

Fukushima & Chernobyl Nuclear Power Plant Accidents

-About the long-term environmental influence-

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In the nuclear-related facility accidents, the influence of 10 years or 20 years after the accidents have been often discussed. We, engineering scholars, are also required to make the long period predictions, based on the short-term actual obtained measurements,.

However, there are rather difficult aspects to make any accurate prediction. Today, I will try to extrapolate from short-term to long-term data, through extracting the property of "exponential property" from short-term data, and applying to long-term data.

In this case, the fact that physical quantity changes exponentially along the time, is very useful. Therefore, I can write a chart by taking that physical quantity as a vertical axis and taking the elapsed time from an accident as a horizontal axis. If it is the quantity that changes with exponentially along the time, even if rewriting the chart to change the unit of time from a week into a year, the shape of the chart does not change.

Based on the above fact, it can be possible that any accident data ten years later will be obtained, extended from data of only several months ago.

At the same time, I will show the photos of monitoring work in the area with restricted access anyone and the photos of decontamination work inside Fukushima Prefecture.