Oceanic dispersion model intercomparison for the Fukushima accident

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There are several attempts to simulate oceanic dispersion of radionuclides discharged into the ocean after the accident of Fukushima Daiichi Nuclear Power Plant on March 11, 2011. In order to understand a present status of model capability to simulate the dispersion of radionuclide and uncertainty in the model simulations, detailed comparisons of model results with observations and also among the model results are necessary. A model intercomparison project, launched by a working group established under the Oceanographic Society of Japan, and then under Japan Science Council, compared results from several downscaling dispersion models focusing on Cesium 137 dispersion for the Fukushima case. Eleven model results from ten groups are participating in the project. Although there are general similarities in basic flow fields and dispersion patterns, significant differences among the simulated results also exist, due to differences in model settings and uncertainty in the forcing fields. This presentation introduces the model intercomparison activity and discuss some preliminary results of the comparisons.

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