3.2 Component 2 : A constant. This function applies from 1643 until 1716

This component is assumed to stop before the end of the data and will therefore be extrapolated as zero.

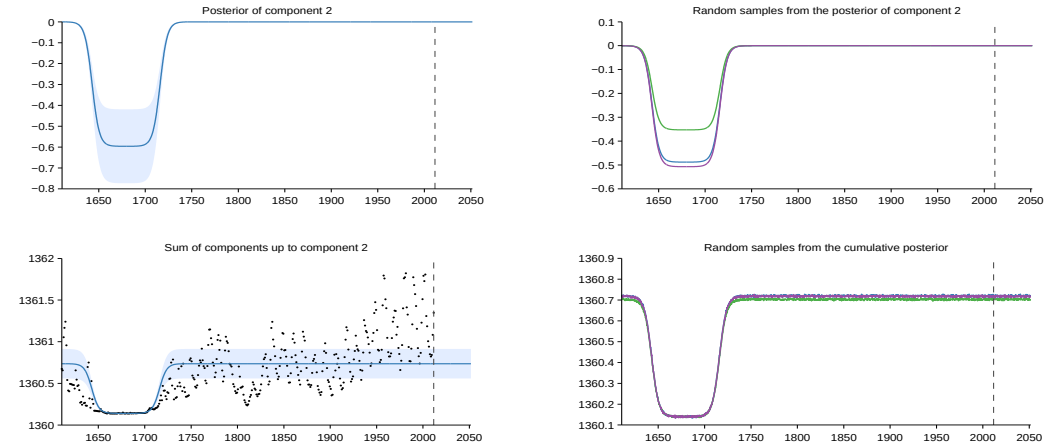

Figure 19: Posterior of component 2 (top) and cumulative sum of components (bottom) with extrapolation. Mean and pointwise variance (left) and three random samples from the posterior distribution (right).

3.3 Component 3 : A smooth function. This function applies until 1643 and from 1716 onwards

This component is assumed to continue smoothly but is also assumed to be stationary so its distribution will return to the prior. The prior distribution places mass on smooth functions with a marginal mean of zero and a typical lengthscale of 23.1 years. [This is a placeholder for a description of how quickly the posterior will start to resemble the prior].

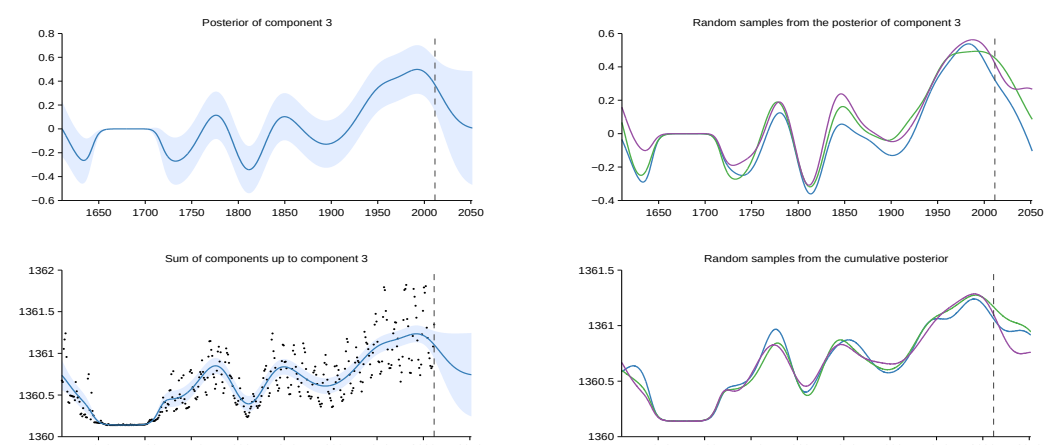

Figure 20: Posterior of component 3 (top) and cumulative sum of components (bottom) with extrapolation. Mean and pointwise variance (left) and three random samples from the posterior distribution (right).