Graphical Depictions of the Various Estimators

**Distribution of $\hat{\theta}$**

- Nested Samples
  - log–Arrhenius
  - Gleason
  - Arrhenius

**Distribution of $\hat{\theta}$**

- Non-nested Samples
  - log–Arrhenius
  - Gleason
  - Arrhenius
Graphical Depictions of the Various Estimators

Distribution of $\hat{\theta}$

Log-Arrhenius Model

- nested density
- nested mean
- non-nested density
- non-nested mean

Distribution of $\hat{\theta}$

Gleason Model

- nested density
- nested mean
- non-nested density
- non-nested mean
The overall bias, variance and MSE estimates for nested and non-nested samples for various species accumulation curve models based on the data used in the above graphs are shown below. These results differ slightly from what was presented before (using a weighted calculation).

**Estimator Properties (based on the above graphs)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Nested</th>
<th>Non-nested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>log.Arr Gleason Arr</td>
<td>log.Arr Gleason Arr</td>
</tr>
<tr>
<td>Bias</td>
<td>9.284 −15.922 1.688</td>
<td>18.364 −10.936 5.266</td>
</tr>
<tr>
<td>Variance</td>
<td>469.149 90.139 122.315</td>
<td>491.740 52.735 88.850</td>
</tr>
<tr>
<td>MSE</td>
<td>555.337 343.664 125.165</td>
<td>828.965 172.324 116.581</td>
</tr>
</tbody>
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