Table S1. Sens slopes on all the computed climatic variables for Mohonk Lake. We computed sens slopes for all monthly and seasonal ENSO and NAO variables, but all sens slope p-values were > 0.05 and therefore not printed in this table.  
\*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Climatic variable** | **p-value** | **Slope** | **Intercept** | **z-statistic** |
| *Day of maximum snow daily* | *0.8183* | *0.167* | *-186* | *0.23* |
| Global temp. anomaly (°C) | <0.001\*\*\* | 0.0112 | -21.8 | 9.93 |
| *Maximum snow depth (mm)* | *0.7162* | *-2.21* | *4.87e+03* | *-0.363* |
| *Sep cumulative snow (mm)* | *1* | *0* | *0* | *0* |
| *Sep-Nov. cumulative rain (mm)* | *0.114* | *0.865* | *-1.4e+03* | *1.58* |
| *Sep-Nov. number of days mean daily air T below zero* | *0.0558* | *-0.0213* | *46.3* | *-1.91* |
| *Sep-Nov. number of days min daily air T below zero* | *0.18* | *-0.0286* | *69.9* | *-1.34* |
| Sep-Oct. number of days mean daily air T below zero | 0.0311\* | 0 | 0 | -2.16 |
| *Sep-Oct. number of days min daily air T below zero* | *0.2535* | *0* | *1.5* | *-1.14* |
| *Sep. % of precipitation as rain* | *1* | *0* | *100* | *0* |
| *Sep. number of days min daily air T below zero* | *1* | *0* | *0* | *0* |
| Sept-Nov. cumulative mean daily air temp. (°C) | 0.0011\*\* | 1.34 | -1.64e+03 | 3.27 |
| *Sept-Nov. cumulative snow (mm)* | *0.2629* | *-0.0577* | *171* | *-1.12* |
| Sept-Oct. cumulative mean daily air temp. (°C) SepOct | 0.0006\*\*\* | 0.972 | -1.06e+03 | 3.41 |
| Sept-Oct. cumulative rain (mm) | 0.0203\* | 0.977 | -1.73e+03 | 2.32 |
| *Sept-Oct. cumulative snow (mm)* | *0.272* | *0* | *0* | *1.1* |
| Sept. cumulative mean daily air temp. (°C) Sep | 0.0001\*\*\* | 0.644 | -760 | 3.9 |
| *Sept. cumulative rain (mm)* | *0.2184* | *0.371* | *-631* | *1.23* |
| *Sept. number of days mean daily air T below zero* | *1* | *0* | *0* | *0* |
| *Oct cumulative mean daily air temp. (°C)* | *0.1013* | *0.317* | *-282* | *1.64* |
| Oct number of days mean daily air T below zero | 0.0203\* | 0 | 0 | -2.32 |
| Oct-Dec cumulative mean daily air temp. (°C) | 0.0033\*\* | 1.41 | -2.34e+03 | 2.93 |
| Oct-Dec. cumulative rain (mm) | 0.0287\* | 0.813 | -1.3e+03 | 2.19 |
| *Oct-Dec. cumulative snow (mm)* | *0.399* | *0.798* | *-1.21e+03* | *0.843* |
| Oct-Dec. number of days mean daily air T below zero | 0.0025\*\* | -0.0882 | 198 | -3.02 |
| *Oct-Dec. number of days min daily air T below zero* | *0.0574* | *-0.0519* | *143* | *-1.9* |
| Oct-Nov cumulative mean daily air temp. (°C) | 0.0365\* | 0.675 | -839 | 2.09 |
| Oct-Nov. cumulative rain (mm) | 0.0435\* | 0.539 | -857 | 2.02 |
| *Oct-Nov. number of days mean daily air T below zero* | *0.0511* | *-0.0204* | *44.7* | *-1.95* |
| *Oct-Nov. number of days min daily air T below zero* | *0.1596* | *-0.0286* | *69.8* | *-1.41* |
| *Oct. % of precipitation as rain* | *0.282* | *0* | *100* | *-1.08* |
| Oct. cumulative rain (mm) | 0.0065\*\* | 0.629 | -1.15e+03 | 2.72 |
| *Oct. cumulative snow (mm)* | *0.2791* | *0* | *0* | *1.08* |
| *Oct. number of days min daily air T below zero* | *0.1721* | *0* | *1* | *-1.37* |
| *Oct-Nov. cumulative snow (mm)* | *0.1781* | *-0.127* | *304* | *-1.35* |
| *Nov cumulative mean daily air temp. (°C)* | *0.2223* | *0.302* | *-451* | *1.22* |
| Nov. % of precipitation as rain | 0.0396\* | 0.0934 | -115 | 2.06 |
| *Nov. cumulative rain (mm)* | *0.4715* | *-0.136* | *369* | *-0.72* |
| *Nov. cumulative snow (mm)* | *0.0551* | *-0.141* | *329* | *-1.92* |
| *Nov. number of days mean daily air T below zero* | *0.0709* | *-0.0189* | *41.6* | *-1.81* |
| *Nov. number of days min daily air T below zero* | *0.3221* | *-0.0182* | *48.1* | *-0.99* |
| *Dec. % of precipitation as rain* | *1* | *0* | *26.7* | *0* |
| *Dec. cumulative rain (mm)* | *0.0735* | *0.321* | *-530* | *1.79* |
| *Dec. cumulative snow (mm)* | *0.2248* | *1.12* | *-1.94e+03* | *1.21* |
| Dec. number of days mean daily air T below zero | 0.0181\* | -0.0588 | 134 | -2.36 |
| *Dec. number of days min daily air T below zero* | *0.176* | *-0.0196* | *64.2* | *-1.35* |
| Dec. cumulative mean daily air temp. (°C) | 0.0046\*\* | 0.78 | -1.58e+03 | 2.84 |
| *Jan cumulative rain (mm)* | *0.9045* | *0.0201* | *41.5* | *0.12* |
| *Jan-Mar cumulative mean daily air temp. (°C)* | *0.0183\** | *1.39* | *-2.9e+03* | *2.36* |
| *Jan-Mar. cumulative rain (mm)* | *0.3423* | *0.326* | *-378* | *0.95* |
| *Jan-Mar. cumulative snow (mm)* | *0.8747* | *-0.207* | *1.41e+03* | *-0.158* |
| *Jan. % of precipitation as rain* | *0.959* | *0.0015* | *18.1* | *0.0514* |
| *Jan. cumulative mean daily air temp. (°C)* | *0.624* | *0.198* | *-513* | *0.49* |
| *Jan. cumulative snow (mm)* | *0.9317* | *0* | *343* | *-0.0857* |
| Jan. number of days mean daily air T below zero | 0.6182 | 0 | 24 | -0.498 |
| *Jan. number of days min daily air T below zero* | *0.1583* | *0* | *29* | *-1.41* |
| Feb cumulative mean daily air temp. (°C) | 0.0268\* | 0.599 | -1.26e+03 | 2.21 |
| Feb-Apr. cumulative mean daily air temp. (°C) | 0.0001\*\*\* | 2.34 | -4.39e+03 | 4.03 |
| *Feb-Apr. cumulative rain (mm)* | *0.6143* | *0.155* | *-36.7* | *0.504* |
| *Feb-Apr. cumulative snow (mm)* | *0.6858* | *-0.714* | *2.12e+03* | *-0.405* |
| Feb-Mar cumulative mean daily air temp. (°C) | 0.0021\*\* | 1.43 | -2.85e+03 | 3.07 |
| *Feb-Mar. cumulative rain (mm)* | *0.6264* | *0.121* | *-62.6* | *0.487* |
| *Feb-Mar. cumulative snow (mm)* | *0.8855* | *-0.186* | *1.01e+03* | *-0.144* |
| Feb-Mar. number of days mean daily air T above zero | 0.0011\*\* | 0.0968 | -162 | 3.27 |
| Feb-Mar. number of days min daily air T above zero | 0.0003\*\*\* | 0.087 | -161 | 3.63 |
| *Feb. % of precipitation as rain* | *0.6708* | *0.016* | *-13.7* | *0.425* |
| *Feb. cumulative rain (mm)* | *0.5928* | *0.0635* | *-49.8* | *0.535* |
| *Feb. cumulative snow (mm)* | *0.6808* | *-0.341* | *1.01e+03* | *-0.411* |
| Feb. number of days mean daily air T below zero | 0.0496\* | -0.037 | 92.7 | -1.96 |
| Feb. number of days min daily air T below zero | 0.0036\*\* | -0.0263 | 77.8 | -2.91 |
| Mar-Apr cumulative mean daily air temp. (°C) | 0.0002\*\*\* | 1.59 | -2.82e+03 | 3.79 |
| *Mar-Apr. cumulative rain (mm)* | *0.7865* | *0.0889* | *16.5* | *0.271* |
| *Mar-Apr. cumulative snow (mm)* | *0.2235* | *-0.998* | *2.3e+03* | *-1.22* |
| Mar-Apr. number of days mean daily air T above zero | 0.0029\*\* | 0.0625 | -73.9 | 2.98 |
| Mar-Apr. number of days min daily air T above zero | 0.0007\*\*\* | 0.0923 | -150 | 3.4 |
| *Mar. % of precipitation as rain* | *0.3528* | *0.0534* | *-79.9* | *0.929* |
| Mar. cumulative mean daily air temp. (°C) | 0.0042\*\* | 0.833 | -1.59e+03 | 2.86 |
| *Mar. cumulative rain (mm)* | *0.5833* | *0.0939* | *-91.4* | *0.548* |
| *Mar. cumulative snow (mm)* | *0.5213* | *-0.468* | *1.2e+03* | *-0.641* |
| Mar. number of days mean daily air T above zero | 0.0032\*\* | 0.0615 | -102 | 2.95 |
| Mar. number of days mean daily air T below zero | 0.0032\*\* | -0.0615 | 133 | -2.95 |
| Mar. number of days min daily air T above zero | 0.0062\*\* | 0.0545 | -99.4 | 2.73 |
| Mar. number of days min daily air T below zero | 0.0062\*\* | -0.0545 | 130 | -2.73 |
| *Apr. % of precipitation as rain* | *0.1598* | *0* | *92.9* | *1.41* |
| Apr. cumulative mean daily air temp. (°C) | 0.0002\*\*\* | 0.84 | -1.4e+03 | 3.69 |
| *Apr. cumulative rain (mm)* | *0.7112* | *-0.0739* | *249* | *-0.37* |
| *Apr. cumulative snow (mm)* | *0.1652* | *0* | *7.62* | *-1.39* |
| Apr. number of days mean daily air T below zero | 0.1745 | 0 | 0 | -1.36 |
| Apr. number of days min daily air T below zero | 0.0034\*\* | -0.04 | 85.1 | -2.93 |