

## Dose rate map in and around Shizuoka Prefecture, central Japan, and pollution by Fukushima Nuclear Power Station

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A dose rate map in and around Shizuoka Prefecture, central Japan, was made to clarify the radioactive pollution by the Fukushima Nuclear Power Station, which caused the severe accident in March, 2011. A scintillation counter with a CsI(Tl) scintillator was used for measuring the dose rate distribution 1m above the ground surface. A spectrum analyzer with an NaI(Tl) scintillator was additionally used for identifying source radioactive elements. An area of low-level pollution (0.06-0.13 micro Sv/h) by Cs-134 and -137 was detected in the northeast Izu Peninsula, where original dose rates were during 0.02-0.04 micro Sv/h. The topography of the pollution area is characterized by a row of plateaus, valleys, and slopes, which are bounded by a ridge of 400-1000m height and the northwestern coast of Sagami Bay. This geographical situation of the pollution, as well as the precipitation and wind records, suggests that a radioactive cloud had reached this area by southwestward wind on March 21-22, 2011, and radioactive particles had been fallen by rain.

Keywords: dose rate, surficial distribution, Shizuoka Prefecture, spectrum analysis, pollution map, Fukushima Nuclear Power Station