

Glossary of Geographical Terms

Ablation : Loss of ice in the body of a glacier through melting etc.

Abrasion : Erosion of rocks by water, wind or ice (glacier).

Absolute humidity : Amount of water vapour present in a unit volume of air; usually expressed as grammes per cubic metre.

Advection : Transfer of heat through horizontal movement of air.

Aeolian : Relating to or caused by wind. Example, aeolian landforms.

Alluvium : The fine debris transported and deposited by a river. Landforms formed by deposition of such material are called alluvial landforms, for example, alluvial plains. Soils formed through river deposition are called alluvial soils.

Altimeter : A type of aneroid barometer for measuring height, used mainly in aeroplanes.

Anemometer : An instrument used for measuring wind velocity.

Anticline : The arch or crest of a fold in the rocks. Its opposite is a syndine, the bottom of a fold.

Antipodes : Two points diametrically opposite on the surface of earth.

Aphelion : The position of the earth in its orbit when it is at its greatest distance from the sun. At its nearest distance from the sun the earth is said to be in perihelion.

Apogee : The position of the moon or any other heavenly body, when it is at its greatest distance from the earth. At its shortest distance from the earth the moon is said to be in perigee.

Asteroids or planetoids : Minor planets revolving around the sun between the orbits of Mars and Jupiter.

Atmosphere : The envelope of air surrounding the earth. The most abundant among its constituents are nitrogen and oxygen.

Atoll : A ring or horseshoe-shaped coral reef.

Attrition : Mutual wearing down of rock particles during transportation by wind, water or ice.

Aurora Australis and Aurora Borealis : The light phenomena seen in the sky at night in the higher latitudes of the southern and northern hemisphere respectively. Aurora comprises an electrical discharge and is usually accompanied by a magnetic storm.

Avalanche : A large mass of snow and ice at high altitude, sliding downslope on a mountain. Usually a large amount of rock material is also involved in an avalanche.

Azonal soil : Soil which has not been subjected sufficiently to soil forming processes and thus has changed little from the parent material. Such soils do not have a mature profile.

Barometer : Instrument used for measuring pressure. A self-recording barometer giving a continuous record of pressure conditions in the form of a line graph is called a barograph and the graph thus provided is called a barogram.

Barysphere, Bathysphere or Centrosphere : Inner portion of the earth below the lithosphere or outer crust.

Base level : The lowest level to which a river can deepen its valley. It is the level of the surface of the water body, a lake or sea, in which the stream finally falls.

Beach : A gently sloping strip of land along the coast. This lies between the high and low tide levels and is formed by depositional action of waves.

Bearing : The horizontal angle between the direction of an object and the meridian through the observer, measured in degrees (zero to 360) clockwise from the north.

Beaufort scale : A scale identifying wind strength. The lowest point on the scale is zero which refers to calm conditions and the highest is 12 referring to a hurricane.

Biogeography : Study of geographical distribution of plants and animals.

Biosphere : That portion of the earth and its environment occupied by various forms of life.

Blizzard : A storm of powdery snow in the polar regions.

Bog : An area of soft, wet, spongy ground consisting mainly of decayed or decaying moss and other vegetable matter.

Bora : A cold and often dry wind experienced along the eastern coast of the Adriatic Sea.

Bore : A high tidal wave causing backflow of water in river.

Caatinga : Thom-forest of Brazil.

Canyon : A narrow, deep, steep-sided river valley cut in the soft rocks.

Cape : A headland, a more or less pointed piece of land jutting out into the sea.

Cardinal points : The four main directions of the compass.

Cartography : The art of drawing maps and charts.

Celestial equator : The imaginary circle formed by the intersection of a plane through the centre of the earth perpendicular to its axis and the celestial sphere.

Celestial sphere : A sphere of infinite radius having its centre at some point in the solar system, for example, at the centre of the earth, on to which all members of the solar system may be projected.

Chaparral : The low, dense scrub, characteristic of Mediterranean type of climatic regions.

Chronometer : An accurate time-keeping instrument.

Climate : The average weather conditions of region throughout the seasons.

Climatology : The science studying climates and their influence on other components of the environment.

Clinometer : An instrument used for determining the difference in elevation between two points.

Cloud : A mass of tiny water droplets or ice crystals formed by condensation of water vapour in the atmosphere.

Condensation : The process by which a substance changes from vapour to liquid.

Condensation nuclei : Microscopic particles having an affinity for water. These serve as the nuclei for the formation of raindrops. The presence of these particles in the atmosphere is necessary for condensation to occur.

Coniferous : Cone-bearing plants with needle-shaped leaves.

Connate water : Water entrapped in the interstices of rocks during their formation; also called fossil water.

Convection : The uplift of air as a result of surface heating or instability due to other reasons. Generally this term refers to vertical movement of gases in contrast to advection.

Convection currents : Due to instability in air some vertical motions in the atmosphere are set up which are more or less in the form of currents.

Coral : A kind of rock formed of polyps forming reefs in the oceans.

Colour of the sky : Seems blue because of the selective scattering of light in the atmosphere by gases and dust particles.

Deciduous forest : Consists of trees that shed their leaves in the dry season.

Downs : Grasslands of Australia.

Denudation : Wearing away of rocks by various agencies like wind, water and ice (glaciers).

Eclipse : Partial or full obscuring of the moon when the earth comes between the sun and the moon is called lunar eclipse. It occurs usually on the day of the full moon.

A partial or complete obscuring of the sun because of the presence of the moon between the sun and the earth is called the solar eclipse and it occurs on the day of the new moon, that is, on the day the moon is not visible.

Ecliptic : The apparent track of the sun throughout the year as a result of the motion of the earth around it. The plane of the ecliptic is the plane passing through this path and is coincident with the plane of the earth's orbit.

Ecology : Studies of organisms in relation to their environment.

Edaphic : Relating to soil.

Eluviation : Removal of material in solution or suspension from the upper horizons of the soils to the lower.

Epicentre : Point on the surface of the earth vertically above the seismic focus or deep focus, that is, the point where an earthquake originates.

Estuary : Mouth of a river where tidal effects are evident and where fresh water and sea water mix. The term also refers to river valleys which have been flooded by sea due to coastal subsidence.

Eustatic movement : A large scale rise or fall of sea level.

Evapotranspiration : The term signifies total loss of water (moisture) from soil in the form of water vapour, including that lost by evaporation from open water bodies, the surface of rocks and also that lost by transpiration from growing plants.

Fathometer : Instrument used for measuring the depth of the ocean.

Fauna : The animal life of a region or a geological period.

Fiord : A glacial valley or part there of now under the sea.

Flood-Plain : A plain bordering a river and formed by river deposition.

Flora : The plant life of a region or geological period.

Fluvial : Belonging or relating to a river.

Fog : A dense mass of small water drops or smoke or dust particles in the lower layers of the atmosphere.

Geosyncline : A large depression or trough in the earth's crust, that is a syncline on a large scale.

Geyser : A thermal spring which throws up a jet of hot water and steam intermittently.

Glacier : A moving mass of ice.

Gorge : A narrow and deep valley of a river.

Great circle : A circle on the earth's surface whose plane passes through its centre and thus bisects it into two hemispheres.

Great circle route : A route between any two points on the earth's surface which follows the great circle between them.

Gulf : A large, deep bay.

Habitat : Natural environment of a plant or animal.

Halophyte : A plant which grows naturally in saline environment.

Hemisphere : One half of the earth's surface, formed when a plane passing through its centre bisects it.

Hinterland : Area from which a port gets most of its exports.

Horse latitudes : Subtropical belt of high pressure over the oceans.

Humidity : State of the atmosphere with respect to the water vapour it contains.

Humus : Decomposed and partly decomposed organic matter in the soil.

Hydrology : The study of the water content on the earth.

Hyetograph : A self-recording rain-gauge.

Hygrometer : Instrument used for measuring humidity in the atmosphere.

Hygrophyte : Plant growing in wetlands.

Iceberg : A mass of land ice which has been broken off or carved from the end of a glacier and is afloat in the sea.

Illuviation : Deposition, in the lower soil horizon, of material removed by eluviation from the upper horizons of the soil.

Insolation : Energy radiated from the sun received by the earth.

International date line : The line approximating to 180° East or West longitude, where the date changes by one day as it is crossed. The date is one day earlier east of this line.

Intertropical convergence zone or inter-tropical front : Zone of low atmospheric pressure near the equator where the northeast and southeast trade winds converge.

Intrazonal soil : Soil which has been influenced in its development, less by climate and vegetation than by factors like parent material and drainage.

Isopleth : Line drawn on the map along which the value of a particular phenomenon or product is uniform.

Isonomal : Isopleth of anomaly.

Isorithm : Any line representing continuous value on maps.

Isobars : Lines of equal pressure.

Isobaths : Lines of equal depth in sea.

Isobronts : Lines joining places experienceing a thunderstorm at the same time.

Isochrones : Lines joining places located at equal travel time from a common centre.

Isoagonals : Lines joining places with same magnetic declination.

Isohalines : Isopleths of salinity.

Isohels : Isopleths of equal amount of sunshine.

Isohyet : Isopleth of rainfall.

Isohypse or contour lines : Isopleths of elevation above sea level.

Isonif : Isopleth of amount of snow.

Isoephene : Isopleth. of seasonal phenomena, for example, flowering dates of plants.

Isopotential : Surface to which artesian water can rise.

Isorymes : Lines of equal frost.

Isoseismals : Lines of equal seismic activity.

Isotherms : Isopleths of temperature.

Isthmus : A narrow strip of land joining two land masses, viz. - the isthmus of Panama joining North and South America.

Karst region or Karstland : Limestone region in which most of the drainage is underground, the surface being dry and barren.

Katabatic wind : Local wind caused by the flow of air down mountain slopes and valleys.

Lagoon : Part of sea partially cut off from it by deposits of sand or coral reefs, viz.

Chilika Lake in Odisha.

Lapse rate : The rate of change of temperature in atmosphere with height; it is said to be positive when temperature decreases with height, as it normally does, and negative when temperature increases with height, as in temperature inversion.

Latitude : The angular distance of a point on the earth's surface north or south of the equator, as measured from the centre of the earth. Latitudinal lines are also called parallels of latitude.

Leaching : The process by which soluble substances are washed out of the upper layers of the soils into lower layers by percolating rainwater.

Leeward : The side or direction sheltered from the wind.

Light year : Distance travelled by light in one year, the speed being 1,86,000 miles per second. The unit is used for measuring the distance of stars from the earth.

Lithosphere : The solid crust of the earth.

Loess : A deposit of fine silt or dust generally held to have been transported to its present situation by wind.

Longitude : The angular distance measured along the equator, between the meridian through a given point and a standard or prime meridian.

Lunar month : The interval of time in which the moon makes one complete revolution around the earth-about 29.5 days.

Magnetic storms : Large, irregular variations or disturbances in the earth's magnetic field.

Meridian : A line of longitude, or half of one of the great circles that pass through the poles and cut the equator at right angles.

Mesophyte : A plant that requires a moderate amount of moisture. Most common trees and shrubs are mesophytes.

Mestizo : Offspring of a European and an American Indian-the term is used mostly in South America.

Meteors : Small pieces in the atmosphere appearing as shooting stars.

Midnight sun : A phenomenon observed in high latitudes around midsummer when the sun does not sink below the horizon throughout the 24 hours of a day and night cycle and may thus be visible even at midnight.

Monsoon : A type of wind system in which there is complete reversal or almost so, of prevailing wind direction from season to season.

Moraine : The debris or fragments of rock material brought down with the movement of glacier.

Mulatto : The offspring of a white and a black person, commonly used in America.

Nivation : Erosion due to action of snow.

Nomadism : The practice, among certain primitive people, of frequently changing their habitation. These people keep moving residence in search of food and fresh pasture for animals. People following this mode of life are called nomads.

Oasis : Area in the desert where water is available.

Ocean Current : Movement of the surface water of the ocean.

Opisometer : Instrument used for measuring distances on a map.

Orbit : Path of a heavenly body through space in relation to some selected point.

Orographic rain : Rain caused by mountains standing in the path of moisture-laden winds.

Outwash Plain : Alluvial plain formed by streams originating from the melting ice of a glacier.

Pampas : The mid-latitude grasslands of South America.

Pastoralism : Practice of breeding and rearing cattle. Some pastoral communities may be nomadic in their habits.

Pedology : The science of the study of soils.

Pelagic : Belonging to the open sea.

Peninsula : A stretch of land almost surrounded by water.

Perigee : The point in the orbit of moon or a planet or in the apparent orbit of the sun, nearest to the earth.

Perihelion : The position of the earth in its orbit or any other heavenly body, nearest to the sun.

Permafrost : Ground that is permanently frozen.

Petrology : The study of the composition, structure and history of rocks forming the crust of the earth.

Phenology : Science dealing with the effects of seasonal changes upon animal and plant life.

Phytogeography : The study of the distribution of plants, on the earth, in relation to environment.

Piedmont : Belonging to or related to the foot of a mountain.

Planetary winds : The general distribution of winds throughout the lower atmosphere which is determined by differences in insolation and would be set up similarly on any rotating planet possessing an atmosphere.

Planimeter : Instrument for measuring irregular plane areas on maps.

Plateau : Extensive level or near level area of elevated land.

Prairies : Mid-latitude grasslands of North America.

Precipitation : Falling water (in liquid or solid form, as the case may be) from the atmosphere to the earth.

Pressure gradient : Rate at which pressure declines horizontally on the earth's surface.

Psychrometer : Instrument used for measuring humidity of the atmosphere.

Radiation : Process by which a body emits radiant energy, viz.- in the form of heat.

Rain shadow : Area having relatively lower average rainfall because it is sheltered from the prevailing rain-bearing winds by a range of mountains or hills.

Reef : Ridge of rocks lying near the surface of the sea, which may be visible at low tide, but usually covered by water.

Reg : A stony desert. A sandy desert is called an erg.

Rhumb line of loxodrome : Line on the earth's surface which cuts all meridians at the same angle.

Saprophyte : A plant which lives on decaying organic matter. Most such plants are fungi.

Satellite : A relatively small body revolving around a planet.

Savanna : An area of tropical grassland with scattered trees.

Seismic focus or deep focus : Point below the earth's surface where an earthquake originates.

Seismograph : Instrument used for measuring and recording earthquake shocks.

Seismology : Science of the study of earthquakes.

Selvas : Dense equatorial forests of the Amazon basin in South America.

Sericulture : The culture of silkworms for production of raw silk.

Sidereal day : The period of time during which a star describes a complete circle in its apparent journey around the pole star, representing the period of one rotation of the earth on its axis and equal to 23 hours 56 minutes 4 seconds. It is thus about 4 minutes shorter than the mean solar day.

Sleet : Precipitation consisting of a mixture of snow and rain.

Smog : Fog heavily laden with smoke.

Snow-line : Lower limit of perpetual snow. The snow above this line does not melt completely even in summer.

Soil erosion : The wearing away and loss of soil mainly by the action of wind and water.

Solar constant : Intensity of the sun's radiation in space at the mean distance of the earth from the sun.

Solar day : The average period taken by the earth in making one rotation on its axis in relation to the sun-24 hours.

Solstice : The time during summer or winter when the sun is vertically above the point which represents its farthest distance north or south of the equator-the two tropics.

Steppe : Mid-latitude grasslands of Eurasia.

Strait : Narrow stretch of sea connecting two extensive areas of sea.

Syncline : Trough or inverted arch of a fold in rock strata.

Sublimation : Change of state of water from solid to vapour directly or vice versa.

Taiga : Coniferous forestland of Siberia.

Temperature inversion : Condition when the temperature is found to be increasing instead of decreasing with height.

Theodolite : Instrument used for measuring angular distances in the vertical plane (elevation) and the horizontal plane (azimuth).

Thermograph : Self - recording thermometer - an instrument for measuring temperature.

Tidal range : Average difference in water level between high and low tide at one place.

Topographic map : Map on sufficiently large scale to show the detailed surface features of an area.

Trans-humance : Practice among pastoral communities to move with their animals seasonally between two regions of different climate.

Tributary : Smaller river which joins a larger river.

Tropics : The Tropic of Cancer and the Tropic of Capricorn located at degrees N and S, respectively, are the northward and southward limits up to which the sun's vertical rays can reach.

Tropical Zone : The area bounded by the two tropics is called the tropical zone.

Tropophyte : A plant which acts as hygrophyte in one season and xerophyte in the other.

Tsunami : A large sea wave caused by an earthquake originating on the sea bed.

Van Allen's Radiation Belts : Named after the physicist who discovered them, these are

two bands of the outermost layer of the atmosphere (magnetosphere), at heights of 3000 km and 16000 km above the earth's surface. Here the ionized particles trapped by the earth's magnetic field from the solar radiation, concentrate.

Viticulture : The culture of grape vine.

Volcano : Vent in the earth's crust caused by magma forcing its way to the surface through which molten or solid rock flow from the interior of the earth.

Watershed : Elevated boundary line separating headstreams which are tributaries to different river systems or basins.

Weather : Condition of the atmosphere at certain time or over a certain period of time as described by meteorological phenomena including temperature, atmospheric pressure and humidity.

Weathering : Decay and disintegration of rocks of the earth's crust by exposure to the atmosphere; it is one of the main processes of denudation.

Willy-willy : Tropical cyclone in the Pacific near the east coast of Australia.

Wind vane : Instrument used to indicate the direction of the wind.

Xerophyte : Plant which is adapted, to living in a region where little moisture (or dry climatic condition) is available.

Yazoo river : Tributary which is prevented from joining the main river because the latter has built up high natural levees; it thus runs parallel to the main stream for a considerable distance before joining it downstream.

Zenith : Point in the celestial sphere vertically above one's head.

Zodiac : Zone of the heavens in which lie the paths of the sun, the moon and the chief planets.

Zonal soil : A soil which owes its well developed characteristics largely to the influence of climate and vegetation. They are characterised by well-developed soil profiles.

Zoogeography : Study of the distribution of animals and successional development on the earth's surface.

Zoophyte : An animal which resembles a plant, viz.-a coral polyp, a sponge.