



Figure S1 Model fit using different values for basis dimension ( $k$ ) in the  $s()$  function used in `gam()`. We used  $k=6$  in the main paper, but show here  $k=4$  (lower panel) and  $k=10$  (upper panel). Using  $k=4$  has a tendency to smooth too much, whereas  $k=10$  may overfit for some populations.