Figure S1 Simulated climates and flowering time of the worldwide A. thaliana population in Fall germination cohorts. (A) Day length during the experiment. Horizontal dashed line represents the duration of the winter periods when day length is 10 h or shorter. (B) Average daily temperature during the experiment. Horizontal dashed line corresponds to 6C. Histogram of flowering time under current (2010) and future climates (2025, 2040, and 2055) for (C) October and (D) September planting. Horizontal dashed lines corresponding to the winter periods when average daily temperature is 6C or below.
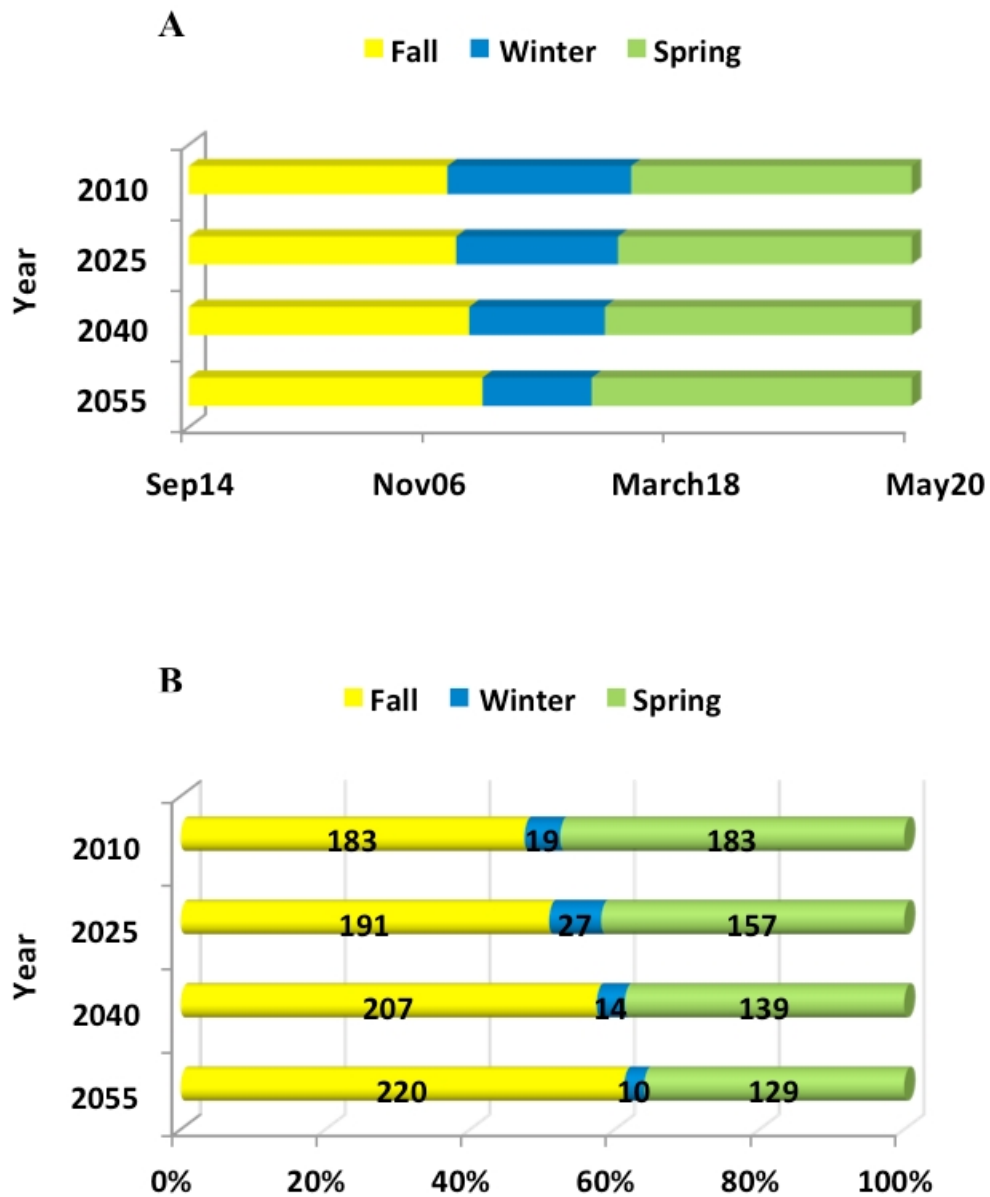
A

Fall Winter Spring

Year

| 2010 |
| 2025 |
| 2040 |
| 2055 |

Sep14   Nov06   March18   May20

B

Fall Winter Spring

Year

Year	Fall	Winter	Spring
2010	183	19	183
2025	191	27	157
2040	207	14	139
2055	220	10	129

0%   20%   40%   60%   80%   100%

Figure S2 Impact of future warming on seasons and percentages of flowering groups. (A) Simulated climates split by season. Winter days correspond to average daily temp of 6C. (B) The proportion of rapid cycling plants, that flowered in Fall, is increased with future warming. The numbers inside the bars represent the counts (number of accessions) in the flowering groups.
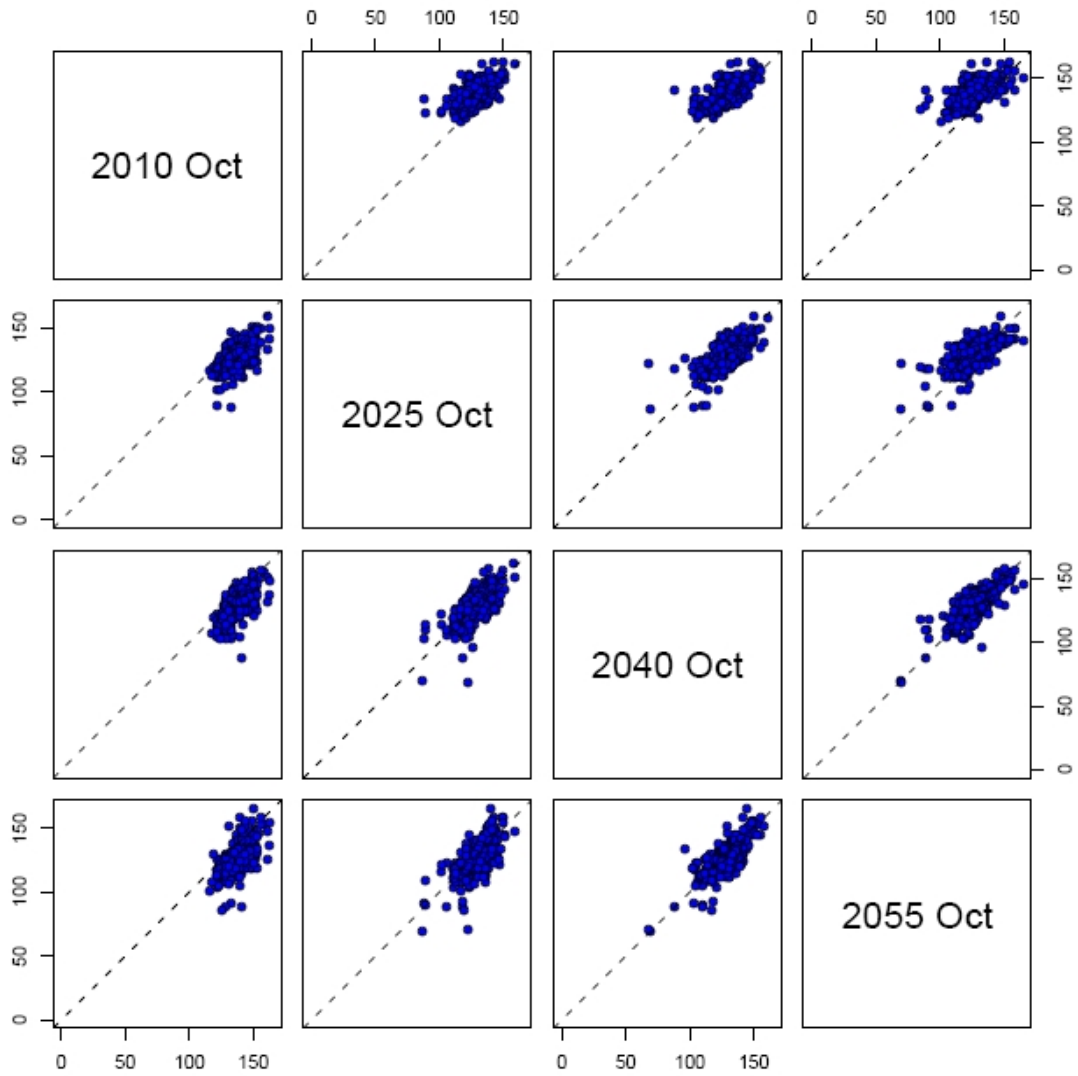
Figure S3 Pairwise plots of October flowering time (FT) under simulated current (2010) and future (2025, 2040, and 2055) climates. Each dot represents the FT of one accession in two environments.
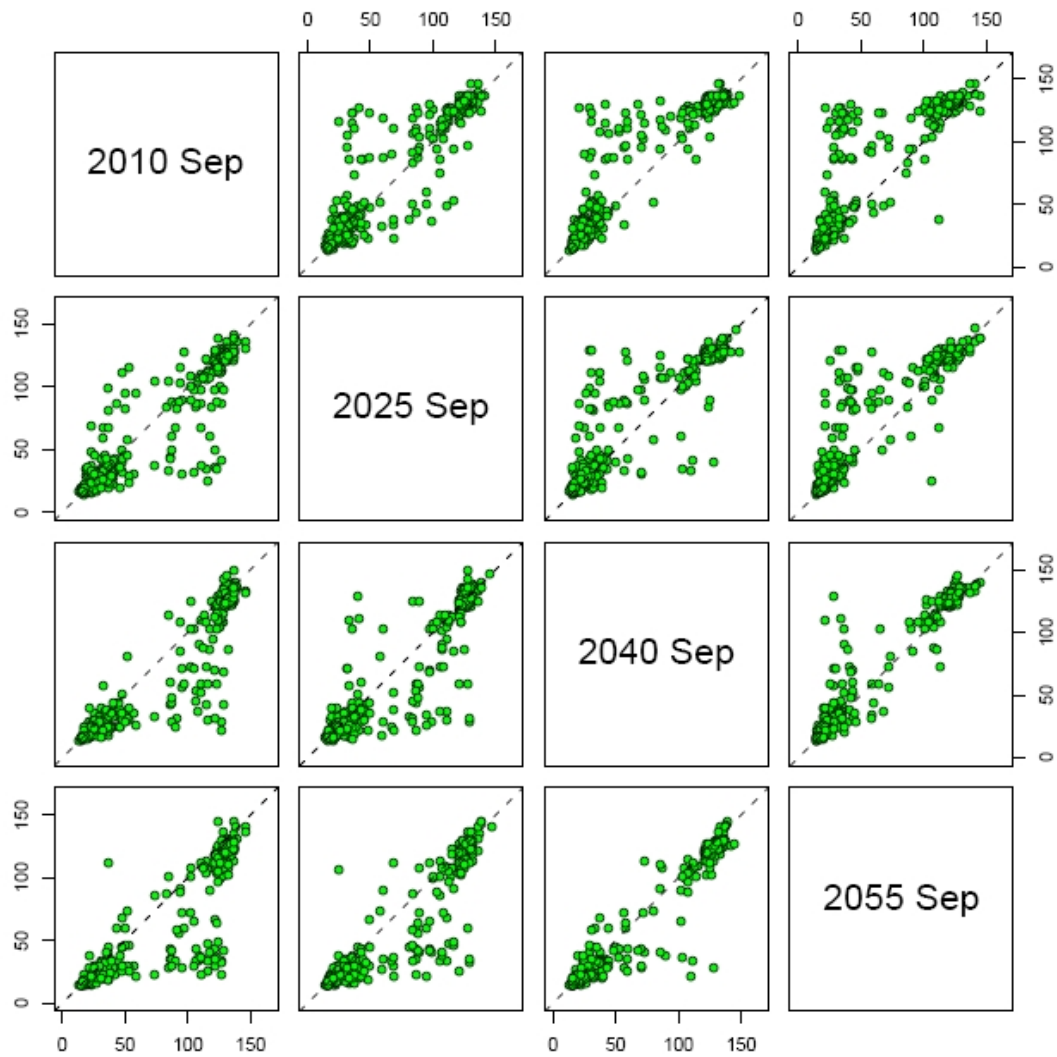
Figure S4 Pairwise plots of September flowering time (FT) under simulated current (2010) and future (2025, 2040, and 2055) climates. Each dot represents the FT of one accession in two environments.
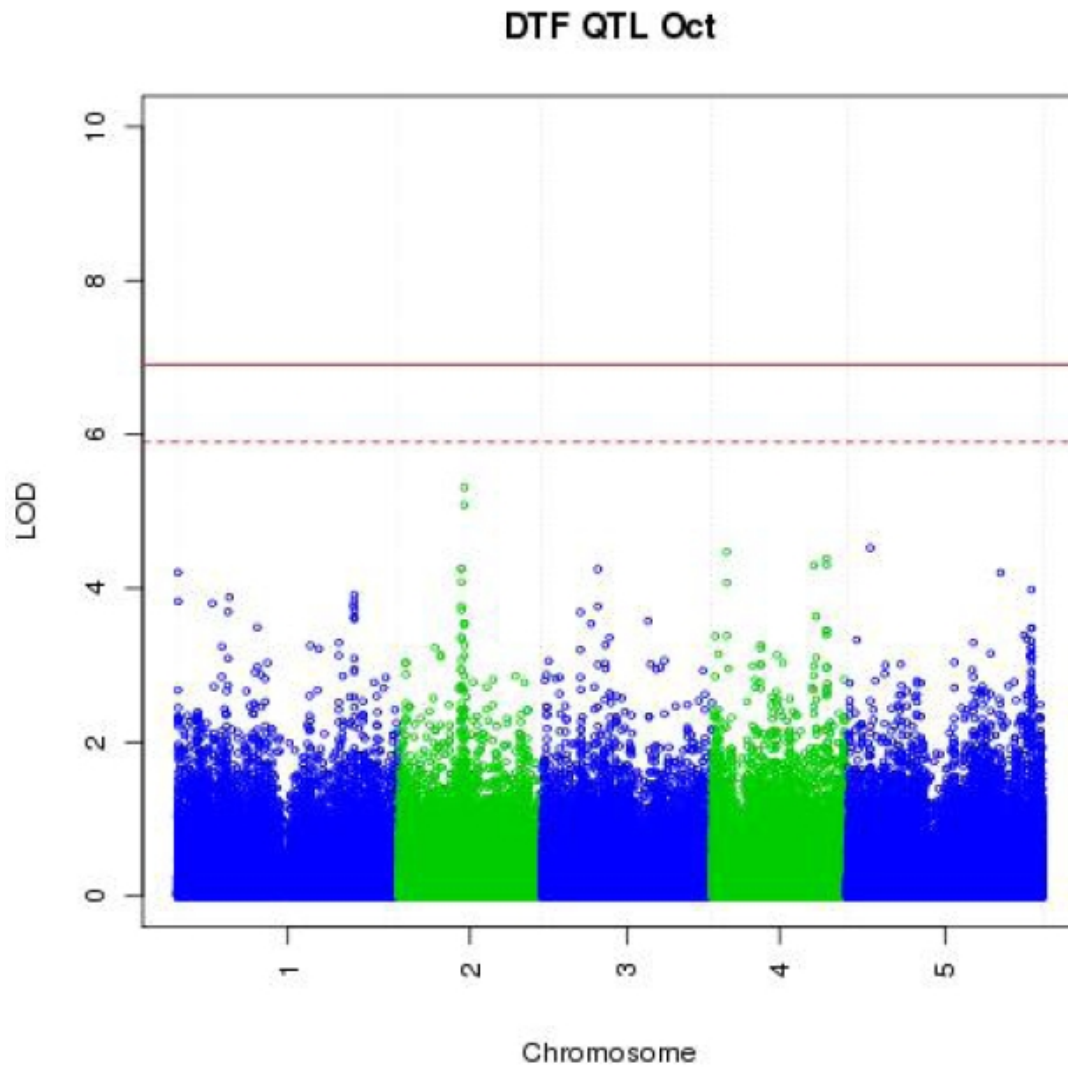
Figure S5 Genome-wide association of flowering time (days to flower) for main FT in October. The dashed horizontal line represents the 5% empirical genome-wide significance threshold and solid line represents the 1% threshold.
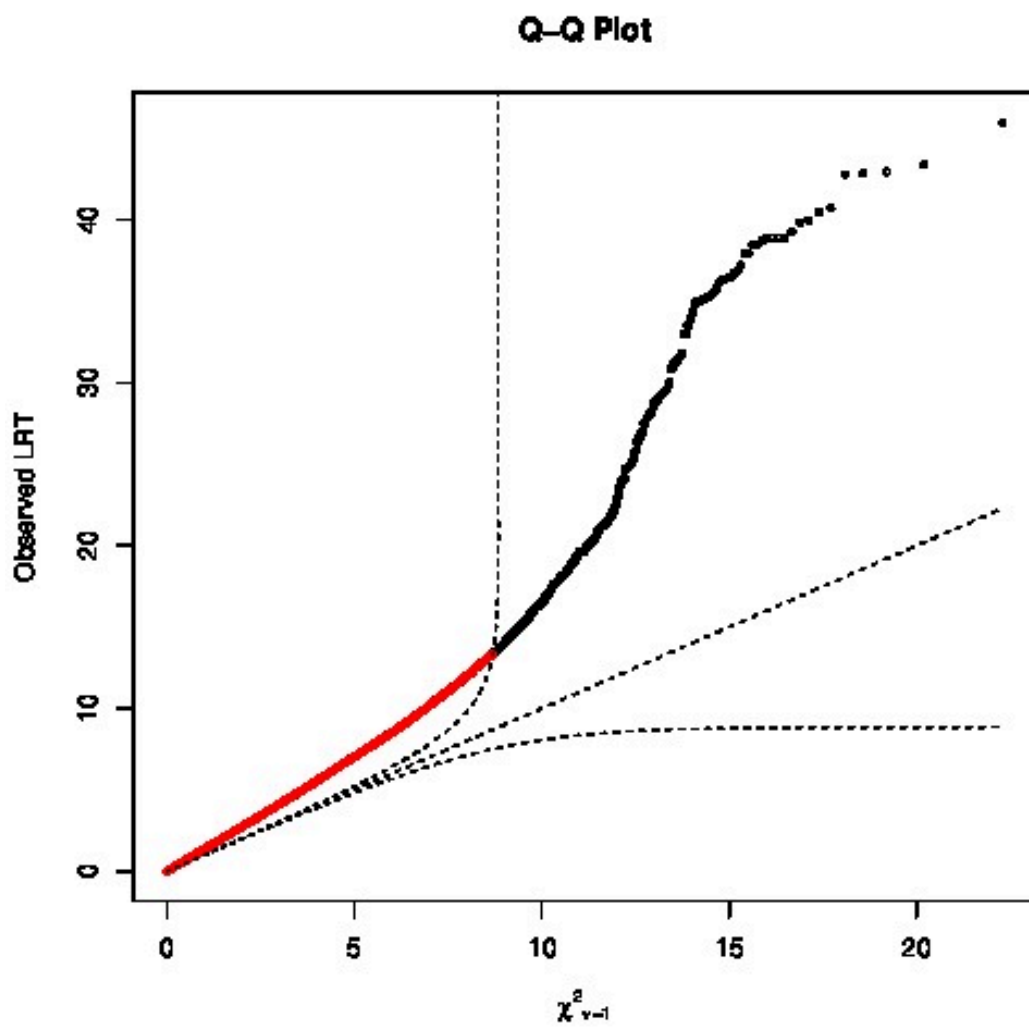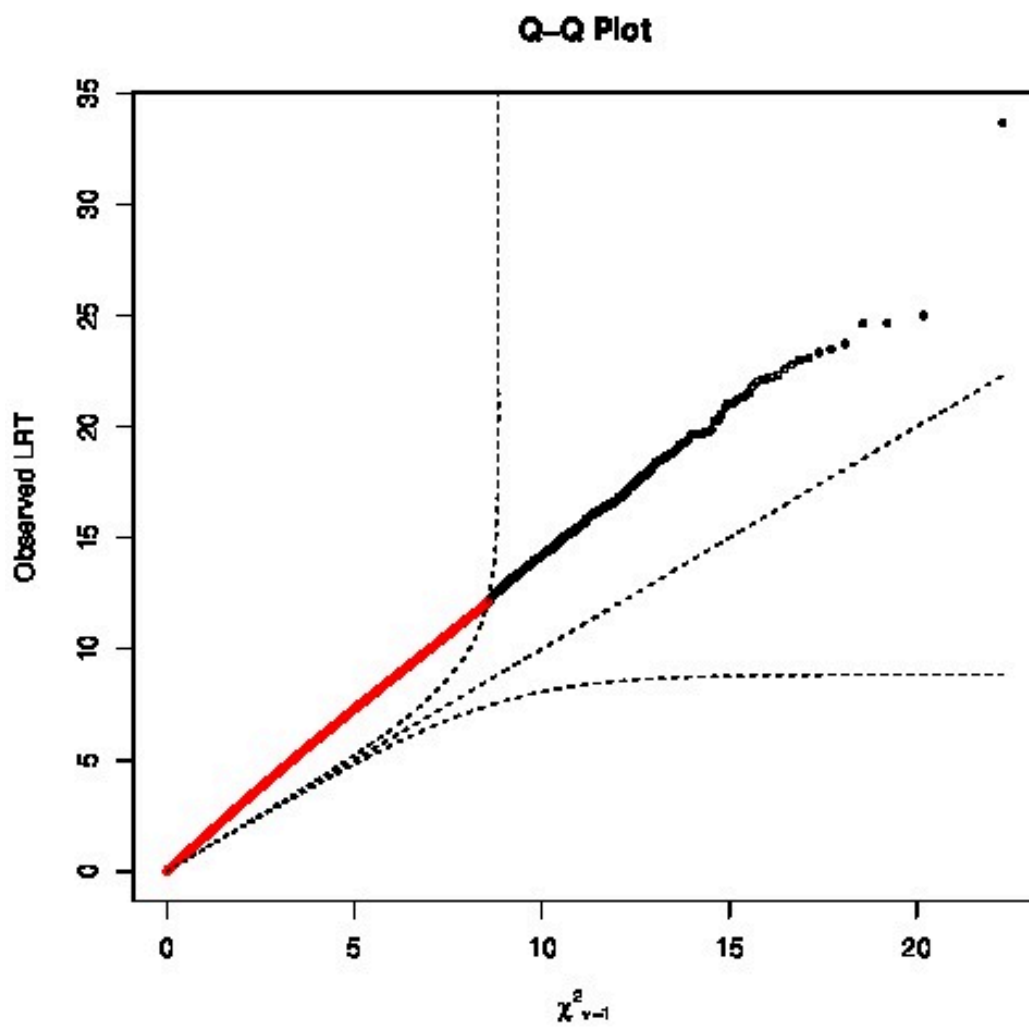
Figure S6 Quantile Quantile plot for FFT QTL

Figure S7 Quantile Quantile plot for THERM QTL

Files S1-S4

Available for download at http://www.genetics.org/lookup/suppl/doi:10.1534/genetics.113.157628/-/DC1

File S1 All phenotype data

File S2 September phenotype data

File S3 GenotypeTAIR9.csv file

File S4 Light