Supplementary material for FracAbility poster

Censoring simulation procedure

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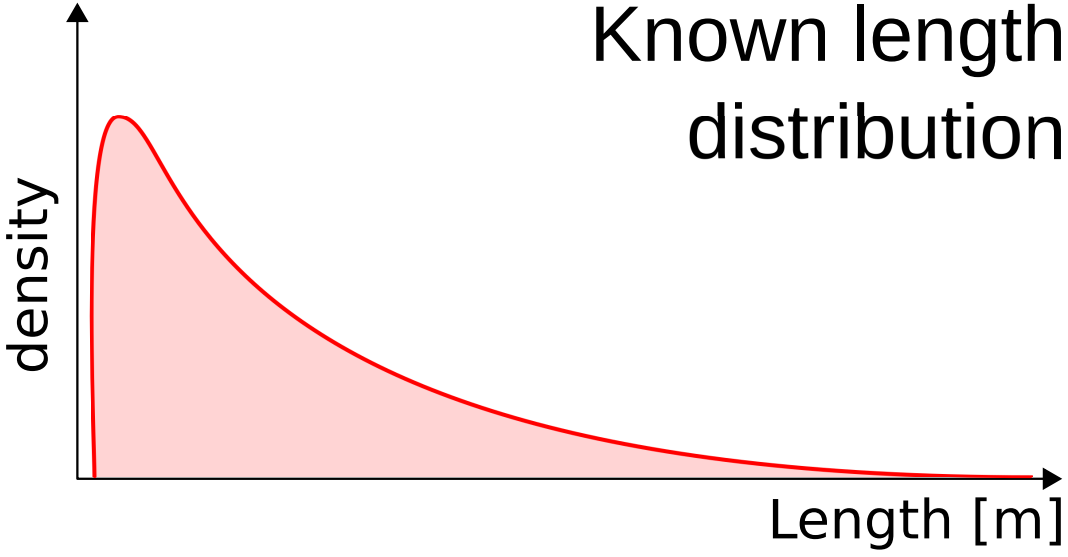
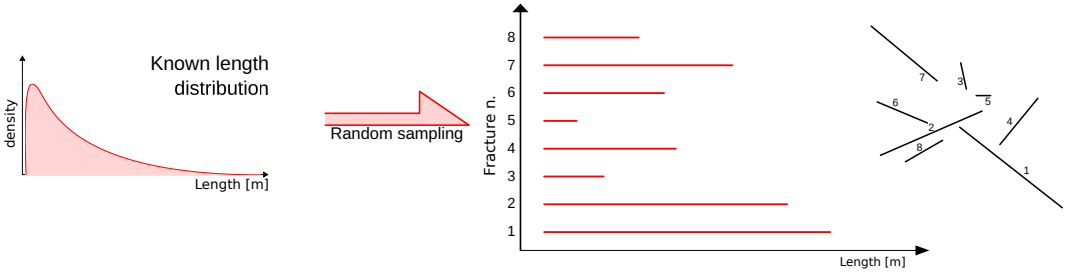
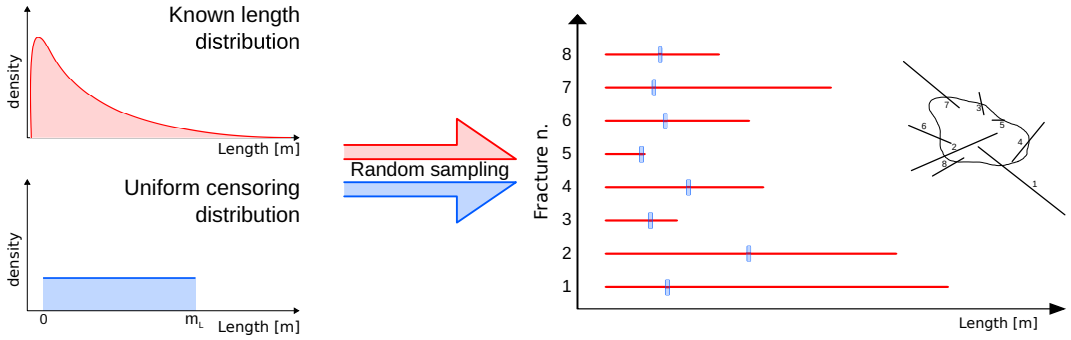
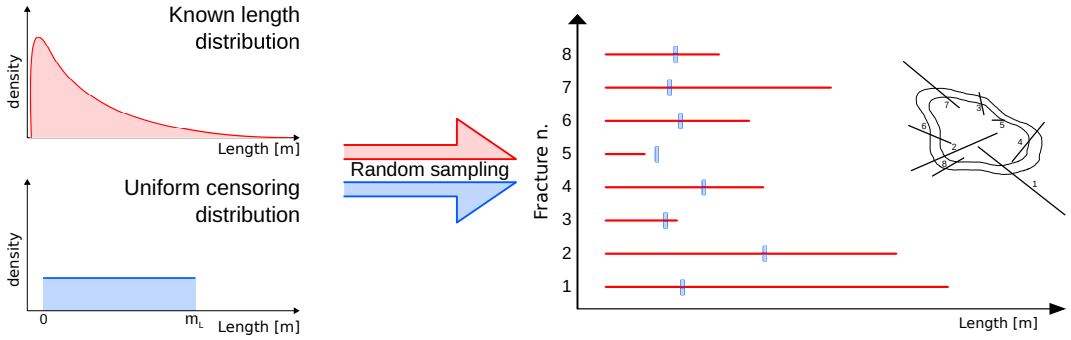
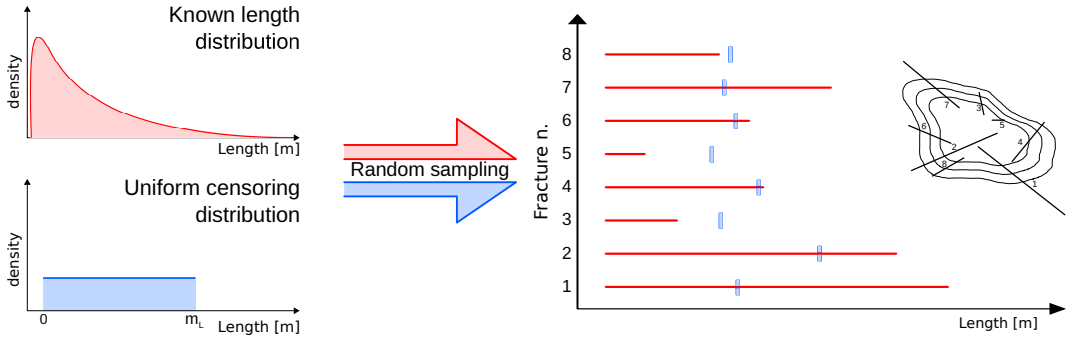
Known length distribution

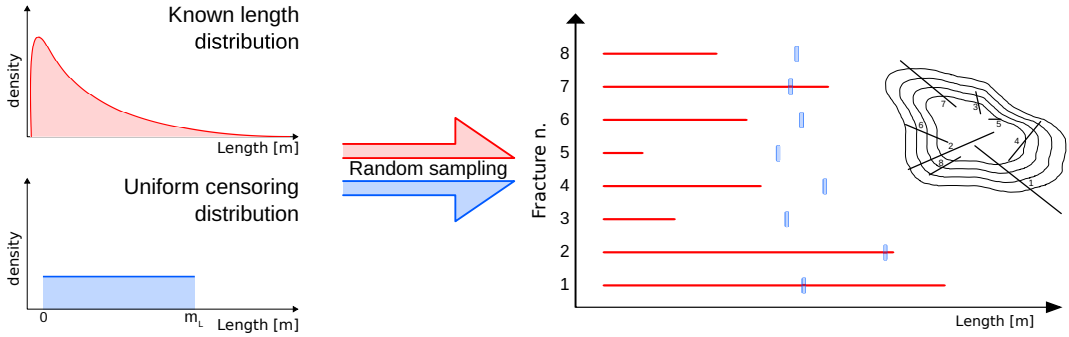


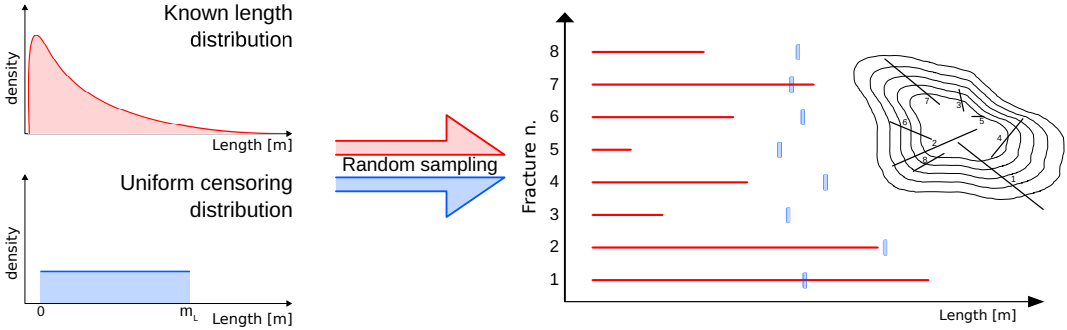

Known length
distribution
density
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]
7
3
5
6
2
4
8
1

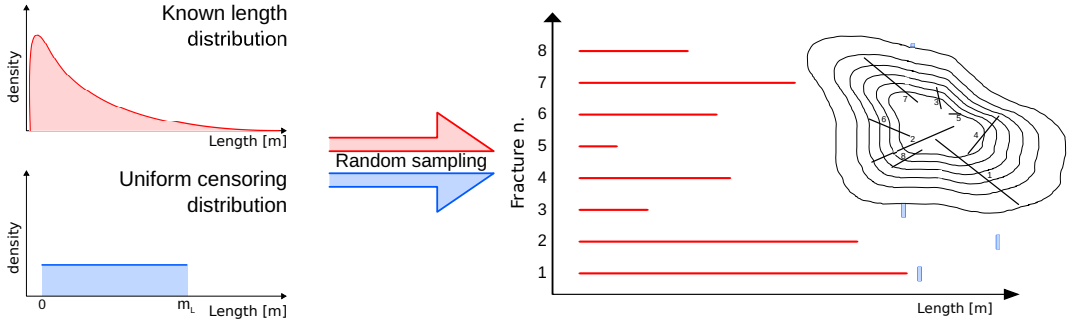

Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]

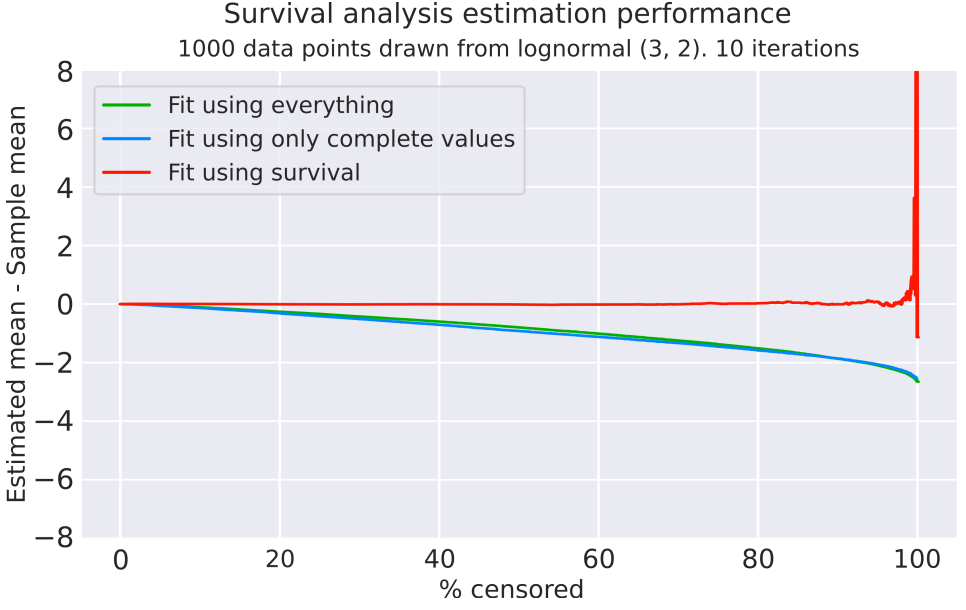

Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]

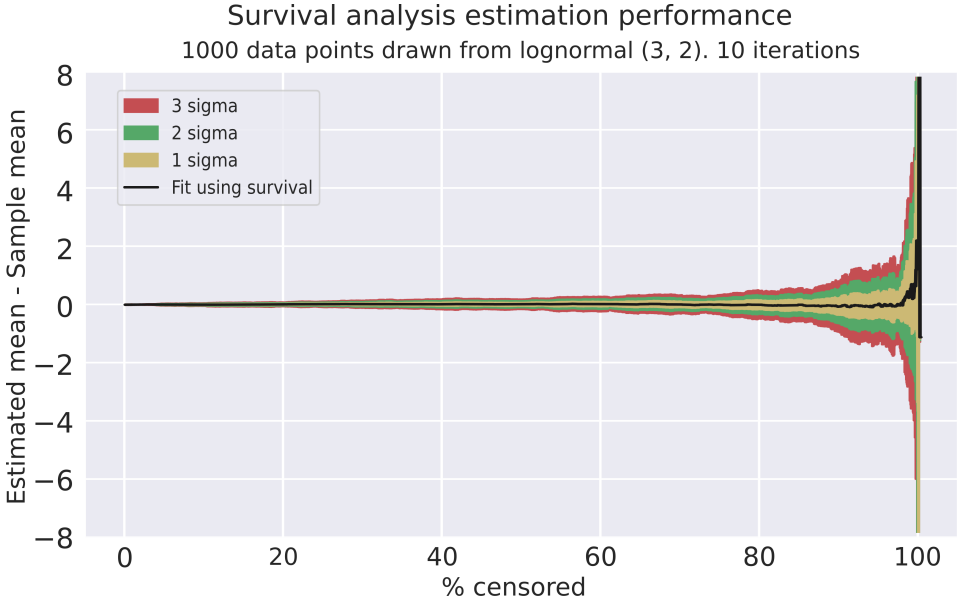

Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]


Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]


Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]


Known length distribution
density
Length [m]
Uniform censoring distribution
density
0
m_L
Length [m]
Random sampling
Fracture n.
8
7
6
5
4
3
2
1
Length [m]


Survival analysis estimation performance
1000 data points drawn from lognormal (3, 2). 10 iterations
Fit using everything
Fit using only complete values
Fit using survival
Estimated mean - Sample mean
% censored
8
6
4
2
0
−2
−4
−6
−8
0
20
40
60
80
100


Survival analysis estimation performance
1000 data points drawn from lognormal (3, 2). 10 iterations
3 sigma
2 sigma
1 sigma
Fit using survival
Estimated mean - Sample mean
8
6
4
2
0
−2
−4
−6
−8
0
20
40
60
80
100
% censored