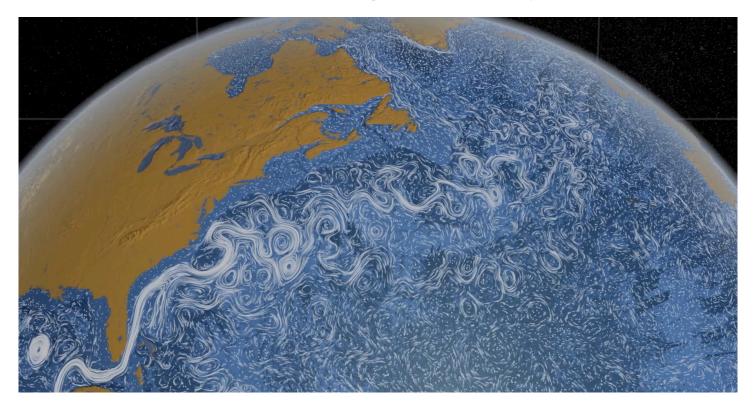
# **My NASA Data - Interactive Models**

## Ocean Circulation Patterns: Garbage Patches Story Map



Ocean currents are masses of water in motion that circulate the water and all that's in it. Driven by wind and other forces, currents on the ocean surface cover our planet. Some span hundreds to thousands of miles across vast ocean basins in well-defined flows. Others are confined to particular regions and form slow-moving, circular pools. Seen from space, the circulating waters offer a study in both chaos and order.

To learn more, visit:

The <u>Ocean Circulation Phenomena page</u> for background information

Teachers who are interested in receiving the answer key, please complete the <u>Teacher Key Request</u> and <u>Verification Form</u>. We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

#### **Grade Band**

- 3-5
- 6-8
- 9-12

#### **Supported NGSS Performance Expectations**

- <u>5-ESS2-1: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</u>
- MS-ESS2-1: Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
- MS-ESS2-4: Develop a model to describe the cycling of water through Earth's systems driven by energy from the Sun and the force of gravity.
- MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.
- MS-PS1-3: Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- HS-ESS3-6: Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

### **NGSS Disciplinary Core Ideas**

- PS1A: Structure and Properties of Matter
- ESS2A: Earth Materials and Systems
- ESS3C: Human Impacts on Earth Systems

## **Science and Engineering Practices**

- Developing and Using Models
- Analyzing and Interpreting Data

### **Crosscutting Concepts**

- Patterns
- Systems and System Models

#### **Related Resources**

- <u>Data Literacy Cube Guide</u>
  <u>Instructional Strategies for the Earth Science Classroom</u>