Guidelines for Proposing GLOBE Student Research Campaign

One of the highly valued attributes of the GLOBE Program is the interaction among students, teachers, and scientists. GLOBE Student Research Campaigns not only stimulate student measurement activity and provide a focus for learning by GLOBE students, they also provide scientists with research quality measurements. GLOBE encourages proposers to work with GLOBE students and teachers, and will selectively support research campaigns upon verifying their feasibility with the GLOBE community. These proposals may come from members of the GLOBE community or be made by the international research programs, projects, and space missions of the U.S. and GLOBE Partner Countries that wish to partner with GLOBE. NASA and the GLOBE Implementation Office (GIO) will work with proposers to refine ideas for such campaigns.

Feedback will be provided within three months of receipt of a proposal.

GLOBE sees three distinct types of Student Research Campaigns based on their duration.

1. GLOBE partners with scientific missions such as satellites and measurement activities associated with these partnerships typically continue for the duration of the mission, often five or more years. As part of these partnerships, specific GLOBE schools may be targeted for special involvement to support specific needs of the partner mission. Such involvement may be the result of location or provision of specialized instrumentation or other factors.

2. Any organization or GLOBE partner or participant may propose campaigns lasting for some limited period of time up to two years with a focus on committed data collection and reporting to support research objectives, stimulate student participation, or provide improved environmental education combining measurements and specific learning activities. Generally such research campaigns should be appropriate for and open to a major proportion of GLOBE schools in many countries. Such campaigns generally should include a targeted opportunity for participating students to present student research papers resulting from their participation.

3. There are natural and human caused events that affect the environment. Specific measurements taken in response to such events can provide significant opportunities for increased understanding of the environment. Capturing data in the wake of such events often must begin within minutes, hours, or a very few days. Participating in the observation of event effects requires planning both on the part of the GLOBE Program and individual teachers and schools. GLOBE is open to working with scientists, and others to prepare for event triggered measurement campaigns with prearranged measurement approaches and educational materials.
How to Propose GLOBE Student Research Campaigns?

Those with ideas for research campaigns should begin by familiarizing themselves with GLOBE and then contact the GLOBE Program Manager at NASA who can involve the GLOBE Implementation Office (GIO) and Goddard GLOBE Information Technology team (GGIT) in the development of a specific proposal if appropriate and desirable.

Proposals for GLOBE Student Research Campaigns should consist of the following components:

1. A full description of the research campaign, including its scientific objective(s) and how it will contribute to scientific characterization of the environment, GLOBE measurement protocols to be used, specific objectives and success criteria for data acquisition and educational outcomes, the optimal and minimal requirements for the timing and frequency of the measurements, plans for analysis of the student data, and relevant information about the schedule and intermediate milestones;

2. Draft materials for recruiting teachers and schools that include any material necessary for training participants; and

3. Relevant publications and resume for all key scientists or educators of the proposing party.

4. The commitment of the proposer’s institution or sponsors to support the activity if accepted, a commitment to coordinate all press and public announcements of the campaign with GLOBE, and the proposer’s commitment to publish the results in science and/or education professional journals.

This document should be sent electronically to the GLOBE Program Manager at NASA Headquarters. The proposal will be reviewed in consultation with appropriate representatives of the GLOBE community to assess its feasibility and relevance to the GLOBE Program as well as its scientific and pedagogical merit. The respective responsibilities of the proposing party and the GLOBE Program will also be examined including their costs and impacts on continuing implementation of the worldwide GLOBE infrastructure.

NASA and the GIO aim to provide feedback within three months of receipt of a proposal.
Requirements for GLOBE Student Research Campaigns

The following are minimum requirements that proposals for GLOBE Student Research Campaigns must meet:

1. The campaign must include a substantial student measurement activity using either existing or proposed new GLOBE science protocols. If new GLOBE protocols are proposed, they will need to be approved through the process outlined in the Guidelines for Proposing New GLOBE Measurement Protocols. New protocols would need to be supported on a long-term basis and become a part of the core GLOBE protocol set.

2. The measurement activity must have the potential to involve schools in at least 3 different GLOBE countries and at least 200 GLOBE schools in taking and reporting research quality data.

3. The measurement activity must be complemented by educational materials and activities to support student learning and research using the measurement data. These activities should have clear educational objectives and outcomes. Any educational materials developed, including new learning activities, would be provided for the continuing use by GLOBE after the end of the campaign.

4. The proposed campaign must contribute to scientific characterization of the environment, address one or more specific research questions, and have clear objectives for data acquisition and educational outcomes.

5. Proposed campaigns must have a lead professional scientist or science team and a lead educator or education team.

6. Proposed campaigns must include an evaluation plan for assessment of community involvement, outcomes met, and educational impact on participating students.

7. Campaign proposals must indicate what support will be required through the worldwide GLOBE common infrastructure and what responsibilities will be met by the proposing team and partners.