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-Term Estimation of the CTBT relevant radionuclides using EgNDC-SRC and Webgrape Software.

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The source-term estimation of the radionuclides detected at IMS stations by using adjoint atmospheric transport modeling (ATM) is a vital part in the CTBTO monitoring and verification Regime. Webgrape software was developed by CTBTO International data center to assist the state signatories in the verification purposes of radionuclides detections. However, the source determination of an event and its nature is the state signatory's responsibility. Therefore, National Data Center of Egypt recently developed its own software for inverse modeling and source determination (EgNDC-SRC). The current work compares the source estimation algorithms of Webgrape and EgNDC-SRC by using some atmospheric transport modeling (ATM) synthetic experiments and some real events that have detections at IMS stations.

Promotional text

This work compares the source estimation of two software; the Webgrape and EgNDC-SRC, by using some ATM synthetic experiments and some real events that have radionuclide detections at IMS stations.

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