

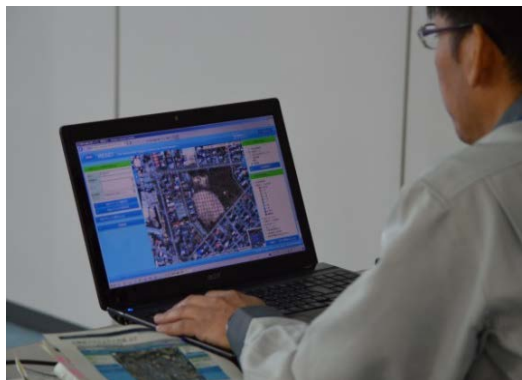
## **Predicting the Effects and Costs of Decontamination Beforehand Restoration Support System for Environment (RESET) starts operation**

The Japan Atomic Energy Agency (JAEA) has developed a system enabling rapid calculation and visualization of the reduction in the air dose rate after decontamination. This system is different from the previous system because it can take into account differences in decontamination effects due to differences in topography in locations such as mountainous areas and valleys, and since cloud computing is used, it is possible to provide a high-quality calculation environment independent of the performance of the personal computer used. This system is designed to be used by people engaged in decontamination projects in municipalities located in Special Decontamination Areas and Intensive Contamination Survey Areas. Through simple operation, it is possible to predict decontamination effects, select the decontamination method, and estimate decontamination cost.

The system known as RESET has a built-in database of measurement data from aircraft monitoring and automobile surveys conducted in Fukushima Prefecture and other areas, as well as knowledge relating to decontamination methods and decontamination factors obtained through decontamination model demonstration projects. When the person in charge of decontamination designates, on a map, the area of decontamination to be carried out, and a decontamination method, the system displays data on the dose rate prior to decontamination and the predicted dose rate after decontamination, and an estimate of the decontamination cost. (See Figs. 1 and 2 on the following page.)

By using an Internet browser, one can operate the system without any special knowledge of topics such as radiation or computer programs. If measurement data is insufficient to evaluate doses, the system will recommend locations for additional measurement. (Fig. 3)

This system is useful for setting decontamination goals (how much the dose rate can be reduced from the current level) and considering the scope of decontamination (which areas to decontaminate to have the greatest effect in reducing the dose rate). It can also



forecast the dose rate when decontamination is not done, and the dose rate 1, 3, 5 and

10 years after decontamination. In addition, the system can evaluate the effect of decontamination by comparing dose rates before and after decontamination, and can predict cost-effectiveness beforehand by estimating decontamination costs.

Takuya Yamashita, who developed this system, plans to show it to local governments in Fukushima Prefecture and recommend it for more effective decontamination.

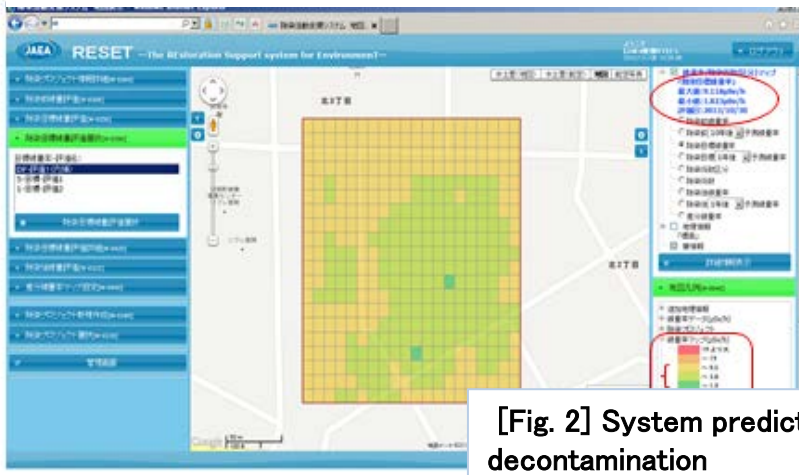
**Takuya Yamashita developed the system.**

**With cloud services,  
no special program is needed.**

# Evaluation of target air dose for decontamination (designation of decontamination factors)



## Display of predicted dose rate map after decontamination



## Evaluation of air dose rate before decontamination

