



GLOBE **Land Cover**

How to Submit a River Ice Observation with the GLOBE Observer App

The GLOBE Observer App Land Cover Module offers a standardized method for collecting photo observations of the landscape that is well suited for capturing ice conditions.

You can collect observations while offline and store them in your app until you get back to the internet and then submit them.

The data from the app is sent to NASA and the GLOBE Program for research and learning on how the land cover is changing around the world. The data from the app collected in Alaska during the frozen seasons gets incorporated into the Fresh Eyes on Ice research and database. The photos flow from the app in near-real time to the National Weather Service Alaska-Pacific River Forecast Center and are used immediately in spring flood forecasting and winter travel safety warnings.

Step 1. Download the GLOBE Observer app

- Download from the [Google Play Store](#) for Android
- Download from the [Apple App Store](#) for iPhone

Tip: The download will be easier if you are on a strong wifi network rather than cellular data. The app can otherwise be used offline until you submit data.



Step 2. Open the app and select GLOBE Land Cover



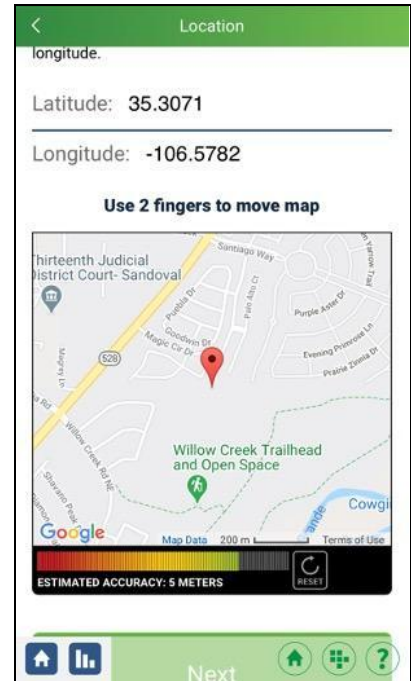
Step 3. Record the observation time

Your date and time of day will be filled in automatically. If you would like to enter photos from another day, you can adjust the date and time to match your observation.

The image shows a mobile app screen titled 'Time'. It has a green header bar with the word 'Time'. Below the header, it says 'Enter the local date and time of the observation:'. There are two dropdown menus: the first one shows 'Nov 3, 2020' and the second one shows '10:29 AM'. Below these is a green button labeled 'Next'. At the bottom of the screen are three icons: a home icon, a magnifying glass icon, and a question mark icon.

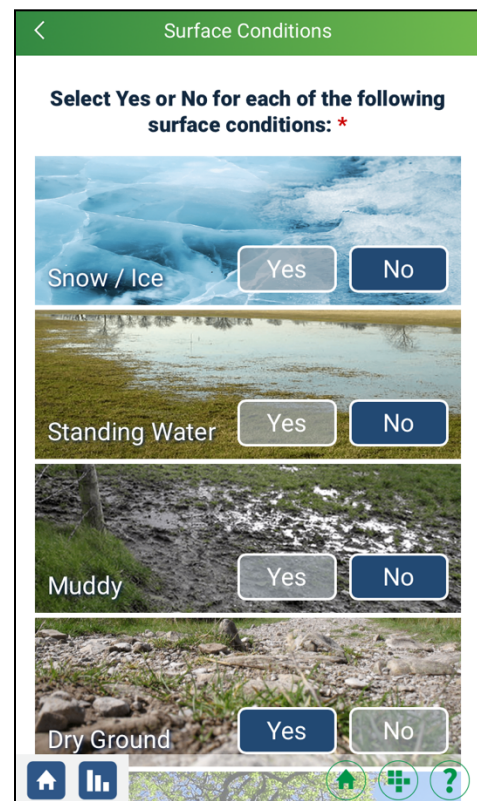
Step 4. Set observation location

The latitude and longitude will be filled in automatically. [NOTE: this screen and the alert screen are the only places the app will get and record your location.] Beneath the map, you will see an estimated accuracy for your location. Click on the reset button to improve location accuracy if needed. You may adjust your location on the map if you are online or manually if you know your location or if you are entering an observation that you took at another location.



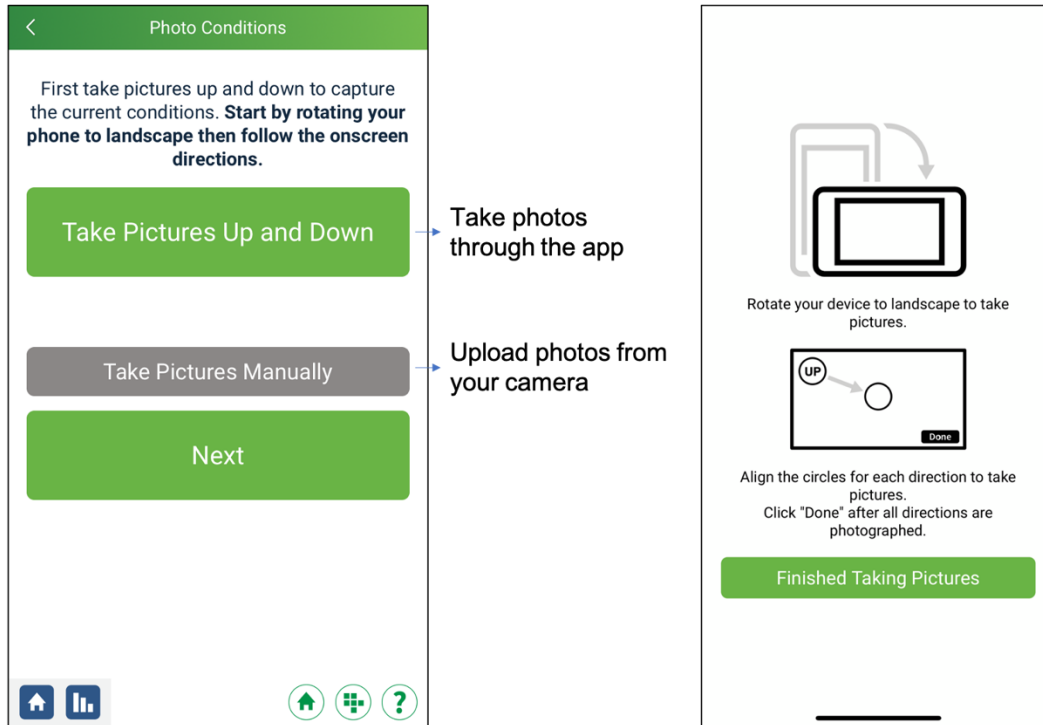
Step 5: Enter appropriate surface conditions

Click yes or no if the surface condition listed is present. This extra data is used for all sorts of research questions, including determining the accuracy of satellite imagery.



Step 6: Take photos up and down.

You may do this through the app or upload photos from your camera.



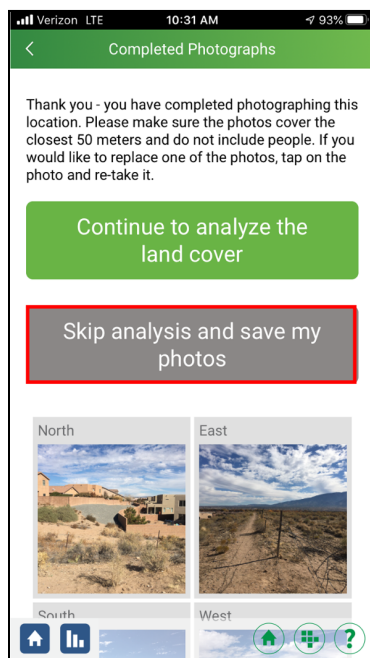
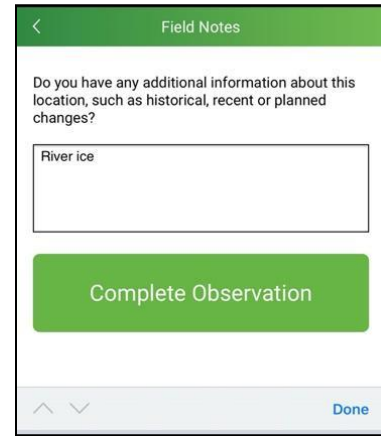
Step 7: Take photos facing north, south, east, and west.

Please include as much of the river as possible in the photos. Again, you may take photos through the app or upload photos from your camera.



The app will help you take photos in each direction or you can upload them manually as shown on the up/down screen. The green circle in the lower left indicates that you have taken a photo in that direction. White circles indicate that photos are missing in those directions.

Step 8: Enter “river ice” or “Fresh Eyes on Ice” in the field notes box and notes about the name of the river or lake and notes about the ice conditions. Tap complete observation.



Step 9: Save your data.

Click Skip analysis and save my photos. Click “finish.” [You may optionally continue to identify what is on the land around the river in your photos.]

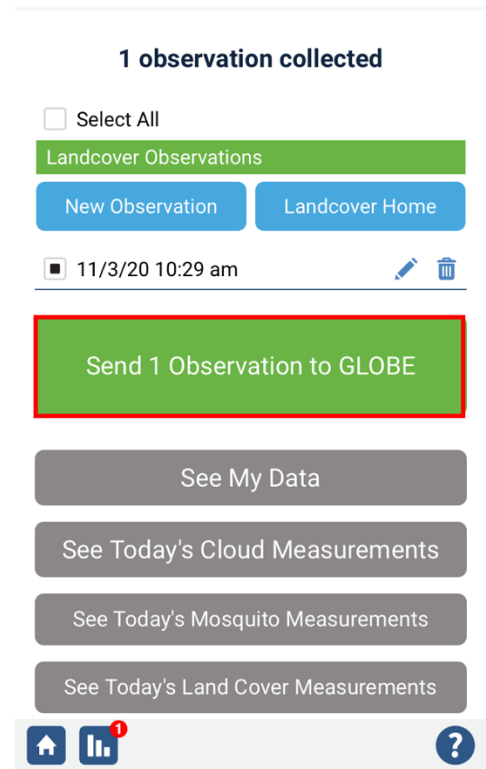
Step 10: Submit your data

When you have cellular data or are on a wireless network, click “submit all land cover data now.”



Click send if you are on a wifi network or have a strong cellular data connection. Otherwise, you can close the app and come back later.

Red number indicates you have 1 saved observation ready to submit. Click on the graph to send the data (right).



Thank you! You are done!

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View the data at GLOBE.gov
or at fresheyesonice.org