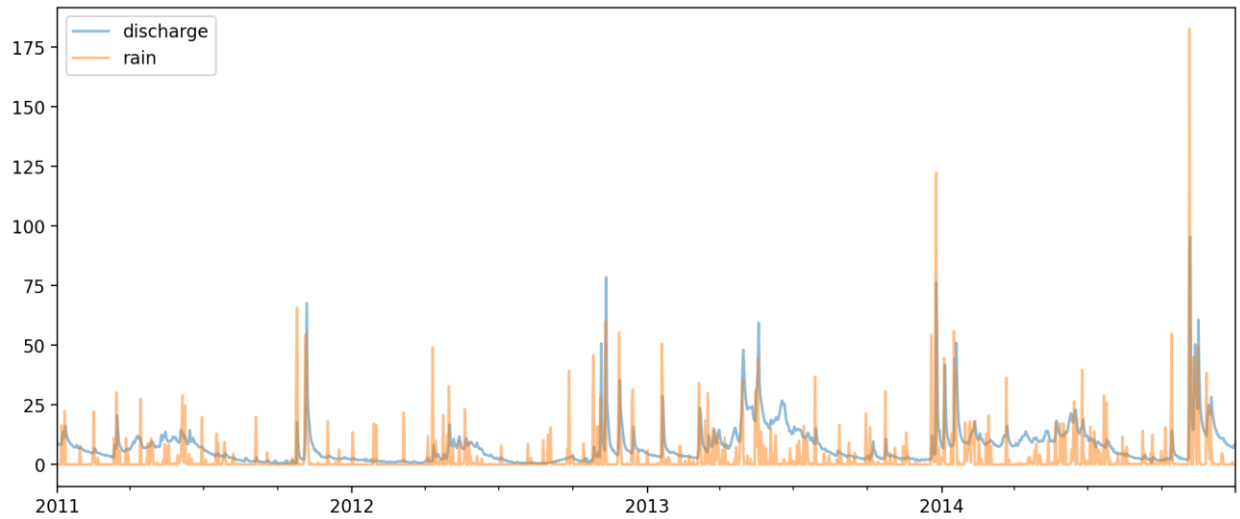## Line plot of precipitation and discharge:
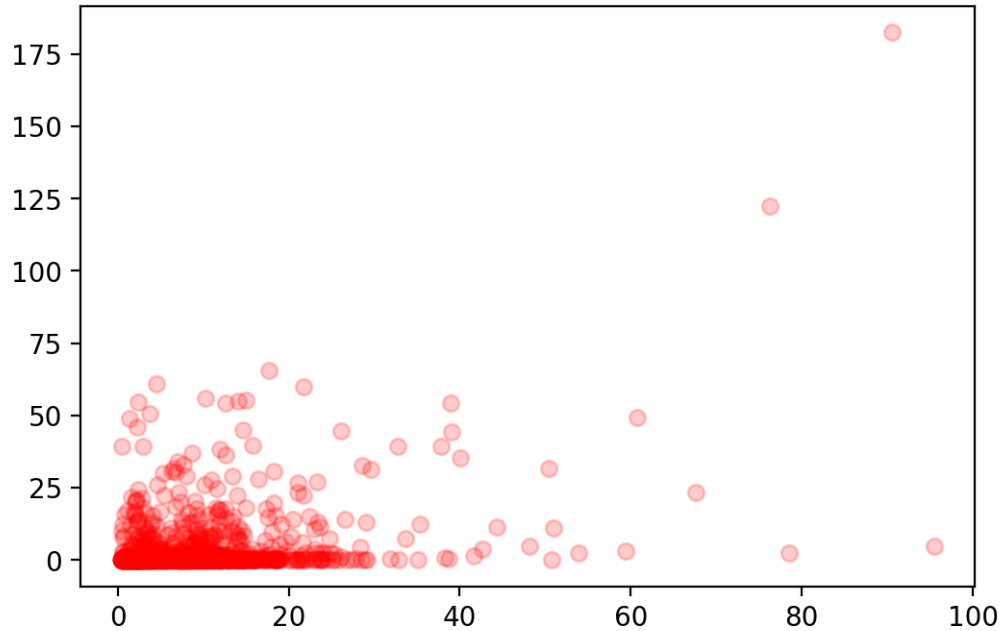

Correlation(R^2 value):

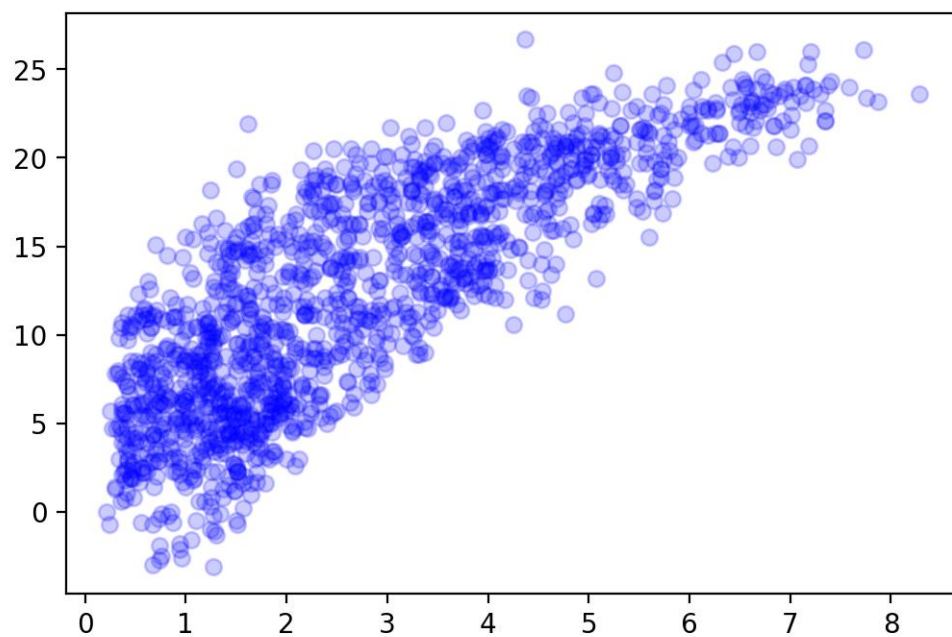## Whole Data:

Discharge-Precipitation:

R^2 value = 0.39365043

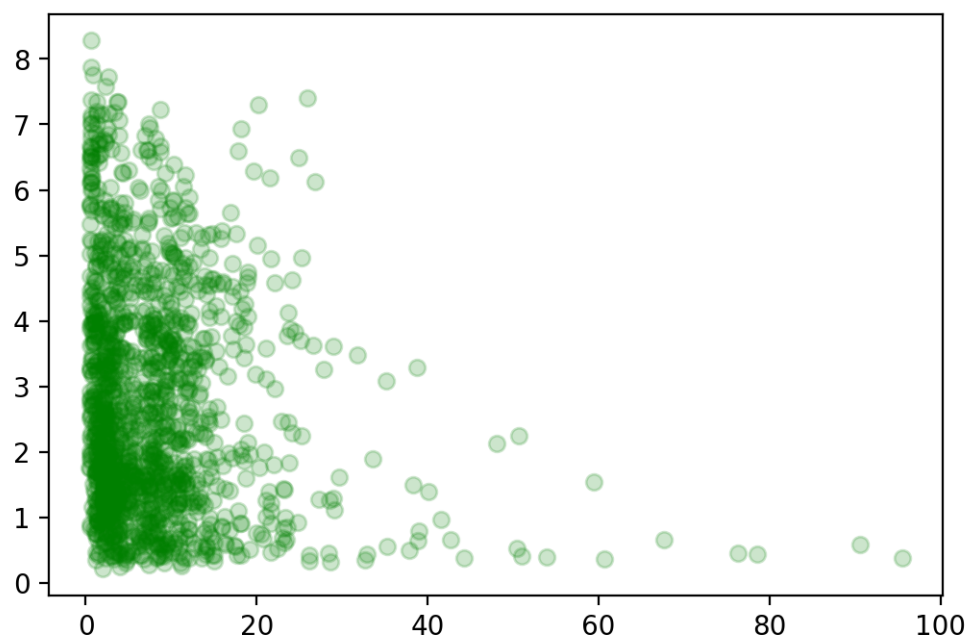**Evaporation-Temperature:**
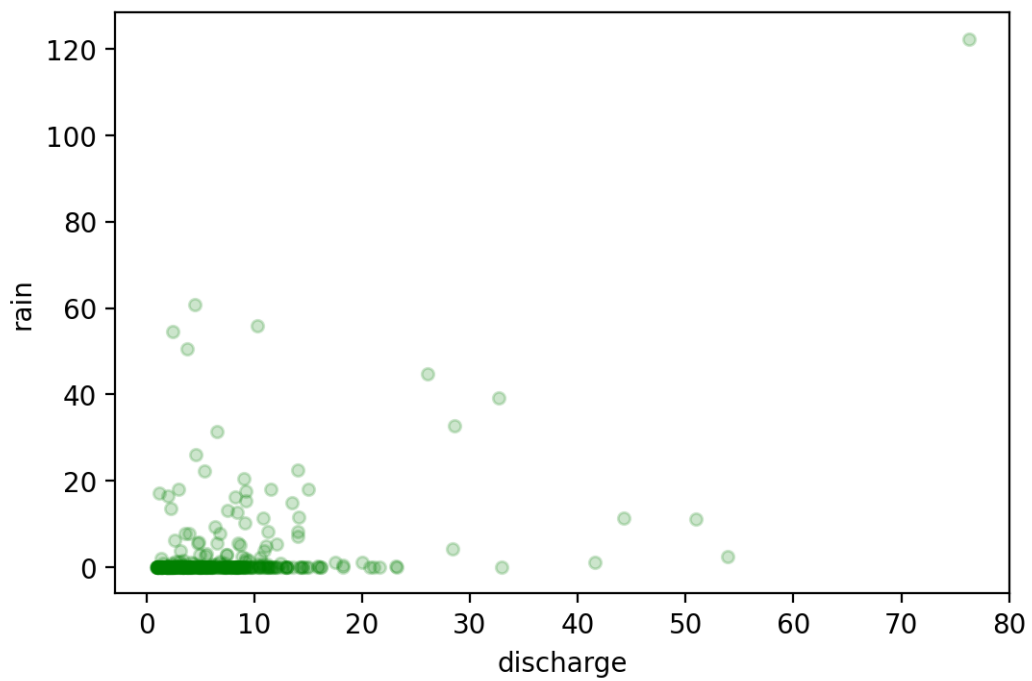
R^2 value = 0.81584188

Discharge-Evaporation:

R^2 value = -0.14355718

Seasonal:
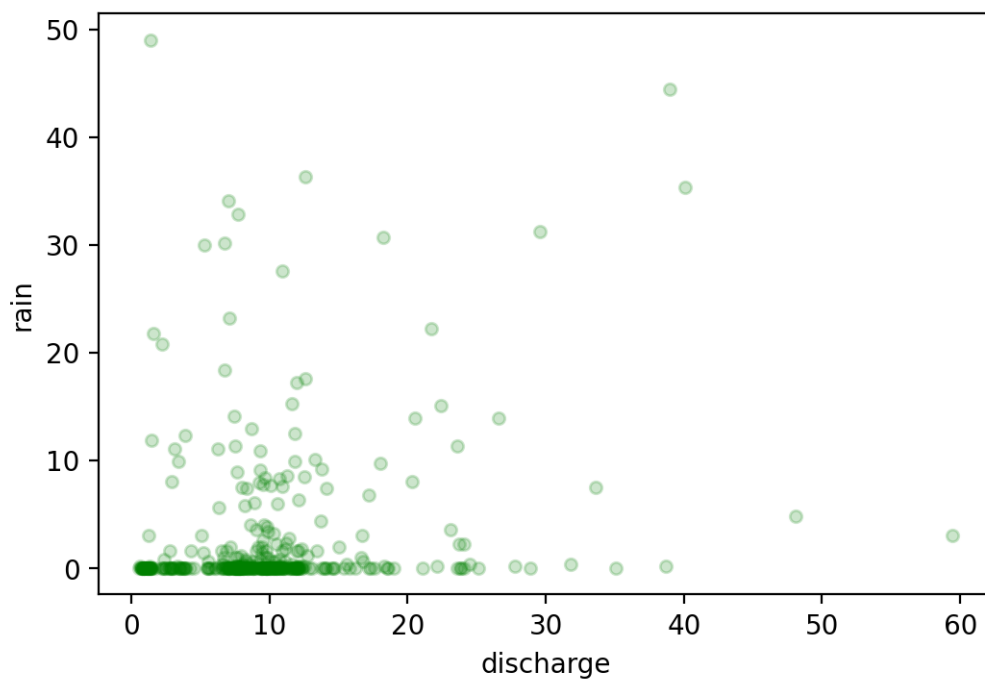
Winter Data:
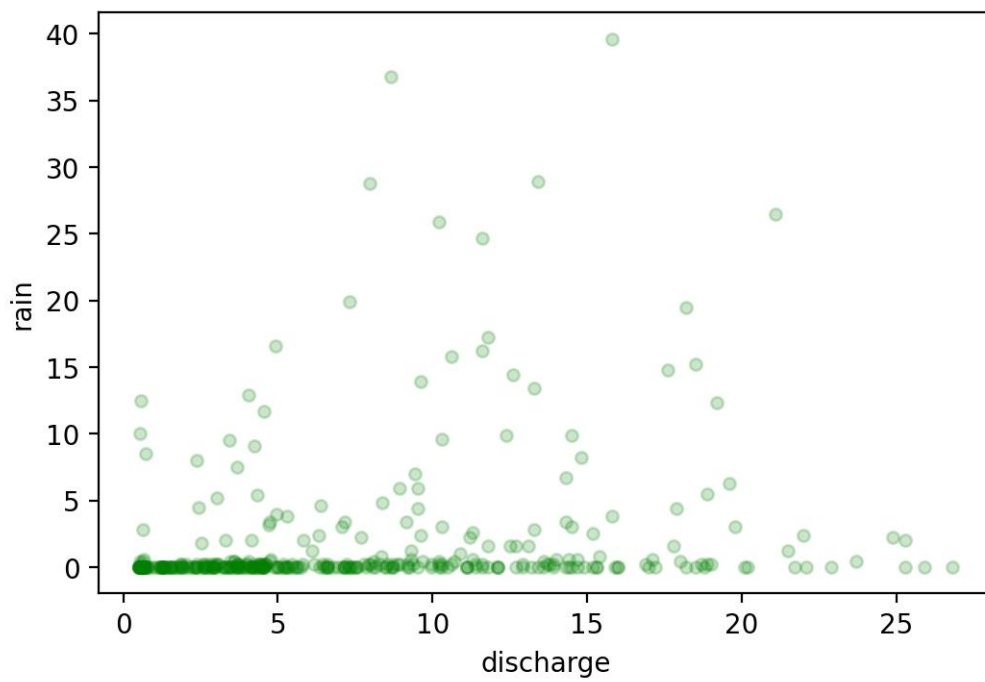
R^2 value = 0.43496245

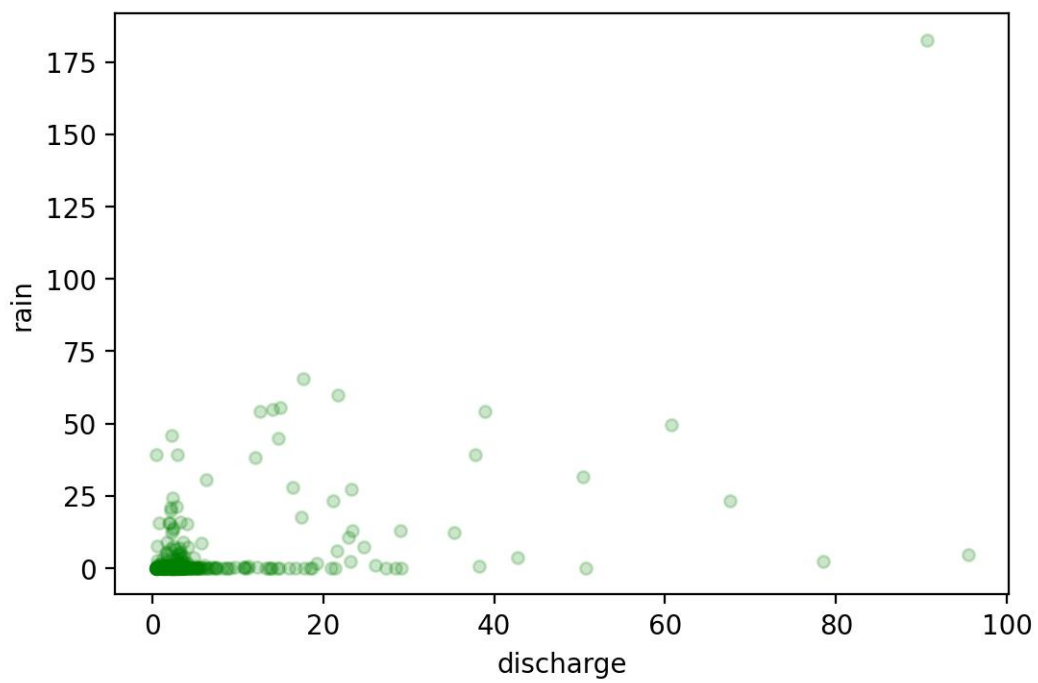**Spring Data:**

R^2 value = 0.20112483

Summer Data:

R^2 value = 0.21377479

Autumn Data:

R^2 value = 0.49951697

Numerical Modeling:

I have prepared all the necessary data in the Arc Map and run the model in Mike-NAM as well as HEC-HMS. I think we have all the required data for running the numerical model we only need to discuss the value of some parameters.

Water Balance:

I have not calculated the water balance yet.