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Development of an Association Algorithm for Radionuclide Measurements

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The International Monitoring System operates a network of radionuclide technology monitoring stations. Historically, each measurement has been analysed separately to verify treaty compliance. Combining sample measurements, including detects and non-detects, invokes greater monitoring capability referred to as network power. A key steppingstone to obtaining network power is to objectively select a group of related sample measurements that are associated with a release event. Such collections of measurements can be assembled by an analyst, or perhaps they can be selected by algorithm. The authors explore, using a year of atmospheric transport calculations and realistic sensor sensitivities, the potential for a computed radionuclide association tool.

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Promotional text

The authors present a simple version of the final computational block needed for an RA Event processing pipeline: an objective scheme for selecting samples that could be associated with a single event. With more tools available this will enable more powerful future RN.

Oral preference format

in-person

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