

Interactive map reveals how British Isles were affected by last glacial cycle 22,000 years ago

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An [interactive online map](#) produced by researchers at the University of Sheffield reveals how major cities were affected by the last glacial cycle 22,000 years ago – when a kilometre-thick ice sheet covered Britain and Ireland.

The vast ice sheet sculpted the landscape, leaving behind landforms which have allowed researchers to piece together how the ice sheet grew, flowed and disappeared. The online BRITICE map allows people to type in their postcode or city to look at how their area was affected and see the landforms that might be nearby – such as moraines recording the margin of the ice sheet.

The BRITICE map and GIS database of the glaciated landscape of the British Isles is the most complete overview of glacial landforms to date, containing more than 170,000 landforms from over 100 years of field investigation.

Dr. Jeremy Ely, a Research Associate on the BRITICE-CHRONO project, from the University of Sheffield's Department of Geography, said: "The landform information tells us about how the last British-Irish ice [sheet](#) behaved. We can see how it dammed rivers, creating large glacial lakes which covered Manchester, Doncaster and Peterborough.

"Corridors of fast flowing ice, known as ice streams, flowed toward the

east over Edinburgh and toward the west over Glasgow. Ice also covered the entirety of Ireland, flowing through the Irish Sea, where it coalesced with Welsh ice, causing it to flow southward toward the Isles of Scilly."

The BRITICE-CHRONO project, funded by the Natural Environment Research Council, has seen researchers work for six years to model the build-up and retreat of the last British-Irish [ice sheet](#). The programme has involved more than 70 scientists from around the world who have visited 28 different islands, collected more than 15 tonnes of samples from 914 sites and steamed 7,942km on marine expeditions.

As well as the online map, a physical accompanying map poster has been distributed to all secondary schools in the UK to assist pupils studying glacial landscapes and processes as part of their GCSE and A Level studies.

The University of Sheffield's Department of Geography is one of the largest departments in the country in terms of undergraduate numbers, and places on courses are amongst the most-sought-after in the UK.

Provided by University of Sheffield

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