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**Eco
Ready**

Earth Observation & Remote Sensing Applications Monitoring Food Security, Biodiversity & Climate

ECO-READY Webinar Series

Webinar 1 of 15

Date: 03.03.2026

Duration: 60 minutes

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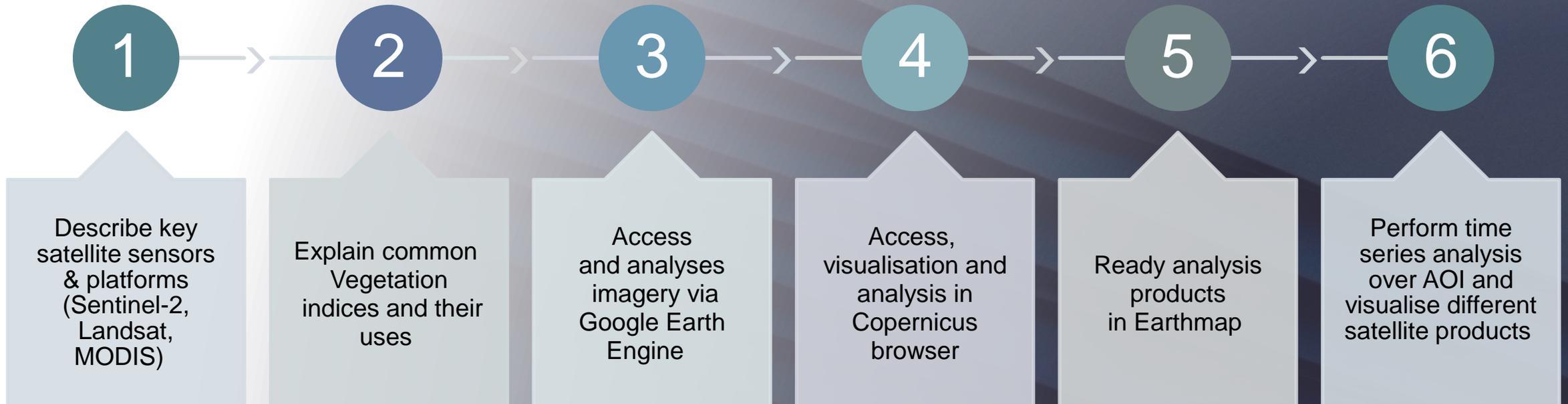
Welcome to webinar 1

- Today's focus: Satellite based monitoring tools
- Live demonstration



Learning Objectives

By the end of this session, you will be able to:



Agenda

0-5 min: Overview of EO & sensors

5-15 min: Spectral indices for agriculture & biodiversity

15-35 min: Google Earth Engine demo

35-45 min: Copernicus browser demo

45-55 min: Earthmap demo

55-60 min: Quick Reflection & discussion

OBSERVING THE EARTH FROM SPACE



Systematic observation of land, oceans, and atmosphere using satellites



Continuous and comparable measurements over time



Enables monitoring across borders and inaccessible areas



Critical for evidence-based decision-making



Earth Observation: A Strategic Tool for Food Security

Five Ways Satellite Data Supports Food Systems



1. Crop Monitoring & Yield Forecasting:

Tracks crop health and predicts yields using satellite data



2. Early Warning Systems:

Identifies risks like droughts and floods to prevent disruptions in food supply



3. Soil & Water Management:

Monitors soil moisture and irrigation efficiency



4. Pest & Disease Detection:

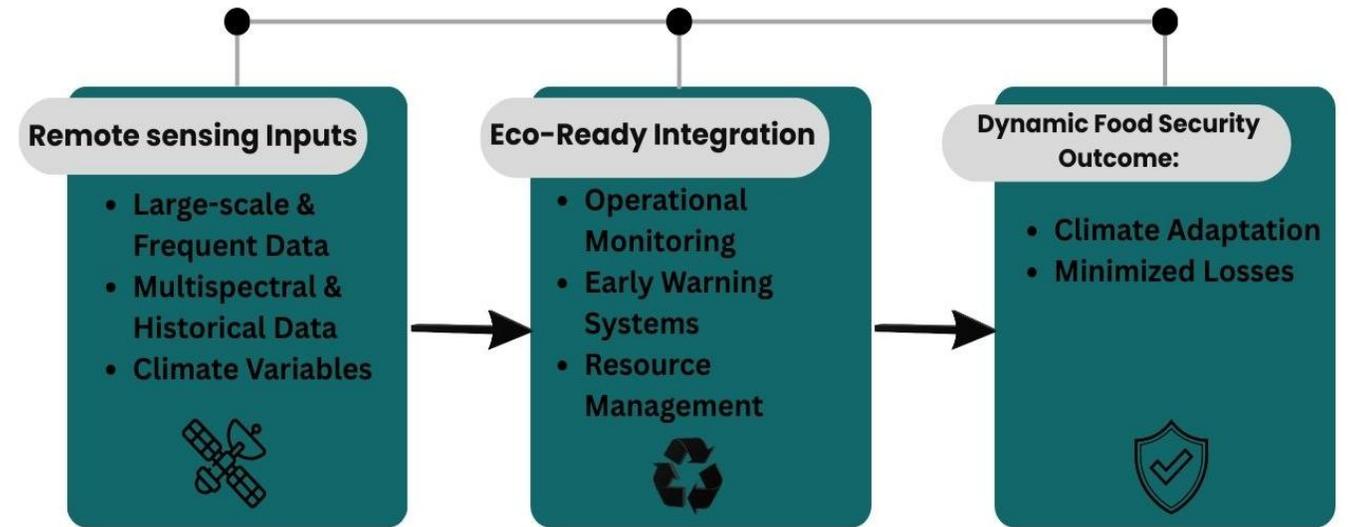
Detects early signs of pests or diseases to minimize crop losses



5. Climate Change Adaptation:

Supports strategies for adjusting to environmental changes impacting agriculture

Earth Observation: A Strategic Tool for Food Security



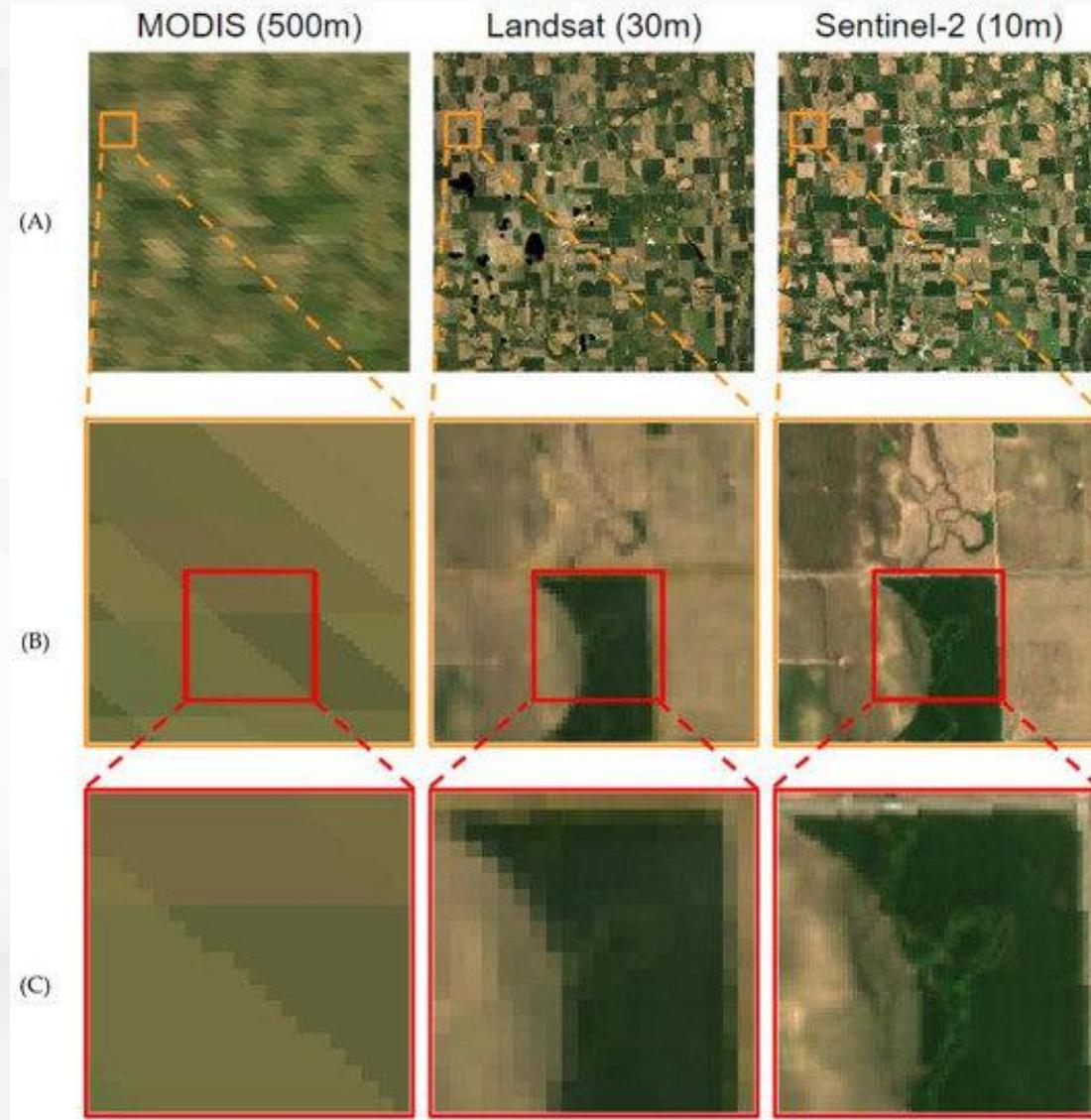
Key satellite sensors

Modis (Moderate Resolution Imaging Spectroradiometer):

- Resolution: Coarse (250m, 500m, 1000m)
- Revisit: Daily global coverage with two satellites (Terra & Aqua) in different orbits
- Use: Global, large-scale environmental monitoring

Landsat 8 & 9 (Operational Land Imager/Thermal Infrared Sensor):

- Resolution: Moderate (30m for most bands, 100m thermal)
- Revisit: 16 days per Satellite
- Use: Long – term land cover/use change, agriculture, water



Sentinel-2 (Multispectral Instrument – MSI):

- Resolution: High (10m, 20m, 60m)
- Revisit: 5 days
- Use: Detailed vegetation health (NDVI), land use mapping, water quality

Key Spectral Indices Overview

NDVI - Normalized Difference Vegetation Index: Measures vegetation greenness / health

EVI - Enhanced Vegetation Index: Improved vegetation index for dense/high-biomass areas

NDMI - Normalized Difference Moisture Index: Indicates vegetation moisture levels

NDWI - Normalized Difference Water Index: Highlights water bodies and surface moisture

SAVI - Soil Adjusted Vegetation Index: Vegetation index corrected for soil brightness

NDVI: Assessing Vegetation Health from Space

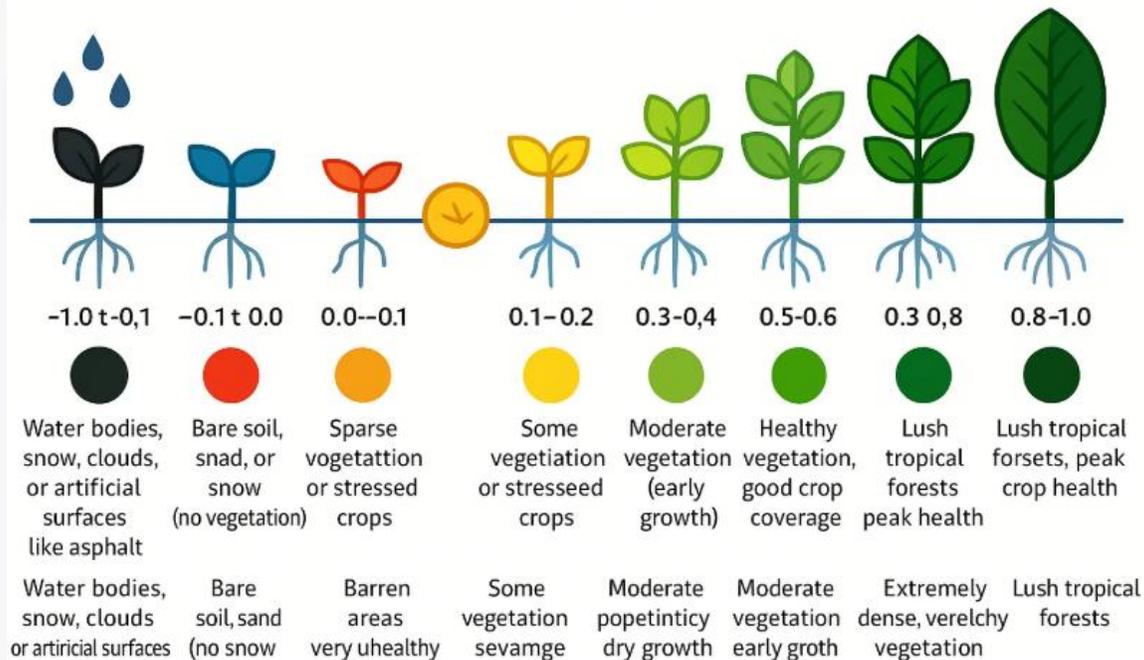
What is NDVI?

- Definition: A quantitative index of photosynthetic activity and biomass
- Wavelengths: Measures the ratio between Red and Near-Infrared (NIR) light
- Red Light: Heavily absorbed by chlorophyll for energy
- NIR Light: Heavily reflected by healthy leaf cell structures
- The Result: High NIR reflection = High vegetation vigor
- NDVI values: -1 to +1

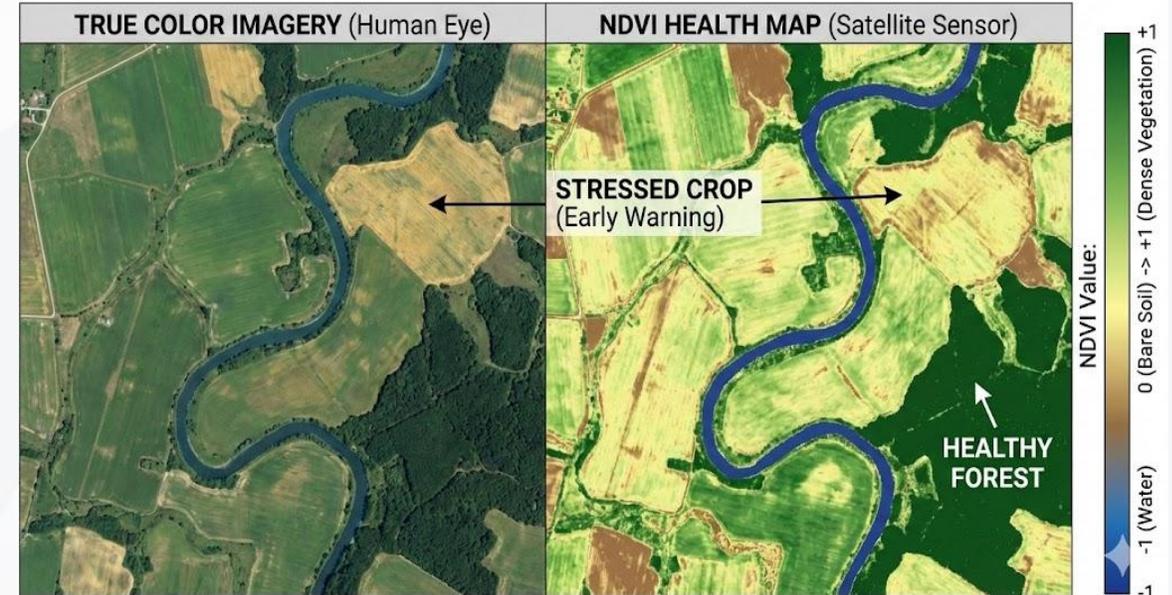
Food Security Impact and Examples:

- Yield Forecasting:** Predicts harvest volumes to stabilize market prices and grain reserves.
- Risk Mitigation:** Triggers insurance payouts and aid **3–6 months early** during droughts.
- Resource Efficiency:** Optimizes water/fertilizer use to maximize output per hectare.
- Example (FEWS NET):** By monitoring NDVI drops in East Africa, agencies position food aid before a famine peaks, saving lives and reducing costs.
- Example (Precision Ag):** Targeted irrigation in "low-vigor" zones can save 10% of a harvest by fixing leaks early.

NDVI Value Range



SATELLITE VIEW: TRUE COLOR vs. NDVI HEALTH MAP

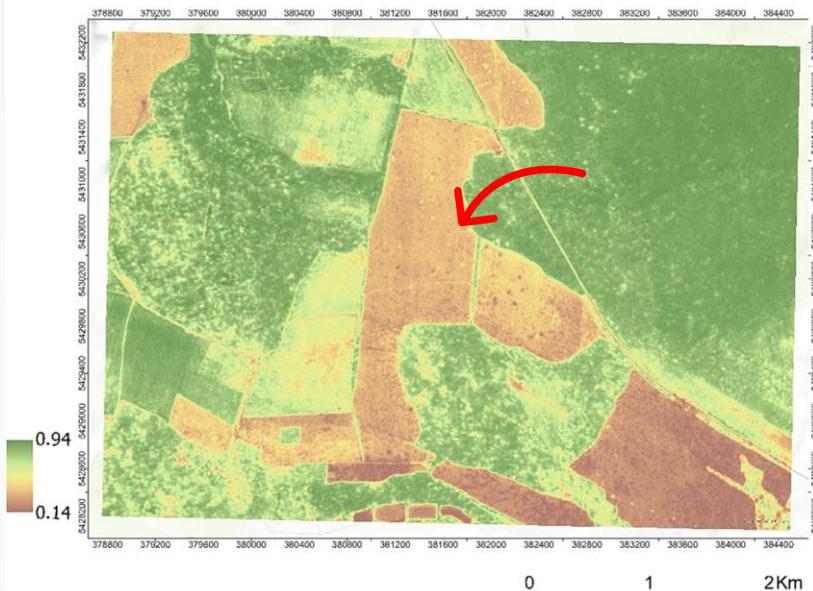


Detecting War Impacts on Vegetation Using NDVI Ukraine Case Study

2021



2022



- NDVI comparison pre-war (2021) vs during war (2022) using 3m satellite imagery
- Clear NDVI decrease in 2022, indicating vegetation degradation
- Damage observed in agricultural and forested areas
- Patterns consistent with shelling, bombing, and land abandonment
- Evidence of reduced agricultural activity and spontaneous vegetation growth
- **Implications for agricultural productivity and food security**

Solokha, M., Pereira, P., Symochko, L., Vynokurova, N., Demyanyuk, O., Sementsova, K., Inacio, M., & Barcelo, D. (2023). *Russian-Ukrainian war impacts on the environment: Evidence from the field on soil properties and remote sensing. Science of the Total Environment, 902*, 166122. <https://doi.org/10.1016/j.scitotenv.2023.166122>

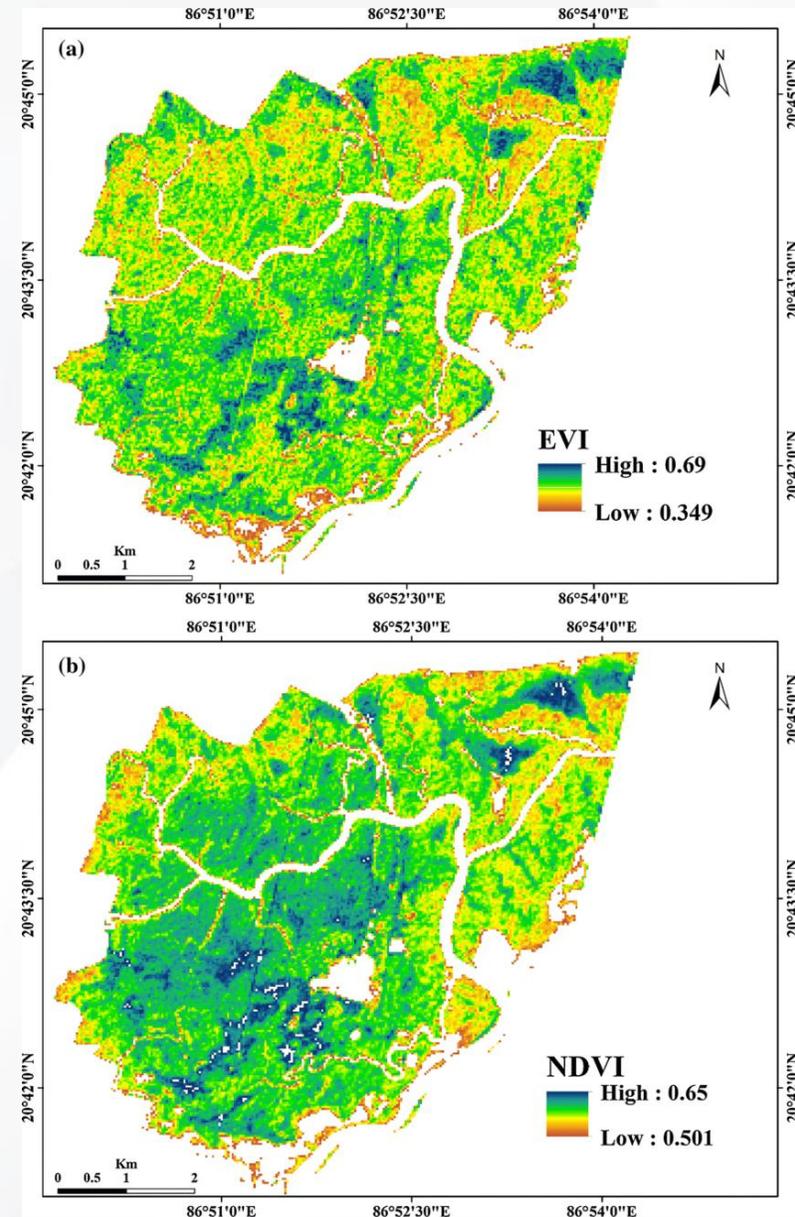
EVI: Enhanced Vegetation Index

Best for: High-biomass regions and hazy conditions.

- **Key Function:** An optimized version of NDVI that reduces "noise" from the atmosphere and soil.
- **Advantage:** Does not "saturate" in dense forests or mature crops where NDVI often fails.
- **Application:** Monitoring tropical rainforests, sugarcane, or dense maize fields.
- **Impact:** Provides accurate biomass data even in areas with frequent cloud or haze.

When to use EVI vs. NDVI

- Use NDVI for: Broad-scale mapping, early-season monitoring, and semi-arid regions.
- Use EVI for: Dense tropical forests, high-biomass crops (like sugarcane or mature maize), and regions with frequent haze or pollution.

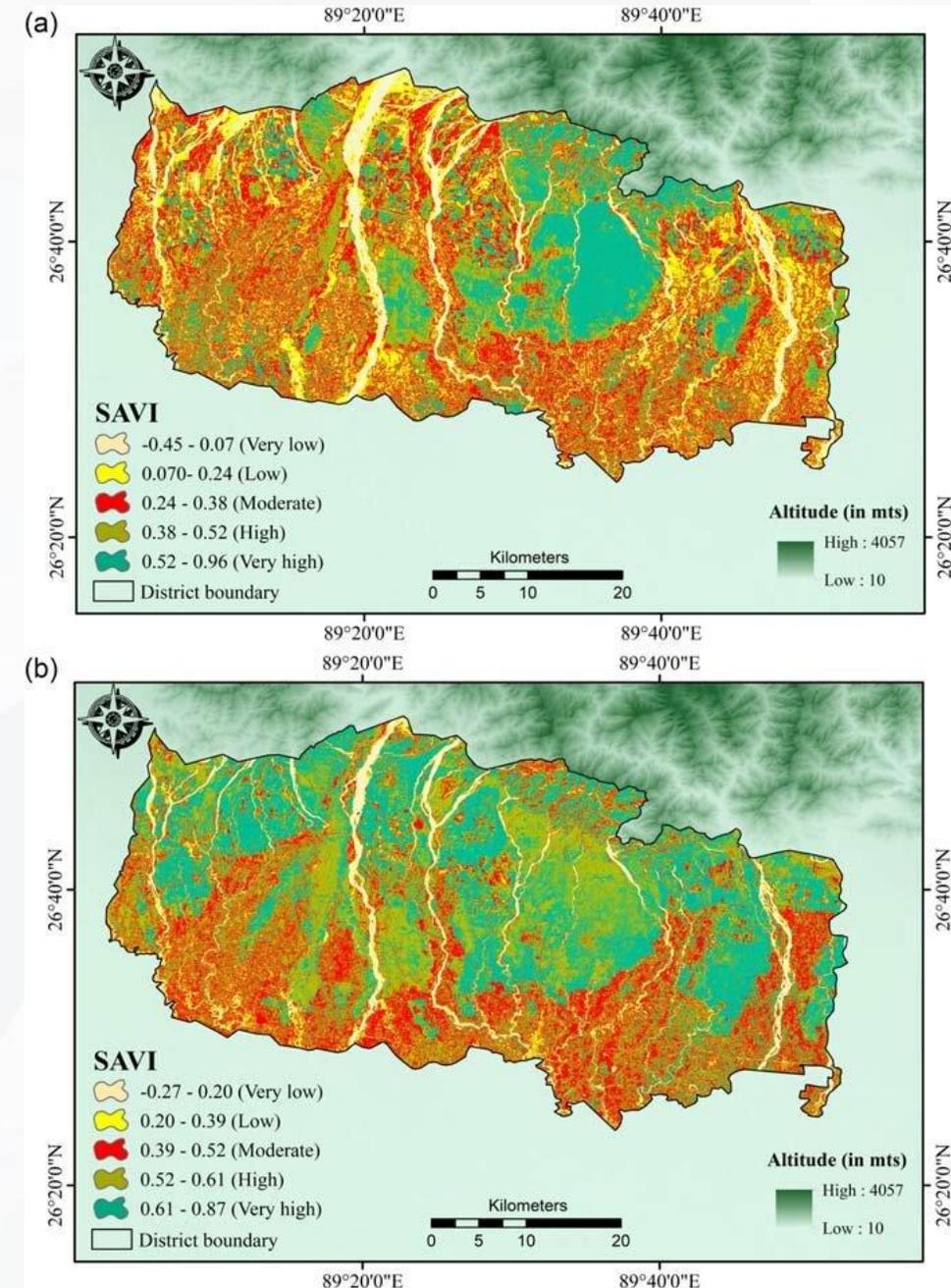


EVI map and NDVI map of Bhitarkanika forest reserve

SAVI: Soil Adjusted Vegetation Index

Best for: Early-stage growth and arid environments.

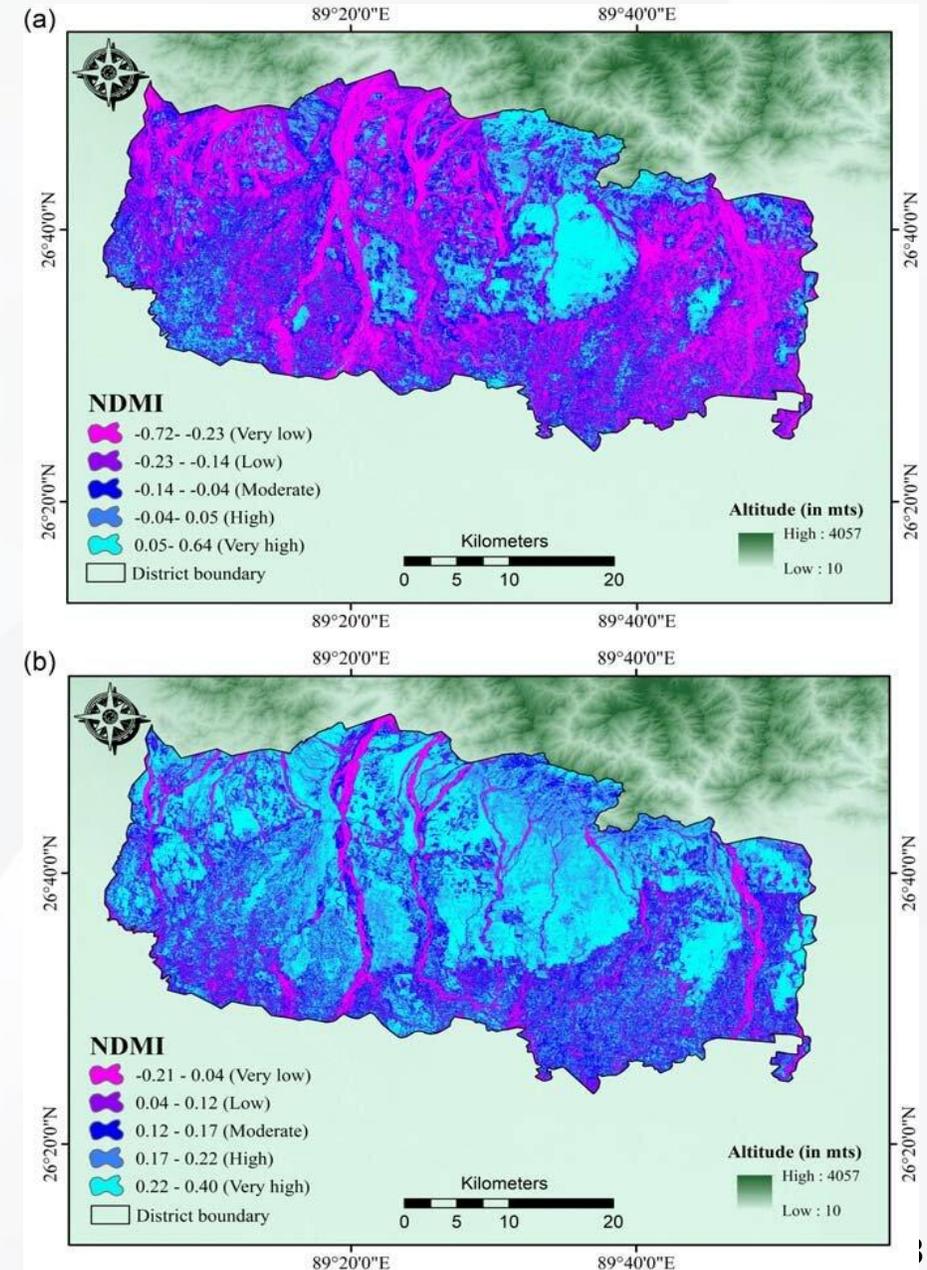
- **Key Function:** Adjusts for the brightness of the soil in the background.
- **Advantage:** Prevents bare soil from being "misread" as stressed vegetation.
- **Application:** Monitoring seedling emergence and crops in desert or dryland regions.
- **Impact:** Precise tracking of early crop establishment for better yield planning.



NDMI: Normalized Difference Moisture Index

Best for: Water stress and drought monitoring

- **Key Function:** Measures the actual liquid water content within the leaf structure
- **Advantage:** Detects dehydration before the plant loses greenness (pre-visual stress).
- **Application:** Irrigation scheduling and forest fire risk (fuel moisture) assessment.
- **Impact:** Enables proactive water management to save crops before they wilt.

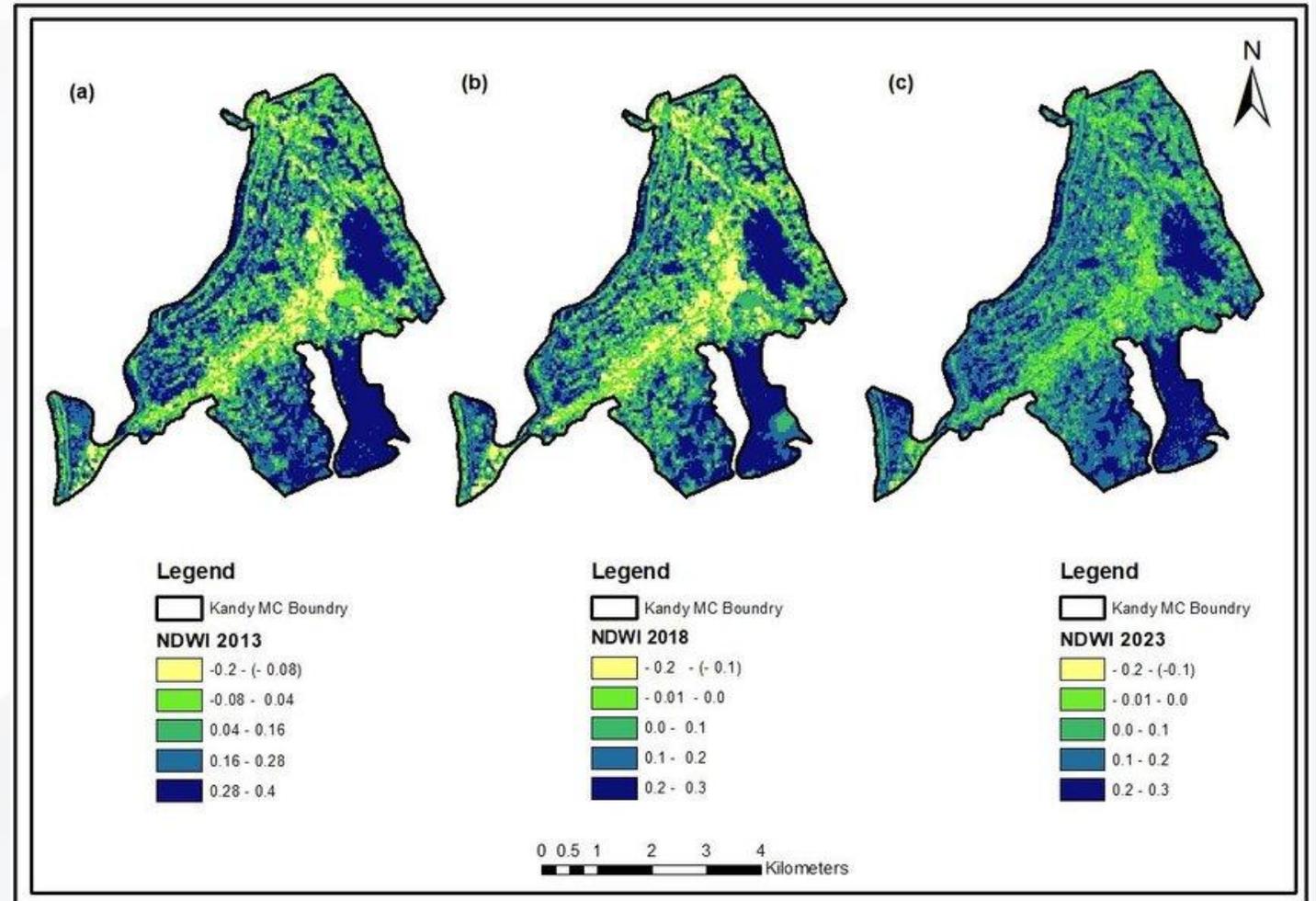


Normalized difference moisture index (NDMI) map of (A) 2000, and (B) 2020.

NDWI: Normalized Difference Water Index

Best for: Flood mapping and surface water management.

- **Key Function:** Specifically designed to identify and delineate open water bodies.
- **Advantage:** High contrast between water and dry land or vegetation.
- **Application:** Flood disaster assessment, reservoir monitoring, and wetland mapping.
- **Impact:** Rapid damage assessment for disaster relief and water resource tracking.



INTRODUCTION TO EARTH MAP



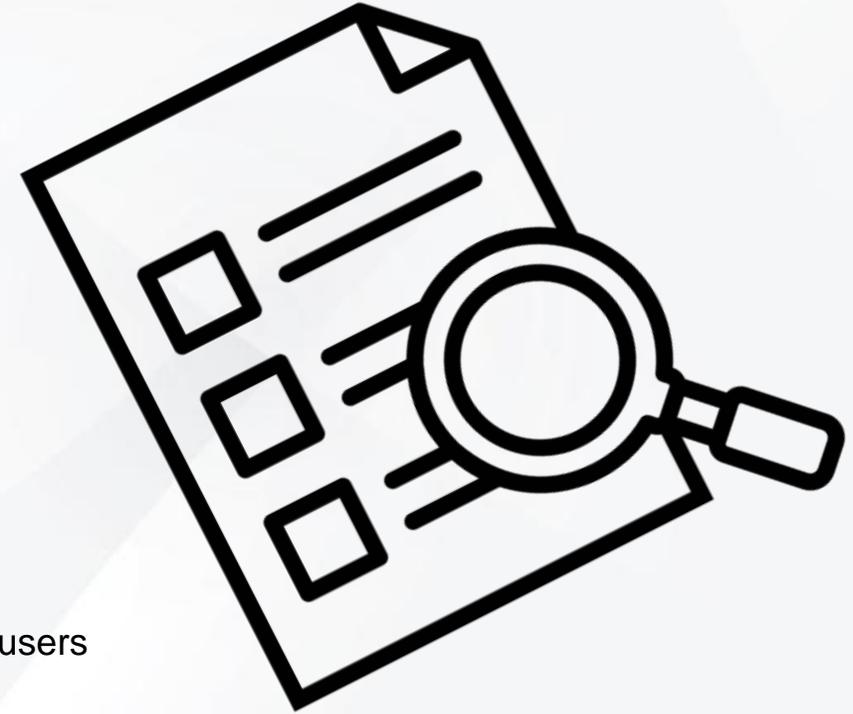
Earth Map - Platform Overview

Earth Map is a free, open-source platform by the FAO and Google that:

- Visualizes environmental and geographic data
- Integrates satellite imagery and mapping technologies
- Provides layered data exploration

Usability:

- Designed with a user-friendly interface
- Requires no specialized technical skills
- Accessible to researchers, educators, and general users

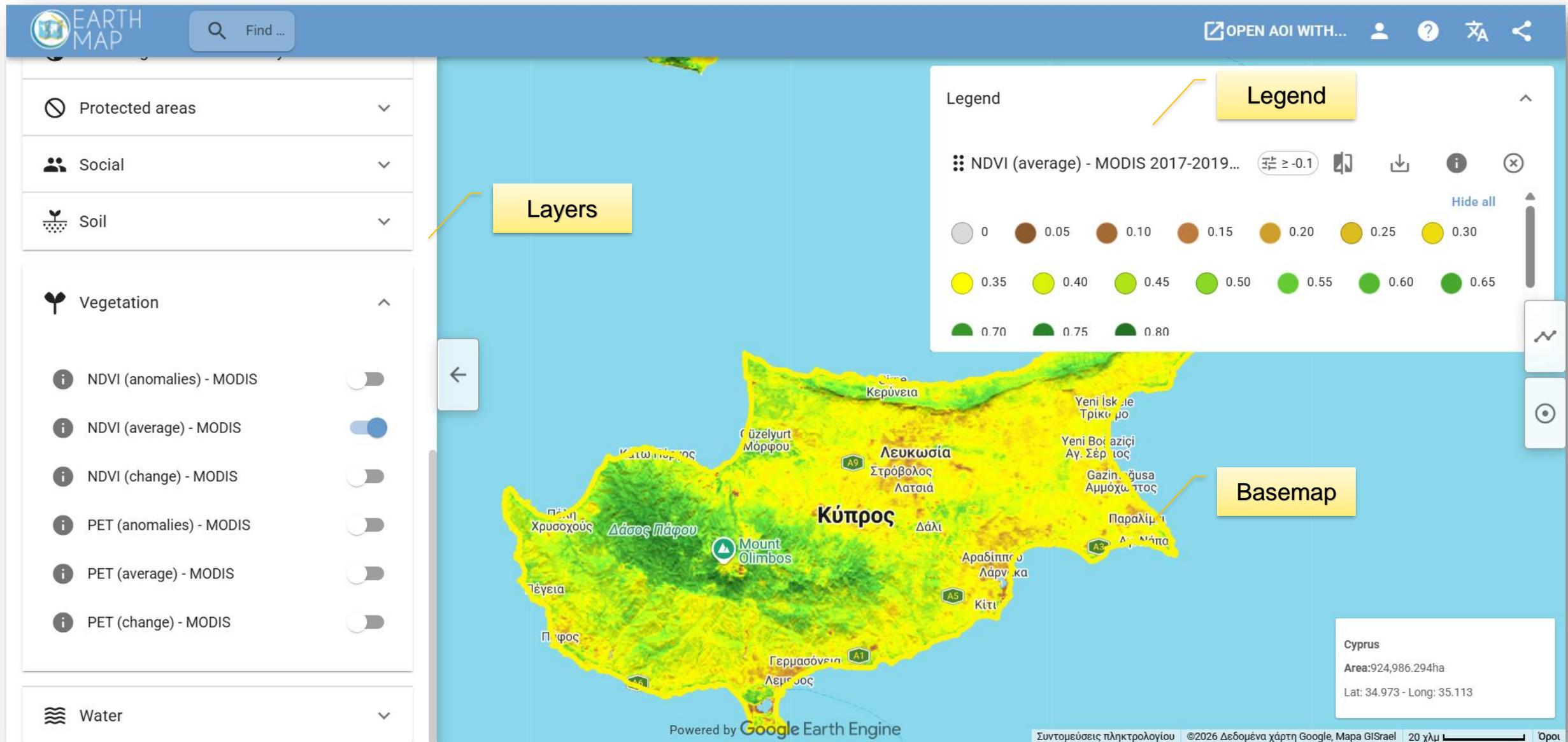


Technical Note:

Supports:

- Data layer visualization
- Spatial analysis & interpretation
- Real-time environmental monitoring

EARTH MAP: From Satellite Data to Geospatial Insights



OPEN AOI WITH...
?
✂
↻

- 🌐 Land Cover / Land Use ▼
- 🌍 Land Degradation Neutrality ▼
- 🚫 Protected areas ▼
- 👤 Social ▼
- 🌱 Soil ▼

🌿 **Vegetation** ▲

- 📄 NDVI (anomalies) - MODIS 🔴
- 📄 NDVI (average) - MODIS 🔵
- 📄 NDVI (change) - MODIS 🔴
- 📄 PET (anomalies) - MODIS 🔴
- 📄 PET (average) - MODIS 🔴
- 📄 PET (change) - MODIS 🔴

- **Real-time NDVI processing**
- **Multi-year time series**
- **Custom period analysis**

Powered by Google Earth Engine

Analytics 📄 Select multiple polygons

CYPRUS

Insights ▼

Vegetation - NDVI MODIS (250m)

Temporal aggregation ▼

Annual

PROCESS 📅 2000 - 2025

Cyprus

Vegetation - NDVI

MODIS (250m)

2000/2025

Mean
Trend (Linear Fit)

2000
2025

Copernicus Browser – Platform Overview

Copernicus Browser is a free web platform developed by the **European Space Agency (ESA)** under the **Copernicus Programme**.

- Provides open access to Sentinel satellite imagery
- Visualizes multi-temporal Earth observation data
- Enables image comparison and exploration
- Supports environmental monitoring and analysis

Technical Features

Supports:

- Satellite data visualization
- Spectral band combinations
- Time-series analysis
- Environmental change detection

Usability & Accessibility

- User-friendly web interface
- No specialized technical skills needed
- Accessible to researchers, educators, and general users



Copernicus Browser: Access to Sentinel Satellite Data

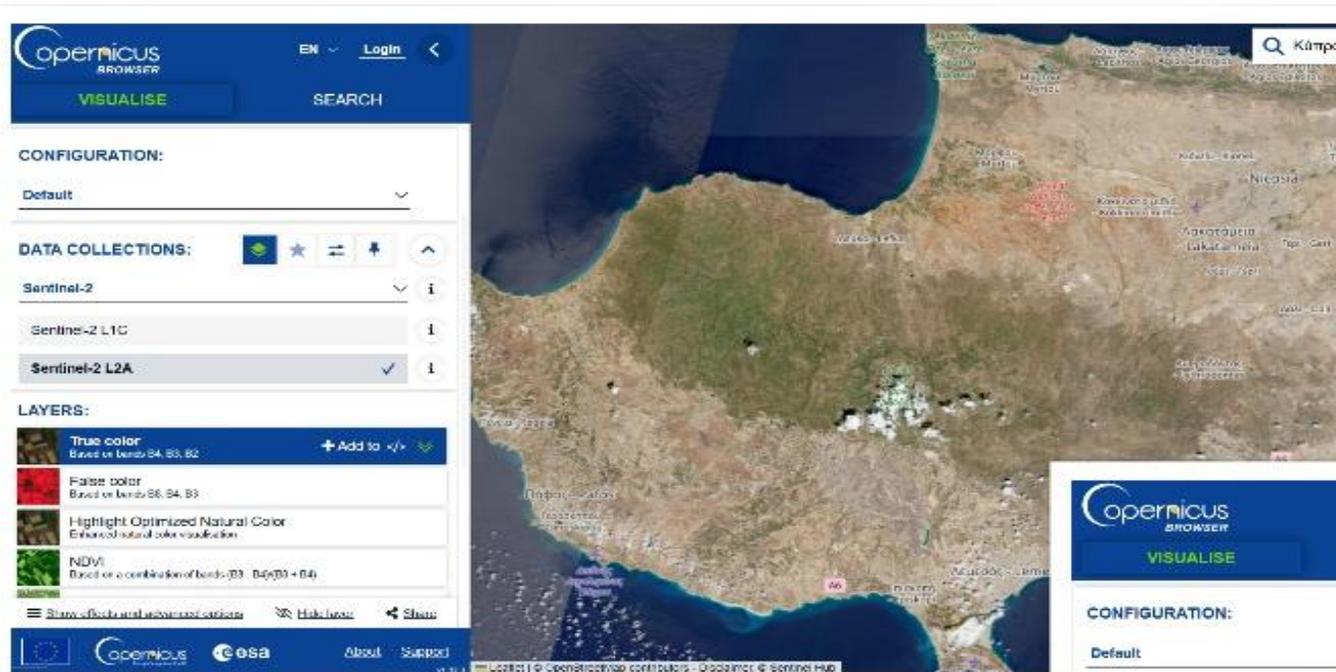
The interface includes a top navigation bar with the Copernicus logo, language selection (EN), and a login button. Below this is a 'VISUALISE' button and a search bar. The main control area features a 'DATE: SINGLE' section with a date selector (YYYY-MM-DD), a 30% cloud cover indicator, and a 'Show latest date' button. A 'CONFIGURATION:' section is set to 'Default'. The 'DATA COLLECTIONS:' section lists 'Sentinel-2', 'Sentinel-2 L1C', and 'Sentinel-2 L2A', with the latter selected. The bottom of the interface contains the European Union flag, the Copernicus logo, the ESA logo, and links for 'About' and 'Support'.

The map interface displays a satellite view of Europe. A yellow banner at the top reads 'Please zoom in or search for a location of interest'. A search bar at the top right contains the text 'Go to Place'. A vertical toolbar on the right side includes icons for home, search, location, and other map functions. A large white box with a blue border in the center contains the URL 'browser.dataspace.copernicus.eu'. A yellow callout box in the bottom right corner lists three features: 'Web-based platform for accessing Copernicus Sentinel data', 'Easy search by location and date', and 'Interactive map for global Earth observation'. The bottom of the map shows the Leaflet logo, copyright information for OpenStreetMap contributors and Sentinel Hub, and coordinates (Lat: 47.06, Lng: 12.44) with a 300 km scale bar.

browser.dataspace.copernicus.eu

- Web-based platform for accessing Copernicus Sentinel data
- Easy search by location and date
- Interactive map for global Earth observation

Visualizing the Same Data in Different Ways



True Color: Natural Vision

- Share configurations
- Custom Scripts (Sentinel hub)
- Define & Download AOIs
- Timeseries

- Search for satellite data (filtering)
- Default themes & Indices
- Cloud coverage
- Pin & compare images



False Color: Enhanced Information



Have you ever thought about how many available satellite is currently available?

Introduction to GEE

- It's challenging to provide an exact number of images collected from the beginning of EO until today because the volume of remote sensing data is vast and continues to grow rapidly.

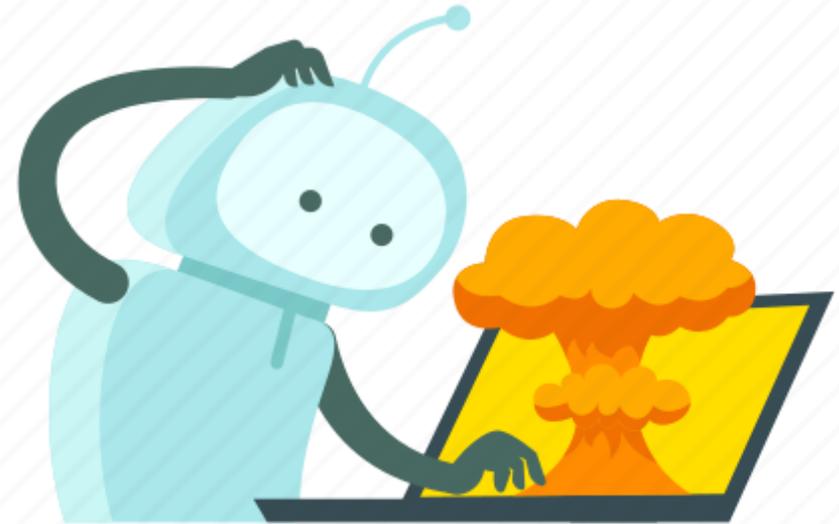




Can we download all this data on our personal PCs?

Introduction to GEE

- We can download and process remote sensing data on personal computers if they meet the necessary hardware and software requirements.
- However, it may not be feasible to process all the available open-access data on our computers





INTRODUCTION TO Google Earth Engine

Methods for image enhancement

- Google Earth Engine is a **cloud-based** platform for scientific data analysis.
- It provides ready-to-use, cloud-hosted datasets and a large pool of servers
- One feature that makes Earth Engine particularly attractive is the ability to run large computations very fast by distributing them across a large pool of servers

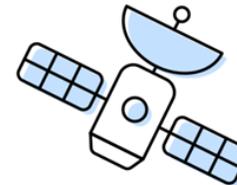
Methods for image enhancement

- Google Earth Engine contains over **50 petabytes** of data composed of **900 datasets** to combine with your data with, many being refreshed daily.



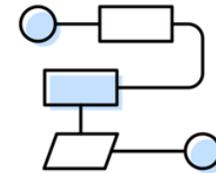
Advantages of GEE

- Cloud Computing capabilities -> Provide to the users a single place for:
 - accessing satellite data – allows users access to a petabyte-scale archive of publicly available remotely sensed imagery, ancillary data,
 - applying remote sensing methodologies, and
 - displaying analysis results.
- GEE's application programming interface (API) allows users to easily apply algorithms with coded commands.
- Is free for non-commercial use (scientists, researchers and developers)



Satellite Imagery

+



Your Algorithms

+



Real World Applications

Google Earth Engine Data Catalogue

- Google Earth Engine Data Catalogue is a **searchable resource** which provide also the metadata for each resource to help guide your analysis development process.
- It contains up-to-date Landsat, MODIS, and Sentinel data to support a wide variety of temporal analysis.
- Each dataset can be accessed using a single snippet of code, and from there can be combined with your existing data to create unique insights.

Google Earth Engine Data Catalogue

- Imagery
- Geophysical
- Climate & Weather
- Demographic
- Vector Data

The Earth Engine Public Data Catalog



Landsat and Sentinel
Raw, TOA, SR, ...



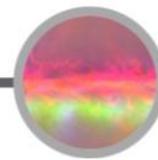
MODIS
Daily, NBAR, LST, ...



Terrain
SRTM, GTOPO, NED, ...



Land Cover
GlobCover, NLCD, ...



Atmospheric
NOAA NCEP, OMI, ...

... and many more, updating daily!

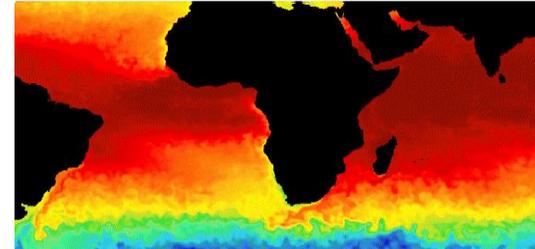
> 200 public datasets

> 5 million images

> 4000 new images every day

> 5 petabytes of data

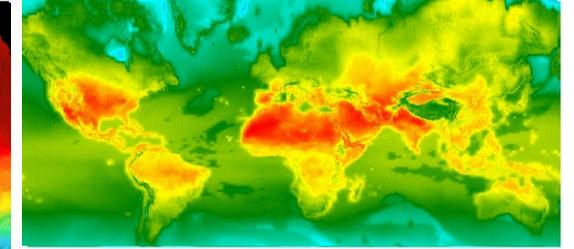
Climate and Weather



Surface Temperature

Thermal satellite sensors can provide surface temperature and emissivity information. The Earth Engine data catalog includes both land and sea surface temperature products derived from several spacecraft sensors, including MODIS, ASTER, and AVHRR, in addition to raw Landsat thermal data.

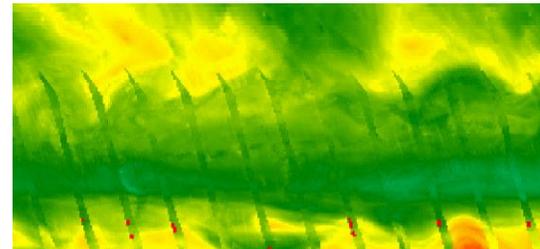
[Explore temperature data](#)



Climate

Climate models generate both long-term climate predictions and historical interpolations of surface variables. The Earth Engine catalog includes historical reanalysis data from NCEP/NCAR, gridded meteorological datasets like NLDAS-2, and GridMET, and climate model outputs like the University of Idaho MACAv2-METDATA and the NASA Earth Exchange's Downscaled Climate Projections.

[Explore climate data](#)



Atmospheric

You can use atmospheric data to help correct image data from other sensors, or you can study it in its own right. The Earth Engine catalog includes atmospheric datasets such as ozone data from NASA's TOMS and OMI instruments and the MODIS Monthly Gridded Atmospheric Product.

[Explore atmospheric data](#)



Weather

Weather datasets describe forecasted and measured conditions over short periods of time, including precipitation, temperature, humidity, and wind, and other variables. Earth Engine includes forecast data from NOAA's Global Forecast System (GFS) and the NCEP Climate Forecast System (CFSv2), as well as sensor data from sources like the Tropical Rainfall Measuring Mission (TRMM).

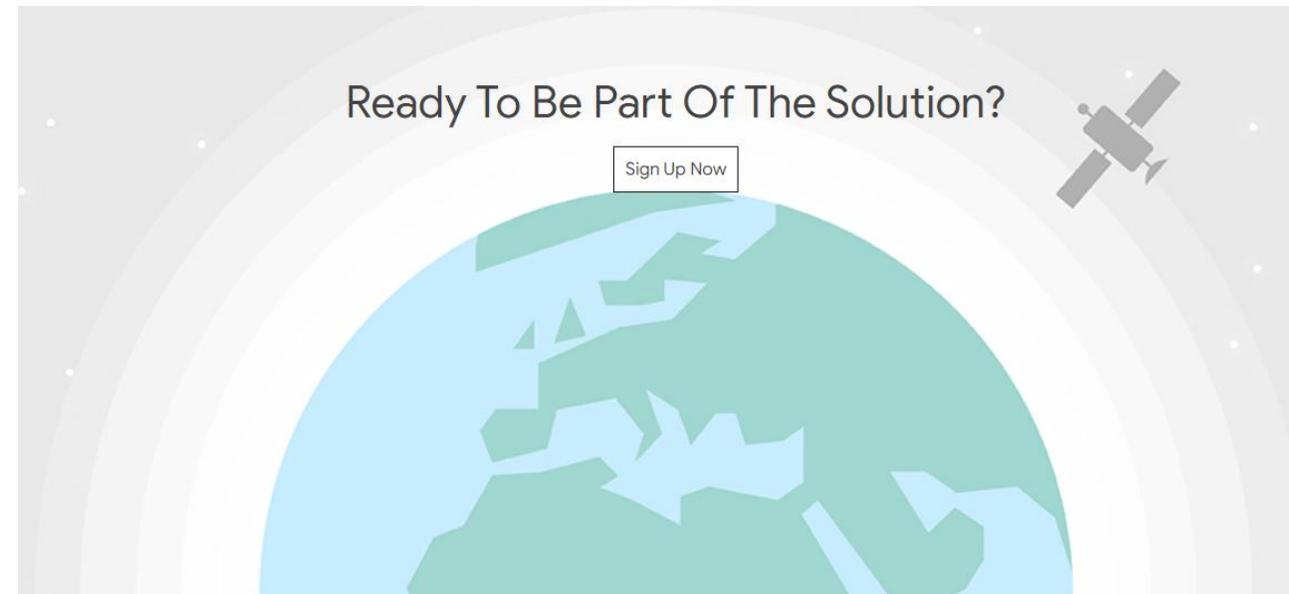
[Explore weather data](#)

Imagery



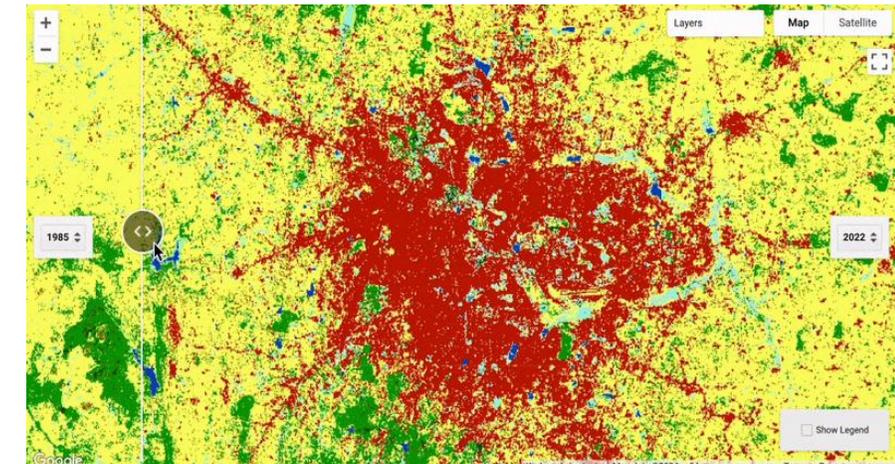
Sign-up

- <https://signup.earthengine.google.com/#/>
- You can use your existing **G**mail account to sign-up



Google Earth Engine Functionality

- Access to a vast data archive
- Geospatial data visualization
- Image and Data Processing
- Statistical Analysis
- Machine Learning Algorithms
- Time series analysis
- Custom Function Development
- Geospatial data fusion
- Data Validation



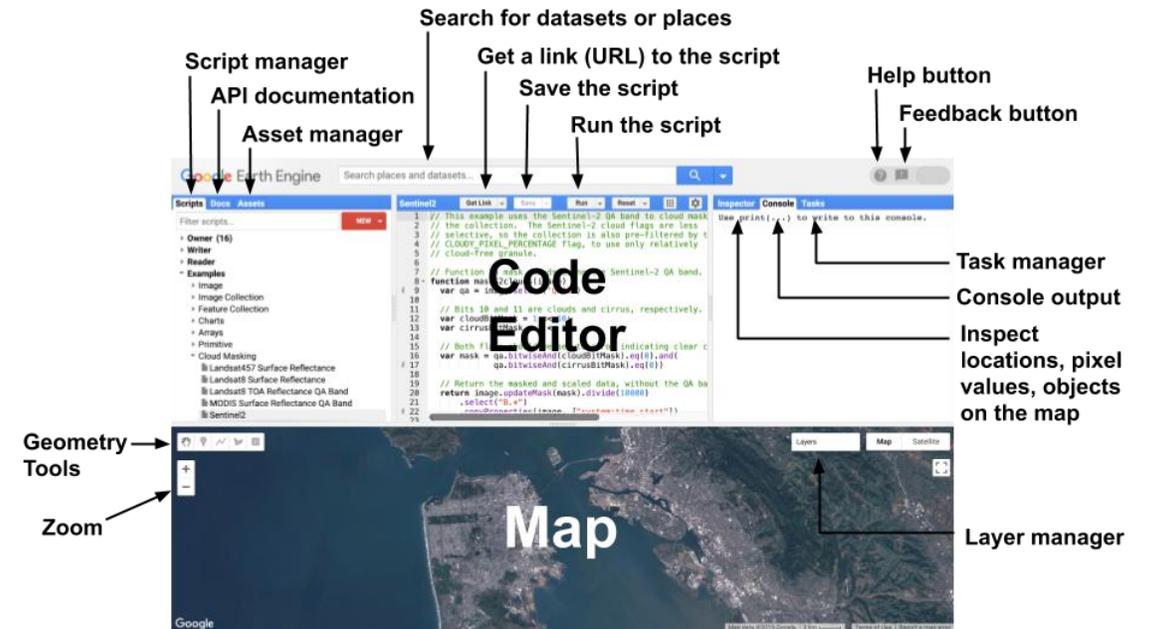
Application Programming Interface (API)

- The Earth Engine **JavaScript** API is currently the most widely used method of working with GEE.
- A **Python** API through Google Colaboratory (Colab) is also available for those interested in using Python - a bit more complicated

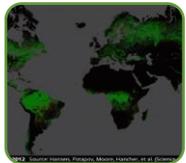
```
//calculate NDVI and NDWI
var NDVI = filtered.normalizedDifference(['B8','B4']);//vegetation
//Map.addLayer(NDVI,{},'NDVI');
var vegPalette = ['red', 'blue', 'yellow', 'green'];
Map.addLayer(NDVI, {min: -1, max: 1, palette: vegPalette}, 'NDVI');
```

Code Editor

- The Earth Engine (EE) Code Editor is a web-based Integrated Development Environment for the Earth Engine JavaScript API.
- Code Editor features are designed to make developing complex geospatial workflows fast and easy.
- The Code Editor has the following elements

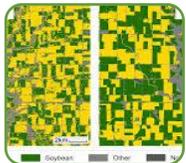


Applications of Google Earth Engine in wide literature



Environmental Monitoring

- Deforestation monitoring
- Forest Health Assessment



Agriculture

- Crop Monitoring
- Precision Agriculture



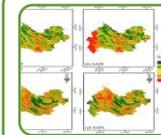
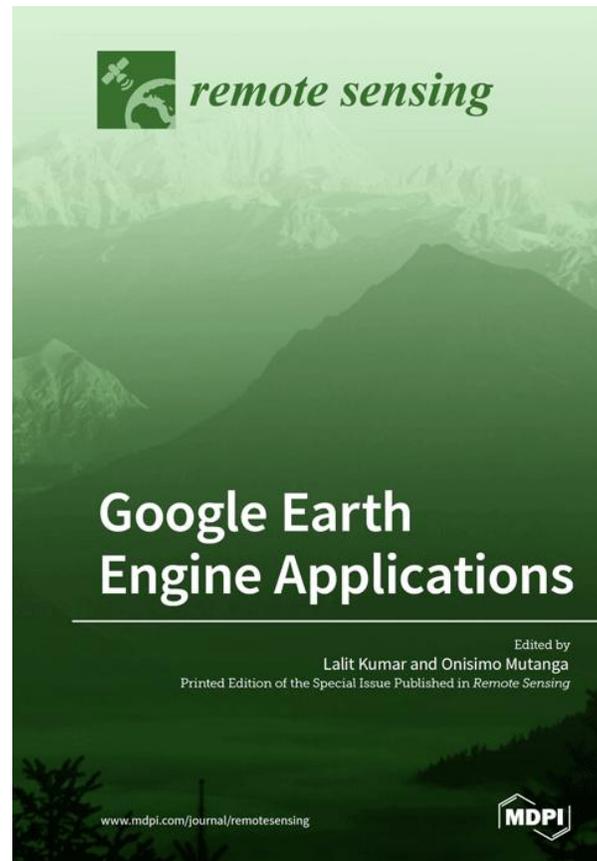
Water Resources

- Water Management
- Flood mapping



Urban Planning

- Monitoring urban sprawl



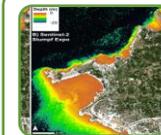
Disaster Management

- Risk Prediction (Forest, Fires, Landslides etc)
- Wildfire monitoring



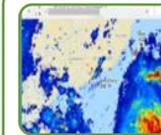
Land Use Land Cover

- Land Cover Classification
- Land Suitability analysis



Archaeology and Cultural Heritage

- Archaeological Site Mapping
- Landscape change analysis



Climate Change and Meteorology

- Weather Forecast
- Climate change assessment



Ecology and Biodiversity

- Habitat mapping
- Species distribution monitoring

Step 1: Define Area of interest

// STEP 1 — Define Area of Interest

// Centers the map on the ROI and zooms in

```
Map.centerObject(roi, 16);
```

// Displays the area of interest on the map

```
Map.addLayer(roi, {}, 'area of interest');
```



STEP 2 — Load Sentinel-2 Data

```
// Loads Sentinel-2 Surface Reflectance Harmonized collection  
  
var s2 = ee.ImageCollection("COPERNICUS/S2_SR_HARMONIZED")  
  
// Filters images to the region of interest  
  
.filterBounds(roi)  
  
// Filters images within the selected time period  
  
.filterDate('2018-01-01', '2025-12-31')  
  
// Keeps only images with less than 5% cloud cover metadata  
  
.filter(ee.Filter.lt('CLOUDY_PIXEL_PERCENTAGE', 5));
```

Harmonized Sentinel-2 MSI: MultiSpectral Instrument,...



Dataset Availability

2017-03-28T00:00:00 -

Dataset Provider

[European Union/ESA/Copernicus](#)

Collection Snippet

```
ee.ImageCollection("COPERNICUS/S2_SR_HARMONIZED")
```

[See example](#)

Tags

copernicus esa eu msi
reflectance sentinel sr

DESCRIPTION BANDS IMAGE PROPERTIES TERMS OF USE

After 2022-01-25, Sentinel-2 scenes with PROCESSING_BASELINE '04.00' or above have their DN (value) range shifted by 1000. The HARMONIZED collection shifts data in newer scenes to be in the same range as in older scenes.

Sentinel-2 is a wide-swath, high-resolution, multi-spectral imaging mission supporting Copernicus Land Monitoring studies, including the monitoring of vegetation, soil and water cover, as well as observation of inland waterways and coastal areas.

The Sentinel-2 L2 data are downloaded from CDSE. They were computed by running sen2cor. WARNING: 2017-2018 L2 coverage in the EE collection is not yet global.

The assets contain 12 UINT16 spectral bands representing SR scaled by 10000 (unlike in L1 data, there is no B10). There are also several more L2-specific bands (see band list for details). See the [Sentinel-2 User Handbook](#) for details.

QA60 is a bitmask band that contained rasterized cloud mask polygons until 2022-01-25, when these polygons stopped being produced. Starting 2024-02-28, legacy-consistent QA60 bands are constructed from the MSK_CLASS1 cloud classification bands. For more details, see [the full explanation of how cloud masks are computed](#).

EE asset ids for Sentinel-2 L2 assets have the following format: COPERNICUS/S2_SR/20151128T002653_20151128T102149_T56MNN. Here the first numeric part represents the sensing date and time, the second numeric part represents the product generation date and time, and the final 6-character string is a unique granule identifier indicating its UTM grid reference (see [MGRS](#)).

STEP 3 — Cloud Masking using SCL

// Function to remove clouds, shadows, cirrus and snow

```
function maskS2(image) {
  // Select Scene Classification Layer
  var scl = image.select('SCL');
  // Remove unwanted classes:
  var mask = scl.neq(3) // 3 = cloud shadow
    .and(scl.neq(8)) // 8 = medium cloud
    .and(scl.neq(9)) // 9 = high cloud
    .and(scl.neq(10)) // 10 = cirrus
    .and(scl.neq(11)); // 11 = snow
  // Apply mask and scale reflectance values
  return image.updateMask(mask)
    .divide(10000)
    .copyProperties(image, ["system:time_start"]); }

```

// Applies cloud masking to the collection

```
var s2_clean = s2.map(maskS2);
```

SCL Class Table

Value	Color	Description
1	#ff0004	Saturated or defective
2	#868686	Dark Area Pixels
3	#774b0a	Cloud Shadows
4	#10d22c	Vegetation
5	#ffff52	Bare Soils
6	#0000ff	Water
7	#818181	Clouds Low Probability / Unclassified
8	#c0c0c0	Clouds Medium Probability
9	#f1f1f1	Clouds High Probability
10	#bac5eb	Cirrus
11	#52fff9	Snow / Ice

STEP 4 — Add RGB Visualization

```
// Selects the first cloud-free image in the collection
```

```
var firstImage = s2_clean.first();
```

```
// Defines visualization parameters for true color composite
```

```
var rgbVis = {
```

```
  bands: ['B4', 'B3', 'B2'], // Red, Green, Blue
```

```
  min: 0,
```

```
  max: 0.3 };
```

```
// Adds RGB image to the map
```

```
Map.addLayer(firstImage, rgbVis,
```

```
'Sentinel-2 RGB (First Image)');
```

The screenshot displays the Google Earth Engine web interface. The top navigation bar includes the Google Earth Engine logo, a search bar, and user information (ee-christos0077). The main content area is split into a code editor on the left and a console on the right. The code editor shows the following JavaScript code:

```
44 .and(scl.neq(10))  
45 .and(scl.neq(11));  
46  
47 // Apply mask and scale reflectance values  
48 return image.updateMask(mask)  
49 .divide(10000)  
50 .copyProperties(image, ["system:time_start"]);  
51 }  
52  
53 // Applies cloud masking to the collection  
54 var s2_clean = s2.map(maskS2);  
55  
56 // =====  
57 // STEP 4 - Add RGB Visualization  
58 //  
59 //  
60 //  
61 // Selects the first cloud-free image in the collection  
62 var firstImage = s2_clean.first();  
63  
64 // Defines visualization parameters for true color composite  
65 var rgbVis = {  
66   bands: ['B4', 'B3', 'B2'], // Red, Green, Blue  
67   min: 0,  
68   max: 0.3  
69 };  
70  
71 // Adds RGB image to the map  
72 Map.addLayer(firstImage, rgbVis, 'Sentinel-2 RGB (First Image)');  
73
```

The console on the right shows the message: "Use print(...) to write to this console." Below the code editor, the map interface shows a satellite view of a landscape with a green polygon overlaid on a field, representing the RGB visualization of the first cloud-free image. The map includes standard navigation controls (zoom in, zoom out, pan) and a layers panel on the right side.

STEP 5 — Calculate NDVI & NDMI

```
function addIndices(image) {
  // NDVI = (NIR - RED) / (NIR + RED)
  var ndvi = image.normalizedDifference(['B8', 'B4'])
    .rename('NDVI');
  // NDMI = (NIR - SWIR) / (NIR + SWIR)
  // Sensitive to vegetation water content
  var ndmi = image.normalizedDifference(['B8', 'B11'])
    .rename('NDMI');
  return image.addBands([ndvi, ndmi]); }
// Adds NDVI and NDMI to each image
var s2_indices = s2_clean.map(addIndices);
```

HEALTHY
VEGETATION REFLECTANCE

50% NIR 8% RED



NDVI = 0.72

STRESSED
VEGETATION REFLECTANCE

40% NIR 30% RED

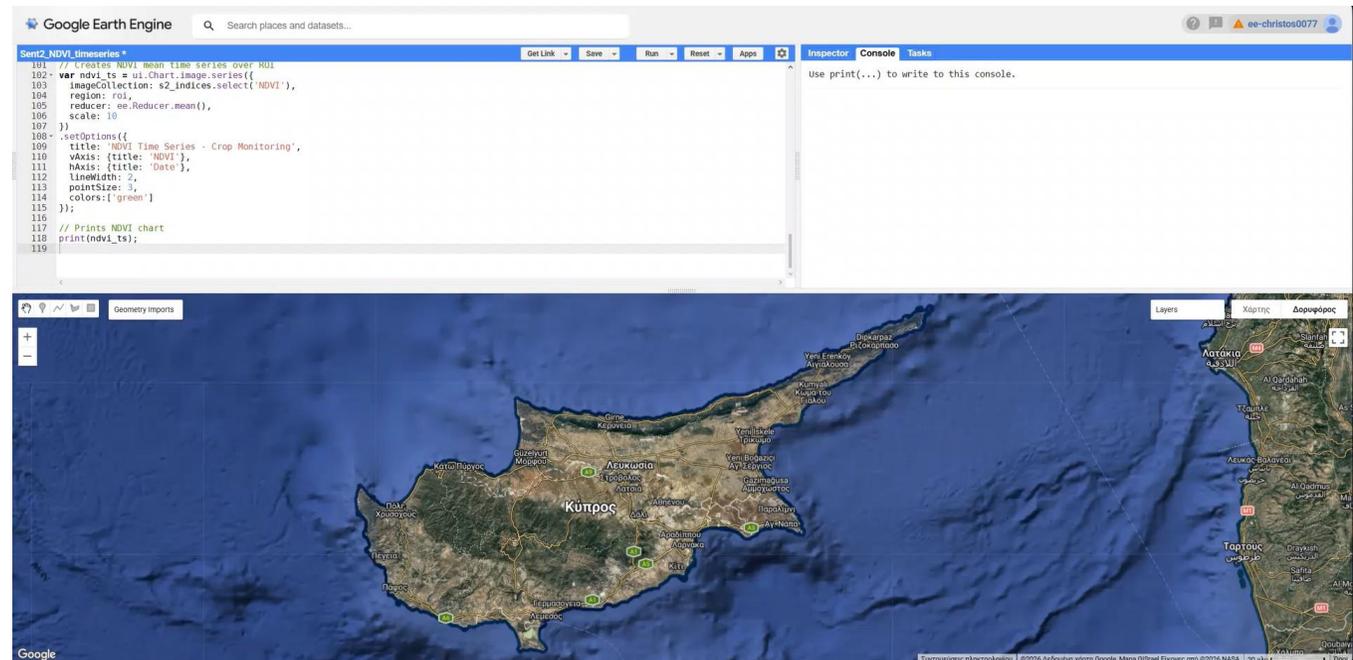


NDVI = 0.14

$$\text{NDVI} = \frac{\text{NIR} - \text{RED}}{\text{NIR} + \text{RED}}$$

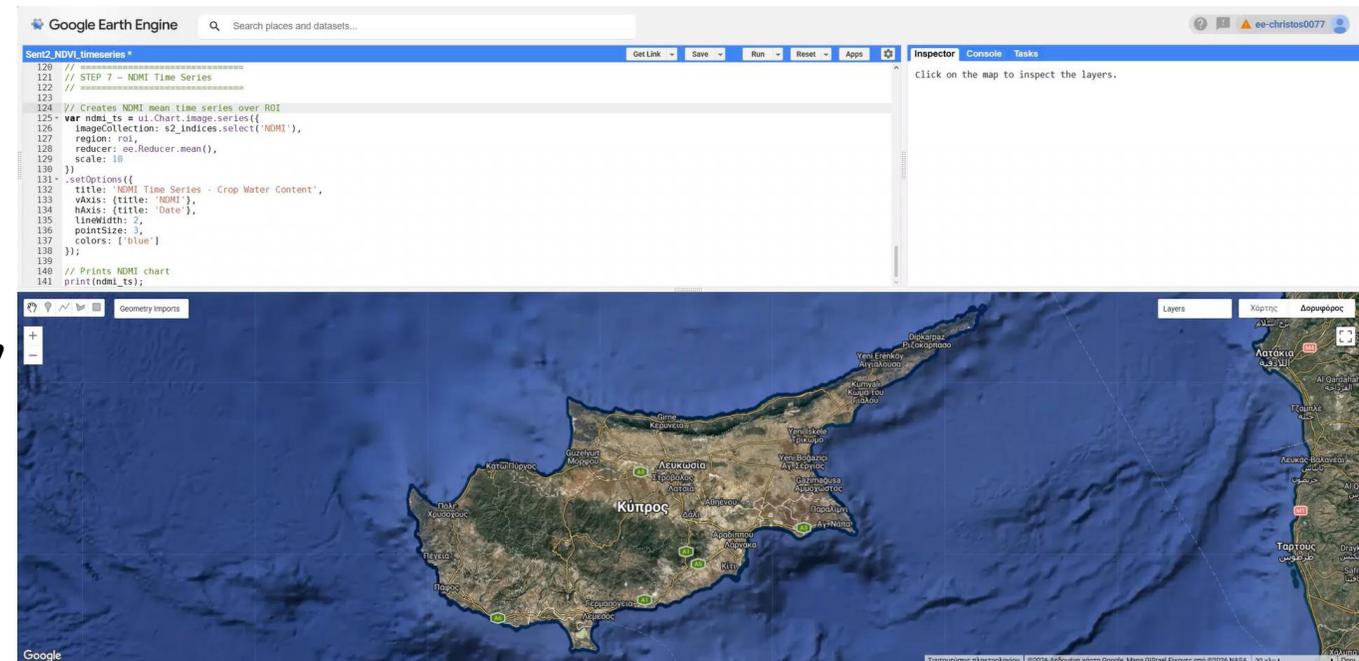
STEP 6 — NDVI Time Series

```
// Creates NDVI mean time series over AOI
var ndvi_ts = ui.Chart.image.series({
  imageCollection: s2_indices.select('NDVI'),
  region: roi,
  reducer: ee.Reducer.mean(),
  scale: 10 })
.setOptions({
  title: 'NDVI Time Series - Crop Monitoring',
  vAxis: {title: 'NDVI'},
  hAxis: {title: 'Date'},
  lineWidth: 2,
  pointSize: 3,
  colors:['green'] });
// Prints NDVI chart
print(ndvi_ts);
```



STEP 7 — NDMI Time Series

```
// Creates NDMI mean time series over AOI
var ndmi_ts = ui.Chart.image.series({
  imageCollection: s2_indices.select('NDMI'),
  region: roi,
  reducer: ee.Reducer.mean(),
  scale: 10 })
.setOptions({
  title:'NDMI TimeSeries-CropWater Content',
  vAxis: {title: 'NDMI'},
  hAxis: {title: 'Date'},
  lineWidth: 2,
  pointSize: 3,
  colors: ['blue' ]});
// Prints NDMI chart
print(ndmi_ts);
```



Code link:

<https://code.earthengine.google.com/d6d38af9d07270e404d46694cb79afae>

Remote Sensing Platforms: When to Use What



Google Earth Engine

- Large-scale analysis & time series
- Requires basic coding skills <https://code.earthengine.google.com/>



Earth Map

- Visual exploration & storytelling
- Easy to use for non-technical users <https://earthmap.org/>



Copernicus Browser

- Direct access to Sentinel data
- Quick exploration & data download <https://browser.dataspace.copernicus.eu/>

***Complementary platforms,
selected based on the goal.***

Thank you for participating!

- Recording & slides in 24 hours
- GEE script templates & notebooks
- Webinar 2 registration link: Make sure you are subscribed to official newsletter through EcoReady website: <https://www.eco-ready.eu/>
- Contact emails: christiana.papouts@cut.ac.cy , c.theocharidis@cut.ac.cy , afroditi.athanasiou@cut.ac.cy , mp.xatzipanagi@edu.cut.ac.cy

See you next time