

Capability of HYSPLIT Dispersion Model in Fukushima Disaster

Atmospheric transport modeling (ATM) is prerequisite for on-site inspection and source location estimation, so it is the critical point of the treaty. The Fukushima Daiichi nuclear disaster was an energy accident at the Fukushima I Nuclear Power Plant in Fukushima, initiated primarily by the tsunami following 9.0 magnitude on 11 March 2011. Literature of Fukushima accident source term estimation for ^{137}Cs , ^{131}I and ^{133}Xe radionuclides was studied that used backward ATM, dose rates in and around Fukushima, seawater contamination and soil contamination methods. The nearest one to reality was used to simulation with HYSPLIT model. The results peruse in some IMS stations and indicated that in majority cases this model has acceptable outcome, also it showed by get away from the point source disagreement with measurements is increase.

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