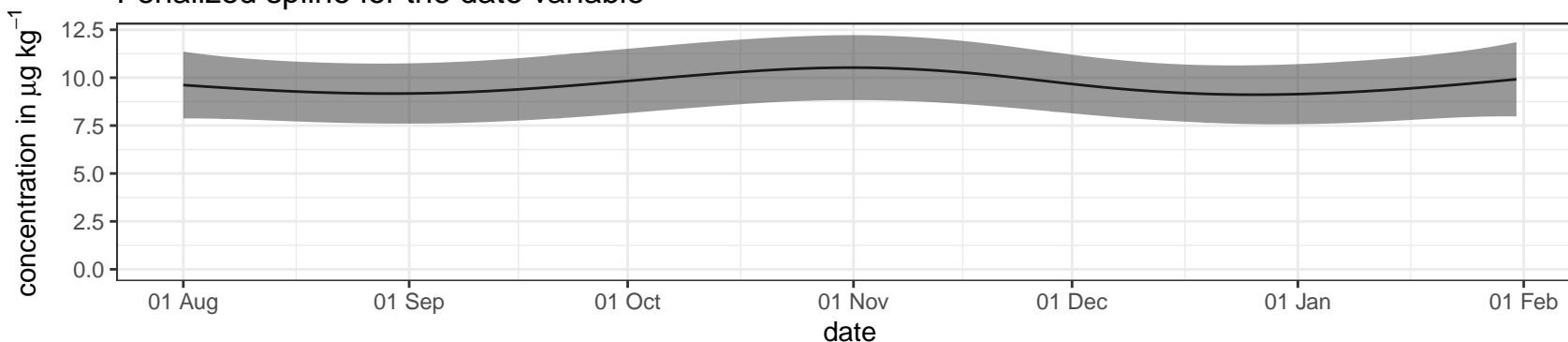


POP

Penalized spline for the date variable



Park regression coefficients

Park	Coefficient	p-value
Bayerischer Wald	1.00	
Eifel	1.24 (0.91, 1.69)	p = 0.17
Hainich	0.74 (0.45, 1.21)	p = 0.23
Hunsrück Hochwald	1.23 (0.89, 1.69)	p = 0.20
Jasmund	0.67 (0.34, 1.30)	p = 0.24
Kellerwald Edersee	1.36 (0.96, 1.92)	p = 0.08
Sächsische Schweiz	1.06 (0.77, 1.46)	p = 0.71
Vorpomm. Boddenlidsch.	0.62 (0.23, 1.71)	p = 0.36

Category	Coefficient	p-value
fawn	1.00	
subadult	0.77 (0.65, 0.90)	p < 0.01
adult	0.72 (0.61, 0.86)	p < 0.01

Coefficient values (higher = more polluted)

2.3
1.65
1
0.5
0.0015

Quantified concentrations

concentration in $\mu\text{g kg}^{-1}$

Bayerischer Wald Eifel Hainich Hunsrück Hochwald Jasmund Kellerwald Edersee Sächsische Schweiz Vorpomm. Boddenlidsch. fawn subadult adult

This box plot displays the distribution of quantified pollutant concentrations. The y-axis is on a log scale from 1 to 1000 $\mu\text{g kg}^{-1}$. The x-axis lists the same parks and age groups as the regression coefficients plot. Each box represents the median (horizontal line), the interquartile range (the box), and the full range of the data (whiskers). Outliers are shown as open circles. The colors of the boxes correspond to the parks/age groups: Bayerischer Wald (blue), Eifel (yellow), Hainich (red), Hunsrück Hochwald (purple), Jasmund (grey), Kellerwald Edersee (brown), Sächsische Schweiz (green), Vorpomm. Boddenlidsch. (pink), fawn (purple), subadult (green), and adult (brown).

Occurrence of pollutants

quantified
detected

Proportion quantified or qualitatively detected

1.0
0.5
0.0

Bayerischer Wald Eifel Hainich Hunsrück Hochwald Jasmund Kellerwald Edersee Sächsische Schweiz Vorpomm. Boddenlidsch. fawn subadult adult

This stacked bar chart shows the proportion of pollutants that were either quantified (darker color) or detected (lighter color) for each park and age group. The y-axis represents the proportion from 0.0 to 1.0. The x-axis lists the same parks and age groups. The colors of the bars correspond to the parks/age groups: Bayerischer Wald (blue), Eifel (yellow), Hainich (red), Hunsrück Hochwald (purple), Jasmund (grey), Kellerwald Edersee (brown), Sächsische Schweiz (green), Vorpomm. Boddenlidsch. (pink), fawn (purple), subadult (green), and adult (brown). The darker shade represents the proportion of quantified pollutants, and the lighter shade represents the proportion of pollutants that were only detected.