## This function is a rapidly varying but smooth function with a typical lengthscale of 3.1 months. The marginal standard deviation of the function increases linearly away from 1843. This component applies from 1751 onwards. This component explains 24.8% of the residual variance; this increases the total variance explained from 97.8% to 98.4%. The addition of this component increases the cross validated MAE by 0.00%

from 0.15 to 0.15. This component explains residual variance but does not improve MAE which suggests that this component describes very short term patterns, uncorrelated noise or is an artefact

Component 7: A rapidly varying smooth function with marginal standard deviation increasing linearly away from 1843. This function applies from 1751 onwards

of the model or search procedure.

Posterior of component 7

1362

1361.51361.51361.5-

Figure 8: Posterior of component 7 (left) and the posterior of the cumulative sum of components with data (right)