ESA WorldCover
A Global Land Cover Product
Developed and Validated in
Ruben Van De Kerchove (VITO Remote Sensing)
Global land cover data provides valuable information for

Biodiversity  
Food security  
Carbon assessment  
Climate modelling
WorldCover Objectives

Produce, deliver and validate a global 10 meters land cover map of the world as fast as possible after the last data acquisition. Minimum of 10 land cover classes & minimum overall accuracy of 75%. Develop innovative approaches exploiting Sentinel-1 & Sentinel-2. Involve several end-users who’s requirements will be considered as the primary input for all engineering aspects.
WorldCover Users

- 5 key users

- Associate users

- European Directorates General (DG’s)
  - AGRI; CLIMA; DEVCO; EEA; ENV; JRC
WorldCover Legend

- 11 classes based on LCCS
- Annual cropland (no oil palm/olive trees or pastures)
- Built-up= (rail)roads, residential, industrial
Copernicus Space Component
**Sentinel-1/2**

**Sentinel-2 L2A**
- 18544 tiles, all observations for 2020 with a cloudcover <90%
- maximum 1 observation a day
- totalling 2 160 210 products

**Sentinel-1 GRD**
- All IWS observations (except for Europe) for 2020
- VV/VH polarization
- totalling 291 855 GRD products
- Terrain corrected to GAMMA0 (Copernicus DEM)
- geocoded to the S2 grid
- Multi-temporal speckle filter
- Max 1 observation per day
Santa Cruz Province - Bolivia
3x3° tiles

- All land areas observed by Sentinel-2
- Antarctica, up to 82.75° N
- 2651 tiles
- COG
- 115 GB
- Lat Lon (4326)
Download

- Download by ROI country/region: WorldCover viewer
- Download full product
- Instructions available at [esa-worldcover.org/data-access](http://esa-worldcover.org/data-access)
Explore

esa-worldcover.org/data-access
Licensing & Documentation

- Free and open CC BY 4.0

- Reference publication is in progress

- Dataset DOI
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THANK YOU

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