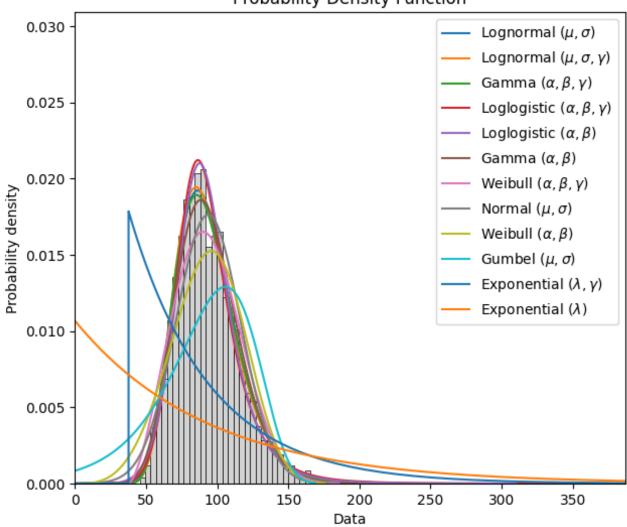
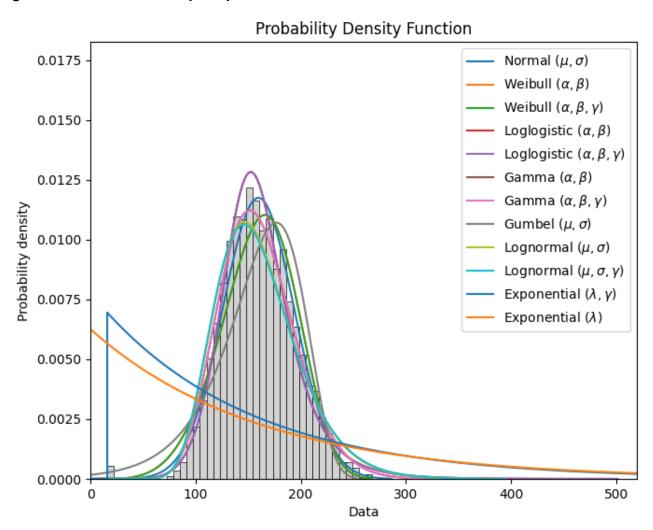
## **Archernar Star - Gaussian fitted pixel values**

## **Probability Density Function**



|                | A1pha    | Beta     | Gamma   | Mu       | Sigma     | Lambda    | AICc          | BIC           | AD          |
|----------------|----------|----------|---------|----------|-----------|-----------|---------------|---------------|-------------|
| Distribution   |          |          |         |          |           |           |               |               |             |
| Lognorma1_2P   |          |          |         | 4.51182  | 0.234044  |           | 26875.075299  | 26887.084030  | 0. 723759   |
| Lognorma1_3P   |          |          | 12.824  | 4. 35477 | 0. 273489 |           | 26869.321914  | 26887.333006  | 0. 274326   |
| Gamma_3P       | 8.05576  | 7.67209  | 31.8406 |          |           |           | 26881.432960  | 26899.444052  | 0.832592    |
| Loglogistic_3P | 70.5222  | 5.81217  | 20.0007 |          |           |           | 26907.056802  | 26925.067894  | 1.618354    |
| Loglogistic_2P | 90.8426  | 7.50308  |         |          |           |           | 26916.814446  | 26928.823177  | 2.027680    |
| Gamma_2P       | 5. 13926 | 18. 2215 |         |          |           |           | 26935.623900  | 26947.632631  | 4. 575302   |
| ₩eibu11_3P     | 63. 233  | 2.60762  | 37.469  |          |           |           | 27083.766951  | 27101.778044  | 16. 421558  |
| Norma1_2P      |          |          |         | 93.6451  | 22.6155   |           | 27229. 450127 | 27241. 458859 | 23.604241   |
| ₩eibull_2P     | 102.541  | 4. 11986 |         |          |           |           | 27507.856819  | 27519.865550  | 48. 299646  |
| Gumbe1_2P      |          |          |         | 105.762  | 28. 4915  |           | 28653. 245920 | 28665.254651  | NaN         |
| Exponentia1_2P |          |          | 37.6811 |          |           | 0.0178686 | 30152.261706  | 30164. 270438 | 515.654879  |
| Exponential_1P |          |          |         |          |           | 0.0106786 | 33239.076205  | 33245.081238  | 824. 555498 |

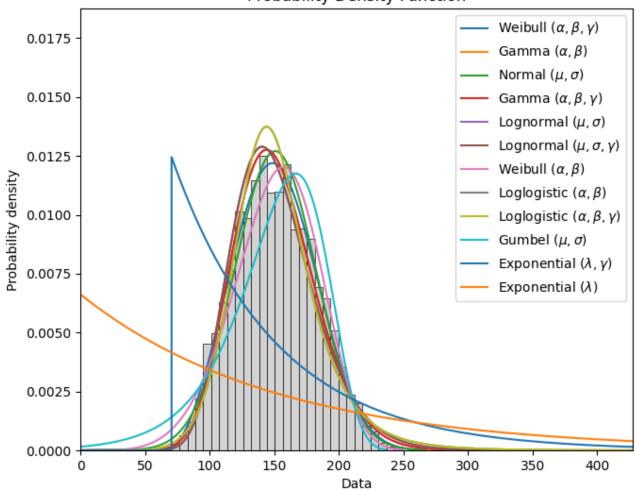
Rigel Star - Gaussian fitted peak pixel values



|                | Alpha    | Beta     | Gamma   | Mu      | Sigma            | Lambda     | AICc          | BIC           | AD          |
|----------------|----------|----------|---------|---------|------------------|------------|---------------|---------------|-------------|
| Distribution   |          |          |         |         |                  |            |               |               |             |
| Norma1_2P      |          |          |         | 159.756 | 33.9558          |            | 29667.985861  | 29679.994592  | 3.103814    |
| Weibull_2P     | 173. 287 | 5.09041  |         |         |                  |            | 29804.809197  | 29816.817928  | 13. 453529  |
| Weibull_3P     | 173. 287 | 5.09041  | 0       |         |                  |            | 29806.813203  | 29824. 824295 | 13. 453529  |
| Loglogistic_2P | 157. 412 | 7. 9505  |         |         |                  |            | 29845.751249  | 29857.759980  | 4.686611    |
| Loglogistic_3P | 157. 412 | 7. 9505  | 0       |         |                  |            | 29847. 755256 | 29865.766348  | 4.686611    |
| Gamma_2P       | 8. 25941 | 19. 3423 |         |         |                  |            | 29967.886076  | 29979.894807  | 5. 759833   |
| Gamma_3P       | 8. 25941 | 19. 3423 | 0       |         |                  |            | 29969.890083  | 29987.901175  | 5. 759833   |
| Gumbe1_2P      |          |          |         | 176.875 | 3 <b>4.</b> 3368 |            | 30212.766398  | 30224. 775129 | 49. 998775  |
| Lognorma1_2P   |          |          |         | 5.04757 | 0.2458           |            | 30383.649826  | 30395.658558  | 20. 151670  |
| Lognorma1_3P   |          |          | 2.35695 | 5.03163 | 0. 252752        |            | 30457.332659  | 30475.343751  | 23.006981   |
| Exponentia1_2P |          |          | 16.0037 |         |                  | 0.00695643 | 35812.541450  | 35824.550181  | 812.890397  |
| Exponential_1P |          |          |         |         |                  | 0.00625956 | 36443.874009  | 36449.879042  | 864. 124225 |

## Unnamed star near zenith - Gaussian fitted peak pixel values

## **Probability Density Function**



|                | A1pha   | Beta     | Gamma    | Mu      | Sigma    | Lambda     | AICc          | BIC           | AD          |
|----------------|---------|----------|----------|---------|----------|------------|---------------|---------------|-------------|
| Distribution   |         |          |          |         |          |            |               |               |             |
| Weibull_3P     | 95.2168 | 2.95816  | 65. 9727 |         |          |            | 29141.332870  | 29159.343962  | 0.762107    |
| Gamma_2P       | 6.72314 | 22. 4455 |          |         |          |            | 29194. 135011 | 29206. 143742 | 3.658557    |
| Norma1_2P      |         |          |          | 150.904 | 31. 4024 |            | 29198.933017  | 29210.941748  | 3.503120    |
| Gamma_3P       | 6.72314 | 22. 4455 | 0        |         |          |            | 29196. 139018 | 29214. 150110 | 3.658557    |
| Lognorma1_2P   |         |          |          | 4. 9942 | 0.214632 |            | 29249.890496  | 29261.899228  | 7.624832    |
| Lognorma1_3P   |         |          | 3.61857  | 4.96876 | 0.220366 |            | 29257.388018  | 29275.399110  | 8.023956    |
| Weibull_2P     | 163.687 | 5. 25209 |          |         |          |            | 29286.891010  | 29298.899741  | 9.070856    |
| Loglogistic_2P | 148.731 | 8.05134  |          |         |          |            | 29350. 272994 | 29362. 281725 | 9. 481685   |
| Loglogistic_3P | 148.731 | 8.05134  | 0        |         |          |            | 29352.277000  | 29370. 288092 | 9. 481685   |
| Gumbel_2P      |         |          |          | 166.79  | 31. 2929 |            | 29710.250396  | 29722. 259128 | 37.950504   |
| Exponentia1_2P |         |          | 70.6069  |         |          | 0.0124537  | 32318. 422581 | 32330.431312  | 488. 228364 |
| Exponential_1P |         |          |          |         |          | 0.00662672 | 36101.875516  | 36107.880549  | 865.770662  |