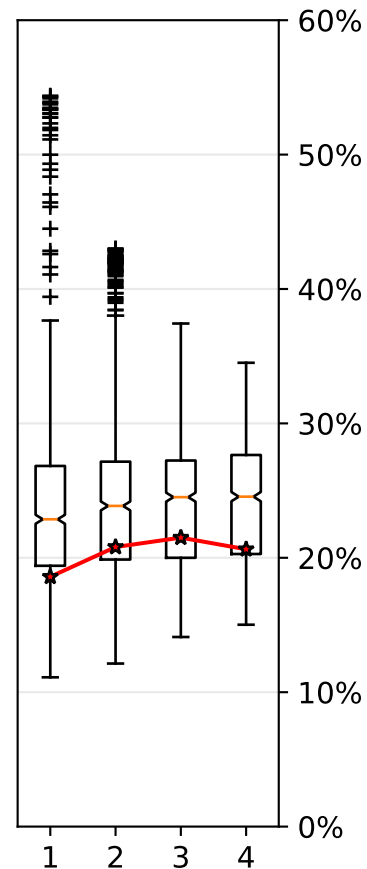
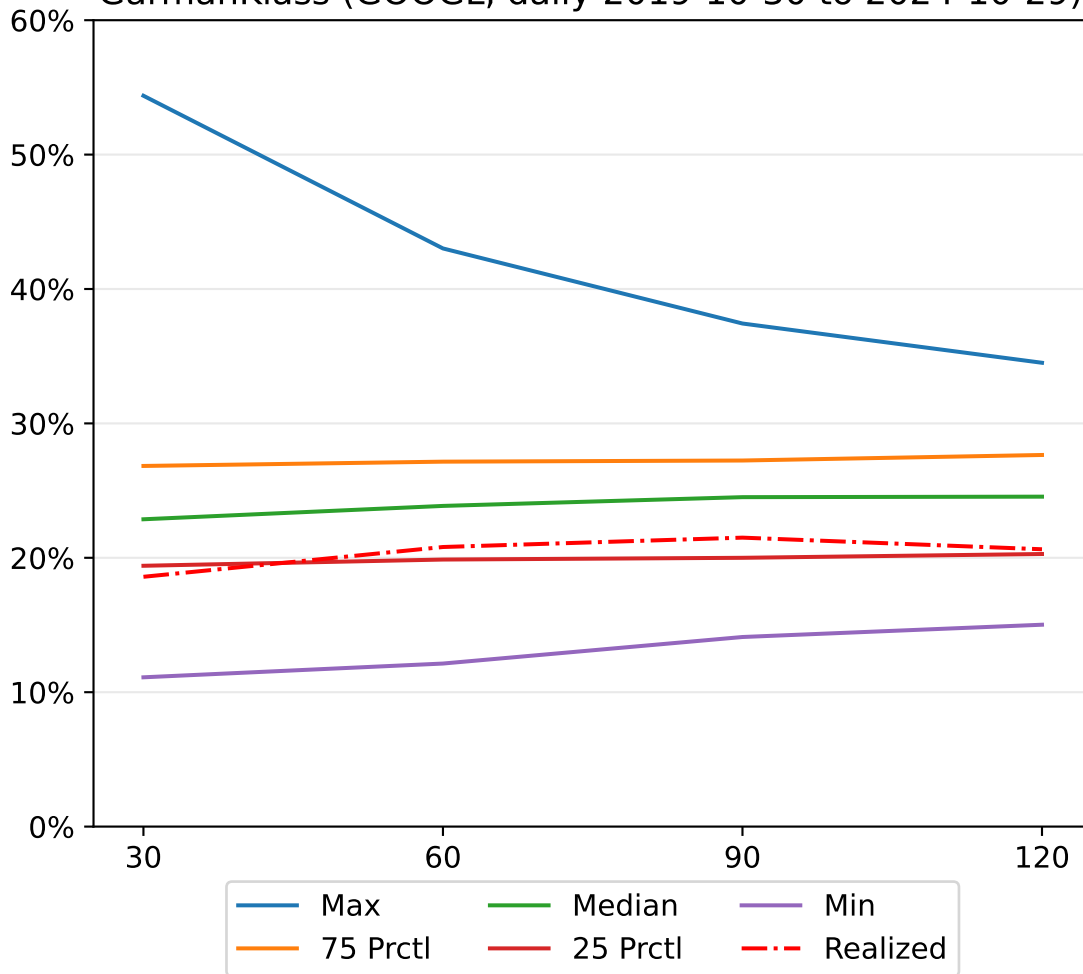
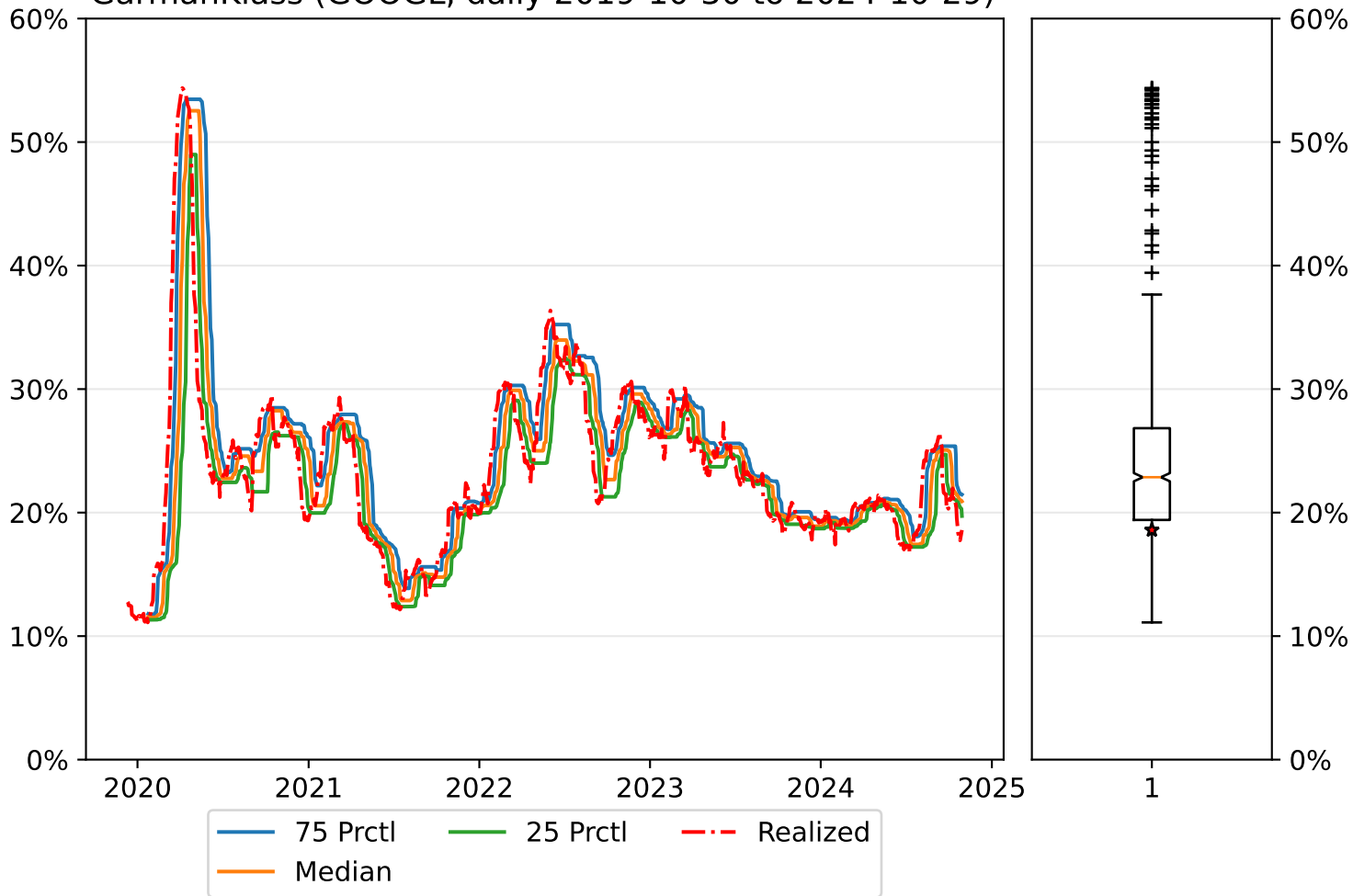


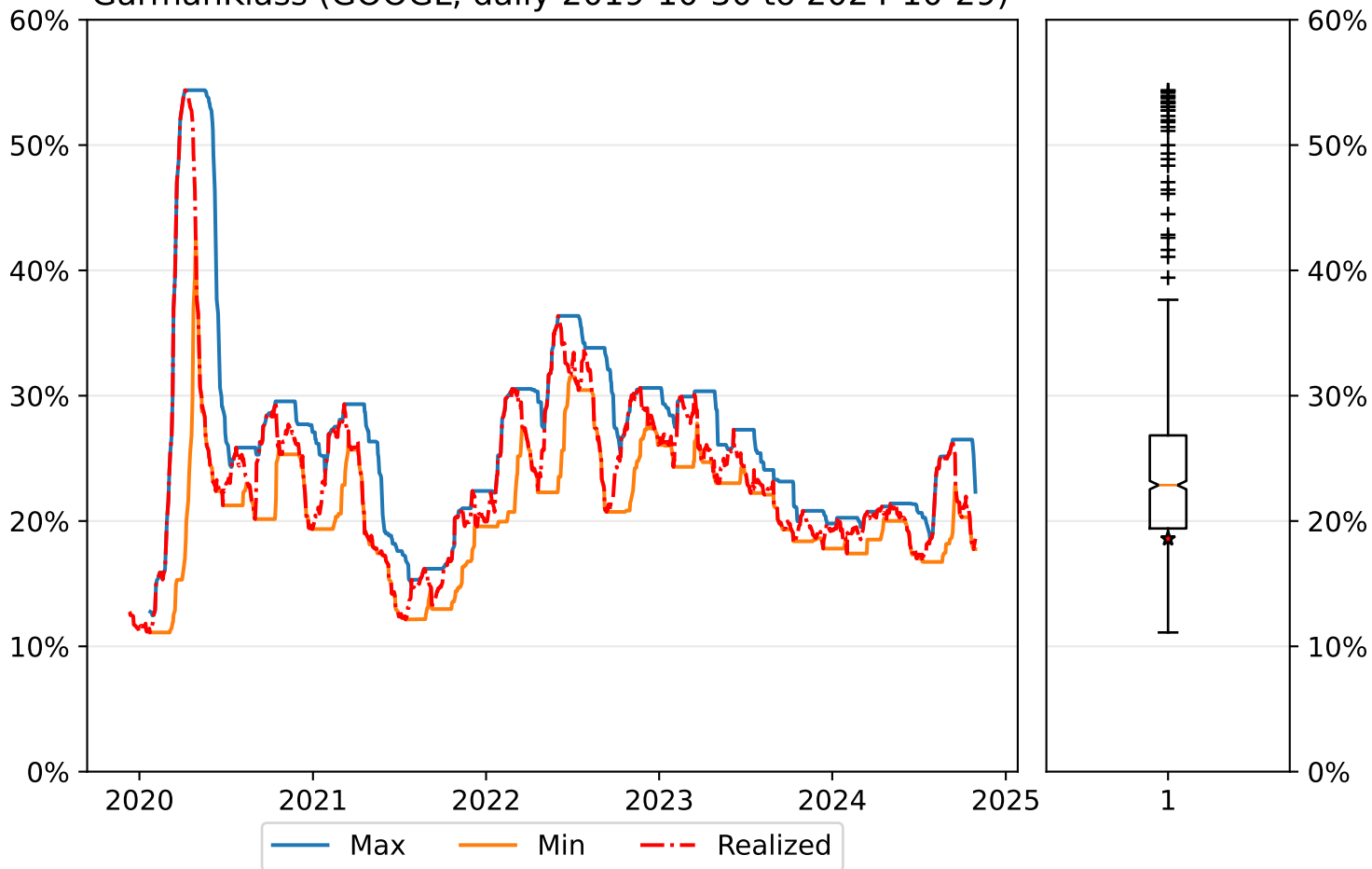
GarmanKlass (GOOGL, daily 2019-10-30 to 2024-10-29)



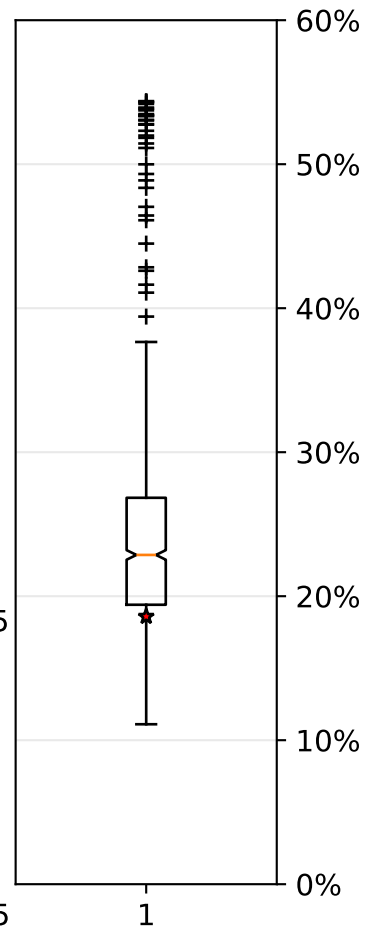
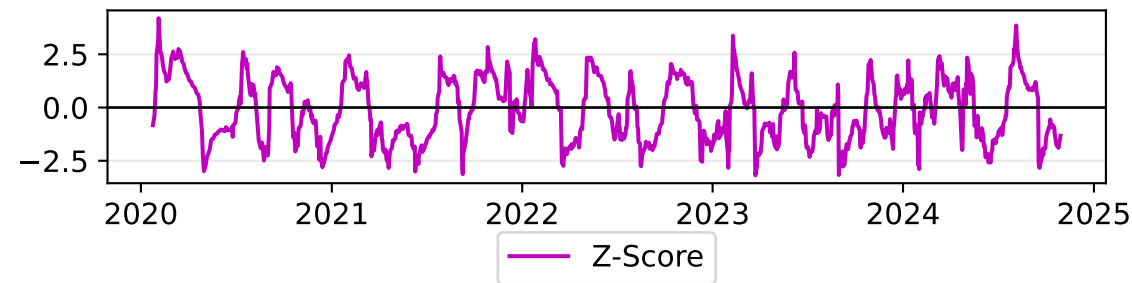
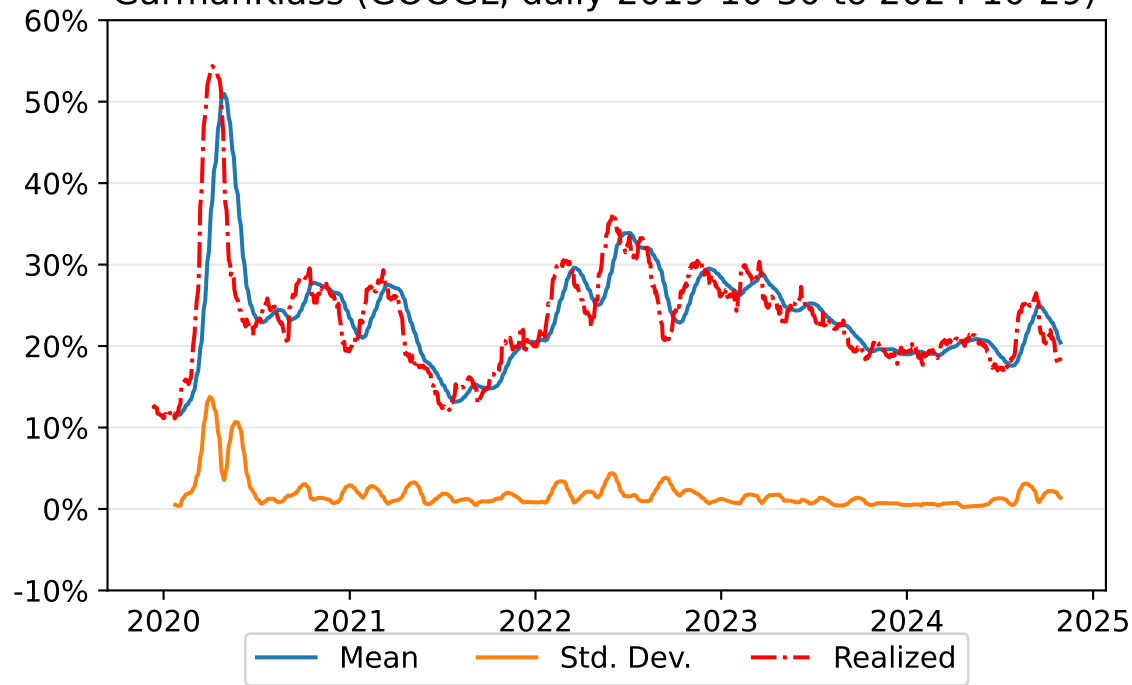
GarmanKlass (GOOGL, daily 2019-10-30 to 2024-10-29)



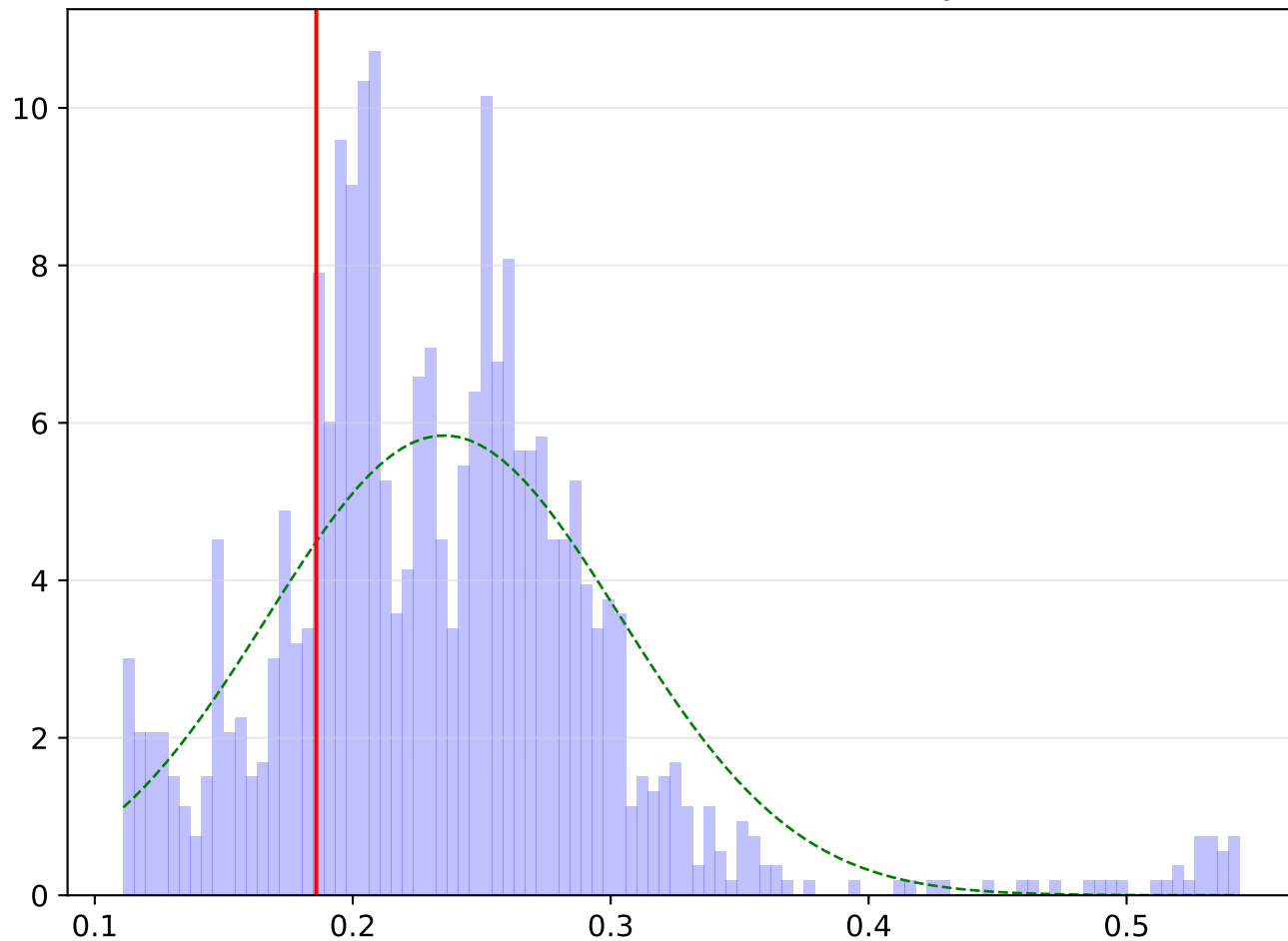
GarmanKlass (GOOGL, daily 2019-10-30 to 2024-10-29)



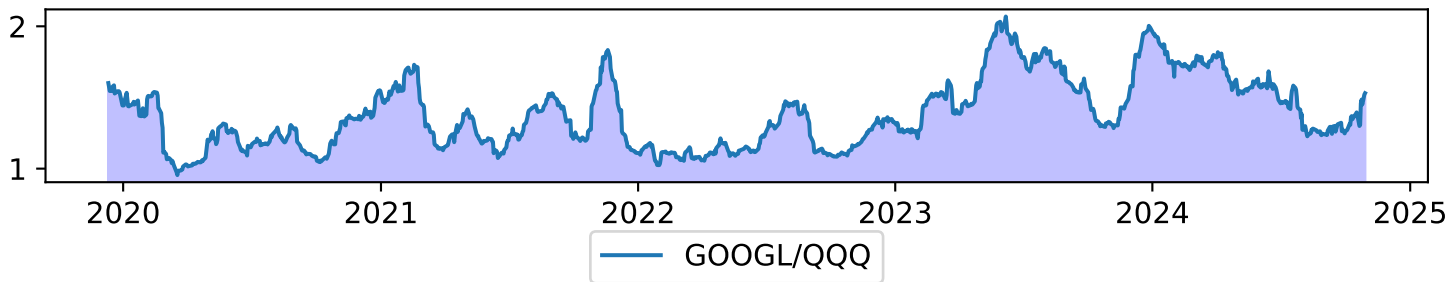
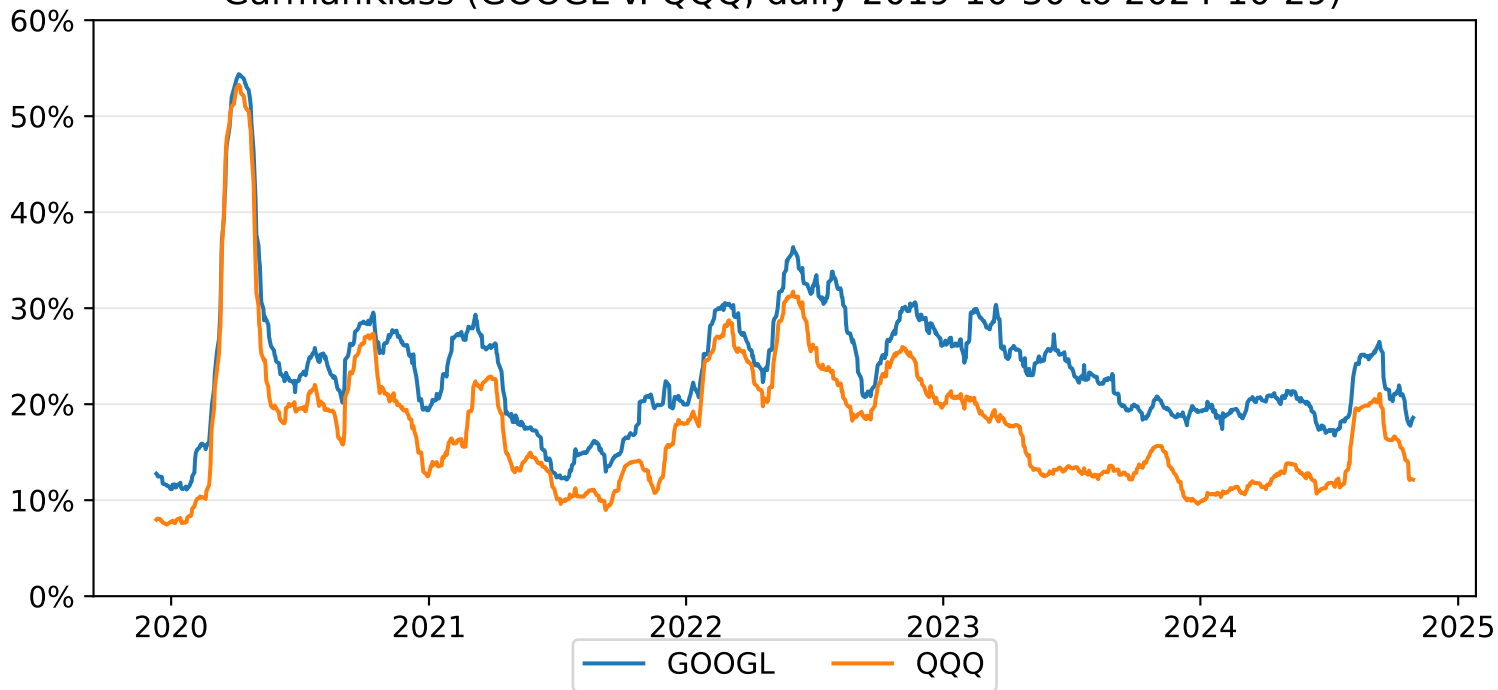
GarmanKlass (GOOGL, daily 2019-10-30 to 2024-10-29)

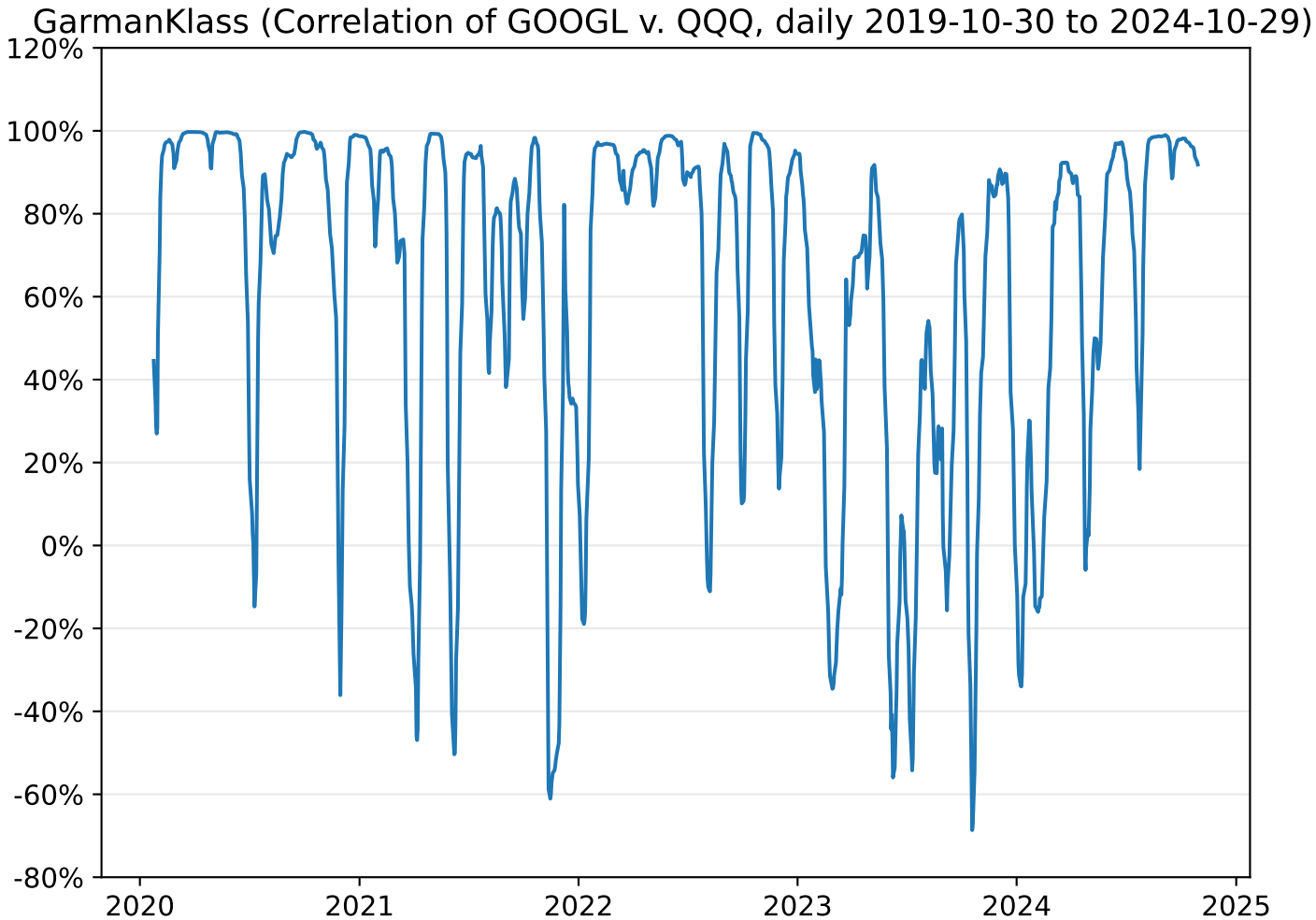


Distribution of GarmanKlass estimator values (GOOGL, daily 2019-10-30 to 2024-10-29)



GarmanKlass (GOOGL v. QQQ, daily 2019-10-30 to 2024-10-29)





OLS Regression Results

```

=====
Dep. Variable:          y      R-squared (uncentered):          0.972
Model:                  OLS    Adj. R-squared (uncentered):          0.972
Method:                  Least Squares  F-statistic:          4.220e+04
Date:                    Tue, 29 Oct 2024  Prob (F-statistic):          0.00
Time:                    23:55:09  Log-Likelihood:          2175.6
No. Observations:        1229    AIC:          -4349.
Df Residuals:            1228    BIC:          -4344.
Df Model:                 1
Covariance Type:          nonrobust
=====

```

	coef	std err	t	P> t	[0.025	0.975]
x1	1.2452	0.006	205.437	0.000	1.233	1.257

```

=====
Omnibus:                81.452    Durbin-Watson:          0.012
Prob(Omnibus):           0.000    Jarque-Bera (JB):        109.637
Skew:                    -0.572    Prob(JB):                1.56e-24
Kurtosis:                3.913    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.