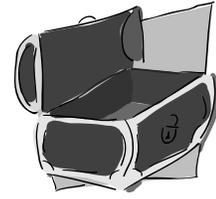


Glossary



Accuracy

How close a measurement is to a standard value of that measurement

Assessment

Evaluation of the value of an object

Biogeochemical

Refers to the chemical interactions between the living (“bio”) and physical (“geo”) components of the Earth system, as in biogeochemical cycles of carbon, nitrogen, etc.

Biomass

The dry weight of vegetation above a unit area of ground, often reported as grams (dry weight) per square meter

Biome

A major ecological community type (as grassland or desert)

Biometry

The process of making biological measurements

Biosphere

The living component of the Earth system, along with the gaseous (atmosphere), liquid (hydrosphere), and solid (geosphere) components

Canopy Cover

The amount of canopy foliage above a given portion of ground is the canopy cover. This will determine the amount of sunlight that reaches that portion of ground.

Catastrophic

Used to describe a sudden, violent event

Characteristics

A distinguishing feature

Classification

Sorting a group of items into well-defined and distinct subsets according to specific criteria

Clinometer

A clinometer is an instrument for measuring the angle of a change in height or elevation.

Criteria

Decision rules that are used to determine into which subset an item is placed during a classification

Deciduous

Refers to trees or shrubs that lose their leaves every year

Default

A preset value that a computer uses or an action that it takes unless it is told otherwise

Densimeter

A device for determining the percentage of canopy closure in a wooded environment

Dichotomous

This is a branching decision tree (decoder) characterized by successive forking into two approximately equal and contradictory divisions, which ultimately leads to only one correct outcome.

Difference/Error Matrix

A graphic method of comparing two data sets for validation

Dominant

A plant or animal that, due to its large numbers or size, influences the conditions of an area and determines what other plants or animals can live there

Ecosystem

System formed by the interactions of a community of living things with its environment

Equatorial

Near the equator

Evapotranspiration

The return of water to the atmosphere by evaporation (from solar energy) and transpiration (plant activity.)

Glossary

List of terms in a special subject with their definitions



Genus (pl. Genera)

This is an inclusive category whose species have more characteristics in common with each other than with species of other genera. Genera, therefore, are collections of closely related species.

Geosphere

The solid component of the Earth system; e.g. rocks, soil, etc.

Gradient

The rate of change in a measured quantity over space or time

Graminoid

Grass-like vegetation

Ground Cover

The amount of ground-level vegetation covering a given area. (For the GLOBE program, “ground level” is defined as “below the observer’s knees.” Ground cover is expressed as a percentage. E.g. 30% ground cover means that, viewed from above, 30% of the ground surface is obscured by ground-level vegetation.

Herbaceous

A plant or plant part that is not woody

Hierarchical

Having the characteristics of a system of objects ranked one above the other

Homogeneous

Composed of parts that are all the same kind, in this case, the same land cover type

Hydrosphere

The liquid component of the Earth system; e.g. oceans, lakes, rivers, etc.

Iterative

To do something over again or repeatedly

Magnetic North

The direction the compass needle points, rather than true north which is a geographic place

Metadata

Any additional information that cannot be expressed in the measurement data such as historical information, weather conditions, weather effects, and other observations

Methodology

A set of procedures or a planned way of doing this investigation

Multitemporal

Viewed from more than one point in time

NOAA

The National Oceanic and Atmospheric Administration.

Perennating Organs

Parts of plants that live over from one season to another (tubers, rhizomes)

Perturbations

A disturbance in the normal functioning of a system

Phenology

The study of changes over time in an environmental setting

Photointerpretation

The production of a land cover map or identification of specific features by visual inspection of an aerial photo or satellite image

Photosynthetic Potential

The maximum amount of biomass that can be produced in an area

Physiological

Characteristic of, or appropriate to, an organism’s healthy or normal functioning

Pixels

The smallest element of an image

Precise

Exact in measuring

Primary Productivity

The rate at which organic material is produced by photosynthesis at a given location. Often represented as grams (dry weight) of Carbon per m² per year.

Protocol

A plan for carrying out a scientific study

Sediment

Matter that settles to the bottom eventually but can be carried along in a water body or the air until then

Senescence

The plant growth phase from full maturity to death that is characterized by a loss in dry weight



Spatial

Having to do with space

Species

This is a group of individual plants/animals that is fundamentally alike.

TM

Thematic Mapper. Carried aboard the Landsat 4 and 5 satellites, this instrument is designed to study surface features in 7 bands covering the visible through thermal infrared regions with a pixel resolution of 30 m in 6 bands and 120 m in the thermal infrared band.

Topographic Map

Map showing detailed features and contour lines of an area

Urban

Areas developed for residential (ex. houses, apartments), commercial (ex. stores), industrial (ex. factories) or transportation (ex. roads) uses

Validation Data

Data necessary to assess the accuracy of a land cover map produced by manual or electronic means.

Variation

A different form of something