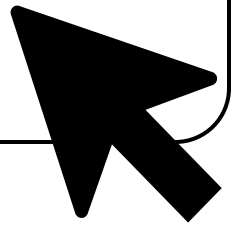


 copernicuslac-chile.eu



Regional Center Copernicus for America Latin America and the Caribbean

Storage, processing and distribution of satellite data
of the Program Copernicus

Image: Tabasco, Mexico >



Land cover and
land use

Direct access >



Urban Atlas

Direct access >



Coastal
monitoring

Direct access >



Sentinel image
repository

Direct access >



Private cloud

Direct access >

Upcoming events

Storage, processing and distribution of satellite data of the Program Copernicus

Image: Tabasco, Mexico



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repository

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Direct

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CMH
Coastal Monitoring Hub



Caracterización de



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CMH
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programme

Our services

Land cover and land use

Urban Atlas

Coastal monitoring

Private Cloud

Sentinel image repository

Image: Tabasco, Mexico



Land cover and land use

from Latin America and the Caribbean

Having tools to understand land cover and land use in Latin America and the Caribbean (LAC) is crucial for informed decision-making regarding land-use planning, environmental management, and sustainable development. It allows for monitoring changes across the landscape, helping to mitigate deforestation, protect biodiversity, ensure food security, and promote effective public policies.

[Go to application](#)[Inicio](#) [en](#) [nuestros servicios](#) [cobertura y uso de suelos](#)

What is it?

A geospatial analysis service that combines Sentinel-2 satellite imagery and local data to map land cover and land use in Latin America and the Caribbean. Specifically designed to capture the region's unique ecological and social characteristics.

Objective

To provide accurate and up-to-date information for monitoring territorial changes, supporting sustainable planning, environmental management, biodiversity protection and the design of evidence-based public policies.

Methodology

The system uses machine learning algorithms trained on large volumes of Sentinel-2 (20 m) multispectral satellite data and regional institutional sources. The model integrates specific bioclimatic variables, generating a continuous spatial and temporal monitoring service adapted to the conditions of Latin America and the Caribbean. The proposed detection classes correspond to:

Artificial surfaces

The class includes any type of area with a predominantly artificial surface. Any urban or urban-related feature is included in this class, which also includes

Crops

This class includes herbaceous crops, timber crops (permanent orchards and plantations) and multiple or layered crops, which combine different types of soil

Grasslands

This class includes any geographical area dominated by natural herbaceous plants (grasslands, prairies, steppes and savannas) with a cover of

Tree cover

The class includes any geographic area dominated by natural trees with a cover of 10% or greater. It also includes areas seasonally or permanently

biodiversity, ensure food security, and promote effective public policies.

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Artificial surfaces

The class includes any type of area with a predominantly artificial surface. Any urban or urban-related feature is included in this class, which also includes industrial areas, landfills, and extraction sites.

Crops

This class includes herbaceous crops, timber crops (permanent orchards and plantations) and multiple or layered crops, which combine different types of soil cover.

Grasslands

This class includes any geographical area dominated by natural herbaceous plants (grasslands, prairies, steppes and savannas) with a cover of 10% or greater.

Tree cover

The class includes any geographic area dominated by natural trees with a cover of 10% or greater. It also includes areas seasonally or permanently flooded with fresh water.

shrub cover

The class includes any geographic area dominated by natural shrubs with a cover of 10% or greater. Herbaceous plants may also be present, at any density. Additionally, it includes areas of shrub cover permanently or regularly flooded with fresh water.

Aquatic or regularly flooded herbaceous vegetation

This class includes any geographical area dominated by natural herbaceous vegetation (coverage of 10% or more) that is permanently or regularly flooded by fresh or brackish water (swamps, marshes, etc.).

Mangroves

This class includes any geographical area dominated by woody vegetation (trees and/or shrubs), with a cover of 10% or more, that is permanently or regularly flooded by salt or brackish water, located in coastal areas or in river deltas.

Sparse vegetation

This class includes any geographic area where natural vegetation cover is between 2% and 10%. This includes areas that are permanently or regularly flooded.

Bare ground

The class includes any geographic area dominated by natural abiotic surfaces, where natural vegetation is absent or almost absent (coverage less than 2%). It also includes areas regularly flooded by fresh water, such as lake shores, riverbanks, salt flats, etc.

Snow and glaciers

This class includes any geographic area covered by snow or glaciers that persist for 10 months or more.

Water bodies

This class includes any geographic area covered by freshwater bodies for most of the year. In some cases, the water may be frozen for part of the year (less than 10 months).

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Land cover and land use

from Latin America and the Caribbean

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[Go to application](#)



Inicio » en » nuestros servicios » Agricultura y uso de suelos

What is it?

A geospatial analysis service that combines Sentinel-2 satellite imagery and local data to map land cover and land use in Latin America and

Explorador de Cobertura y Uso de Suelos

Buscar por país o ciudad

☐ Coordenadas

Leyenda

- ☒ Superficies artificiales
- ☒ Cultivos
- ☒ Pastizales
- ☒ Áreas de cobertura arbórea
- ☒ Áreas de cobertura arbustiva
- ☒ Vegetación herbácea acuática o inundada regularmente
- ☒ Manglares
- ☒ Vegetación escasa
- ☒ Suelo desnudo
- ☒ Nieve y glaciares
- ☒ Cuerpos de agua

Seleccionar Todas

Limpiar Selección

Modificar Opacidad de Capa

Productos disponibles:

2020

2021

2022

2023

2024

☐ Dibujar rectángulo de área a descargar

Buscar por país o ciudad

☐ Coordenadas

Leyenda

- ☒ Superficies artificiales
- ☒ Cultivos
- ☒ Pastizales
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- ☒ Áreas de cobertura arbustiva
- ☒ Vegetación herbácea acuática o inundada regularmente
- ☒ Manglares

Land Cover and Land Use Explorer

Search by country or city

☐ Coordinates

Legend

- ☒ Artificial surfaces
- ☒ Cropland
- ☒ Grassland
- ☒ Tree covered areas
- ☒ Shrubs covered areas
- ☒ Herbaceous vegetation, aquatic or regularly flooded
- ☒ Mangroves
- ☒ Sparse vegetation
- ☒ Bare soil
- ☒ Snow and glaciers
- ☒ Water bodies

Select all

Clear selection

Modify layer opacity

Available products:

2020

2021

2022

2023

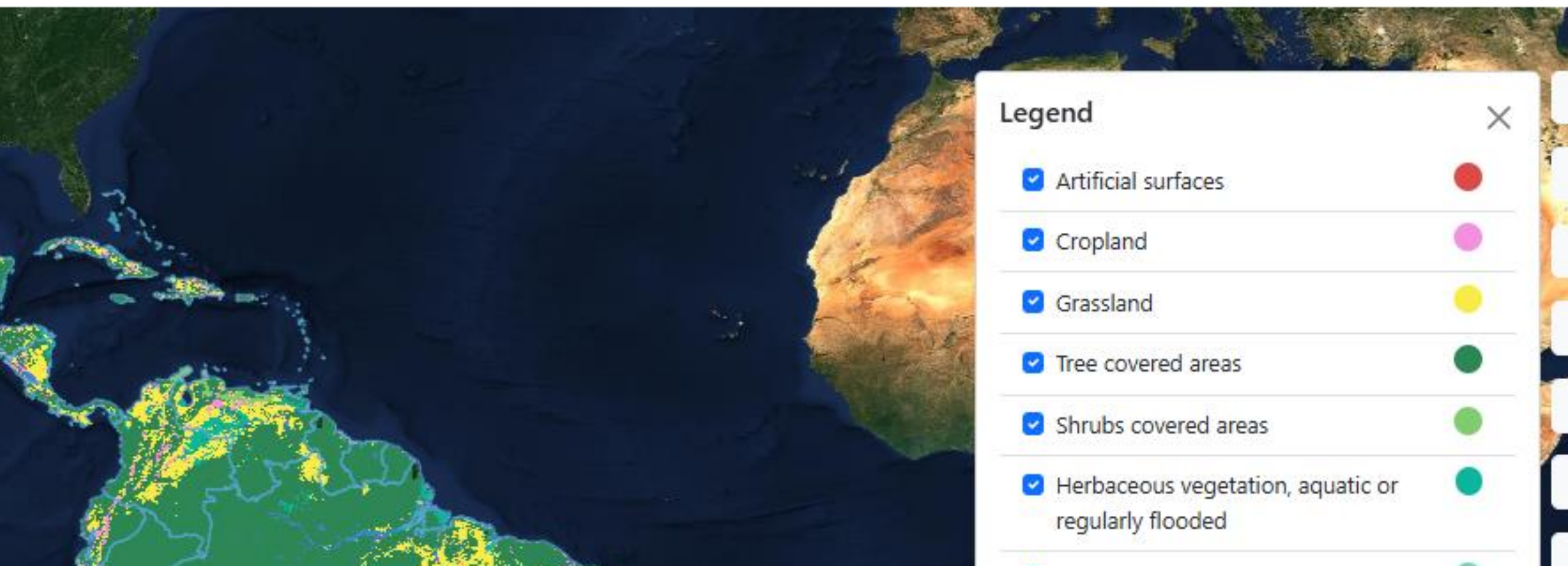
2024

☐ Draw rectangle for download

Search by country or city



☐ Coordinates



Legend



- ☒ Artificial surfaces ●
- ☒ Cropland ●
- ☒ Grassland ●
- ☒ Tree covered areas ●
- ☒ Shrubs covered areas ●
- ☒ Herbaceous vegetation, aquatic or regularly flooded ●

Search by country or city



Coordinates

Legend



Artificial surfaces



Cropland



Grassland



Tree covered areas



Shrubs covered areas



Herbaceous vegetation, aquatic or
regularly flooded





Legend



- ☒ Artificial surfaces 
- ☒ Cropland 
- ☒ Grassland 
- ☒ Tree covered areas 
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- ☒ Herbaceous vegetation, aquatic or regularly flooded 
- ☒ Mangroves 
- ☒ Sparse vegetation 
- ☒ Bare soil 
- ☒ Snow and glaciers 
- ☒ Water bodies 

Select all

Clear selection

Modify layer opacity

Available products:

2020

2021

2022

2023

2024

 Draw rectangle for download





Land Cover and Land Use Explorer

Search by country or city

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- ☐ Bare soil
- ☐ Snow and glaciers
- ☐ Water bodies

[Select all](#)[Clear selection](#)

Modify layer opacity

Available products:

[2020](#)[2021](#)[2022](#)[2023](#)[2024](#)☐ Draw rectangle for download

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Login

Log in with your email and password to gain access and download images from CopernicusLAC Chile.

Email address

Password

[Recover / verify your account](#)

or

[Sign up](#)

Email address

myname@domain.com

Password

[Recover / verify your account](#)

or

[Sign up](#)

Sign In



Land Cover and Land Use Explorer

Search by country or city

Coordinates

Legend

- ☒ Artificial surfaces
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Select all

Clear selection

Modify layer opacity

Available products:

2020

2021

2022

2023

2024

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User registration

Fill in the required information to gain access and download images from CopernicusLAC Chile.

Email address

Email address



First name

First name

Last name

Last name

Gender

Gender



Year of birth

Country or territory

Country or territory



Language of preference

English



Occupation

Occupation



In which type of organisation you work in?

In which type of organisation you work in?



What is the name of the organization you work in?

What is the name of the organization you work in?

In which area of application will you use the Copernicus services and data?

In which area of application will you use the Copernicus



In which economic sector will you use the Copernicus services and data?

In which economic sector will you use the Copernicus se



How did you hear about our services?

How did you hear about our services?



Password

Password



Retype password

Password



It must be at least 8 characters long

☐ I accept the [Terms and conditions](#)

Sign Up

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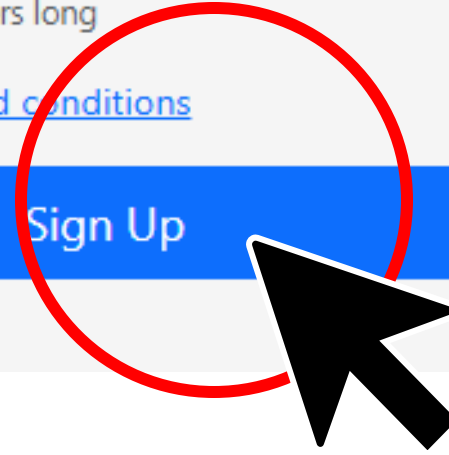
Retype password



It must be at least 8 characters long

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Please verify your email address.

Using the code or link sent to your email

Land Cover and Land Use Explorer

Search by country or city

COUNTRIES

Anguila
Antigua y Barbuda
Antillas Neerlandesas
Argentina
Aruba
Bahamas
Barbados



✕
▼

COUNTRIES

Jamaica

CITIES

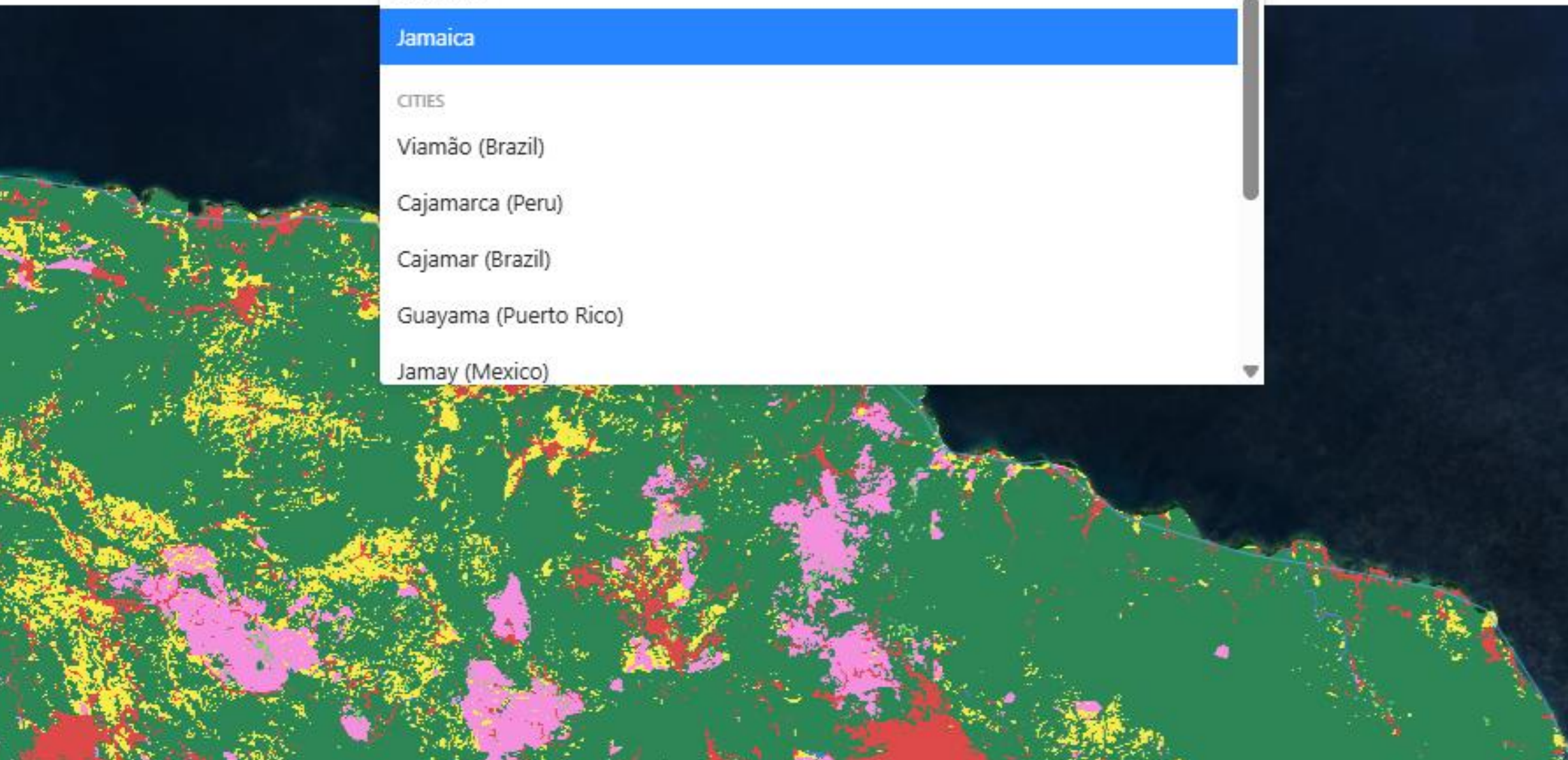
Viamão (Brazil)

Cajamarca (Peru)

Cajamar (Brazil)

Guayama (Puerto Rico)

Jamay (Mexico)



Land Cover and Land Use Explorer

Search by country or city

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- ☐ Bare soil
- ☐ Snow and glaciers
- ☐ Water bodies

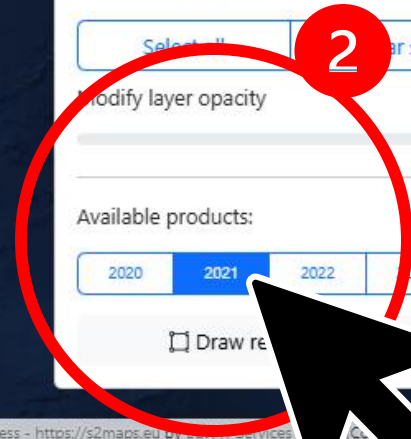
Select all Clear selection

Modify layer opacity

Available products:

2020 2021 2022 2023 2024

Draw rectangle



☐ Coordinates

Legend

- ☒ Artificial surfaces
- ☒ Cropland
- ☒ Grassland
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- ☒ Bare soil
- ☒ Snow and glaciers
- ☒ Water bodies

Select all

Clear selection

Modify layer opacity

Available products:

2020

2021

2022

2023

2024

Draw rectangle for download

☐ Coordinates

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- ☐ Artificial surfaces
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Select all

Clear selection

Modify layer opacity

Available products:

2020

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2023

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- ☐ Snow and glaciers
- ☐ Water bodies

Select all

Clear selection

Modify layer opacity

Available products:

2020

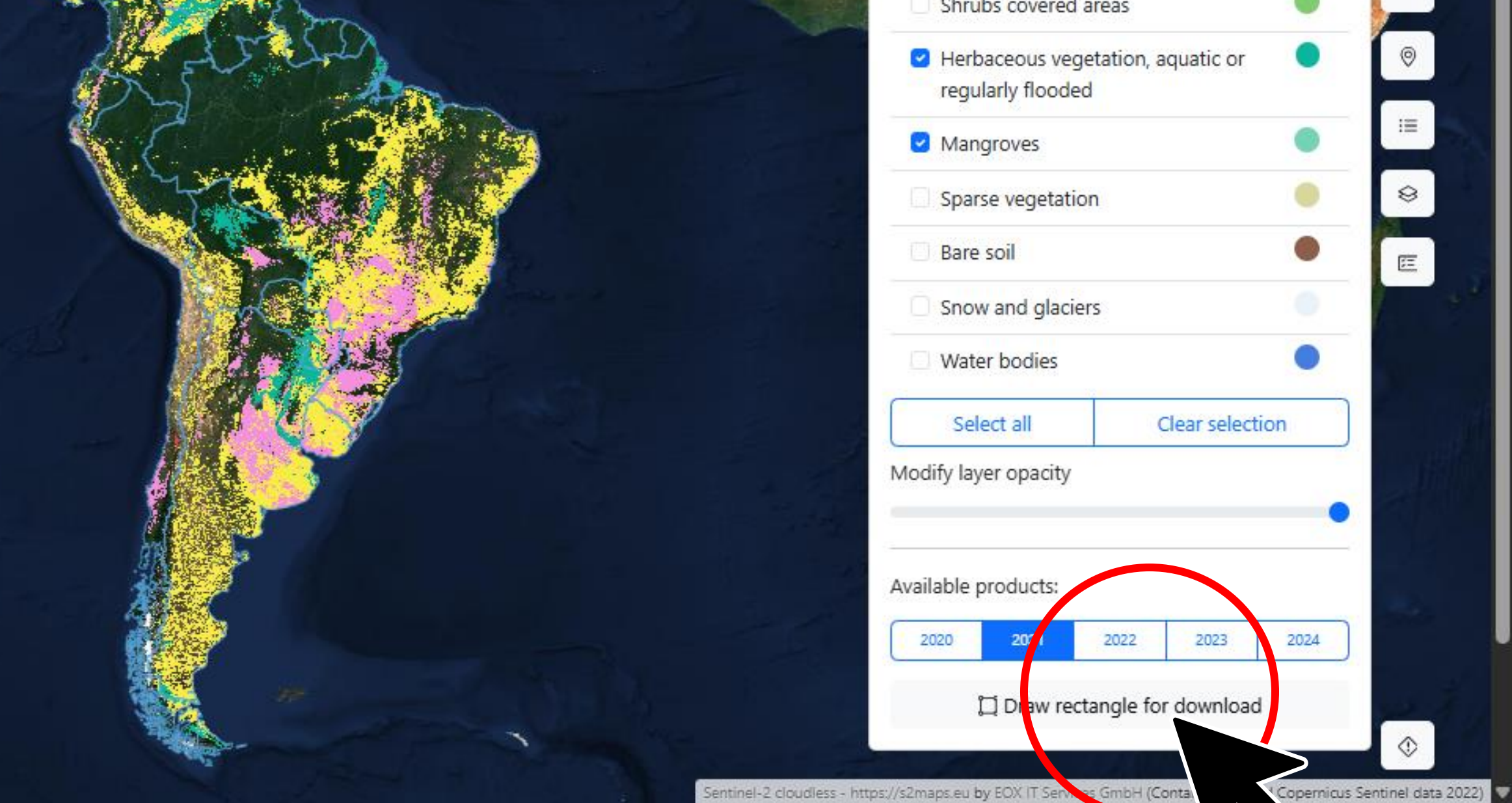
2021

2022

2023

2024

Draw rectangle for download



Land Cover and Land Use Explorer

Search by country or city

☐ Coordinates

Cancel drawing



Observations:

- Downloads in .tif format cannot exceed 10° in latitude or longitude
- Downloads in .shp format cannot exceed 1° in latitude or longitude

100 km

Image download options



Select the layer to download:

- | | | | |
|---|---|---|---|
| ☒ Artificial surfaces | ☒ Tree covered areas | ☒ Mangroves | ☒ Snow and glaciers |
| ☒ Cropland | ☒ Shrubs covered areas | ☒ Sparse vegetation | ☒ Water bodies |
| ☒ Grassland | ☒ Herbaceous vegetation, aquatic or regularly flooded | ☒ Bare soil | |

Select all

Clear selection

Selected rectangle:

Latitude 0.74°
Longitude 1.06°



Sentinel-2 cloudless - <https://s2maps.eu> by EOX IT Services GmbH (Contains modified Copernicus Sentinel data 2022)

Choose the year to start the download:

2020 2021 2022 2023 2024

↓ Create GeoTIFF

↓ Download Shapefile

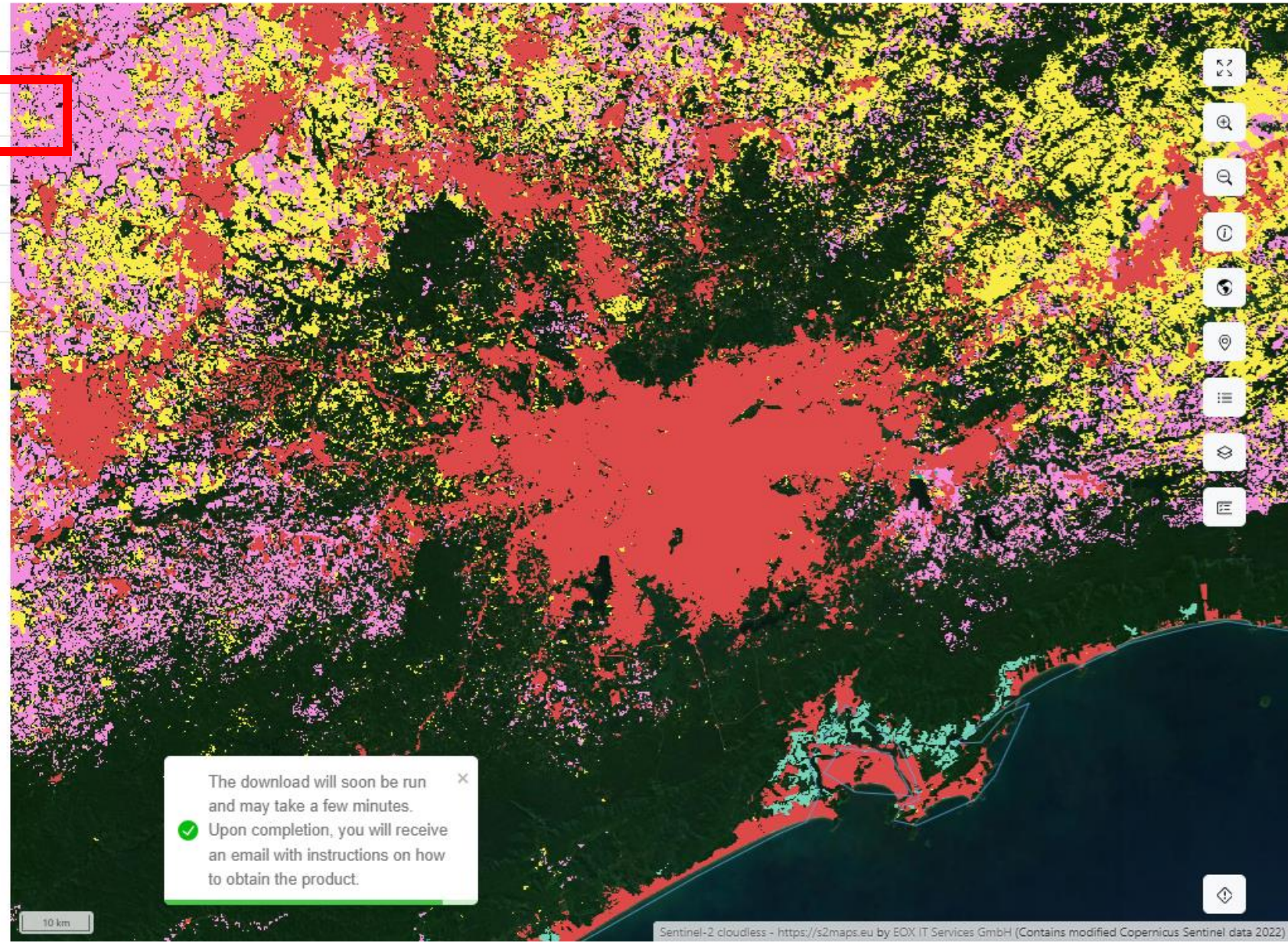
Land Cover and Land Use Explorer

Search by country or city

☐ Coordinates

Download history

Nº	Date	Status	Product
01	29 May 2026, 10:12	Pending	2024
02	29 May 2026, 09:19	Completed	2024 2.6 MB
03	29 May 2026, 09:18	Completed	2024 1.0 MB
04	29 May 2026, 08:58	Completed	2024 20.4 MB
05	14 Apr 2026, 16:25	Failed	2024



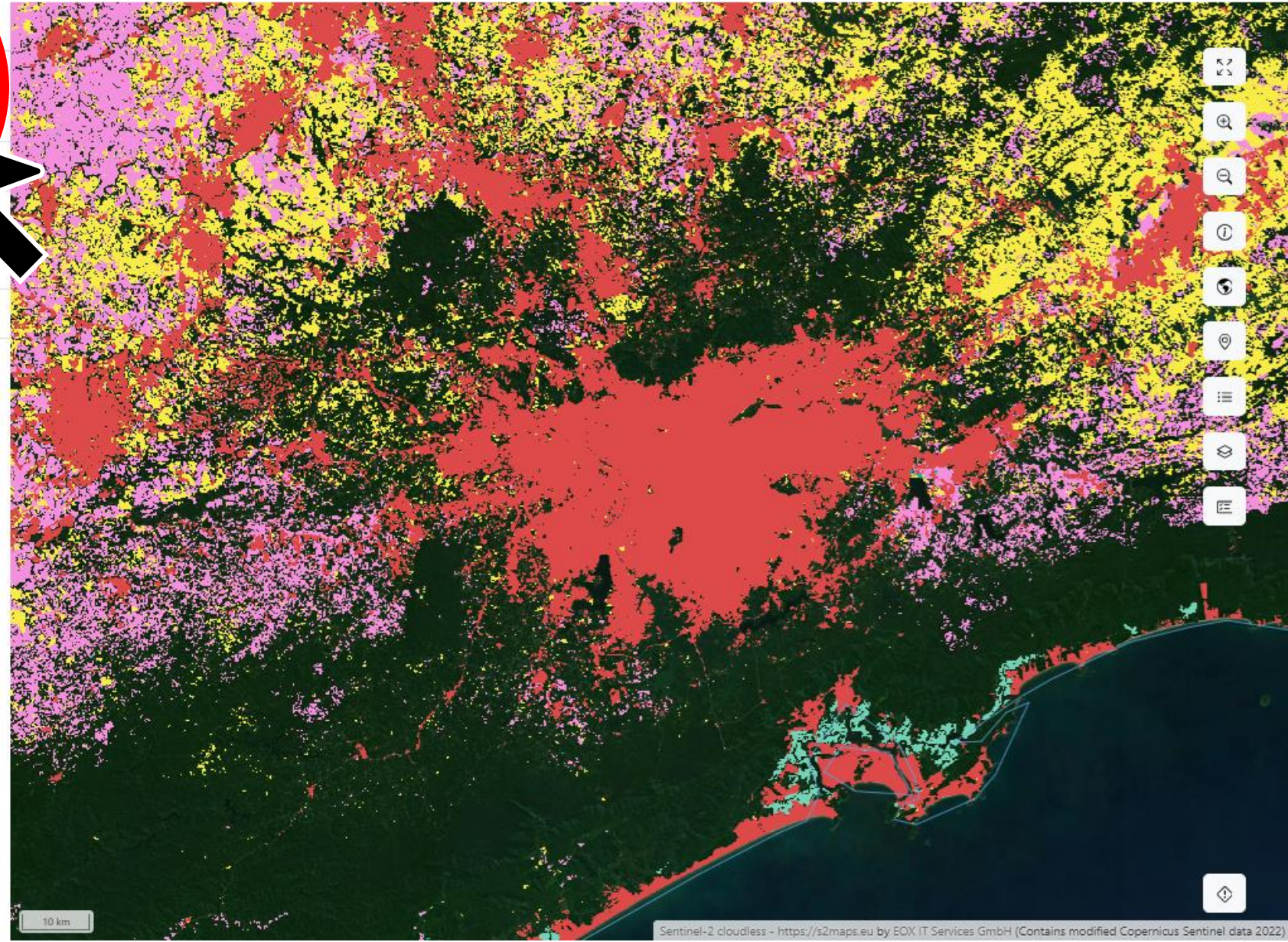
Land Cover and Land Use Explorer

Search by country or city

☐ Coordinates

Download history

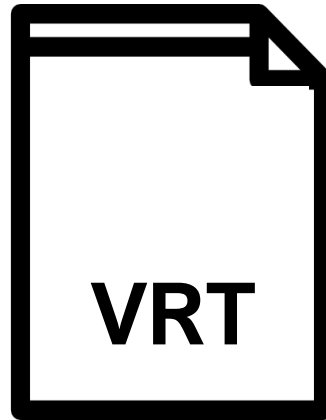
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05	14 Apr 2026, 16:25	Failed	2024  



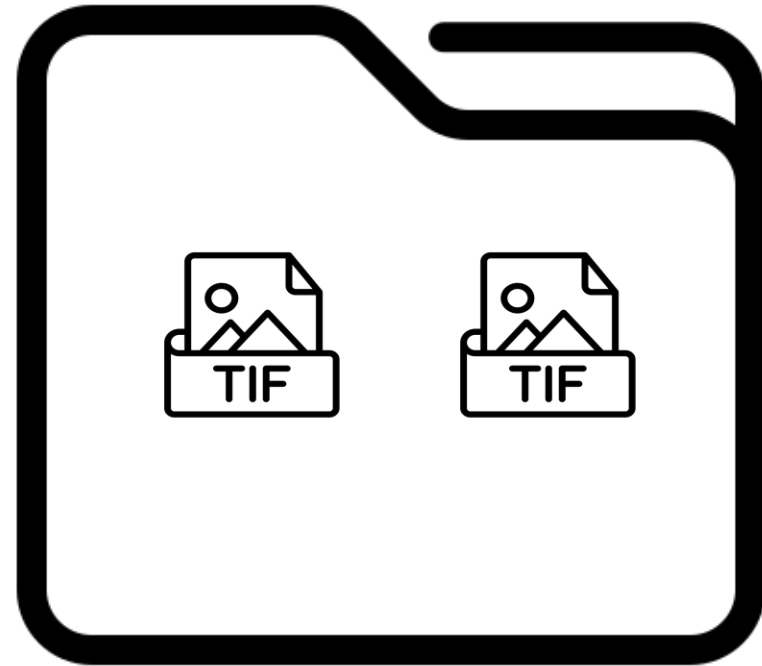
GeoTIFF



legend.csv



mosaic.vrt



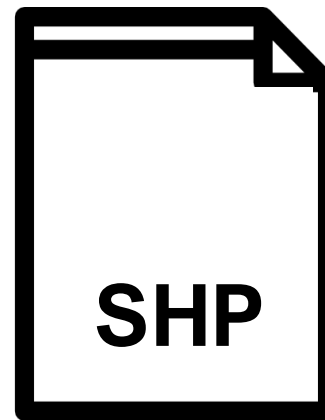
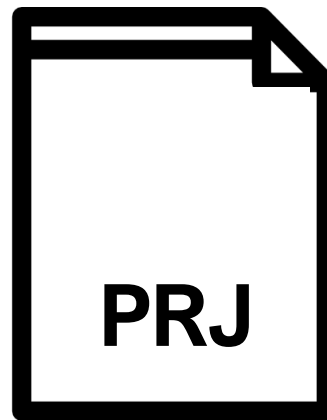
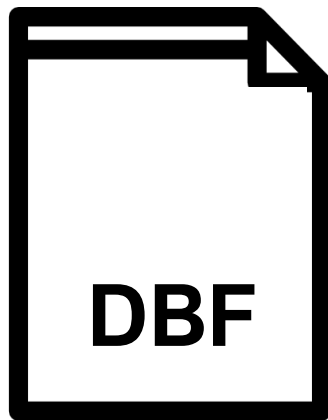
img



Shapefile



legend.csv





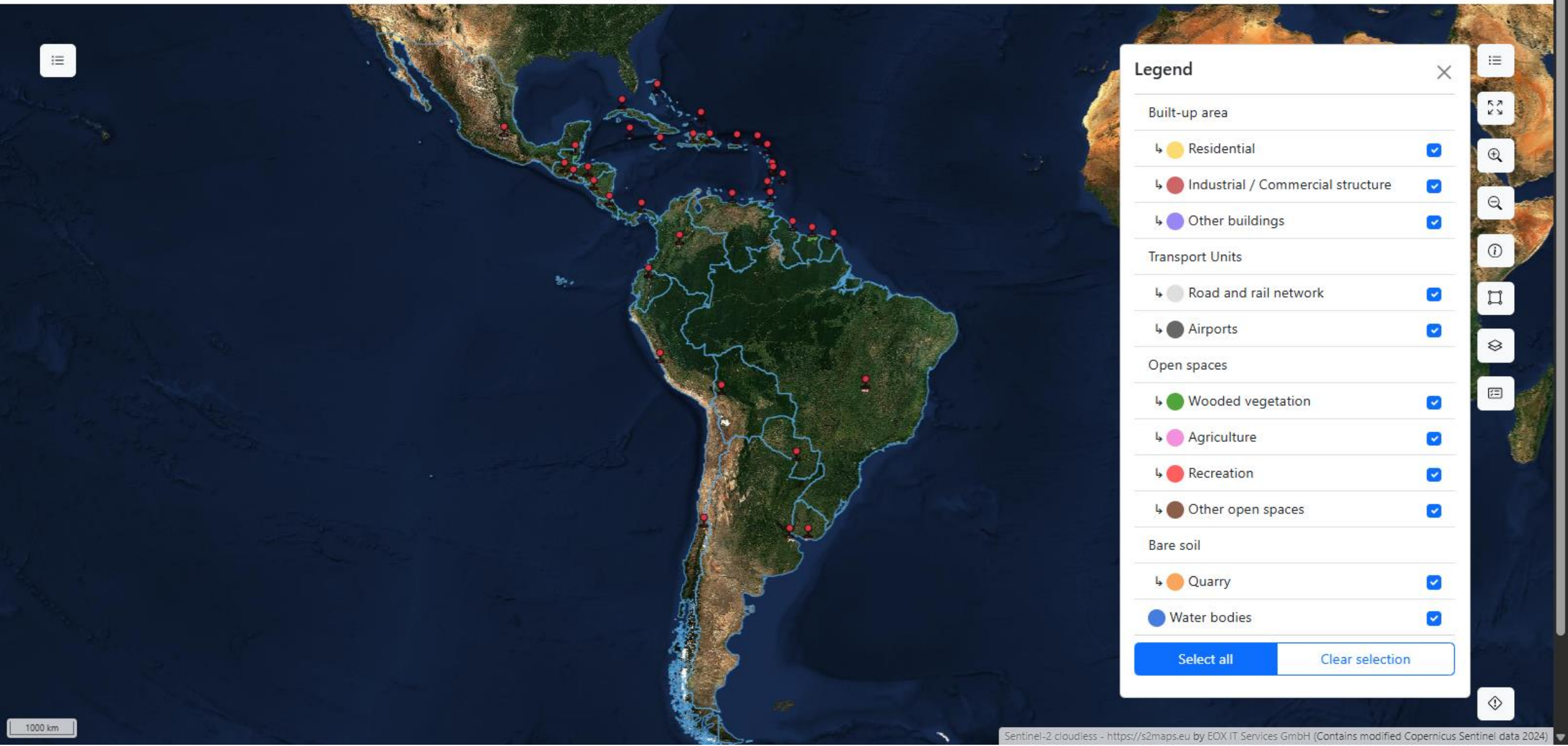
legend.csv

Value	Name (ES)	Name (PT)	Name (EN)
4096	Superficies artificiales	Superfícies artificiais	Artificial surfaces
8192	Cultivos	Terras agrícolas	Cropland
12288	Pastizales	Pastagens	Grassland
16384	Áreas de cobertura arbórea	Áreas cobertas por árvores	Tree covered areas
20480	Áreas de cobertura arbustiva	Áreas cobertas por arbustos	Shrubs covered areas
24576	Vegetación herbácea acuática o inundada regularmente	Vegetação herbácea, aquática ou regularmente inundada	Herbaceous vegetation, aquatic or regularly flooded
28672	Manglares	Manguezais	Mangroves
32768	Vegetación escasa	Vegetação escassa	Sparse vegetation
36864	Suelo desnudo	Solo nu	Bare soil
40960	Nieve y glaciares	Neve e glaciares	Snow and glaciers
45056	Cuerpos de agua	Corpos de agua	Water bodies

Urban Atlas Explorer

Search by country or city

☐ Coordinates



Legend

Built-up area

- ☒ Residential
- ☒ Industrial / Commercial structure
- ☒ Other buildings

Transport Units

- ☒ Road and rail network
- ☒ Airports

Open spaces

- ☒ Wooded vegetation
- ☒ Agriculture
- ☒ Recreation
- ☒ Other open spaces

Bare soil

- ☒ Quarry
- ☒ Water bodies

Select all

Clear selection

