

Data for Climate Adaptation: Working Together to Improve Risk Assessments

CAG Consultants Adaptation
Seminar Series Oct 2025



Webinar Focus

Which key data sets and tools can be used for assessing climate change risks in England?

Webinar structure

We would like to record the webinar

Use the chat for comments and questions

Opportunity for discussion at the end

You can click the slides to see sources. E.g. Click [here](#)

Please introduce yourself in chat

Who are CAG Consultants?

CAG is a cooperative partnership of consultants working on environmental projects. We work primarily on climate action (decarbonisation and adaptation) as well as nature. Our areas of expertise are:

- Research
- Monitoring and evaluation
- Engagement
- Economic analysis
- Climate risk assessment



What are we covering today?

Where does risk assessment fit into adaptation response?

National climate hazard tools and data

Approaches to climate risk assessment

Climate Vulnerability Index data sets and tools

Risks by Risk assessment data sets and tools

Key steps for LA Adaptation Response



Preparation and Planning



Assessing Climate Risks and Opportunities



Creating the Adaptation Plan



Putting the Plan into Action



Monitoring and Evaluation

Poll

Have you done a climate risk assessment?

- We did this for NI188, but not recently
- We have done one for our own operations
- We have done one for our community
- No, but are planning to do one
- Nothing so far

Meeting chat



Have you done a climate risk assessment?

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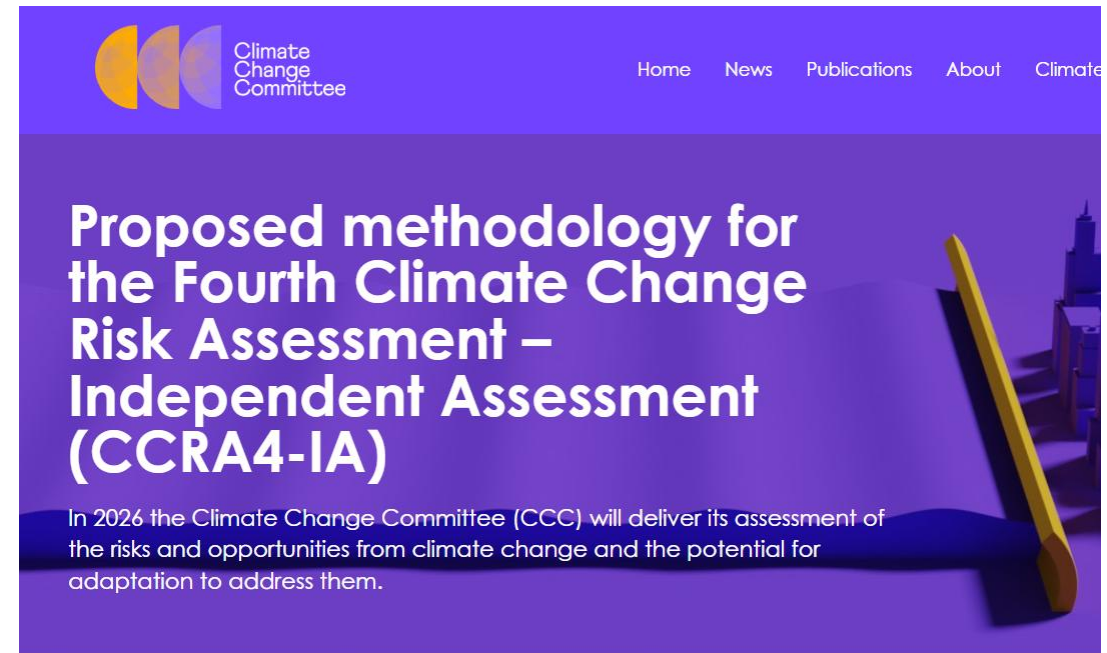
What are the main high-level climate hazard data sets for LAs?

CCRA 4

45 Risks and Opportunities

Grouped into 5 themes

- Built Environment
- Economy
- Health and wellbeing
- Infrastructure
- Land, nature and food
- Download [here](#)



Built Environment

BE1: Risks to buildings and communities from heat

BE2: Risks to buildings and communities from flooding

BE3: Risks to buildings and communities from coastal change

BE4: Risks to buildings and communities, excluding from heat, flooding and coastal change

BE5: Risks to indoor environmental quality

BE6: Risks to cultural heritage and landscapes

BE7: Risks to facilities delivering public services, excluding health and social care

BE8: Risks to local resilience planning and emergency service response capabilities

BE9: Risks and opportunities to households from changing energy demand

Main Message for the CCRA

We know what the main risks and opportunities are in the UK, by themes

But at a national scale, we need to understand this locally.



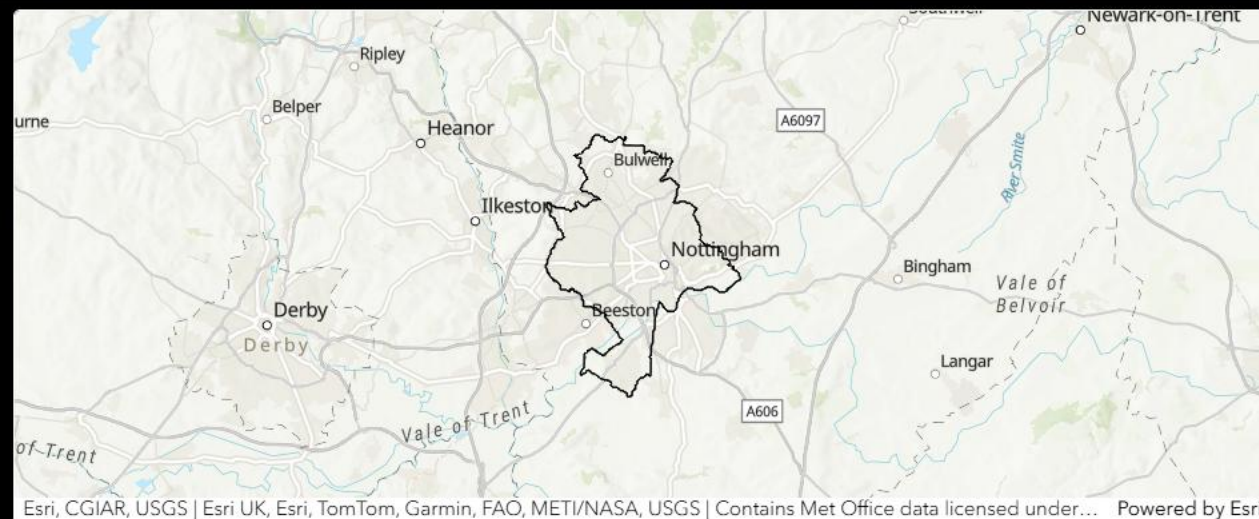
Local Authority Climate Service

Welcome to the Met Office's climate service for Local Authorities in the UK.

This site provides tools and resources that have been specifically designed for Local Authorities to help you better understand climate change in your local area and support your adaptation journey.

This information may be useful for others, not just Local Authorities. It is free and available for all. This is a Beta service and will be developed further.





Generate Report for Nottingham

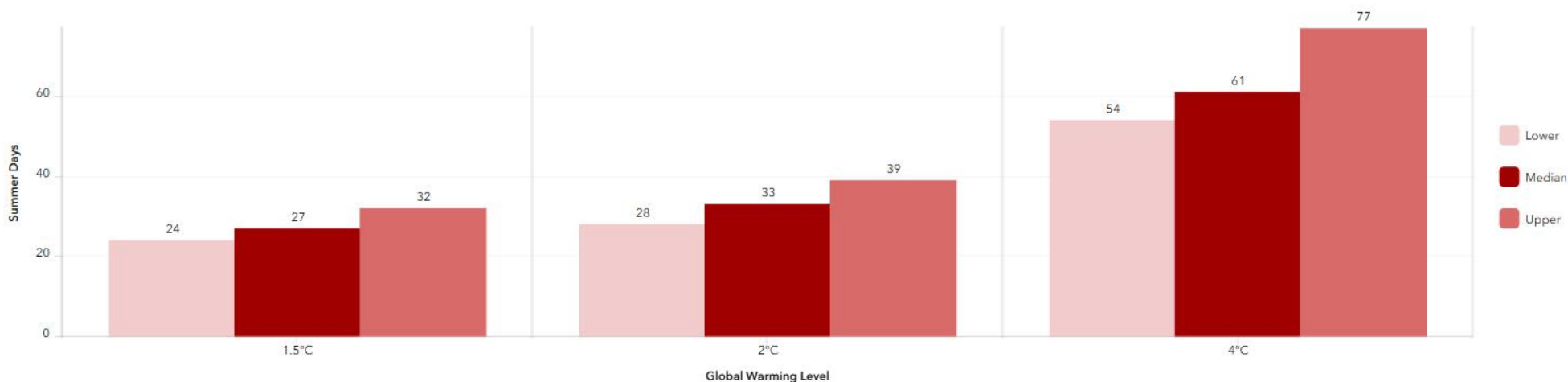
To get started:

1. Select a Local Authority (top right)
2. View projected changes in climate for the selected Local Authority in **graphs** using the tabs in the bottom left corner.
3. View different Climate Averages or Climate Indicators (bottom left) using the green tabs or arrow buttons (◀ and ▶), including Sea Level rise for coastal areas.
4. View a detailed **Climate Report** for the selected Local Authority using the button above.

Find out **further information** about this explorer and **provide feedback** via the ☰ menu in the top right of the page.

Average number of Summer Days in Nottingham

The average number of summer days per year modelled in 1981-2000 was 13. In the most recent decades, 2001-2020, the average number of summer days modelled per year was 24.



Description: Projections for three future Global Warming Levels of the annual number of days where the daily maximum temperature is above 25°C. One Summer Day is one day in which the threshold is passed in a year.

Impact relevance: High daytime temperatures with health impacts for vulnerable people at risk of hospital admission or death. Transport disruption - e.g. track buckling on railways. Can also indicate periods of increased water demand.

This dataset can be viewed on the Climate Data Portal - [Summer Days](#).

Information on global warming levels and lower/median/upper estimates can be found in the [Scientific Detail](#).

Summer Days

Hot Summer Days

Extreme Summer Days

Tropical Nights

Frost Days

Icing Days

Growing Degree Days

Heating Degree Days

Cooling Degree Days

Climate Averages

Climate Indicators

Annual Count of Summer Days - Projections (Local Authority) v1

Authoritative



Met Office
Met Office

Summary

Annual Count of Summer Days (annual number of days where the daily maximum temperature is above 25°C). Absolute values for a range of future Global Warming Levels, relative to the 1981-2000 baseline. The data source is the set of Regional (12km) UK Climate Projections (UKCP18), from which spatial averages have been calculated over Local Authority areas. This dataset forms part of the Met Office's Climate Data Portal service where other datasets can

Read More

View Full Details

Download

Details



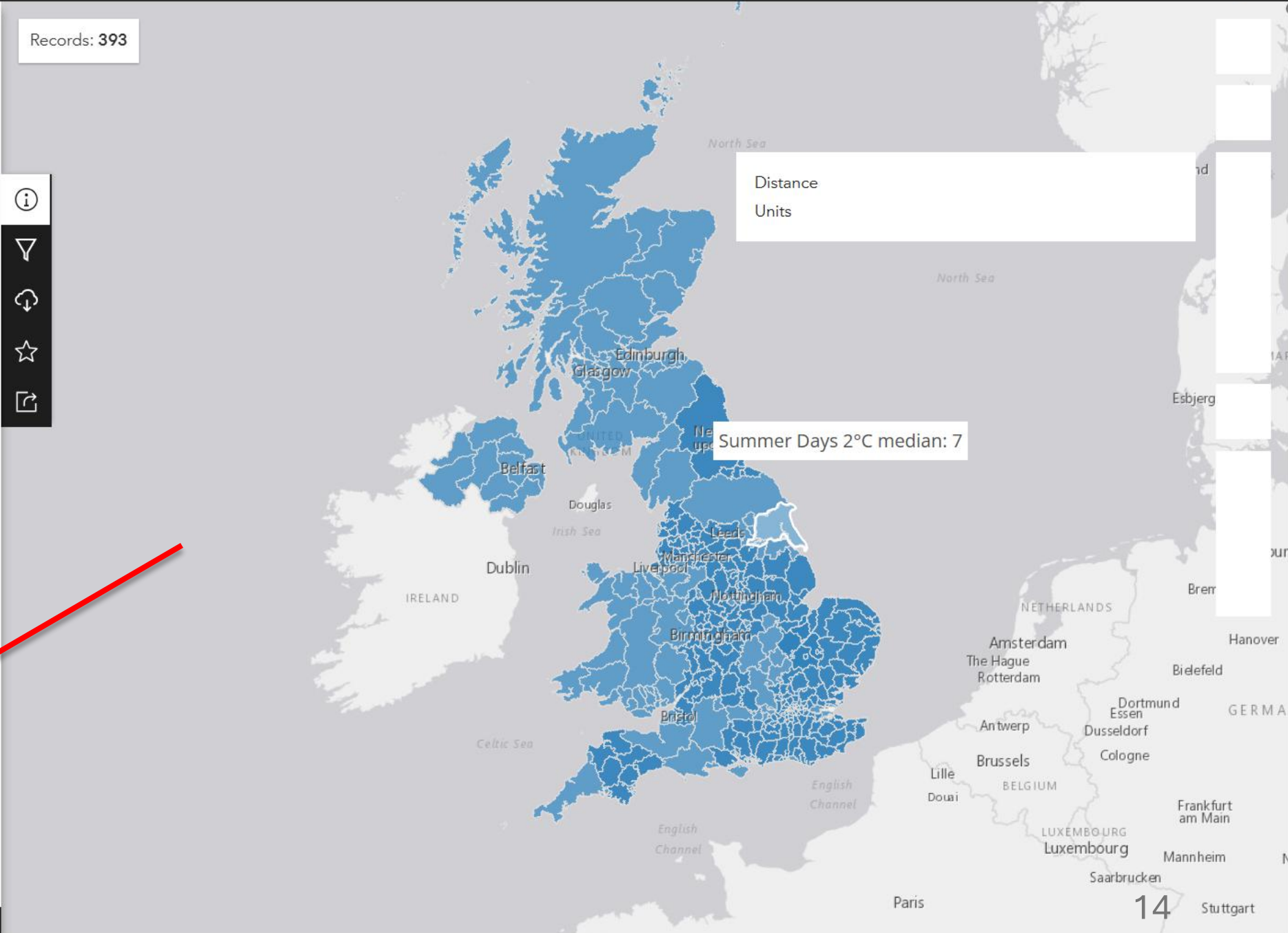
Dataset
Feature Layer

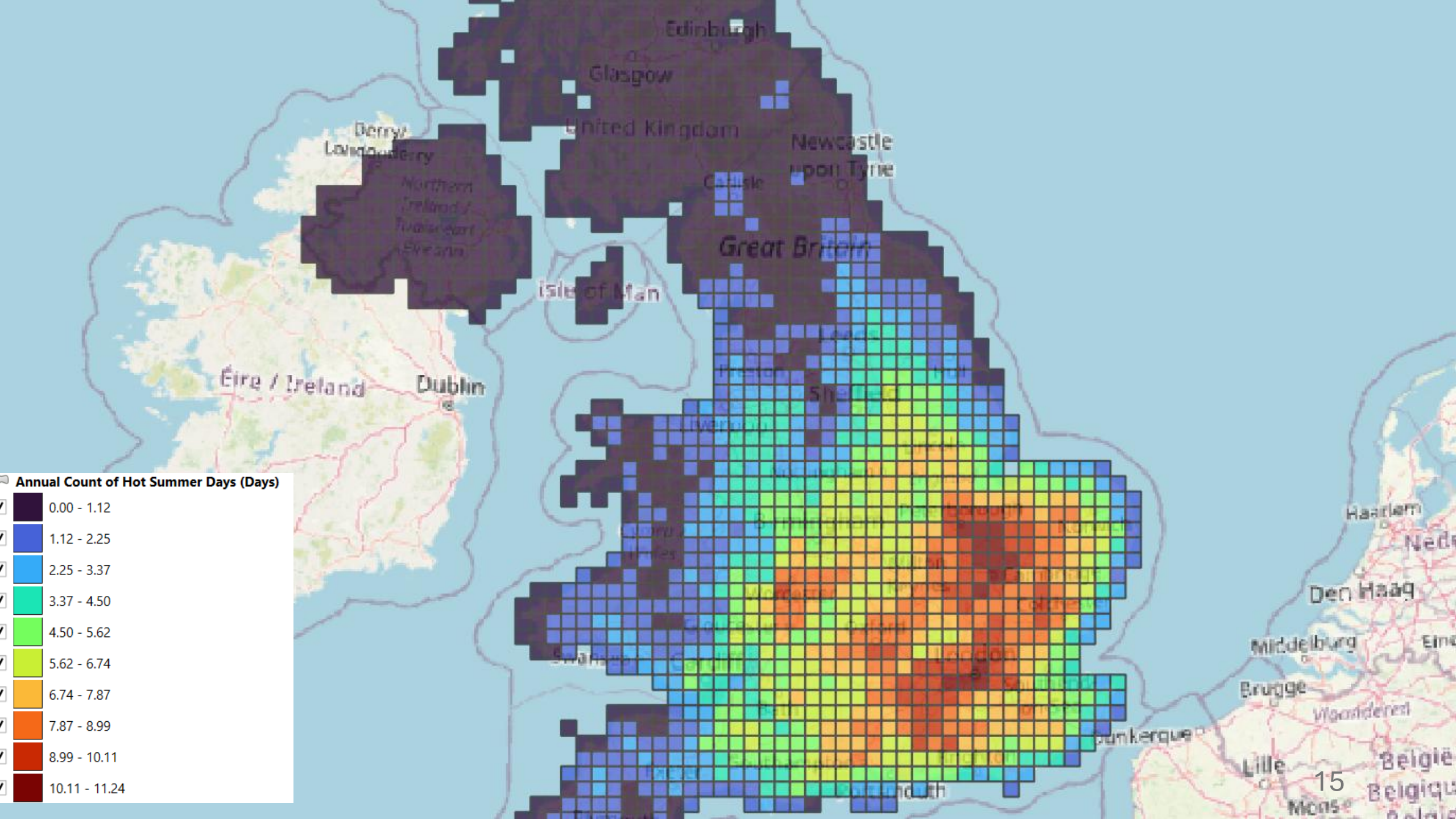


August 8, 2024 at 2:27:35 PM GMT+1
Info Updated

I want to use this

Records: 393





Main Message from LACS

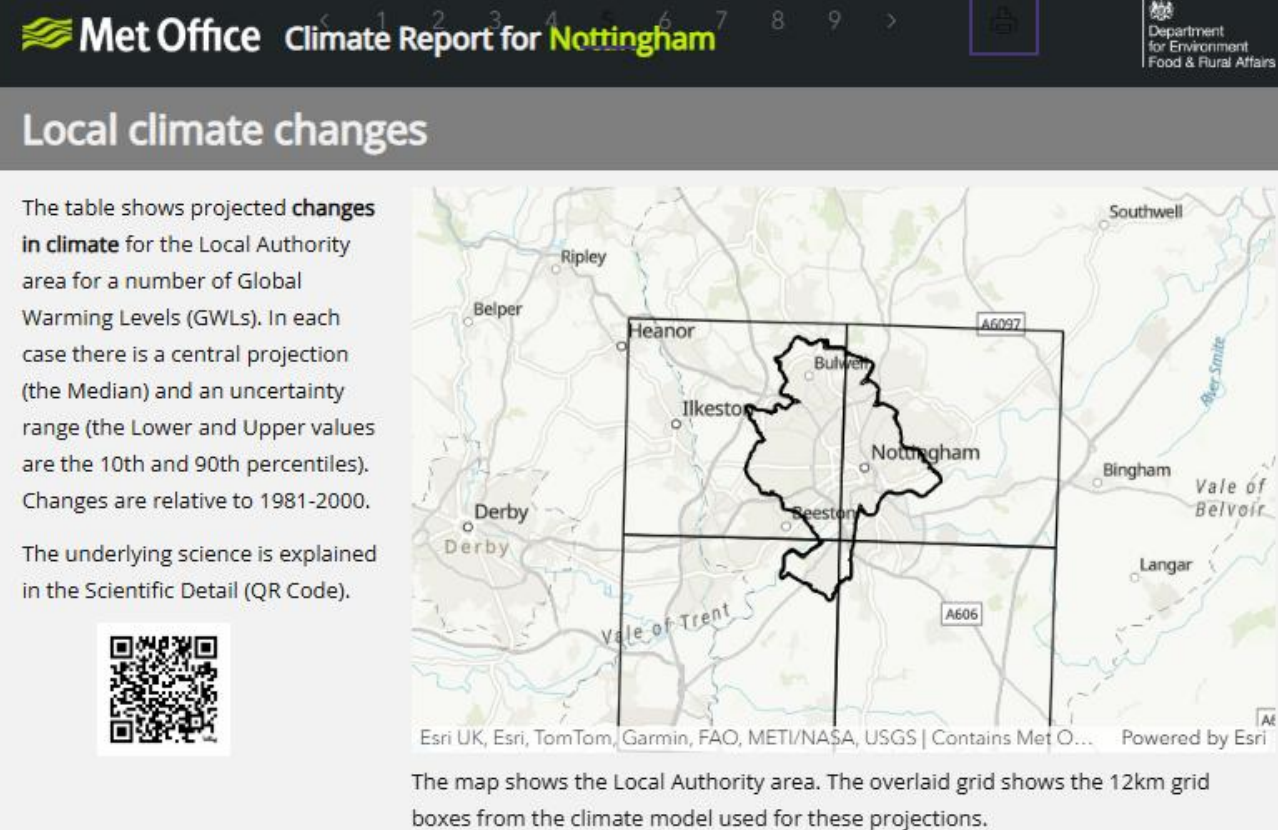
Increased temp and extremes

Increased winter rain

Decreased summer rain

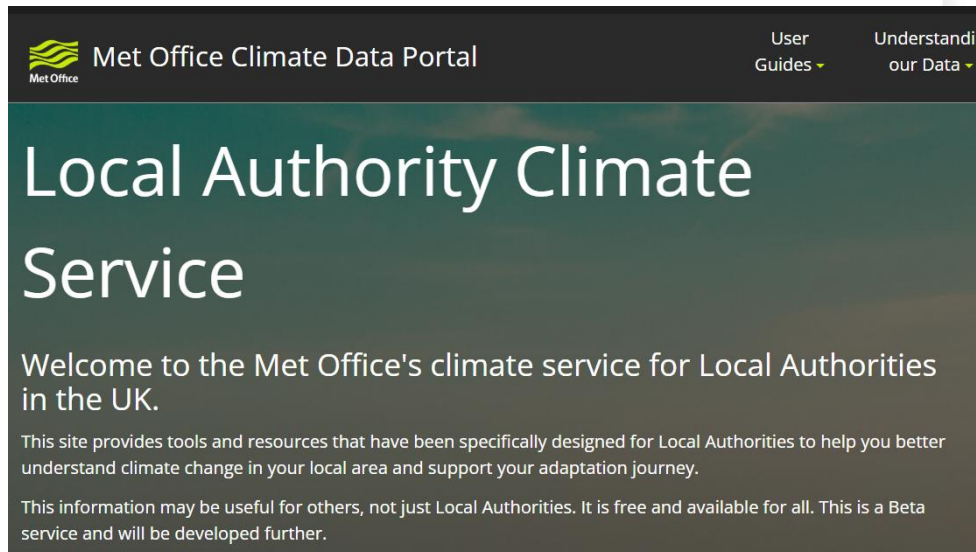
Increase variability

Decrease frost etc...



		0.6°C GWL Baseline 1981-2000	1.0°C GWL Recent Past 2001-2020	1.5°C GWL Paris Agreement	2°C GWL Guidance: Prepare	4°C GWL Guidance: Assess risks
	TEMPERATURE	°C	°C	°C change	°C change	°C change
	Summer Maximum Temperature	29.5 29.2 to 29.9	31.7 30.8 to 32.9	+2.9 +1.1 to +4.1	+3.2 +2.2 to +5.5	+6.9 +6.3 to +8.8
	Summer Average Temperature	15.9 15.9 to 15.9	17.0 16.7 to 17.4	+1.4 +1.1 to +2.0	+2.1 +1.4 to +2.7	+4.2 +3.7 to +5.1
	Winter Average Temperature	4.3 4.3 to 4.3	4.9 4.6 to 5.4	+1.0 +0.5 to +1.3	+1.3 +0.6 to +1.7	+2.7 +1.7 to +3.3
	Winter Minimum Temperature	-7.4 -7.7 to -6.9	-5.8 -7.1 to -4.3	+2.2 +0.7 to +3.1	+2.7 +1.5 to +3.8	+4.5 +3.3 to +6.0

Met Office Local Authority Climate Service



LACS online mapping tool that presents key **climate hazards** at a local level



Provides a summary report and graphs



But, still quite high-level, 12 km grid



Focussed on hazards like temperature, rainfall.

Poll and Question

Have you used the LACS?

- Yes
- No

Chat: What was your experience like?



Welcome to the Climate Risk Indicator Explorer

Plot and access data on UK climate risks at scales from the local authority to the nation

This website provides information on future changes to indicators of climate risk across the UK. The information is provided at scales ranging from the district to the four nations of the UK, and for several different scenarios describing how global emissions of the greenhouse gases that cause climate change might increase in the future.

Users can plot maps showing the variation in indicators across the UK and can plot and download time series for specific locations.

CLICK TO ACCESS THE RISK EXPLORER

Show this welcome screen on start ☒

What's new?

The website was updated in August 2023 with the following revisions:

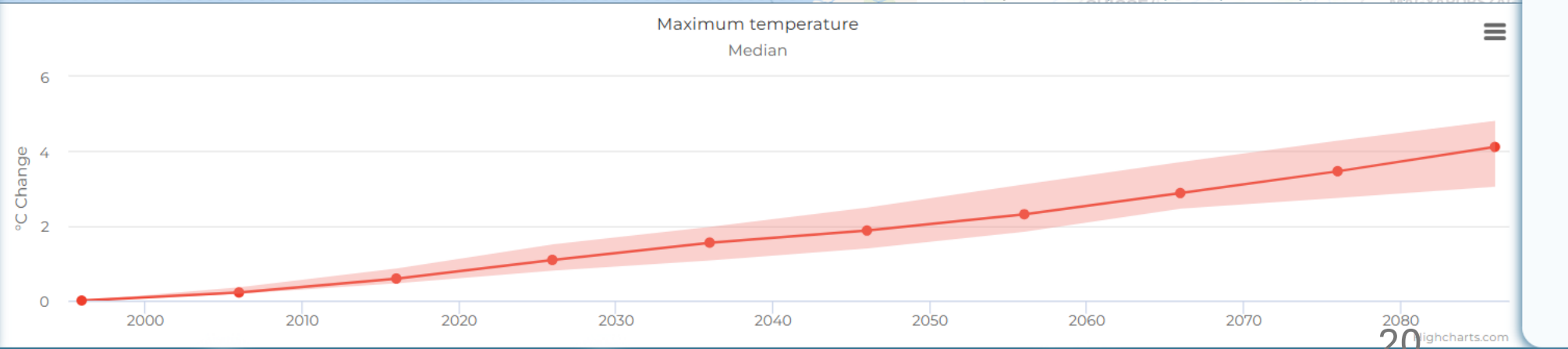
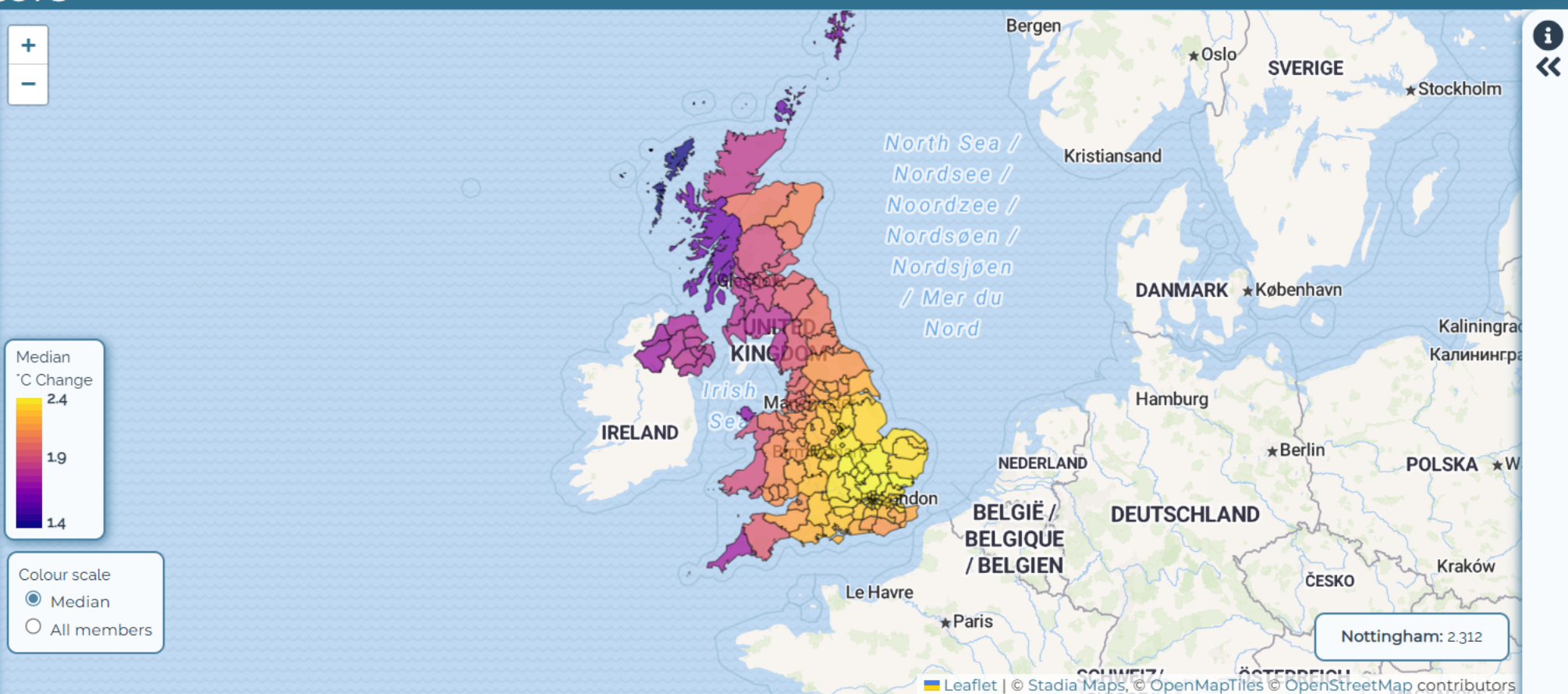
- Replacement of indicators calculated using the probabilistic strand following updates in August 2022 to the UKCP18 probabilistic projections. The changes are relatively small.
- Addition of indicators calculated with the UKCP18 probabilistic RCP4.5 projections.
- Replacement of the "2, 3 and 4°C in 2100" indicators calculated from subsets of the probabilistic strand with indicators calculated from rescaled global strand projections, and addition of a "1.5°C in 2100" scenario (see the info panel for more details).

- Indicator Category
- Climate
- Indicator
- Maximum temperature
- Variant
- Spring
- Metric
- °C Change
- Scenario
- RCP8.5
- Strand
- UKCP18 Global HadGEM
- Member
- Median
- Spatial Resolution
- Counties/Districts
- Spatial Unit
- Nottingham
- Time Period
- 2041-2070

SELECT ADDITIONAL SCENARIO

SELECT MULTIPLE REGIONS

DOWNLOAD DATA



Indicator Category
Climate

Indicator
Maximum temperature

Variant
Spring

Metric
°C Change

Scenario
RCP8.5

Strand
UKCP18 Global HadGEM

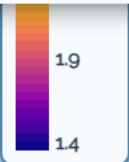
Member
Median

Spatial Resolution
Counties/Districts

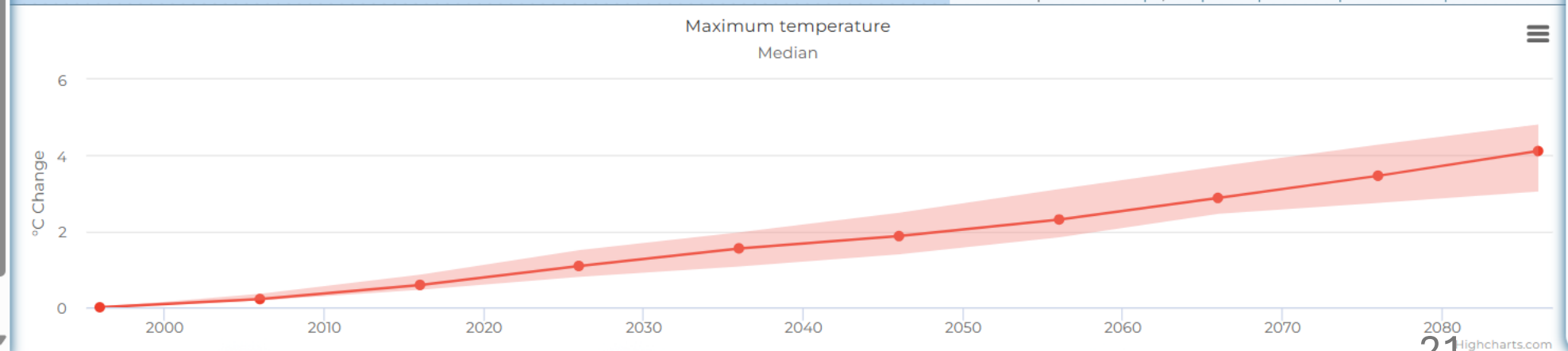
Spatial Unit
Nottingham

Time Period
2041-2070

- Climate
- Temperature extremes
- Heating and cooling
- Transport
- Agriculture
- Wildfire



- Colour scale
- ☒ Median
 - ☐ All members



SELECT ADDITIONAL SCENARIO

SELECT MULTIPLE REGIONS

DOWNLOAD DATA



Indicator Category
Transport

Indicator
Road melt risk (Tmax > 25°C)

Metric
days/year

Scenario
RCP8.5

Strand
UKCP18 Global HadGEM

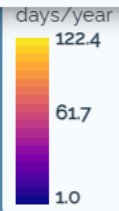
Member
Median

Spatial Resolution
Local Authority Areas

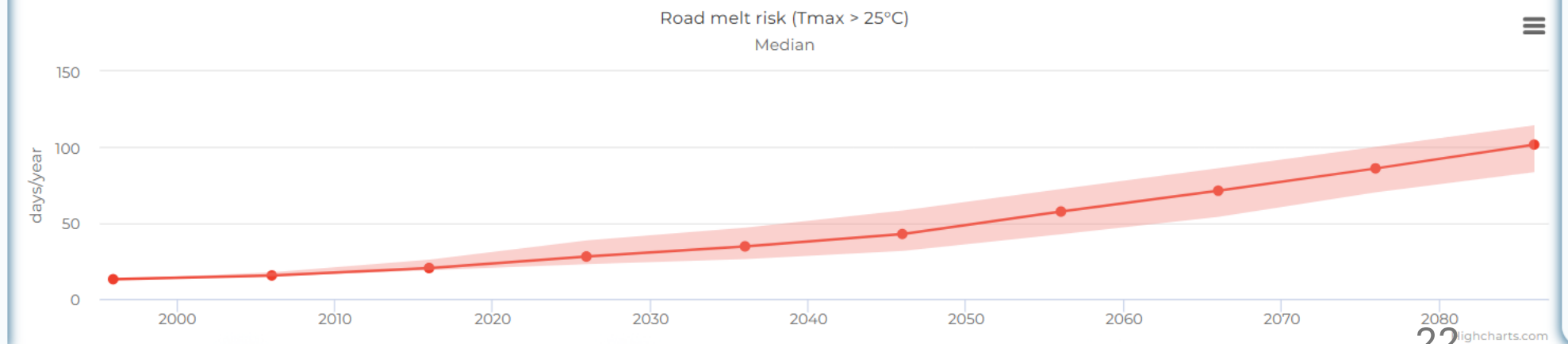
Spatial Unit
Nottingham

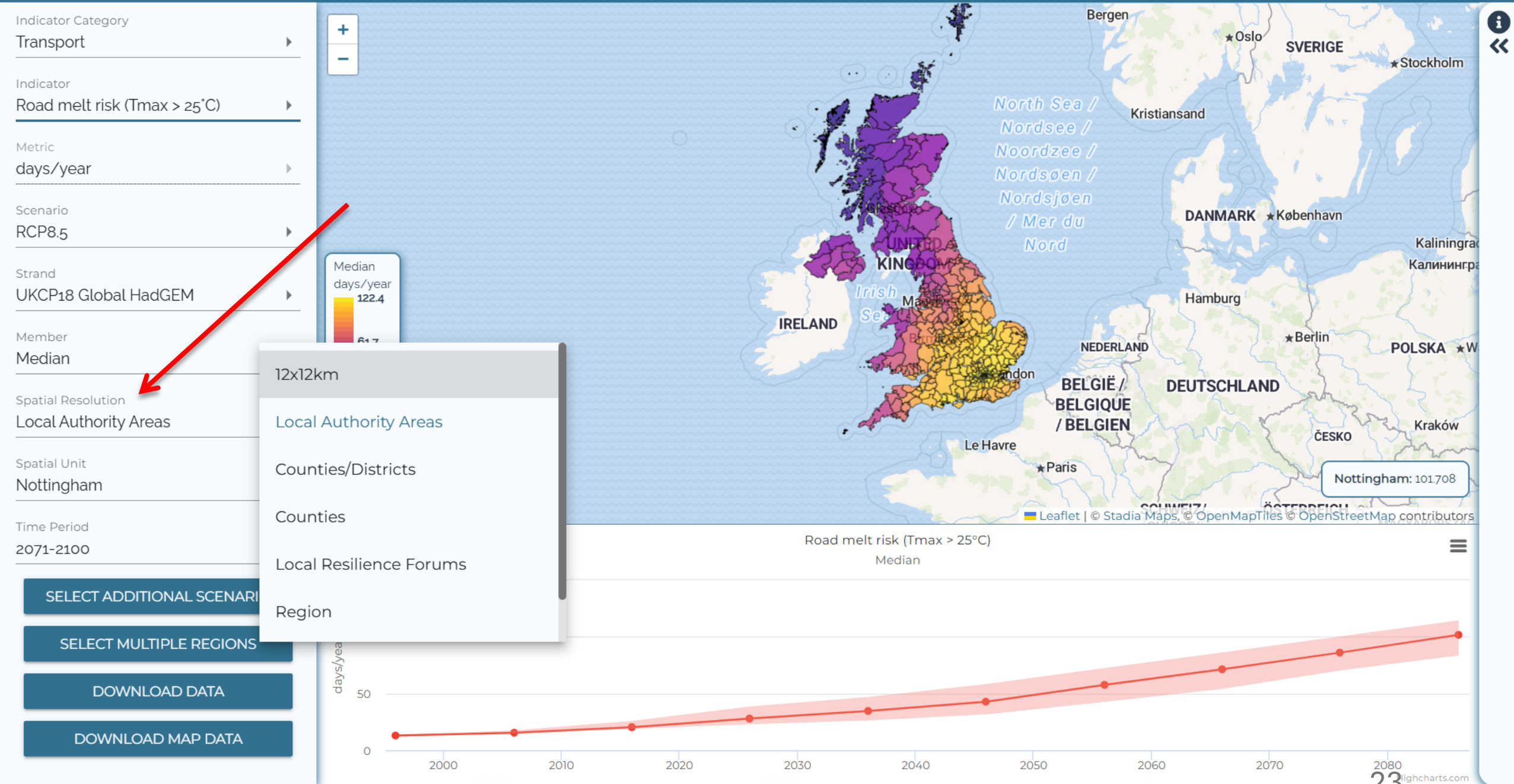
Time Period
2071-2100

- Road melt risk (Tmax > 25°C)
- Road accident risk (Tmin < 0°C)
- Rail: high temperatures
- Rail: adverse weather days



- Colour scale
- Median
 - All members





Indicator Category

Climate

Indicator

Maximum temperature

Variant

Spring

Metric

°C Change

Scenario

RCP8.5

Strand

UKCP18 Global HadGEM

Member

Median

Spatial Resolution

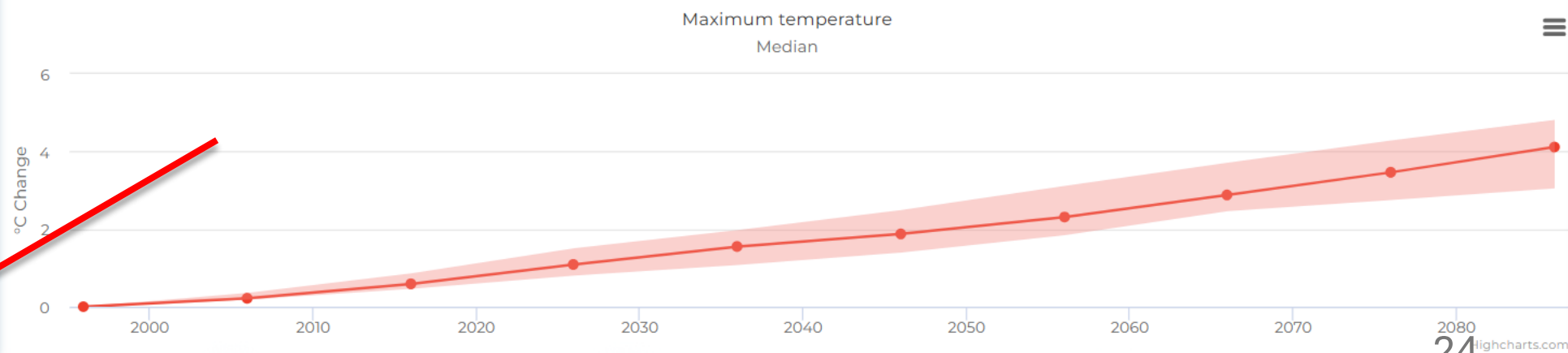
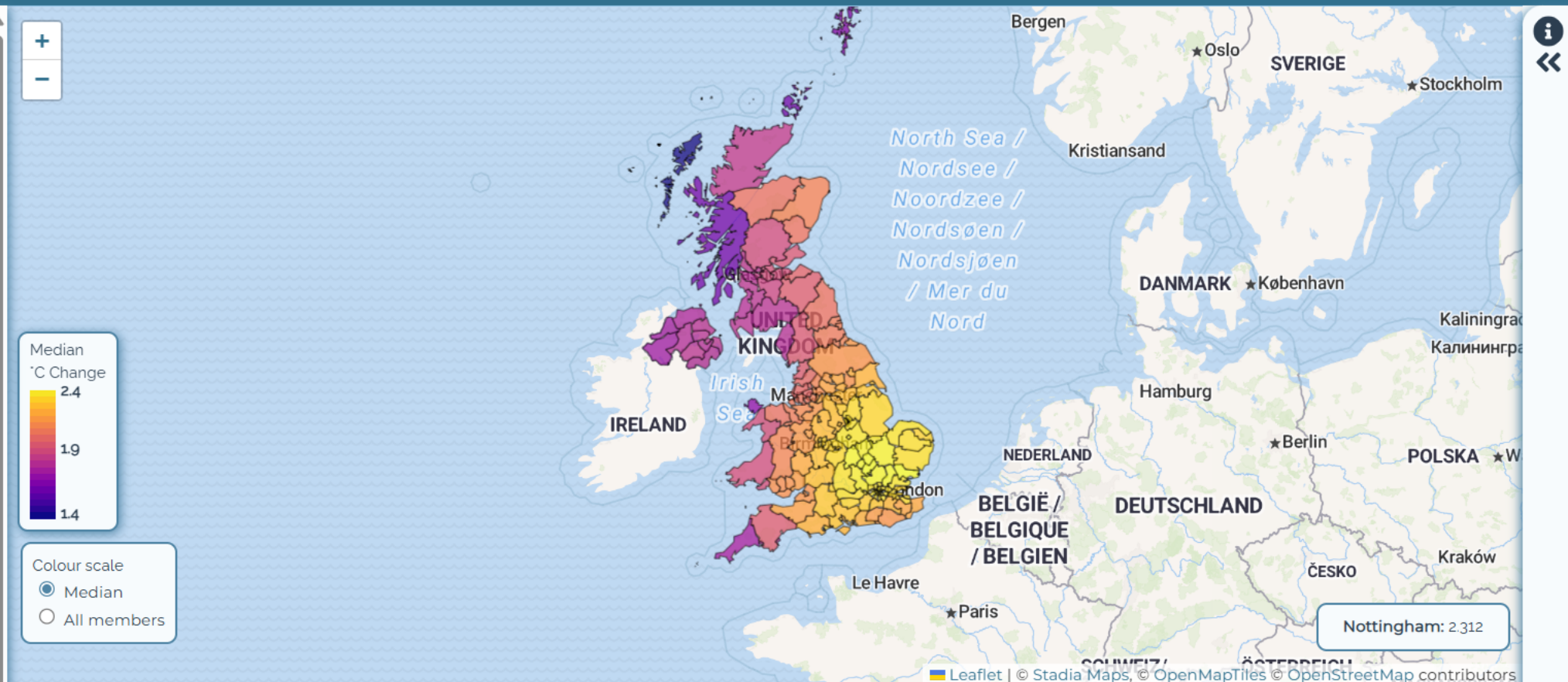
Counties/Districts

Spatial Unit

Nottingham

Time Period

2041-2070

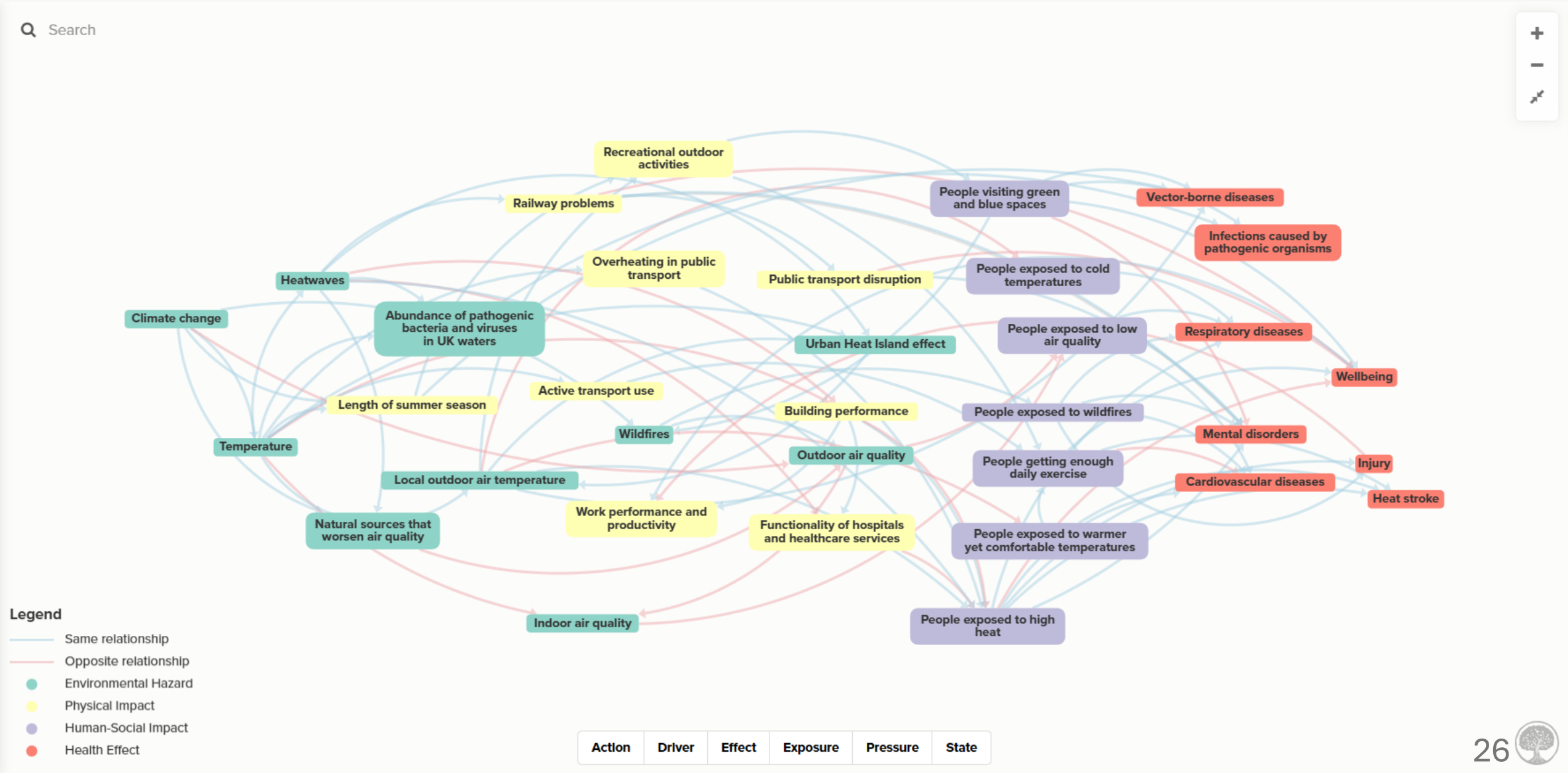
[SELECT ADDITIONAL SCENARIO](#)
[SELECT MULTIPLE REGIONS](#)
[DOWNLOAD DATA](#)


Use this tool to see what the scientific research is saying about:

- **How** local climates will change
- **What** health and community impacts may occur as a result
- **Who** will be most vulnerable and why
- **Which** adaptations to consider

LCAT is **evidence-based** and designed with and for **local decision makers**.

Helpful resources:





Find address or place



Layer List

Layers

Overheating and Humidity Current

...

Overheating and Humidity Future

...

Storm Damage Current

...

Storm Damage Future

...

Slope Failure Current

...

Slope Failure Future

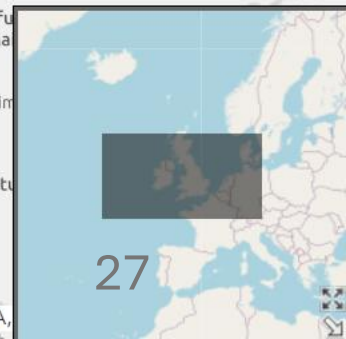
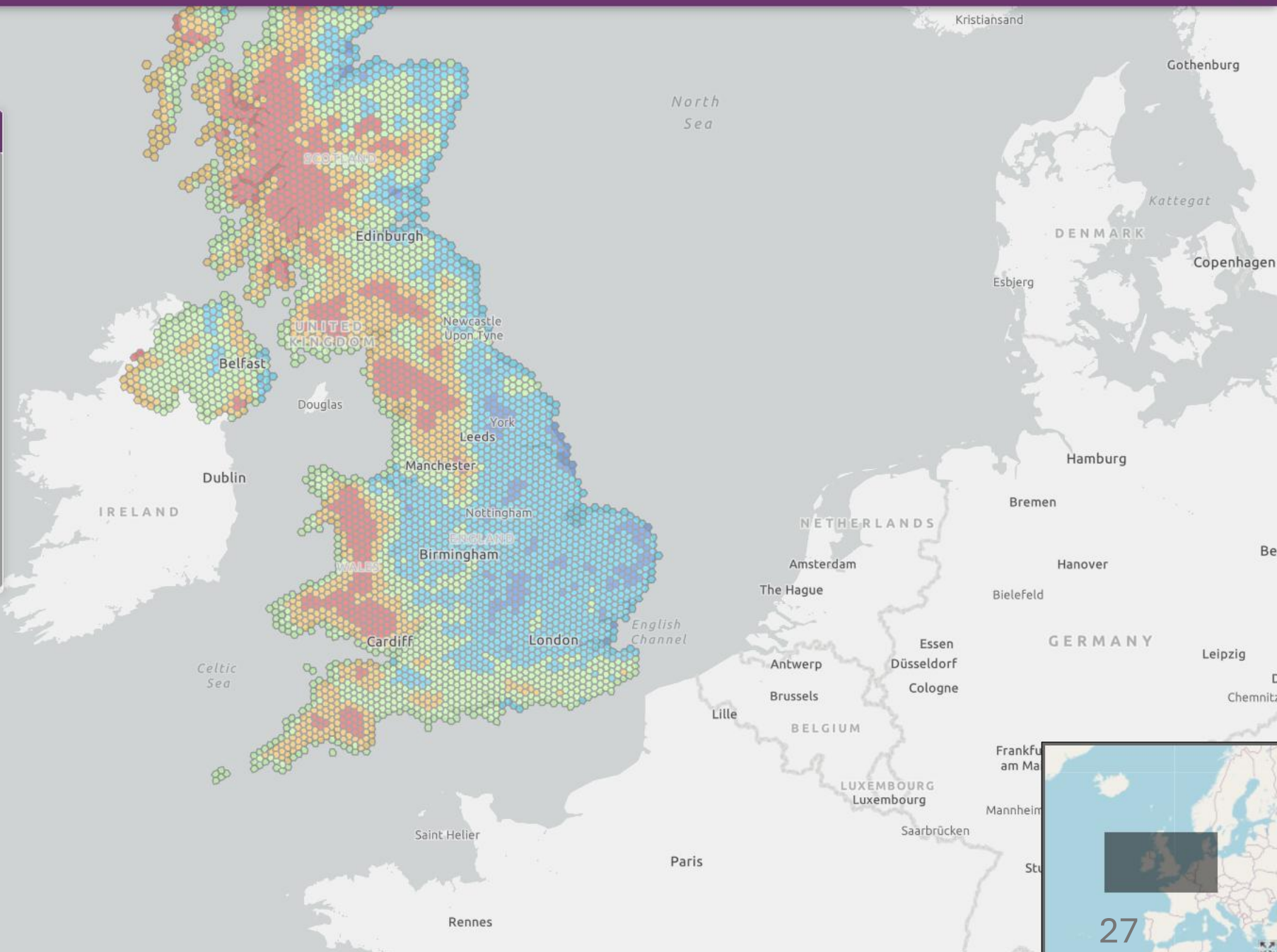
...

Soil Heave Current

...

Soil Heave Future

...



High-level Hazard data summary

Robust scientific data

Only available at regional or
12X12km grids

Limited to hazards like temperature,
changing rain fall, frost etc

What now?

We need understanding
local/neighbourhood
vulnerability

No set method for this,
but in general we need
to consider

Two General Approaches

Climate
Vulnerability
Index

Risk by Risk
Assessment

Climate Vulnerability Index (CVI)

Composite score of vulnerability at
a local level

Social Data: percentage of
elderly residents, poor
quality housing, low
income

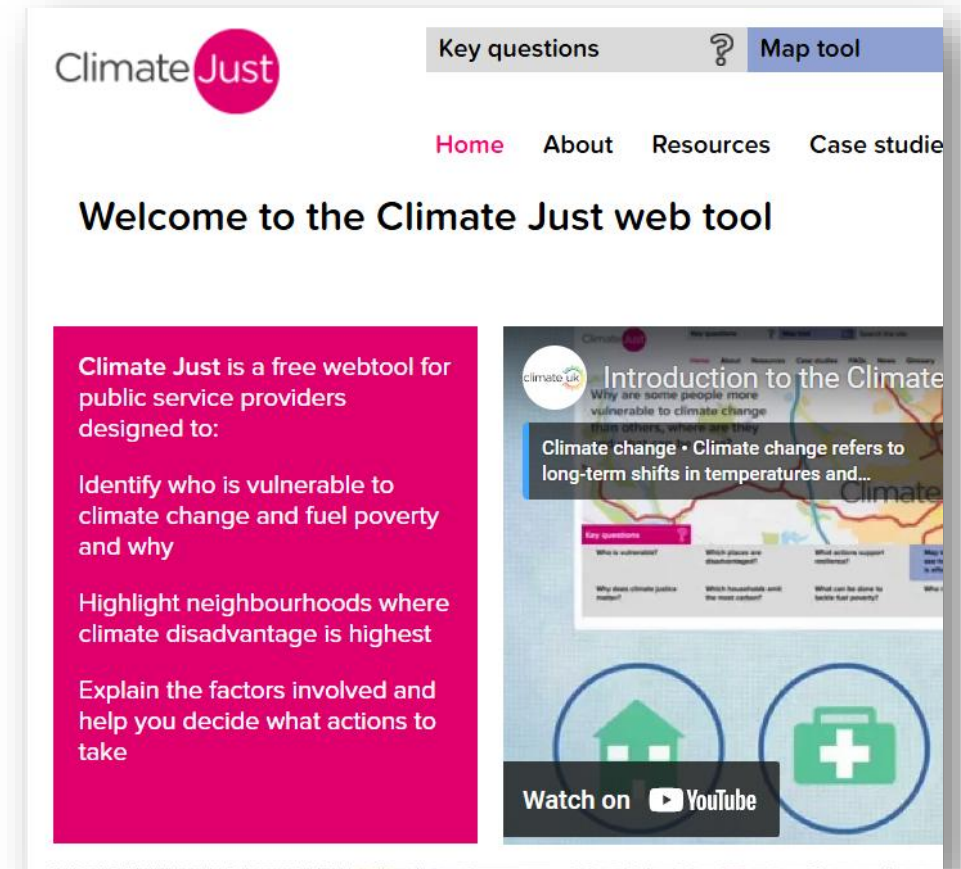
Climate Data: Flooding or
heat

Climate Just CVI

Maps communities that are socially vulnerable and disadvantaged by the impacts of climate change

2 main indices focused on flooding and heatwaves

Provides vulnerability data at a **Lower layer Super Output Areas (LSOA)** level





Search Layer



Flood



Neighbourhood Flood Vulnerability Index



Susceptibility



Inability to prepare



Inability to respond



Inability to recover



Community support



Social Flood Risk Index



Heat

Flood England 2022 - New

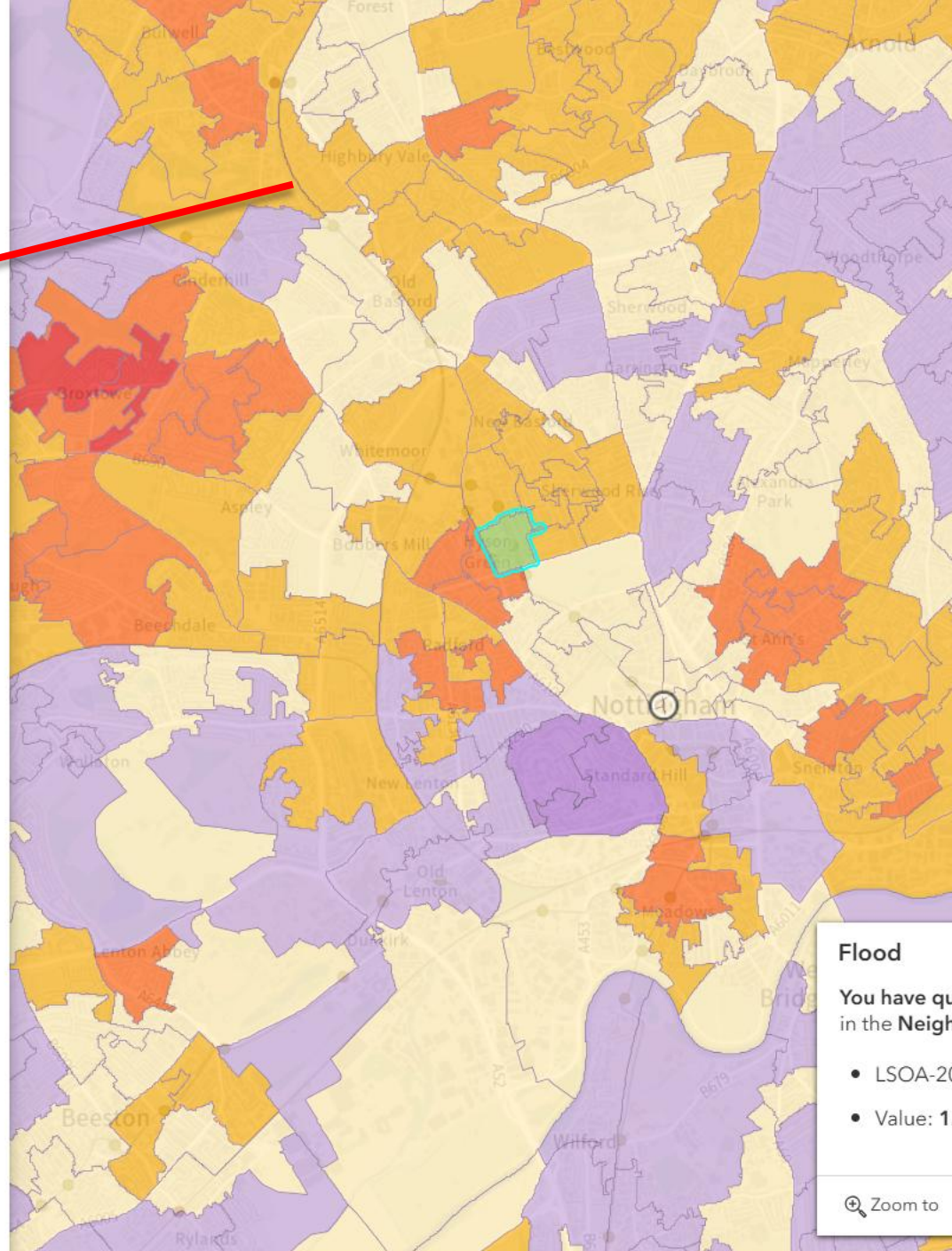
Flood Wales 2022 - New

Heat England 2022 - New

Heat Wales 2022 - New

Government Agency Maps

Administrative Areas



No legend

0 100

No legend

0 100

No legend

0 100

Flood

Neighbourhood Flood Vulnerability Index

Acute
Very high
Relatively high
UK Average
Relatively low
Very low
Slight

0 63 100
Opacity

Flood

You have queried a location with the following details in the Neighbourhood Flood Vulnerability Index map:

- LSOA-2011 name: Nottingham 0185
- Value: 1.19

Zoom to

33

Neighbourhood Flood Vulnerability Index (NFVI)

Susceptibility	This includes factors that make people more likely to be harmed by a flood, such as age (the very young and the elderly), health and disability, and the type of housing they live in
Ability to prepare	This considers a household's capacity to take steps before a flood, which can be affected by income, home ownership, and access to information.
Ability to respond	This looks at how well people can react during a flood, taking into account factors like having a car, knowing how to get information, and the strength of community support networks.
Ability to recover	This assesses the long-term capacity to bounce back after a flood, which is heavily influenced by financial resources, insurance coverage, and mental health support.
Community support	This is based on the availability and quality of services provided by health and emergency services as well as broader care and social services



Search Layer



Flood

Neighbourhood Flood Vulnerability Index



Susceptibility



Inability to prepare



Inability to respond



Inability to respond

Income

Information use

Local knowledge

Physical mobility

Crime

Inability to recover



Community support



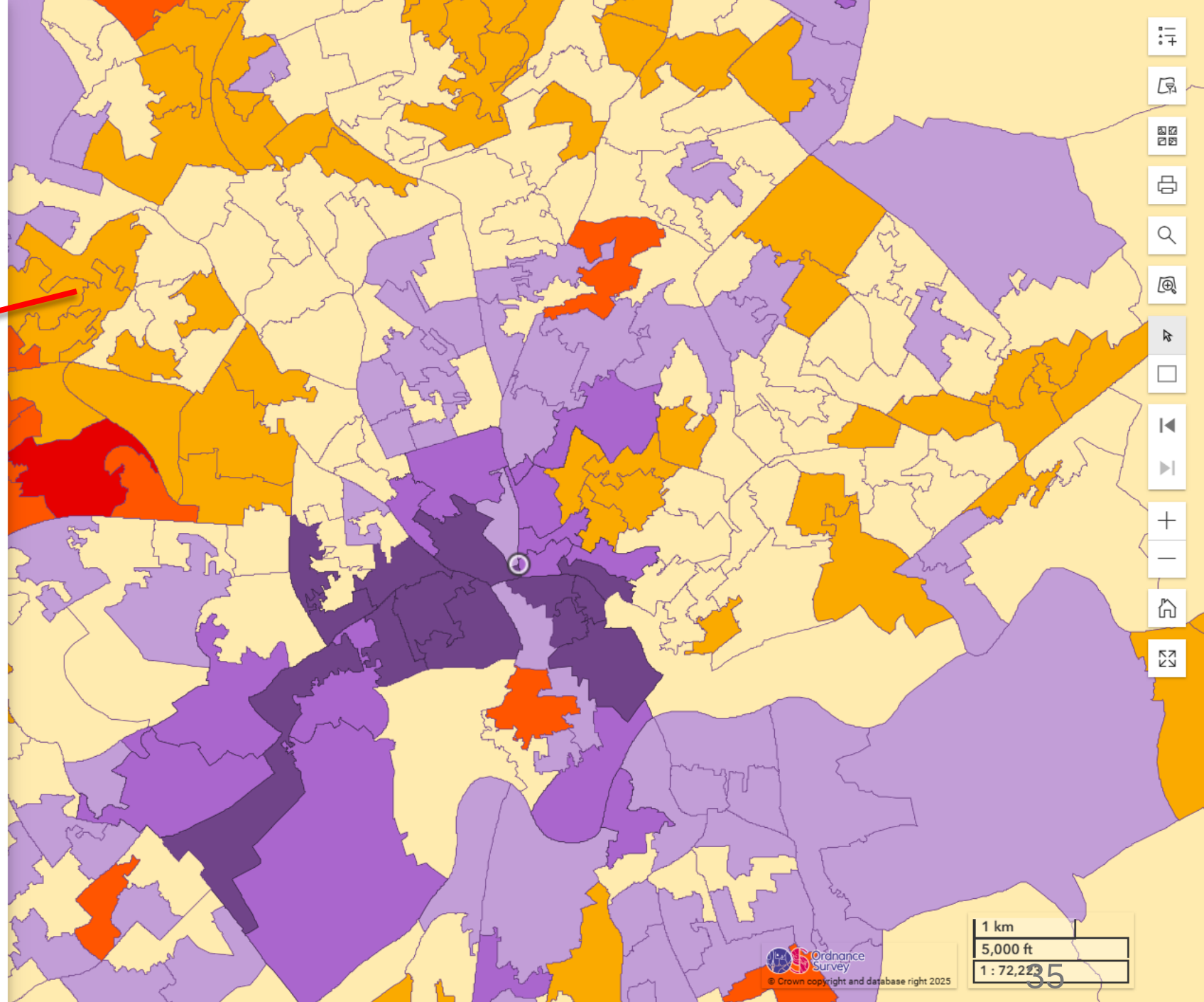
Social Flood Risk Index



Heat

Flood England 2022 - New

Flood Wales 2022 - New





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?

↓

The Climate Just Map Tool data is available for download through various bundles and archives.

- ≡

⚙

↓

©
- Shapefiles Bundle

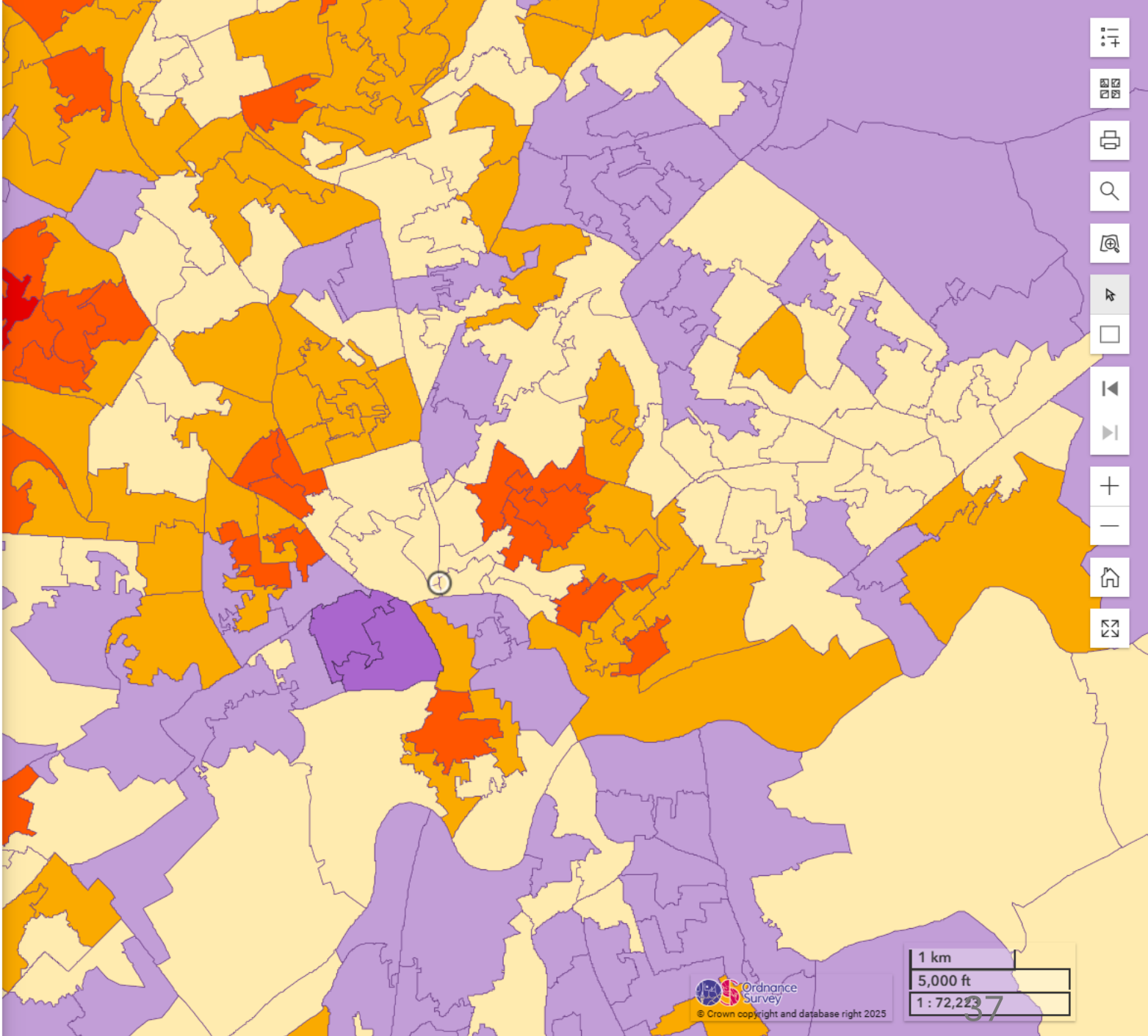
Geopackage

File Geodatabase

Excel File Bundle

Formatted Excel File Bundle

KML File Bundle



Other Climate Vulnerability Indices



Overheating maps

Explore the impact of climate change on future temperatures inside homes and model how different adaptations change internal temperatures.

[Further information](#) ⓘ [Get started](#) >>

Find area

England and Wales

Climate change projections

Switch the projected temperatures using modelled predictions for climate change on estimated CO2 emissions

RCP2.6 2030 - Lower emissions scenario

Overheating metrics

Metrics displayed on the map showing the impact of the selected climate change projection and retrofit adaptations.

TM59+SVI Combined hours over 26°C & SVI

Building adaptation measures

Building retrofit for net zero and climate adaptations. Use these options to compare the impacts of different packages of building adaptation. The analysis modelled four different packages.

NONE Baseline (no adaptations)

Use and share

[Share this map](#) [Export this map \(PNG\)](#)

[Download data](#) [Embed this map](#)

LAD Local Authority Districts

Welcome

Use these maps to explore a model developed to explore the impact of climate change on temperatures inside homes and compare how different adaptations change impacts.

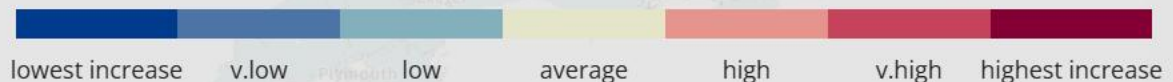
Read the about 'Further information' to understand the **important limitations** of the results shown here.

To get started search for a **postcode** or **local authority** below, you can come back to the introduction tour of the data and interface at any time by clicking 'get started'.

[Skip intro & don't show this again](#)

England and Wales

Combined hours over 26°C & SVI



[show individual metric values](#)

60% of domestic homes in area had EPC (used in model)



adaptations change internal temperatures.

[Further information](#) ⓘ [Get started](#) >>

Find area

Nottingham 021C **LSOA** ✕

Climate change projections

Switch the projected temperatures using modelled predictions for climate change on estimated CO2 emissions

RCP8.5 2080 - High emissions scenario

☐ **RCP2.6** 2030 - Lower emissions scenario ⓘ

☐ **RCP2.6** 2050 - Lower emissions scenario ⓘ

☒ **RCP8.5** 2080 - High emissions scenario ⓘ

Overheating metrics

Metrics displayed on the map showing the impact of the selected climate change projection and retrofit adaptations.

TM59+SVI Combined hours over 26°C & SVI

☒ **TM59+SVI** Combined hours over 26°C & SVI ⓘ

☐ **TM59** Hours over 26°C ⓘ

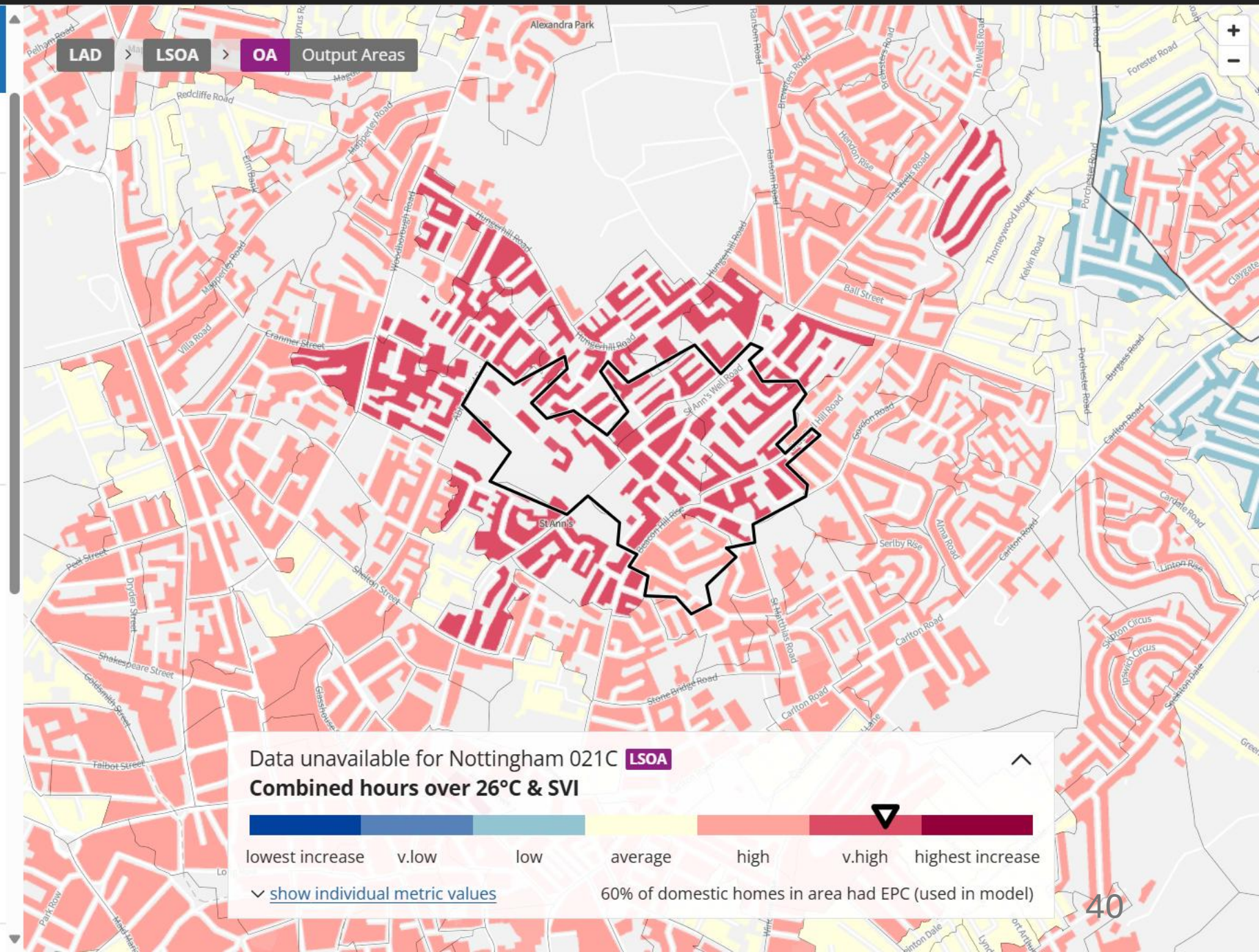
☐ **SVI** Social Vulnerability Index ⓘ

☐ **SVI DEC** Social Vulnerability Index - Decile ⓘ

☐ **T IN** Nighttime indoor temperature ⓘ

☐ **T OUT** Nighttime outdoor temperature ⓘ

Building adaptation measures





- ☒ **TM59+SVI** Combined hours over 26°C & SVI ⓘ
- ☐ **TM59** Hours over 26°C ⓘ
- ☐ **SVI** Social Vulnerability Index ⓘ
- ☐ **SVI DEC** Social Vulnerability Index - Decile ⓘ
- ☐ **T IN** Nighttime indoor temperature ⓘ
- ☐ **T OUT** Nighttime outdoor temperature ⓘ

Building adaptation measures

Building retrofit for net zero and climate adaptations. Use these options to compare the impacts of different packages of building adaptation. The analysis modelled four different packages.

NONE Baseline (no adaptations) ▼

Use and share

- [Share this map](#)
- [Export this map \(PNG\)](#)
- [Download data](#)
- [Embed this map](#)

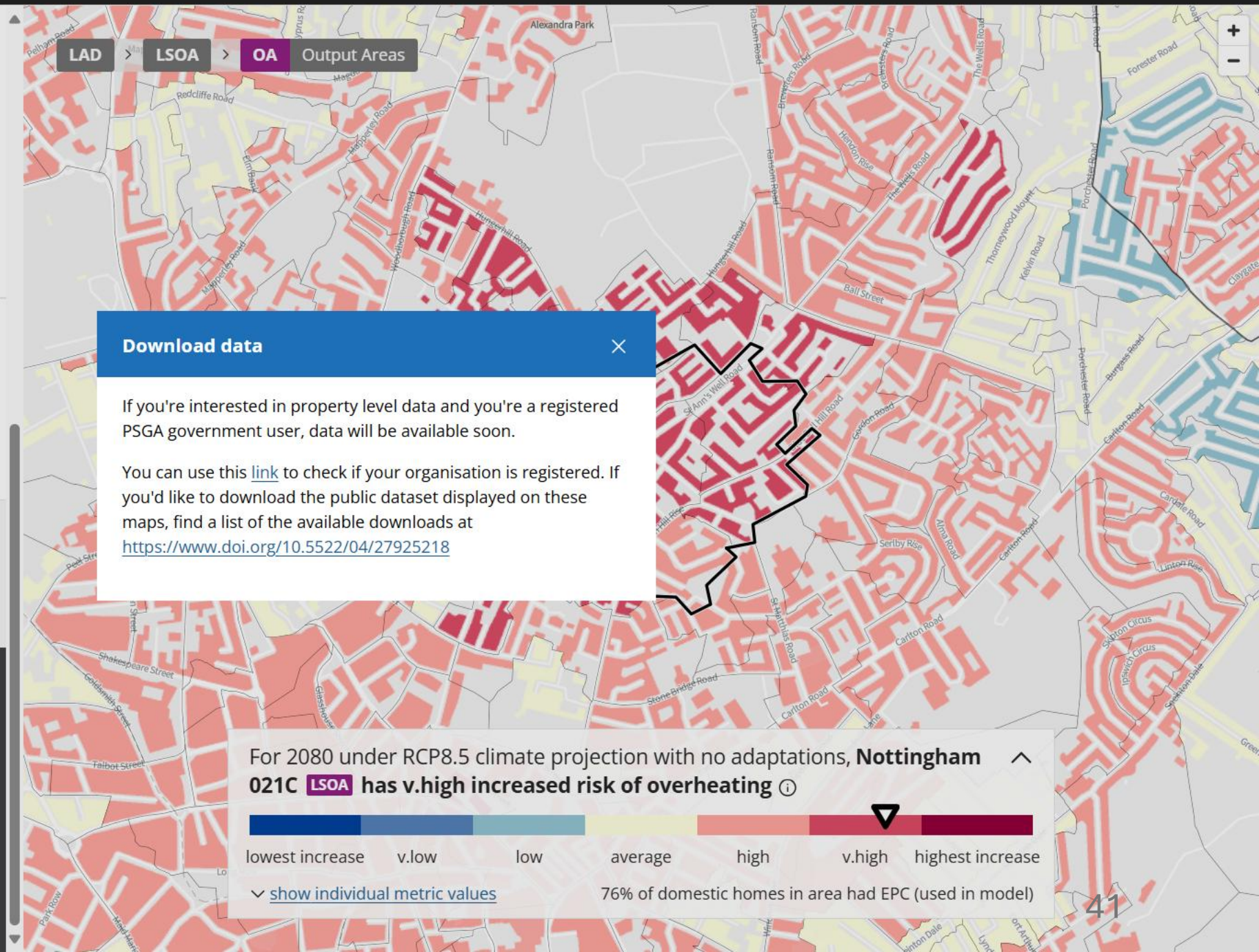
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OGL

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CLIMATE VULNERABILITY

☒ VIEW DATA FOR WEST SUSSEX

☒ BOUNDARIES

☒ VULNERABILITY INDICES

☒ Climate Vulnerability Index

- ☒ Relative Vulnerability
- ☒ From 0.000 to 0.199
- ☒ From 0.199 to 0.399
- ☒ From 0.399 to 0.600
- ☒ From 0.600 to 0.800
- ☒ From 0.800 to 1.000

☐ Heat Vulnerability Index

☐ Flood Vulnerability Index

☒ HEAT VULNERABILITY

☒ FLOOD VULNERABILITY

☒ POPULATION DOMAIN

☒ EXPOSURE DOMAIN

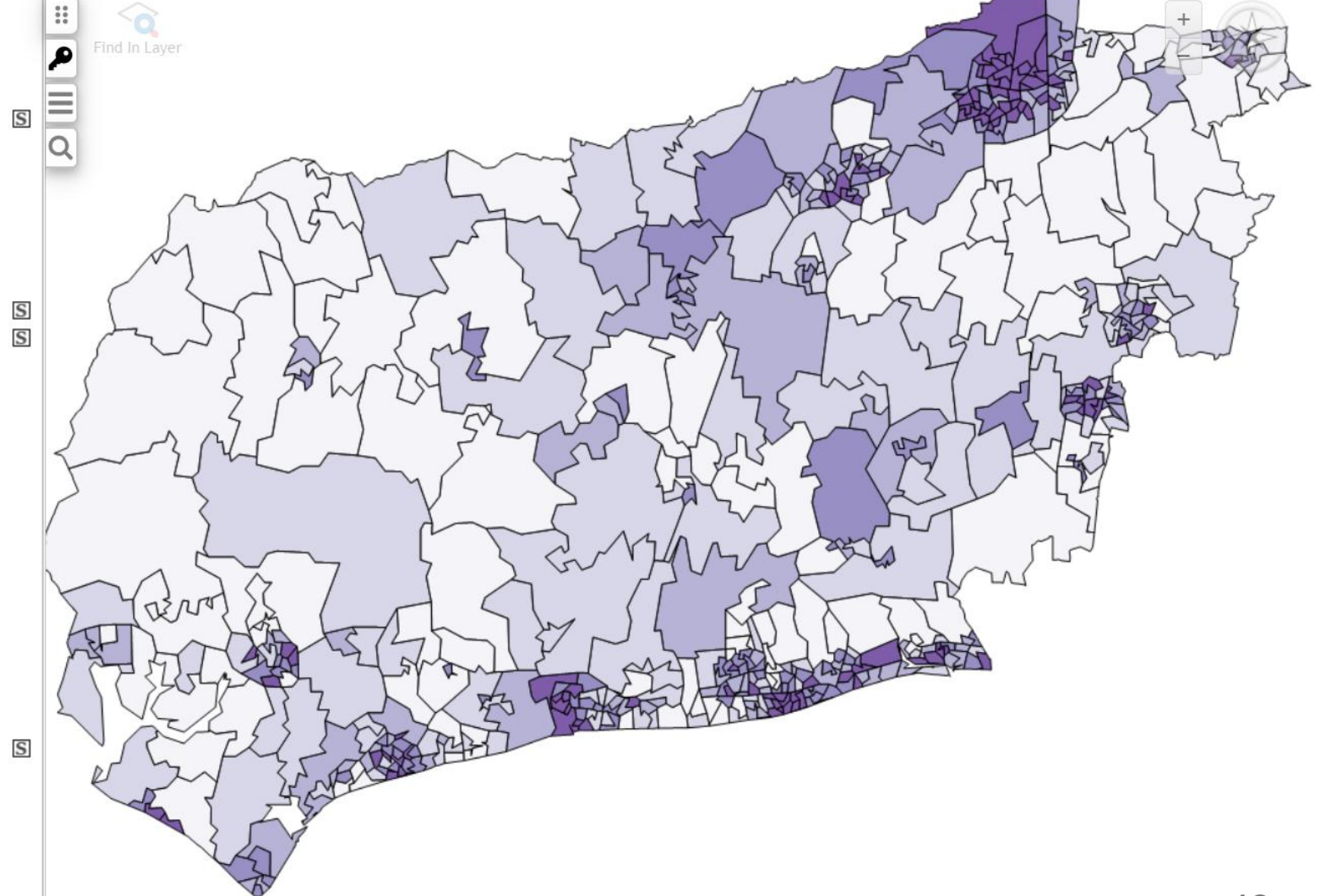
☒ ENVIRONMENTAL RISK DOMAIN

☐ VIEW DATA BY DISTRICT/BOROUGH

☒ BOUNDARIES

- ☒ ADUR
- ☒ ARUN
- ☒ CHICHESTER
- ☒ CRAWLEY
- ☒ HORSHAM
- ☒ MID SUSSEX
- ☒ WORTHING

☐ Basemap



Overview

This map presents overall climate risk scores (a combination of climate hazard, socio-economic vulnerability and exposure data) for lower super output areas (LSOAs) in the WMCA area.

Use the tool tip to see a LSOA's overall climate risk score and the scores of component layers.

Fourteen vulnerability layers have been combined into one, averaged vulnerability layer to support user experience of this page.

[Click here](#) for more information on the method and datasets used.

Key

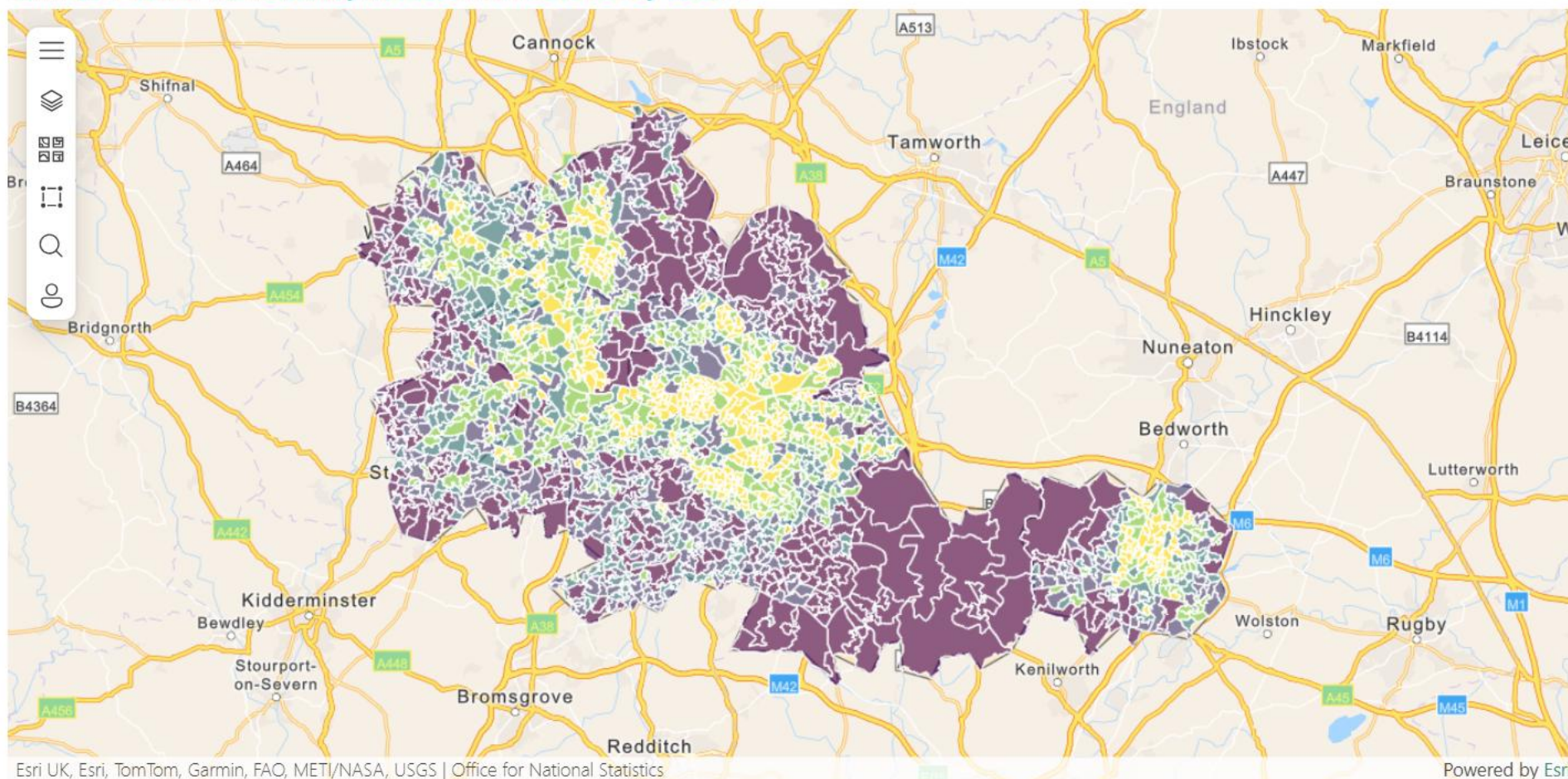


Viridis colour scale indicates low (purple) to high (yellow) climate risk

Local Authority

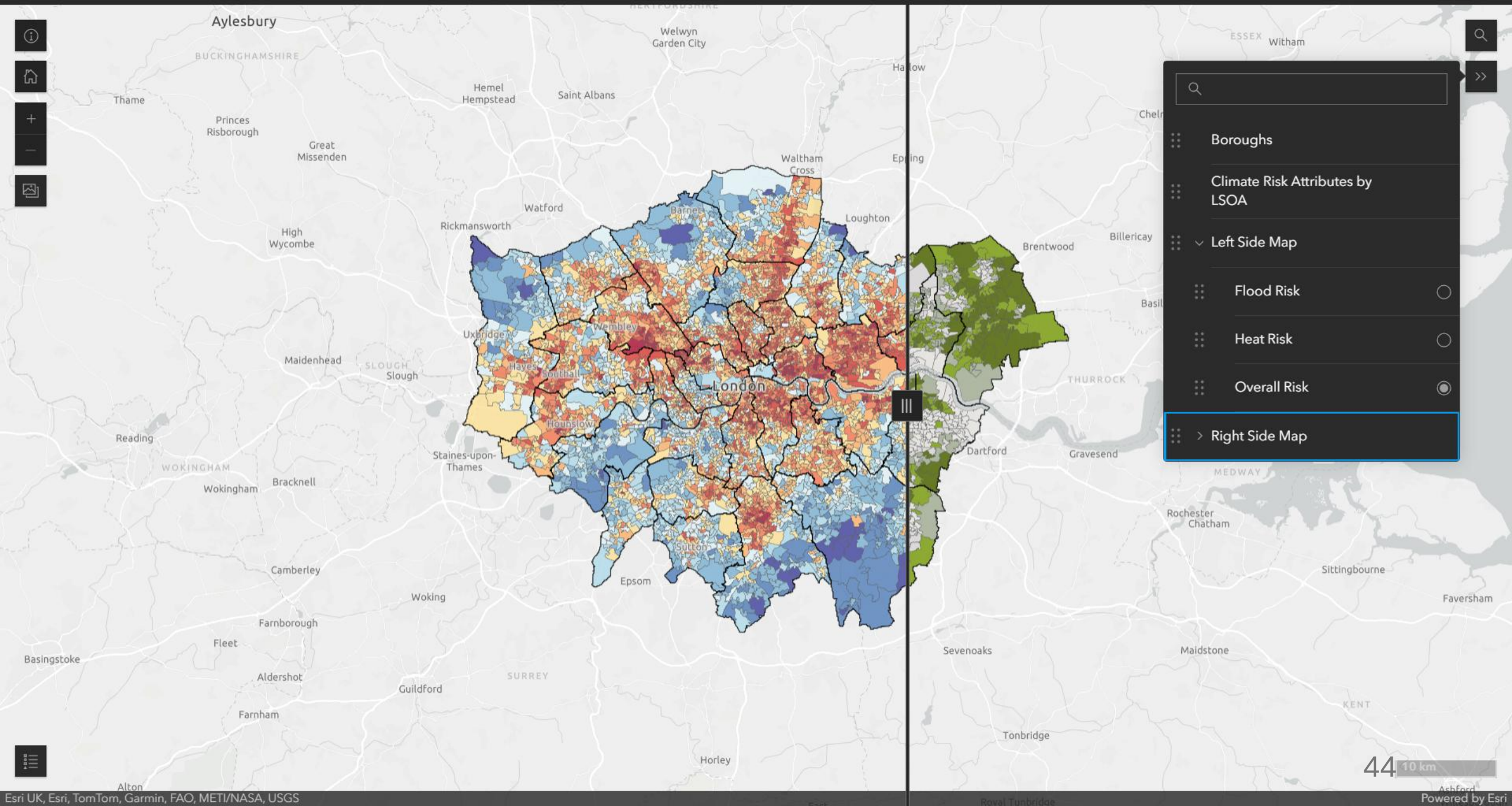
All

Climate Risk & Vulnerability Assessment Scores by LSOA



Hover over an area for more information on the area's ratings.

London Climate Risk Maps



Vulnerability Index Approach

Pros



Method is worked out already



Easy to use



Data very localised

Cons



Typically focused on social vulnerability (heat, flooding)



Doesn't cover all risks in CCRA

Poll and Question

Which of the presented CVIs have you used?

- Climate Just
- DEFRA Overheating Maps
- West Sussex CVI
- West Midlands Climate Risk Map
- Other
- None

Chat: What was your experience like?

Two General Approaches

Climate
Vulnerability
Index

Risk by Risk
Assessment

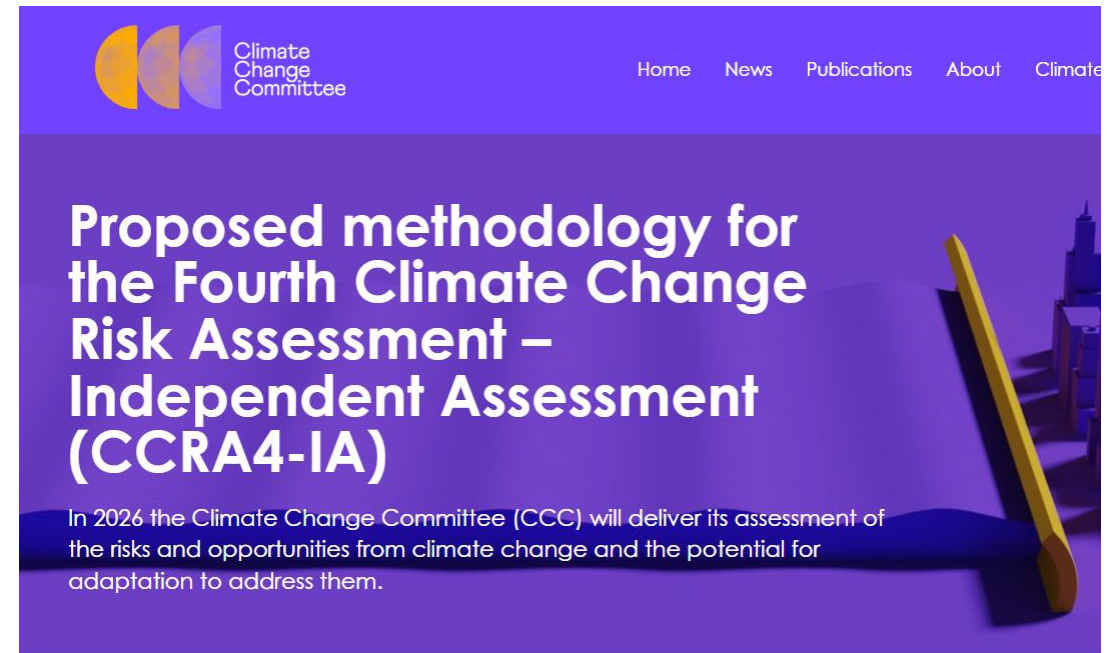
Risk by Risk Approach

CCRA 4

45 Risks and Opportunities

Grouped into 5 themes

- Built Environment
- Economy
- Health and wellbeing
- Infrastructure
- Land, nature and food
- Download [here](#)



Conduct an Assessment for each Risks/Opportunity



Exposure

Spatial Data and Maps



Sensitivity

Census/IMD Data



Adaptive Capacity

Local Plans and policies, budgets,
staff



DELIVERING VALUE AND EFFICACY FOR THE PUBLIC PURSE

Search



News

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Toolkits

Expertise

Our Team

About Us

LGR

Hello, Derek Morgan

Resource Hub

[Home](#) / [Resource Hub](#) / [Climate](#) / [Climate Adaptation Toolkit and Risk and Opportunities Matrix](#)

Climate Adaptation Toolkit and Risk and Opportunities Matrix

The UK Government has committed to reducing carbon emissions to net zero by 2050, and 70% of local authorities in the UK have declared a climate emergency. **Net zero cannot be achieved without adaptation.**

Adaptation (in climate change context) is otherwise known as resilience or preparedness. Resilience is the ambition, adaptation is the method.

We need to adapt to the challenges that arise from the significant climate impacts we are facing in the UK, and take advantage of the opportunities.

Risk and Opportunities Matrix

Following user feedback we have updated the previously named risk register generator.



Resource Hub

Share



Our Reports

Download Resources

Partners

Resource Collaborators

Built Environment

BE1: Risks to buildings and communities from heat

BE2: Risks to buildings and communities from flooding

BE3: Risks to buildings and communities from coastal change

BE4: Risks to buildings and communities, excluding from heat, flooding and coastal change

BE5: Risks to indoor environmental quality

BE6: Risks to cultural heritage and landscapes

BE7: Risks to facilities delivering public services, excluding health and social care

BE8: Risks to local resilience planning and emergency service response capabilities

BE9: Risks and opportunities to households from changing energy demand

A photograph of a narrow, wet street in a coastal town. The street is flanked by historic buildings. On the left, there are white buildings with dark timber framing. One building has a sign that reads 'THE STANDARD INN' and another has a circular sign with three fish. On the right, there is a building with a half-timbered upper floor. In the distance, a person is walking away on the street. The sky is overcast and the street is wet, reflecting the buildings and sky.

Buildings

Building Data - What do we want to know?

Location (i.e. where the building are)

How big they are (i.e. building parcel size)

What are they used for? (e.g. Schools vs Clinics)

Building Data

- **Local Land and Property Gazetteer (LLPG):**

- Every local authority in England and Wales has a statutory duty to create and maintain an LLPG.
- This is a definitive database of all land and property within their administrative area.
- It includes the address, a unique identifier (the UPRN - Unique Property Reference Number), and various other details about each property.

May only be point data, not parcels

Best classification

BETA This is a new service – your [feedback](#) will help us to improve it.

[Sign in](#)
[Create an account](#)

[Home](#) > [Index polygons spatial data \(INSPIRE\)](#) > Download dataset

Download

Index polygons spatial data (INSPIRE)

Data showing the indicative extent and position of registered freehold properties in England and Wales.

This dataset was published on 7 September 2025. You can access the data until we update the files. New files are published on the first Sunday of every month.

You can:

- [download polygons by local authority](#)

Land parcels with no categories

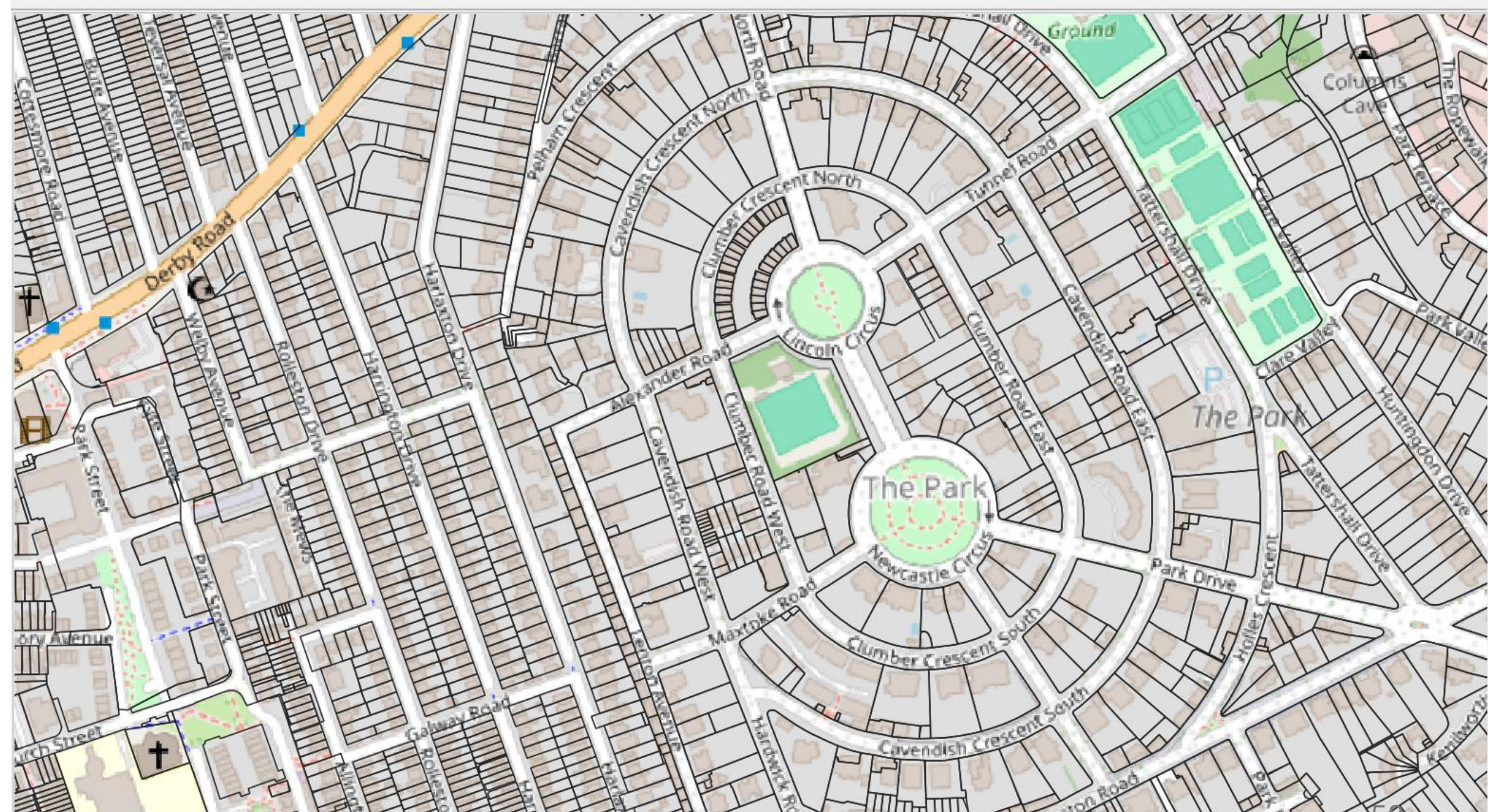
Contents

- [A](#)
- [B](#)
- [C](#)

Download polygons

The files are listed by local authority.

You'll need a Geographical Information System (GIS) to view the downloaded



Coordinate 456047, 339599



Scale 1:3828



Magnifier 100%



Rotation

0.0 °



☒ Render



EPSG:27700



Search Where is this?  



Building and land parcels with poor categories

Ordnance Survey National Geographic Database (OS NGD)

A single store of all our authoritative data for Great Britain

What is the OS NGD?

The OS NGD is a single store of all Ordnance Survey's authoritative data for Great Britain. The OS NGD delivers the richer data you need for better analysis and our download service, OS Select+Build, makes it easier to find, package and analyse the data you need, such as address and building data for emergency planning.

[Access via the OS Data Hub](#)

*Parcels and categories,
Public Sector Geospatial Agreement (PSGA)*





TopographicArea

- Building
- Building, Rail
- Building, Structure
- General Surface
- General Surface, Rail, Structure
- General Surface, Roadside, Structure
- General Surface, Structure
- Glasshouse
- Historic Interest, Landform
- Historic Interest, Structure
- Inland Water
- Inland Water, Natural Environment
- Inland Water, Road Or Track
- Inland Water, Structure
- Landform
- Landform, Rail
- Landform, Road Or Track
- Natural Environment
- Natural Environment, Rail
- Natural Environment, Rail, Structure
- Natural Environment, Roadside
- Natural Environment, Structure
- Natural Environment, Tidal Water
- Path
- Path, Roadside
- Path, Structure
- Rail
- Rail, Road Or Track
- Rail, Structure
- Road Or Track
- Road Or Track, Structure



Heat

Met Office Tempertarute Data

**Met Office Climate Data Portal**

User Guides ▾ Understanding our Data ▾ Climate Data ▾ Local Authority ▾

Filters

Reset

1 - 12 of 30 results

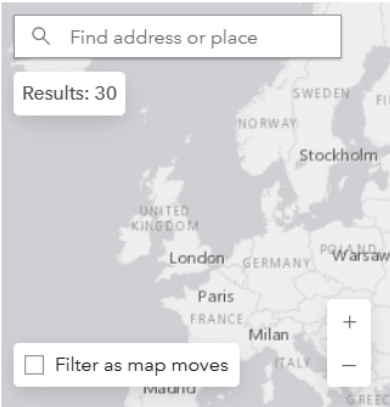
Sort by: Relevance ▾ List ▾ ⋮

Tags: UK Projections Temperature ×

Location

Find address or place

Results: 30



☐ Filter as map moves

Tags

Filter options

☐ Climate (74)

☐ Met Office (74)

Dataset

Annual Count of Summer Days - Projections (Local Authority) v1

Met Office

Annual Count of Summer Days (annual number of days where the daily maximum temperature is above 25°C). Absolute values for a range of future Global Warming Levels, relative to the 1981-2000 baseline....

Type: **Feature Service** Date updated: **08/08/2024**

Tags: **Met Office, Climate, UK, Projections, Local Authoritie...** Date created: **09/07/2024**

Dataset

Annual Count of Extreme Summer Days - Projections (12km)

Met Office

Annual Count of Extreme Summer Days (annual number of days where the maximum daily temperature is above 35°C), projections for a range of future global warming levels from the UK Climate Projections...

Type: **Feature Service** Date updated: **28/01/2025**

Tags: **Met Office, Climate, UKCP, 12km, UK, Projections, Te...** Date created: **07/02/2023**

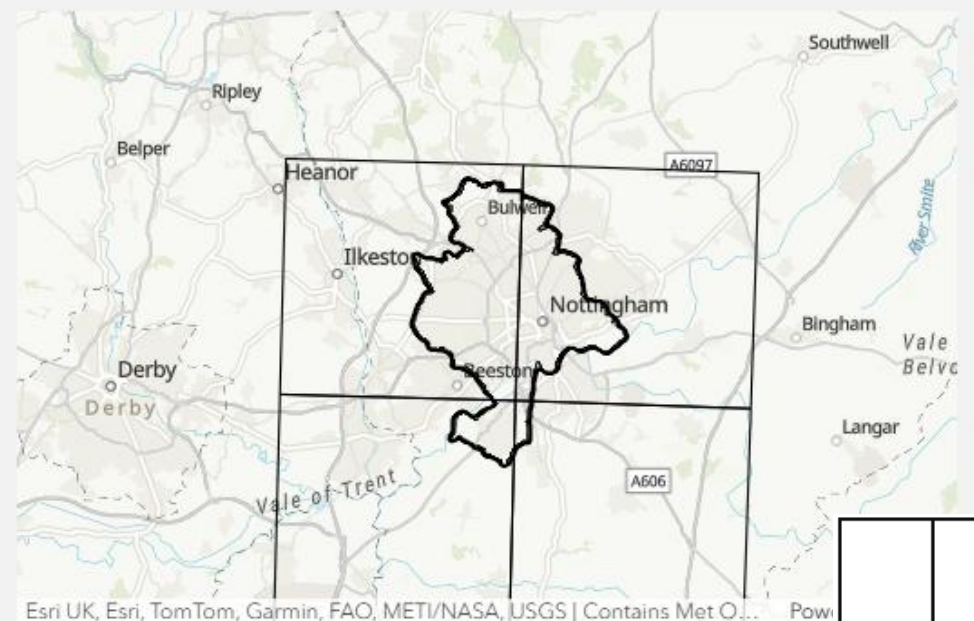
Dataset

Annual Heating Degree Days - Projections (12km)

Local climate changes

The table shows projected **changes in climate** for the Local Authority area for a number of Global Warming Levels (GWLs). In each case there is a central projection (the Median) and an uncertainty range (the Lower and Upper values are the 10th and 90th percentiles). Changes are relative to 1981-2000.

The underlying science is explained in the Scientific Detail (QR Code).



		0.6°C GWL Baseline 1981-2000	1.0°C GWL Recent Past 2001-2020	1.5°C GWL Paris Agreement	2°C GWL Guidance: Prepare	4°C GWL Guidance: Assess risks
	TEMPERATURE	°C	°C	°C change	°C change	°C change
	Summer Maximum Temperature	29.5 29.2 to 29.9	31.7 30.8 to 32.9	+2.9 +1.1 to +4.1	+3.2 +2.2 to +5.5	+6.9 +6.3 to +8.8
	Summer Average Temperature	15.9 15.9 to 15.9	17.0 16.7 to 17.4	+1.4 +1.1 to +2.0	+2.1 +1.4 to +2.7	+4.2 +3.7 to +5.1
	Winter Average Temperature	4.3 4.3 to 4.3	4.9 4.6 to 5.4	+1.0 +0.5 to +1.3	+1.3 +0.6 to +1.7	+2.7 +1.7 to +3.3
	Winter Minimum Temperature	-7.4 -7.7 to -6.9	-5.8 -7.1 to -4.3	+2.2 +0.7 to +3.1	+2.7 +1.5 to +3.8	+4.5 +3.3 to +6.0
	Annual Average Temperature	9.8 9.8 to 9.8	10.6 10.5 to 10.8	+1.1 +0.9 to +1.3	+1.7 +1.2 to +1.9	+3.4 +2.9 to +3.9

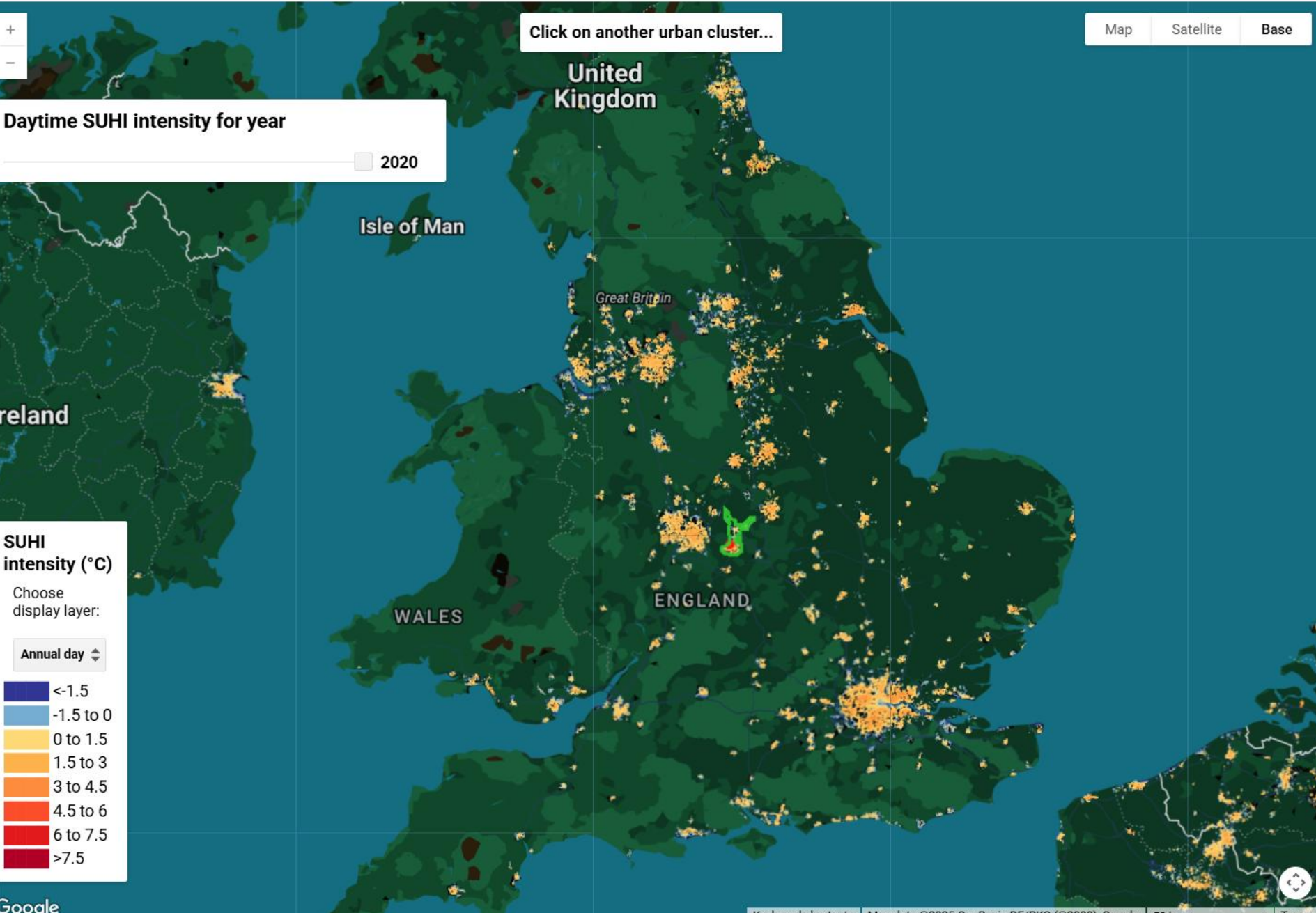
Heat – What do we want to know?

Met Office has data on temperature (e.g. increase in Av temp)

But this is 12X12 Km data

We need Local Urban Heat Island Data

Unfortunately, there isn't really any good UHI data



Global Surface UHI Explorer

This app displays surface urban heat islands (SUHI) at a global scale from 2003 to 2020. Use the search bar or pan over the map to find your urban cluster of interest. Click anywhere within the boundary of an urban cluster, and the cluster mean statistics will be listed in the space below. You also have the option to subset and download the gridded SUHI intensity rasters for the selected urban cluster at the bottom of the panel.

[Click here to read methodological details](#)

Lat: 52.43 Lon: -1.53

Annual daytime SUHI: 1.24 °C

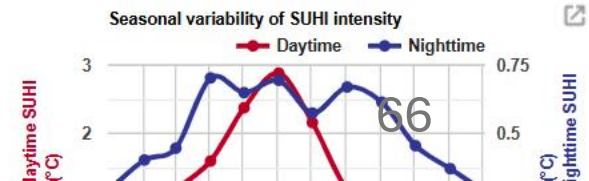
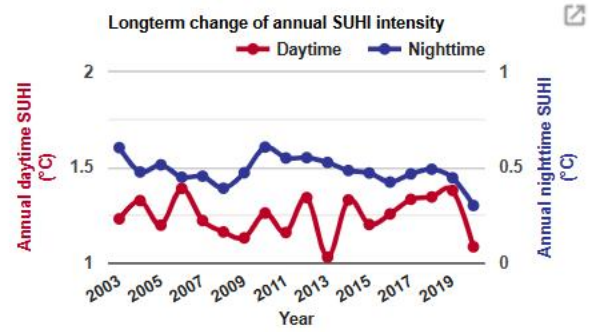
Annual nighttime SUHI: 0.48 °C

Summer daytime SUHI: 2.10 °C

Summer nighttime SUHI: 0.63 °C

Winter daytime SUHI: 0.56 °C

Winter nighttime SUHI: 0.33 °C



[Homepage](#) > [Resources](#) > [Urban Heat Island Web Map](#)

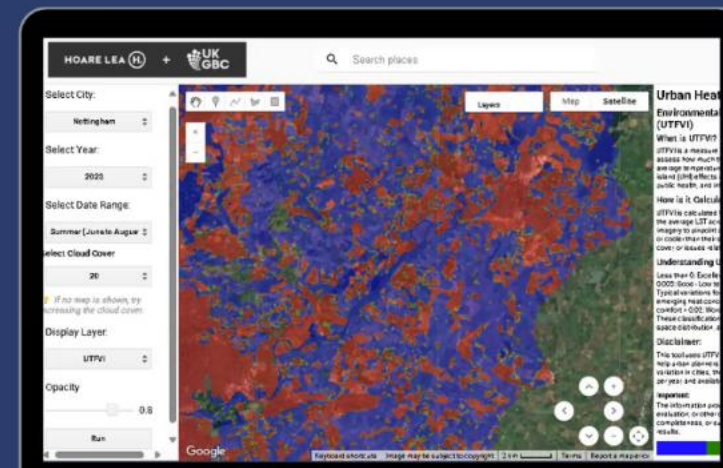
Urban Heat Island Web Map

This tool uses satellite imagery to assess temperature variations within urban environments.

Climate Change Adaptation

Resilience Roadmap

Webmaps



This interactive webmap, made by Hoare Lea, illustrates how different urban areas feel in terms of thermal sensation by measuring the **Urban Thermal Field Variance Index (UTFVI)** of six cities in the UK: London, Manchester, Cardiff, Birmingham, Nottingham and Glasgow.



HOARE LEA 

+



 Search places

Google Earth Engine Apps

Select City:

Nottingham

Select Year:

2024

Select Date Range:

Summer (June to August)

Select Cloud Cover

20

If no map is shown, try increasing the cloud cover.

Display Layer:

UTFVI

Opacity

0.8

Run



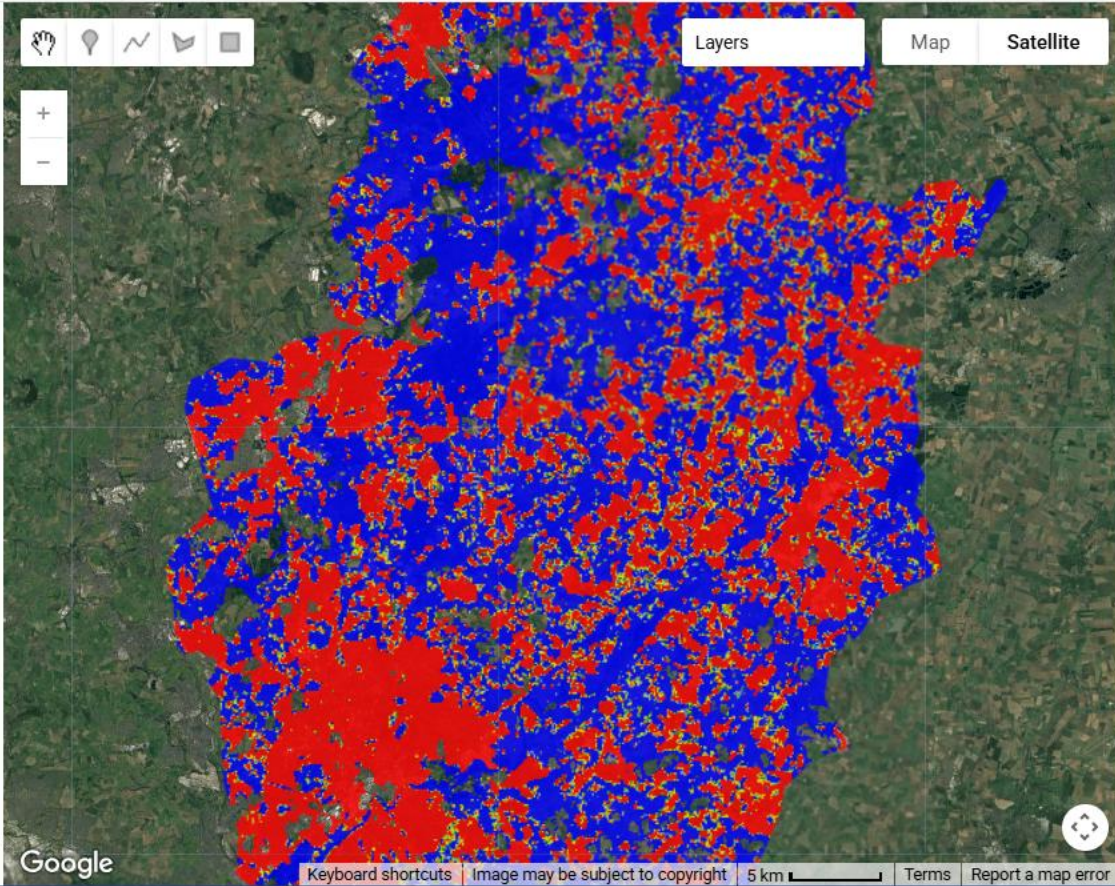
+

-

Layers

Map

Satellite



Google

Keyboard shortcuts | Image may be subject to copyright | 5 km | Terms | Report a map error

Urban Heat Island Map

Environmental Evaluation: Urban Thermal Field Variance Index (UTFVI)

What is UTFVI?

UTFVI is a measure used to assess temperature variation within urban environments. It helps assess how much the land surface temperature (LST) in a particular area differs from the average temperature of the surrounding area. This index is crucial for analysing urban heat island (UHI) effects and understanding thermal patterns that may impact environmental quality, public health, and infrastructure planning.

How is it Calculated?

UTFVI is calculated by comparing the land surface temperature (LST) at a specific location to the average LST across the surrounding area. This analysis uses openly available satellite imagery to pinpoint areas that deviate significantly from the norm – either being much warmer or cooler than their surroundings. These deviations may signal heat stress zones, altered land cover, or issues related to urban design and vegetation loss.

Understanding UTFVI Values and Ecological Scale:

Less than 0: Excellent - Very low thermal deviation; stable and consistent temperature
0 to 0.005: Good - Low temperature variation; within acceptable urban limits
0.005 to 0.01: Normal - Typical variations for built environments
0.01 to 0.015: Bad - Notable variation; may indicate emerging heat concerns
0.015 to 0.02: Worse - High thermal stress; potential concern for urban comfort
> 0.02: Worst - Severe thermal anomaly, potentially harmful urban heat conditions.

These classifications help guide decisions in efforts to mitigate heat stress, improve green space distribution, and enhance thermal comfort.

Disclaimer:

This tool uses UTFVI, LST, and UHI derived from calibrated satellite imagery. While images can help urban planners and environmental researchers explore patterns of surface temperature variation in cities, the data is indicative only. It is based on a limited number of satellite images per year, and availability may vary significantly due to cloud cover and atmospheric conditions. This dashboard was developed for R&D purposes to support of a nonprofit/public service initiative. It uses Google Earth Engine under its terms for non-commercial, public interest applications.

Important:

The information provided should not be used for planning, design, formal risk assessment, cost evaluation, or other decision-making purposes. We make no guarantees about the accuracy, completeness, or suitability of the data, and accept no liability for any use or interpretation of the results.

68

A photograph of a flooded forest area. In the foreground, there is a dark, muddy path or clearing. Beyond it, a body of water reflects the surrounding trees. The trees are mostly bare, with some green foliage visible on the left. The word "Flooding" is written in white text across the center of the image.

Flooding



Risk of Flooding from Rivers and Sea - Climate Change 1

Summary

Risk of Flooding from Rivers and the Sea (RoFRS) shows the chance of flooding from rivers and the sea taking into account the presence and condition of flood defences. It is our main way of communicating flood risk from rivers and sea to the public through our 'Check Your Long Term Flood Risk' service on gov.uk. Climate change scenarios have been produced for this dataset to indicate the predicted impacts of climate change on future risk.

While flood defences reduce the level of risk they...

[Show More](#)

Categories

[environment](#)

[inlandWaters](#)

[oceans](#)

Keywords

[Natural risk zones](#)

[risk](#)

[Flood Risk Management](#)

[climate change](#)

[rivers](#)

[sea](#)

Use limitation statement

There are no public access constraints to this data. Use of this data is subject to the licence identified.

Published by

Environment Agency

Contact publisher

[Defra Data Services Forum](#)

Dataset reference dates

Creation date

30 October 2024

Revision date

30 October 2024

Publication date

28 January 2025

Period

N/A

Related datasets

[Flood Map for Planning - Flood Zones plus Climate Change](#)

Risk of Flooding from Rivers and Sea – Climate Change

High

- greater than or equal to 1 in 30 (3.3%) chance of flooding in any year

Medium

- Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year

Low

- Less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year

Very low

- less than 1 in 1000 (0.1%) chance of flooding in any given year

RCP 8.5 at the "2050s" epoch

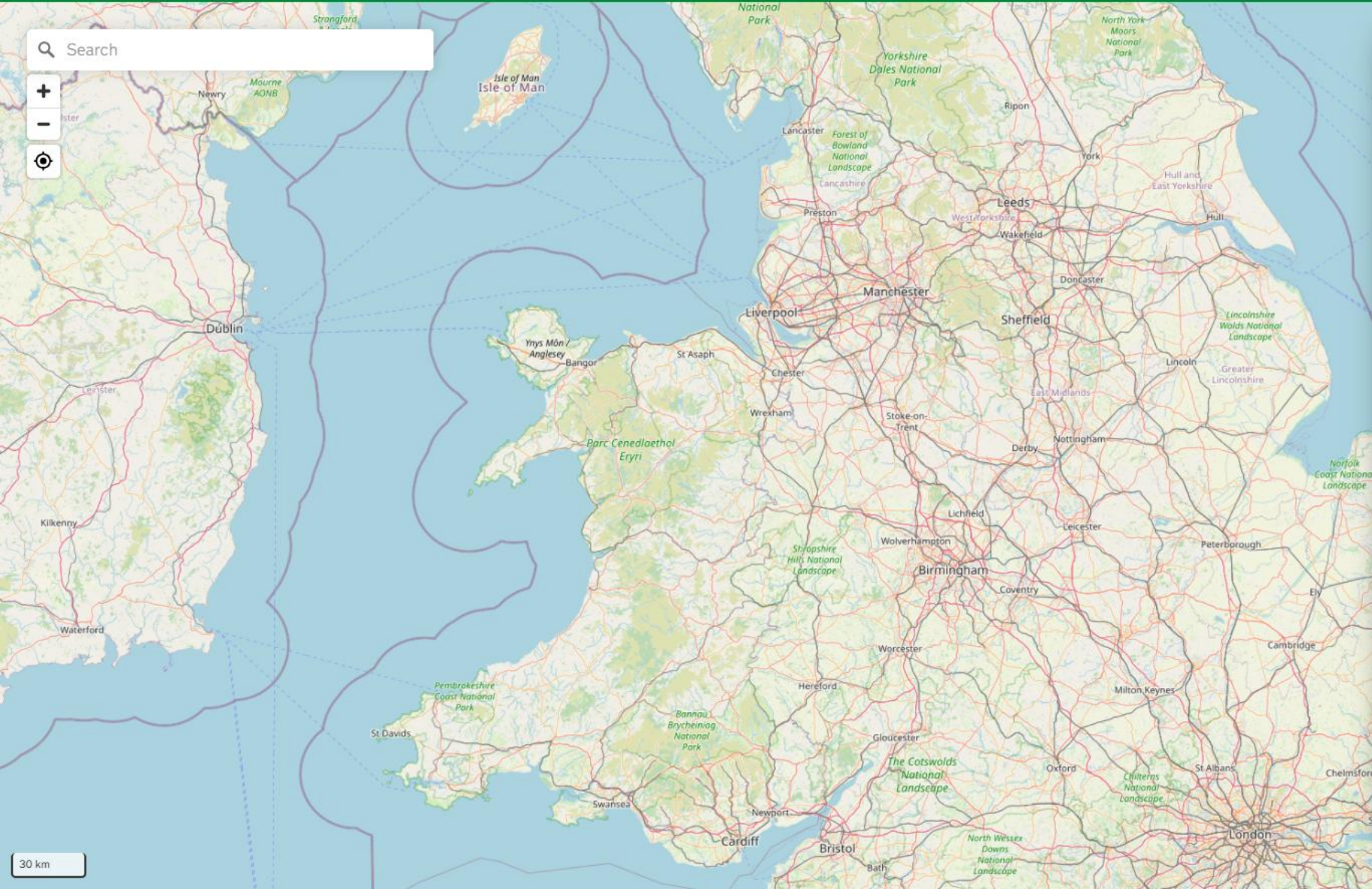
The likelihood of flooding for the following depths:

- 0.2m
- 0.3m
- 0.6m
- 0.9m
- 1.2m



Defra OGC preview

[Layers](#) [Download](#)



Download

Area of interest

Full dataset

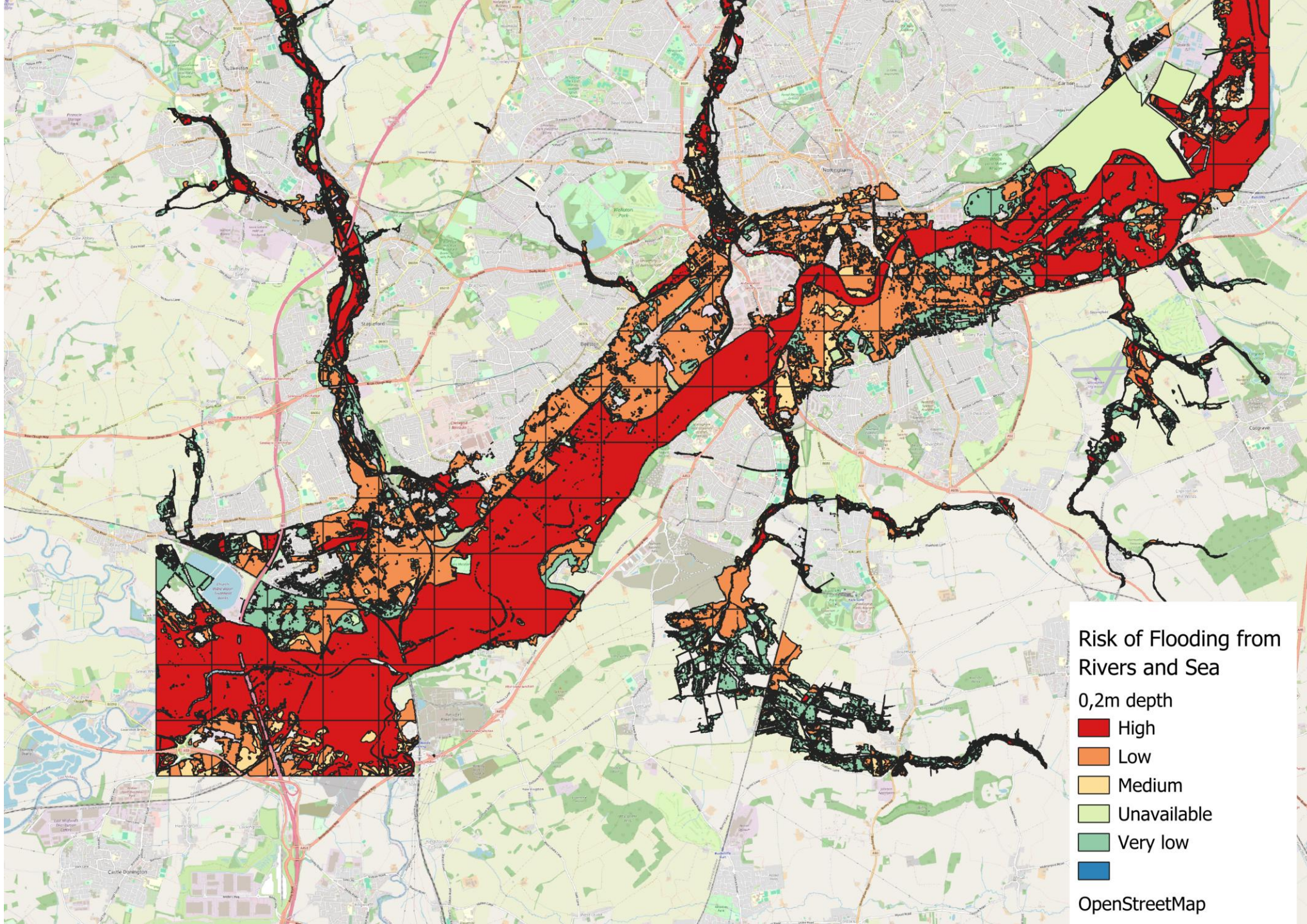
Layers

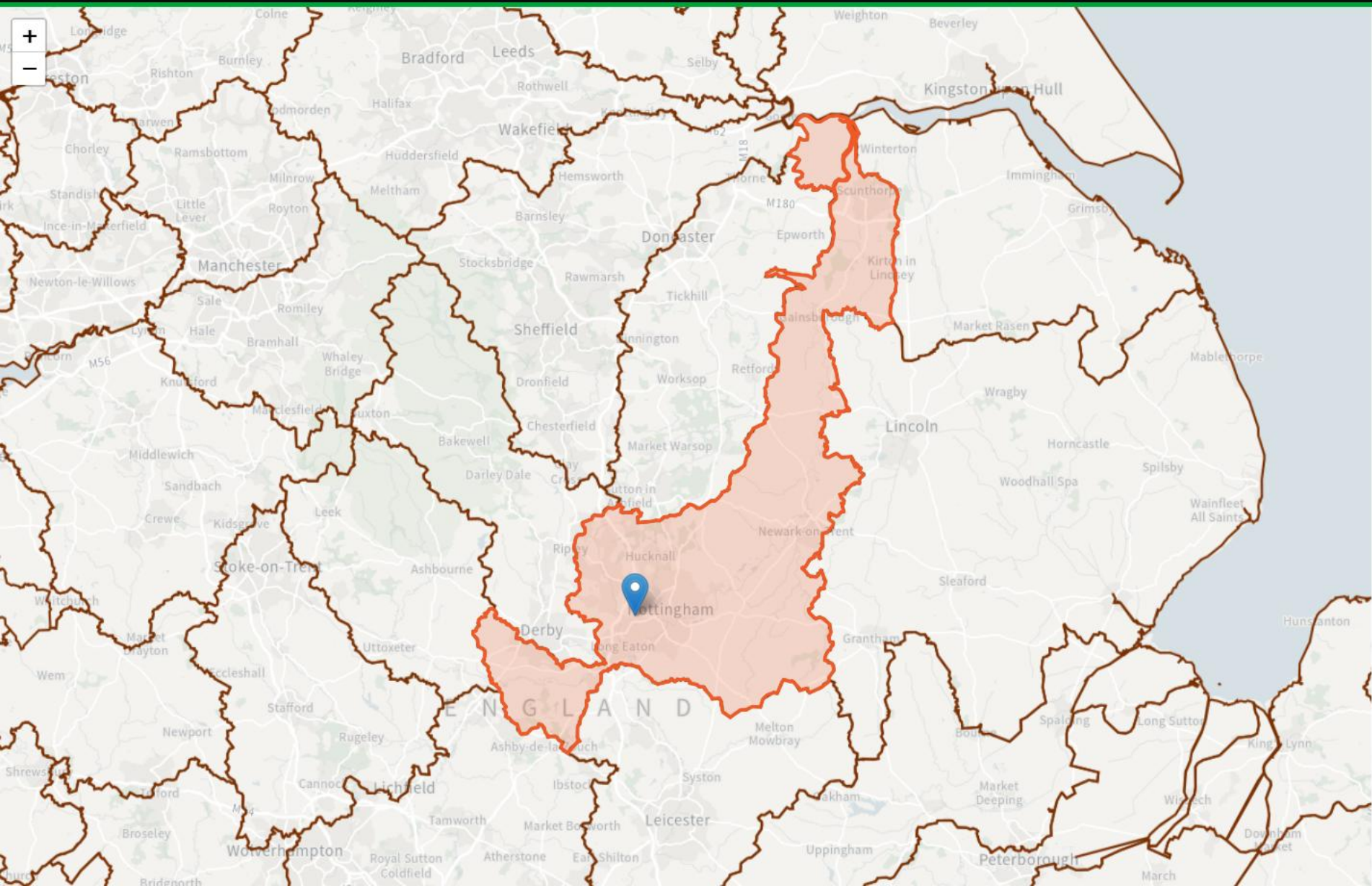
All

File format

ESRI Shapefile

Download file





Lower Trent and Erewash Management Catchment peak river flow allowances

	Central	Higher	Upper
2020s	13%	18%	29%
2050s	17%	23%	38%
2080s	29%	39%	62%

This map contains information generated by [UK Centre for Ecology and Hydrology](#) using UK Climate projections.

A wide-angle photograph of a coastal scene. On the right, a steep, grassy hillside with patches of white chalk cliffs descends towards a narrow, sandy beach. The ocean is on the left, with gentle waves washing onto the shore. The sky is filled with soft, white clouds. The word "Coastal" is written in a large, black, sans-serif font on the left side of the image.

Coastal



National Coastal Erosion Risk Mapping (NCERM) - National (2024)

Summary

The National Coastal Erosion Risk Map shows projected areas at risk from erosion. The erosion risk zones are created by splitting the coastline into 'frontages'. These frontages are defined as lengths of coast with consistent characteristics based on location, the cliff behaviour characteristics and the defence characteristics.

It is intended as an up-to-date and reliable benchmark dataset showing erosion risk extents for:

Two periods: Medium Term (up to 2055) and Long Term (up to 2105)

Two management scenarios: With Shoreline Management Plans delivered and No Future Intervention

Three climate scenarios: Present Day climate (2020), Higher Central allowance and Upper End allowance. The two allowances use sea level rise data from UKCP18 RCP8.5 70th and 95th percentiles respectively.

Defence type and SMP policies for each of the two periods described above are included. All distances are cumulative over time and given in metres.

Ground instability zones show areas of geologically complex cliffs where land has previously experienced ground movement. This zone uses the

Published by

Environment Agency

Contact publisher

[Defra Data Services Forum](#)

Dataset reference dates

Creation date

28 November 2024

Revision date

28 November 2024

Publication date

28 January 2025

Period

N/A

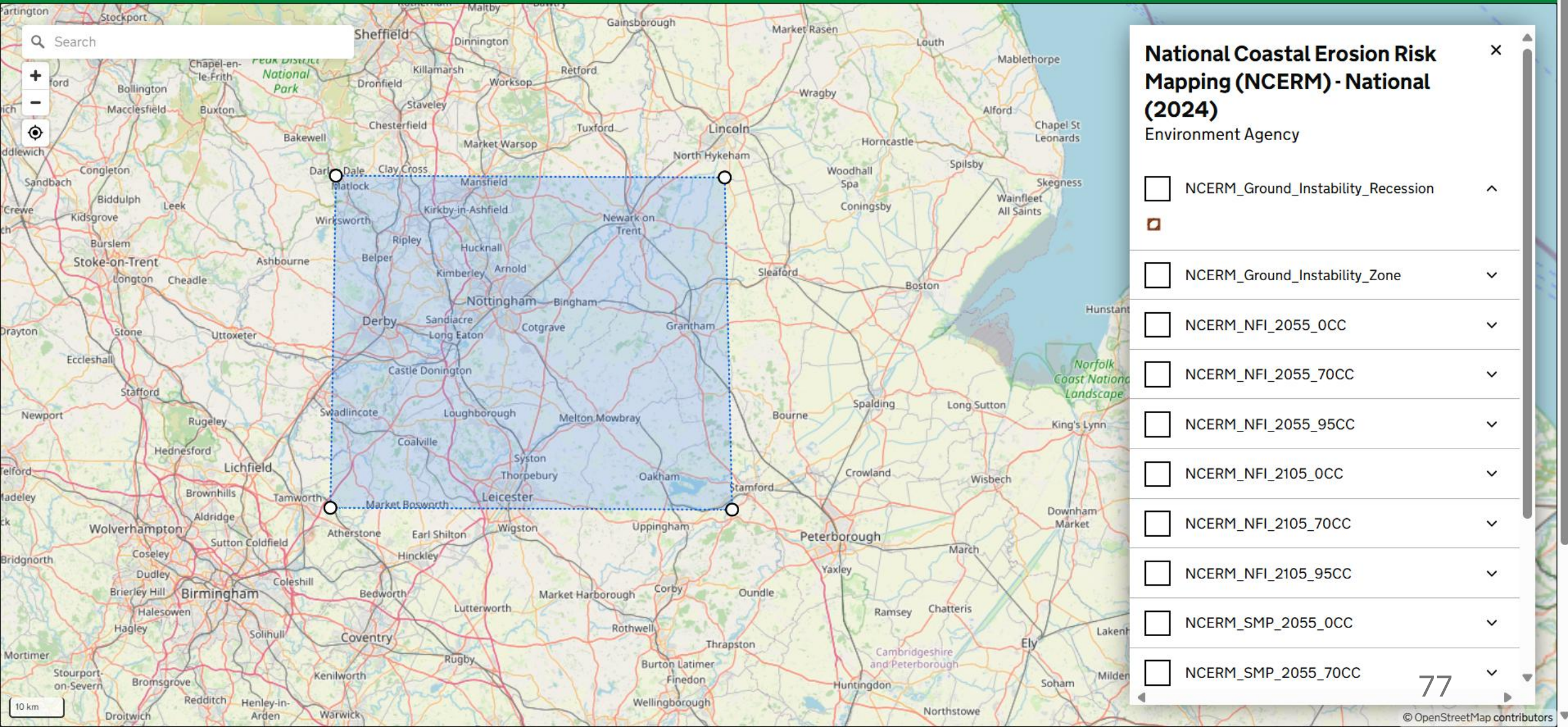
Related datasets

[National Coastal Erosion Risk Mapping \(NCERM\) - Key](#)



Defra OGC preview

[Layers](#) [Download](#)



National Coastal Erosion Risk Mapping (NCERM) - National (2024)

Environment Agency

☐ NCERM_Ground_Instability_Recession



☐ NCERM_Ground_Instability_Zone

☐ NCERM_NFI_2055_OCC

☐ NCERM_NFI_2055_70CC

☐ NCERM_NFI_2055_95CC

☐ NCERM_NFI_2105_OCC

☐ NCERM_NFI_2105_70CC

☐ NCERM_NFI_2105_95CC

☐ NCERM_SMP_2055_OCC

☐ NCERM_SMP_2055_70CC

Hold The Line

Managed Realignment

No Active Intervention





Poll and Question

Do you have data gaps specifically for the built environment?

- Yes
- No

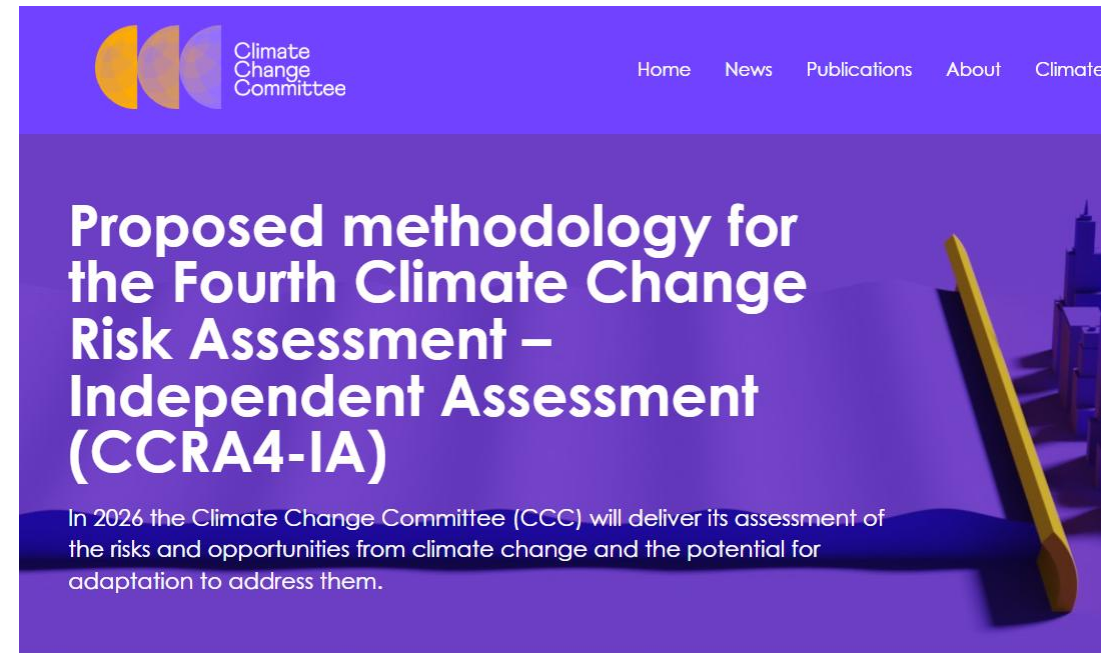
Chat: What are your data gaps?

CCRA 4

45 Risks and Opportunities

Grouped into 5 themes

- Built Environment
- Economy
- Health and wellbeing
- Infrastructure
- Land, nature and food
- Download [here](#)



Economy

E1: Risks to UK macroeconomic performance and stability

E2: Risks to domestic and overseas physical assets of UK businesses

E3: Risks to domestic and international supply chains and resource inputs of UK businesses

E4: Risks to Productivity and Availability of Labour in the UK

E5: Risks to financial institutions and the financial system

E6: Risks to public finances

E7: Risks to household finances

E8: Opportunities to UK businesses and financial institutions from delivering adaptation goods and services

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[Employment and
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and community](#)

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Search for a keyword(s) or time series ID



[Home](#) > [Employment and labour market](#) > [People in work](#) > [Labour productivity](#)

Dataset

Subregional productivity: labour productivity indices by local authority district

Not future projections & only at LA level

Contact:
[Subregional team](#)

Release date:
19 June 2025

Next release:
June 2026

About this Dataset

Annual labour productivity (output per hour and output per job) indices by local authority districts.

Edition in this dataset

Current edition of this dataset



[View all data related to labour
productivity](#)

Contact details for this
dataset

Subregional team
subnational@ons.gov.uk
+44 1329 447825

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[Business, industry
and trade](#)

[Economy](#)

[Employment and
labour market](#)

[People, population
and community](#)

[Taking part in a
survey?](#)

Search for a keyword(s) or time series ID



[Home](#) > [Employment and labour market](#) > [People in work](#) > [Earnings and working hours](#)

Dataset

Income estimates for small areas, England and Wales



Contact:
[Andrew Zelin](#)

Release date:
11 October 2023

Next release:
To be announced

Only at MSOA level

About this Dataset

Estimates of annual household income for the four income types for Middle layer Super Output Areas, or local areas, in England and Wales.

Edition in this dataset

Financial year ending 2020 edition of this dataset



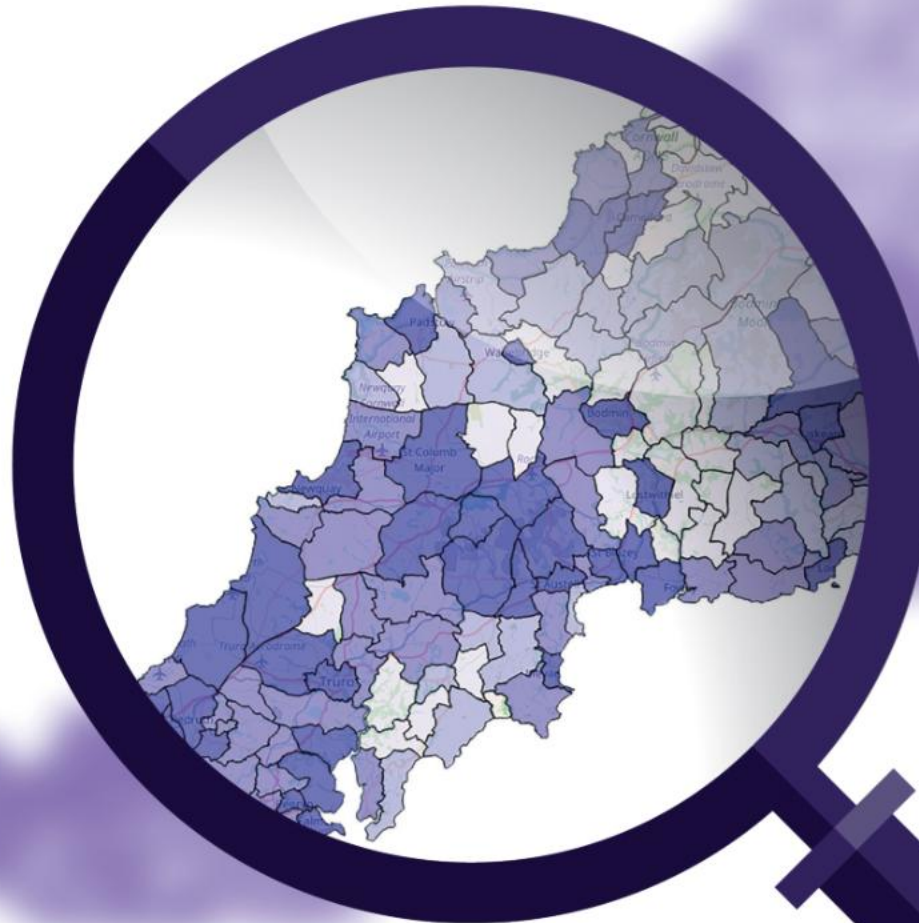
[xlsx \(1.5 MB\)](#)

[View all data related to earnings and
working hours](#)

Contact details for this dataset

Andrew Zelin
Economic.Wellbeing@ons.gov.uk
+44 1329 447767

Economic Inactivity Interdependencies Analysis



Regression results for overall economic inactivity and by sub-category

Economic Inactivity Overall

Metric	Nottingham	East Midlands	England
% reporting a long term MSK problem (aged 16+)	17.0	20.0	18.4
People entitled to Disability Living Allowance (%)	2.3	2.0	2.1
Households owned with a mortgage or loan (%)	22.7	30.0	28.8
% claiming Pension Credit aged 65+	18.9	9.8	10.8

Retired

Metric	Nottingham	East Midlands	England
% reporting a long term MSK problem (aged 16+)	17.0	20.0	18.4
Households owned with a mortgage or loan (%)	22.7	30.0	28.8
Jobs density	1.00	0.79	0.87
% of residents that provides 20+ hours unpaid care a week	4.5	4.7	4.4
Life expectancy at 65 - male	16.9	18.5	18.6
Life expectancy at 65 - female	19.4	20.8	21.1
% of lone parent households	13.7	10.3	11.1

Looking after home or family

Metric	Nottingham	East Midlands	England
% qualified to NVQ2 and above (aged 16-64)	70.5	74.7	78.2
% of residents that provides 20+ hours unpaid care a week	4.5	4.7	4.4

Long-term sick or disabled

Metric	Nottingham	East Midlands	England
% qualified to NVQ2 and above (aged 16-64)	70.5	74.7	78.2
% of adults who are physically inactive	36.7	38.1	36.3

×



86



Welcome to the

Climate Change Impact Scenario Explorer

This tool showcases the main results of the COACCH project.

Different impacts along the causal chain starting from climate change pressures and ending with economic implications are presented in multiple combinations of climate change and social economic scenarios. The assessment is performed by a set of last generation biophysical, econometric, economic models that are integrated consistently to provide a comprehensive and multidimensional picture of realistic climate change futures.

Results are shown at the NUTS 2 level for the European Union + UK.

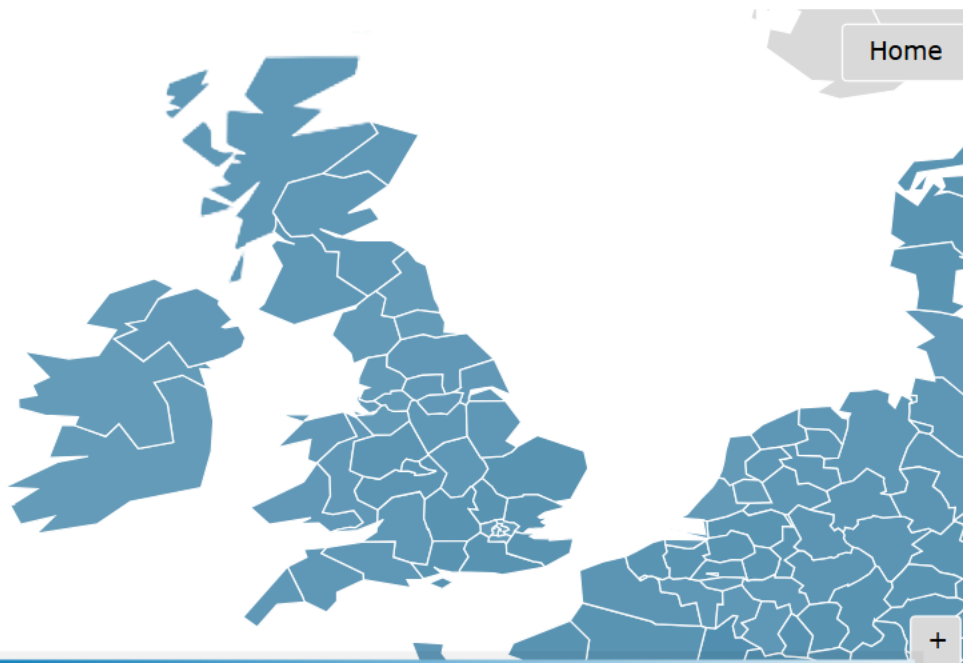


Select data for Map 1

Impact	Forestry	▼ ?
Scenario	SSP5-RCP8.5	▼ ?
Variable	Forest_Yield - IIASA	▼ ?
Period	2050	▼ ?
Investment Mobility	Low	▼ ?

[Show data](#)[Download data](#)

Forestry - SSP5-RCP8.5 - Forest_Yield - 2050 - low Inv. Mobility
(% change from baseline)

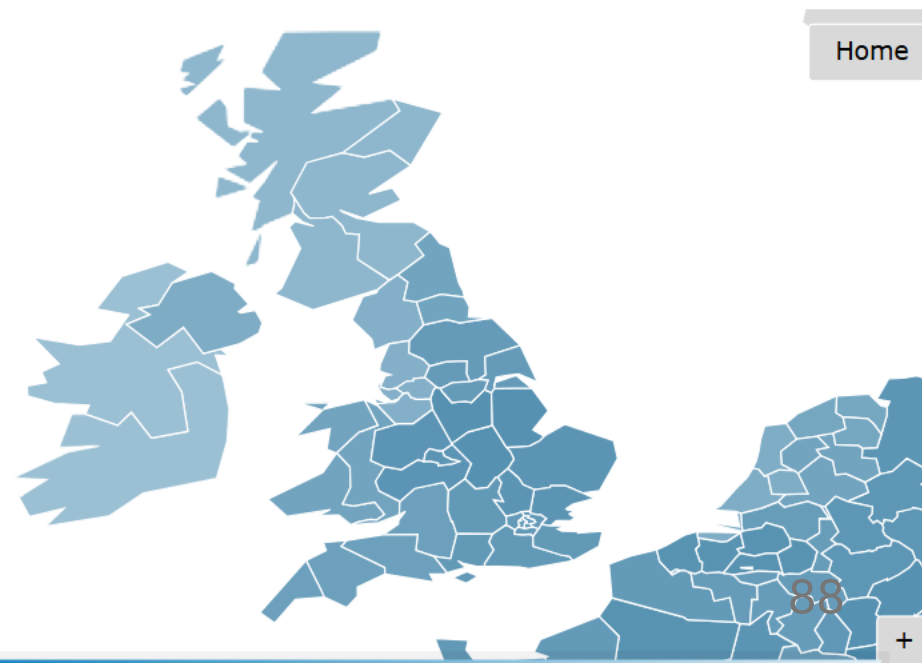


Select data for Map 2

Impact	Labour_Productivity	▼ ?
Scenario	SSP5-RCP8.5	▼ ?
Variable	GDP - CMCC	▼ ?
Period	2050	▼ ?
Investment Mobility	High	▼ ?

[Show data](#)[Download data](#)

Labour_Productivity - SSP5-RCP8.5 - GDP - 2050 - High Inv. Mobility
(% change from baseline)



Health and wellbeing

H1: Risks to people from heat

H2: Risks to people from extreme weather, excluding heat

H3: Risks to people from changes in air quality

H4: Risks to people from climate-sensitive diseases

H5: Risks to food safety and nutrition

H6: Risks to health and social care delivery

H7: Opportunities for health and wellbeing



Overheating maps

Explore the impact of climate change on future temperatures inside homes and model how different adaptations change internal temperatures.

[Further information](#) ⓘ [Get started](#) >>

Find area

England and Wales

Climate change projections

Switch the projected temperatures using modelled predictions for climate change on estimated CO2 emissions

RCP2.6 2030 - Lower emissions scenario

Overheating metrics

Metrics displayed on the map showing the impact of the selected climate change projection and retrofit adaptations.

TM59+SVI Combined hours over 26°C & SVI

Building adaptation measures

Building retrofit for net zero and climate adaptations. Use these options to compare the impacts of different packages of building adaptation. The analysis modelled four different packages.

NONE Baseline (no adaptations)

Use and share

[Share this map](#) [Export this map \(PNG\)](#)

[Download data](#) [Embed this map](#)

LAD Local Authority Districts

Welcome

Use these maps to explore a model developed to explore the impact of climate change on temperatures inside homes and compare how different adaptations change impacts.

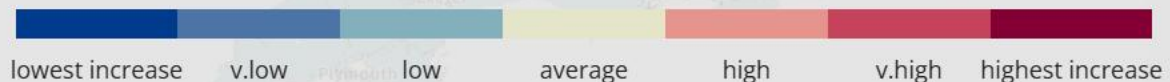
Read the about 'Further information' to understand the **important limitations** of the results shown here.

To get started search for a **postcode** or **local authority** below, you can come back to the introduction tour of the data and interface at any time by clicking 'get started'.

[Skip intro & don't show this again](#)

England and Wales

Combined hours over 26°C & SVI



[show individual metric values](#)

60% of domestic homes in area had EPC (used in model)



UK AIR

Air Information Resource

[Data Archive](#) > [UK Ambient AQ Map](#)



Add Overlays

Select data type

Background

Select a layer to view

Nitrogen Dioxide annual mean

Select a year

2024

Data layer transparency

Select basemap from the gallery



Clear Map

About this ambient air quality map

This interactive tool allows you to explore ambient air quality concentration data from Defra's national Pollution Climate Mapping modelling.

» [Read guidance on using this GIS tool](#) (PDF - opens in a new window).

Use the toolbar above to switch between different layers and available tools.

This map tool is optimised for fast internet connections and modern web browsers; it may be slow in older browsers (such as Internet Explorer 8 or below).

** Important Notes:

The UK's annual [compliance assessment](#) is based on both modelling and monitoring and therefore analysis of the modelling results in this GIS tool alone will not give the overall compliance result as reported under the Air Quality Standards Regulations 2010.

For comparison with the Limit and Target Values in the Air Quality Standards Regulations 2010, data should be rounded to integers for all pollutants except Lead, Arsenic, Cadmium and BaP which should be rounded to 1 d.p.

PM₁₀ data before 2004 is [TEOM](#) (new window), while 2004 onwards is [Gravimetric Equivalent](#) (new window).

There are no CO maps after 2010. Due to low concentrations assessed by Defra across the UK, the modelling for this pollutant is no longer required.

As part of the 2017 UK plan for tackling roadside nitrogen dioxide concentrations, local authorities with exceedances of the annual mean nitrogen dioxide limit value have been required to develop local plans or studies to consider measures to achieve the statutory limit value within the shortest possible time. These studies or plans may include local scale modelling and/or monitoring data, and in some cases this local data and the national PCM modelling present different results. This local data is not reflected within these datasets, however we are working to develop our approach to assessing national NO₂ compliance with a view to better reflecting local level NO₂ concentrations.

The 2021 NO_x and NO₂ data in this map, originally published on 29th September 2022, have been republished on 8th February 2024. The re-publication corrected a processing error which caused an underestimate in the NO_x emissions from taxis in central London.

Emissions data can be explored with the [National Atmospheric Emissions Inventory maps](#).

Accessibility version

Requested Information

[About this ambient air quality map](#)

[Download UK datasets](#)

The search tools will process the requested information, and the results will appear here. During this processing time you can continue using the map.

Legend



UK AIR

Air Information Resource

[Data Archive](#) > [UK Ambient AQ Map](#)

Select data type

Background

Select a layer to view

Nitrogen Dioxide annual mean

Select a year

2024

Data layer transparency

Select basemap from the gallery



GB
Topographic
Hillshade

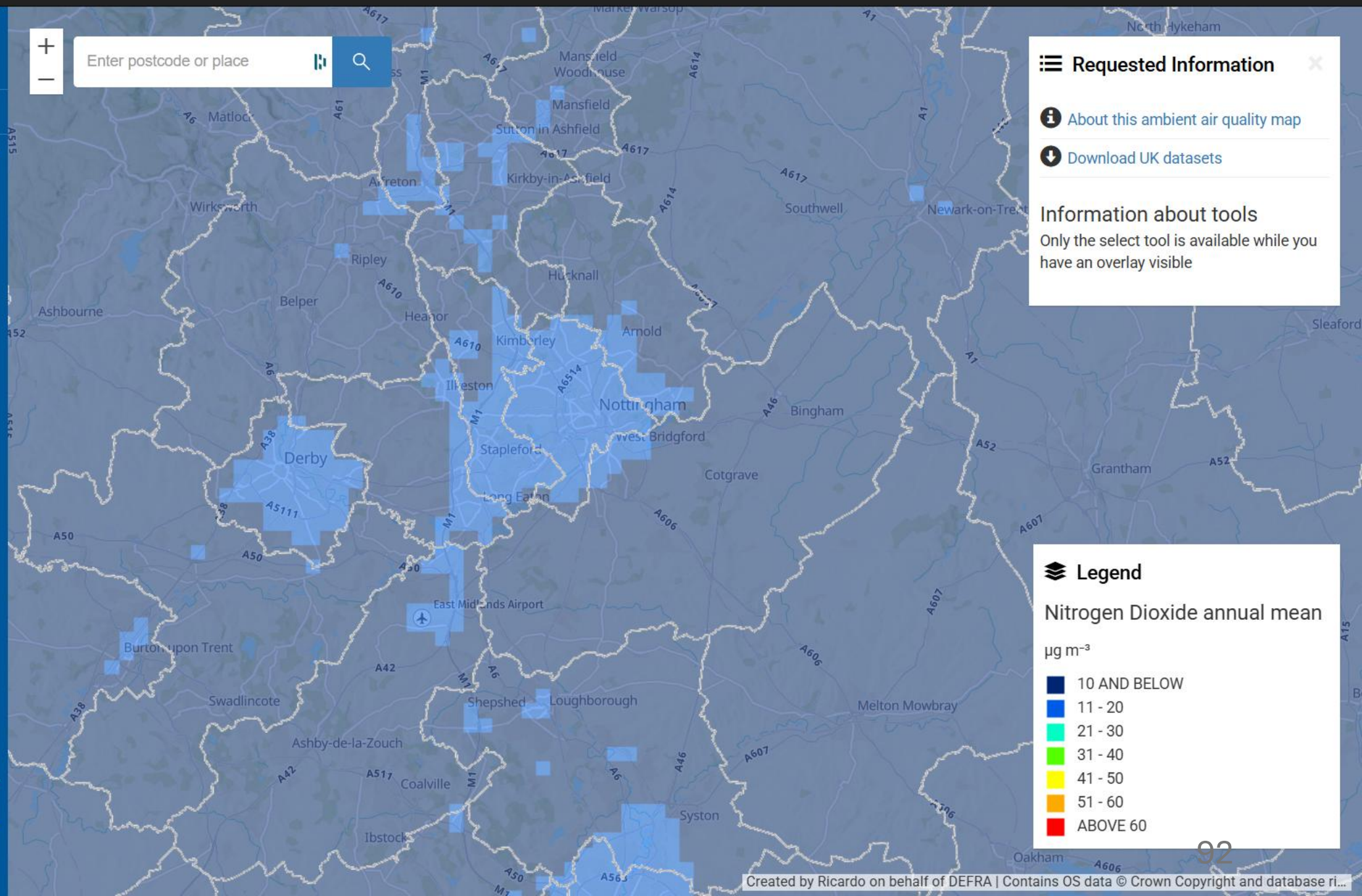


GB
Cartographic



GB D
Gre

Clear Map



Requested Information

[About this ambient air quality map](#)

[Download UK datasets](#)

Information about tools

Only the select tool is available while you have an overlay visible

Legend

Nitrogen Dioxide annual mean

$\mu\text{g m}^{-3}$

- 10 AND BELOW
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- ABOVE 60

NEW Fingertips Shape the future of Fingertips - your feedback will help us to improve it. [Join here](#)**IMPORTANT** Some issues were identified which resulted in incorrect trend markers being displayed on the website and/or in the data downloads. These have now been corrected. If you previously downloaded data for reuse it is advisable to re-download them.[Go to the data](#)

Contents

[Local health, public health data for small geographic areas](#)[Local health, public health data for small geographic areas](#)[Introduction](#)[Recent updates](#)[Historic news and updates](#)[Home](#) > [Public health profiles](#) > [Local health, public health data for small geographic areas](#)

Local health, public health data for small geographic areas

Recent update: August 2025

In this release 20 indicators have been updated to the latest available time period. This includes indicators on mortality, life expectancy, general fertility rate, low birth weight babies, fuel poverty, unemployment and long term unemployment. The child weight indicators have been updated to Middle layer Super Output Area 2021 (MSOA 21) boundaries. 14 indicators have been removed from Local Health. The [Local Health indicator updates](#) provides details of indicators updated and removed in this release.

Data has been updated for middle layer super output areas (MSOA), lower tier and upper tier local authorities, regions and England. Data for wards and clinical commissioning groups (CCGs) has been removed from the tool.

Please note the www.localhealth.org.uk website has now been decommissioned as explained in the recent update note from [January 2025](#). All queries to the decommissioned site should be redirected here.

Introduction

Local health is a collection of public health indicators presented at small geographical areas. By breaking the data down to smaller areas, hidden inequalities can be highlighted. Local Health contains indicators related to:

Local health, public health data for small geographic areas ▾

Geography

Search area

[▶ Your area lists](#)

Area type

MSOA ▾

Group type

Counties & UAs (2021/22-2022/23) ▾

Area

Arboretum, Forest & Trent University



Indicator

Resident population (a

▶ [Legend](#) ▶ [Benchmark](#) ▶ [More](#)

Areas **All in Nottingham** All in England

[Show 99.8% CI values](#)



Data view ▾

Map

Topic ▾

Our community

Find indicator in Our community

- Resident population (aged 0 to 15)
- Resident population (aged 65 and over)
- Resident population (aged 85 and over)
- Population density: people per square kilometre
- Poverty: Index of Multiple Deprivation
- Poverty: English Indices of Deprivation
- Children in poverty: Income Deprivation Affecting Children Index (IDACI) (aged 0 to 15)
- Older people in poverty: Income Deprivation Affecting Older People Index (IDAOPI) (aged 60 and over)
- Fuel poverty (low income, low energy efficiency methodology)
- Unemployment: people claiming out of work benefit (aged 16 to 64)
- Long-term unemployment: people claiming out of work benefit for over 12 months (aged 16 to 64)

to benchmark ▾

Count	Value	95% Lower CI	95% Upper CI
1,229	10.1	9.6	10.6

[Home](#) > [Society and culture](#) > [Community and society](#)

Accredited official statistics

English indices of deprivation 2019

Statistics on relative deprivation in small areas in England. Further details are provided at the bottom of this page and in the FAQ document.

From: [Ministry of Housing, Communities & Local Government \(2018 to 2021\)](#)

Published 26 September 2019



 [Get emails about this page](#)

Applies to England

Documents



[Statistical release - main findings](#)

Related content

Collection

[English indices of deprivation](#)

Poll and Question

Are you liaising with health colleagues to map health and climate risks?

- Yes
- No

Chat: What has been your experience?

Infrastructure

I1: Risks to the delivery of infrastructure services from interdependencies with other infrastructure systems

I2: Risks to electricity generation assets

I3: Risks to electricity transmission and distribution

I4: Risks to fuel supply systems

I5: Risks to road transport systems

I6: Risks to rail transport systems

I7: Risks to aviation, shipping and other transport systems

I8: Risks to digital and communications systems

I9: Risks to water supply and wastewater systems

I10: Risks to waste management systems, excluding wastewater systems

System and Network

[Home](#) / [Data Groups](#) / [System and Network](#)



System and Network

Information and data related to network assets and system operation; for example the various Long Term Development Statement tables.


[Search help](#)

10 Datasets found for "Substations"

Order by:

Relevance ▾

Distribution Substations

[CSV](#)
[PDF](#)

This dataset provides the distribution substations within NGED's four licence areas and their connection to the primary substation. A distribution substation is an electrical...

33kV Substations

[PDF](#)

BETA

[Home](#) > [Ordnance Survey](#) > [OS Open Roads](#)

OS Open Roads

Published by: Ordnance Survey
Last updated: 16 April 2025
Topic: Not added
Licence: None

Summary

OS Open Roads is a high-level view of the road network, from motorways to country lanes in Great Britain. The links represent an approximate central alignment of the road carriageway and include roads classified by the National or Local Highway authority (for example, A Roads) and unclassified roads which make up Great Britain's road network. Attributes identify the roads that make up the Primary Route Network (PRN) and the Strategic Route Network

[View full summary](#)

More from this publisher

[All datasets from Ordnance Survey](#)

Search

Q



Dataset



GB Railways and stations

Metadata Quality ⓘ ★★★★★☆

This data shows the position of all railway lines and railway stations in Great Britain. Both standard gauge (network rail managed) and narrow gauge (generally private) railways are shown. This data was extracted from Ordnance Survey Strategy Data that was released as part of the OS OpenData initiative in April 2010. GIS vector data. This dataset was first accessioned in the EDINA ShareGeo Open repository on 2010-09-22 and migrated to Edinburgh DataShare on 2017-02-21.

Host [Edinburgh DataShare](#)Owner [University of Edinburgh](#)

Last Updated 21 Feb 2017

Access Open

Usage Rights Free

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Downloads 36

Views 413

Likes 0

[Source](#)

Like



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Cite

100

Topics

[Roads and rail](#)[Cars, buses, and trains](#)

OS MasterMap Networks - Water Layer

[Product overview](#)
[Technical information](#)
[Get this product](#)

OS MasterMap Networks - Water Layer

Get this product

What you get

Key features

Content and context

Precise watercourses details

Complete picture in 2D and 3D

Answers on tap

Detailed centre line

Category

Networks

Access

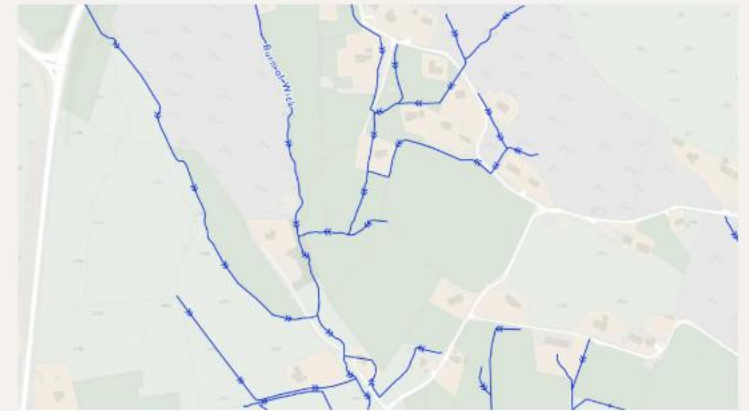
Download

Data structure

Vector

Update frequency

Every three months

[View technical information](#)


Public Sector Geospatial Agreement (PSGA)

[Find an OS licensed Partner](#)

[Other ways to access](#)

[Free for PSGA: Find out if you're a member](#)

Land, nature and food

N1: Risks to terrestrial and coastal ecosystems

N2: Risks to freshwater ecosystems

N3: Risks to marine ecosystems

N4: Risks to soil ecosystems

N5: Risks to natural carbon stores and sequestration

N6: Risks to agriculture

N7: Risks to fisheries and aquaculture

N8: Risks to forestry

N9: Opportunities for agriculture, fisheries, aquaculture and forestry

N10: Opportunities for species and ecosystems

N11: Risks to food security

BETA

[Home](#) > [Ordnance Survey](#) > [OS Open Rivers](#)

OS Open Rivers

Published by: Ordnance Survey
Last updated: 16 April 2025
Topic: Not added
Licence: None

Summary

OS Open Rivers GIS data contains over 144,000 km of water bodies and watercourses map data. These include freshwater rivers, tidal estuaries and canals.

Understand how water bodies and watercourses in Great Britain join up.

OS Open Rivers provides a comprehensive dataset of Great Britain's

[View full summary](#)

More from this publisher

[All datasets from Ordnance Survey](#)

Search

Q

Workspace

APIs



API Projects

API Catalogue

API Dashboard

API Transaction History

Downloads



Open Data

Sample Data

OS Net



RINEX Data

Station Health

Data Archive

← [OpenData downloads](#)

BGS Soil Parent Material Model

Soils are the result of weathering processes that occur on the Earth's surface where the atmosphere meets the geosphere and hydrosphere. We live in this 'critical zone', relying on our soils to grow our food and sustain the biodiversity and health of our environment.

A 'parent material' is a soil-science name for a weathered rock or deposit from and within which a soil has formed. In Great Britain, parent materials provide the basic foundations and building blocks of the soil, influencing their texture, structure, drainage and chemistry.

The Soil Parent Material Model details the distribution of physiochemical properties of the weathered and unweathered parent materials of Great Britain to: (i) facilitate spatial mapping of soil properties Great Britain; (ii) identify soils and landscapes sensitive to erosion; (iii) provide a national overview of our soil resource; and (iv) develop a better understanding of weathering properties and processes.

Coverage: All of Great Britain

Data structure: Vector

Supply format: ESRI® Shapefile, and GeoPackage

Version Date: Version 6

Data provider: [British Geological Survey](#) [↗](#)

Download BGS Soil Parent Material Model

All OpenData can be freely downloaded under the [Open Government Licence](#) [↗](#). Please acknowledge reproduced materials.

1

Specify an area

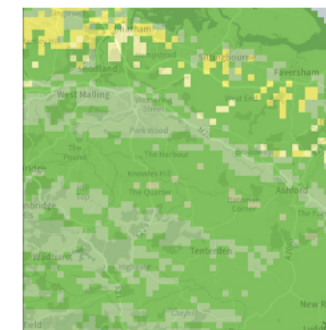
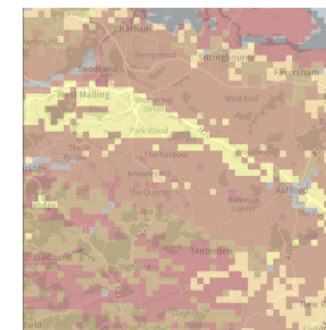
All of Great Britain

Free OpenData



Provided by British Geological Survey

Supporting information

[Product Information](#) [↗](#)
[User Guide \(1 km resolution\)](#) [↗](#)


UKCEH Land Cover Maps

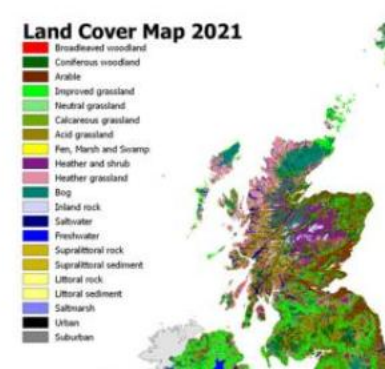
[Home](#) > [Data](#) > [UKCEH Land Cover Maps](#)

UKCEH Land Cover Maps

The UKCEH Land Cover Maps (LCMs) map UK land cover. They do this by describing the physical material on the surface of the United Kingdom providing an uninterrupted national dataset of land cover classes from grassland, woodland and fresh water to urban and suburban built-up areas.

UKCEH has a long history of using satellite imagery to map land cover from the first national Land Cover Map of Great Britain in 1990 to the current production of annual Land Cover Maps and land cover change data.

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Henrys, P.A.; Keith, A.M.; Wood, C.M.

Model estimates of aboveground carbon for Great Britain

<https://doi.org/10.5285/9be652e7-d5ce-44c1-a5fc-8349f76f5f5c>

[Download data](#)
[Supporting docs](#)
[Cite this dataset](#)
[View record as ▾](#)

This dataset presents estimates of total carbon stored in vegetation across Great Britain (GB). Presented as carbon density (tonnes per hectare) the data was obtained by estimating carbon density values for each land cover type and then projecting across GB using the 2007 Land Cover Map. Countryside Survey data from 2007 was also used to derive the carbon density estimates for each land cover type and as such the dataset is a representation for 2007. Changes in size and productivity of the aboveground carbon pool may act as a sink or source for carbon dioxide. As such, the carbon stored in vegetation and its spatial distribution plays a vital role in climate regulation.

Publication date: 2016-03-22

2
citations

104
downloads *

2,097
views *

[More information](#)

Format

Esri Shapefile

Risk by Risk Approach

Pros



Aligned with national CCRA



Aligns with other assessments



Covers all sectors

Cons



Can be time consuming and difficult to do



There isn't always data available



Data can be at LA or neighbourhood level

Which approach?

Do you want to focus on specific areas, neighbourhoods

Do you want to focus on the whole LA?

They are not mutually exclusive

Poll and Question

Have you used CVI or Risk by Risk approach

- CVI
- Risk by Risk
- Both
- None
- Not sure

Open for discussion

- Final Poll – What other Adaptation Related Seminars would you be interested in?
 - Local Authority Adaptation Powers and Duties
 - How to do Adaptation Planning?
 - Adaptation Pathways 101
 - Financing Adaptation
 - Other



Adaptation
Data
Seminar
Series -
[here](#)