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## Monitoring of mean for asymmetric distributions

Nowadays control charts are used not only to control glass thickness, the diameter of rods etc. Have been invented many types of modern charts to control meteorological, medical, financial or telecommunications data. They often have heavy tails, skewness, and asymmetry. Approximation of such data by Gaussian distribution is not the most beneficial. We need to model. Hence the need to model data with a different distribution. Controlling a process that exhibits asymmetry is a more difficult task than monitoring symmetric features (v. Figueiredo & Gomes (2013)). It was assumed to construct a chart to control the work of the heart. This is definitely an asymmetrical process. Three control charts were constructed: to monitor average and grand mean of Rayleigh distribution and grand mean for approximated distribution to Gaussian distribution.

### References

- [1] M.K. Gądek, K.J. Szajowski, *Monitoring of mean for asymmetric distributions*, *Mathematica Applicanda* 46(1) (2018), 59–75, doi=10.14708/ma.v46i1.6373.