GLOBE
Global Learning & Observations to Benefit the Environment
@NASAGO

GLOBE Data Fundamentals: Training 1

October 31, 2019

Questions? help@globe.gov
Training Mission Statement

To increase the use of GLOBE data by scientists for research. This is accomplished through online training that teaches participants how to access, visualize, and analyze GLOBE data.
Welcome to Training 1
Prerequisites

There are no prerequisites.

This training assumes no prior knowledge of GLOBE.
Learning objectives

Training 1 will answer the following:

What is GLOBE?

What data are available?

How do I get the data?
Outline

1. Introduction to GLOBE
2. Data Collection
3. Data Access
4. Data Documentation
5. Summary
1. Introduction to GLOBE
GLOBE Program

Global Learning & Observations to Benefit the Environment (GLOBE)
GLOBE by numbers

Since 1995
121 countries
34,000 schools
142,000 citizen scientists

23rd GLOBE Annual Meeting, Detroit, Michigan, USA, July 2019
2. Data Collection
Who is collecting data?

Teachers & Students

Citizen Scientists
GLOBE protocols for data collection

Water
Alkalinity
Conductivity
Dissolved Oxygen
Macroinvertebrates
Mosquitoes
Nitrate
pH
Salinity
Temperature
Turbidity

Biosphere
Biometry
Tree Height
Carbon Cycle
Green Up
Green Down
Land Cover
Lilac Phenology
Pheno. Gardens

Soil
Bulk Density
Particle Size Dist.
pH
Soil Characterization
Soil Fertility
Soil Moisture
Temperature

Air
Aerosols
Clouds
Pressure
Precipitation
Relative Humidity
Surf. Temperature
Temperature
Water Vapor

How are data collected?

Automated Weather Station  Manual  Mobile app
GLOBE Observer app

Download on the App Store
GET IT ON Google Play
Training

In-Person

Online

In the app

https://www.globe.gov/get-trained
What kinds of data are collected?

Air Temperature

Manual: Dundaga Secondary School, Latvia

North

East

South

West

Up

Down
Impact of mobile app on data coverage
3. Data Access
Accessing GLOBE data

GLOBE data are all made freely available to everyone: globe.gov/globe-data
4. Data Documentation
Citation

Global Learning and Observations to Benefit the Environment (GLOBE) Program, Date Data was Accessed, https://www.globe.gov/globe-data
User Guide

The purpose of the GLOBE Data User Guide is to help scientists and researchers understand, access, and use available GLOBE data.

PDF available at globe.gov/globe-data/globe-data-user-guide
Reporting issues in the data

Users are encouraged to report errors or inconsistencies they discover in GLOBE data. Please report issues to help@globe.gov and include the following information in your email:

- Your name
- Your organization
- Your contact information
- Brief description of how you are using GLOBE data
- Date (approximate) issue was discovered
- Description of the issue
5. Summary
Summary

GLOBE is a worldwide community of students, teachers, scientists, and citizen scientists

GLOBE data are all made freely available to everyone

Data are available at globe.gov/globe-data

Download the GLOBE Observer app at observer.globe.gov
Stay connected with GLOBE

Join our listserv for scientists and researchers using GLOBE data
https://lists.nasa.gov/mailman/listinfo/go-sci

@GLOBEProgram and @NASAGO

@TheGLOBEProgram and @nasa.globeobserver