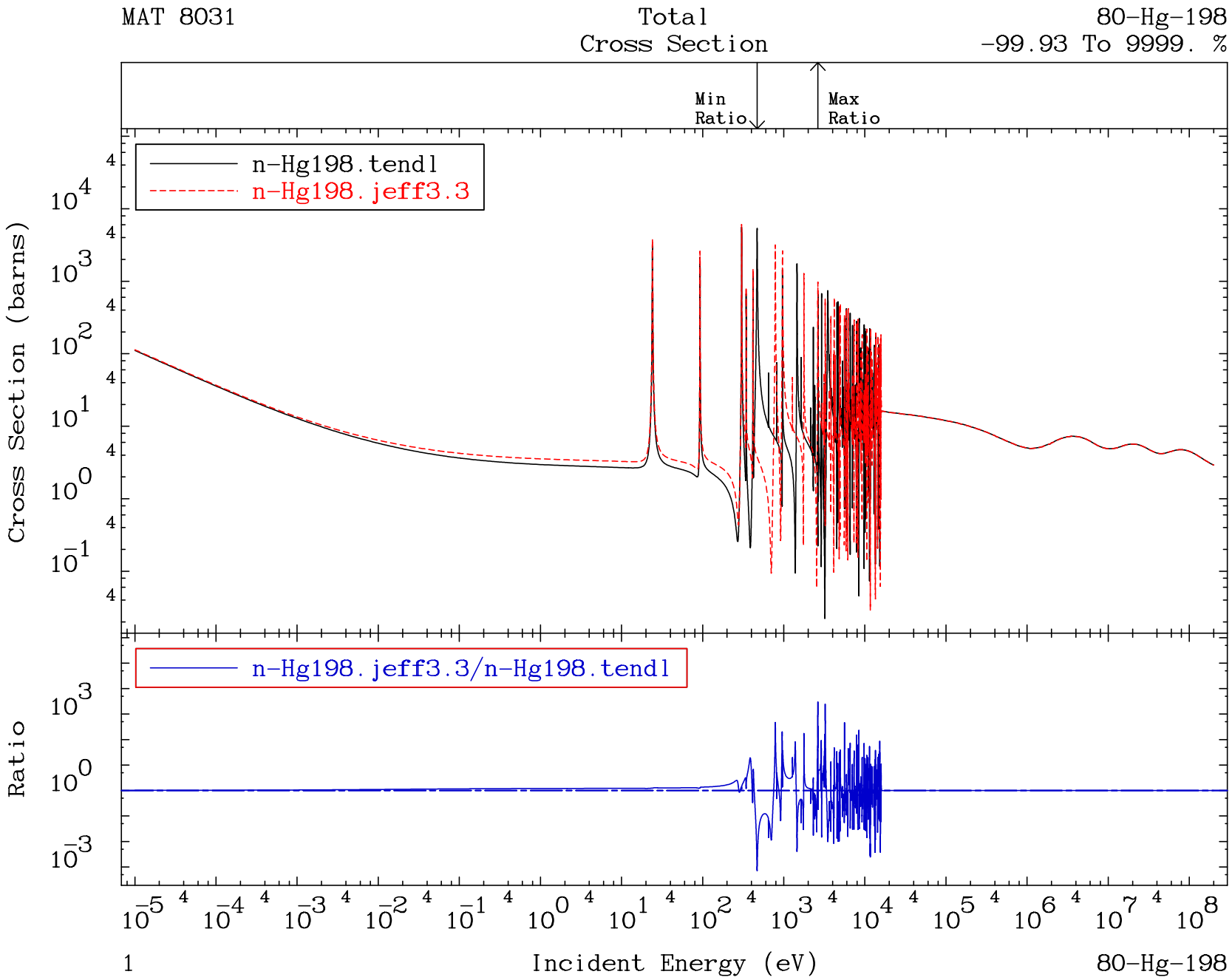
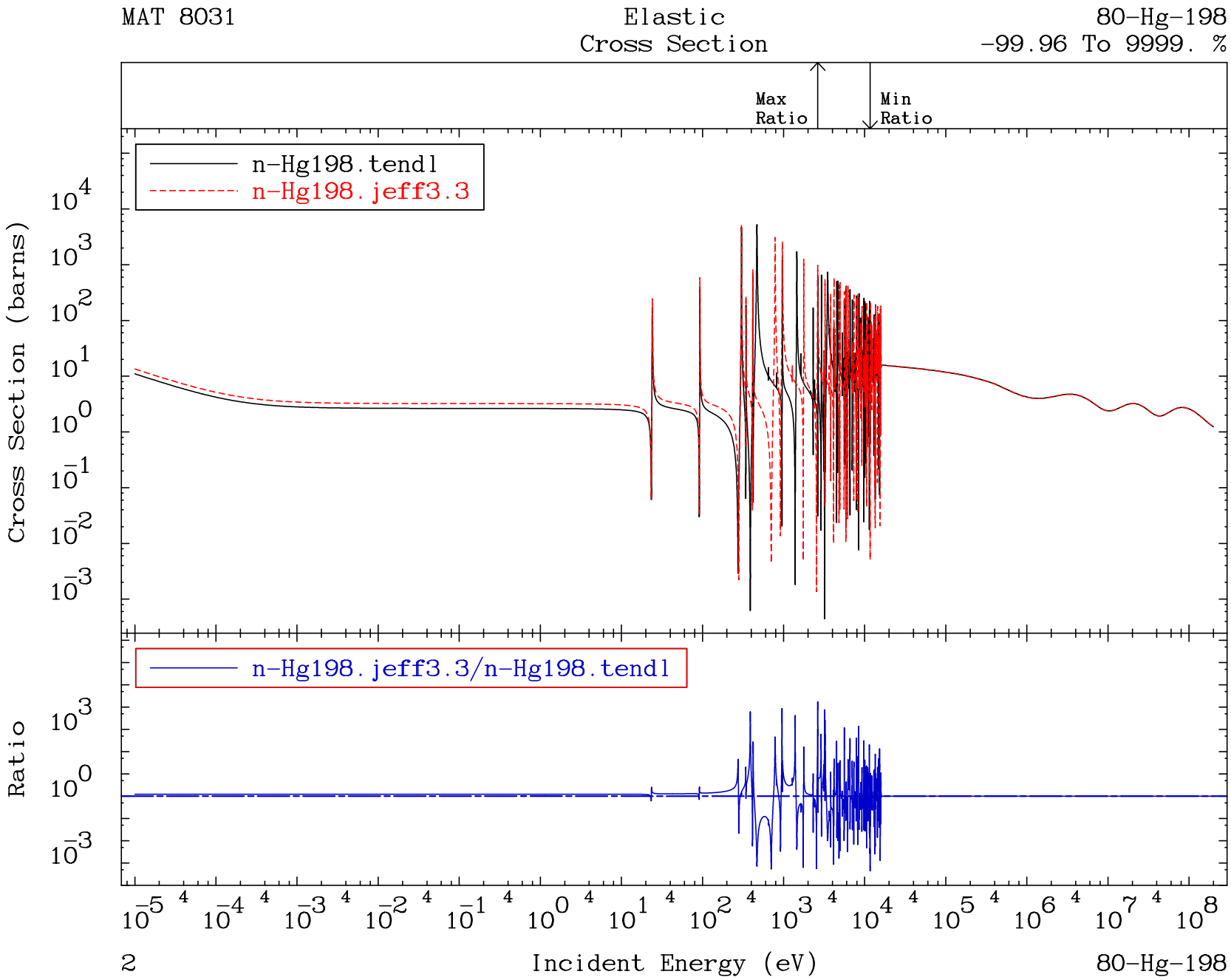
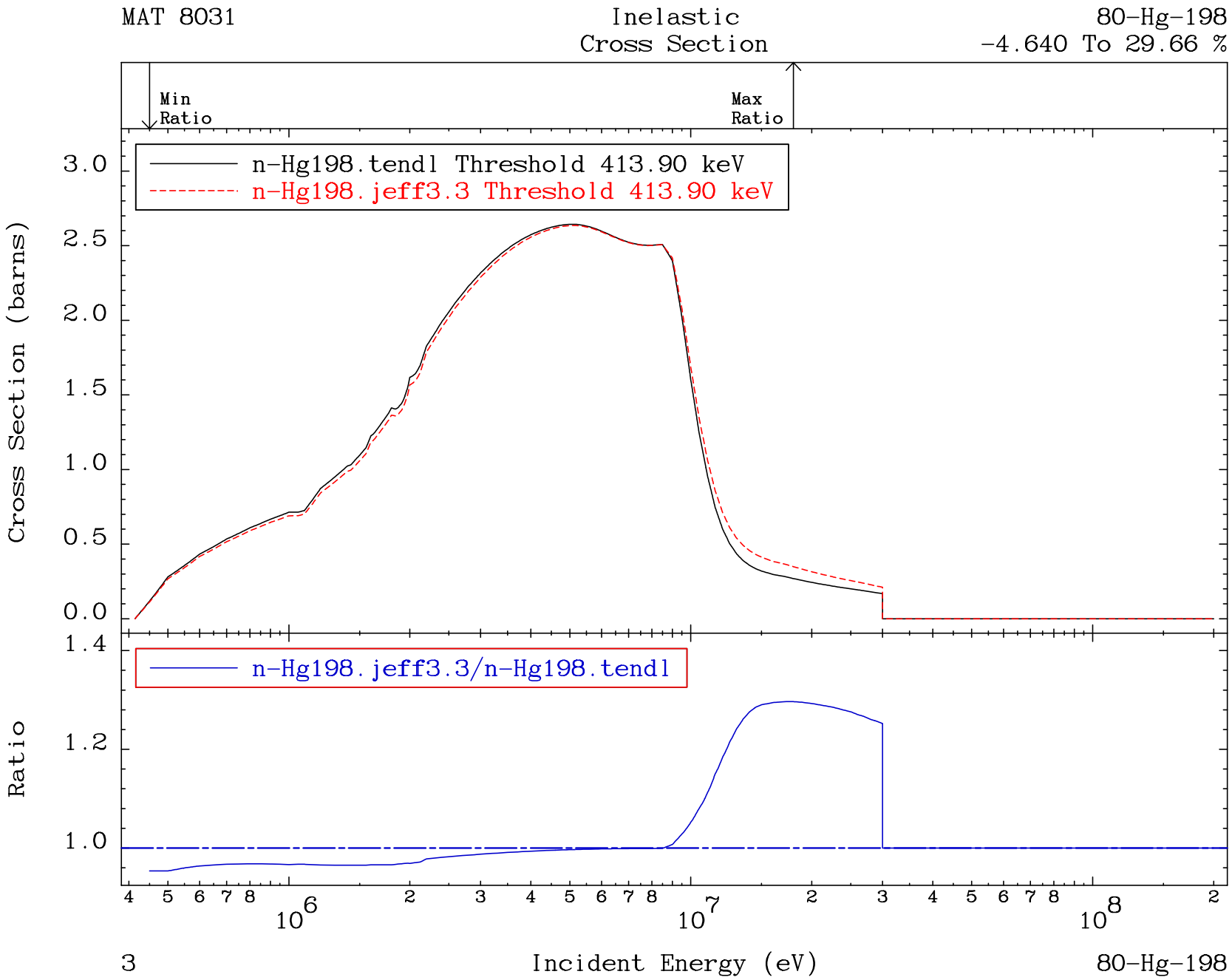
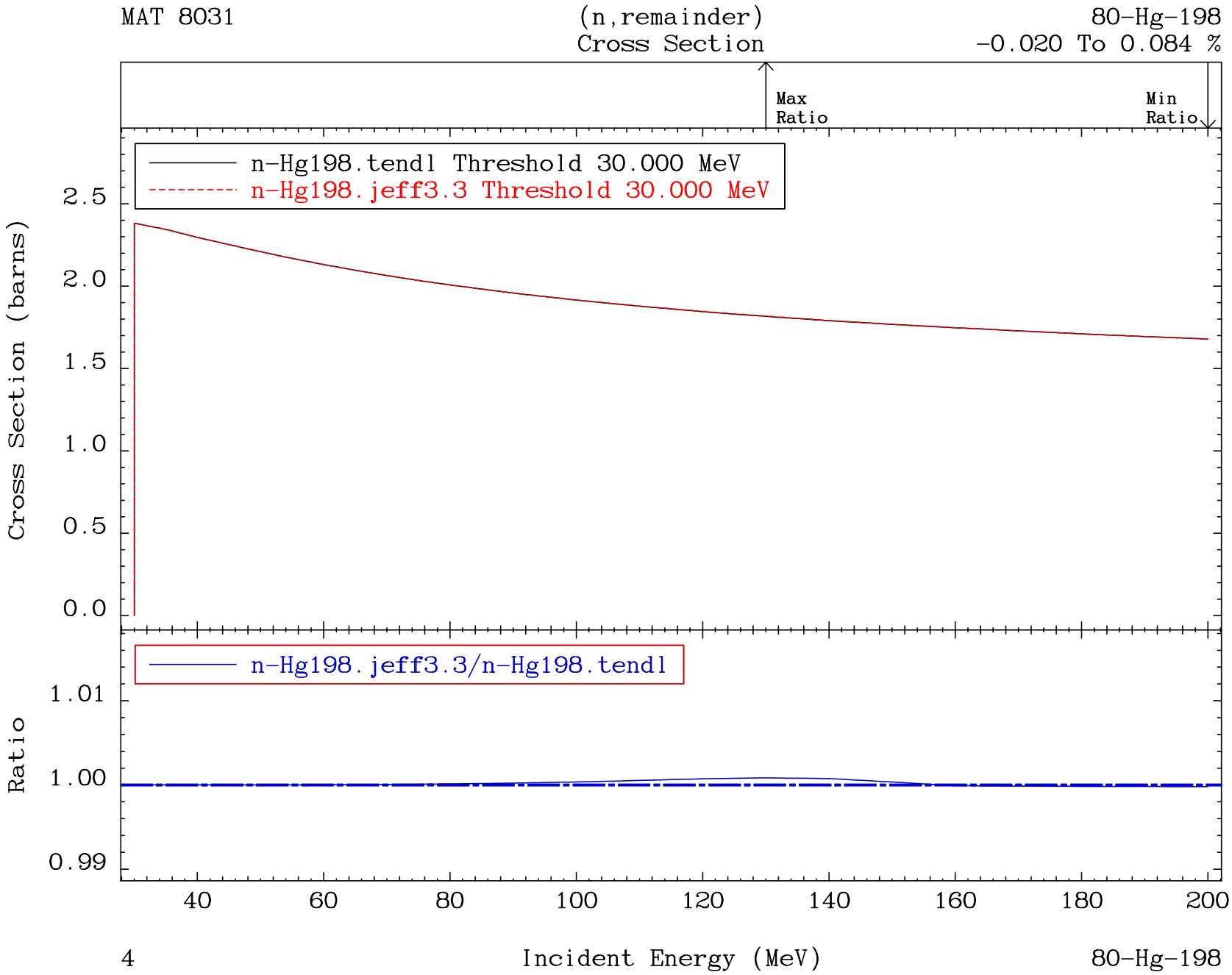
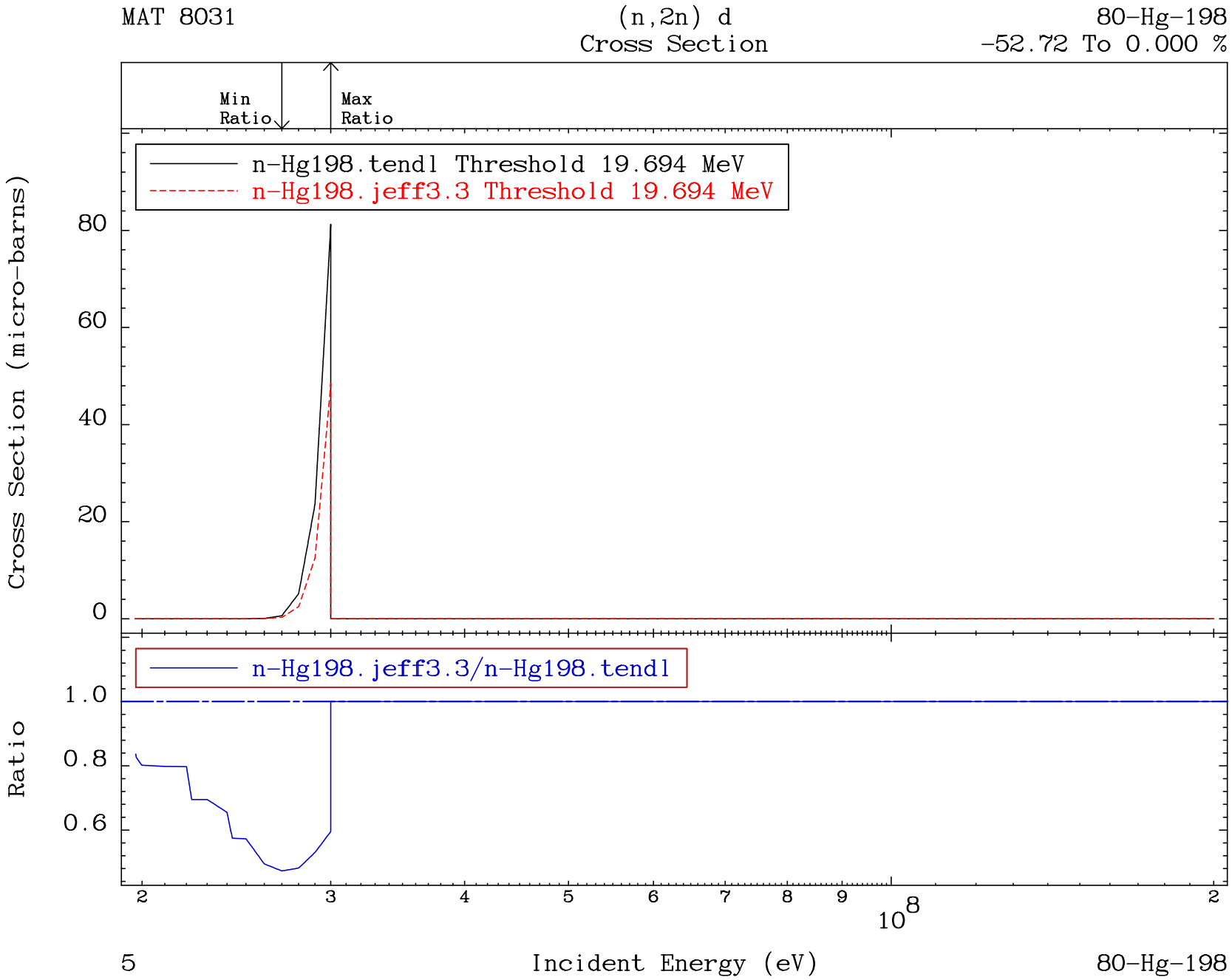
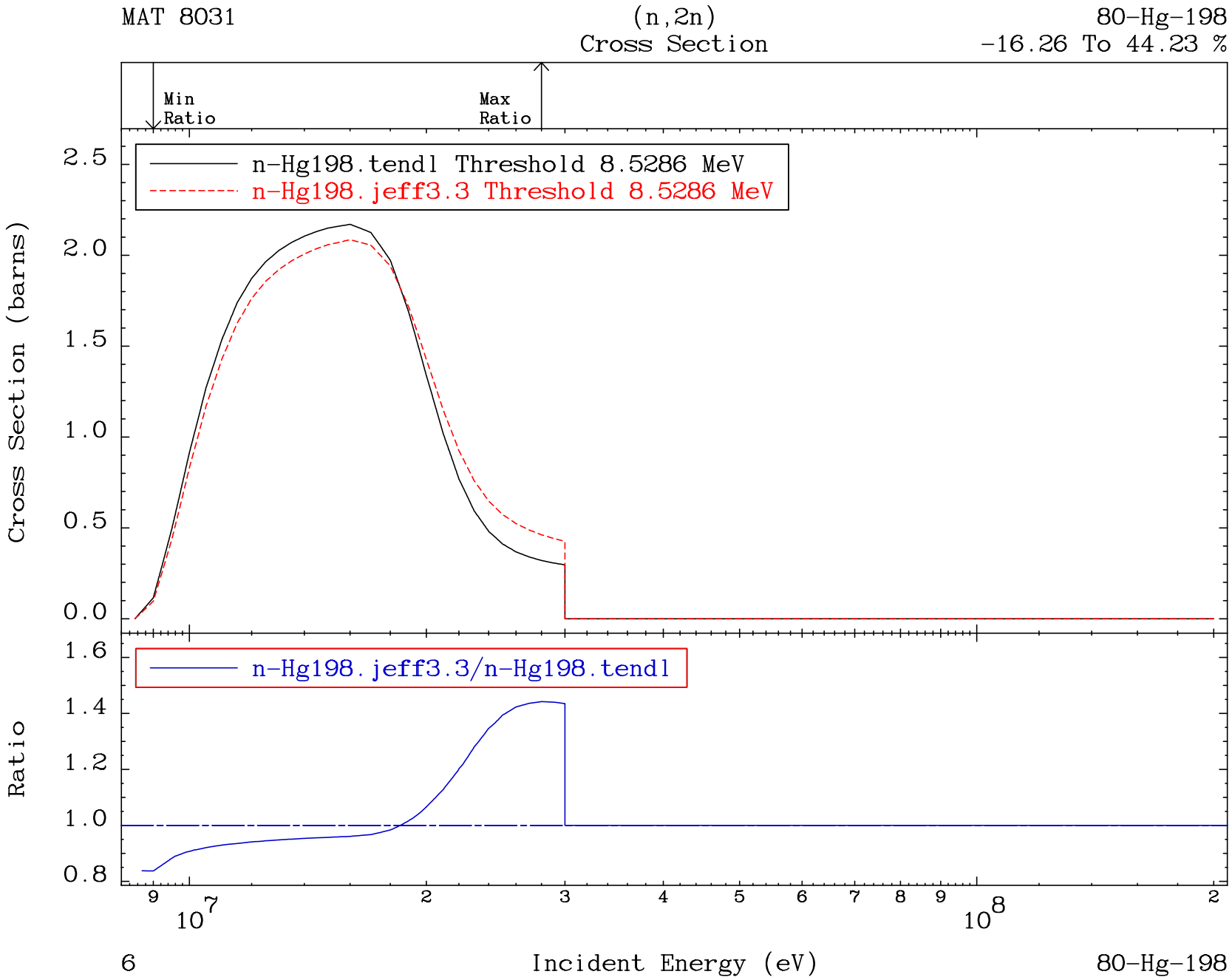

MAT 8031
Total
Cross Section
80-Hg-198
-99.93 To 9999. %
Min
Ratio
Max
Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
1
80-Hg-198

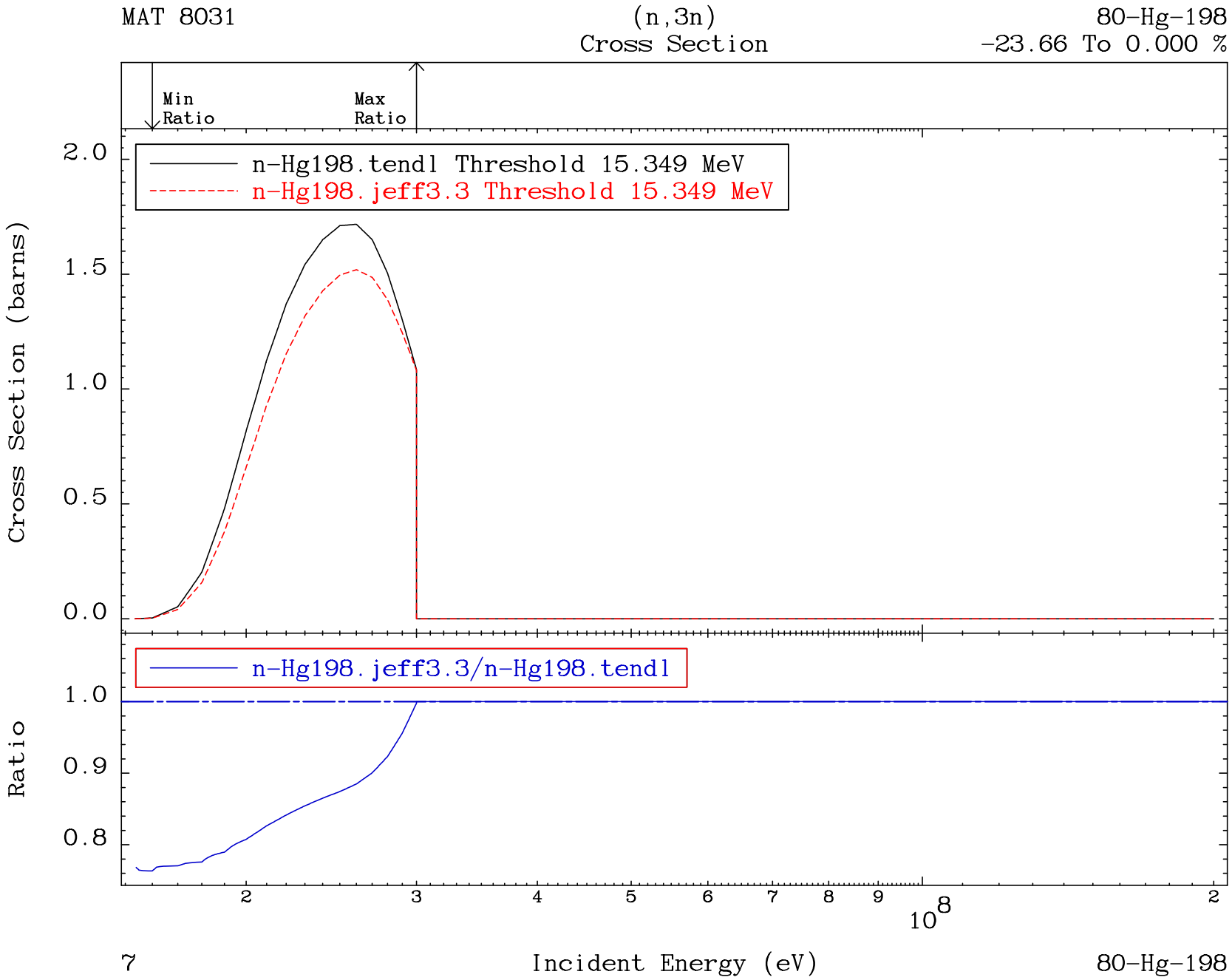

MAT 8031
Elastic
Cross Section
80-Hg-198
-99.96 To 9999. %
Max
Ratio
Min
Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
2
80-Hg-198

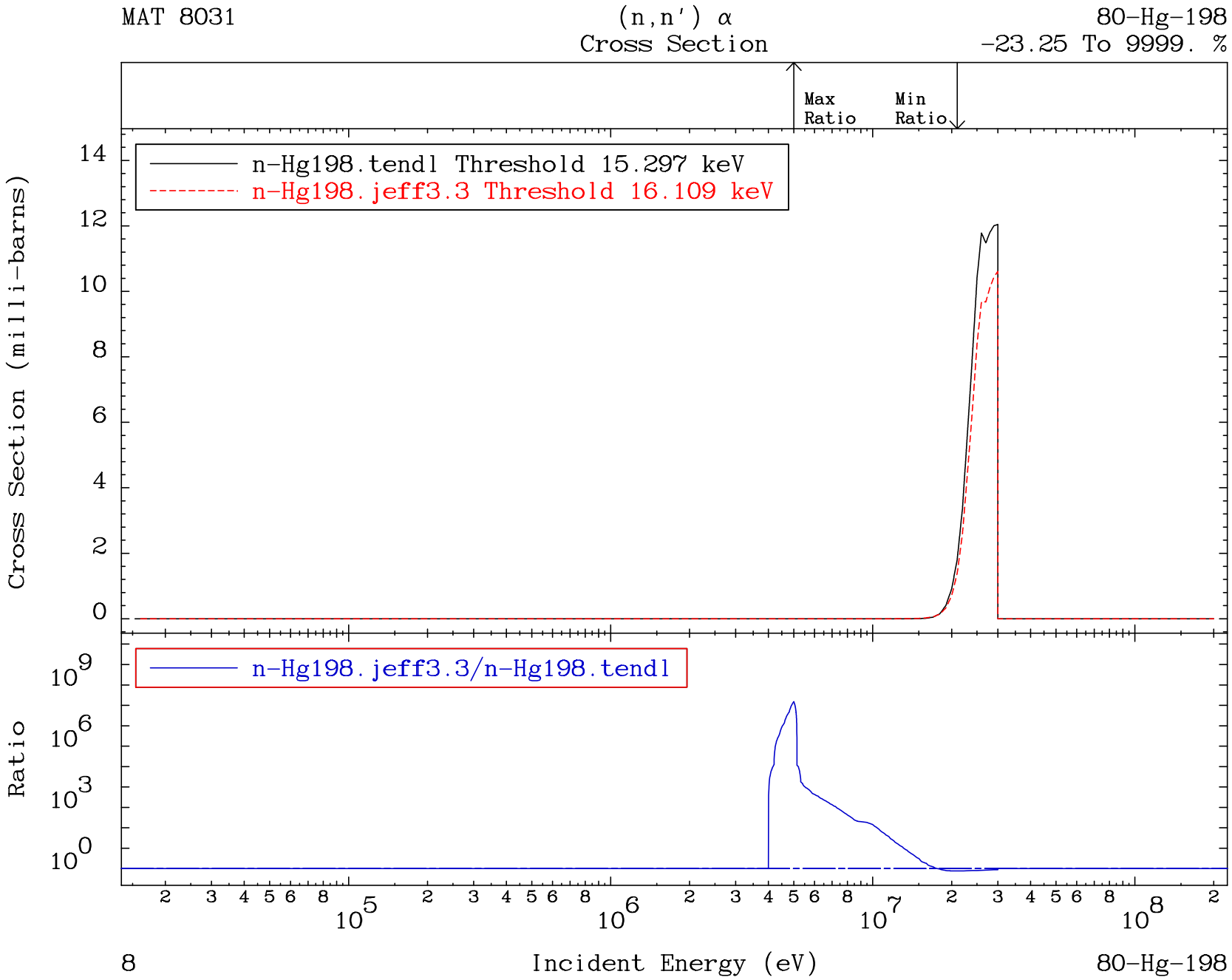

MAT 8031
Inelastic
Cross Section
80-Hg-198
-4.640 To 29.66 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 413.90 keV
n-Hg198.jeff3.3 Threshold 413.90 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.4
1.2
1.0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
80-Hg-198

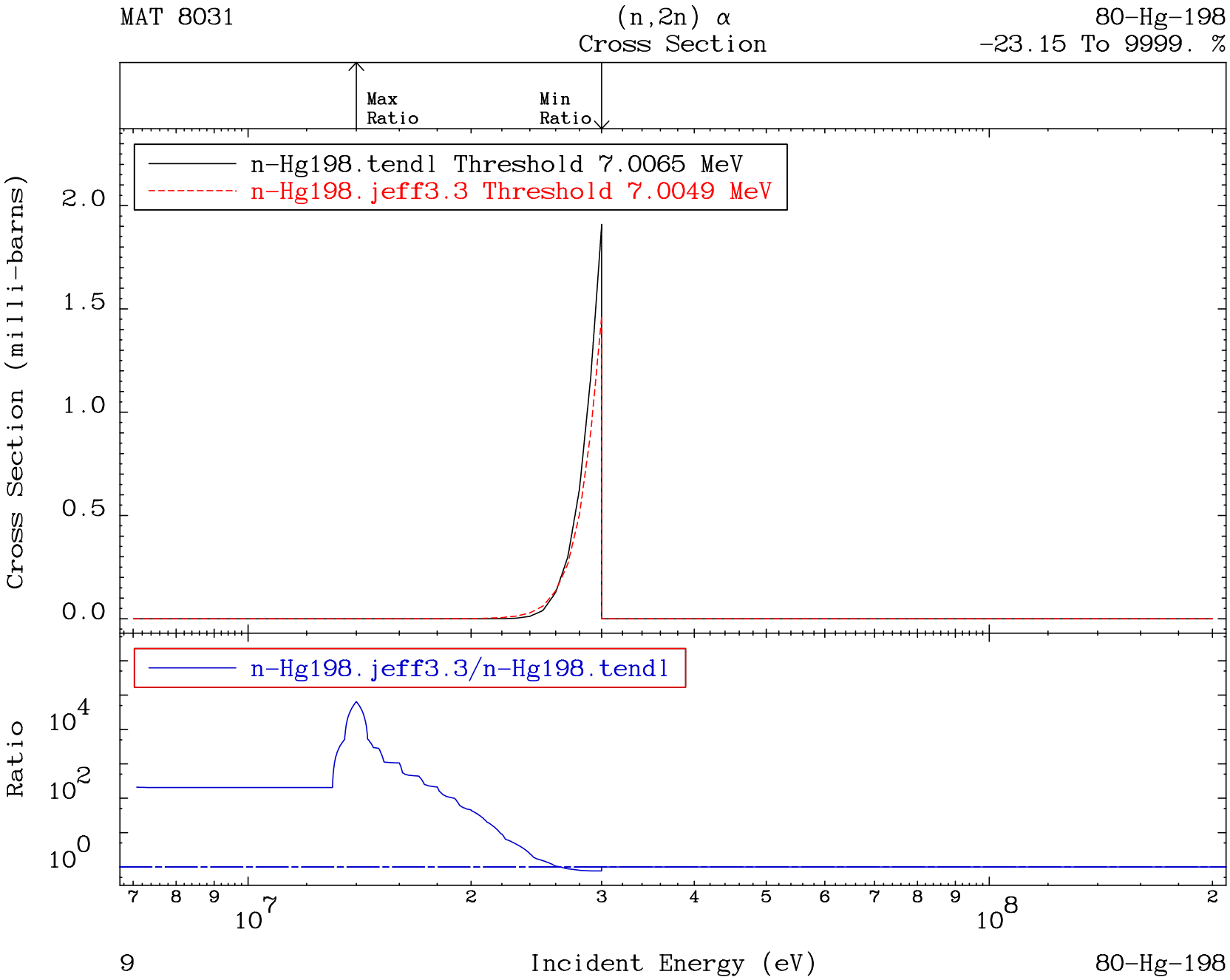

MAT 8031
(n,remainder)
Cross Section
80-Hg-198
-0.020 To 0.084 %
Max
Ratio
Min
Ratio
n-Hg198.tendl Threshold 30.000 MeV
n-Hg198.jeff3.3 Threshold 30.000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
80-Hg-198

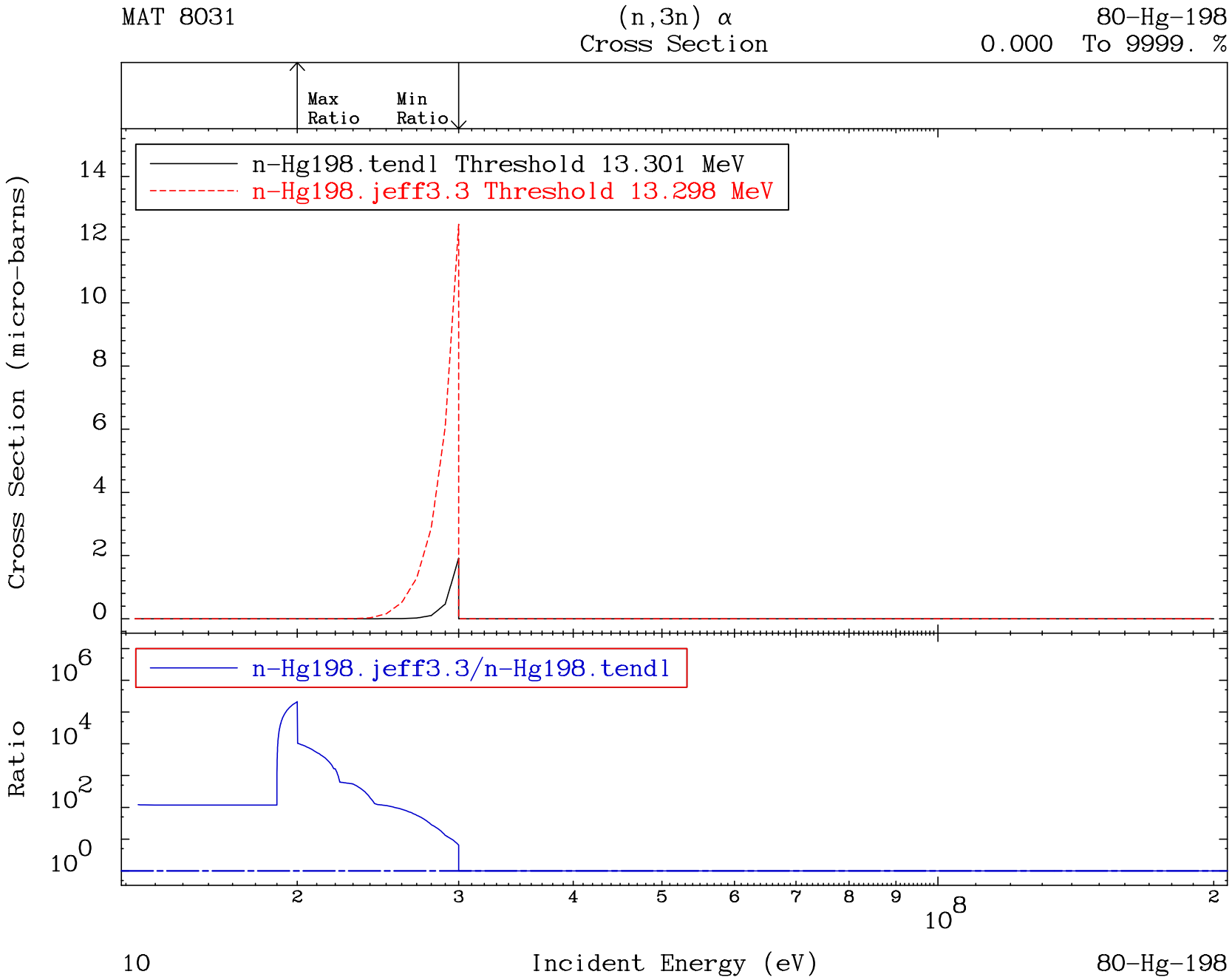

MAT 8031
(n,2n) d
Cross Section
80-Hg-198
-52.72 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 19.694 MeV
n-Hg198.jeff3.3 Threshold 19.694 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
80-Hg-198

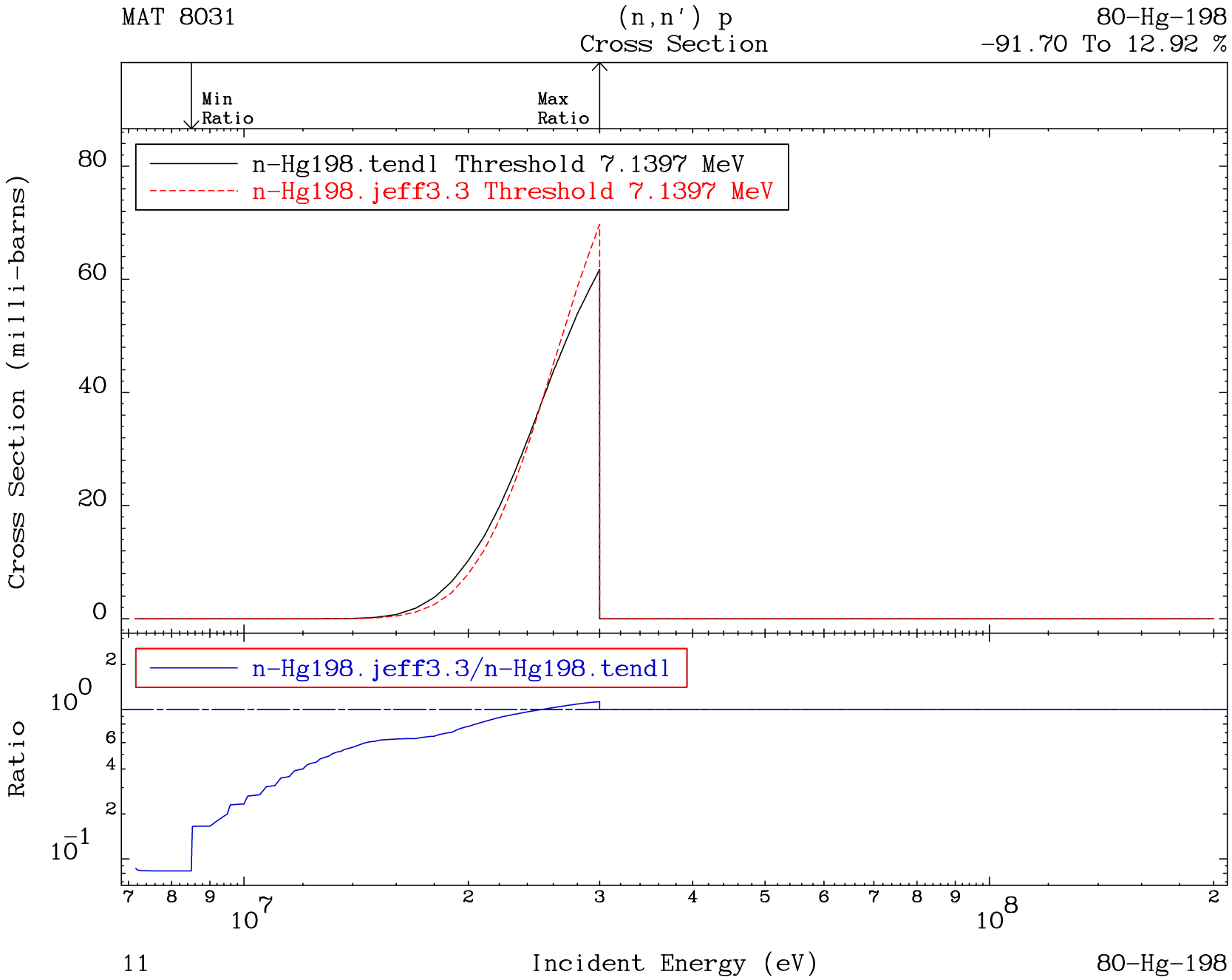

MAT 8031
(n,2n)
Cross Section
80-Hg-198
-16.26 To 44.23 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 8.5286 MeV
n-Hg198.jeff3.3 Threshold 8.5286 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.6
1.4
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
80-Hg-198

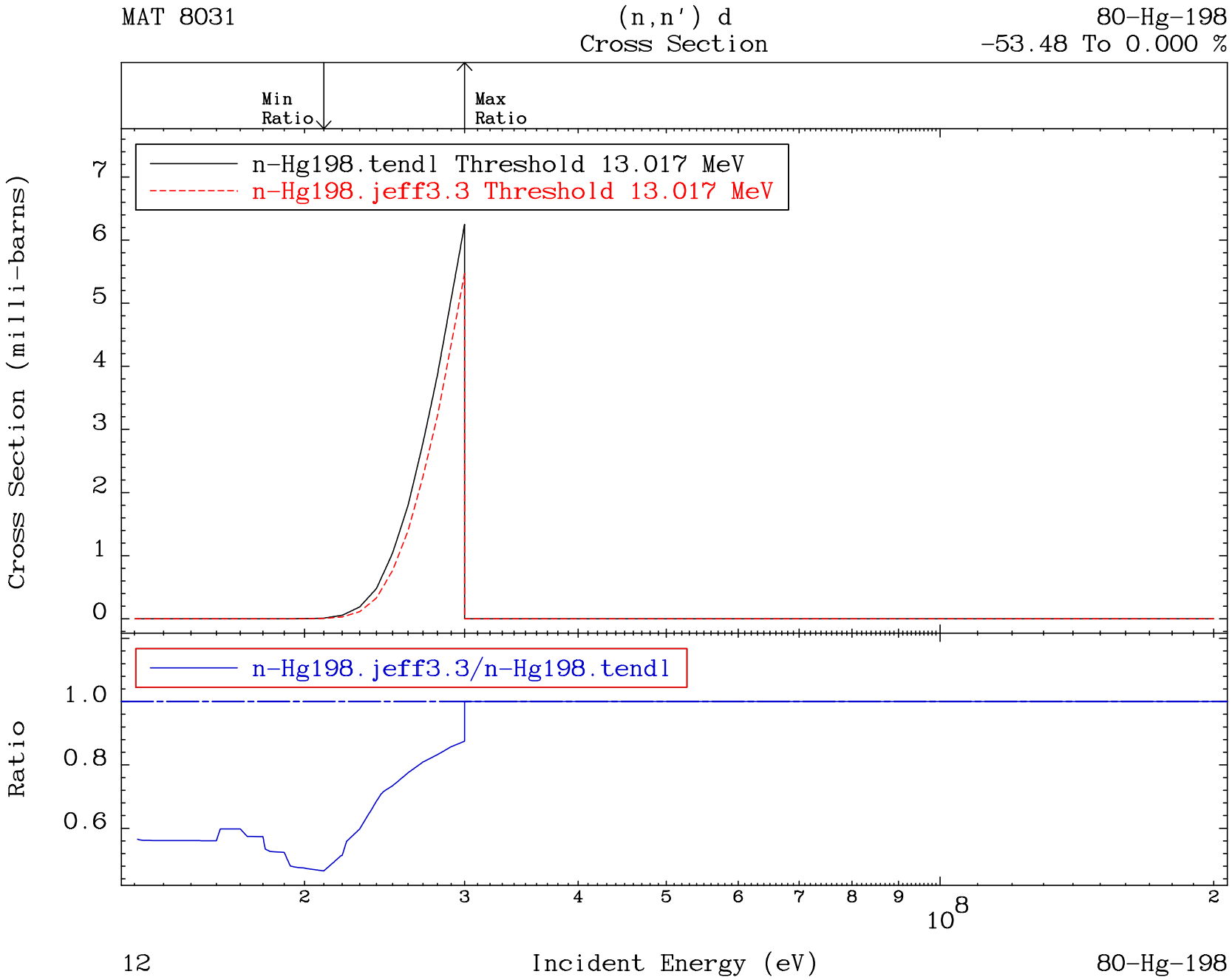

MAT 8031
(n,3n)
Cross Section
80-Hg-198
-23.66 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.349 MeV
n-Hg198.jeff3.3 Threshold 15.349 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
80-Hg-198

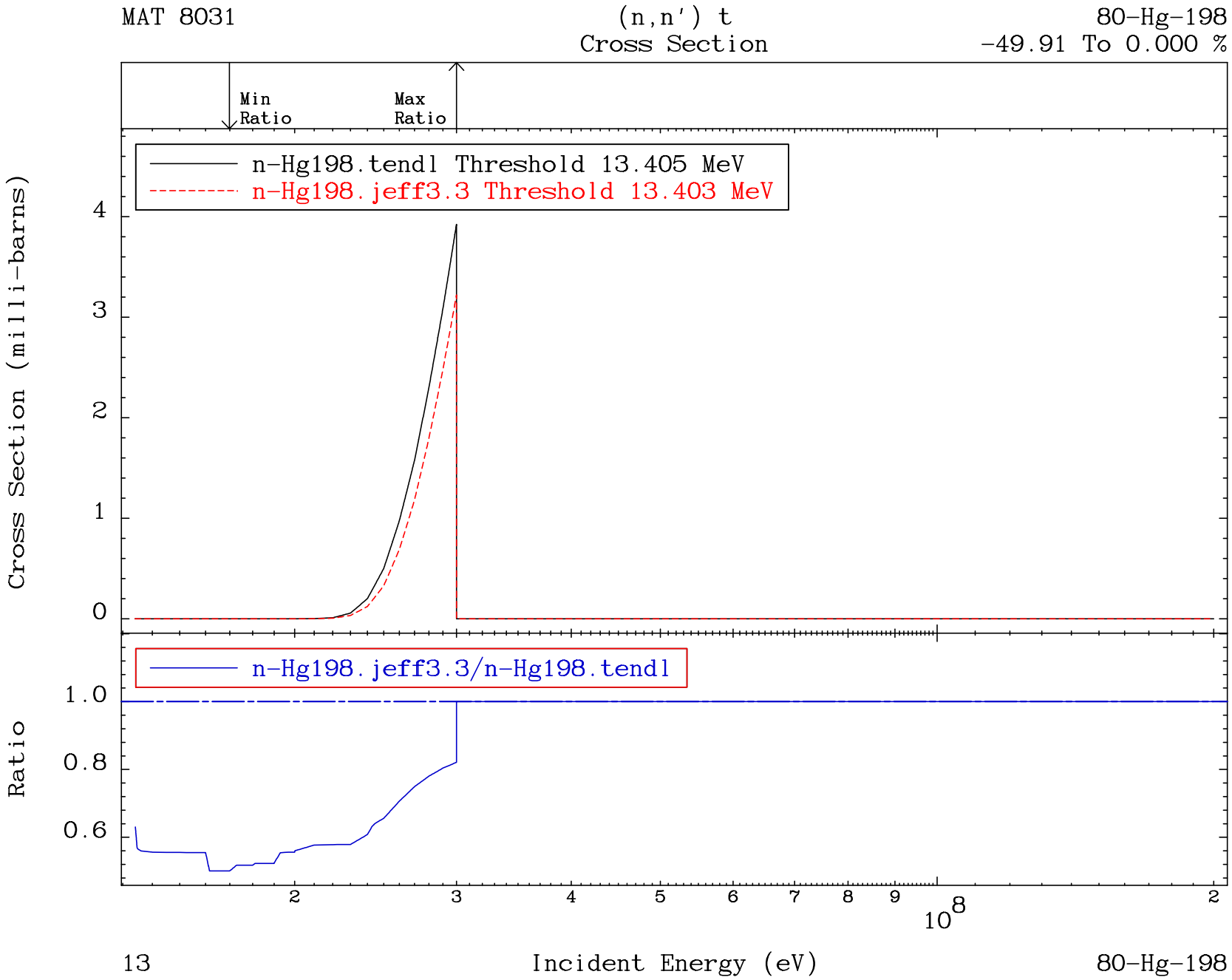

MAT 8031
(n,n') α
Cross Section
80-Hg-198
-23.25 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 15.297 keV
n-Hg198.jeff3.3 Threshold 16.109 keV
Cross Section (milli-barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
8
80-Hg-198

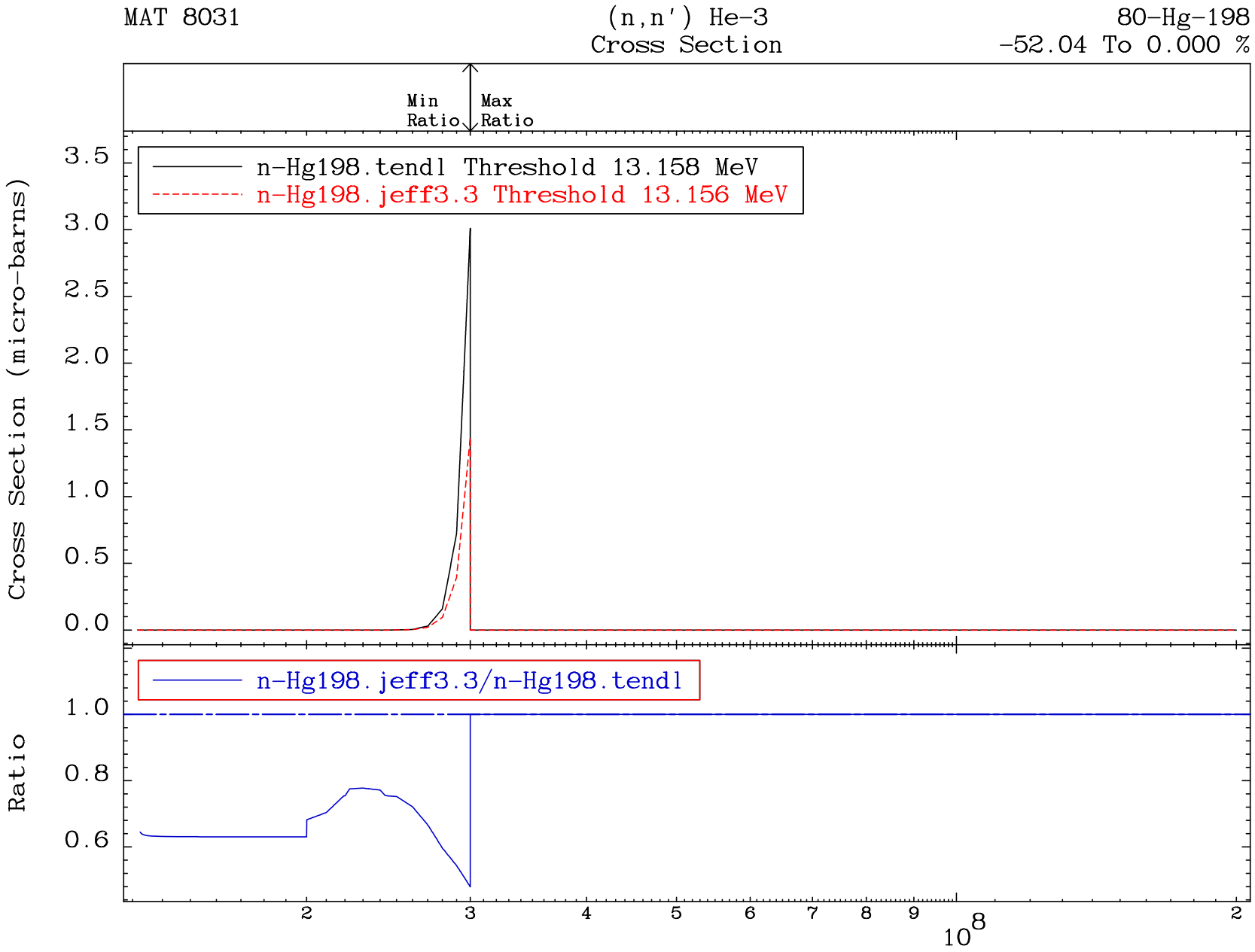

MAT 8031
(n,2n) α
Cross Section
80-Hg-198
-23.15 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 7.0065 MeV
n-Hg198.jeff3.3 Threshold 7.0049 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
80-Hg-198

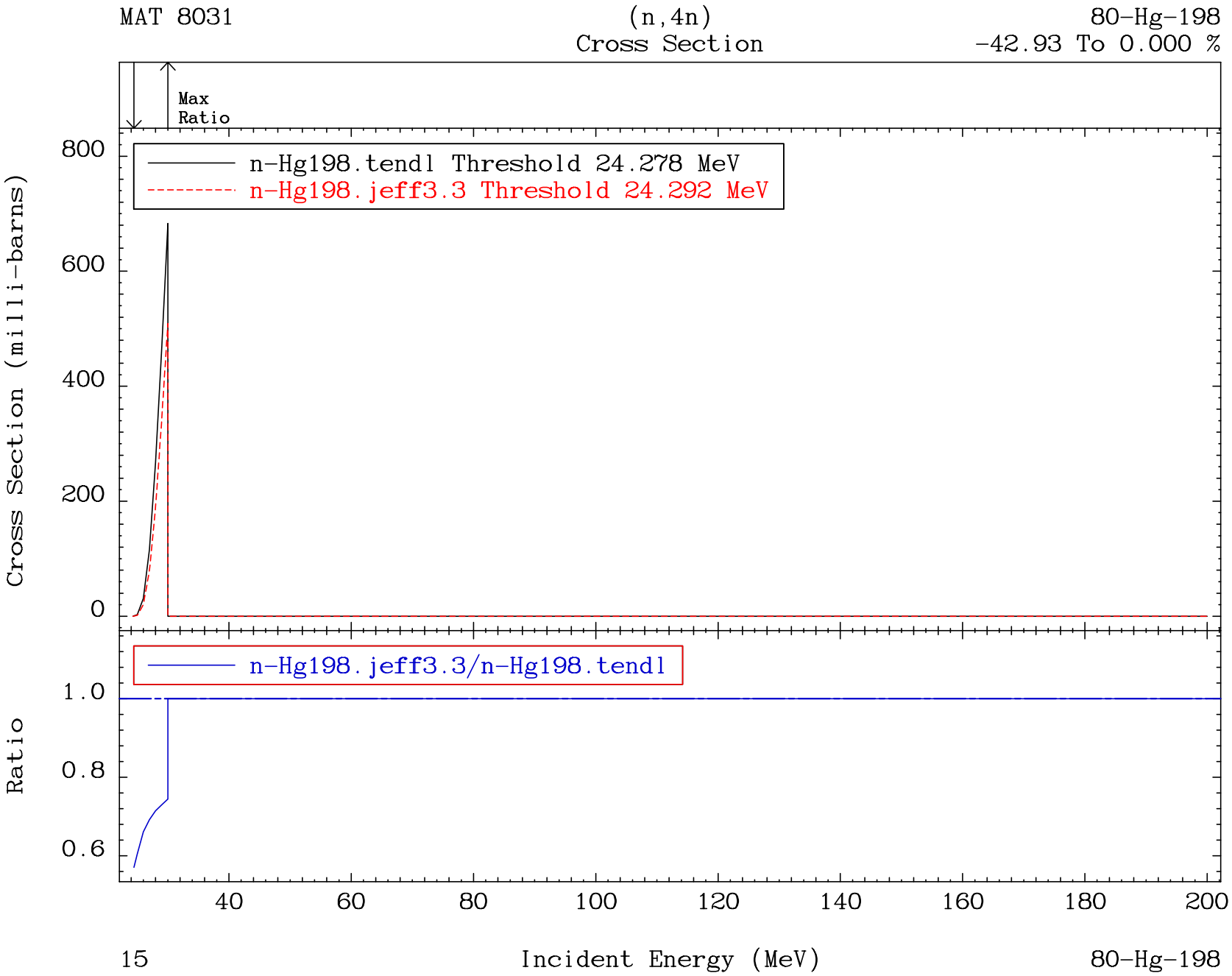

MAT 8031
(n,3n) α
Cross Section
80-Hg-198
0.000 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 13.301 MeV
n-Hg198.jeff3.3 Threshold 13.298 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
12
14
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^0
10^2
10^4
10^6
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
80-Hg-198

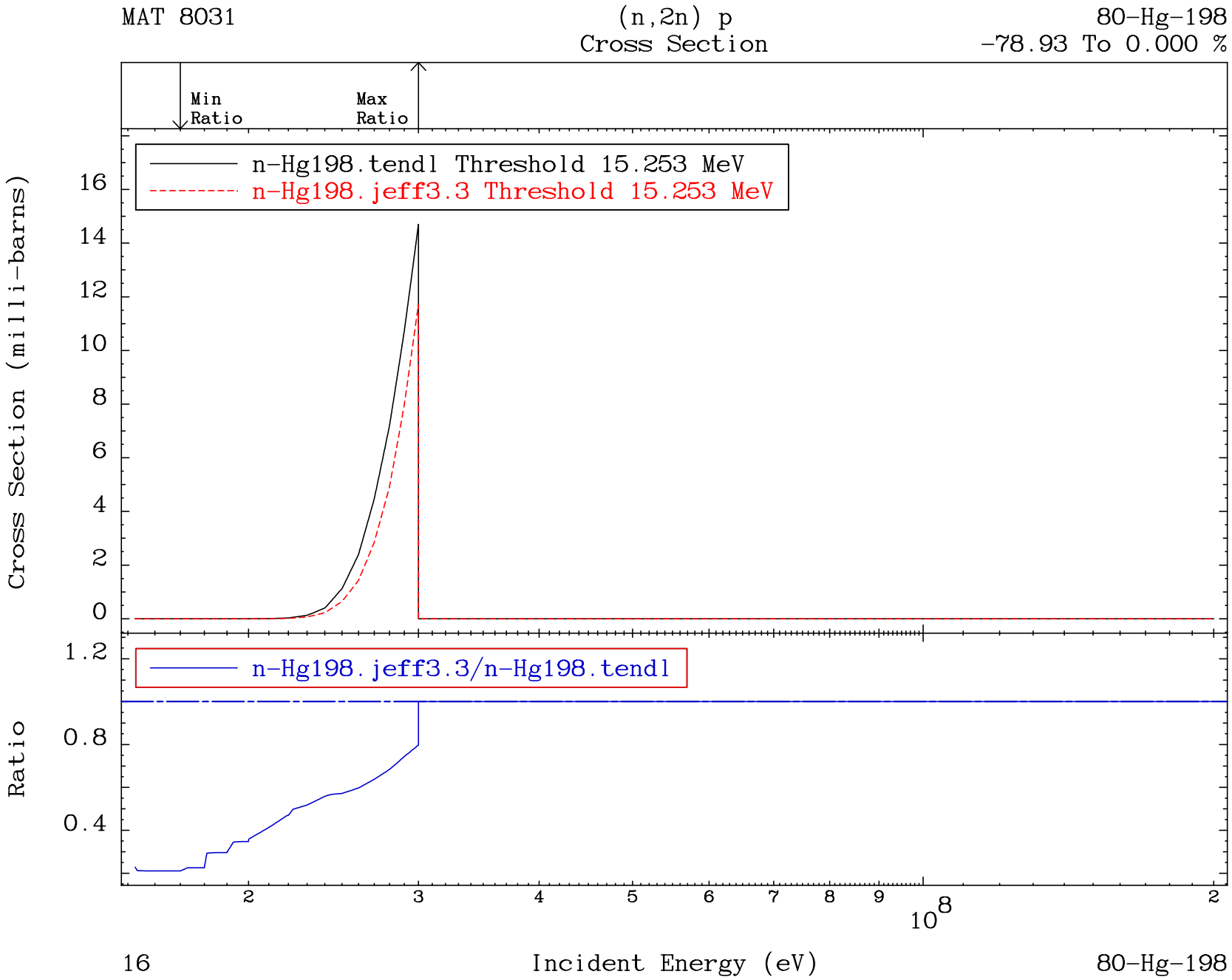

MAT 8031
(n,n') p
Cross Section
80-Hg-198
-91.70 To 12.92 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 7.1397 MeV
n-Hg198.jeff3.3 Threshold 7.1397 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
2
10^0
6
4
2
10^-1
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
80-Hg-198

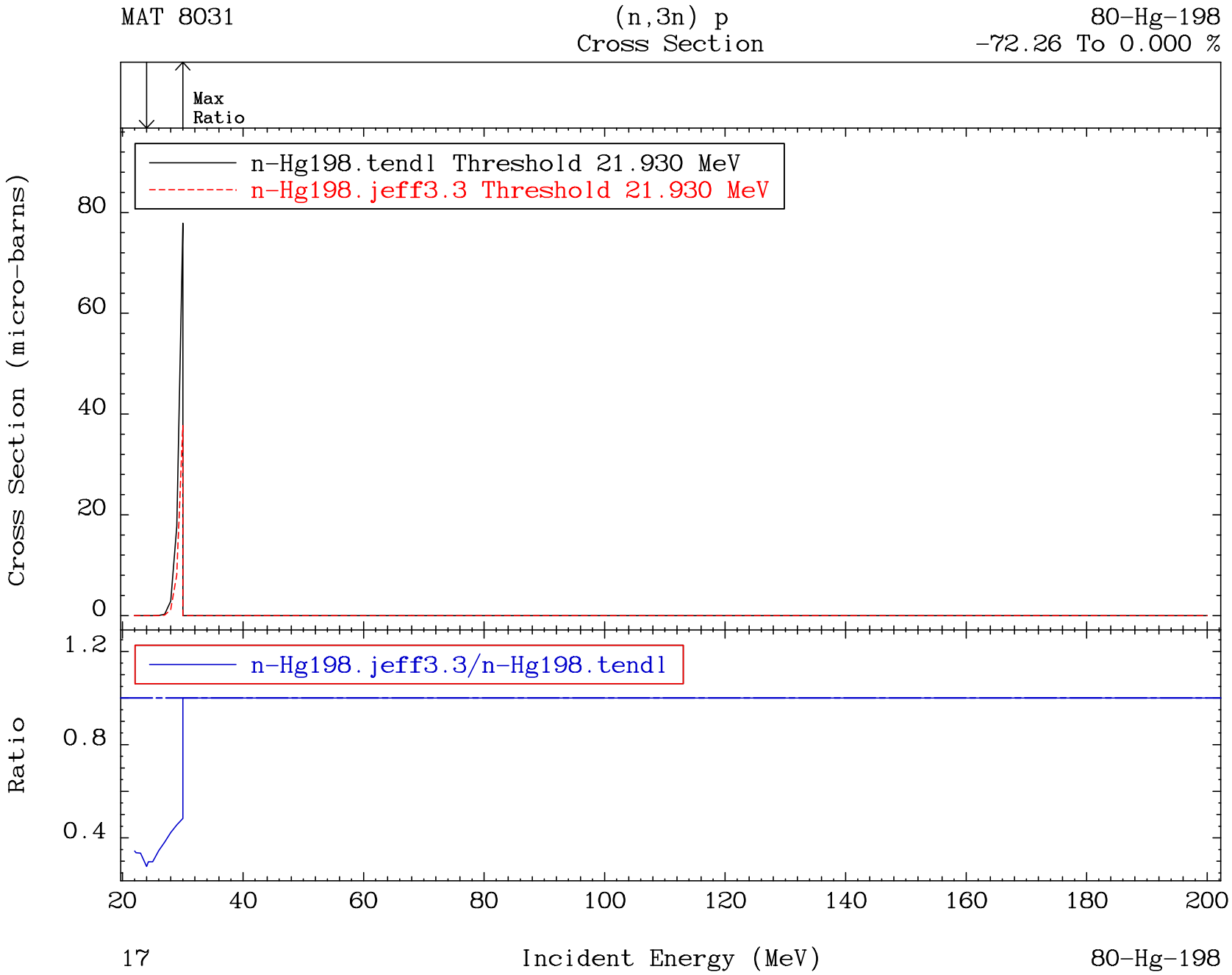

MAT 8031
(n,n') d
Cross Section
80-Hg-198
-53.48 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.017 MeV
n-Hg198.jeff3.3 Threshold 13.017 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.6
0.8
1.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
80-Hg-198

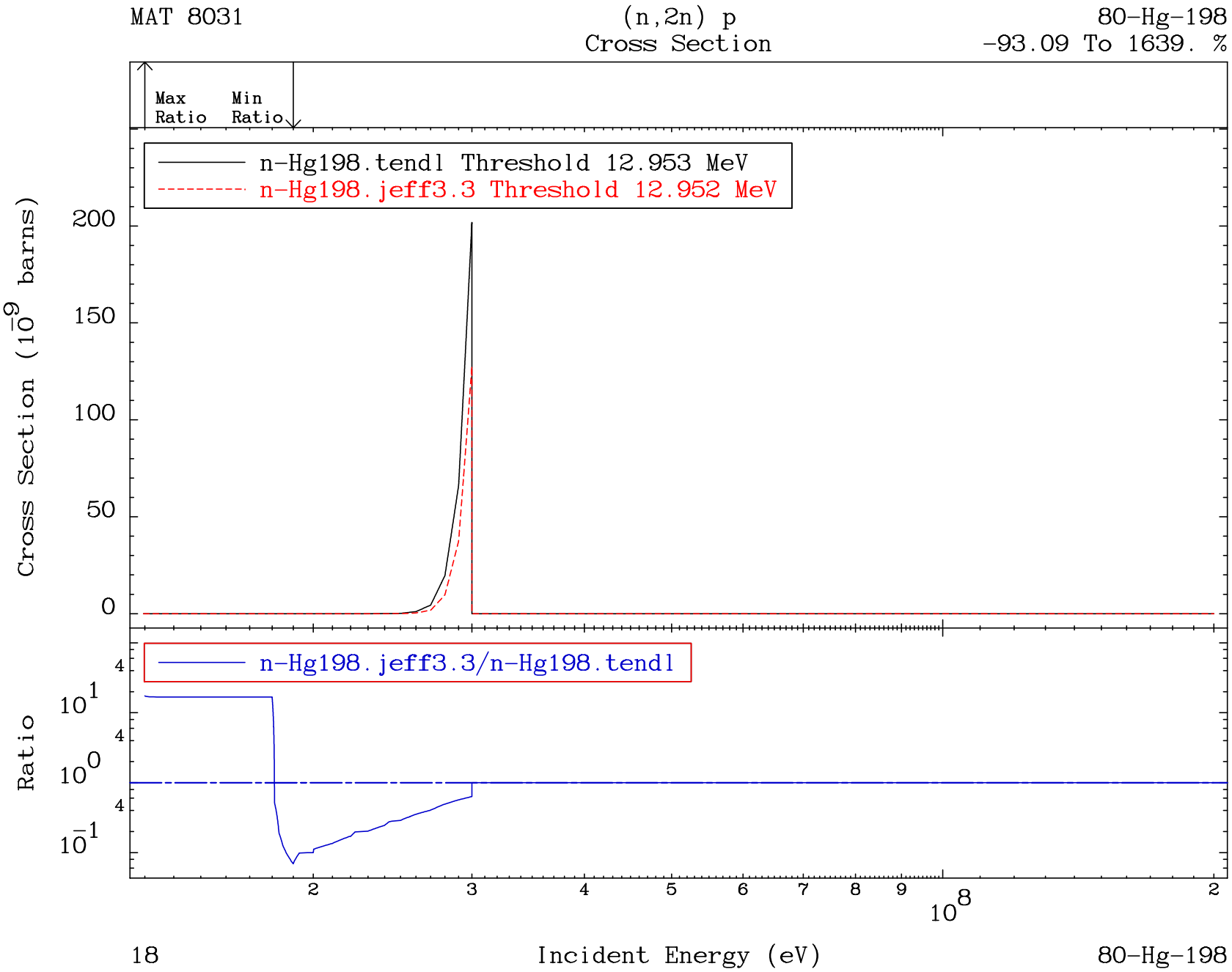

MAT 8031
(n,n') t
Cross Section
80-Hg-198
-49.91 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.405 MeV
n-Hg198.jeff3.3 Threshold 13.403 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
80-Hg-198

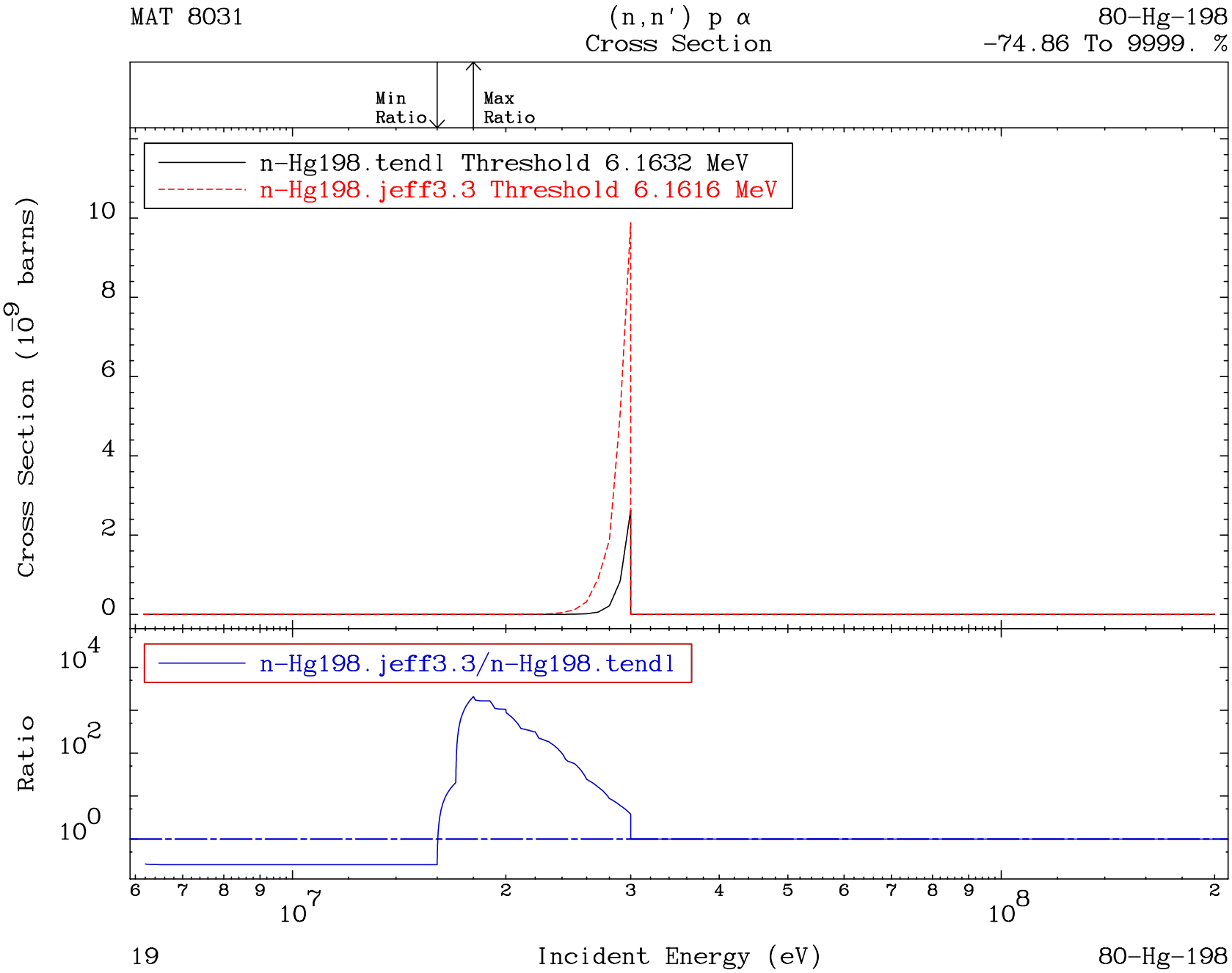

MAT 8031
(n,n') He-3
Cross Section
80-Hg-198
-52.04 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.158 MeV
n-Hg198.jeff3.3 Threshold 13.156 MeV
Cross Section (micro-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
80-Hg-198

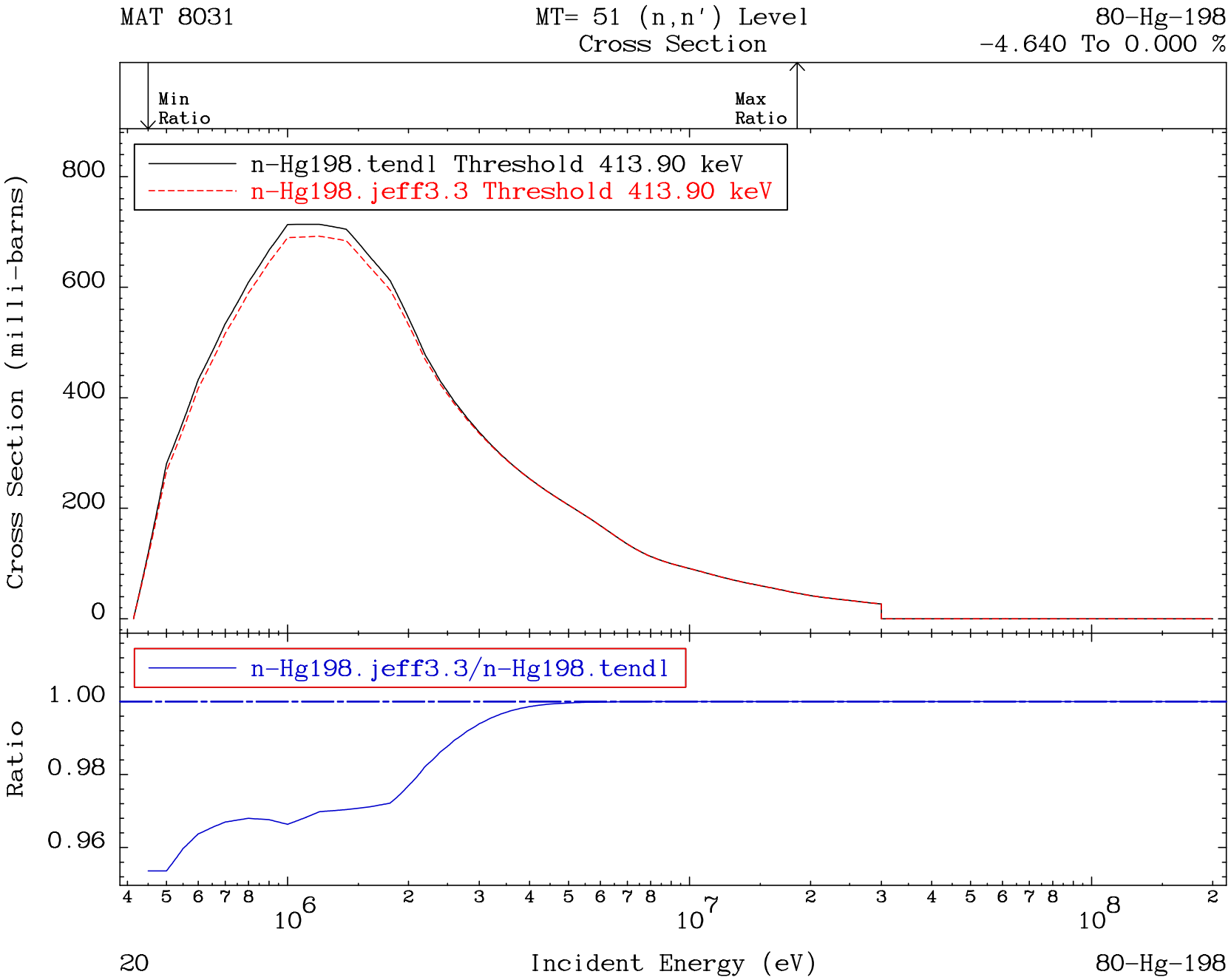

MAT 8031
(n,4n)
Cross Section
80-Hg-198
-42.93 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 24.278 MeV
n-Hg198.jeff3.3 Threshold 24.292 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
80-Hg-198

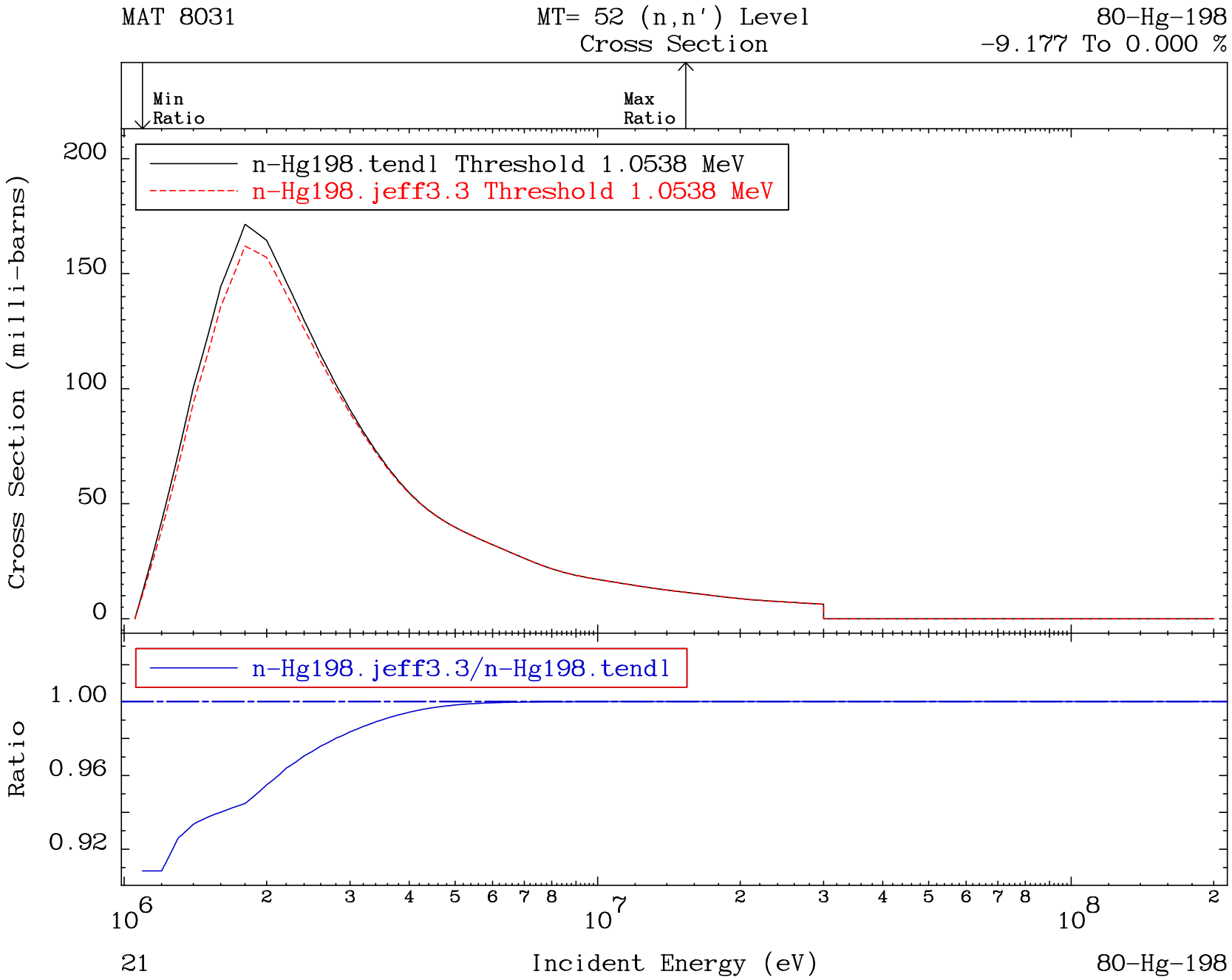

MAT 8031
(n,2n) p
Cross Section
80-Hg-198
-78.93 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.253 MeV
n-Hg198.jeff3.3 Threshold 15.253 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
80-Hg-198

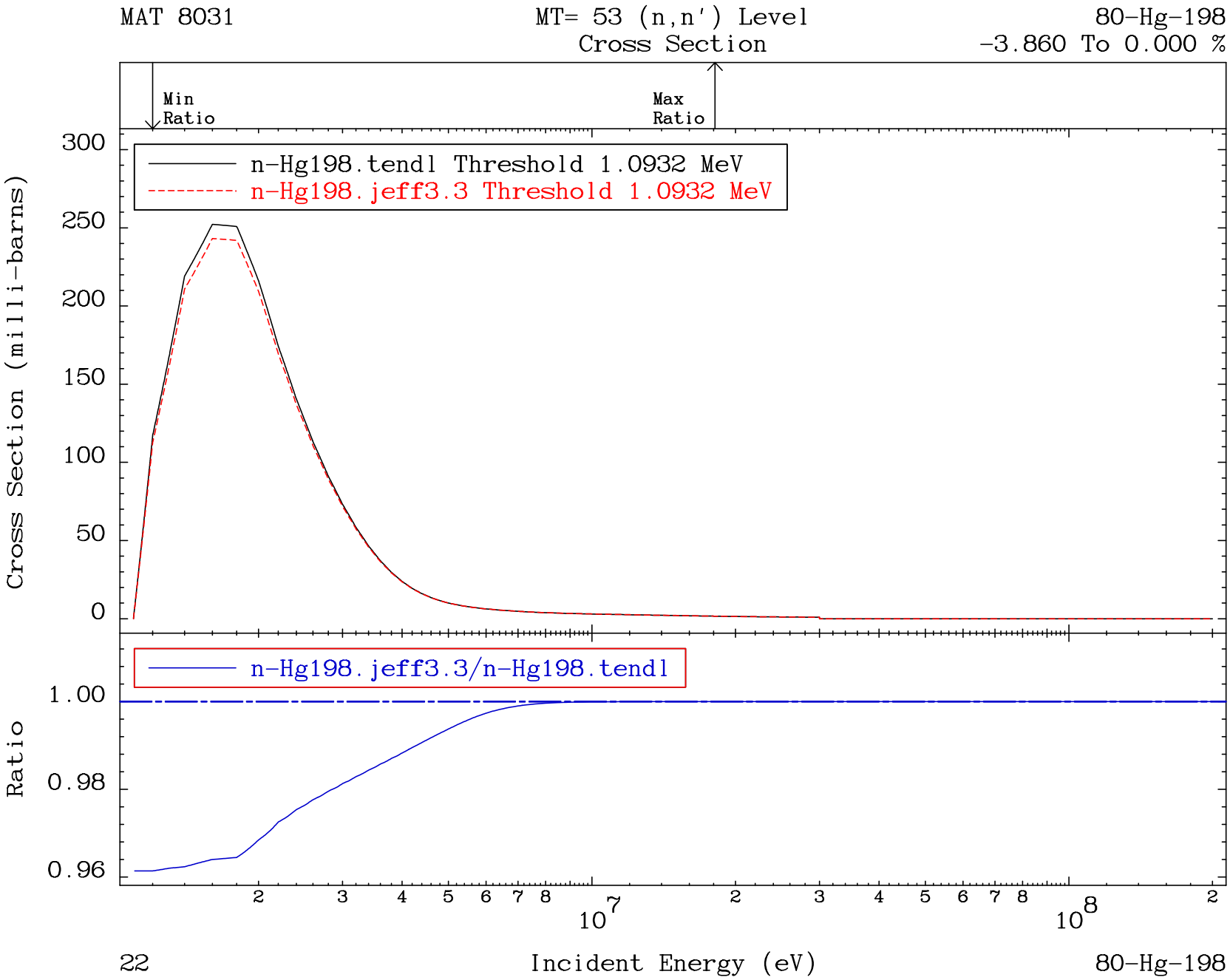

MAT 8031
(n,3n) p
Cross Section
80-Hg-198
-72.26 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 21.930 MeV
n-Hg198.jeff3.3 Threshold 21.930 MeV
Cross Section (micro-barns)
0
20
40
60
80
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
20
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
80-Hg-198

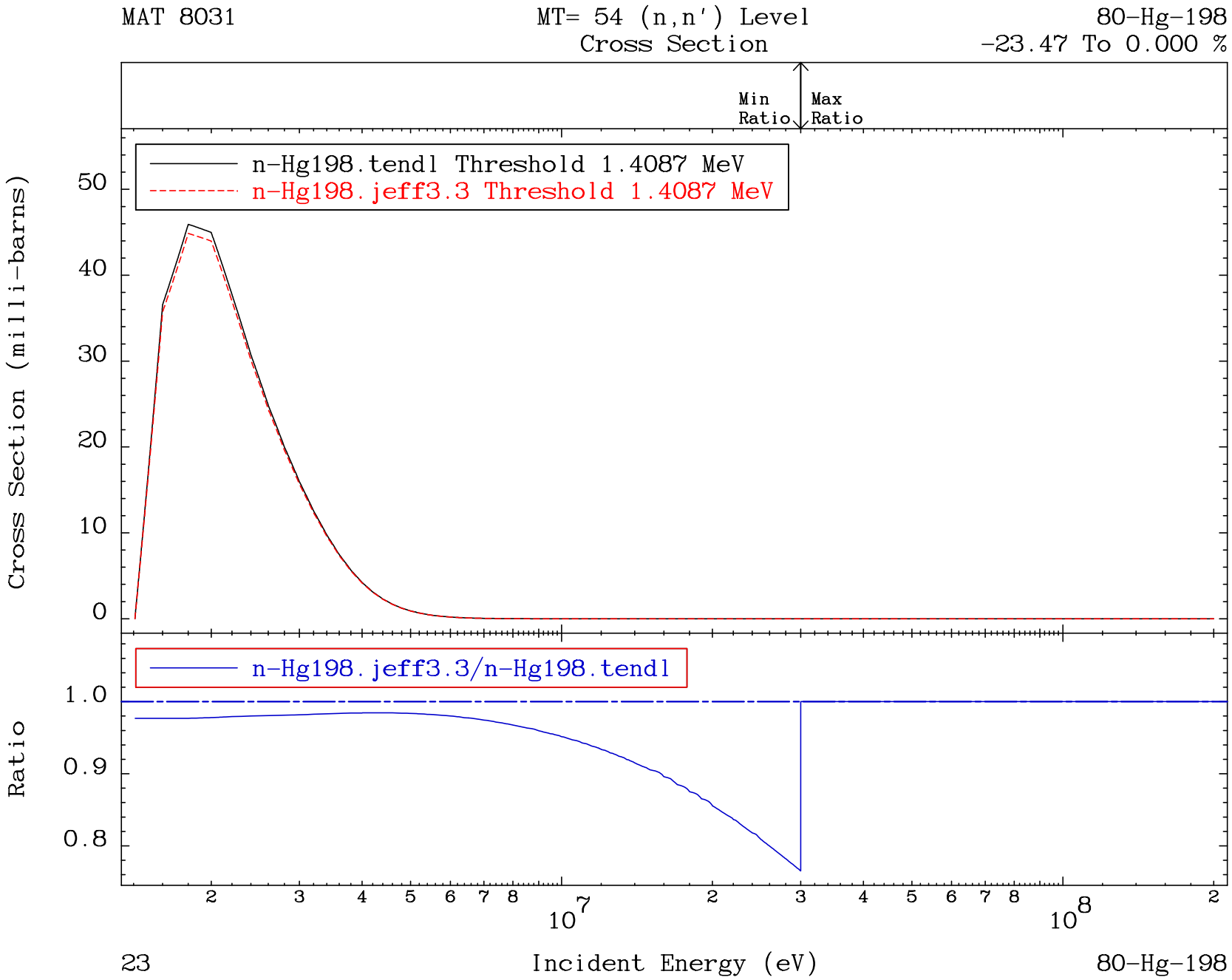

MAT 8031
(n,2n) p
Cross Section
80-Hg-198
-93.09 To 1639. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 12.953 MeV
n-Hg198.jeff3.3 Threshold 12.952 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^{1}
10^{0}
10^{-1}
2
3
4
5
6
7
8
9
10^{8}
2
18
Incident Energy (eV)
80-Hg-198

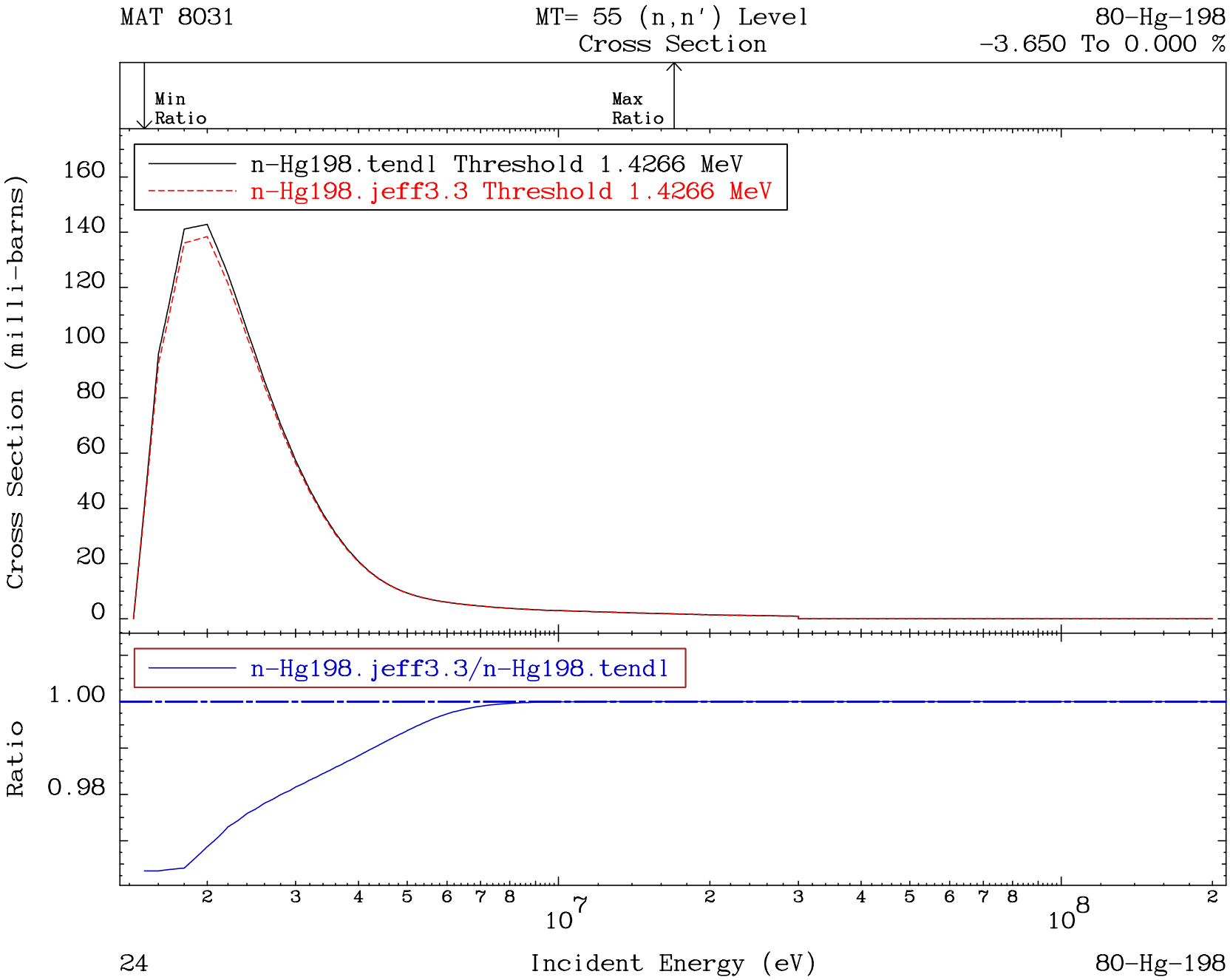

MAT 8031
(n,n') p α
Cross Section
80-Hg-198
-74.86 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 6.1632 MeV
n-Hg198.jeff3.3 Threshold 6.1616 MeV
Cross Section (10^-9 barns)
0
2
4
6
8
10
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^0
10^2
10^4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
19
80-Hg-198

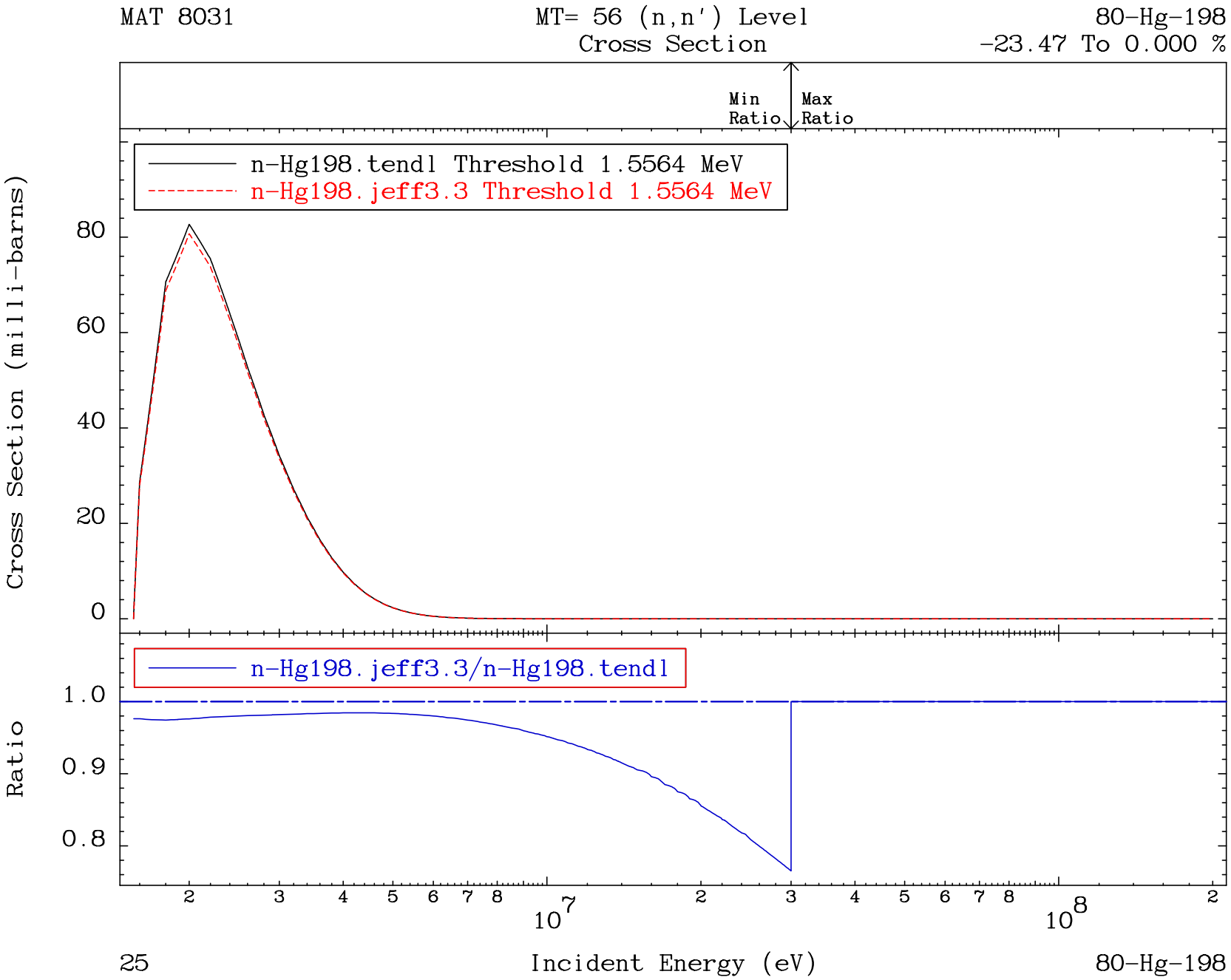

MAT 8031
MT= 51 (n,n') Level
Cross Section
80-Hg-198
-4.640 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 413.90 keV
n-Hg198.jeff3.3 Threshold 413.90 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
0.96
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
80-Hg-198

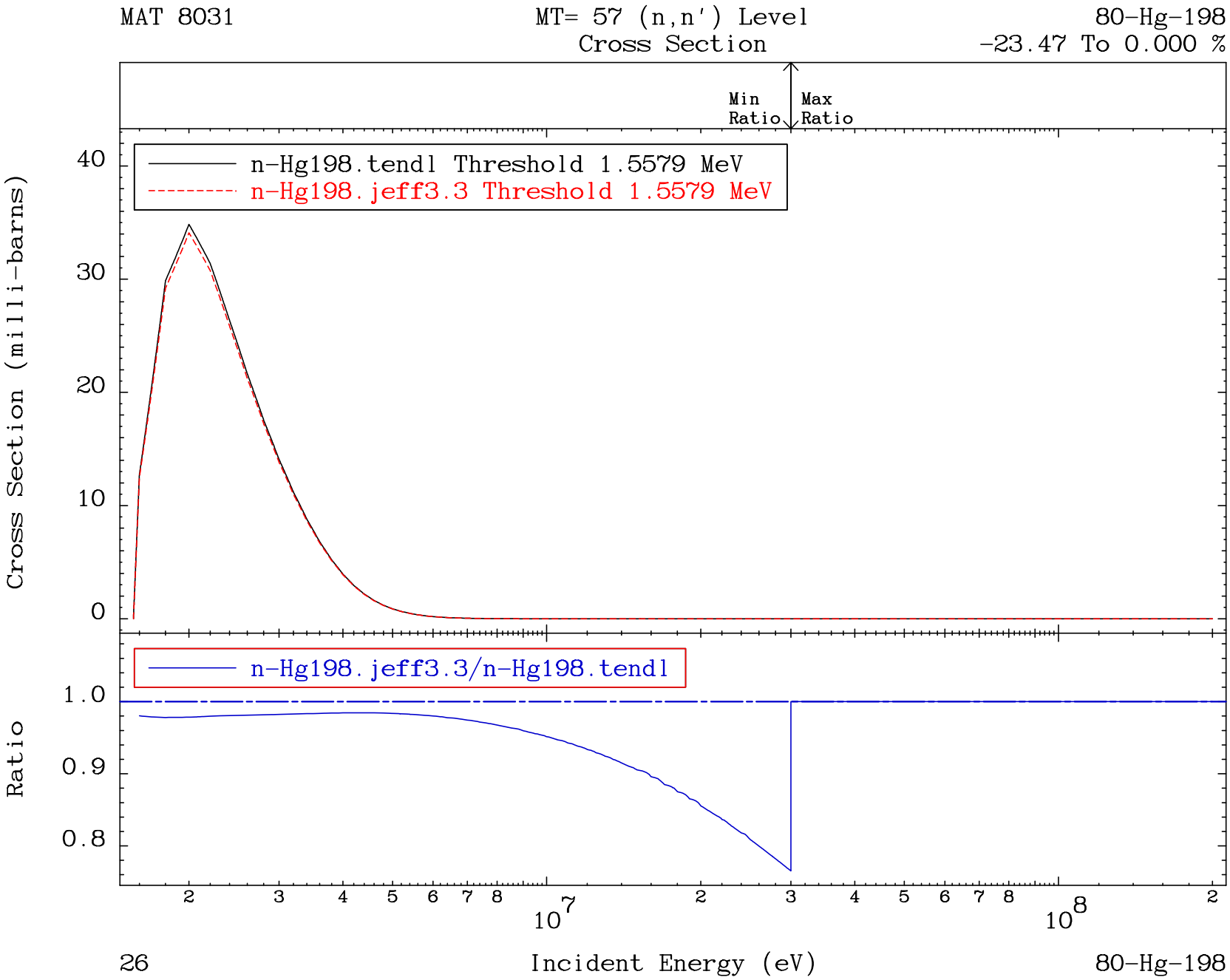

MAT 8031
MT= 52 (n,n') Level
Cross Section
80-Hg-198
-9.177 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.0538 MeV
n-Hg198.jeff3.3 Threshold 1.0538 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.96
0.92
10^6
10^7
10^8
21
Incident Energy (eV)
80-Hg-198

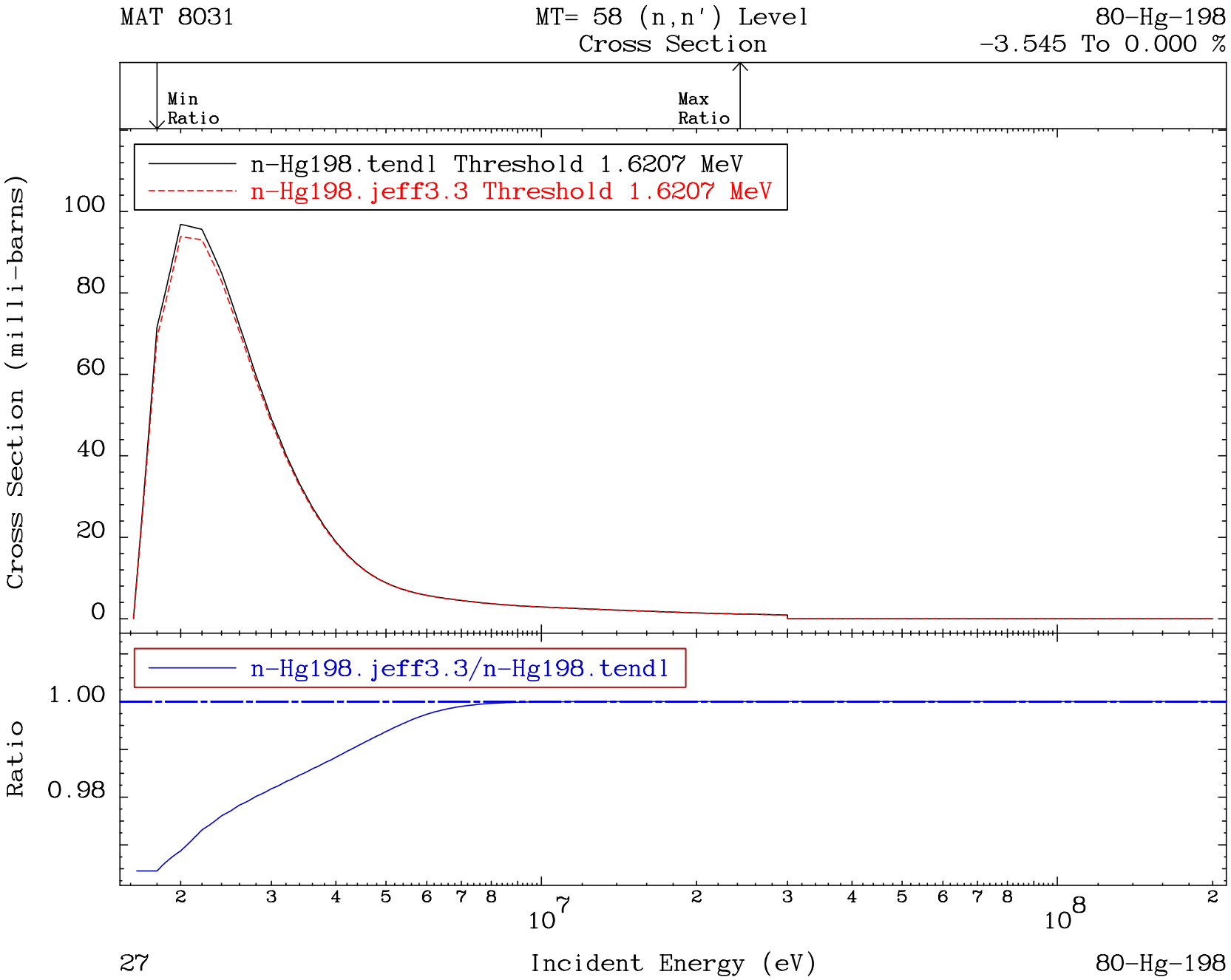

MAT 8031
MT= 53 (n,n') Level
Cross Section
80-Hg-198
-3.860 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.0932 MeV
n-Hg198.jeff3.3 Threshold 1.0932 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
80-Hg-198

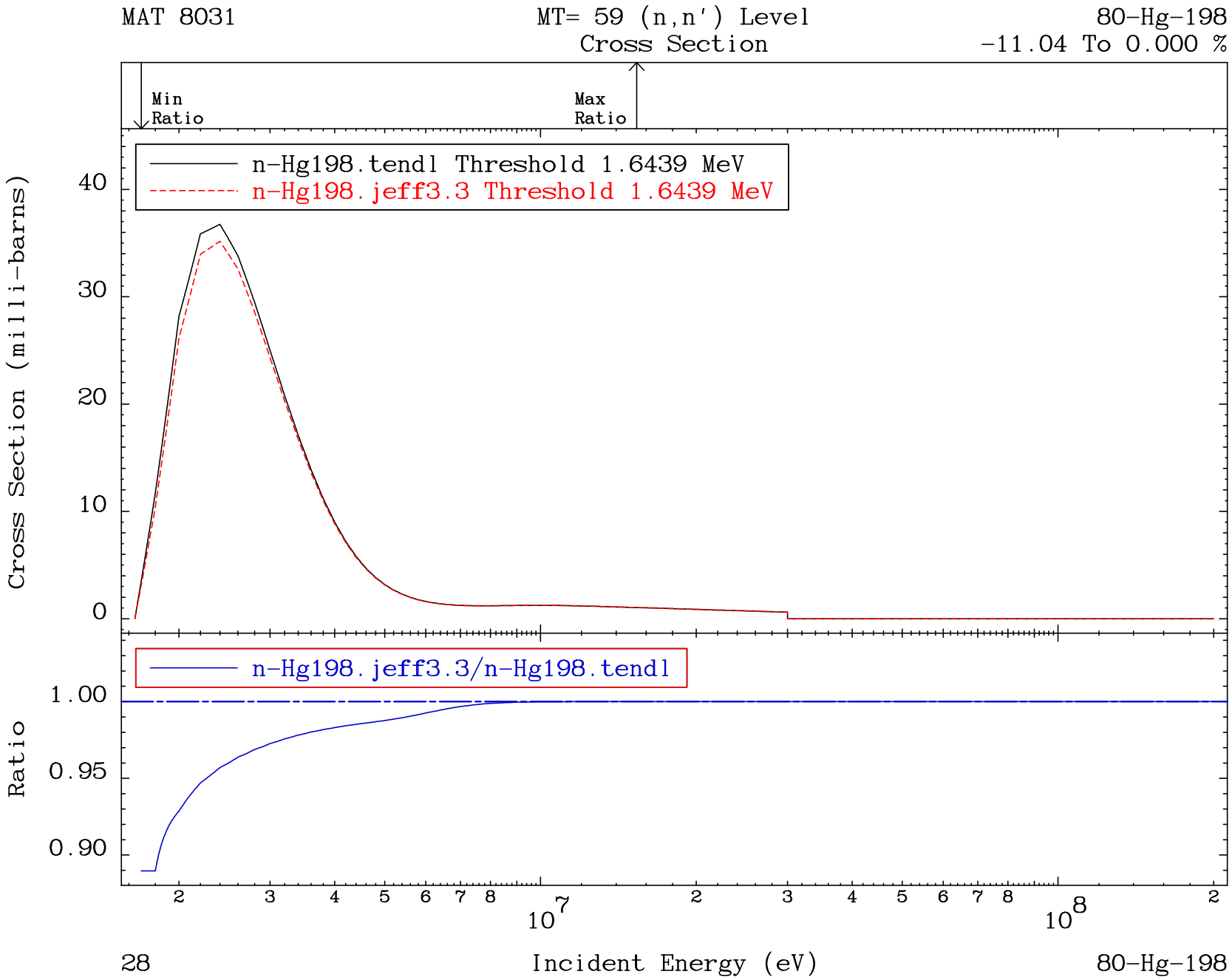

MAT 8031
MT= 54 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.4087 MeV
n-Hg198.jeff3.3 Threshold 1.4087 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
80-Hg-198

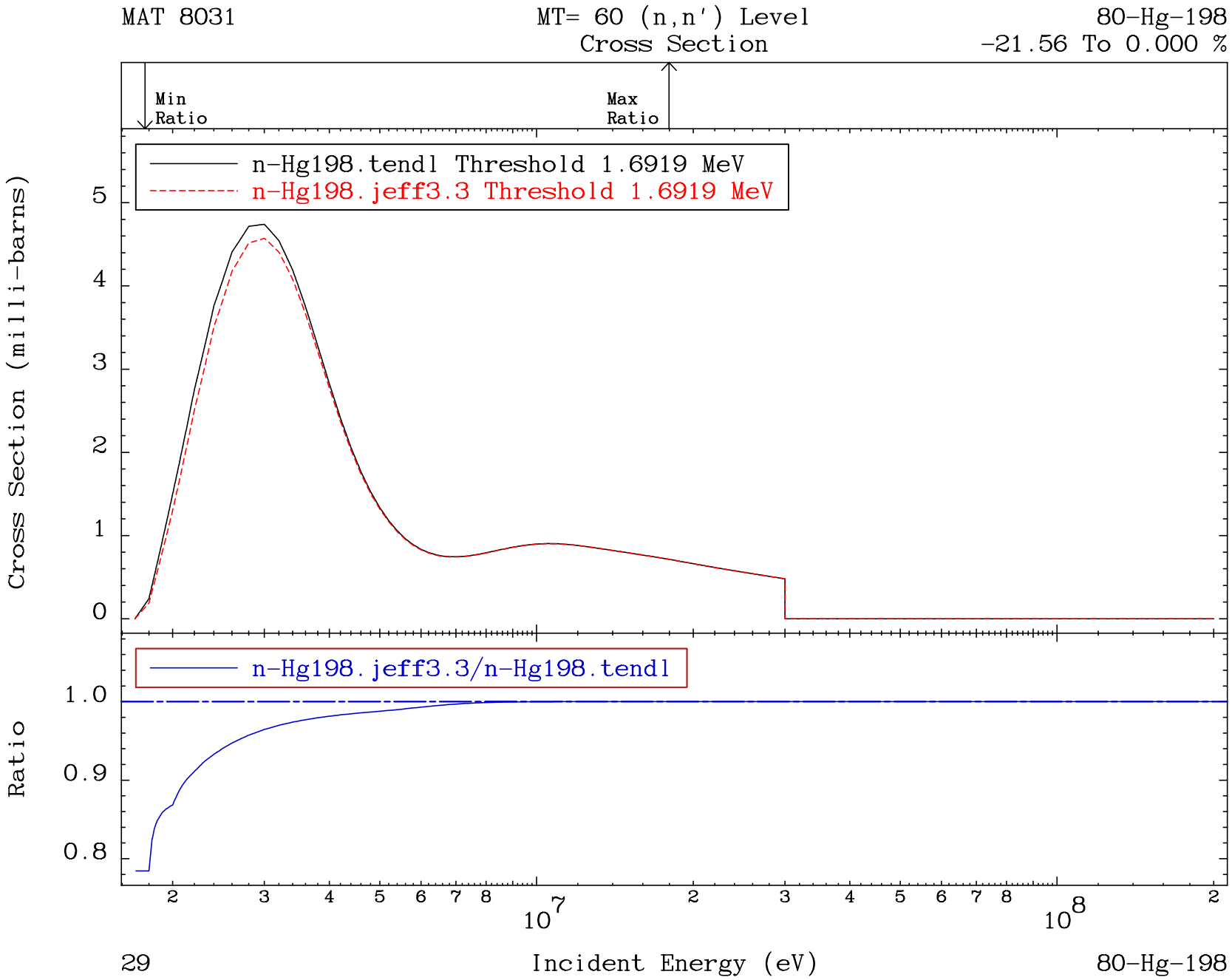

MAT 8031
MT= 55 (n,n') Level
Cross Section
80-Hg-198
-3.650 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.4266 MeV
n-Hg198.jeff3.3 Threshold 1.4266 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
80-Hg-198

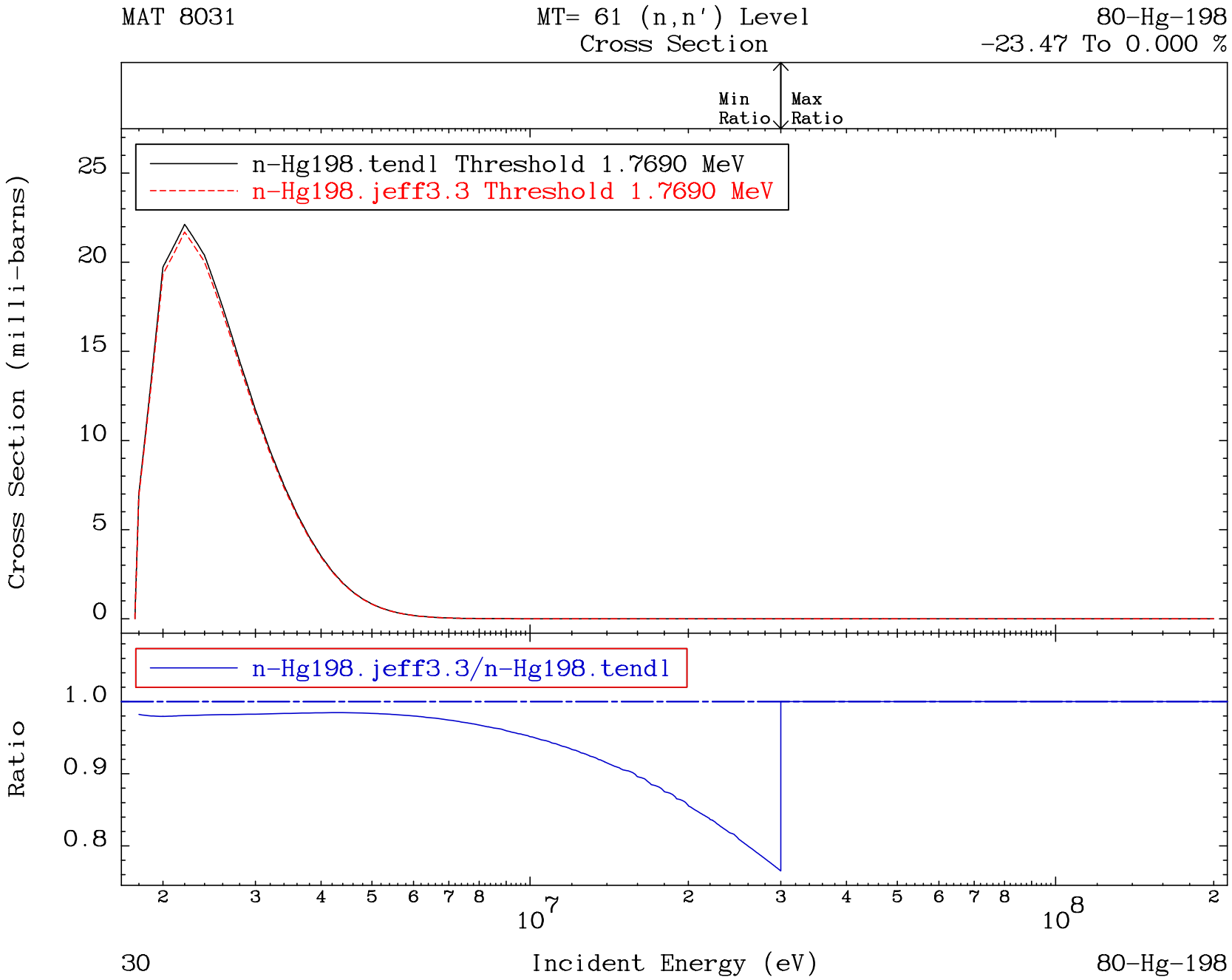

MAT 8031
MT= 56 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.5564 MeV
n-Hg198.jeff3.3 Threshold 1.5564 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
80-Hg-198

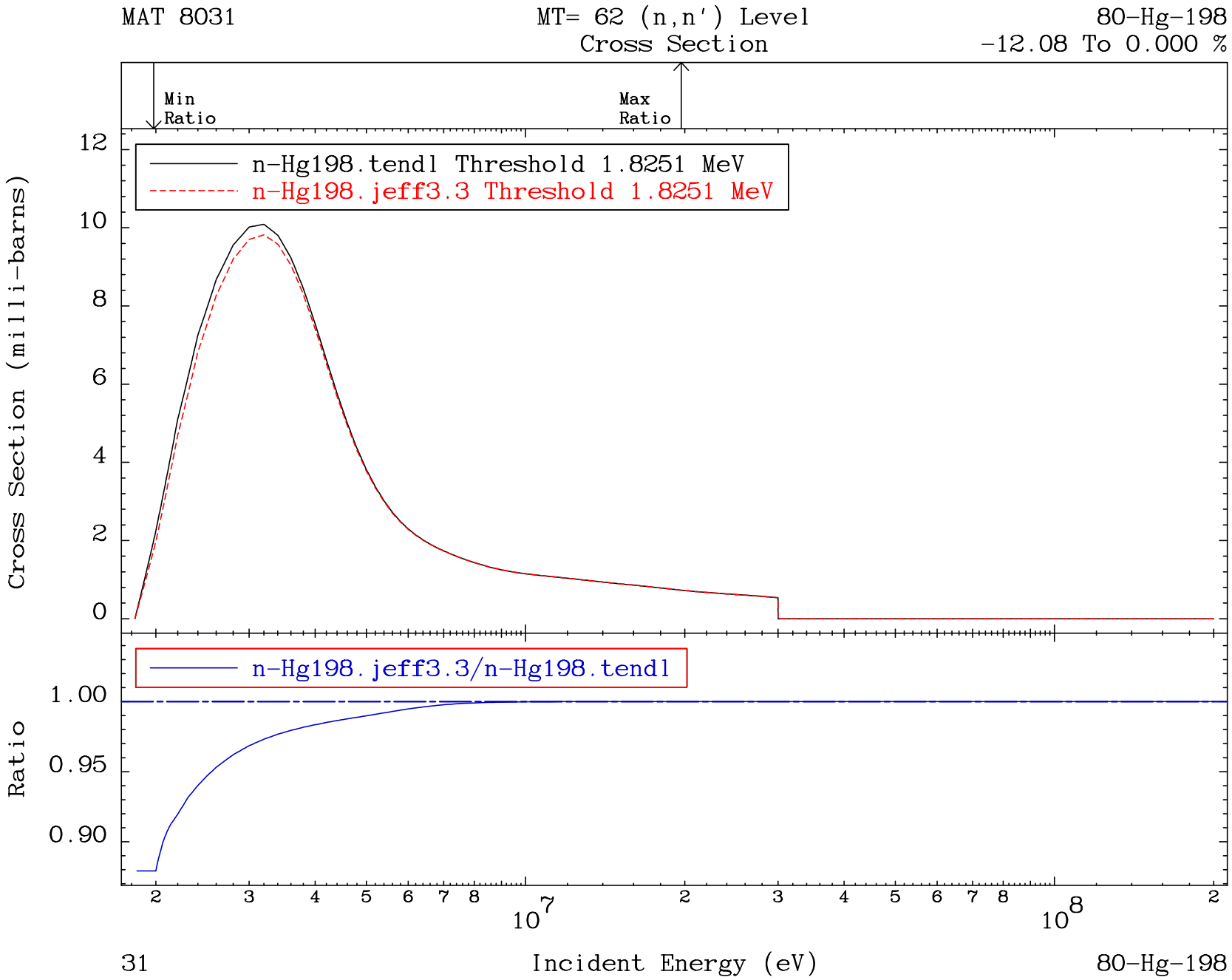

MAT 8031
MT= 57 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.5579 MeV
n-Hg198.jeff3.3 Threshold 1.5579 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
80-Hg-198

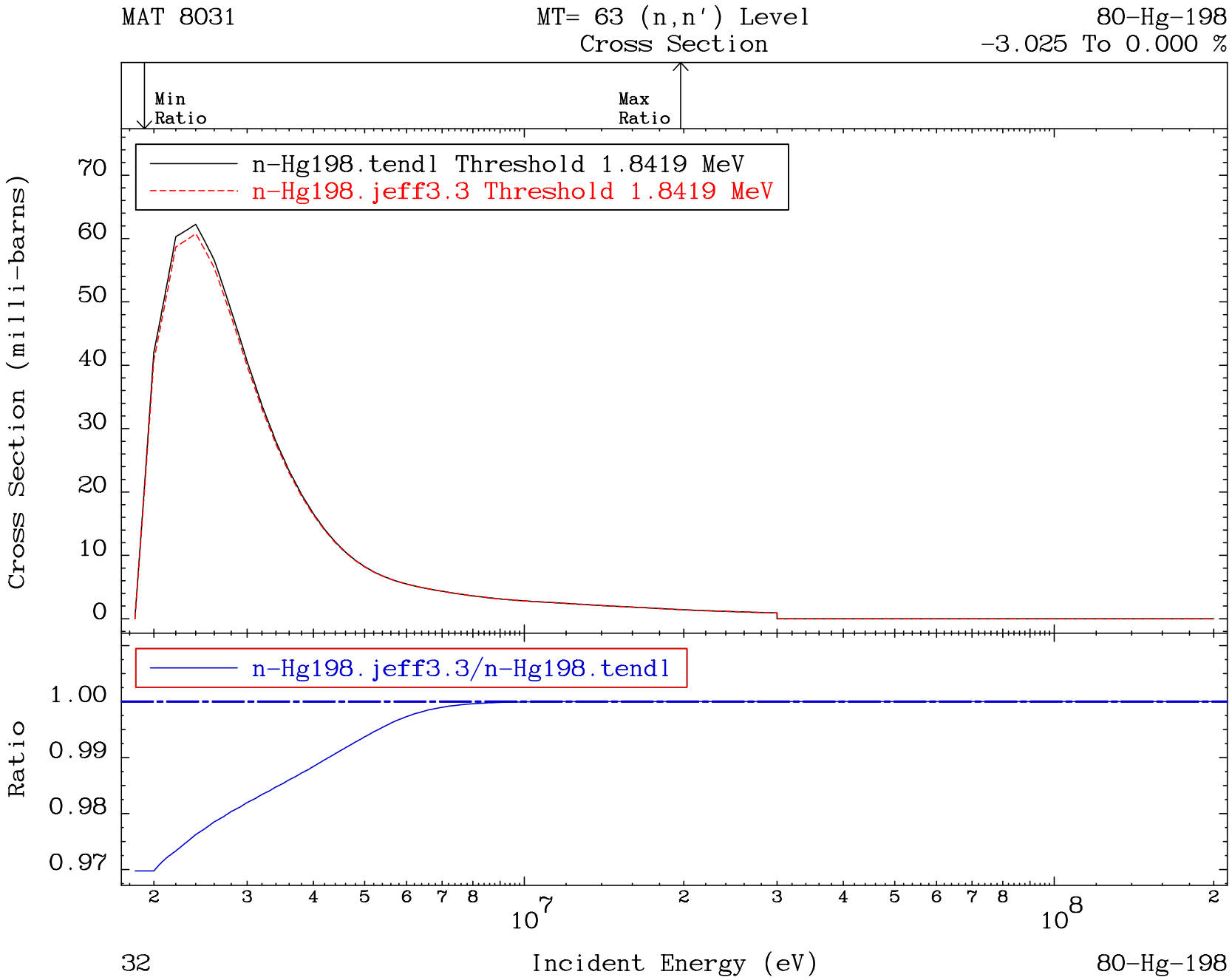

MAT 8031
MT= 58 (n,n') Level
Cross Section
80-Hg-198
-3.545 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.6207 MeV
n-Hg198.jeff3.3 Threshold 1.6207 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
80-Hg-198

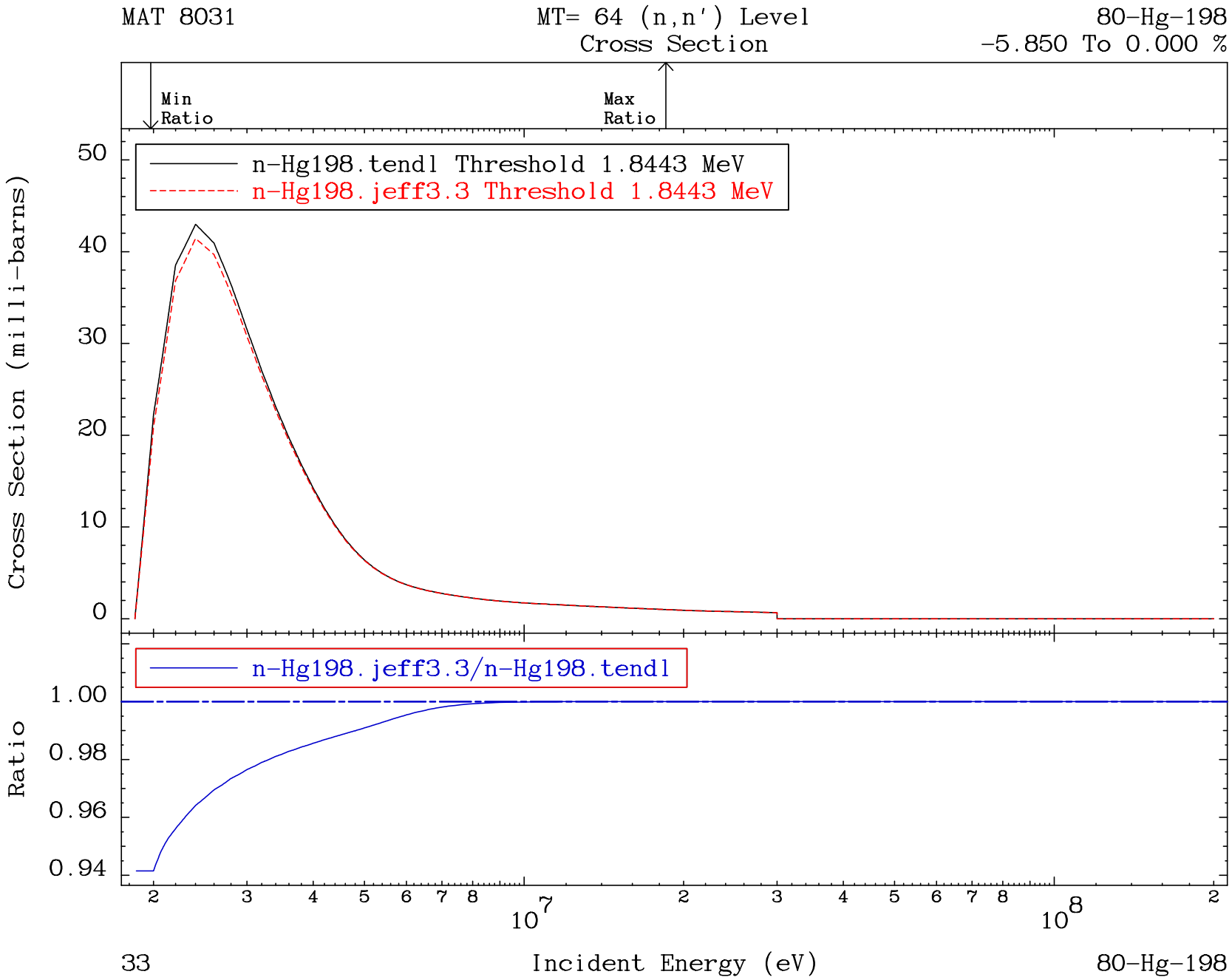

MAT 8031
MT= 59 (n,n') Level
Cross Section
80-Hg-198
-11.04 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.6439 MeV
n-Hg198.jeff3.3 Threshold 1.6439 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.95
0.90
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
80-Hg-198

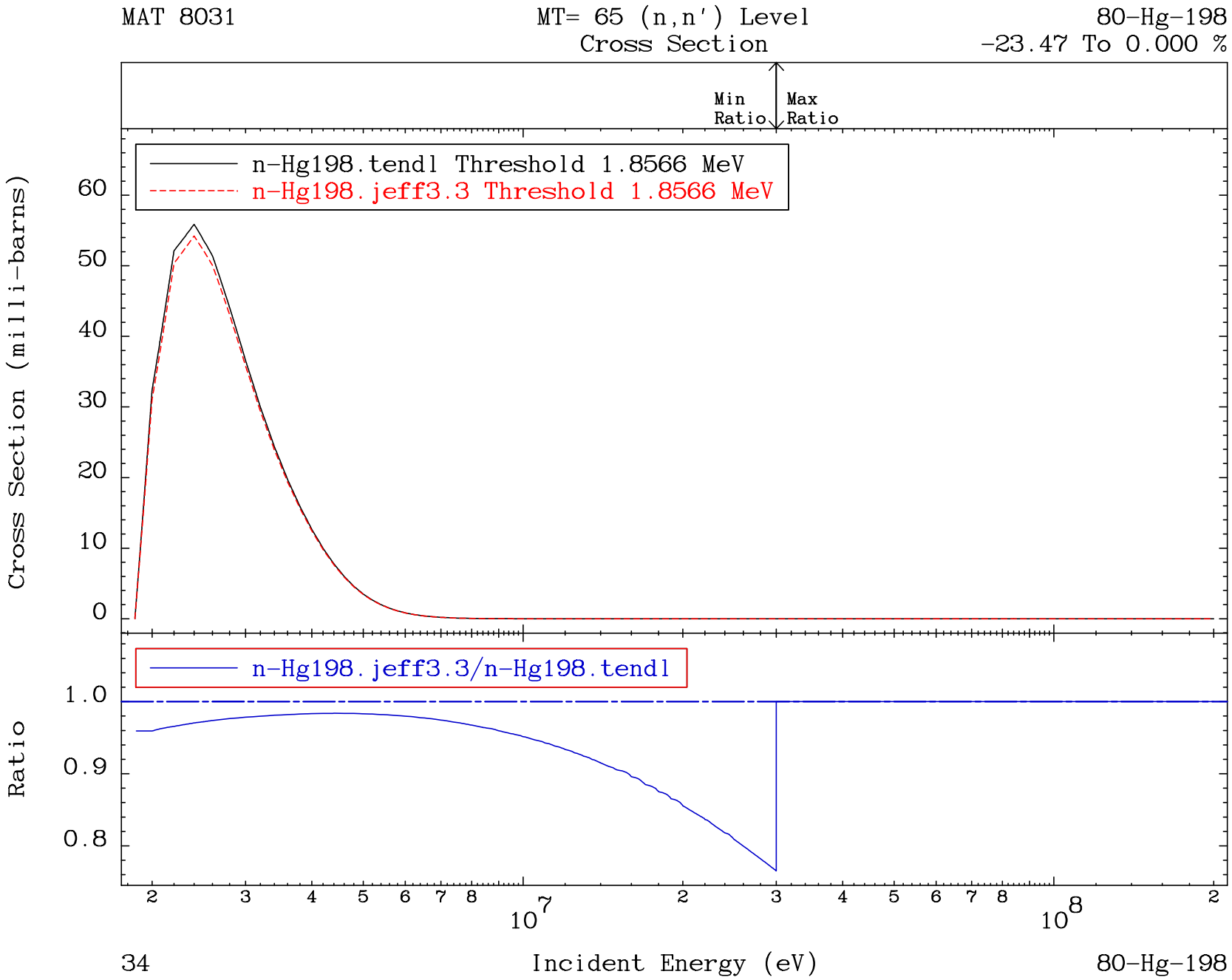

MAT 8031
MT= 60 (n,n') Level
Cross Section
80-Hg-198
-21.56 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.6919 MeV
n-Hg198.jeff3.3 Threshold 1.6919 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.8
0.9
1.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
80-Hg-198

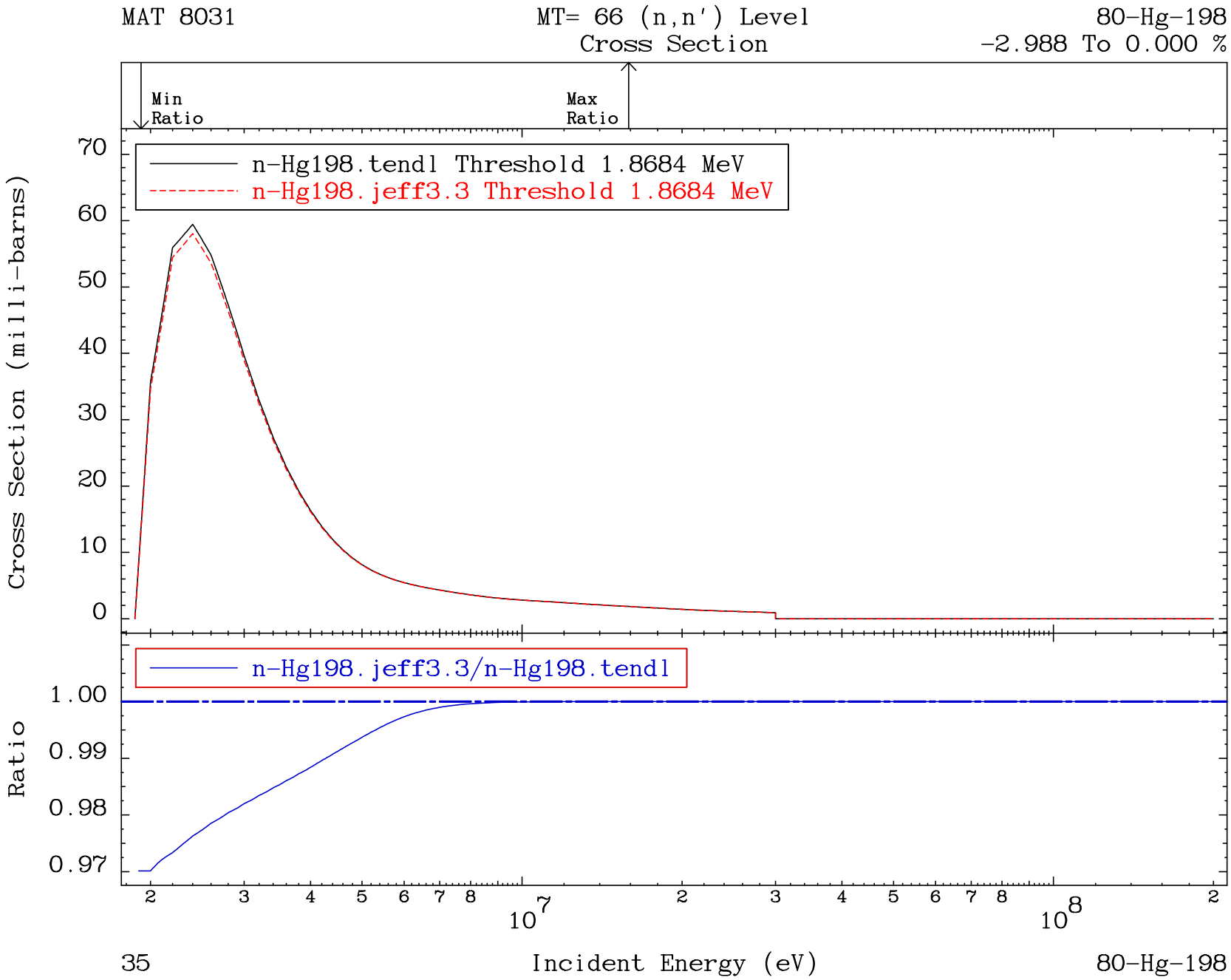

MAT 8031
MT= 61 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.7690 MeV
n-Hg198.jeff3.3 Threshold 1.7690 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
80-Hg-198

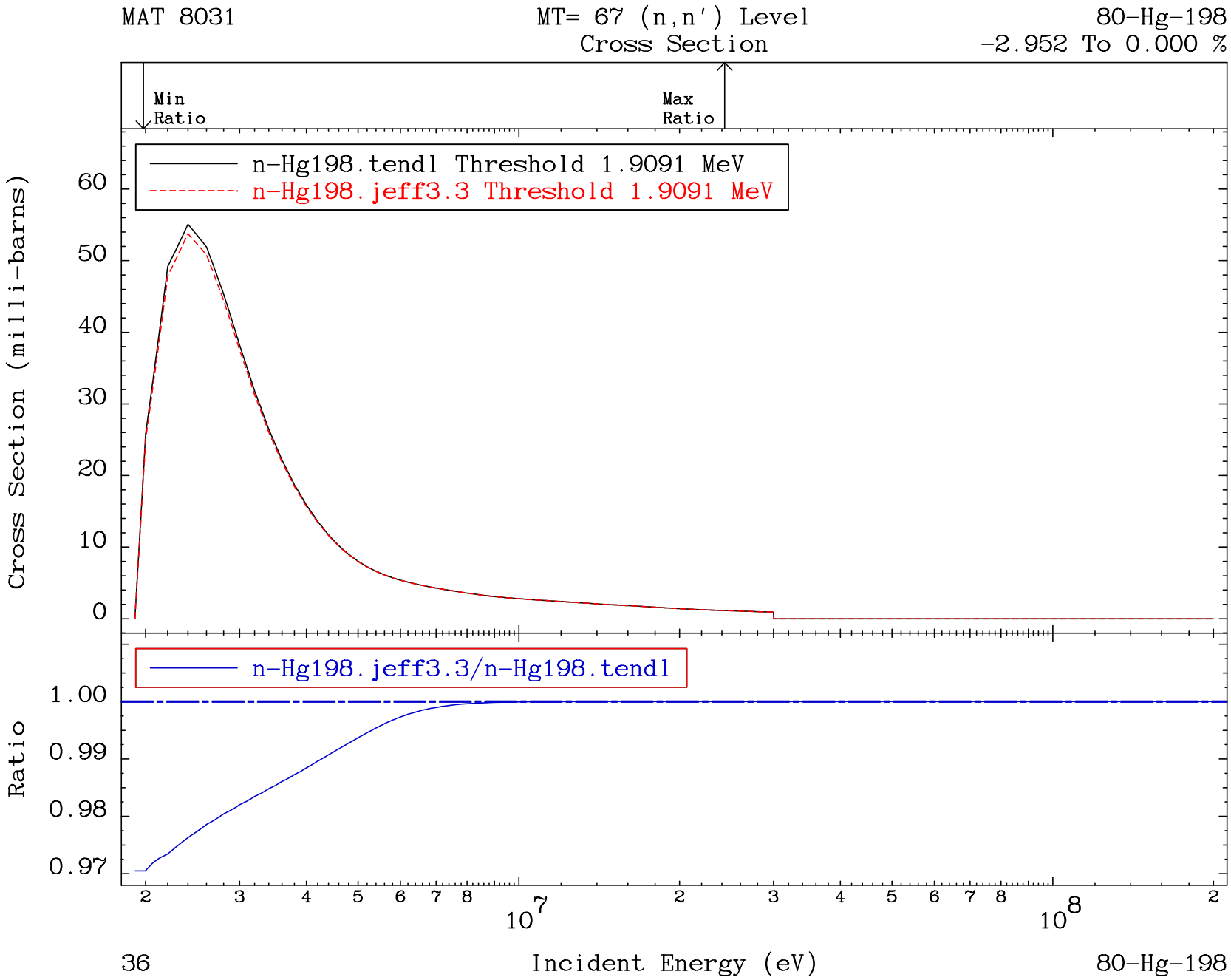

MAT 8031
MT= 62 (n,n') Level
Cross Section
80-Hg-198
-12.08 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.8251 MeV
n-Hg198.jeff3.3 Threshold 1.8251 MeV
Cross Section (milli-barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
31
80-Hg-198

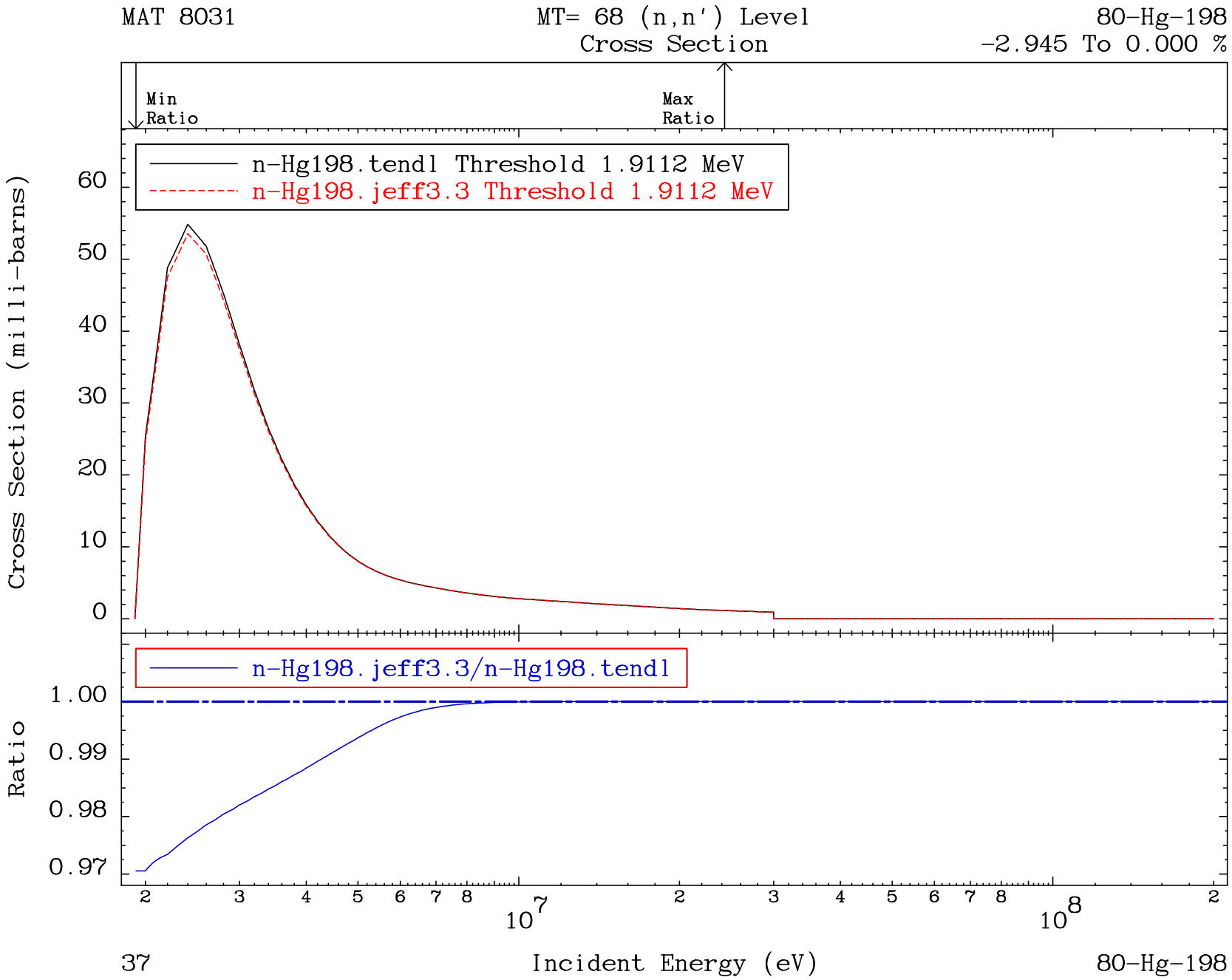

MAT 8031
MT= 63 (n,n') Level
Cross Section
80-Hg-198
-3.025 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.8419 MeV
n-Hg198.jeff3.3 Threshold 1.8419 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
0.97
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
80-Hg-198

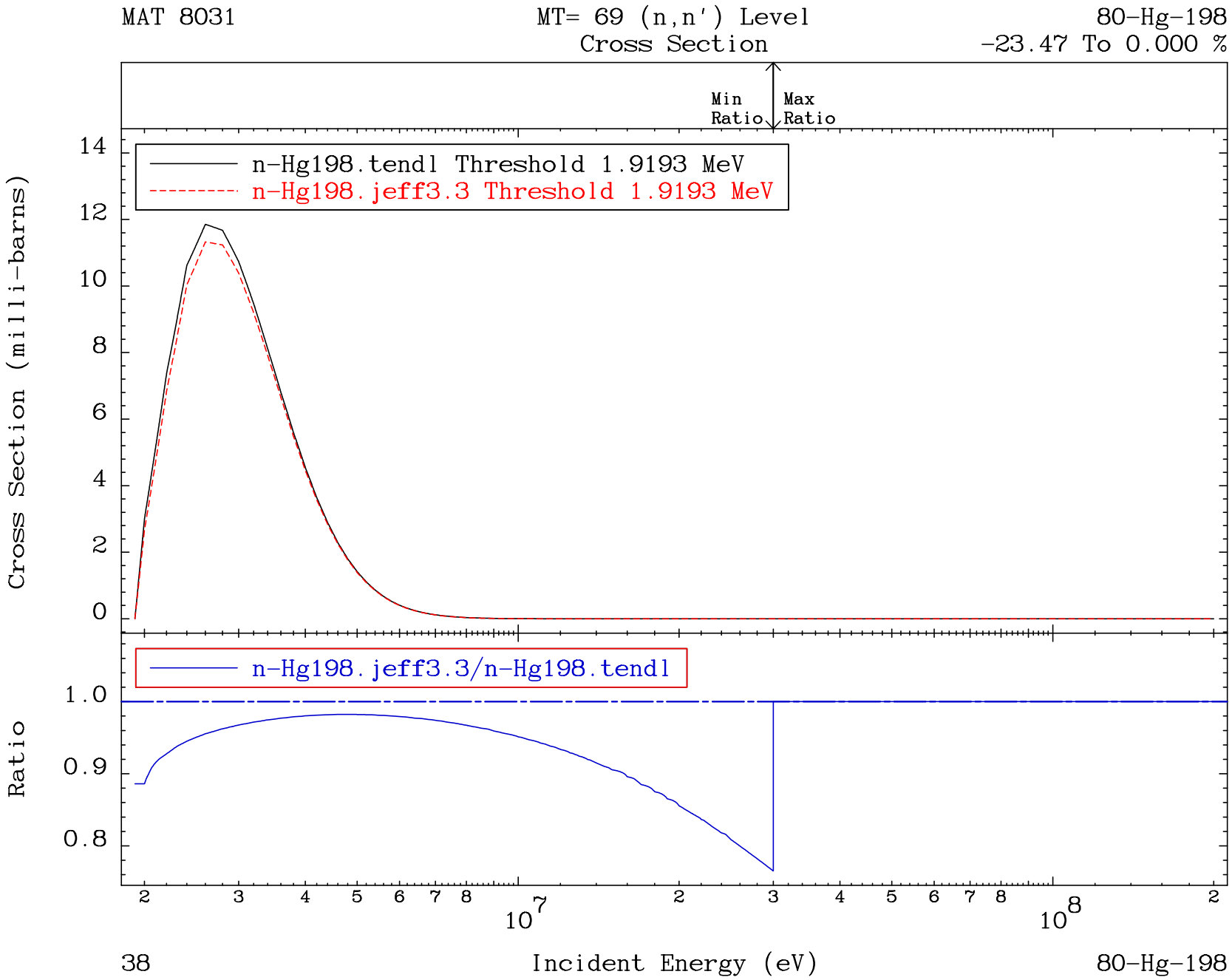

MAT 8031
MT= 64 (n,n') Level
Cross Section
80-Hg-198
-5.850 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.8443 MeV
n-Hg198.jeff3.3 Threshold 1.8443 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
0.96
0.94
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
80-Hg-198

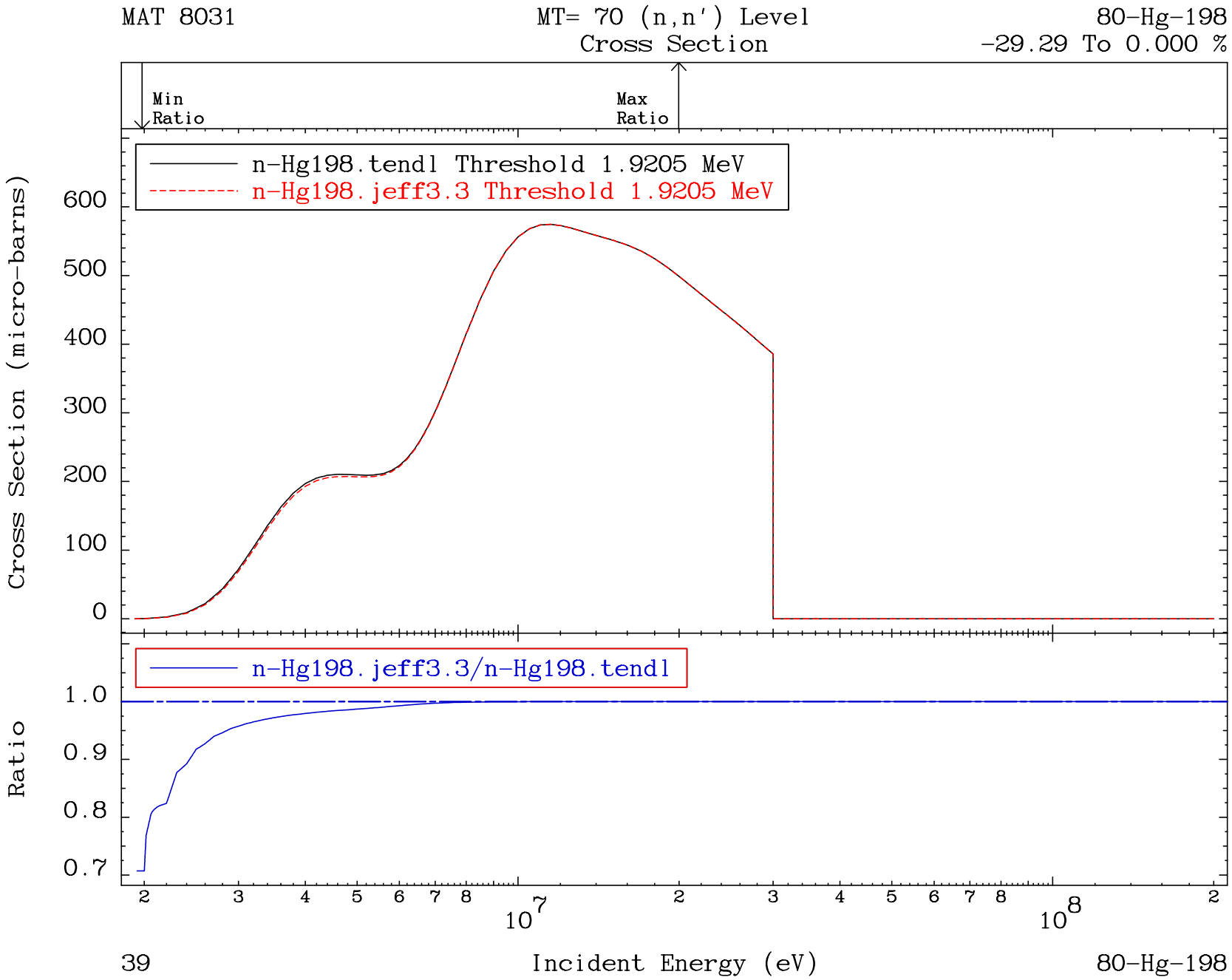

MAT 8031
MT= 65 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.8566 MeV
n-Hg198.jeff3.3 Threshold 1.8566 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
34
Incident Energy (eV)
80-Hg-198

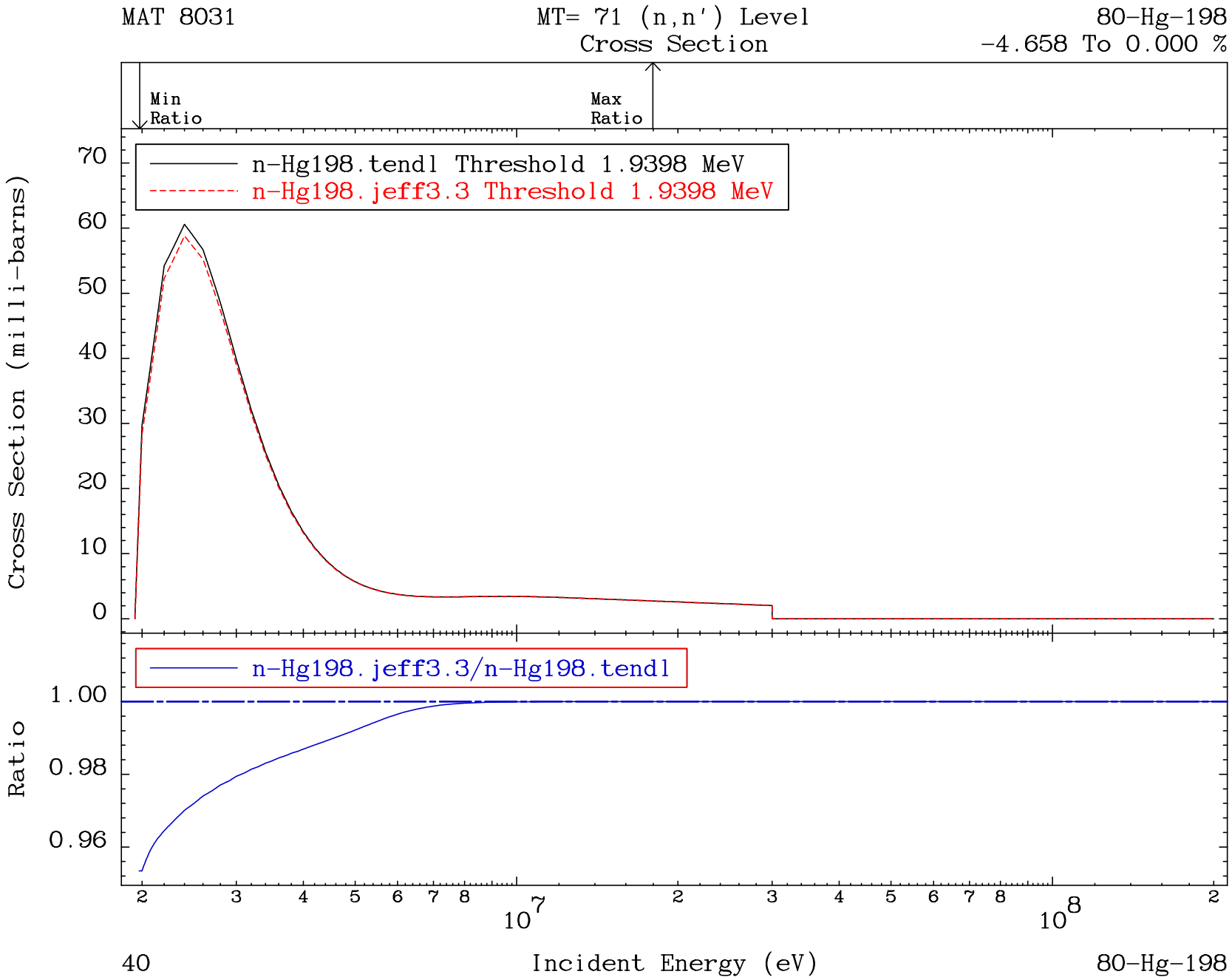

MAT 8031
MT= 66 (n,n') Level
Cross Section
80-Hg-198
-2.988 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.8684 MeV
n-Hg198.jeff3.3 Threshold 1.8684 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
0.97
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
35
Incident Energy (eV)
80-Hg-198

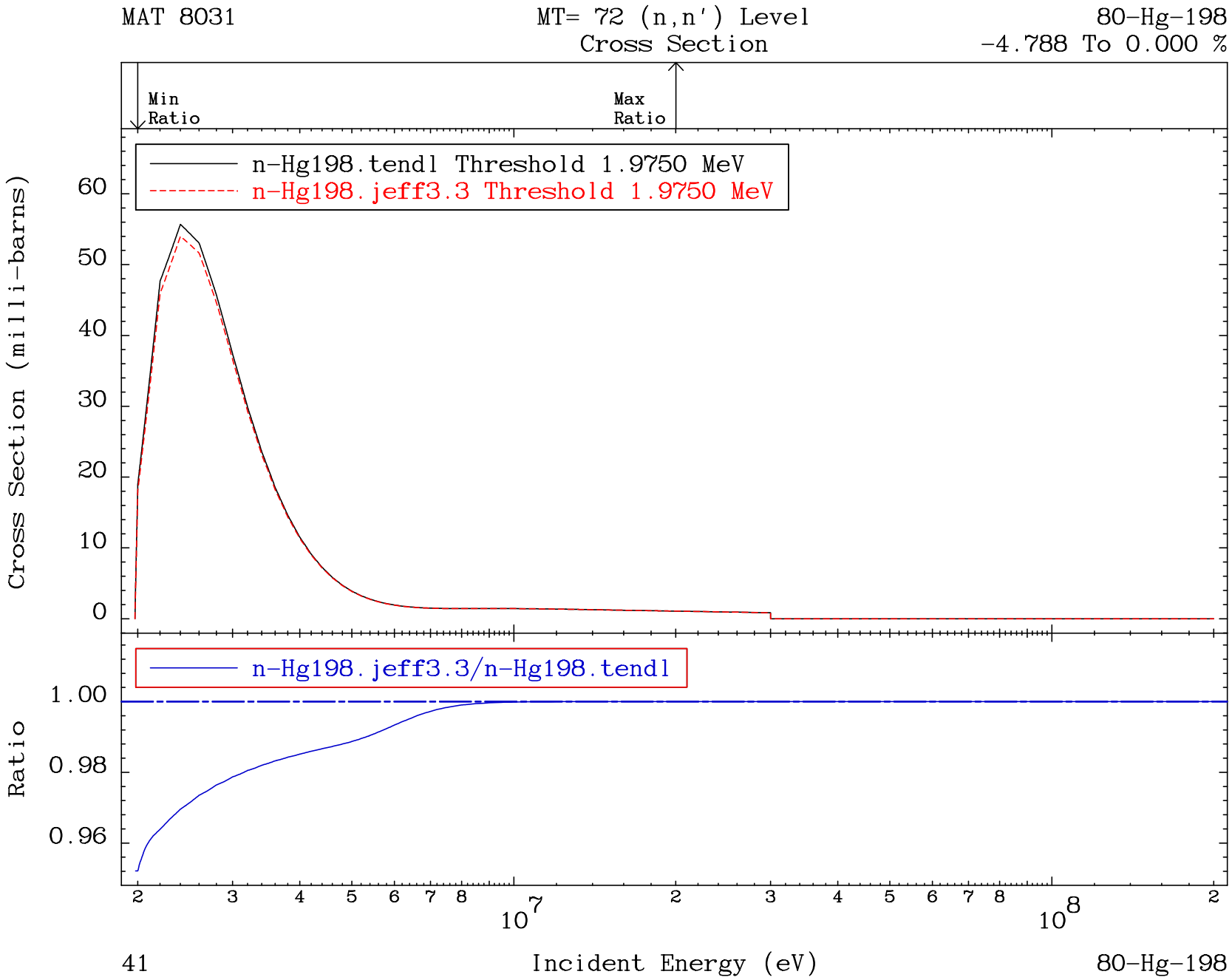

MAT 8031
MT= 67 (n,n') Level
Cross Section
80-Hg-198
-2.952 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.9091 MeV
n-Hg198.jeff3.3 Threshold 1.9091 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
0.97
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
36
Incident Energy (eV)
80-Hg-198

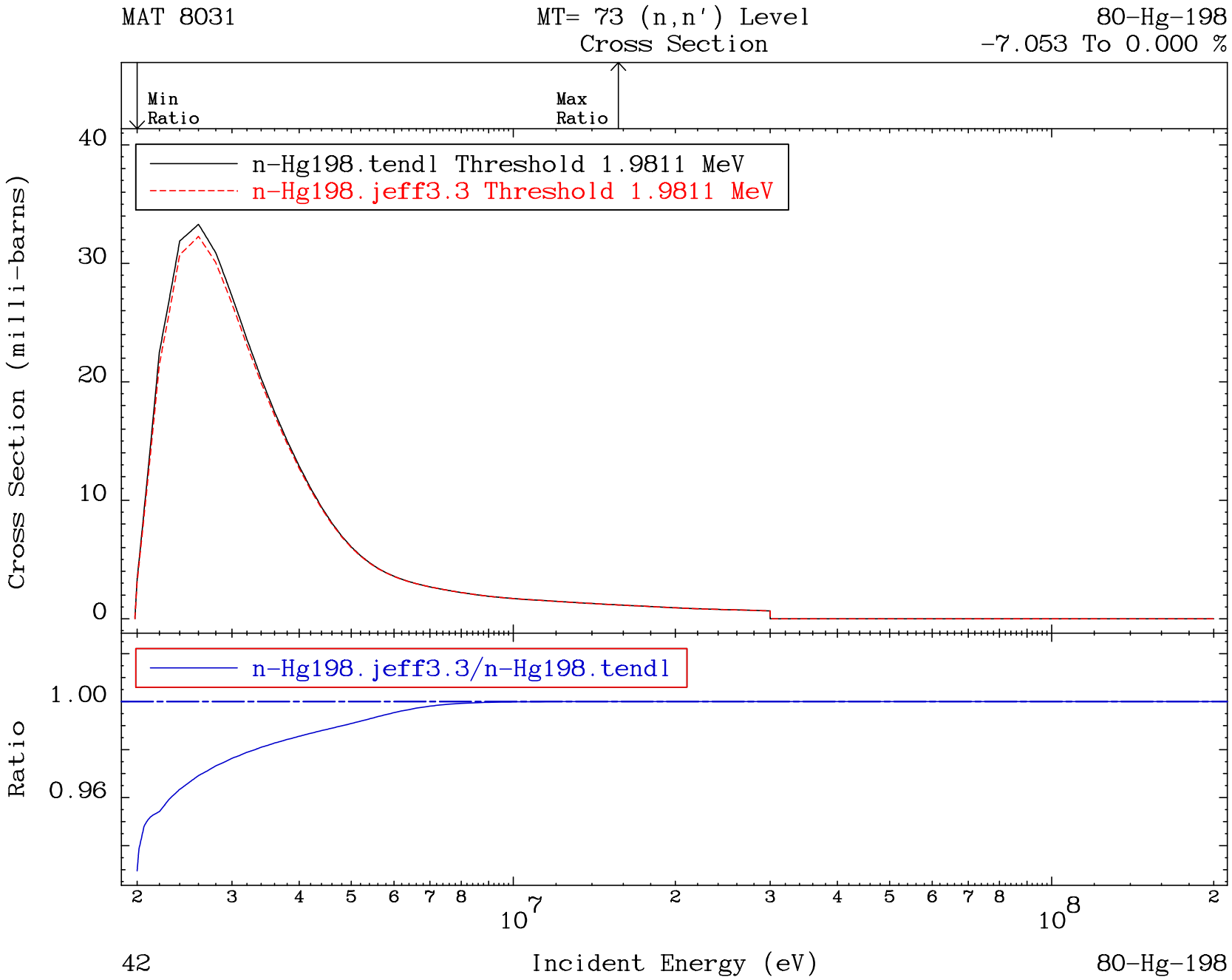

MAT 8031
MT= 68 (n,n') Level
Cross Section
80-Hg-198
-2.945 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.9112 MeV
n-Hg198.jeff3.3 Threshold 1.9112 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
0.97
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
80-Hg-198

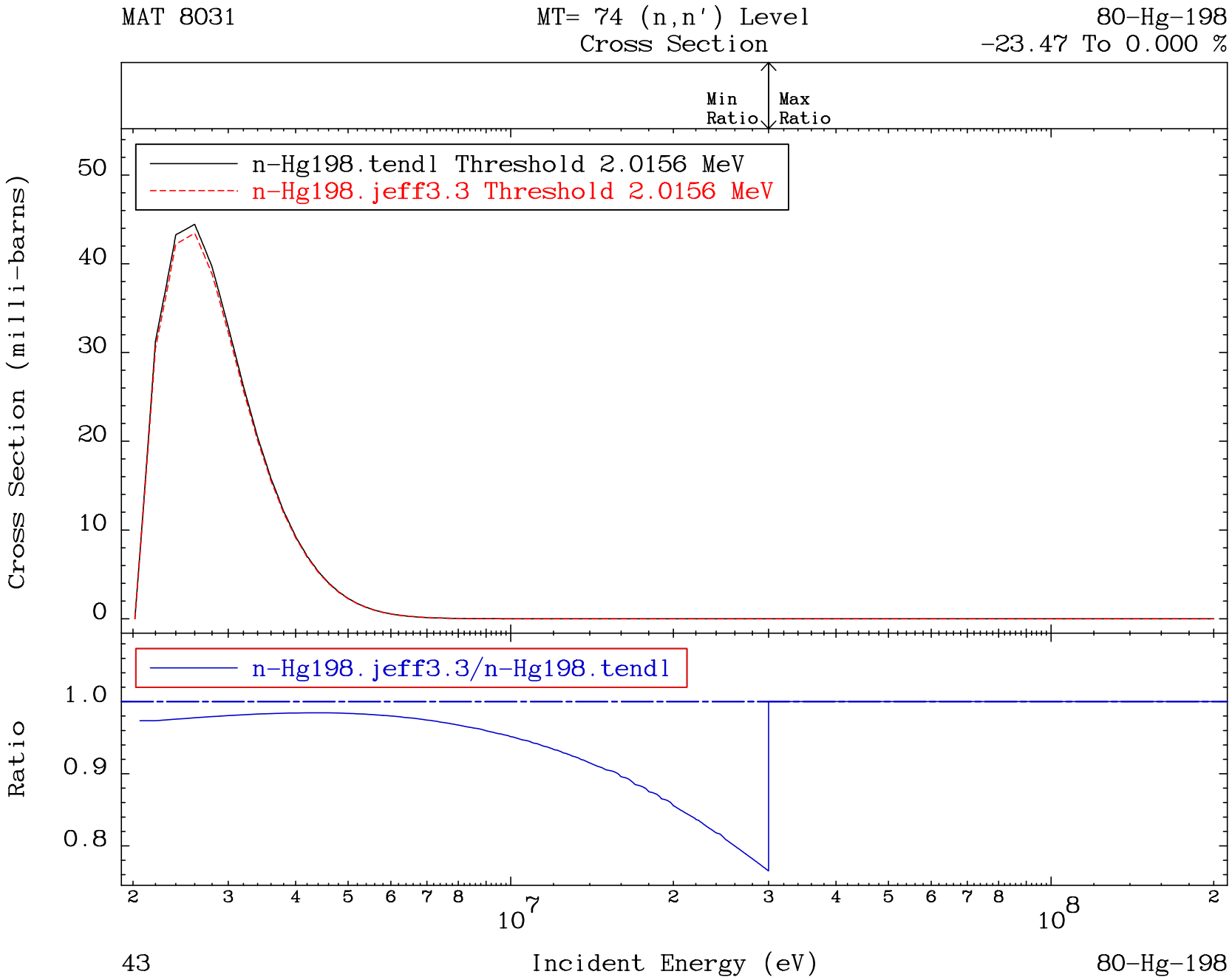

MAT 8031
MT= 69 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.9193 MeV
n-Hg198.jeff3.3 Threshold 1.9193 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
80-Hg-198

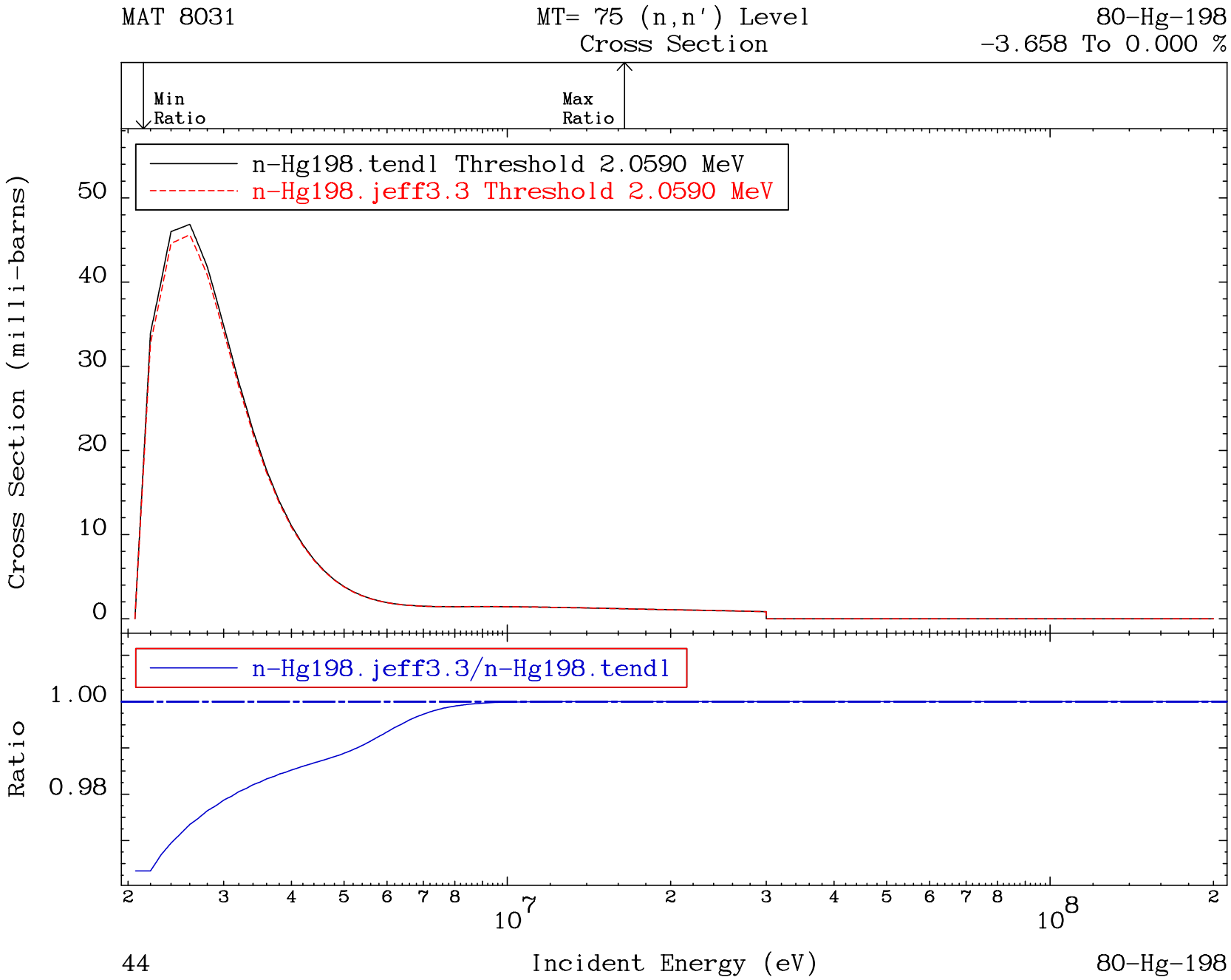

MAT 8031
MT= 70 (n,n') Level
Cross Section
80-Hg-198
-29.29 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 1.9205 MeV
n-Hg198.jeff3.3 Threshold 1.9205 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
0.7
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
80-Hg-198

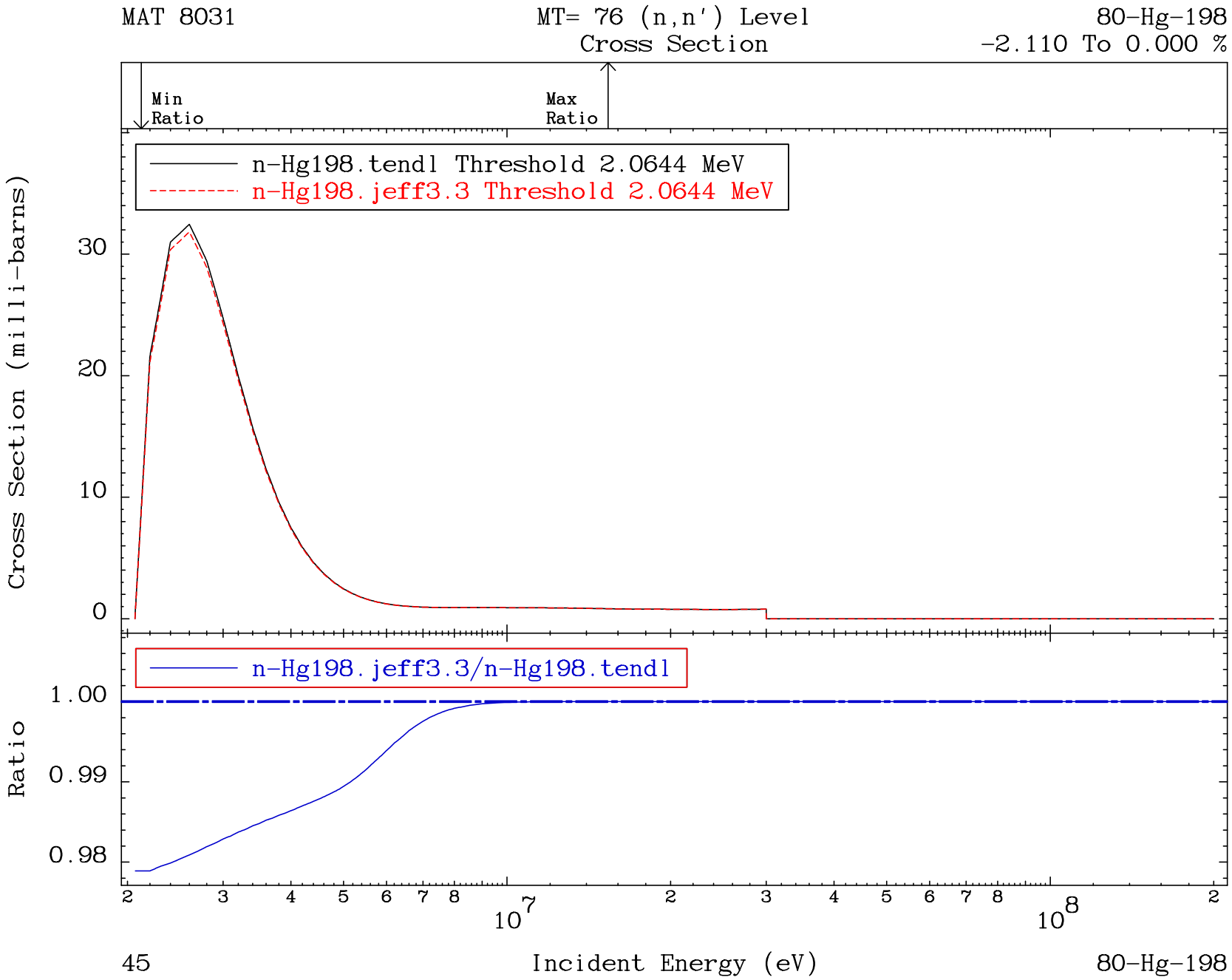

MAT 8031
MT= 71 (n,n') Level
Cross Section
80-Hg-198
-4.658 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.9398 MeV
n-Hg198.jeff3.3 Threshold 1.9398 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
40
Incident Energy (eV)
80-Hg-198

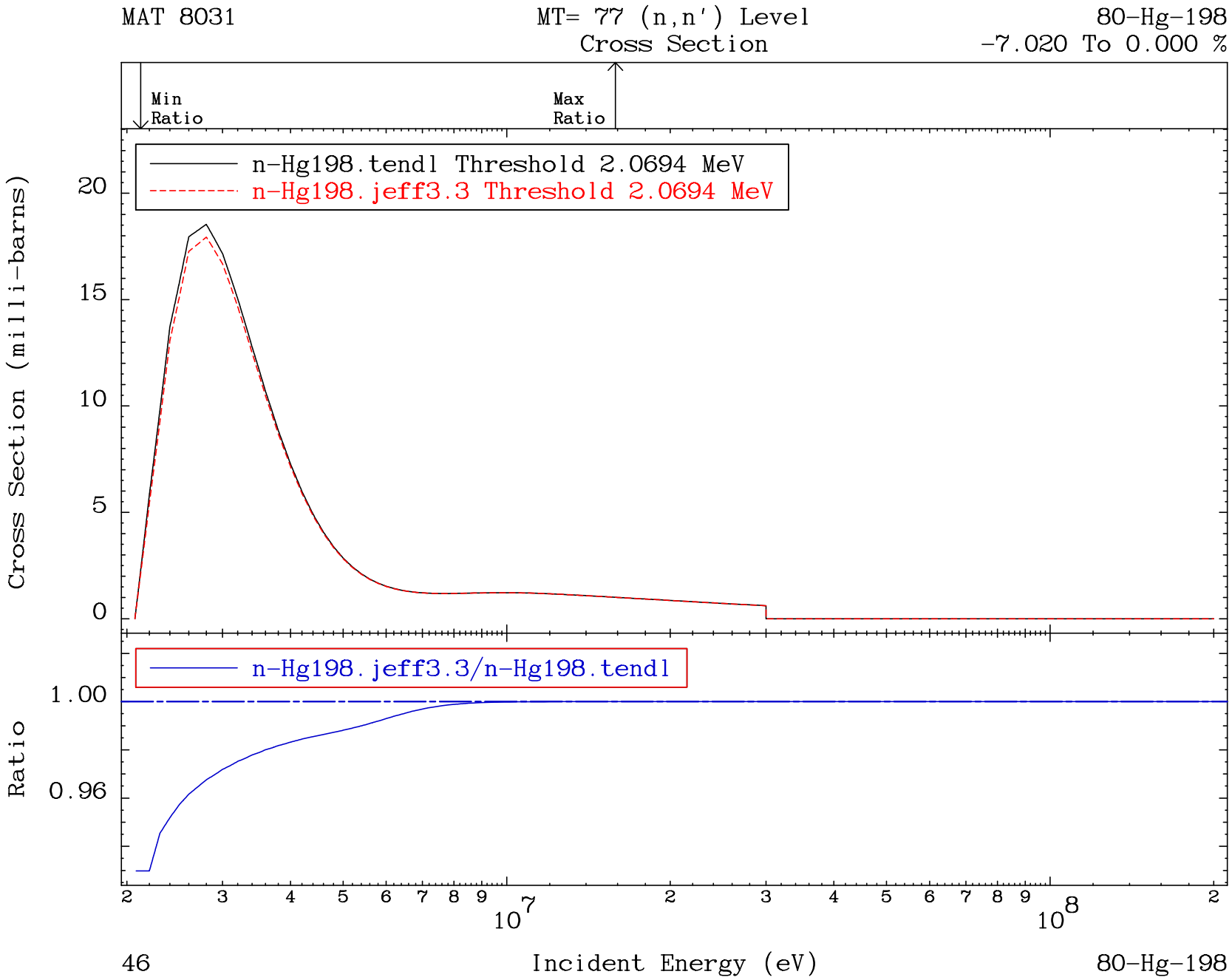

MAT 8031
MT= 72 (n,n') Level
Cross Section
80-Hg-198
-4.788 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.9750 MeV
n-Hg198.jeff3.3 Threshold 1.9750 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
41
Incident Energy (eV)
80-Hg-198

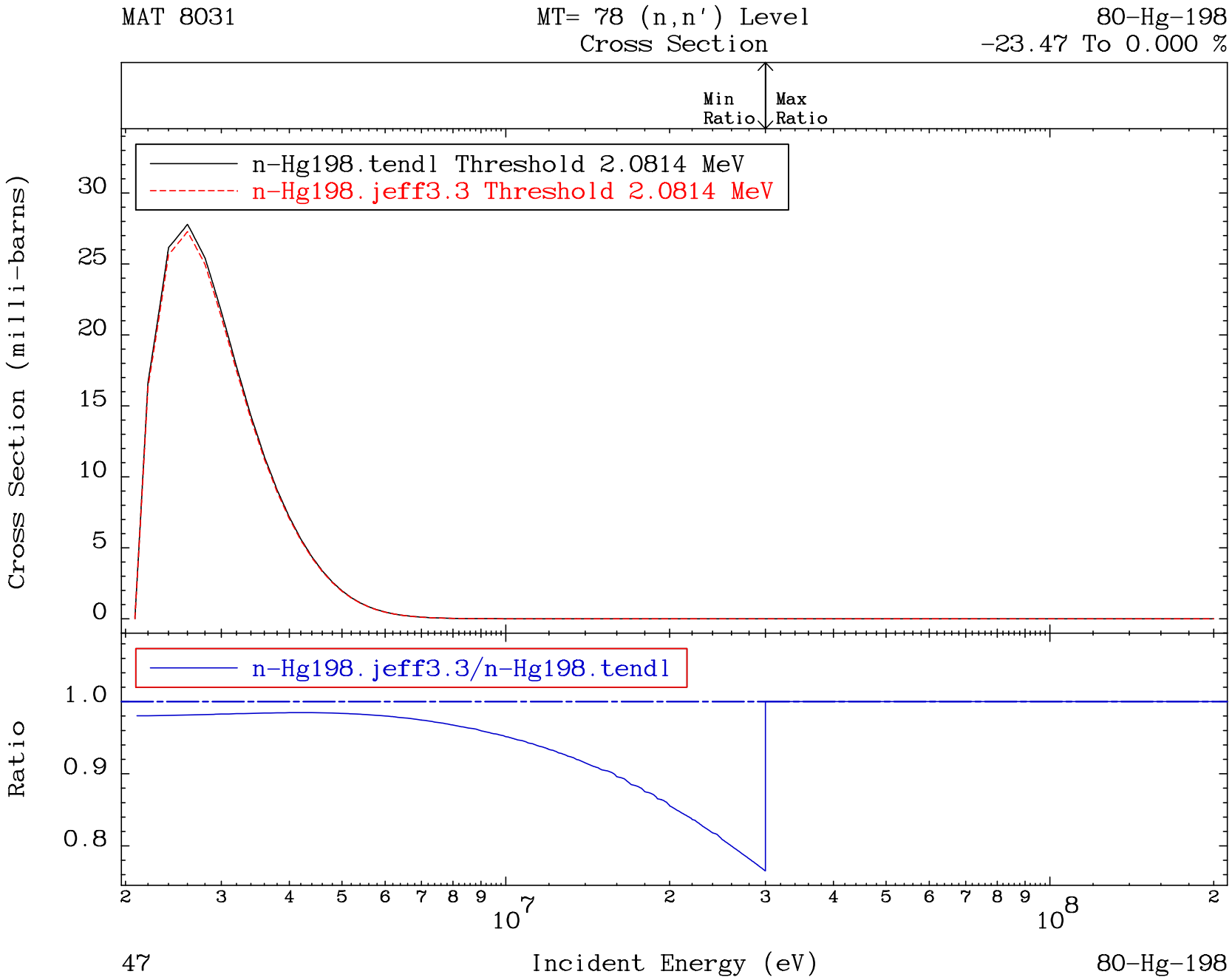

MAT 8031
MT= 73 (n,n') Level
Cross Section
80-Hg-198
-7.053 To 0.000 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 1.9811 MeV
n-Hg198.jeff3.3 Threshold 1.9811 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
42
Incident Energy (eV)
80-Hg-198

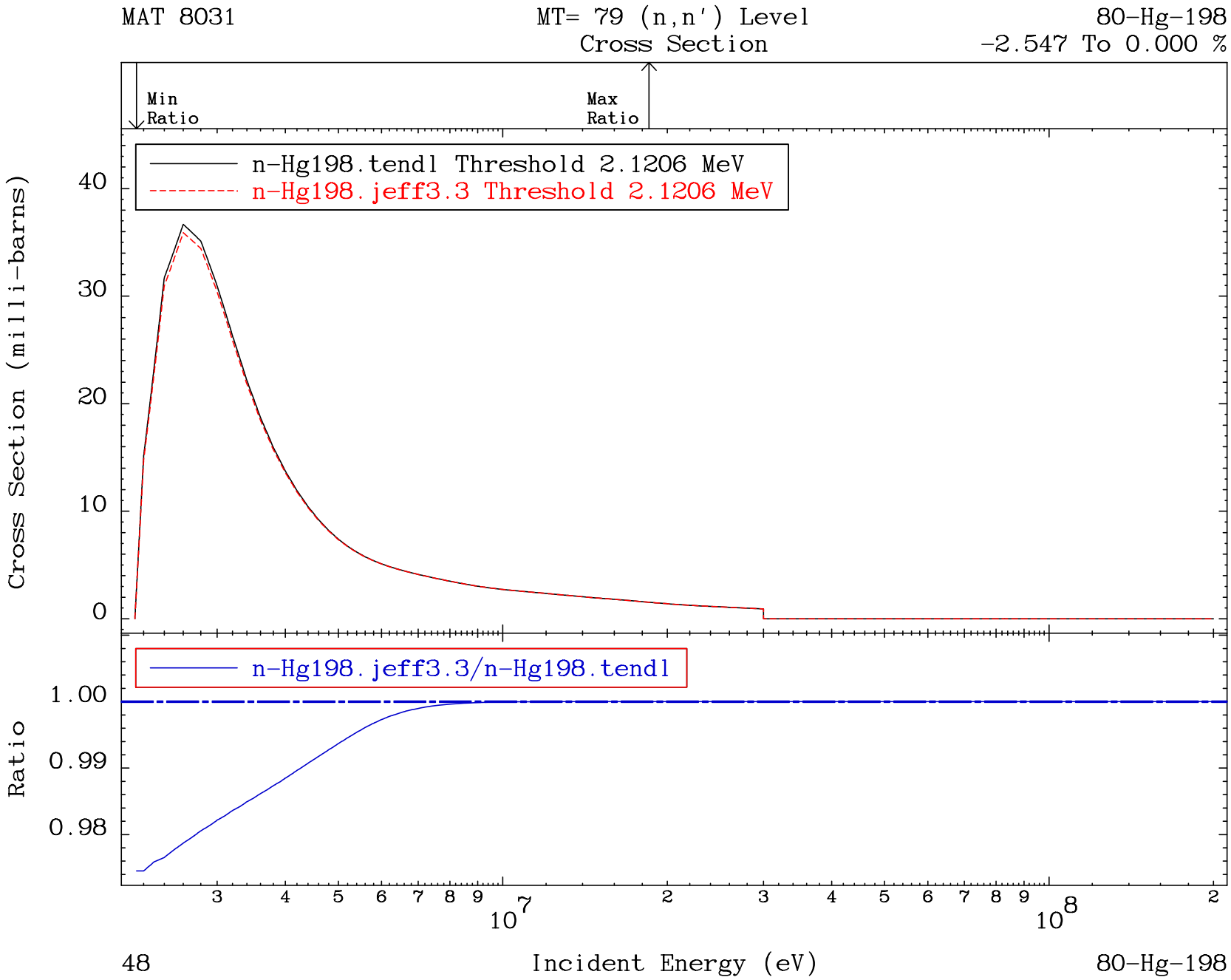

MAT 8031
MT= 74 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.0156 MeV
n-Hg198.jeff3.3 Threshold 2.0156 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
80-Hg-198

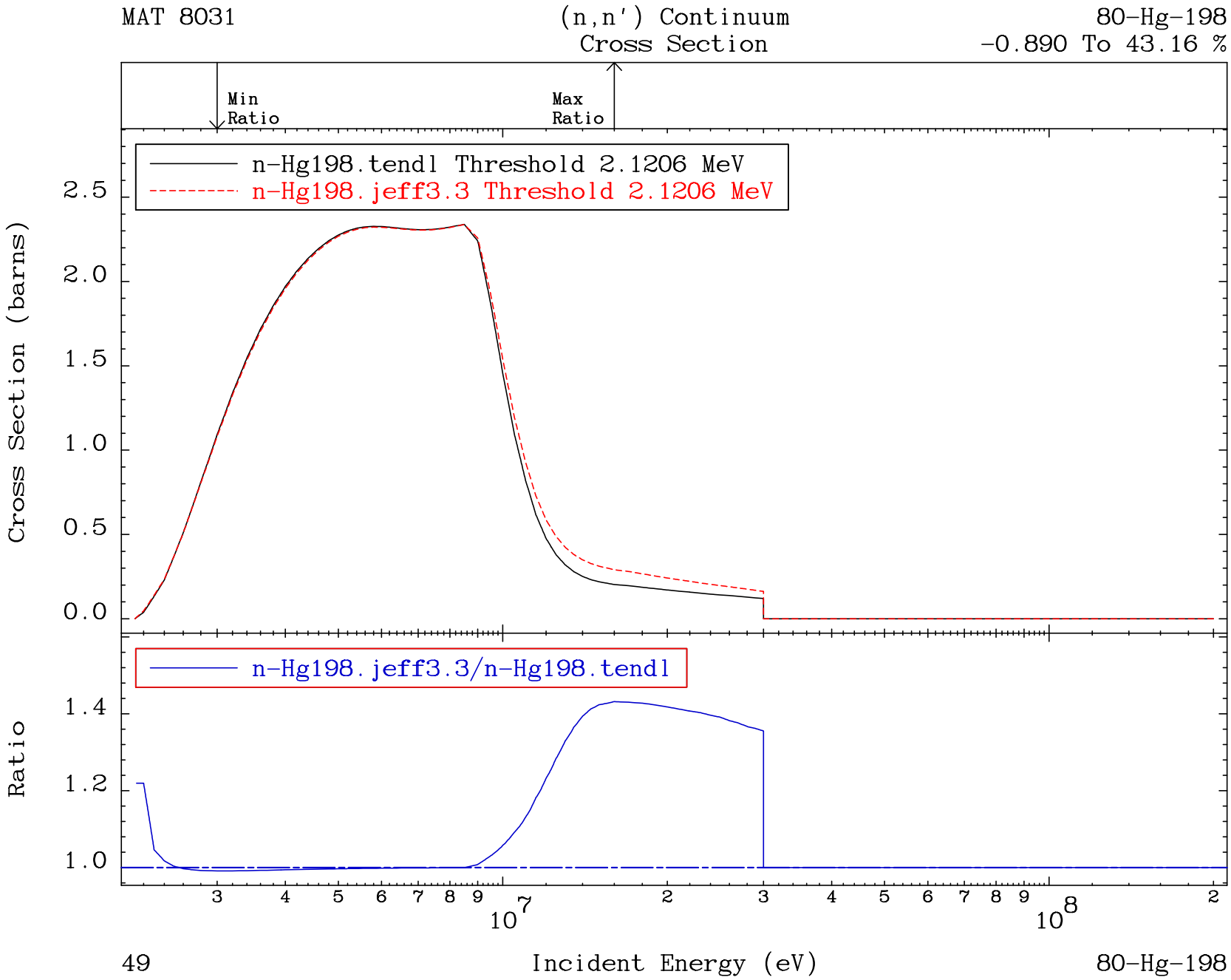

MAT 8031
MT= 75 (n,n') Level
Cross Section
80-Hg-198
-3.658 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.0590 MeV
n-Hg198.jeff3.3 Threshold 2.0590 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.98
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
44
Incident Energy (eV)
80-Hg-198

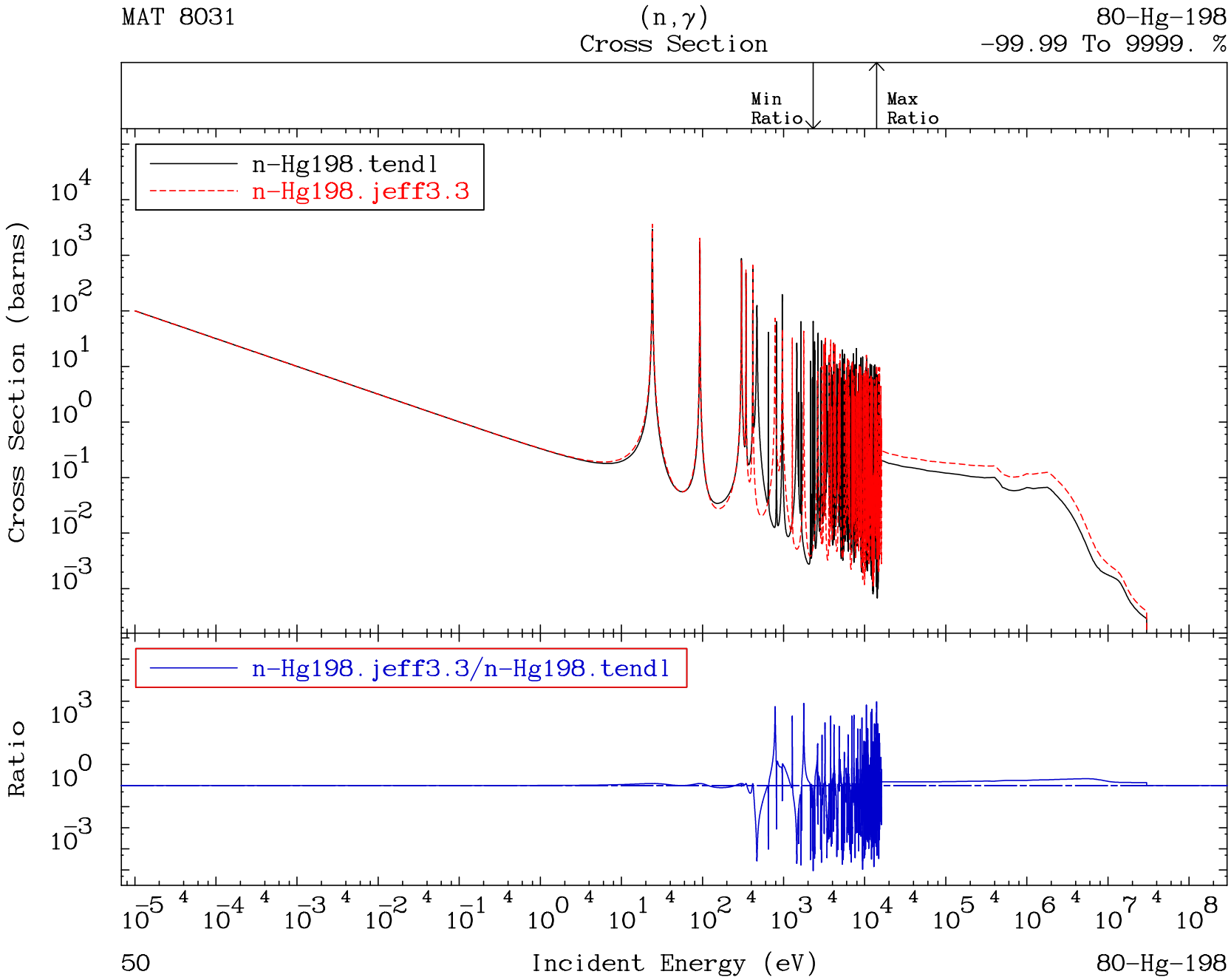

MAT 8031
MT= 76 (n,n') Level
Cross Section
80-Hg-198
-2.110 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.0644 MeV
n-Hg198.jeff3.3 Threshold 2.0644 MeV
Cross Section (milli-barns)
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
80-Hg-198

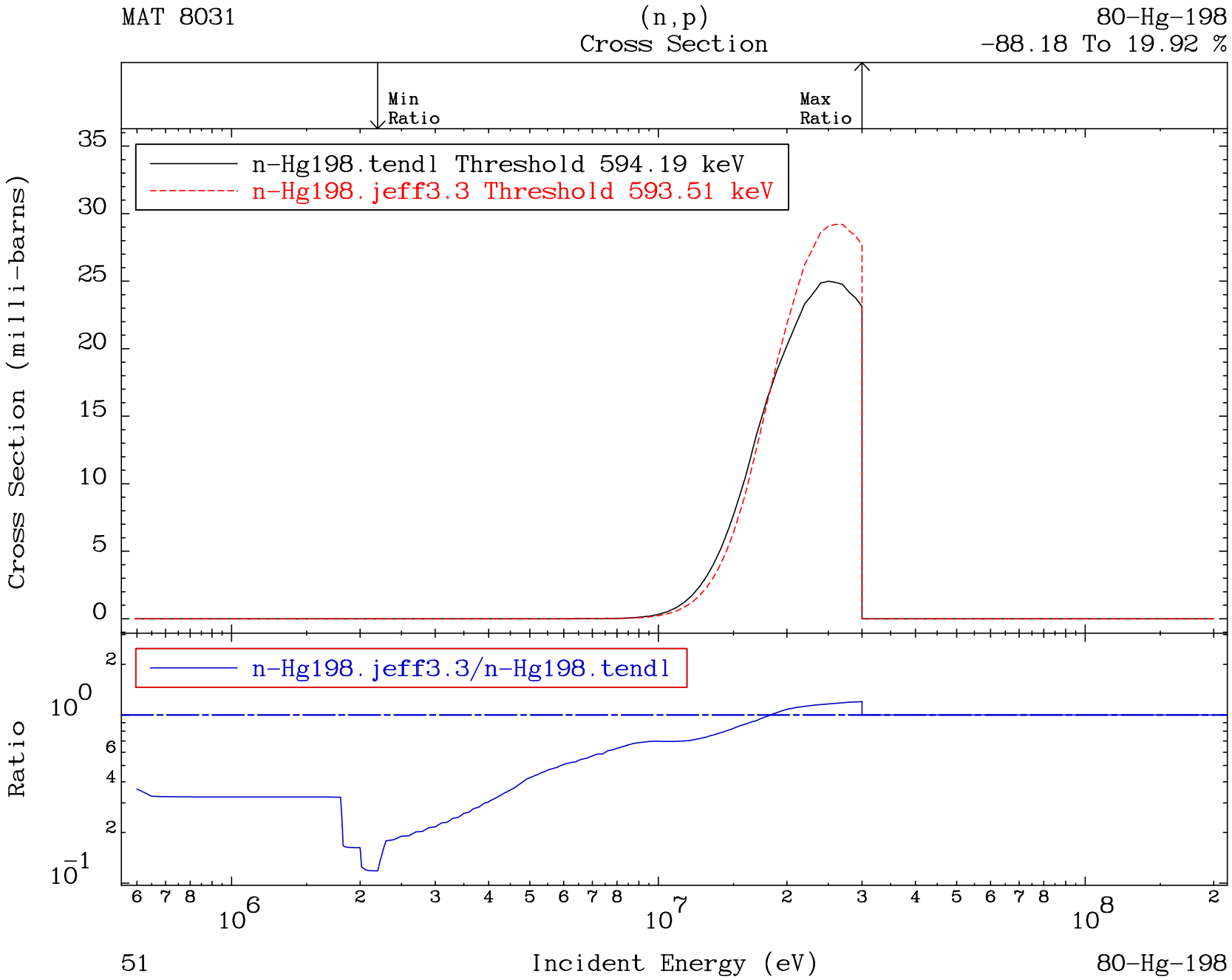

MAT 8031
MT= 77 (n,n') Level
Cross Section
80-Hg-198
-7.020 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.0694 MeV
n-Hg198.jeff3.3 Threshold 2.0694 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.96
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
80-Hg-198

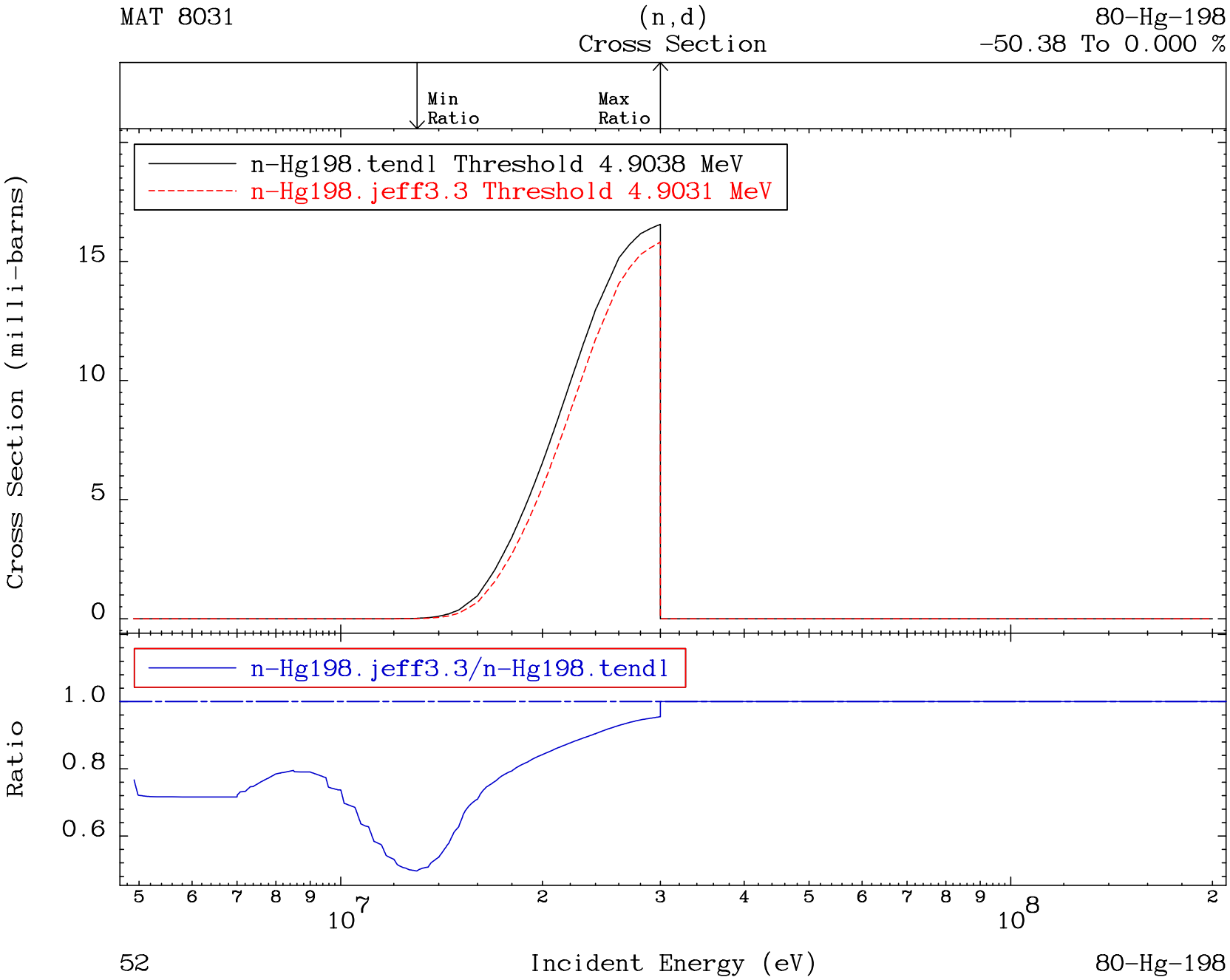

MAT 8031
MT= 78 (n,n') Level
Cross Section
80-Hg-198
-23.47 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.0814 MeV
n-Hg198.jeff3.3 Threshold 2.0814 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
80-Hg-198

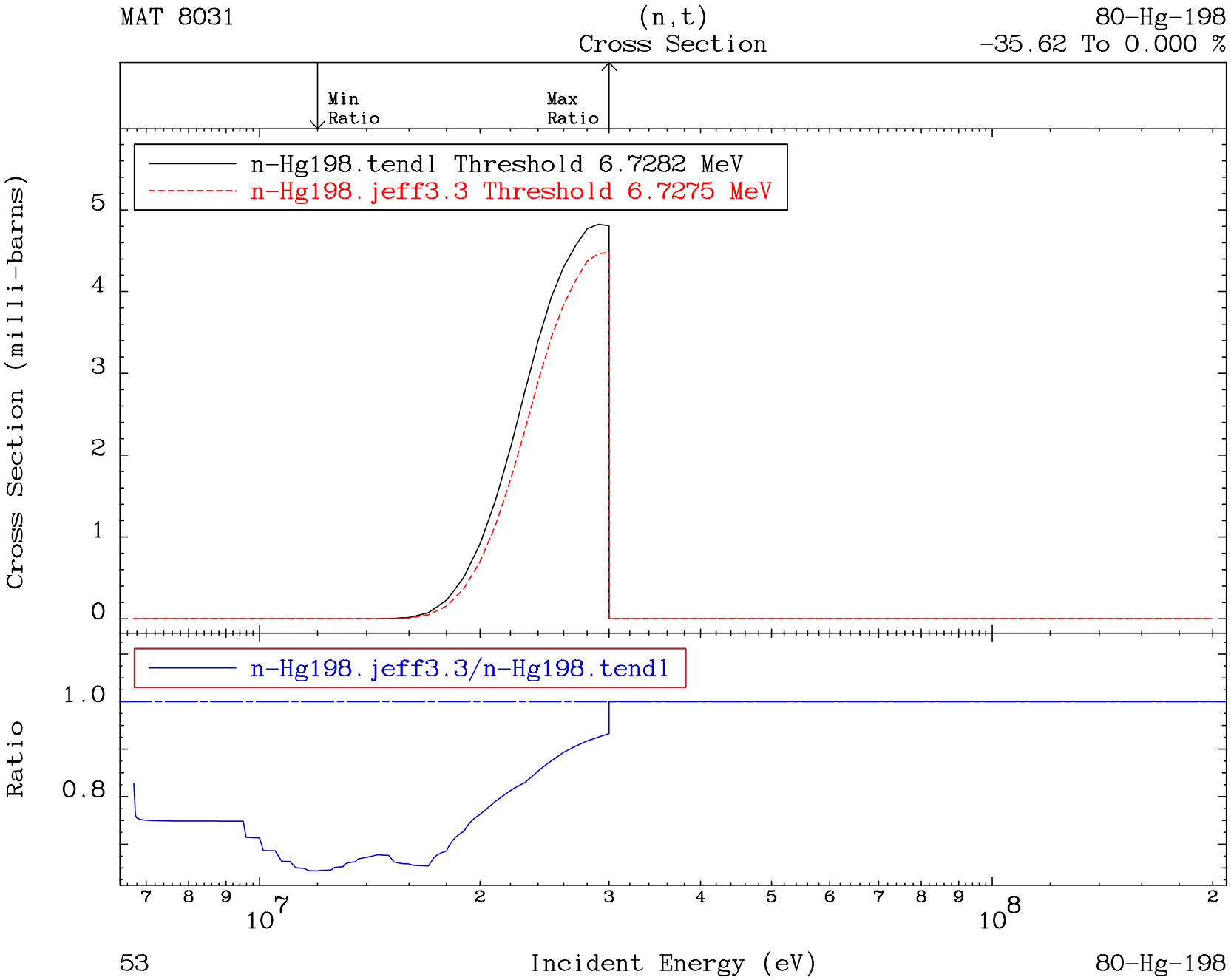

MAT 8031
MT= 79 (n,n') Level
Cross Section
80-Hg-198
-2.547 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.1206 MeV
n-Hg198.jeff3.3 Threshold 2.1206 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.00
0.99
0.98
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
80-Hg-198

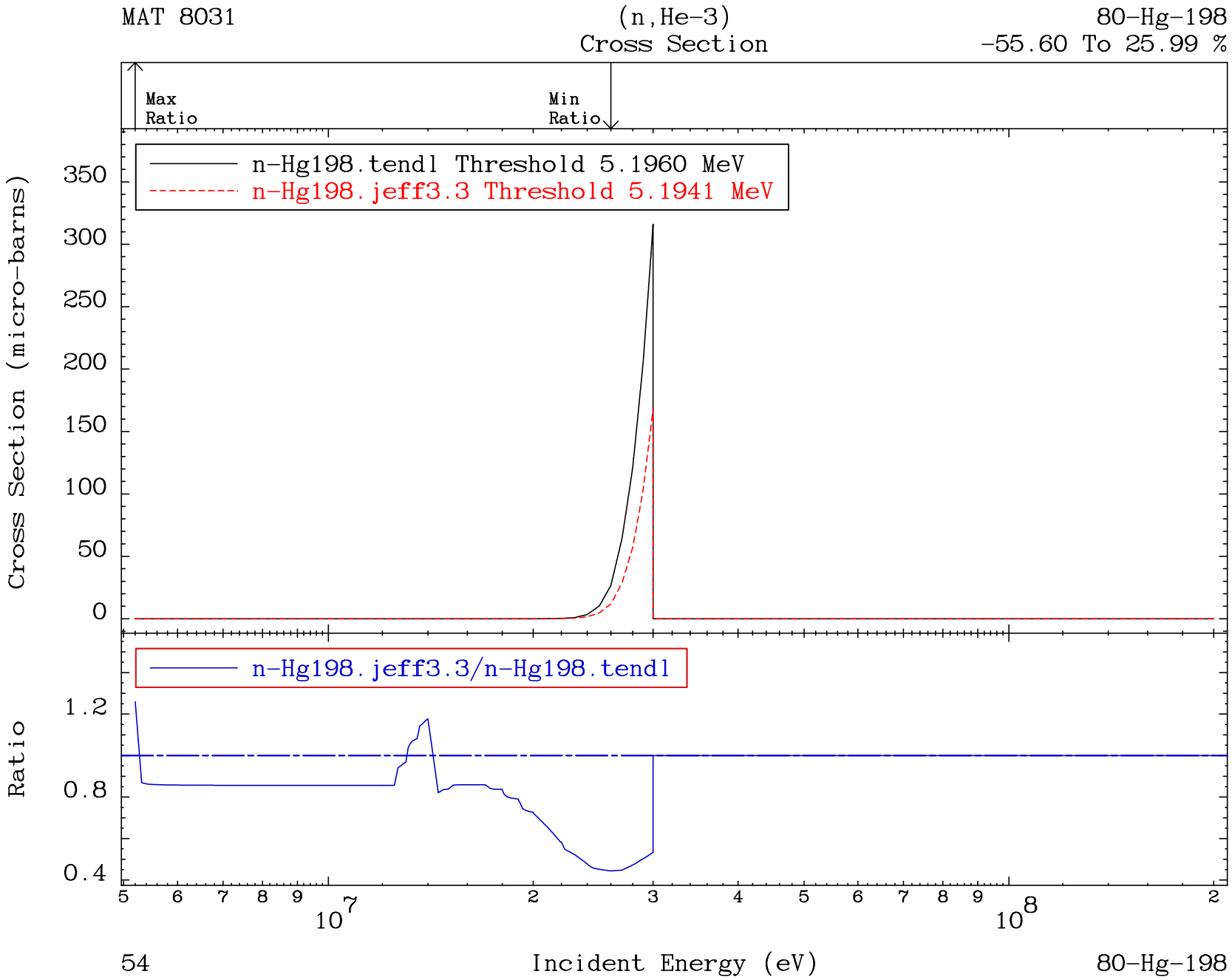

MAT 8031
(n,n') Continuum
Cross Section
80-Hg-198
-0.890 To 43.16 %
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 2.1206 MeV
n-Hg198.jeff3.3 Threshold 2.1206 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.4
1.2
1.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
49
Incident Energy (eV)
80-Hg-198

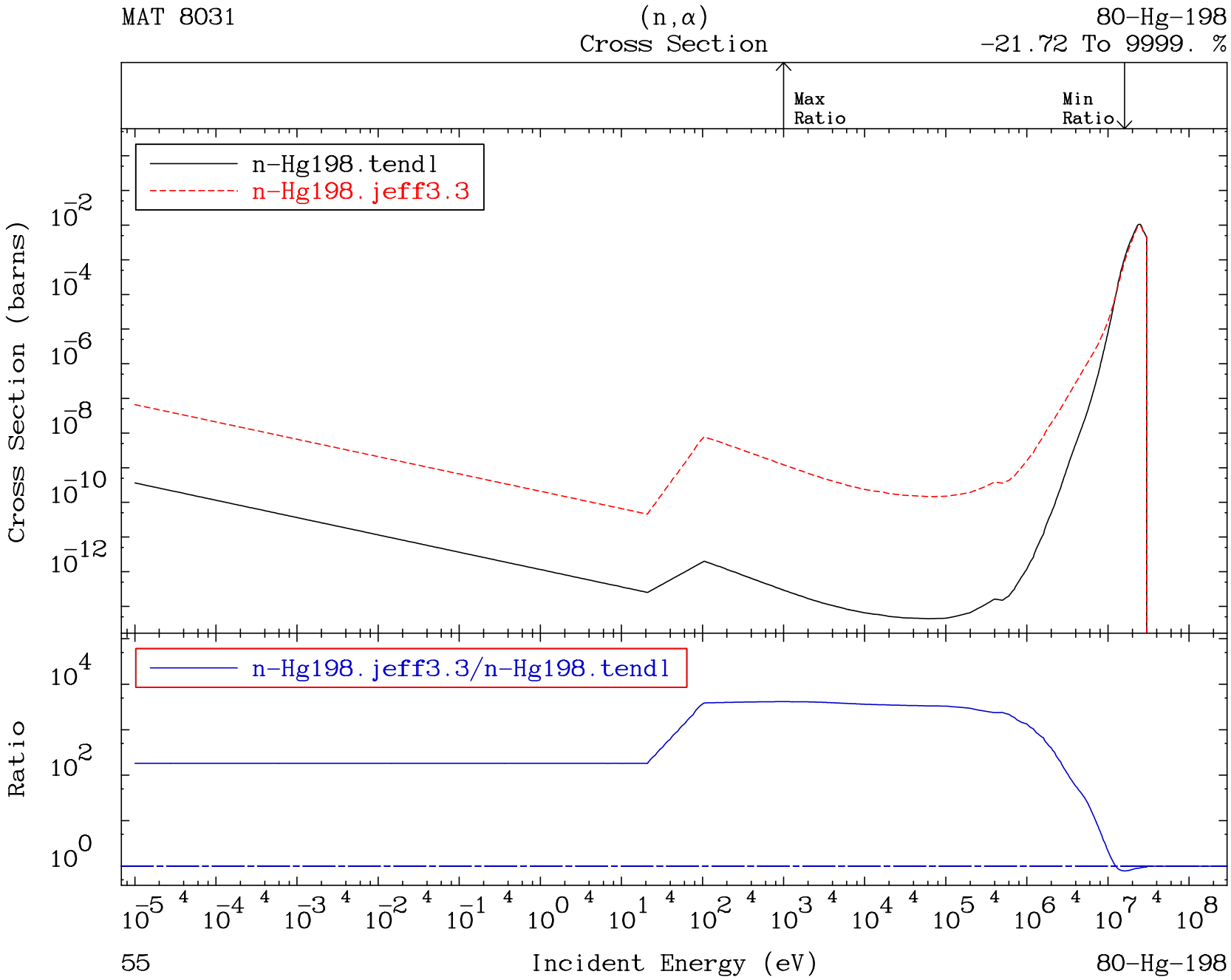

MAT 8031
(n,γ)
Cross Section
80-Hg-198
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
50
80-Hg-198

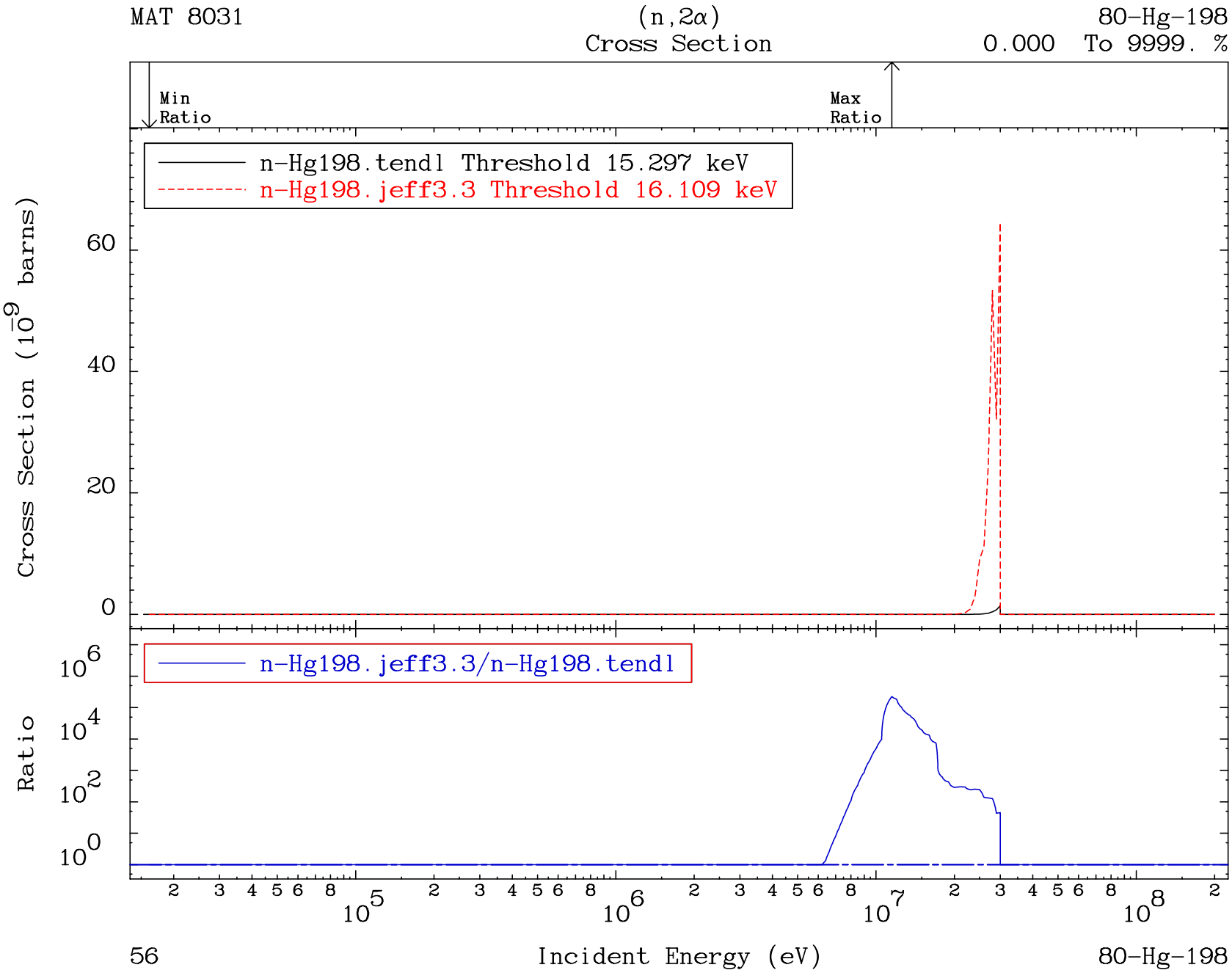

MAT 8031
(n,p)
Cross Section
80-Hg-198
-88.18 To 19.92 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 594.19 keV
n-Hg198.jeff3.3 Threshold 593.51 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
2
10^0
6
4
2
10^-1
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
51
Incident Energy (eV)
80-Hg-198

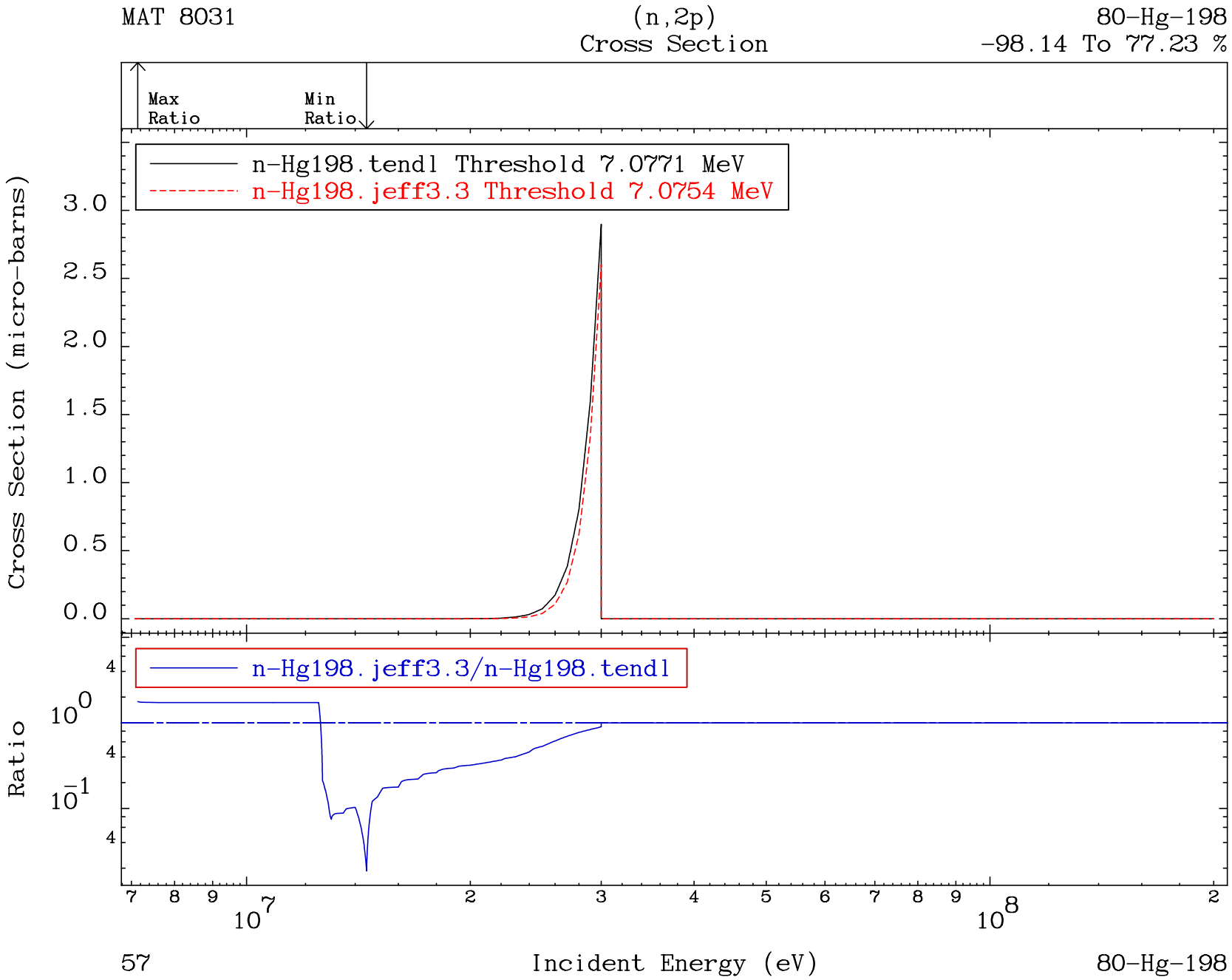

MAT 8031
(n,d)
Cross Section
80-Hg-198
-50.38 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 4.9038 MeV
n-Hg198.jeff3.3 Threshold 4.9031 MeV
Cross Section (milli-barns)
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
80-Hg-198

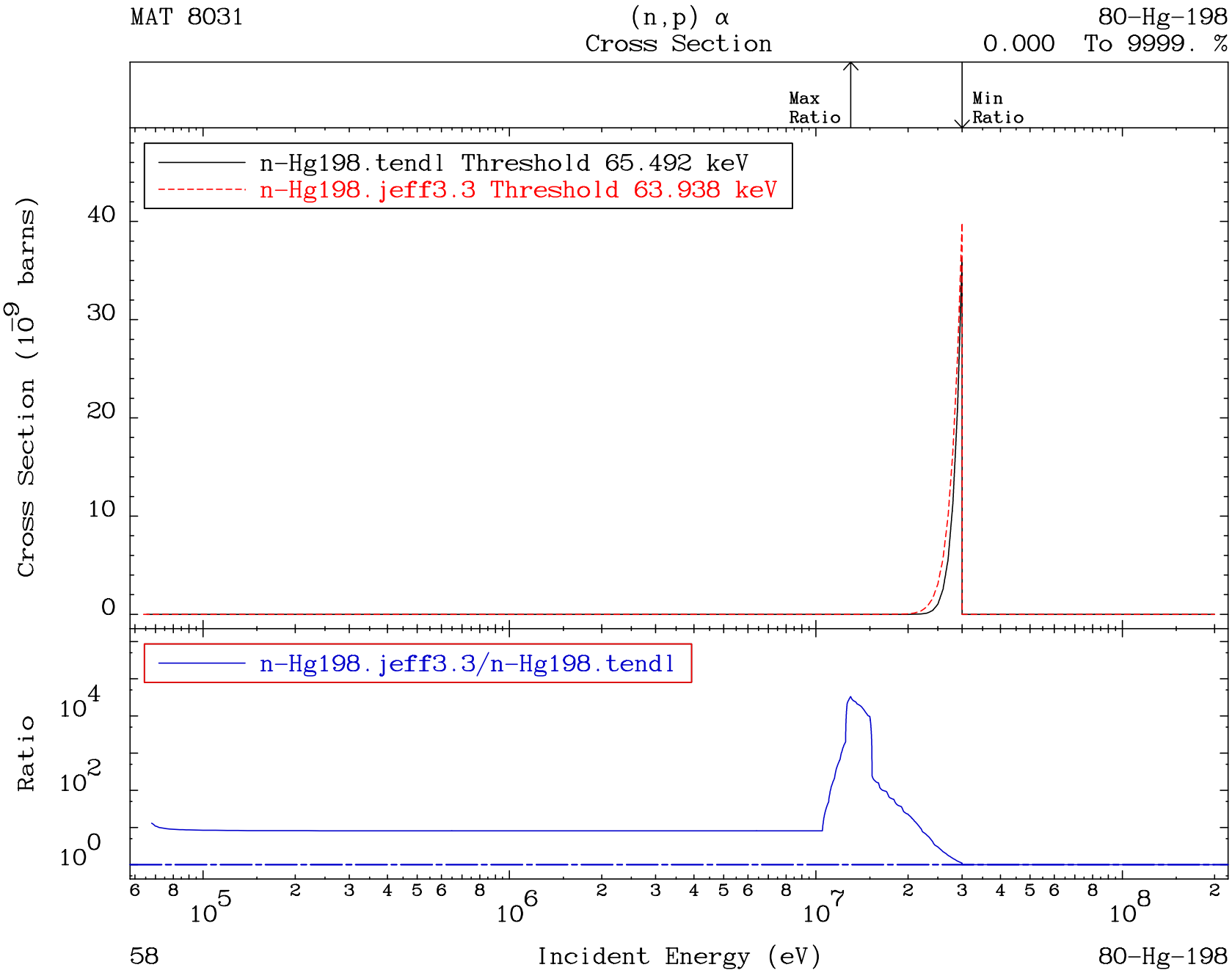

MAT 8031
(n,t)
Cross Section
80-Hg-198
-35.62 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 6.7282 MeV
n-Hg198.jeff3.3 Threshold 6.7275 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
80-Hg-198

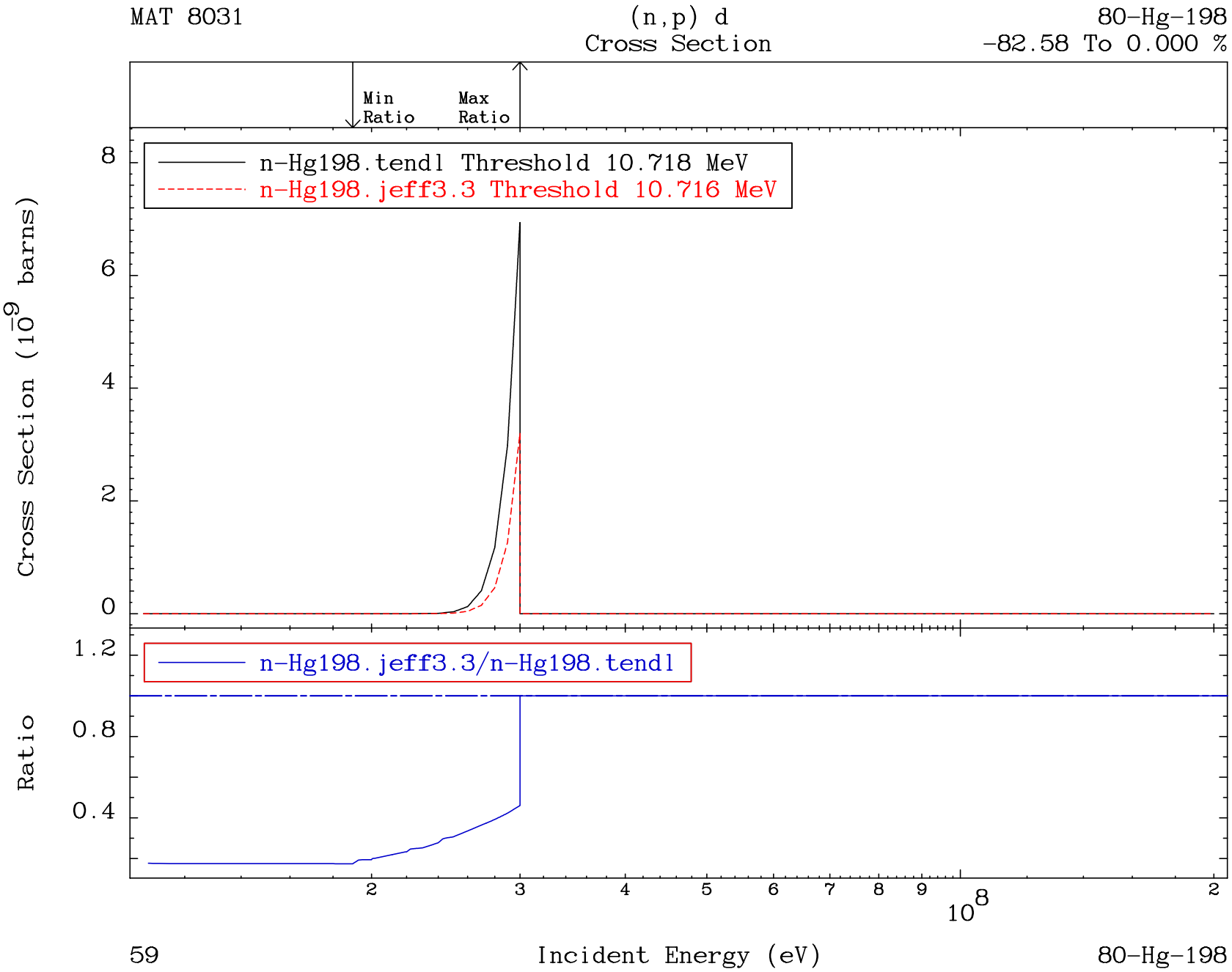

MAT 8031
(n,He-3)
Cross Section
80-Hg-198
-55.60 To 25.99 %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 5.1960 MeV
n-Hg198.jeff3.3 Threshold 5.1941 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
80-Hg-198

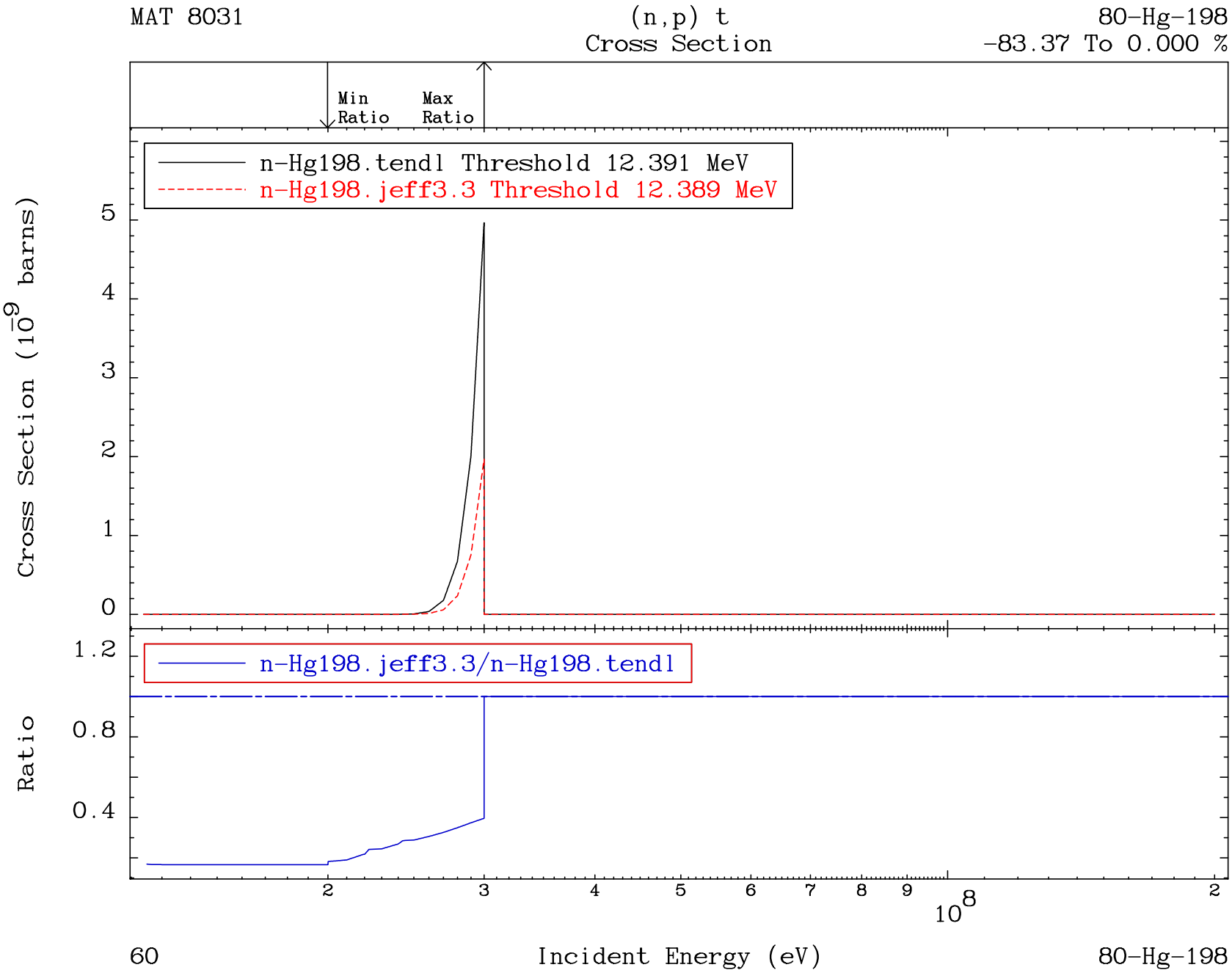

MAT 8031
(n,α)
Cross Section
80-Hg-198
-21.72 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
55
80-Hg-198

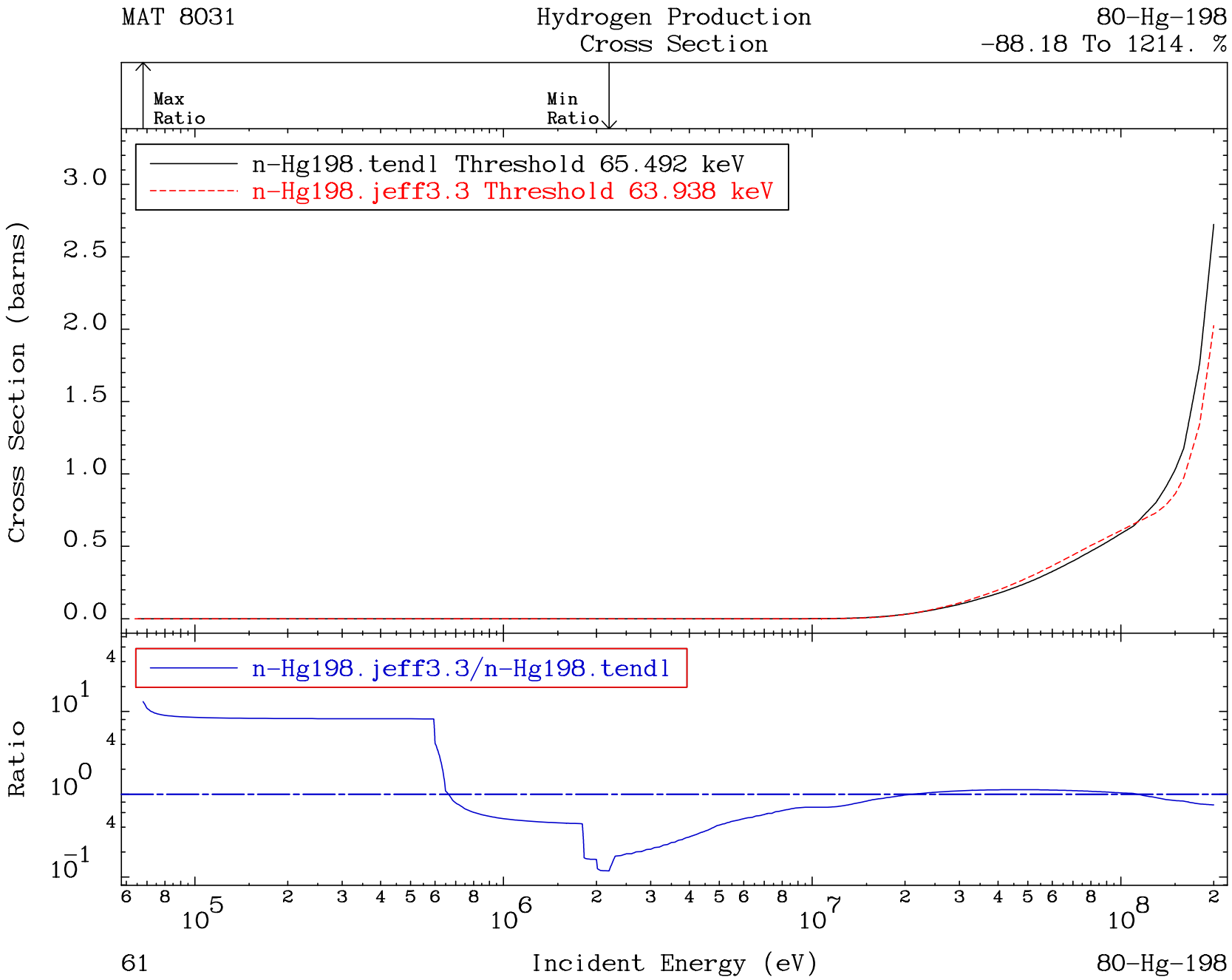

MAT 8031
(n,2α)
Cross Section
80-Hg-198
0.000 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.297 keV
n-Hg198.jeff3.3 Threshold 16.109 keV
Cross Section (10^-9 barns)
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
56
Incident Energy (eV)
80-Hg-198

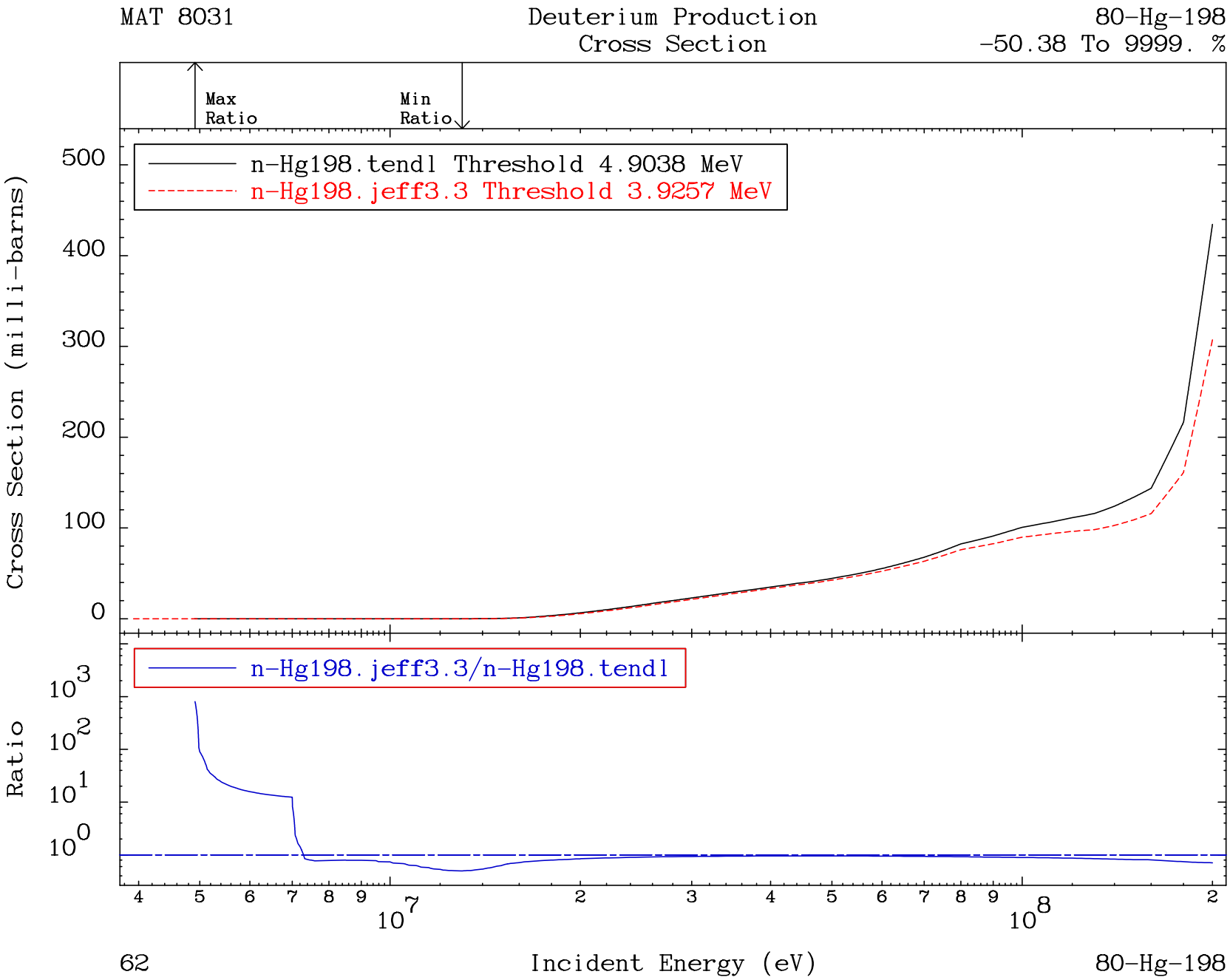

MAT 8031
(n,2p)
Cross Section
80-Hg-198
-98.14 To 77.23 %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 7.0771 MeV
n-Hg198.jeff3.3 Threshold 7.0754 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^0
10^-1
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
57
Incident Energy (eV)
80-Hg-198

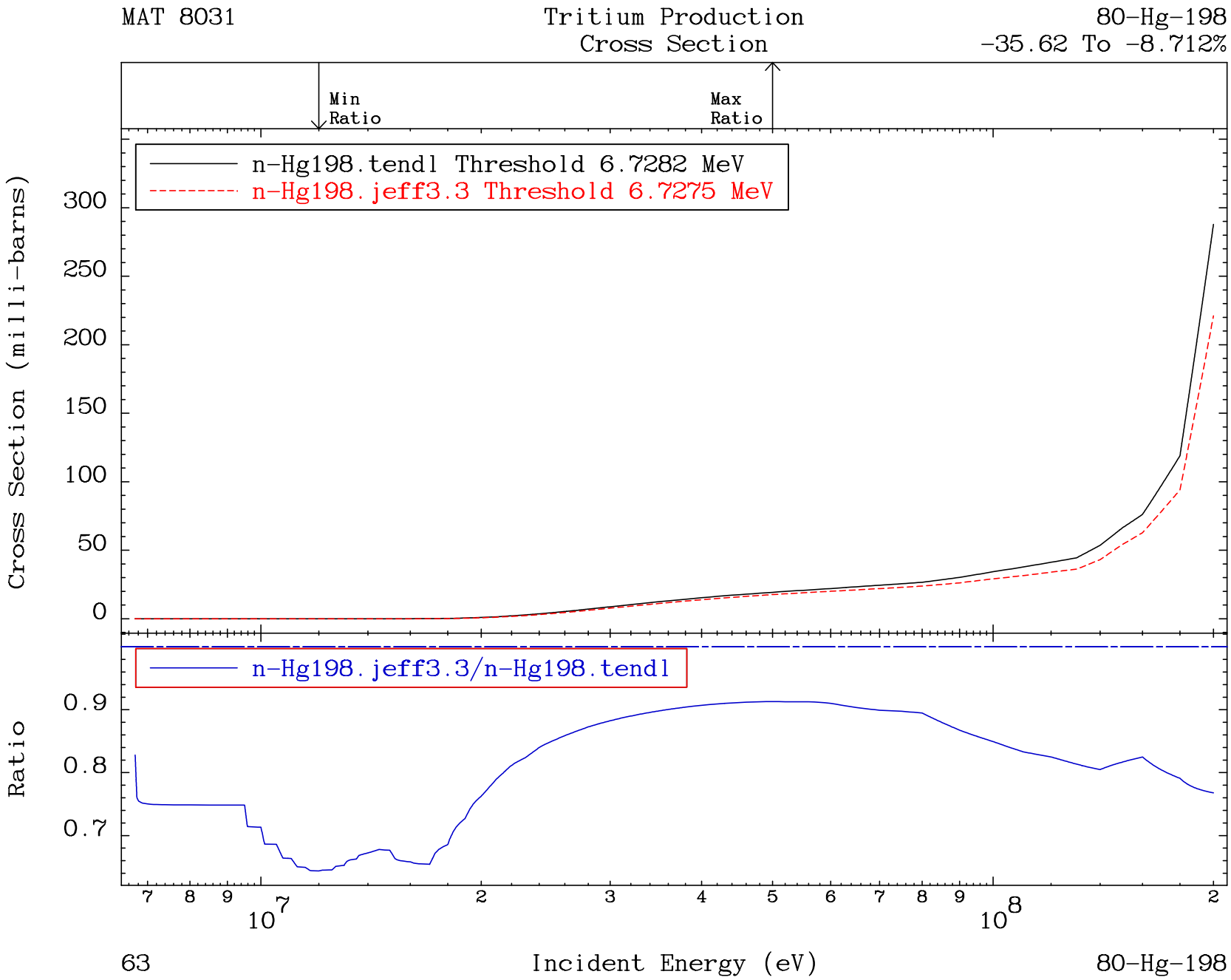

MAT 8031
(n,p) α
Cross Section
80-Hg-198
0.000 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 65.492 keV
n-Hg198.jeff3.3 Threshold 63.938 keV
Cross Section (10^{-9} barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^4
10^2
10^0
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
58
Incident Energy (eV)
80-Hg-198

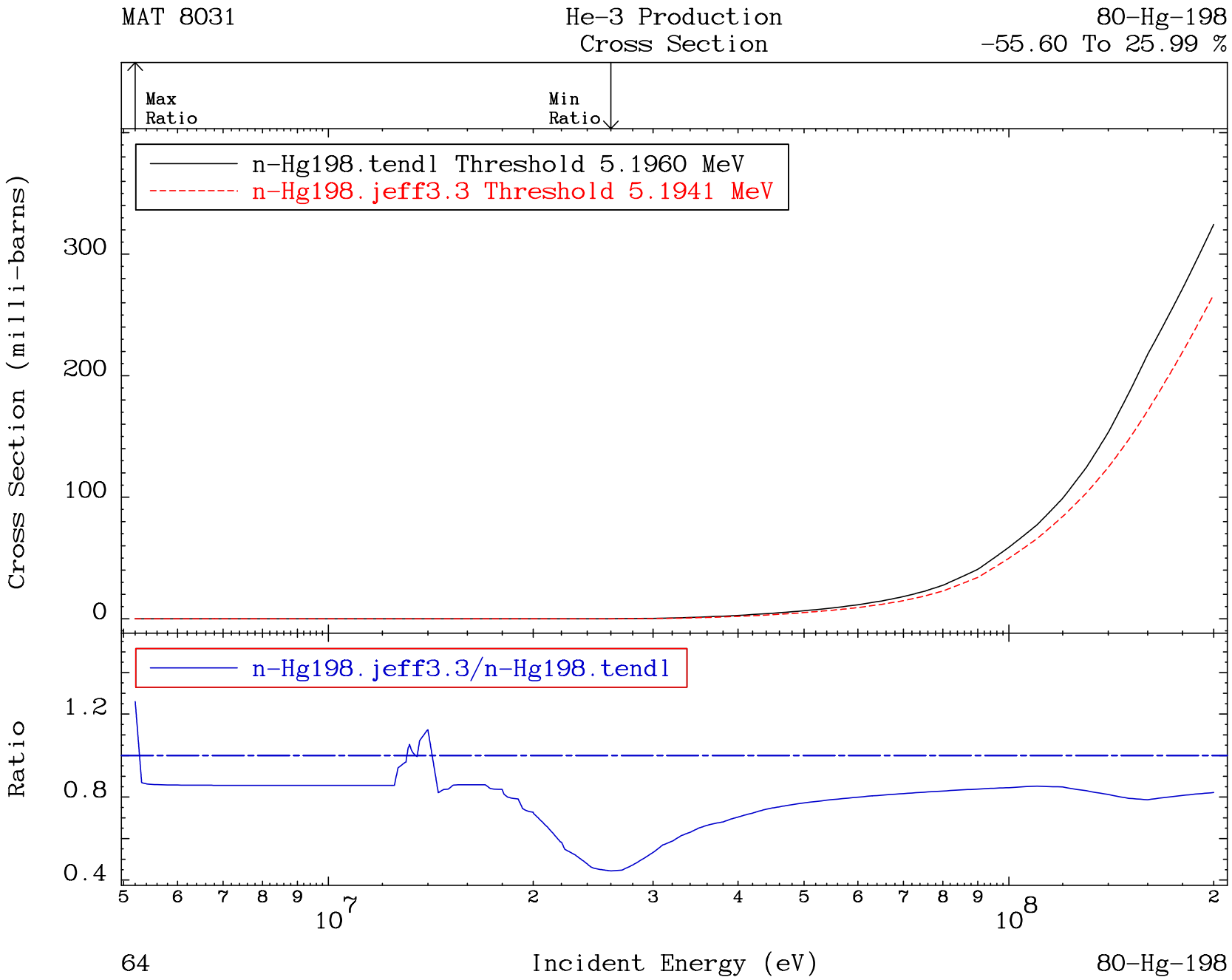

MAT 8031
(n,p) d
Cross Section
80-Hg-198
-82.58 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 10.718 MeV
n-Hg198.jeff3.3 Threshold 10.716 MeV
Cross Section (10^{-9} barns)
8
6
4
2
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
80-Hg-198

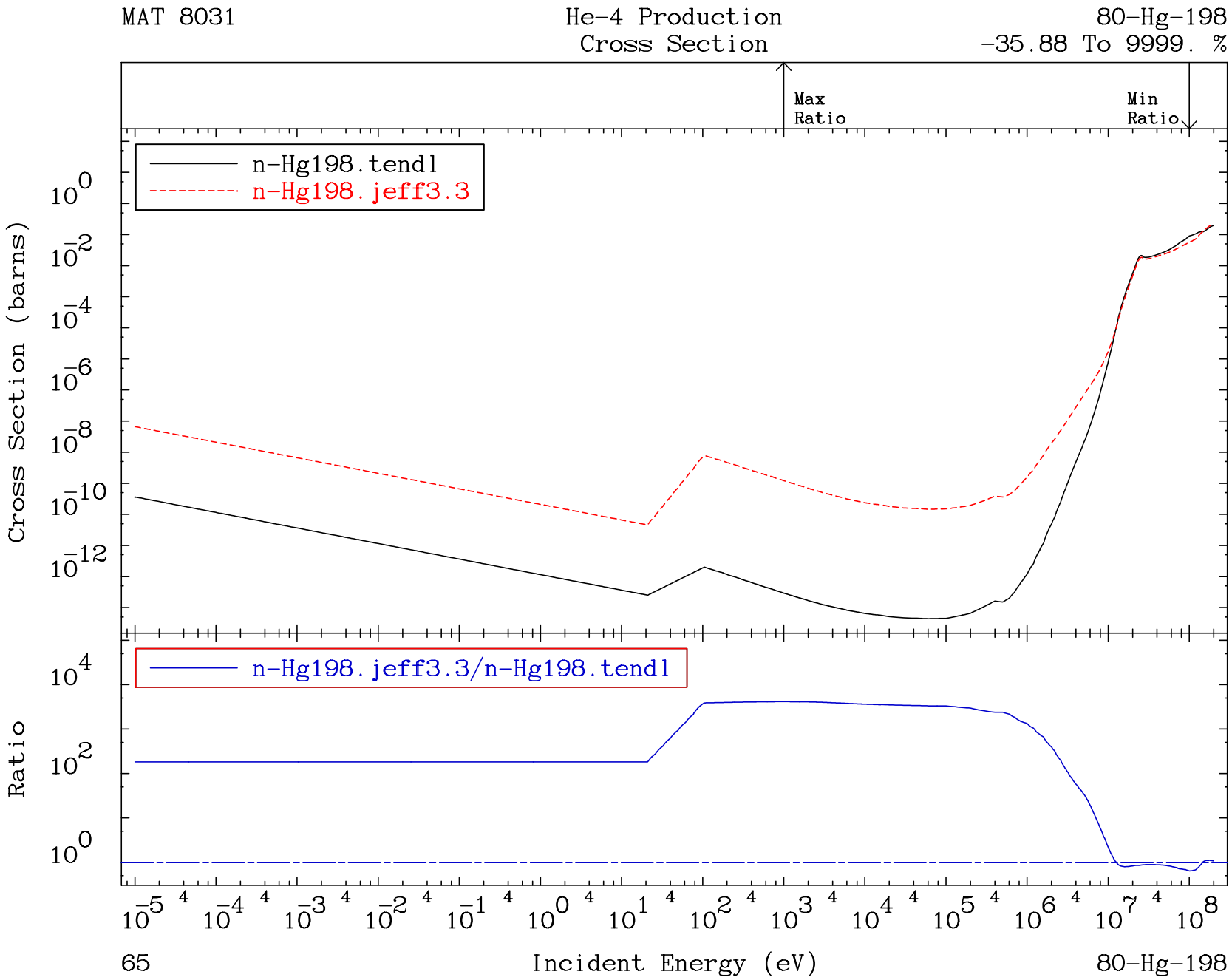

MAT 8031
(n,p) t
Cross Section
80-Hg-198
-83.37 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 12.391 MeV
n-Hg198.jeff3.3 Threshold 12.389 MeV
Cross Section (10^-9 barns)
0
1
2
3
4
5
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
80-Hg-198

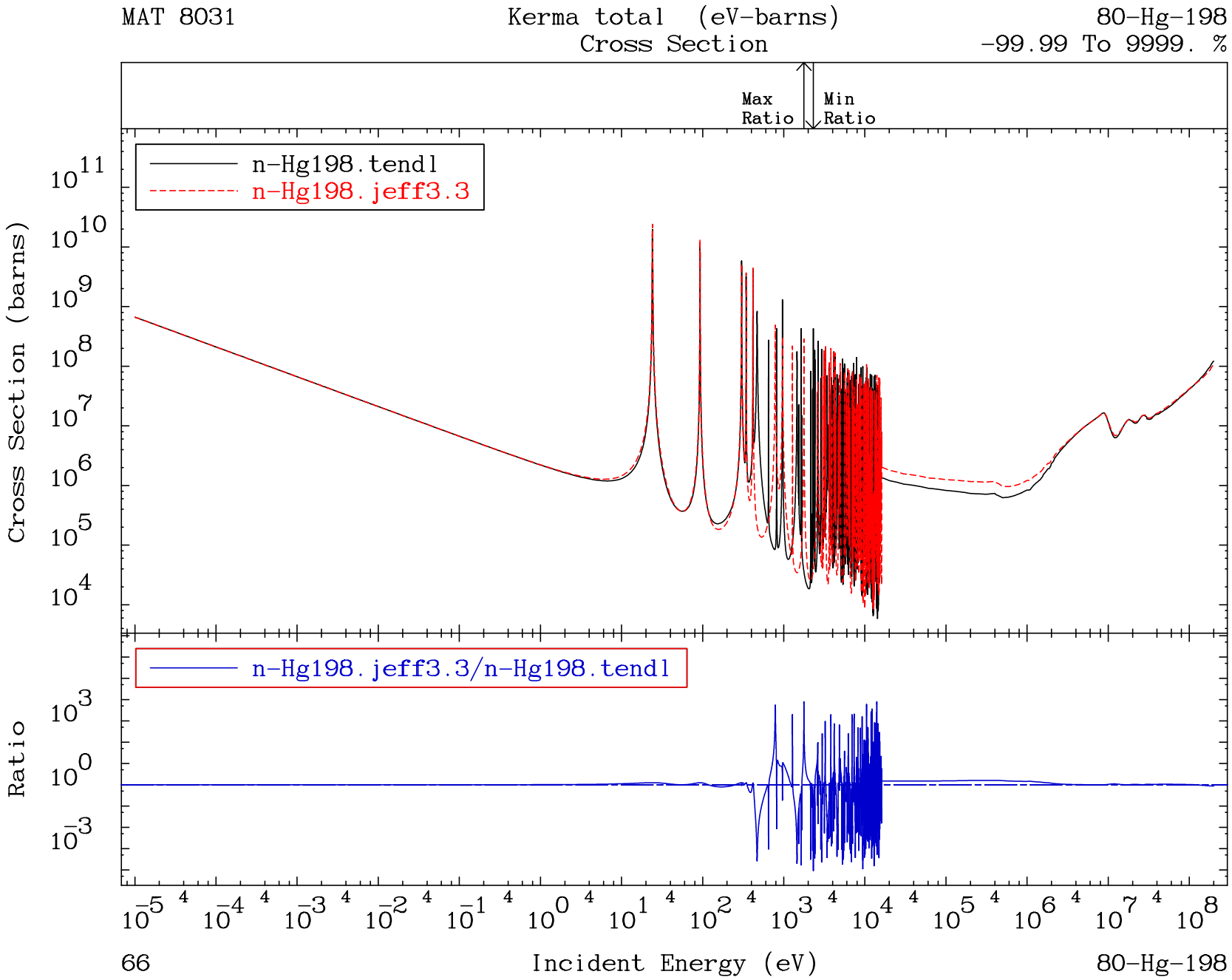

MAT 8031
Hydrogen Production
Cross Section
80-Hg-198
-88.18 To 1214. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 65.492 keV
n-Hg198.jeff3.3 Threshold 63.938 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^1
10^0
10^{-1}
10^5
10^6
10^7
10^8
61
Incident Energy (eV)
80-Hg-198

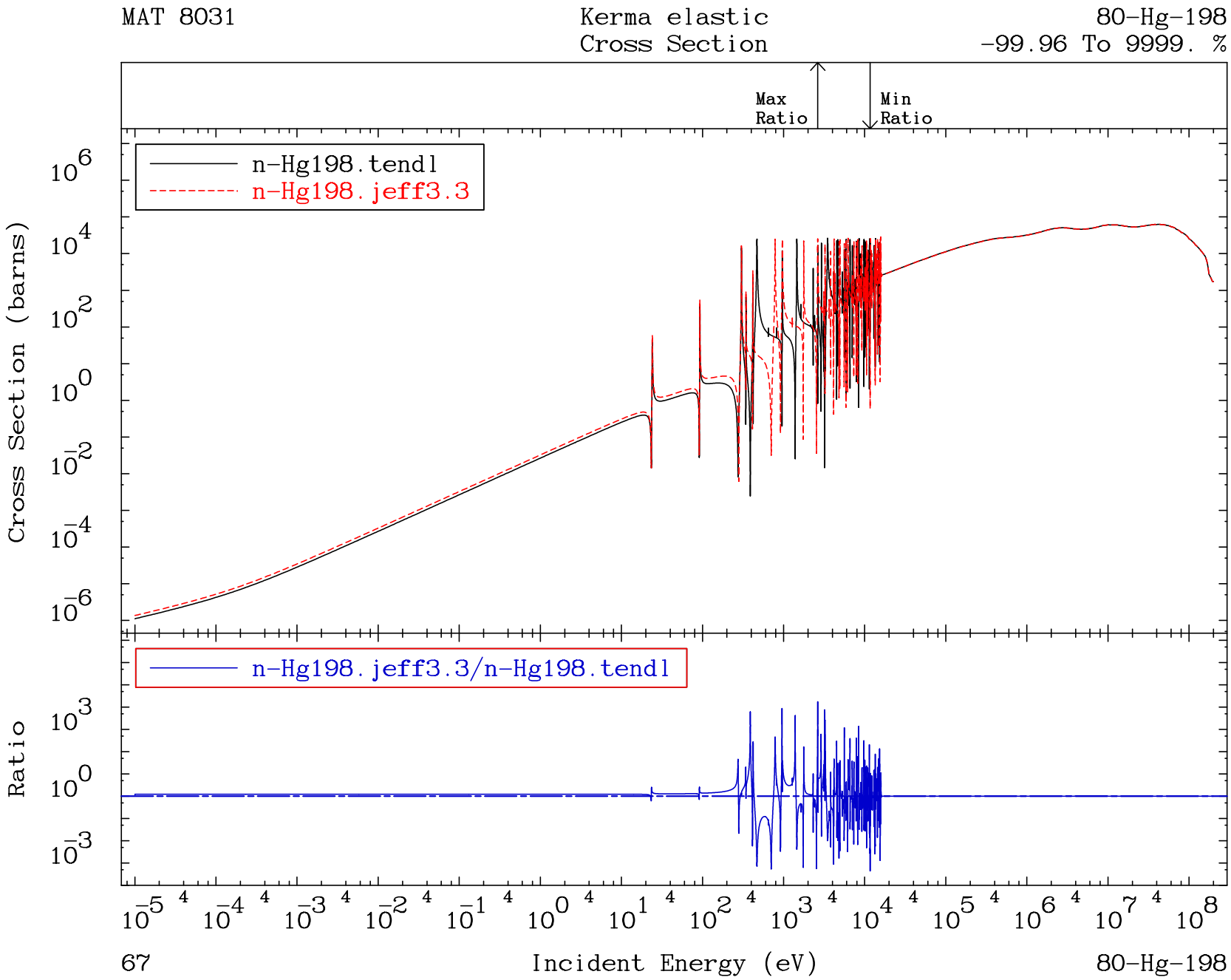

MAT 8031
Deuterium Production
Cross Section
80-Hg-198
-50.38 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 4.9038 MeV
n-Hg198.jeff3.3 Threshold 3.9257 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^3
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
80-Hg-198

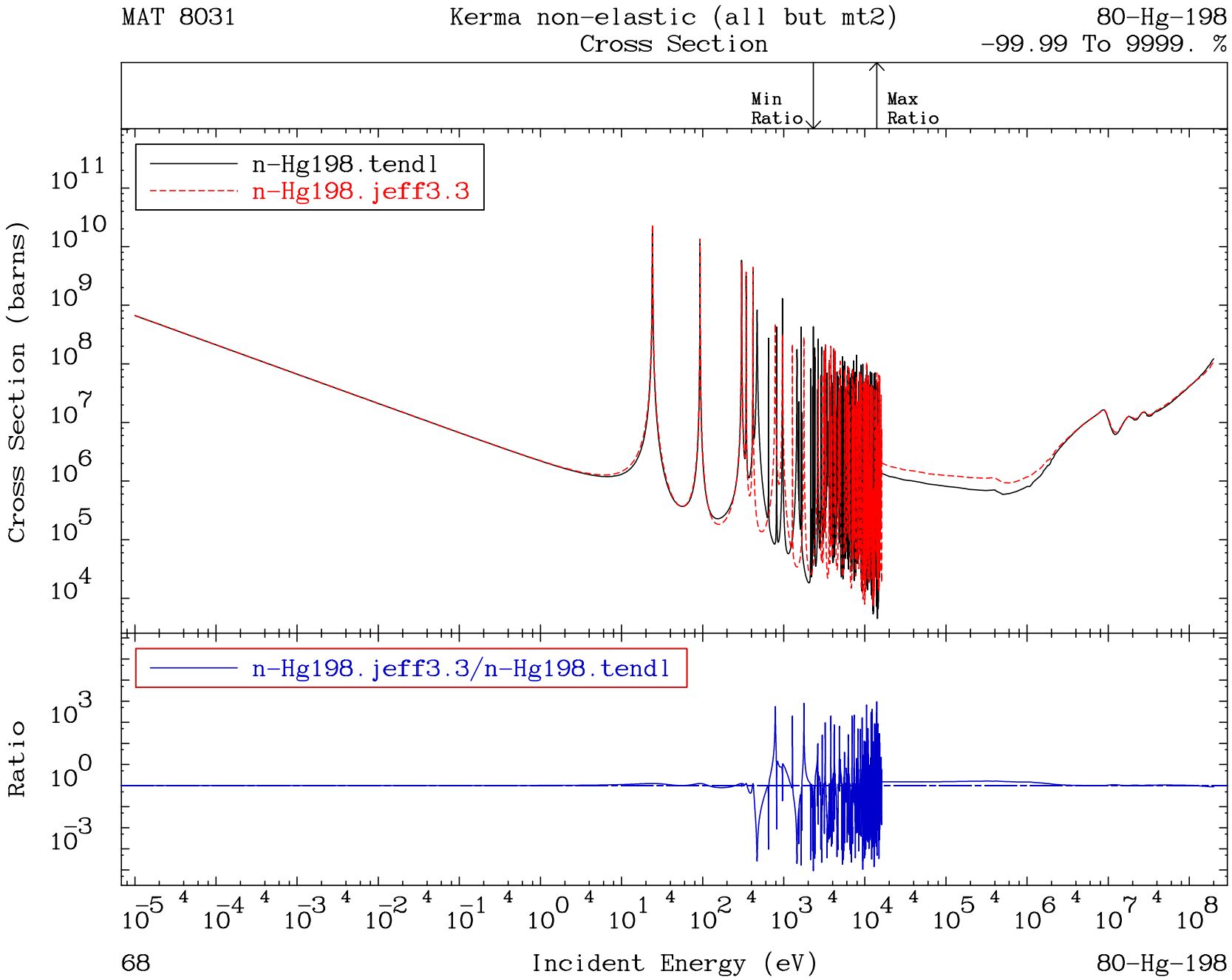

MAT 8031
Tritium Production
Cross Section
80-Hg-198
-35.62 To -8.712%
Min
Ratio
Max
Ratio
n-Hg198.tendl Threshold 6.7282 MeV
n-Hg198.jeff3.3 Threshold 6.7275 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.9
0.8
0.7
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
63
Incident Energy (eV)
80-Hg-198

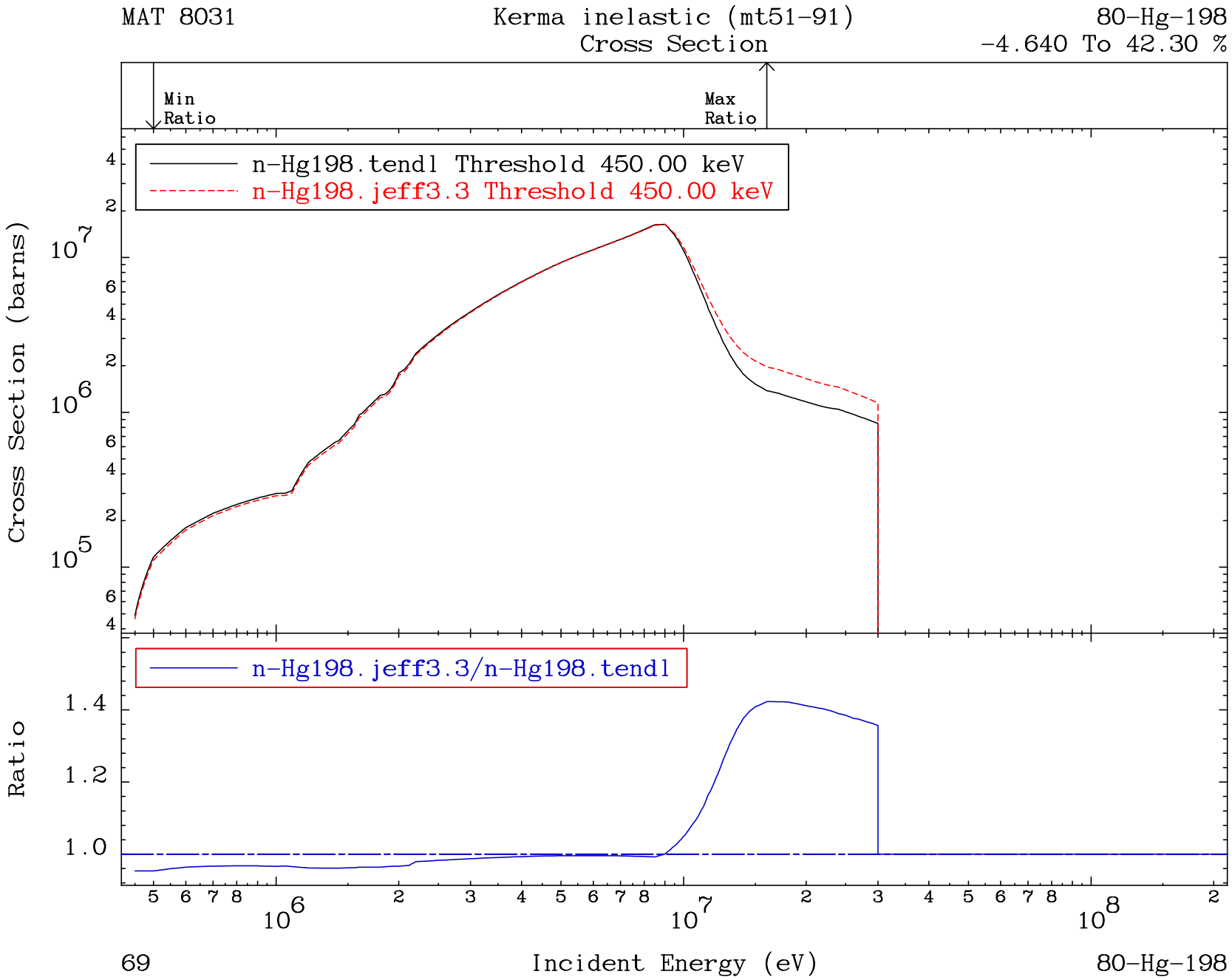

MAT 8031
He-3 Production
Cross Section
80-Hg-198
-55.60 To 25.99 %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 5.1960 MeV
n-Hg198.jeff3.3 Threshold 5.1941 MeV
Cross Section (milli-barns)
300
200
100
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
80-Hg-198

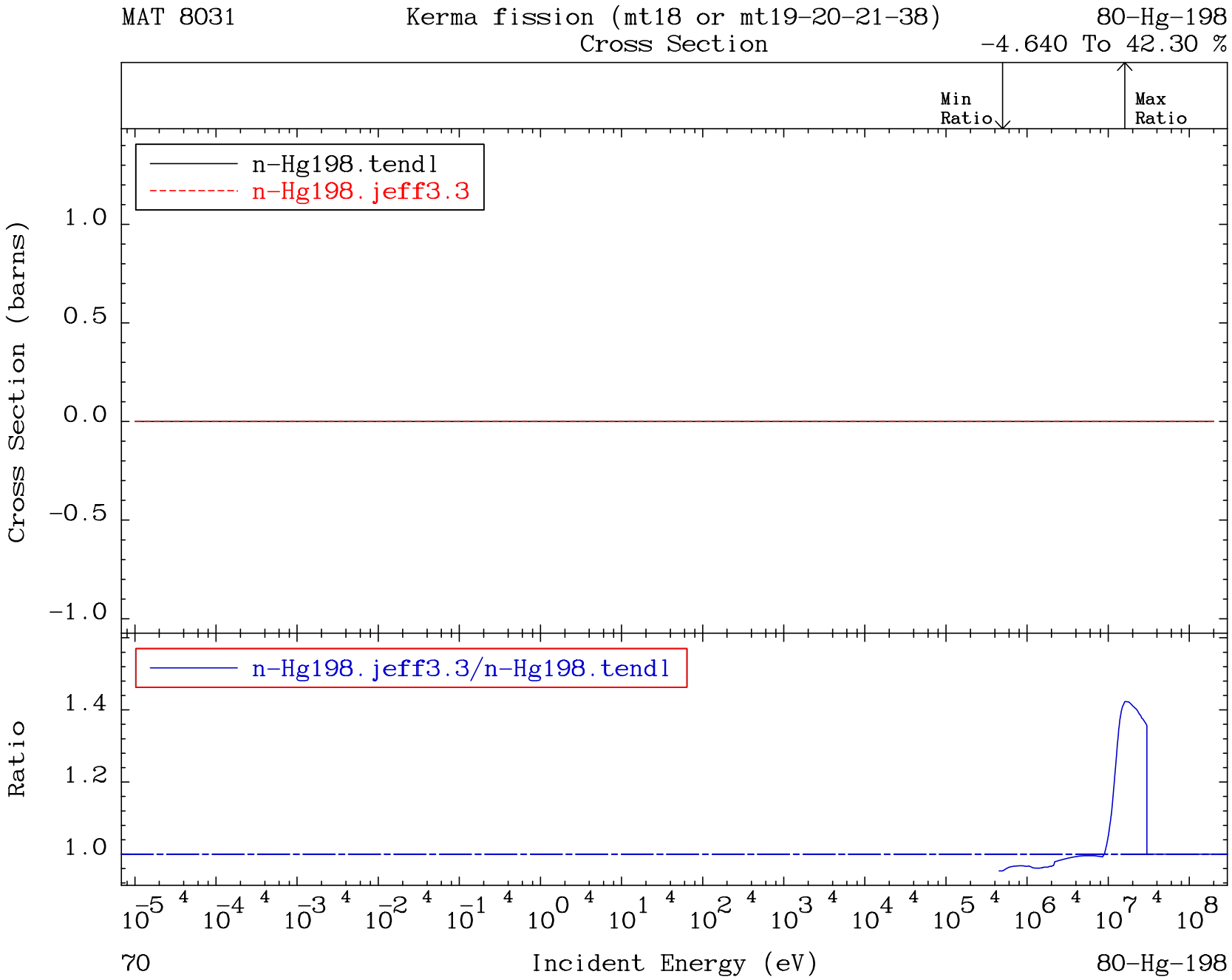

MAT 8031
He-4 Production
Cross Section
80-Hg-198
-35.88 To 9999. %
Max
Ratio
Min
Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
65
80-Hg-198

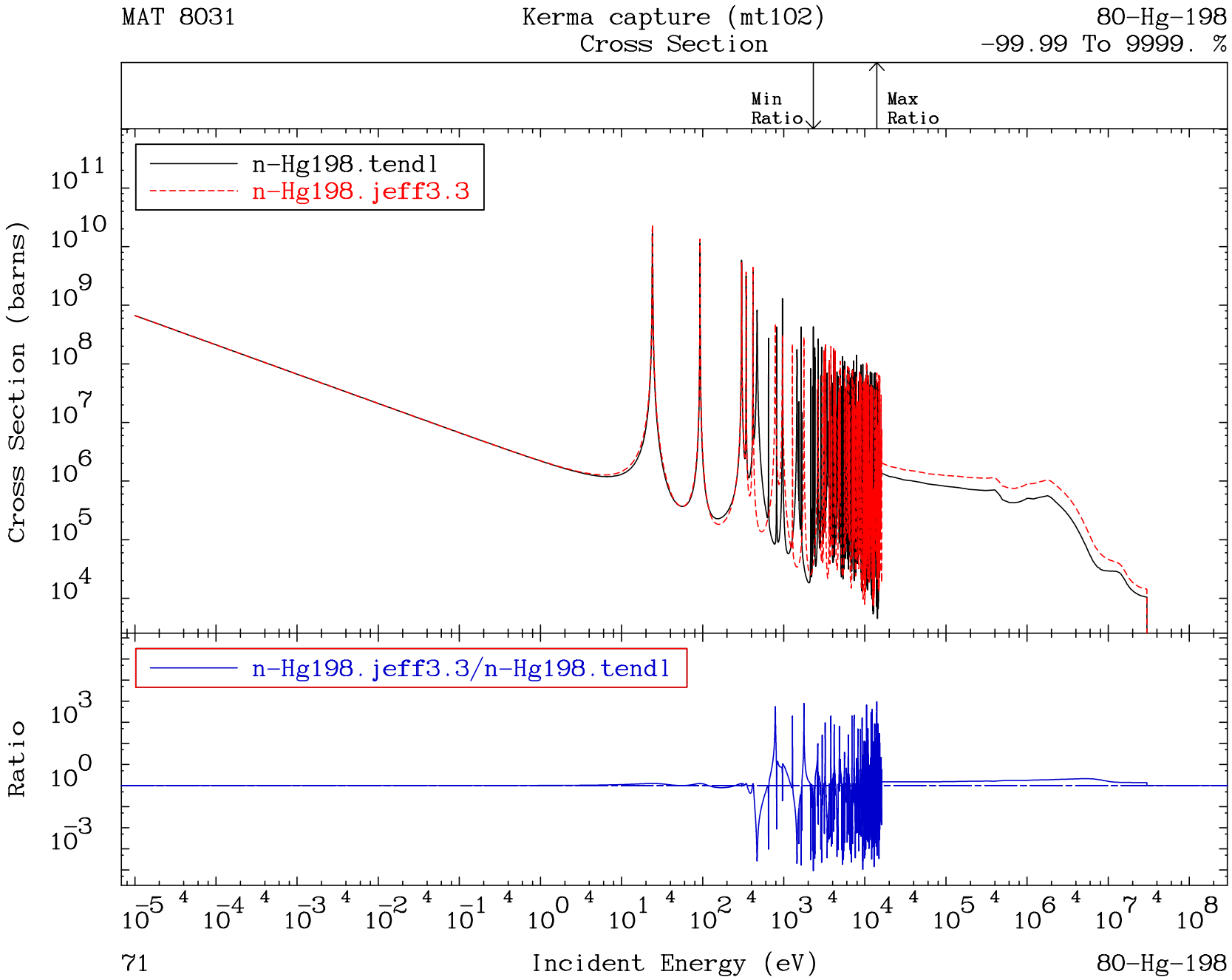

MAT 8031
Kerma total (eV-barns)
Cross Section
80-Hg-198
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
66
80-Hg-198

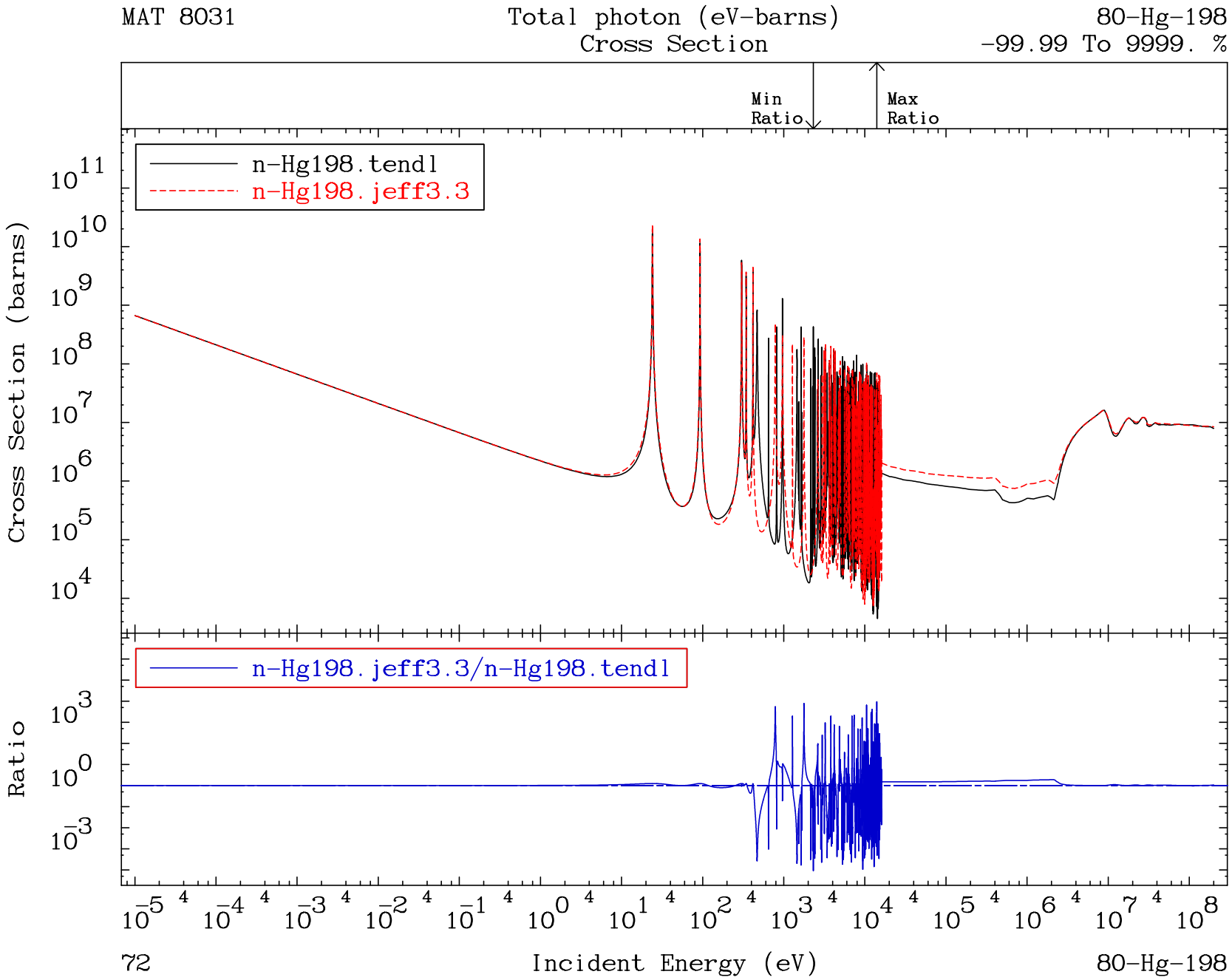

MAT 8031
Kerma elastic
Cross Section
80-Hg-198
-99.96 To 9999. %
Max
Ratio
Min
Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
67
80-Hg-198

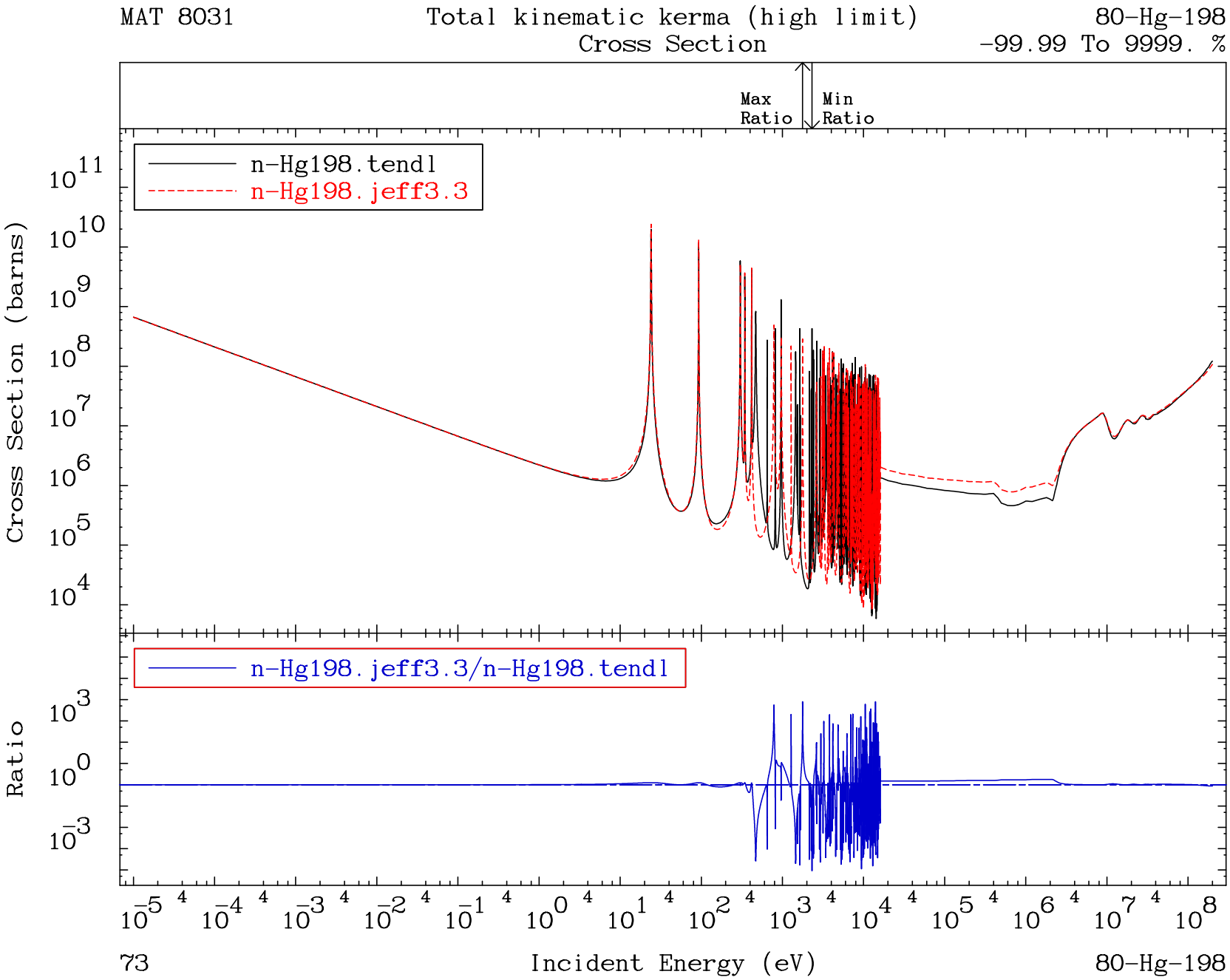

MAT 8031
Kerma non-elastic (all but mt2)
Cross Section
80-Hg-198
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
68
80-Hg-198

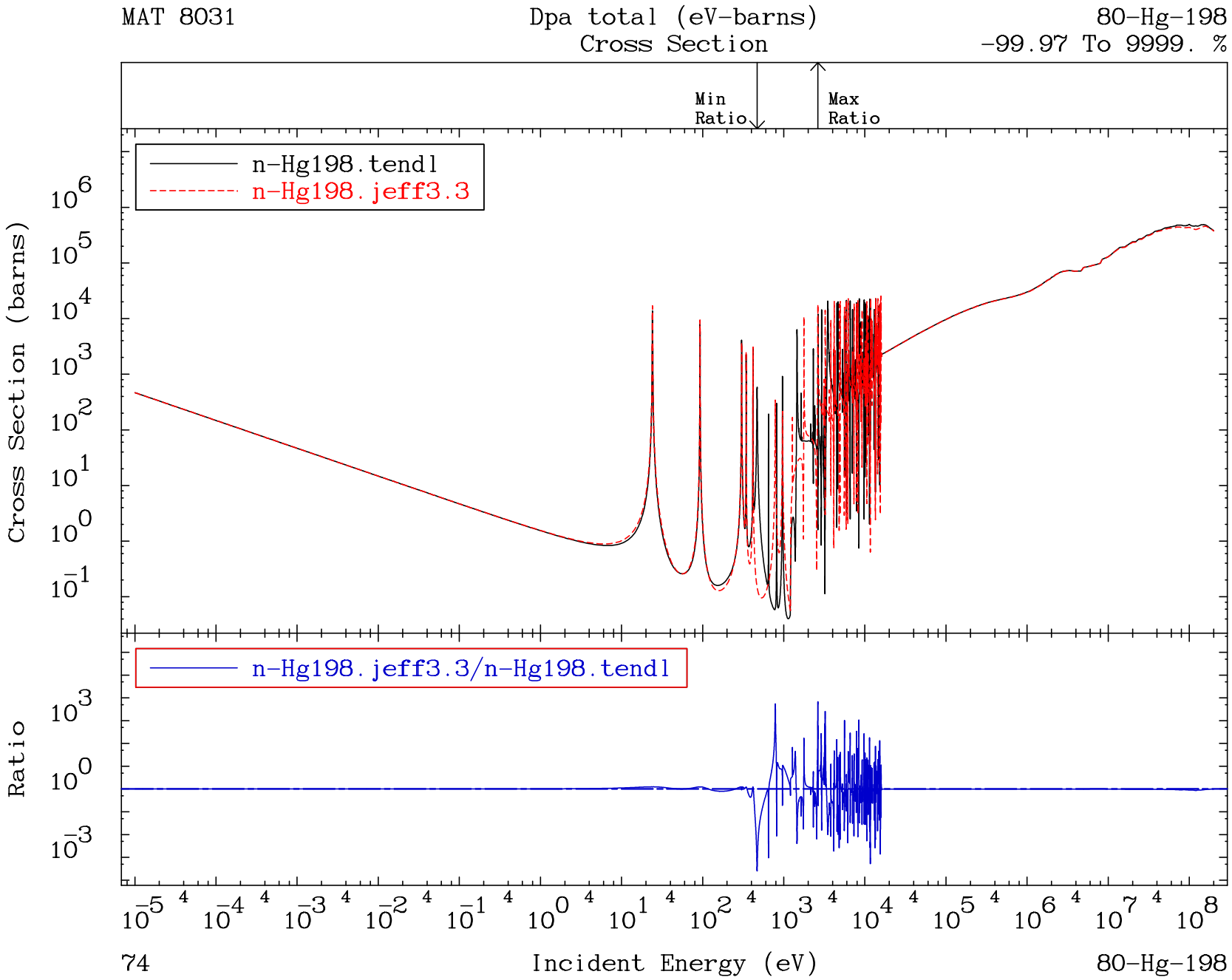

MAT 8031
Kerma inelastic (mt51-91)
Cross Section
80-Hg-198
-4.640 To 42.30 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 450.00 keV
n-Hg198.jeff3.3 Threshold 450.00 keV
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
69
80-Hg-198

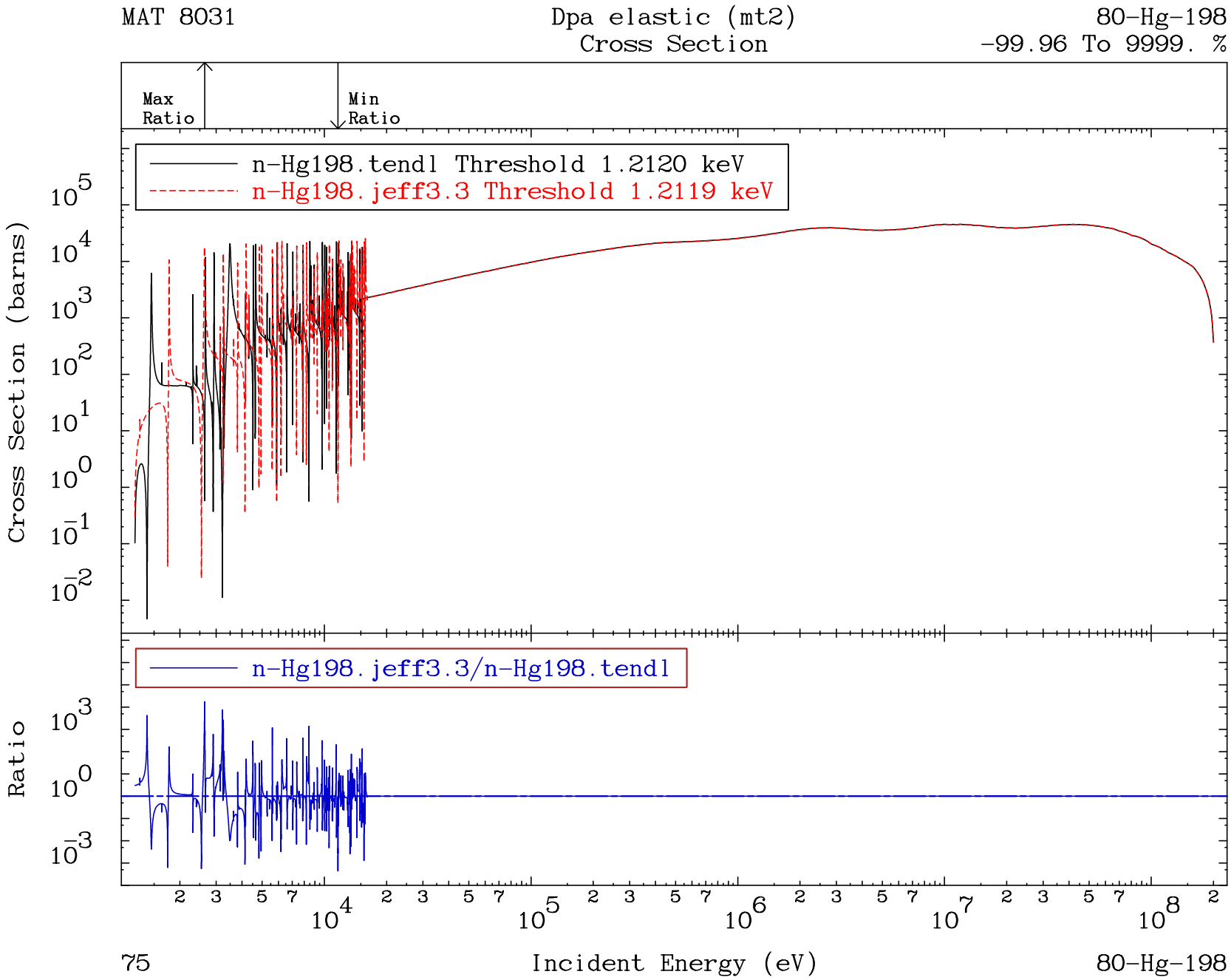

MAT 8031
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
80-Hg-198
-4.640 To 42.30 %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.4
1.2
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
70
Incident Energy (eV)
80-Hg-198

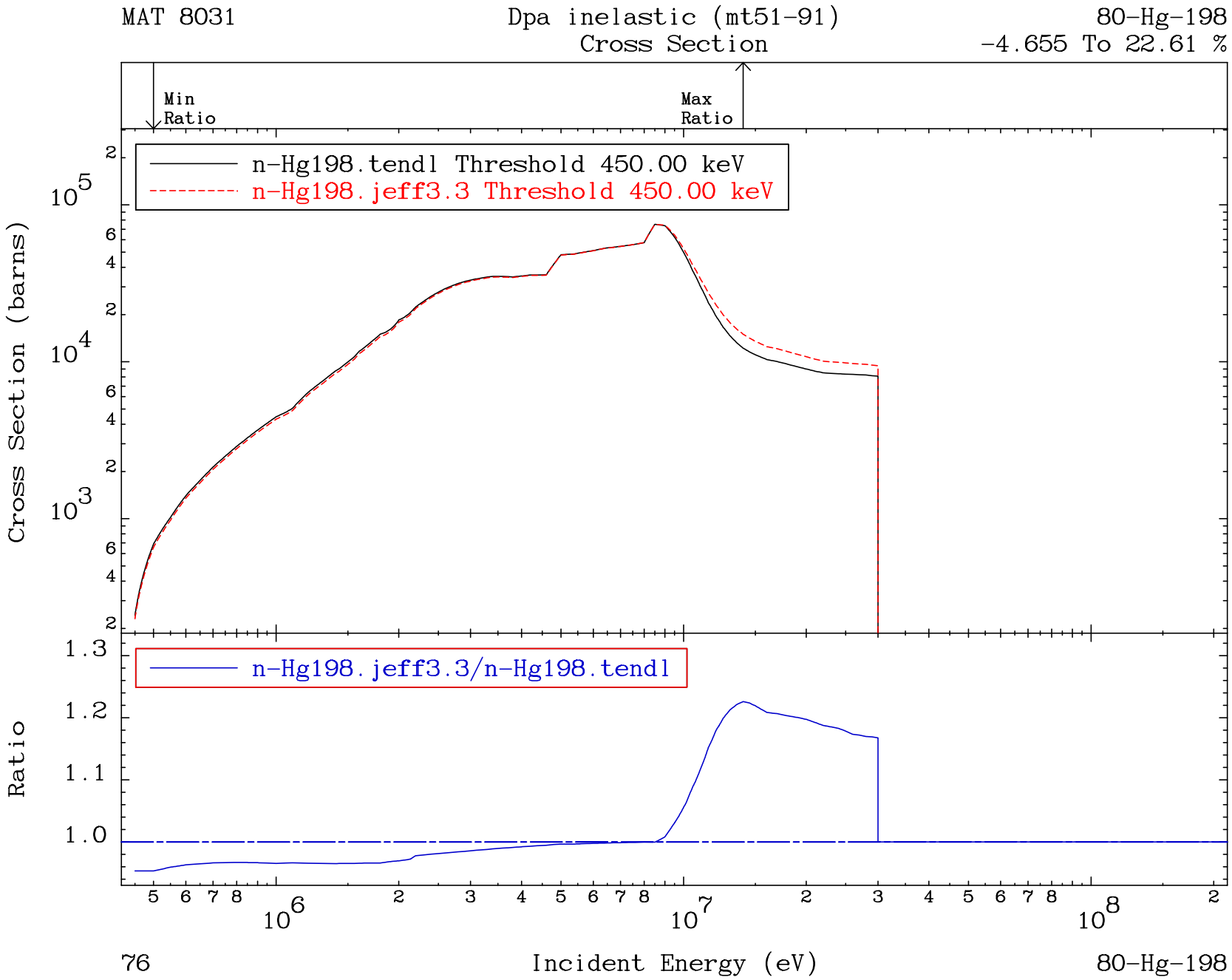

MAT 8031
Kerma capture (mt102)
Cross Section
80-Hg-198
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
71
80-Hg-198

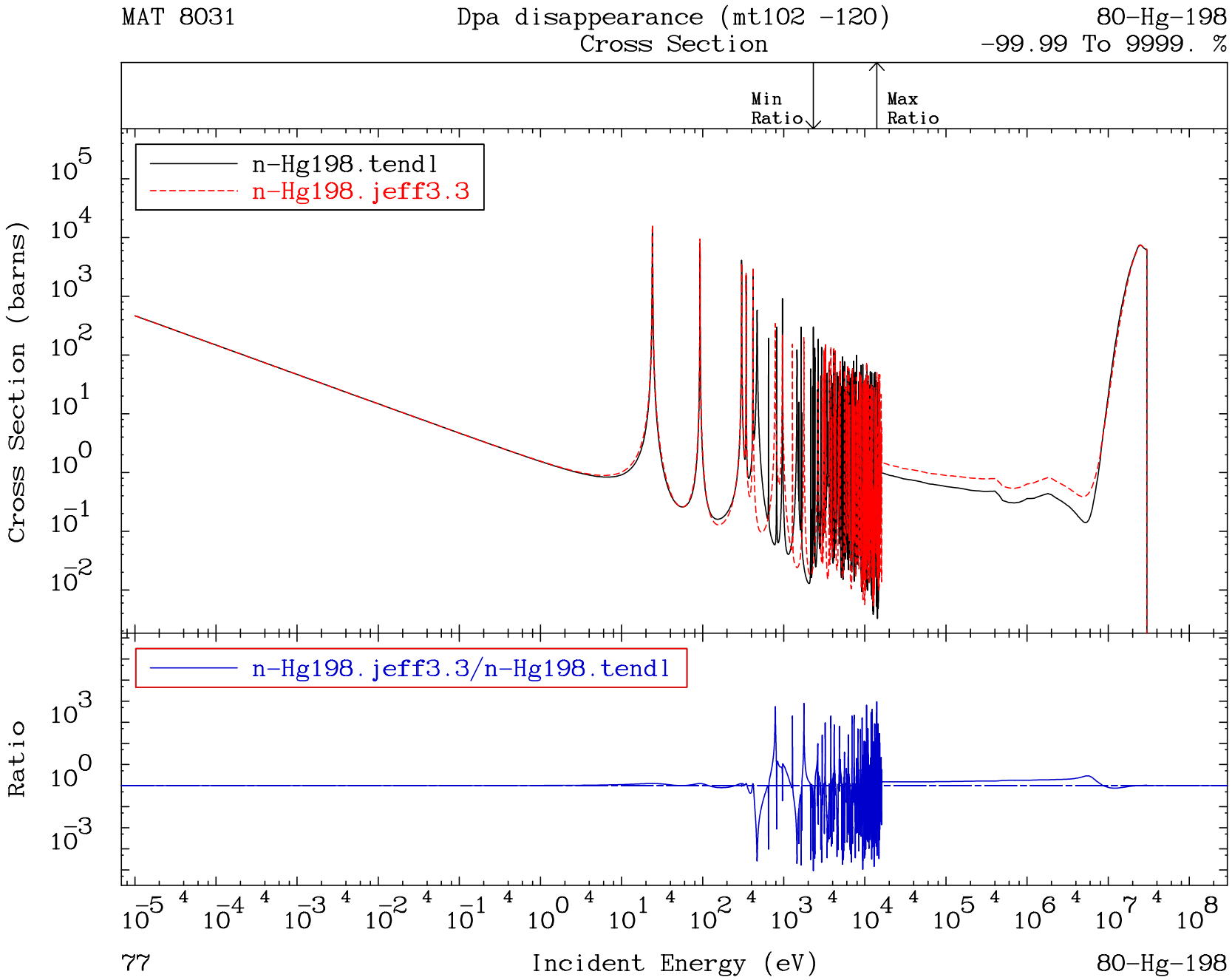

MAT 8031
Total photon (eV-barns)
Cross Section
80-Hg-198
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
72
80-Hg-198

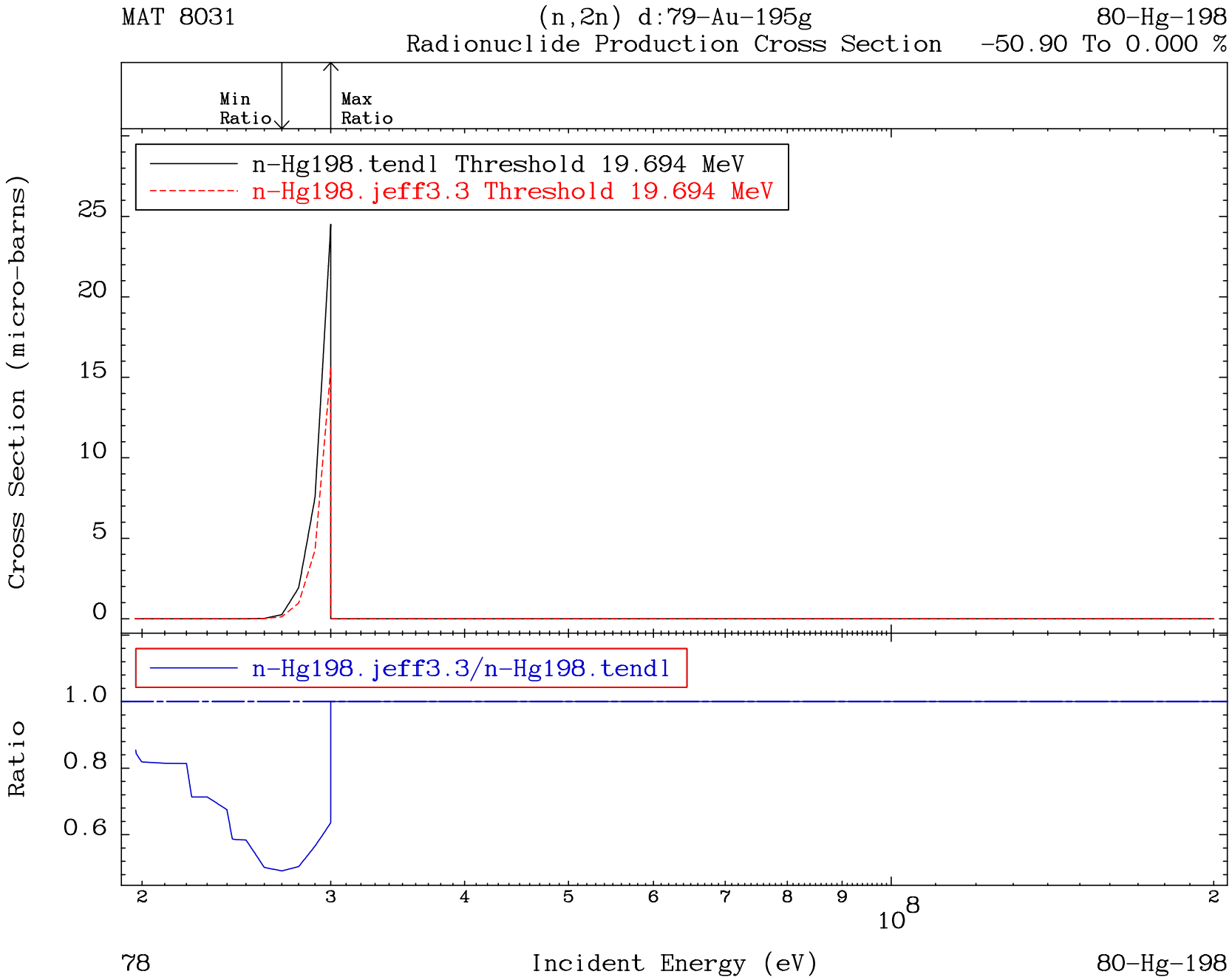

MAT 8031
Total kinematic kerma (high limit)
Cross Section
80-Hg-198
-99.99 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
73
80-Hg-198

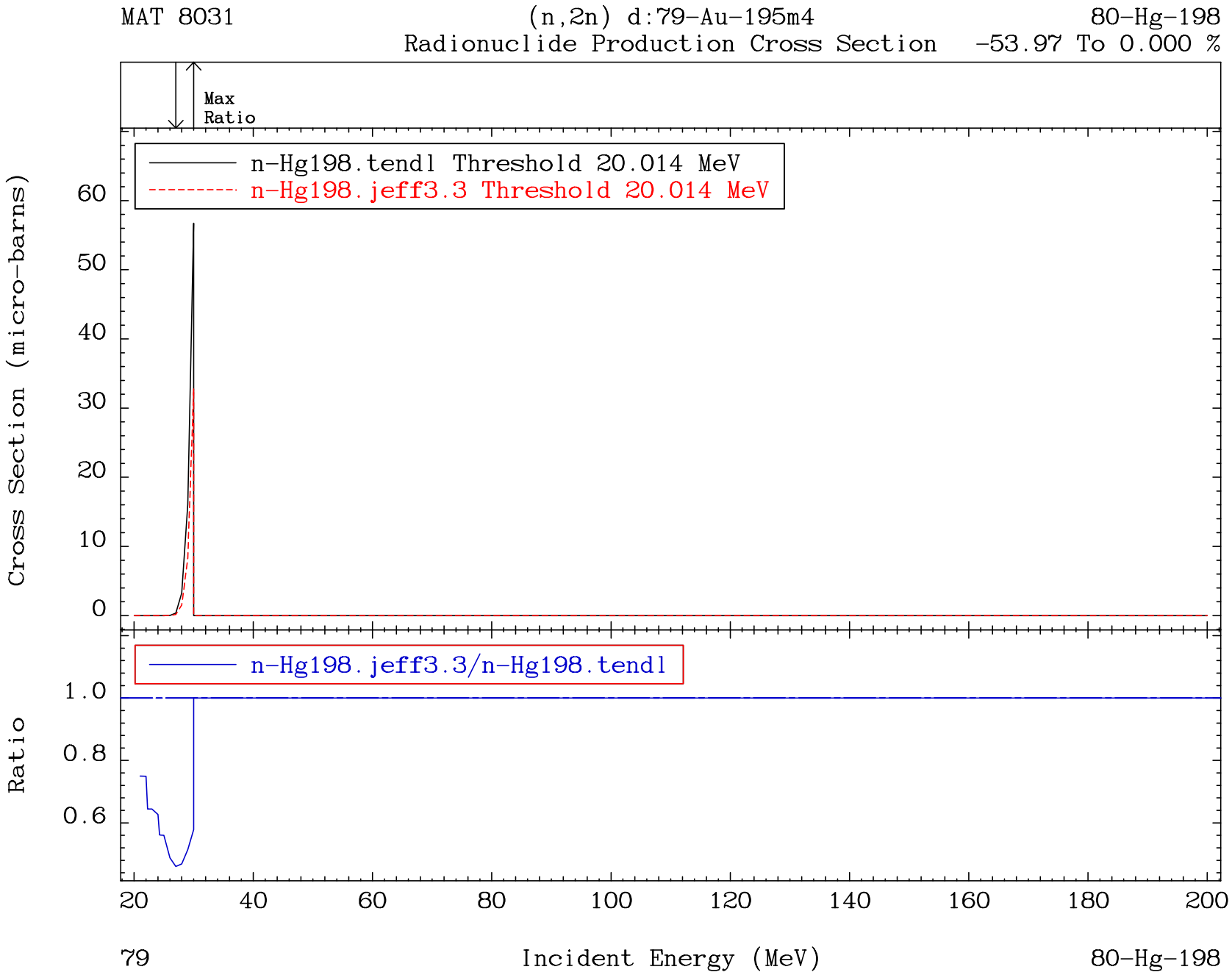

MAT 8031
Dpa total (eV-barns)
Cross Section
80-Hg-198
-99.97 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
74
Incident Energy (eV)
80-Hg-198

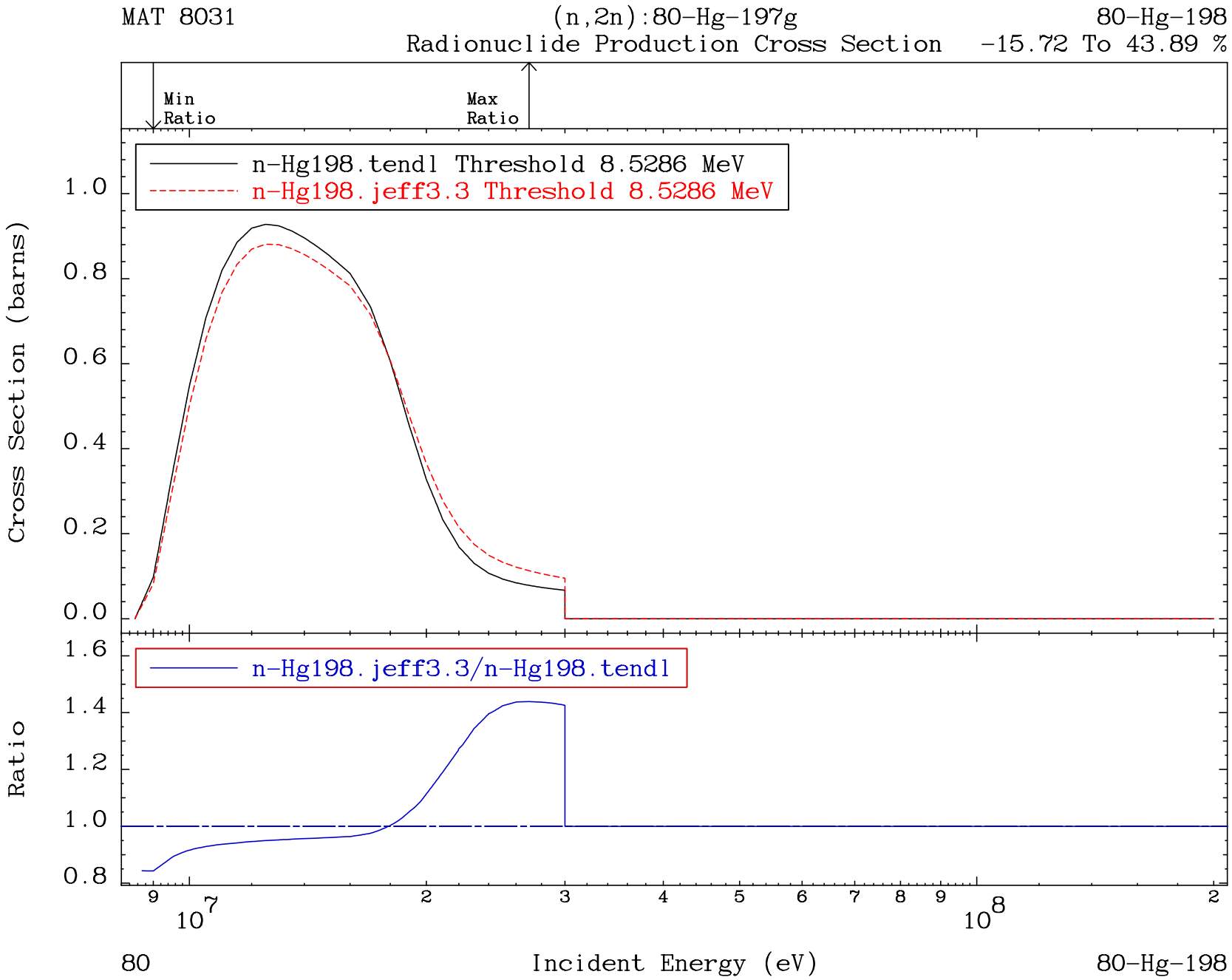

MAT 8031
Dpa elastic (mt2)
Cross Section
80-Hg-198
-99.96 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 1.2120 keV
n-Hg198.jeff3.3 Threshold 1.2119 keV
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
75
80-Hg-198

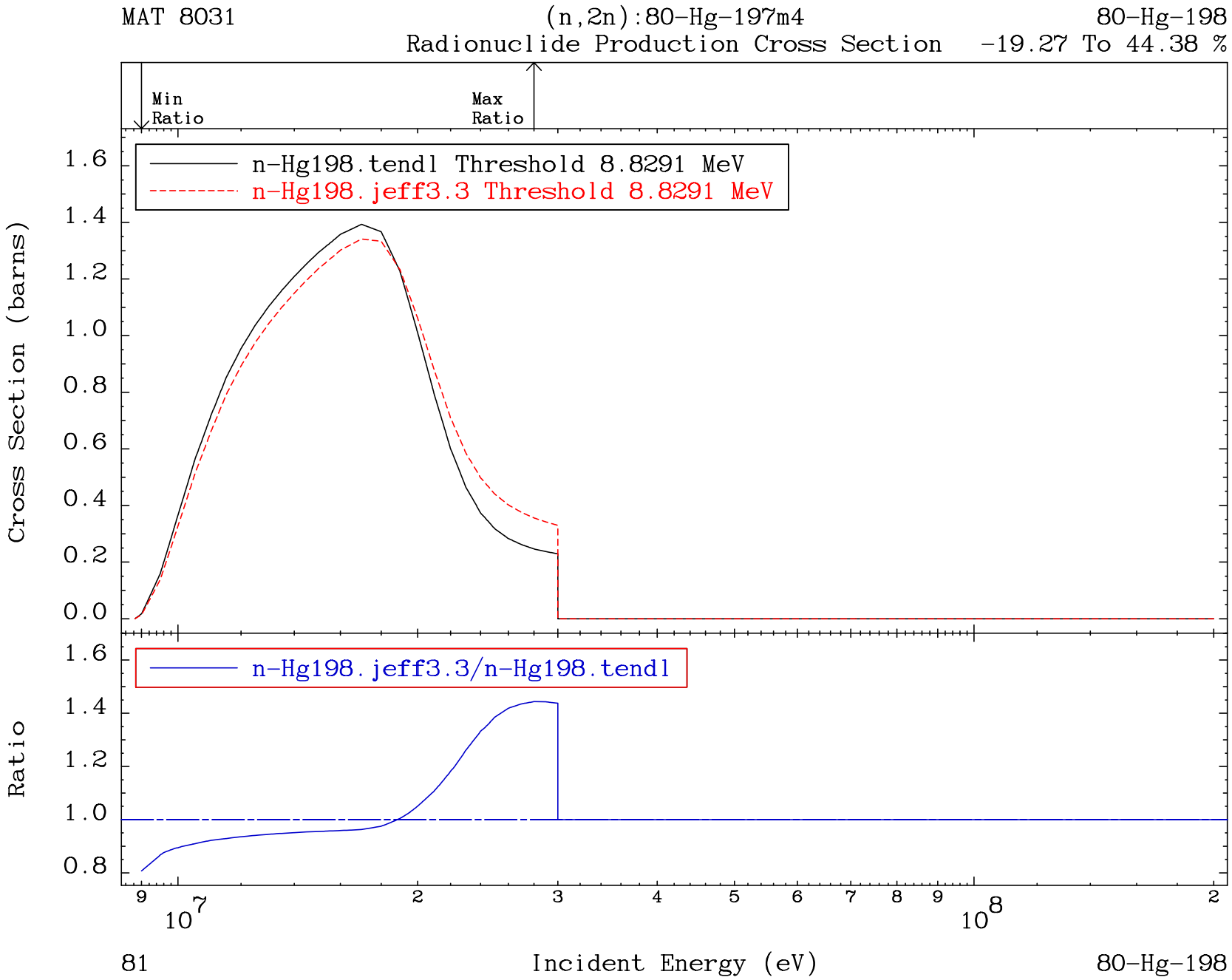

MAT 8031
Dpa inelastic (mt51-91)
Cross Section
80-Hg-198
-4.655 To 22.61 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 450.00 keV
n-Hg198.jeff3.3 Threshold 450.00 keV
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
76
80-Hg-198

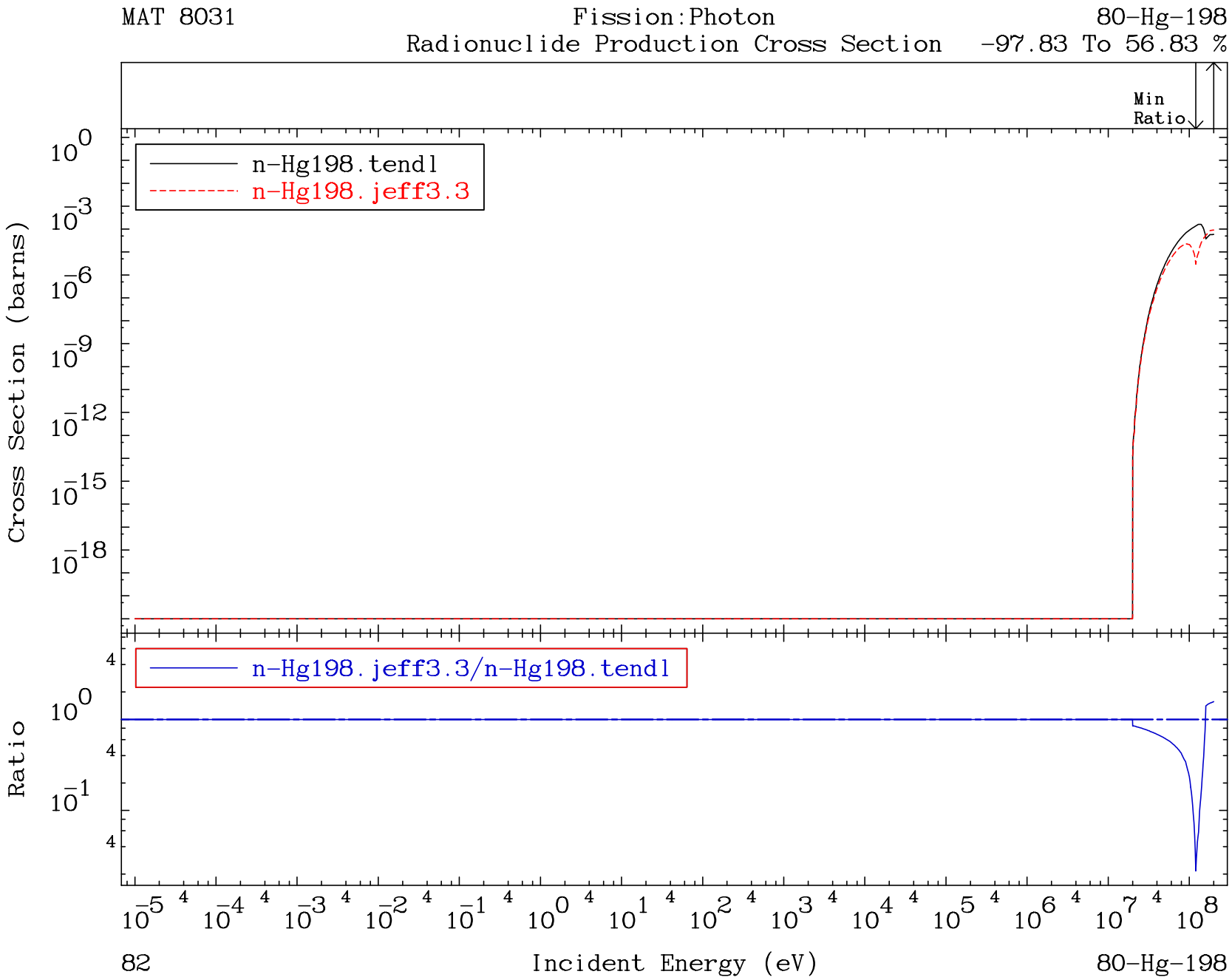

MAT 8031
Dpa disappearance (mt102 -120)
Cross Section
80-Hg-198
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
77
80-Hg-198

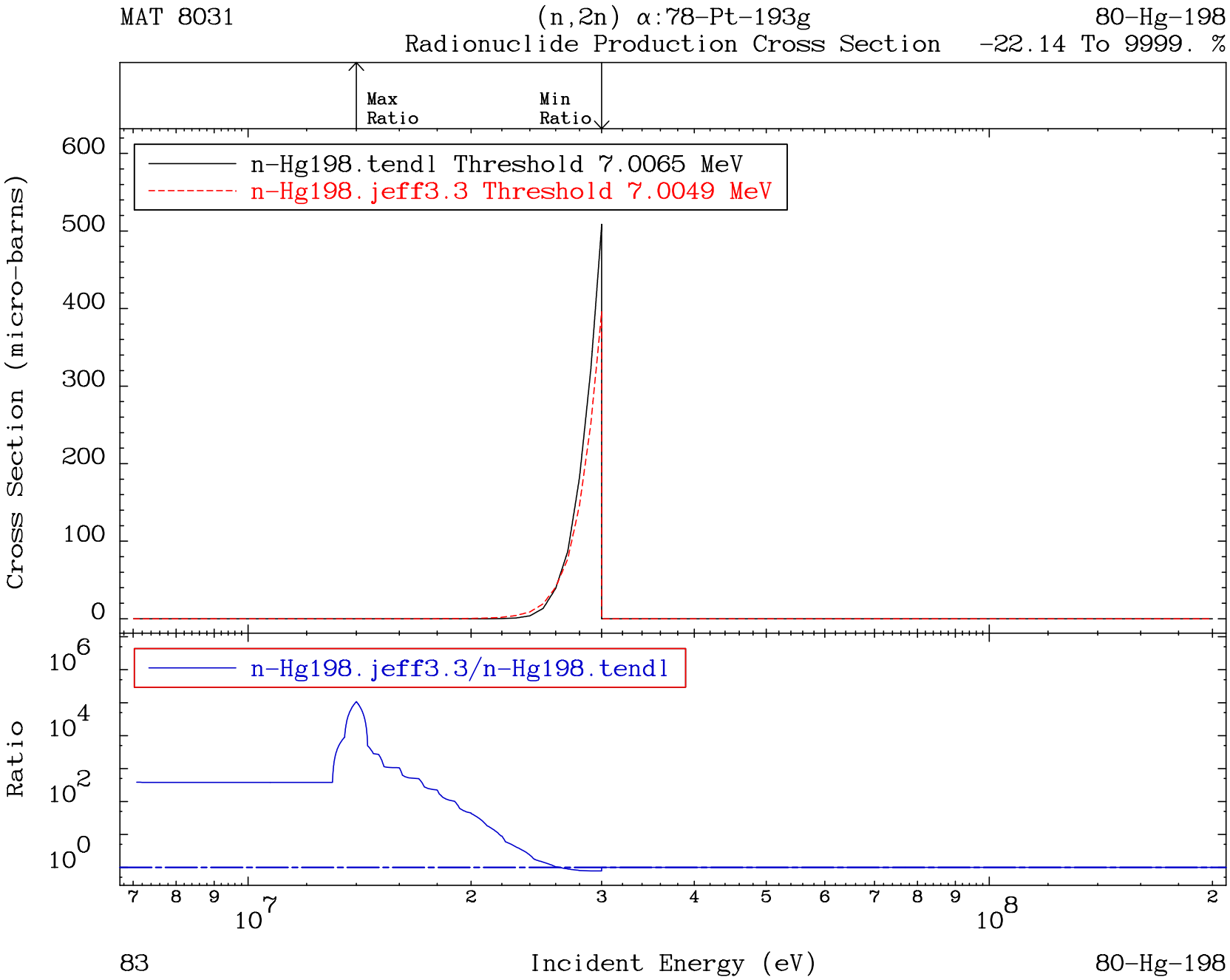

MAT 8031
(n,2n) d:79-Au-195g
80-Hg-198
Radionuclide Production Cross Section
-50.90 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 19.694 MeV
n-Hg198.jeff3.3 Threshold 19.694 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
80-Hg-198

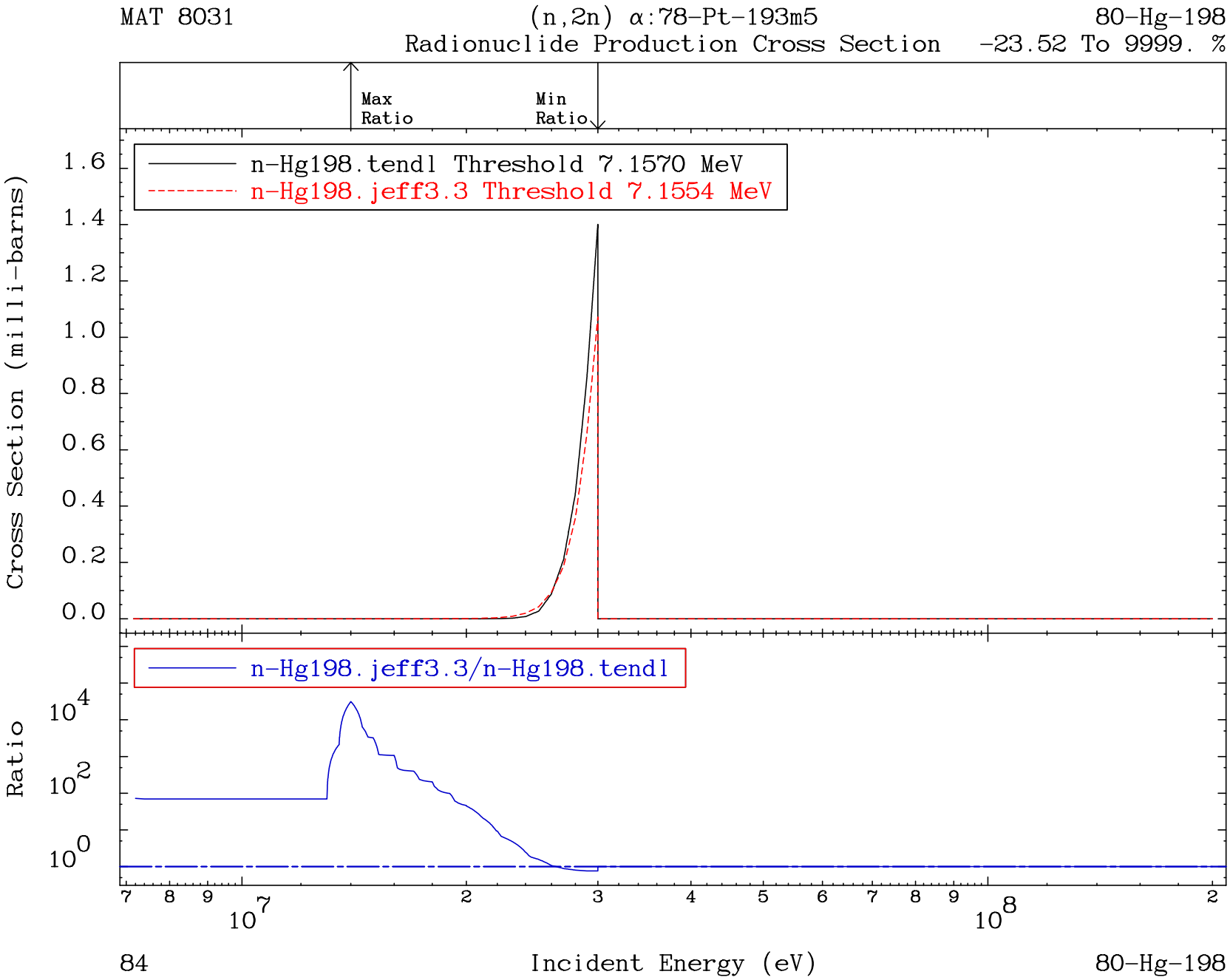

MAT 8031
(n,2n) d:79-Au-195m4
80-Hg-198
Radionuclide Production Cross Section
-53.97 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 20.014 MeV
n-Hg198.jeff3.3 Threshold 20.014 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
20
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
80-Hg-198

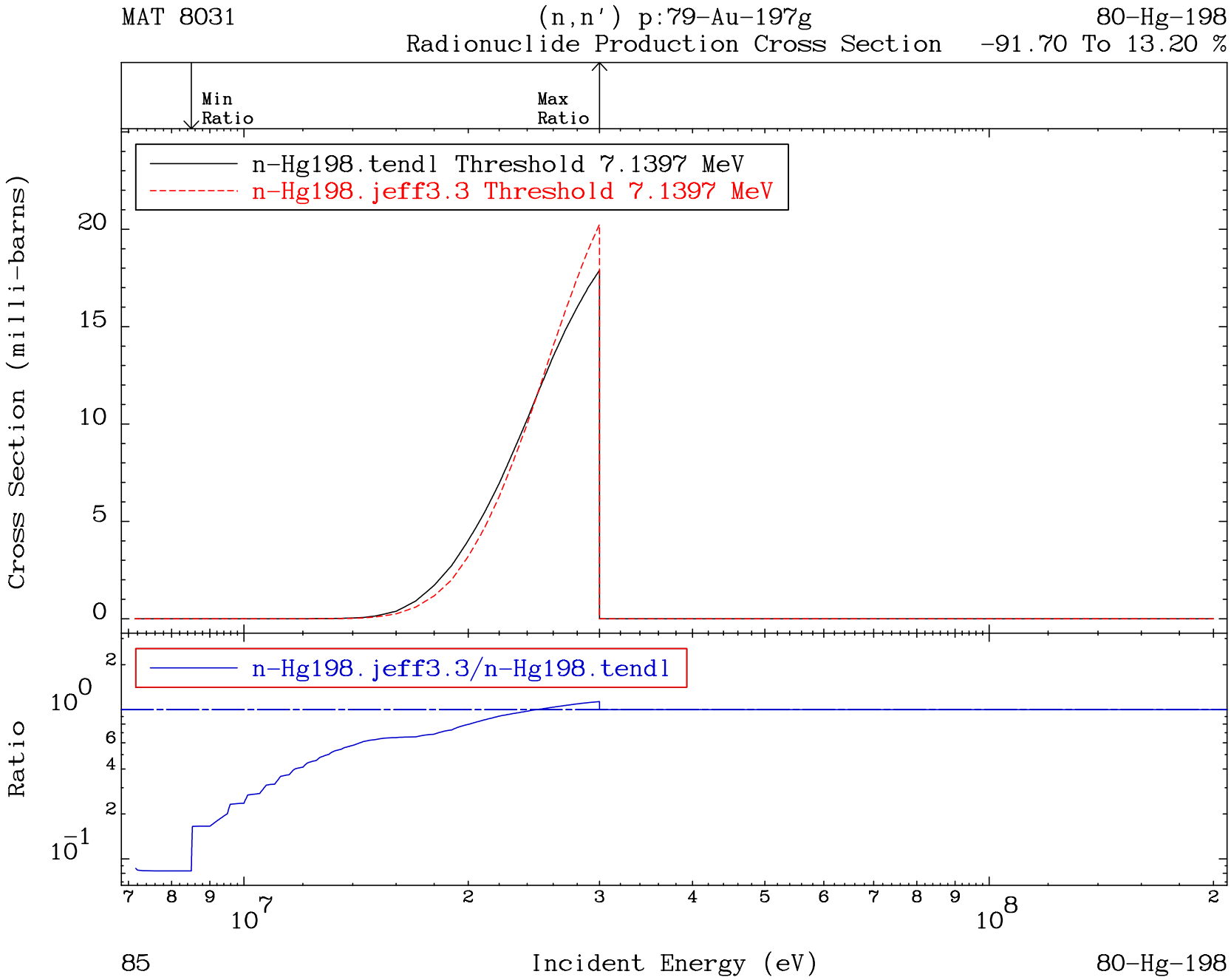

MAT 8031
(n,2n):80-Hg-197g
80-Hg-198
Radionuclide Production Cross Section
-15.72 To 43.89 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 8.5286 MeV
n-Hg198.jeff3.3 Threshold 8.5286 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.6
1.4
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
80-Hg-198

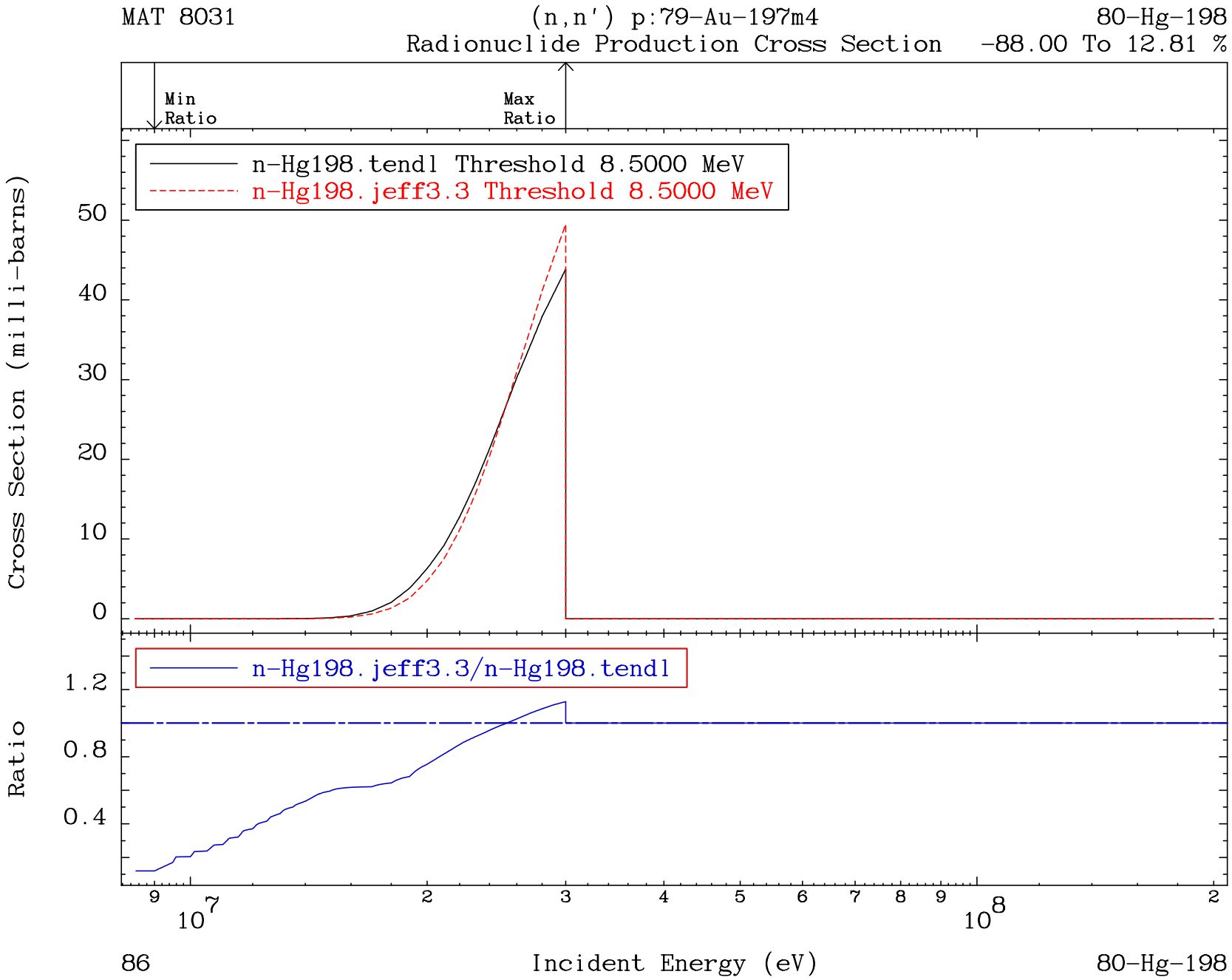

MAT 8031
(n,2n):80-Hg-197m4
80-Hg-198
Radionuclide Production Cross Section -19.27 To 44.38 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 8.8291 MeV
n-Hg198.jeff3.3 Threshold 8.8291 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.6
1.4
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
80-Hg-198

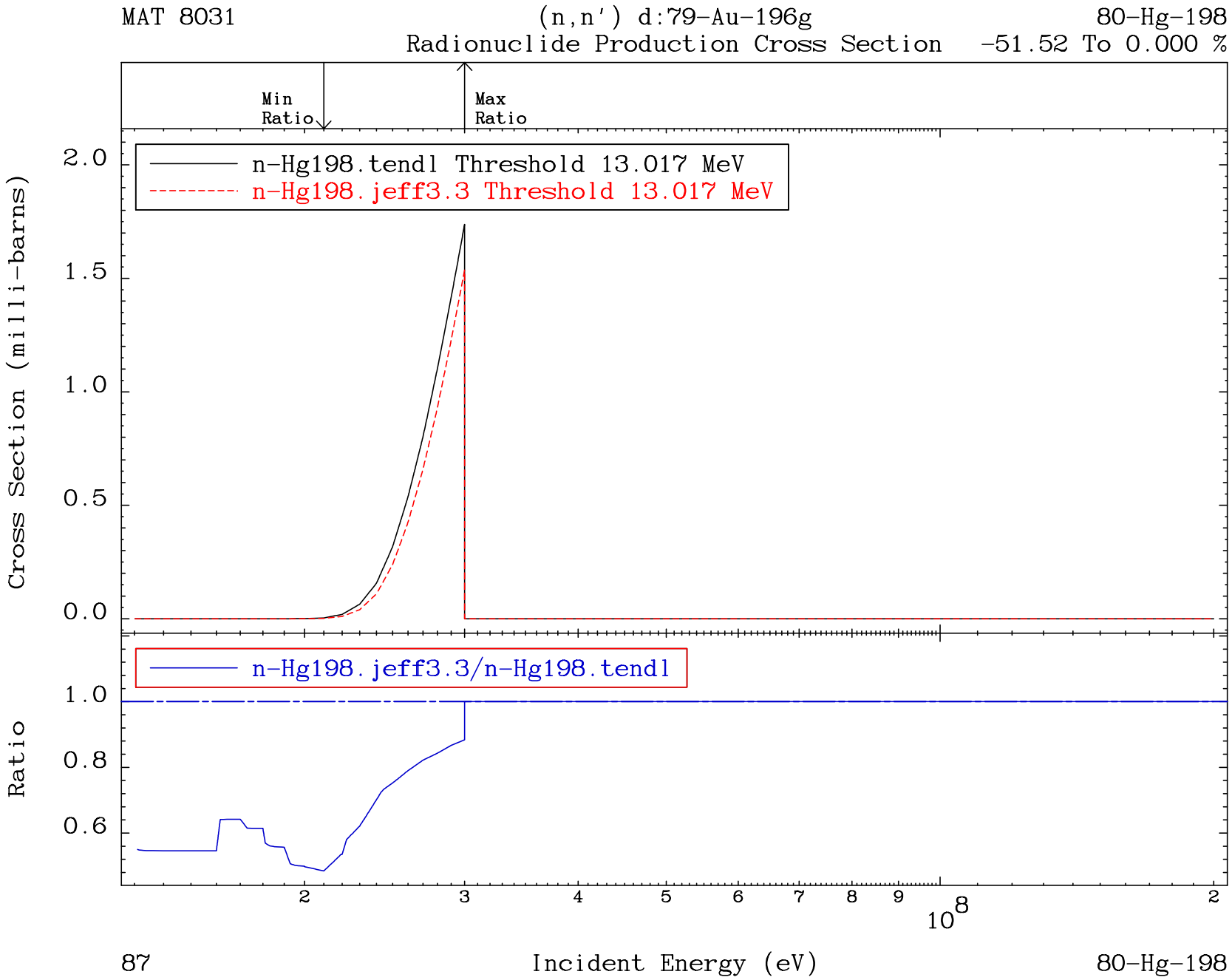

MAT 8031
Fission:Photon
80-Hg-198
Radionuclide Production Cross Section
-97.83 To 56.83 %
Min Ratio
n-Hg198.tendl
n-Hg198.jeff3.3
Cross Section (barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
82
80-Hg-198

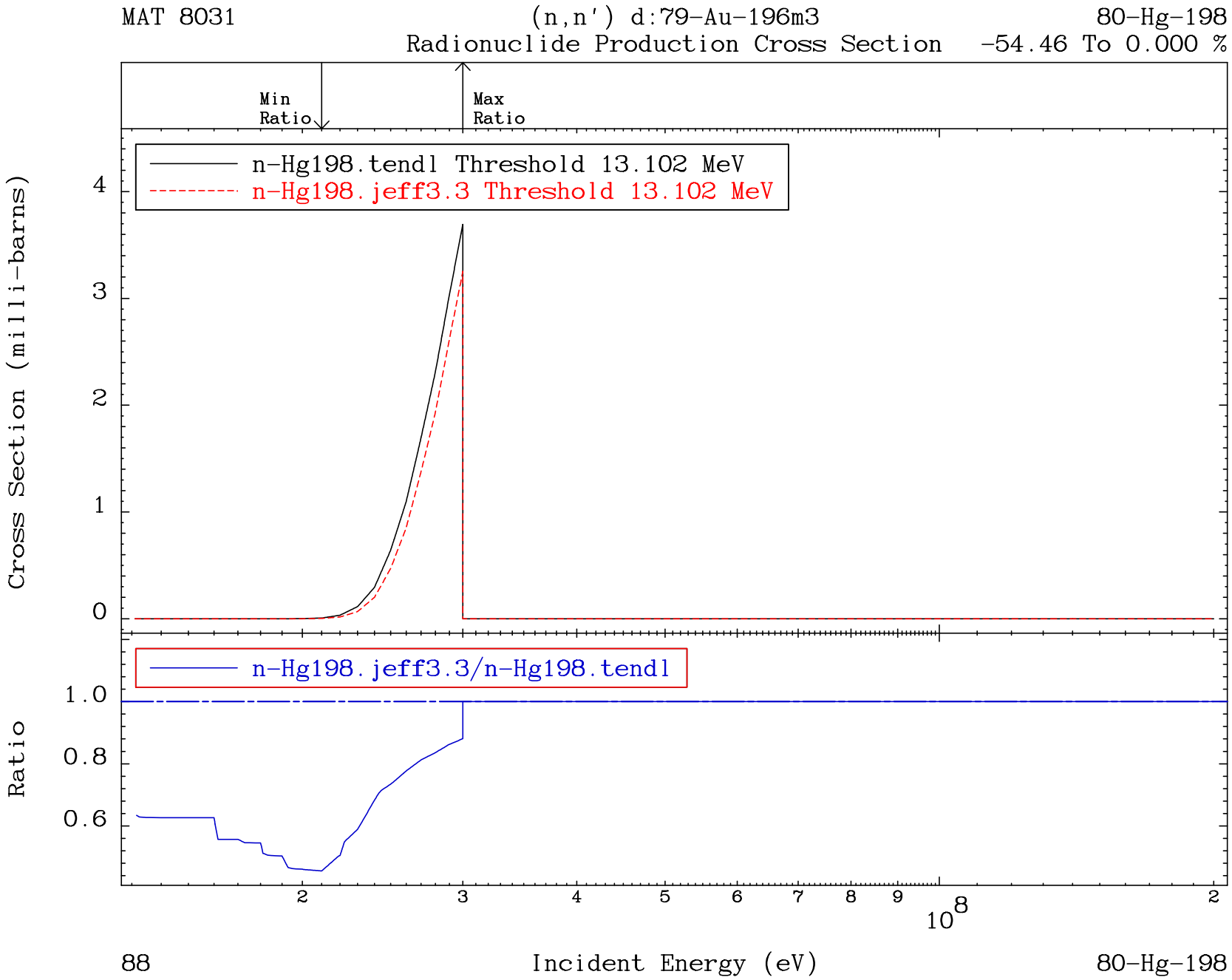

MAT 8031
(n,2n) α:78-Pt-193g
80-Hg-198
Radionuclide Production Cross Section -22.14 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 7.0065 MeV
n-Hg198.jeff3.3 Threshold 7.0049 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^6
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
80-Hg-198

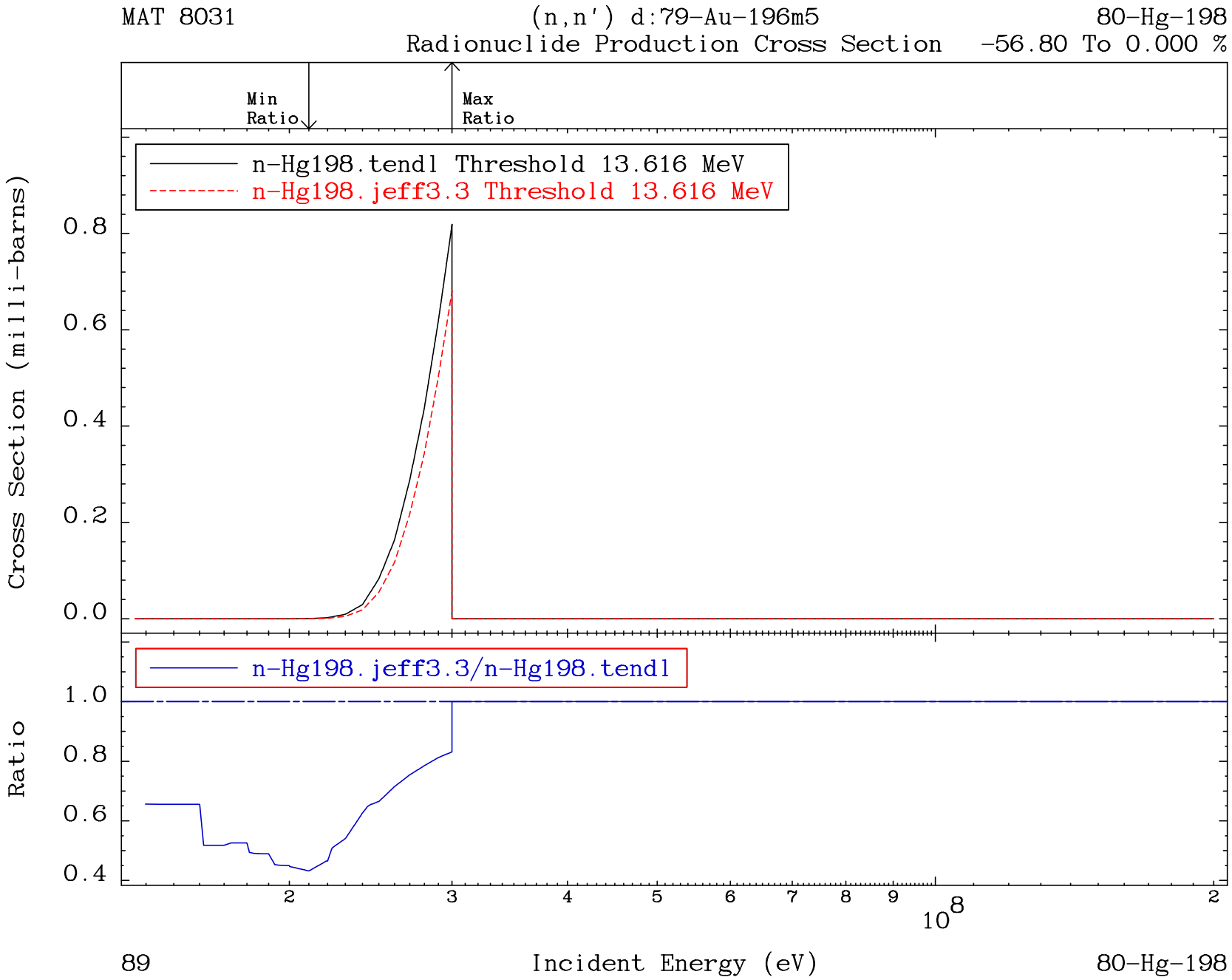

MAT 8031
(n,2n) α:78-Pt-193m5
80-Hg-198
Radionuclide Production Cross Section -23.52 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 7.1570 MeV
n-Hg198.jeff3.3 Threshold 7.1554 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
84
Incident Energy (eV)
80-Hg-198

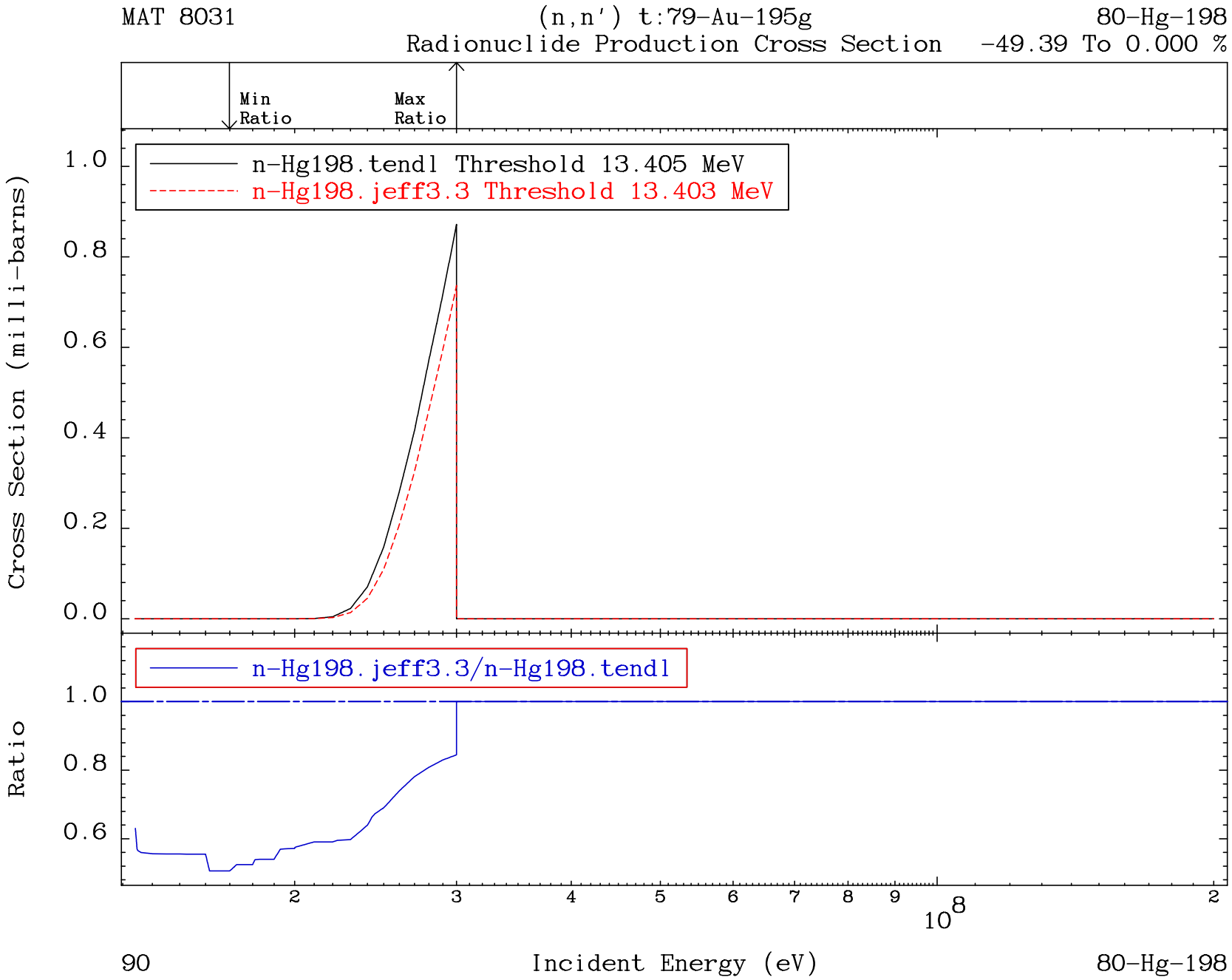

MAT 8031
(n,n') p:79-Au-197g
80-Hg-198
Radionuclide Production Cross Section -91.70 To 13.20 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 7.1397 MeV
n-Hg198.jeff3.3 Threshold 7.1397 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
2
10^0
6
4
2
10^-1
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
80-Hg-198

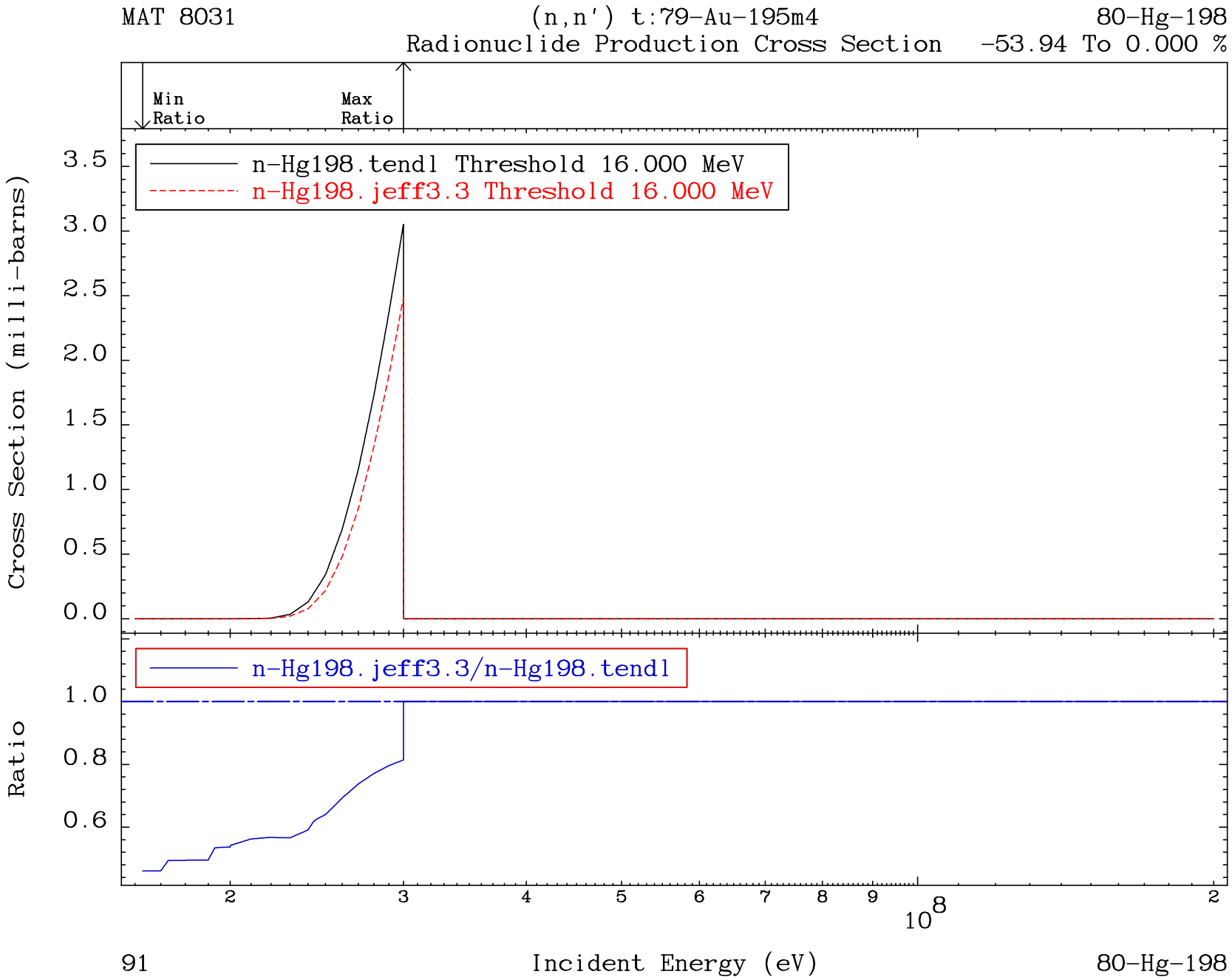

MAT 8031
(n,n') p:79-Au-197m4
80-Hg-198
Radionuclide Production Cross Section -88.00 To 12.81 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 8.5000 MeV
n-Hg198.jeff3.3 Threshold 8.5000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
80-Hg-198

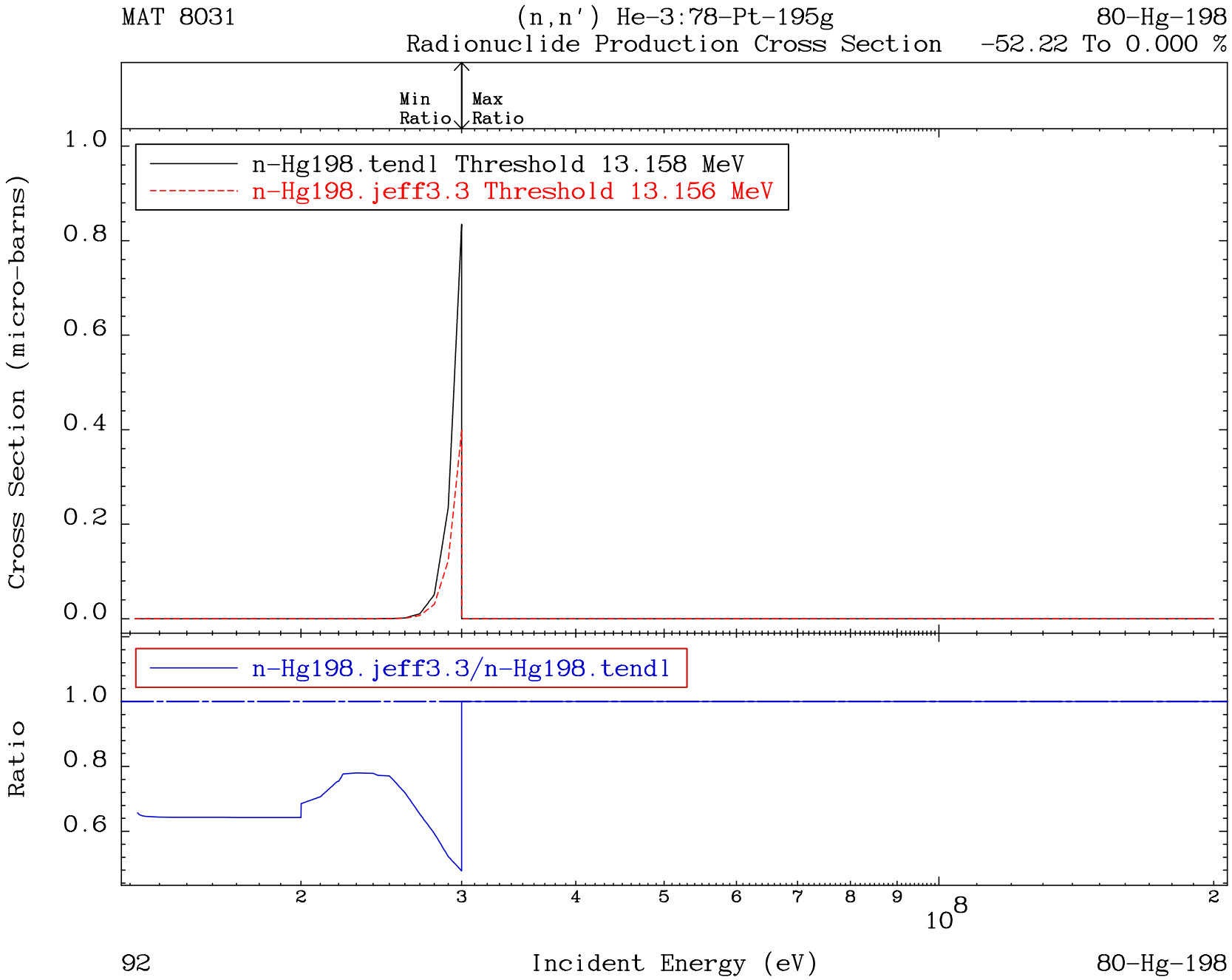

MAT 8031
(n,n') d:79-Au-196g
80-Hg-198
Radionuclide Production Cross Section -51.52 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.017 MeV
n-Hg198.jeff3.3 Threshold 13.017 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
80-Hg-198

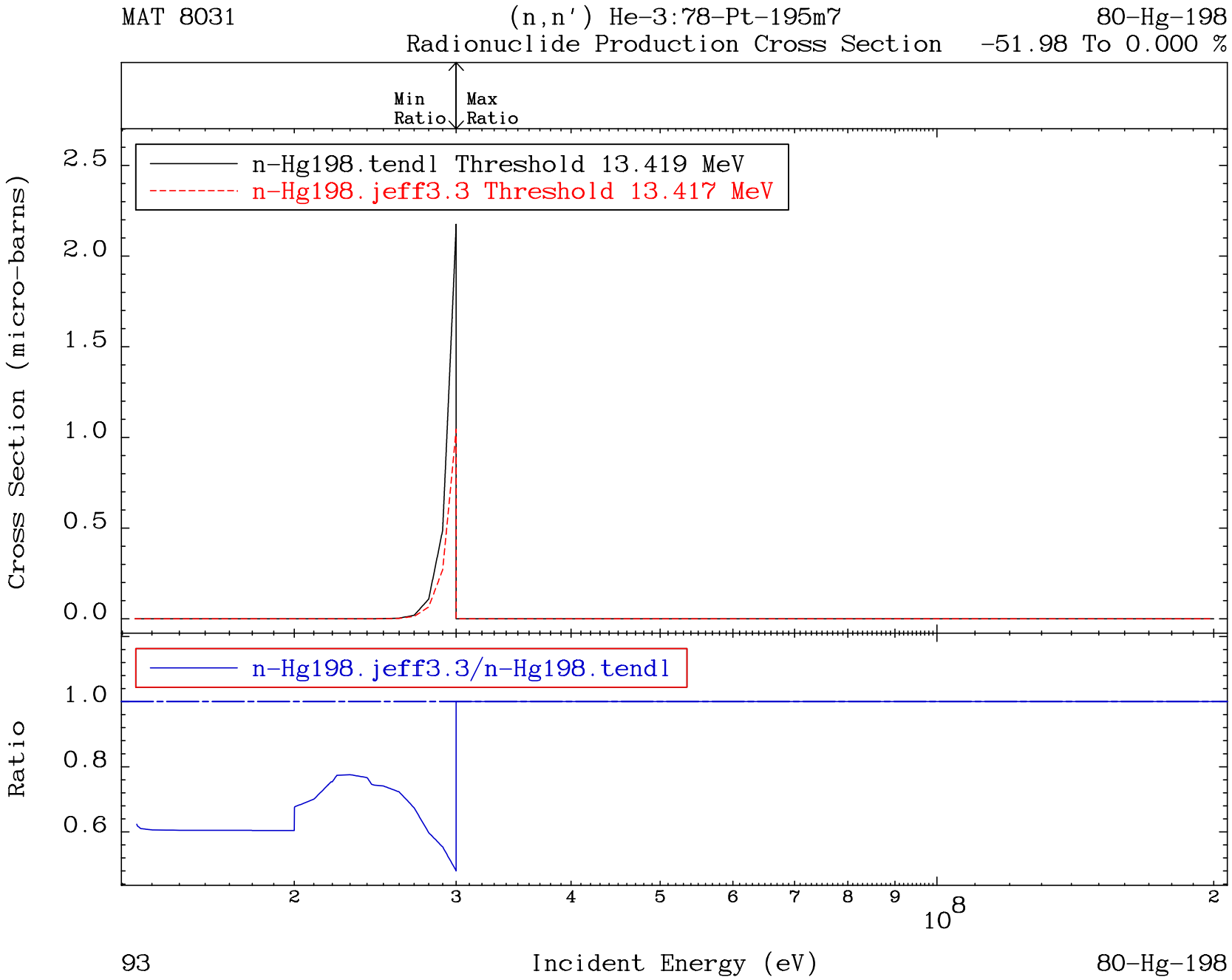

MAT 8031
(n,n') d:79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section -54.46 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.102 MeV
n-Hg198.jeff3.3 Threshold 13.102 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
80-Hg-198

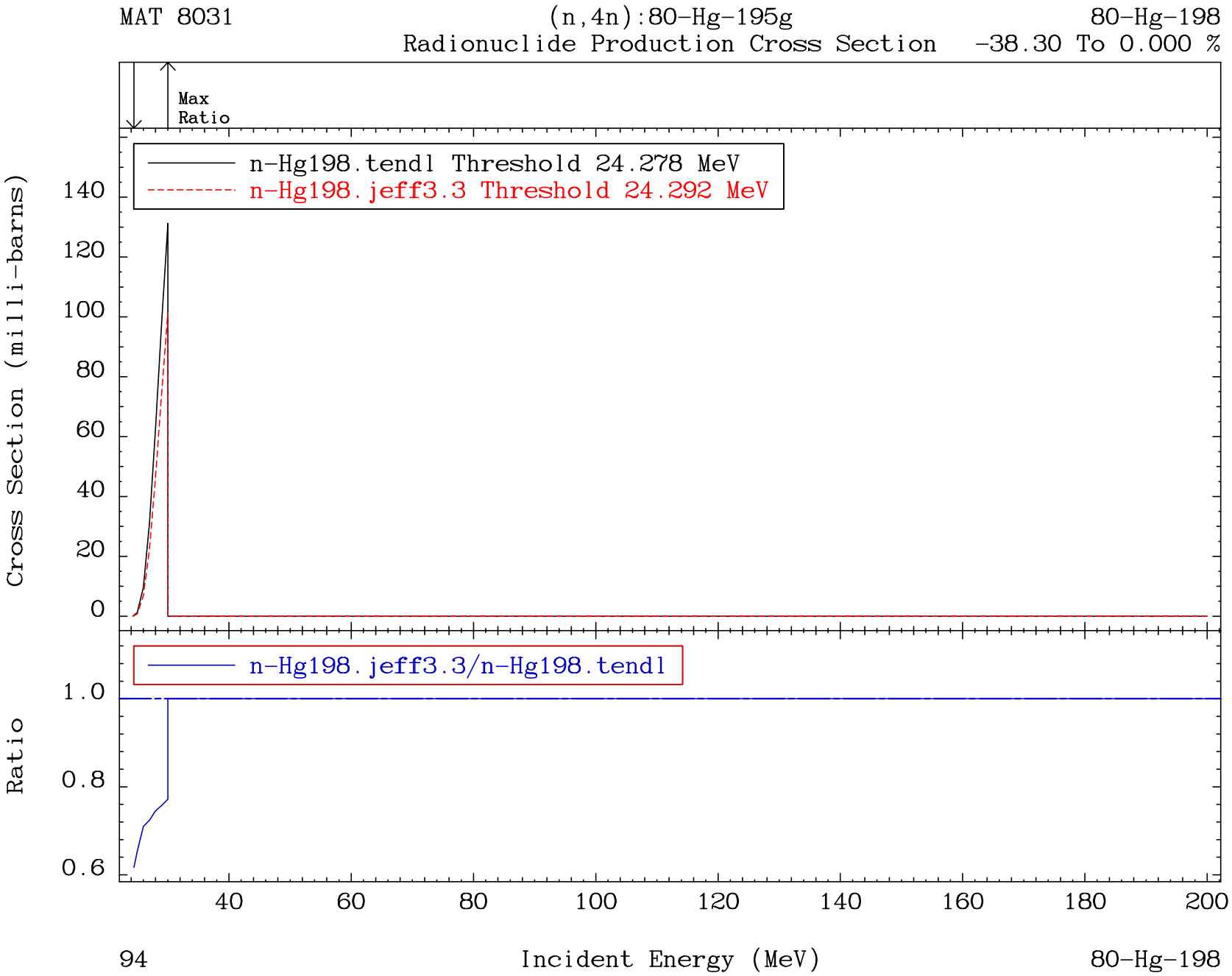

MAT 8031
(n,n') d:79-Au-196m5
80-Hg-198
Radionuclide Production Cross Section -56.80 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.616 MeV
n-Hg198.jeff3.3 Threshold 13.616 MeV
Cross Section (milli-barns)
0.0
0.2
0.4
0.6
0.8
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
0.4
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
80-Hg-198

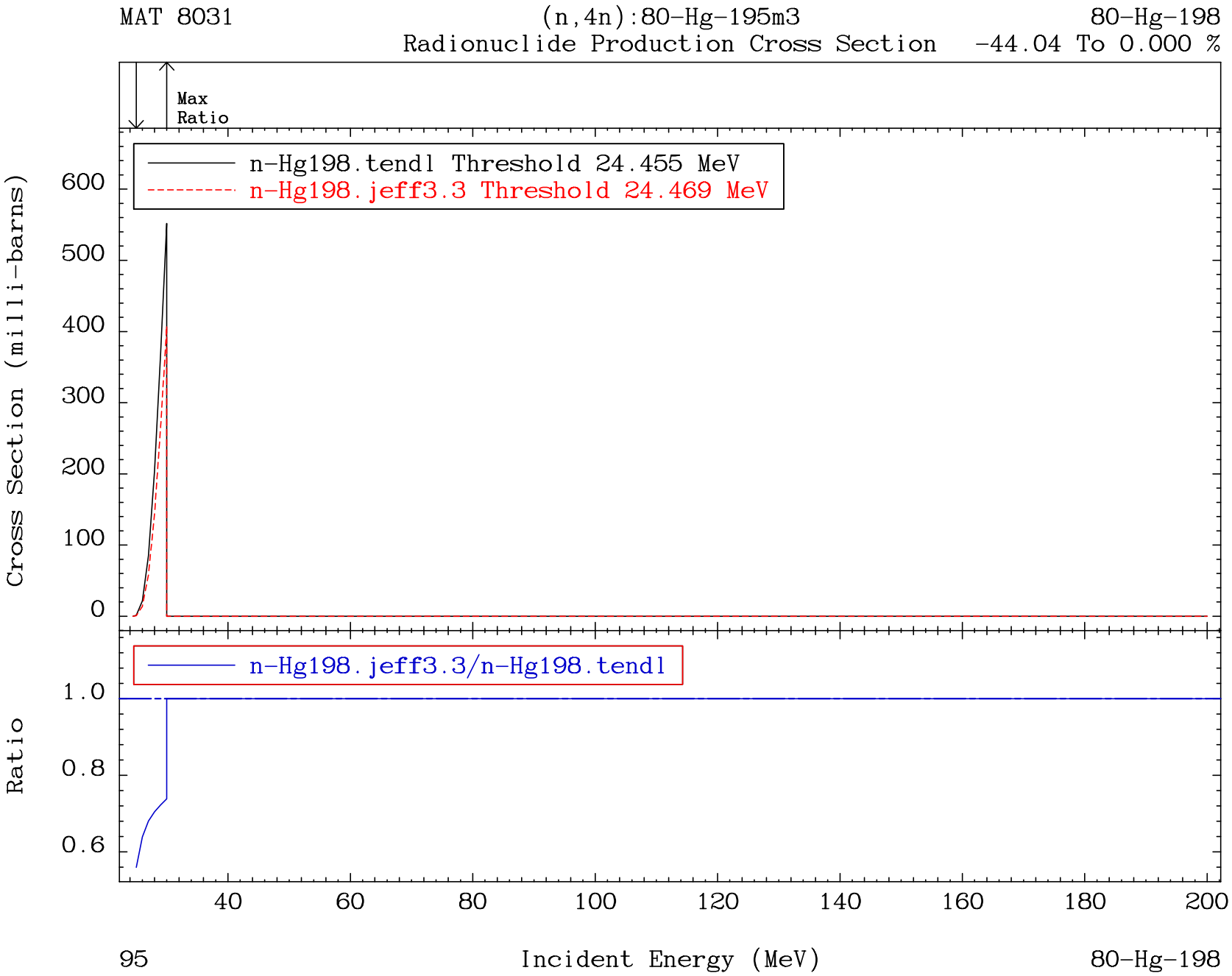

MAT 8031
(n,n') t:79-Au-195g
80-Hg-198
Radionuclide Production Cross Section -49.39 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.405 MeV
n-Hg198.jeff3.3 Threshold 13.403 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
80-Hg-198

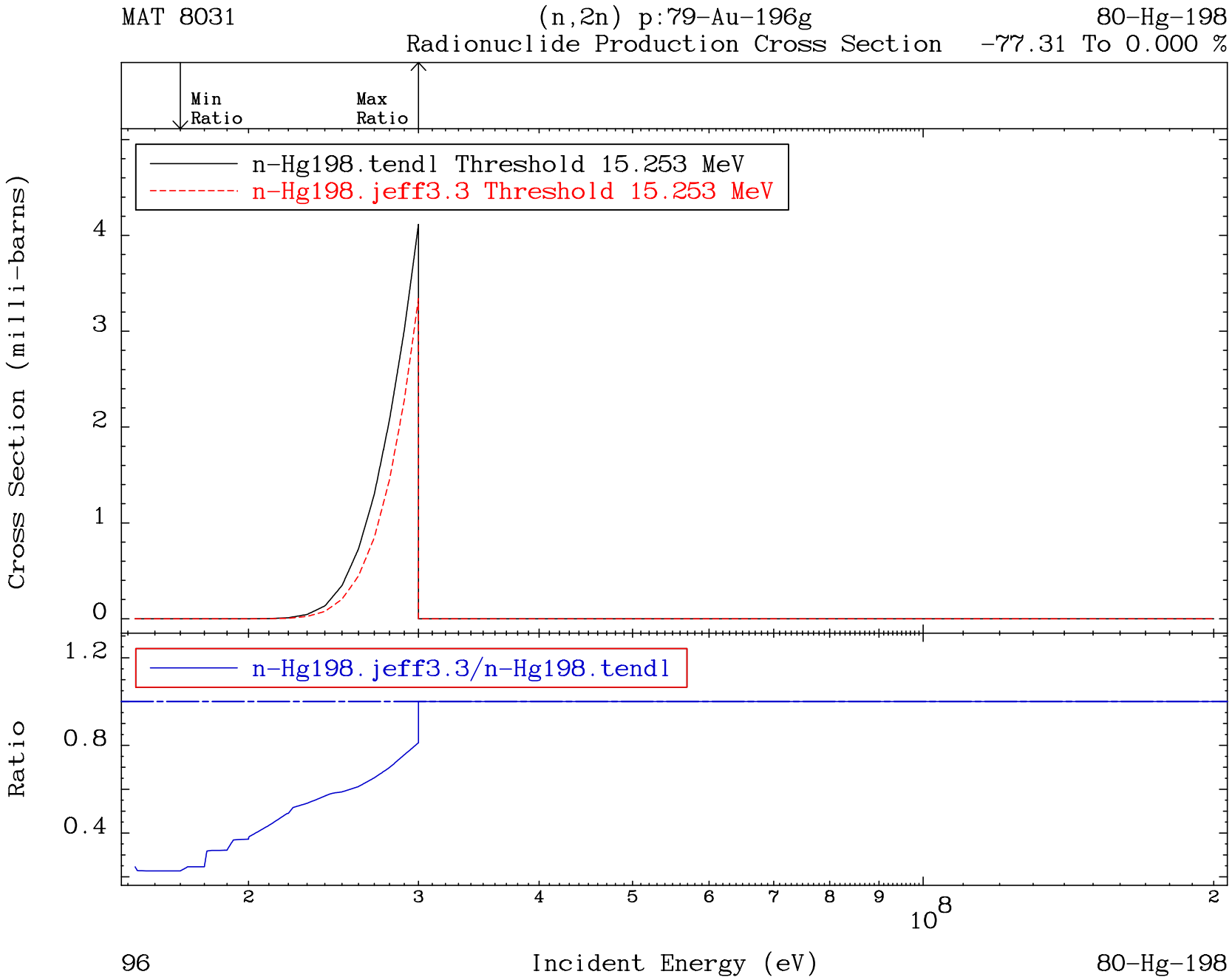

MAT 8031
(n,n') t:79-Au-195m4
80-Hg-198
Radionuclide Production Cross Section
-53.94 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 16.000 MeV
n-Hg198.jeff3.3 Threshold 16.000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
80-Hg-198

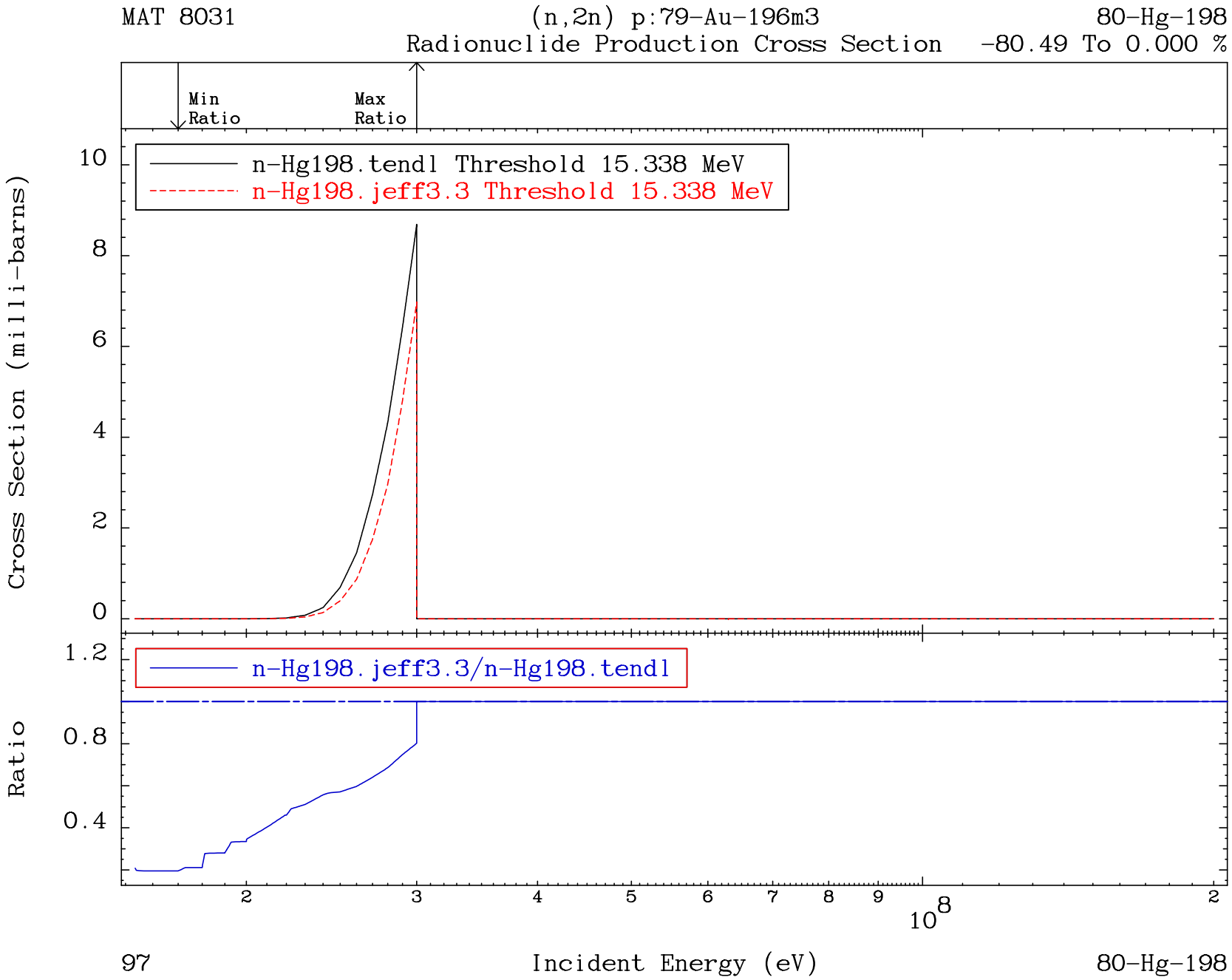

MAT 8031
(n,n') He-3:78-Pt-195g
80-Hg-198
Radionuclide Production Cross Section
-52.22 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.158 MeV
n-Hg198.jeff3.3 Threshold 13.156 MeV
Cross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
80-Hg-198

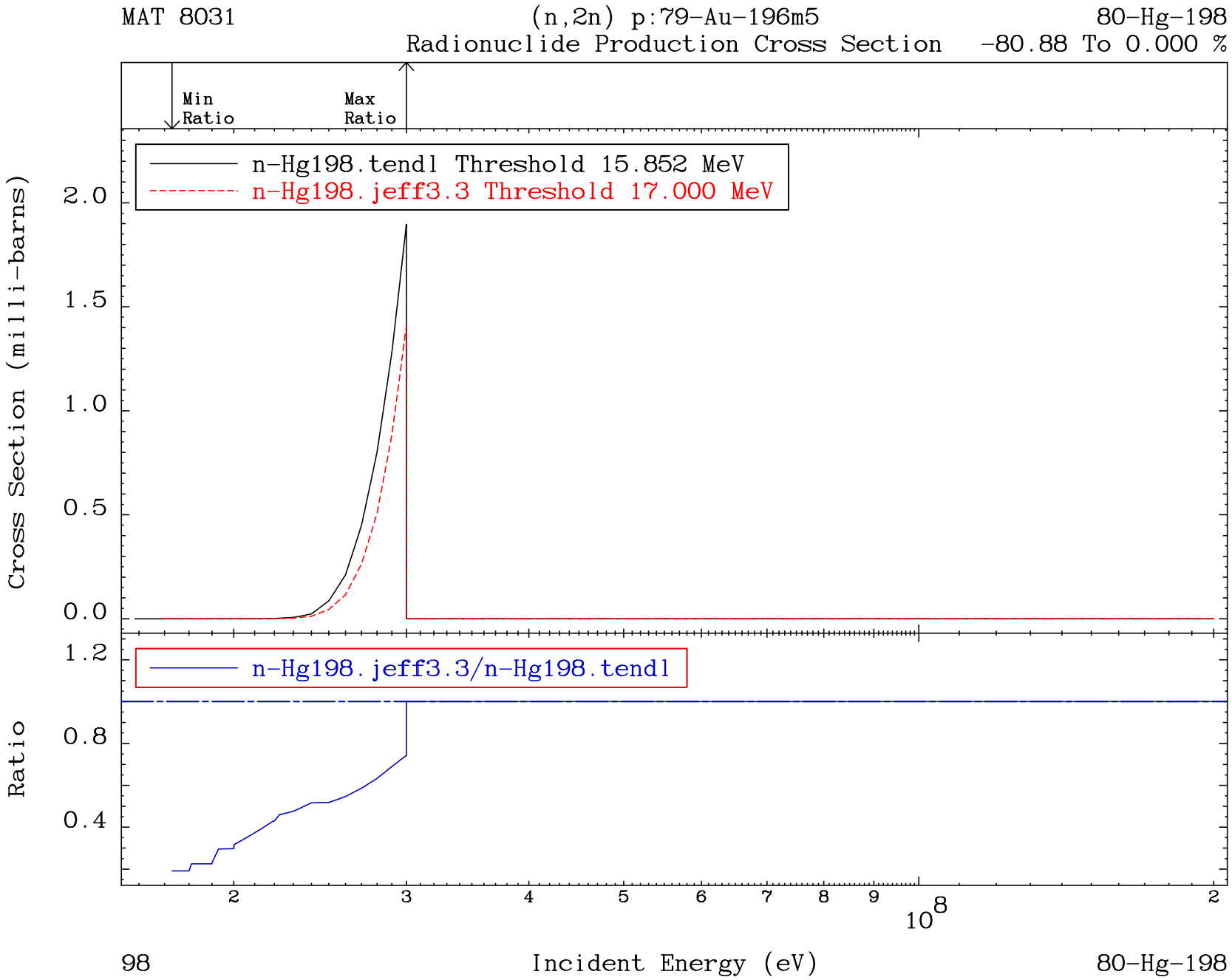

MAT 8031
(n,n') He-3:78-Pt-195m7
80-Hg-198
Radionuclide Production Cross Section
-51.98 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 13.419 MeV
n-Hg198.jeff3.3 Threshold 13.417 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
2
10^8
93
Incident Energy (eV)
80-Hg-198

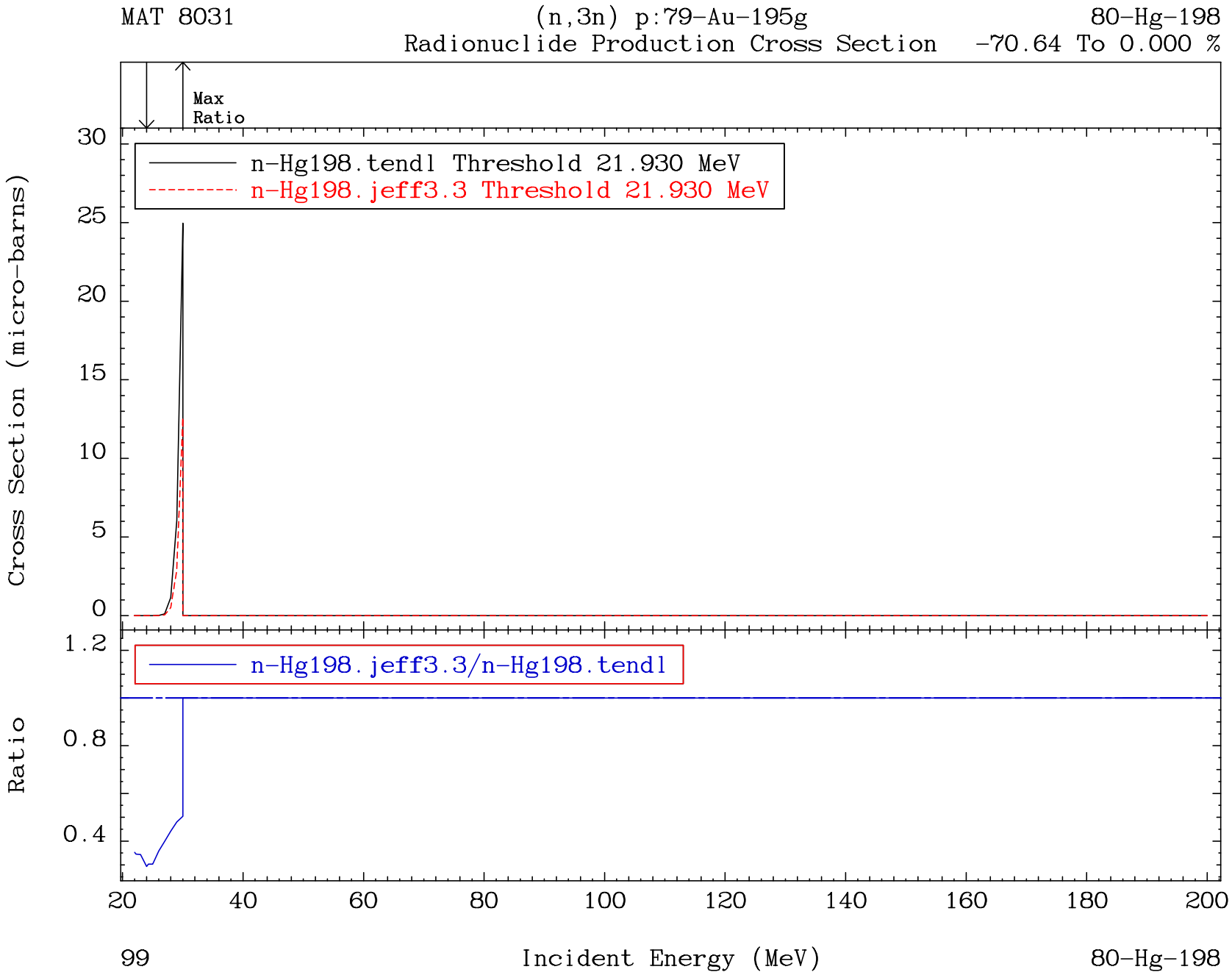

MAT 8031
(n,4n):80-Hg-195g
80-Hg-198
Radionuclide Production Cross Section
-38.30 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 24.278 MeV
n-Hg198.jeff3.3 Threshold 24.292 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
40
60
80
100
120
140
160
180
200
94
Incident Energy (MeV)
80-Hg-198

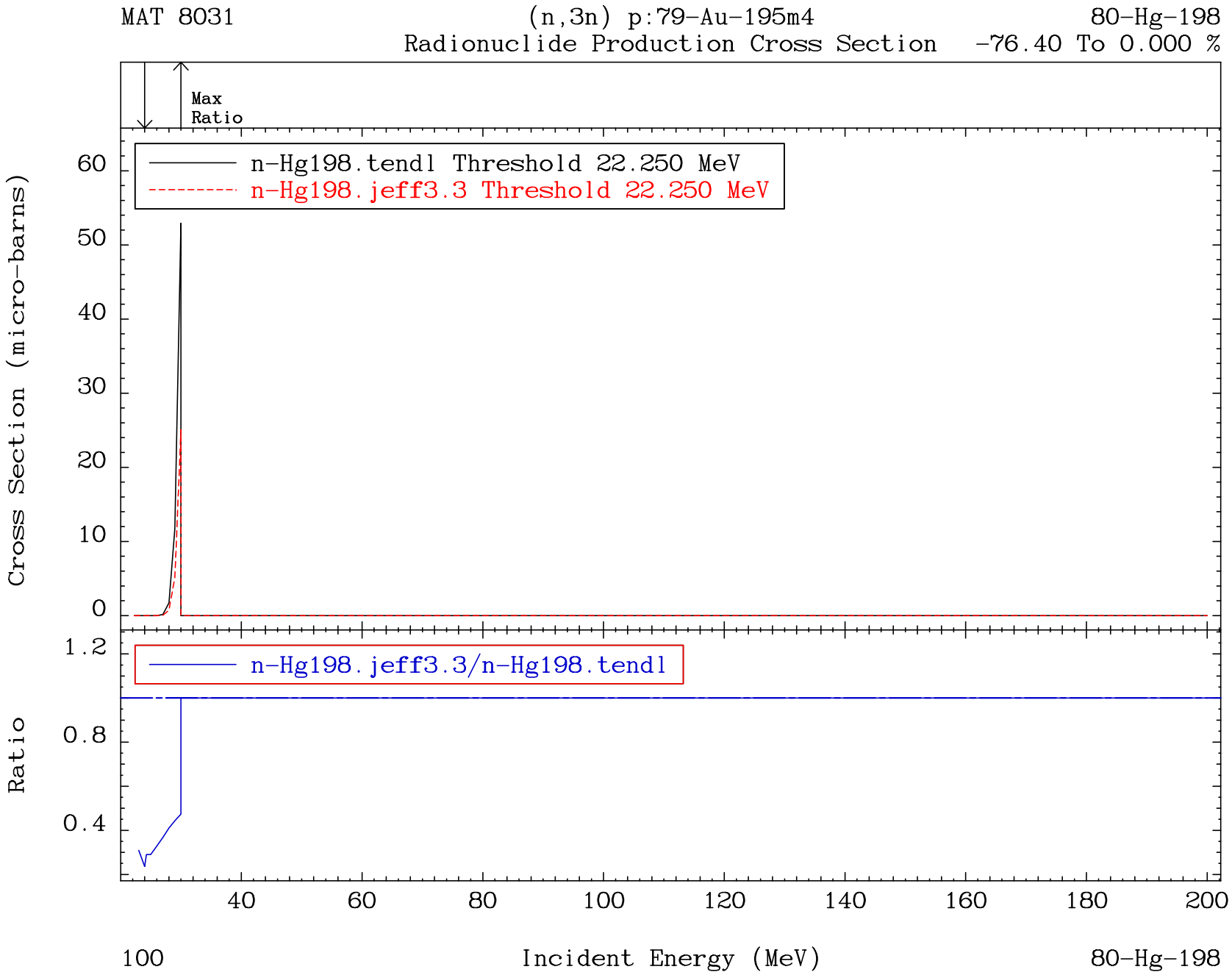

MAT 8031
(n,4n):80-Hg-195m3
80-Hg-198
Radionuclide Production Cross Section -44.04 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 24.455 MeV
n-Hg198.jeff3.3 Threshold 24.469 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
40
60
80
100
120
140
160
180
200
95
Incident Energy (MeV)
80-Hg-198

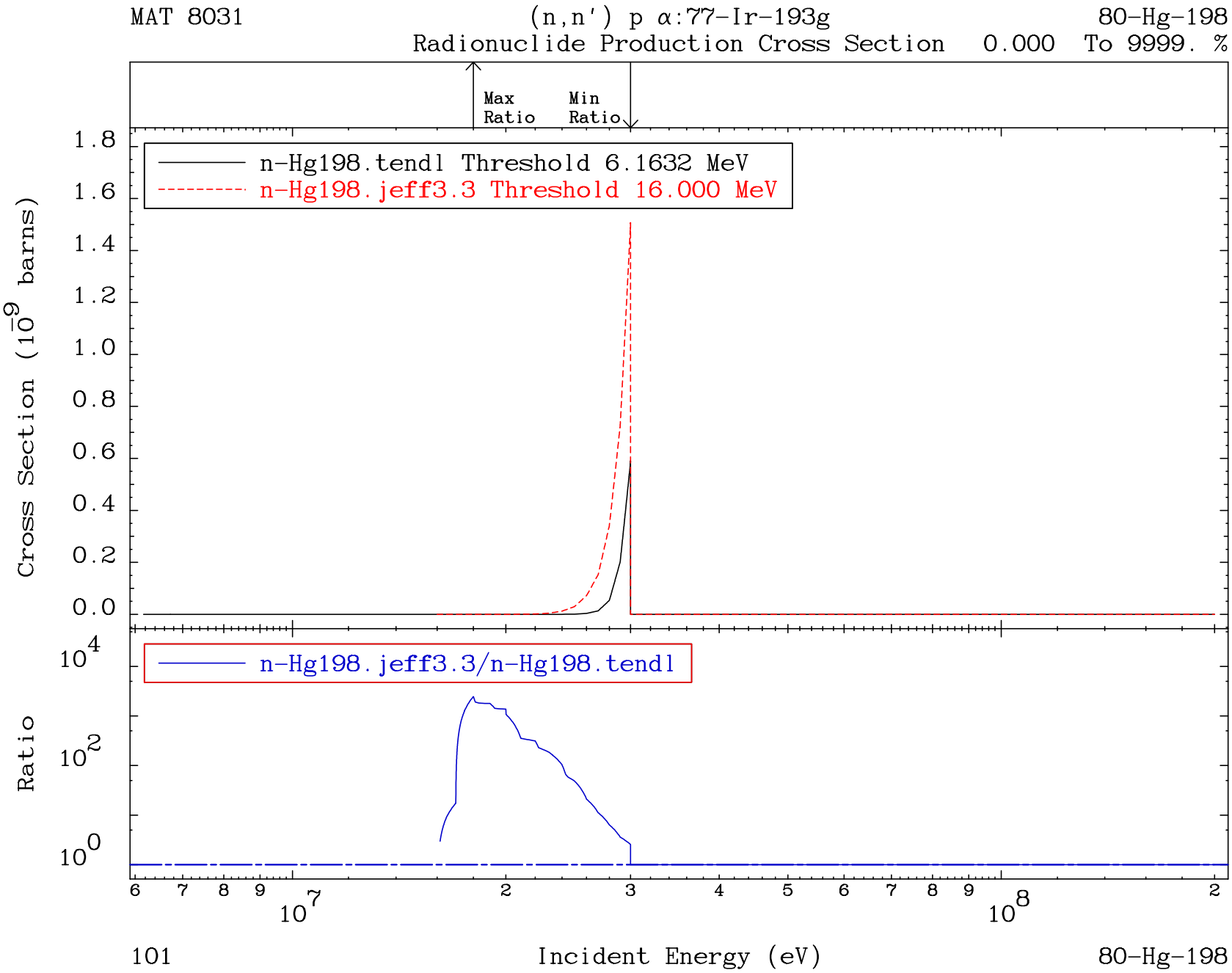

MAT 8031
(n,2n) p:79-Au-196g
80-Hg-198
Radionuclide Production Cross Section
-77.31 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.253 MeV
n-Hg198.jeff3.3 Threshold 15.253 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
80-Hg-198

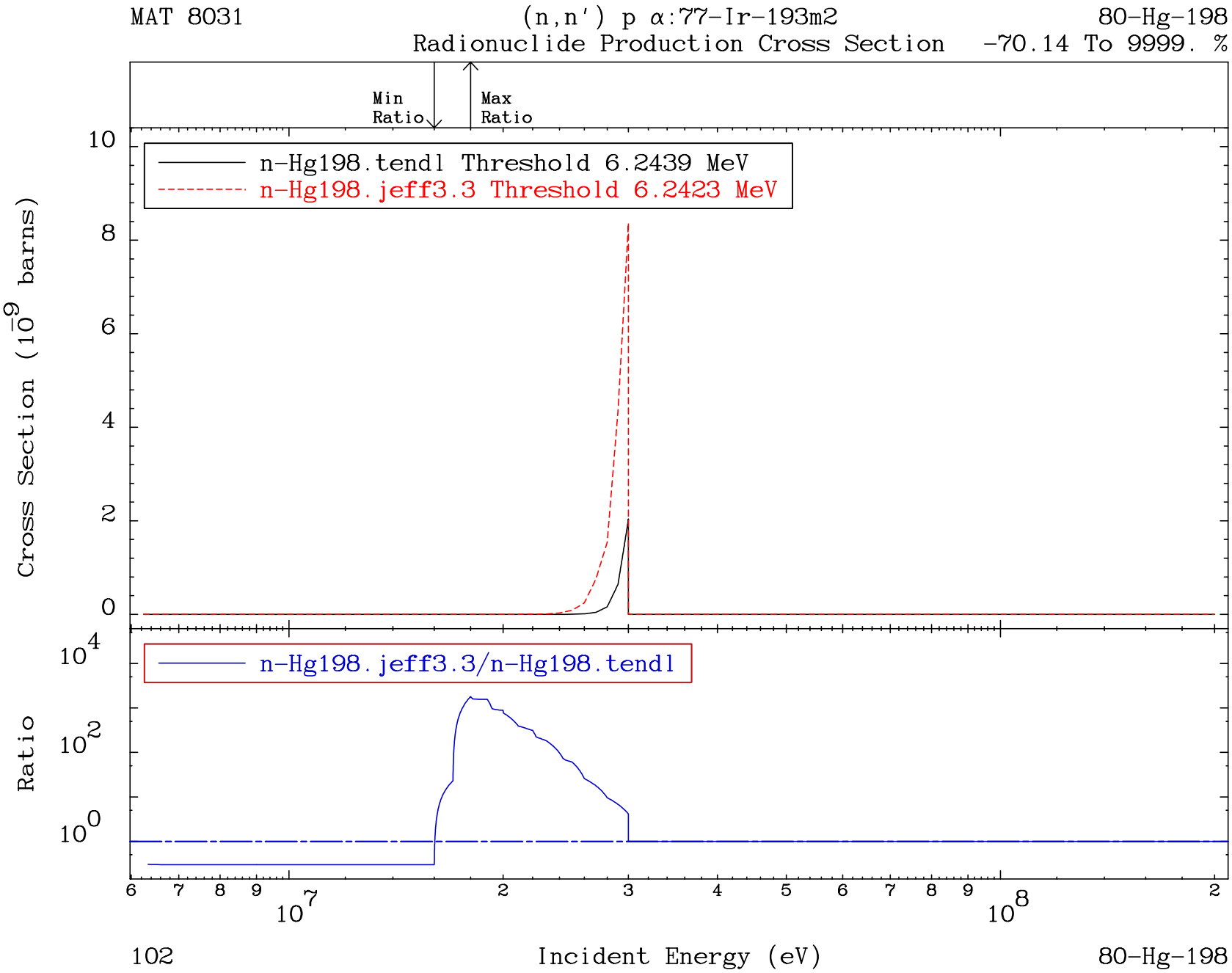

MAT 8031
(n,2n) p:79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section
-80.49 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.338 MeV
n-Hg198.jeff3.3 Threshold 15.338 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
97
Incident Energy (eV)
80-Hg-198

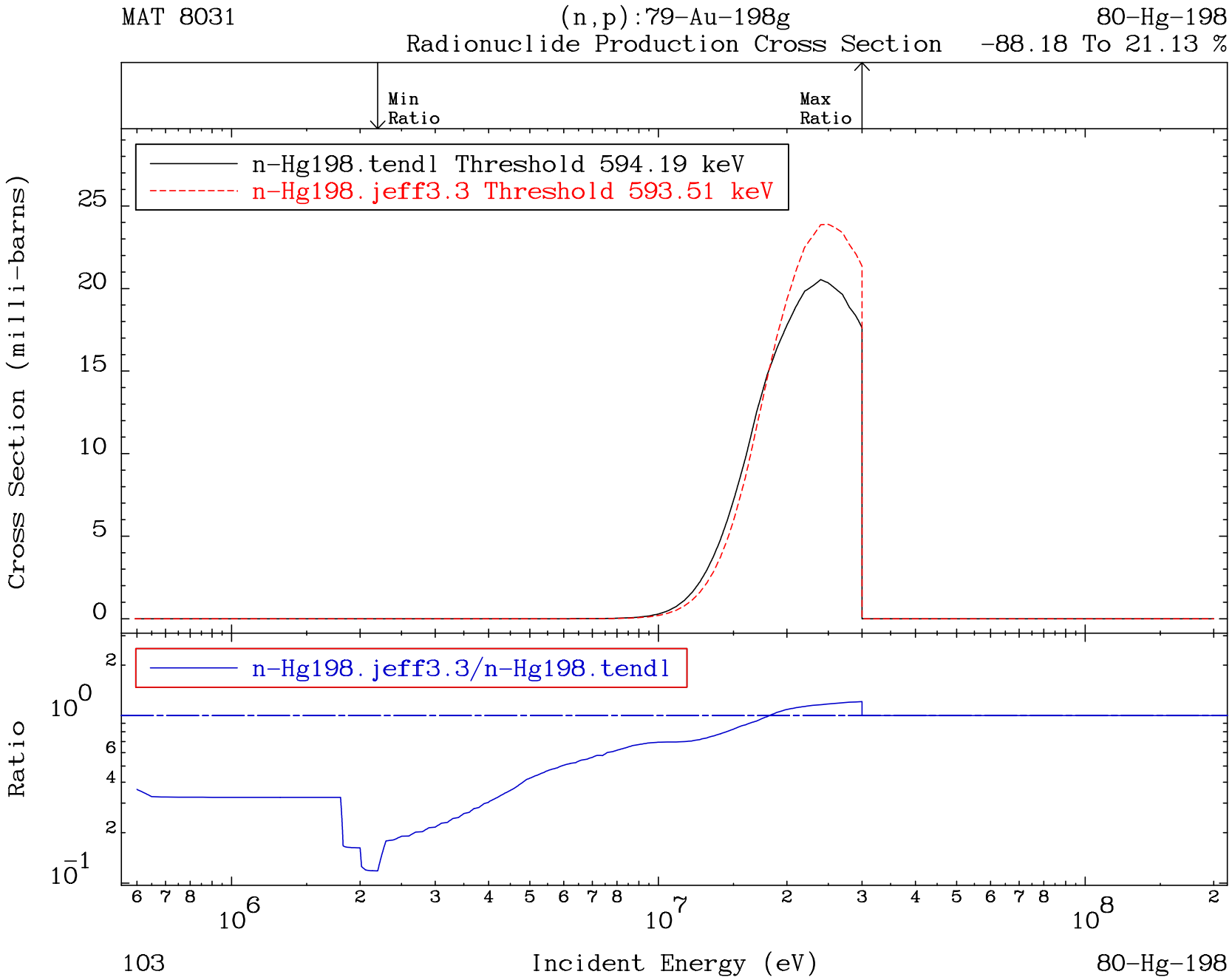

MAT 8031
(n,2n) p:79-Au-196m5
80-Hg-198
Radionuclide Production Cross Section
-80.88 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 15.852 MeV
n-Hg198.jeff3.3 Threshold 17.000 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
98
Incident Energy (eV)
80-Hg-198

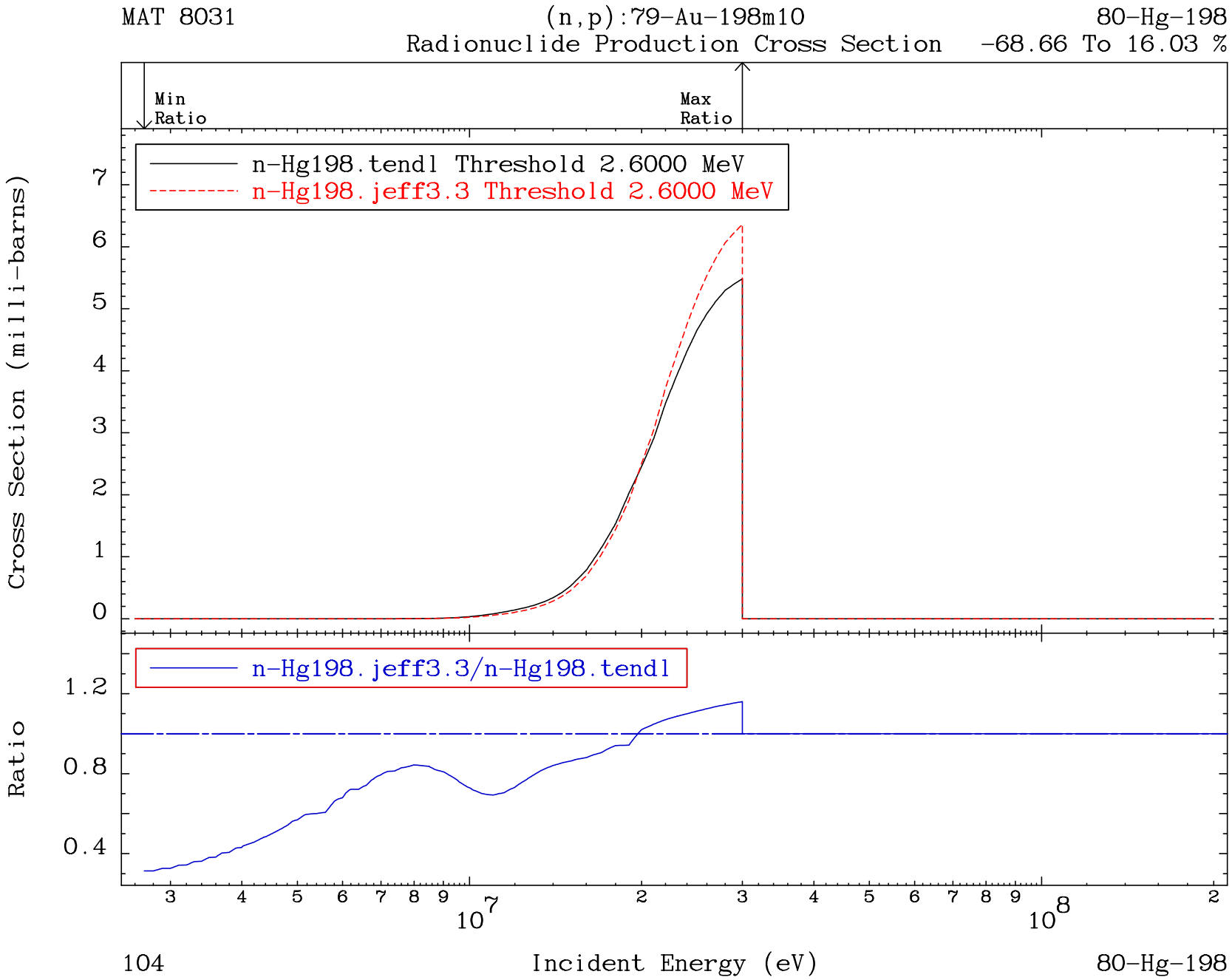

MAT 8031
(n,3n) p:79-Au-195g
80-Hg-198
Radionuclide Production Cross Section
-70.64 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 21.930 MeV
n-Hg198.jeff3.3 Threshold 21.930 MeV
n-Hg198.jeff3.3/n-Hg198.tendl
Cross Section (micro-barns)
Ratio
Incident Energy (MeV)
99
80-Hg-198

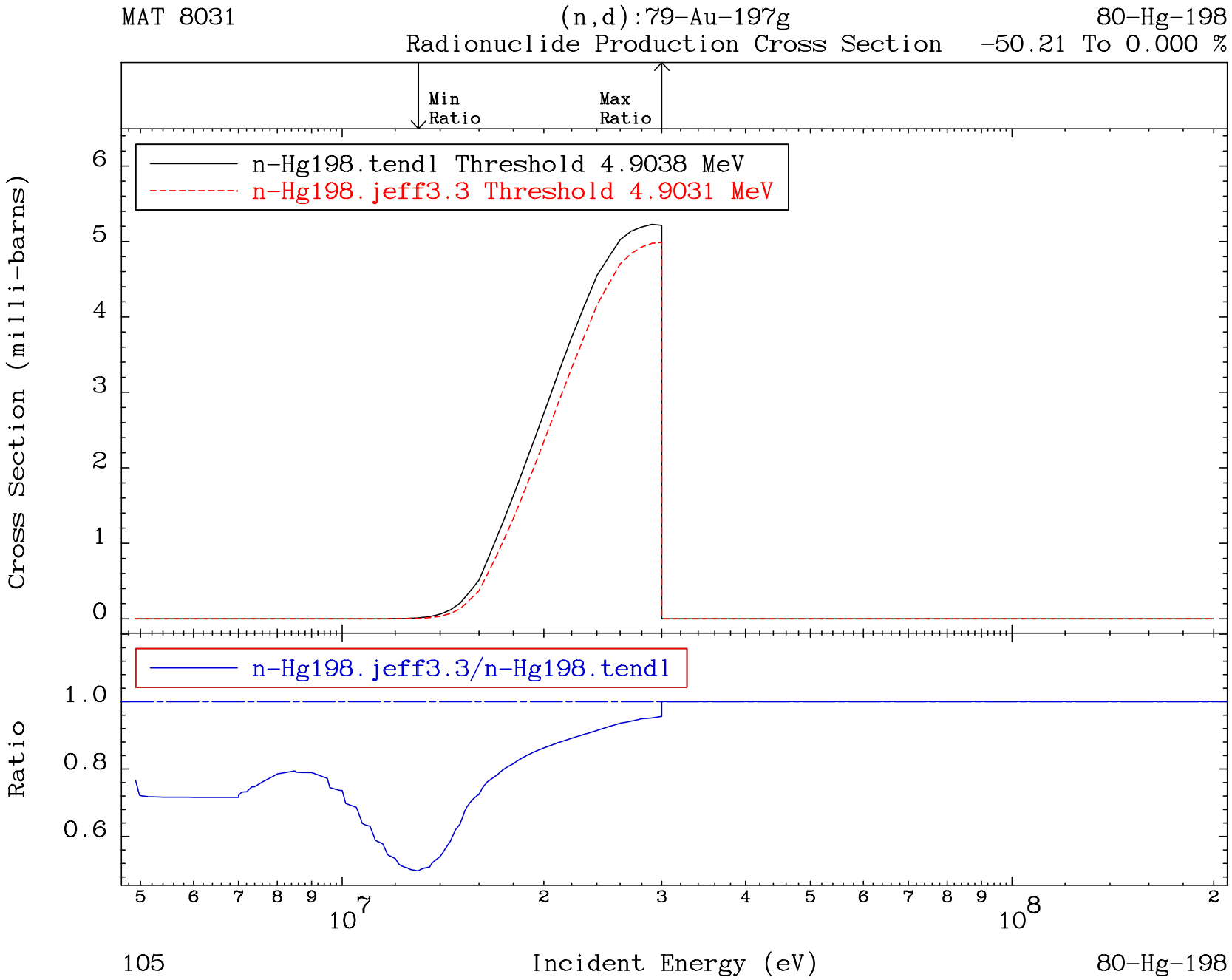

MAT 8031
(n,3n) p:79-Au-195m4
80-Hg-198
Radionuclide Production Cross Section
-76.40 To 0.000 %
Max
Ratio
n-Hg198.tendl Threshold 22.250 MeV
n-Hg198.jeff3.3 Threshold 22.250 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
1.2
0.8
0.4
Ratio
40
60
80
100
120
140
160
180
200
100
Incident Energy (MeV)
80-Hg-198

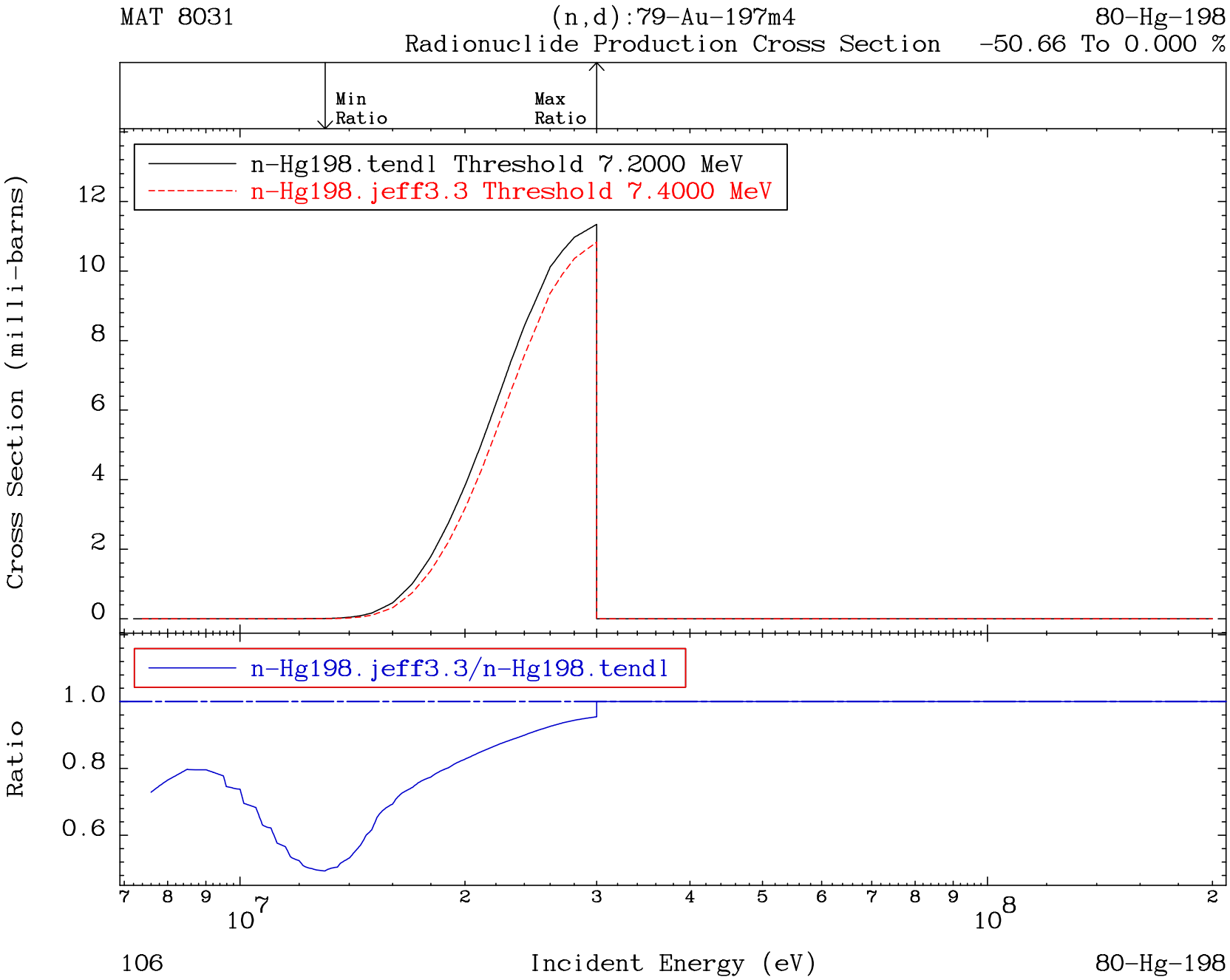

MAT 8031
(n,n') p α:77-Ir-193g
80-Hg-198
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 6.1632 MeV
n-Hg198.jeff3.3 Threshold 16.000 MeV
Cross Section (10^{-9} barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
101
Incident Energy (eV)
80-Hg-198

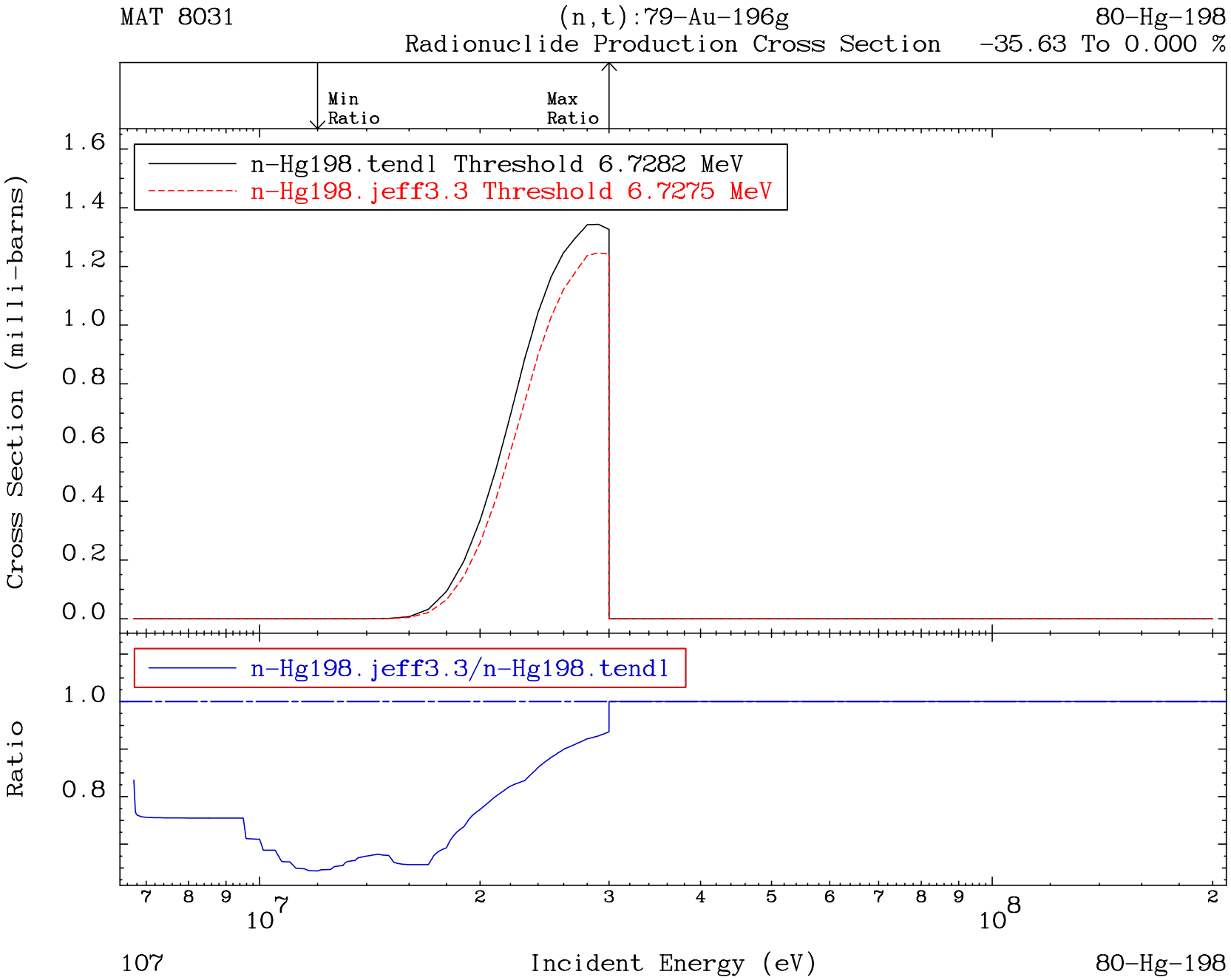

MAT 8031
(n,n') p α:77-Ir-193m2
80-Hg-198
Radionuclide Production Cross Section -70.14 To 9999. %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 6.2439 MeV
n-Hg198.jeff3.3 Threshold 6.2423 MeV
Cross Section (10^{-9} barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
102
80-Hg-198

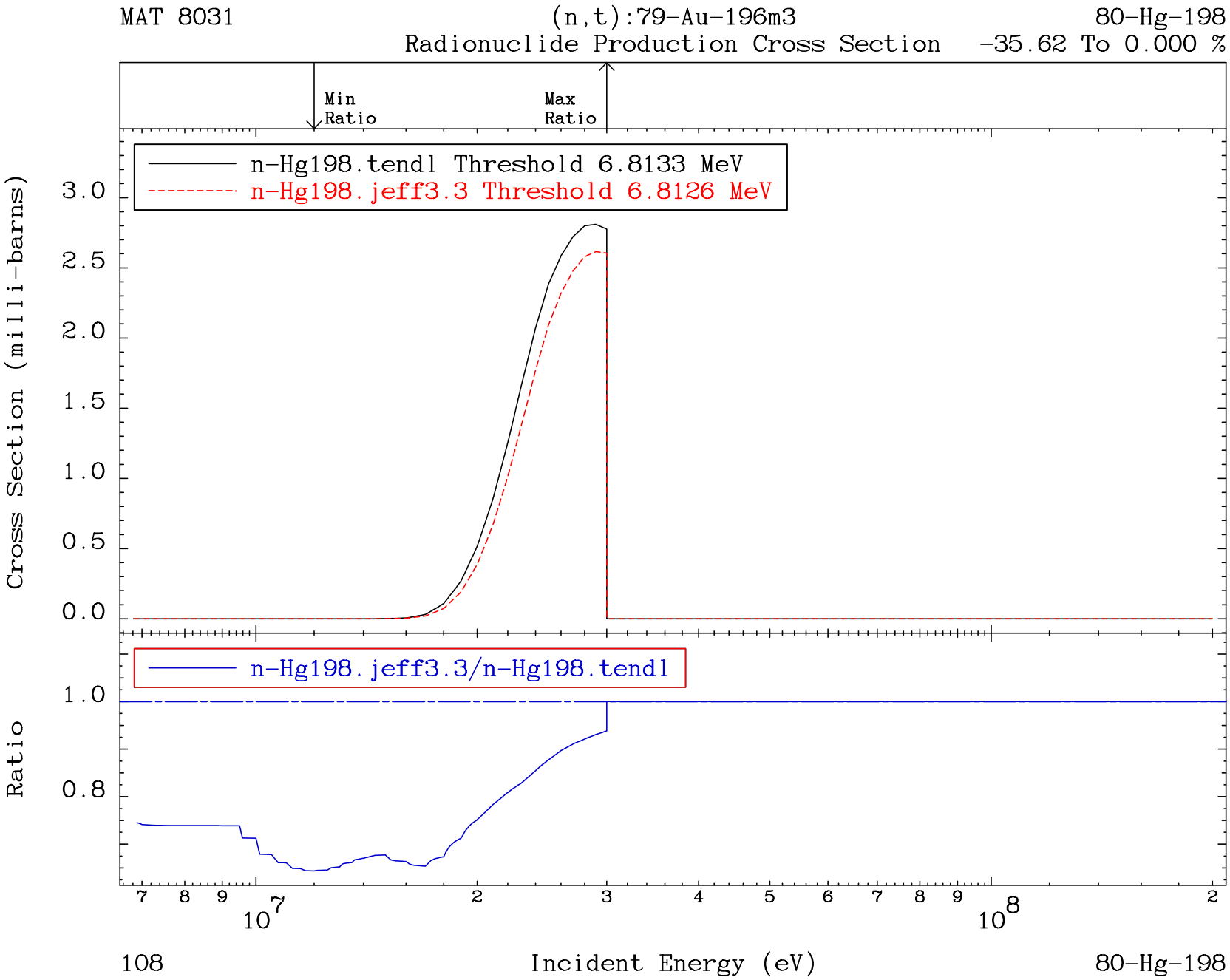

MAT 8031
(n,p):79-Au-198g
80-Hg-198
Radionuclide Production Cross Section
-88.18 To 21.13 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 594.19 keV
n-Hg198.jeff3.3 Threshold 593.51 keV
Cross Section (milli-barns)
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
Incident Energy (eV)
103
80-Hg-198

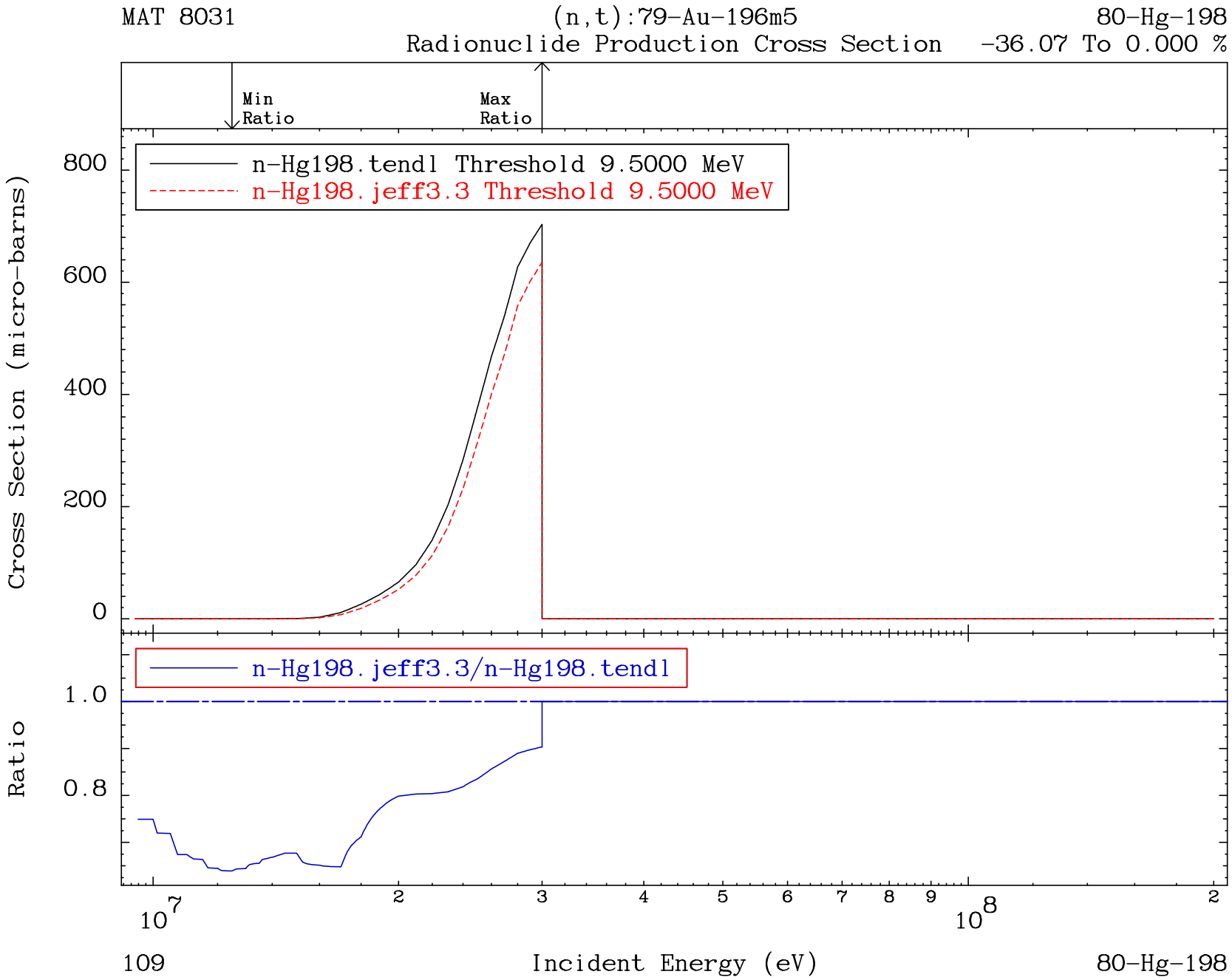

MAT 8031
(n,p):79-Au-198m10
80-Hg-198
Radionuclide Production Cross Section -68.66 To 16.03 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 2.6000 MeV
n-Hg198.jeff3.3 Threshold 2.6000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
104
Incident Energy (eV)
80-Hg-198

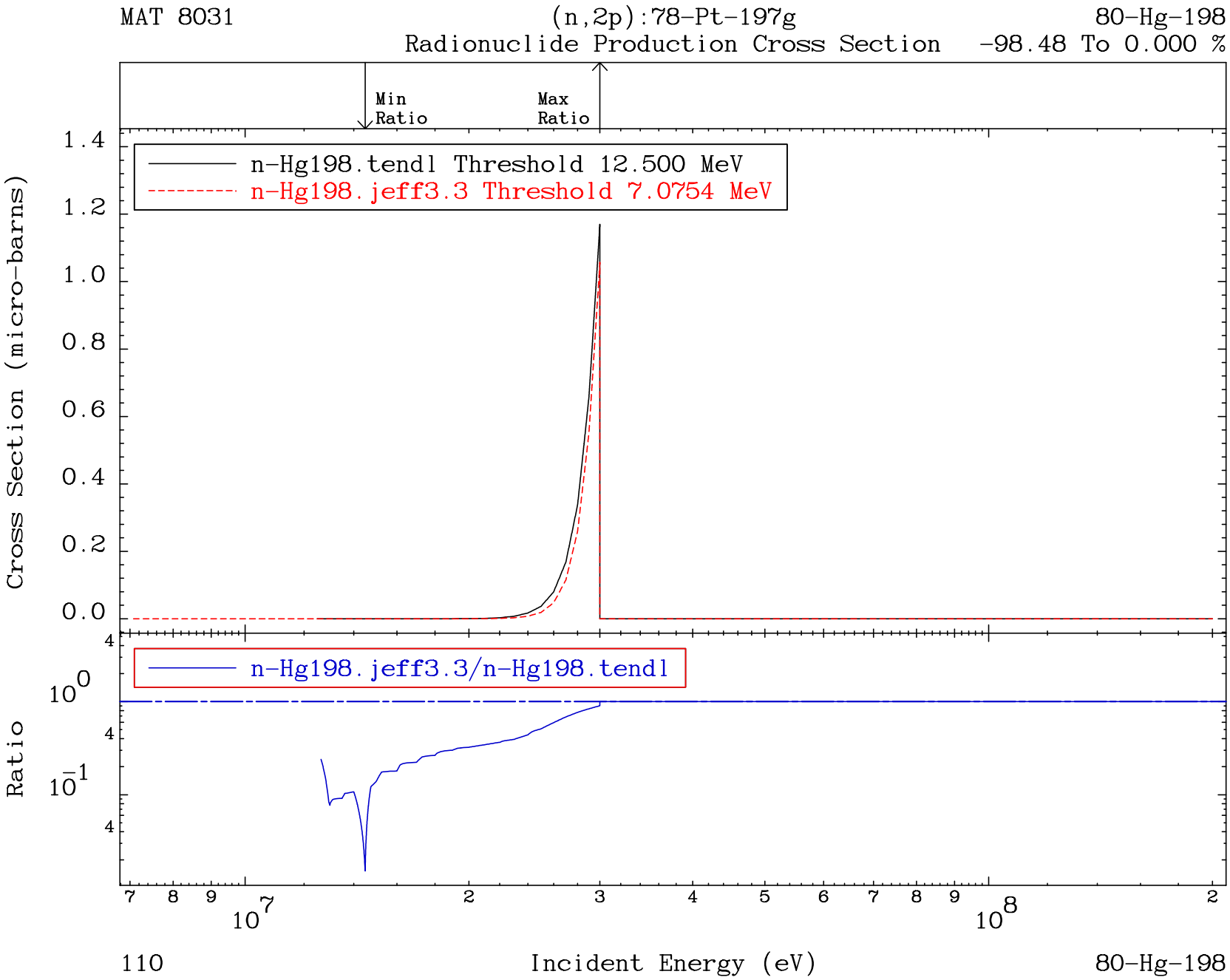

MAT 8031
(n,d):79-Au-197g
80-Hg-198
Radionuclide Production Cross Section
-50.21 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 4.9038 MeV
n-Hg198.jeff3.3 Threshold 4.9031 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
0.6
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
105
Incident Energy (eV)
80-Hg-198

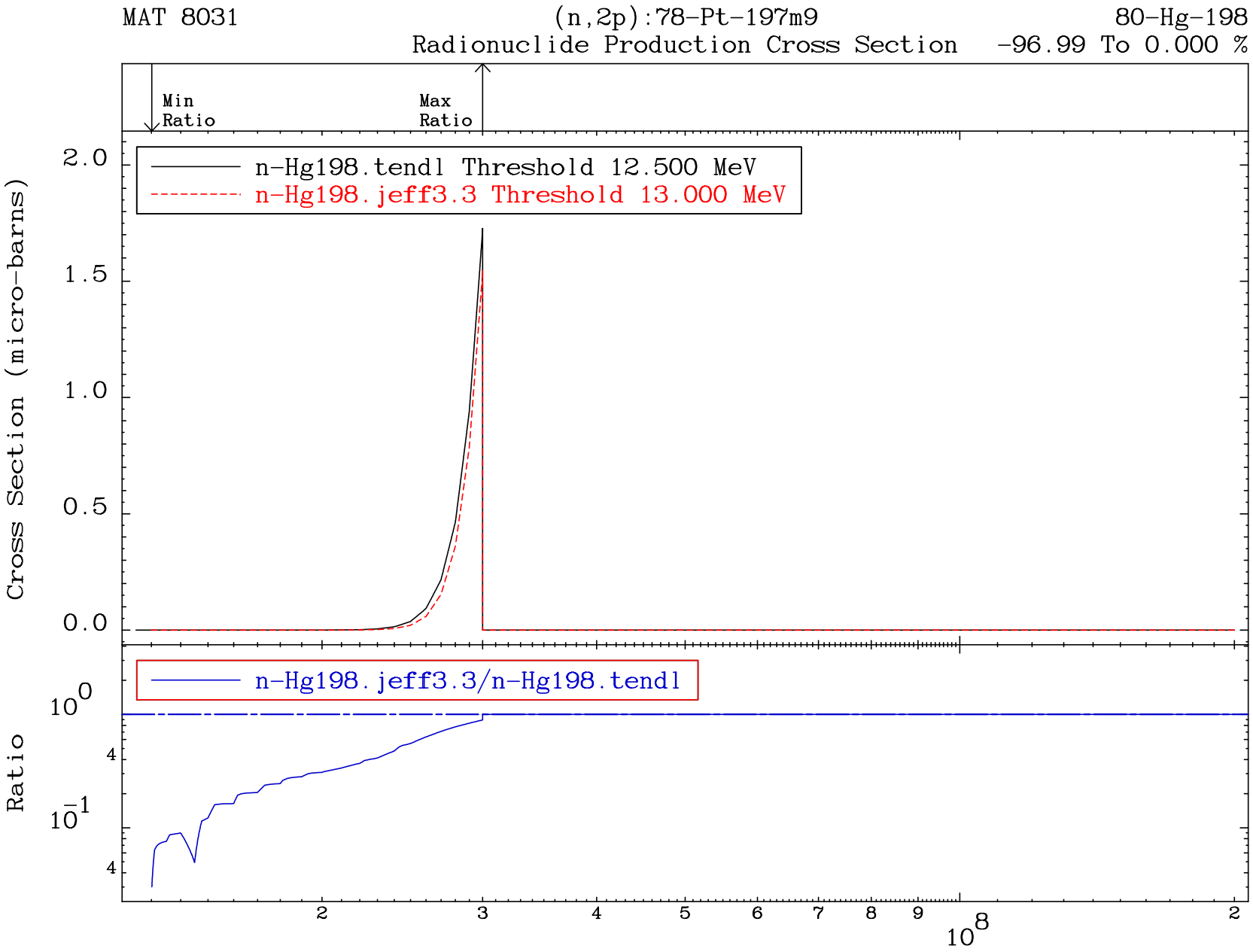

MAT 8031
(n,d):79-Au-197m4
80-Hg-198
Radionuclide Production Cross Section
-50.66 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 7.2000 MeV
n-Hg198.jeff3.3 Threshold 7.4000 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.6
0.8
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
106
Incident Energy (eV)
80-Hg-198

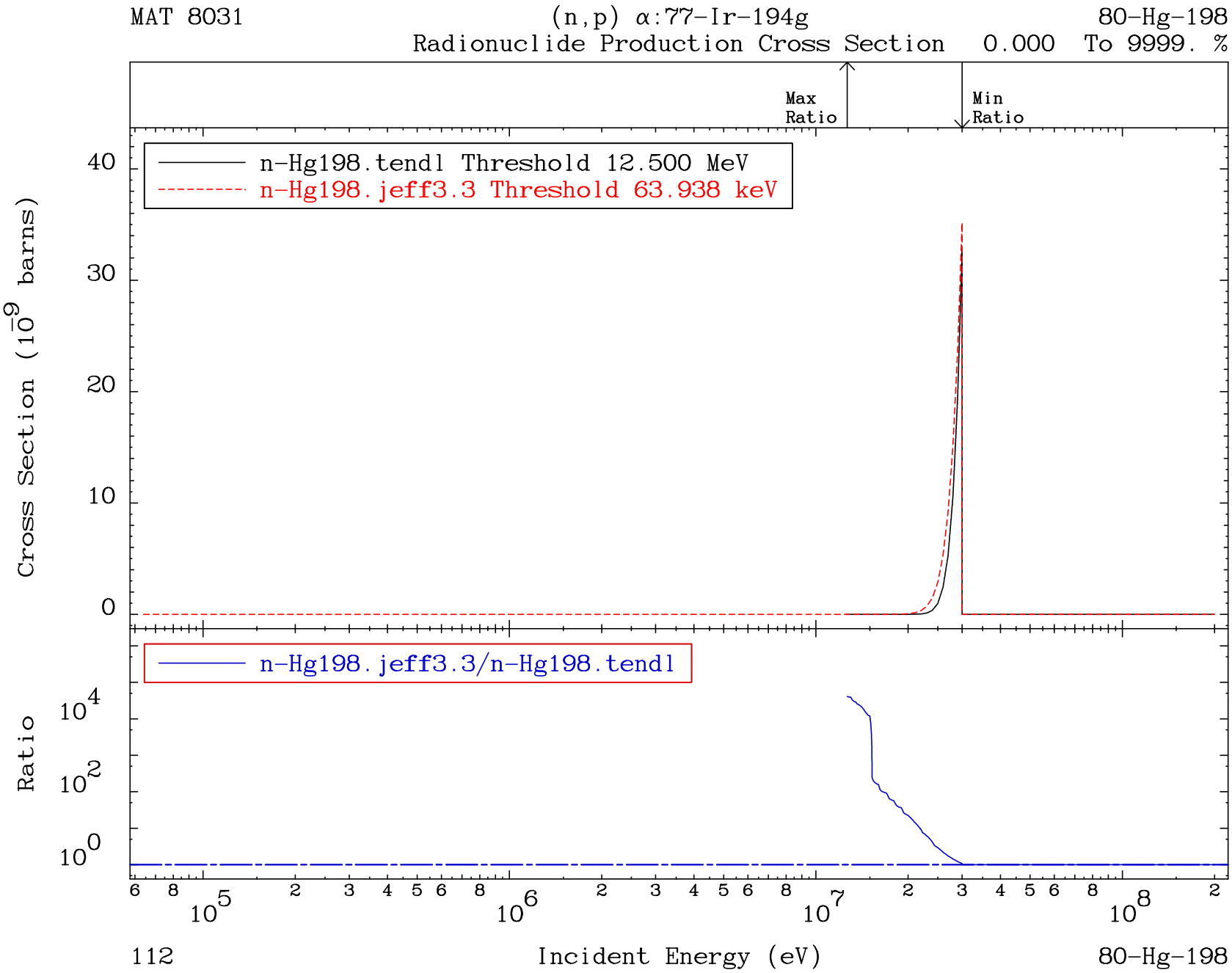

MAT 8031
(n,t):79-Au-196g
80-Hg-198
Radionuclide Production Cross Section
-35.63 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 6.7282 MeV
n-Hg198.jeff3.3 Threshold 6.7275 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
107
Incident Energy (eV)
80-Hg-198

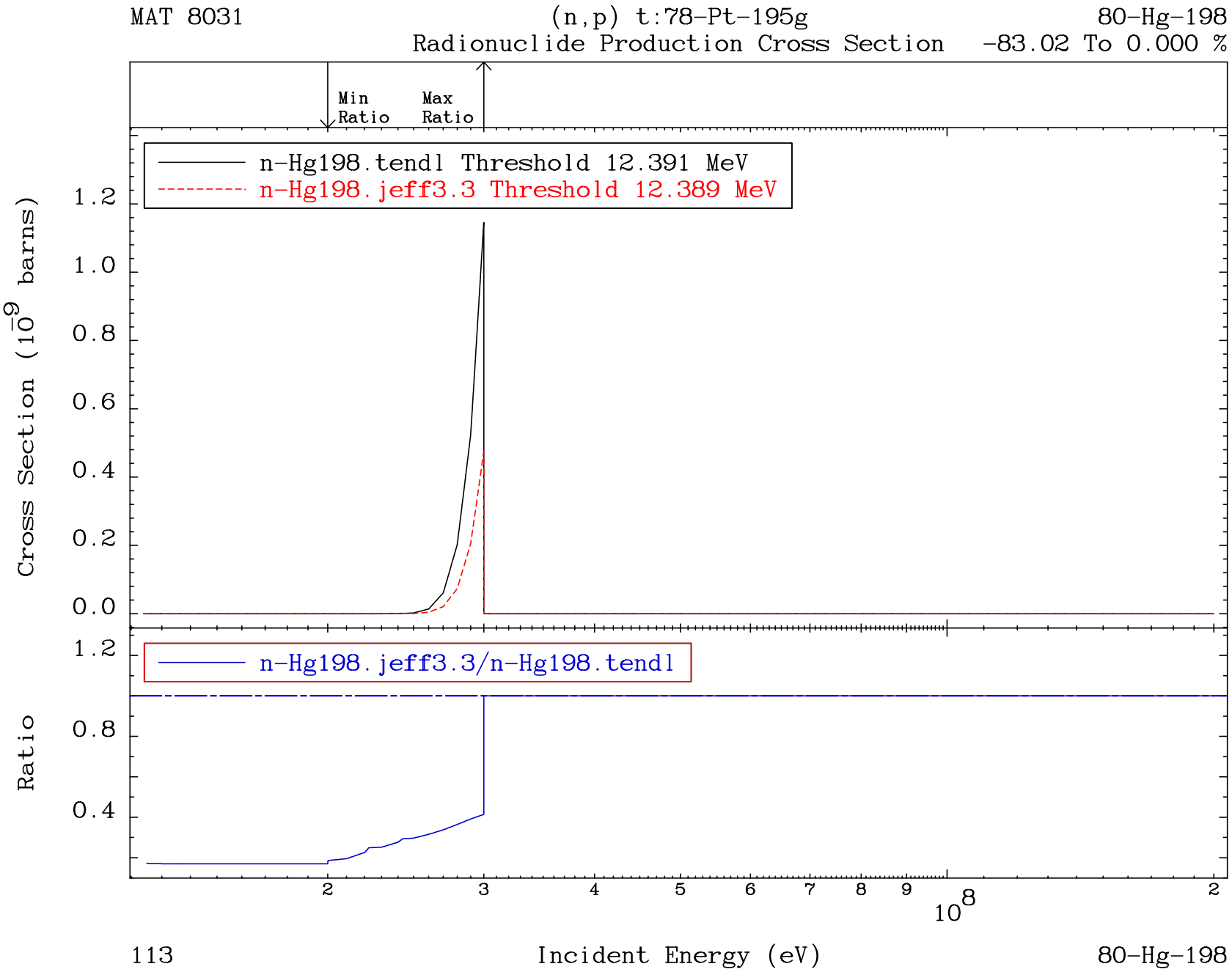

MAT 8031
(n,t):79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section -35.62 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 6.8133 MeV
n-Hg198.jeff3.3 Threshold 6.8126 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
108
Incident Energy (eV)
80-Hg-198

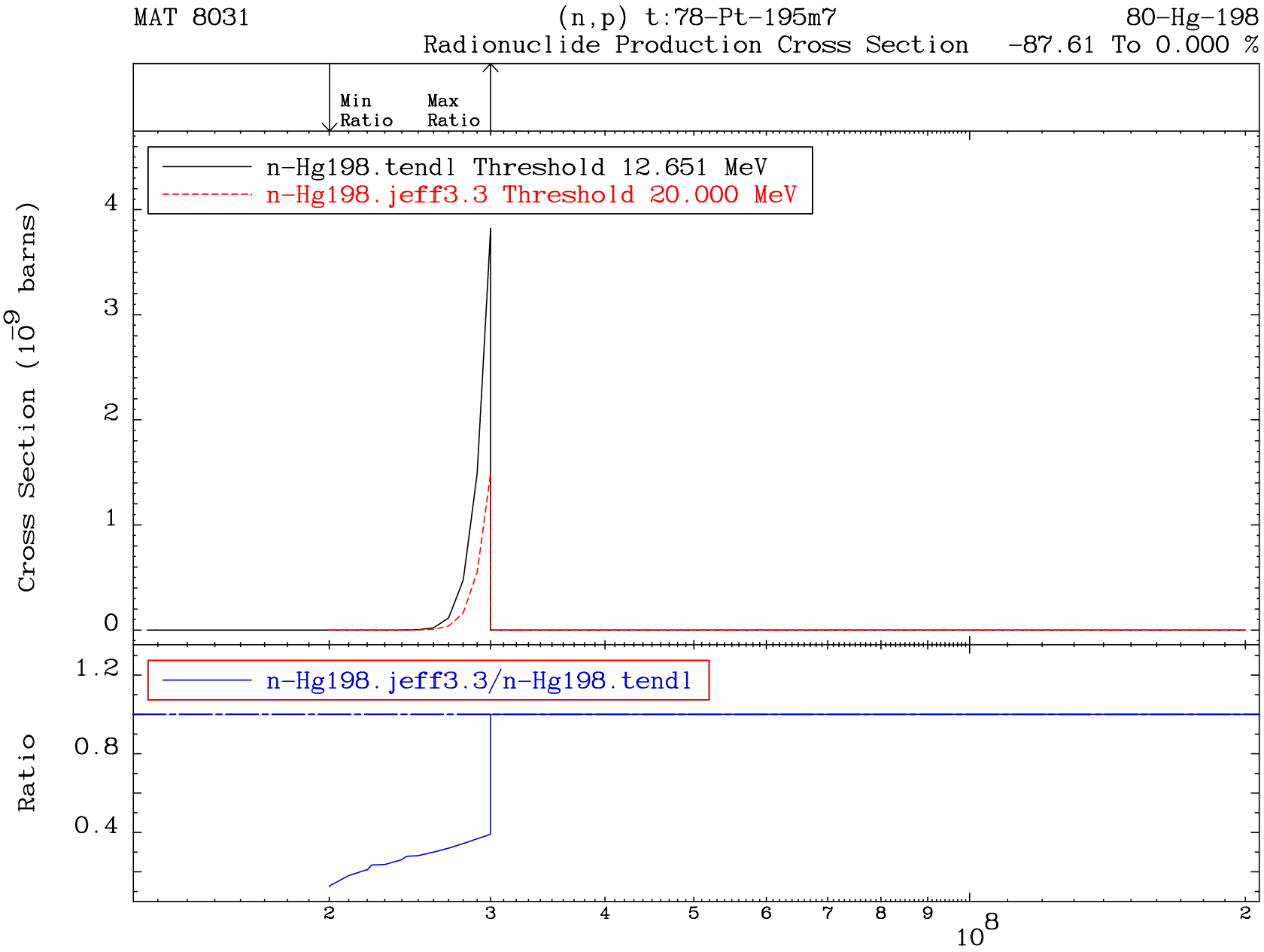

MAT 8031
(n,t):79-Au-196m5
80-Hg-198
Radionuclide Production Cross Section -36.07 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 9.5000 MeV
n-Hg198.jeff3.3 Threshold 9.5000 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
109
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,2p):78-Pt-197g
80-Hg-198
Radionuclide Production Cross Section -98.48 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 12.500 MeV
n-Hg198.jeff3.3 Threshold 7.0754 MeV
Cross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^0
10^-1
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
110
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,2p):78-Pt-197m9
80-Hg-198
Radionuclide Production Cross Section -96.99 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 12.500 MeV
n-Hg198.jeff3.3 Threshold 13.000 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
111
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,p) α:77-Ir-194g
80-Hg-198
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Hg198.tendl Threshold 12.500 MeV
n-Hg198.jeff3.3 Threshold 63.938 keV
Cross Section (10^{-9} barns)
40
30
20
10
0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
10^4
10^2
10^0
6 8 10^5 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
112
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,p) t:78-Pt-195g
80-Hg-198
Radionuclide Production Cross Section
-83.02 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 12.391 MeV
n-Hg198.jeff3.3 Threshold 12.389 MeV
Cross Section (10^{-9} barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
113
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,p) t:78-Pt-195m7
80-Hg-198
Radionuclide Production Cross Section -87.61 To 0.000 %
Min Ratio
Max Ratio
n-Hg198.tendl Threshold 12.651 MeV
n-Hg198.jeff3.3 Threshold 20.000 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
n-Hg198.jeff3.3/n-Hg198.tendl
Ratio
0.4
0.8
1.2
2
3
4
5
6
7
8
9
10^{8}
2
114
Incident Energy (eV)
80-Hg-198