

APPENDIX D

Binomial Peak-Fit Ages

1. 05-01
2. 05-03
3. 05-04
4. 05-06
5. 05-07
6. 05-08
7. 05-09
8. 05-10
9. 05-11
10. 05-12
11. 05-13
12. 05-16
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14. KA 1
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05-01 - Kulthieth Formation, Donald Ridge

BinomFit for Windows ver.1.0
[03/08/2006 11:42] Main results
05-01ab, U35Z-45,46
File: C:\Documents and Settings\John
Garver\Desktop\FT\SEP\Alaska\Alaska\05-01.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 34.80 | 0.453 | 46.6 | 23.30 |
| 2. | 67.00 | 0.615 | 13.1 | 6.57 |

Total range for grain ages: 16.6 to 78.8 Ma
Number of active grains: 50
Number of removed grains: 0
Degrees of freedom for fit: 47
Average of the SE(Z)'s for the grains: 0.24
Estimated width of peaks in PD plot in Z units: 0.29

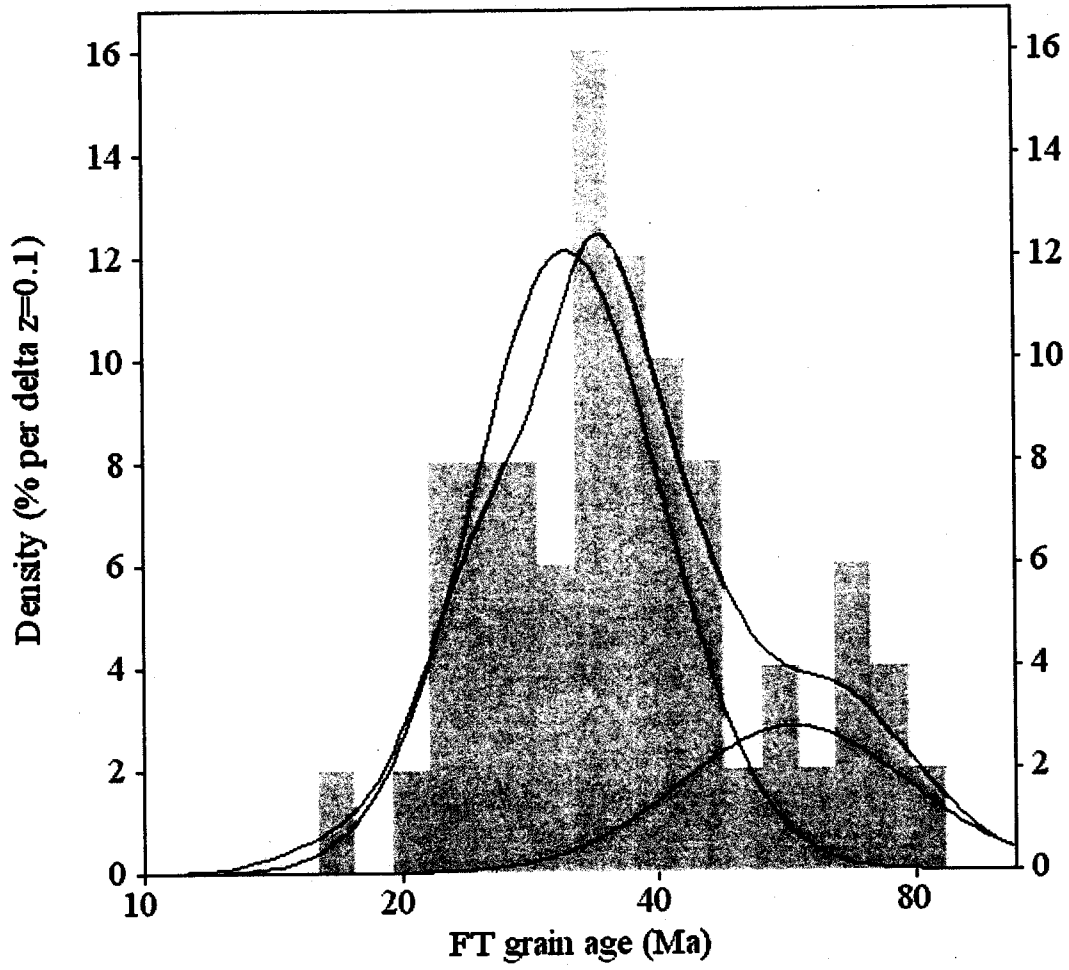
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|----|----------|--------------|----------------|------|--------|------|
| 1. | 31.4 | -1.6 ...+1.6 | -3.0 ...+3.3 | 0.26 | 78.4 | 9.3 |
| 2. | 57.6 | -7.3 ...+8.4 | -13.5 ...+17.6 | 0.30 | 21.6 | 9.3 |

Log-likelihood for best fit: -161.799
Chi-squared value for best fit: 49.979
Reduced chi-squared value: 1.063
Probability for F test: 0%
Degrees of freedom for fit: 47
Condition number for covar matrix: 15.33
Number of iterations: 11

Probability-Density Plot with Best-Fit Peaks



05-03 - Kulthieth Formation, North of Donald Ridge

BinomFit for Windows ver.1.0
 [03/08/2006 11:46] Main results
 05-03ab, U35Z-47,48
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-03.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 38.50 | 0.480 | 39.9 | 19.93 |
| 2. | 54.80 | 0.569 | 25.3 | 12.63 |
| 3. | 105.00 | 0.717 | 5.1 | 2.53 |

 Total range for grain ages: 19.3 to 108.4 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.25
 Estimated width of peaks in PD plot in Z units: 0.29

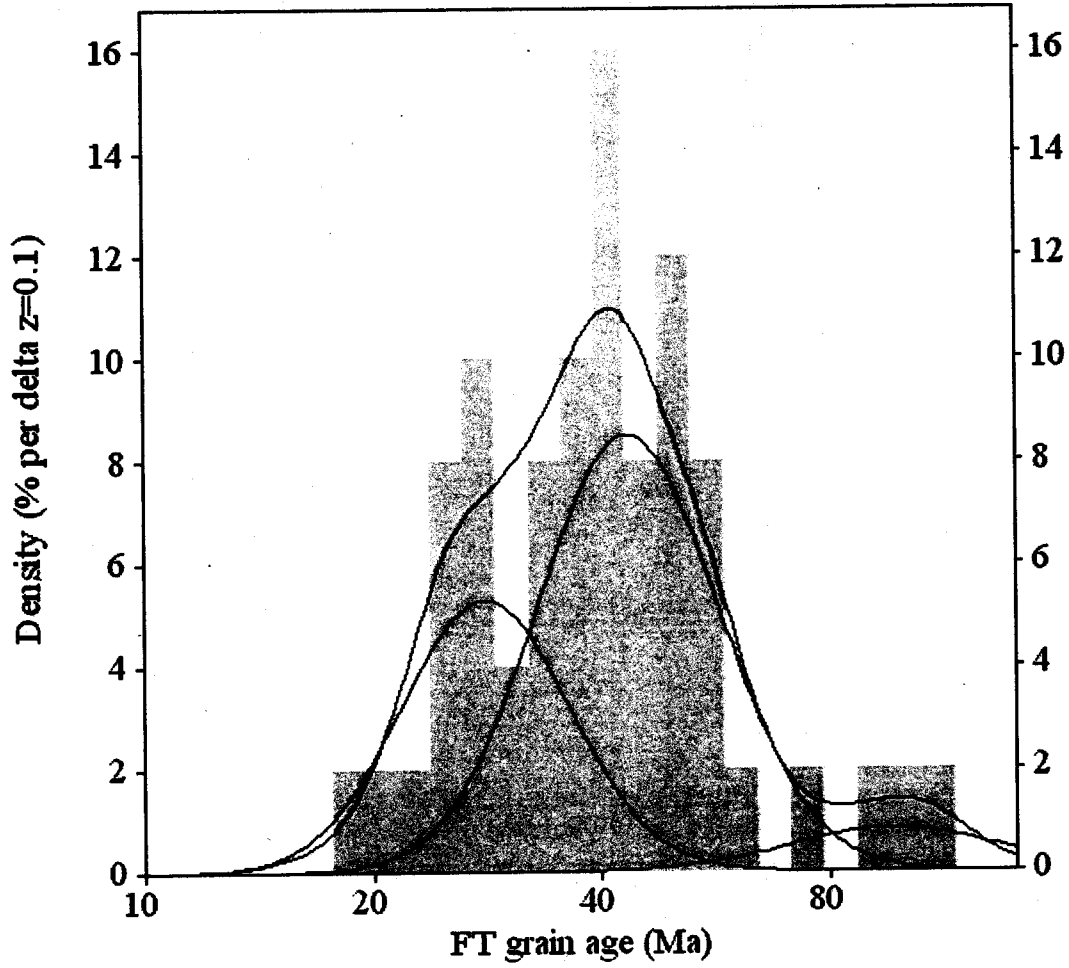
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|-------|----------|----------------|----------------|------|--------|------|
| Count | | | | | | |
| 1. | 28.1 | -2.5 ...+2.8 | -4.7 ...+5.7 | 0.26 | 34.2 | 14.2 |
| 17.1 | | | | | | |
| 2. | 43.5 | -3.2 ...+3.4 | -6.0 ...+7.0 | 0.28 | 59.2 | 14.1 |
| 29.6 | | | | | | |
| 3. | 97.0 | -16.0 ...+19.2 | -28.9 ...+41.1 | 0.31 | 6.6 | 4.1 |
| 3.3 | | | | | | |

 Log-likelihood for best fit: -161.760
 Chi-squared value for best fit: 45.437
 Reduced chi-squared value: 1.010
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 60.18
 Number of iterations: 27

Probability-Density Plot with Best-Fit Peaks



05-04 - Kulthieth Formation, North of Donald Ridge

BinomFit for Windows ver.1.0
 [03/08/2006 11:49] Main results
 05-04ab, U35Z-49,50
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-04.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 27.60 | 0.401 | 30.7 | 15.37 |
| 2. | 37.90 | 0.479 | 44.7 | 22.37 |

 Total range for grain ages: 21.2 to 70.4 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 47
 Average of the SE(Z)'s for the grains: 0.24
 Estimated width of peaks in PD plot in Z units: 0.28

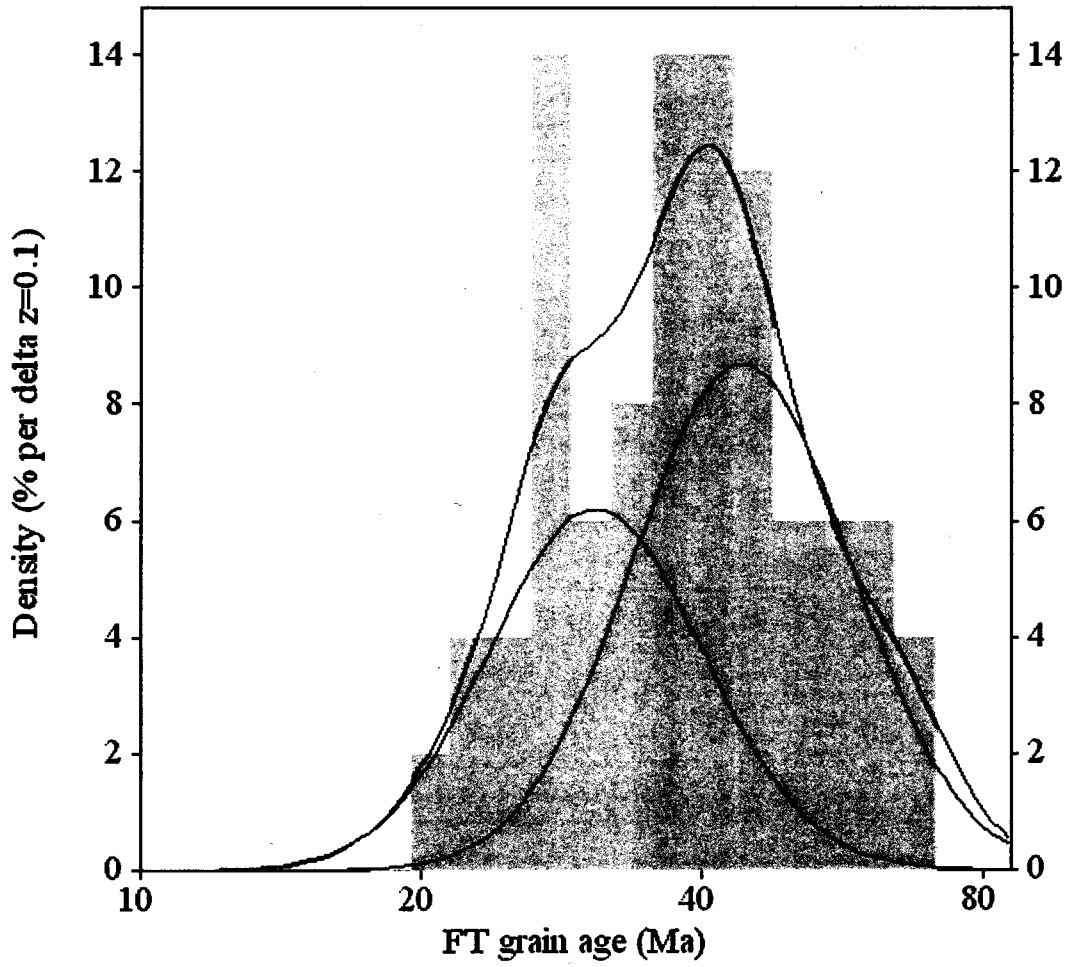
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|-------|----------|--------------|--------------|------|--------|------|
| Count | | | | | | |
| 1. | 30.8 | -3.2 ...+3.6 | -6.0 ...+7.4 | 0.26 | 41.1 | 21.9 |
| 20.6 | | | | | | |
| 2. | 44.1 | -3.6 ...+3.9 | -6.8 ...+8.0 | 0.27 | 58.9 | 21.9 |
| 29.4 | | | | | | |

 Log-likelihood for best fit: -154.014
 Chi-squared value for best fit: 49.160
 Reduced chi-squared value: 1.046
 Probability for F test: 0%
 Degrees of freedom for fit: 47
 Condition number for covar matrix: 23.49
 Number of iterations: 18

Probability-Density Plot with Best-Fit Peaks



05-06 - Kulthieth Formation, Northern Robinson Mountains

BinomFit for Windows ver.1.0
 [03/08/2006 11:50] Main results
 05-06a, U35Z-51
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-06a.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 22.80 | 0.358 | 17.7 | 8.84 |
| 2. | 36.30 | 0.471 | 53.1 | 26.55 |
| 3. | 91.10 | 0.692 | 4.0 | 1.99 |

Total range for grain ages: 14.0 to 91.5 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.22
 Estimated width of peaks in PD plot in Z units: 0.26

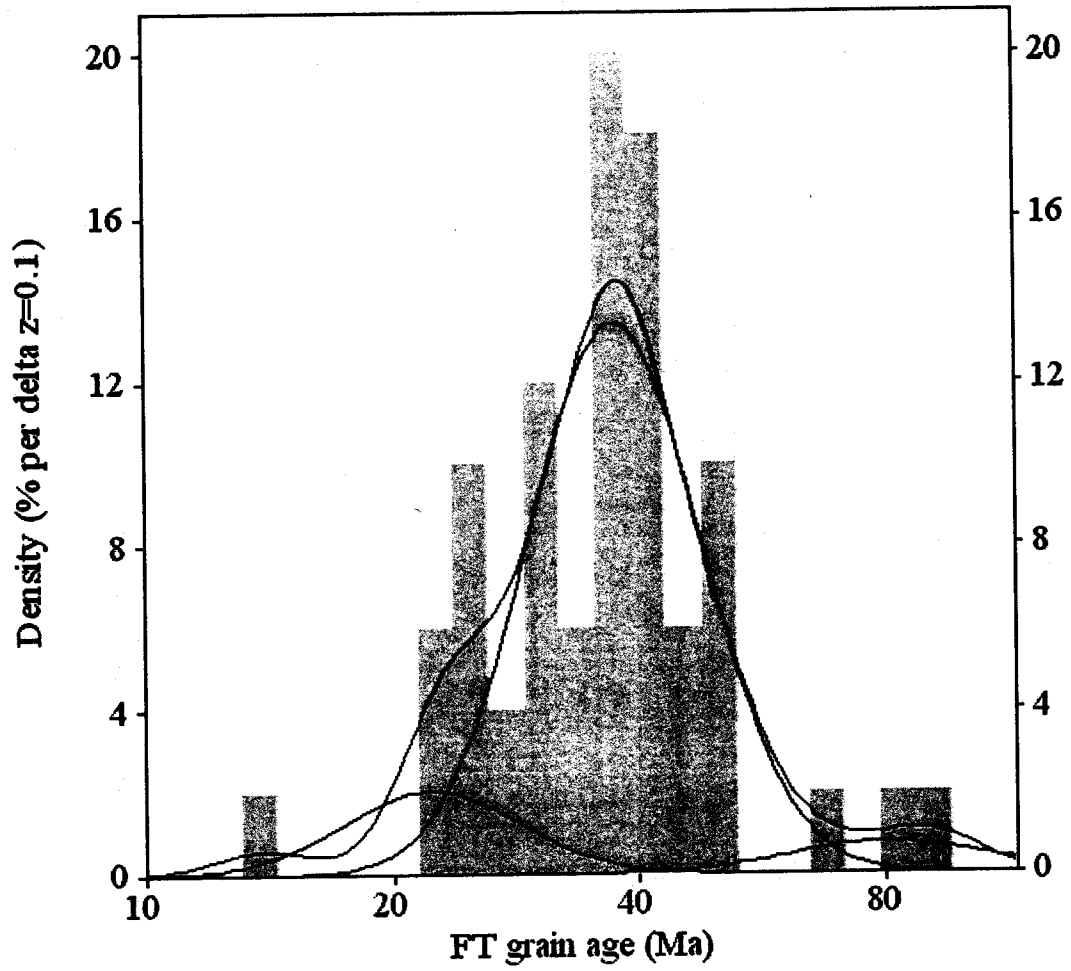
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|----|----------|----------------|----------------|------|---------|-------|
| 1. | 22.3 | -2.8 ...+3.1 | -5.1 ...+6.6 | 0.25 | 12.6 | 8.3 |
| 2. | 37.5 | -1.9 ...+2.0 | -3.6 ...+4.0 | 0.24 | 82.2 | 8.7 |
| 3. | 80.2 | -14.2 ...+17.3 | -25.5 ...+37.3 | 0.27 | 5.2 | 3.7 |

Log-likelihood for best fit: -165.385
 Chi-squared value for best fit: 48.539
 Reduced chi-squared value: 1.079
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 67.46
 Number of iterations: 10

Probability-Density Plot with Best-Fit Peaks



05-07 - Poul Creek Formation, Northern Robinson Mountains

BinomFit for Windows ver.1.0
 [03/08/2006 11:51] Main results
 05-07ab, U35Z-52,53
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-07.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 28.30 | 0.411 | 35.2 | 17.58 |
| 2. | 38.40 | 0.487 | 38.4 | 19.21 |
| 3. | 84.10 | 0.675 | 6.3 | 3.17 |

Total range for grain ages: 19.7 to 86.5 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.24
 Estimated width of peaks in PD plot in Z units: 0.29

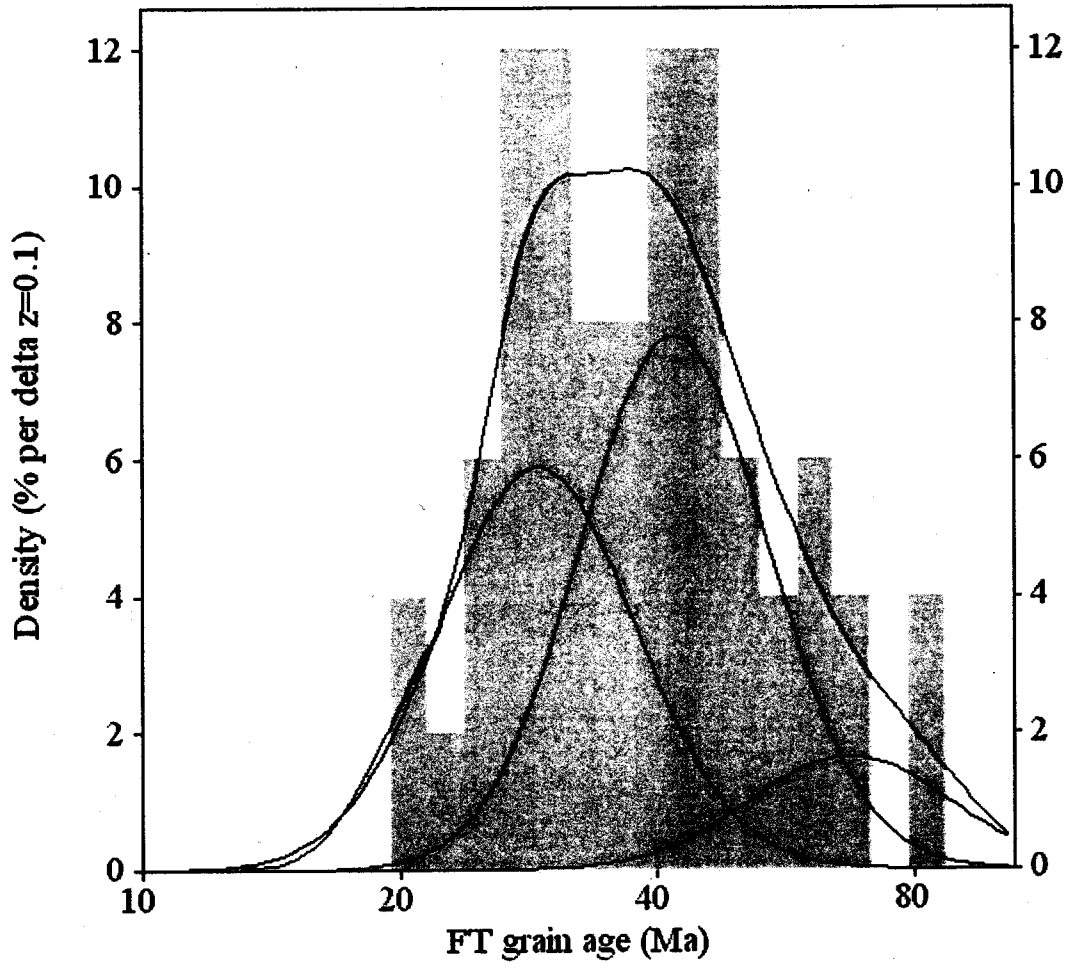
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|------|----------|----------------|----------------|------|---------|-------|
| 1. | 29.0 | -3.1 ...+3.5 | -5.8 ...+7.3 | 0.27 | 39.2 | 23.9 |
| 19.6 | | | | | | |
| 2. | 42.0 | -5.4 ...+6.2 | -9.9 ...+13.0 | 0.26 | 49.8 | 21.8 |
| 24.9 | | | | | | |
| 3. | 67.2 | -12.0 ...+14.7 | -21.6 ...+31.7 | 0.27 | 11.0 | 10.3 |
| 5.5 | | | | | | |

Log-likelihood for best fit: -163.449
 Chi-squared value for best fit: 47.994
 Reduced chi-squared value: 1.067
 Probability for F test: 2%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 80.57
 Number of iterations: 10

Probability-Density Plot with Best-Fit Peaks



05-08 - Poul Creek Formation, Northern Robinson Mountains

BinomFit for Windows ver.1.0
 [03/08/2006 11:51] Main results
 05-08ab, U35Z-67,68
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-08.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 38.40 | 0.507 | 51.0 | 25.52 |
| 2. | 80.40 | 0.684 | 3.5 | 1.77 |

 Total range for grain ages: 24.6 to 80.4 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 47
 Average of the SE(Z)'s for the grains: 0.26
 Estimated width of peaks in PD plot in Z units: 0.3

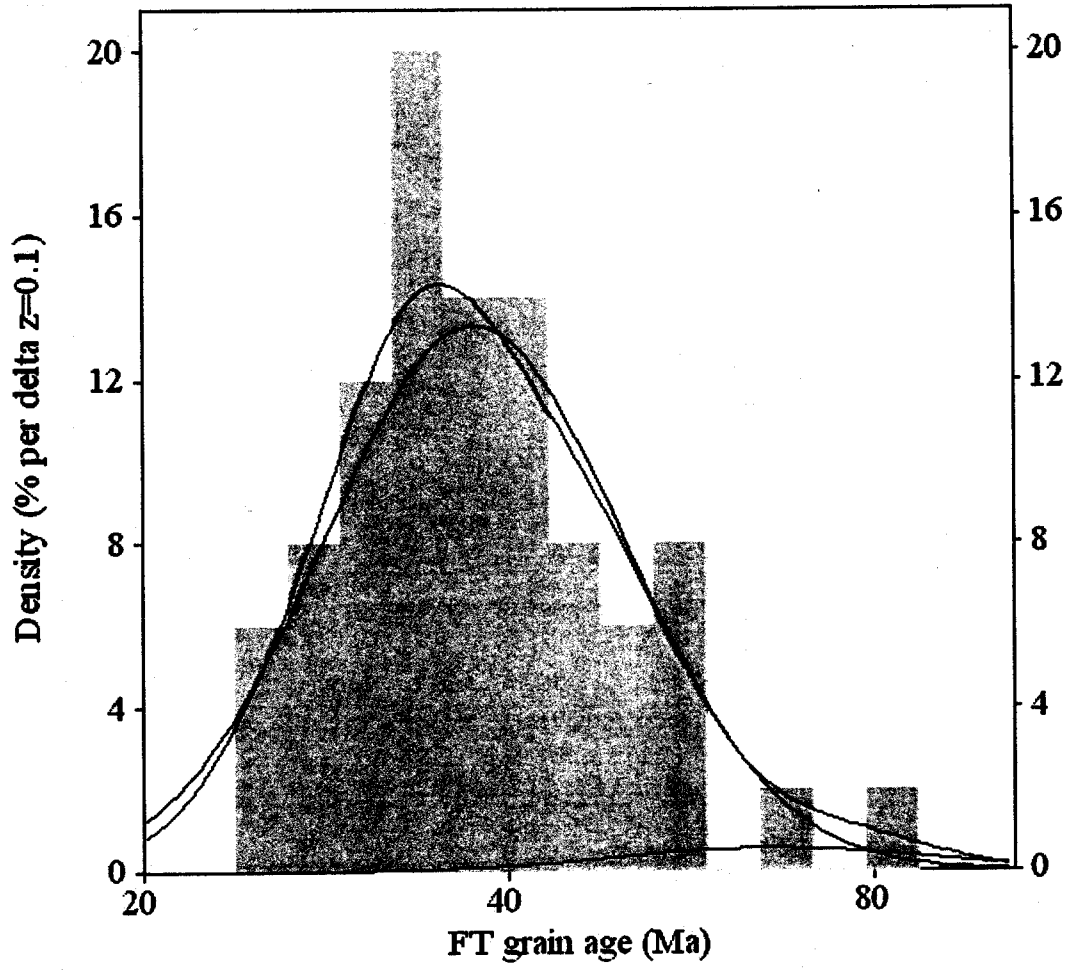
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|----|----------|----------------|----------------|------|---------|-------|
| 1. | 37.5 | -1.9 ...+2.0 | -3.7 ...+4.1 | 0.29 | 96.0 | 6.0 |
| 2. | 65.8 | -19.5 ...+27.6 | -32.7 ...+64.8 | 0.29 | 4.0 | 6.0 |

 Log-likelihood for best fit: -139.614
 Chi-squared value for best fit: 42.409
 Reduced chi-squared value: 0.902
 Probability for F test: 0%
 Degrees of freedom for fit: 47
 Condition number for covar matrix: 108.00
 Number of iterations: 7

Probability-Density Plot with Best-Fit Peaks



05-09 - Yakataga Formation, Kulthieth Mountain

BinomFit for Windows ver.1.0

[03/08/2006 11:52] Main results

05-09a, U35Z-54

File: C:\Documents and Settings\John

Garver\Desktop\FT\SEP\Alaska\Alaska\05-09a.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 24.70 | 0.381 | 19.7 | 9.83 |
| 2. | 28.90 | 0.419 | 16.1 | 8.06 |
| 3. | 78.20 | 0.662 | 10.9 | 5.46 |

Total range for grain ages: 6.1 to 113.5 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.22
 Estimated width of peaks in PD plot in Z units: 0.26

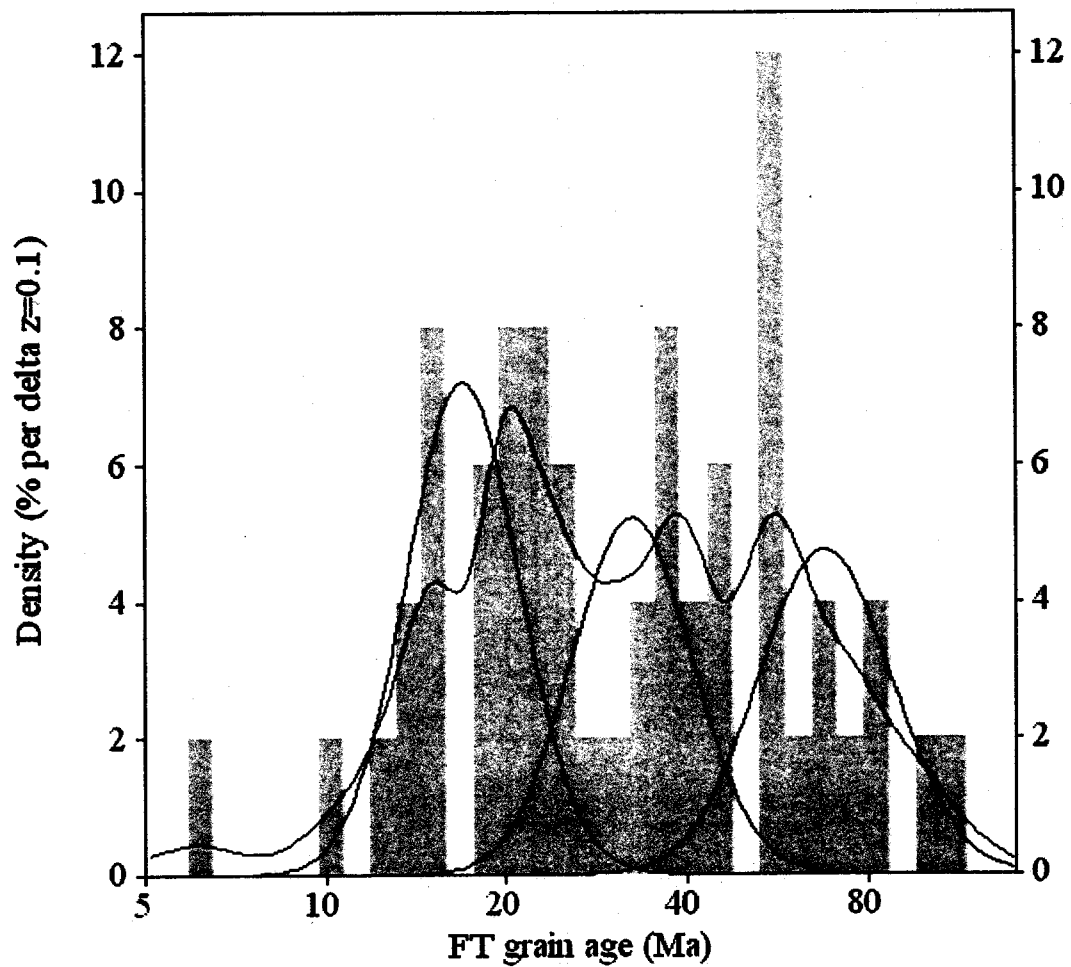
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|----|----------|--------------|--------------|------|---------|-------|
| 1. | 16.9 | -1.0 ...+1.0 | -1.8 ...+2.1 | 0.22 | 39.3 | 8.3 |
| 2. | 32.4 | -2.6 ...+2.8 | -4.9 ...+5.7 | 0.23 | 30.2 | 8.2 |
| 3. | 67.8 | -4.4 ...+4.7 | -8.4 ...+9.6 | 0.26 | 30.4 | 7.2 |

Log-likelihood for best fit: -207.878
 Chi-squared value for best fit: 51.540
 Reduced chi-squared value: 1.145
 Probability for F test: 1%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 6.35
 Number of iterations: 8

Probability-Density Plot with Best-Fit Peaks



05-10 – Yakataga Formation, Kulthieth Mountain

BinomFit for Windows ver.1.0
 [03/08/2006 11:52] Main results
 05-10ab, U35Z-55,56
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-10.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 26.30 | 0.398 | 19.8 | 9.88 |
| 2. | 42.10 | 0.515 | 19.6 | 9.81 |
| 3. | 72.30 | 0.646 | 15.9 | 7.96 |

 Total range for grain ages: 8.3 to 90.5 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.21
 Estimated width of peaks in PD plot in Z units: 0.25

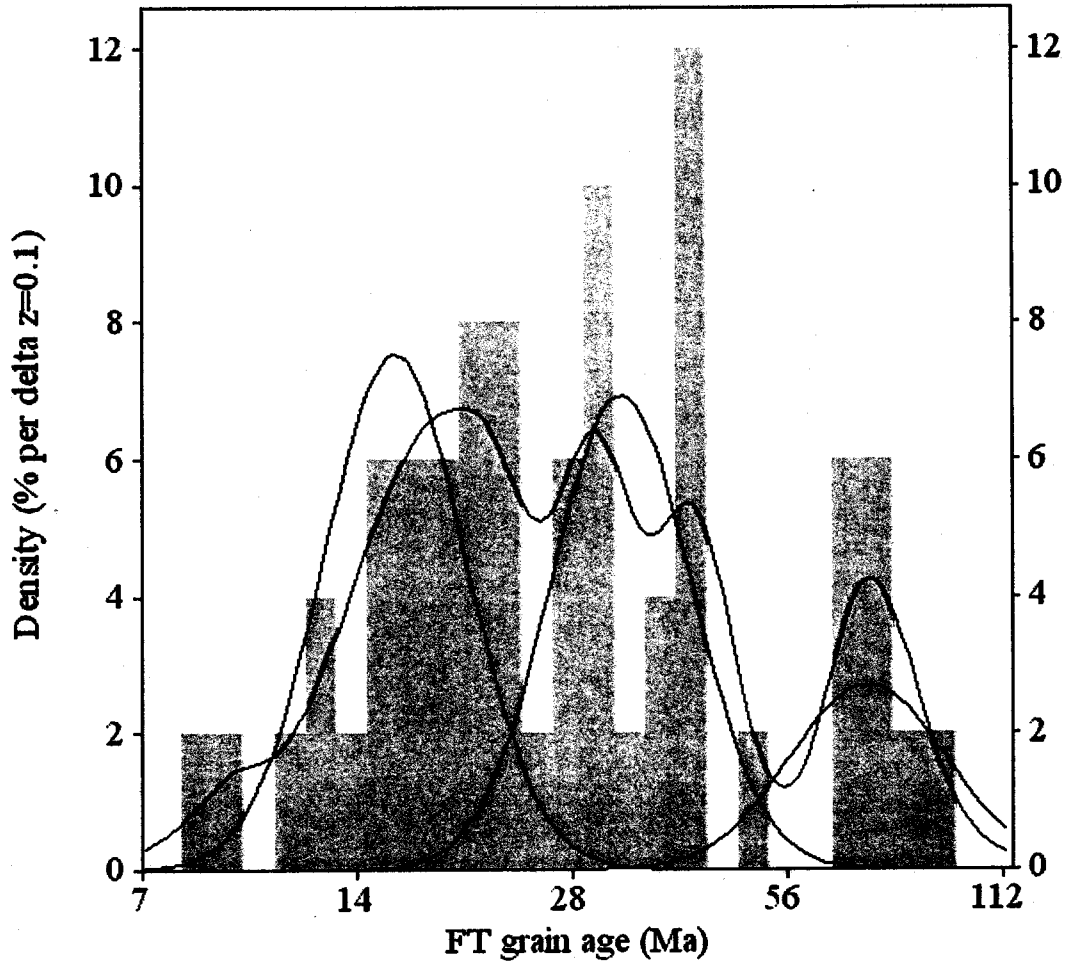
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|------|----------|--------------|----------------|------|---------|-------|
| 1. | 15.8 | -0.9 ...+1.0 | -1.7 ...+1.9 | 0.23 | 43.5 | 8.1 |
| 21.7 | | | | | | |
| 2. | 32.8 | -2.2 ...+2.3 | -4.1 ...+4.7 | 0.23 | 39.4 | 8.1 |
| 19.7 | | | | | | |
| 3. | 72.5 | -6.1 ...+6.7 | -11.6 ...+13.7 | 0.25 | 17.1 | 5.6 |
| 8.5 | | | | | | |

 Log-likelihood for best fit: -203.868
 Chi-squared value for best fit: 49.912
 Reduced chi-squared value: 1.109
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 8.39
 Number of iterations: 10

Probability-Density Plot with Best-Fit Peaks



05-11 – Yakataga Formation, Kulthieth Mountain

BinomFit for Windows ver.1.0
 [03/08/2006 11:52] Main results
 05-11ab, U35Z-57,58
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-11.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 9.80 | 0.199 | 4.6 | 2.30 |
| 2. | 25.10 | 0.388 | 31.7 | 15.83 |
| 3. | 81.60 | 0.675 | 7.2 | 3.60 |

 Total range for grain ages: 4.3 to 113.9 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.2
 Estimated width of peaks in PD plot in Z units: 0.23

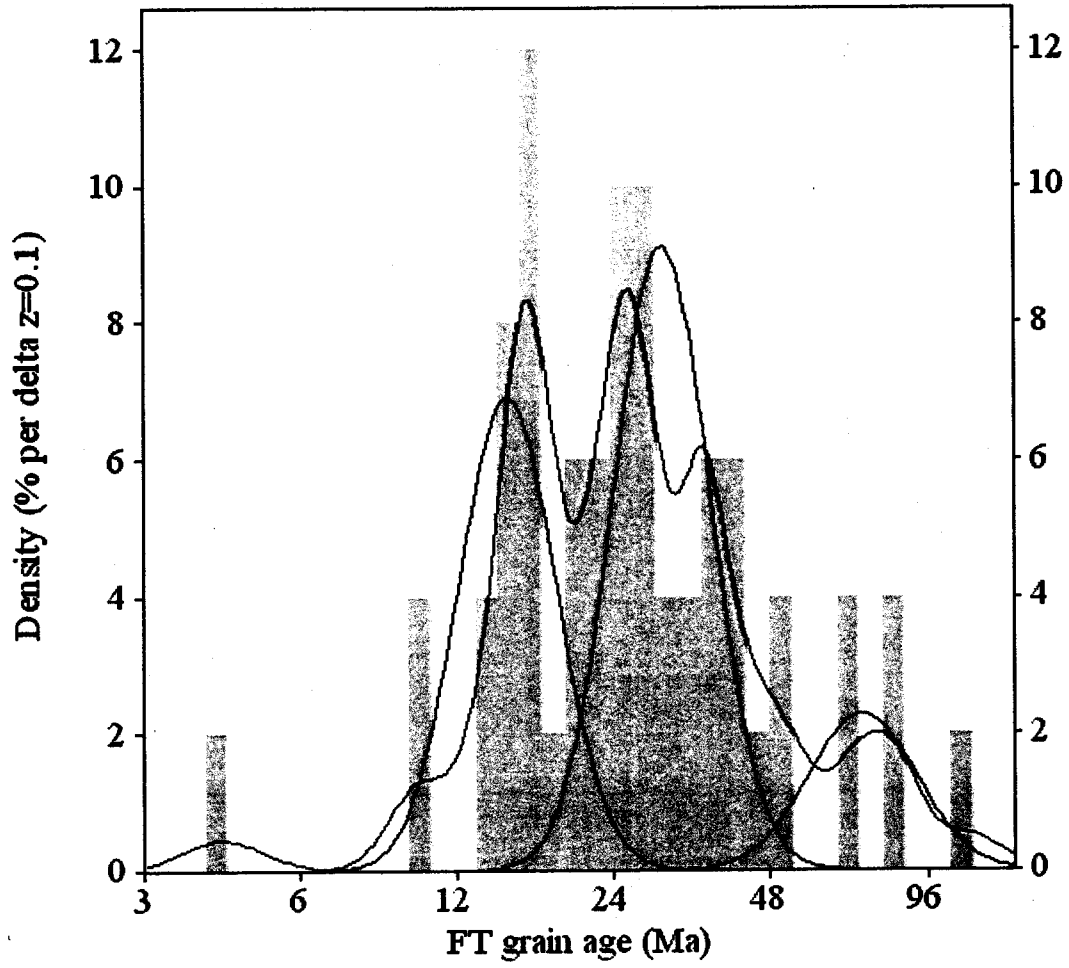
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|-------|----------|--------------|----------------|------|---------|-------|
| Count | | | | | | |
| ----- | | | | | | |
| 1. | 15.1 | -0.8 ...+0.9 | -1.6 ...+1.8 | 0.22 | 37.4 | 7.6 |
| 18.7 | | | | | | |
| 2. | 29.8 | -1.6 ...+1.6 | -3.0 ...+3.3 | 0.21 | 48.8 | 7.9 |
| 24.4 | | | | | | |
| 3. | 71.9 | -6.7 ...+7.4 | -12.6 ...+15.3 | 0.24 | 13.7 | 5.3 |
| 6.9 | | | | | | |

 Log-likelihood for best fit: -213.861
 Chi-squared value for best fit: 54.465
 Reduced chi-squared value: 1.210
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 8.56
 Number of iterations: 13

Probability-Density Plot with Best-Fit Peaks



05-12 – Yakataga Formation, Suckling Hills

BinomFit for Windows ver.1.0
 [03/08/2006 11:53] Main results
 05-12ab, U35Z-59,60
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-12.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 12.40 | 0.241 | 2.8 | 1.41 |
| 2. | 16.30 | 0.294 | 15.4 | 7.71 |
| 3. | 30.90 | 0.442 | 39.3 | 19.67 |

Total range for grain ages: 12.4 to 113.8 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.21
 Estimated width of peaks in PD plot in Z units: 0.24

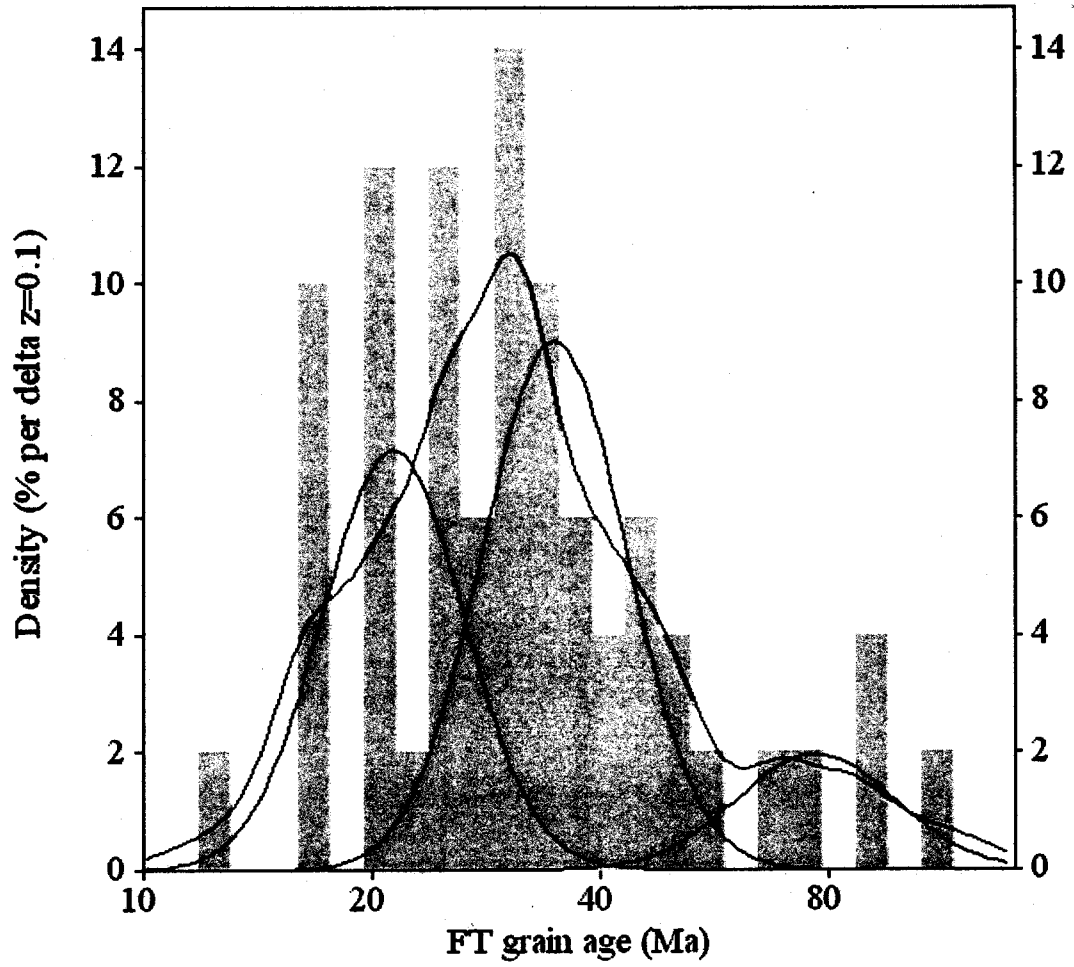
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|------|----------|--------------|----------------|------|---------|-------|
| 1. | 21.3 | -1.6 ...+1.7 | -3.0 ...+3.4 | 0.22 | 38.7 | 11.1 |
| 19.4 | | | | | | |
| 2. | 34.8 | -2.4 ...+2.6 | -4.6 ...+5.3 | 0.22 | 49.4 | 11.0 |
| 24.7 | | | | | | |
| 3. | 76.8 | -8.7 ...+9.8 | -16.2 ...+20.5 | 0.24 | 11.9 | 5.3 |
| 5.9 | | | | | | |

Log-likelihood for best fit: -194.762
 Chi-squared value for best fit: 54.099
 Reduced chi-squared value: 1.202
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 23.51
 Number of iterations: 45

Probability-Density Plot with Best-Fit Peaks



05-13 - Poul Creek Formation, Grindle Hills

BinomFit for Windows ver.1.0
 [03/08/2006 11:53] Main results
 05-13b, U35Z-62
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-13b.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 32.40 | 0.457 | 39.7 | 19.87 |
| 2. | 70.30 | 0.647 | 7.9 | 3.93 |

 Total range for grain ages: 17.7 to 73.3 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 47
 Average of the SE(Z)'s for the grains: 0.23
 Estimated width of peaks in PD plot in Z units: 0.27

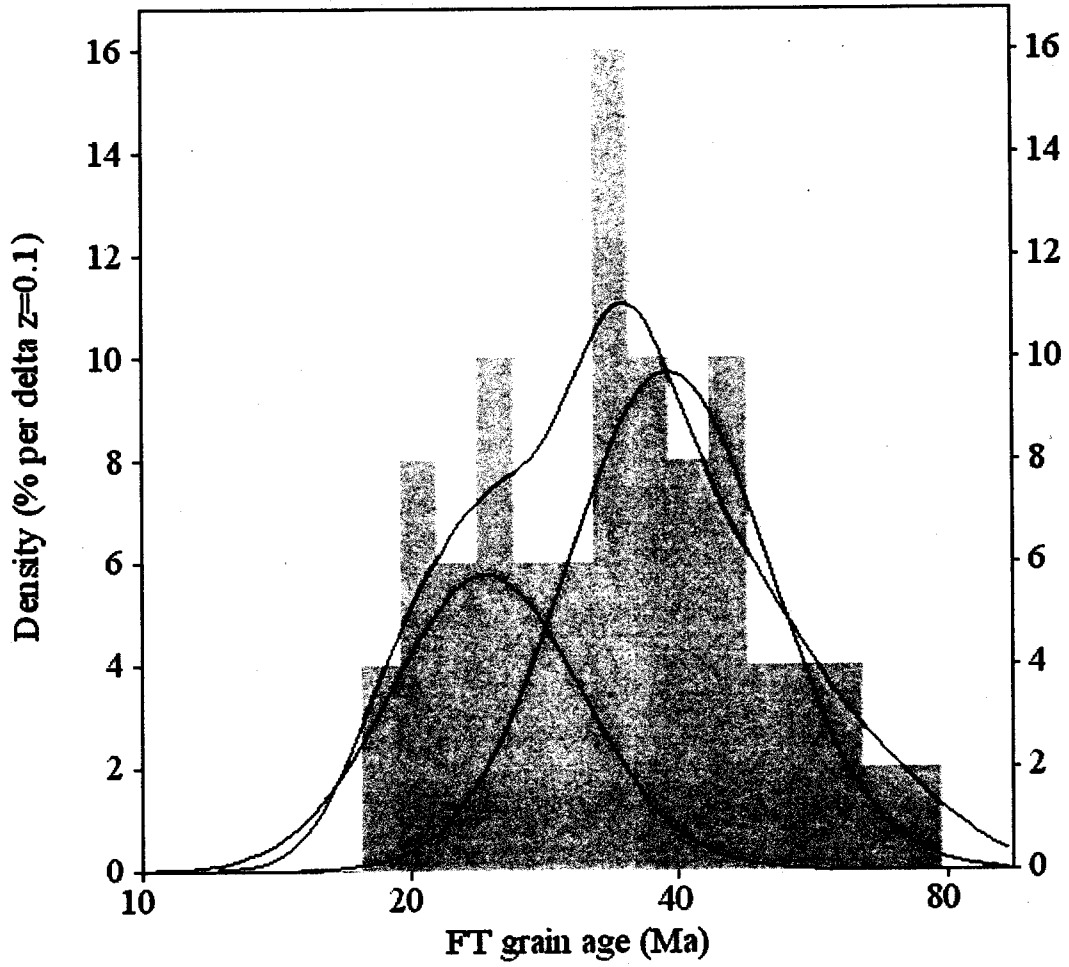
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|-------|----------|--------------|--------------|------|--------|------|
| Count | | | | | | |
| ----- | | | | | | |
| 1. | 24.4 | -2.2 ...+2.4 | -4.1 ...+4.9 | 0.25 | 35.8 | 12.7 |
| 17.9 | | | | | | |
| 2. | 38.9 | -2.6 ...+2.8 | -4.9 ...+5.6 | 0.26 | 64.2 | 12.7 |
| 32.1 | | | | | | |

 Log-likelihood for best fit: -165.005
 Chi-squared value for best fit: 56.195
 Reduced chi-squared value: 1.196
 Probability for F test: 0%
 Degrees of freedom for fit: 47
 Condition number for covar matrix: 10.44
 Number of iterations: 36

Probability-Density Plot with Best-Fit Peaks



05-16 - Poul Creek Formation, Grindle Hills

BinomFit for Windows ver.1.0
 [03/08/2006 11:54] Main results
 05-16ab, U35Z-63,64
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\05-16.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 39.50 | 0.509 | 36.4 | 18.18 |
| 2. | 82.40 | 0.684 | 8.4 | 4.18 |

 Total range for grain ages: 22.2 to 91.5 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 47
 Average of the SE(Z)'s for the grains: 0.25
 Estimated width of peaks in PD plot in Z units: 0.29

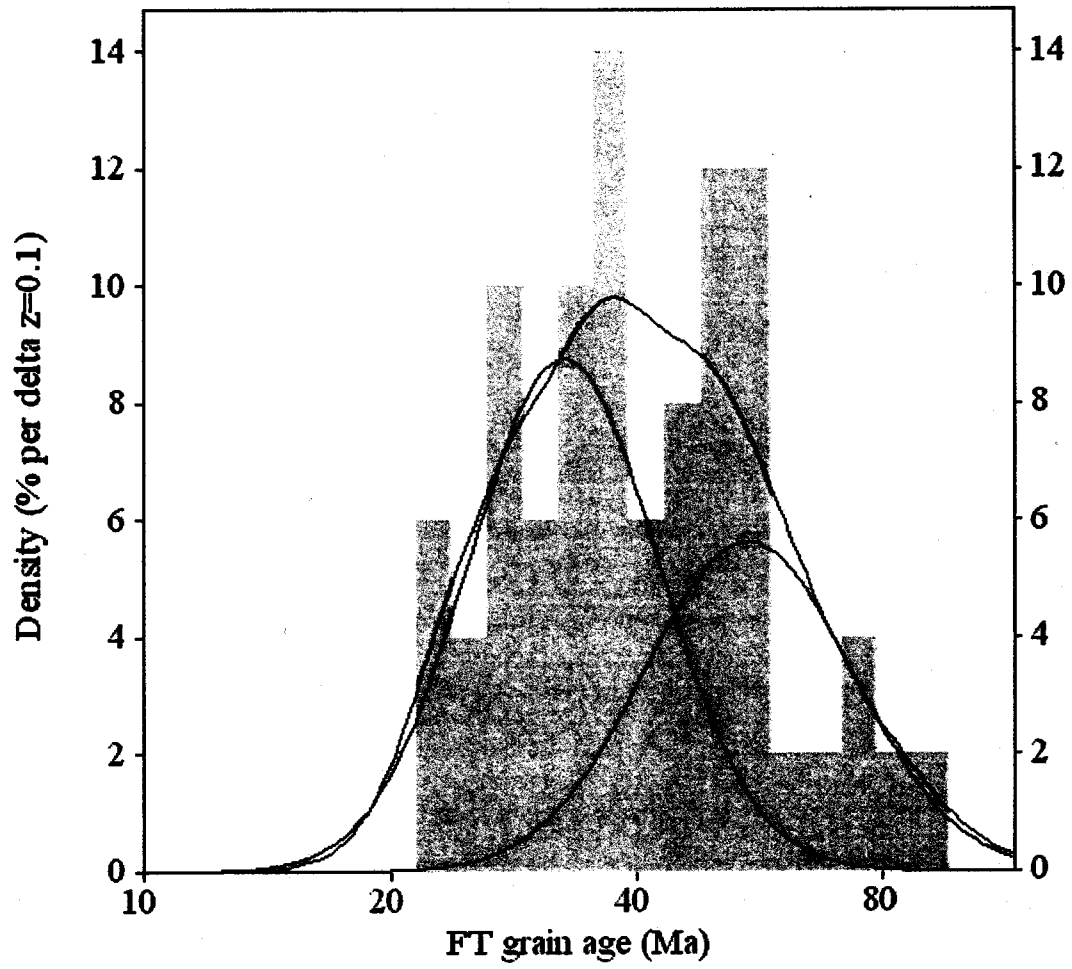
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|-------|----------|--------------|----------------|------|---------|-------|
| Count | | | | | | |
| 1. | 32.6 | -2.4 ...+2.6 | -4.5 ...+5.3 | 0.27 | 58.6 | 14.8 |
| 29.3 | | | | | | |
| 2. | 54.7 | -5.5 ...+6.1 | -10.2 ...+12.6 | 0.29 | 41.4 | 14.8 |
| 20.7 | | | | | | |

 Log-likelihood for best fit: -159.103
 Chi-squared value for best fit: 48.820
 Reduced chi-squared value: 1.039
 Probability for F test: 0%
 Degrees of freedom for fit: 47
 Condition number for covar matrix: 13.24
 Number of iterations: 23

Probability-Density Plot with Best-Fit Peaks



05-17 - Kulthieth Formation, Khitrov Hills

BinomFit for Windows ver.1.0
[03/08/2006 11:54] Main results
05-17ab, U35Z-65,66
File: C:\Documents and Settings\John
Garver\Desktop\FT\SEP\Alaska\Alaska\05-17.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 32.50 | 0.462 | 51.6 | 25.78 |
| 2. | 51.20 | 0.576 | 21.3 | 10.66 |

Total range for grain ages: 18.6 to 66.4 Ma
Number of active grains: 50
Number of removed grains: 0
Degrees of freedom for fit: 47
Average of the SE(Z)'s for the grains: 0.26
Estimated width of peaks in PD plot in Z units: 0.3

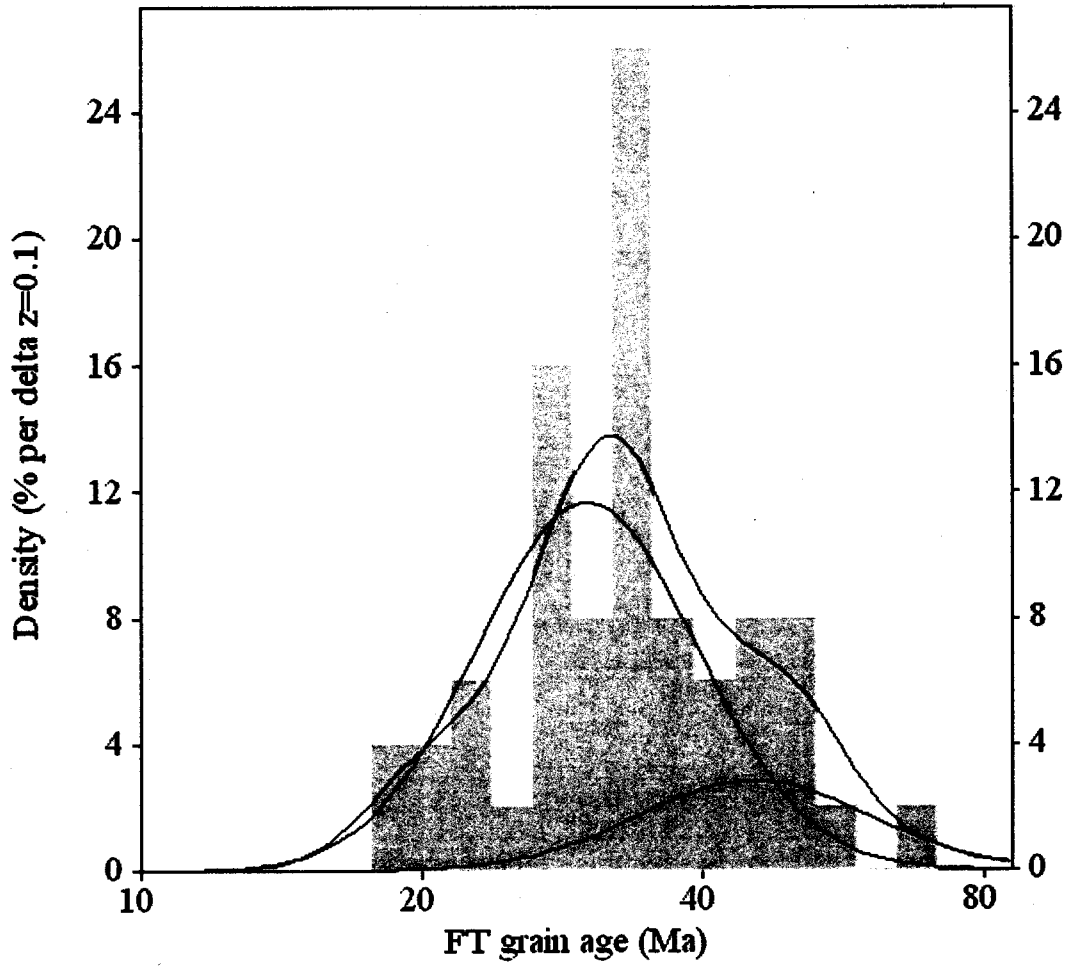
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|------|----------|--------------|----------------|------|--------|------|
| 1. | 30.1 | -1.8 ...+1.9 | -3.4 ...+3.9 | 0.27 | 79.8 | 15.2 |
| 39.9 | | | | | | |
| 2. | 45.3 | -6.3 ...+7.3 | -11.5 ...+15.3 | 0.29 | 20.2 | 15.2 |
| 10.1 | | | | | | |

Log-likelihood for best fit: -148.615
Chi-squared value for best fit: 46.771
Reduced chi-squared value: 0.995
Probability for F test: 0%
Degrees of freedom for fit: 47
Condition number for covar matrix: 23.69
Number of iterations: 6

Probability-Density Plot with Best-Fit Peaks



KA 1 - Kaliakh River

BinomFit for Windows ver.1.0
[03/08/2006 11:56] Main results
KA-1ab, U35Z-36,37
File: C:\Documents and Settings\John
Garver\Desktop\FT\SEP\Alaska\Alaska\KA-1.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 38.90 | 0.470 | 38.1 | 19.05 |
| 2. | 64.00 | 0.593 | 24.6 | 12.29 |

Total range for grain ages: 21.8 to 79.9 Ma
Number of active grains: 50
Number of removed grains: 0
Degrees of freedom for fit: 47
Average of the SE(Z)'s for the grains: 0.22
Estimated width of peaks in PD plot in Z units: 0.26

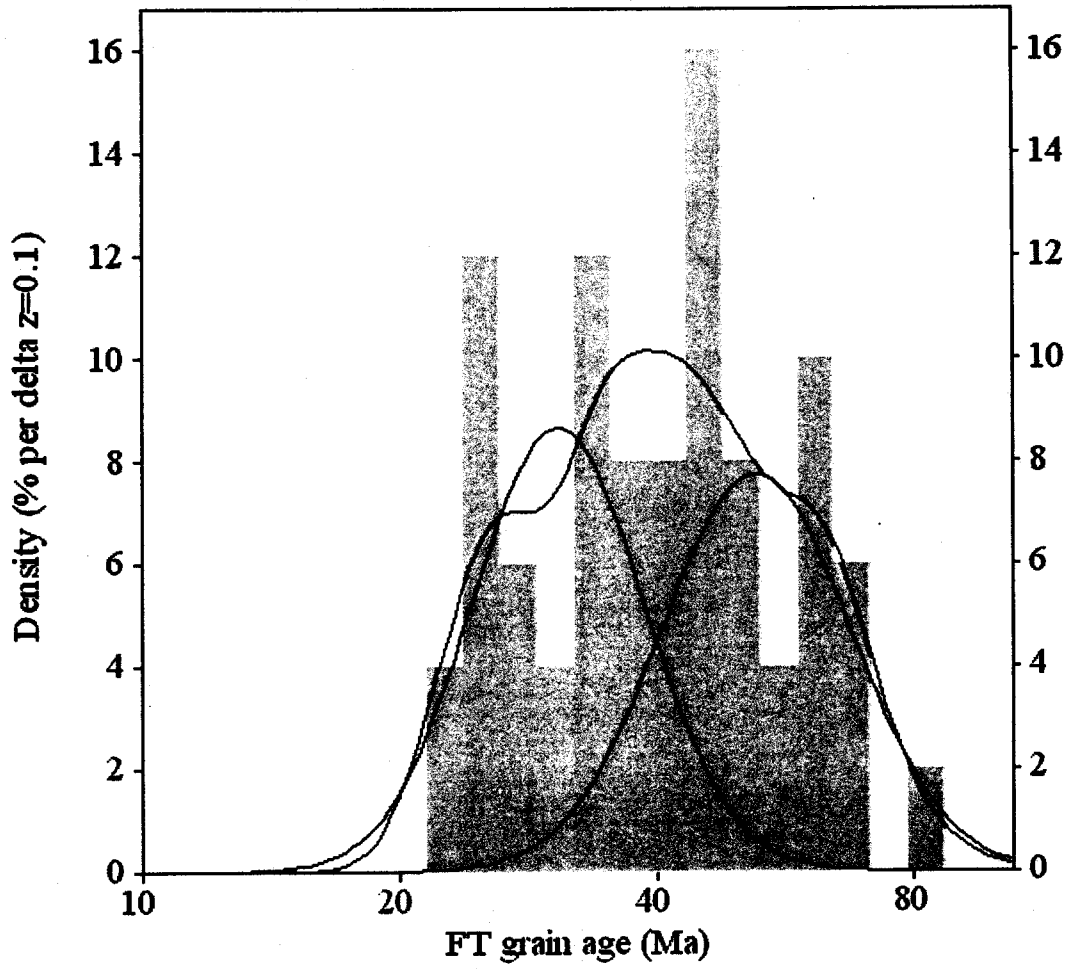
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|-------|----------|--------------|--------------|------|---------|-------|
| Count | | | | | | |
| 1. | 30.7 | -2.0 ...+2.1 | -3.7 ...+4.2 | 0.23 | 50.3 | 12.1 |
| 25.1 | | | | | | |
| 2. | 52.3 | -3.8 ...+4.0 | -7.1 ...+8.2 | 0.26 | 49.7 | 12.1 |
| 24.9 | | | | | | |

Log-likelihood for best fit: -170.174
Chi-squared value for best fit: 47.947
Reduced chi-squared value: 1.020
Probability for F test: 0%
Degrees of freedom for fit: 47
Condition number for covar matrix: 9.64
Number of iterations: 18

Probability-Density Plot with Best-Fit Peaks



KL 2 - Kulthieth River

BinomFit for Windows ver.1.0
[03/08/2006 11:57] Main results
KL-2ab, U35Z-38,39
File: C:\Documents and Settings\John
Garver\Desktop\FT\SEP\Alaska\Alaska\KL-2.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 2)

| Peak #. | Peak Age | Theta | Fraction,% | Count |
|---------|----------|-------|------------|-------|
| 1. | 37.30 | 0.461 | 40.4 | 20.18 |
| 2. | 69.70 | 0.616 | 17.2 | 8.61 |

Total range for grain ages: 22.0 to 77.3 Ma
Number of active grains: 50
Number of removed grains: 0
Degrees of freedom for fit: 47
Average of the SE(Z)'s for the grains: 0.22
Estimated width of peaks in PD plot in Z units: 0.25

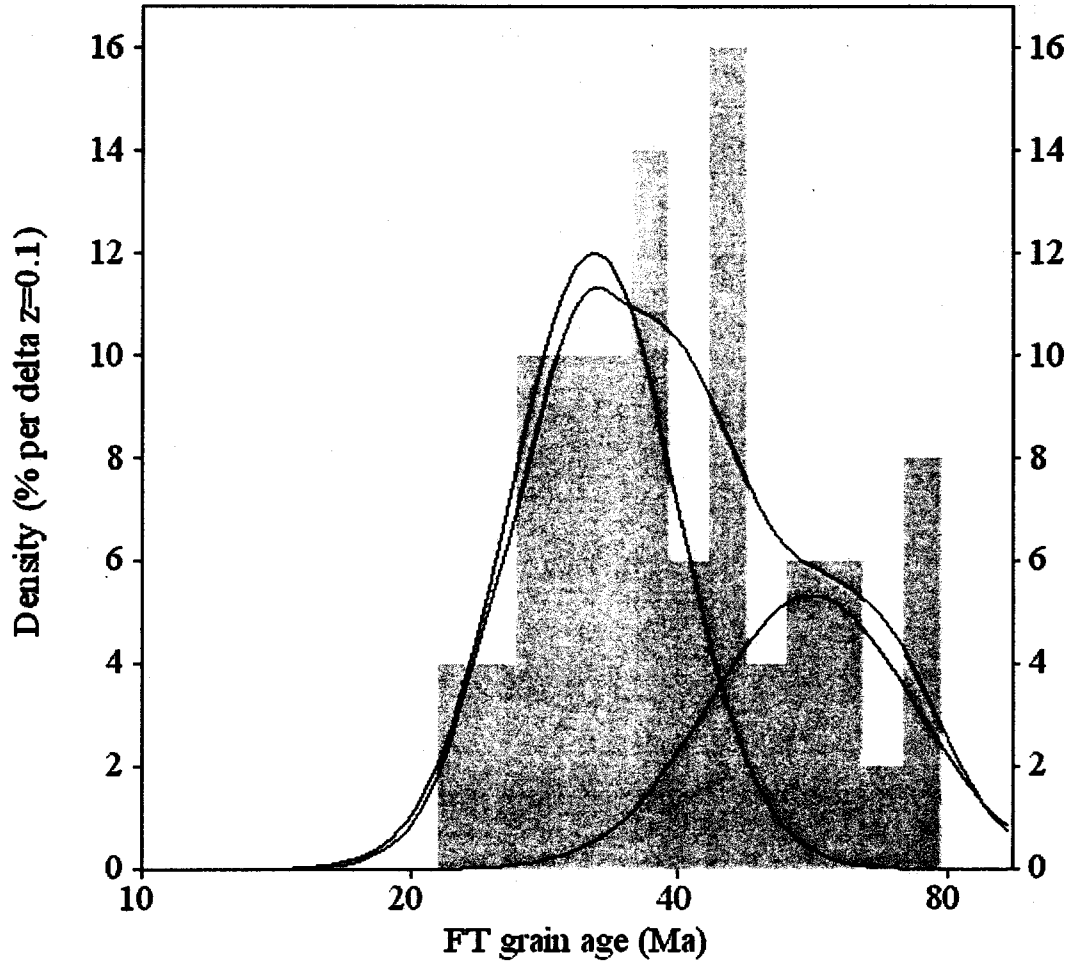
PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac,% | SE,% |
|-------|----------|--------------|---------------|------|--------|------|
| Count | | | | | | |
| 1. | 32.1 | -1.5 ...+1.6 | -2.9 ...+3.2 | 0.22 | 64.7 | 10.6 |
| 32.4 | | | | | | |
| 2. | 56.4 | -4.8 ...+5.3 | -9.0 ...+10.8 | 0.26 | 35.3 | 10.6 |
| 17.6 | | | | | | |

Log-likelihood for best fit: -171.332
Chi-squared value for best fit: 45.991
Reduced chi-squared value: 0.979
Probability for F test: 0%
Degrees of freedom for fit: 47
Condition number for covar matrix: 12.34
Number of iterations: 14

Probability-Density Plot with Best-Fit Peaks



DK 3 - Duktotoh River

BinomFit for Windows ver.1.0
 [03/08/2006 11:56] Main results
 DK-3a, U35Z-40
 File: C:\Documents and Settings\John
 Garver\Desktop\FT\SEP\Alaska\Alaska\DK-3a.txt

FIT OPTION: Best-fit peaks using the binomial model of Galbraith and Green

INITIAL GUESS FOR MODEL PARAMETERS (number of peaks to fit = 3)

| Peak #. | Peak Age | Theta | Fraction, % | Count |
|---------|----------|-------|-------------|-------|
| 1. | 19.20 | 0.308 | 8.5 | 4.24 |
| 2. | 25.10 | 0.368 | 9.4 | 4.69 |
| 3. | 38.70 | 0.473 | 43.9 | 21.97 |

 Total range for grain ages: 15.7 to 77.8 Ma
 Number of active grains: 50
 Number of removed grains: 0
 Degrees of freedom for fit: 45
 Average of the SE(Z)'s for the grains: 0.21
 Estimated width of peaks in PD plot in Z units: 0.24

PARAMETERS FOR BEST-FIT PEAKS

- * Standard error for peak age includes group error
- * Peak width is for PD plot assuming a kernel factor = 0.60

| #. | Peak, Ma | 68%CI | 95%CI | W(Z) | Frac, % | SE, % |
|------|----------|--------------|--------------|------|---------|-------|
| 1. | 19.5 | -2.4 ...+2.7 | -4.4 ...+5.7 | 0.24 | 8.8 | 4.6 |
| 4.4 | | | | | | |
| 2. | 34.8 | -3.4 ...+3.8 | -6.3 ...+7.7 | 0.22 | 36.6 | 22.0 |
| 18.3 | | | | | | |
| 3. | 46.7 | -3.5 ...+3.8 | -6.6 ...+7.7 | 0.23 | 54.6 | 22.4 |
| 27.3 | | | | | | |

 Log-likelihood for best fit: -171.433
 Chi-squared value for best fit: 48.404
 Reduced chi-squared value: 1.076
 Probability for F test: 0%
 Degrees of freedom for fit: 45
 Condition number for covar matrix: 36.16
 Number of iterations: 37

Probability-Density Plot with Best-Fit Peaks

