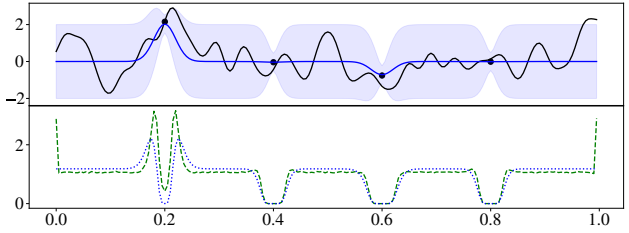
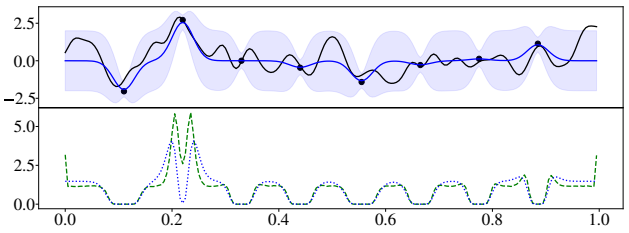
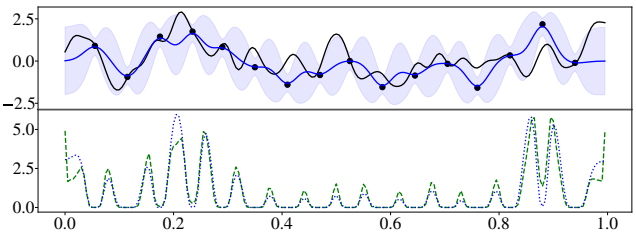


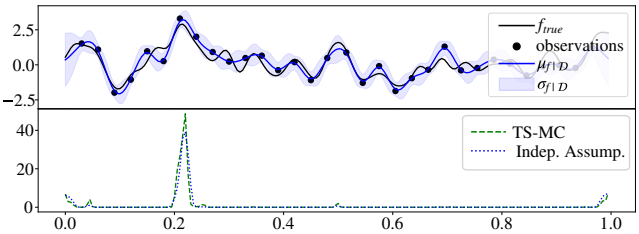
(a) $|\mathcal{D}| = 4$



(b) $|\mathcal{D}| = 8$



(c) $|\mathcal{D}| = 16$



(d) $|\mathcal{D}| = 32$

Figure 6: Falsely relying on Assumption 2 does not qualitatively change the estimation of Gaussian PoM, but rather leads to a more conservative prediction, underestimating the maximality of entries near the best observations. This can be understood as a consequence of Slepian's lemma [45].