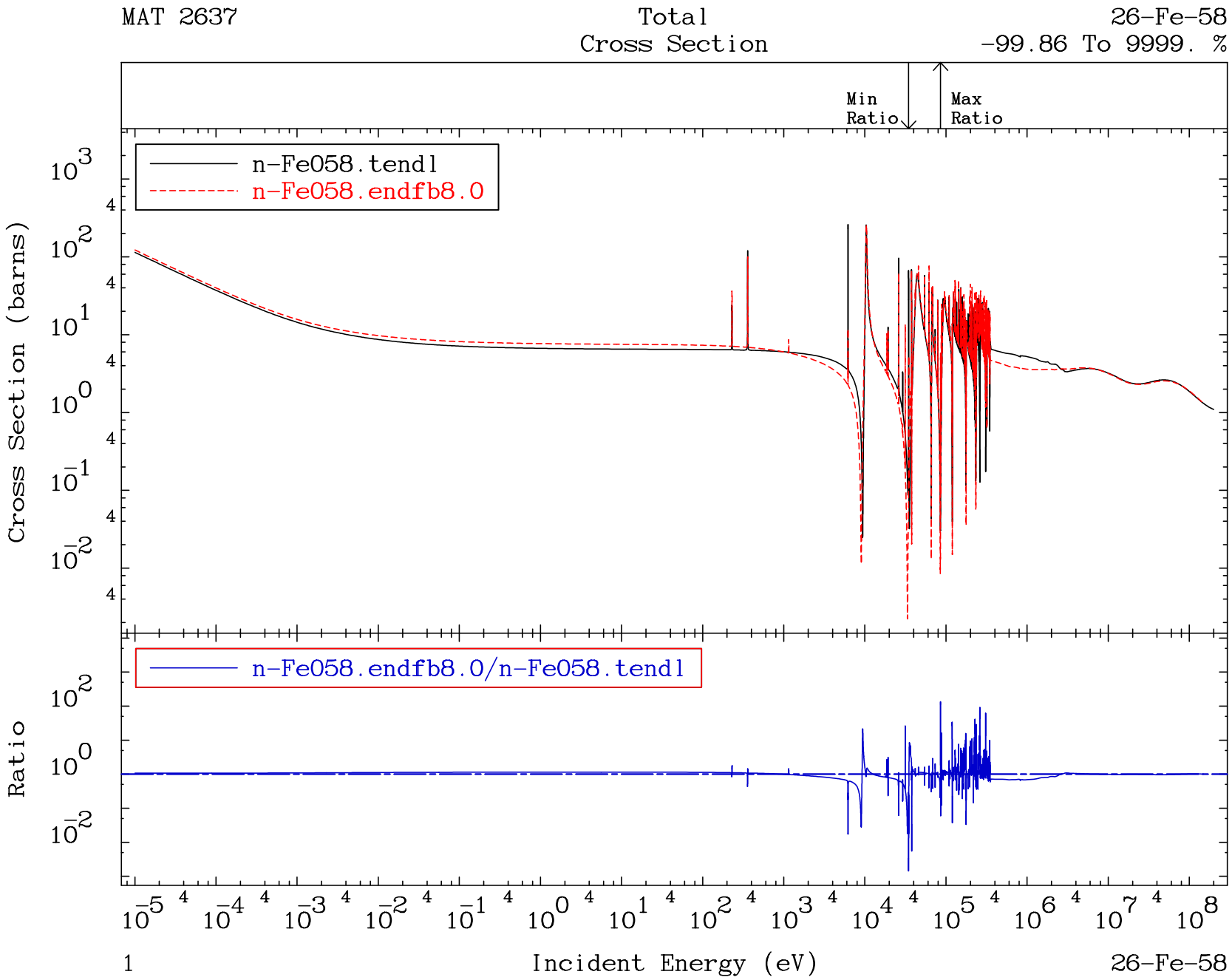
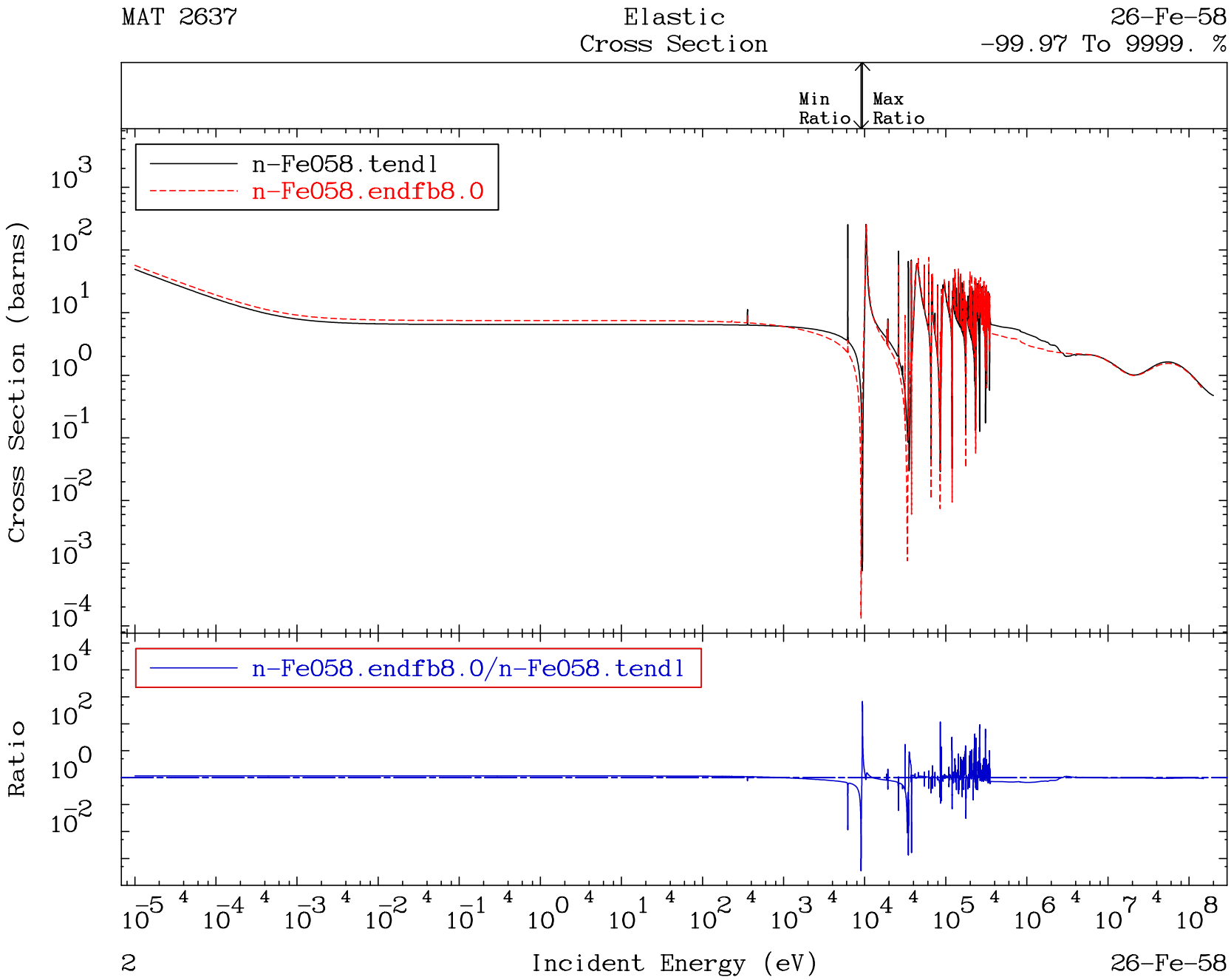
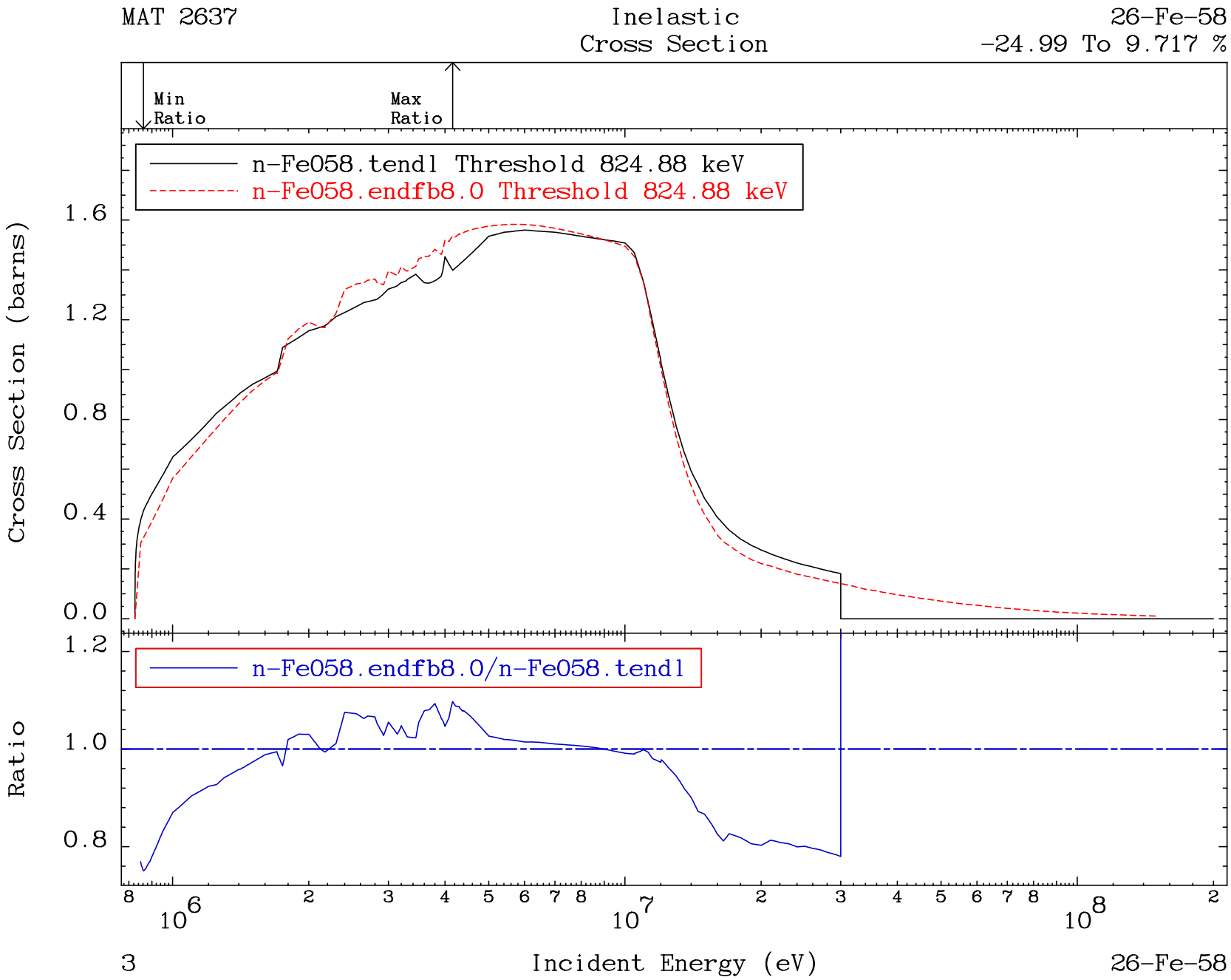
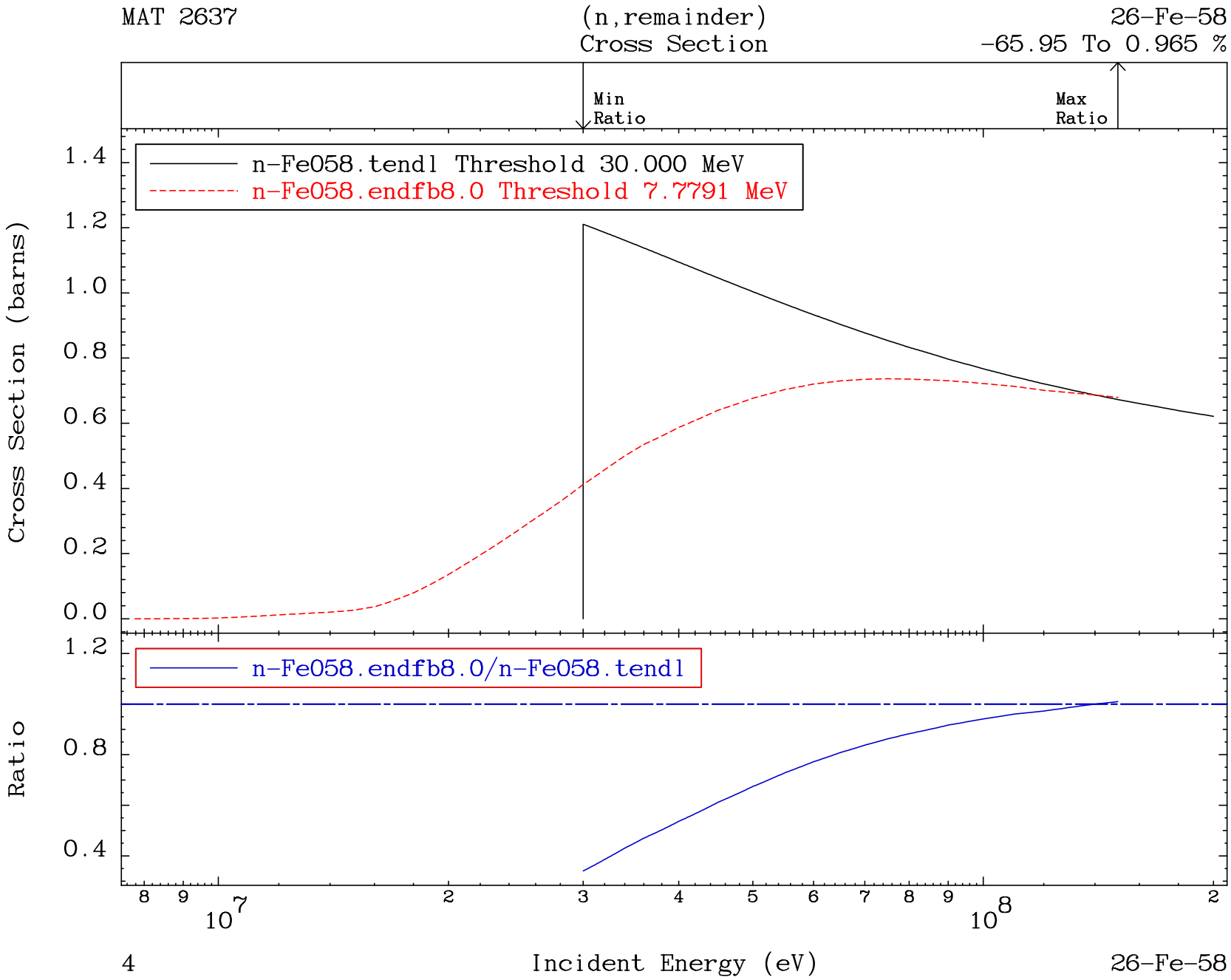
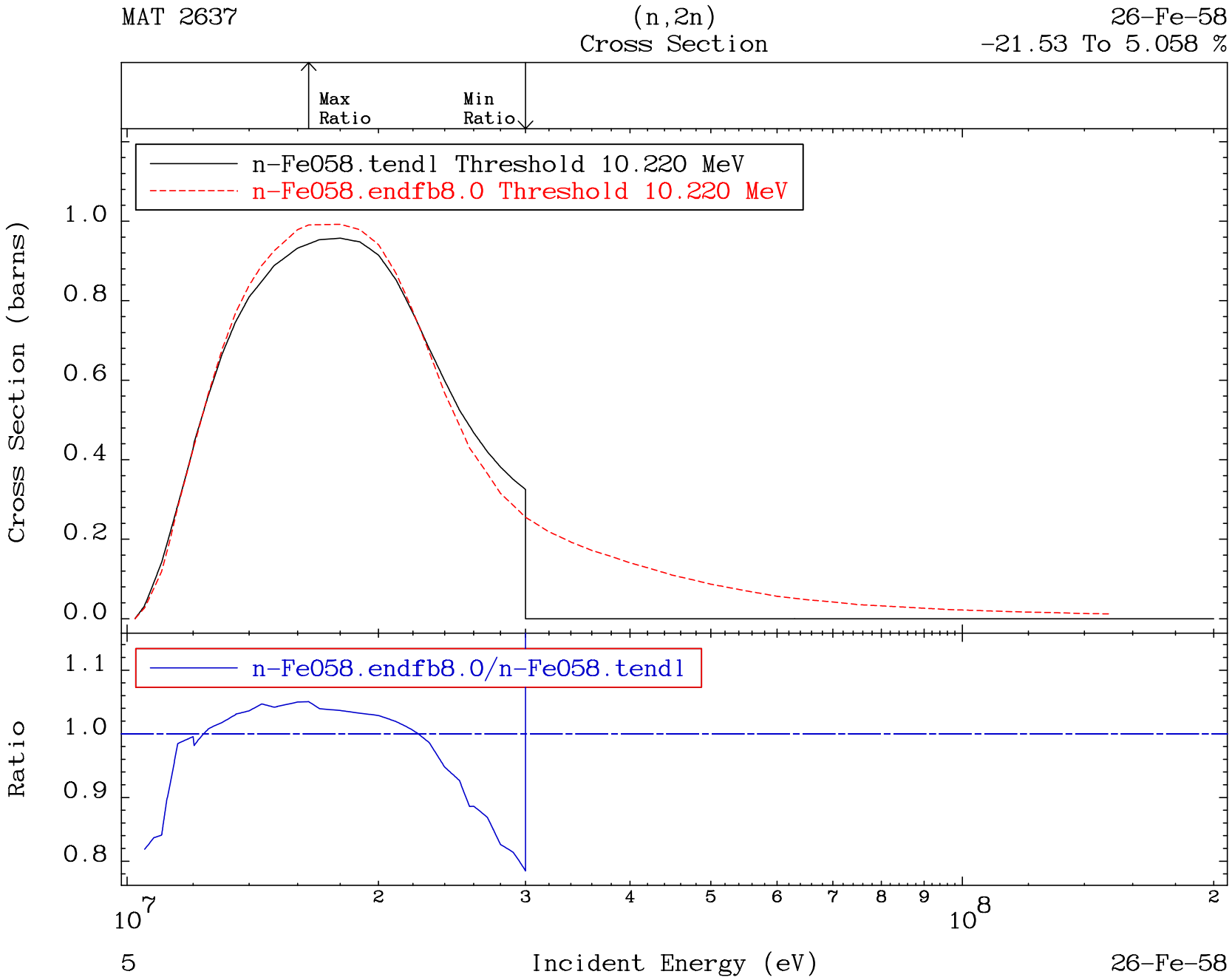
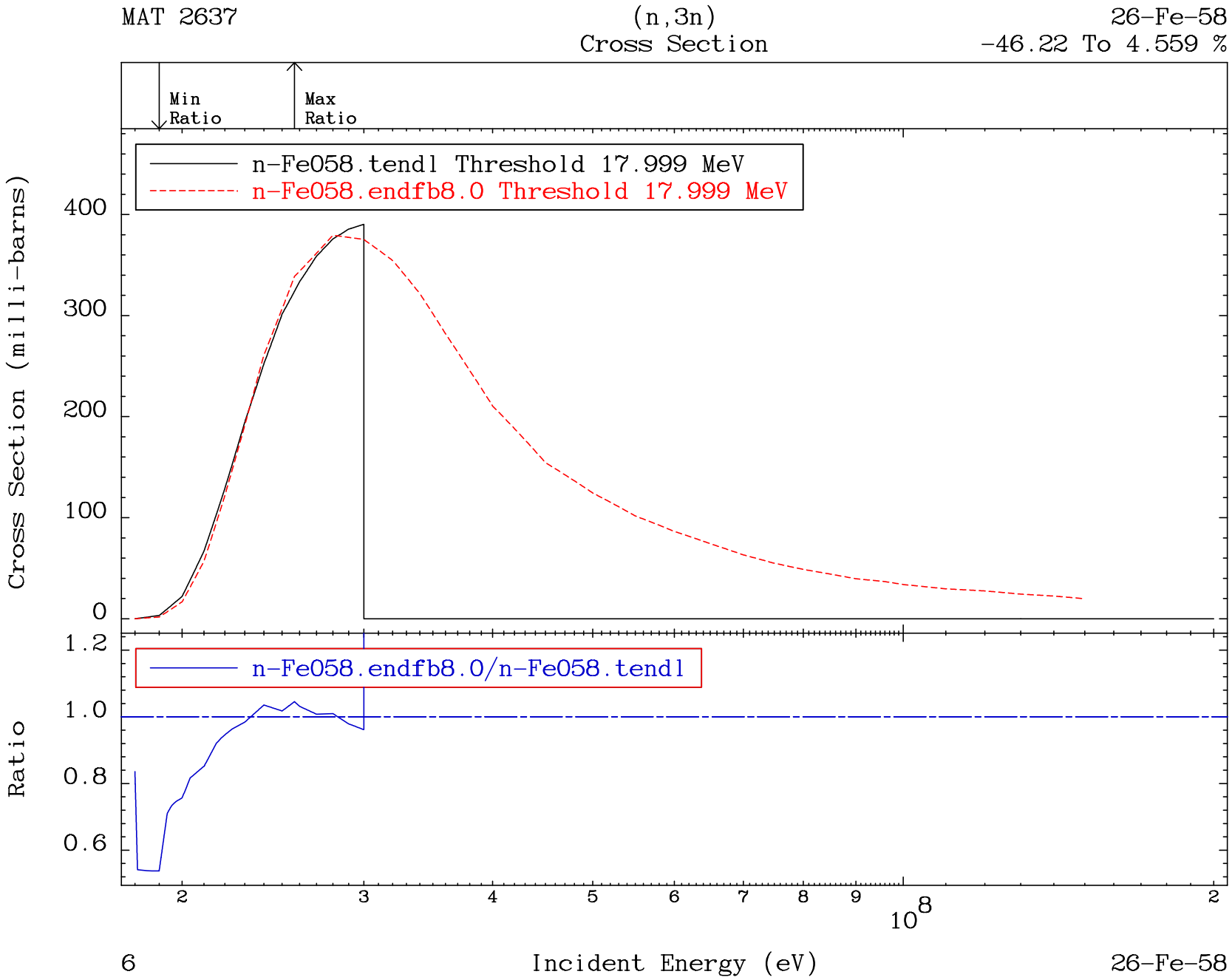

MAT 2637
Total
Cross Section
26-Fe-58
-99.86 To 9999. %
Min
Ratio
Max
Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
1
26-Fe-58

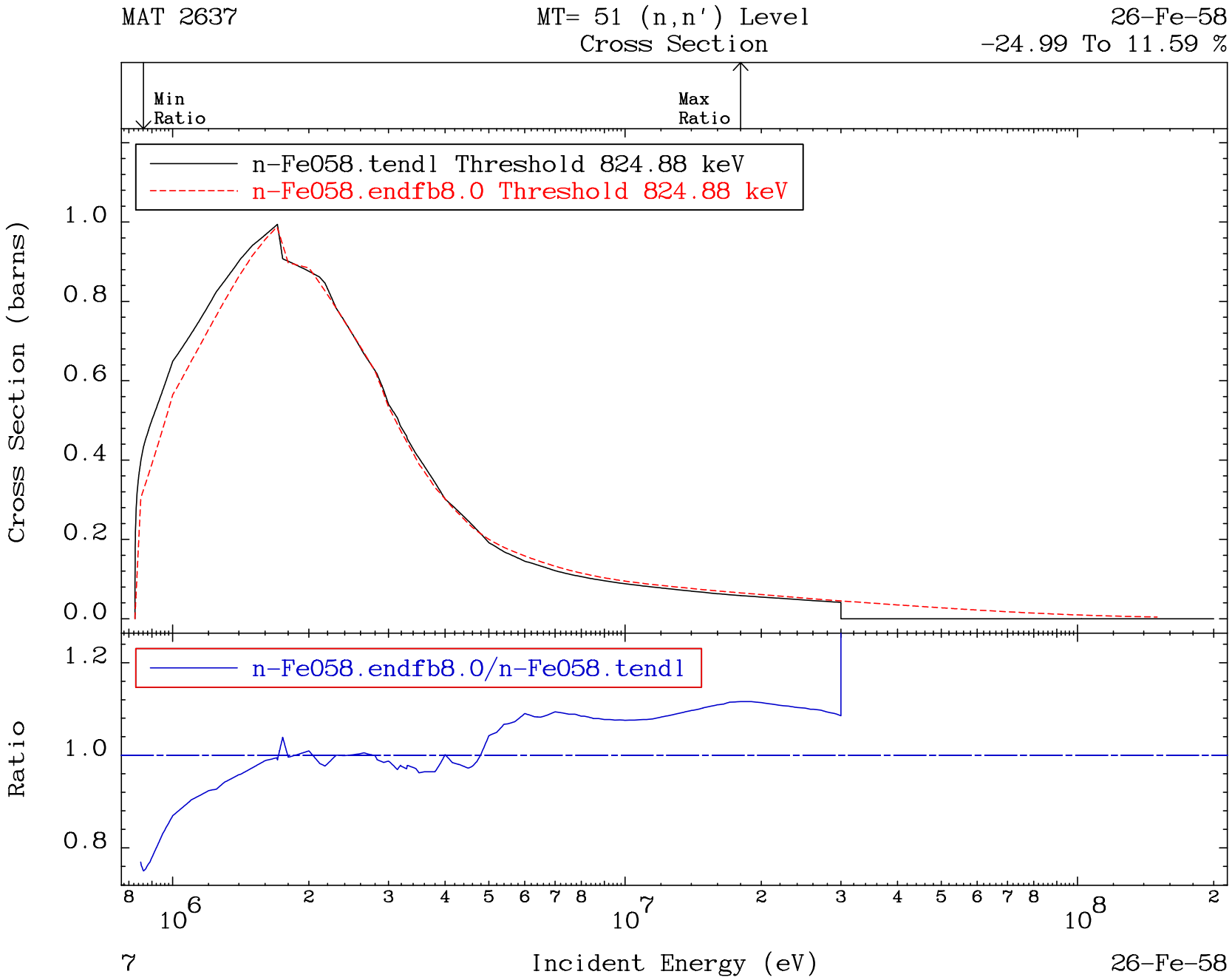

MAT 2637
Elastic
Cross Section
26-Fe-58
-99.97 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
2
26-Fe-58

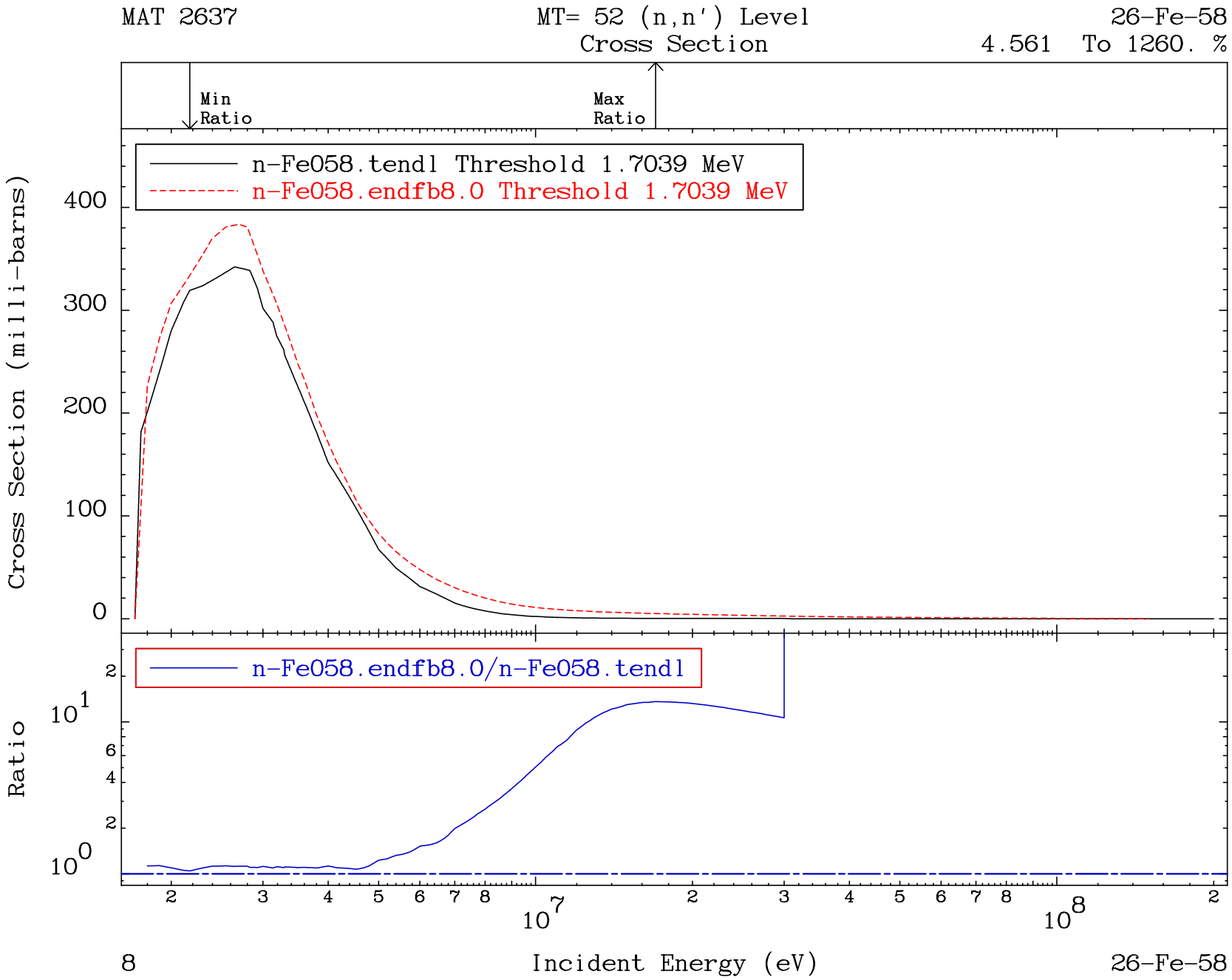

MAT 2637
Inelastic
Cross Section
26-Fe-58
-24.99 To 9.717 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 824.88 keV
n-Fe058.endfb8.0 Threshold 824.88 keV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
1.0
0.8
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
3
Incident Energy (eV)
26-Fe-58

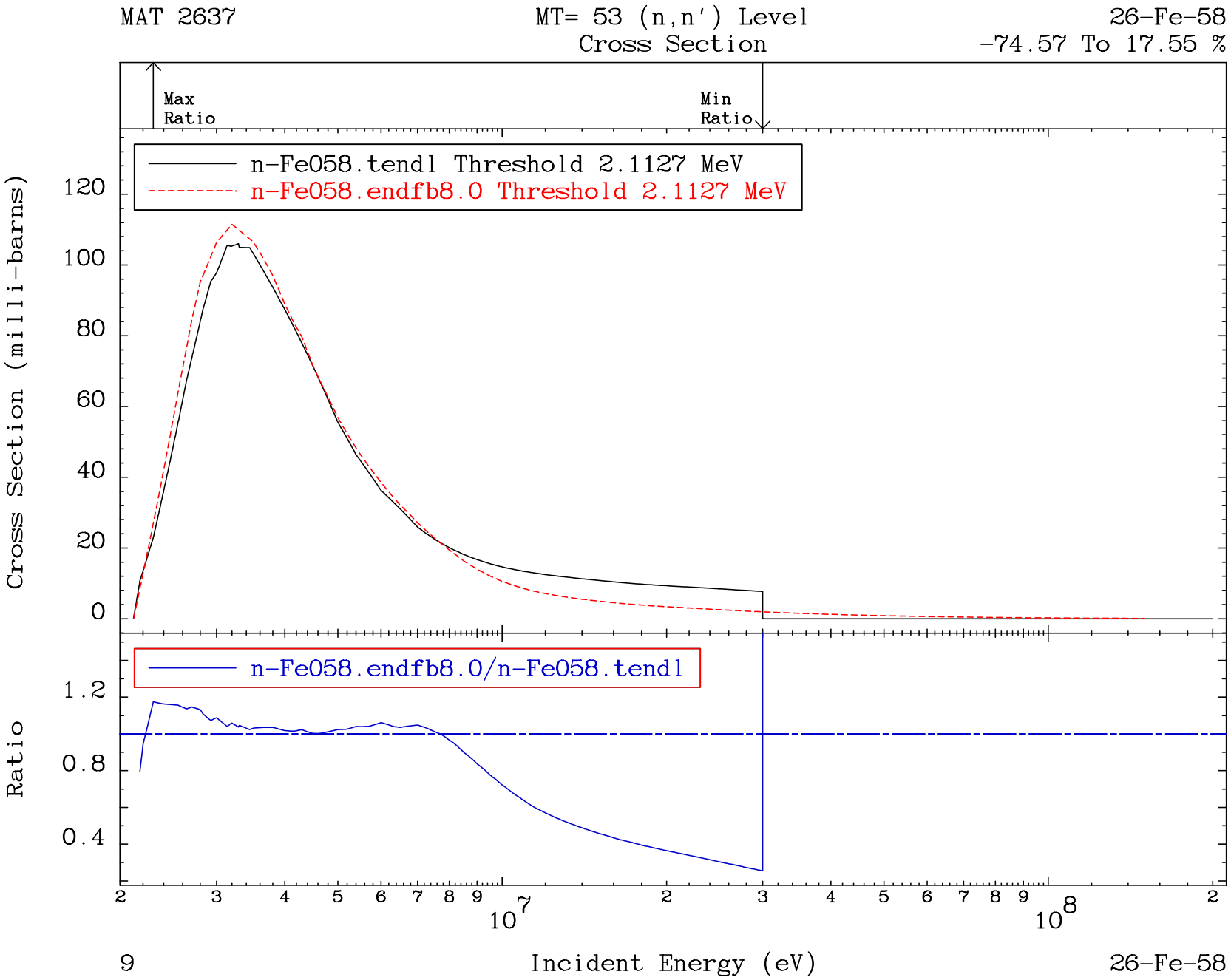

MAT 2637
(n,remainder)
Cross Section
26-Fe-58
-65.95 To 0.965 %
Min
Ratio
Max
Ratio
n-Fe058.tendl Threshold 30.000 MeV
n-Fe058.endfb8.0 Threshold 7.7791 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
0.8
0.4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
26-Fe-58

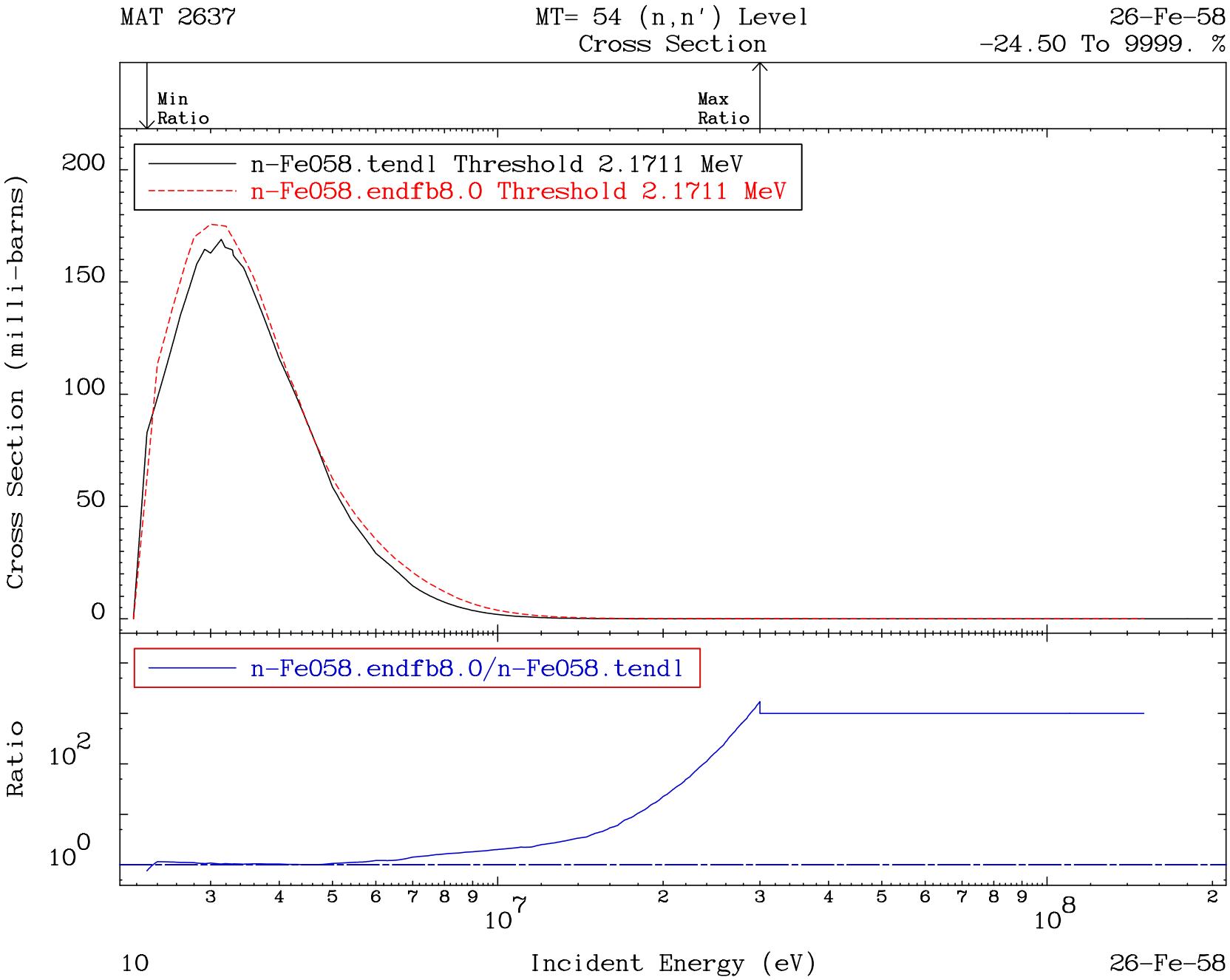

MAT 2637
(n,2n)
Cross Section
26-Fe-58
-21.53 To 5.058 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 10.220 MeV
n-Fe058.endfb8.0 Threshold 10.220 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.1
1.0
0.9
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
26-Fe-58

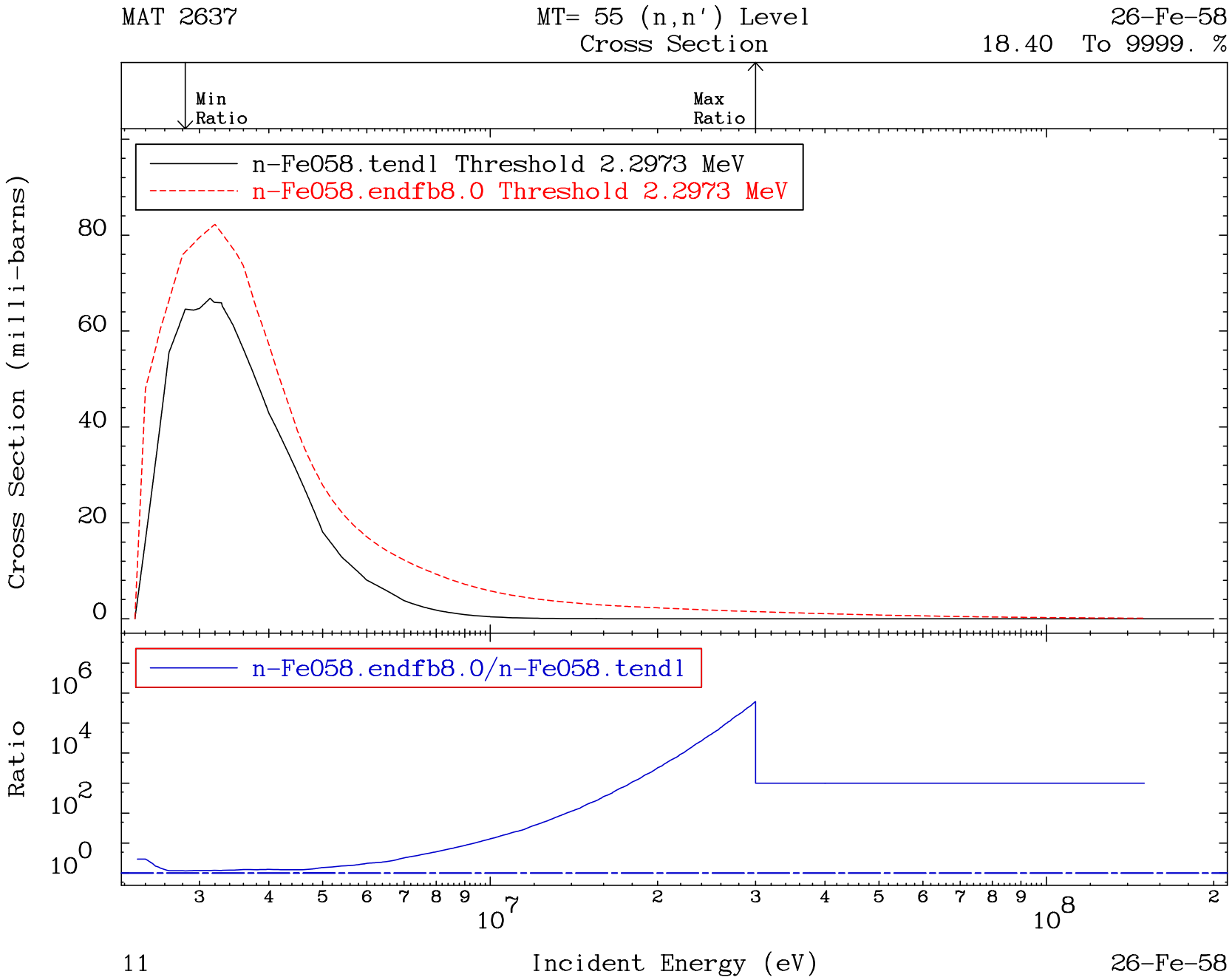

MAT 2637
(n,3n)
Cross Section
26-Fe-58
-46.22 To 4.559 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 17.999 MeV
n-Fe058.endfb8.0 Threshold 17.999 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
26-Fe-58

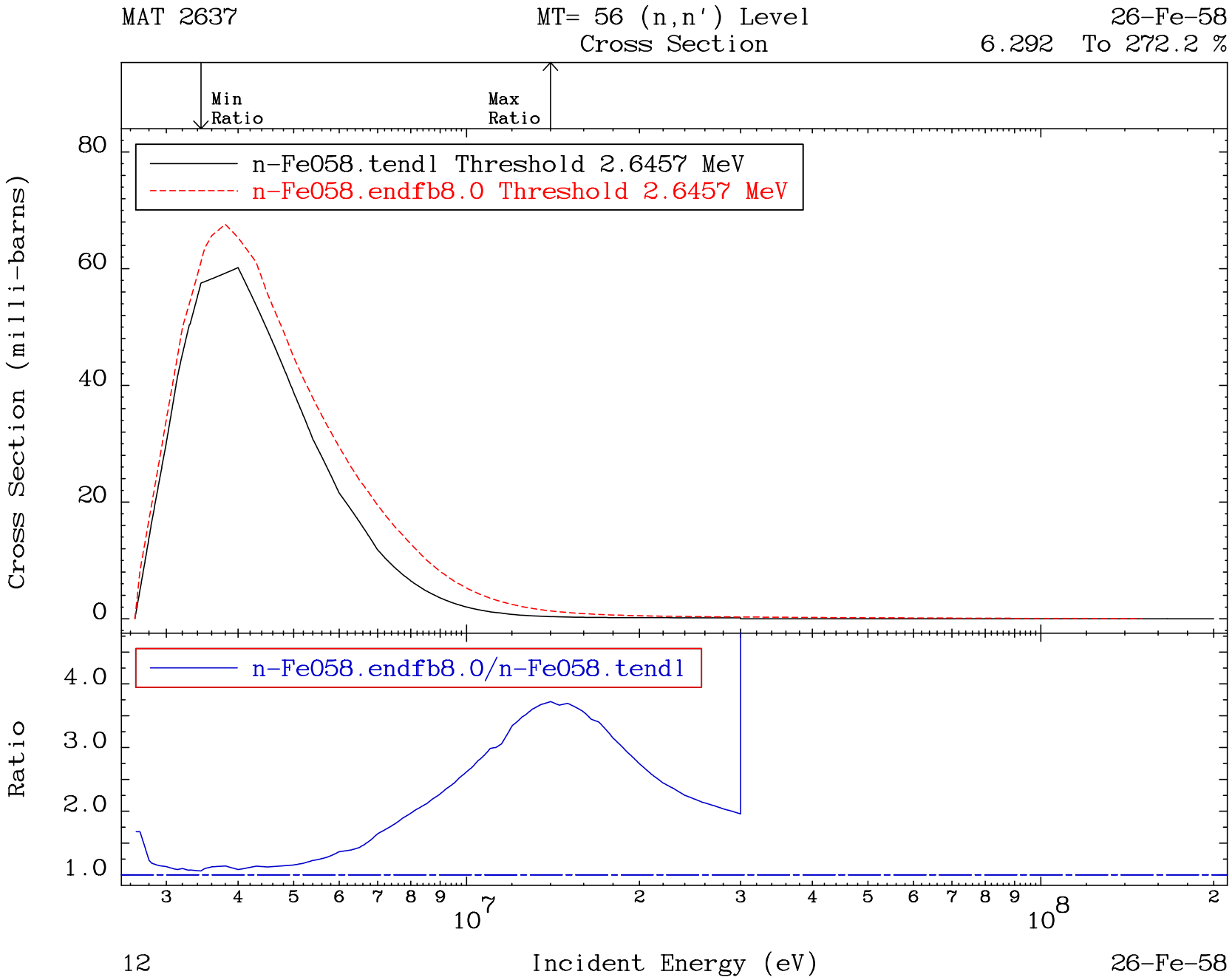

MAT 2637
MT= 51 (n,n') Level
Cross Section
26-Fe-58
-24.99 To 11.59 %
Min
Ratio
Max
Ratio
n-Fe058.tendl Threshold 824.88 keV
n-Fe058.endfb8.0 Threshold 824.88 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
1.0
0.8
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
26-Fe-58

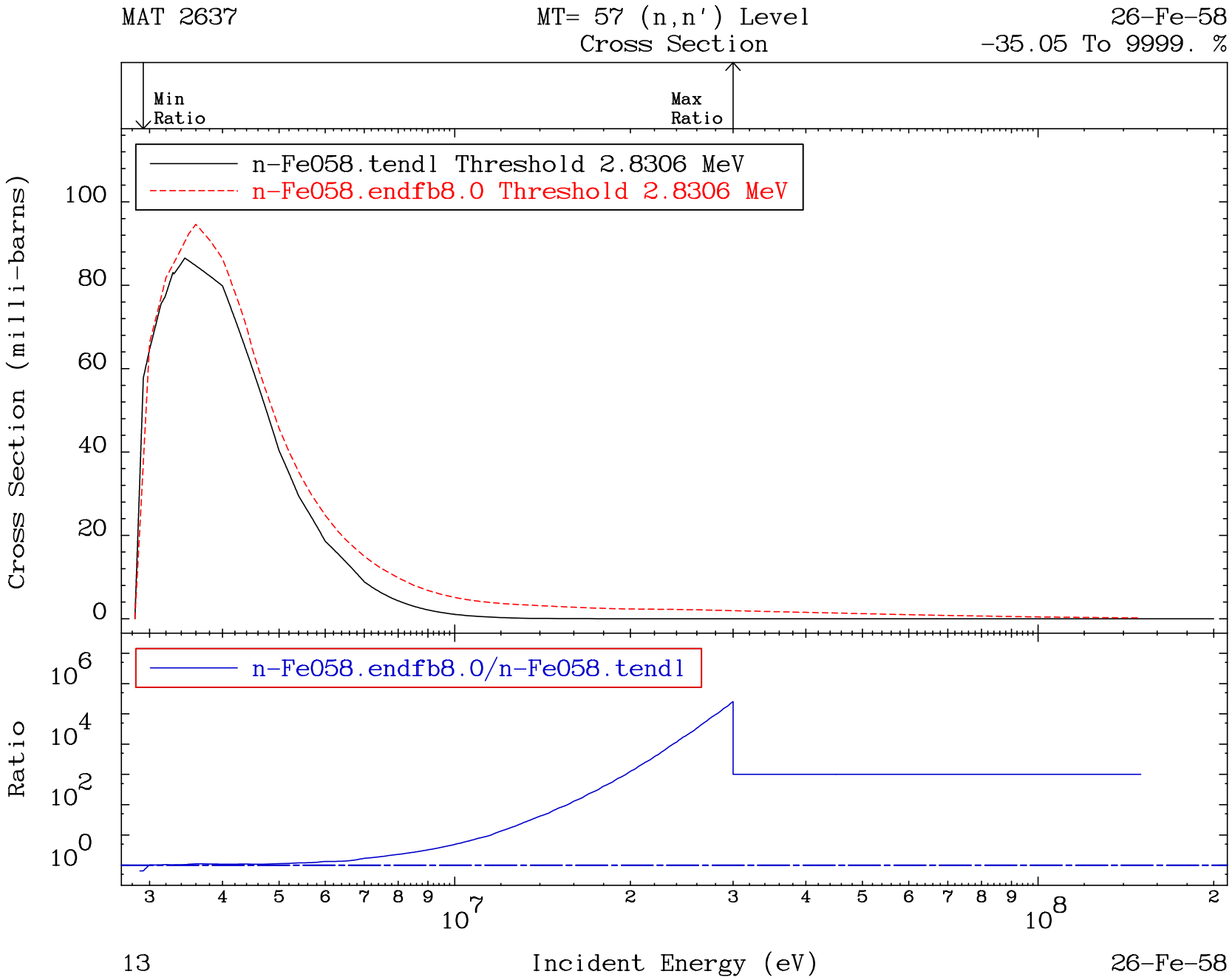

MAT 2637
MT= 52 (n,n') Level
Cross Section
26-Fe-58
4.561 To 1260. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 1.7039 MeV
n-Fe058.endfb8.0 Threshold 1.7039 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^1
10^0
2
6
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
26-Fe-58

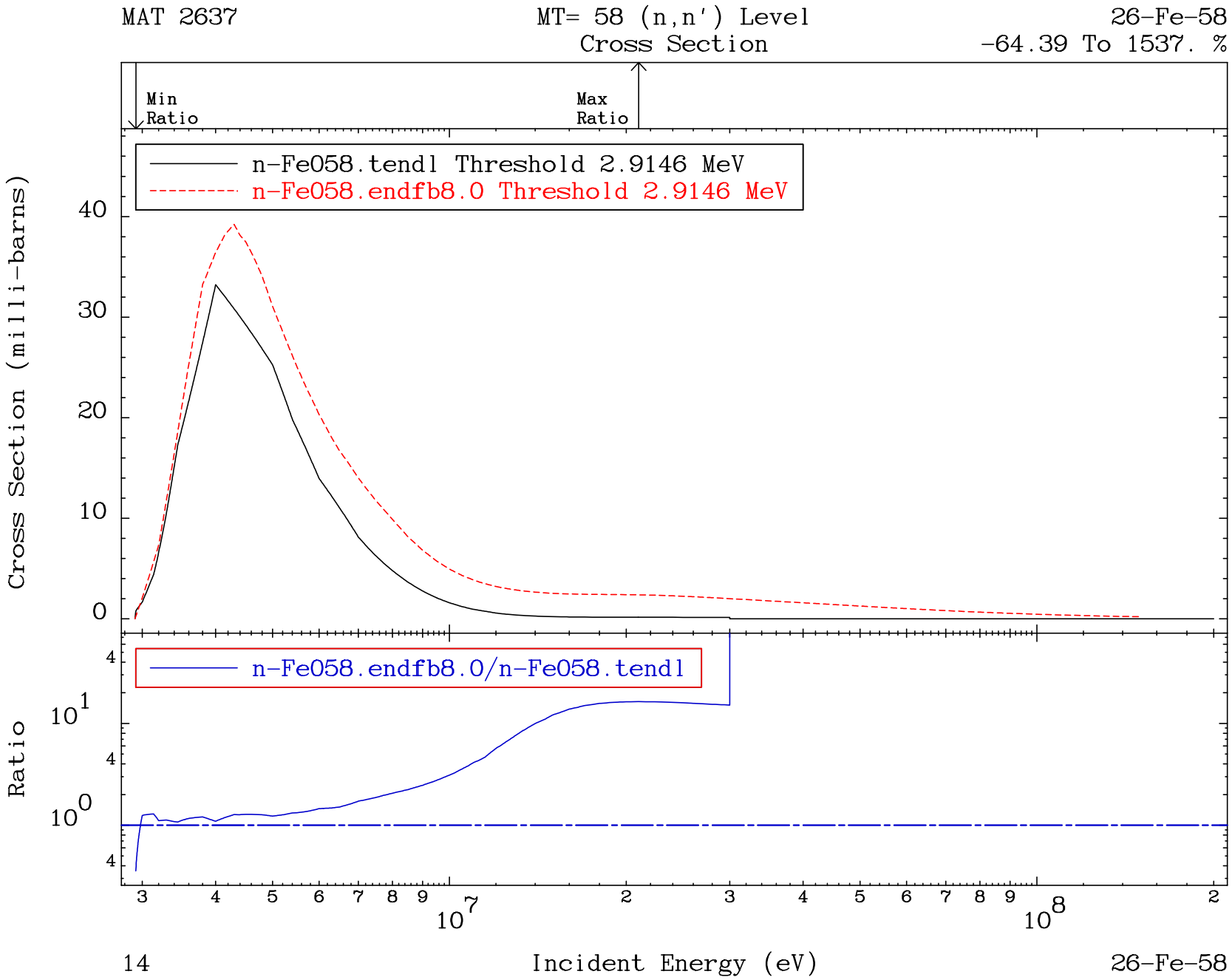

MAT 2637
MT= 53 (n,n') Level
Cross Section
26-Fe-58
-74.57 To 17.55 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 2.1127 MeV
n-Fe058.endfb8.0 Threshold 2.1127 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
0.8
0.4
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
26-Fe-58

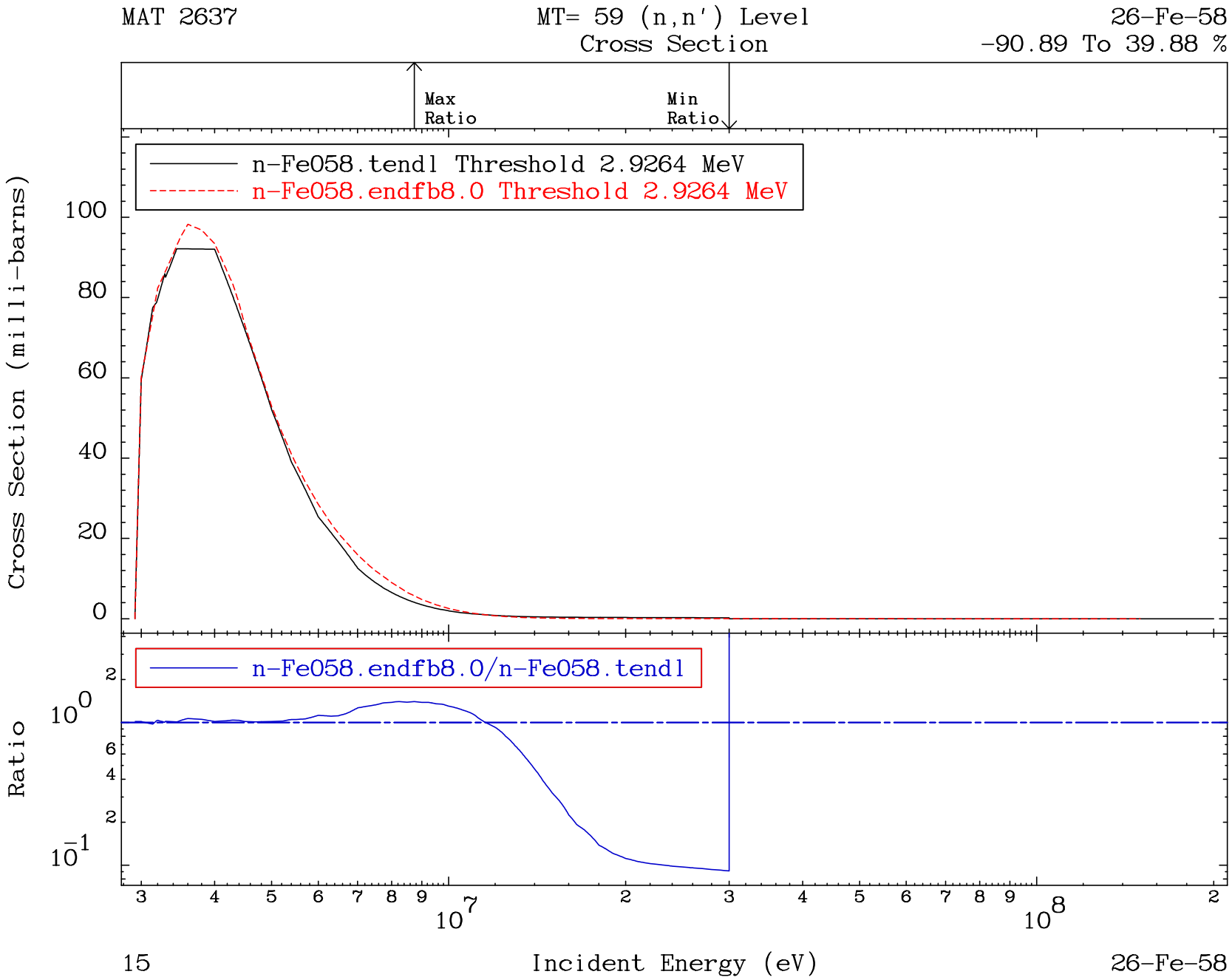

MAT 2637
MT= 54 (n,n') Level
Cross Section
26-Fe-58
-24.50 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 2.1711 MeV
n-Fe058.endfb8.0 Threshold 2.1711 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
26-Fe-58

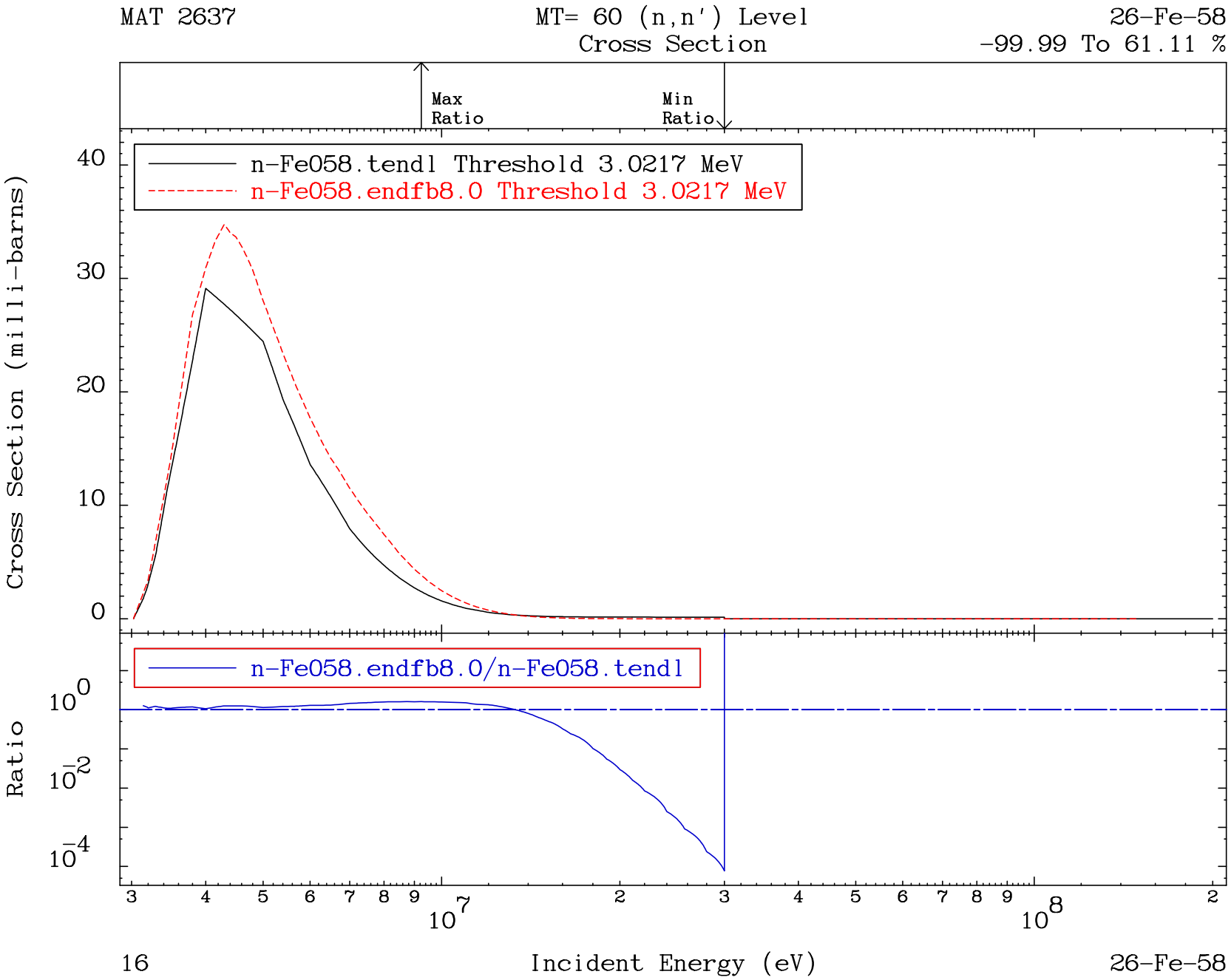

MAT 2637
MT= 55 (n,n') Level
Cross Section
26-Fe-58
18.40 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 2.2973 MeV
n-Fe058.endfb8.0 Threshold 2.2973 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
11
Incident Energy (eV)
26-Fe-58

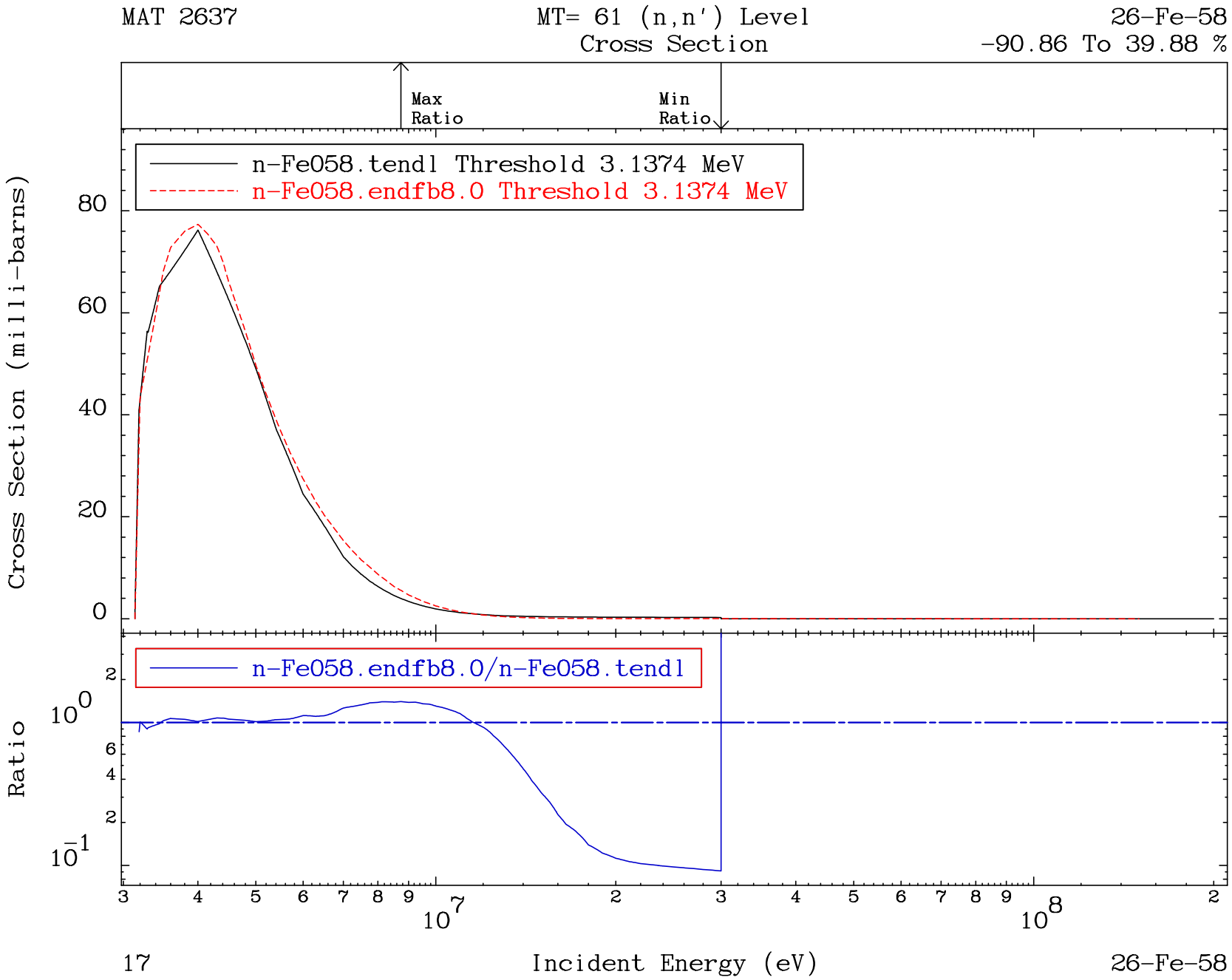

MAT 2637
MT= 56 (n,n') Level
Cross Section
26-Fe-58
6.292 To 272.2 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 2.6457 MeV
n-Fe058.endfb8.0 Threshold 2.6457 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
4.0
3.0
2.0
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
26-Fe-58

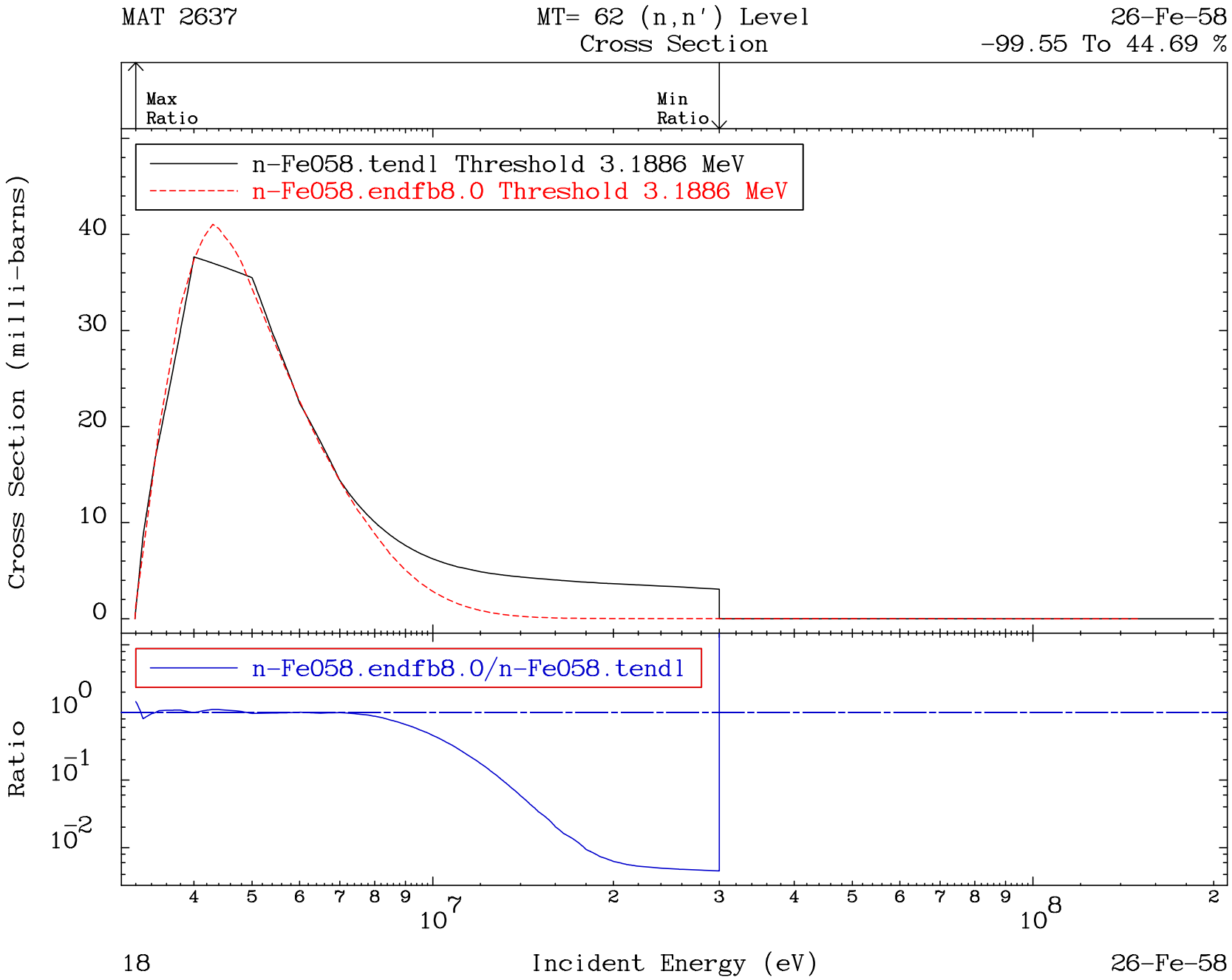

MAT 2637
MT= 57 (n,n') Level
Cross Section
26-Fe-58
-35.05 To 9999. %
Min
Ratio
Max
Ratio
n-Fe058.tendl Threshold 2.8306 MeV
n-Fe058.endfb8.0 Threshold 2.8306 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
26-Fe-58

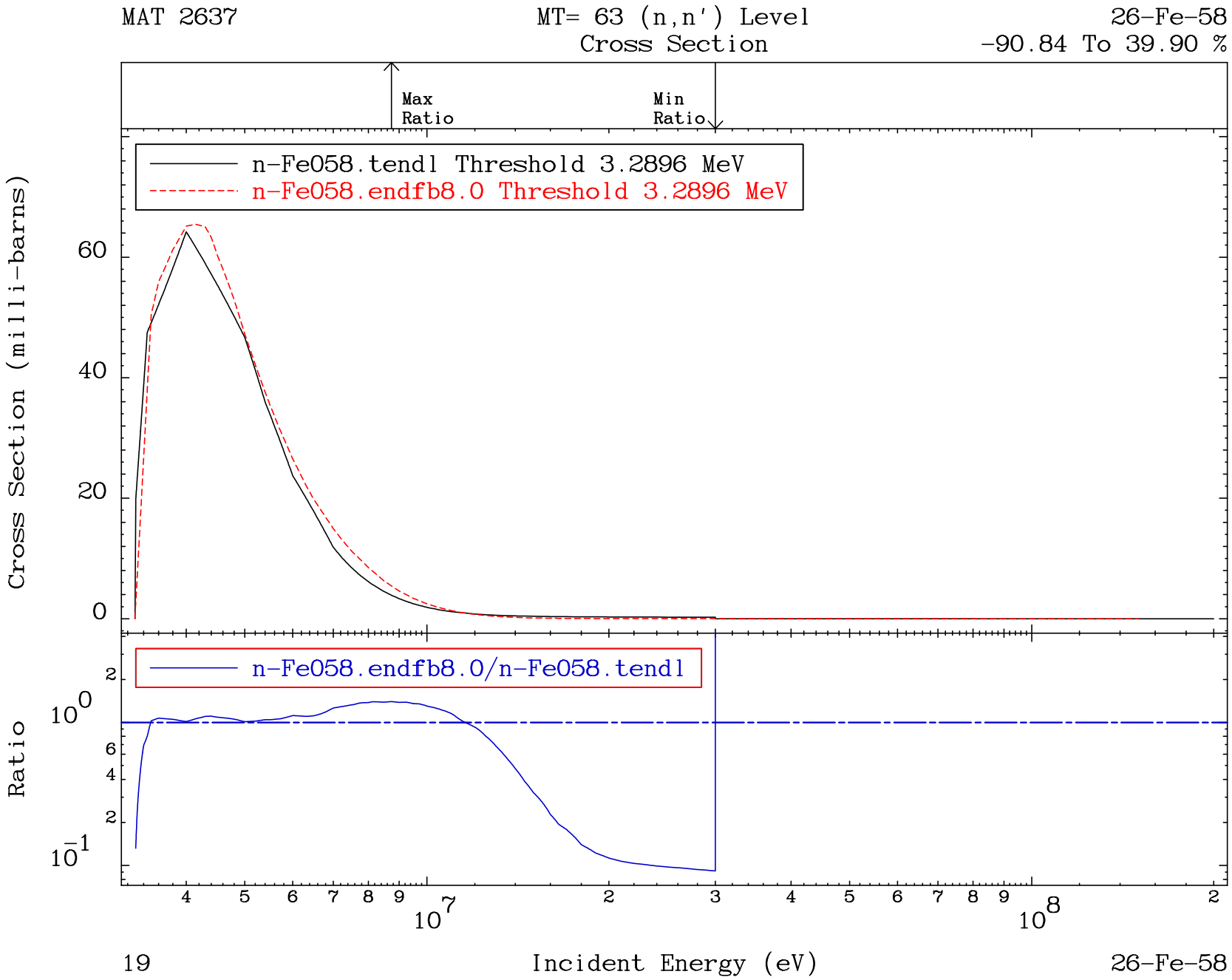

MAT 2637
MT= 58 (n,n') Level
Cross Section
26-Fe-58
-64.39 To 1537. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 2.9146 MeV
n-Fe058.endfb8.0 Threshold 2.9146 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^1
10^0
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
26-Fe-58

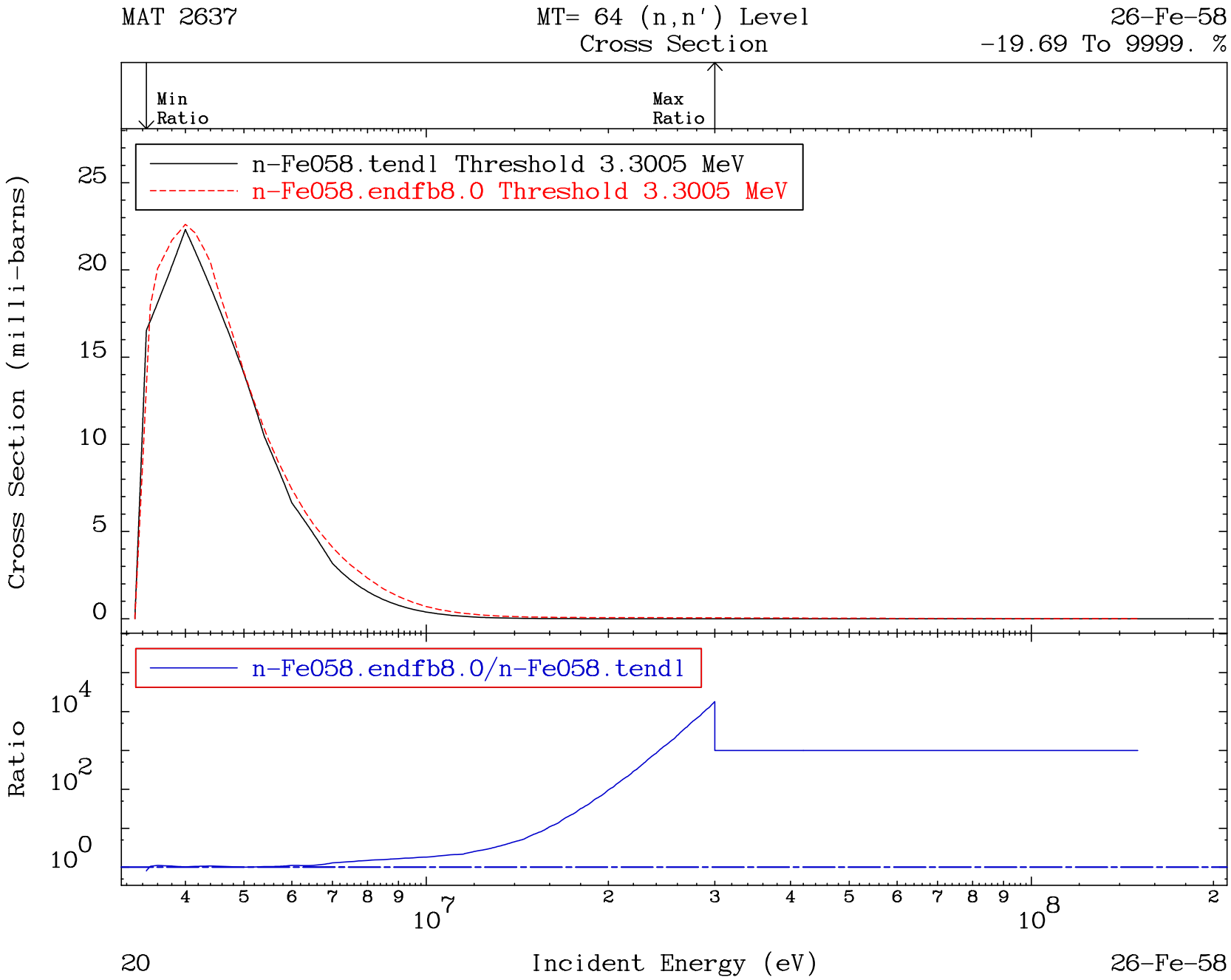

MAT 2637
MT= 59 (n,n') Level
Cross Section
26-Fe-58
-90.89 To 39.88 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 2.9264 MeV
n-Fe058.endfb8.0 Threshold 2.9264 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
2
10^0
6
4
2
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
26-Fe-58

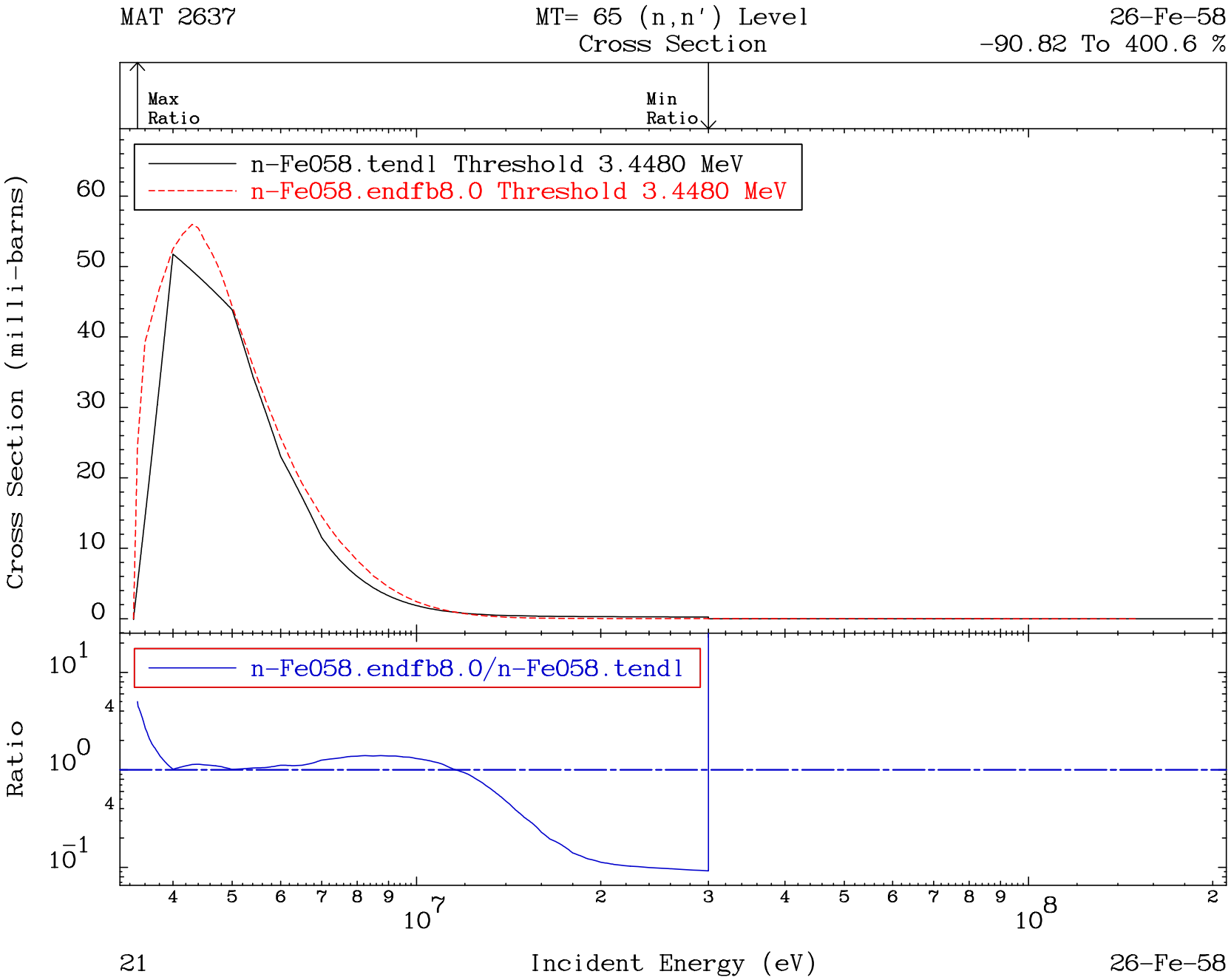

MAT 2637
MT= 60 (n,n') Level
Cross Section
26-Fe-58
-99.99 To 61.11 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.0217 MeV
n-Fe058.endfb8.0 Threshold 3.0217 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^0
10^-2
10^-4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
26-Fe-58

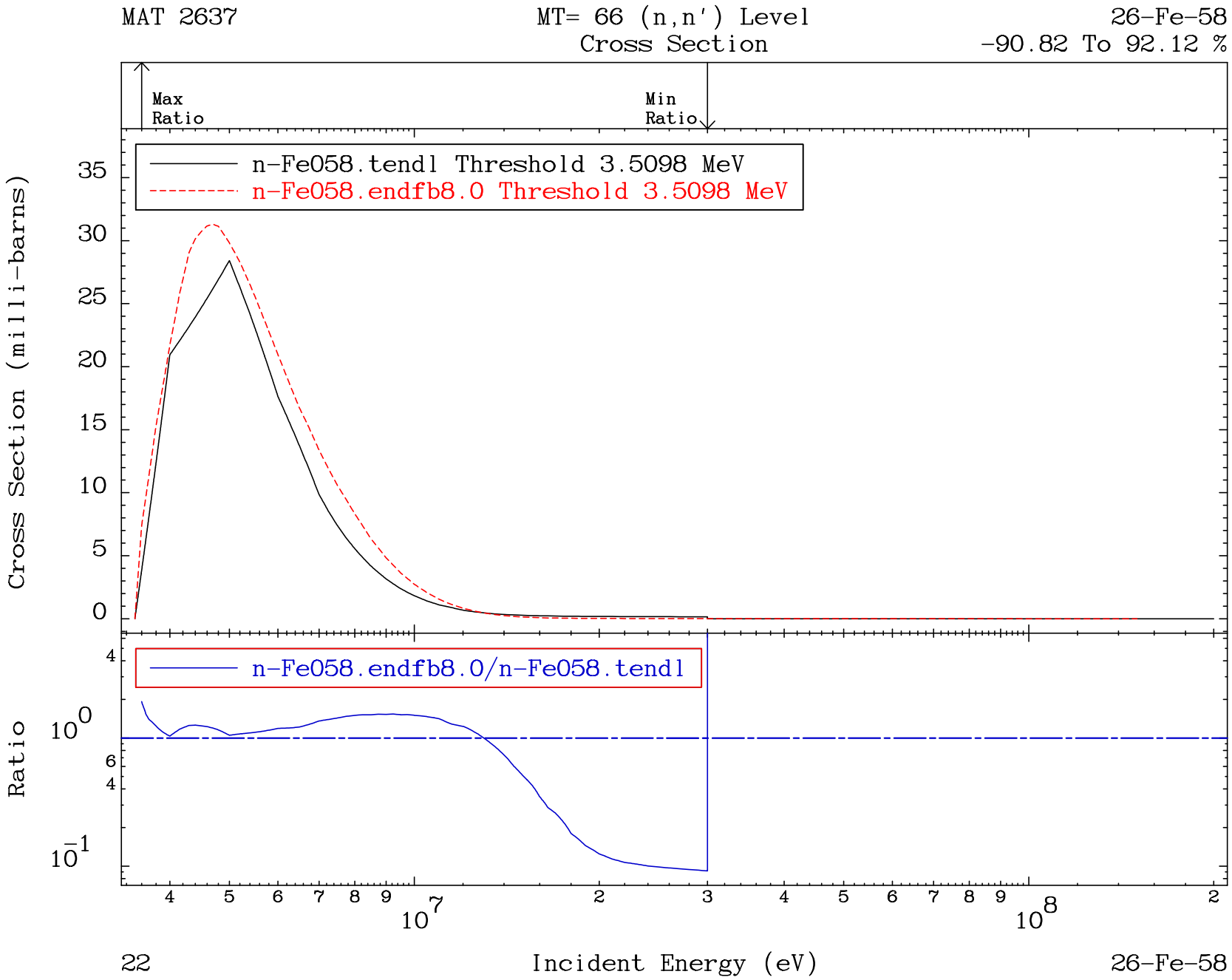

MAT 2637
MT= 61 (n,n') Level
Cross Section
26-Fe-58
-90.86 To 39.88 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.1374 MeV
n-Fe058.endfb8.0 Threshold 3.1374 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
2
10^0
6
4
2
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
26-Fe-58

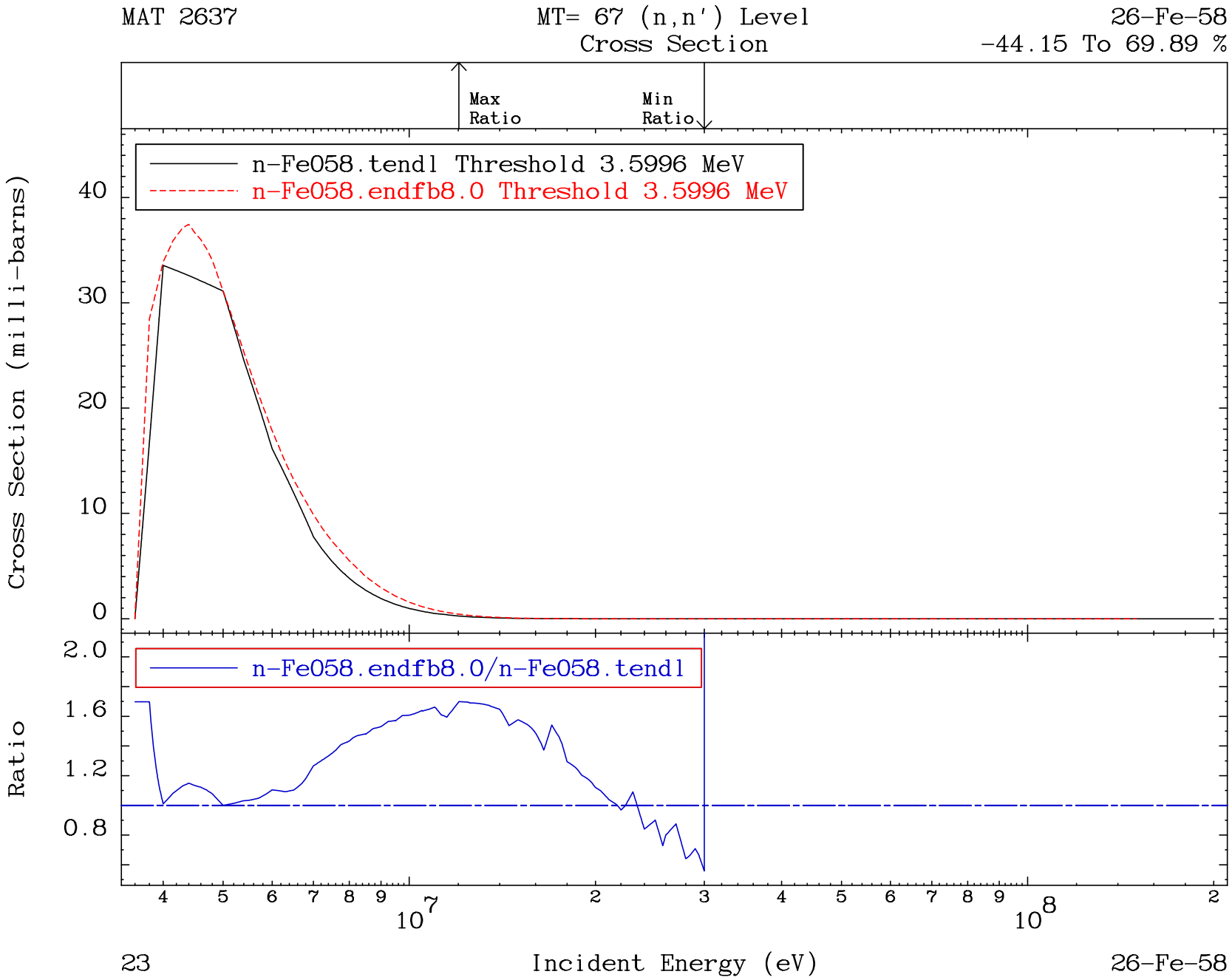

MAT 2637
MT= 62 (n,n') Level
Cross Section
26-Fe-58
-99.55 To 44.69 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.1886 MeV
n-Fe058.endfb8.0 Threshold 3.1886 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^0
10^-1
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
26-Fe-58

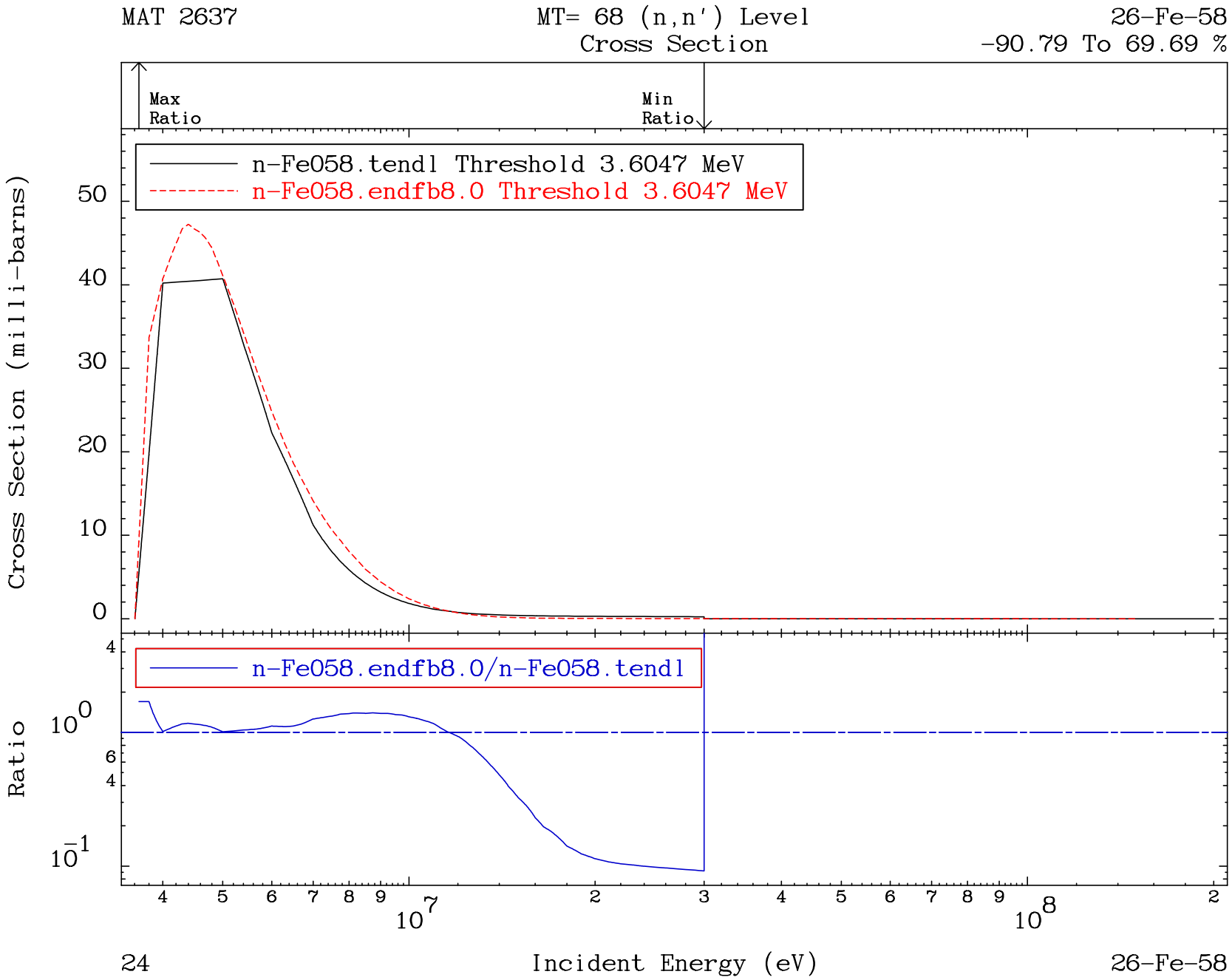

MAT 2637
MT= 63 (n,n') Level
Cross Section
26-Fe-58
-90.84 To 39.90 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.2896 MeV
n-Fe058.endfb8.0 Threshold 3.2896 MeV
Cross Section (milli-barns)
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
2
10^0
6
4
2
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
26-Fe-58

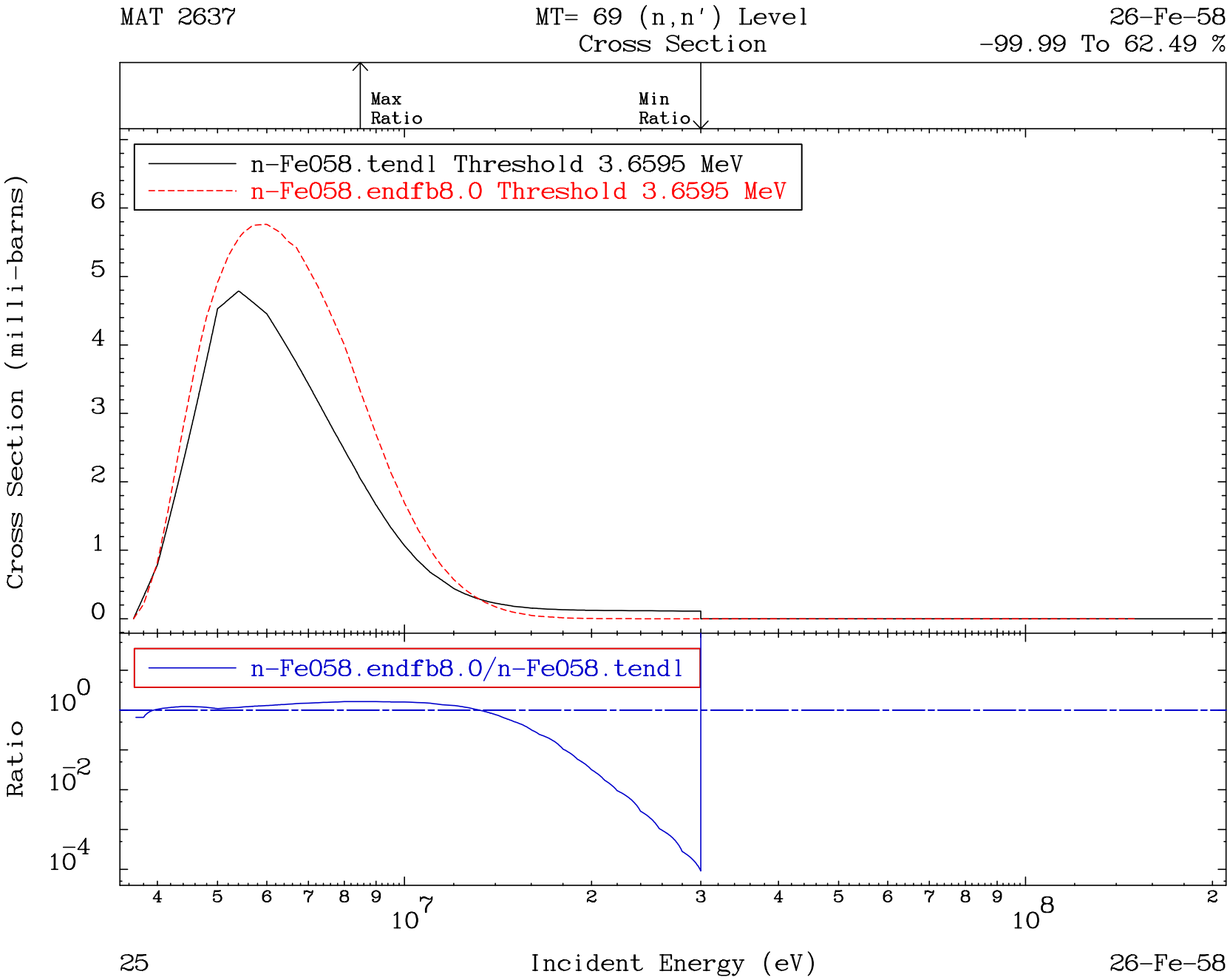

MAT 2637
MT= 64 (n,n') Level
Cross Section
26-Fe-58
-19.69 To 9999. %
Min
Ratio
Max
Ratio
n-Fe058.tendl Threshold 3.3005 MeV
n-Fe058.endfb8.0 Threshold 3.3005 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
20
Incident Energy (eV)
26-Fe-58

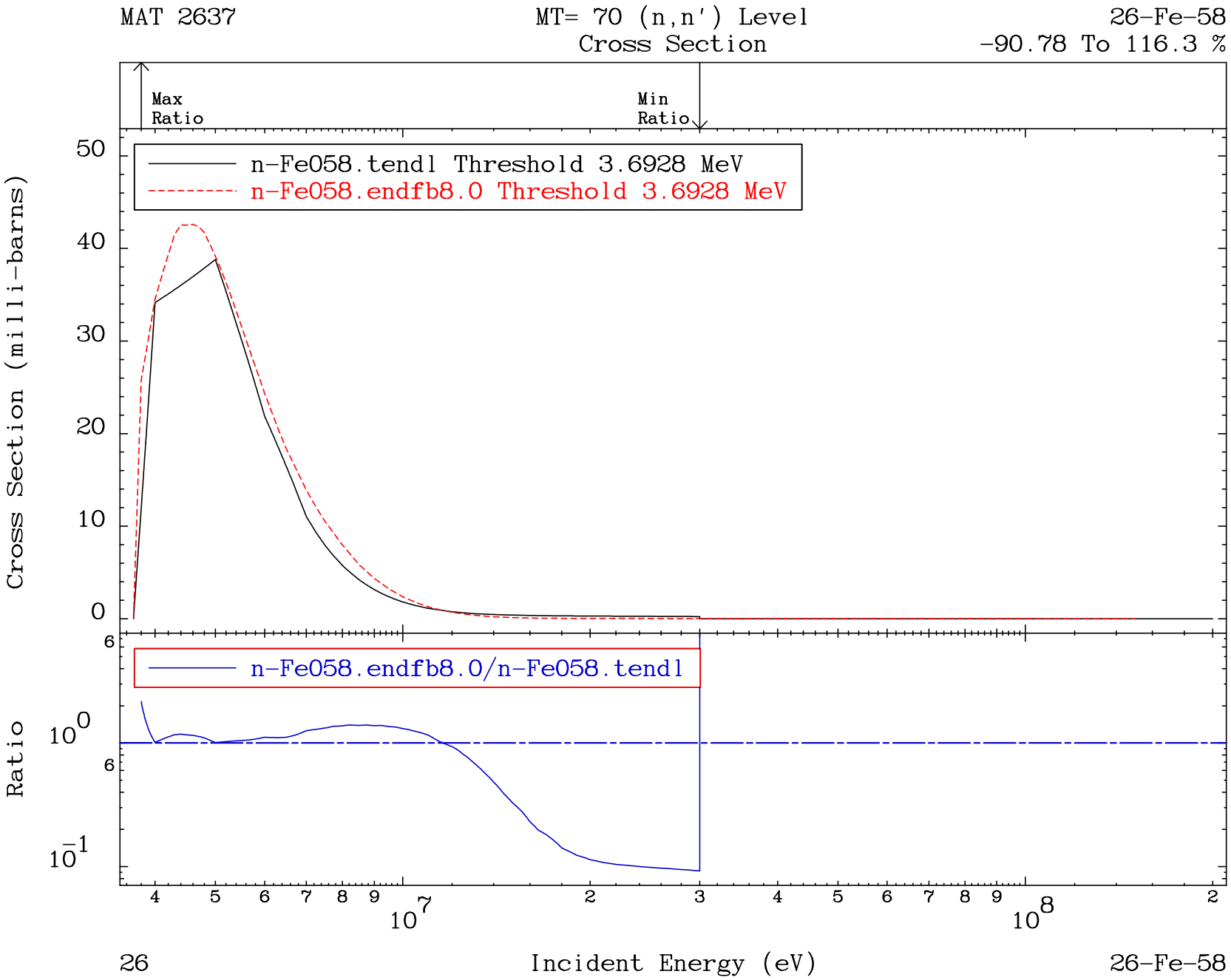

MAT 2637
MT= 65 (n,n') Level
Cross Section
26-Fe-58
-90.82 To 400.6 %
Max
Ratio
Min
Ratio
n-Fe058.tendl Threshold 3.4480 MeV
n-Fe058.endfb8.0 Threshold 3.4480 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^1
4
10^0
4
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
26-Fe-58

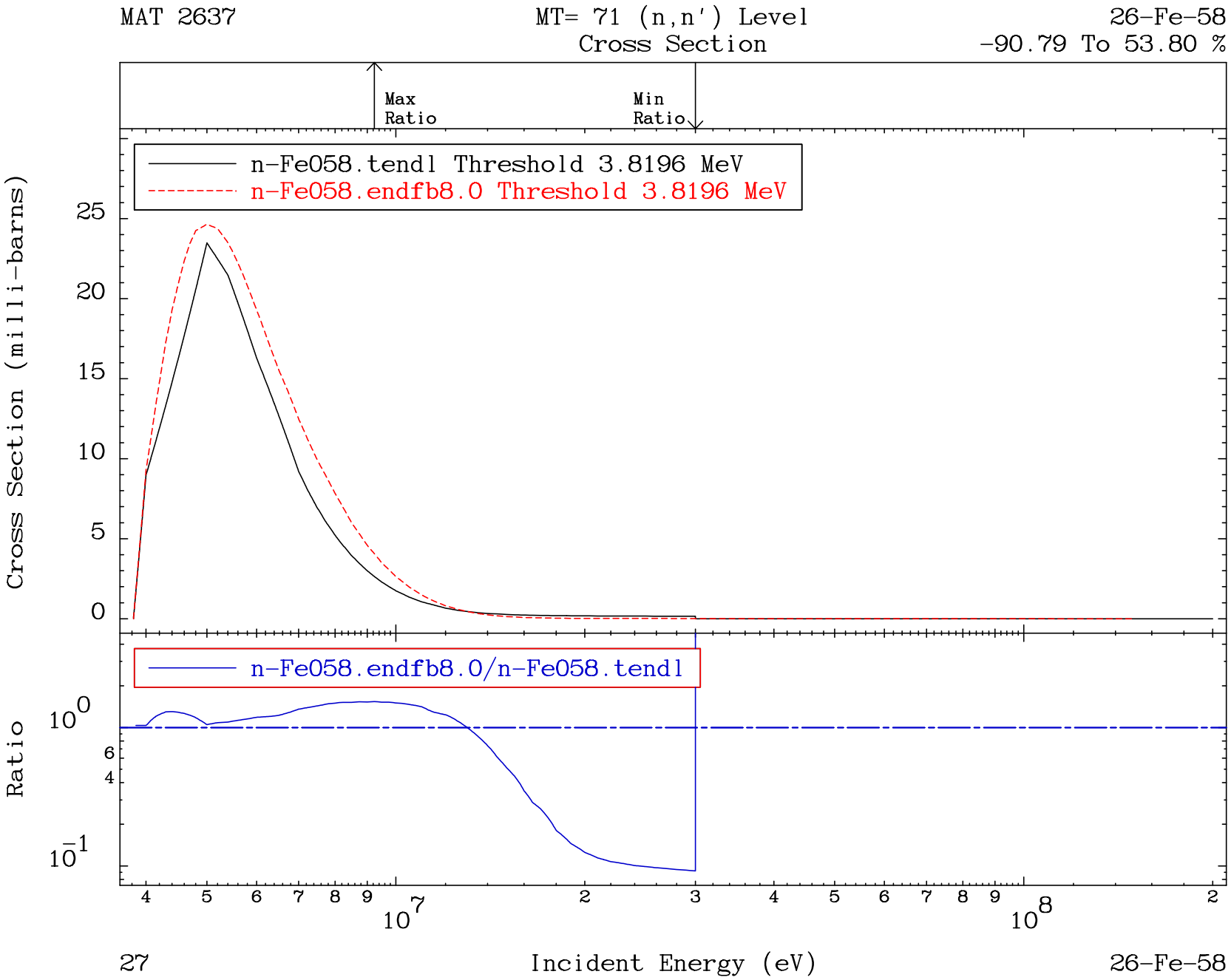

MAT 2637
MT= 66 (n,n') Level
Cross Section
26-Fe-58
-90.82 To 92.12 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.5098 MeV
n-Fe058.endfb8.0 Threshold 3.5098 MeV
Cross Section (milli-barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
22
26-Fe-58

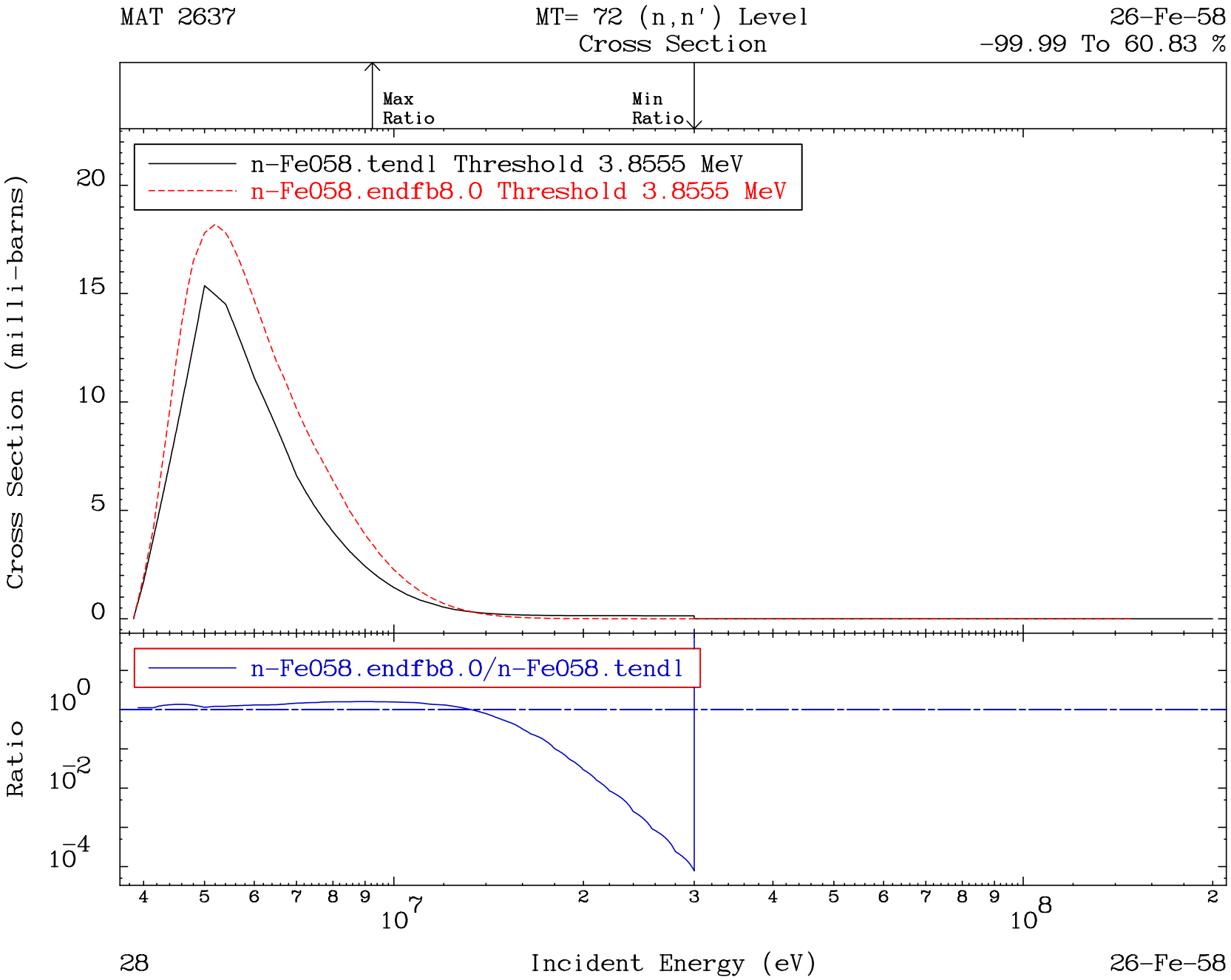

MAT 2637
MT= 67 (n,n') Level
Cross Section
26-Fe-58
-44.15 To 69.89 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.5996 MeV
n-Fe058.endfb8.0 Threshold 3.5996 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
2.0
1.6
1.2
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
26-Fe-58

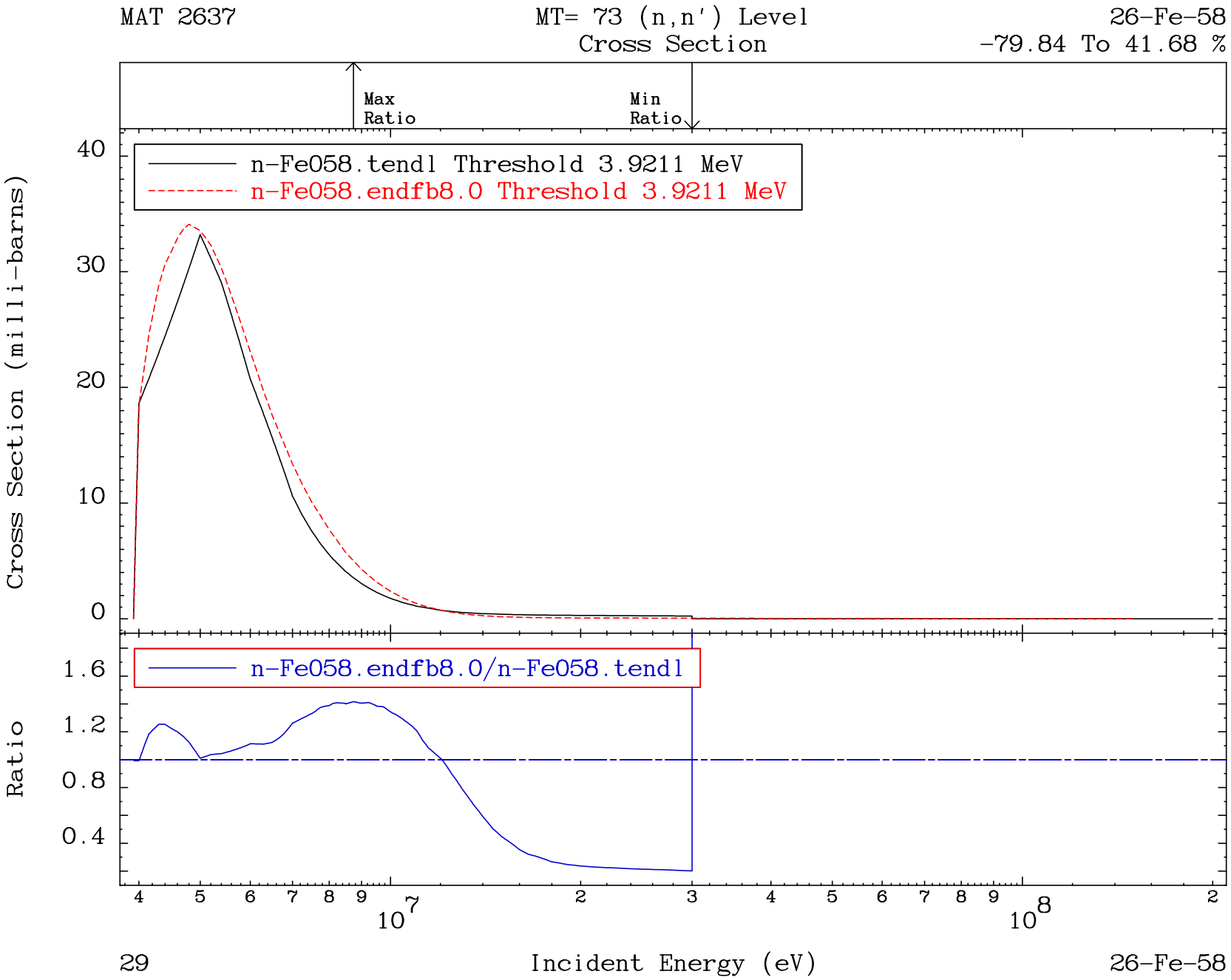

MAT 2637
MT= 68 (n,n') Level
Cross Section
26-Fe-58
-90.79 To 69.69 %
Max
Ratio
Min
Ratio
n-Fe058.tendl Threshold 3.6047 MeV
n-Fe058.endfb8.0 Threshold 3.6047 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
4
10^0
6
4
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
26-Fe-58

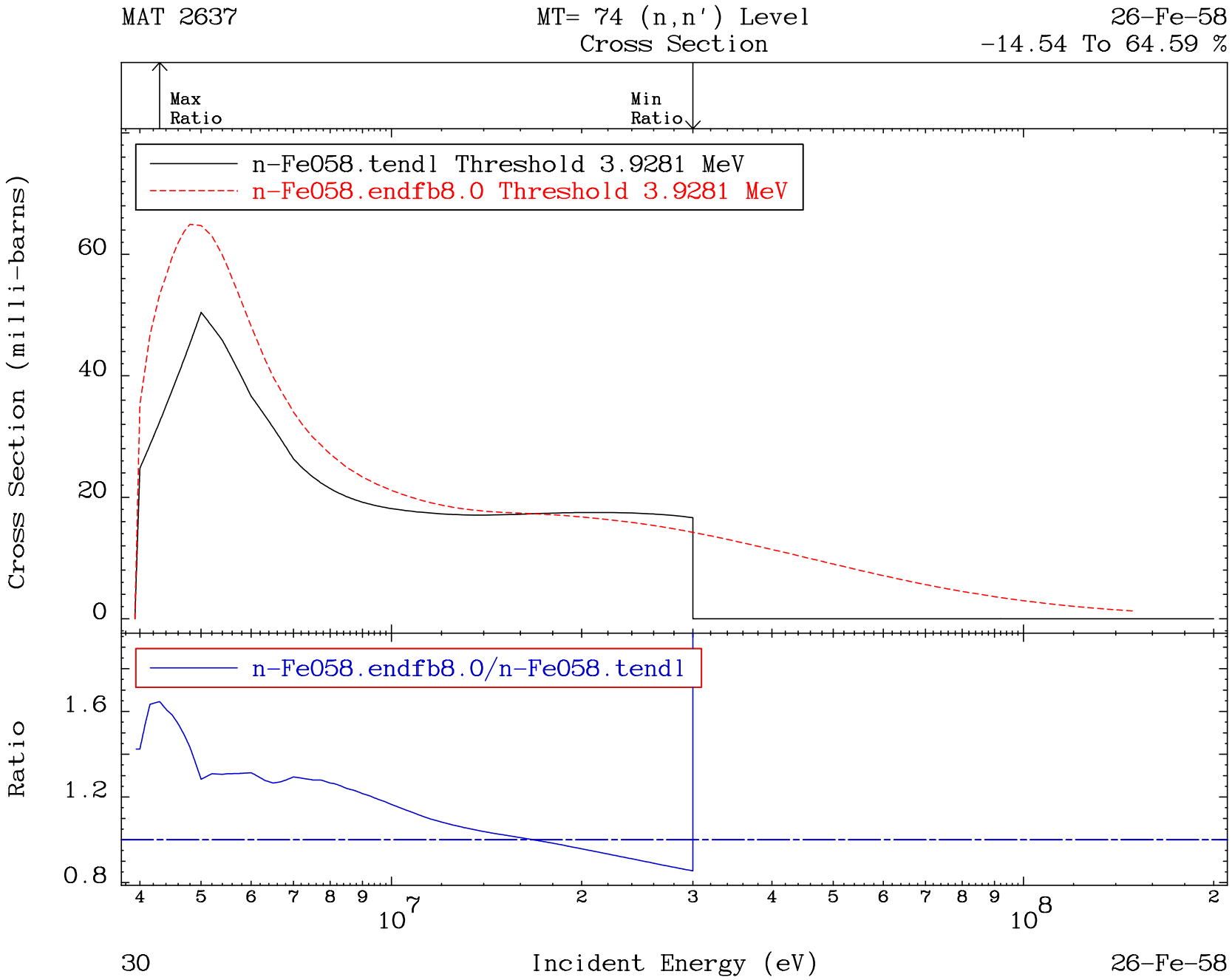

MAT 2637
MT= 69 (n,n') Level
Cross Section
26-Fe-58
-99.99 To 62.49 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.6595 MeV
n-Fe058.endfb8.0 Threshold 3.6595 MeV
Cross Section (milli-barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
25
26-Fe-58

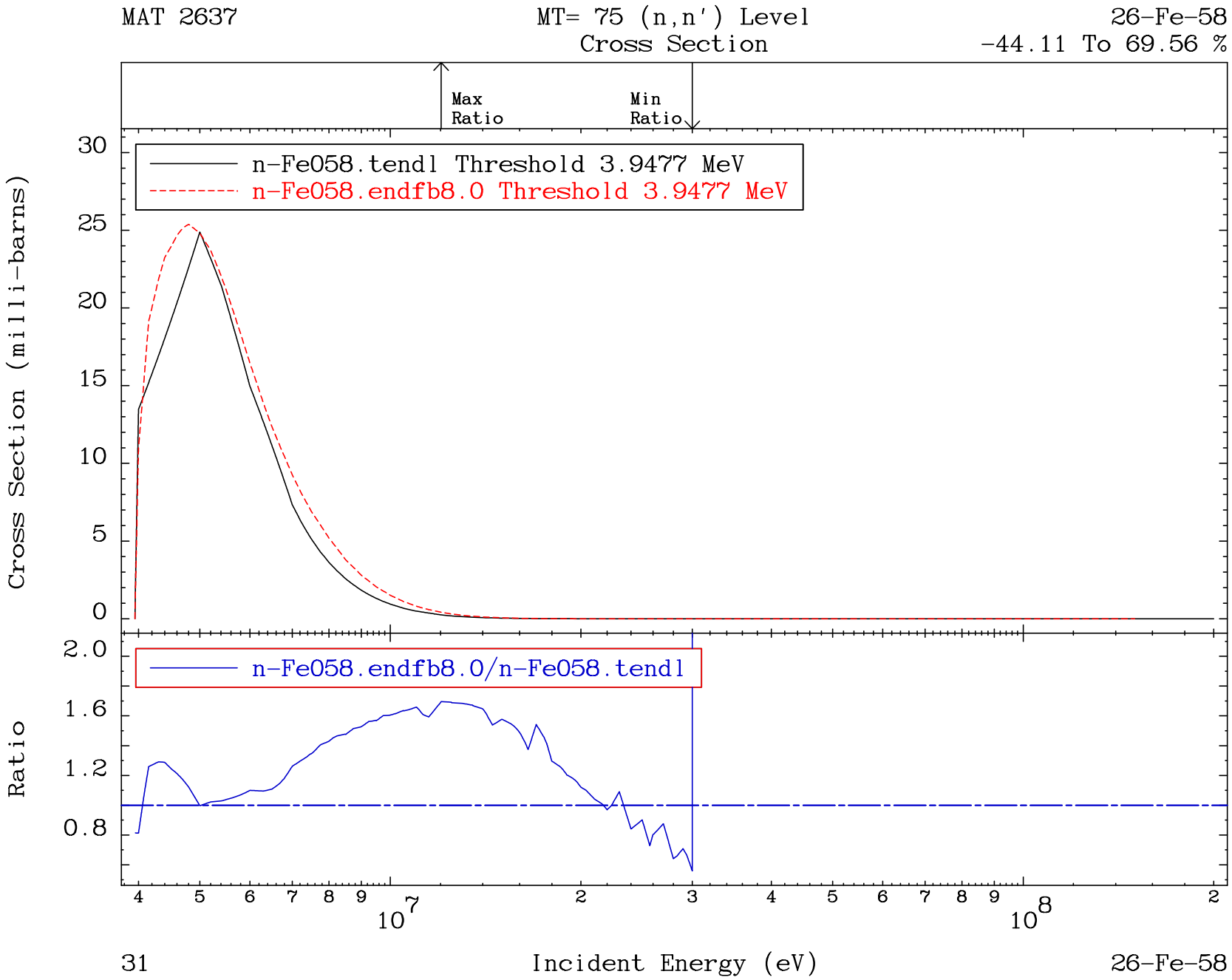

MAT 2637
MT= 70 (n,n') Level
Cross Section
26-Fe-58
-90.78 To 116.3 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.6928 MeV
n-Fe058.endfb8.0 Threshold 3.6928 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
6
10^0
6
10^{-1}
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
26-Fe-58

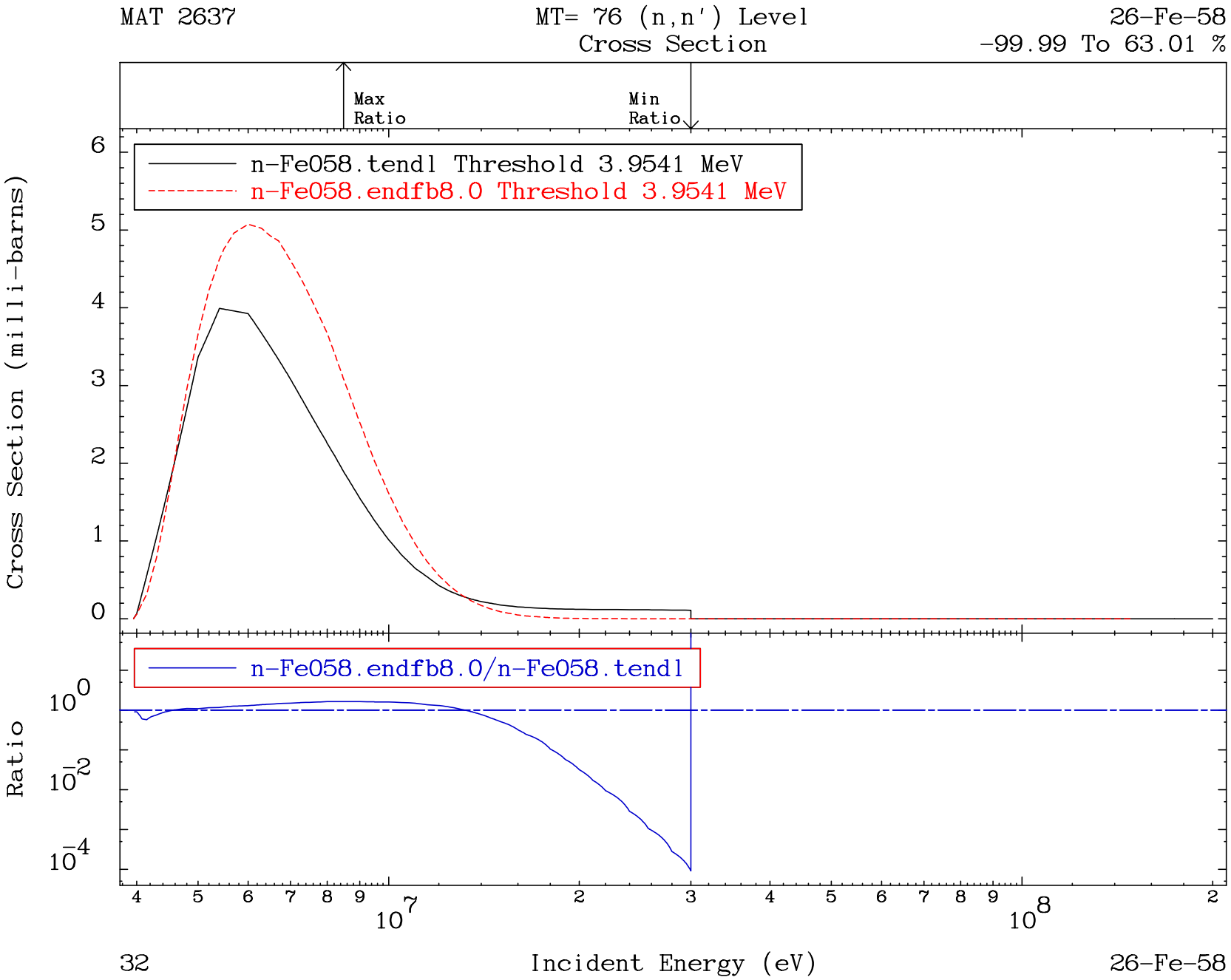

MAT 2637
MT= 71 (n,n') Level
Cross Section
26-Fe-58
-90.79 To 53.80 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.8196 MeV
n-Fe058.endfb8.0 Threshold 3.8196 MeV
Cross Section (milli-barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
27
26-Fe-58

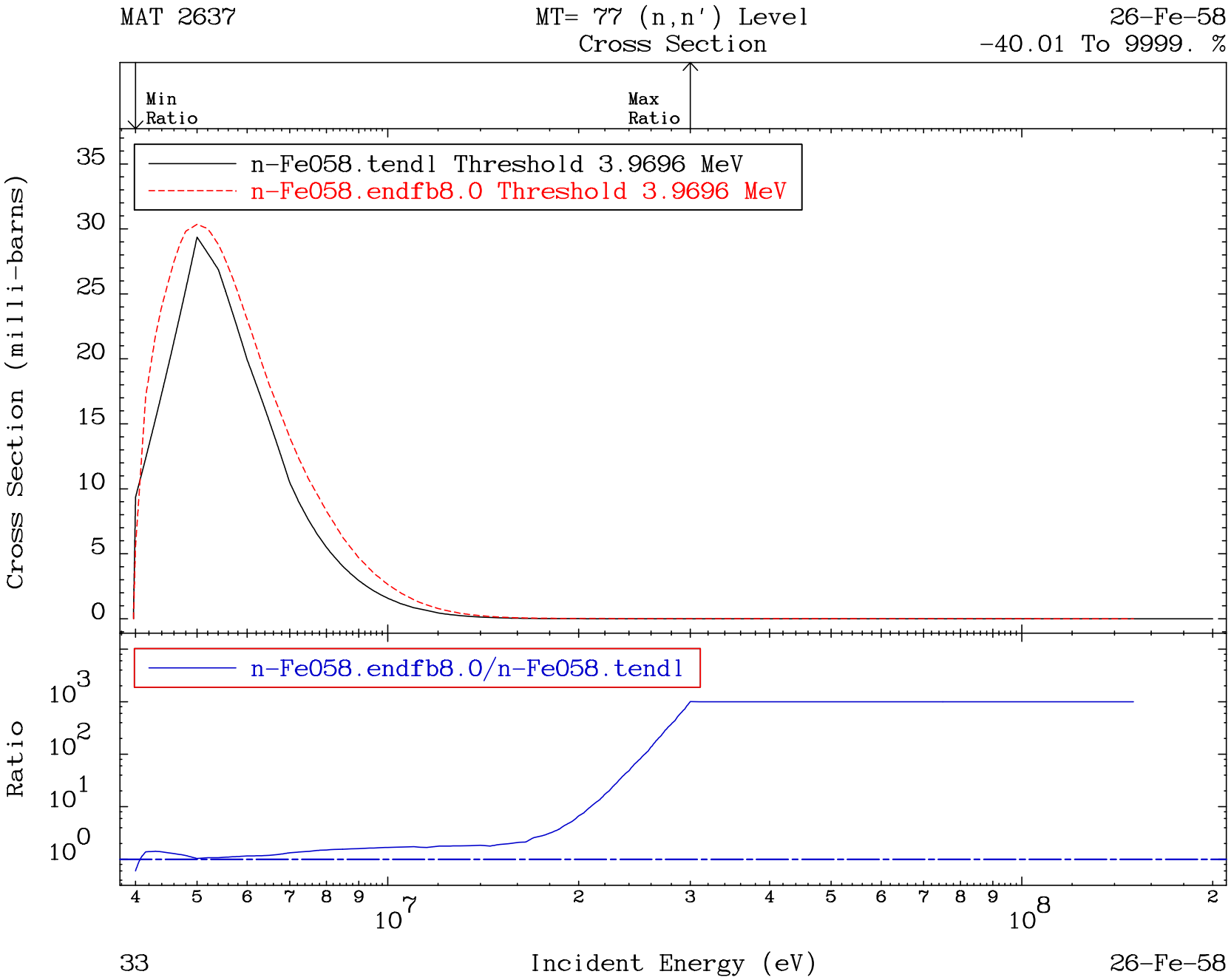

MAT 2637
MT= 72 (n,n') Level
Cross Section
26-Fe-58
-99.99 To 60.83 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.8555 MeV
n-Fe058.endfb8.0 Threshold 3.8555 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^0
10^-2
10^-4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
26-Fe-58

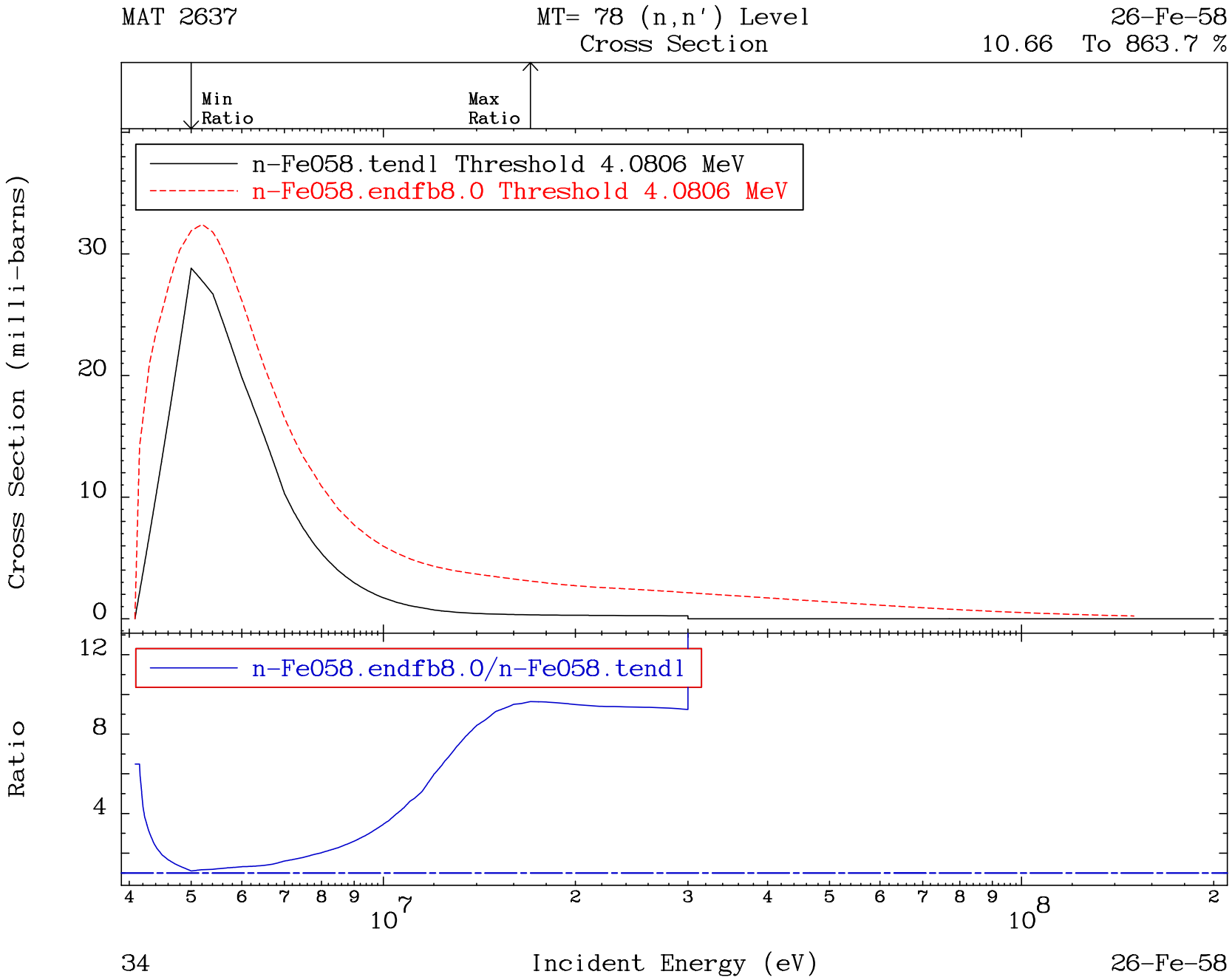

MAT 2637
MT= 73 (n,n') Level
Cross Section
26-Fe-58
-79.84 To 41.68 %
Max
Ratio
Min
Ratio
n-Fe058.tendl Threshold 3.9211 MeV
n-Fe058.endfb8.0 Threshold 3.9211 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.6
1.2
0.8
0.4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
26-Fe-58

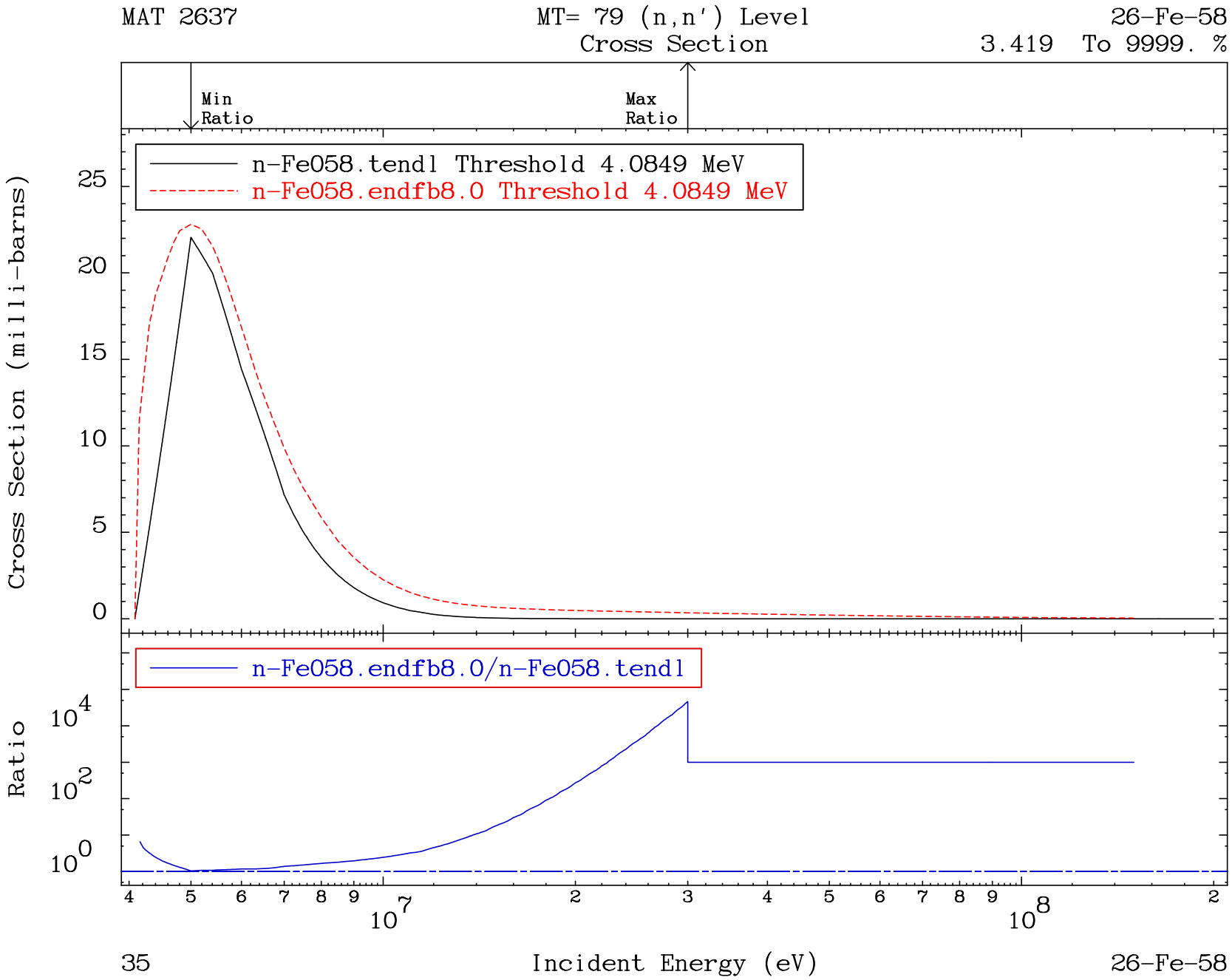

MAT 2637
MT= 74 (n,n') Level
Cross Section
26-Fe-58
-14.54 To 64.59 %
Max
Ratio
Min
Ratio
n-Fe058.tendl Threshold 3.9281 MeV
n-Fe058.endfb8.0 Threshold 3.9281 MeV
Cross Section (milli-barns)
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.6
1.2
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
26-Fe-58

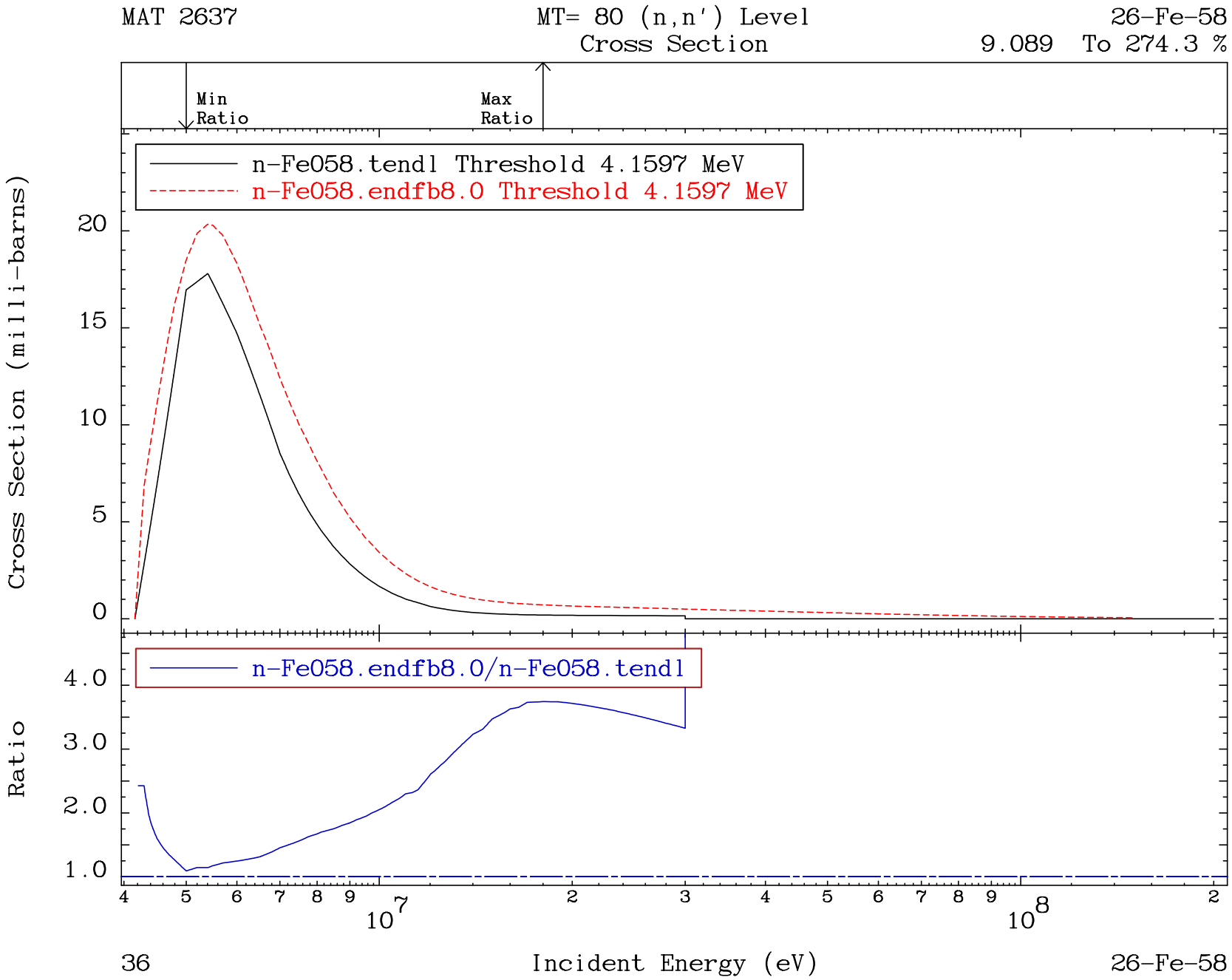

MAT 2637
MT= 75 (n,n') Level
Cross Section
26-Fe-58
-44.11 To 69.56 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.9477 MeV
n-Fe058.endfb8.0 Threshold 3.9477 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
2.0
1.6
1.2
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
26-Fe-58

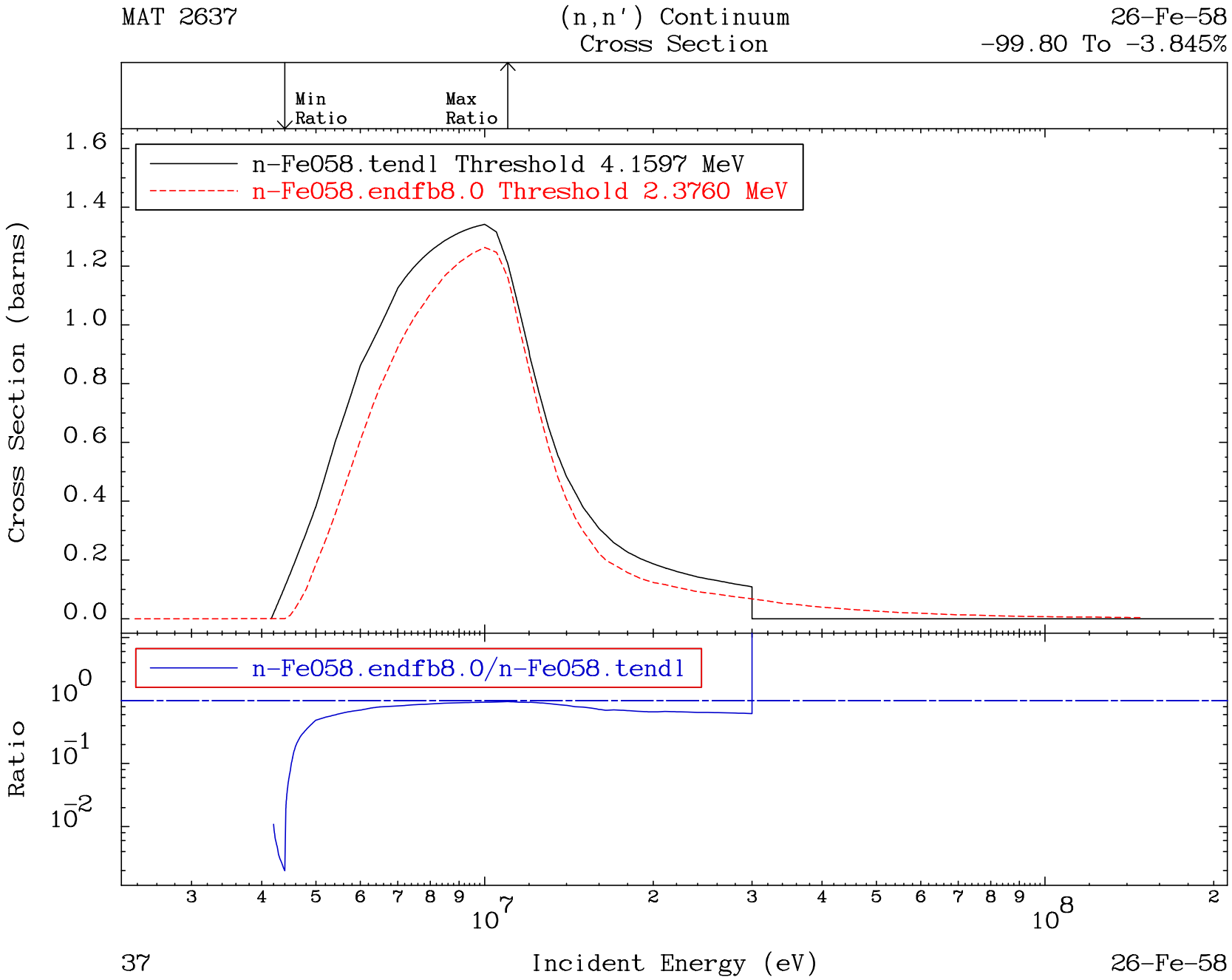

MAT 2637
MT= 76 (n,n') Level
Cross Section
26-Fe-58
-99.99 To 63.01 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 3.9541 MeV
n-Fe058.endfb8.0 Threshold 3.9541 MeV
Cross Section (milli-barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
32
26-Fe-58

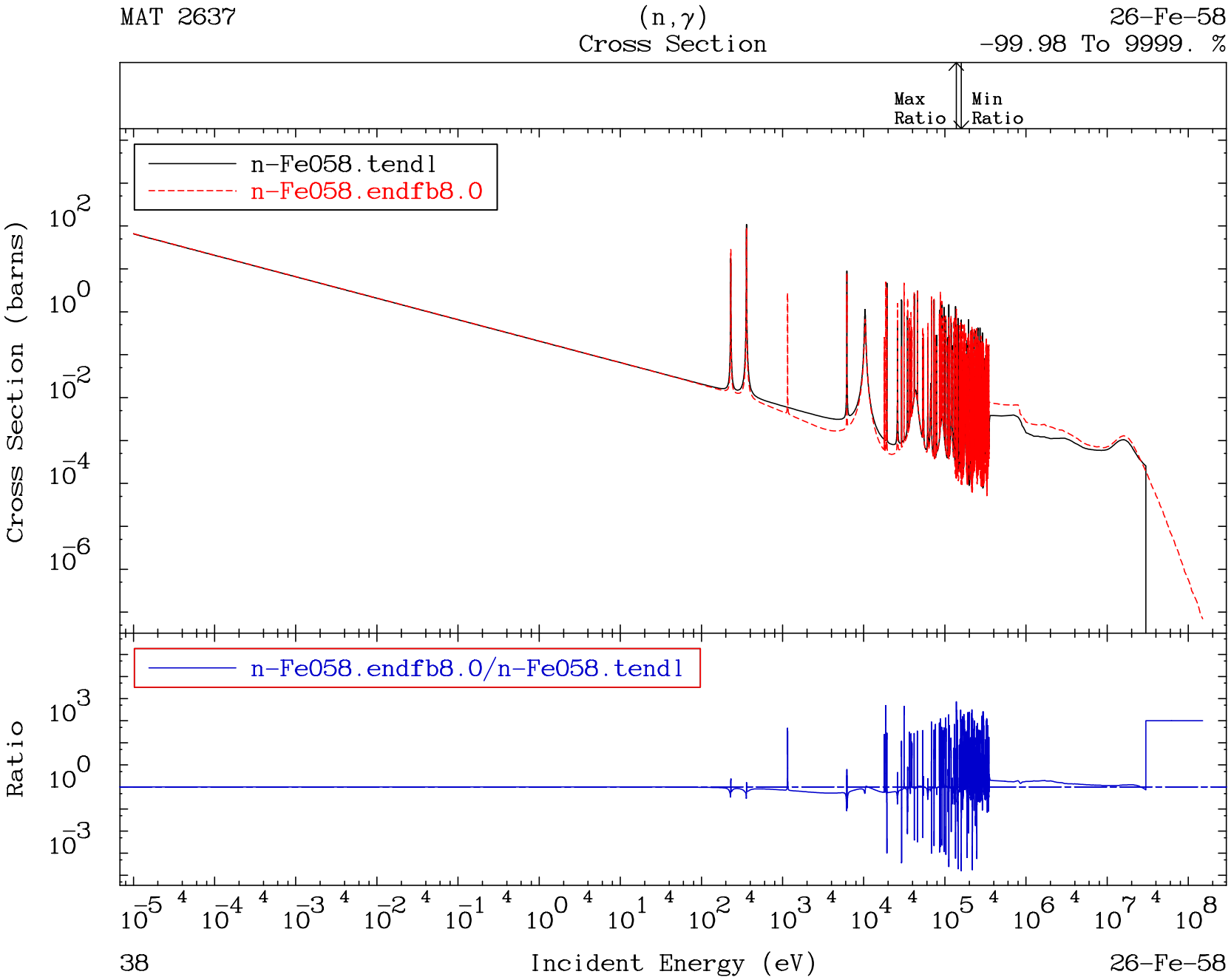

MAT 2637
MT= 77 (n,n') Level
Cross Section
26-Fe-58
-40.01 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 3.9696 MeV
n-Fe058.endfb8.0 Threshold 3.9696 MeV
Cross Section (milli-barns)
0
5
10
15
20
25
30
35
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^0
10^1
10^2
10^3
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
26-Fe-58

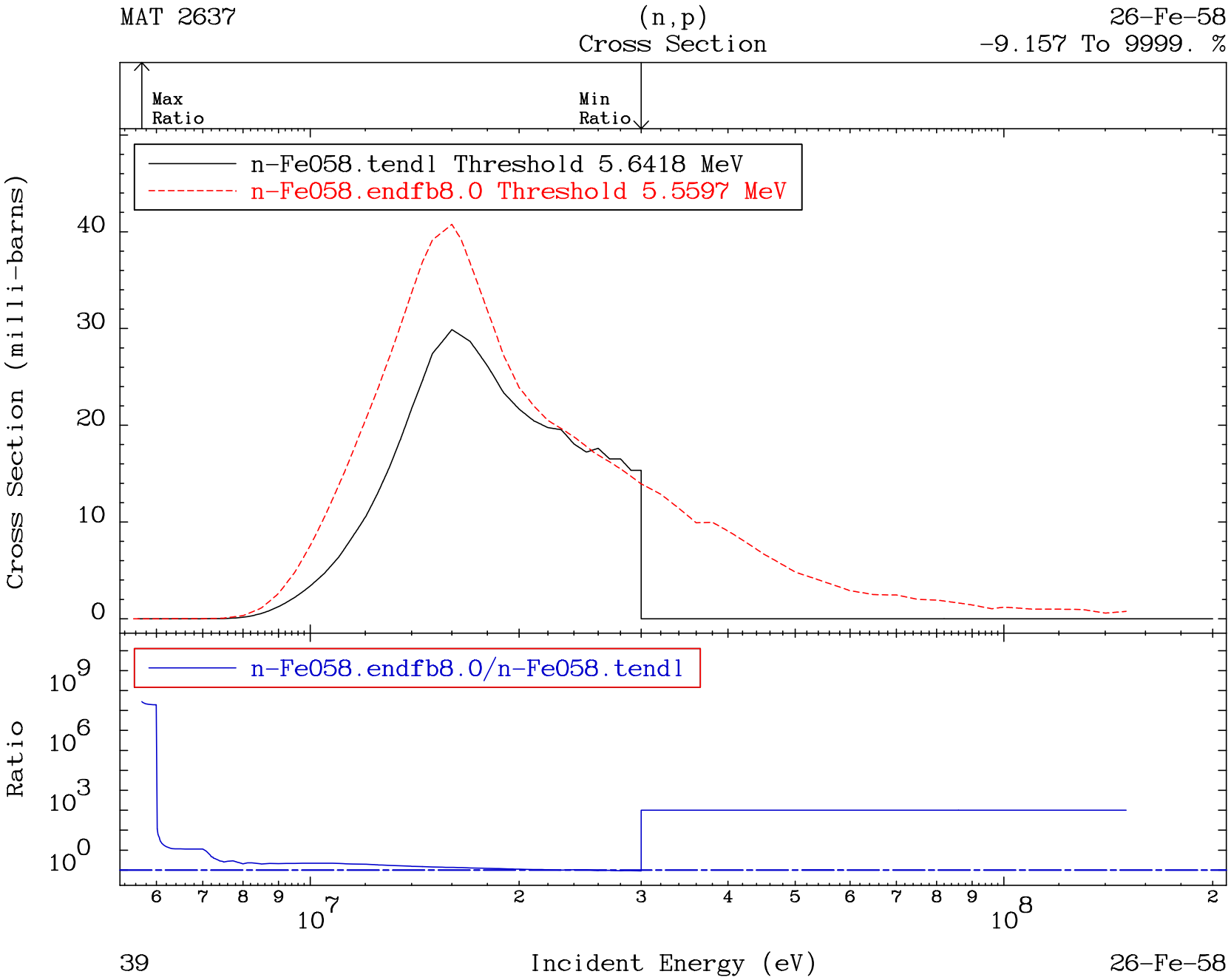

MAT 2637
MT= 78 (n,n') Level
Cross Section
26-Fe-58
10.66 To 863.7 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 4.0806 MeV
n-Fe058.endfb8.0 Threshold 4.0806 MeV
Cross Section (milli-barns)
0
10
20
30
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
4
8
12
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
26-Fe-58

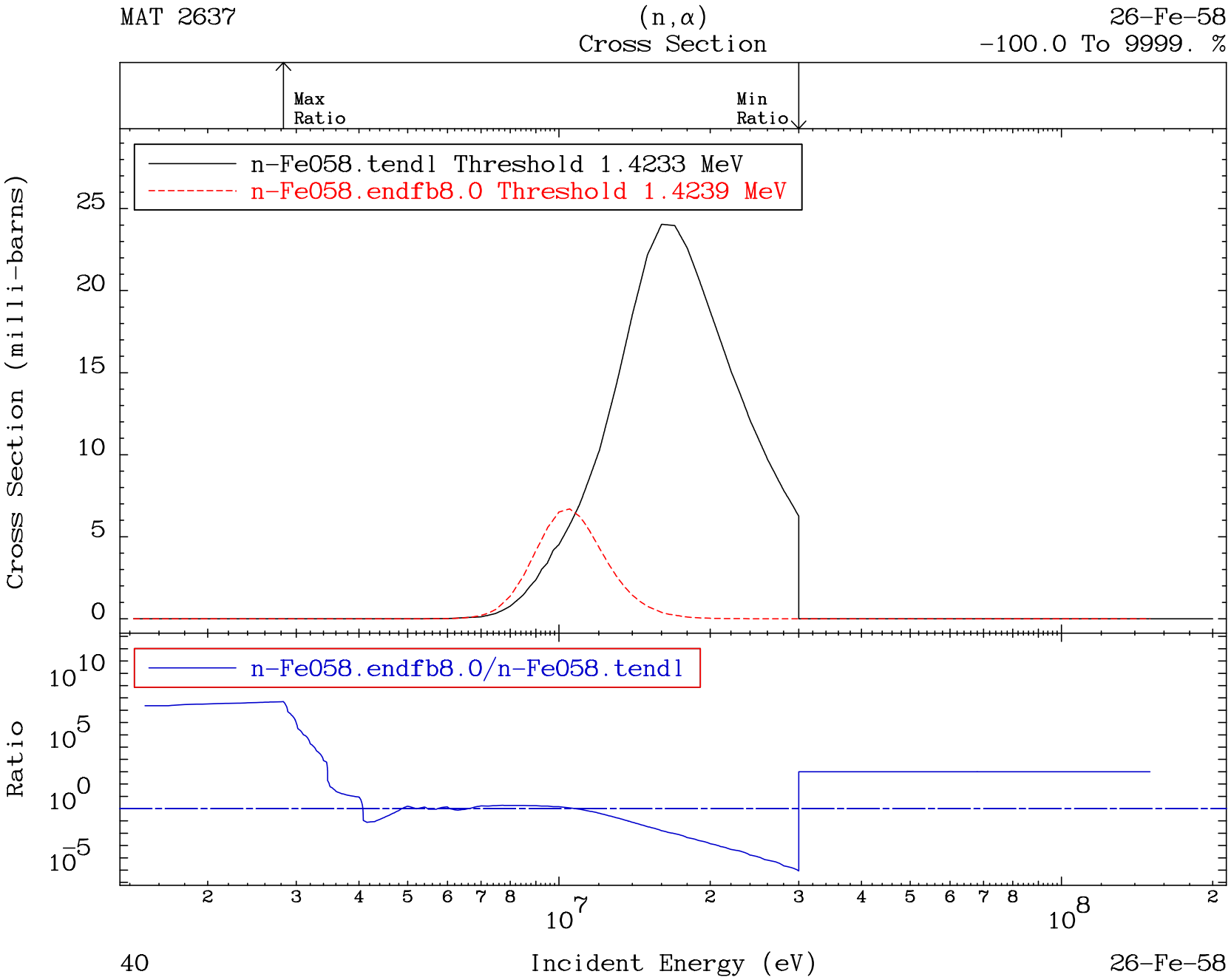

MAT 2637
MT= 79 (n,n') Level
Cross Section
26-Fe-58
3.419 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 4.0849 MeV
n-Fe058.endfb8.0 Threshold 4.0849 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
26-Fe-58

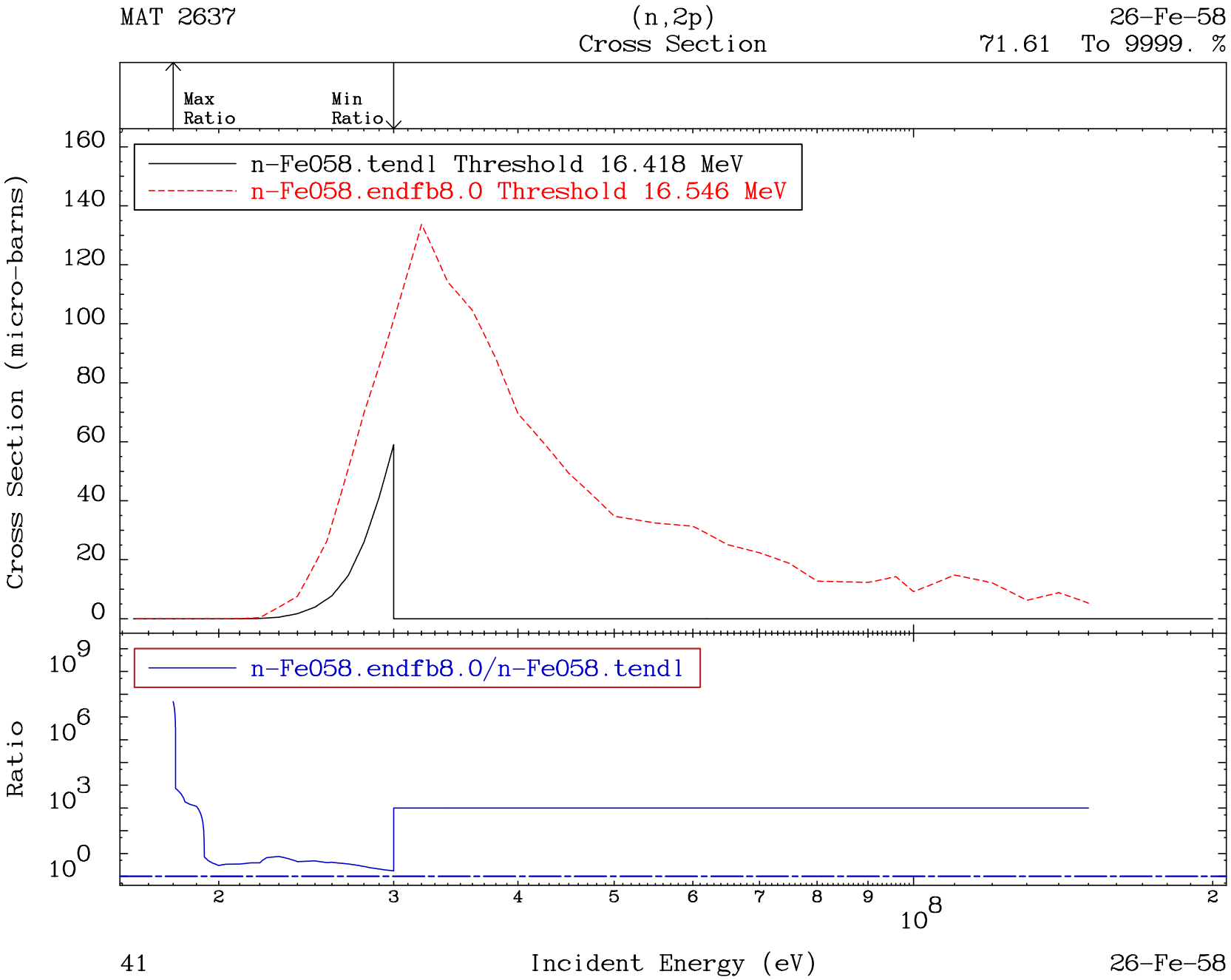

MAT 2637
MT= 80 (n,n') Level
Cross Section
26-Fe-58
9.089 To 274.3 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 4.1597 MeV
n-Fe058.endfb8.0 Threshold 4.1597 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
4.0
3.0
2.0
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
26-Fe-58

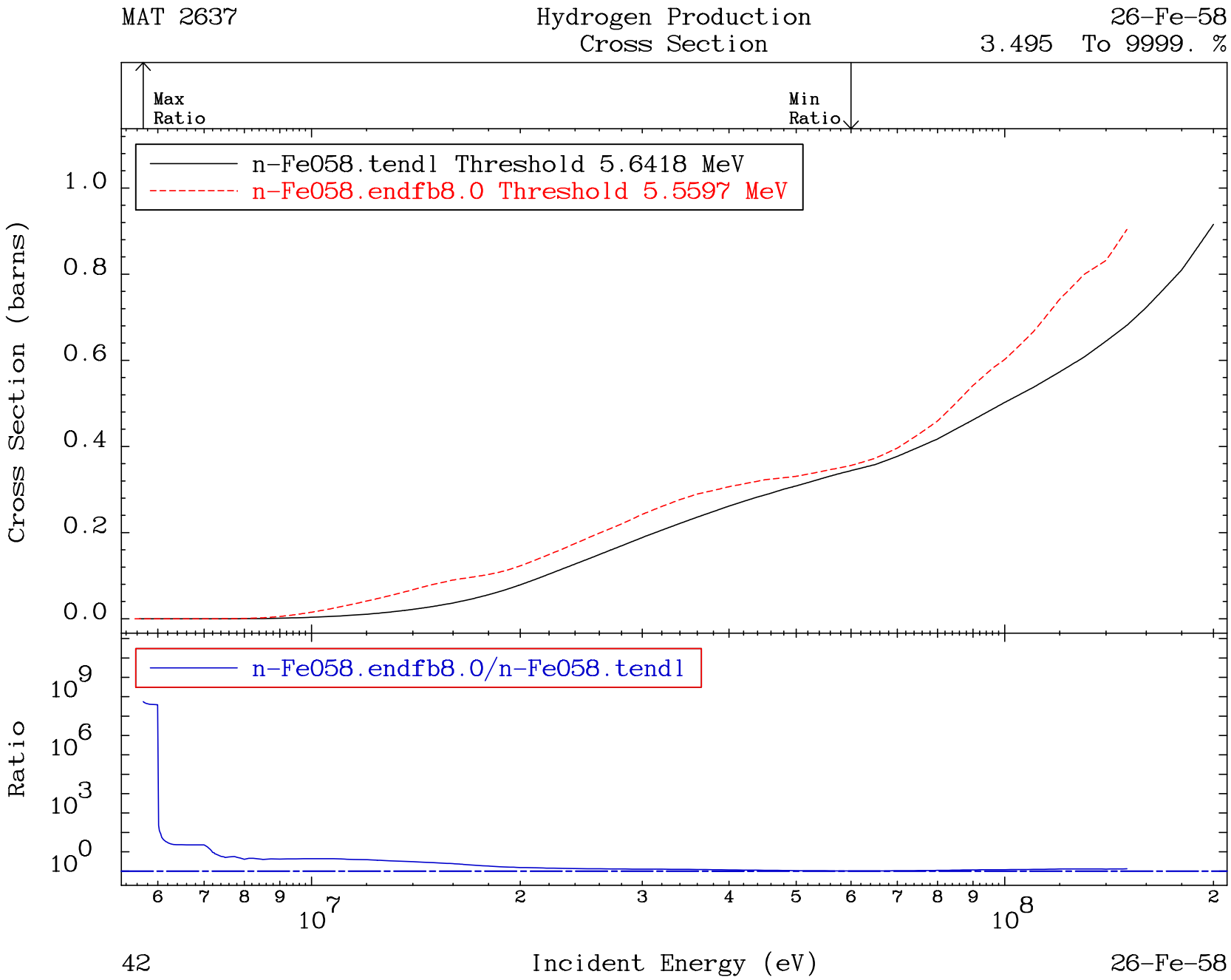

MAT 2637
(n,n') Continuum
Cross Section
26-Fe-58
-99.80 To -3.845%
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 4.1597 MeV
n-Fe058.endfb8.0 Threshold 2.3760 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^0
10^-1
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
26-Fe-58

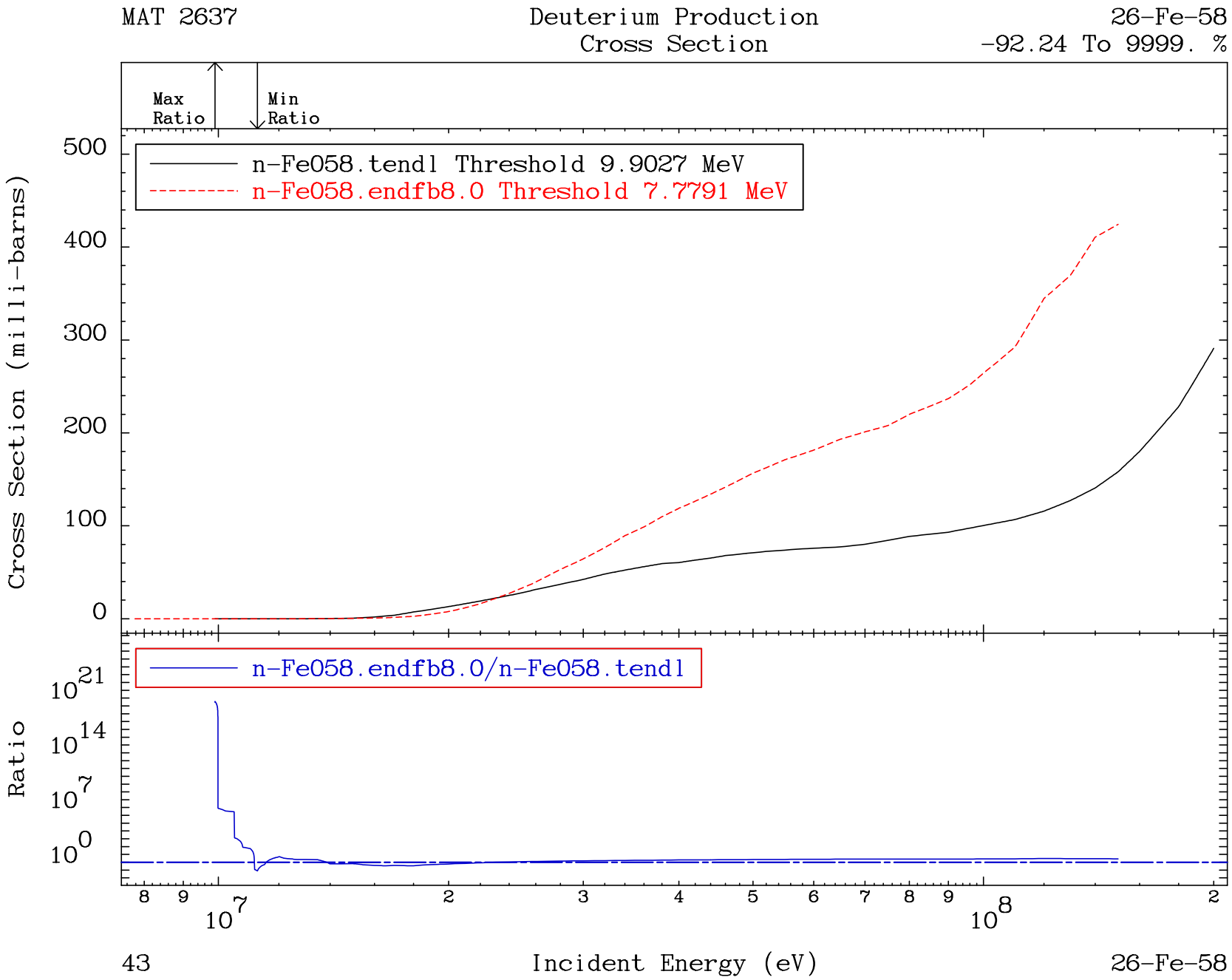

MAT 2637
(n,γ)
Cross Section
26-Fe-58
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
38
26-Fe-58

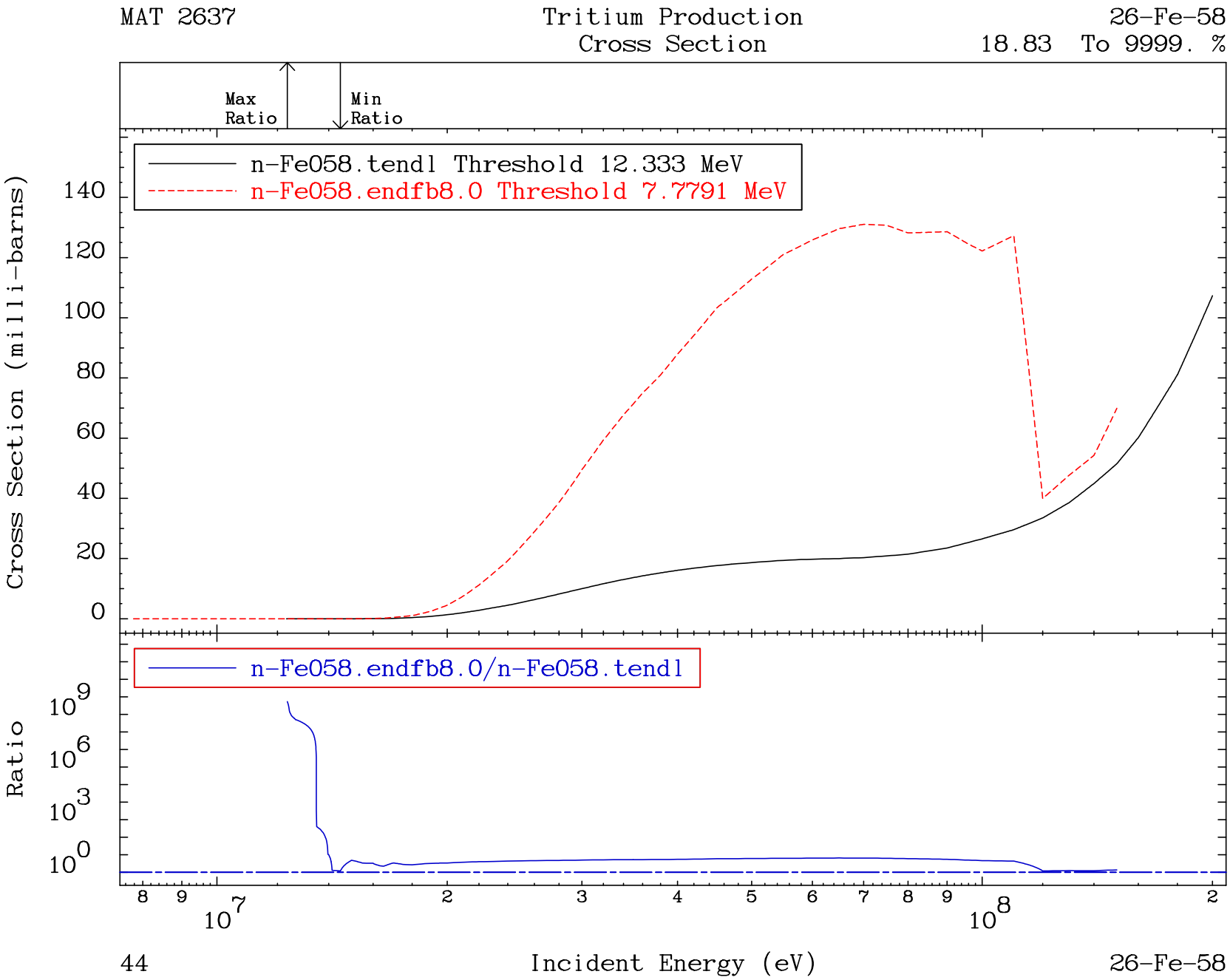

MAT 2637
(n,p)
Cross Section
26-Fe-58
-9.157 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 5.6418 MeV
n-Fe058.endfb8.0 Threshold 5.5597 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
26-Fe-58

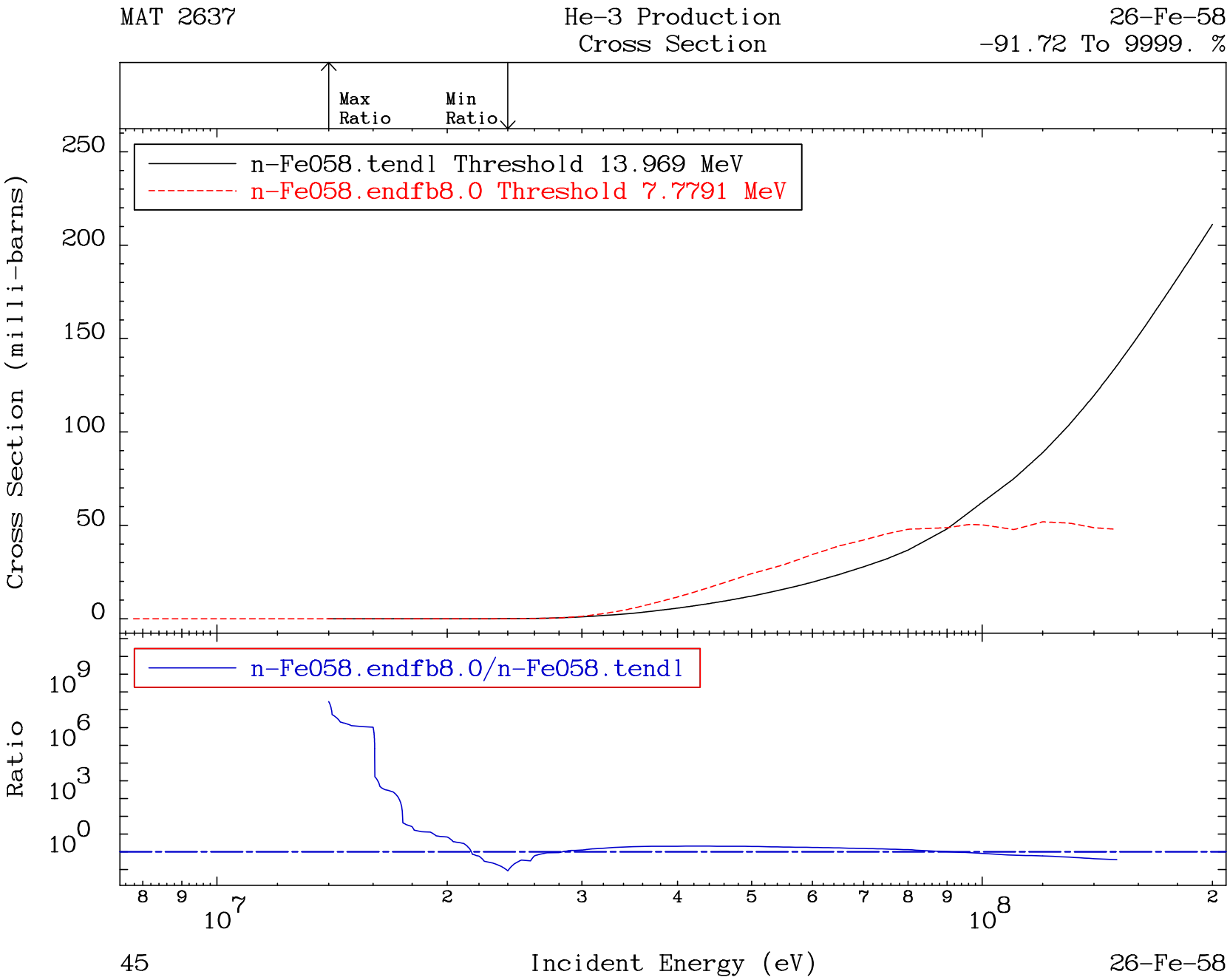

MAT 2637
(n,α)
Cross Section
26-Fe-58
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 1.4233 MeV
n-Fe058.endfb8.0 Threshold 1.4239 MeV
Cross Section (milli-barns)
0
5
10
15
20
25
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^10
10^5
10^0
10^-5
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
26-Fe-58

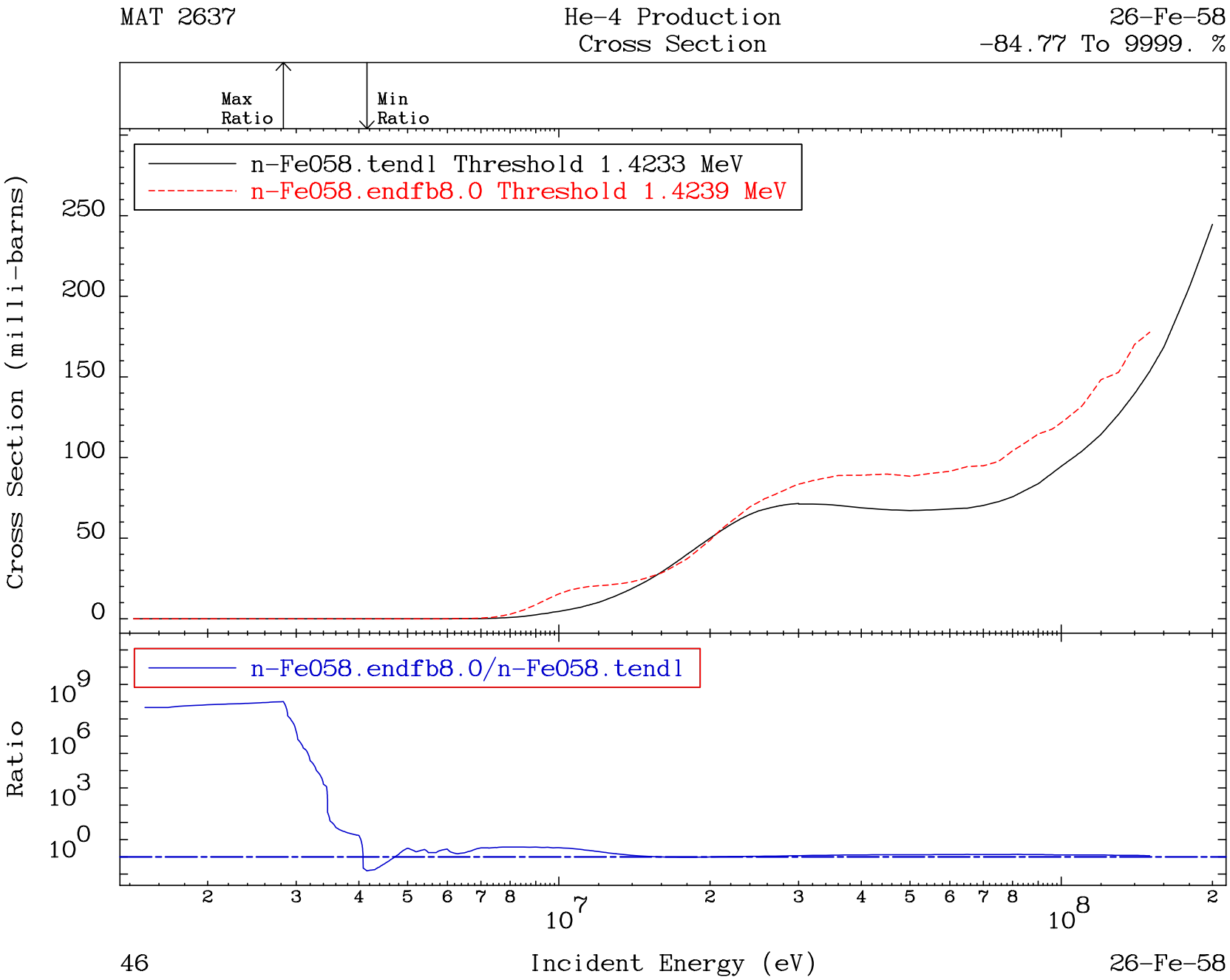

MAT 2637
(n,2p)
Cross Section
26-Fe-58
71.61 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 16.418 MeV
n-Fe058.endfb8.0 Threshold 16.546 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
26-Fe-58

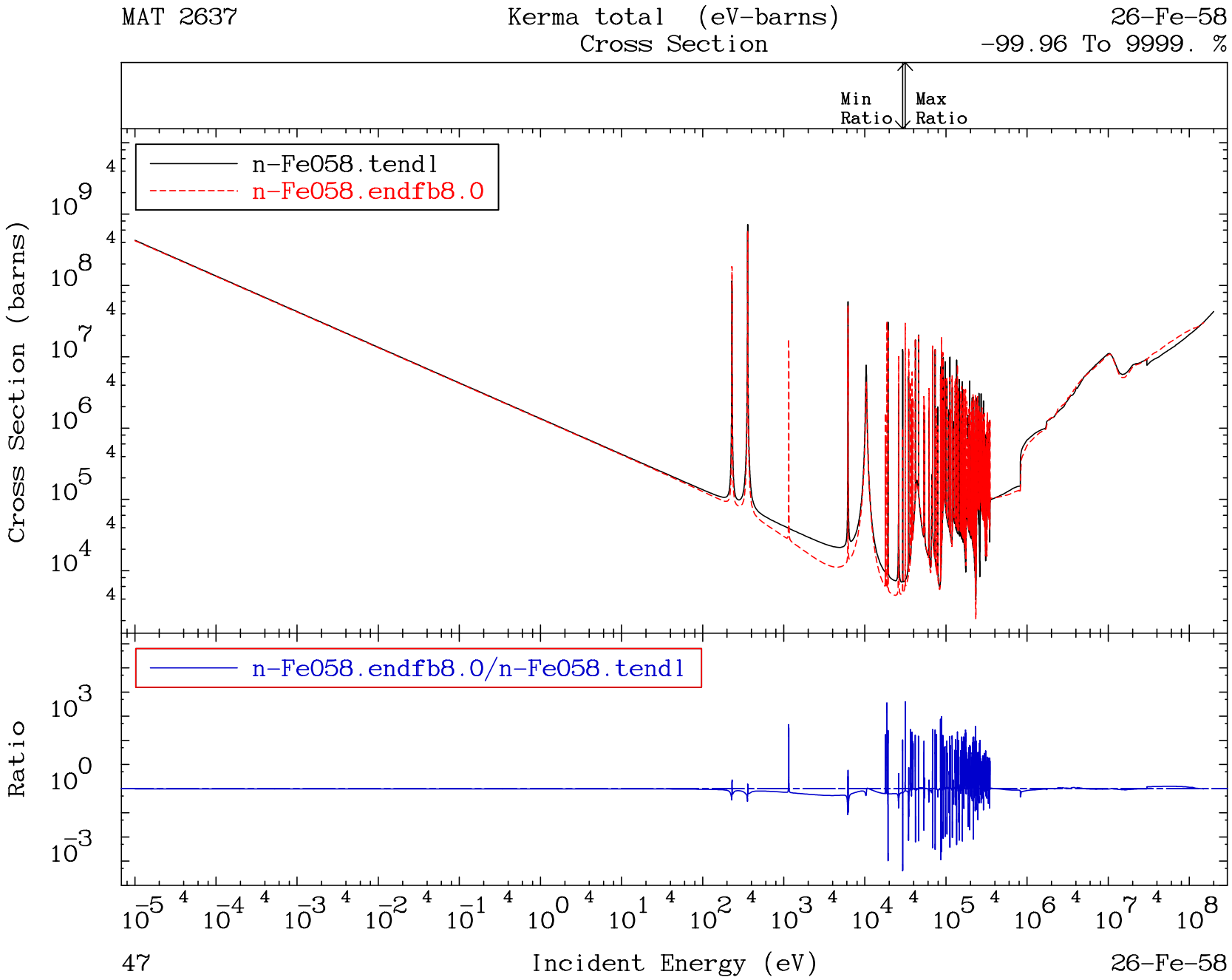

MAT 2637
Hydrogen Production
Cross Section
26-Fe-58
3.495 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 5.6418 MeV
n-Fe058.endfb8.0 Threshold 5.5597 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
26-Fe-58

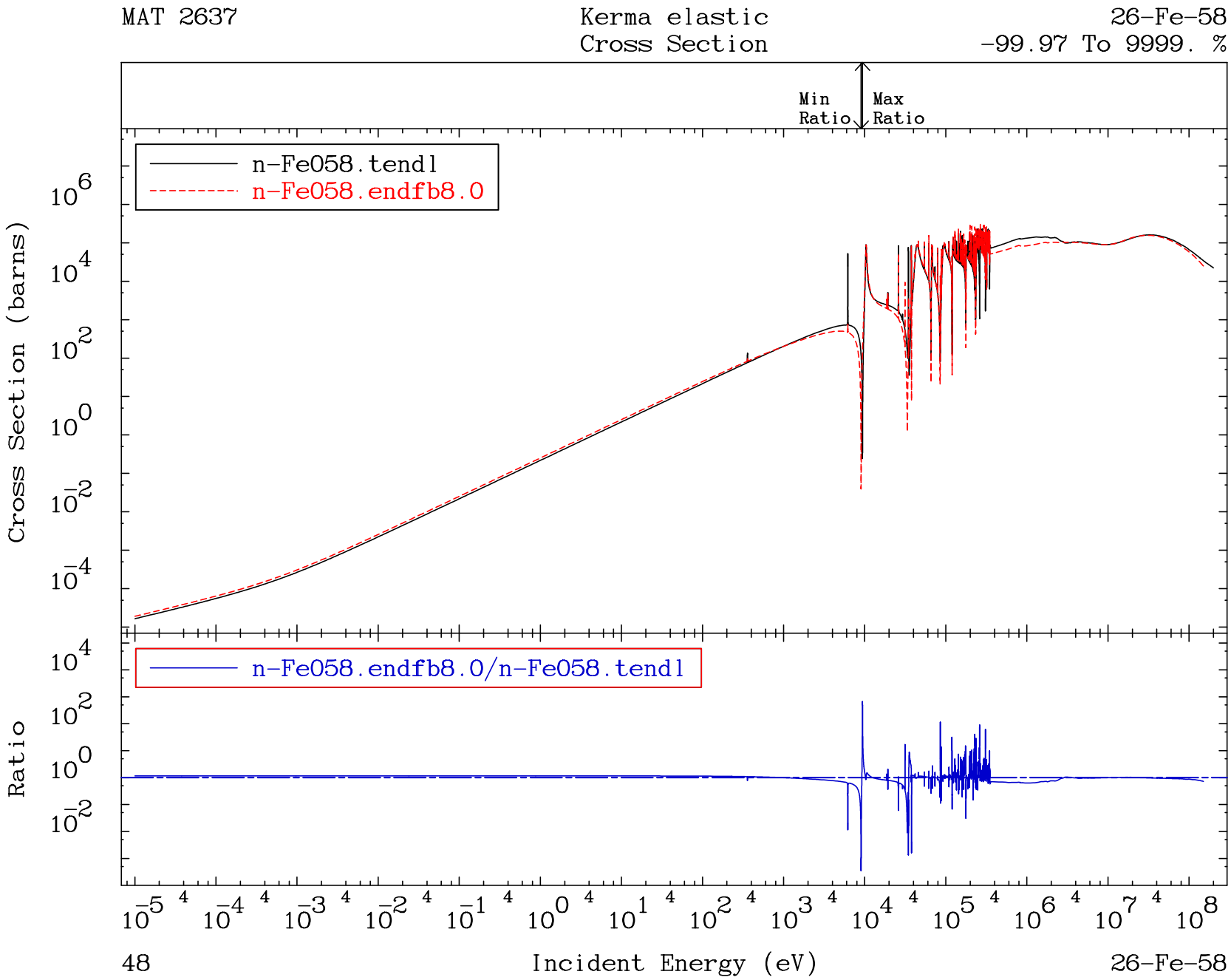

MAT 2637
Deuterium Production
Cross Section
26-Fe-58
-92.24 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 9.9027 MeV
n-Fe058.endfb8.0 Threshold 7.7791 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^21
10^14
10^7
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
26-Fe-58

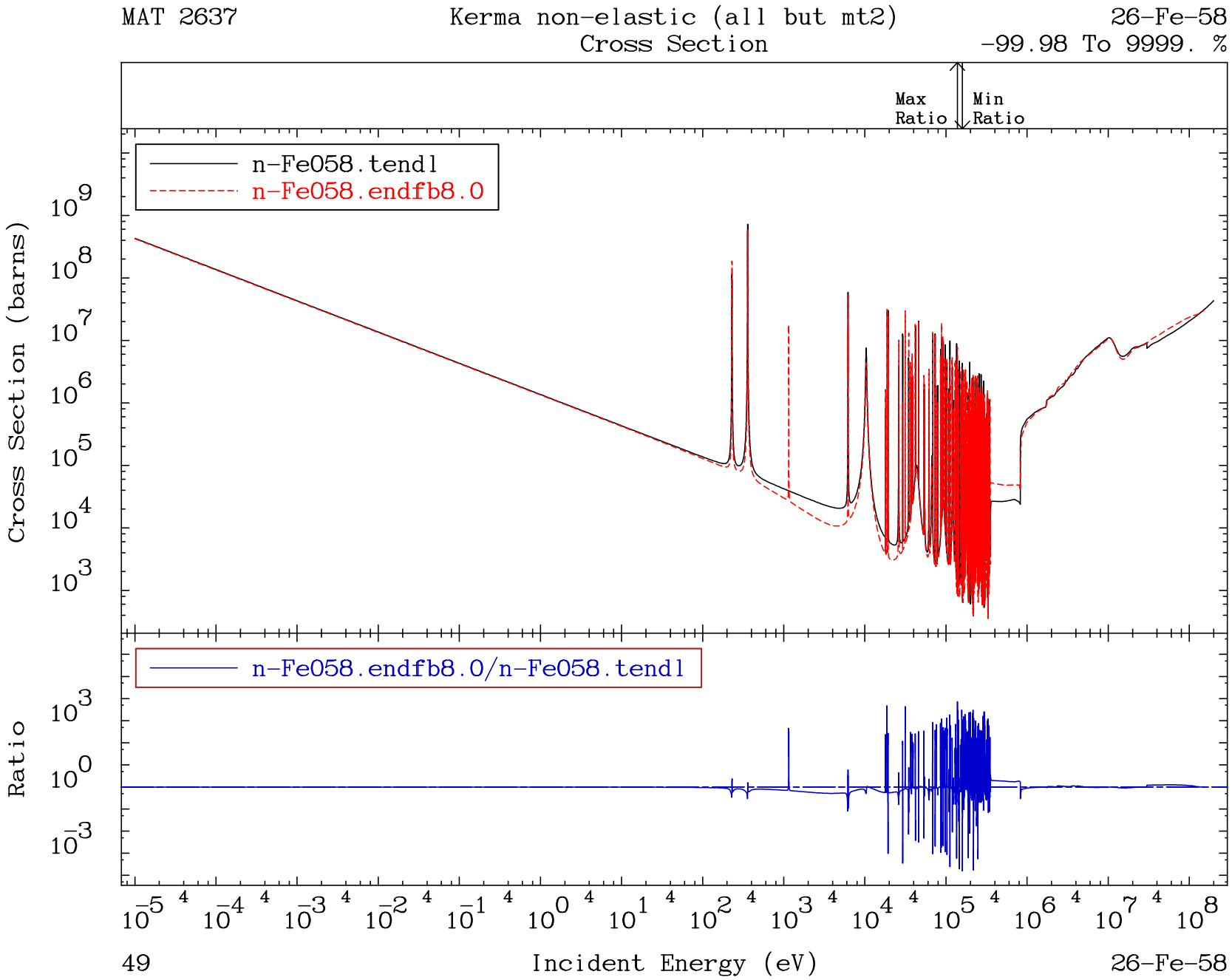

MAT 2637
Tritium Production
Cross Section
26-Fe-58
18.83 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 12.333 MeV
n-Fe058.endfb8.0 Threshold 7.7791 MeV
Cross Section (milli-barns)
0
20
40
60
80
100
120
140
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
26-Fe-58

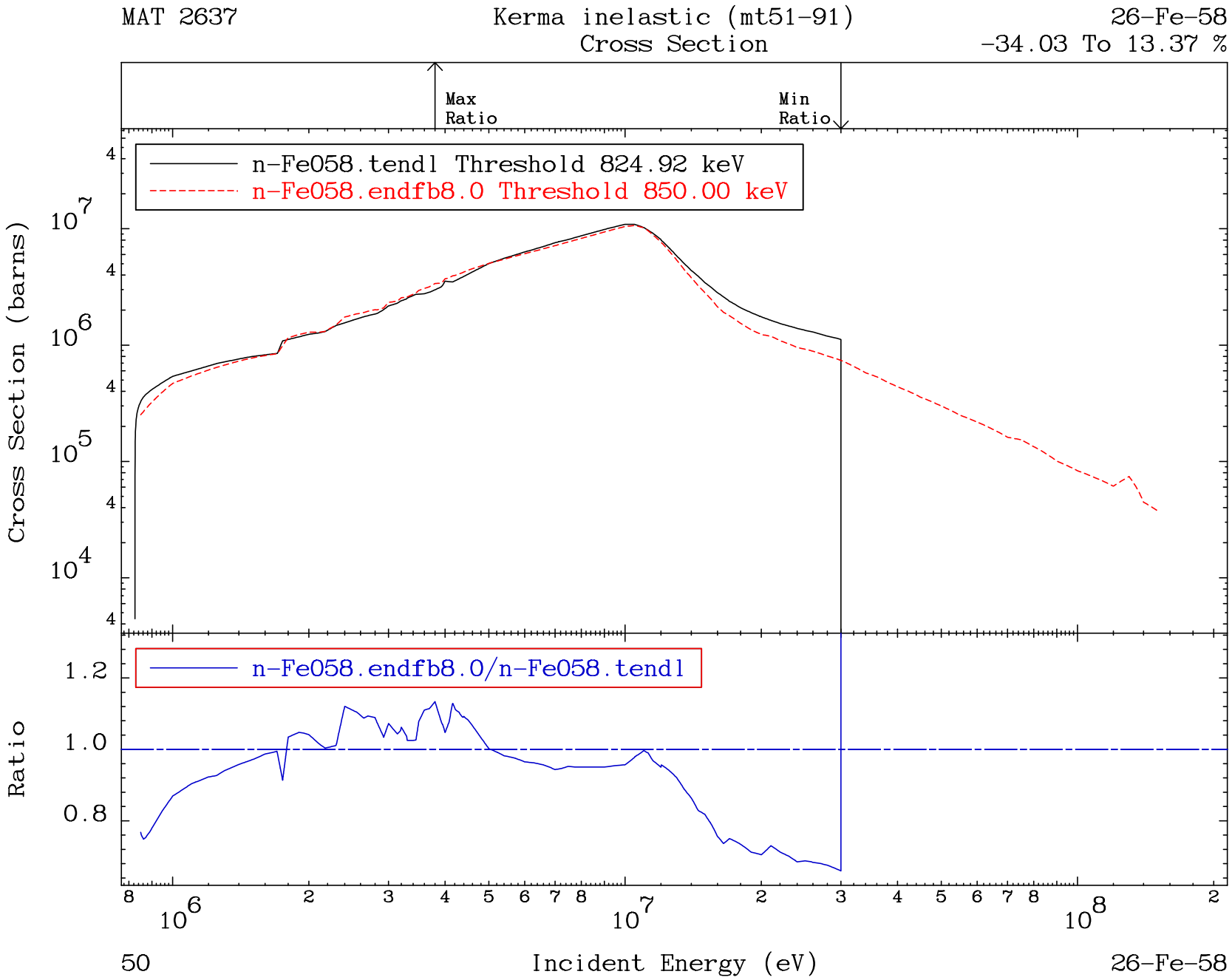

MAT 2637
He-3 Production
Cross Section
26-Fe-58
-91.72 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 13.969 MeV
n-Fe058.endfb8.0 Threshold 7.7791 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
26-Fe-58

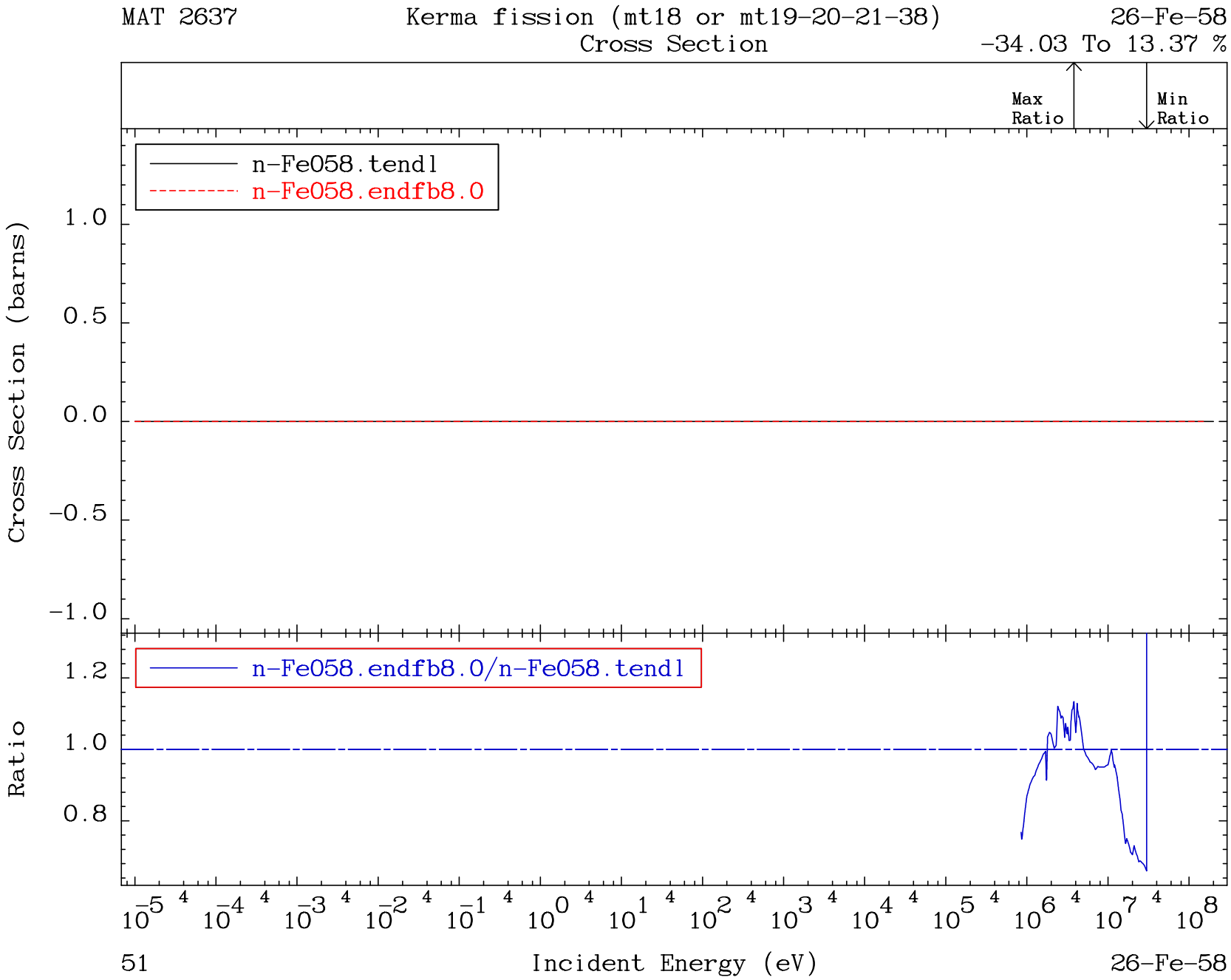

MAT 2637
He-4 Production
Cross Section
26-Fe-58
-84.77 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 1.4233 MeV
n-Fe058.endfb8.0 Threshold 1.4239 MeV
Cross Section (milli-barns)
0
50
100
150
200
250
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
26-Fe-58

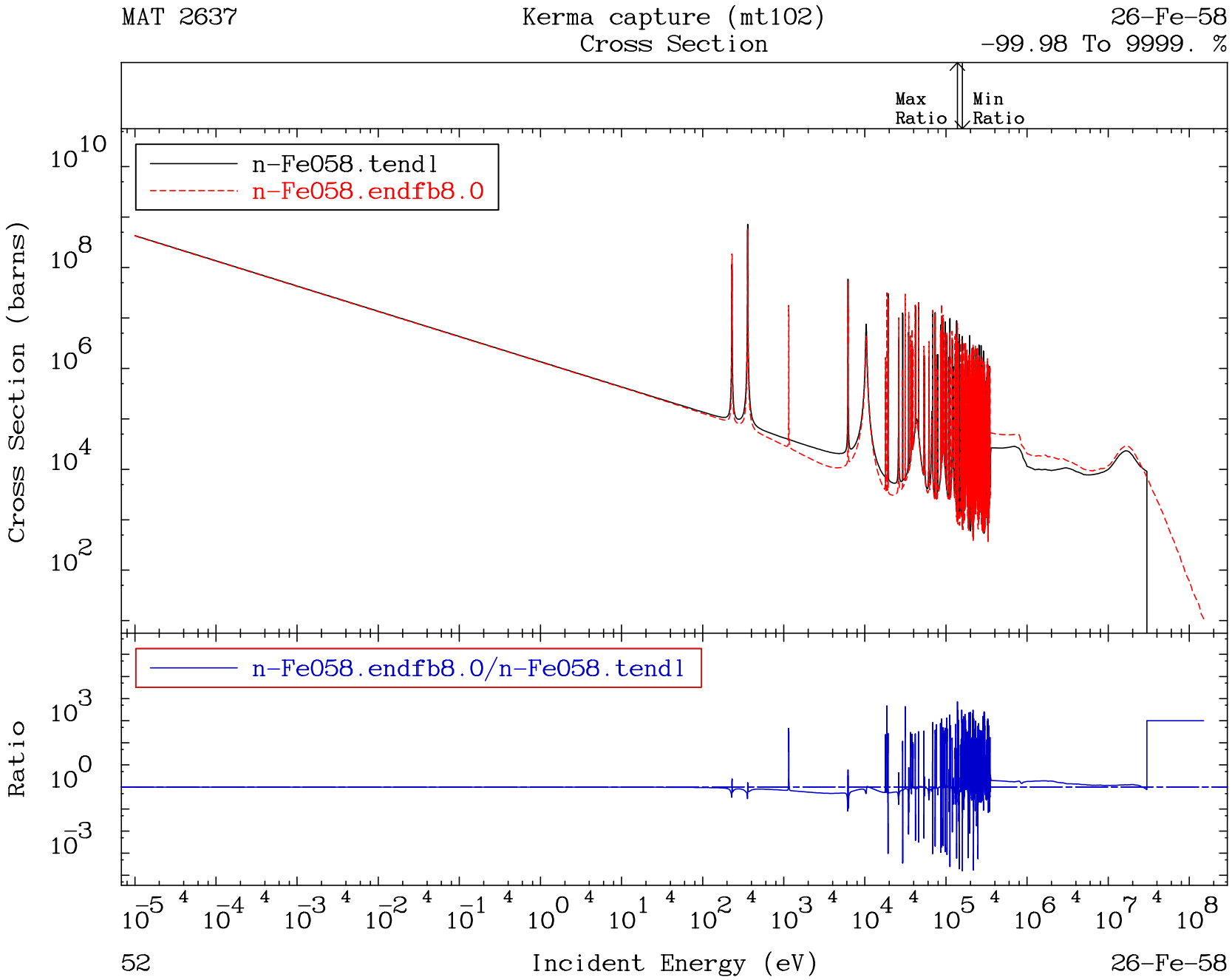

MAT 2637
Kerma total (eV-barns)
Cross Section
26-Fe-58
-99.96 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
47
26-Fe-58

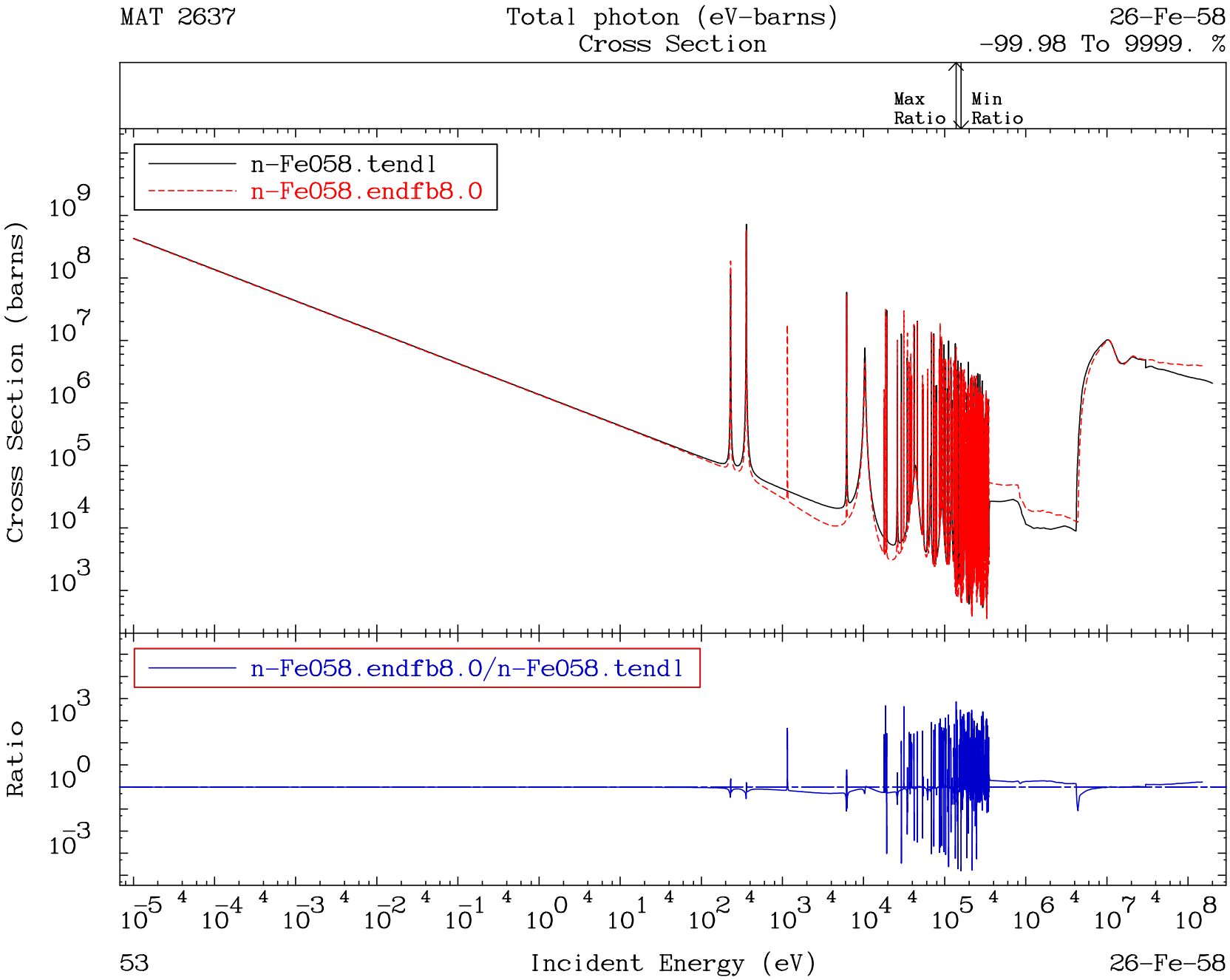

MAT 2637
Kerma elastic
Cross Section
26-Fe-58
-99.97 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
48
26-Fe-58

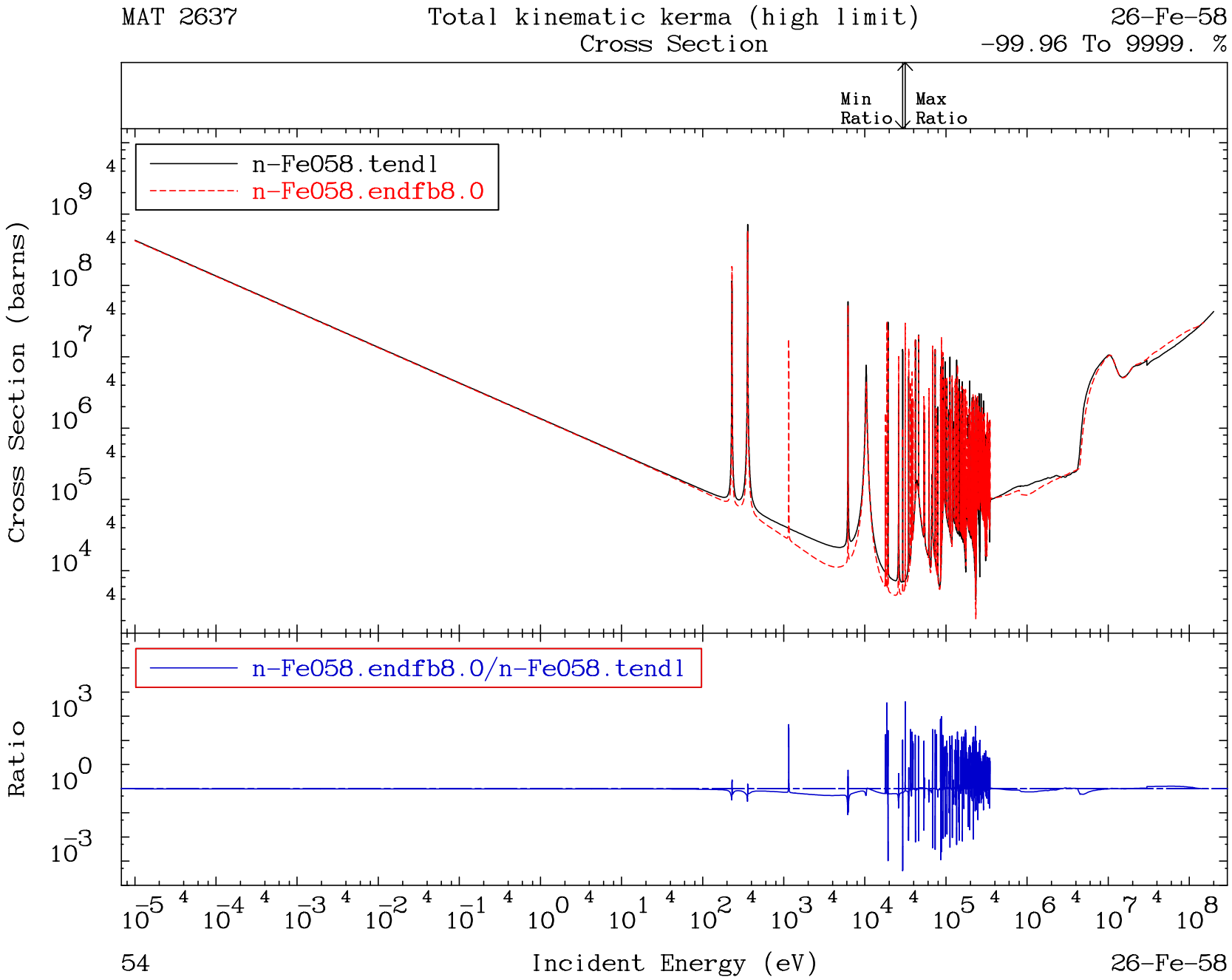

MAT 2637
Kerma non-elastic (all but mt2)
Cross Section
26-Fe-58
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
49
26-Fe-58

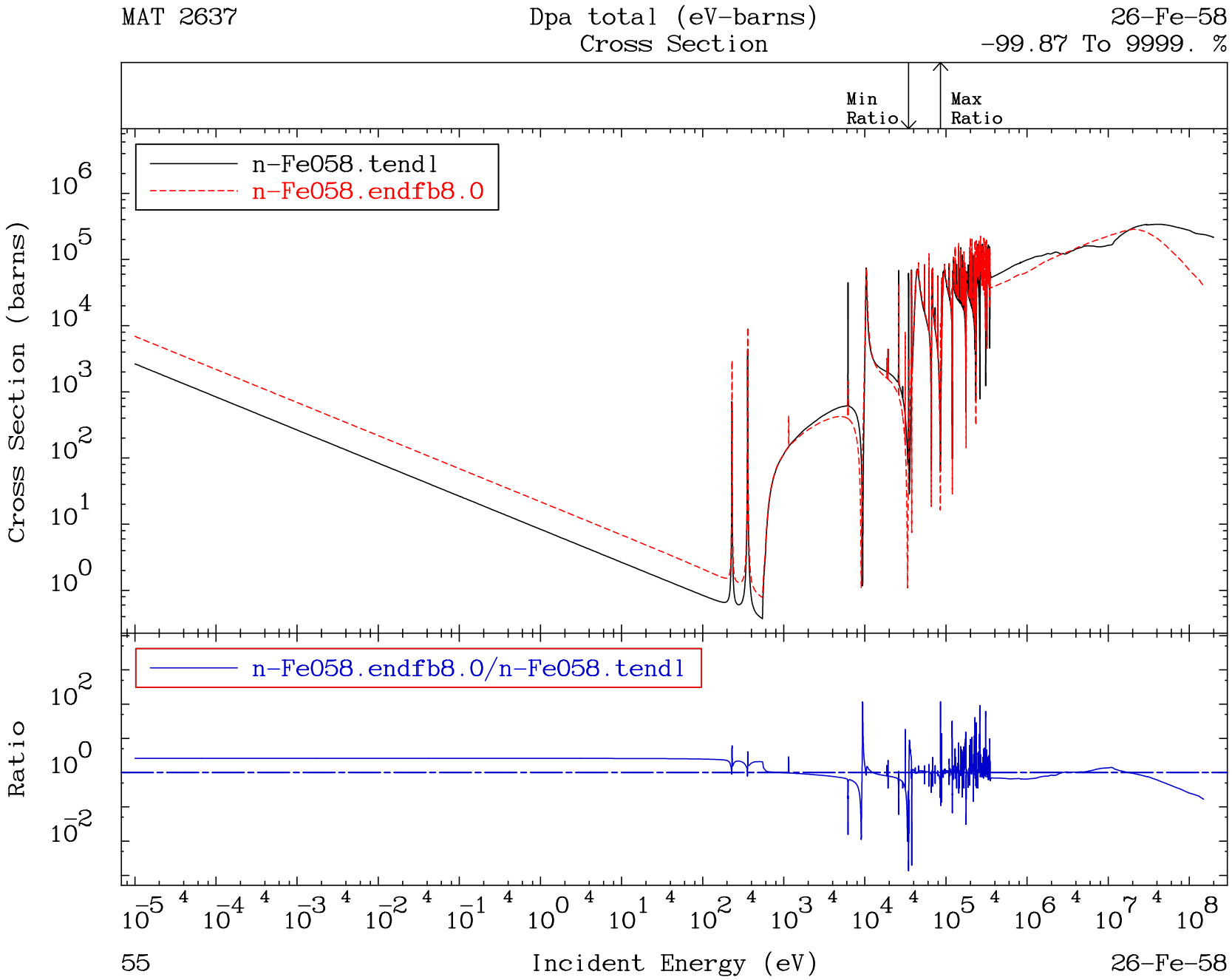

MAT 2637
Kerma inelastic (mt51-91)
Cross Section
26-Fe-58
-34.03 To 13.37 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 824.92 keV
n-Fe058.endfb8.0 Threshold 850.00 keV
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
50
26-Fe-58

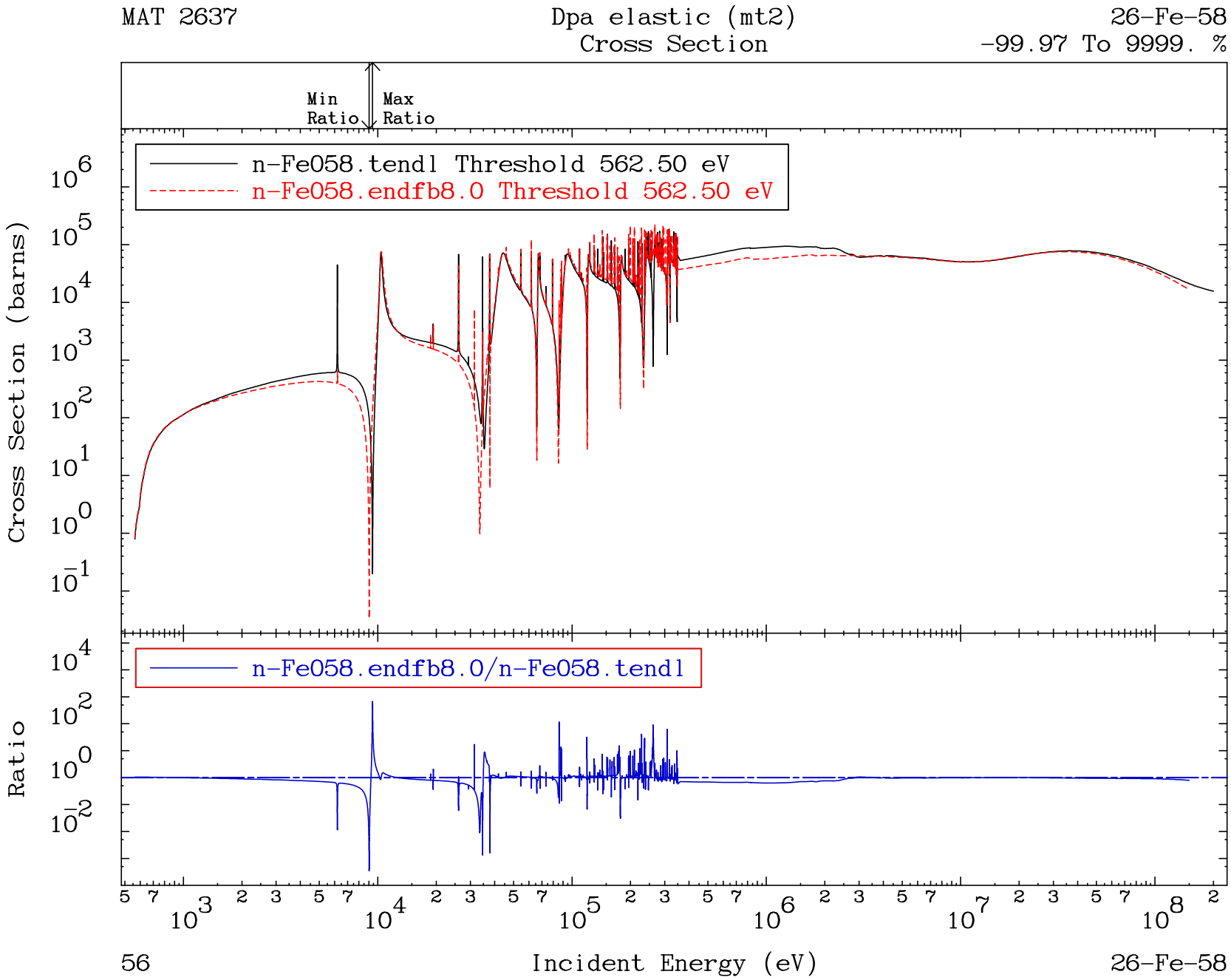

MAT 2637
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
26-Fe-58
-34.03 To 13.37 %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
1.2
1.0
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
51
Incident Energy (eV)
26-Fe-58

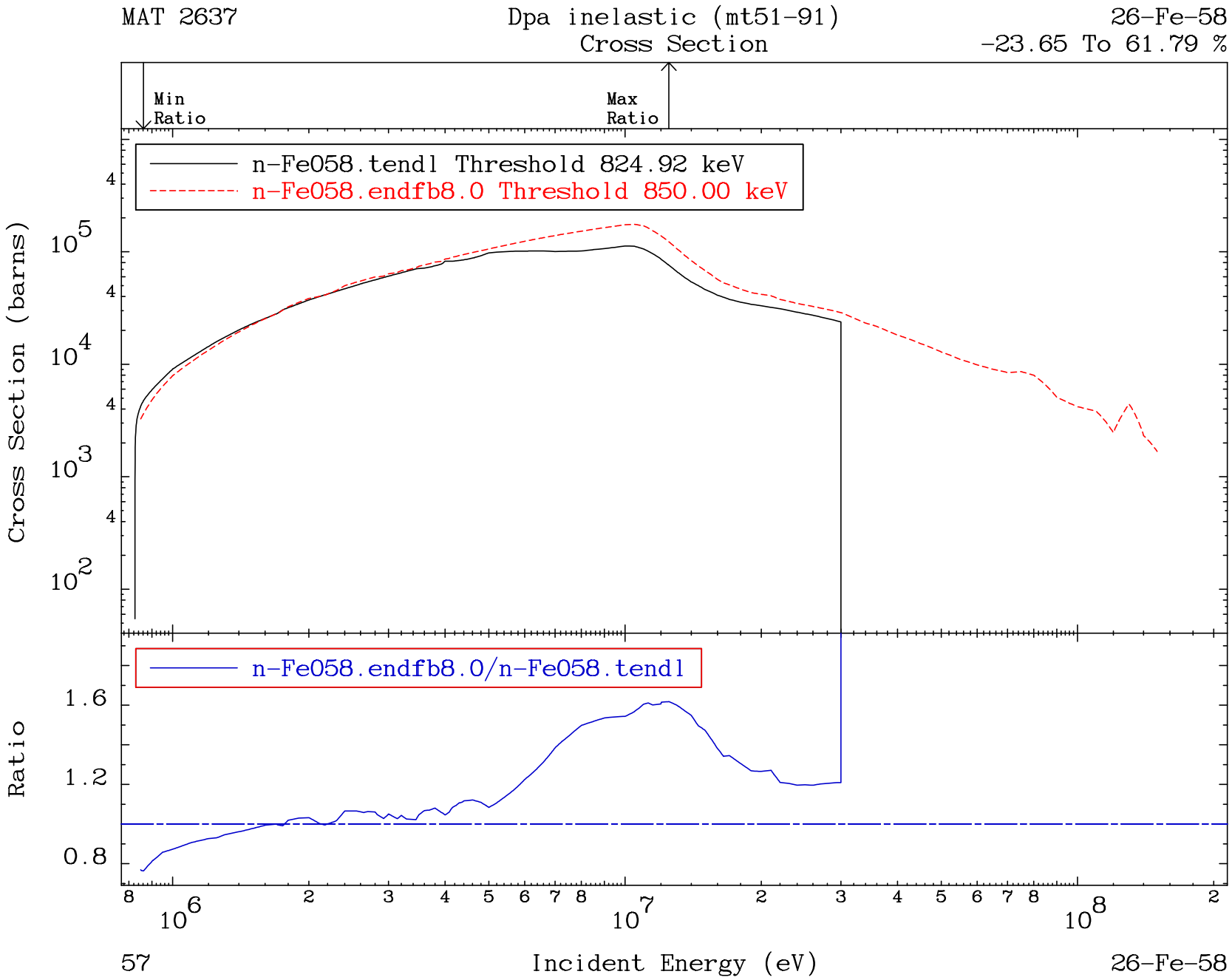

MAT 2637
Kerma capture (mt102)
Cross Section
26-Fe-58
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
52
26-Fe-58

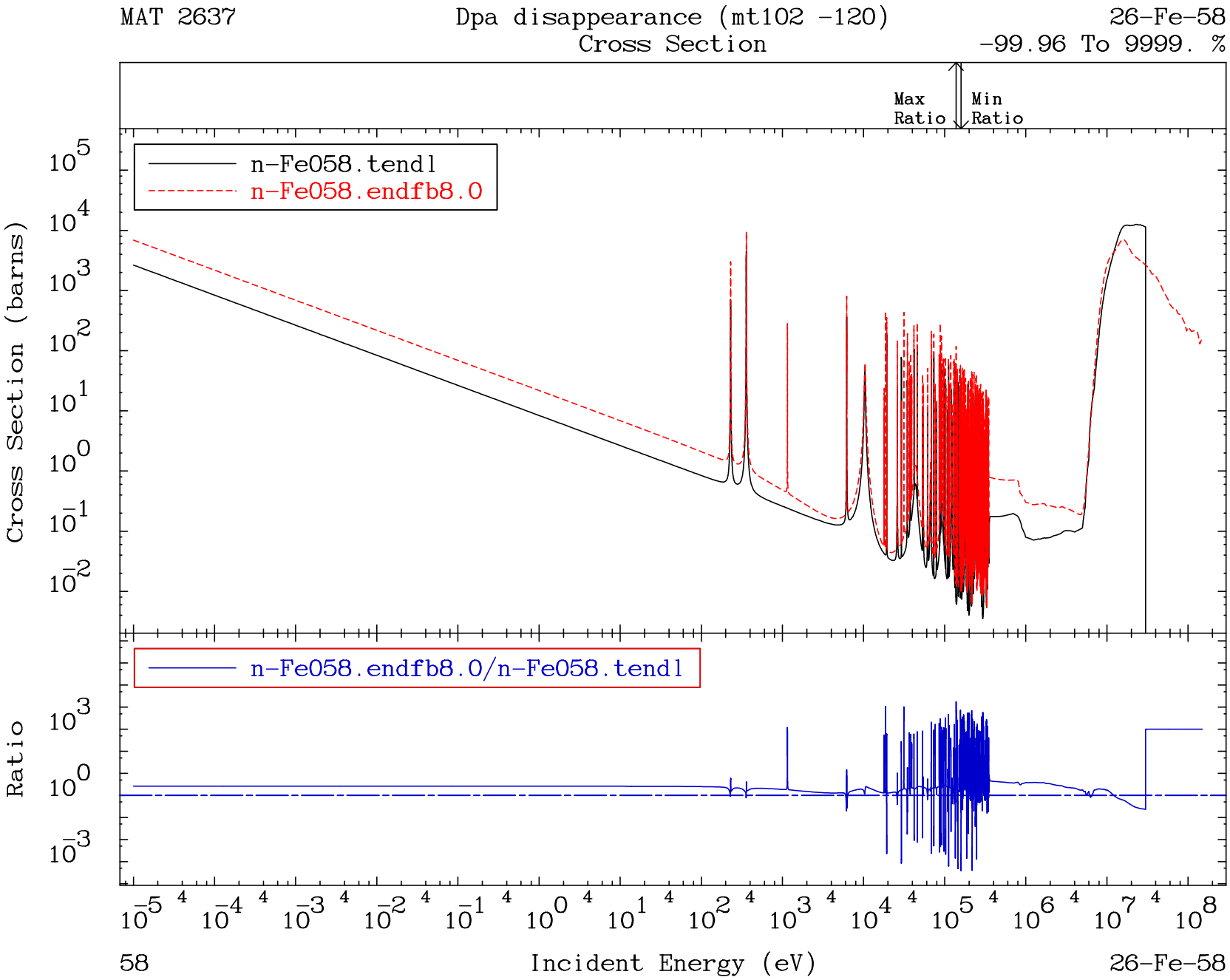

MAT 2637
Total photon (eV-barns)
Cross Section
26-Fe-58
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
53
26-Fe-58

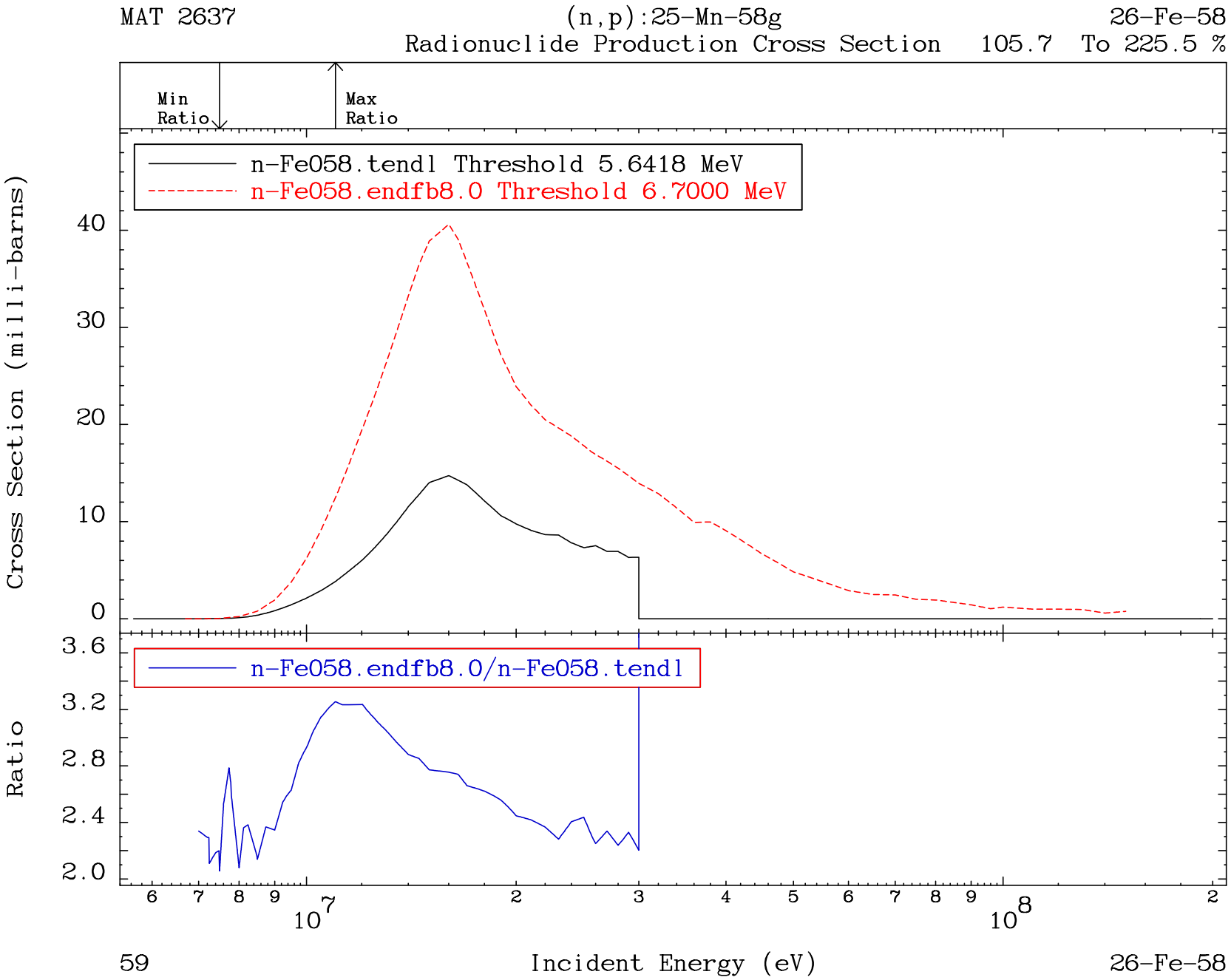

MAT 2637
Total kinematic kerma (high limit)
Cross Section
26-Fe-58
-99.96 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
54
26-Fe-58

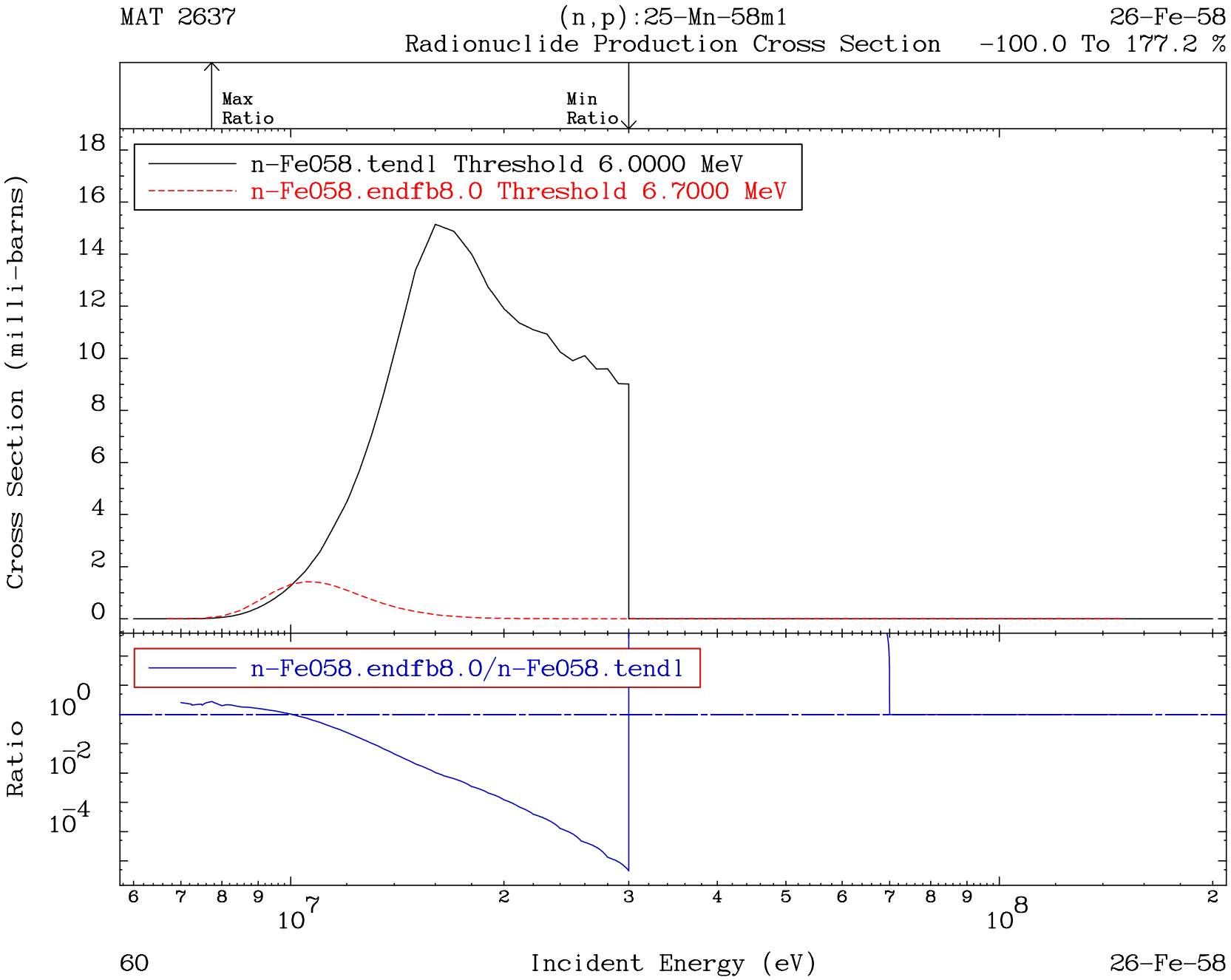

MAT 2637
Dpa total (eV-barns)
Cross Section
26-Fe-58
-99.87 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
55
Incident Energy (eV)
26-Fe-58


MAT 2637
Dpa elastic (mt2)
Cross Section
26-Fe-58
-99.97 To 9999. %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 562.50 eV
n-Fe058.endfb8.0 Threshold 562.50 eV
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
56
26-Fe-58


MAT 2637
Dpa inelastic (mt51-91)
Cross Section
26-Fe-58
-23.65 To 61.79 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 824.92 keV
n-Fe058.endfb8.0 Threshold 850.00 keV
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
57
26-Fe-58


MAT 2637
Dpa disappearance (mt102 -120)
Cross Section
26-Fe-58
-99.96 To 9999. %
Max Ratio
Min Ratio
n-Fe058.tendl
n-Fe058.endfb8.0
Cross Section (barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
58
Incident Energy (eV)
26-Fe-58


MAT 2637
(n,p):25-Mn-58g
26-Fe-58
Radionuclide Production Cross Section 105.7 To 225.5 %
Min Ratio
Max Ratio
n-Fe058.tendl Threshold 5.6418 MeV
n-Fe058.endfb8.0 Threshold 6.7000 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
3.6
3.2
2.8
2.4
2.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
59
Incident Energy (eV)
26-Fe-58


MAT 2637
(n,p):25-Mn-58m1
26-Fe-58
Radionuclide Production Cross Section -100.0 To 177.2 %
Max Ratio
Min Ratio
n-Fe058.tendl Threshold 6.0000 MeV
n-Fe058.endfb8.0 Threshold 6.7000 MeV
Cross Section (milli-barns)
n-Fe058.endfb8.0/n-Fe058.tendl
Ratio
Incident Energy (eV)
60
26-Fe-58