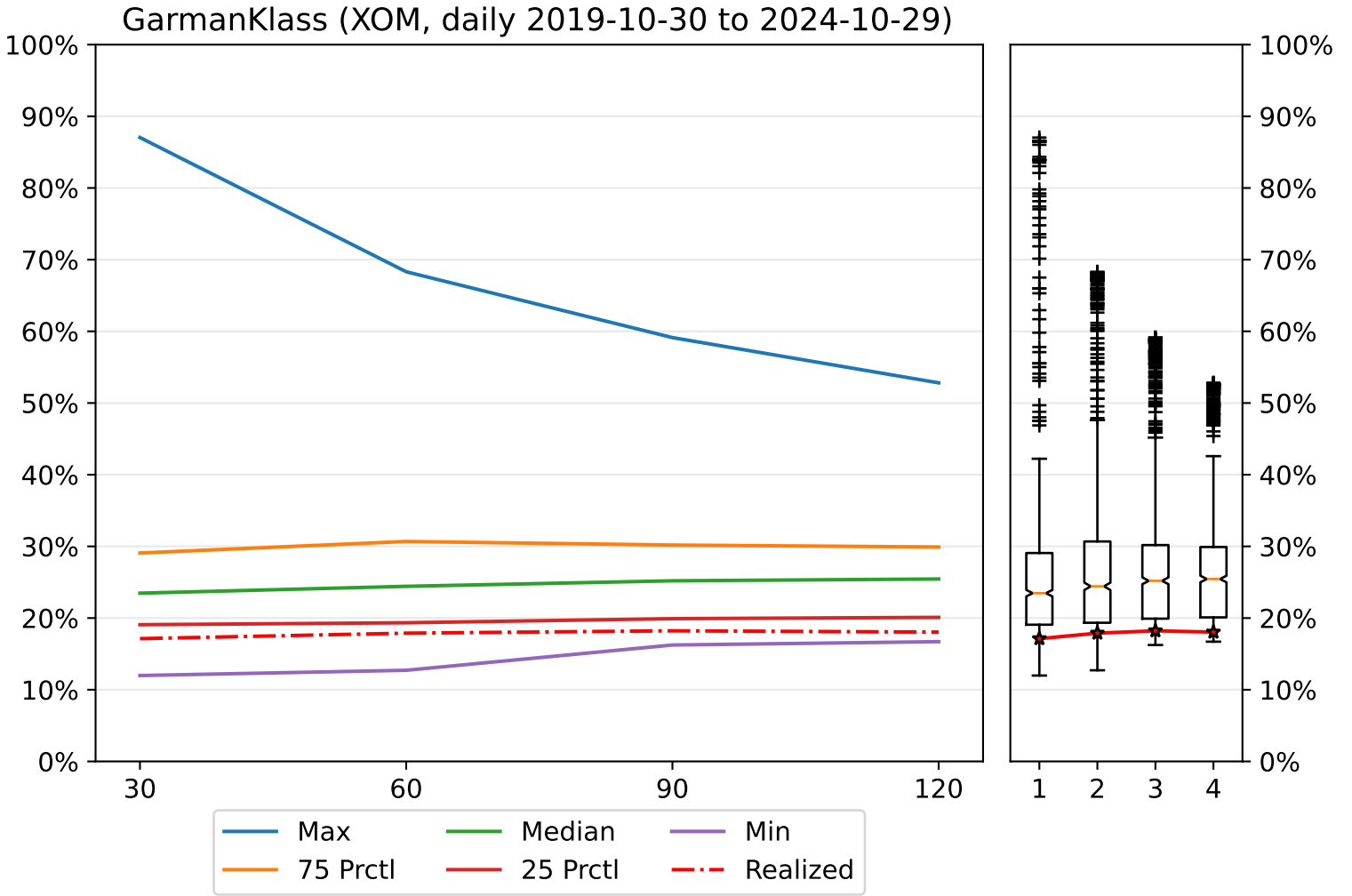
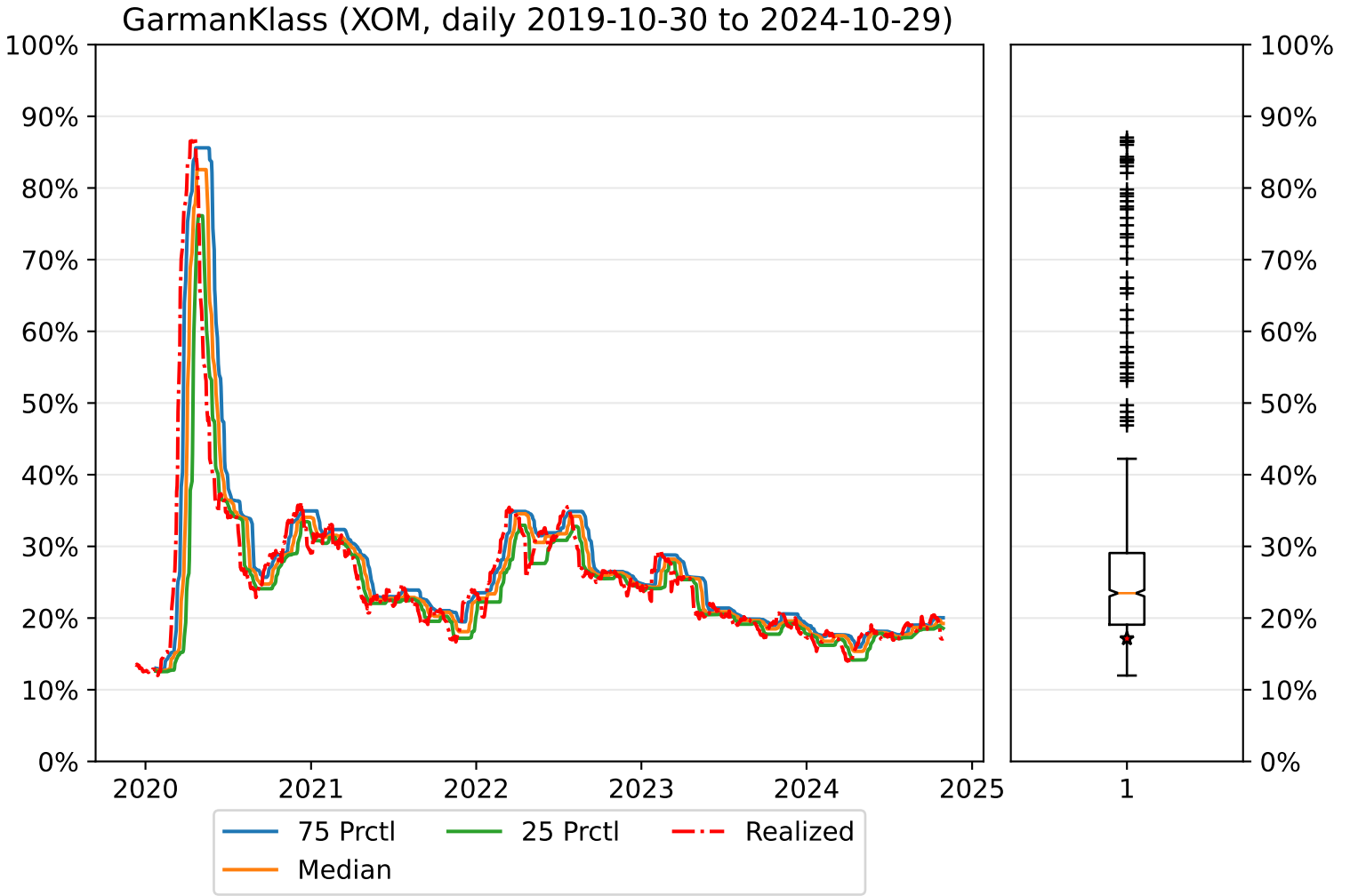
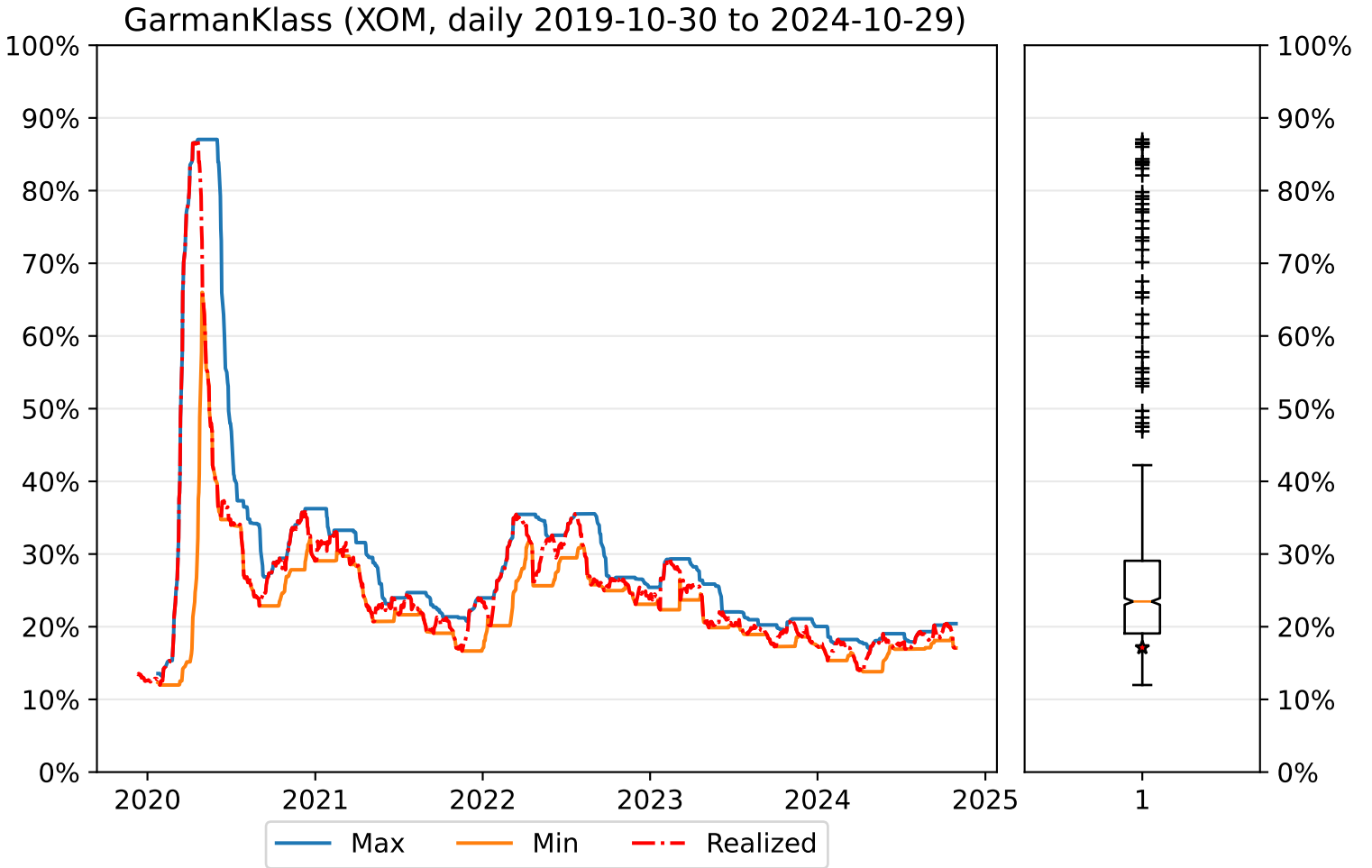
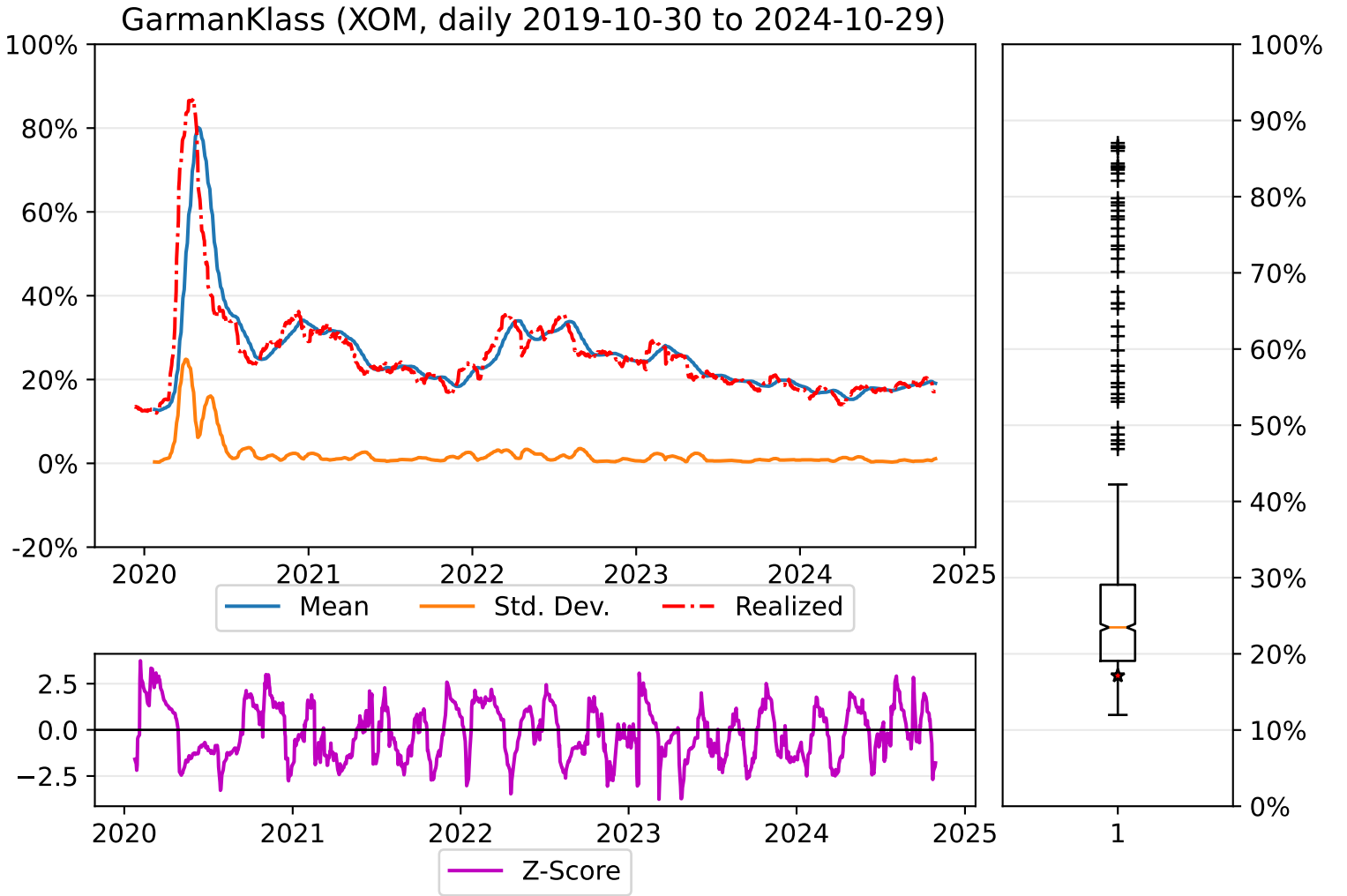
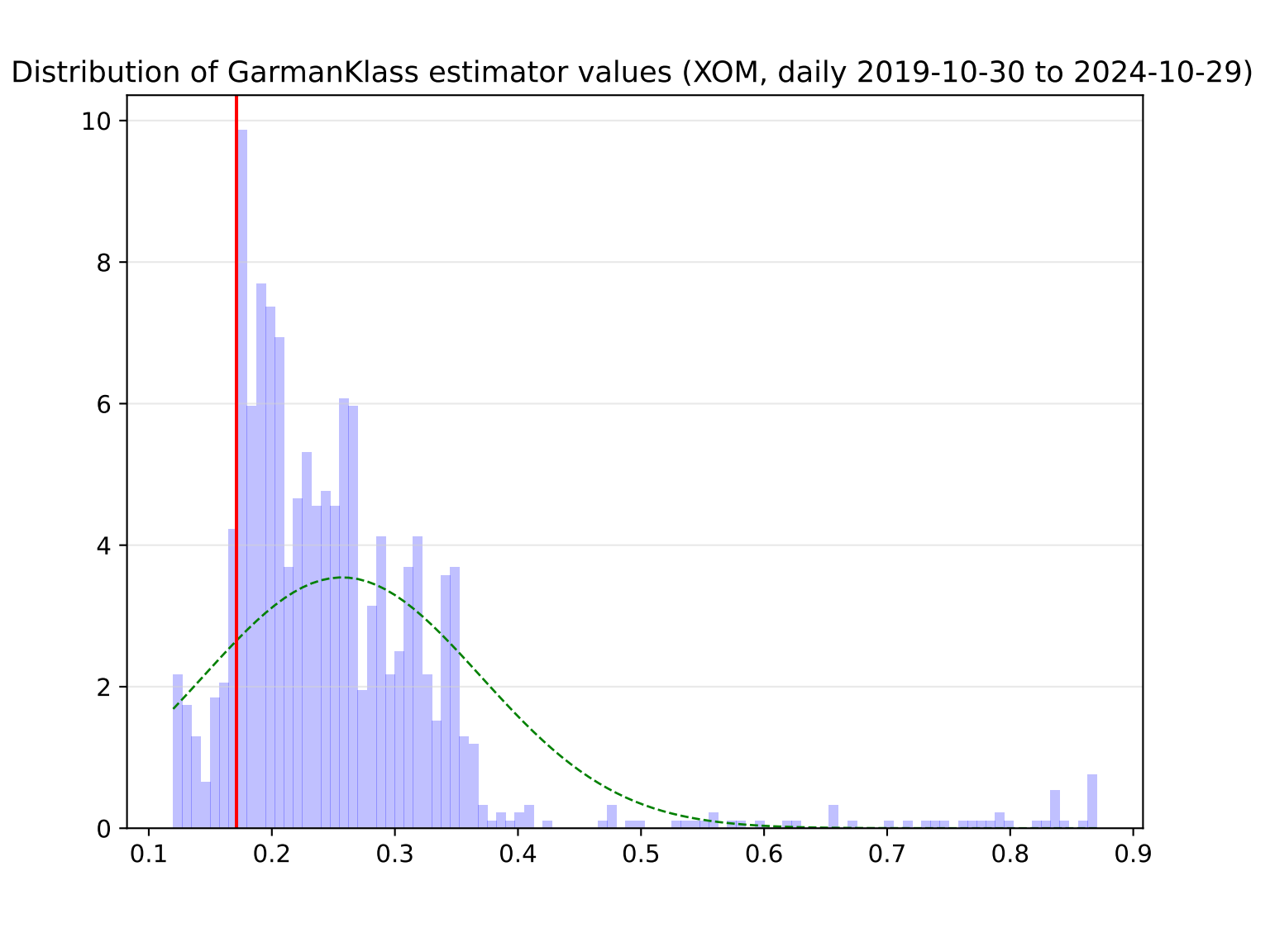
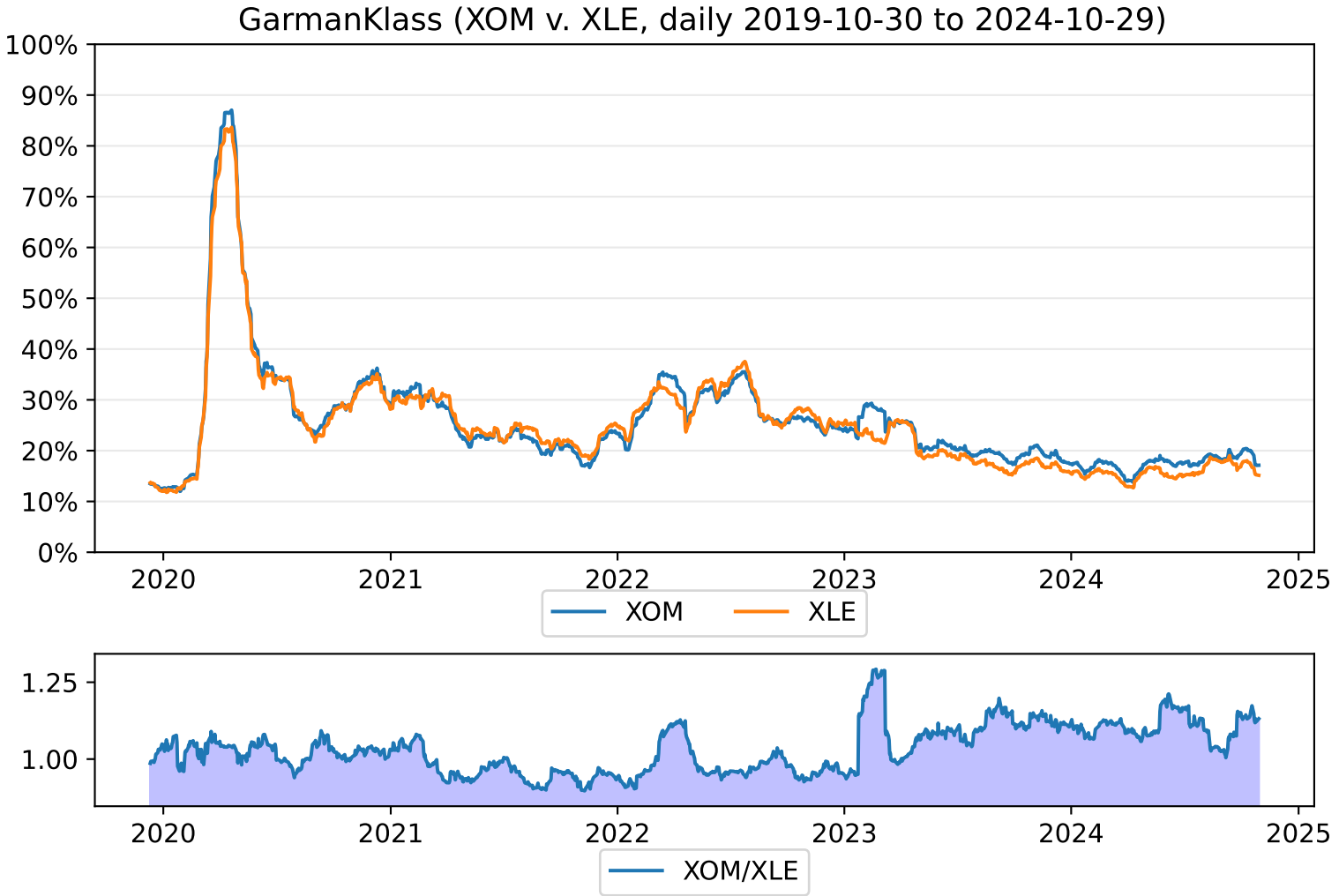

GarmanKlass (XOM, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
30
60
90
120
1
2
3
4
Max
75 Prctl
Median
25 Prctl
Min
Realized

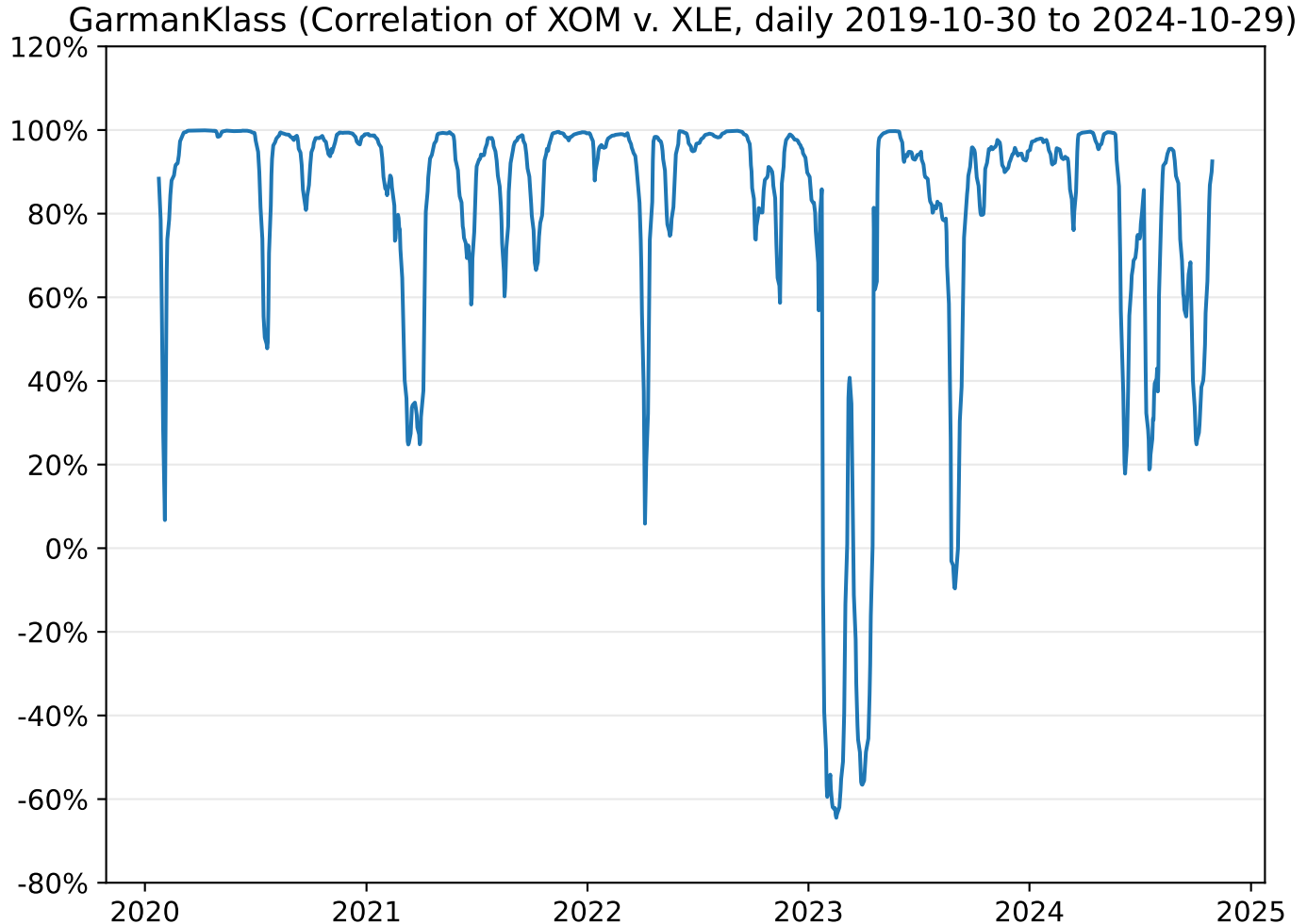

GarmanKlass (XOM, daily 2019-10-30 to 2024-10-29)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2020
2021
2022
2023
2024
2025
1
75 Prctl
Median
25 Prctl
Realized


GarmanKlass (XOM, 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 (XOM, 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
2.5
0.0
−2.5
Z-Score
1
90%
70%
50%
30%
10%


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


GarmanKlass (XOM 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
XOM
XLE
1.25
1.00
2020
2021
2022
2023
2024
2025
XOM/XLE


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

```
                                 OLS Regression Results
================================================================================
Dep. Variable:                      y   R-squared (uncentered):                   0.996
Model:                            OLS   Adj. R-squared (uncentered):              0.996
Method:                 Least Squares   F-statistic:                          3.216e+05
Date:                Tue, 29 Oct 2024   Prob (F-statistic):                        0.00
Time:                        23:55:24   Log-Likelihood:                          3241.9
No. Observations:                1229   AIC:                                     -6482.
Df Residuals:                    1228   BIC:                                     -6477.
Df Model:                           1
Covariance Type:            nonrobust
==============================================================================
                 coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------
x1             1.0207      0.002    567.096      0.000       1.017       1.024
==============================================================================
Omnibus:                       29.292   Durbin-Watson:                   0.041
Prob(Omnibus):                  0.000   Jarque-Bera (JB):               30.963
Skew:                           0.389   Prob(JB):                     1.89e-07
Kurtosis:                       3.018   Cond. No.                         1.00
==============================================================================

Notes:
[1] R² 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.
```