

Outreach

There are great opportunities for schools and colleges to get involved with our projects.

We need Birmingham schools to take part in HiTemp!

The BUCL research team will initially be focusing efforts on the NERC-funded [HiTemp project \(/schools/gees/centres/bucl/hitemp/index.aspx\)](/schools/gees/centres/bucl/hitemp/index.aspx), which will see 250 temperature sensors and 25 weather stations installed within the Birmingham conurbation: 131 of these will be located on schools, approximately 100 on lampposts in the CBD, whilst the weather stations will be sited in primary sub-stations.

If your school would like to get involved with the HiTemp project, please [contact us \(/schools/gees/centres/bucl/contact.aspx\)](/schools/gees/centres/bucl/contact.aspx) or download an [information leaflet \(PDF 456KB\) \(/Documents/college-les/gees/bucl-leaflet-schools.pdf\)](/Documents/college-les/gees/bucl-leaflet-schools.pdf).

UK Space Agency-funded 'Hot Cities' Workshops

The 'Hot Cities' project delivers hands-on KS1-5 STEM workshops, based about the theme of monitoring the health of our cities from space. Research into urban environments is becoming increasingly important as more of the world's population are living in towns and cities. It is therefore important that we obtain a better understanding of climate in these areas, how these areas will be affected by climate change, and the impact this will have within the built environment. The 'Hot Cities' workshops introduced 5-16 year olds to the role of the UK Space Industry, the importance of satellite technology for observing the changing climates of our cities, as well as to improve understanding of a range of STEM subjects. These workshops also provided an opportunity for learners to meet 'real' scientists.

For example, a typical primary school workshop includes:

- 1) Introduction: Overview of the UK Space industry, importance of satellite applications, observing and monitoring urban areas, climate change.
- 2) Activity 1: Thermal camera demonstration and activities exploring different materials, objects etc.
- 3) Activity 2: Urban heat mapping: Learners' use site-maps, hand-held portable thermal cameras, kestrel weather units and IR thermometers to identify hot-spots in their school yard and measure other microclimate parameters. This data was then mapped and plotted back in the classroom.
- 4) Plenary: Evaluation of results - what have we learnt? Who are scientists and what do they do?!

More advanced activities (e.g. involving GPS, GIS) are available for KS3-5. We are also happy to discuss the creation of bespoke workshops for specific subjects.

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