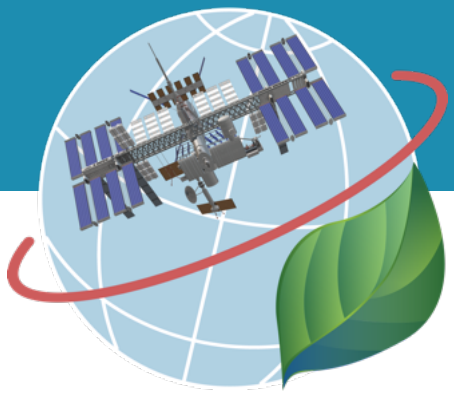
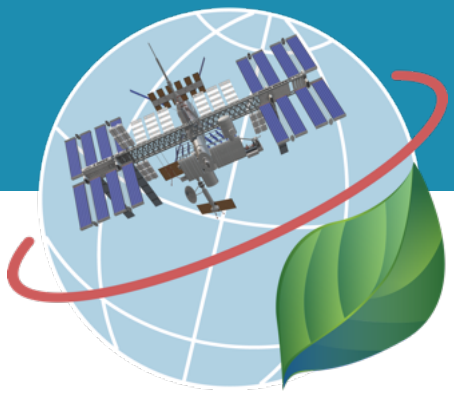


Contents



9

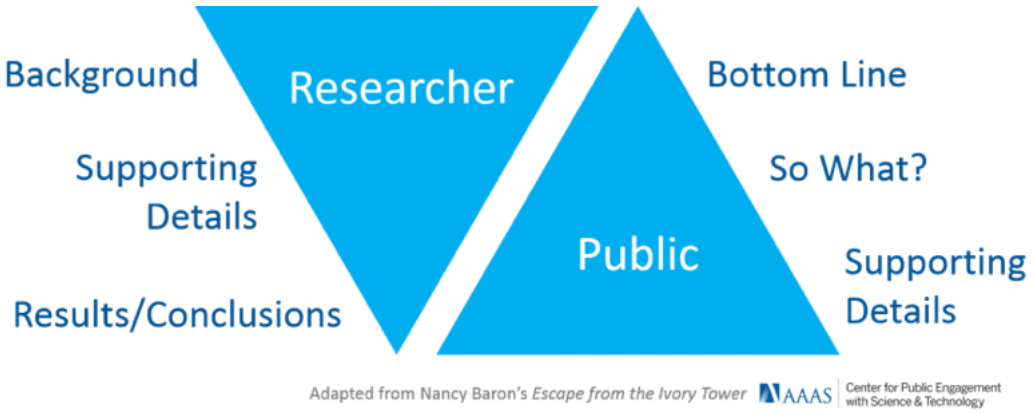
Communicating Data

Quick Links To Sections

Objectives:

1. Learn how to access colorbrewer options in QGIS.
2. Incorporate Dr. Davidoff's data communication ideas into our ECOSTRESS workflow.

Motivation For Today's Tutorial : Communicating Science



The following is an excerpt from the National Institute of Health's Article "Communicating Science Effectively: A Research Agenda.":

The public generally holds scientists and their work in high regard due to the contributions science has made to the daily lives of those in society, and science in turn has benefited from substantial financial and other forms of public support. This mutually supportive relationship between science and society places a responsibility on scientists and technologists, as citizens, to share the results of their work with the broader public so they can reap its benefits as expeditiously as possible.

Communicating about science effectively with public audiences, however, turns out to be more difficult than it might at first appear. Complexity stems from the diversity and interconnectedness of many elements, including the goals for communicating, the content being conveyed, the format in which it is presented, and the individuals and organizations involved. People approach science communication from their own starting points; a combination of expectations, knowledge, skills, beliefs, and values that are in turn shaped by broader social, political, and economic influences.

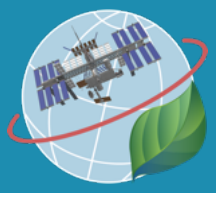
Moreover, the communication landscape is changing dramatically in ways that offer unprecedented opportunities to communicate and connect with others but also pose many challenges.

In the last class, Dr. Davidoff presented some new ideas about communicating data. Today we are going to incorporate those ideas into our ECOSTRESS workflow.

9.1 USING COLORBREWER IN QGIS

9.2 INSTRUCTIONS FROM DR. DAVIDOFF

1. Redesign a previous map, using the principles of graphical communication
    - What are the variables your map displays, and what visual dimensions are you using to encode that data? What color palette are you using and why?
    - How are you following the principle of data/ink ratio? Do you have any unnecessary lines? Can your line strokes be reduced in weight? What are you using as your base map and why?



- What grid layout are you using? Are the panels the same size? Similarly justified? Do they have titles and captions that explain their contents? Is there a hierarchy of size in the type?
- Are you following the principles of gestalt psychology? Are related items physically proximal? Are unrelated items standalone?

2. Adapt the redesigned map, using a small multiples presentation. Use the comparison to show that there is a relationship between variables over the map.

Map of the Week Assignments

1. Submit your redesigned map following the instructions above.
2. Submit your small multiples presentation following the instructions above.

Submit these assignments via Canvas before the next class.

Recommended Citation: Forsythe, J.D., G.R. Goldsmith, and J.B. Fisher. 2023. Observing Earth from Above Tutorials. Chapman University. https://jeremydforsythe.github.io/icecream-tutorials/

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