

Instructions

This instruction will show you how to find the accurate data for 'Average Day-Light', 'Average Temperature', and 'Average Precipitation' of each location for input.

Average Day-Light

- Visit the [Astronomical Applications Department](#)
- (1) Pick out the year (e.g. 2025)
- Make sure the type is '**daylight**'
- You can either manually input the location's long. & lat.
OR
- (2) You can click on '**Need USA Location**' and input the city
OR nearest major city to your location
- Click '**Import Data**'
- Click on '**Get Data**'
- (3) When you get the the result page, you can **copy** the results (it's in EXCEL/ GOOGLE SHEET format) and **paste** it in EXCEL/GOOGLE SHEET and **calculate** the average daylight from June to September
- You got the results for **AVERAGE DAY-LIGHT!**

Data Services

Rise/Set/Transit/Twilight Data

Complete Sun and Moon Data for One Day

Table of Sunrise/Sunset, Moonrise/Moonset, or Twilight Times for an Entire Year

Rise/Set/Transit Times for Major Solar System Objects and Bright Stars

Duration of Daylight and Darkness Table for One Year

Phases of the Moon

Dates of Primary Phases of the Moon

Fraction of the Moon Illuminated

Eclipses and Transits

Eclipses Online Portal

Eclipses of the Sun and Moon

2017 August 21 Total Solar Eclipse

2023 October 14 Annular Solar Eclipse

2024 April 8 Total Solar Eclipse

Solar Eclipse Computer

Lunar Eclipse Computer

Transits of Mercury and Venus

Transit Computer

Positions of Selected Celestial Objects

Altitude and Azimuth of the Sun or Moon During One Day

Tenocentric Configuration of

Duration of Daylight/Darkness Table for One Year

This data services provides a method for obtaining a table of the duration of daylight or darkness for any year between 1700 and 2100.

Use the following steps to create a table for any location worldwide:

- Enter the **year** (1700 - 2100) for which the table is desired.
- Select the **table type** (daylight or darkness) from the drop-down list.
- Specify the **location** of interest using the fields provided on the form. Use the buttons to find coordinates of cities or towns in the U.S. or its territories, or to convert between Degrees-Minutes-Seconds (DMS) and Decimal Degrees.
- Click the **"Get Data"** button at the end of the form to compute the table. The table will provide the data requested in hours:minutes format.

Be sure to read the [Notes section](#) for an explanation of the items in the table.

Specify year, type of table, and place:

Year

For example: 1986

2024

Type of table

daylight

Location

Coordinates in decimal degrees. North and East are positive. For example: 38.9072, -77.0369

Latitude

0.0000

Longitude

0.0000

Need USA Location?

Prefer DMS Input?

(1)

[Eclipses Online Portal](#)

[Eclipses of the Sun and Moon](#)

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[Solar Eclipse Computer](#)

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Positions of Selected Celestial Objects

[Altitude and Azimuth of the Sun or Moon During One Day](#)

[Topocentric Configuration of Major Solar System Bodies](#)

[Geocentric Positions of Major Solar System Objects and Bright Stars](#)

[Topocentric Positions of Major Solar System Objects and Bright Stars](#)

Dates and Times

[Earth's Seasons - Equinoxes, Solstices, Perihelion, and Aphelion](#)

[Julian Date Converter](#)

[Sidereal Time](#)

[Daylight Saving Time](#)

Celestial Navigation

[Celestial Navigation Data for Assumed Position and Time](#)

[Navigational Star Chart](#)

Documentation

[API Documentation](#)

[Printing and Exporting Data](#)

Specify year, type of table, and place:

Year

For example: 1986

2024

Type

daylight

Location

Coordinates

Latitude

0.0000

Location

Custom Location

Need coordinates?

Need U.S. location?

Time

Examples:

hours

0.00

☒ West of Greenwich (UTC)

Need a time zone? Try the [time zone map](#).

[Get Data](#)

Notes

Explanation

The **Duration of Daylight** table provides, for each calendar date, the total time that any portion of the Sun is above the horizon. Typically (for low and mid-latitude locations), this will be the elapsed time beginning at sunrise and ending at sunset.

The **Duration of Darkness** table provides, for each calendar date, the total time that the entire Sun is below the

(2)

Duration of Daylight/Darkness Table for One Year

Duration of Daylight for the Year 2024 Aspen, CO N 39° 11', W 106° 50' Zone: 7.0 hours West of Greenwich													
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
1	09:28	10:13	11:21	12:41	13:53	14:45	14:52	14:10	13:00	11:45	10:30	09:37	
2	09:29	10:15	11:24	12:43	13:55	14:46	14:52	14:08	12:58	11:42	10:28	09:35	
3	09:30	10:18	11:27	12:46	13:57	14:47	14:51	14:06	12:55	11:40	10:25	09:34	
4	09:31	10:20	11:29	12:48	13:59	14:48	14:50	14:04	12:53	11:37	10:23	09:33	
5	09:31	10:22	11:32	12:51	14:01	14:49	14:49	14:02	12:50	11:35	10:21	09:32	
6	09:32	10:24	11:34	12:54	14:03	14:50	14:48	14:00	12:48	11:32	10:19	09:31	
7	09:33	10:26	11:37	12:56	14:05	14:51	14:47	13:58	12:46	11:30	10:17	09:30	
8	09:34	10:28	11:39	12:59	14:07	14:51	14:46	13:56	12:43	11:27	10:15	09:30	
9	09:35	10:31	11:42	13:01	14:09	14:52	14:45	13:54	12:40	11:25	10:13	09:29	
10	09:37	10:33	11:44	13:04	14:11	14:53	14:44	13:52	12:38	11:22	10:11	09:28	
11	09:38	10:35	11:47	13:06	14:13	14:53	14:43	13:49	12:35	11:20	10:09	09:28	
12	09:39	10:38	11:50	13:08	14:15	14:54	14:42	13:47	12:33	11:17	10:07	09:27	
13	09:40	10:40	11:52	13:11	14:17	14:54	14:41	13:45	12:30	11:15	10:05	09:27	
14	09:42	10:42	11:55	13:13	14:19	14:55	14:40	13:43	12:28	11:12	10:03	09:26	
15	09:43	10:45	11:57	13:16	14:21	14:55	14:38	13:41	12:25	11:10	10:01	09:26	
16	09:45	10:47	12:00	13:18	14:22	14:55	14:37	13:38	12:23	11:07	09:59	09:25	
17	09:46	10:49	12:02	13:21	14:24	14:55	14:36	13:36	12:20	11:05	09:57	09:25	
18	09:48	10:52	12:05	13:23	14:26	14:56	14:34	13:34	12:18	11:03	09:56	09:25	
19	09:49	10:54	12:08	13:25	14:28	14:56	14:33	13:31	12:15	11:00	09:54	09:25	
20	09:51	10:57	12:10	13:28	14:29	14:56	14:31	13:29	12:13	10:58	09:52	09:25	
21	09:53	10:59	12:13	13:30	14:31	14:56	14:30	13:27	12:10	10:55	09:51	09:25	
22	09:54	11:02	12:15	13:33	14:32	14:56	14:28	13:24	12:08	10:53	09:49	09:25	
23	09:56	11:04	12:18	13:35	14:34	14:55	14:26	13:22	12:05	10:51	09:47	09:25	
24	09:58	11:06	12:20	13:37	14:35	14:55	14:25	13:20	12:03	10:48	09:46	09:25	

AVERAGE TEMPERATURE - AVERAGE PRECIPITATION:

- Visit the [NOAA - National Weather Service](#)
- (1) Select the region on the Map
- (2) You got to the NOWData page
- You can select specific location within that region or you can click on '**View Map**' to have better reference
- Make sure the '**Product**' is '**Summarized Monthly Data**'
- For option, you can select the range of year you wanted the data
- Under '**Variable**' you can select between '**Average Temperature**' or '**Precipitation**'
- Click '**Go**' to get the table
- (3) Each row of the table will represent a year
- Look for the year you wanted the data - **Copy and Paste** the table data (in EXCEL/GOOGLE SHEET format) into EXCEL/GOOGLE SHEET and calculate the average from **June to September**.
- You got the '**AVERAGE TEMPERATURE**' and/or '**AVERAGE PRECIPITATION**'



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"City, St" or ZIP code

Enter location ...

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Widespread Flooding Remains in the Mid-Mississippi Valley; Storm Shifting Across the Southeast U.S.

The storm system which brought excessive rainfall and lingering flooding over the mid-Mississippi River Valley this past weekend will progressively shift through the Southeast U.S. Monday. Scattered thunderstorms, some with heavy rainfall, severe winds, and perhaps a tornado are possible Monday afternoon across parts of northern Florida and the southern Atlantic Seaboard. [Read More](#)

Climate

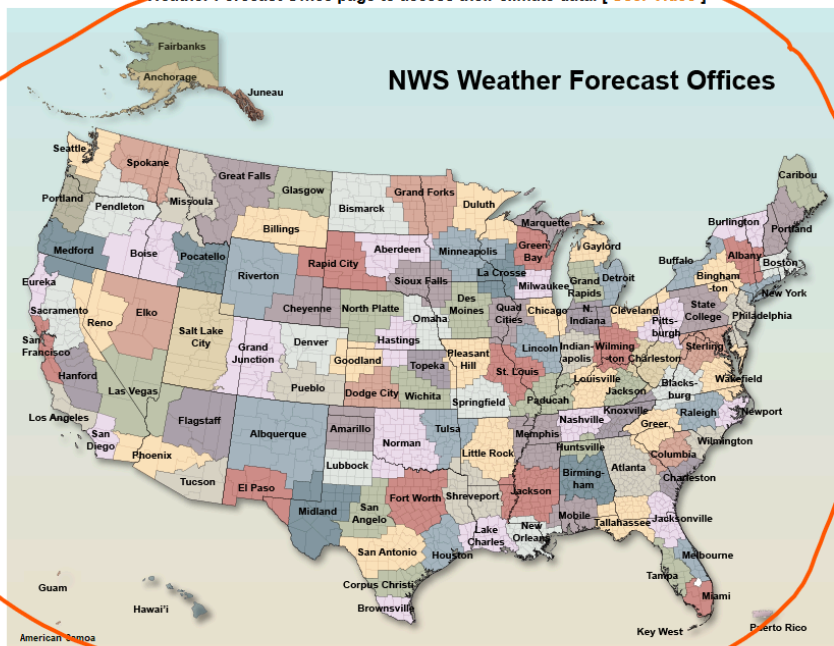
[Weather.gov > Climate](#)

National Weather Service

National Headquarters

For the latest climate forecasts see the [Climate Prediction Center \(CPC\)](#) web page.

The map below is your portal to NWS Climate information. Select an area of interest and you will be directed to the local Weather Forecast Office page to access their climate data. [\[User Video \]](#)



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National Oceanic and Atmospheric Administration
National Weather Service
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Climate

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NOWData - NOAA Online Weather Data

1. Location »
Grand Junction Area
Altenbern, CO
Aspen 1SW, CO
Black Canyon, CO
Blue Mesa Lake, CO
Bonham Reservoir, CO
Cedaredge 1E, CO
Cimarron, CO
Cochetopa Creek, CO
Collbran, CO

2. Product »
☐ Daily data for a month
☐ Daily almanac
☒ Monthly summarized data
☐ Calendar day summaries
☐ Daily/monthly normals
☐ Climatology for a day
☐ First/last dates
☐ Temperature graphs
☐ Accumulation graphs

3. Options »
Year range: 2000 - 2025
Variable:
Precipitation
Max temp
Min temp
Avg temp
Precipitation
Snowfall
Snow depth
HDD base 65
CDD base 65
GDD base 50

4. View

Product Description:
MONTHLY SUMMARIZED DATA - calculates averages, totals, extremes or frequencies for the selected variable for each month year for the selected range of years. Note: trace precipitation/snowfall amounts are treated as zero in sums, mean, and number of counts. Annual average temperatures are the average of the two monthly values. Temperatures are reported in degrees F; precipitation and snowfall are reported in inches.

The Applied Climate Information System (ACIS) is a joint project of the Regional Climate Centers, the National Centers for Environmental Information (NCEI) and the National Weather Service. Official data and data for additional locations are available from the Regional Climate Centers and NCEI.



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National Oceanic and Atmospheric Administration
National Weather Service
Grand Junction, CO
2844 Aviators Way
Grand Junction, CO 81506-8644

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NOWData - NOAA Online Weather Data

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Monthly Total Precipitation for ASPEN 1SW, CO

Click column heading to sort ascending, click again to sort descending.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	2.31	2.30	2.80	1.69	2.03	1.06	1.79	1.79	2.01	0.50	2.42	1.28	21.98
2001	M	M	M	2.58	2.74	1.60	2.30	2.97	2.12	1.03	2.40	1.30	M
2002	1.71	1.40	2.20	1.42	0.21	0.00	1.70	1.22	3.30	1.80	2.55	1.00	M
2003	0.55	M	2.97	2.47	2.91	1.35	0.49	0.90	2.70	0.50	3.00	2.30	M
2004	1.90	2.36	0.90	1.73	1.03	1.59	1.36	0.78	2.60	1.68	3.00	1.30	M
2005	M	1.98	M	2.48	1.29	1.76	1.84	2.12	2.65	3.51	2.40	2.69	M
2006	2.74	1.14	2.15	0.99	1.06	0.30	3.55	1.52	2.74	M	2.64	1.41	M
2007	1.93	2.11	1.85	1.78	2.03	0.87	3.73	1.20	2.74	2.95	0.46	5.28	26.93
2008	4.24	3.17	3.55	2.51	2.56	0.60	0.90	1.51	0.83	0.71	2.12	4.62	27.32
2009	2.85	1.27	2.63	2.83	2.54	1.47	2.06	1.06	1.42	1.76	1.37	1.90	23.16
2010	0.86	2.49	2.25	3.96	1.70	1.55	1.92	4.92	0.71	2.42	2.38	2.55	27.71
2011	1.84	2.75	2.89	6.39	2.47	0.81	3.16	0.85	0.92	1.97	1.71	0.76	26.52
2012	2.38	1.64	0.55	1.75	1.07	M	2.38	2.28	1.44	1.50	0.44	2.11	M
2013	1.23	1.67	1.83	3.99	2.40	0.12	2.40	2.07	4.27	2.09	2.11	2.17	26.35
2014	3.62	2.17	3.28	1.67	2.32	0.30	1.86	2.74	2.22	1.57	2.40	3.13	27.28
2015	0.34	1.60	2.44	1.85	4.69	1.07	3.29	1.81	1.22	2.00	1.80	2.59	24.70
2016	2.50	2.01	2.48	2.97	1.71	0.65	1.44	2.93	1.36	1.13	1.60	2.92	23.70
2017	4.22	1.60	1.85	2.00	2.51	0.28	2.29	1.72	1.73	2.85	0.81	1.02	22.88
2018	1.49	3.19	1.65	3.62	0.77	1.19	1.02	1.58	0.52	2.49	1.86	1.88	21.26
2019	2.55	2.24	6.04	2.40	3.86	1.26	1.35	0.82	0.39	2.59	1.78	2.23	27.51
2020	1.77	2.47	1.83	2.38	1.45	1.46	1.17	1.13	1.53	1.03	1.76	1.85	19.83
2021	0.63	2.99	3.19	1.19	2.28	1.02	1.77	2.12	1.42	1.63	1.87	4.68	24.79
2022	1.45	2.23	2.43	1.78	2.14	0.71	1.95	3.21	1.04	2.73	1.98	2.27	23.92
2023	2.57	2.11	3.84	2.84	2.21	1.24	0.10	1.05	1.07	3.51	0.79	1.81	23.14



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