Fieldwork Techniques for Independent Investigations

Some ideas, data sources and guidance for students wishing to include weather measurements in their NEA.

A guide to collecting weather data https://www.rgs.org/CMSPages/GetFile.aspx?nodeguid=59f46632-ae51-4ea7-ab94-a0c537eb3c71&lang=en-GB

Passage of a depression

http://www.metlink.org/wp-content/uploads/2013/11/depression_caseswow.pdf

Data source: http://wow.metoffice.gov.uk

Weather and Health/ Behaviour

- Classroom behaviour (http://www.metlink.org/wp-content/uploads/2014/08/behaviour_weather_wow.pdf
)
- Use of inhalers in schools
- Number of people off school with illness
- http://www.metlink.org/wp-content/uploads/2013/06/Effect-of-Climate-Variability-on-School-Attendance.pdf
- https://journals.lww.com/epidem/Fulltext/2017/03000/Traffic related Air Pollution and Attention in.5.as px

Data source: http://wow.metoffice.gov.uk

Urban Climates

Using Wow data to look at urban heat islands http://www.metlink.org/observations-and-data/wow/

Urban winds: fieldwork guidance can be found on http://www.metlink.org/observations-and-data/instruments/

Urban temperature http://www.metlink.org/other-weather/urban-heat-islands/urban-heat-island-background/

Data source: http://wow.metoffice.gov.uk

Community resilience to extreme weather

- Extreme weather memories. http://talkingjobs.net/modules/wmb/?ref=nm
- Tempest data base https://www.nottingham.ac.uk/geography/extreme-weather/search/
- Data source: http://www.metoffice.gov.uk/public/weather/climate/gcqrqyr80

Local microclimate



http://www.metlink.org/wp-content/uploads/2013/06/USBmicroclimate-1.pdf

http://www.geographyteachingtoday.org.uk/fieldwork/info/local-learning/fieldwork-in-the-school-grounds/5-quick-and-easy-ideas/

https://www.rgs.org/schools/teaching-resources/quick-and-easy-ideas/

Data source: http://wow.metoffice.gov.uk

Factors affecting rainfall:

https://www.manchester.ac.uk/discover/news/tuesday-wettest-day-of-week-suggests-new-analysis/

https://rmets.onlinelibrary.wiley.com/doi/10.1002/joc.2321

Orographic rainfall http://www.metlink.org/wp-content/uploads/2013/11/orographic foehn.pdf

Red Sky at Night

http://www.metlink.org/wp-content/uploads/2013/11/teenagers/red_sky.pdf with an introductory concept cartoon from the ASE http://www.nationalstemcentre.org.uk/elibrary/resource/490/concept-cartoons-weather

http://www.metlink.org/other-weather/miscellaneous-weather/weather-folklore/

Snow

Data Sources: http://www.metlink.org/other-weather/miscellaneous-weather/will-snow/

Sky Colour

http://thechromologist.com/make-cyanometer-tool-blue-sky-thinking/ with https://uk-air.defra.gov.uk/interactive-map pollution forecast and pollen forecast http://www.metoffice.gov.uk/health/public/pollen-forecast

Weather and Flooding

Data source: National River Flow Archive http://nrfa.ceh.ac.uk/ and https://environment.data.gov.uk/hydrology/index.html#/landing

Sea level

http://www.coolgeography.co.uk/GCSE/AQA/Coastal%20Zone/Sea%20level%20rise/Sea%20level%20rise.htm



Land and Sea breezes, sea breeze front

Data source: http://wow.metoffice.gov.uk

Air Masses

https://earth.nullschool.net/

http://www1.wetter3.de/Archiv/archiv_ukmet.html

various links on http://www.metlink.org/secondary/key-stage-4/

Data source: http://wow.metoffice.gov.uk

General resources

https://www.rgs.org/schools/teaching-resources/key-stage-five/extreme-weather/

http://www.metlink.org/observations-and-data/

http://www.metlink.org/observations-and-data/instruments/

https://www.rgs.org/schools/teaching-resources/a-student-guide-to-the-a-level-independent-investi/

https://www.geography-fieldwork.org/a-level/before-starting/

https://www.rgs.org/in-the-field/fieldwork-in-schools/fieldwork-resources/

