HYDROLOGY, SEMINAR 2

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In the following task, a total of six stations were analyzed. Precipitation and discharge for the same were downloaded from the SMHI website, and were imported and analyzed in Python. The station were :

1. Gransel
2. Karats
3. Langsjon
4. Sikfors KRV
5. Holmfors
6. Vojmsjoluspen

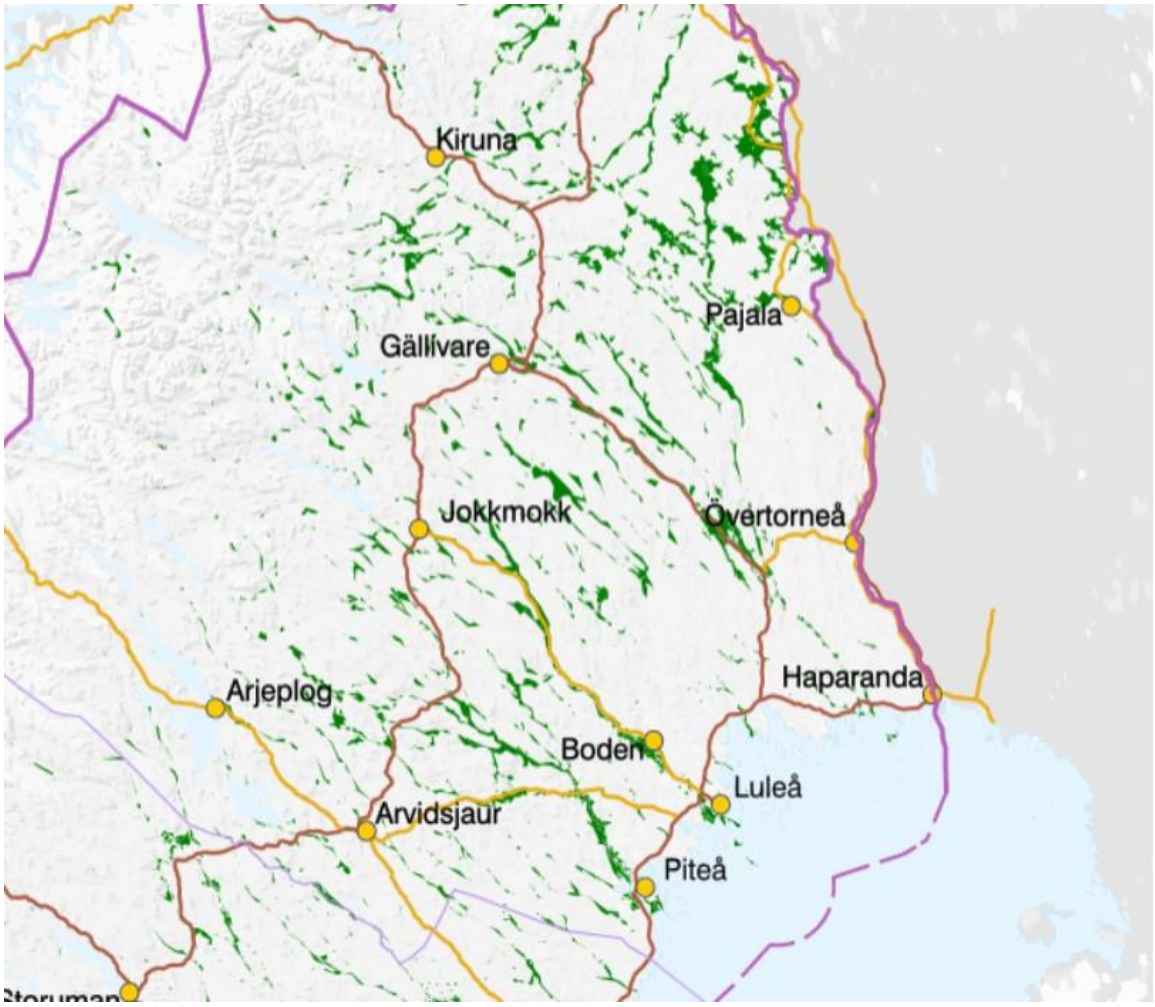

Fig.1 : This figure shows the bird's eye view area from where the data was collected.

This data was analyzed in python. First the monthly total values were calculated for each data set. Then the run-off ratio was determined, which is the total discharge upon the total precipitation. Which is the monthly run-off ratio. Similarly the yearly run off ratio was calculated. Finally, the monthly run-off ratio was divided by the yearly run-off ratio and graphs were obtained in python.

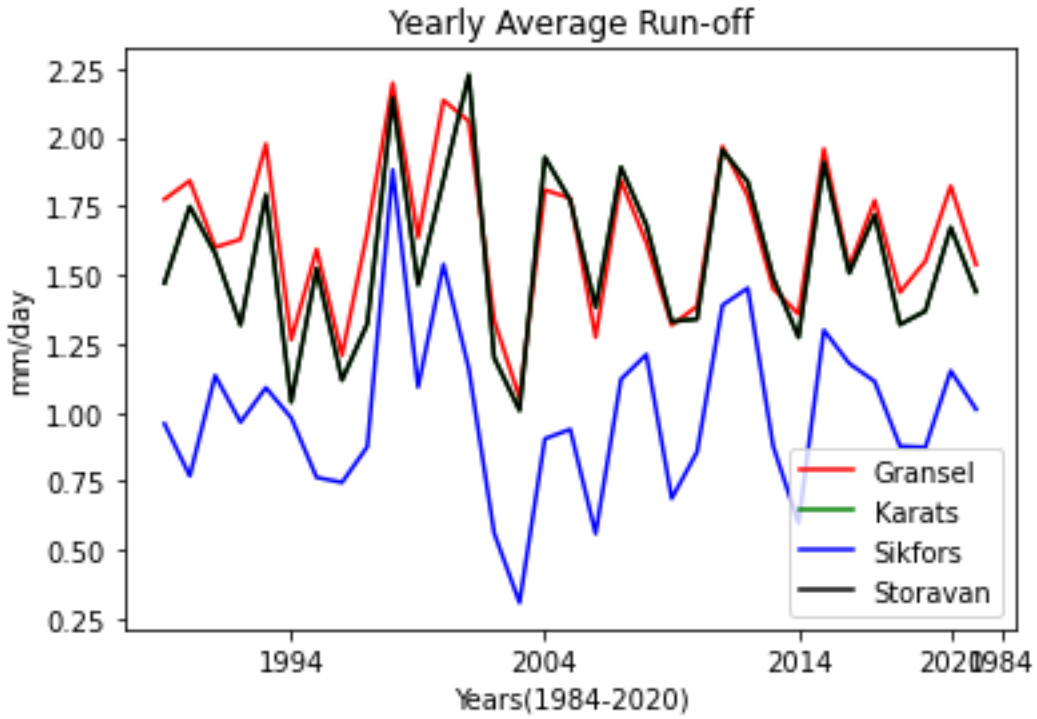

Fig.2 : This graph shows that the yearly Average run-off for the catchments. The values of Karats and storavan, are identical and hence have overlapped each other.

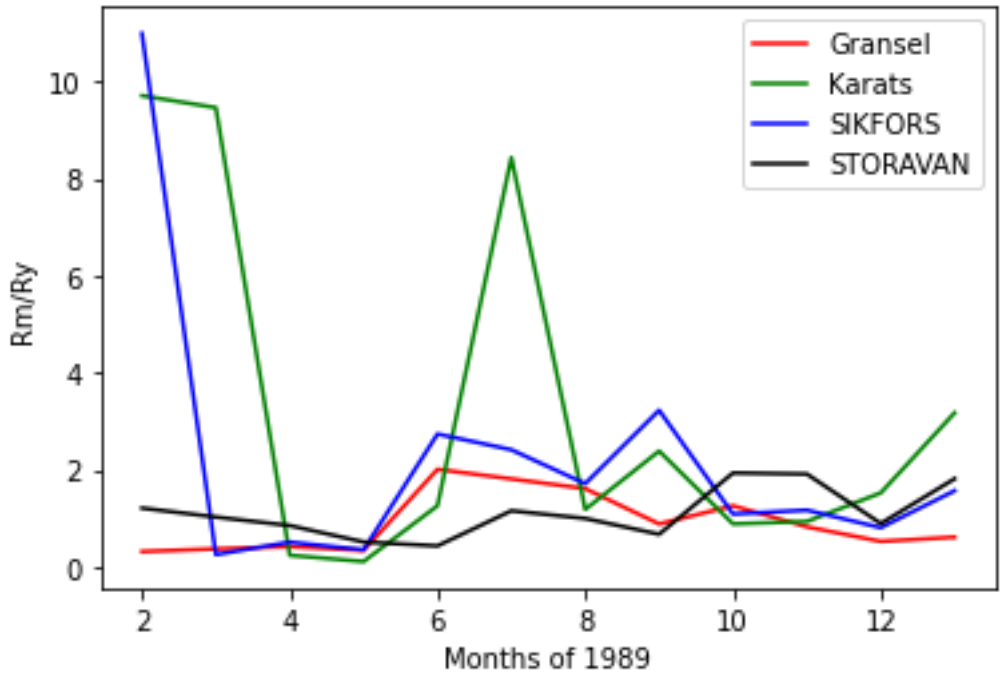

Fig.3: This graph shows the monthly by yearly Run-off ratio. We can see that the summer months have a higher value than the winter months as the discharge is more.

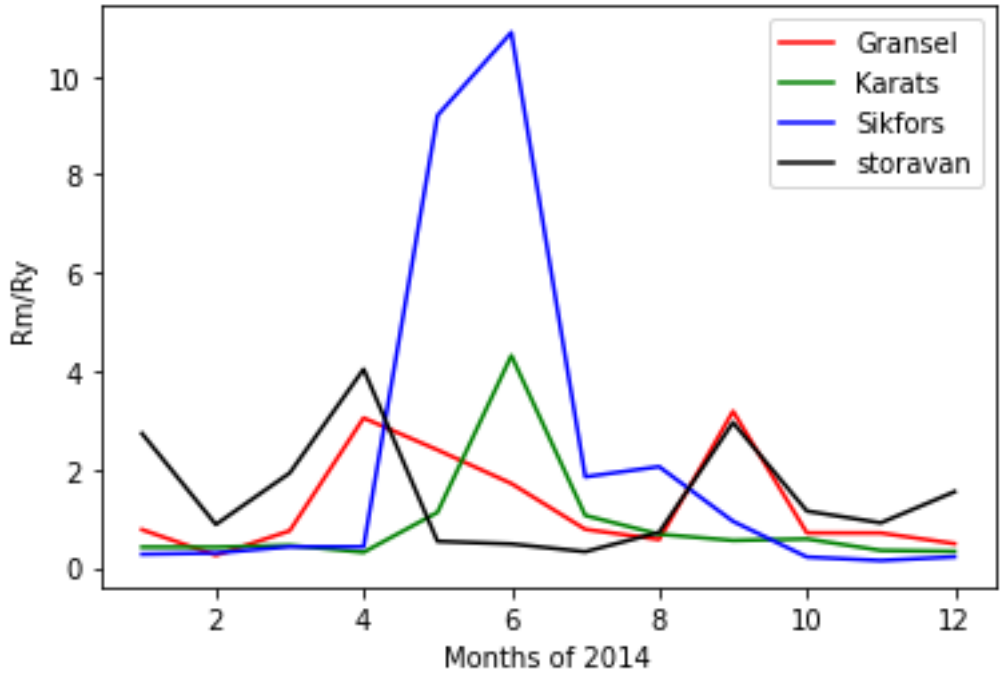

Fig.4: This graph shows the monthly by yearly Run-off ratio. Comparing to figure three, we can see here that the Sikfors has a very high value of the ratio in the months of summer.