

Accident in the Japanese NPP Fukushima: Spread of Radioactivity/weather currently not favorable/low level radioactivity measured in California (Update: 20 March 2011 11:00)

Weather in the crisis region

Today Sunday the probability for rain showers rises in the evening, the weak winds come from the northeast, causing dispersion from the coast towards the interior.

On Monday a frontal system causes general cooling, weak winds from direction north east, the rain / snowline falls below 1000m .

On Tuesday again north easterly winds in the morning, later during the day the wind turns towards north westerly directions. It is cloudy with a probability for precipitation of around 40%. Temperatures vary between 1 and 11 deg.

Wednesday partly sunny with weak winds, a temporary north easterly component cannot be excluded, but the wind direction will mostly be from northwest. Temperatures between 0 und 8 deg. Brief snow showers are not excluded.

Dispersion Modeling

The results of the dispersion model show that radiation is increasingly transported inland. Due to the predicted precipitation, most of the radioactive particles will be washed out and deposited on the surface. The long-range transport of radiation across the Pacific ceases (see pictures below).

The colour scale shows a total of 5 colours. The area marked „E“ shows an area with estimated current equivalent dose rate of 10 mSv/h (in a 25x25 km² square). The violet colour on the outer edge of contaminated areas (Area A) represents 0,3 µSv/h, which corresponds to the amount of the natural background radiation dose.

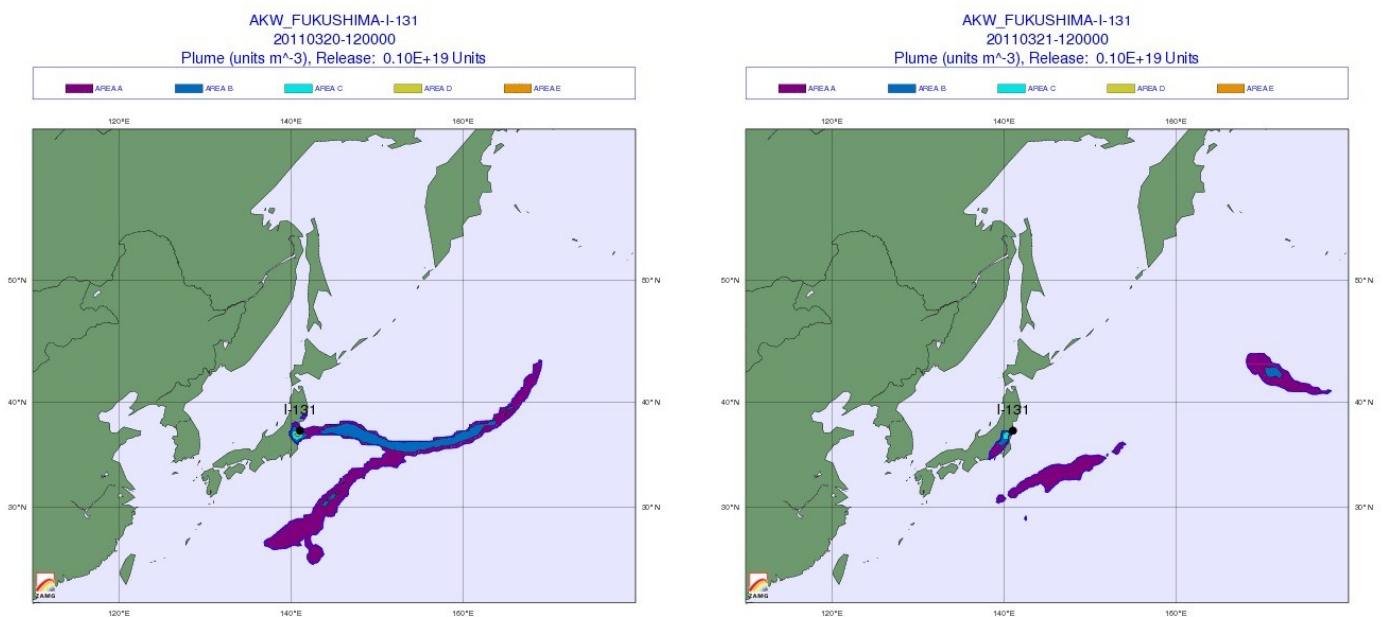


Figure: Spread of Radioactivity over Eastern Asia today and tomorrow 12:00 UTC

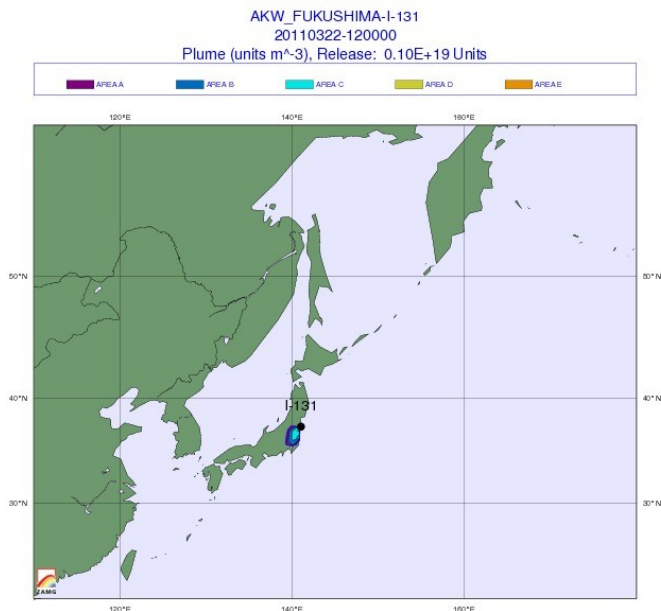


Figure: Spread of Radioactivity over Eastern Asia day after tomorrow 12:00 UTC

Radiation data/CTBTO

Reviewed CTBTO reports show that radiation levels in Takasaki decreased after a peak in the middle of last week. This is mainly due to transport conditions. The activity concentrations in Petropavlovsk were constant on 15 and 16 March, with Iodine-131 levels on the order of Milli-Bq pro m³. According to a report not reviewed yet, readings in Sacramento/California increased on 17 March to the levels observed in Russia. In both, Russia and California, observed radiation was four orders of magnitude lower than in Takasaki. There is no health risk whatsoever.

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ZAMG will not answer any questions related to travel in Japan or in other parts of the world, since this is the responsibility of national radiation protection authorities. Travel advisories and warnings are available from your foreign ministry. In Austria, such advisories are available on www.bmeia.gv.at.

This information is updated daily, and whenever the development of the situation requires it.

Videos:

Plume spread from Fukushima/Permanent Release/Iodine-131

Plume spread from Fukushima/Permanent Release/Cesium-137 (global image)