Statistical Data Analyses on Railway Accidents In Japan

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Abstract   *We deal with past statistical data on the railway accidents having occurred in the last 30 years in Japan, which consists of frequency, types, causes and consequences such as injured and deaths. Investigating these accident data we show several probabilistic mathematical models such as Markov model explaining the transitional phenomena of the accidents and Poisson models illustrating the occurrence frequency of serious accidents. Additionally, several countermeasures prepared by several railway companies in order to prevent railway accidents are measured and evaluated quantitatively with their effectiveness.*