Gridded Population of the World, Version 4 (GPWv4): Population Count, Revision 11

Identification_Information
Spatial_Data_Organization_Information
Spatial_Reference_Information
Distribution_Information
Metadata_Reference_Information

Identification Information

Section Index

Citation:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): Population Count, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4JW8BX5
Description:
Abstract:
The Gridded Population of the World, Version 4 (GPWv4): Population Count, Revision 11 consists of estimates of human population (number of persons per pixel), consistent with national censuses and population registers, for the years 2000, 2005, 2010, 2015, and 2020. A proportional allocation gridding algorithm, utilizing approximately 13.5 million national and sub-national administrative units, was used to assign population counts to 30 arc-second grid cells. The data files were produced as global rasters at 30 arc-second (~1 km at the equator) resolution. To enable faster global processing, and in support of research communities, the 30 arc-second data were aggregated to 2.5 arc-minute, 15 arc-minute, 30 arc-minute and 1 degree resolutions.
Purpose: To provide estimates of population count for the years 2000, 2005, 2010, 2015, and 2020, consistent with national censuses and population registers, as raster data to facilitate data integration.
Supplemental Information: The documentation for this data set is available at http://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/docs.
Time Period of Content:

Time Period Information:
Multiple Dates/Times:
Single Date/Time:
Calendar Date: 2000/07/01
Single Date/Time:
Calendar Date: 2005/07/01
Single Date/Time:
Calendar Date: 2010/07/01
Single Date/Time:
Calendar Date: 2015/07/01
Single Date/Time:
Calendar Date: 2020/07/01
Currentness Reference: publication date
Status:
Progress: Complete
Maintenance and Update Frequency: As needed
Spatial Domain:
Bounding Coordinates:
West Bounding Coordinate: -180.000000
East Bounding Coordinate: 180.000000
North Bounding Coordinate: 90.000000
South Bounding Coordinate: -90.000000
Keywords:
Theme:
Theme Keyword Thesaurus: GCMD Science Keywords, Version 8.6
Theme Keyword: EARTH SCIENCE > HUMAN DIMENSIONS > POPULATION > POPULATION SIZE
Theme:
Theme Keyword Thesaurus: SEDAC Theme
Theme Keyword: Population
Theme:
Theme Keyword Thesaurus: Data Granularity
Theme Keyword: Country
Theme Keyword: Continent
Theme Keyword: Global
Theme:
Theme Keyword Thesaurus: ISO Topic
Theme Keyword: Society
Place:
Place Keyword Thesaurus: CIESIN Location Terms, Version 3.1
Place Keyword: Global
Access Constraints: None
Use Constraints:
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Contact Organization Primary:

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State or Province: New York
Postal Code: 10964
Country: United States
Contact Voice Telephone: +1 845-365-8920
Contact Facsimile Telephone: +1 845-365-8922
Contact Electronic Mail Address: ciesin.info@ciesin.columbia.edu
Browse Graphic:
Browse Graphic File Name: https://sedac.ciesin.columbia.edu/downloads/maps/gpw-v4/gpw-v4-population-count-rev11/gpw-v4-population-count-rev11-global-2015-thumbnail.jpg
Browse Graphic File Description: Global Population Count (2015)
Browse Graphic File Type: JPEG
Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University, United Nations Food and Agriculture Programme - FAO, and Centro Internacional de Agricultura Tropical - CIAT
Publication Date: 20051231
Title: Gridded Population of the World, Version 3 (GPWv3): Population Count Grid
Edition: 3.00
Geospatial Data Presentation Form: raster, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4639MPP
Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20160711
Title: Gridded Population of the World, Version 4 (GPWv4): Population Count
Edition: 4.00
Geospatial Data Presentation Form: raster, map
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4X63JVC
Cross Reference:
Citation Information:
Originator: Doxsey-Whitfield, E., K. MacManus, S. B. Adamo, L. Pistolesi, J. Squires, O. Borkovska and S. R. Baptista
Publication Date: 20150724
Title: Taking Advantage of the Improved Availability of Census Data: A First Look at the Gridded Population of the World, Version 4

Geospatial Data Presentation Form: journal article
Series Information:
Series Name: Papers in Applied Geography
Issue Identification: 1(3): 226-235
Online Linkage: https://doi.org/10.1080/23754931.2015.1014272

Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20171222
Title: Gridded Population of the World, Version 4 (GPWv4): Population Count, Revision 10
Edition: 4.10
Geospatial Data Presentation Form: raster, map
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4PG1PPM

Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): Administrative Unit Center Points with Population Estimates, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: vector, tabular, database, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4BC3WMT

Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): Data Quality Indicators, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H42Z13KG

Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): Land and Water Area,

Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4Z60M4Z

Cross Reference:
Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): National Identifier Grid, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, vector, map, map service
Publication Information:
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Online Linkage: https://doi.org/10.7927/H4TD9VDP

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Geospatial Data Presentation Form: raster, map, map service
Publication Information:
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Online Linkage: https://doi.org/10.7927/H49C6VHW

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Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
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Geospatial Data Presentation Form: document
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Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H45Q4T5F

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Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231

Title: Gridded Population of the World, Version 4 (GPWv4): Basic Demographic Characteristics, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H46M34XX

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Citation Information:
Originator: Center for International Earth Science Information Network - CIESIN - Columbia University
Publication Date: 20181231
Title: Gridded Population of the World, Version 4 (GPWv4): Population Count Adjusted to Match 2015 Revision of UN WPP Country Totals, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
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Online Linkage: https://doi.org/10.7927/H4PN93PB

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Title: Gridded Population of the World, Version 4 (GPWv4): Population Density Adjusted to Match 2015 Revision UN WPP Country Totals, Revision 11
Edition: 4.11
Geospatial Data Presentation Form: raster, map, map service
Publication Information:
Publication Place: Palisades, NY
Publisher: NASA Socioeconomic Data and Applications Center (SEDAC)
Online Linkage: https://doi.org/10.7927/H4F47M65

Spatial Data Organization Information

Section Index

Direct Spatial Reference Method: Raster
Raster Object Information:
Raster Object Type: Grid Cell
Row Count: 17400
Column Count: 43200
Vertical Count: 1

Spatial Reference Information

Section Index

Horizontal Coordinate System Definition:
- **Geographic**:
  - **Latitude Resolution**: 0.008333
  - **Longitude Resolution**: 0.008333
  - **Geographic Coordinate Units**: Decimal degrees
- **Geodetic Model**:
  - **Horizontal Datum Name**: WGS84
  - **Ellipsoid Name**: WGS84
  - **Semi-major Axis**: 6378137.000000
  - **Denominator of Flattening Ratio**: 298.257224

Distribution Information

Section Index

Distributor:
- **Contact Information**:
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    - **Contact Organization**: NASA Socioeconomic Data and Applications Center (SEDAC)
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Resource Description: CIESIN_SEDAC_GPWv4_POPCOUNT_R11

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Standard Order Process:
- **Digital Form**:

Digital Transfer Information:

Fees: 0

Ordering Instructions:

The data in Georeferenced Tagged Image File Format (.tif), American Standard Code for Information Interchange (.asc), and Network Common Data Format Version 4 (.nc) formats; the maps in Portable Document Format (.pdf), and Portable Network Graphics (.png) formats; and the web map services are available from the NASA Socioeconomic Data and Applications Center (SEDAC).

Standard Order Process:

Digital Form:

Digital Transfer Information:

Format Name: ASCII

File Decompression Technique: Unzip

Digital Transfer Option:

Online Option:

Computer Contact Information:

Network Address:

Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/data-download

Access Instructions: Data accessible via the data set landing page.

Digital Form:

Digital Transfer Information:

Format Name: GeoTIFF

File Decompression Technique: Unzip

Digital Transfer Option:

Online Option:

Computer Contact Information:

Network Address:

Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/data-download

Access Instructions: Data accessible via the data set landing page.

Digital Form:

Digital Transfer Information:

Format Name: netCDF-4

File Decompression Technique: Unzip

Digital Transfer Option:

Online Option:

Computer Contact Information:

Network Address:

Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev10/data-download

Access Instructions: Data accessible via the data set landing page.

Digital Form:

Digital Transfer Information:

Format Name: PDF

Digital Transfer Option:

Online Option:

Computer Contact Information:
Network Address:
Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/maps
Access Instructions: Maps accessible via the data set landing page.

Digital Form:
Digital Transfer Information:
Format Name: PNG
Digital Transfer Option:
Online Option:
Computer Contact Information:
Network Address:
Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/maps
Access Instructions: Maps accessible via the data set landing page.

Digital Form:
Digital Transfer Information:
Format Name: WMS
Digital Transfer Option:
Online Option:
Computer Contact Information:
Network Address:
Network Resource Name: https://sedac.ciesin.columbia.edu/data/set/gpw-v4-population-count-rev11/maps/services
Access Instructions: Web Map Services accessible via the data set landing page.

Available Time Period:
Time Period Information:
Range of Dates/Times:
Beginning Date: 2019/02/28
Ending Date: Present

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Section Index

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Metadata Contact:
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Metadata Standard Name: FGDC Content Standards for Digital Geospatial Metadata
Metadata Standard Version: FGDC-STD-001-1998
Metadata Time Convention: local time

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