

Supplementary material

Table S.1. Overview of root mean squared error (RMSE), R^2 and adjusted R^2 for the linear and quadratic models of all predictors when GDD in July is included in the model.

| | | Linear | | | Quadratic | | |
|-------|-------------------|--------|-------|---------|------------|-------|---------|
| | Predictors | RMSE | R2 | Adj. R2 | RMSE | R2 | Adj. R2 |
| GDD | March | 480 | 0.100 | 0.038 | 437 | 0.333 | 0.234 |
| GDD | April | 470 | 0.143 | 0.084 | 440 | 0.340 | 0.242 |
| GDD | May | 481 | 0.104 | 0.042 | 443 | 0.320 | 0.220 |
| GDD | June | 482 | 0.107 | 0.046 | 443 | 0.323 | 0.222 |
| GDD | August | 469 | 0.160 | 0.102 | 441 | 0.349 | 0.253 |
| GDD | March-August | 475 | 0.140 | 0.081 | 441 | 0.343 | 0.246 |
| Rainy | days March | 482 | 0.094 | 0.032 | 435 | 0.335 | 0.237 |
| Rainy | days April | 481 | 0.097 | 0.035 | 443 | 0.324 | 0.223 |
| Rainy | days May | 452 | 0.197 | 0.141 | 426 | 0.356 | 0.260 |
| Rainy | days June | 466 | 0.150 | 0.091 | 415 | 0.389 | 0.299 |
| Rainy | days July | 472 | 0.136 | 0.076 | 419 | 0.389 | 0.299 |
| Rainy | days August | 470 | 0.137 | 0.077 | 426 | 0.365 | 0.271 |
| Rainy | days March-August | 479 | 0.106 | 0.045 | 458 | 0.323 | 0.222 |

Table S.2. Overview of root mean squared error (RMSE), R^2 and adjusted R^2 for the linear and quadratic models of all predictors when GDD in July and the number of rainy days in June are included in the model.

| | | Linear | | | Quadratic | | |
|-------|-------------|--------|-------|---------|------------|-------|---------|
| | Predictors | RMSE | R2 | Adj. R2 | RMSE | R2 | Adj. R2 |
| GDD | March | 484 | 0.153 | 0.062 | 443 | 0.420 | 0.281 |
| GDD | April | 472 | 0.188 | 0.101 | 441 | 0.420 | 0.280 |
| GDD | May | 480 | 0.162 | 0.073 | 451 | 0.397 | 0.253 |
| GDD | June | 478 | 0.173 | 0.084 | 445 | 0.400 | 0.255 |
| GDD | August | 468 | 0.212 | 0.127 | 446 | 0.417 | 0.277 |
| Rainy | days March | 478 | 0.165 | 0.075 | 436 | 0.409 | 0.267 |
| Rainy | days April | 473 | 0.180 | 0.092 | 447 | 0.401 | 0.257 |
| Rainy | days May | 450 | 0.247 | 0.167 | 436 | 0.429 | 0.292 |
| Rainy | days July | 468 | 0.205 | 0.120 | 415 | 0.471 | 0.344 |
| Rainy | days August | 465 | 0.207 | 0.122 | 437 | 0.441 | 0.306 |

Table S.3. Overview of root mean squared error (RMSE), R^2 and adjusted R^2 for the linear and quadratic models of all predictors when GDD in July and rainy days in June and July are included in the model.

| | Predictors | Linear | | | Quadratic | | |
|-------|-------------|--------|-------|---------|-----------|-------|---------|
| | | RMSE | R2 | Adj. R2 | RMSE | R2 | Adj. R2 |
| GDD | March | 485 | 0.209 | 0.092 | 447 | 0.498 | 0.323 |
| GDD | April | 473 | 0.246 | 0.134 | 437 | 0.510 | 0.339 |
| GDD | May | 485 | 0.209 | 0.091 | 447 | 0.484 | 0.304 |
| GDD | June | 481 | 0.224 | 0.109 | 440 | 0.495 | 0.319 |
| GDD | August | 476 | 0.248 | 0.136 | 452 | 0.493 | 0.317 |
| Rainy | days March | 468 | 0.251 | 0.140 | 432 | 0.491 | 0.315 |
| Rainy | days April | 470 | 0.242 | 0.130 | 452 | 0.478 | 0.296 |
| Rainy | days May | 460 | 0.273 | 0.165 | 426 | 0.524 | 0.358 |
| Rainy | days August | 473 | 0.241 | 0.128 | 428 | 0.529 | 0.366 |

Table S.4. Overview of root mean squared error (RMSE), R^2 and adjusted R^2 for quadratic models of predictors for mean rain and rainy days when GDD in July is included in the model, when using complete observations for both.

| Predictors | RMSE | R2 | Adj. R2 |
|--------------------------|------------|-------|---------|
| Rainy days March | 435 | 0.335 | 0.237 |
| Rainy days April | 443 | 0.324 | 0.223 |
| Rainy days May | 426 | 0.356 | 0.260 |
| Rainy days June | 415 | 0.389 | 0.299 |
| Rainy days July | 419 | 0.389 | 0.299 |
| Rainy days August | 426 | 0.365 | 0.271 |
| Rainy days March--August | 458 | 0.323 | 0.222 |
| Rain mean March | 446 | 0.351 | 0.255 |
| Rain mean April | 435 | 0.372 | 0.279 |
| Rain mean May | 417 | 0.397 | 0.308 |
| Rain mean June | 439 | 0.327 | 0.228 |
| Rain mean July | 433 | 0.386 | 0.295 |
| Rain mean August | 453 | 0.377 | 0.285 |
| Rain mean March--August | 473 | 0.314 | 0.213 |