

Supplementary Materials

1. Median values for the variables Slope, Site index, Altitude, and Distance from road, for different CHI habitats, all forest, and Mature forest in 10 municipalities. A-H = Aurskog-Høland, U-Aker = Ullensaker, M-dal = Marnardal, S-dalen = Songdalen, E-dal = Etnedal, S-A = Sør-Aurdal, R-dalen = Rendalen. Habitats: Rich bark = Trees with nutrient-rich bark, Pend lich = Pendant lichens, Late succ = Late successions of deciduous trees, Lux ground = Luxuriant ground vegetation.

Slope (ascent in percent of horizontal distance in meter)

	A-H	U-aker	M-dal	S-dalen	Søgne	E-dal	S-A	Tokke	R-dalen	Vinje
1. Snags	-	-	-	-	-	25.3	26.6	-	11.6	25.8
2. Logs	23.1	3.7	33.8	34.5	27.2	23.4	29.2	46.6	20.0	32.5
3. Rich bark	-	-	35.1	47.3	28.0	13.4	33.5	63.2	-	-
4. Pend lich	-	-	-	-	-	16.9	12.9	-	28.5	-
5. Late succ	14.0	-	28.9	29.2	23.0	34.4	23.7	52.6	27.0	41.4
6. Old trees	19.0	-	32.6	34.5	27.4	21.0	19.2	32.3	12.3	25.0
9. Lux ground	13.3	5.3	43.9	38.9	31.3	18.1	19.6	49.5	25.6	39.5
Mature forest	15.2	3.1	17.1	15.1	17.9	15.4	15.1	25.1	15.9	22.4
All forest	13.0	2.6	15.6	14.4	17.5	16.1	15.6	25.2	15.7	21.2

Site index (tree height in meter at 40 years of age)

	A-H	U-aker	M-dal	S-dalen	Søgne	E-dal	S-A	Tokke	R-dalen	Vinje
1. Snags	-	-	-	686	-	659	554	-	686	622
2. Logs	238	197	200	609	125	636	618	540	609	666
3. Rich bark	-	-	179	-	119	795	715	318	-	-
4. Pend lich	-	-	-	688	-	811	680	-	688	-
5. Late succ	202	-	236	498	131	638	424	464	498	617
6. Old trees	255	-	185	695	118	849	723	694	695	769
9. Lux ground	198	143	132	643	98	759	550	520	643	715

Mature forest	231	198	239	611	106	783	689	657	611	722
All forest	224	197	236	517	88	751	624	601	517	695

	A-H	U-aker	M-dal	S-dal	Søgne	E-dal	S-A	Tokke	R-dal	Vinje
1. Snags	-	-	-	-	-	14.0	8.0	-	11.0	11.0
2. Logs	16.9	17.0	14.0	15.3	16.2	14.0	11.0	14.0	11.0	11.0
3. Rich bark	-	-	14.3	19.8	17.0	11.0	11.0	14.0	-	-
4. Pend lich	-	-	-	14.0	-	9.6	8.7	-	9.5	-
5. Late succ	17.0	-	14.0	17.0	15.1	14.0	17.0	14.0	13.4	14.0
6. Old trees	13.8	-	14.1	-	16.8	8.0	8.0	11.0	8.0	8.1
9. Lux ground	17.0	20.0	16.8	17.0	17.0	11.0	14.0	14.0	14.0	14.0
Mature forest	11.0	17.0	11.0	11.0	11.0	8.0	8.0	11.0	11.0	8.0
All forest	14.0	17.0	14.0	14.0	14.0	11.0	11.0	11.0	14.0	11.0

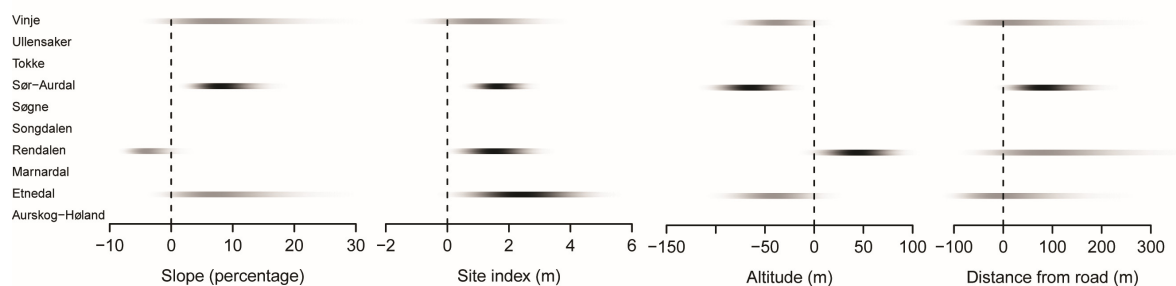
Altitude (meter above sea level)

Distance from road

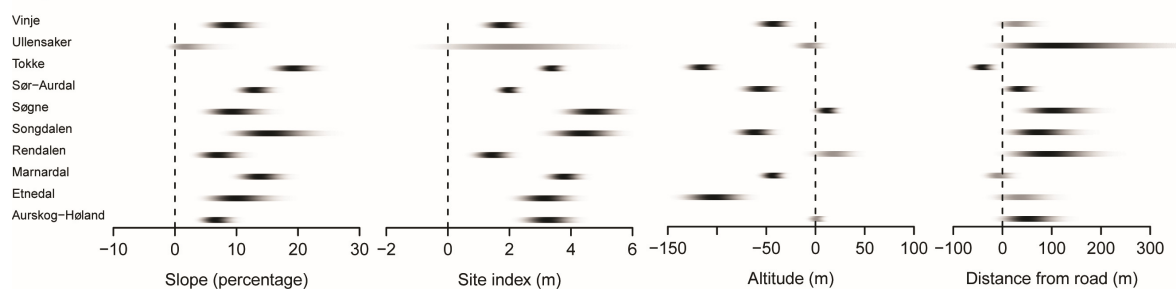
	A-H	U-aker	M-dal	S-dalen	Søgne	E-dal	S-A	Tokke	R-dalen	Vinje
1. Snags	-	-	-	-	-	193	295	-	311	171
2. Logs	341	250	224	237	317	270	309	224	301	284
3. Rich bark	-	-	230	156	192	269	214	169	-	-
4. Pend lich	-	-	-	-	-	464	318	-	464	-
5. Late succ	201	-	236	161	205	124	95	152	233	131
6. Old trees	360	-	190	170	264	248	415	340	540	315
9. Lux ground	188	401	136	157	191	187	167	178	242	157
Old forest	265	180	228	198	222	222	232	227	249	208
All forest	200	140	159	126	148	151	156	145	173	140

2. Differences in the distribution of CHI habitats compared to mature forests stands with regard to the four variables slope, site index, altitude and distance from road. Posterior distributions for the estimated differences between the individual CHI habitats and the forest stand for 10 municipalities. The vertical line at 0 indicates the average for the forest stands in each municipality. The bars indicate the posterior density distribution, and the black bars represent those with a mass of more than 0.975 at either side of 0, i.e. deviates considerably from the expectation of the [mature](#) forest stand in given municipality. The results here represent the background for Table 3 in the main text.

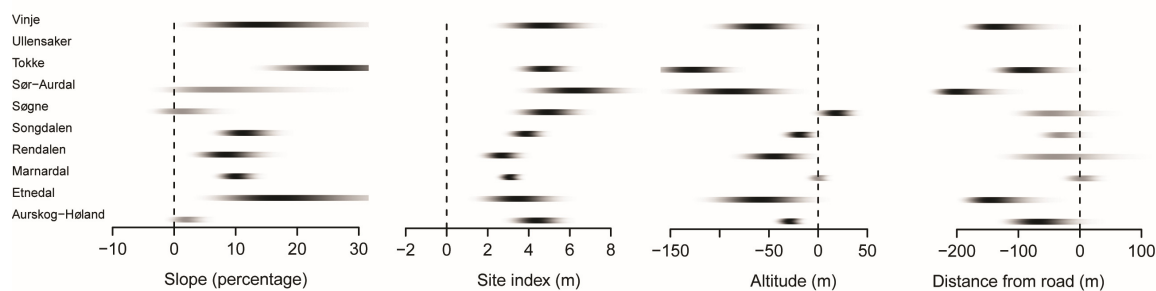
Snags



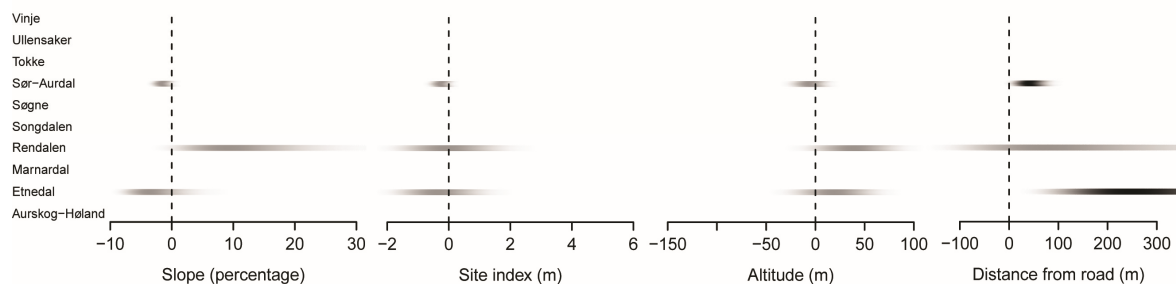
Logs



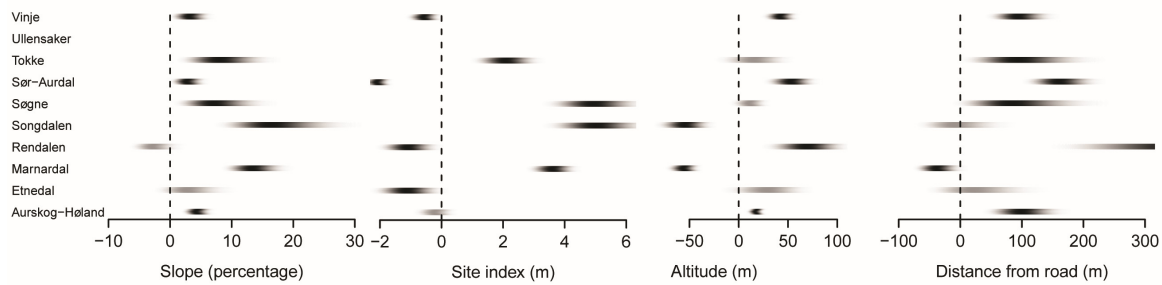
Late succession of deciduous trees



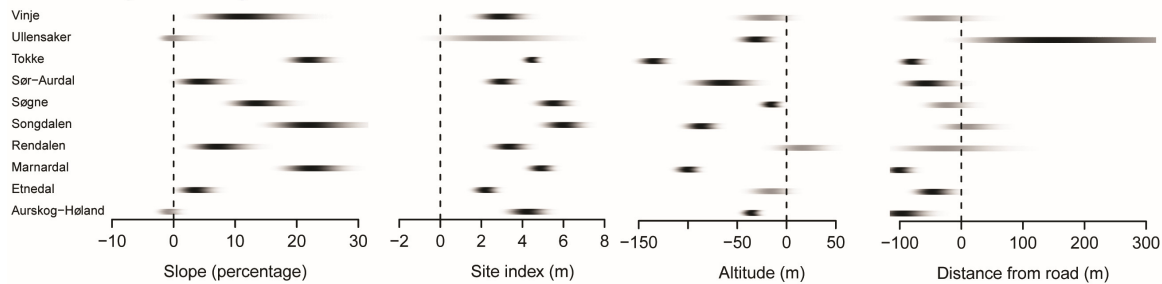
Pendant lichens



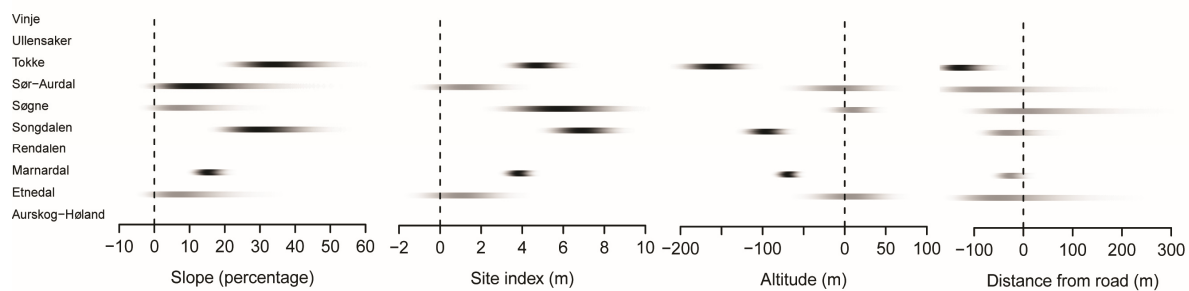
Old trees



Luxuriant ground vegetation



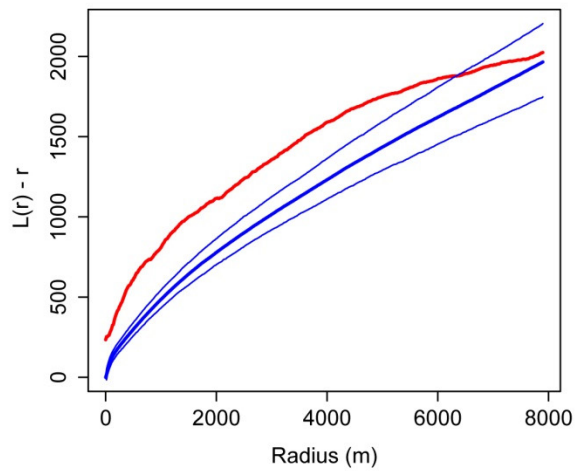
Trees with nutrient-rich bark



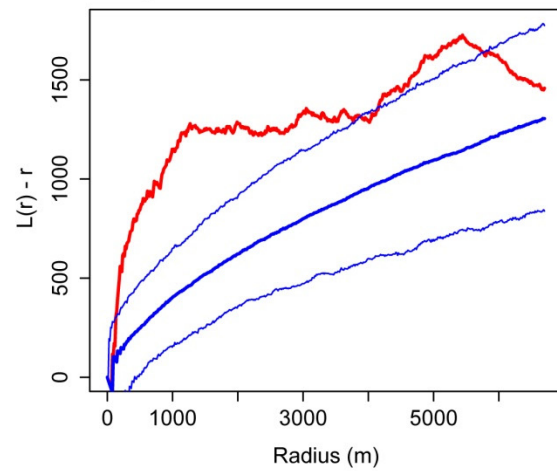
3. Ripley's K analyses for degree of spatial clustering by Chi-habitats beyond a random distribution conditioned on the distribution of the forest stands in development classes 4-5. The red lines represent $L(r) - r = \sqrt{K(r)/\pi} - r$, where $K(r)$ is Ripley's K is expected number of Chi-habitats within a radius r . The blue lines represent the distribution of $L(r) - r$ from the distribution of forest stands in development classes 4-5 representing simulated random distribution of Chi-habitats. If the red line exceeds the blue lines it indicates that the Chi-habitats are more clustered than anticipated conditioned on the distribution of the forest stands: a) all Chi-habitats combined, i.e. habitats may occur at the same position, b) Logs, c) Late succession of deciduous forest, d) Old trees, e) Luxuriant ground vegetation, and f) Trees with nutrient rich bark.

1. Aurskog – Høland:

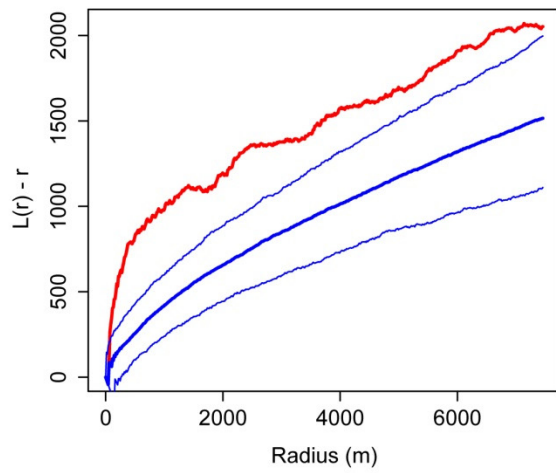
a) All Chi



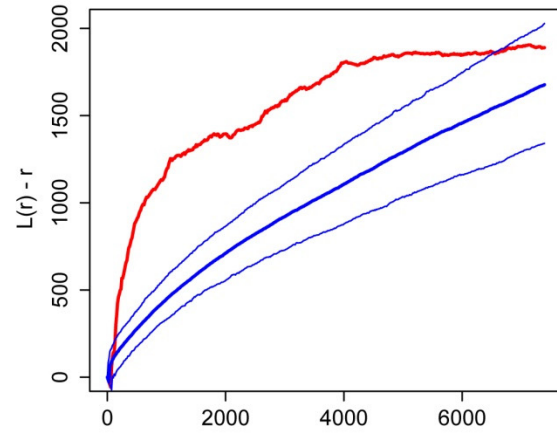
b) Logs



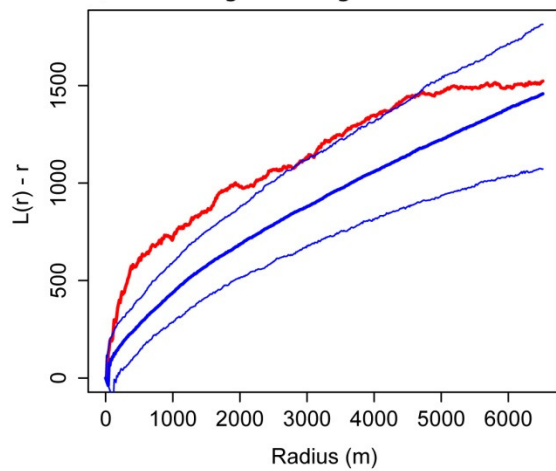
c) Late succession of deciduous trees



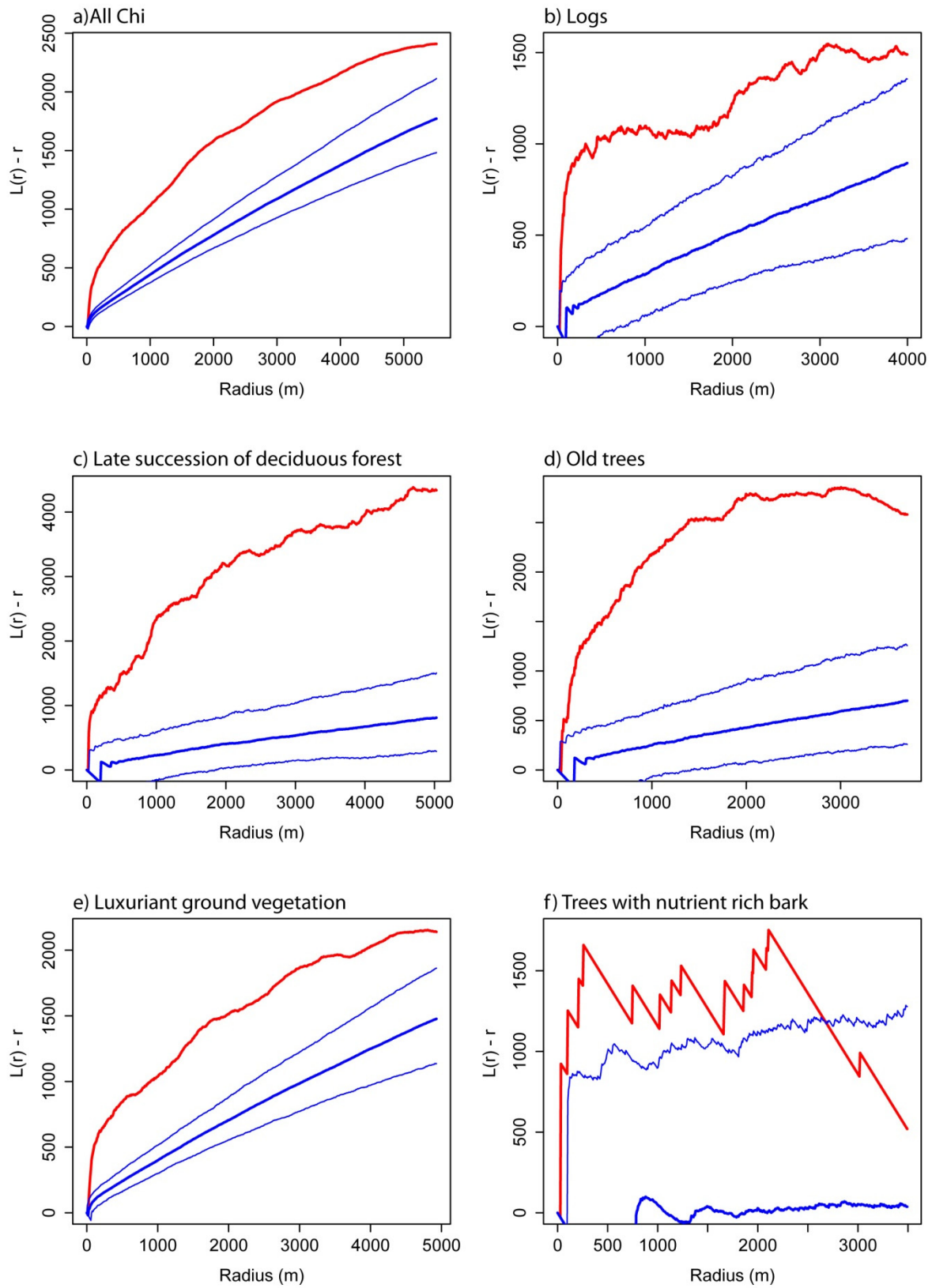
d) Old trees



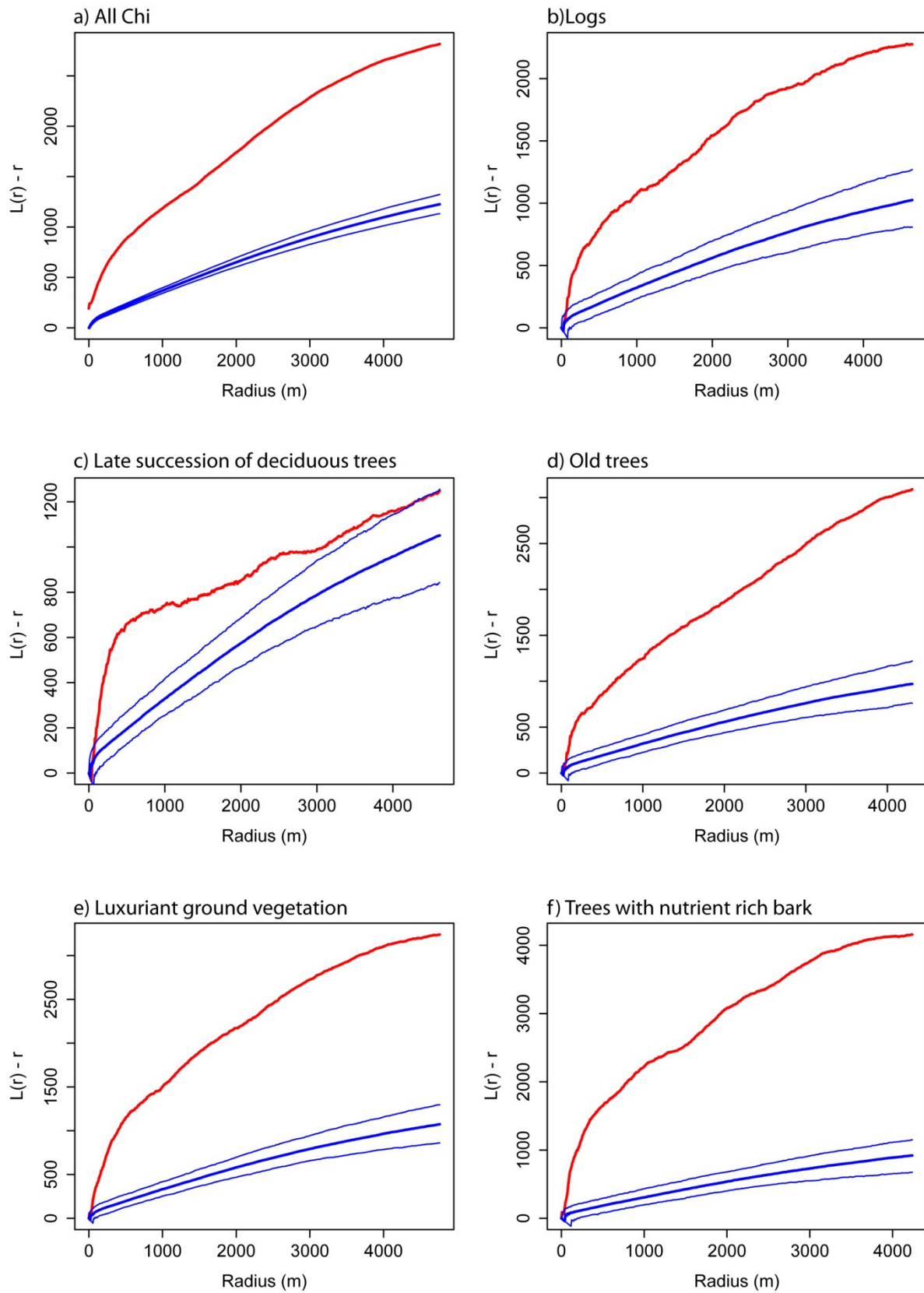
e) Luxuriant ground vegetation



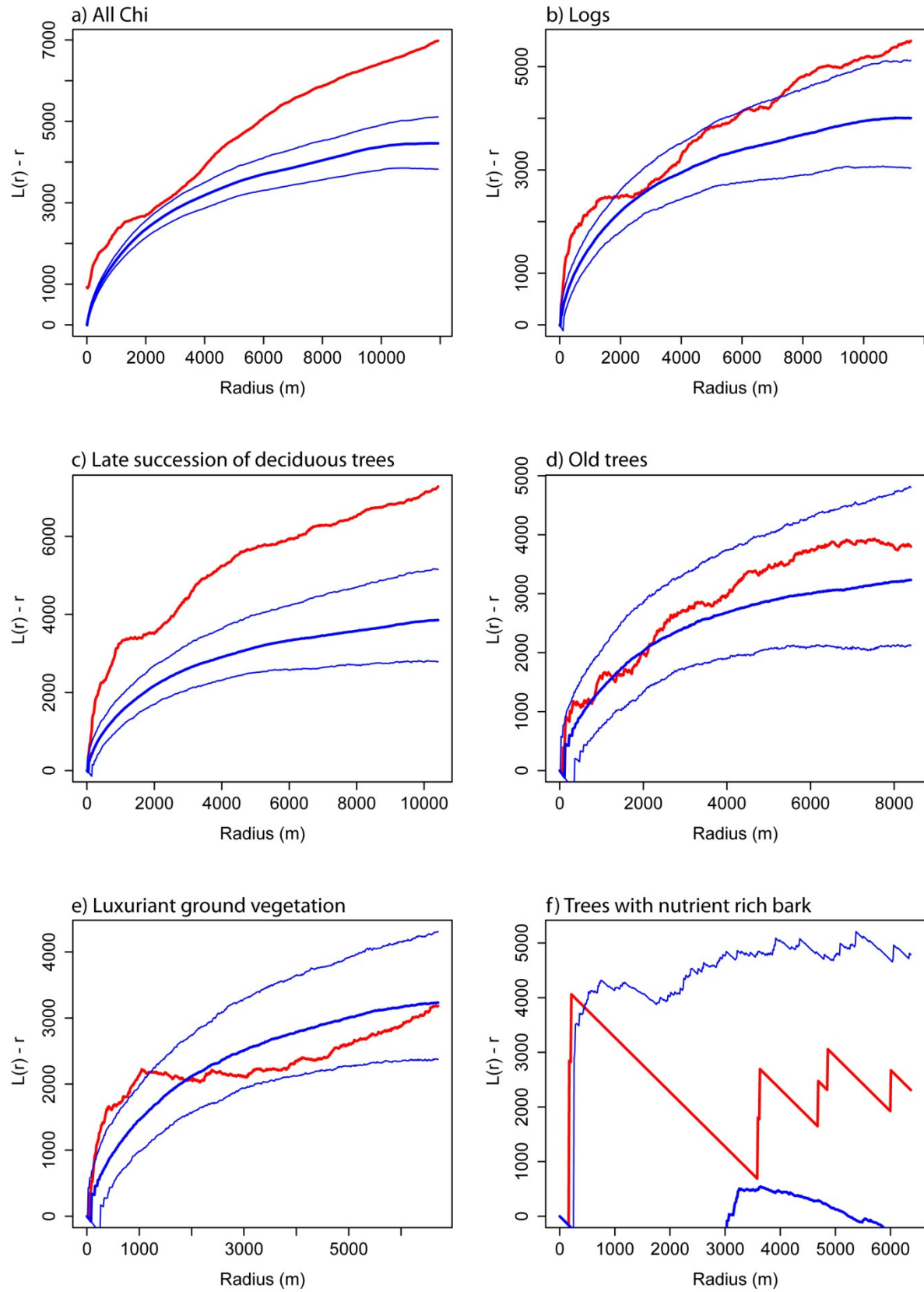
2. Ettnedal



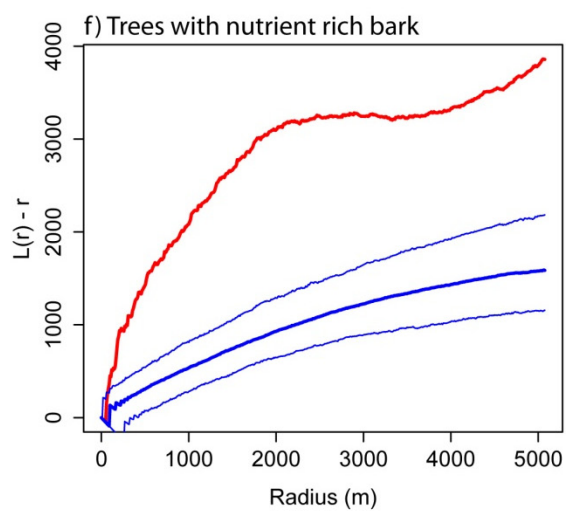
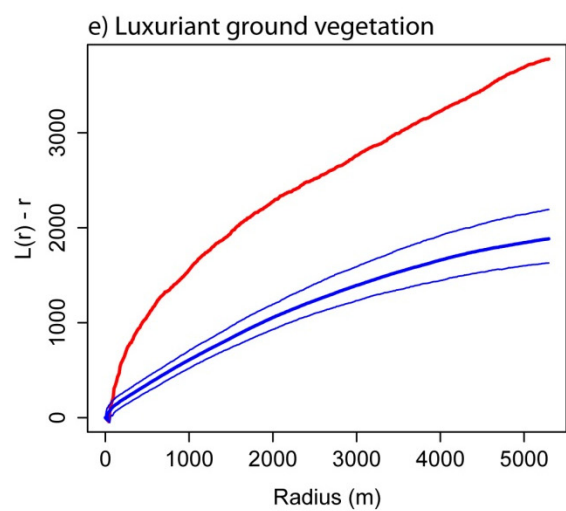
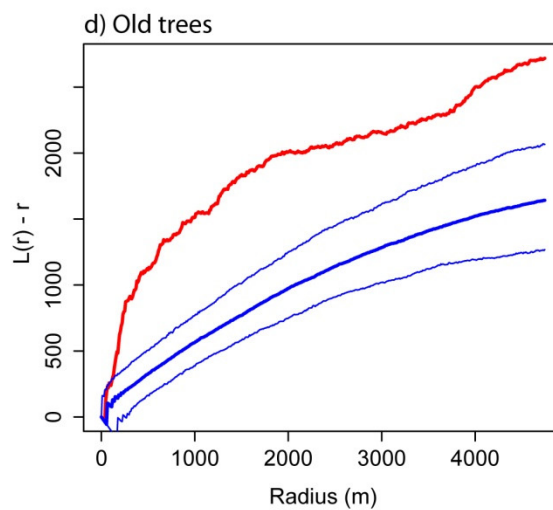
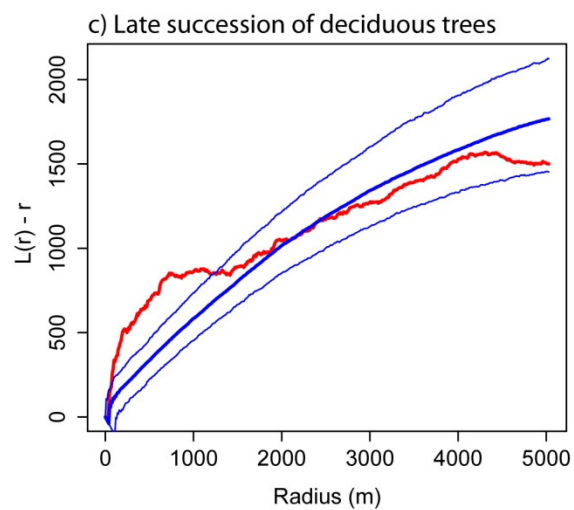
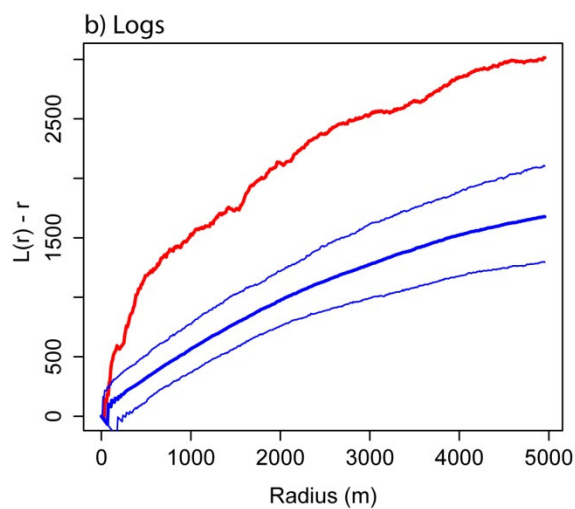
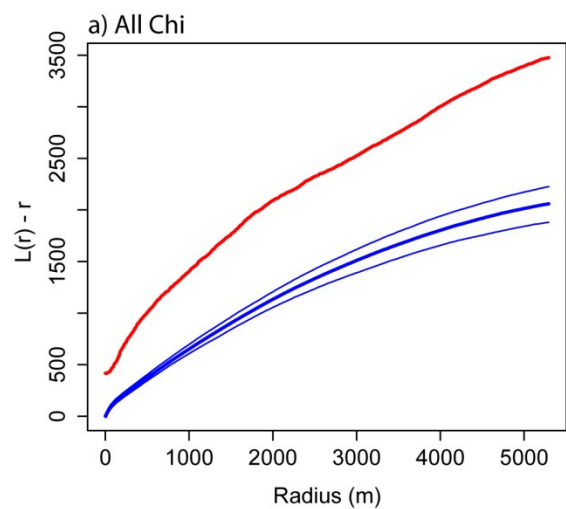
3. Marnardal



4. Rendalen

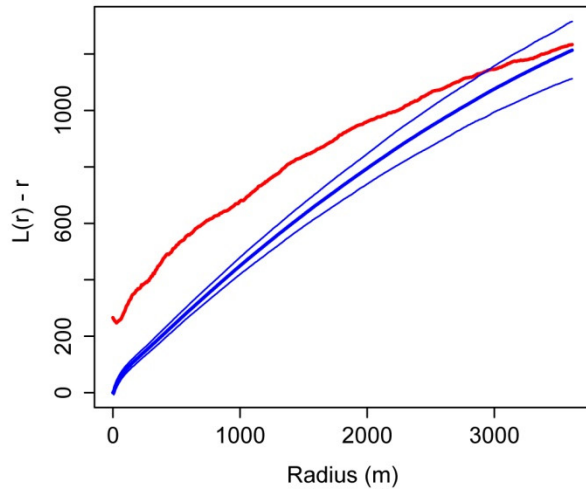


5. Songdalen

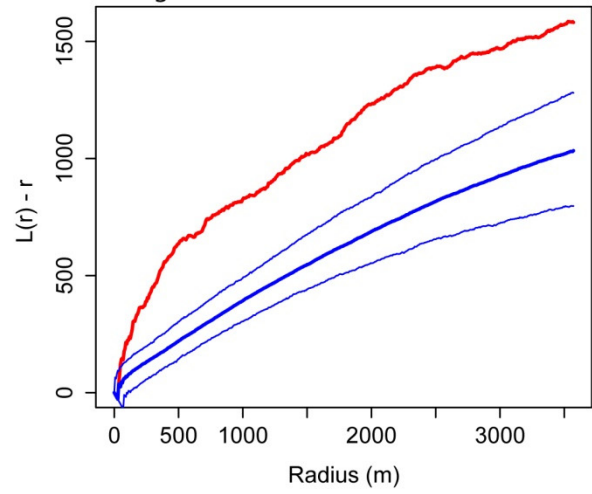


6. Søgne

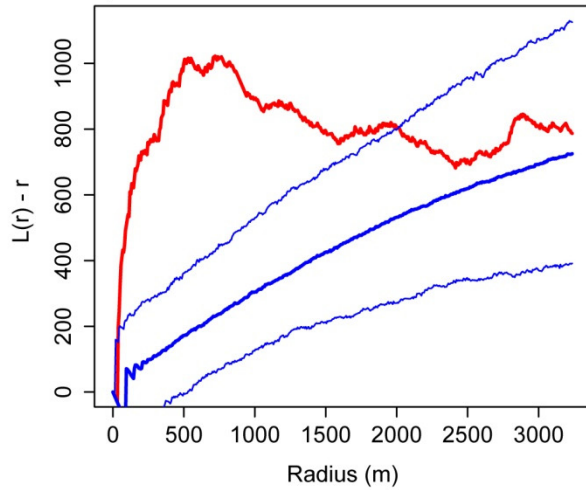
a) All Chi



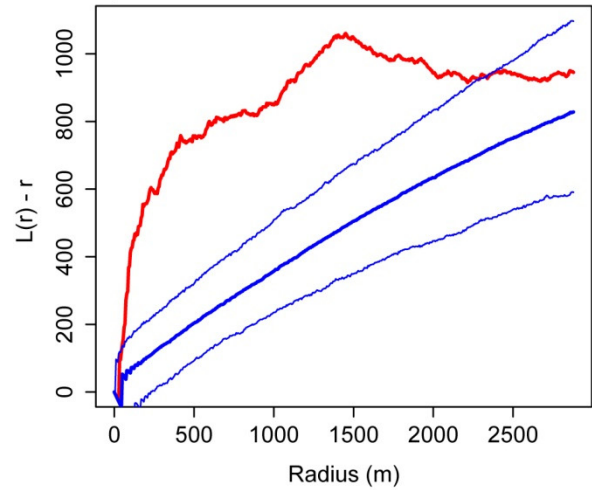
b) Logs



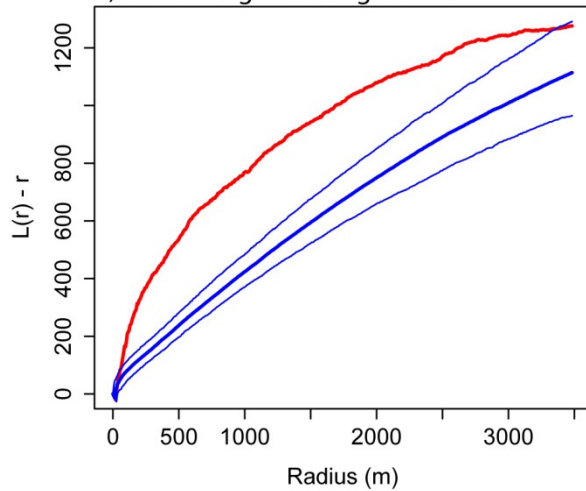
c) Late succession of deciduous trees



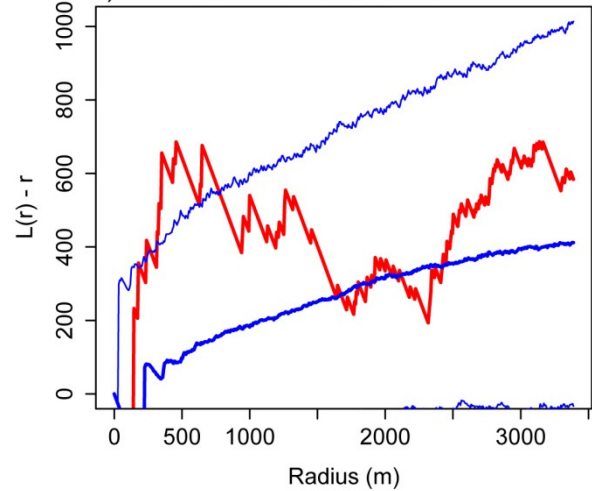
d) Old trees



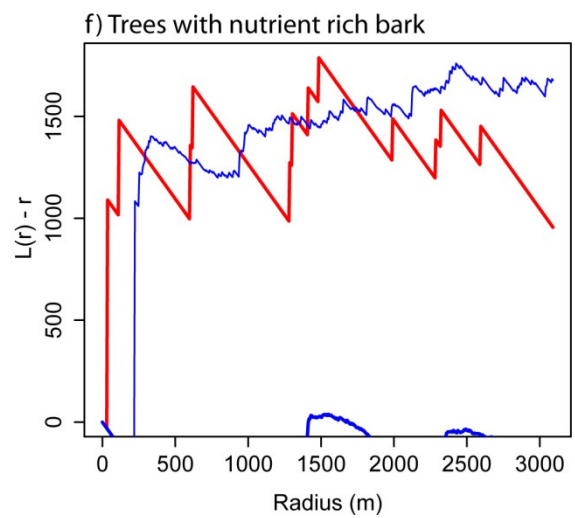
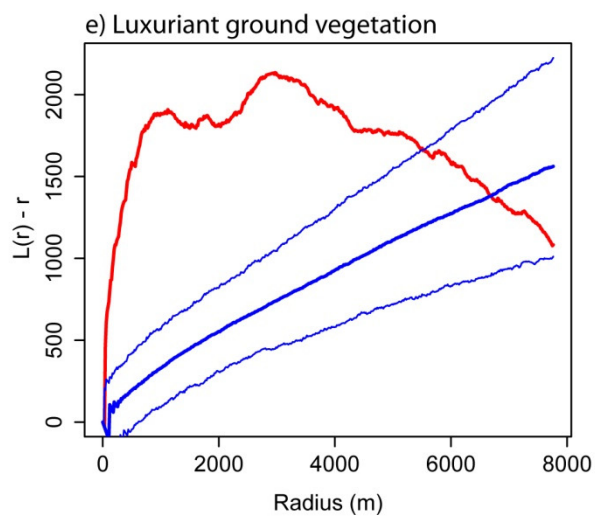
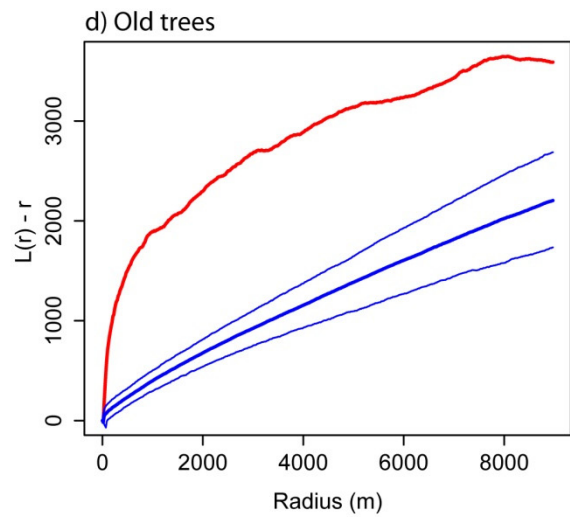
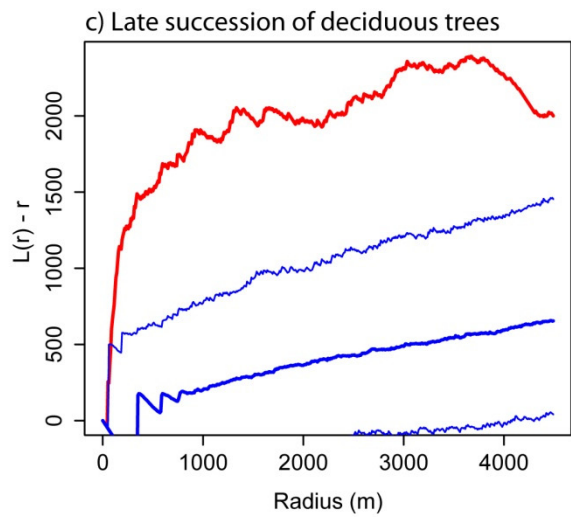
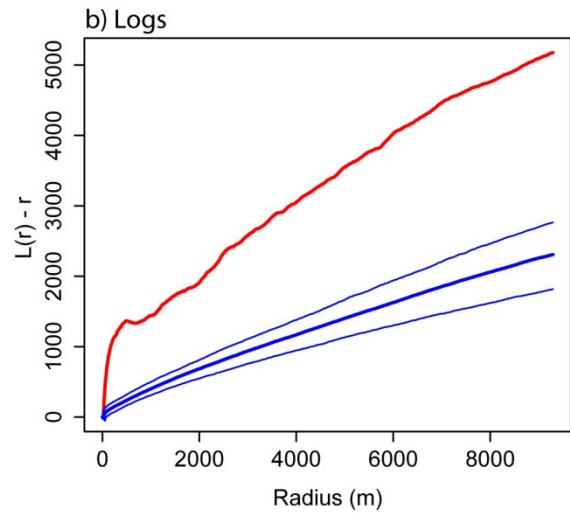
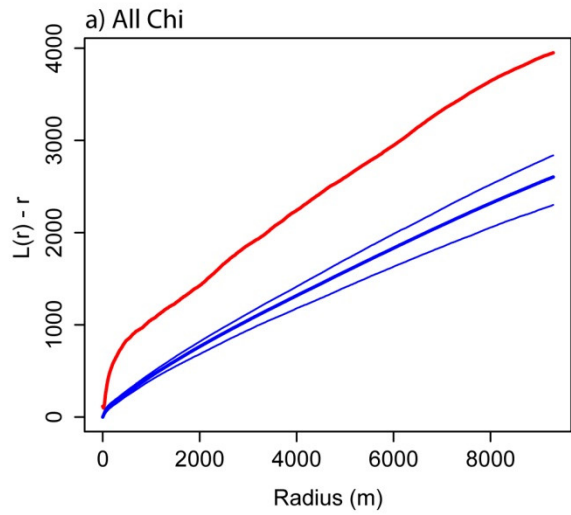
e) Luxuriant ground vegetation



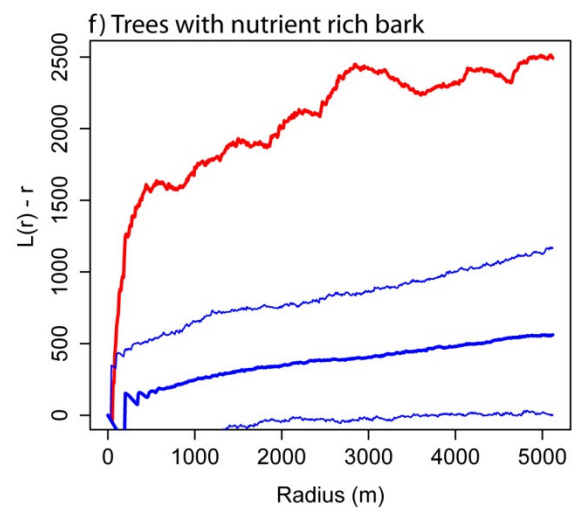
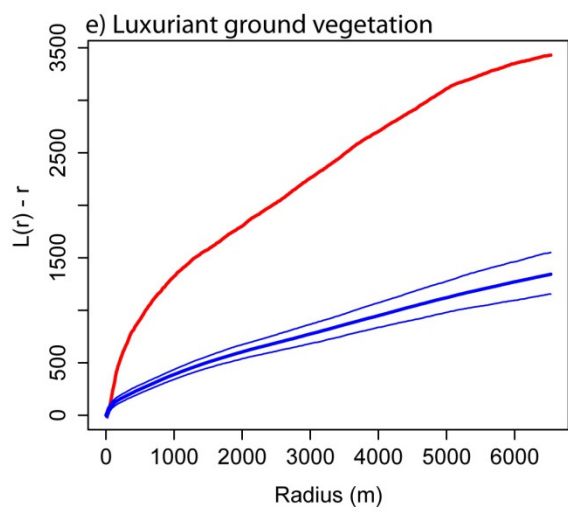
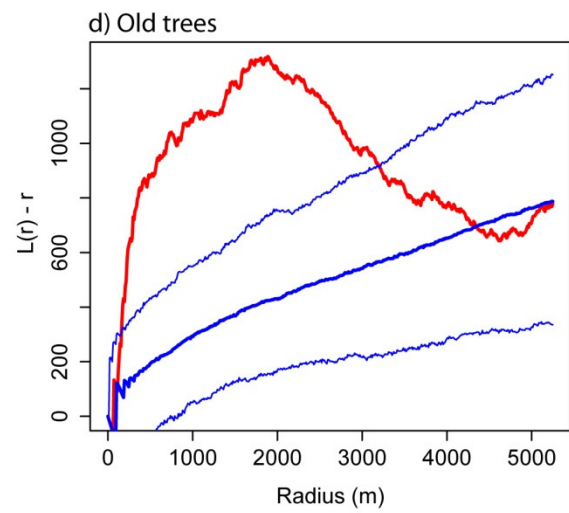
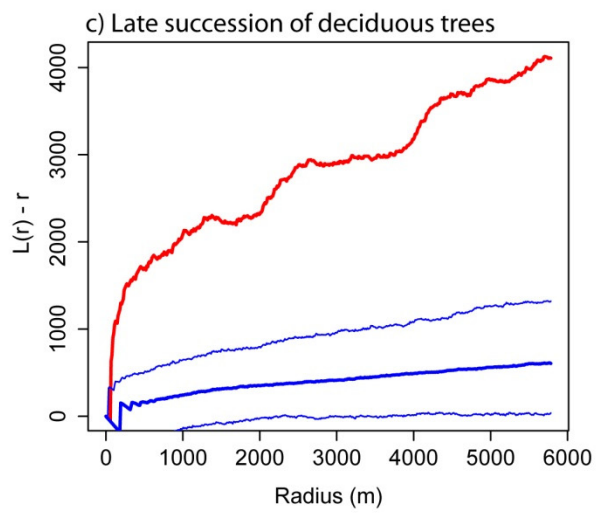
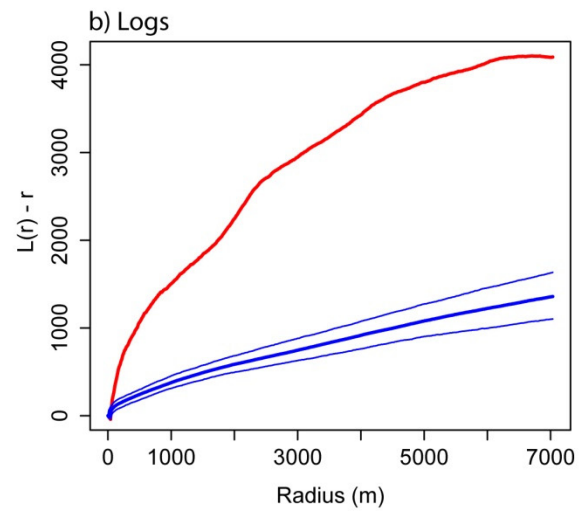
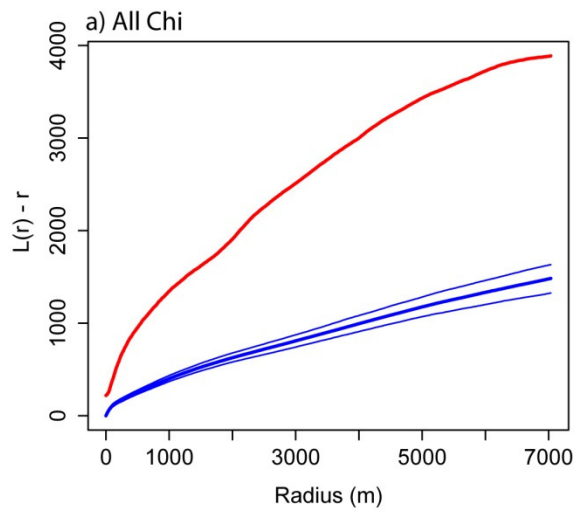
f) Trees with nutrient rich bark



7. Sør Aurdal

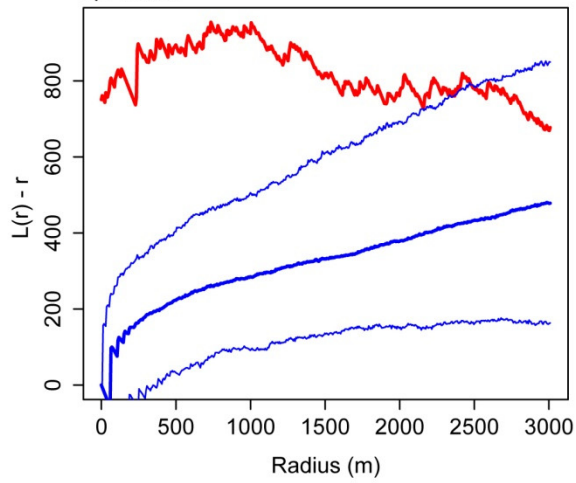


8. Tokke

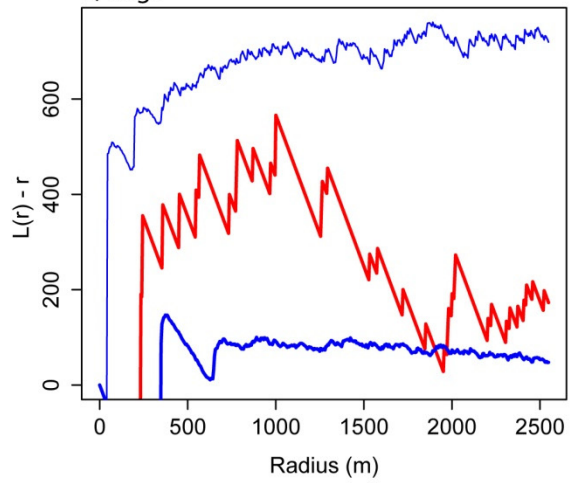


9. Ullensaker

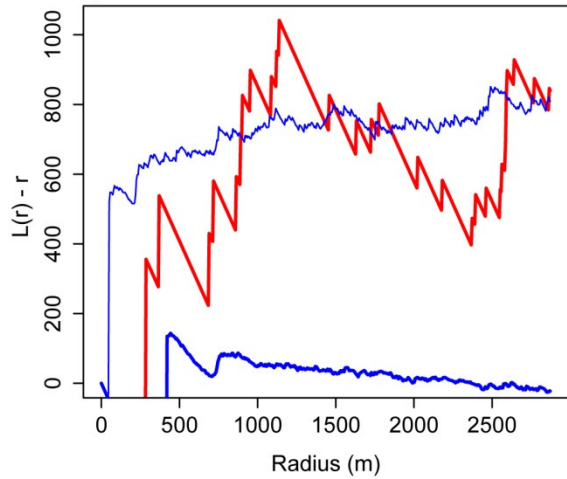
a) All Chi



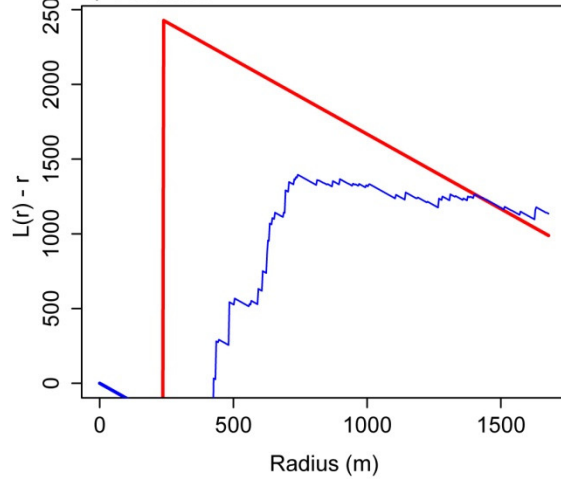
b) Logs



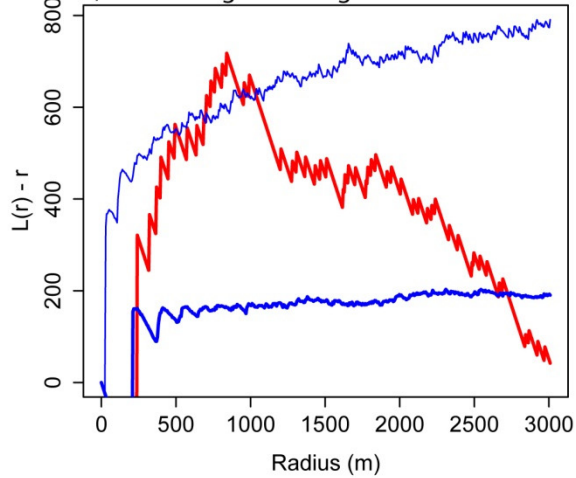
c) Late succession of deciduous trees



d) Old trees



e) Luxuriant ground vegetation



10. Vinje

