Table S4. (Model 3) Step-by-step forward selection results of the generalized Poisson regression model in each step based on $AIC_c$. $T_i$, $S_i$ and $R_i$ represent minimum temperature, sunshine duration and total rainfall in the $i^{th}$ month. For each of the variable included in the model, the corresponding $AIC_c$, the leave-one-out mean squared error for the validation set ($MSE_{Va}$), the leave-one-out mean squared error for the training set ($MSE_T$), and the mean squared error ratio ($F = \frac{MSE_{Va}}{MSE_T}$) were calculated.

| Step | (Intercept) | $T_1$ | $S_1$ | $T_2$ | $T_3$ | $T_5$ | $T_6$ | $S_2$ | $T_4$ | $R_1$ | $R_2$ | $R_3$ | $R_4$ | $R_5$ | $AIC_c$ | $MSE_{Va}$ | $MSE_T$ | $F$  |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|------------|----------|------|
| 1    | 33.51       | -1.038| -1.051|       |       |       |       |       |       |       |       |       |       |       | 30314   | 1.124     | 0.913    | 1.230 |
| 2    | 59.24       | -1.766| -1.051|       |       |       |       |       |       |       |       |       |       |       | 10893   | 0.399     | 0.301    | 1.326 |
| 3    | 62.36       | -2.014| -1.079| 0.257 |       |       |       |       |       |       |       |       |       |       | 8311    | 0.376     | 0.257    | 1.463 |
| 4    | 58.08       | -2.002| -1.082| 0.280 | 0.186 |       |       |       |       |       |       |       |       |       | 7219    | 0.426     | 0.285    | 1.496 |
| 5    | 76.29       | -1.914| -1.142| 0.229 | 0.274 | -0.816|       |       |       |       |       |       |       |       | 5055    | 0.429     | 0.262    | 1.637 |
| 6    | 74.52       | -1.594| -1.044| 0.282 | 0.296 | -1.052| -0.298|       |       |       |       |       |       |       | 3763    | 0.419     | 0.238    | 1.759 |
| 7    | 75.47       | -1.393| -0.930| 0.289 | 0.233 | -1.346| -0.375| 0.151 |       |       |       |       |       |       | 3152    | 0.429     | 0.193    | 2.219 |
| 8    | 69.44       | -0.894| -0.730| 0.322 | 0.348 | -1.537| -0.506| 0.353 | -0.329|       |       |       |       |       | 1517    | 0.258     | 0.114    | 2.260 |
| 9    | 69.27       | -0.822| -0.715| 0.321 | 0.422 | -1.511| -0.484| 0.350 | -0.507| 0.013 |       |       |       |       | 930     | 0.162     | 0.078    | 2.067 |
| 10   | 68.84       | -0.837| -0.683| 0.368 | 0.456 | -1.481| -0.498| 0.325 | -0.548| 0.016 | -0.007|       |       |       | 901     | 0.211     | 0.066    | 3.181 |
| 11   | 65.63       | -0.824| -0.584| 0.374 | 0.482 | -1.431| -0.501| 0.317 | -0.539| 0.018 | -0.011| 0.001 |       | 840     | 0.268     | 0.062    | 4.308 |
| 12   | 57.58       | -0.721| -0.478| 0.408 | 0.539 | -1.343| -0.555| 0.357 | -0.536| 0.019 | -0.010| 0.002| 0.001 | 791     | 0.294     | 0.051    | 5.726 |