

Climate Change Impact on Hydrology in the Upper Blue Nile Basin

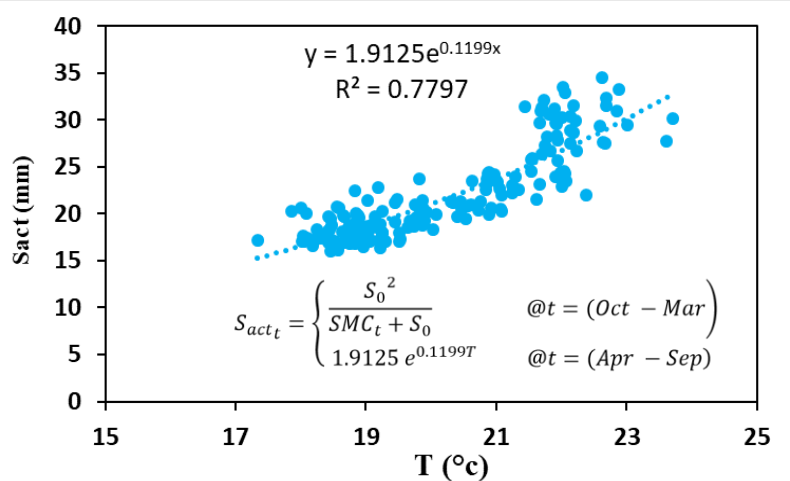
Input

GCMs (IPSL-CM5A-MR, HadGEM2-ES, and MPI-ESM-LR),
(RCP4.5, RCP8.5),
Rain & Temp.

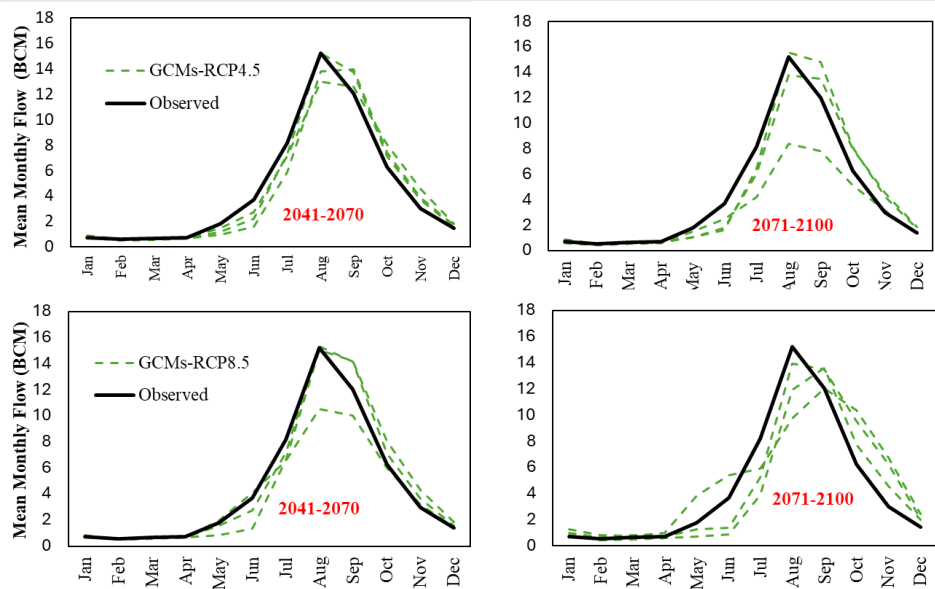
**Bias Correction
Method (DCF)**

Process

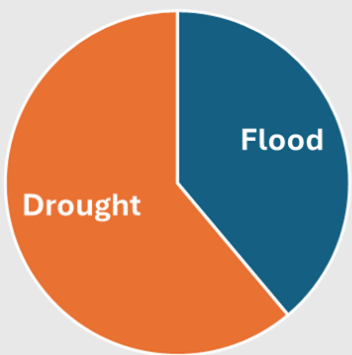
Modify SCHydro Model



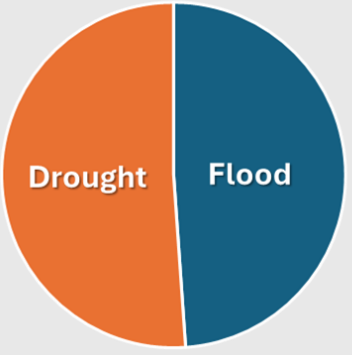
Outcomes



RCP 4.5



RCP 8.5



Conclusion

Climate change will shift Blue Nile flows, increasing dry season water, reducing wet season flows, and balancing flood-drought risks, requiring adaptive management.