

GLOBE IVSS Research Proposal Template

Overview: This template provides an example of items that could be included in a research proposal submitted to the International Virtual Science Symposium (IVSS). Final IVSS Research Proposal submissions should be in the format of a presentation, which could be a StoryMap, poster, video, or another creative presentation format.

Project Title:

A brief, descriptive title for your project (less than 15 words). Be sure to include "Research Proposal:" in your title.

Example: "Research Proposal: Investigating the Relationship Between Surface and Air Temperature on Different Types of Ground Cover"

Student(s) Name(s):

List your name(s).

School/Organization Name:

Include your school name and country.

Teacher/Mentor Name(s):

List the name(s) of your teacher(s) or mentor(s).

Research Question(s) and Hypothesis

State your research question(s) and hypothesis clearly and specifically.

Example:

"How does the amount of cloud cover relate to daily surface temperature in our region during the spring season?"

AND

"We hypothesize that increased cloud cover is associated with lower daily maximum temperatures."

Description of Study Site



Describe where your study is taking place. Include:

- Name of the location (city, region, country)
- GPS coordinates (if possible)
- Description of the local environment (e.g., urban, rural, forested, coastal)
- Climate characteristics
- Any specific features relevant to your project (e.g., proximity to water, elevation)
- Related imagery and maps, e.g. <u>land cover observations</u>, satellite imagery, maps, etc.

Example:

"Our study site is located in Nairobi, Kenya (1.2921° S, 36.8219° E). It is an urban area with a subtropical highland climate and experiences both wet and dry seasons."

Data Collection Plan

Describe how you will collect your data, including:

A. Data Types and Sources

- Which <u>GLOBE protocols</u> will you use? (e.g., Atmosphere: Cloud, Temperature, Precipitation; Hydrosphere: Water pH, etc.)
- Will you collect your own data, use existing GLOBE data from the GLOBE database, or both?
- Will you use data from other sources?

B. Data Collection Schedule

- When will you collect data (dates/times)?
- How frequently (daily, weekly)?
- For how long?

C. Equipment and Tools

What tools will you use for data collection? (GLOBE instruments, GLOBE Observer App, etc.)

D. Who Will Collect the Data?

Individual roles if it's a team project



Example:

"We will use the GLOBE Atmosphere protocols to collect daily cloud cover and temperature data using a thermometer and the GLOBE Observer app. We plan to collect data from September 1 to November 30, 3 times per week."

Background and Supporting Information

Provide brief background information or scientific context. Include:

- Why did you choose this topic?
- Any related studies or research
- Relevance to your community or region

Expected Outcomes or Goals

- What do you hope to learn?
- How will this help your community or contribute to science?

Example:

"We hope to understand how cloud patterns affect local temperatures and share this information with our local weather center to improve awareness about climate changes."

GLOBE Data Use Plan (Optional)

Detail how GLOBE data will be used:

- Which datasets from the GLOBE database you plan to use (include locations, site names, etc.)
- How these datasets support or supplement your own data collection
- Example:

"We will compare our collected data with data from nearby GLOBE schools in Tanzania and Uganda to see regional trends."

Challenges and Considerations (Optional)



- What challenges might you face in your data collection or analysis?
- How do you plan to overcome them?

Example:

"We may miss some days of data due to rain or school closures. We plan to average data weekly to minimize the impact of gaps."

References

• Cite any articles, GLOBE protocols, or other sources used in developing your proposal.