


Functional trait map of southeast Asia (Wood density)

1. IDENTIFICATION INFORMATION

Name	Functional trait map of southeast Asia (Wood density)
Metadata Identifier	GRENE_ei_EcoBiodiv_TraitMap_SE_Asia_Wood_Density20230727092251-en

2. CONTACT

2.1 CONTACT on DATASET

Name	Michio Oguro
Organization	Tohoku University
E-mail	mogu@biology.tohoku.ac.jp

Name	Tohru Nakashizuka
Organization	Tohoku University
E-mail	toron@m.tohoku.ac.jp

2.2 CONTACT on PROJECT

3. DOCUMENT AUTHOR

Name	Michio Oguro
Organization	Tohoku University
E-mail	mogu@biology.tohoku.ac.jp

4. DATASET CREATOR

Name	Michio Oguro
Organization	Tohoku University

Name	Tohru Nakashizuka
Organization	Tohoku University

Name	Hiroko Kurokawa
Organization	Forestry and Forest Products Research Institute

Name	Masahiro Aiba
Organization	Tohoku University

5. DATE OF THIS DOCUMENT

2023-07-27

6. DATE OF DATASET

creation : 2016-03-01

7. DATASET OVERVIEW

7.1 Abstract

This data contains wood density map of southeast Asia. For the details of data provision and term of use, please contact us by e-mail.

7.2 Topic Category(ISO19139)

environment

biota

7.3 Temporal Extent

Begin Date	1998-04-01
End Date	2000-03-31
Temporal Characteristics	The duration of satellite images which used for creation of original vegetation map were acquired

7.4 Geographic Bounding Box

North latitude bound	29.659077285
West longitude bound	87.682992715
Eastbound longitude	155.004410515
South latitude bound	-12.109773175

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
row	42	4678 (deg)
column	67	7540 (deg)

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Ecosystems, Biodiversity	GEOSS
theme	Biosphere > Terrestrial Ecosystems > Forests, Biosphere > Terrestrial Ecosystems > Alpine/Tundra, Biosphere > Terrestrial Ecosystems > Montane Habitats, Biosphere > Terrestrial Ecosystems > Shrubland/Scrub, Biosphere > Ecological Dynamics > Community Dynamics > Biodiversity Functions, Land Surface > Land Use/Land Cover > Land Resources, Biosphere > Terrestrial Ecosystems > Wetlands > Peatlands, Biosphere > Terrestrial Ecosystems > Wetlands > Swamps	GCMD_science
theme	BIOGEOSCIENCES > Ecosystems, structure and dynamics, BIOGEOSCIENCES > Biodiversity	AGU
theme	Biodiversity, Ecosystem Function/Dynamics	GEO_COP
place	Asia > Eastern Asia > Japan	Country
discipline	Wood density	No_Dictionary

7.7.2 Keywords on Project

7.8 Online Resource

7.9 Data Environmental Information

Value of 0 denotes sea/water/no vegetation pixel. Value of $-1.7e+308$ denotes NoData.

7.10 Distribution Information

name	version	specification
TIFF	6.0	GeoTIFF

8. DATA PROCESSING

8.1 Data Processing (1)

8.1.1 General Explanation of the data producer's knowledge about the lineage of a dataset

Two vegetation maps of insular and continental southeast Asia (Stibig et al. 2002; Stibig and Beuchle 2003) were combined to make a vegetation map of whole southeast Asia. To classify secondary vegetation by its primary vegetation type, primary vegetation type of pixels denoting secondary vegetation were estimated by a statistical model in which climate condition (WorldClim, Hijmans et al. 2002) and soil type (Harmonized World Soil Database, FAO/IIASA/ISRIC/ISSCAS/JRC, 2012) are used

as predictor variable. The leaf lignin concentration map was made by assigning values of wood dry density ($\log_{10}(\text{g}/\text{cm}^3)$) for each pixel of this new vegetation map based on their vegetation type.

8.1.2 Data Source

Data Source Citation Name	Description of derived parameters and processing techniques used
Stibig, Beuchle, and Janvier (2002) Forest cover map of insular southeast Asia at 1:5 500 000 derived from SPOT-VEGETATION satellite images. TREES Publication Series D: Thematic outputs n° 3.	
Stibig and Beuchle (2003) Forest cover map of continental southeast Asia at 1:4 000 000 derived from SPOT4-VEGETATION satellite images. TREES Publication Series D: Thematic outputs n° 4.	
Hijmans, R.J., S.E. Cameron, J.L. Parra, P.G. Jones and A. Jarvis, 2005. Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology 25: 1965-1978.	
FAO/IIASA/ISRIC/ISSCAS/JRC, 2012. Harmonized World Soil Database (version 1.2). FAO, Rome, Italy and IIASA, Laxenburg, Austria.	

9. DATA REMARKS

10. DATA POLICY

10.1 Data Policy by the Data Provider

10.2 Data Policy by the Project

11. LICENSE

12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

12.2 Acknowledge the Project

13. REFERENCES