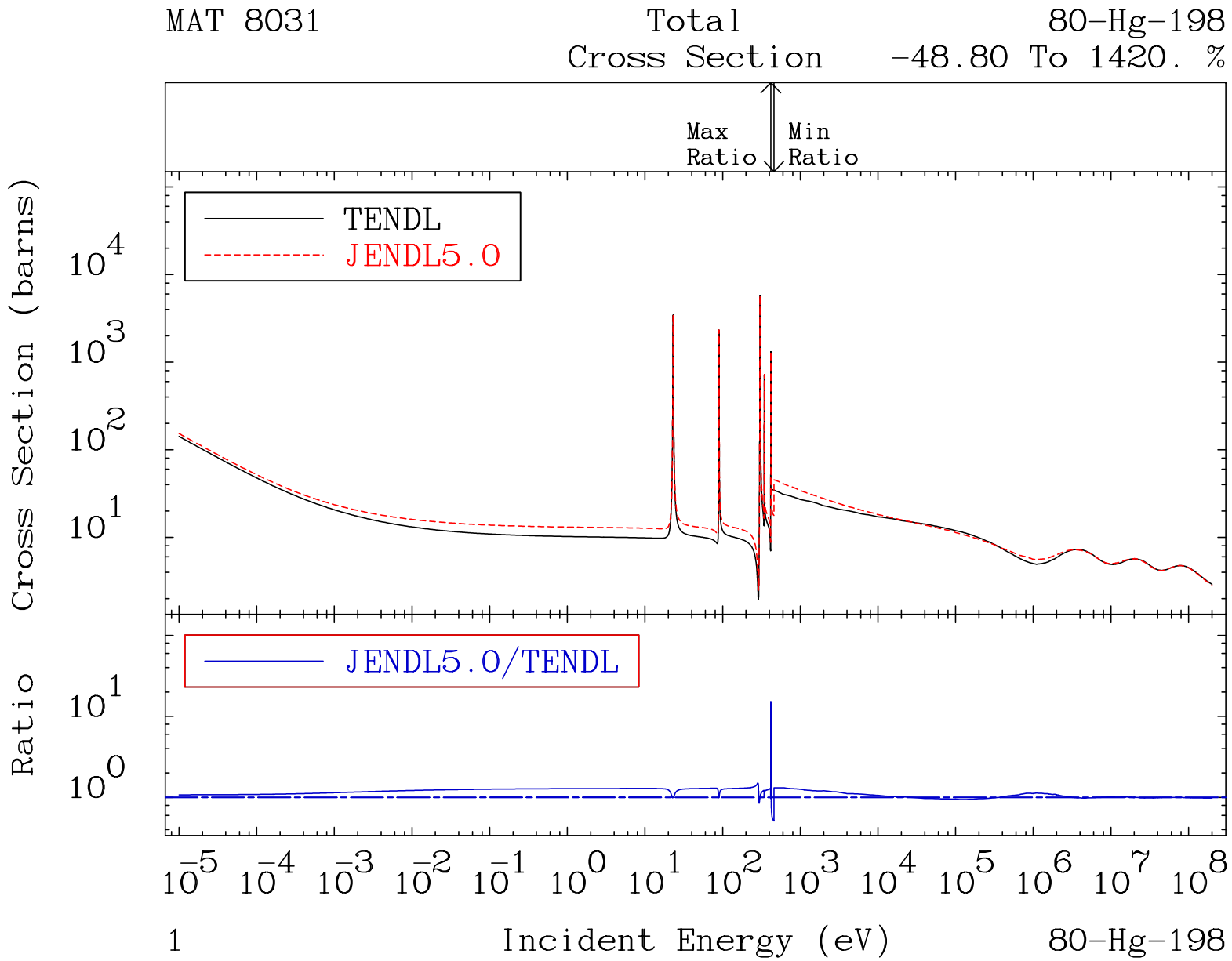
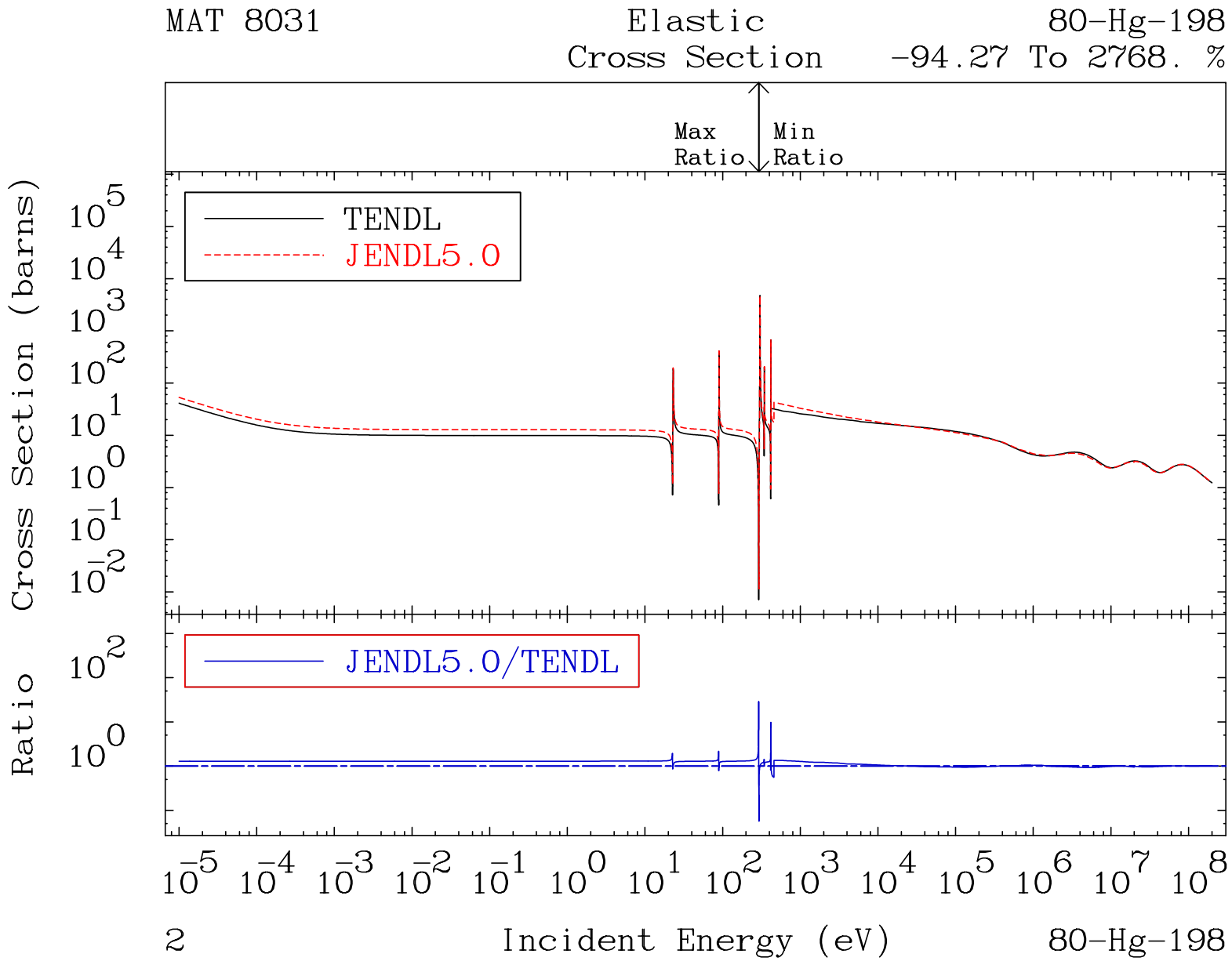
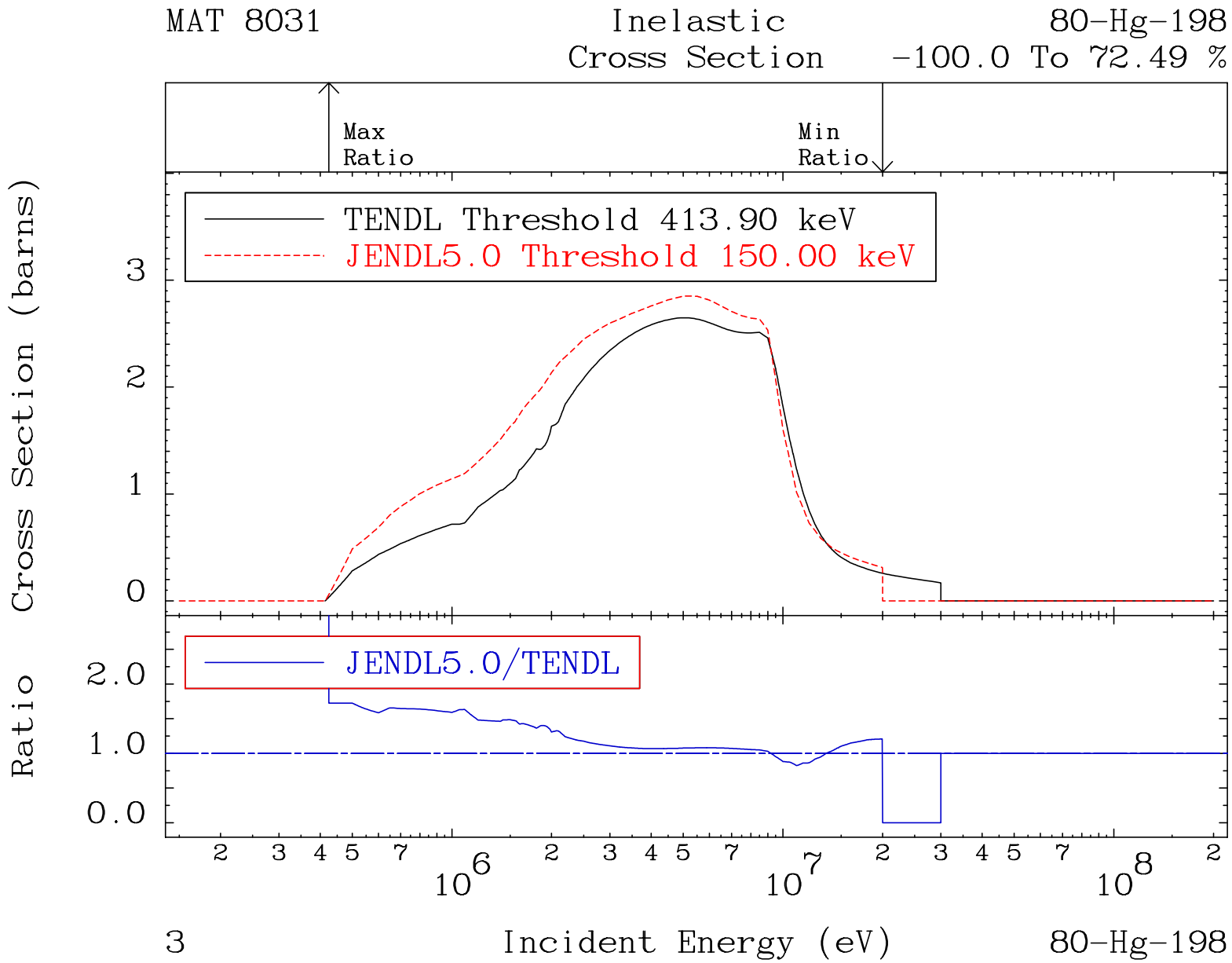
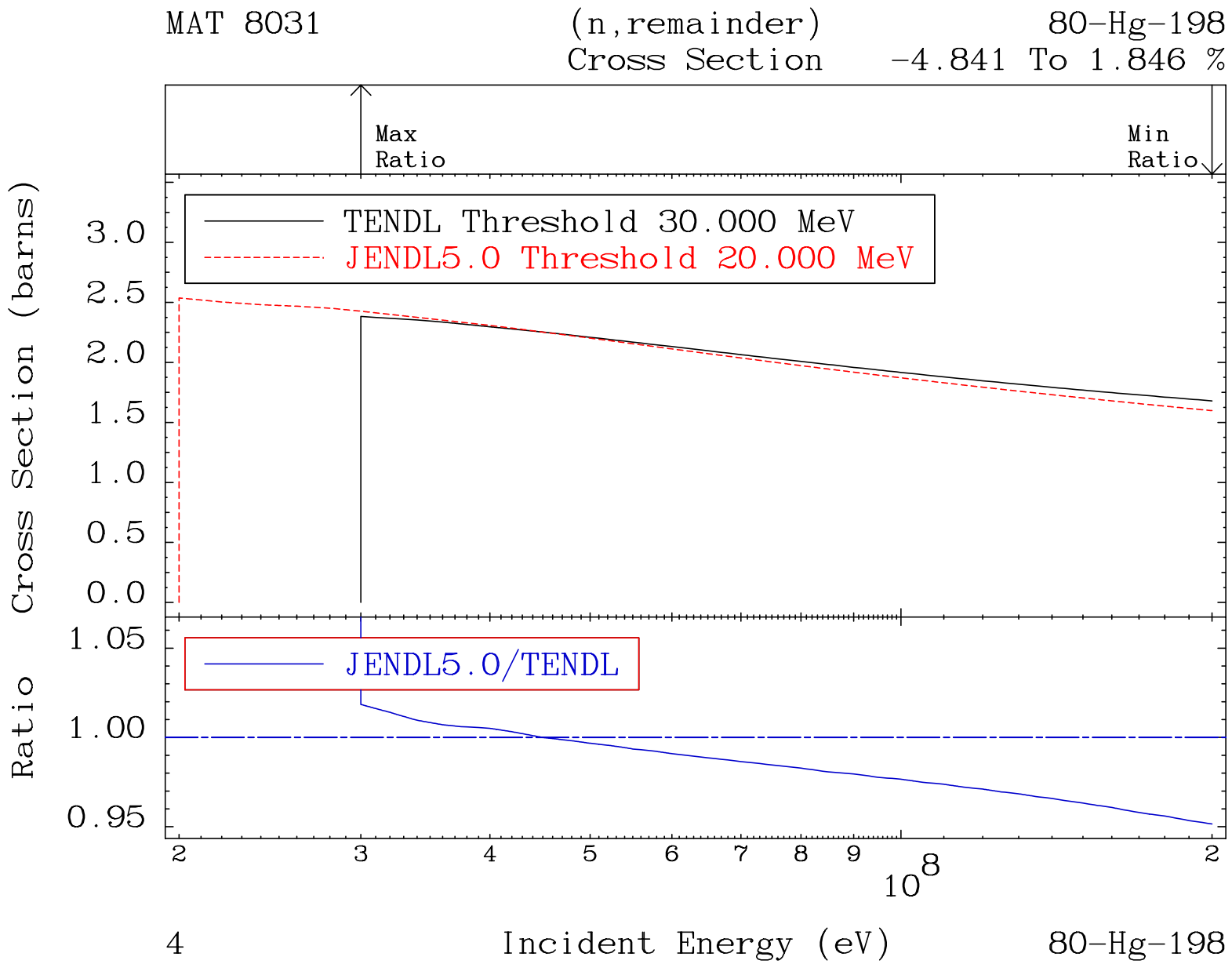
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

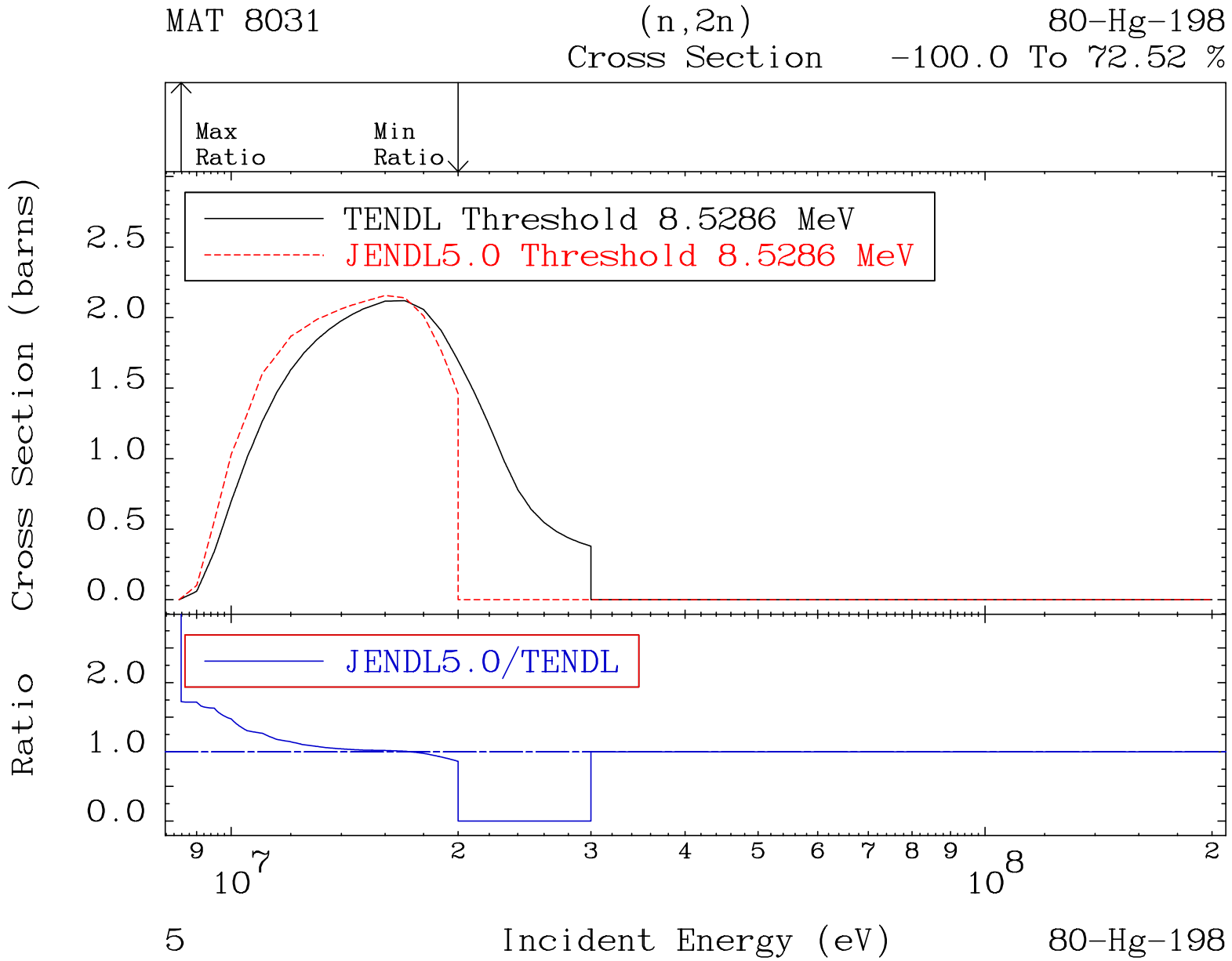
Press Mouse Button to Start

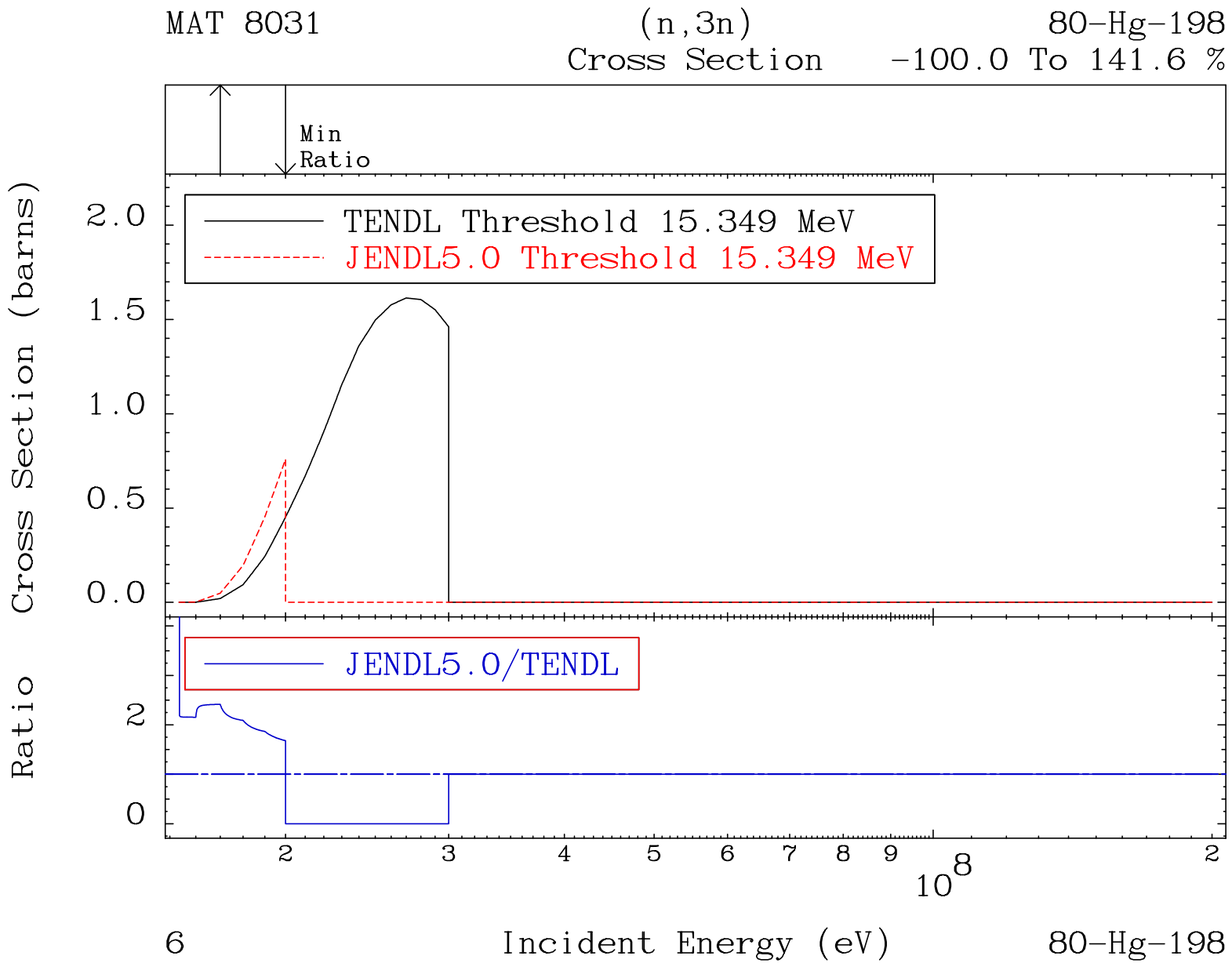

MAT 8031
Total
Cross Section
80-Hg-198
-48.80 To 1420. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
80-Hg-198

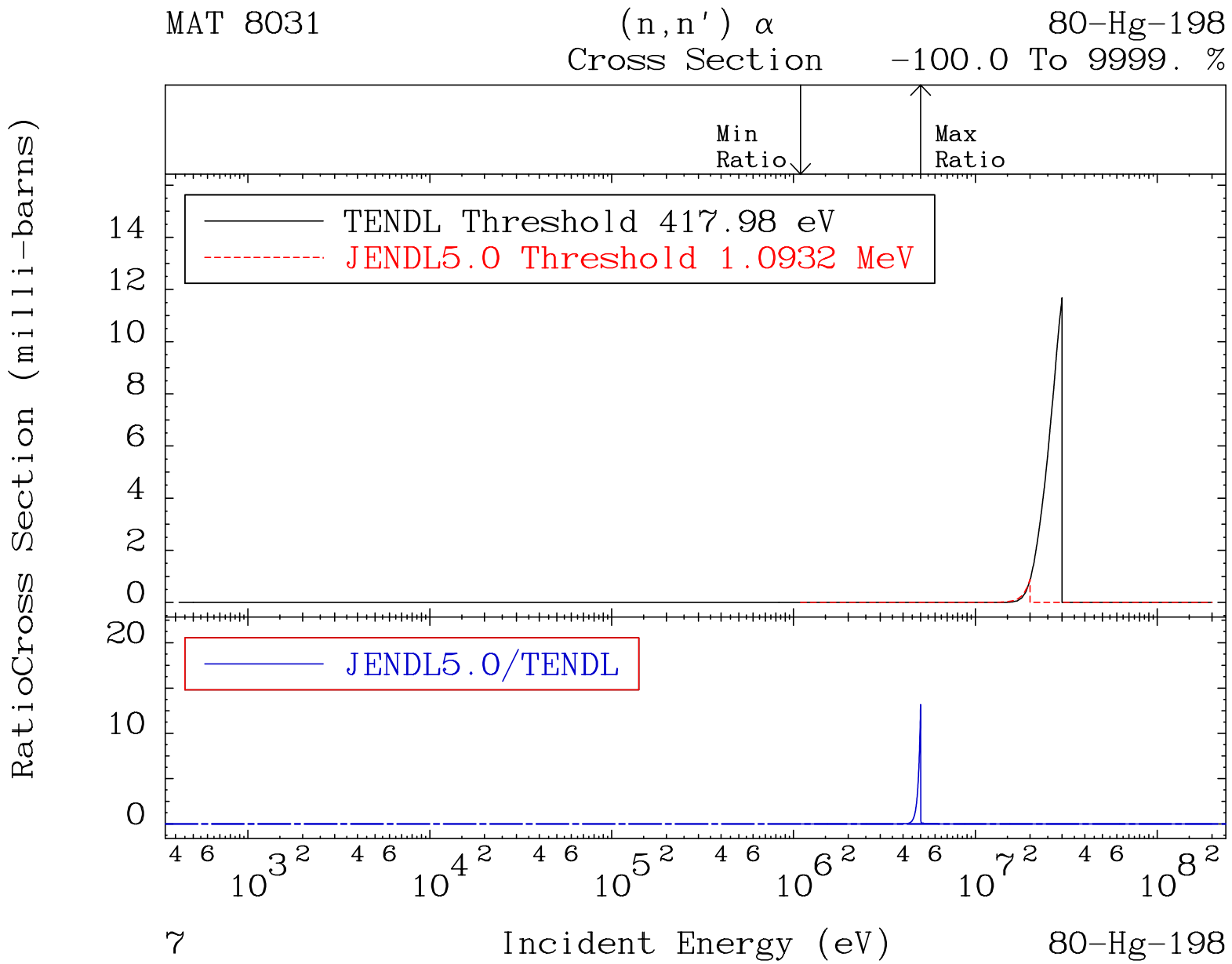

MAT 8031
Elastic
Cross Section
80-Hg-198
-94.27 To 2768. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
80-Hg-198

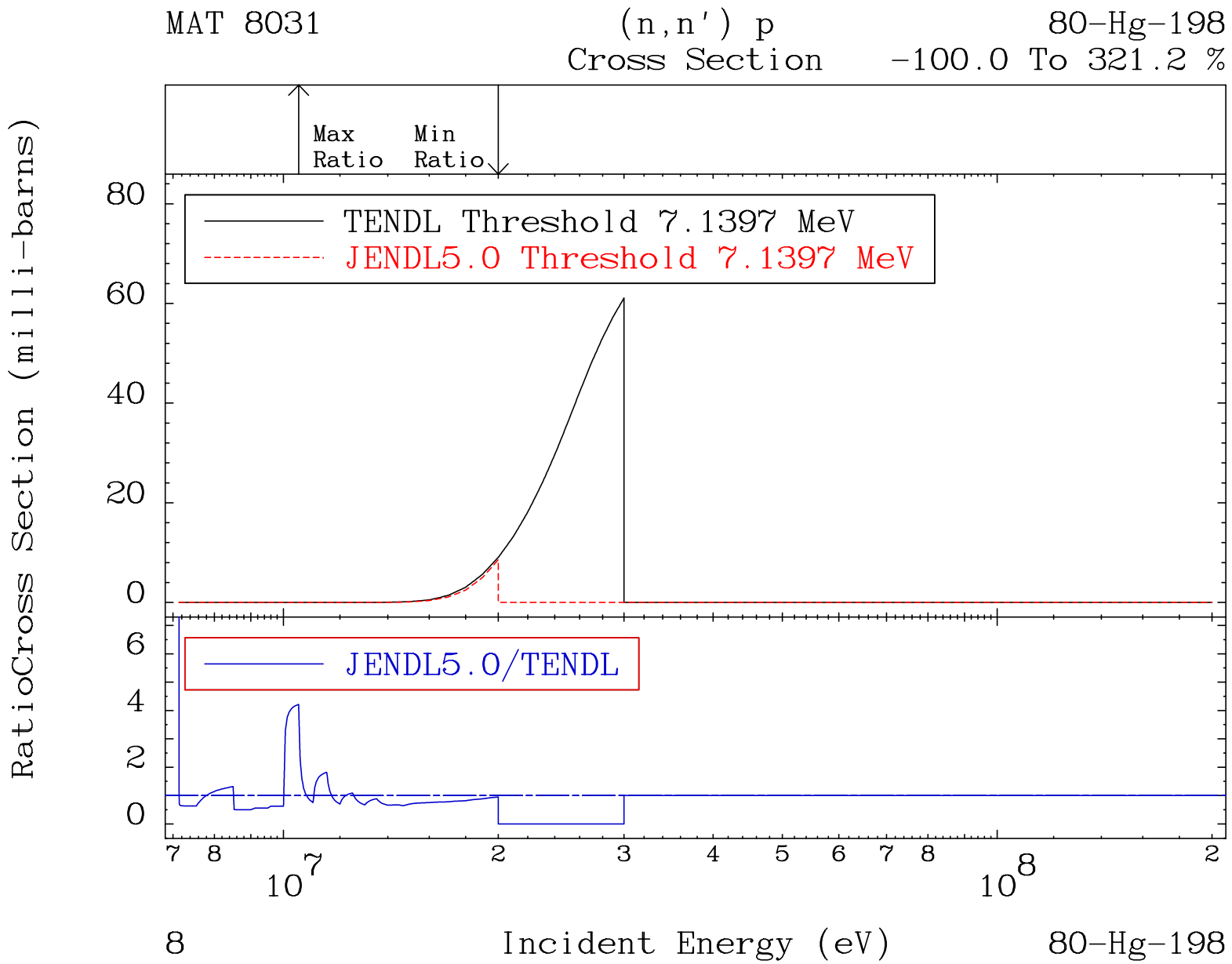

MAT 8031
Inelastic
Cross Section
80-Hg-198
-100.0 To 72.49 %
Max
Ratio
Min
Ratio
TENDL Threshold 413.90 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
0
1
2
3
JENDL5.0/TENDL
Ratio
0.0
1.0
2.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
80-Hg-198

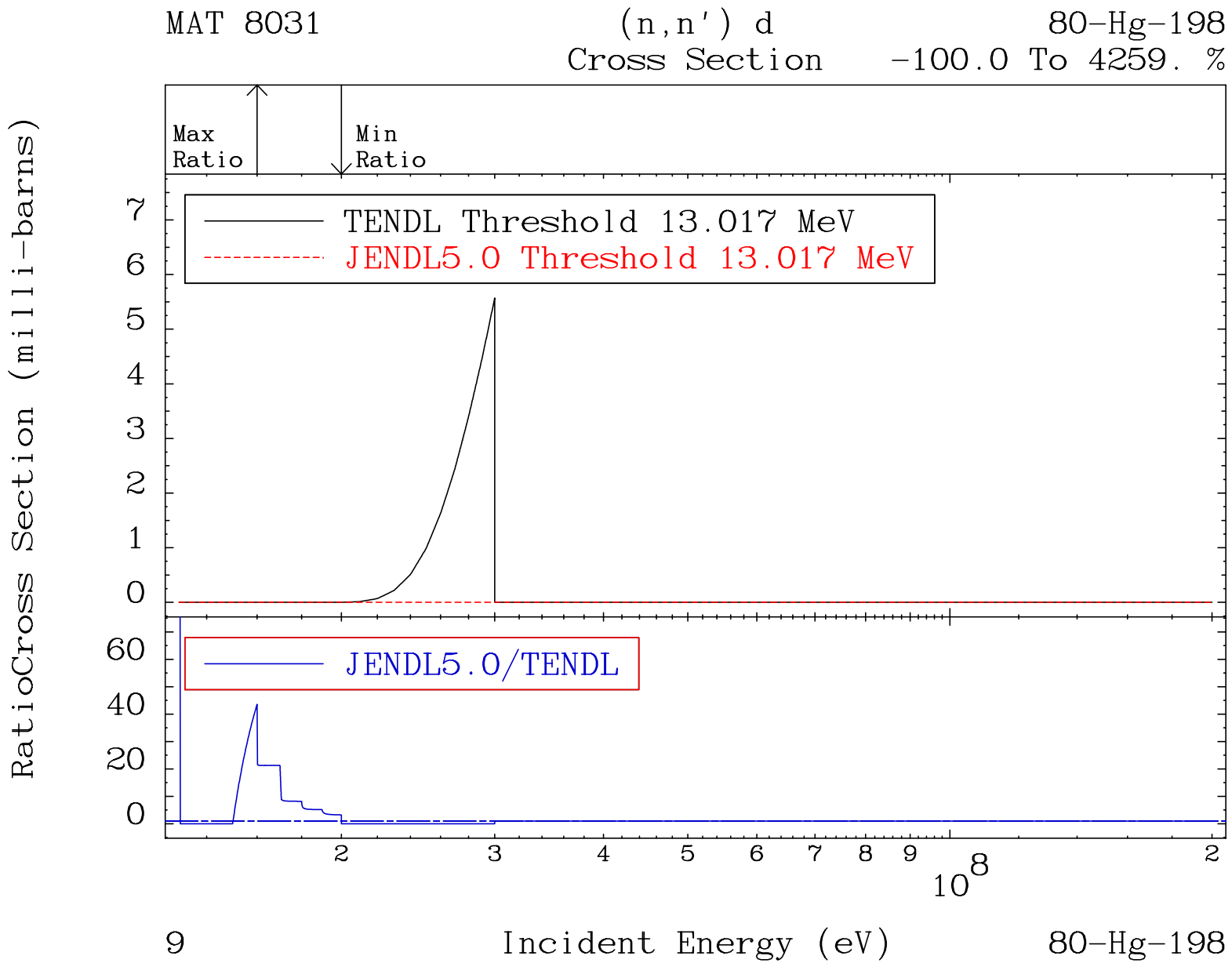

MAT 8031
(n,remainder)
Cross Section
80-Hg-198
-4.841 To 1.846 %
Max
Ratio
Min
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.05
1.00
0.95
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
80-Hg-198

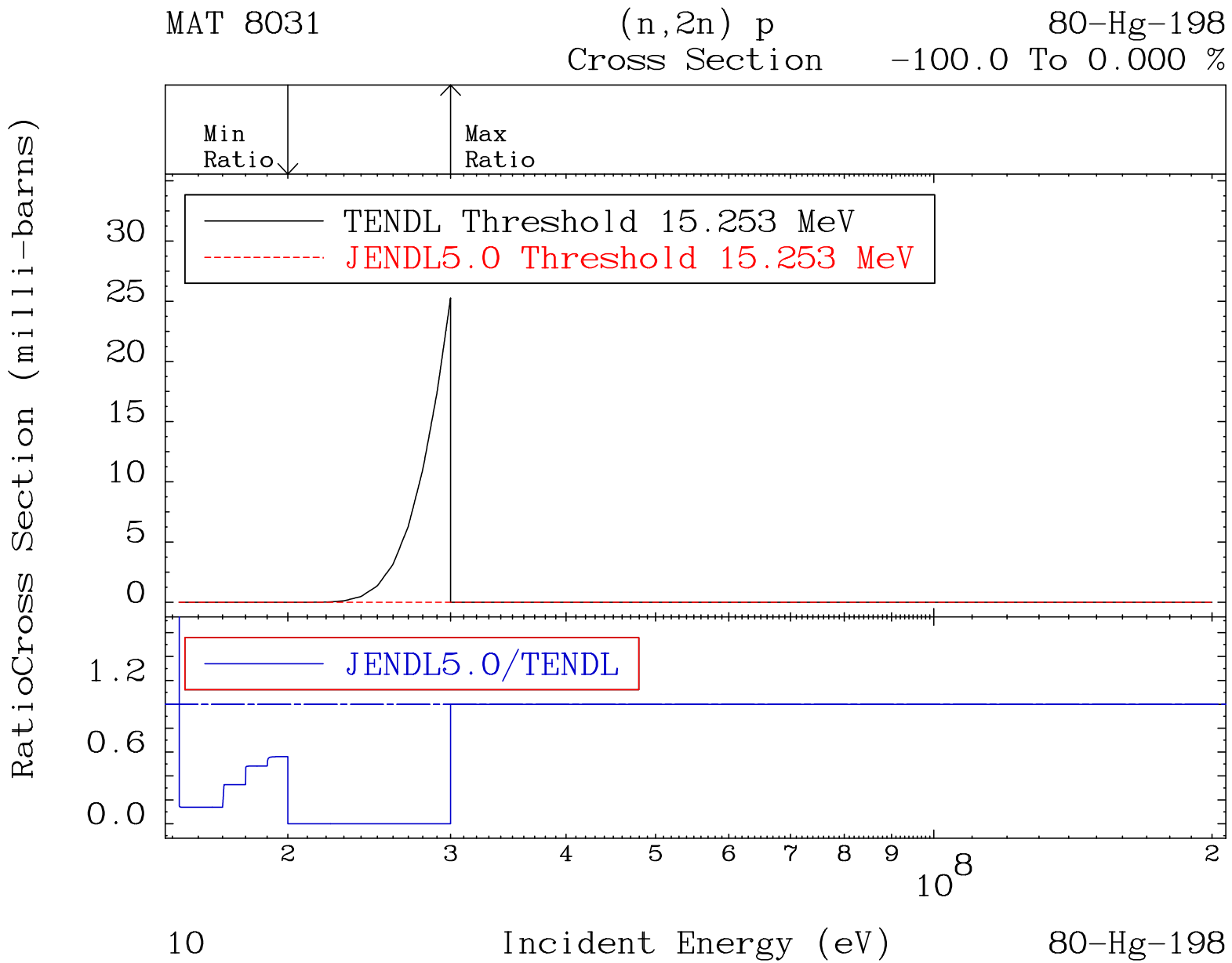

MAT 8031
(n,2n)
Cross Section
80-Hg-198
-100.0 To 72.52 %
Max Ratio
Min Ratio
TENDL Threshold 8.5286 MeV
JENDL5.0 Threshold 8.5286 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
80-Hg-198

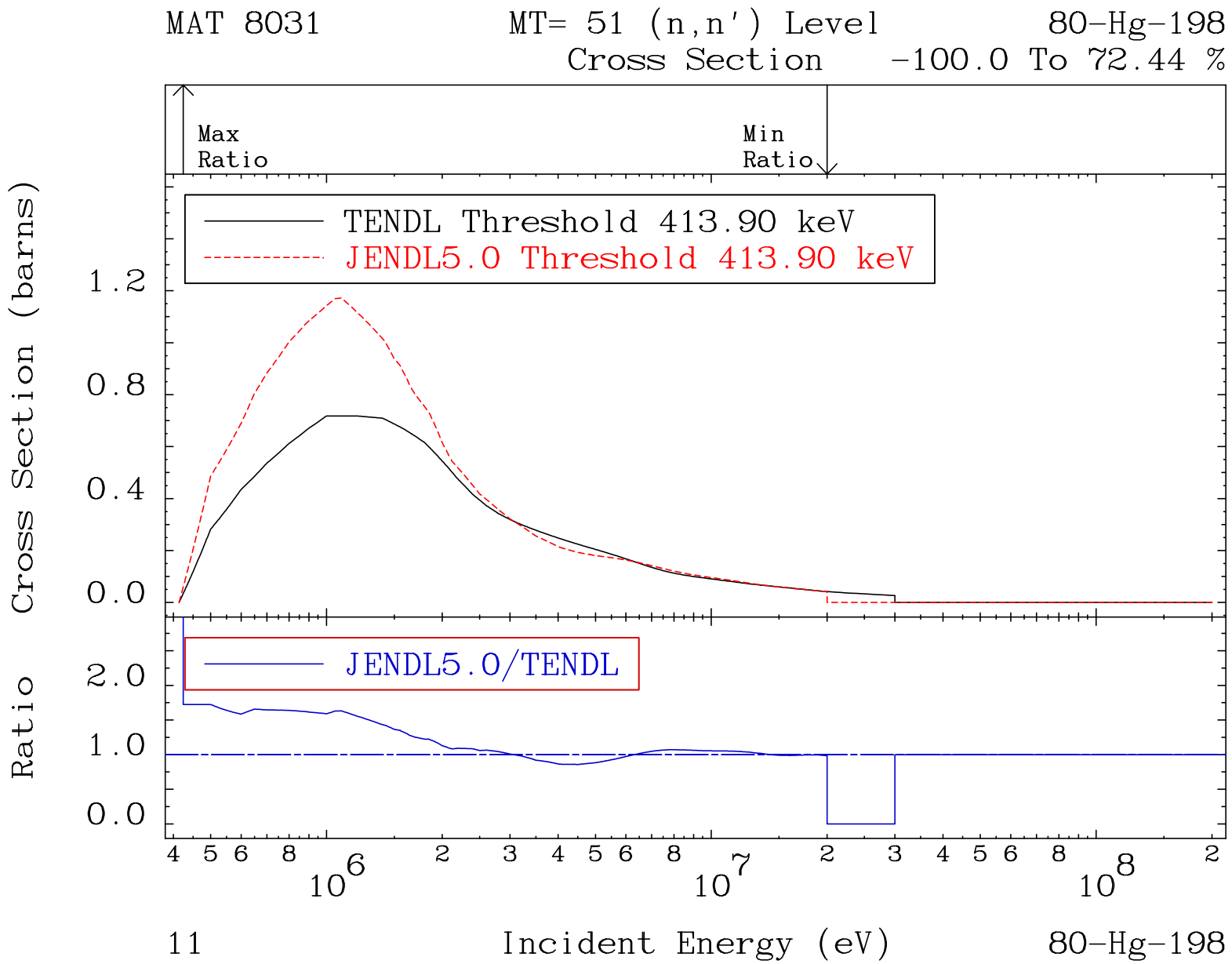

MAT 8031
(n,3n)
Cross Section
80-Hg-198
-100.0 To 141.6 %
Min
Ratio
TENDL Threshold 15.349 MeV
JENDL5.0 Threshold 15.349 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
2
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
80-Hg-198

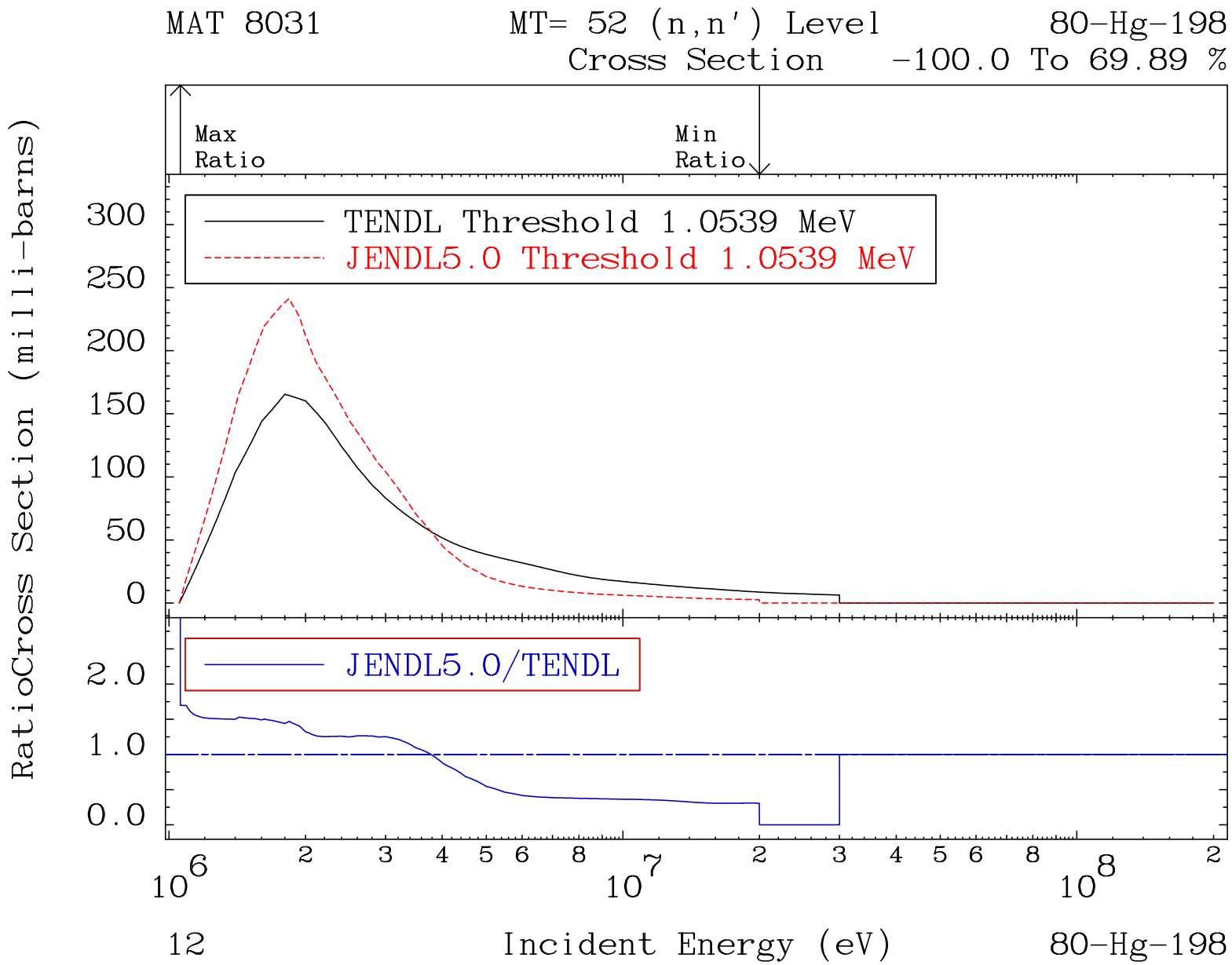

MAT 8031
(n,n') α
Cross Section
80-Hg-198
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 417.98 eV
JENDL5.0 Threshold 1.0932 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
7
80-Hg-198

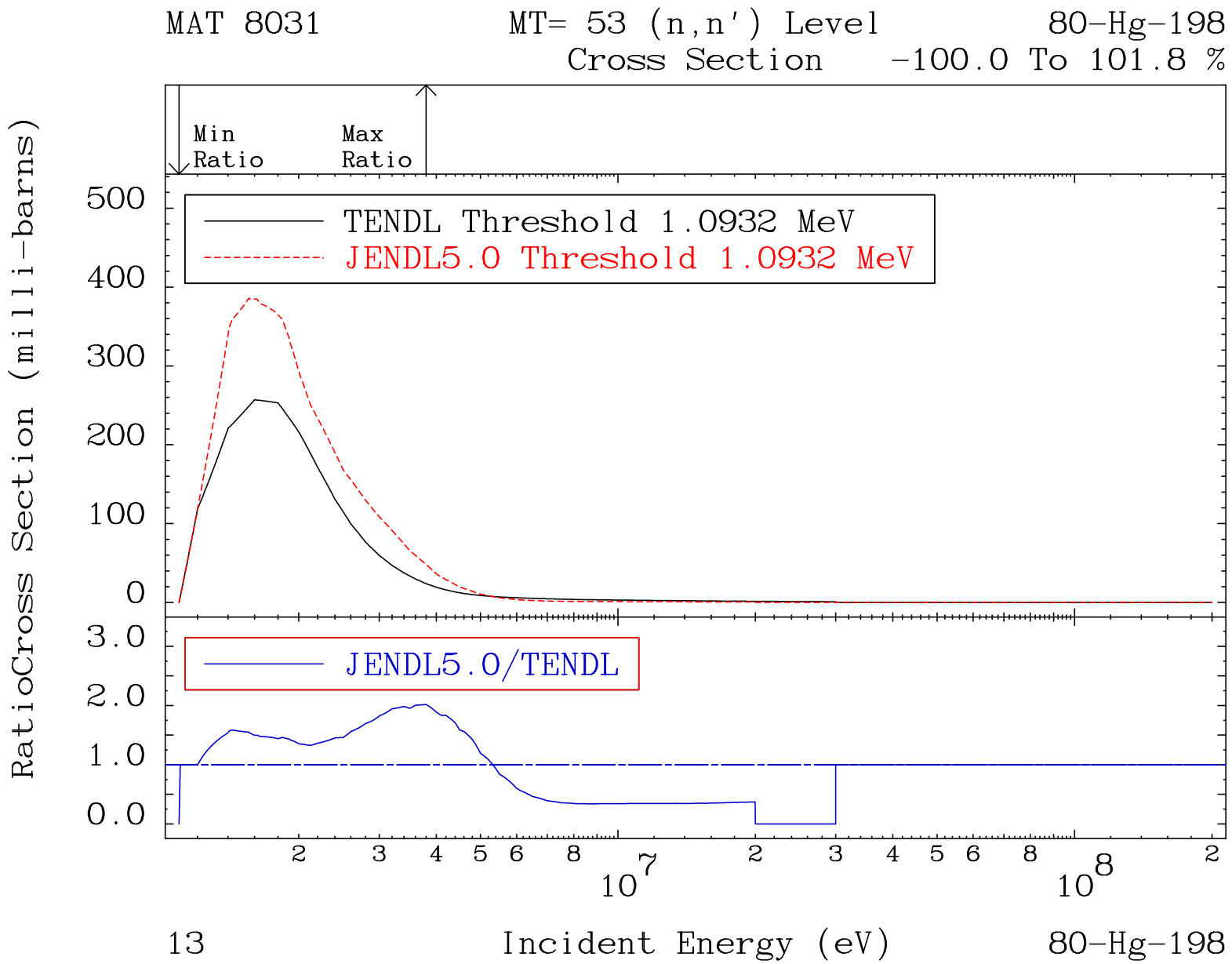

MAT 8031
(n,n') p
Cross Section
80-Hg-198
-100.0 To 321.2 %
Max Ratio
Min Ratio
TENDL Threshold 7.1397 MeV
JENDL5.0 Threshold 7.1397 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
80-Hg-198

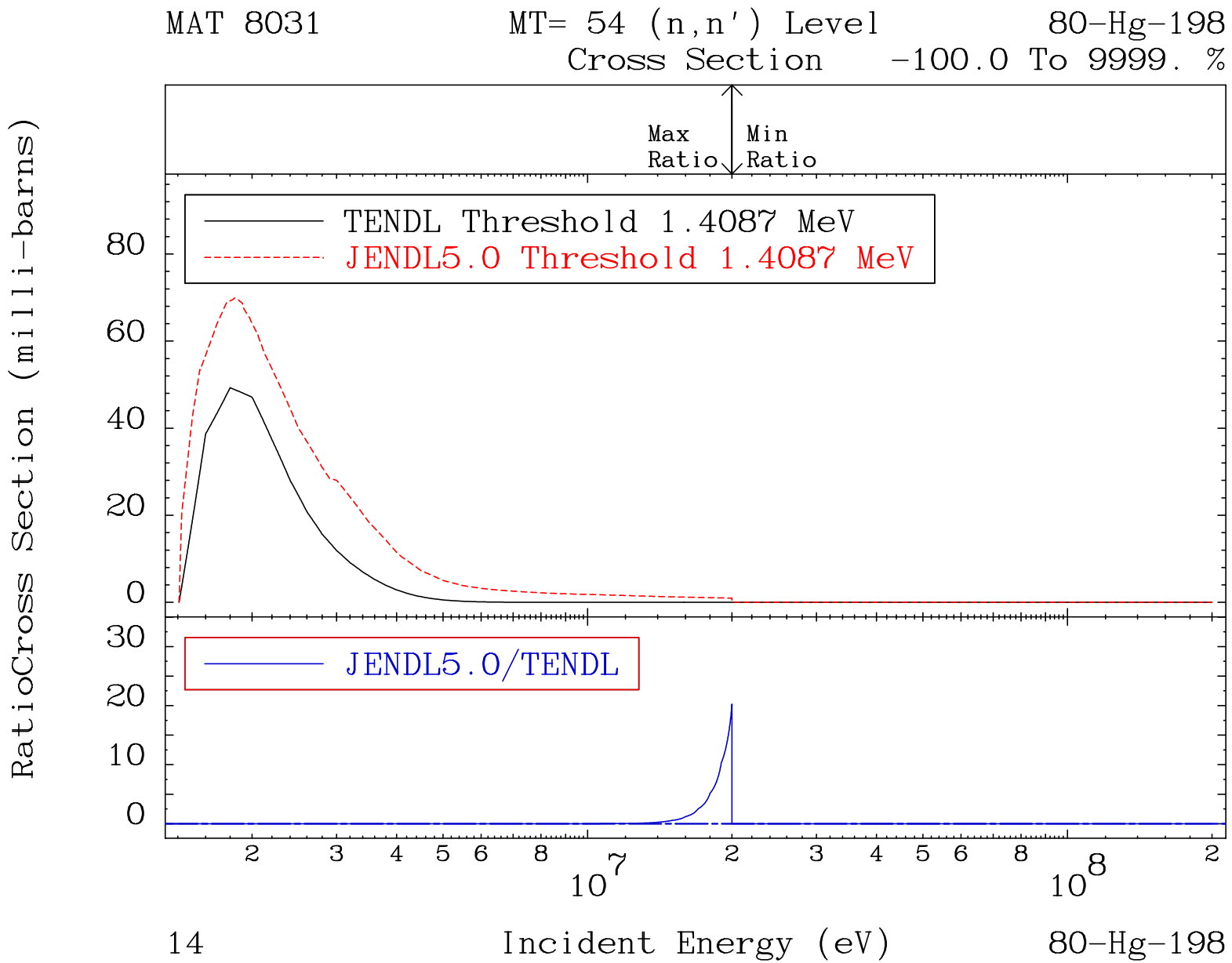

MAT 8031
(n,n') d
Cross Section
80-Hg-198
-100.0 To 4259. %
Max Ratio
Min Ratio
TENDL Threshold 13.017 MeV
JENDL5.0 Threshold 13.017 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
9
80-Hg-198

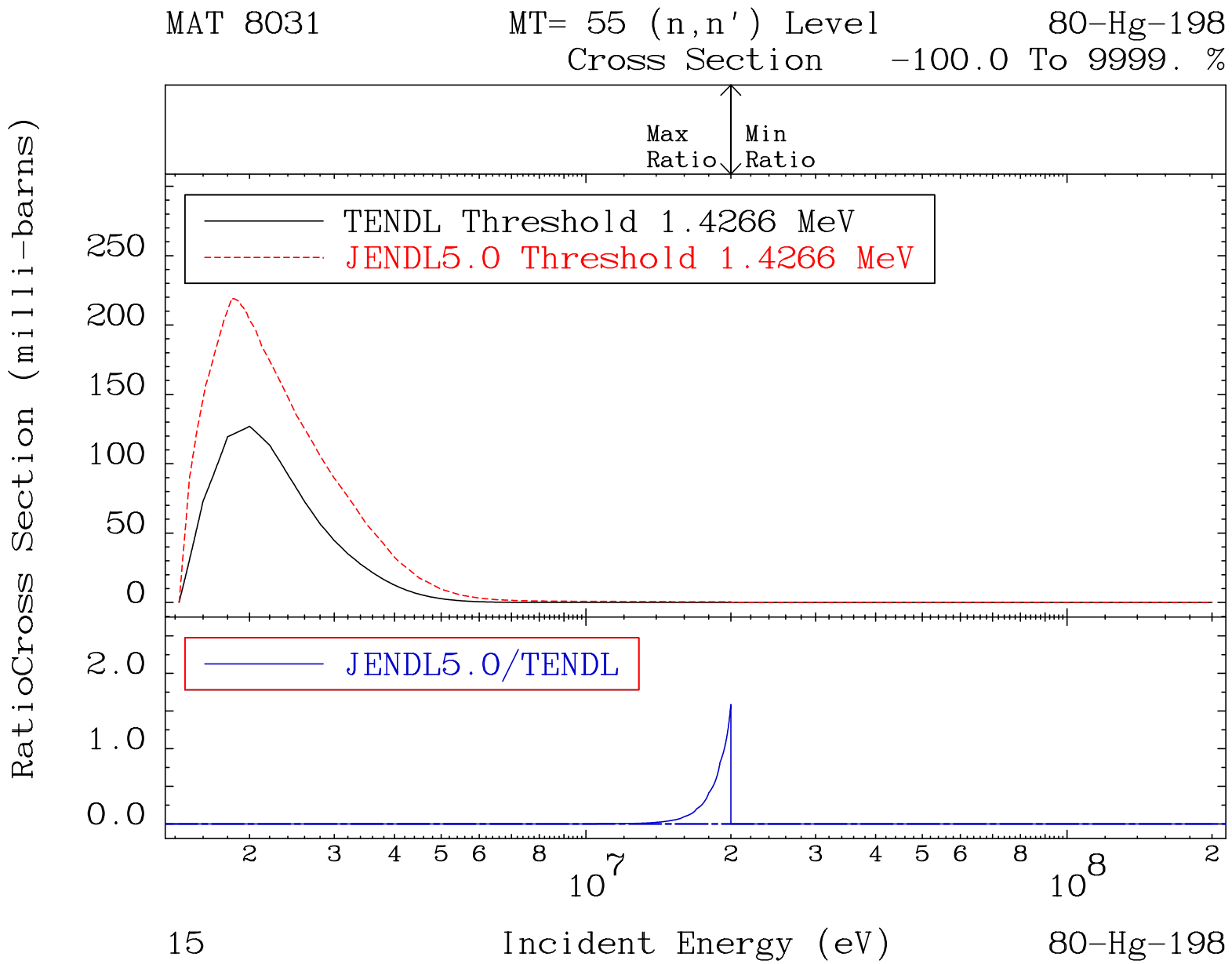

MAT 8031
(n,2n) p
Cross Section
80-Hg-198
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.253 MeV
JENDL5.0 Threshold 15.253 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
80-Hg-198

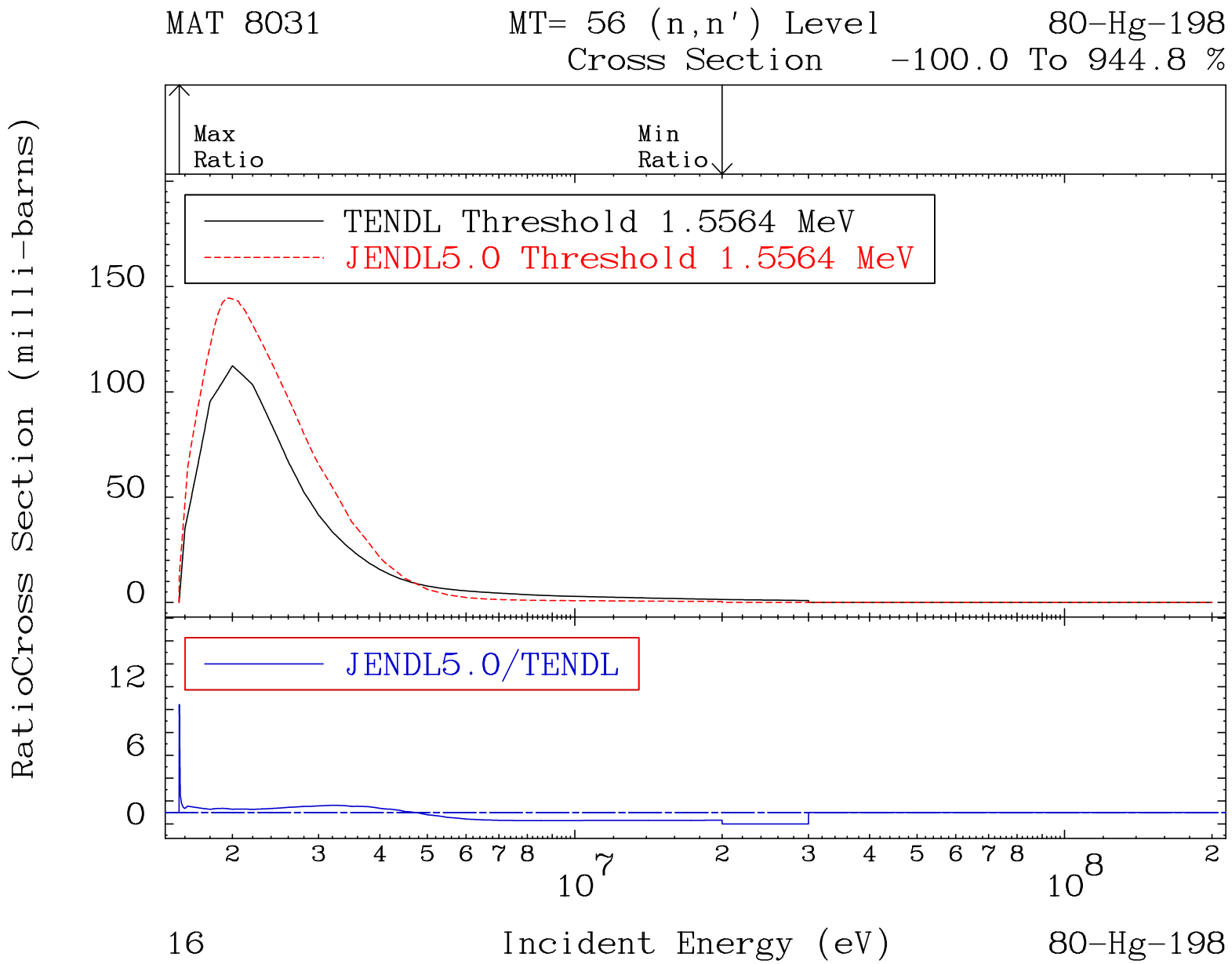

MAT 8031
MT= 51 (n,n') Level
80-Hg-198
Cross Section -100.0 To 72.44 %
Max Ratio
Min Ratio
TENDL Threshold 413.90 keV
JENDL5.0 Threshold 413.90 keV
Cross Section (barns)
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
2.0
1.0
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
80-Hg-198

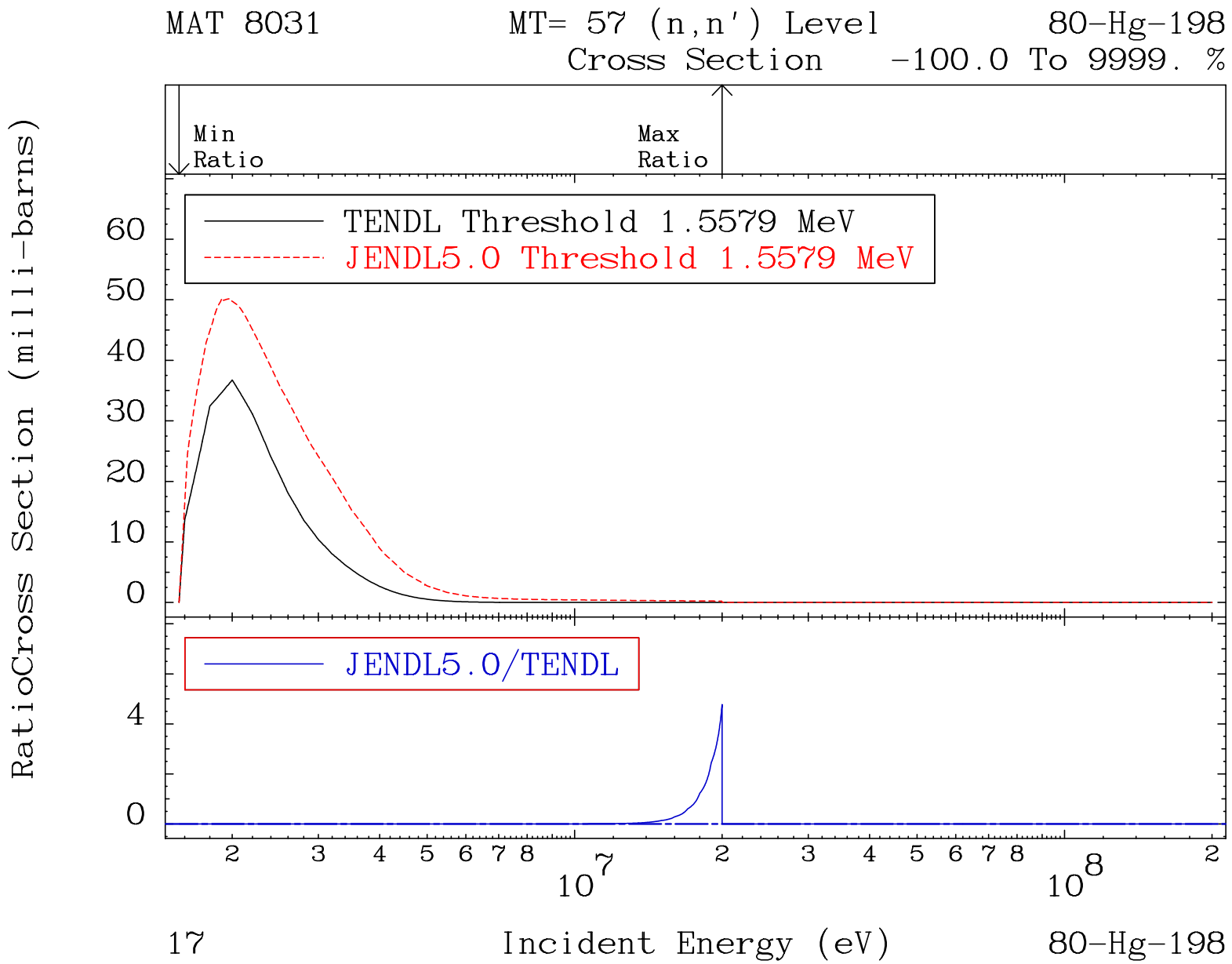

MAT 8031
MT= 52 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 69.89 %
Max Ratio
Min Ratio
TENDL Threshold 1.0539 MeV
JENDL5.0 Threshold 1.0539 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
10^6
10^7
10^8
Incident Energy (eV)
12
80-Hg-198

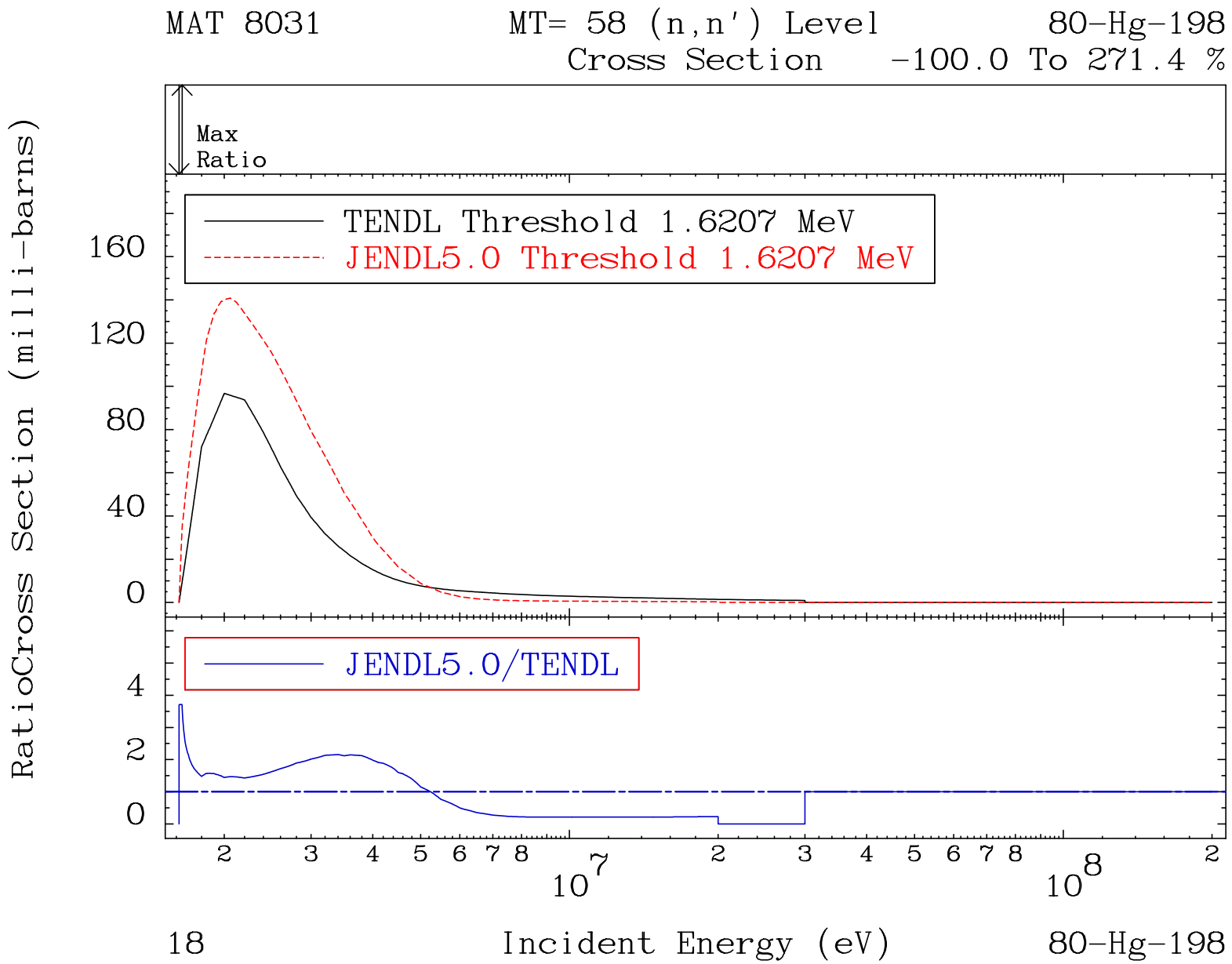

MAT 8031
MT= 53 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 101.8 %
Min Ratio
Max Ratio
TENDL Threshold 1.0932 MeV
JENDL5.0 Threshold 1.0932 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
13
Incident Energy (eV)
80-Hg-198

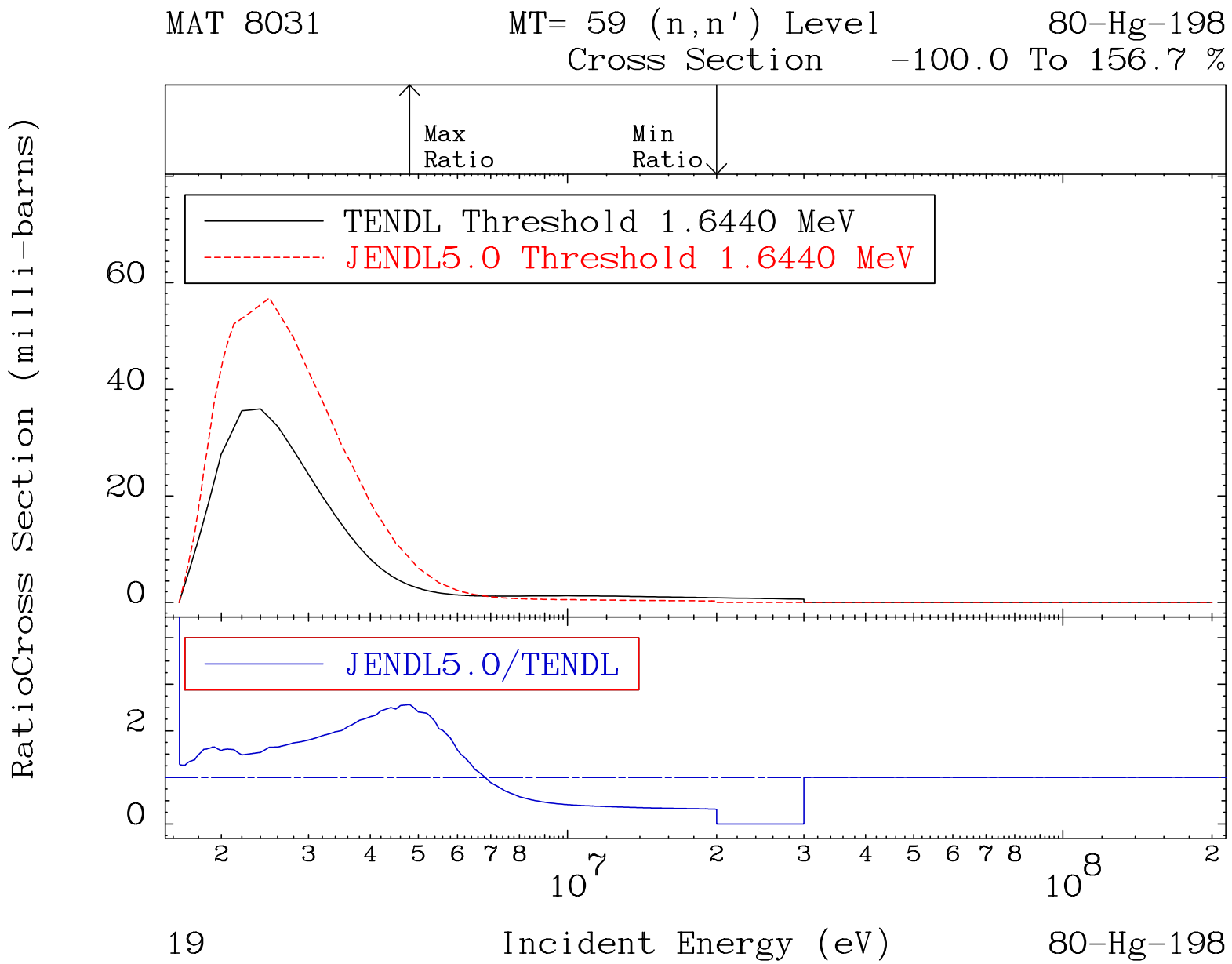

MAT 8031
MT= 54 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4087 MeV
JENDL5.0 Threshold 1.4087 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
80-Hg-198

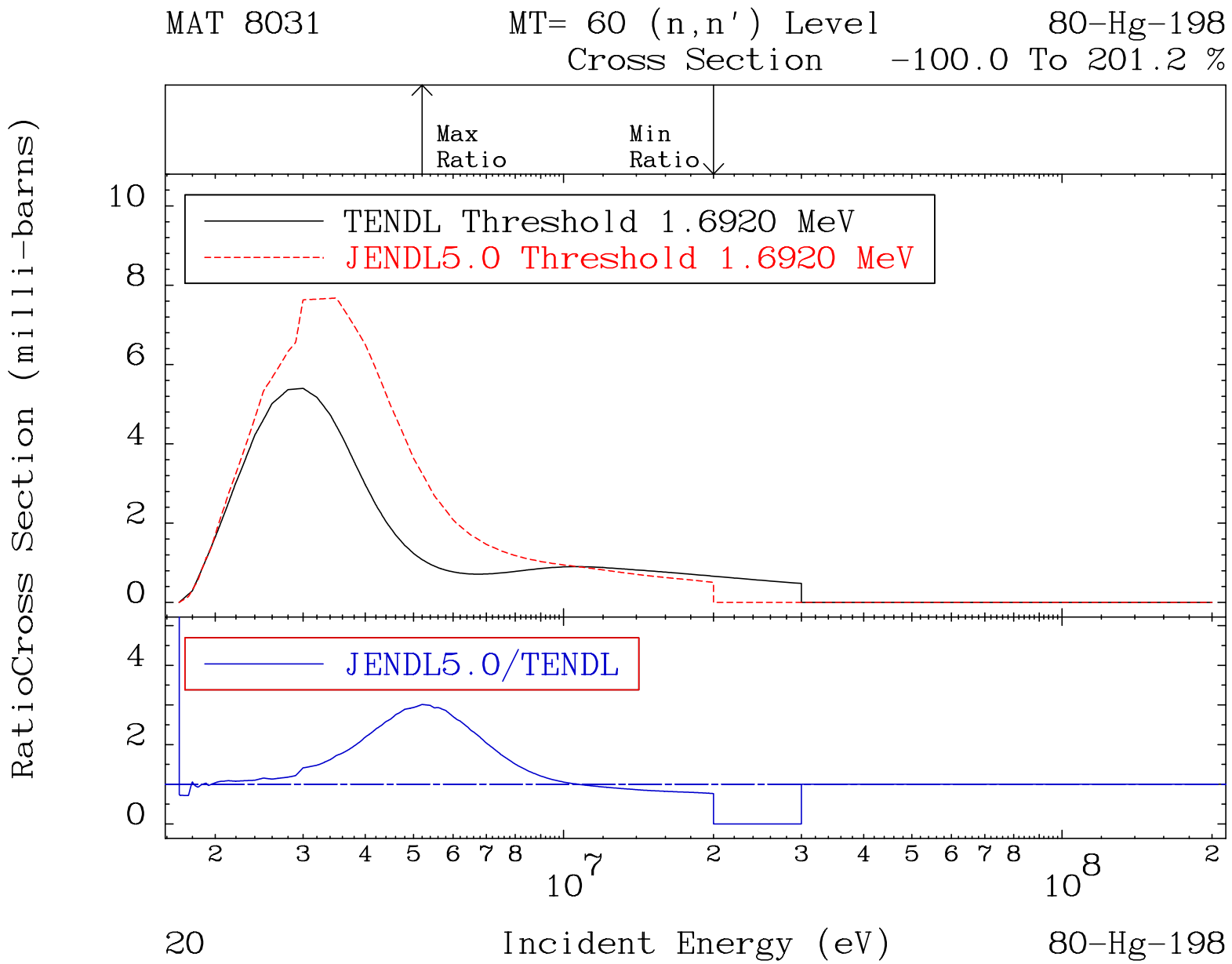

MAT 8031
MT= 55 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4266 MeV
JENDL5.0 Threshold 1.4266 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
80-Hg-198

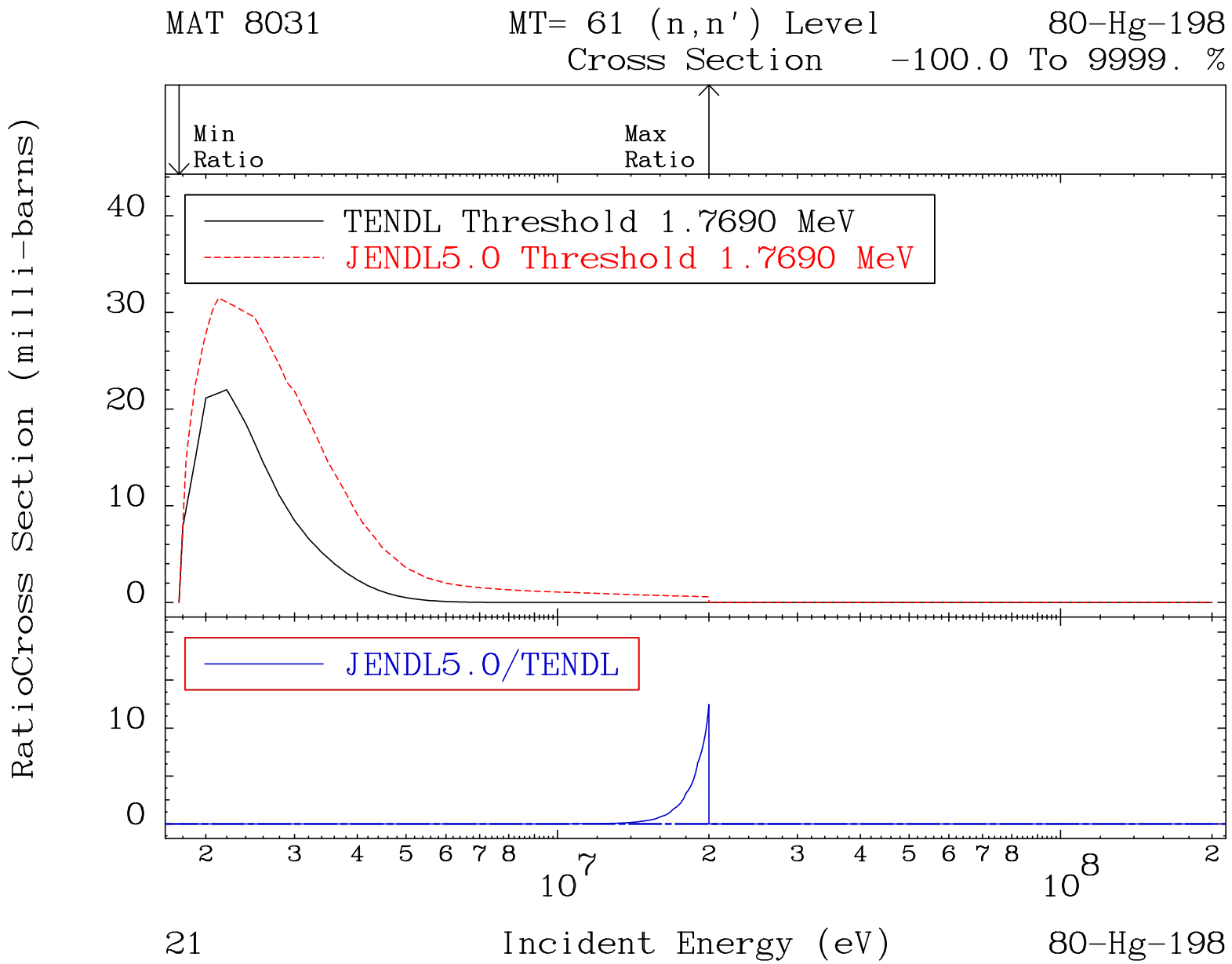

MAT 8031
MT= 56 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 944.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.5564 MeV
JENDL5.0 Threshold 1.5564 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
12
6
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
80-Hg-198

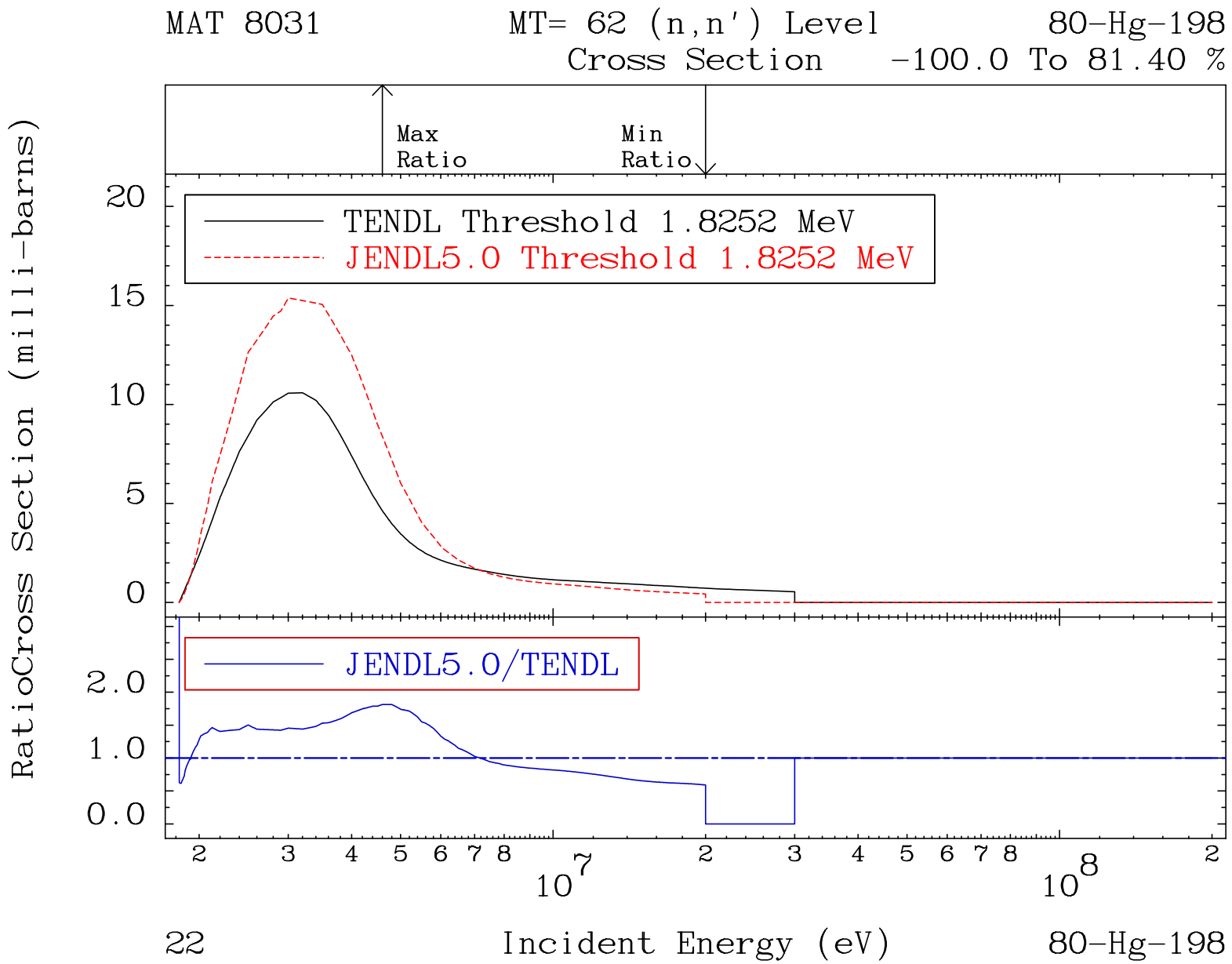

MAT 8031
MT= 57 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5579 MeV
JENDL5.0 Threshold 1.5579 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
80-Hg-198

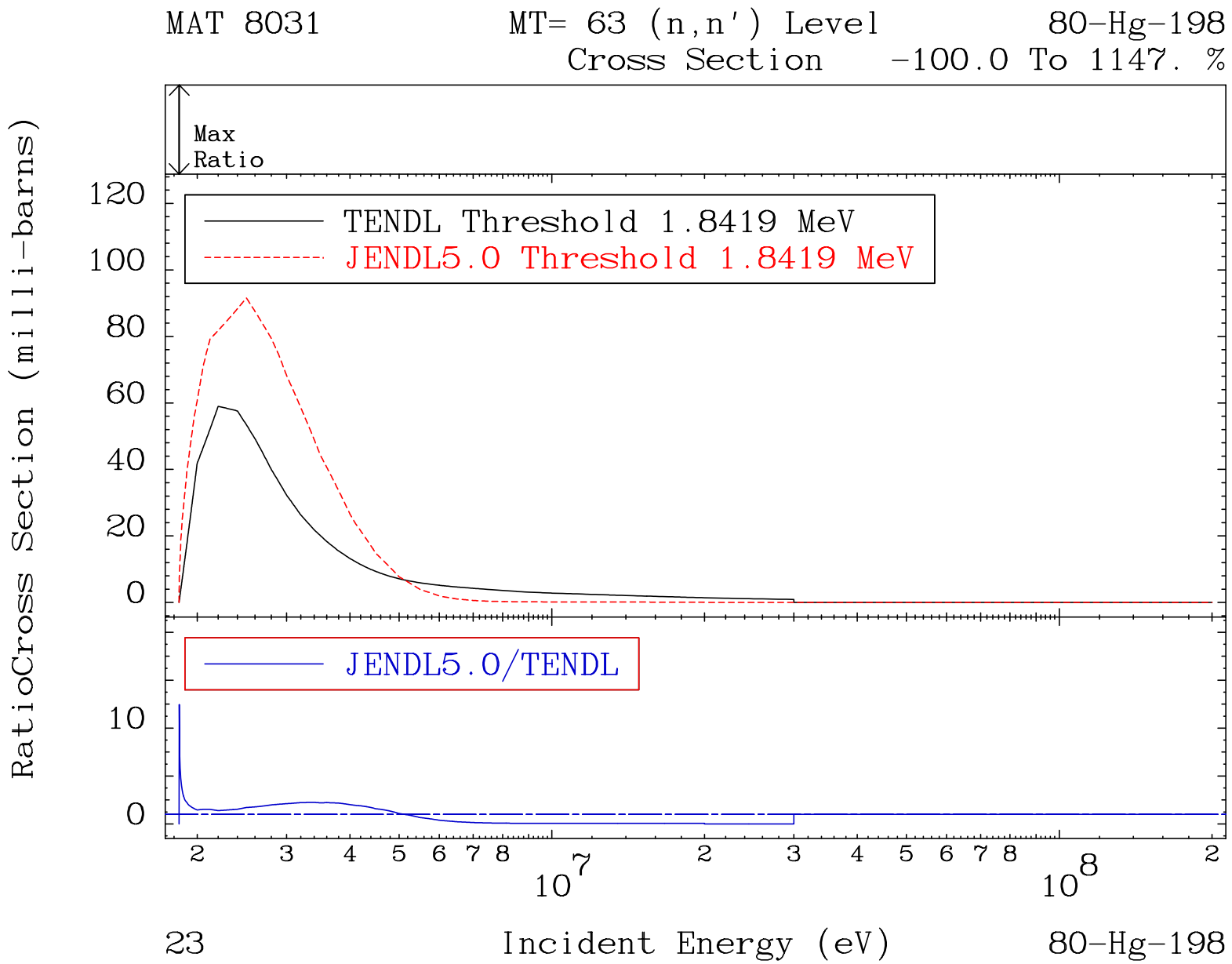

MAT 8031
MT= 58 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 271.4 %
Max
Ratio
TENDL Threshold 1.6207 MeV
JENDL5.0 Threshold 1.6207 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
80-Hg-198

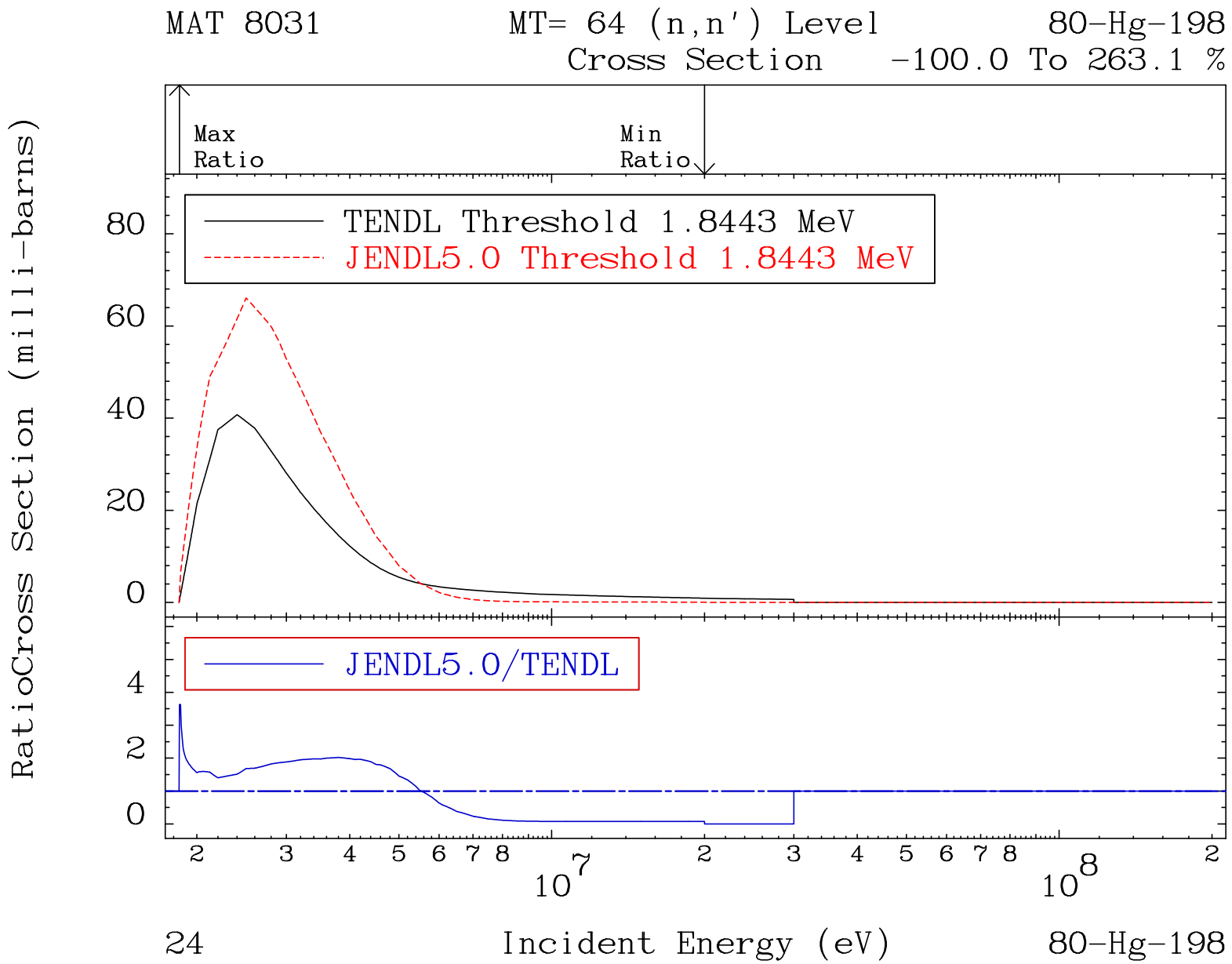

MAT 8031
MT= 59 (n,n') Level
80-Hg-198
Cross Section -100.0 To 156.7 %
Max Ratio
Min Ratio
TENDL Threshold 1.6440 MeV
JENDL5.0 Threshold 1.6440 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
80-Hg-198

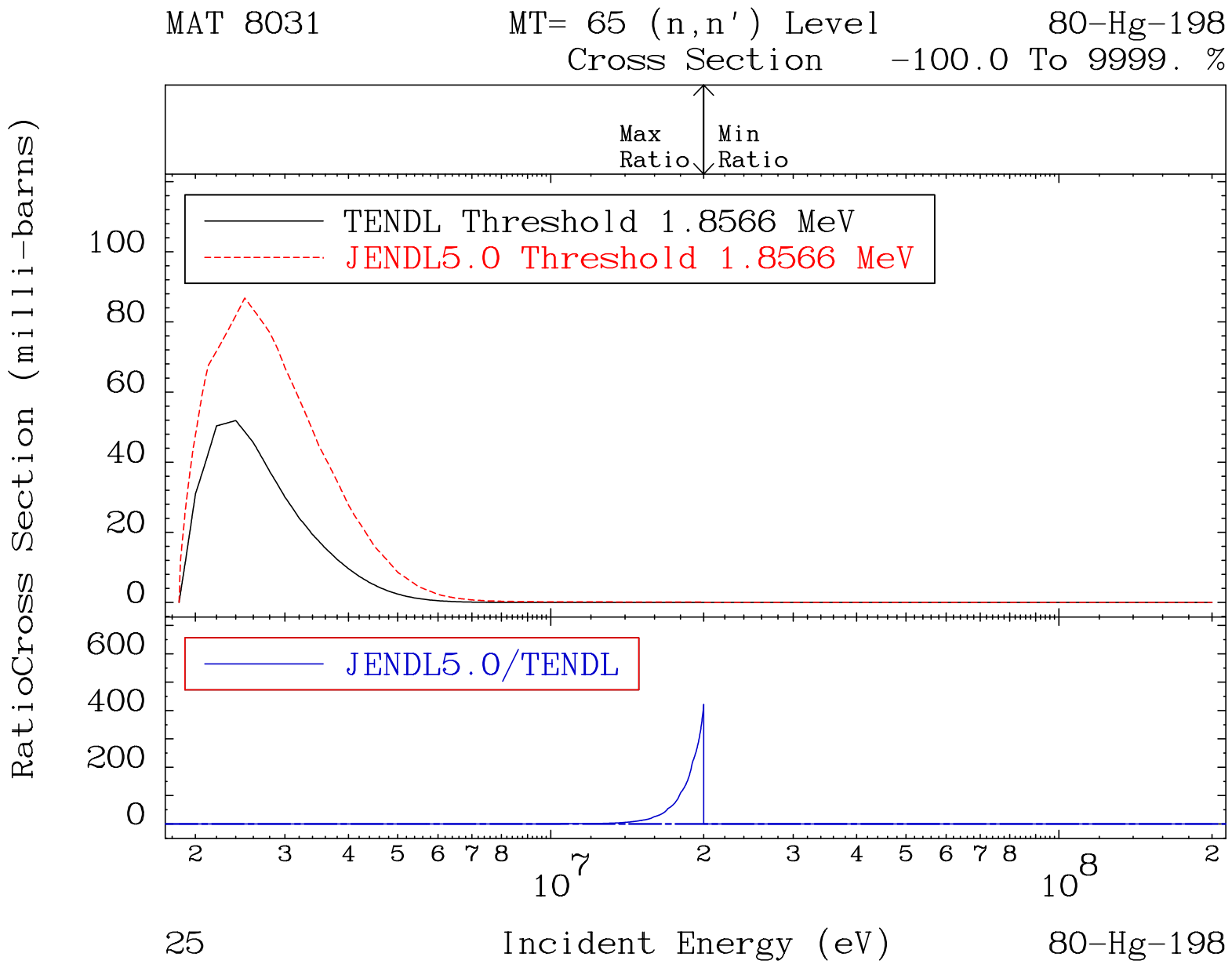

MAT 8031
MT= 60 (n,n') Level
80-Hg-198
Cross Section -100.0 To 201.2 %
Max Ratio
Min Ratio
TENDL Threshold 1.6920 MeV
JENDL5.0 Threshold 1.6920 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
20
80-Hg-198

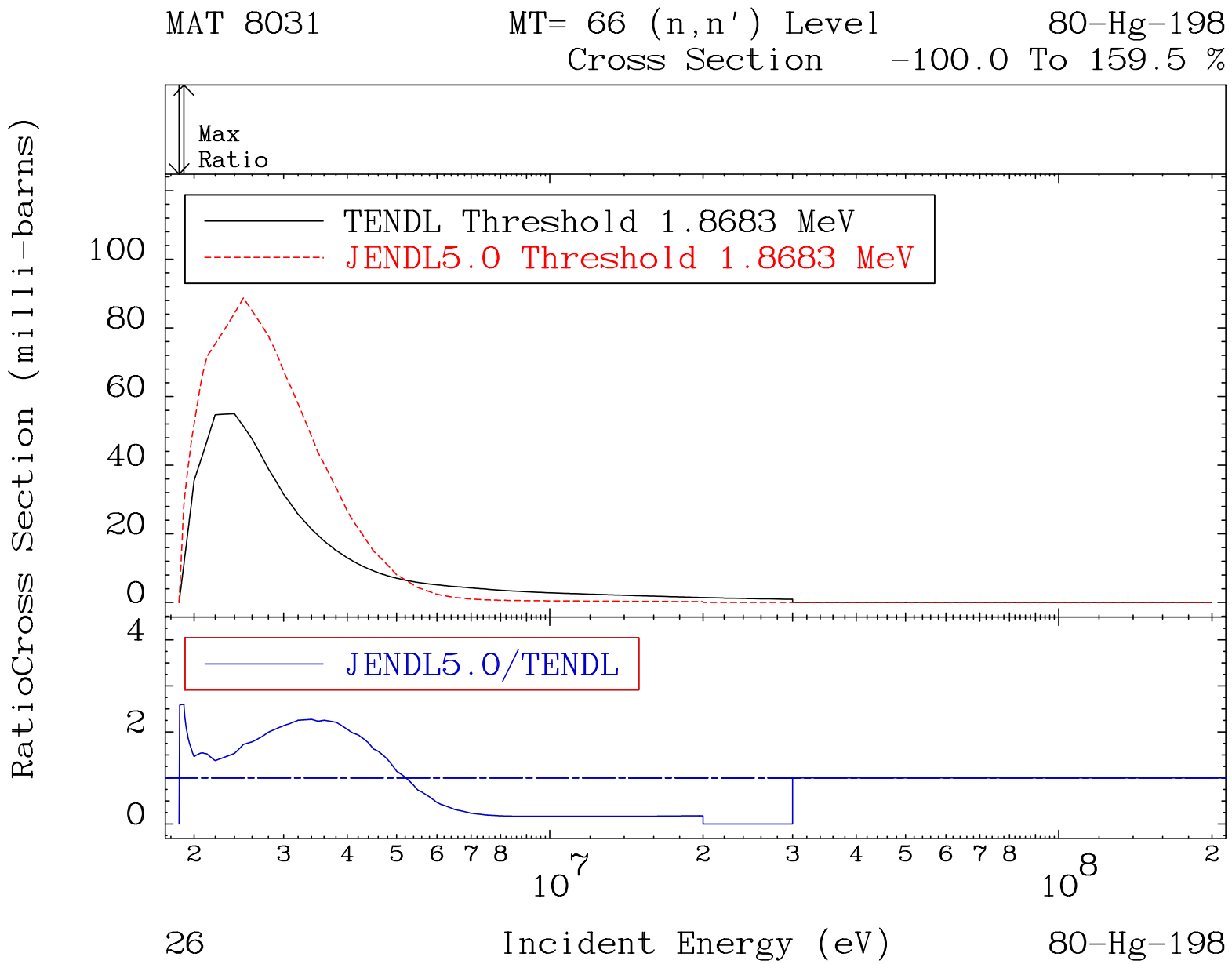

MAT 8031
MT= 61 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.7690 MeV
JENDL5.0 Threshold 1.7690 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
80-Hg-198

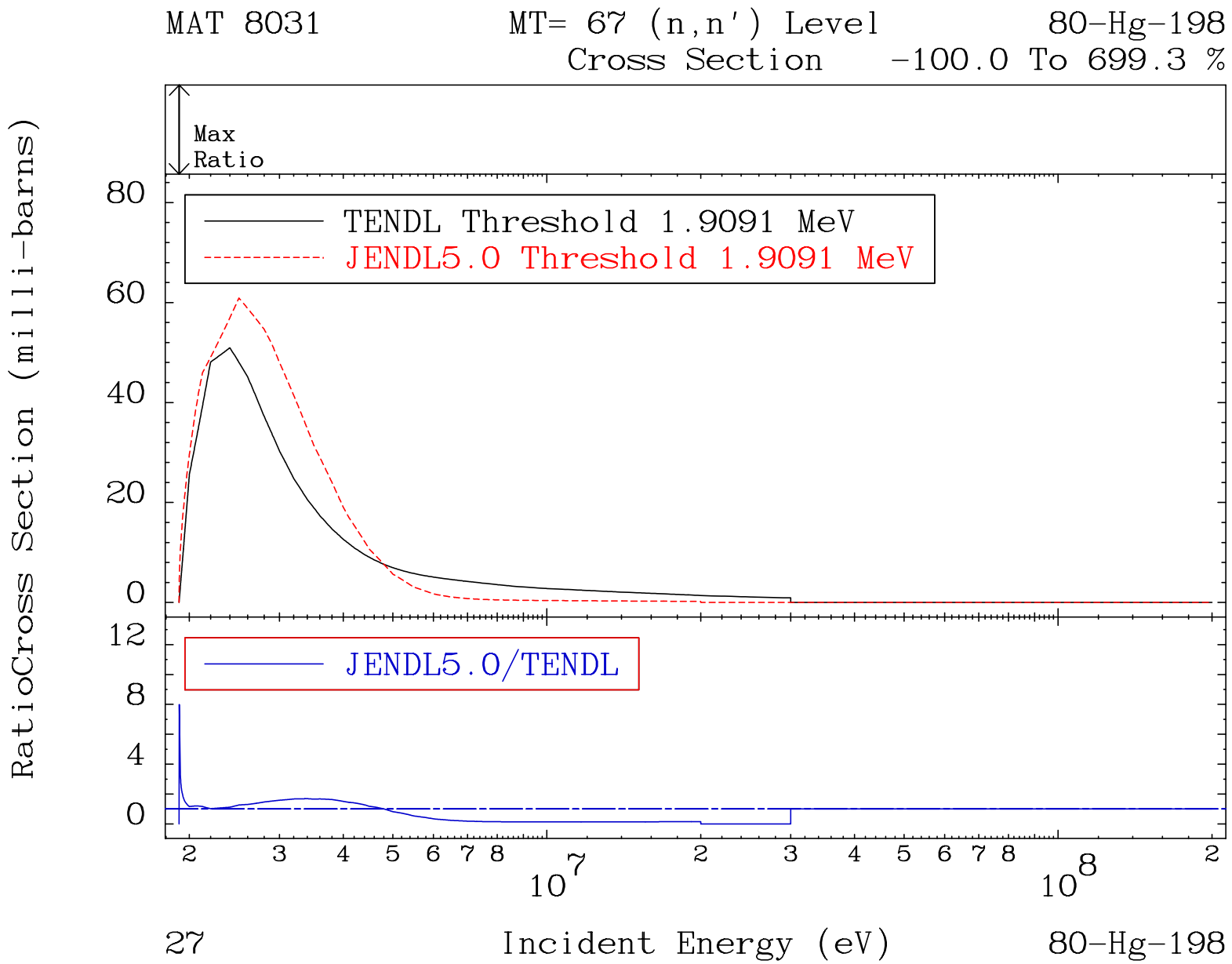

MAT 8031
MT= 62 (n,n') Level
80-Hg-198
Cross Section -100.0 To 81.40 %
Max Ratio
Min Ratio
TENDL Threshold 1.8252 MeV
JENDL5.0 Threshold 1.8252 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
80-Hg-198

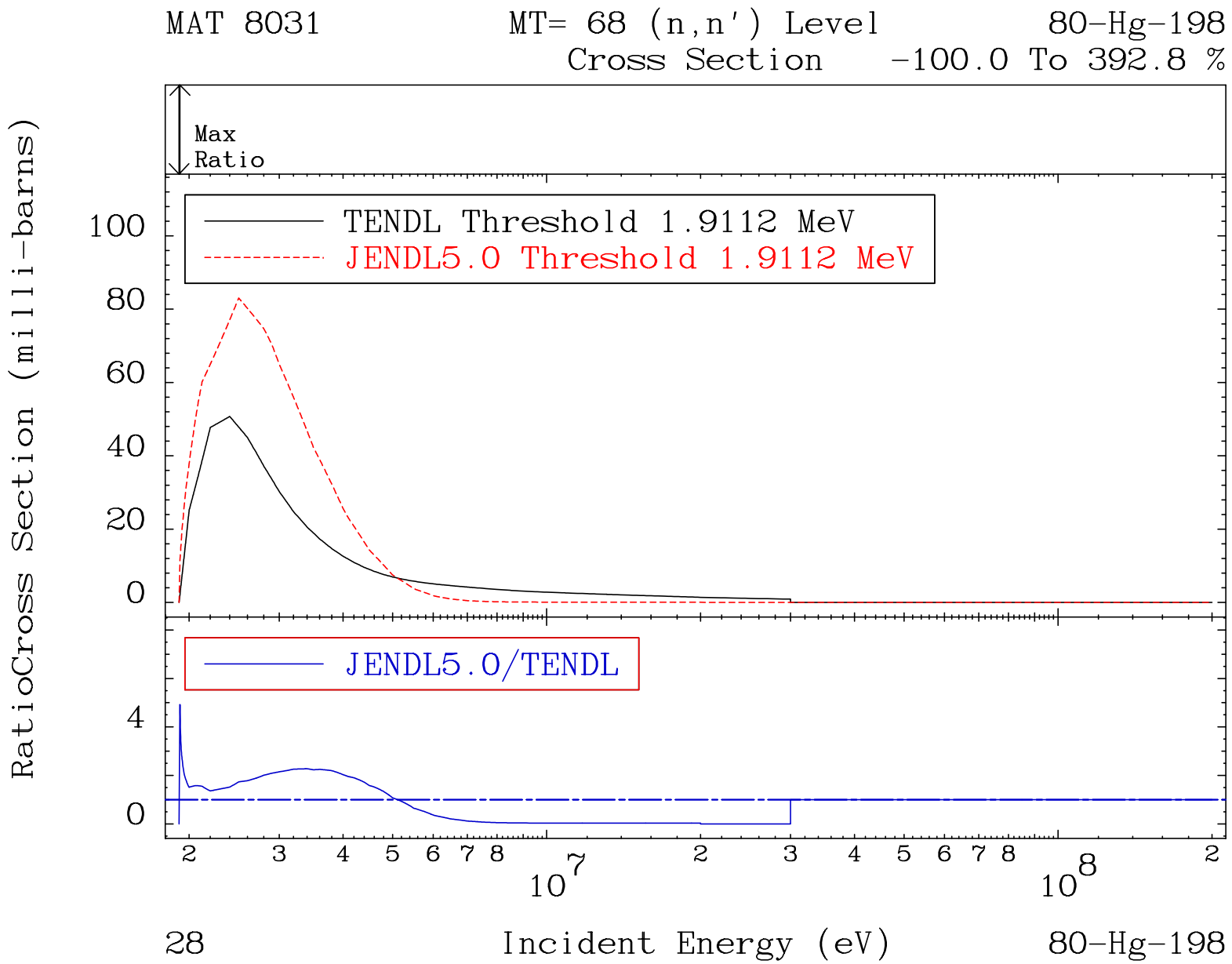

MAT 8031
MT= 63 (n,n') Level
80-Hg-198
Cross Section -100.0 To 1147. %
Max
Ratio
TENDL Threshold 1.8419 MeV
JENDL5.0 Threshold 1.8419 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
80-Hg-198

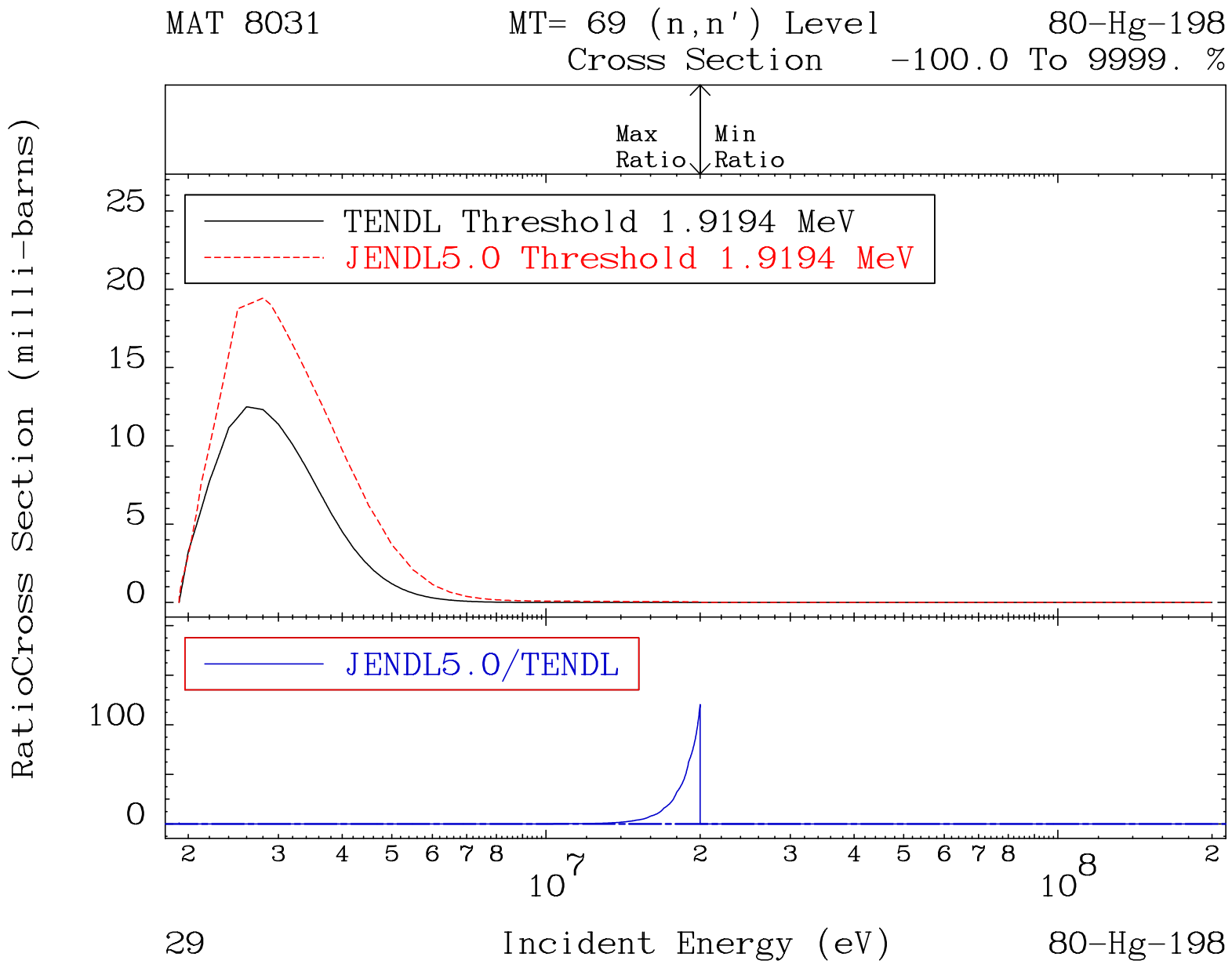

MAT 8031
MT= 64 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 263.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.8443 MeV
JENDL5.0 Threshold 1.8443 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
80-Hg-198

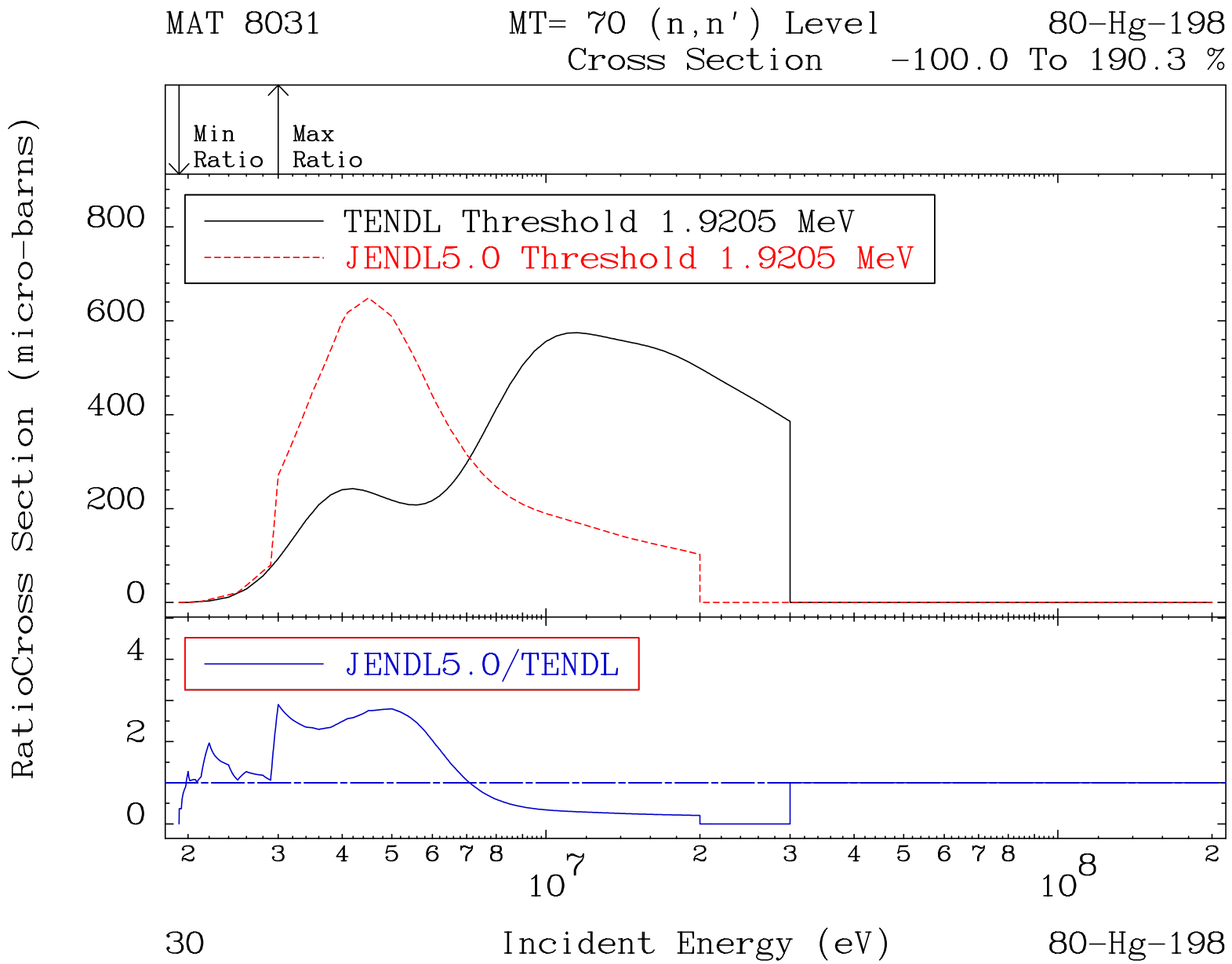

MAT 8031
MT= 65 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8566 MeV
JENDL5.0 Threshold 1.8566 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
600
400
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
80-Hg-198

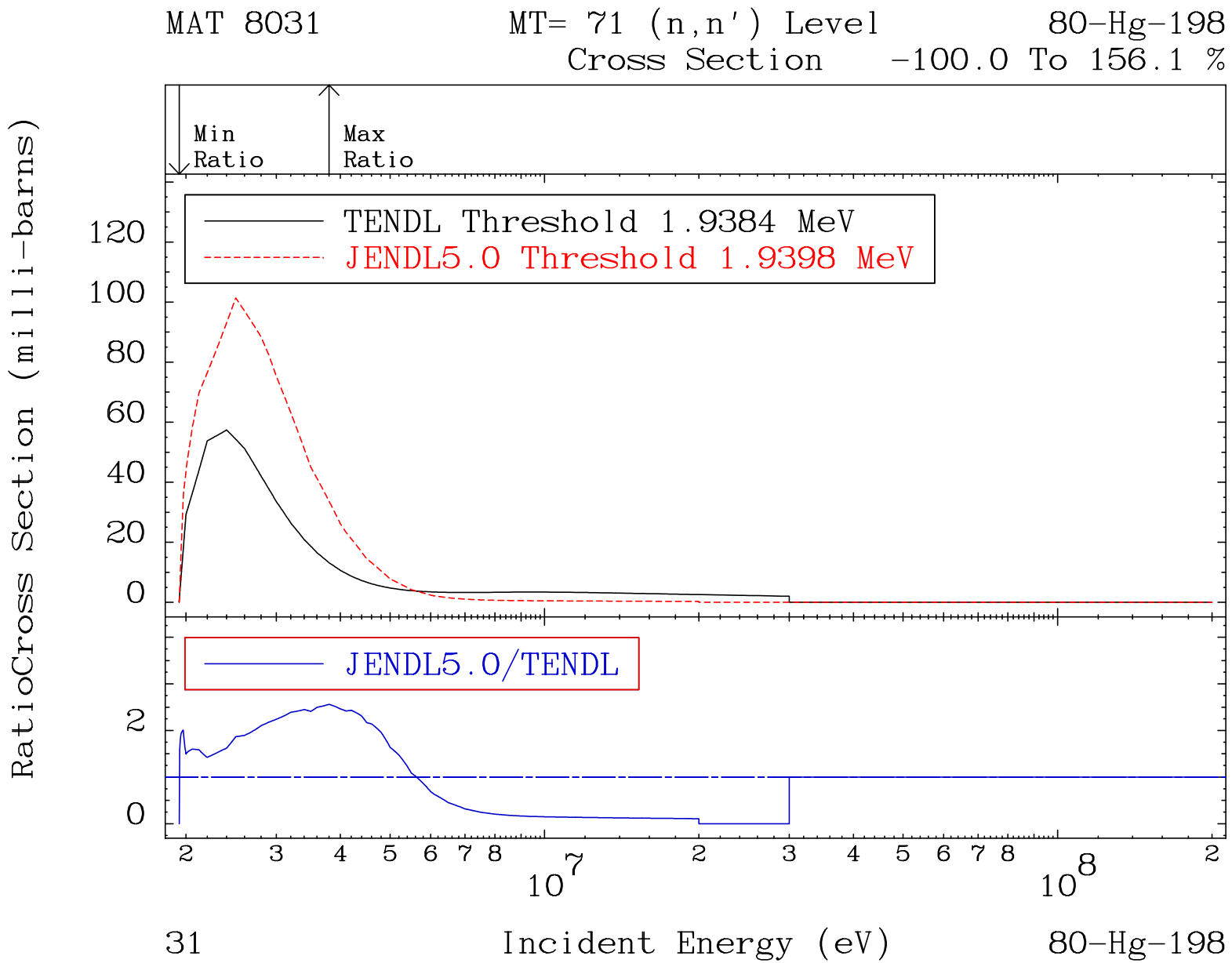

MAT 8031
MT= 66 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 159.5 %
Max
Ratio
TENDL Threshold 1.8683 MeV
JENDL5.0 Threshold 1.8683 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
80-Hg-198

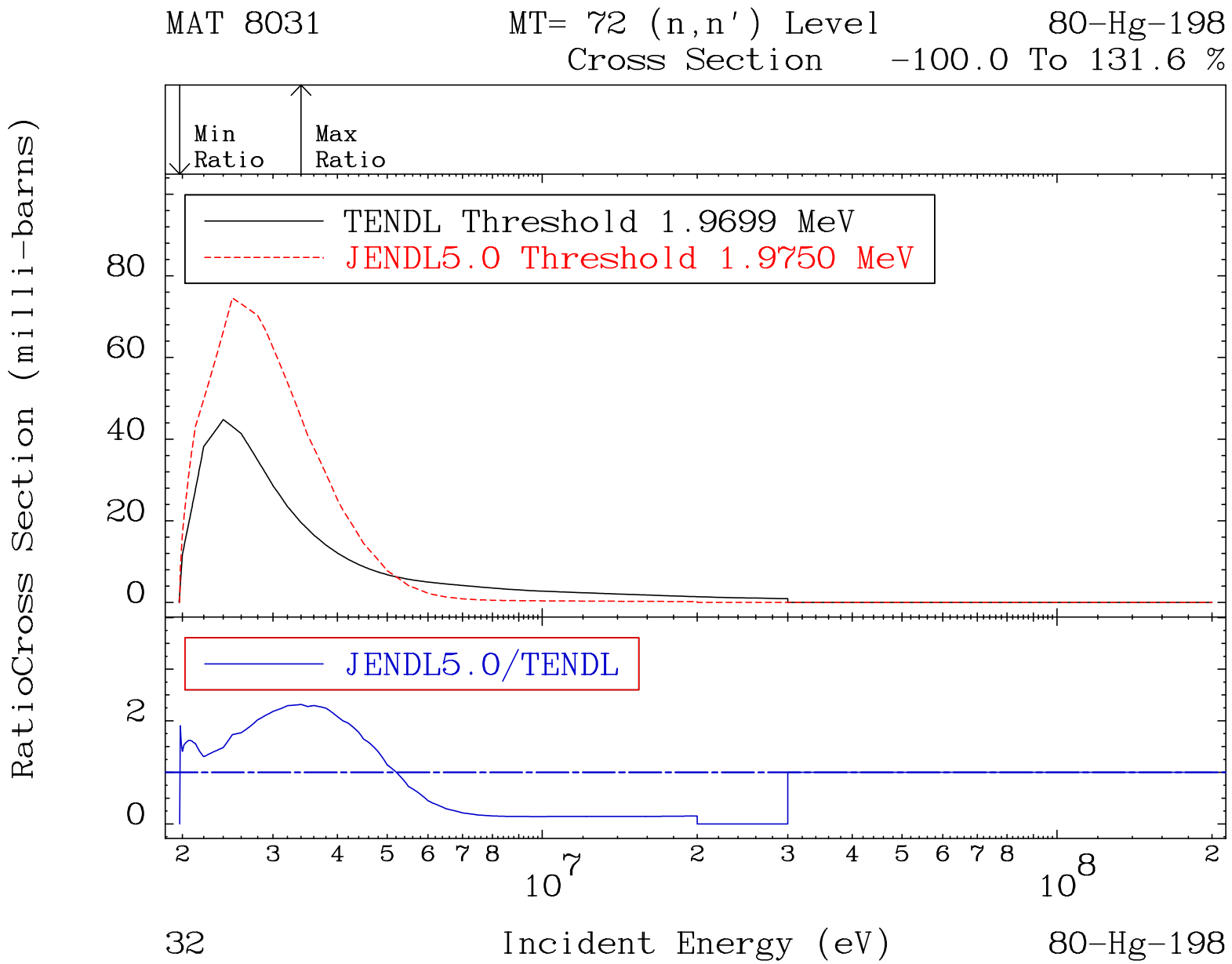

MAT 8031
MT= 67 (n,n') Level
80-Hg-198
Cross Section -100.0 To 699.3 %
Max
Ratio
TENDL Threshold 1.9091 MeV
JENDL5.0 Threshold 1.9091 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
80-Hg-198

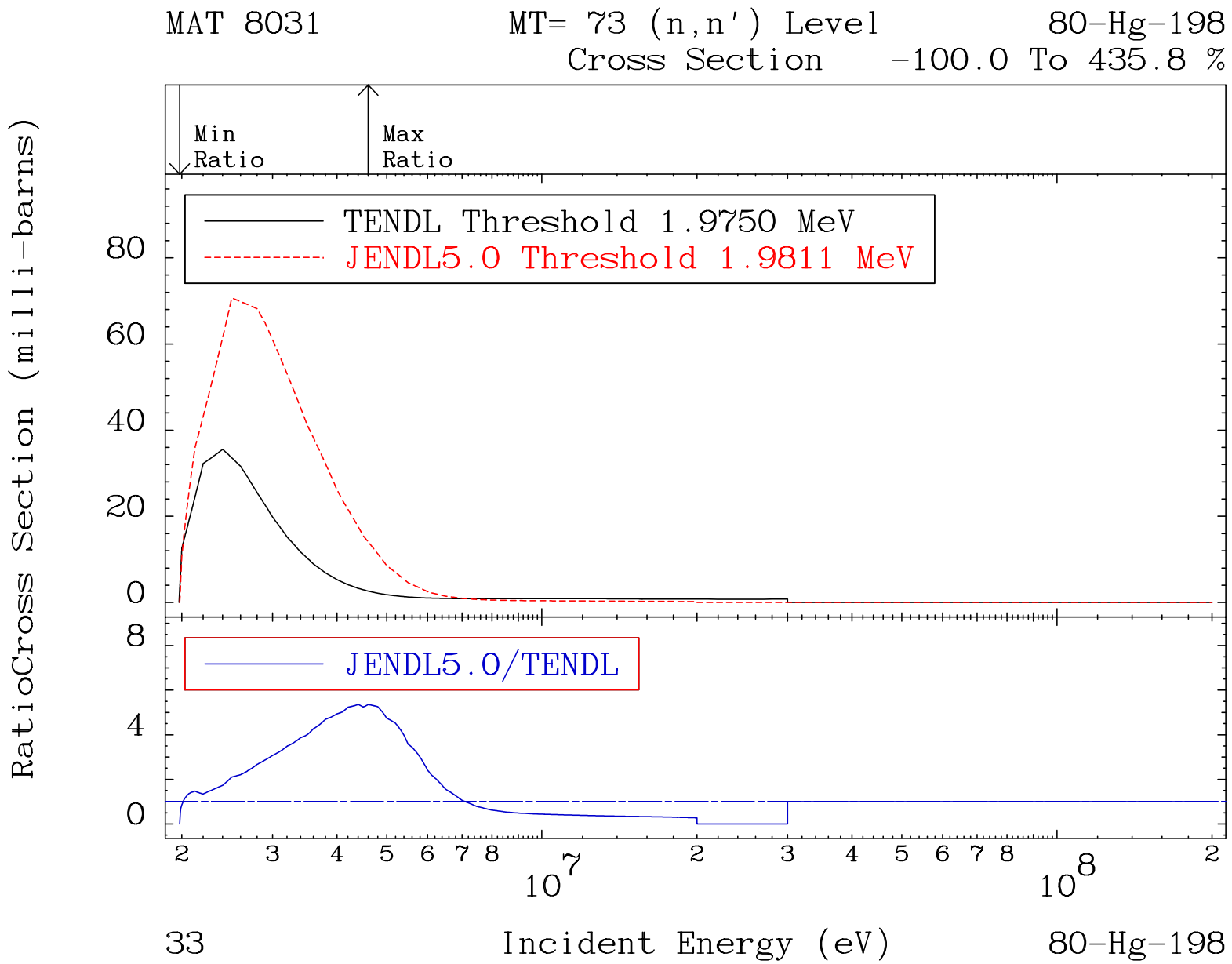

MAT 8031
MT= 68 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 392.8 %
Max
Ratio
TENDL Threshold 1.9112 MeV
JENDL5.0 Threshold 1.9112 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
80-Hg-198

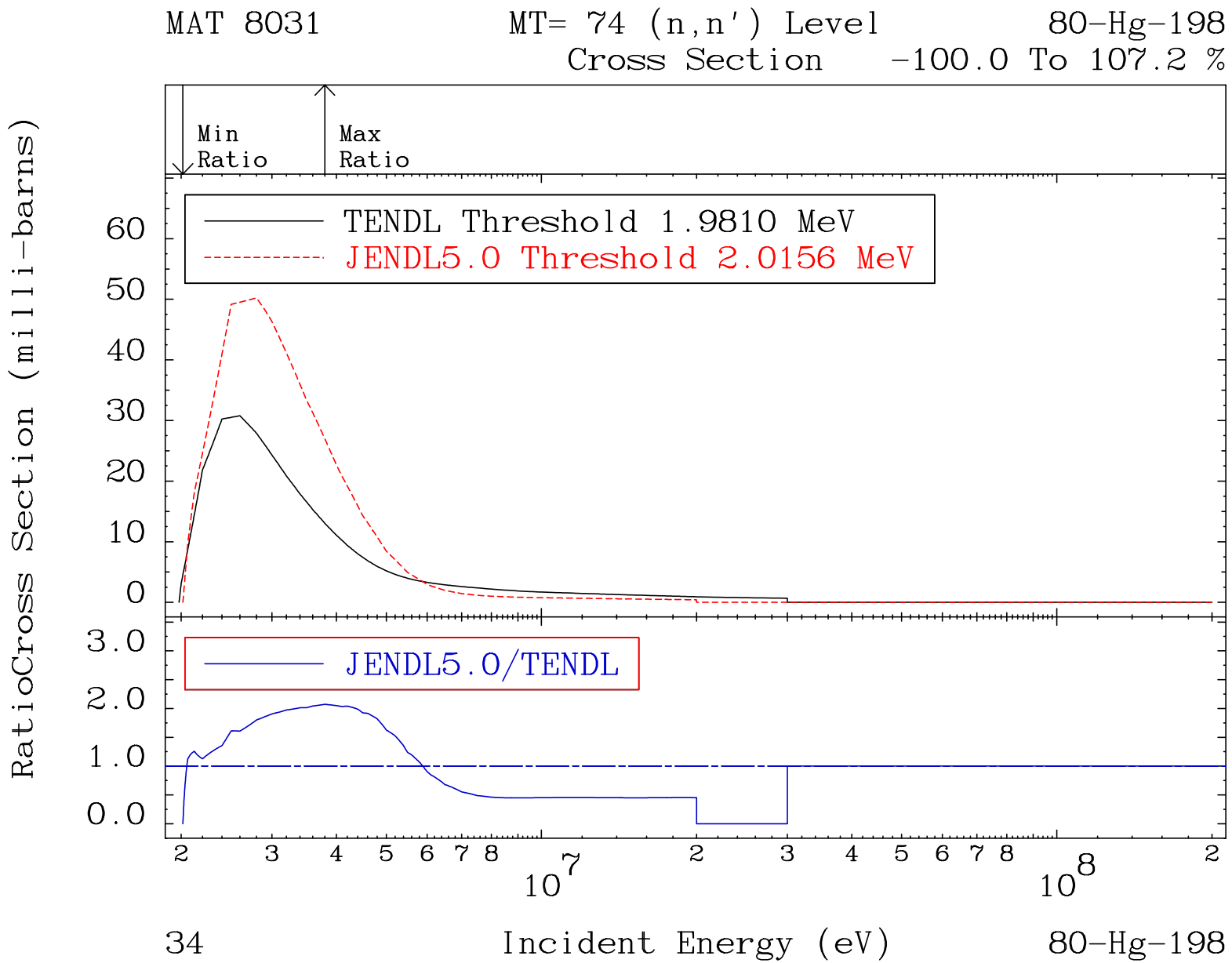

MAT 8031
MT= 69 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.9194 MeV
JENDL5.0 Threshold 1.9194 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
80-Hg-198

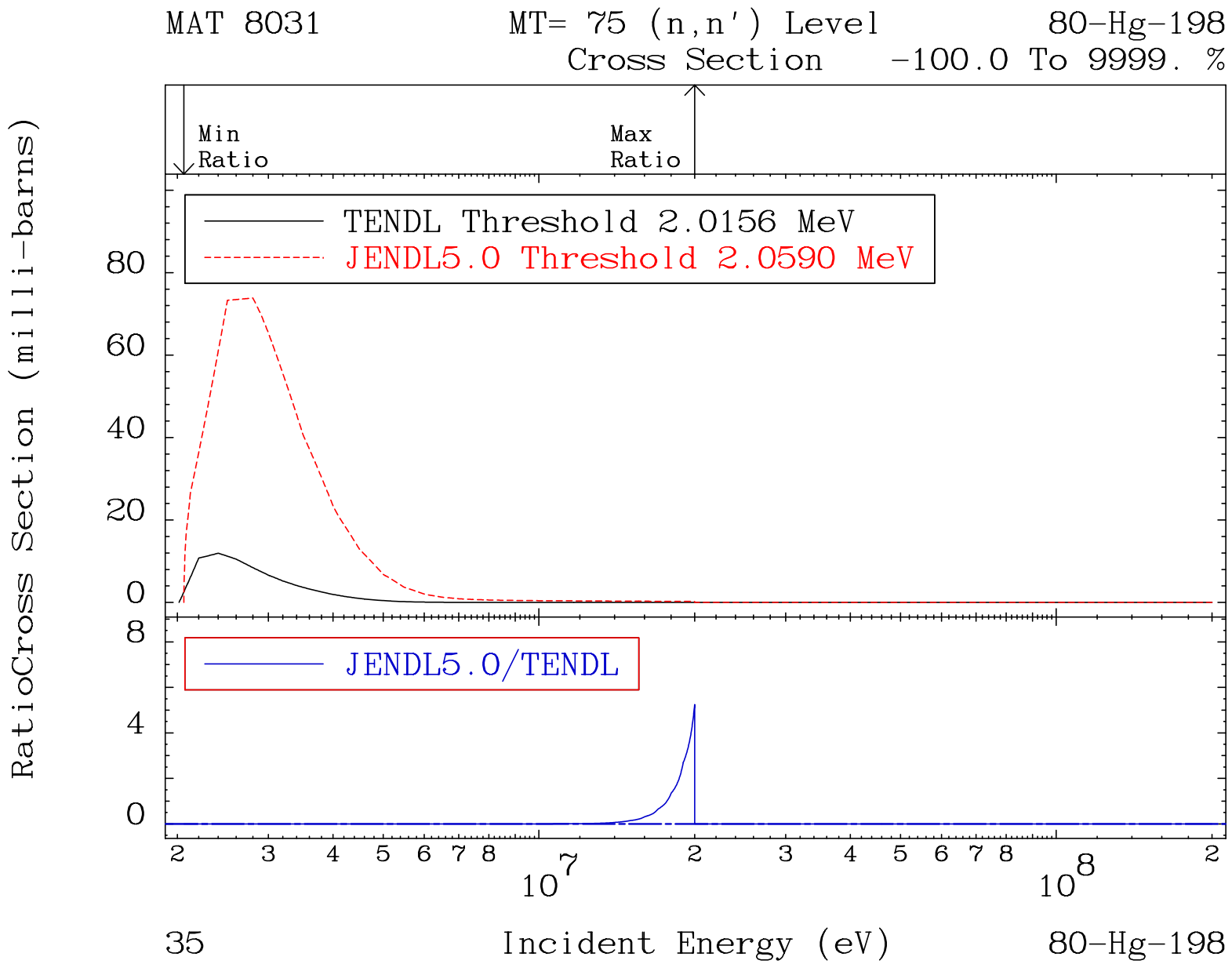

MAT 8031
MT= 70 (n,n') Level
80-Hg-198
Cross Section -100.0 To 190.3 %
Min Ratio
Max Ratio
TENDL Threshold 1.9205 MeV
JENDL5.0 Threshold 1.9205 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
80-Hg-198

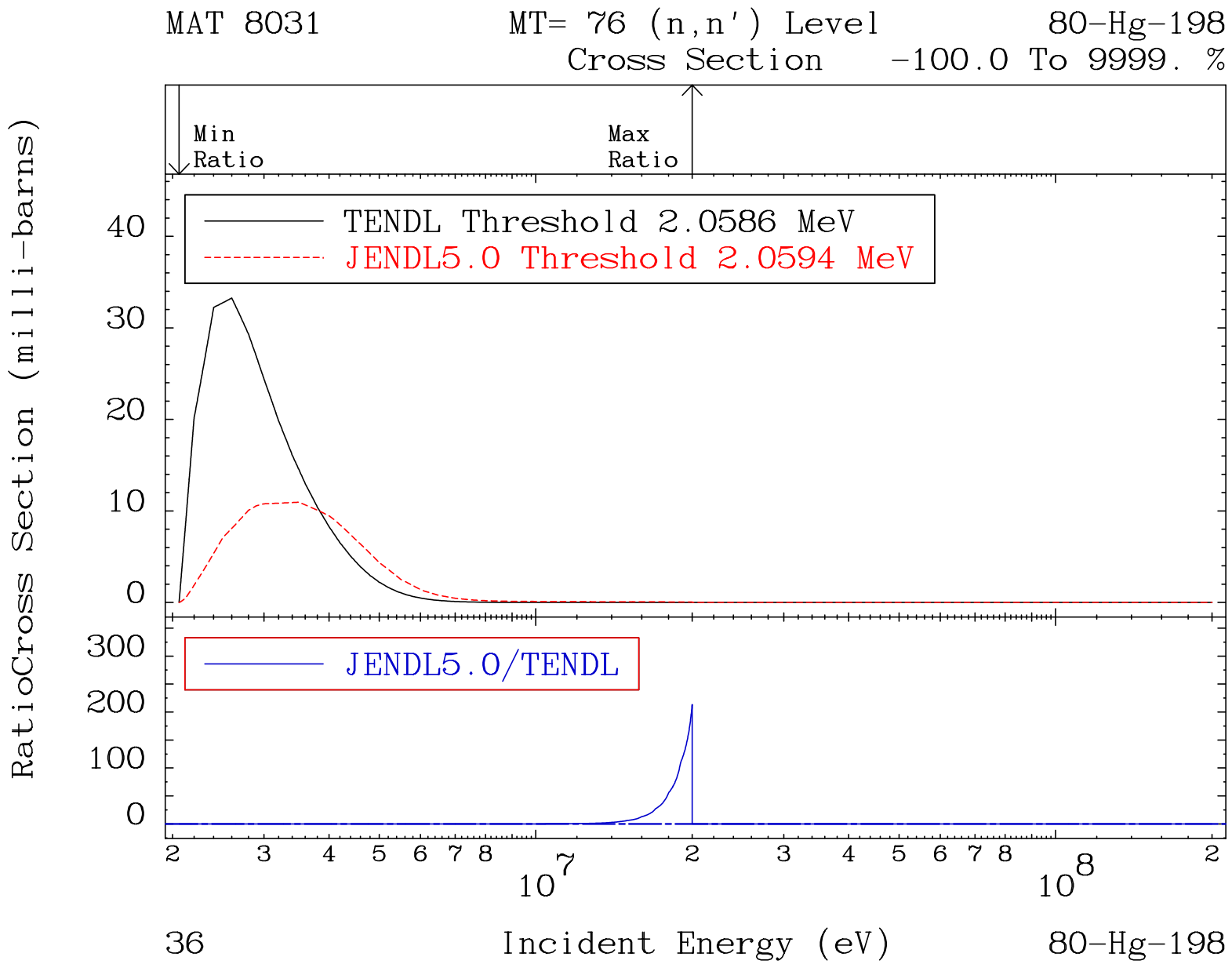

MAT 8031
MT= 71 (n,n') Level
80-Hg-198
Cross Section -100.0 To 156.1 %
Min Ratio
Max Ratio
TENDL Threshold 1.9384 MeV
JENDL5.0 Threshold 1.9398 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
80-Hg-198

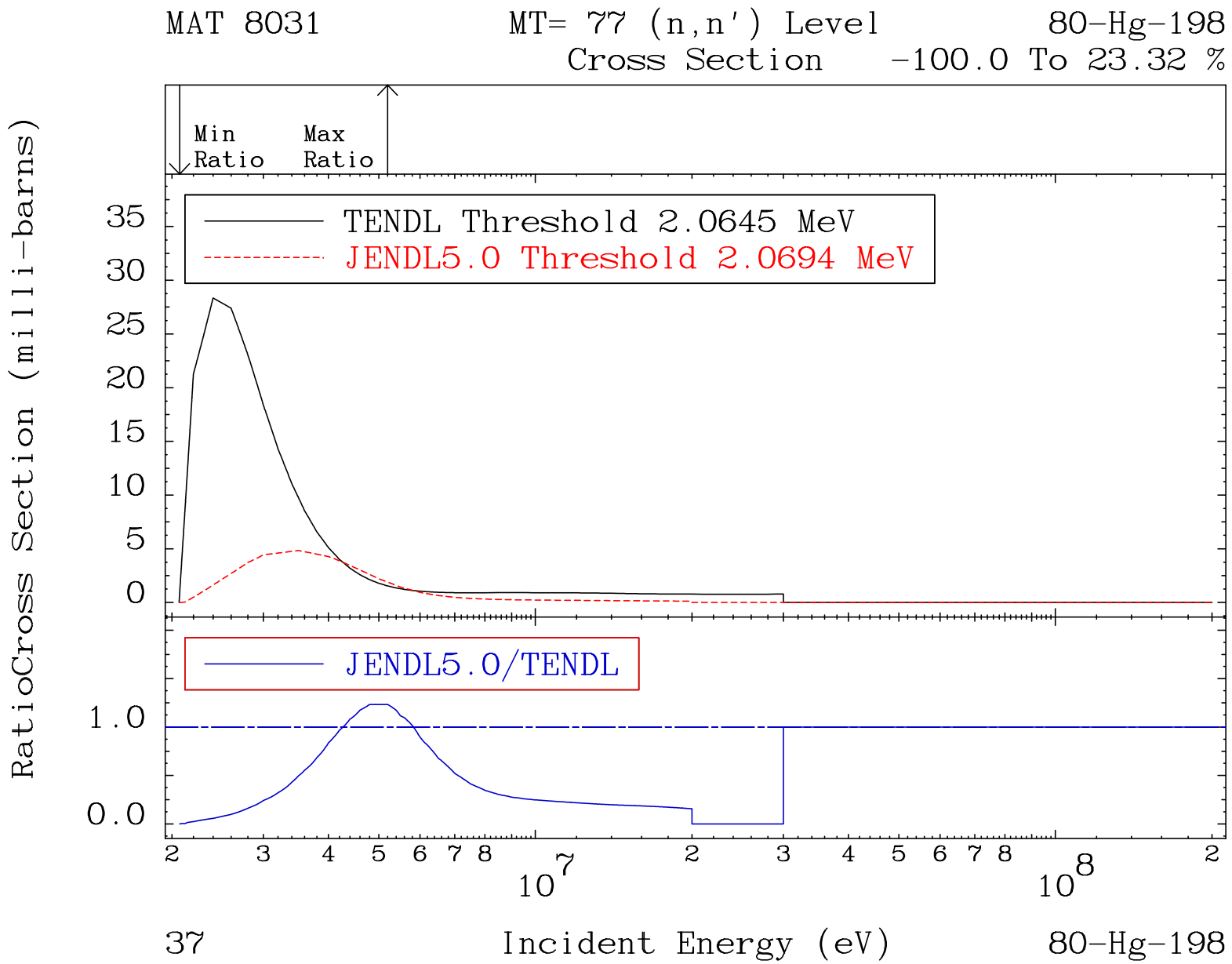

MAT 8031
MT= 72 (n,n') Level
80-Hg-198
Cross Section -100.0 To 131.6 %
Min Ratio
Max Ratio
TENDL Threshold 1.9699 MeV
JENDL5.0 Threshold 1.9750 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
80-Hg-198

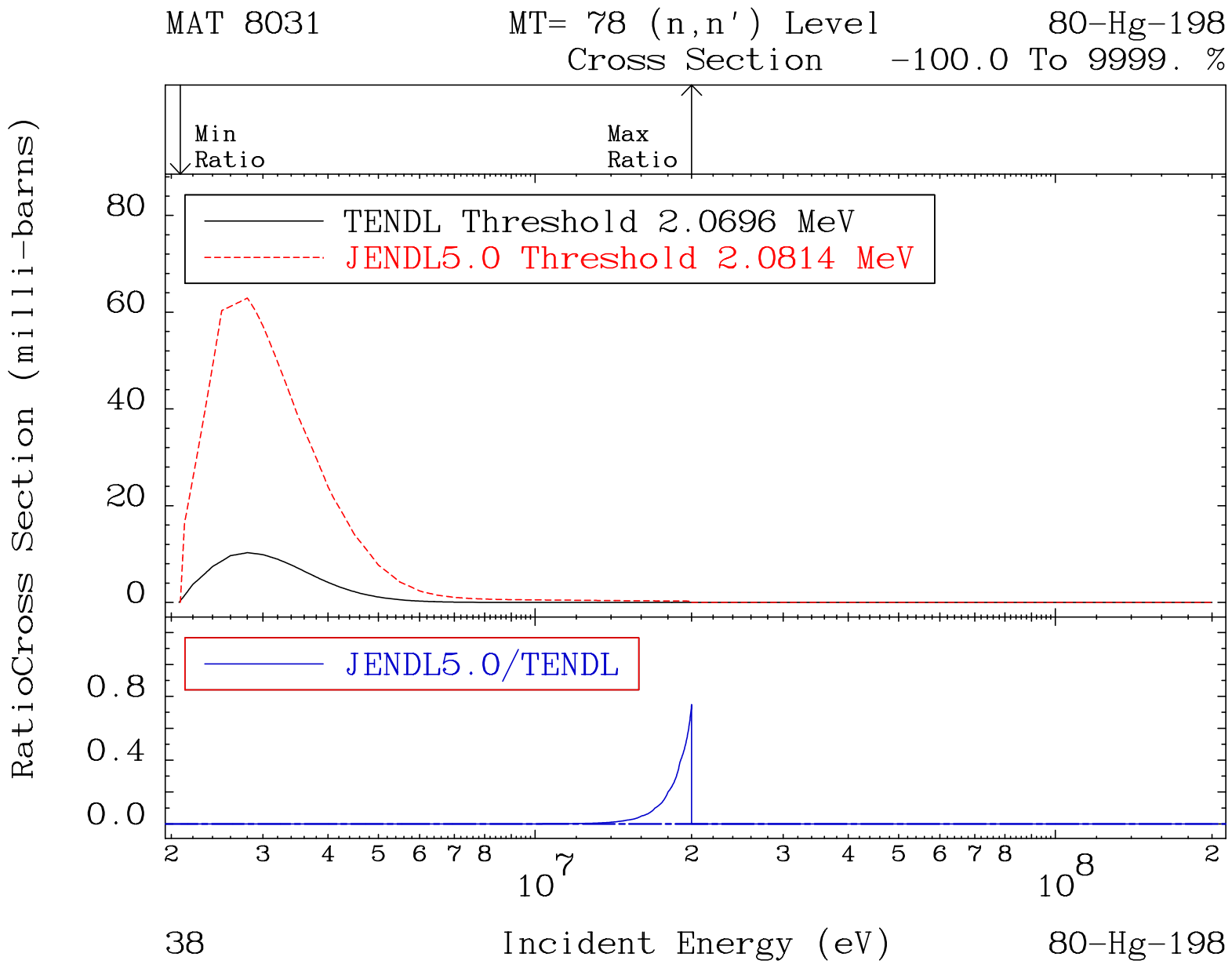

MAT 8031
MT= 73 (n,n') Level
80-Hg-198
Cross Section -100.0 To 435.8 %
Min Ratio
Max Ratio
TENDL Threshold 1.9750 MeV
JENDL5.0 Threshold 1.9811 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
80-Hg-198

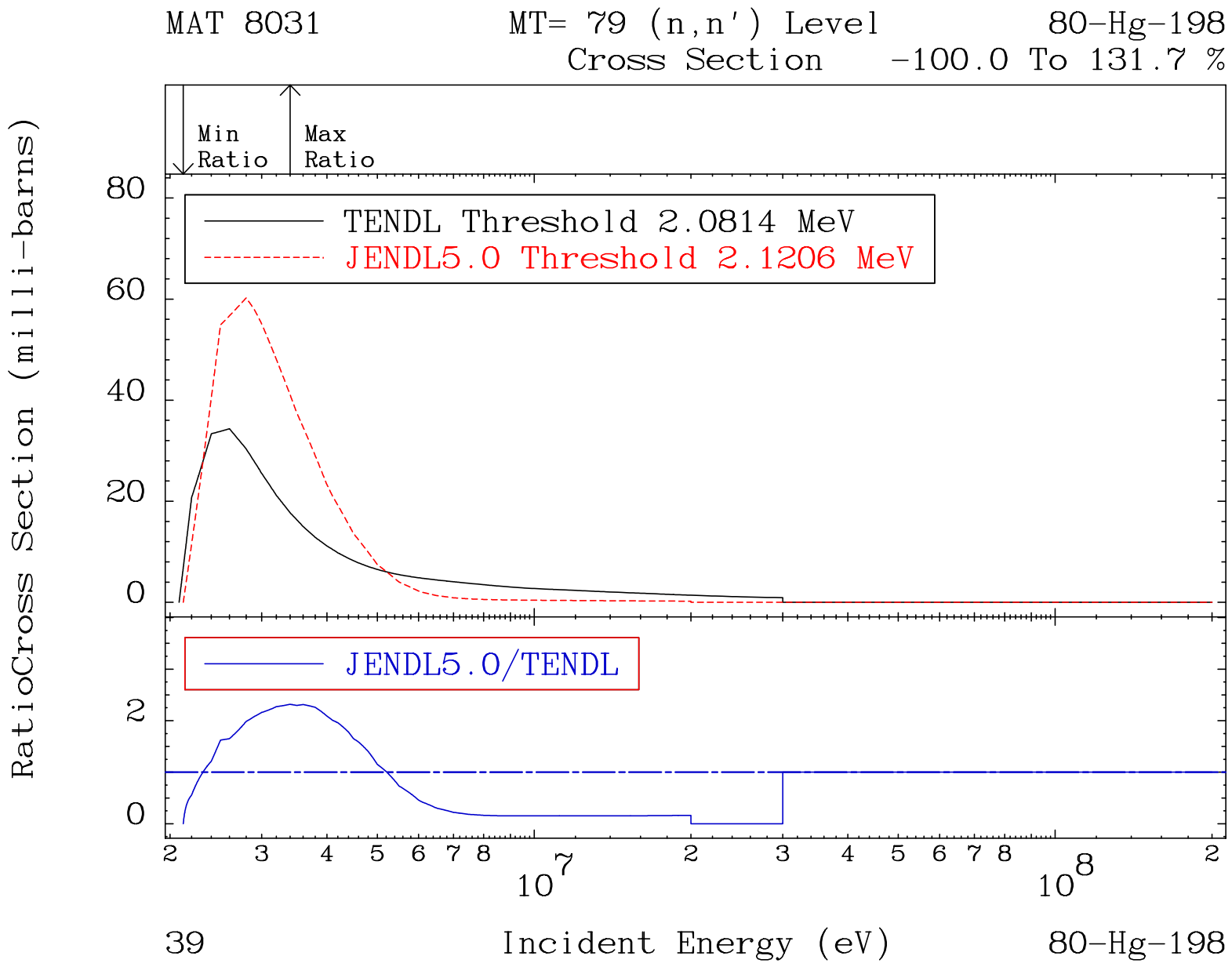

MAT 8031
MT= 74 (n,n') Level
80-Hg-198
Cross Section -100.0 To 107.2 %
Min Ratio
Max Ratio
TENDL Threshold 1.9810 MeV
JENDL5.0 Threshold 2.0156 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
80-Hg-198

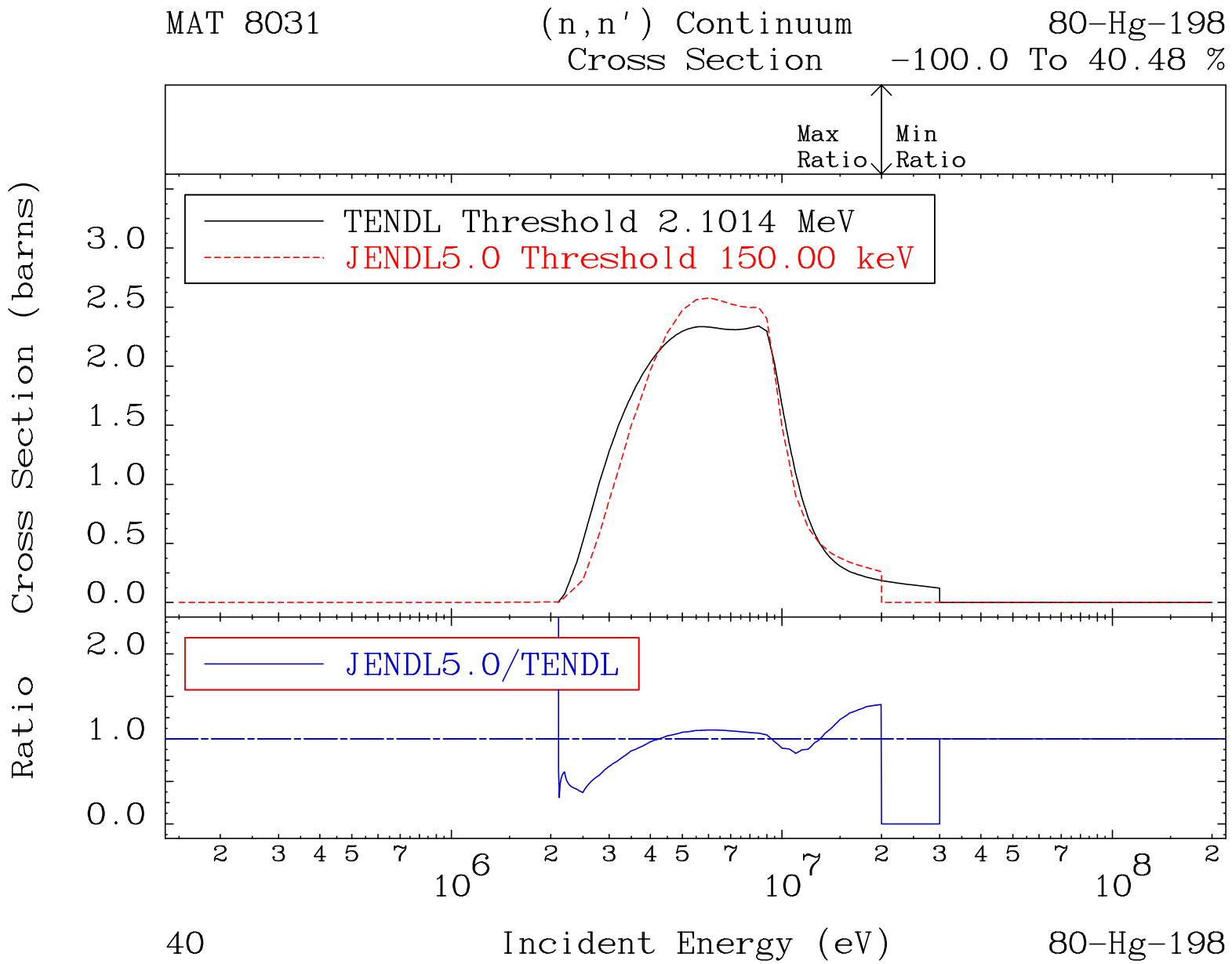

MAT 8031
MT= 75 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0156 MeV
JENDL5.0 Threshold 2.0590 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
80-Hg-198

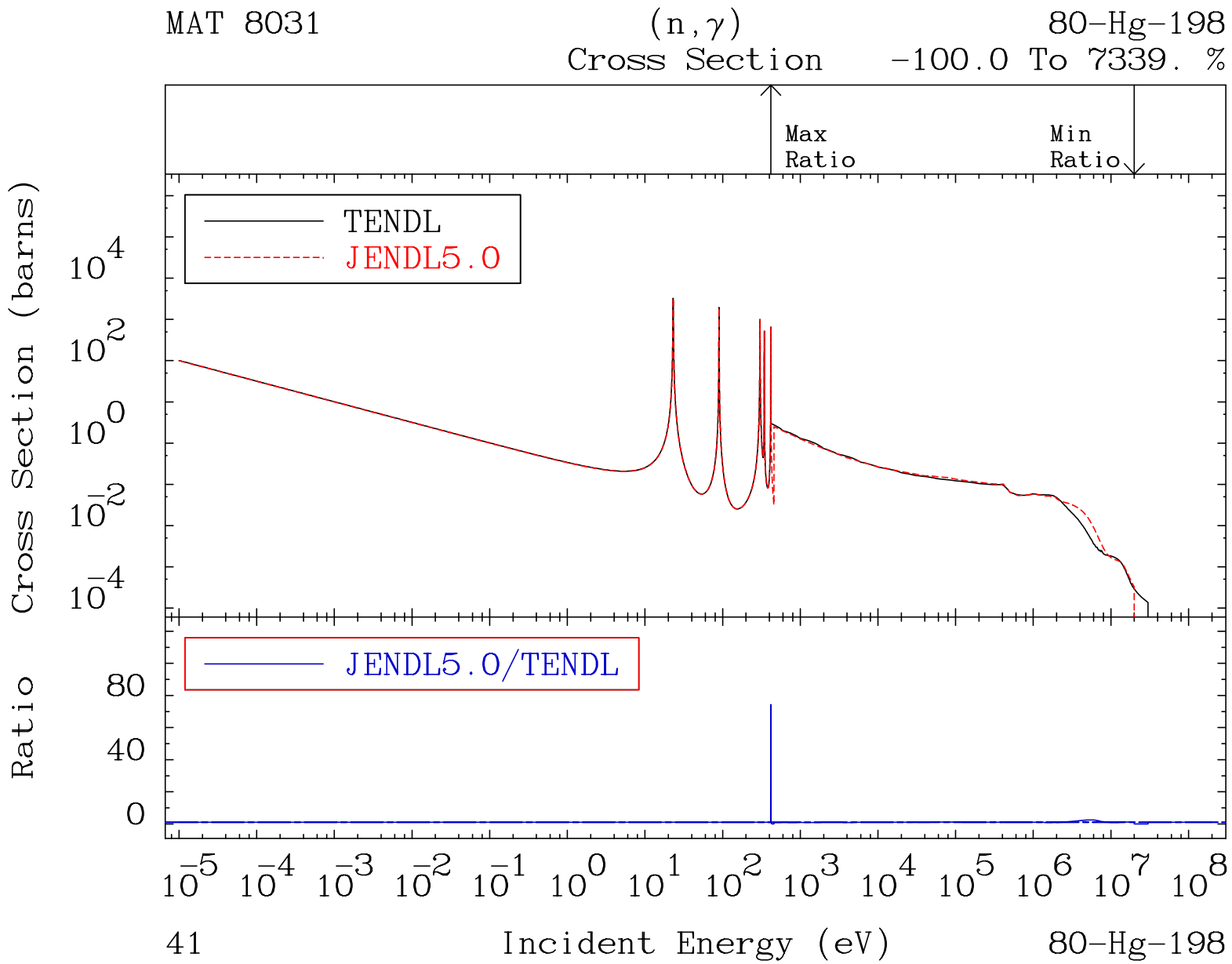

MAT 8031
MT= 76 (n,n') Level
80-Hg-198
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0586 MeV
JENDL5.0 Threshold 2.0594 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
300
200
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
80-Hg-198

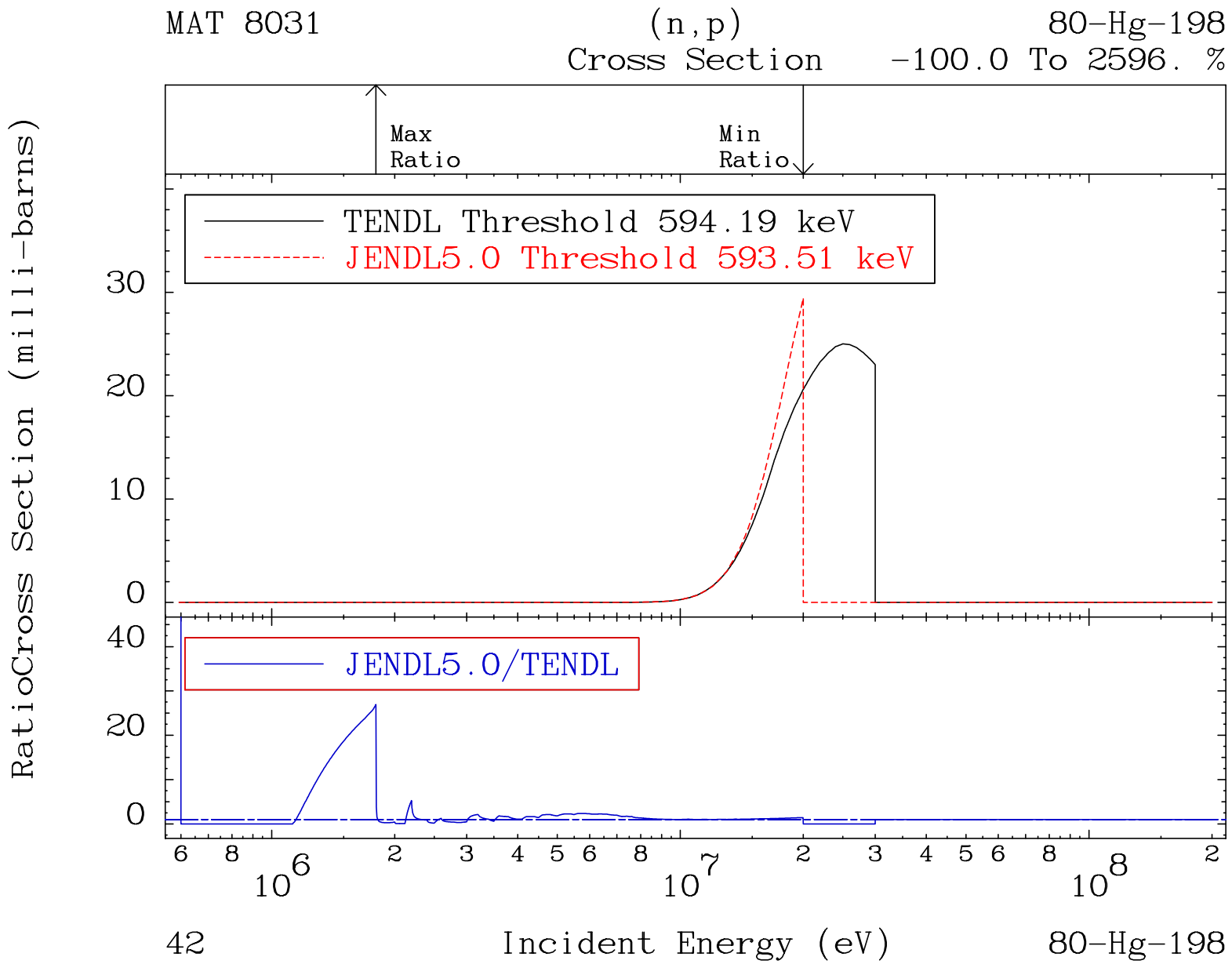

MAT 8031
MT= 77 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 23.32 %
Min Ratio
Max Ratio
TENDL Threshold 2.0645 MeV
JENDL5.0 Threshold 2.0694 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
80-Hg-198

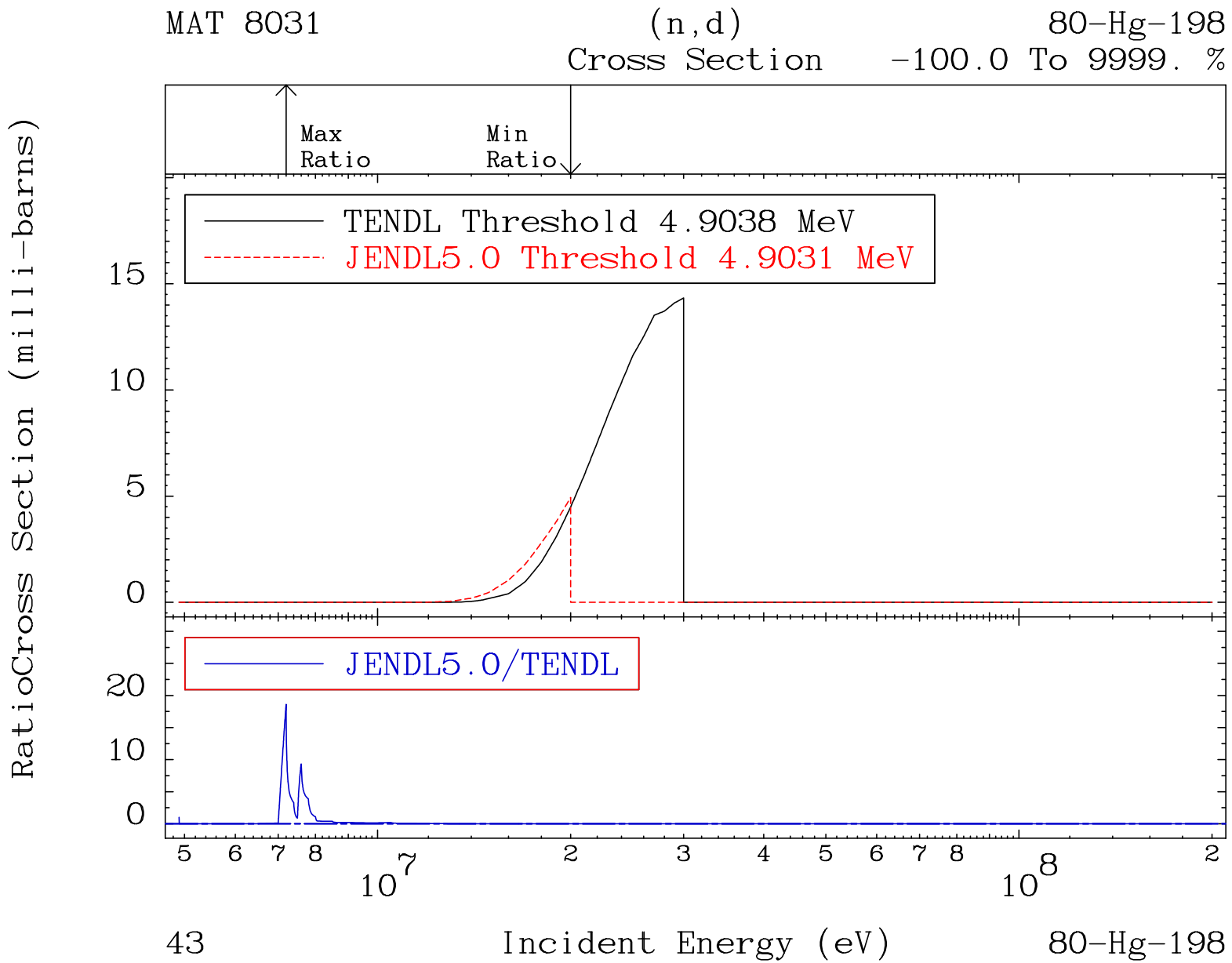

MAT 8031
MT= 78 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0696 MeV
JENDL5.0 Threshold 2.0814 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
80-Hg-198

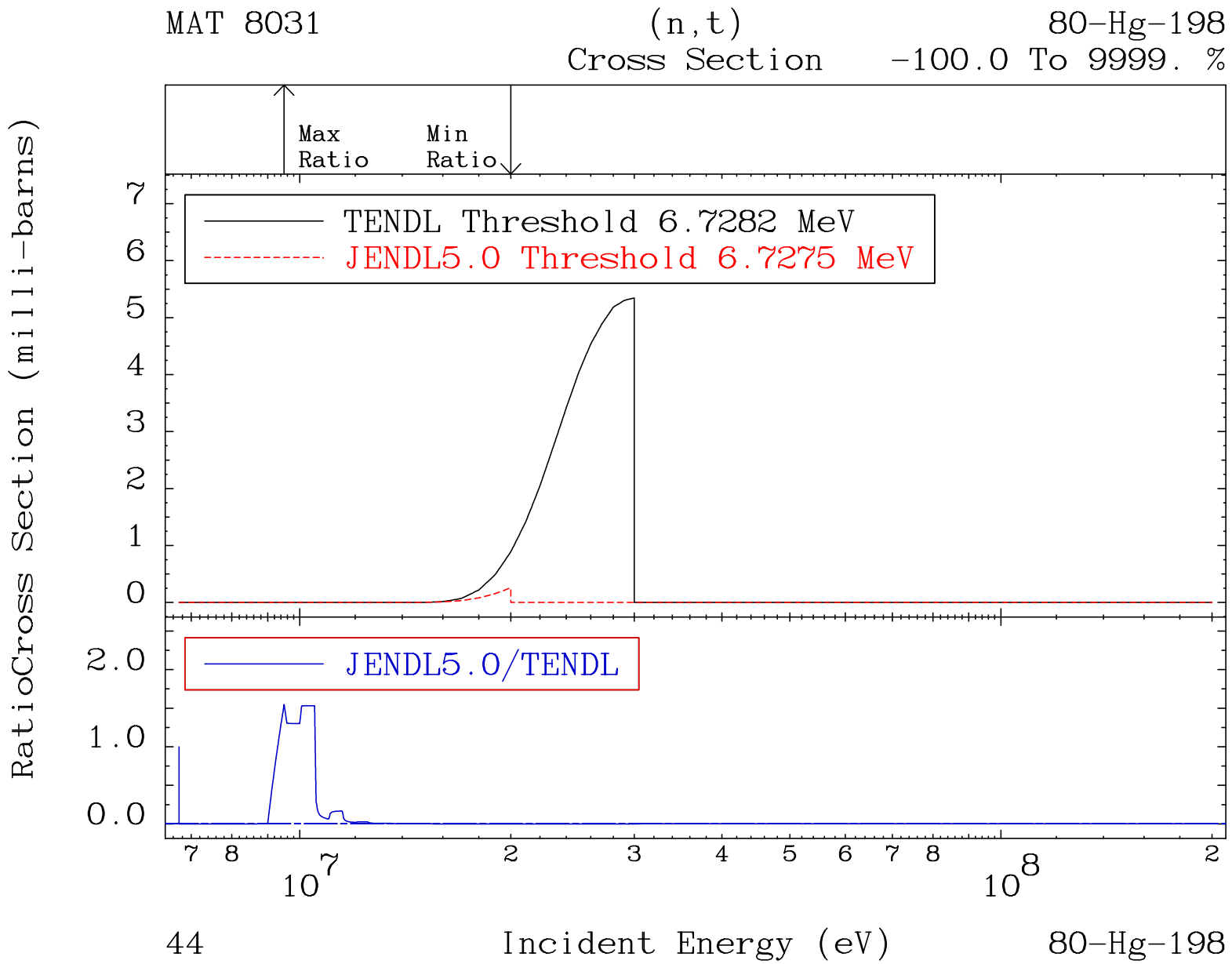

MAT 8031
MT= 79 (n,n') Level
80-Hg-198
Cross Section
-100.0 To 131.7 %
Min Ratio
Max Ratio
TENDL Threshold 2.0814 MeV
JENDL5.0 Threshold 2.1206 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
80-Hg-198

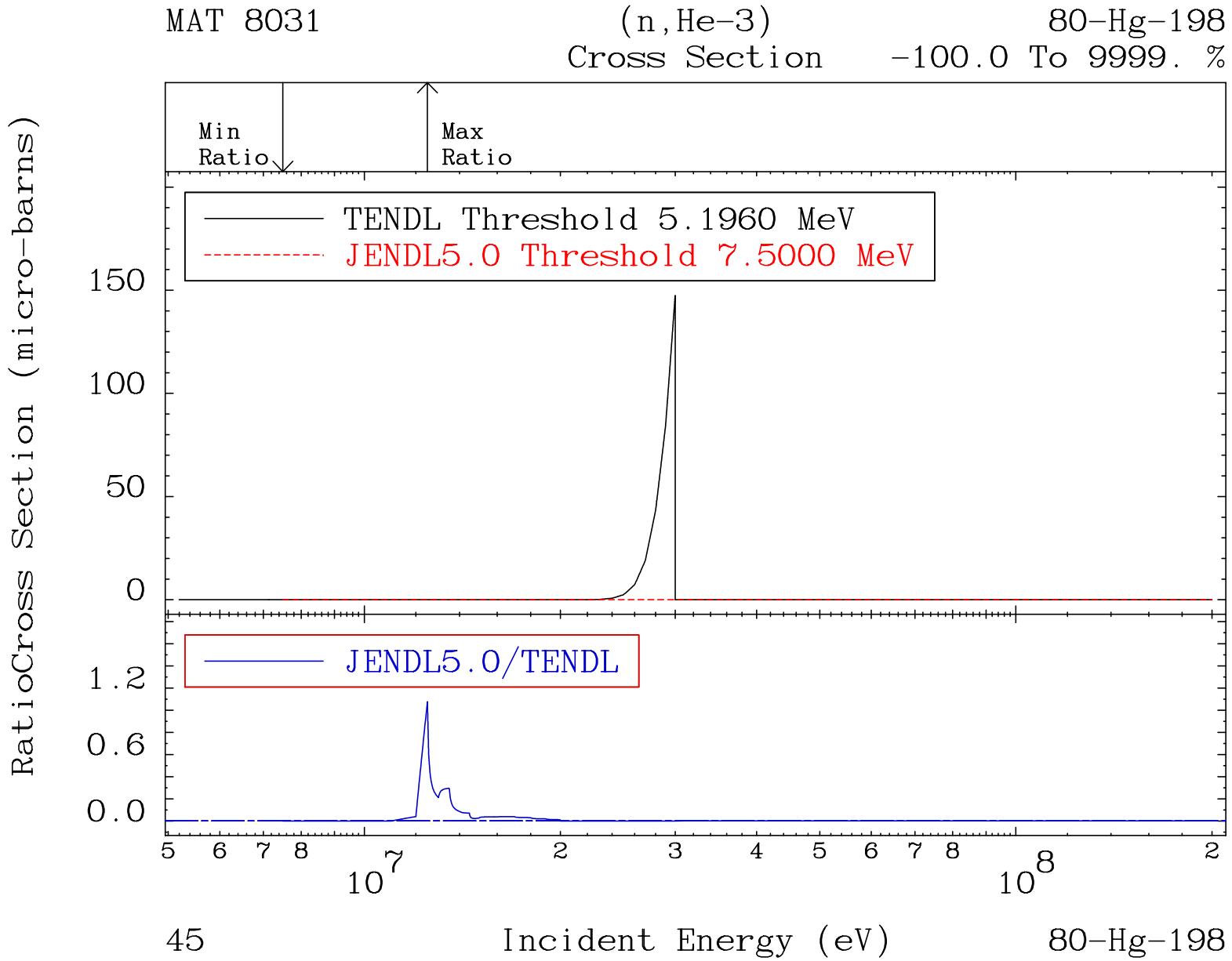

MAT 8031
(n,n') Continuum
Cross Section
80-Hg-198
-100.0 To 40.48 %
Max Ratio
Min Ratio
TENDL Threshold 2.1014 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
80-Hg-198

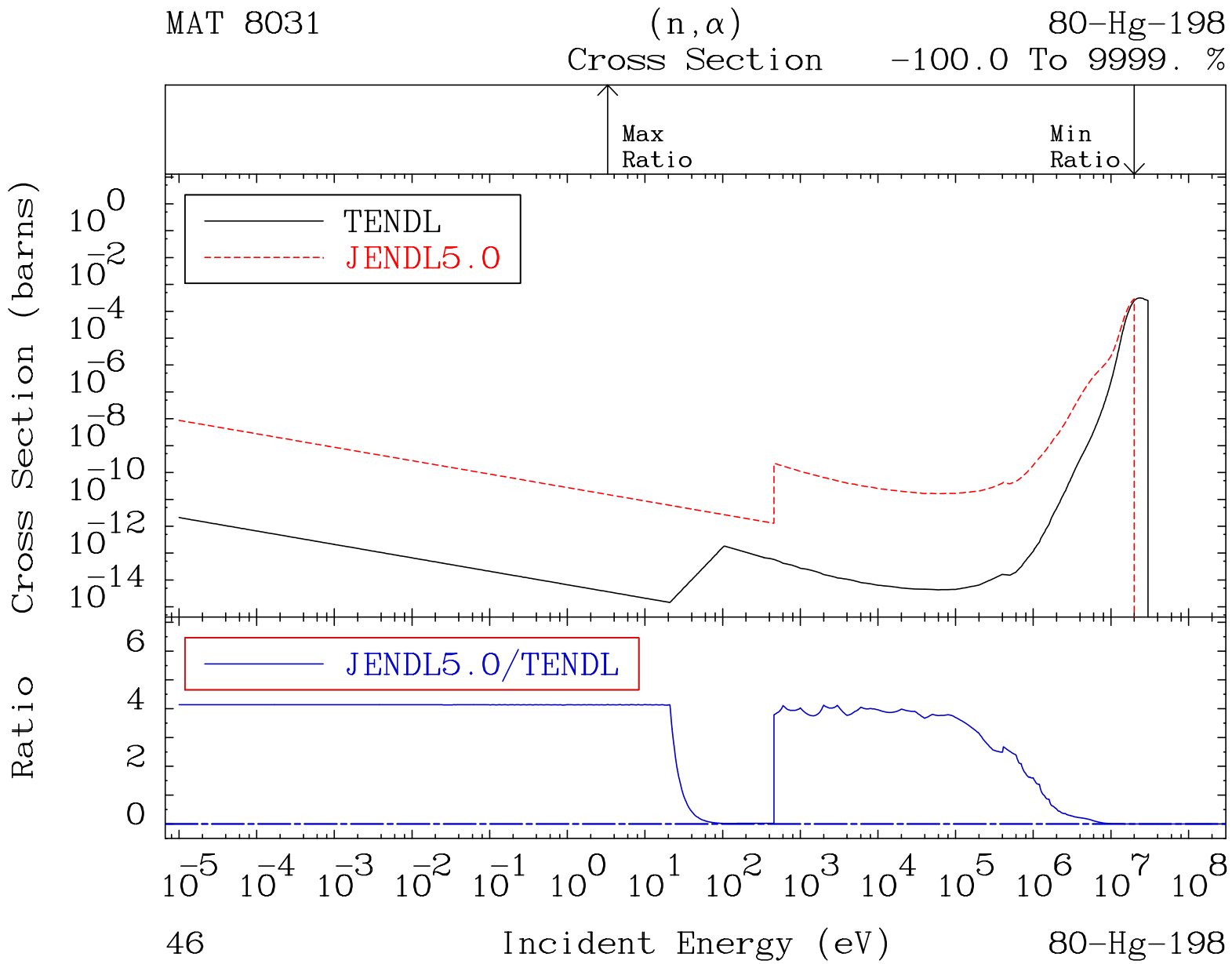

MAT 8031
(n,γ)
Cross Section
80-Hg-198
-100.0 To 7339. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
JENDL5.0/TENDL
Ratio
80
40
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
80-Hg-198

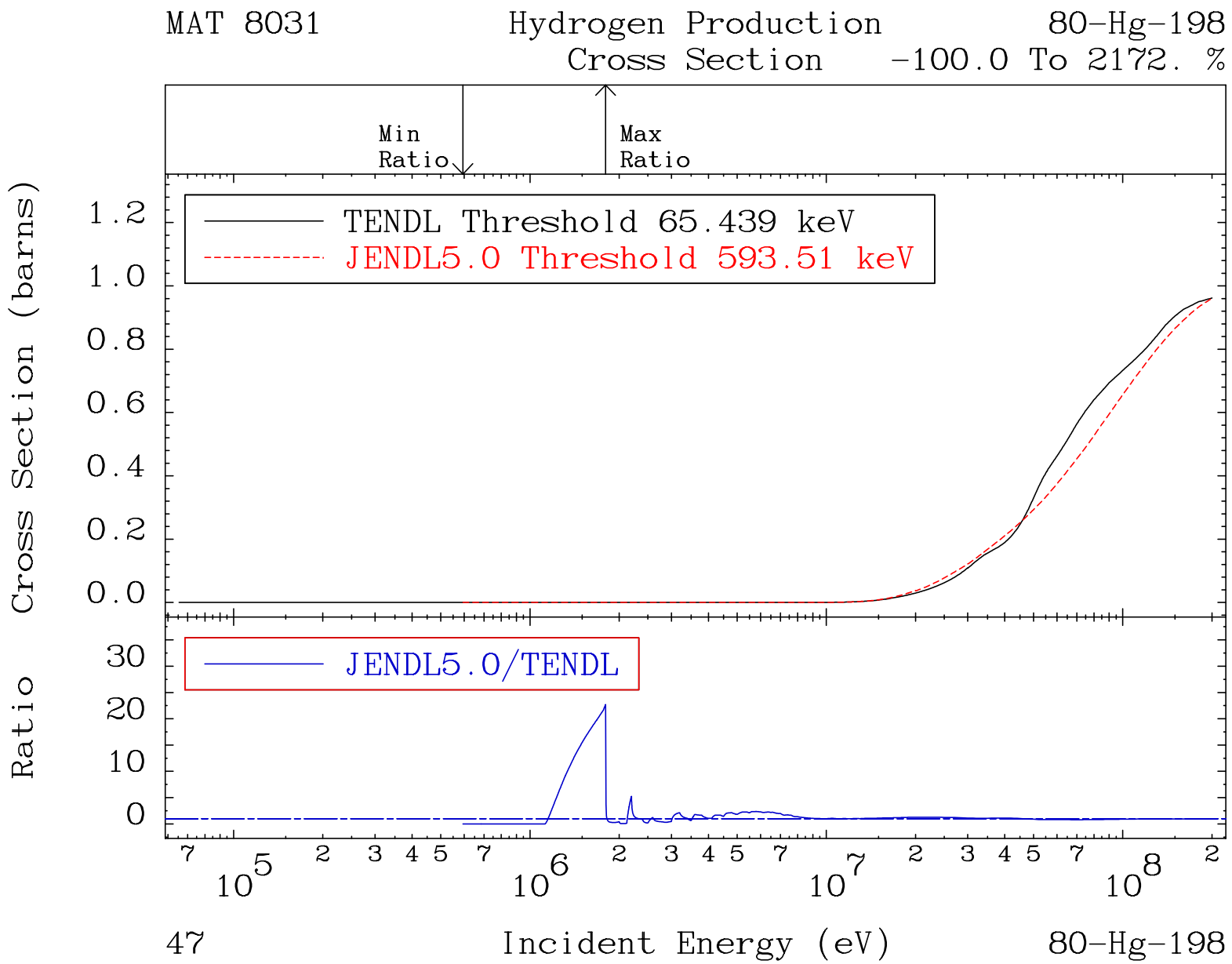

MAT 8031
(n,p)
Cross Section
80-Hg-198
-100.0 To 2596. %
Max Ratio
Min Ratio
TENDL Threshold 594.19 keV
JENDL5.0 Threshold 593.51 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
42
80-Hg-198

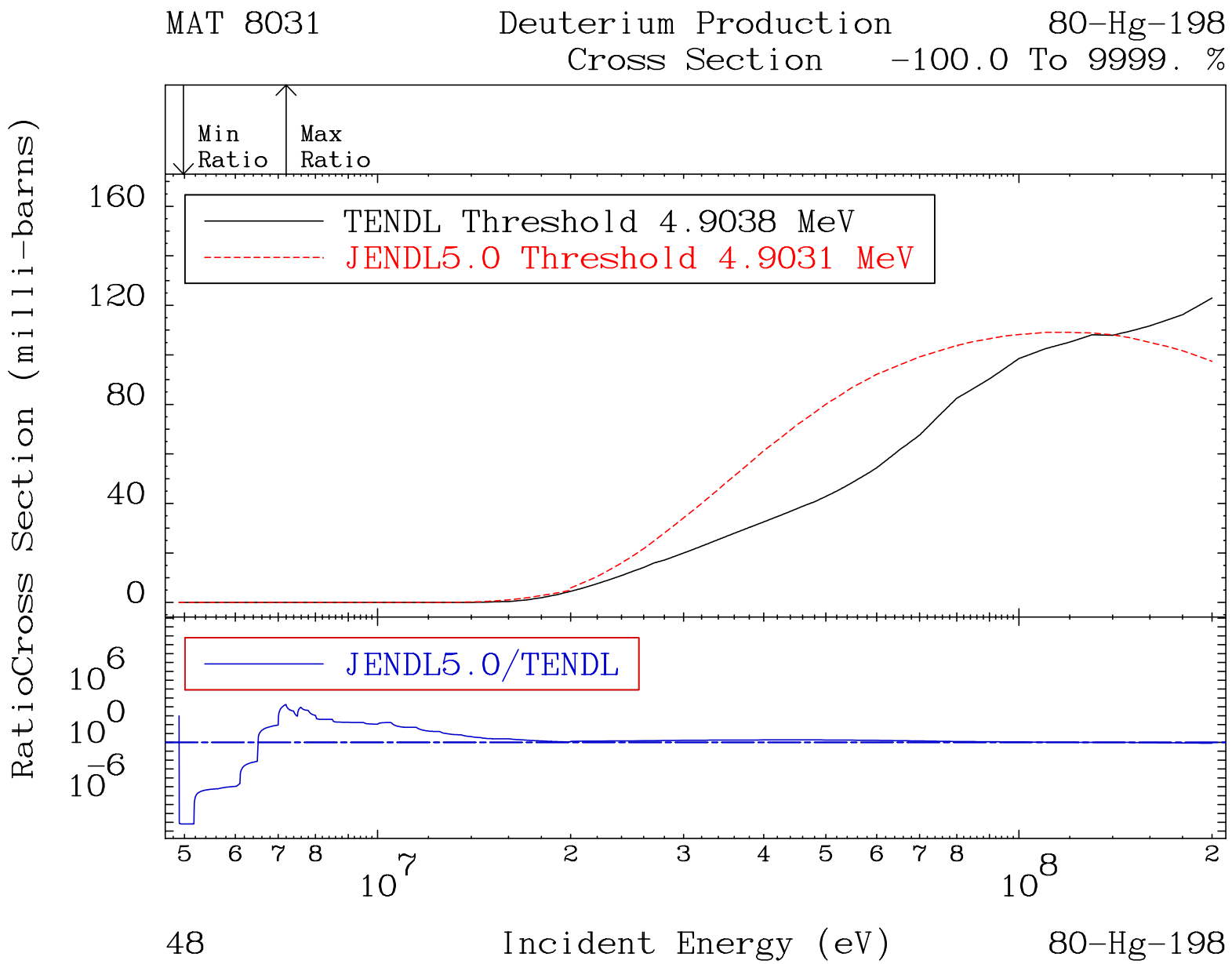

MAT 8031
(n,d)
Cross Section
80-Hg-198
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.9038 MeV
JENDL5.0 Threshold 4.9031 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
20
10
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
80-Hg-198

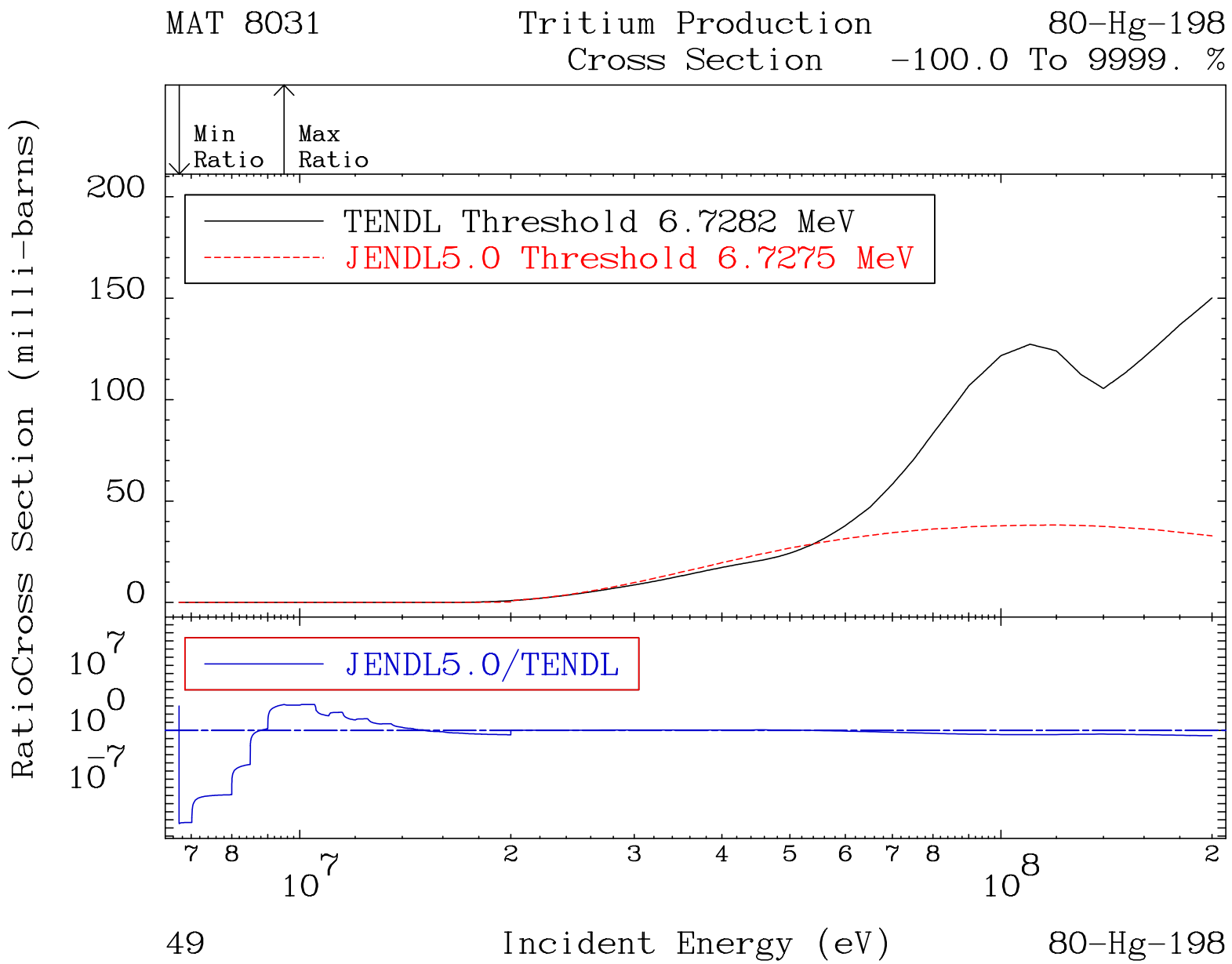

MAT 8031
(n,t)
Cross Section
80-Hg-198
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.7282 MeV
JENDL5.0 Threshold 6.7275 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
44
80-Hg-198

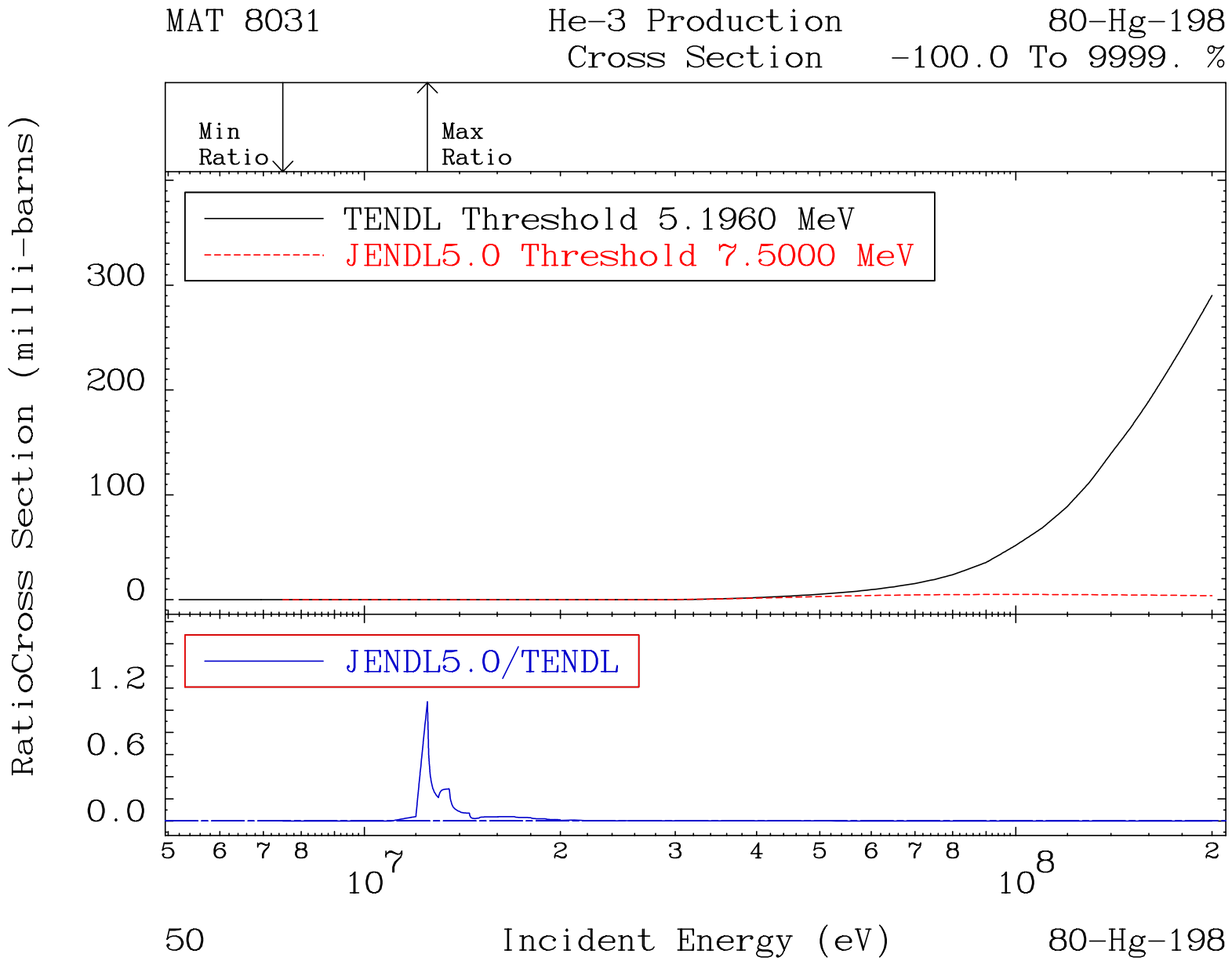

MAT 8031
(n,He-3)
Cross Section
80-Hg-198
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.1960 MeV
JENDL5.0 Threshold 7.5000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
150
100
50
0
1.2
0.6
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
80-Hg-198

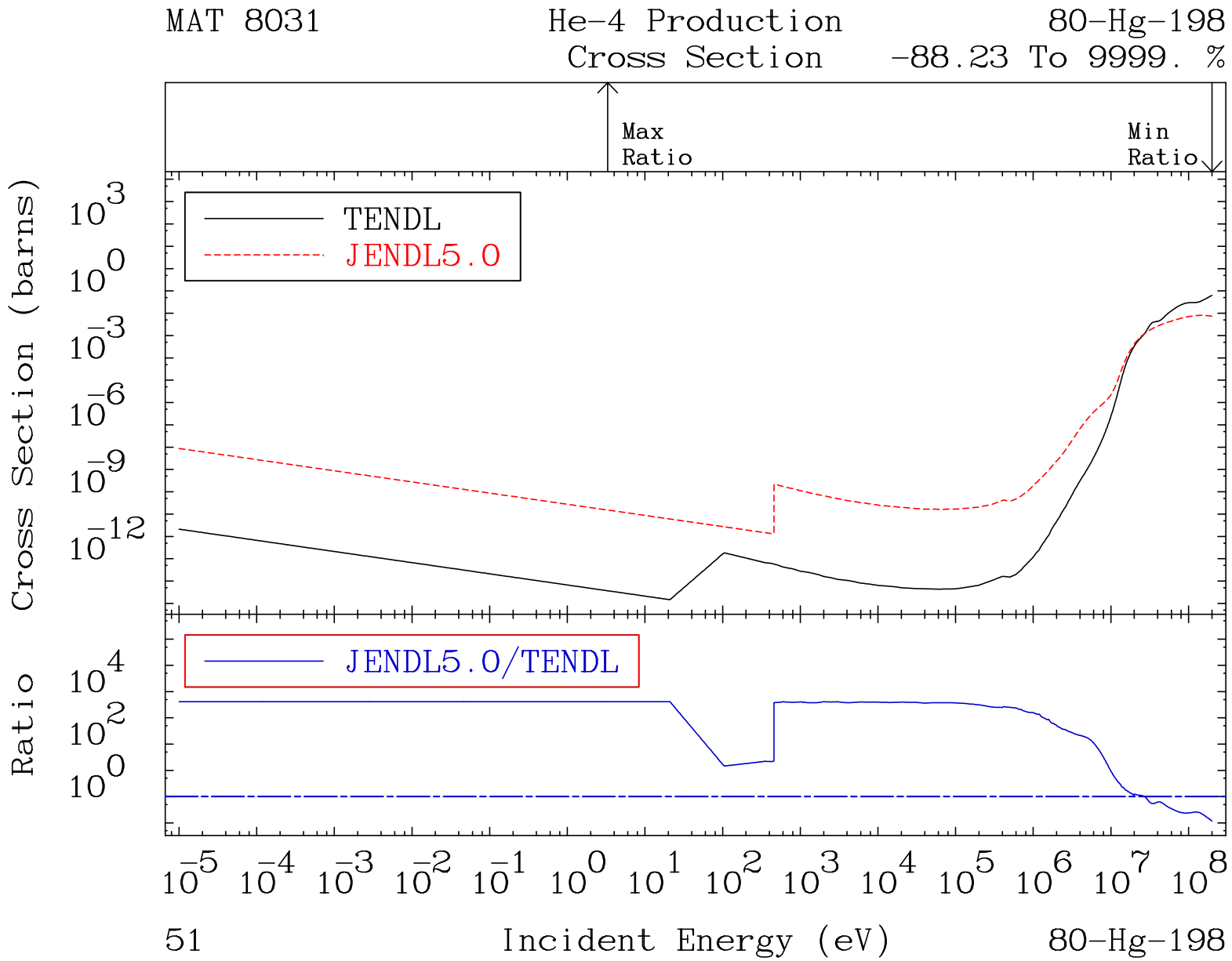

MAT 8031
(n,α)
Cross Section
80-Hg-198
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
46
80-Hg-198

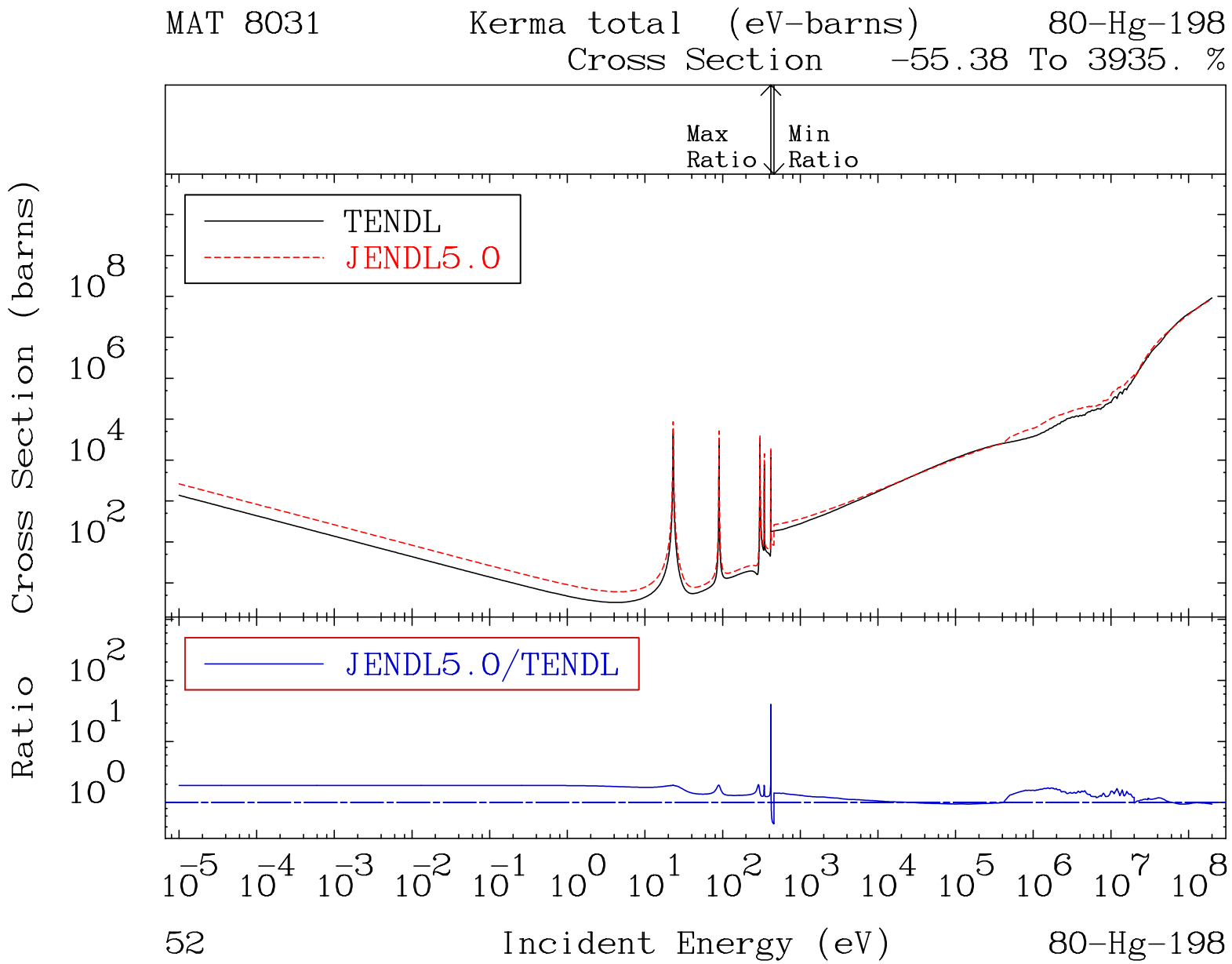

MAT 8031
Hydrogen Production
80-Hg-198
Cross Section
-100.0 To 2172. %
Min Ratio
Max Ratio
TENDL Threshold 65.439 keV
JENDL5.0 Threshold 593.51 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
30
20
10
0
7
2
3
4
5
7
10^5
10^6
10^7
10^8
47
Incident Energy (eV)
80-Hg-198

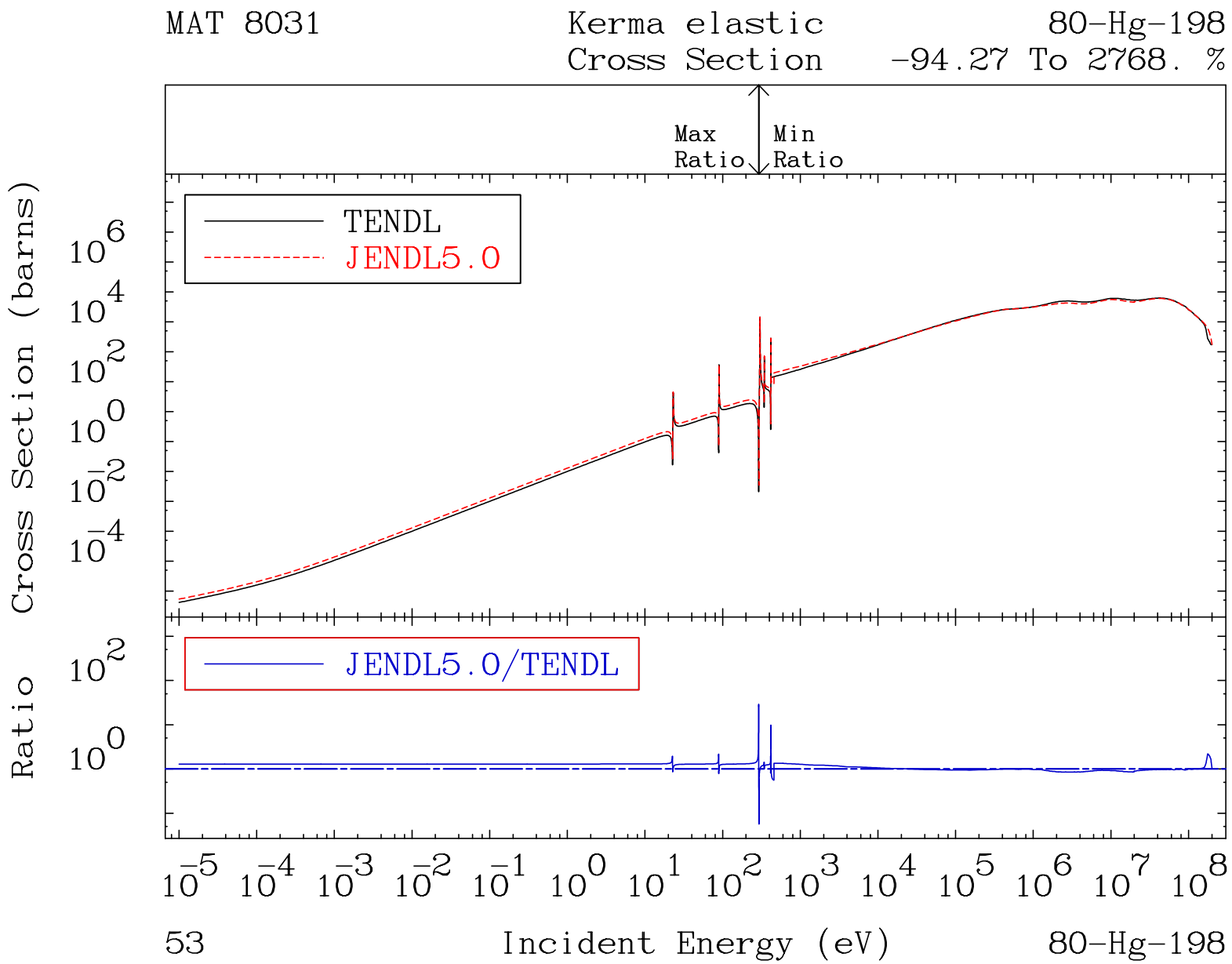

MAT 8031
Deuterium Production
80-Hg-198
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.9038 MeV
JENDL5.0 Threshold 4.9031 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^6
10^0
10^-6
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
48
80-Hg-198

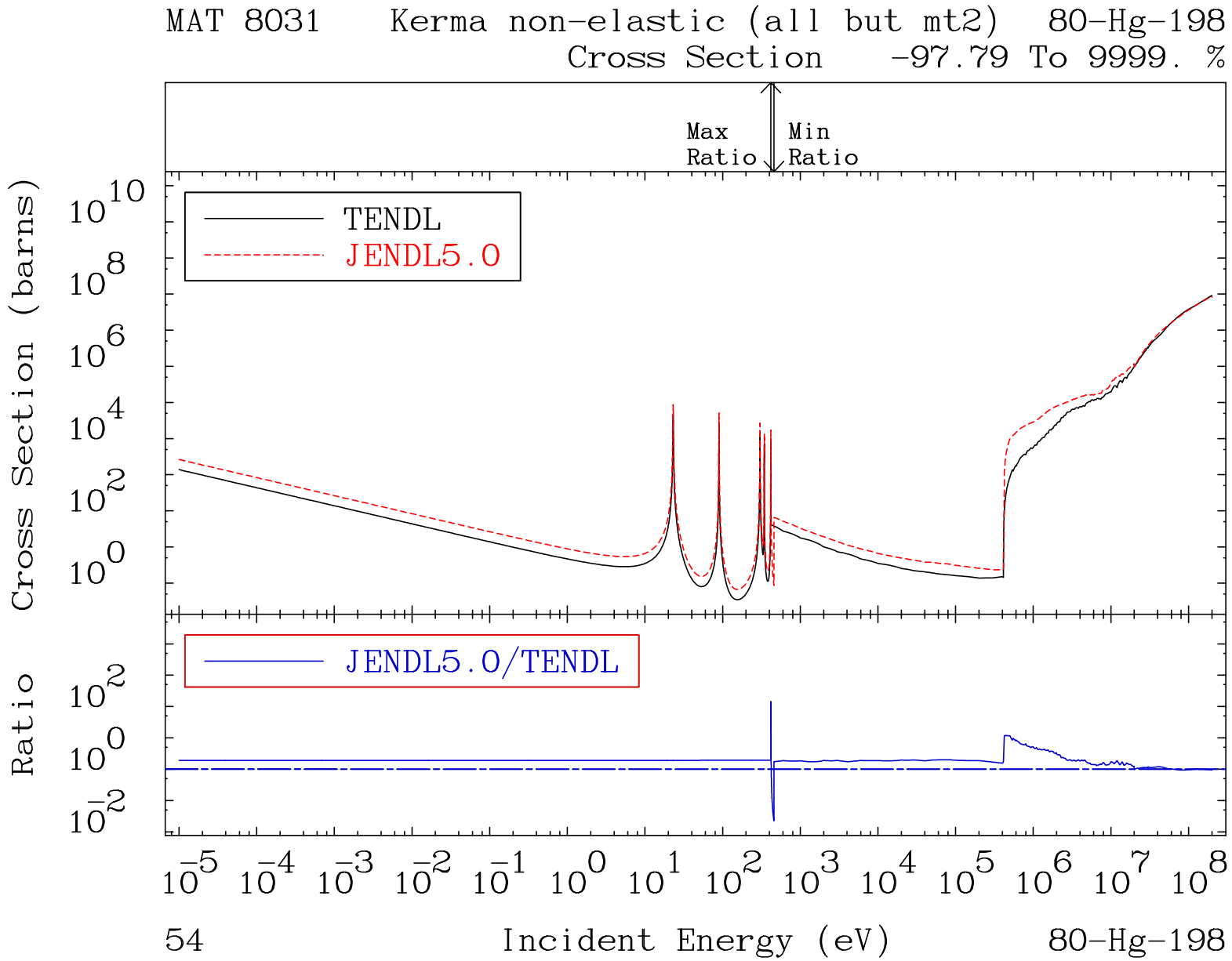

MAT 8031
Tritium Production
80-Hg-198
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.7282 MeV
JENDL5.0 Threshold 6.7275 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^7
10^0
10^-7
7 8 10^7 2 3 4 5 6 7 8 10^8 2
49
Incident Energy (eV)
80-Hg-198

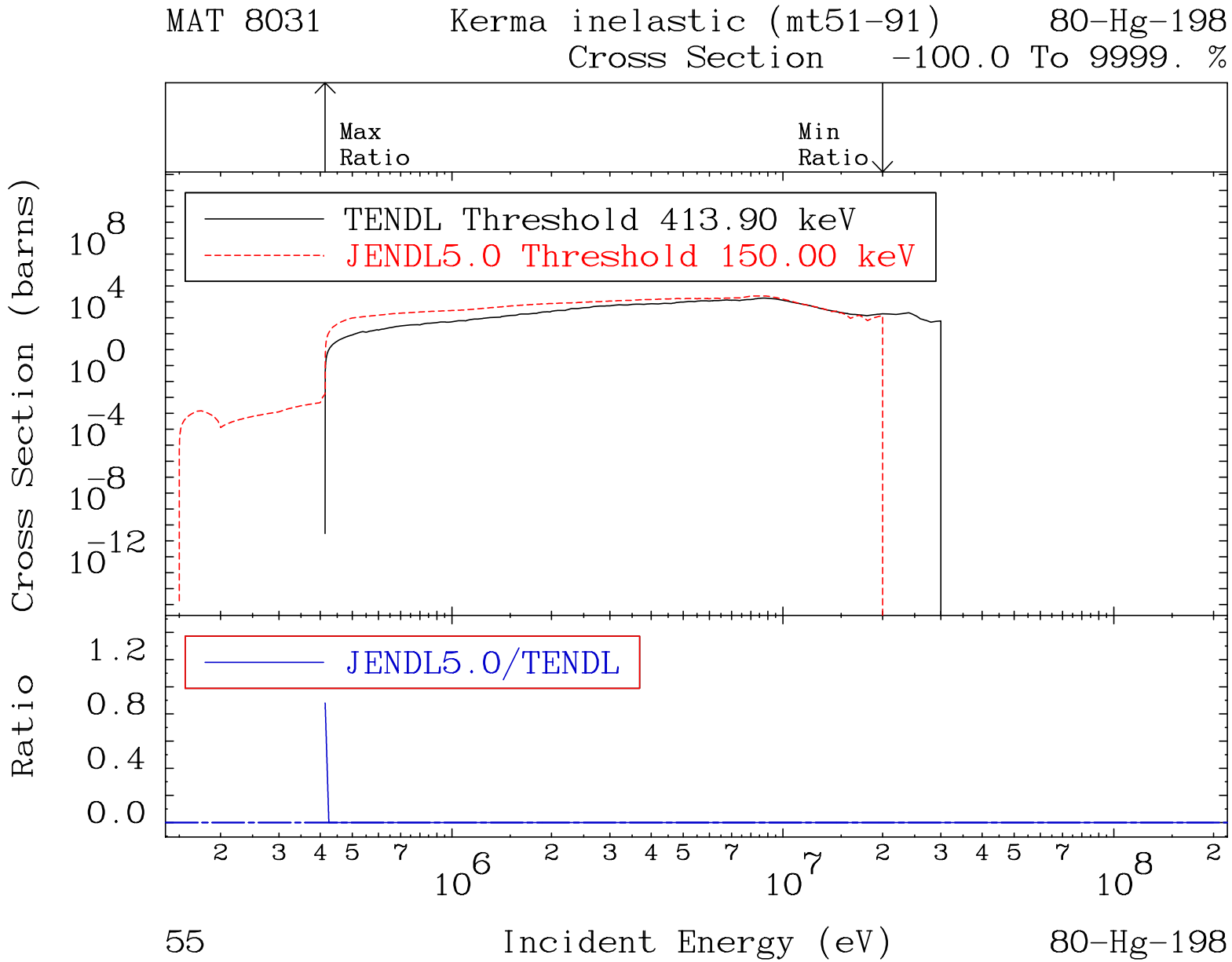

MAT 8031
He-3 Production
Cross Section
80-Hg-198
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.1960 MeV
JENDL5.0 Threshold 7.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
200
100
0
1.2
0.6
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
50
Incident Energy (eV)
80-Hg-198

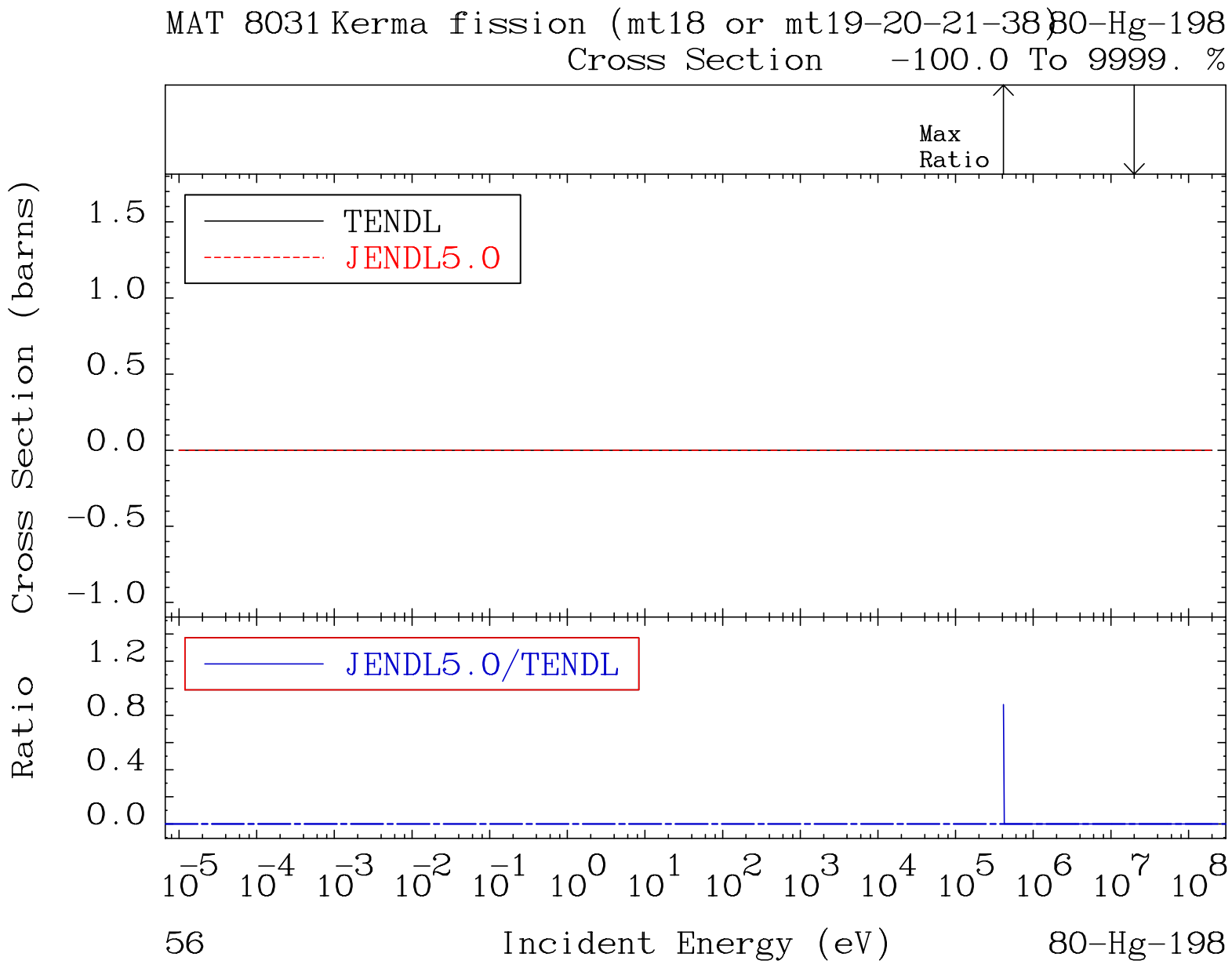

MAT 8031
He-4 Production
Cross Section
80-Hg-198
-88.23 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
80-Hg-198

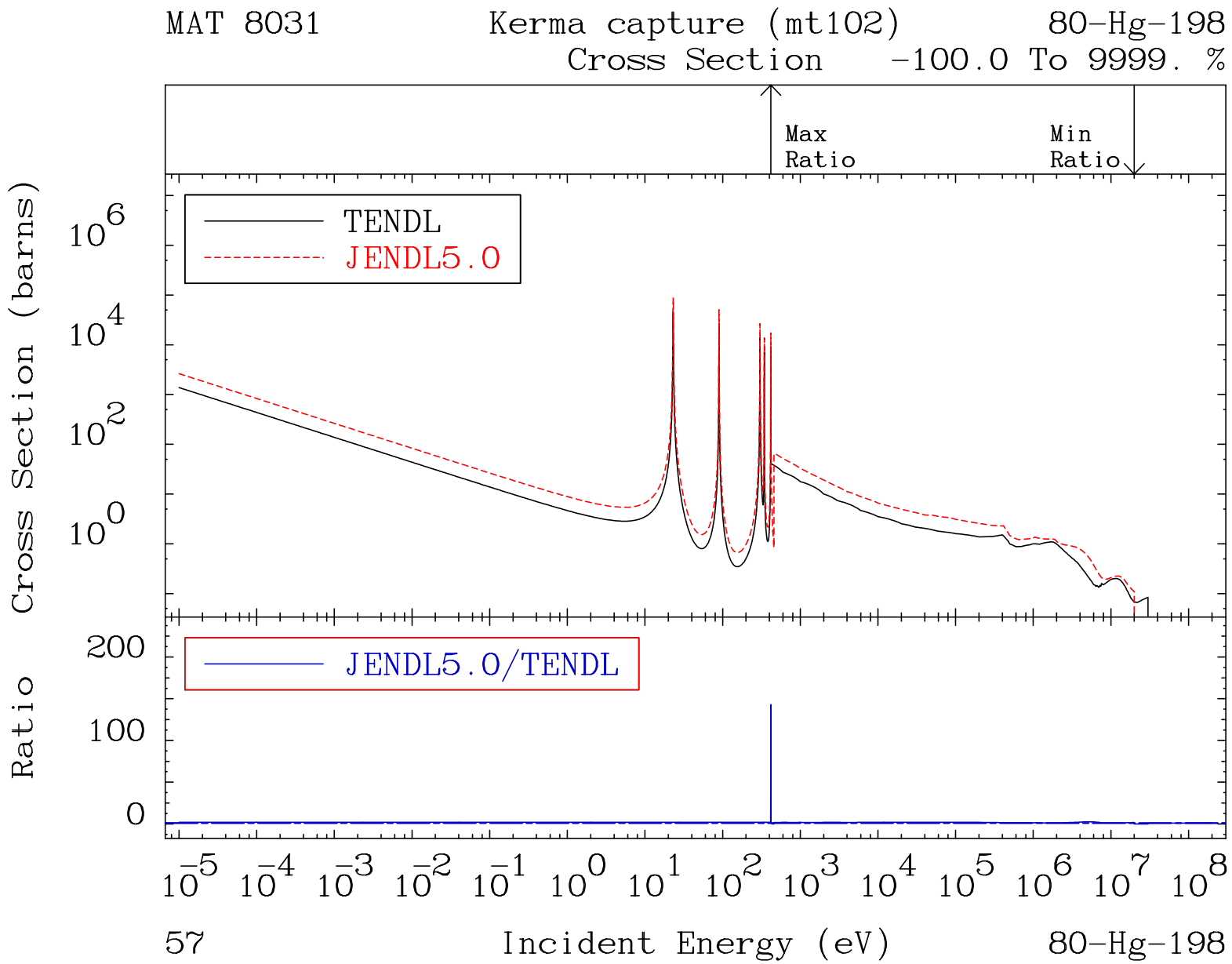

MAT 8031
Kerma total (eV-barns)
80-Hg-198
Cross Section -55.38 To 3935. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
52
80-Hg-198

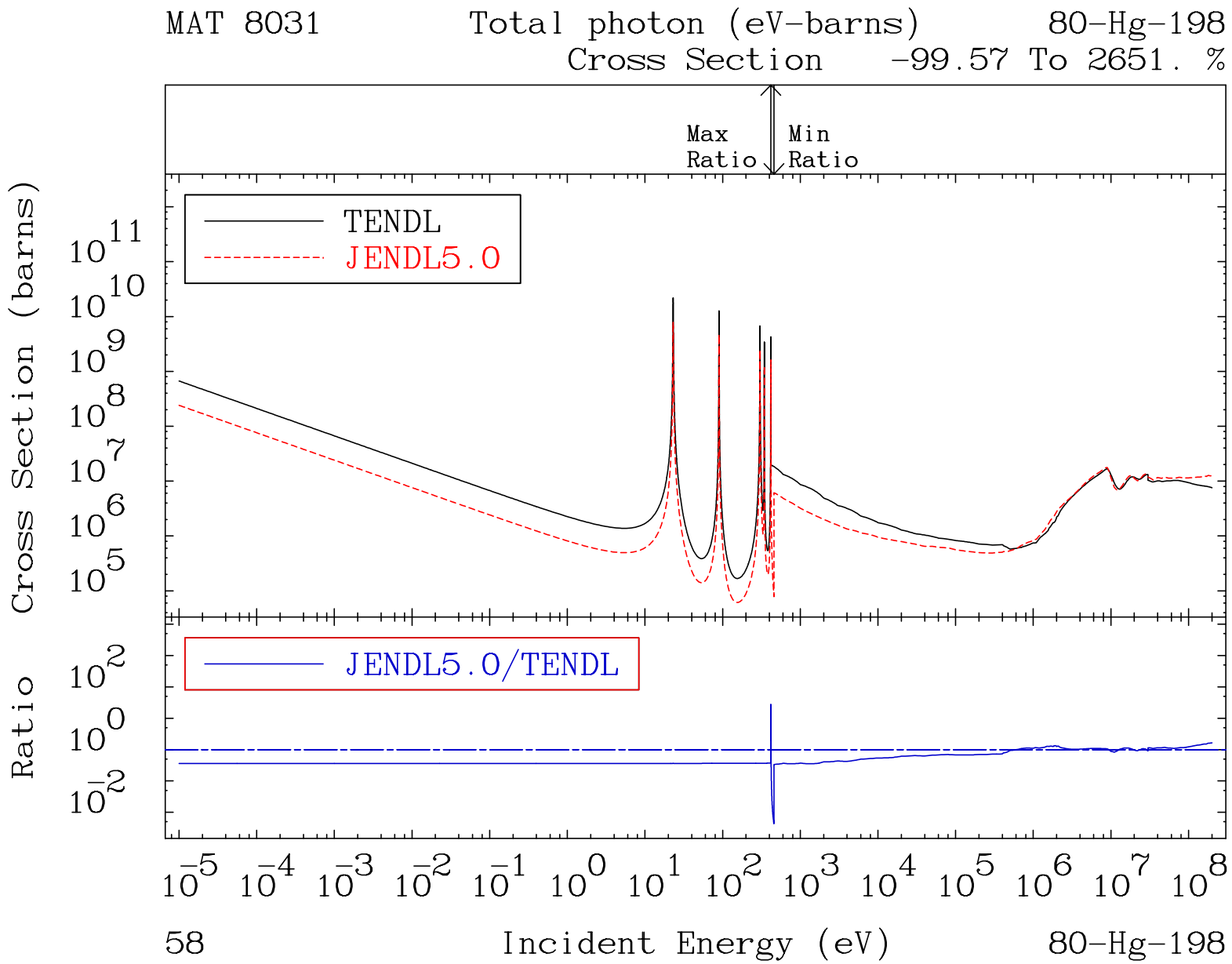

MAT 8031
Kerma elastic
Cross Section
80-Hg-198
-94.27 To 2768. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
80-Hg-198

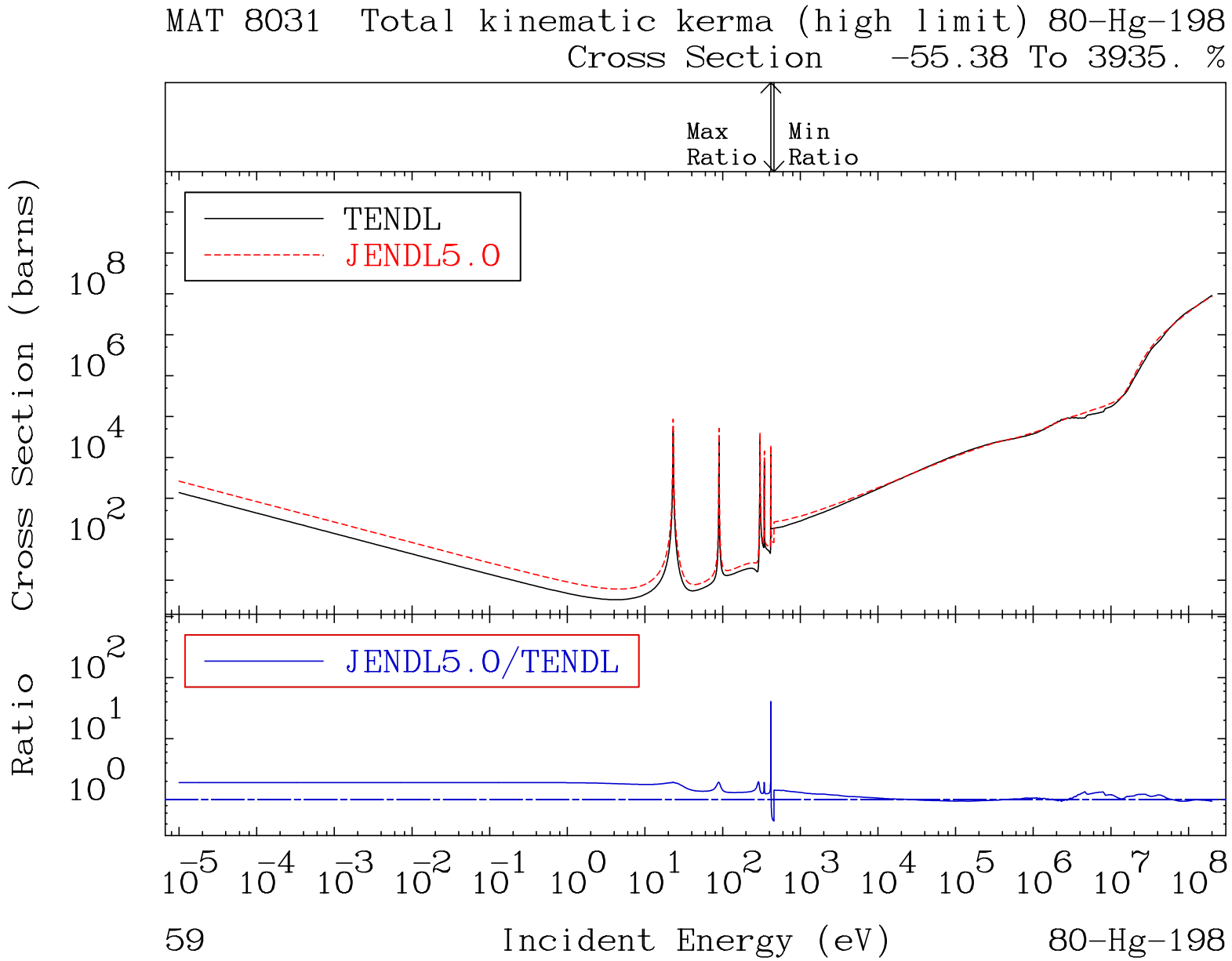

MAT 8031 Kerma non-elastic (all but mt2) 80-Hg-198
Cross Section -97.79 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
54
80-Hg-198

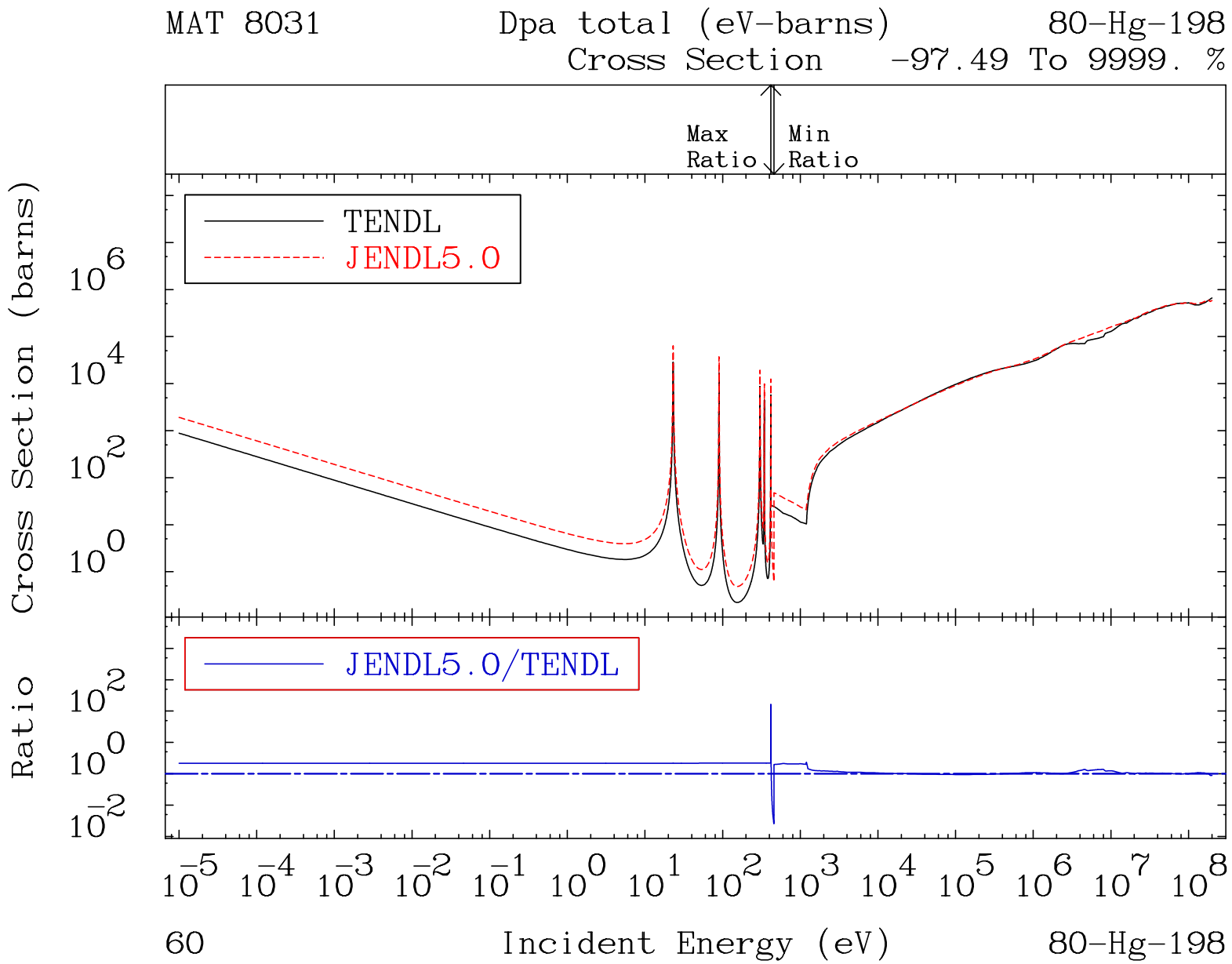

MAT 8031
Kerma inelastic (mt51-91)
80-Hg-198
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 413.90 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
55
80-Hg-198

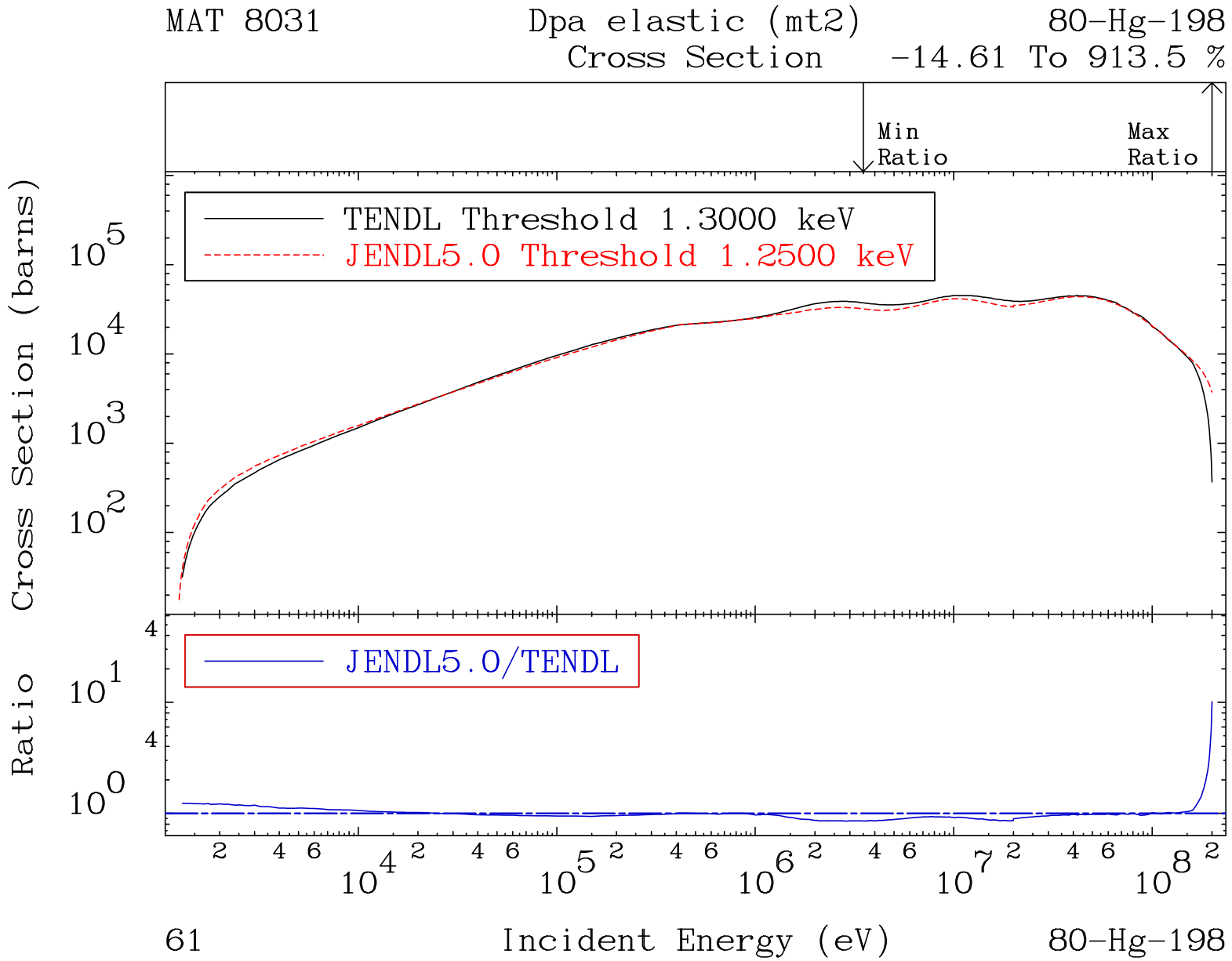

MAT 8031 Kerma fission (mt18 or mt19-20-21-38) 80-Hg-198
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.2
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
56
Incident Energy (eV)
80-Hg-198

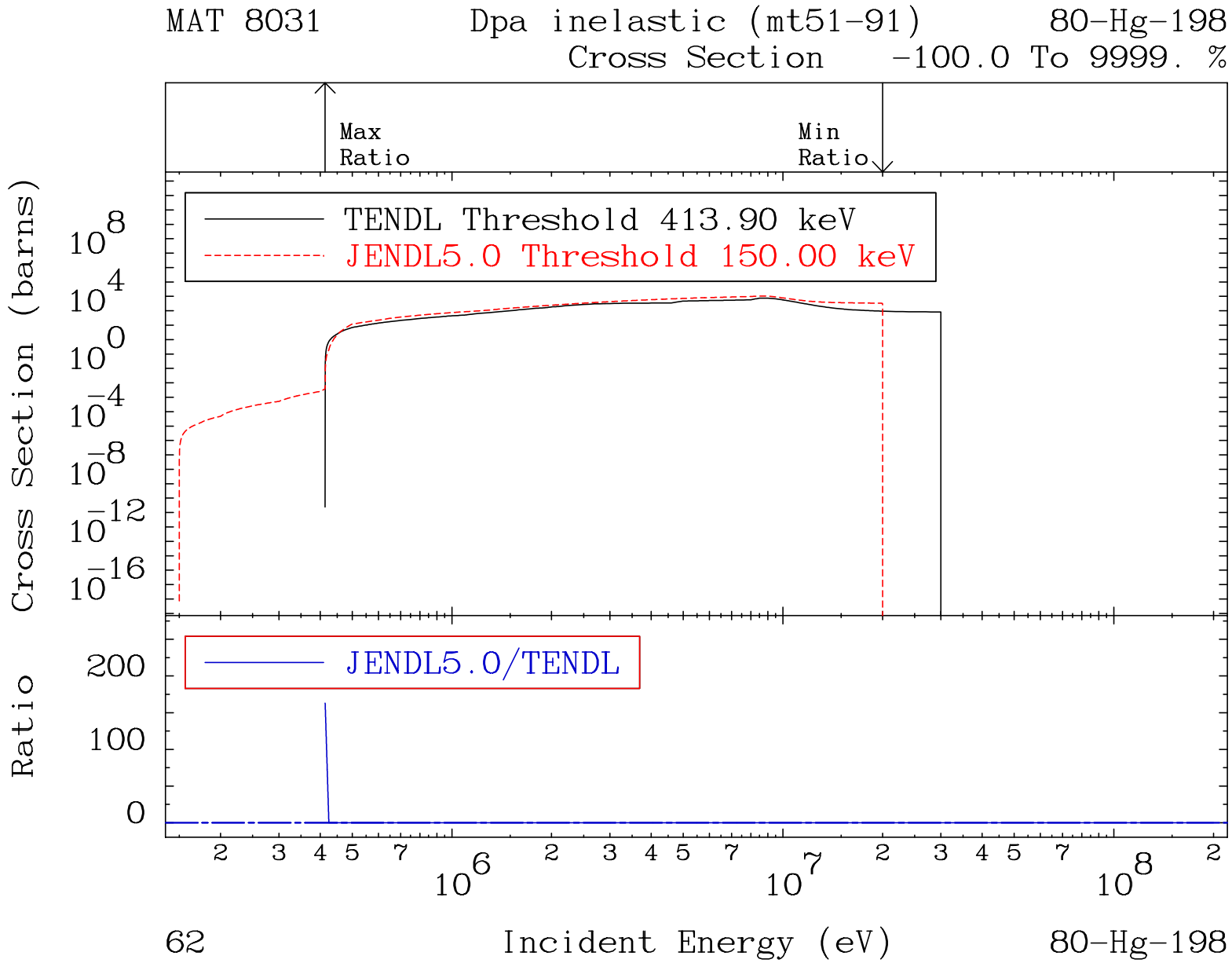

MAT 8031
Kerma capture (mt102)
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
57
80-Hg-198

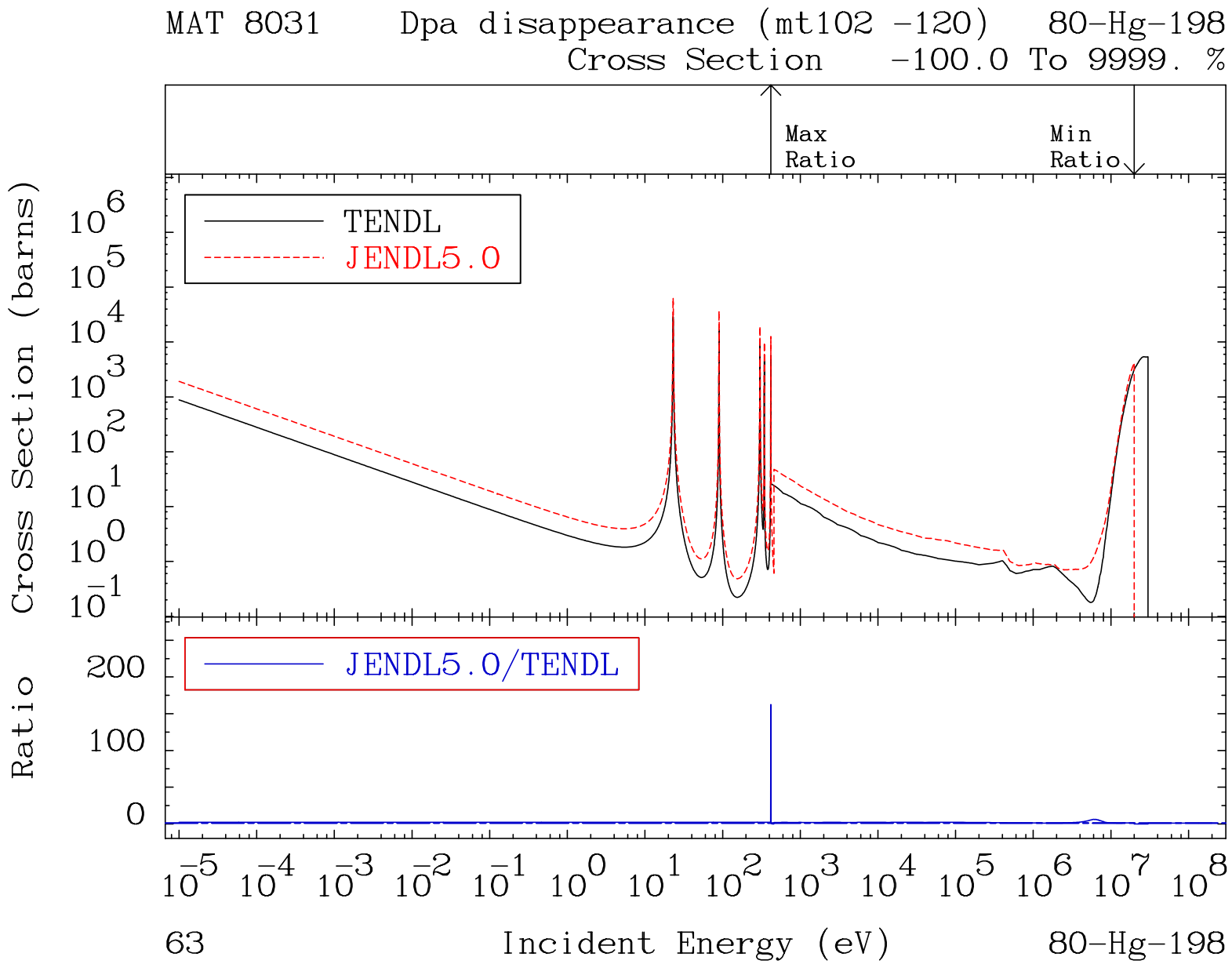

MAT 8031
Total photon (eV-barns)
80-Hg-198
Cross Section -99.57 To 2651. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
58
Incident Energy (eV)
80-Hg-198

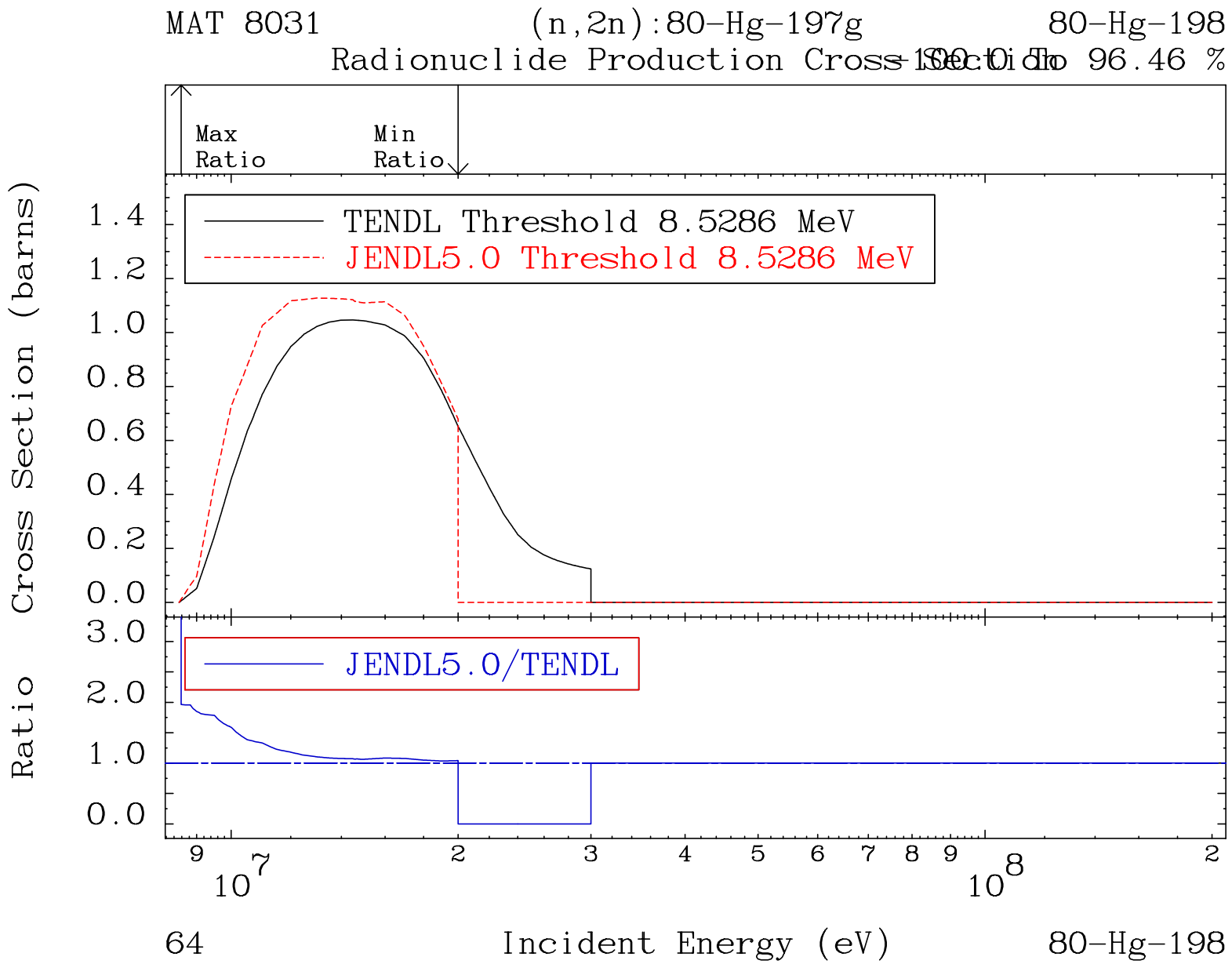

MAT 8031 Total kinematic kerma (high limit) 80-Hg-198
Cross Section -55.38 To 3935. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
59
80-Hg-198

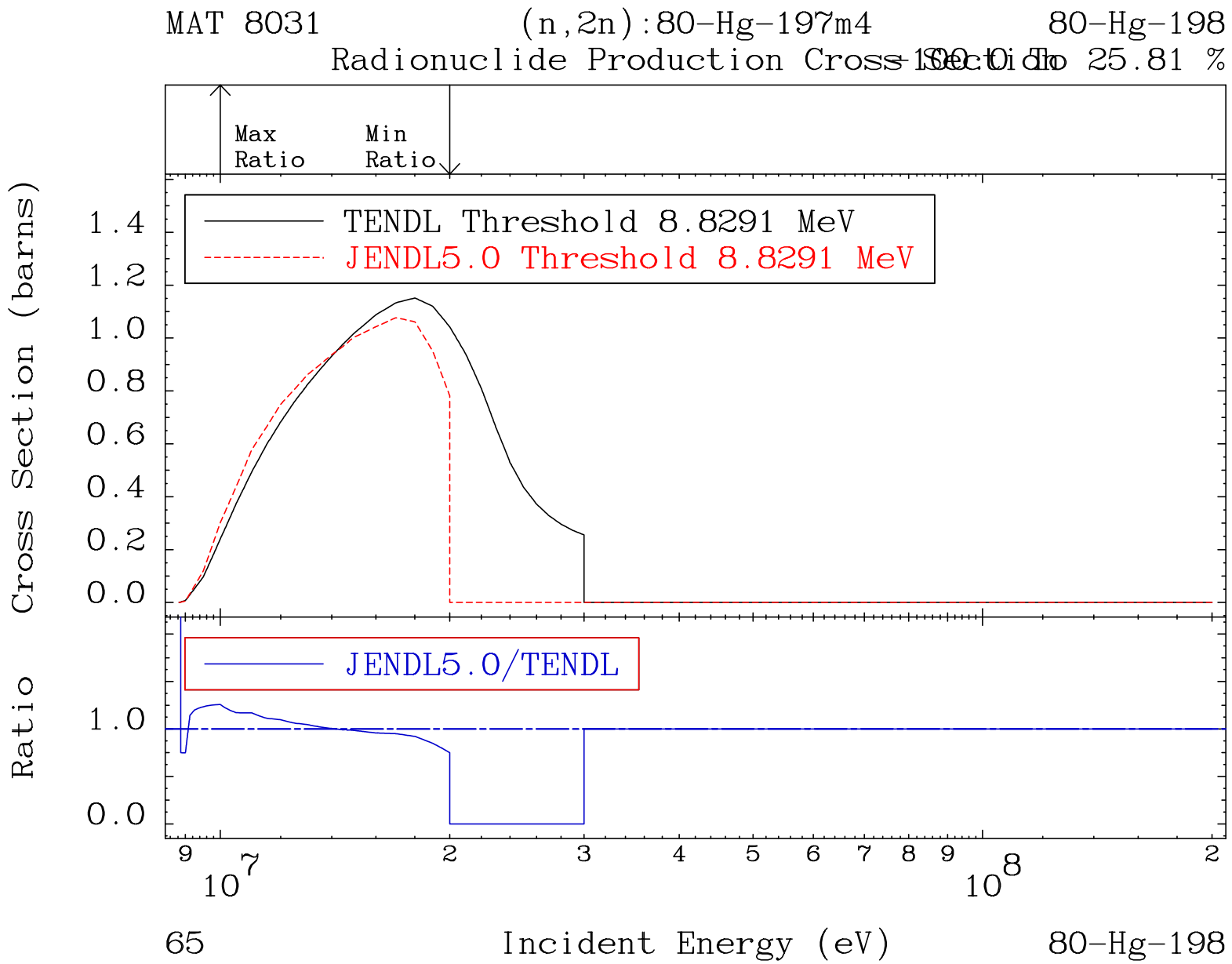

MAT 8031
Dpa total (eV-barns)
80-Hg-198
Cross Section -97.49 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
80-Hg-198

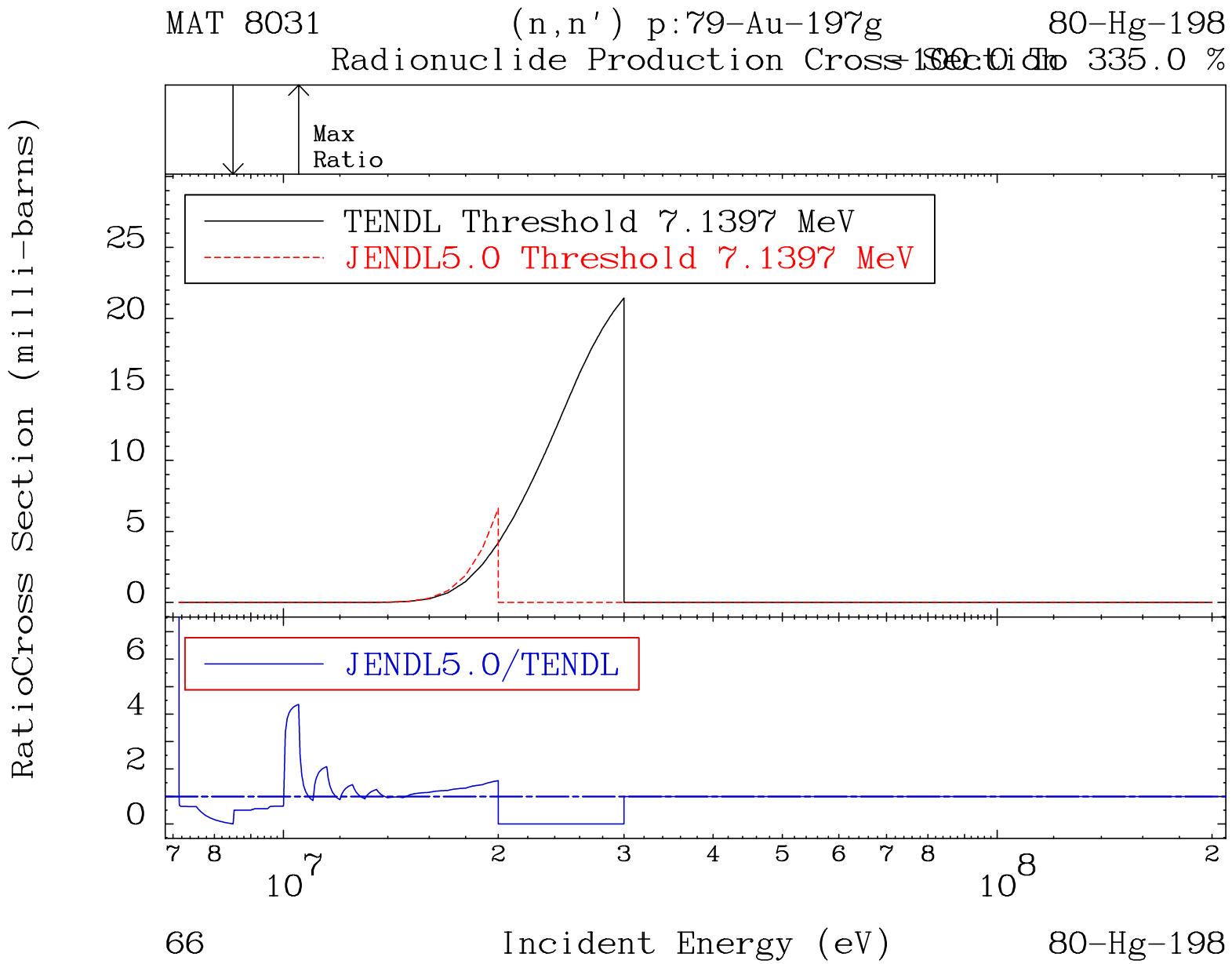

MAT 8031
Dpa elastic (mt2)
Cross Section
80-Hg-198
-14.61 To 913.5 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3000 keV
JENDL5.0 Threshold 1.2500 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
80-Hg-198

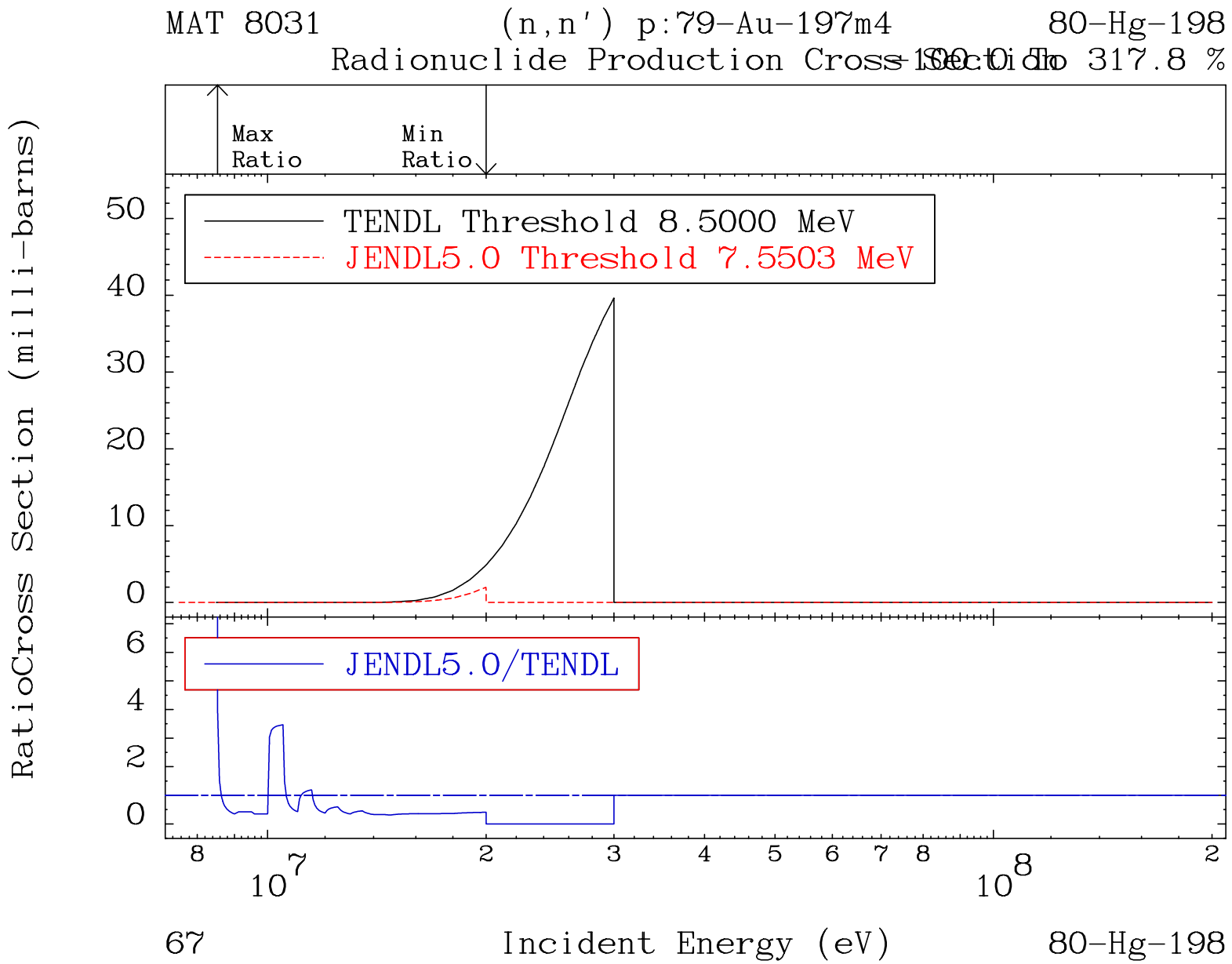

MAT 8031
Dpa inelastic (mt51-91)
80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 413.90 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
80-Hg-198

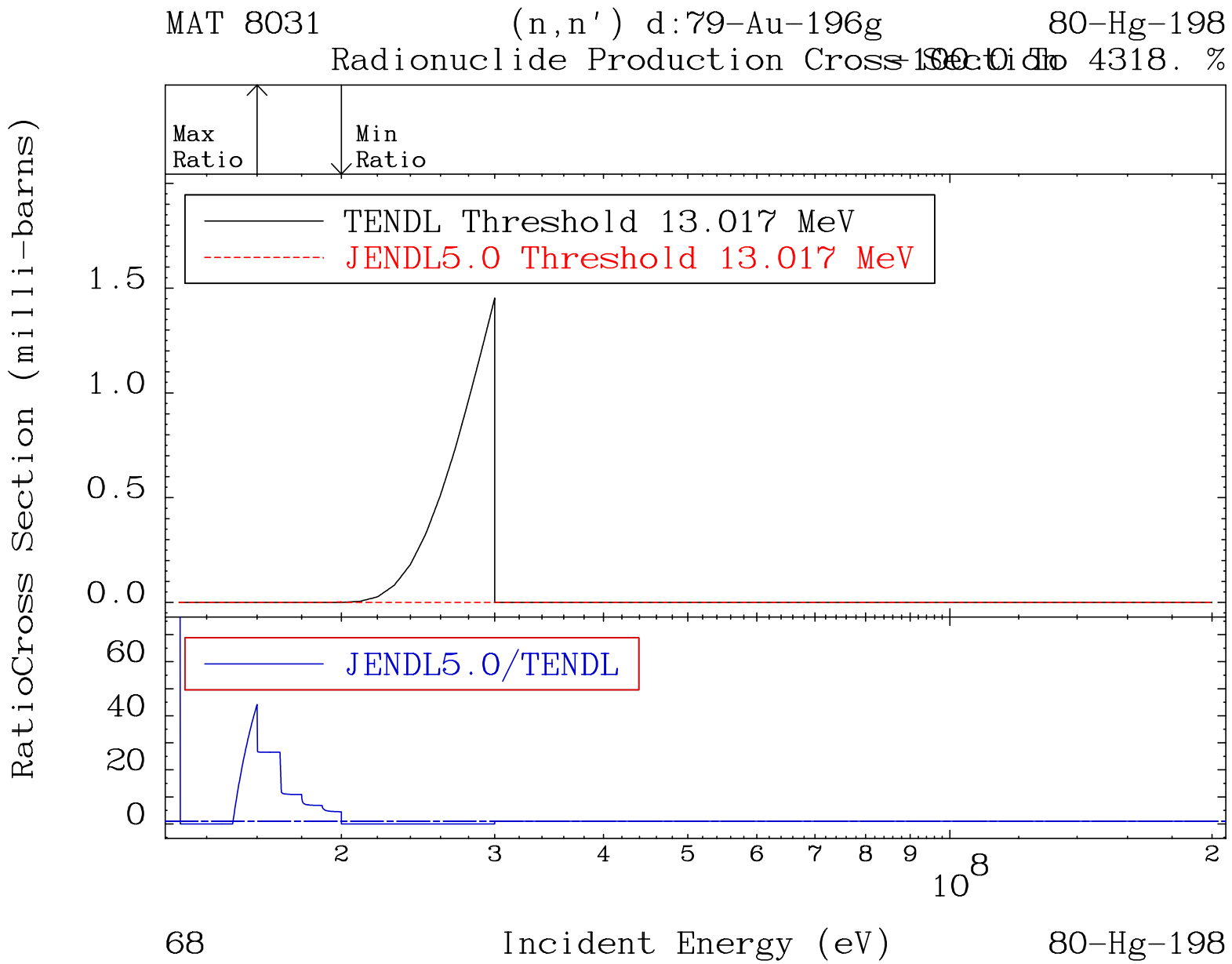

MAT 8031 Dpa disappearance (mt102 -120) 80-Hg-198
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
80-Hg-198

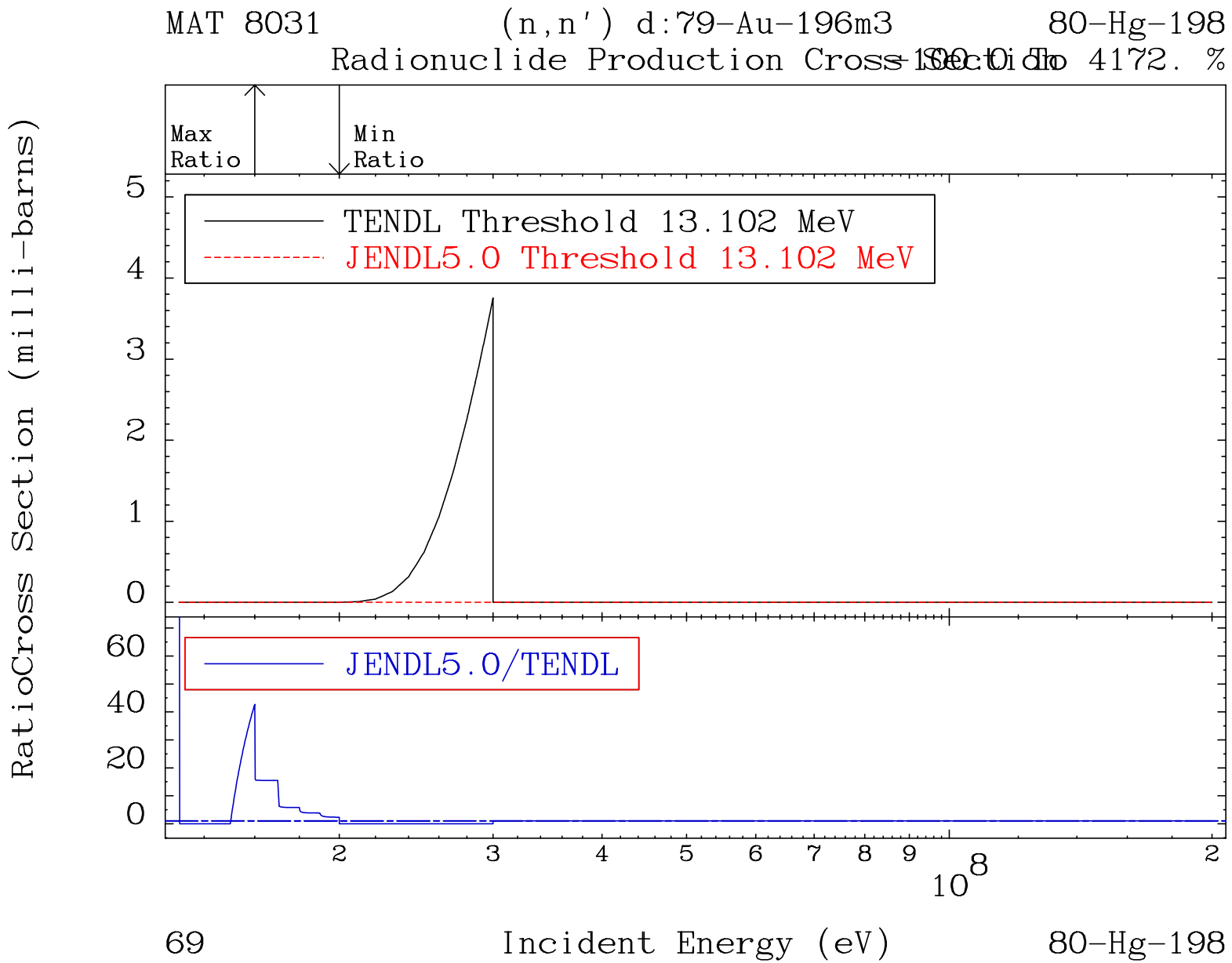

MAT 8031
(n,2n):80-Hg-197g
80-Hg-198
Radionuclide Production Cross Section To 96.46 %
Max Ratio
Min Ratio
TENDL Threshold 8.5286 MeV
JENDL5.0 Threshold 8.5286 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
80-Hg-198

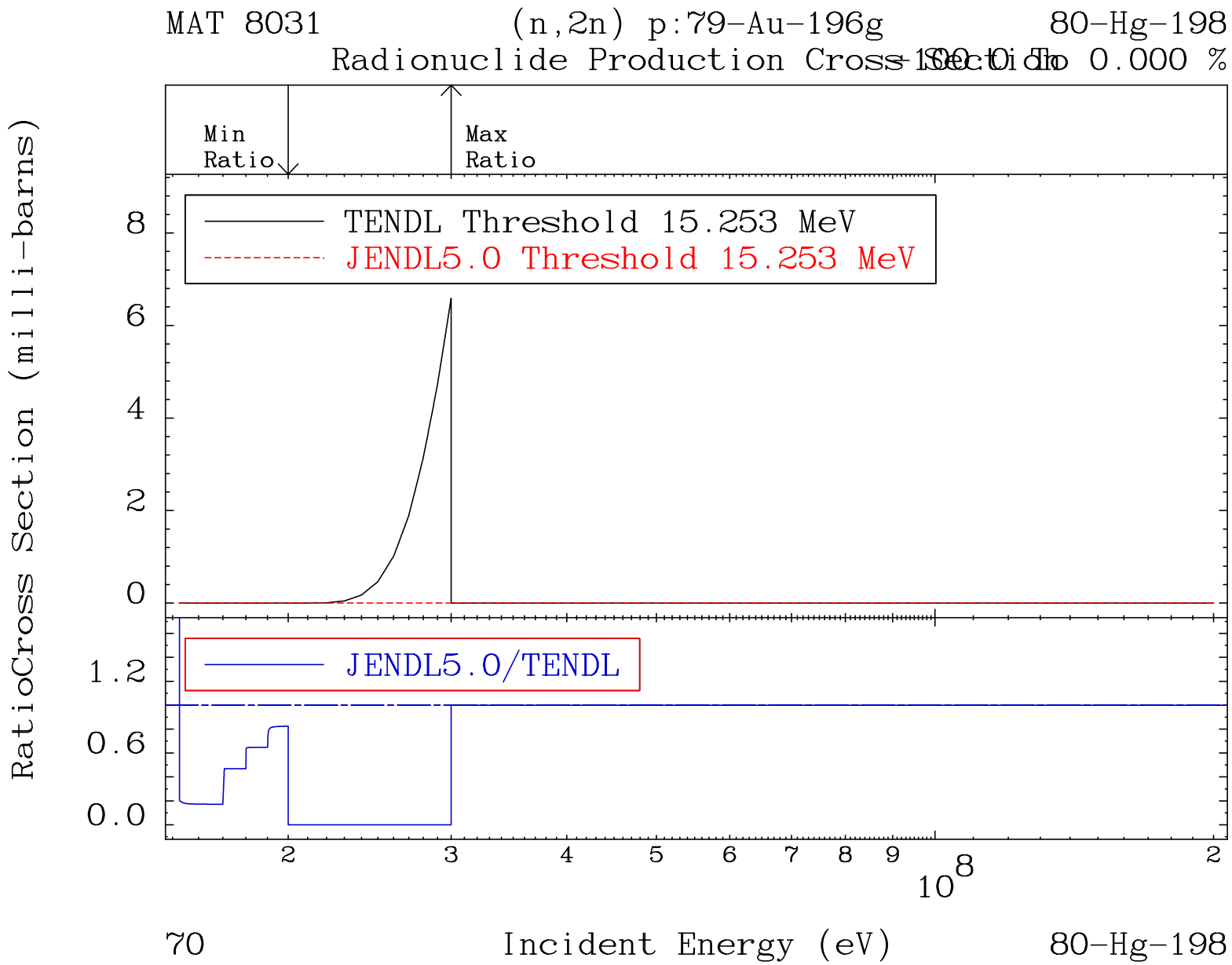

MAT 8031
(n,2n):80-Hg-197m4
80-Hg-198
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 8.8291 MeV
JENDL5.0 Threshold 8.8291 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
80-Hg-198

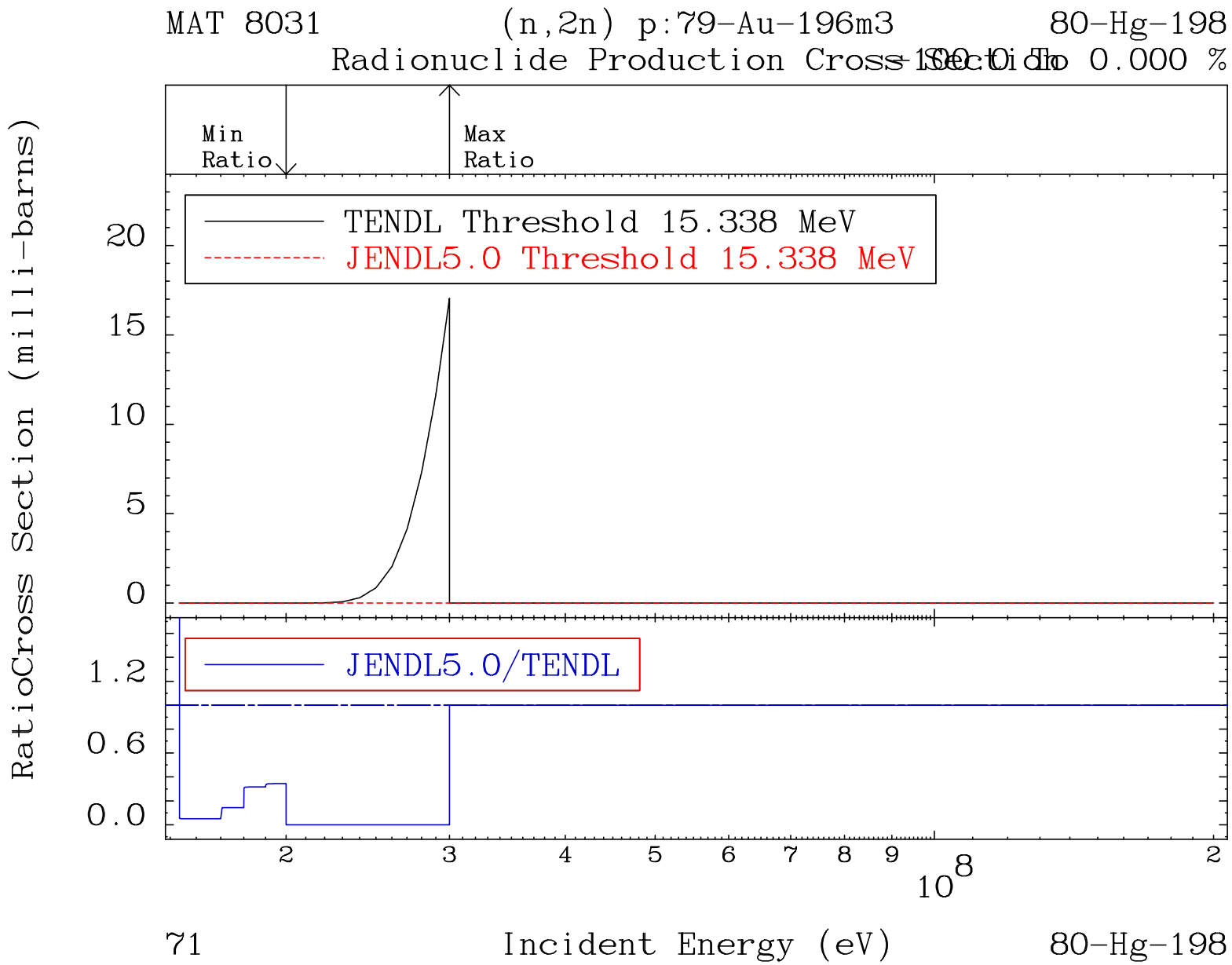

MAT 8031
(n,n') p:79-Au-197g
80-Hg-198
Radionuclide Production Cross Section To 335.0 %
Max
Ratio
TENDL Threshold 7.1397 MeV
JENDL5.0 Threshold 7.1397 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
66
80-Hg-198

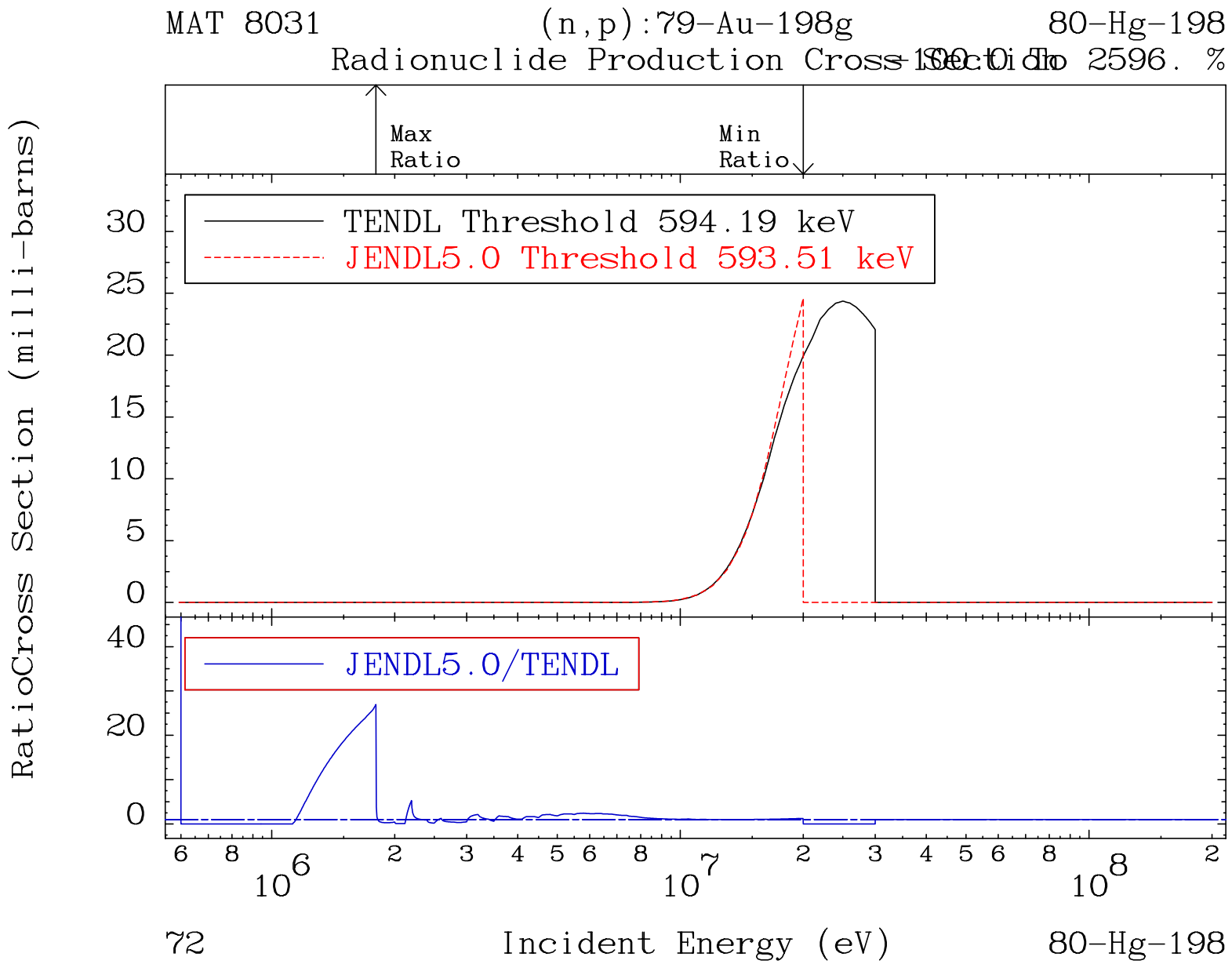

MAT 8031
(n,n') p:79-Au-197m4
80-Hg-198
Radionuclide Production Cross Section
Max Ratio = 100.0 To 317.8 %
Max Ratio
Min Ratio
TENDL Threshold 8.5000 MeV
JENDL5.0 Threshold 7.5503 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
6
4
2
0
8
2
3
4
5
6
7
8
2
10^7
10^8
67
Incident Energy (eV)
80-Hg-198

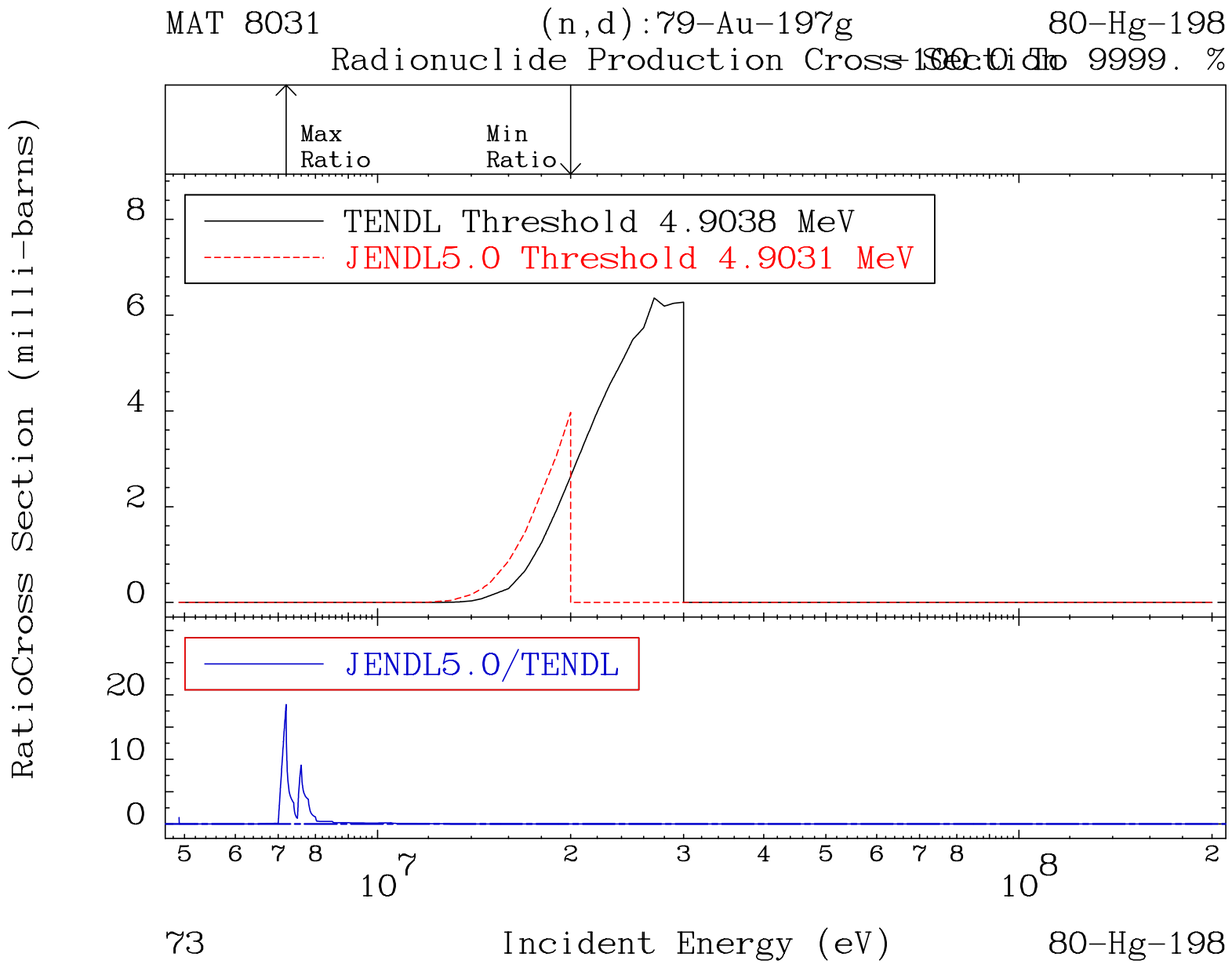

MAT 8031
(n,n') d:79-Au-196g
80-Hg-198
Radionuclide Production Cross Section To 4318. %
Max Ratio
Min Ratio
TENDL Threshold 13.017 MeV
JENDL5.0 Threshold 13.017 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
60
40
20
0
2
3
4
5
6
7
8
9
2
10^8
68
Incident Energy (eV)
80-Hg-198

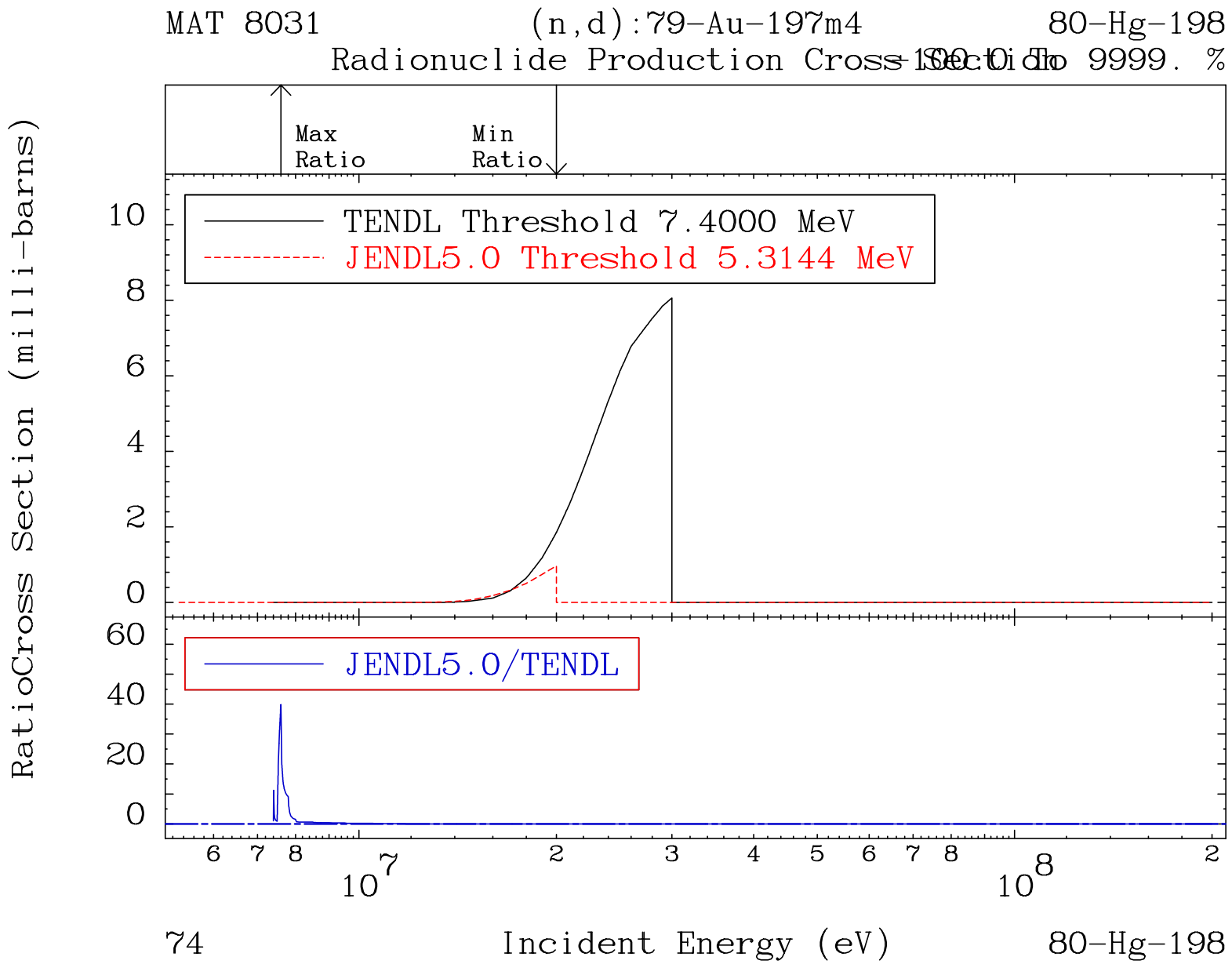

MAT 8031
(n,n') d:79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section To 4172. %
Max Ratio
Min Ratio
TENDL Threshold 13.102 MeV
JENDL5.0 Threshold 13.102 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
69
80-Hg-198

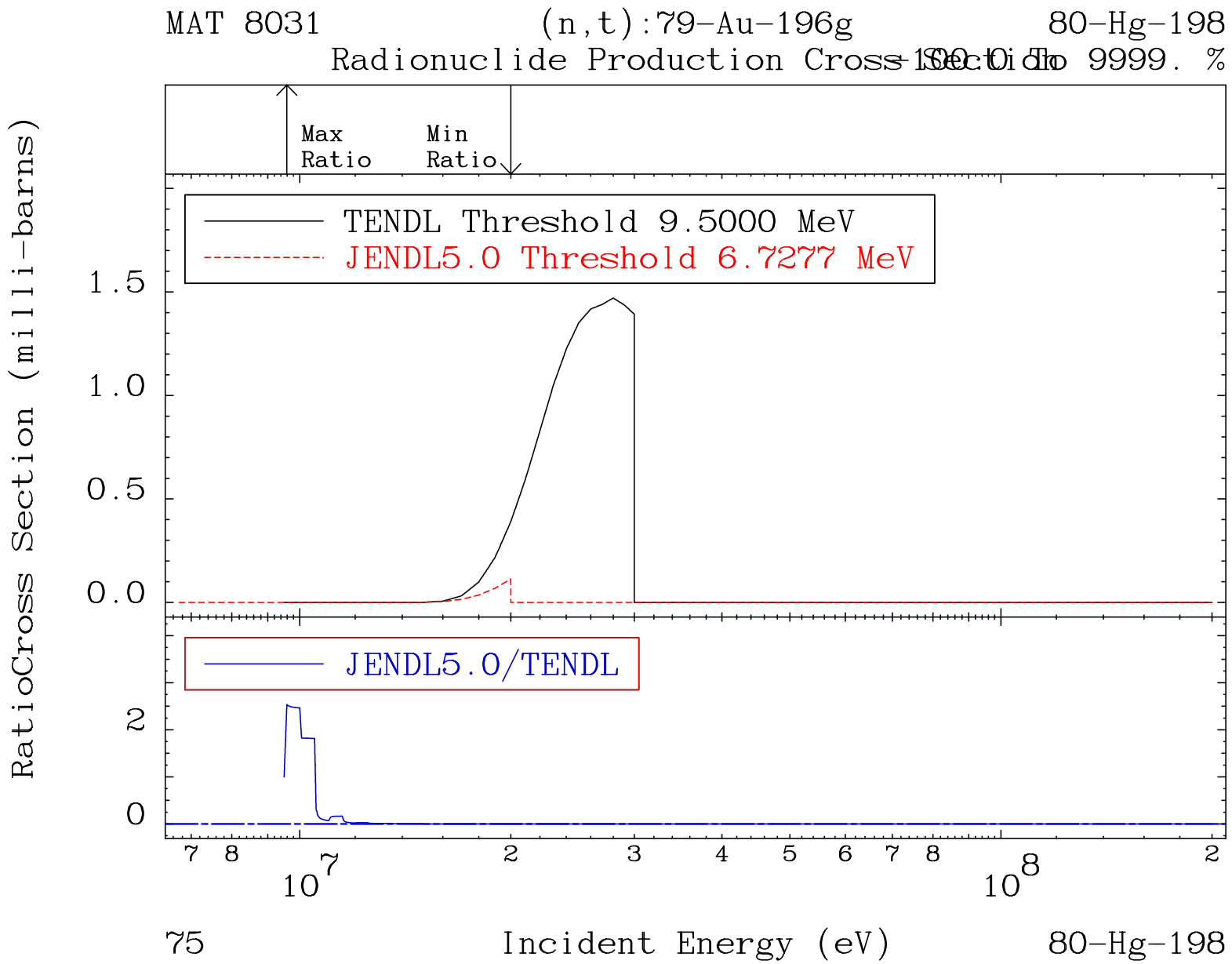

MAT 8031
(n,2n) p:79-Au-196g
80-Hg-198
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 15.253 MeV
JENDL5.0 Threshold 15.253 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
70
80-Hg-198

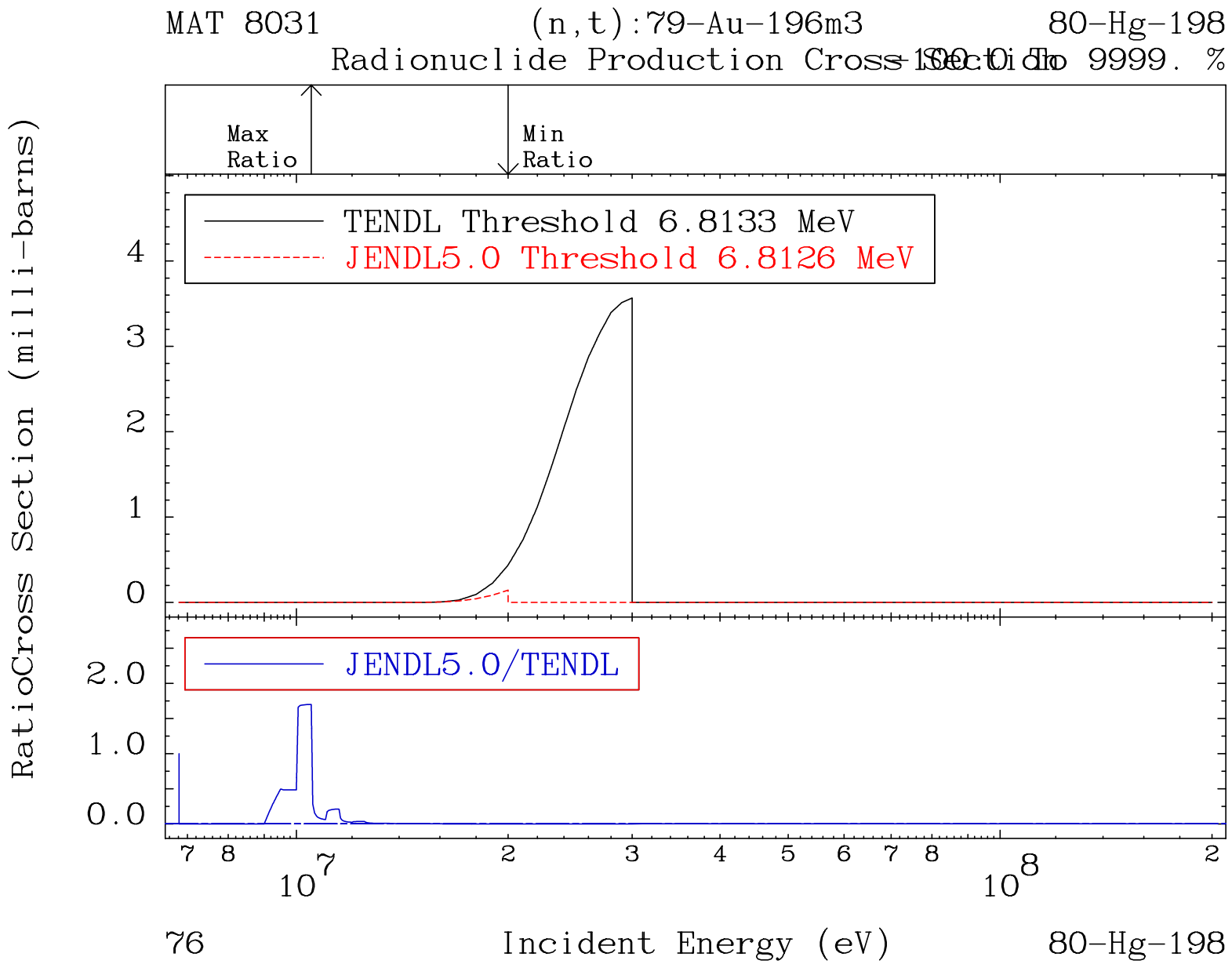

MAT 8031
(n,2n) p:79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.338 MeV
JENDL5.0 Threshold 15.338 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
71
Incident Energy (eV)
80-Hg-198


MAT 8031
(n,p):79-Au-198g
80-Hg-198
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 594.19 keV
JENDL5.0 Threshold 593.51 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
72
80-Hg-198


MAT 8031
(n,d):79-Au-197g
80-Hg-198
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.9038 MeV
JENDL5.0 Threshold 4.9031 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
73
80-Hg-198


MAT 8031
(n,d):79-Au-197m4
80-Hg-198
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.4000 MeV
JENDL5.0 Threshold 5.3144 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
74
80-Hg-198


MAT 8031
(n,t):79-Au-196g
80-Hg-198
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 9.5000 MeV
JENDL5.0 Threshold 6.7277 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
75
80-Hg-198


MAT 8031
(n,t):79-Au-196m3
80-Hg-198
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8133 MeV
JENDL5.0 Threshold 6.8126 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
76
80-Hg-198