

Data Characteristics

Spatial Coverage: Continental North America (Mexico, United States, Canada), Hawaii, and Puerto Rico

Spatial Resolution: 1 km grid

Temporal Coverage

Continental North America (Mexico, United States, Canada) and Hawaii: 1980 to 2023

Puerto Rico: 1950 to 2023

Temporal Resolution: Daily

Study Areas (All latitude and longitude given in decimal degrees)

Site	Westernmost Longitude	Easternmost Longitude	Northernmost Latitude	Southernmost Latitude
Continental North America	-178.1333	-53.0567	82.9143	14.0749
Puerto Rico	-67.9927	-64.1196	19.9382	16.8444
Hawaii	-160.3056	-154.772	23.5186	17.9539

Data File Information

Filename format: daymet_v4_daily_<region>_<pppp>_<yyyy>.nc, where

<region> is either 'na' (for continental North America), 'hi' (for hawaii), or 'pr' (for Puerto Rico), <pppp> is the respective parameter abbreviation (dayl, prcp, srad, swe, tmax, tmin, and vp), and <yyyy> is year (1950 through 2023).

Example filename: daymet_v4_daily_na_prcp_2014.nc

Table 1. Parameters, abbreviations, units, and descriptions.

Parameter	Abbreviation	Units	Description
Day length	dayl	s d ⁻¹	Duration of the daylight period in seconds per day. This calculation is based on the period of the day during which the sun is above a hypothetical flat horizon
Precipitation	prcp	mm	Daily total precipitation in millimeters. Sum of all forms of precipitation converted to a water-equivalent depth.
Shortwave radiation	srad	W m ⁻²	Incident shortwave radiation flux density in watts per square meter, taken as an average over the daylight period of the day. Note: Daily total radiation (MJ/m ² /day) can be calculated as follows: ((srad (W/m ²) * dayl (s/day)) / 1,000,000)
Snow water equivalent	swe	kg m ⁻²	Snow water equivalent in kilograms per square meter. The amount of water contained within the snowpack.
Maximum air temperature	tmax	degrees C	Daily maximum 2 m air temperature in degrees Celsius.
Minimum air temperature	tmin	degrees C	Daily minimum 2 m air temperature in degrees Celsius.

Parameter	Abbreviation	Units	Description
Water vapor pressure	vp	Pa	Water vapor pressure in pascals. Daily average partial pressure of water vapor.

Coordinate Reference System

Projection System: Lambert Conformal Conic

Parameters

Projection units: meters
 Datum (spheroid): WGS_84
 1st standard parallel: 25 deg N
 2nd standard parallel: 60 deg N
 Central meridian: -100 deg (W)
 Latitude of origin: 42.5 deg N
 False easting: 0
 False northing: 0

PROJ.4: +proj=lcc +lat_1=25 +lat_2=60 +lat_0=42.5 +lon_0=-100 +x_0=0 +y_0=0 +ellps=WGS84 +units=m +no_defs

The Daymet Calendar

The Daymet calendar is based on a standard calendar year. All Daymet years, including leap years, have 1–365 days. For leap years, the Daymet data include leap day (February 29) and December 31 is discarded from leap years to maintain a 365-day year.

Version Information

The data are stored and distributed as individual CF-compliant netCDF files for each parameter. The most current Daymet data are being delivered to the user in both Daymet software and Daymet data versions.