

Environment

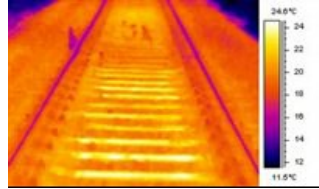
Academic staff

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The environment research team is based both within the Department of Civil Engineering and School of Geography, Earth & Environmental Science. The focus of the team is to develop technologies to forecast and mitigate against the impacts of current and future climate on the built environment.

The team have successfully been involved in numerous projects involving the impact of temperature on road and rail infrastructure. One particular highlight being the RSSB funded project to spatially identify locations of track prone to railway buckling. This work is currently being further developed to identify the nature of the problem under future climate change scenarios. This project sets to identify the economic costs of increased temperatures on the rail network in terms of increased track failures and thermal comfort.

Overall the group has capabilities to measure, model, map and forecast all weather related phenomena on the railway network. Future research will look at the application of high resolution instrumentation and forecasting techniques to further improve our understanding of track failures and low adhesion events.



Current projects:

- The effect of climate change on the UK railway network (RRUK PhD studentship)
- Verification and improvement of route-based forecasts (PhD studentship funded by Weather Services International)

