

EU Forest Observatory on deforestation and forest degradation - EUFO

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EUFO – “legal basis”

Introduced in COM(2019) 352 final “Stepping up EU Action to Protect and Restore the World’s Forest” as action by the Commission

- *“The Commission will [...] establish an **EU Observatory on deforestation, forest degradation, changes in the world’s forest cover, and associated drivers**. The objective of this is to **facilitate access to information on supply chains** for public entities, consumers and businesses.”*

Noted in Regulation (EU) 2023/1115 on Deforestation-free supply chains (EUDR):

- “The EU Observatory should **facilitate access to information on supply chains** for public entities, consumers and business, **providing easy-to-understand data and information** linking deforestation, forest degradation and changes in the world’s forest cover to Union demand for, and trade in, commodities and products. The EU Observatory should thus **support the implementation of this Regulation by providing scientific evidence** with regard to global deforestation and forest degradation and related trade.”
- The EU Observatory should:
 - Provide for land cover maps, including with time series since the cut-off date
 - Provide for a range of classes allowing landscape composition
 - Participate in the development of an early warning system combining research and monitoring capacity.
 - Cooperate with the competent authorities, relevant international organisations and bodies, research institutes, non-governmental organisations, operators, traders, third countries and other relevant stakeholders
 - Be operational as soon as possible.

EUFO – “legal basis” (cont.)

Noted in EUDR FAQ Question 61: When will the EU Forest Observatory be operational? How is this going to help companies implement the Regulation?

- The Observatory **will build on already existing monitoring tools**, including Copernicus products and other publicly or privately available sources, to **support the implementation of this Regulation by providing scientific evidence**, including land cover maps on the cut-off date, regarding global deforestation and forest degradation and related trade. **The use of these maps will not automatically ensure that the conditions of the Regulation are complied with**, but it will be a tool to help companies to ensure compliance with this Regulation, for example to assess the deforestation risk. Companies will still be obliged to carry out due diligence.
- The EU Forest Observatory will **cover all forests worldwide**, including European forests and will be developed in coherence with other ongoing EU policy developments such as the Forest Monitoring Law and upgrading and enhancement of the Forest Information System for Europe (FISE).
- There is not yet a **precise date for the full operationalization of the Observatory** (indicative date for the platform to be online is December 2023). The availability of the services provided in the future by the Observatory is however not a precondition to comply with the requirements set by this Regulation.

Noted in new EU Forest Strategy for 2030

- “The Commission’s EU Observatory on deforestation, forest degradation, changes in the world’s forest cover, and associated drivers will **develop Earth-Observation-based monitoring tools for forests** that may be operationalized by Copernicus and taken up by FISE as part of the integrated forest monitoring system.”

Implemented by the JRC

EUFO - components

Global forest monitoring

Forest attributes

Forest cover changes and drivers

Tropical moist forest

Global forest cover 2020

Production and Trade of Commodities

Production from FAO

Trade flows

Tools for Forest Monitoring

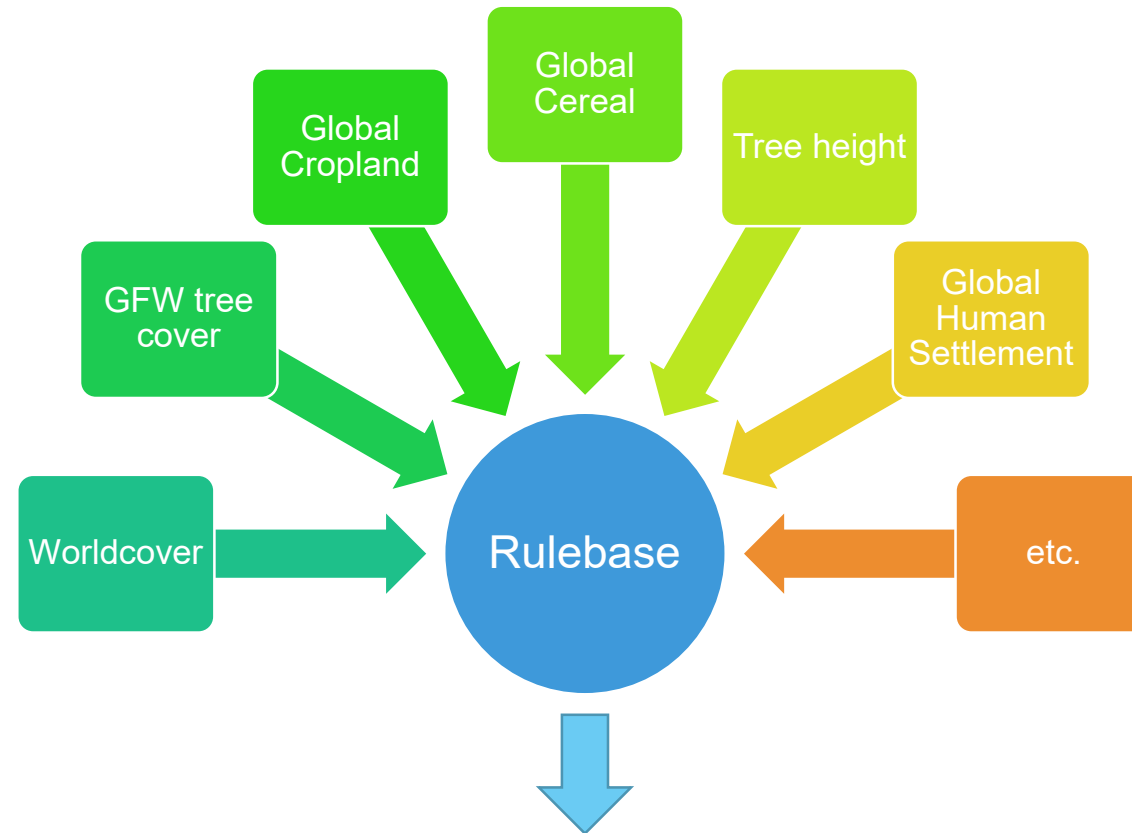
Near real time disturbance analysis

Landscape patterns analysis

EU forest tree species distribution

Impact toolbox

Global forest cover map for 2020



Global forest cover map of standing trees at 10m resolution for year 2020



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Layers

You are now looking at WorldCover V2 2021



WorldCover Version 1



WorldCover Version 2



Different algorithm versions were used to generate the 2020 and 2021 WorldCover maps. Consequently, changes between the maps include both real changes in land cover and changes due to the algorithms used



WorldCover V2 2021
WorldCover - Map



Sentinel 1



Sentinel 2



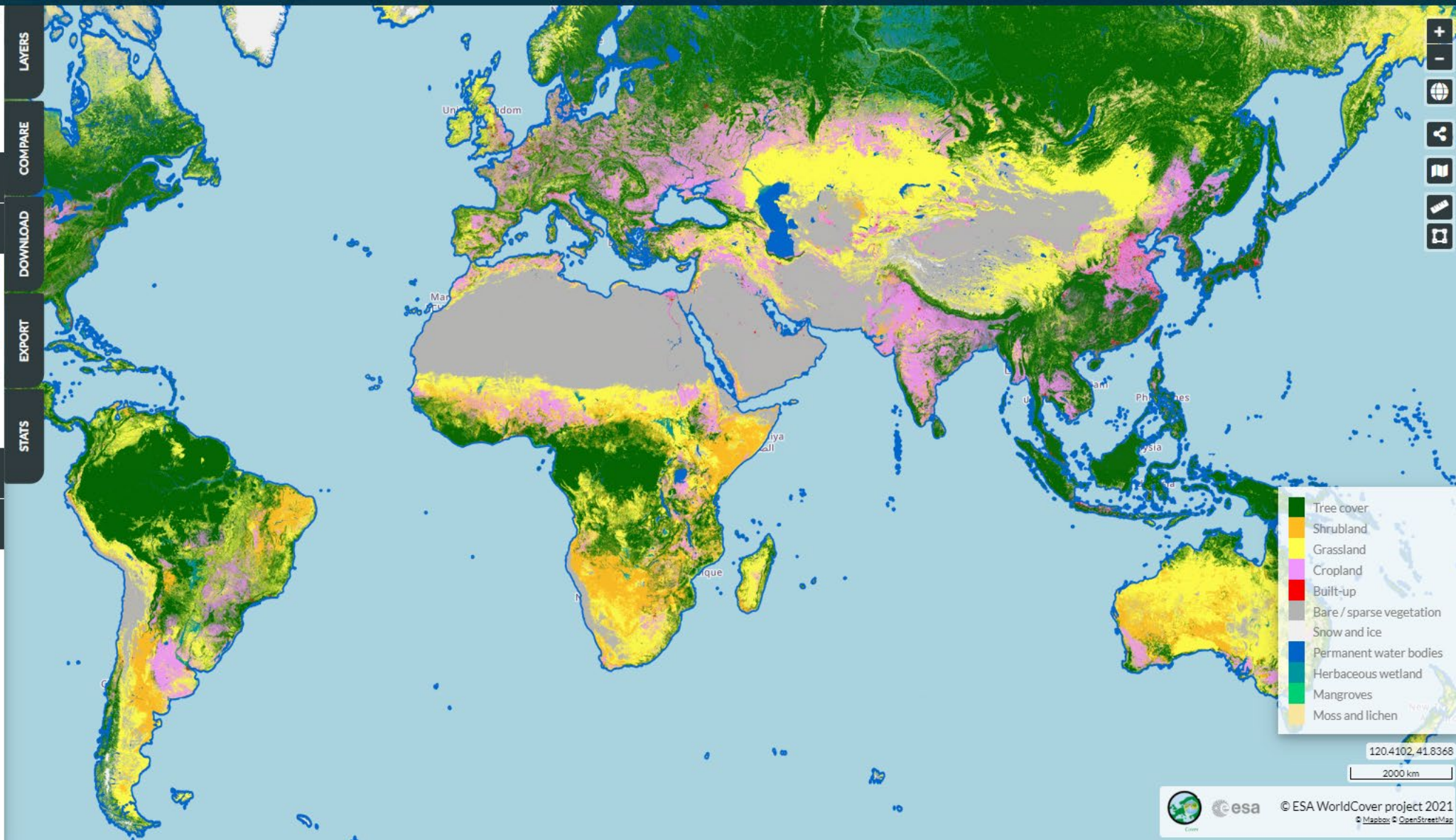
LAYERS

COMPARE

DOWNLOAD

EXPORT

STATS



- Tree cover
- Shrubland
- Grassland
- Cropland
- Built-up
- Bare / sparse vegetation
- Snow and ice
- Permanent water bodies
- Herbaceous wetland
- Mangroves
- Moss and lichen

120.4102, 41.8368

2000 km

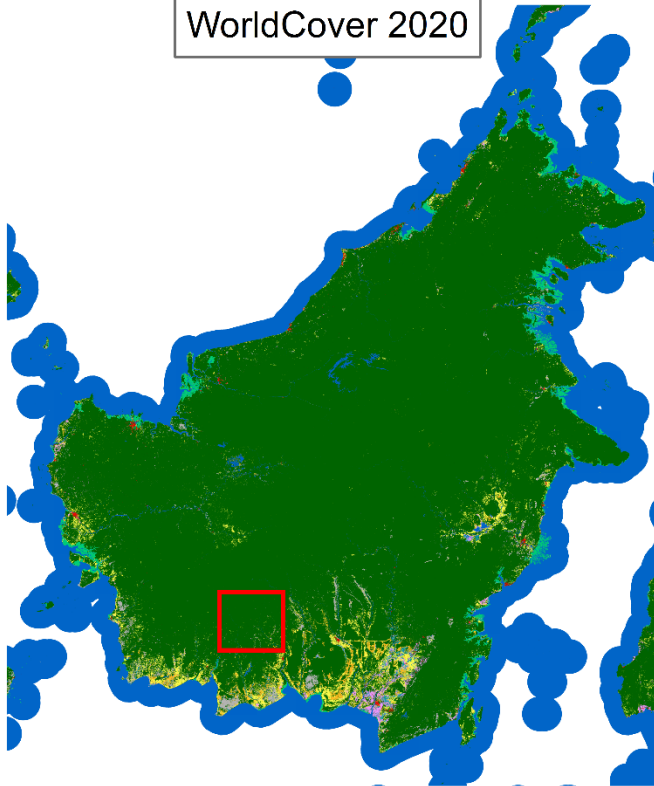


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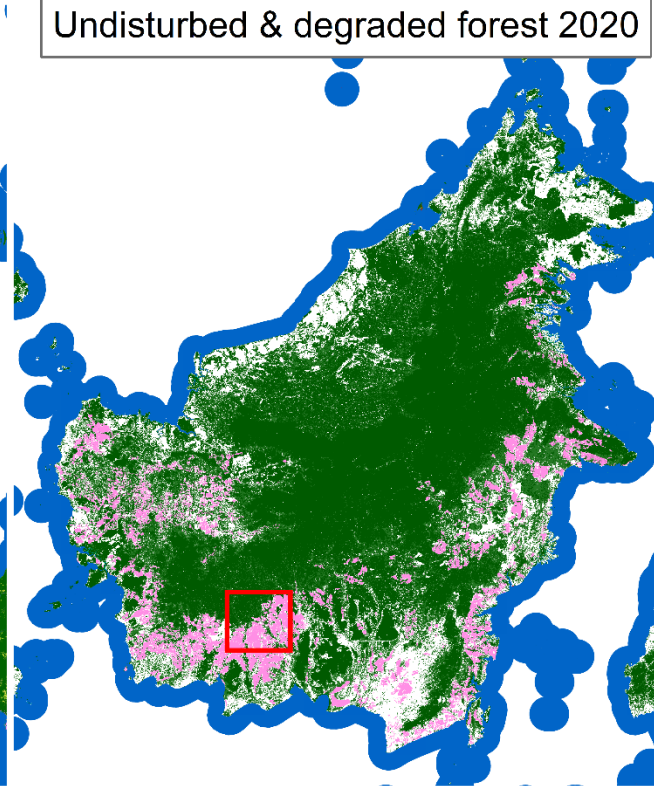
© ESA WorldCover project 2021

Mapbox OpenStreetMap

WorldCover 2020



Undisturbed & degraded forest 2020

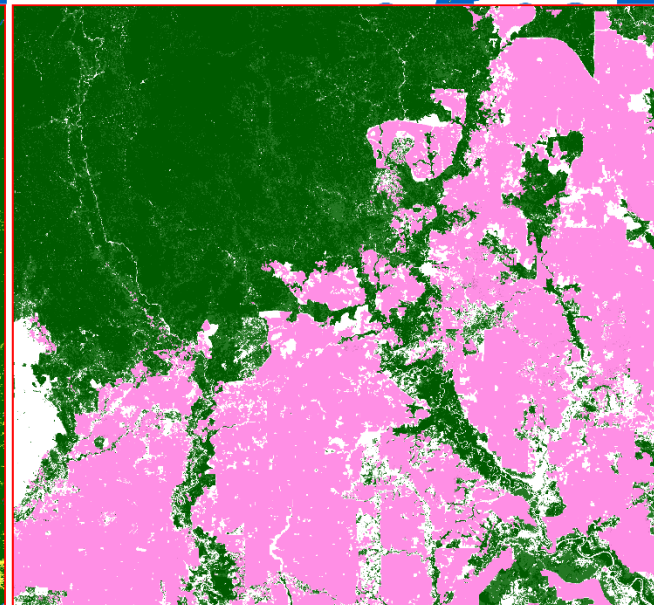
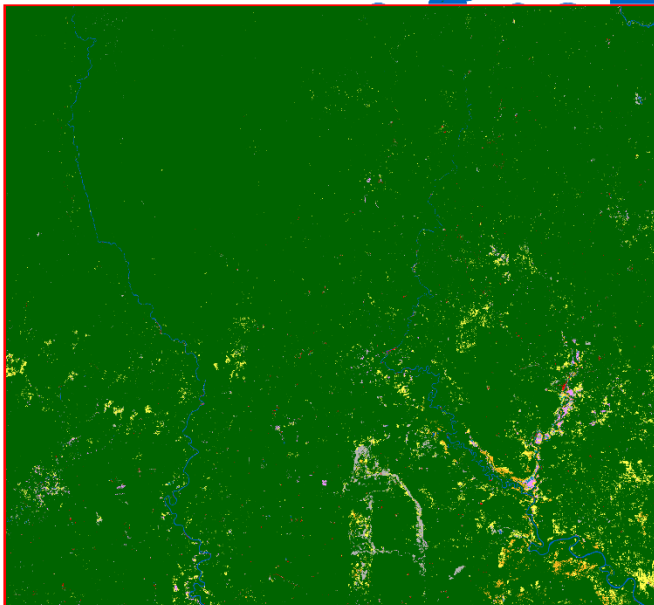


Tree Cover # Forest Cover

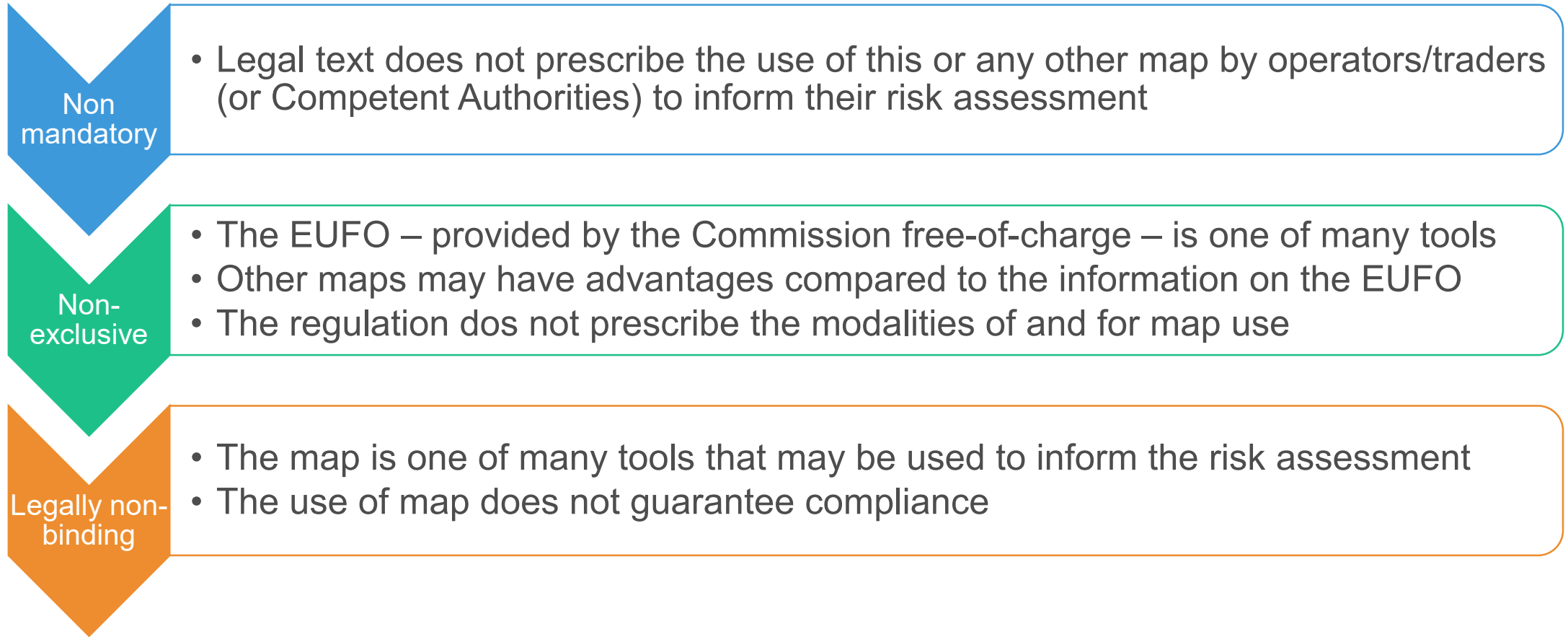
(4) 'forest' means land spanning more than 0,5 hectares with trees higher than 5 metres and a canopy cover of more than 10 %, or trees able to reach those thresholds in situ, excluding land that is predominantly under agricultural or urban land use;

(5) 'agricultural use' means the use of land for the purpose of agriculture, including for agricultural plantations and set-aside agricultural areas, and for rearing livestock;

(6) 'agricultural plantation' means land with tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, olive orchards and agroforestry systems where crops are grown under tree cover; it includes all plantations of relevant commodities other than wood; agricultural plantations are excluded from the definition of 'forest';



Role of the global forest map in context of the EUDR



Geolocation obligations in the EUDR

Recital (49)

... operators should establish and implement due diligence systems. .. The due diligence systems should be designed to provide access to information ... including the geolocation coordinates of relevant plots of land. **Those geolocation coordinates** that rely on timing, positioning and/or Earth observation **could make use of space data and services delivered under the Union's Space programme (EGNOS/Galileo and Copernicus)**.

Article 2 – Definitions

28) 'geolocation' means the geographical location of a plot of land described by means of latitude and longitude coordinates corresponding to at least one latitude and one longitude point and using at least six decimal digits; for plots of land of more than four hectares used for the production of the relevant commodities other than cattle, this shall be provided using polygons with sufficient latitude and longitude points to describe the perimeter of each plot of land;

Article 9 - Information requirements

Operators shall collect information, documents and data which demonstrate that the relevant products comply with Article 3. For this purpose, **the operator shall collect**, organise ... **the following information**, ..., relating to each relevant product:

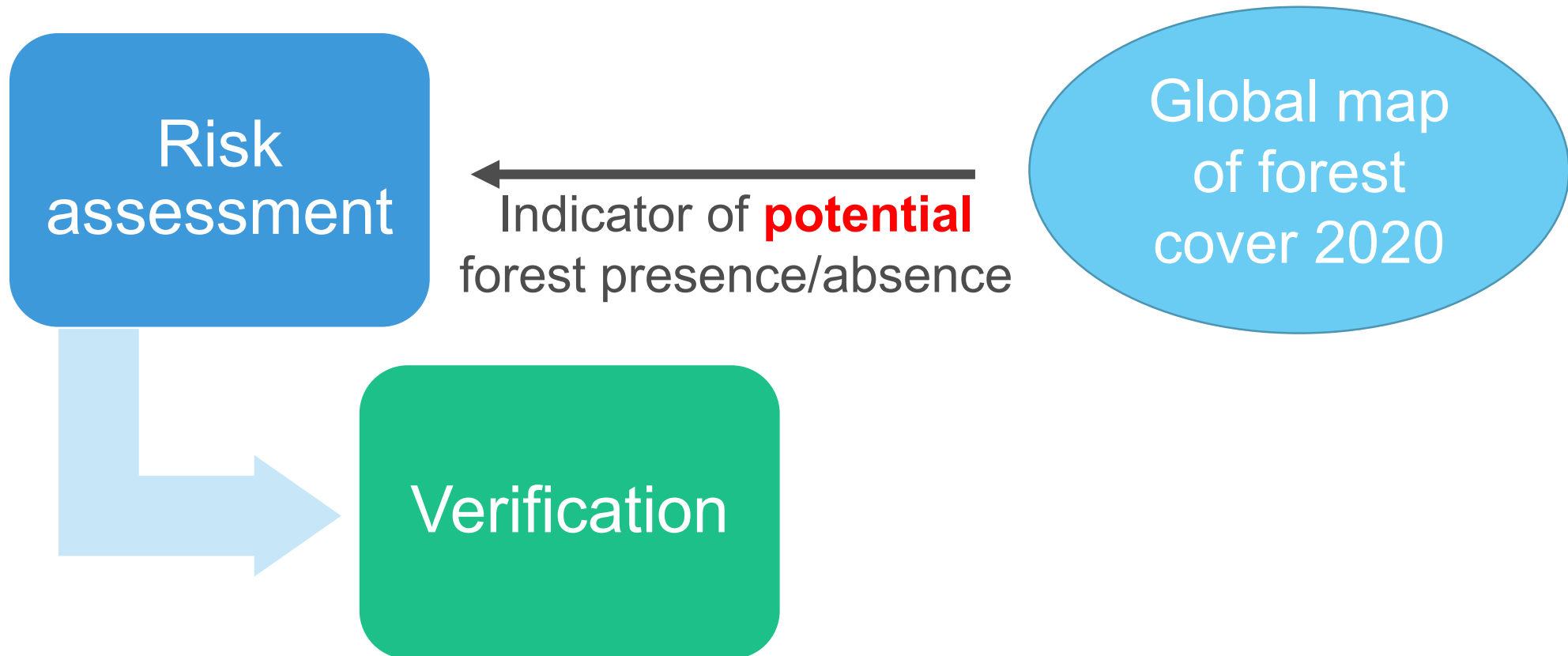
(d) **the geolocation of all plots of land where the relevant commodities that the relevant product contains, or has been made using, were produced**, as well as the date or time range of production; where a relevant product contains or has been made with relevant commodities produced on different plots of land, the geolocation of all different plots of land shall be included;

Article 18 - Checks on operators and non-SME traders

2. The checks on operators and non-SME traders may also include, where appropriate,

(d) **any technical and scientific means adequate to determine whether the relevant products are deforestation-free, including Earth observation data such as from the Copernicus programme and tools or from other publicly or privately available relevant sources;**

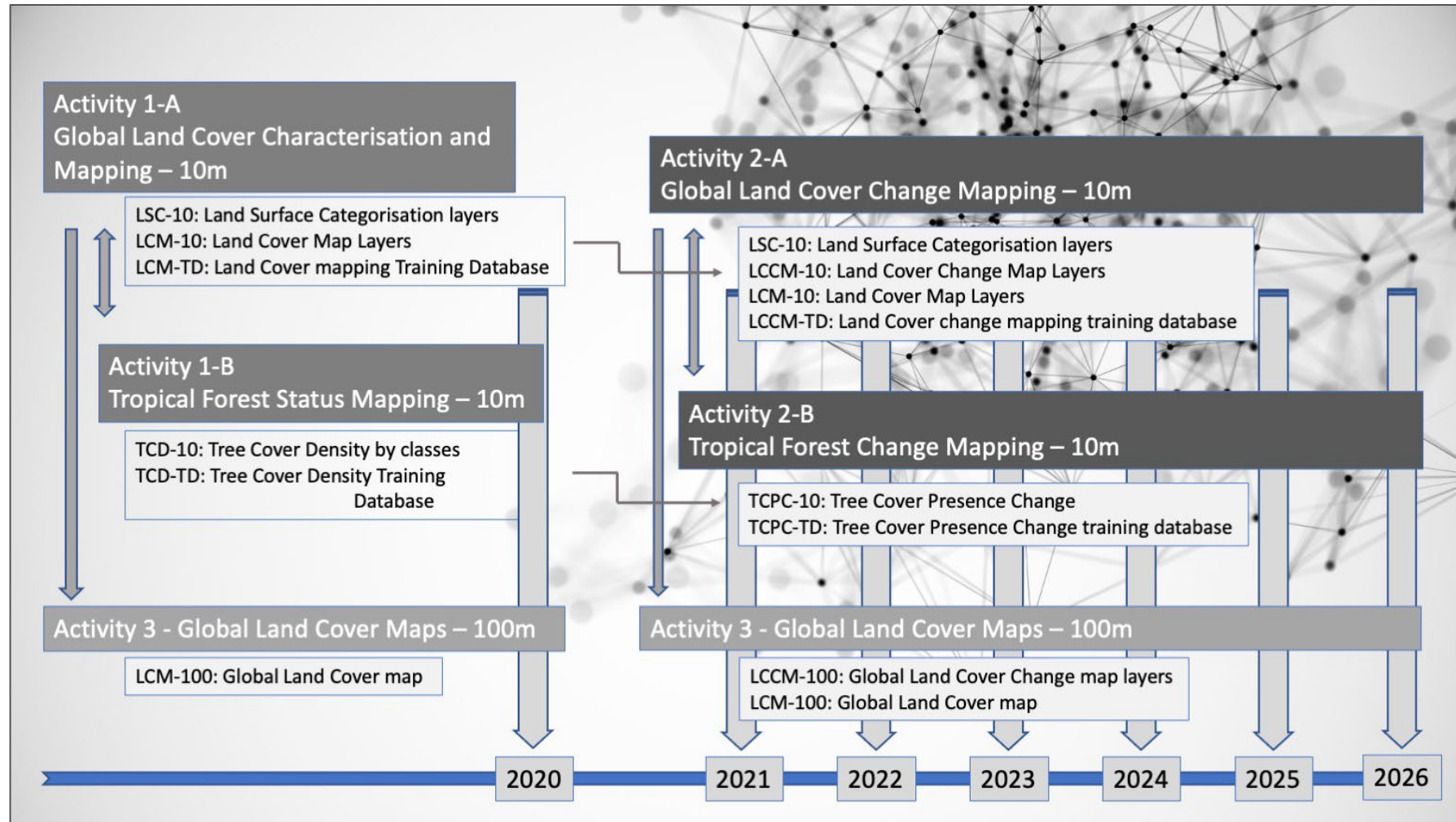
How can the EUFO global forest map be used?



EUFO - portal



Forthcoming Copernicus Global Land service component : Global Land Cover and Tropical Forest Mapping and Monitoring



Forthcoming Copernicus Global Land service component : Global Land Cover and Tropical Forest Mapping and Monitoring (‘LCFM’)



Submitted by:



Together With:



Thank you



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