

---

## Contents

### **Investigating the impact of Hurricane Hugo on Stream Chemistry data in Luquillo**

Here are the expectations

Background

Goals

Data

Chemistry of stream water data from the Luquillo Mountains

Group project presentation (12-15min)

Reference

## Investigating the impact of Hurricane Hugo on Stream Chemistry data in Luquillo

We are going to build on the exercise we used the first day and work on implementing and refining the workflow we developed during that session.

## Here are the expectations

---

By group of 4-5 collaborators:

- Find an awesome name for your group (one of the hardest step)
- Setup a shared GitHub repository
- Use the MEDS server Taylor as your main computing resource
- Use GitHub to manage your code development in a collaborative manner
- Use shared folder on Taylor to manage your data /courses/EDS214/my\_group\_name
- Document your work as you go!!
- Use GitHub issues to track your work and discuss progress and tasks

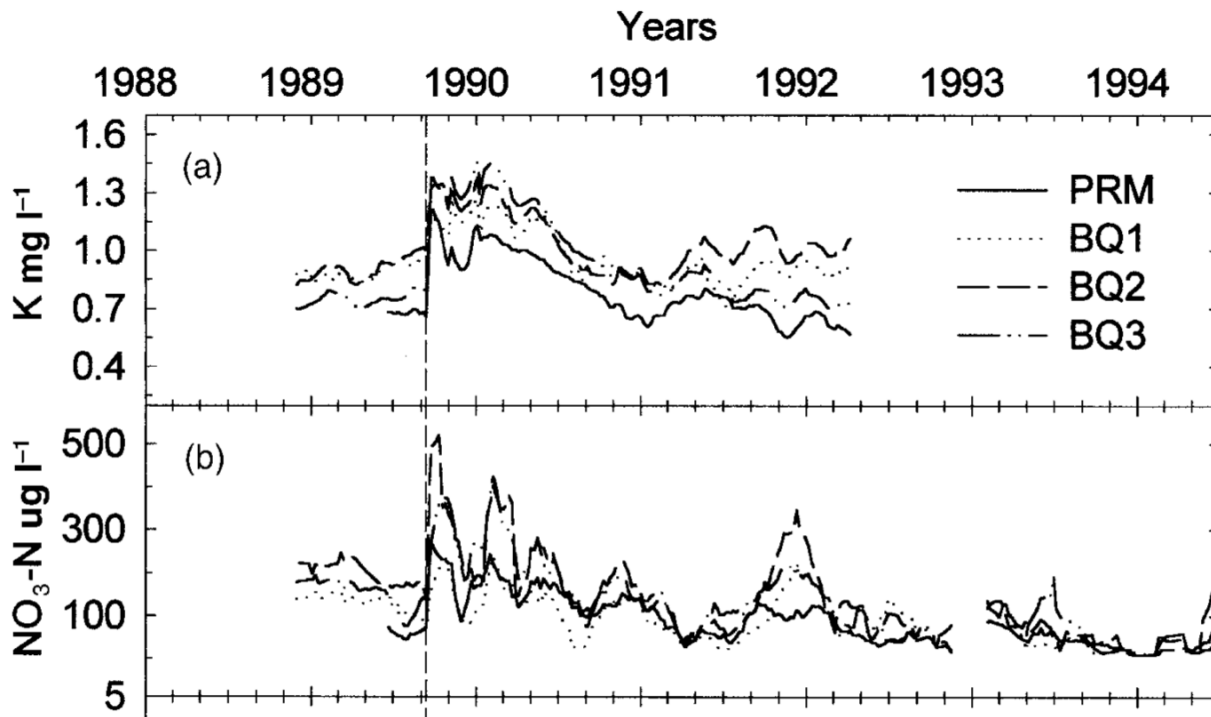
## Background

---

The Luquillo Experimental Forest (LEF) has been a center of tropical forestry research for nearly a century. In addition, the LEF is a recreation site for over a half a million people per year, a water supply for approximately 20% of Puerto Rico's population, a regional center for electronic

communication, and a refuge of Caribbean biodiversity. It is the goal of the USDA Forest Service and the University of Puerto to promote and maintain the forest's role as a center of active and dynamic scientific inquiry. However, to maintain the ecological integrity of the forest while balancing the many demands placed upon it's resources, certain protocol is required. This guide provides the major protocols that govern research in the LEF. These protocols are designed to help researchers protect the forests, obey the law, create an amiable and non-discriminatory work environment, and provide a historical record for future scientists

Here for more information about the Luquillo site: <https://lternet.edu/site/luquillo-lter/>



## Goals

1. Can you recreate that plot (content, not style wise)
2. Ask your own question! You are encouraged to define you own question around this topic as a team using the latest data set

## Data

Data are available from the Environmental Data Initiative ([EDI](#)) that is hosting most of the data of the Long Term Ecological Research ([LTER](#)) Network.

## Chemistry of stream water data from the Luquillo Mountains

McDowell, W. 2022. Chemistry of stream water from the Luquillo Mountains ver 4923058. Environmental Data Initiative. <https://doi.org/10.6073/pasta/1dd1a59a7e6fbe95fdf8736477d81b83>

## Group project presentation (12-15min)

---

Major points to hit:

- Goal/Question + workflow you used to achieve it (aka *THE* plan)
- How did you set up your project (server, data, code, ...)
- How did you organize your team (tasks, who did what)
- Results
- Challenges
- Share your work! Where to find your resources

## Reference

---

Schaefer, D., McDowell, W., Scatena, F., & Asbury, C. (2000). Effects of hurricane disturbance on stream water concentrations and fluxes in eight tropical forest watersheds of the Luquillo Experimental Forest, Puerto Rico. *Journal of Tropical Ecology*, 16(2), 189-207.  
[doi:10.1017/S0266467400001358](https://doi.org/10.1017/S0266467400001358)