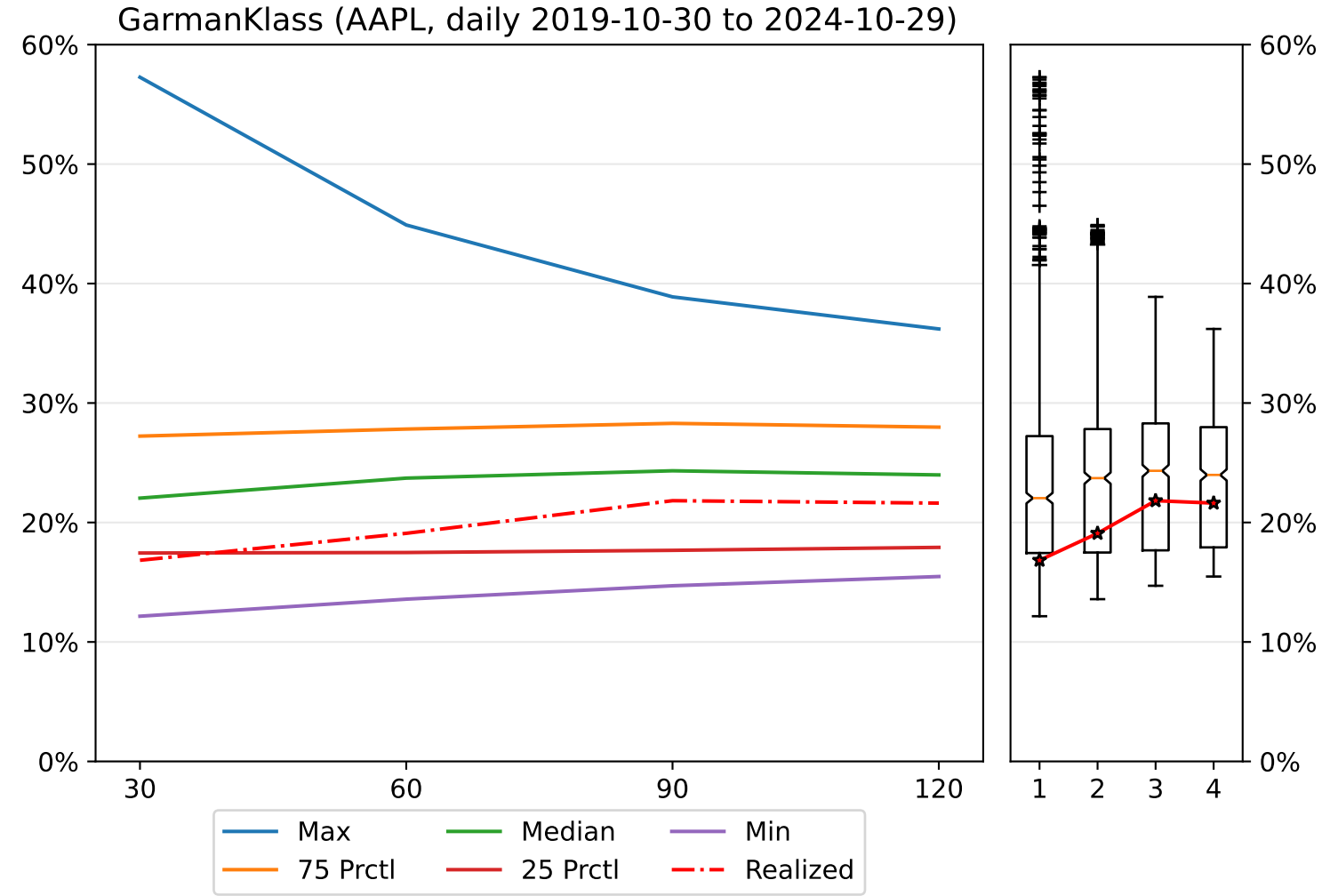
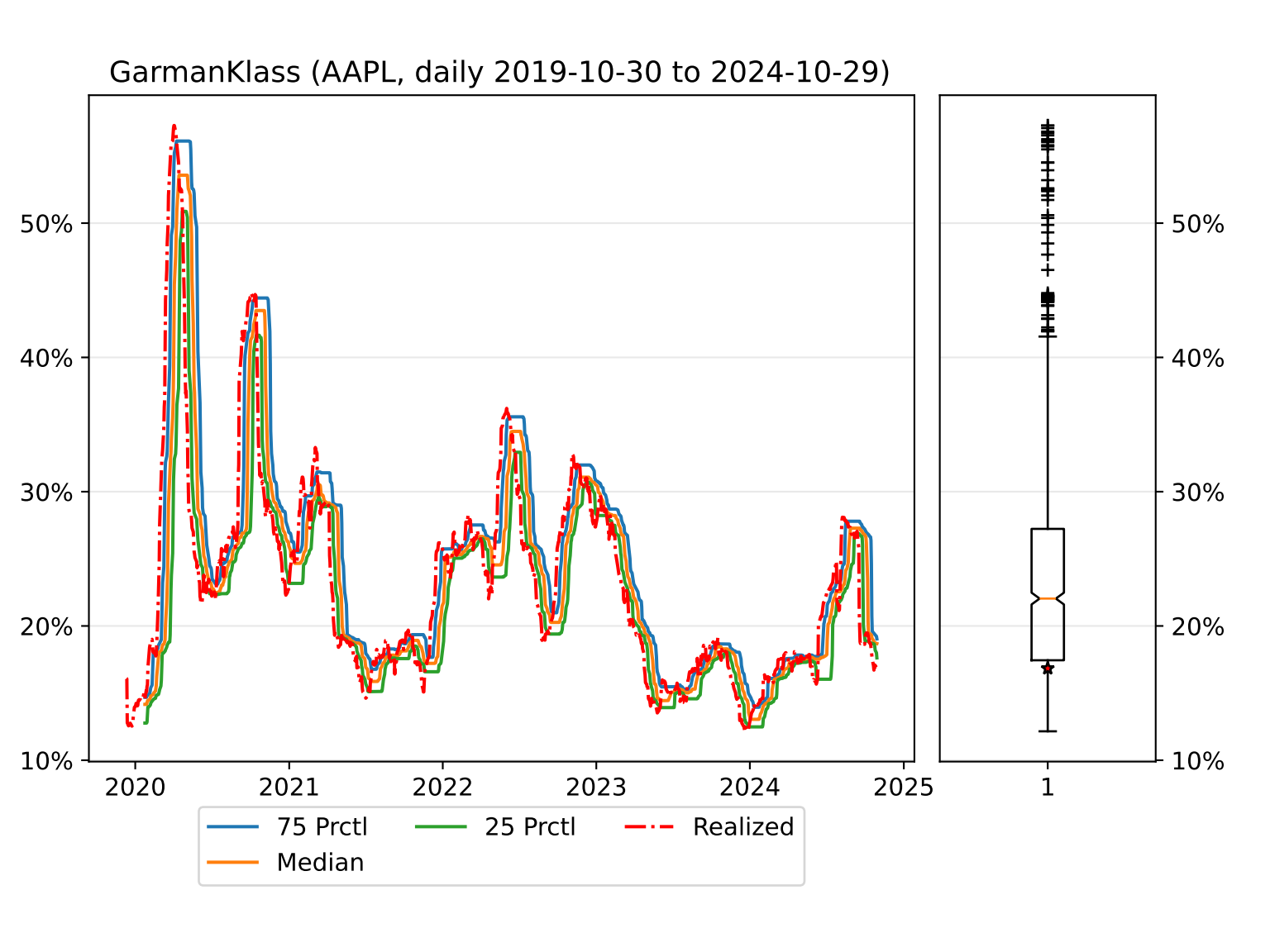
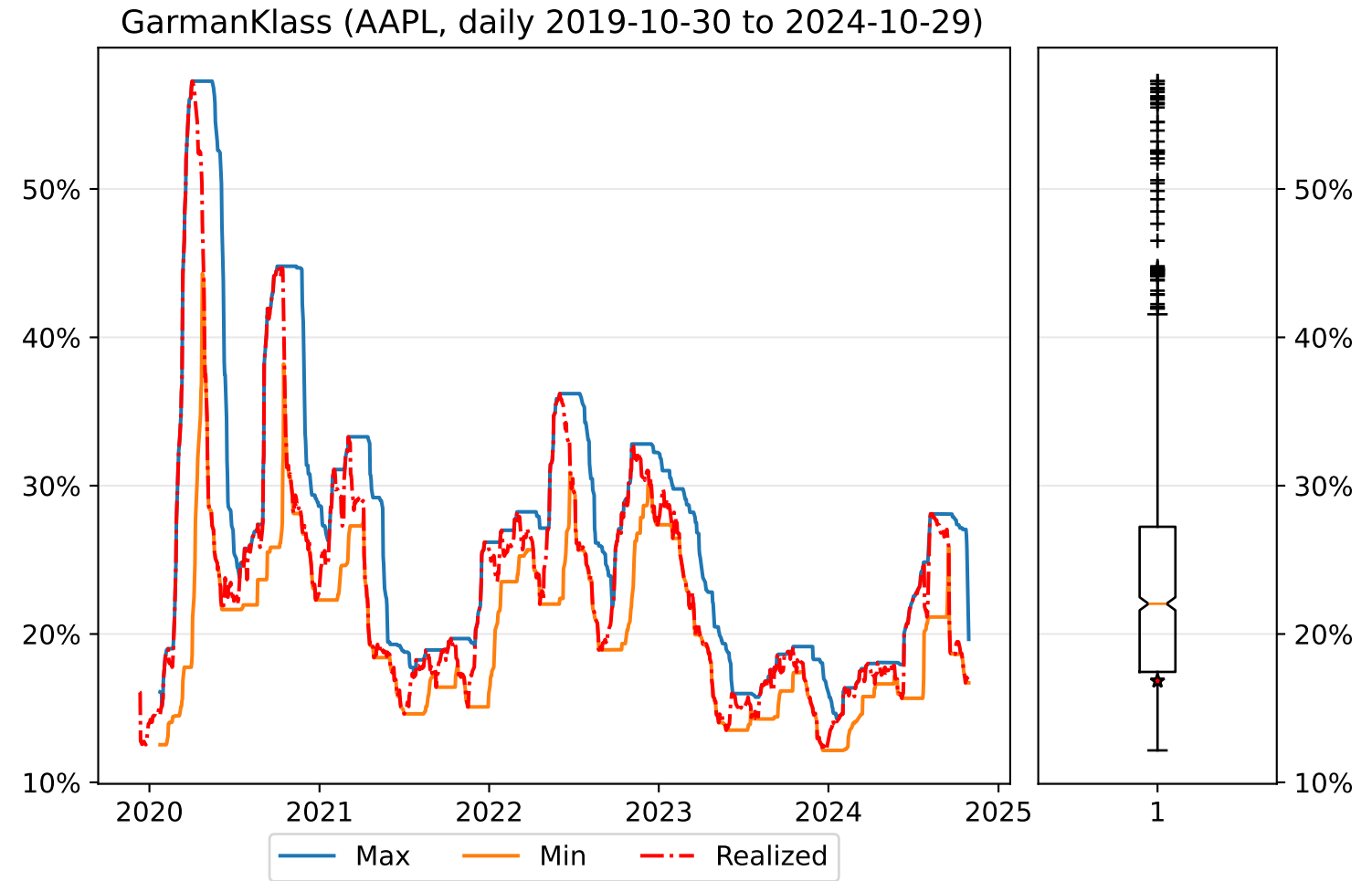
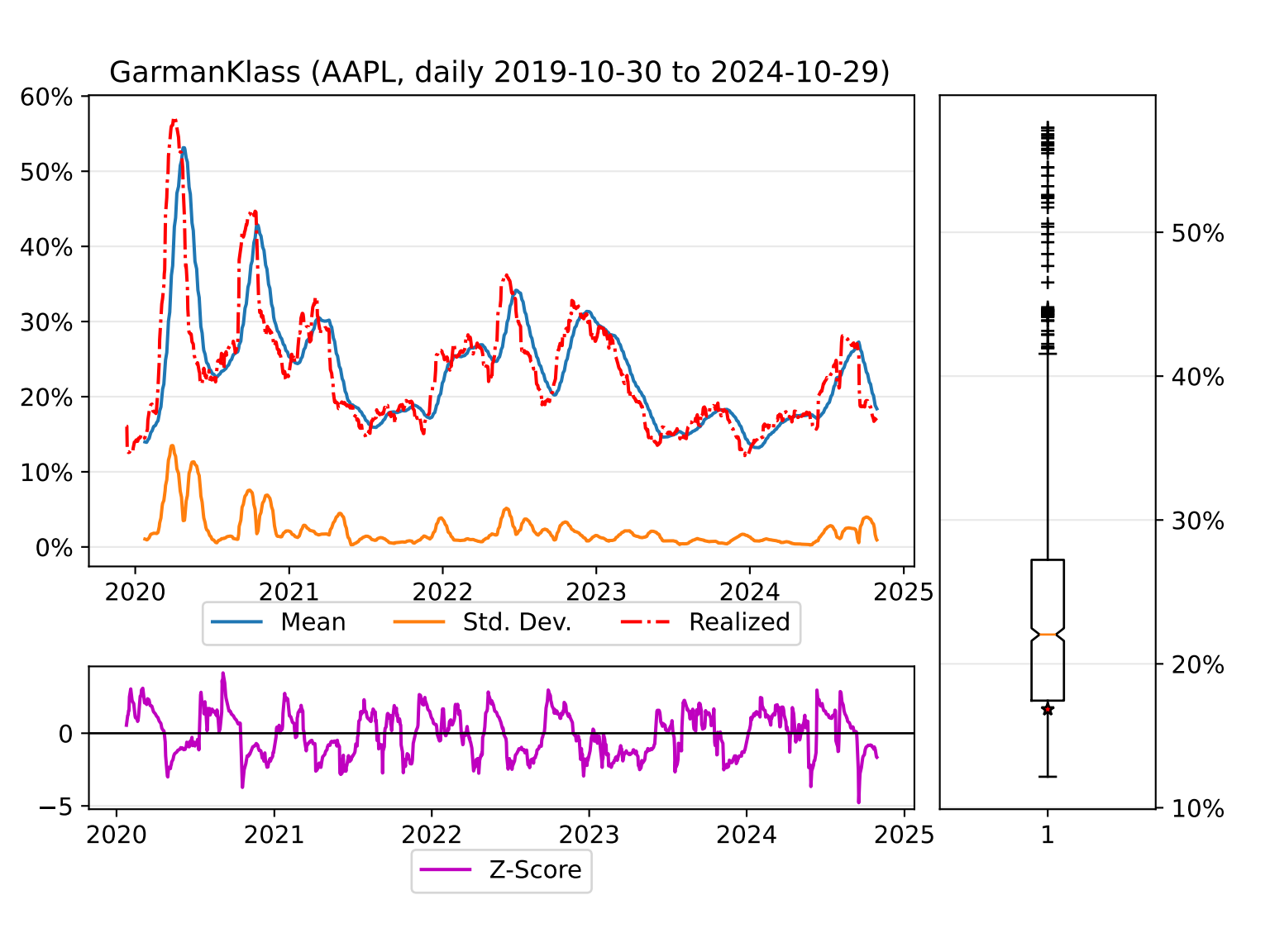
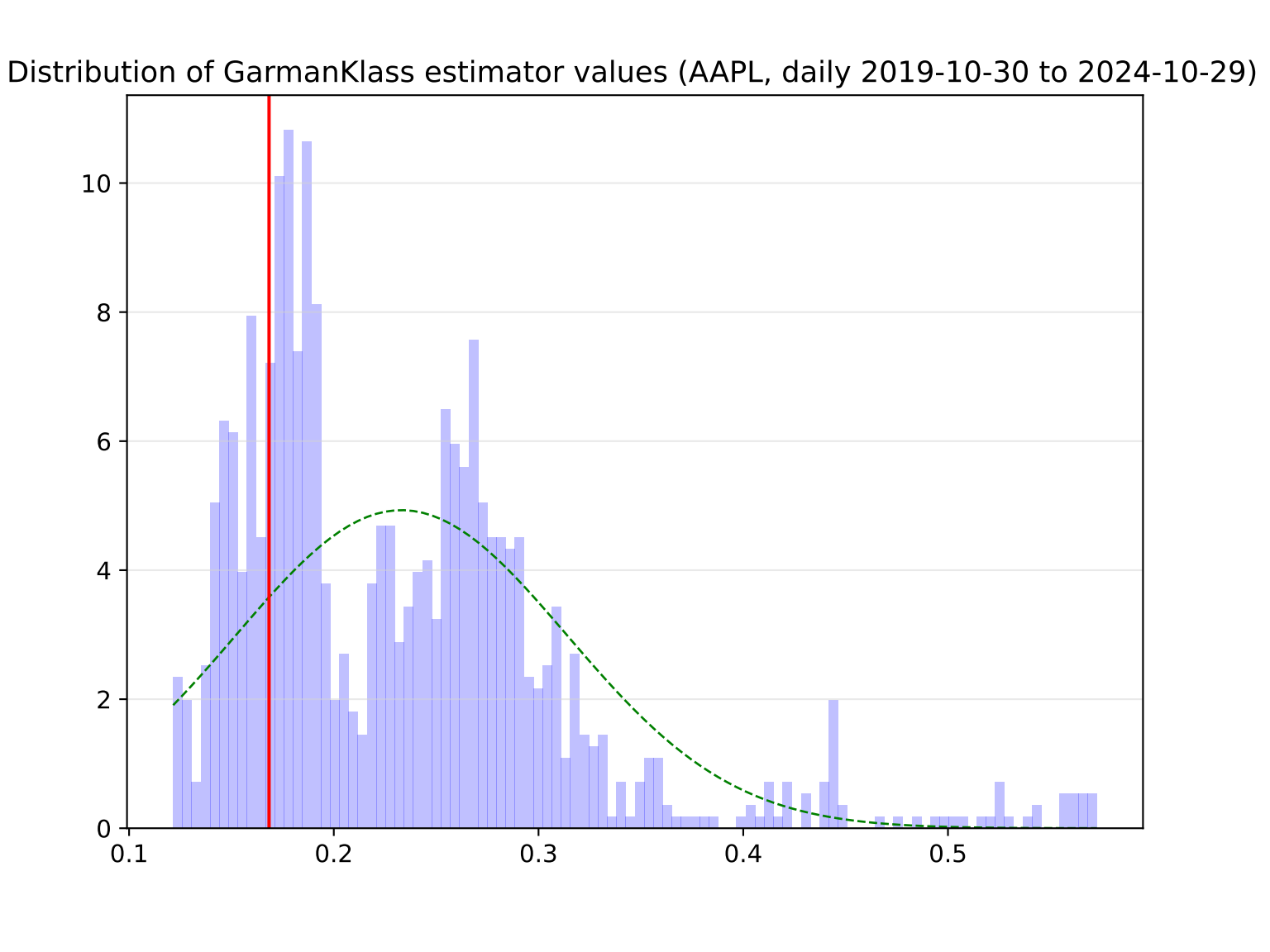
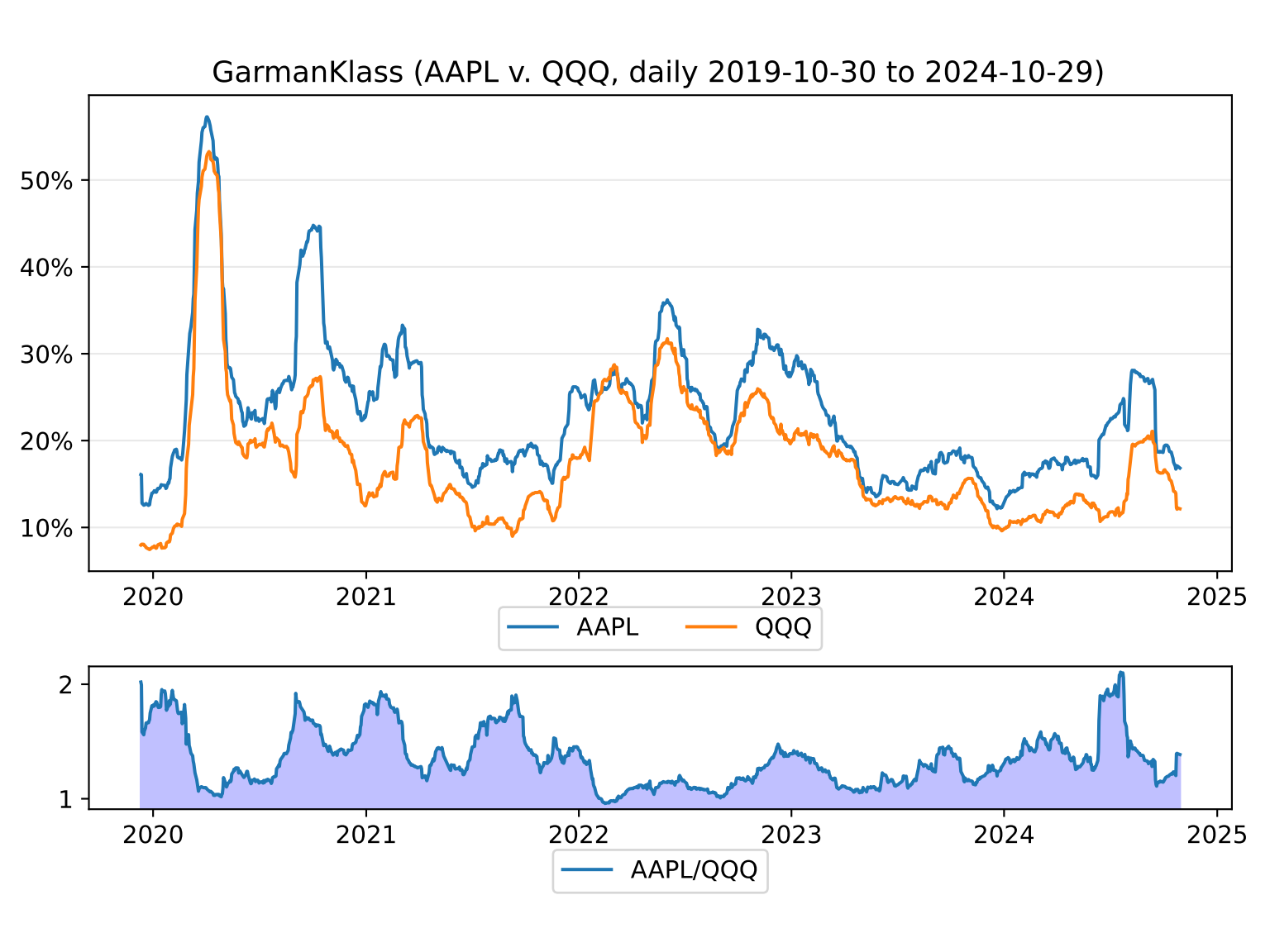

GarmanKlass (AAPL, daily 2019-10-30 to 2024-10-29)
60%
50%
40%
30%
20%
10%
0%
30
60
90
120
1
2
3
4
Max
75 Prctl
Median
25 Prctl
Min
Realized

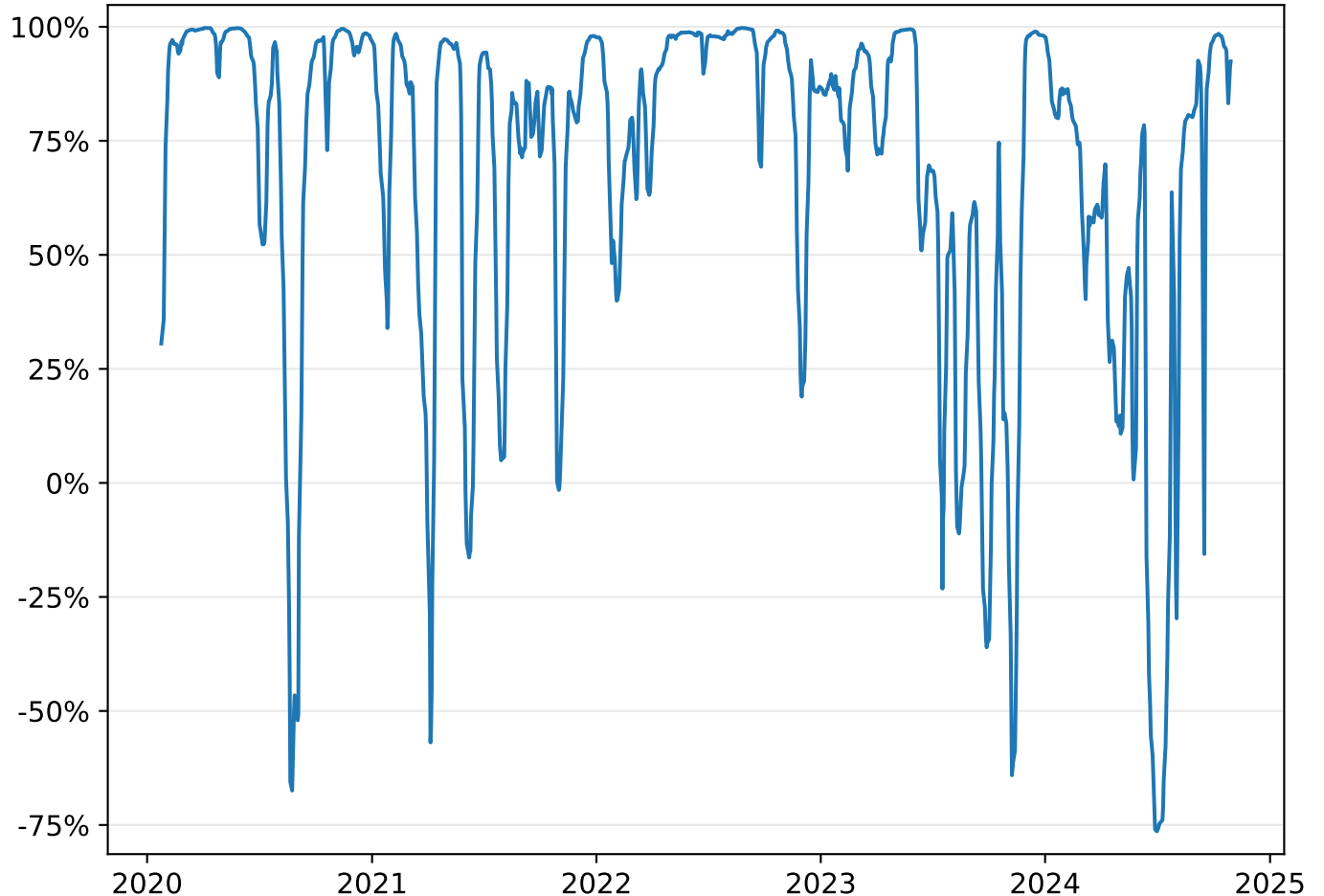

GarmanKlass (AAPL, daily 2019-10-30 to 2024-10-29)
50%
40%
30%
20%
10%
2020
2021
2022
2023
2024
2025
1
75 Prctl
Median
25 Prctl
Realized


GarmanKlass (AAPL, daily 2019-10-30 to 2024-10-29)
50%
40%
30%
20%
10%
2020
2021
2022
2023
2024
2025
1
Max
Min
Realized


GarmanKlass (AAPL, daily 2019-10-30 to 2024-10-29)
60%
50%
40%
30%
20%
10%
0%
2020
2021
2022
2023
2024
2025
Mean
Std. Dev.
Realized
0
−5
Z-Score
50%
40%
30%
20%
10%
1


Distribution of GarmanKlass estimator values (AAPL, daily 2019-10-30 to 2024-10-29)
0
2
4
6
8
10
0.1
0.2
0.3
0.4
0.5


GarmanKlass (AAPL v. QQQ, daily 2019-10-30 to 2024-10-29)
50%
40%
30%
20%
10%
2020
2021
2022
2023
2024
2025
AAPL
QQQ
2
1
2020
2021
2022
2023
2024
2025
AAPL/QQQ


GarmanKlass (Correlation of AAPL v. QQQ, daily 2019-10-30 to 2024-10-29)
100%
75%
50%
25%
0%
-25%
-50%
-75%
2020
2021
2022
2023
2024
2025

OLS Regression Results

Dep. Variable:	y	R-squared (uncentered):	0.970
Model:	OLS	Adj. R-squared (uncentered):	0.970
Method:	Least Squares	F-statistic:	4.024e+04
Date:	Tue, 29 Oct 2024	Prob (F-statistic):	0.00
Time:	23:05:32	Log-Likelihood:	2139.0
No. Observations:	1229	AIC:	-4276.
Df Residuals:	1228	BIC:	-4271.
Df Model:	1		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
x1	1.2526	0.006	200.592	0.000	1.240	1.265

Omnibus:	12.688	Durbin-Watson:	0.014
Prob(Omnibus):	0.002	Jarque-Bera (JB):	16.582
Skew:	0.126	Prob(JB):	0.000251
Kurtosis:	3.510	Cond. No.	1.00

Notes:
[1] R^2 is computed without centering (uncentered) since the model does not contain a constant.
[2] Standard Errors assume that the covariance matrix of the errors is correctly specified.