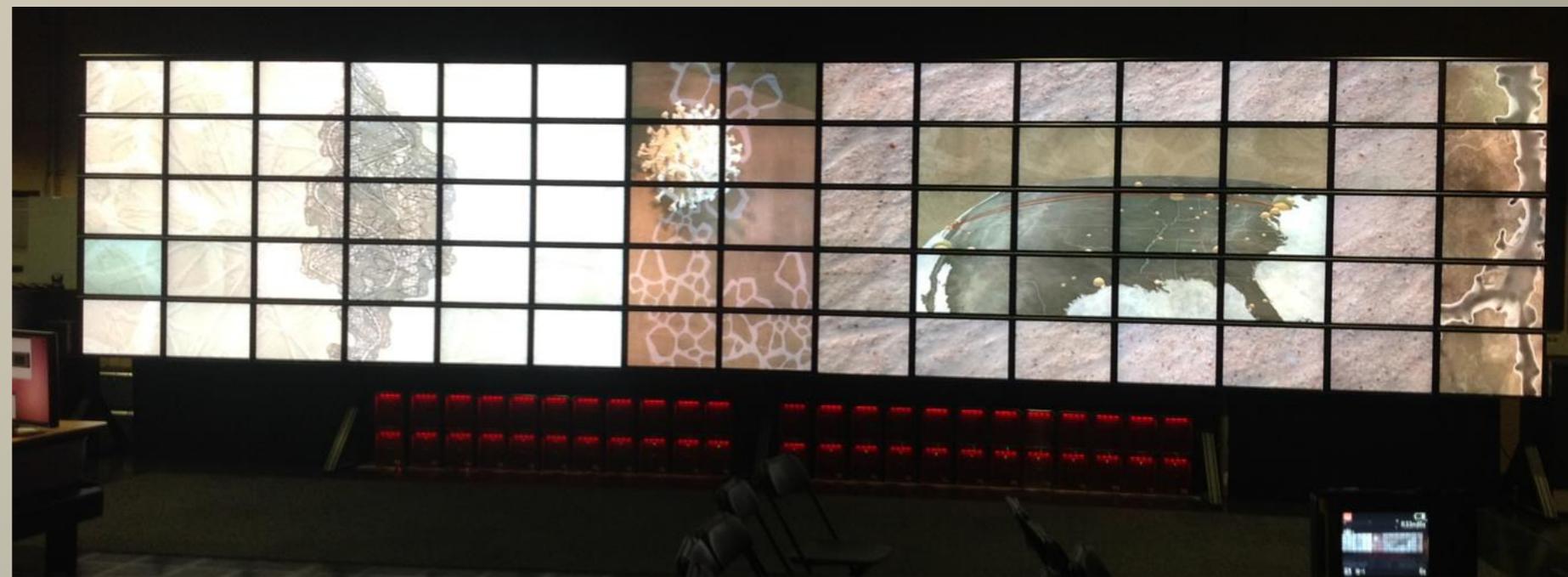




Francesca Samsel
Assistant Research Professor, University of Texas at El Paso
Research Affiliate, Center for Agile Technologies, UT Austin
Collaborating with the Visualization Research Team, LANL

Artistic and
Scientific language

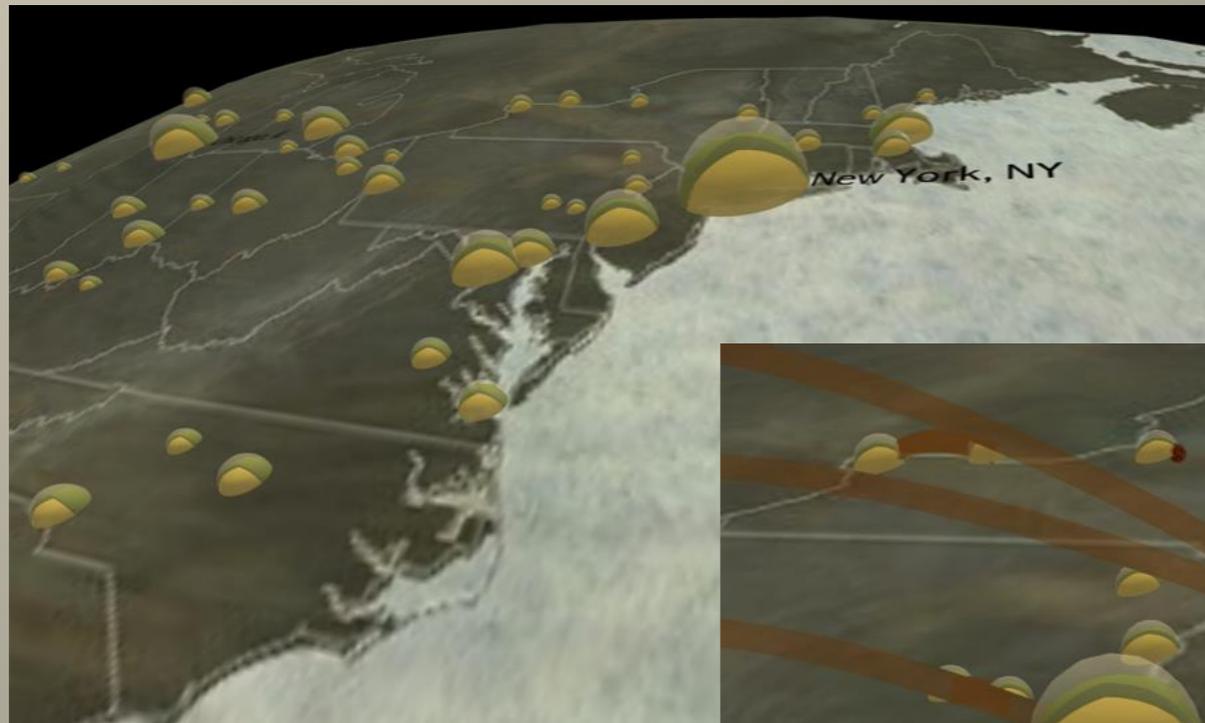
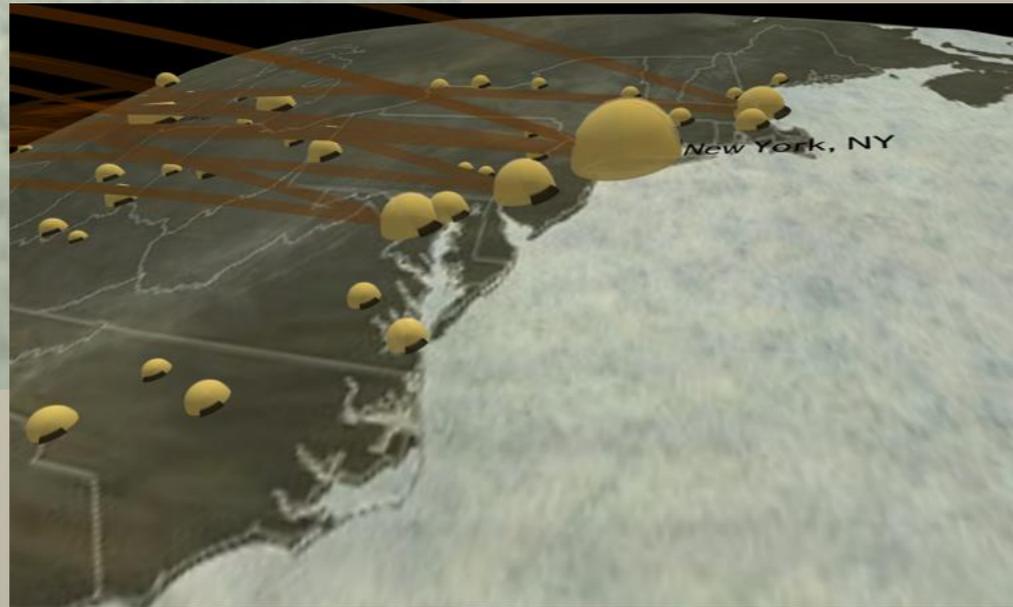
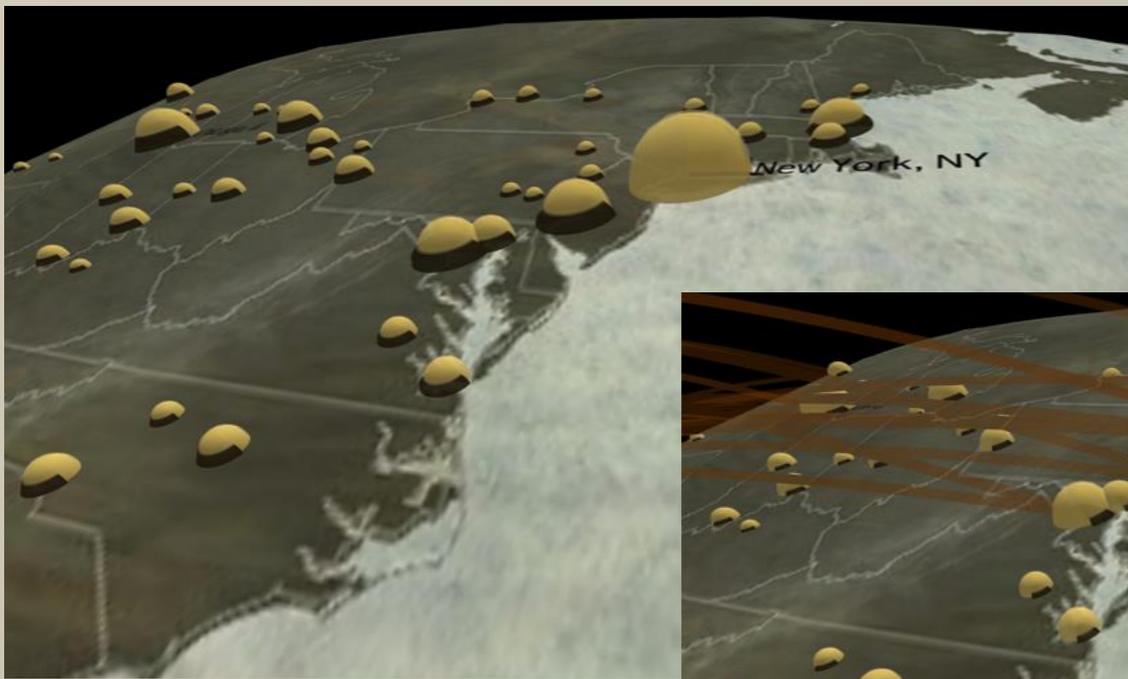
Communicating to
both hemispheres



Transmission

Francesca Samsel, University of Texas at El Paso
Visualization in collaboration with Kelly Gaither
Texas Advanced Computing Center, University of Texas at Austin

Visualization in collaboration with Dr. Kelly Gaither
Based on the Pandemic Flu research of Dr. Lauren Ancel Meyers
Texas Advanced Computing Center, University of Texas at Austin



Speaking to both sides of the Brain

data

human connection



CyberShare Center for Excellence
University of Texas at El Paso
Francesca Samsel Dr. Craig Tweedie
Commissioned by the Rubin Center for the Arts

Re-Enchanting Science



Turbulence and Topography

Commissioned by
The Ruben Center for the Arts in
collaboration with ISEA 2012

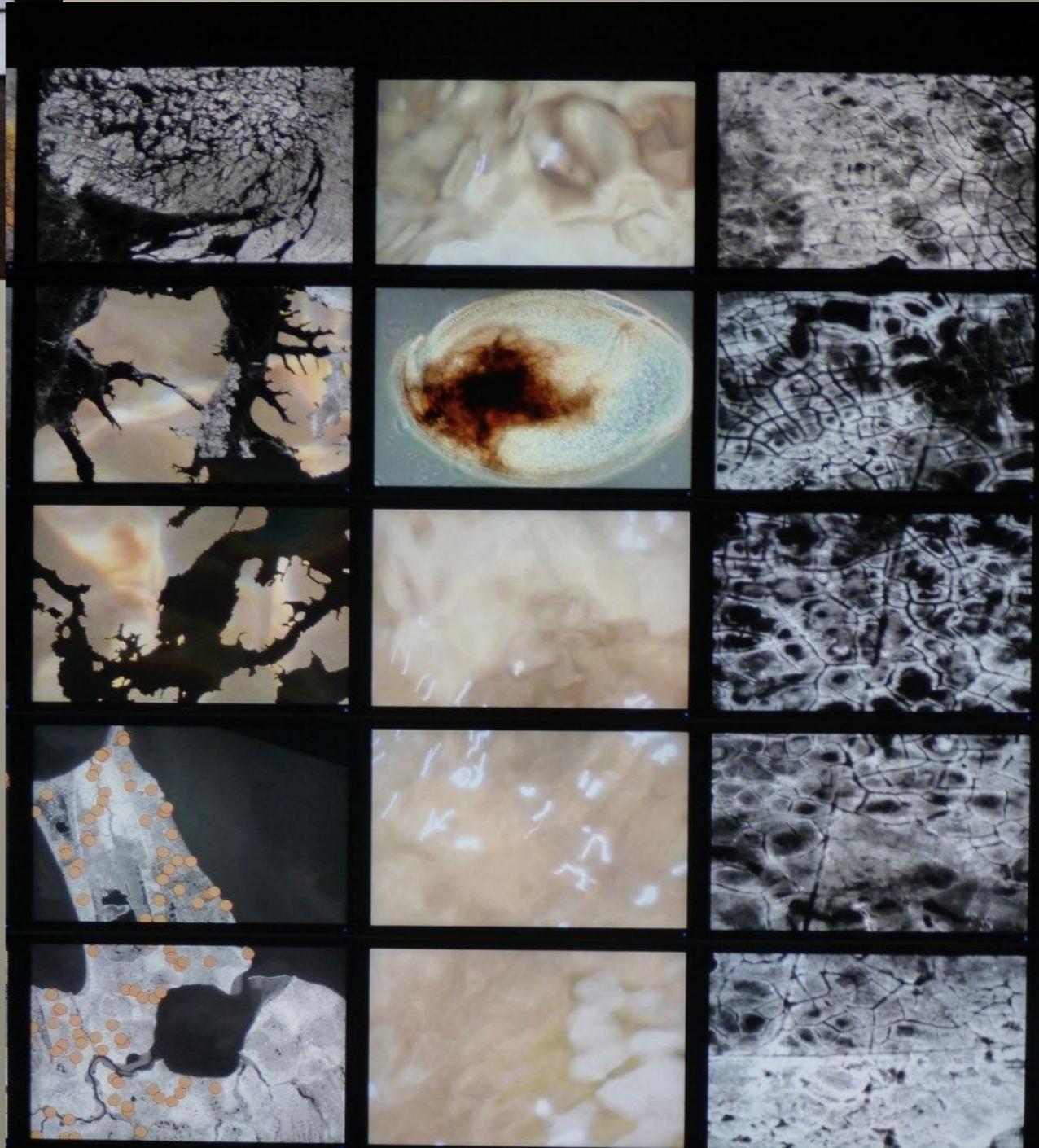
CyberShare Center for Excellence
University of Texas at El Paso
Francesca Samsel Dr. Craig Tweedie



Speaking to Our Humanity Through...

The wonder of nature
plankton
topography
satellite maps
lidar data

From the human hand
photographs
etchings
drawings



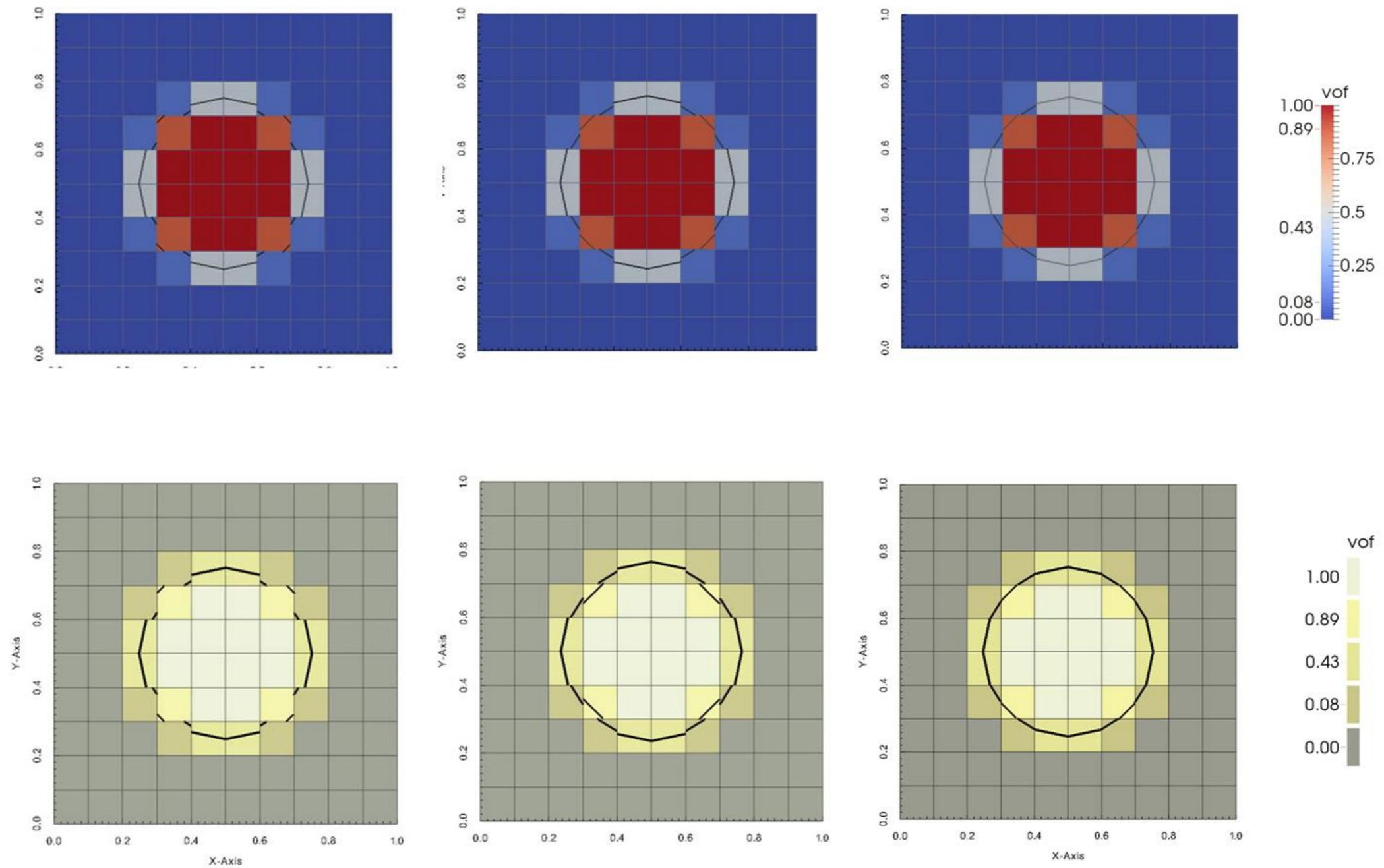
Turbulence and Topography

Francesca Samsel Dr. Craig Tweedie
CyberShare Center for Excellence
University of Texas at El Paso

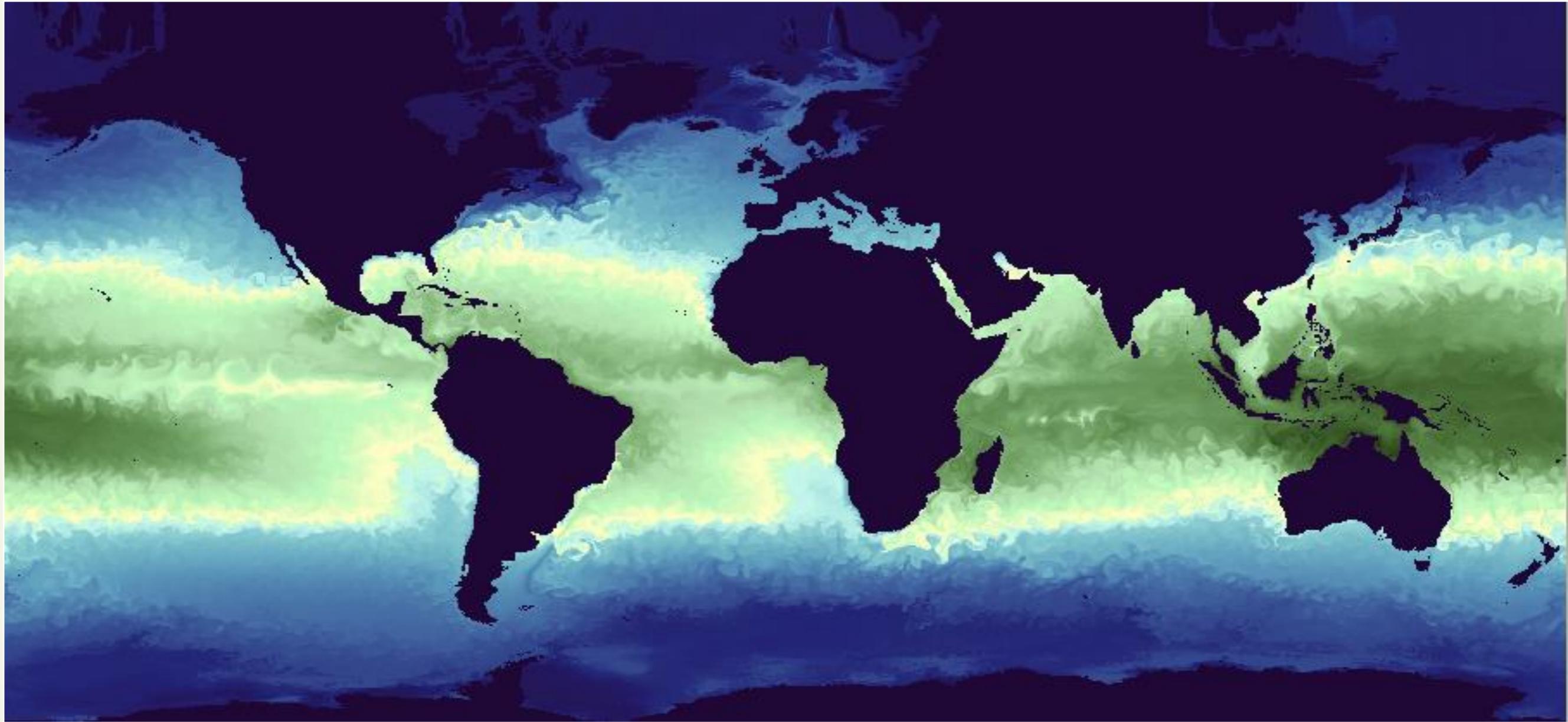


Less is usually more
Leave a bit unsaid
Reduce to create focus

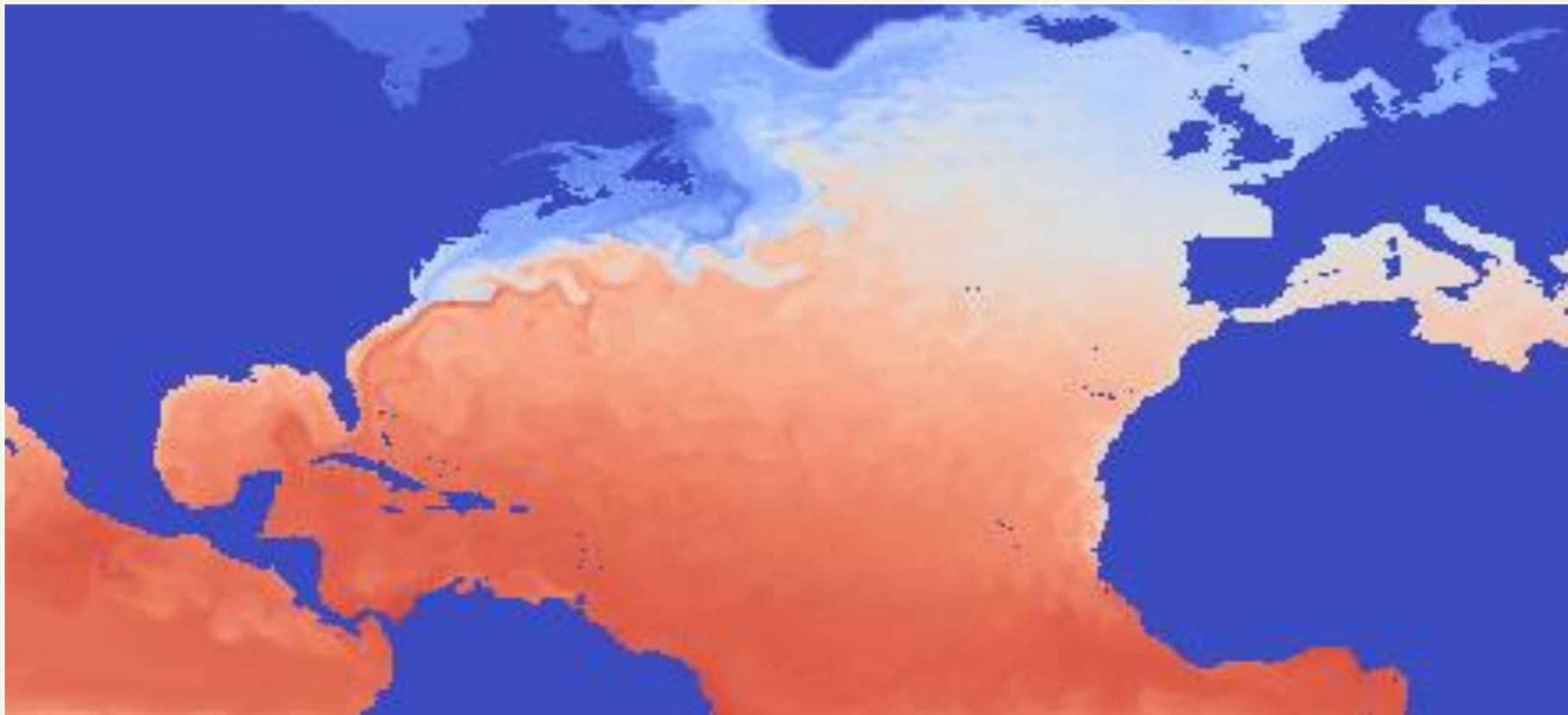
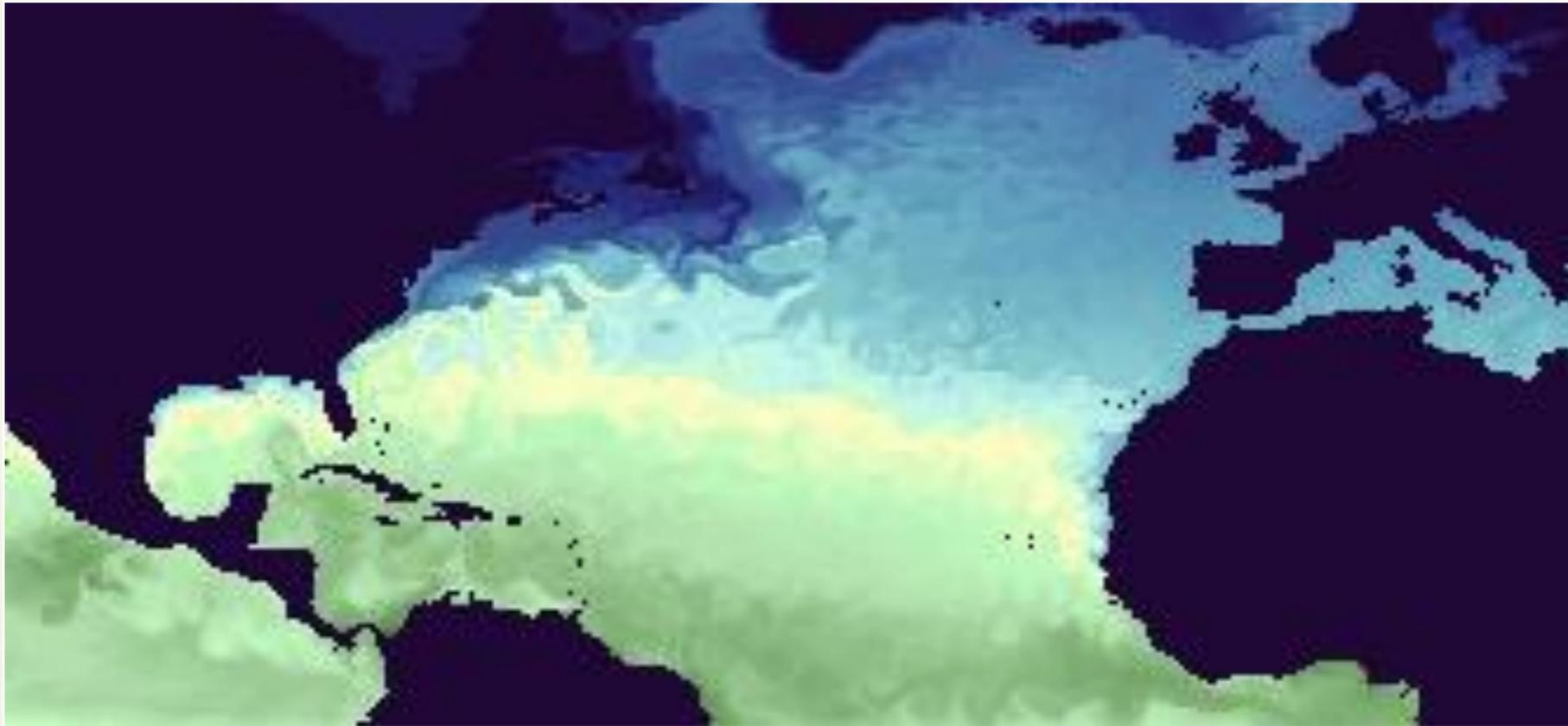
For Example...



Placing the highlight color to draw attention to the relevant areas
Non-critical areas colored with neutrals



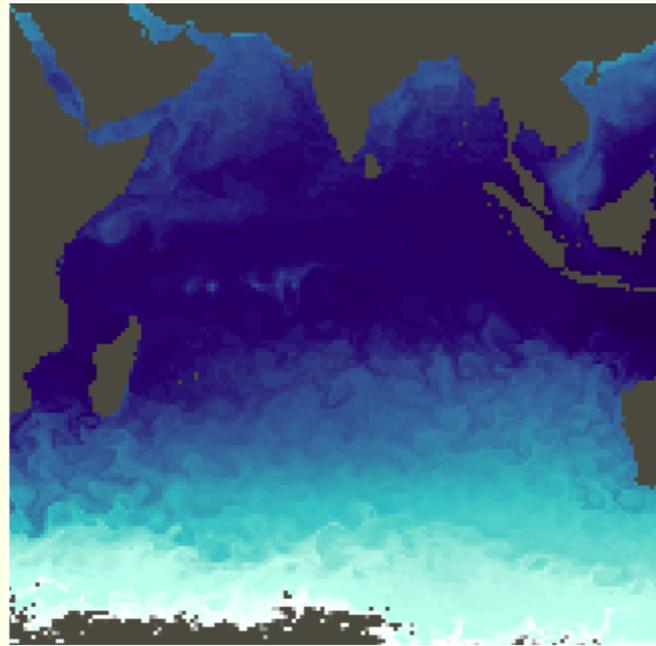
Perception driven color mapping



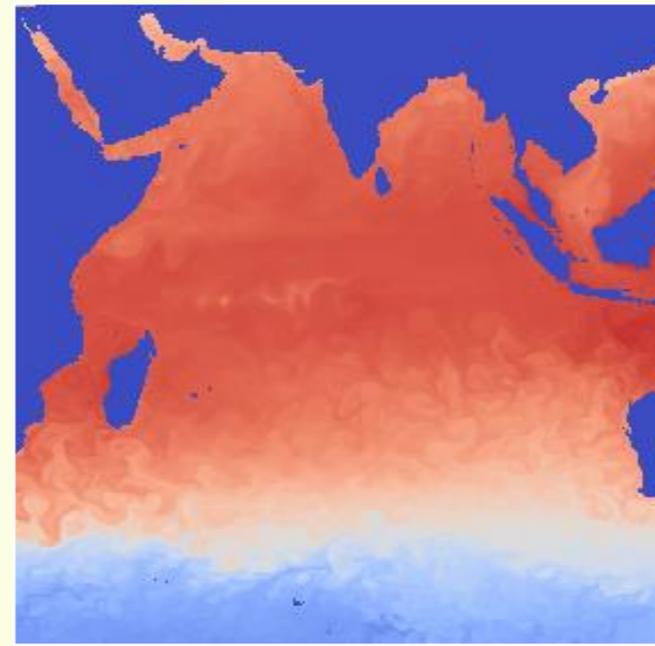
Same data
More information
Lower cognitive load

Comparisons to the defaults

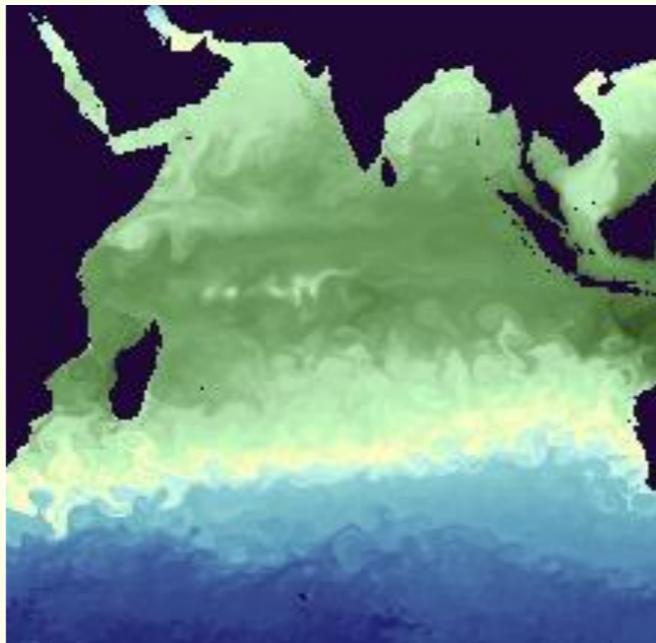
Rainbow color map and Red / Blue color map



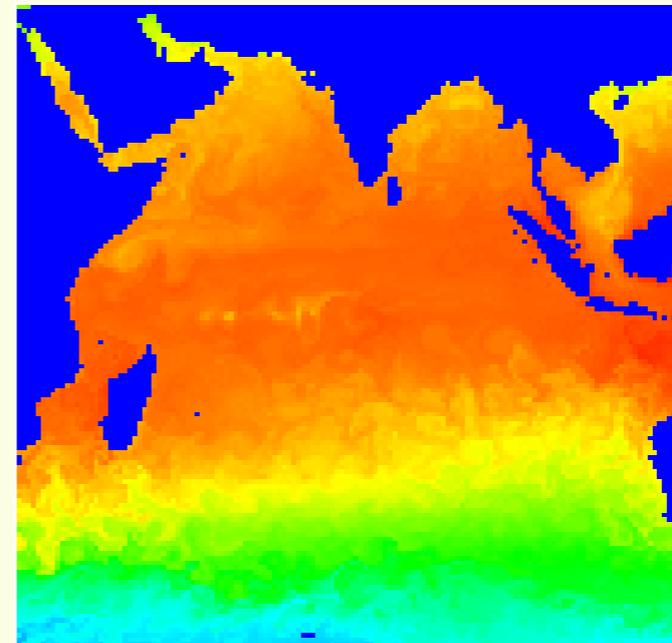
linear blue



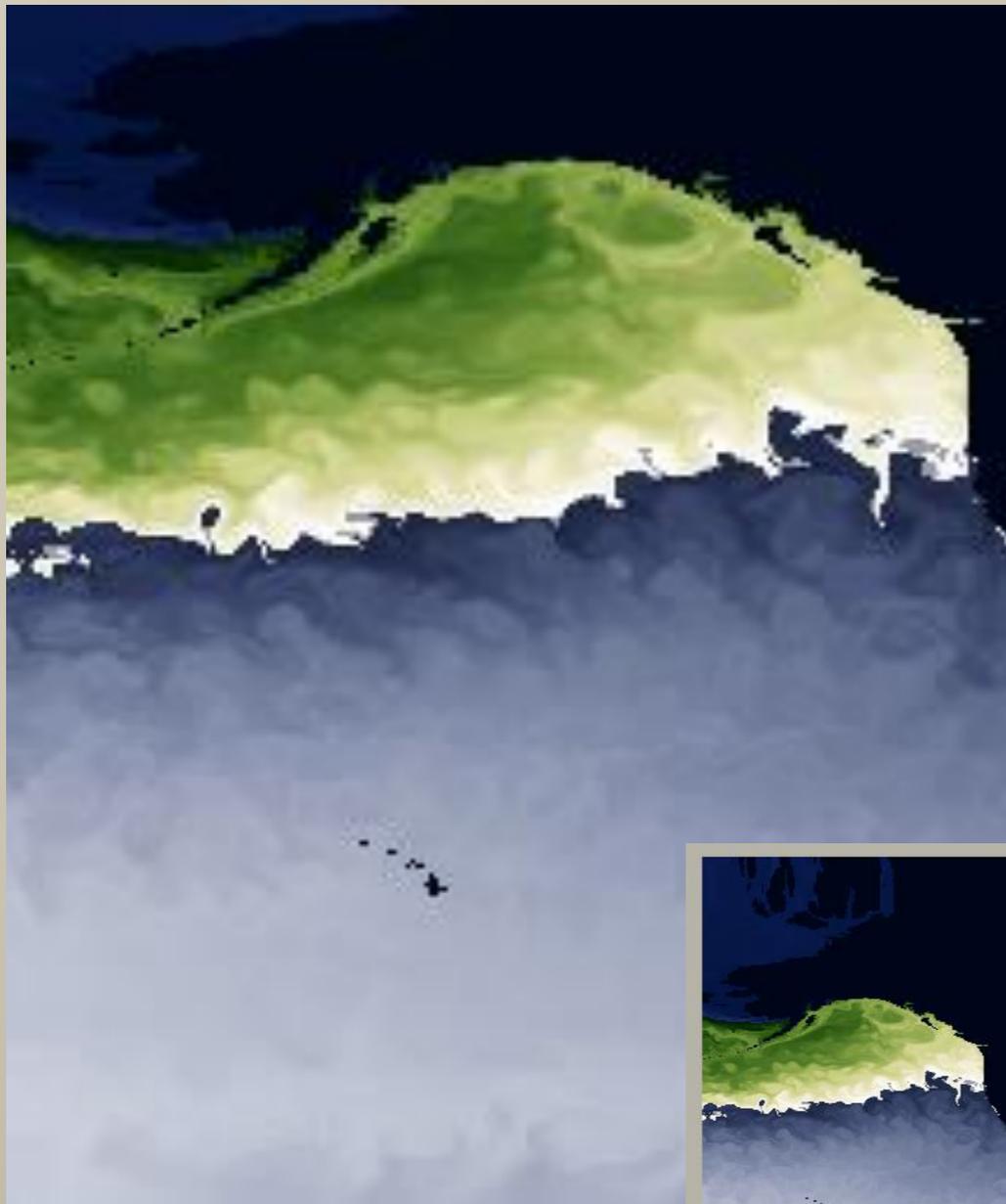
warm / cool



blue / green divergent

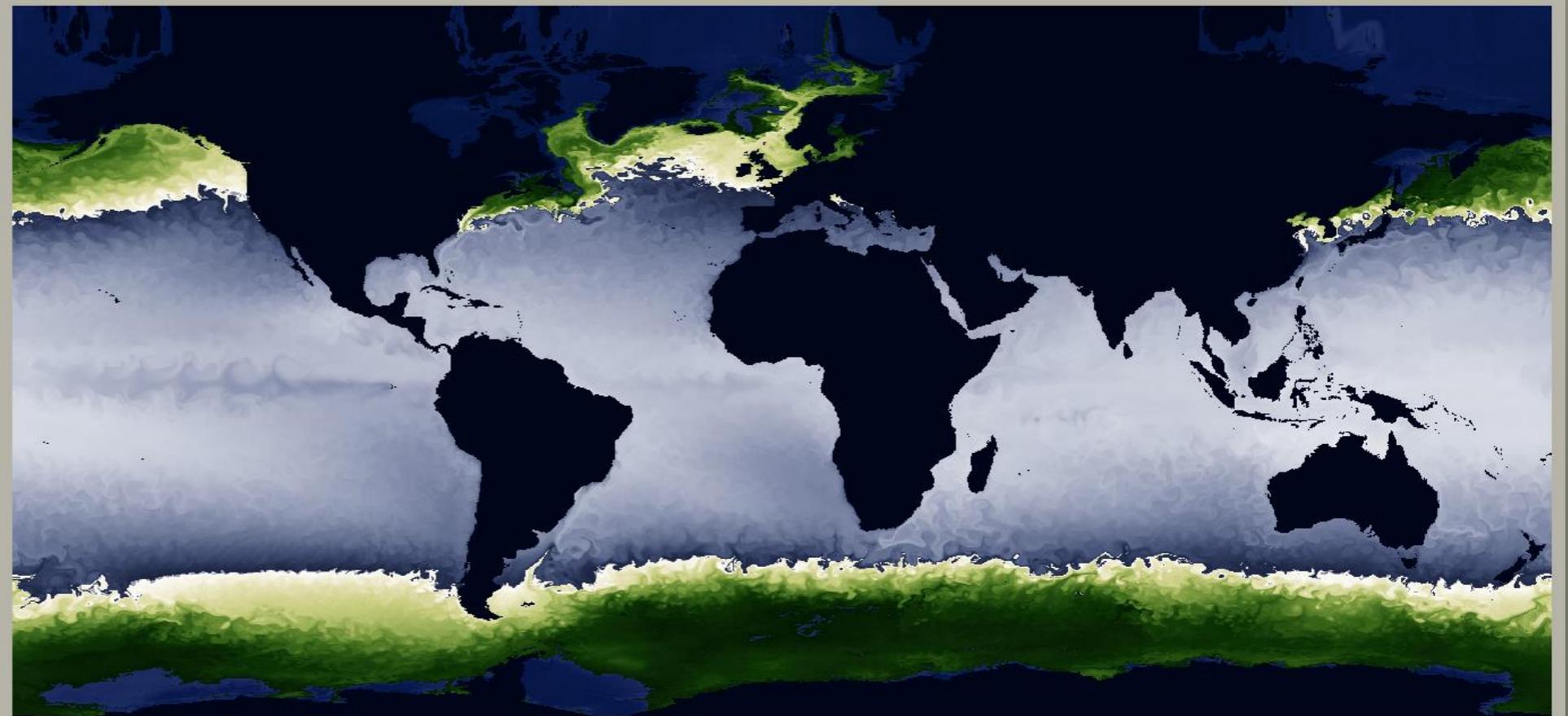


rainbow



Focusing attention

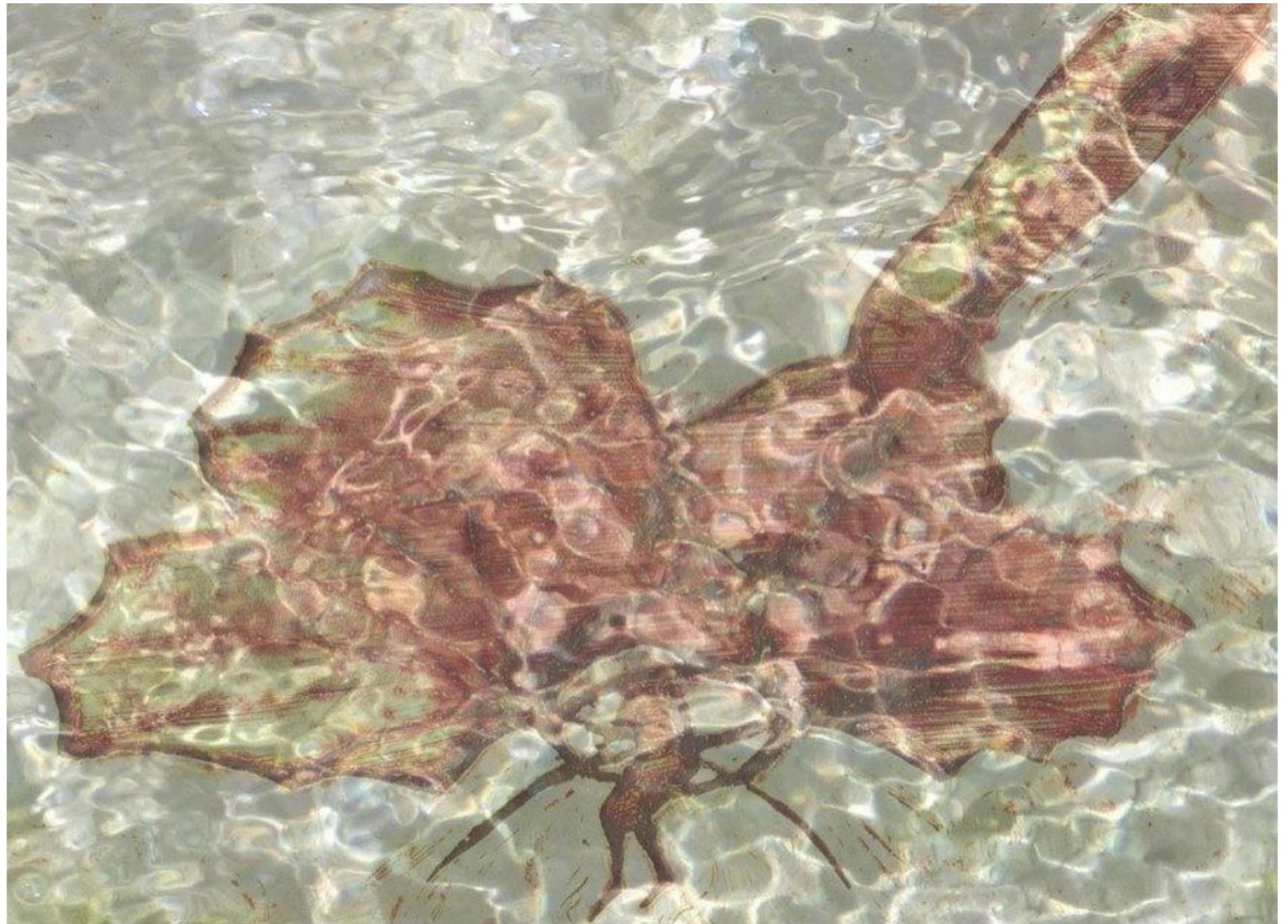
Highlighting specific data ranges



Risk and Trust

Working outside of
one's comfort zone
is required.

All parties need to
trust that results will
come.



A collaboration is an *investment* on everyone's part.
One committed extended collaboration is better than
many smaller projects.



Poetry and Logic

***“We must link artistic vision
to scientific creativity...***

***... to “re-enchant” the story of our
relationship to nature, and of how knowledge
is acquired.”***

Christopher Comer

Professor of Biology & Neuroscience
Dean of the College of Arts & Sciences
University of Montana