

Monthly sunshine duration dataset

Period of record

Monthly, annual and seasonal sunshine duration totals are available from June 1880 to date; estimates have been made to cover minor periods of missing data, although there are some remaining gaps in the first few years of record.

Between the start of the record and December 1999, daily sunshine durations were taken from the record of a Campbell-Stokes sunshine recorder mounted on the south-facing parapet of the observatory building. Since daily sunshine records ceased at the site in December 1999, monthly sunshine totals have been estimated to the nearest hour using an adjustment factor applied to a Met Office regional sunshine value. Full details are set out in Appendix 6 in *Durham Weather and Climate since 1841*.

Units

All values are in hours, to a precision of 0.1 h during the period of manual records (rounded where necessary to one decimal place): and to the nearest hour since.

Content

Monthly sunshine duration totals are the sum of daily values available within the month. There are occasional estimates where there are known errors or minor gaps in the record; full details are given in Appendix 6 in *Durham Weather and Climate since 1841*. Seasonal totals are the sum of all daily values within each three-month period, where winter consists of December, January and February (DJF, dated by the January year), spring is March, April and May (MAM), and so forth. Calendar year totals represent the sum of all daily sunshine duration totals within 12 months January to December.

Note that these records of monthly sunshine duration may differ slightly from previously published data, owing to the inclusion of minor corrections from time-to-time.

Record format

Excel (xlsx) record format: monthly sunshine duration totals in hours are set out for each month, season and calendar year, starting in 1880. Missing data are shown blank (empty cells).

If you use this dataset in any publication or published work, please include the following citation:

Burt, Stephen and Burt, Tim, 2022. *Durham Weather and Climate since 1841*. Oxford University Press, 580 pp.

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