

Wine Project

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```
grapes = pd.read_csv("us-grape-production.csv")
temps = pd.read_csv("filtered-temp.csv")

grapes = grapes.rename(columns={
    "Grapes | 00000560 || Production | 005510 || tonnes": "Grape_Production_tonnes"
})

grapes = grapes[(grapes["Year"] >= 1961) & (grapes["Year"] <= 2023)]
temps = temps[(temps["Year"] >= 1961) & (temps["Year"] <= 2023)]

merged = pd.merge(grapes, temps, on="Year")
(
    ggplot(merged, aes(x="Average_Fahrenheit_Temperature", y="Grape_Production_tonnes")) +
    geom_point(color="purple") +
    geom_smooth(method="lm", color="black") +
    labs(
        title="U.S. Grape Production vs. Average Temperature (1961-2023)",
        x="Average Temperature (°F)",
        y="Grape Production (tonnes)"
    ) +
    theme_minimal()
)
```

