

Environmental Radioactivity Database of Fukushima Daiichi Nuclear Plant Accident

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We started a project to publish environmental radioactivity data with DOI, Digital Object Identifier, in June 2019. Regardless of terrestrial, marine, atmosphere, biological, and human environments, all measured data on environmental radioactivity after the Fukushima Daiichi Nuclear Power Plant accident and metadata on samples can be published with DOI at an English web site. In our system, people can search raw data in this site by specifying the time, latitude, longitude, altitude/depth, space, name of radionuclide and type of sample throughout the dataset in this system. This presentation introduces the outline and discusses necessary actions in the future. The data measured after the FNPP1 accident are held by researchers and government agencies, but raw data were not published nor they were only reports written in Japanese. They will be dissipated and passed on to future generations. Therefore these data should be collected, then formatted and given a DOI. Finally, they can be published with metadata. Our activities ensure that the raw data can be transferred to future generations. In addition to the data publication on this site, preparations have been made to search for publicly available data from organizations such as the IAEA and Japanese government agencies and regulatory agencies that have already been published in various forms. Research and monitoring data conducted before the FNPP1 accident will be also collected and made public for future generations. A standard data format is presented to create data sheets which can be published with less human resource, and searchable tables can be created as well. A part of the general-purpose server is used for data publication and download. For data search, we operate one server dedicated to DB. The open policy at our site is fully disclosed under the Creative Commons Attribution 4.0 International License. The setup of the hardware systems and software for publication and search is done. The challenge is how to increase the types and number of data in the future and how to make the system easy to use. We would like your cooperation for future study and generations.

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