

# **The UK Met Offices' Atmospheric Emergency Response Capability**

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The Met Office has international commitments to provide an emergency response service for discharges of material and gases into the atmosphere. Such events include the release of nuclear material (WMO - RSMC) and the emissions from erupting volcanoes (CAA - VAAC). In addition, the Met Office has several national obligations for both domestic and foreign events that may impact upon UK territories. These commitments are met through a 24/7 operational team known as EMARC who are in turn supported by a team of research staff within the Atmospheric Dispersion Group at the Met Office. This team are also responsible for the scientific development of NAME III the Met Offices' Lagrangian particle/puff atmospheric dispersion model that combined with the Met Offices' numerical weather prediction model, the UM, is used to provide the atmospheric dispersion modelling that enables the above services.

This talk will introduce the Met Office atmospheric dispersion emergency response capability, NAME III and through the use of several real world cases illustrate the models wide ranging functionality.

List of acronyms:

RSMC - Regional Specialist Meteorological Centre

CAA - Civil Aviation Authority

VAAC - Volcanic Ash Advisory Centre

NAME - Numerical Atmospheric Modelling Environment Environment