



New likelihood variables (the angles)

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February 24th, 2011



Present plan

- **Likelihood:** should include maximum possible information

- **Scoring & shower building:**

- **First iteration:**

- Skeleton (simultaneous building of tracks)
- Tight criteria
- High purity
- Reasonable efficiency

- **Second iteration:**

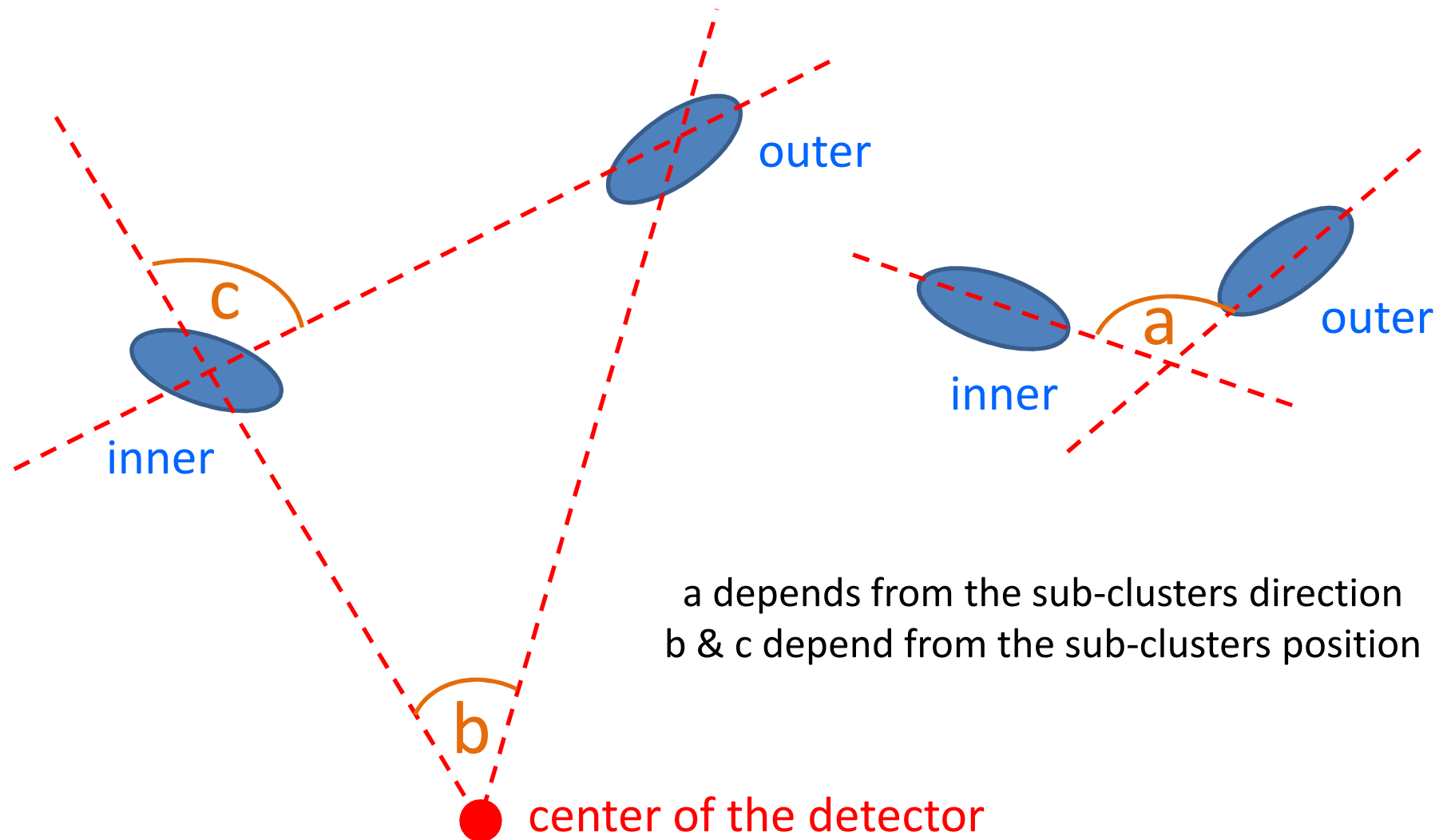
- Criteria can include information based on the first iteration
- Increasing the efficiency
- Adding the isolated sub-clusters
- Adding the ambiguous sub-clusters

- The criteria of the score depends from the way that it is used in the shower building

- Both should be optimized at the same time

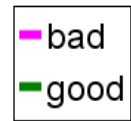
From the last meeting

Three angles

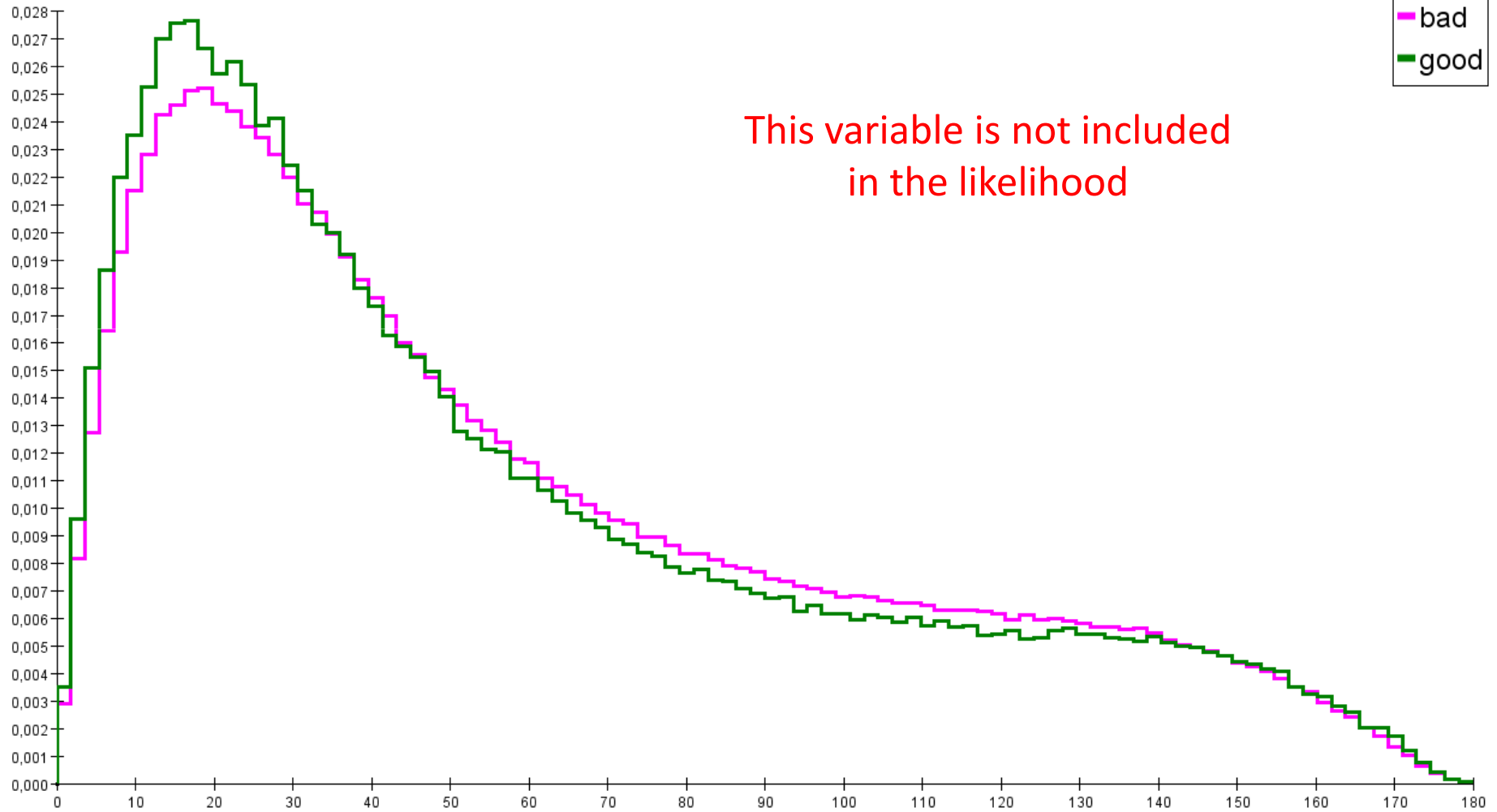


PDF

Angle a - Clump Clump

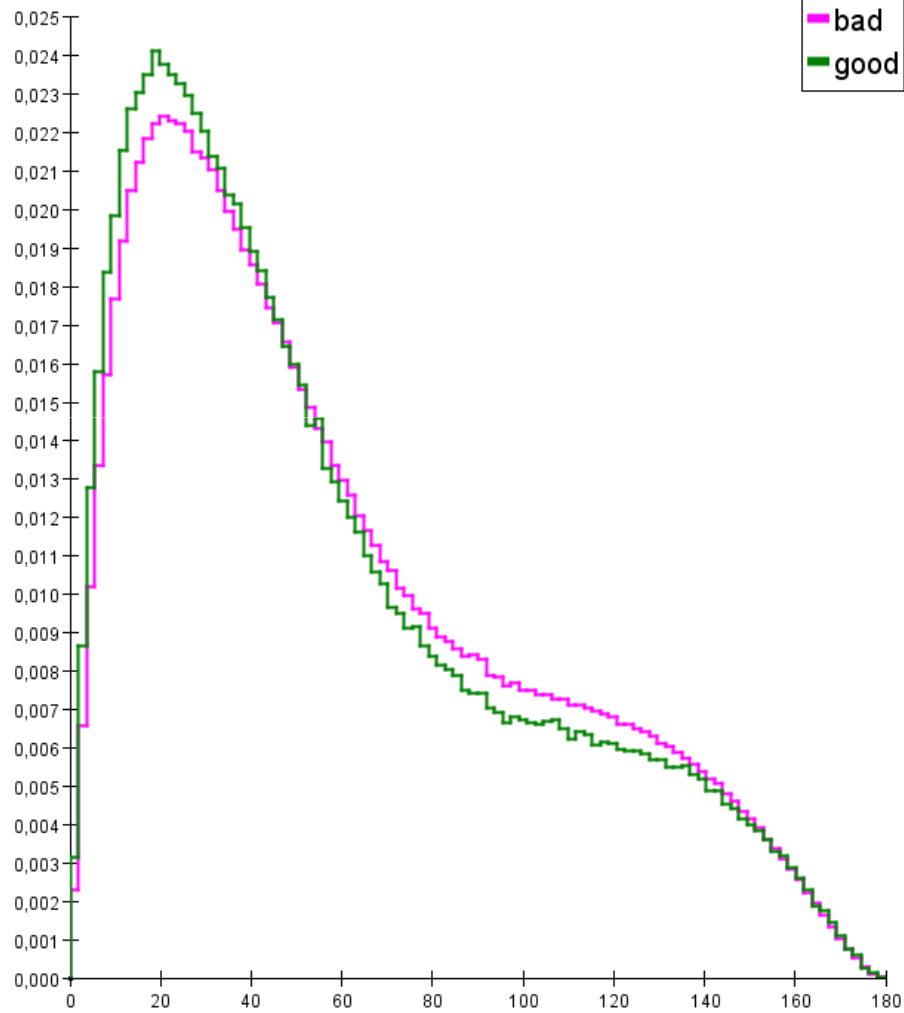


This variable is not included
in the likelihood



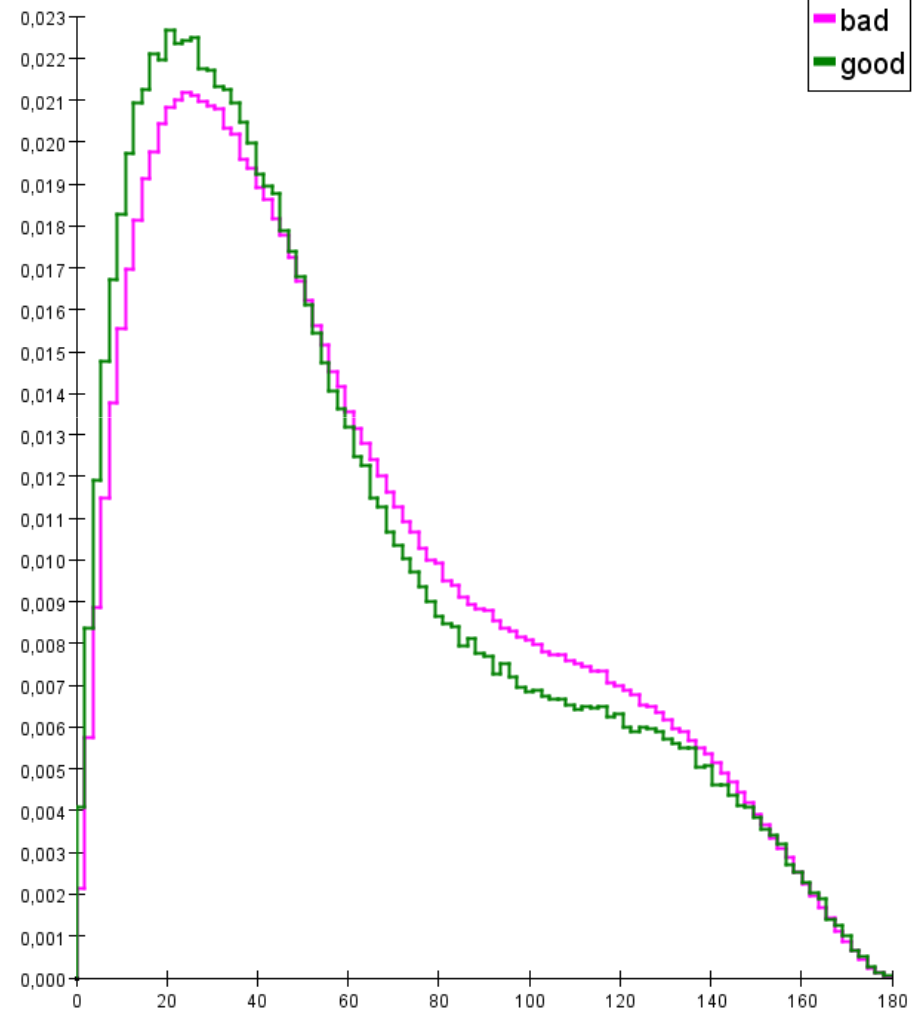
PDF

Angle a - Mip Clump



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Angle a - Mip Mip



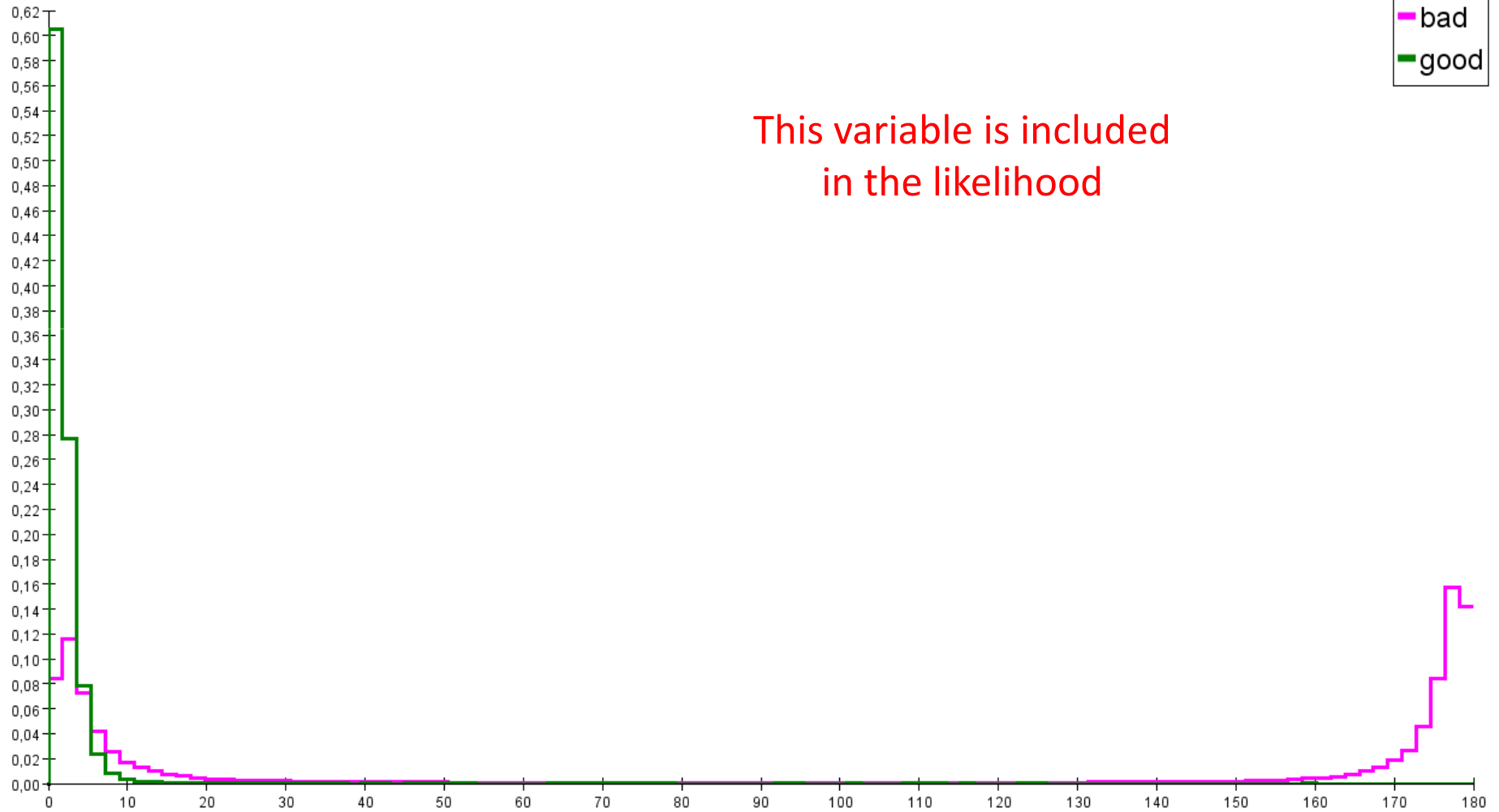
G. Halladjian

PDF

Angle b - Clump Clump

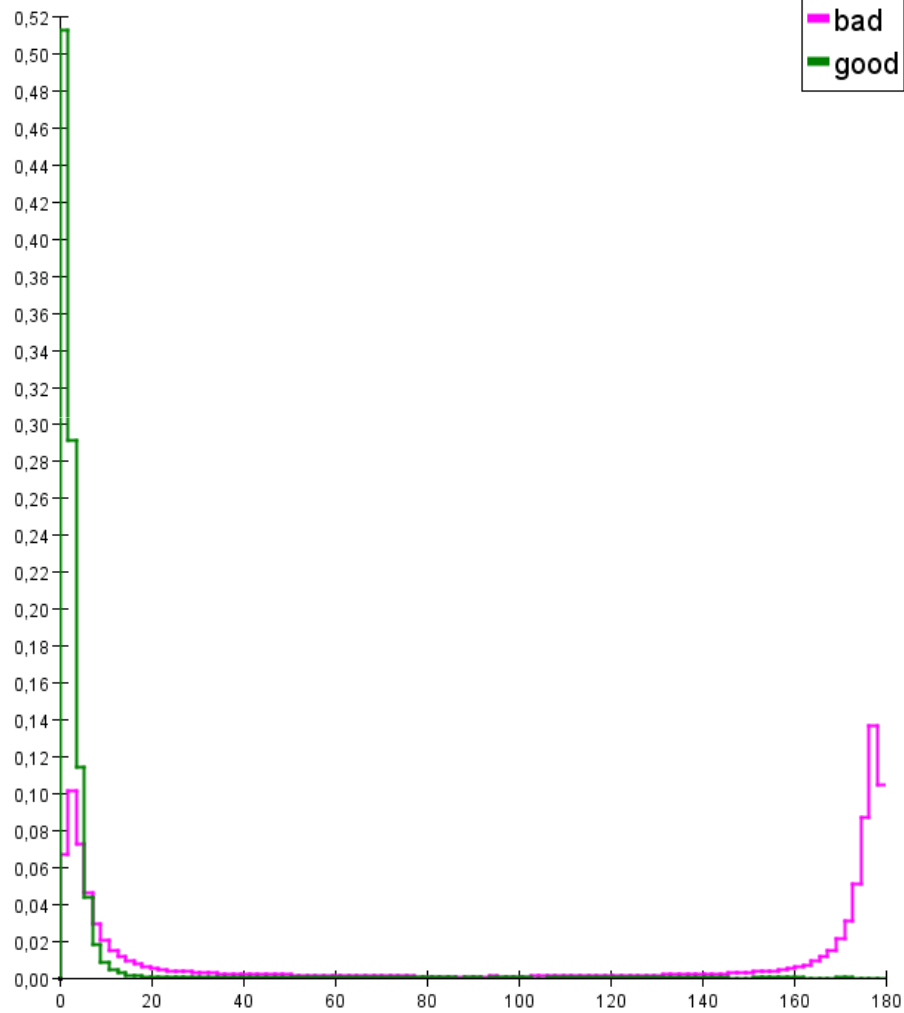


This variable is included
in the likelihood



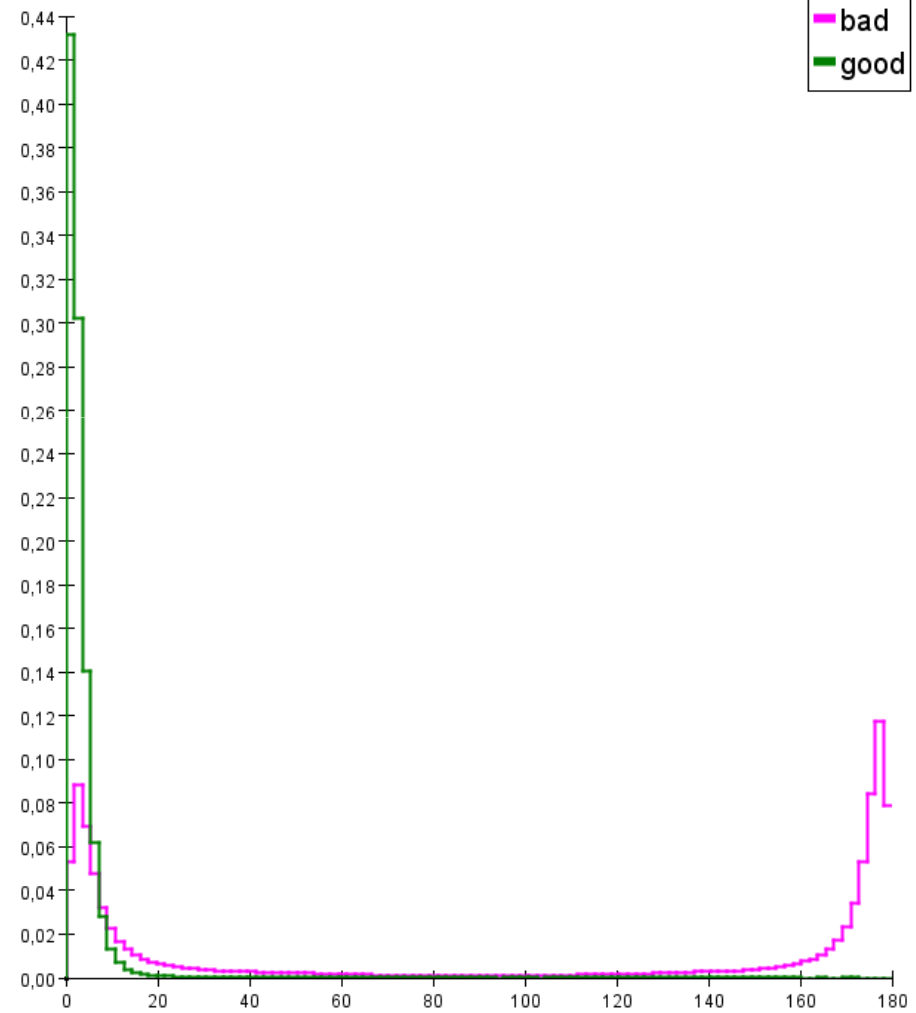
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Angle b - Mip Clump



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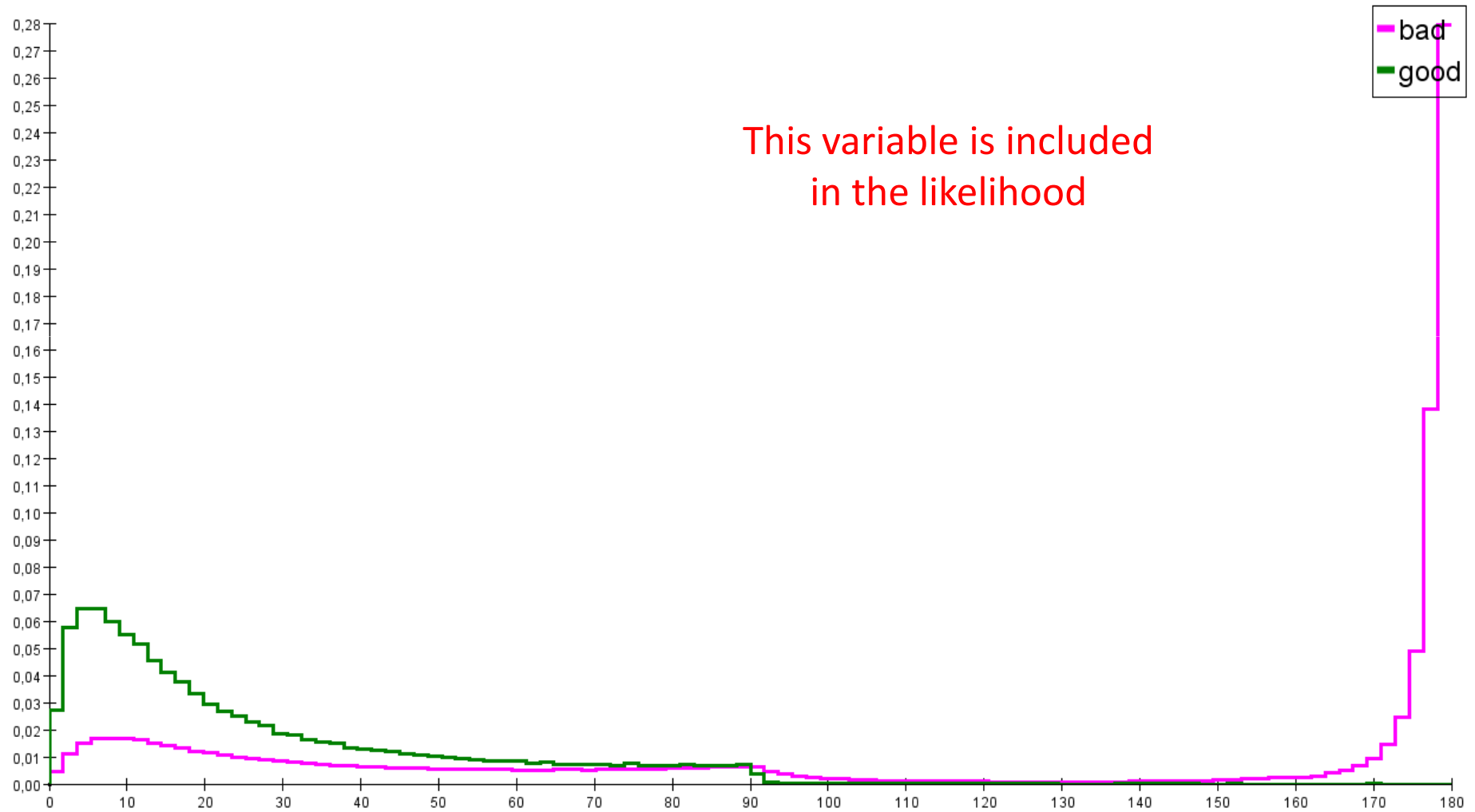
Angle b - Mip Mip



G. Halladjian

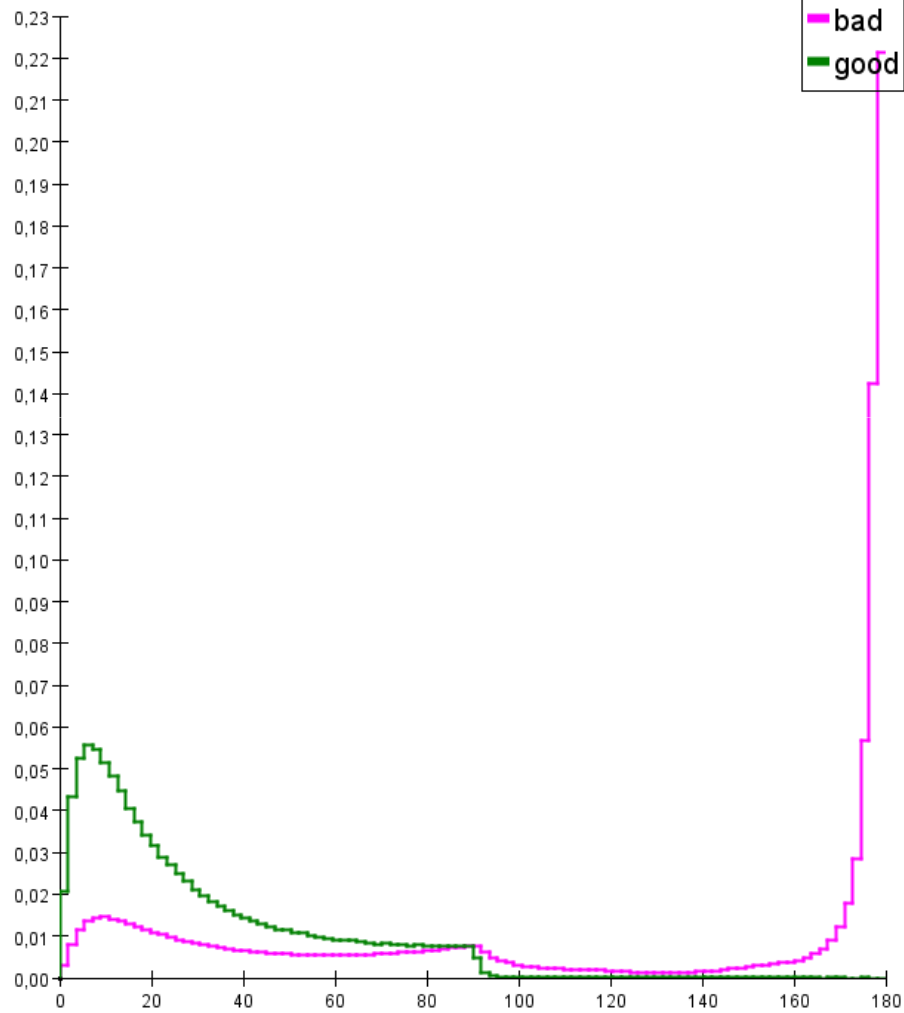
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Angle c - Clump Clump



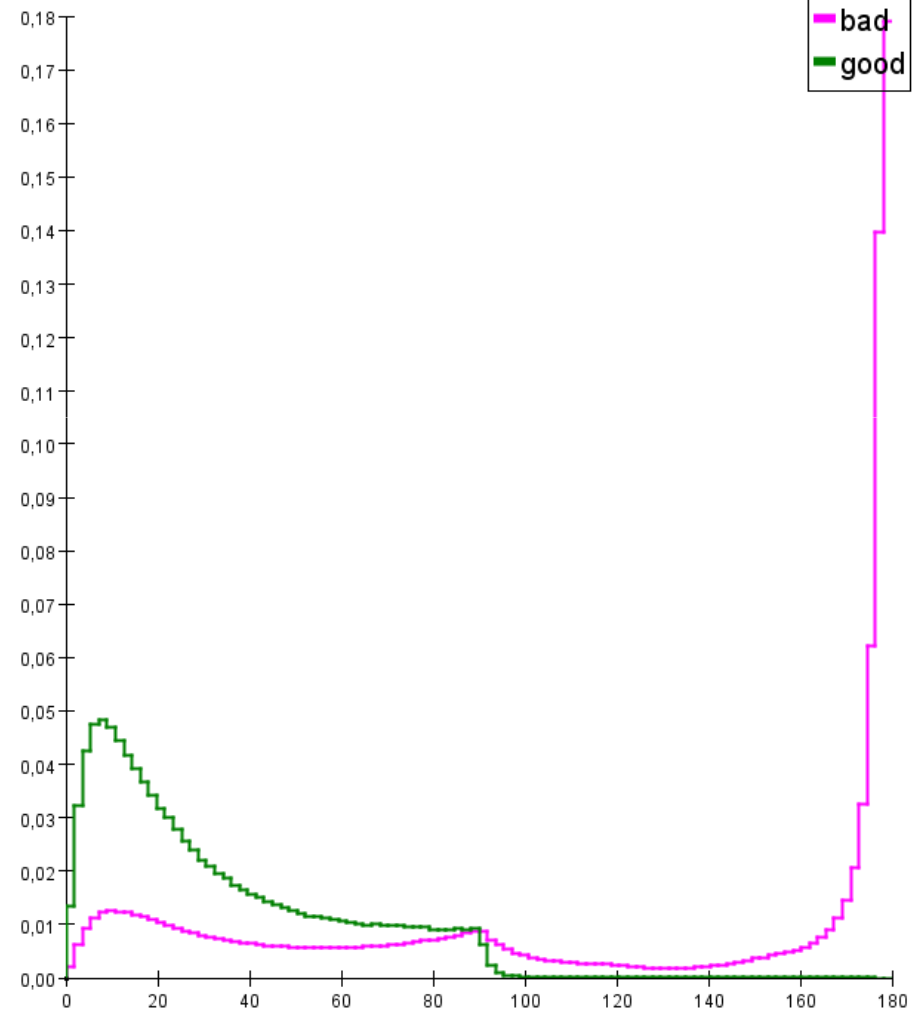
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Angle c - Mip Clump



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Angle c - Mip Mip

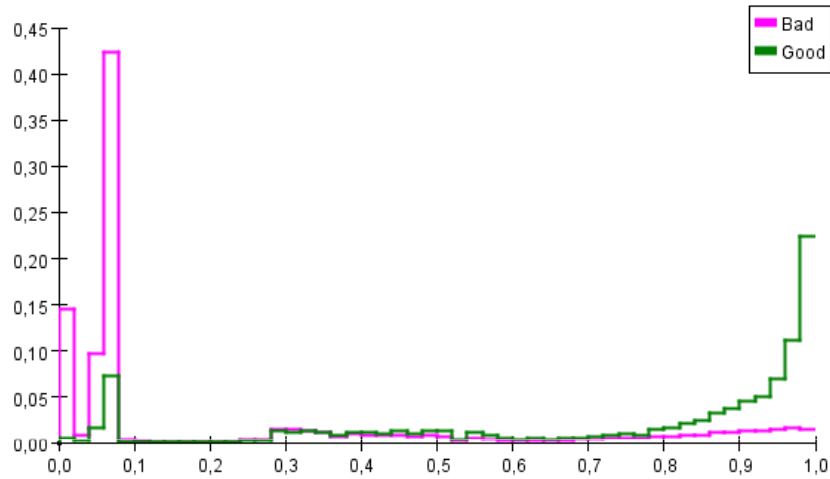


G. Halladjian

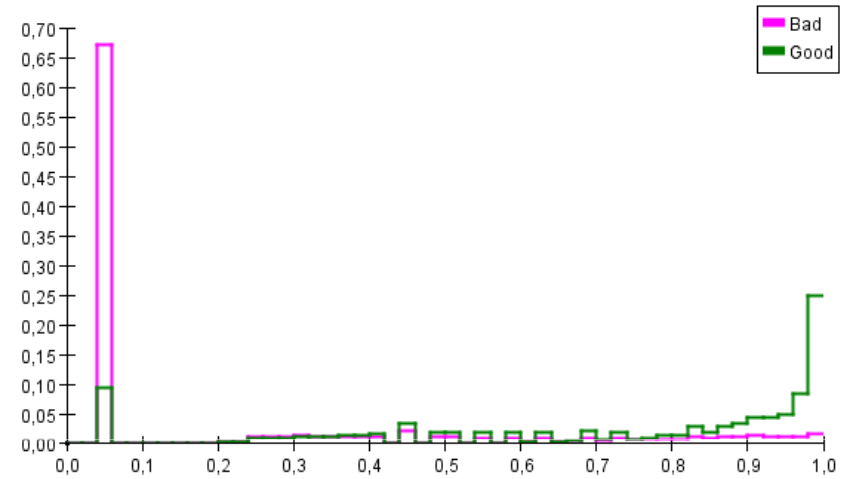
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Likelihood (w/o angles)

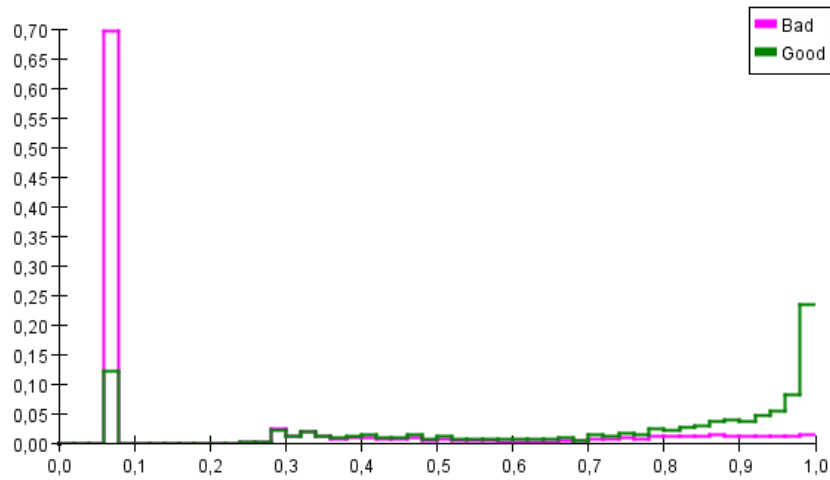
Likelihood - AnyCluster AnyCluster



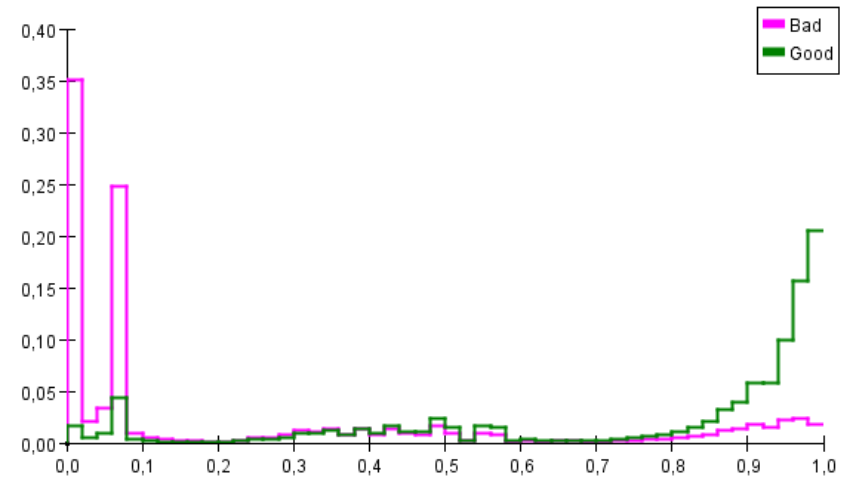
Likelihood - Clump Clump



Likelihood - Mip Clump

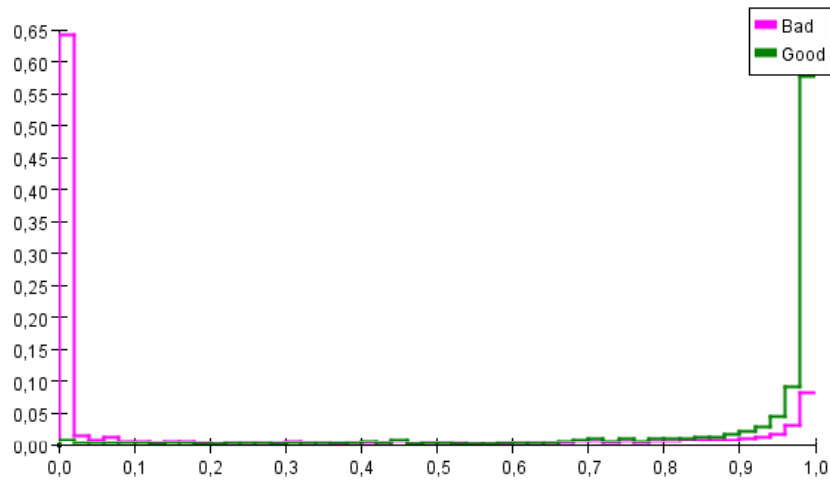


Likelihood - Mip Mip

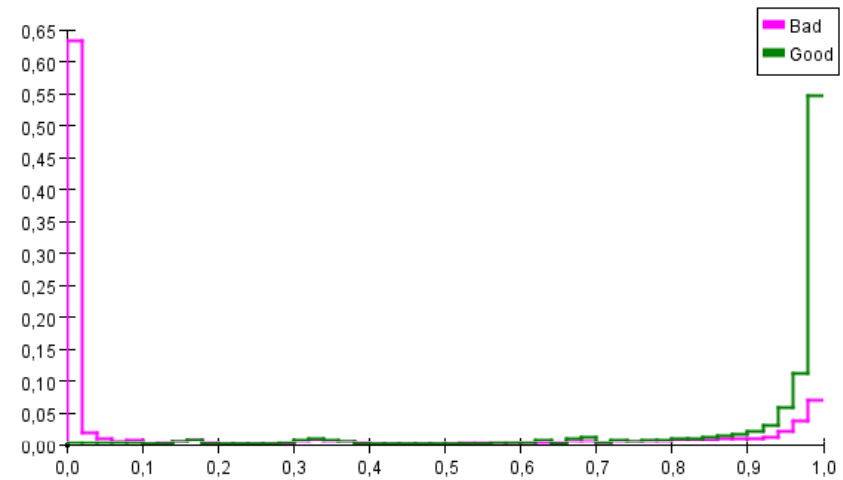


Likelihood (with angles)

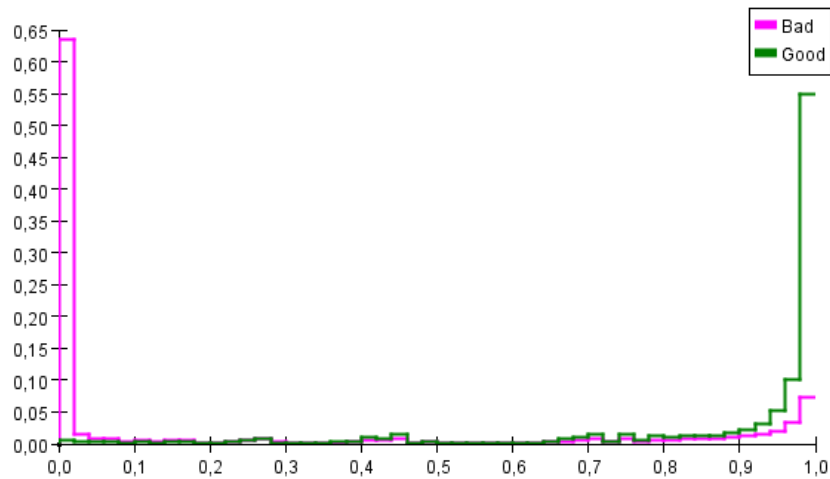
Likelihood - AnyCluster AnyCluster



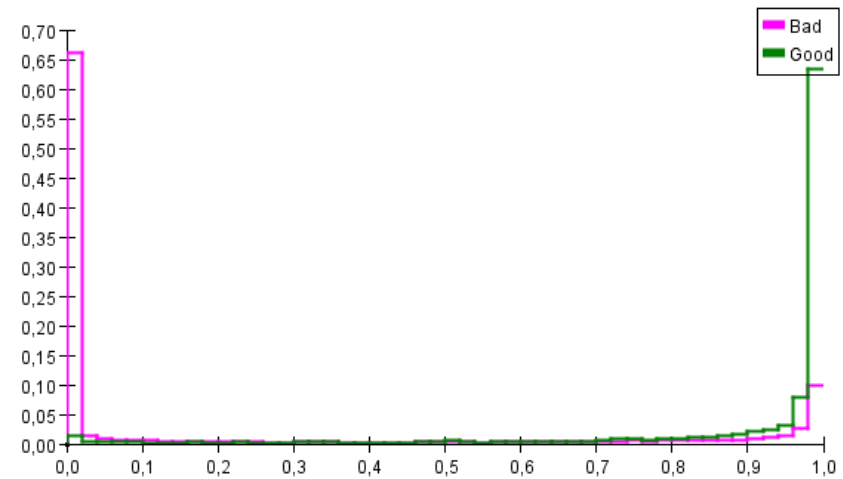
Likelihood - Clump Clump



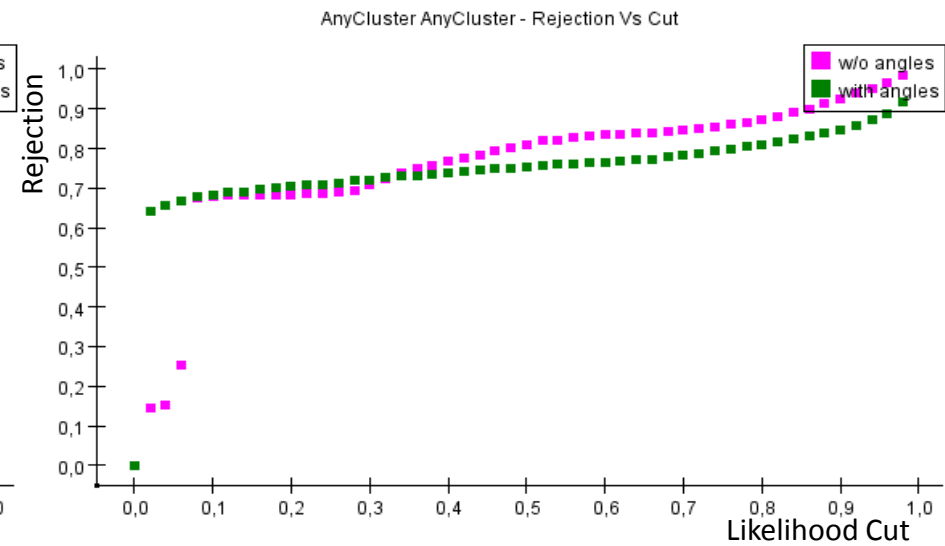
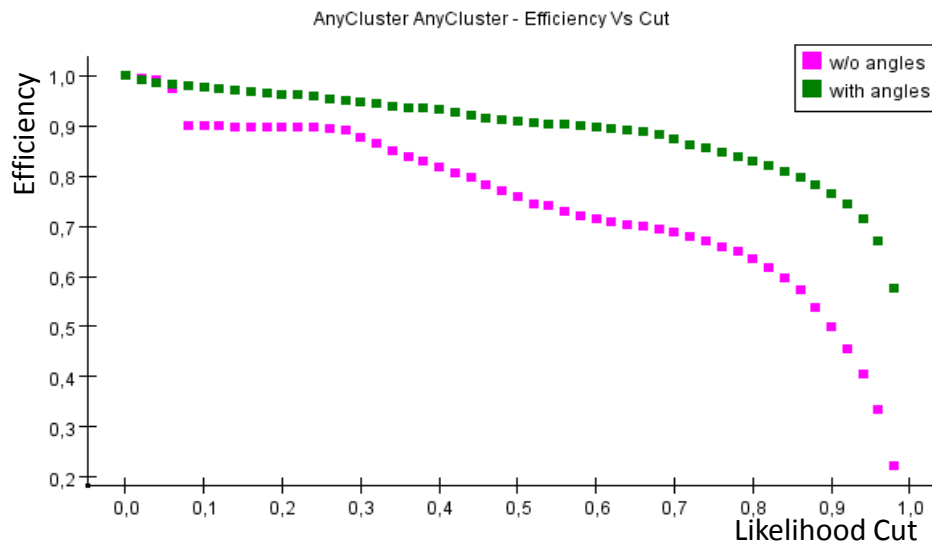
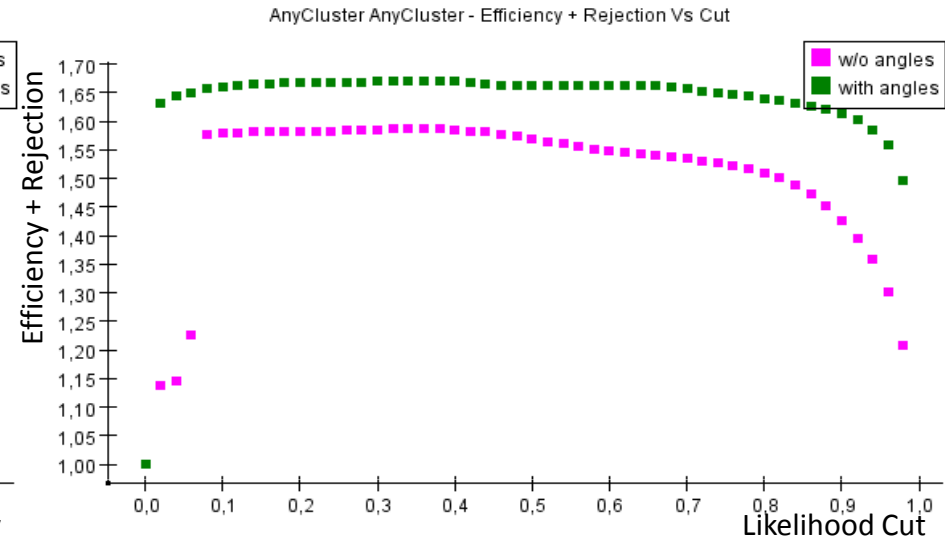
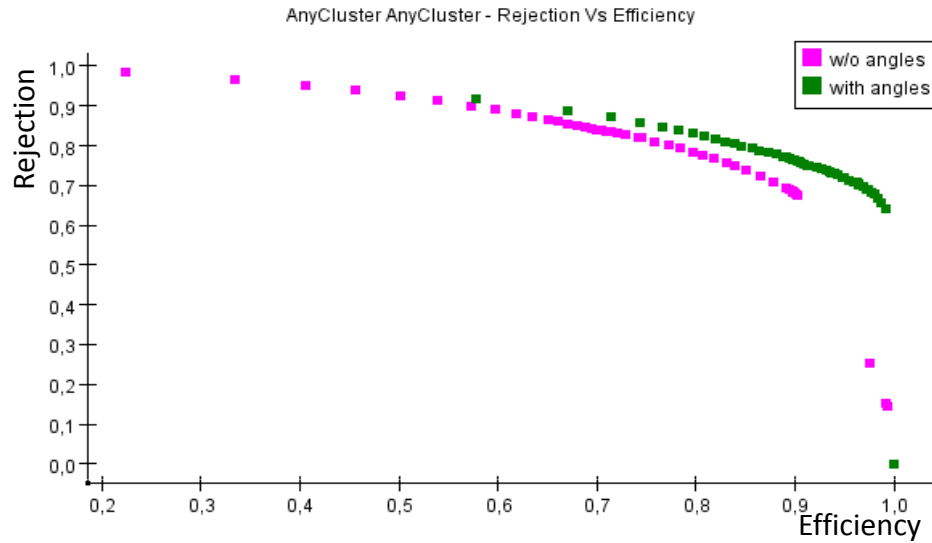
Likelihood - Mip Clump



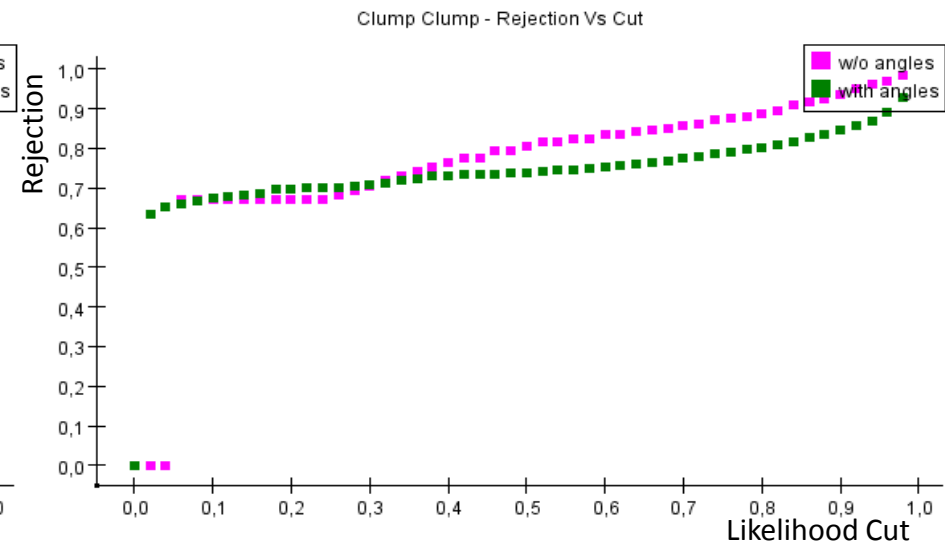
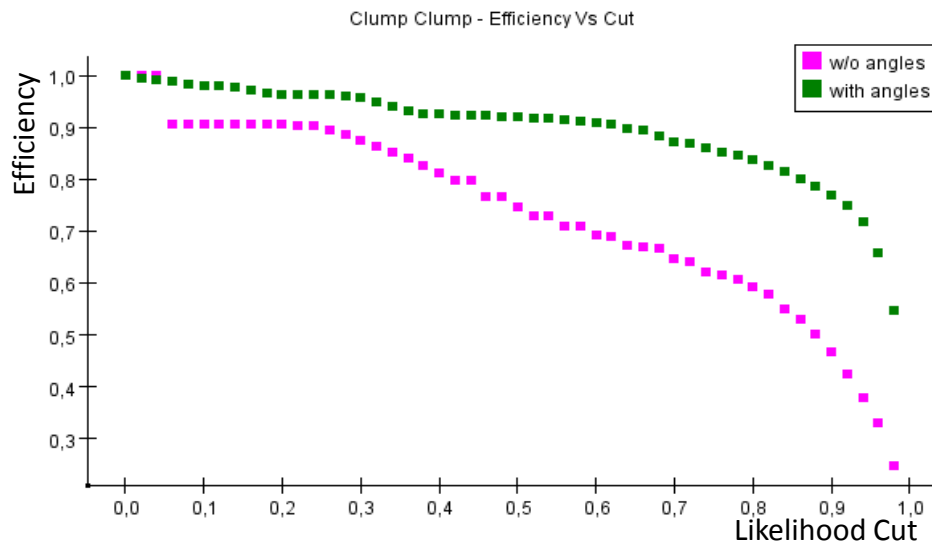
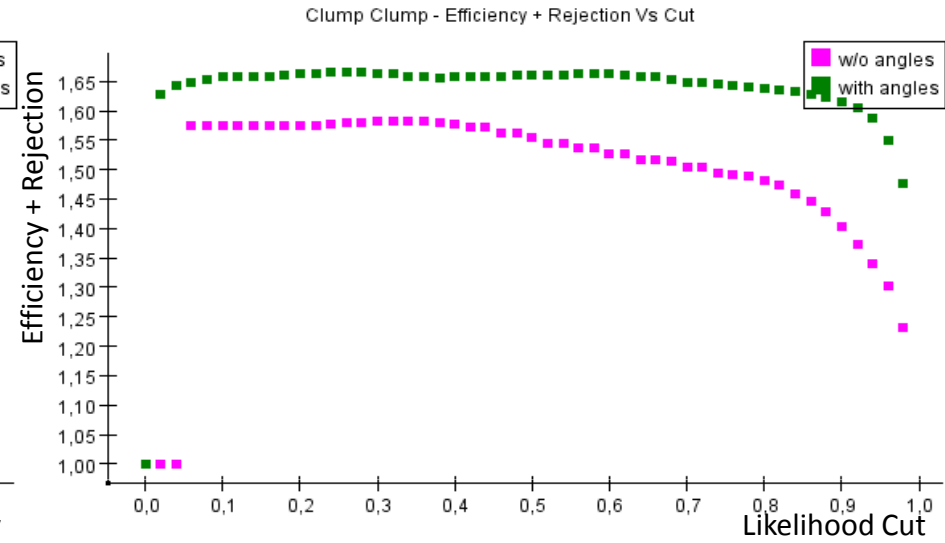
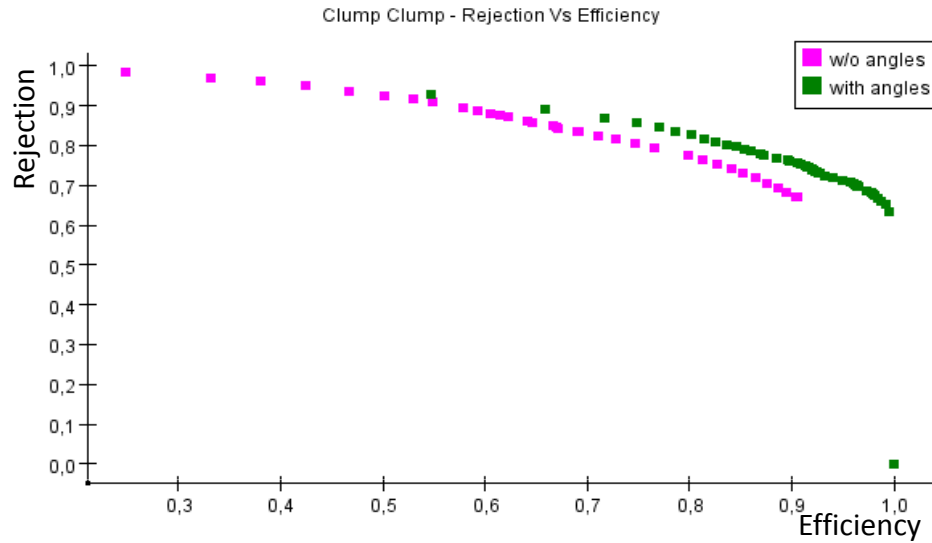
Likelihood - Mip Mip



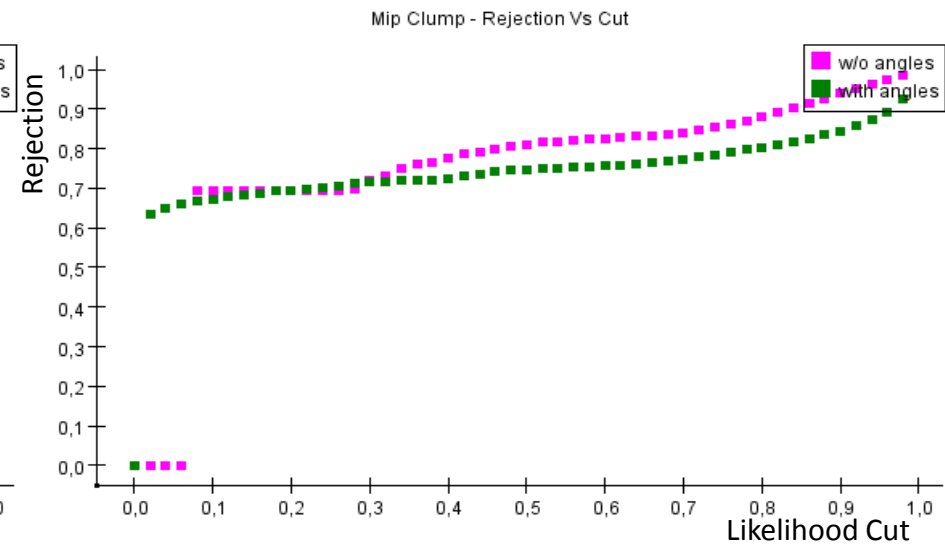
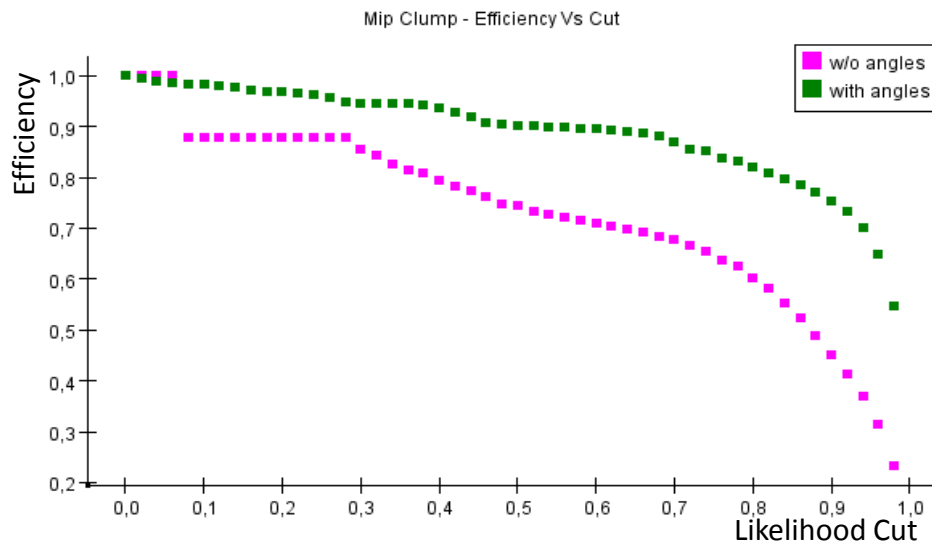
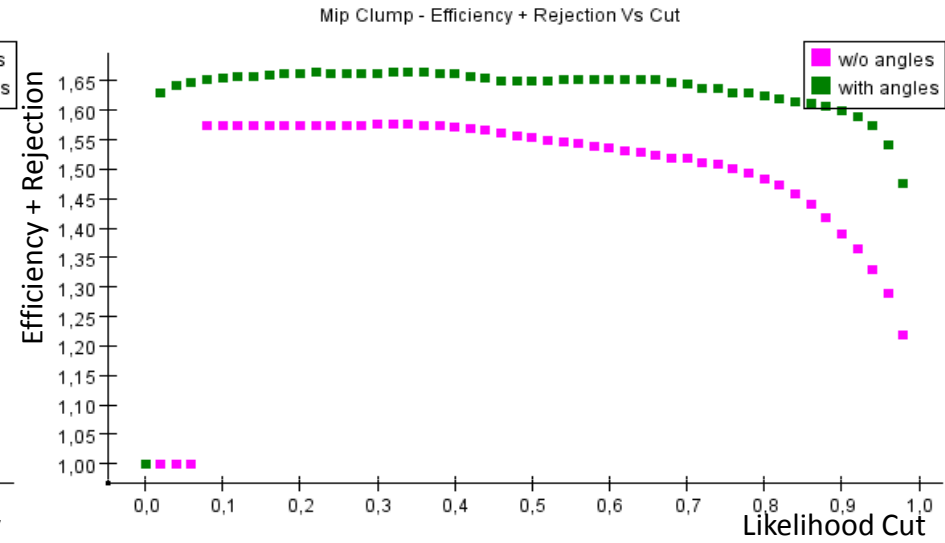
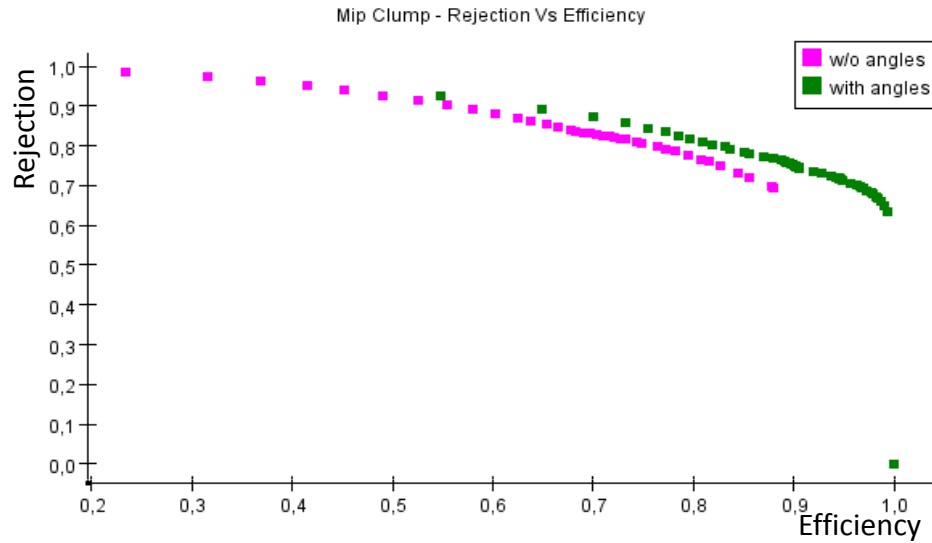
Efficiency & Rejection



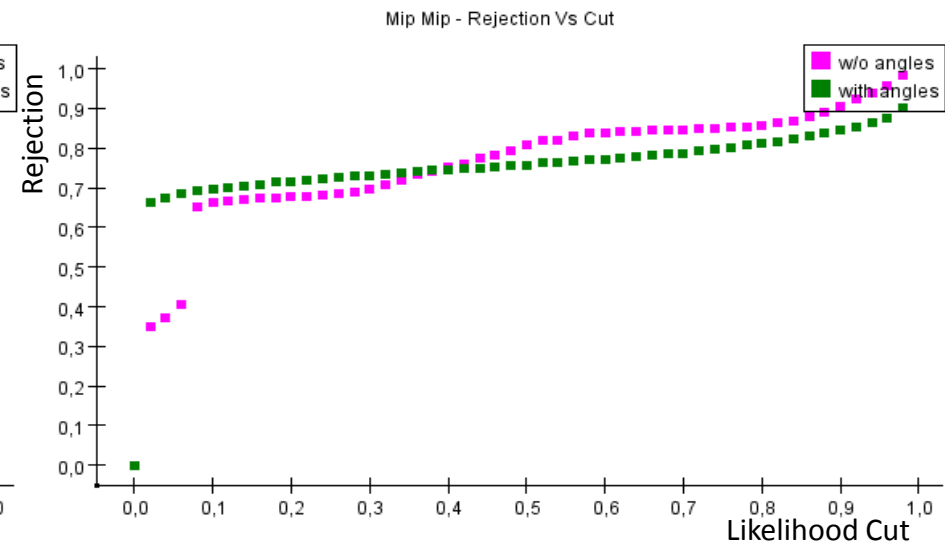
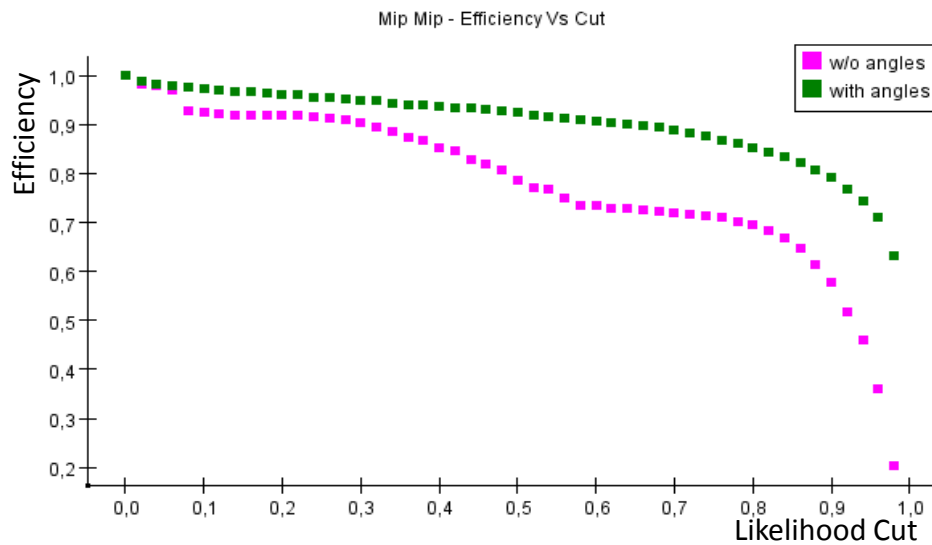
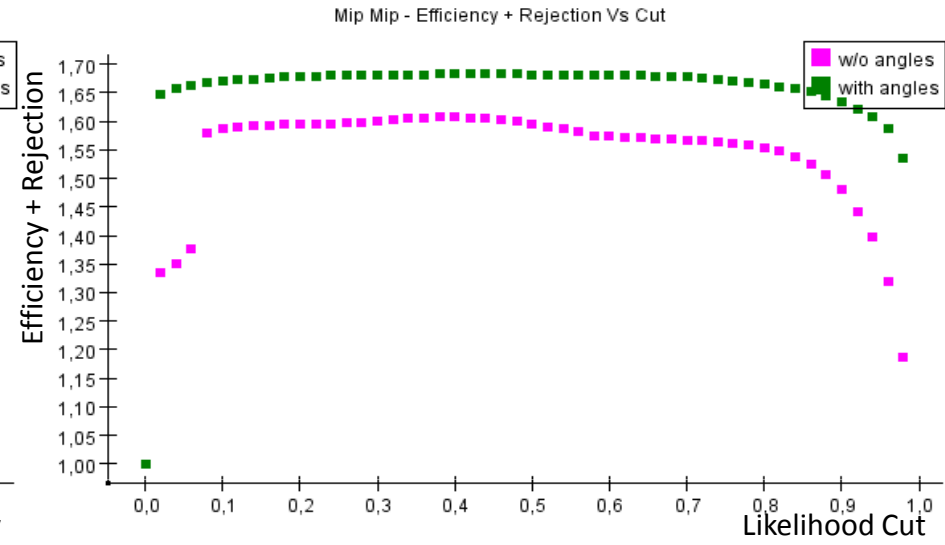
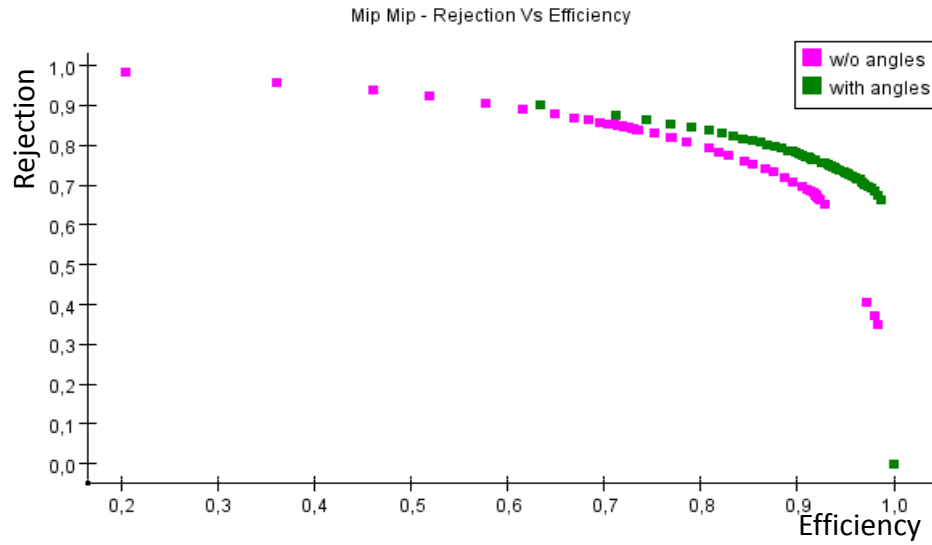
Efficiency & Rejection



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- Skeleton (simultaneous building of tracks)
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- High purity
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- Criteria can include information based on the first iteration
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