

Identification_Information:

Citation:

Citation_Information:

Originator: AFCCC - Air Force Combat Climatology Center (AFWA)

Publication_Date: 20070601

Title: Legates Surface and Ship Observation of Precipitation

Geospatial_Data_Presentation_Form: Digital

Description:

Abstract: The Legates precipitation dataset provides monthly and annual precipitation mean values by latitude and longitude globally. The dataset was acquired from The National Aeronautics and Space Administration (NASA) as 0.5 x 0.5 degree gridded data in ASCII format.

Purpose: Support DoD projects.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 192001

Ending_Date: 198012

Currentness_Reference: From the data

Status:

Progress: Complete

Maintenance_and_Update_Frequency: Complete

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -180.0

East_Bounding_Coordinate: 180.0

North_Bounding_Coordinate: 90.0

South_Bounding_Coordinate: -90.0

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Meteorology

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Global

Stratum:

Stratum_Keyword_Thesaurus: None

Stratum_Keyword: Surface

Temporal:

Temporal_Keyword_Thesaurus: None

Temporal_Keyword: Monthly

Access_Constraints: Access through AFCCC is limited to DoD agencies and their contractors. All other requests are filled through the National Climatic Data Center in Asheville, N.C.

Use_Constraints: None

Data_Set_Credit: This dataset has not been altered from what was received. It was collected from the National Aeronautics and Space Administration (NASA).

Security_Information:

Security_Classification_System: DoD

Security_Classification: Unclassified

Security_Handling_Description: None

Data_Quality_Information:

Logical_Consistency_Report: The data set represents a global climatology of mean monthly precipitation based upon traditional land-based rain gauge measurements and shipboard measurements. The rain gauge measurements were

collected from existing sources, coding errors were corrected and redundant station information removed. When received at AFCCC, this data set was checked for completeness and reasonable values. There are no nulls within this dataset. Unit conversions for data are not required as it is loaded in the same units that were received from NASA.

Completeness_Report: This database consists of 24,635 spatially independent terrestrial station records and 2223 oceanic grid records. A procedure for correcting the gauge-induced biases was implemented to remove the systematic errors associated with traditional rain gauge collection methods. The corrected monthly precipitation measurements were then interpolated to a 0.5 degree latitude by 0.5 degree longitude grid using a spherically based interpolation procedure. This climatology is largely representative of the 61-year period from 1920 to 1980; with greater weight given to the more recent (data-rich) years.

Lineage:

Process_Step:

Process_description: Specific details on the work that was done in creating the Legates data is available from the NASA web site:
http://daac.gsfc.nasa.gov/guides/GSFC/guide/legates_rain_gauge_dataset.gd.shtml.

Process_date: 1920

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: LEGATES

Entity_Type_Definition: Metadata about a station in the Legates Surface and Ship Observation of Precipitation. This is an oracle database. Described is one table. The table contains latitude and longitude coordinates, mean precipitation by month, and mean annual precipitation. There are no missing values or nulls within this table.

Entity_Type_Definition_Source: AFCCC

Attribute:

Attribute_Label: LATITUDE

Attribute_Definition: The latitude coordinate of a geophysical-point-observation

Attribute_Definition_Source: Joint Metoc Conceptual Data Model

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: -90.0000000

Range_Domain_Maximum: 90.0000000

Attribute_Units_of_Measure: degrees

Beginning_Date_of_Attribute_Values: 1920

Attribute_Measurement_Frequency: monthly

Attribute:

Attribute_Label: LONGITUDE

Attribute_Definition: the longitude coordinate of a geophysical-point-observation

Attribute_Definition_Source: Joint METOC Conceptual Data Model

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: -180.0000000

Range_Domain_Maximum: 180.0000000

Attribute_Units_of_Measure: degrees

Beginning_Date_of_Attribute_Values: 1920

Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: JANUARY_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of January
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: FEBRUARY_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of February
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: MARCH_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of March
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: APRIL_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of April
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: MAY_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of May
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500

Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
Attribute_Label: JUNE_MEAN
Attribute_Definition: The mean liquid equivalent precipitation amount for the month of June
Attribute_Definition_Source: AFCCC
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 0
Range_Domain_Maximum: 5500
Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
Attribute_Label: JULY_MEAN
Attribute_Definition: The mean liquid equivalent precipitation amount for the month of July
Attribute_Definition_Source: AFCCC
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 0
Range_Domain_Maximum: 5500
Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
Attribute_Label: AUGUST_MEAN
Attribute_Definition: The mean liquid equivalent precipitation amount for the month of August
Attribute_Definition_Source: AFCCC
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 0
Range_Domain_Maximum: 5500
Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
Attribute_Label: SEPTEMBER_MEAN
Attribute_Definition: The mean liquid equivalent precipitation amount for the month of September
Attribute_Definition_Source: AFCCC
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 0
Range_Domain_Maximum: 5500
Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
Attribute_Label: OCTOBER_MEAN
Attribute_Definition: The mean liquid equivalent precipitation amount for the month of October
Attribute_Definition_Source: AFCCC
Attribute_Domain_Values:

Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
Beginning_Date_of_Attribute_Values: 1920
Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: NOVEMBER_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of November
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: DECEMBER_MEAN
 Attribute_Definition: The mean liquid equivalent precipitation amount for the month of December
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per month
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: monthly

Attribute:
 Attribute_Label: ANNUAL_MEAN
 Attribute_Definition: the total mean annual accumulation of liquid equivalent precipitation
 Attribute_Definition_Source: AFCCC
 Attribute_Domain_Values:
 Range_Domain:
 Range_Domain_Minimum: 0
 Range_Domain_Maximum: 5500
 Attribute_Units_of_Measure: millimeters per year
 Beginning_Date_of_Attribute_Values: 1920
 Attribute_Measurement_Frequency: yearly

Overview_Description:

Entity_and_Attribute_Overview: Due to the volume of the data, customers are requested to specify the specific fields and/or regions they require.

Entity_and_Attribute_Detail_Citation: The Legates Surface and Ship Observation of Precipitation data set is used in verification of climate model predictions of precipitation cycles, large scale hydrological cycle and ecological studies, and evaluating climate change. The Legates precipitation data set has data from over 25,000 stations.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: AFCCC/DOO

Contact_Address:
Address_Type: Mailing and Physical
Address: 151 Patton Avenue, Room 120
City: Asheville
State_or_Province: NC
Postal_Code: 28801-5002
Country: USA
Contact_Voice_Telephone: (828) 271-4291
Contact_Voice_Telephone: DSN 673-9004
Contact_Facsimile_Telephone: (828) 271-4334
Contact_Facsimile_Telephone: DSN 673-9024
Contact_Electronic_Mail_Address: doo_all@afccc.af.mil
Hours_of_Service: 0730-1630 Eastern Time M-F

Resource_Description: Legates Surface and Ship Observation of Precipitation

Distribution_Liability:

The data was obtained to support DOD requests for climatological precipitation values. As such, it is only valid for its intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose.

Custom_Order_Process: Order by station or region. Order through the above distribution contact or this web site:

https://www2.afccc.af.mil/forms_mil/html/restricted/sarform.html

Metadata_Reference_Information:

Metadata_Date: 20070601
Metadata_Review_Date: 20070601
Metadata_Future_Review_Date: 20080601
Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:
Contact_Organization: AFCCC/DOD
Contact_Address:
Address_Type: Mailing and physical.
Address: 151 Patton Avenue Room 120
City: Asheville
State_or_Province: NC
Postal_Code: 28801-5002
Country: USA
Contact_Voice_Telephone: (828) 271-4299
Contact_Voice_Telephone: DSN 673-9006
Contact_Facsimile_Telephone: (828) 271-4334
Contact_Facsimile_Telephone: DSN 673-9024
Contact_Electronic_Mail_Address: dod@afccc.af.mil
Hours_of_Service: 0730-1630 EST M-F

Metadata_Standard_Name: FGDC-Content Standards for Digital Geospatial Metadata.

Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Time_Convention: Universal Time
Metadata_Access_Constraints: None
Metadata_Use_Constraints: None
Metadata_Security_Information:
Metadata_Security_Classification_System: DoD
Metadata_Security_Classification: Unclassified
Metadata_Security_Handling_Description: None