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The Case against Generally Weighted Moving Average (GWMA) Control Charts

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We argue against the use of generally weighted moving average (GWMA) control charts. Our primary reasons are the following: 1) There is no recursive formula for the GWMA control chart statistic, so all previous data must be stored and used in the calculation of each chart statistic. 2) The Markovian property does not apply to the GWMA statistics, so computer simulation must be used to determine control limits and the statistical performance. 3) An appropriately designed, and much simpler, exponentially weighted moving average (EWMA) chart provides as good or better statistical performance. 4) In some cases the GWMA chart gives more weight to past data values than to current values.

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