**Supplemental Table A.** Summary of hydroclimate variable loadings from principal component analysis (PCA1, Hypothesis 1) after varimax rotation. Variables indicate precipitation and river level during the end of the rainy season (April–May), 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 | 0.178 | -0.725 |  |  |  | -0.552 |
| Average local precipitation | -0.245 |  | -0.125 | 0.353 | 0.7 | -0.22 |
| Maximum local precipitation |  |  | -0.147 |  | 0.904 | 0.154 |
| Minimum headwaters’ precipitation | 0.296 |  |  | -0.763 | 0.223 | -0.274 |
| Average headwaters’ precipitation | -0.612 | -0.317 | -0.141 |  | 0.44 | -0.447 |
| Maximum headwaters’ precipitation | -0.298 | 0.333 |  | 0.528 | 0.403 | -0.272 |
| Minimum local river levels | 0.204 |  | -0.848 | -0.131 | 0.237 | 0.142 |
| Maximum local river levels | 0.174 | -0.16 | -0.182 | -0.138 |  | 0.851 |
| Minimum headwaters’ river level | -0.453 | -0.732 | 0.139 |  | 0.312 |  |
| Average headwaters’ river level |  | -0.932 | -0.2 |  |  |  |
| Maximum headwaters’ river level | 0.259 | -0.729 | -0.189 |  |  | 0.452 |
| Local precipitation in April |  | 0.162 | -0.547 | 0.148 | 0.437 | -0.281 |
| Local precipitation in May | -0.151 |  | -0.232 | -0.122 |  | -0.828 |
| Headwaters’ precipitation in April | -0.869 |  |  | 0.109 |  | -0.174 |
| Local river level in May | -0.145 | -0.329 | -0.824 |  |  |  |
| Headwaters’ precipitation in May | -0.183 |  | -0.189 | -0.831 | -0.261 |  |