PHY224 Curve Fit Lab 1

Hachem Fattouh

September 20, 2024

in exercise 1, we are given climate data containing the mean atmospheric CO2 content over the last half-century. using this data in a CSV file I plotted the data for the last 20 years, along with a line of best fit using the linear regression line f(x) = ax + b.

from the data, the coefficients calculated were:

$$a=2.303$$

$$b = -4239$$

$$r^2 = 0.997$$

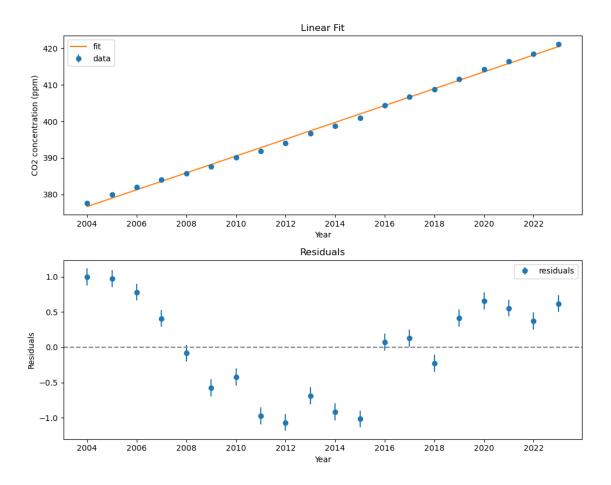


Figure 1: the 2 figures above are the data with its line of best fit, and the corresponding residuals for each dataset.