

		Reference input data	Updated/new input data
Land cover	Source	Olson (1992)	MODIS MCD12C1 (2016)
	Spatial resolution	1° (aggregated from 10')	0.05°
	Temporal resolution	Static	Yearly data (since 2001)
Clay fraction	Source	Scholes and Brown de Colstoun (2011)	GSDE (Shangguan et al., 2014)
	Spatial resolution	1°	0.1° (aggregated from 30'')
	Temporal resolution	Static	Static
	Notes	Clay fraction in top 30 cm soil layer	Clay fraction in top 4.5 cm soil layer
Vegetation	Source	Kergoat et al. (1999), Bonan et al. (2002)	Yuan et al. (2011)
	Spatial resolution	1° (aggregated from 0.5°)	0.1° (aggregated from 30'')
	Temporal resolution	Monthly values (April 1992 to March 1993)	Monthly values (since 2000, aggregated from 8-day values)
	Notes		MODIS based
Topography	Source	–	Danielson and Gesch (2011), GMTED2010 (2010)
	Spatial resolution	–	0.1° (aggregated from 30'')
	Temporal resolution	–	Static
Chemical composition	Source	–	Karydis et al. (2016), Natural Earth (2016)
	Spatial resolution	–	0.1°
	Temporal resolution	–	Static