

The radiation dose monitoring network system in a coastal area

We propose the real time monitoring radiation dose network of marine area by using buoys and drones. This system will be provide 2-dimensional dose distribution and estimation of health risk for people who move in the area where the system monitors. This system has been developing to keep safety of evacuees from radiation accident and resident around nuclear power plant in case. However there is the possibility to use the system for monitoring of nuclear test by improvement of analysis of data from sensor network. The monitoring network consists from buoys and drones equipped with a spectrometer for radiation and environmental sensors. These components are connected each other by IoT network and satellite communication. The program for nuclear identification from energy spectrum should be optimized for nuclei which are assumed to be detected. Additionally, the correction function for dose calculation should be also optimized because buoys and drones will move. These optimization and predicted usability of the system will be shown in this presentation.

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