

July 8, 2011

Results of the Third Airborne Monitoring Survey by MEXT

The results of the third airborne monitoring survey by MEXT (announced on May 30, 2011) were summarized today, so they are provided here.

1. Objective of this monitoring

Ahead of the onset of a full-fledged rainy season, MEXT conducted an airborne monitoring survey* so as to ascertain the current status of the accumulation of radioactive substances on the ground surface by checking the air dose rate 1m above the ground surface and the deposition of radioactive substances on the ground surface, within 80km of the Fukushima Dai-ichi NPS. Monitoring was conducted using a measuring instrument of the U.S. Department of Energy (hereinafter, "U.S. DOE") installed in a helicopter of the Ministry of Defense within 40km, and a measuring instrument of the Nuclear Safety Technology Center(NUSTEC) installed in a private helicopter within 40–80km of the Fukushima Dai-ichi NPS. The validity of the monitoring results was verified with the cooperation of the U.S. DOE in analysis and is based on the comparison with the results of the airborne monitoring in April.

*Airborne monitoring is a technique in which highly sensitive, large radiation detectors are installed in an aircraft, and gamma rays from radioactive substances accumulated in the ground are quickly measured over a large area, in order to check the surface deposition.

2. Details of this monitoring

- OMonitoring dates: May 31 to July 2
- OAircraft: MEXT (NUSTEC, Japan Atomic Energy Agency)
 - Private helicopter (BELL412)
 - Helicopter of the Ministry of Defense (UH60)
- oItems covered: Air dose rate 1 m above the ground surface within an 80 km range of the Fukushima Dai-ichi NPS, and deposition of radioactive substances (cesium 134, cesium 137) on the ground surface

3. Results of this monitoring

Attachments 1 to 4 contain the "Dose Measurement Map" which shows the air dose rate 1m from the ground surface, and the "Soil Concentration Map" which shows the deposition of radioactive substances on the soil surface, both prepared through this monitoring.

The results of the comparison between air dose rates measured at the time of the airborne monitoring in April and those during this monitoring are shown in Attachment 5. It was confirmed that air dose rates decreased by around 20% from April.

The maps were prepared based on the following conditions.

- oCreated based on results of airborne monitoring by MEXT.
- oThis published data was prepared based on the results obtained from May 31 to July 2 by two helicopters, in a total 29 flights. Their flight altitudes were from 150 to 300m above ground.
- The air dose rate at the ground surface is the averaged value of air dose rates in a roughly 300m to 600m diameter circle (varies by flight altitude) below the aircraft.
- The width of the track is around 2km.
- The map of an 80km range from the Fukushima Dai-ichi NPS shows the attenuation-compensated values as of the final day of this monitoring (July 2).
- The deposition of cesium 134 at the ground surface was calculated based on the results of airborne monitoring and of measurements which the NUSTEC took on the ground using a gamma ray energy analysis device.
- The deposition of cesium 137 at the ground surface was calculated based on the results of the measurements of cesium 134 on the ground by the NUSTEC using a gamma ray energy analysis device, and analysis values of cesium 137.
- The measured area range is 80km from the Fukushima Dai-ichi NPS so as to make comparison with the results of the airborne monitoring in April.

4. Future plans

In order to check changes in the influences of radioactive substances by season, airborne monitoring shall be continued within 80km from the Fukushima Dai-ichi NPS. The next monitoring will be conducted around August, after the rainy season. In areas outside the 100 to 120km areas from the Fukushima Dai-ichi NPS, airborne monitoring using disaster-prevention helicopters owned by municipalities has also been conducted. Monitoring in the northern part of Miyagi prefecture was completed and the results are now being analyzed. Monitoring in the southern part of Tochigi prefecture is scheduled to start on July 11.

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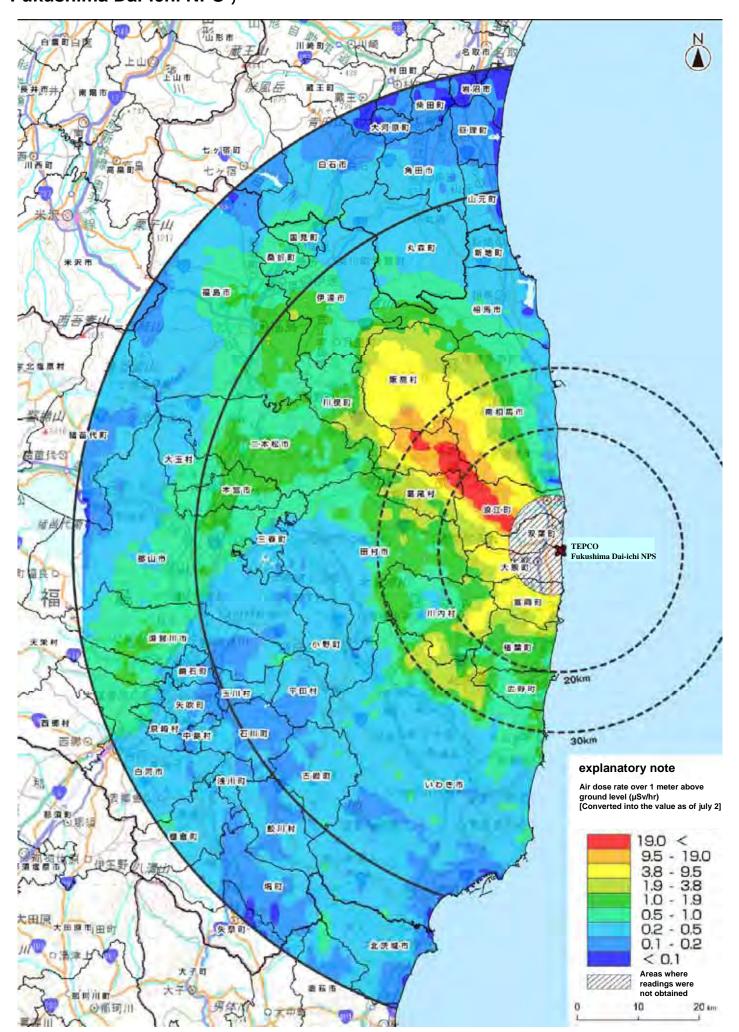
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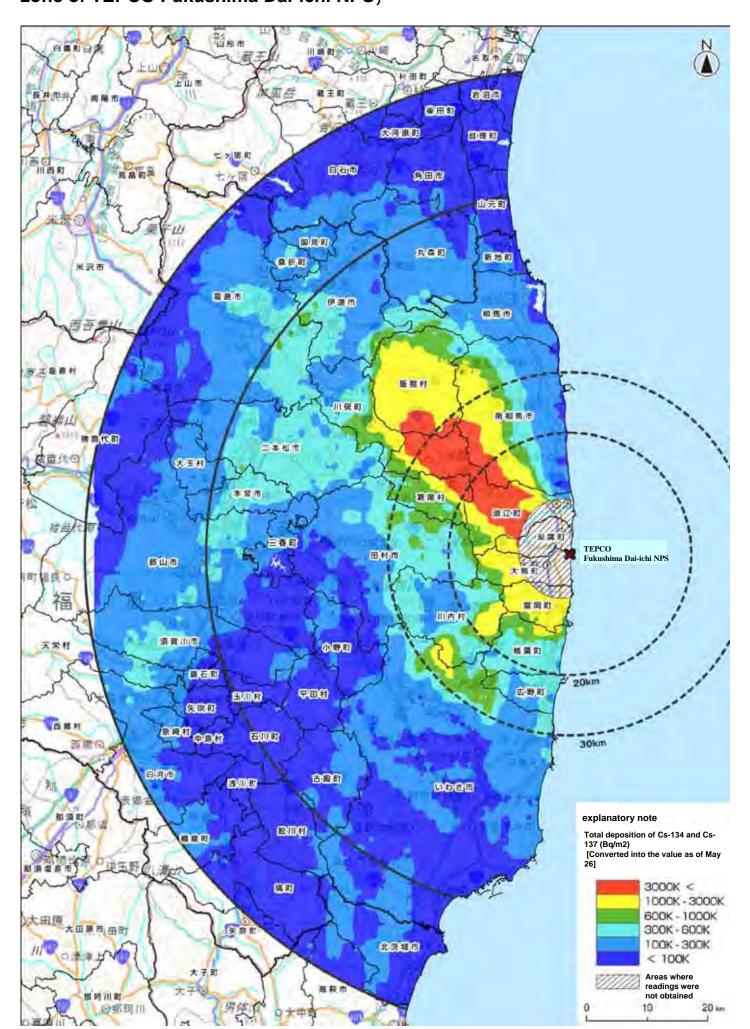
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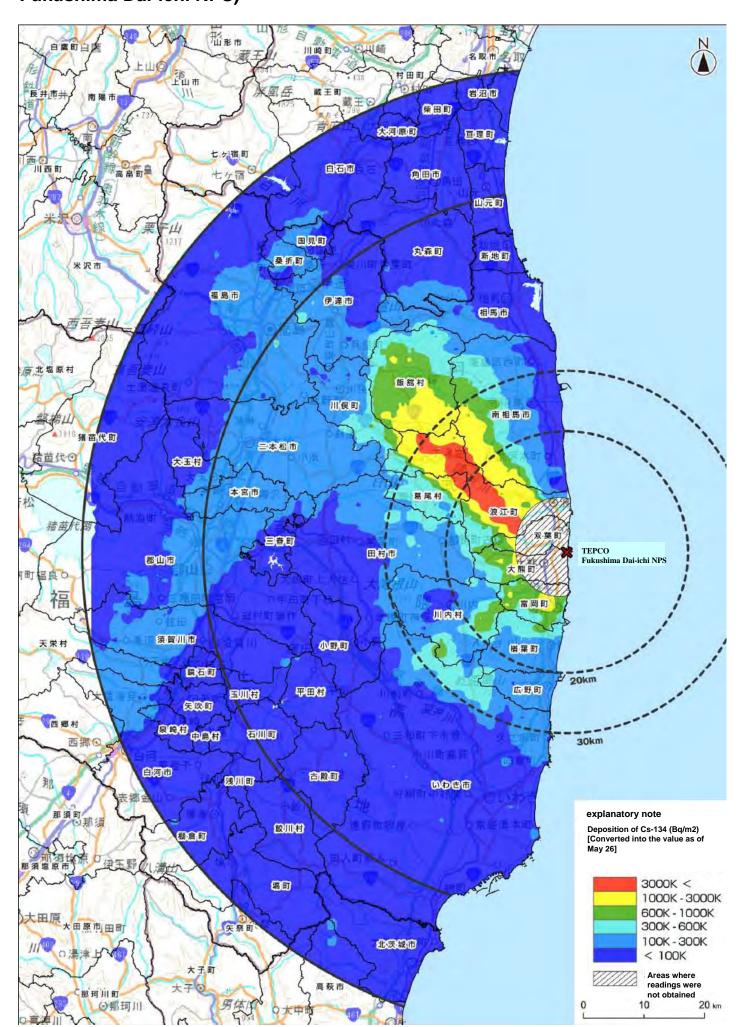
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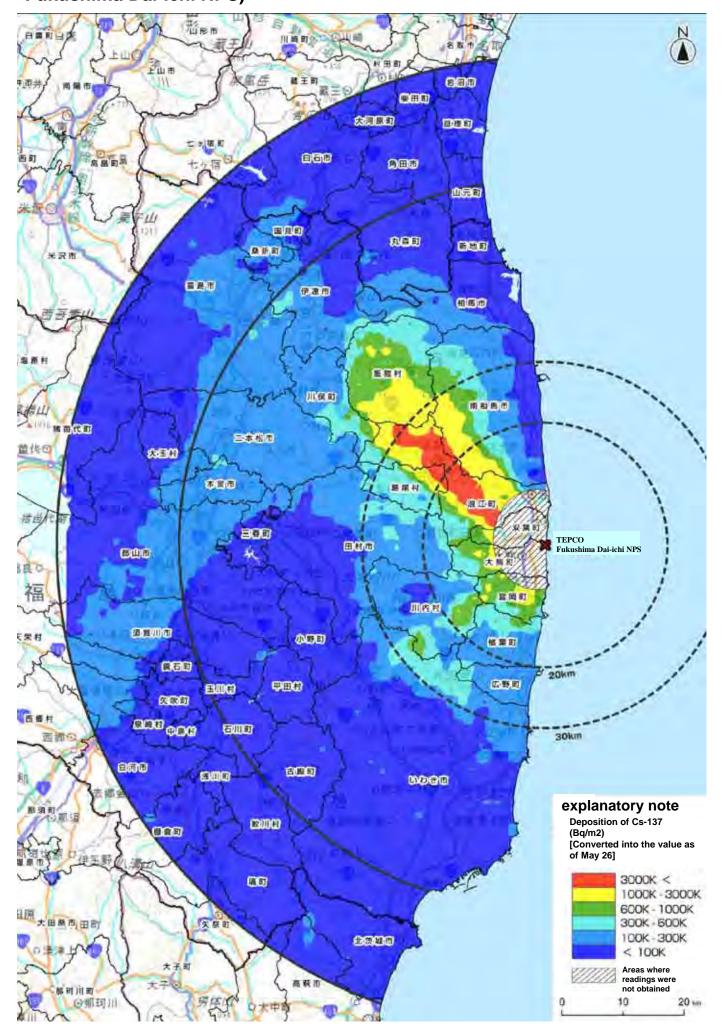
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Results of the third airborne monitoring by MEXT and DOE (Surface deposition of Cs-137 inside 80 km zone of TEPCO Fukushima Dai-ichi NPS)



Annex5

2 Results of the third airborne monitoring/Results of the first airborne monitoring the first airborne monitoring and the third airborne monitoring Comparison between air dose rates measured at the time of 1.8 1.7 1,6 1.5 1.3 11 6.0 0.8 0.7 9.0 0.5 0.4 0.3 0.1 0 Frequency 20.0% 18.0% 16.0% 4.0% 2.0% 0.0% 14.0% 12.0% 8.0% 6.0%

(Reference)

