	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 Nas- sikas (2017)
Time span Time step	1992–2015 annual	850–2100 annual	10 000 BC-2015 1000 year for the BCE period, then 100 year till 1700, 10 year till 2000, and from 2000 to 2015 annual	2000–2014 gross loss, annual; gross gain for one period (2000–2012)	1850–2015 annual
Spatial reso- lution	300 m	0.25°	5 arcmin	30 m	country
Land-use/ land-cover type	forest, shrub, grass- land, cropland, bare soil, water and urban	forest, cropland, pas- ture, rangeland, urban and non-forested	cropland, grazing lands and urban	forest	forest
Gross or net Data source	gross and net satellite (MERIS, SPOT-VGT, AVHRR, and PROBA-V)	gross and net urban, cropland, pasture and rangeland from HYDE 3.2 (Klein Goldewijk et al., 2016); forest and transitions based on model	net cropland and grazing land are based on the FAO categories for "Arable land and permanent crops" and "Permanent meadows and pastures" (FAOSTAT, 2015); Spatial distri- bution based on ESA CCI epoch LC map 2010	gross and net satellite (Landsat)	net at country level 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 pe- riod 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