

# How Qgis is helping me write a book

## The Littleover Landscape: From Ice Age to Domesday

Tony Brookes, September 2023

With thanks to the Littleover History Group & the Derbyshire Archaeological Society for  
their support

# The Book!

- Landscape Archaeology, covering 1,000,000 BC to 1087 AD
  - The Littleover Area is a 7.5 mile radius around St Peter's Church, map later
  - Qgis used to create all the maps needed to tell the story of the landscape shown by the archaeological finds, Geology, Crop Marks, Parish Boundaries, and the Domesday Book
- Aimed at the Lay reader

Found in a back Garden  
in Mickleover, the next  
door parish to  
Littleover

Portable Antiquities Scheme,  
Annual Report 2004/5



6. The handaxe (DENO-DE1DA4) from Mickleover, Derbyshire. 78.16 x 59.58 x 27.08mm.

# Main Data Sources

- Derbyshire's Historic Environment Record (H.E.R.) at Matlock who have supplied their data for my book (3 shapefiles & a 1200 page pdf) (about 450 items)
- The British Museum's Portable Antiquities Scheme's (P.A.S) data – approx. 420 items in the A.O.I.
- Other sources
  - Papers (mainly via Google as no academic account)
  - Books
  - Periodicals or Serials
  - Anything else relevant
  - ABEbooks & Oxbow Publishing
  - UK Data Service
  - Historic England – Some Shapefiles showing cropmarks, from the Aggregates Levy projects
  - Environment Agency - LIDAR

# Open Source Software

- Qgis v 3.32. – 1 Lima
- Zotero (reference manager)
- Blender (maybe)

unlikely

Inkscape

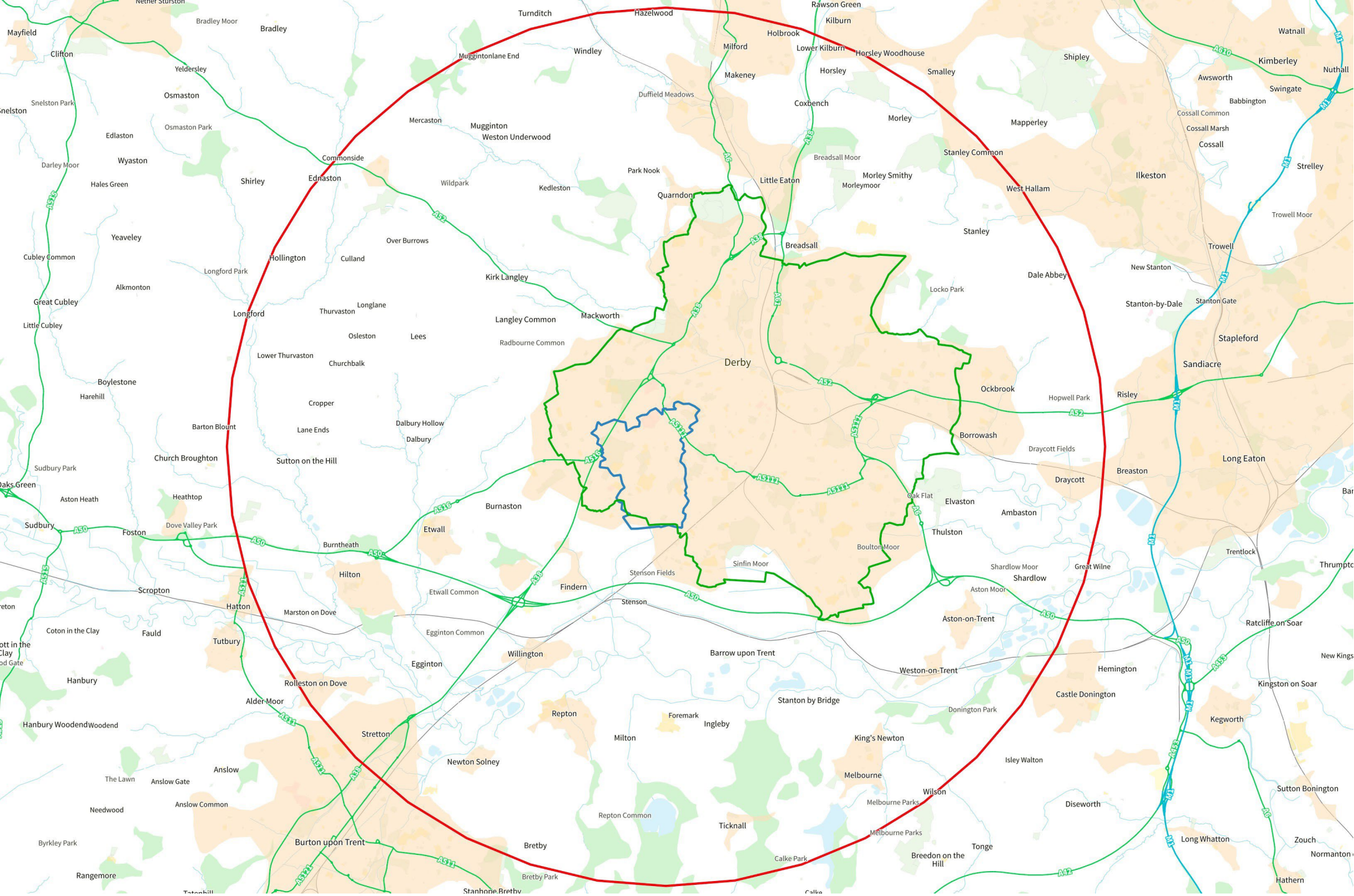
Gimp

Open or Apache Office

# Closed Source Software

(Needed to publish a book & prepare images for presentations & articles)

- Scrivener
- MS Office 365 (family) & Apple's Numbers, Pages, Keynote
- Affinity Suite (Photo, Publisher, Designer all v2)
- Mac
  
- Websites
- ColorBrewer
- <https://archaeologydataservice.ac.uk>
- Google, Youtube,
- etc



The Littleover Area of Interest (AOI) Red circle , Data from the Ordnance Survey, & Derby City Council 2016 Ward boundaries (shown in green).

The Littleover parish boundary (in blue) is from Kain, R.J.P., Oliver, R.R. (2001). *Historic Parishes of England and Wales : an Electronic Map of Boundaries before 1850 with a Gazetteer and Metadata*. [data collection]. UK Data Service. SN: 4348, [DOI: 10.5255/UKDA-SN-4348-1](https://beta.ukdataservice.ac.uk/datacatalog/studies/study?id=4348)

OS Open Zoomstack & Derby City 2016 boundary

Each point could be as small as a coin or as large as a Cursus

**Cursuses** are [monumental Neolithic](#) structures resembling [ditches](#) or [trenches](#) (Wikipedia)

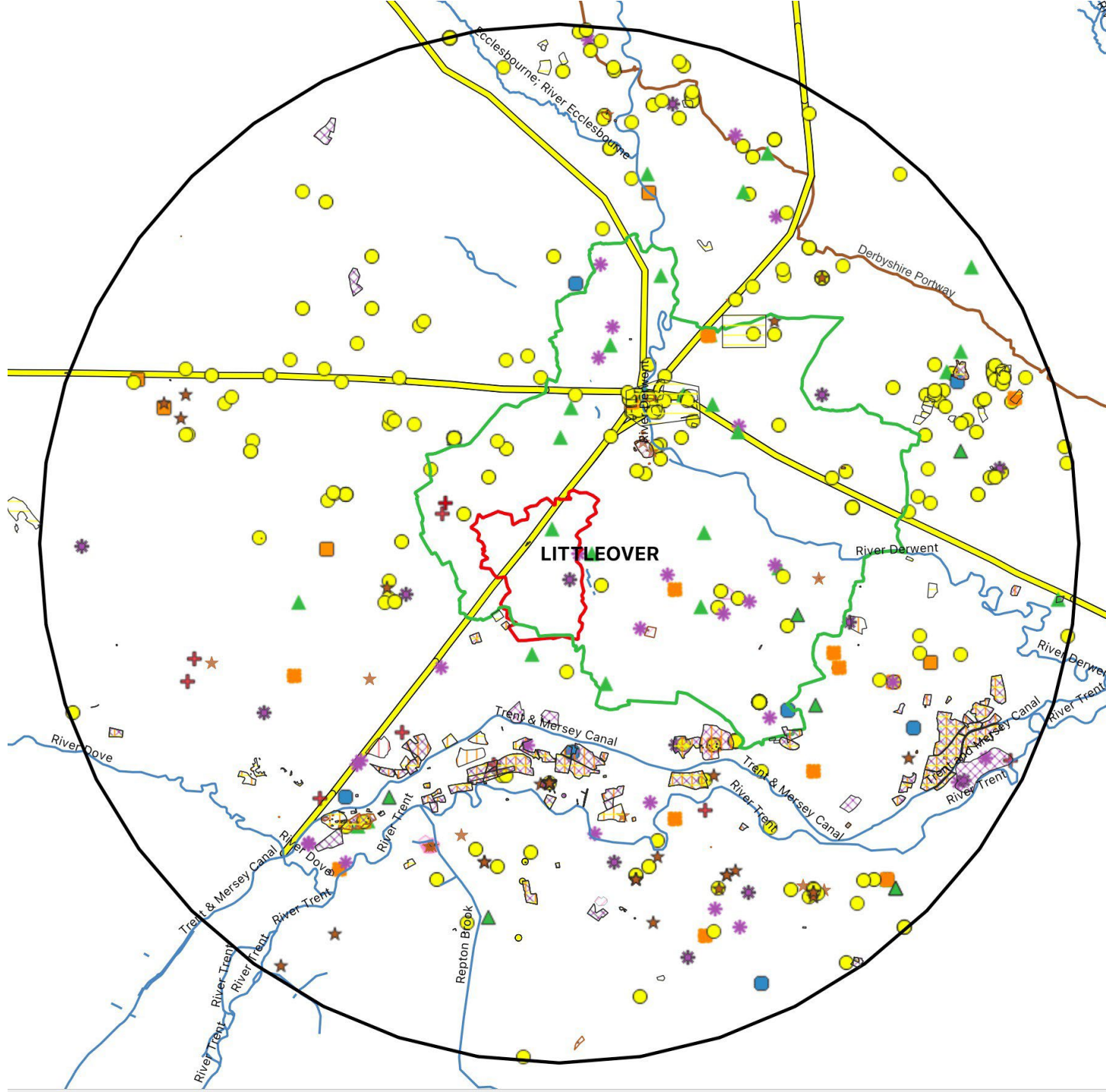
All eras, and too many to make sense of!

☑ All Pas Data 2 sets & Eras [245]

- ☑ + PALAEOLITHIC [1]
- ☑ ● MESOLITHIC [4]
- ☑ ▲ NEOLITHIC [9]
- ☑ \* BRONZE AGE [16]
- ☑ ■ IRON AGE [5]
- ☑ ● ROMAN [162]
- ☑ ★ EARLY MEDIEVAL [47]

☑ V2 Eras & symbology testbed

- ☑ + Paleolithic
- ☑ ● Mesolithic
- ☑ ▲ NEolithic
- ☑ \* Bronze Age
- ☑ ■ Iron Age
- ☑ ● Roman
- ☑ ★ Anglo-Saxon
- ☑ ○ Viking
- ☑ ○ Norman



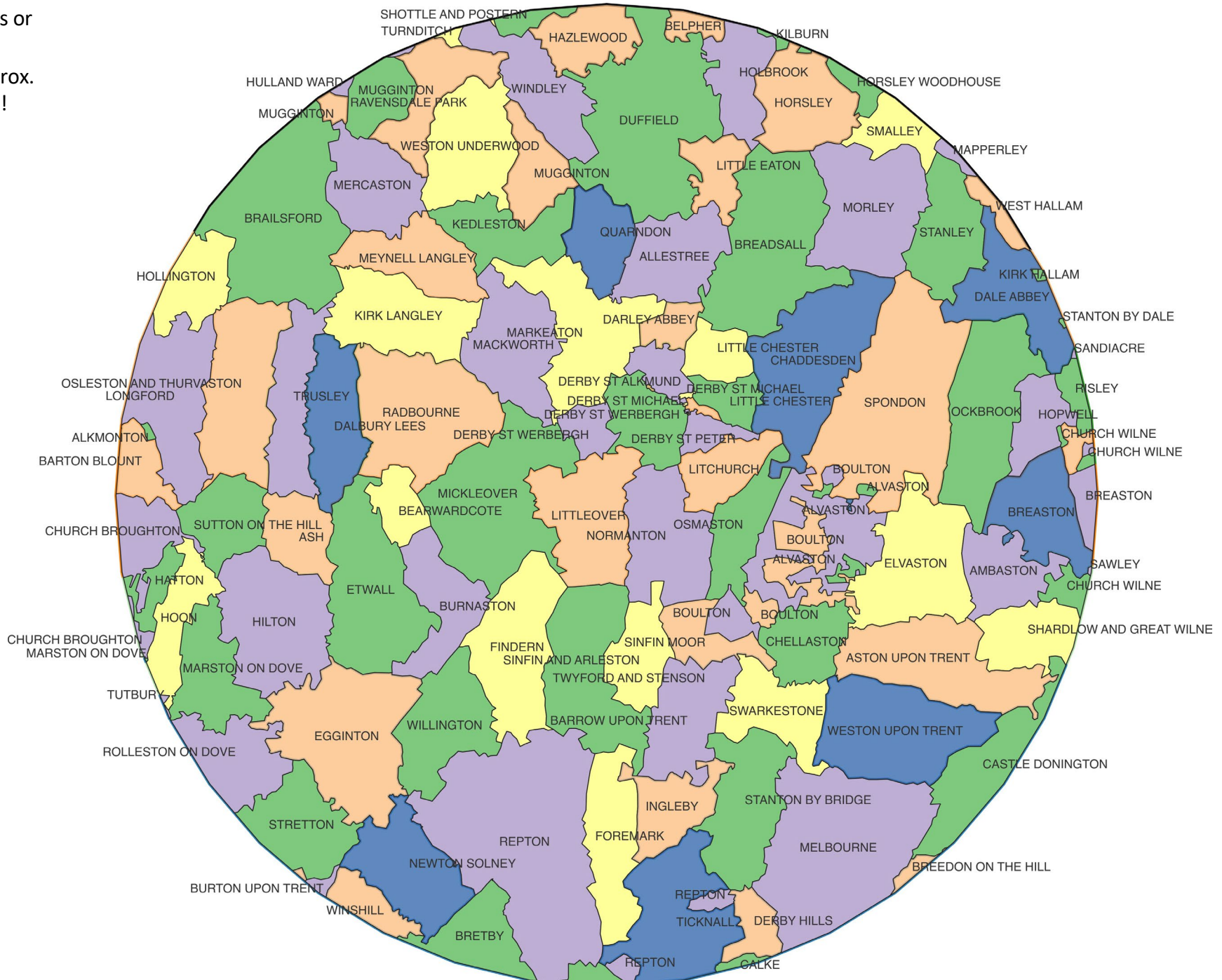
Hashing marks - areas of archaeological interest, mainly cropmarks.....

Polygon Shading

- ☑ [diagonal lines] Paleolithic
- ☑ [dotted] Mesolithic
- ☑ [green diagonal lines] Neolithic
- ☑ [purple cross-hatch] Bronze Age
- ☑ [orange vertical lines] Iron Age
- ☑ [yellow horizontal lines] Roman
- ☑ [brown square pattern] Saxon
- ☑ [pink diagonal lines] Viking
- ☑ [grey cross-hatch] Norman
- ☐ [white] [red dotted]

**132** Parishes or  
part parishes,  
total area approx.  
113,000 acres!

ALKMONTON	HAZLEWOOD	ROLLESTON ON DOVE
ALLESTREE	HILTON	SANDIACRE
ALVASTON	HOLBROOK	SAWLEY
AMBASTON	HOLLINGTON	SHARDLOW AND GREAT WILNE
ASH	HOON	SHOTTLE AND POSTERN
ASTON UPON TRENT	HOPWELL	SINFIN AND ARLESTON
BARROW UPON TRENT	HORNINGLOW	SINFIN MOOR
BARTON BLOUNT	HORSLEY	SMALLEY
BEARWARDCOTE	HORSLEY WOODHOUSE	SPONDON
BELPHER	HULLAND WARD	STANLEY
BOULTON	INGLEBY	STANTON BY DALE
BRAILSFORD	KEDLESTON	STANTON BY BRIDGE
BREADSALL	KILBURN	STANTON BY DALE
BREASTON	KIRK HALLAM	STRETTON
BREEDON ON THE HILL	KIRK LANGLEY	SUTTON ON THE HILL
BRETBY	KIRK LANGLEY	TICKNALL
BURNASTON	LITCHURCH	TRUSLEY
BURTON UPON TRENT	LITTLE CHESTER	TURNDITCH
CALKE	LITTLE EATON	TUTBURY
CASTLE DONINGTON	LITTLEOVER	TWYFORD AND STENSON
CHADDESDEN	LONGFORD	WEST HALLAM
CHELLASTON	MACKWORTH	WESTON UNDERWOOD
CHURCH BROUGHTON	MAPPERLEY	WINDLEY
CHURCH BROUGHTON	MARKEATON	WINSHILL
CHURCH BROUGHTON	MARSTON ON DOVE	
CHURCH WILNE	MELBOURNE	
DALBURY LEES	MERCASTON	
DALE ABBEY	MEYNELL LANGLEY	
DARLEY ABBEY	MICKLEOVER	
DERBY ALL SAINTS	MORLEY	
DERBY HILLS	MUGGINTON	
DERBY ST ALKMUND	NEWTON SOLNEY	
DERBY ST MICHAEL	NORMANTON	
DERBY ST PETER	OCKBROOK	
DERBY ST WERBERGH	OSLESTON AND THURVASTON	
DUFFIELD	OSMASTON	
EGGINTON	QUARNDON	
ELVASTON	RADBOURNE	
ETWALL	RAVENSDALE PARK	
FINDERN	REPTON	
FOREMARK	REPTON	
HATTON	RISLEY	



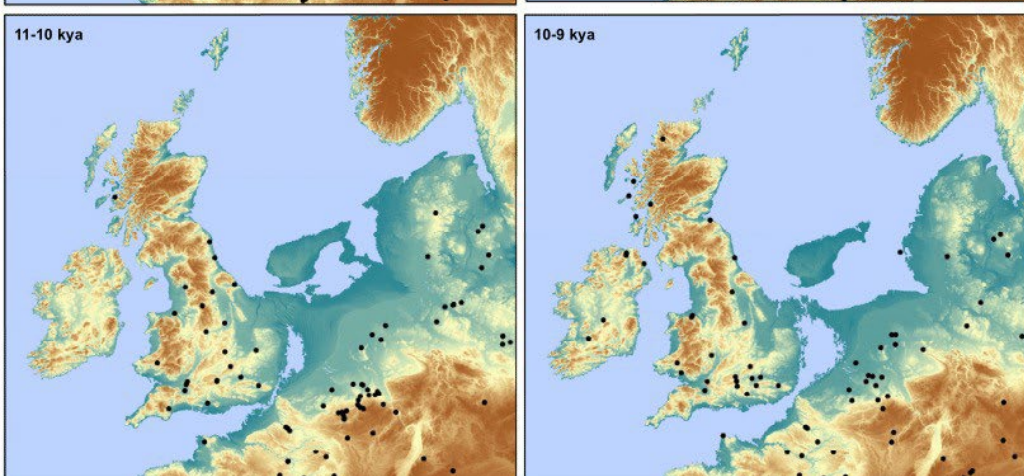
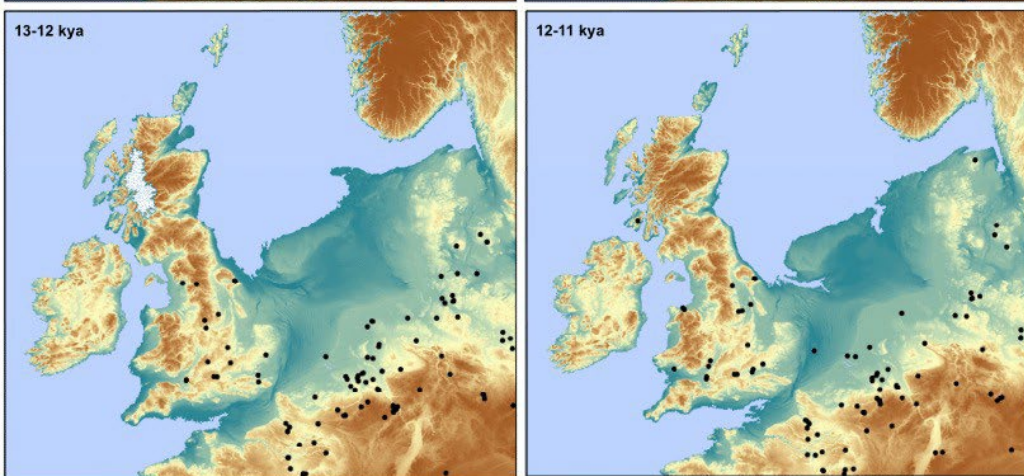
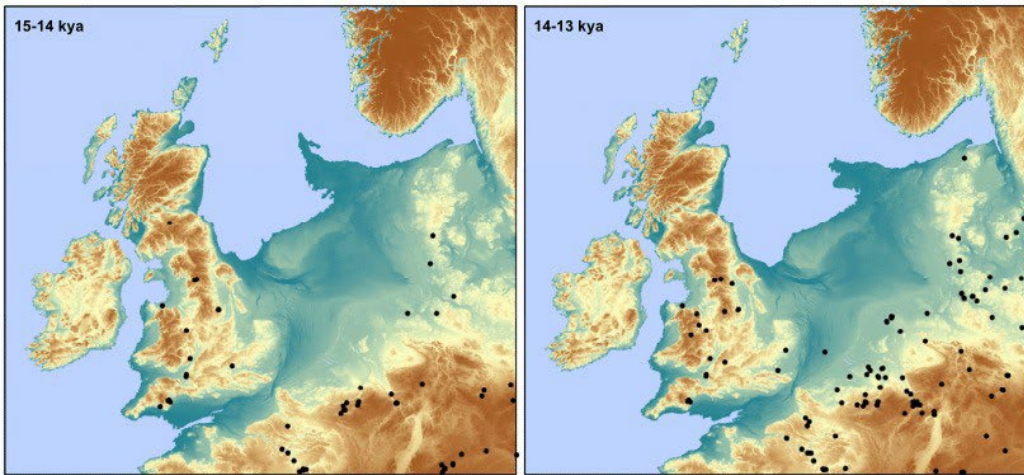
Colour	Marine Isotope Sequence	Dates BC
Green	16	676,000
Grey	12	430,000 – 480,000
White	6	130,000 – 170,000
Reddish	4	71,000
Grey	Last Glacial Maximum	20,000

Shapefile by kind permission of Batchelor, C., Margold, M., Krapp, M., Murton, D., Dalton, A., Gibbard, P., ...Manica, A. (2019). The configuration of Northern Hemisphere ice sheets through the Quaternary. Nature Communications, 10, Article 3713. <https://doi.org/10.1038/s41467-019-11601-2>

The Paper offers 3 reconstructions for each ice age, best estimate, maximum & minimum. Plotted here is the best estimate







Map Series showing how Doggerland was slowly drowned as the sea level rose as the last Ice Age ended. Note – The black dots are human settlements, including those currently underwater.

The colonization of Ireland: A human ecology perspective  
 Jesse W. Tune  
 Department of Anthropology, Fort Lewis College, 1000  
 Rim Dr., Durango, CO, 81301, USA

[Quaternary Science Reviews 249 \(2020\) 106632](https://doi.org/10.1016/j.quascirev.2020.106632)



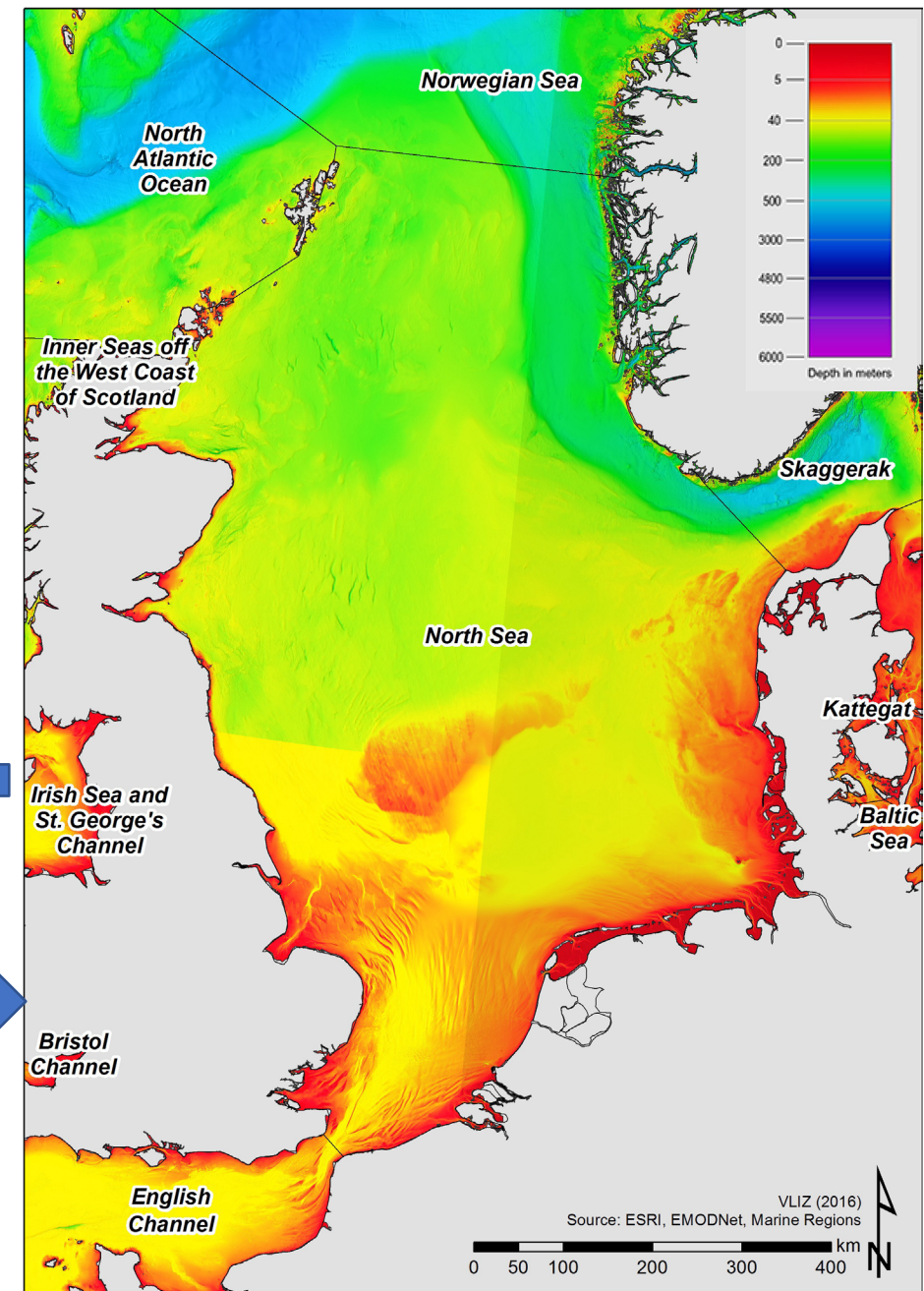
Modern North Sea



Production and Cost Assessment of Offshore Wind Power in the North Sea

To cite this article: J N Sørensen *et al* 2021 *J. Phys.: Conf. Ser.* **1934** 012019

Data from <https://www.gebco.net>

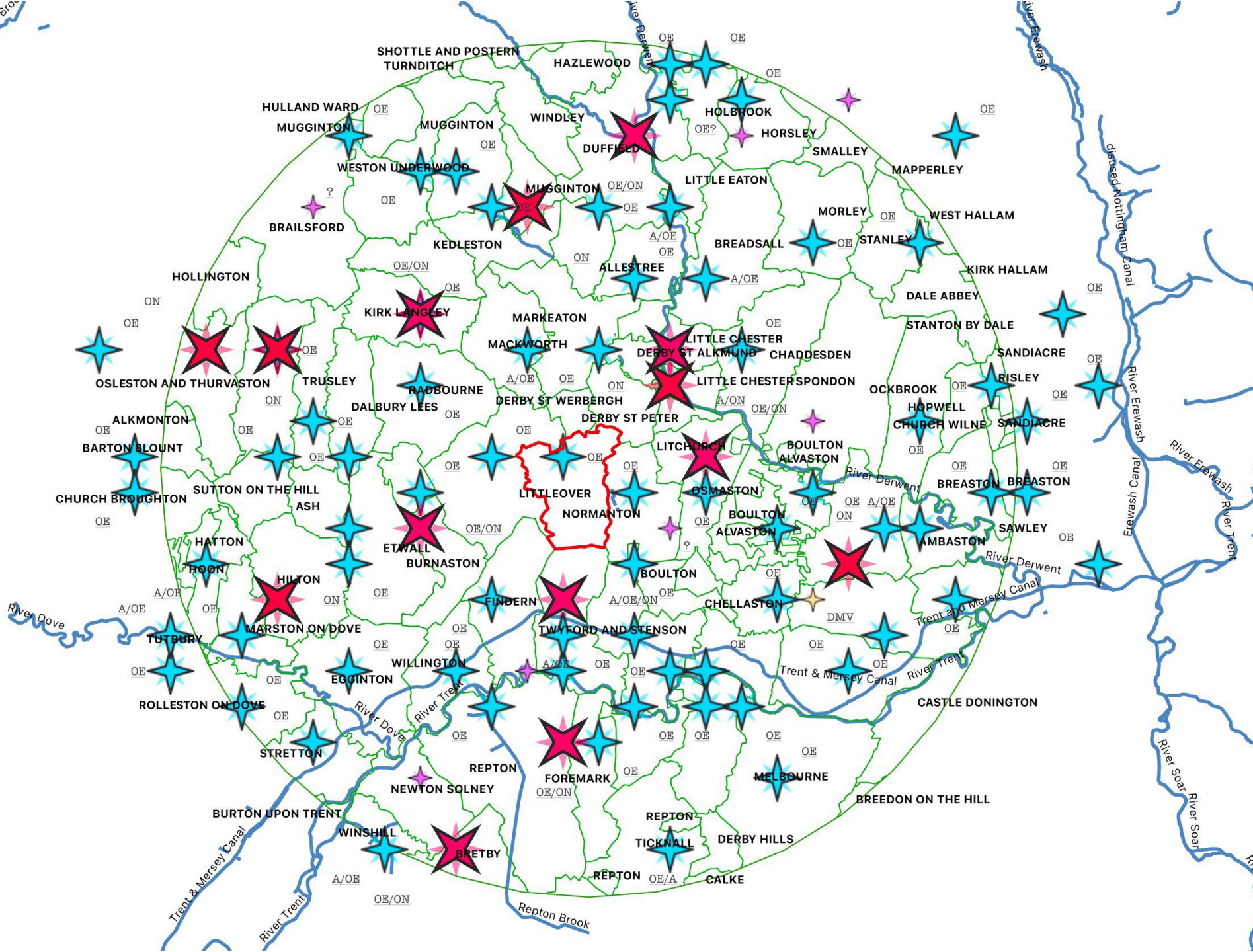


N.B: All images on this slide are taken directly from the PDF's referenced

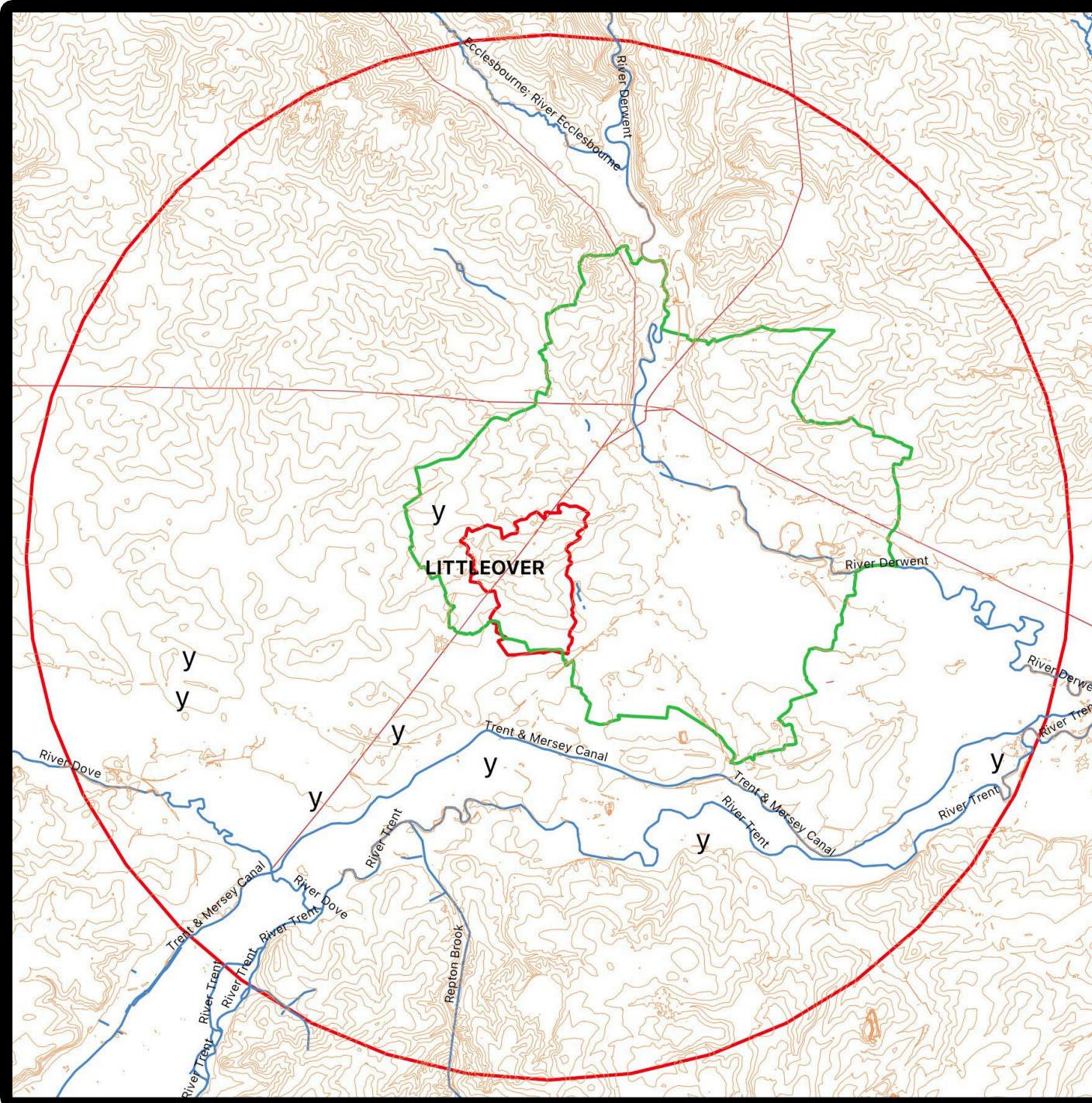
# 1st Attempt Place name Derivations

Blue = OE elements inc Anglian

Red = some element of Old Norse



Symbol	Value	Legend
✓	A/OE/ON	A/OE/ON
✓	OE/ON	OE/ON
✓	ON	ON
✓	A/ON	A/ON
✓	DMV	DMV
✓	OE	OE
✓	A/OE	A/OE
✓	OE?	OE?
✓	OE/A	OE/A
✓	?	?
✓	<i>all other values</i>	



Brown lines - OS Terrain 50 Contours based data  
2022 edition

Red Circle – Area of Interest

Green Line – Derby City 2016 Administrative Boundary

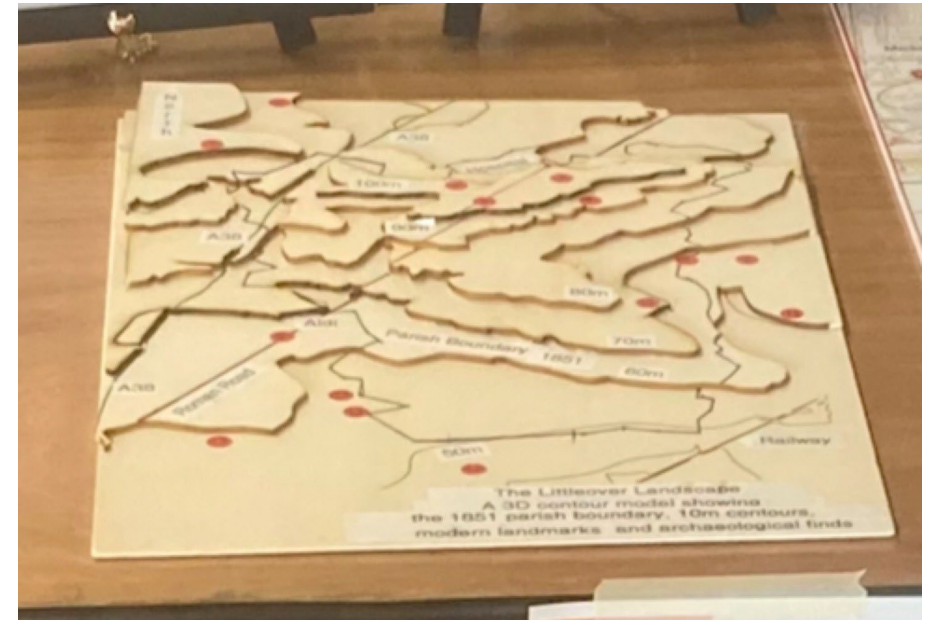
Red Line – 1851 Parish Boundary for Littleover

Paleolithic finds marked thus – y

Blue Line – Rivers & canals

## Spin Off Project in 2022

An area around Littleover has also been laser cut into a 3D representation of Littleover (it was only a slightly scaled up somewhere between A4 & A3). It and some maps & text were exhibited at a Making Festival in Derby in 2022. Qgis used to create contour svg's



# Why Oh Why?

- Are Grid Refs always in a different format to the previous batch & often appear near Penzance..?
- Can I not get straight in my head the differences between the TLA's for Lidar???[DEM/DSM/DTM]
- Are there so many closed source papers?
- Are there always interesting new things popping up?
  - 1944 USAFE Aerial photos
- Can I have
  - A way of running a catalogue of the Qgis Projects and shapefiles used in the Project on my Mac not a distant server? (that I don't have)...
  - A faster start-up of Qgis on my Mac?
- How does the H.E.R service use a system that supplies hidden map ref's that QGIS plots but not displayed in the attributes table or CSV's?
- Incredibly useful
  - University of Nottingham's Community borrower scheme
  - Being a member of Local History/Archaeology Groups
  - Qgis user email list
  - Online tutorials and documentation (Qgis et al)
- Need to learn & then do in Qgis....
  - Lidar for the AOI
  - Viewshed analysis - how far are the barrows visible & where from?
  - Least cost routing between the Domesday book settlements – and earlier ones when I've plotted them separately

Any Questions  
??