

Operation of Web-based Atmospheric Dispersion Model for a Nuclear Accident Kyung-Suk Suh, Kihyun Park, Byung-II Min, Sora Kim, Jiyoon Kim and Yoomi Choi 989-111 Daedeok-daero, Daejeon/Korea Atomic energy research Institute



- A radiological emergency preparedness system in Korea has been developed to predict the behavior of radioactive material released into the environment and estimate the dose assessment for humans in case of a nuclear accident in neighboring countries, including Korea.

- The system is composed of atmospheric dispersion, marine dispersion, and dose assessment models, along with a graphic user interface module. It can evaluate the dispersion patterns of radionuclides in the air and ocean, and the short-term and long-term radiological effects of a nuclear accident on humans.
- It has been constructed on the web to allow users to access it easily and simply through an intrinsic IP address, username, and password.
- The atmospheric dispersion, marine dispersion, and dose assessment models have already been validated by model-to-model comparisons and measurements from the Chernobyl and Fukushima accidents.
- The described system is now in operation for government and nuclear-related organizations in Korea in case of a nuclear accident.

If you want to learn more about this, come see my e-poster during session P2.4-122 on this date or access it online on the SnT2023 Conference platform!