



Activities to empower change through science and community action



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SECTION 1: ABOUT THE COLLECTIVE



ABOUT THE COLLECTIVE

The NASA Space Apps Collective is an expansion of the NASA Space Apps Challenge program that builds capacity and skills for the NASA Space Apps community and the general public.

Through year-round communications and workshops, participants learn from each other as well as from NASA and space agency Subject Matter Experts. With this knowledge, participants are empowered to use NASA data to advance NASA mission priorities and to make a difference both locally and globally.

In 2025, the Collective Cohort worked on projects that advance disaster response, health and education, data accessibility, and technology innovation using NASA data.



The 2024-2025 Collective consisted of:



3 Collective Cohort virtual workshops and a virtual Collective Genius Summit that engaged **477 participants across 6 continents.**



A **Cohort of 30 members from 19 countries** sharing projects using NASA data to better their community.



Collaboration with **four International space agency partners** alongside **29 space-related Subject Matter Experts.**



Case Studies of **29 community-involved projects** being implemented around the world with NASA Data.

LAUNCH A PROJECT USING NASA DATA

The 2025 Collective Learning Lab

The Collective Learning Lab is a resource built for the NASA Space Apps Collective Community to help you explore NASA data along with some activities to create and plan an impactful project in your community..

The 2025 Collective Learning Lab has links to:

- Case studies from the Collective Cohort of real world projects via the [Collective Chronicles](#)
- Learn from NASA Subject Matter Experts, Space Agency Partners, and Collective Cohort members
- Activities for brainstorming and planning a project, receiving feedback, and preparing for launch
- A list of resources including NASA data sets and programs you can leverage to use NASA data for a positive impact



The Learning Lab will be especially useful to you if you want to:



Explore and utilize NASA's free and open data to foster innovation and community change.



Create positive impact in your community through creating a vision and building a project map.



Engage your community in building a program and vision that solves real world challenges.



Innovate by exploring and testing possibilities for real world use of NASA data.

WHAT IS NASA DATA?

NASA collects vast quantities of data about stars, planets and other objects, the Sun, our Earth, and even cells! This information is stored in a number of topical archives. Here we collect together some places where you can begin to explore NASA data, primarily through resources that are accessible with just a web browser. Start your data exploration with resources like the ones listed below...

[NASA Applied Sciences Homepage](#)

- Learn more about NASA's Applied Sciences program, and how Earth observations - or data - is used to solve our planet's most pressing issues.

[Entry Points to NASA Science Data](#)

- Explore entry points to NASA Science Data amongst a myriad of disciplines - especially, Earth Science data in Table 4.

[NASA Open Data Portal](#)

- Explore NASA's clearinghouse site for open-data provided to the public, storing tens of thousands of datasets.

[NASA ARSET Training](#)

- NASA offers an Applied Remote Sensing Training (ARSET) for those interested in learning more about how to use NASA's Earth Science data and become fluent in using NASA's tools.

[GLOBE Observer App](#)

- Globe Observer, the app of the Global Learning and Observations to Benefit the Environment ([GLOBE Program](#)), invites you to make environmental observations to help scientists studying Earth and the environment.



Note: This is just a starting point in your search to better understand how NASA data is being used to engage communities and empower change. Feel free to dig deeper into other NASA datasets and programs beyond the ones listed above. Have fun!

SECTION 2: CREATING A PROJECT



PROCESS FOR CREATING A PROJECT

In the following pages,
you will find activities
to help you:



ENVISION
CHANGE

ACTIVITY 1



MAP YOUR
PROJECT

ACTIVITY 2



VALIDATE WITH
COMMUNITY

ACTIVITY 3



REFINE &
LAUNCH

ACTIVITY 4

ACTIVITY 1

CREATE A VISION FOR YOUR PROJECT

EXPECTED TIME: 30-60 MINUTES

PURPOSE

This exercise asks you to imagine the possibilities for impact if you were to dedicate time and energy to solving a challenge you see in your community. Use this activity to dream up and visualize the future. You will have the opportunity in subsequent activities to refine this vision.

STEPS

1. [Download](#) (or draw) the *Future Headlines: NASA Space Apps Collective* template. Print it or draw it on a blank page to fill in your answers based on your idea.

FUTURE HEADLINES

NEWS OUTLET: HEADLINE:

MAIN POINTS IN THE STORY

QUOTE

QUOTE ATTRIBUTION

2. Think about the type of change you want to create. What is the main challenge you would like to address? Think about how you might address this challenge.
3. Imagine it's five years from now and you are in an ideal future. You scroll through the news and there's a headline about how science and NASA data have catalyzed positive change in your community related to your own project idea.
4. Think about how a news outlet is reporting on the impact of your project. View the prompts on the following page and fill in the template.
5. Look over your future news story and ask yourself, "What themes do I notice?" and "What's most important about the story I've crafted?"

This activity was adapted from similar facilitation techniques found on [SessionLab](#).

ACTIVITY 1 - EXAMPLE

CREATE A VISION FOR YOUR PROJECT

MINDSET FOR THIS ACTIVITY

From a vantage point of five years in the future, look back on accomplishments of your project idea. Your local community has become a leader for leveraging NASA data for positive impact. What is the world saying? Start anywhere on the template and fill in the elements of your imagined story. Think about what it might take to make this vision a reality.

Choose a news outlet that you'd want to feature the story about your work. Next, create a headline for your story.

What are the main points in the story? Are there some anecdotes or facts that illuminate the impact of your project?

FUTURE HEADLINES EXAMPLE



NEWS OUTLET: **Scientific American**

HEADLINE: **Yet Another NASA Space Apps Collective Project Tackles Global Issues With NASA Data**

MAIN POINTS IN THE STORY

- The NASA Space Apps Collective invites you to leverage NASA's open data to solve a problem in your community.
- With this data you could do some analysis, design an app, or build a tracker, just to name a few examples.
- The project, designed alongside community members, has revolutionized the way we think about NASA open data, and had immediate impact.

QUOTE

I didn't know all this open NASA data was at my fingertips! Thanks to the NASA Space Apps Collective, I can tackle the world's greatest challenges!

NASA Space Apps Collective Community Member

QUOTE ATTRIBUTION

Who was interviewed for the story, and what did they say about your project?

ACTIVITY 2

PROJECT DEFINITION AND DEVELOPMENT

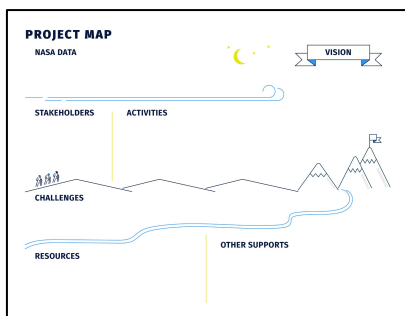
EXPECTED TIME: 4-8 HOURS

PURPOSE

In this activity, you'll map out an actionable idea for change in your community. You may choose to work on something from scratch, or a project that you've already been working on and would like to expand its reach/impact. Consider this a first draft that you will refine later.

STEPS

1. [Download](#) (or draw) the *Project Map*: *NASA Space Apps Collective* template. Print or draw the template to fill in with your responses.



2. Look over your filled-in *Future Headlines* template. Summarize your ideal future into a vision statement. This will anchor your *Project Map*.

3. Next, fill in the portions of the template above the horizon line – Stakeholders, Activities and NASA Data.
4. Finally, fill in the lower portion of the template – Challenges, Resources, Other Supports.

Use the questions and suggestions on the following page to guide your responses.

For inspiration on incorporating NASA data into your community project, [see page 16](#) to watch the NASA Space Apps Collective Chronicles.

ACTIVITY 2 - EXAMPLE

PROJECT DEFINITION AND DEVELOPMENT

PROJECT CONSIDERATIONS

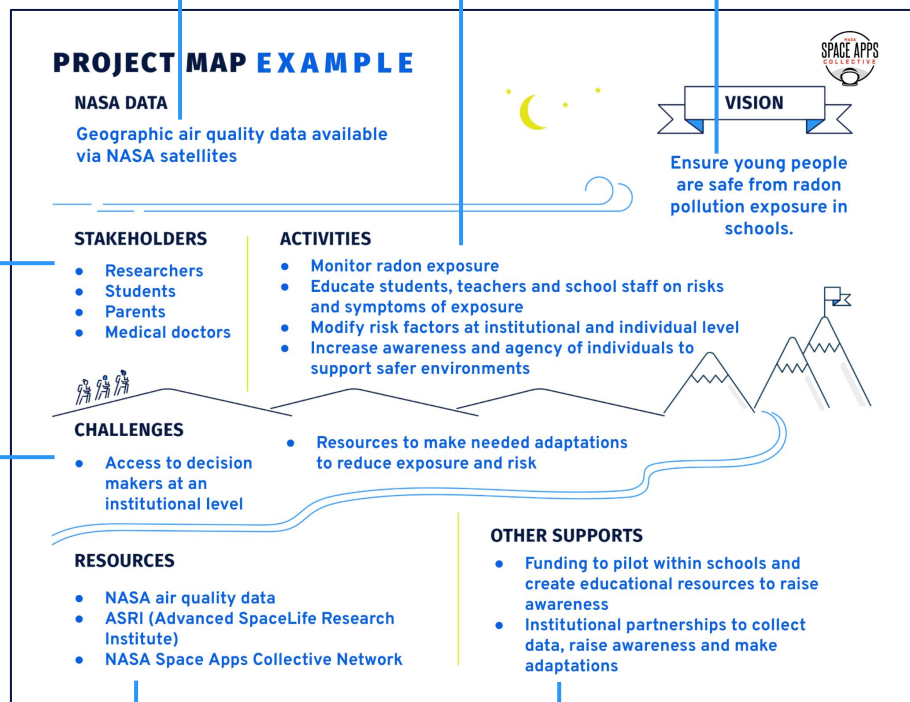
How might you use NASA data to support your vision?

What activities will support implementation of your vision? How will you engage stakeholders?

What challenge are you addressing? Write a succinct statement that encapsulates your 5+ year vision for change in your community.

Who are the key community members and stakeholders who could be affected by your vision and benefit from your success?

What challenges will you face on the way to your vision? How might you overcome those challenges? Think about addressing them through activities, resources and supports.



The project example is based on real work being done by Jessica D'Urbano, a 2025 Space Apps Collective cohort member.

What resources do you currently have that will help you achieve your vision?

What conditions, attitudes or other supports might provide momentum?

ACTIVITY 3

VALIDATE PROJECT WITH COMMUNITY

EXPECTED TIME: 2 WEEKS to MANY MONTHS (depending on scope)

PURPOSE

In the activity you will set up and engage in conversations with individuals or groups from your community to help vet, validate and strengthen your project.

STEPS

1. **Download (or draw)** the *Space Apps Collective Community Validation Workbook*. Print the template to fill in with your responses or create a separate document with your information.



The *Space Apps Collective Community Validation Workbook*, provides comprehensive structure and advice. The process flows as follows:

2. **Prepare to engage community.** In this step you will articulate your project, further clarify and map your community, prioritize those to speak with and craft your key questions.
3. **Interview community members.** Customize the sample script provided and track the insights that come out 8-10 conversations.
4. **Reflect on learnings.** Your interviews may reveal information that provides deeper understanding of the problem you are addressing and your first draft *Project Map*. Insights gained will help you adjust your project approach.



ACTIVITY 4

REFINE AND LAUNCH YOUR PROJECT

EXPECTED TIME: 2-4 WEEKS

PURPOSE

Feed what you've learned from community conversations into a revised project presentation. Then prepare to pitch your project to 2-3 individuals or groups that can accelerate your progress.

STEPS

1. Reflect on insights gathered from your community engagements. Refine your project vision, your plan and anticipated impact.
2. Consider what you need to get your project off the ground. What resources, expertise, skills, etc.?
3. Think of who can help you fill those gaps. These are the people you need to present your project to.
4. Create a slide presentation to shape the pitch. Follow these guidelines:
 - Start with a captivating statement or question to engage your audience.
 - State the core problem your project addresses and why it matters.
 - Outline your project's solution and how your approach is innovative.
 - Give voice to your community and what you've already learned from them.
 - Explain the anticipated, measurable impact.
 - Identify and list resources you have and need.
 - End with a call to action – a compelling message to motivate your audience.
5. Practice with friends or family first, then set up meetings.
6. Focus on creating lasting relationships even if support may not be initially forthcoming.

SECTION 3: ADDITIONAL RESOURCES



GET INSPIRED BY THE NASA SPACE APPS COLLECTIVE COMMUNITY



[NASA Space Apps Collective Genius Summit Video Library](#)

Watch every session from the 2025 NASA Space Apps Collective Genius Summit! Benefit from the wealth of knowledge shared by NASA Subject Matter Experts, global Space Agency Partners, industry leaders, and the Collective Cohort!



[NASA Space Apps Collective Chronicles](#)

Learn from the powerful stories, projects, and initiatives the Collective Cohort has been working on. Their experiences span across backgrounds, regions, and cultures from around the globe.



[ARSET Workshop GLOBE Workshop](#)

Become a citizen scientist and learn from workshops hosted by NASA's Applied Remote Sensing Training Program (ARSET) and the Global Learning and Observations to Benefit the Environment (GLOBE) Program.



[Data in Action: Stories from the NASA Space Apps Collective Cohort](#)

Explore some of the Collective Cohort members' personal stories and work they have led in their local communities. Their stories serve as inspiration to empower people as they overcome challenges and strive for action.



STAY ENGAGED WITH THE NASA SPACE APPS CHALLENGE

JOIN THE NASA INTERNATIONAL SPACE APPS CHALLENGE

Stay informed, engaged, and explore the latest opportunities for the upcoming NASA International Space Apps Challenge on October 4-5, 2025. We're excited for you to join us for the largest annual global hackathon, whether you're a coder, scientist, designer, storyteller, maker, technologist, or innovator this is an opportunity to come together and use open data from NASA and its Space Agency Partners to create solutions to challenges we face on Earth and in space!



Become a part of the global NASA Space Apps community by visiting the [NASA Space Apps Challenge webpage](#).

