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To uncover hotspots of radiation with a Si/CdTe Compton Camera

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Dust containing radioactive materials dispersed following the Fukushima nuclear power plant accident in March 2011. Gamma-rays are emitted in the process when unstable nuclei in the materials decay. Based on the technology of Si/CdTe Compton Camera, we have manufactured a quick prototype model for the use in the field. The camera, now called an "Ultra-Wide-Angle Compton Camera" was successfully applied to visualize the distribution of radio-active substances in the Fukushima area. In this talk, we will summarize the design and performance of the ultra-wide angle Compton Camera. Commercial models currently developed by our groups will be also described.

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