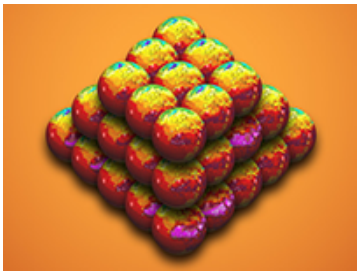

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CTBTO experience in visualisation of ensembles and derived products

The Atmospheric Transport Modelling (ATM) operational system deployed and used at CTBTO produces source receptor sensitivity (SRS) fields, which specify the location of the air masses prior to their arrival at any radionuclide station of the International Monitoring System (IMS) network. Currently the ATM operational system is based on a Lagrangian Particle Dispersion Model, FLEXPART, driven by the global meteorological fields provided by the European Centre for Medium-Range Weather Forecasts (ECMWF) and the US National Centers for Environmental Prediction (NCEP) at a resolution of 0.5 degree. World Meteorological Organization (WMO) supports CTBTO with the ATM computations performed on request in the framework of the joint CTBTO-WMO Level 5 support system. Each detection identified by the IMS particulate network as level 5 gives rise to a request for support issued to the Regional Specialised Meteorological Centres (RSMCs) of the WMO.

Based on the SRS fields several products are calculated. They are made accessible via the Web connected Graphic Engine (Web-Grape) and its online version: Web-Grape Internet Based Service (Web-Grape-IBS). One of the functionalities is called MMFOR (i.e. the multiple model (MM) FOR selector), and it allows to calculate, overlap and inter-compare the FOR products for an ensemble of models. A related functionality, called MMPSR (i.e. multiple model (MM) possible source region (PSR) calculator) is derived from the overlapping or simple averaging of an ensemble of single model PSR results.

This presentation will give an overview of the functionalities and demonstrate the most interesting cases.

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