	PFTs from annual ESA CCI maps	LUH2v2h (Hurtt et al., 2011)	HYDE 3.2 (Klein Goldewijk et al., 2016)	Hansen et al. (2013)	Houghton and Nassikas (2017)
Time span	1992–2015	850–2100	10 000 BC-2015	2000–2014	1850–2015
Time step	annual	annual	1000 year for the BCE period, then 100 year till 1700, 10 year till 2000, and from 2000 to 2015 annual	gross loss, annual; gross gain for one period (2000–2012)	annual
Spatial resolution	300 m	0.25°	5 arcmin	30 m	country
Land-use/ land-cover type	forest, shrub, grassland, cropland, bare soil, water and urban	forest, cropland, pasture, rangeland, urban and non-forested	cropland, grazing lands and urban	forest	forest
Gross or net	gross and net	gross and net	net	gross and net	net at country level
Data source	satellite (MERIS, SPOT-VGT, AVHRR, and PROBA-V)	urban, cropland, pasture and rangeland from HYDE 3.2 (Klein Goldewijk et al., 2016); forest and transitions based on model	cropland and grazing land are based on the FAO categories for "Arable land and permanent crops" and "Permanent meadows and pastures" (FAOSTAT, 2015); Spatial distribution based on ESA CCI epoch LC map 2010	satellite (Landsat)	FAO FRA (FAO, 2015), based on country reports
Advantage	full land cover types; relatively long time series; relatively high resolution; full gross transitions	full gross transitions; long time series	long time series; inventory-based	high resolution	inventory-based
Disadvantage	no specific pasture; uncertainty in cross-walking table	no separation of deciduous and evergreen forest; model-based forest areas; model-based temporal changes in historical cropland and grazing land (HYDE 3.2)	no forest; coarse time steps	short time period; no annual forest gain, but only for the whole period of 2000–2012; no other LC types	not grid-cell explicit; no other LC types; inconsistency of data sources and forest definitions between different countries