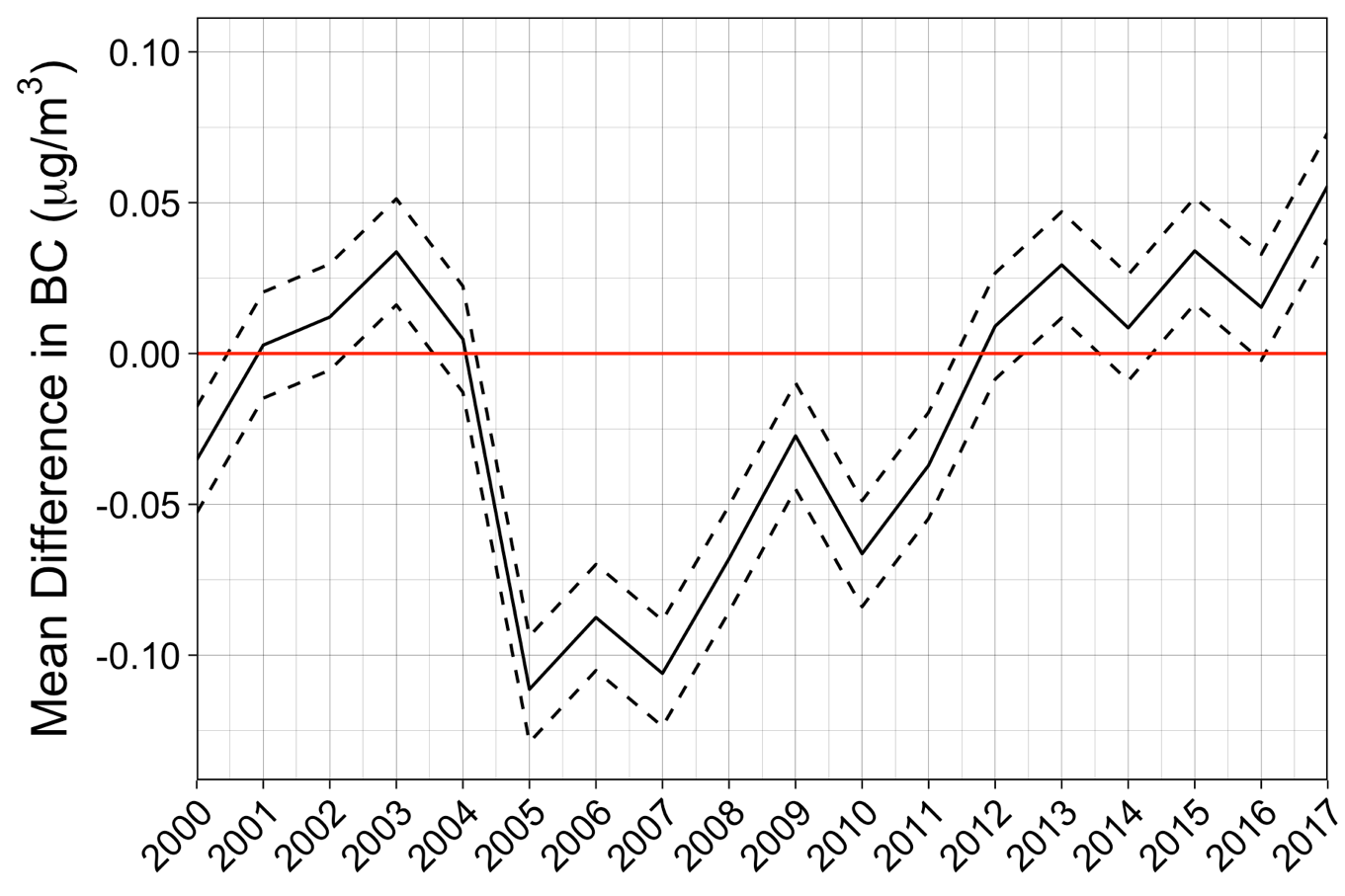
**BC** Linear Mixed Effects Regression

**BC** Smoothed (GAMM with k = 10)Chart, line chart

Description automatically generated

**BC** Smoothed (GAMM with k = 7)Chart, line chart

Description automatically generated

**BC** Smoothed (GAMM with k = 5)Chart, line chart

Description automatically generated

**NH4** Linear Mixed Effects Regression Chart, line chart

Description automatically generated

Chart, line chart

Description automatically generatedChart, line chart

Description automatically generated

**NH4** Smoothed (GAMM with k = 10)Chart, line chart

Description automatically generated

**NH4** Smoothed (GAMM with k = 7)Chart, line chart

Description automatically generated

**NH4** Smoothed (GAMM with k = 5)Chart, line chart

Description automatically generated

**NO3** Linear Mixed Effects Regression

**Chart, line chart

Description automatically generated**

**NO3** Smoothed (GAMM with k = 10) **Chart, line chart

Description automatically generated**

**NO3** Smoothed (GAMM with k = 7)**Chart, line chart

Description automatically generated**

**NO3** Smoothed (GAMM with k = 5)**Chart, line chart

Description automatically generated**

**NO3** Smoothed (GAMM with k = 10)Chart, line chart

Description automatically generated

**OM** Linear Mixed Effects Regression

Chart, line chart

Description automatically generated

**OM** Smoothed (GAMM with k = 10)

Chart, line chart

Description automatically generated

**OM** Smoothed (GAMM with k = 7)

Chart, line chart

Description automatically generated

**OM** Smoothed (GAMM with k = 5)

Chart, line chart

Description automatically generated

**SO4** Linear Mixed Effects Regression

Chart, line chart

Description automatically generated

**SO4** Smoothed (GAMM with k = 10)

Chart, line chart

Description automatically generated

**SO4** Smoothed (GAMM with k = 7)

Chart, line chart

Description automatically generated

**SO4** Smoothed (GAMM with k = 5)

Chart, line chart

Description automatically generated

**SOIL** Linear Mixed Effects Regression

Chart, line chart

Description automatically generated

**SOIL** Smoothed (GAMM with k = 10)

Chart, line chart

Description automatically generated

**SOIL** Smoothed (GAMM with k = 7)

Chart, line chart

Description automatically generated

**SOIL** Smoothed (GAMM with k = 5)

Chart, line chart

Description automatically generated