

### **1.3-P09. Intercomparison study between RODOS and FLEXPART dry deposition for I-131**

FLEXPART is a Lagrangian particle dispersion transport model which is originally designed for calculating the long-range and mesoscale dispersion of air pollutants from point sources. Through the years, these type of models have proven to be a very useful tool in an operational context for the protection of the population in case of accidents in a nuclear power plant. In the meantime, FLEXPART has evolved into a more comprehensive tool for atmospheric transport modelling and analysis. RODOS is also a Lagrangian particle dispersion model which has been specially designed to be used in the emergency planning. The main advantage of the RODOS model is that it can work on a very high resolution. Since the FLEXPART model is designed to be operational for the long-range transport and therefore runs on a resolution of  $0.2^\circ \times 0.2^\circ$  in this particular case study, it is not trivial to compare the dry deposition fields obtained by both transport models. This presentation will show results of an intercomparison study between both designs and evaluate how well the dry deposition results match to the observations.

**Primary author:** DELCLOO, Andy (Royal Meteorological Institute)

**Presenter:** DELCLOO, Andy (Royal Meteorological Institute)

**Track Classification:** 1. The Earth as a complex system