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Analysis of the impact of Heathrow and Gatwick airport closures on local air quality during Eyjafjallajökull eruption 15th-17th April 2010

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During the eruption of Eyjafjallajökull in April 2010, UK airspace was closed to all flights at noon on Thursday 15th April, and remained closed for six days.

Pairs of continuous NO2 analysers positioned at upwind and downwind locations around Heathrow and Gatwick were used to perform an analysis of the contribution of airport-related emissions to pollution measurements at the downwind sites during normal operation and during the closure.

The period of unprecedented closure allowed us to demonstrate that these airports have a clear and measurable effect on local NO2 concentrations and that this effect dropped to zero (Gatwick) or near zero (Heathrow) during the period of closure.