

July 14, 2025

1 Results

| | KS | Kuiper | AD | CvM | Chi2 | AIC |
|----------------------------------|---------------|-------------|------------|---------|---------------|-----------|
| GH (mle) | 0.7709 | 0.3725 | 0.4363333 | 0.5613 | 0.06039 | -40037.66 |
| Meixner (GMM) | $< 2.2e - 16$ | < 0.00025 | < 0.001 | 0.2523 | $< 2.2e - 16$ | -39902.86 |
| Meixner (mle) | $< 2.2e - 16$ | < 0.00025 | 0.177 | 0.4105 | 0.03594 | -40029.35 |
| CGMY (mle) | $< 2.2e - 16$ | < 0.00025 | 0.9743333 | 0.2851 | 3.011e-11 | -39973.53 |
| DEJD (mle) | 0.06293 | 0.024 | 0.035 | 0.348 | 0.002857 | -39964.75 |
| α -Stable (mle) | 0.0008544 | < 0.00025 | 0.01333333 | 0.02262 | 3.011e-11 | -39900.42 |
| α -Stable (q) | 0.01797 | < 0.00025 | 0.02366667 | 0.3688 | 5.174e-10 | -39802.51 |
| Symmetric α -Stable (mle) | 0.001534 | < 0.00025 | 0.01366667 | 0.7923 | 2.91e-14 | -39879.2 |

Table 1: P-values from goodness-of-fit tests for various fitted distributions to S&P 500 log-returns