

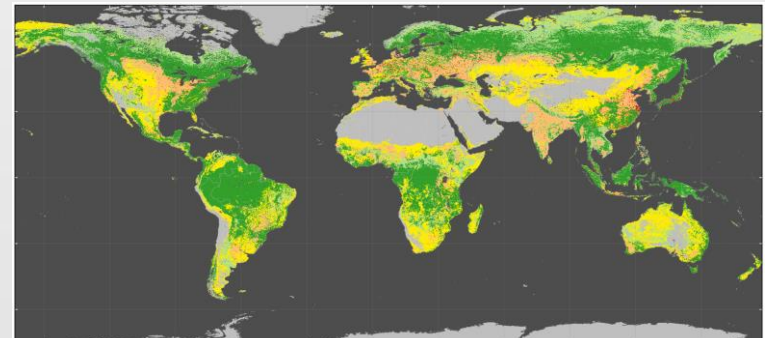


	COP-26 (Nov 2021)	GST1 (2021-23?)	Beyond (2024+)	Notes
Biomass	<p>Fall back is individual existing datasets</p> <p>Synthesised biomass product providing estimates at a jurisdictional level globally</p>	<p>Synthesized, jurisdictional level biomass, emission factors (and prototype biomass change)</p>	<p>Synthesized spatially explicit, annual biomass, emission factors and biomass change</p>	<p>Work plan and schedule provided</p>
Land Cover	<ul style="list-style-type: none"> - Copernicus annual global land cover - C3S/CCI Land Cover - WorldCover, HILDA+ 	<p>Synthesised map products and estimates of land cover and change at regional, and global levels</p>	<p>Statistically robust activity data estimates (6 IPCC classes) at national and global levels</p>	<p>GOFC-GOLD coordination proposed</p>
Forest & OLU-Wetlands	<ul style="list-style-type: none"> - Global Forest Watch tree cover loss and forest fluxes - Global Mangrove Watch cover and change (1996-2016) - Global Mangrove biomass (2000) 	<p>Global tree cover and forest emissions and removals</p> <p>Global mangrove cover and change at 25 m (2019+)</p> <p>Global mangrove biomass at 12 m (2015)</p>	<p>Global annual forest emissions and removals at 30-100 m resolution.</p> <p>Global annual mangrove emissions and removals at 10-25 m resolution.</p>	<p>In coordination with GMW</p>
Agriculture	<p>Demonstration WorldCereal products for at least 5 countries (Argentina, Spain, France, Ukraine and Tanzania)</p>	<p>Initial WorldCereal map and analytical system.</p> <p>On-going seasonal analysis products</p>	<p>Continual system improvement and production of seasonal state and change products</p>	<p>In coordination with GEOGLAM</p>

Indicates off the shelf datasets possible. Indicates additional resources needed.



- ❑ Forest/land cover/wetland and change essential for national GHG inventories estimating activity data and to global AFOLU modeling and assessments
- ❑ Many agencies producing relevant data and products; aim of a joint effort is to provide synthesis of available products and experiences in three main areas:
 - **Support of national GHG inventories for activity data estimation following the IPCC GPG: *showcase experiences of countries using satellite-derived activity data and demonstrate progress in novel products related to land use change, wetlands, forest/land degradation, fire/burnt area***
 - **Improved global land change data for AFOLU and modeling assessments: *Present long-term harmonized global land cover change data and novel, next generation global land cover/change products at higher spatial/temporal/thematic detail***
 - **Enhance consistency/comparability of national GHG inventories and global GHG estimates: *Develop best available global land cover change estimates at regional level for statistical comparison with country-reported data***
- ❑ Activities: expert meetings, coordinate input from CEOS partners, synthesis towards COP26 presentation
- ❑ Coordination builds upon GOFC-GOLD land cover





The following products are proposed as the most suitable choices to present the dedicated CEOS agency support for the GST by UNFCCC COP26 in Nov. 2021:

1. Useful for countries and national reporting:
 - a. **Global Forest Watch tree cover loss** (annual from 2000 onwards, 30 m, NASA)
 - b. **Global Mangrove Watch** data on cover and change (25 m, JAXA)
 - c. **LCLUC Global Mangrove Mapping** data on AGB and Total Biomass (30 m, NASA JPL/GSFC)
 - d. **Copernicus annual global land cover service** (2015-onwards, 100 m, EC)
 - e. **WorldCover** (2020, 10 m, ESA)
2. For (longer-term) global modeling and GHG assessments:
 - a. **LC CCI annual 1992-2015** (now continued under Copernicus climate service C3S until today, 1 km change, ESA/EC)
 - b. **HILDA+ 1960-2019** global, annual land cover change harmonized with FAO statistics (synthesis product for modeling community)
3. For linking national reporting with global estimation (in a statistical sense)
 - a. **Nancy Harris/GFW forest fluxes data 2000-2019** (NASA)
 - b. **Copernicus annual global land cover service and regional land cover change statistics** (using reference data for estimation, EC/ESA)



What else can be done with additional resources:

→ **Support of national GHG inventories for activity data estimation following the IPCC GPG:**

- ◆ Enhanced synthesis/lessons learned for update of EO-data in tropical countries for national forest estimation and reporting
- ◆ Work on specific country demonstrators for uptake of more novel EO-data streams in national reporting: land use change, wetlands, forest/land degradation, fire/burnt area

→ **Improved global land change data for AFOLU and modeling assessments:**

- ◆ Work on uptake of long-term harmonized global land cover change data global modeling approaches
- ◆ Improved global dataset separating managed and unmanaged land

→ **Enhance consistency/comparability of national GHG inventories and global GHG estimates:**

- ◆ Develop best available global land cover change estimates at regional level for statistical comparison with country-reported data (could be done based on Copernicus global land cover service and available reference data)
- ◆ Linking IPCC land class and area changes with emissions and removal estimates (i.e. combining with harmonized biomass derived factors?)