

Supplementary material to:

A Genome-Wide Linkage Scan Identifies Multiple Chromosomal Regions

Influencing Serum Lipid Levels in the Population on the Samoan Islands

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SUPPLEMENTARY MATERIAL TABLE

Table S1. Description of the pedigrees included in the three study samples.

Pedigree	Number	Number of of Gene- Individuals in Pedigree	<u>Am. Samoa</u>		<u>Samoa</u>		<u>Combined</u>	
			Pheno- typed	Geno- typed	Pheno- typed	Geno- typed	Pheno- typed	Geno- typed
1 ^t	8	719 *	206	197	49	42	255	239
2	7	553 *	211	208	12	9	223	217
3	7	127 *	14	14	37	34	51	48
4	4	96 *	26	25	33	27	59	52
5	5	78 *	8	8	26	22	34	30
6	6	74 *	1	1	20	18	21	19
7	5	59 *	1	1	26	24	27	25
8	5	58	0	0	26	21	26	21
9	5	57	0	0	20	16	20	16
10	4	57 *	1	1	28	28	29	29
11	6	57 *	1	1	16	15	17	16
12	5	55 *	4	4	30	27	34	31
13	5	53	0	0	26	21	26	21
14 ^t	7	52	0	0	18	16	18	16
15	6	47 *	4	4	17	14	21	18
16	5	47	0	0	24	17	24	17
17	7	44	0	0	13	11	13	11
18	5	43	0	0	24	21	24	21
19	4	43	0	0	20	16	20	16
20	5	40	0	0	12	10	12	10
21	4	39 *	1	1	14	13	15	14
22	4	37 *	1	1	23	24	24	25
23	4	36 *	4	4	13	13	17	17
24	4	36	0	0	22	16	22	16
25	5	28	0	0	8	7	8	7
26	5	26 *	1	1	13	13	14	14
27	5	26	6	6	0	0	6	6
28	4	22	0	0	11	9	11	9
29	5	22	8	8	0	0	8	8
30	3	20 *	4	4	5	4	9	8
31	3	19	0	0	10	7	10	7
32 ^t	4	19	7	7	0	0	7	7
33	4	18	0	0	9	6	9	6
34	4	18	0	0	8	6	8	6
35	5	16	0	0	4	2	4	2
36	4	15	0	0	4	4	4	4
37	3	14 *	1	1	8	7	9	8
38	3	14	10	11	0	0	10	11

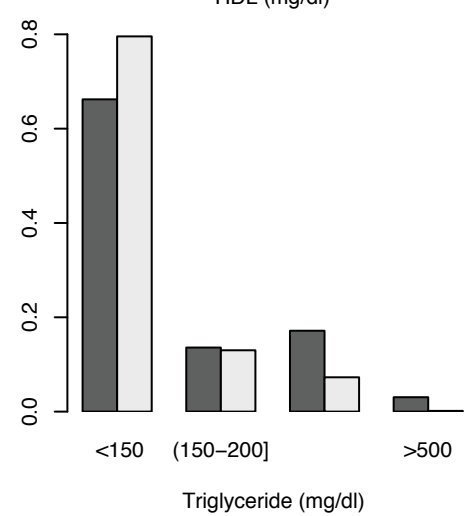
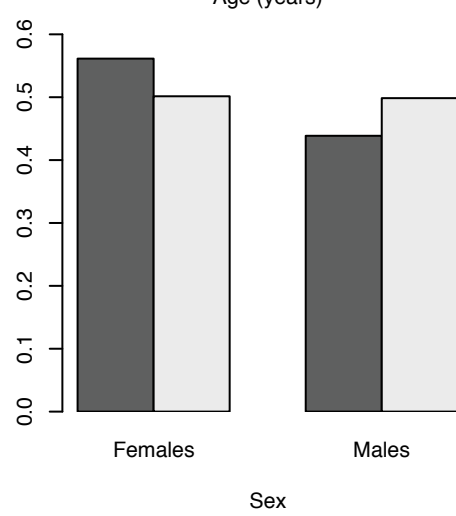
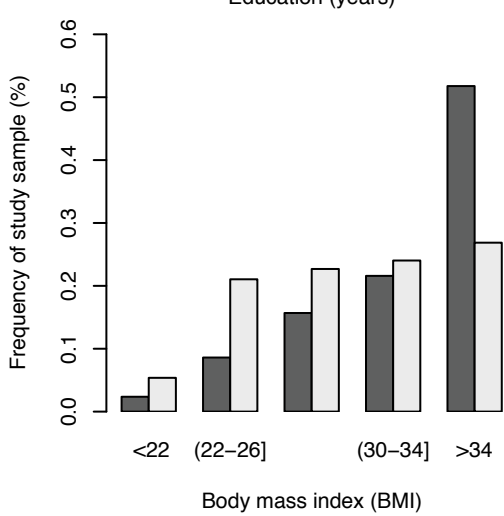
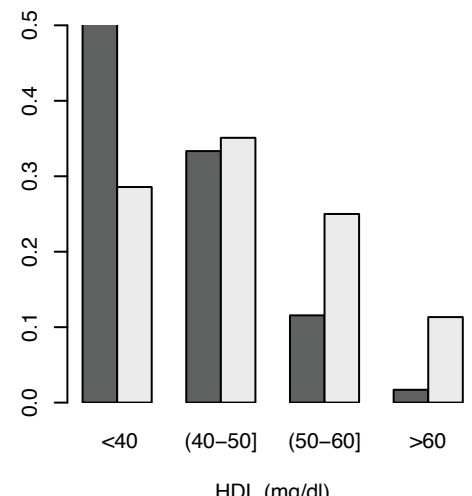
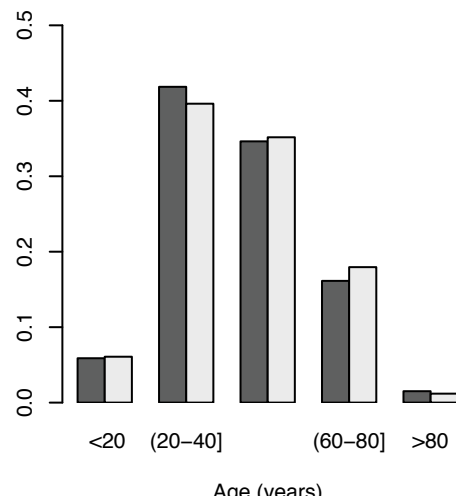
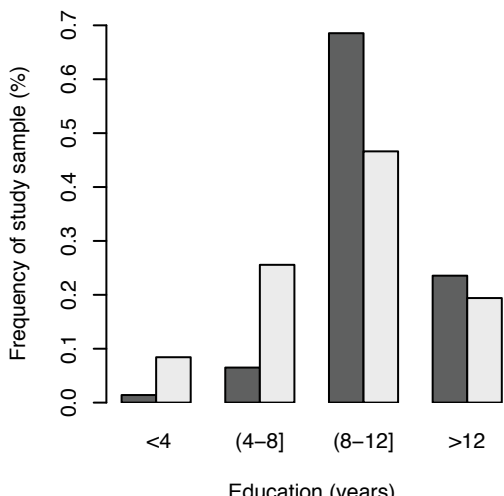
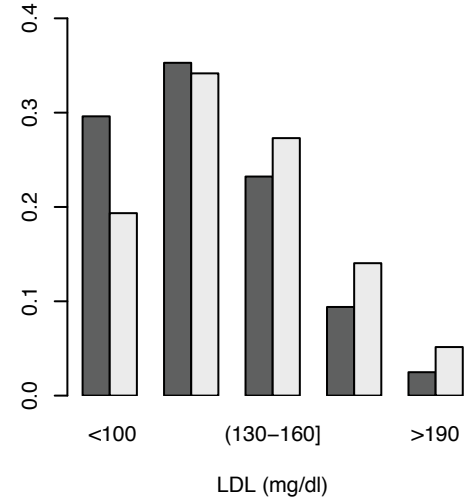
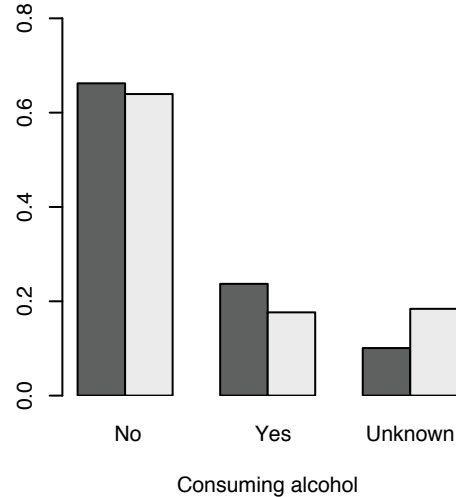
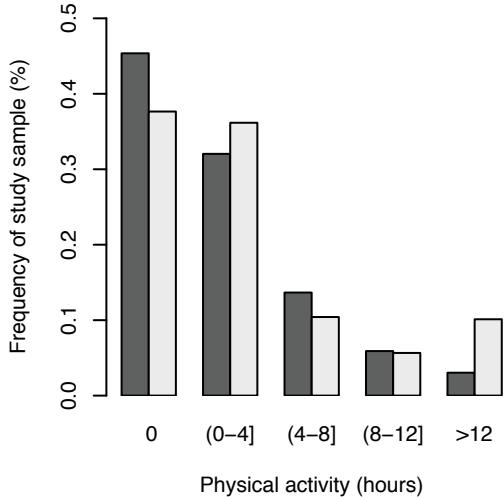
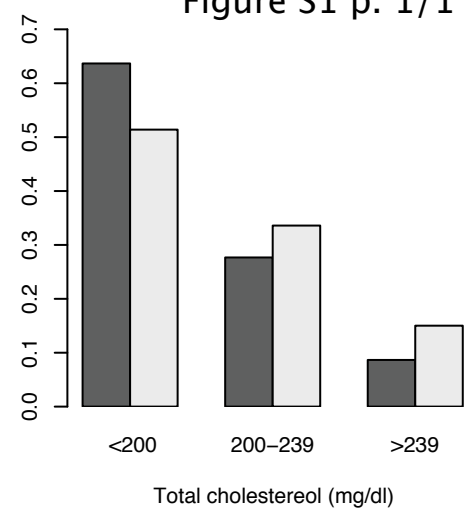
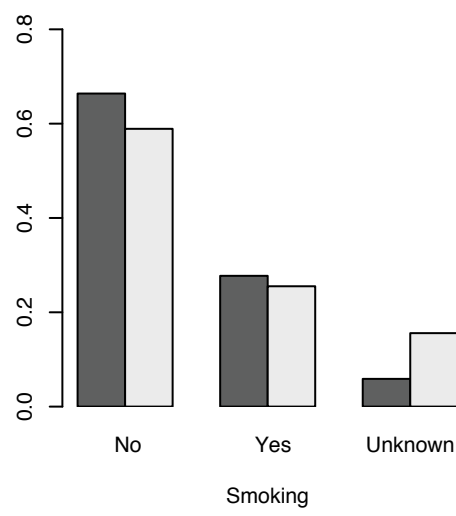
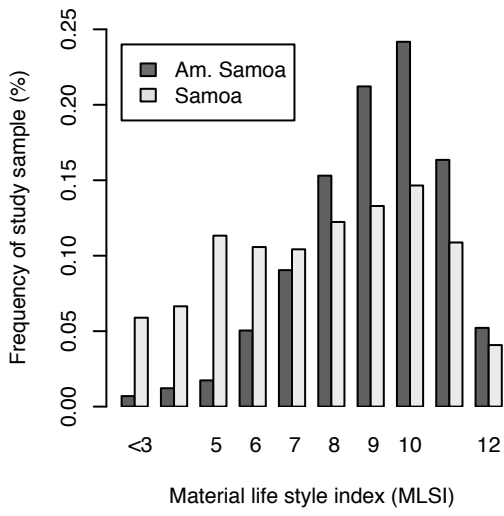
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43	4	12	0	0	6	5	6	5
44	3	11 *	1	1	5	3	6	4
45	4	10	0	0	6	3	6	3
46	3	10	3	4	0	0	3	4
47	4	10	4	4	0	0	4	4
48	3	9	0	0	3	3	3	3
49	3	9 *	3	3	3	2	6	5
50	3	9	5	5	0	0	5	5
51	3	8	4	4	0	0	4	4
52	3	8	2	2	0	0	2	2
53	3	8	2	2	0	0	2	2
54	3	7	4	4	0	0	4	4
55	3	7	2	2	0	0	2	2
56	3	7	4	4	0	0	4	4
57	3	6	2	2	0	0	2	2
58	2	5	2	2	0	0	2	2
59	2	5	4	4	0	0	4	4
60	2	5	0	0	3	3	3	3
61	2	4	0	0	3	3	3	3
62	2	4 *	1	1	1	1	2	2
63	2	4	2	2	0	0	2	2
64	2	4	2	2	0	0	2	2
65	2	4	2	2	0	0	2	2
66	2	3	0	0	2	2	2	2
67	2	3	0	0	2	2	2	2
68	2	3	0	0	2	2	2	2
69	2	3	0	0	2	2	2	2
70	2	3	2	2	0	0	2	2
71	2	3	3	3	0	0	3	3

Note that the exact number of successfully genotyped markers and phenotyped traits may shift for different markers and different traits. To be included in the study sample a family had to have at least two genotyped family members. *Indicates that the pedigree structure includes individuals from both the Am. Samoa and the Samoa study sample. † Three families include monozygotic twins of which one individual per pair was removed prior to statistical analysis.

SUPPLEMENTARY MATERIAL FIGURE LEGENDS

Figure S1 Distribution of covariates and traits in American Samoa and Samoa.

Figure S2. Genome-wide linkage results from American Samoa (left column), Samoa (middle column) and for the combined study sample (right column) are shown when **a)** the initial covariate set was screened for. **b)** BMI in addition to all other covariates were screened for. For the X chromosome the model including the X-linked polygenic VC is shown.



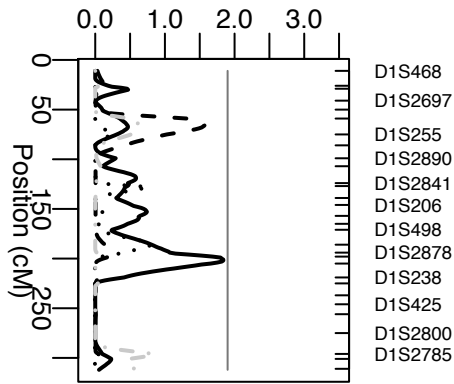
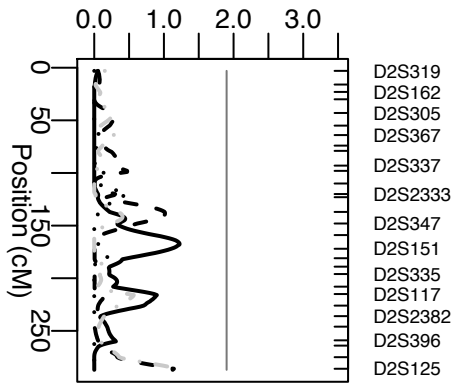
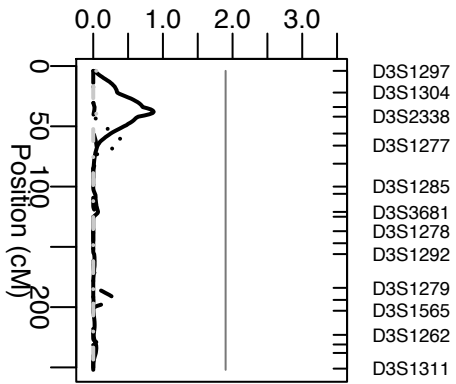
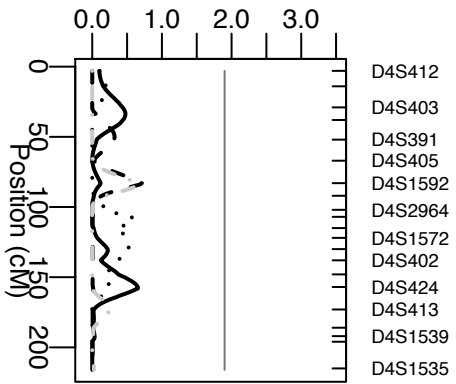
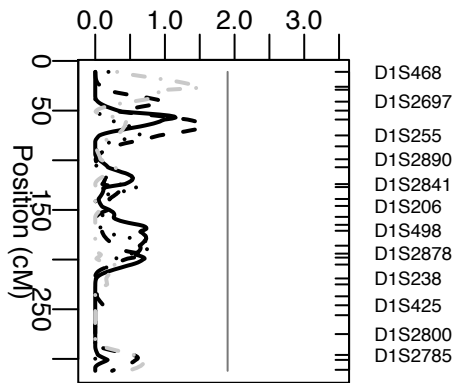
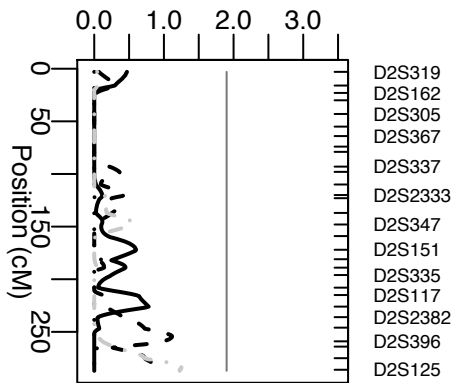
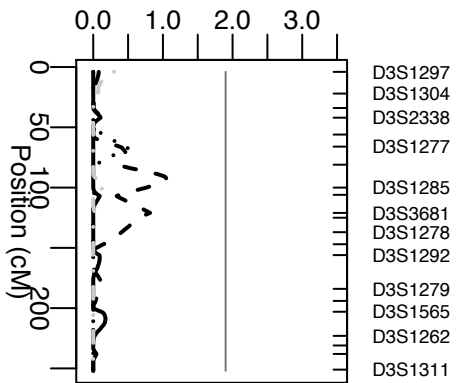
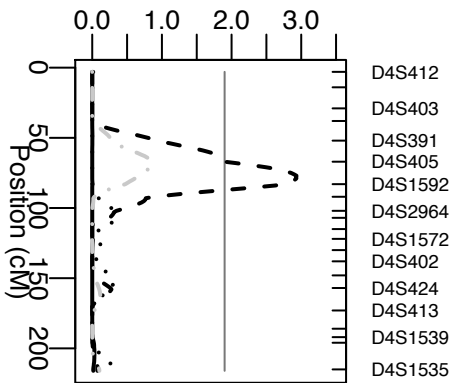
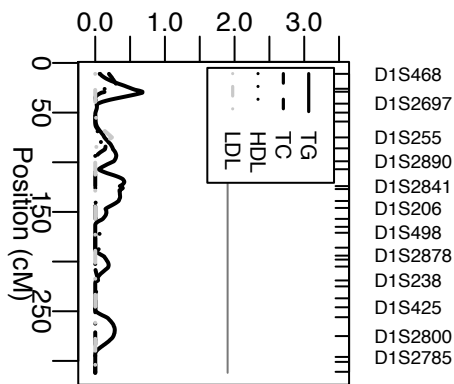
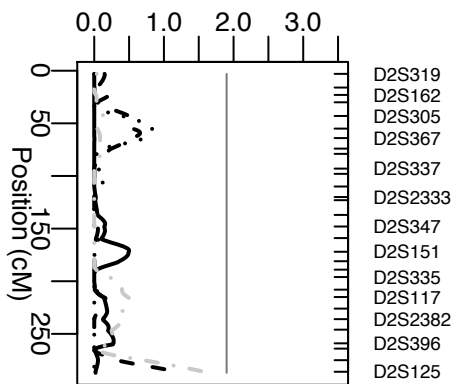
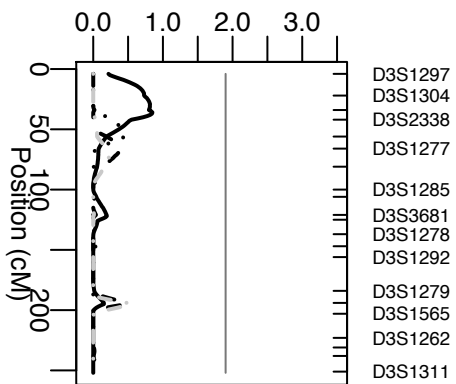
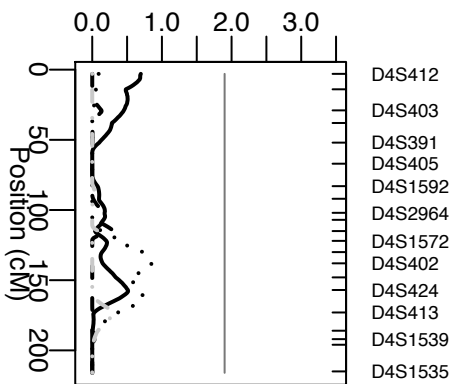


Figure S2a p. 1/6

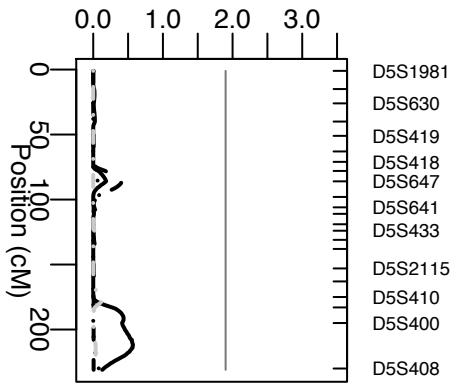
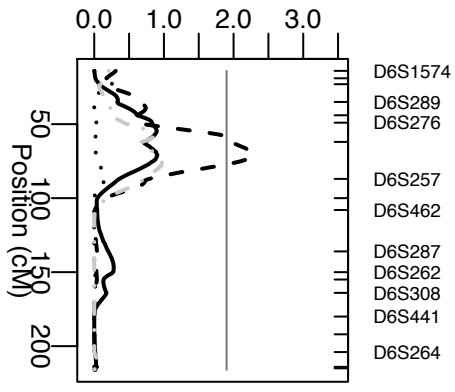
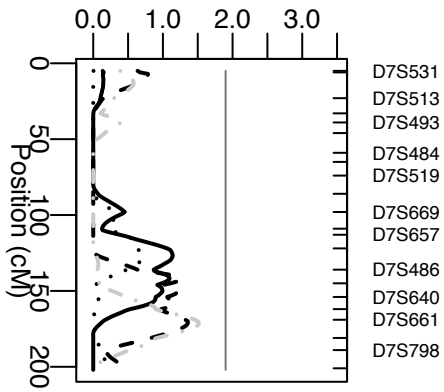
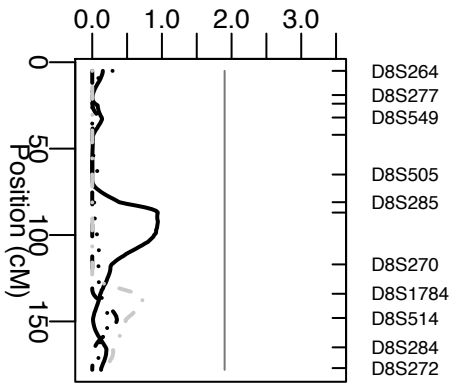
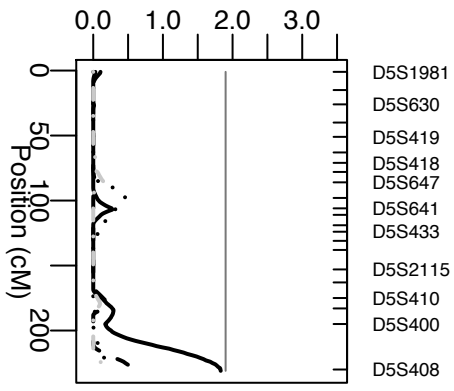
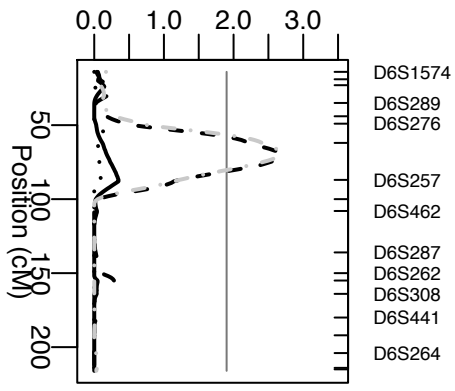
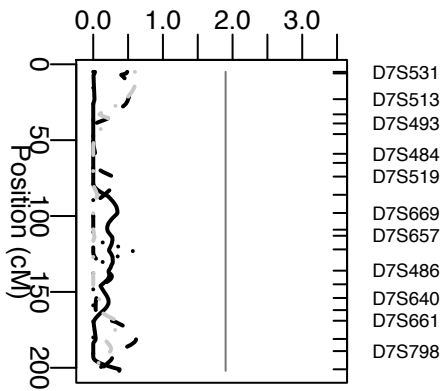
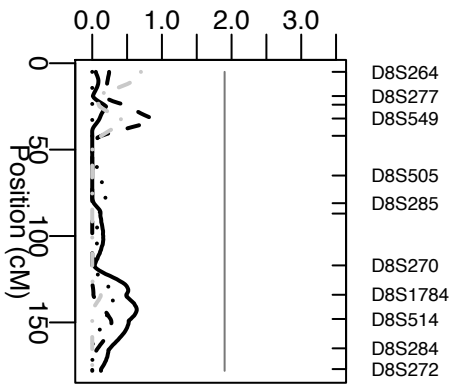
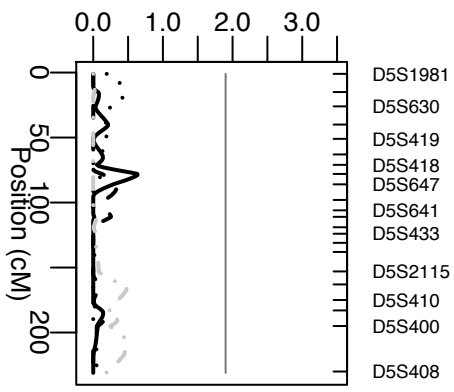
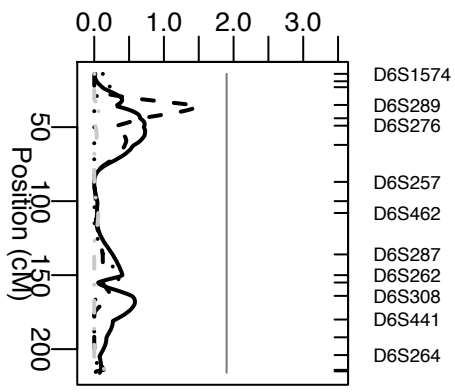
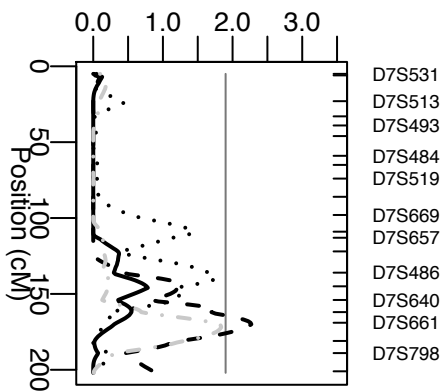
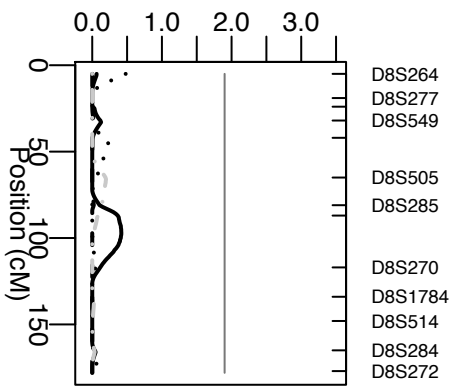


Figure S2a p. 2/6

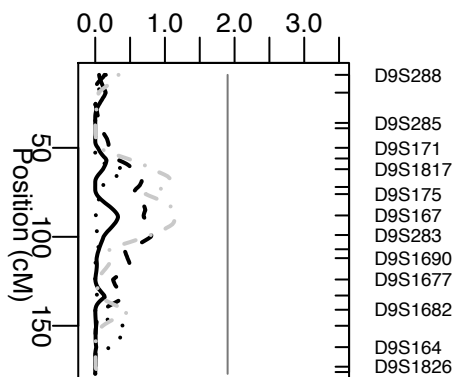
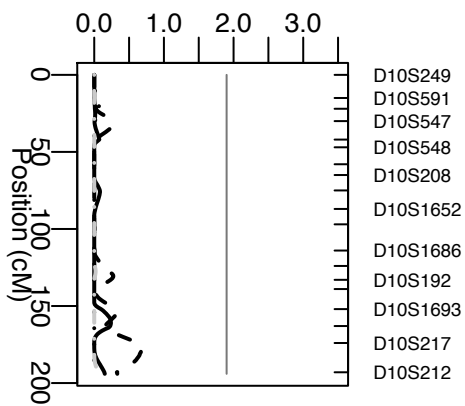
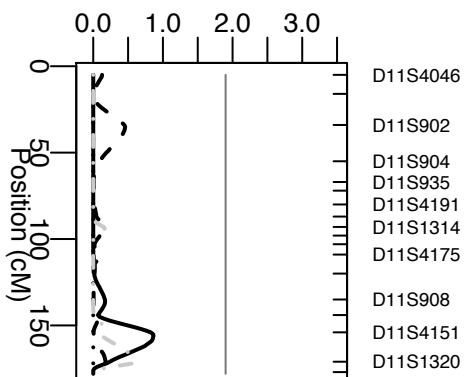
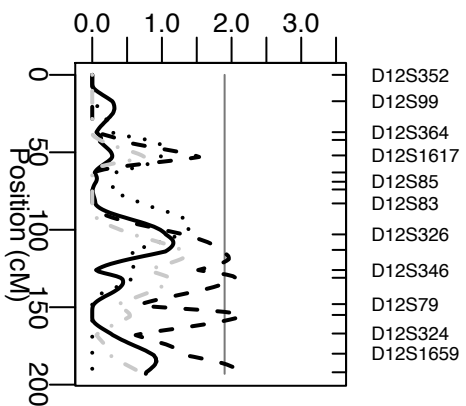
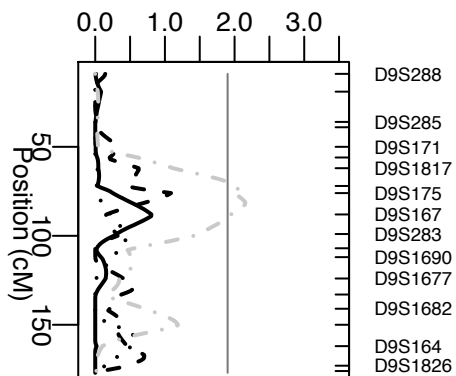
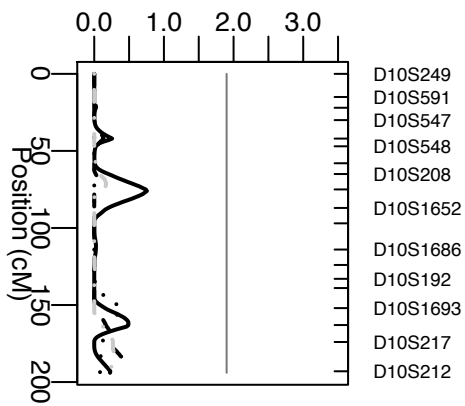
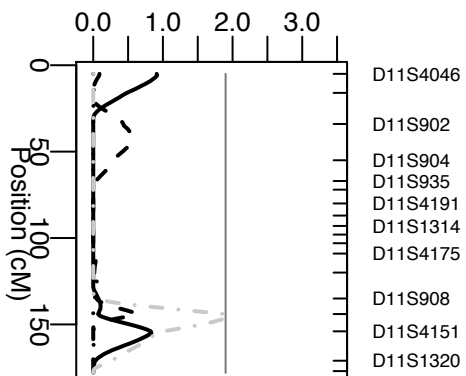
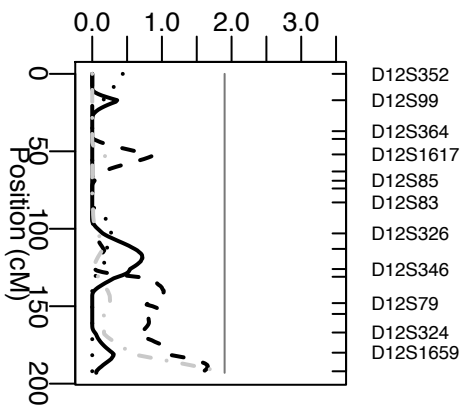
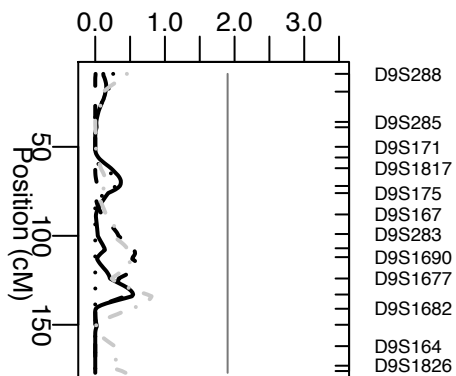
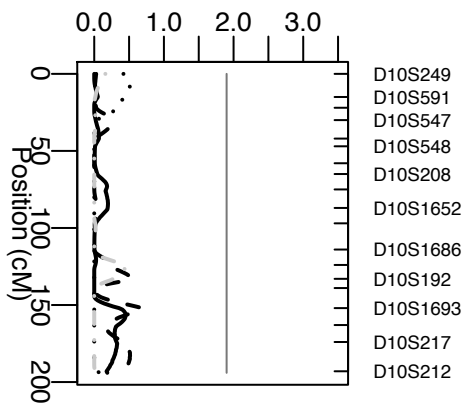
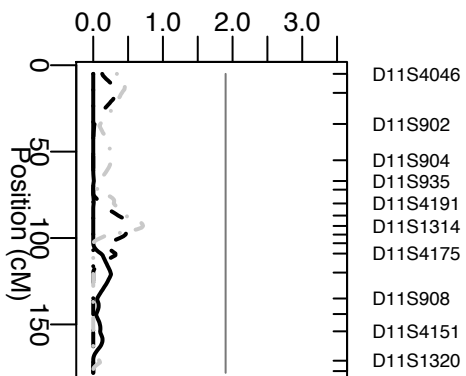
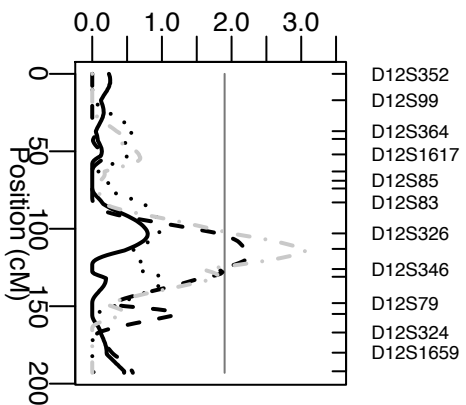


Figure S2a p. 3/6

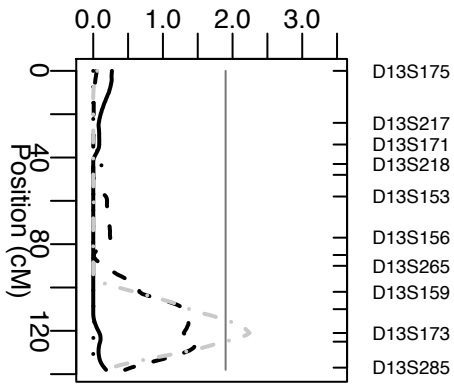
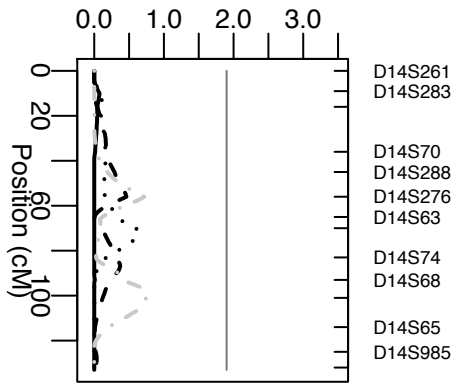
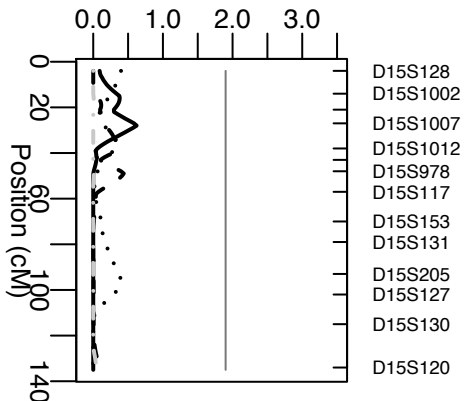
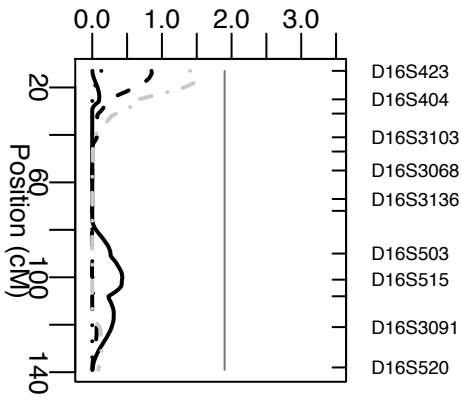
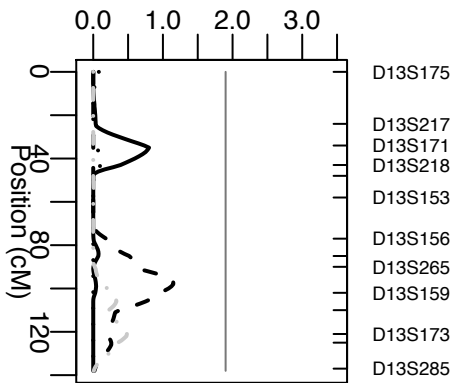
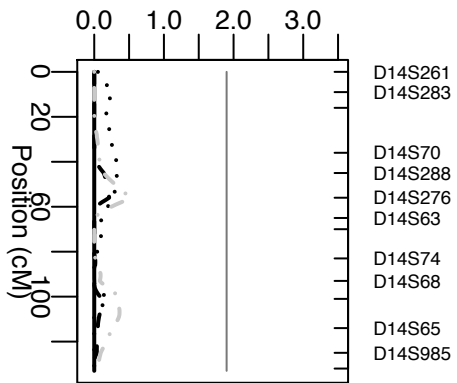
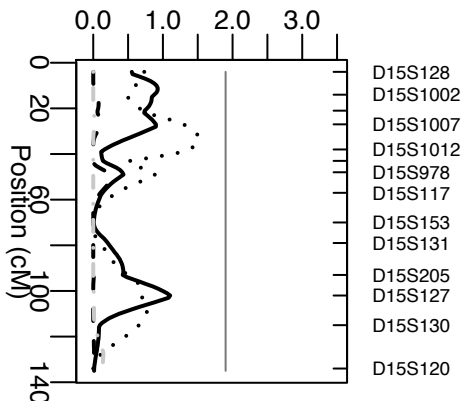
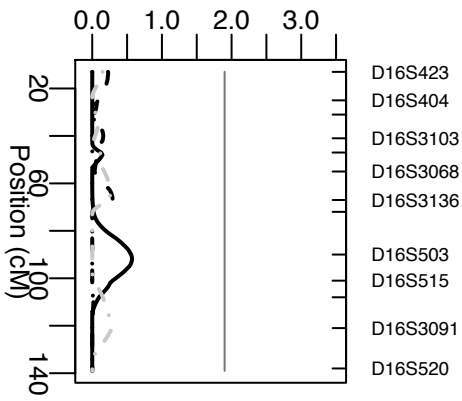
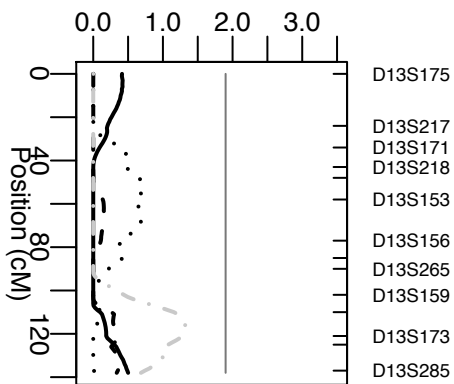
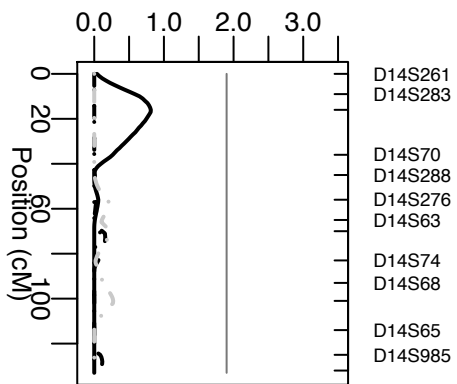
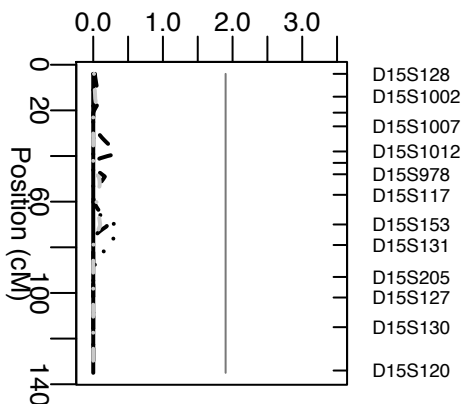
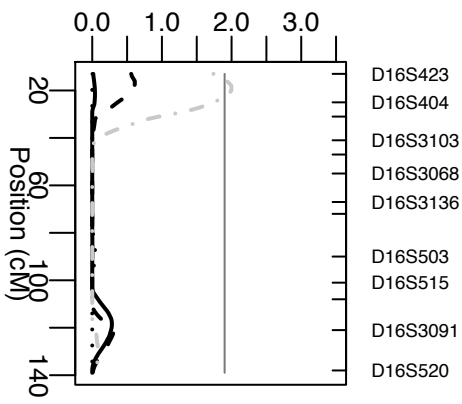


Figure S2a p.4/6

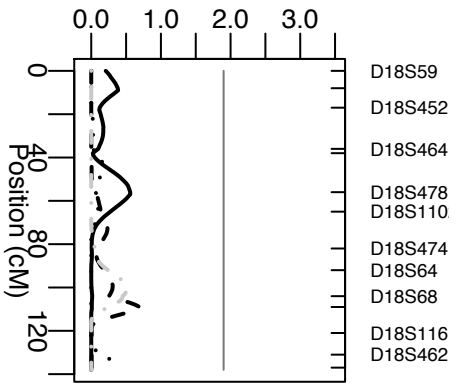
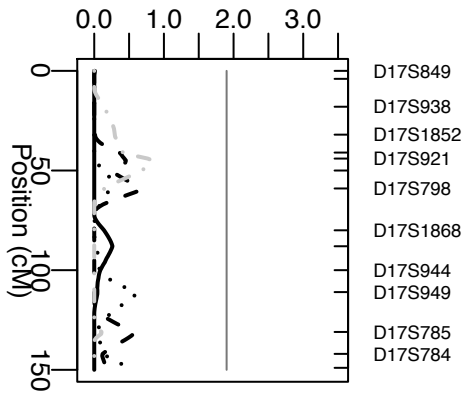
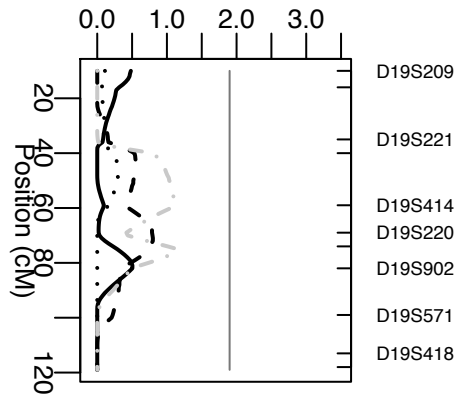
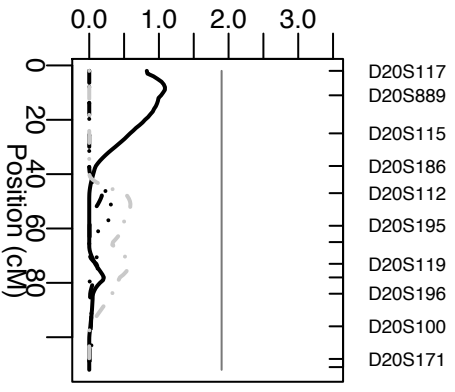
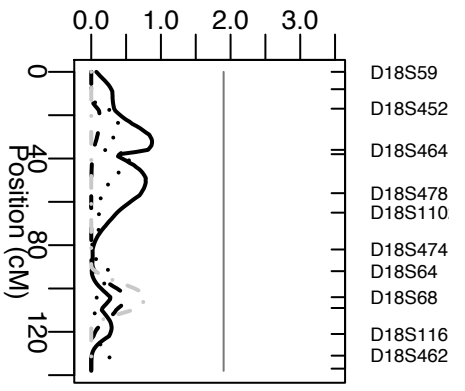
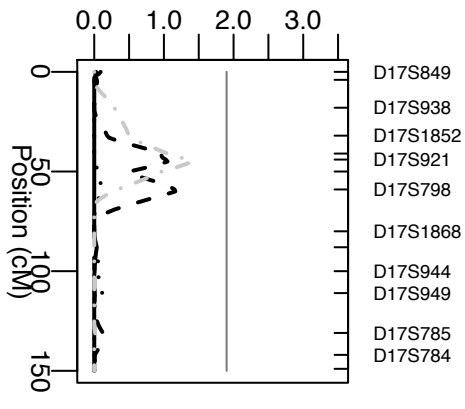
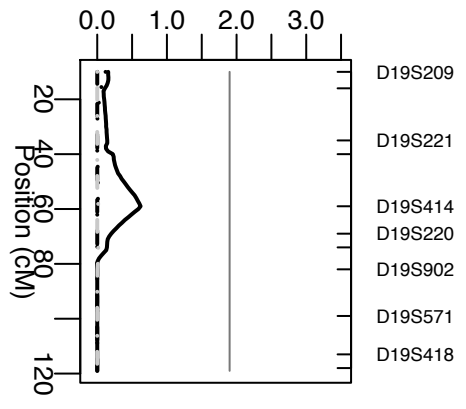
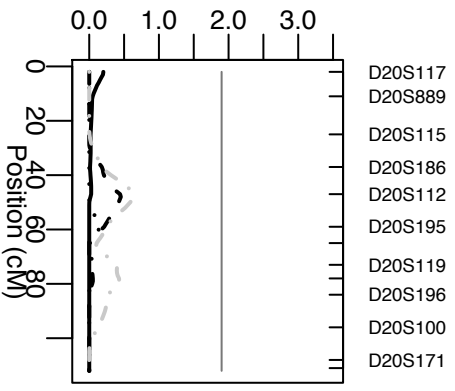
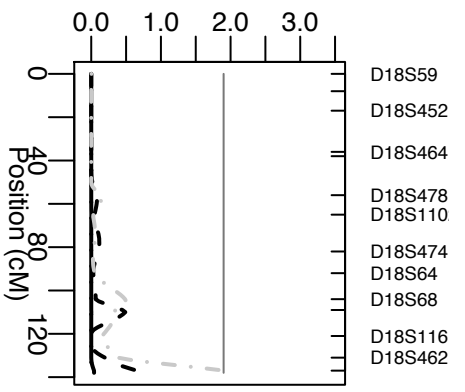
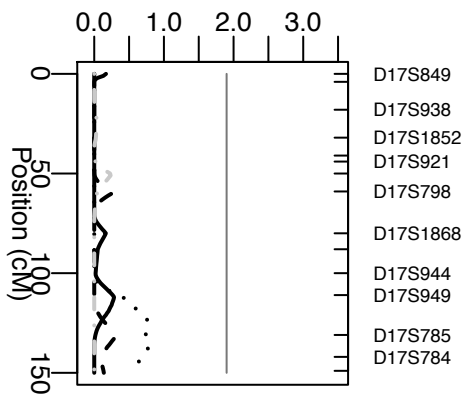
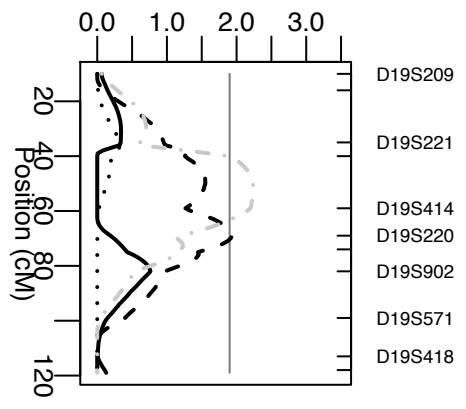
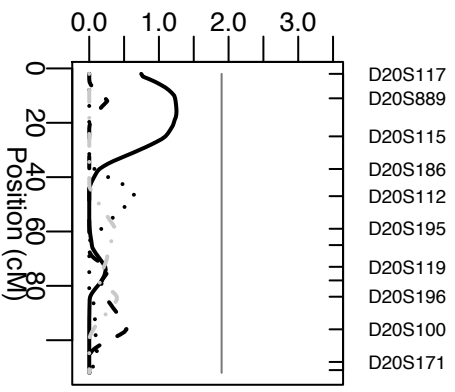


Figure S2a p. 5/6

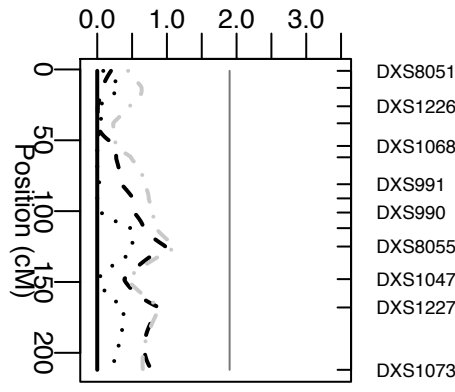
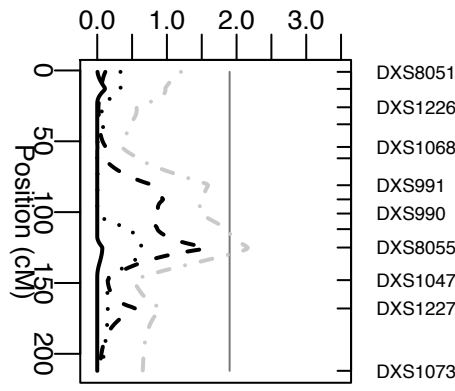
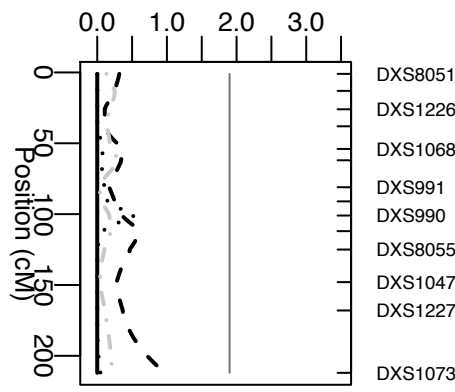
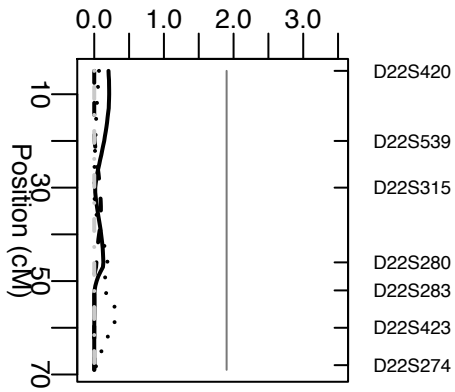
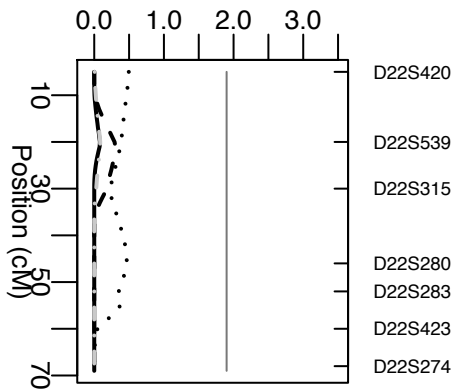
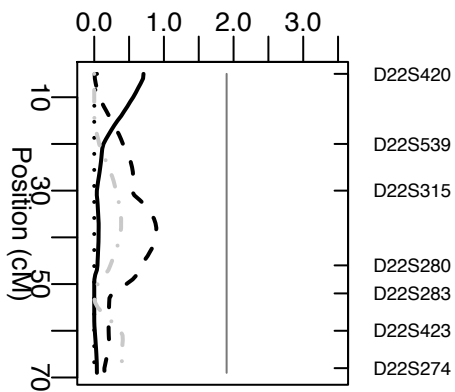
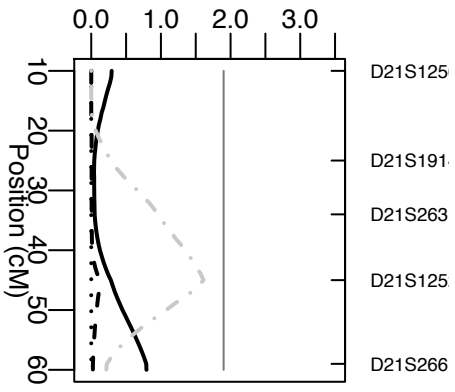
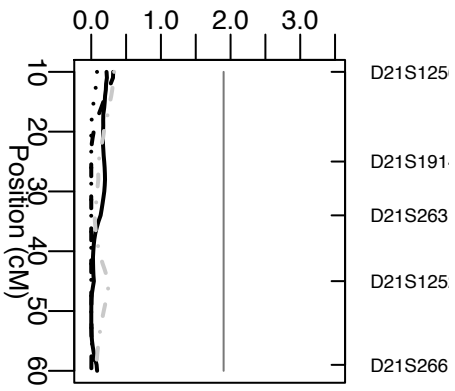
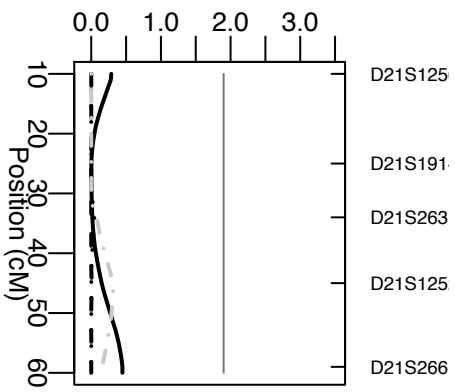


Figure S2a p. 6/6

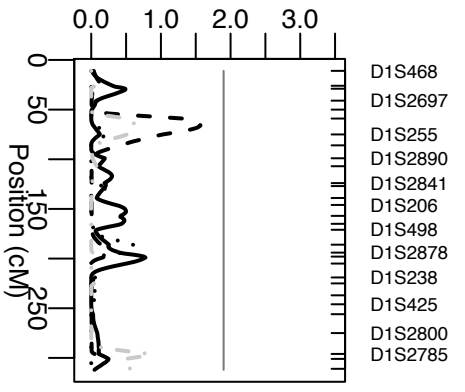
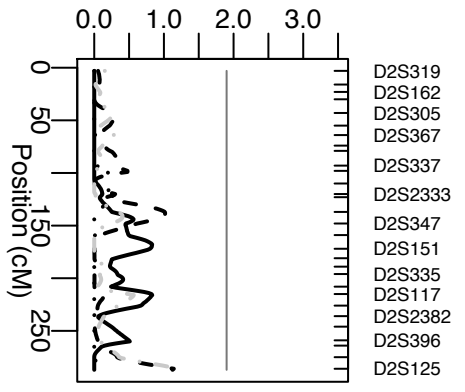
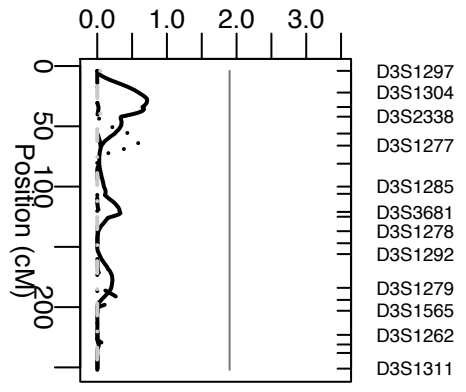
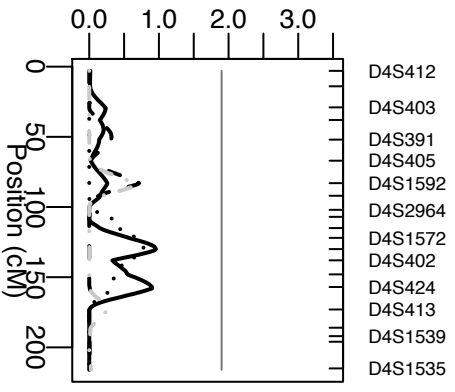
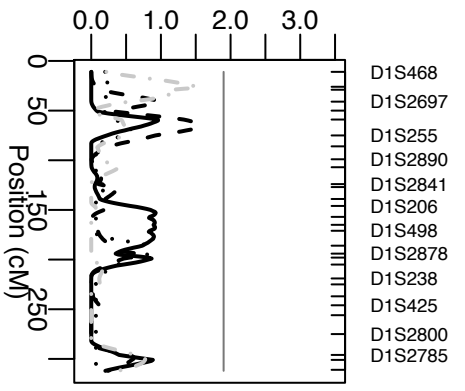
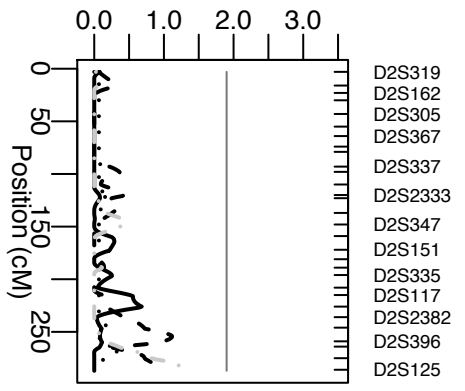
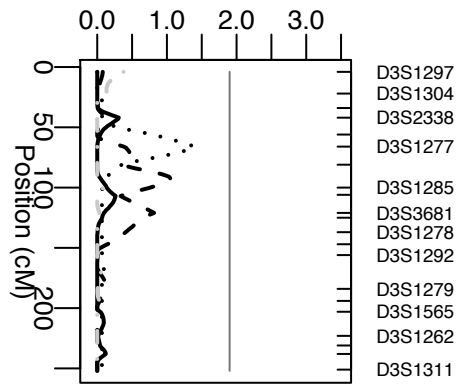
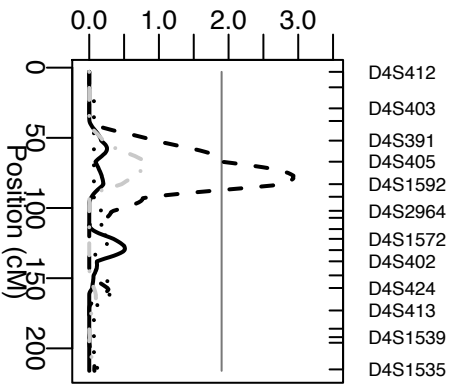
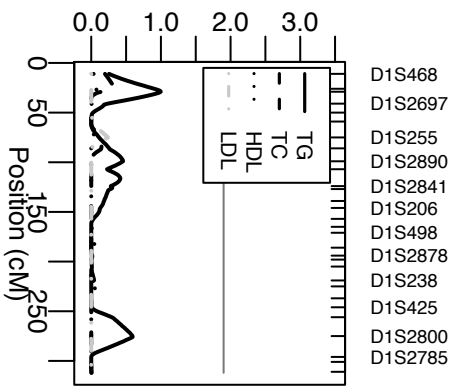
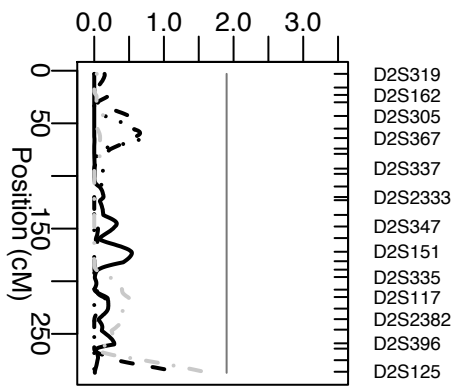
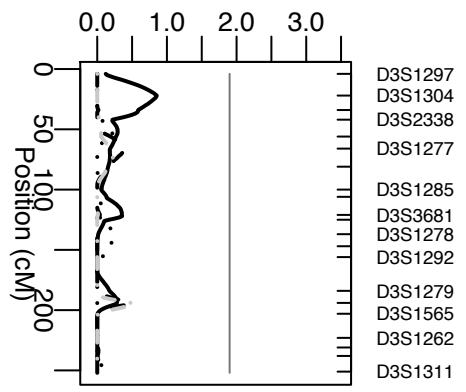
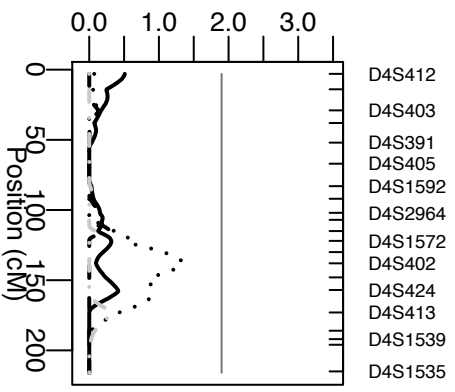


Figure S2b p. 1/6

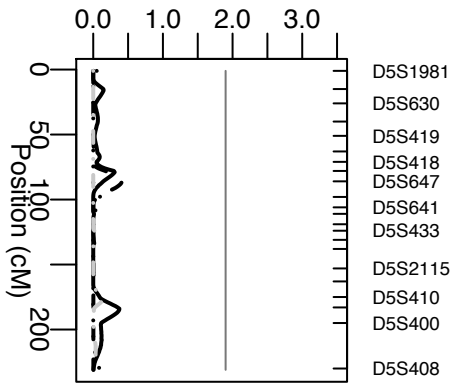
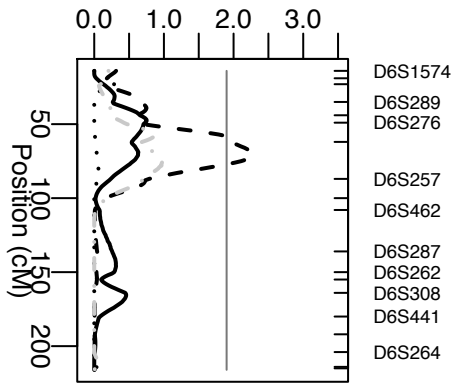
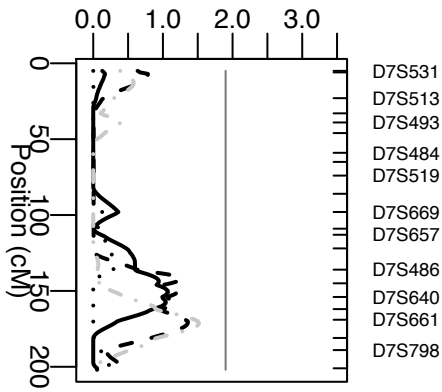
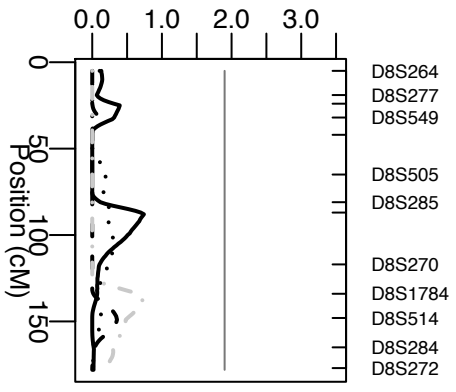
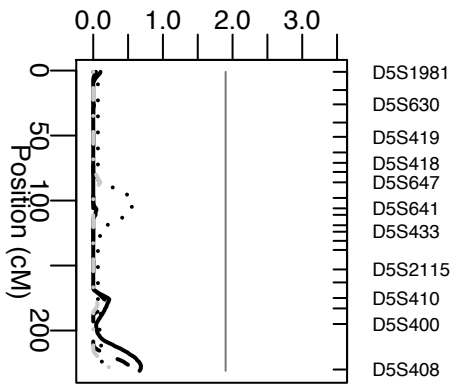
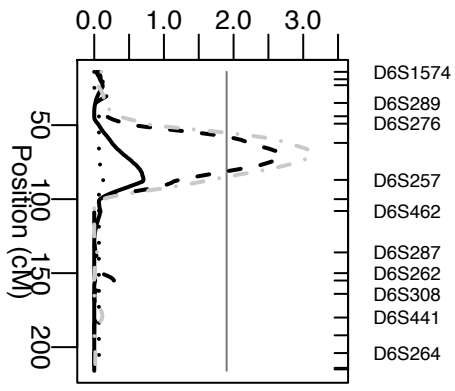
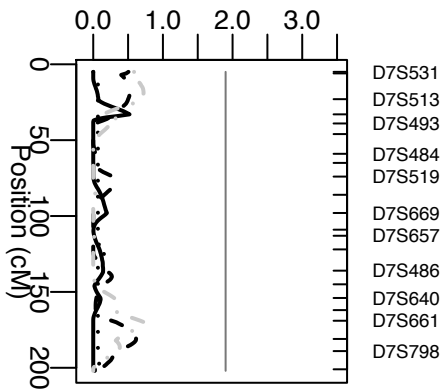
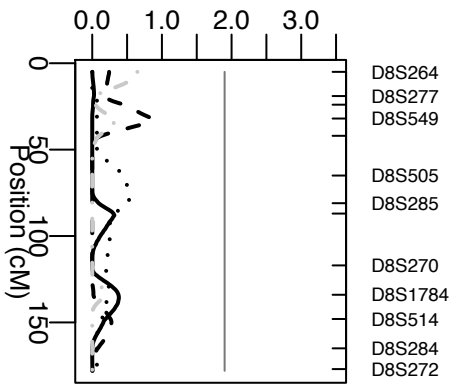
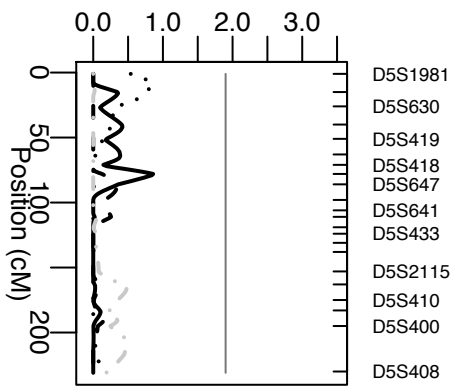
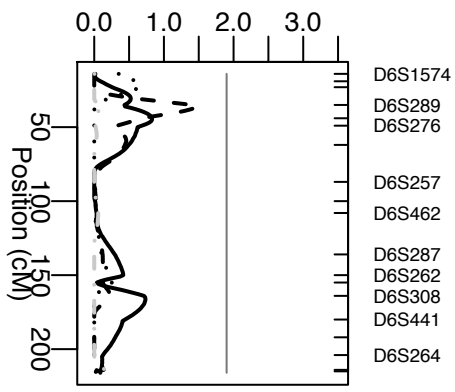
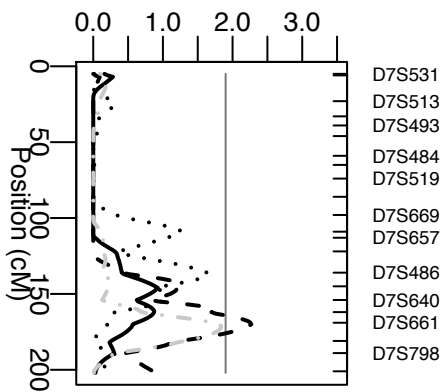
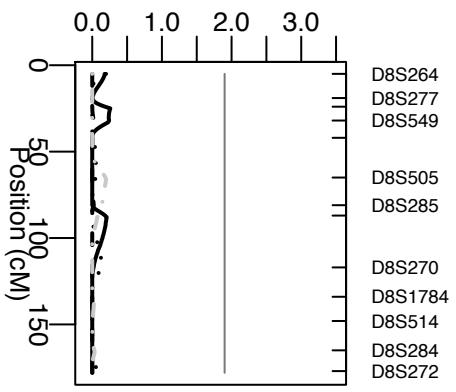


Figure S2b p. 2/6

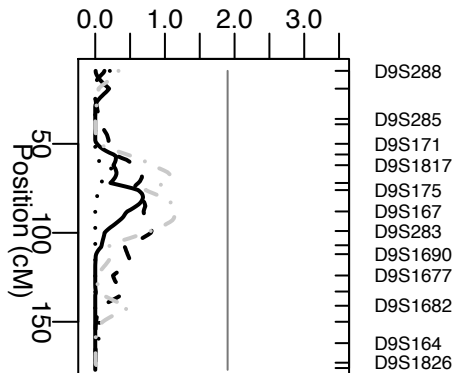
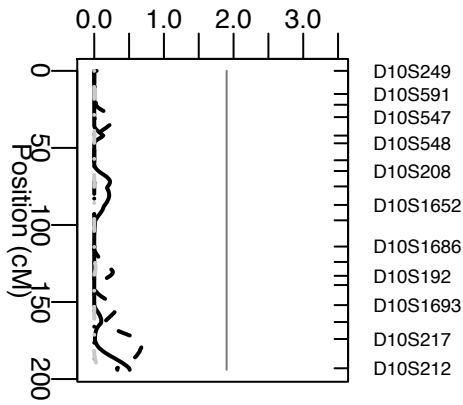
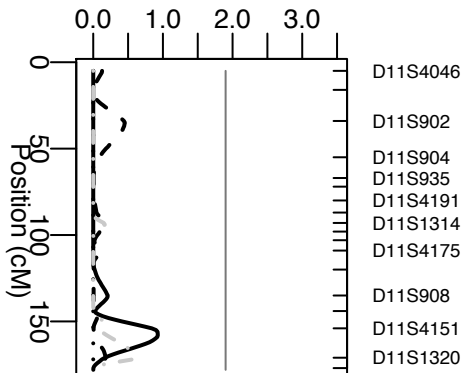
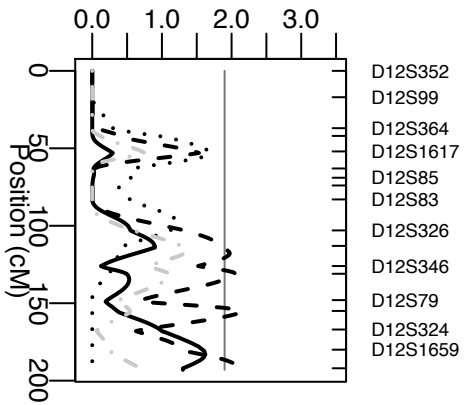
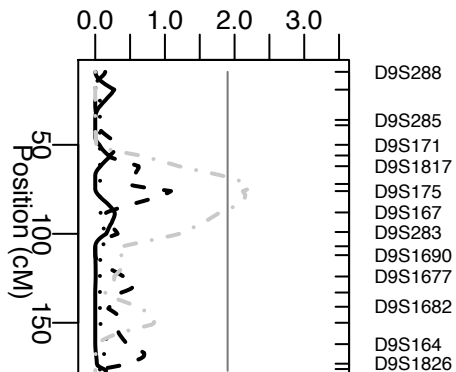
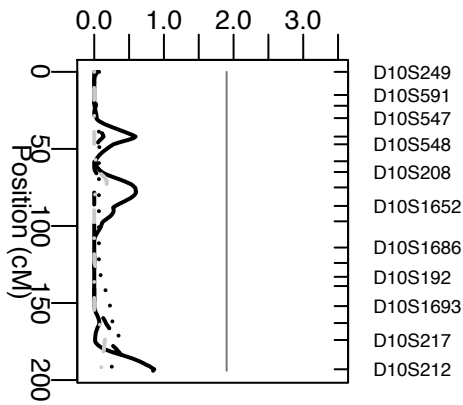
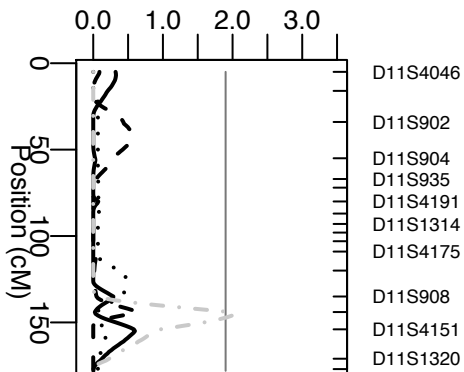
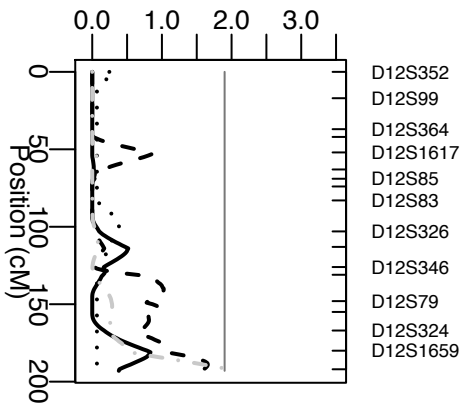
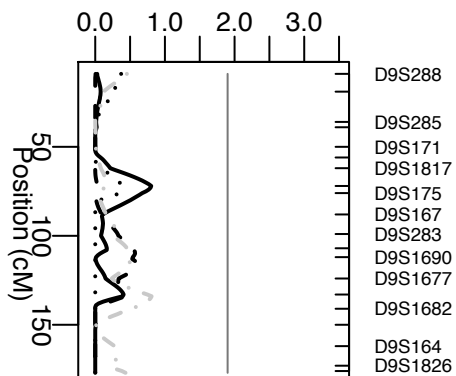
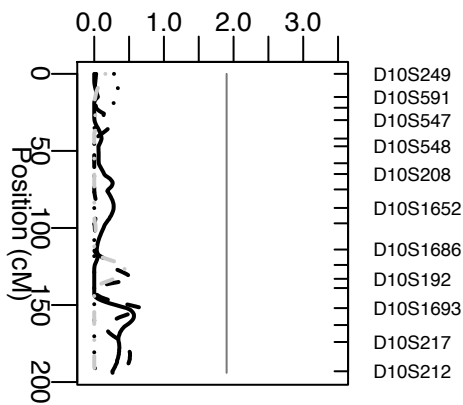
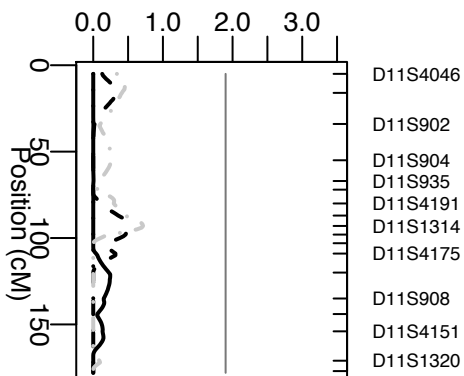
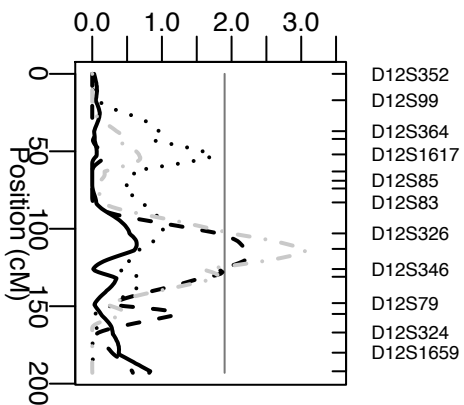


Figure S2b p.3/6

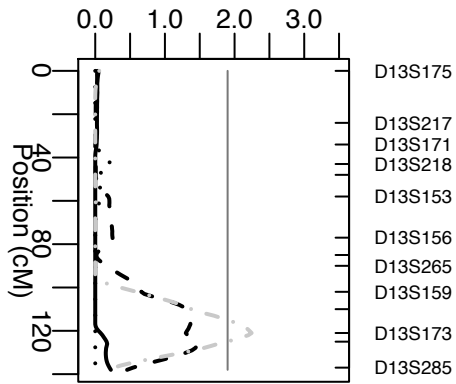
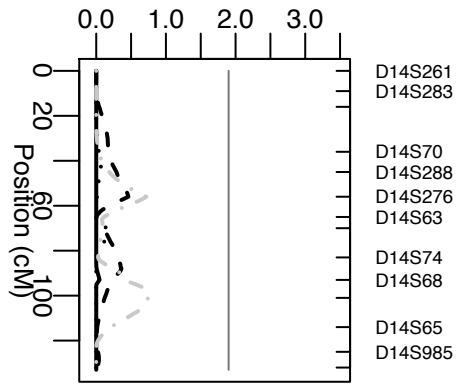
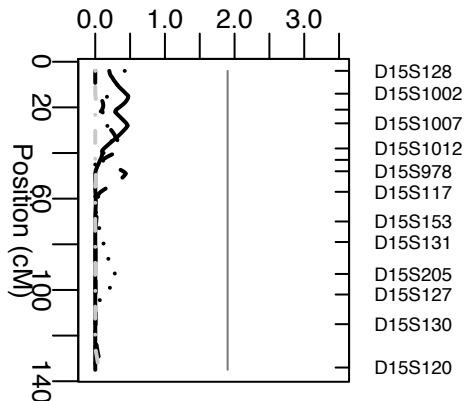
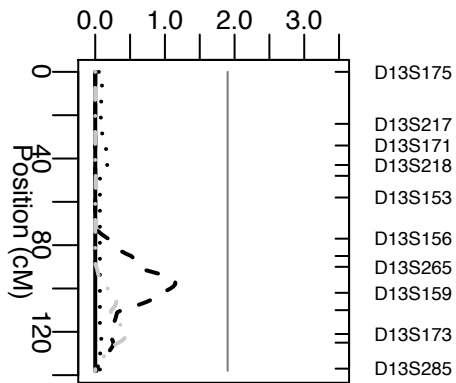
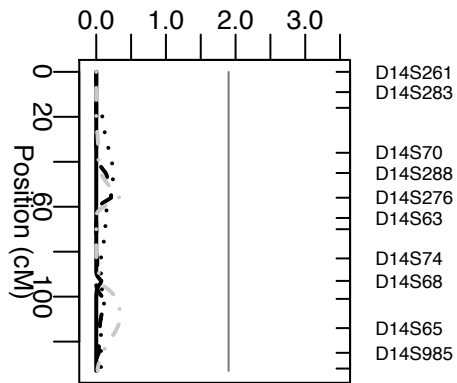
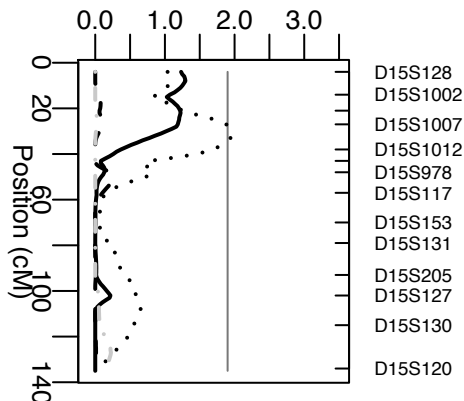
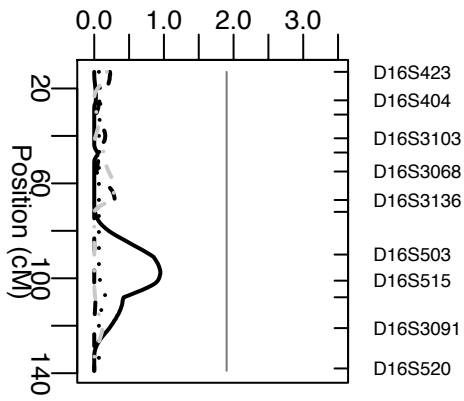
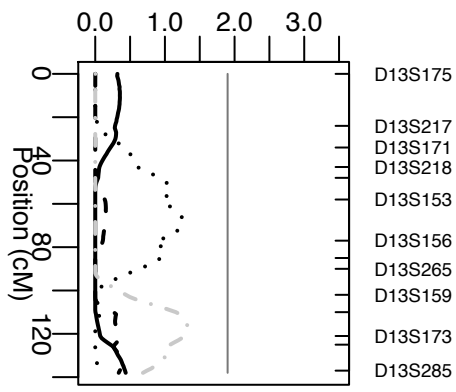
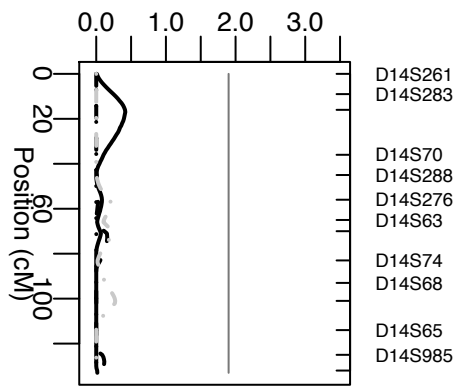
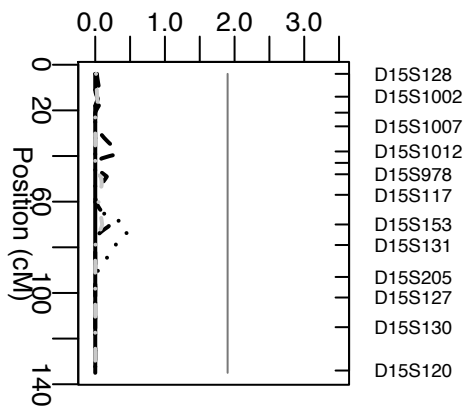
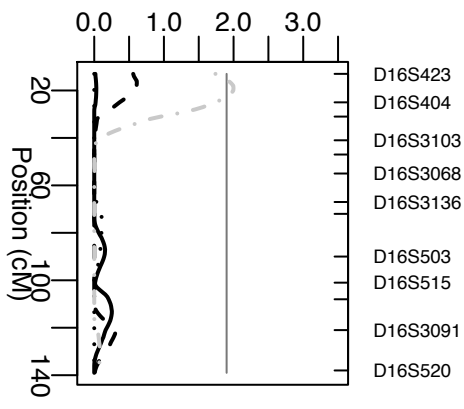


Figure S2b p. 4/6

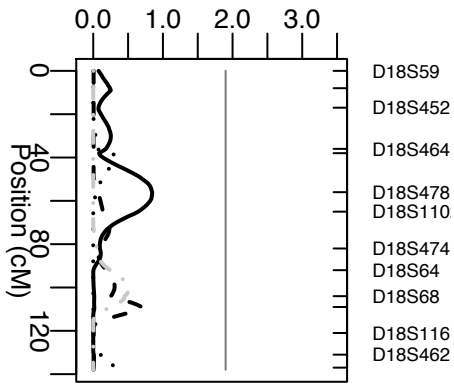
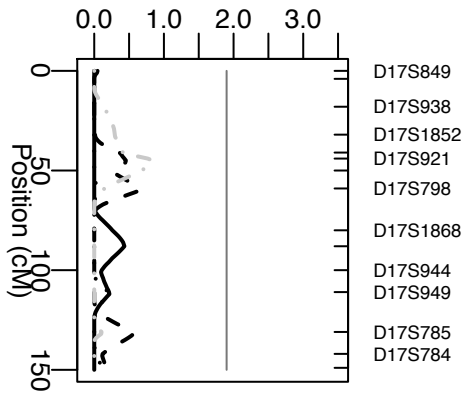
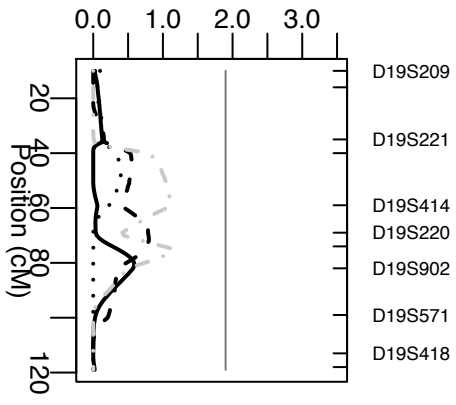
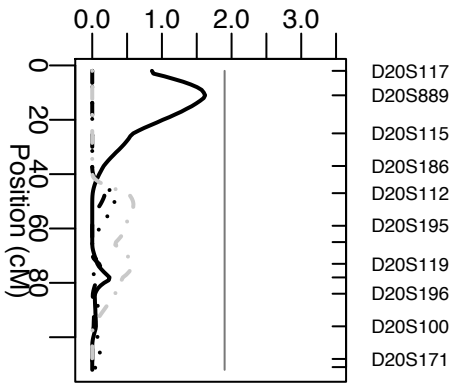
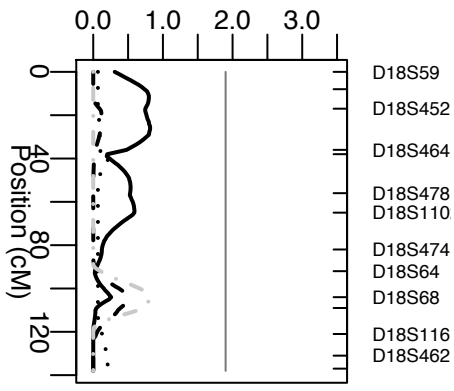
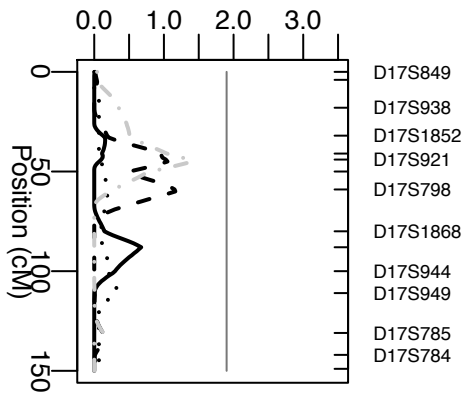
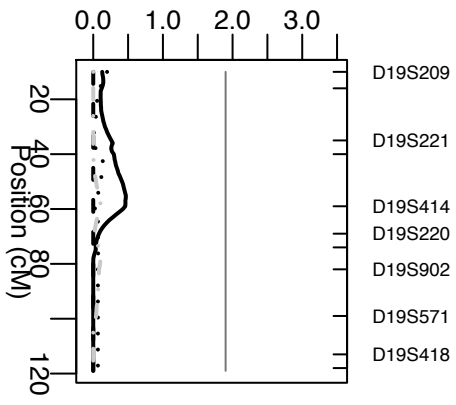
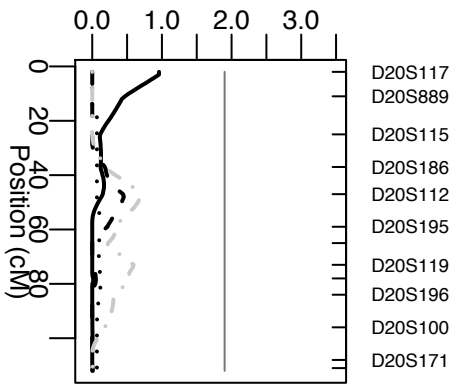
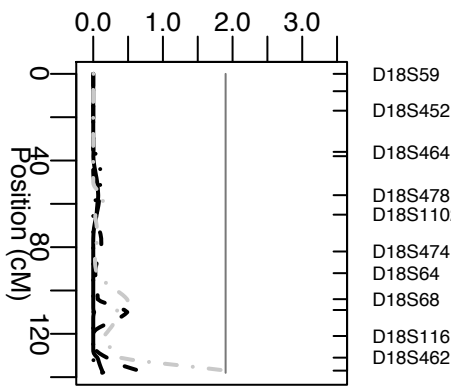
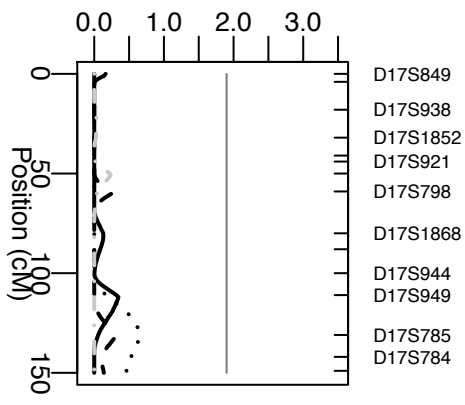
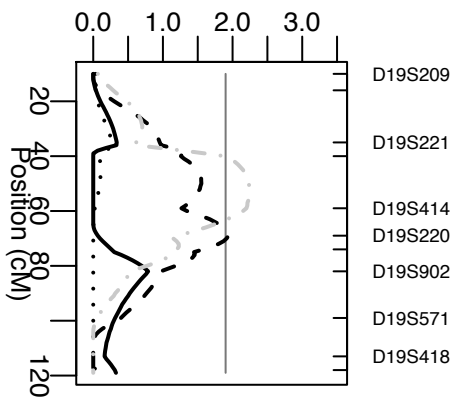
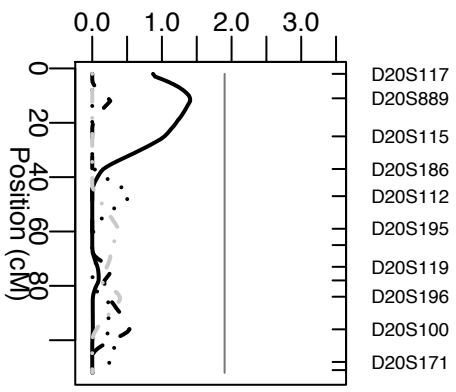


Figure S2b p. 5/6

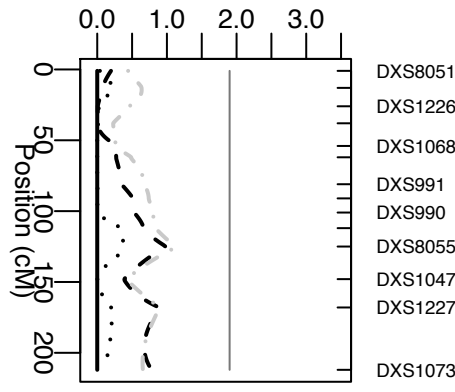
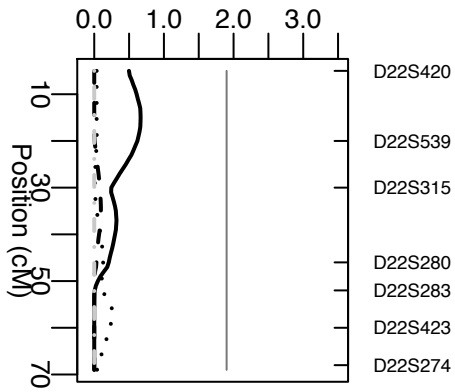
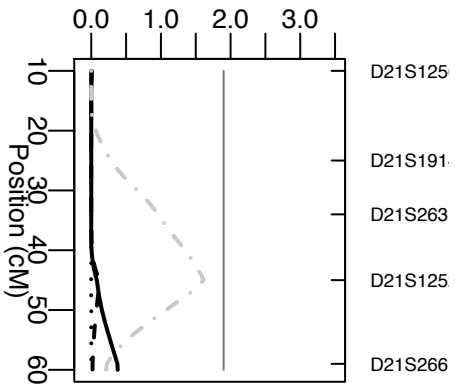
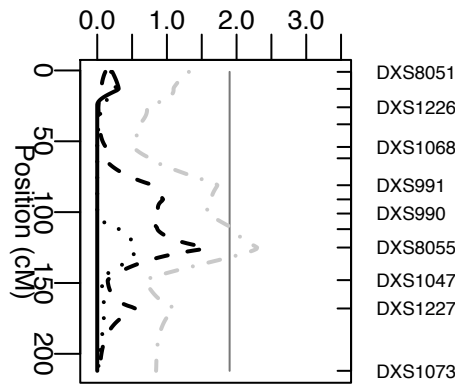
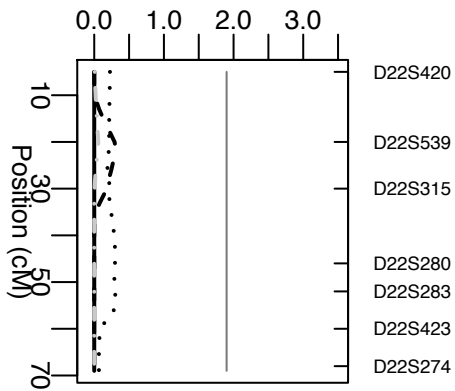
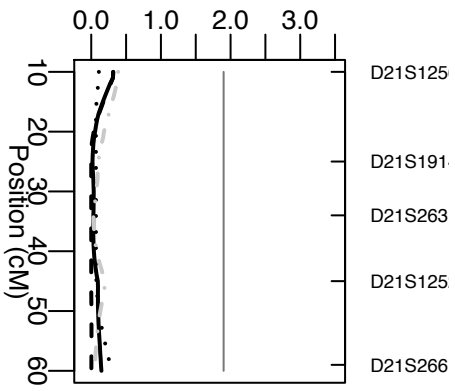
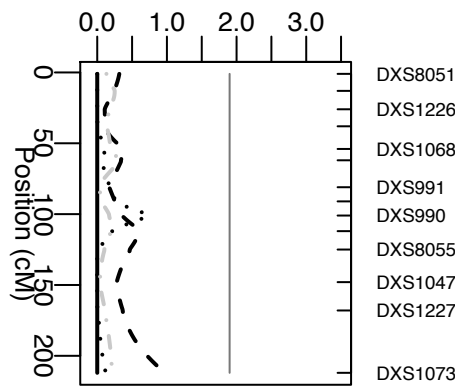
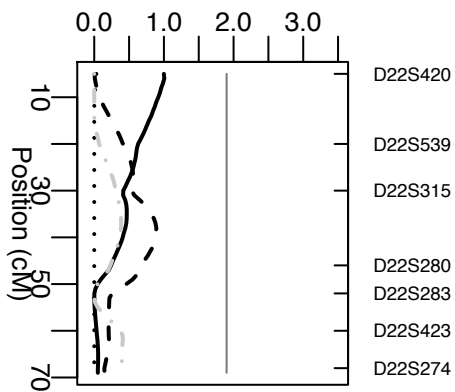
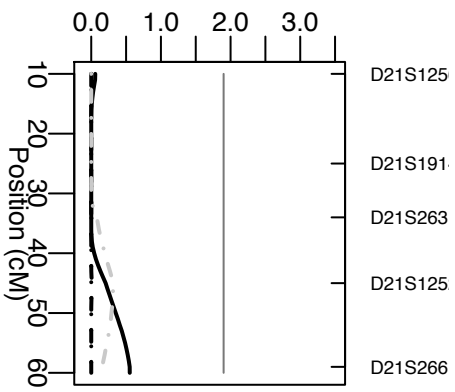


Figure S2b p. 6/6