| Run | $\sigma^2$ | l | $\sigma_{noise}^2$ | $\hat{\sigma}^2$  | Î               | $\hat{\sigma}_{noise}^2$ |
|-----|------------|---|--------------------|-------------------|-----------------|--------------------------|
| 1   | 5          | 2 | 1                  | $5.20 \pm 2.07$   | $0.50 \pm 0.09$ | $0.91 \pm 0.68$          |
| 2   | 15         | 2 | 2                  | $14.12 \pm 13.14$ | $2.07 \pm 1.09$ | $2.04 \pm 1.51$          |
| 3   | 3          | 3 | 0.5                | $2.68 \pm 3.33$   | $3.24 \pm 1.65$ | $0.97 \pm 0.71$          |
| 4   | 0.5        | 5 | 0.5                | $0.45 \pm 0.62$   | $3.96 \pm 2.50$ | $0.56 \pm 0.30$          |

Table 1: Four runs of synthetic data using different hyperparameters for the magnitude, lengthscale, and noise (i.e.  $\sigma^2, l, \sigma^2_{noise}$ ). Each run is executed n=100 times to calculate the mean and standard deviation of the estimated values for each hyperparameter (i.e.  $\hat{\sigma}^2, \hat{l}, \hat{\sigma}^2_{noise}$ ).