```
import pandas as pd
import matplotlib.pyplot as plt

# Sample satellite-style CO2 data
data = {
    "Year": [2020]*12,
    "Month": list(range(1, 13)),
    "CO2_ppm": [413.4, 414.1, 414.5, 416.2, 417.1, 416.6, 415.3, 414.0, 413.1, 414.8, 415.9, 416.7]
}

df = pd.DataFrame(data)
df["Date"] = pd.to_datetime(df[["Year", "Month"]].assign(DAY=1))
df.set_index("Date", inplace=True)
df.head()
```

Date	Year	Month	CO2_ppm
2020-01-01	2020	1	413.4
2020-02-01	2020	2	414.1
2020-03-01	2020	3	414.5
2020-04-01	2020	4	416.2
2020-05-01	2020	5	417.1

```
plt.figure(figsize=(10, 5))
plt.plot(df.index, df["CO2_ppm"], marker='o', color='seagreen')
plt.title("Monthly CO₂ Levels in 2020 (ppm)")
plt.xlabel("Date")
plt.ylabel("CO₂ Concentration (ppm)")
plt.grid(True)
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```