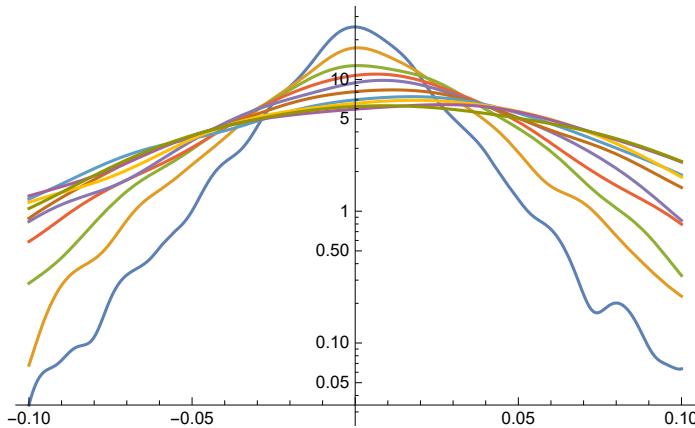


```

price = Log[FinancialData["AAPL", {{2002}, {2017}}, "Value"]];
dists =
  Table[SmoothKernelDistribution[Differences[price[[1 ;; ; i]]], "Scott"], {i, 10}];
distpdfs = (PDF[#, x]) & /@ dists;
LogPlot[distpdfs, {x, -0.1, 0.1}]

```



```

means = Mean /@ dists
stds = StandardDeviation /@ dists
maximums = NMaxValue[#, x] & /@ distpdfs
ListLogLogPlot[means]
ListLogLogPlot[stds]
ListLogLogPlot[maximums]

```

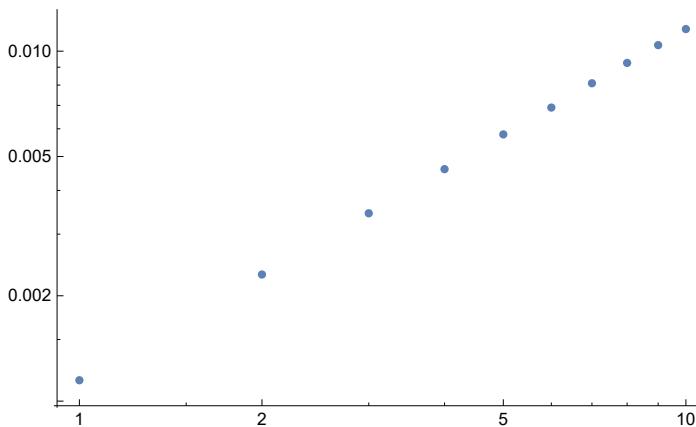
```

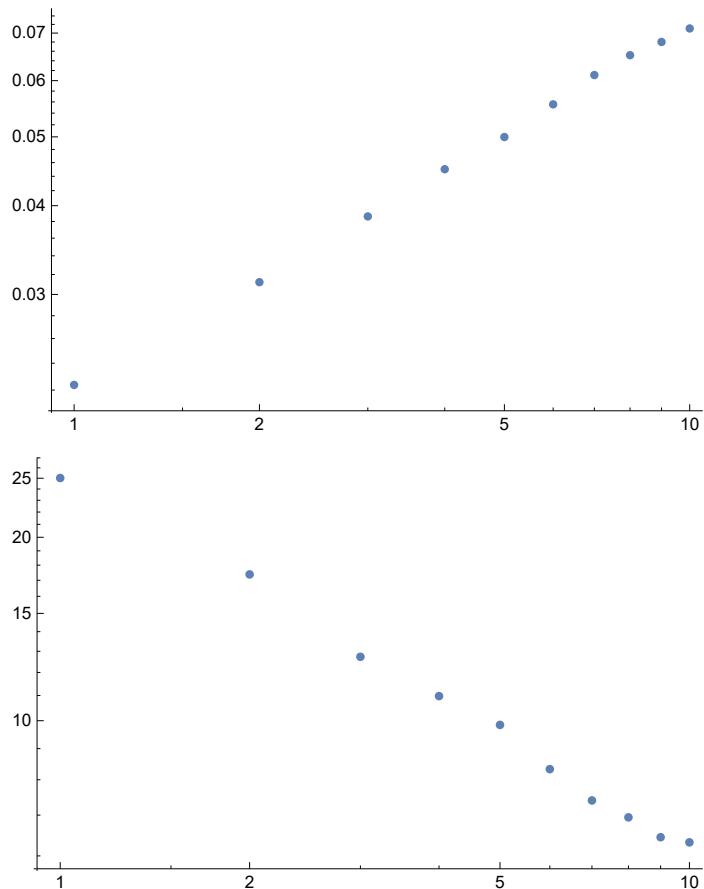
{0.00114715, 0.00230027, 0.00344145, 0.00460053,
 0.00578317, 0.00689978, 0.00809644, 0.00925537, 0.0104064, 0.0115659}

{0.0223716, 0.0312152, 0.0386305, 0.0450181,
 0.0499706, 0.0555591, 0.061096, 0.0651617, 0.0680173, 0.0710572}

{25.0188, 17.3804, 12.7315, 10.9747, 9.84313, 8.32755, 7.3981, 6.94099, 6.43869, 6.31506}

```





```
FindFit[means, a xα, {a, α}, x]
FindFit[stds, a xβ, {a, β}, x]
FindFit[maximums, a xγ, {a, γ}, x]
{a → 0.00114371, α → 1.00504}
{a → 0.0221408, β → 0.512347}
{a → 25.3299, γ → -0.609416}
```