

ArcGIS StoryMap Quickstart Guide



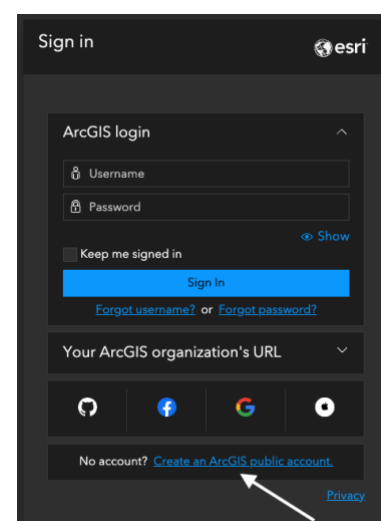
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Overview

This guide will help you create an ArcGIS StoryMap that tells the story of your GLOBE research. Your StoryMap will combine maps, images, and narrative to create an engaging multimedia presentation.

Step 1: Create Your Free ArcGIS Account

1. **Visit the ArcGIS StoryMaps website**
 - Go to storymaps.arcgis.com
 - Returning users, click "Sign In." New users: Step 2.
2. **Create a public account.**
 - Click "Sign In"
 - Click "Create an ArcGIS public account" (see screenshot)
 - Fill in your information.
 - Verify your email address to complete the account setup.
3. **Access StoryMaps**
 - Once logged in, you'll see the StoryMaps homepage
 - Click "Create story" to begin



Step 2: Choose Your StoryMap Type

This step will help you choose the StoryMap format that best fits your research goals and gives you the flexibility to design a clear, engaging narrative about your community and research focus. Select **"Start from scratch,"** which gives you the most flexibility to:

- Combine text, maps, and media effectively
- Control the flow of your climate narrative
- Customize sections for different aspects of your community

Step 3: Plan Your Story Structure

This step will help you plan the overall structure of your StoryMap so your research unfolds in a logical, engaging way that clearly communicates your process, findings, and conclusions. Your StoryMap should include these key sections for a GLOBE Research Project:

A. Introduction Section

- Describe the problem you are trying to solve
- Provide a brief overview of what readers will learn—state the science of your topic(s)
- Explain why the research is important—what is the community impact/connection of your research?
- Include a compelling opening image or map

B. Research Methods and/or Data Collection Plan

- Describe what you did for your research or what you plan to do
 - What data did you compare, or what do you plan to compare?
- Describe your study area(s): (site, school, community)
- Describe GLOBE protocols and/or data from the GLOBE database used/plan to use
- Include a picture and map of your study area(s) (e.g., Google Earth, satellite data, etc.)
- Include images of participants collecting data.

C. Data Analysis and Discussion of Results

- Include a table of your results
 - Make sure your table has a title and is numbered
 - Make sure each column or row in your table is clearly labeled
- Include a visualization of your results (e.g. graph(s))
 - Make sure your graphs have a title and are numbered
 - Make sure you have a legend (description of the information) in your graph
- Include a discussion of the results
 - Summarize (in words) your results by referring to your table(s) and graph(s)
 - Write about possible sources of error with your data:
 - What errors may be in your data?
 - Do your results compare with someone else's research?

D. Conclusion

- Discuss whether the results support your hypothesis
 - Discuss why or why not your hypothesis was correct
- Write about how you reached your conclusion
- Restate why it is important to know the results of your research
- What follow-up actions would you take:
 - Continue the study?
 - Use different protocols?
 - Collaborate with others?
- Write about the impact of working with a project mentor/scientist (*if applicable*)

E. Bibliography

- State the books/articles/websites you used in the project

Step 4: Set Up Your StoryMap

This step will help you establish the foundation of your StoryMap by choosing a design, title, and cover image that set the tone and visual identity for your research story.

1. Add a compelling title

- Example: "Climate Chronicles: [Your Community Name]". Keep it concise but descriptive.
- Your name is automatically dropped in based on your account. This remains a 'draft' until published.

2. Choose a theme

Click the "Design" button in the toolbar at the top

- For climate stories, consider:
 - **Summit**: Clean, professional look
 - **Slate**: Good for environmental topics
 - **Obsidian**: Modern, dark theme
 - **Vintage**: Classic storytelling feel

3. Add a cover image

- Click "Add cover image and summary."
- Use a representative image of your research project. The following links provide various layers, such as agriculture, precipitation, and droughts, available from many different sources. Be sure you provide attribution for each screenshot or download you include. URLs are appropriate.
- [<https://www.drought.gov/>]
- [<https://livingatlas.arcgis.com/en/home/>]
- [<https://livingatlas2.arcgis.com/landsatexplorer/>]
- [<https://www.star.nesdis.noaa.gov/goes/>]
- [<https://worldview.earthdata.nasa.gov/>]
- Write a summary (2-3 sentences) of your story

Step 5: Create Your Introduction Section

This step will help you introduce your research project by providing essential background information and geographic context so your audience understands where and why your investigation took place.

1. Add a text block

- Click the "+" button and select "Text"
- Write 2-3 paragraphs introducing your research project
- Include basic facts: location, population, key features

2. Add your first map

- Click "+" and select "Map"
- Choose "Express map" for quick setup

- Search for your community name or location of your study site
- Adjust the zoom level to show your area clearly
- Add a caption explaining what the map shows

Step 6: Build Your Research Methods Section

These steps will help you clearly describe how and where your data were collected so your audience understands the process behind your research and can see the context of your study.

1. **Add a section header**
 - Use heading formatting (## in the text editor)
 - Example: "Research Methods" or "Data Collection Plan"
2. **Create a detailed location map**
 - Add another Express map
 - Zoom out to show regional context
 - Consider adding multiple map views if helpful
3. **Add images**
 - Click "+" and select "Image"
 - Use photos of the study site, participants collecting data, etc.
 - Always add captions explaining the significance

Step 7: Develop Your Data Analysis and Results Section(s)

These steps will help you organize and present the data you collected so your audience can easily see patterns, relationships, and key findings that support your research story.

1. **Analysis of GLOBE data and other data sources (if applicable)**
 - Create text blocks with key data*
 - Consider using the "Sidecar" layout for text + images/data visualizations
 - Include:
 - Data tables
 - Data visualizations (graphs, maps, etc.)—use the "Chart" block for graphs or embed images of graphs from other sources
 - Satellite data (if used)
 - Consider using before/after images to show changes
2. **Add images**
 - Photos of participants collecting or analyzing data

Step 8: Present Conclusions

1. **Discuss whether results support your hypothesis**
 - Add text describing why or why not your hypothesis was correct
 - Explain how you reached your conclusion
2. **Discuss next steps for your research**

*Each GLOBE Virtual Science Symposium (VSS) project must use GLOBE data, whether from the [GLOBE database](#) or [newly collected](#) in the field. You are encouraged to enrich your investigations with data from other credible sources.

Step 9: Enhance with Multimedia

Finding Good Images

- **Free sources:** Unsplash, Pexels, Wikimedia Commons
- **U.S. Government sources:** USGS, NOAA, NASA
- **Local sources:** Community websites, local government
- Always check usage rights and add proper attribution

Map Tips

- Keep maps focused and uncluttered
- Use appropriate zoom levels for your story
- Add clear, descriptive captions
- Consider using different map styles for variety

Text Best Practices

- Write in an engaging, accessible style
- Keep paragraphs short (3-4 sentences)
- Use subheadings to organize content
- Include specific facts and data points

Step 10: Stop Here and ...

1. **Preview your story**
 - Click "Preview" to see how it looks to readers
 - Check on both desktop and mobile views
 - Test all links and embedded content
2. **Edit and refine**

- Ensure smooth flow between sections
- Check for spelling and grammar
- Verify that all data sources are cited
- Run through your StoryMap with your collaborators (teacher, research team, colleagues, etc.) before publishing

3. Publish your StoryMap

- Click "Publish" when ready
- Choose your sharing settings:
 - Public: Anyone can view
 - Organization: Only your school/organization
 - Private: Only you can view
- Copy the sharing link for submission

Don't Forget: Attribution and Acknowledgments

Before publishing your StoryMap, make sure you've properly credited all sources and contributors:

Data Source Attribution

- **GLOBE data and protocols:** Cite [GLOBE.gov](https://www.globe.gov) website, [GLOBE Visualization System](https://www.globe.gov/visualization), or [Advanced Data Access Tool \(ADAT\)](https://www.globe.gov/advanced-data)
- **Satellite data:** Cite NASA, NOAA, or other official sources with full titles and dates
- **Population data:** Reference Census Bureau, local government, or demographic sources
- **Geographic information:** Credit mapping services, geological surveys, or local authorities
- **Format example:** "Temperature data courtesy of NOAA Climate Data Online, accessed March 2024."

Image and Media Attribution

- **Photos:** Include photographer's name, source, and license information if available. Include [media release forms](#) for any recognizable images of people included in the project.
- **Maps:** Credit the mapping service or data provider (beyond the automatic ArcGIS attribution)
- **Charts/graphs:** Acknowledge the original data source and any tools used to create visualizations
- **Format example:** "Photo by Jane Smith, courtesy of City Planning Department" or "Image from Unsplash by [Photographer Name]."

Author Acknowledgment

- **Add an "About" or "Credits" section** at the end of your StoryMap
- **Include your name** as the author/researcher
- **Acknowledge helpers:** Educators, scientists, community members, or organizations that assisted.

- **School/organization credit:** Include your school name and any relevant class or program
- **Format example:** "Created by [Your Name], Earth System Explorers, 2025"

Quick Attribution Checklist

- All data sources are appropriately cited with dates
- Image sources and photographers credited
- Map data providers acknowledged
- Your authorship is clearly stated
- Any community contributors or interviewees thanked

Remember: Proper attribution shows respect for others' work and makes your StoryMap more credible and professional!

Pro Tips for Success

- **Start with an outline** before building in StoryMaps
- **Collect all your content first** (images, data, text) before starting
- **Keep it focused** - better to tell one story well than many stories poorly
- **Use high-quality images** that are relevant to your narrative
- **Test your story** with friends or family before publishing
- **Cite your sources** for all data and images used
- **Save frequently** - StoryMaps auto-saves, but manual saves are good practice

Troubleshooting Common Issues

- **Maps not loading:** Check your internet connection and try refreshing
- **Images not displaying:** Ensure images are from supported sources and under size limits
- **Layout issues:** Try different block types or themes if the content doesn't display well
- **Sharing problems:** Verify your sharing settings match your intended audience

Resources for Environmental and Satellite Data

- **GLOBE Visualization System:** <https://vis.globe.gov/GLOBE/>
- **GLOBE Advanced Data Access Tool (ADAT):** <https://www.globe.gov/globe-data/retrieve-data>
- **My NASA Data Earth System Data Explorer:** <https://mynasadata.larc.nasa.gov/basic-page/earth-system-data-explorer>
- **NASA Worldview:** <https://worldview.earthdata.nasa.gov/>
- **NASA Giovanni:** <https://giovanni.gsfc.nasa.gov/giovanni/>
- **NASA Earth Data GIS Portal:** <https://gis.earthdata.nasa.gov/portal/home/index.html>
- **NOAA Climate Explorer:** climate.gov

- EPA Climate Indicators: epa.gov
- NASA Climate Kids: climatekids.nasa.gov
- Local weather services: weather.gov
- Community Collaborative Rain, Hail & Snow Network (CoCoRaHS): <https://www.cocorahs.org/>
- State climate offices: Many states have climate data portals

ArcGIS StoryMaps Resources:

- ArcGIS StoryMaps Gallery: <https://doc.arcgis.com/en/arcgis-storymaps/gallery/>
 - [Sailing for a Sustainable Ocean StoryMap](#) by Ashlee Wells, GLOBE Alumna
- Recorded webinar: [Mapping Your GLOBE Data with ESRI ArcGIS and Creating StoryMaps](#)

This guide provides the foundation for creating a StoryMap of your GLOBE research. Take your time, be creative, and let the story of your research shine through your narrative and visuals.

Story Map Project Worksheet

Title: _____

Team Members: _____

Research Question: _____

Sections to Include

- **Abstract**
- **Methods including supporting:**
 - Images, photographs, video
 - Maps
- **Results**
- **Acknowledgements:**
- **References:**

List of Photos to Add (with attribution<- URL where you found the image)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

What did I discover during my research? (Write a summary)

What was fun or surprising?

Did I check my spelling and preview my story? Yes / No

Did I include my research, photos, and analysis? Yes / No

Link to my Story Map: _____

Sources

Introduction to ArcGIS StoryMaps - Esri Documentation <https://doc.arcgis.com/en/arcgis-storymaps/get-started/what-is-arcgis-storymaps.htm>

NCEI Story Maps: Bringing Data to Life | News - NOAA <https://www.ncei.noaa.gov/news/ncei-story-maps-bringing-data-life>

Mapping your GLOBE data with ESRI ArcGIS and Creating Story Maps
https://www.youtube.com/watch?v=yuwcOD5_Vdg

StoryMaps | NASA Earthdata <https://www.earthdata.nasa.gov/learn/gis/storymaps>

Maps and Geospatial Products <https://www.ncei.noaa.gov/maps-and-geospatial-products>

5E Earth System StoryMap Collection: Lesson Plans | MyNASADData <https://mynasadata.larc.nasa.gov/basic-page/5e-earth-system-storymap-collection-lesson-plans>

Get started with ArcGIS StoryMaps | Documentation <https://learn.arcgis.com/en/projects/share-the-story-of-an-expedition/>

What is a StoryMap? - My NASA Data <https://mynasadata.larc.nasa.gov/basic-page/what-storymap>

Create a data-driven map tour - ArcGIS StoryMaps
<https://storymaps.arcgis.com/stories/53d9d11a512042e7be18a2a32c981570>

What is a Story Map? | My NASA Data <https://mynasadata.larc.nasa.gov/print/pdf/node/1128>

Getting started with ArcGIS StoryMaps <https://storymaps.arcgis.com/stories/cea22a609a1d4cccb8d54c650b595bc4>

Science, satellites, and storytelling: In conversation with Joshua ... <https://www.esri.com/arcgis-blog/products/arcgis-storymaps/mapping/science-satellites-storytelling>

NASA Earth Science Thematic Web Maps - ArcGIS StoryMaps
<https://storymaps.arcgis.com/collections/e97041c72e8b427b9428a9fced22cbf8>

Explore Earth Data with NASA - ArcGIS StoryMaps
<https://storymaps.arcgis.com/stories/70d53322a1054d9098604dc36ae23f4e>

GLOBE Earth as a System - Additional Resources | MyNASADData <https://mynasadata.larc.nasa.gov/globe-connections/globe-earth-system-additional-resources>

Data Tools | NASA Earthdata <https://www.earthdata.nasa.gov/data/tools>

NASA Earthdata: Your Gateway to NASA Earth Observation Data <https://www.earthdata.nasa.gov>

NOAA's GeoPlatform - Geospatial Data, Maps, & Apps - Climate.gov <https://www.climate.gov/maps-data/dataset/noaas-geoplatform-geospatial-data-maps-apps>

ArcGIS StoryMaps - Tutorials + Resources - Library Guides <https://guides.library.ucsc.edu/DS/Resources/StoryMaps>