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CORINE Land Cover 2018 (vector/raster 100 m), Europe, 6-yearly

Provides pan-European CORINE Land Cover inventory for 44 thematic classes for the 2018 reference year. The dataset has a Minimum Mapping Unit (MMU) of 25 hectares (ha) for areal phenomena and a Minimum Mapping Width (MMW) of 100 m for linear phenomena and is available as vector and as 100 m raster data.

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CORINE Land Cover 2012 (vector/raster 100 m), Europe, 6-yearly

Provides pan-European CORINE Land Cover inventory for 44 thematic classes for the 2012 reference year. The dataset has a Minimum Mapping Unit (MMU) of 25 hectares (ha) for areal phenomena and a Minimum Mapping Width (MMW) of 100 m for linear phenomena and is available as vector and as 100 m raster data.

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CORINE Land Cover 2006 (vector/raster 100 m), Europe, 6-yearly

Provides pan-European CORINE Land Cover inventory for for 44 thematic classes the 2006 reference year. The dataset has a Minimum Mapping Unit (MMU) of 25 hectares (ha) for areal phenomena and a Minimum Mapping Width (MMW) of 100 m for linear phenomena and is available as vector and as 100 m raster data.

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Download corine land cover for two years of your choice (1990, 2000, 2006, 2012 and 2018 are available). For example, I chose 2006 and 2018. When selecting “Download” it will ask you to Log in. When you log in, go to the bottom of the page and select the first one, which is a raster layer and “Add to cart”.

<input type="checkbox"/> File	Area of interest	Version	Resolution	Type	Format	Size
<input checked="" type="checkbox"/> u2018_clc2018_v2020_20u1_raster100m	Europe	v2020_20u1	100 m	Raster	Geotiff	125 MB
<input type="checkbox"/> u2018_clc2018_v2020_20u1_fgdb	Europe	v2020_20u1	-	Vector	GDB	5 GB
<input type="checkbox"/> u2018_clc2018_v2020_20u1_geoPackage	Europe	v2020_20u1	-	Vector	GPKG	4 GB

[Add to cart](#) [Show cart](#)

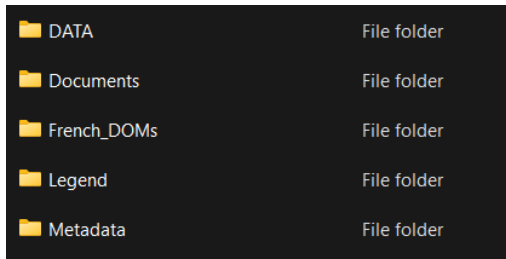
Go to cart, select the layer and “Process Download Request”. Then select “downloading process page”, find the layer and select “Download file”.

My cart

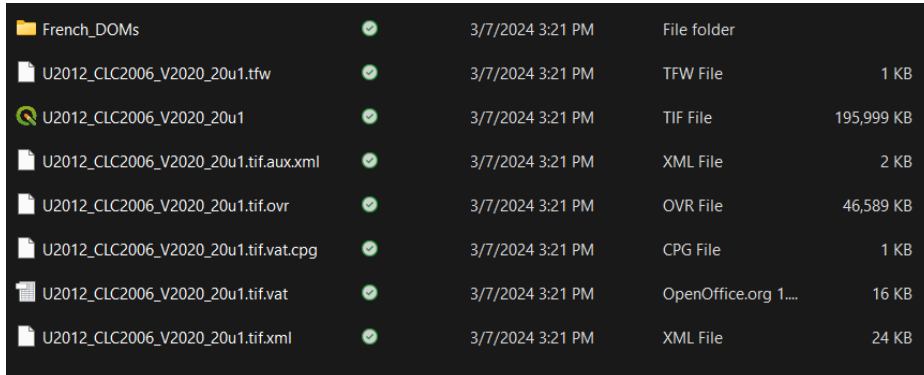
<input checked="" type="checkbox"/> Static info	Configurable	Projection ?	Timeseries
<input checked="" type="checkbox"/> Name: CORINE Land Cover 2018 (vector/raster 100 m), Europe, 6-yearly Source: Pre-packaged Area: Europe	Type: Collection: Format: ? Layer/Band:	Raster - Geotiff -	- -

[Process Download Request](#)

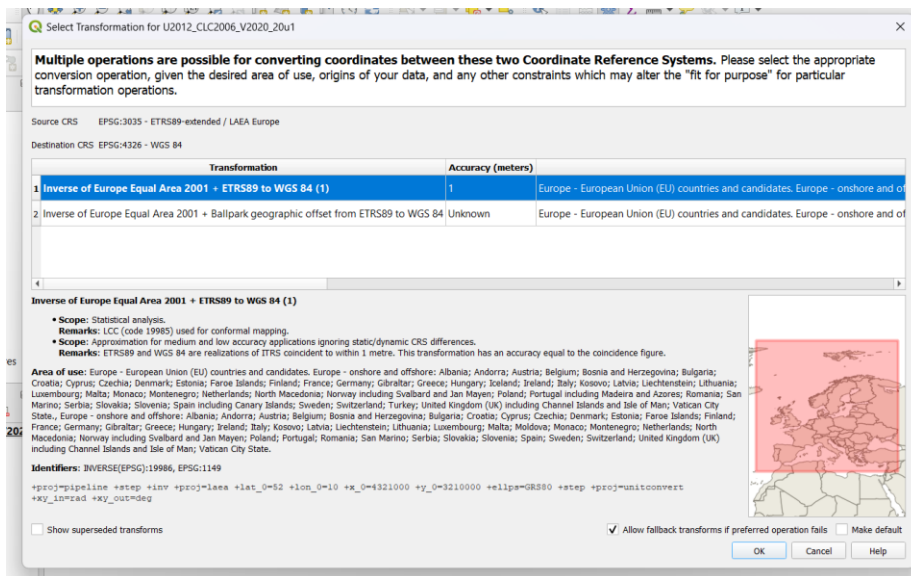
Unzip all the folders (there are many) until you end up in this structure:



Repeat all the steps for the other year of your choice. The land cover raster is in “DATA” folder, the one with TIF format.



Open it with QGIS and this window will pop up:



Select OK. Corine uses LAEA coordinate reference system (European), but it is necessary to transform it into WGS 84, so it will overlay your island data. Right click on the layer->Export->Save as... Enter a file name and select where you want to save it. On CRS (Coordinate Reference System) select EPSG:4326 – WGS 84 and then OK. Repeat it for both years. After saving, I recommend you close the current QGIS session and open the files you just saved in another QGIS session. This will make sure your projection is in QGS 84 (you can check it at the lower right corner). Also, open the islands' shapefile.

Next step is cropping Land Cover only for the islands area.

Raster->Extraction->Clip Raster by Mask Layer. Input layer must be one of your rasters and mask layer, your islands shapefile. Data in the area outside the islands will appear black, so you need to state that all zero values must be “nodata” values. To do that, add “0” (zero) where it says, “Assign a specific nodata value to output bands”. Do the same for both rasters and then save them.

Now, add a legend with all the corine categories. The raster files you downloaded include the legend layer, which assigns every value to the corine categories.

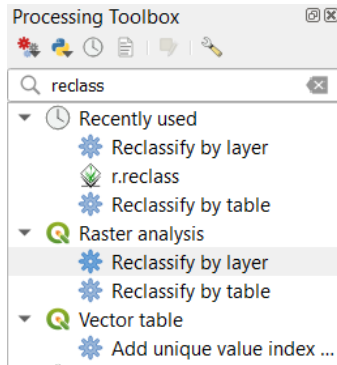
Double click on the layers you made in the previous step->Symbology and in the lower left corner:

Style->Load style. Find the “Legend” folder of downloaded corine data and select “clc_legend_qgis_raster” file and then “OK”. Corine Land Cover includes three levels of data categories which are explained in the table below:

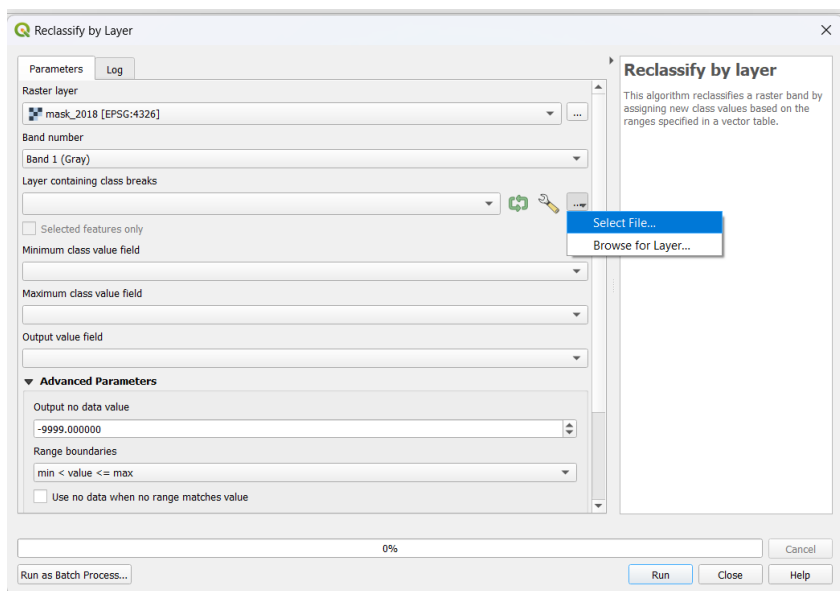
Level 1	Level 2	Level 3
1. Artificial surfaces	1.1 Urban fabric	1.1.1 Continuous urban fabric
		1.1.2 Discontinuous urban fabric
	1.2 Industrial, commercial and transport units	1.2.1 Industrial or commercial units
		1.2.2 Road and rail networks and associated land
		1.2.3 Port areas
		1.2.4 Airports
	1.3 Mine, dump and construction sites	1.3.1 Mineral extraction sites
		1.3.2 Dump sites
		1.3.3 Construction sites
	1.4 Artificial, non-agricultural vegetated areas	1.4.1 Green urban areas
1.4.2 Sport and leisure facilities		
2. Agricultural areas	2.1 Arable land	2.1.1 Non-irrigated arable land
		2.1.2 Permanently irrigated land
		2.1.3 Rice fields
	2.2 Permanent crops	2.2.1 Vineyards
		2.2.2 Fruit trees and berry plantations
		2.2.3 Olive groves
	2.3 Pastures	2.3.1 Pastures
	2.4 Heterogeneous agricultural areas	2.4.1 Annual crops associated with permanent crops
		2.4.2 Complex cultivation patterns
		2.4.3 Land principally occupied by agriculture, with
2.4.4 Agro-forestry areas		
3. Forest and seminatural areas	3.1 Forests	3.1.1 Broad-leaved forest
		3.1.2 Coniferous forest
		3.1.3 Mixed forest
	3.2 Scrub and/or herbaceous vegetation associations	3.2.1 Natural grasslands
		3.2.2 Moors and heathland
		3.2.3 Sclerophyllous vegetation
		3.2.4 Transitional woodland-shrub
	3.3 Open spaces with little or no vegetation	3.3.1 Beaches, dunes, sands
		3.3.2 Bare rocks
		3.3.3 Sparsely vegetated areas
3.3.4 Burnt areas		
3.3.5 Glaciers and perpetual snow		
4. Wet-lands	4.1 Inland wetlands	4.1.1 Inland marshes
		4.1.2 Peat bogs
	4.2 Maritime wetlands	4.2.1 Salt marshes
		4.2.2 Salines
		4.2.3 Intertidal flats
5. Water bodies	5.1 Inland waters	5.1.1 Water courses
		5.1.2 Water bodies
	5.2 Marine waters	5.2.1 Coastal lagoons
		5.2.2 Estuaries
		5.2.3 Sea and ocean

In the map you see Level 3 categories. There is a way converting your data into the first level.

Enable “Processing Toolbox Panel” when you right click on the empty grey area at the upper menu. When it appears, search for “reclassify by layer”.

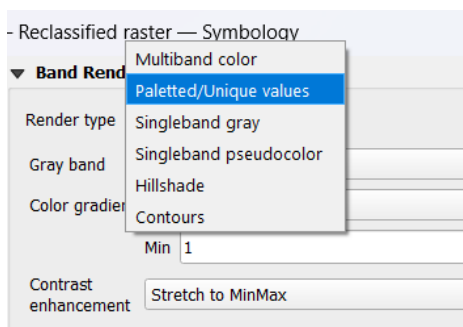


I am giving you an excel file where I have columns of min and max values of Level 3 categories and a column of Level 1 categories.



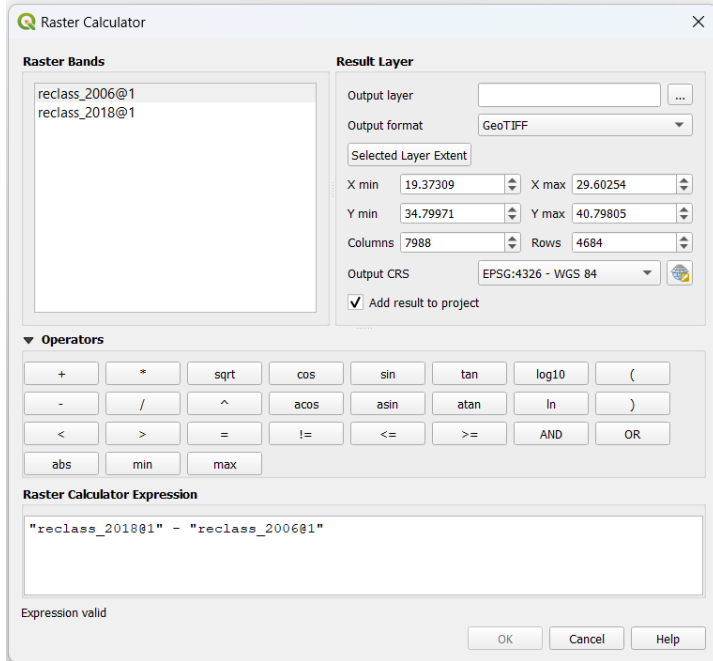
As shown in picture, select the excel file from your computer. For minimum class value field select “min”, for the maximum “max” and for output value select “val”. In the advanced parameters, go to the drop down menu of “Range boundaries”, select the third option “min<=value<=max” and then “Run”. Repeat for the other year and save the layers.

Double click on the layers you made to access Symbology. On the Paletted/Unique values->Classify to see the categories of Level 1. Change the colors according to each category and add on “Label” the names of Level 1 categories.



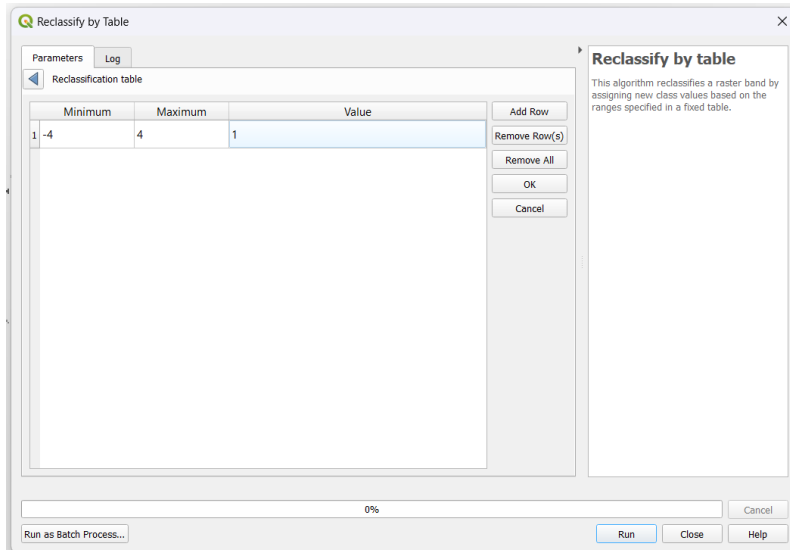
You can now map the land cover Level 1 categories for each year.

Final step, go to Raster->Raster Calculator and write: "reclass_2018@1" - "reclass_2006@1" (replace the names of your rasters accordingly), to see the changes. You must insert Output layer to make the process.



Zero values indicate no change. Double click the change layer->Transparency and add "0" (zero) in "Additional no data value" field.

Assign all changes into one with "reclassify by table" (you will find it from Processing Toolbox). Insert raster with changes. Go to the three dots on the right of "Reclassification table" ->Add row and insert the minimum value of your raster and the maximum value of your raster. Fill "value" column with "1" (one) -> OK.



In “Range boundaries” from the drop down menu select the third option “min <=value<=max” and select the option “Use NoData when no range matches value” ->Run. Now, you only have the changes with 1 value.

Your result will be something like this:

