

Railway accident investigation report

Railway operator: East Japan Railway Company
Accident type: Train derailment
Date and time: About 16:04, March 2, 2013
Location: Around 255,824m from the origin in Fukushima station, between Jinguji station and Kariwano station, Ou Line, Daisen City, Akita Prefecture.

SUMMARY

The outbound limited express 3025M train, named "Komachi 25" composed of six vehicles, starting from Tokyo station bound for Akita station of East Japan Railway Company, departed from Omagari station about 28 minutes behind schedule, i.e., 15:25, March 2, 2013. While the train driver repeated on/off operation of the notch following the caution signal of the block signal and considering the train speed decline by the snow, between Jinguji station and Kariwano station at about 20 km/h, he felt the shock and irregular sound from the right bottom of the driving desk, and applied the maximum notch of the service brake and stopped the train.

He checked the vehicles, after the train stopped, and found the first axle of the front bogie of the front vehicle had derailed to the left with respect to the direction of the train. It was found by the later inspection, the first axle of the front bogie derailed to the left by about 25 mm, and the second axle derailed to the left by about 20 mm. There were 125 passengers, 3 train crews and 2 cabin attendants were on board the train, but there is no casualty.

PROBABLE CAUSES

It is considered probable that the left wheels of the first and the second axles of the front bogie of the front vehicle derailed to the left by slip climbing up the standard gauge rail, due to the vehicle being lifted by a large amount of snow underneath it, respectively, while powering in the section of the three-rails track where much attention was necessary for the snowdrift.

It is considered probable that the snowdrift grew large in a short time before the accident by the deep fallen snow compared to that of the average year and snowfall with strong wind in the accident day, moreover there were no snow fences around there. And the situation that much snows were likely to remain the standard gauge rail side of the three-rails track due to narrower space between the track and side snow wall in the standard gauge rail side compared to the narrow gauge rail side of the track was effected to the background inducing the accident. In addition, it is considered probable that snow between the standard gauge rail and the narrow gauge rail were effected to the background inducing the accident.