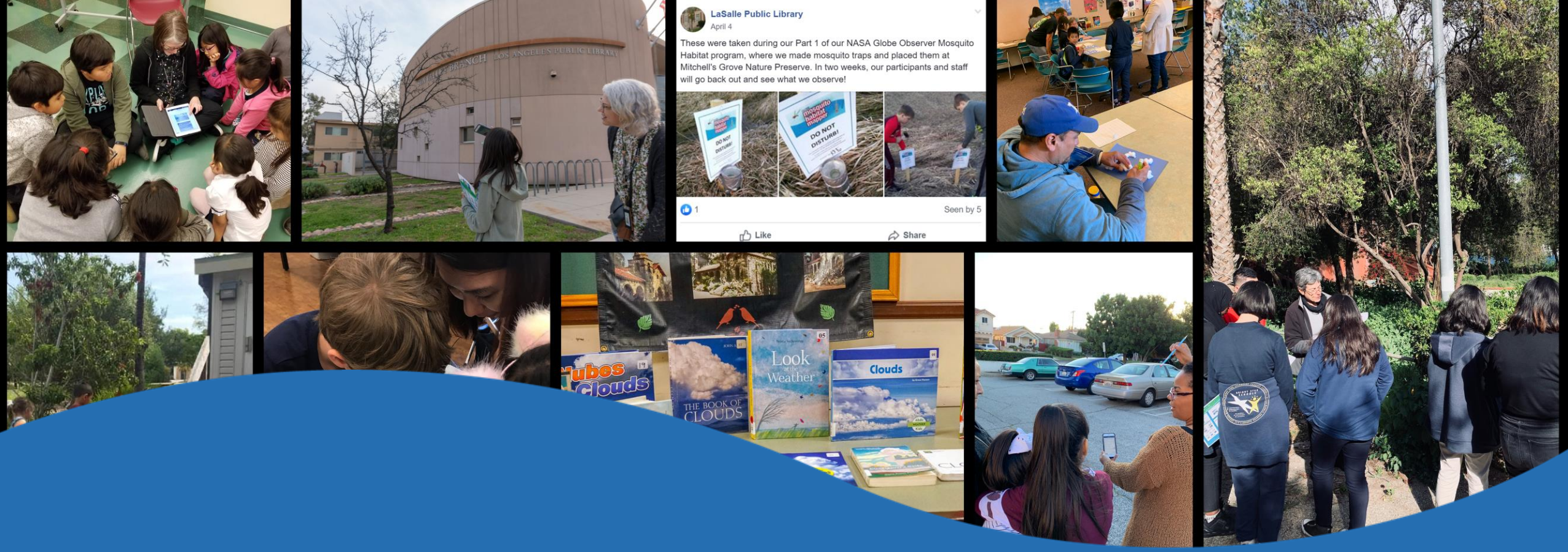


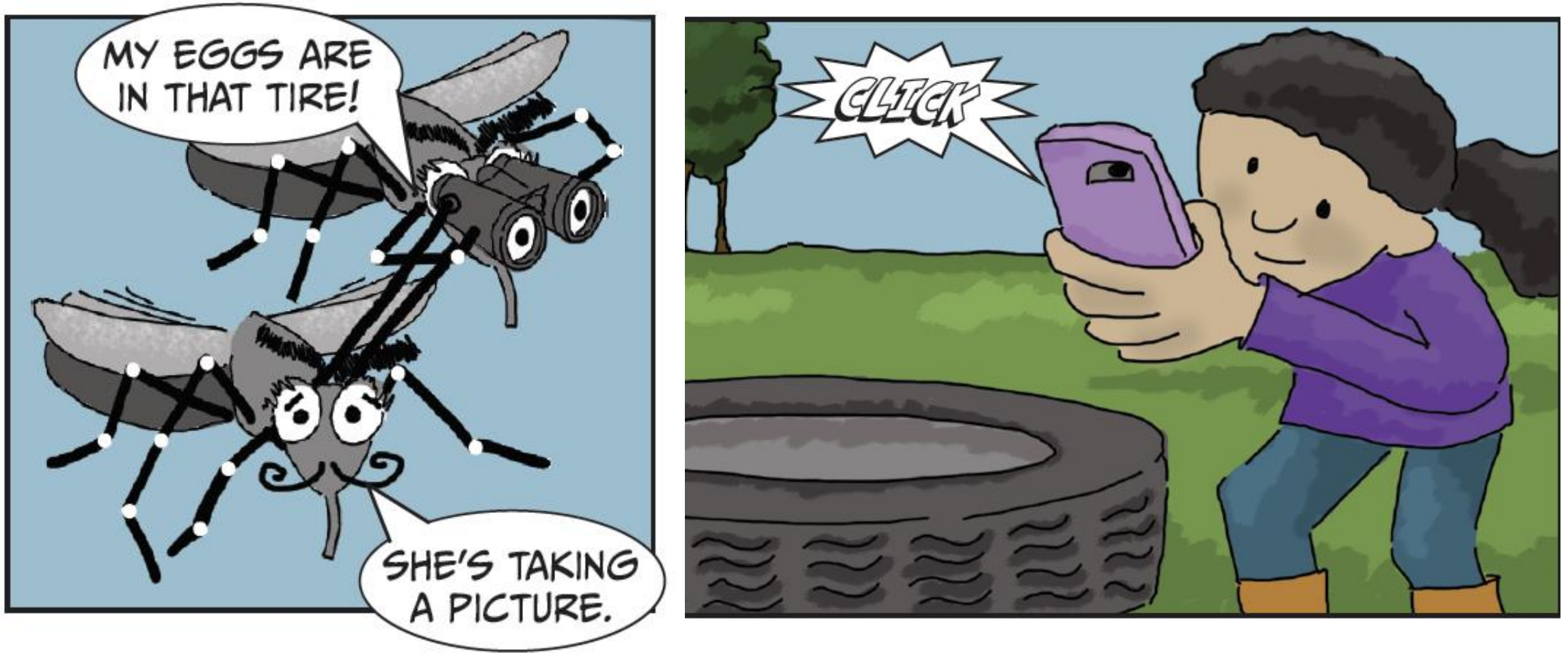
Earth Citizen Science with GLOBE Observer

Theresa Schwerin
Institute for Global Environmental Strategies

nesec
NASA Earth Science Education Collaborative

What is a Citizen Scientist:

*A person who **volunteers with science research** – for example by making and recording observations*



From *Zika Zine: The Story of Three Aedes Mosquitoes and the Zika Within Them*, https://scied.ucar.edu/zikazine

25TH ANNIVERSARY 1995 • 2020

THE GLOBE PROGRAM

https://observer.globe.gov/about/get-the-app

Download on the App Store

GET IT ON Google Play

theresa_schwerin@strategies.org

GLOBE clouds

Observations: 60

New Cloud Observation

Review/Send Observations

Check Satellite Flyovers

My Observations

Map Today's Cloud Measurements

Overall Sky Conditions

What percentage of the whole sky is covered by clouds? *

Few
< 0 - 10

Isolated
10 - 25

Scattered
25 - 50

Broken
50 - 90

Overcast
90 - 100

What color is the sky?

Clouds Wizard

Rain

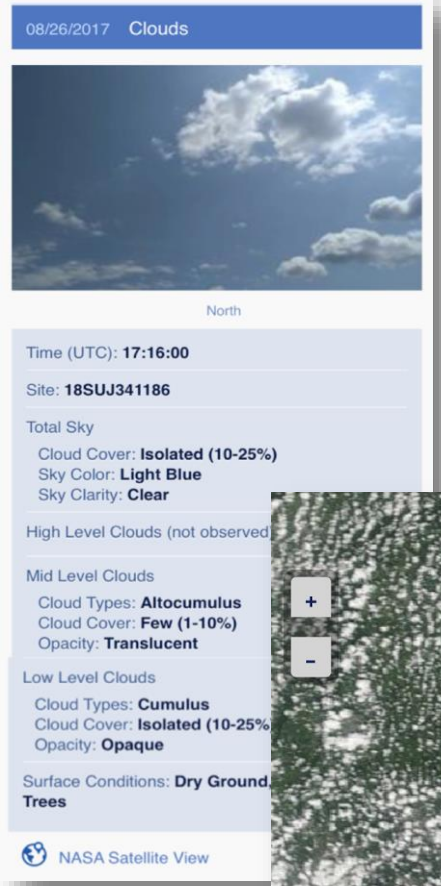
Is there thunder, lightning and/or heavy rain?

No

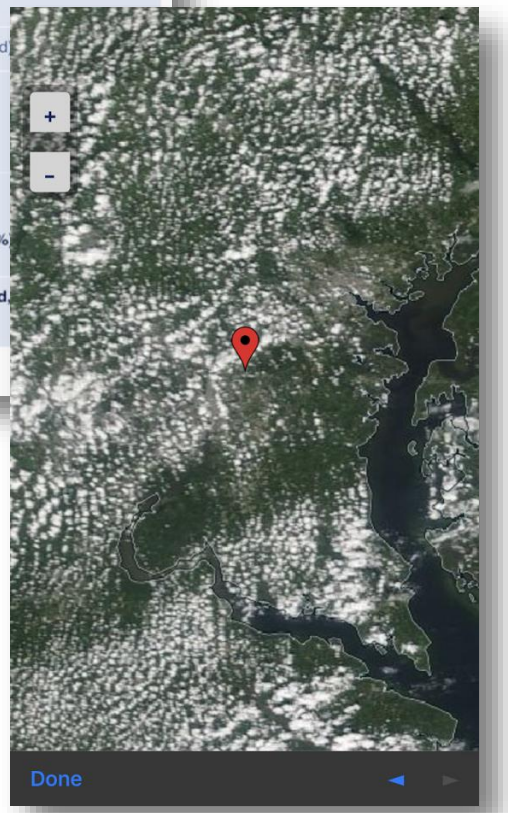
0 Clouds Identified

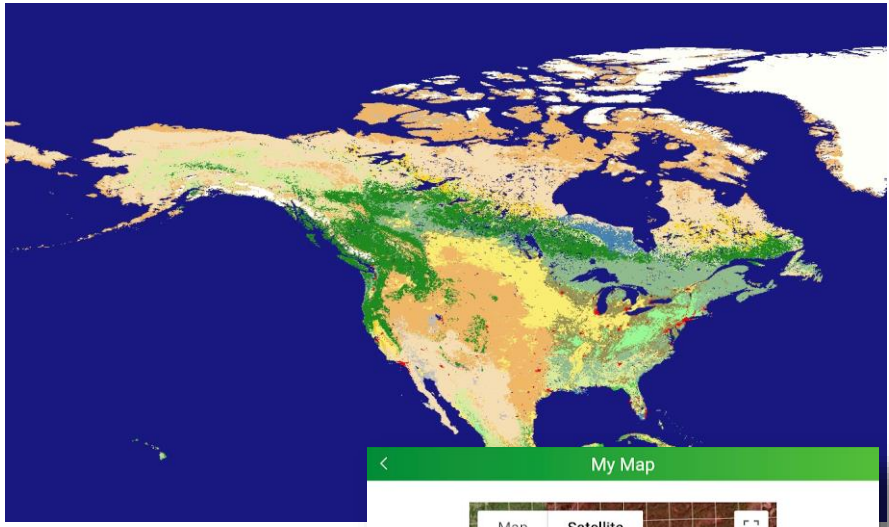
Done

Yes

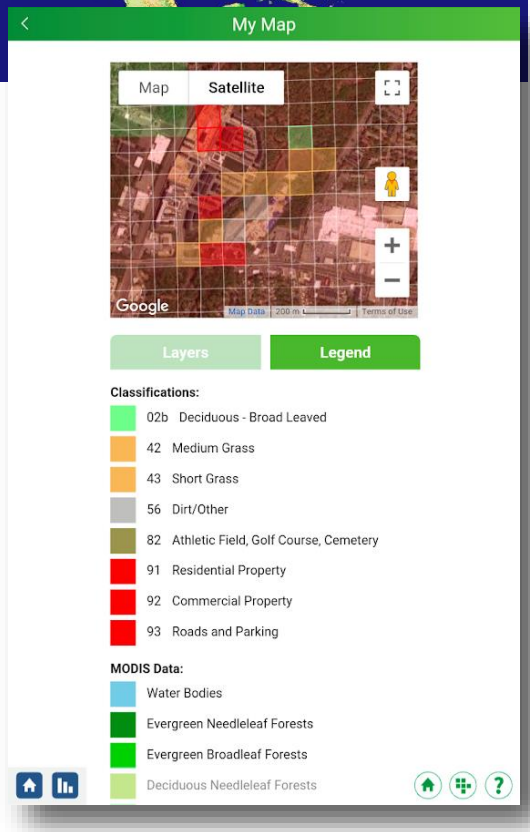


User cloud observation (left) and satellite cloud image (below)





Satellite-based land cover map (top) and user-created map (right)



2020-01-25

South Africa Citizen Science

Site: 35JPM233509

Measurements | Data Counts | Site Info | Photos

Next Site 1/4

Biosphere

Biometry – Tree Heights

Data Date Range: 2019-05-23 to 2019-05-23

Data Source: **GLOBE Observer App**
Measured At: **2019-05-23 13:45:00**
Tree Height: **26.74 m**
Mv Updated At: **2019-10-04 06:50:11.173472+00**
Elevation: **1060.90 m**

Measurement Values

Tree Height (meters)

5-10 | 11-20 | 21-40 | 41-60 | 61-80 | 81-1

Sites on Map: 12581

2000 km

Resources to support Earth citizen science In your library programs

- Go to http://www.starnetlibraries.org/our-planet-earth/
- Scroll down to GLOBE at Home Section

★ Activity | Taking Observations | Program Ideas

Cloud in a Jar:

- Download Activity (English Version) | Download Activity (Spanish Version)
- View Video Demo (North Hollywood Branch/Los Angeles Public Library)
- View Toolkit to discover more activities, book and other resources

★ Activity | Taking Observations | Program Ideas

Build a Mosquito Larvae Trap:

- Download Activity (English Version)
- View Video Demo (Dr. Russanne Low, IGES)
- View Toolkit to discover more activities, book and other resources

★ Activity | Taking Observations | Program Ideas

Build a Clinometer:

- Download Activity (English Version)
- View Video Demo (Coming Soon)
- View Toolkit to discover more activities, book and other resources

★ Activity | Taking Observations | Program Ideas

Make a Map:

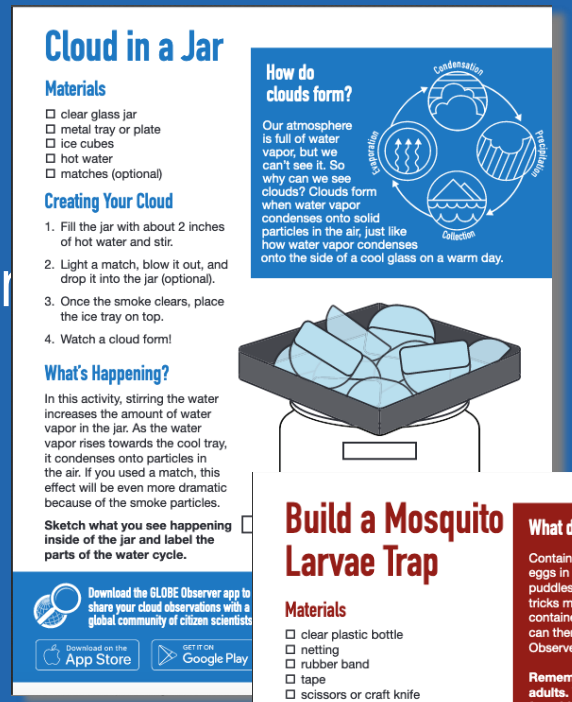
- Download Activity (English Version)
- View Video Demo (Coming Soon)
- View Toolkit to discover more activities, book and other resources

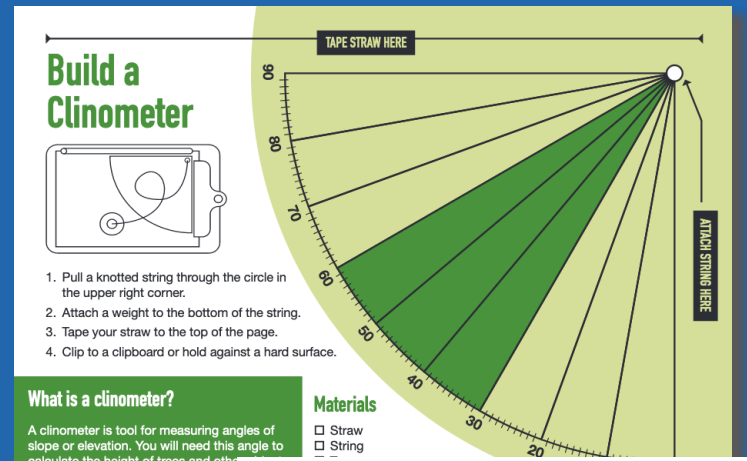
★ Activity | Taking Observations | Program Ideas

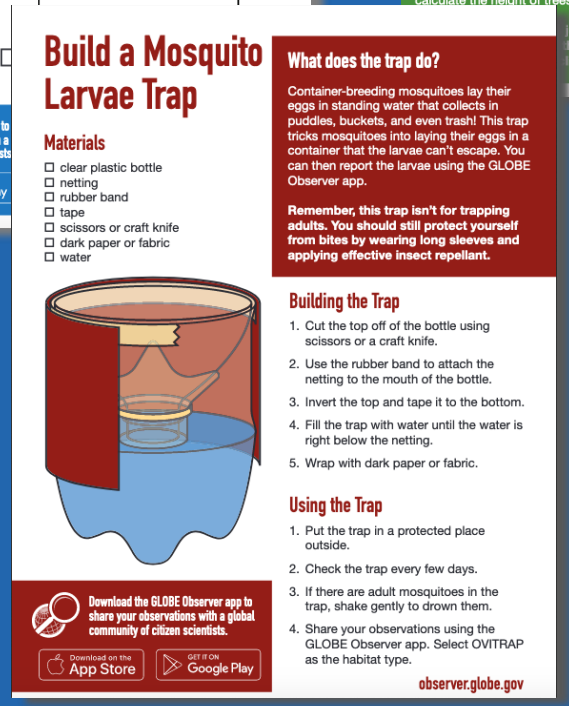
Simplified hands-on activities

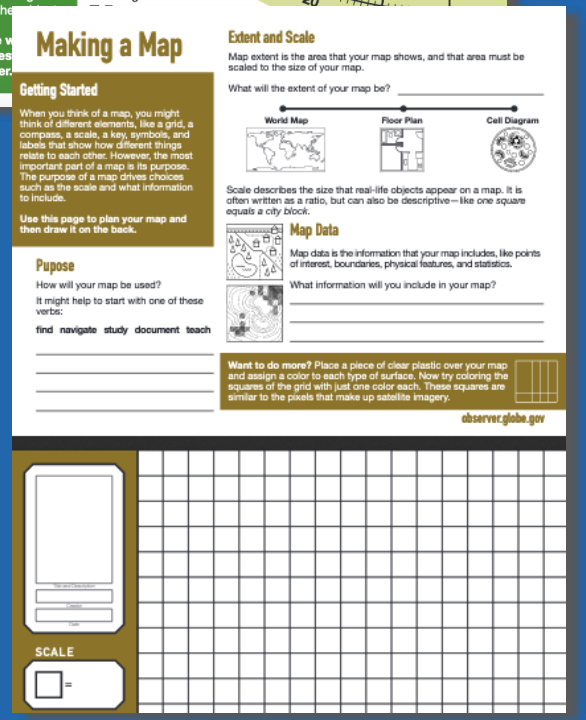
- Take and Make
- Do not require special equipmer
- Short video demos
- Link to more

Video/photo courtesy N. Hollywood Branch of Los Angeles Public Library







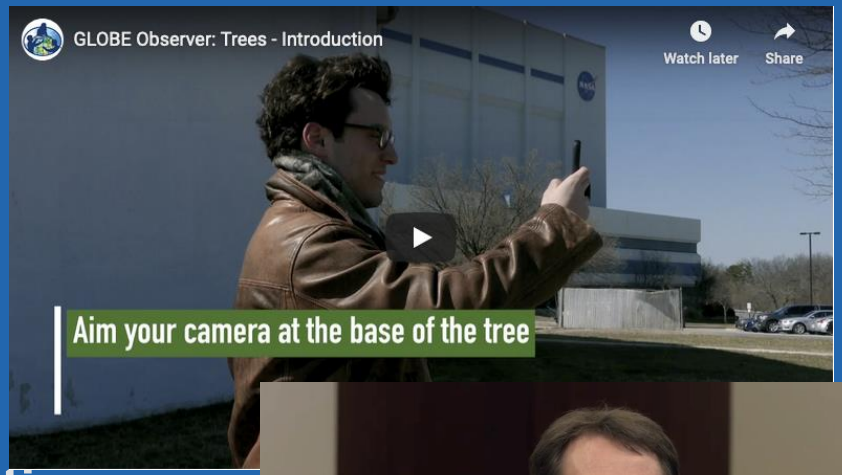


Activity | Taking Observations | Program Ideas

Taking Observations

Links and videos related to:

- How to take observations
- Why NASA wants your observations
- Science background and related information



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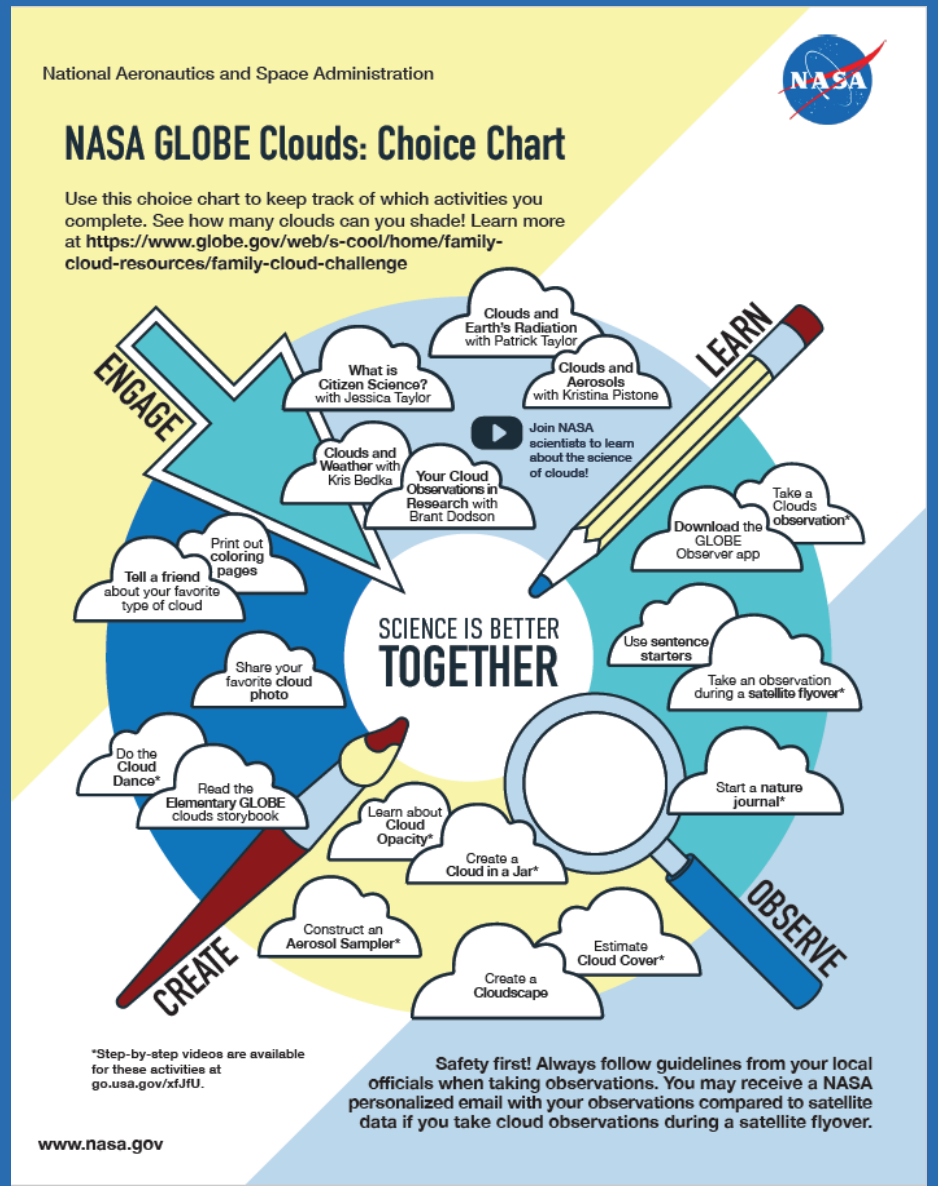
Activity | Taking Observations | Program Ideas



Community Cloud Challenge

- **Learn** about clouds
- **Create** with clouds
- **Engage** with the cloud observer community
- **Observe** clouds

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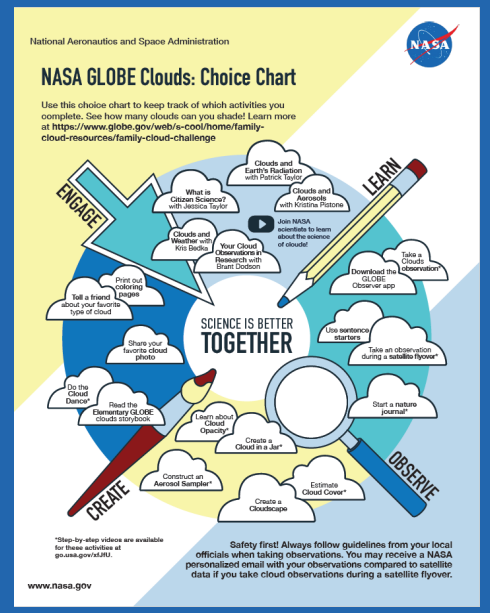
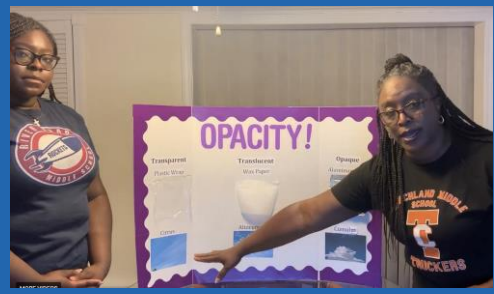
Community Cloud Challenge: Learn

Videos with NASA subject matter experts

- Satellite Matches to GLOBE Cloud Observations
- What is Citizen Science?
- Clouds and Weather from 22,000 miles away
- Clouds and Earth's Climate
- Aerosols and Air Quality
- Impact of Your Observations in Research





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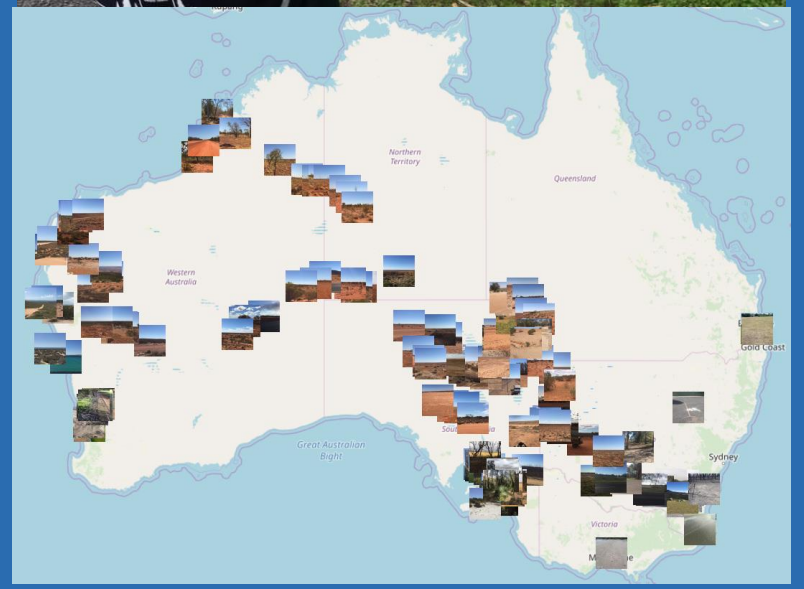
Using the GLOBE Teams Tool

What is a GLOBE Team?

Teams can be used to set up a competition, coordinate a community's citizen science efforts, support an educational or corporate initiative, or simply enable a group of people to work together (including virtually).

Who can join or create a GLOBE Team?

- Anyone with a GLOBE or GLOBE Observer login
- You can join or create as many teams as you wish
- Data collected counts in the total for every team you are on.



Teams of Scouts and their adult leaders collected nearly 200 land cover observations during a 3- month competition in 2019.

How to Create a Team (using the app)

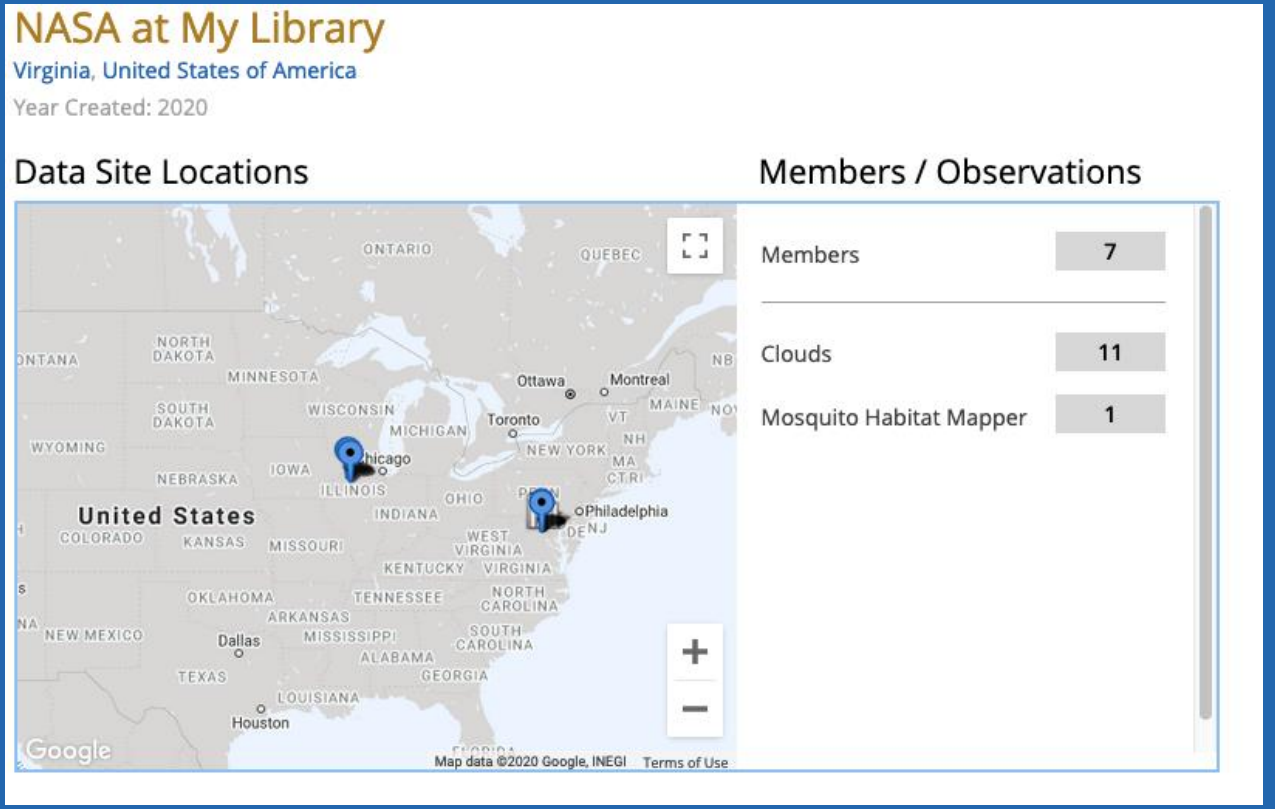
- Download the app, register and login
- Click on the gear icon (top right)
- Select Create a GLOBE Team
- Enter a team name (screened)
- Select your country (required) and city and zip code (optional). This info will be public on the GLOBE Teams page.
- Email confirmation that you successfully created a team & instructions for managing.

Learn more about teams

https://observer.globe.gov/do-globe-observer/do-more/teams

How to Join the NASA@ My Library Team (using the app)

- Log in to the app
- Join the NASA@ My Library Team:
  - Click on the gear icon (upper right)
  - Select "Join a GLOBE Team"
  - Under "Referral code" enter team code: GLIDEVQX

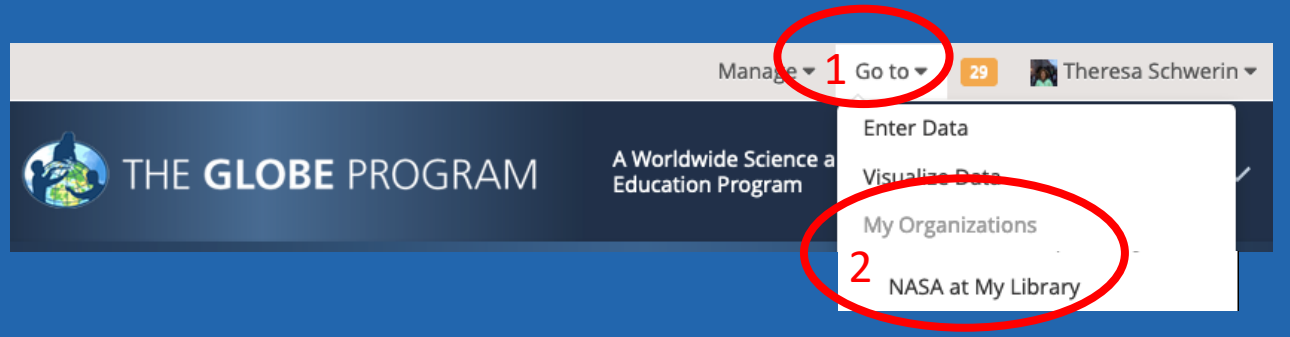


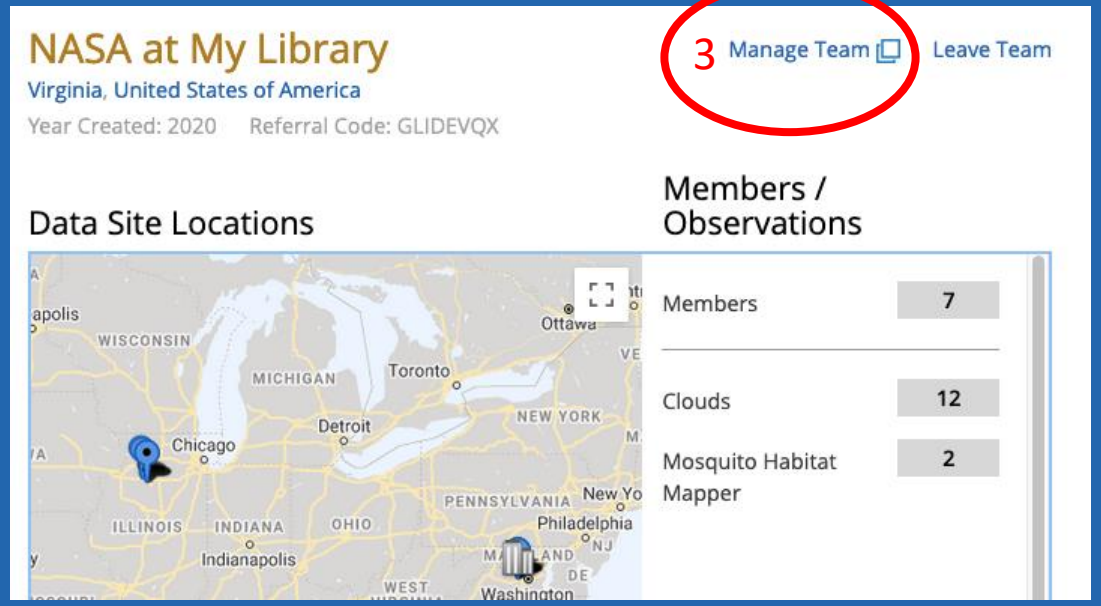
Learn more about the NASA @ My Library Team: https://observer.globe.gov/naml
Learn more about teams: https://observer.globe.gov/do-globe-observer/do-more/teams

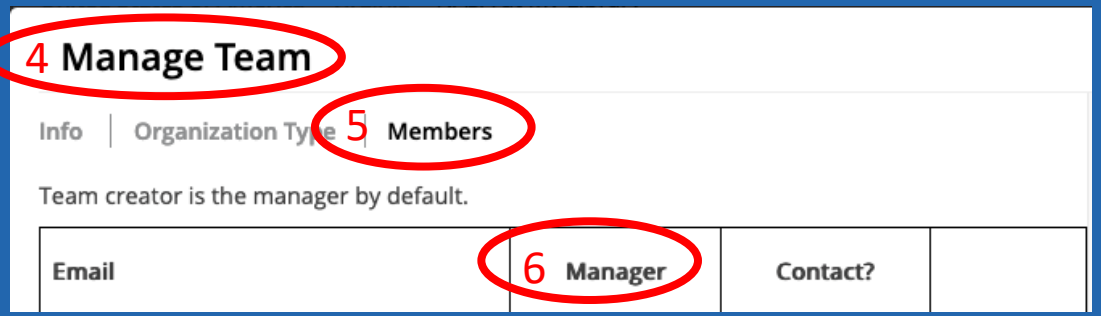
Managing your Team

Go to globe.gov and login

1. Click on “Go to” in the top white bar.
2. My Organizations →Select team
3. Select “Manage Team” to →
4. See all options to manage team
5. Select ”Members” to see a list of members and email addresses.
6. Manager is the team creator (by default) can change to another group member.

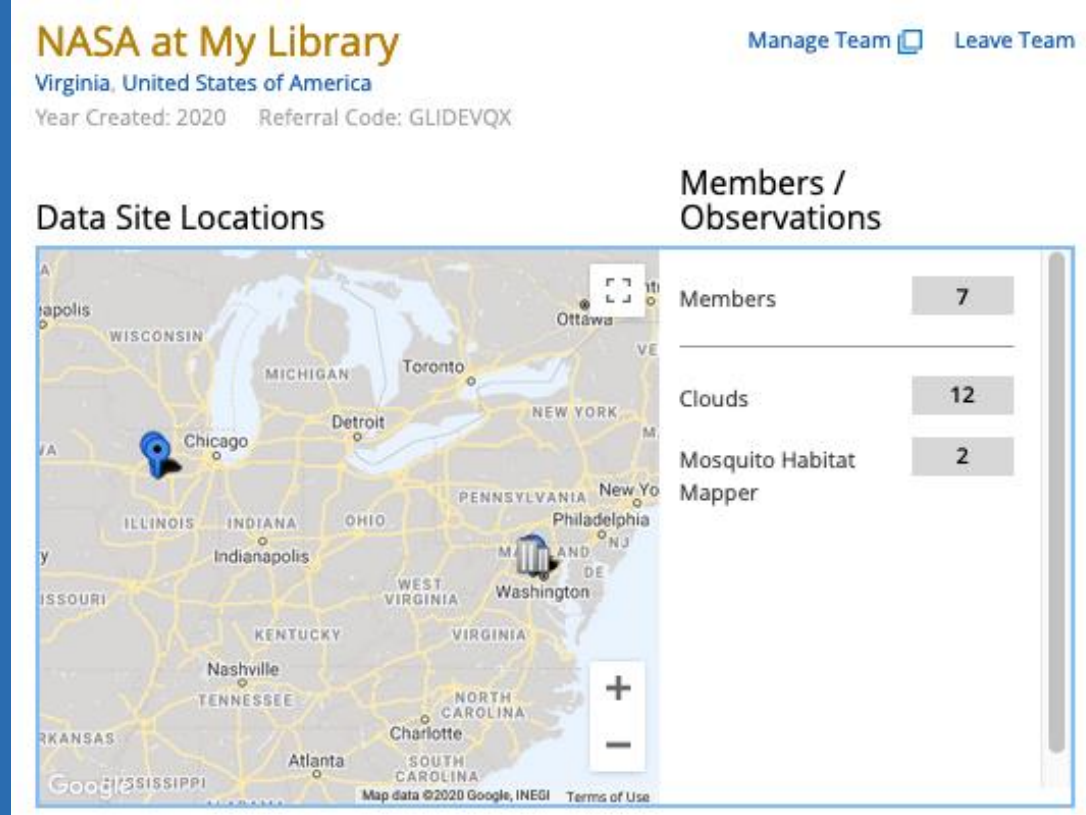






Benefits of Creating a Team

- Track impact from an event or training
- Invite patrons to take science home and maintain connection to your library
- Set up a competition
- Coordinate volunteer efforts



DATA SITES

Include citizen science sites

Site Name	Organization Name	Investigation Area	# Observations	Created	Last Used
16TBL936858	United States of America Citizen Science	Atmosphere	1	07/16/2020	07/16/2020
16TBL979798	Illinois GLOBE v-School	Atmosphere	1	07/18/2020	07/18/2020
16TCL081709	United States of America Citizen Science	Atmosphere	1	08/25/2020	08/25/2020

Tips for Teams

- Setting up multiple teams? Start each team name with the same string to make it easier to group your teams together: e.g., library name + event name
- Keep your team private if you want to use the tool to track engagement
- Distribute your team name, referral code, and URL to your patrons with event information

Learn more about teams

https://observer.globe.gov/do-globe-observer/do-more/teams

SCIENTIST, AUTHOR, & ILLUSTRATOR
DR. LISA GARDINER

SCIENTIST
DR. RUSTY LOW

SEPT 3 @ 2 PM CT

For you and your patrons!

Register at:https://bit.ly/StarNetGO