	21.9	26.3	21.9	422	327.8	89.5	5.1	422.4	0.0	160.4	2.0	30.4	6.2	18.7	12.2	44.8	3.0
3	1	0	60	1904	20.2	11.6	14.5	11.6	122	14.8	95.9	10.8	121.5	0.0	43.1	4.3	10.5	3.0	4.6	4.0	10.7	0.4
3	1	5	65	1827	22.6	12.4	15.4	12.4	144	21.3	114.3	8.6	144.3	0.0	53.0	3.5	11.5	3.4	4.9	4.7	12.6	0.5
3	1	10	70	1748	24.9	13.2	16.3	13.2	167	27.4	131.4	8.6	167.4	0.0	62.2	3.5	12.4	3.8	5.1	5.3	14.6	0.5
3	1	15	75	1665	26.7	14.0	17.1	14.0	189	52.6	127.6	8.6	188.8	0.0	70.7	3.4	13.1	4.2	5.3	5.9	16.4	0.6
3	1	20	80	1582	28.3	14.7	17.9	14.7	209	63.7	139.2	6.4	209.4	0.0	79.8	2.6	13.7	4.5	5.4	6.4	18.1	0.7
3	1	25	85	1500	29.8	15.5	18.8	15.5	229	79.0	143.8	5.9	228.8	0.0	87.8	2.4	14.2	4.8	5.5	6.9	19.8	0.7
3	1	30	90	1388	30.3	16.1	19.6	16.1	242	89.5	146.6	5.4	241.6	0.0	93.2	2.2	14.5	4.9	5.5	7.2	20.8	0.8
3	1	35	95	1286	30.7	16.8	20.4	16.8	253	109.2	138.9	4.9	253.0	0.0	98.0	2.0	14.7	5.1	5.5	7.4	21.8	0.8
3	1	40	100	1196	31.1	17.4	21.1	17.4	264	127.4	131.9	4.5	263.9	0.0	102.6	1.8	14.9	5.2	5.4	7.7	22.8	0.9
3	1	45	105	1116	31.5	18.0	21.9	18.0	274	143.0	126.9	4.2	274.1	0.0	106.9	1.7	15.1	5.3	5.4	7.9	23.7	0.9
3	1	50	110	1045	31.8	18.6	22.7	18.6	284	155.1	124.8	3.9	283.8	0.0	110.9	1.6	15.2	5.4	5.4	8.1	24.6	0.9
4	1	0	60	2224	16.4	9.5	12.2	9.5	83	0.0	71.2	12.1	83.3	0.0	28.0	4.9	8.6	2.3	4.1	2.9	7.4	0.4
4	1	5	65	2134	18.7	10.3	13.0	10.3	101	0.0	91.0	10.5	101.5	0.0	35.9	4.2	9.7	2.7	4.5	3.5	9.0	0.4
4	1	10	70	2044	20.9	11.1	13.9	11.1	121	9.9	99.8	11.0	120.7	0.0	43.3	4.4	10.7	3.0	4.8	4.1	10.6	0.5
4	1	15	75	1953	22.7	11.8	14.6	11.8	139	16.1	113.8	8.8	138.7	0.0	51.4	3.5	11.5	3.4	5.0	4.6	12.1	0.6
4	1	20	80	1862	24.3	12.5	15.4	12.5	157	22.5	125.6	8.6	156.7	0.0	58.8	3.5	12.2	3.7	5.2	5.1	13.6	0.6
4	1	25	85	1770	25.9	13.2	16.1	13.2	175	27.6	138.7	8.3	174.7	0.0	66.0	3.4	12.9	4.0	5.4	5.5	15.1	0.7
4	1	30	90	1680	27.2	13.9	16.9	13.9	192	41.8	142.0	8.0	191.9	0.0	73.1	3.2	13.4	4.2	5.5	6.0	16.5	0.8
4	1	35	95	1592	28.4	14.6	17.6	14.6	208	61.7	140.2	6.2	208.2	0.0	80.3	2.5	13.9	4.5	5.6	6.4	17.9	0.8
4	1	40	100	1508	29.5	15.2	18.3	15.2	224	72.6	145.2	5.8	223.7	0.0	86.8	2.3	14.3	4.7	5.6	6.8	19.2	0.9
4	1	45	105	1427	30.4	15.8	19.0	15.8	238	89.2	143.6	5.4	238.1	0.0	92.8	2.2	14.7	4.9	5.7	7.1	20.5	0.9
4	1	50	110	1349	31.2	16.4	19.7	16.4	251	99.8	146.7	5.0	251.4	0.0	98.3	2.0	15.0	5.1	5.7	7.5	21.7	1.0
5	1	0	60	2083	12.4	8.0	10.5	8.0	55	0.0	41.8	12.9	54.7	0.0	16.5	5.2	6.1	1.6	3.1	2.0	4.9	0.3
5	1	5	65	2019	13.9	8.7	11.2	8.7	65	0.0	54.2	11.3	65.5	0.0	21.5	4.6	6.8	1.9	3.4	2.4	5.8	0.3
5	1	10	70	1956	15.2	9.4	11.8	9.4	77	0.0	67.1	9.7	76.8	0.0	26.7	3.9	7.5	2.1	3.6	2.7	6.7	0.4
5	1	15	75	1894	16.3	10.1	12.3	10.1	87	0.0	77.1	10.1	87.2	0.0	30.7	4.1	8.0	2.3	3.8	3.0	7.4	0.4
5	1	20	80	1833	17.3	10.7	12.8	10.7	97	0.0	87.1	10.3	97.4	0.0	34.8	4.2	8.5	2.4	4.0	3.2	8.2	0.5
5	1	25	85	1774	18.2	11.3	13.3	11.3	107	0.0	99.0	8.2	107.3	0.0	39.6	3.3	8.9	2.6	4.1	3.5	8.9	0.5
5	1	30	90	1715	18.9	11.9	13.8	11.9	117	0.0	108.7	8.1	116.8	0.0	43.6	3.3	9.2	2.7	4.3	3.7	9.5	0.6
5	1	35	95	1658	19.6	12.5	14.2	12.5	126	11.3	106.6	7.9	125.8	0.0	47.3	3.2	9.5	2.9	4.4	3.9	10.2	0.7
5	1	40	100	1603	20.1	13.0	14.6	13.0	134	13.9	112.7	7.7	134.4	0.0	50.9	3.1	9.8	3.0	4.4	4.1	10.8	0.7
5	1	45	105	1549	20.6	13.5	15.0	13.5	142	16.8	118.1	7.5	142.4	0.0	54.2	3.0	10.1	3.1	4.5	4.3	11.3	0.8
5	1	50	110	1498	21.1	14.0	15.4	14.0	150	19.1	123.3	7.3	149.7	0.0	57.3	2.9	10.3	3.2	4.6	4.4	11.8	0.8