

### 3.2 Component 2 : An approximately periodic function with a period of 1.0 years and with linearly increasing amplitude

This component is assumed to continue to be approximately periodic. The shape of the function is assumed to vary very smoothly between periods but will eventually return to the prior. The amplitude of the function is assumed to continue to increase linearly. The prior is entirely uncertain about the phase of the periodic function. Consequently the pointwise posterior will appear to lose its periodicity, but this merely reflects the uncertainty in the shape and phase of the function. [This is a placeholder for a description of how quickly the posterior will start to resemble the prior].

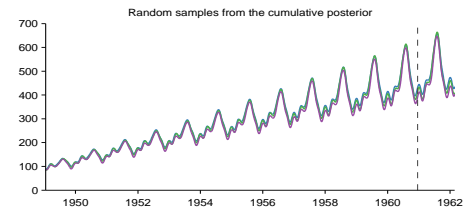
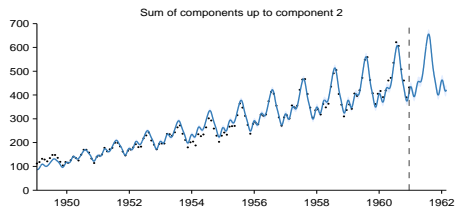
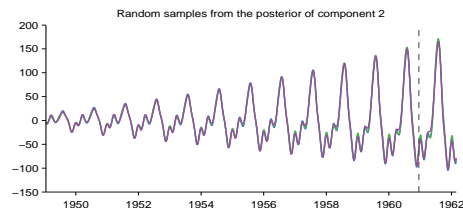
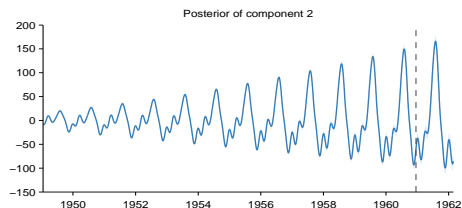


Figure 11: Posterior of component 2 (top) and cumulative sum of components (bottom) with extrapolation. Mean and pointwise variance (left) and three random samples from the posterior distribution (right).