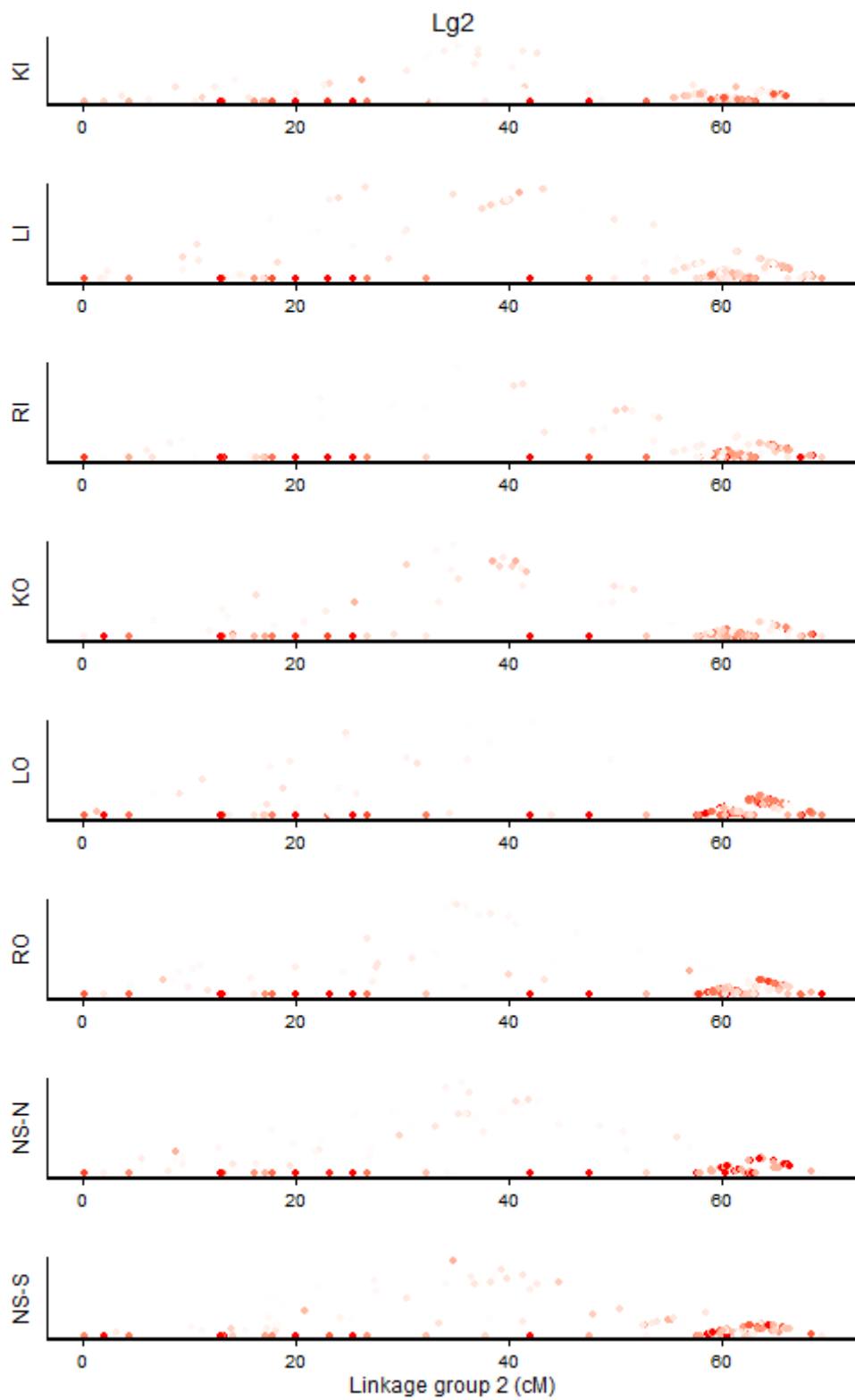


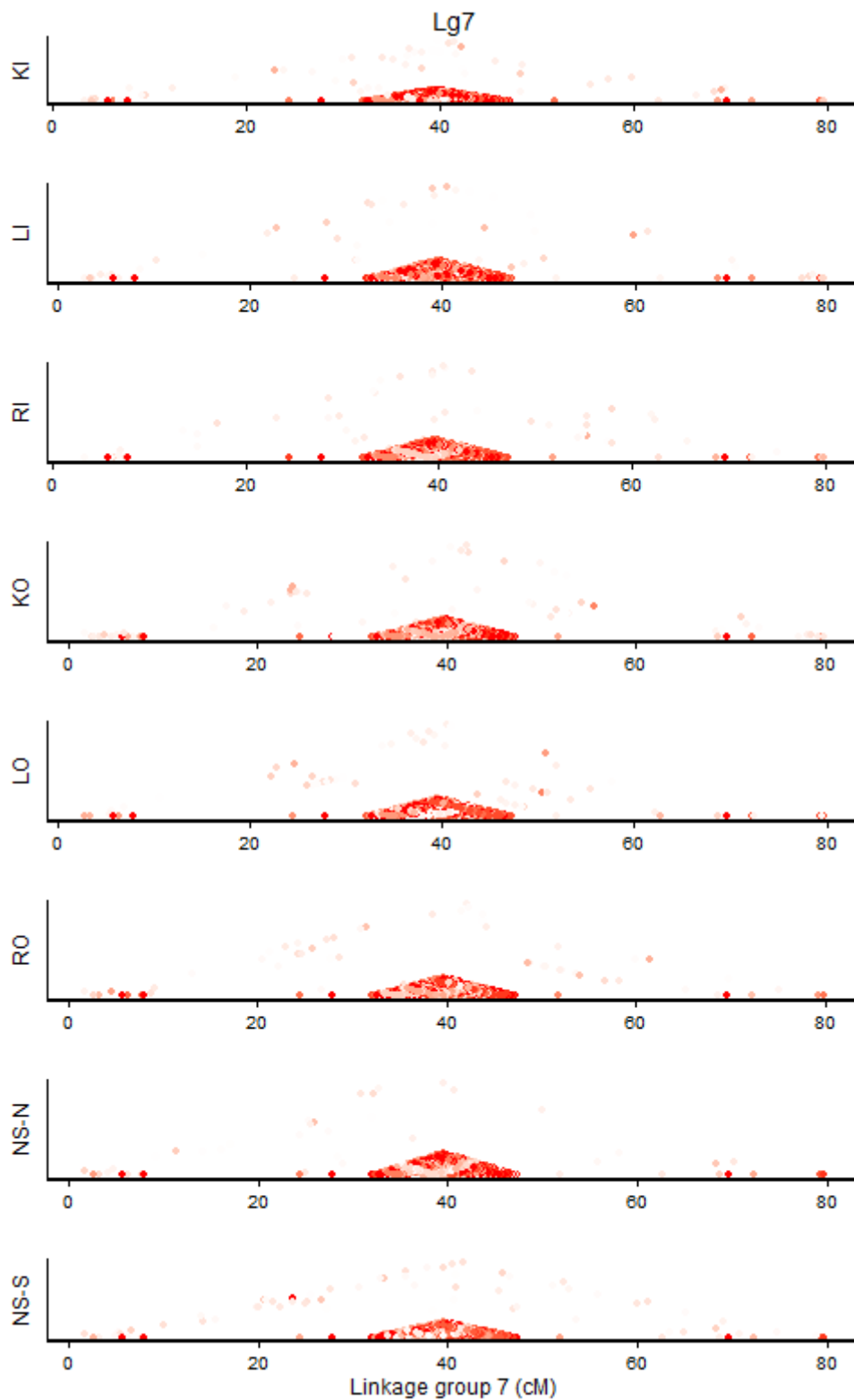
Supplementary Fig. S1. **Linkage disequilibrium on Atlantic cod linkage group 2**

SNP pairs showing high composite linkage disequilibrium ( $CLD > 0.5$ ) within sampling sites (Table 1) are indicated on a white ( $CLD = 0.5$ ) to red ( $CLD = 1$ ) scale according to a preliminary linkage map (cM).

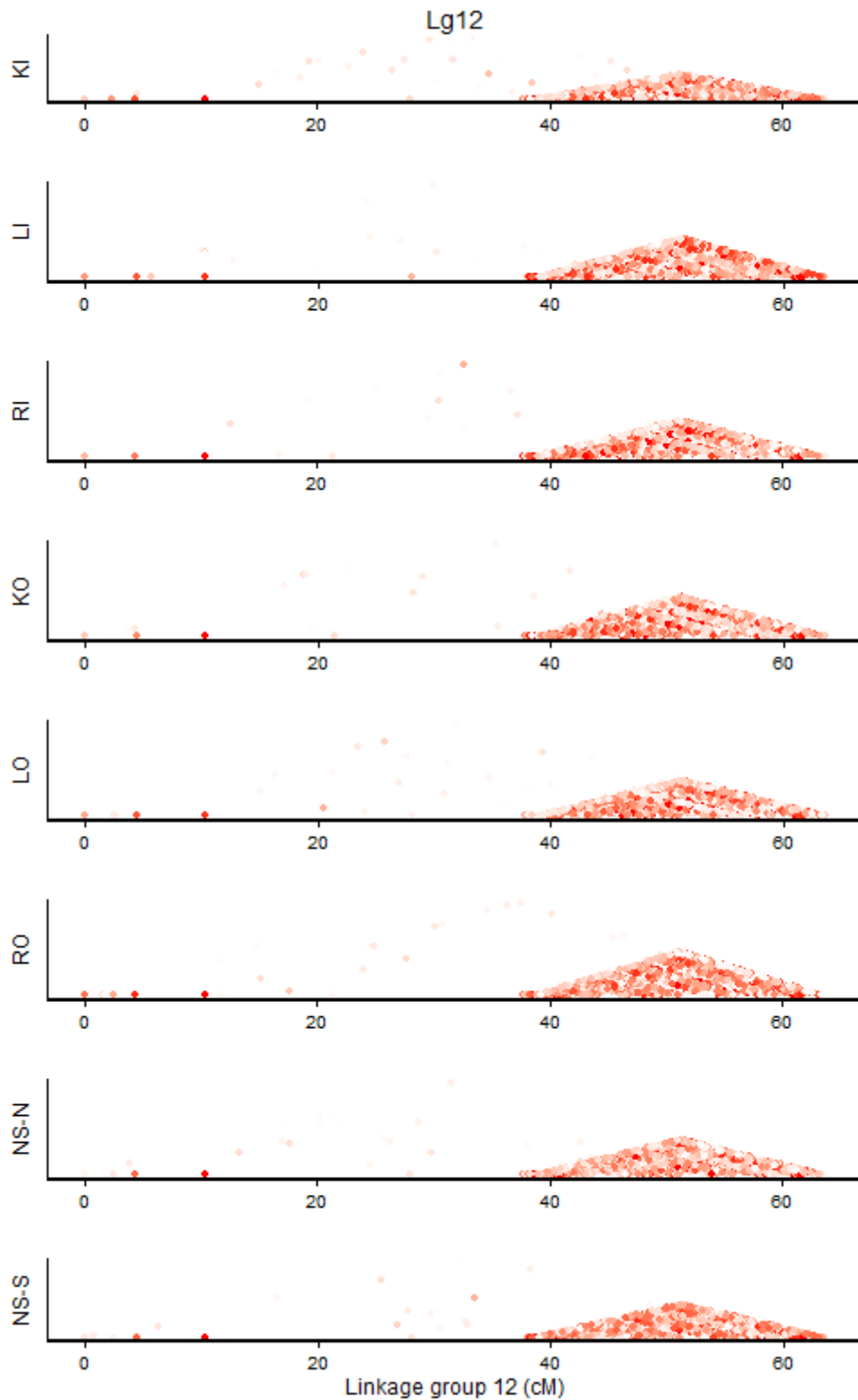


Supplementary Fig. S2. **Linkage disequilibrium on Atlantic cod linkage group 7**

SNP pairs showing high composite linkage disequilibrium ( $CLD > 0.5$ ) within sampling sites (Table 1) are indicated on a white ( $CLD = 0.5$ ) to red ( $CLD = 1$ ) scale according to a preliminary linkage map (cM).

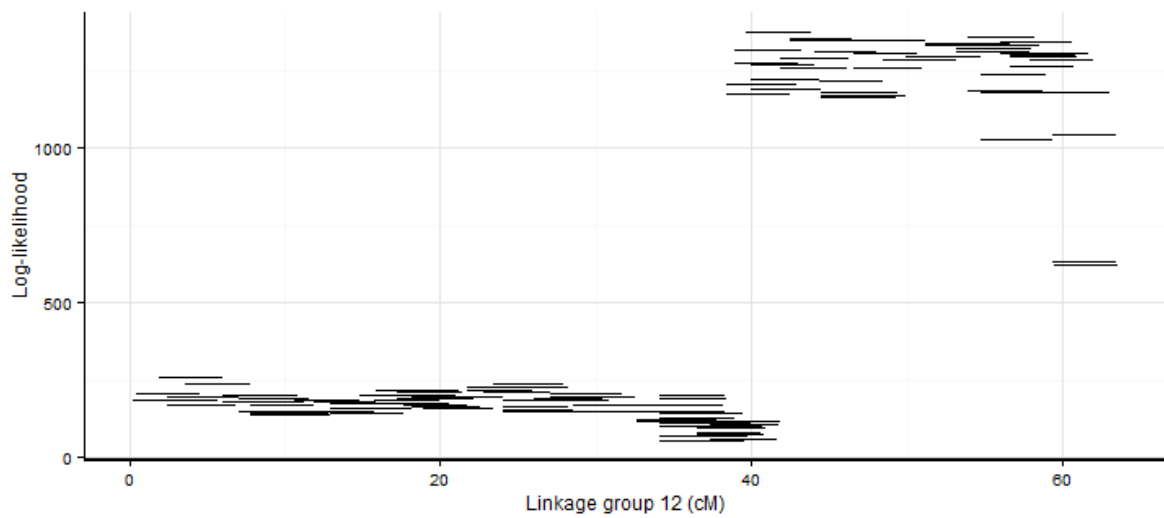
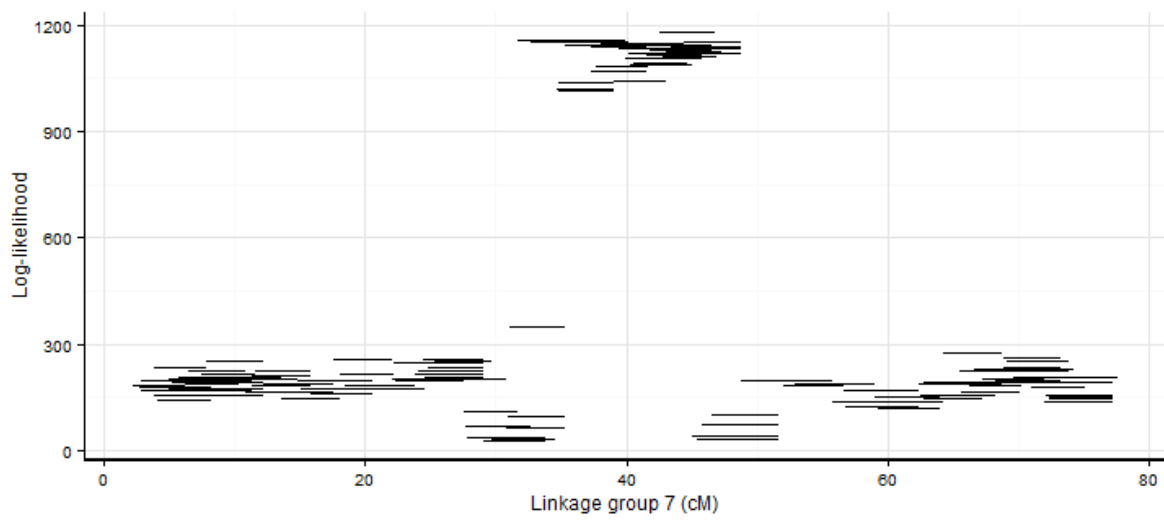
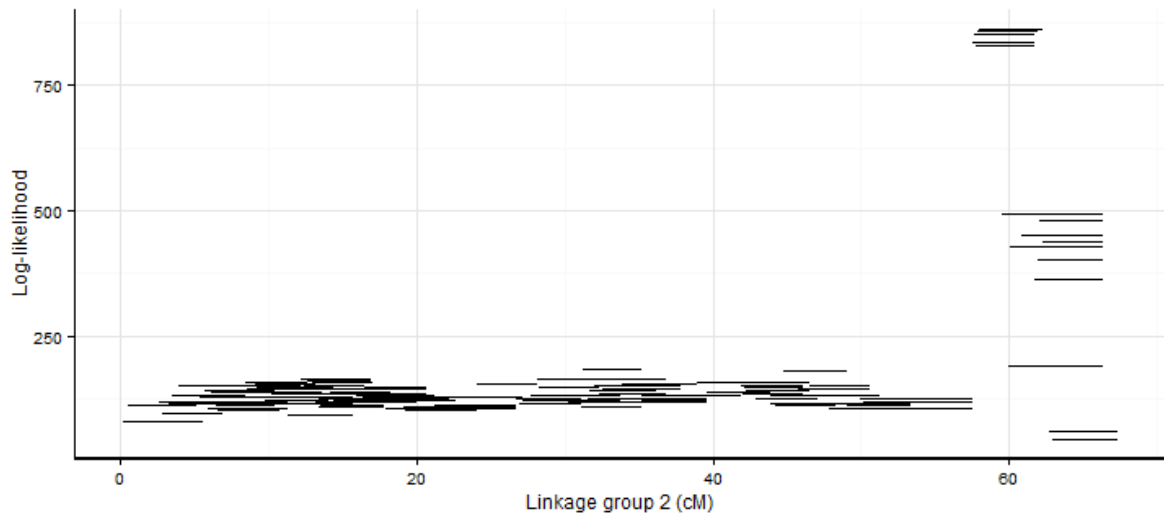


Supplementary Fig. S3. **Linkage disequilibrium on Atlantic cod linkage group 12**  
SNP pairs showing high composite linkage disequilibrium ( $CLD > 0.5$ ) within sampling sites (Table 1) are indicated on a white ( $CLD = 0.5$ ) to red ( $CLD = 1$ ) scale according to a preliminary linkage map (cM).



Supplementary Fig. S4 **Probabilistic scan for inverted haplotypes**

Sliding window analyses for inverted haplotypes, for window size of 4cM, are presented for linkage group 2 (top), 7 (middle) and 12 (below).



Supplementary Fig. S5 **Identification of inversion genotypes**

Principle component analyses were conducted for identification of inversion genotypes, and principle component 1 (PC1) and 2 (PC2) are presented for the rearranged segments of linkage group 2, 7 and 12.

