

data (Almakyn)

4.827	1.271	1.369	1.547	1.841	1.042	2.395	3.766	1.954	0.831
4.753	2.043	4.447	2.471	0.831	0.618	2.638	0.242	0.766	1.629
0.444	2.486	3.919	2.771	1.185	2.903	3.366	2.4	1.854	2.683
2.164	2.511	4.525	3.37	2.249	2.773	4.327	3.176	1.381	5.322
5.301	1.171	4.763	0.926	3.568	1.591	5.551	3.083	1.498	3.027
1.587	2.488	0.235	1.702	5.277	1.294	0.924	4.897	3.237	5.021
3.812	4.18	2.24	1.484	3.305	2.287	2.148	4.108	2.417	1.291
1.607	2.09	1.288	2.248	1.99	3.026	1.094	3.103	3.084	4.262
2.766	1.156	2.709	1.8	2.593	0.493	1.294	3.139	0.565	1.639
1.373	1.687	4.84	1.886	2.765	3.383	2.421	1.401	2.056	4.065
1.287	1.734	1.602	1.928	2.134	2.993	1.888	4.767	3.433	0.847
1.968	4.052	2.345	2.776	3.823	2.171	2.196	2.12	2.609	4.039
1.574	2.124	1.154	0.665	3.466	2.671	0.443	2.24	1.523	3.543
1.828	1.665	1.996	3.994	2.382	4.487	2.761	1.657	0.641	3.885
3.455	3.104	2.449	0.313	0.851	1.635	1.894	3.923	1.224	3.167
1.977	1.978	1.394	0.587	1.887	0.506	3.641	3.816	1.476	0.354
2.198	5.241	2.029	2.823	2.855	2.472	0.317	4.858	1.109	1.459
1.213	1.302	1.762	3.74	1.715	0.573	3.377	1.2	3.779	5.007
2.97	2.56	2.982	2.678	2.233	1.675	2.831	1.454	5.547	3.522
1.018	2.411	2.693	2.394	4.362	1.858	3.702	0.942	0.332	3.877

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	1.41	0	NO
Nakagami distribution	5	1.37	0	NO
gamma distribution	5	3.88	0	NO

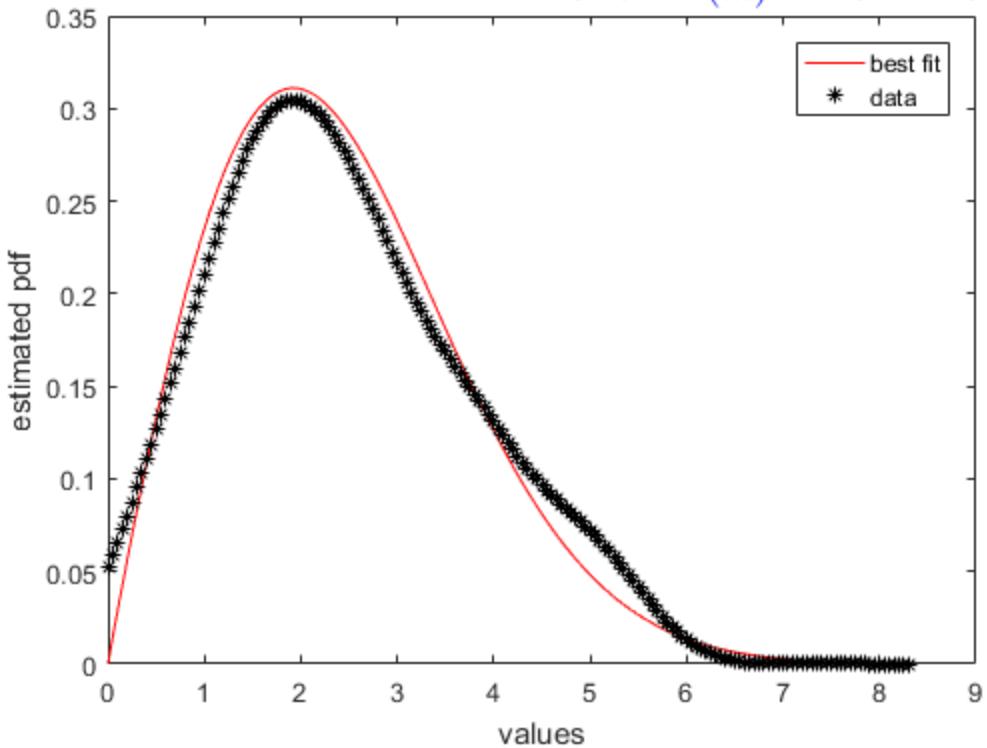
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 0.9836 \quad \Omega = 7.5065$

[p m shankar](#)

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Anderson R)

```

-3 -2.353 -2.706 -0.873 -3.582 -2.646 -3.8 -0.417 -1.892 -2.127
-1.756 -3.099 0.957 -1.989 -1.818 -3.886 -2.801 -0.988 -3.139 -2.119
-2.954 -3.565 -0.556 -5.439 1.965 -0.999 -0.387 -1.153 -0.811 -0.864
0.235 0.659 1.387 -2.809 -0.188 -4.94 -2.579 -1.155 1.298 -2.308
0.765 0.142 -3.664 -1.371 -1.131 -0.73 1.98 -0.46 -2.251 1.826
0.65 3.806 -1.185 0.544 -2.773 -1.417 -0.702 0.065 -0.869 -1.597
-2.702 -3.635 -1.904 -2.864 -1.016 -0.894 -1.607 1.169 -0.178 -0.978
-0.669 -3.497 -2.725 -1.065 -0.81 0.13 0.783 0.034 -0.432 -3.216
1.04 -1.216 -0.043 -1.302 2.156 -3.307 -3.118 -3.948 -2.522 -0.732
-0.826 0.222 -0.24 -2.485 2.426 -1.451 -1.834 4.051 2.734 0.646
1.446 -1.77 -1.476 2.084 2.134 0.519 -2.166 3.426 -1.665 0.226
-1.987 -2.449 -0.064 -0.567 1.14 -0.936 -3.859 -1.972 -0.046 3.968
-0.965 0.742 2.318 -0.089 0.187 -0.691 -0.325 -2.253 -0.537 -1.58
-1.588 -3.177 -3.267 -0.517 -1.419 -1.835 -1.872 -4.796 0.345 0.633
0.084 -0.601 0.916 -0.435 2.288 -2.197 -0.407 0.52 -1.65 -1.532
-2.487 -1.22 2.948 -2.487 2.962 2.761 -0.375 -1.411 3.275 0.146
-2.118 2.961 1.422 -2.046 0.329 0.749 -4.639 -0.064 0.03 0.573
0.927 -1.126 -3.819 -2.633 -1.058 -0.908 0.947 -5.105 -2.227 1.121
-5.38 -0.627 -0.231 2.636 -2.287 -2.784 1.12 0.064 -0.763 -0.454
-2.391 -0.049 0.928 -1.34 0.705 -2.643 0.91 -2.03 -0.138 -0.347

```

p m shankar

Summary of χ^2 tests

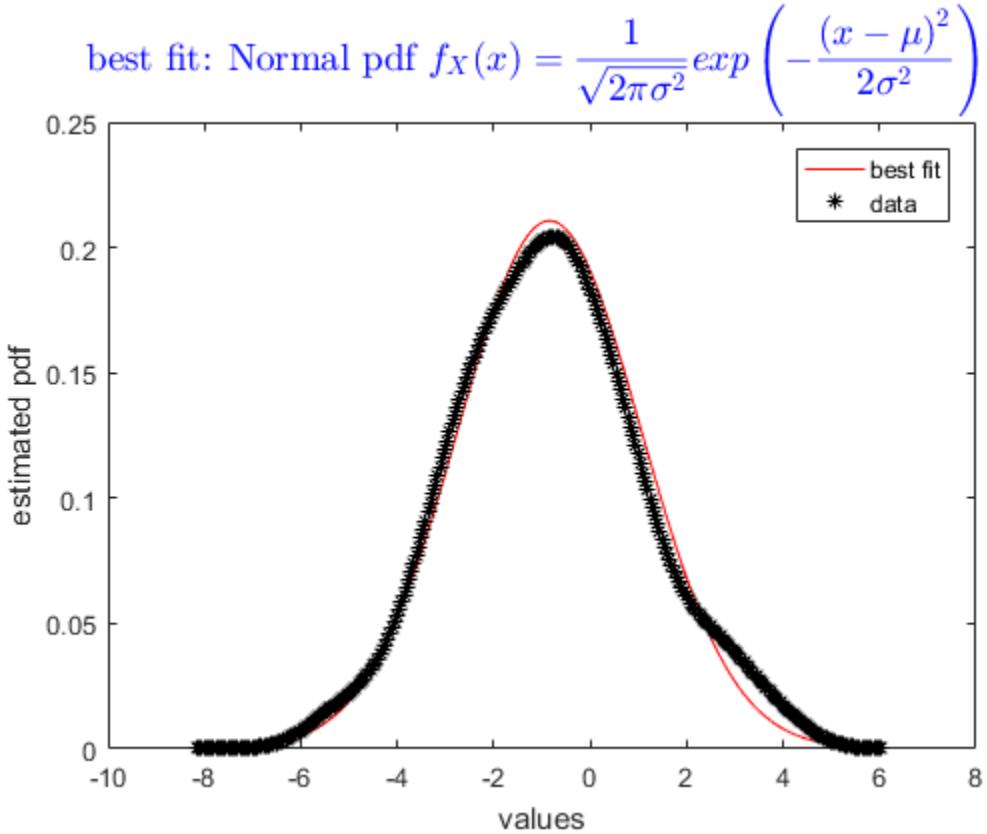
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	5.68	0	NO
Laplace distribution	6	14.84	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.84393$ $\sigma = 1.8939$

p m shankar



data (Anderson W)

2.902	2.264	1.967	1.965	1.819	4.047	1.936	1.132	1.015	3.54
2.732	1.925	3.854	0.704	3.374	2.214	1.121	1.821	1.572	2.182
3.832	1.382	0.618	3.017	3.011	1.892	3.251	0.546	4.041	1.919
2.784	3.026	2.476	0.505	5.541	2.728	2.468	3.36	3.885	3.295
1.815	3.768	1.99	5.326	3.576	2.325	2.209	3.171	0.423	1.955
0.831	3.087	1.946	1.543	1.83	0.638	2.189	2.631	2.488	3.456
2.371	3.026	3.307	1.993	2.833	2.931	2.917	0.363	1.154	2.672
2.772	0.772	2.105	2.651	2.127	1.274	1.581	1.503	2.755	4.135
2.617	2.948	2.074	1.461	3.124	4.062	1.067	1.281	2.143	1.105
0.795	3.602	3.654	3.847	3.867	3.352	2.305	2.462	1.686	0.63
1.669	3.568	2.705	4.957	2.906	5.008	0.209	0.734	4.592	0.336
0.232	2.816	3.461	5.197	1.443	3.084	2.555	0.372	2.912	1.947
2.492	1.508	2.226	1.671	2.73	2.037	3.421	2.996	2.436	0.784
3.195	5.575	1.537	3.832	5.547	1.881	3.471	3.595	4.608	2.18
3.435	2.537	2.984	2.041	3.309	2.001	1.589	0.934	2.962	1.525
4.068	3.085	3.586	2.137	0.544	4.615	2.046	1.68	2.03	1.147
3.015	1.898	2.714	1.254	1.984	0.856	3.648	1.266	4.221	2.878
3.29	2.908	3.143	0.6	0.581	2.492	1.322	1.871	1.043	3.791
1.873	2.335	3.653	4.891	3.019	1.189	3.242	0.9	0.711	3.04
2.288	1.683	4.972	5.315	3.476	3.027	2.73	4.006	1.993	3.652

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	15.45	1	YES
Nakagami distribution	5	15.56	1	YES
gamma distribution	5	24.8	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

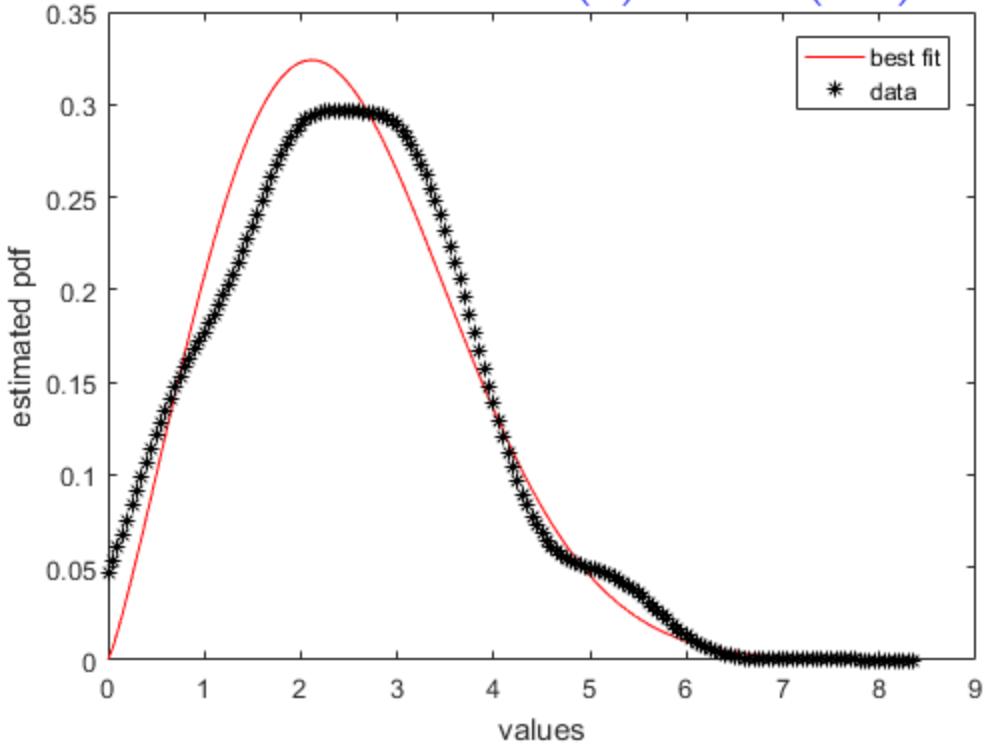
best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

lowest χ^2 stat

a = 2.8043 b = 2.8043

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Andiario)

```

-1.432 -2.115 -2.013 -0.617 -2.307 -1.793 -6.729 -1.86 -1.239 -2.07
0.189  2.743  0.403 -0.767  0.001   -2   -2.697  0.187 -3.967  0.65
0.902 -1.936  0.414  0.149  0.042 -1.848 -4.905  0.548  1.515 -3.669
0.338 -3.052  0.958 -0.908 -0.708 -1.166 -1.058  0.58 -0.332 -0.568
1.344 -1.113  1.379  1.152 -1.934 -3.015 -1.838  0.34 -2.292 -1.821
-1.52 -0.401 -3.591 -2.684 -1.008 -1.299 -1.536 -1.076 -0.055 -0.937
1.175 -2.322 -1.177  0.96 -2.003 -0.452 -0.143 -0.973 -0.595 -0.727
-2.763 -1.037 -3.748 -4.618  2.738 -2.09  1.018  2.206 -3.073 -1.704
-2.039 -0.612 -1.705  0.326  0.085  2.853 -3.09 -1.189 -2.154 -0.678
2.343 -2.583 -2.057  1.406 -3.235 -2.898 -2.941  1.908 -0.402  1.648
-1.699 -1.78  2.901 -2.316 -4.626 -2.27 -5.365 -0.722 -4.951 -0.734
-3.096  1.725 -1.806 -2.822 -3.493 -3.705  3.06  3.226 -1.851 -0.099
-0.53 -1.497  0.446 -1.959 -2.684  1.893  1.539 -1.211 -1.884  1.022
0.753 -0.497  1.782 -1.785 -0.488 -1.614 -1.276  0.425 -2.377 -2.705
-2.232 -5.101 -1.024 -4.304 -5.894 -0.427 -3.733 -2.129 -3.747  3.219
-0.676  0.247 -1.73 -1.274 -0.786 -3.294 -5.655 -0.79  2.004  1.862
-1.001 -2.52 -0.584 -0.728 -1.191 -5.559 -0.517 -2.314 -4.438 -1.379
-3.693  0.737  0.546 -0.508 -1.722  0.513 -1.713 -4.976 -3.272 -1.344
0.662 -0.804  1.72 -1.668 -0.714 -0.672 -0.393  1.311 -5.01  2.613
-4.413 -1.277  1.687 -1.218 -1.302  0.038  0.438 -4.577 -0.738  0.359

```

p m shankar

Summary of χ^2 tests

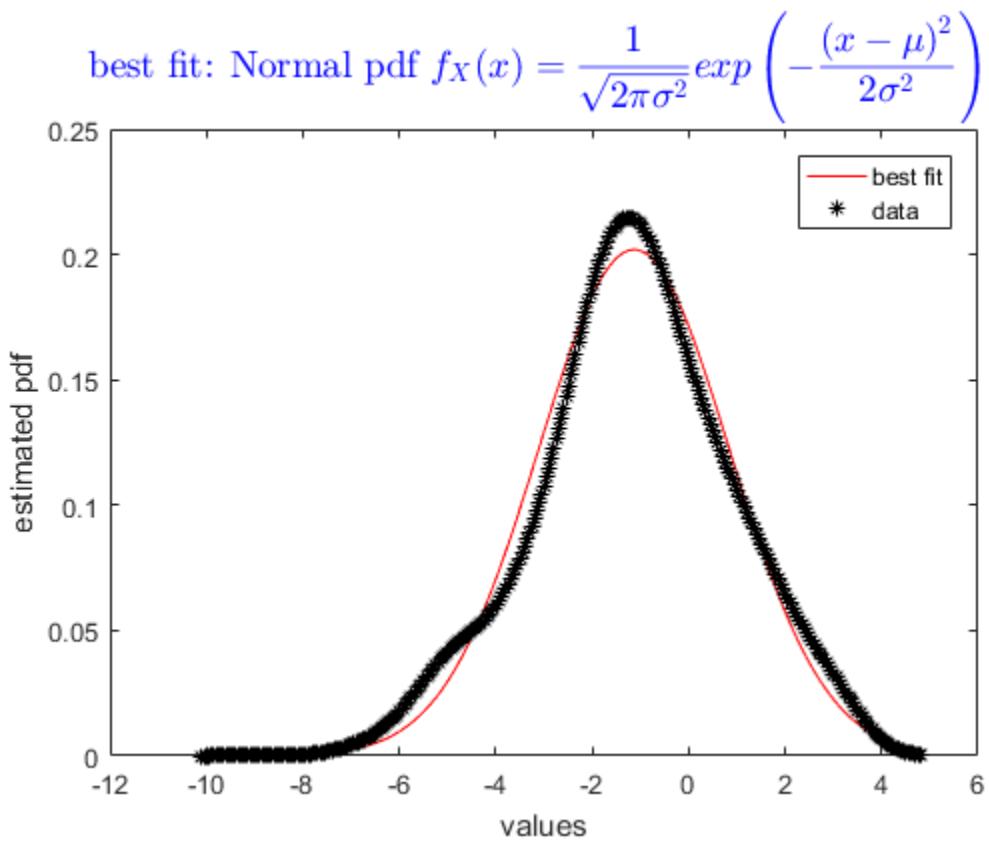
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	6.66	0	NO
Laplace distribution	6	16.02	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.1327 \quad \sigma = 1.9754$

p m shankar



data (Balaji)

4.479	3.113	2.236	4.277	2.577	2.891	1.559	2.692	1.307	2.454
1.584	3.673	5.065	2.654	4.02	1.444	5.402	2.324	1.369	3.612
3.625	2.044	1.37	2.076	2.165	1.719	2.795	1.668	4.1	5.12
5.723	5.358	3.232	2.713	0.091	3.667	2.345	0.382	1.268	7.418
3.451	1.372	3.306	2.039	3.297	2.393	1.547	1.344	1.129	2.976
1.798	1.574	3.559	1.098	4.897	3.57	1.128	0.395	2.636	1.585
2.818	0.506	1.158	1.429	4.147	0.658	3.375	1.938	2.708	1.538
1.772	2.607	2.831	3.695	2.453	6.04	0.661	2.85	2.916	1.592
2.542	4.165	2.246	2.595	2.862	2.425	4.52	0.829	2.92	1.454
1.353	5.775	0.985	4.181	4.017	3.219	2.533	2.543	4.209	3.031
4.082	1.187	1.101	1.608	3.093	1.431	1.74	3.1	2.256	2.87
3.573	1.207	3.286	1.586	1.175	2.679	1.801	1.882	1.12	0.928
0.36	1.651	2.035	0.9	1.214	3.506	2.265	5.432	1.331	3.098
4.473	1.078	1.746	1.162	4.714	2.483	1.615	2.526	5.008	4.501
0.894	1.237	2.965	1.75	1.334	0.579	1.472	0.43	3.099	3.705
3.481	3.628	0.964	3.835	2.944	1.149	2.807	0.842	1.324	1.858
2.357	3.11	3.416	0.675	3.342	1.268	4.508	3.374	1.607	1.229
5.018	1.072	0.844	4.18	2.132	0.444	1.974	1.576	2.739	3.987
1.521	4.079	1.868	6.082	2.092	0.895	1.257	3.417	5.153	2.431
4.461	0.666	1.074	2.727	3.206	3.197	3.196	0.721	2.696	2.724

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.4	0	NO
Nakagami distribution	5	4.5	0	NO
gamma distribution	5	5.56	0	NO

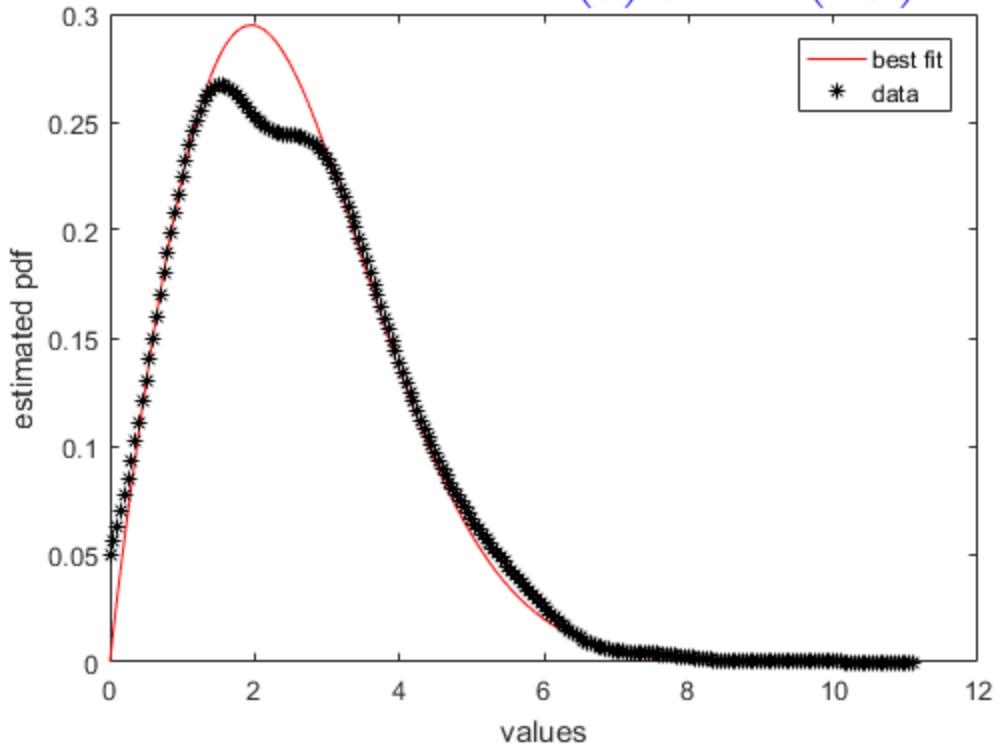
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.8458 b = 2.8458

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Basu)

```

2.111 -1.385 -4.598 -4.064 -4.472 0.771 -1.438 3.742 -0.421 1.029
-0.241 1.436 0.532 -5.512 -7.178 -0.157 1.055 -2.88 -2.805 -1.53
-0.315 -2.053 1.511 -1.982 -1.096 5.46 -2.355 -4.279 -1.429 -5.771
-2.673 -3.008 -2.416 0.744 0.586 -2.522 -0.892 -1.67 0.137 -5.782
-0.624 0.129 -0.056 -6.767 0.415 1.743 0.139 1.094 -2.106 -3.675
0.324 -2.699 -2.683 -0.912 -0.777 -0.584 0.429 -0.667 -1.645 -2.807
-4.458 -0.975 -0.047 0.549 -3.841 -0.468 -2.352 -1.098 -0.555 0.958
-2.636 0.353 -0.243 -3.469 -0.288 -3.083 2.2 -1.465 -2.727 -1.963
-1.36 0.092 1.309 -0.946 -2.893 -1.712 -0.92 -1.109 -0.257 -6.34
0.093 -0.811 2.758 -3.616 2.205 0.636 -0.401 -2.002 4.564 1.213
0.927 -4.189 -1.08 -0.063 -5.122 -3.727 -1.882 -1.251 -0.114 -0.47
-0.095 -1.429 -3.125 -0.286 -1.767 1.198 -0.212 -3.298 -2.575 -1.694
2.708 -0.579 -1.532 -1.042 -1.796 0.287 -1.849 -1.752 1.324 -1.443
-0.753 1.893 0.613 -2.069 -2.959 -2.054 -1.6 -4.067 -4.184 -4.06
1.078 -2.584 0.223 -2.089 3.238 -3.246 -2.113 -1.746 0.187 -1.444
2.616 -0.547 -2.83 0.657 -3.795 1.26 -1.076 -0.418 -0.622 -1.336
-0.967 -1.944 -4.495 1.086 -1.228 -2.589 -3.77 -1.109 0.592 0.752
-2.82 -2.176 -0.495 -3.243 1.534 -1.273 -2.156 -0.608 -1.425 1.76
-3.977 -0.749 0.079 -0.582 0.923 -0.068 1.384 -3.387 -0.969 -0.106
-0.052 -0.596 -0.242 -1.697 0.702 -4.783 -1.448 -0.101 -2.098 0.269

```

p m shankar

Summary of χ^2 tests

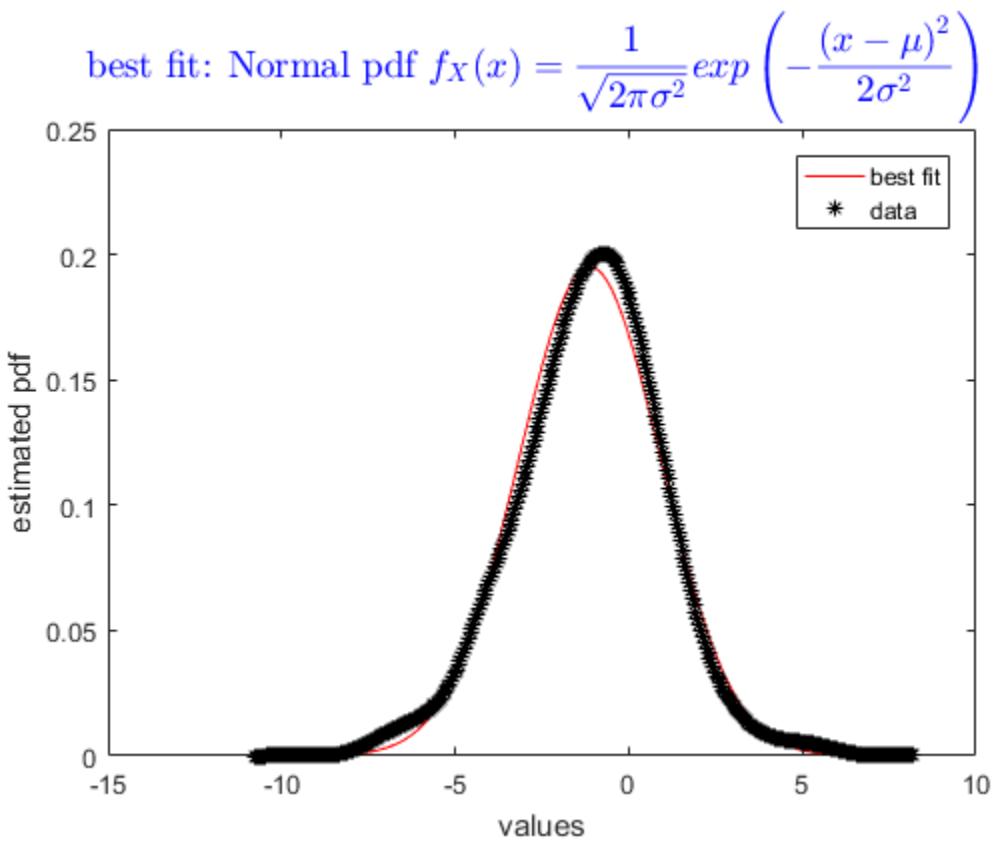
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	5.56	0	NO
Laplace distribution	6	12.65	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.1224 \quad \sigma = 2.0452$

p m shankar



data (Buccieri)

1.195	0.386	1.639	5.47	2.859	2.433	2.134	1.368	1.789	1.145
2.948	3.667	2.547	0.458	0.54	4.556	1.939	1.877	4.269	3.13
2.641	2.909	4.264	2.948	4.531	1.901	3.09	3.904	0.643	1.669
0.677	5.599	1.354	1.441	1.028	3.51	4.092	3.314	0.941	3.483
3.369	0.822	0.635	1.233	2.179	0.913	1.583	0.962	3.252	4.816
0.44	0.709	1.521	3.129	1.544	2.358	0.323	4.263	2.068	1.439
3.543	1.643	1.948	1.177	0.785	2.009	1.72	3.544	3.614	4.606
1.413	2.15	3.597	0.396	0.72	0.802	2.547	1.094	1.735	2.662
2.963	1.152	2.932	1.357	5.495	1.222	1.458	1.2	0.948	2.194
5.884	3.971	2.181	2.337	0.18	5.693	2.706	1.351	1.09	1.676
2.655	3.099	2.858	1.956	2.3	3.892	0.337	2.544	2.063	0.915
1.503	3.491	2.822	3.471	1.342	3.722	1.627	4.254	6.13	1.521
4.709	2.67	4.84	1.581	4.132	1.85	3.502	2.464	3.094	1.031
3.797	1.754	4.785	1.912	2.588	3.783	2.638	2.161	0.977	1.853
4.098	5.645	1.378	4.616	3.556	5.205	3.55	1.452	2.735	2.131
1.218	2.227	1.289	1.217	1.69	1.688	1.329	2.695	2.007	4.896
2.032	2.53	0.847	0.936	1.457	1.694	2.267	1.206	1.179	3.099
4.585	1.342	2.759	0.398	2.68	1.911	4.057	3.038	2.146	3.326
2.699	2.366	0.985	1.958	2.009	3.668	0.451	3.167	3.28	3.896
4.168	1.108	2.151	2.982	3.786	1.289	5.016	1.899	3.9	2.096

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	2.46	0	NO
Nakagami distribution	5	2.81	0	NO
gamma distribution	5	1.93	0	NO

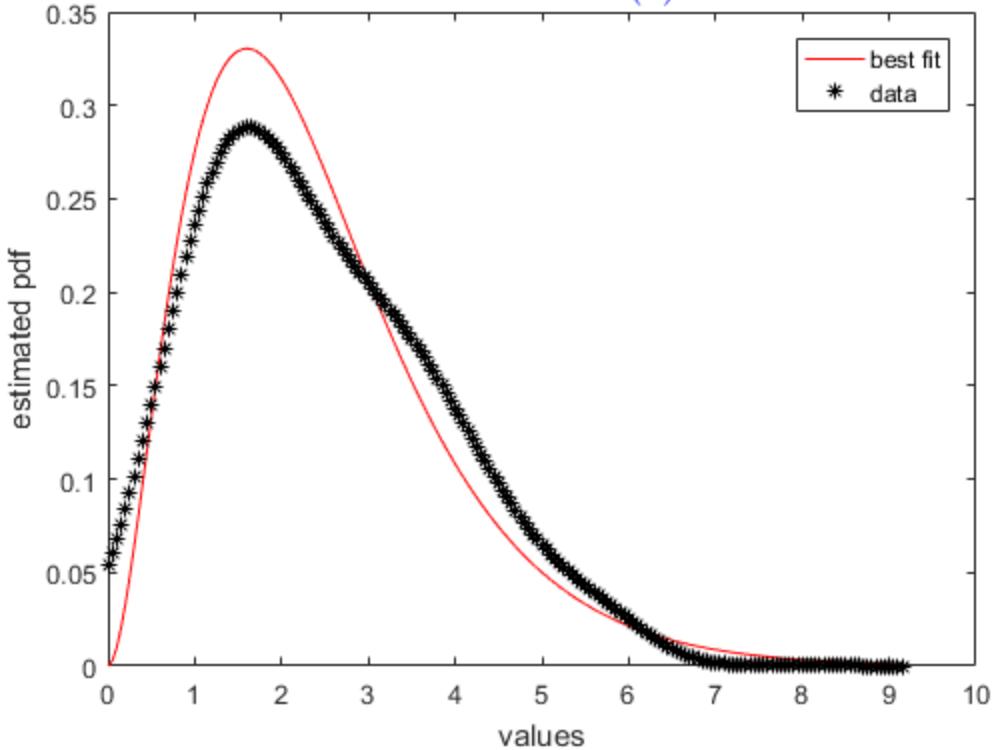
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 2.9149 b = 0.83562

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Burke)

```

-0.72  0.028 -3.533 -2.957 -4.596  0.472  3.849  0.562  1.765 -0.448
-1.661 -4.947 -1.527 -0.334 -3.504  1.548 -1.605  0.481 -2.019 -0.095
  0.87 -1.443 -2.127  1.709 -1.965  0.931  1.176  1.548 -1.057 -1.225
-0.652 -1.289 -4.078 -1.279  0.218 -0.379 -2.04 -1.196 -2.869 -2.773
-1.797 -4.368 -0.92 -1.763 -1.248 -2.401 -3.145 -2.244  1.787 -2.209
-2.346 -3.54 -1.658 -2.842  2.161 -3.098 -1.696 -0.796  0.461  0.549
-4.837 -2.075 -1.036  0.046 -3.447 -0.746 -4.469  0.425 -0.5 -1.368
-1.678 -4.575 -0.611 -6.388 -0.759 -0.56 -0.779  0.608  0.248 -2.037
-0.642 -3.436  1.326  1.756  1.639 -2.264 -5.281 -0.504 -1.031  1.581
  1.548 -1.137  0.312 -1.086 -2.219 -1.114  1.901 -4.123 -2.168 -1.973
  0.26 -2.495  2.137  0.114 -1.786 -0.903 -6.277 -2.162  0.096 -2.412
  1.364  0.074  0.681  2.099  0.574 -4.355 -3.749 -0.037 -2.994 -0.256
  0.273 -0.033 -3.042 -0.108 -1.207  0.326 -1.095 -1.332  2.003 -1.868
-1.368 -0.674  2.337  0.308 -0.391  2.264 -1.933 -4.368 -1.063 -3.486
  2.443  0.059  2.043  0.736  0.823  0.986  0.265 -1.045  3.244 -1.582
  0.251 -1.134  1.819  0.971 -1.417 -1.293 -2.992 -0.976 -2.318  0.247
-0.122 -1.528 -3.358 -3.097 -0.916 -1.187  1.319 -0.218 -1.612 -3.092
-1.919 -0.613 -2.194 -3.104    0 -0.244 -0.521 -5.808 -2.171  0.557
-1.847 -3.042  2.573 -2.273 -7.46 -2.539 -3.243 -2.206  3.455 -1.902
  2.609 -0.022  2.218 -0.837 -0.358 -0.664  0.889 -0.077 -0.202 -0.367

```

p m shankar

Summary of χ^2 tests

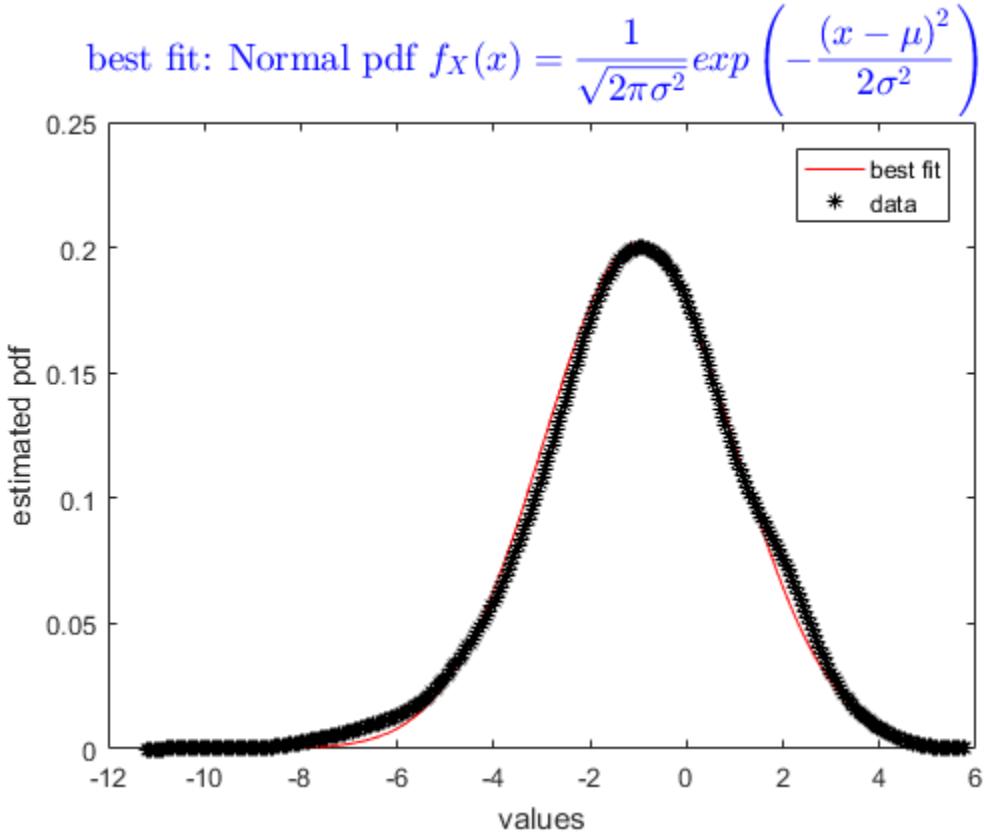
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	6.24	0	NO
Laplace distribution	6	6.71	0	NO

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.991 \quad \sigma = 1.9787$

p m shankar



data (Cai)

2.007	0.719	1.809	2.764	2.733	3.074	1.447	3.929	2.538	0.965
2.033	1.507	1.905	1.793	1.524	1.089	5.539	3.307	2.233	2.742
4.999	1.129	0.73	2.903	3.451	4.532	2.967	6.133	3.61	3.959
1.487	3.59	4.717	3.212	2.396	4.32	1.642	3.651	2.281	0.814
3.79	5.865	4.578	2.149	4.594	1.609	2.491	3.425	2.398	2.02
2.391	3.652	2.503	2.858	3.651	0.409	1.139	3.695	4.259	3.403
5.063	0.889	0.452	5.367	1.514	3.729	1.079	1.075	3.705	4.062
1.603	3.104	1.444	2.671	1.98	2.089	2.982	2.491	2.698	2.49
2.651	3.11	4.134	1.127	2.087	3.074	1.825	1.725	1.452	1.573
3.19	2.798	1.263	1.72	1.622	3.528	1.43	2.241	2.272	2.095
2.954	2.278	1.974	0.789	4.578	1.941	1.987	2.876	1.567	2.258
5.61	1.247	2.131	4.807	7.15	1.337	2.388	6.061	1.756	1.919
1.533	2.435	2.2	2.287	1.486	3.061	2.413	1.071	0.271	3.839
1.719	1.985	1.449	1.209	4.418	0.612	3.682	1.773	0.855	2.982
2.778	1.277	3.511	2.738	5.64	2.684	1.087	2.548	4.667	1.04
1.454	1.377	3.485	0.51	1.905	1.073	1.236	1.682	0.747	2.94
1.708	2.838	3.614	1.791	2.481	4.158	1.67	0.715	2.425	1.937
2.369	1.701	0.876	2.932	2.541	1.777	1.807	4.682	4.32	0.989
3.193	1.371	3.584	3.924	1.495	1.345	3.076	1.595	1.929	2.125
2.888	0.951	3.28	2.917	1.817	3.513	3.08	1.621	3.616	1.367

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	8.2	0	NO
Nakagami distribution	5	8.51	0	NO
gamma distribution	5	6.44	0	NO

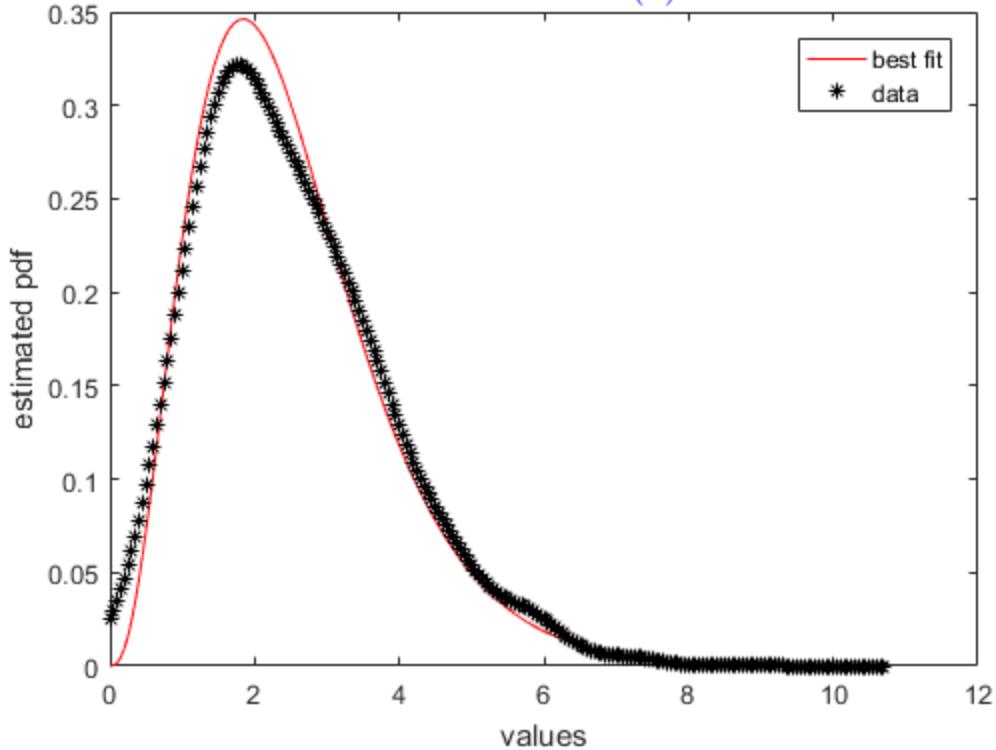
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 3.7107 b = 0.67879

[p m shankar](#)

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Chan)

0.594	0.622	1.929	-2.888	0.713	0.395	3.741	-0.365	-0.134	-0.983
-1.817	-1.222	-0.625	-1.609	-1.738	-2.247	-2.234	-0.82	0.341	0.696
-0.245	0.579	-0.77	-2.683	-1.988	-1.223	-2.597	-1.425	-1.784	-0.751
1.01	0.303	-0.392	-1.092	-2.678	1.64	-1.557	0.206	0.297	1.522
-0.846	-4.536	-4.053	-0.998	1.851	1.204	1.411	-0.357	1.236	-2.516
0.009	1.107	-0.416	-1.931	-0.207	-3.866	-2.297	-2.392	-1.395	-1.546
-3.722	-2.223	0.033	-0.358	0.833	-0.14	-1.74	0.59	0.102	-1.237
1.36	-3.856	0.158	0.415	-2.216	-0.262	-2.306	-1.242	-0.867	-3.848
-1.267	-1.711	0.284	2.676	0.142	-0.591	-2.208	0.78	0.653	-3.691
-1.786	-7.12	-3.552	-5.37	-1.484	-2.598	1.712	0.476	-4.108	-1.005
-2.083	-1.396	4.377	0.897	-4.301	1.053	0.555	-3.052	-1.248	-1.701
-3.117	-1.615	-4.159	-0.401	-5.006	-2.35	-0.731	-0.267	-1.611	-0.545
-4.577	-0.447	-1.409	-1.428	-1.87	-0.005	-0.999	-1.259	0.533	-4.287
0.479	1.961	-1.045	1.201	-1.68	-0.192	0.319	-0.31	2.16	-1.712
0.637	-2.748	-2.713	-2.753	0.382	2.305	-1.436	-1.57	-4.125	-4.442
0.725	-1.627	-2.508	1.336	-3.312	2.662	1.931	-2.783	-1.343	1.356
-2.015	-2.181	-1.816	-2.907	0.253	-0.311	0.549	-1.442	0.001	-2.12
-2.141	-0.822	-1.446	-0.584	-0.522	-2.458	-2.263	-1.085	0.059	0.95
-0.184	-3.929	-1.96	-1.647	-3.302	-2.038	-1.359	-0.191	-1.655	0.906
-0.532	-1.367	-2.302	0.611	-3.649	-4.26	-0.079	-0.614	-4.66	-1.587

p m shankar

Summary of χ^2 tests

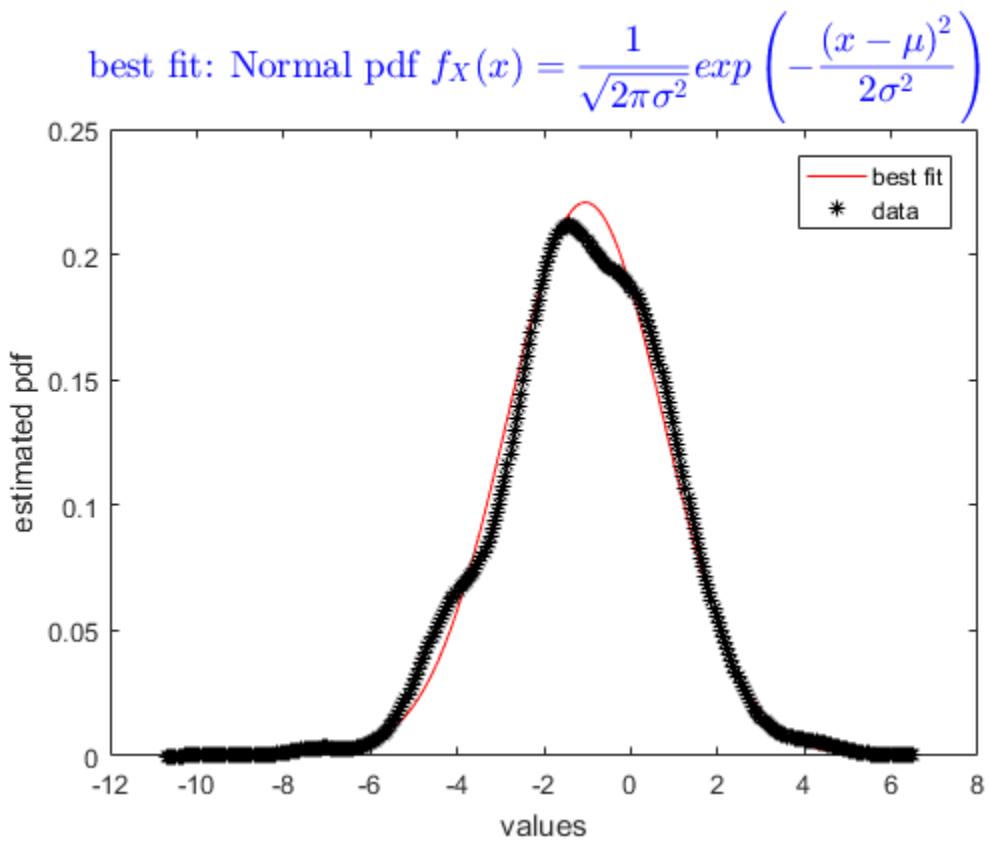
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	1.98	0	NO
Laplace distribution	6	19.87	1	YES

**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0475 \quad \sigma = 1.8069$

p m shankar



data (Ciliberto)

2.24	1.587	2.352	4.251	2.504	3.05	3.432	1.691	1.012	3.06
3.665	2.56	1.341	4.907	4.072	2.026	2.1	1.191	4.783	1.637
1.434	3.793	1.466	2.827	4.724	1.568	1.807	1.935	0.296	1.594
4.978	1.018	1.006	1.691	4.079	1.606	2.566	3.345	4.035	3.71
3.677	1.545	1.994	3.659	0.965	1.973	2.062	0.954	0.309	2.107
2.24	4.285	2.295	2.032	2.361	6.061	1.889	3.813	3.199	2.93
2.45	3.079	2.406	2.652	1.017	2.714	2.187	2.008	1.49	4.156
0.72	2.759	1.604	3.438	0.788	3.159	1.245	3.911	4.468	2.744
2.153	1.699	3.196	1.957	0.53	1.358	4.823	0.802	1.706	2.893
1.952	0.672	2.668	1.175	4.905	3.124	1.101	1.021	1.847	1.525
3.459	1.703	2.043	2.353	2.777	1.6	3.483	3.455	0.912	2.035
2.908	3.216	2.75	4.442	1.816	2.613	1.891	2.788	5.818	2.296
2.794	2.533	1.227	1.209	1.966	3.65	1.278	2.753	1.724	1.726
3.071	1.667	1.991	2.106	2.577	6.185	1.576	1.119	3.094	2.904
2.452	2.159	2.784	1.735	3.303	2.413	1.967	1.652	1.316	1.198
3.17	3.525	2.618	1.107	6.82	1.197	0.647	2.898	2.385	4.541
2.761	2.277	1.79	1.6	1.999	1.919	4.353	2.405	0.557	2.429
2.96	0.442	3.256	2.578	4.537	2.906	1.682	1.924	1.443	3.674
1.474	3.951	3.431	2.283	5.032	2.339	1.714	1.426	1.909	1.821
2.747	3.624	0.569	4.407	4.135	0.953	2.669	0.966	0.802	3.739

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	6.32	0	NO
Nakagami distribution	5	5.97	0	NO
gamma distribution	5	4.07	0	NO

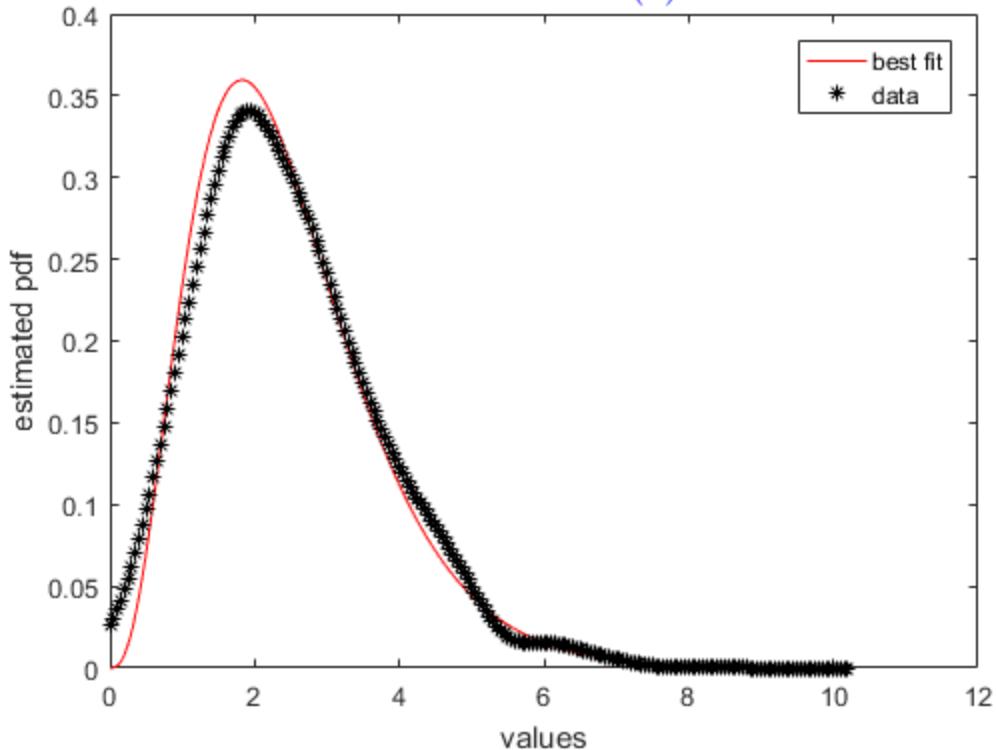
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 3.8698 b = 0.63604

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Davis A)

2.355	-0.554	-2.872	-0.499	0.745	-0.535	0.088	-3.784	1.96	0.392
-3.825	-1.7	-1.738	-3.381	-3.76	-1.452	1.254	-1.237	-3.989	-0.266
-1.39	-5.543	1.267	-1.37	-2.258	-2.436	-2.016	-1.05	1.632	-1.467
-2.704	-1.037	2.937	-2.086	-0.026	-0.044	-2.892	-3.635	2.251	1.49
-1.288	-1.184	-1.455	0.706	-3.246	0.352	-1.036	-3.196	-1.353	-1.723
-1.19	-0.499	2.817	0.223	-4.677	-5.95	0.439	-1.71	-0.572	0.162
0.957	-2.89	1.864	-2.658	2.47	-1.068	0.562	-1.866	-4.412	0.876
-1.563	-2.831	-0.41	-1.757	-2.542	-2.92	-0.712	-0.017	-0.917	1.688
0.776	-1.707	-2.06	-3.81	-1.843	-1.287	0.837	-2.396	0.44	-0.108
-5.86	0.623	-1.727	-5.586	-1.902	-1.322	2.265	-2.1	-0.849	3.169
-3.438	1.209	-1.674	-3.247	-2.673	-3.17	2.917	-4.268	-0.914	-2.495
-1.62	-0.804	-0.248	-3.056	0.469	-0.56	-0.048	-5.131	-3.018	-1.078
-0.232	1.127	1.301	0.073	-2.397	2.883	-3.149	-0.407	-2.589	1.044
-3.889	1.599	-0.709	0.664	-0.976	-2.062	-3.955	1.08	0.514	-1.421
-1.211	5.065	2.773	-0.975	-0.666	-4.556	0.685	0.907	-2.563	2.711
0.064	-1.142	0.418	-3.615	-0.889	1.838	-0.039	-2.315	-4.542	1.484
-3.192	-0.566	-3.105	-0.999	-2.65	3.379	5.174	-3.362	-1.45	-2.796
-0.391	-2.239	-3.409	4.892	-2.581	-0.412	0.95	0.906	-2.593	-4.305
1.764	1.598	-4.769	1.867	-3.391	1.474	-1.689	-0.454	1.126	-0.52
0.601	0.401	-1.683	-2.881	-0.493	2.77	-0.259	-0.184	1.021	-1.574

p m shankar

Summary of χ^2 tests

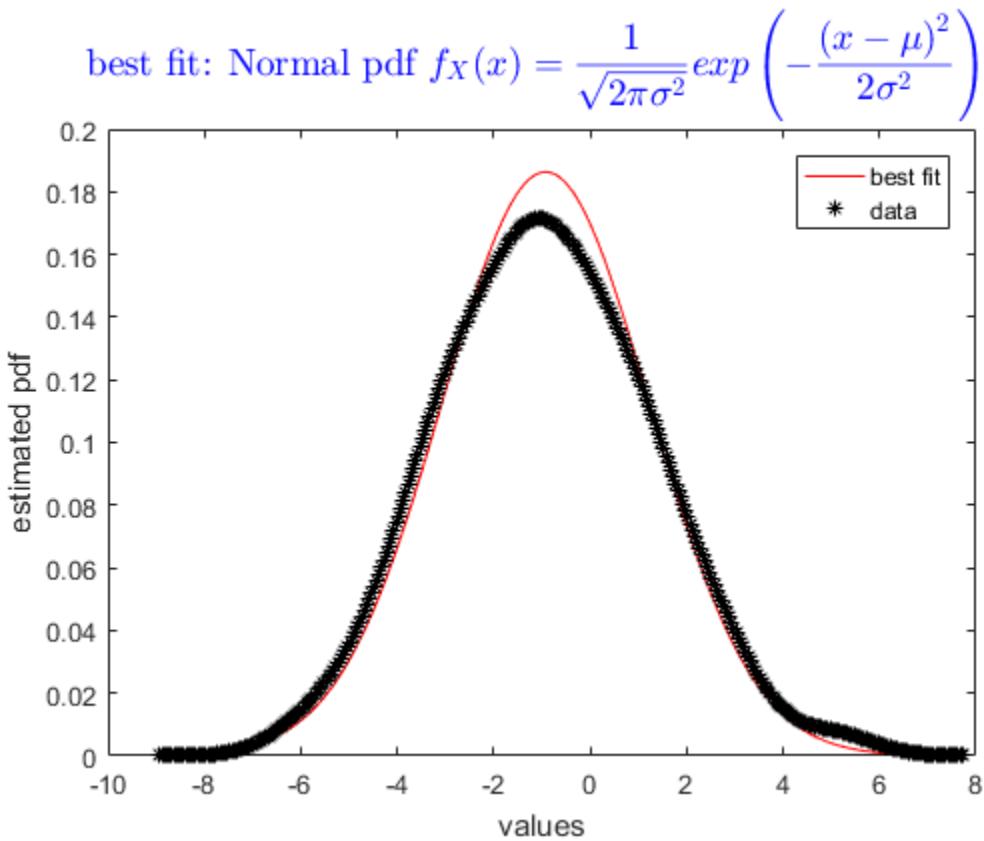
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	2.75	0	NO
Laplace distribution	6	20.67	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.92542 \quad \sigma = 2.1409$

p m shankar



data (Davis E)

1.649	2.368	3.338	2.728	2.493	3.514	1.459	2.096	1.533	2.401
3.914	2.424	2.544	0.067	3.109	4.66	2.693	1.201	1.956	1.387
2.682	2.531	1.775	1.709	2.625	1.567	1.252	5.211	1.582	1.117
2.177	3.604	3.307	1.959	2.699	5.222	2.522	2.968	1.294	0.925
3.429	0.118	0.337	1.537	3.301	3.613	4.648	1.18	0.98	2.544
4.724	2.871	4.003	1.722	1.5	3.998	2.652	3.078	2.971	2.14
5.249	1.512	2.52	1.341	2.23	0.964	2.199	4.478	3.146	2.884
1.967	3.408	1.063	4.031	2.155	3.243	5.092	4.432	1.417	0.633
2.328	0.915	1.203	0.6	3.697	0.998	1.683	2.051	4.84	1.157
2.877	3.496	3.51	3.708	3.145	2.041	3.043	2.858	2.843	3.09
2.424	5.578	3.224	1.117	3.696	2.687	0.471	1.532	1.339	0.647
1.139	1.924	4.348	0.853	1.729	1.567	2.341	2.411	1.72	1.406
0.57	1.517	4.473	1.875	1.997	0.518	3.381	2.798	2.592	3.566
2.295	1.918	2.196	0.61	1.391	1.874	4.089	3.535	1.436	0.91
1.244	4.582	1.94	1.946	3.422	2.017	2.652	1.679	0.875	3.76
3.317	3.146	4.541	2.998	2.328	2.155	3.096	2.701	1.58	1.915
4.751	3.635	5.819	2.435	3.488	1.379	4.035	1.624	3.597	3.204
2.282	2.802	1.786	1.366	1.197	3.944	3.552	3.069	1.069	1.165
4.795	1.365	2.08	1.685	0.261	1.857	0.498	2.618	1.59	4.564
2.517	3.542	2.35	3.948	1.095	3.393	0.845	3.903	5.011	1.917

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.95	0	NO
Nakagami distribution	5	5.12	0	NO
gamma distribution	5	9.41	0	NO

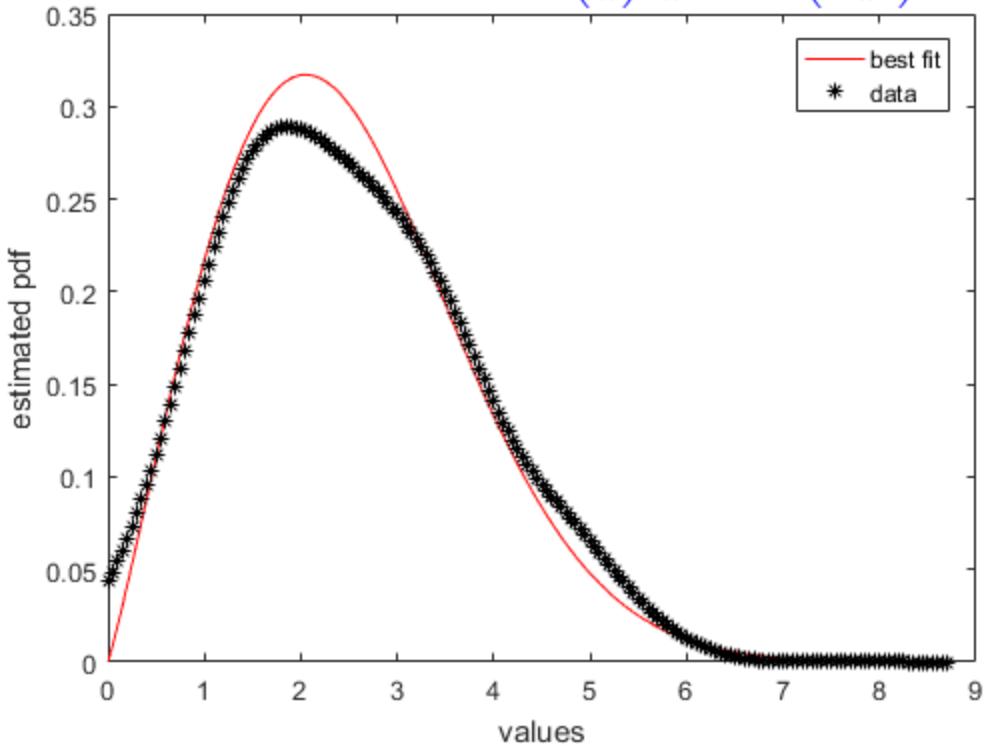
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.791 b = 2.791

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (deGruchy)

```

-2.392 -5.225  0.369 -3.305 -2.882 -4.381 -1.54   -0.6   -2.222  1.925
-2.852 -0.619 -2.988 -3.516 -1.518 -0.576 -2.057 -3.578  -3.3   0.858
-3.846 -0.853  0.694 -3.255 -0.811  0.362  2.046  0.339 -1.313 -3.622
  0.43   0.729 -0.891 -0.892 -5.717 -1.439   0.38  -2.162 -1.246 -1.571
-4.635 -2.117 -2.115 -4.632  -0.09 -3.658  0.378 -4.005 -2.432 -0.852
-2.66   -1.042 -1.197 -6.542 -4.477  2.964 -0.802 -0.737 -3.111 -2.026
-2.697 -3.817   0.76  -4.111 -3.532 -2.043 -3.399  4.502 -0.455 -1.064
-3.25   1.654 -2.693 -1.016 -0.075 -1.453 -1.985 -1.893  0.386 -2.999
-0.245 -1.902  0.423 -1.258 -3.62  -1.559 -1.077  1.524 -0.517 -0.811
-0.745 -4.35   0.199 -0.607 -1.539  0.832  -1.43  0.176 -0.796  3.013
-1.076 -2.924 -2.308  0.009  1.293 -1.234  1.703   1.89 -1.012 -1.976
-4.358 -2.101 -1.629  2.686 -0.973 -2.706 -1.332  0.201  0.028 -1.784
-1.724 -0.029  1.613  0.432 -3.462  0.025  2.639 -1.421 -4.479 -1.414
  2.259  0.437 -0.586 -2.476  0.747 -0.964  0.307 -0.914  1.391 -3.229
-0.885  3.577   0.51   1.846  0.259 -1.374 -0.676 -2.464 -0.804  -2.59
  1.923  -5.26  -0.928 -1.099 -0.166  0.491   1.06  -2.936 -0.826  3.798
-0.801  0.505  2.469  0.079  2.088  1.552 -0.987  0.915 -0.496  3.186
-2.848  3.142 -6.065 -1.653 -4.172 -3.384  1.391 -2.151 -1.085  0.288
-0.77   2.057 -4.309 -1.847  0.427  4.143 -0.252 -3.946 -2.398  3.829
  0.162 -1.582 -3.227 -0.971 -2.325 -3.606  0.477 -1.782  2.221 -2.577

```

p m shankar

Summary of χ^2 tests

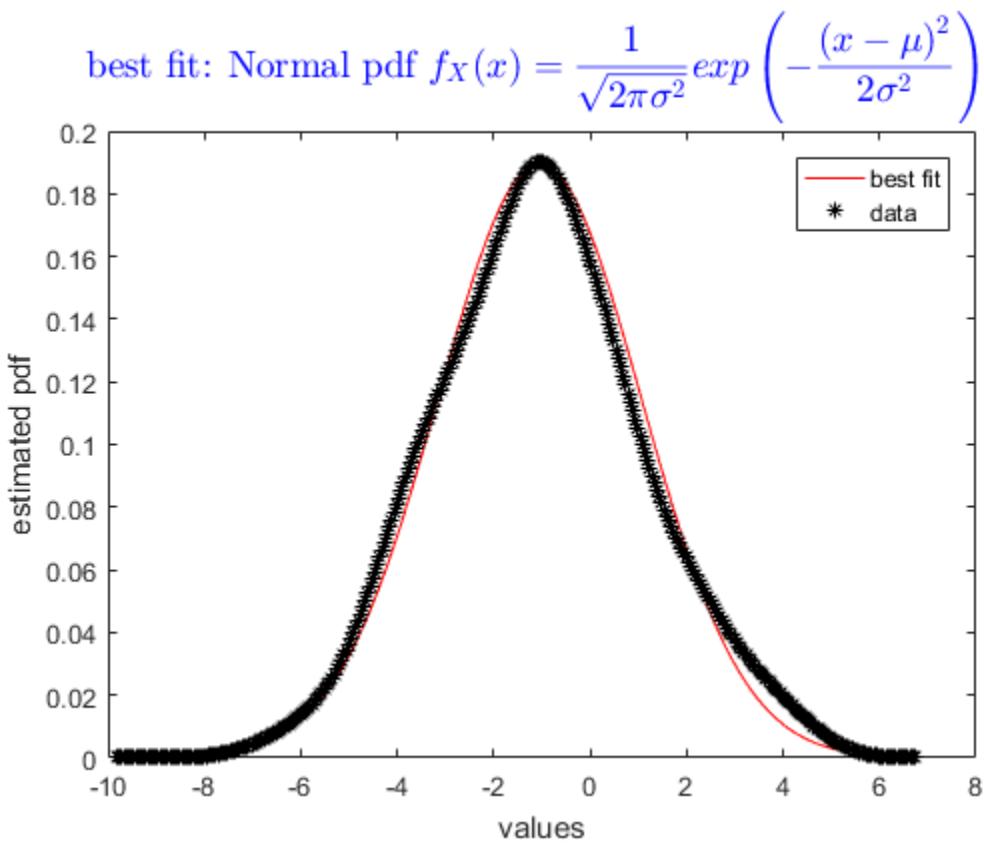
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	6.61	0	NO
Laplace distribution	6	14.76	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.048 \quad \sigma = 2.1047$

p m shankar



data (Deitrich)

4.605	2.673	2.562	4.28	3.841	1.417	0.978	3.214	1.837	2.211
1.936	0.79	1.821	0.871	2.471	2.214	4.762	3.183	2.25	2.683
5.238	2.158	2.066	2.544	3.312	3.488	1.197	3.563	3.931	0.63
0.342	2.765	1.209	1.65	1.404	3.225	3.205	1.69	5.979	1.906
1.69	2.088	2.098	2.762	1.748	3.891	0.977	4.943	2.718	2.203
2.566	1.634	1.721	4.157	2.829	2.735	1.945	2.465	1.884	2.089
1.741	5.122	3.656	3.769	2.609	3.761	2.437	4.366	3.115	0.5
4.138	6.203	0.695	2.46	4.183	2.282	1.962	2.501	1.055	1.554
2.042	2.289	4.183	0.95	2.403	0.724	3.762	3.527	1.471	2.153
2.214	3.307	1.58	1.245	1.809	1.564	3.125	1.034	1.918	6.537
1.648	3.169	2.546	0.376	2.492	2.68	0.72	2.075	2.781	2.261
1.633	4.192	3.509	0.577	3.924	0.991	1.475	4.75	2.044	1.971
3.08	2.881	2.276	1.044	5.439	3.292	2.153	1.236	2.397	3.454
2.789	2.723	3.871	2.121	2.455	1.444	4.454	4.599	0.967	6.192
0.517	0.834	3.047	3.935	5.348	3.833	1.883	3.028	1.567	1.122
1.968	3.913	0.736	2.307	0.957	4.445	4.142	1.307	2.576	2.221
0.485	1.208	2.701	1.07	1.286	3.331	1.109	1.466	0.74	0.764
2.847	1.089	0.614	6.172	1.58	4.02	4.001	1.516	1.691	3.373
2.353	0.645	3.47	0.66	1.719	2.45	2.802	2.18	1.537	1.751
1.919	2.342	0.939	0.459	1.367	3.148	2.131	1.57	0.93	1.518

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.87	0	NO
Nakagami distribution	5	5.51	0	NO
gamma distribution	5	5.73	0	NO

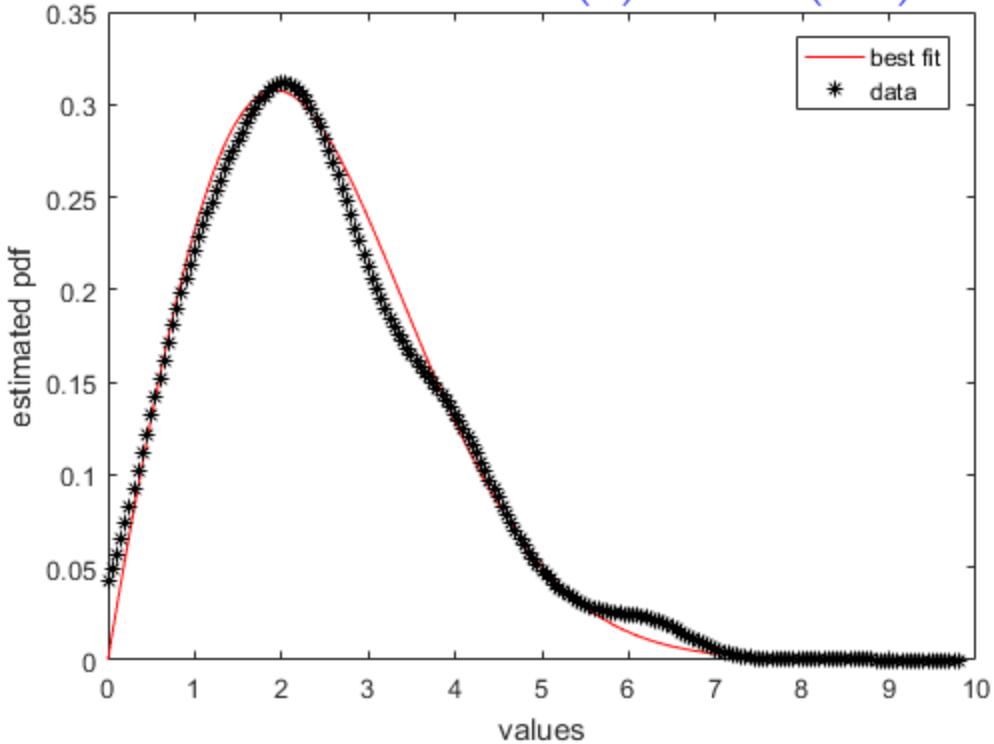
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.7624 b = 2.7624

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Deng)

```

-0.184 -2.956 -2.612 -1.935 -3.38 -0.902 -1.726 -1.716 -2.596 0.008
-1.409 -1.162 1.582 2.197 -1.424 1.923 1.39 -4.593 -1.845 -2.088
0.343 -2.109 -2.943 -2.21 -1.09 -5.535 -1.449 -1.758 -1.473 0.308
-5.865 -1.999 -2.596 -0.826 0.662 0.257 -2.066 0.606 -3.736 -2.615
-3.879 0.378 -0.178 -0.208 1.636 -1.054 -1.841 -0.427 -0.487 -2.573
1.477 -1.62 -0.873 0.164 -4.251 0.728 1.139 -1.912 -1.674 1.128
-3.606 -1.309 -0.062 -0.054 -2.239 -0.462 -0.234 -1.974 1.722 -0.524
-1.526 -0.685 -1.674 -2.154 -2.208 -0.078 -2.241 -1.942 -0.881 -1.68
-1.95 -3.583 2.002 -0.148 0.846 -7.16 -2.876 0.518 -3.055 -2.752
-1.129 -1.639 -2.751 0.108 -2.591 -0.307 -4.382 -3.419 -0.539 -4.908
2.013 0.041 -1.302 1.294 -2.457 -2.85 1.933 -5.028 -2.258 -0.973
0.022 0.637 -2.78 -0.722 -1.275 1.133 0.085 -0.507 -1.269 -4.88
0.401 0.556 -2.387 0.08 -1.611 4.98 -4.385 -2.294 0.888 -2.629
-4.286 -2.094 -3.932 -1.176 2.418 -2.158 -2.292 0.701 -1.578 -3.104
-6.429 -1.762 2.726 -0.762 1.566 -1.255 -0.319 -2.351 -0.221 0.542
-0.168 1.042 1.62 -2.304 2.345 0.365 -0.449 -0.137 -2.007 -0.647
2.939 1.393 -2.627 -0.659 0.634 -1.41 -2.604 -1.61 1.286 2.069
2.437 2.726 -0.445 0.019 -6.045 2.285 -2.134 3.074 -2.489 -0.562
-1.066 -0.522 0.051 -1.951 -2.88 -1.106 -0.242 -4.121 -0.315 -1.487
-2.533 -1.061 1.375 -1.985 1.169 -3.65 -3.224 -4.367 -0.811 0.172

```

p m shankar

Summary of χ^2 tests

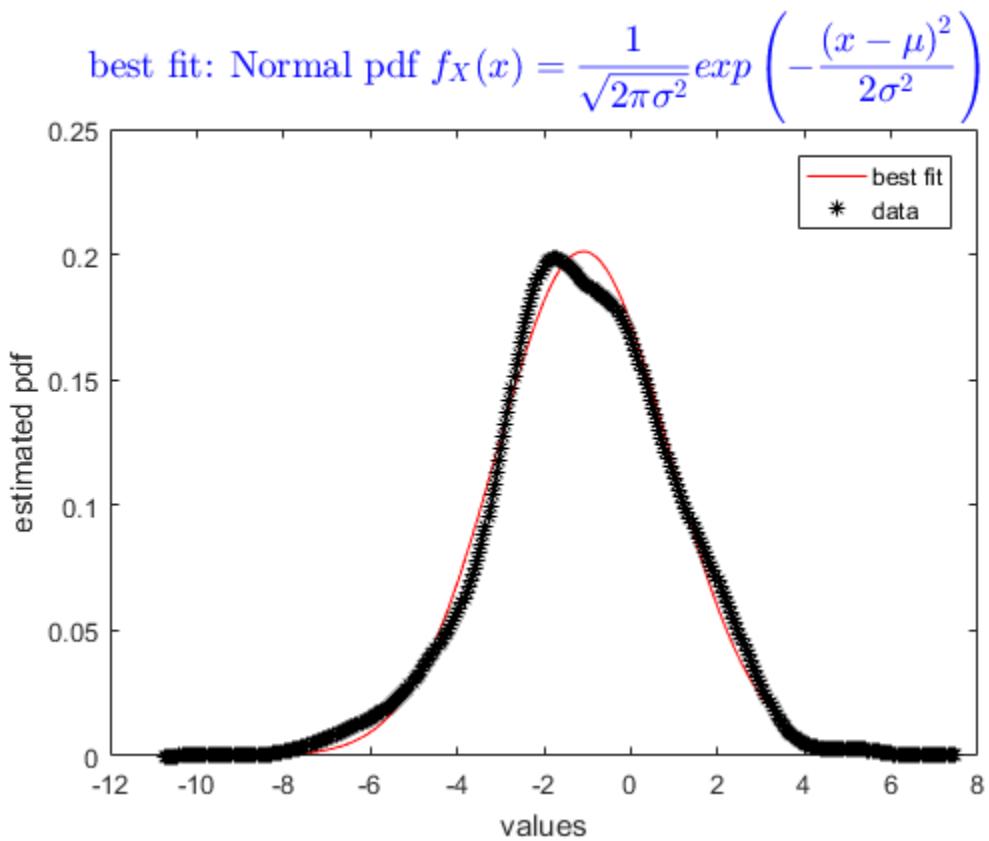
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	7.46	0	NO
Laplace distribution	6	19.92	1	YES

**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0965 \quad \sigma = 1.9828$

p m shankar



data (DePaul)

3.15	3.38	4.156	2.086	1.963	0.387	1.383	2.911	2.991	4.168
3.366	0.27	1.333	3.801	3.119	3.008	1.525	6.066	3.18	2.662
1.965	2.693	2.693	3.549	2.594	2.018	0.765	1.804	2.651	3.199
3.15	1.27	1.669	2.846	2.315	1.662	1.144	0.684	3.667	3.341
3.222	1.557	2.477	2.141	4.105	1.453	2.898	4.143	2.068	4.208
1.872	2.215	1.742	2.077	1.953	5.425	5.236	2.499	0.73	3.999
4.175	0.732	2.764	2.684	0.454	0.538	0.766	3.178	1.431	1.36
4.423	2.361	3.136	7.191	2.974	3.076	0.788	1.917	1.805	1.715
3.069	2.34	2.485	3.271	3.292	3.134	4.282	1.544	0.917	1.676
0.488	3.643	2.727	2.489	0.391	2.373	2.655	4.241	1.306	2.108
0.163	3.728	1.377	4.515	3.995	5.121	0.394	1.581	0.621	0.086
0.929	4.551	4.024	2.476	2.7	5.52	0.988	4.078	2.698	0.559
3.921	2.007	0.921	3.761	5.408	2.59	0.954	6.106	2.663	2.502
2.491	1.465	3.5	1.237	0.984	2.052	2.527	1.458	1.622	0.661
1.253	3.115	4.447	4.567	0.478	1.282	3.804	2.938	4.397	8.971
2.691	0.835	4.057	0.754	1.699	1.098	1.936	4.553	1.785	0.748
4.87	1.66	2.124	2.539	2.967	1.968	2.119	1.66	1.894	2.383
4.539	2.924	1.44	2.881	1.65	3.221	1.399	0.706	1.293	1.181
2.094	2.464	2.159	1.61	0.256	4.099	2.38	1.759	0.807	2.052
4.982	1.509	1.95	2.102	1.221	2.521	0.433	3.593	6.581	1.233

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	2.78	0	NO
Nakagami distribution	4	2.89	0	NO
gamma distribution	5	6.07	0	NO

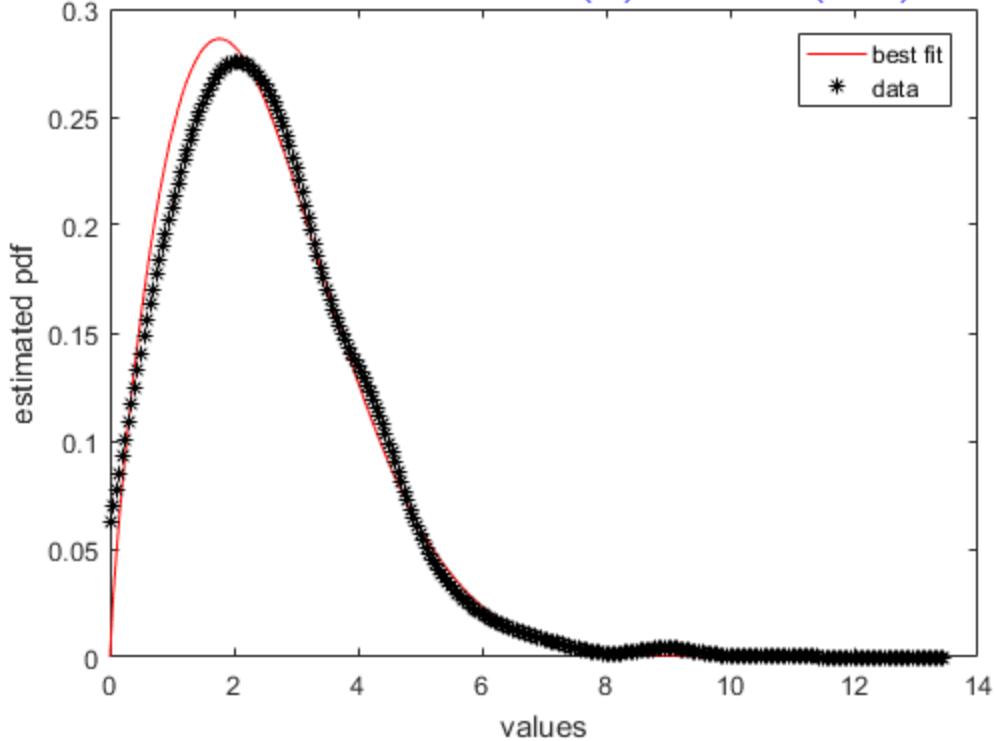
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.7978 b = 2.7978

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (DeVane)

```

-1.566 -1.894 -0.02 -6.901 -0.383 -0.487 -4.033 -3.031 -0.631 1.035
-1.859 0.193 -0.279 -2.04 -2.014 -0.117 -0.71 -1.977 -3.587 -3.99
-0.037 -2.477 0.094 1.57 0.708 -0.668 1.674 -0.502 -1.47 -1.177
-1.117 -0.243 -1.665 1.301 -2.422 -1.238 -4.387 1.507 -2.886 0.173
0.852 -0.031 0.023 0.912 -3.371 -2.895 -5.08 -1.003 1.521 -3.139
-1.587 -0.722 -1.591 -1.296 -2.44 2.134 -1.734 -3.046 -0.309 -0.648
-1.239 -1.686 1.264 -1.108 -1.208 0.097 -1.908 -0.892 2.763 -4.473
-3.183 -0.098 1.181 -0.153 1.127 0.916 -1.709 -1.411 -1.314 -2.019
1.634 -1.614 -1.756 0.844 0.818 -2.133 -1.198 -0.941 1.459 -1.742
-5.033 -1.674 -1.153 -1.546 -2.279 -2.645 -2.455 -0.459 0.015 -1.017
-5.676 -3.009 1.609 0.021 1.451 -3.159 0.785 -3.088 1.517 0.784
-3.211 -3.018 -0.815 -2.854 -2.64 -0.123 -0.629 -3.428 -2.584 0.263
-1.88 -2.579 -1.916 2.11 1.529 -0.396 -1.771 -2.224 2.979 -1.494
-2.84 -2.548 -4.691 -4.271 -0.893 -2.612 0.163 -1.295 -0.949 1.255
2.196 -0.736 0.276 -0.166 0.026 -6.059 -5.52 0.493 -0.895 1.323
1.808 -1.447 -0.933 -2.123 0.803 1.087 3.264 0.01 1.65 -1.9
-1.724 2.965 2.395 -3.484 -2.542 -1.15 1.955 -1.045 -2.604 -1
-2.007 -4.399 -3.742 -3.01 -3.914 -2.444 0.355 -0.128 -4.424 -0.797
-0.621 -0.021 -1.019 2.257 -0.032 1.649 -4.853 -2.391 1.436 -1.386
0.727 -0.885 3.2 2.286 0.475 -1.239 -2.571 -0.444 -0.02 -1.91

```

p m shankar

Summary of χ^2 tests

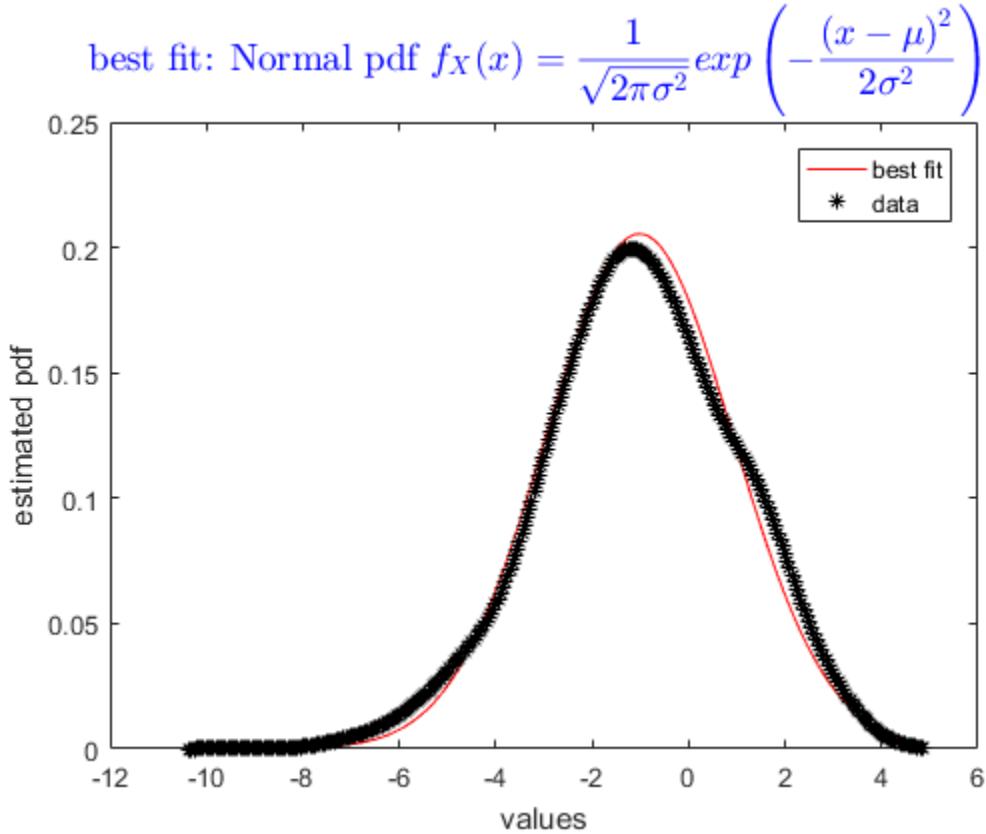
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.36	0	NO
Laplace distribution	6	18.11	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0201 \quad \sigma = 1.942$

p m shankar



data (Ding)

3.005	1.296	4.433	4.03	2.429	1.836	2.171	2.315	2.224	2.928
1.415	1.964	0.365	4.292	5.436	2.919	1.2	2.639	3.703	3.345
3.86	2.638	5.744	3.73	3.62	2.964	3.107	2.878	1.341	5.74
1.002	1.322	0.834	3.598	2.532	1.528	0.892	5.508	2.6	0.472
0.234	1.373	2.324	2.212	2.627	0.544	3.016	3.776	4.224	2.149
3.691	2.132	2.761	2.931	1.921	0.797	3.198	1.586	0.996	0.709
2.422	4.13	6.832	1.669	3.483	1.105	0.554	1.182	2.529	2.718
2.299	0.84	2.823	4.034	2.152	2.356	3.499	2.356	2.9	3.121
0.733	2.863	2.828	3.503	1.147	2.768	3.644	4.175	1.339	5.477
1.901	1.5	3.195	4.512	3.958	1.887	2.158	2.275	2.601	2.178
2.543	1.002	1.726	4.412	3.542	4.076	2.116	2.608	2.107	3.517
0.906	1.221	0.747	1.363	1.819	4.936	2.974	1.028	2.311	1.572
2.466	2.051	3.5	3.256	1.47	3.277	1.289	2.786	1.915	1.593
2.221	3.111	1.582	1.047	4.088	3.847	0.997	2.264	1.175	1.241
5.582	1.887	4.223	1.846	0.872	1.833	2.031	4.415	2.732	1.732
2.015	2.465	2.835	0.901	2.916	5.259	2.409	1.861	2.752	1.645
3.688	3.219	2.921	0.776	0.505	4.153	3.072	3.135	0.8	3.06
2.38	6.936	1.727	0.944	5.392	1.511	0.644	1.582	3.498	1.877
3.503	0.451	3.2	2.856	2.634	2.12	2.675	3.76	3.078	1.888
2.476	3.033	2.871	4.274	2.768	0.74	4.001	2.006	2.01	2.437

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	9.15	0	NO
Nakagami distribution	5	9.46	0	NO
gamma distribution	5	14.85	1	YES

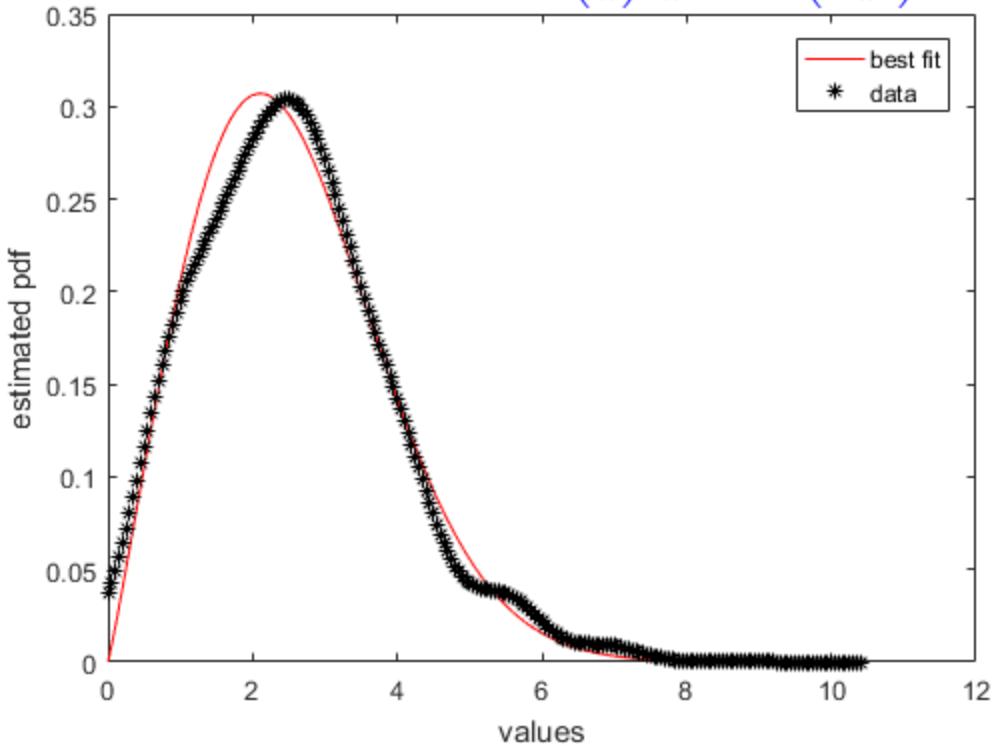
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right)^{\frac{b}{a}} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.8767 b = 2.8767

[p m shankar](#)

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Dogan)

```

-2.247 -2.225 -1.198  1.643  0.905 -0.935 -2.418 -3.146 -0.059  1.138
-3.586 -3.33 -0.147  2.452 -1.884 -0.032  2.371 -2.73 -1.216  0.072
 1.583 -2.799 -1.105  0.493 -0.746 -2.024  2.031 -1.887 -2.092 -3.284
-1.215 -1.345 -3.576 -2.603  0.119  1.121 -1.786  1.441 -1.693 -3.956
-1.765 -1.241 -0.495  0.696 -0.644  0.118 -0.484  2.527  0.213 -1.308
-1.952 -2.014 -1.304  1.913 -0.378  2.725  1.728 -2.146 -3.002 -3.53
-1.814 -2.484 -0.374  0.352 -1.467 -2.314 -1.361 -2.537  3.39 -1.335
-2.548  1.993  0.697  0.859 -1.756 -0.78 -3.056  0.966  1.405 -0.656
  3.28 -2.39 -2.21   1.46 -0.436 -3.185 -2.699 -1.737 -0.678 -2.259
-3.754  1.94  2.403  0.345 -3.948 -4.278 -0.499  2.219 -1.51 -3.875
-0.756 -3.084 -1.065 -1.603  1.012 -4.072 -1.824 -1.139 -0.147 -0.689
  0.121 -1.028 -3.091  1.095 -3.524 -3.845 -3.893 -1.809 -3.767 -1.11
-3.043 -3.744  2.489 -0.49 -2.876  1.343 -2.398 -0.092 -2.997 -2.628
-1.02 -0.549  0.598 -1.825 -2.191 -2.082  0.14 -0.27 -1.379 -0.747
-3.877  1.886  2.003  2.124 -2.443 -4.64 -1.573 -1.831 -2.642 -2.702
-0.11 -1.295 -2.396  1.736 -4.365 -1.725  1.457 -2.423 -4.836  1.917
-0.699 -0.914 -0.852 -2.101  0.663  1.54 -1.488  1.16 -4.512 -0.843
-0.436  1.402 -4.044 -3.641 -3.701 -4.374  4.403 -1.151 -1.396  1.248
-0.954  1.857 -4.471 -3.748 -0.67 -2.43 -1.9 -2.83 -0.211  0.11
-2.677 -1.818 -2.8  0.068 -0.962 -1.385  2.211  0.115  1.868 -0.051

```

p m shankar

Summary of χ^2 tests

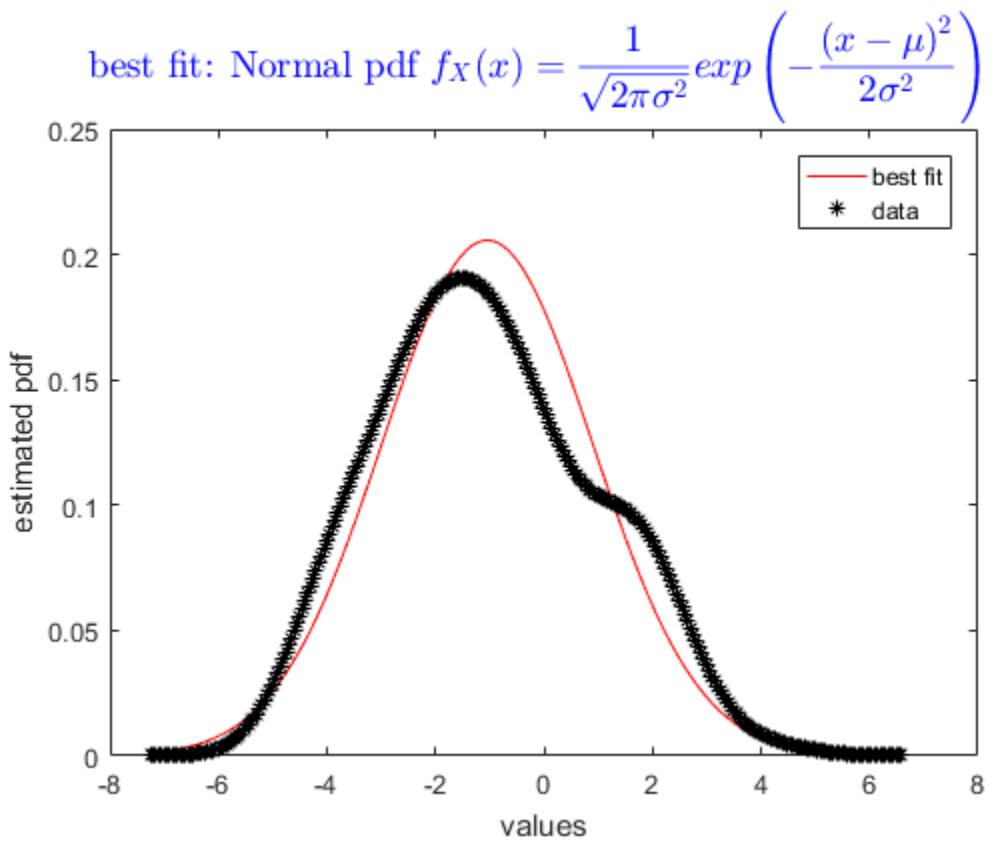
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	12.46	0	NO
Laplace distribution	6	44.47	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.045 \quad \sigma = 1.94$

p m shankar



data (Donatiello)

3.172	2.743	1.193	3.553	3.878	3.584	3.366	2.862	3.949	1.105
2.912	3.203	2.271	2.396	2.117	2.685	3.397	2.666	3.66	3.339
3.905	2.095	3.954	1.143	2	3.769	3.718	1.821	2.539	2.24
4.485	2.51	2.306	0.611	2.342	2.831	4.317	3.923	0.615	3.104
0.386	2.656	2.853	1.952	4.964	2.484	1.85	3.115	3.362	0.949
2.152	5.463	1.508	8.516	4.32	4.195	2.553	9.043	0.147	2.373
1.678	5.007	1.277	3.687	1.01	0.723	3.465	1.17	4.933	1.237
3.105	2.304	1.18	3.223	0.142	1.158	0.992	2.526	1.578	1.365
2.211	3.687	3.766	4.317	2.802	2.608	5.052	3.393	3.563	1.849
2.539	1.986	2.988	0.674	3.006	3.412	4.943	2.565	3.027	0.958
2.338	2.67	1.332	2.73	4.554	4.317	0.898	1.515	5.607	5.713
2.941	2.074	2.014	1.01	1.954	5.123	1.431	0.605	3.491	4.075
0.552	1.771	1.293	2.414	2.723	2.005	3.502	0.666	1.651	0.56
2.082	2.021	2.524	2.468	2.734	1.297	2.49	1.106	0.983	2.749
3.641	1.811	3.777	0.794	4.199	0.818	0.868	2.357	2.052	2.486
3.392	2.609	1.827	3.298	2.511	1.331	1.638	5.726	5.011	0.762
1.982	0.633	2.03	4.241	4.972	1.248	1.341	1.038	2.896	1.426
3.02	2.829	2.343	3.442	0.586	0.903	4.535	1.936	5.248	2.501
1.921	2.127	0.356	2.842	5.636	2.6	1.182	1.308	1.619	3.836
1.79	2.146	4.301	2.939	2.002	3.241	3.393	1.586	1.725	3.005

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	3.59	0	NO
Nakagami distribution	4	3.57	0	NO
gamma distribution	5	9.72	0	NO

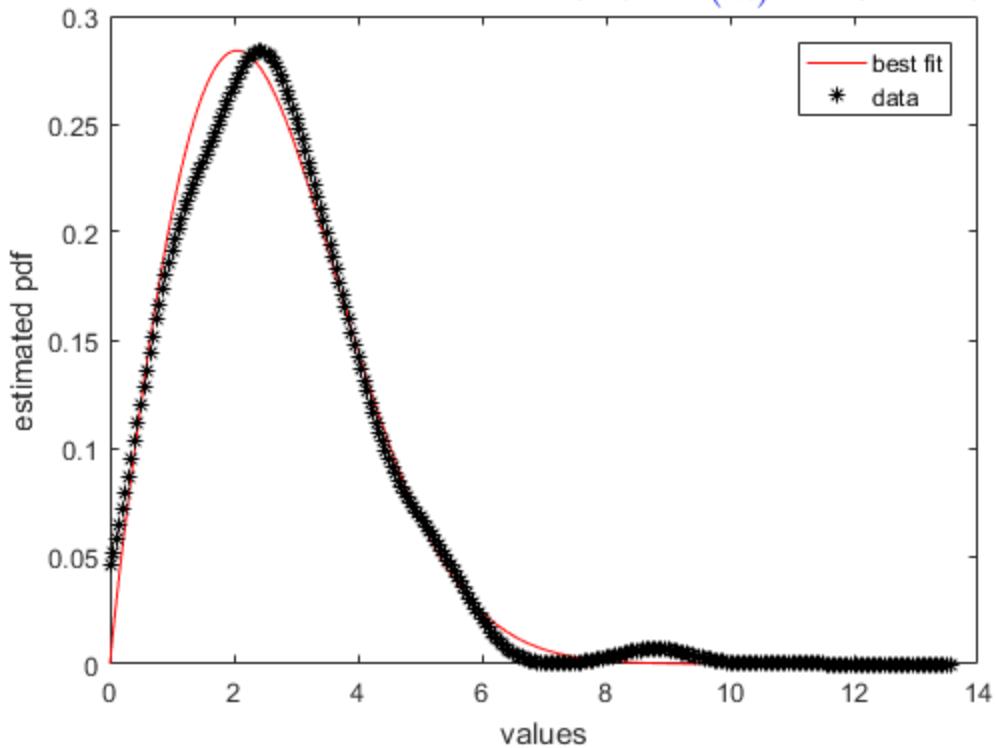
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

m = 0.95576 Ω = 8.8156

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Doyle)

```

-2.118 -2.664 -3.349  0.183 -0.168 -1.439 -2.643 -3.944 -1.178 -0.768
-0.808 -0.092  0.612  0.453  3.419  0.436 -3.894   0.2  -6.097 -5.452
-4.03  -1.968  1.447  1.842 -0.992 -2.165 -1.402  -5.18  -2.496 -3.946
-0.049  2.143 -1.555  0.124  2.027 -2.947 -3.065 -1.123  2.825 -5.317
-0.372 -3.863  0.397  1.684 -2.093 -2.352  0.581  1.215 -1.438  0.446
-4.317 -2.145 -1.033 -4.937 -2.787  -3.93  1.251  1.043 -1.041  3.439
-1.256 -0.193  2.707 -2.544  0.517 -2.557  0.453  0.809 -0.966 -1.744
-0.184 -1.865  0.859 -2.251 -3.488 -2.143  1.256 -5.759 -3.943 -0.056
-1.069 -2.072  0.497  1.485 -1.061 -4.256 -0.538  -1.91  -3.459 -4.069
  1.079 -1.825 -5.551 -2.111  -0.23  1.024 -1.689  1.328 -3.501 -1.021
-2.571 -4.084  2.559 -4.327 -2.261  1.416 -2.286  -1.1  1.465 -0.141
-0.728 -6.33  -1.001 -2.508 -3.272 -0.711  0.349  2.653 -0.735  3.435
  1.679 -0.749 -1.502  0.513 -5.605  0.467 -1.767  -1.81  -0.849 -1.255
-5.518  2.857  0.931  0.361 -0.049 -1.452 -2.397 -1.723  1.168 -0.375
-2.329  1.778 -1.369 -0.804 -0.053  0.202  0.304 -2.867 -2.105 -3.791
-3.981 -0.983 -0.165 -1.554 -2.223 -6.129 -1.565 -0.862 -0.962 -1.306
-4.45  -1.22  -0.395 -1.098 -3.499 -1.524 -2.723 -0.892 -0.148 -2.896
  0.588  -1.6  0.451  0.216 -0.496  0.88 -2.009 -0.721  1.471 -2.432
-0.483  -1.81  -4.347 -2.643  1.761 -0.535  0.499 -3.046 -2.028 -2.938
-1.173 -2.858 -0.625 -2.041  0.175  1.603 -1.672  1.602 -5.231 -2.224

```

p m shankar

Summary of χ^2 tests

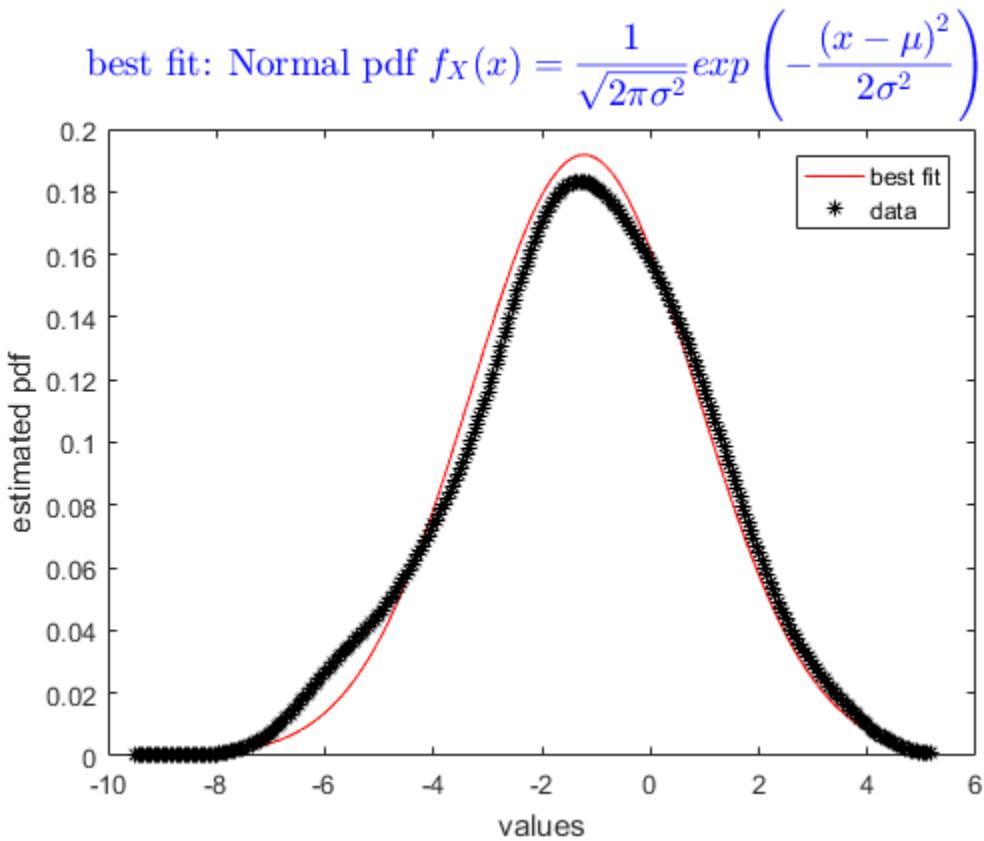
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	5.46	0	NO
Laplace distribution	6	21.36	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.2261 \quad \sigma = 2.08$

p m shankar



data (Drzewicki)

```

-1.292 -0.384 0.793 -2.279 -1.073 -0.844 -3.448 -3.154 -0.55 -1
-0.308 -0.436 -0.076 -1.913 0.38 -3.855 0.443 1.501 0.666 1.032
3.529 0.436 -1.706 -1.89 -5.172 -0.92 -1.088 -2.217 -1.226 -0.502
-0.93 0.103 -1.989 0.006 -2.492 -3.47 0.078 -2.38 -4.636 0.764
-0.743 0.042 2.826 0.79 -1.563 1.357 -0.503 -0.781 -1.959 -1.944
-0.006 -2.837 -0.219 -3.362 -0.884 -1.845 -1.151 -1.479 -0.582 0.91
-1.698 -1.372 0.549 -4.437 1.61 -0.513 2.467 -0.496 -2.333 -1.381
-1.952 1.054 -3.086 -2.203 -0.507 -0.833 -1.467 -0.381 1.715 -0.584
-1.53 1.832 -1.07 -1.466 1.522 -2.523 1.895 -0.9 2.241 -0.148
0.874 -0.026 1.408 0.077 -3.655 -1.374 -0.66 -0.652 0.05 -1.256
-2.424 -4.674 -0.933 -4.202 -2.124 0.88 -0.184 -1.453 2.164 -4.75
-0.295 -0.118 0.821 -2.664 2.786 -0.999 -2.452 -0.804 -3.225 -1.992
-4.446 -0.479 -2.514 -1.735 -2.531 2.761 -1.099 2.362 -1.766 2.609
-0.448 -2.585 -0.427 -1.902 1.975 -0.452 -0.316 -4.036 -3.441 -4.244
-0.029 0.988 -1.351 2.101 -1.833 -3.057 -4.613 -3.204 -2.054 -3.339
-0.718 -0.182 0.533 -1.294 1.006 0.696 -1.676 -0.426 -1.043 2.758
-2.033 -1.037 -1.697 -0.799 -2.776 -2.56 -0.091 -3.736 0.133 -1.463
-2.115 2.184 -1.157 -3.709 -0.258 0.784 -1.259 0.178 0.755 1.659
-4.484 4.198 0.331 -1.691 -2.4 -1.319 -2.533 -1.904 2.78 1.93
1.284 -4.518 -0.262 -3.761 0.987 -2.342 -4.953 -0.453 -1.15 0.427

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.28	0	NO
Laplace distribution	6	24.09	1	YES

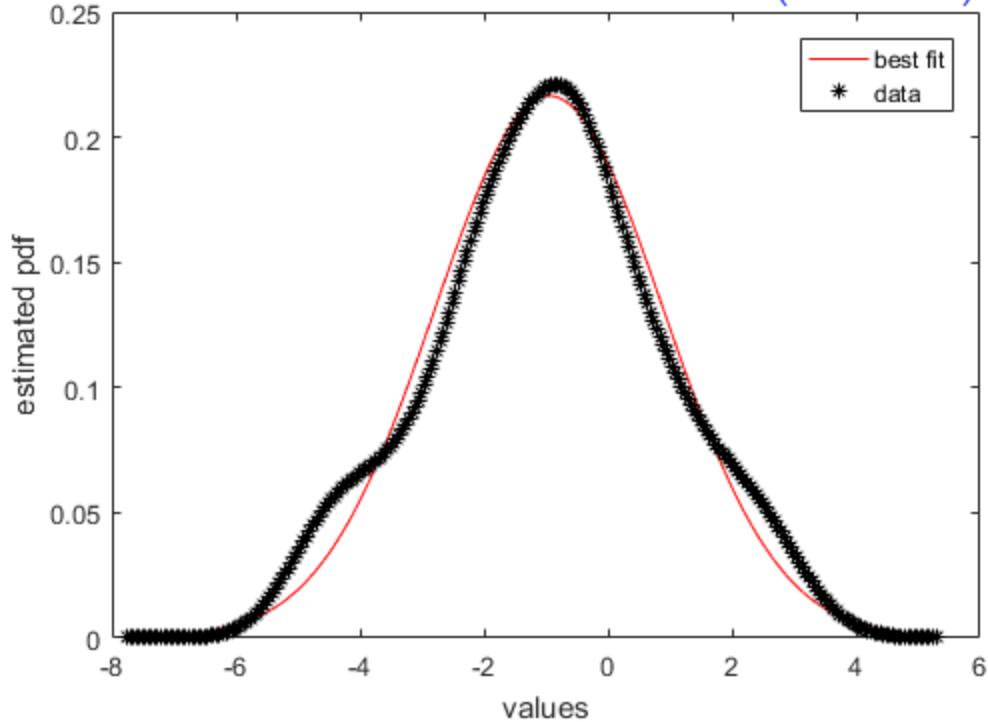
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.94981 \quad \sigma = 1.8422$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Dunkers)

3.071	2.541	3.693	2.421	1.14	4.652	1.343	2.169	0.69	3.672
5.2	1.762	2.694	1.446	3.739	4.118	3.77	4.582	1.43	0.671
3.523	0.709	3.513	3.703	1.862	0.927	5.429	3.756	0.458	1.295
1.068	1.269	3.571	3.369	2.906	1.679	4.19	1.519	1.25	1.54
3.265	2.197	0.864	0.334	1.466	3.632	1.749	0.818	4.79	0.28
3.522	1.252	1.427	2.03	1.996	2.104	3.046	2.218	1.043	3.262
3.6	2.179	4.79	2.573	0.942	2.271	4.408	2.117	1.611	1.401
3.936	2.785	2.861	2.628	4.801	1.793	0.4	2.363	1.656	2.338
3.645	3.248	2.997	3.495	4.009	1.853	1.472	1.597	3.018	0.355
1.359	2.006	1.442	1.622	2.698	4.768	2.64	5.628	1.035	2.865
1.469	1.27	2.351	2.594	5.997	0.337	2.583	4.114	4.33	3.724
2.014	1.66	1.253	1.842	4.66	2.961	1.066	1.631	2.592	0.488
1.538	1.688	0.633	1.603	1.233	4.377	2.468	2.708	1.142	3.472
0.675	0.936	1.93	3.384	3.165	4.546	2.637	1.025	3.433	3.872
1.949	3.134	3.635	2.205	1.127	1.017	1.24	2.239	4.125	3.969
2.825	3	1.613	2.557	2.794	1.523	0.687	1.78	2.237	2.706
3.801	2.979	2.479	1.899	1.283	3.08	1.25	3.382	0.611	0.753
4.852	3.78	0.615	1.609	2.945	4.349	4.209	1.379	0.683	1.335
1.661	1.291	4.229	2.077	2.635	2.264	0.873	2.751	1.28	1.398
1.613	1.203	3.406	0.875	4.583	2.405	3.285	1.361	0.502	3.567

p m shankar

Summary of χ^2 tests

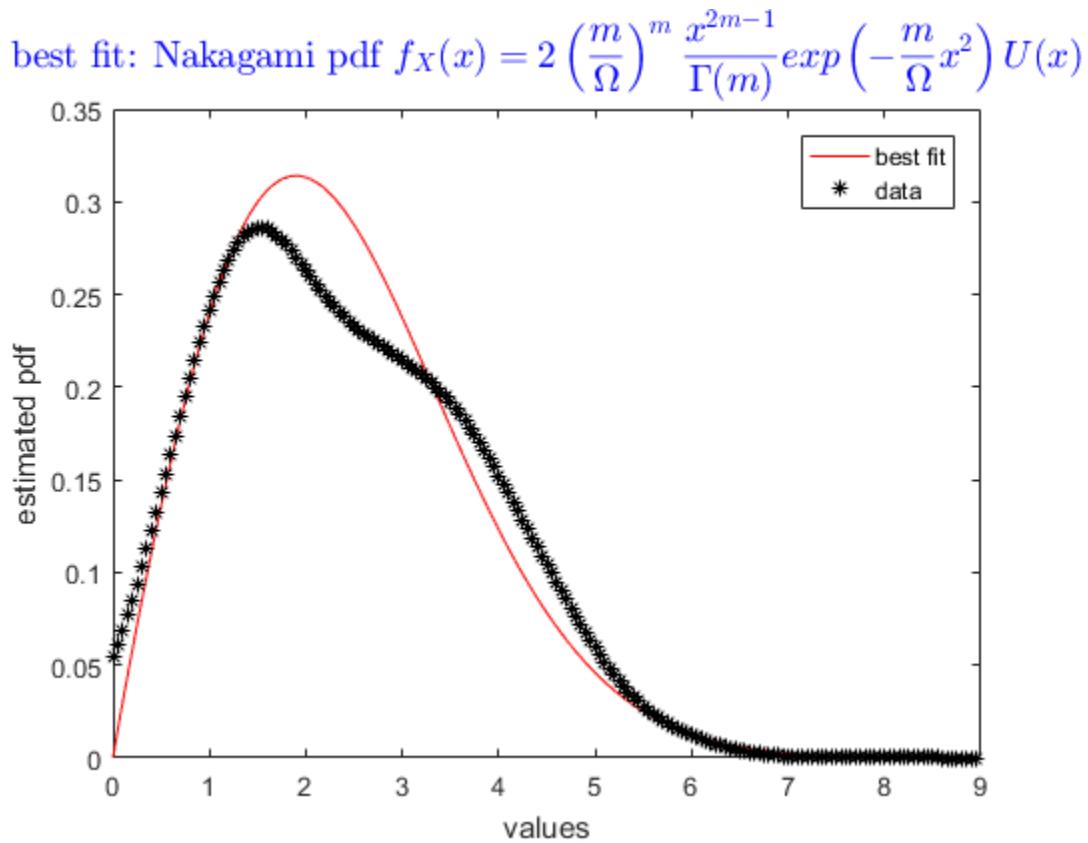
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	10.69	0	NO
Nakagami distribution	5	10.62	0	NO
gamma distribution	5	12.82	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 0.98103 \quad \Omega = 7.3508$

p m shankar



data (Dunlap)

```

-1.062 -0.011 0.408 -1.077 0.5 1.002 -1.051 -2.851 -2.415 -1.19
-1.587 -1.639 -2.188 0.593 2.82 1.638 -0.916 0.494 0.857 1.3
1.263 -2.737 0.644 -0.99 1.146 -0.479 -2.758 2.987 -2.055 -1.836
-0.326 -0.008 -0.834 -3.23 -0.645 -1.763 -4.868 -2.098 -1.792 1.011
-0.981 -1.211 -3.757 -3.868 -1.264 -2.11 1.023 -0.073 0.968 -3.287
-0.518 -2.33 0.606 -2.927 -1.99 -1.921 0.345 -3.283 1.783 -0.954
-1.406 -3.543 0.907 -0.672 1.166 -0.194 -3.264 3.573 -0.449 -0.938
-2.277 0.854 -0.004 -0.546 -0.396 1.436 -1.141 -2.764 -2.561 -5.412
0.905 -2.412 0.065 -2.232 -1.144 -1.039 -1.252 -2.232 -1.463 -1.293
-0.903 -1.61 0.666 0.794 -2.141 -0.291 1.68 0.861 1.748 -4.222
-3.498 1.224 -1.548 -2.121 -1.377 -3.7 -1.145 -2.224 -0.831 -0.407
-1.675 -1.681 -1.005 0.052 -0.232 -2.096 2.242 0.985 1.325 -0.756
-1.602 2.127 -0.305 2.4 1.102 -0.432 -2.498 -5.071 3.297 -3.128
-0.3 -2.277 1.367 -3.122 0.682 -3.115 1.036 2.927 -2.451 -1.119
-0.845 2.684 1.468 1.861 -0.539 -1.885 -4.966 -1.876 -0.921 -2.049
-2.355 0.62 -1.057 -0.434 -2.727 1.586 -3.203 3.256 -1.342 -2.324
-1.068 -0.188 0.461 -0.414 0.461 0.288 -1.814 -2.274 -2.315 -2.027
0.369 -0.419 -3.307 2.536 0.934 -2.609 1.878 -2.022 -2.877 -2.713
-0.723 0.03 0.307 -0.798 -0.47 -0.735 2.011 -0.122 -2.048 -3.365
-0.568 -2.285 -2.116 -3.146 1.208 -0.945 -1.505 -0.842 2.96 -1.339

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	7.4	0	NO
Laplace distribution	6	35.44	1	YES

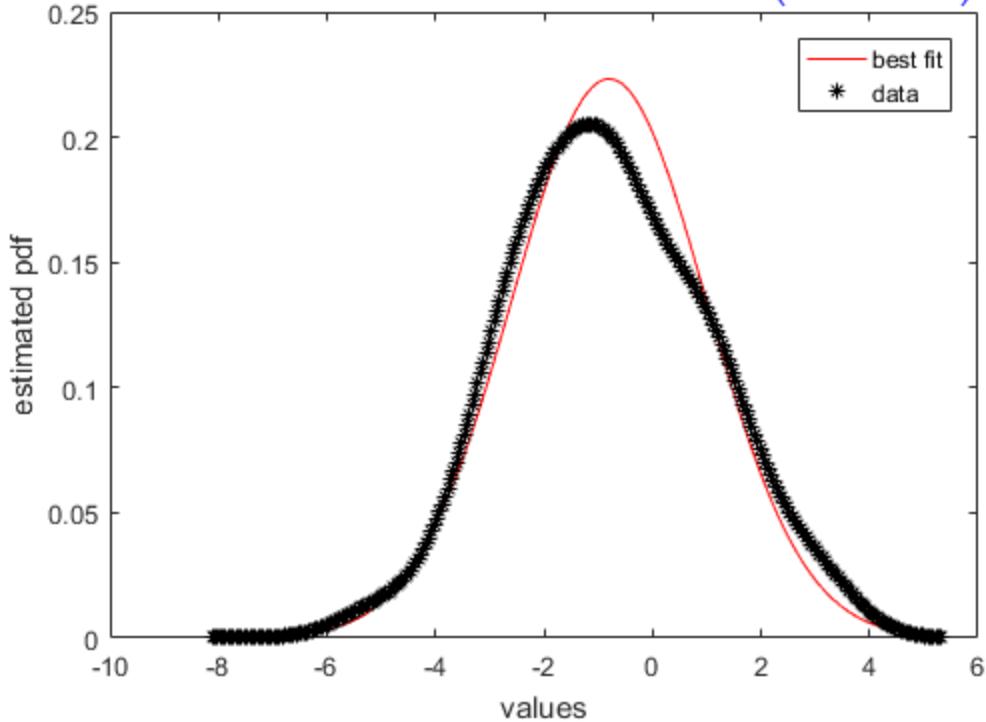
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.80125 \quad \sigma = 1.7868$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Dwyer)

0.376	1.556	1.497	1.207	4.64	2.373	1.603	3.82	1.93	4.541
2.569	5.548	1.259	3.038	1.29	0.995	2.503	2.742	1.52	0.75
2.406	2.468	1.749	1.974	1.235	2.957	1.712	1.097	1.205	2.019
4.312	1.805	3.508	4.755	2.396	0.976	2.326	1.635	4.697	1.971
1.675	3.015	4.21	0.858	4.133	1.834	1.995	3.069	2.059	1.929
0.537	3.124	0.929	1.94	1.719	3.454	1.494	1.387	2.889	2.226
3.829	2.611	1.053	1.346	2.553	0.923	1.777	4.049	1.547	2.111
1.037	2.464	2.604	3.964	2.627	0.484	2.161	3.953	2.902	2.002
3.72	2.192	1.161	0.298	0.41	3.507	1.813	3.177	1.044	1.537
2.844	2.789	4.935	3.974	1.509	4.508	2.537	1.513	2.65	5.109
2.23	3.842	1.855	3.61	2.401	5.292	1.6	2.09	2.117	1.093
1.51	1.803	5.737	0.426	0.733	2.089	1.088	0.898	3.559	1.396
2.596	3.528	3.069	0.422	0.852	1.485	1.013	1.018	2.174	2.183
1.359	2.043	3.045	4.222	5.438	0.654	3.775	2.52	3.127	1.751
2.124	2.781	1.262	6.37	1.044	1.256	0.921	3.823	4.031	1.978
1.196	2.506	2.485	2.309	5.736	2.265	2.519	1.398	1.17	1
1.846	3.066	2.003	0.678	0.751	1.033	4.884	2.485	3.291	2.804
0.465	4.008	1.034	1.318	6.178	0.101	2.498	2.836	1.374	2.824
0.953	3.967	2.028	5.076	0.794	2.602	5.409	2.908	4.181	2.181
2.212	1.543	3.167	2.413	2.561	1.826	7.204	1.755	1.235	5.156

p m shankar

Summary of χ^2 tests

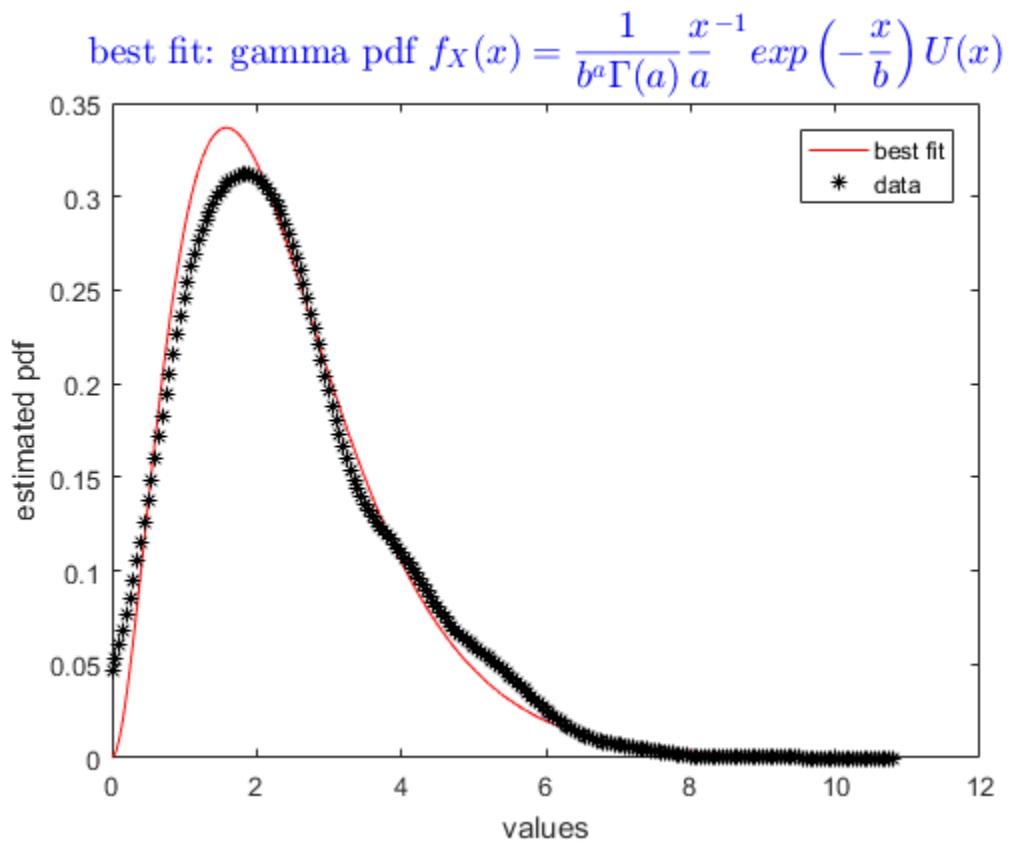
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	5.81	0	NO
Nakagami distribution	5	6.73	0	NO
gamma distribution	5	2.93	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 2.9414 b = 0.81445

p m shankar



data (Eelman)

```

2.742 -0.388 -2.426 1.079 -2.079 0.831 4.387 -4.801 1.034 -0.901
-3.691 -2.287 1.597 -1.816 -0.816 -0.139 1.584 -4.45 -2.858 1.314
-0.744 -1.054 -1.396 0.1 2.975 2.819 5.992 -2.617 0.303 -2.402
0.411 0.914 -0.464 -4.11 -1.259 -2.92 -2.953 -1.294 -1.409 0.065
-0.693 -2.703 -2.074 -2.052 -3.694 -0.776 -2.532 -0.638 -1.597 3.857
-0.082 0.617 1.138 -1.776 -2.231 0.567 1.445 0.94 2.033 -5.447
-4.054 -2.981 -1.735 -0.539 -0.289 -3.686 0.683 -1.473 -3.181 1.649
3.803 1.917 1.697 1.733 -6.01 -0.188 0.57 -4.288 -1.118 -2.223
-2.015 -5.294 -2.719 -0.212 -6.125 -1.608 -0.821 -0.945 -4.032 -2.201
3.196 -1.102 2.095 -0.153 -3.999 -1.709 -1.318 -0.358 -0.311 -1.112
-0.646 -0.657 0.055 0.139 -1.478 -1.888 -2.046 3.433 -0.113 0.038
-0.097 -0.275 -0.255 -0.551 -2.56 -1.033 -2.264 -1.703 -2.034 -0.247
0.096 -2.838 -2.219 2.345 -1.15 -0.947 -0.263 -3.212 -1.825 0.721
1.402 -4.602 -2.567 1.608 1.295 1.61 1.055 -4.3 1.831 1.307
-4.569 -0.095 -0.586 -1.304 -1.218 -4.985 -1.023 -4.94 0.083 -4.112
-1.938 -1.152 -1.034 -0.301 -3.684 -2.974 -1.425 1.156 -2.654 1.019
-0.046 -1.994 -1.023 -2.659 -0.369 -1.345 -1.546 0.636 0.599 0.329
-1.563 -1.74 -3.833 -3.574 1.317 -1.885 -2.193 -2.217 -1.329 -3.357
-0.368 1.583 1.217 -2.878 -1.123 -1.66 0.286 0.873 3.778 1.808
-5.148 -3.495 -2.135 -1.98 -0.885 -0.37 -3.195 -1.566 1.533 -3.692

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	5.37	0	NO
Laplace distribution	6	18.11	1	YES

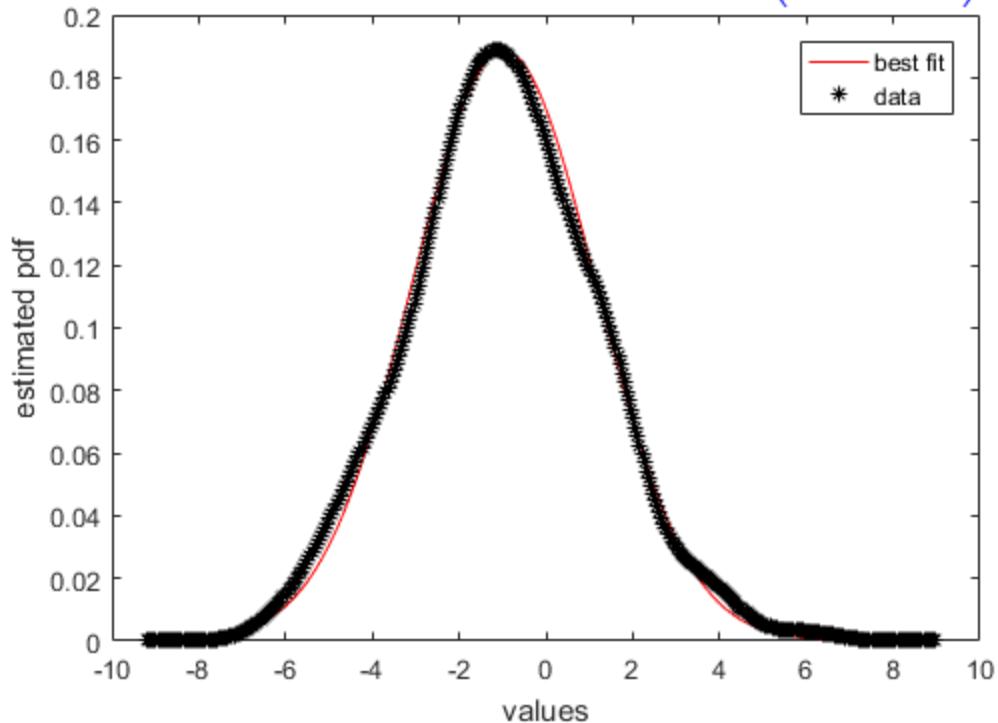
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.9653 \quad \sigma = 2.1151$

p m shankar

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$



data (Gabel)

1.301	1.212	2.316	1.548	0.793	1.598	2.318	2.448	1.146	2.99
2.422	5.852	1.571	1.893	3.545	4.895	2.063	1.929	2.019	5.305
1.216	3.637	2.034	3.511	2.712	1.749	2.237	3.738	4.542	1.724
3.265	1.525	0.572	1.373	1.517	3.793	2.218	1.656	2.483	0.716
1.726	2.702	3.288	1.531	1.523	1.878	4.085	1.6	0.84	1.553
6.159	3.902	3.046	4.736	4.124	0.765	3.184	0.658	5.197	1.933
5.081	2.268	0.754	3.771	2.636	2.854	2.468	4.229	1.764	2.994
3.876	4.192	4.899	4.422	2.857	2.57	3.02	3.211	1.655	0.662
6.322	3.241	4.32	1.459	0.704	3.103	2.861	3.02	2.176	4.395
1.602	0.565	1.525	3.703	1.335	1.423	2.706	5.404	1.641	1.917
2.562	4.507	2.868	1.412	2.966	1.59	1.54	2.653	2.683	2.468
2.411	4.722	1.705	3.025	1.019	2.106	4.127	2.582	4.168	1.756
1.495	1.925	2.912	3.406	3.345	1.188	2.092	3.691	2.713	1.902
2.088	2.525	4.774	1.397	3.255	4.841	3.887	1.812	4.19	4.803
3.51	3.572	1.041	5.454	1.177	1.881	3.057	3.334	2.413	2.503
2.087	3.771	2.428	0.966	1.162	3.574	1.812	3.471	1.223	3.172
2.527	1.564	4.809	2.46	4.699	2.496	3.219	2.379	3.371	1.53
1.478	1.543	2.16	1.659	1.515	2.014	2.816	2.419	3.417	1.63
1.096	1.918	3.218	0.586	1.473	2.969	2.138	1.992	1.661	6.553
2.704	1.613	2.882	2.341	2.763	4.326	3.399	0.804	3.452	1.232

p m shankar

Summary of χ^2 tests

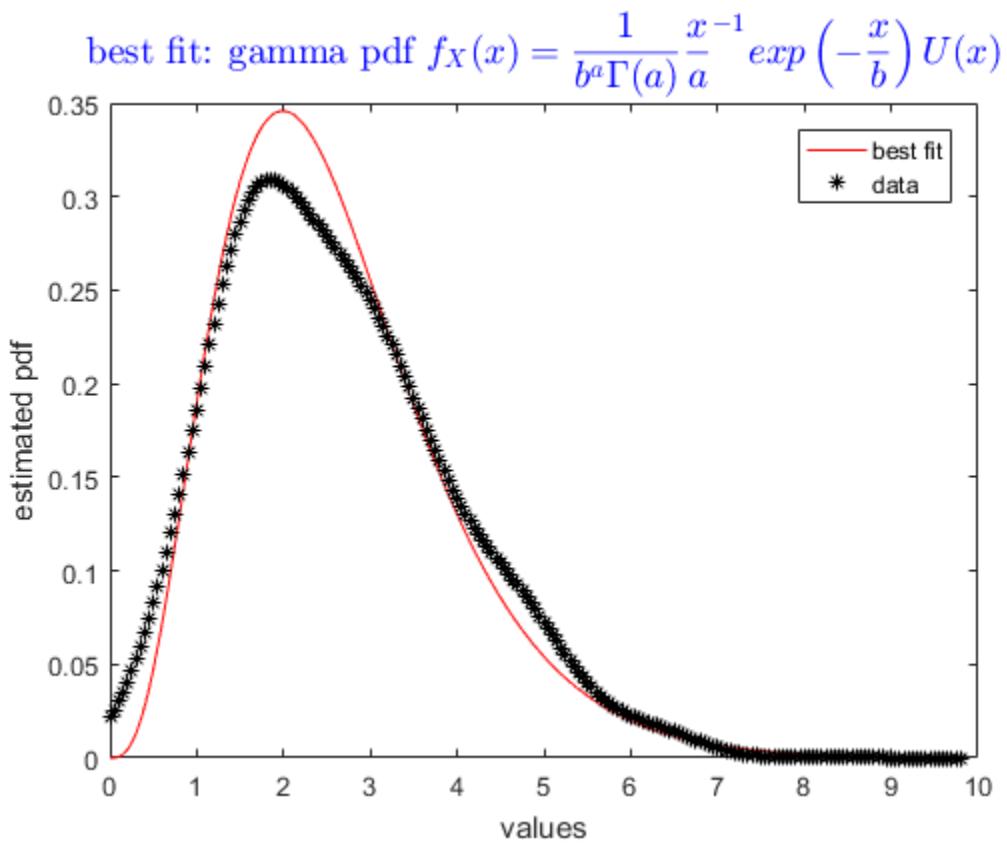
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	7.65	0	NO
Nakagami distribution	5	6.62	0	NO
gamma distribution	5	3.63	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 4.1405 b = 0.63393

p m shankar



data (Gallagher)

```

-2.018 -2.028 1.977 0.46 1.686 0.529 0.391 -0.168 -0.891 -1.654
0.466 -0.014 -1.391 1.184 -3.325 0.282 -0.994 1.181 -0.287 -0.685
1.906 -3.211 0.954 -2.093 -1.372 -2.434 1.346 -0.943 -1.157 -0.486
-0.03 0.256 0.117 -0.842 -1.485 -0.742 -0.869 -6.362 -1.086 0.225
-2.46 1.688 -1.907 -2.635 -1.643 -2.2 -3.7 -4.414 -1.283 -1.625
-0.61 0.053 -3.156 -2.047 -0.083 -3.727 -0.914 -0.693 0.527 -0.789
-2.114 -3.67 -3.175 -2.704 -0.418 2.392 0.546 1.489 -5.138 -2.074
-1.334 -0.326 -2.538 -3.106 -2.813 0.559 0.791 -1.882 0.945 -2.783
1.808 -2.984 2.974 0.162 -3.935 1.882 -3.037 -3.101 -0.994 -0.042
1.507 -3.099 -3.246 -3.458 -1.402 -3.026 -1.261 0.609 0.393 -1.745
-0.57 -3.483 -1.623 -1.626 -2.762 1.515 -0.969 -1.711 -1.348 -0.69
-1.886 -2.959 0.295 1.735 -0.322 -0.385 -2.74 0.533 -0.208 2.032
-0.332 -0.448 -0.257 1.208 -0.021 -6.828 -1.437 -2.533 -0.179 1.753
1.493 2.07 -1.236 -2.671 -4.63 -2.93 -1.718 -0.491 0.1 -2.435
-2.243 0.855 -2.711 -1.413 -1.046 -1.361 -0.104 -3.462 -4.054 -1.749
-1.663 -5.992 1.451 1.011 1.399 -2.554 -3.913 -1.756 -3.202 0.009
1.411 2.02 -3.055 -2.152 1.701 -2.046 0.862 1.672 2.018 0.424
-1.578 -2.378 -0.758 -5.665 -2.334 -0.497 -2.819 -1.756 1.621 -2.586
-0.562 0.442 -1.11 -1.033 -0.354 -3.039 -0.209 -0.311 -0.268 0.85
-0.759 -1.661 1.116 -1.501 1.343 -1.961 -1.346 -2.178 0.39 -1.554

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	6.34	0	NO
Laplace distribution	6	35.31	1	YES

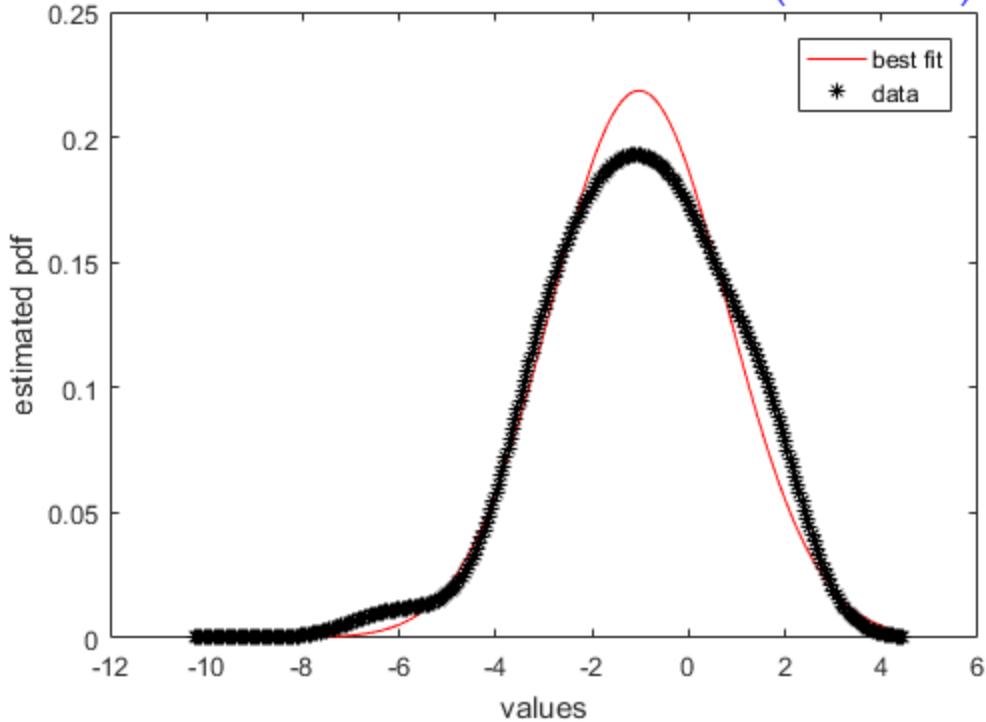
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0268 \quad \sigma = 1.8254$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Gish)

1.156	2.313	4.058	2.32	2.384	2.358	1.858	4.923	2.672	4.365
1.676	1.951	3.54	5.555	1.791	2.174	3.814	1.743	3.756	2.201
2.651	3.183	3.223	3.049	1.993	1.949	3.373	2.608	1.97	3.072
1.001	1.805	2.422	0.876	1.118	2.12	1.319	4.526	1.361	1.234
3.475	2.158	7.211	3.509	1.464	1.369	1.301	4.211	0.688	2.047
1.77	1.135	0.961	4.111	0.809	2.57	2.37	3.034	0.855	4.447
2.188	2.544	1.507	2.304	2.897	1.653	4.294	2.149	2.351	1.305
1.605	5.213	2.829	0.719	1.575	0.707	4.232	4.807	3.17	1.866
1.602	0.529	2.621	4.532	3.684	0.483	3.115	2.285	2.808	0.526
1.401	0.391	1.543	5.088	1.802	1.061	2.667	1.233	3.588	2.423
1.242	1.166	2.455	5.1	2.531	2.206	1.497	5.846	3.632	0.629
3.177	3.626	1.168	1.257	1.001	1.887	1.653	4.145	1.817	1.408
1.959	1.484	0.635	0.911	2.391	1.247	1.391	5.306	2.545	4.064
1.09	3.493	1.747	3.914	4.781	4.654	2.484	2.936	1.924	3.163
3.524	0.682	3.233	3.657	5.4	0.9	3.512	1.732	2.233	5.141
2.413	1.26	1.689	3.592	3.536	3.237	2.677	0.742	0.991	1.857
1.793	2.332	3.43	1.683	2.945	1.915	1.806	2.431	2.843	3.464
0.469	2.294	2.899	0.797	1.627	2.076	2.501	3.14	2.547	1.092
1	3.67	4.024	2.454	2.226	1.264	0.819	4.198	1.862	2.259
0.383	2.125	3.084	3.058	2.561	2.469	3.184	1.735	1.89	6.015

p m shankar

Summary of χ^2 tests

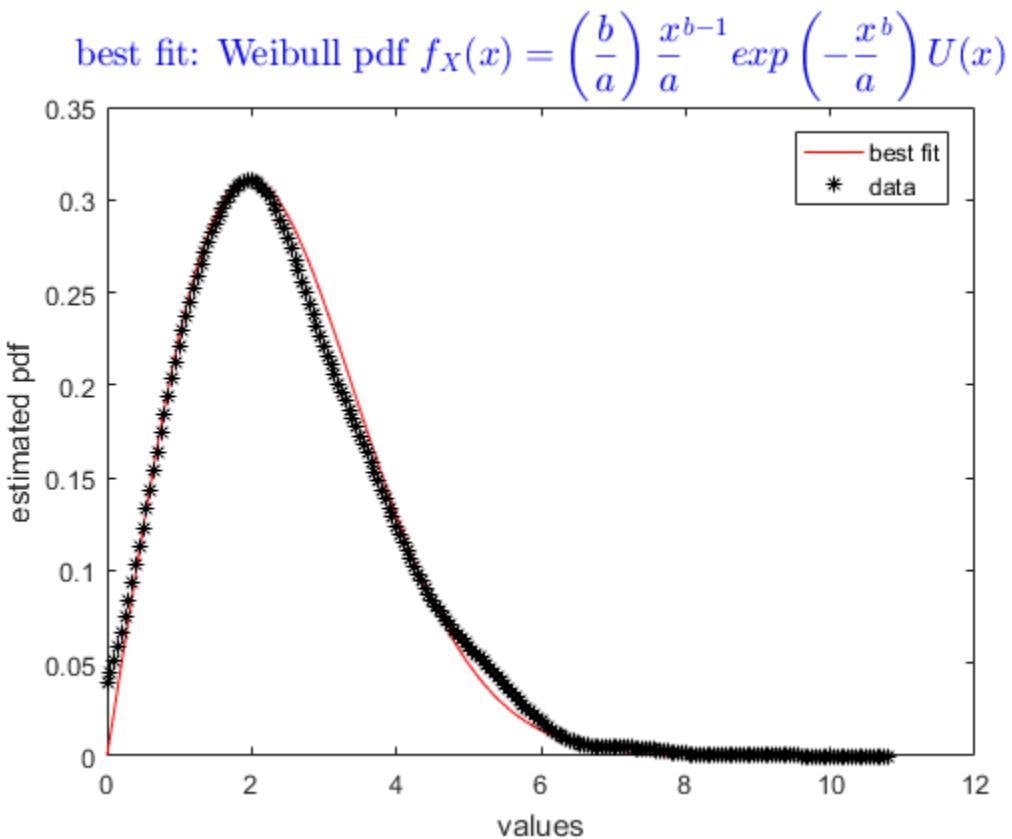
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	1.37	0	NO
Nakagami distribution	4	1.51	0	NO
gamma distribution	5	2.43	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.7735 b = 2.7735

p m shankar



data (Hammer)

```

-0.499 -2.594 1.203 -1.919 -2.468 -3.178 -2.397 0.825 1.382 -1.099
-1.121 -1.696 -1.117 1.281 -3.317 0.102 -1.121 4.063 -0.139 0.807
-1.076 -0.057 -3.485 0.368 -0.196 -3.309 -0.972 -0.702 -4.73 -6.584
-1.445 -4.99 -1.149 0.928 1.996 0.794 0.555 1.259 -2.266 -1.596
0.613 -2.838 -4.723 -0.492 -1.333 -1.615 -2.277 -4.728 -2.245 0.228
-3.295 0.97 -4.909 -2.128 1.206 2.307 -3 0.485 -2.273 3.595
0.454 -0.6 -1.37 3.264 -2.433 -3.326 -2.771 0.308 -0.571 -3.325
-0.015 -2.619 -5.745 -4.608 1.123 -1.478 -4.626 0.634 -1.545 1.006
-0.538 -3.346 0.613 0.423 1.264 -0.855 -1.61 -2.315 4.337 4.187
2.414 1.379 -2.898 2.818 -1.548 -0.268 -2.042 -2.201 -0.216 -3.991
1.985 -2.404 -2.349 -2.617 -1.119 -0.14 -5.032 0.028 1.463 -1.1
-1.208 -2.643 1.282 -2.623 -1.71 0.126 -3.134 -5.45 -1.056 2.876
0.84 0.152 -2.652 -1.24 -0.778 -0.884 -2.044 -2.588 1.759 -1.633
-3.536 -3.164 -3.637 0.654 -2.102 -0.977 -3.166 0.972 -1.438 -0.135
-0.083 -0.811 1.202 -1.628 0.687 2.322 3.665 -0.671 -3.636 -0.398
2.887 1.249 -4.417 -2.493 -1.014 -1.867 1.781 -0.572 -3.282 1.907
-1.941 2.978 3.333 0.516 -1.633 -0.801 -2.334 -1.856 -0.413 -2.219
-2.711 -2.679 0.25 -2.118 -0.12 -2.399 -3.443 -1.632 0.022 1.11
3.836 -0.322 0.218 -2.306 -3.171 -1.067 -2.631 -5.285 -1.863 -1.889
-2.066 0.048 -0.819 -1.841 -1.14 -5.376 2.314 -9.647 -3.023 -4.077

```

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	7.37	0	NO
Laplace distribution	6	27.13	1	YES

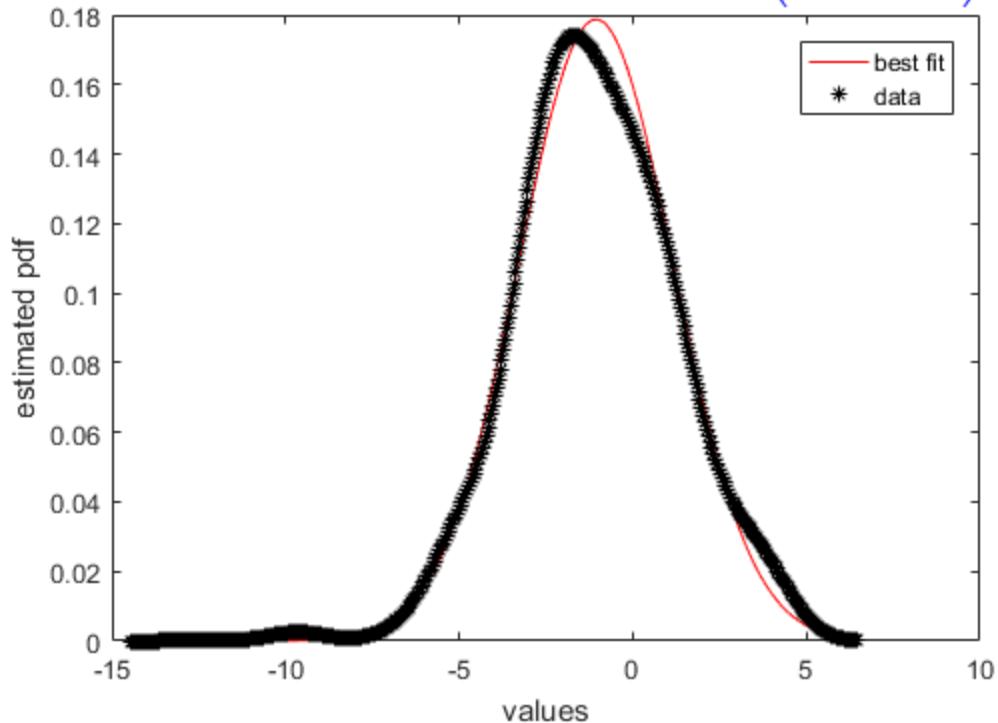
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0627 \quad \sigma = 2.2323$

[p m shankar](#)

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Harman)

4.404	1.518	1.199	4.964	2.58	3.23	3.776	4.316	5.198	1.65
0.647	0.938	1.045	4.477	1.663	0.878	5.489	3.474	2.085	2.231
1.759	2.825	0.968	1.581	0.784	0.608	3.198	1.169	5.246	2.258
0.971	2.129	6.221	1.893	2.427	0.987	2.416	0.989	3.297	2.507
1.025	1.089	5.253	3.206	3.367	3.317	1.669	3.678	0.988	6.755
1.124	1.018	4.058	1.699	0.719	3.261	0.585	3.905	1.245	2.955
1.832	1.675	2.283	1.017	0.548	4.173	0.769	3.831	2.185	3.563
1.267	0.786	1.923	2.135	2.135	1.729	4.187	1.393	3.216	0.955
2.456	2.016	1.453	4.1	0.419	1.76	1.004	1.702	3.332	3.621
1.597	2.487	1.008	0.709	1.548	4.454	4.182	1.948	1.063	5.237
0.651	1.317	1.385	0.9	5.157	3.716	0.889	0.074	2.567	1.553
3.052	1.257	1.806	3.388	3.566	3.32	1.95	4.559	3.296	0.933
2.375	0.935	0.829	3.642	2.478	3.213	2.813	3.145	3.772	0.351
2.655	3.751	1.808	2.64	4.932	1.767	0.595	1.712	3.331	2.683
2.035	2.493	1.616	0.832	1.826	2.838	1.987	0.558	2.389	1.299
3.111	1.594	2.847	1.025	2.896	2.291	2.167	2.052	2.409	0.145
6.047	3.476	2.776	1.132	2.231	2.451	2.519	3.529	3.089	2.278
5.172	3.064	2.48	1.262	7.815	4.527	4.455	4.304	1.174	2.848
1.818	0.669	3.573	0.75	3.7	6.474	2.191	0.627	1.642	1.822
3.555	2.427	1.109	5.801	4.611	3.63	1.453	2.333	1.425	2.854

p m shankar

Summary of χ^2 tests

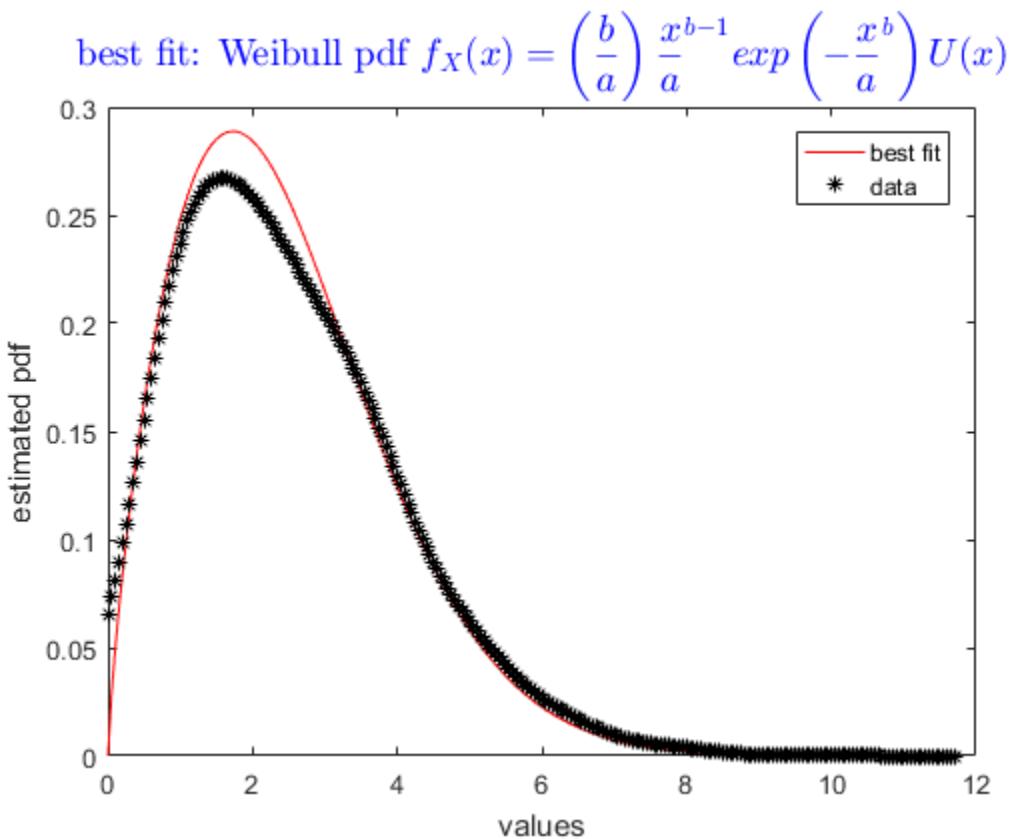
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.12	0	NO
Nakagami distribution	5	4.34	0	NO
gamma distribution	5	7.42	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.7628 b = 2.7628

p m shankar



data (Hasan)

```

-2.349 -2.241 -1.809 -0.114 -0.713 0.236 -0.475 -1.4 -1.38 0.839
0.962 1.678 -0.952 -0.777 -4.168 -2.606 -1.657 -2.228 1.321 0.549
1.323 -0.789 -5.906 -1.192 -1.991 -1.762 -4.289 -0.957 -3.312 -2.438
-2.774 -1.52 -1.858 -0.523 -3.052 0.733 1.03 -2.824 -2.559 -1.115
-2.463 3.441 2.28 -1.18 0.142 -2.244 1.292 -0.028 -0.155 0.243
-1.588 -0.363 1.358 -3.502 -1.167 -3.242 -0.683 2.042 -1.216 0.283
-0.081 -0.722 -3.446 -3.5 -0.551 -1.631 -1.402 -1.787 0.975 -2.441
2.145 -0.833 -2.51 -0.457 -2.714 -1.579 0.974 -1.226 0.354 -1.978
1.01 0.879 -1.338 0.664 0.302 -0.582 0.825 -0.62 4.107 3.634
1.64 0.149 -0.274 1.212 0.215 -1.867 -0.853 -1.084 -2.832 -2.171
-5.243 0.234 -2.655 1.142 -2.382 1.513 -4.727 -2.972 -1.722 -4.793
1.979 -0.908 -0.6 -1.591 -3.623 -0.343 -1.479 -1.85 -0.778 -4.072
-2.938 -1.751 1.163 0.557 -3.117 1.089 -2.106 0.099 0.3 -3.75
0.777 -3.25 0.456 -1.329 -2.823 1.407 1.985 -2.41 -0.092 1.033
0.688 -1.574 -1.293 -1.626 -2.748 -3.964 -0.769 -3.039 -2.71 -2.913
0.856 -4.055 0.765 -0.379 1.894 -3.359 -3.104 1.203 2.018 -1.542
-2.476 -0.845 -0.427 0.506 -2.489 -1.228 -2.662 -3.625 0.619 -4.002
-2.453 -2.477 -3.462 -1.328 -1.169 2.69 -0.576 -5.092 0.194 -2.066
-1.268 -1.977 -0.855 -3 -0.56 -1.248 -0.36 0.454 -1.301 0.179
0.116 -3.126 -2.102 -2.173 -0.288 1.349 -2.333 -0.902 -2.244 -3.604

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	3.47	0	NO
Laplace distribution	6	34.8	1	YES

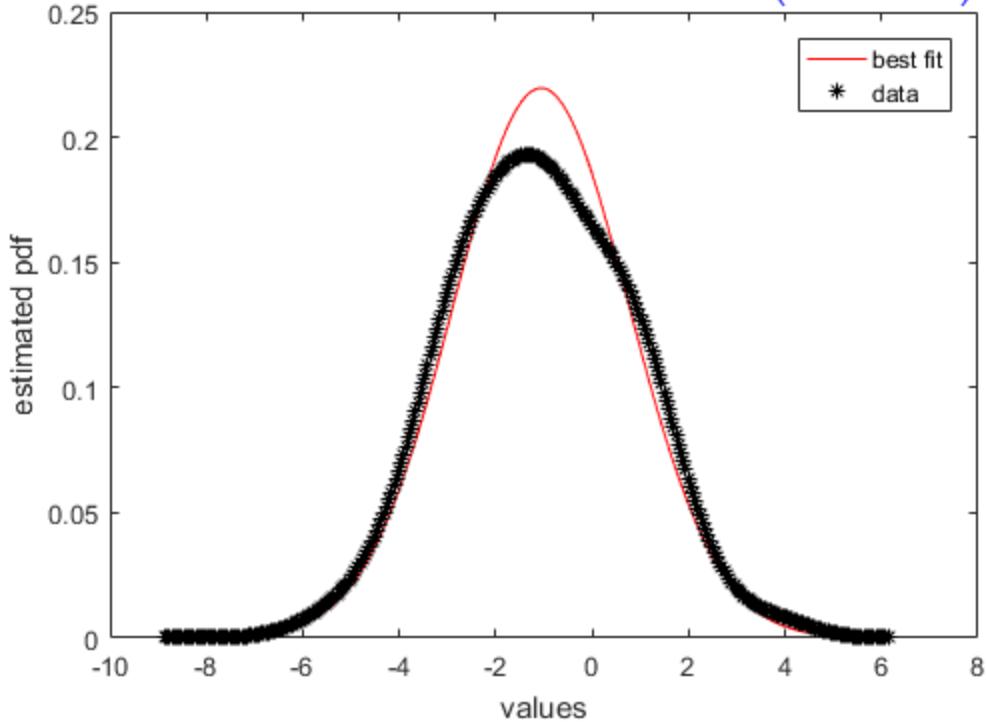
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.0602 \quad \sigma = 1.8167$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Hoque)

1.948	2.235	2.915	4.23	2.848	3.379	2.588	1.523	0.886	1.553
1.675	3.262	2.86	1.57	2.042	1.487	2.663	1.64	3.054	1.327
1.474	1.093	4.143	1.227	2.52	1.385	4.217	6.108	3.081	3.016
1.06	2.404	2.918	2.414	4.144	2.695	1.126	3.639	2.737	2.874
2.849	1.74	1.432	0.892	3.139	3.254	5.454	2.994	3.435	1.436
1.308	2.393	2.1	1.869	1.847	3.006	3.142	2.435	3.501	2.973
6.021	1.316	1.204	2.112	1.426	4.586	3.15	1.394	2.55	0.454
1.329	5.796	2.825	2.417	4.419	4.276	2.139	1.253	0.83	3.607
4.95	2.622	4	2.745	2.208	1.55	4.719	2.743	1.608	2.124
1.861	2.078	3.532	1.682	2.605	0.644	4.01	2.247	1.805	2.694
5.621	3.921	3.556	3.948	2.834	2.099	1.863	1.589	2.675	2.369
1.614	3.03	5.928	1.266	1.69	1.73	1.379	1.776	1.515	3.335
4.392	0.247	2.56	2.949	2.978	1.755	1.391	1.739	2.474	1.399
2.685	1.154	3.017	1.839	2.283	1.271	3.527	3.051	1.2	2.104
3.397	2.785	3.639	4.624	3.62	2.264	4.743	1.273	2.34	1.852
2.933	2.579	2.023	5.322	1.853	0.779	3.631	2.457	0.913	0.837
1.3	1.484	1.069	1.156	1.401	1.365	2.234	1.106	2.885	2.611
0.724	2.637	1.153	3.634	1.327	3.932	1.23	1.031	2.265	1.237
1.902	4.371	2.556	0.937	3.902	2.466	4.173	4.04	6.479	4.298
1.885	2.01	2.693	1.795	2.822	2.78	0.901	3.053	0.417	0.622

p m shankar

Summary of χ^2 tests

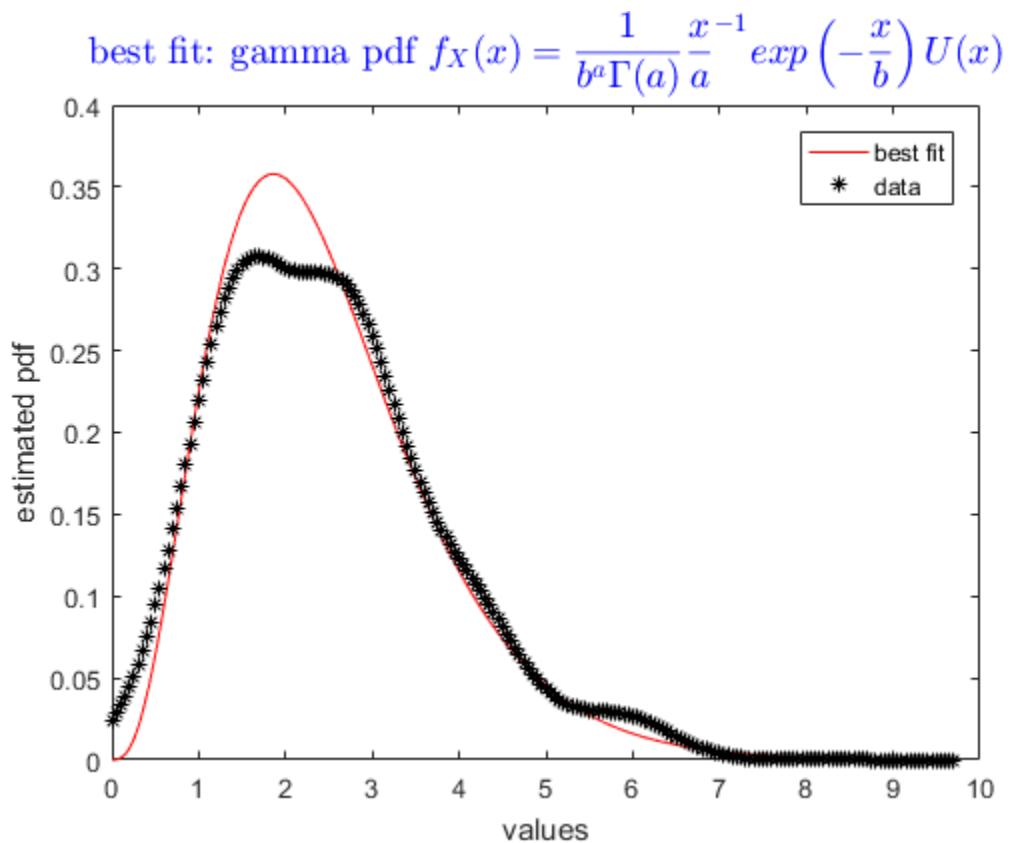
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	14.08	1	YES
Nakagami distribution	5	13.11	1	YES
gamma distribution	5	6.59	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 3.9454 b = 0.63135

p m shankar



data (Huynh)

-2.917 1.981 -1.458 -2.087 3.409 -0.48 2.423 0.015 -2.477 0.174
-1.518 -2.807 -4.986 -1.41 -0.07 -0.993 -1.537 -4.963 -1.973 0.209
-1.347 -0.464 -1.655 0.155 -1.591 -2.153 -1.444 1.076 -0.572 -1.651
-2.038 -2.416 -2.988 0.75 0.039 -0.9 -0.635 -0.207 -1.064 -2.384
-2.393 0.611 -0.861 -0.889 -3.08 -1.09 0.485 1.244 0.071 -3.029
0.938 -0.028 -1.669 -4.598 -0.311 -0.462 -0.912 -0.991 2.085 -1.259
0.992 -6.112 -0.301 -2.431 -3.43 -2.834 -1.593 0.576 -4.759 -1.459
-3.412 -2.795 0.858 -2.39 -0.485 -1.871 -0.29 -2.034 1.447 -2.204
-0.064 -3.209 -1.778 -2.424 0.475 -3.149 -2.17 -0.507 0.39 -4.199
-3.384 -4.092 -3.493 -1.027 -4.612 -1.648 -1.869 1.288 -2.087 -1.026
2.369 0.301 -2.747 -1.177 1.167 0.071 -1.476 -4.227 -4.691 -0.68
3.623 0.696 0.169 1.385 -1.884 -0.892 -1.002 -2.139 -0.257 -1.47
-4.114 -0.315 2.6 -1.644 -0.456 1.587 -1.775 2.913 -1.732 -3.354
-0.088 3.045 -4.604 -2.004 -1.79 5.051 -5.731 -3.003 -2.066 -5.784
-3.335 -4.321 2.111 1.375 -2.31 -1.36 1.473 -0.549 0.126 -0.181
-2.386 2.258 -0.083 -1.135 2.606 -2.783 -3.971 -1.273 -0.328 -4.072
-0.872 0.898 -0.349 -0.691 0.394 -0.557 -1.204 -2.859 -1.814 -0.306
0.574 0.509 0.527 -1.04 -2.019 -1.644 -2.807 0.854 -3.56 -2.888
-2.157 -3.64 0.1 0.06 -2.487 -3.548 -1.065 -1.852 3.847 -0.892
-2.291 0.12 0.962 -1.302 -1.84 -1.507 1.052 -2.543 -1.306 -0.665

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	3.37	0	NO
Laplace distribution	6	12.99	1	YES

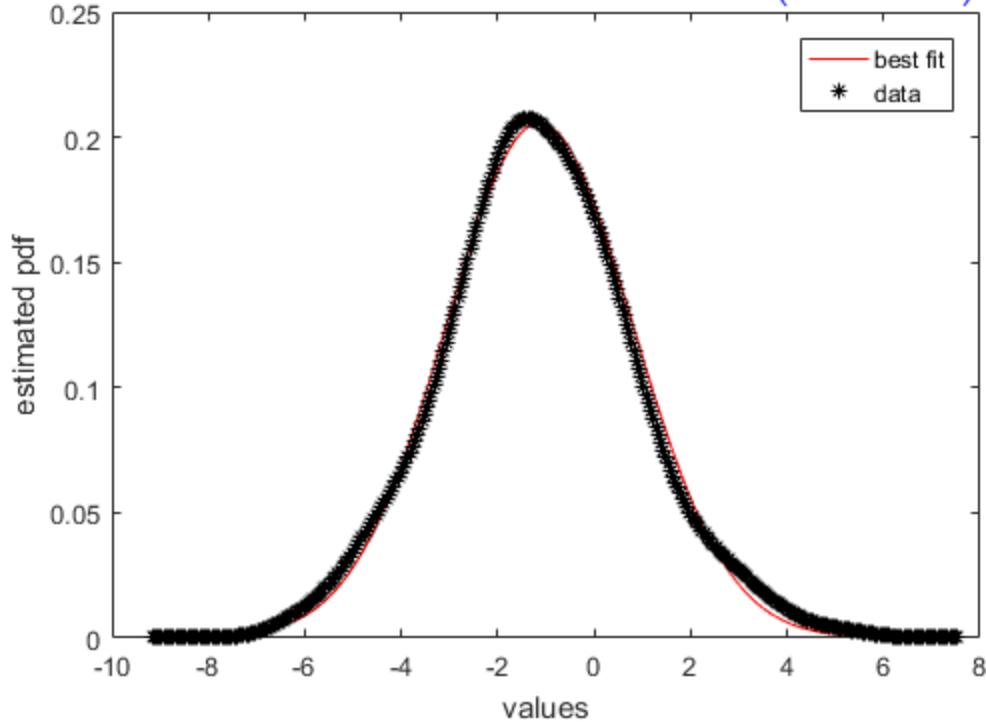
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -1.1314 \quad \sigma = 1.9404$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Jacob)

1.256	3.892	3.378	0.494	3.353	3.362	3.197	2.475	0.958	3.881
6.826	4.897	1.419	3.087	1.466	1.671	0.848	1.575	0.604	1.649
2.628	1.32	3.053	2.408	2.851	0.698	1.158	2.073	0.634	2.811
0.981	3.482	1.258	1.394	3.349	5.026	5.329	2.111	0.373	2.753
0.617	2.266	2.994	2.232	2.752	1.435	2.01	2.4	0.361	4.873
1.443	1.385	2.834	3.571	3.731	1.504	1.62	0.671	2.925	5.036
2.713	0.569	1.062	1.324	3.33	2.789	4.48	2.872	1.479	1.25
4.538	4.453	3.536	1.811	3.963	1.346	2.64	3.845	1.4	2.499
3.083	1.449	3.739	1.759	1.455	3.017	2.407	2.187	2.34	0.647
0.64	2.875	0.83	1.437	2.467	1.202	1.755	4.169	2.89	4.087
0.875	2.674	2.385	1.95	4.477	3.256	1.857	3.737	3.373	2.005
0.119	4.219	0.489	4.911	1.736	0.816	3.171	1.928	5.34	2.86
1.574	2.912	4.592	0.421	4.169	1.927	2.507	4.834	2.693	3.823
4.811	4.115	3.772	3.957	0.054	2.748	3.214	0.771	1.642	0.852
2.747	4.751	2.708	0.524	2.043	2.377	2.362	2.19	4.12	1.04
1.537	4.461	1.829	0.668	2.123	1.533	0.785	1.217	5.587	1.921
0.825	0.361	2.452	1.734	2.963	2.411	5.654	2.723	2.152	5.575
2.385	2.16	0.998	2.377	3.824	3.861	2.593	3.102	2.202	2.13
1.6	2.41	1.451	3.393	1.516	4.47	3.563	4.152	4.145	2.341
3.103	3.54	4.863	3.705	0.436	2.084	0.904	3.666	2.656	1.849

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	5.09	0	NO
Nakagami distribution	5	4.19	0	NO
gamma distribution	5	13.07	1	YES

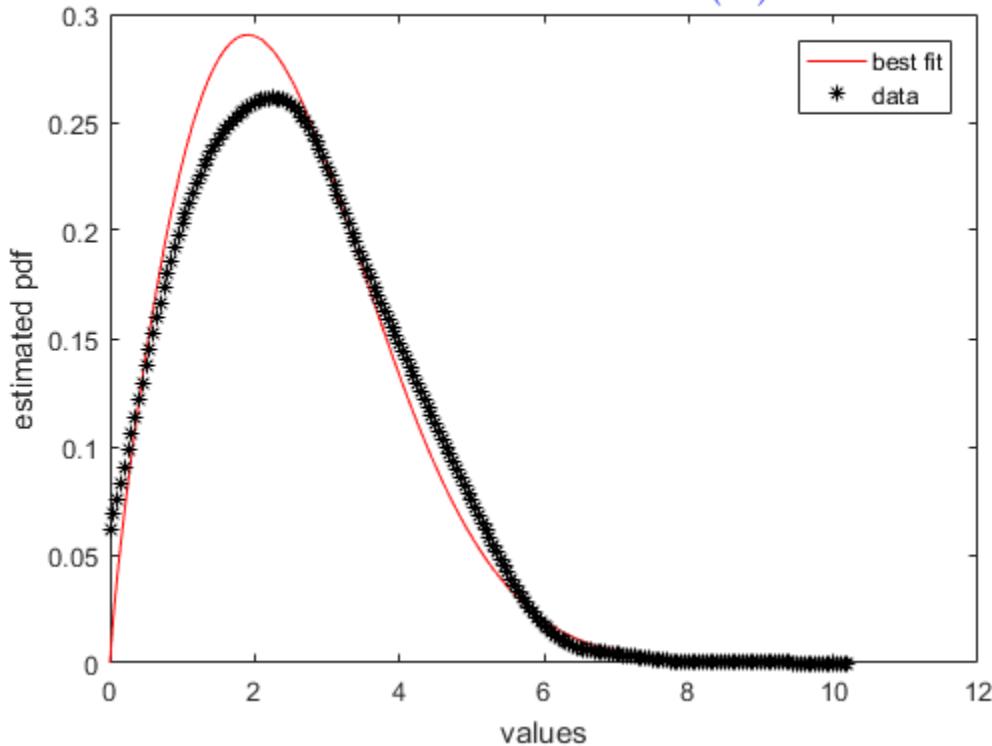
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 0.90526 \quad \Omega = 8.1026$

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Jiang)

```

-2.61 1.109 -3.106 0.069 -1.364 -4.63 -0.058 -1.309 1.41 1.014
-1.683 -0.862 0.598 -2.869 -1.572 0.218 -1.657 2.111 -1.507 1.792
1.426 -0.174 -0.766 0.099 -4.03 4.444 0.011 -1.915 1.464 0.932
0.828 4.657 -2.621 -3.121 0.621 -0.993 -0.126 1.747 -0.649 1.102
4.137 -0.101 -2.051 1.215 -3.177 -2.082 -1.87 -2.611 2.309 0.265
-1.562 -0.181 -1.35 0.713 -2.533 -1.499 0.165 -4.357 -0.046 -2.131
-1.55 2.602 0.04 0.682 -2.359 0.297 -3.469 -0.433 0.232 -2.867
0.116 2.303 -1.325 -0.276 -2.364 -0.75 0.386 1.793 1.918 -1.527
-1.656 -0.766 -0.967 0.088 -0.563 -4.737 -0.328 3.054 -1.523 -1.058
2.174 0.561 -1.918 -2.816 0.49 -0.732 -2.599 4.104 0.352 -3.51
1.359 -1.198 -0.102 -0.544 2.409 -0.325 -2.364 -1.15 0.904 -1.607
-0.83 -2.98 -4.62 -1.312 -3.471 -1.258 -5.613 1.512 -2.284 -3.524
1.304 -0.223 1.742 -2.838 -2.328 1.177 2.563 -2.128 -2.082 -3.354
0.782 0.065 -0.152 0.981 -0.401 -0.736 -0.647 -1.701 -0.026 -0.363
-0.323 -0.262 -2.023 -4.088 0.929 1.676 -1.81 0.929 -2.317 3.588
0.646 1.118 0.3 2.158 0.493 -1.908 -5.086 -0.261 0.516 -1.685
0.848 -2.032 1.632 -1.688 -4.497 -6.566 0.255 -3.232 1.416 -1.885
-0.676 -2.945 -0.658 0.291 -1.073 -2.067 -2.486 -4.472 -0.95 0.168
-3.863 3.21 -0.664 0.957 -1.753 -1.795 0.361 -3.106 -0.148 -0.087
-0.3 -2.081 -2.384 1.633 -0.623 1.439 -1.482 -1.3 -1.836 -2.748

```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.97	0	NO
Laplace distribution	6	18.27	1	YES

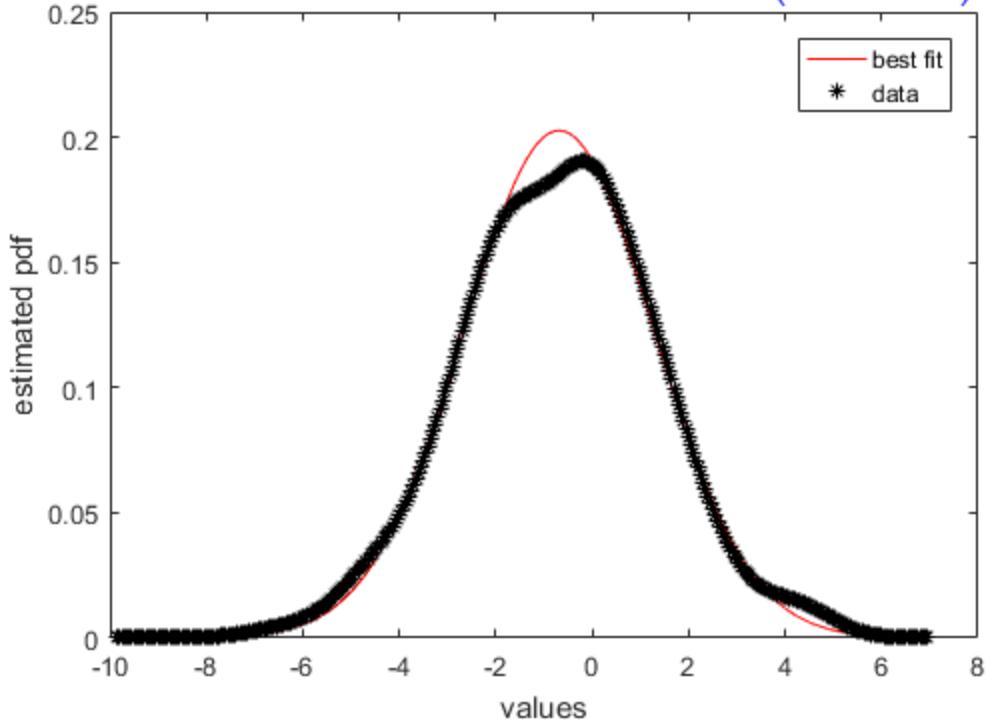
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.6879 \quad \sigma = 1.9687$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (John)

4.401	2.261	2.58	2.658	2.879	0.39	5.411	2.085	3.07	1.466
3.385	0.472	1.228	1.499	1.793	1.881	3.999	2.036	4.439	2.25
3.748	1.713	2.131	2.546	2.071	1.47	1.221	2.62	1.809	1.413
3.317	3.522	1.486	0.246	4.027	1.883	3.701	1.576	3.434	0.545
4.106	1.259	2.67	0.235	4.164	2.526	1.599	3.544	2.208	2.714
3.29	1.283	3.232	0.797	0.584	0.609	0.521	4.663	2.404	4.672
1.738	1.676	1.656	5.896	3.011	3.898	1.985	3.462	1.928	1.44
4.684	1.716	0.629	5.828	2.532	0.675	1.512	1.537	5.568	3.714
2.069	4.284	1.609	5.728	1.472	1.496	2.229	1.329	2.234	1.06
1.767	0.967	2.289	0.096	2.511	3.681	2.998	4.686	0.567	1.83
1.572	3.051	5.124	3.197	3.167	2.403	2.879	0.774	1.506	1.242
1.417	1.926	2.324	2.627	1.75	3.577	2.178	1.137	2.054	2.407
2.894	2.527	2.266	4.761	3.657	1.341	4.643	0.514	3.569	1.229
1.322	0.545	2.093	2.274	3.139	2.093	4.895	4.455	3.343	2.567
2.082	2.357	1.294	0.671	1.914	3.589	3.344	3.086	1.598	1.613
0.29	2.193	2.659	2.803	1.473	1.398	1.669	2.229	2.55	1.672
2.724	1.201	1.494	1.691	1.288	2.321	4.419	1.814	1.027	2.023
1.734	1.522	2.752	3.137	3.467	0.449	3.555	3.213	3.074	4.849
0.95	3.222	1.065	4.113	1.174	2.533	1.325	3.266	3.402	1.135
3.971	1.319	0.413	2.5	2.552	4.599	2.643	3.321	4.062	2.137

p m shankar

Summary of χ^2 tests

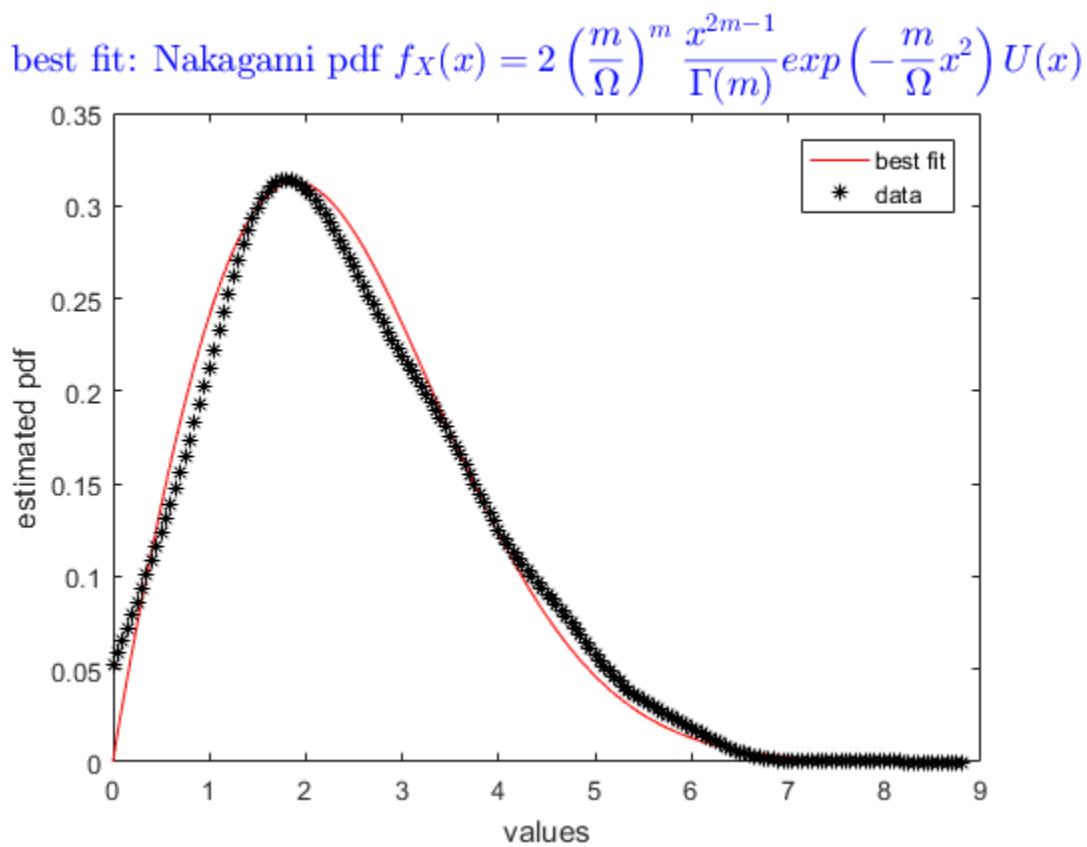
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.65	0	NO
Nakagami distribution	5	4.53	0	NO
gamma distribution	5	8.74	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

m = 0.97161 $\Omega = 7.3576$

p m shankar



data (Karch)

```
-0.387 0.014-2.307 -5.267 2.258 0.521 6.724 -1.931 -2.881 -6.085  
3.502 -5.622-2.724 -1.902 -1.125 -4.664 0.476 -2.786 -4.544 -0.635  
-8.777 0.152-1.042 -0.342 -1.407 -1.7 2.137 -7.251 -5.36 -4.546  
0.587 2.891-1.061 1.302 2.763 -3.634 -5.175 -2.857 5.578 -3.005  
-1.044 -0.533-4.595 2.633 -4.413 -1.089 -3.406 -4.494 2.966 -0.342  
-5.923 1.104 -2.09 -1.742 0.09 -3.801 -2.817 -4.938 -1.077 1.117  
-3.301 0.181-2.495 -6.475 0.505 -0.53 1.295 -5.469 -5.771 -5.353  
-0.972 -2.91 -0.117 -4.227 -2.731 0.218 -2.834 -3.601 -4.596 1.782  
8.735 -1.118 1.28 -5.185 -1.353 3.136 0.105 -8.008 -2.53 -0.02  
6.308 -4.362 1.328 5.051 -5.498 -2.582 -8.155 0.893 0.374 -2.204  
-6.05 0.665-4.591 -3.847 -5.444 -8.415 -3.062 -0.44 -5.996 -2.586  
7.105 -5.441-1.768 0.244 -1.685 -4.519 -4.471 -2.06 -8.99 -2.653  
0.176 -5.207-5.642 -2.577 0.167 2.064 -6.731 -2.104 -6.347 -2.909  
-2.189 -4.428-5.341 0.666 5.756 -5.216 -0.476 -4.394 -0.999 -1.931  
0.144 -10.8332.021 -4.295 -4.001 0.883 -1.154 1.056 -0.826 -1.846  
-2.615 2.315 2.598 -6.207 -1.438 -1.628 -1.9 -2.4 -0.645 0.478  
-2.372 -1.024-4.309 -6.267 -2.247 2.31 -6.001 -4.144 -2.391 2.581  
2.469 -4.265-0.886 -0.535 -7.799 -7.883 1.382 2.054 -1.449 -0.599  
2.227 2.111-2.677 -2.532 -3.317 -2.593 -0.949 -2.674 -3.428 -2.629  
2.252 -7.135 1.352 -2.588 -7.384 -5.624 -2.897 -3.767 0.586 -0.124
```

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	4.54	0	NO
Laplace distribution	6	19.89	1	YES

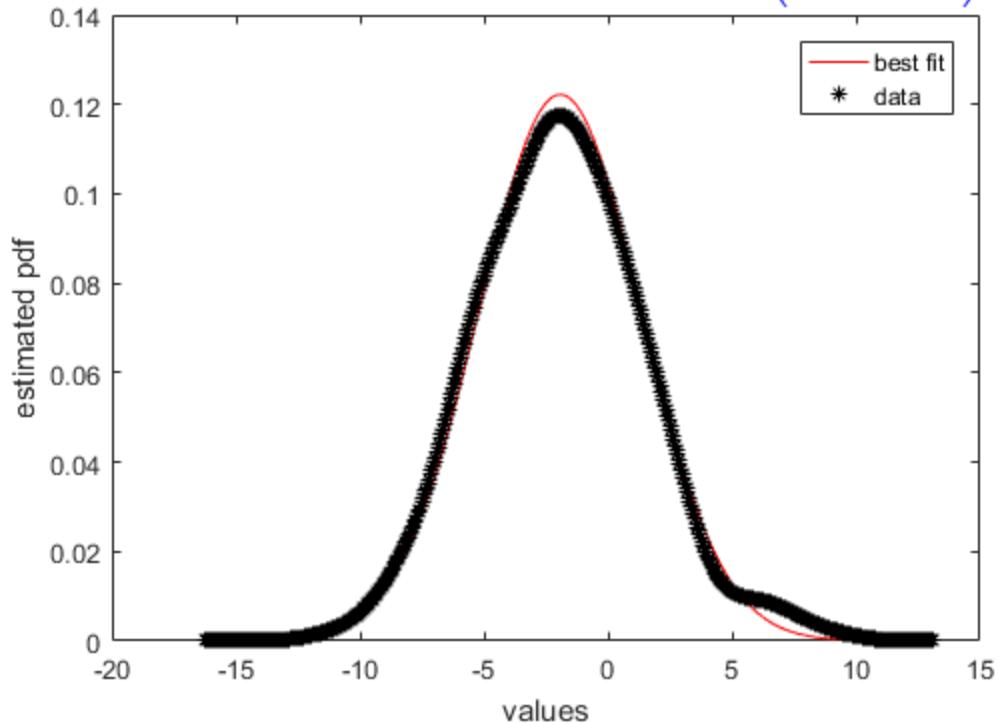
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$

$$\mu = -1.9244 \quad \sigma = 3.2648$$

p m shankar

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$



data (Karna)

4.193	1.696	0.785	8.669	1.548	3.52	0.781	3.75	3.349	0.145
3.572	3.721	1.182	4.874	9.888	2.383	0.238	0.885	3.172	3.311
0.75	3.302	2.737	2.481	1.519	8.276	0.306	2.003	3.113	3.579
2.578	7.381	2.06	11.209	1.639	2.327	4.48	0.821	0.883	5.12
1.761	2.1	5.404	1.4	6.923	2.672	2.54	2.506	5.37	4.557
3.518	2.097	3.115	2.906	5.336	5.356	0.372	1.902	1.979	1.403
2.618	1.53	2.865	1.25	2.437	1.024	5.085	0.607	1.749	4.029
0.373	2.2	1.238	3.086	2.685	0.44	1.522	3.07	7.484	2.435
4.586	0.79	3.888	0.738	0.079	4.552	2.711	3.599	0.409	0.331
1.349	2.217	8.42	1.54	4.239	4.796	1.877	9.361	1.902	2.202
0.676	1.225	1.076	4.867	3.346	4.952	10.007	5.405	9.558	4.529
1.964	0.778	4.905	5.338	2.658	4.012	1.396	1.779	1.834	1.061
2.198	1.205	2.165	5.276	1.046	0.49	1.211	2	1.447	0.525
2.578	0.692	2.753	1.903	3.646	6.105	2.644	3.752	2.399	1.03
3.074	0.349	2.586	0.728	0.621	3.831	4.447	0.342	3.32	0.646
1.094	1.272	2.56	1.509	1.138	2.475	4.03	0.417	0.286	4.252
1.815	5.018	0.635	5.168	4.742	0.455	5.411	1.553	10.155	3.085
3.866	1.617	1.516	5.779	3.304	1.962	5.831	0.455	0.782	3.312
0.48	4.52	1.892	5.128	2.745	2.253	0.51	3.417	1.273	0.3
3.314	3.798	3.279	2.736	4.142	0.094	1.049	5.308	4.82	10.673

p m shankar

Summary of χ^2 tests

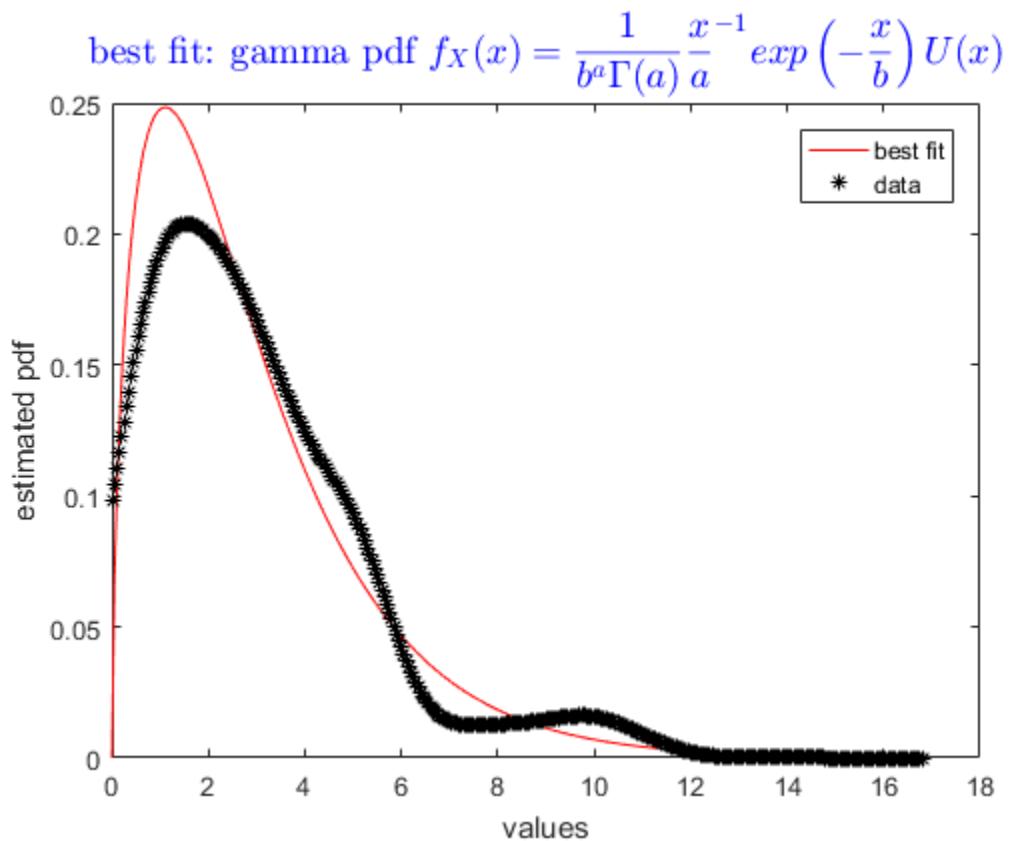
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	11.05	0	NO
Nakagami distribution	5	20.54	1	YES
gamma distribution	5	9.27	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 1.6097 b = 1.8089

p m shankar



data (Khoa)

1.889	5.065	10.599	0.684	2.202	-7.916	-0.657	-0.912	-1.205	-3.981
3.143	0.3	0.221	6.947	0.3	-1.952	-8.417	-3.938	-4.975	-0.579
0.189	0.061	0.943	4.02	1.484	-7.007	-2.754	-2.582	-2.992	-0.052
0.397	2.471	2.149	3.278	1.445	-0.602	-1.922	-1.805	-2.325	-0.943
1.793	6.591	1.642	1.158	0.454	-0.604	-2.625	-0.177	-0.056	-3.202
1.422	4.064	4.315	5.973	0.649	-0.975	-1.261	-2.619	-5.566	-1.613
1.598	2.684	2.337	0.98	1.651	-5.694	-1.396	-0.051	-0.468	-6.683
4.714	1.558	0.113	6.711	5.096	-1.248	-3.693	-3.597	-1.317	-0.295
3.599	4.016	1.811	1.275	4.282	-1.97	-2.52	-1.065	-2.932	-0.385
2.259	1.518	1.955	2.115	0.361	-0.082	-12.503	1.218	-4.968	-0.604
4.403	1.022	4.388	0.749	10.655	-1.297	-0.048	-1.853	-2.544	-4.033
0.508	4.519	2.147	1.006	2.141	-0.668	-5.366	-1.078	-2.189	-1.561
4.908	6.426	1.415	0.304	5.353	-2.37	-6.727	-1.217	-6.346	-11.381
4.463	3.645	1.161	0.346	0.065	-2.515	-2.963	-5.176	-1.585	-2.565
5.303	3.43	2.783	3.288	1.016	-0.576	-4.857	-6.167	-4.459	-3.487
4.44	2.573	3.004	1.075	2.077	-7.45	-2.142	-0.003	-2.867	-5.47
2.492	2.033	0.036	4.861	2.258	-6.048	-3.241	-5.296	-1.619	-5.165
3.503	7.377	9.831	10.466	8.459	-5.257	-0.149	-10.27	-4.137	-2.582
0.239	4.013	0.366	0.887	1.148	-2.818	-0.249	-1.733	-3.709	-7.086
2.53	0.666	0.272	2.079	9.48	-0.554	-8.831	-0.377	-1.448	-1.54

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	11.87	0	NO
Laplace distribution	6	5.65	0	NO

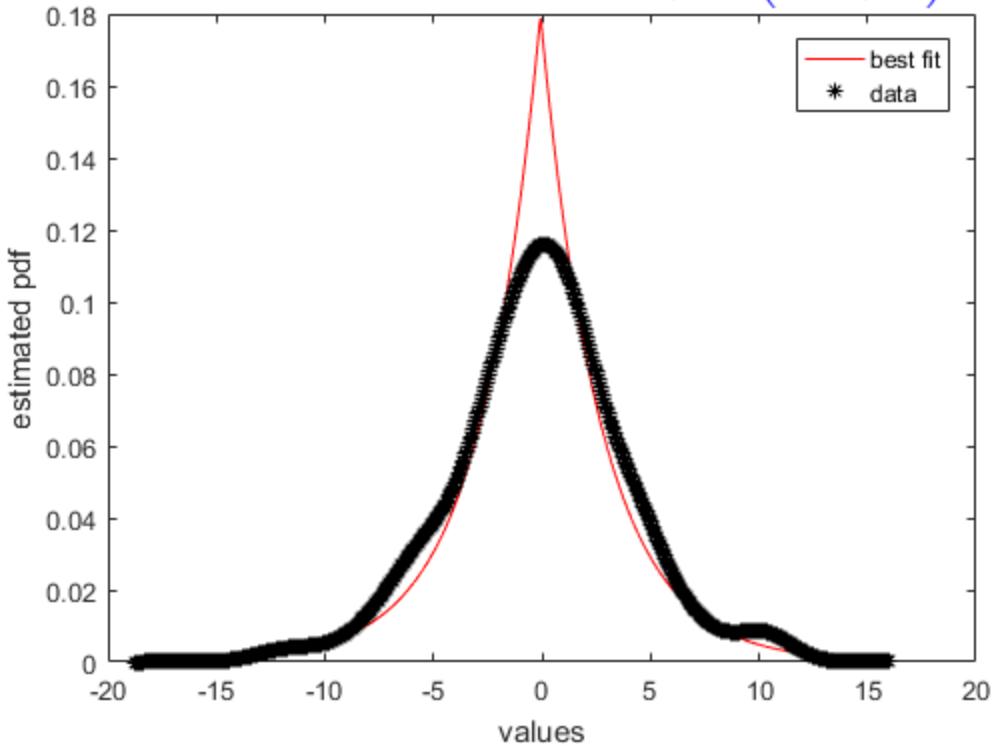
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Laplacian pdf $f_X(x) = \frac{1}{2b} \exp\left(-\frac{|x-a|}{b}\right)$

a = -0.069426 b = 2.781

p m shankar

$$\text{best fit: Laplacian pdf } f_X(x) = \frac{1}{2b} \exp\left(-\frac{|x - a|}{b}\right)$$



data (Laudando)

0.442	1.194	0.666	1.876	1.122	0.717	1.872	1.381	2.459	1.895
1.095	1.994	2.869	2.128	1.83	1.15	2.211	0.782	2.003	1.437
1.809	1.319	1.131	1.919	1.889	1.203	1.824	2.113	0.822	1.003
1.194	0.508	0.226	0.914	1.085	3.159	0.821	2.935	2.901	4.041
1.031	2.467	1.157	2.594	0.975	2.248	1.526	0.554	1.235	1.93
1.691	0.586	1.174	0.612	2.139	1.617	1.709	1.439	1.26	2.358
1.865	1.044	0.669	3.32	1.475	1.549	1.793	2.625	1.367	2.017
0.796	1.314	0.653	1.722	0.433	1.202	1.699	0.34	1.851	1.67
1.265	2.277	2.613	2.978	1.98	1.109	0.904	2.51	1.243	1.812
0.947	0.681	1.83	1.91	3.969	1.575	2.716	0.595	1.843	1.244
0.291	0.651	1.553	2.196	1.711	2.614	3.235	0.392	1.662	0.818
1.064	0.987	1.568	0.66	0.716	0.704	1.284	2.173	0.589	0.937
2.017	1.263	0.849	1.131	1.151	2.421	0.892	0.262	1.982	1.151
1.919	1.252	1.323	1.278	2.013	3.62	1.76	1.24	1.795	2.652
1.35	1.16	1.617	0.736	3.073	1.583	1.908	2.62	1.097	3.122
2.005	2.548	1.278	2.118	1.604	1.193	2.324	1.205	0.963	0.49
1.92	1.519	0.143	0.658	2.471	0.911	2.651	2.807	3.695	2.269
2.432	0.398	0.522	2.831	2.035	1.534	1.342	1.877	2.012	1.6
0.299	3.955	1.906	1.24	1.167	0.944	2.074	2.099	2.649	2
1.423	1.68	1.226	2.177	1.95	2.485	0.753	1.949	1.64	1.037

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.47	0	NO
Nakagami distribution	5	3.97	0	NO
gamma distribution	5	5.37	0	NO

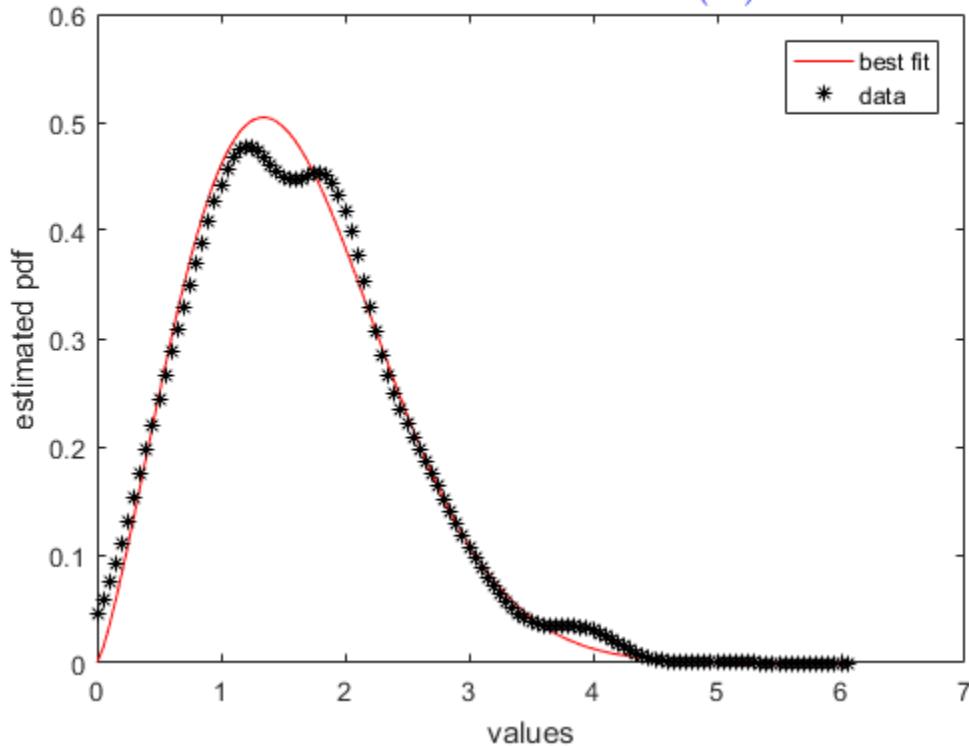
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 1.14 \quad \Omega = 3.2072$

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Lechman)

-0.217 -3.307 -3.637 1.318 -4.244 -6.623 -3.094 -2.643 -4.573 -1.967
 0.668 -5.995 -1.389 -4.067 -4.805 3.511 -4.269 -5.292 -2.911 -2.385
 1.07 -1.893 -0.677 -1.818 0.553 -2.58 0.985 2.676 0.025 -3.359
 -0.984 -1.841 0.274 1.229 -4.769 2.291 -1.493 0.735 -2.975 -1.15
 -1.59 -0.374 -1.075 -0.28 -5.199 2.879 0.623 -2.277 -0.596 -2.437
 0.632 -0.285 -2.143 4.663 0.972 -4.672 -3.079 -0.717 3.945 2.605
 3.911 -2.715 0.491 -1.12 -2.636 -0.558 1.24 -1.575 0.988 -0.411
 1.211 -3.033 -1.284 -4.88 2.112 7.666 -5.534 -4.654 1.593 1.553
 -0.789 0.984 1.018 0.11 -4.231 -1.537 2.917 -8.206 4.901 -1.35
 -2.436 -1.955 -1.225 -3.28 -2.536 0.216 1.116 -1.119 1.938 -1.204
 0.249 -4.428 -1.016 -0.876 -0.396 -0.173 -0.725 -2.156 -0.006 2.146
 -2.21 -0.974 -1.23 1.695 0.373 2.17 -3.903 -2.442 3.878 2.671
 -0.404 -0.49 -3.303 -0.23 0.169 1.726 -1.994 -3.115 -3.262 -0.918
 0.946 -2.028 -3.317 -0.251 -0.521 -3.366 -0.364 -5.543 -2.705 3.231
 1.311 0.659 -3.403 -1.493 -1.575 -2.096 2.019 -2.304 4.046 0.189
 0.47 -0.436 3.462 -1.366 -2.448 -0.142 -3.584 -0.596 0.136 -0.079
 2.445 -1.532 -1.5 -1.258 0.201 -1.146 2.238 -3.655 -1.105 4.48
 3.628 -1.11 1.351 -7.997 -1.967 5.337 5.92 0.126 0.145 2.839
 -5.744 0.145 -0.127 -0.017 0.054 0.097 -2.238 -1.682 -1.66 1.268
 -5.447 -2.104 3.648 1.476 1.719 0.094 0.172 -1.254 -1.73 0.006

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	2.66	0	NO
Laplace distribution	6	6.55	0	NO

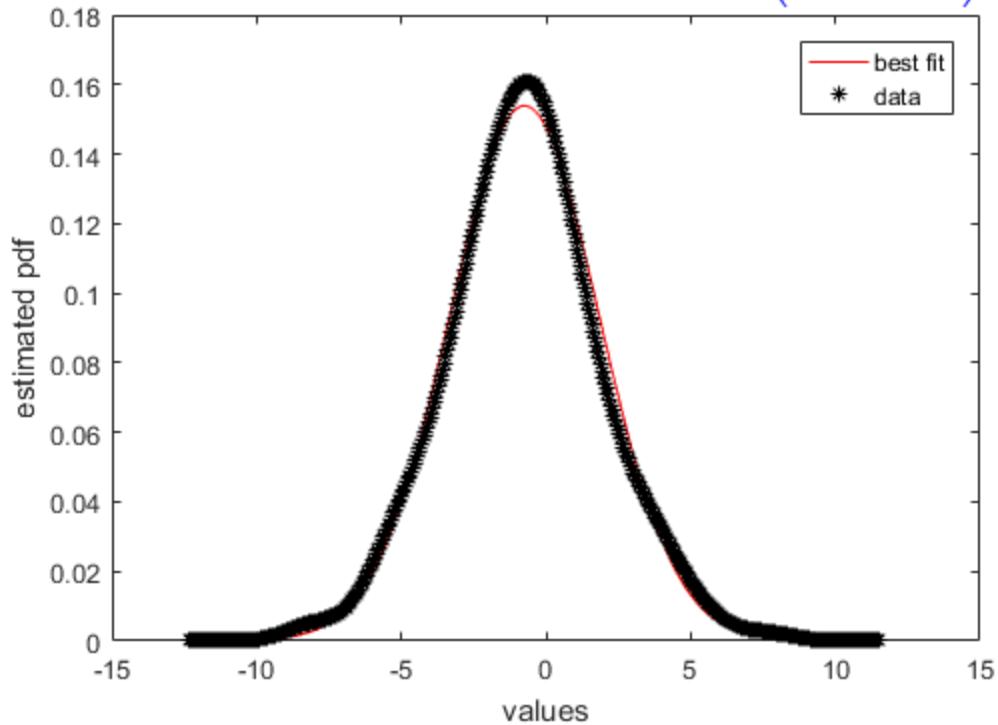
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.74262 \quad \sigma = 2.5923$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Li)

1.528	1.789	0.476	0.519	2.473	5.288	3.624	4.298	0.344	0.82
1.405	2.736	1.53	5.955	1.093	1.436	0.537	5.235	0.195	0.204
0.082	1.347	3.304	0.437	2.176	1.529	2.528	5.862	1.417	1.549
3.478	5.482	3.588	5.621	0.318	0.818	3.149	0.521	2.498	0.593
1.294	0.638	3.044	0.273	1.143	2.655	3.749	3.075	0.621	15.568
6.859	1.563	1.655	3.28	0.098	2.3	1.198	0.434	1.547	1.147
1.307	4.204	0.953	1.346	0.454	4.318	4.988	2.452	2.651	2.491
1.924	3.239	0.378	1.916	7.661	1.615	1.481	0.537	3.874	0.873
2.298	8.241	2.406	10.573	0.612	2.185	2.239	1.712	0.378	3.918
0.321	1.164	2.357	1.43	8.559	1.186	1.859	0.55	3.808	0.171
3.617	4.07	1.693	0.824	7.301	6.065	0.612	3.375	1.158	2.055
4.797	1.234	4.104	3.211	1.839	9.056	1.79	1.929	0.574	2.599
1.602	2.098	2.124	4.779	7.183	1.776	0.395	0.49	1.375	1.241
1.586	0.237	5.783	1.558	0.802	6.812	0.424	1.138	0.961	0.052
1.745	0.666	3.571	0.821	0.559	1.198	5.475	2.122	1.276	1.27
0.121	0.119	1.374	3.594	6.436	3.226	1.75	0.932	0.951	0.935
2.337	3.151	1.682	7.237	0.669	0.036	0.901	9.395	2.595	1.717
4.607	0.731	2.214	2.331	0.732	1.945	3.984	0.777	0.695	1.057
1.516	4.698	0.425	2.777	3.603	1.153	1.189	1.325	3.912	5.09
0.592	1.001	1.356	0.468	1.767	0.942	12.045	7.839	0.24	0.722

p m shankar

Summary of χ^2 tests

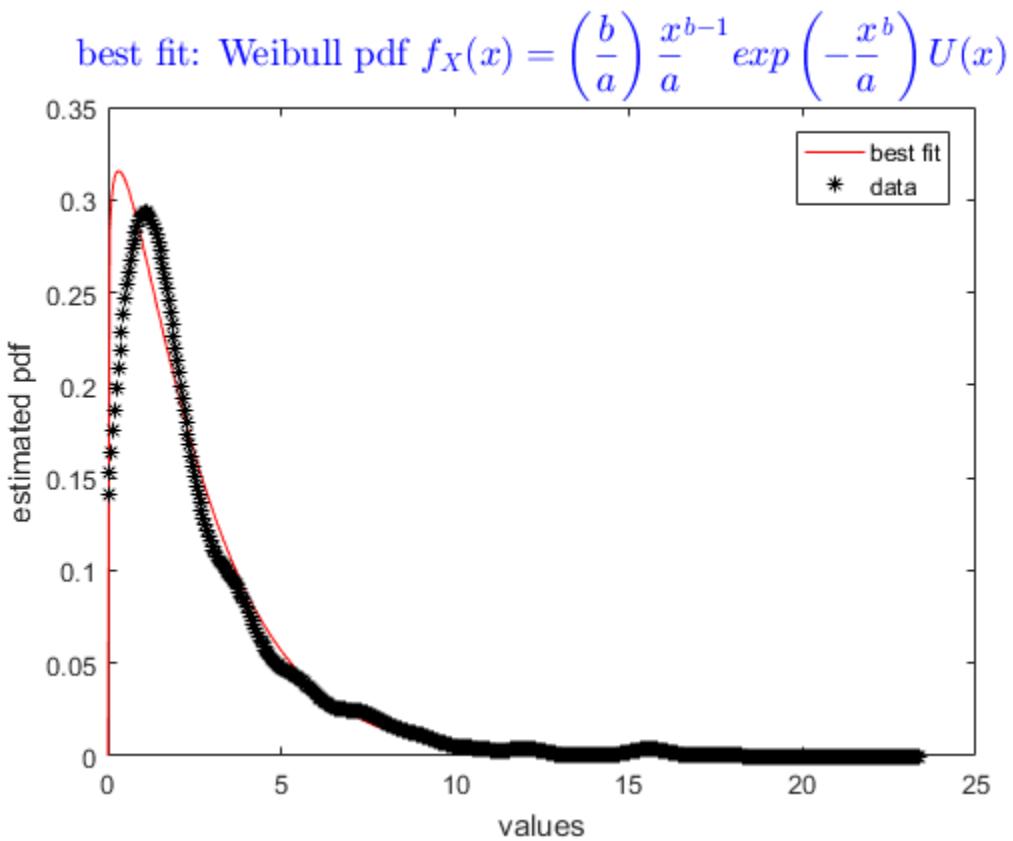
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	3	3.84	0	NO
Nakagami distribution	3	13.82	1	YES
gamma distribution	3	3.99	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.5421 b = 2.5421

p m shankar



data (Liao)

3.433	2.704	1.005	1.44	2.447	3.797	1.871	-2.296	3.304	3.935
1.734	2.314	0.081	2.933	1.976	-2.551	1.034	-0.145	2.717	3.261
-1.535	-0.507	-3.206	1.7	7.532	1.659	0.274	2.318	2.891	1.021
2.242	-1.677	1.748	2.804	1.063	-1.116	-0.262	-1.561	4.012	1.249
-2.591	2.304	1.49	5.242	1.683	-0.287	-0.001	1.1	1.591	4.559
-1.116	3.894	1.677	3.497	0.833	1.517	-0.734	2.097	3.408	0.521
1.303	-1.58	-1.156	-1.246	2.233	2.783	-1.08	4.557	0.976	2.716
1.823	-3.416	-0.46	-0.66	-0.05	-0.673	3.531	2.282	2.579	-0.757
1.141	3.872	-0.833	0.756	3.015	2.106	0.517	2.893	-1.807	-0.524
-2.866	0.877	4.575	-0.285	4.658	3.917	-2.458	0.291	4.084	2.726
2.637	3.356	-0.641	0.842	1.171	-0.71	0.024	-0.158	-2.55	2.297
3.524	2.971	0.607	3.456	0.863	-0.984	3.121	1.113	1.411	3.116
3.335	-1.437	-0.78	-0.063	-0.127	0.977	-0.076	-0.787	0.308	-0.266
-0.141	0.136	2.821	0.428	0.053	2.254	4.555	3.244	-1.318	3.036
0.212	-0.67	0.975	0.545	-2.407	1.003	-0.559	2.552	1.672	1.344
-1.035	1.359	1.146	2.349	0.893	-0.633	-0.506	2.925	1.664	0.905
1.5	3.333	2.879	3.074	-0.763	1.23	-1.066	3.522	3.822	4.378
1.504	1.112	2.35	0.701	3.512	1.414	3.328	0.784	1.274	3.874
-0.543	-3.2	2.572	0.366	1.312	0.111	-0.16	-0.154	2.155	-3.502
2.839	3.471	-3.265	2.867	1.11	-1.241	1.835	2.051	1.486	1.713

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	10.4	0	NO
Laplace distribution	6	37.92	1	YES

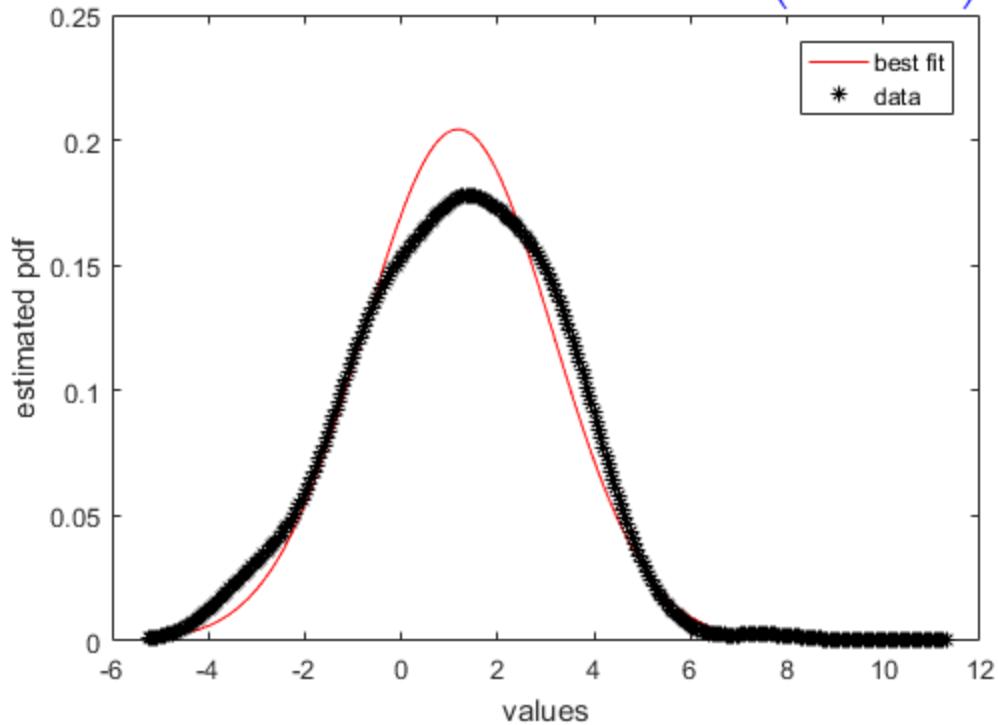
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = 1.1781 \quad \sigma = 1.9524$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Liston)

1.023	0.517	1.2	0.835	1.893	0.624	1.81	1.327	1.747	1.079
1.953	1.702	1.127	0.963	1.681	1.685	0.906	0.864	1.019	1.304
1.412	1.229	0.652	1.141	0.904	1.383	1.209	0.752	1.322	1.252
1.366	1.073	0.842	0.719	0.791	1.737	0.503	1.363	1.617	1.302
1.269	0.902	1.953	0.605	1	1.288	0.629	0.822	1.134	1.568
1.389	0.788	0.625	1.437	1.227	1.704	1.518	1.466	0.95	0.656
0.983	1.004	0.49	2.663	1.693	1.69	1.91	0.757	0.825	2.069
1.116	2.186	1.295	1.341	0.685	1.159	1.558	1.097	1.235	1.626
2.456	0.711	1.663	1.144	1.374	1.565	1.758	1.269	0.974	0.544
0.71	0.916	1.122	0.723	0.975	1.403	1.538	0.567	1.417	1.41
1.132	1.721	2.189	0.323	1.144	1.728	0.976	1.743	1.033	1.311
1.304	1.625	1.049	1.356	0.933	1.138	0.615	0.968	1.027	0.73
0.679	0.819	0.935	1.321	0.931	2.28	1.317	1.497	1.422	1.217
0.63	0.607	1.107	1.409	1.422	0.773	1.187	1.594	0.867	1.146
1.229	1.433	1.221	0.499	1.647	1.155	0.967	1.135	0.722	0.848
0.705	0.582	0.898	0.889	1.47	1.018	1.538	0.885	1.143	0.657
1.091	1.163	1.607	1.388	1.506	0.773	0.705	0.985	1.471	1.202
1.295	1.568	1.457	1.043	1.547	1.625	1.46	1.049	1.36	1.348
1.054	1.458	1.07	1.981	1.442	0.888	2.116	0.746	1.599	0.787
1.855	1.98	1.321	1.071	0.749	1.016	0.92	1.165	1.104	1.433

p m shankar

Summary of χ^2 tests

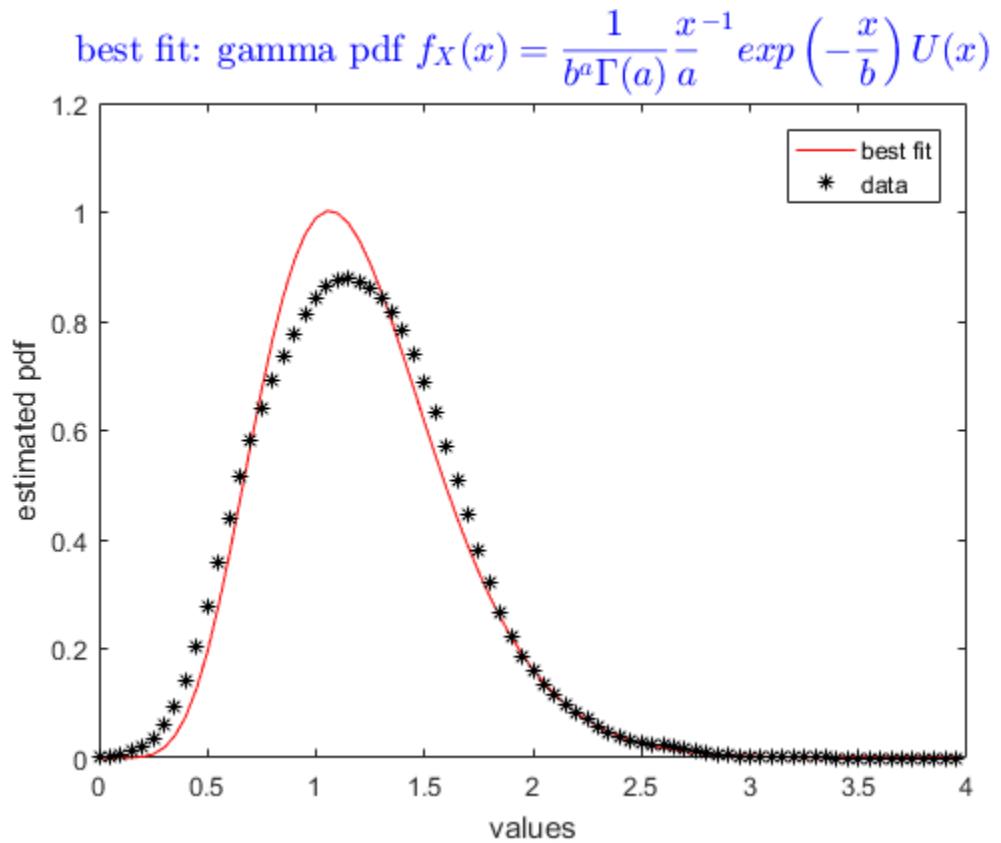
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	6.03	0	NO
Nakagami distribution	5	2.76	0	NO
gamma distribution	5	2.34	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 8.2987 b = 0.14558

p m shankar



data (Liu)

6.252	2.664	1.424	1.916	0.801	5.569	3.476	2.448	0.77	4.121
1.193	1.689	4.907	5.828	1.654	7.723	5.069	0.972	1.641	2.601
3.65	1.39	1.416	3.655	5.174	3.994	1.376	3.247	0.273	0.974
0.878	2.042	2.732	9.855	2.022	0.925	1.444	3.234	1.791	0.483
1.275	5.145	3.455	0.55	0.897	11.177	0.605	4.543	2.658	2.967
10.832	1.997	5.607	1.123	5.854	1.474	3.834	6.308	3.846	1.991
4.798	4.952	5.135	3.412	3.591	0.942	1.641	2.983	9.418	3.452
1.277	2.902	2.856	5.549	2.045	2.398	2.583	3.072	4.059	8.281
1.22	1.642	1.61	6.816	4.353	0.317	3.799	0.175	1.464	3.036
0.954	4.451	6.045	5.032	0.677	3.245	1.407	3.029	1.654	5.49
3.607	5.68	3.505	3.196	0.313	2.352	1.938	2.243	1.855	3.784
3.814	2.208	5.708	1.539	1.345	0.804	1.517	2.841	1.745	6.732
0.299	2.17	3.684	7.669	3.525	3.094	1.238	1.521	3.653	3.067
1.985	2.887	2.099	0.968	2.382	7.415	1.881	2.464	1.982	0.587
5.534	5.073	2.858	2.618	5.355	1.641	8.981	3.553	4.906	2.528
3.223	6.149	0.811	1.214	3.142	5.744	4.946	8.19	1.111	1.325
1.188	3.422	0.66	3.205	1.425	3.99	2.732	12.284	3.401	1.008
0.443	1.577	0.687	3.168	1.519	4.503	5.38	1.859	0.471	2.408
1.786	1.625	2.847	1.424	3.94	1.499	1.867	1.926	3.462	6.993
0.9	7.566	2.16	1.431	1.243	0.541	3.246	1.902	6.564	1.252

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	4.53	0	NO
Nakagami distribution	4	9.08	0	NO
gamma distribution	5	5.41	0	NO

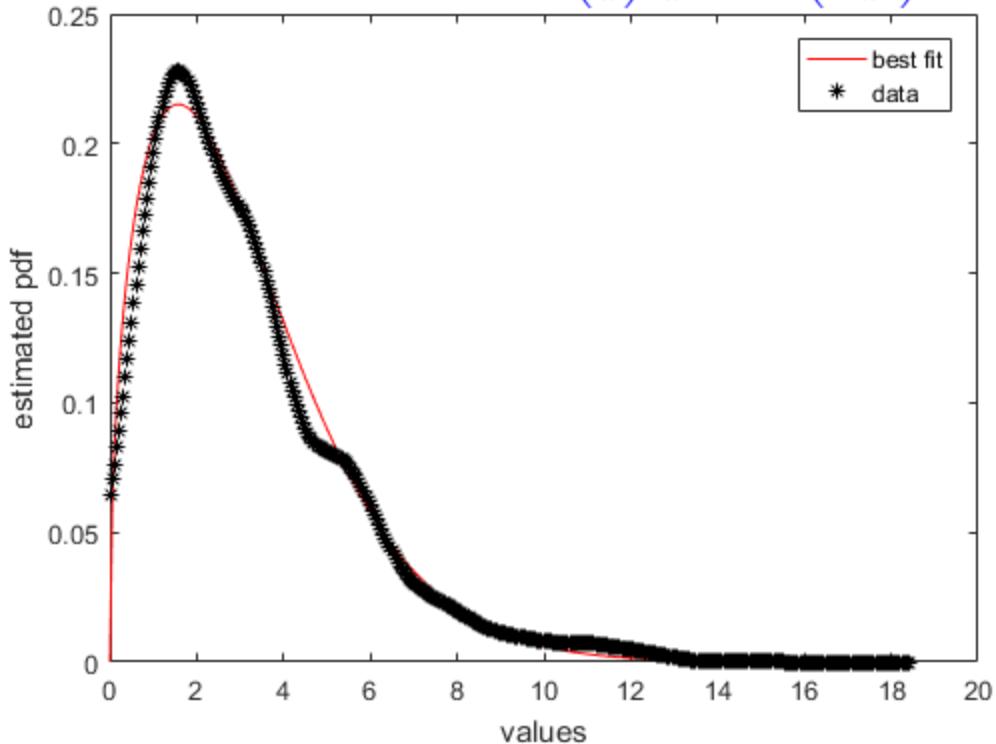
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 3.4439 b = 3.4439

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Louie)

```

-2.292 -0.078 -2.086 -4.461 -5.2 -1.458 -5.327 -1.656 -1.014 -0.188
-4.277 -3.128 1.913 -3.745 -3.357 -1.29 -3.656 -2.632 0.88 -1.537
-1.37 -4.578 -4.544 -3.605 -3.862 -4.613 -4.583 -2.027 -1.63 -1.83
-2.613 -1.198 -1.45 0.205 0.2 0.442 -1.693 -0.784 -3.488 -3.221
-1.557 -0.944 -3.853 -2.961 -3.22 -1.498 -1.696 -0.548 -1.887 -0.317
-0.251 -7.025 -3.444 -1.817 -4.552 -1.713 -3.386 -3.499 0.041 1.257
-2.986 -1.952 -1.118 -4.666 -2.833 0.701 0.339 -4.655 1.566 -1.049
-2.965 2.191 0.186 -2.366 -3.37 -1.682 -3.576 -2.838 -4.81 -1.385
-2.518 -2.377 -1.66 -5.252 -1.476 -5.445 -2.691 0.04 -1.772 -1.529
-1.575 -3.288 0.61 -3.405 -2.463 -2.032 -3.335 -1.314 -2.867 0.068
2.074 -4.016 -3.86 -0.481 -4.971 0.334 -3.793 -1.212 -0.911 -2.662
-3.746 -5.622 -1.324 1.419 -0.839 0.425 -1.891 -2.885 -1.662 -3.024
0.68 -2.979 -3.062 -1.029 -2.728 -1.471 -4.788 -3.531 -3.177 -0.936
-2.431 -1.397 -3.515 -1.806 -3.2 -5.387 -2.624 2.154 -5.614 -2.613
-0.204 -3.968 -7.263 0.147 -3.704 0.193 -0.339 -2.21 -4.428 -0.216
-1.881 -1.493 -0.48 -0.544 -0.412 -2.115 -0.372 -2.066 -3.213 -4.928
-3.068 -0.424 1.75 -6.898 -2.218 -1.616 -5.892 -2.547 -2.547 0.653
-2.518 -3.187 -1.001 -5.583 -5.106 0.563 -1.187 -1.861 0.351 -3.461
-0.082 -1.016 0.753 -3.667 2.342 -1.194 -2.916 -2.639 -3.189 -1.523
0.534 -0.869 -1.882 -3.747 -2.683 -9.444 -1.099 -4.088 -1.256 -2.936

```

p m shankar

Summary of χ^2 tests

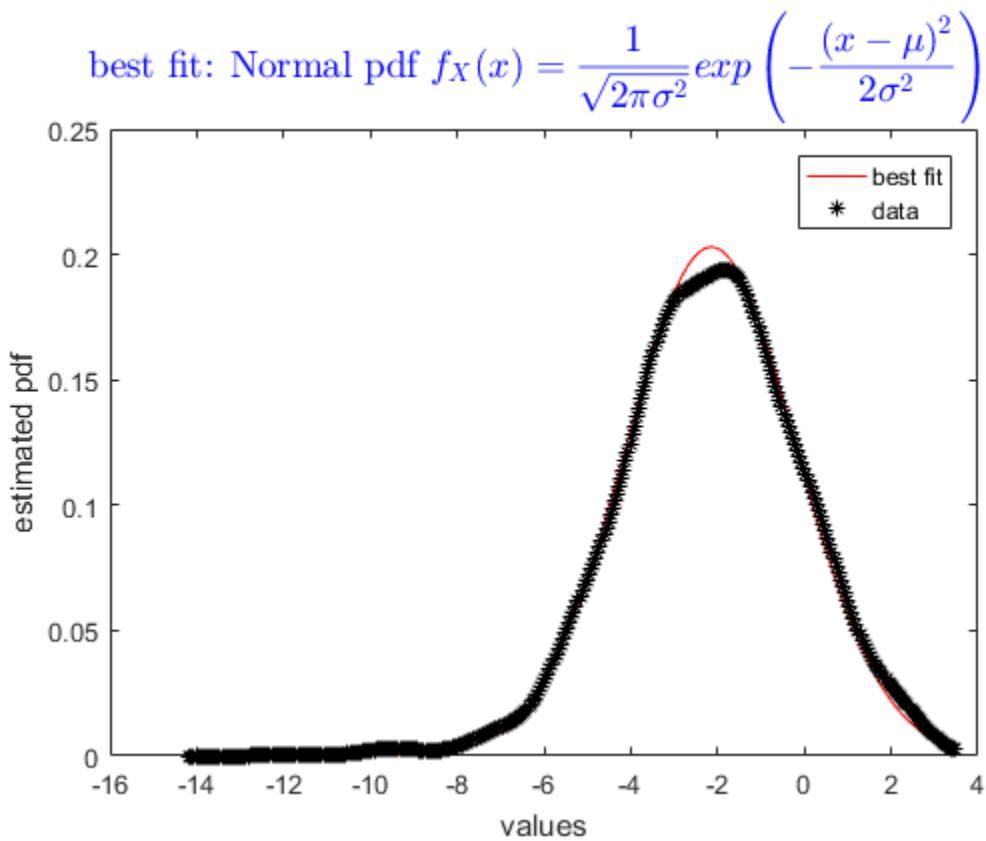
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	5.56	0	NO
Laplace distribution	6	23.16	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -2.1462 \quad \sigma = 1.9656$

p m shankar



data (Mahoney)

1.322	1.185	1.585	3.391	1.597	1.728	1.572	1.252	1.497	1.259
0.435	0.144	0.673	1.673	2.047	0.497	1.456	1.197	0.965	2.793
0.158	2.834	1.985	1.482	1.46	1.058	2.065	0.461	0.498	0.653
0.396	0.879	0.938	2.079	0.498	3.089	1.571	1.11	1.706	1.73
1.319	0.474	0.547	2.417	0.518	1.549	1.153	0.756	0.069	0.936
0.474	0.569	0.791	1.32	1.448	1.189	1.159	0.964	0.638	0.721
1.463	2.188	1.819	1.495	0.94	1.024	2.029	1.304	0.726	0.928
1.067	0.321	1.518	0.659	1.76	1.346	2.197	1.846	0.973	0.983
1.142	1.357	1.51	1.182	0.34	0.686	1.439	1.068	1.171	1.799
0.614	0.546	1.723	0.673	1.029	2.085	0.645	1.951	1.462	1.29
1.681	0.571	1.564	1.321	1.883	0.239	1.948	1.91	0.664	0.384
0.961	1.526	2.344	3.098	2.23	0.64	1.247	0.578	1.08	1.789
1.068	1.018	1.337	3.454	1.132	1.558	2.158	2.16	0.745	1.876
0.973	0.572	1.332	2.009	1.706	1.044	0.572	0.992	0.167	1.71
1.623	2.948	2.822	1.504	2.438	1.637	0.773	1.364	0.732	0.756
1.576	2.403	1.007	0.863	2.036	2.332	1.135	1.05	0.598	1.576
1.939	1.482	2.52	2.033	2.6	1.21	1.456	0.828	1.275	1.067
2.273	2.069	1.999	1.695	0.93	0.657	1.267	1.638	0.551	1.952
1.677	2.757	0.923	0.993	0.744	0.778	0.52	2.661	1.571	2.341
1.527	0.743	1.152	1.675	0.694	0.348	0.474	0.636	1.887	1.626

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	2.27	0	NO
Nakagami distribution	5	2	0	NO
gamma distribution	5	3.26	0	NO

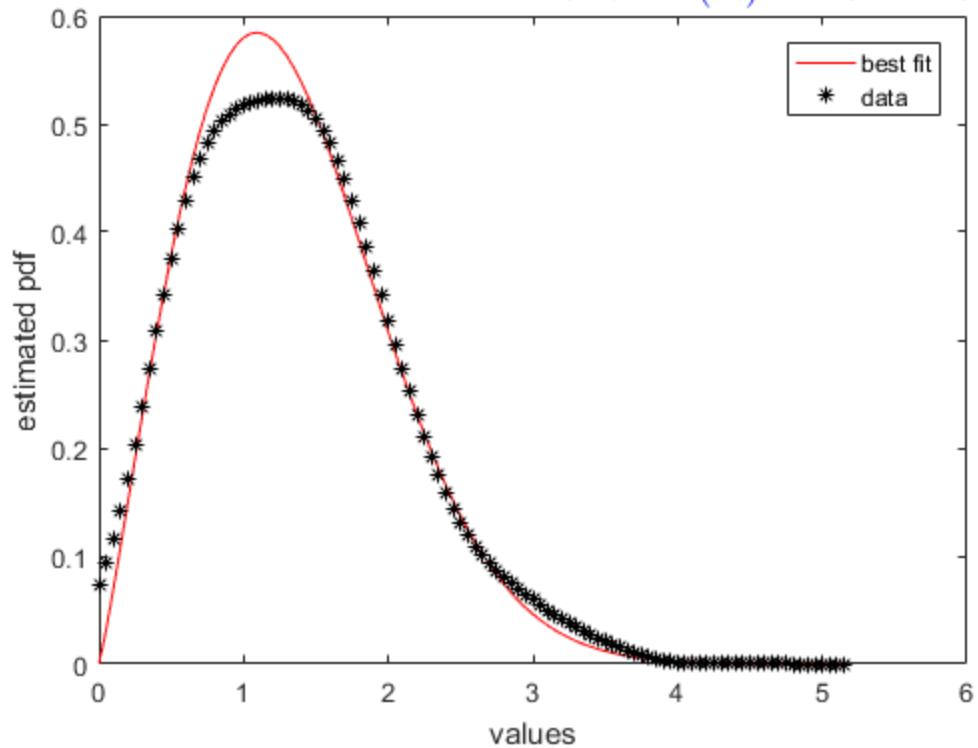
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

$m = 1.0608 \quad \Omega = 2.2538$

[p m shankar](#)

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Mak)

6.864	2.481	2.274	0.129	1.224	2.331	0.335	5.752	3.815	1.978
9.716	2.238	3.686	0.29	2.067	0.756	1.342	3.009	1.036	1.644
2.416	5.907	5.073	4.651	1.353	2.427	0.99	2.29	6.034	4.166
2.326	4.374	2.126	1.714	2.355	13.118	0.373	6.091	1.837	4.492
1.78	1.559	6.41	5.17	0.226	0.864	2.377	3.404	3.027	3.359
1.296	1.177	1.139	3.911	3.232	5.654	2.08	0.831	0.953	1.179
1.49	3.469	0.404	1.178	0.083	3.848	4.372	2.1	4.812	2.357
6.255	2.205	4.659	2.13	1.325	3.851	1.753	1.105	4.807	0.74
1.982	1.109	2.306	0.543	0.338	3.343	1.075	0.393	1.85	2.017
2.419	4.13	4.843	1.438	2.802	1.562	2.828	0.591	2.153	1.732
0.904	2.222	3.596	0.388	6.383	0.966	4.099	7.573	0.102	1.472
1.44	3.141	0.065	1.357	0.049	1.887	0.069	4.882	5.24	2.322
0.421	2.056	0.514	1.29	4.292	4.054	2.848	6.509	1.289	0.126
0.599	4.696	1.711	0.829	9.322	6.42	1.982	3.436	3.522	0.781
2.259	3.244	11.755	11.181	0.7	2.814	8.691	1.687	1.523	1.606
4.032	2.098	2.193	4.239	1.047	6.425	3.929	10.281	4.842	1.493
6.23	2.406	0.495	4.508	6.403	1.331	1.113	1.739	2.885	2.318
0.573	8.075	1.475	3.951	1.982	5.267	3.32	2.155	0.742	2.721
1.239	3.497	2.242	0.083	0.764	0.416	6.681	4.168	0.312	0.096
4.858	1.929	3.011	3.578	0.046	0.717	2.497	1.542	3.279	9.991

p m shankar

Summary of χ^2 tests

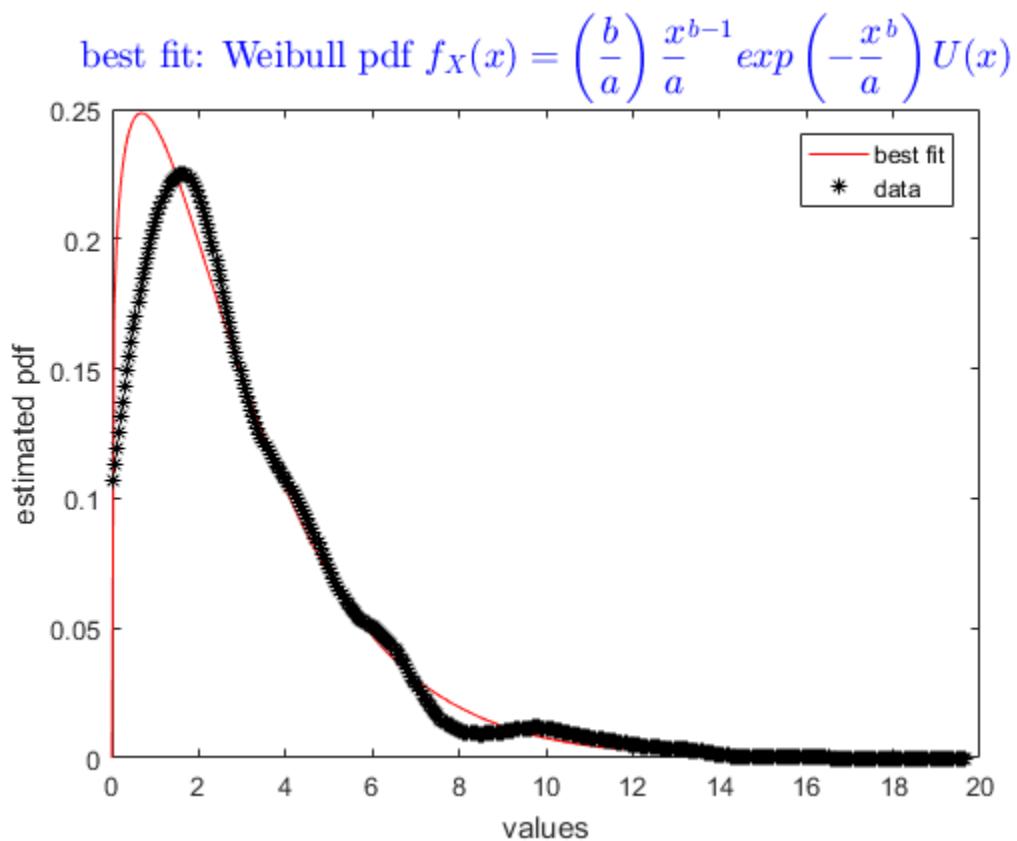
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	5	0	NO
Nakagami distribution	4	10.53	1	YES
gamma distribution	5	5.31	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 3.0317 b = 3.0317

p m shankar



data (Miksitz)

1.474	1.34	1.565	1.352	1.532	0.856	1.123	0.502	0.602	1.035
1.625	1.434	1.785	1.204	1.919	1.179	1.421	1.383	1.064	1.072
0.959	0.494	1.578	1.685	1.558	1.127	1.241	1.144	0.877	1.175
1.75	0.727	1.185	0.918	1.173	1.255	0.675	1.249	1.208	0.885
0.912	1.313	0.71	1.138	1.748	1.136	1.475	1.152	1.568	1.265
1.553	1.225	0.659	1.18	1.005	1.527	1.685	1.044	0.405	1.282
1.063	1.326	1.012	1.427	0.781	1.062	1.997	0.904	1.785	1.366
1.034	1.307	0.622	1.407	1.33	0.693	1.961	1.272	0.643	1.154
0.969	1.928	0.593	0.984	1.346	1.406	0.567	1.472	0.839	0.967
2.41	0.867	1.695	0.666	0.789	1.209	1.594	1.138	2.212	1.678
0.882	0.998	1.329	0.97	1.476	0.671	0.668	1.098	2.128	0.704
0.76	1.568	1.068	0.851	1.757	1.728	0.874	1.35	0.876	0.987
0.412	0.518	1.23	0.781	0.614	1.36	0.778	1.583	1.486	1.546
0.931	0.856	0.887	0.859	0.766	0.671	0.887	2.098	0.565	1.515
1.18	1.261	1.546	1.853	0.918	0.971	0.616	0.847	0.789	1.131
1.951	1.086	0.397	0.833	1.251	1.442	0.327	1.156	0.823	1.49
0.648	1.306	0.866	0.694	1.757	0.889	1.348	0.947	1.635	1.731
1.258	0.361	1.393	1.463	1.137	0.609	0.751	1.025	1.411	0.797
1.112	1.163	1.701	0.346	0.833	0.679	0.724	1.641	1.215	0.781
0.751	1.144	1.299	1.827	2.224	0.928	1.135	0.946	0.921	0.98

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	5.19	0	NO
Nakagami distribution	5	1.79	0	NO
gamma distribution	5	2.47	0	NO

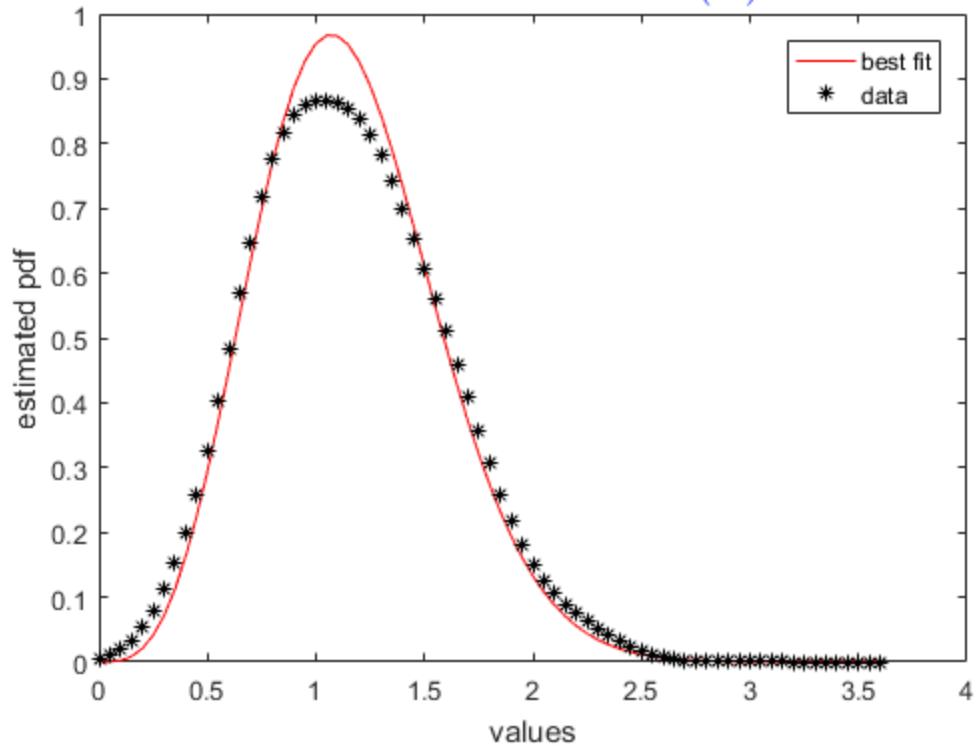
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

m = 2.105 Ω = 1.5039

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Millington)

```

-0.573 -3.796 -2.203  1.76  -1.84  1.217 -3.278  0.473  1.355 -1.559
-4.835 -3.095 -2.85  -4.127 -5.364 -3.914 -3.524 -2.308 -1.983  1.546
-4.135 -5.341 -1.593 -1.853 -4.018  2.023 -2.844  -3.59  -5.557  0.466
 1.265 -0.872 -3.424  1.842 -4.587  -1.96  -2.983 -3.163  1.38  1.728
-3.951 -1.389 -2.501 -0.715 -7.329 -1.109 -0.685 -2.995 -2.583 -1.559
-3.397 -3.254 -1.619 -1.258  2.266  0.899  0.872 -0.125 -0.151 -0.183
-1.875 -4.785 -6.44  -2.291 -3.461  0.206  -5.07 -4.311 -3.444 -3.182
-3.597 -2.551 -5.836  -1.51  -0.32  -3.752  1.506 -1.062 -0.776 -2.462
-1.707 -2.336 -4.134  1.78  -1.966  -3.83  0.566  0.009  -0.33  -5.496
 0.352 -6.346  -1.84  -2.922 -3.988  -3.83  -1.813  -3.72  0.026  -1.86
-1.863  0.615 -1.594 -2.443 -2.081  0.15  1.16  -1.331 -1.002 -0.146
 1.452 -1.129 -3.462 -2.911 -1.191 -2.271  -1.51  -5.307 -2.082 -4.116
-4.899 -5.507  0.625 -2.824 -4.286 -2.889 -4.041 -0.606 -1.711 -2.445
-2.569  1.956  0.266 -2.345  0.396 -1.835  0.256 -4.244 -1.395 -3.448
-3.748 -2.307 -2.354 -0.762  0.394  0.072  2.465 -0.387 -3.477 -3.617
-1.263 -4.947  4.651 -1.824 -2.195 -2.318 -3.548 -1.133 -0.899 -0.195
-4.523 -3.852 -2.731 -3.521 -0.771 -1.381 -4.003 -2.823 -4.129 -1.865
-5.519 -1.475 -0.033  1.304 -4.437 -6.631  0.277  -4.96  -5.811 -0.521
-2.787 -4.88  -2.126 -3.739 -0.856 -3.335 -2.048  0.663 -1.667 -1.206
-5.63  -2.947 -5.45  -2.661 -2.257 -4.133 -4.728 -1.695 -1.605 -0.128

```

p m shankar

Summary of χ^2 tests

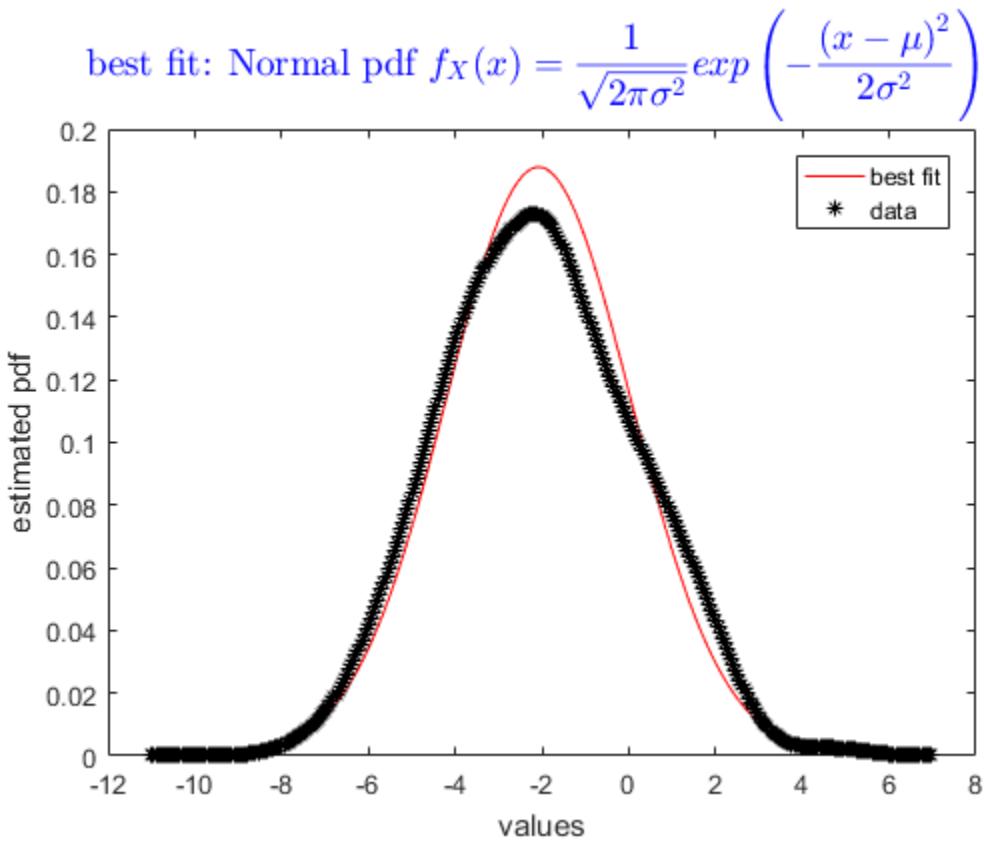
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.69	0	NO
Laplace distribution	6	33.39	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -2.0795 \quad \sigma = 2.1233$

p m shankar



data (Morris)

5.681	0.739	2.648	3.159	12.984	6.815	11.145	2.741	1.19	0.086
3.945	1.669	5.625	0.851	1.532	5.184	2.352	1.775	0.987	5.571
6.175	3.607	2.602	6.148	6.098	2.111	4.43	2.838	2.422	11.219
1.909	1.954	3.341	2.046	5.044	0.766	2.046	3.23	1.574	0.772
2.506	1.306	3.913	1.877	0.608	1.446	1.082	0.544	1.683	2.891
8.107	1.602	1.509	5.073	5.51	2.227	2.958	6.516	4.496	2.925
0.983	2.983	5.093	1.559	3.239	0.932	3.102	4.078	5.427	0.596
1.861	2.411	1.196	1.792	1.064	2.697	3.941	2.302	2.08	0.725
1.636	3.279	4.04	1.566	1.866	3.462	0.744	2.423	3.243	2.458
1.149	5.613	4.909	1.567	3.564	2.164	4.082	1.525	1.297	3.495
1.898	3.47	0.901	6.373	1.757	10.83	2.199	2.432	3.581	6.542
3.336	0.375	2.517	4.601	1.605	4.227	3.06	3.519	2.767	3.169
2.994	6.799	0.866	2.41	7.408	2.944	8.138	0.358	3.421	3.899
1.265	5.383	3.731	2.418	3.445	1.68	5.516	3.278	1.887	3.139
0.261	1.613	1.776	3.241	5.457	3.655	0.907	4.563	1.983	4.229
4.495	4.908	2.705	2.88	0.973	3.565	1.156	0.762	5.209	3.024
0.803	1.194	5.937	0.595	6.102	0.825	16.011	5.649	2.496	2.292
1.217	4.237	2.674	3.177	6.73	3.29	1.518	2.301	0.407	1.616
0.892	2.613	0.883	1.274	2.038	3.102	2.812	6.237	2.812	1.633
7.534	2.411	10.866	1.776	0.675	2.975	1.445	1.874	1.225	3.76

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	3	12.06	1	YES
Nakagami distribution	3	24.26	1	YES
gamma distribution	3	8.09	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

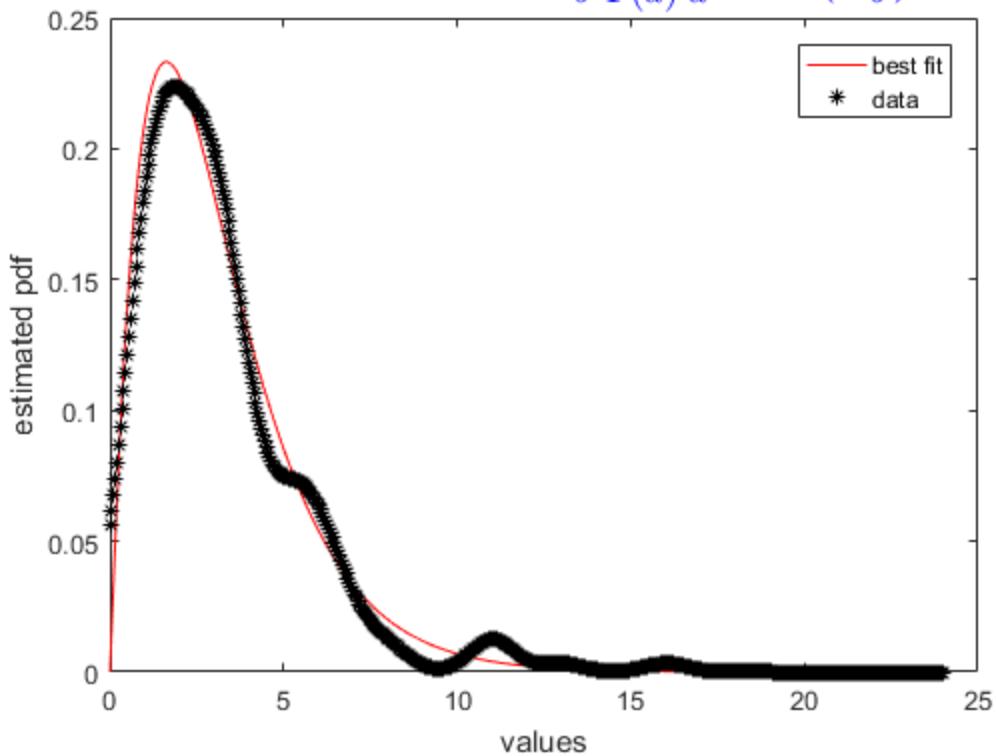
best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

lowest χ^2 stat

a = 2.0496 b = 1.545

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Muhammad)

0.394	5.689	5.119	0.93	-5.333	-7.141	-7.989	-3.116	-0.499	-3.415
-0.188	-5.11	-2.411	-2.088	-2.045	-3.286	-0.41	0.002	-4.123	-0.632
-6.678	-8.889	0.658	-3.587	-0.486	-0.958	-9.16	3.892	-2.378	0.684
-6.187	-2.875	-2.405	3.962	-4.478	-4.955	-1.044	0.122	-8.837	2.081
-1.584	-4.635	-1.222	-7.184	2.383	-5.053	-1.983	-2.784	-1.046	-0.286
-4.106	3.426	-6.36	2.311	0.635	2.059	-1.809	-2.019	-8.018	-6.675
-3.561	-0.475	-0.884	0.667	-3.136	0.046	0.583	-0.73	-4.26	3.551
0.292	-1.172	-2.888	1.381	-1.724	0.166	-3.206	-2.871	1.929	-3.667
-1.104	-3.214	-6.431	1.929	-0.137	-8.446	-3.23	-6.64	3.014	0.115
1.158	-2.175	-1.164	-9.534	-3.963	-3.653	-1.415	-4.229	2.689	-10.522
-1.113	-7.428	-8.948	-0.589	-7.658	1.64	2.182	-4.103	-5.272	5.39
2.376	-3.973	-0.846	-1.884	-0.711	-0.982	-3.403	-5.233	-4.29	-5.499
-3.057	1.302	1.051	-1.885	-1.788	-8.134	-4.138	-3.579	-2.414	-4.111
-1.576	-5.601	-3.854	-4.174	-5.631	0.663	-6.334	-1.829	-1.874	-3.013
-2.191	-4.332	-0.714	-6.867	2.093	-1.732	2.793	-4.911	-2.292	-1.082
-1.602	-0.466	-1.047	-4.899	-0.428	1.158	0.15	-2.896	0.329	-5.177
-5.275	-1.046	-4.001	-0.883	-2.152	-7.239	-0.743	0.62	-1.966	0.971
0.086	0.351	-1.741	-1.821	-0.291	0.717	2.319	-0.496	1.11	-8.078
-3.916	0.791	-5.556	-0.232	-1.704	-3.281	-1.319	-0.66	-0.874	-2.084
-5.035	-2.988	0.062	0.345	-3.831	-0.671	-4.055	-2.467	-1.186	-1.683

p m shankar

Summary of χ^2 tests

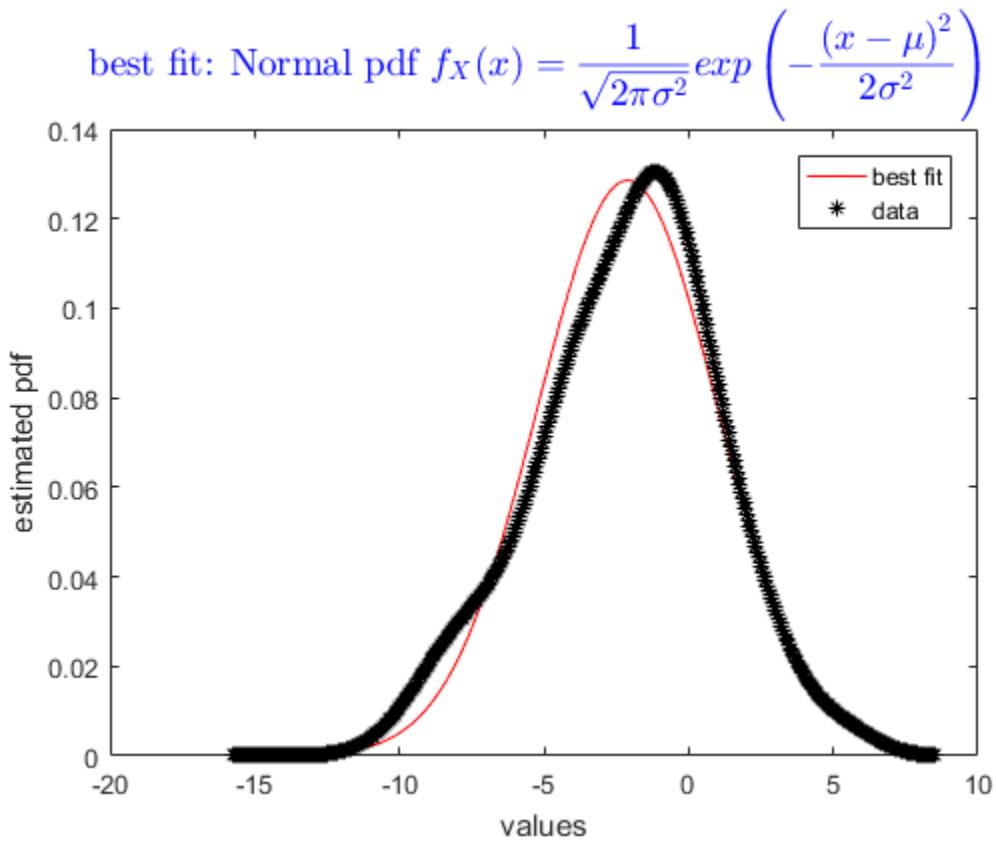
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.8	0	NO
Laplace distribution	6	18.44	1	YES

**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -2.1118 \quad \sigma = 3.1037$

p m shankar



data (Neal)

2.391	4.076	1.648	1.916	0.513	0.847	3.591	3.997	2.726	7.365
0.366	6.209	6.069	1.966	1.374	0.898	0.234	5.475	0.539	0.358
1.405	0.667	1.549	0.789	0.282	3.215	1.167	0.94	1.935	2.037
3.582	6.603	1.581	10.292	3.881	0.204	2.654	5.335	5.559	1.14
0.918	2.33	0.099	5.084	1.993	7.581	0.257	5.046	1.618	6.213
1.741	2.33	5.57	3.422	0.133	4.356	0.009	1.038	1.292	4.691
3.563	2.827	0.399	1.496	0.937	2.854	0.277	1.262	2.476	1.244
1.508	2.226	1.712	1.926	2.561	3.967	0.627	0.435	1.27	2.514
3.052	0.203	2.336	2.728	4.31	0.769	1.379	0.197	1.136	0.435
0.939	0.41	0.471	1.408	0.247	0.505	1.633	1.759	8.115	2.692
6.814	3.483	1.613	2.728	0.457	1.312	3.901	0.729	0.762	1.304
2.788	1.436	2.636	6.86	0.781	5.73	0.571	1.924	10.309	0.482
0.597	4.233	0.807	1.458	0.095	6.757	0.381	3.896	7.958	10.111
0.349	1.216	0.325	10.247	0.763	2.869	1.367	3.129	2.128	0.795
8.882	10.642	0.931	1.991	0.265	0.924	3.801	8.128	0.465	1.043
7.906	0.468	9.558	7.807	0.322	1.391	0.22	3.268	0.935	4.947
1.104	1.427	0.609	1.512	5.531	0.717	2.803	3.174	0.411	2.644
10.053	0.494	0.742	6.731	0.438	0.62	0.936	0.111	3.048	0.843
2.541	2.371	3.332	1.073	3.451	2.445	0.157	0.08	0.498	1.352
5.463	2.249	6.425	2.787	0.976	0.174	3.528	2.148	0.865	1.18

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	7.49	0	NO
Nakagami distribution	5	15.82	1	YES
gamma distribution	5	7.88	0	NO

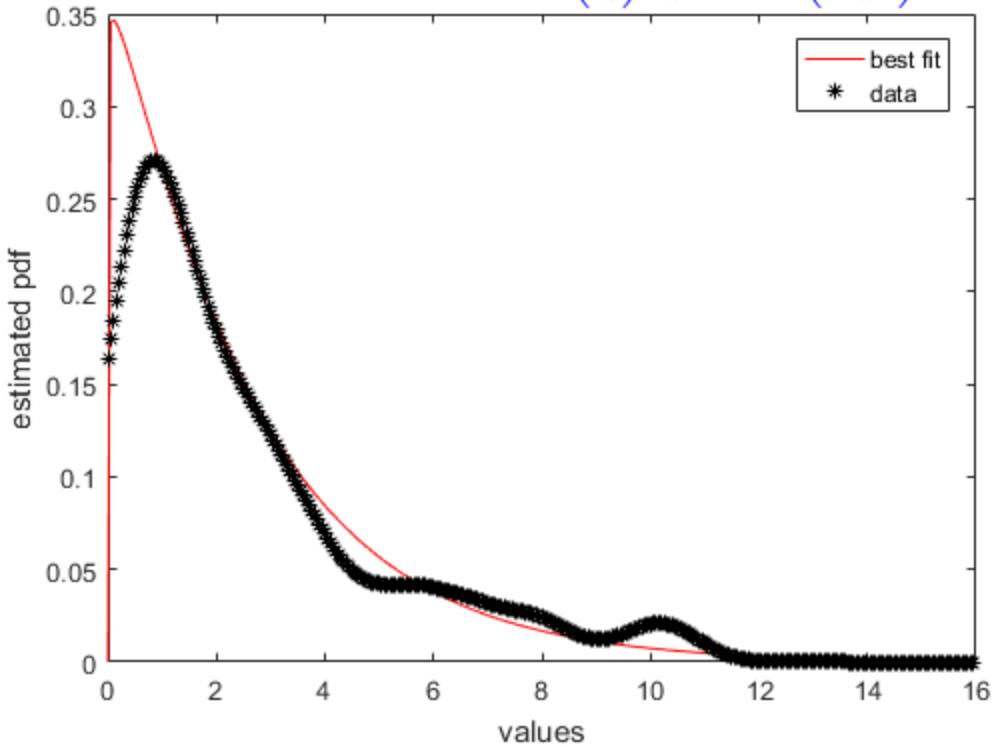
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right)^{\frac{b}{a}} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.589 b = 2.589

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Nguyen)

-3.438	-0.117	-3.128	-6.691	-7.801	-2.187	-7.991	-2.484	-1.521	-0.283
-6.415	-4.691	2.869	-5.617	-5.035	-1.936	-5.484	-3.948	1.319	-2.305
-2.056	-6.866	-6.817	-5.408	-5.794	-6.92	-6.874	-3.04	-2.445	-2.746
-3.92	-1.797	-2.175	0.307	0.301	0.663	-2.54	-1.176	-5.232	-4.832
-2.335	-1.416	-5.78	-4.441	-4.83	-2.247	-2.544	-0.822	-2.831	-0.476
-0.376	-10.538	-5.165	-2.726	-6.828	-2.569	-5.079	-5.249	0.061	1.886
-4.479	-2.927	-1.677	-6.999	-4.249	1.052	0.508	-6.982	2.349	-1.573
-4.447	3.287	0.279	-3.549	-5.055	-2.523	-5.364	-4.257	-7.216	-2.078
-3.778	-3.565	-2.49	-7.878	-2.214	-8.167	-4.037	0.06	-2.658	-2.294
-2.362	-4.933	0.915	-5.107	-3.694	-3.048	-5.002	-1.972	-4.3	0.102
3.111	-6.023	-5.79	-0.722	-7.457	0.501	-5.689	-1.818	-1.366	-3.993
-5.619	-8.433	-1.986	2.129	-1.259	0.638	-2.836	-4.328	-2.493	-4.537
1.02	-4.468	-4.593	-1.544	-4.092	-2.206	-7.182	-5.297	-4.766	-1.404
-3.646	-2.096	-5.272	-2.708	-4.8	-8.08	-3.937	3.231	-8.422	-3.919
-0.306	-5.952	-10.895	0.22	-5.555	0.289	-0.509	-3.315	-6.643	-0.325
-2.821	-2.24	-0.719	-0.816	-0.618	-3.172	-0.559	-3.1	-4.819	-7.392
-4.603	-0.636	2.625	-10.347	3.327	-2.424	-8.838	-3.821	-3.821	0.979
-3.778	-4.78	-1.501	-8.375	-7.658	0.844	-1.78	-2.791	0.527	-5.192
-0.123	-1.523	1.129	-5.5	3.512	-1.792	-4.374	-3.959	-4.784	-2.284
0.8	-1.304	-2.823	-5.621	-4.025	-14.167	1.648	-6.133	-1.884	-4.404

p m shankar

Summary of χ^2 tests

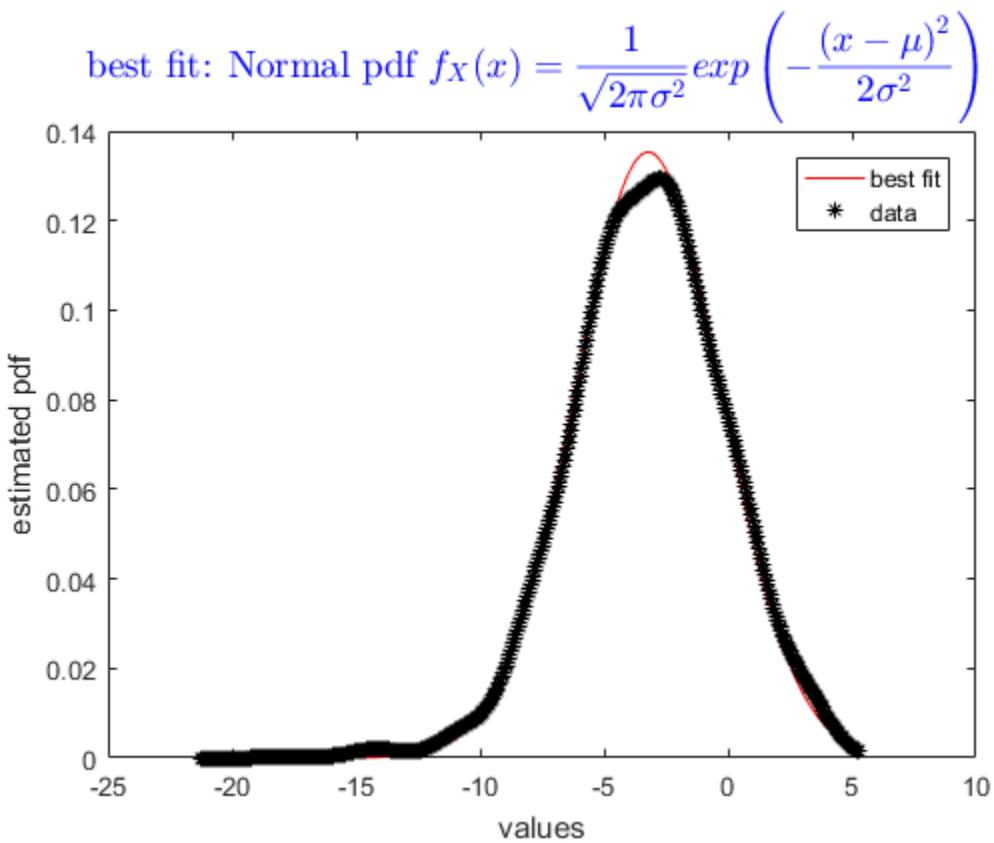
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	5.56	0	NO
Laplace distribution	6	23.16	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -3.2194 \quad \sigma = 2.9484$

p m shankar



data (newt)

2.511	0.87	0.903	1.726	1.03	0.646	1.457	0.387	0.264	3.465
1.978	1.971	0.709	1.828	0.85	0.312	0.709	0.825	1.355	1.094
1.404	0.173	0.966	3.862	0.638	2.411	1.436	1.757	1.088	0.753
0.823	3.028	1.213	0.505	2.988	0.517	0.795	0.861	2.224	0.972
0.505	2.693	1.576	1.334	1.897	1.138	1.657	0.907	1.903	1.198
2.868	0.7	0.391	1.11	1.305	1.92	1.002	0.761	2.02	0.656
2.113	0.583	1.775	1.611	1.479	1.842	0.524	0.81	2.725	0.294
1.389	1.131	1.229	0.116	1.557	0.885	1.875	1.605	1.71	1.615
0.777	0.797	0.823	0.191	2.488	1.078	1.284	1.23	1.818	0.714
1.205	1.214	1.756	0.285	0.783	1.096	2.215	0.761	1.519	1.68
0.796	1.097	0.614	0.956	1.431	0.268	2.133	1.12	2.125	3.077
1.997	1.931	1.181	0.849	0.942	1.104	2.487	0.326	0.056	2.306
0.944	1.243	0.46	1.571	1.158	2.277	2.388	1.992	1.225	1.582
1.039	2.588	1.535	1.208	2.584	2.008	1.025	0.468	1.46	1.633
3.349	2.546	0.388	1.708	1.629	2.266	1.414	0.8	1.766	3.006
0.823	1.568	0.411	0.863	0.281	2.08	1.005	1.678	1.506	2.023
0.137	1.018	1.094	0.752	0.4	0.946	0.59	1.024	1.438	1.352
2.15	0.507	2.267	2.378	1.479	1.002	0.779	1.317	0.415	0.773
1.515	0.943	1.502	1.841	1.041	1.491	0.233	2.145	1.257	0.929
1.93	0.922	1.702	1.891	1.138	2.021	0.745	1.161	1.056	0.87

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	0.67	0	NO
Nakagami distribution	5	0.72	0	NO
gamma distribution	5	3.3	0	NO

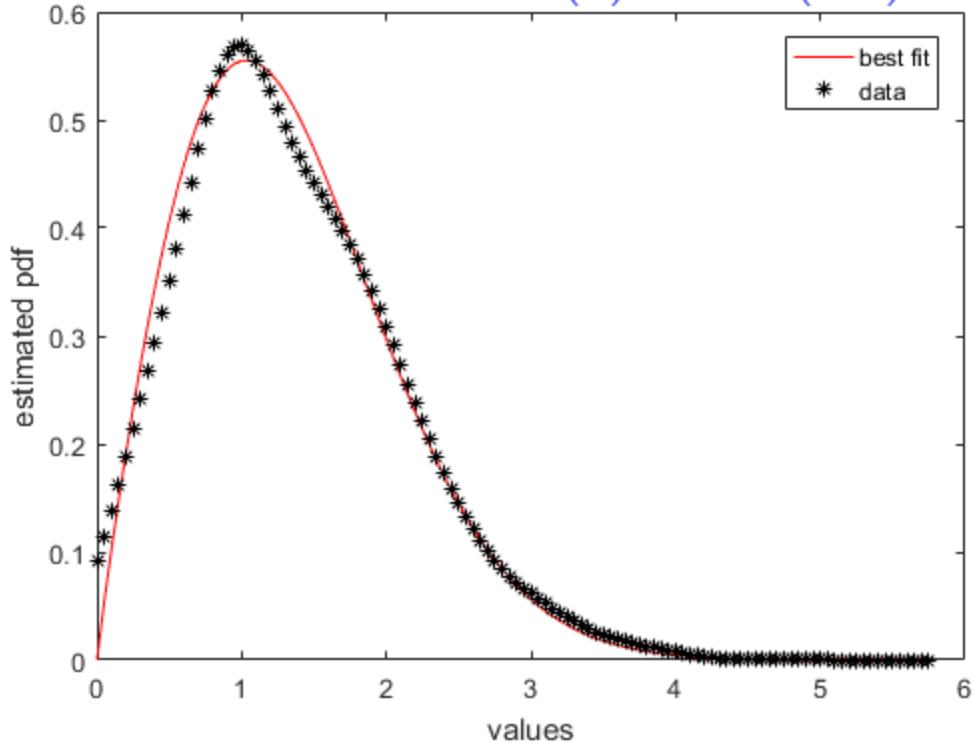
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 1.5094 b = 1.5094

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Odemis)

0.3	5.26	2.084	11.409	5.364	3.316	6.351	6.61	1.792	14.844
1.411	6.507	1.277	1.987	0.394	4.938	6.43	0.211	5.16	18.687
3.359	1.815	1.615	9.306	3.16	5.204	2.031	4.349	2.1	0.317
7.963	5.773	10.18	3.762	2.175	9.014	13.305	16.248	1.265	6.562
5.353	4.801	1.025	5.645	4.965	3.8	15.81	8.16	0.263	0.869
7.85	3.358	1.331	5.165	0.758	1.779	8.147	1.952	9.241	1.573
3.701	2.21	3.066	3.974	7.473	6.947	1.53	6.025	12.987	1.86
2.733	2.857	3.644	8.529	1.329	6.753	6.109	0.014	5.118	15.231
2.357	10.739	1.814	2.18	3.767	4.417	10.673	3.944	3.246	2.412
13.556	4.212	3.014	3.754	13.954	2.899	7.175	1.062	2.838	7.849
0.816	7.355	0.972	6.676	2.383	1.866	1.596	4.815	6.073	0.502
6.111	1.556	5.025	1.512	8.308	2.959	3.689	7.629	3.902	1.072
3.643	2.29	42.736	3.192	8.982	4.497	9.393	3.155	2.536	12.086
1.387	12.237	9.343	12.901	6.434	8.462	12.026	10.518	5.229	7.302
9.293	11.505	0.27	2.216	2.107	0.673	2.431	12.505	9.825	2.668
10.312	14.253	2.234	5.523	7.469	0.993	3.525	3.837	7.08	5.145
2.046	2.298	1.724	6.315	0.595	7.754	1.962	1.719	7.307	9.035
5.099	1.321	8.544	5.093	6.492	10.303	6.288	10.046	0.356	8.781
1.776	2.991	0.873	3.546	2.936	2.901	2.102	11.154	0.604	9.741
0.068	7.442	6.013	6.377	1.542	12.718	1.254	0.748	2.49	12.609

p m shankar

Summary of χ^2 tests

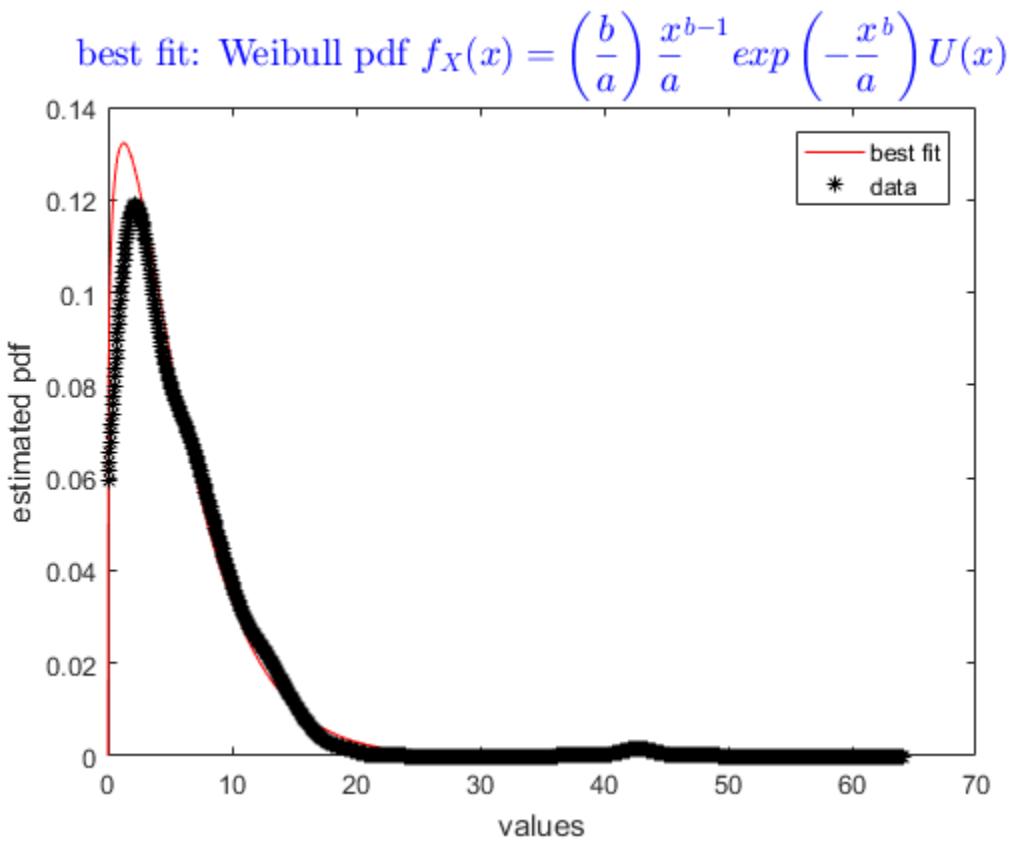
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	2	2.13	0	NO
Nakagami distribution	1	2.31	0	NO
gamma distribution	2	2.89	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 5.7078 b = 5.7078

p m shankar



data (Owsiany)

1.816	1.941	1.504	0.883	1.252	2.672	1.113	1.657	1.412	0.907
0.463	0.688	1.548	0.726	2.519	1.83	0.305	0.931	0.42	1.027
0.383	0.854	0.909	1.578	1.222	0.956	1.044	1.448	2.55	2.654
2.784	0.941	0.866	0.451	2.569	0.557	2.064	1.452	1.467	0.713
1.083	0.45	0.708	1.113	0.619	1.548	0.63	1.883	1.79	0.177
2.653	0.666	1.083	1.674	1.081	2.847	0.848	0.852	1.824	1.365
1.388	1.162	2.29	1.724	0.912	0.473	2.234	0.67	1.522	1.548
1.21	3.061	1.143	0.512	0.989	1.301	2.026	0.415	0.421	2.607
0.626	2.303	2.66	1.504	1.031	0.459	1.653	1.223	1.244	1.831
1.028	1.222	0.79	2.066	0.326	1.584	1.39	1.923	0.702	1.105
1.753	0.331	0.968	0.352	1.974	0.912	1.198	1.067	1.536	1.07
0.475	0.62	1.073	0.983	1.294	3.018	1.704	1.908	1.324	1.76
0.772	0.389	1.827	0.201	0.621	1.227	0.652	1.416	0.336	0.977
1.138	0.246	0.871	1.921	1.254	1.575	0.723	0.598	2.131	2.515
0.494	1.491	0.852	0.65	0.781	1.566	1.707	1.38	2.444	0.371
1.5	1.599	1.549	1.26	1.965	0.328	1.045	0.417	0.885	2.314
1.563	0.741	2.774	1.088	0.911	0.804	2.269	1.489	0.399	1.571
1.039	1.868	0.619	2.643	0.449	1.571	0.949	0.899	2.234	0.983
2.345	0.306	0.766	1.134	2.021	1.015	1.542	1.092	0.982	1.242
1.485	0.403	1.231	1.013	1.382	1.406	0.95	2.272	2.08	1.194

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	6.73	0	NO
Nakagami distribution	5	6.88	0	NO
gamma distribution	5	9.19	0	NO

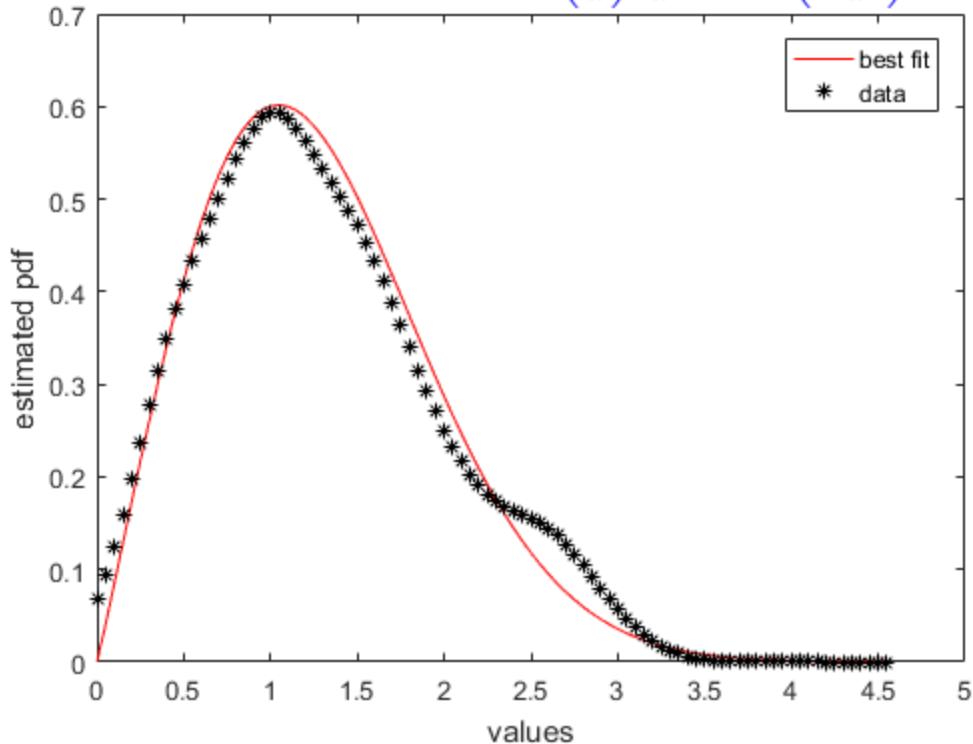
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right)^{\frac{b}{a}} x^{b-1} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 1.4499 b = 1.4499

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Panagiotou)

1.698	1.002	0.955	1.412	1.625	1.233	1.349	1.08	0.43	1.424
0.607	0.985	2.265	1.772	1.832	1.111	2.311	1.455	1.223	2.4
1.654	1.037	1.653	0.927	1.44	1.592	1.088	0.788	1.219	1.506
1.348	1.308	1.743	0.833	0.878	1.669	0.919	1.315	1.133	1.036
2.17	1.62	1.084	1.051	1.648	1.596	1.426	1.418	0.599	1.499
0.882	0.725	1.537	1.563	1.172	2.306	1.387	0.803	0.859	0.953
2.363	0.476	1.92	2.497	1.57	1.678	1.088	1.631	1.542	1.572
1.392	1.794	1.2	1.478	1.544	0.998	1.378	1.144	0.757	1.613
1.238	0.88	1.402	0.969	1.648	1.698	1.001	1.198	1.769	1.322
0.611	1.022	0.497	0.631	0.91	1.803	1.299	1.553	1.423	0.786
0.499	1.542	0.695	2.372	1.526	2.046	0.941	1.416	1.536	1.584
1.127	0.856	1.597	0.346	1.547	0.509	1.307	1.492	1.427	0.93
1.1	1.423	0.782	0.687	0.967	1.104	1.302	1.058	1.181	1.684
1.661	1.204	0.505	0.869	2.033	1.621	0.535	1.546	0.732	1.217
1.485	2.33	1.448	0.642	1.352	1.104	1.753	0.523	1.846	1.076
1.463	0.82	2.128	0.837	1.433	0.889	1.558	1.635	0.466	1.275
2.006	0.364	1.256	1.651	0.889	1.64	1.529	1.45	1.591	0.961
0.817	0.356	1.198	0.842	1.32	1.22	0.891	1.002	1.731	1.698
0.465	0.528	1.96	1.674	2.48	1.533	0.743	1.966	1.472	1.562
0.997	0.673	1.072	1.143	1.825	1.58	1.38	0.609	1.515	0.997

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	23.84	1	YES
Nakagami distribution	5	25.7	1	YES
gamma distribution	5	32.8	1	YES

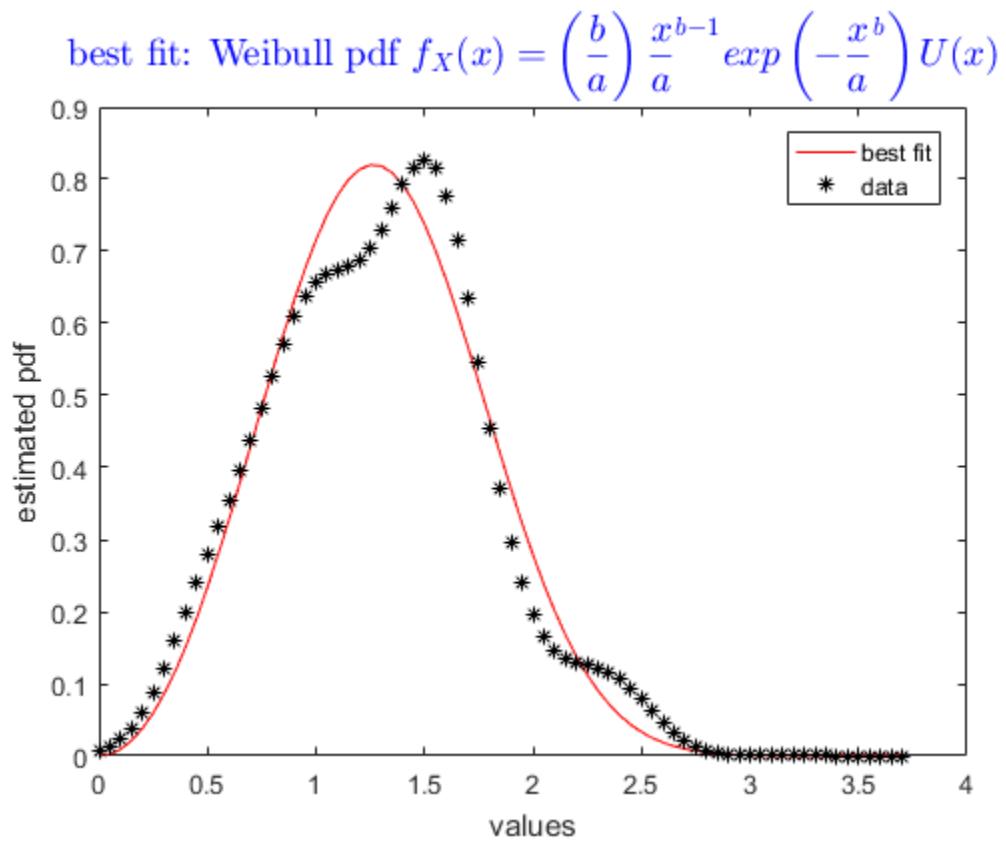
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

lowest χ^2 stat

a = 1.4449 b = 1.4449

p m shankar



data (Papadimitriou)

-0.859 -5.694 -3.305 2.64 -2.76 1.826 -4.917 0.709 2.032 -2.338
 -7.252 -4.642 -4.275 -6.191 -8.047 -5.871 -5.286 -3.462 -2.974 2.319
 -6.202 -8.011 -2.389 -2.779 -6.027 3.035 -4.266 -5.386 -8.335 0.699
 1.897 -1.308 -5.136 2.762 -6.881 -2.94 -4.474 -4.745 2.07 2.591
 -5.926 -2.083 -3.752 -1.072 -10.993 1.663 -1.027 -4.493 -3.874 -2.339
 -5.095 -4.881 -2.428 -1.887 3.399 1.349 1.308 -0.188 -0.227 -0.274
 -2.813 -7.177 -9.66 -3.436 -5.191 0.309 -7.605 -6.467 -5.167 -4.774
 -5.396 -3.826 -8.755 -2.264 -0.48 -5.628 2.259 -1.592 -1.164 -3.693
 -2.56 -3.504 -6.201 2.671 -2.948 -5.746 0.849 0.013 -0.495 -8.243
 0.528 -9.519 -2.76 -4.383 -5.982 -5.744 -2.719 -5.58 0.039 -2.791
 -2.794 0.922 -2.392 -3.665 -3.121 0.224 1.74 -1.997 -1.503 -0.219
 2.179 -1.693 -5.193 -4.367 -1.786 -3.407 -2.266 -7.96 -3.122 -6.175
 -7.349 -8.261 0.937 -4.236 -6.428 -4.334 -6.061 -0.909 -2.567 -3.667
 -3.854 2.934 0.399 -3.517 0.594 -2.752 0.384 -6.367 -2.093 -5.172
 -5.622 -3.461 -3.531 -1.143 0.591 0.107 3.697 -0.581 -5.215 -5.425
 -1.894 -7.42 6.977 -2.735 -3.292 -3.477 -5.323 -1.699 -1.349 -0.293
 -6.785 -5.778 -4.096 -5.282 -1.157 -2.072 -6.004 -4.234 -6.193 -2.798
 -8.279 -2.212 -0.05 1.956 -6.656 -9.946 0.415 -7.44 -8.716 -0.781
 -4.181 -7.319 -3.189 -5.609 -1.284 -5.003 -3.072 0.995 -2.5 -1.81
 -8.445 -4.421 -8.175 -3.991 -3.385 -6.2 -7.091 -2.542 -2.407 -0.193

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.69	0	NO
Laplace distribution	6	31.28	1	YES

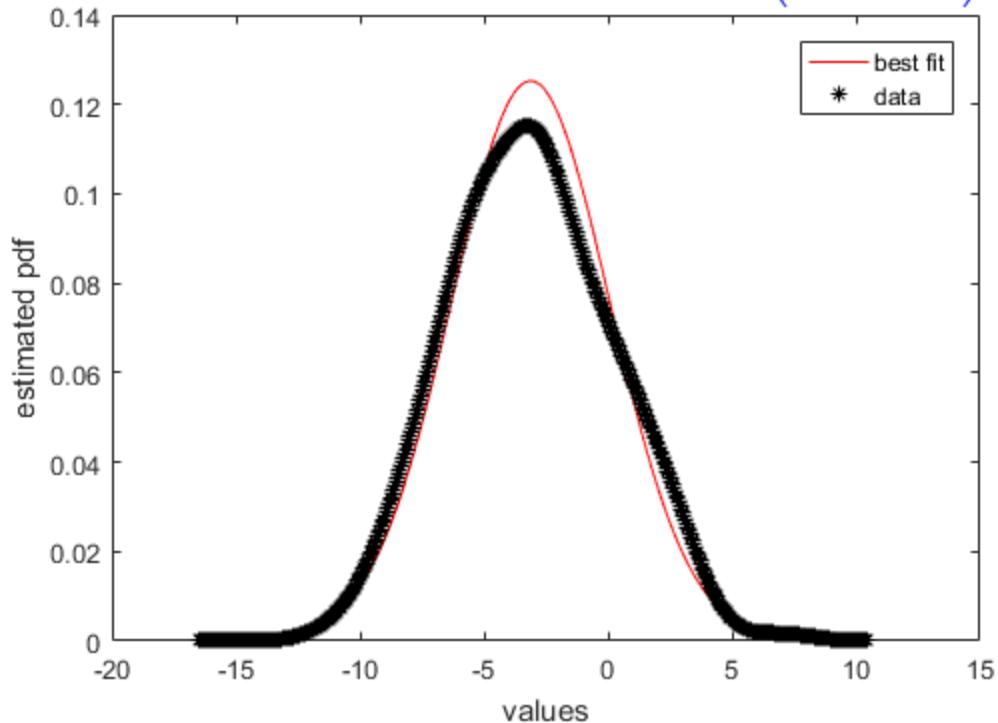
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -3.1192 \quad \sigma = 3.1849$

p m shankar

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Peng)

0.985	0.869	1.533	1.61	0.497	1.689	1.839	1.028	0.62	1.57
2.175	0.699	1.566	1.333	0.918	1.059	2.105	0.296	1.728	1.519
0.457	2.086	1.661	1.23	0.9	1.075	1.575	2.151	1.301	1.424
1.391	1.519	1.404	0.953	0.833	1.023	0.613	1.028	1.18	1.358
1.025	0.473	2.214	1.354	1.469	1.649	1.048	1.692	2.161	1.493
1.269	0.937	0.645	1.964	0.646	0.874	1.476	0.94	1.038	0.789
1.233	1.204	0.869	0.654	0.303	0.53	1.045	2.464	0.928	1.529
0.749	0.968	0.588	0.719	2.19	1.729	1.53	2.361	1.177	0.941
1.411	0.953	1.286	2.899	0.647	1.575	0.477	1.166	0.935	1.142
2.046	1.287	1.912	1.365	2.742	1.134	1.119	0.797	1.737	1.295
1.513	1.019	2.231	0.71	1.575	1.212	0.904	1.94	1.26	1.669
1.567	1.531	0.831	1.023	2.098	1.142	1.204	1.143	1.296	1.323
1.952	0.62	0.94	0.952	1.186	0.465	1.461	0.474	1.459	1.321
0.51	1.139	1.69	1.996	1.342	1.094	0.748	0.98	0.93	1.011
1.042	2.223	0.897	2.441	0.833	0.649	0.882	2.648	1.613	1.447
0.923	1.301	0.824	1.741	1.614	2.07	1.415	1.232	0.481	1.943
2.083	0.908	1.918	1.244	0.745	1.497	1.879	1.389	0.698	1.777
1.867	1.117	1.819	0.475	0.545	1.837	1.148	1.694	0.886	1.057
0.576	1.55	2.174	1.744	1.043	0.816	2.734	1.196	1.926	1.941
1.656	0.468	0.926	1.751	2.011	1.412	0.997	1.362	1.524	1.269

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	6.55	0	NO
Nakagami distribution	5	6.09	0	NO
gamma distribution	5	8.32	0	NO

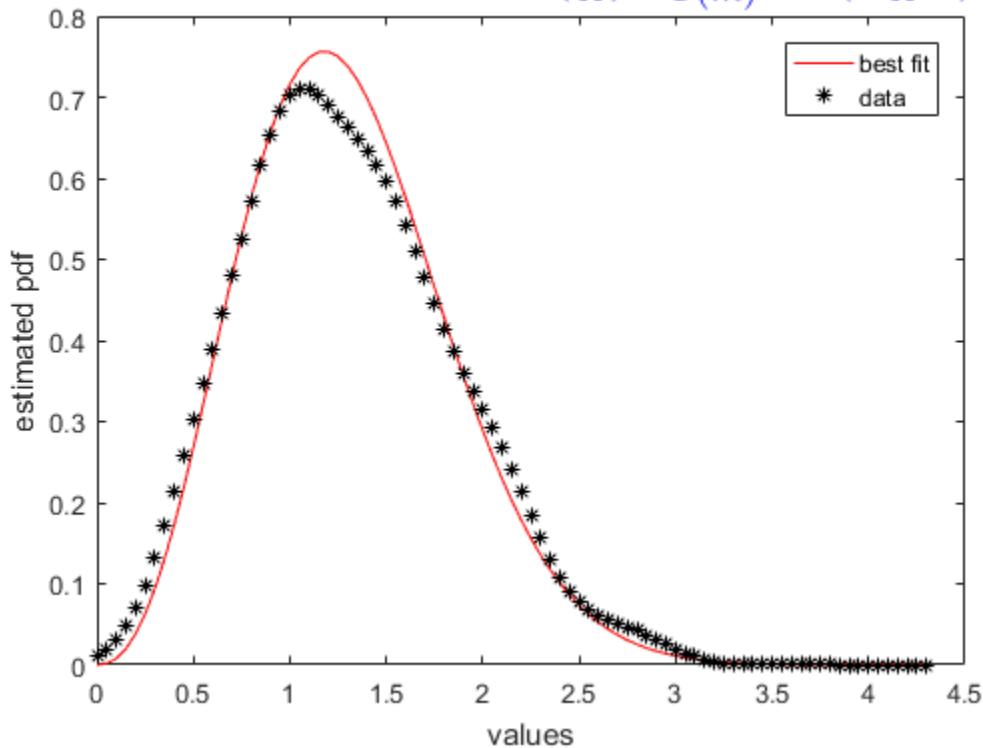
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

$m = 1.6619 \quad \Omega = 1.9799$

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$



data (Peschansky)

0.846	1.067	0.865	0.572	1.392	0.861	0.682	2.361	1.016	1.299
0.991	0.714	1.276	0.97	0.948	1.165	1.302	1.309	1.771	0.433
0.977	0.886	1.963	1.432	0.657	1.33	1.89	0.757	2.165	0.813
1.423	1.52	1.422	0.555	1.275	1	0.653	1.371	1.626	1.276
1.143	0.63	1.274	0.329	1.776	2.17	1.666	2.725	1.48	1.859
1.068	1.201	2.525	0.895	1.843	1.288	0.84	2.008	1.282	0.551
1.515	1.452	1.365	1.652	1.425	1.04	1.433	1.055	0.929	1.052
1.699	1.683	0.304	0.479	1.288	1.28	1.668	0.986	0.979	0.849
1.556	1.274	2.178	1.741	2.025	1.189	0.394	2.5	0.785	1.397
1.145	1.27	1.083	1.528	0.467	1.19	1.466	2.468	0.894	0.858
1.24	1.019	1.426	1.909	0.713	0.303	1.301	1.739	1.867	1.147
1.622	1.631	0.597	1.734	1.232	1.871	0.482	0.313	2.247	0.508
0.945	0.856	0.917	2.471	1.178	0.143	0.93	0.62	2.492	0.831
1.303	1.007	1.947	0.372	1.12	1.281	0.659	0.996	0.238	1.851
1.18	1.355	1.2	1.915	1.903	1.605	2.065	1.372	2.752	0.853
1.507	1.044	1.283	1.377	0.97	1.983	2.117	2.633	1.539	0.21
1.239	1.189	0.855	0.836	1.044	0.407	1.619	1.843	1.037	0.411
0.356	0.788	1.406	0.743	1.876	1.056	0.568	1.916	1.037	2.29
1.419	0.757	2.246	0.94	1.892	1.376	1.368	1.084	0.718	0.996
1.569	1.232	1.93	1.276	1.871	0.94	0.759	0.625	1.083	1.746

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	8	0	NO
Nakagami distribution	5	6.91	0	NO
gamma distribution	5	9.12	0	NO

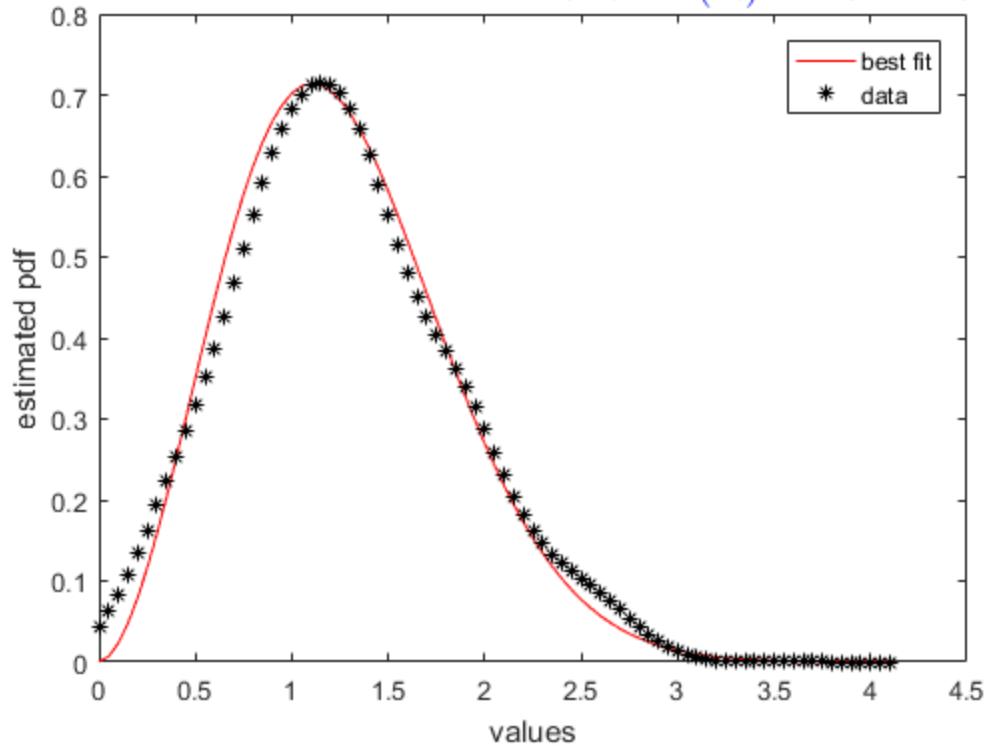
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

m = 1.3973 Ω = 1.9042

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Pham)

1.477	0.434	1.791	0.915	1.566	1.613	1.255	0.479	1.3	0.565
0.769	1.837	1.733	0.882	1.027	1.664	2.693	3.134	0.359	1.106
1.686	1.231	0.508	0.972	1.586	2.394	1.134	2.134	1.087	1.026
0.986	0.733	1.096	0.75	1.621	1.99	2.604	1.459	1.827	2.223
0.427	1.209	0.377	1.106	0.991	0.857	0.554	0.625	0.925	1.863
1.578	1.042	1.04	1.243	1.371	2.331	0.582	1.865	1.6	2.731
0.682	1.145	1.764	0.539	2.262	0.439	1.562	0.388	0.807	1.351
0.733	0.84	2.264	1.45	1.802	1.379	0.243	0.263	0.065	1.587
2.166	2.491	1.166	1.785	0.254	2.386	0.323	1.485	1.717	1.675
2.04	1.262	1.354	1.689	0.898	1.121	0.16	0.185	0.398	1.255
1.407	1.819	0.911	0.475	0.968	0.644	2.039	2.175	0.902	1.959
0.918	1.564	0.787	0.891	1.588	1.542	3.624	0.784	2.3	0.393
0.971	1.157	1.437	0.598	2.97	0.748	1.771	1.108	1.777	0.373
0.932	0.816	1.129	1.478	1.124	0.881	1.545	1.035	0.39	1.087
3.241	1.412	1.887	1.014	2.731	1.088	1.81	1.267	1.285	4.003
2.148	1.235	0.362	2.789	1.729	1.482	0.794	1.845	0.53	0.479
0.778	2.147	1.226	0.433	1.931	1.448	1.829	2.088	0.749	0.926
0.622	1.86	1.701	1.304	1.342	1.381	1.343	1.011	3.001	2.421
0.81	1.662	1.821	1.213	0.769	1.391	1.742	0.704	0.765	0.09
0.358	1.34	0.329	0.774	1.023	1.849	1.546	0.95	0.921	1.613

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	3.26	0	NO
Nakagami distribution	4	3.25	0	NO
gamma distribution	5	7.75	0	NO

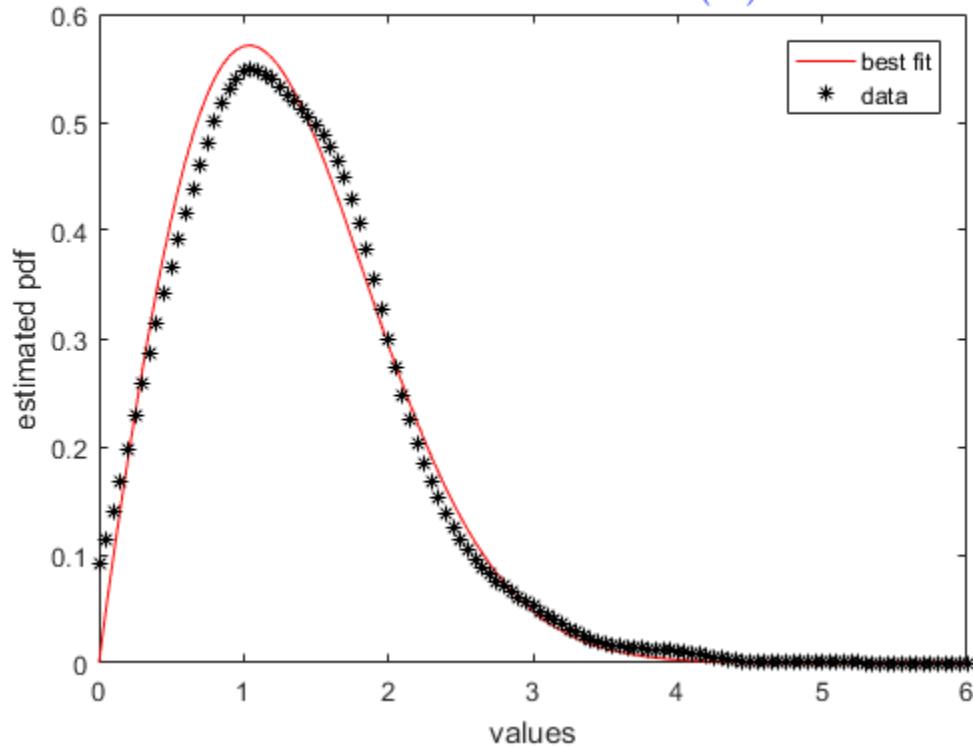
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

m = 0.97581 Ω = 2.2137

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$



data (Pizzo)

2.831	1.324	2.428	1.899	10.3964	2.88	0.606	2.61	1.004	2.63
0.214	0.607	2.391	4.052	1.083	3.666	1.999	4.45	7.748	1.649
4.357	2.353	7.95	5.255	3.242	2.862	4.753	2.013	2.741	5.066
1.021	4.427	3.504	5.54	6.858	0.756	6.289	2.478	0.346	2.958
1.454	3.082	2.056	3.749	1.468	0.76	0.326	2.119	0.917	2.582
0.679	2.586	1.237	1.829	5.681	1.544	6.505	1.063	2.686	3.304
2.988	1.357	1.826	1.482	4.331	3.49	6.149	1.661	4.296	4.388
1.408	1.918	7.48	0.792	7.603	2.487	1.216	3.316	2.877	5.077
1.688	0.787	0.918	0.514	1.398	5.237	5.495	2.182	0.789	1.497
1.478	1.76	0.682	1.115	3.121	1.778	1.697	0.954	4.606	2.29
1.448	4.164	4.219	3.67	1.323	4.85	1.03	3.104	3.037	3.143
1.645	0.704	1.433	5.878	0.624	2.392	2.657	2.464	1.141	2.099
5.573	0.319	2.11	0.315	1.045	0.685	0.943	4.72	3.433	2.586
1.684	0.509	1.906	6.107	0.788	1.984	3.632	9.066	0.362	3.769
1.945	1.551	4.553	3.319	2.846	0.74	1.876	2.563	2.274	7.531
0.173	4.319	1.661	2.025	6.458	3.13	3.07	2.061	3.251	1.097
3.021	0.55	0.935	1.869	1.671	1.797	4.355	12.24	2.824	1.311
1.2	3.164	1.232	1.03	0.131	0.754	3.813	3.242	0.294	4.011
2.248	1.626	2.451	1.494	10.9457	9.46	3.803	2.099	2.253	0.652
0.545	7.624	0.792	6.247	0.746	1.948	2.354	10.3953	0.057	1.732

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	4.77	0	NO
Nakagami distribution	4	12.29	1	YES
gamma distribution	5	2.61	0	NO

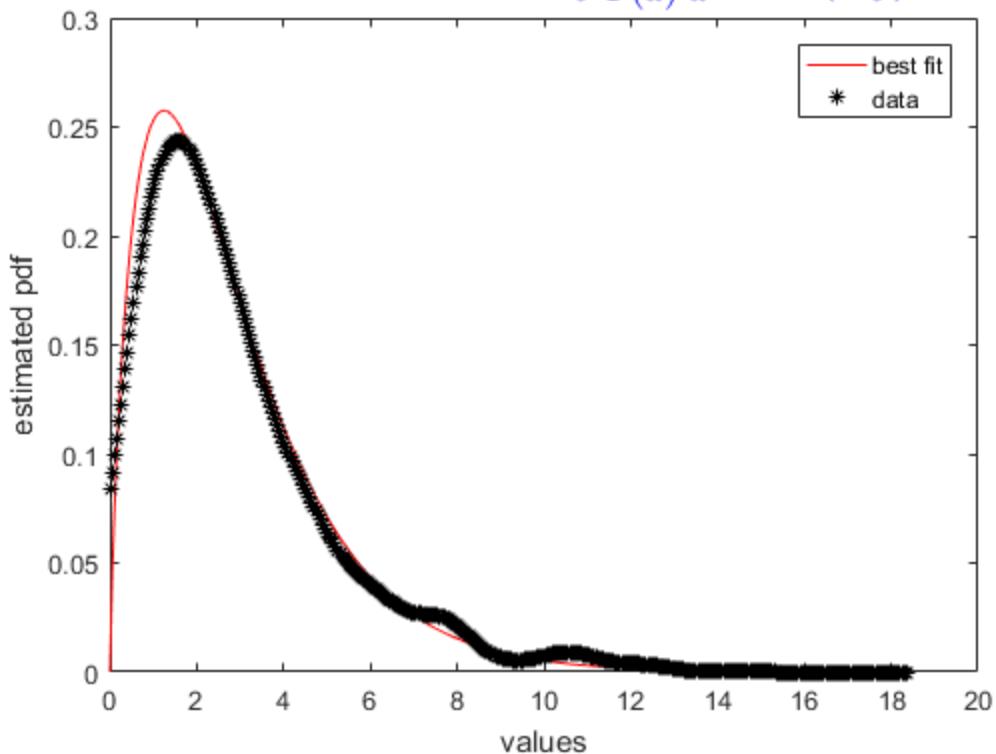
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 1.7901 b = 1.5748

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Purcell)

1.133	1.143	0.701	1.708	1.159	1.378	1.569	1.333	1.035	1.303
1.198	1.52	1.714	1.335	0.957	1.513	0.889	2.948	2.291	1.04
0.686	0.305	1.167	1.754	0.825	1.12	1.782	0.398	1.227	1.209
0.496	0.68	1.611	2.246	1.413	1.346	1.388	0.781	1.195	1.644
1.354	0.857	2	1.419	1.105	0.467	1.553	1.836	0.856	0.951
1.44	2.037	1.013	0.853	0.609	1.153	1.155	1.527	0.47	1.473
0.452	1.736	0.635	2.241	1.44	0.959	2.32	0.449	0.893	1.984
0.907	2.184	0.766	1.44	0.985	0.918	1.036	1.102	1.548	1.928
1.452	1.396	0.802	0.736	0.88	1.652	1.614	1.16	1.002	0.583
1.597	0.991	1.396	1.188	0.865	0.756	0.733	1.937	0.173	1.559
0.679	0.667	1.367	1.168	1.456	1.918	1.14	0.399	1.528	1.112
0.358	0.636	1.508	1.972	0.665	1.314	0.399	0.945	0.547	1.79
1.733	1.463	2.777	0.731	0.398	1.455	1.259	1.616	1.696	0.912
1.927	0.531	1.229	1.178	1.726	1.447	1.652	1.056	1.295	2.271
1.391	0.739	1.086	0.773	1.131	1.397	0.292	0.851	1.352	1.839
1.602	1.648	1.064	1.514	2.317	1.195	1.199	0.803	1.045	0.393
0.759	0.295	2.661	1.053	2.197	1.188	1.02	0.918	0.649	1.712
1.422	0.981	2.807	2.116	0.778	1.095	2.493	2.247	0.815	2.28
0.936	2.037	1.102	2.218	0.392	1.001	1.553	1.133	0.428	1.518
0.966	1.026	0.787	0.443	0.906	2.298	0.496	1.364	1.292	1.088

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	5.58	0	NO
Nakagami distribution	5	4.74	0	NO
gamma distribution	5	5.74	0	NO

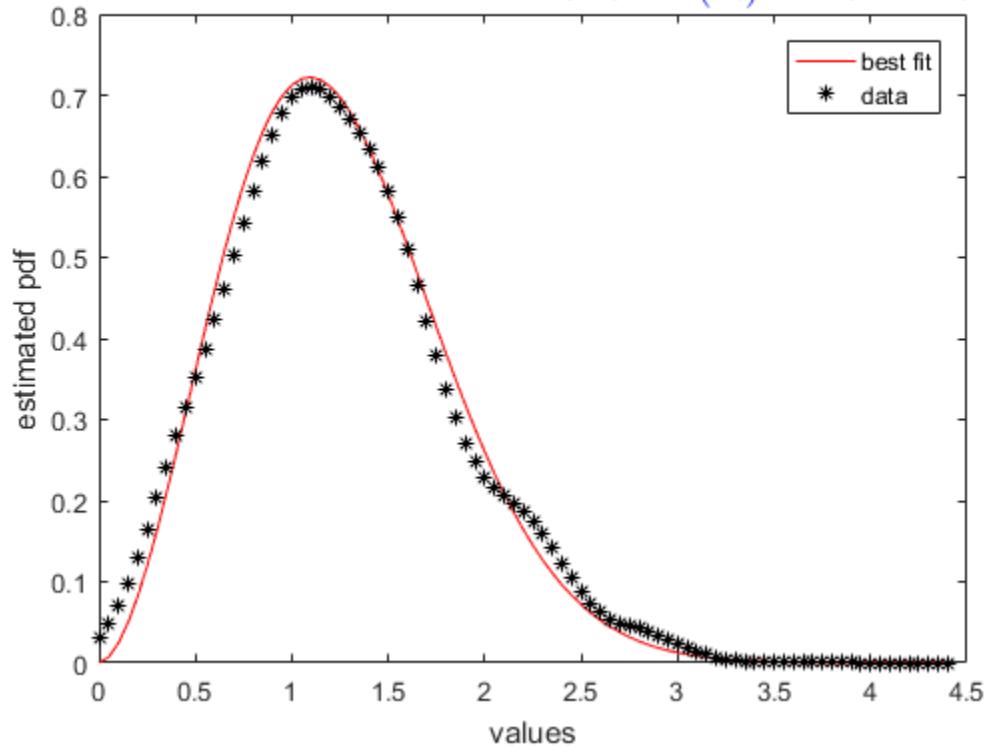
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

m = 1.3977 $\Omega = 1.8614$

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$



data (Reed)

3.603	1.541	2.684	2.696	0.394	2.07	0.907	0.903	2.761	0.082
8.464	9.893	0.428	1.771	2.368	4.756	2.522	3.288	3.481	0.438
2.382	3.986	9.348	10.892	1.84	3.179	6.6	1.558	3.859	1.414
1.491	0.274	0.305	8.424	8.555	3.238	1.525	2.542	4.152	0.696
5.312	0.866	0.895	1.138	5.29	9.301	3.828	1.703	0.325	1.849
2.265	1.123	1.979	4.129	1.303	0.646	3.865	0.619	5.025	2.937
6.004	2.536	4.126	4.383	2.129	2.021	8.905	3.065	1.24	1.377
3.778	4.248	1.084	0.508	2.551	7.61	6.28	0.175	4.968	10.385
0.388	1.727	0.02	1.339	2.582	0.8	1.361	1.623	4.459	3.078
2.178	1.771	6.009	7.528	4.424	2.764	4.862	2.815	3.617	5.377
3.935	0.534	2.536	4.951	0.424	3.602	0.504	0.461	0.645	3.192
4.166	0.815	0.447	6.584	4.06	1.921	2.698	0.463	3.336	3.516
4.181	2.45	1.617	6.18	3.262	0.05	0.345	0.979	2.746	2.001
1.114	0.322	7.22	1.198	3.739	4.43	4.195	0.256	3.216	0.942
1.602	2.138	5.551	0.056	5.883	2.898	16.682	0.086	4.078	1.387
4.712	4.712	6.331	2.026	3.713	3.03	4.573	2.167	5.152	4.126
3.281	3.991	0.843	4.919	5.177	5.771	1.721	3.127	2.922	2.738
4.421	6.424	0.401	4.161	5.427	0.792	5.923	3.51	0.681	5.385
2.376	1.074	7.69	2.969	4.813	2.238	6.744	0.999	1.309	0.123
1.486	0.752	1.683	3.806	3.065	6.122	2.28	1.317	4.145	7.5

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	3.49	0	NO
Nakagami distribution	3	4.03	0	NO
gamma distribution	4	5.19	0	NO

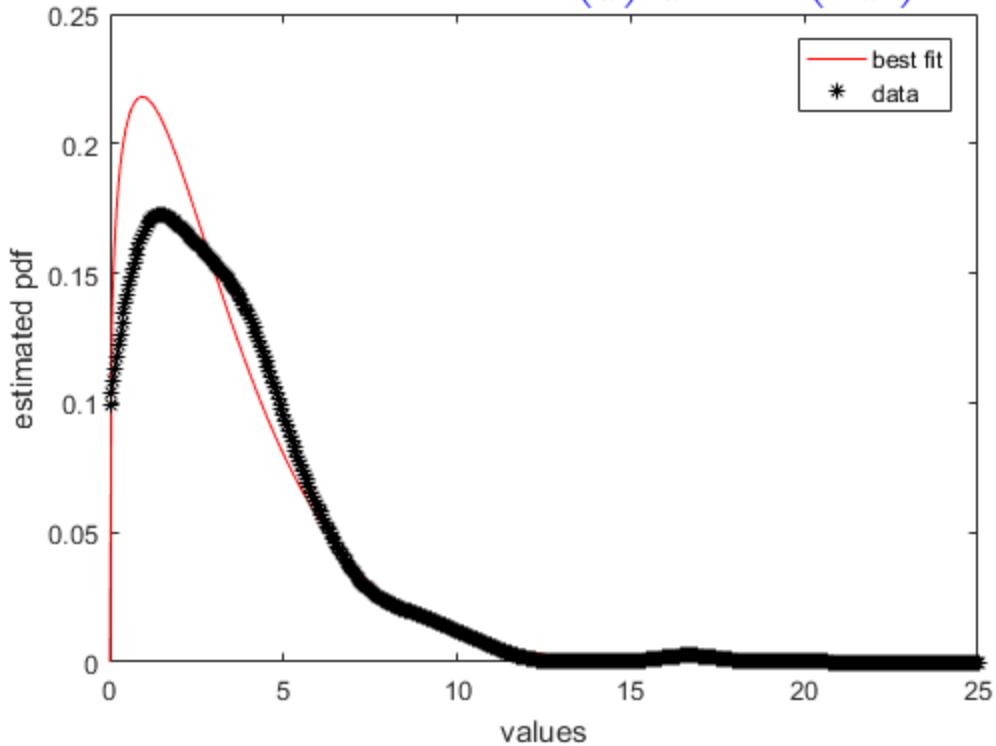
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 3.4044 b = 3.4044

p m shankar

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Rouf)

3.72	1.073	0.261	3.536	2.158	-2.442	-0.957	0.318	3.113	6.297
4.5	1.419	-0.881	2.105	1.021	-0.144	-2.193	0.982	3.534	2.415
1.235	1.044	-3.371	-1.022	0.364	1.635	0.005	4.214	-0.367	2.81
4.016	-1.262	2.964	1.98	-1.629	0.669	0.987	-0.511	4.445	0.273
3.687	2.03	2.194	3.067	1.559	3.184	2.868	3.588	3.47	1.463
3.45	3.624	2.956	1.114	2.714	2.687	1.736	0.981	0.007	-0.576
3.901	1.617	2.642	-1.114	3.421	2.098	0.795	0.262	2.131	2.592
1.285	0.371	-2.055	-0.031	1.249	2.741	1.969	0.798	-0.329	0.161
2.739	2.825	1.707	3.065	0.535	5.609	-0.776	5.772	3.961	4.23
3.682	3.918	5.37	1.363	4.941	0.996	2.102	0.268	1.447	3.458
0.616	2.41	3.361	2.266	4.923	6.827	3.573	4.528	3.319	1.367
-1.062	2.487	1.198	2.123	6.284	5.216	1.459	1.671	1.619	0.784
2.818	1.943	0.564	3.004	-0.374	4.029	3.871	0.495	2.036	-1.249
1.902	0.351	0.769	3.414	-1.068	-2.438	0.835	2.912	0.512	3.201
2.4	1.765	2.016	2.383	1.825	0.37	3.54	1.739	0.582	3.216
1.474	3.757	1.871	2.606	2.278	-1.134	-1.192	1.329	1.124	1.301
-0.193	1.388	-0.289	2.234	2.87	1.904	1.59	2.464	6.351	5.708
2.465	2.913	0.591	-0.789	0.516	-0.617	2.64	0.548	3.241	2.688
3.366	1.379	0.934	3.355	1.102	0.62	-0.596	5.734	2.624	2.704
2.083	2.68	3.693	3.595	0.883	4.456	-1.453	1.698	2.599	1.546

p m shankar

Summary of χ^2 tests

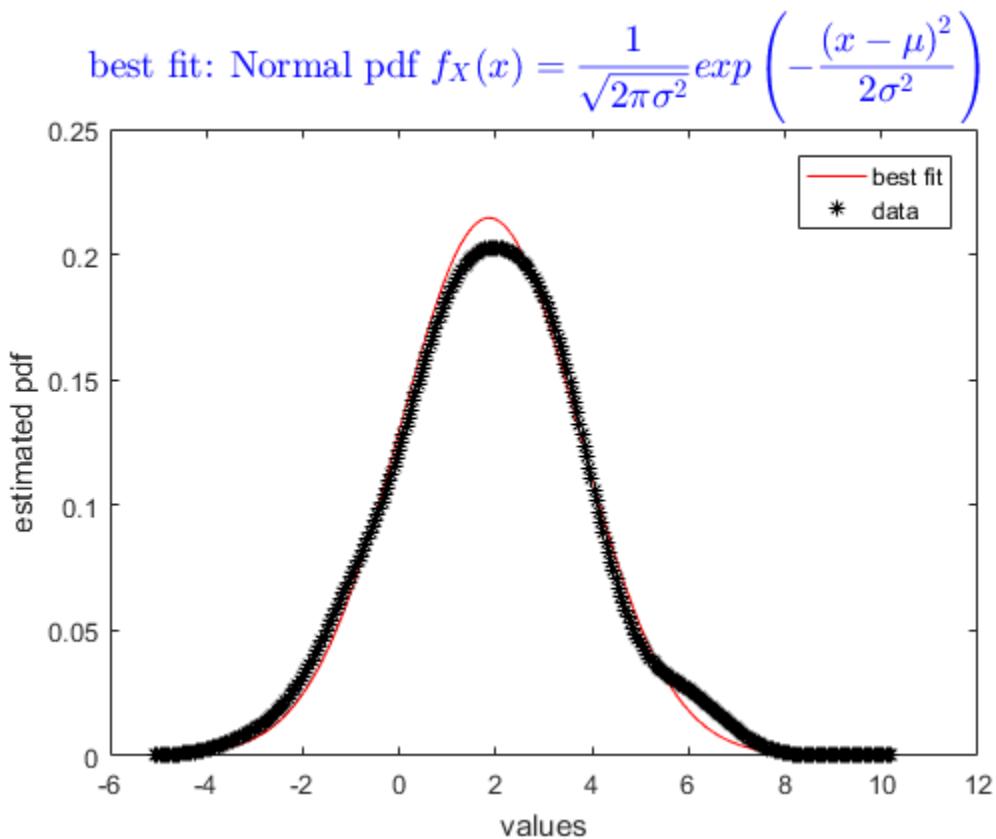
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	5.78	0	NO
Laplace distribution	6	19.72	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = 1.864 \quad \sigma = 1.8591$

p m shankar



data (Saleh)

2.945	0.917	1.571	0.767	1.882	2.157	1.443	1.747	0.551	0.281
0.638	1.954	0.758	1.387	0.86	1.244	0.928	0.821	0.402	1.499
0.718	0.645	0.546	1.01	1.34	0.762	1.275	0.768	1.655	0.743
1.806	2.196	0.579	0.944	0.968	0.265	1.021	0.485	1.326	0.898
1.287	2.074	1.287	0.594	0.866	0.365	2.036	2.59	1.432	1.165
0.56	1.533	1.12	1.441	1.649	1.409	1.313	0.988	0.843	1.549
0.418	0.341	1.628	0.617	0.69	1.034	1.966	1.458	1.574	0.399
0.768	1.27	1.389	1.734	0.917	1.765	0.806	2.137	0.222	0.703
1.532	0.944	1.621	1.331	0.475	0.959	1.327	1.65	1.608	1.291
0.577	1.559	1.091	1.774	2.286	1.035	0.503	1.219	1.467	2.017
1.509	1.604	0.376	0.4	1.164	0.596	0.981	1.074	1.319	1.666
0.912	1.113	2.24	1.802	0.936	1.688	1.239	1.6	1.274	1.138
1.006	0.797	1.364	0.537	0.774	1.393	1.297	1.9	2.132	1.388
1.553	0.756	2.794	1.21	1.717	2.322	1.576	1.969	1.583	1.54
0.91	0.896	0.935	0.708	1.088	0.593	0.874	2.216	1.153	1.578
1.147	0.391	0.873	0.8	1.654	0.514	1.037	1.996	0.812	0.612
1.024	1.575	1.584	0.97	2.084	1.616	0.538	1.778	0.923	1.243
0.848	1.377	0.564	0.309	1.282	1.359	1.403	0.475	0.765	1.316
2.429	1.761	1.365	3.14	0.768	0.883	0.61	1.492	0.584	2.494
1.589	2.193	1.364	2.195	0.382	1.141	1.343	1.381	0.488	0.474

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	10.01	0	NO
Nakagami distribution	5	9.95	0	NO
gamma distribution	5	12.52	1	YES

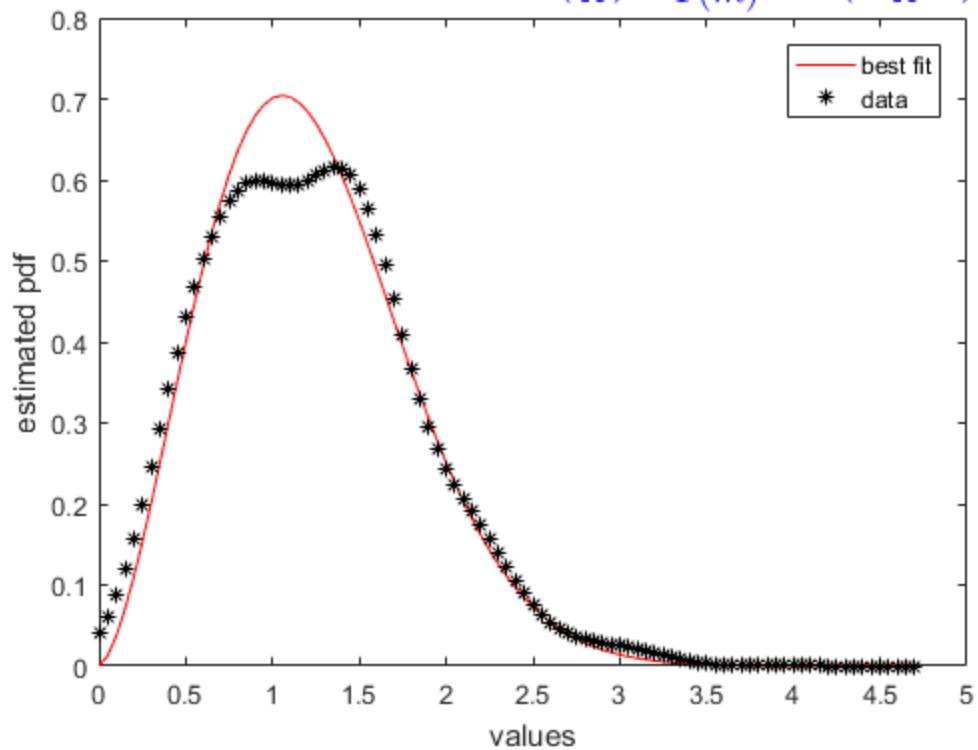
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega} \right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp \left(-\frac{m}{\Omega} x^2 \right) U(x)$

m = 1.2875 Ω = 1.8229

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Sanford)

8.668	0.874	8.077	2.084	1.629	1.926	10.649	0.853	1.415	1.931
0.364	11.007	0.479	0.15	3.506	0.525	3.816	6.326	4.742	3.932
3.909	3.237	14.982	3.814	5.847	0.727	2.473	3.984	0.724	4.676
4.055	0.197	3.423	2.078	3.085	5.116	2.099	3.246	0.804	5.085
4.423	5.304	7.207	5.586	6.835	3.606	3.382	7.692	1.655	5.594
0.157	1.406	1.033	1.19	0.224	1.807	1.722	2.778	0.574	0.84
2.023	1.334	0.242	0.124	0.757	3.664	2.516	2.778	3.238	12.221
3.164	1.986	2.362	3.574	1.472	3.316	5.331	3.066	0.102	2.373
10.423	2.873	1.414	0.742	7.222	0.663	2.592	2.328	3.929	0.983
2.644	0.151	5.304	2.086	2.599	2.939	5.099	2.032	0.558	0.603
7.66	3.273	2.366	1.065	0.302	2.403	3.643	1.656	7.028	3.995
14.781	2.204	2.854	7.474	2.21	1.001	2.855	0.333	2.554	0.004
0.721	3.032	2.151	2.685	3.434	1.165	2.953	4.632	13.97	0.483
1.82	0.921	7.82	3.163	1.03	7.92	1.912	1.463	5.69	1.466
1.674	6.577	5.664	1.698	1.412	5.109	8.113	1.807	4.698	3.051
6.152	0.724	0.767	4.534	0.469	1.056	3.694	3.315	11.589	3.145
4.529	1.131	1.75	1.63	6.199	3.013	3.622	2.293	4.582	1.237
3.45	0.094	2.948	0.286	9.827	3.657	2.989	4.745	3.163	1.68
4.805	2.774	3.188	1.261	4.354	0.868	0.454	5.065	3.278	2.934
6.309	1.183	0.836	10.456	0.15	4.354	0.849	1.094	0.803	0.04

p m shankar

Summary of χ^2 tests

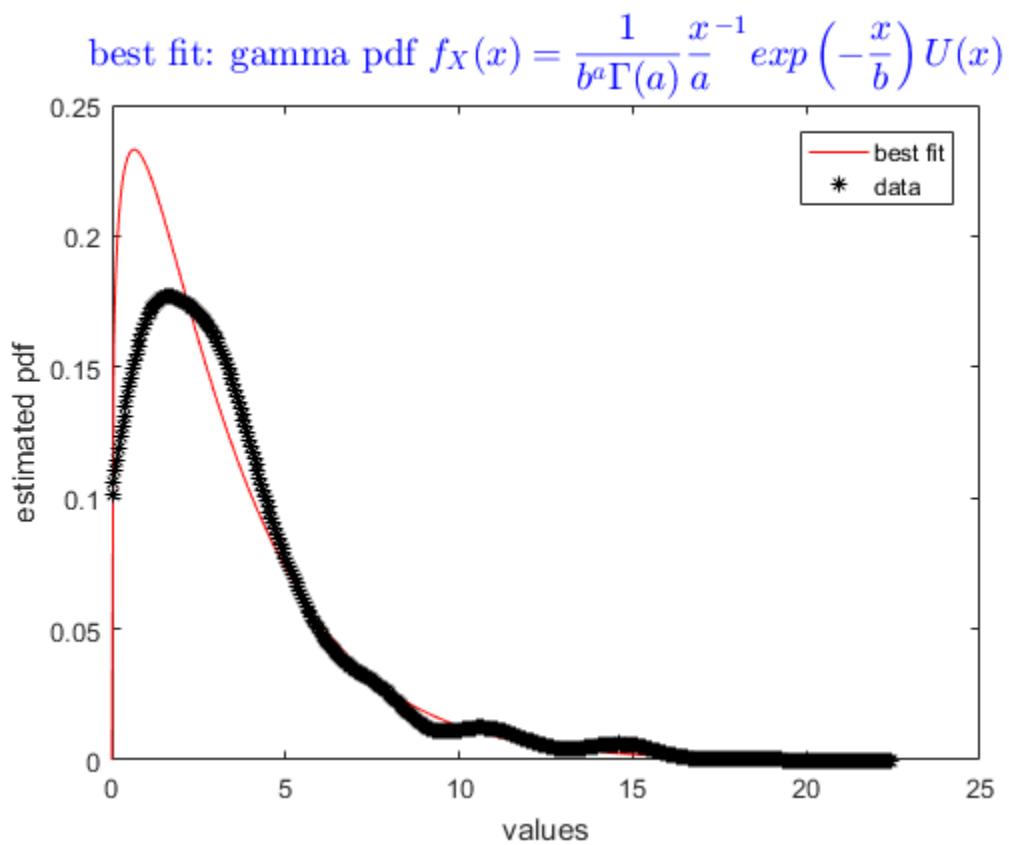
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.59	0	NO
Nakagami distribution	4	11.43	1	YES
gamma distribution	5	3.94	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 1.2424 b = 2.6302

p m shankar



data (Shahriar)

2.47	2.46	0.807	2.386	1.358	1.421	1.711	2.956	1.284	1.32
3.353	2.164	1.928	3.222	0.335	0.883	0.908	0.804	2.981	0.497
2.72	3.064	2.019	2.607	0.558	6.899	3.283	0.333	1.747	1.875
2.861	2.666	3.279	2.262	2.167	3.778	1.654	2.129	2.576	1.762
2.716	3.045	1.761	3.518	0.28	2.492	0.877	3.476	1.425	2.509
1.833	4.891	1.409	0.352	0.997	0.747	2.941	2.046	3.66	2.584
1.967	5.104	0.91	2.266	2.709	0.08	1.827	0.201	3.27	1.787
1.212	1.234	2.162	1.168	0.556	3.325	2.121	1.302	3.202	2.005
2.484	4.989	1.334	1.122	3.687	3.313	1.047	0.465	2.525	2.127
1.335	0.8	3.268	3.024	3.66	3.769	4.303	0.674	2.379	1.624
1.633	3.188	4.904	1.666	6.741	1.769	1.373	3.002	3.05	4.516
1.927	1.76	3.576	2.911	2.731	2.355	1.92	3.814	1.585	3.222
1.004	2.013	0.971	3.611	2.496	2.919	2.298	2.361	0.523	0.68
2.312	1.473	1.192	2.37	3.638	3.163	1.247	3.563	2.291	1.836
1.861	2.55	3.234	4.102	1.457	3.234	2.404	1.327	1.168	5.107
1.284	1.313	3.321	3.716	0.521	0.879	2.536	2.568	1.187	2.767
1.964	2.065	1.566	1.993	2.66	1.695	1.613	2.235	0.173	4.398
0.315	1.291	2.393	3.116	1.217	1.721	2.412	3.175	3.115	1.198
3.749	2.518	0.645	4.777	1.578	1.617	3.282	1.383	2.636	1.459
2.739	0.698	2.153	0.192	3.717	3.289	4.267	3.155	1.302	1.973

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	1.85	0	NO
Nakagami distribution	4	1.81	0	NO
gamma distribution	5	8.84	0	NO

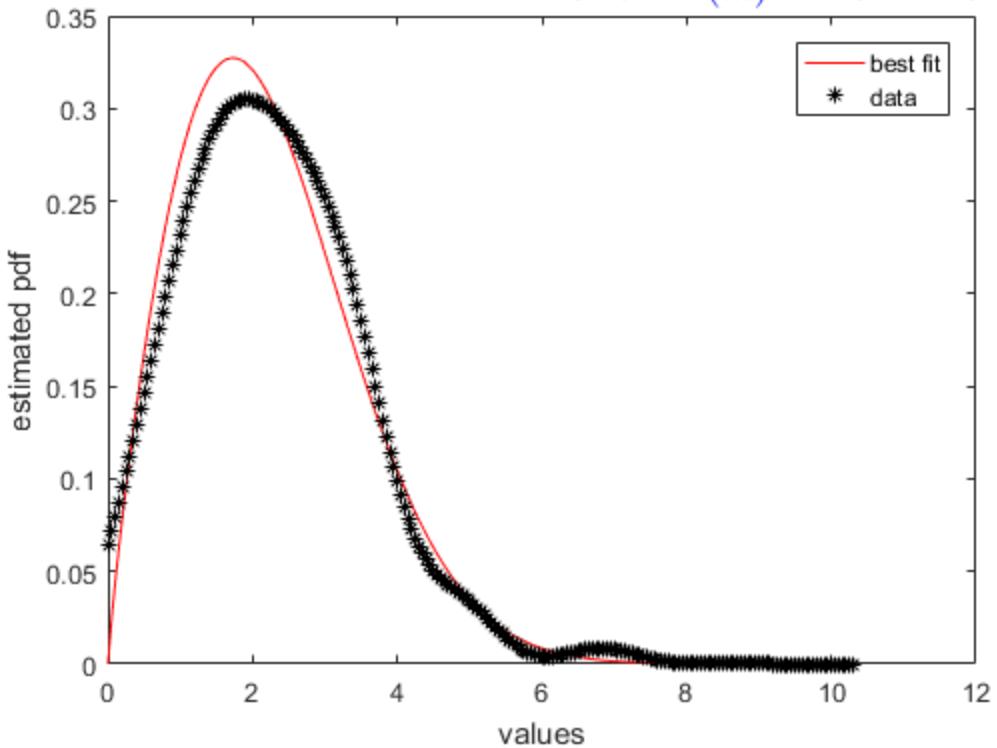
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

m = 0.92631 Ω = 6.4841

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Shetzline)

0.665	1.78	1.834	2.677	1.558	0.882	1.464	2.15	1.447	0.555
0.932	1.15	1.937	2.485	0.721	2.312	1.999	1.994	1.461	1.09
1.618	2.551	2.263	0.897	2.552	1.573	0.984	3.438	1.368	3.983
1.589	3.212	0.167	2.827	2.054	0.513	1.464	2.401	2.212	2.061
1.843	1.542	2.654	1.936	2.632	1.803	1.213	2.718	2.011	2.19
2.565	1.199	1.894	2.643	1.593	1.358	2.008	2.309	0.938	1.194
1.812	2.279	2.375	1.428	1.4	1.06	2.91	2.375	1.395	0.076
1.275	2.321	1.931	2.096	1	2.209	3.689	1.286	3.514	2.117
2.849	2.012	2.104	0.812	0.796	1.546	0.312	0.472	0.624	2.31
1.856	0.421	2.527	1.278	0.996	2.707	0.982	2.844	2.833	0.542
0.781	2.296	0.821	2.707	1.165	0.587	1.629	1.09	1.119	2.91
2.465	2.986	3.101	1.845	1.133	1.77	2.595	0.835	2.607	1.376
0.789	0.838	0.929	2.247	0.381	0.935	0.761	1.774	1.014	1.922
2.87	1.17	3.724	1.428	1.465	1.212	2.625	0.729	2.192	0.267
1.293	2.146	1.995	2.704	0.513	0.775	2.84	1.473	1.232	1.728
1.21	1.072	1.838	0.765	1.603	3.526	0.797	1.719	1.779	0.585
4.903	1.771	1.498	1.797	2.272	2.276	2.976	1.032	1.751	2.527
1.94	0.716	1.541	1.866	2.93	2.848	2.07	3.124	1.97	1.479
0.603	1.854	2.823	0.569	2.231	1.298	2.016	2.968	4.091	2.082
2.059	1.315	1.925	2.984	2.088	2.832	2.56	1.555	1.225	2.033

p m shankar

Summary of χ^2 tests

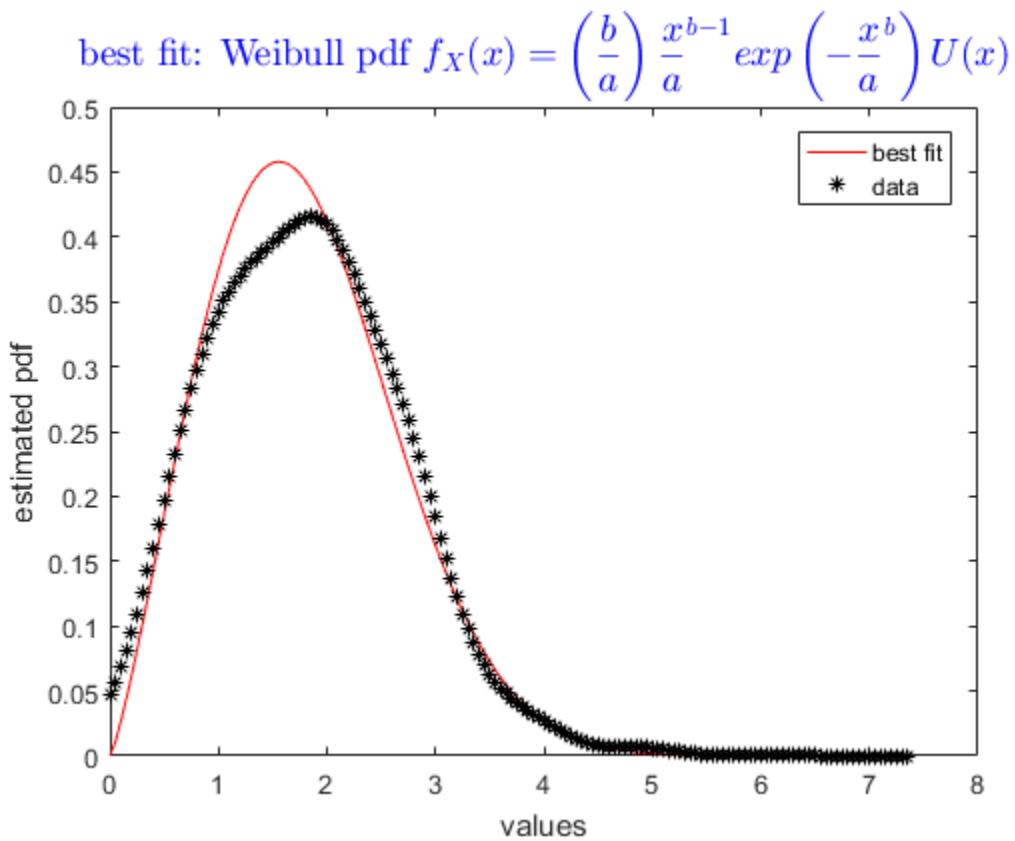
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	4.33	0	NO
Nakagami distribution	5	5.3	0	NO
gamma distribution	5	13.47	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.0273 b = 2.0273

p m shankar



data (Singer)

1.037	15.601	4.677	3.071	3.951	1.121	5.664	2.362	6.988	0.504
1.209	2.127	6.186	1.955	11.816	2.973	5.2	1.094	3.617	0.708
2.599	2.088	1.397	0.206	1.143	1.371	0.535	1.747	2.515	2.21
0.18	0.437	0.142	0.682	4.347	4.684	2.016	0.698	4.722	4.996
2.838	5.277	0.491	12.263	0.993	2.097	4.214	7.306	1.021	3.635
9.317	1.941	1.614	1.234	0.36	1.009	2.943	4.264	1.289	5.836
6.447	2.124	0.842	0.274	1.765	1.011	2.612	3.693	1.013	11.164
3.682	2.327	2.781	1.757	1.603	2.953	2.378	2.612	0.448	2.87
5.784	4.621	0.144	6.02	2.043	2.925	0.633	8.364	3.667	8.284
0.45	0.93	1.185	2.291	0.259	2.77	6.235	1.161	1.281	2.096
1.371	3.267	3.622	1.958	7.97	2.07	2.094	3.241	8.678	2.856
1.902	0.409	1.531	1.778	5.459	2.992	3.514	2.924	1.606	6.644
10.46	3.184	8.69	0.32	1.123	0.483	2.025	1.987	2.812	7.727
1.168	0.625	3.241	1.472	3.921	1.324	1.488	1.621	2.588	0.704
0.16	1.344	1.423	0.747	6.746	3.683	0.859	1.394	0.675	1.252
1.119	1.638	0.572	4.028	2.193	2.874	1.077	0.761	4.864	2.188
2.124	3.388	0.599	0.311	2.014	2.128	7.923	2.083	2.337	1.118
0.495	1.334	3.57	0.811	0.406	4.172	1.916	1.919	5.527	1.732
1.543	1.246	8.751	1.175	0.65	1.337	2.517	1.22	1.694	8.985
2.04	4.097	3.694	8.246	0.761	2.467	3.389	1.257	2.315	3.593

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	10.41	1	YES
Nakagami distribution	3	16.98	1	YES
gamma distribution	4	10.11	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

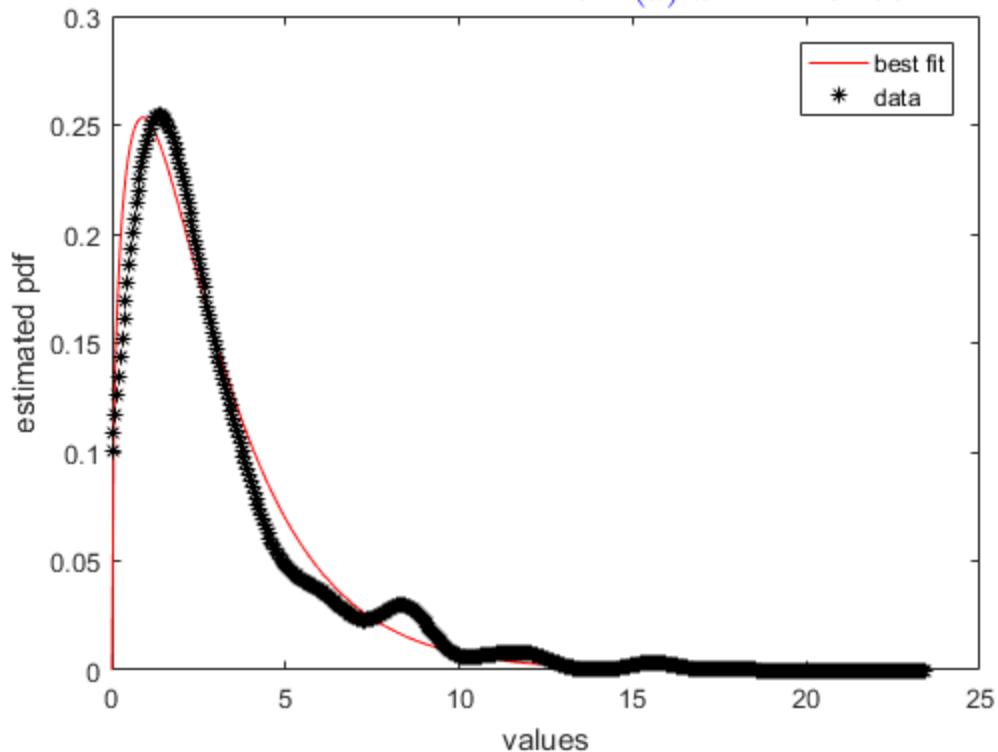
best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

lowest χ^2 stat

a = 1.4467 b = 1.9884

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Singh)

2.871	1.785	3.149	0.758	3.3	1.794	1.861	2.744	2.185	8.729
0.306	1.703	3.653	2.958	3.249	0.918	3.101	4.473	1.758	1.907
1.114	1.385	1.462	0.721	2.236	1.382	1.128	2.869	8.544	5.071
0.901	3.09	1.865	2.999	3.125	1.191	3.385	2.155	9.16	4.648
2.951	7.909	4.27	3.256	3.359	2.543	8.553	2.283	1.156	1.11
0.144	11.858	0.53	4.522	2.185	1.053	2.267	2.503	3.287	0.198
0.842	2.804	1.847	2.623	2.056	3.702	4.038	2.747	2.618	6.165
3.263	2.638	0.314	1.196	3.893	2.142	2.802	1.539	0.021	3.668
0.208	0.831	0.08	2.769	2.828	0.474	0.271	1.677	0.688	0.931
0.246	2.254	2.174	3.678	0.438	1.946	2.132	3.595	3.893	1.548
0.621	5.149	1.932	9.57	1.901	4.34	4.113	0.639	4.026	3.008
1.207	1.454	2.85	2.349	3.071	2.709	1.869	4.68	1.783	5.613
1.021	0.542	7.827	6.279	1.577	5.887	4.629	0.895	2.961	2.447
8.446	1.746	2.354	4.546	2.842	6.425	3.008	3.26	6.502	2.374
1.785	1.52	3.093	4.913	2.359	7.191	0.884	4.117	16.92	3.079
3.148	1.393	3.045	1.134	1.023	7.059	1.481	2.424	6.973	1.556
0.611	6.129	2.105	2.489	0.177	2.007	1.486	1.24	1.168	2.767
1.171	2.836	1.381	6.13	14.017	3.46	0.331	3.201	0.864	2.841
8.073	1.456	0.604	0.669	3.298	2.209	0.453	1.573	3.488	3.77
6.661	2.58	1.402	1.014	5.455	1.902	5.833	1.131	1.457	1.93

p m shankar

Summary of χ^2 tests

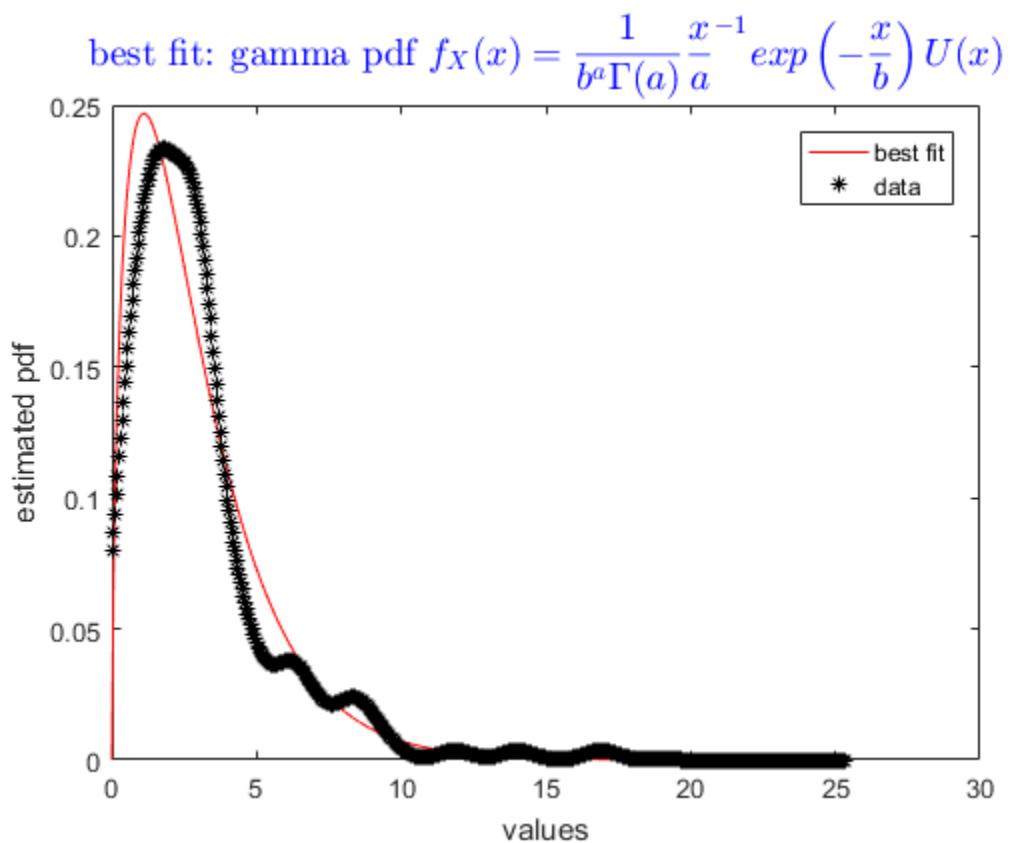
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	3	7.67	0	NO
Nakagami distribution	3	14.98	1	YES
gamma distribution	3	5.95	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 1.6019 b = 1.8293

p m shankar



data (Sinha)

1.27	0.864	3.385	0.805	2.464	0.585	0.612	1.902	0.175	1.526
2.59	1.93	2.349	1.274	0.342	2.409	1.772	0.289	2.053	2.08
1.222	2.009	2.57	1.422	1.529	1.116	1.096	1.818	1.221	0.586
1.978	2.633	0.716	2.92	2.829	1.479	2.361	0.757	1.323	1.907
1.679	2.907	3.41	1.679	3.285	1.347	1.337	2.185	0.864	1.735
1.742	3.052	0.798	2.057	0.032	1.285	0.877	1.073	1.104	1.39
1.234	1.258	0.931	1.017	1.918	1.63	1.69	1.433	2.505	3.856
1.988	2.881	3.493	4.432	1.28	1.384	0.686	1.996	1.426	0.434
0.745	1.28	0.836	1.274	2.389	2.344	0.645	2.406	0.965	2.74
0.4	3.46	2.871	2.095	1.418	2.28	1.083	1.779	1.841	0.852
1.526	0.871	1.023	2.283	2.113	2.775	1.123	2.257	0.941	2.02
0.111	2.211	1.3	1.509	1.158	1.326	0.851	1.396	2.575	1.596
0.687	2.108	1.483	2.556	0.493	2.735	4.654	1.034	1.418	2.87
1.693	2.239	1.871	1.397	1.589	1.577	0.95	1.99	2.202	2.024
2.497	4.111	1.682	3.564	1.853	3.408	3.656	2.548	0.708	1.199
1.573	2.064	1.177	2.792	1.106	1.6	0.986	1.65	2.044	2.66
1.837	2.231	1.746	3.095	3.25	2.192	1.394	0.764	1.812	1.269
2.805	2.272	1.966	1.919	3.385	2.373	3.502	2.183	1.616	0.556
1.496	0.96	1.824	1.186	1.424	1.509	2.618	1.035	2.917	1.152
1.157	0.822	2.774	0.578	0.713	2.655	1.25	1.778	2.33	1.279

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	3.28	0	NO
Nakagami distribution	5	3.02	0	NO
gamma distribution	5	6.09	0	NO

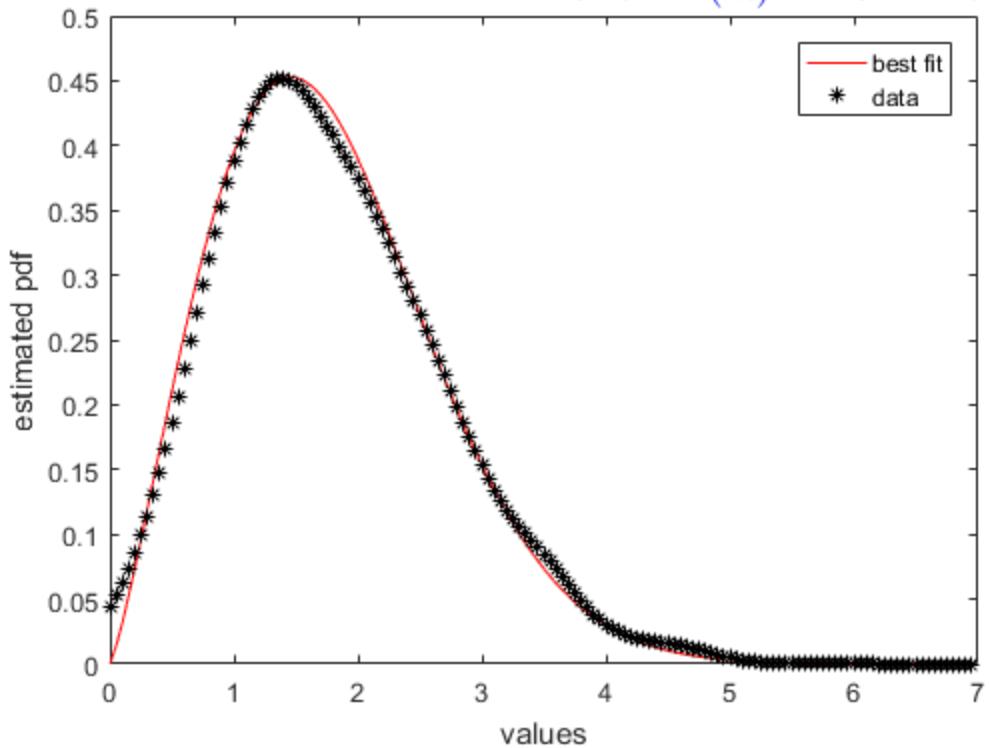
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 1.1063$ $\Omega = 3.8865$

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (Sohan)

2.245	0.643	3.264	2.732	3.543	3.316	1.907	2.469	4.764	2.894
4.598	1.89	0.688	1.397	4.057	0.566	2.737	2.377	3.685	2.21
1.409	0.895	1.451	2.836	2.865	2.451	2.201	1.531	3.239	3.681
1.724	0.214	1.071	1.742	4.484	2.241	0.718	2.377	0.696	2.533
3.6	0.588	2.092	2.763	1.359	2.527	0.869	1.92	1.934	1.229
3.097	2.147	0.484	2.027	0.596	3.477	0.896	1.734	4.656	2.724
2.712	3.605	1.032	1.375	3.07	1.125	0.434	2.337	0.907	1.4
4.661	4.143	3.685	1.359	1.785	3.265	1.334	1.026	0.565	1.655
3.164	2.437	0.642	2.382	2.277	1.069	5.102	1.929	2.133	1.046
4.105	1.909	1.528	3.379	3.308	2.373	0.219	1.137	2.288	2.02
7.412	0.71	2.716	4.873	3.197	2.324	2.216	2.686	1.729	2.454
1.681	0.652	0.968	3.746	3.226	1.982	2.02	0.973	3.03	1.731
1.172	1.097	0.575	0.663	0.674	2.296	3.889	3.088	1.491	1.773
2.412	3.255	1.547	1.741	2.11	6.136	1.23	3.674	0.346	1.976
2.89	2.416	1.894	1.69	1.193	1.598	1.44	3.917	3.364	1.402
2.806	0.755	3.444	5.594	3.249	2.915	1.947	3.416	1.697	2.472
1.452	1.98	0.295	3.1	3.041	1.81	1.359	1.174	1.665	3.628
3.201	2.229	1.131	3.963	1.009	2.534	1.531	0.475	1.68	2.503
1.845	2.799	0.758	3.376	2.099	1.939	1.754	3.187	0.284	1.145
2.954	1.72	1.541	3.863	0.3	1.244	3.95	1.252	2.436	0.821

p m shankar

Summary of χ^2 tests

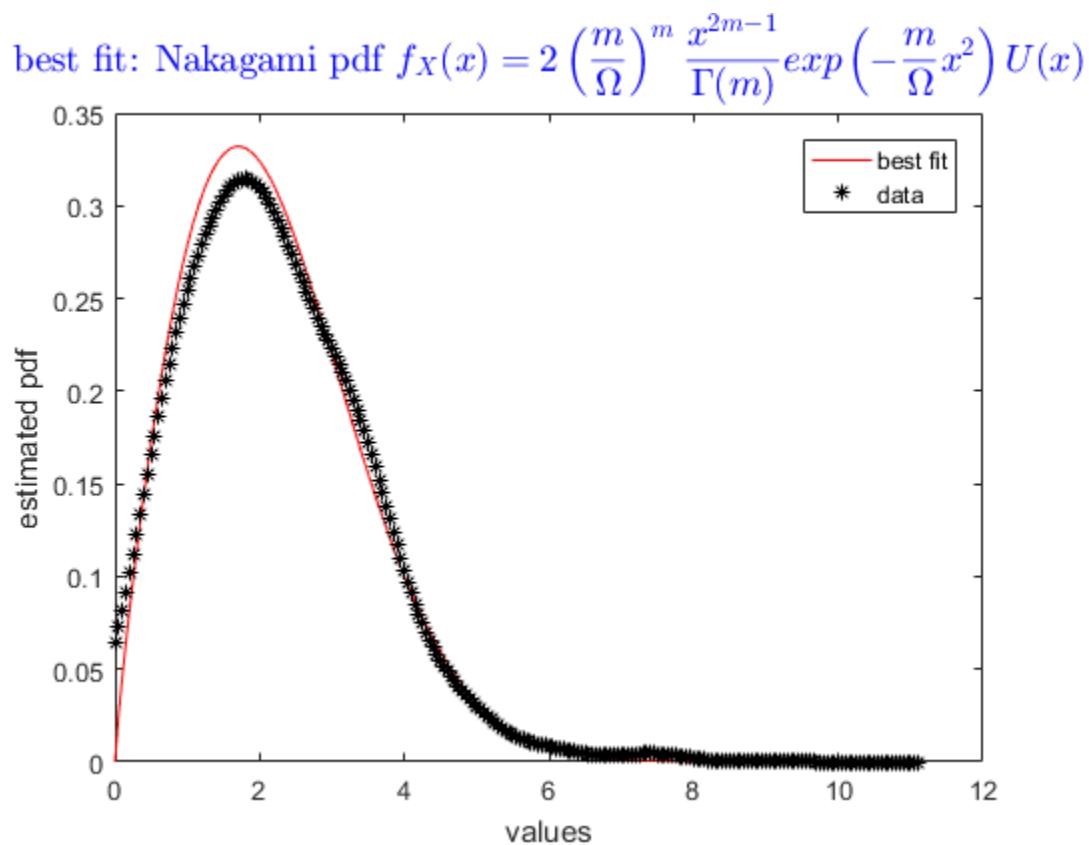
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	1.32	0	NO
Nakagami distribution	4	1.28	0	NO
gamma distribution	5	4.46	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

m = 0.92642 Ω = 6.3037

p m shankar



data (Stanford)

2.206	1.367	1.472	3.271	4.249	1.132	1.396	2.883	0.897	2.918
2.394	2.132	1.379	0.431	1.227	1.937	2.939	1.394	0.614	3.598
2.29	1.406	1.215	0.681	2.002	1.62	2.523	2.623	3.018	3.555
2.822	0.862	2.608	2.364	1.859	2.019	1.11	3.126	3.582	1.435
2.48	2.687	2.531	1.961	1.996	1.499	2.49	1.32	0.581	2.298
2.471	2.239	2.108	1.075	0.805	2.446	3.256	1.895	2.326	1.933
1.327	1.68	2.59	1.975	1.182	4.305	2.262	1.309	1.967	1.909
2.18	0.596	2.725	1.587	2.725	1.187	1.405	1.206	2.895	0.135
1.452	0.76	0.516	1.215	2.035	0.755	1.214	0.864	0.346	2.169
1.972	0.433	3.382	3.021	1.858	2.194	0.618	1.995	1.626	3.532
3.234	0.86	1.696	2.826	2.754	3.25	2.711	1.292	1.891	0.821
2.645	1.679	2.832	3.445	1.738	1.964	0.941	2.28	2.67	0.593
0.417	0.707	2.95	1.707	3.429	1.296	2.134	1.321	1.514	1.416
2.092	0.628	0.944	2.005	0.929	0.768	2.833	0.478	1.537	1.259
1.975	2.276	1.858	0.147	0.886	3.941	2.388	1.89	1.589	1.908
1.866	0.977	2.034	0.634	1.205	0.662	2.27	2.536	1.586	3.08
2.059	2.699	3.019	2.522	1.205	3.289	1.678	1.5	0.517	2.136
3.072	0.741	1.927	2.535	2.969	1.814	2.38	1.396	3.85	2.206
2.049	2.353	0.364	3.836	0.83	2.257	2.512	0.512	0.652	2.959
1.68	0.84	3.915	0.73	2.065	0.538	0.839	2.838	2.123	1.058

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.15	0	NO
Nakagami distribution	5	4.62	0	NO
gamma distribution	5	13.78	1	YES

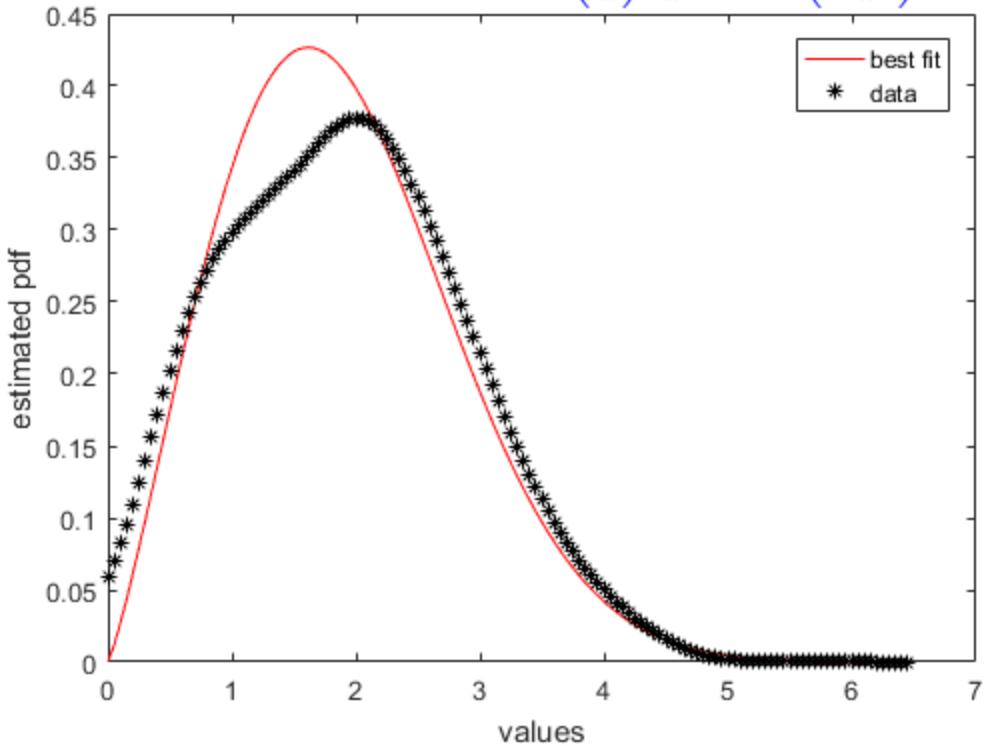
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.137 b = 2.137

[p m shankar](#)

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Syrilo)

3.037	1.631	-1.654	2.513	3.406	4.695	1.496	2.274	1.5	1.01
0.014	0.139	2.075	1.86	0.52	7.691	0.797	2.986	1.257	-2.871
1.307	2.527	1.98	3.838	2.127	-0.012	1.21	-1.75	-0.047	-0.469
-0.49	1.607	2.745	1.139	0.972	-0.245	1.928	4.236	1.718	2.447
-0.963	5.76	3.437	1.467	-0.084	-0.606	0.192	-1.318	0.095	3.133
-2.175	-0.139	-0.249	-0.459	2.988	-0.451	4.271	-0.264	5.196	4.282
4.68	1.698	2.025	1.901	0.939	1.276	2.71	0.807	-1.52	2.34
-2.564	-1.423	1.79	1.205	-4.934	2.191	-4.011	3.186	2.03	2.223
6.21	4.754	3.895	-0.54	5.37	1.81	0.175	2.601	0.501	-0.457
3.028	2.821	3.349	2.61	0.902	-1.114	2.788	1.51	1.081	-2.458
-2.729	4.334	-0.068	2.04	2.266	4.551	3.371	3.255	-1.961	3.489
1.319	0.994	-2.13	5.623	0.591	3.417	-1.353	0.413	3.183	2.576
3.27	2.401	-0.124	2.533	1.813	-0.472	5.033	4.644	1.932	2.391
0.123	4.103	3.478	2.536	0.977	1.026	1.42	1.684	3.691	2.808
3.091	0.913	1.485	1.147	1.377	0.528	-1.505	-2.183	2.742	0.624
-0.575	2.638	1.093	-0.685	0.63	1.378	0.65	-0.308	-0.091	3.745
1.696	-1.311	0.107	-0.873	-0.707	0.22	0.201	-0.471	-0.944	3.42
4.547	0.914	0.25	2.177	0.582	0.069	4.641	-0.76	0.478	0.923
2.248	1.261	2.426	4.568	2.088	1.863	-2.882	2.822	2.539	0.268
3.978	0.1	3.016	2.256	1.11	0.895	-0.114	-0.916	-0.71	1.399

p m shankar

Summary of χ^2 tests

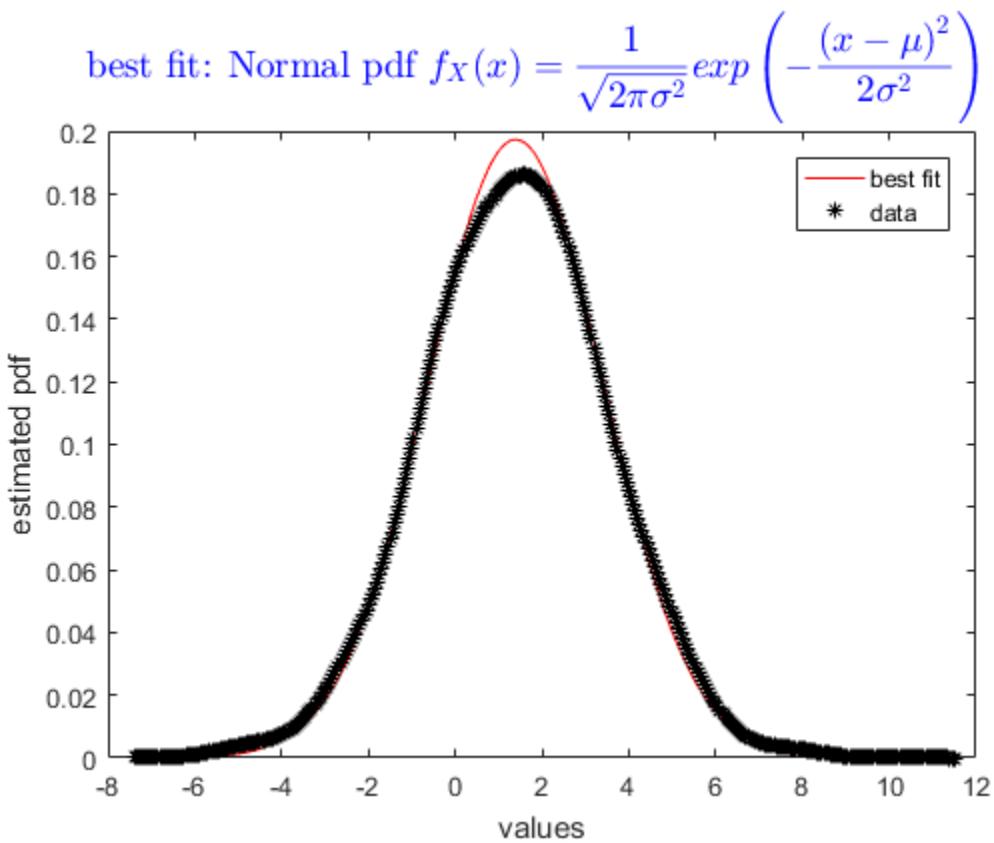
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.13	0	NO
Laplace distribution	6	14.32	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = 1.3958 \quad \sigma = 2.0219$

p m shankar



data (Teperov)

2.838	1.487	3.461	-0.556	1.777	1.004	3.548	2.732	3.297	-1.115
3.8	0.452	1.069	2.875	0.598	3.887	-0.303	-0.816	-1.076	-0.751
3.479	2.421	3.422	0.713	1.194	-1.627	0.188	1.114	3.543	2.556
-2.286	-0.185	3.57	2.451	-0.258	-1.99	2.296	2.073	0.732	1.511
2.089	3.341	1.186	1.373	1.115	1.452	6.191	2.942	0.105	3.3
-4.638	4.057	1.722	0.382	1.89	-1.196	-0.391	1.577	0.031	3.86
-1.698	5.141	3.319	0.029	4.69	0.926	5.079	2.186	-2.759	-0.027
-0.193	2.852	1.368	-1.273	0.616	-0.003	2.481	4.012	1.311	-0.613
1.588	3.371	0.046	-0.098	0.656	2.363	-0.286	3.988	-0.804	-2.221
1.385	3.077	0.483	0.278	1.952	0.638	3.028	0.374	-1.858	1.078
1.255	-0.516	0.213	1.28	1.793	1.744	1.944	1.969	1.49	2.883
3.574	1.269	-0.668	2.329	1.519	2.341	0.56	4.595	0.325	4.496
1.734	2.338	3.966	1.96	1.715	2.31	0.626	1.834	0.701	1.652
3.263	-0.786	-2.67	3.214	-2.599	2.467	-2.603	1.563	1.748	0.57
1.348	1.053	1.316	1.596	4.128	0.913	1.178	4.338	1.829	1.941
-0.329	-1.333	1.759	3.547	2.736	-3.439	2.562	3.284	0.8	-0.144
-0.873	0.975	1.913	1.136	0.661	2.004	2.029	0.186	0.929	1.681
3.9	1.956	1.073	0.92	0.191	-0.358	0.836	1.508	0.704	1.338
0.668	2.172	-1.554	3.13	0.12	2.564	3.63	-0.748	0.987	-0.977
2.468	2.867	0.412	2.145	-1.859	-1.153	0.707	1.003	-0.371	0.827

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	5	2.75	0	NO
Laplace distribution	6	19.5	1	YES

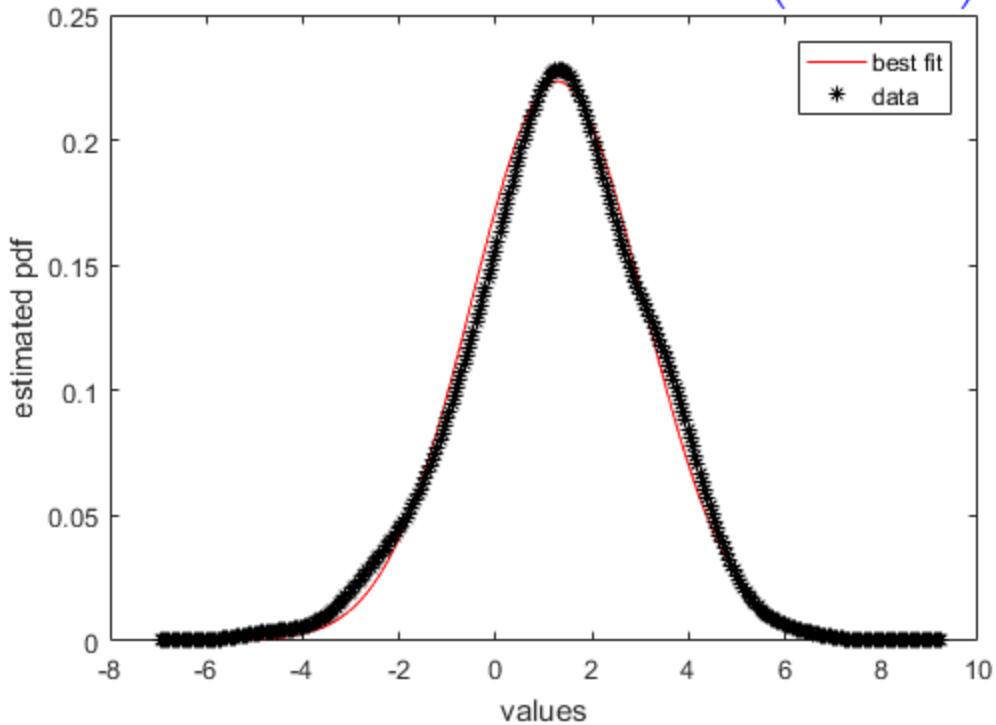
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = 1.2811 \quad \sigma = 1.7851$

[p m shankar](#)

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Traore)

7.309	0.126	10.55	5.519	4.779	2.008	0.899	0.264	3.886	3.084
4.797	12.106	4.677	0.213	0.727	7.032	1.227	1.506	7.396	0.294
2.133	2.094	2.647	11.005	0.384	0.144	4.496	2.146	4.048	3.903
4.616	0.067	2.028	0.281	3.74	12.456	0.319	5.072	7.603	3.372
1.438	2.482	0.525	1.094	8.543	0.666	0.823	4.973	2.373	0.815
4.054	2.01	3.759	6.63	6.867	2.605	3.187	2.501	1.648	2.726
2.396	2.258	1.087	5.534	1.127	3.43	0.358	0.581	3.175	5.248
4.554	2.321	0.275	0.999	2.054	0.143	0.698	3.61	6.904	0.402
2.398	8.045	1.763	1.08	5.913	2.204	7.719	3.514	6.481	4.405
0.38	3.129	1.378	2.767	6.393	2.642	1.687	4.372	0.469	8.103
5.765	2.603	4.277	0.853	0.053	4.867	0.523	6.24	3.538	0.544
1.974	0.641	1.404	4.984	0.485	0.85	4.552	4.484	1.85	1.197
0.648	2.879	0.816	2.496	0.451	4.356	3.981	0.192	0.173	7.688
0.237	3.906	0.384	1.738	0.674	0.324	3.877	0.588	0.795	0.762
1.249	0.459	7.818	7.551	2.375	0.025	2.662	8.163	1.243	5.414
1.145	7.764	1.594	1.092	5.06	0.654	0.187	4.125	1.313	2.945
0.567	5.083	0.807	1.923	1.191	3.326	1.029	1.348	1.106	1.127
0.678	5.287	3.947	1.644	4.294	7.387	0.356	0.914	2.755	2.342
3.74	1.09	2.392	3.139	3.84	0.217	0.489	1.29	4.758	0.605
0.55	8.51	3.791	0.66	10.857	0.851	2.219	0.772	2.417	7.884

p m shankar

Summary of χ^2 tests

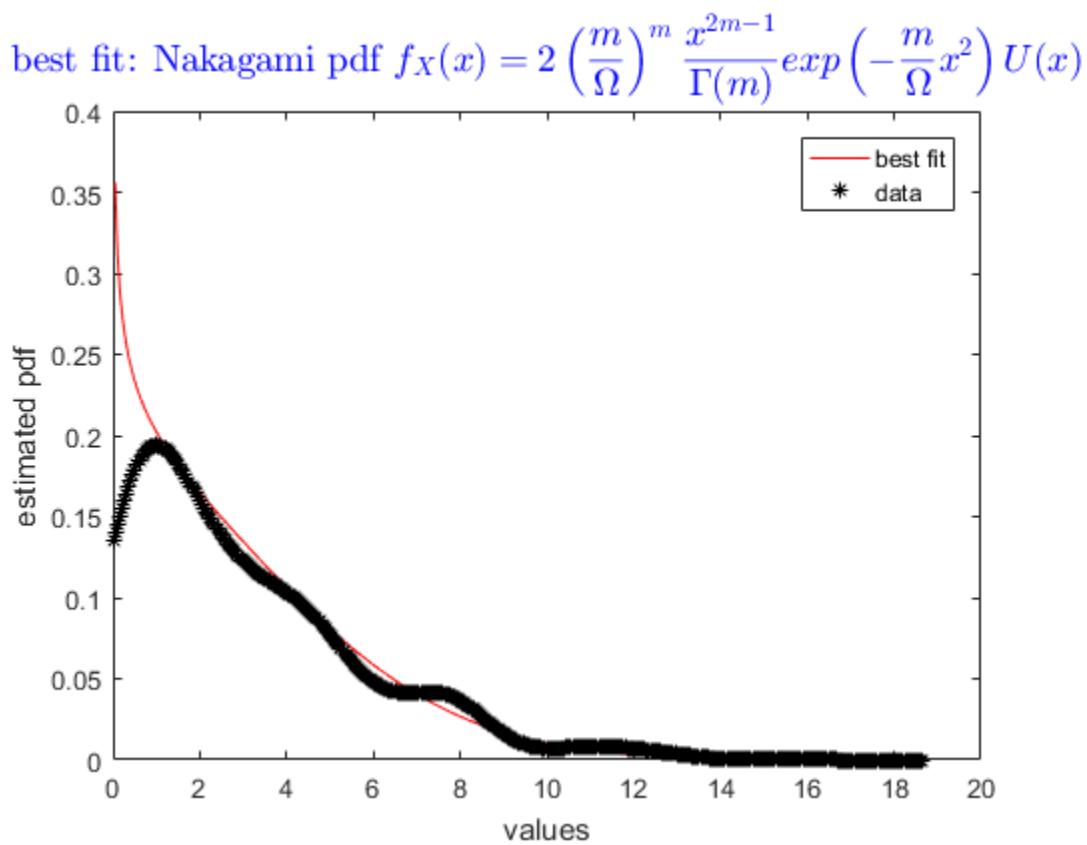
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	4.47	0	NO
Nakagami distribution	5	4.12	0	NO
gamma distribution	5	4.86	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 0.40995 \quad \Omega = 15.6675$

p m shankar



data (Truong)

1.825	1.633	0.771	3.729	1.247	0.421	1.181	1.343	0.557	2.569
3.119	0.199	1.662	3.697	2.532	1.61	2.628	1.446	0.811	2.993
2.348	1.452	1.703	2.872	3.252	2.066	1.38	1.48	5.607	4.314
2.034	3.774	3.651	2.875	5.355	3.181	1.882	1.383	4.452	3.538
1.05	2.242	0.727	0.643	3.917	3.758	5.081	1.621	0.93	1.851
1.612	1.515	1.717	3.241	2.634	0.86	2.311	0.849	2.251	0.793
2.138	2.622	2.912	2.059	2.74	2.517	4.695	2.108	2.257	1.274
0.998	0.714	0.559	3.458	2.062	2.222	1.233	2.59	2.63	1.481
2.137	1.692	4.384	0.719	2.437	4.136	0.348	0.487	0.624	2.321
2.851	0.662	4.916	0.676	0.636	1.005	1.523	3.605	1.455	0.519
1.399	2.31	3.897	3.526	3.387	2.823	1.247	3.13	0.628	1.323
0.44	2.741	2.028	0.927	1.247	0.759	1.793	3.414	1.989	2.506
2.474	0.857	0.899	5.24	3.287	4.196	2.802	1.156	4.89	1.931
2.993	5.033	2.386	1.427	1.163	1.74	1.353	4.106	1.112	3.07
2.975	3.455	1.9	0.899	1.897	1.892	1.511	2.11	2.791	2.918
4.979	0.51	1.792	2.434	2.172	1.587	2.257	1.791	0.943	1.386
0.331	1.45	4.023	2.959	2.528	2.613	2.331	2.51	0.97	2.685
1.172	2.719	2.421	3.701	2.487	4.525	3.439	1.527	1.931	2.321
1.893	1.086	2.544	1.02	2.45	2.798	1.962	0.982	2.212	1.346
2.43	1.155	2.966	1.613	2.917	0.667	3.19	0.809	1.008	2.551

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	3.82	0	NO
Nakagami distribution	5	4.13	0	NO
gamma distribution	5	5.79	0	NO

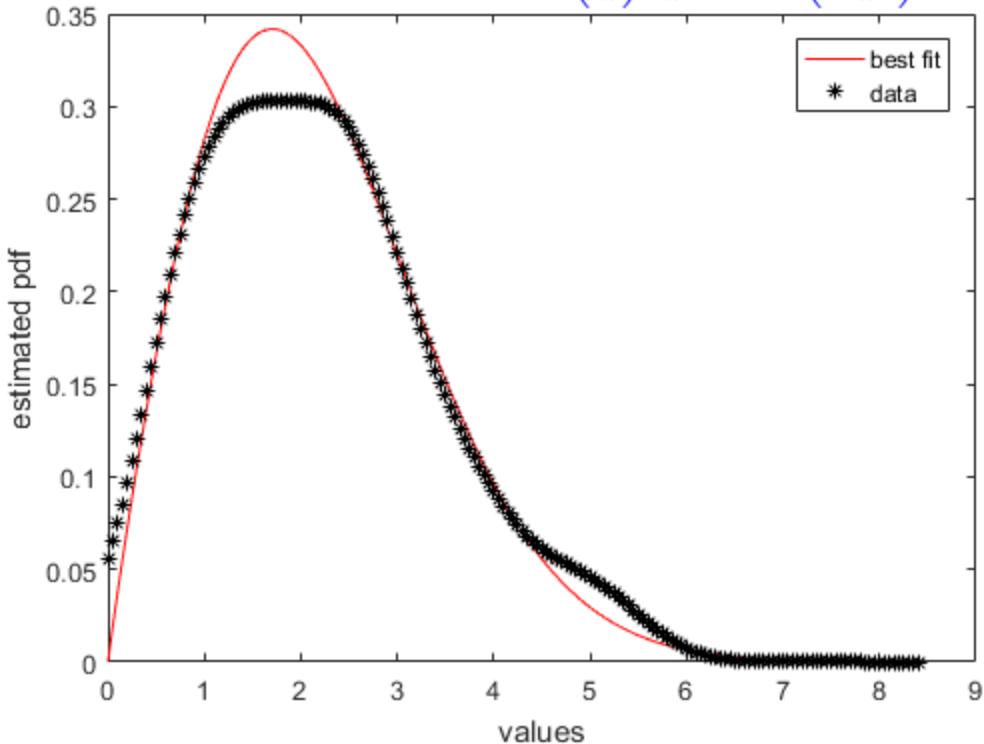
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right)^{\frac{b}{a}} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.4672 b = 2.4672

[p m shankar](#)

$$\text{best fit: Weibull pdf } f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$$



data (Tweed)

2.013	3.606	3.458	2.463	2.741	2.121	3.096	3.909	1.703	2.759
1.174	3.267	0.635	2.15	0.983	0.944	2.405	3.381	2.394	1.181
1.387	1.334	1.157	1.56	0.535	1.881	2.106	2.308	1.069	3.988
1.301	2.375	0.994	3.052	1.105	3.751	2.102	2.966	3.462	2.848
3.284	2.079	1.838	1.175	3.719	2.453	1.59	3.433	2.474	1.733
1.552	1.694	1.709	2.635	2.029	1.282	1.674	2.59	2.074	3.303
2.415	0.854	3.334	1.821	2.382	2.454	1.148	2.85	1.633	1.732
2.643	3.535	3.149	2.3	3.641	1.658	2.29	2.571	1.691	2.816
3.842	3.214	1.486	1.856	1.067	1.673	2.426	2.101	2.47	2.4
1.748	3.168	1.38	1.813	1.647	2.843	0.966	0.795	1.161	2.686
1.385	1.509	3.287	2.808	3.526	1.074	3.323	2.85	2.951	3.089
3.605	3.059	1.635	2.119	1.72	3.018	2.087	2.428	1.22	2.636
2.799	2.158	2.608	3.045	2.693	1.427	2.617	0.525	2.766	1.925
0.928	1.753	2.82	1.153	0.827	2.404	0.961	2.294	2.398	3.898
3.255	0.532	1.398	2.057	3.097	1.598	1.957	0.625	4.471	1.946
0.875	1.976	2.381	1.38	2.005	2.564	2.288	2.216	2.115	2.929
2.552	2.68	1.866	0.727	2.287	1.216	1.263	0.573	2.552	2.435
1.258	2.104	3.733	1.527	2.403	1.346	1.694	2.131	1.898	2.285
2.72	2.126	1.674	2.097	1.258	3.163	2.022	3.159	1.031	1.521
1.738	1.179	0.336	1.285	2.857	1.814	3.298	2.566	2.025	2.868

p m shankar

Summary of χ^2 tests

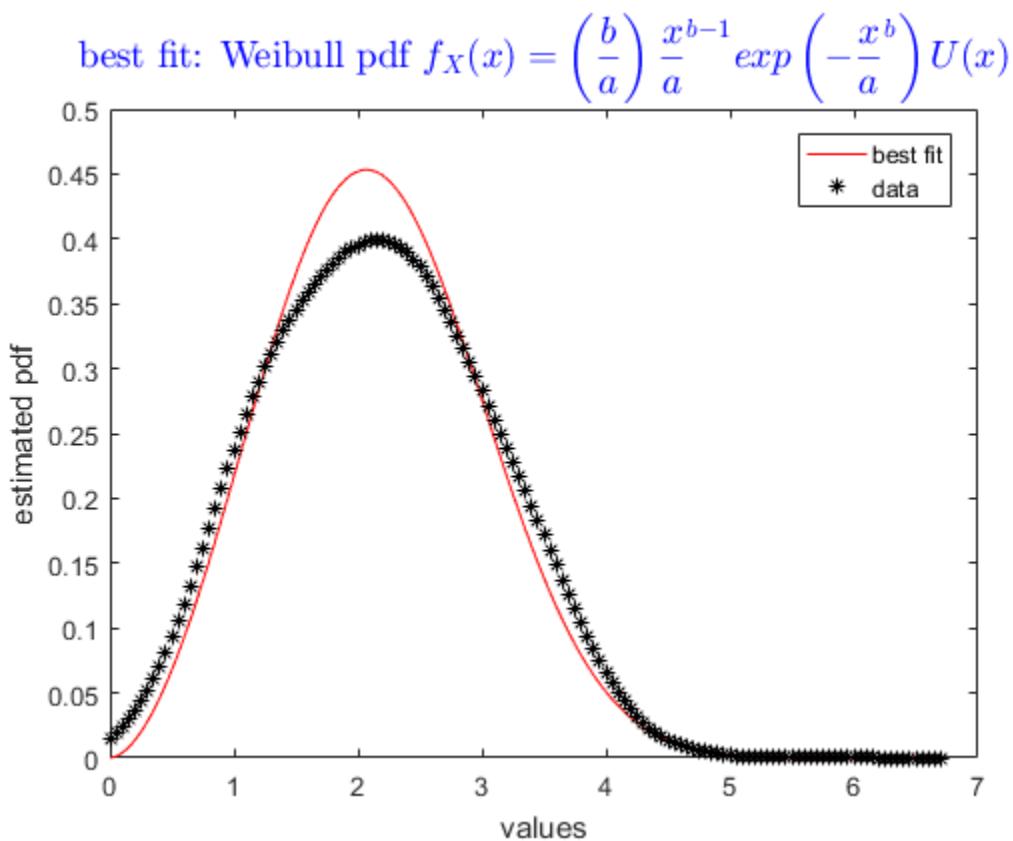
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	3.58	0	NO
Nakagami distribution	5	5.5	0	NO
gamma distribution	5	11.73	1	YES

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

a = 2.4285 b = 2.4285

p m shankar



data (Vader)

```
-2.859 0.428 -3.018 -0.636 -0.631 -2.316 -5.073 -3.687 -1.454 -1.094  
1.838 0.706 -3.249 -3.027 -0.893 -0.779 -1.117 -5.74 -1.786 0.338  
-1.74 1.373 -5.236 -2.994 -4.364 -0.361 -1.796 -3.912 1.353 -2.12  
-1.385 -2.403 -0.691 1.39 -2.867 -2.253 -3.613 -2.907 2.448 -0.857  
-5.489 -2.496 -0.765 0.521 -3.527 -3.483 -1.25 -0.335 -1.22 -3.101  
-3.231 -0.815 1.698 0.923 -2.544 -2.374 -2.274 -0.262 -0.924 0.542  
-6.472 -2.69 3.137 -2.804 2.418 -2.084 0.605 1.818 -3.935 -2.487  
-2.333 -0.7 1.199 0.607 -0.939 -0.202 -5.387 0.522 0.557 -4.157  
-0.116 -2.969 -0.829 0.4 -4.452 -1.448 -0.971 -3.026 -3.196 -2.058  
1.266 -1.908 0.552 0.254 -0.1 0.409 -0.424 -1.308 -0.999 -2.556  
-4.759 -4.329 -1.291 -1.981 -2.203 -3.006 -5.739 -0.736 -0.945 -3.224  
-5.675 -5.352 -1.766 -1.267 0.281 -0.597 0.158 -0.414 -1.805 -2.666  
-0.732 -1.154 -2.665 2.717 -2.251 0.153 1.061 -3.936 -0.53 -0.228  
-1.221 -2.113 -0.054 -0.511 -1.377 -0.369 0.019 -2.989 -1.36 -1.644  
-3.462 -3.092 -0.857 -4.555 1.001 -3.019 1.864 -2.223 2.847 -4.654  
-0.271 -1.705 -3.686 -1.842 -0.845 -0.429 -0.22 -1.717 1.521 1.398  
-1.755 -2.225 -0.378 -5.424 1.217 -2.671 -5.5 2.042 2.852 -1.061  
-0.699 1.093 0.441 -0.036 -1.89 -1.487 -3.622 -0.719 0.467 0.03  
-2.335 -2.329 -1.505 -3.152 -1.777 -2.5 1.219 -3.5 -1.274 -3.772  
-3.218 0.976 -1.248 -1.701 -0.652 0.406 -2.044 -1.28 -1.106 -1.815
```

[p m shankar](#)

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	6.88	0	NO
Laplace distribution	6	29.71	1	YES

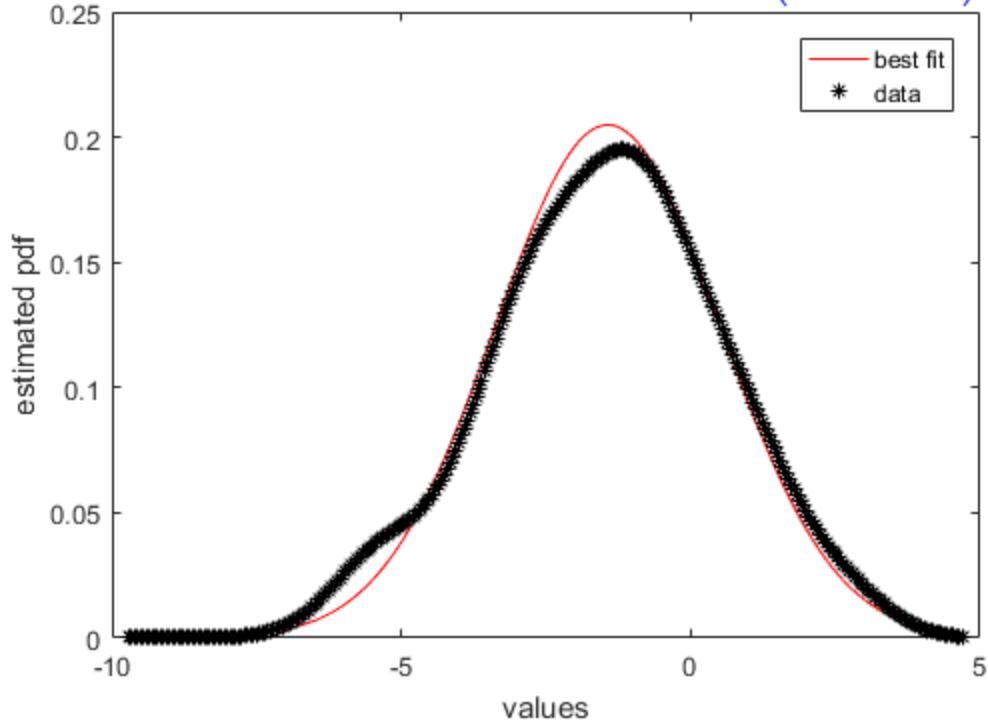
**data set contains -ve values
cannot be gamma, Nakagami, Weibull**

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$

$$\mu = -1.4329 \quad \sigma = 1.9468$$

[p m shankar](#)

$$\text{best fit: Normal pdf } f_X(x) = \frac{1}{\sqrt{2\pi}\sigma^2} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$



data (Wan)

3.588	0.811	6.316	0.56	1.648	4.122	0.85	5.178	0.287	0.764
0.593	5.599	0.141	0.866	1.71	1.672	4.629	1.553	6.228	7.028
0.818	1.336	3.982	4.246	0.321	1.453	0.315	1.564	3.066	3.332
4.513	6.049	0.466	6.217	3.035	0.525	0.419	5.077	2.851	4.053
4.32	0.053	1.778	0.114	1.183	0.34	4.952	4.384	3.219	8.819
1.792	3.462	2.047	2.126	0.018	0.585	1.617	5.63	2.909	2.681
1.965	3.929	0.686	0.596	0.61	2.577	0.886	0.437	4.359	1.891
2.764	5.504	1.053	3.263	2.51	1.594	0.819	4.733	1.531	1.309
1.211	5.13	7.239	1.9	3.524	2.027	0.563	0.979	2.237	1.464
4.451	2.11	3.077	1.802	4.437	4.262	1.204	1.41	2.889	2.125
2.095	5.38	0.613	2.151	2.202	0.581	1.915	5.647	2.116	2.232
1.179	2.409	4.192	0.316	2.06	2.445	1.048	0.568	0.81	1.114
1.293	2.961	1.045	3.566	0.936	8.04	4.967	5.642	1.224	5.192
3.189	1.926	0.979	0.713	1.689	0.296	2.527	5.571	3.363	0.789
1.608	5.021	1.111	2.164	0.686	4.177	1.13	0.556	1.877	2.381
2.235	5.35	3.337	3.063	11.146	2.996	3.338	4.644	6.038	2.751
2.061	0.31	3.378	3.936	2.145	1.571	5.59	2.631	2.897	2.52
0.599	5.176	0.34	12.837	0.987	6.487	2.713	5.8	1.514	0.177
1.594	3.468	0.915	3.048	3.452	1.908	2.05	3.023	1.952	0.823
1.062	7.508	0.418	7.547	1.717	6.844	0.847	0.396	7.101	1.089

p m shankar

Summary of χ^2 tests

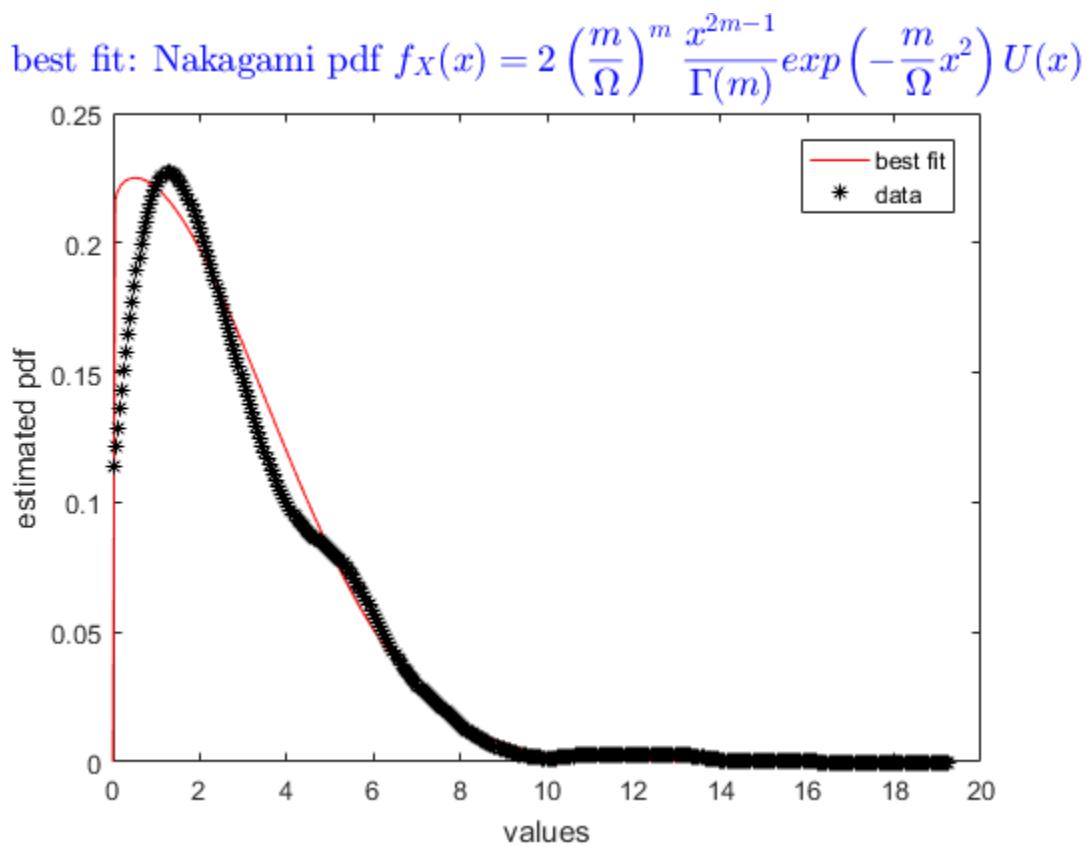
	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	4	3.28	0	NO
Nakagami distribution	3	2.91	0	NO
gamma distribution	5	4.24	0	NO

data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

$m = 0.51102 \quad \Omega = 11.877$

p m shankar



data (Weinberger)

4.247	0.861	0.122	0.313	4.841	2.879	1.302	4.106	3.915	1.201
1.002	2.472	1.422	0.205	0.423	0.45	1.96	0.923	2.705	3.984
2.227	5.489	3.673	1.357	4.029	2.52	1.246	0.664	2.007	4.536
2.23	1.048	4.425	3.377	2.166	0.448	1.447	1.524	5.563	2.062
4.008	2.381	4.204	8.22	1.748	0.118	9.909	9.036	2.145	6.306
0.979	7.335	3.846	0.253	0.576	0.068	1.116	4.345	2.382	5.088
3.141	3.896	3.647	3.415	2.538	2.387	4.328	3.768	4.816	0.032
2.822	3.332	4.213	2.654	1.318	19.981	2.101	12.379	9.622	2.292
3.651	1.467	4.752	1.421	4.629	3.688	3.639	2.215	6.149	1.895
1.633	1.856	2.133	2.45	1.047	0.147	0.53	1.282	1.88	0.871
1.822	3.474	0.21	6.636	3.592	5.673	1.34	2.045	0.549	1.544
7.778	0.946	0.781	1.937	1.33	2.804	0.513	0.284	1.088	3.469
1.552	5.464	2.157	5.396	1.587	2.132	2.665	3.069	7.759	5.026
0.045	0.436	6.634	2.281	5.62	0.584	1.47	0.678	6.765	7.416
1.9	3.554	0.225	1.042	2.63	1.195	4.426	2.046	2.216	0.538
3.869	1.123	3.587	0.098	1.371	1.613	8.315	0.842	3.936	0.567
1.362	0.373	1.355	12.115	1.184	0.093	2.265	2.597	1.728	6.255
0.804	0.087	5.333	0.202	2.045	1.096	0.968	0.32	3.439	5.042
3.284	1.084	2.207	2.115	2.709	5.746	0.319	9.339	2.522	6.884
1.922	0.581	0.229	0.445	2.317	0.806	3.039	2.174	0.401	0.578

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	3	0.72	0	NO
Nakagami distribution	2	4.66	0	NO
gamma distribution	3	0.7	0	NO

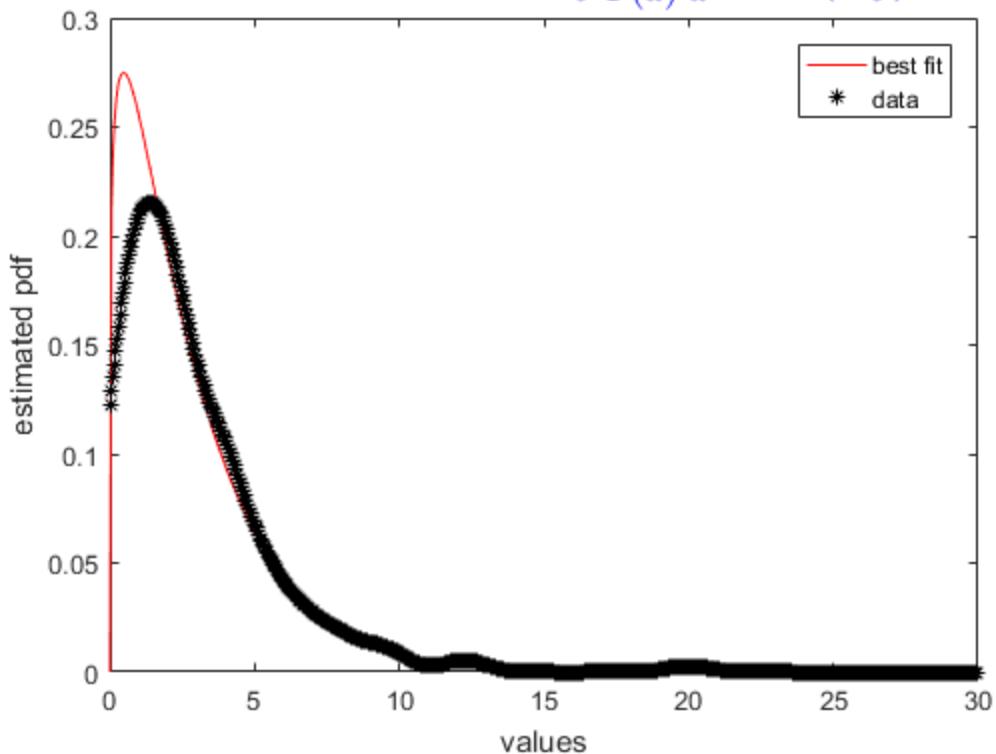
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 1.1982 b = 2.3555

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Wojdylo)

2.467	2.503	1.689	2.965	2.052	2.927	3.308	2.137	1.187	3.143
1.152	2.278	1.221	3.085	2.3	1.915	1.977	2.943	2.392	3.123
3.196	3.177	2.335	0.517	1.248	3.643	2.861	1.119	1.819	4.274
3.645	3.406	2.41	0.737	4.285	1.723	2.04	2.702	3.732	1.494
1.797	2.119	2.398	1.082	2.501	2.375	2.586	0.922	2.999	1.444
2.664	1.837	1.264	2.317	3.05	2.179	1.659	1.812	3.331	1.116
0.378	1.385	2.155	2.924	3.426	1.132	1.567	1.959	3.19	2.543
2.98	2.002	3.18	2.483	1.176	1.651	3.215	2.109	2.965	2.305
2.095	3.513	2.895	1.668	2.367	0.845	2.36	1.577	2.286	1.898
2.017	1.682	3.031	1.176	2.114	1.631	3.112	2.833	3.019	1.835
2.215	3.082	2.53	1.329	3.366	2.345	3.304	3.226	2.168	0.725
2.292	3.377	2.508	0.751	2.023	2.308	2.183	2.533	1.831	1.969
3.085	3.612	2.102	3.089	2.411	2.188	2.976	3.303	1.3	1.054
2.765	3.402	3.165	3.199	1.971	2.832	1.712	2.471	1.633	1.052
1.719	2.89	1.748	2.949	3.688	2.342	3.705	0.703	0.629	0.329
0.385	2.454	2.529	2.767	3.62	3.116	3.008	1.968	2.871	2.739
2.095	2.689	1.895	1.705	2.303	2.163	1.369	2.051	3.015	0.953
1.902	3.096	2.373	2.861	1.46	2.42	1.428	2.32	1.079	3.246
1.818	1.924	1.632	2.005	1.776	3.566	2.918	2.328	1.185	1.296
0.911	3.239	2.807	3.012	2.106	2.508	2.239	2.412	2.479	3.257

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	15.13	1	YES
Nakagami distribution	5	24.38	1	YES
gamma distribution	5	38.97	1	YES

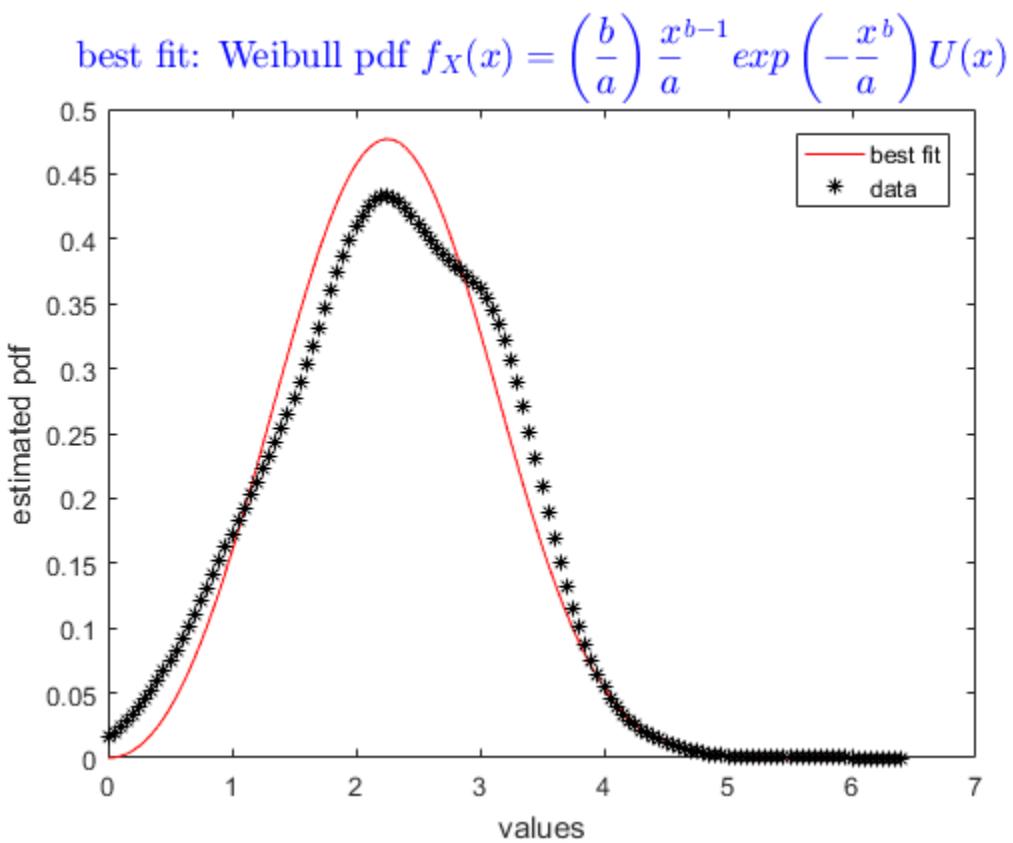
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Weibull pdf $f_X(x) = \left(\frac{b}{a}\right) \frac{x^{b-1}}{a} \exp\left(-\frac{x^b}{a}\right) U(x)$

lowest χ^2 stat

a = 2.5512 b = 2.5512

p m shankar



data (Yang)

2.581	1.364	1.531	2.074	8.058	0.391	0.859	1.701	3.5	8.877
3.368	3.505	2.886	2.007	5.083	2.91	1.067	4.249	3.249	2.364
6.232	1.268	2.774	6.117	4.029	2.905	1.146	5.125	8.155	0.45
2.266	1.33	1.164	0.281	3.981	1.032	3.264	1.309	4.2	3.76
10.13	4.646	0.471	3.314	1.552	0.678	1.282	2.352	1.901	0.916
1.832	4.373	5.275	13.343	1.154	0.871	3.391	6.264	3.383	2.531
2.172	3.083	3.558	2.194	3.352	6.818	0.887	5.164	2.659	2.899
2.329	9.98	3.145	0.716	2.053	1.39	4.906	4.331	2.194	0.391
2.025	0.55	2.132	4.517	6.794	1.524	2.764	2.512	3.215	0.564
3.957	0.831	1.193	4.354	0.345	8.534	2.86	2.206	1.343	3.118
3.741	0.866	2.817	1.66	0.471	1.852	2.226	0.691	3.558	0.706
2.369	0.946	1.549	3.364	6.681	5.44	6.539	2.057	1.783	0.866
3.068	1.799	2.285	3.296	1.196	2.214	2.264	8.348	1.813	4.117
5.921	3.558	1.387	1.688	1.745	1.353	3.634	1.527	1.726	0.278
3.797	2.376	5.083	3.873	0.817	2.356	4.663	4.83	2.722	2.346
2.551	1.354	4.902	1.214	3.278	2.223	1.773	1.445	1.148	1.665
5.379	0.627	1.664	1.438	4.649	2.737	3.834	0.596	6.204	2.167
1.808	1.012	3.05	7.413	2.257	0.967	2.479	2.885	0.566	1.702
0.18	7.183	1.2	6.506	1.364	3.313	4.378	4.708	1.263	3.817
1.088	0.436	3.942	1.33	1.876	2.418	2.15	2.184	1.507	3.489

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	3	2.53	0	NO
Nakagami distribution	3	7.53	0	NO
gamma distribution	4	1.08	0	NO

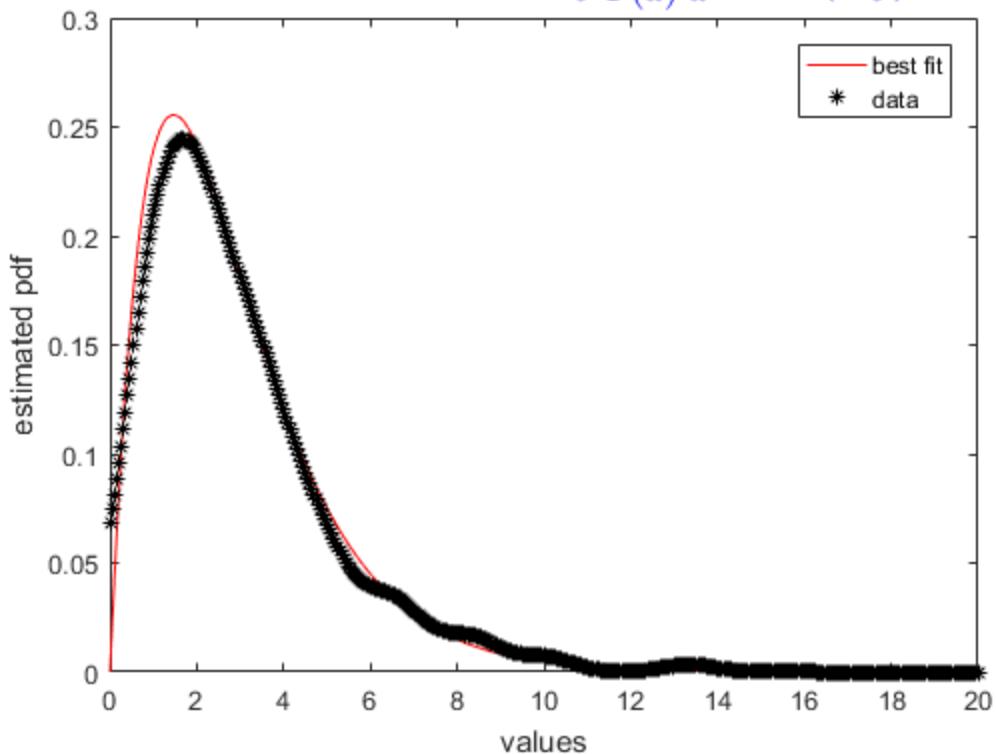
data set is completely positive; cannot be Gaussian, Laplacian

best fit: gamma pdf $f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$

a = 2.0304 b = 1.4214

p m shankar

$$\text{best fit: gamma pdf } f_X(x) = \frac{1}{b^a \Gamma(a)} \frac{x^{a-1}}{a} \exp\left(-\frac{x}{b}\right) U(x)$$



data (Yang)

-0.048	3.718	5.771	3.465	3.768	1.236	2.847	2.836	-2.553	-3.528
-1.208	-1.725	0.346	1.229	1.577	3.236	4.047	3.296	2.318	-0.077
0.848	0.787	3.15	-0.88	1.962	4.129	-0.58	0.401	2.969	1.272
4.606	1.483	4.726	1.085	1.751	0.998	2.476	0.865	1.664	2.448
2.756	1.471	3.932	-0.191	2.893	1.356	-0.314	0.335	-1.873	2.87
-0.555	1.934	4.728	0.871	4.979	3.69	0.551	1.172	-2.623	2.58
1.096	1.86	0.3	4.349	2.831	2.479	0.168	-0.37	5.142	0.739
3.222	0.459	3.58	4.483	2.875	-1.86	0.496	3.876	-0.998	4.386
4.616	1.021	1.011	0.012	3.978	-0.123	0.882	-0.926	3.373	-0.119
1.241	0.114	-1.47	0.751	3.297	-0.004	-0.174	0.738	1.157	-1.442
-0.136	0.13	0.788	2.348	-0.8	-1.152	0.243	4.145	1.343	2.351
2.077	3.365	2.209	1.728	0.972	1.137	2.502	2.271	0.279	3.428
-0.763	-0.917	5.17	0.478	-1.75	1.763	4.841	0.776	2.638	3.441
3.263	0.778	3.295	3.545	2.663	4.288	-1.583	0.647	1.186	2.545
-0.388	-0.865	2.005	-1.338	5.305	2.912	0.956	2.274	-0.637	3.25
0.257	2.789	3.468	6.593	4.66	3.826	2.183	3.306	0.875	1.816
-2.482	-0.678	0.471	0.784	3.342	-0.007	2.469	2.936	1.466	4.631
-0.404	-1.897	-1.121	2.303	-0.376	2.144	3.405	4.972	1.235	4.206
2.016	-1.081	0.125	0.088	0.026	4.771	1.763	-0.518	2.389	1.685
3.896	2.591	-0.871	-0.541	1.86	0.204	-1.984	1.14	2.303	3.065

p m shankar

Summary of χ^2 tests

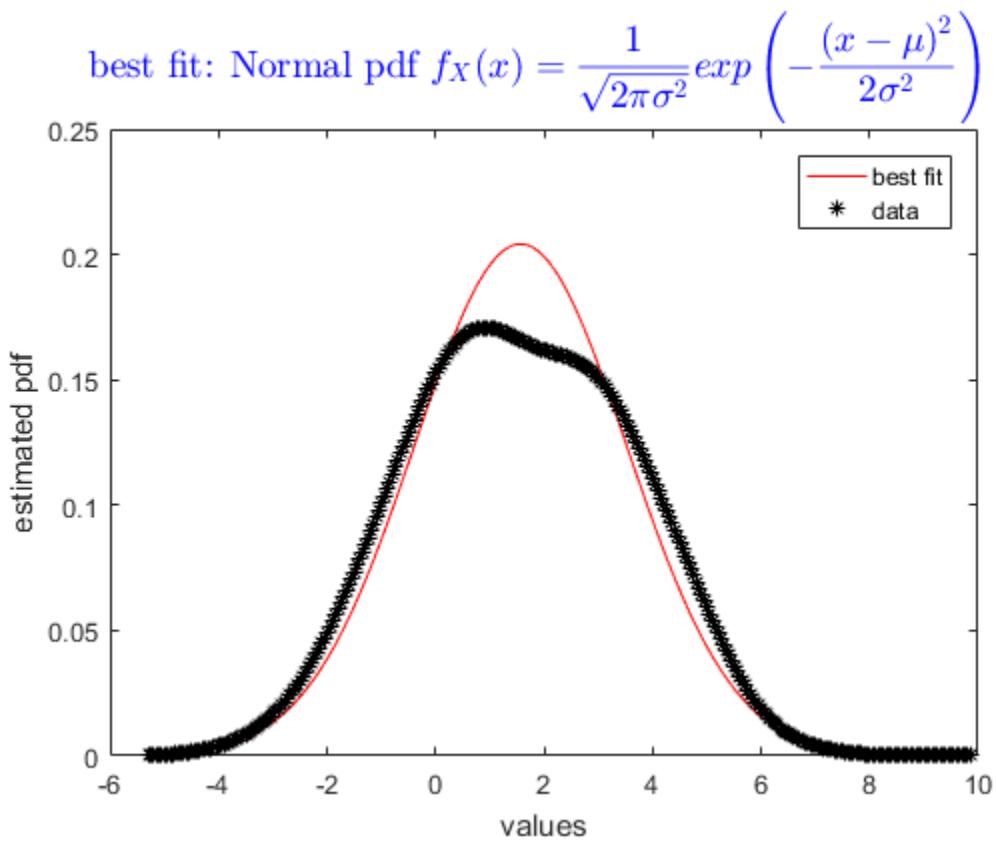
	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	8.73	0	NO
Laplace distribution	6	43.79	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = 1.5671 \quad \sigma = 1.9542$

p m shankar



data (Zhong)

1.355	0.745	0.944	0.706	1.335	0.949	0.256	1.731	1.63	0.672
0.881	1.296	0.377	1.191	0.853	1.003	0.745	0.788	2.098	1.011
2.377	0.858	1.166	0.969	1.409	0.841	1.82	0.873	1.234	2.36
1.065	1.76	0.947	1.457	1.155	1.898	0.751	1.908	1.032	0.712
1.895	1.167	1.796	1.642	1.752	0.629	1.016	1.657	1.735	1.366
1.686	1.302	1.128	1.051	1.677	0.61	1.002	1.227	1.893	0.956
1.035	1.218	2	0.828	1.634	1.434	1.75	1.956	0.953	1.724
0.762	0.969	1.881	1.132	1.207	0.726	0.989	1.515	0.872	1.191
1.122	1.509	2.11	1.018	1.332	0.619	1.98	0.883	1.072	0.987
1.242	0.932	0.45	1.095	1.199	0.381	0.447	0.809	1.152	0.925
1.451	0.707	1.425	0.486	1.559	1.115	1.385	1.022	1.284	0.725
1.147	0.904	1.091	0.929	1.694	1.458	1.001	0.984	1.274	1.268
1.401	1.427	1.994	1.573	1.172	1.004	2.005	0.9	2.097	1.143
0.636	1.119	1.212	1.349	1.281	1.096	0.919	1.155	0.666	1.117
1.3	1.619	1.15	0.996	0.849	1.686	1.547	1.01	0.81	1.007
1.354	1.417	0.899	1.022	1.693	1.187	1.257	0.741	0.909	1.356
2.172	1.534	1.191	1.195	1.832	0.672	1.967	0.972	0.773	1.333
0.281	0.967	0.433	1.693	1.163	1.038	0.69	1.034	1.487	1.734
0.59	1.471	1.355	1.475	1.206	1.214	1.361	0.964	0.758	1.07
1.34	2.108	1.732	1.494	0.829	1.31	1.172	1.643	1.288	0.916

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Weibull distribution	5	8.92	0	NO
Nakagami distribution	5	6.79	0	NO
gamma distribution	5	8.5	0	NO

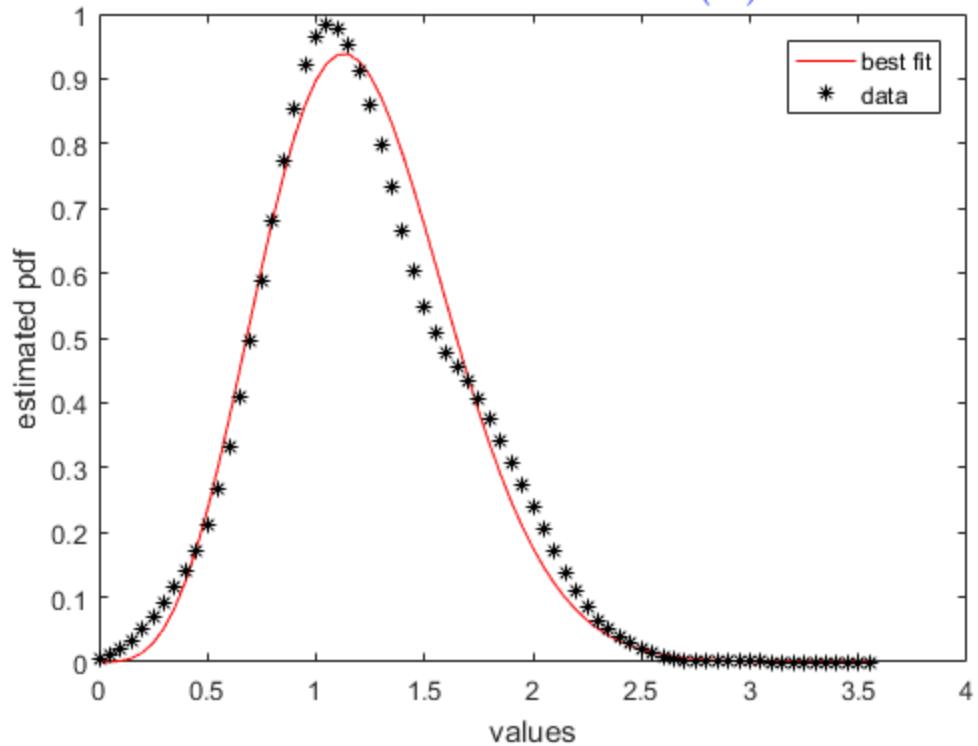
data set is completely positive; cannot be Gaussian, Laplacian

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$

m = 2.1788 Ω = 1.6513

p m shankar

best fit: Nakagami pdf $f_X(x) = 2 \left(\frac{m}{\Omega}\right)^m \frac{x^{2m-1}}{\Gamma(m)} \exp\left(-\frac{m}{\Omega}x^2\right) U(x)$



data (shankar)

0.65	-1.574	0.319	-3.672	0.875	-2.879	2.663	-1.556	0.274	1.735
-1.323	-1.8	-0.08	-4.294	-5.019	1.804	-1.213	0.047	1.062	-4.027
0.576	4.66	-2.743	3.187	-2.183	-0.146	-0.897	-2.66	2.528	-3.789
2.022	1.68	-1.988	1.925	-5.91	2.593	-2.145	-1.36	-0.984	-2.415
-2.377	-1.592	-0.866	-0.177	0.967	-0.431	-1.638	-4.75	-1.292	2.685
0.204	-3.52	-1.418	-0.37	-2.435	-2.143	-0.584	-1.935	-0.515	-2.282
1.148	-0.376	-1.231	2.134	-1.924	3.445	1.825	3.506	-2.313	0.579
-5.461	-1.475	-1.645	-1.387	-1.379	-0.759	-1.189	0.919	2.924	-4.501
-5.834	-1.855	-3.008	-0.593	-3.049	-1.745	1.879	2.216	-2.845	-0.241
-0.846	-1.56	-1.498	-0.244	0.235	-0.802	0.279	-3.318	3.088	-0.987
-2.67	-2.304	1.372	-0.045	4.83	-1.734	1.884	-0.969	4.254	-0.71
-1.734	-2.207	-1.618	-0.968	3.122	-1.337	0.286	0.365	-4.361	-1.208
-0.021	2.382	-3.044	-3.601	-0.702	2.099	-1.474	-1.64	-2.101	-2.151
-3.566	-0.816	-0.047	-0.47	-0.68	0.021	-3.953	0.312	1.665	-2.325
-0.74	-2.4	1.292	1.093	0.297	-1.512	0.238	-0.733	-1.735	-3.296
-2.624	0.639	-0.428	-0.843	-2.36	-3.885	-1.003	-3.519	1.559	-0.124
0.819	-0.492	1.233	1.409	-0.241	-2.037	-0.173	-3.549	-2.52	-2.937
-1.095	-2.438	-0.828	0.062	0.805	-1.401	2.003	0.712	1.603	-0.269
-1.678	-2.481	-1.355	2.472	-1.041	-2.086	-0.054	1.119	-0.011	2.055
0.875	-2.216	-2.428	-1.015	1.652	-0.934	1.733	-1.938	0.625	-0.285

p m shankar

Summary of χ^2 tests

	degF.	χ^2 stat	h	REJECT-YES/NO
Normal distribution	6	4.91	0	NO
Laplace distribution	6	20.16	1	YES

data set contains -ve values
cannot be gamma, Nakagami, Weibull

best fit: Normal pdf $f_X(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$

$\mu = -0.70345 \quad \sigma = 2.0267$

p m shankar

