

**National Aggregates of Geospatial Data Collection:
Population, Landscape And Climate Estimates, Version 3
(PLACE III)**

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Socioeconomic Data and Applications Center (SEDAC)
Center for International Earth Science Information Network (CIESIN)
Columbia University
61 Route 9W
P.O. Box 1000
Palisades, NY 10964

Please address comments to SEDAC User Services

<http://sedac.uservoice.com/knowledgebase>

(845) 365-8969

This document outlines the basic variable and themes used to construct the PLACE Version 3 release. For further information on the methods used to develop this data set, please read the methods document available under the "documentation" tab of the PLACE III web site (see link under citation below).

Suggested data set citation:

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<http://sedac.ciesin.columbia.edu/data/set/nagdc-population-landscape-climate-estimates-v3>.



Notes on data usage

The csv version of the National Aggregates of Geospatial Data Collection's Population, Landscape and Climate Estimates, Version 3 (PLACE III) is provided for the use of researchers who might not have access to the pivot table functionality and macros provided in the Microsoft Excel 2010 *xlsm* version of the data set.

In order to use the data properly it is vital to understand the database structure. Due to the numerous variables included in the PLACE III database, it was impossible to release a version horizontally structured without exceeding the maximum number of columns allowed by Microsoft Excel. In order to account for this fact, and to increase the performance of the database, the data has been structured in vertical long form. Consequently, in order to examine data for a particular country, or variable it is necessary to subset the database into a dataset of interest. We provide a number of columns that stratify the information contained in PLACE III by geography, prosperity, and urban-rural designation. Additionally, the user might opt to subset the data by country(s) or variable(s).

Please find in the following pages the definitions of the fields contained in this csv database, and information on the origin and definition of the categorical filters and input themes with their component variables.

Variable Name	Variable Description
OBJECTID	Identification number given to each feature in the data set by the GIS software.
COUNTRYID	Number identification, unique for each country.
ISO3V10	International Standards Organization unique three-letter country or area code.
UNSDCODE	United Nations Statistics Division unique code for each country or area.
Country Name	Country or area name
Country Name 2	(Duplicate field for use in pivot table filtering) Country or area name
Theme: Variable	Concatenation of the theme and variable names.
ThemeID	Number identification, unique for each theme.
Theme Name	Name of the theme. Each theme is subdivided into a number of variables, which could be numerical ranges or categories.
Theme Description	Summary of information contained in each theme.
VariableID	Number identification, unique for each variable
Variable Name	Name of the variable within a theme, which could be a numerical range or a category. Variable boundaries delineated the areas within which population and land area statistics were generated.
Variable Description	Defines each variable within a theme.
DesignationID	Number identification, unique for each designation.
Designation Name	Urban, or rural population.
Designation Description	Urban or rural locations are defined by GRUMPv1 Urban Extent.
Area	The total area, in square kilometers, that make up input variable zones.
Area_Pct	The percent of a country's total area located within a specific variable zone.
Population1990	The total 1990 population count within an input variable zone*.
Population1990_Pct	The percent of a country's total 1990 population located within a specific variable zone.
Population2000	The total 2000 population count within an input variable zone*.
Population2000_Pct	The percent of a country's total 2000 population located within a specific variable zone.
Population2010	The total 2010 population count within an input variable zone*.
Population2010_Pct	The percent of a country's total 2010 population located within a specific variable zone.
GeoRegion	Geo Regions refer to the UN's macro geographical regions, and correspond as closely as possible to continents.
GeoSubregion	More detailed subregions from the UN, with countries grouped independently of political affiliations to other countries.
IncomeGroup	The World Bank divides countries into four income groups. These groups are defined by 2010 GNI per capita. They are: low income (\$1,005 or less), lower middle income (\$1,006 – \$3,975), upper middle income (\$3,976 - \$12,275) and high income (\$12,276 or more)
LendingCategory	Lending category is assigned by the World Bank. IDA (International Development Assistance) loans are targeted interest-free loans and grants reserved for poor countries (per capita income less than \$1,175) that lack the financial ability to borrow from the International Bank for Reconstruction and Development. IBRD loans are concessional. Blend countries qualify for both types of loans – these countries are low-income, but are financially creditworthy.

Country Classifications	Source	Description
Geo Region	United Nations Statistics Division < http://unstats.un.org/unsd/methods/m49/m49regin.htm > Updated 20 Sept, 2011. Accessed 20 Nov, 2011.	The geographical regions used by the United Nations Statistics Division in its publications and databases. Each country is shown in one region only. Geo Regions refer to the UN's macro geographical regions, and correspond as closely as possible to continents.
Geo Subregion	United Nations Statistics Division < http://unstats.un.org/unsd/methods/m49/m49regin.htm > Updated 20 Sept, 2011. Accessed 20 Nov, 2011.	Within macro geographical groupings, more detailed sub-regions are shown. From the UN: "The assignment of countries or areas to specific groupings is for statistical convenience and does not imply any assumption regarding political or other affiliation of countries or territories by the United Nations."
Income Group	World Bank < http://data.worldbank.org/about/country-classifications/country-and-lending-groups#South_Asia > Updated 18 July, 2011. Accessed 20 Nov, 2011.	From the World Bank: "Economies are divided according to 2010 GNI per capita, calculated using the World Bank Atlas method. The groups are: low income, \$1,005 or less; lower middle income, \$1,006 - \$3,975; upper middle income, \$3,976 - \$12,275; and high income, \$12,276 or more."
Lending Category	World Bank < http://data.worldbank.org/about/country-classifications/country-and-lending-groups#South_Asia > Updated 18 July, 2011. Accessed 20 Nov, 2011.	From the World Bank: "IDA countries are those that had a per capita income in 2010 of less than \$1,175 and lack the financial ability to borrow from the International Bank for Reconstruction and Development (IBRD). IDA loans are deeply concessional—interest-free loans and grants for programs aimed at boosting economic growth and improving living conditions. IBRD loans are nonconcessional. Blend countries are eligible for IDA loans because of their low per capita incomes but are also eligible for IBRD loans because they are financially creditworthy."
Urban/Rural Designation	GRUMPv1 Urban Extents Dataset < http://sedac.ciesin.columbia.edu/gpw/global.jsp > Accessed 20 Nov, 2011.	The Global Rural-Urban Mapping Project, Version 1 (GRUMPv1) urban extent grid distinguishes urban and rural areas based on a combination of population counts (persons), settlement points, and the presence of Nighttime Lights . Areas are defined as urban where contiguous lighted cells from the Nighttime Lights or approximated urban extents based on buffered settlement points for which the total population is greater than 5,000 persons. This dataset is produced by the Columbia University Center for International Earth Science Information Network (CIESIN) in collaboration with the International Food Policy Research Institute (IFPRI), The World Bank, and Centro Internacional de Agricultura Tropical (CIAT)

Theme	Variable Name	Description
Biomes:		Global Biomes data were obtained from the World Wildlife Fund (WWF) Terrestrial Ecoregions of the World dataset, in Feb 2006. The data depict global terrestrial vegetation biodiversity patterns for the worlds 825 ecoregions and 14 biomes.
	Boreal Forests/Taiga	Low annual temperatures characterize northerly latitudes; precipitation ranges from 40-100 centimetres per year and may fall mainly as snow. Soil is nutrient poor, largely due to permafrost and poor drainage. Source: WWF
	Deserts and Xeric Shrublands	The amount of rainfall varies; generally, however, evaporation exceeds rainfall, which is usually less than 10 inches annually. Temperature variability is also diverse: the Sahara is hot all year while the Gobi has a cold winter. Source: WWF
	Flooded Grasslands and Savannas	These areas support numerous plants and animals adapted to the unique hydrologic regimes and soil conditions, and may host large congregations of migratory and resident waterbirds. Examples include the Evergaldes and Pantanal. Source: WWF
	Lakes	Lakes
	Mangroves	Occuring in the waterlogged, salty soils of sheltered tropical and subtropical shores, they are subject to the twice-daily ebb and flow of tides, and seasonal weather fluctuations. They stretch from the intertidal zone up to the high-tide mark. WWF
	Mediterranean Forests, Woodlands, and Scrub	Characterized by hot and dry summers, while winters tend to be cool and moist. Although the habitat is globally rare, it features an extraordinary biodiversity. Most plants are fire adapted, and dependent on this disturbance for their persistence. WWF
	Montane Grasslands and Shrublands	High elevation (montane and alpine) grasslands and shrublands, including the puna and paramo in South America, subalpine heath in New Guinea and East Africa, and steppes of the Tibetan plateaus. They are tropical, subtropical, and temperate. Source: WWF
	Rock and Ice	Rock and Ice
	Temperate Broadleaf and Mixed Forests	Temperate forests experience a wide range of variability in temperature and precipitation. In regions where rainfall is broadly distributed throughout the year, deciduous trees mix with species of evergreens. Source: WWF

Temperate Coniferous Forests	Temperate evergreen forests are found in areas with warm summers and cool winters, and vary enormously in their kinds of plant life. In some, needleleaf trees dominate, while others are home primarily to broadleaf evergreen trees, or a mix of both. WWF
Temperate Grasslands, Savannas, and Shrublands	Prairies in North America, pampas in South America, veld in Southern Africa and steppe in Asia. These regions are devoid of trees, except for riparian or gallery forests around streams and rivers. Diverse floral communities and large grazing mammals. WWF
Tropical and Subtropical Coniferous Forests	Found mainly in North and Central America, these tropical regions experience low levels of precipitation and moderate variability in temperature. They have diverse species of conifers and a thick, closed canopy. Source: WWF
Tropical and Subtropical Dry Broadleaf Forests	These forests occur in climates that are warm year-round. Although they may receive several hundred centimeters of rain per year, they deal with long dry seasons which last several months. Deciduous trees predominate these forests. Source: WWF
Tropical and Subtropical Grasslands, Savannas, and Shrublands	Characterized by rainfall levels between 90-150 centimetres per year, which is not enough rain to support extensive tree cover. Grasses and large mammals dominate. Source: WWF
Tropical and Subtropical Moist Broadleaf Forests	Generally found in large, discontinuous patches between the Tropics of Cancer and Capricorn; characterized by low variability in temperature and >200cm annual rainfall. Forest is dominated by semi-evergreen and evergreen deciduous tree species. WWF
Tundra	A treeless polar desert found in the high latitudes in the polar regions, primarily in Alaska, Canada, Russia, Greenland, Iceland, and Scandinavia. The region's long, dry winters feature months of total darkness and extremely frigid temperatures. WWF
Coastal Proximity:	Coastal proximity zones (regions within 5, 10, 100 or 200km of a coast) were created from the GRUMPv1 shoreline. The vector was converted into points, from which geodesic buffers were created and dissolved into polygons. The inland areas were extracted.
5km zone	Within 5km of GRUMP v1 Coastline
10km zone	Within 10km of GRUMP v1 Coastline
100km zone	Within 100km of GRUMP v1 Coastline
200km zone	Within 200km of GRUMP v1 Coastline

<p>Climate Zones:</p>	<p>The Köppen-Geiger Climate Classification system was chosen to represent global climatological regions based on emissions scenarios from the IPCC for 2001 - 2025.</p> <p><i>Scenario A1:</i> (F1: fossil fuel intensive) quick economic growth, launch of new/efficient technologies.</p> <p><i>Scenario A2:</i> very heterogenic world with focus on family values and local traditions.</p> <p><i>Scenario B1:</i> a world without materialism and launch of clean technologies.</p> <p><i>Scenario B2:</i> focus on local solutions for economic and ecological sustainability.</p> <p><i>Observed climate data</i> for the period 1976-2000.</p>
<p>Bwk: Arid, desert, cold</p>	<p>Arid, desert, cold as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Bsk: Arid, steppe, cold arid</p>	<p>Arid, steppe, cold arid as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Aw: Equatorial winter dry</p>	<p>Equatorial winter dry as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Af: Equatorial, fully humid</p>	<p>Equatorial, fully humid as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Am: Equatorial, monsoonal</p>	<p>Equatorial, monsoonal as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>As: Equatorial, summer dry</p>	<p>Equatorial, summer dry as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Bwh: Hot arid, desert</p>	<p>Hot arid, desert as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>
<p>Bsh: Hot arid, steppe</p>	<p>Hot arid, steppe as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025</p>

Ef: Polar frost	Polar frost as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Et: Polar tundra	Polar tundra as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dfc: Snow, fully humid, cool summer	Snow, fully humid, cool summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dfd: Snow, fully humid, extremely continental	Snow, fully humid, extremely continental as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dfa: Snow, fully humid, hot summer	Snow, fully humid, hot summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dfb: Snow, fully humid, warm summer	Snow, fully humid, warm summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dsc: Snow, summer dry and cool	Snow, summer dry and cool as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dsa: Snow, summer dry and hot	Snow, summer dry and hot as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dsb: Snow, summer dry and warm	Snow, summer dry and warm as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dwc: Snow, winter dry, cool summer	Snow, winter dry, cool summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dwd: Snow, winter dry, extremely continental	Snow, winter dry, extremely continental as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Dwa: Snow, winter dry, hot summer	Snow, winter dry, hot summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios

	for the period 2001 - 2025
Dwb: Snow, winter dry, warm summer	Snow, winter dry, warm summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cfc: Warm temperate, fully humid, cool summer	Warm temperate, fully humid, cool summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cfa: Warm temperate, fully humid, hot summer	Warm temperate, fully humid, hot summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cfb: Warm temperate, fully humid, warm summer	Warm temperate, fully humid, warm summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Csc: Warm temperate, summer dry and cool	Warm temperate, summer dry and cool as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Csa: Warm temperate, summer dry and hot	Warm temperate, summer dry and hot as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Csb: Warm temperate, summer dry and warm	Warm temperate, summer dry and warm as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cwc: Warm temperate, winter dry, cool summer	Warm temperate, winter dry, cool summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cwa: Warm temperate, winter dry, hot summer	Warm temperate, winter dry, hot summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025
Cwb: Warm temperate, winter dry, warm summer	Warm temperate, winter dry, warm summer as modeled based on observed climate data and estimated climate data for the A1F1, A2, B1 and B2 emissions scenarios for the period 2001 - 2025

Elevation:	ISciences' digital elevation data is a 1km raster that combines NASA's Shuttle Radar Topographic Mission data with bathymetric values to produce a land elevation and marine depth layer. 12 thematic zones were created by aggregating elevation values.
<5 meters	Elevation under 5 meters
5-10 meters	Elevation between 5 and 10 meters
10-25 meters	Elevation between 10 and 25 meters
25-50 meters	Elevation between 25 and 50 meters
50-100 meters	Elevation between 50 and 100 meters
100-200 meters	Elevation between 100 and 200 meters
200-400 meters	Elevation between 200 and 400 meters
400-800 meters	Elevation between 400 and 800 meters
800-1500 meters	Elevation between 800 and 1500 meters
1500-3000 meters	Elevation between 1500 and 3000 meters
3000-5000 meters	Elevation between 3000 and 5000 meters
>5000 meters	Elevation over 5000 meters
Population Density Zones	Population Density layers, for 1990, 2000, and 2010 were created by dividing the 1990, 2000, and 2010 UN-adjusted population (POP) count grids by the land area (LA) grid. Population and area grids are from GRUMP v1.
0 persons per sq. km	0 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
0 - 2 persons per sq. km	0 - 2 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
2 - 5 persons per sq. km	2 - 5 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
5 - 10 persons per sq. km	5 - 10 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
10 - 15 persons per sq. km	10 - 15 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
15 - 50 persons per sq. km	15 - 50 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
50 - 100 persons per sq. km	50 - 100 person density zone based on GRUMP v1 population density 1990, 2000 or 2010

100 - 500 persons per sq. km	100 - 500 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
500 - 1000 persons per sq. km	500 - 1000 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
1000 - 10000 persons per sq. km	1000 - 10000 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
10000 - 50000 persons per sq. km	10000 - 50000 person density zone based on GRUMP v1 population density 1990, 2000 or 2010
>50000 persons per sq. km	Greater than 50000 person density zone based on GRUMP v1 population density 1990, 2000 or 2010