Anti-Fracking Protest, England, 2011-2019: Data and Variable Descriptors

**Data Overview and Collection Notes**

This data contains information about the number of ‘conventional’ and ‘non-conventional’ protest events (defined below) during the anti-fracking campaigns in England, by year and county. Years cover the campaign period from its beginning in 2011 until the nationwide moratorium announced by the UK Government in 2019, with protest events from October 2011 until March 2019 captured. The counties represent three different contexts in which community-based mobilisation against fracking was seen; namely, Lancashire alongside North and South Yorkshire. Numerous other variables are provided, including socio-economic and industry-specific data. UK-level data is also included and the variables represent a mix of data forms, especially of a binary nature.

The data provides an important window into the English anti-fracking campaigns that were community-led, inclusive of surrounding contextual factors. It is of interest for studies of this timeframe, industry and mobilisation both as a standalone dataset and for complementary use alongside other datasets. The dataset lends itself to comparative, time-series cross-sectional analyses at the intersection between local socio-political and economic contexts, and community-based anti-fracking mobilisation.

Most variables in the dataset are original. Economic indicators for specific English regions are reproduced under Open Government Licence from the UK’s Office for National Statistics. The event count data that forms a core element to this dataset was collected through a protest event analysis of actions listed on two online fracking and activist-specific websites by county and year (for details, see Garland et al. 2023). Protest events were categorised as ‘conventional’, involving procedural (litigation, petitions) and awareness-raising (leafletting, presentations) events, and ‘non-conventional’, denoting demonstrations (marches), camps (site occupations) and direct action (following Earl et al. 2003; Garland et al. 2023; Koopmans and Rucht, 2002).

The data is therefore organised according to conventional protest events (*n*=383), non-conventional actions (*n*=167) and county-years (*n*=27).

Limitations stemming from the original data collection strategy include the underreporting of direct action events that were not commonly advertised in advance of their occurrence. Efforts to compensate for this were undertaken by Garland et al. (2023) through consulting local newspapers and community group websites.

**Variable Descriptions**

The following table provides information about the organisation of the data, including variables that are present and their respective values. It further states the variable labels and codes that are used for the Stata (.dta) data file.

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| **Variable** | **Stata Label** | **Data Type** | **Description** | **Values** |
| County | county | Nominal (String) | Case county. | Lancashire; North Yorkshire; South Yorkshire |
| Year | year | Ordinal (String). | Year. | 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019 |
| Conventional Protest Event1 | convprot | Continuous (Numeric) | Number of conventional protest events (procedural, awareness-raising). | 0-356 |
| Non-Conventional Protest Event1 | nonconvprot | Continuous (Numeric) | Number of non-conventional protest events (demonstrations, camps, direct action). | 0-97 |
| Local Political Opportunity Structure Openness (Planning) | lposop | Binary (Numeric) | Whether the planning process at the local government level is open or closed for public consultation. | 0: Closed  1: Open  9: Invalid |
| National Political Opportunity Structure Openness (General) | nposop | Binary (Numeric) | Whether the national (UK) government is open or closed to debate on fracking. | 0: Closed  1: Open |
| Conservative Local Authority | concouncil | Binary (Numeric) | Whether the local authority is administered by the Conservative (centre-right) party. | 0: Not Conservative  1: Conservative  9: Invalid |
| National-Level Political Allies | natpolally | Binary (Numeric) | Whether anti-fracking support can be found among national-level elites, such as political parties in opposition. | 0: Absent  1: Present |
| Submitted Fracking Site Application | fraplanapsub | Binary (Numeric) | Whether the local authority has received an application from industry requesting planning permission to build and operate a site related to hydraulic fracturing and shale gas. | 0: Absent  1: Present  9: Invalid |
| Physical Fracking Site Presence | physite | Binary (Numeric) | Whether a physical site intended for hydraulic fracturing has been or is currently under construction. | 0: Absent  1: Present  9: Invalid |
| Number of Fracking Sites | numfracksite |  | The number of industrial developments earmarked for hydraulic fracturing operations to take place. | 0-2, 9 |
| Occurrence of Hydraulic Fracturing | acfrack | Binary (Numeric) | Whether hydraulic fracturing, as the process of high-pressure liquid injection into the ground to break rock layers to release shale gas, has been conducted. | 0: Absent  1: Present  9: Invalid |
| General Election (National Level) | genelec | Binary (Numeric) | Years in which there was – and was not – a general election in the UK (national level). | 0: No Election  1: Election |
| Local Election Occurrence | locelec | Binary (Numeric) | Years in which there was – and was not – elections for local authority bodies. | 0: No Election  1: Election  9: Invalid |
| Gross Disposable Household Income (GDHI), pounds million2 | gdhi | Continuous (Numeric) | A measure of annual gross disposable household income supplied by the ONS at the ITL3 level and current basic prices, in pounds million. ITL3 levels refer to the specific areas under each case county that experienced fracking, namely: Fydle (Lancashire); Ryedale (North Yorkshire); and, Rotherham (South Yorkshire). | 919-4419, 9999 |
| GDHI (Binary Based on Yearly Mean Scores) | gdhimean | Binary (Numeric) | GDHI re-organised based around the mean income calculated using each local area’s GDHI amount for each respective year. | 0: Below Mean  1: At or Above Mean  9: Invalid |
| Out-of-Work Benefits Claimant Rates (% Local Population)3 | owben | Discrete (Numeric) | The percentage of the local population that claims out-of-work benefits (Job Seekers Allowance, later Universal Credit from 2013 onwards). Figures are from the ONS and based on the ITL3 level. Note that national-level figures relate specifically to Great Britain and not to the whole United Kingdom. | 0.9-5.3 |
| Out-of-Work Benefits Claimants (GB Baseline Comparison) | owbenbase | Binary (Numeric) | Out-of-work benefits re-organised around the average claimant levels for Great Britain, as a percentage of the national population. | 0: Below Baseline  1: At or Above Baseline  9: Invalid |
| Economically Active (% Local Population)3 | econact | Discrete (Numeric) | The percentage of the local ITL3 population that are economically active; that is, employed (including self-employment). National-level figures refer to Great Britain only. ONS-derived. | 74-87.5 |
| Economically Active (GB Baseline Comparison) | econactbase | Binary (Numeric) | A re-organisation of economic activity data centred on the percentage of the population that are economically active at the Great Britain level. | 0: Below Baseline  1: At or Above Baseline  9: Invalid |
| Local Area Geographic Classification | geoclass | Nominal (String) | Classification of rurality or urban locational characteristics, based on UK Government information. | Urban with Minor Conurbation; Urban with City and Town; Mainly Rural; Undefined |
| Local Area Geographic Classification (Binary Measure) | geoclassbin | Binary (numeric) | A re-organisation of rural-urban classification data. | 0: Urban  1: Rural  9: Invalid |
| Local Authority Structure | latype | Nominal (String) | The organisational structure of local authorities. | County Council; Metropolitan Borough Council; Undefined |
| Local Authority Structure (Binary) | latypebin | Binary (Numeric) | Local authority structures re-organised into a binary measure. | 0: County Council  1: Metropolitan Borough Council  9: Invalid |

**Supplementary Data Sources**

*(See above table)*

1 Garland, J., Saunders, C., Olcese, C. and Tedesco, D. (2023). Anti-Fracking Campaigns in the United Kingdom: The Influence of Local Opportunity Structures on Protest. *Social Movement Studies*. 22(2):211-31. https://doi.org/10.1080/14742837.2022.2031956.

2 Office for National Statistics (ONS) (2023). *Regional Gross Disposable Household Income: Local Authorities by ITL1 Region*. Available: https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/datasets/regionalgrossdisposablehouseholdincomelocalauthoritiesbyitl1region (accessed 25th February 2024).

3 Office for National Statistics (ONS) (2023). *Local Authority Profile*. Available: https://www.nomisweb.co.uk/reports/lmp/la/contents.aspx (accessed 25th February 2024).

**References**

Earl, J., Soule, S. and McCarthy, J. (2003). Protest Under Fire? Explaining the Policing of Protest. *American Sociological Review*. 68(4):581-606. https://doi.org/10.2307/1519740.

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Koopmans, R., and Rucht, D. (2002). Protest Event Analysis. In: Klandermans, B. and Staggenborg, S. (eds). *Methods of Social Movement Research*. Minneapolis, MN: University of Minnesota, 231-59.