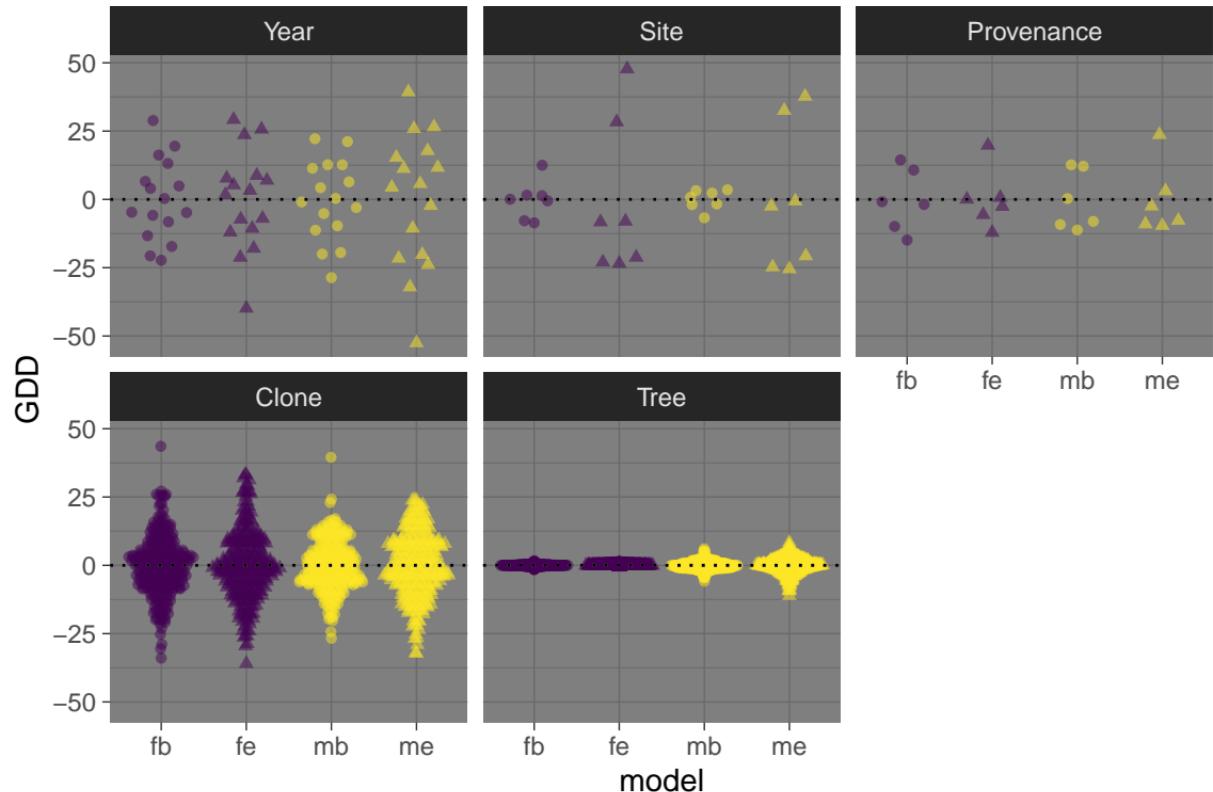


Offset medians

event begin end Sex FEMALE MALE

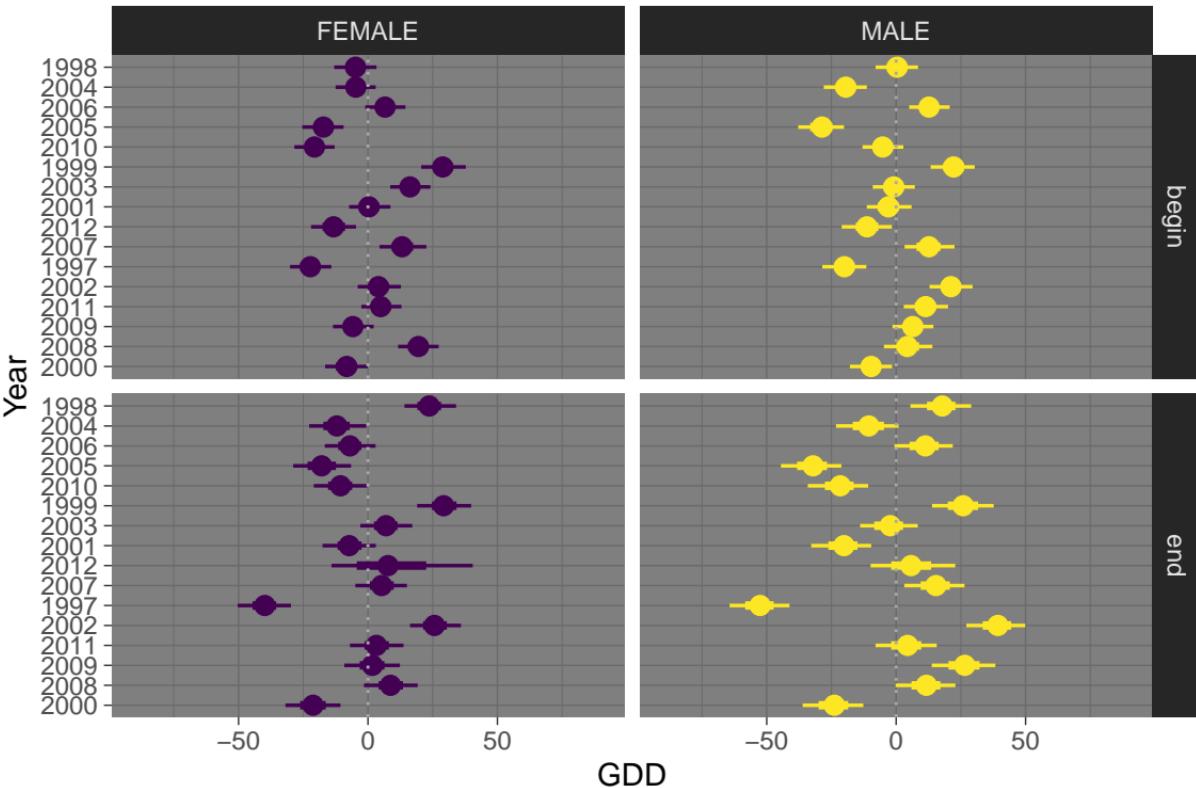


2000 draws from posterior

Year offsets

Ordered warmest to coldest MAT

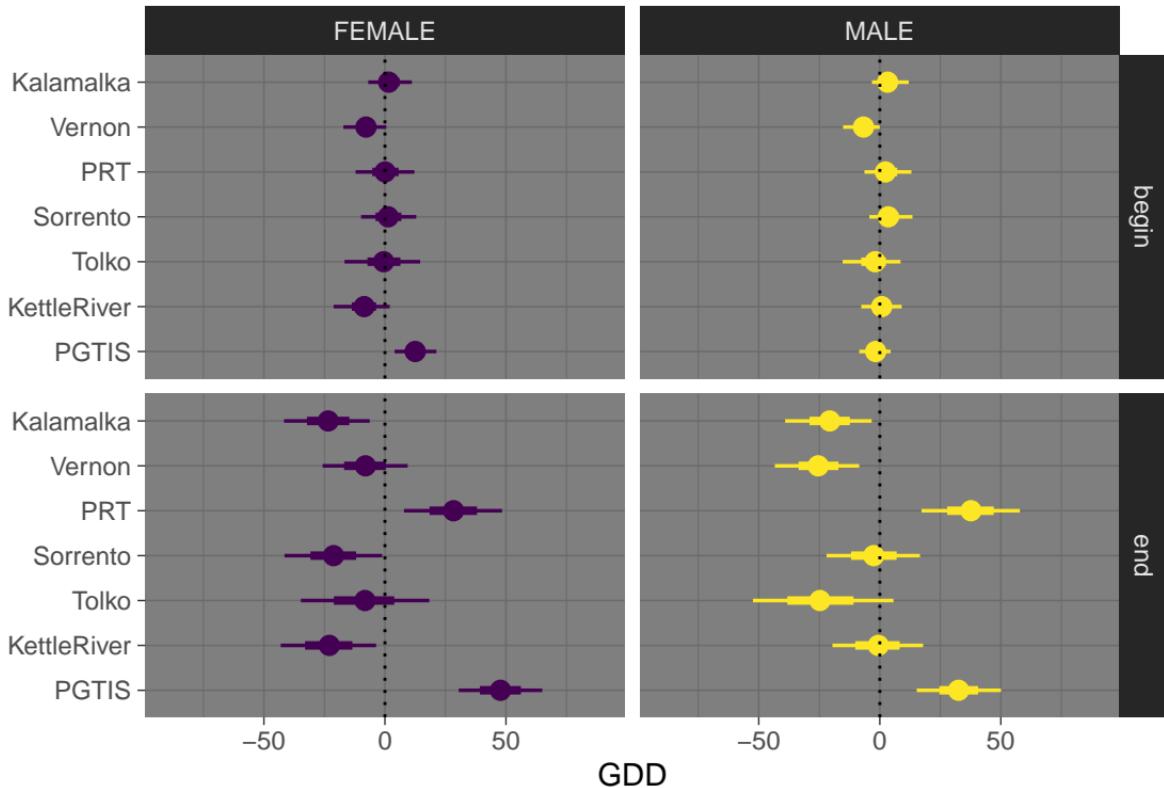
Sex ● FEMALE ● MALE



Site offsets

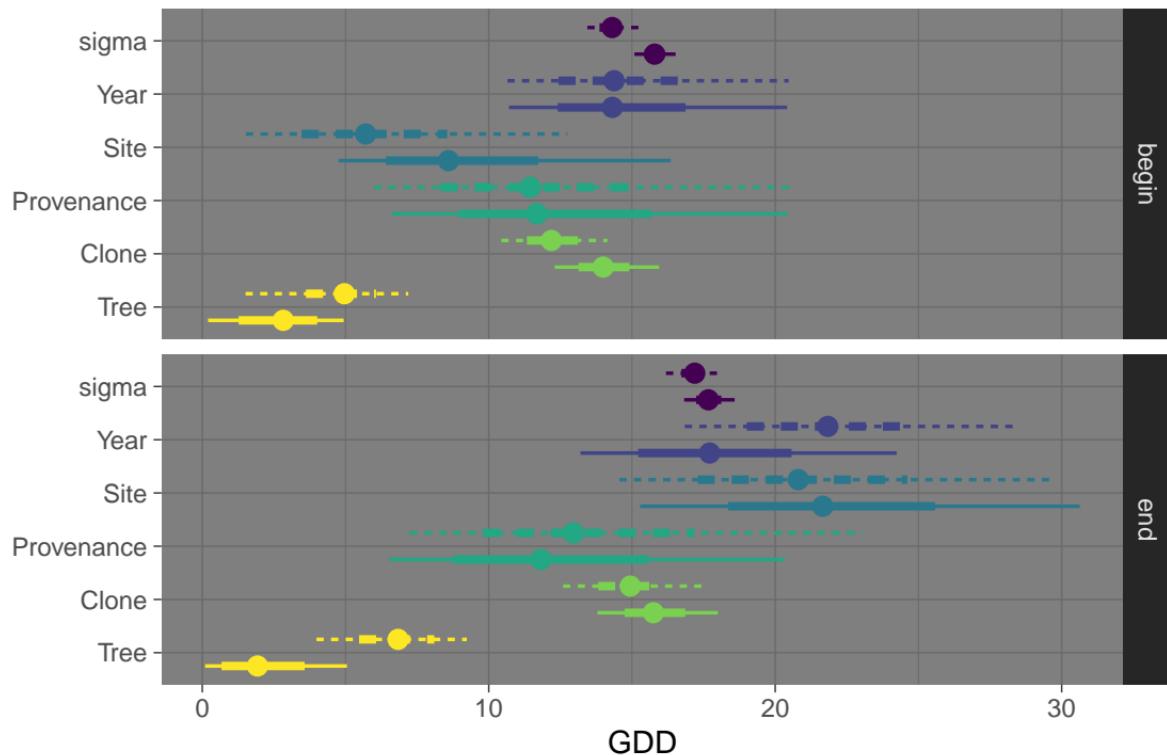
Ordered warmest to coldest MAT

Sex FEMALE MALE



Standard deviation of pop mean & offsets

Sex — FEMALE — MALE

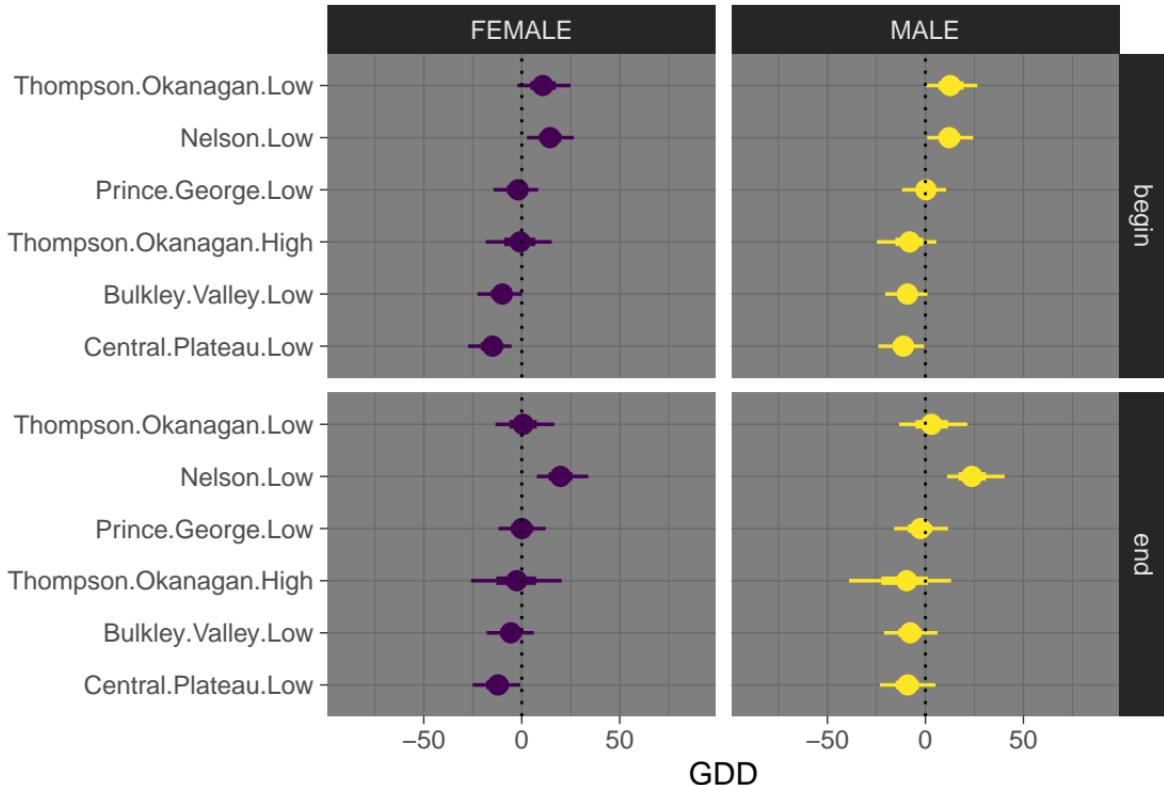


2000 draws from the posterior

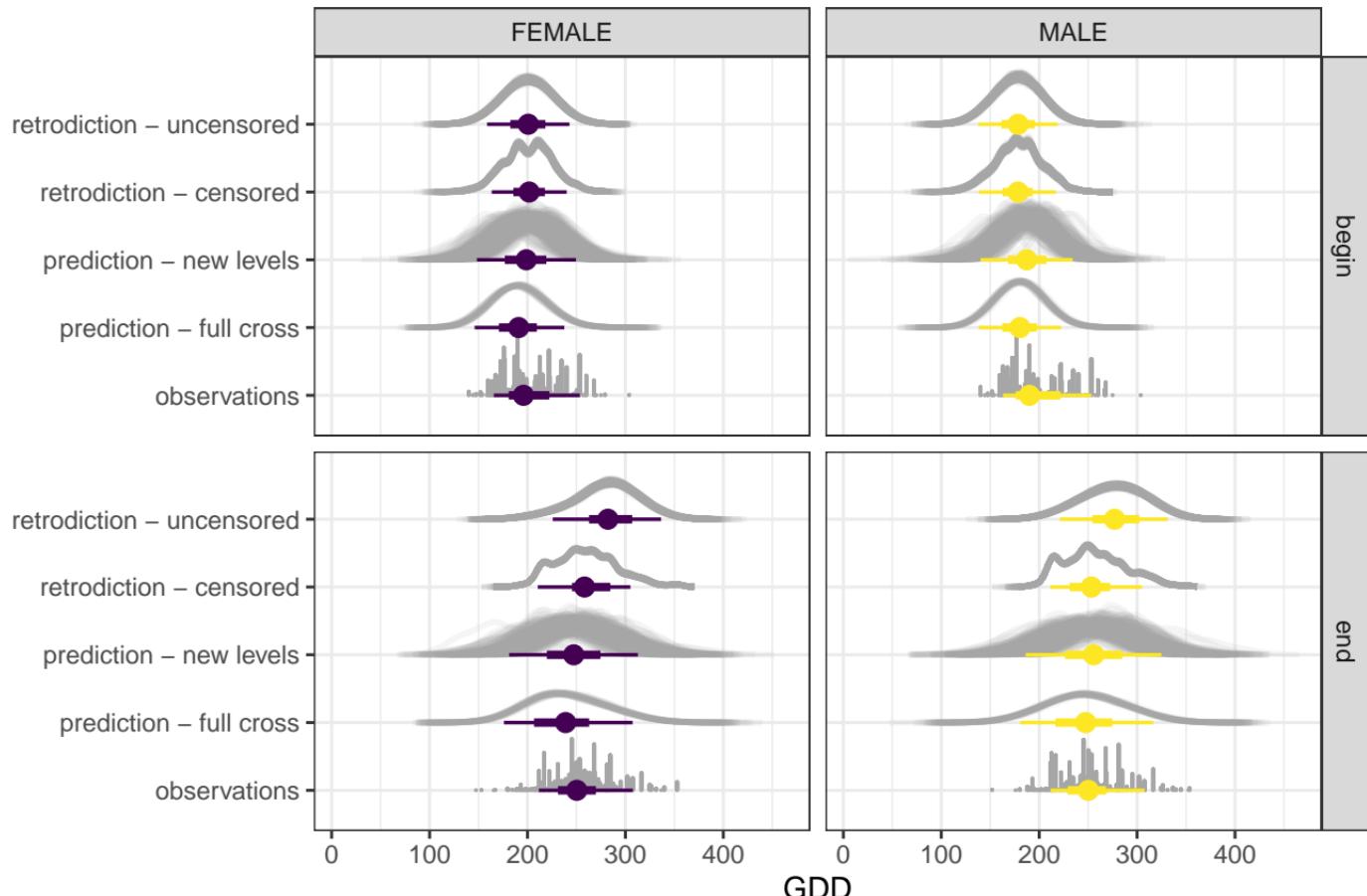
Provenance offsets

Ordered warmest to coldest MAT

Sex FEMALE MALE

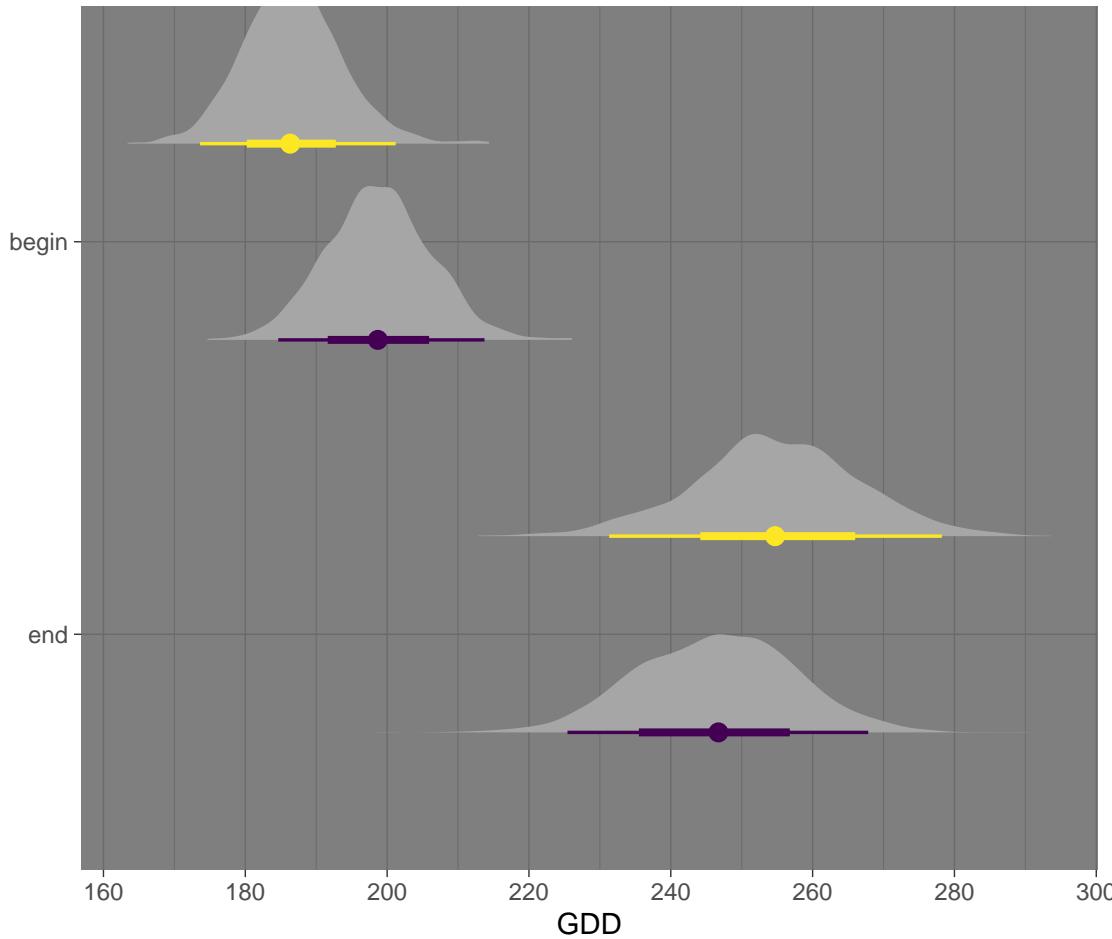


Modeled and observed flowering events



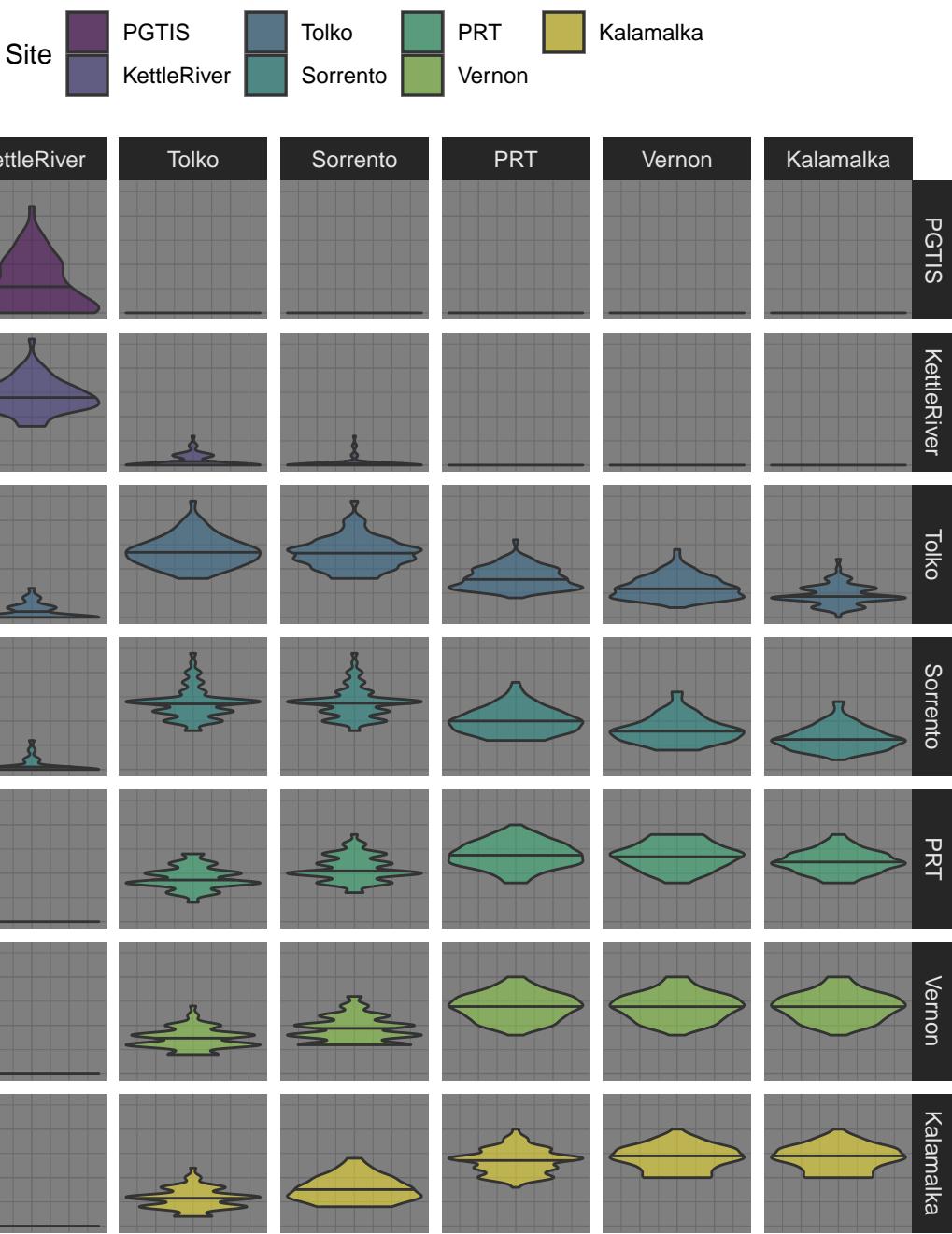
Population mean

Sex FEMALE MALE



Days of flowering overlap between sites

1945–2012

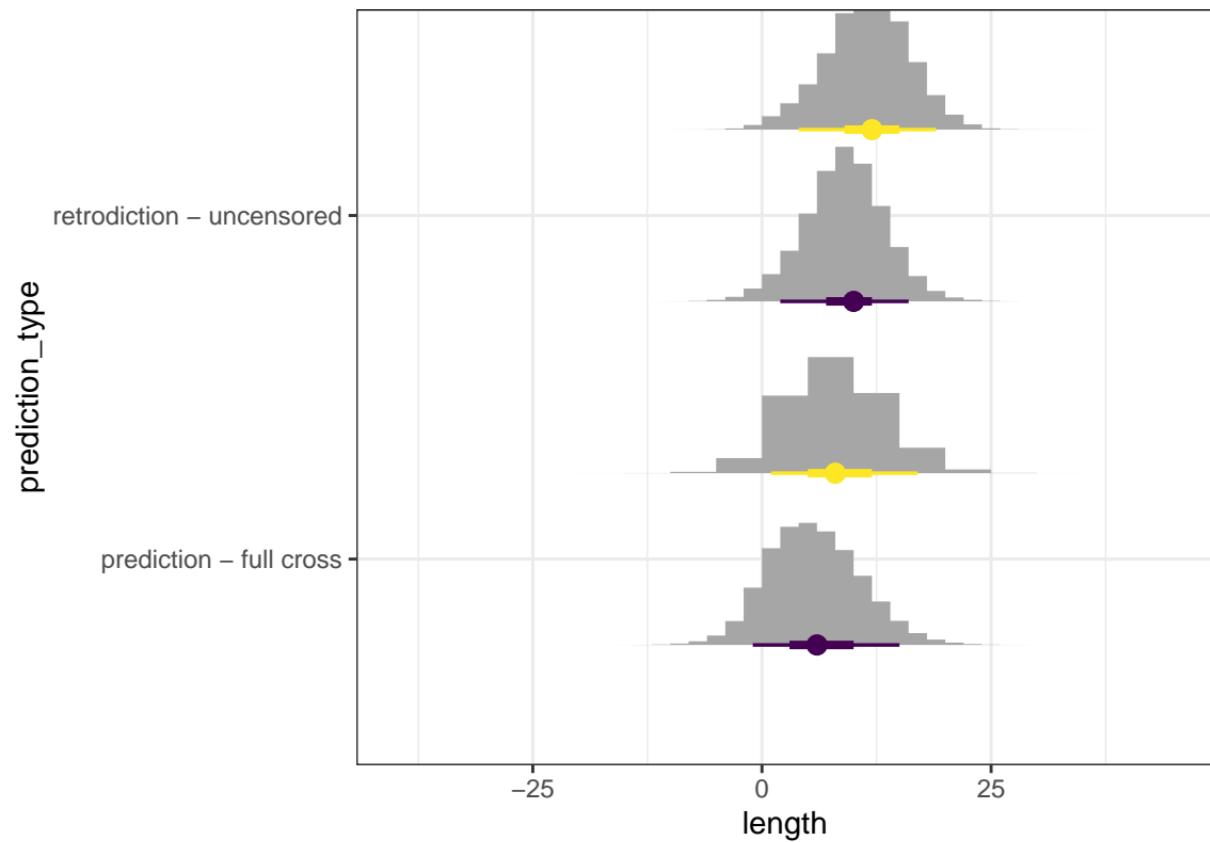


30 forcing samples from the model translated into DoY of flowering event for 7 Sites 1945–2012.

Then calculated median DoY across samples and used those to construct flowering period intervals (begin to end). Then determined the intersection of those intervals for all sites and years

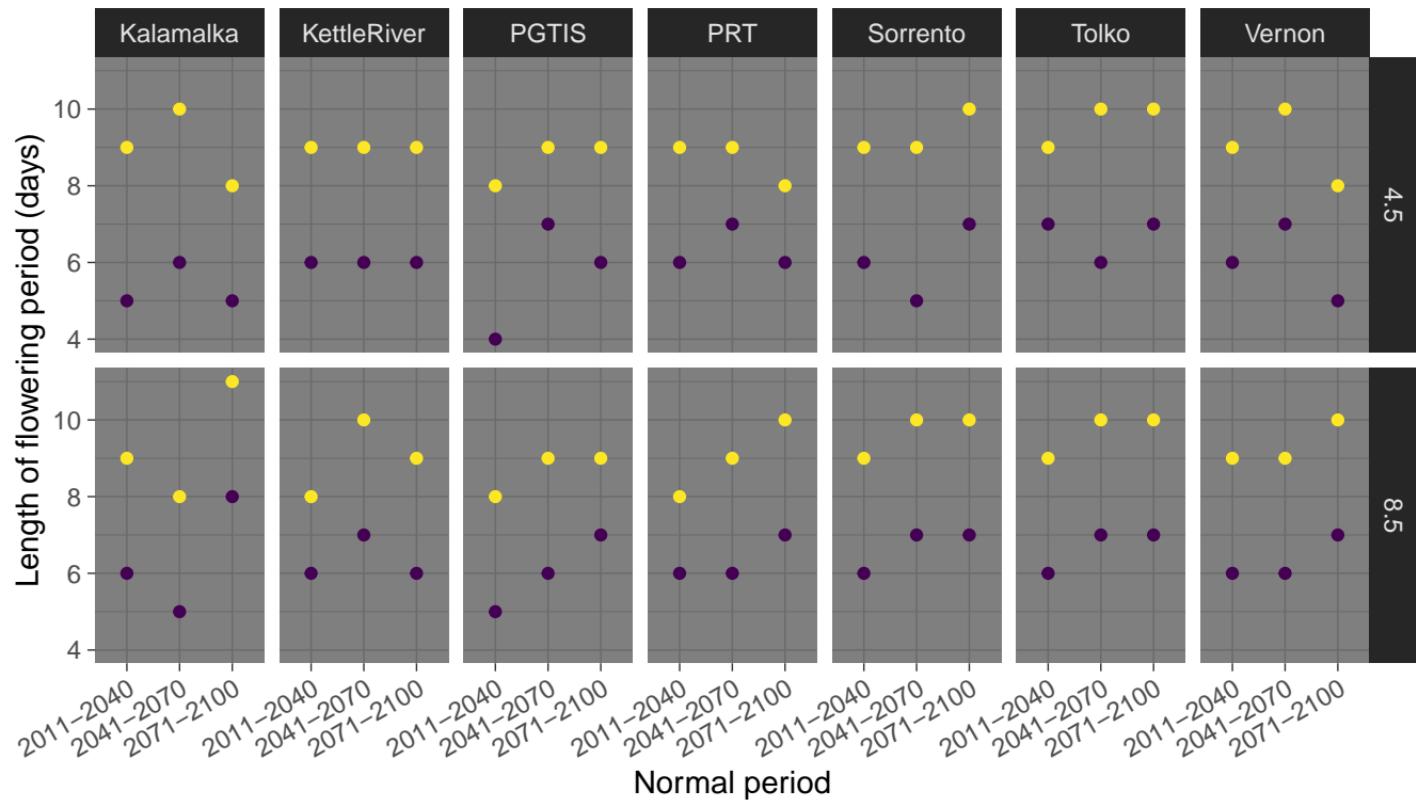
Length of phenological period for individuals

Sex ● FEMALE ○ MALE



Future flowering period median length

Sex ● FEMALE ● MALE

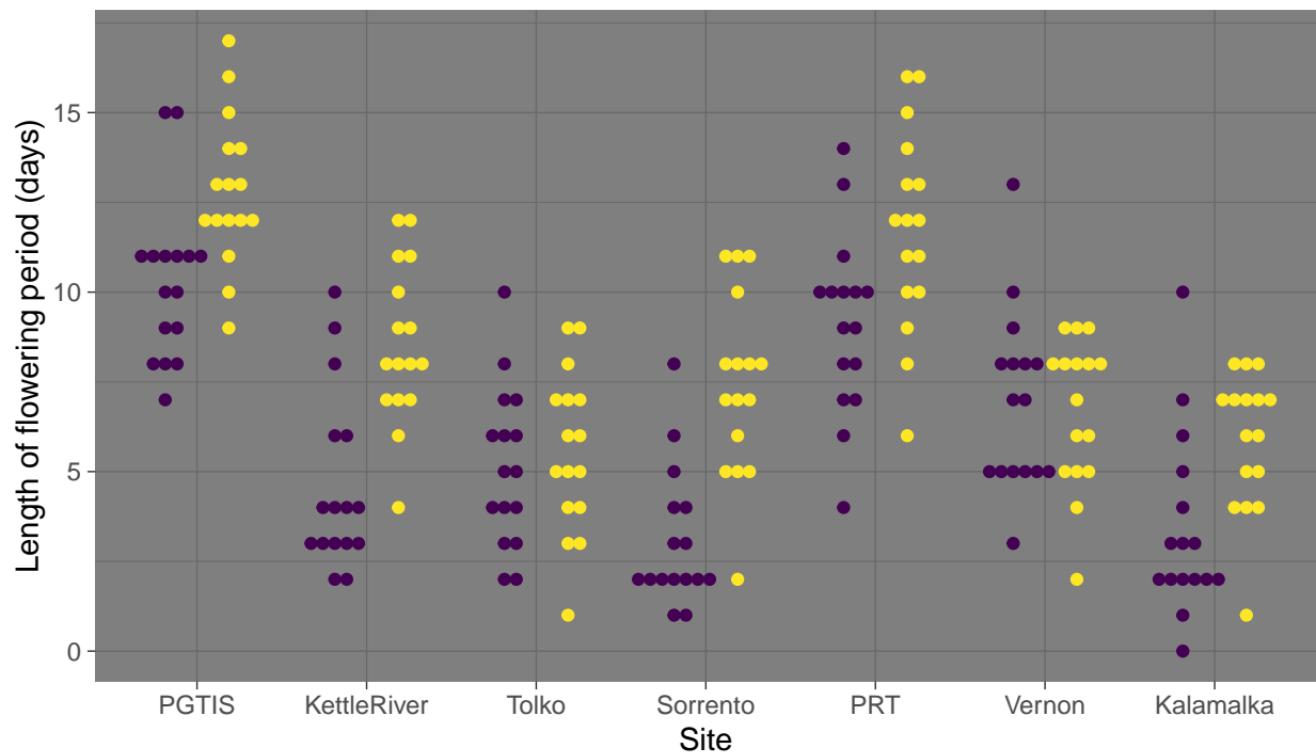


fully crossed – only 5 posterior samples!

Median flowering period length at a site

Each point represents one year at one site 1997–2012

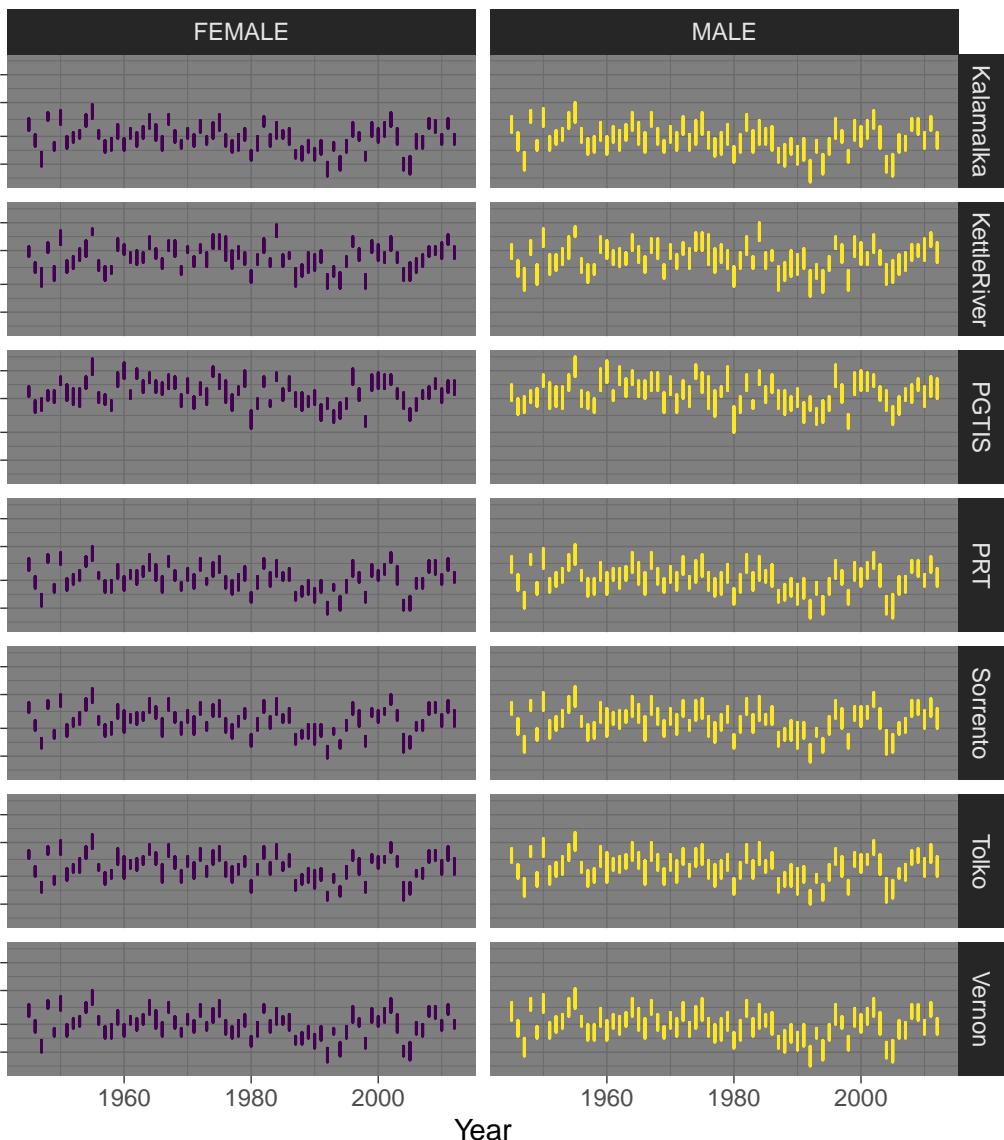
Sex FEMALE MALE



fully crossed predictions

Flowering period from 1945–2012 at 7 sites

median start day of year to median end day of year

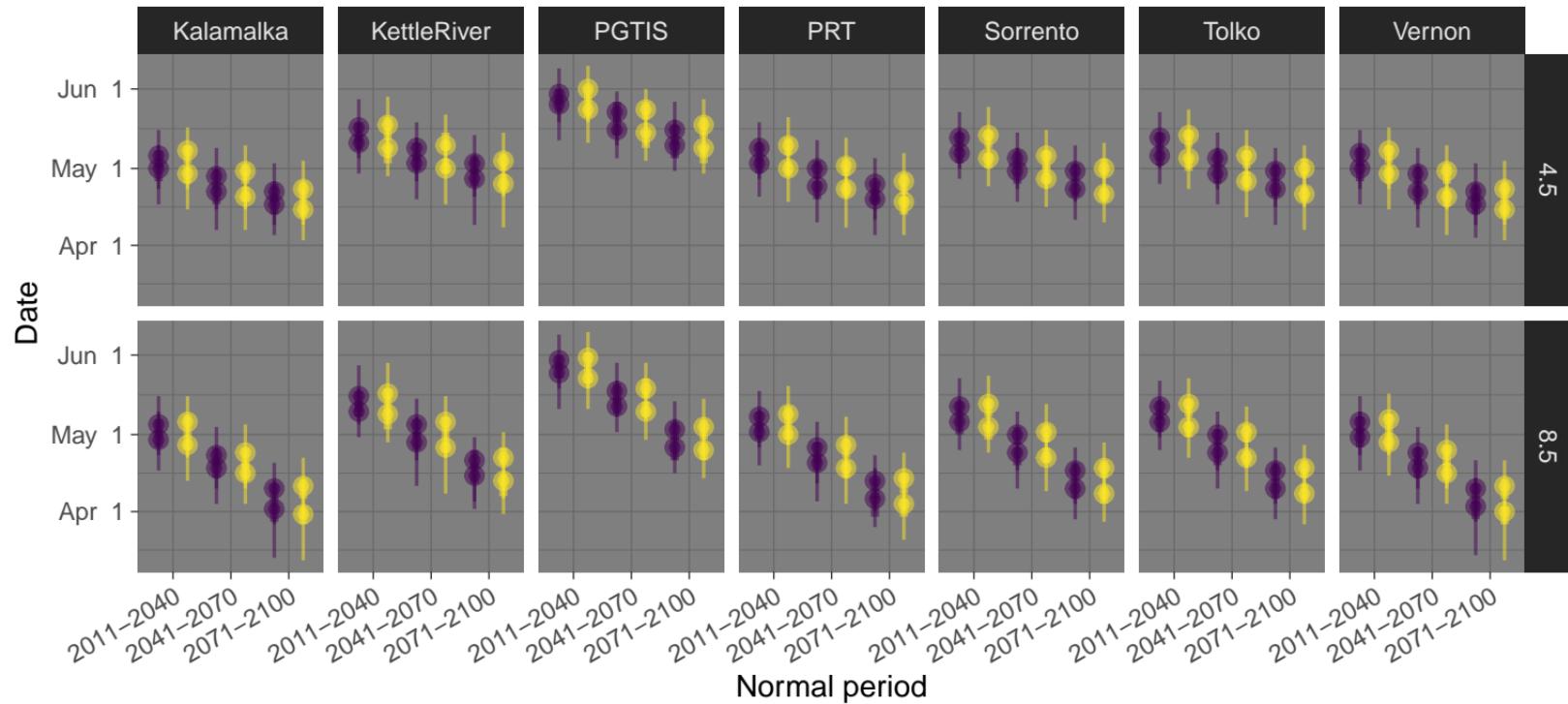


1500 forcing observations simulated from 200 draws of the posterior with new factor levels and matched to forcing data for plotted sites and years. Daily temperature data from PCIC and adjusted using monthly climateNA

Future flowering periods at 7 sites for 2 Climate forcing scenarios

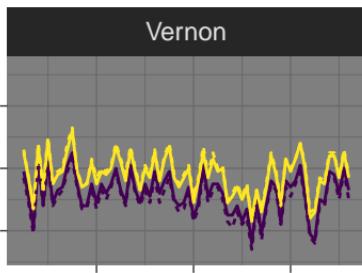
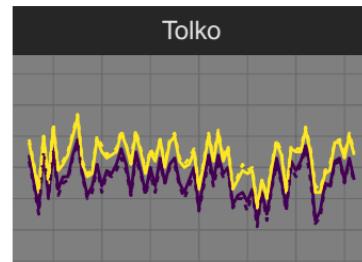
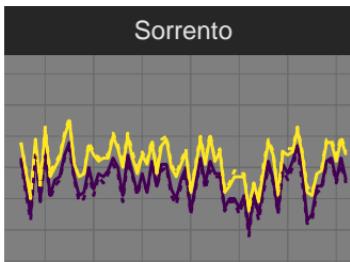
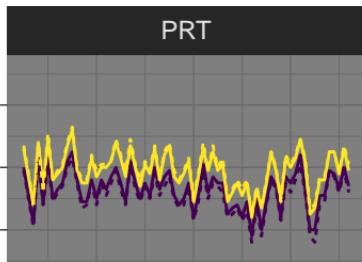
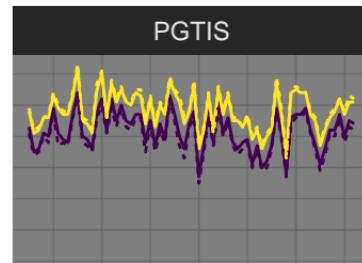
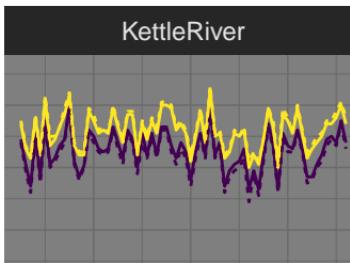
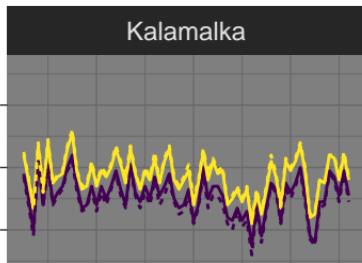
median start day to median end day

Sex ● FEMALE ♀ MALE



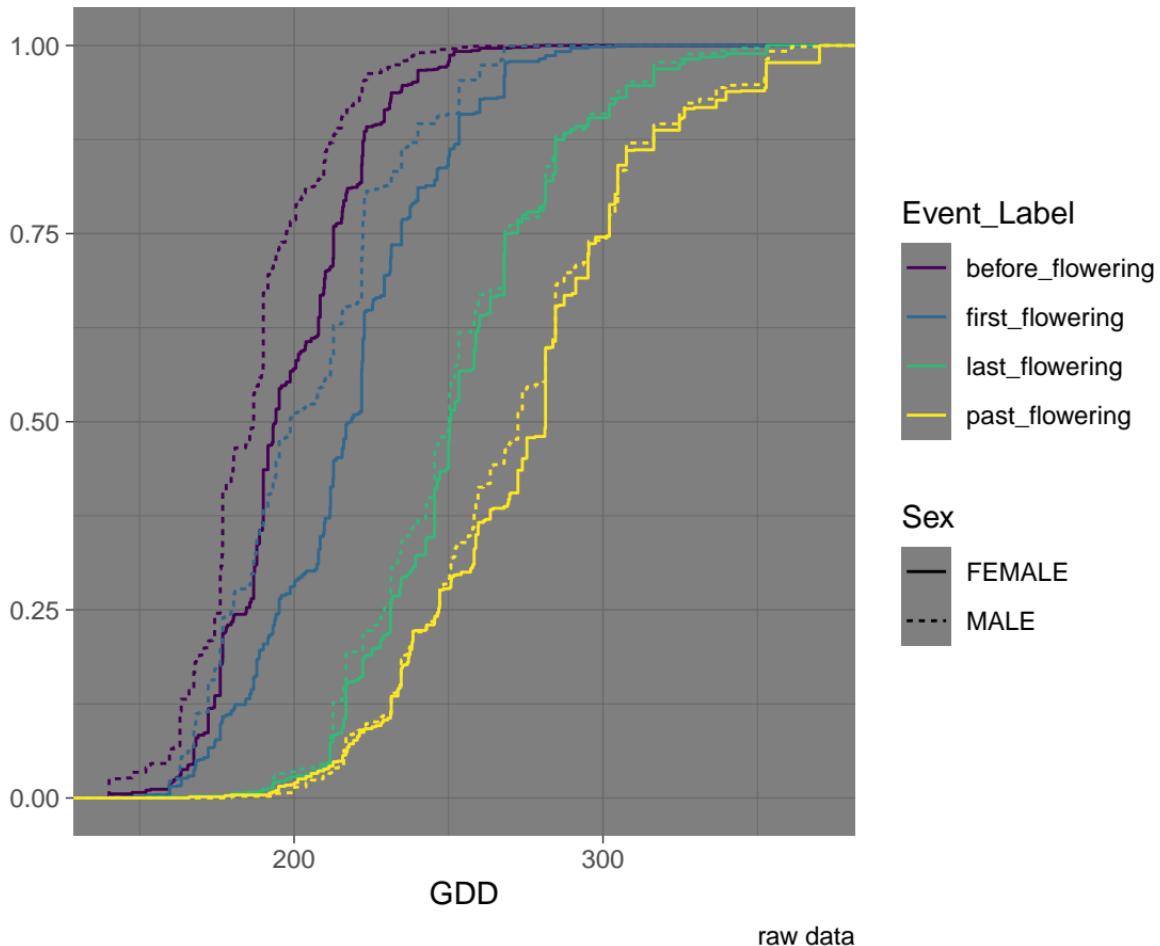
medians of 1500 forcing observations simulated from 30 draws of the posterior with new factor levels and matched to day of year data for plotted sites and years. Daily temperature timeseries for 7 sites from PCIC & adjusted using ClimateNA

event begin end Sex FEMALE MALE



Year

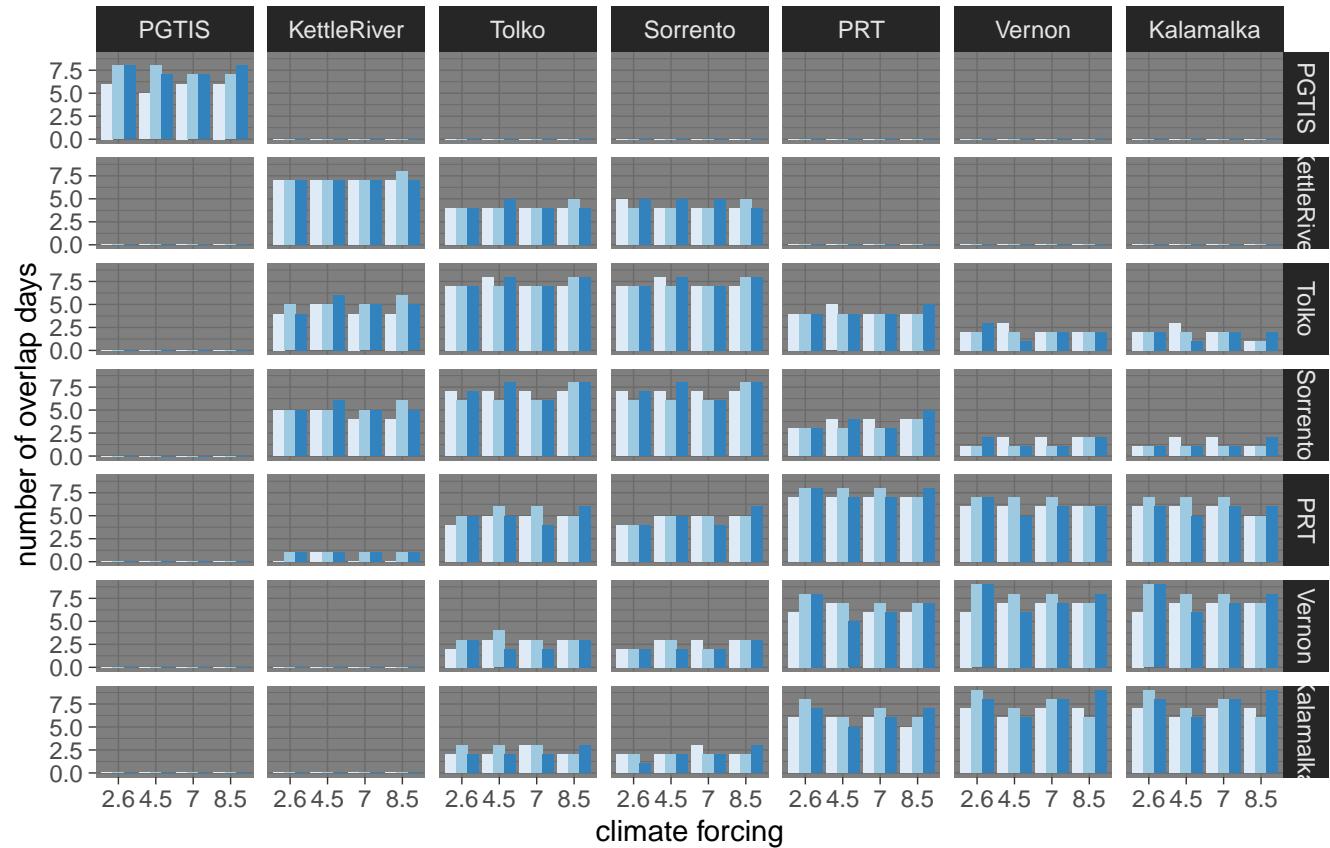
Cumulative distribution of accumulated forcing for flowering events



Days of flowering overlap between sites

Normal period 2011–2040

normal_period 2011–2040 2041–2070 2071–2100

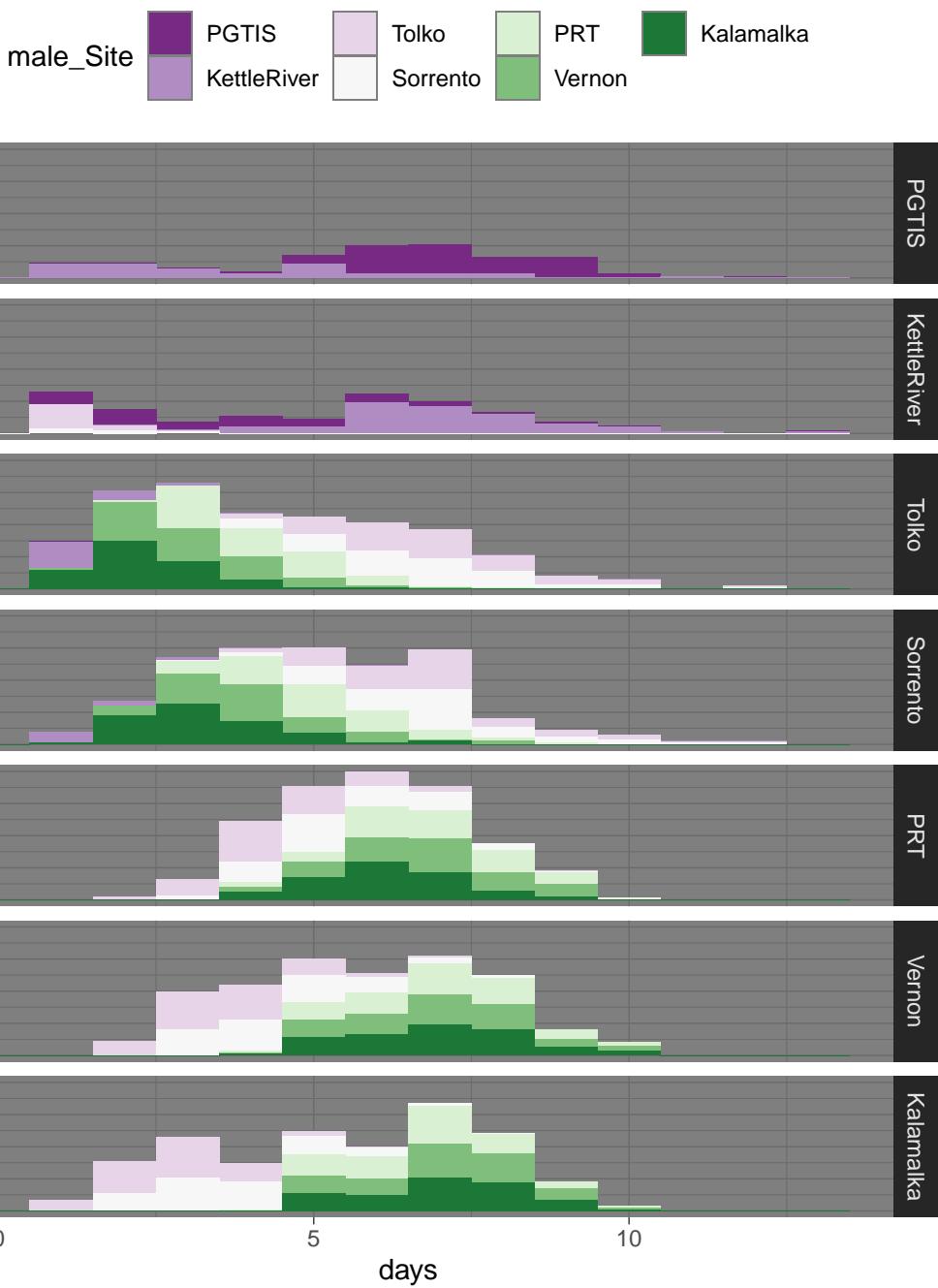


30 forcing samples from the model translated into DoY of flowering event for 7 Sites 1945–2012.
Then calculated median DoY across samples and used those to construct flowering period intervals (begin to end).

Then determined the intersection of those intervals for all sites and years

Days receptivity overlaps with pollen shed at different sites

1945–2012



30 forcing samples from the model translated into DoY of flowering event for 7 Sites 1945–2012.

Then calculated median DoY across samples and used those to construct flowering period intervals (begin to end). Then determined the intersection of those intervals for all sites and years