Mixed Poisson Process with Pareto Mixing variable - Revisited

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In 2013 Jodanova, Dusek and Stehlik consider Mixed Poisson Process with Pareto mixing variable and introduce Mixed Poisson-Pareto, Exponential-Pareto and Erlang-Pareto distributions. The aim of this paper is to popularize these results. Some new results are given: invariance of Exponential-Pareto type with respect to integrated tail transformations, the distribution of the tinning variable of the Mixed Poisson-Pareto distribution and description of the tinned Mixed Poisson-Pareto process.

Keywords: Generalized exponential integral function; Gamma-Pareto distribution; Integrated tail distribution; Tinning variable.