

Cquest.Earth

CQUEST.EARTH

ALPHA V1

TUTORIAL



CQUEST

Carbon Made Simple

HELLO!

We are excited to bring you CQuest.Earth (Alpha), a prototype application that will allow you to begin harnessing insights into your current NCS projects and potential project areas around the world. If you would like to read more about how this platform was built please check out our CTO Julian Kremers' [blog posts on our website](#).

WHY WE BUILT THIS

CQuest is tackling the problem of expensive and lagging metrics into NCS projects for scouting and MRV. CQuest.ai is our remote sensing and machine learning foundry where we will extract useful, repeatable, and affordable insights from various data sources. These insights will be delivered to you, our customers, through CQuest.Earth. The current version of CQuest.Earth allows users to easily extract vegetative insights and knowledge from some of the MODIS datasets. We will regularly improve and update CQuest.Earth and plan to add additional features in the near future. CQuest.Earth is currently completely free to use. We just ask that you spend a few minutes to give us your feedback.

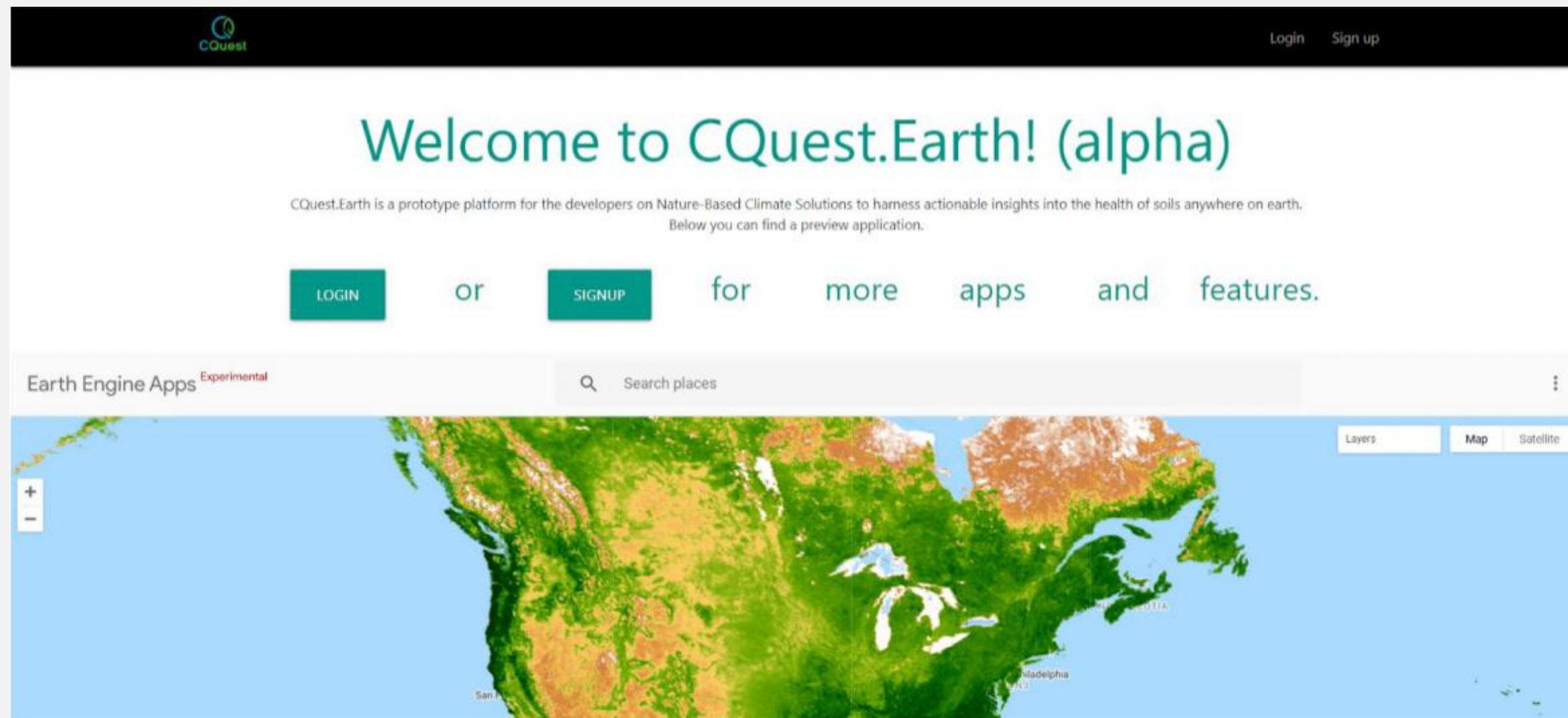
POTENTIAL USE-CASE:

Are you interested in learning about degrading or non-degrading landscapes in current or potential project areas? Our tool allows you to easily access NDVI data to determine vegetation trends over the past 20 years.

Without Further ado,
Let's Jump in!

THE LANDING PAGE

To begin, please click [CQuest.Earth](#), or copy and paste into your browser. The page you see should look similar to the page below.

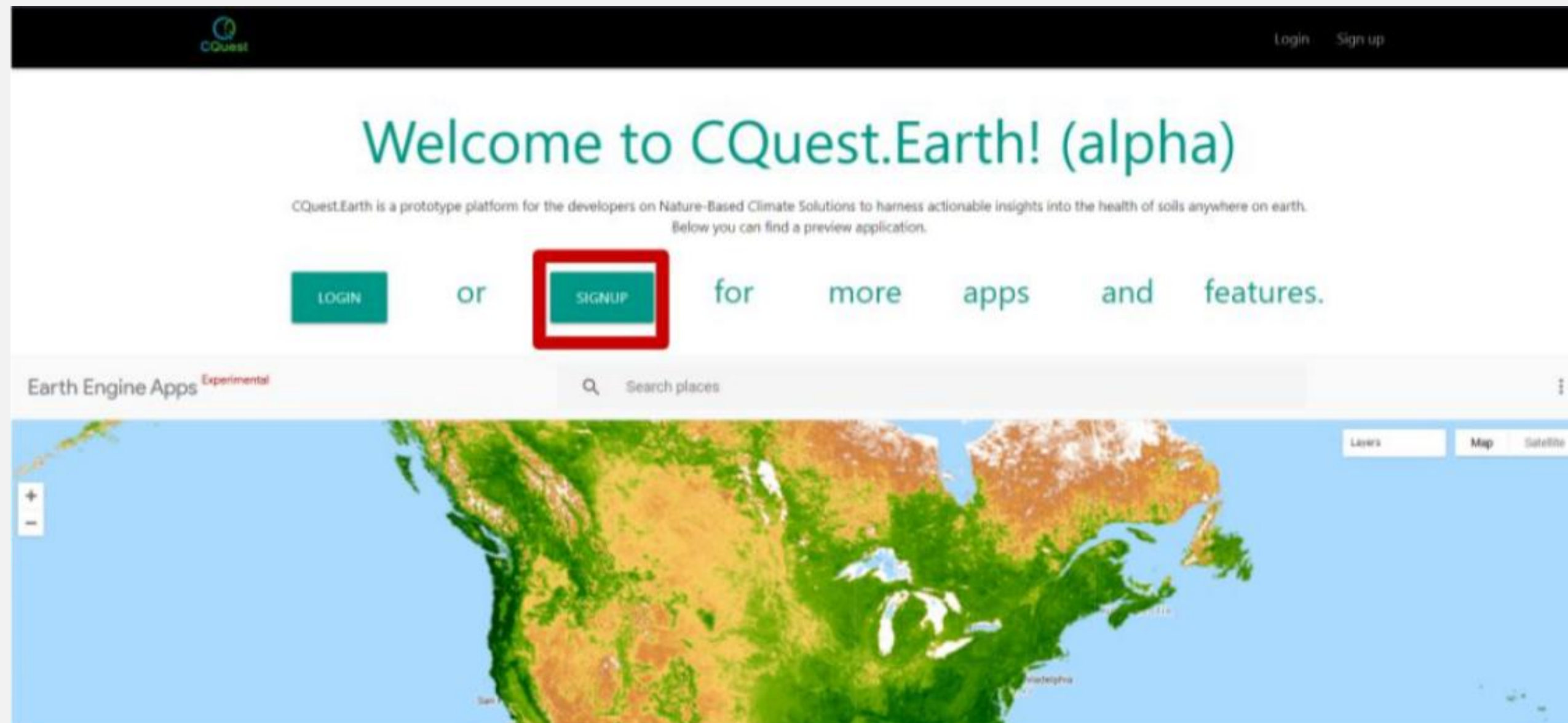


The landing page shows a map of the NDVI values. You can use the slider to change the year, and visually track the changes over the years dating back to 2000.

SIGNING UP

06

If this is your first time logging in, please click the signup button (highlighted below), otherwise please login (and welcome back!).



SIGNING UP

For those of you signing up, please follow the signup instructions.

Sign up

Name*:

Jakob Levin

Email address*:

jakob@CQuest.ai

password*:

••••••••

Company*:

CQuest

Industry*:

NCS

Position*:

Co-Founder

Phone-number:

EASY PEASY!

08

Now, welcome to CQuest.Earth.

Your browser should look something like this.

The screenshot displays the CQuest Earth Engine Apps interface. At the top, there is a navigation bar with the CQuest logo and 'Account Logout' links. Below this is a search bar labeled 'Search places'. The main content area is titled 'MODIS Vegetation Time-Series Charts' and includes a list of five steps for creating a time-series chart. The interface features a central map showing global vegetation data with a color scale from 0 (brown) to 1 (green). The map is labeled with 'Layers', 'Map', and 'Satellite' options. To the right of the map, there is a text prompt: 'Follow the instructions on the left to create your time-series chart'. The bottom left of the interface shows a color scale for 'MODIS NDVI 2019' ranging from 0 to 1.

Earth Engine Apps Experimental

Search places

Account Logout

MODIS Vegetation Time-Series Charts

1. Select a metric of interest.
Select Layer
2. Select a geometry type and place your first/reference geometry on the map.
Select Geometry Type
3. Select and place/draw your second geometry on the map.
Select Geometry Type
4. Click "Show Time-Series" to view the comparison.
Show Time-series
5. Wait for chart to render and/or repeat steps 1-4 for another metric/location.

MODIS NDVI 2019

0 0.5 1

Follow the instructions on the left to create your time-series chart

GENERATING CHARTS

In the left navbar you can see various options:

- Metric of interest:
- Geometry type point 1
- Geometry type point 2
- Show Time Series

So, let's do an analysis! This app is designed to be intuitive, but here are some tips and tricks to improve your user experience. If you have any questions feel free to email jakob@CQuest.ai at any time!

GENERATING CHARTS

01

In box 1, select the type of analysis you would like to see. NDVI, GPP, NPP, etc. We will continuously add additional datasets.

02

In box 2, select the geometry type. Please remember to select your point, or area before moving on to box 3!

03

In box 3 is the same as box 2. Generally it makes the most sense to select the same type of geometry (point, or area) as you did in box 2.

04

Once you have selected your analysis click the “Show Time Series Button”

GENERATING CHARTS

Depending on the metric you chose, and the size of the selected area, the chart can take a few minutes to render (see image below). If it seems like the system is stuck, please refresh your page!

The screenshot displays the Earth Engine Apps interface for the 'MODIS Vegetation Time-Series Charts' tool. The top navigation bar includes the CQuest logo, 'Account', and 'Logout'. Below the navigation bar, the 'Earth Engine Apps' header is visible, along with a search bar labeled 'Search places'. The main interface is divided into three sections:

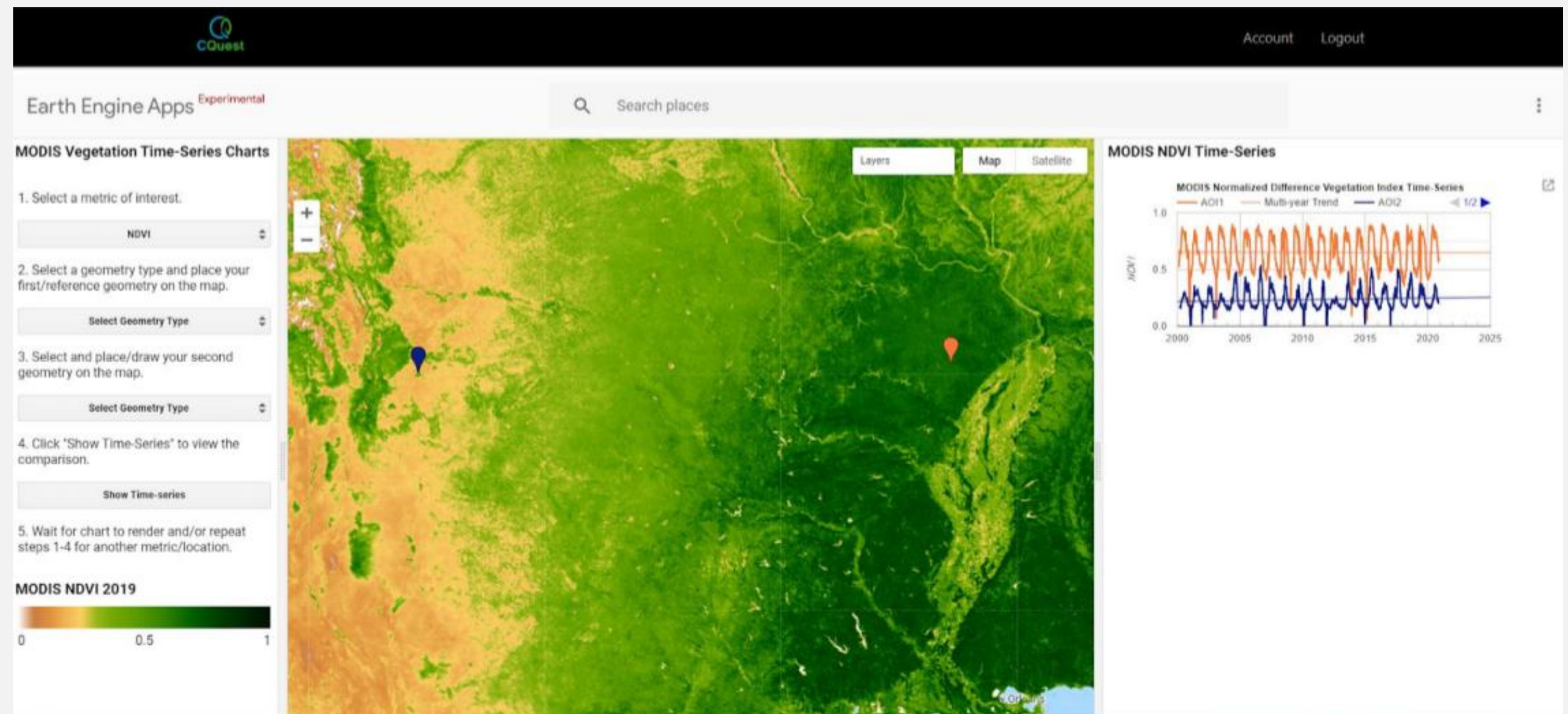
- Left Panel (Instructions):** Contains five numbered steps for using the tool. Step 1: '1. Select a metric of interest.' with a dropdown menu set to 'NDVI'. Step 2: '2. Select a geometry type and place your first/reference geometry on the map.' with a dropdown menu set to 'Select Geometry Type'. Step 3: '3. Select and place/draw your second geometry on the map.' with another dropdown menu set to 'Select Geometry Type'. Step 4: '4. Click "Show Time-Series" to view the comparison.' with a 'Show Time-series' button. Step 5: '5. Wait for chart to render and/or repeat steps 1-4 for another metric/location.'
- Center Panel (Map):** A satellite-style map showing a landscape with green vegetation and brown soil. Two points are marked on the map: a blue point on the left and a red point on the right. The map includes zoom controls (+ and -) and tabs for 'Layers', 'Map', and 'Satellite'.
- Right Panel (Chart):** Titled 'MODIS NDVI Time-Series', it displays a status message: 'Generating chart...' with a circular arrow icon.

At the bottom left of the interface, there is a color scale legend for 'MODIS NDVI 2019', ranging from 0 (brown) to 1 (dark green), with a midpoint at 0.5.

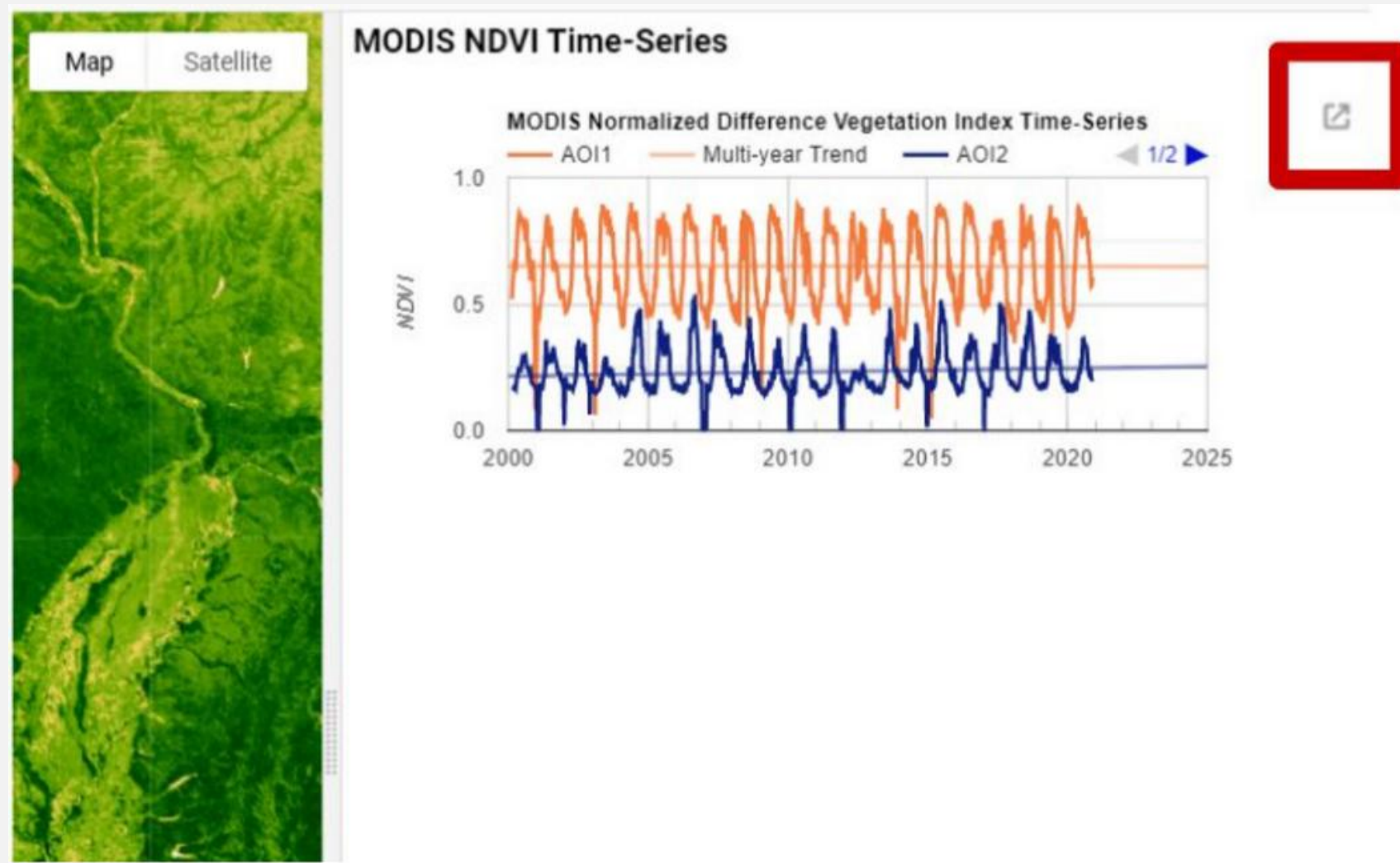
GENERATING CHARTS

And after a few moments voilà, we have a very cool comparative chart between the two locations you selected.

The chart includes a legend with the color coded location of the point and a trend line to easily show the multiyear trend of the NDVI measurements. Now let's dive even deeper!

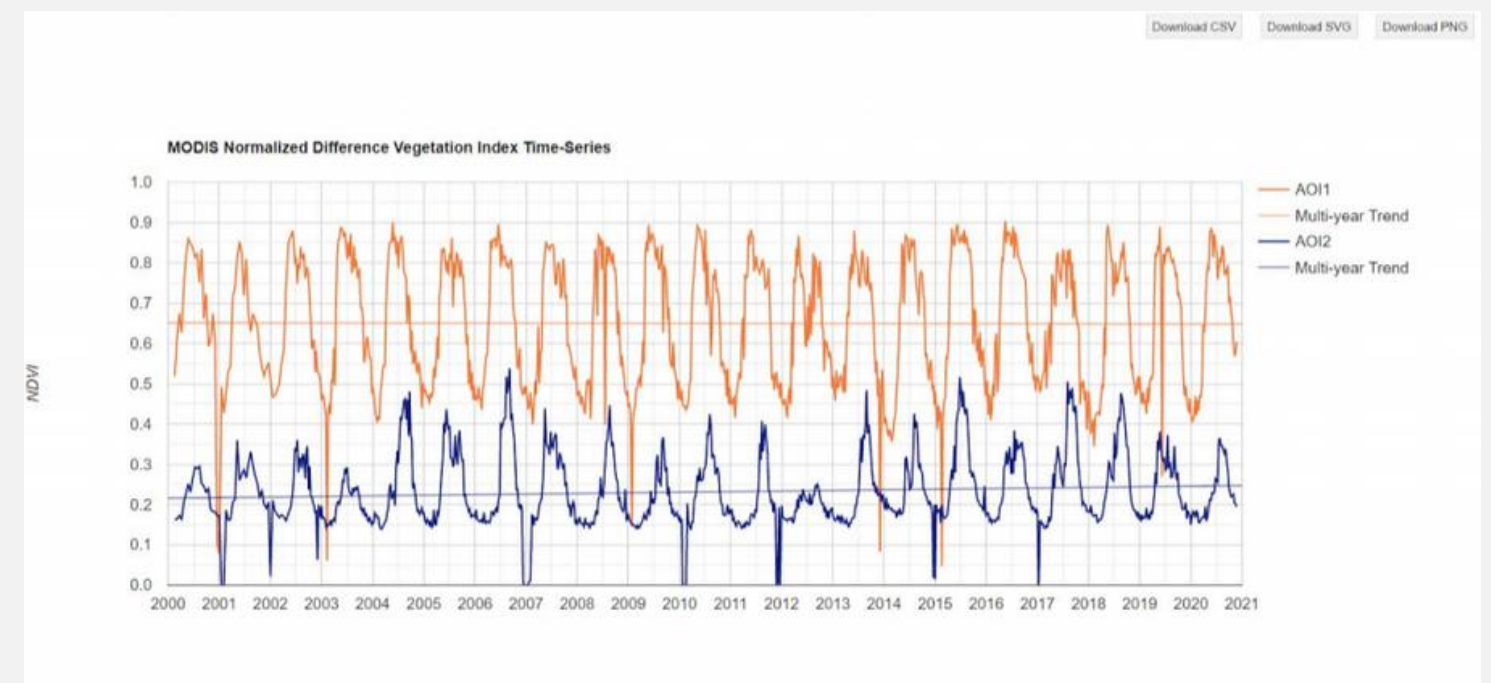


GENERATING CHARTS



Excellent. Now we have the option to download the graph image as an SVG or PNG file or to access the raw data in a CSV!

Zooming in on the graph, there is a button on the top right corner. Click this to enlarge the chart and see some additional options.



WRAPPING UP

Thank you for showing interest in growing the role of remote sensing and machine learning in NCS. As mentioned earlier, this is just a prototype platform that we have built to begin to scratch the surface. Stay tuned for updates and exciting new features in the near future.

We kindly ask that you take a few minutes to provide feedback. This would be a huge help as we continue to grow our solution.
