ZAMG
Zentralanstalt für Meteorologie und Geodynamik

Accident in the Japanese NPP Fukushima: Spread of Radioactivity
(Update: March 17, 2011 9:00)

Weather in the crisis region

Currently, northwesterly upper-level winds predominate in the crisis region. Surface winds also predominantly come from northwesterly directions. Precipitation is limited to the areas upstream (north-western coast). Tomorrow night, winds are shifting to the south-west. In both cases, air from the reactors is predominately transported to the open sea.

Dispersion modelling

Dispersion model results currently show that the plume spreads towards the ocean. Currently, the plume expands towards the south-east (see images below). Later, the plume will start moving towards the north-west (see animated images). Populated areas outside the immediate crisis area are currently not directly hit.

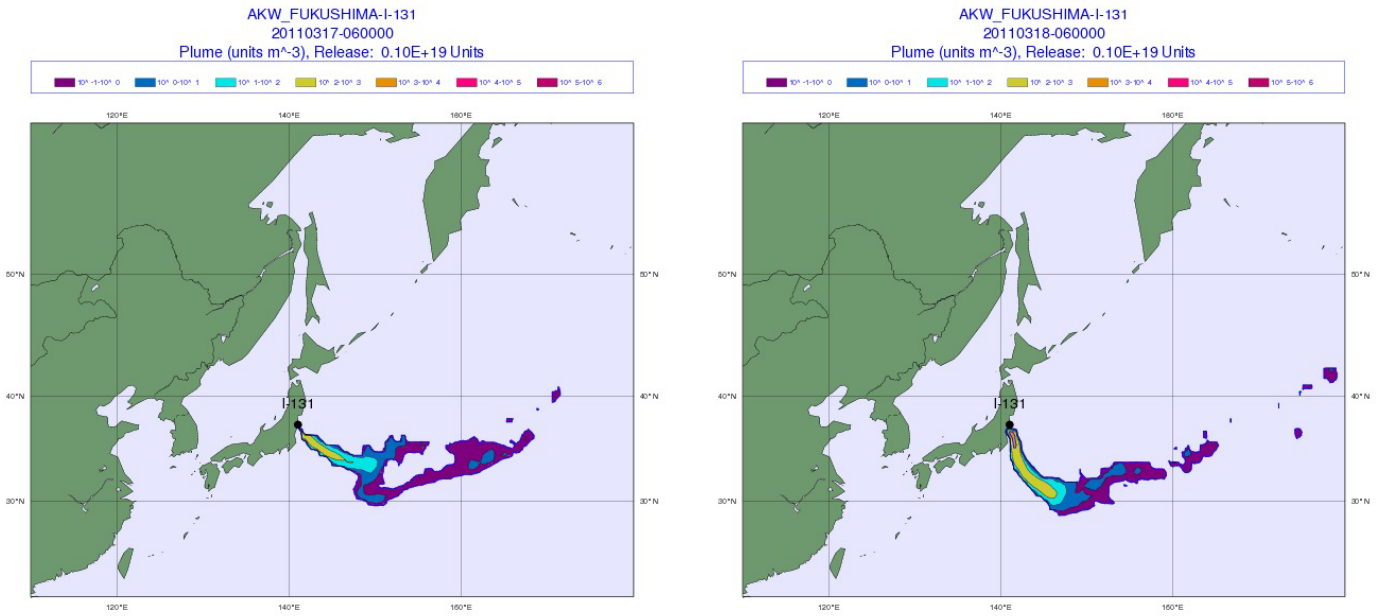

Figure: Plume spread over Eastern Asia today 6:00 UTC and tomorrow 6:00 UTC

Radiation data/CTBTO

The CTBTO station in Takasaki/Gunma in Japan was recording the detection of numerous radionuclides. Analysis, however, shows that the measurements published yesterday were accidentally contaminated in the handling. This contamination was caused by a plume of radioactivity getting into the station building while the filter was in the detector. The radionuclides detected are correct, but the time reference and concentration is wrong. This problem is solved as soon as the first contaminated filter gets analysed. We will make available these data as soon as they come in.

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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)