The Trees Around the GLOBE Student Research Campaign commenced on September 15, 2018 in conjunction with NASA’s ICESat-2 satellite launch on the same date at 6:02am PDT. This campaign is a student research campaign focusing on tree height - one of the measurements conducted by the ICESat-2 mission.

Why Tree Height?

Tree height is not just a measurement - it is a gateway to understanding many things about the environment and is the main indicator of how well an ecosystem can grow trees. The structure of tree canopies, the 3D arrangement of individual trees, has a huge effect on how ecosystems function and cycle through carbon, water, and nutrients.

The Students in the Field

The Dual Purpose

The Trees Around the GLOBE Student Research Campaign

Michigan, USA

Croatia

Switzerland

New York USA

The Tree PICS

Australia

Spain

United States

The Tools

The IOPS

Campaign Intensive Observation Periods (IOPs) are focused periods of time when students are encouraged to collect large amounts of tree height and land cover data and enter it in the GLOBE database.

Data that is collected during an IOP will provide other GLOBE students, scientists, researchers, and educators large amounts of concentrated data over a short period of time.

This can also be referred to as "Data Density." Ground-based data density can serve as way to help validate data coming from satellites and airborne instruments.

Why Trees?

Tree Research Experts

Satellite/Instrument Data & Maps

Student Data (GLOBE Measurements & Cultural)

GLOBE Global Student and School Collaboration Networking

Trees Campaign

The Metrics

6500+ Tree Height Measurements

6400+ Green Up/Green Down Measurements

5500+ Land Cover Measurements

11 webinars (10 campaign specific, 1 FB Live)

505 direct participants from 26 countries

2 IOPs with 4,211 measurements

22 blogs with 16,000+ views

62 uploaded documents

4 IVSS projects related to campaign

The NASA GO Trees Tool

The Trees observation tool in the NASA GLOBE Observer (NASA GO) app allows citizen scientist observers to use their mobile devices to take tree height and tree circumference measurements all over the globe.

The Websites

Campaign: http://www.globe.gov/web/trees-around-the-globe/overview

App: http://observer.globe.gov

ICESat-2: https://icesat2.gsfc.nasa.gov

NSIDC: https://nsidc.org/data/icesat-2

Open Attimetry: https://openaltimetry.org/data/icesat2/

Bibliography

Discussion

ICESat-2 Satellite

www.postersession.com