EDA Energy ETF Report

Tickers: UGA, UNG, USO

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UGA • Schema & Missingness (All Columns)

Column	dtype	non_null	missing	missing_%	unique	sample
Adj Close|UGA	float64	1255	0	0.0	980	28.88
Close|UGA	float64	1255	0	0.0	980	28.88
High|UGA	float64	1255	0	0.0	978	28.91
Low|UGA	float64	1255	0	0.0	989	28.56
Open|UGA	float64	1255	0	0.0	994	28.63
Volume|UGA	int64	1255	0	0.0	692	44900.0
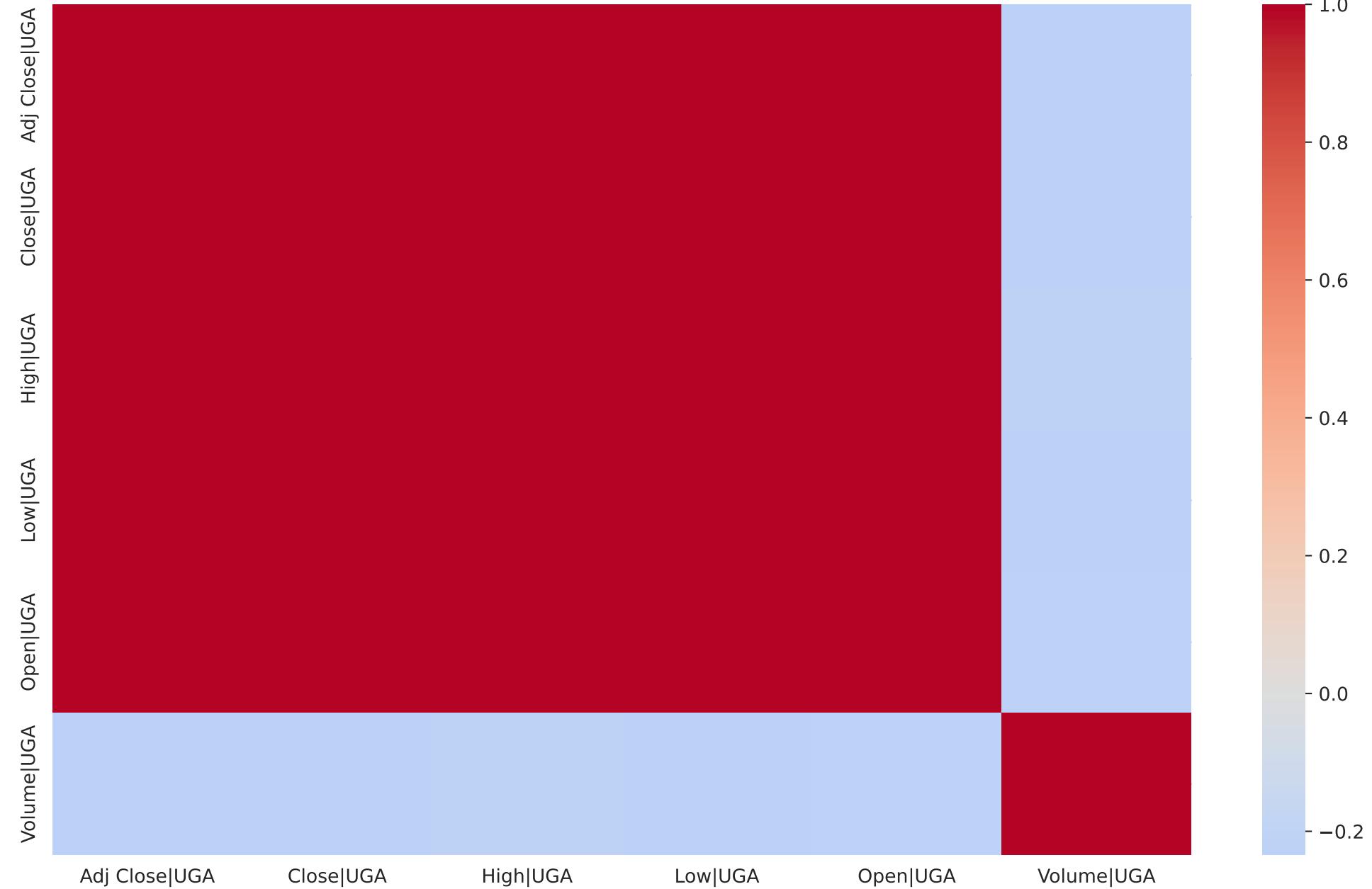
UGA • Numeric Quality & Ranges

Column	non_null	missing	missing_%	zeros	zeros_%	negatives	negatives_%	min	p01	q1	median	mean	q3	p99	max	std
Adj Close|UGA	1255	0	0.0	0	0.0	0	0.0	28.31	30.9724	54.88	61.23	57.553	64.68	74.6522	80.06	11.4829
Close|UGA	1255	0	0.0	0	0.0	0	0.0	28.31	30.9724	54.88	61.23	57.553	64.68	74.6522	80.06	11.4829
High|UGA	1255	0	0.0	0	0.0	0	0.0	28.63	31.3754	55.715	61.75	58.1118	65.245	75.3738	80.29	11.5829
Low|UGA	1255	0	0.0	0	0.0	0	0.0	28.3	30.5224	54.05	60.64	56.9414	64.22	73.8284	79.12	11.3827
Open|UGA	1255	0	0.0	0	0.0	0	0.0	28.54	30.9094	54.99	61.18	57.5404	64.69	74.8106	79.31	11.4877
Volume|UGA	1255	0	0.0	0	0.0	0	0.0	1700.0	4654.0	16350.0	30800.0	48053.5171	57000.0	277028.0	570500.0	56109.4825
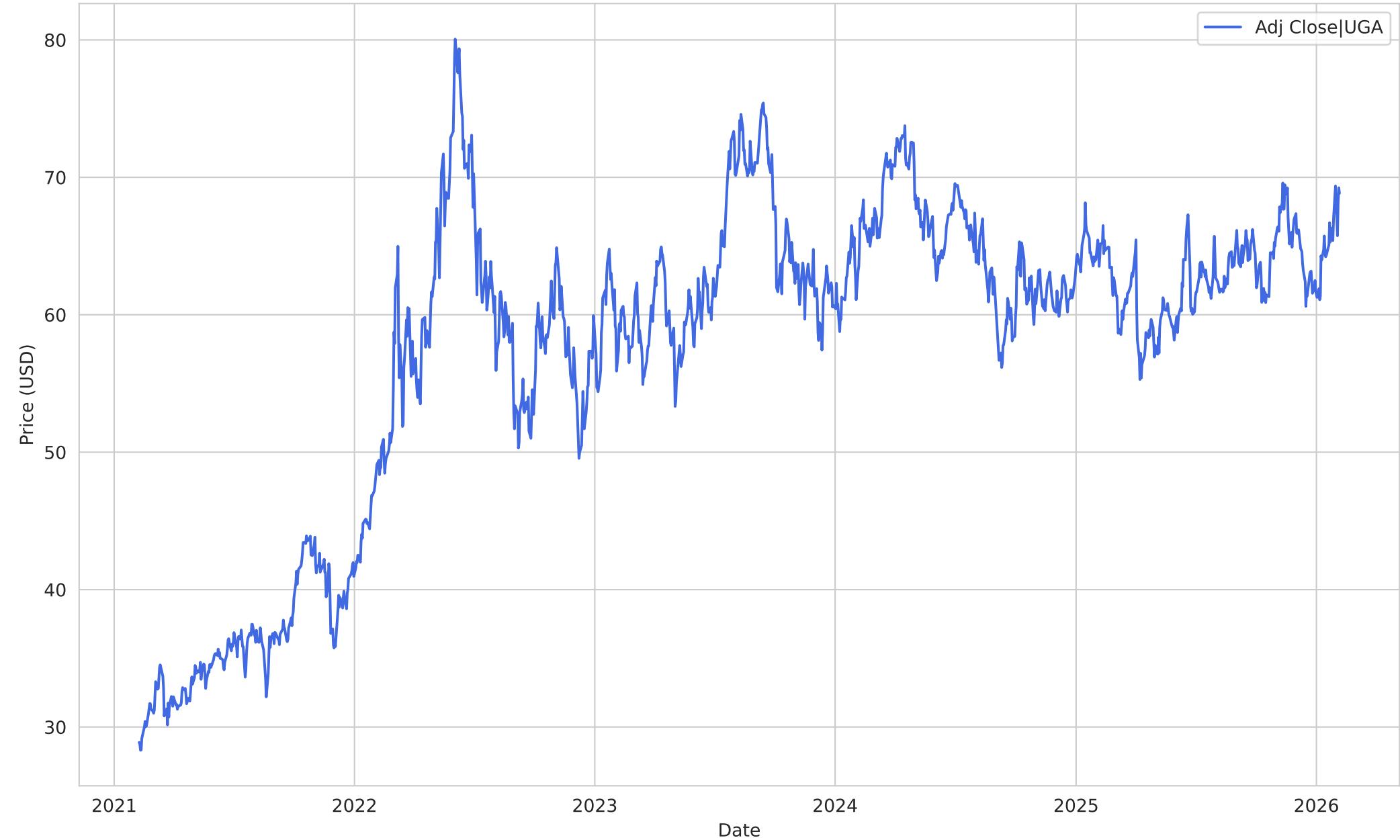
UGA • Numeric Overview (Describe)

| Variable	count	mean	std	min	1%	5%	25%	50%	75%	95%	99%	max
Adj Close|UGA	1255.0	57.553	11.4829	28.31	30.9724	33.823	54.88	61.23	64.68	71.387	74.6522	80.06
Close|UGA	1255.0	57.553	11.4829	28.31	30.9724	33.823	54.88	61.23	64.68	71.387	74.6522	80.06
High|UGA	1255.0	58.1118	11.5829	28.63	31.3754	34.037	55.715	61.75	65.245	72.225	75.3738	80.29
Low|UGA	1255.0	56.9414	11.3827	28.3	30.5224	33.421	54.05	60.64	64.22	70.639	73.8284	79.12
Open|UGA	1255.0	57.5404	11.4877	28.54	30.9094	33.609	54.99	61.18	64.69	71.326	74.8106	79.31
Volume|UGA	1255.0	48053.5171	56109.4825	1700.0	4654.0	7600.0	16350.0	30800.0	57000.0	148020.0	277028.0	570500.0
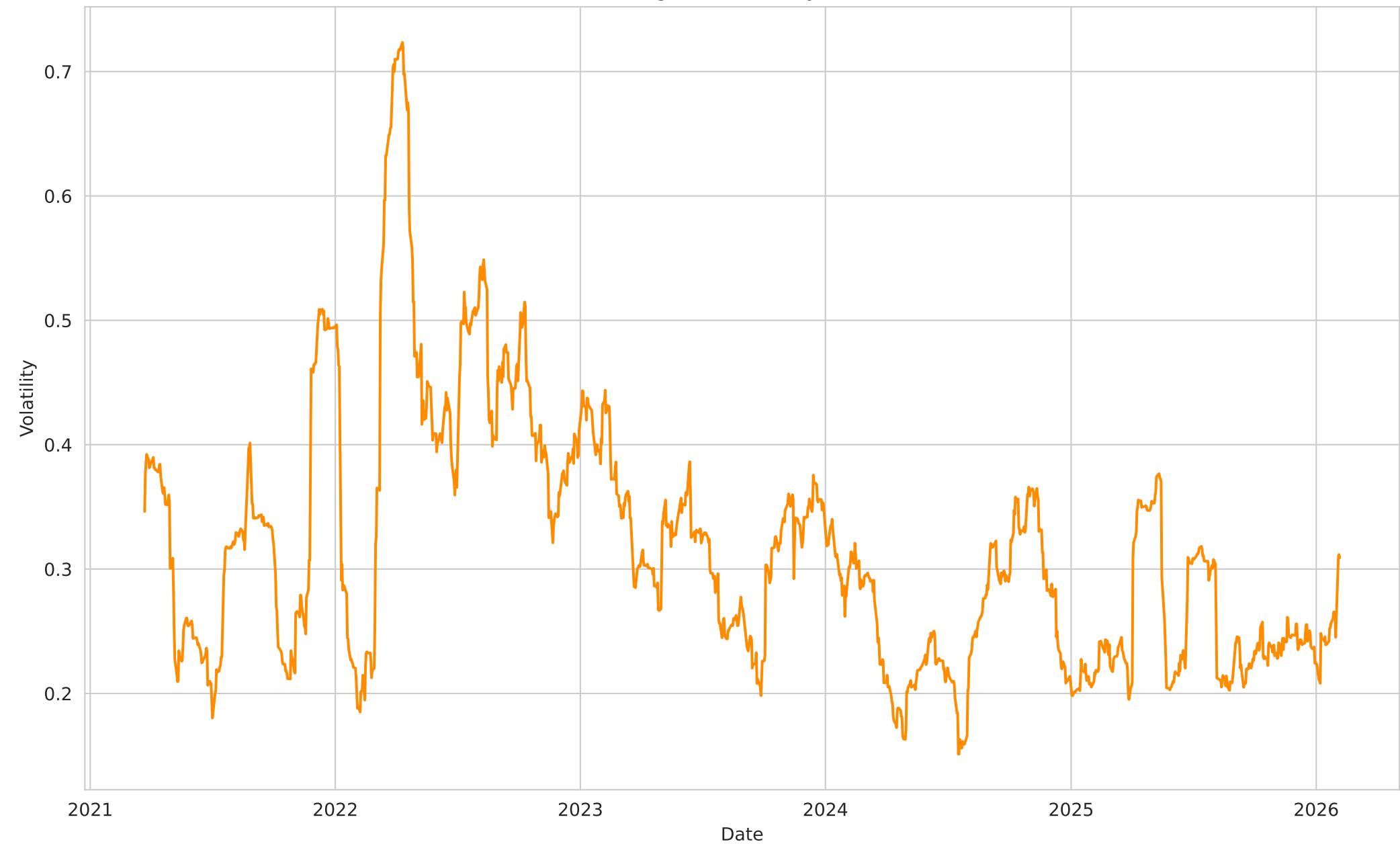
UGA • Correlation (numeric)
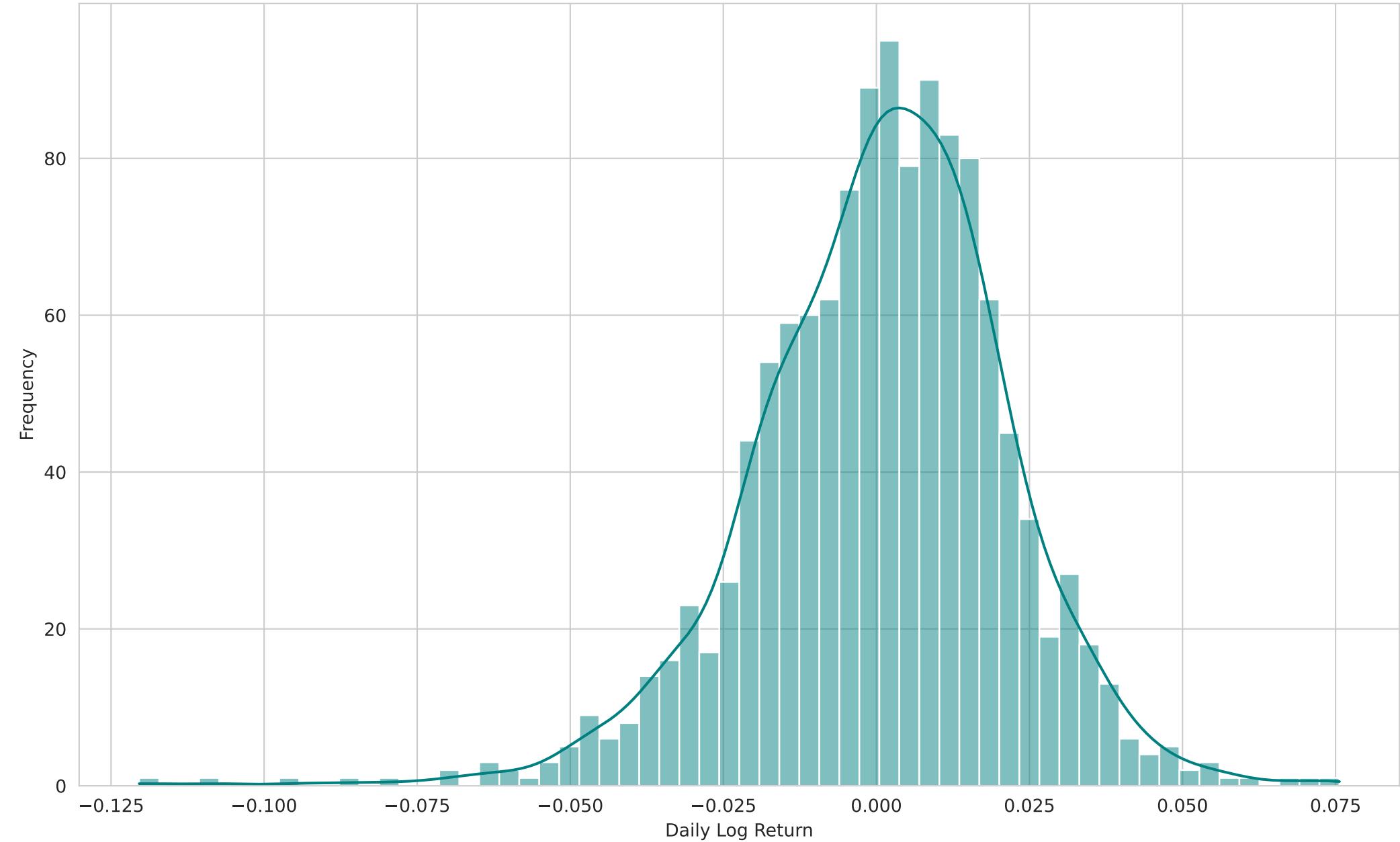
UGA • Adj Close|UGA Price

UGA • Rolling 30D Volatility (Annualized)

UGA • Daily Log Returns Distribution

UNG • Schema & Missingness (All Columns)

Column	dtype	non_null	missing	missing_%	unique	sample
Adj Close|UNG	float64	1255	0	0.0	1001	42.36
Close|UNG	float64	1255	0	0.0	1001	42.36
High|UNG	float64	1255	0	0.0	969	42.56
Low|UNG	float64	1255	0	0.0	996	41.68
Open|UNG	float64	1255	0	0.0	978	42.32
Volume|UNG	int64	1255	0	0.0	1250	1178350.0
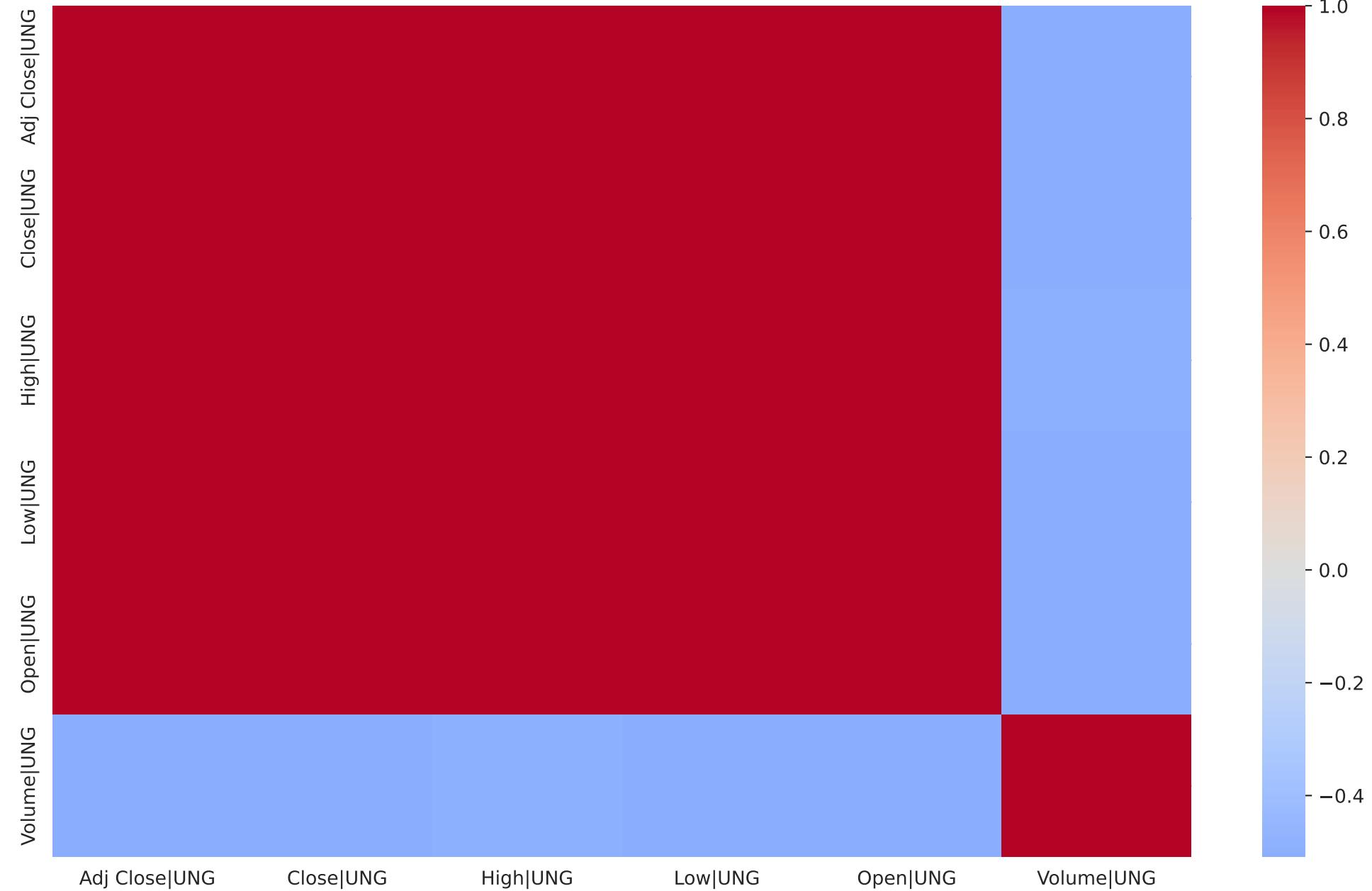
UNG • Numeric Quality & Ranges

Column	non_null	missing	missing_%	zeros	zeros_%	negatives	negatives_%	min	p01	q1	median	mean	q3	p99	max	std
Close|UNG	1255	0	0.0	0	0.0	0	0.0	10.24	11.8754	15.805	27.44	39.9259	56.06	126.7288	135.16	30.3388
Close|UNG	1255	0	0.0	0	0.0	0	0.0	10.24	11.8754	15.805	27.44	39.9259	56.06	126.7288	135.16	30.3388
High|UNG	1255	0	0.0	0	0.0	0	0.0	10.37	11.9708	16.09	28.0	40.7764	57.02	128.2304	138.0	31.1313
Low|UNG	1255	0	0.0	0	0.0	0	0.0	9.95	11.644	15.62	27.04	39.0499	55.38	122.4736	130.2	29.4811
Open|UNG	1255	0	0.0	0	0.0	0	0.0	10.2	11.7878	15.965	27.48	39.9227	56.0	125.6608	136.2	30.3323
Volume|UNG	1255	0	0.0	0	0.0	0	0.0	223850.0	329124.5	1867262.5	4602600.0	5650487.612	7300600020	7964448504	62330031	863.6822

UNG • Numeric Overview (Describe)

| Variable	count	mean	std	min	1%	5%	25%	50%	75%	95%	99%	max
Adj Close|UNG	1255.0	39.9259	30.3388	10.24	11.8754	12.858	15.805	27.44	56.06	107.852	126.7288	135.16
Close|UNG	1255.0	39.9259	30.3388	10.24	11.8754	12.858	15.805	27.44	56.06	107.852	126.7288	135.16
High|UNG	1255.0	40.7764	31.1313	10.37	11.9708	13.06	16.09	28.0	57.02	110.692	128.2304	138.0
Low|UNG	1255.0	39.0499	29.4811	9.95	11.644	12.607	15.62	27.04	55.38	105.392	122.4736	130.2
Open|UNG	1255.0	39.9227	30.3323	10.2	11.7878	12.832	15.965	27.48	56.0	107.44	125.6608	136.2
Volume|UNG	1255.0	5650487.6127	6831863.6822	223850.0	329124.5	553610.0	1867262.5	4602600.0	7300600.0	14196260.0	27964448.0	54623300.0

UNG • Correlation (numeric)
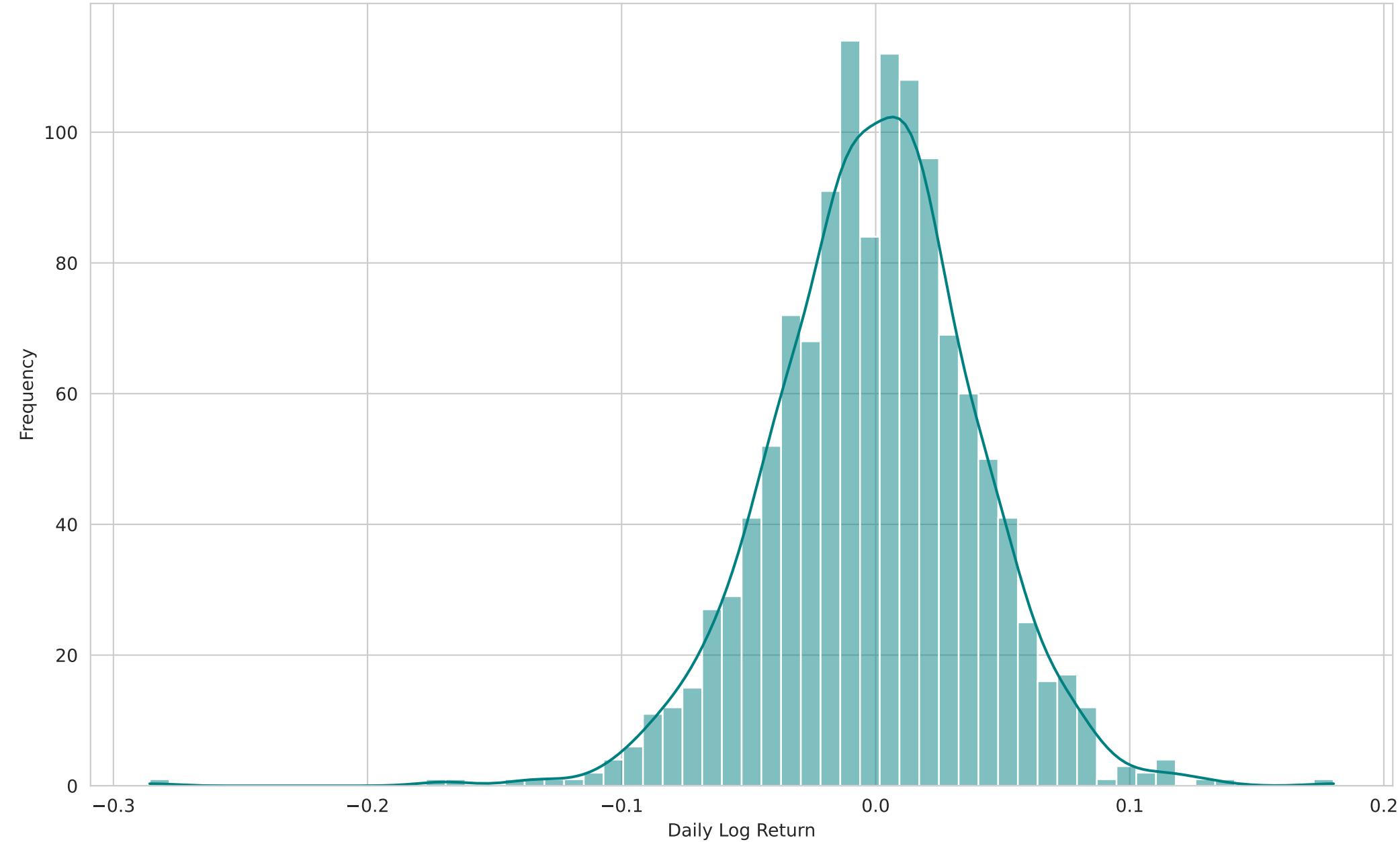
UNG • Adj Close|UNG Price

UNG • Rolling 30D Volatility (Annualized)

UNG • Daily Log Returns Distribution

USO • Schema & Missingness (All Columns)

Column	dtype	non_null	missing	missing_%	unique	sample
Adj Close|USO	float64	1255	0	0.0	1002	38.94
Close|USO	float64	1255	0	0.0	1002	38.94
High|USO	float64	1255	0	0.0	1024	38.98
Low|USO	float64	1255	0	0.0	1026	38.47
Open|USO	float64	1255	0	0.0	1010	38.47
Volume|USO	int64	1255	0	0.0	1246	4216200.0
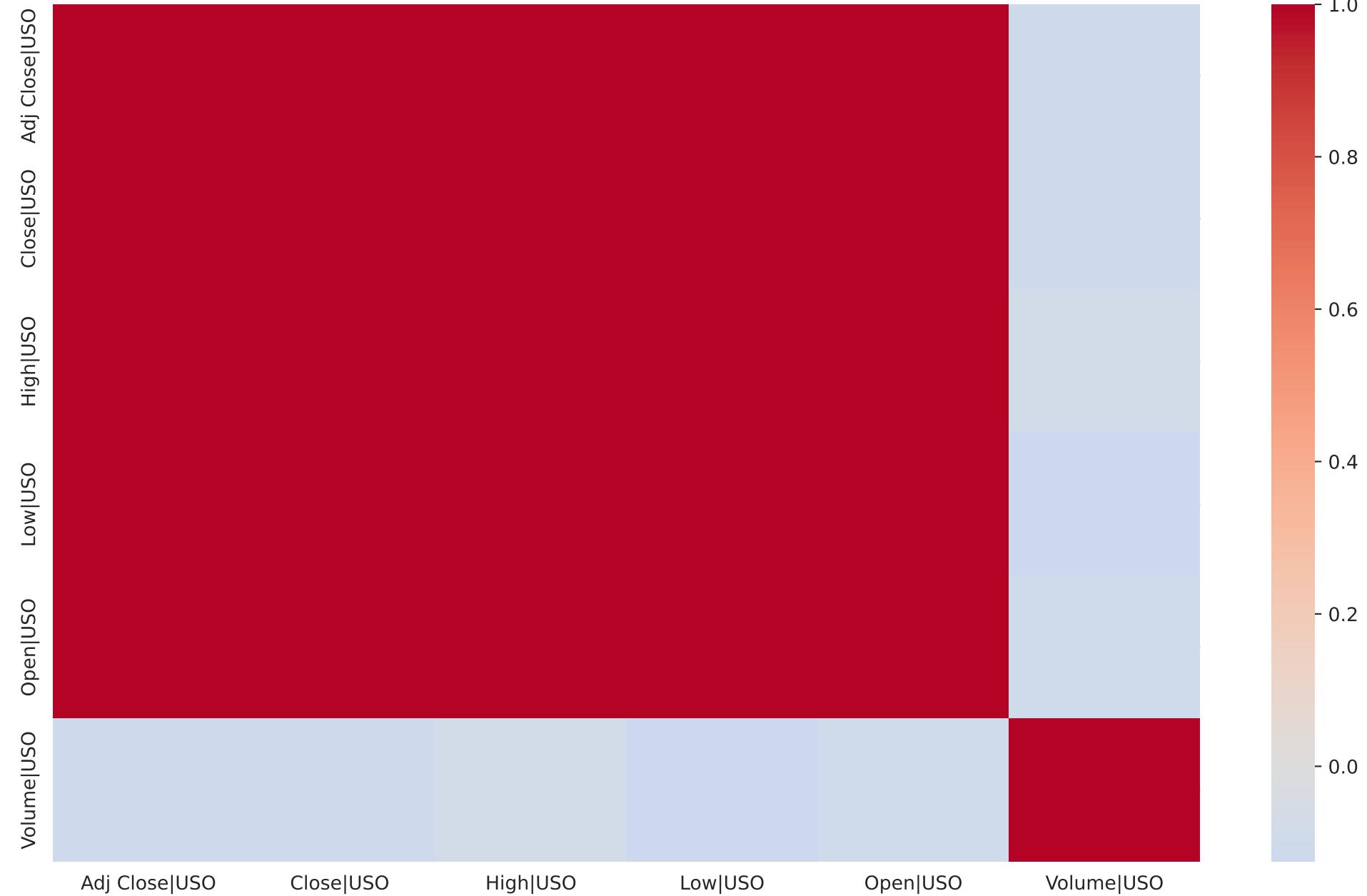
USO • Numeric Quality & Ranges

Column	non_null	missing	missing_%	zeros	zeros_%	negatives	negatives_%	min	p01	q1	median	mean	q3	p99	max	std
j Close|USO	1255	0	0.0	0	0.0	0	0.0	38.94	40.5024	64.37	71.24	68.0683	75.27	85.4646	91.99	10.8855
Close|USO	1255	0	0.0	0	0.0	0	0.0	38.94	40.5024	64.37	71.24	68.0683	75.27	85.4646	91.99	10.8855
High|USO	1255	0	0.0	0	0.0	0	0.0	38.98	41.0608	65.085	71.94	68.7967	76.11	87.3334	92.2	11.0103
Low|USO	1255	0	0.0	0	0.0	0	0.0	38.47	40.0916	63.56	70.45	67.3118	74.545	84.3814	90.72	10.7674
Open|USO	1255	0	0.0	0	0.0	0	0.0	38.47	40.6308	64.45	71.31	68.0945	75.36	86.1376	91.03	10.9084
Volume|USO	1255	0	0.0	0	0.0	0	0.0	734700.0	1388242.0	2945350.0	4143000	7099773.0395	5539700	17911856	50659489	10627.7901
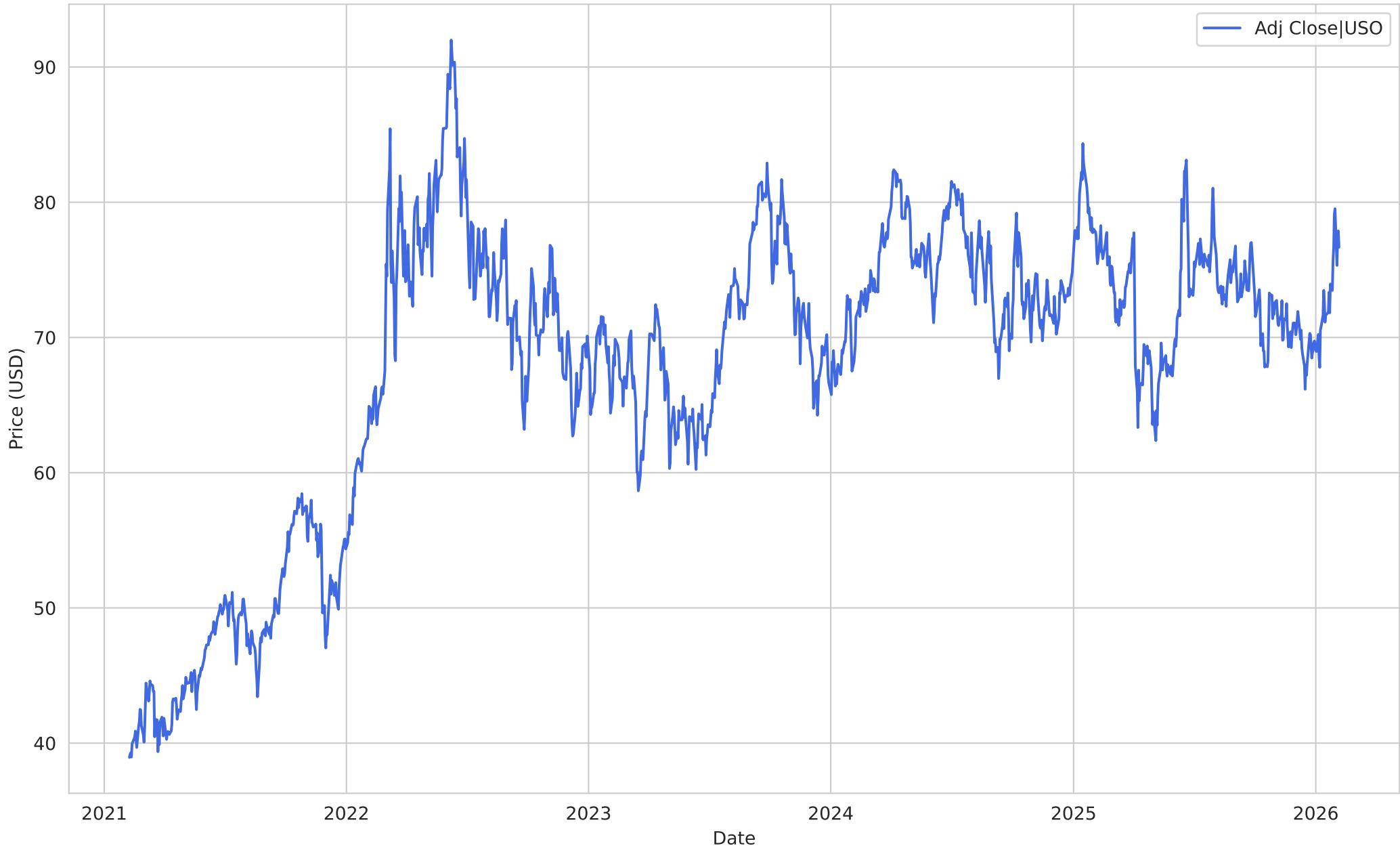
USO • Numeric Overview (Describe)

Variable	count	mean	std	min	1%	5%	25%	50%	75%	95%	99%	max
Adj Close|USO	1255.0	68.0683	10.8855	38.94	40.5024	44.424	64.37	71.24	75.27	81.061	85.4646	91.99
Close|USO	1255.0	68.0683	10.8855	38.94	40.5024	44.424	64.37	71.24	75.27	81.061	85.4646	91.99
High|USO	1255.0	68.7967	11.0103	38.98	41.0608	44.63	65.085	71.94	76.11	81.759	87.3334	92.2
Low|USO	1255.0	67.3118	10.7674	38.47	40.0916	43.882	63.56	70.45	74.545	80.09	84.3814	90.72
Open|USO	1255.0	68.0945	10.9084	38.47	40.6308	44.108	64.45	71.31	75.36	81.103	86.1376	91.03
Volume|USO	1255.0	4799773.0339	5119627.7901	734700.0	1388242.0	1800750.0	2945350.0	4143000.0	5539700.0	9546880.0	17911856.0	50659400.0
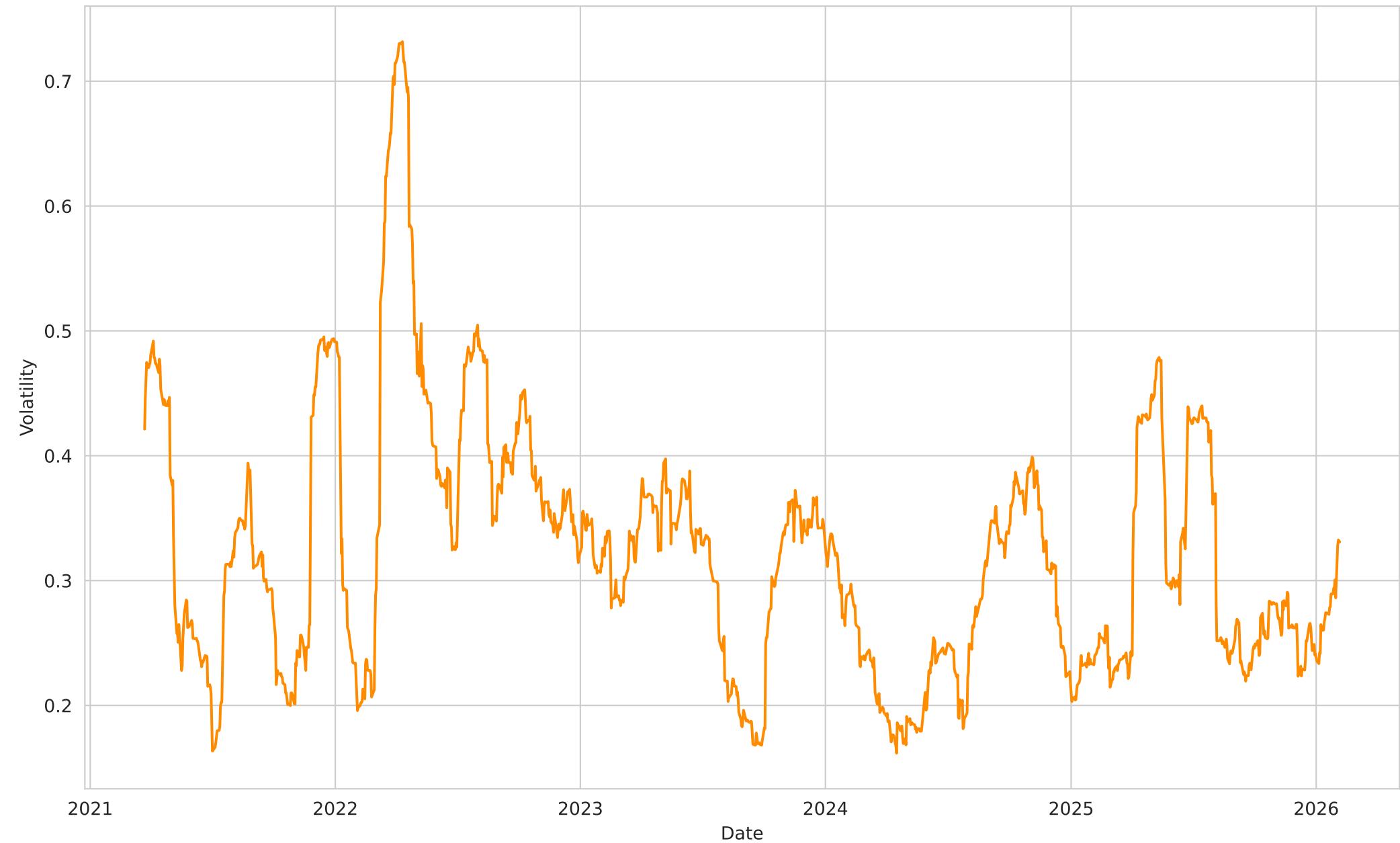
USO • Correlation (numeric)
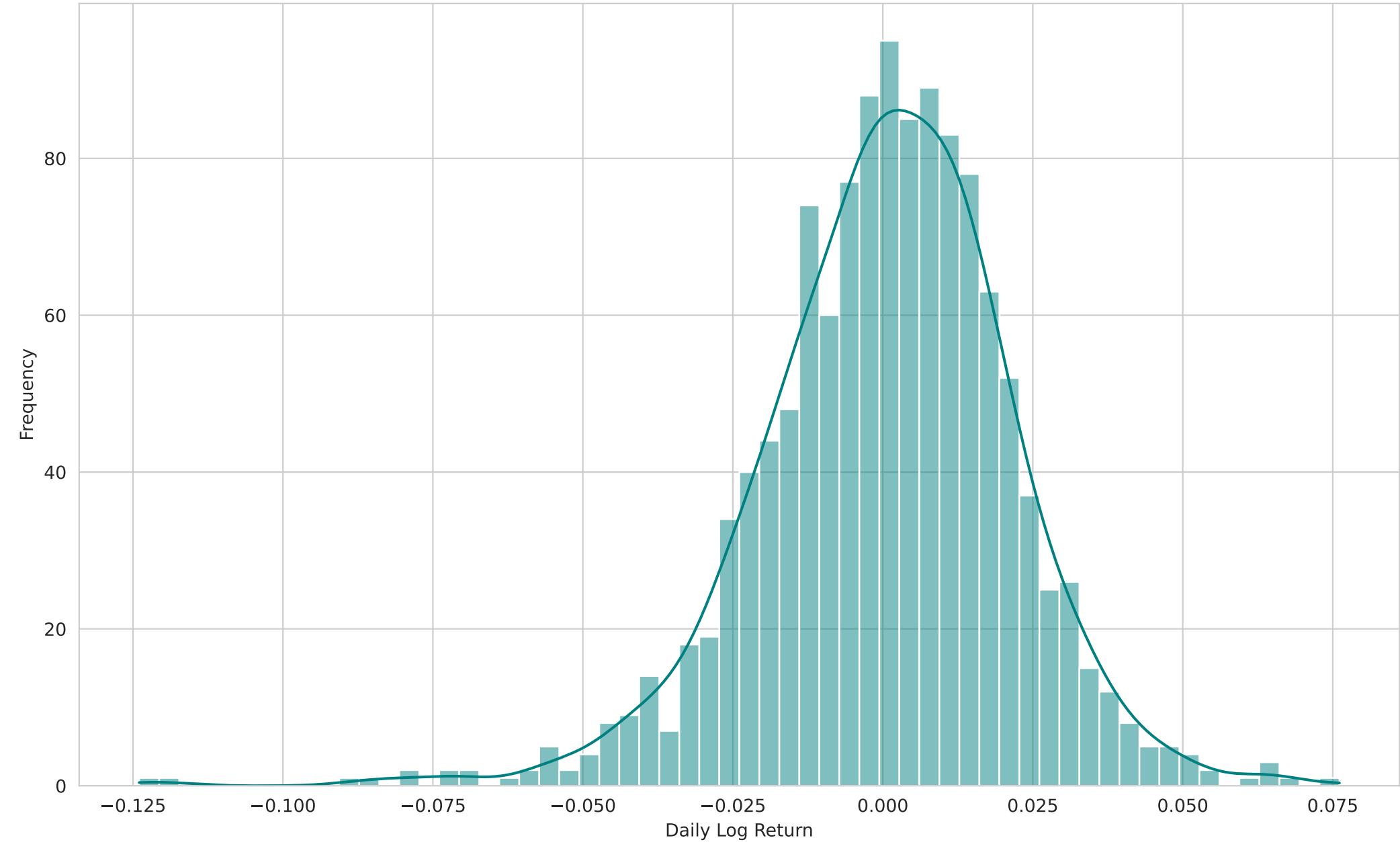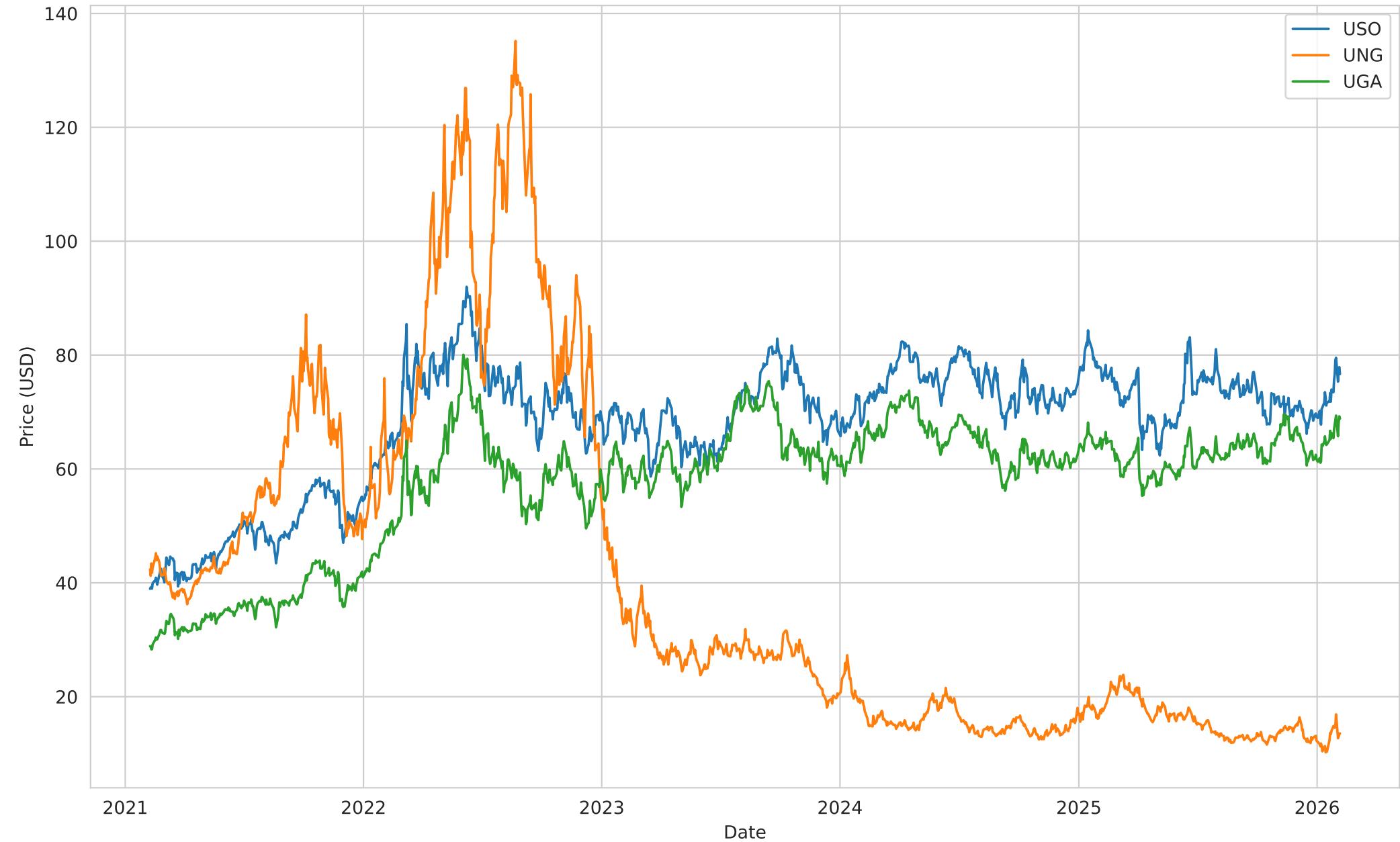
USO • Rolling 30D Volatility (Annualized)

USO • Daily Log Returns Distribution

Cross-Ticker • Close/Adj Close Prices

Cross-Ticker • Daily Log Returns Correlation