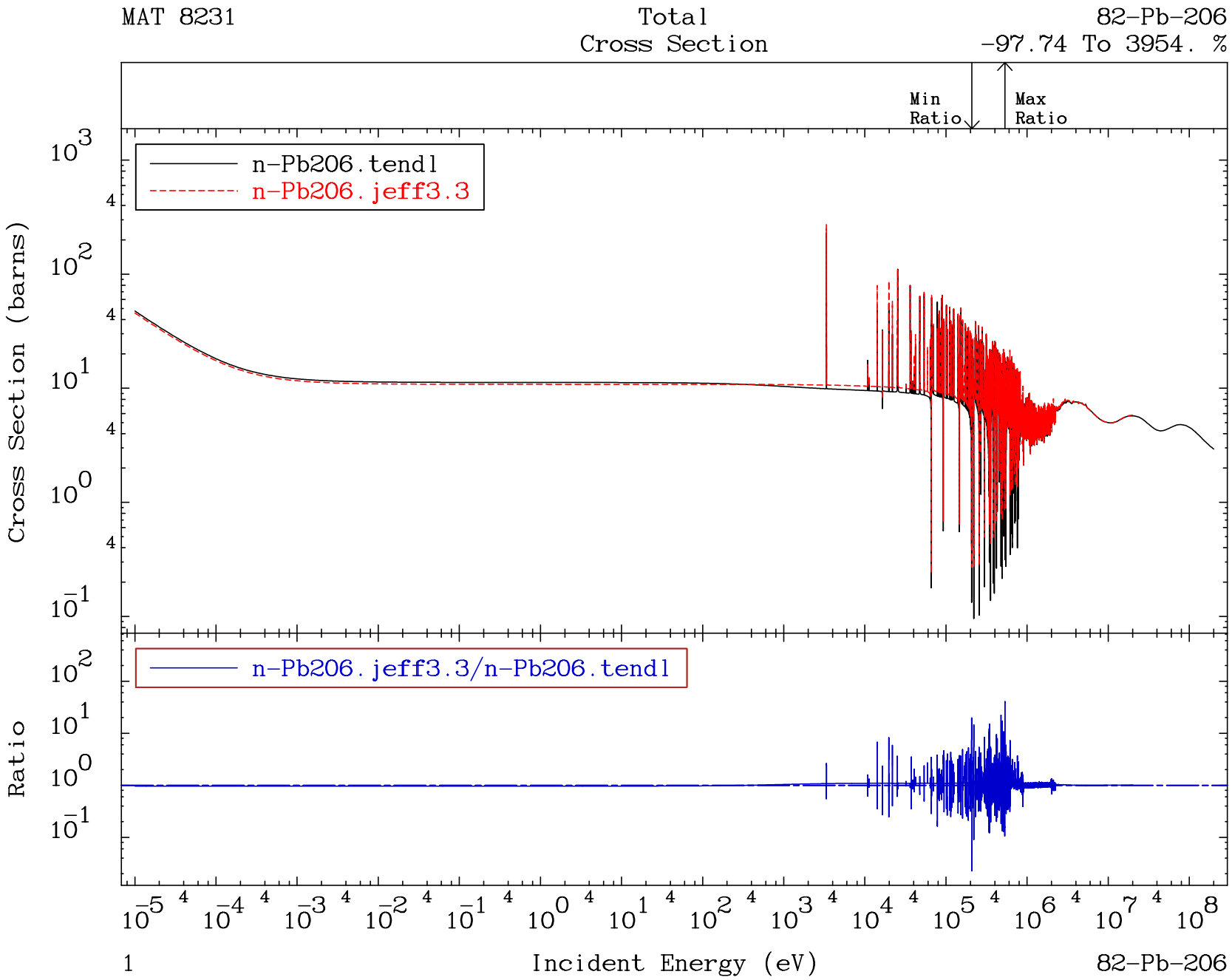
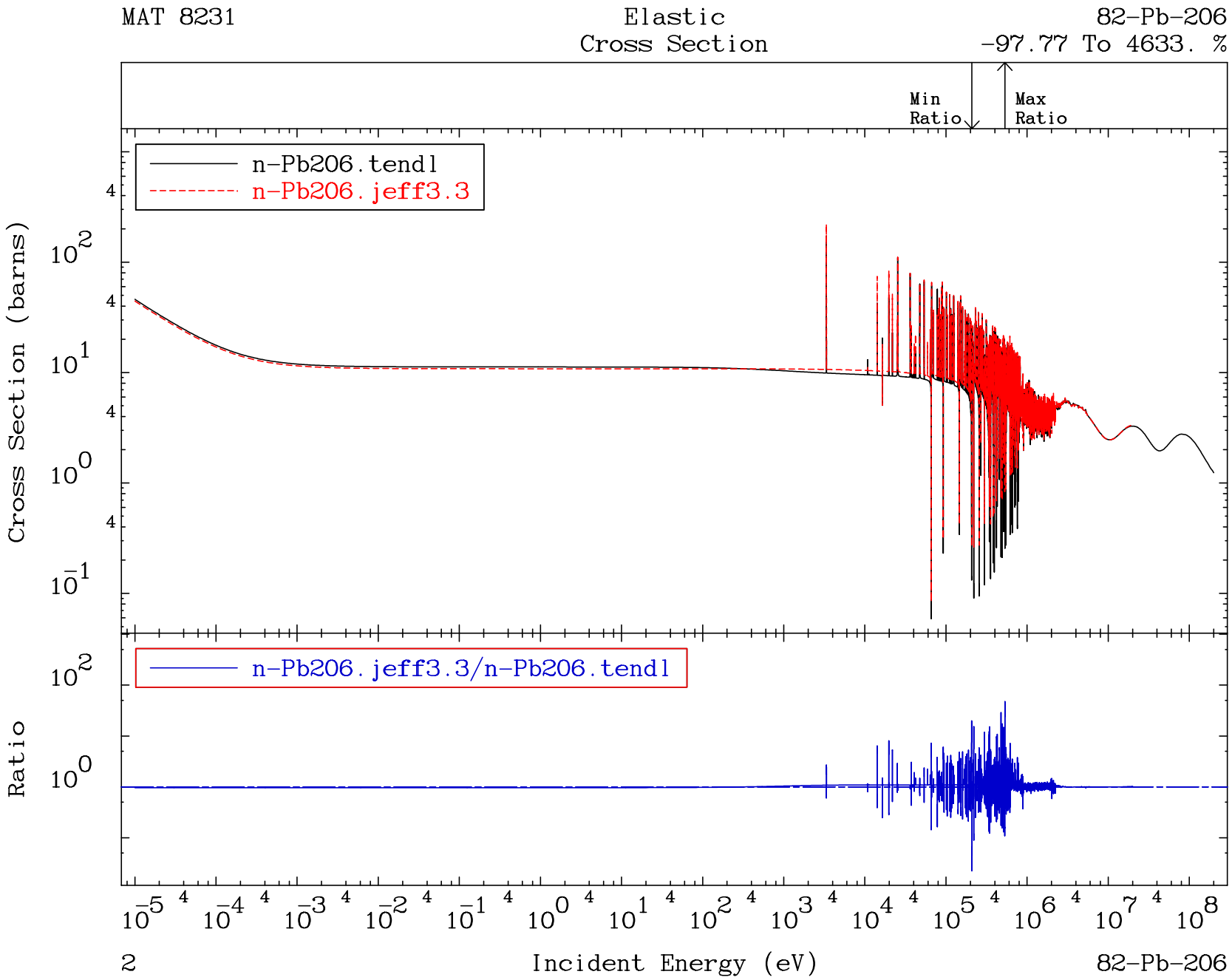
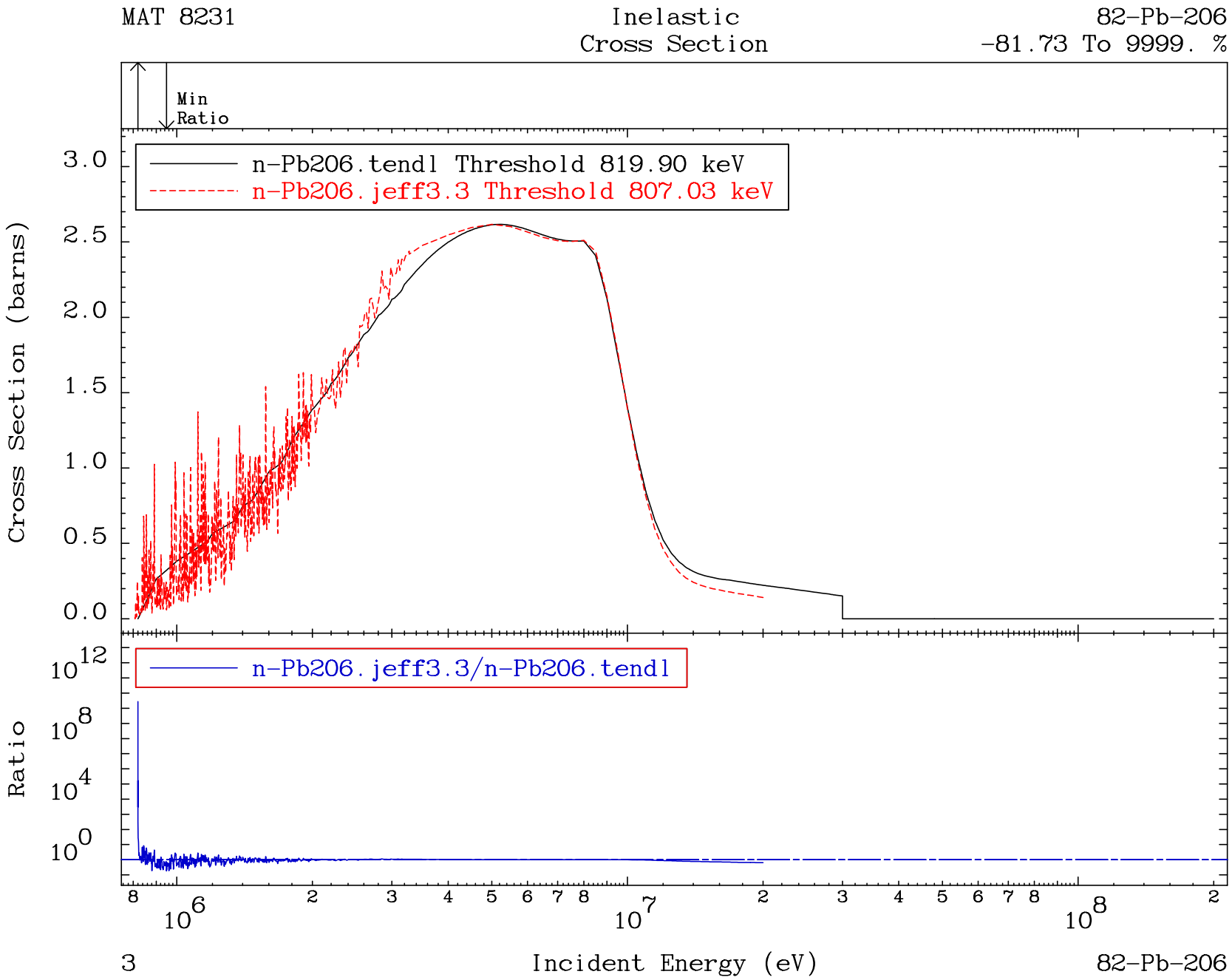
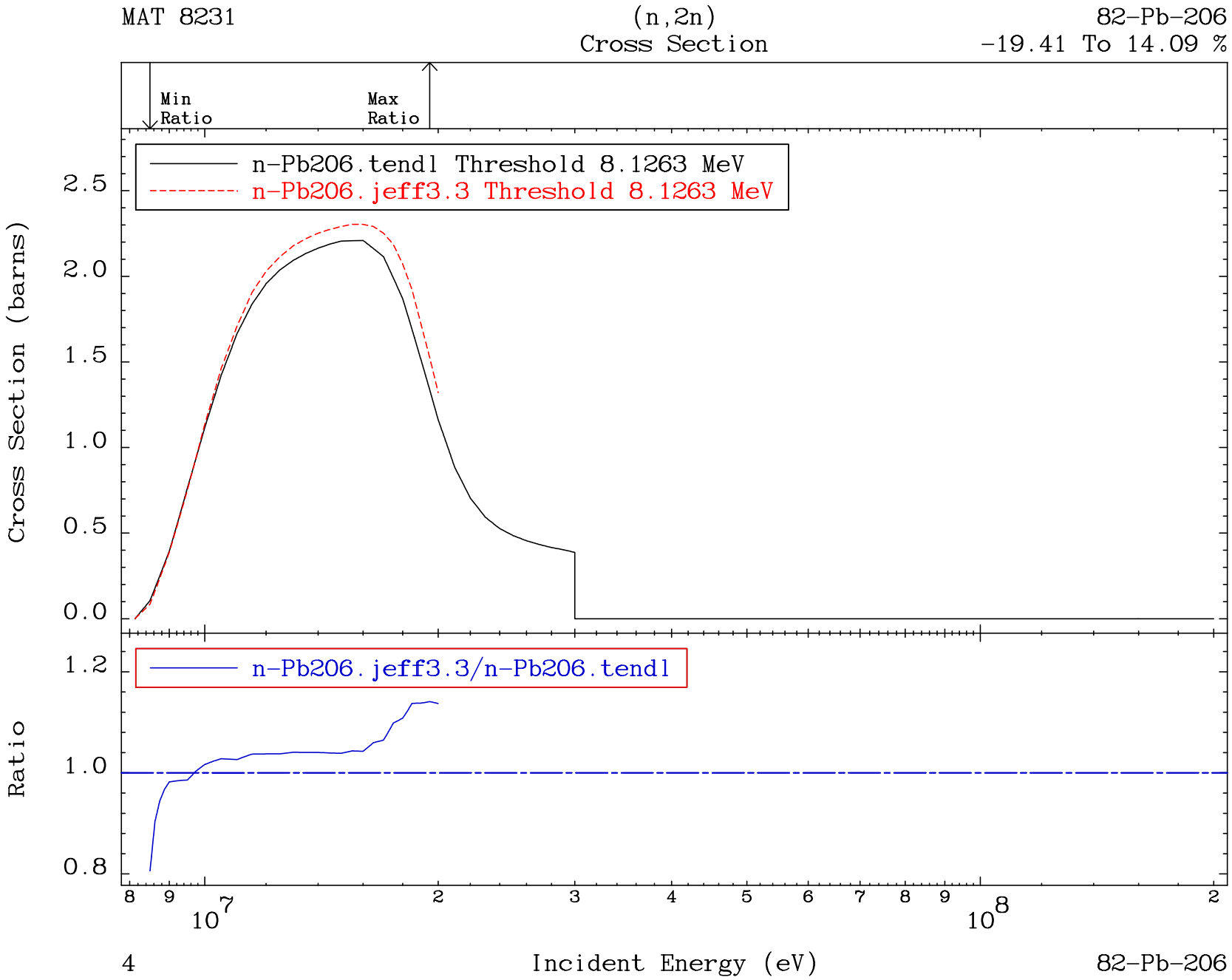
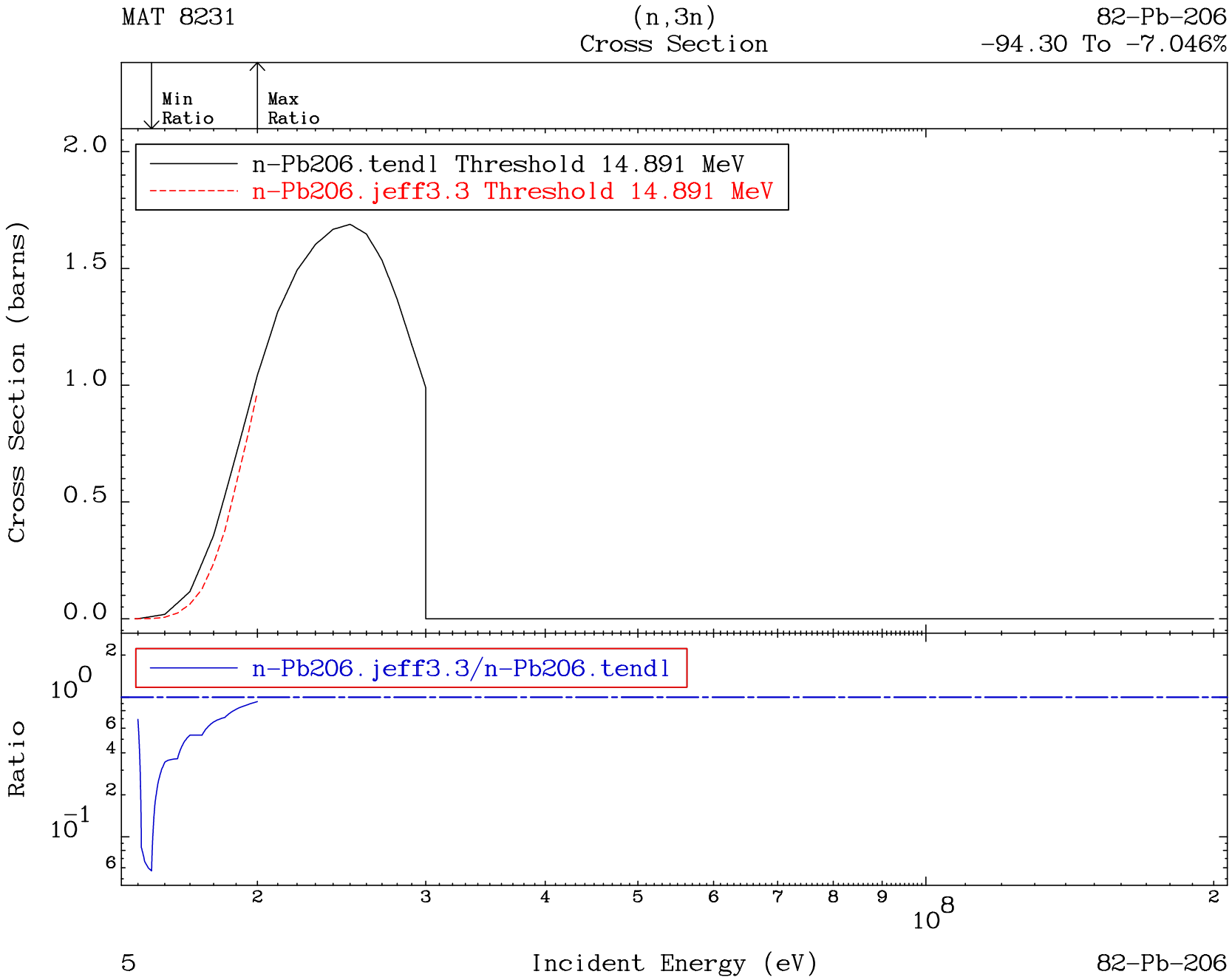
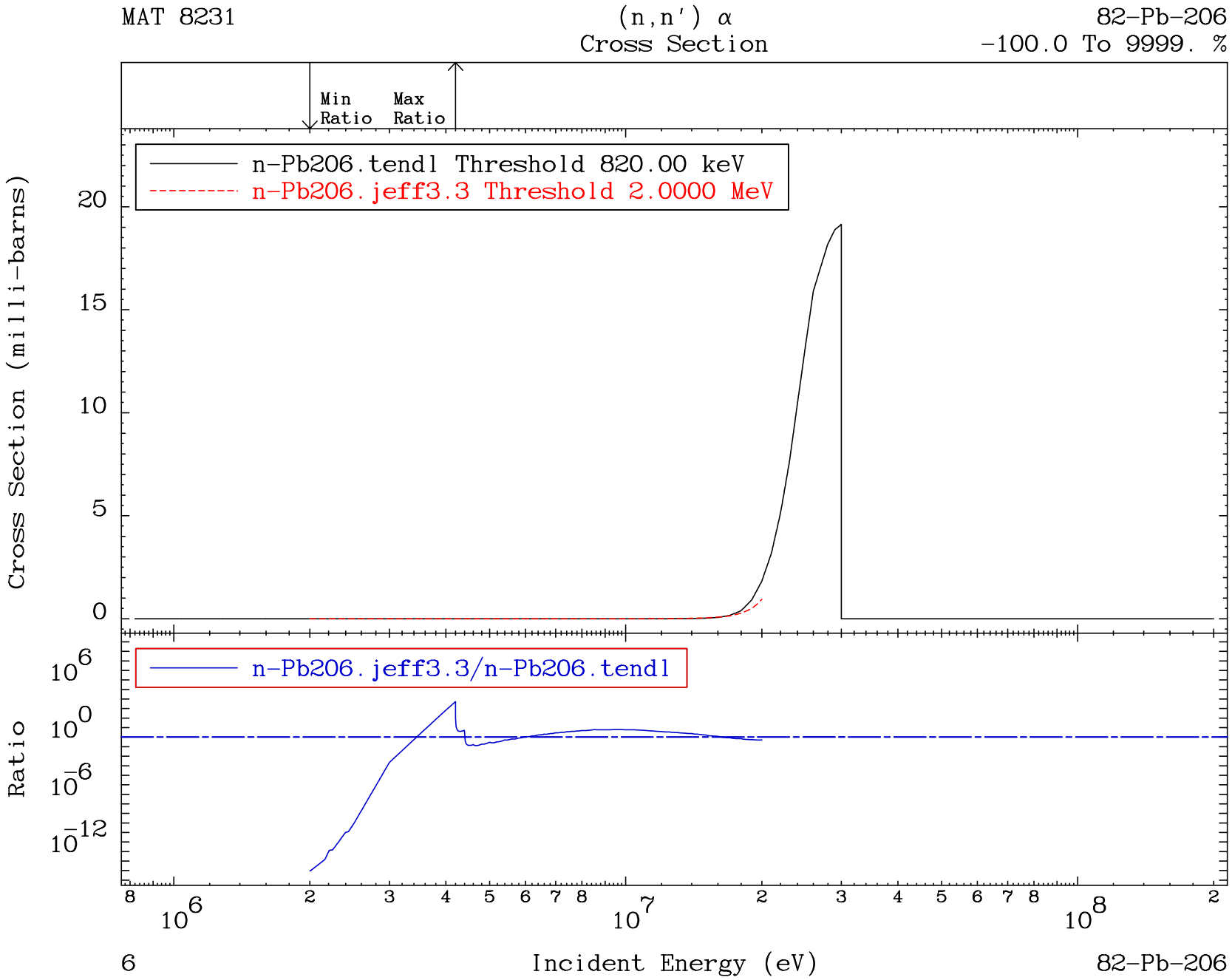

MAT 8231
Total
Cross Section
82-Pb-206
-97.74 To 3954. %
Min
Ratio
Max
Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
1
82-Pb-206

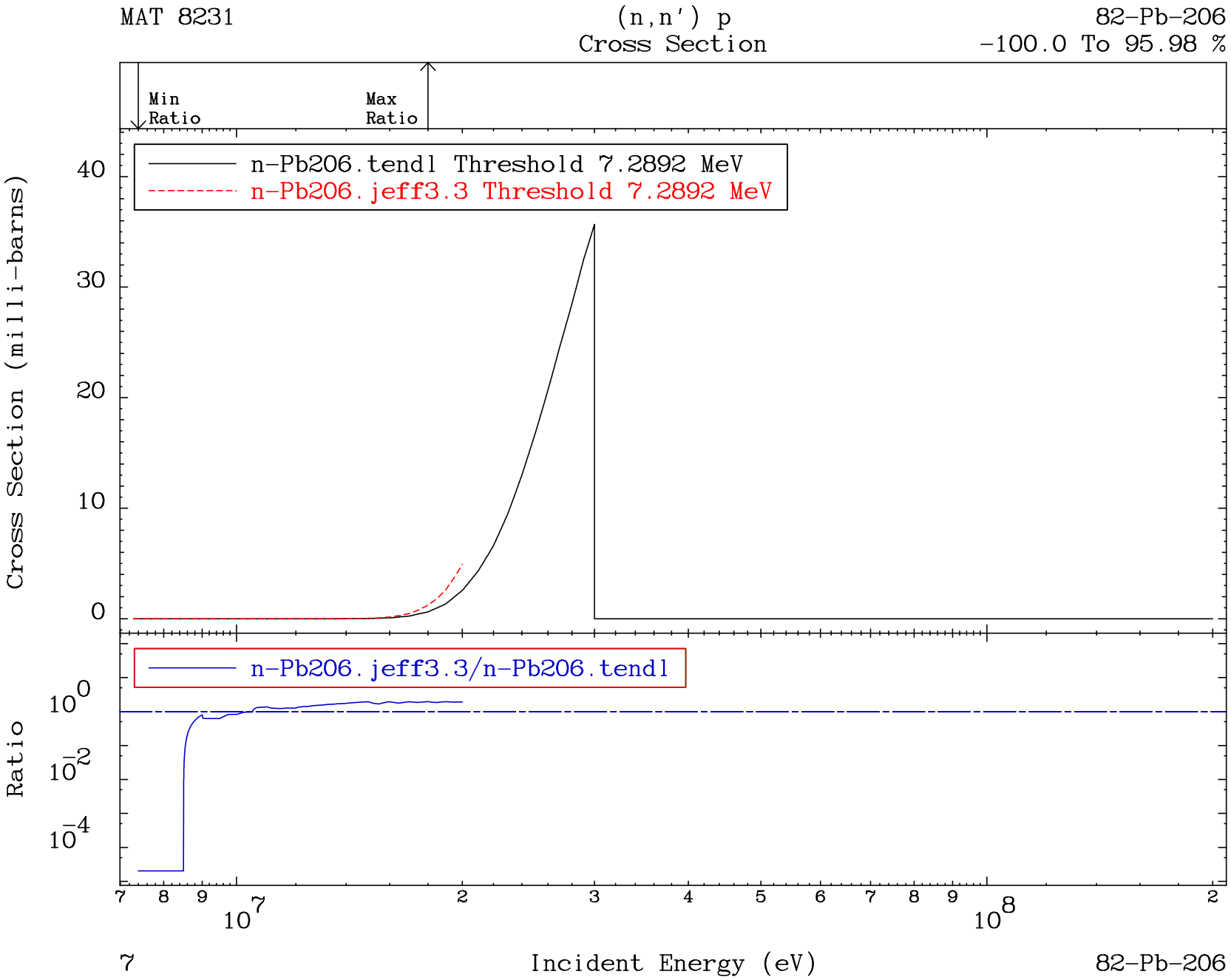

MAT 8231
Elastic
Cross Section
82-Pb-206
-97.77 To 4633. %
Min Ratio
Max Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
2
82-Pb-206

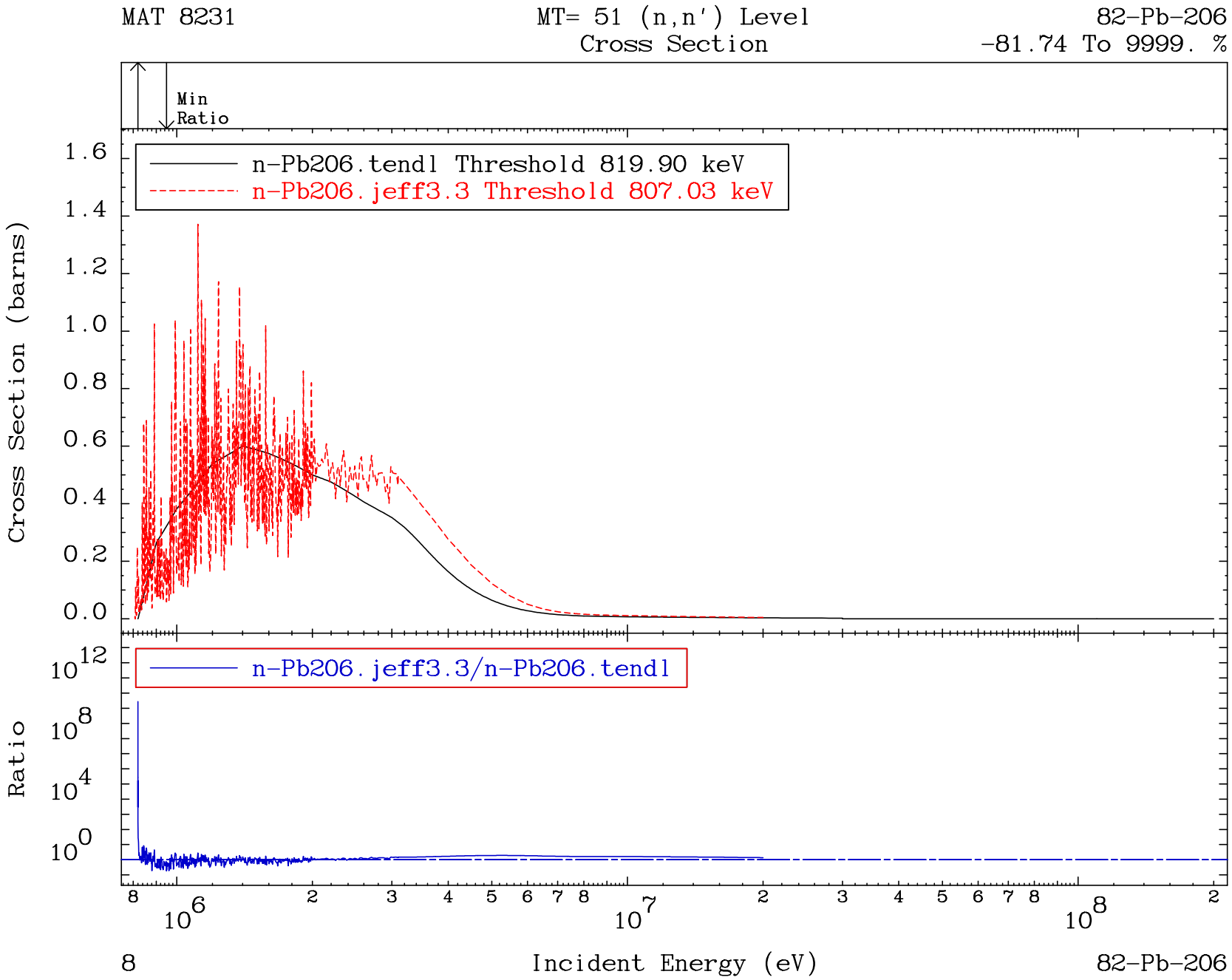

MAT 8231
Inelastic
Cross Section
82-Pb-206
-81.73 To 9999. %
Min
Ratio
n-Pb206.tendl Threshold 819.90 keV
n-Pb206.jeff3.3 Threshold 807.03 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^12
10^8
10^4
10^0
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
3
82-Pb-206

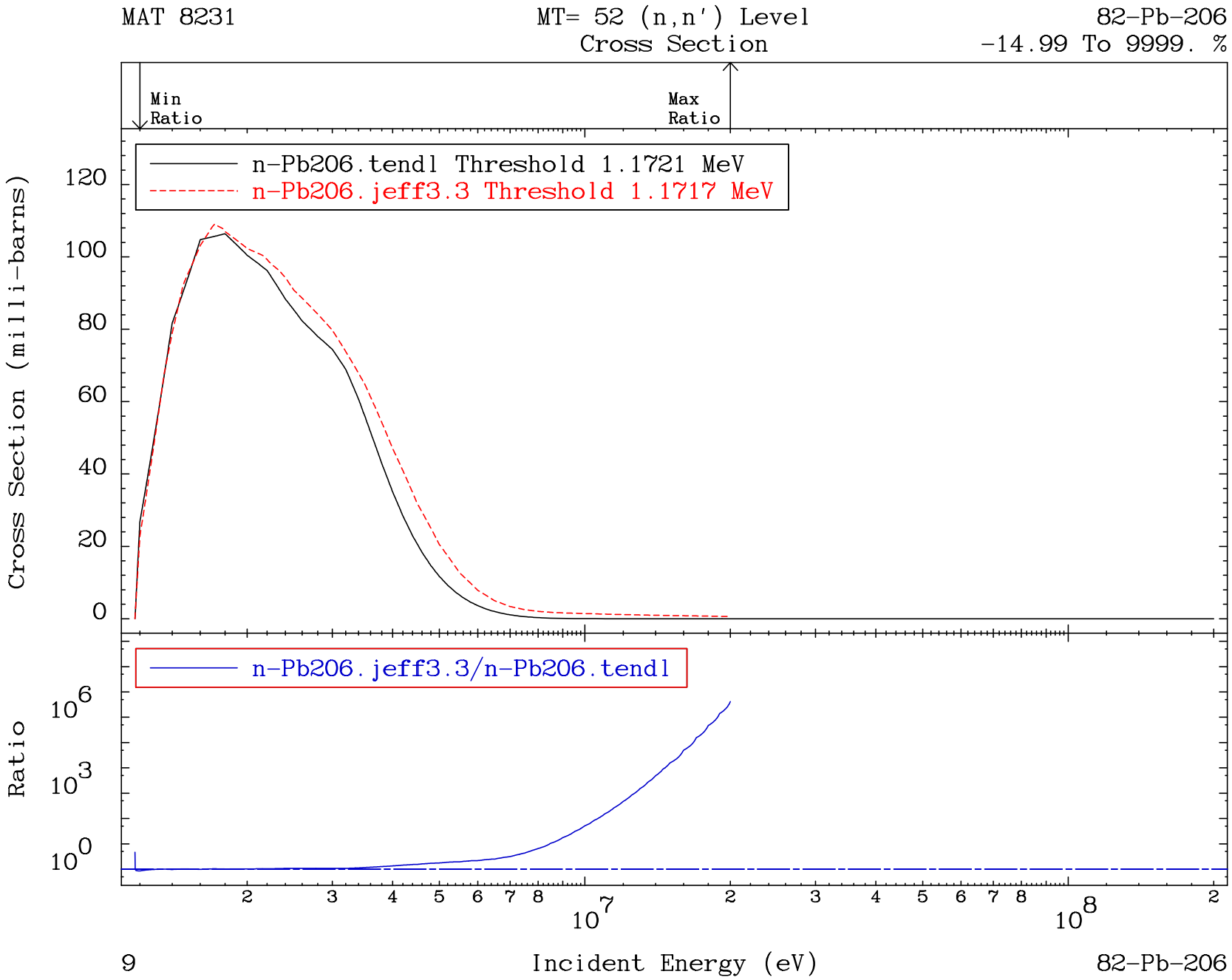

MAT 8231
(n,2n)
Cross Section
82-Pb-206
-19.41 To 14.09 %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 8.1263 MeV
n-Pb206.jeff3.3 Threshold 8.1263 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
1.2
1.0
0.8
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
82-Pb-206

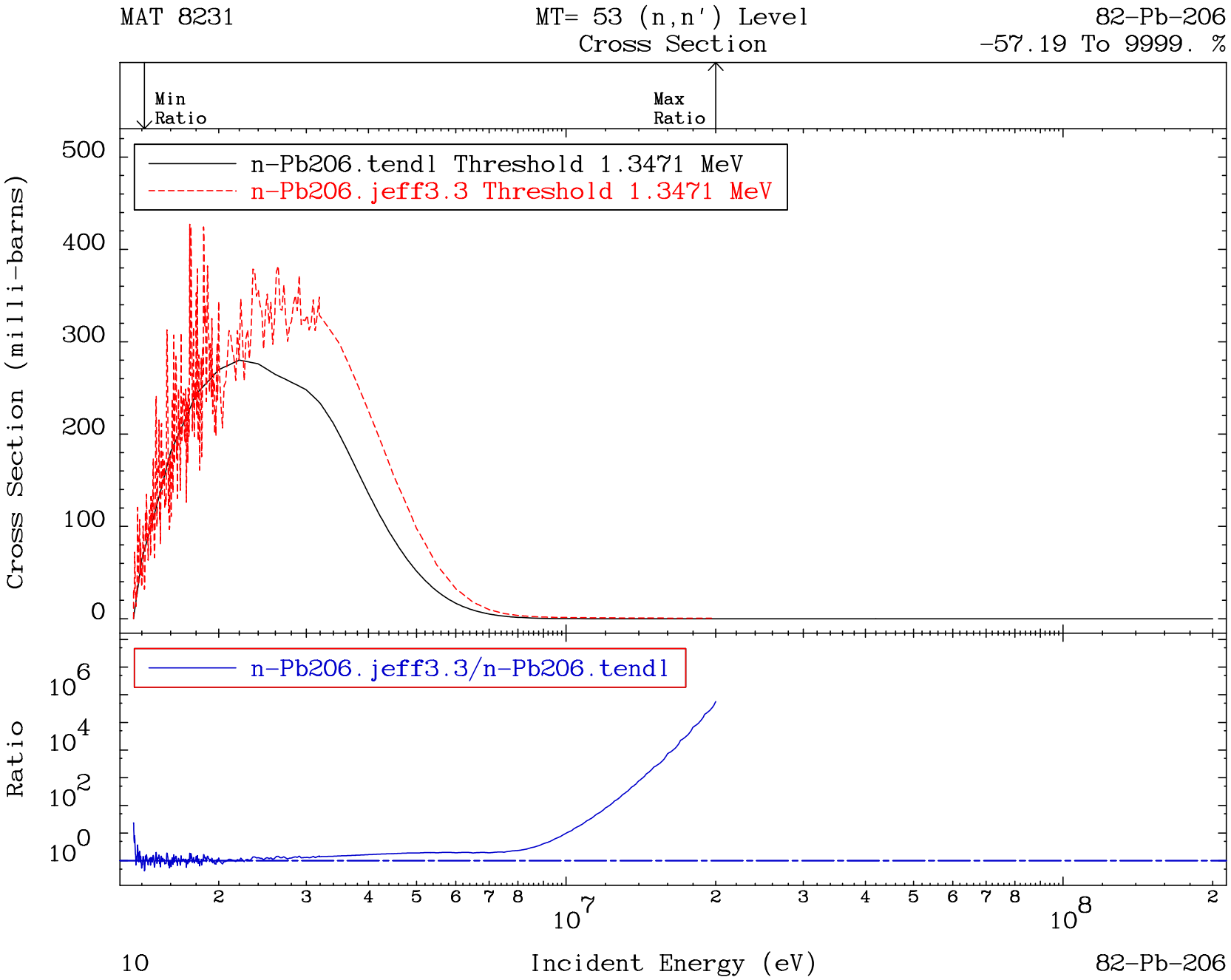

MAT 8231
(n,3n)
Cross Section
82-Pb-206
-94.30 To -7.046%
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 14.891 MeV
n-Pb206.jeff3.3 Threshold 14.891 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^0
10^-1
2
6
4
2
6
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
82-Pb-206

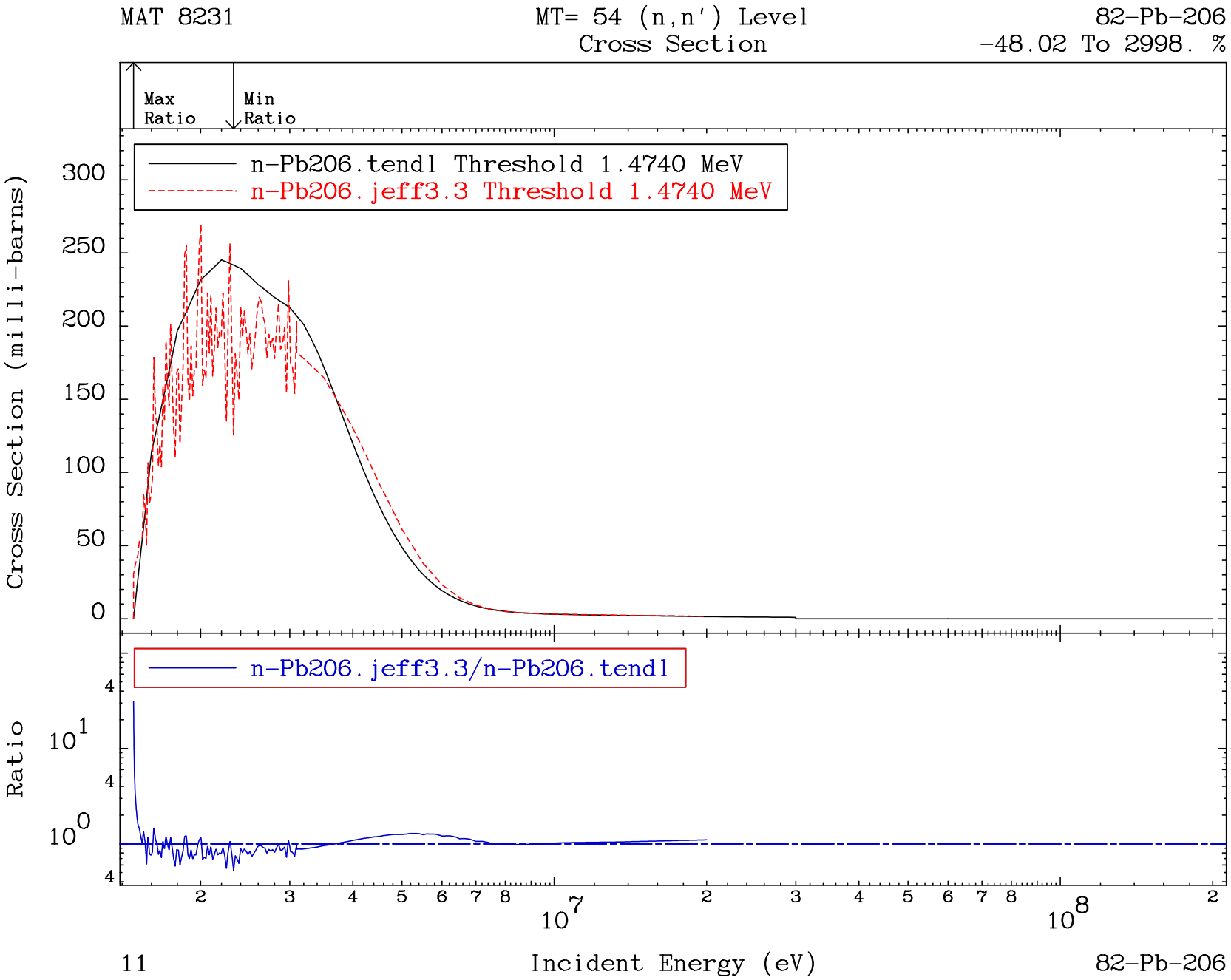

MAT 8231
(n,n') α
Cross Section
82-Pb-206
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 820.00 keV
n-Pb206.jeff3.3 Threshold 2.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^0
10^-6
10^-12
8 2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
6
Incident Energy (eV)
82-Pb-206

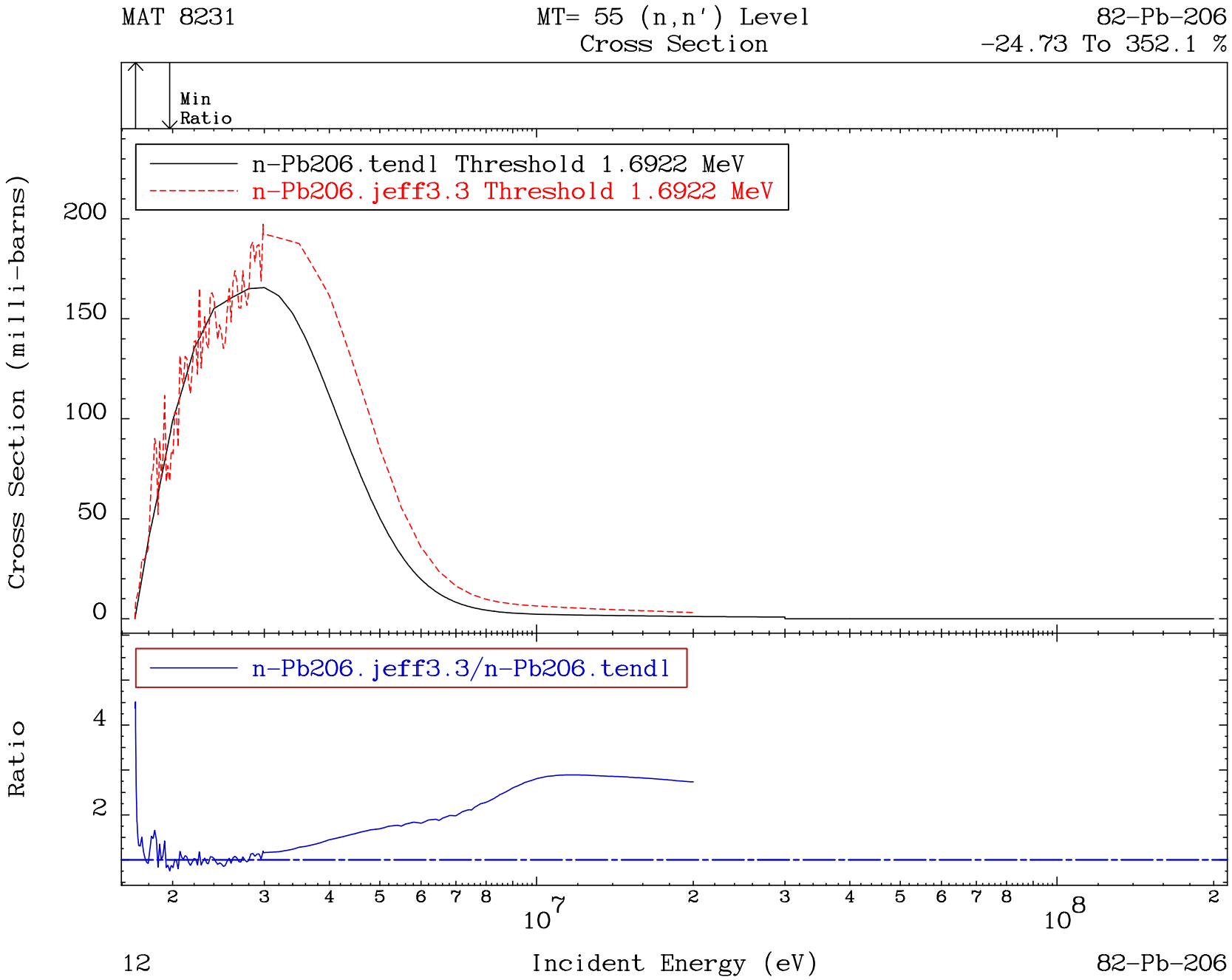

MAT 8231
(n,n') p
Cross Section
82-Pb-206
-100.0 To 95.98 %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 7.2892 MeV
n-Pb206.jeff3.3 Threshold 7.2892 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
82-Pb-206

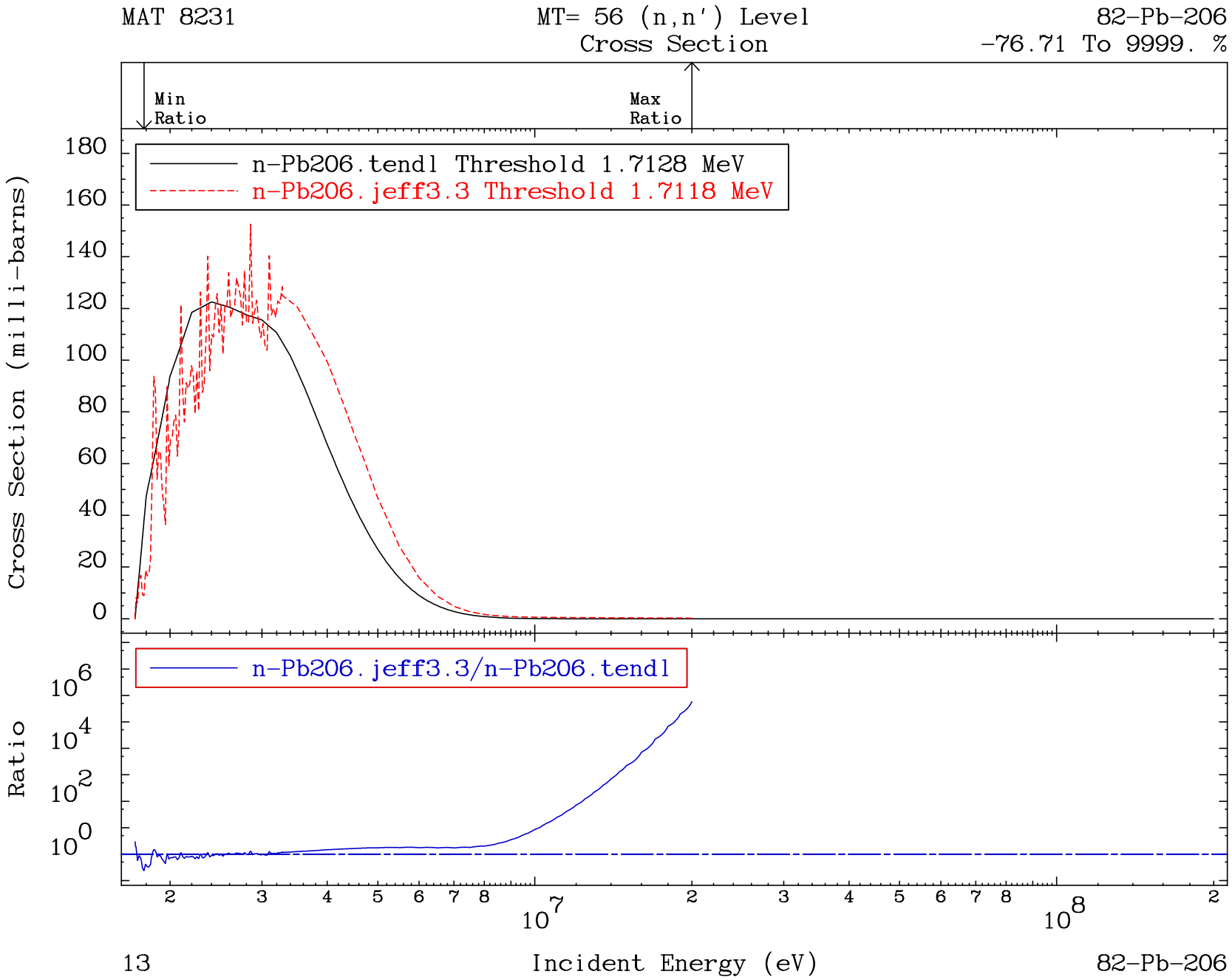

MAT 8231
MT= 51 (n,n') Level
Cross Section
82-Pb-206
-81.74 To 9999. %
Min
Ratio
n-Pb206.tendl Threshold 819.90 keV
n-Pb206.jeff3.3 Threshold 807.03 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^12
10^8
10^4
10^0
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
8
Incident Energy (eV)
82-Pb-206

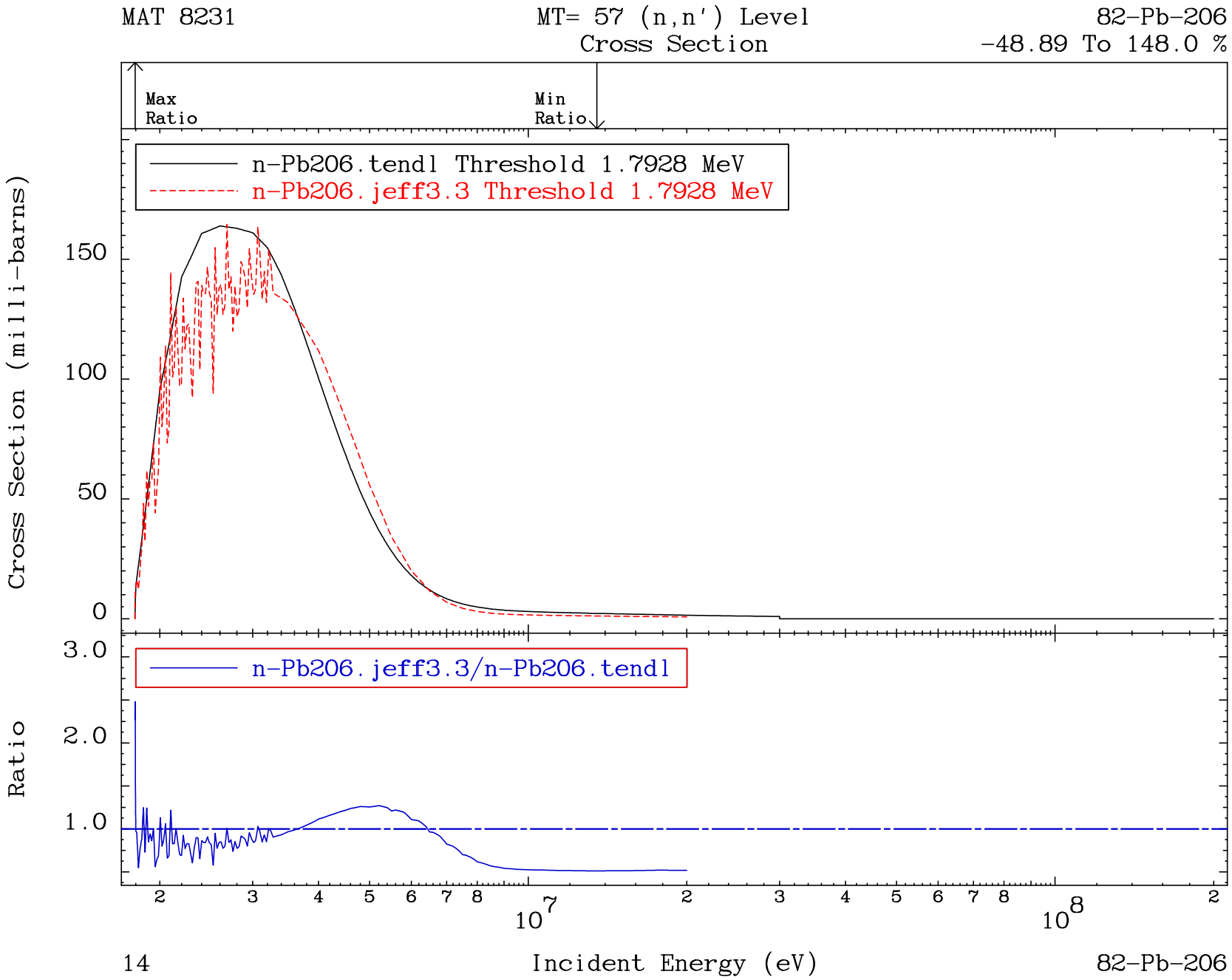

MAT 8231
MT= 52 (n,n') Level
Cross Section
82-Pb-206
-14.99 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 1.1721 MeV
n-Pb206.jeff3.3 Threshold 1.1717 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
82-Pb-206

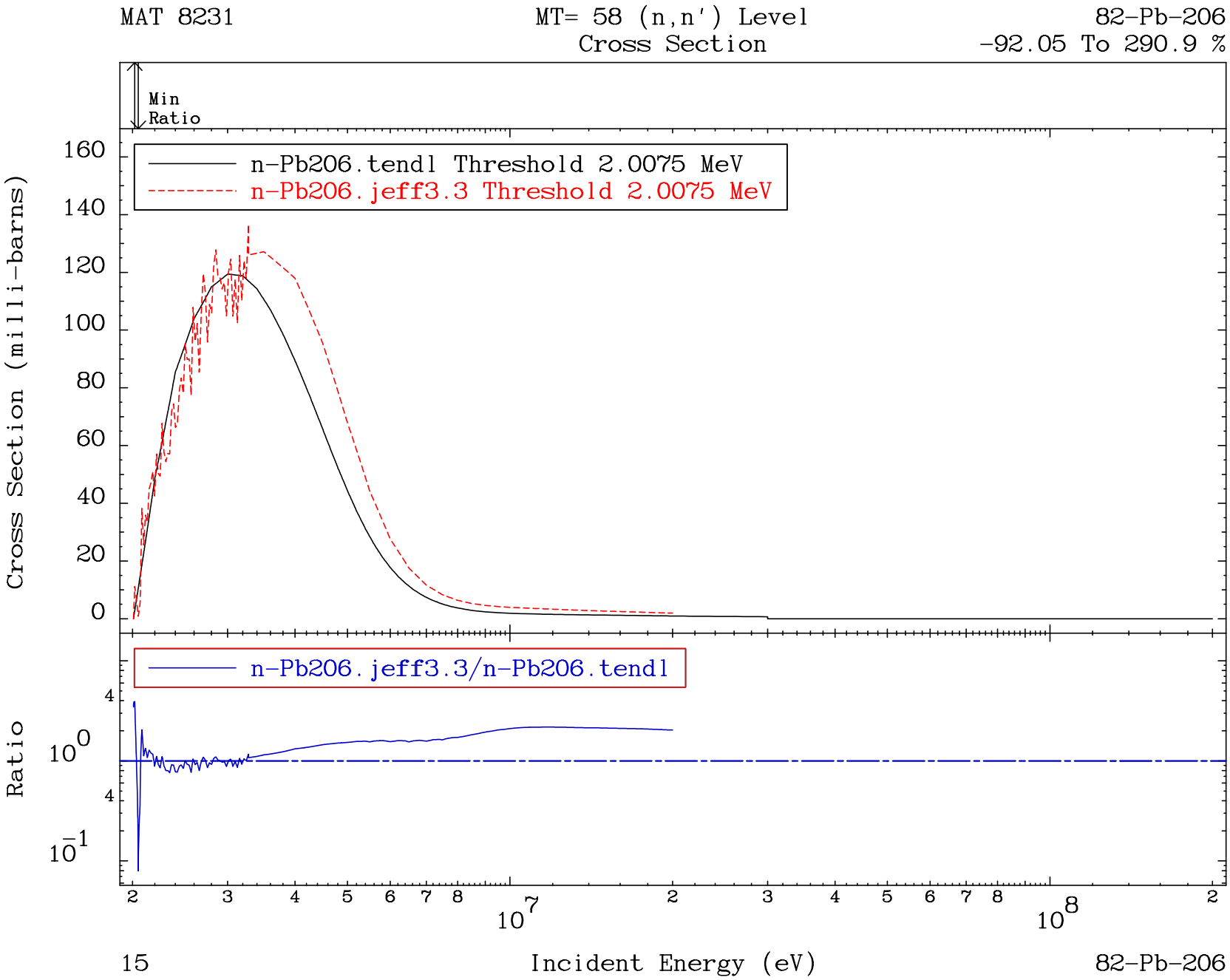

MAT 8231
MT= 53 (n,n') Level
Cross Section
82-Pb-206
-57.19 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 1.3471 MeV
n-Pb206.jeff3.3 Threshold 1.3471 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
82-Pb-206

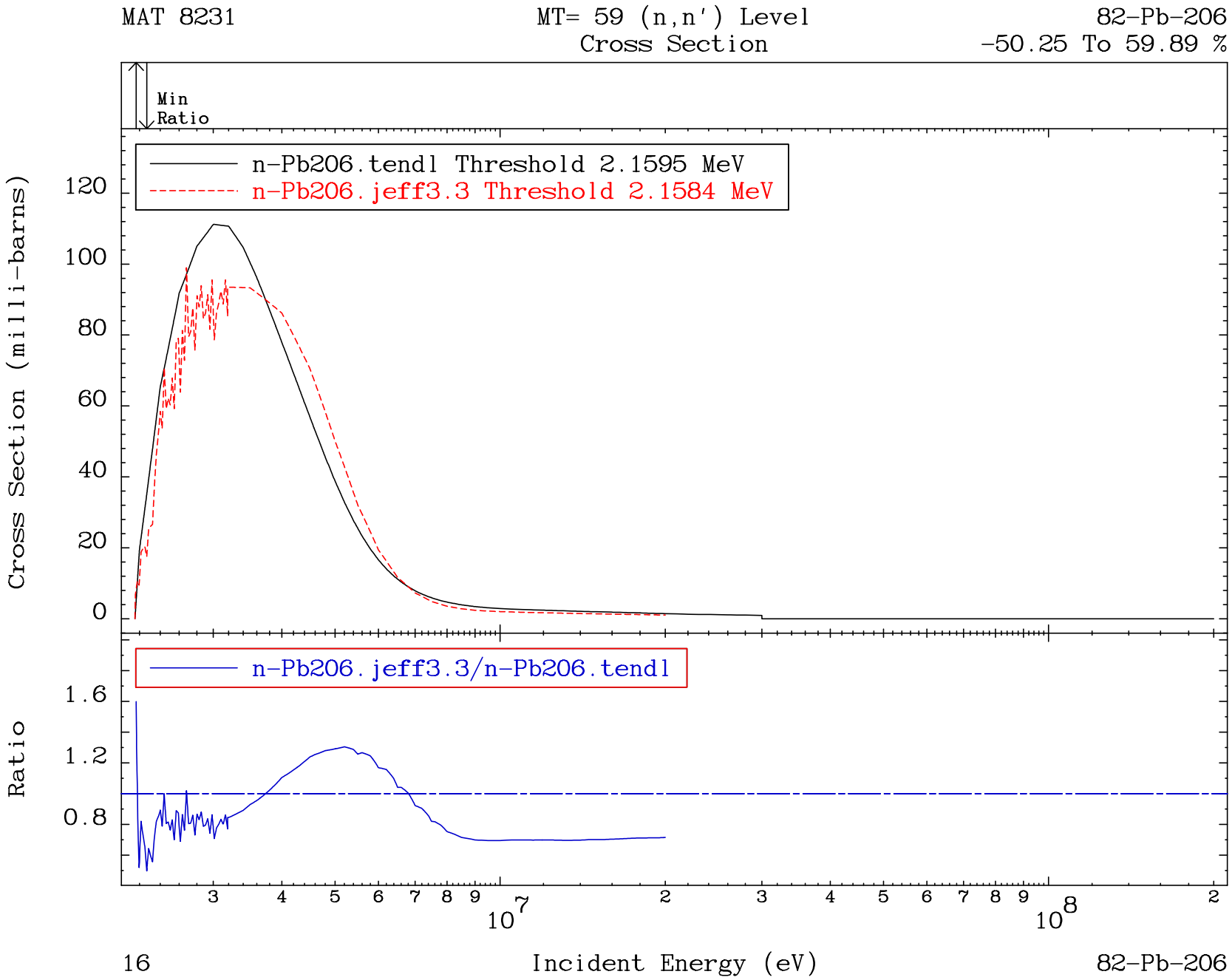

MAT 8231
MT= 54 (n,n') Level
Cross Section
82-Pb-206
-48.02 To 2998. %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 1.4740 MeV
n-Pb206.jeff3.3 Threshold 1.4740 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^1
10^0
4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
82-Pb-206

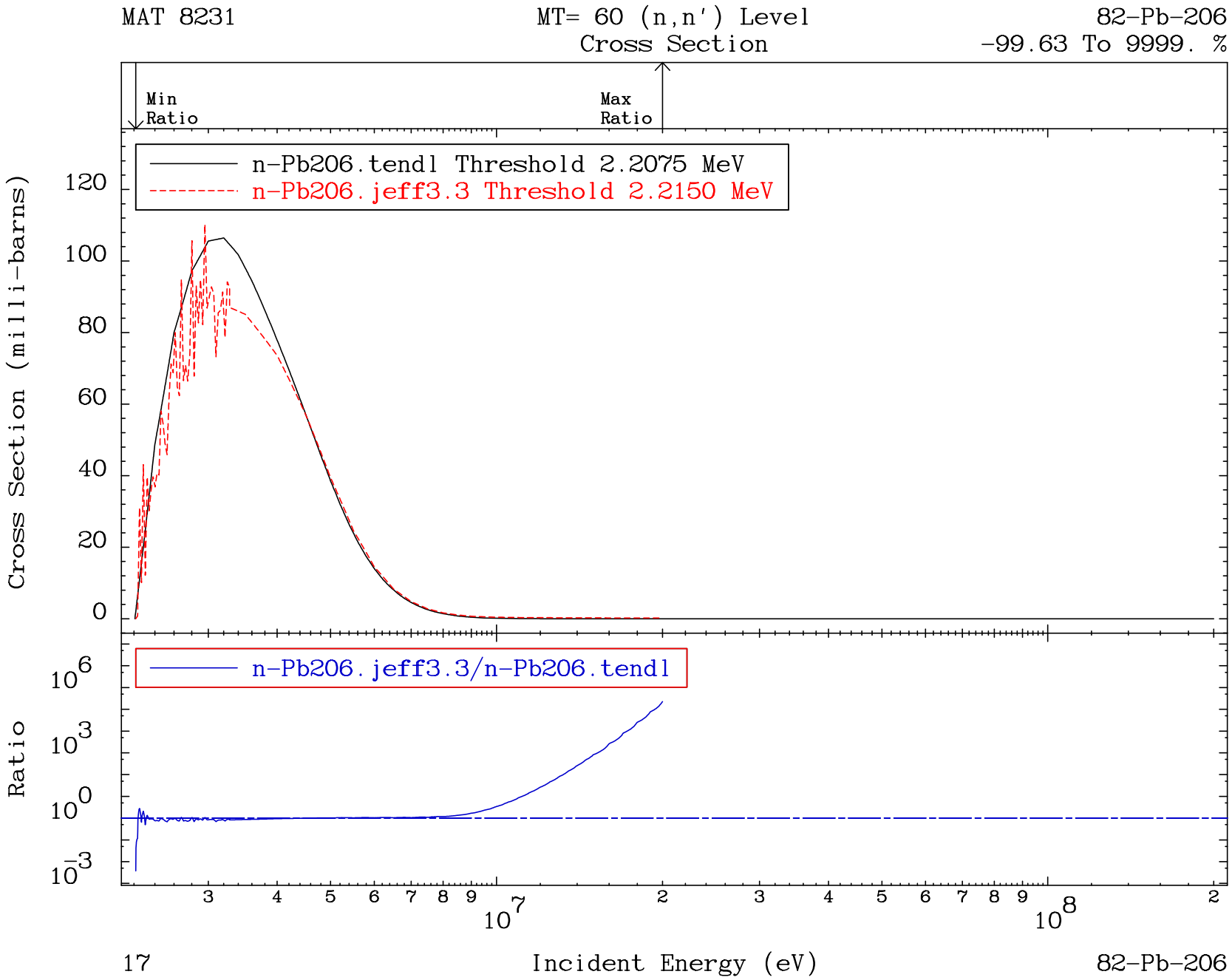

MAT 8231
MT= 55 (n,n') Level
Cross Section
82-Pb-206
-24.73 To 352.1 %
Min
Ratio
n-Pb206.tendl Threshold 1.6922 MeV
n-Pb206.jeff3.3 Threshold 1.6922 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
4
2
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
82-Pb-206

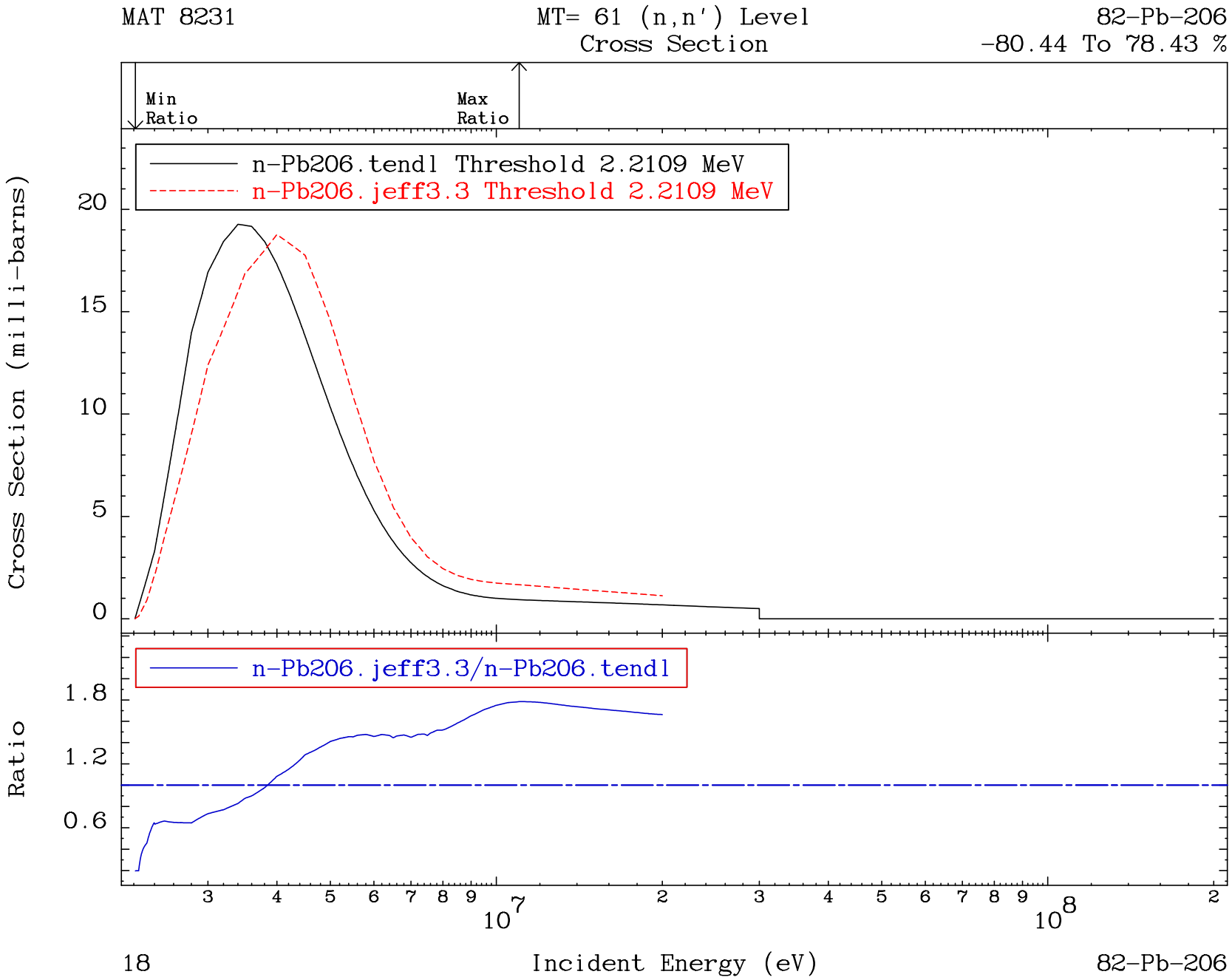

MAT 8231
MT= 56 (n,n') Level
Cross Section
82-Pb-206
-76.71 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 1.7128 MeV
n-Pb206.jeff3.3 Threshold 1.7118 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
82-Pb-206

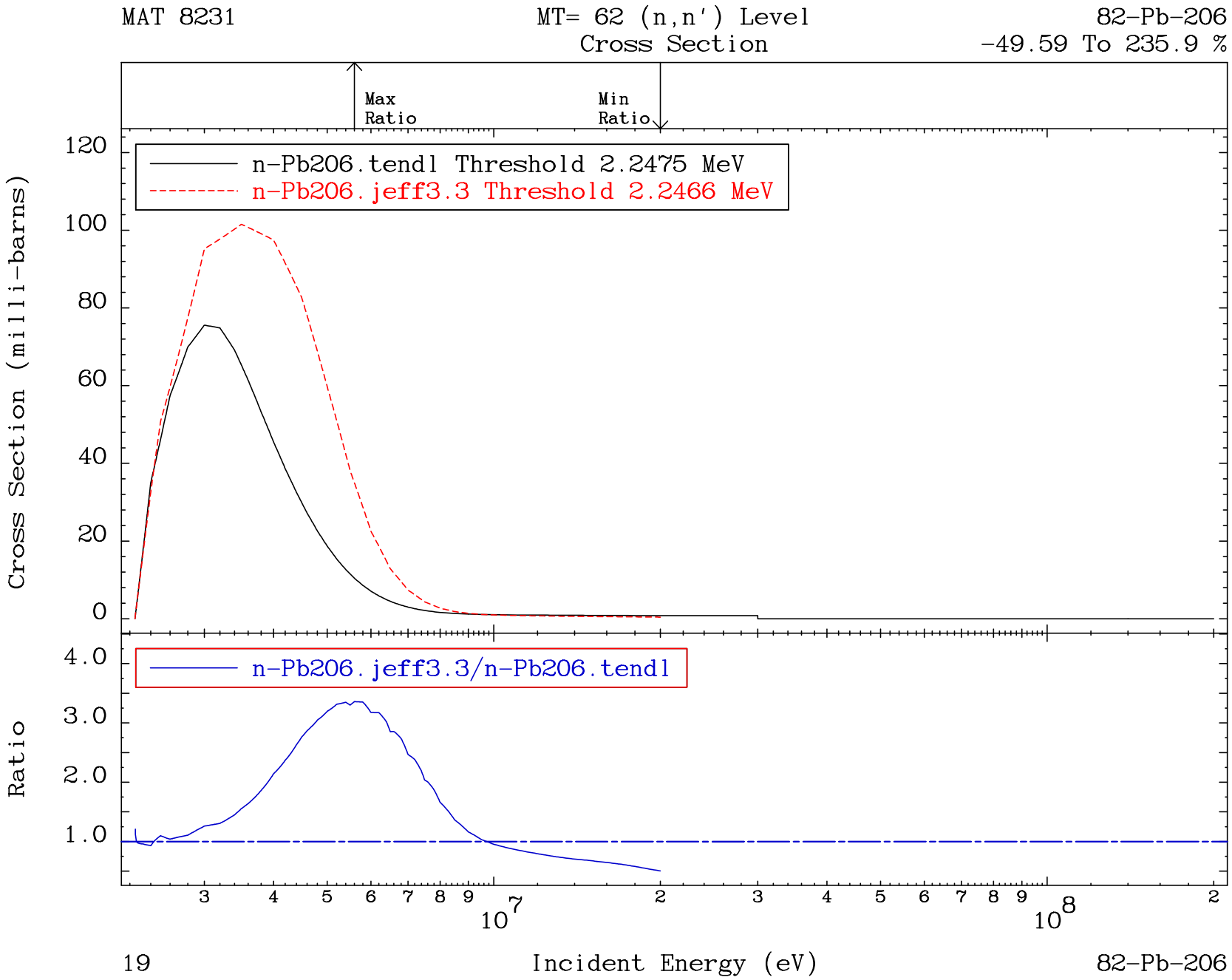

MAT 8231
MT= 57 (n,n') Level
Cross Section
82-Pb-206
-48.89 To 148.0 %
Max
Ratio
Min
Ratio
n-Pb206.tendl Threshold 1.7928 MeV
n-Pb206.jeff3.3 Threshold 1.7928 MeV
Cross Section (milli-barns)
150
100
50
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
82-Pb-206

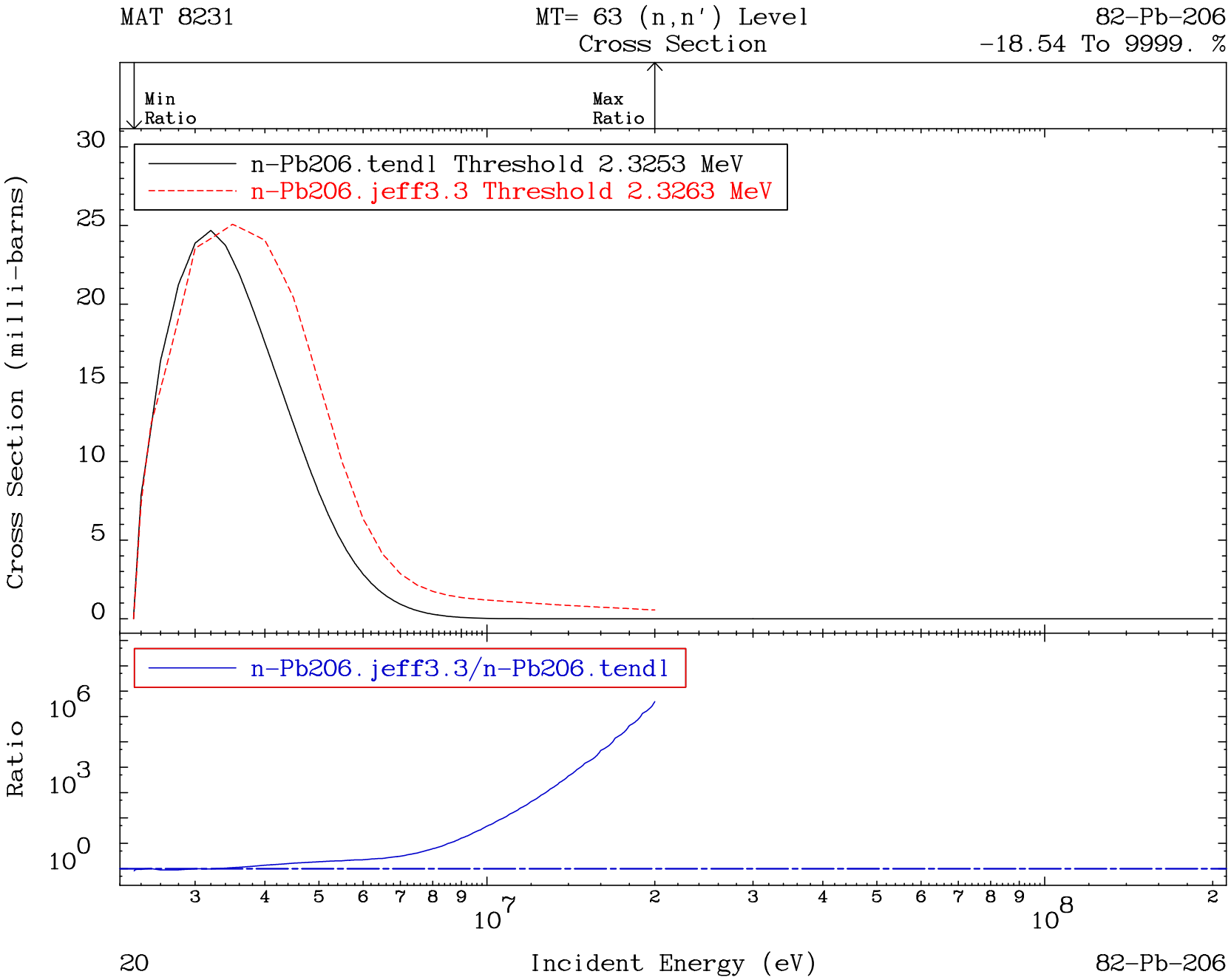

MAT 8231
MT= 58 (n,n') Level
Cross Section
82-Pb-206
-92.05 To 290.9 %
Min
Ratio
n-Pb206.tendl Threshold 2.0075 MeV
n-Pb206.jeff3.3 Threshold 2.0075 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
4
10^0
4
10^{-1}
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
82-Pb-206

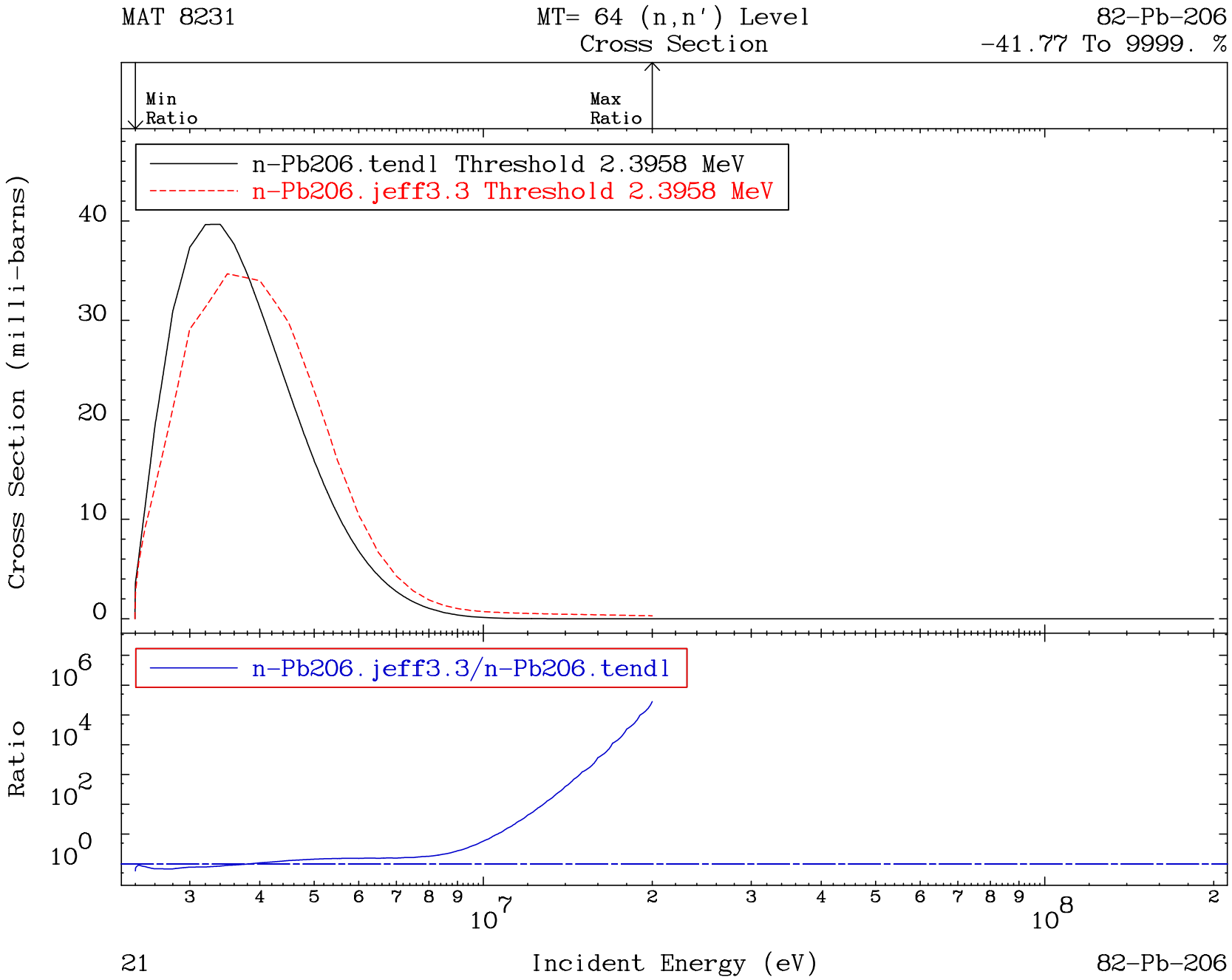

MAT 8231
MT= 59 (n,n') Level
Cross Section
82-Pb-206
-50.25 To 59.89 %
Min
Ratio
n-Pb206.tendl Threshold 2.1595 MeV
n-Pb206.jeff3.3 Threshold 2.1584 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
1.6
1.2
0.8
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
82-Pb-206

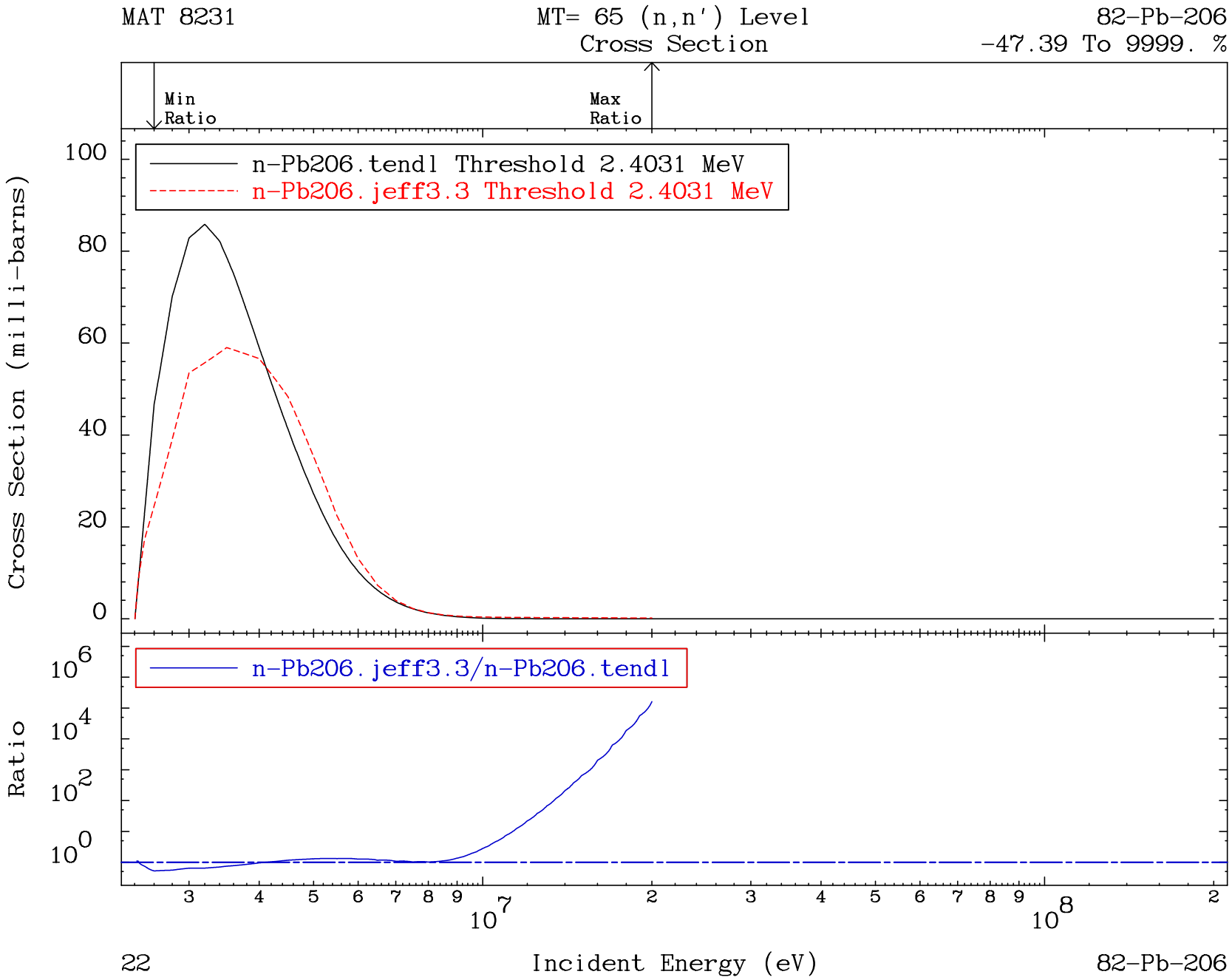

MAT 8231
MT= 60 (n,n') Level
Cross Section
82-Pb-206
-99.63 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.2075 MeV
n-Pb206.jeff3.3 Threshold 2.2150 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^3
10^0
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
82-Pb-206

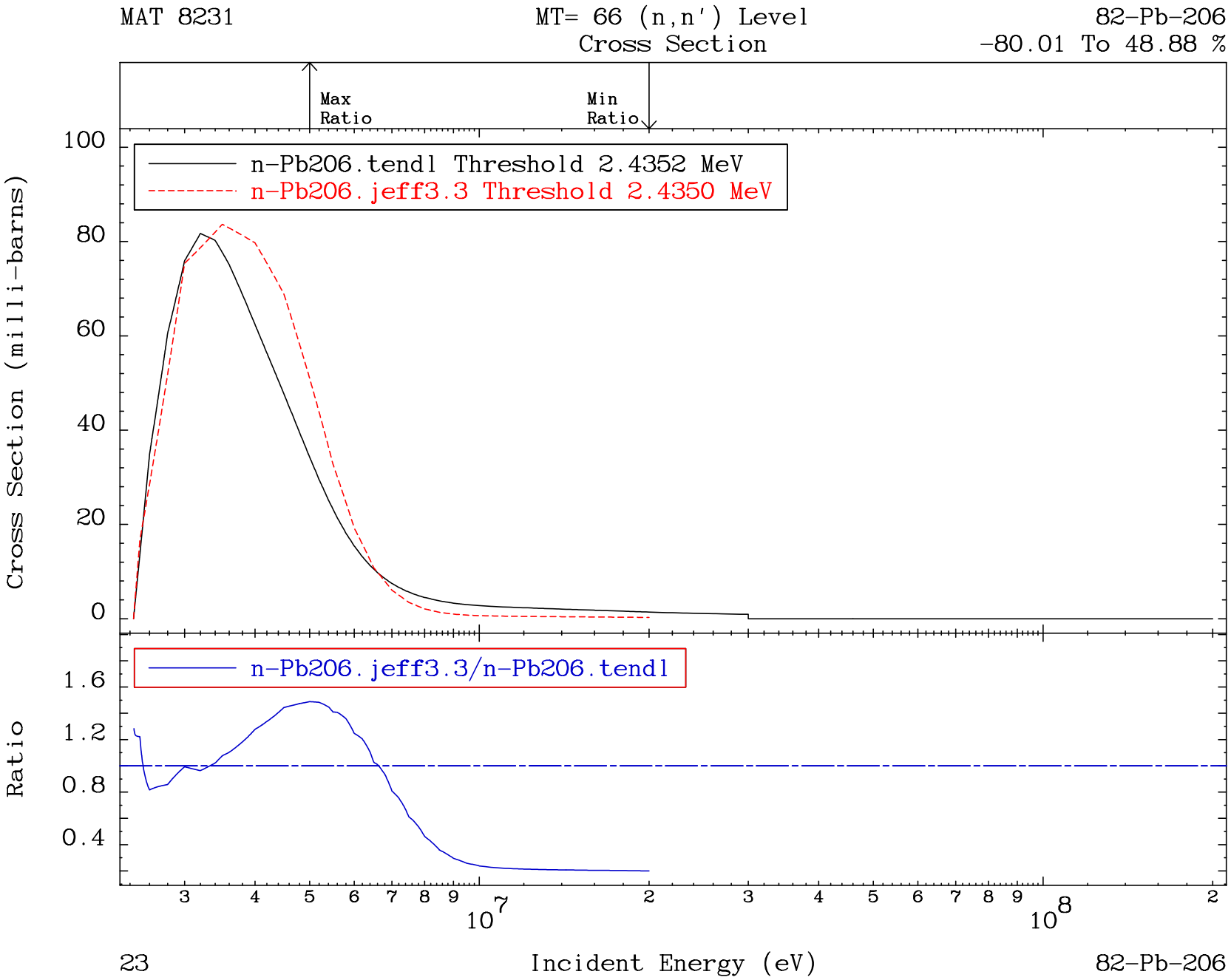

MAT 8231
MT= 61 (n,n') Level
Cross Section
82-Pb-206
-80.44 To 78.43 %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.2109 MeV
n-Pb206.jeff3.3 Threshold 2.2109 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
1.8
1.2
0.6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
82-Pb-206

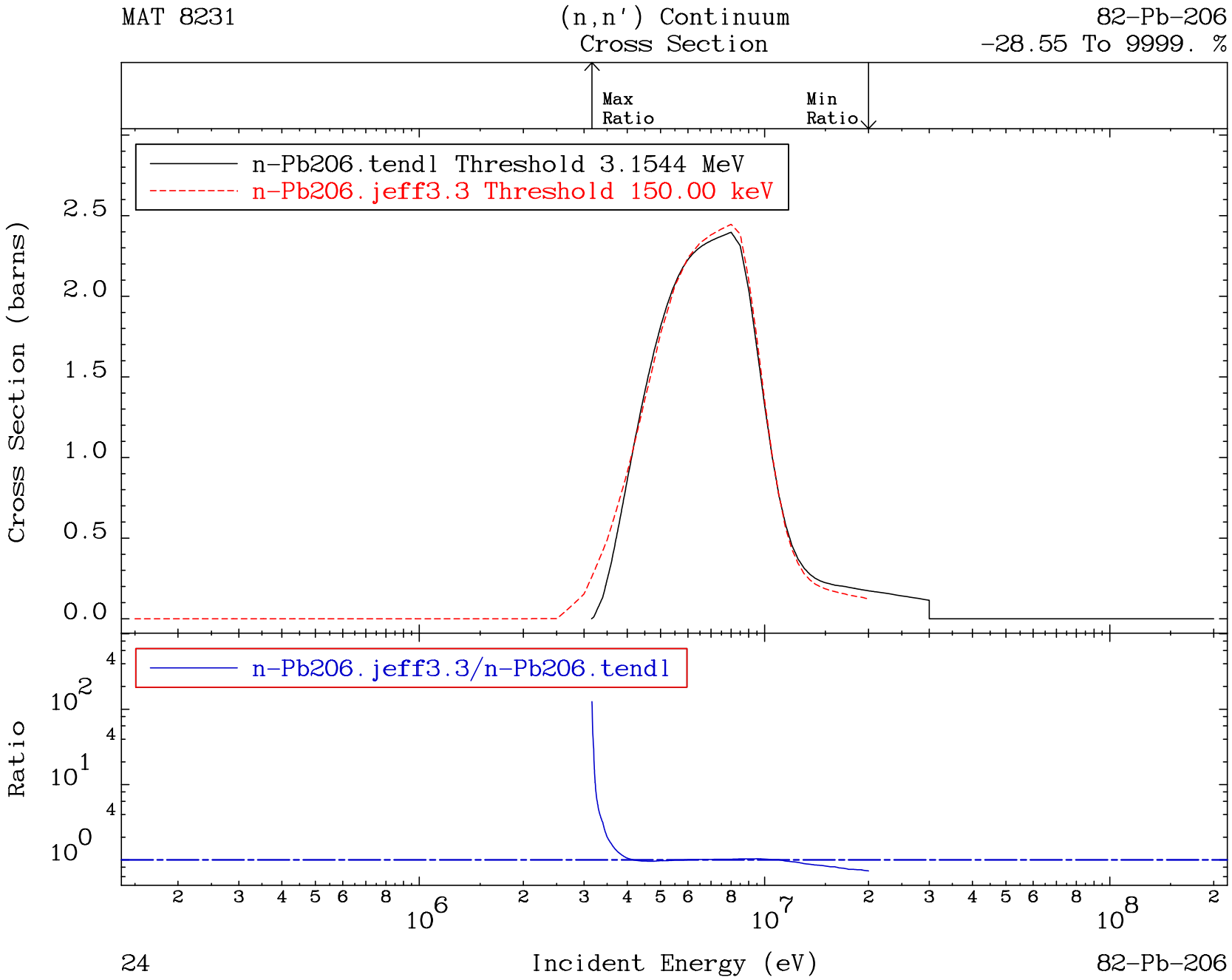

MAT 8231
MT= 62 (n,n') Level
Cross Section
82-Pb-206
-49.59 To 235.9 %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 2.2475 MeV
n-Pb206.jeff3.3 Threshold 2.2466 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
4.0
3.0
2.0
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
82-Pb-206

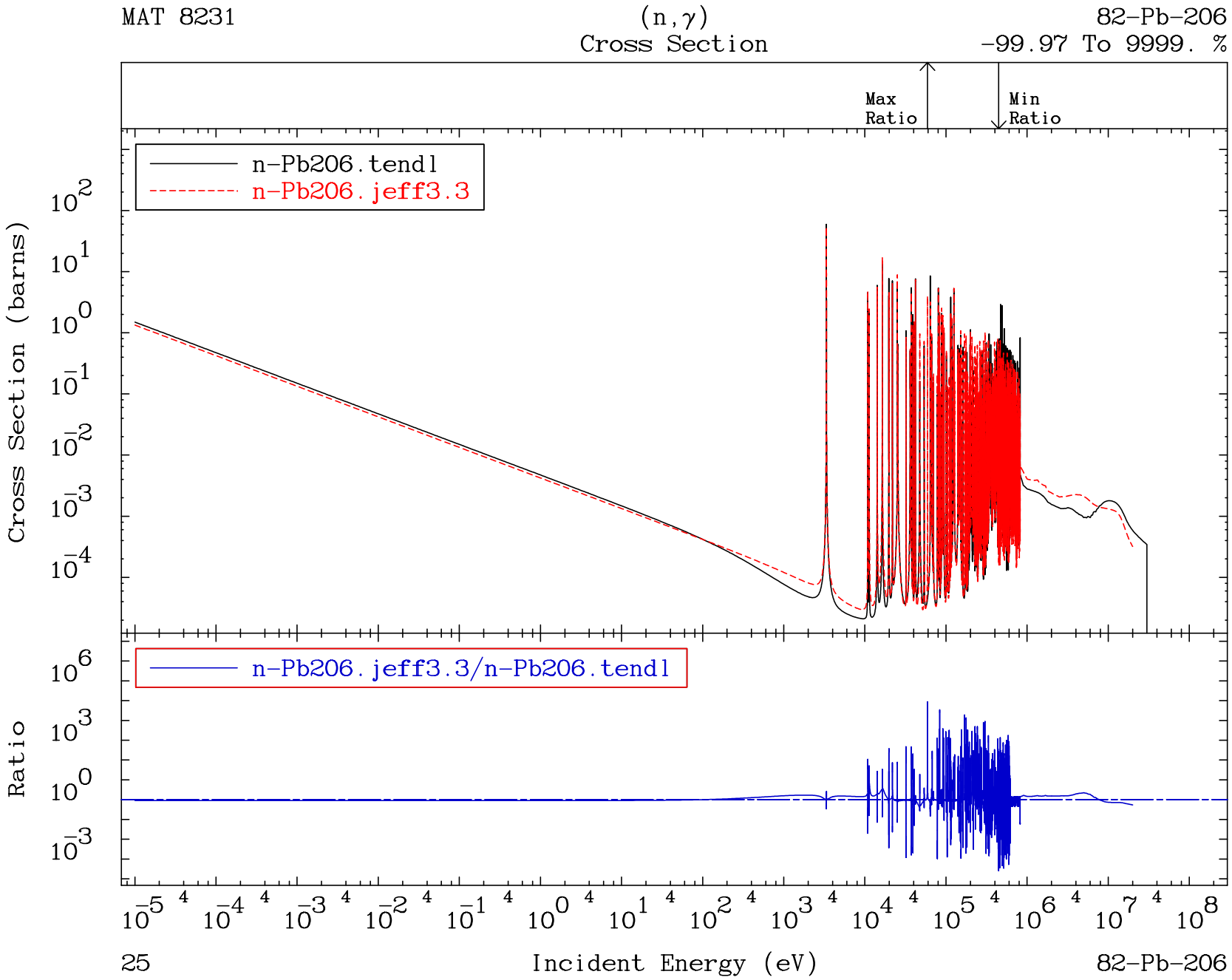

MAT 8231
MT= 63 (n,n') Level
Cross Section
82-Pb-206
-18.54 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.3253 MeV
n-Pb206.jeff3.3 Threshold 2.3263 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
82-Pb-206

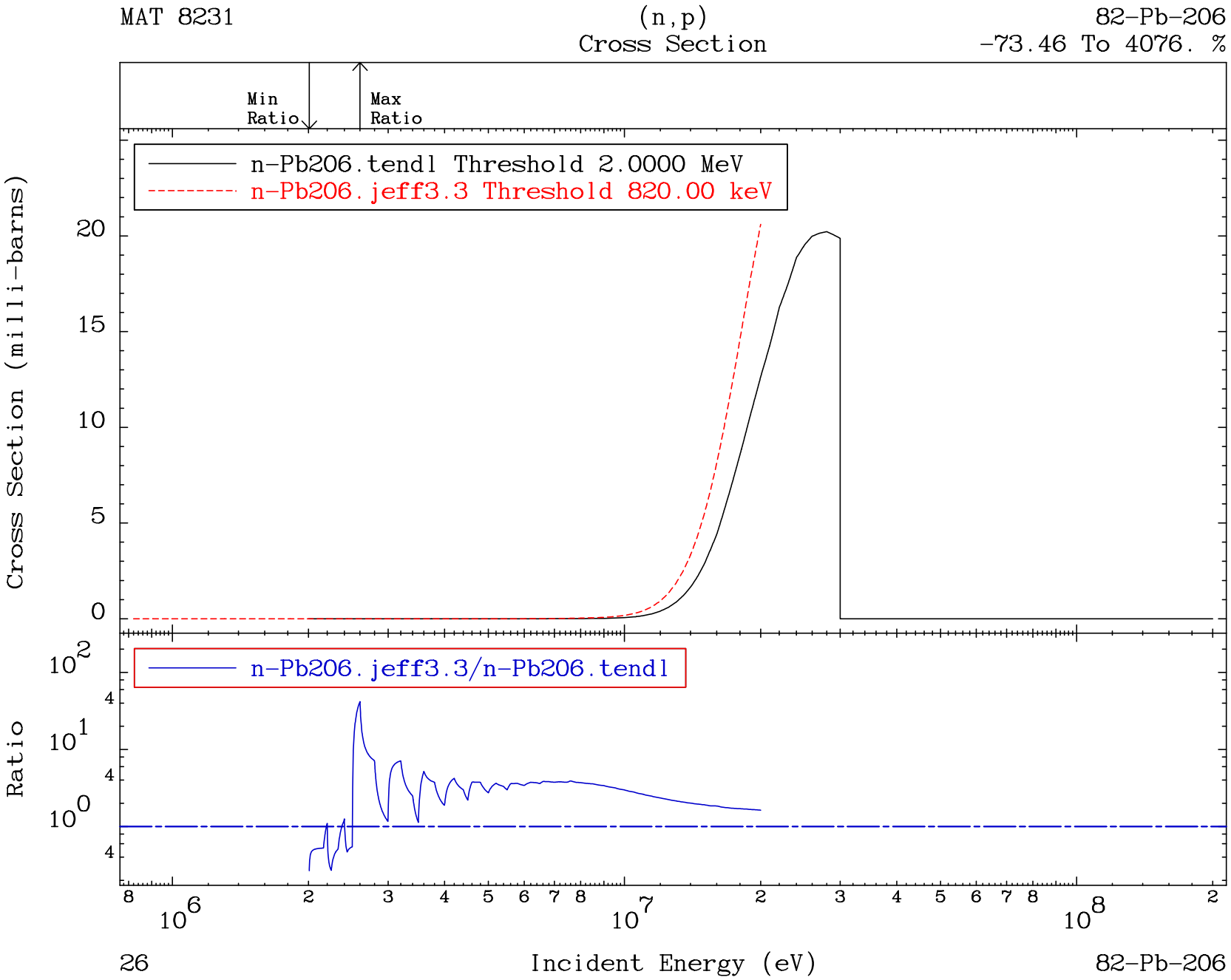

MAT 8231
MT= 64 (n,n') Level
Cross Section
82-Pb-206
-41.77 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.3958 MeV
n-Pb206.jeff3.3 Threshold 2.3958 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
82-Pb-206

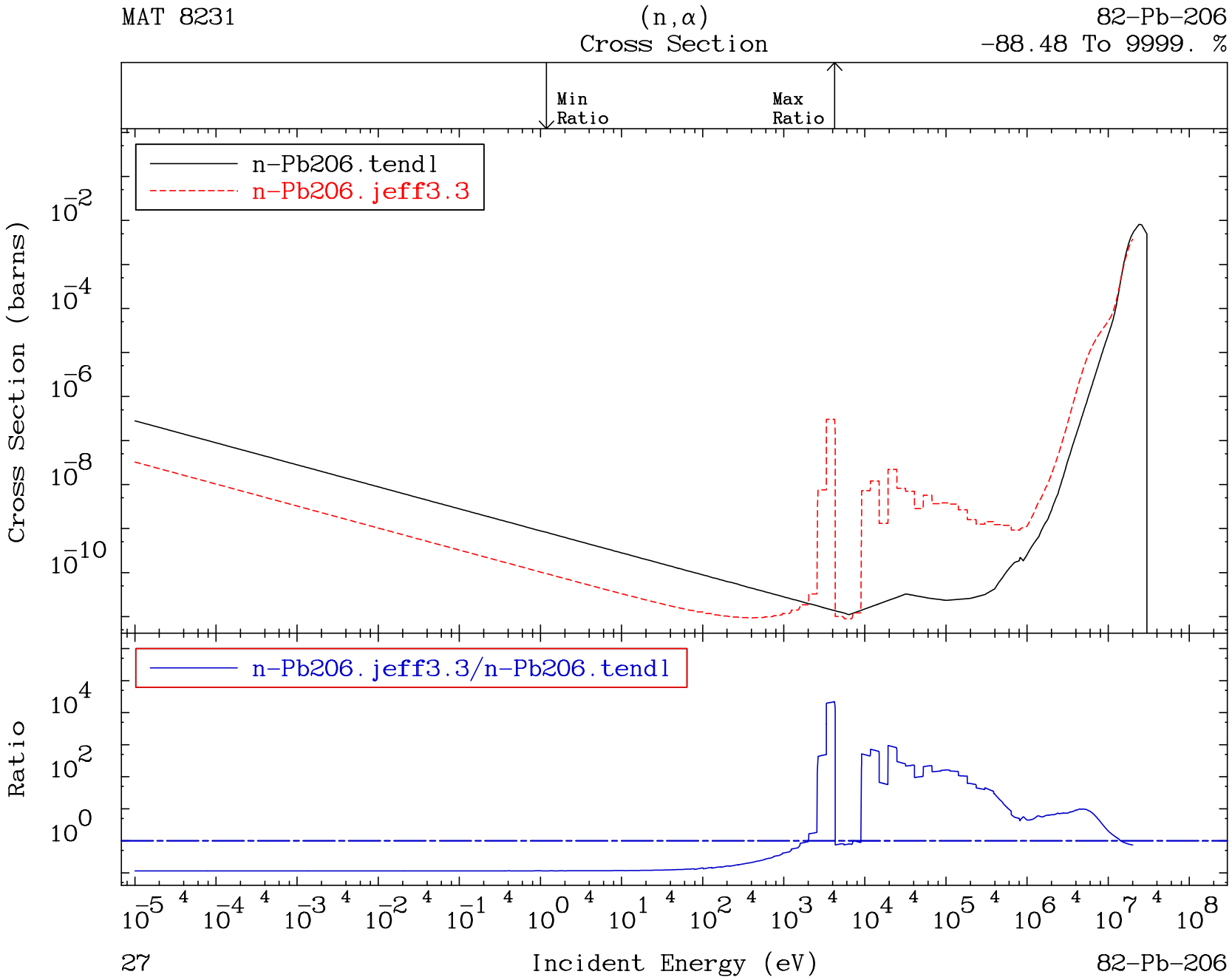

MAT 8231
MT= 65 (n,n') Level
Cross Section
82-Pb-206
-47.39 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.4031 MeV
n-Pb206.jeff3.3 Threshold 2.4031 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
82-Pb-206

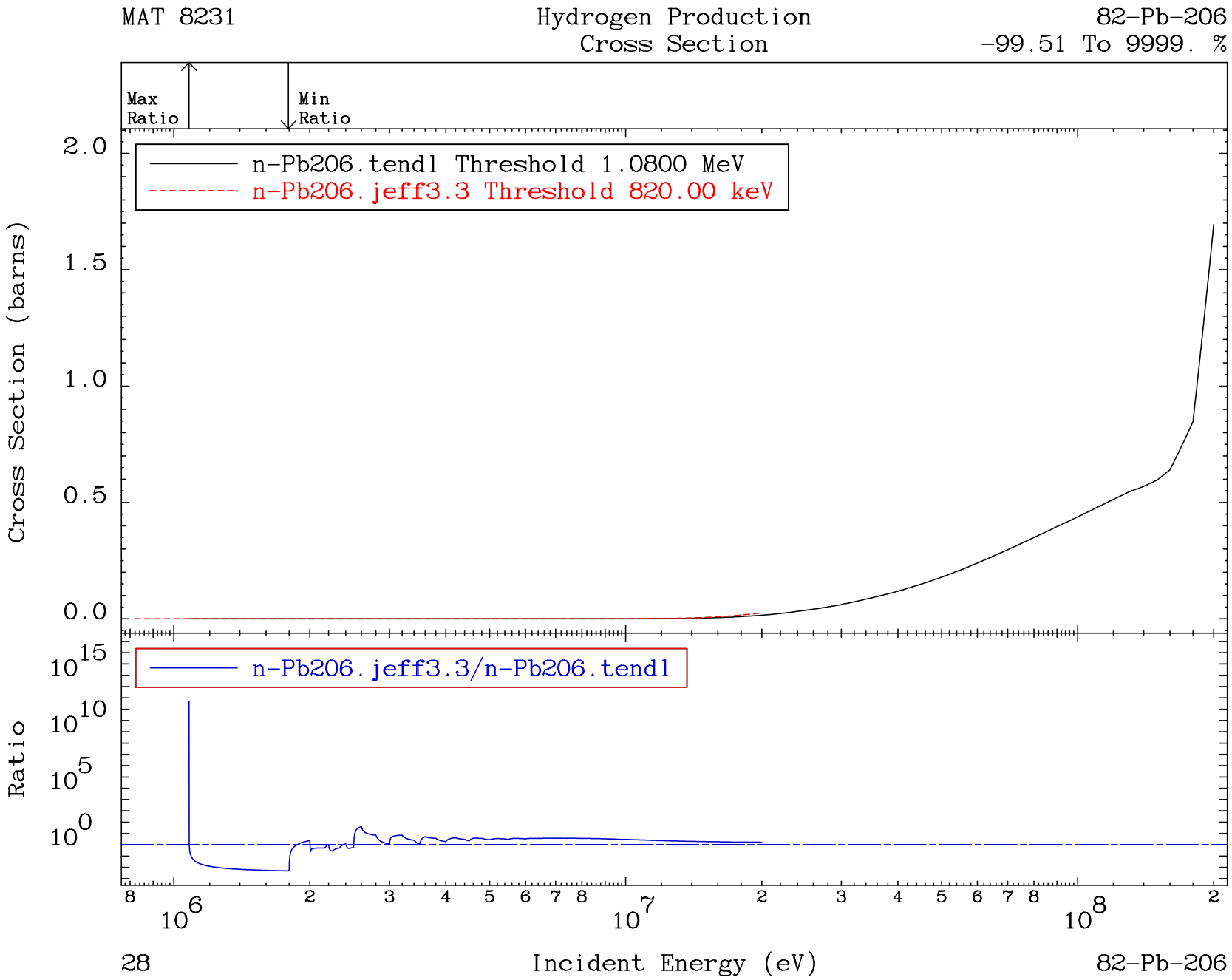

MAT 8231
MT= 66 (n,n') Level
Cross Section
82-Pb-206
-80.01 To 48.88 %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 2.4352 MeV
n-Pb206.jeff3.3 Threshold 2.4350 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
82-Pb-206

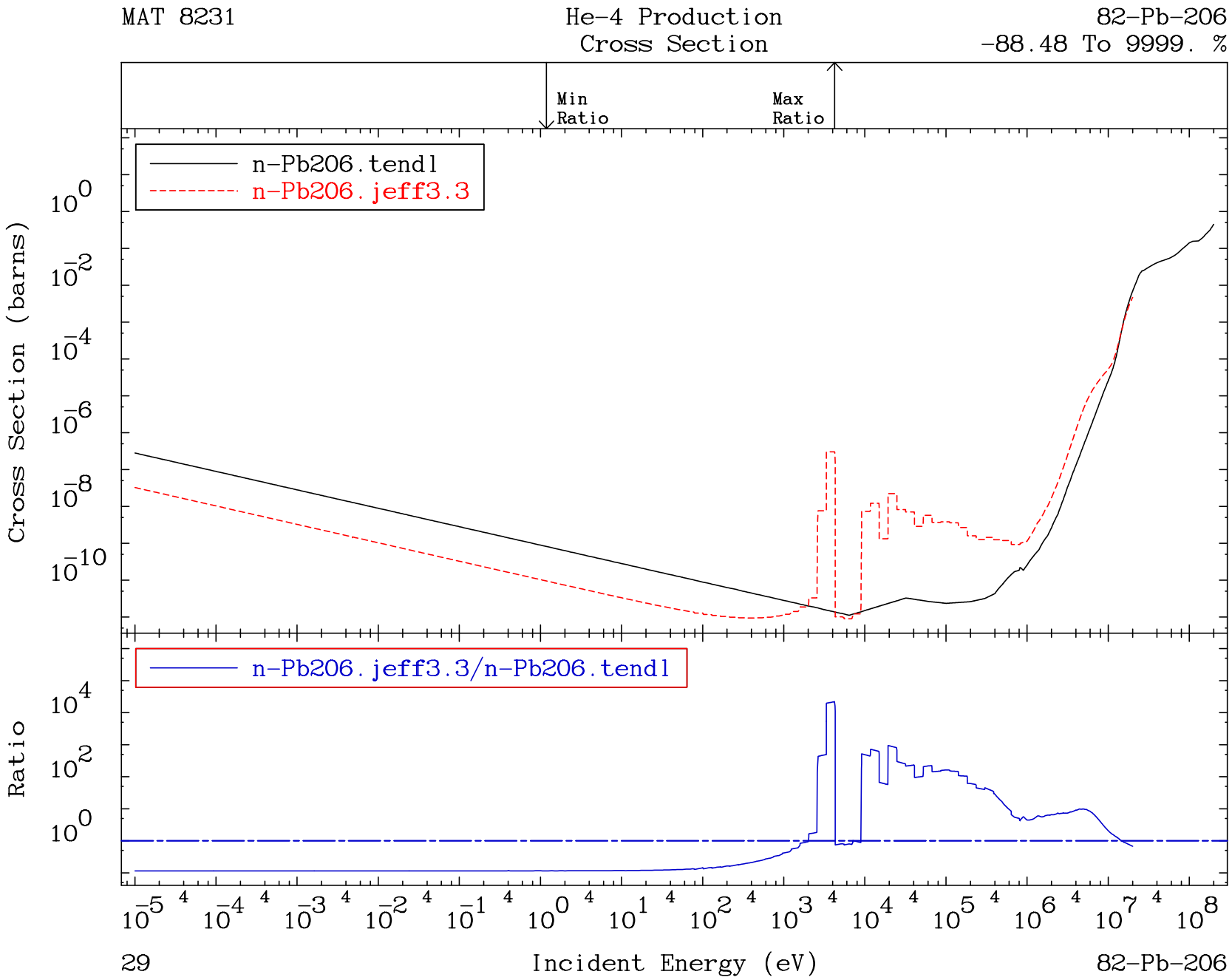

MAT 8231
(n,n') Continuum
Cross Section
82-Pb-206
-28.55 To 9999. %
Max
Ratio
Min
Ratio
n-Pb206.tendl Threshold 3.1544 MeV
n-Pb206.jeff3.3 Threshold 150.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^2
10^1
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
82-Pb-206

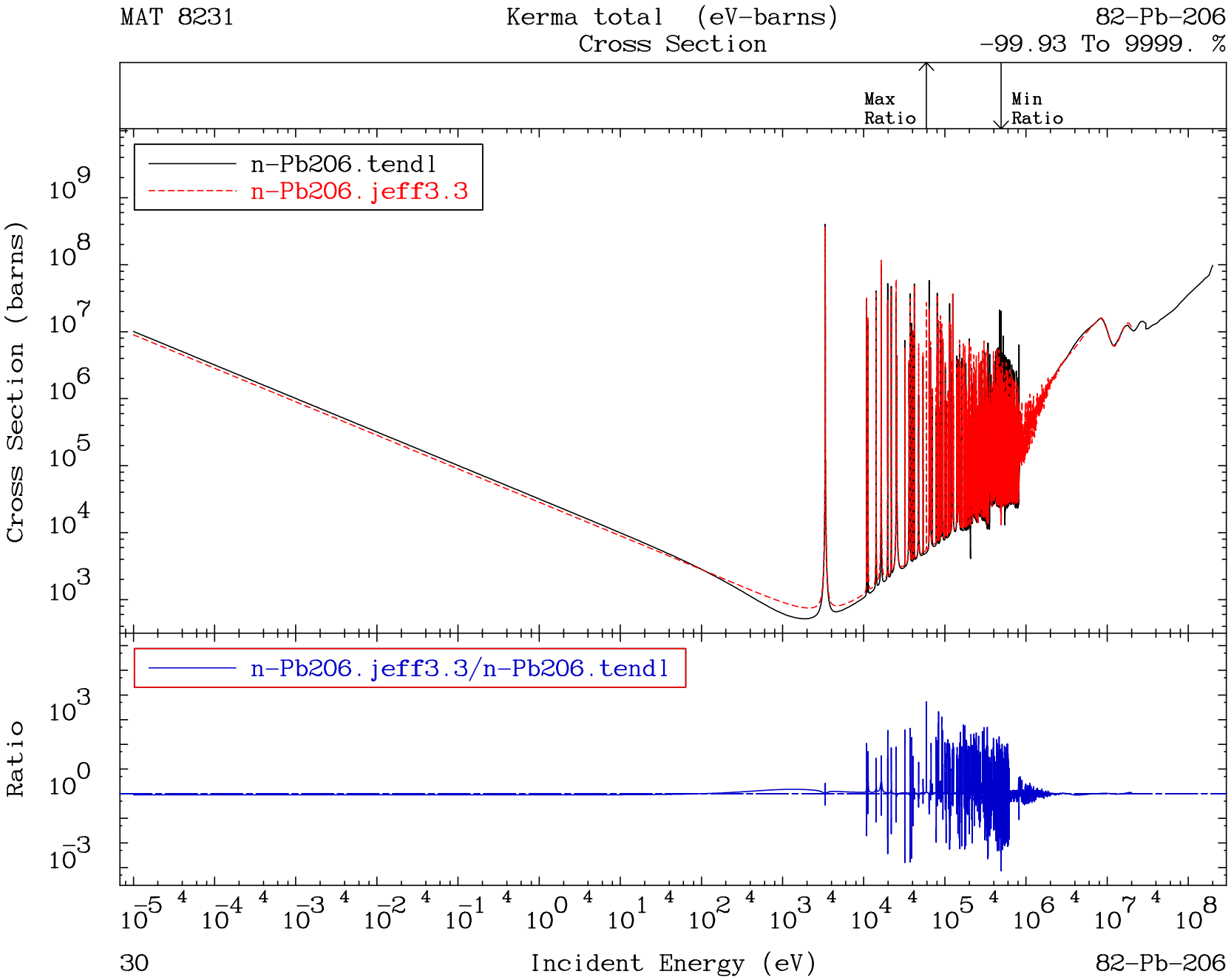

MAT 8231
(n,γ)
Cross Section
82-Pb-206
-99.97 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
25
82-Pb-206

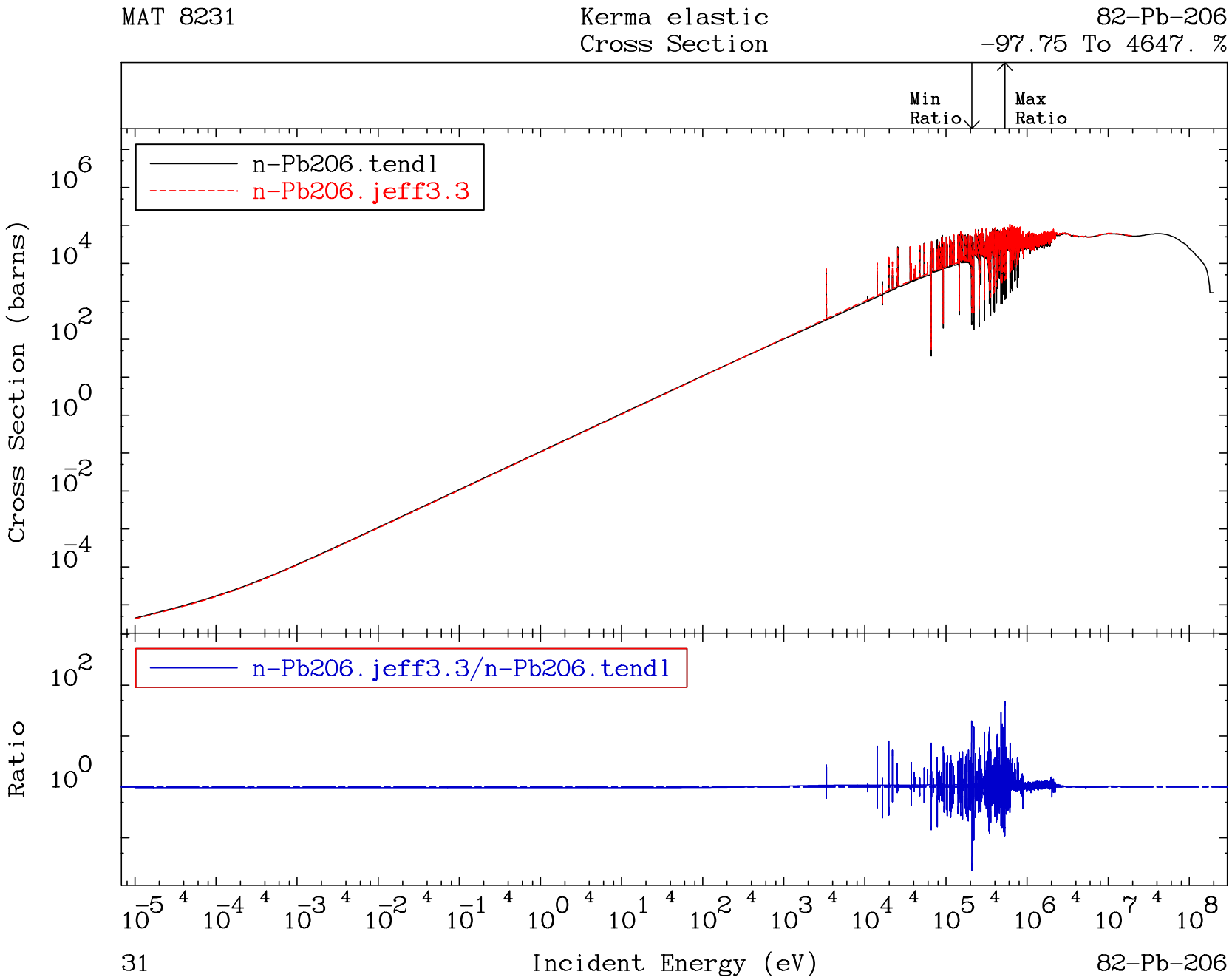

MAT 8231
(n,p)
Cross Section
82-Pb-206
-73.46 To 4076. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 2.0000 MeV
n-Pb206.jeff3.3 Threshold 820.00 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^2
10^1
10^0
4
4
4
8
2
3
4
5
6
7
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
82-Pb-206

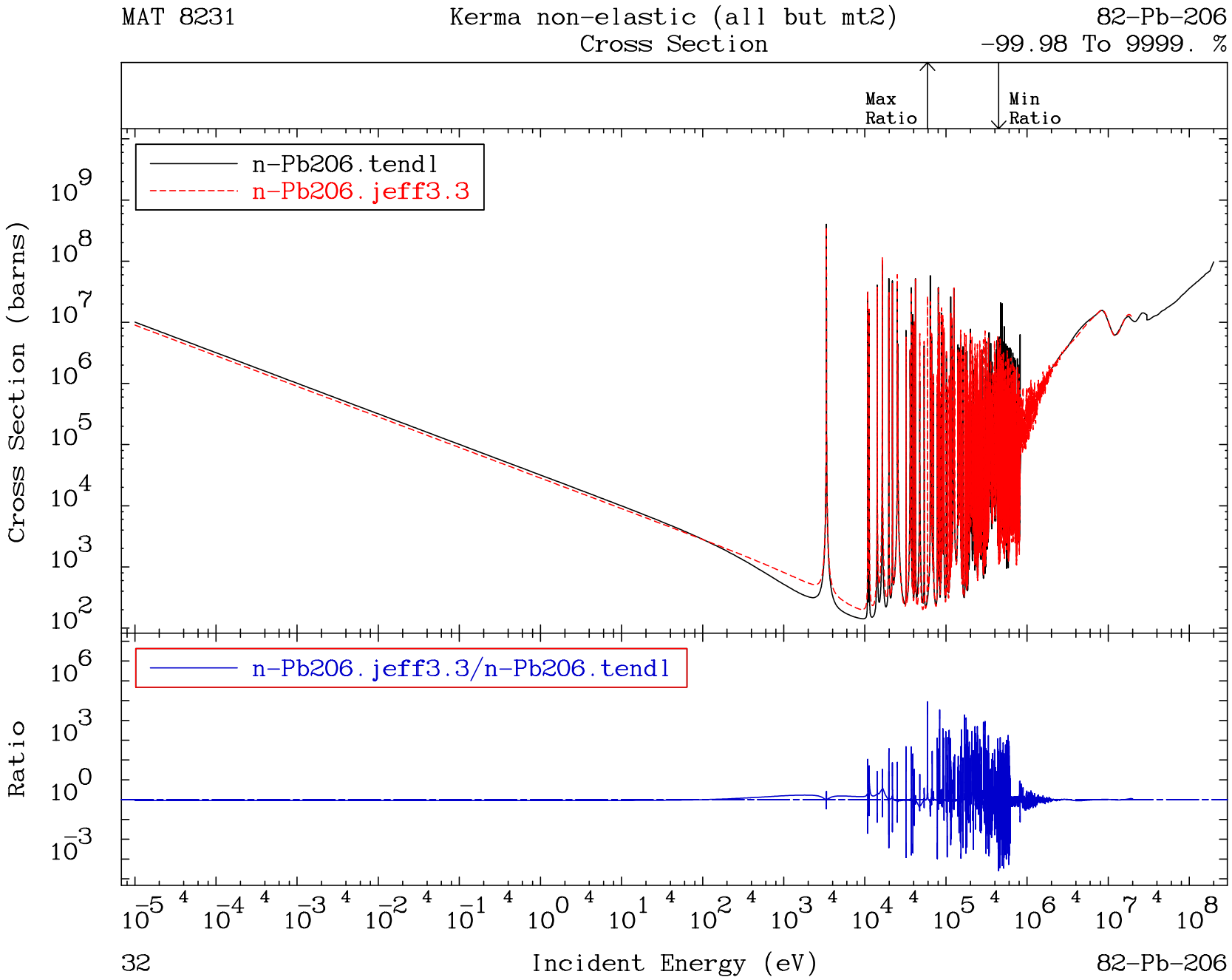

MAT 8231
(n,α)
Cross Section
82-Pb-206
-88.48 To 9999. %
Min Ratio
Max Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
27
82-Pb-206

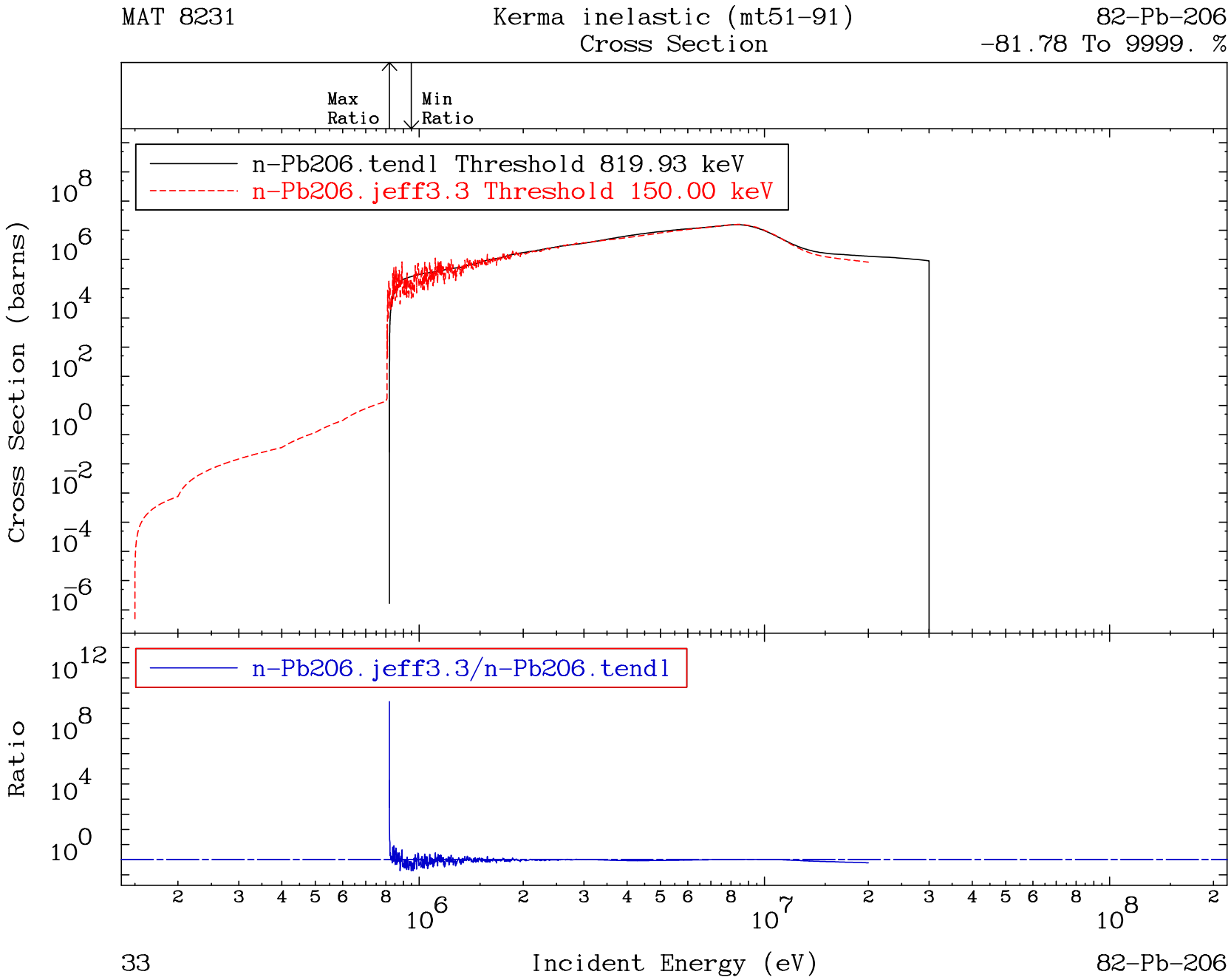

MAT 8231
Hydrogen Production
Cross Section
82-Pb-206
-99.51 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 1.0800 MeV
n-Pb206.jeff3.3 Threshold 820.00 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^15
10^10
10^5
10^0
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
82-Pb-206

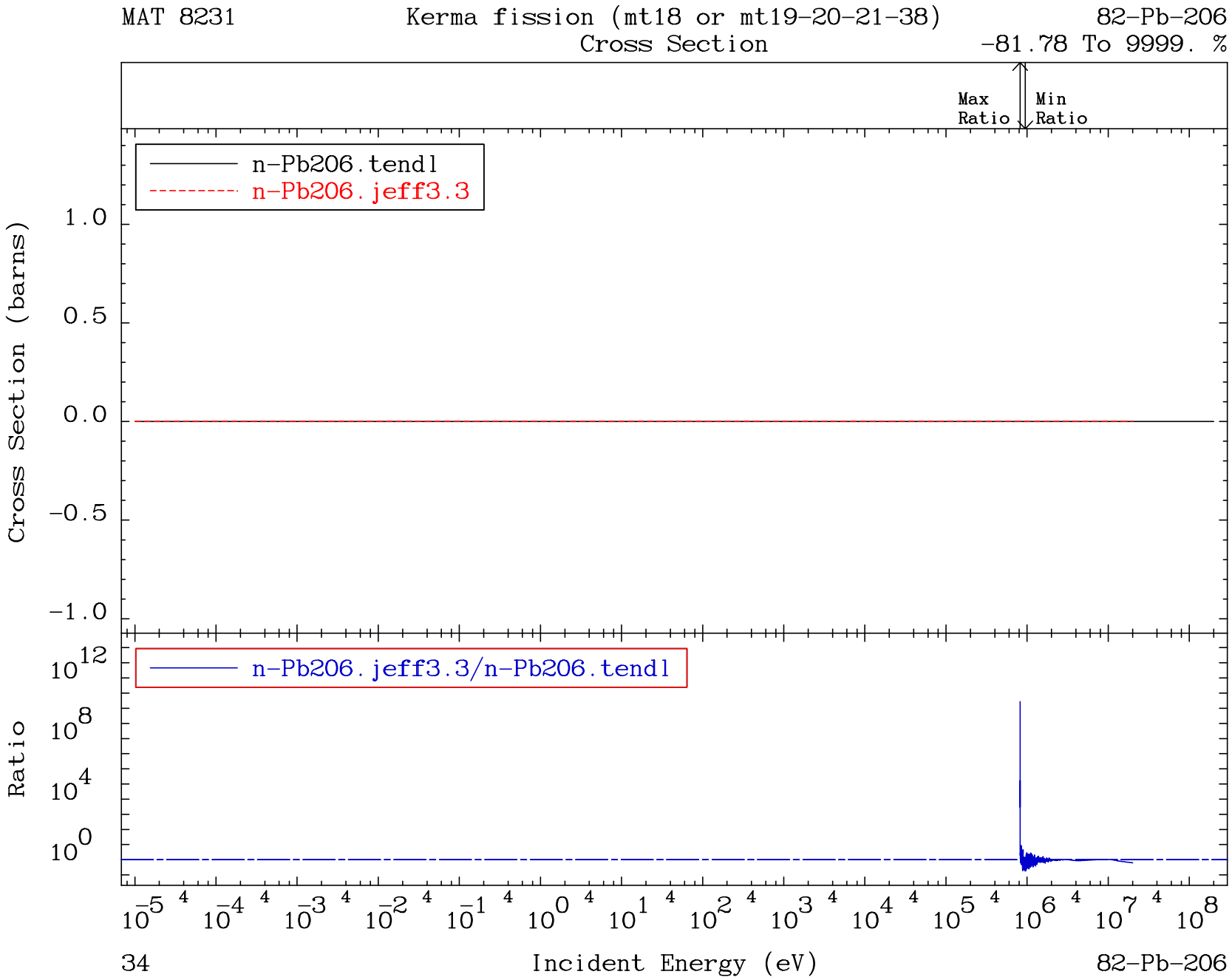

MAT 8231
He-4 Production
Cross Section
82-Pb-206
-88.48 To 9999. %
Min
Ratio
Max
Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
29
82-Pb-206

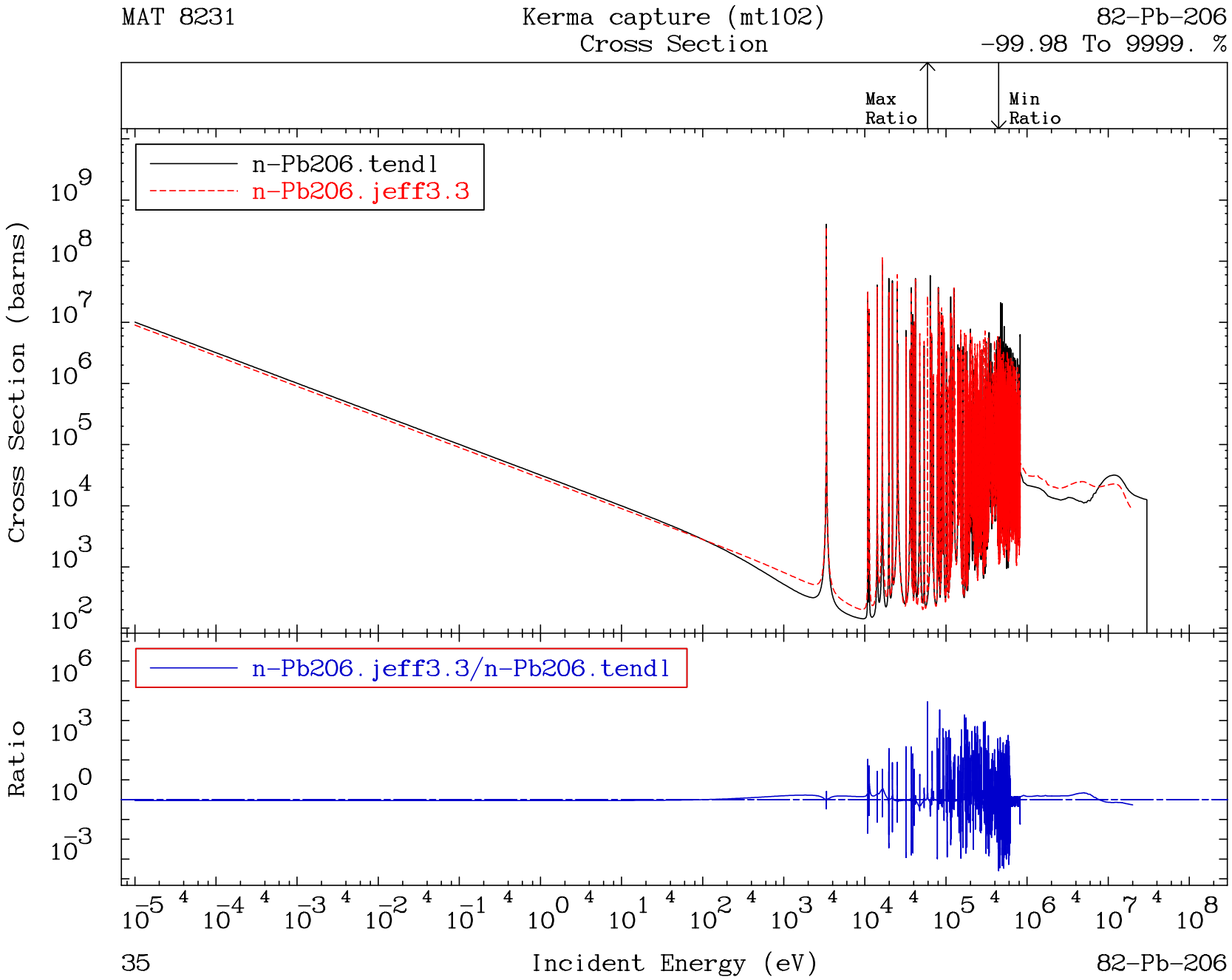

MAT 8231
Kerma total (eV-barns)
Cross Section
82-Pb-206
-99.93 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
30
82-Pb-206

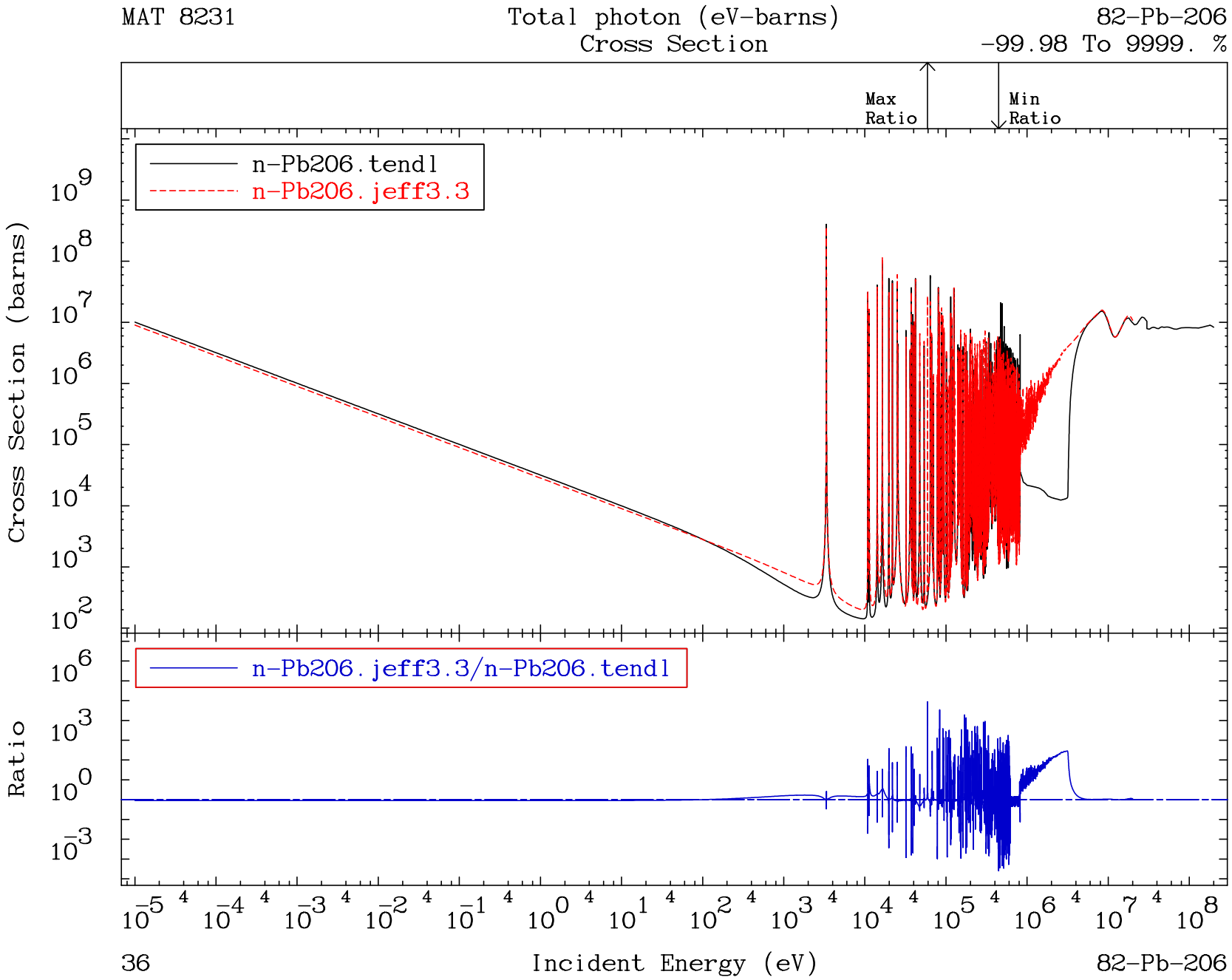

MAT 8231
Kerma elastic
Cross Section
82-Pb-206
-97.75 To 4647. %
Min
Ratio
Max
Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
31
82-Pb-206

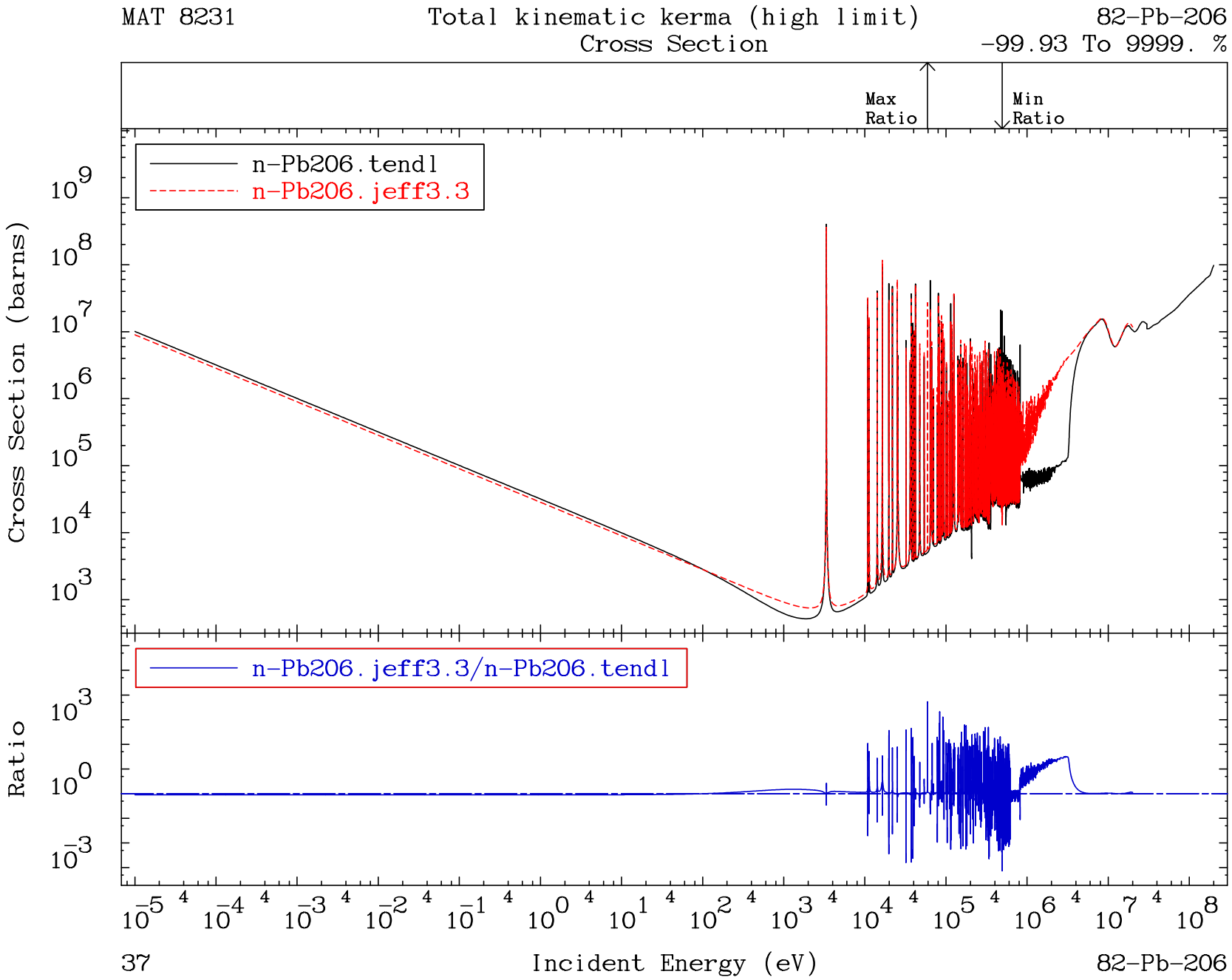

MAT 8231
Kerma non-elastic (all but mt2)
Cross Section
82-Pb-206
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
32
82-Pb-206

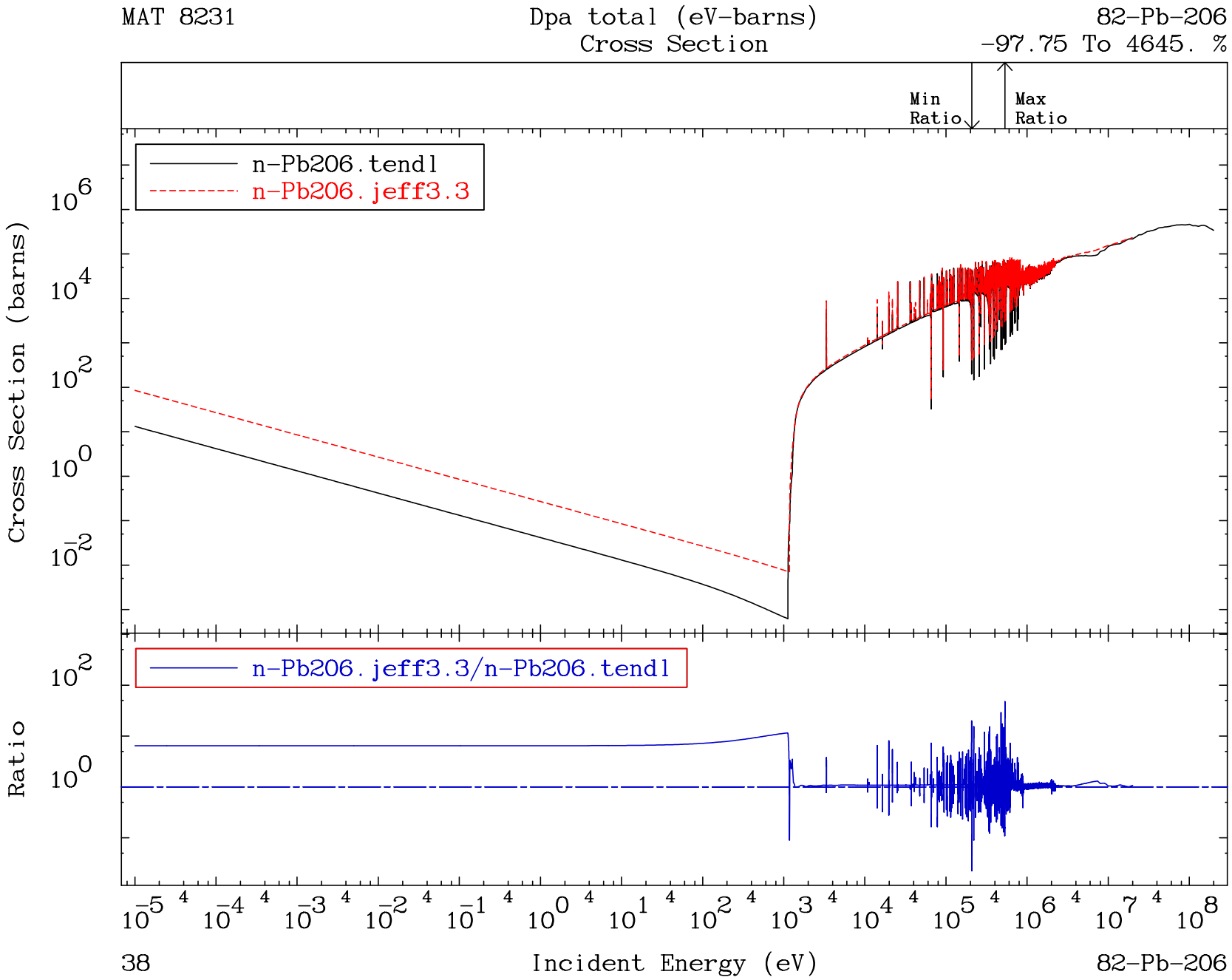

MAT 8231
Kerma inelastic (mt51-91)
Cross Section
82-Pb-206
-81.78 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 819.93 keV
n-Pb206.jeff3.3 Threshold 150.00 keV
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
33
82-Pb-206

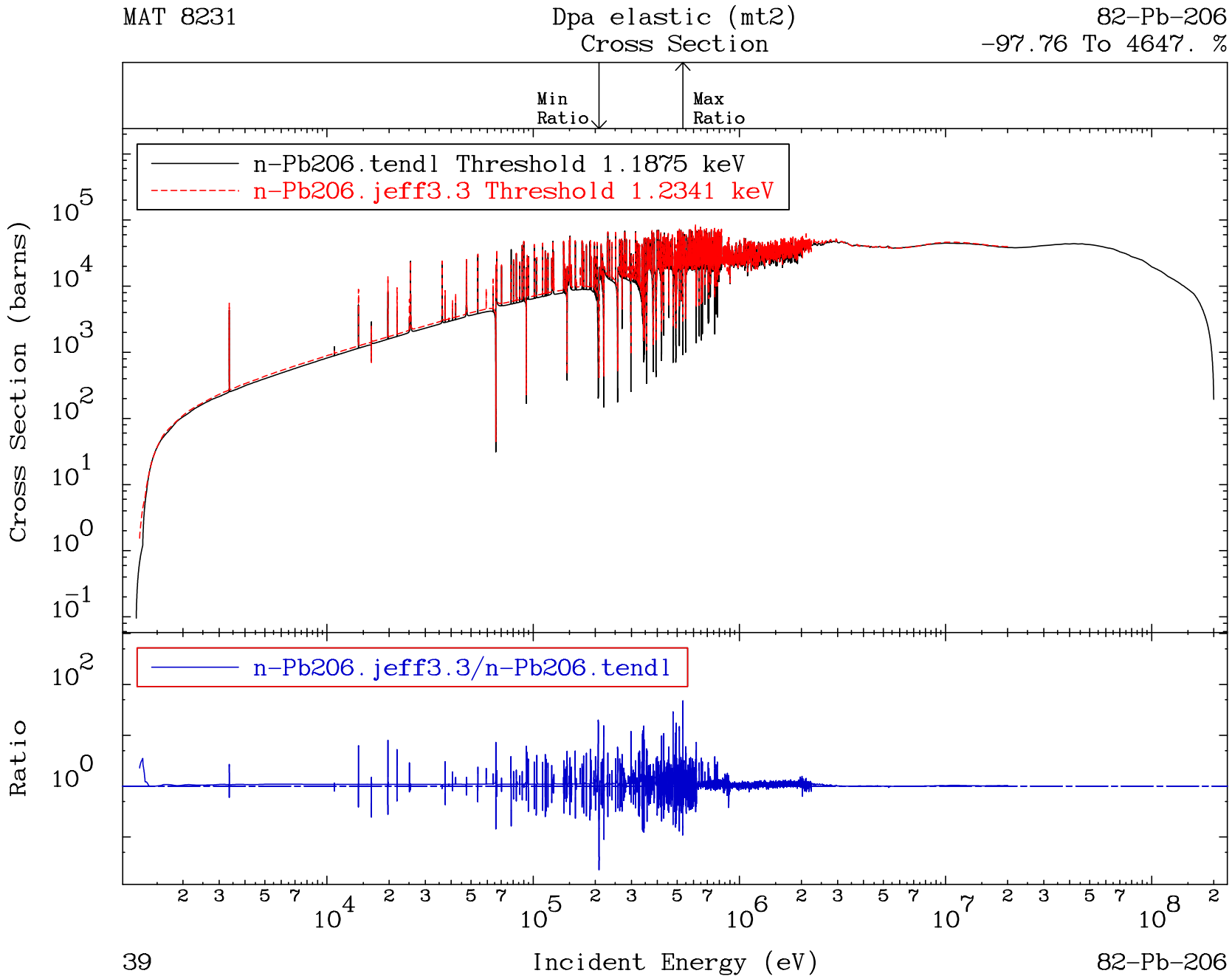

MAT 8231
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
82-Pb-206
-81.78 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
10^{12}
10^{8}
10^{4}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
34
Incident Energy (eV)
82-Pb-206

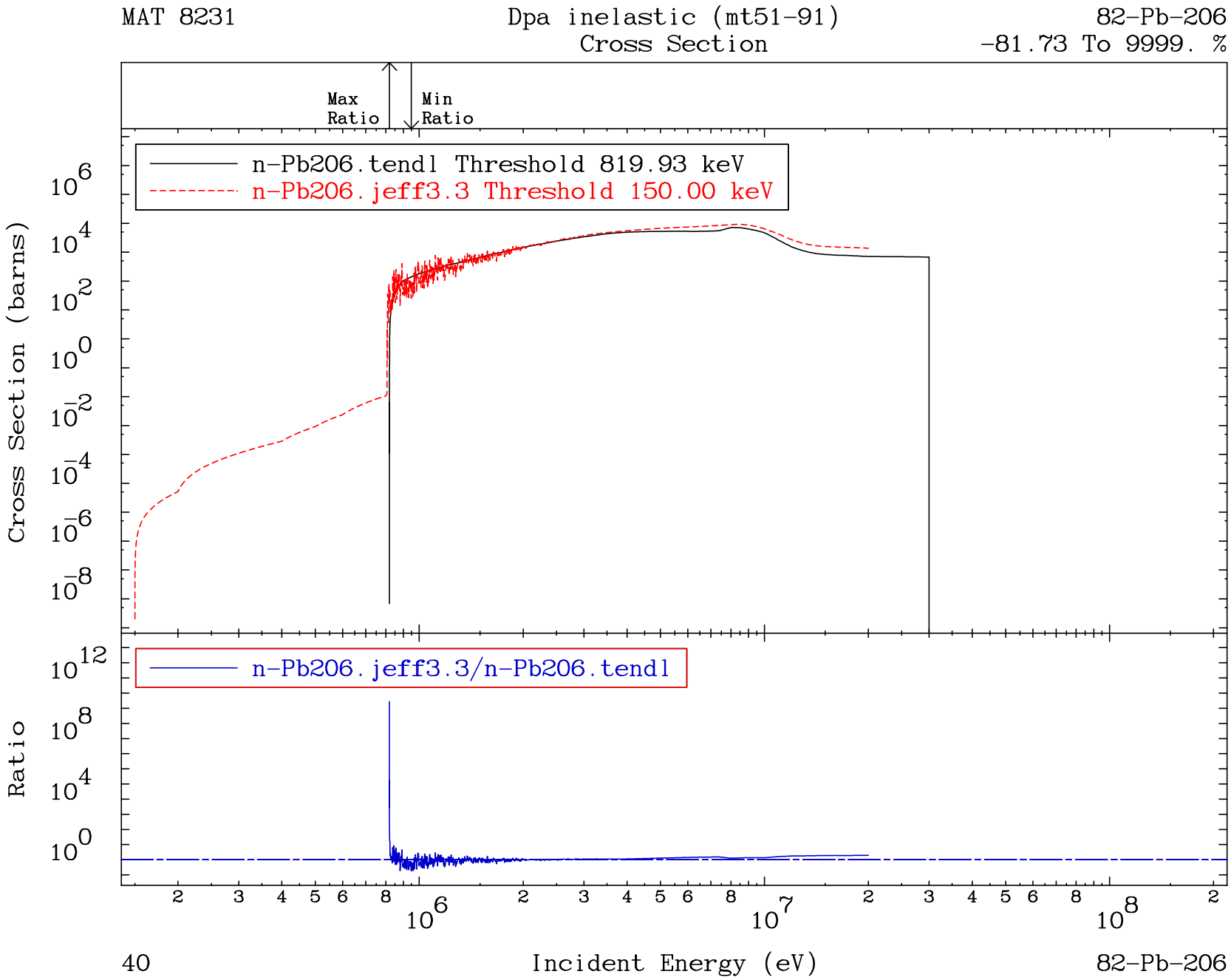

MAT 8231
Kerma capture (mt102)
Cross Section
82-Pb-206
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
35
Incident Energy (eV)
82-Pb-206

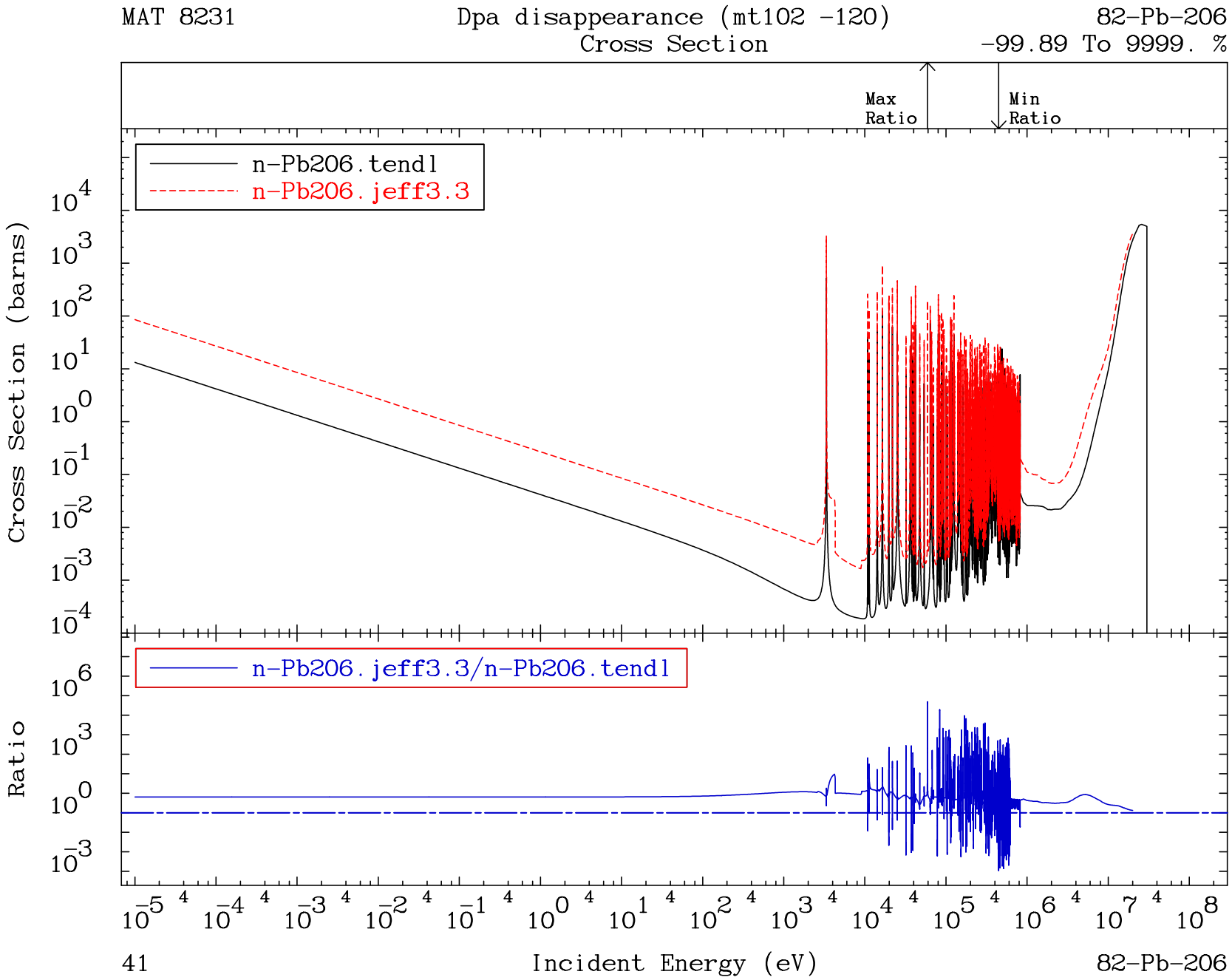

MAT 8231
Total photon (eV-barns)
Cross Section
82-Pb-206
-99.98 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
36
82-Pb-206


MAT 8231
Total kinematic kerma (high limit)
Cross Section
82-Pb-206
-99.93 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
37
82-Pb-206


MAT 8231
Dpa total (eV-barns)
Cross Section
82-Pb-206
-97.75 To 4645. %
Min Ratio
Max Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
38
82-Pb-206


MAT 8231
Dpa elastic (mt2)
Cross Section
82-Pb-206
-97.76 To 4647. %
Min Ratio
Max Ratio
n-Pb206.tendl Threshold 1.1875 keV
n-Pb206.jeff3.3 Threshold 1.2341 keV
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
39
82-Pb-206


MAT 8231
Dpa inelastic (mt51-91)
Cross Section
82-Pb-206
-81.73 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl Threshold 819.93 keV
n-Pb206.jeff3.3 Threshold 150.00 keV
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
40
82-Pb-206


MAT 8231
Dpa disappearance (mt102 -120)
Cross Section
82-Pb-206
-99.89 To 9999. %
Max Ratio
Min Ratio
n-Pb206.tendl
n-Pb206.jeff3.3
Cross Section (barns)
n-Pb206.jeff3.3/n-Pb206.tendl
Ratio
Incident Energy (eV)
41
82-Pb-206