

```
In [11]: import pandas as pd
import matplotlib.pyplot as plt
from scipy.stats import linregress

def draw_plot():
    # Read data from file
    df = pd.read_csv("C:/Users/kbabu/Downloads/epa-sea-level.csv")

    # Create scatter plot
    x = df["Year"]
    y = df["CSIRO Adjusted Sea Level"]

    fig, ax = plt.subplots(figsize=(12,12))
    ax = plt.scatter(x, y)

    # Create first line of best fit
    res = linregress(x,y)
    print(res)
    x_forecast= pd.Series([i for i in range(1850, 2051)])
    y_forecast = res.slope*x_forecast + res.intercept
    plt.plot(x_forecast, y_forecast, 'r-')

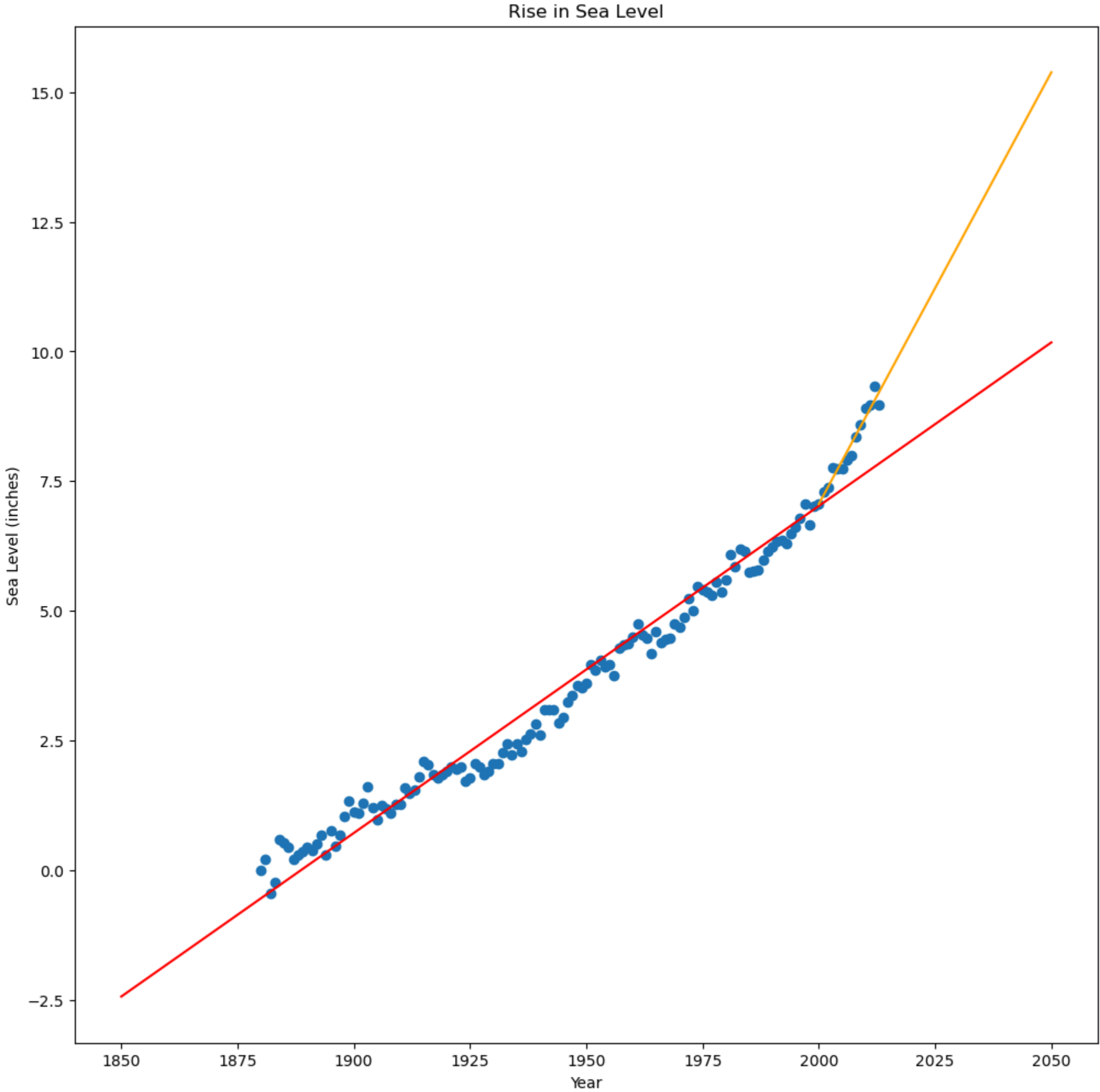
    df_forc = df.loc[df["Year"] >= 2000]
    new_x = df_forc["Year"]
    new_y = df_forc["CSIRO Adjusted Sea Level"]

    # Create second line of best fit
    new_res = linregress(new_x, new_y)
    new_x_forecast= pd.Series([i for i in range(2000, 2051)])
    new_y_forecast = new_res.slope*new_x_forecast + new_res.intercept
    plt.plot(new_x_forecast, new_y_forecast, 'orange')

    #Add labels and title
    plt.title("Rise in Sea Level")
    plt.xlabel("Year")
    plt.ylabel("Sea Level (inches)")

draw_plot()
```

LinregressResult(slope=0.0630445840121348, intercept=-119.06594196773978, rvalue=0.984757131182585, pvalue=3.7886969791131554e-102, stderr=0.000969211871328715, intercept_stderr=1.8869433812425225)



```
In [ ]:
```