

Product Summary

Climate Observations for Small Areas is a data product that contains average climate observations for [Lower Layer Super Output Areas](#) (LSOAs) in England and Wales. Datadaptive has calculated a selection of climate variables by sampling the Met Office's annual [HadUK-Grid](#) data at the population-weighted centroid of each LSOA.

The data product contains the following calculated climate variables for the ten-year period from 2011 to 2020:

- precipitation (rainfall): total amount in millimeters (mm),
- sunshine duration (sun): total duration of bright sunshine in hours,
- mean air temperature (tas): average of daily mean temperature in centigrade (°C),
- maximum air temperature (tasmax): average of daily maximum temperature in centigrade (°C), and
- minimum air temperature (tasmin): average of daily minimum temperature in centigrade (°C).

The data product also contains LSOA11 codes and names, and mid-2020 population estimates and population density for each LSOA.

Annual HadUK-Grid data was sampled at the population-weighted centroid of each LSOA. The centroids of 99 of the LSOAs were slightly outside the grid. For each those LSOAs, the sample point was the centroid of the 1km grid cell nearest to the LSOA centroid.

Sampled values were rounded to one decimal place and then averaged to produce the ten-year variables.

Data quality statement

Datadaptive has taken reasonable care in calculating the variables and preparing the data. However, the accuracy and currency of the data is dependent on the source data and methods.

Data formats

The data is supplied as tables in CSV format.

Licensing

The data may be re-used under the terms of the [Open Government Licence 3.0](#).

Attribution

If you re-use this data in a product or application you must use the following attribution statement:

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Pricing

Free

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File Specifications

Climate Observations for Small Areas

File name: LSOACLIMATE_2011-20
Record count: 34,753
Geographic coverage: England and Wales
File format: CSV

Following is a table that describes the columns and attributes in the file.

Field	Type	Description
LSOA11CD	Text	Lower Layer Super Output Area (December 2011) statistical code
LSOA11NM	Text	Lower Layer Super Output Area (December 2011) statistical name
POPMIDYR	Integer	Mid-2020 estimated total population resident in LSOA
POPSQKM	Integer	Mid-2020 estimated total population per square kilometer of LSOA area
RAINAvg	Decimal	Total precipitation amount in calendar years 2011-2020 (mm)
SUNAVG	Decimal	Total duration of bright sunshine in calendar years 2011-2020 (hours)
TASAVG	Decimal	Average of daily mean temperature in calendar years 2011-2020 (°C)
TASMAXAVG	Decimal	Average of daily maximum temperature in calendar years 2011-2020 (°C)
TASMINAVG	Decimal	Average of daily minimum temperature in calendar years 2011-2020 (°C)