

GLOBE Program: Global Connections in Science and Education

Soil Moisture Network Workshop 2016

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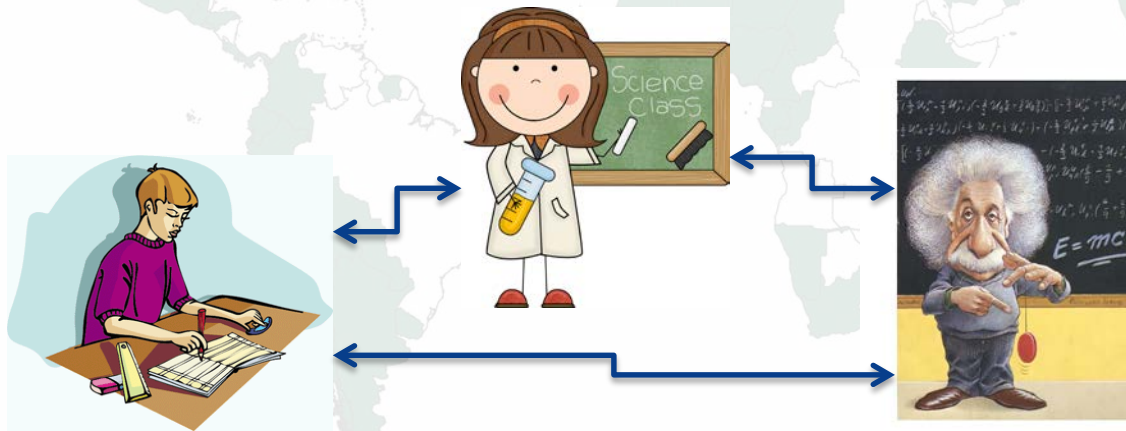


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What is The GLOBE Program?

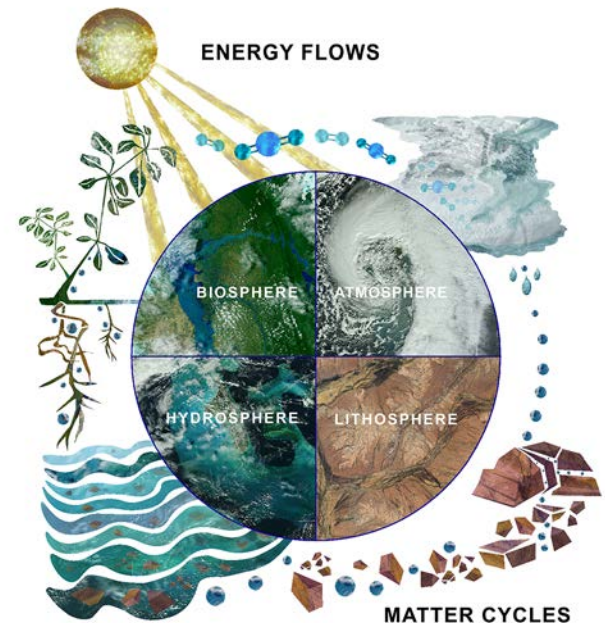
- GLOBE is

a science and education program that connects
Students, Teachers, and Scientist



The Goals of GLOBE

- Contribute to scientific understanding of Earth as a system
 - Atmosphere
 - Biosphere
 - Hydrosphere
 - Pedosphere
- Connect and inspire the next generation of global scientists and other STEM professionals



How GLOBE Works

- Countries become formally involved through bi-lateral agreements with the U.S. 117 countries have been involved with the program since 1995
- In the U.S., there is a network of over 100 partners around the country

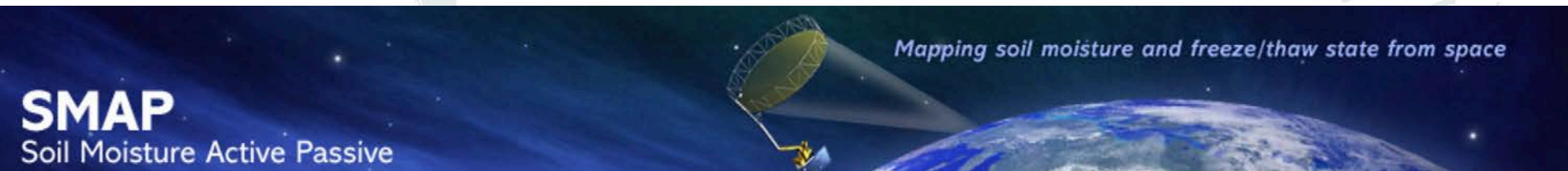
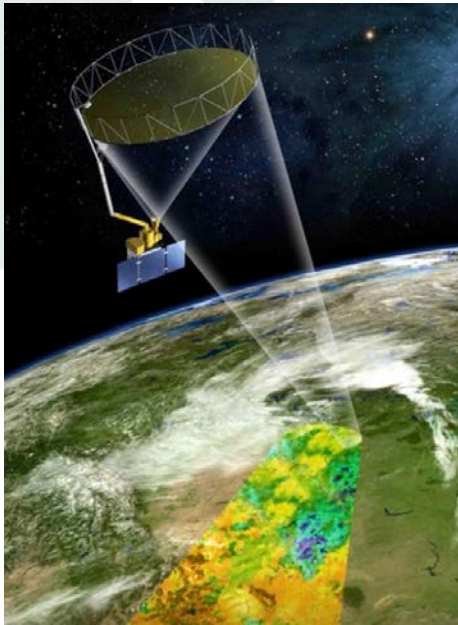


How GLOBE Works

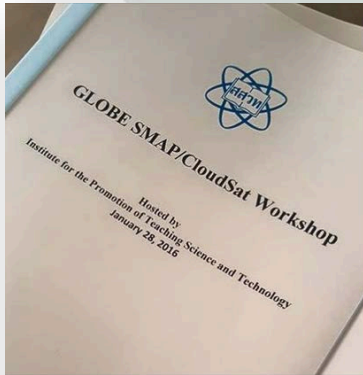
- Teachers acquire expertise and confidence, through free regional workshops and online training. GLOBE has developed the GLOBE Teachers Guide which is used to train teachers in the protocols and learning activities.
- Students (ages 5-18-years old) conduct scientifically meaningful environmental measurements, record their data to the GLOBE website, visualize their data and collaborate with scientists and other GLOBE students and communities worldwide.
- The measurements taken by the GLOBE students serve two important purposes
- Using state-of-the-art technology, GLOBE creates a forum for students to communicate with their peers around the world.



Participations via field campaigns and satellite missions



GLOBE Research Campaigns



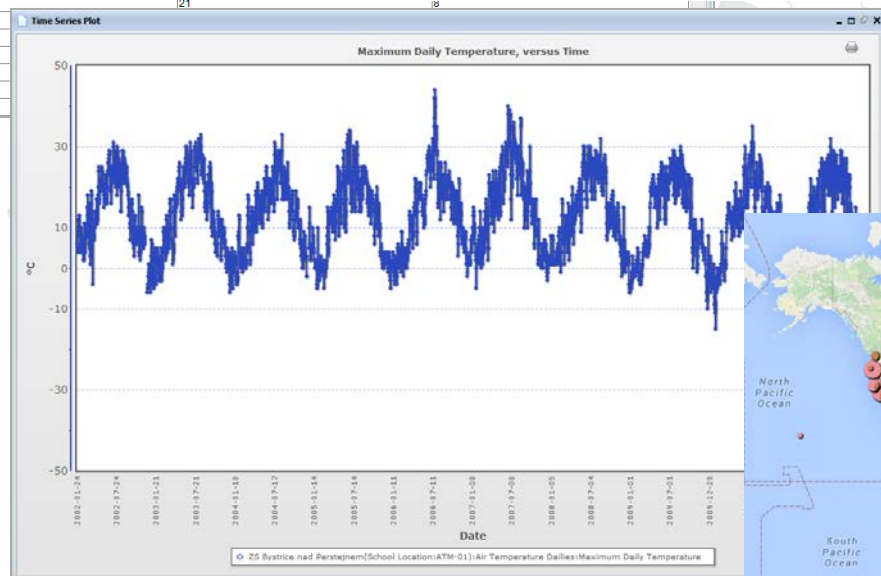
Science Fairs

Measurement data are available in several formats.

Tabular (spreadsheet)

Measured At	Current Temp	Maxin
2012-09-17 11:00:00	18	18
2012-09-16 11:00:00	17	18
2012-09-15 11:00:00	15	19
2012-09-14 11:00:00	16	17
2012-09-13 11:00:00	10	15
2012-09-12 11:00:00	16	18
2012-09-11 11:00:00	19	21
2012-09-10 11:00:00	18	
2012-09-09 11:00:00	20	
2012-09-08 11:00:00	21	
2012-09-07 11:00:00	12	
2012-09-06 11:00:00	15	
2012-09-05 11:00:00	21	

Time series (graphs)



Spatial (maps)



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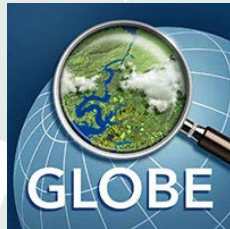
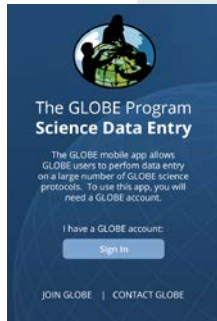
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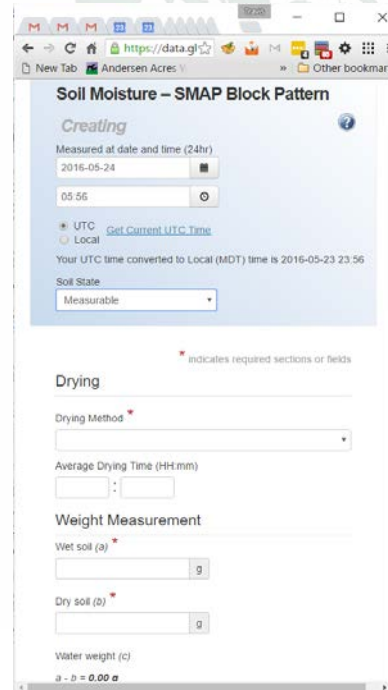
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Methods of Entering Data in GLOBE

Mobile Apps



Website

A screenshot of the GLOBE Program website showing the "Soil Moisture - SMAP Block Pattern" data entry form. The form is titled "Creating" and includes fields for "Measured at date and time (24hr)" with a date of "2016-05-24" and a time of "05:56". There are radio buttons for "UTC" and "Local", with a link to "Get Current UTC Time". Below this, it states "Your UTC time converted to Local (MDT) time is 2016-05-23 23:56". The "Soil State" is set to "Measurable". A section titled "Drying" includes a "Drying Method" dropdown menu and a field for "Average Drying Time (HH:mm)". The "Weight Measurement" section includes fields for "Wet soil (a)", "Dry soil (b)", and "Water weight (c)". At the bottom, it shows the calculation "a - b = 0.00 g".

Email



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QUESTIONS?

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