

Improvement of JMA's Tropical Cyclone Track Forecasts (21 May 2008)

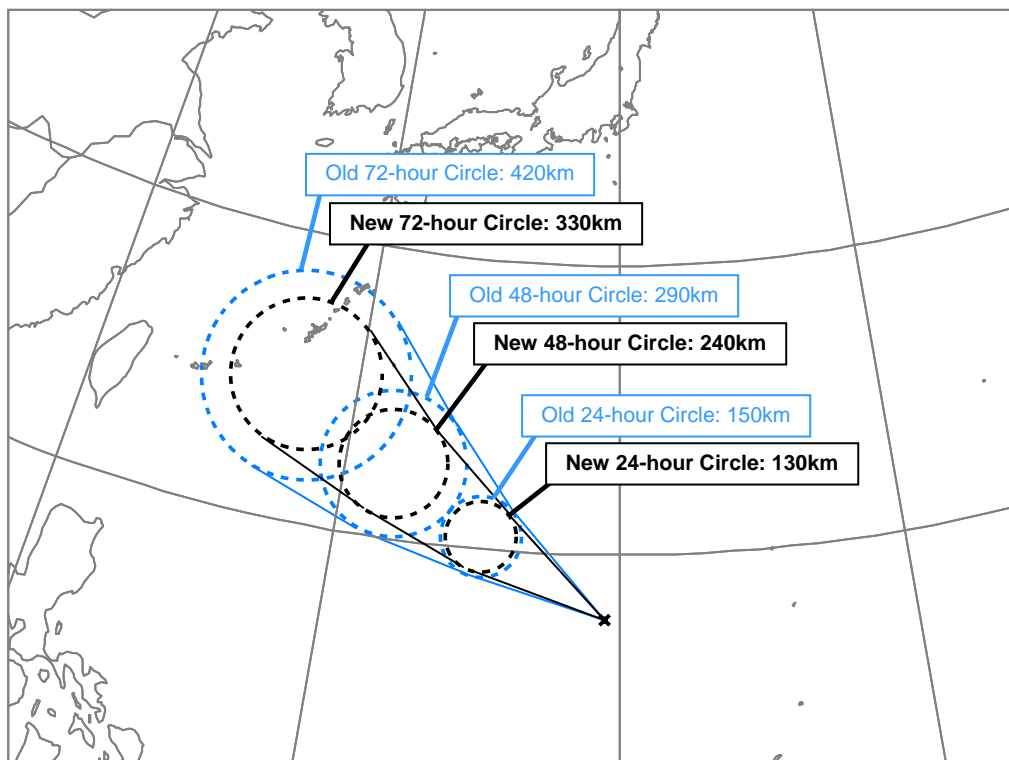
The RSMC Tokyo - Typhoon Center of JMA is a Regional Specialized Meteorological Centre (RSMC) that carries out specialized activities in analysis, tracking and forecasting of western North Pacific tropical cyclones (TCs) within the framework of the UN World Meteorological Organization (WMO).

As from 21 May 2008, the Center improves forecasts, reducing radii of probability circles* in its TC track forecasts. The radius of the circle is determined statistically based on the performance in the past several years, depending on the direction and speed of TC movement. The verification of JMA's operational forecasts from 2004 to 2007 indicates the feasibility of reduction in the radii of the circles about 15% on average; 20% in case of a TC moving northwestward and 10% in the other directions. The improvement in TC track forecasts is realized mainly by the advance of numerical weather prediction techniques.

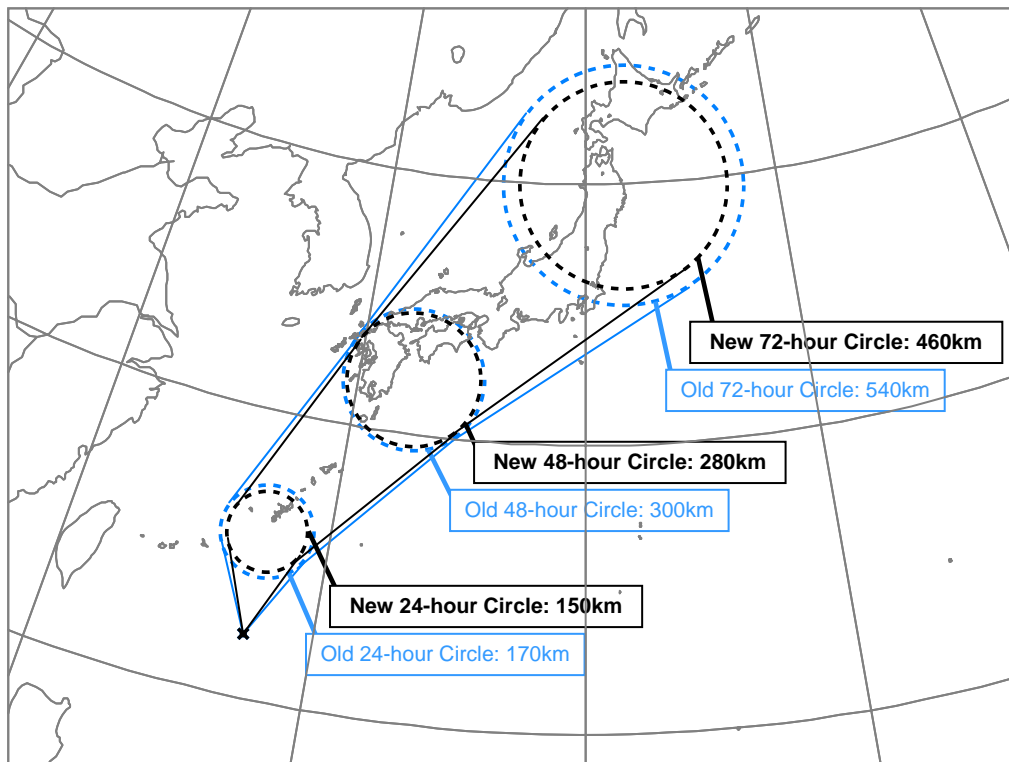
* probability circle: a circular range in which a TC will be located with a probability of 70% at each forecast time to indicate uncertainty of the forecasts

Examples of track forecasts with new/old probability circles

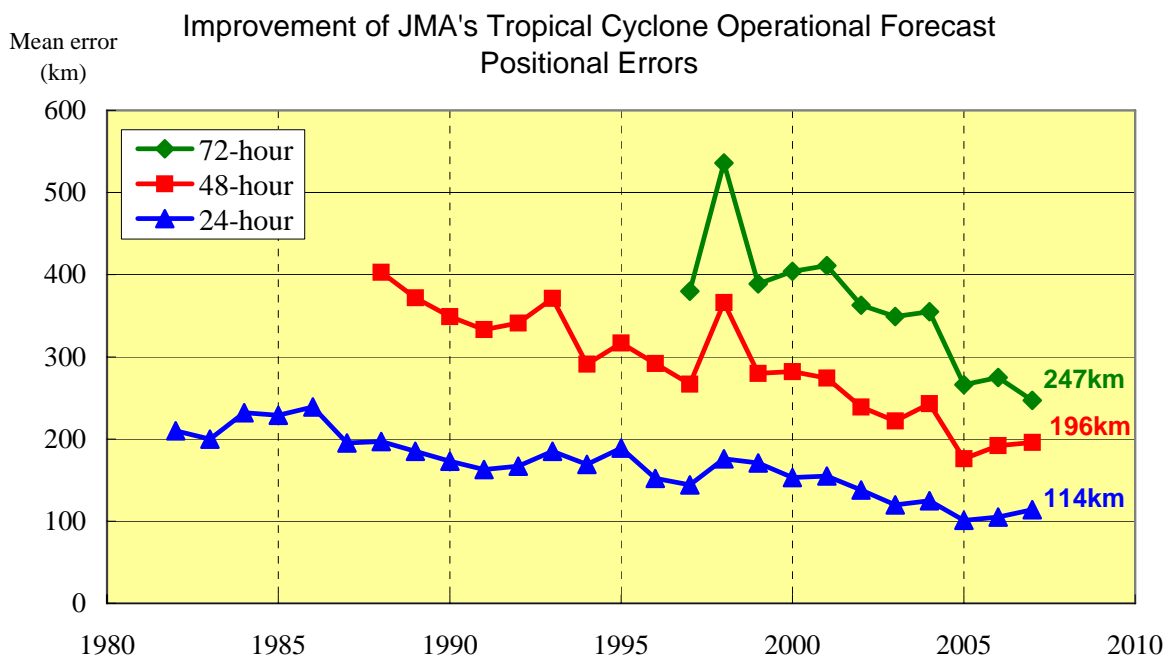
(1) In the case of a TC moving toward northwest, tropical cyclone SAOMAI (0608)



(2) In the case of a TC moving toward northeast, tropical cyclone TOKAGE (0423)



Improving JMA's typhoon forecasts



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