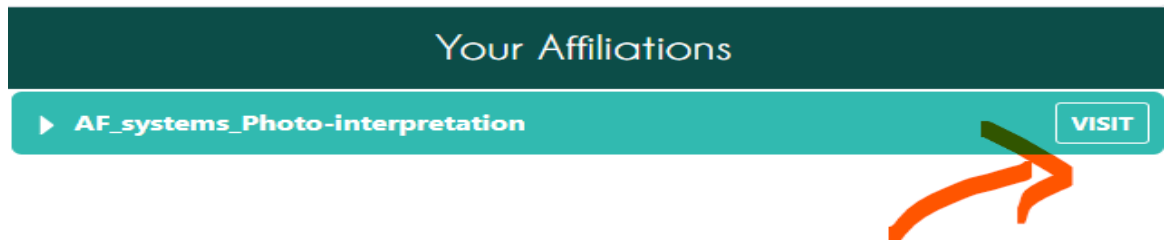
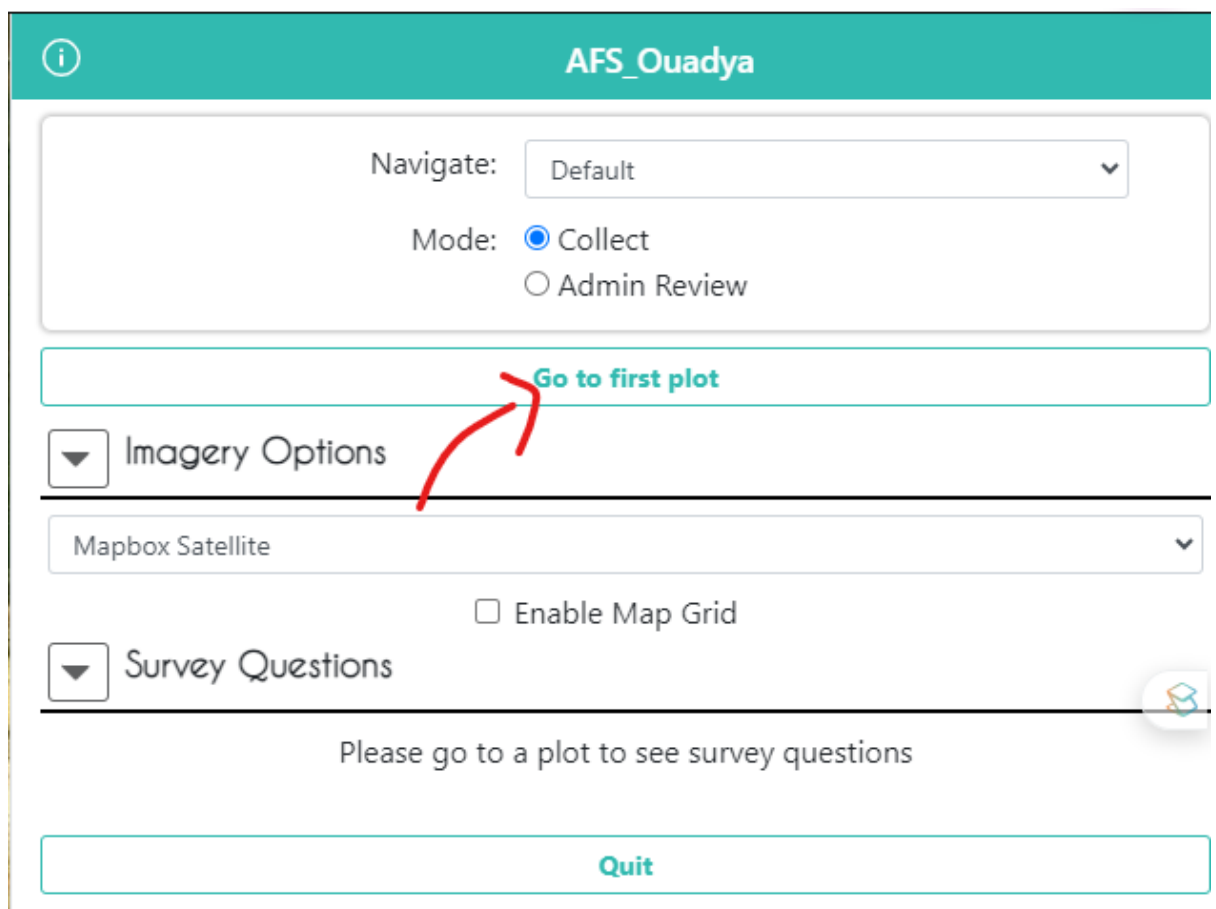


Here are the steps to follow in order to perform this survey:

- 1- Create an account using the following link:
<https://app.collect.earth/login?returnurl=%2Fhome>
- 2- A confirmation email will be sent to your inbox. Please confirm and log in to your account.
- 3- You will then see a list of projects. Click on “**Visit**” next to the project titled “**AF_systems_Photo-interpretation**”



- 4- The list of surveys will appear. Please choose your survey and click on it. This will direct you to the photo-interpretation interface. Then, click on “Go to first plot,” and the project will open the first plot:



5- The main interface will appear:

The screenshot shows the main interface of the AFS_Ouadya application. The interface is divided into several sections with various controls and buttons. Red circles with numbers 1 through 8 are placed over specific elements, with arrows pointing to them from the right side of the image.

- 1**: Points to the "Navigate:" dropdown menu, which is currently set to "Default".
- 2**: Points to the "Go to plot" button, which is located next to a text input field containing the number "2".
- 3**: Points to the "Mapbox Satellite" dropdown menu under the "Imagery Options" section.
- 4**: Points to the "Unanswered Color" section, which includes a question mark icon, a pencil icon, and radio buttons for "Black" (selected) and "White".
- 5**: Points to the "Unanswered Color" section, specifically to the question mark icon.
- 6**: Points to the "are there trees / shrubs?" question text in the survey question box.
- 7**: Points to the "Plot Confidence:" slider, which is currently set to a low value.
- 8**: Points to the "Flag Plot" button, which is located at the bottom of the interface.

The interface also includes other buttons and sections such as "External Tools" (with "Re-Zoom", "GeoDash", "Hide Samples", "Hide Boundary", "Download Plot KML", and "Interpretation Instructions"), "Imagery Options" (with "Mapbox Satellite" and "Enable Map Grid"), "Survey Questions" (with "Unanswered Color" and "Plot Confidence:"), and a bottom section with "Flag Plot", "Clear All", "Save", and "Quit" buttons.

=> The legend is as follows:

1) **The Navigate Mode:** This feature helps you filter the plots. You can go directly to “Analyzed plots” to review or modify the plots you have already interpreted. “Unanalyzed plots” displays only the plots you haven't analyzed yet, and “Default” displays all plots. You can also filter the plots based on their level of **confidence**.

2) **The Plot ID**

3) **The Basemap/Imagery** used for photo-interpretation (more details below)

4) **The Drawing Tool** (more details below)

5 & 6) **The Survey Questions**

7) **The Confidence Plot**

8) **The Save Button:** It's mandatory to click on this button to save your interpretation.

N.B , don't worry about where you stopped last time, the interface allows you to start from the last plot you didn't analyze.

During the process of identifying different systems, a set of tools may be useful. Here are some of them:

- 1- In some cases, you will need to draw a polygon that defines the observation unit (30 m x 30 m) or count the number of trees per hectare (100 m x 100 m). To do this, you can use the "Draw Sample Points" tool (Fig1) and select the Polygon option. Use the scale at the bottom right of the screen to ensure accuracy when drawing (Fig2):

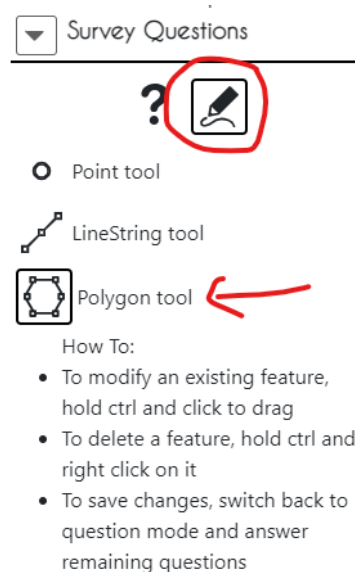


Fig 1: Draw sample points tool

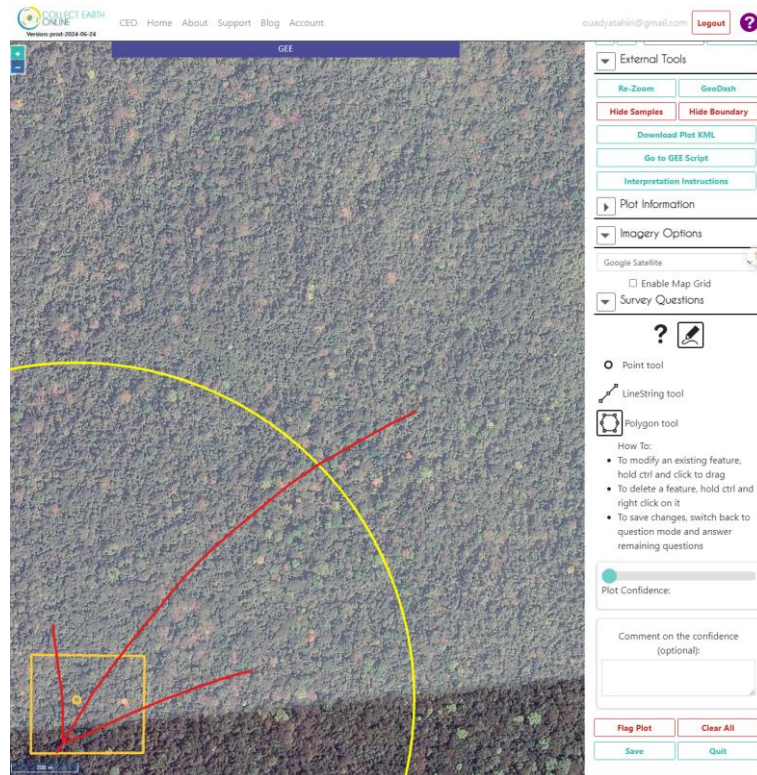


Fig 2: Scale location

- 2- Some scenes may not be clear, making it difficult to identify trees. This could be due to cloudy conditions or scene distortion (Fig4). In such cases, you can use several basemaps to visualize the scene with alternative imagery. You have access to three high-resolution satellite imagery sources: ESRI, Google, and Mapbox satellite (fig3).

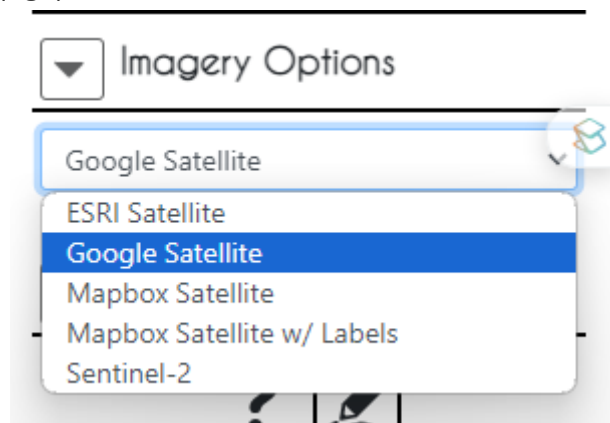


Fig 3: Basemaps satellite imageries

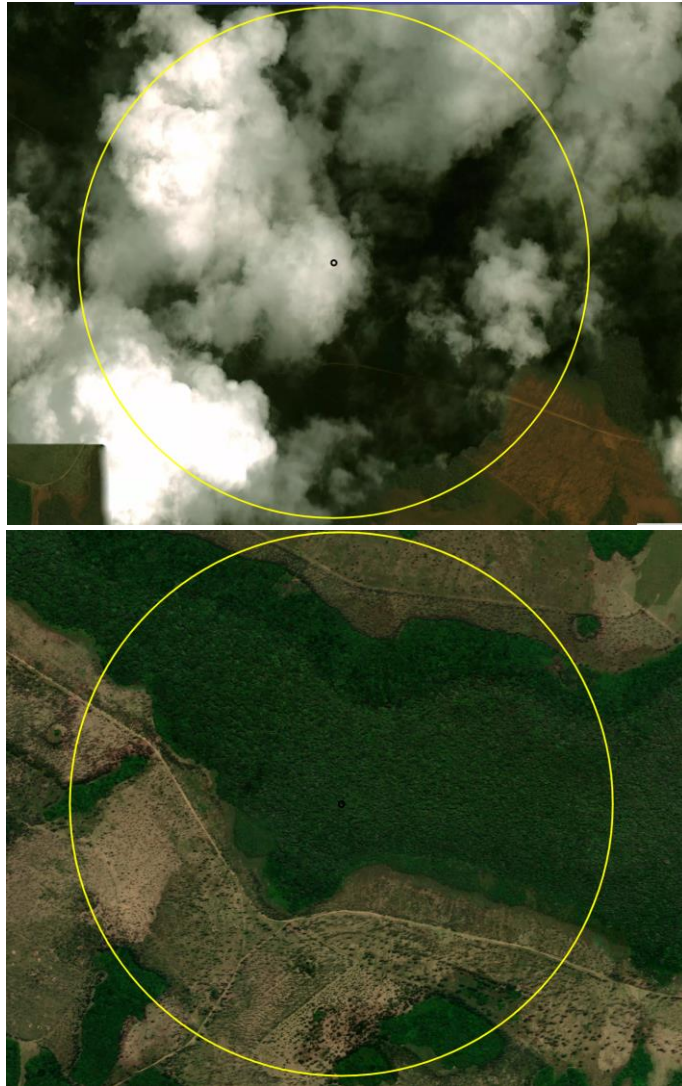


Fig 4 : Same scene from different imageries Mapbox (above) / Esri (Below)

- 3- Sometimes, it can be challenging to determine whether what you are seeing is vegetation or not. In this case, you can use the false-color infrared option after selecting Sentinel-2 as your basemap (Fig 5). This method enhances vegetation visibility and helps distinguish it more clearly (Don't forget to click on "Update Map" to upload the new basemap).

▼ Imagery Options

Sentinel-2

Year: 2020

Month: January

Band Combination

Short Wave Infrared

Update Map

Fig 4: Sentinel visualization

- 4- For density calculation, if there is no visible spacing between dispersed trees and it is unclear how many trees are present, you can simply select "No" as your answer to the question “Are there dispersed trees with a density below 50 trees per hectare?”