

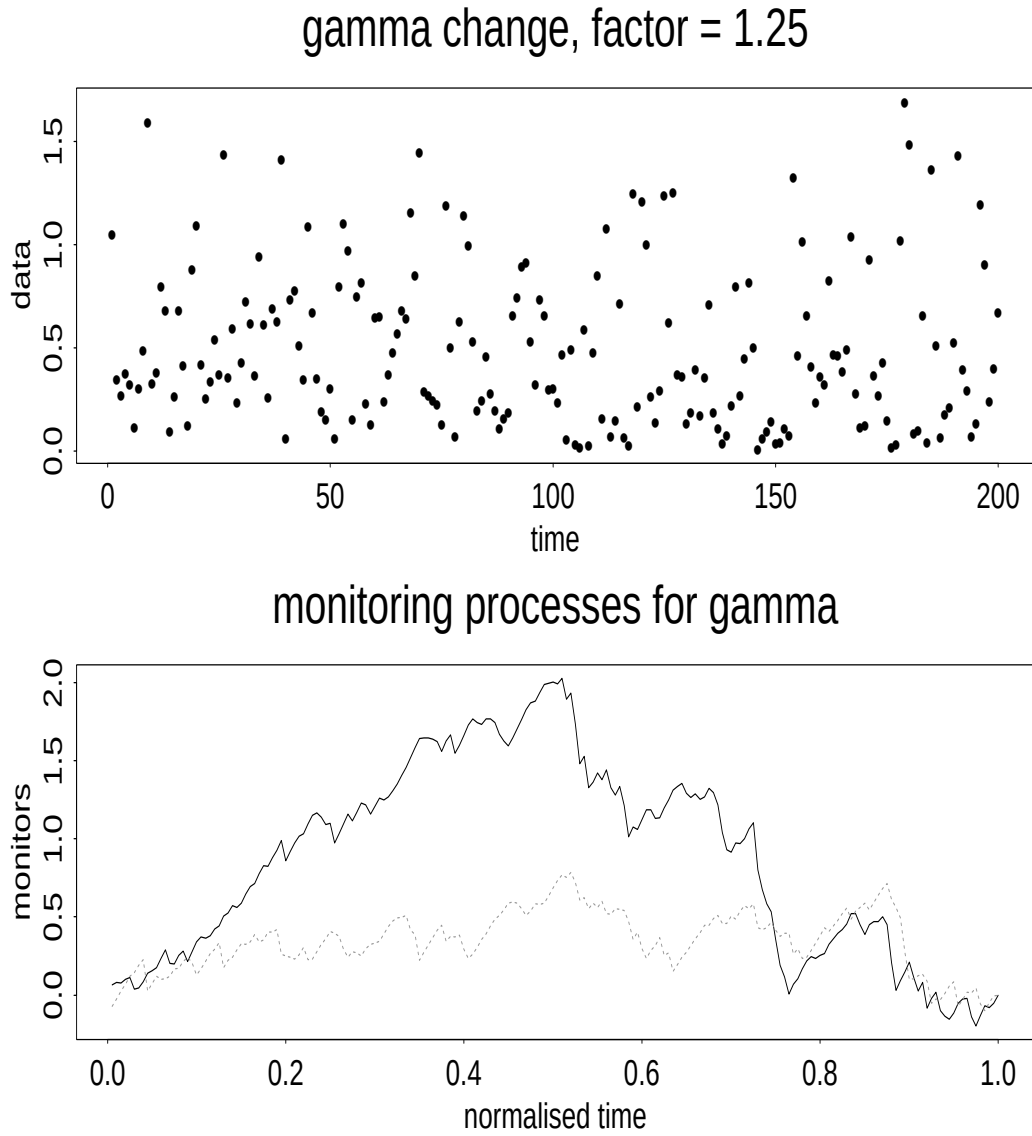


FIGURE 1: The first 100 and the following 100 data points have been drawn from two different Gamma densities; these have the same mean level, but the second has standard deviation 1.25 times bigger than that of the first. This aspect is barely visible from the data figure, but is being brought out by the monitoring processes; the maximum absolute value of the first of these exceeds the null-distribution 0.95 point of 1.358, for example. The triangular shape correctly indicates that the non-constancy is in form of a break point about half-way through the data.

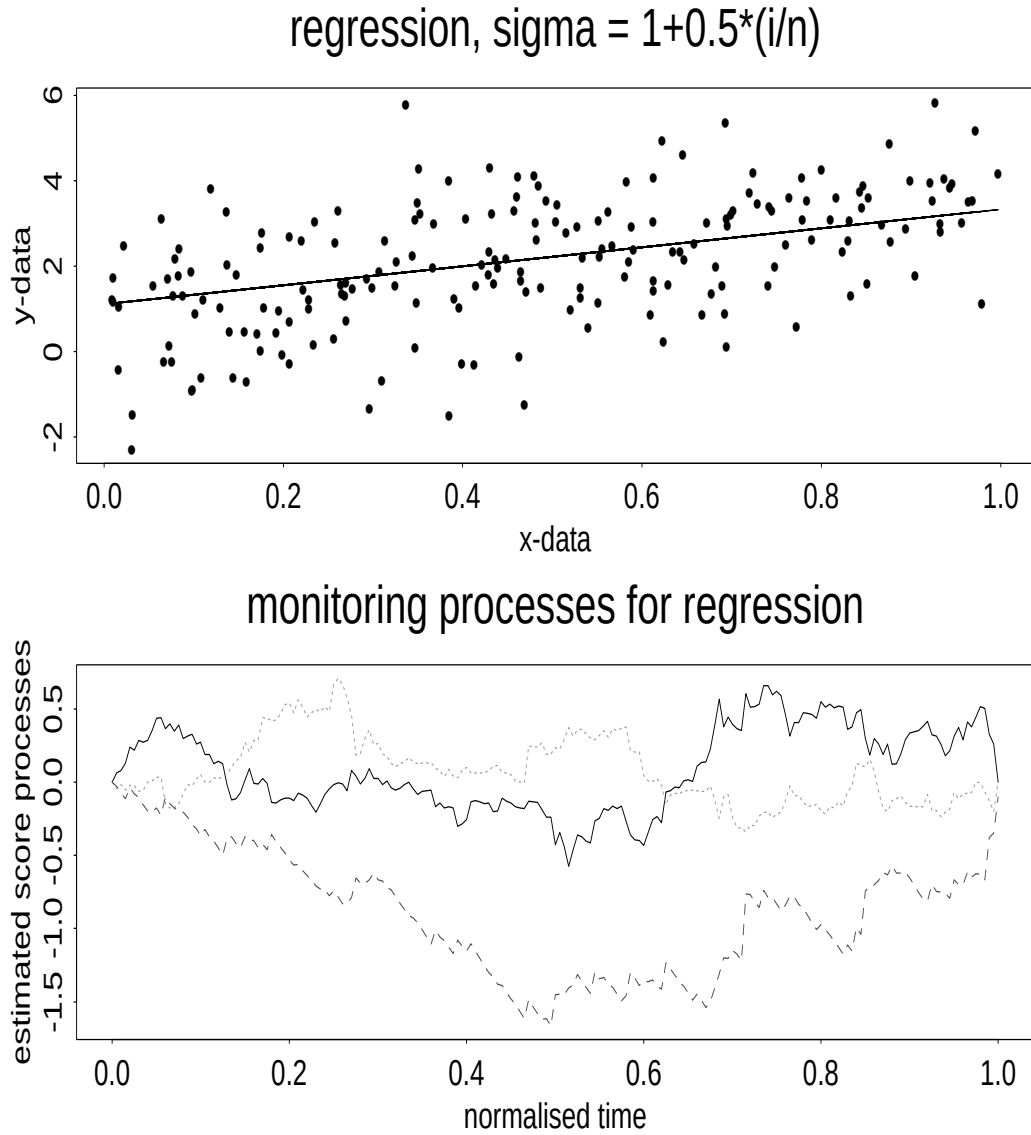


FIGURE 2: Here $n = 200$ pairs are generated by letting x_i s be independent (and not sorted) uniformly on $(0, 1)$ and then using the the $y_i = a + bx_i + \varepsilon_i$ model, with normal errors $N(0, \sigma_i^2)$ and using $\sigma_i = 1 + 0.5 i/n$. The monitoring process plots pick up the aspect that σ is not constant, in that its maximum absolute value exceeds the 1.358 value, for example. Also its approximately parabolic shape helps identify the type of non-constancy of the σ parameters.

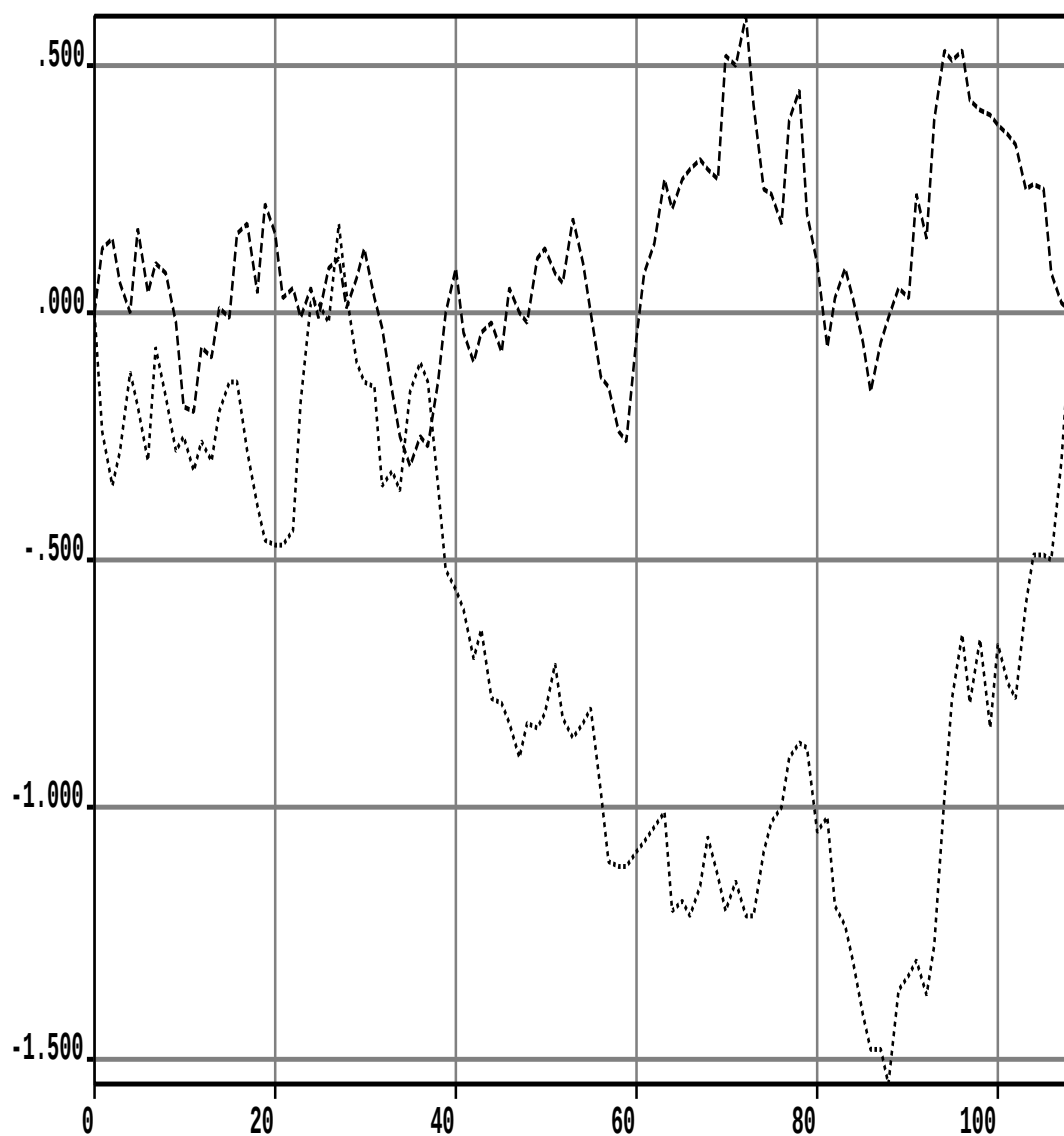


FIGURE 3: Monitoring plots for checking the constancy of Poisson parameters, for the two sets of Dutch Ombudsman data (see Appendix II). The plot for the expected number of TBS-sentences does not indicate any departure from the hypothesis of constancy, whereas the plot for the expected number of ended treatments indicates that this parameter has not been constant over the time period studied. The triangular shape indicates a sudden decrease around March 1990.