

## 2.5 Component 5 : A rapidly varying smooth function. This function applies until 1643 and from 1716 onwards

This component is a rapidly varying but smooth function with a typical lengthscale of 1.6 years. This component applies until 1643 and from 1716 onwards.

This component explains 75.9% of the residual variance; this increases the total variance explained from 92.3% to 98.1%. The addition of this component reduces the cross validated MAE by 0.35% from 0.15 to 0.15.

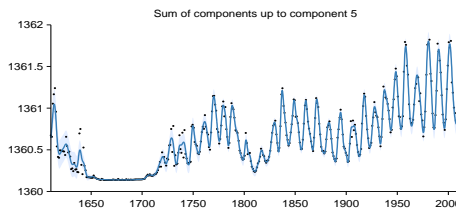
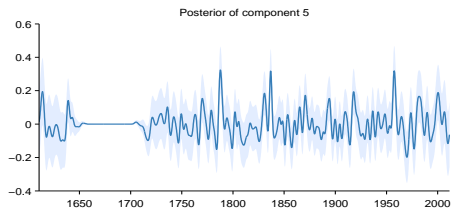


Figure 10: Pointwise posterior of component 5 (left) and the posterior of the cumulative sum of components with data (right)

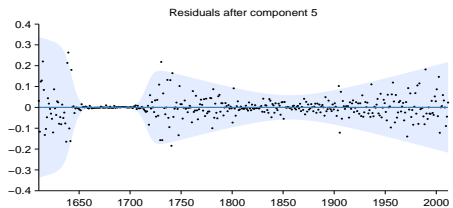


Figure 11: Pointwise posterior of residuals after adding component 5