

# data-pipelining-with-polygon

December 26, 2025

## 1 Data Pipelining With Polygon

### 1.1 Python Imports

```
[1]: # Standard Library
import datetime
import io
import os
import random
import sys
import time
import warnings

from datetime import datetime, timedelta
from pathlib import Path

# Data Handling
import numpy as np
import pandas as pd

# Data Visualization
import matplotlib.dates as mdates
import matplotlib.pyplot as plt
import matplotlib.ticker as mtick
import seaborn as sns
from matplotlib.ticker import FormatStrFormatter, FuncFormatter, MultipleLocator

# Data Sources
import yfinance as yf

# Statistical Analysis
import statsmodels.api as sm

# Machine Learning
from sklearn.decomposition import PCA
from sklearn.preprocessing import StandardScaler

# Suppress warnings
```

```
warnings.filterwarnings("ignore")
```

## 1.2 Add Directories To Path

```
[2]: # Add the source subdirectory to the system path to allow import config from settings.py
current_directory = Path(os.getcwd())
website_base_directory = current_directory.parent.parent.parent
src_directory = website_base_directory / "src"
sys.path.append(str(src_directory)) if str(src_directory) not in sys.path else None

# Import settings.py
from settings import config

# Add configured directories from config to path
SOURCE_DIR = config("SOURCE_DIR")
sys.path.append(str(Path(SOURCE_DIR))) if str(Path(SOURCE_DIR)) not in sys.path else None

# Add other configured directories
BASE_DIR = config("BASE_DIR")
CONTENT_DIR = config("CONTENT_DIR")
POSTS_DIR = config("POSTS_DIR")
PAGES_DIR = config("PAGES_DIR")
PUBLIC_DIR = config("PUBLIC_DIR")
SOURCE_DIR = config("SOURCE_DIR")
DATA_DIR = config("DATA_DIR")
DATA_MANUAL_DIR = config("DATA_MANUAL_DIR")

# Print system path
for i, path in enumerate(sys.path):
    print(f"{i}: {path}")
```

```
0: /usr/lib/python313.zip
1: /usr/lib/python3.13
2: /usr/lib/python3.13/lib-dynload
3:
4: /home/jared/python-virtual-envs/general_313/lib/python3.13/site-packages
5:
/home/jared/Cloud_Storage/Dropbox/Websites/jaredszajkowski.github.io_congo/src
```

## 1.3 Track Index Dependencies

```
[3]: # Create file to track markdown dependencies
dep_file = Path("index_dep.txt")
dep_file.write_text("")
```

[3]: 0

## 1.4 Python Functions

```
[4]: from export_track_md_deps import export_track_md_deps
from polygon_fetch_full_history import polygon_fetch_full_history
from polygon_pull_data import polygon_pull_data
```

## 1.5 Function Usage

### 1.5.1 Polygon Fetch Full History

```
[5]: from load_api_keys import load_api_keys
from polygon import RESTClient

# Load API keys from the environment
api_keys = load_api_keys()

# Get the environment variable for where data is stored
DATA_DIR = config("DATA_DIR")

# Open client connection
client = RESTClient(api_key=api_keys["POLYGON_KEY"])

# Create an empty DataFrame
df = pd.DataFrame({
    'Date': pd.Series(dtype="datetime64[ns]"),
    'open': pd.Series(dtype="float64"),
    'high': pd.Series(dtype="float64"),
    'low': pd.Series(dtype="float64"),
    'close': pd.Series(dtype="float64"),
    'volume': pd.Series(dtype="float64"),
    'vwap': pd.Series(dtype="float64"),
    'transactions': pd.Series(dtype="int64"),
    'otc': pd.Series(dtype="object")
})

# Example usage - minute
df = polygon_fetch_full_history(
    client=client,
    ticker="AMZN",
    timespan="day",
    multiplier=1,
    adjusted=True,
    existing_history_df=df,
    current_start=datetime(2025, 1, 1),
    free_tier=True,
```

```
verbose=True,  
)
```

Pulling day data for 2025-01-01 00:00:00 thru 2025-06-30 00:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume	\
0	2025-01-02 05:00:00	222.030	225.150	218.190	220.22	33956579.0	
1	2025-01-03 05:00:00	222.505	225.360	221.620	224.19	27515606.0	
2	2025-01-06 05:00:00	226.780	228.835	224.840	227.61	31849831.0	
3	2025-01-07 05:00:00	227.900	228.381	221.460	222.11	28084164.0	
4	2025-01-08 05:00:00	223.185	223.520	220.200	222.13	25033292.0	
..	...	...	...	...	...		
117	2025-06-24 04:00:00	212.135	214.340	211.045	212.77	38378757.0	
118	2025-06-25 04:00:00	214.615	216.030	211.110	211.99	31755698.0	
119	2025-06-26 04:00:00	213.120	218.035	212.010	217.12	50480814.0	
120	2025-06-27 04:00:00	219.920	223.300	216.740	223.30	119217138.0	
121	2025-06-30 04:00:00	223.520	223.820	219.120	219.39	58887780.0	

	vwap	transactions	otc
0	221.2745	449631	None
1	223.7050	346976	None
2	227.0921	410686	None
3	223.4033	379570	None
4	222.0414	325539	None
..	...	...	...
117	213.1129	459901	None
118	212.8066	417565	None
119	216.0944	572822	None
120	221.7267	750603	None
121	220.6316	673189	None

[122 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume	\
0	2025-01-02 05:00:00	222.030	225.150	218.190	220.22	33956579.0	
1	2025-01-03 05:00:00	222.505	225.360	221.620	224.19	27515606.0	
2	2025-01-06 05:00:00	226.780	228.835	224.840	227.61	31849831.0	
3	2025-01-07 05:00:00	227.900	228.381	221.460	222.11	28084164.0	
4	2025-01-08 05:00:00	223.185	223.520	220.200	222.13	25033292.0	
..	...	...	...	...	...		
117	2025-06-24 04:00:00	212.135	214.340	211.045	212.77	38378757.0	
118	2025-06-25 04:00:00	214.615	216.030	211.110	211.99	31755698.0	
119	2025-06-26 04:00:00	213.120	218.035	212.010	217.12	50480814.0	
120	2025-06-27 04:00:00	219.920	223.300	216.740	223.30	119217138.0	
121	2025-06-30 04:00:00	223.520	223.820	219.120	219.39	58887780.0	

	vwap	transactions	otc
0	221.2745	449631	None
1	223.7050	346976	None
2	227.0921	410686	None
3	223.4033	379570	None
4	222.0414	325539	None
..	...	...	...
117	213.1129	459901	None
118	212.8066	417565	None
119	216.0944	572822	None
120	221.7267	750603	None
121	220.6316	673189	None

[122 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2025-06-29 04:00:00 thru 2025-12-26 04:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume \
0	2025-06-30 04:00:00	223.520	223.820	219.12	219.39	58887780.0
1	2025-07-01 04:00:00	219.500	221.875	217.93	220.46	39256830.0
2	2025-07-02 04:00:00	219.730	221.600	219.06	219.92	30894178.0
3	2025-07-03 04:00:00	221.820	224.010	221.36	223.41	29632353.0
4	2025-07-07 04:00:00	223.000	224.290	222.37	223.47	36604139.0
..	...	...	...	...	...	...
120	2025-12-18 05:00:00	225.705	229.225	224.41	226.76	50267599.0
121	2025-12-19 05:00:00	226.760	229.125	225.58	227.35	85539391.0
122	2025-12-22 05:00:00	228.610	229.480	226.71	228.43	32189837.0
123	2025-12-23 05:00:00	229.055	232.445	228.73	232.14	29230205.0
124	2025-12-24 05:00:00	232.130	232.950	231.33	232.38	11392602.0

	vwap	transactions	otc
0	220.6316	673189	None
1	220.1508	544150	None
2	220.2103	429633	None
3	222.8867	364422	None
4	223.4121	513469	None
..	...	...	...
120	226.8046	510971	None
121	227.4216	473871	None
122	228.1121	465884	None
123	231.3567	435723	None
124	232.3350	193487	None

[125 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume	\
0	2025-01-02 05:00:00	222.030	225.150	218.19	220.22	33956579.0	
1	2025-01-03 05:00:00	222.505	225.360	221.62	224.19	27515606.0	
2	2025-01-06 05:00:00	226.780	228.835	224.84	227.61	31849831.0	
3	2025-01-07 05:00:00	227.900	228.381	221.46	222.11	28084164.0	
4	2025-01-08 05:00:00	223.185	223.520	220.20	222.13	25033292.0	
..	...	...	...	...	...	...	
241	2025-12-18 05:00:00	225.705	229.225	224.41	226.76	50267599.0	
242	2025-12-19 05:00:00	226.760	229.125	225.58	227.35	85539391.0	
243	2025-12-22 05:00:00	228.610	229.480	226.71	228.43	32189837.0	
244	2025-12-23 05:00:00	229.055	232.445	228.73	232.14	29230205.0	
245	2025-12-24 05:00:00	232.130	232.950	231.33	232.38	11392602.0	

	vwap	transactions	otc
0	221.2745	449631	None
1	223.7050	346976	None
2	227.0921	410686	None
3	223.4033	379570	None
4	222.0414	325539	None
..	...	...	...
241	226.8046	510971	None
242	227.4216	473871	None
243	228.1121	465884	None
244	231.3567	435723	None
245	232.3350	193487	None

[246 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2025-12-23 05:00:00 thru 2026-06-21 05:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume	vwap	\
0	2025-12-23 05:00:00	229.055	232.445	228.73	232.14	29230205.0	231.3567	
1	2025-12-24 05:00:00	232.130	232.950	231.33	232.38	11392602.0	232.3350	

	transactions	otc
0	435723	None
1	193487	None

Combined data:

	Date	open	high	low	close	volume	\
0	2025-01-02 05:00:00	222.030	225.150	218.19	220.22	33956579.0	
1	2025-01-03 05:00:00	222.505	225.360	221.62	224.19	27515606.0	
2	2025-01-06 05:00:00	226.780	228.835	224.84	227.61	31849831.0	
3	2025-01-07 05:00:00	227.900	228.381	221.46	222.11	28084164.0	
4	2025-01-08 05:00:00	223.185	223.520	220.20	222.13	25033292.0	
..	...	...	...	...	...	...	

241	2025-12-18	05:00:00	225.705	229.225	224.41	226.76	50267599.0
242	2025-12-19	05:00:00	226.760	229.125	225.58	227.35	85539391.0
243	2025-12-22	05:00:00	228.610	229.480	226.71	228.43	32189837.0
244	2025-12-23	05:00:00	229.055	232.445	228.73	232.14	29230205.0
245	2025-12-24	05:00:00	232.130	232.950	231.33	232.38	11392602.0

		vwap	transactions	otc
0		221.2745	449631	None
1		223.7050	346976	None
2		227.0921	410686	None
3		223.4033	379570	None
4		222.0414	325539	None
..		...	...	...
241		226.8046	510971	None
242		227.4216	473871	None
243		228.1121	465884	None
244		231.3567	435723	None
245		232.3350	193487	None

[246 rows x 9 columns]

```
[6]: # Copy this <!-- INSERT_polygon_fetch_full_history_HERE --> to index_temp.md
export_track_md_deps(dep_file=dep_file, md_filename="polygon_fetch_full_history.
    ↪md", content=df.to_markdown(floatfmt=".5f"))
```

Exported and tracked: polygon\_fetch\_full\_history.md

### 1.5.2 Polygon Pull Data

```
[7]: current_year = datetime.now().year
current_month = datetime.now().month
current_day = datetime.now().day

# Example usage - daily
df = polygon_pull_data(
    base_directory=DATA_DIR,
    ticker="AMZN",
    source="Polygon",
    asset_class="Equities",
    start_date=datetime(current_year - 2, current_month, current_day),
    timespan="day",
    multiplier=1,
    adjusted=True,
    force_existing_check=True,
    free_tier=True,
    verbose=True,
    excel_export=True,
    pickle_export=True,
```

```

        output_confirmation=True,
    )

time.sleep(12)  # Sleep for 2 seconds to avoid hitting rate limits

```

File found...updating the AMZN day data.

Existing data:

	Date	open	high	low	close	volume	\
0	2023-07-28 04:00:00	129.690	133.0100	129.3300	132.21	46269781.0	
1	2023-07-31 04:00:00	133.200	133.8700	132.3800	133.68	41901516.0	
2	2023-08-01 04:00:00	133.550	133.6900	131.6199	131.69	42250989.0	
3	2023-08-02 04:00:00	130.154	130.2300	126.8200	128.21	50988614.0	
4	2023-08-03 04:00:00	127.480	129.8400	126.4100	128.91	90855736.0	
..	...	...	...	...	...	...	
584	2025-11-24 05:00:00	222.555	227.3300	222.2700	226.28	54318223.0	
585	2025-11-25 05:00:00	226.380	230.5200	223.8000	229.67	39379339.0	
586	2025-11-26 05:00:00	230.740	231.7474	228.7700	229.16	38497719.0	
587	2025-11-28 05:00:00	231.240	233.2850	230.2200	233.22	20250425.0	
588	2025-12-01 05:00:00	233.220	235.7970	232.2500	233.88	42903594.0	

	vwap	transactions	otc
0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
584	225.7269	666490	None
585	228.4920	566277	None
586	229.8728	508687	None
587	232.2031	309443	None
588	234.0476	561696	None

[589 rows x 9 columns]

Last date in existing data: 2025-12-01 05:00:00

Number of rows in existing data: 589

Forcing check of existing data...

Pulling day data for 2023-12-26 00:00:00 thru 2024-06-23 00:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume	\
0	2023-12-27 05:00:00	153.560	154.780	153.12	153.34	31434733.0	
1	2023-12-28 05:00:00	153.720	154.080	152.95	153.38	27057002.0	
2	2023-12-29 05:00:00	153.100	153.890	151.03	151.94	39823204.0	
3	2024-01-02 05:00:00	151.540	152.380	148.39	149.93	47339424.0	
4	2024-01-03 05:00:00	149.200	151.050	148.33	148.47	49425495.0	
..	...	...	...	...	...	...	



117	2024-06-14	04:00:00	183.080	183.720	182.23	183.66	25456410.0
118	2024-06-17	04:00:00	182.520	185.000	181.22	184.06	35601907.0
119	2024-06-18	04:00:00	183.735	184.290	181.43	182.81	36659157.0
120	2024-06-20	04:00:00	182.910	186.510	182.72	186.10	44726779.0
121	2024-06-21	04:00:00	187.800	189.275	185.86	189.08	72931754.0

	vwap	transactions	otc
0	153.6438	311463	None
1	153.5269	301925	None
2	152.3275	353441	None
3	149.8527	476433	None
4	149.4058	416955	None
..	...	...	...
117	183.2123	307405	None
118	183.3132	432322	None
119	182.6619	390343	None
120	185.1798	471760	None
121	188.1272	435848	None

[122 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume	\
0	2023-07-28 04:00:00	129.690	133.0100	129.3300	132.21	46269781.0	
1	2023-07-31 04:00:00	133.200	133.8700	132.3800	133.68	41901516.0	
2	2023-08-01 04:00:00	133.550	133.6900	131.6199	131.69	42250989.0	
3	2023-08-02 04:00:00	130.154	130.2300	126.8200	128.21	50988614.0	
4	2023-08-03 04:00:00	127.480	129.8400	126.4100	128.91	90855736.0	
..	...	...	...	...	...	...	
584	2025-11-24 05:00:00	222.555	227.3300	222.2700	226.28	54318223.0	
585	2025-11-25 05:00:00	226.380	230.5200	223.8000	229.67	39379339.0	
586	2025-11-26 05:00:00	230.740	231.7474	228.7700	229.16	38497719.0	
587	2025-11-28 05:00:00	231.240	233.2850	230.2200	233.22	20250425.0	
588	2025-12-01 05:00:00	233.220	235.7970	232.2500	233.88	42903594.0	

	vwap	transactions	otc
0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
584	225.7269	666490	None
585	228.4920	566277	None
586	229.8728	508687	None
587	232.2031	309443	None
588	234.0476	561696	None

[589 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2024-06-20 04:00:00 thru 2024-12-17 04:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume	\
0	2024-06-20 04:00:00	182.91	186.510	182.7200	186.10	44726779.0	
1	2024-06-21 04:00:00	187.80	189.275	185.8600	189.08	72931754.0	
2	2024-06-24 04:00:00	189.33	191.000	185.3300	185.57	50610379.0	
3	2024-06-25 04:00:00	186.81	188.840	185.4200	186.34	45898475.0	
4	2024-06-26 04:00:00	186.92	194.800	186.2600	193.61	65103893.0	
..	...	...	...	...	...	...	
120	2024-12-10 05:00:00	226.09	229.060	224.2002	225.04	31199864.0	
121	2024-12-11 05:00:00	226.41	231.200	226.2600	230.26	35385785.0	
122	2024-12-12 05:00:00	229.83	231.090	227.6300	228.97	28204084.0	
123	2024-12-13 05:00:00	228.40	230.200	225.8608	227.46	28768080.0	
124	2024-12-16 05:00:00	230.23	233.000	228.0100	232.93	37552096.0	

	vwap	transactions	otc
0	185.1798	471760	None
1	188.1272	435848	None
2	187.2457	535367	None
3	186.9520	382085	None
4	192.1117	649554	None
..	...	...	...
120	226.2639	417668	None
121	229.9009	427394	None
122	229.3395	342638	None
123	227.8553	362555	None
124	231.5484	430659	None

[125 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume	\
0	2023-07-28 04:00:00	129.690	133.0100	129.3300	132.21	46269781.0	
1	2023-07-31 04:00:00	133.200	133.8700	132.3800	133.68	41901516.0	
2	2023-08-01 04:00:00	133.550	133.6900	131.6199	131.69	42250989.0	
3	2023-08-02 04:00:00	130.154	130.2300	126.8200	128.21	50988614.0	
4	2023-08-03 04:00:00	127.480	129.8400	126.4100	128.91	90855736.0	
..	...	...	...	...	...	...	
584	2025-11-24 05:00:00	222.555	227.3300	222.2700	226.28	54318223.0	
585	2025-11-25 05:00:00	226.380	230.5200	223.8000	229.67	39379339.0	
586	2025-11-26 05:00:00	230.740	231.7474	228.7700	229.16	38497719.0	
587	2025-11-28 05:00:00	231.240	233.2850	230.2200	233.22	20250425.0	
588	2025-12-01 05:00:00	233.220	235.7970	232.2500	233.88	42903594.0	

	vwap	transactions	otc
--	------	--------------	-----

0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
584	225.7269	666490	None
585	228.4920	566277	None
586	229.8728	508687	None
587	232.2031	309443	None
588	234.0476	561696	None

[589 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2024-12-15 05:00:00 thru 2025-06-13 05:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume \
0	2024-12-16 05:00:00	230.23	233.0000	228.01	232.93	37552096.0
1	2024-12-17 05:00:00	232.39	232.7300	227.85	231.15	35948131.0
2	2024-12-18 05:00:00	230.77	231.3999	220.11	220.52	43281443.0
3	2024-12-19 05:00:00	224.91	226.0900	222.92	223.29	39918739.0
4	2024-12-20 05:00:00	219.84	226.2100	218.73	224.92	88279184.0
..	...	...	...	...	...	...
118	2025-06-09 04:00:00	214.75	217.8500	212.88	216.98	38102502.0
119	2025-06-10 04:00:00	216.78	217.6900	214.15	217.61	31303317.0
120	2025-06-11 04:00:00	217.41	218.4000	212.89	213.20	39325981.0
121	2025-06-12 04:00:00	211.78	213.5800	211.33	213.24	27639991.0
122	2025-06-13 04:00:00	209.96	214.0500	209.62	212.10	29337763.0

	vwap	transactions	otc
0	231.5484	430659	None
1	230.7897	433266	None
2	225.2441	529103	None
3	224.0262	466361	None
4	223.9497	456278	None
..	...	...	...
118	216.0254	560148	None
119	216.5561	429031	None
120	214.8840	503640	None
121	212.8655	364940	None
122	211.9129	443361	None

[123 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume \
--	------	------	------	-----	-------	----------

0	2023-07-28 04:00:00	129.690	133.0100	129.3300	132.21	46269781.0
1	2023-07-31 04:00:00	133.200	133.8700	132.3800	133.68	41901516.0
2	2023-08-01 04:00:00	133.550	133.6900	131.6199	131.69	42250989.0
3	2023-08-02 04:00:00	130.154	130.2300	126.8200	128.21	50988614.0
4	2023-08-03 04:00:00	127.480	129.8400	126.4100	128.91	90855736.0
..	...	...	...	...	...	...
584	2025-11-24 05:00:00	222.555	227.3300	222.2700	226.28	54318223.0
585	2025-11-25 05:00:00	226.380	230.5200	223.8000	229.67	39379339.0
586	2025-11-26 05:00:00	230.740	231.7474	228.7700	229.16	38497719.0
587	2025-11-28 05:00:00	231.240	233.2850	230.2200	233.22	20250425.0
588	2025-12-01 05:00:00	233.220	235.7970	232.2500	233.88	42903594.0

	vwap	transactions	otc
0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
584	225.7269	666490	None
585	228.4920	566277	None
586	229.8728	508687	None
587	232.2031	309443	None
588	234.0476	561696	None

[589 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2025-06-12 04:00:00 thru 2025-12-09 04:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume \
0	2025-06-12 04:00:00	211.780	213.58	211.330	213.24	27639991.0
1	2025-06-13 04:00:00	209.960	214.05	209.620	212.10	29337763.0
2	2025-06-16 04:00:00	212.310	217.06	211.600	216.10	33284158.0
3	2025-06-17 04:00:00	215.195	217.41	214.560	214.82	32086262.0
4	2025-06-18 04:00:00	215.090	217.96	212.340	212.52	44360509.0
..	...	...	...	...	...	...
119	2025-12-02 05:00:00	235.005	238.97	233.550	234.42	45785363.0
120	2025-12-03 05:00:00	233.350	233.38	230.610	232.38	35495058.0
121	2025-12-04 05:00:00	232.770	233.50	226.800	229.11	45680903.0
122	2025-12-05 05:00:00	230.320	231.24	228.547	229.53	33117277.0
123	2025-12-08 05:00:00	229.590	230.83	226.270	226.89	35019072.0

	vwap	transactions	otc
0	212.8655	364940	None
1	211.9129	443361	None

2	215.1622	457829	None
3	215.7332	431316	None
4	214.6135	475101	None
..	...	...	...
119	235.2927	589890	None
120	232.2585	525904	None
121	228.6896	635145	None
122	229.7654	433533	None
123	227.6878	510441	None

[124 rows x 9 columns]

Combined data:

	Date	open	high	low	close	volume	\
0	2023-07-28 04:00:00	129.690	133.01	129.3300	132.21	46269781.0	
1	2023-07-31 04:00:00	133.200	133.87	132.3800	133.68	41901516.0	
2	2023-08-01 04:00:00	133.550	133.69	131.6199	131.69	42250989.0	
3	2023-08-02 04:00:00	130.154	130.23	126.8200	128.21	50988614.0	
4	2023-08-03 04:00:00	127.480	129.84	126.4100	128.91	90855736.0	
..	...	...	...	...	...	...	
589	2025-12-02 05:00:00	235.005	238.97	233.5500	234.42	45785363.0	
590	2025-12-03 05:00:00	233.350	233.38	230.6100	232.38	35495058.0	
591	2025-12-04 05:00:00	232.770	233.50	226.8000	229.11	45680903.0	
592	2025-12-05 05:00:00	230.320	231.24	228.5470	229.53	33117277.0	
593	2025-12-08 05:00:00	229.590	230.83	226.2700	226.89	35019072.0	

	vwap	transactions	otc
0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
589	235.2927	589890	None
590	232.2585	525904	None
591	228.6896	635145	None
592	229.7654	433533	None
593	227.6878	510441	None

[594 rows x 9 columns]

Sleeping for 12 seconds to avoid hitting API rate limits...

Pulling day data for 2025-12-07 05:00:00 thru 2026-06-05 05:00:00 for AMZN...

New data:

	Date	open	high	low	close	volume	\
0	2025-12-08 05:00:00	229.590	230.830	226.2700	226.89	35019072.0	
1	2025-12-09 05:00:00	226.840	228.570	225.1100	227.92	25840496.0	

2	2025-12-10	05:00:00	228.805	232.420	228.4600	231.78	38790432.0
3	2025-12-11	05:00:00	230.710	232.110	228.6901	230.28	28248522.0
4	2025-12-12	05:00:00	229.870	230.080	225.1200	226.19	35636939.0
5	2025-12-15	05:00:00	227.930	227.930	221.5000	222.54	47286085.0
6	2025-12-16	05:00:00	223.035	223.660	221.1304	222.56	39293678.0
7	2025-12-17	05:00:00	224.655	225.190	220.9900	221.27	44030569.0
8	2025-12-18	05:00:00	225.705	229.225	224.4100	226.76	50267599.0
9	2025-12-19	05:00:00	226.760	229.125	225.5800	227.35	85539391.0
10	2025-12-22	05:00:00	228.610	229.480	226.7100	228.43	32189837.0
11	2025-12-23	05:00:00	229.055	232.445	228.7300	232.14	29230205.0
12	2025-12-24	05:00:00	232.130	232.950	231.3300	232.38	11392602.0

	vwap	transactions	otc
0	227.6878	510441	None
1	227.7138	371664	None
2	231.2702	501584	None
3	230.0536	426422	None
4	226.8227	553245	None
5	223.2278	619103	None
6	222.6031	478274	None
7	222.5990	493509	None
8	226.8046	510971	None
9	227.4216	473871	None
10	228.1121	465884	None
11	231.3567	435723	None
12	232.3350	193487	None

Combined data:

	Date	open	high	low	close	volume \
0	2023-07-28 04:00:00	129.690	133.010	129.3300	132.21	46269781.0
1	2023-07-31 04:00:00	133.200	133.870	132.3800	133.68	41901516.0
2	2023-08-01 04:00:00	133.550	133.690	131.6199	131.69	42250989.0
3	2023-08-02 04:00:00	130.154	130.230	126.8200	128.21	50988614.0
4	2023-08-03 04:00:00	127.480	129.840	126.4100	128.91	90855736.0
..	...	...	...	...	...	...
601	2025-12-18 05:00:00	225.705	229.225	224.4100	226.76	50267599.0
602	2025-12-19 05:00:00	226.760	229.125	225.5800	227.35	85539391.0
603	2025-12-22 05:00:00	228.610	229.480	226.7100	228.43	32189837.0
604	2025-12-23 05:00:00	229.055	232.445	228.7300	232.14	29230205.0
605	2025-12-24 05:00:00	232.130	232.950	231.3300	232.38	11392602.0

	vwap	transactions	otc
0	131.8837	413438	None
1	133.3410	406644	None
2	132.2470	385743	None
3	128.3973	532942	None
4	131.4941	746639	None
..	...	...	...
601	226.8046	510971	None

```

602  227.4216      473871  None
603  228.1121      465884  None
604  231.3567      435723  None
605  232.3350      193487  None

```

[606 rows x 9 columns]

Exporting AMZN day data to Excel...

Exporting AMZN day data to Pickle...

The first and last date of day data for AMZN is:

```

          Date    open    high    low   close    volume    vwap  \
0 2023-07-28 04:00:00  129.69  133.01  129.33  132.21  46269781.0  131.8837

```

```

    transactions    otc
0           413438  None

```

```

          Date    open    high    low   close    volume    vwap  \
605 2025-12-24 05:00:00  232.13  232.95  231.33  232.38  11392602.0  232.335

```

```

    transactions    otc
605           193487  None

```

Number of rows after data update: 606

Number of rows added during update: 17

Polygon data complete for AMZN day data.

-----

```

[8]: # Copy this <!-- INSERT_polygon_pull_data_HERE --> to index_temp.md
      export_track_md_deps(dep_file=dep_file, md_filename="polygon_pull_data.md",
      ↪content=df.to_markdown(floatfmt=".5f"))

```

Exported and tracked: polygon\_pull\_data.md