Quick user guide of the Land Cover State products in GTiff and NetCDF formats

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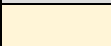
The LC_CCI project delivers global land cover maps at 300m spatial resolution for three epochs centred on the year 2010 (2008-2012), 2005 (2003-2007) and 2000 (1998-2002). The Coordinate Reference System (CRS) used for the global land cover databases is a geographic coordinate system (GCS) based on the World Geodetic System 84 (WGS84) reference ellipsoid. The legend, presented in Table 1, has been defined using the UN-LCCS, which is quite compatible with the Pant Functional Types used in many models.

Table 1: Legend of the global LC maps, based on LCCS

VALUE		LABEL	COLOR
0		No Data	
10		Cropland, rainfed	
	11	Herbaceous cover	
	12	Tree or shrub cover	
20		Cropland, irrigated or post-flooding	
30		Mosaic cropland (>50%) / natural vegetation (tree, shrub, herbaceous cover) (<50%)	
40		Mosaic natural vegetation (tree, shrub, herbaceous cover) (>50%) / cropland (<50%)	
50		Tree cover, broadleaved, evergreen, closed to open (>15%)	
60		Tree cover, broadleaved, deciduous, closed to open (>15%)	
	61	Tree cover, broadleaved, deciduous, closed (>40%)	
	62	Tree cover, broadleaved, deciduous, open (15-40%)	
70		Tree cover, needleleaved, evergreen, closed to open (>15%)	
	71	Tree cover, needleleaved, evergreen, closed (>40%)	
	72	Tree cover, needleleaved, evergreen, open (15-40%)	
80		Tree cover, needleleaved, deciduous, closed to open (>15%)	
	81	Tree cover, needleleaved, deciduous, closed (>40%)	
	82	Tree cover, needleleaved, deciduous, open (15-40%)	
90		Tree cover, mixed leaf type (broadleaved and needleleaved)	
100		Mosaic tree and shrub (>50%) / herbaceous cover (<50%)	
110		Mosaic herbaceous cover (>50%) / tree and shrub (<50%)	
120		Shrubland	
	121	Evergreen shrubland	
	122	Deciduous shrubland	
130		Grassland	
140		Lichens and mosses	
150		Sparse vegetation (tree, shrub, herbaceous cover) (<15%)	
	152	Sparse shrub (<15%)	
	153	Sparse herbaceous cover (<15%)	
160		Tree cover, flooded, fresh or brakish water	

170	Tree cover, flooded, saline water	
180	Shrub or herbaceous cover, flooded, fresh/saline/brakish water	
190	Urban areas	
200	Bare areas	
201	Consolidated bare areas	
202	Unconsolidated bare areas	
210	Water bodies	
220	Permanent snow and ice	

Each land cover map is delivered along with 4 quality flags described in Table 2.

Table 2: Quality flags of the LC maps

NAME IN PRODUCT	DATA TYPE	DESCRIPTION
ESACCI-LC-L4-LCCS-Map-300m-P5Y-YYYY-v2.x_qualityflag1.nc/tif	byte	Indicates if the pixel has been processed (1) or not (0) 0 - pixel not processed 1 - pixel processed
ESACCI-LC-L4-LCCS-Map-300m-P5Y-YYYY-v2.x_qualityflag2.nc/tif	byte	Indicates the pixel status as defined by the pre-processing: 1 - Pixel flagged as "clear land" 2 - Pixel flagged as "clear water" 3 - Pixel flagged as "clear snow and ice" 4 - Pixel flagged as "cloud" 5 - Pixel flagged as "cloud shadow"
ESACCI-LC-L4-LCCS-Map-300m-P5Y-YYYY-v2.x_qualityflag3.nc/tif	short	Indicates the number of valid observations available to derive the classification
ESACCI-LC-L4-LCCS-Map-300m-P5Y-YYYY-v2.x_qualityflag4.nc/tif	byte	Provides a level of confidence in the product (ranging from 0 to 100)