

README of GLOBBIOMASS dataset of forest biomass, Africa (25 m)

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Document versioning

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This document provides a description of the GlobBiomass Africa biomass data product with a pixel size of 25 m.

The work was supported by the European Space Agency (ESA) within the Data User Element (DUE) project GlobBiomass (ESRIN contract No. 4000113100/14/I-NB).

This dataset is the basis for the official GlobBiomass dataset consisting of global estimates of forest biomass with 1 ha pixels (<https://doi.pangaea.de/10.1594/PANGAEA.894711>). The dataset in this repository represents the original GlobBiomass dataset of AGB for Africa from which the official dataset was obtained after averaging from 25 m to 100 m. Given the lower accuracy of the 25 m pixel-based estimates, it is recommended to use the official GlobBiomass dataset unless detailed spatial resolution is a fundamental asset.

NOTE: For questions, feedback and data-related issues, please contact

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Data products

The data products consist of datasets including estimates of

- above ground biomass (AGB, unit: tons/ha i.e., Mg/ha) for the year 2010

Definition: the mass, expressed as oven-dry weight of the woody parts (stem, bark, branches and twigs) of all living trees excluding stump and roots.

A separate data layer is provided with per-pixel uncertainty expressed as standard error in Mg/ha.

Spatial coverage: Africa, bounding box: longitude -26°E/+56°E latitude: -36°N/+38°N.

Validity of estimates: Estimates have been generated for each point on Earth for which EO data were available. However, areas for which the Landsat canopy cover of 2010 (Hansen et al., 2013) is equal to zero (typically, water, urban, permanent snow and ice and bare soil) have been masked out.

Reference system: Lat-long, WGS-84

Corner coordinates: top left corner of pixel

Pixel spacing: The AGB estimates are provided with a pixel spacing of 0.000222222° (roughly corresponding to 25 m at the Equator).

Timeframe: year 2010 (+/- 1 year)

Data format: GeoTIFF, LZW compression, unsigned 16-bit integer

Structure of dataset

All AGB maps, including estimates of uncertainty defined as the standard deviation of the estimate, are stored in 2 deg x 2 deg tiles

The most recent version is date = **20180531**

The file name refers to the top left corner coordinate and indicates the data product

Example of file name (for tile with top left corner coordinate 0°N and 2°E)

Layers:

AGB:	N00E002_agb.tif
AGB standard error	N00E002_agb_err.tif

Legend

> 0 : AGB estimate

0: masked out with Landsat canopy cover of 2010 or no data