

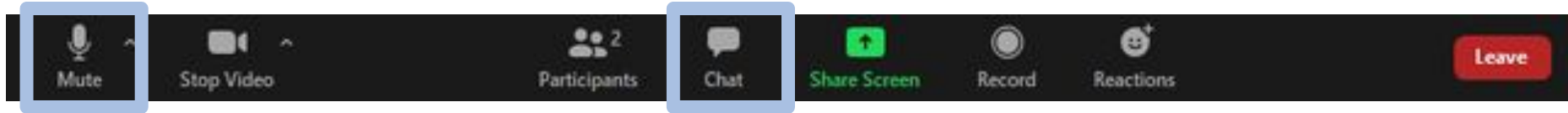


Welcome to the IVSS Badges Overview Webinar!

Please share where you are joining us from in the chat.

During the webinar:

- Please keep your microphone muted
- Use the chat to ask questions!



This meeting is being recorded and will be posted on the IVSS webpage later today. Thank you for joining us!



GLOBEPROGRAM®

2025 GLOBE International Virtual Science Symposium (IVSS)

Webinar #5: 2025 IVSS Badges Overview

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



2025 International Virtual Science Symposium (IVSS)

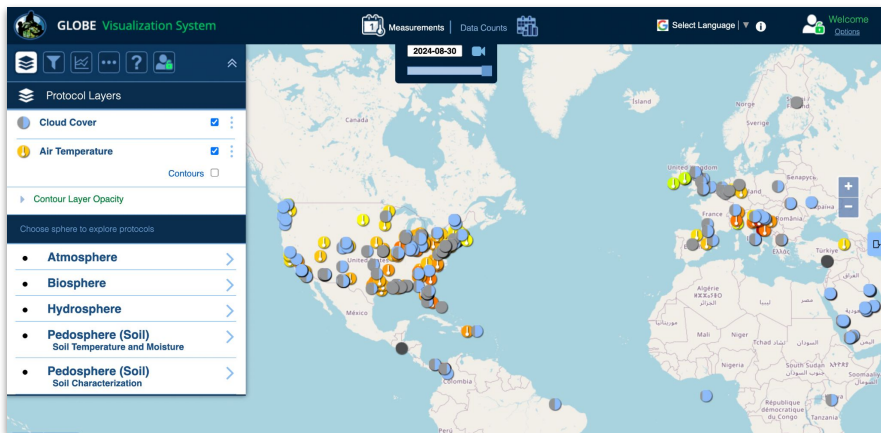
30 Years of GLOBE: Understanding the Past, Present, and Future



Celebrating GLOBE's 30th Anniversary



- Access and analyze data from the GLOBE database to enrich your understanding of Earth system processes
- Compare past GLOBE data to newly collected data, if new data are collected
- Data analyzed can be from any time period, region, or any length of time
- Submit your data to the GLOBE database!



30 Years of GLOBE

Campaign Resources
Webinars
Logo Design Contest
Related Campaigns and IOPs

Check out the submitted designs for the 30 Years of GLOBE Campaign Student Logo Design Contest!

30 Years of GLOBE Campaign: Comparing GLOBE Data Past and Present



Campaign Dates: September 2024–September 2025

GLOBE is committed to environmental education and data literacy, and understanding the environment on local, regional and global levels by exploring past data alongside present data is important in measuring environmental changes at all scales, and planning for the future. The purpose of this year-long campaign is to take a deep-dive into the last 30 years of GLOBE data. The GLOBE Program encourages participants, specifically GLOBE students, to consider what environmental changes are emerging in their local ecosystems through collecting and analyzing environmental data via GLOBE protocols across all four GLOBE spheres,

<https://www.globe.gov/web/30-years-of-globe-campaign/overview>





2025 IVSS Timeline

05 December - 05 March 2025: Reports Accepted

November - January 2025: Judge Recruitment

19 March 2025: Judging Webinar

19 March - 02 April 2025: Judging Period

22 April 2025: Earth Day Celebration, Feedback to Students and Stipend Drawing



Project Requirements

This is what you will need in order to be considered in the IVSS judging process.

Most important: projects must include GLOBE data!

- Abstract/Summary
- Research report
- Appendix with data downloaded from GLOBE database*
- Explanation for each badge
- Presentation
- Photo release forms

* Required to earn the “I am a Data Scientist” badge

Earth Day Stipend Drawing



- Projects that meet the following criteria will be entered into the stipend drawing:
 - Earn 4-stars on IVSS Research Project
 - Earn the featured badge for 2025: "I am a Data Scientist"
 - Receive at least two additional badges
- Student teams selected as stipend recipients are invited to attend the **GLOBE Annual Meeting Student Experience** where they present their work and engage in a **GLOBE field experience** with students, scientists, and STEM professionals from all over the world (max 4 students per team).
- Stipend funds can be used to help offset the cost of attending the 2025 GLOBE Annual Meeting in July, held in the USA.



IVSS Badges

“I am a Student Researcher” Badge



- All scored projects will receive this badge
- Students earn 1-4 stars on their projects and receive the respective badge

“I am a Data Scientist”: Featured Badge for 2025

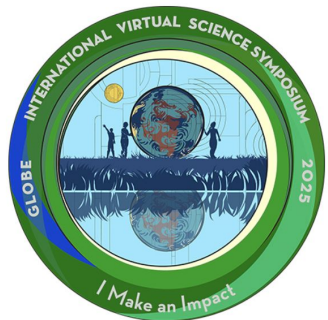
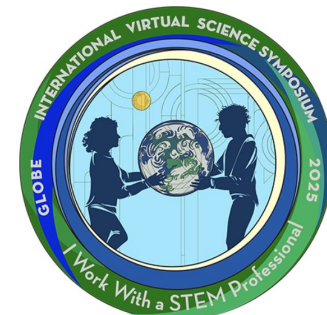
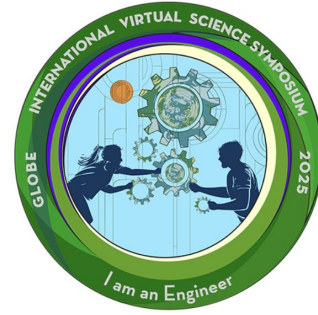
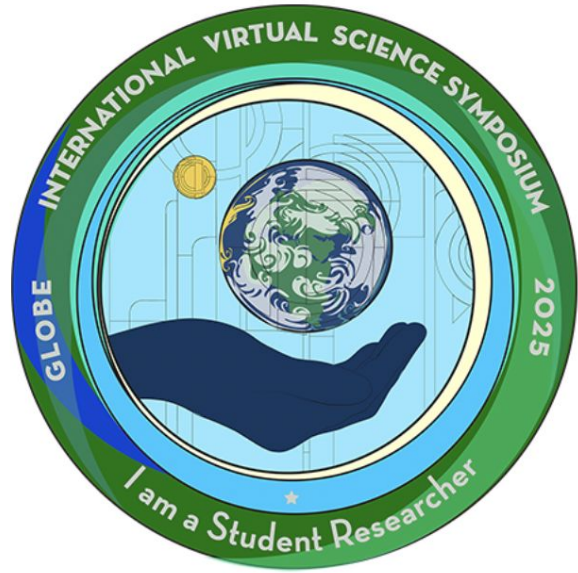
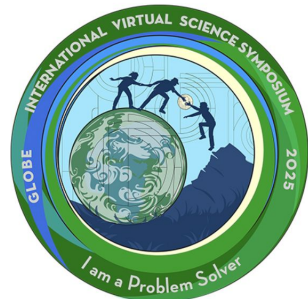
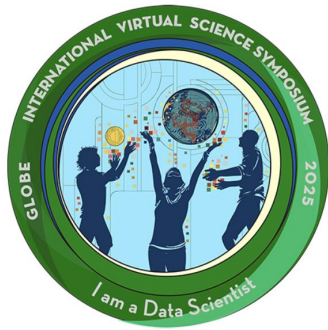
- Students must access and analyze historic data from the GLOBE database, in addition to newly collected data, as part of their 2025 IVSS project to be eligible for the stipend drawing

Additional Science Badges

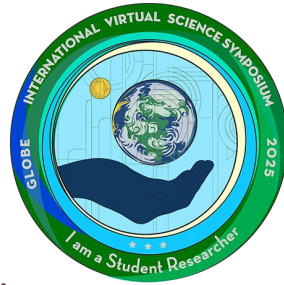
- Students need to choose to apply for these badges when uploading a project
- Students should describe how each badge was earned in their report
- Students can earn up to 3 out of 8 additional badges
- **Minimum of two additional awarded badges are required to be part of the stipend drawing, including the “I am a Data Scientist” badge**



Students earn various badges by describing the **scientific** and **engineering practices** they engage with in their research projects.



“I am a Student Researcher” Badge



1 Star Project - Insufficient

The report is missing significant information or does not contain all five required elements*.

2 Star Project - Needs Improvement

Report may be incomplete and need additional clarification or be missing one or more of the required elements*.

3 Star Project - Good

Report contains all required elements and is written clearly, but could need a bit more information or explanation.

4 Star Project - Exceptional

The report goes above and beyond the expectations of this project and is clear and concise.

*Minimum Report Requirements: Title, Abstract, Research Questions, Research Methods, and Conclusion
https://www.globe.gov/news-events/meetings_symposia/virtual-conferences/how-projects-are-judged



New Badge for 2025: “I am an Earth System Scientist”



I am an Earth System Scientist

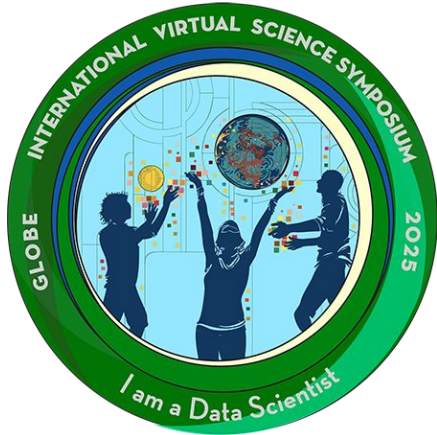
The report clearly describes the interconnectedness of Earth’s spheres on the research question and applies multiple GLOBE protocols, or GLOBE protocol bundles, to investigate the research question. The research team clearly explains the dynamic and interconnected nature of Earth’s systems and the processes that influence and depend on one another through the analysis and interpretation of GLOBE and Earth system science data.



2025 IVSS Theme

30 Years of GLOBE: Understanding the Past, Present, and Future

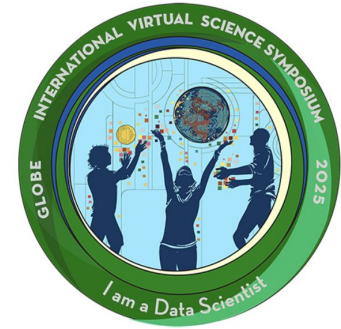
Required Badge for Stipend Eligibility



I am a Data Scientist

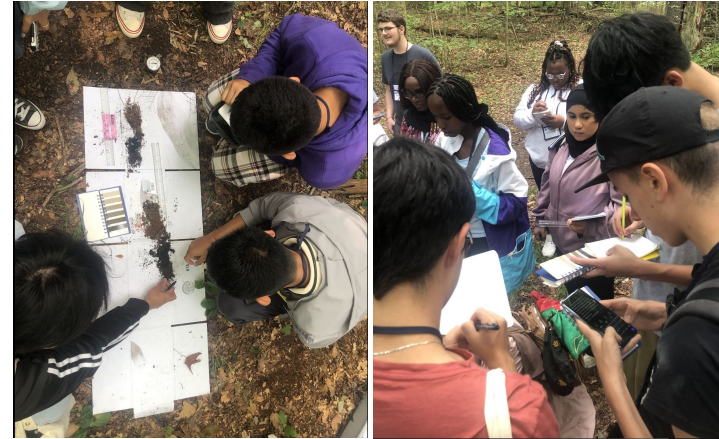
The report includes in-depth analysis of data downloaded from the GLOBE Database as well as the students' own data sources, if new data is collected. Students discuss limitations of these data, make inferences about past, present, or future events, or use data to answer questions or solve problems in the represented system.

I am a Data Scientist Badge Requirements



Reports must include analysis of data downloaded from the GLOBE database, including the following:

- **Data Tables**
 - Organized, properly labeled, and contain all data retrieved from the GLOBE database
 - Raw data included as a separate page labeled "Appendix" for review
- **Data Analysis**
 - Graphs are properly labeled and appropriate for the data collected
 - Statistical/mathematical analysis clearly communicated
- **Discussion of Analysis and Conclusions**
 - Data analysis is described and claims reference data
 - Compare results with published or expected results



“I am a Data Scientist” Badge Example from 2024 IVSS Stipend Recipients from Bhutan



A comprehensive investigation on Carbon Storage in the vegetation of our schoolyard and determining the Carbon Footprint of the school through the measurement of carbon using GLOBE's Carbon Cycle Protocols.

Organization(s): Pelrithang Higher Secondary School

Country: Bhutan

Student(s): Sangay Choden Yeshey Wangchuk Kalpana Mongar
Usha Pyakurel Shankar Ghimrey

Grade Level: Middle School (grades 6-8, ages 11-14)

GLOBE Educator(s): Arun Kumar Chhetri

Contributors: Sahapati Gurung (Assistant Focal Teacher)

Report Type(s): International Virtual Science Symposium Report

Protocols: Carbon Cycle



Table 5 The details from the GLOBE Visualization System for the three measurements.

School Name Pelrithang Higher Secondary School			
Site Name	PHSS: Non-Standard Carbon Cycle Site		
User id	85378938		
Latitude	26.90234		
Longitude	90.49045		
Elevation	289.4		
Plot Size (m ²)	2085.8		
Site Type	Non-Standard		
Measured on	2022-10-10	2023-08-22	2024-02-24
Total Biomass (g/m ²)	7512.1	8670.3	9259.3
Total Carbon Storage (gC/m ²)	3756	4335.1	4629.7
Tree Biomass (g/m ²)	5764.2	6291.3	6681.3
Tree Carbon Storage (gC/m ²)	2882.1	3145.6	3340.6
Shrub Biomass (g/m ²)	1679.3	2310	2505.7
Shrub Carbon Storage (gC/m ²)	839.7	1155	1252.8
Herbaceous Biomass (g/m ²)	68.6	69.1	72.3
Herbaceous Carbon Storage (gC/m ²)	34.3	34.5	36.2



Data tables with GLOBE data



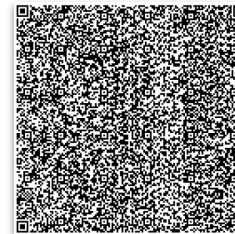
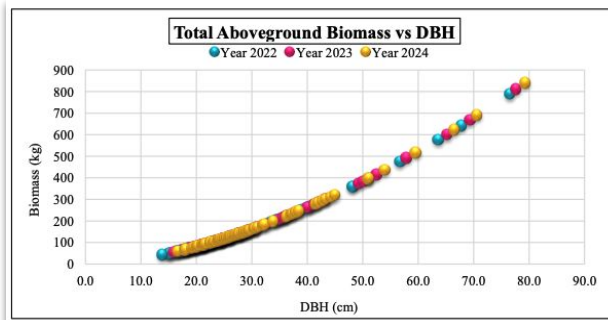
Graphs and data analysis



Data entered and retrieved from the GLOBE database



Badge explanations



Scan to view this project example!



I AM A DATA SCIENTIST

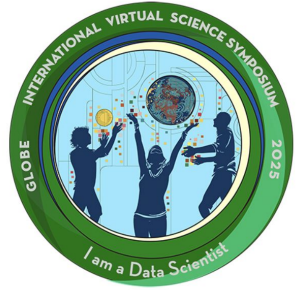
This research involves a thorough measurement of carbon stored in the trees, shrubs and herbaceous of our schoolyard. We have tried to provide an in-depth analysis of the data collected over a period of three years. We also analyzed net primary productivity (NPP) and the Carbon Footprint.

Sponsored by:

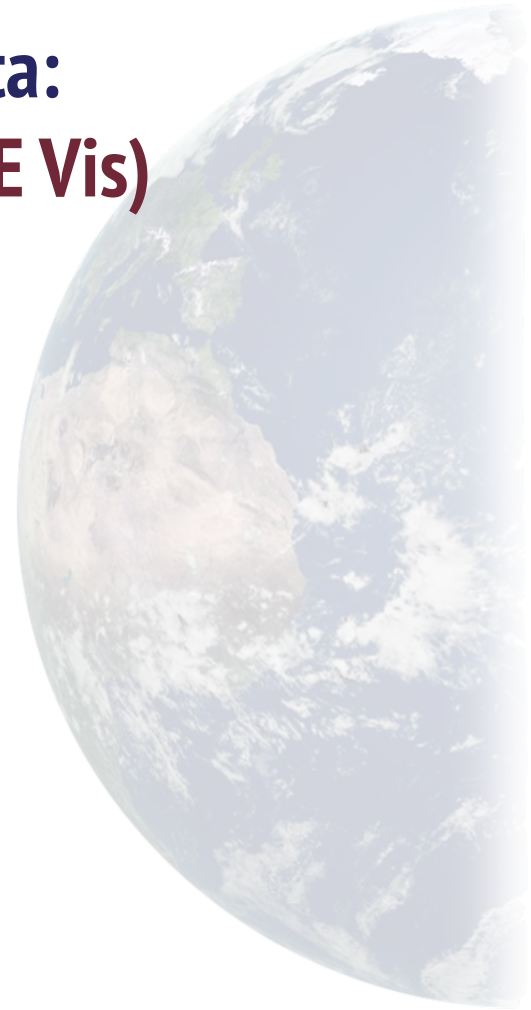


Supported by:





Visualize and Download GLOBE Data: GLOBE Visualization System (GLOBE Vis) Advanced Data Access Tool (ADAT)

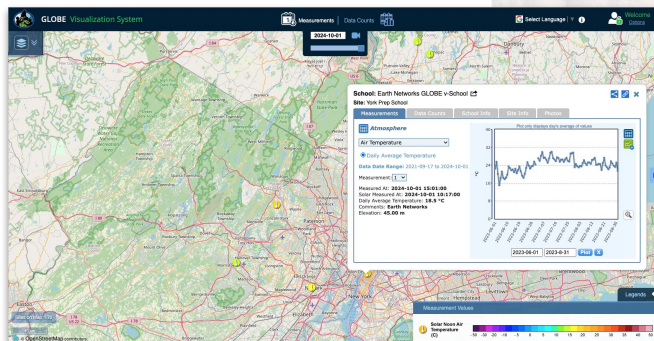
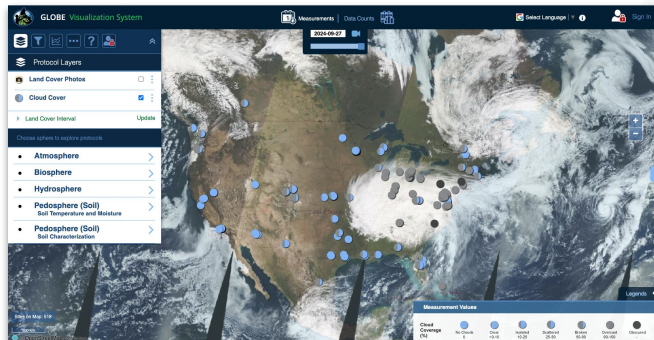


GLOBE Visualization System

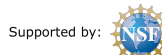


Features of GLOBE Vis

- Visualize data: map view, data table, or plot data
- Compare data from multiple sites
- Create multi-site plots
- Download data as a CSV file

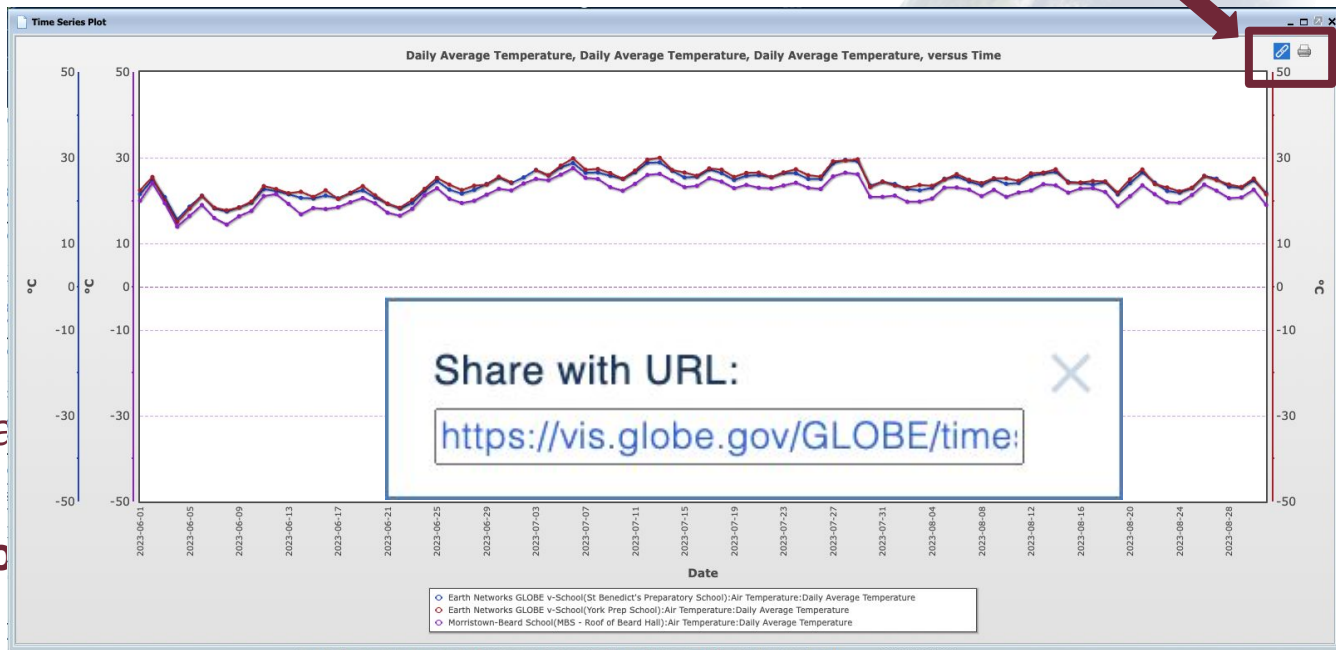


<https://vis.globe.gov/GLOBE>



GLOBE Vis: Save, Share, or Print Data Plots

- Click on the  icon to create a shared link
 - Share link with others or save to return to plots at a later date
- Click on the  icon to print or save as PDF



GLOBE's Advanced Data Access Tool (ADAT)

Features of ADAT

- Advanced data search filters
- Identify data-rich sites
- Download data from one or more sites
- CSV download

The screenshot displays the GLOBE's Advanced Data Access Tool (ADAT) interface. At the top, it says "THE GLOBE PROGRAM Advanced Data Access Tool". Below this, there are buttons for "Apply Filter", "Clear", "Load", and "Save", along with a date range "Data Last Updated: 2024-10-01".

The main section is titled "808 Sites Found". Below this, there are two buttons: "Obtain Measurement Data" and "Download Summary Data". A red arrow points to the "Download Summary Data" button.

The interface includes a "Select a Filter:" section with the following options:

- Site Filters**
 - Select Protocols
 - X Air Temperature
 - X Precipitation
 - Date Range
 - X 2023-06-01 to 2023-8-31
 - Data Count Range
- Country or State/Territory**
- In proximity of a lake or river:**
- School/Teacher/Partner/Team**
- Elevation Range**
- Lat/Long Range**
- Proximity to Lat/Long**

The table below lists the sites found, with columns for Site Name, Site Number, Latitude, Longitude, and Elevation. The table is sorted by Site Number.

Site Name	Site Number	Latitude	Longitude	Elevation	
116Secondary School At Riyadh	24.76689	46.74457	610.6		
2 Intermediate School Abu Ansh Al Jazan	16.979				
6. Staatliche Regelschule "Wartburgschule"					
Abd Elmajed Bin Abd-Alaziz Secondary School at Al Ma					
Abd Elmajed Bin Abd-Alaziz Secondary School at Al Ma					
Abdulah Bin Saam Secondary School at Al-Khaz					
Angelia Creek Test Site 1	40.311				
Kenhorst Out Fall ACWA	40.301				
Unnamed tributary behind Ken Griff Church	40.302				
Rabbit Run before entering Angelia Creek	40.301				
Almenes gimnazija	56.145				
Alahad secondary school At Jazan	16.714				
Alexander von Humboldt Gymnasium	47.867				
Alexander von Humboldt Gymnasium	47.866				
Al Farad Secondary School at Riyadh	24.662				
Alquba Secondary Girls School at Al-Hufuf	25.261				
Al-Hibed Secondary School For Girls At Al-qunibad	19.532				
Al-Hibed Secondary School For Girls At Al-qunibad	18.975				
Al-Hassan Bin Al-Hathim Intermediate School At Al-Qor Al-ORDAT	19.511				
Al-Haythem Intermediate and Secondary Girls School at Al-Haythem Intermediate-ATM-01	24.1				
Alkameesh 3Intermedia school at Alhessa	25.355				
Alkameesh 3Intermedia school at Alhessa	25.355				
Al-Rhadeq Secondary School at Al-Madrath Al-Monash	24.511				
Al-Khazbah Intermediate and Secondary School at Jazan	16.699				
Alkhawazmi basic school	24.261				
Alkhaf Intermediate Girls School at Al-Hufuf	25.293				
Alkhaf Intermediate Girls School at Al-Hufuf	25.293				
Al-Lagan Intermediate and Secondary Girls School at Al-Lagan Intermediate and Secondary Girls School at Al-Lagan	16.663				
Al-Matam Intermediate and Secondary Girls School at Al-Matam Intermediate and Secondary Girls School	16.899				
Al-Matam Intermediate and Secondary Girls School at Al-Matam Intermediate and Secondary school	17.429				
Al-Matam Intermediate and Secondary Girls School at Sa Ala Bahy	17.426				
Al-Matam Intermediate and Secondary Girls School at Sa Ahrir Salh	17.42996	42.54966	99.5		
Al-Matam Intermediate and Secondary Girls School at Sa Ahrir Salh	17.42996	42.54966	99.5		
Al-Ofuss Secondary School at Al-Rahab	20.06468	41.36248	2244		
Alpena Elementary/Middle School	PLAYGROUND Weather Station - Alpena Elementary Sch	36.29046	-93.29612	378	

At the bottom, it says "1 - 35 of 808".

<https://datasearch.globe.gov>






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A Worldwide Science and Education Program



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Home > Training > Tutorial Center > Data Access, Analysis & Reporting

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< Back

Data Access, Analysis & Reporting Tutorials

<h3>Introduction</h3> <p>Introduction to Data Retrieval Data User's Guide</p>	<h3>My Observations</h3> <p>How to Use the My Observations Tool</p>	<h3>Visualization System "Vis"</h3> <p>Introduction to the "Vis" System Introduction - 3 Steps to Using Vis The Vis Popup Window Features Multisite Plots - How to Overlay and Compare Data Plots Overlay Satellite Data See Just Your Measurements</p>
<h3>Advanced Data Access Tool "ADAT"</h3> <p>Quick Overview of ADAT Choose Protocols and Date Ranges Apply Filters Share Your filters</p>	<h3>API</h3> <p>How to Use GLOBE's API</p>	<h3>Research & Reporting</h3> <p>Search For GLOBE Student Reports Submitting a Student Research Report</p>



GLOBE Data Resources

Step-by-step video tutorials

- GLOBE Vis System
- Advanced Data Access Tool (ADAT)
- GLOBE API



<https://www.globe.gov/get-trained/tutorial-center/data-access>



Additional Resources

GLOBE Data Challenge

- ADAT Walkthrough
- Climate Data Challenge

Data Resources

- GLOBE data resources

Archived Webinars

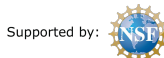
- 2025 IVSS playlist, including several videos from GLOBE partners and NASA project scientists

The screenshot shows the GLOBE PROGRAM website. The header includes the GLOBE logo and the text "THE GLOBE PROGRAM A Worldwide Science and Education Program". The navigation bar has links for "About / Join", "Training", "Do GLOBE", "GLOBE Data", "Community", "News and Events", and "Support". The main content area is titled "IVSS: Student Resources" and includes a sidebar with links like "Report Requirements", "Badges", "How Projects Are Judged", "Teacher Resources", "Student Resources", "Stipend Recipients", "Judge Resources and Guidelines", "Celebrating 2024 IVSS Reports", "Regional Statistics", and "2024 IVSS Reports". The main text area says "The following resources can help students as they plan, research, complete and present their reports for an International Virtual Science Symposia." and lists resources for the "GLOBE Data Challenge", including "GLOBE ADAT System Walkthrough Using October 2024 Hurricane Data (pdf)" and "GLOBE Climate Change Data Challenge (pdf)". Below this are sections for "Creating a Research Project", "Preparing a Presentation", "Data Resources", and "Webinars".

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



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2025 IVSS Timeline

05 December - 05 March 2025: Reports Accepted

19 March - 02 April 2025: Judging Period

22 April 2025: Earth Day Celebration, Feedback to Students and Stipend Drawing

Upcoming IVSS/Campaign Webinars:

- 5 December: A Tale of Two Scientists: Changes in Data and Technology Over Time
- 8 January: AI in Earth Systems: Leveraging Technology Ethically
- 22 January: How to Submit an IVSS Project

Visit the IVSS Page to Learn More!


Report requirements, badge information, student resources, and more!

Recorded IVSS webinars:

- ❖ IVSS Informational Webinar
- ❖ Accessing Data from the GLOBE Database
- ❖ Resources to Support Student Research from GLOBE Partners and NASA Scientists

Questions? Email:
ivss@nasaglobe.org

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




THE GLOBE PROGRAM
A Worldwide Science and Education Program

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

International Virtual Science Symposium

- Report Requirements
- Badges
- How Projects Are Judged
- Teacher Resources
- Student Resources
- Stipend Recipients
- Judge Resources and Guidelines
- Celebrating 2024 IVSS Reports
- Regional Statistics
- 2024 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. **The new theme for the 2025 IVSS Symposium is 30 Years of GLOBE: Understanding the Past, Present, and Future.** Come back to this page in the coming weeks for more information.

Note: Students must complete and sign a [media release form](#) in order for their project to be accepted for judging.





Thank you! Questions?