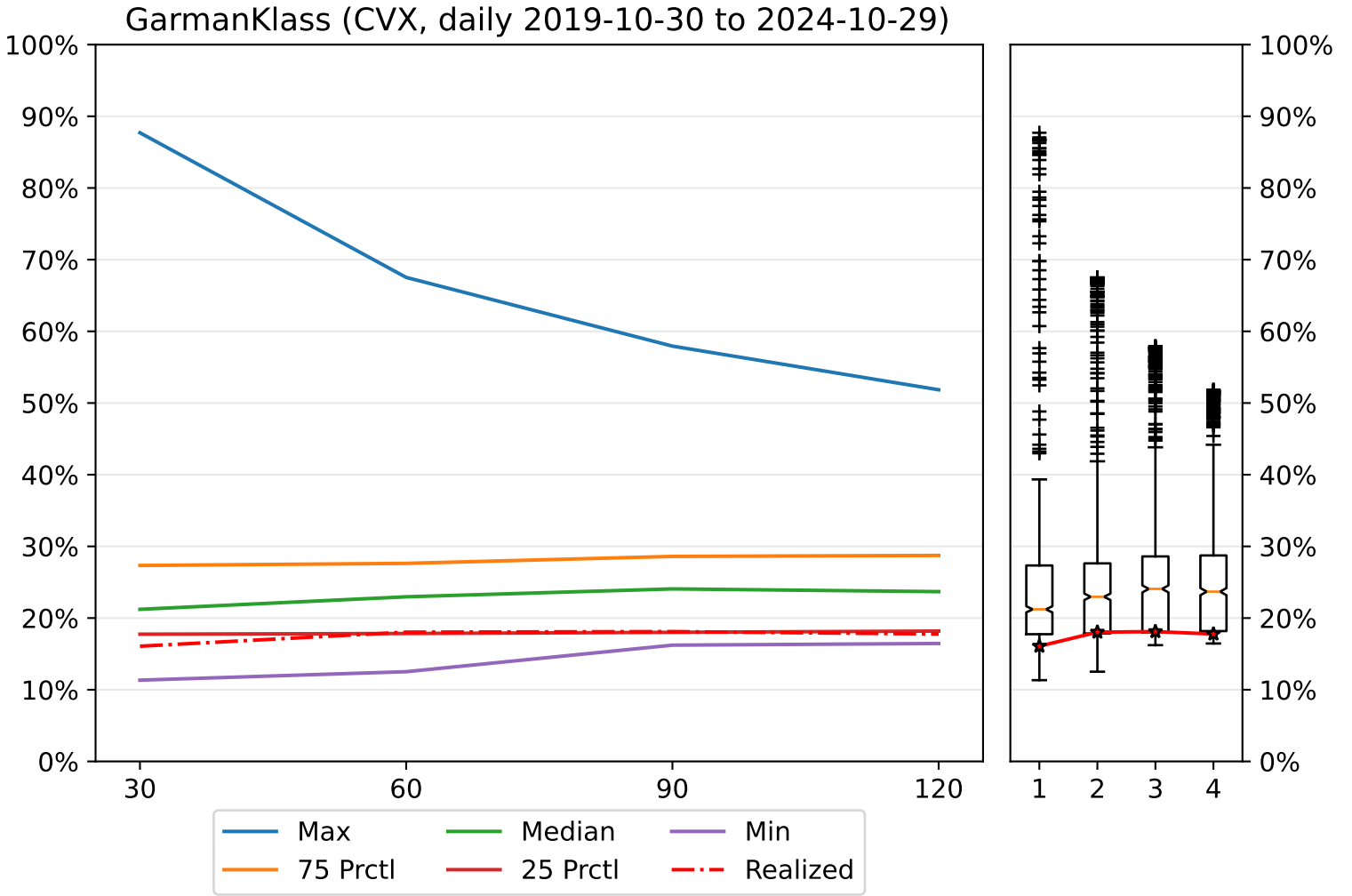
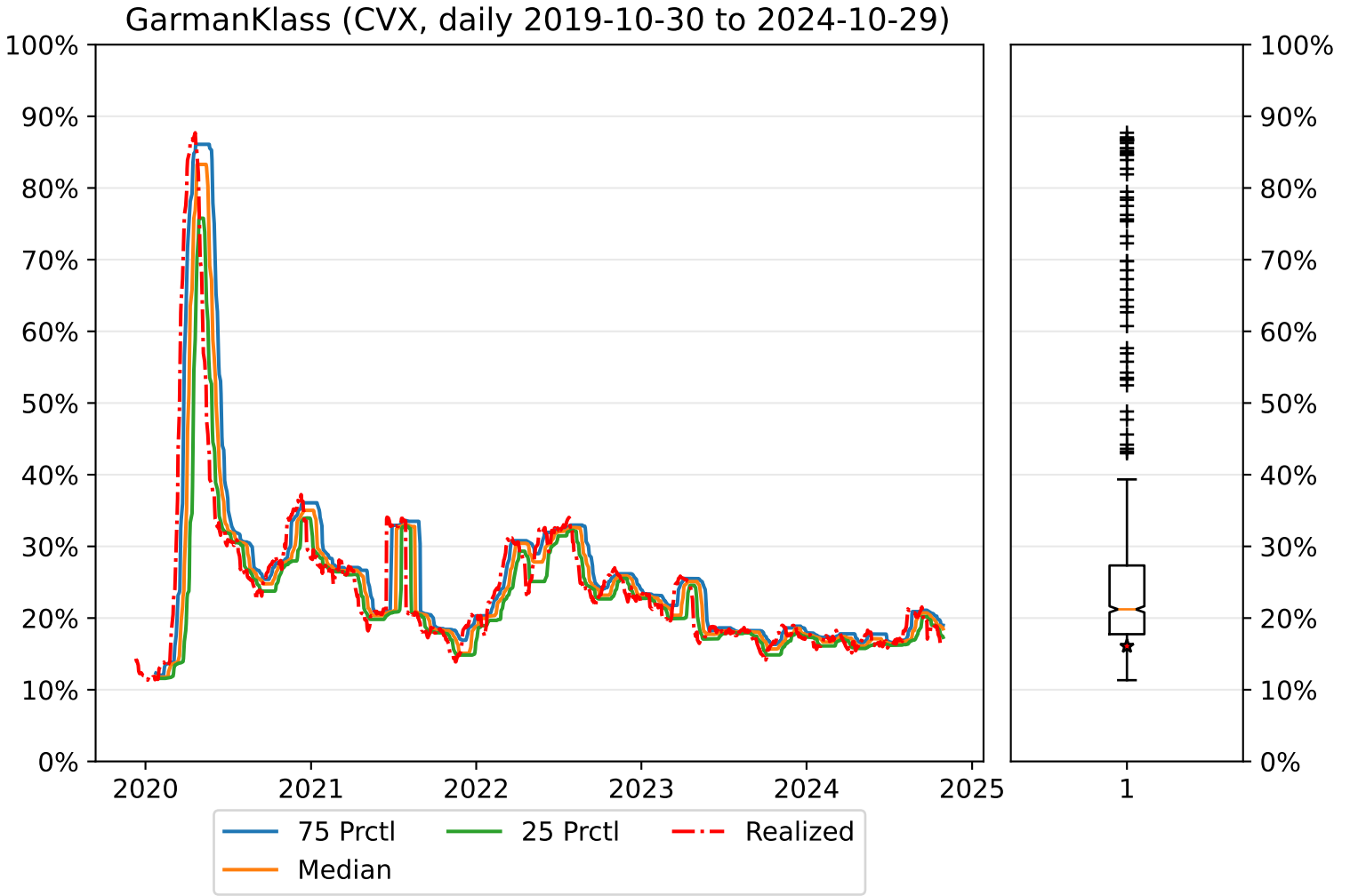
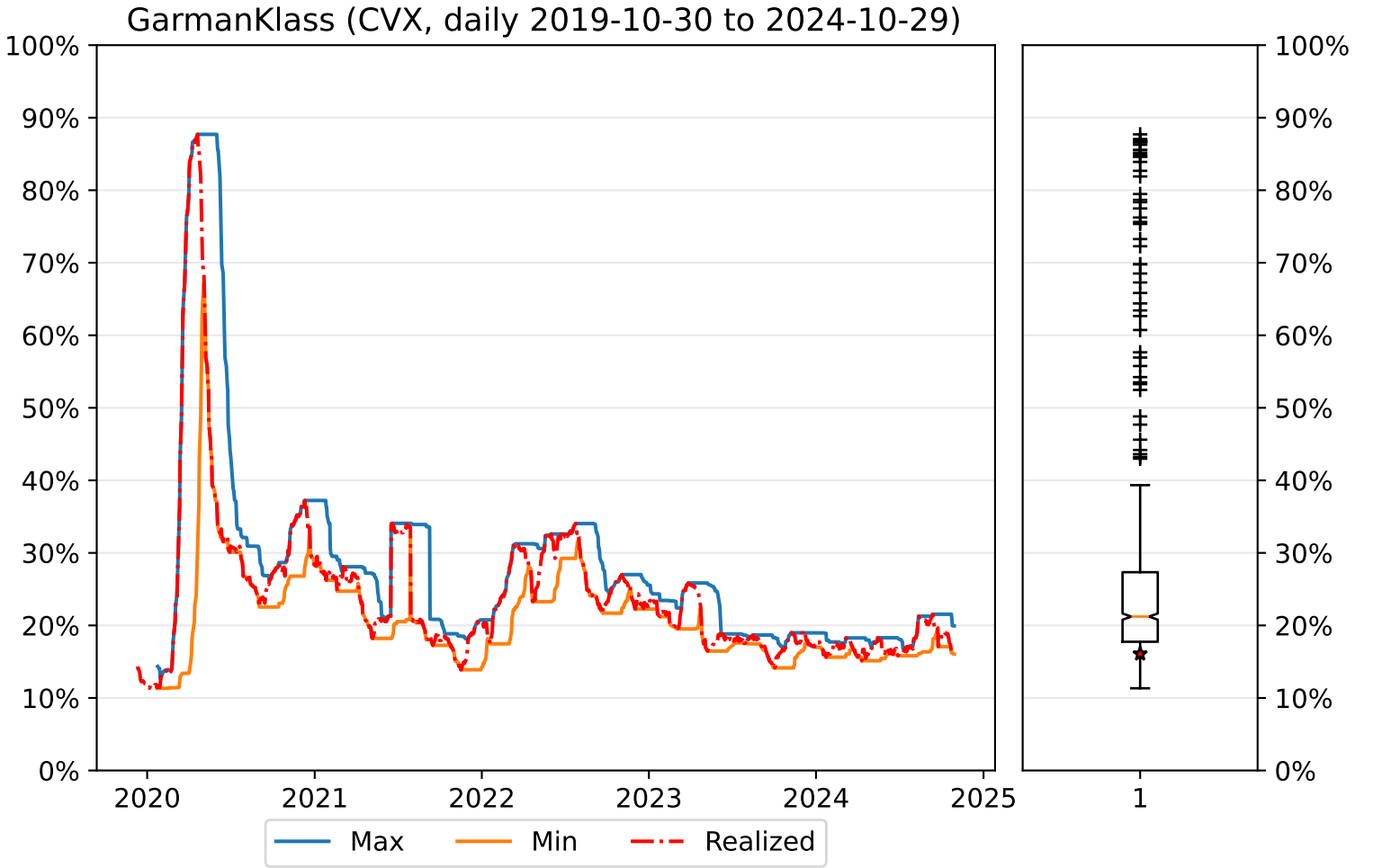
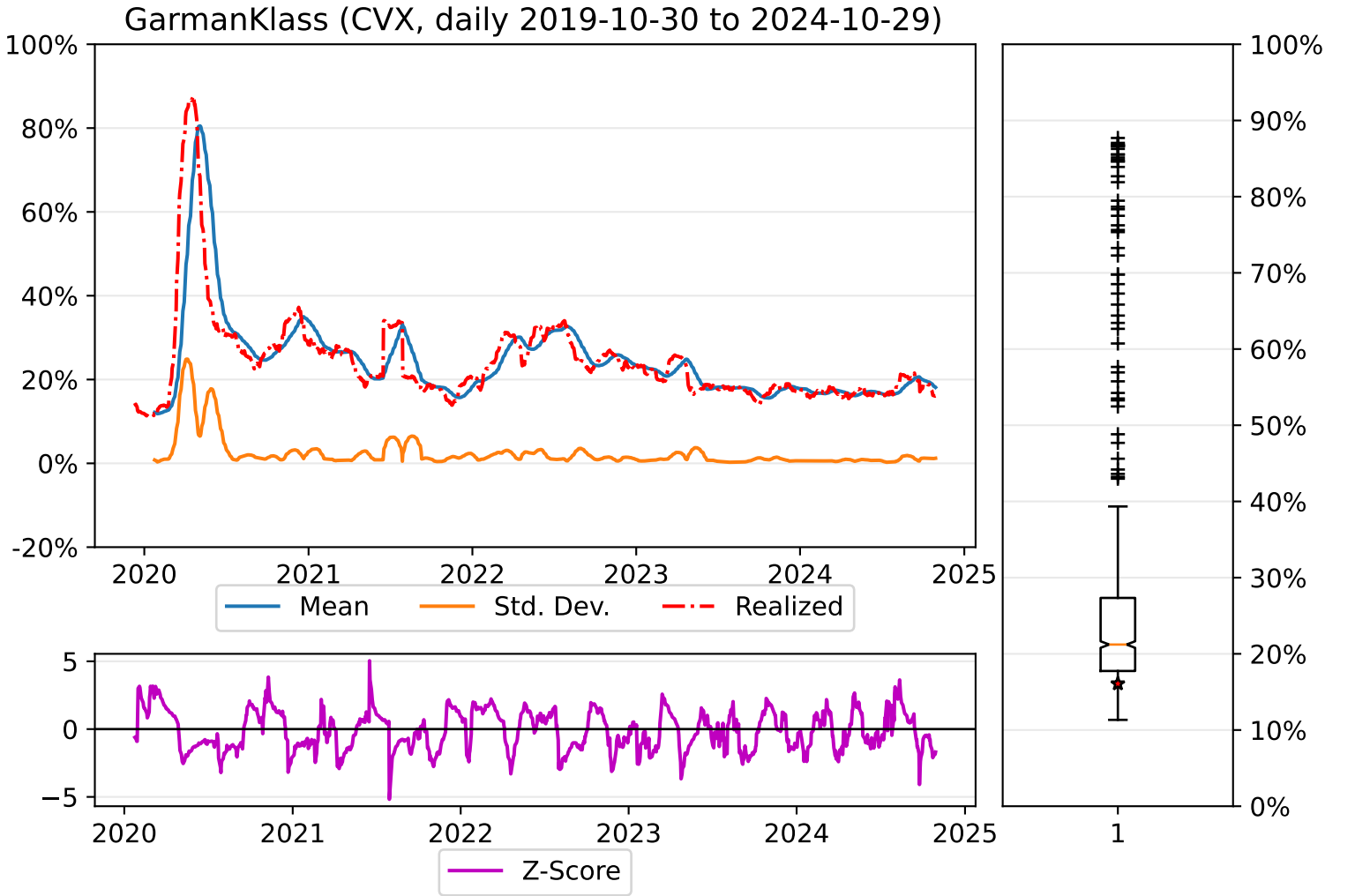
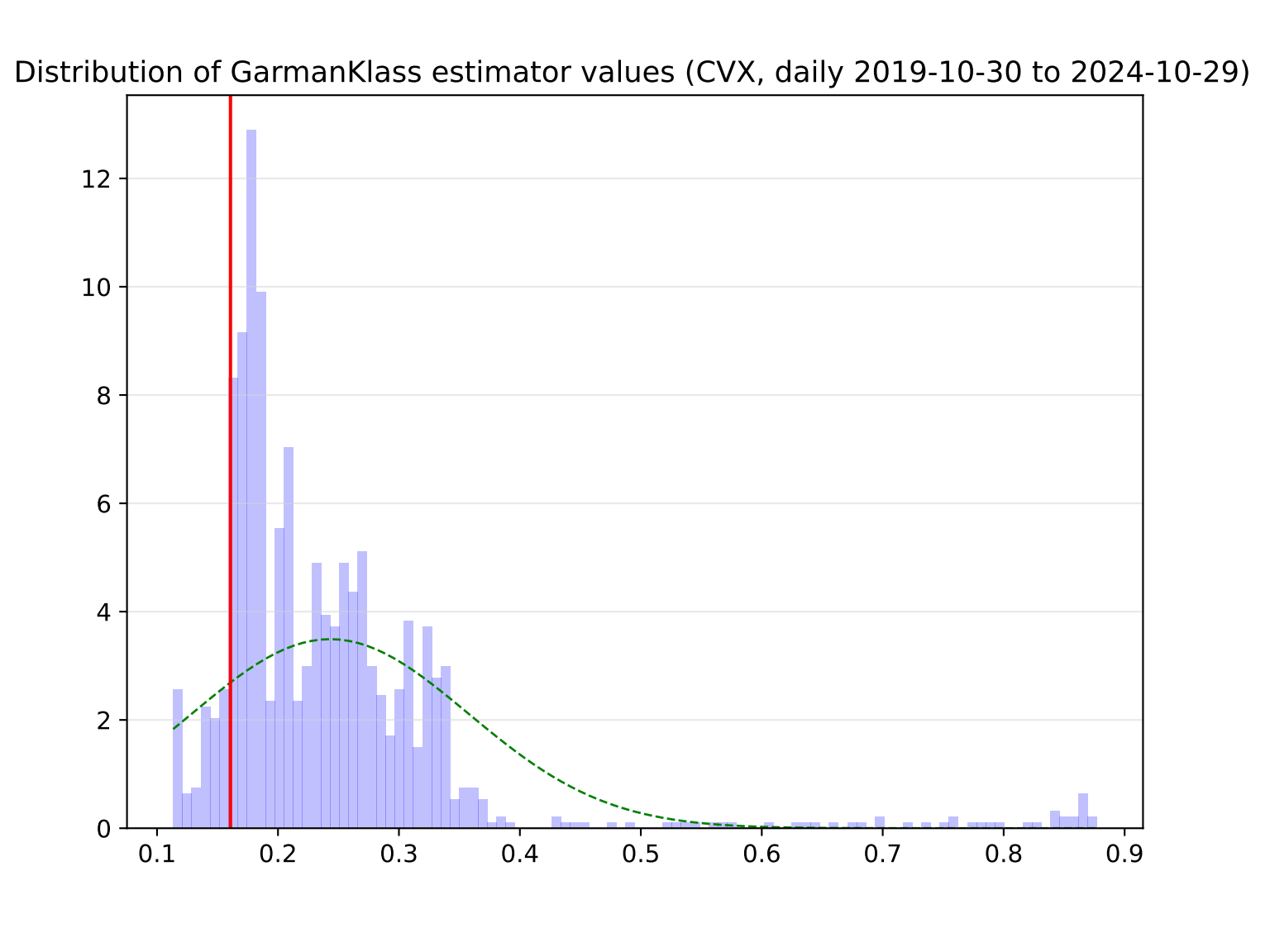
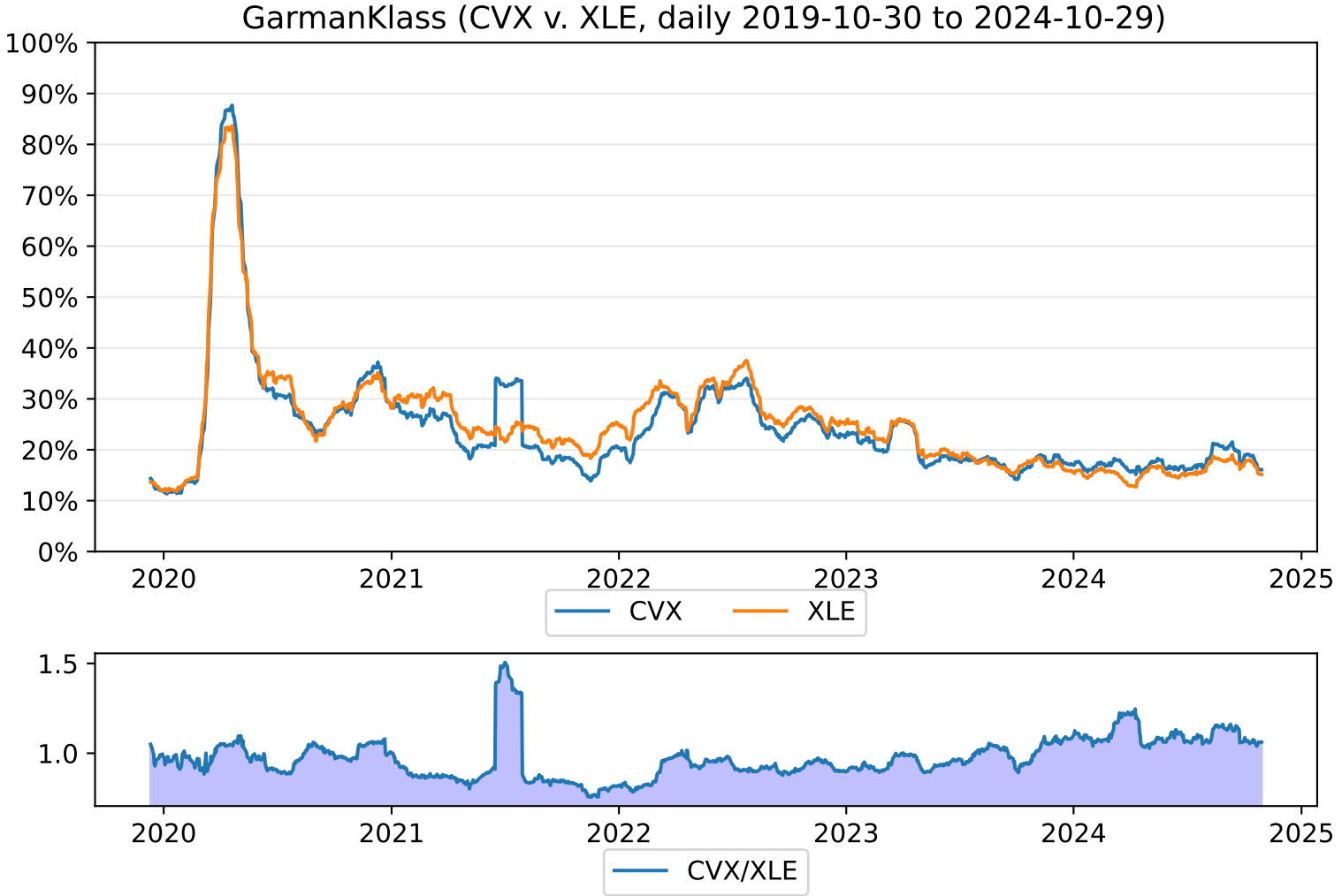

GarmanKlass (CVX, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
30
60
90
120
1
2
3
4
Max
75 Prctl
Median
25 Prctl
Min
Realized

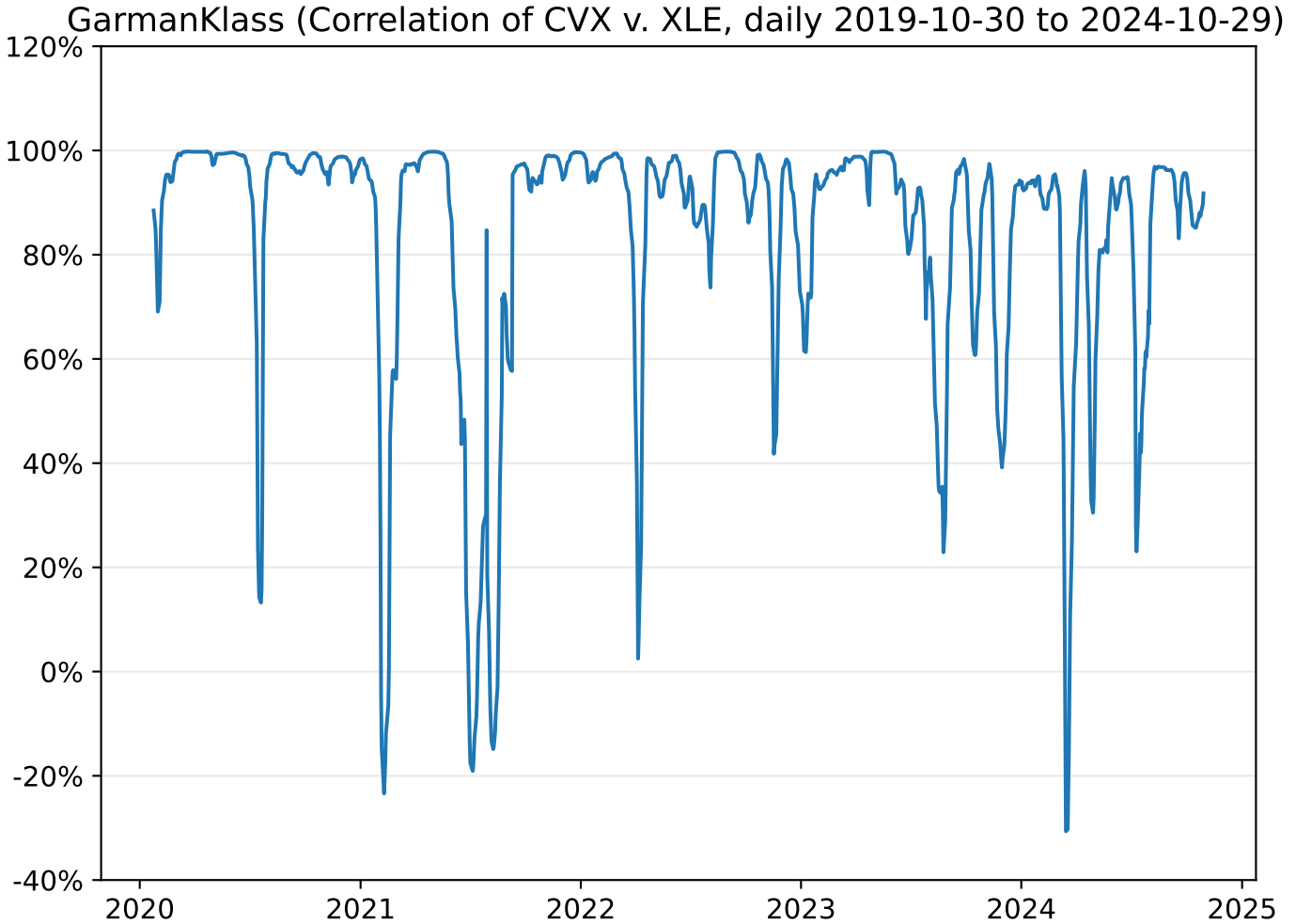

GarmanKlass (CVX, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2020
2021
2022
2023
2024
2025
1
75 Prctl
Median
25 Prctl
Realized


GarmanKlass (CVX, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2020
2021
2022
2023
2024
2025
1
Max
Min
Realized


GarmanKlass (CVX, daily 2019-10-30 to 2024-10-29)
100%
80%
60%
40%
20%
0%
-20%
2020
2021
2022
2023
2024
2025
Mean
Std. Dev.
Realized
5
0
−5
Z-Score
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1


Distribution of GarmanKlass estimator values (CVX, daily 2019-10-30 to 2024-10-29)
0
2
4
6
8
10
12
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9


GarmanKlass (CVX v. XLE, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2020
2021
2022
2023
2024
2025
CVX
XLE
1.5
1.0
2020
2021
2022
2023
2024
2025
CVX/XLE


GarmanKlass (Correlation of CVX v. XLE, daily 2019-10-30 to 2024-10-29)
120%
100%
80%
60%
40%
20%
0%
-20%
-40%
2020
2021
2022
2023
2024
2025

OLS Regression Results

Dep. Variable:	y	R-squared (uncentered):	0.989
Model:	OLS	Adj. R-squared (uncentered):	0.989
Method:	Least Squares	F-statistic:	1.150e+05
Date:	Tue, 29 Oct 2024	Prob (F-statistic):	0.00
Time:	23:55:29	Log-Likelihood:	2667.4
No. Observations:	1229	AIC:	-5333.
Df Residuals:	1228	BIC:	-5328.
Df Model:	1		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
x1	0.9739	0.003	339.054	0.000	0.968	0.980

Omnibus:	316.108	Durbin-Watson:	0.044
Prob(Omnibus):	0.000	Jarque-Bera (JB):	871.507
Skew:	1.317	Prob(JB):	5.68e-190
Kurtosis:	6.174	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.