

Figure S1: Days until flowering and gene expression for 15 *Arabidopsis thaliana* genotypes originating from an altitudinal gradient in the Swiss Alps. Colors denote different vernalization treatments. The 13 genotypes included in all main analyses are plotted in circles, whereas the excluded genotypes E001 and E003 are plotted in triangles. Lines show the predicted regression slope for each vernalization treatment calculated from linear mixed effects models with altitude (linear and quadratic) and treatment as fixed and genotype as random factors.

A: Days until flowering. Circle and triangle sizes indicate the number of plants flowering on a particular day. **B:** Gene expression of *FT* at late collection time.

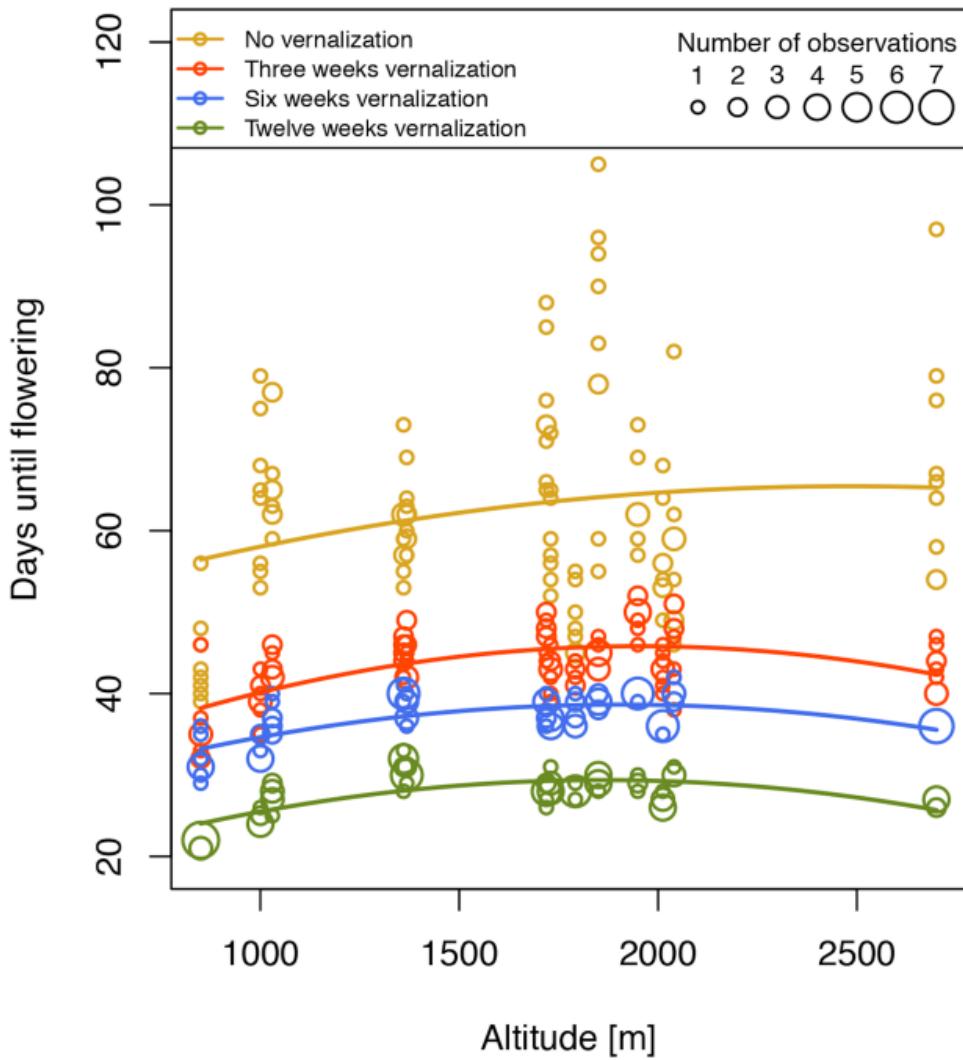


Figure S2: Days until flowering for 13 *Arabidopsis thaliana* genotypes originating from an altitudinal gradient in the Swiss Alps. Colors denote different vernalization treatments. Lines show the predicted regression slope for each vernalization treatment calculated from a linear mixed effects model with altitude (linear and quadratic) and treatment as fixed and genotype as random factors. Circle size indicates the number of plants flowering on a particular day.

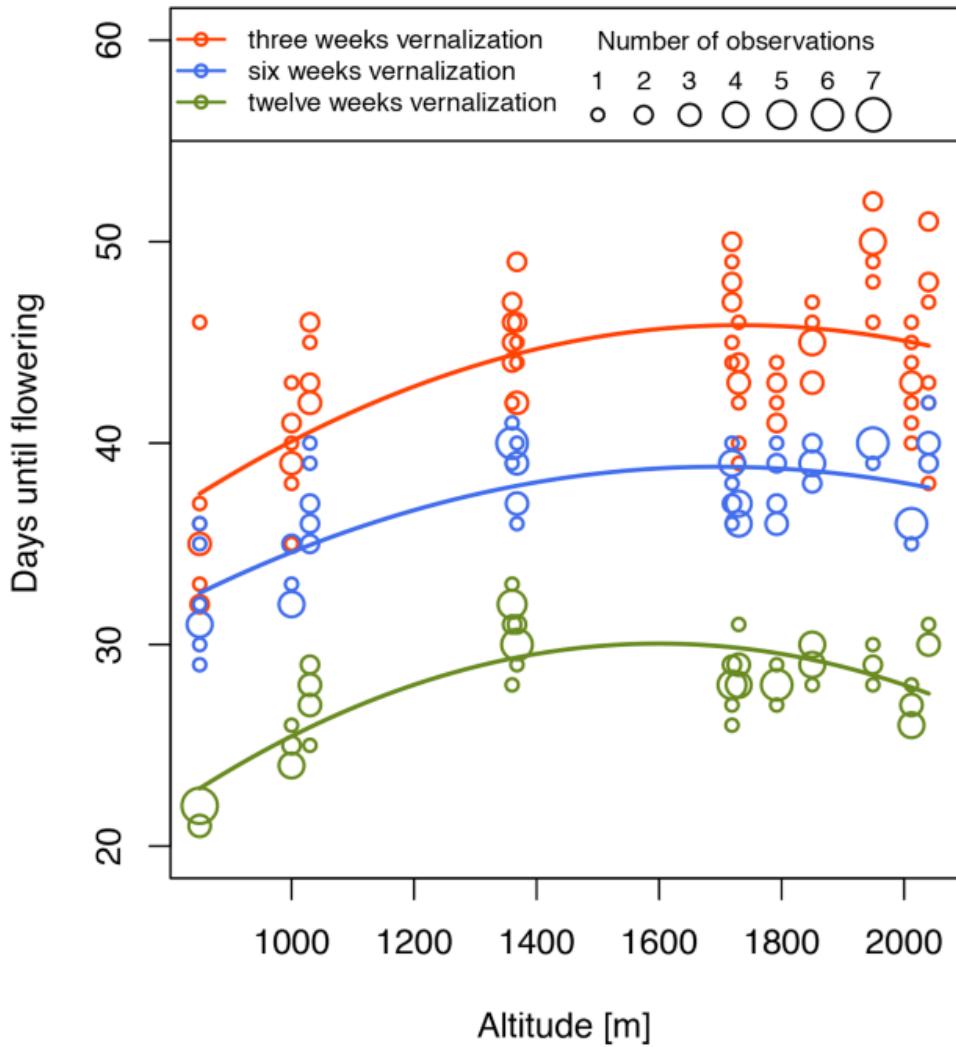


Figure S3: Days until flowering for 12 *Arabidopsis thaliana* genotypes originating from an altitudinal gradient in the Swiss Alps. Colors denote different vernalization treatments. Lines show the predicted regression slope for each vernalization treatment calculated from a linear mixed effects model with altitude (linear and quadratic) and treatment as fixed and genotype as random factors. Circle size indicates the number of plants flowering on a particular day.

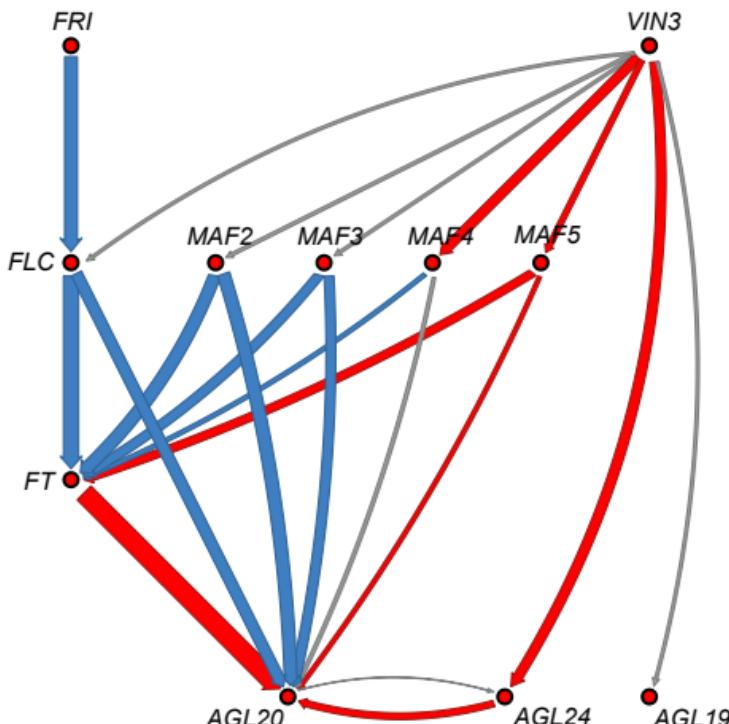


Figure S4: Gene regulatory network of the vernalization pathway, whereby edges indicate correlations of the expression of the upstream gene collected at the early collection time (last day of vernalization treatment) with the expression of the downstream gene collected at the late collection time (10 days later, at long day growth conditions). For each genotype the mean of the three biological replica of each treatment and collection time was calculated, so correlations of early expression with late expression could be calculated for each genotype and all three vernalization treatments together. Edge width indicates strength of correlation. Red edges indicate correlations with $r > 0.1$; blue edges with $r < -0.1$.

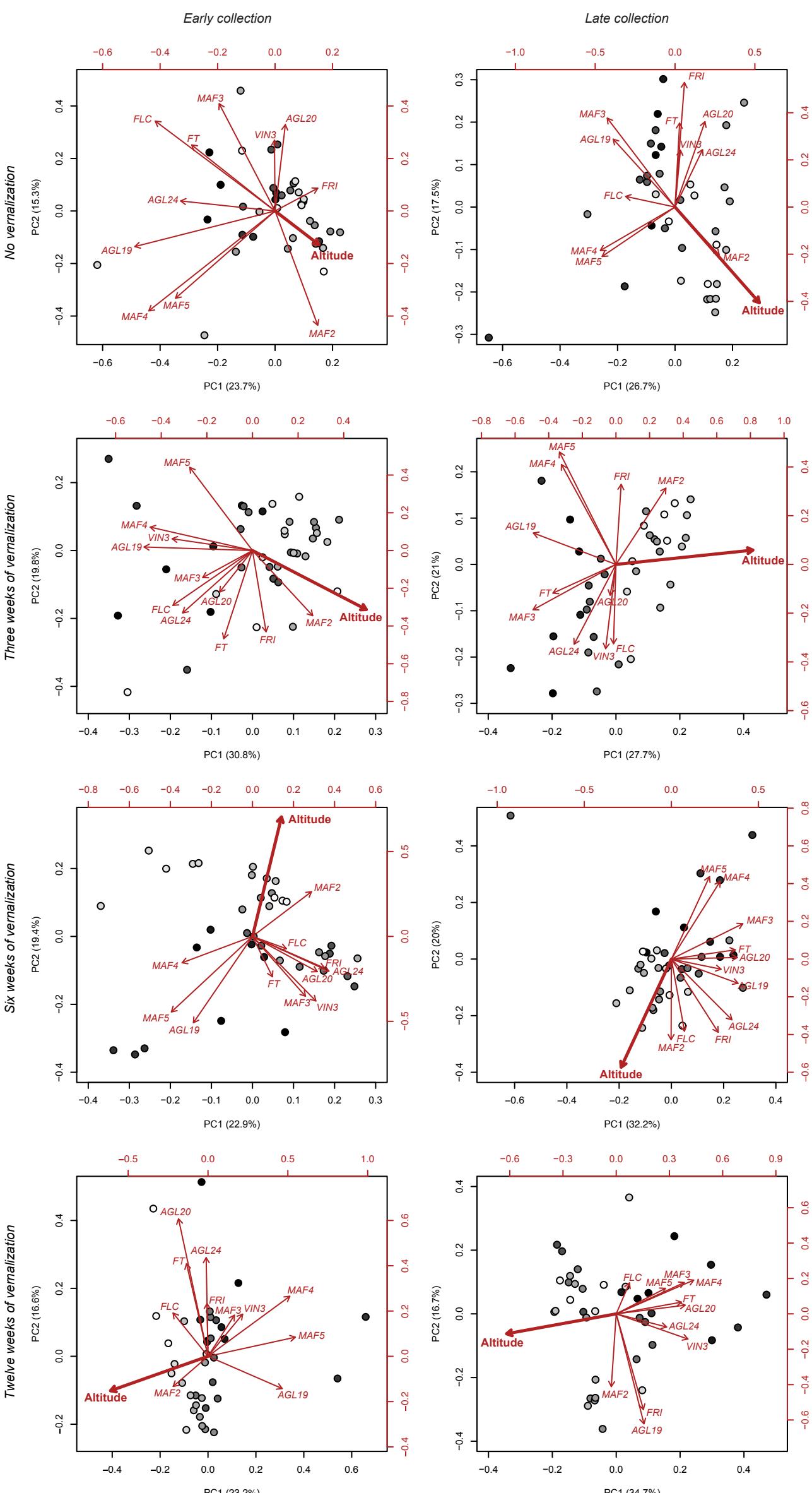


Figure S5: PCA's calculated with the gene expression data of 11 genes of the flowering pathway, separately for each vernalization treatment and collection time. Gradation from light to dark indicate altitudinal gradient from high to low. Mostly altitude strongly correlated with one or both principal components.

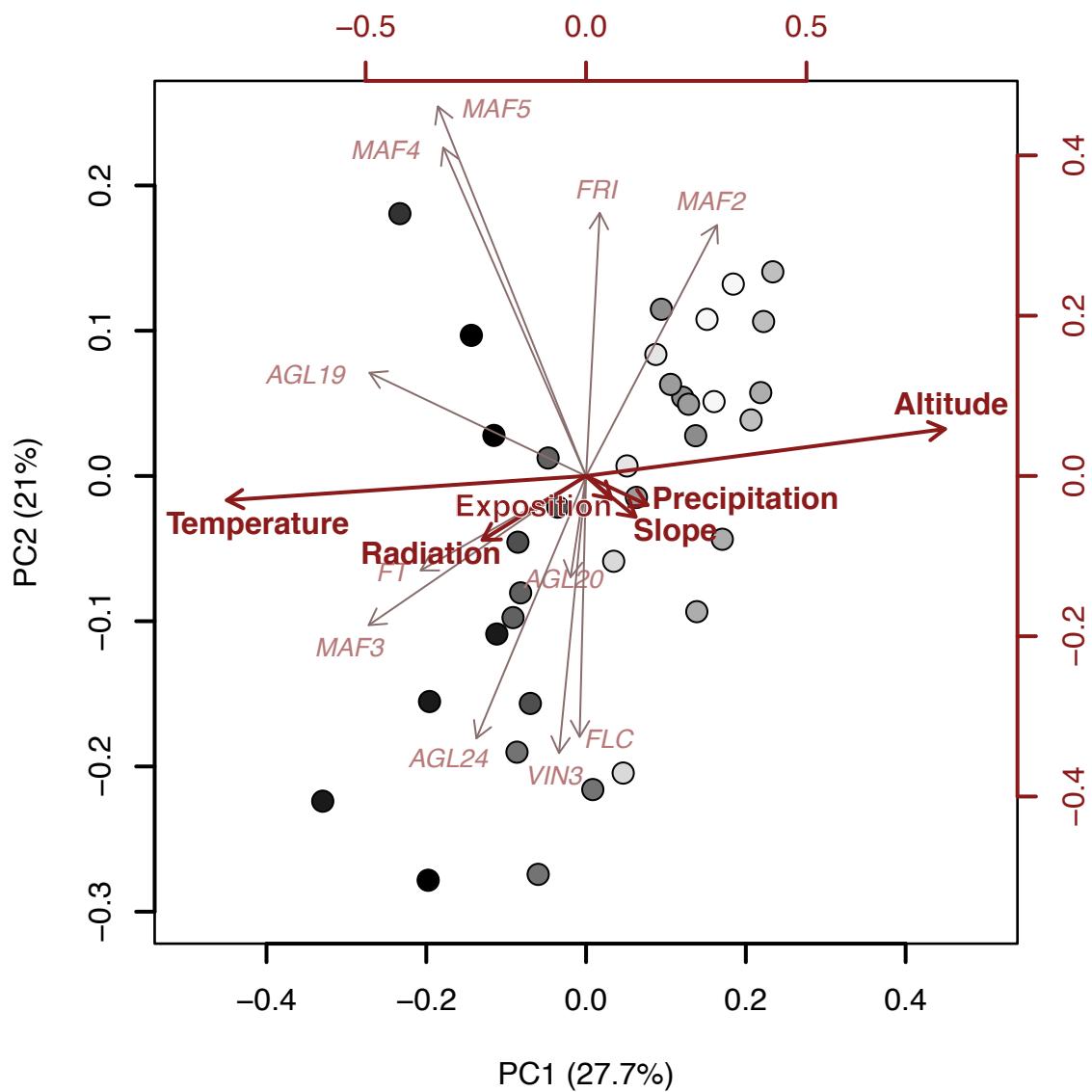


Figure S6: PCA calculated with the gene expression data of 11 genes of the flowering pathway for plants vernalized for three treatments from late collection time. Gradation from light to dark indicates altitudinal gradient from high to low. Altitude and environmental variables (average yearly temperature, average yearly precipitation, yearly solar radiation, exposition and slope) were correlated with the principal components.

Table S1: Effect of altitude on flowering date, including non-vernalized plants. A linear mixed effect model was used with altitude (linear and quadratic) and vernalization treatment including their interactions as fixed factors and genotypes as random factors. Heteroscedasticity between treatments was accounted for by using the “weights” argument in the lme function.

	Estimate	SE	T_{df}^b	p-value
Altitude, linear	54.975	26.131	2.104 ₃₉₈	0.036
Altitude, quadratic	-21.373	26.056	-0.820 ₃₉₈	0.413
3 weeks vernalization	-18.527	1.205	-15.380 ₃₉₈	<0.001
6 weeks vernalization	-25.074	1.181	-21.239 ₃₉₈	<0.001
12 weeks vernalization	-34.329	1.177	-29.164 ₃₉₈	<0.001
Altitude (linear) x 3 weeks	-20.217	24.539	-0.824 ₃₉₈	0.410
Altitude (quadratic) x 3 weeks	-18.113	24.459	-0.741 ₃₉₈	0.459
Altitude (linear) x 6 weeks	-32.585	24.058	-1.354 ₃₉₈	0.176
Altitude (quadratic) x 6 weeks	-9.538	23.978	-0.398 ₃₉₈	0.691
Altitude (linear) x 12 weeks	-35.685	23.986	-1.488 ₃₉₈	0.138
Altitude (quadratic) x 12 weeks	-11.697	23.908	-0.489 ₃₉₈	0.625

^bT-values and degrees of freedom

Table S2: Effect of altitude on flowering date of vernalized plants without the genotype from the highest altitude, E012. A linear mixed effect model was used with altitude (linear and quadratic) and vernalization treatment including their interactions as fixed factors and genotypes as random factors. Heteroscedasticity between treatments was accounted for by using the “weights” argument in the lme function.

	Estimate	SE	T _{df} ^b	P
Altitude, linear	42.087	9.733	4.324 ₂₇₁	<0.001
Altitude, quadratic	-21.987	9.774	-2.250 ₂₇₁	0.025
6 weeks vernalization	-6.506	0.321	-20.288 ₂₇₁	<0.001
12 weeks vernalization	-15.764	0.305	-51.650 ₂₇₁	<0.001
Altitude (linear) x 6 weeks	-12.156	5.468	-2.223 ₂₇₁	0.027
Altitude (quadratic) x 6 weeks	4.082	5.467	0.747 ₂₇₁	0.456
Altitude (linear) x 12 weeks	-15.362	5.200	-2.954 ₂₇₁	0.003
Altitude (quadratic) x 12 weeks	-4.179	5.194	-0.805 ₂₇₁	0.422

^bT-values and degrees of freedom

Table S3: Effect of altitude on flowering date of vernalized plants including genotypes E001 and E003. A linear mixed effect model was used with altitude (linear and quadratic) and vernalization treatment including their interactions as fixed factors and genotypes as random factors. Heteroscedasticity between treatments was accounted for by using the “weights” argument in the lme function.

	Estimate	SE	T _{df} ^b	P
Altitude, linear	-22.448	16.562	-1.355 ₃₃₈	0.176
Altitude, quadratic	8.007	16.525	0.485 ₃₃₈	0.628
6 weeks vernalization	-8.278	0.511	-16.190 ₃₃₈	<0.001
12 weeks vernalization	-17.728	0.504	-35.208 ₃₃₈	<0.001
Altitude (linear) x 6 weeks	30.414	9.544	3.187 ₃₃₈	0.002
Altitude (quadratic) x 6 weeks	-20.149	9.485	-2.124 ₃₃₈	0.034
Altitude (linear) x 12 weeks	32.765	9.399	3.486 ₃₃₈	<0.001
Altitude (quadratic) x 12 weeks	-25.635	9.345	-2.743 ₃₃₈	0.006

^bT-values and degrees of freedom

Table S4: Effect of yearly average temperature on flowering date of vernalized plants. A linear mixed effect model was used with temperature (linear and quadratic) and vernalization treatment including their interactions as fixed factors and genotypes as random factors. Heteroscedasticity between treatments was accounted for by using the “weights” argument in the lme function.

	Estimate	SE	T _{df} ^b	P
Temperature, linear	-30.990	9.873	-3.139 ₂₉₂	0.002
Temperature, quadratic	-33.743	9.837	-3.430 ₂₉₂	<0.001
6 weeks vernalization	-6.549	0.306	-21.414 ₂₉₂	<0.001
12 weeks vernalization	-15.799	0.292	-54.072 ₂₉₂	<0.001
Temperature (linear) x 6 weeks	8.632	5.358	1.611 ₂₉₂	0.108
Temperature (quadratic) x 6 weeks	7.957	5.327	1.494 ₂₉₂	0.136
Temperature (linear) x 12 weeks	10.860	5.110	2.125 ₂₉₂	0.034
Temperature (quadratic) x 12 weeks	5.598	5.092	1.099 ₂₉₂	0.272

^bT-value and degrees of freedom

Table S5: Genes examined and primers used in this study. Primer efficiency was calculated using LinReg. AL = Amplicon length (bp)

Gene	Gene ID	AL	Primer forward	Primer reverse	Probe	Efficiency
<i>ACT2</i> *	AT3G18780	74	TTCCGCTCTTCTTCCAAG	CCATTGTCACACACGATTGG	102	1.969
<i>PDF2</i> *	AT1G13320	84	ATTCCGATAGTCGACCAAGC	AACATCAACATCTGGGTCTCA	22	1.842
<i>SAM2</i> *	AT4G01850	139	CTCTAATGCCCGAGCTT	TGCTATCAGGGTCTGCTCA	148	1.796
<i>UBC9</i> *	AT4G27960	84	CATCTGAAGGAGCAGTGGAG	GGGTTTGGATCCGTTAACAA	108	1.815
<i>AGL19</i>	AT4G22950	75	ACCGAAGCTTGAGCAGGATA	CCTCTGCCTCAACTTCTCAAT	142	1.782
<i>AGL20/SOC1</i>	AT2G45660	62	CAAACCCTTTAGCCAATCG	GAGTTTGCCCCCTCACCA	143	1.636
<i>AGL24</i>	AT4G24540	74	AGCCGTGTGTCAGAAAAGAAG	AATTCCGATCCCCGTTCT	136	1.525
<i>FLC</i>	AT5G10140	60	GAUTGCCCTCTCCGTGACTA	TTCTCAACAAAGCTCAACATGAG	142	1.627
<i>FRI</i>	AT4G00650	142	CAGTCACCGCTGGCATTTA	CCAAGCTAACAAATTGCTCTTG	121	1.776
<i>FT</i>	AT1G65480	70	GGTGGAGAAGACCTCAGGAA	GGTGCTAGGACTTGGAACATC	138	1.738
<i>MAF1</i>	AT1G77080	60	TGCCTCCGGAAAACCTCTATG	GGCTGAACAGCGCTTCTAT	69	1.925
<i>MAF2</i>	AT5G65050	130	GGCTCCGGAAAACCTCTACAA	GAGTGGCAGATAATTCCGAG	16	1.987
<i>MAF3</i>	AT5G65060	96	ACAGAACTAATGATGGAGGATATGAA	CTTCTTCCCCACCTGGCTA	7	1.721
<i>MAF4</i>	AT5G65070	91	TGAAGACCCATCAAGAGAAGG	GACTTCTTCATCTCCCCATCTT	146	1.639
<i>MAF5</i>	AT5G65080	117	TCCACCGGCAAACCTCTACA	CTGAGTTTGTCTCAAGATCC	101	1.800
<i>VIN3</i>	AT5G57380	68	CGCGTATTGCGGTAAAGATAA	TCTCTTCGCCACCTTCACT	67	1.579

* these genes were used as reference genes, although *SAM2* had to be excluded due to instable expression.

Table S6: Effect of (logarithmic) gene expression on flowering time separately for early and late collection time, including genotypes E001 and E003.

Linear mixed effects models were used with genes included as fixed factors and genotypes as random factors. Significant gene expression effects are shown in bold.

Gene	Early Collection					Late Collection				
	Estimate	SE	T _{df} ^b	P	P ^c	Estimate	SE	T _{df} ^b	P	P ^c
<i>AGL19</i>	-3.598	0.539	-6.672₁₀₂	<0.001	**	-3.108	0.569	-5.465₉₆	<0.001	*
<i>FLC</i>	2.516	0.590	4.266₁₀₂	<0.001	.	1.957	0.316	6.201₉₆	<0.001	
<i>AGL20</i>	-1.309	0.477	-2.742₁₀₂	0.007		-0.525	0.485	-1.083 ₉₆	0.281	
<i>MAF4</i>	6.211	2.832	2.193₁₀₂	0.031	.	12.504	2.977	4.200₉₆	<0.001	*
<i>MAF2</i>	1.525	0.710	2.149₁₀₂	0.034		-0.805	0.760	-1.058 ₉₆	0.293	
<i>VIN3</i>	1.888	1.065	1.773 ₁₀₂	0.079	.	-0.303	0.511	-0.592 ₉₆	0.555	
<i>AGL24</i>	1.259	0.928	1.356 ₁₀₂	0.178		-1.384	0.881	-1.572 ₉₆	0.119	
<i>MAF3</i>	0.348	0.446	0.781 ₁₀₂	0.437		-0.013	0.362	-0.037 ₉₆	0.971	
<i>MAF5</i>	-1.086	2.175	-0.500 ₁₀₂	0.618		-2.035	1.242	-1.638 ₉₆	0.105	
<i>FRI</i>	-0.610	1.256	-0.486 ₁₀₂	0.628		2.734	1.367	2.001 ₉₆	0.048	
<i>FT</i>	0.127	1.004	0.126 ₁₀₂	0.900		-1.523	0.389	-3.917₉₆	<0.001	*

^bT-value and degrees of freedom

^csignificant P-values of linear mixed effects models where the mean gene expression of each gene (per genotype and treatment) was tested against the mean flowering time of each treatment, separately for the two collection times. *: P-value < 0.05; **: P-value < 0.01

Table S7: Correlation coefficients between gene regulation of the vernalization pathway and flowering time including genotypes E001 and E003.

Gene regulatory network analysis revealed that several edges (Pearson correlations between gene pairs) of the vernalization pathway correlated significantly with flowering time in vernalized plants, indicating that flowering time can be explained by the regulation of genes analysed in this study.

Edge	Correlation	T _{df} ^b	P	P adj. ^c
<i>AGL20-AGL24</i>	-0.667	-5.740 ₄₁	<0.001	***
<i>FT-AGL20</i>	-0.562	-4.349 ₄₁	<0.001	***
<i>VIN3-FLC</i>	-0.479	-3.493 ₄₁	0.001	**
<i>VIN3-AGL19</i>	-0.449	-3.218 ₄₁	0.003	*
<i>FLC-FT</i>	0.383	2.654 ₄₁	0.011	*
<i>MAF3-AGL20</i>	0.326	2.123 ₃₈	0.040	ns
<i>VIN3-MAF3</i>	0.320	2.080 ₃₈	0.044	ns
<i>MAF3-FT</i>	-0.239	-1.514 ₃₈	0.138	ns
<i>MAF2-AGL20</i>	-0.229	-1.509 ₄₁	0.139	ns
<i>VIN3-MAF4</i>	0.195	1.274 ₄₁	0.210	ns
<i>MAF2-FT</i>	0.181	1.179 ₄₁	0.245	ns
<i>MAF4-AGL20</i>	0.162	1.048 ₄₁	0.301	ns
<i>MAF5-FT</i>	-0.122	-0.788 ₄₁	0.435	ns
<i>VIN3-MAF5</i>	0.104	0.669 ₄₁	0.507	ns
<i>VIN3-MAF2</i>	-0.103	-0.665 ₄₁	0.509	ns
<i>MAF4-FT</i>	-0.100	-0.646 ₄₁	0.522	ns
<i>FLC-AGL20</i>	-0.080	-0.513 ₄₁	0.610	ns
<i>MAF5-AGL20</i>	0.058	0.373 ₄₁	0.711	ns
<i>VIN3-AGL24</i>	-0.052	-0.334 ₄₁	0.740	ns
<i>FRI-FLC</i>	0.023	0.150 ₄₁	0.882	ns

^bT-value and degrees of freedom

^cP-values were adjusted following Benjamini and Hochberg (1995). *** adjusted P-value < 0.001; ** adjusted P-value < 0.01; * adjusted P-value < 0.05; ns: adjusted P-value > 0.05

Table S8: Effect of altitude on gene expression of vernalized plants. Linear mixed effect models were calculated separately for each gene and collection time, with altitude (linear and quadratic) and treatment as well as their interactions as fixed and genotype as random factors.

Genes, collection	Altitude (lin.)		Altitude (quad.)		6 wks vern.		12 wks vern.		Alt (lin)×6 wks		Alt (quad)×6 wks		Alt (lin)×12 wks		Alt(quad)×12 wks	
	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b	t _{df}	p ^b
AGL19, early	-3.046 ₉₃	0.0030 *	2.635 ₉₃	0.0099 *	15.864 ₉₃	<0.0001 ****	45.109 ₉₃	<0.0001 ****	-1.513 ₉₃	0.1336	-2.012 ₉₃	0.0471	0.729 ₉₃	0.4677	-5.323 ₉₃	<0.0001 ****
AGL19, late	-4.714 ₉₀	<0.0001 ****	1.296 ₉₀	0.1984	11.505 ₉₀	<0.0001 ****	27.662 ₉₀	<0.0001 ****	3.027 ₉₀	0.0032 *	-2.358 ₉₀	0.0205	3.284 ₉₀	0.0015 **	-3.600 ₉₀	0.0005 **
AGL20, early	-0.147 ₉₃	0.8835	1.764 ₉₃	0.0810	-1.037 ₉₃	0.3024	-1.180 ₉₃	0.2410	-0.634 ₉₃	0.5276	-2.181 ₉₃	0.0317	0.428 ₉₃	0.6698	0.096 ₉₃	0.9235
AGL20, late	1.044 ₉₀	0.2991	3.829 ₉₀	0.0002 **	4.163 ₉₀	<0.0001 ***	7.929 ₉₀	<0.0001 ****	-1.778 ₉₀	0.0788	-1.776 ₉₀	0.0791	-3.553 ₉₀	0.0006 **	-3.375 ₉₀	0.0011 **
AGL24, early	-0.795 ₉₃	0.4289	1.407 ₉₃	0.1628	-1.429 ₉₃	0.1563	3.202 ₉₃	0.0019 **	0.365 ₉₃	0.7159	-1.622 ₉₃	0.1083	0.599 ₉₃	0.5505	-0.518 ₉₃	0.6059
AGL24, late	-2.248 ₉₀	0.0270	-0.664 ₉₀	0.5082	-0.949 ₉₀	0.3453	5.043 ₉₀	<0.0001 ****	2.186 ₉₀	0.0314	0.801 ₉₀	0.4252	0.570 ₉₀	0.5704	1.320 ₉₀	0.1903
FLC, early	0.069 ₉₃	0.9453	3.357 ₉₃	0.0011 **	-15.095 ₉₃	<0.0001 ****	-39.007 ₉₃	<0.0001 ****	0.223 ₉₃	0.8244	-3.881 ₉₃	0.0002 **	3.554 ₉₃	0.0006 **	-0.644 ₉₃	0.5213
FLC, late	0.660 ₉₀	0.5109	0.580 ₉₀	0.5635	-15.903 ₉₀	<0.0001 ****	-36.409 ₉₀	<0.0001 ****	1.817 ₉₀	0.0725	-0.900 ₉₀	0.3707	1.452 ₉₀	0.1499	2.859 ₉₀	0.0053 *
FRI, early	1.276 ₉₃	0.2051	0.796 ₉₃	0.4280	4.611 ₉₃	<0.0001 ****	2.575 ₉₃	0.0116 *	-1.797 ₉₃	0.0755	-2.009 ₉₃	0.0474	-0.776 ₉₃	0.4394	1.045 ₉₃	0.2988
FRI, late	0.848 ₉₀	0.3986	1.603 ₉₀	0.1124	0.877 ₉₀	0.3827	5.766 ₉₀	<0.0001 ****	-0.198 ₉₀	0.8434	-3.460 ₉₀	0.0008 **	-1.679 ₉₀	0.0967	-1.928 ₉₀	0.0570
FT, early	0.264 ₉₃	0.7922	0.832 ₉₃	0.4077	-1.246 ₉₃	0.2160	8.259 ₉₃	<0.0001 ****	-1.299 ₉₃	0.1970	0.674 ₉₃	0.5019	-1.065 ₉₃	0.2898	1.025 ₉₃	0.3081
FT, late	-4.800 ₈₉	<0.0001 ****	2.767 ₈₉	0.0069 *	6.538 ₈₉	<0.0001 ****	18.493 ₈₉	<0.0001 ****	4.452 ₈₉	<0.0001 ***	-0.534 ₈₉	0.5949	1.834 ₈₉	0.0699	-0.561 ₈₉	0.5759
MAF2, early	2.347 ₉₃	0.0211	-0.120 ₉₃	0.9049	1.146 ₉₃	0.2546	-3.098 ₉₃	0.0026 **	-0.881 ₉₃	0.3807	-1.022 ₉₃	0.3096	-1.999 ₉₃	0.0486	-0.587 ₉₃	0.5586
MAF2, late	1.621 ₉₀	0.1085	1.288 ₉₀	0.2012	-3.956 ₉₀	0.0002 ***	-5.803 ₉₀	<0.0001 ****	-1.302 ₉₀	0.1962	-2.971 ₉₀	0.0038 *	-0.171 ₉₀	0.8648	-1.096 ₉₀	0.2759
MAF3, early	-2.252 ₉₃	0.0267	0.783 ₉₃	0.4354	-0.999 ₉₃	0.3202	-11.564 ₉₃	<0.0001 ****	-0.493 ₉₃	0.6231	-1.958 ₉₃	0.0533	2.524 ₉₃	0.0133 *	-1.421 ₉₃	0.1587
MAF3, late	-1.230 ₉₀	0.2219	0.587 ₉₀	0.5587	-4.436 ₉₀	<0.0001 ****	-8.521 ₉₀	<0.0001 ****	-0.502 ₉₀	0.6171	-1.474 ₉₀	0.1439	-3.292 ₉₀	0.0014 **	1.152 ₉₀	0.2525
MAF4, early	-1.938 ₉₂	0.0557	3.759 ₉₂	0.0003 **	-3.840 ₉₂	0.0002 ***	-7.211 ₉₂	<0.0001 ****	0.711 ₉₂	0.4791	-4.320 ₉₂	<0.0001 ***	1.214 ₉₂	0.2279	-4.462 ₉₂	<0.0001 ***
MAF4, late	-1.327 ₉₀	0.1879	2.014 ₉₀	0.0470	-4.031 ₉₀	0.0001 ***	-6.643 ₉₀	<0.0001 ****	-0.842 ₉₀	0.4021	-1.976 ₉₀	0.0513	-0.898 ₉₀	0.3716	0.741 ₉₀	0.4606
MAF5, early	-0.732 ₉₂	0.4661	-0.006 ₉₂	0.9955	1.423 ₉₂	0.1582	1.326 ₉₂	0.1880	-2.229 ₉₂	0.0283	1.869 ₉₂	0.0647	-2.129 ₉₂	0.0359	2.210 ₉₂	0.0296
MAF5, late	-1.820 ₉₀	0.0720	0.972 ₉₀	0.3337	-0.969 ₉₀	0.3350	-0.171 ₉₀	0.8646	1.193 ₉₀	0.2361	-0.656 ₉₀	0.5134	2.507 ₉₀	0.0140 *	-1.286 ₉₀	0.2016
VIN3, early	-3.087 ₉₂	0.0027 *	1.138 ₉₂	0.2581	-1.522 ₉₂	0.1313	-1.482 ₉₂	0.1418	1.555 ₉₂	0.1233	0.371 ₉₂	0.7114	0.059 ₉₂	0.9532	-0.734 ₉₂	0.4646
VIN3, late	-0.435 ₉₀	0.6644	-0.052 ₉₀	0.9590	6.105 ₉₀	<0.0001 ****	10.472 ₉₀	<0.0001 ****	-0.696 ₉₀	0.4881	0.612 ₉₀	0.5422	-2.677 ₉₀	0.0088 *	1.060 ₉₀	0.2922

^b original p-values are shown in this table. These were then corrected for multiple testing following Benjamini and Hochberg (1995) separately for each factor. Asterisks denote the significance of these adjusted p-values. * : adjusted p-value < 0.05; ** : adjusted p-value < 0.01; *** : adjusted p-value < 0.001; **** : adjusted p-value < 0.0001

Table S9: Gene regulatory network analysis show that some edges could be associated with altitude. However, after adjusting for multiple testing, none of the effects remained significant.

Gene 1	Gene 2	Correlation	T_{df}^b	P	P adj.^c
FT	AGL20	-0.722	-3.464 ₁₁	0.0053	0.1059
MAF5	AGL20	0.497	1.901 ₁₁	0.0838	0.4503
VIN3	MAF5	0.495	1.888 ₁₁	0.0857	0.4503
FLC	AGL20	0.484	1.835 ₁₁	0.0937	0.4503
MAF4	AGL20	0.428	1.570 ₁₁	0.1448	0.4503
VIN3	MAF2	0.415	1.513 ₁₁	0.1584	0.4503
AGL20	AGL24	-0.397	-1.433 ₁₁	0.1796	0.4503
VIN3	AGL19	-0.396	-1.431 ₁₁	0.1801	0.4503
MAF3	AGL20	0.385	1.319 ₁₀	0.2164	0.4810
MAF2	FT	-0.283	-0.977 ₁₁	0.3494	0.6989
VIN3	FLC	0.224	0.763 ₁₁	0.4617	0.7394
FLC	FT	0.222	0.754 ₁₁	0.4667	0.7394
FRI	FLC	-0.215	-0.730 ₁₁	0.4806	0.7394
VIN3	AGL24	-0.191	-0.645 ₁₁	0.5322	0.7603
VIN3	MAF3	0.163	0.523 ₁₀	0.6126	0.8158
VIN3	MAF4	0.110	0.367 ₁₁	0.7209	0.8158
MAF5	FT	-0.103	-0.342 ₁₁	0.7385	0.8158
MAF3	FT	-0.095	-0.303 ₁₁	0.7683	0.8158
MAF4	FT	0.088	0.293 ₁₁	0.7750	0.8158
MAF2	AGL20	0.070	0.233 ₁₁	0.8200	0.8200

^bT-value and degrees of freedom

^cP-values were adjusted following Benjamini and Hochberg (1995)

Table S10: Environmental parameters for all original collection sites, extrapolated with interpolated GIS data (ARCMAP 10; ESRI). Genotype E001 and E003 (in italic) were excluded from analyses.

Altitude	Genotype	Yearly precipitation	Yearly solar radiation	Average winter temperature	Average summer temperature	Average yearly temperature	Maximal winter temperature	Maximal summer temperature	Maximal yearly temperature	Minimal winter temperature	Minimal summer temperature	Minimal yearly temperature	Habitat exposition	Habitat slope
800	E001	12503	15731	2.02	12.35	7.18	6.16	17.92	12.04	-1.21	8.19	3.49	7	9
850	E002	7771	17429	2.40	13.01	7.70	6.65	19.32	12.98	-1.35	8.19	3.42	190	11
900	E003	7320	11197	2.93	13.64	8.28	6.91	19.76	13.34	-1.24	8.33	3.54	286	17
1000	E004	8261	22824	2.08	12.57	7.32	6.40	18.91	12.65	-1.73	7.74	3.01	210	38
1030	E005	8743	17947	1.78	12.23	7.00	5.91	18.11	12.01	-2.03	7.35	2.66	128	23
1360	E006	15503	19286	-0.33	9.80	4.73	4.14	15.15	9.64	-3.38	5.65	1.14	175	16
2040	E007	10407	21887	-4.13	6.07	0.97	0.80	11.31	6.05	-8.39	1.52	-3.44	189	21
1719	E008	8280	16834	-1.32	8.33	3.50	2.91	13.29	8.10	-4.73	4.15	-0.29	65	18
1850	E009	10631	14401	-2.84	6.36	1.75	1.25	10.65	5.95	-6.31	2.21	-2.05	318	28
2012	E011	10064	19986	-2.84	6.41	1.78	0.86	10.10	5.48	-6.58	1.93	-2.32	93	47
2700	E012	14172	22404	-5.57	2.88	-1.34	-1.47	6.34	2.43	-8.42	-0.49	-4.46	258	34
1368	E014	15550	18899	-0.36	9.77	4.70	4.07	15.05	9.56	-3.44	5.58	1.07	176	12
1730	E015	8359	16834	-1.34	8.31	3.48	2.81	13.13	7.97	-4.82	4.05	-0.39	65	18
1792	E016	8615	16619	-1.55	8.05	3.24	2.71	12.97	7.84	-4.92	3.93	-0.49	113	6
1949	E017	9394	17179	-1.97	7.51	2.76	2.25	12.25	7.25	-5.35	3.41	-0.97	88	29