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A data visualisation tool for radionuclide detection events

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The United Kingdom National Data Centre (UK NDC) has developed a novel tool for the analysis of radionuclide (RN) detection events on the International Monitoring System (IMS). An automated process for the fusion of RN and atmospheric transport modelling (ATM) data streams has been produced which efficiently compiles a wealth of information in a single source and puts interactive virtual maps at an analyst's disposal for rapid data interrogation. A specially dedicated, automated radionuclide analysis pipeline periodically identifies 'plumes' of Xe-133 and high-priority RN detection events at IMS stations and these are compared with simulated station contributions from possible radionuclide emitters. For a given detection event, features such as wind direction vectors, station history and 2D representations of emission contributions are all available for visualisation and interaction within the new tool.

Promotional text

This poster outlines recent developments to the United Kingdom NDC radionuclide detection event analysis capabilities. An interactive data visualisation tool allows for the rapid interrogation of potential source locations.

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