

## **Citizen Science with ISeeChange**

LOUISIANA STATE MUSEUM

**Living with Hurricanes: Katrina and Beyond – Post-video Activity** Watch the video at: https://louisianastatemuseum.org/education/virtual-field-trip/hurricane-katrina

#### Weather Observation and Data Collection

**Objective:** Students will discover how weather affects their communities and brainstorm solutions to climate challenges by observing weather and recording, analyzing and reporting weather data.

Louisiana Student Standards: MS-LS2-1, MS-LS2-4, MS-ESS3-2, MS-ESS3-3, MS-ESS3-4, MS-ESS3-5, HS-LS2-1, HS-LS2-2, HS-LS2-6, HS-LS2-7, HS-LS4-5, HS-ESS2-2, HS-ESS3-5, HS-ESS3-6

### Introduction

Hurricane Katrina caused devastating loss of life and property damage throughout the Gulf Coast region when it made landfall on August 29, 2005. By the end of the year, 2005 held the record for the most tropical cyclones in one season with 28 named storms.

Just fifteen years later, the year 2020 broke 2005's record for the most active hurricane season. Many scientists believe that global climate change will continue to increase the frequency and intensity of future hurricanes. These changes place communities at risk.

How do scientists discover changes in weather and climate? Scientists make observations, record their findings, and analyze trends and changes in the data over time. You can make observations in your own neighborhood to learn more about the impact of weather on your daily life and uncover the effects the climate change on your community. Get started with the organization ISeeChange (www.iseechange.org).

The mission of ISeeChange is connecting people to their changing environments and developing solutions together. ISeeChange crowdsources data to identify the impacts of climate change. You can contribute by sharing your observations and stories!

### **Activity summary**

Choose a local weather or climate feature to observe, record, and analyze with your class.

Create an ISeeChange account where you can share your weather observations and stories.

Discuss your weather observations with your class or others on the ISeeChange platform.

Develop solutions for your community to adapt to or lessen the effects of climate change.





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# **Choose an investigation**

What will your class investigate? You can focus on one aspect of weather in your community. Here are some examples of ISeeChange's ongoing investigations in the New Orleans area:

- Extreme Heat: Urban heat is a growing problem. Heat disrupts health, daily routines, household expenses, local businesses, and schools. Help monitor urban heat with temperature data and observations of how heat impacts you and your neighbors. Learn more and share your stories at <a href="https://www.iseechange.org/investigations/5749ffb4245032597e8c643f/">https://www.iseechange.org/investigations/5749ffb4245032597e8c643f/</a>
- **Storms and Flooding:** Flooding damages homes, cars, roads, and bridges. Help figure out where to monitor and target flood fixes so New Orleans can be more resilient. Local observations fill in the missing details in the bigger picture of flooding impacts. Learn more and share your stories at <a href="https://www.iseechange.org/investigations/5749ffb4245032597e8c643d/">https://www.iseechange.org/investigations/5749ffb4245032597e8c643d/</a>

Or choose another aspect of weather in your community! Observe snowfall, coastal erosion, or flowers blooming. Find more ideas at <u>www.iseechange.org/investigations</u> or come up with your own topic.

### Create an account and share stories

Follow the instructions on the next page to create an account for yourself or your class. Start sharing weather data and stories. Try making posts daily or weekly and choose a time frame for your project.

### **Discuss your weather observations**

You can discuss your findings after a month or collect data throughout the year and discuss regularly.

- What did you observe?
- How do your observations compare to your classmates' observations?
- How do your observations compare to those from the same month in a previous year? Find this
  information with the date range in the search function at <a href="https://www.iseechange.org/sightings">https://www.iseechange.org/sightings</a>
- How did this aspect of weather impact you, your family, or your neighbors? Can you identify both positive and negative impacts?
- Why does this weather event occur in your community? What natural and human-made aspects of your environment might influence these weather events?

### **Develop solutions**

Brainstorm ways to lessen the negative impact of these weather events on your community. How can you prevent floods or lessen their impact? How might you decrease extreme heat? Research possible solutions and be creative!







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### Become an ISeeChange community member

What you see change in your backyard, neighborhood, and city is important to our understanding of how climate change and weather affect our communities. Your observations and block-by-block insights can help cities, engineers and local organizations advocate for and create solutions to climate challenges. If you or your community has a question or hypothesis about how climate is changing your area, you can also use your ISeeChange account to collect data and answer those questions.

- Create your account: Your account is a personal record of your sightings as well as a way to connect with your local community. Your location is generalized to protect your personal privacy. Make an account at <u>www.iseechange.org/sign-up</u>
- 2. **Post a sighting:** The best posts combine detailed stories and photos to show what you're seeing in your environment and how it affects you. We then sync your stories to local weather data and trends. Add a sighting at <u>www.iseechange.org/posts/create</u>
- 3. Have conversations and connect: Comment on what others are seeing in your area and across the globe. Connect with community members on tips to manage the same climate challenges you are experiencing. Read and comment on other weather sightings in your community at <a href="http://www.iseechange.org/sightings">www.iseechange.org/sightings</a>
- 4. **Help improve local knowledge and research:** During weather events let us know what you're seeing and check in on the feed to see what information your community is gathering. We may send push notifications and emails during local and regional weather events. When you respond to them, we do our best to share what you saw with people studying local weather trends.
- 5. **Contribute to solutions:** We share posts on social media, in newsletters and in reports to local partners that are working on solutions. Be sure to subscribe to our emails so you can be the first to know when we hear someone has used your post as data. This helps you and others track how your community is changing in response to climate change.