

Sharing Satellite Data with a World of Citizen Scientists



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SSAI



<https://observer.globe.gov/get-data/clouds-data>



CERES Science Team Meeting TEST YOUR CLOUD OBSERVATION SKILLS!

1. Download the GLOBE Observer app to your mobile device
2. Select "Create an Account"
 - a. Enter the email you wish to use and select your country affiliation
 - b. Enter Referral Code: **GLIDSMU7** (*This will connect everyone to the same GLOBE Team*) and then select "Create Account"
 - c. An email will be sent to this address with a password to be used on the next screen
 - d. Enter the password
3. Select "GLOBE Clouds" to make a sky observation

Getting Started video: <https://www.youtube.com/watch?v=cZM3PO5hoHU>



Good News!

- Science Activation extension for NESEC was selected.
This includes **GLOBE Observer** and **GLOBE Clouds** activities.
- Extension Jan 2021 – Dec 2025
- <https://science.nasa.gov/learners>



Recent Publications

Earth and Space

GLOBE Observer Data 2016-2019

AGU ADVANCING EARTH AND SPACE SCIENCE

Earth and Space Science

TECHNICAL REPORTS: DATA
10.1029/2020EA001175

Key Points:

- GLOBE Observer is a mobile app from NASA used worldwide by citizen scientists to collect Earth system observations
- Thirty-eight thousand participants have submitted 320,000 observations—including 1,000,000 georeferenced photographs—from all seven continents
- It would take an individual more than 13 years to replicate the same sampling effort

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GLOBE Observer Data: 2016–2019

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Abstract This technical report summarizes the GLOBE Observer data set from 1 April 2016 to 1 December 2019. GLOBE Observer is an ongoing NASA-sponsored international citizen science project that is part of the larger Global Learning and Observations to Benefit the Environment (GLOBE) Program, which has been in operation since 1995. GLOBE Observer has the greatest number of participants and geographic coverage of the citizen science projects in the Earth Science Division at NASA. Participants use the GLOBE Observer mobile app (launched in 2016) to collect atmospheric, hydrologic, and terrestrial observations. The app connects participants to satellite observations from Aqua, Terra, CALIPSO, GOES, Himawari, and Meteosat. Thirty-eight thousand participants have contributed 320,000 observations worldwide, including 1,000,000 georeferenced photographs. It would take an individual more than 13 years to replicate this effort. The GLOBE Observer app has substantially increased the spatial extent and sampling density of GLOBE measurements and more than doubled the number of measurements collected through the GLOBE Program. GLOBE Observer data are publicly available (at observer.globe.gov).

Plain Language Summary GLOBE Observer is a NASA citizen science mobile application (“app”) that gives anyone with a smartphone or tablet the opportunity to share what they see in the sky and on the landscape around them. GLOBE Observer is available for free from Google Play and the Apple App Store. Since 2016, tens of thousands of people around the world have taken hundreds of thousands of observations. An individual scientist would have to work non-stop for more than 13 years to make the same number of observations. All of the data sent through GLOBE Observer go into a worldwide

BAMS

Video –Clouds Around the World: How a Simple Citizen Science Data Challenge Became a World wide Success



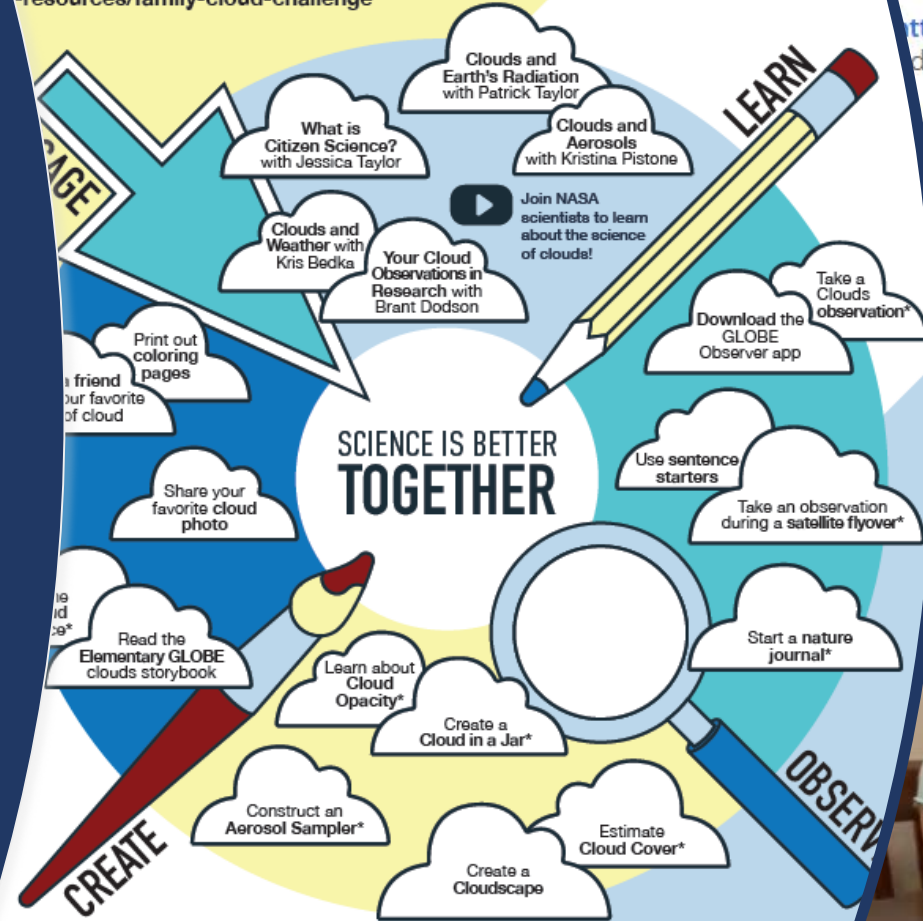
COVID 19

- Changed emphasis for Summer Cloud Challenge: *Science is Better Together*
- New Resources:
 - At Home Videos
 - At Home Activities
 - Family Guide (English & Spanish)

National Aeronautics and Space Administration

NASA GLOBE Clouds: Choice Chart

Use this choice chart to keep track of which activities you complete. See how many clouds can you shade! Learn more at <https://www.globe.gov/web/s-cool/home/family-resources/family-cloud-challenge>



*Step-by-step videos are available for these activities at go.usa.gov/xfJfU.

www.nasa.gov

Safety first! Always follow guidelines from officials when taking observations. You may receive personalized email with your observations compared to data if you take cloud observations during a satellite flyover.

Program

on with Jessica Taylor

(Angley Research Center) and her two daughters as they try out the #Cloud Challenge

paper (white and blue), scissors, glue or tape, and a marker or pencil.

<https://www.globe.gov/documents/348614/d58984c8-381c-4783-ad30-2>

ide: <https://www.globe.gov/web/s-cool/home/family-cloud-resources>

NASAGO #Clouds #GLOBEatHome #GOatHome #CitizenScience #CitSci
Citizen Science SciStarter See Less

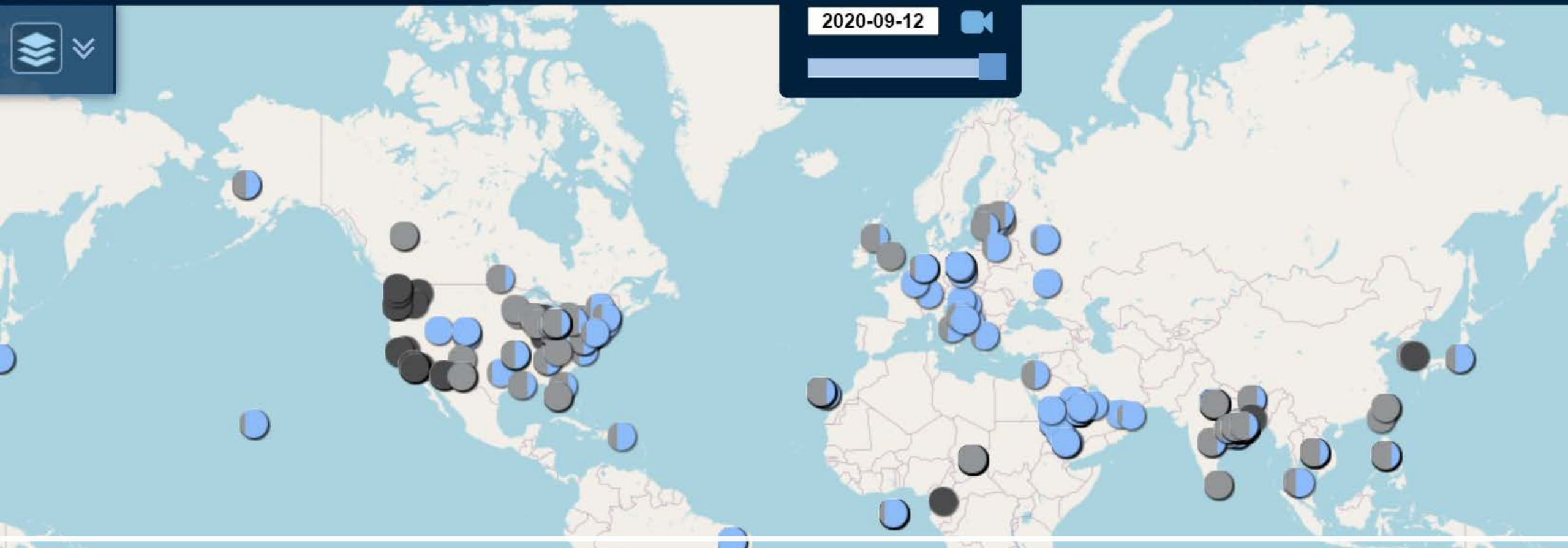


Reach in August 2020

20,493 GLOBE Clouds Observations
Received

15,385 matches to GEO
2,097 matches to Aqua &
1,653 matches to Terra

6,602 People
contributed observations

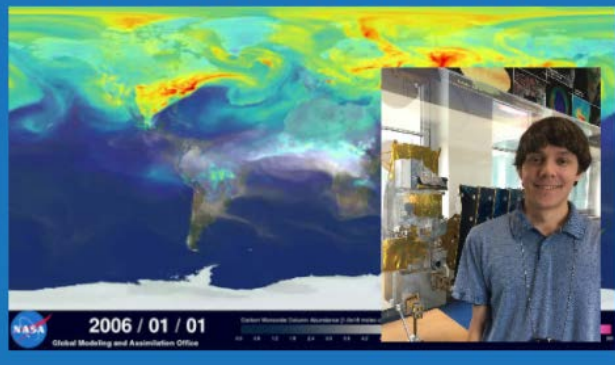


Let's Review Your Observations: <https://www.globe.gov/globe-data/visualize-and-retrieve-data>

Sites on Map: 488

2000 km

Compare cloud type and cloud cover information with weather and climate computer models.



Get Involved!

1. Make suggestions to the app, satellite match processing, etc
2. Analyze the data or serve as a mentor
3. Share your research and tell your story



J. Brant Dodson (Atmospheric Scientist, NASA Langley Research Center) will explain the power of citizen science observations and how GLOBE and GLOBE Observer cloud observations are being used in his research. Brant, a Houston, TX native loves looking up at the skies day and night as he is also a backyard astronomer.