

CITIZEN SCIENCE



WORKSHOP GOALS

Participants will be able to:

1. Know the protocols for collecting data in the citizen science projects.
2. Upload collected data to the appropriate database.
3. Encourage citizen scientists to begin researching questions based on their data collection.

STUDENT RESEARCH



THE **GLOBE** PROGRAM

A Worldwide Science and Education Program



About / Join

Training

Do GLOBE

GLOBE Data

Community

News and Events

Support

Home > News and Events > Meetings & Symposia > International Virtual Science Symposium

Share

International Virtual Science Symposium

Report Requirements

Badges

How Projects Are
Judged

Teacher Resources

Student Resources

Stipend Recipients

Judge Resources and
Guidelines

Regional Statistics

2023 IVSS Reports

International Virtual Science Symposium



The International Virtual Science Symposium is an opportunity for GLOBE students to showcase their research to the rest of the community. Projects are judged by prestigious scientists across dozens of GLOBE nations. Students are eligible for stipends and [GLOBE badges](#).

Students may submit a project on any topic, but they are encouraged to align their research with the year's theme.



https://www.globe.gov/news-events/meetings_symposia/virtual-conferences



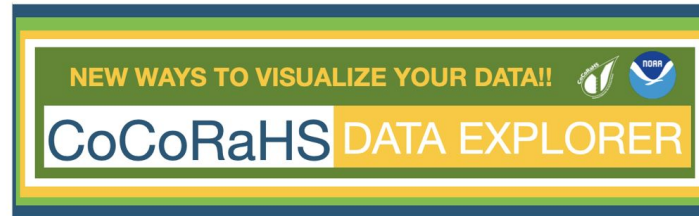
Welcome to CoCoRaHS! "Volunteers working together to measure precipitation across the nations."

Main Menu

- [Home](#)
- [About Us](#)
- [Join CoCoRaHS](#)
- [Contact Us](#)
- [Donate](#)

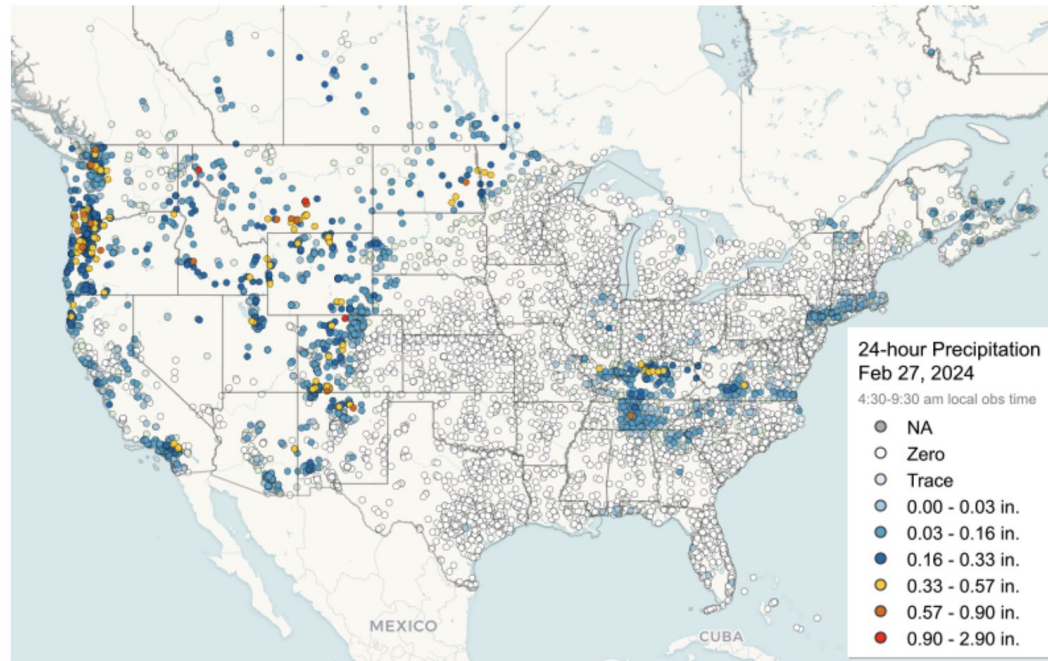
Resources

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Reports received today 2/27/2024 as of 4:23 PM EST

Daily	Multi-day	SigWx	Hail	Condition	ET
10,525	101	7	1	8	9



CoCoRaHS Testimonials

Tell us your story!

Celebrating 25 years

JOIN
CoCoRaHS

Training Animations

Things to
know about...

New Data : List Daily Precipitation Reports

US Units

Search Daily Precipitation Reports

Station Fields:

Station Number

Station Name

Location:

USA

Michigan

ALL COUNTIES

Date Range:

Start Date: 2/27/2024

End Date: 2/27/2024

Precip Value:

All Precip Values

Operator

Search

Searched: Stations in Michigan. Report date on 2/27/2024.

Showing 1 - 50 of 150 Records.

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Obs Date ▲	Obs Time	Station Number	Station Name	Gauge Catch in.	24hr Snowfall			Snowpack			State	County	View	Maps
					❄ in	💧 in	SLR	❄ in	💧 in	Density				
2/27/2024	4:55 AM	MI-CL-5	Harrison 5.2 ESE	0.00	0.0	NA	NA	NA	NA	NA	MI	Clare		Active Static
2/27/2024	5:00 AM	MI-MB-33	Roseville 1.7 ENE	0.00	0.0	NA	NA	NA	NA	NA	MI	Macomb		Active Static
2/27/2024	5:00 AM	MI-WY-43	Dearborn Heights 1.8 NW	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/27/2024	5:10 AM	MI-MB-71	St Clair Shores 2.5 N	0.00	0.0	NA	NA	NA	NA	NA	MI	Macomb		Active Static
2/27/2024	5:15 AM	MI-HL-4	Jonesville 5.9 ENE	0.00	0.0	NA	NA	NA	NA	NA	MI	Hillsdale		Active Static
2/27/2024	5:30 AM	MI-KN-14	Grandville 1.3 WSW	0.00	0.0	0.00	NA	0.0	0.00	NA	MI	Kent		Active Static
2/27/2024	5:30 AM	MI-KN-94	Caledonia 2.6 NNW	0.00	0.0	NA	NA	NA	NA	NA	MI	Kent		Active Static
2/27/2024	5:45 AM	MI-ON-4	Ontonagon 1.8 ESE	0.00	0.0	0.00	NA	T	NA	NA	MI	Ontonagon		Active Static
2/27/2024	6:00 AM	MI-CS-5	Niles 3.5 E	0.00	0.0	NA	NA	NA	NA	NA	MI	Cass		Active Static
2/27/2024	6:00 AM	MI-IS-5	Shepherd 3.7 SSE	0.00	0.0	NA	NA	NA	NA	NA	MI	Isabella		Active Static
2/27/2024	6:00 AM	MI-MB-65	Chesterfield 2.4 E	0.00	0.0	NA	NA	NA	NA	NA	MI	Macomb		Active Static
2/27/2024	6:00 AM	MI-MD-10	Midland 1.5 NNE	NA	0.0	NA	NA	0.0	NA	NA	MI	Midland		Active Static
2/27/2024	6:00 AM	MI-MD-15	Midland 4.4 SW	0.00	0.0	NA	NA	NA	NA	NA	MI	Midland		Active Static
2/27/2024	6:00 AM	MI-OK-128	Berkley 0.6 N	0.00	0.0	NA	NA	0.0	NA	NA	MI	Oakland		Active Static

My Data Entry : List My Daily Precipitation Reports

US Units

Showing 1 - 50 of 3377 Records.

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Obs Date ▲	Obs Time	Station Number	Station Name	Gauge Catch in.	24hr Snowfall			Snowpack			State	County	Actions	Maps
					❄ in	💧 in	SLR	❄ in	💧 in	Density				
2/27/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/26/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/25/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/24/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/23/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/22/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/21/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/20/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/19/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	T	NA	MI	Wayne		Active Static
2/18/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	T	T	NA	NA	T	NA	NA	MI	Wayne		Active Static
2/17/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	T	NA	MI	Wayne		Active Static
2/16/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.11	1.0	NA	NA	T	NA	NA	MI	Wayne		Active Static
2/15/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/14/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	T	T	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/13/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/12/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/11/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/10/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static
2/9/2024	7:00 AM	MI-WY-52	Livonia 2.0 NE	0.00	0.0	NA	NA	NA	NA	NA	MI	Wayne		Active Static

GETTING STARTED WITH COCORAHHS

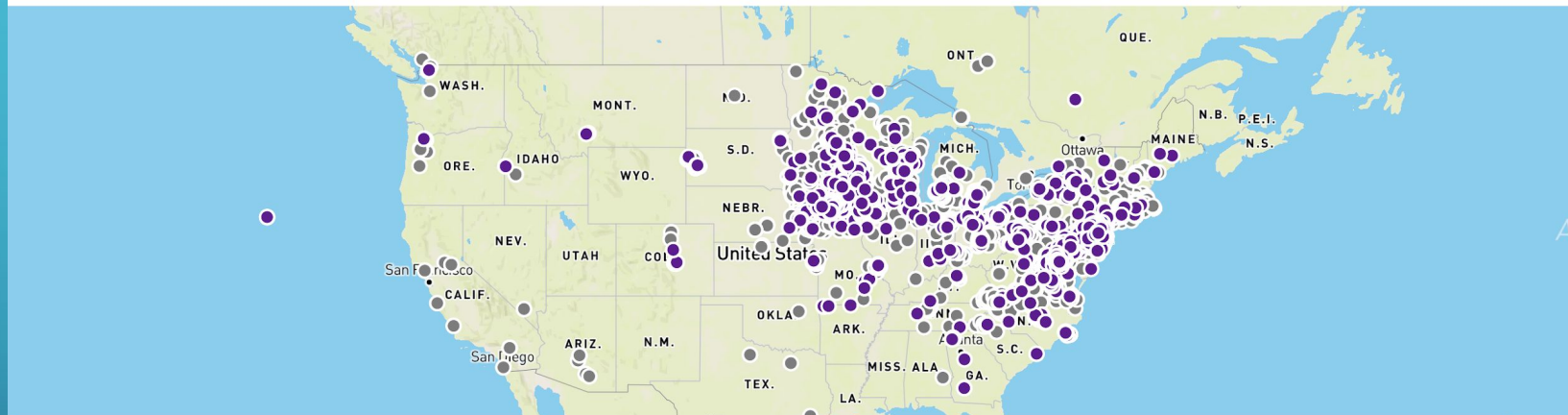


<https://youtu.be/GgLatKFXyXQ?si=ER0d9sG6p-9Sz2uO>

Share the water quality data from your local streams. Make an impact in communities across the nation.

Share the water quality data from your local streams. Make an impact in communities across the nation.

EXPLORE DATA



Stations

Samples

Organizations

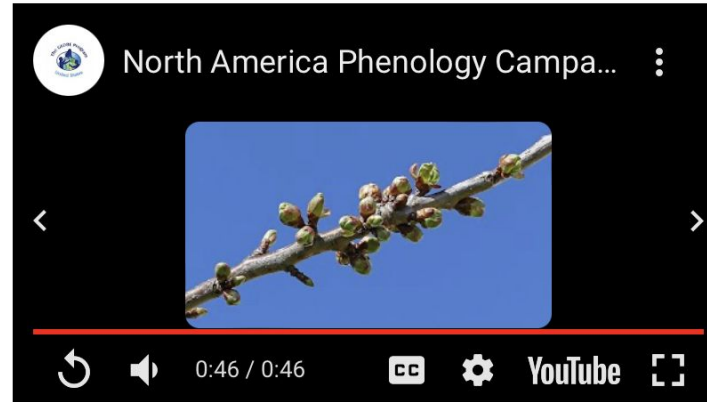
Members

<https://www.cleanwaterhub.org>

North America Phenology Campaign

Join the Spring Phenology Campaign!

In the video below (<1 min) hear from scientists why it is important to study phenology, and then join the campaign to contribute to the understanding of the timing of spring green-up.

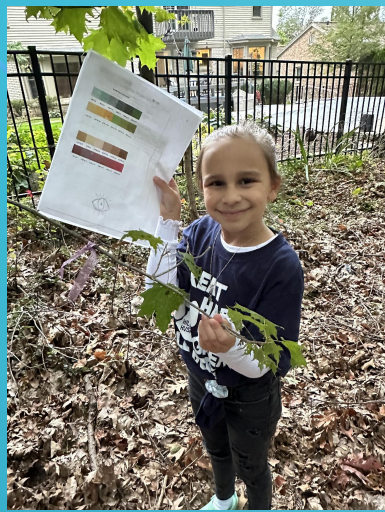


Spring Dates: February 2024 - June 2024

The North America Phenology Campaign is focused on monitoring and reporting plant phenology data to help validate the timing of the plant growing season. In this campaign, students will observe and report plant green-down and green-up, have opportunities to meet scientists, and collaborate with other students.

[Register Here to Participate](#)

<https://www.youtube.com/watch?v=wc7Qm7NGfJg>



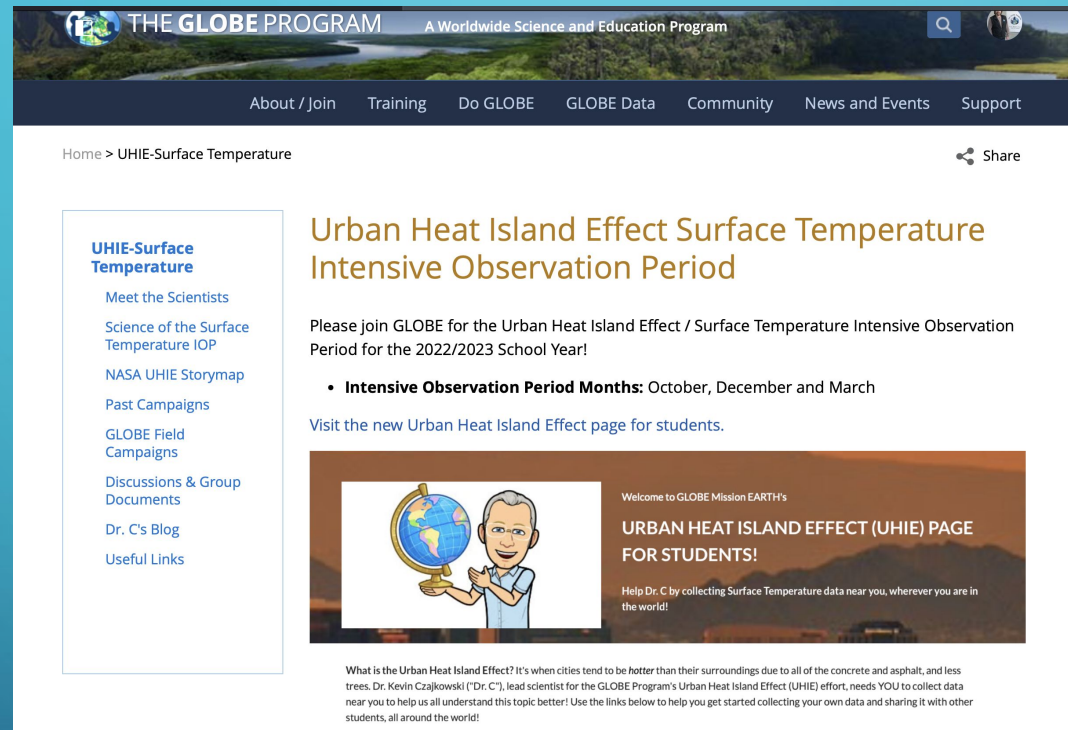
Harper (3rd
Grade) doing
GLOBE “Green
Down” 2023

Data uploaded to
GLOBE Data
Access Tool



A1	organization_id																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	organization	org_name	site_id	site_name	latitude	longitude	elevation	measured_c	greenings:u	greenings:m	greenings:ye	greenings:gr	greenings:ve	greenings:ge	greenings:sp	greenings:in	greenings:st	greenings:le	greenings:le	greenings:pr	greenings:av	greenings:nu	greenings:nu	greenings:
2	The GLOBE	The name of	The GLOBE	The name as	The latitude	The longitud	The elevation	The date only of when the data were o	Year of mea	Greening cyc	Type of vege	Genus of the	Species of th	was the plan	green up or	swelling, budburst, leaf	the length of which may be measured					4	1	
3	6514193	Wayne Coun	330283	Heritage Par	42.4788	-83.3919	255.4	9/20/23	398311	9/20/23	2023	1 tree	Acer	saccharum		down	color change 5GY:4/8 5GY 5GY:4/8					4	1	
4	6514193	Wayne Coun	330283	Heritage Par	42.4788	-83.3919	255.4	10/28/23	398311	10/28/23	2023	1 tree	Acer	saccharum		down	color change 2.5Y:8/12 5G 2.5Y:8/12					4	1	
5	6514193	Wayne Coun	330283	Heritage Par	42.4788	-83.3919	255.4	11/1/23	398311	11/1/23	2023	1 tree	Acer	saccharum		down	fallen				0	0	1	
6	6514193	Wayne Coun	330283	Heritage Par	42.4788	-83.3919	255.4	11/1/23	398311	11/1/23	2023	1 tree	Acer	saccharum		down	color change 2.5Y:8/12 2.5Y:8/12				0	1	1	
7																								

GLOBE SURFACE TEMPERATURE CAMPAIGN



The screenshot shows the GLOBE Program website. The header includes the GLOBE logo, the text "THE GLOBE PROGRAM", and the tagline "A Worldwide Science and Education Program". A navigation bar contains links: "About / Join", "Training", "Do GLOBE", "GLOBE Data", "Community", "News and Events", and "Support". Below the navigation bar, the breadcrumb "Home > UHIE-Surface Temperature" is visible, along with a "Share" button. On the left, a sidebar titled "UHIE-Surface Temperature" lists links: "Meet the Scientists", "Science of the Surface Temperature IOP", "NASA UHIE Storymap", "Past Campaigns", "GLOBE Field Campaigns", "Discussions & Group Documents", "Dr. C's Blog", and "Useful Links". The main content area features the title "Urban Heat Island Effect Surface Temperature Intensive Observation Period" in large orange text. Below the title, a paragraph invites users to join GLOBE for the Urban Heat Island Effect / Surface Temperature Intensive Observation Period for the 2022/2023 School Year. A bullet point lists the "Intensive Observation Period Months: October, December and March". A link says "Visit the new Urban Heat Island Effect page for students." Below this is a banner image with a cartoon character holding a globe. The banner text reads: "Welcome to GLOBE Mission EARTH's URBAN HEAT ISLAND EFFECT (UHIE) PAGE FOR STUDENTS! Help Dr. C by collecting Surface Temperature data near you, wherever you are in the world!". At the bottom of the banner, a small text block explains the Urban Heat Island Effect and encourages data collection.

THE GLOBE PROGRAM A Worldwide Science and Education Program

About / Join Training Do GLOBE GLOBE Data Community News and Events Support

Home > UHIE-Surface Temperature Share

UHIE-Surface Temperature

- Meet the Scientists
- Science of the Surface Temperature IOP
- NASA UHIE Storymap
- Past Campaigns
- GLOBE Field Campaigns
- Discussions & Group Documents
- Dr. C's Blog
- Useful Links

Urban Heat Island Effect Surface Temperature Intensive Observation Period

Please join GLOBE for the Urban Heat Island Effect / Surface Temperature Intensive Observation Period for the 2022/2023 School Year!

- **Intensive Observation Period Months:** October, December and March

Visit the new Urban Heat Island Effect page for students.

Welcome to GLOBE Mission EARTH's

URBAN HEAT ISLAND EFFECT (UHIE) PAGE FOR STUDENTS!

Help Dr. C by collecting Surface Temperature data near you, wherever you are in the world!

What is the Urban Heat Island Effect? It's when cities tend to be hotter than their surroundings due to all of the concrete and asphalt, and less trees. Dr. Kevin Czajkowski ("Dr. C"), lead scientist for the GLOBE Program's Urban Heat Island Effect (UHIE) effort, needs YOU to collect data near you to help us all understand this topic better! Use the links below to help you get started collecting your own data and sharing it with other students, all around the world!

<https://www.globe.gov/web/surface-temperature-field-campaign>

IRT



Surface Temperature

<https://youtu.be/WjcVJXMQcDk?si=qejN7YcBm0Wj-HKL>

TERRA ROVER

<https://youtu.be/WjcVJXMQcDk?si=qejN7YcBm0Wj-HKL>

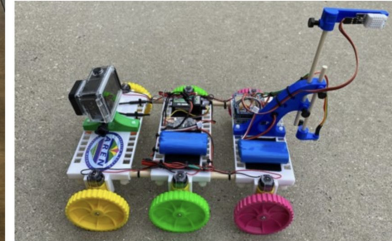
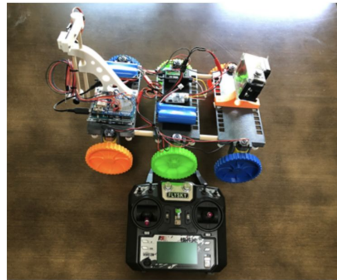
AREN Project

Aeropods

TerraROVERS

AquaROVERS

AREN: TerraROVERS



TerraROVERS are used to collect and analyze surface temperature data. They can explore how surface materials impact local temperatures and impact phenomena such as the [Urban Heat Island Effect](#).

TerraROVER's carry instruments that allow for field missions using NASA-inspired AREN operations and GLOBE protocols.

- **Example Student Research Report Featuring TerraROVER:** [Use of a TerraRover 2 to Collect Fine Particulate Matter Using Arduino Related Technology](#)

Related GLOBE Protocols and Bundles

- Air Temperature
- Clouds
- Relative Humidity
- Surface Temperature
- Urban Bundle

CLOUDS

 THE GLOBE PROGRAM

 GLOBE
Observer

Sign In
Forgot/Change Password

Get the AppDo GLOBE ObserverLead a ProgramGet DataNews, Events, and PeoplePublicationsAboutSearch

Home > Do GLOBE Observer > Clouds

Share

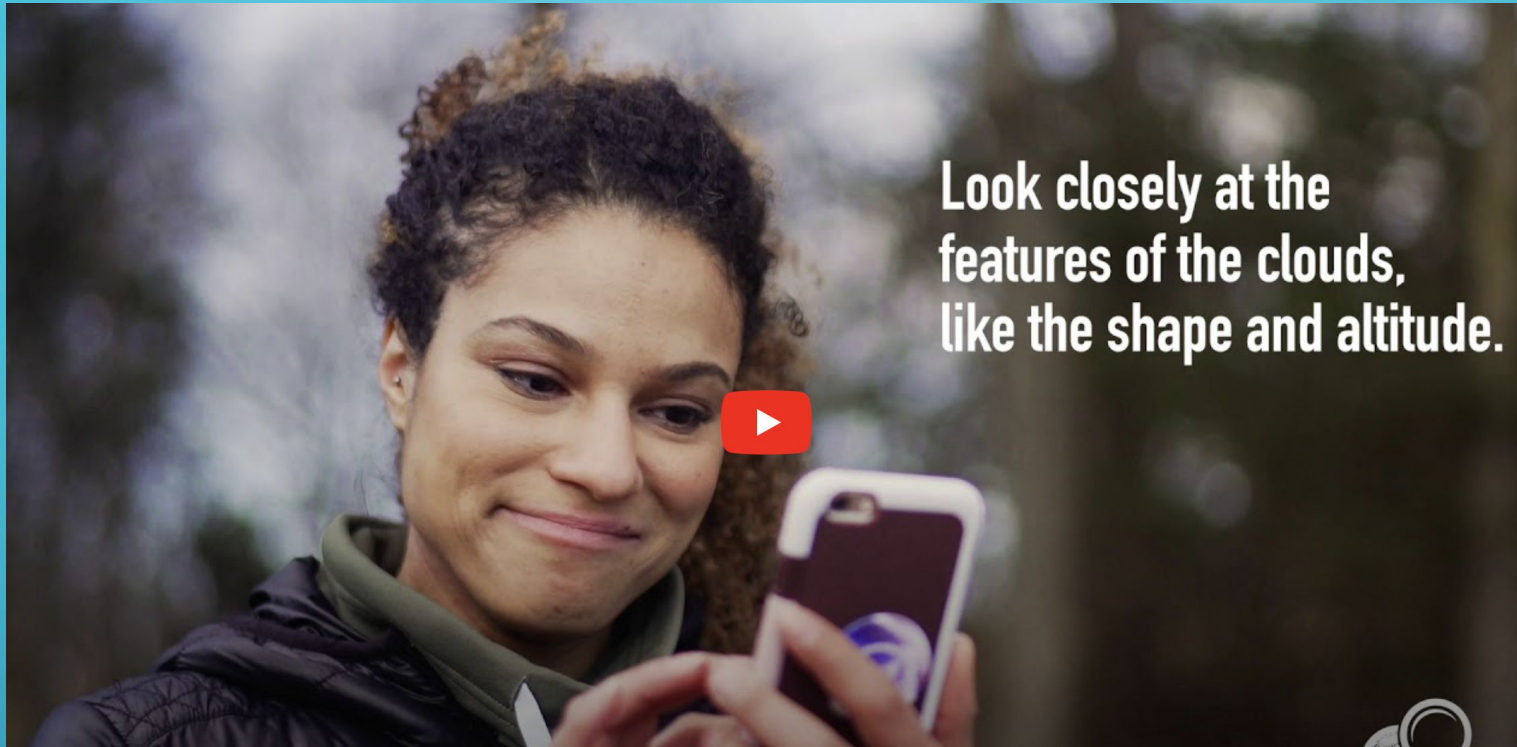
OverviewTaking ObservationsClouds ScienceResource Library

What is GLOBE Clouds?



GLOBE Clouds is an app-based tool that will help you document what you see in the sky. Once you have downloaded the GLOBE Observer app and created an account, the Clouds tool (including the Clouds Wizard if you wish to use it) will guide you through the observation

<https://observer.globe.gov/do-globe-observer/clouds>



**Look closely at the
features of the clouds,
like the shape and altitude.**

<https://www.youtube.com/watch?v=J9KgKLVFu9U>

CITIZEN SCIENCE

