

Visible Sky, indirect and direct insolation and Leaf Area Index (LAI) of the tree layer of seven dominant vegetation types (IMPETUS dataset ID = 289)

General information

Dataset name: Visible Sky, indirect and direct insolation and Leaf Area Index (LAI) of the tree layer of seven dominant vegetation types (IMPETUS dataset ID = 289)

Created on: 2004-02-10

Contact(s)

Dr. Orthmann, Bettina - Institut für Biodiversitätsforschung der Universität Rostock Fachbereich Biowissenschaften
- bettina.orthmann@biologie.uni-rostock.de (PI or Lead scientist)

Period

Date begin (yyyy-mm-jj): 2002-03-01

Date end (yyyy-mm-jj): 2002-10-30

Project(s)

IMPETUS

Data description

Abstract

Visible Sky, indirect and direct insolation are parameters derived from hemispherical photographs, which were taken with the HemiView System (Delta-T Devices, Ltd., UK) in 1.3m above the ground - above the herbaceous layer. Thus all values refer to the tree layer and do not represent total vegetation cover. Visible sky (VS) gives the overall proportion of the sky hemisphere that is visible. The global site factor (GSF) is calculated as the ratio of total radiation below the canopy to total radiation above the canopy. Likewise, indirect site factor (ISF) and direct site factor (DSF) are calculated using indirect and direct radiation below and above the canopy, respectively. HemiView algorithms estimate leaf area index (LAI) as half of the total leaf area per unit ground area, what is a rough approximation. For information on the vegetation types see section "related Datasets" below. Parameter, Attribute list: leaf area index (LAI), visible sky, global site factor, indirect site factor, direct site factor. Dataset created by IMPETUS subproject A3.

No information about Data Lineage; No information about Data Consistency; No information about Data Completeness; Positional Accuracy: Position is measured by a GPS; No information about Quantitative Attribute Accuracy

Observing strategy

collection of relevant abiotic parameters in order to characterize the seven dominant vegetation types and to analyse the relationship between these parameters and the herbaceous layer and the regeneration of tree species. All parameter are strongly related to tree cover and therefore appropriate to serve for meteorological, hydrological or remote sensing analyses and modelling approaches.

Geographic information

Aguima Catchment

Location name:	Aguima Catchment
West bounding coordinate (°):	1.9124
East bounding coordinate (°):	1.9621
North bounding coordinate (°):	9.1342
South bounding coordinate (°):	9.1061

Doguè

Location name:	Doguè
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IMPETUS_289

Location name:	IMPETUS_289
West bounding coordinate (°):	1.9012
East bounding coordinate (°):	1.9175
North bounding coordinate (°):	9.1432
South bounding coordinate (°):	9.123

Measured parameters

Vegetation classification

Parameter name:	vegetation classification
Parameter keyword:	Biosphere > Vegetation

Vegetation

Parameter name:	vegetation
Parameter keyword:	Biosphere > Vegetation

Leaf area index

Parameter name:	leaf area index
Parameter keyword:	Biosphere > Vegetation > Vegetation Index

Data use information

Use constraints:	Please inform the Point of Contact if you use the data for publication
Data policy:	IMPETUS data policy
Database:	IMPETUS
Original data format(s):	Excel