

**Supporting the Scientific Practice of Data Analysis through Creative Investigations of Long-Term Ecological Datasets**

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Project type:​ Developing and Testing Innovations

Project Overview: Data Jam engages students in the process of exploring, analyzing, and summarizing long-term data about nearby ecosystems that are the subject of extensive long-term study by LTER. The first goal is the development and validation of a new professional development model to support Data Jam teachers. The second goal is to broaden opportunities for students to develop their abilities to conduct independent research projects using long-term ecological data while developing their identity as a STEM professional.

Puerto Rican students value the opportunity to use data about their island to investigate their own research questions.

**Equity**

Data Jam empowers students to investigate their own environment. The design of and recruitment for the teacher professional development is intentional about reaching schools in parts of Puerto Rico that traditionally have not had access to scientific resources.

**Lessons Learned & Insights Gained**

Building teacher capacity around statistical concepts enables teachers to mentor their students in conducting their own research projects using long term ecological data. For many students, Data Jam was their first experience designing their own research project.

**New Challenges & Next Steps**

Hurricane Fiona forced school closures for several weeks and some still do not have Internet restored. We are adapting our support for schools and adjusting timelines. The crisis has also revealed variability in leadership support for Data Jam. We are exploring ways to better communicate with school leaders.