**ET Assignment**

**Student:**

**Part 1: Turn in coding materials**

|  |  |  |
| --- | --- | --- |
| Component | Points | Points |
| Script (.m or .R/.rmd) | 80 |  |
| - Script is commented throughout | + 5 |  |
| CSV of Exported Data | 15 |  |
| - 365 rows of variables used in plots and calculations | 5 |  |
| **Total** | 105 |  |

**Part 2: Data Analysis and Interpretation**

|  |  |  |
| --- | --- | --- |
| Question | Points | Points |
| 1. Plots of Daily Temp, VPD, Rn, Precipitation | **Total: 14 points** |  |
| -Each plot | 2pts |  |
| - Axes labels and units on each plot | 1 pt |  |
| - Table of mean annual conditions | 2 pts |  |
| 2. Describe each PET method, and discuss | **Total: 14 points** |  |
| - Variables required for each method | 3 pts |  |
| - Discussion of strengths and weaknesses of each | 4 pts |  |
| 3. Calculate and plot AET, PETtemp, PETenergy | **Total: 10 points** |  |
| -Each plot | 3 pts |  |
| - Axes labels and units on each plot | 1 pt |  |
| - Correct Values | 2 pts |  |
| 4. Calculate and Plot the ratio of AET:PET | **Total: 12 points** |  |
| -Each plot | 2 pts |  |
| - Axes labels and units on each plot | 1 pt |  |
| - Discuss the meaning and variability for each plot | 3 pts |  |
| 5. Why is AET less than PET | **6 pts** |  |
| 6. Why is AET not a constant fraction? | **6 pts** |  |
| 7. What additional variables would be useful? | **6 pts** |  |
| 8. Calculate mean annual ET using all three methods | **Total: 8 points** |  |
| - Correct values for each | 2 pts |  |
| - Add values to the table of annual conditions | 2 pts |  |
| 9. Does one PET method represent the site better, why? | **Total: 10 points** |  |
| 10. Why do we need to understand ET? | **Total: 14 points** |  |
| **Total** | 100 |  |

*\*If you turn in your work showing your calculations we can give partial credit.*