

DATA SOURCES AND DESCRIPTIONS

Data type/description	Data file name	Source	Script data is used in
CSV file containing airport names, webpages and coordinates for major airports within Northern Ireland	Airports.csv UNC = 'Name'	Coordinates derived from Google Earth Pro	Interactive_map.ipynb
Vector data showing the locations of Areas of Outstanding Natural Beauty (AONBs) within Northern Ireland	AONBs.shp (shapefile and associate files) UNC = 'NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of Areas of Special Scientific Interest (ASSIs) within Northern Ireland	ASSIs.shp (shapefile and associate files) UNC = 'NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the county borders within Northern Ireland	Counties.shp (shapefile and associate files) UNC = 'CountyName'	Land and Property Services (LPS) Ordnance Survey Northern Ireland (OSNI) open data	Locator_map.py Proximity_analysis.py Site_characteristics.py Interactive_map.ipynb
SRTM DEM raster data, reprojected to WGS84 UTM Zone 29N, and re-sampled to 100m	DEM.tif	Shuttle Radar Topography Mission (SRTM) data from the National Aeronautics and Space Administration (NASA) and the National Geospatial-Intelligence Agency (NGA)	Site_characteristics.py (and Interactive_map.ipynb)
CSV file containing harbour names, webpages and coordinates for major harbours within Northern Ireland	Harbours.csv UNC = 'Name'	Coordinates derived from Google Earth Pro	Interactive_map.ipynb
Vector data showing the locations of lakes and water bodies within Northern Ireland	Lakes.shp (shapefile and associate files)	Department of Agriculture, Environment and Rural Affairs (DAERA) open data	Locator_map.py
25m pixel raster data set representing the land surface classified into 21 UKCEH land cover classes covering Northern Ireland	Landcover.tif	Derived from UK Centre for Ecology & Hydrology (UKCEH) open data	Site_characteristics.py (and Interactive_map.ipynb)
Vector data showing the local government district borders within Northern Ireland	Local_Government_Districts.shp (shapefile and associate files) UNC = 'LGDNAME'	Land and Property Services (LPS) Ordnance Survey Northern Ireland (OSNI) open data	Site_characteristics.py (and Interactive_map.ipynb)
Vector data showing the locations of nature reserves and national nature reserves within Northern Ireland	Nature_Reserves.shp (shapefile and associate files) UNC='NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of historic parks and gardens within Northern Ireland (December 2022)	Parks_and Gardens.shp (shapefile and associate files) UNC = 'SITE'	Department for Communities - Historic Environment Division open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of peatland priority habitats within Northern Ireland	Peatland.shp (shapefile and associate files)	Northern Ireland Environment Agency (NIEA) - Natural Environment Division open data	Proximity_analysis.py (and Interactive_map.ipynb)
CSV file containing place name, type, LGD, county and population (Some places are settlements and some are monuments or districts, populations are given for larger settlements)	Place_information.csv UNC = 'Name'	Derived from Northern Ireland 2011 Census data and information from city population webpage	Locator_map.py Proximity_analysis.py (and Interactive_map.ipynb)
Vector data derived from Gazetteer dataset showing the locations of settlements and key places within Northern Ireland	Places.shp (shapefile and associate files) UNC = 'PLACENAME'	Land and Property Services (LPS) Ordnance Survey Northern Ireland (OSNI) open data	Locator_map.py Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of primary substations within Northern Ireland	Primary_Substations.shp (shapefile and associate files) UNC = 'site_name'	Northern Ireland Electricity (NIE) Networks open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of Ramsar sites within Northern Ireland	Ramsar_Sites.shp (shapefile and associate files) UNC = 'NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of rivers within Northern Ireland	Rivers.shp (shapefile and associate files)	Northern Ireland Environment Agency (NIEA) - Water Management Unit (WMU) open data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of Special Areas of Conservation (SACs) within Northern Ireland	SACs.shp (shapefile and associate files) UNC = 'NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) data	Proximity_analysis.py (and Interactive_map.ipynb)
Vector data showing the locations of Special Protection Areas (SPAs) within Northern Ireland	SPAs.shp (shapefile and associate files) UNC = 'NAME'	Department of Agriculture, Environment and Rural Affairs (DAERA) data	Proximity_analysis.py (and Interactive_map.ipynb)
250k Superficial Geology polygons covering Northern Ireland converted to raster and reclassified	Superficial_Geology.tif	Geological Survey of Northern Ireland open data	Site_characteristics.py (and Interactive_map.ipynb)
Raster data showing mean average wind power density at 100m covering Great Britain	Wind_Power_Density.tif	Global Wind Atlas open data	Site_characteristics.py (and Interactive_map.ipynb)
Raster data showing mean average wind speed at 100m covering Great Britain	Wind_Speed.tif	Global Wind Atlas open data	Site_characteristics.py (and Interactive_map.ipynb)

UNC = column label for the uniquely identifying naming column

- Open data NI portal: <https://www.opendatani.gov.uk/>
- UK Government open data portal: <https://www.data.gov.uk/>
- UK Centre for Ecology & Hydrology open data: <https://eidc.ac.uk/>
- Census data: <https://www.nisra.gov.uk/statistics/census/>
- City Population: <http://www.citypopulation.de/en/uk/>
- Northern Ireland Electricity data hub: <https://nienetworks.opendatasoft.com/pages/home/>
- Global Wind Atlas: <https://globalwindatlas.info/en>
- SRTM download: <https://earthexplorer.usgs.gov/>