ENVIRONMENTAL DATA VISUALIZATION

Science Film Festival

KEYWORDS

environmental monitoring | data science | statistical analysis | data visualization | evidence-based policy

Environmental data scientists collect and analyze information about the health of the environment, such as air and water quality, climate trends, and ecosystem changes. They use graphs, maps, and other visual tools to help governments, businesses, and the public understand important issues and make better decisions. Their work helps track pollution, monitor endangered species, and measure progress on climate goals. Green jobs in environmental data science are essential because they turn complex information into clear insights that can guide action to protect people and nature.

AGE RANGE
12-16 years

SMALL GROUPS
(2-3 students)

DURATION
45 minutes

MATERIALS

- Environmental datasets
- Graphing software or paper
- Calculators
- Trend analysis worksheets
- Colored markers

ENVIRONMENTAL DATA VISUALIZATION

Science Film Festival

PROCEDURE

1. Receive real environmental monitoring dataset
2. Identify key trends and patterns in data
3. Create clear visualizations showing important findings
4. Calculate basic statistics (averages, trends)
5. Draw conclusions about environmental conditions
6. Present findings with policy recommendations

INSTRUCTIONAL GUIDELINES FOR FACILITATOR

- Provide clean, manageable datasets
- Help with graphing software or provide graph paper
- Encourage proper data interpretation
- Connect to environmental monitoring and data science careers

LEARNING OUTCOMES

- Understand environmental data analysis
- Learn about environmental data science careers
- Practice data visualization and interpretation

EXTENSION SUGGESTIONS

- Set up simple environmental monitoring
- Contribute to citizen science projects
- Research environmental databases and tools