**Supplemental Table B.** Summary of hydroclimate variable loadings from principal component analysis (PCA2, Hypothesis 2) after varimax rotation. Variables indicate precipitation and river level during embryonic development (September–October) and at hatching time (November), in the headwaters or nesting sites (local) of *Podocnemis expansa* in the Javaés River, Araguaia National Park, Pium, Tocantins, Brazil from 1985 to 2009.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Hydroclimate variable** | **PC1** | **PC2** | **PC3** | **PC4** | **PC5** | **PC6** |
| Minimum local precipitation | -0.617 |  |  |  |  | 0.691 |
| Average local precipitation |  | 0.249 |  | 0.814 |  | 0.230 |
| Maximum local precipitation |  |  | 0.176 | 0.882 |  |  |
| Minimum headwaters’ precipitation |  | -0.114 |  |  |  |  |
| Average headwaters’ precipitation | -0.227 | 0.541 | 0.130 | 0.333 | 0.475 | 0.405 |
| Maximum headwaters’ precipitation | 0.178 | 0.818 |  | 0.309 |  |  |
| Minimum local river levels |  |  | 0.917 | 0.132 | -0.157 | -0.104 |
| Maximum local river levels | -0.140 | -0.689 | 0.245 | 0.159 |  | -0.570 |
| Minimum headwaters’ river level | -0.661 | 0.112 |  | 0.249 | 0.563 | 0.106 |
| Average headwaters’ river level | -0.865 | -0.141 |  | 0.107 | 0.174 | 0.217 |
| Maximum headwaters’ river level | -0.793 | -0.393 | 0.241 |  |  | -0.251 |
| Local precipitation in September | -0.449 |  | 0.107 |  | 0.574 | 0.455 |
| Local precipitation in October | -0.106 | 0.325 |  | 0.209 | 0.164 | 0.842 |
| Local precipitation in November |  | -0.117 | -0.528 | 0.486 |  | 0.378 |
| Headwaters’ precipitation in October |  |  |  |  | 0.959 | 0.129 |
| Headwaters’ precipitation in November |  |  |  |  | 0.181 | 0.818 |
| Local river level in October |  | -0.260 | 0.820 | 0.192 | 0.190 |  |
| Local river level in November | -0.196 | 0.181 | 0.794 |  | 0.188 | 0.329 |
| Headwaters’ river level in October | -0.653 | 0.314 |  | -0.182 | 0.485 |  |