Supplementary file for the paper "Local bandwidth selectors for deconvolution kernel density estimation" by A. Achilleos and A. Delaigle.

In this file we present the full simulations results for the eight densities considered in our simulation study. As in section 5.2 of the paper, we show boxplots of the log of the ratio $\text{ASE}(h_{GPI})/\text{ASE}(\hat{h})$ over 100 replications, where h_{GPI} denotes the GPI bandwidth and $\hat{h}$ is one of our new procedures. A value larger than 0 means that the local bandwidth gave a smaller ASE than h_{GPI} (and thus worked better). The first four figures show the results for densities 1 to 4. Figures 5 to 8 correspond to densities 5 to 8. In each figure, we show boxplots for $n = 100$, $n = 250$ and $n = 500$. In Figures 1 and 5, the errors are Laplace with a NSR of 10%; in Figures 2 and 6, the errors are Laplace with a NSR of 25%; in Figures 3 and 7, the errors are normal with a NSR of 10%; in Figures 4 and 8, the errors are normal with a NSR of 25%. The conclusions are as in the paper.
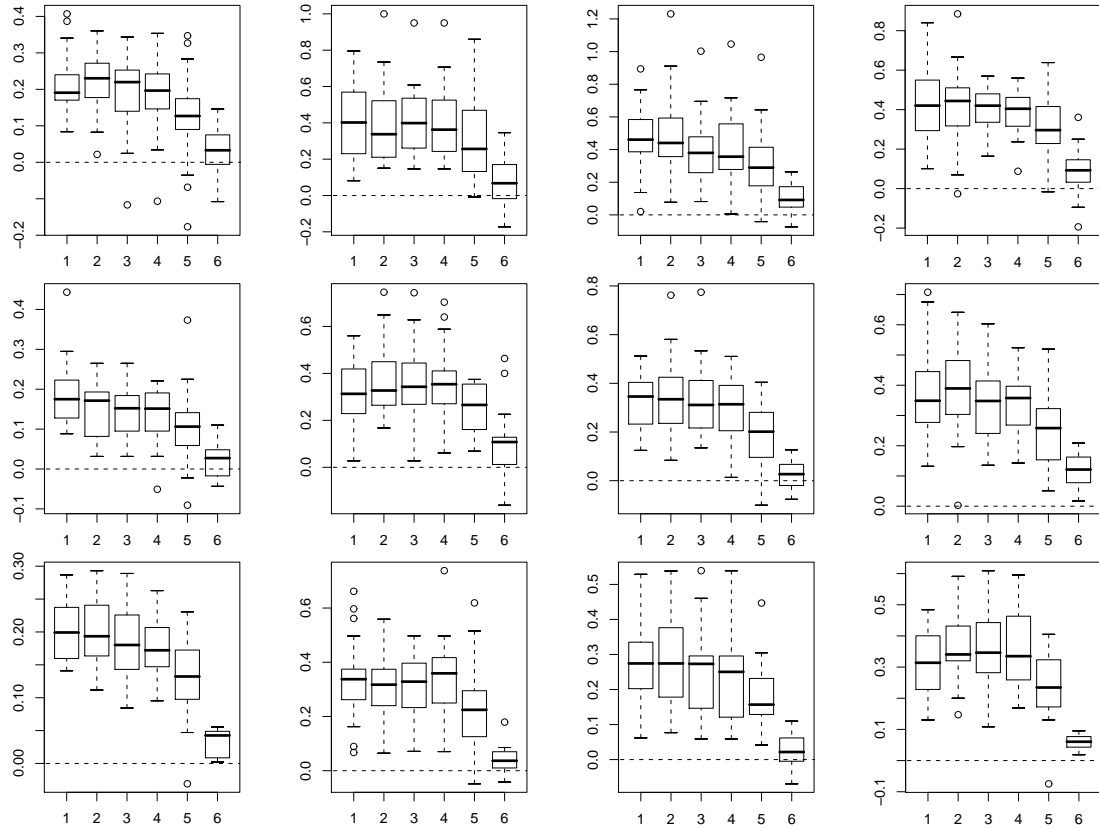
Figure 1: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 1, 2, 3 and 4. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is Laplace with NSR 10% and, row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
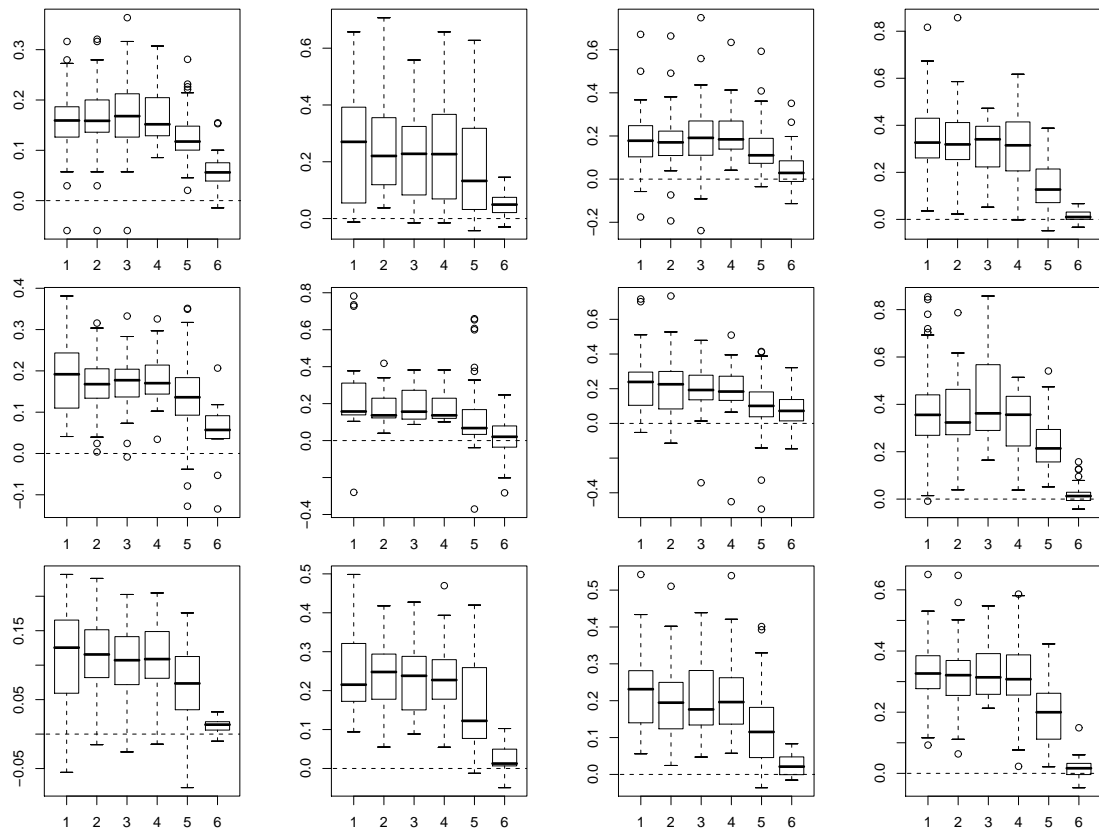
Figure 2: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 1, 2, 3 and 4. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is Laplace with NSR 25% and, row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
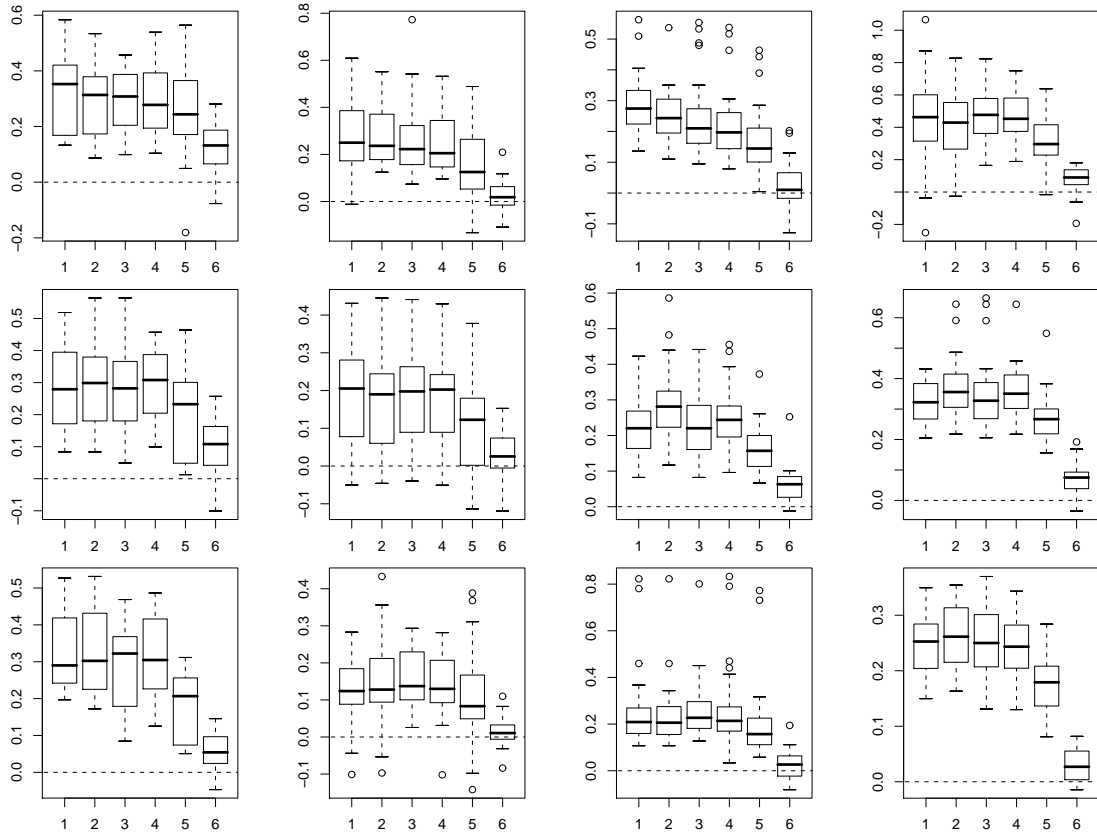
Figure 3: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 1, 2, 3 and 4. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is normal with NSR 10% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
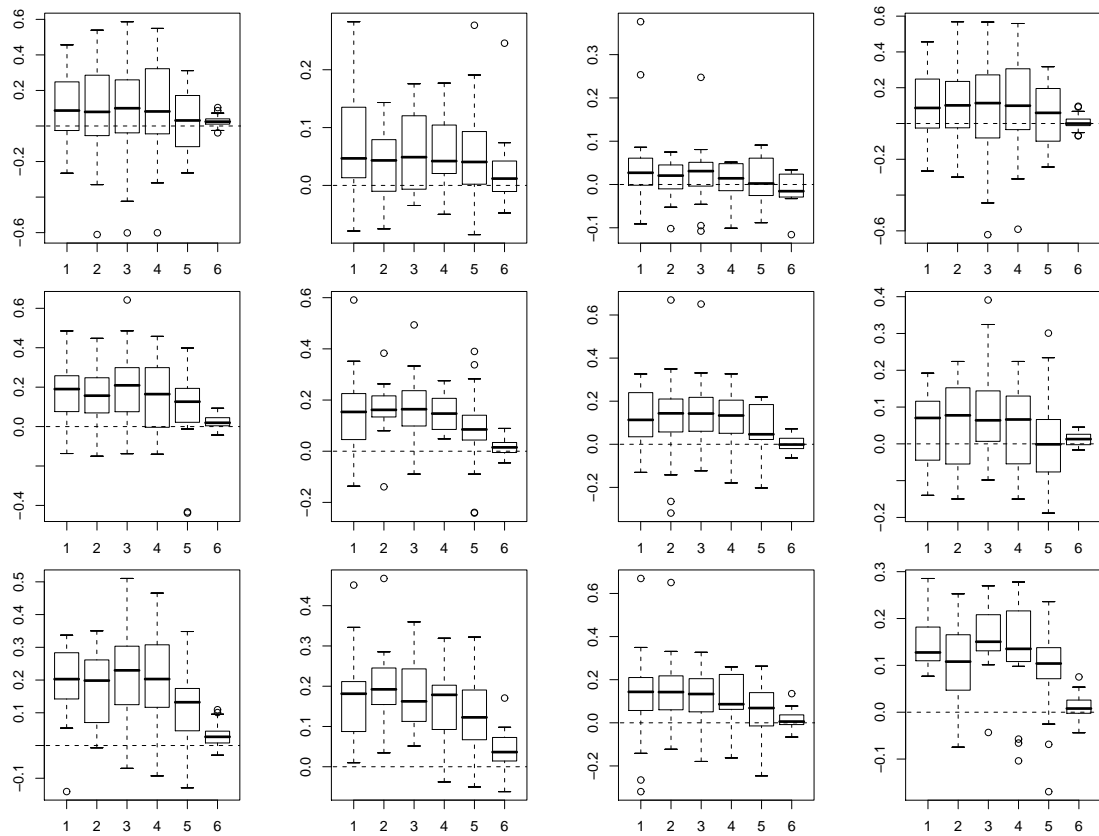
Figure 4: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 1, 2, 3 and 4. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is normal with NSR 25% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
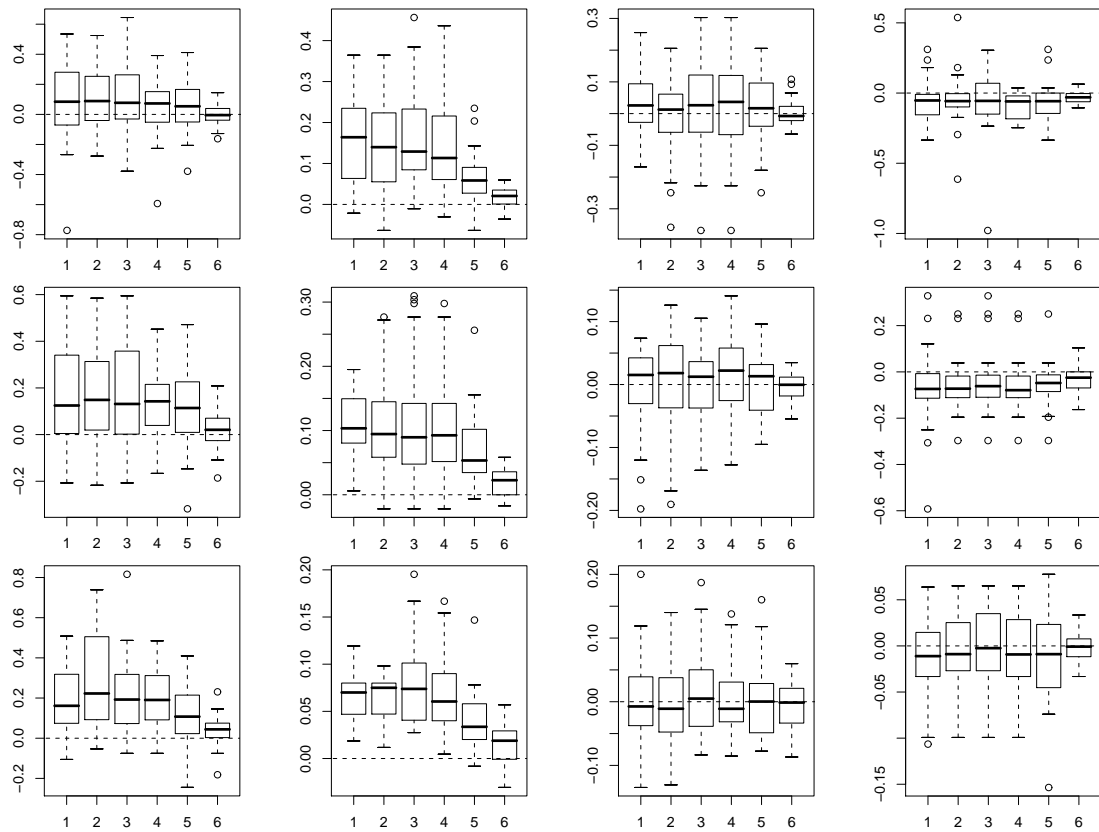
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Figure 5: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 5, 6, 7 and 8. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is Laplace with NSR 10% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$..
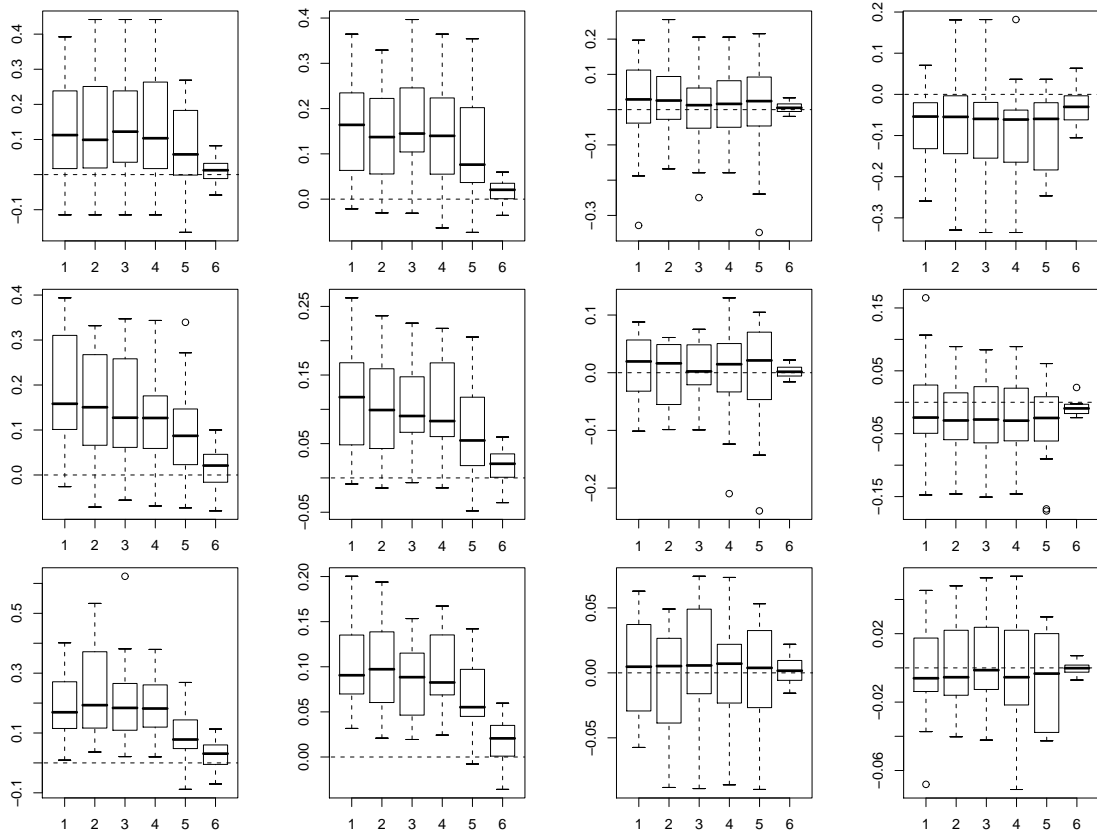
Figure 6: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 5, 6, 7 and 8. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is Laplace with NSR 25% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
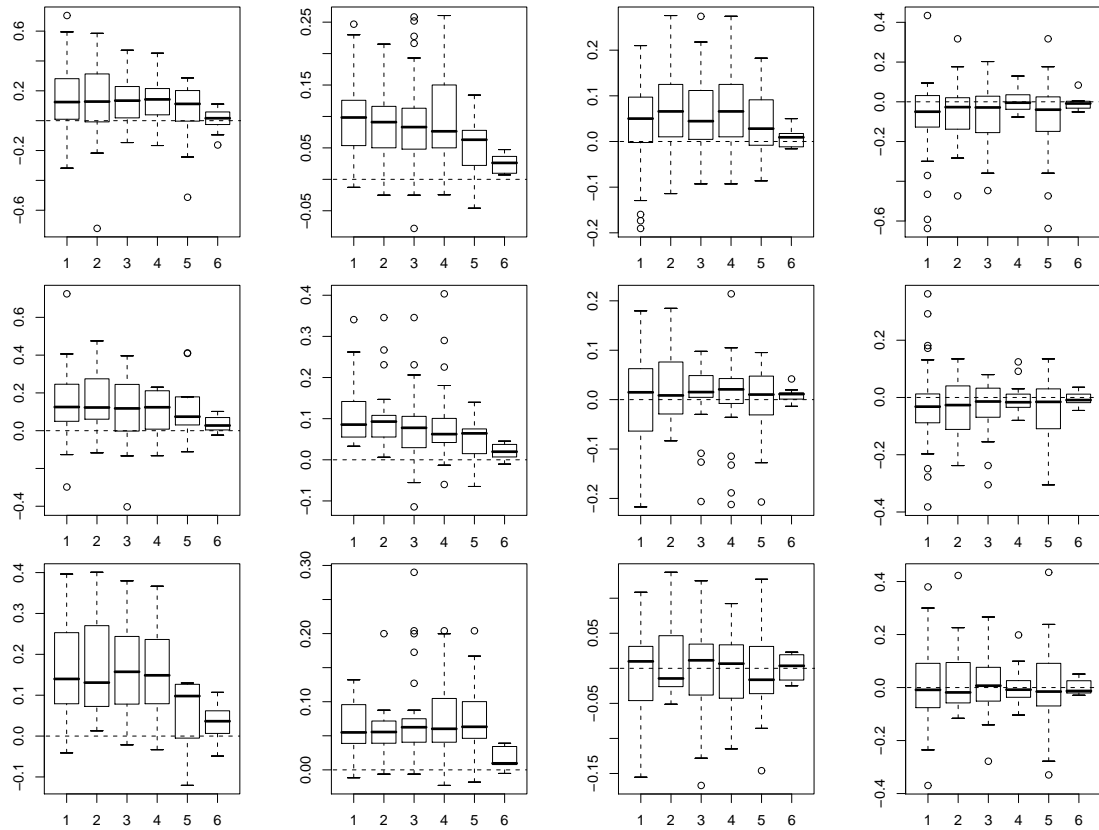
Figure 7: Boxplots of log of ratio $\mathrm{ASE}(h_{GPI})/\mathrm{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 5, 6, 7 and 8. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is normal with NSR 10% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.
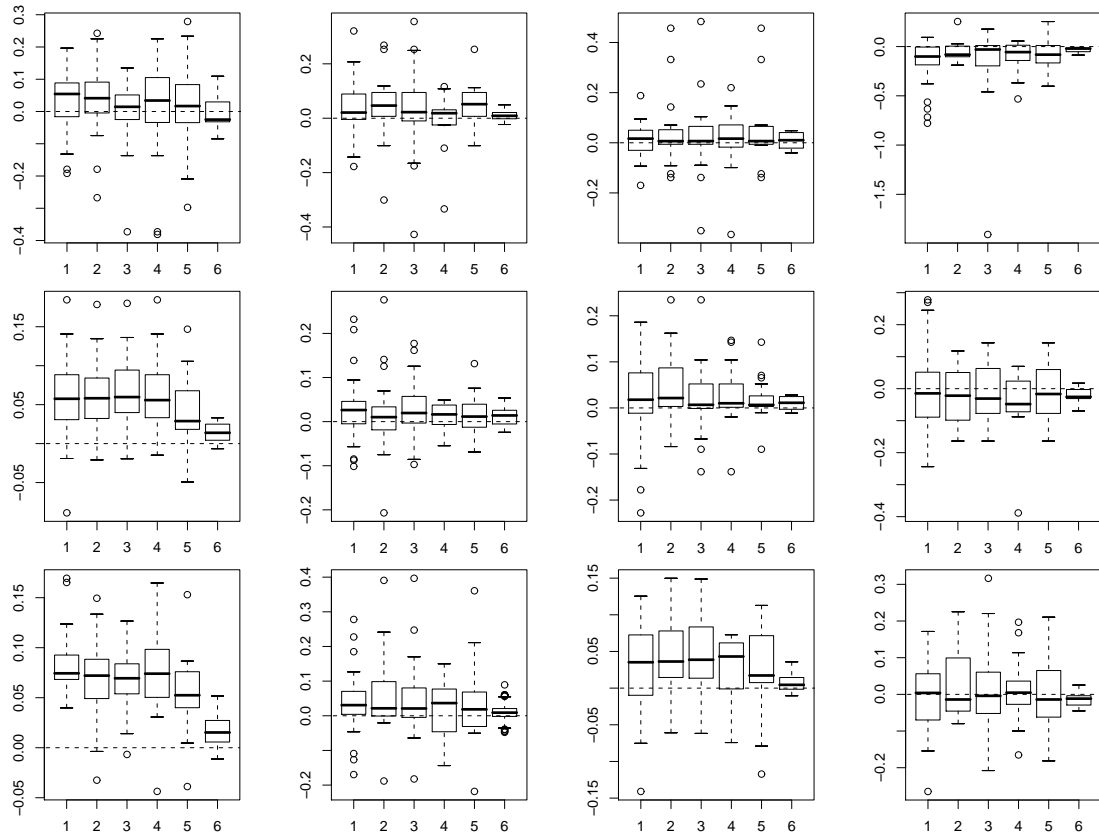
Figure 8: Boxplots of log of ratio $\text{ASE}(h_{GPI})/\text{ASE}(\hat{h})$ over the 100 replications for, from left to right, densities 5, 6, 7 and 8. The boxes show 1: EBBSD1, 2: EBBSI1, 3: IPID1, 4: IPII1, 5: LSIMEX, 6: GSIMEX. In each case, the error is normal with NSR 25% and row 1: $n = 100$, row 2: $n = 250$, row 3: $n = 500$.