Input Files

Age Model Database

EventID	Mean_age	Uncertainty
A	50	30
B	80	20
C	30	05
D	80	50
E	150	75

Stratigraphic Relationship Database

Older	Younger
B	A
D	B
D	C
E	D

For each vent: D B A E C

Example Stratigraphic Relationships

A (50,30) ← Volcanic Event

B (80, 20)   C (30, 5) ← Mean age, uncertainty of dating model

D (80, 50) ← Highly Ranked: Node with most neigbors

E (150, 75) ← Low Ranked: Node with fewest neigbors

Repeat 10,000 x

CDF from Crater Chronology Model

1
0

Mean Age

Time

Binary Function from Stratigraphy

1
0

Min. Age   Max. Age

Time

Combined & normalized CDF

1
0

Random #

Time
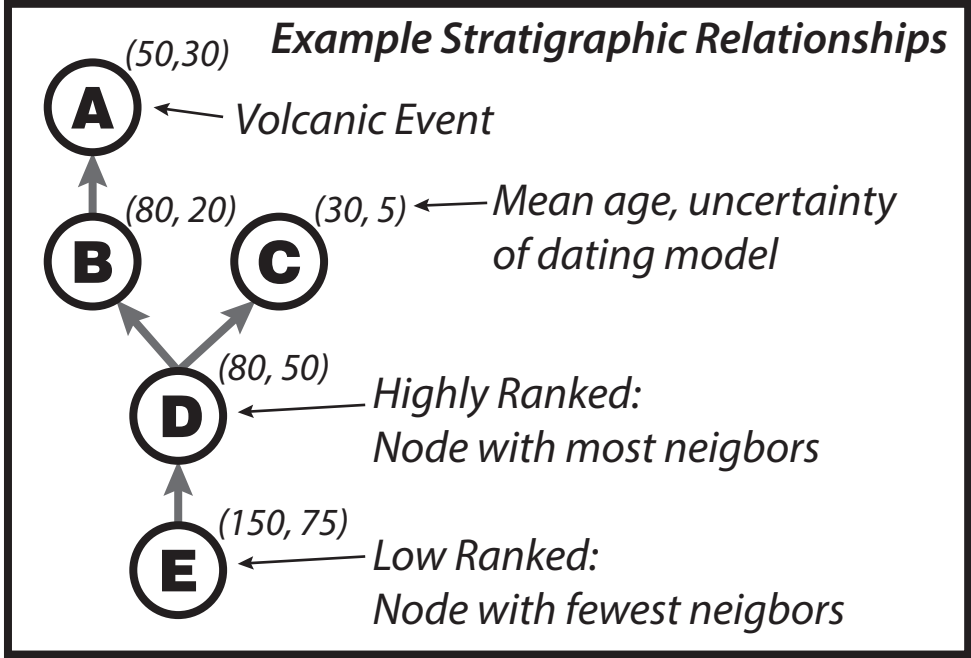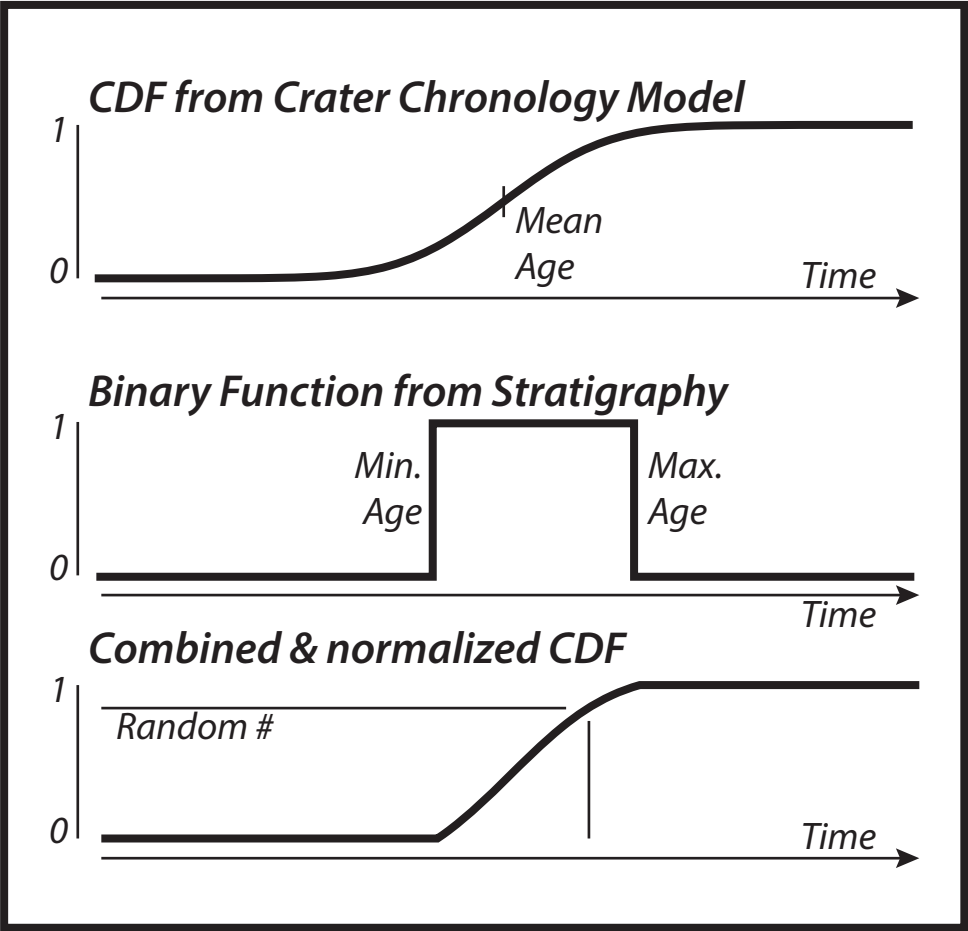
Output

```
Sampled_Age[A]
Sampled_Age[B]
...
Sampled_Age[E]
```