Program Complot
(Version 2018-1)
by
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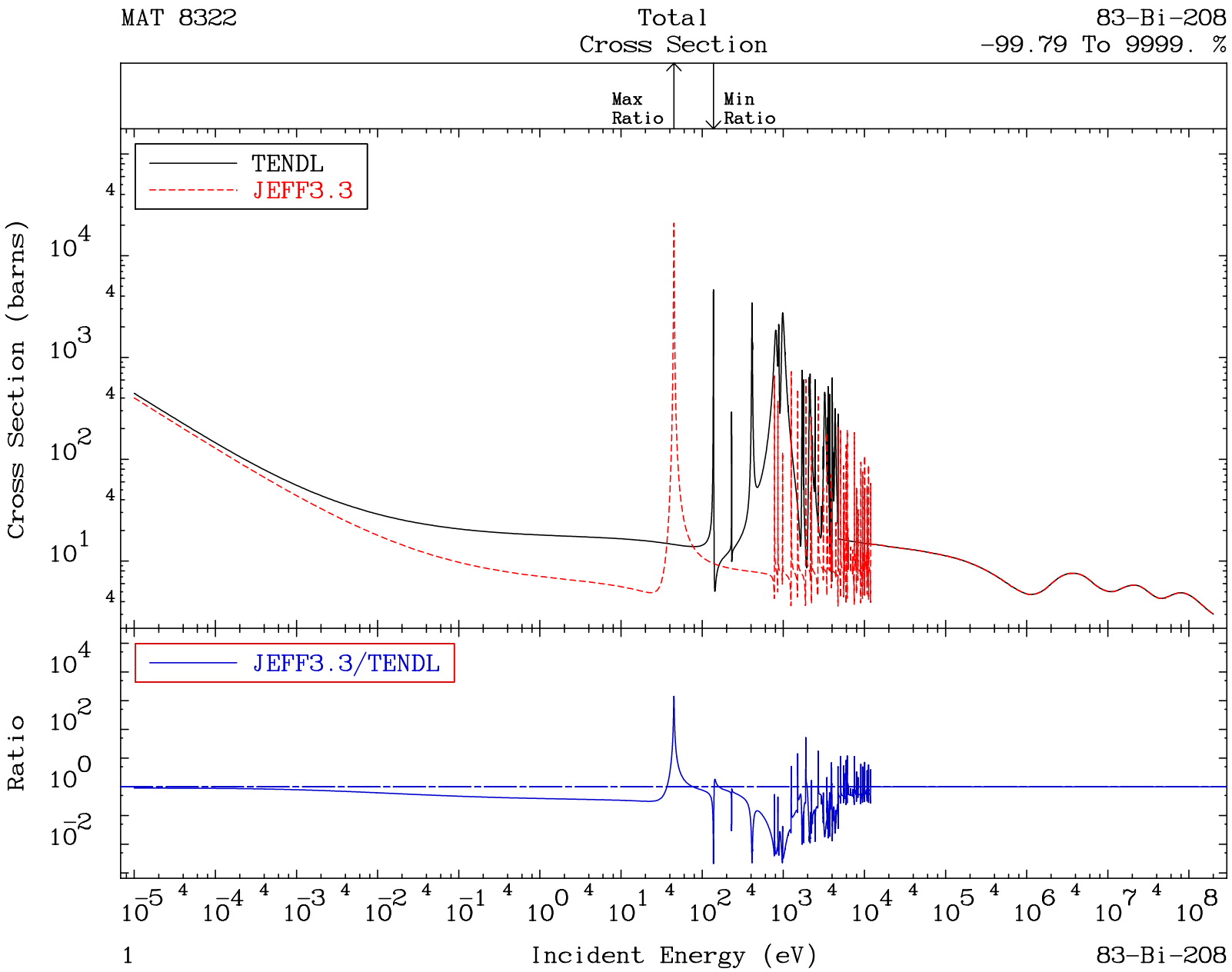
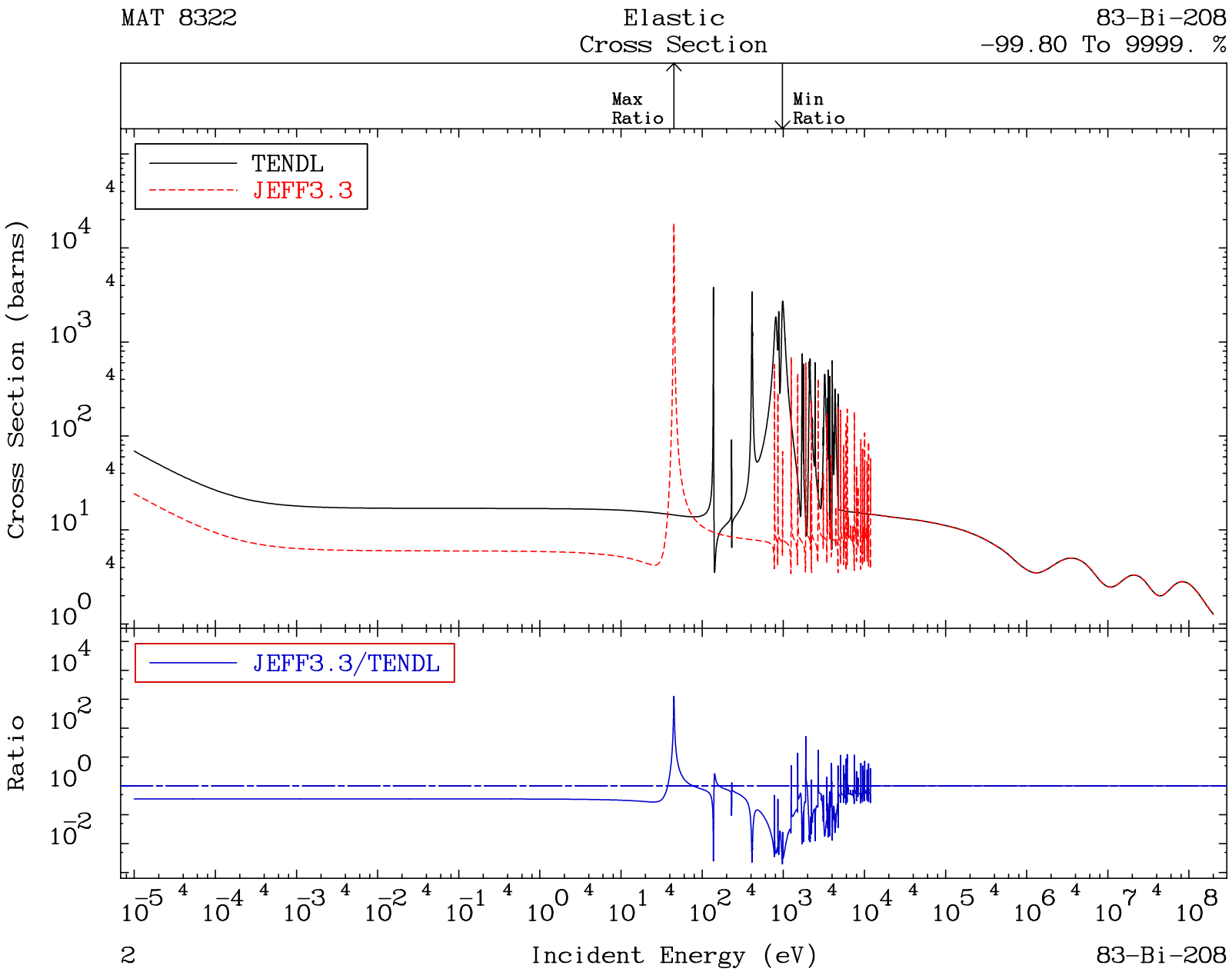
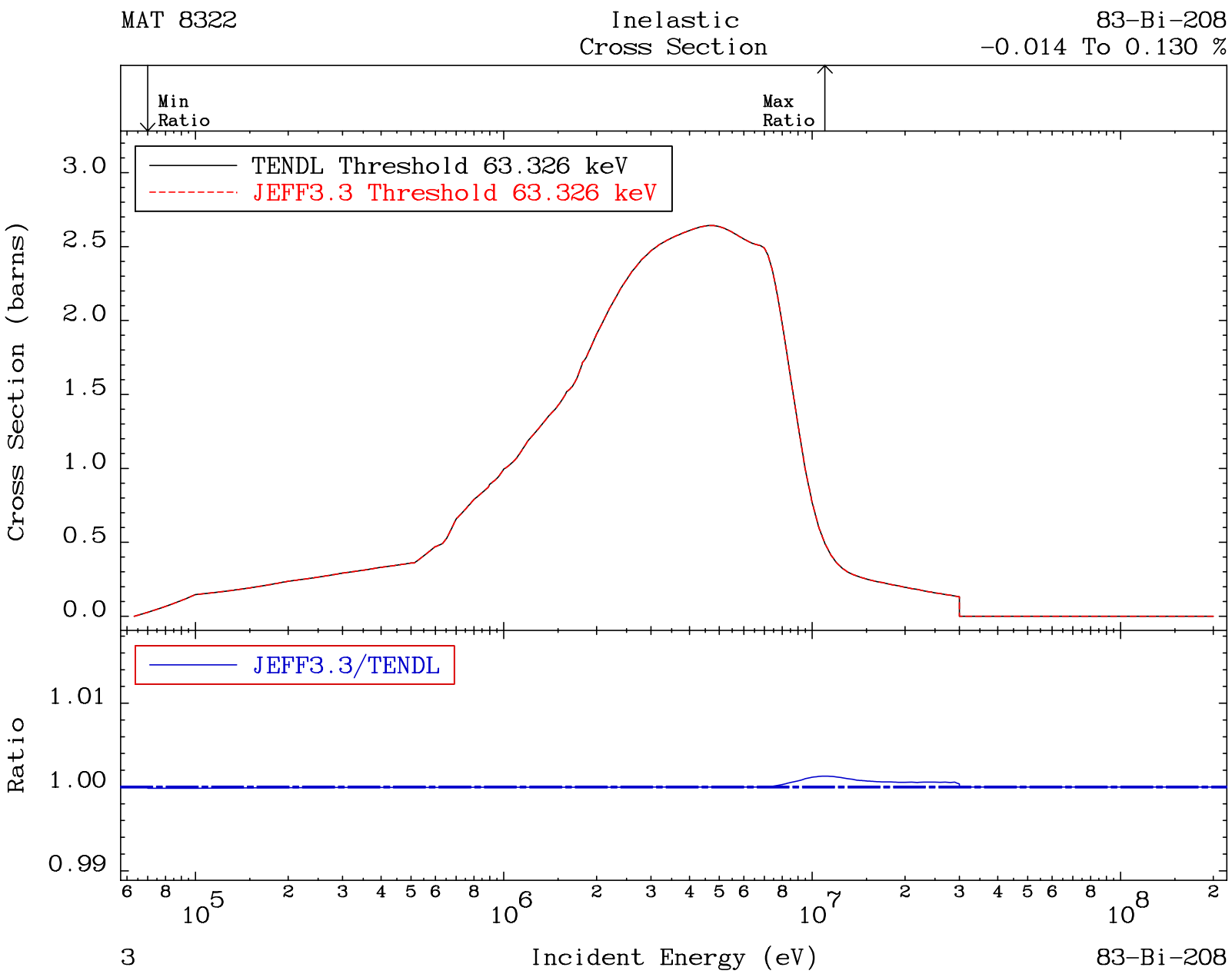
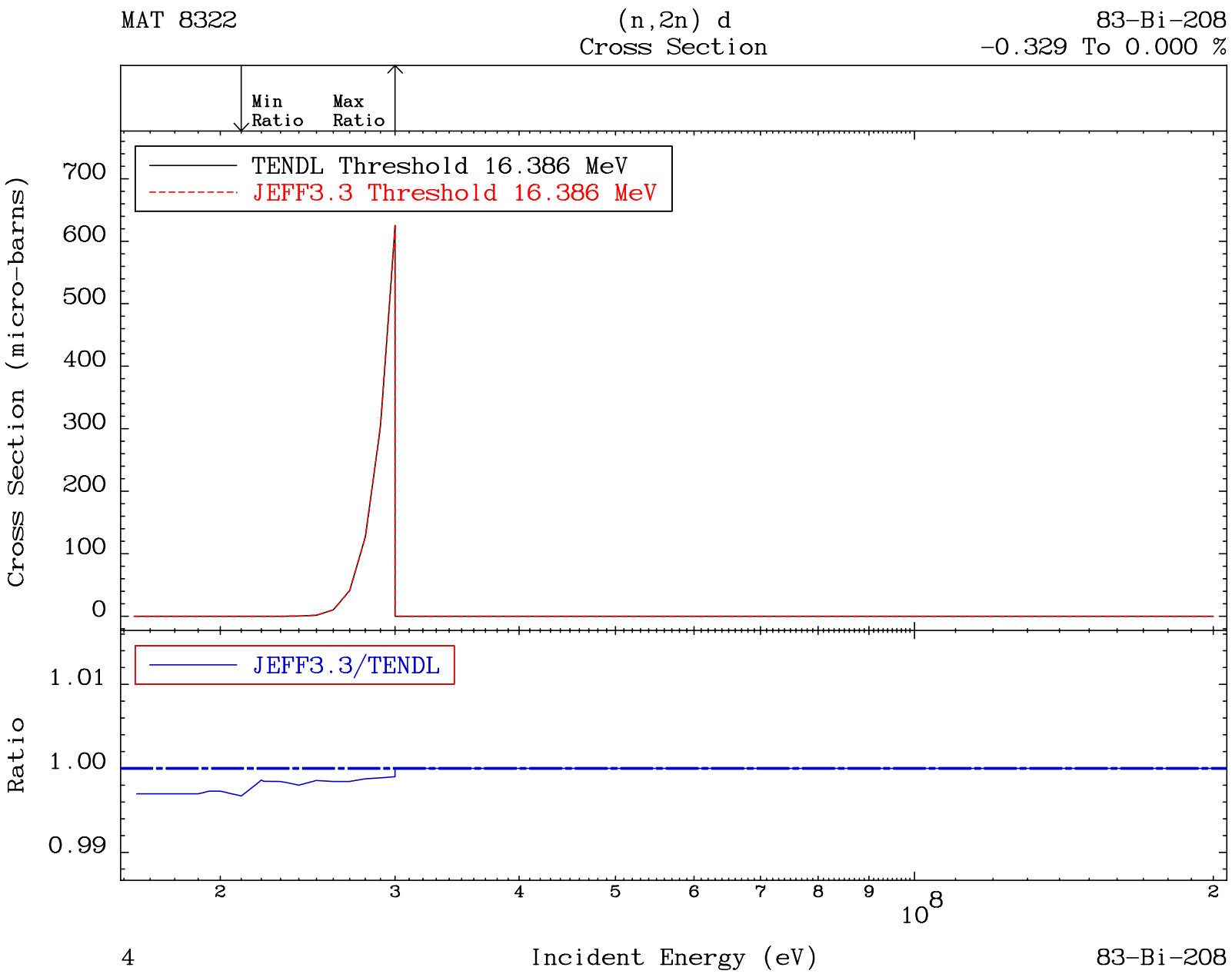
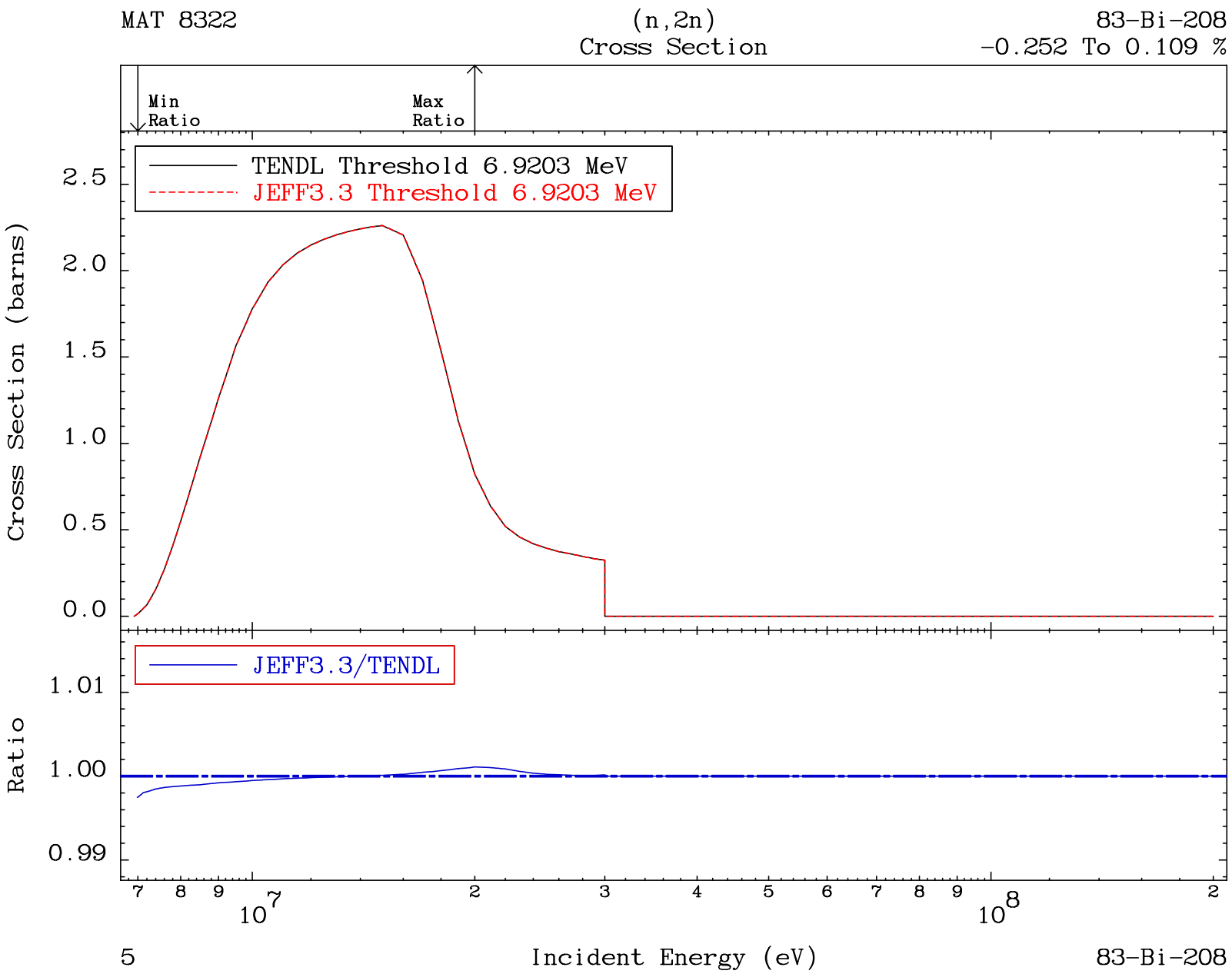
Press Mouse Button to Start

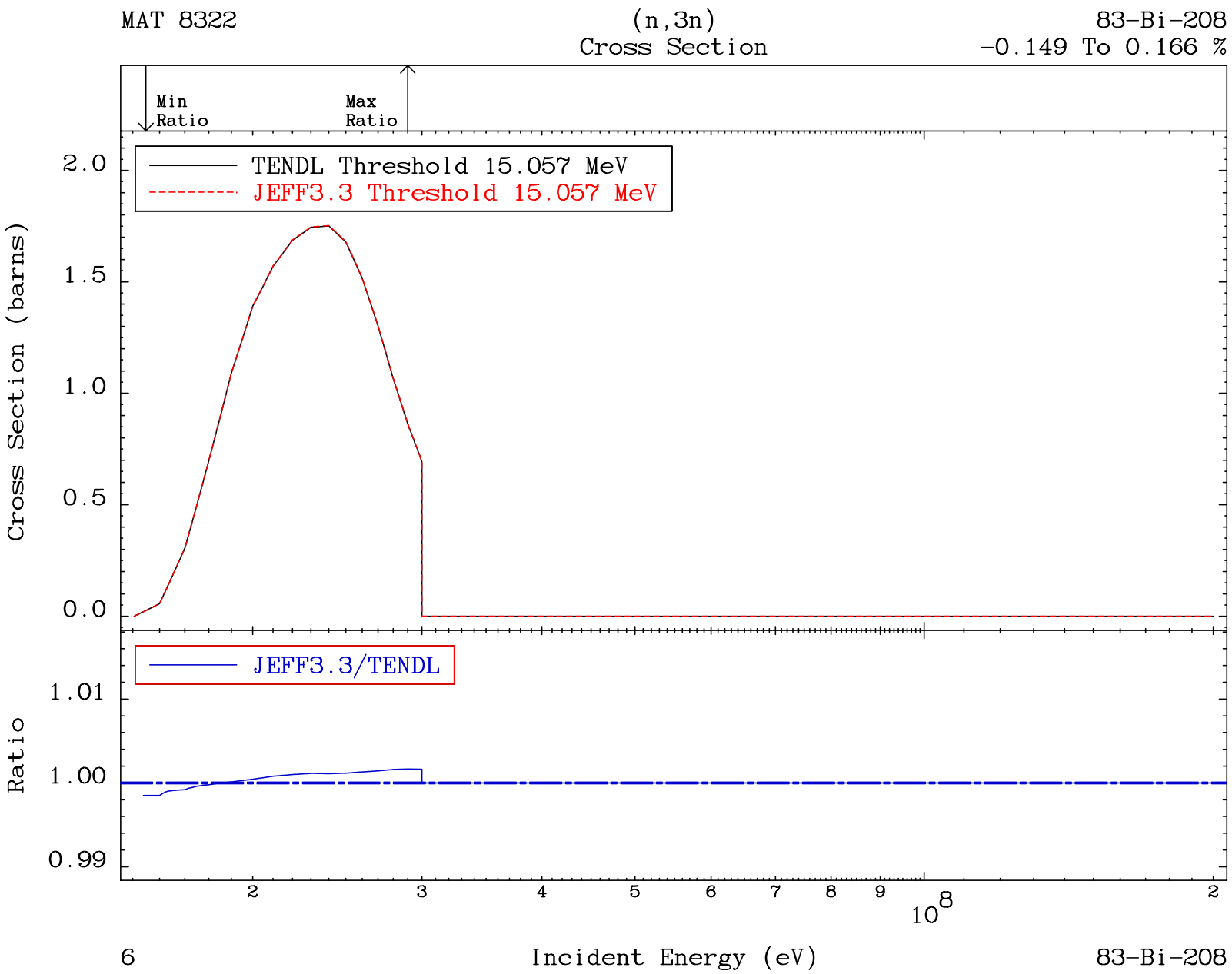

MAT 8322
Total
Cross Section
83-Bi-208
-99.79 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
83-Bi-208

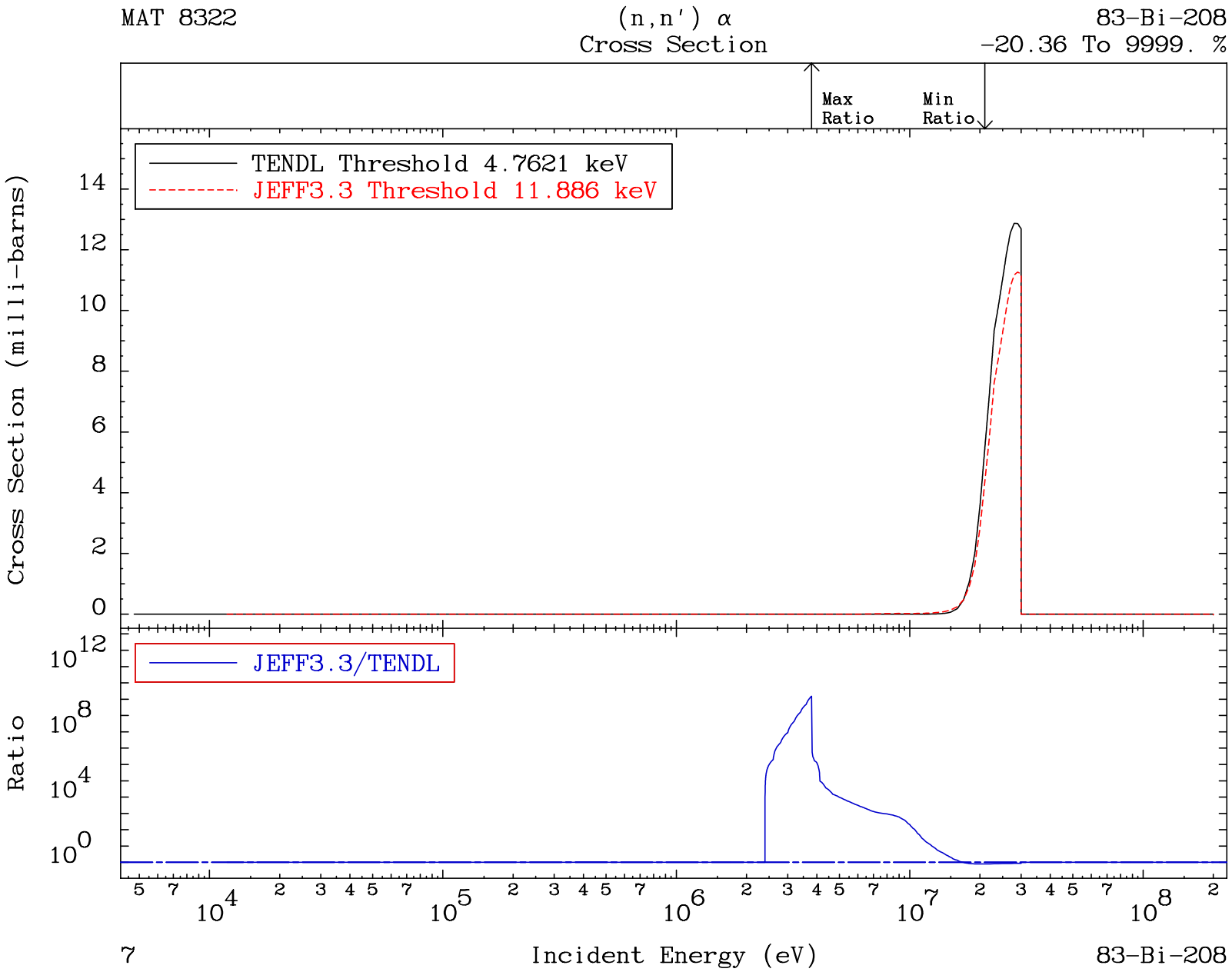

MAT 8322
Elastic
Cross Section
83-Bi-208
-99.80 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
83-Bi-208

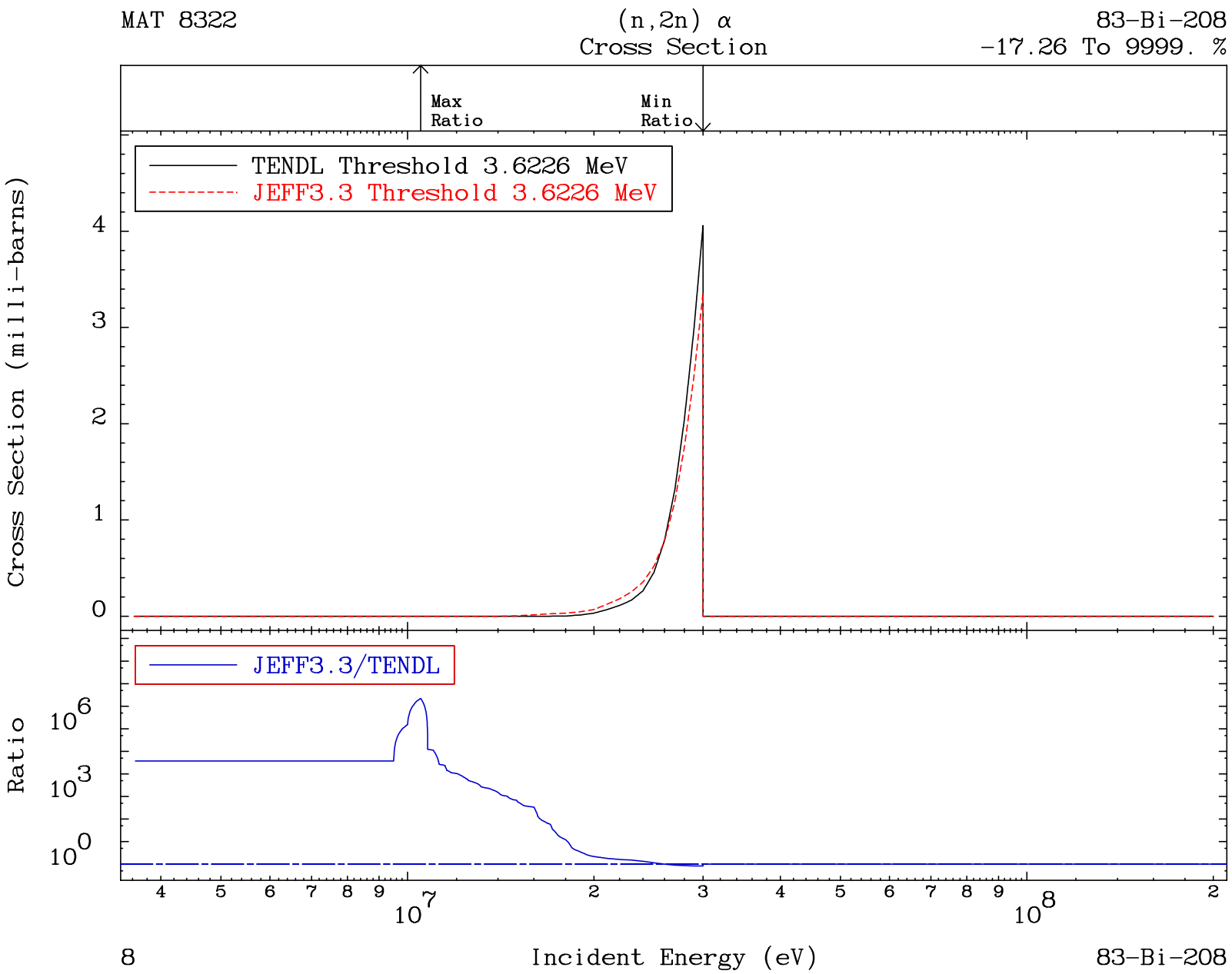

MAT 8322
Inelastic
Cross Section
83-Bi-208
-0.014 To 0.130 %
Min
Ratio
Max
Ratio
TENDL Threshold 63.326 keV
JEFF3.3 Threshold 63.326 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
83-Bi-208

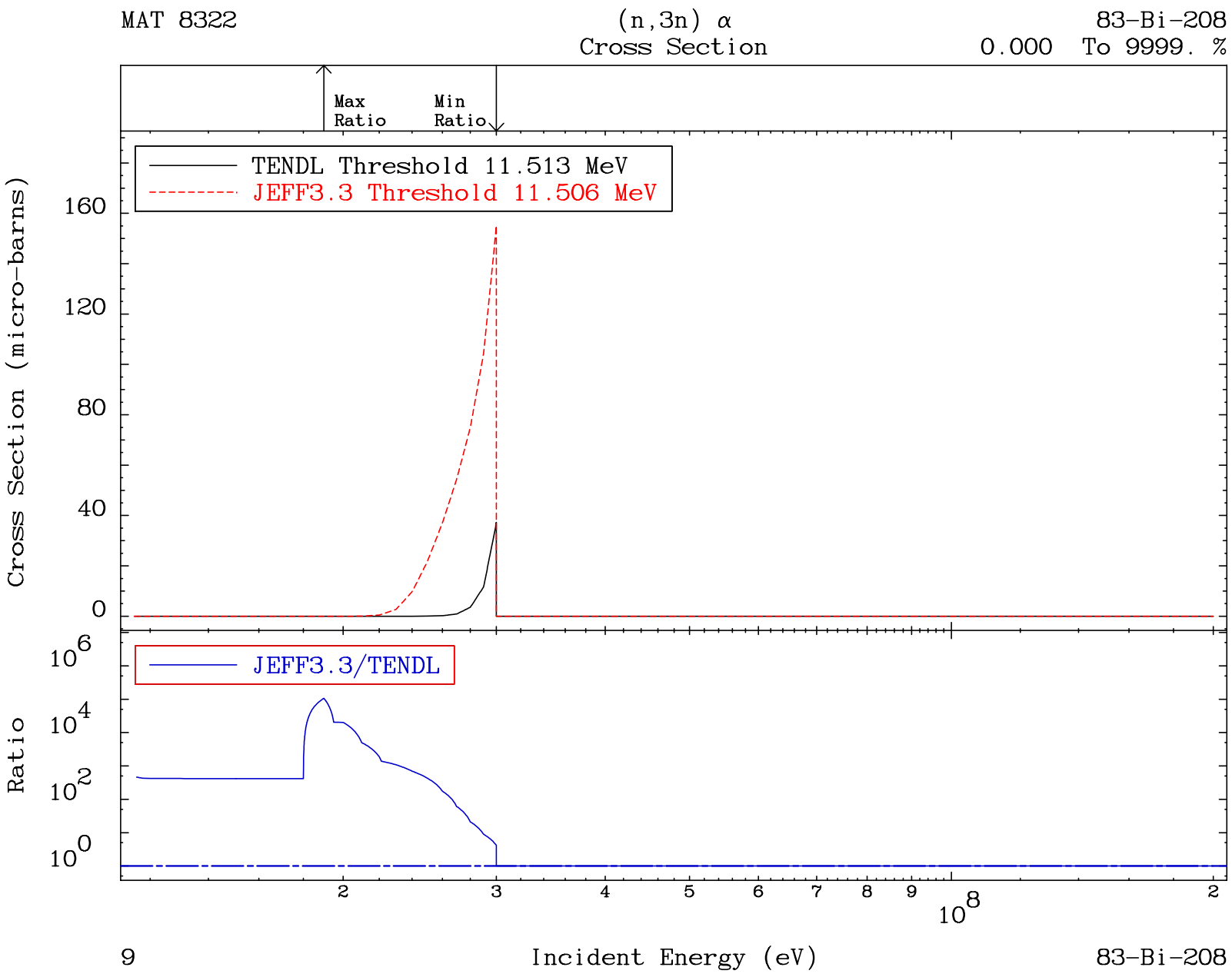

MAT 8322
(n,2n) d
Cross Section
83-Bi-208
-0.329 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.386 MeV
JEFF3.3 Threshold 16.386 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
83-Bi-208

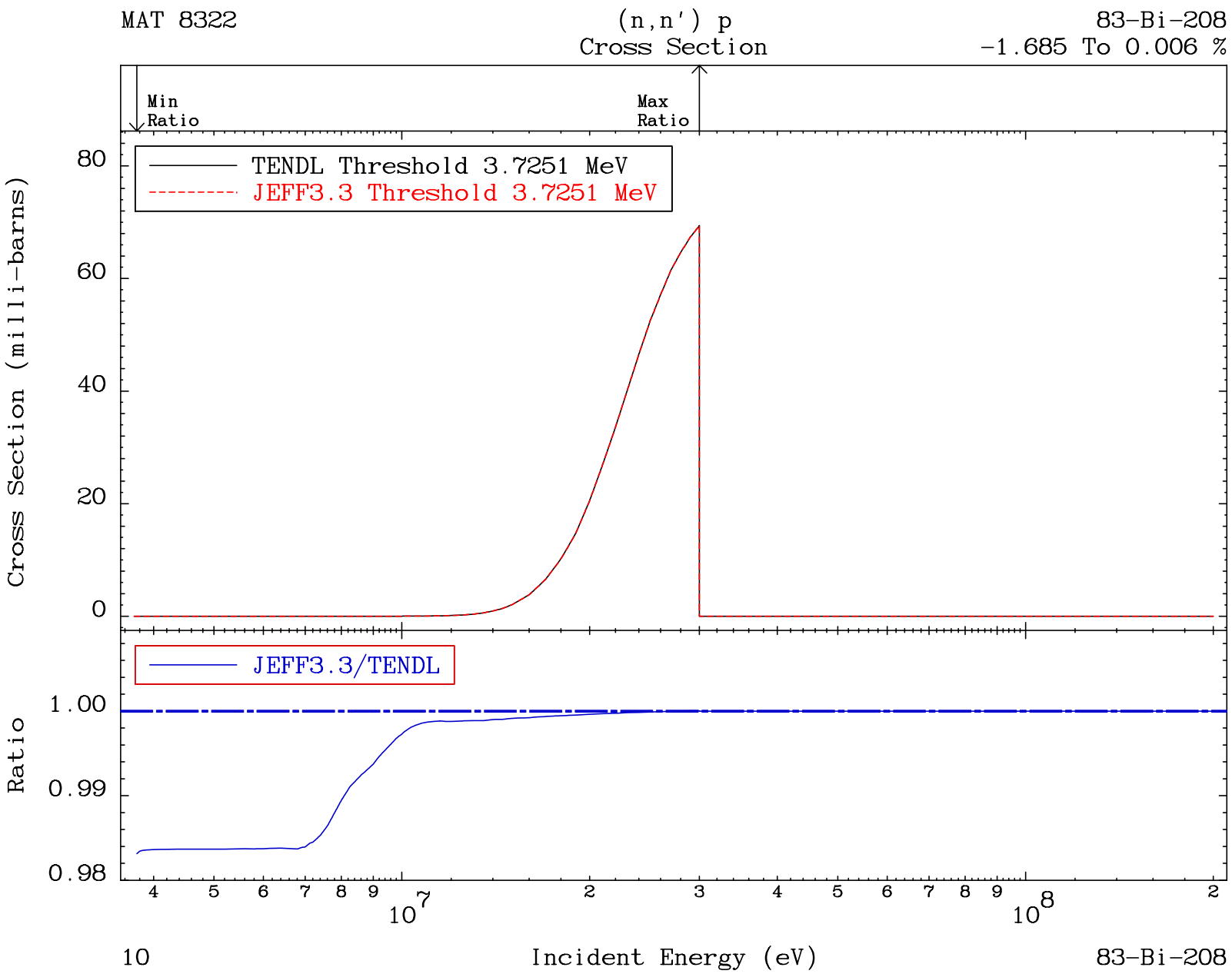

MAT 8322
(n,2n)
Cross Section
83-Bi-208
-0.252 To 0.109 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.9203 MeV
JEFF3.3 Threshold 6.9203 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
5
Incident Energy (eV)
83-Bi-208

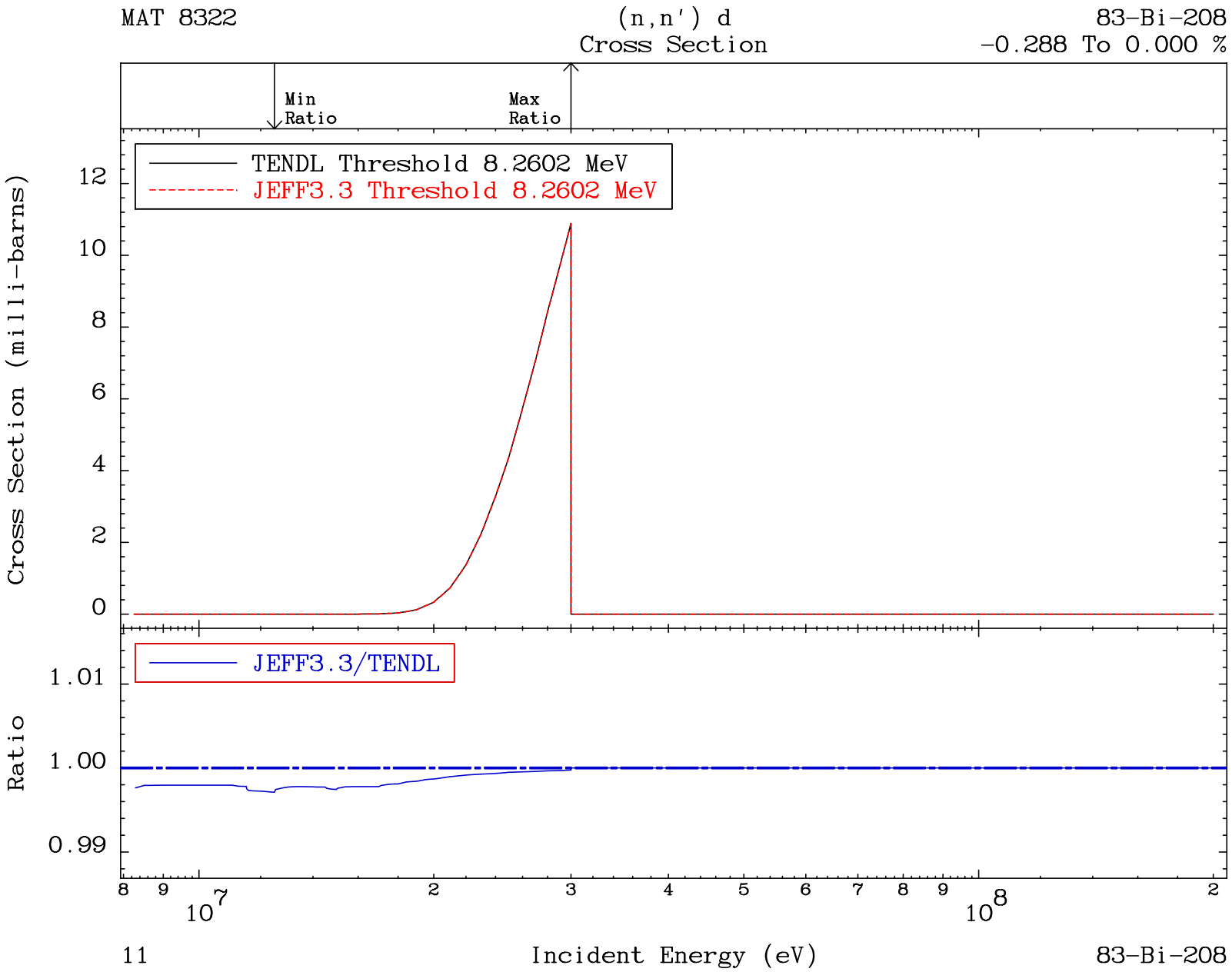

MAT 8322
(n,3n)
Cross Section
83-Bi-208
-0.149 To 0.166 %
Min Ratio
Max Ratio
TENDL Threshold 15.057 MeV
JEFF3.3 Threshold 15.057 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
83-Bi-208

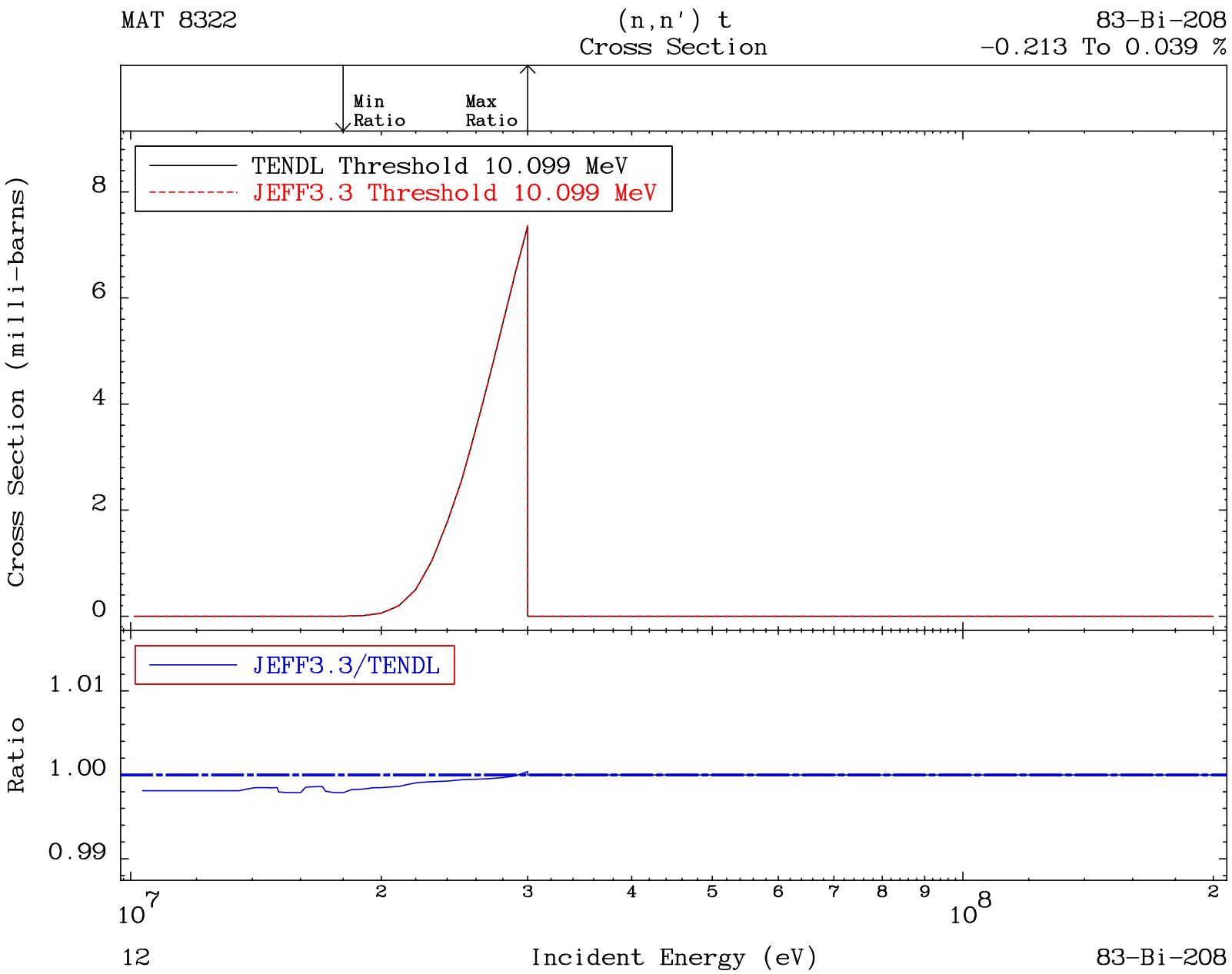

MAT 8322
(n,n') α
Cross Section
83-Bi-208
-20.36 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.7621 keV
JEFF3.3 Threshold 11.886 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
7
83-Bi-208

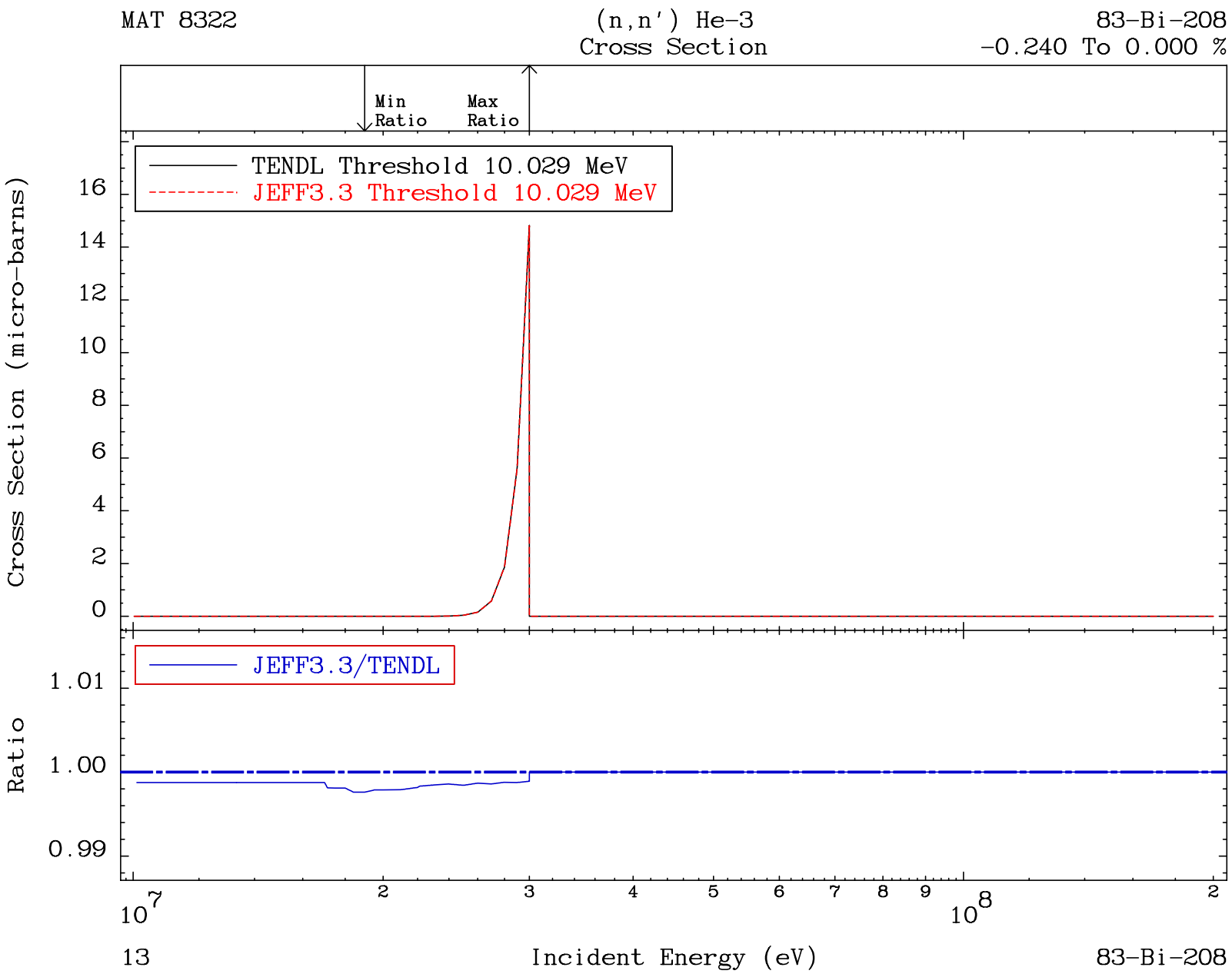

MAT 8322
(n,2n) α
Cross Section
83-Bi-208
-17.26 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.6226 MeV
JEFF3.3 Threshold 3.6226 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
8
83-Bi-208

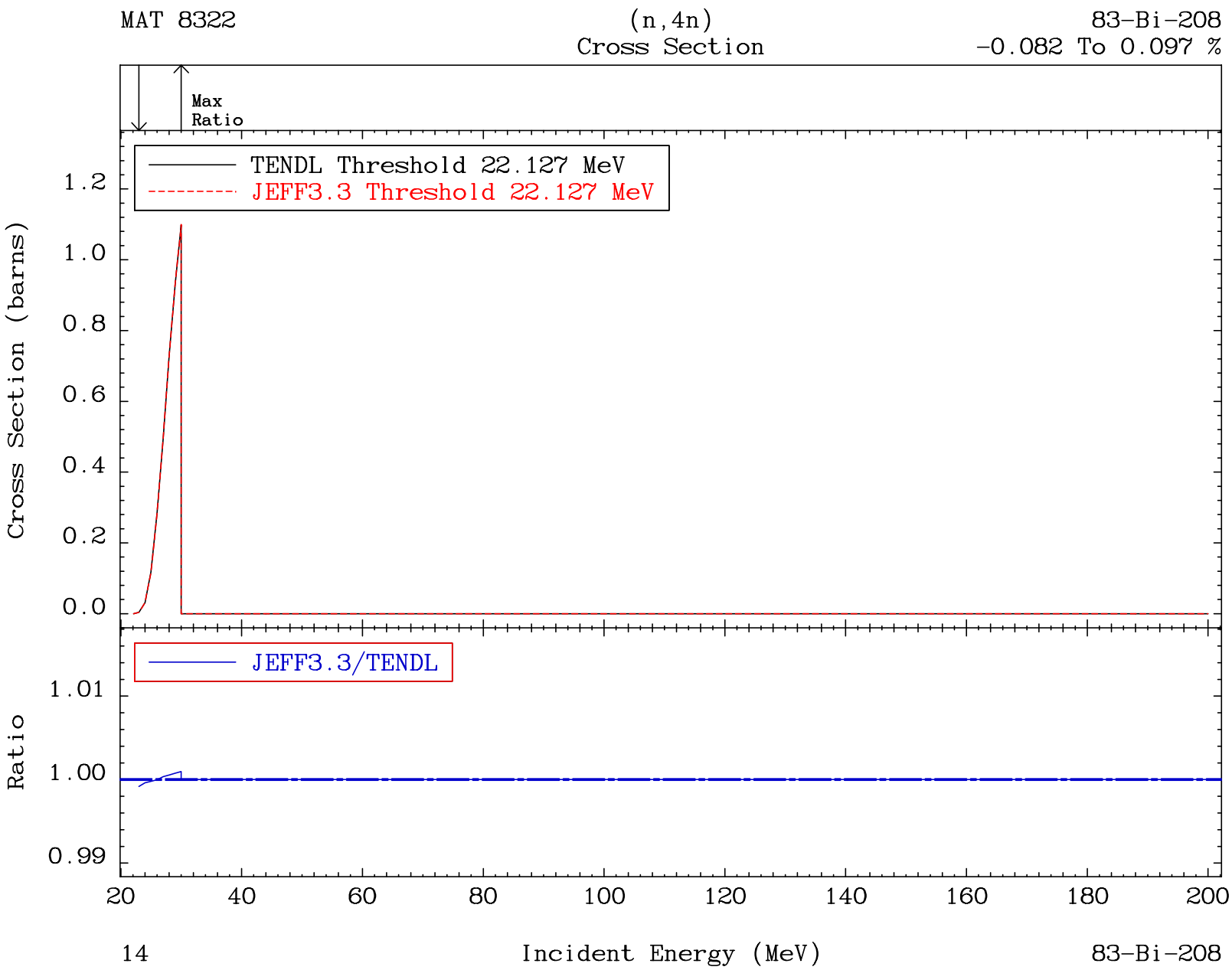

MAT 8322
(n,3n) α
Cross Section
83-Bi-208
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.513 MeV
JEFF3.3 Threshold 11.506 MeV
Cross Section (micro-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
83-Bi-208

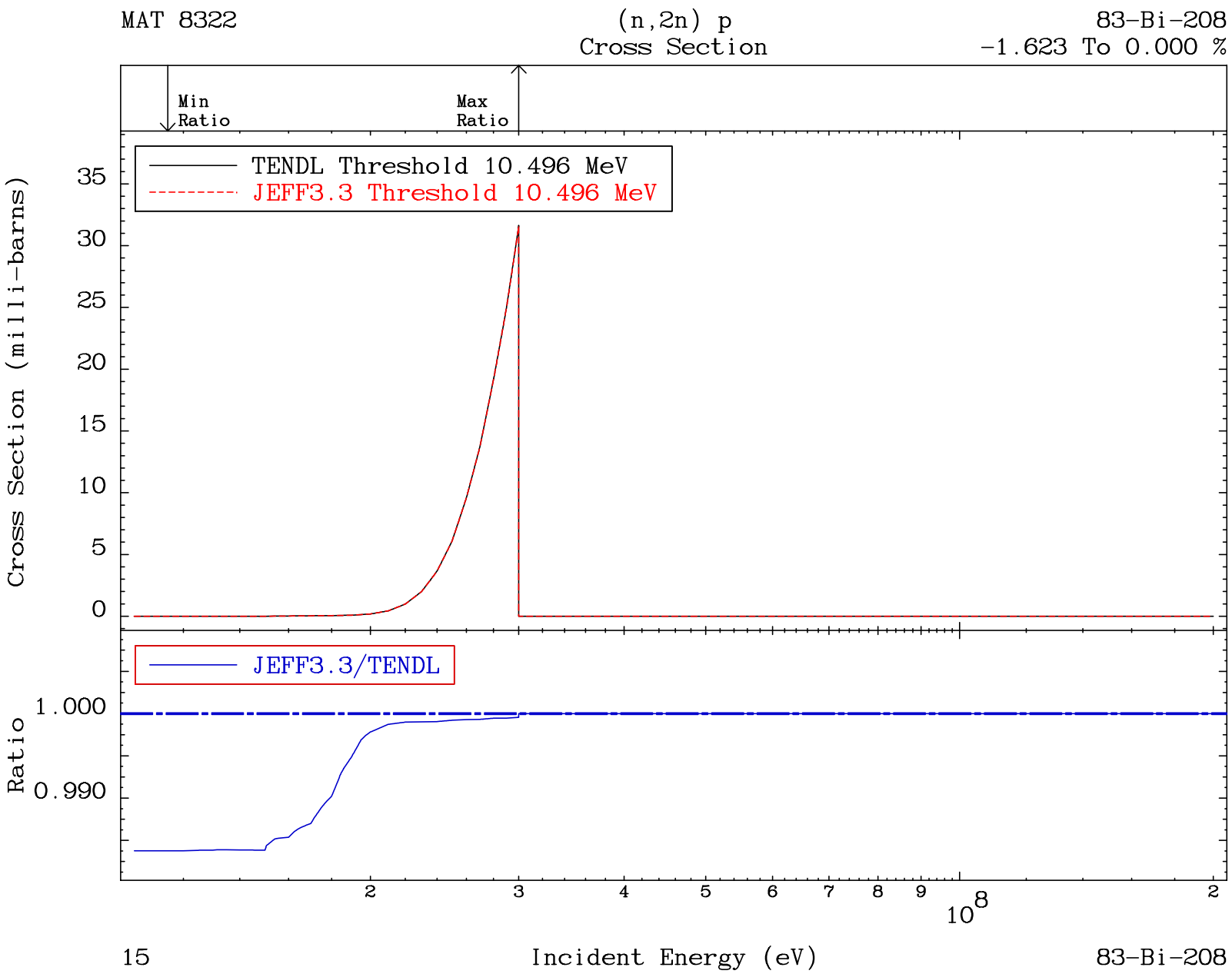

MAT 8322
(n,n') p
Cross Section
83-Bi-208
-1.685 To 0.006 %
Min Ratio
Max Ratio
TENDL Threshold 3.7251 MeV
JEFF3.3 Threshold 3.7251 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
83-Bi-208

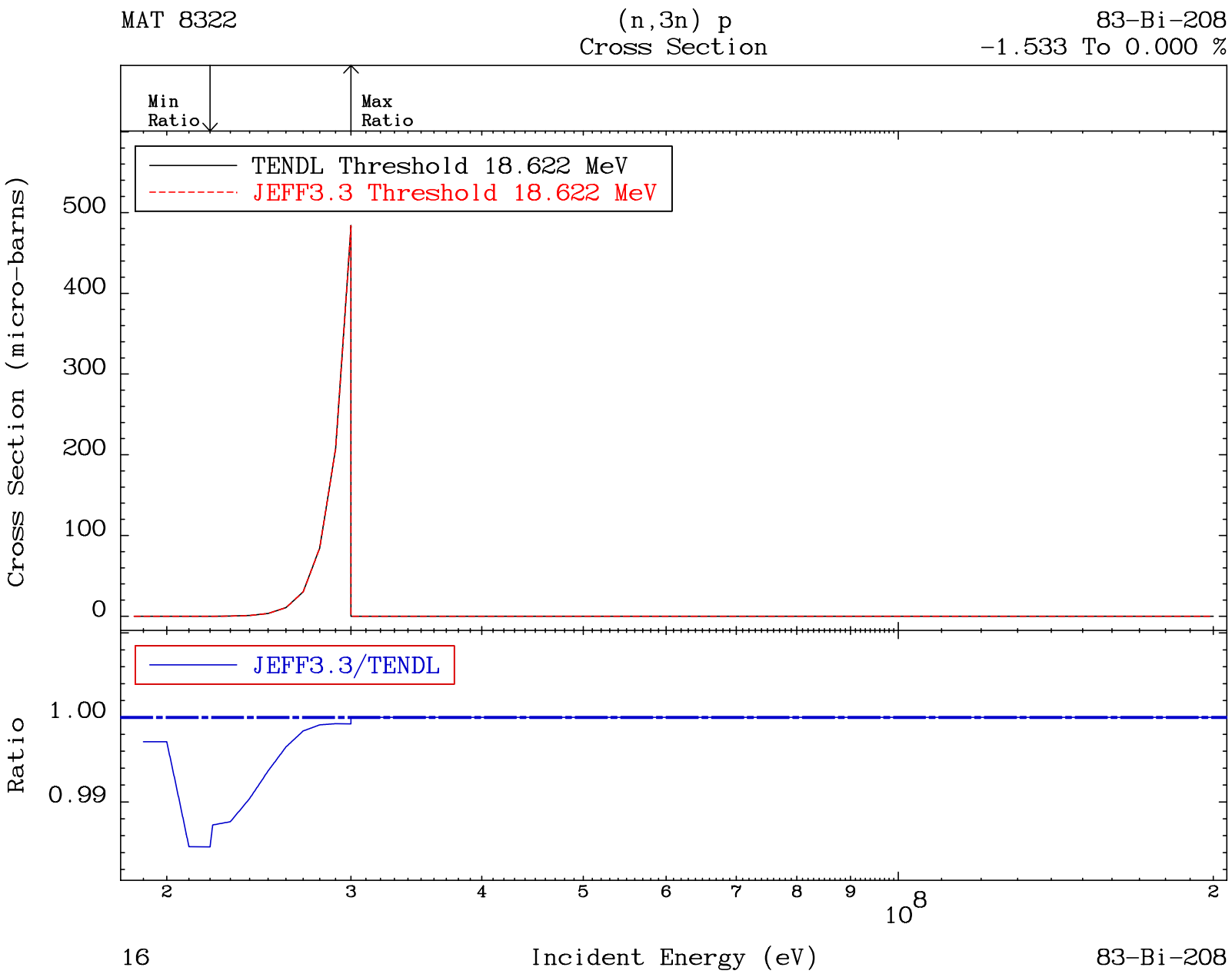

MAT 8322
(n,n') d
Cross Section
83-Bi-208
-0.288 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 8.2602 MeV
JEFF3.3 Threshold 8.2602 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
83-Bi-208

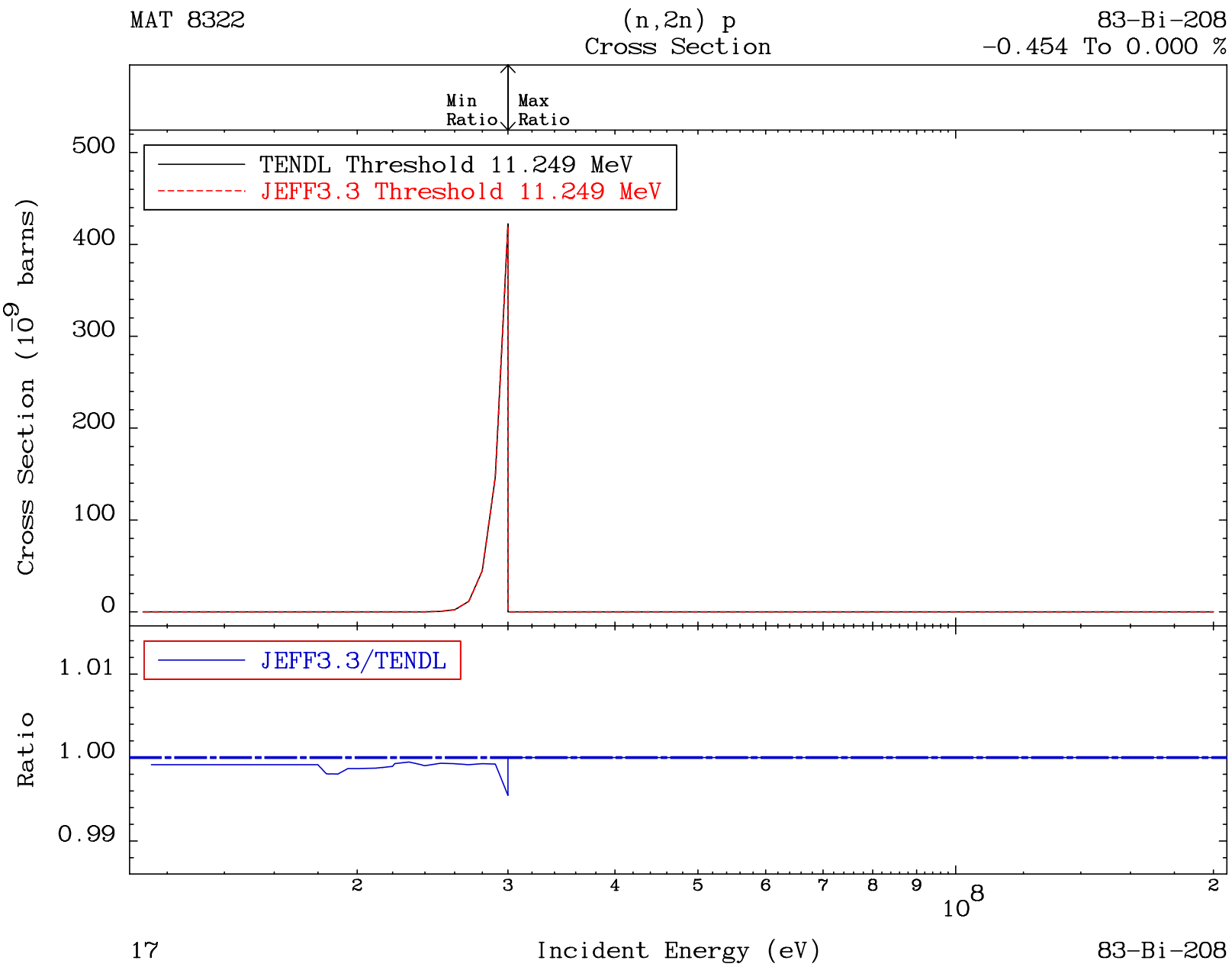

MAT 8322
(n,n') t
Cross Section
83-Bi-208
-0.213 To 0.039 %
Min Ratio
Max Ratio
TENDL Threshold 10.099 MeV
JEFF3.3 Threshold 10.099 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
10^7
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
83-Bi-208

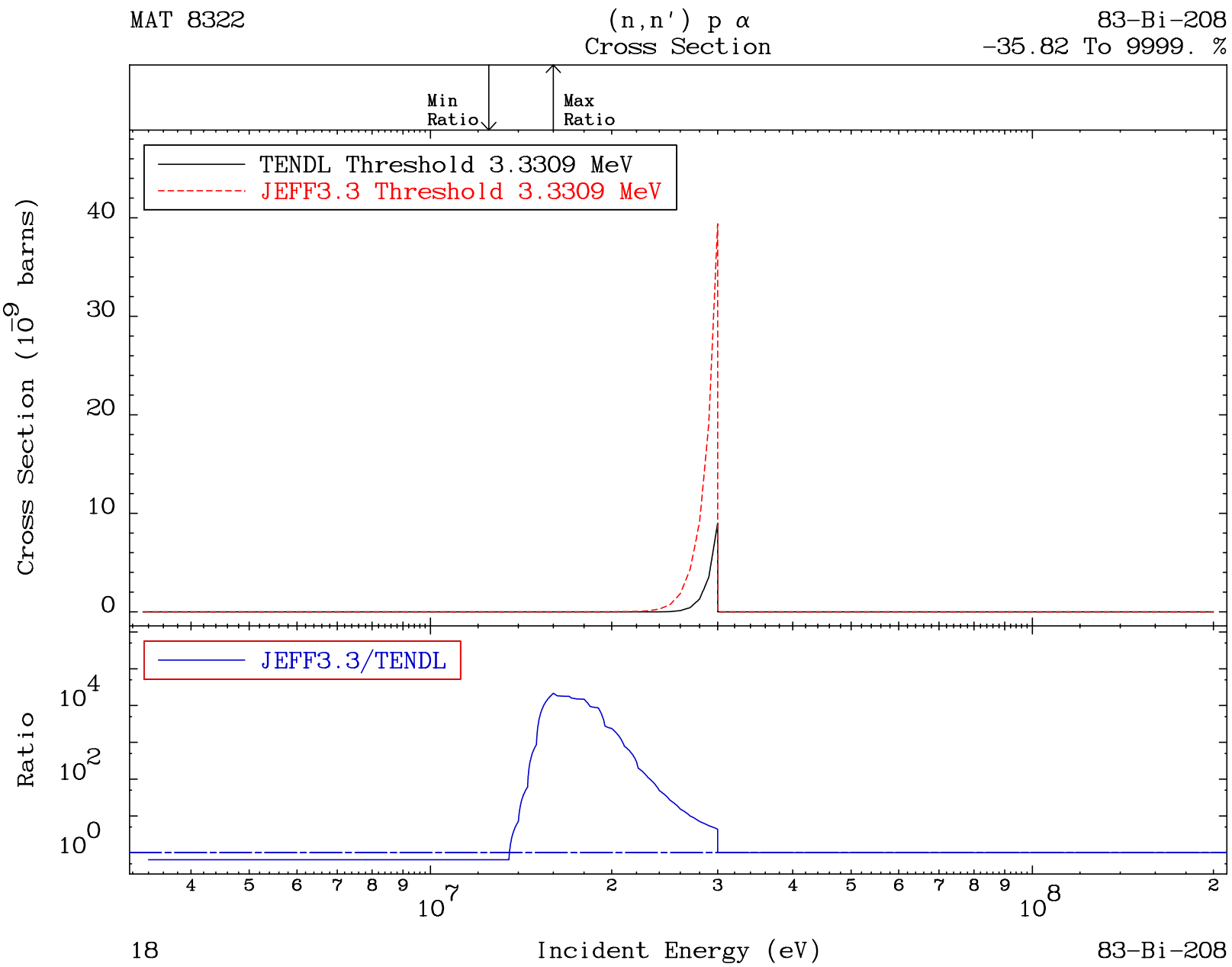

MAT 8322
(n,n') He-3
Cross Section
83-Bi-208
-0.240 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 10.029 MeV
JEFF3.3 Threshold 10.029 MeV
Cross Section (micro-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
83-Bi-208

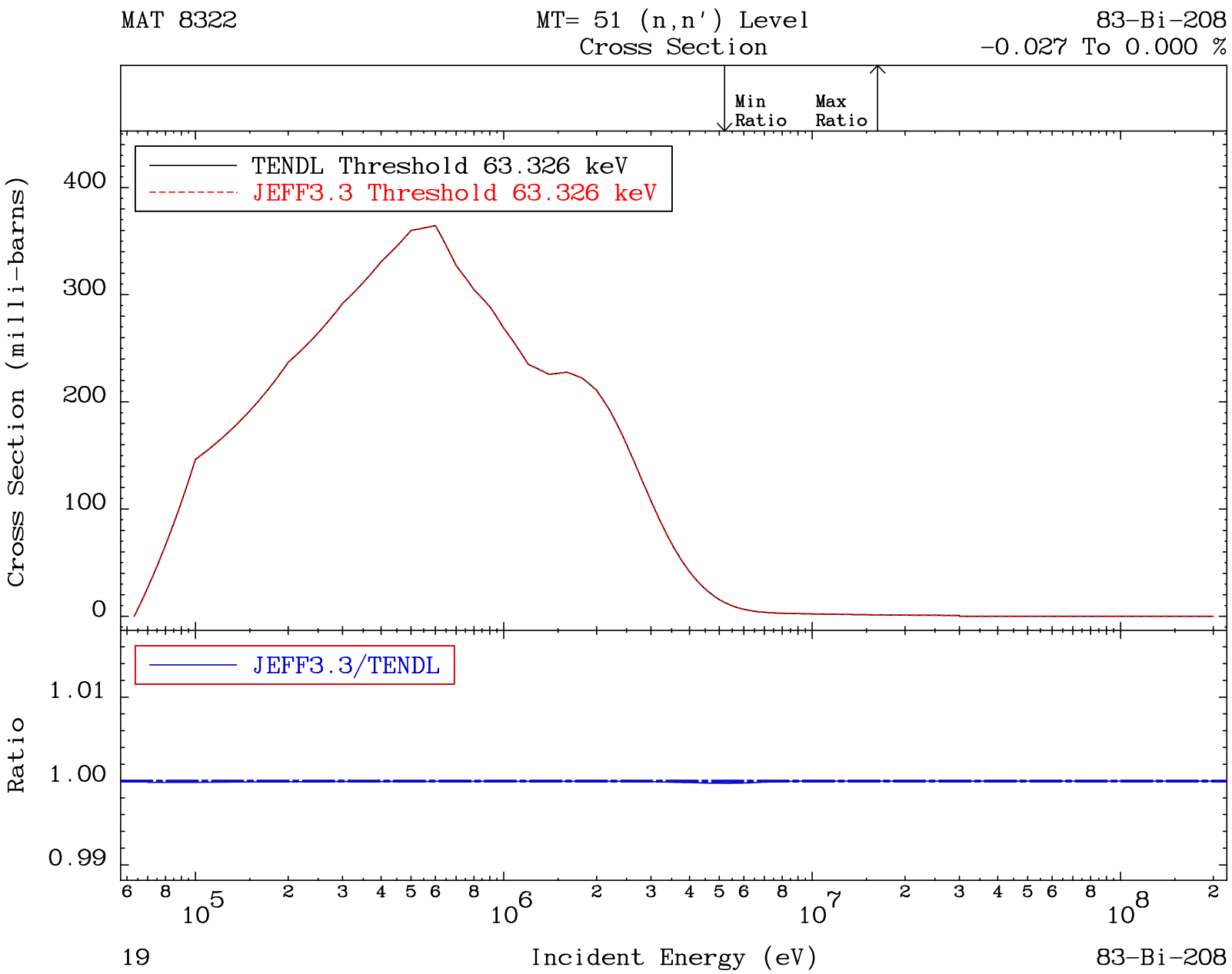

MAT 8322
(n,4n)
Cross Section
83-Bi-208
-0.082 To 0.097 %
Max
Ratio
TENDL Threshold 22.127 MeV
JEFF3.3 Threshold 22.127 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
83-Bi-208

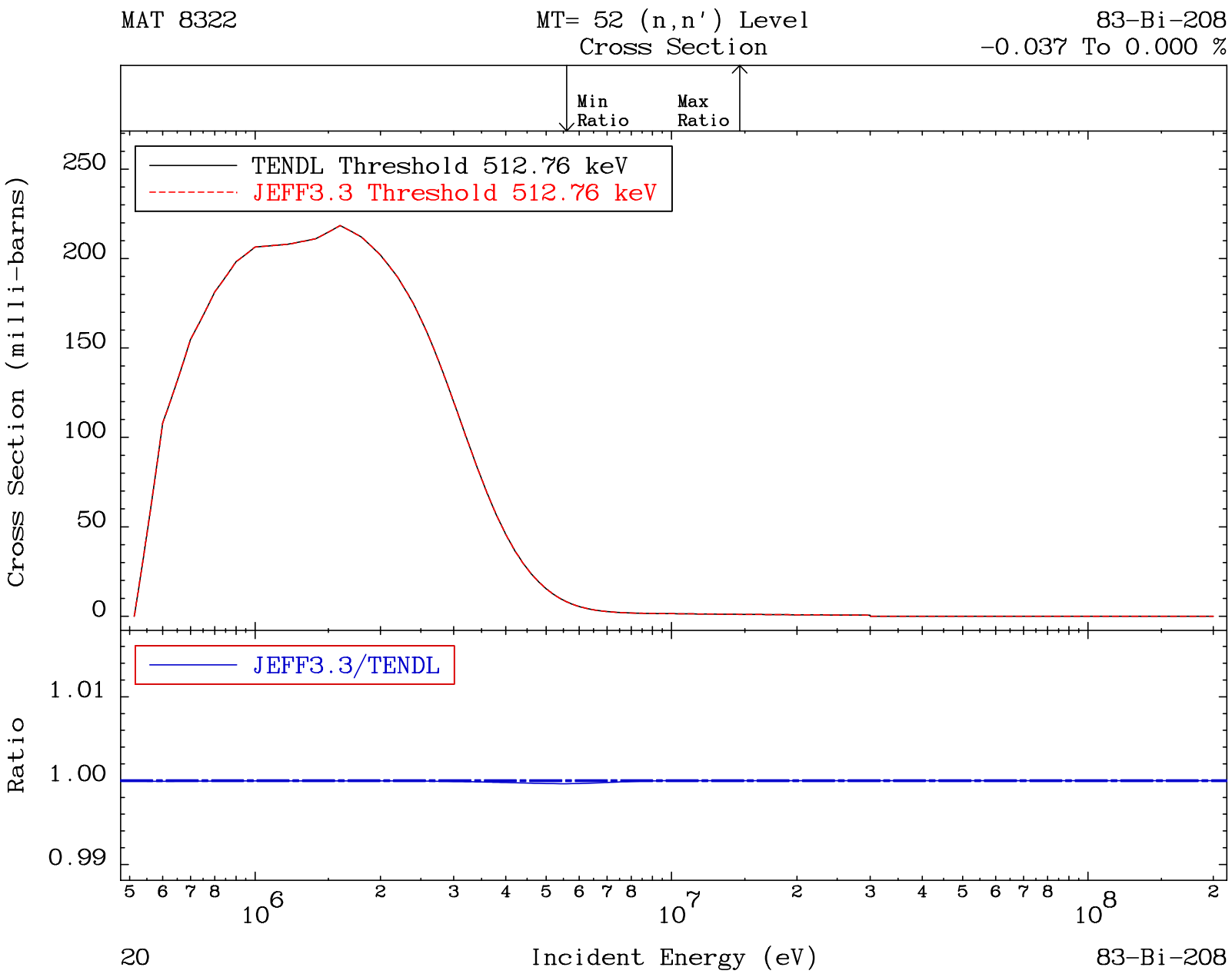

MAT 8322
(n,2n) p
Cross Section
83-Bi-208
-1.623 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 10.496 MeV
JEFF3.3 Threshold 10.496 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.000
0.990
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
83-Bi-208

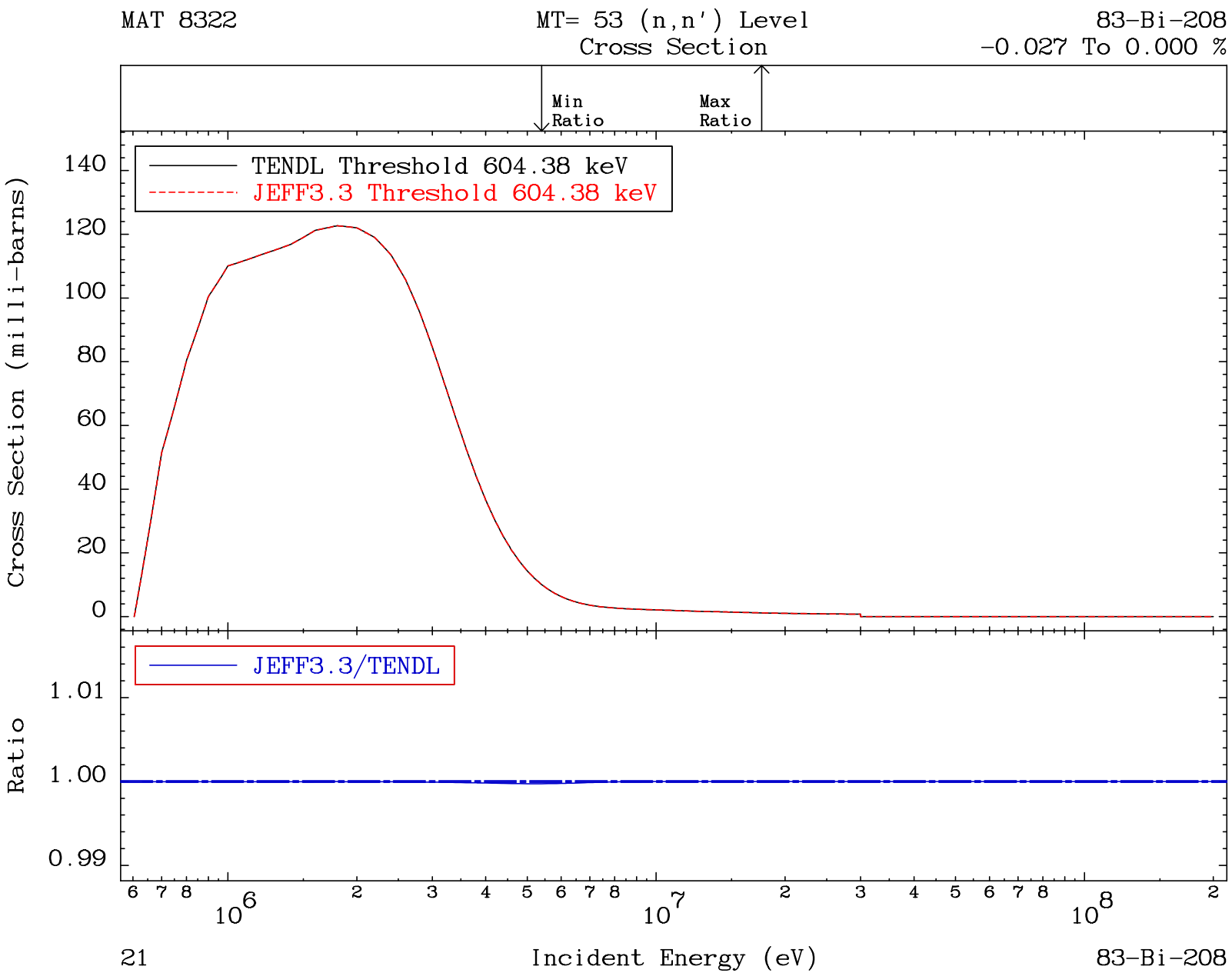

MAT 8322
(n,3n) p
Cross Section
83-Bi-208
-1.533 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.622 MeV
JEFF3.3 Threshold 18.622 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
83-Bi-208

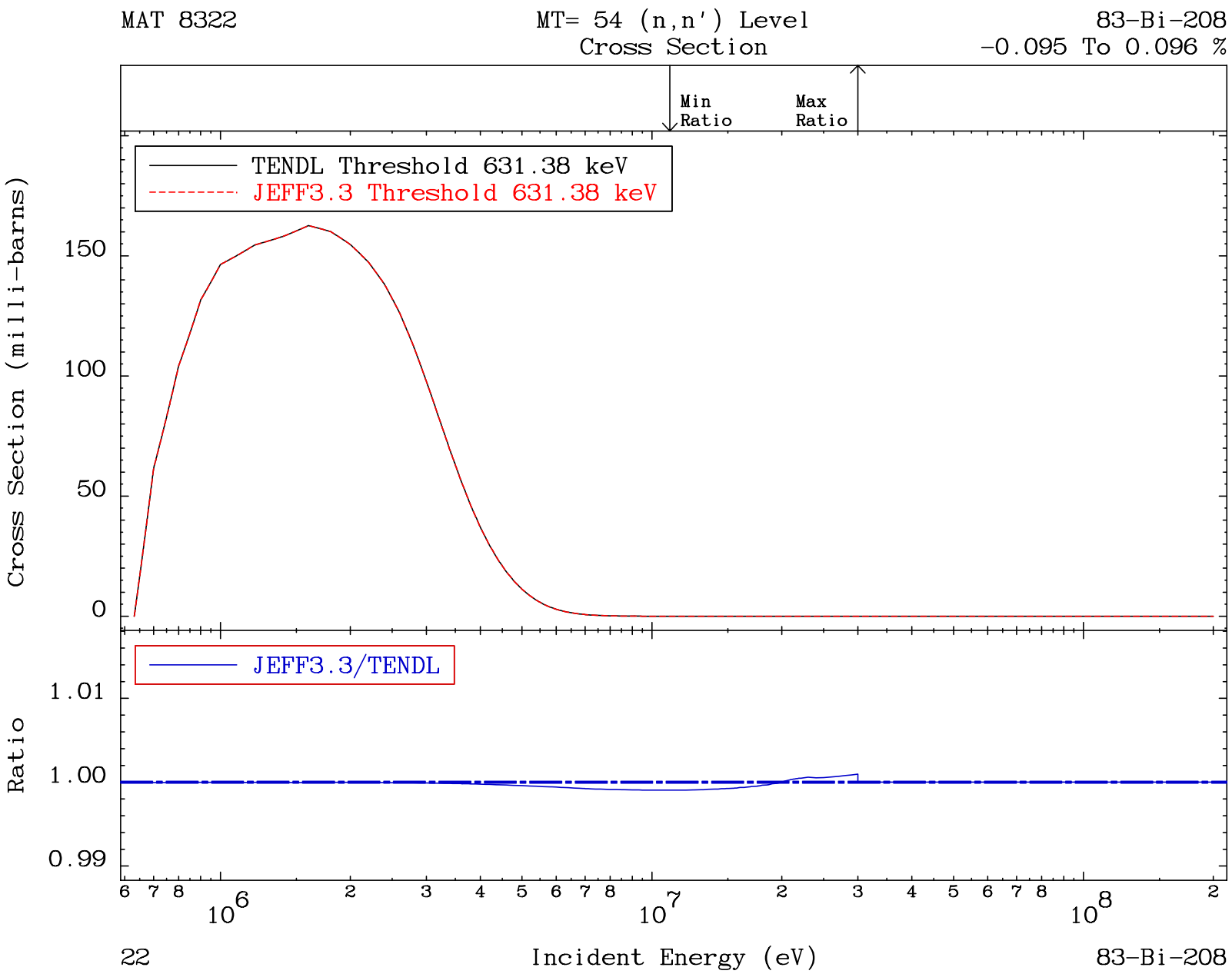

MAT 8322
(n,2n) p
Cross Section
83-Bi-208
-0.454 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.249 MeV
JEFF3.3 Threshold 11.249 MeV
Cross Section (10^{-9} barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
83-Bi-208

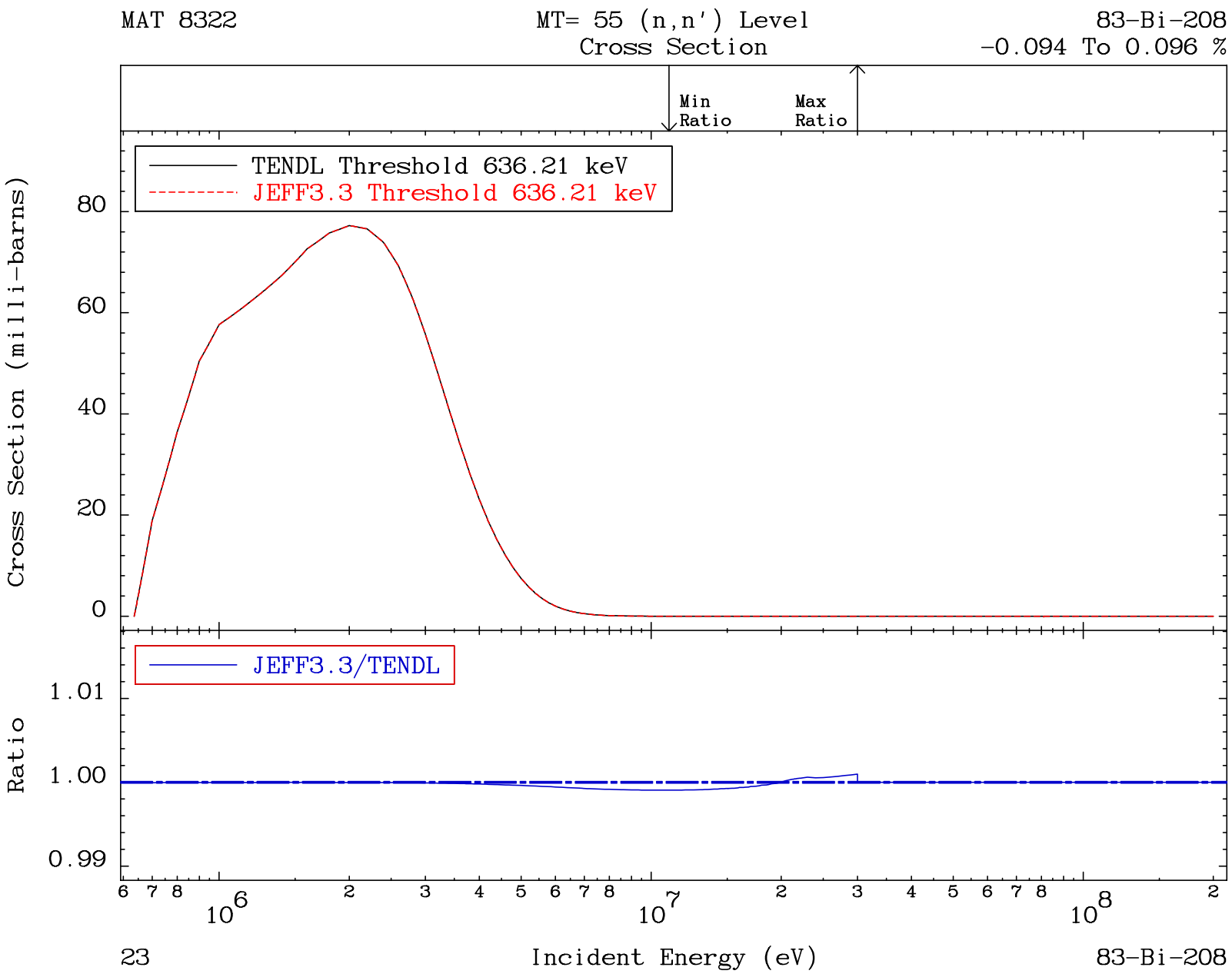

MAT 8322
(n,n') p α
Cross Section
83-Bi-208
-35.82 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.3309 MeV
JEFF3.3 Threshold 3.3309 MeV
Cross Section (10^{-9} barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
83-Bi-208

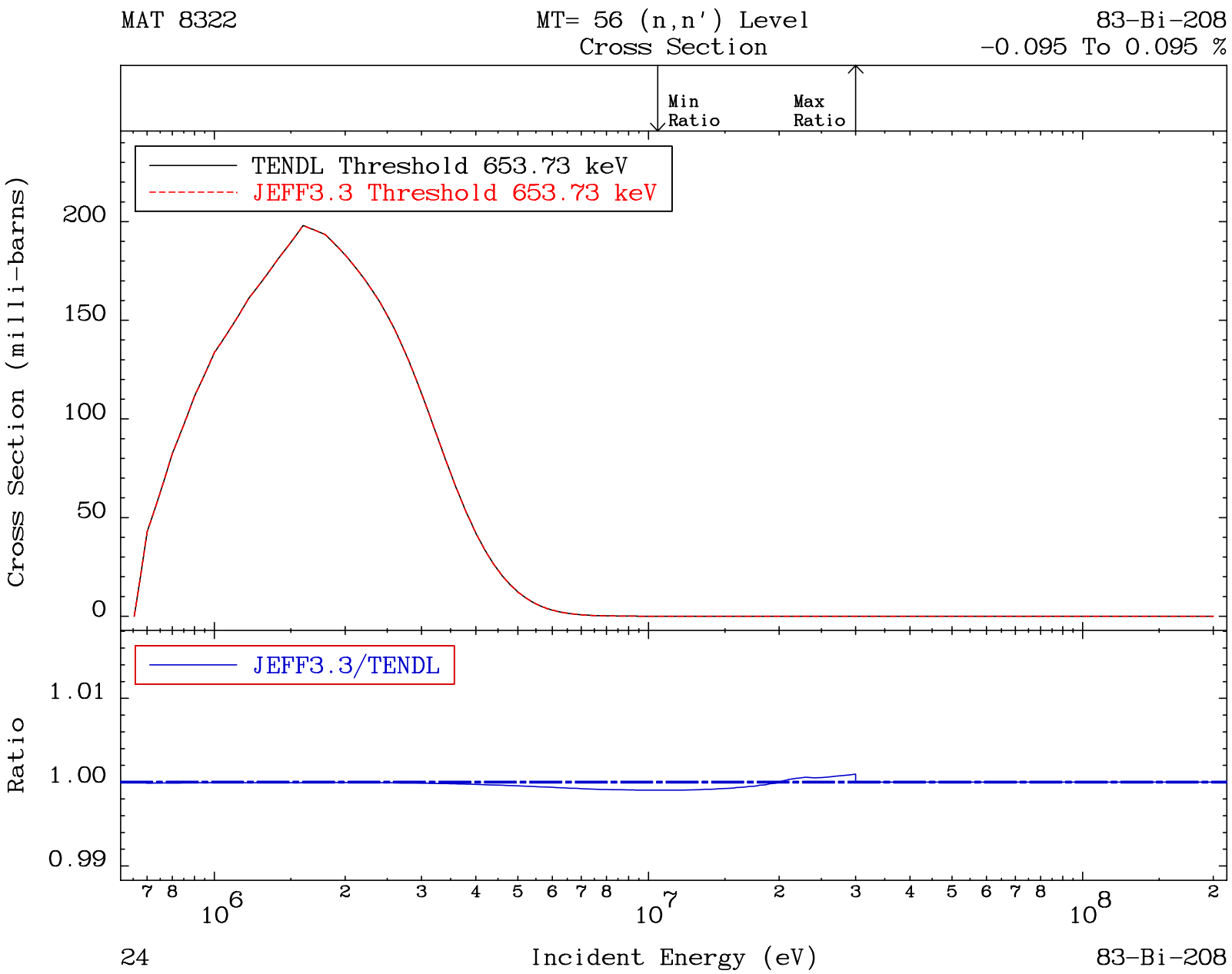

MAT 8322
MT= 51 (n,n') Level
Cross Section
83-Bi-208
-0.027 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 63.326 keV
JEFF3.3 Threshold 63.326 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
83-Bi-208

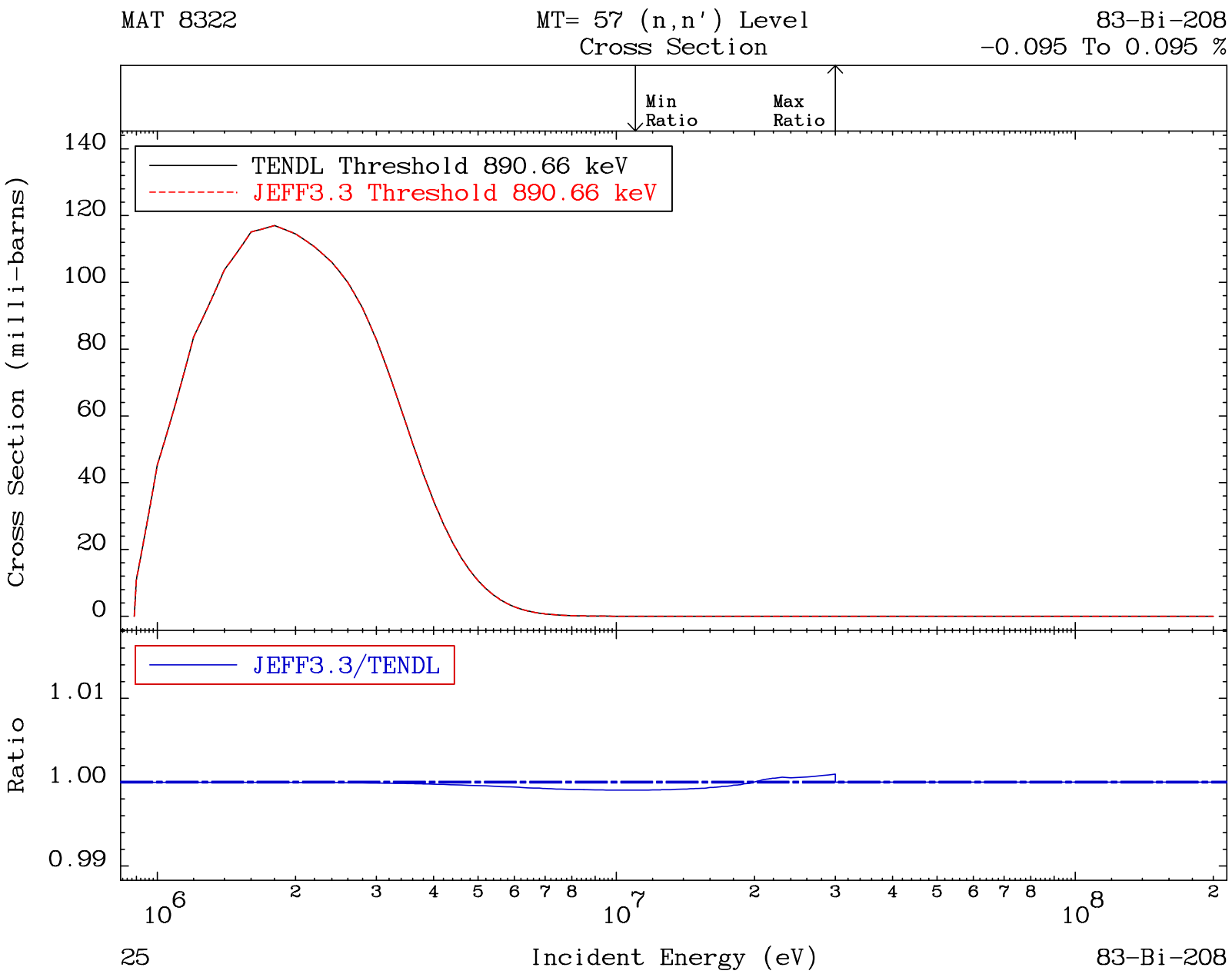

MAT 8322
MT= 52 (n,n') Level
Cross Section
83-Bi-208
-0.037 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 512.76 keV
JEFF3.3 Threshold 512.76 keV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
83-Bi-208

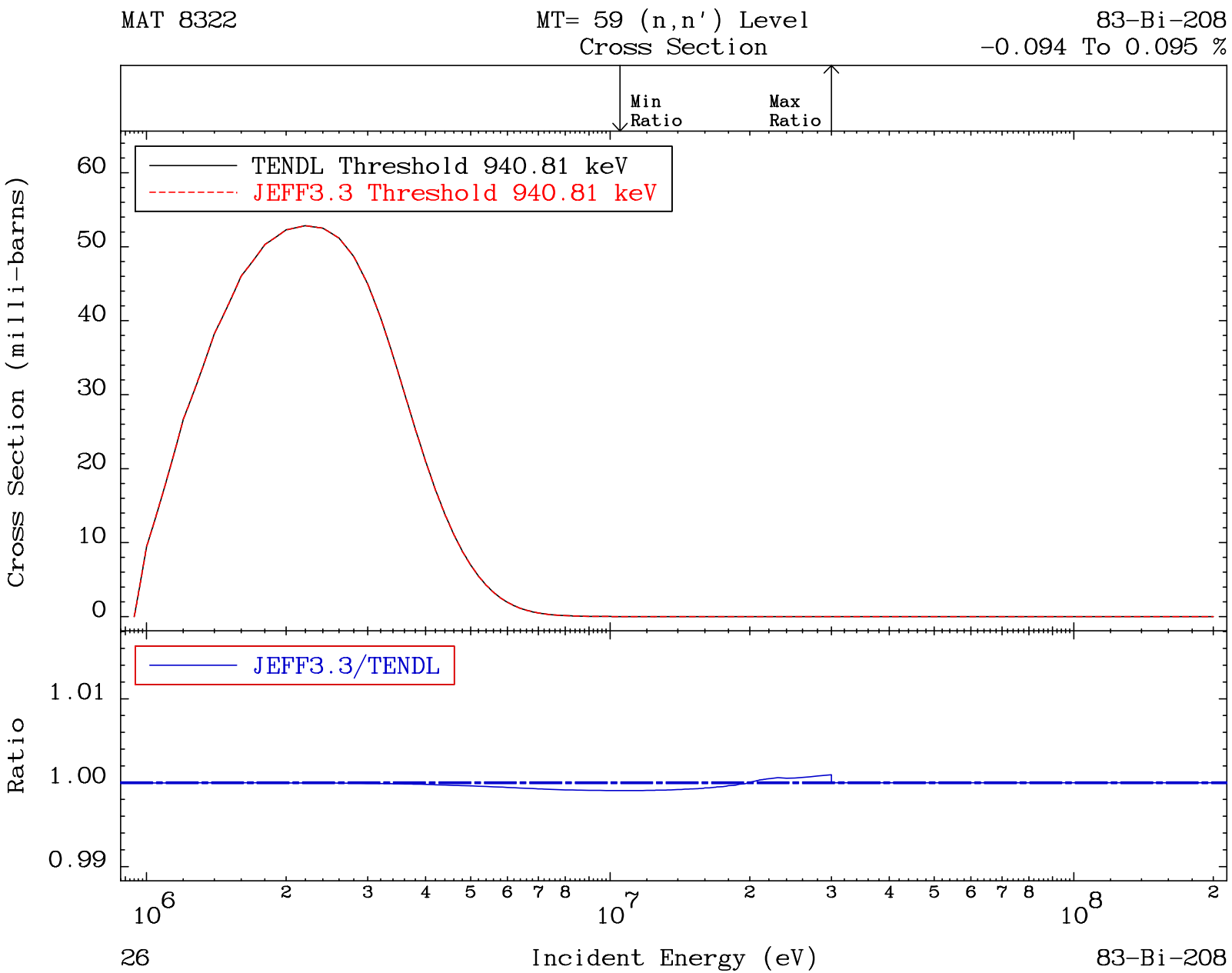

MAT 8322
MT= 53 (n,n') Level
Cross Section
83-Bi-208
-0.027 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 604.38 keV
JEFF3.3 Threshold 604.38 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
21
Incident Energy (eV)
83-Bi-208

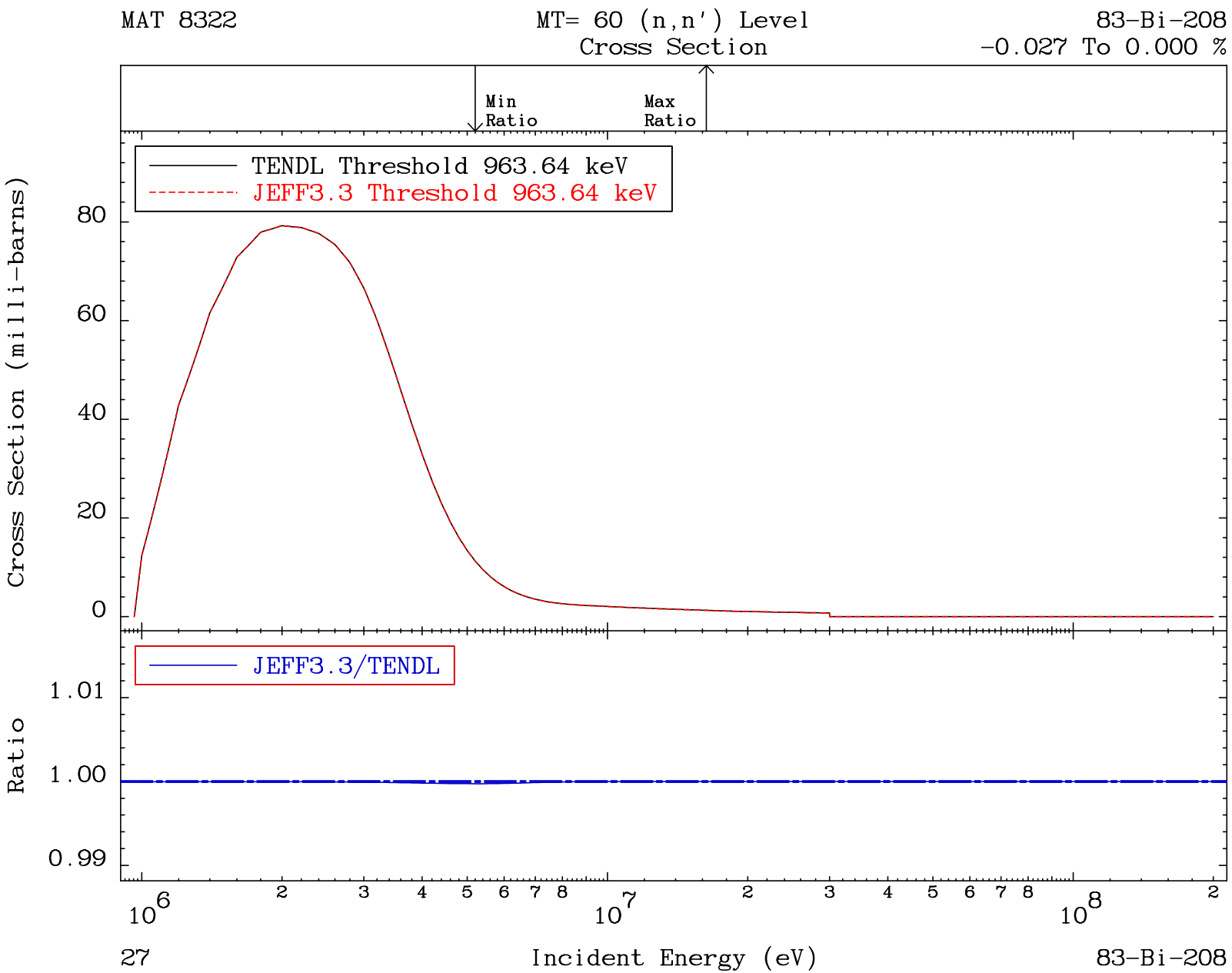

MAT 8322
MT= 54 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.096 %
Min Ratio
Max Ratio
TENDL Threshold 631.38 keV
JEFF3.3 Threshold 631.38 keV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
83-Bi-208

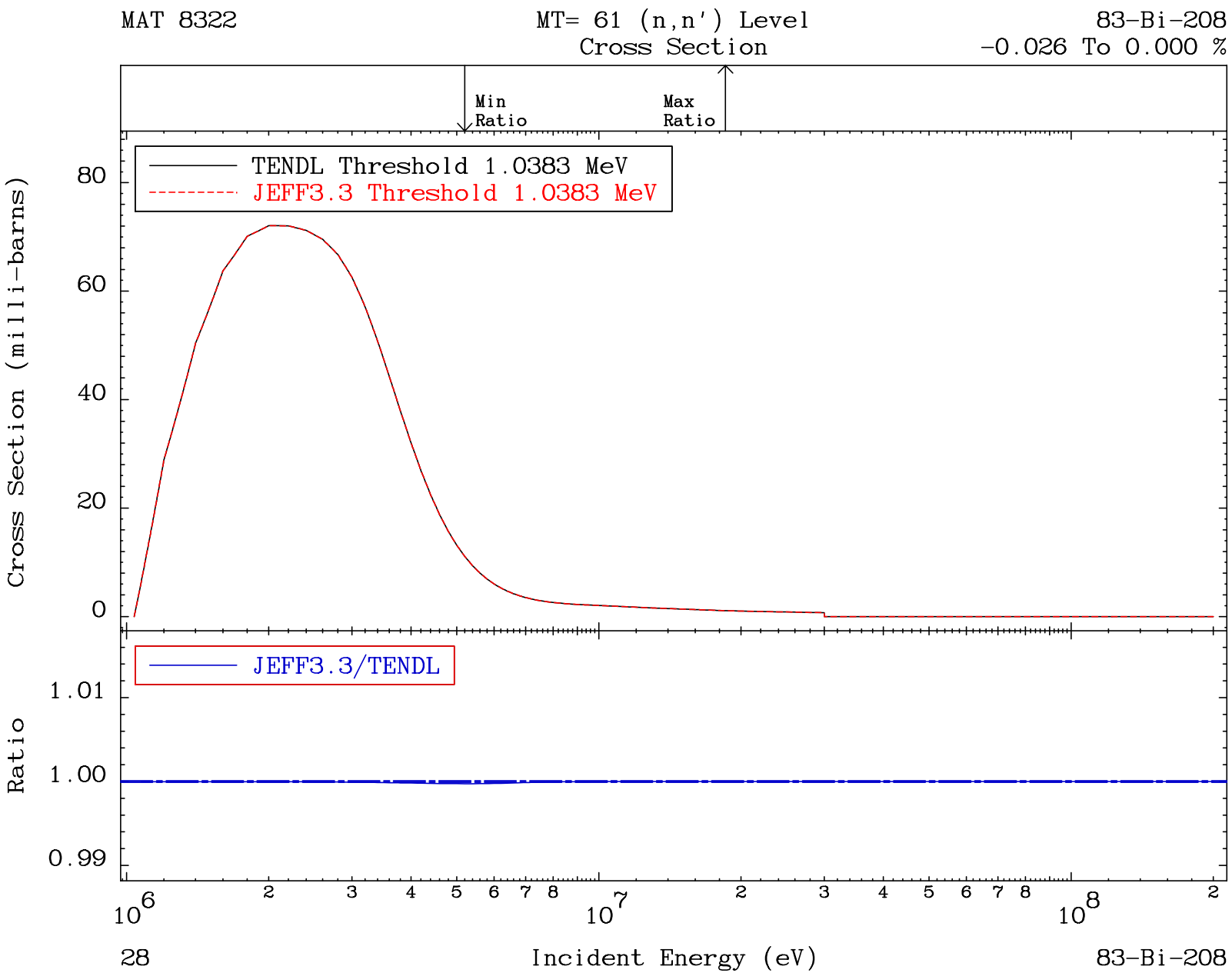

MAT 8322
MT= 55 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min Ratio
Max Ratio
TENDL Threshold 636.21 keV
JEFF3.3 Threshold 636.21 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
83-Bi-208

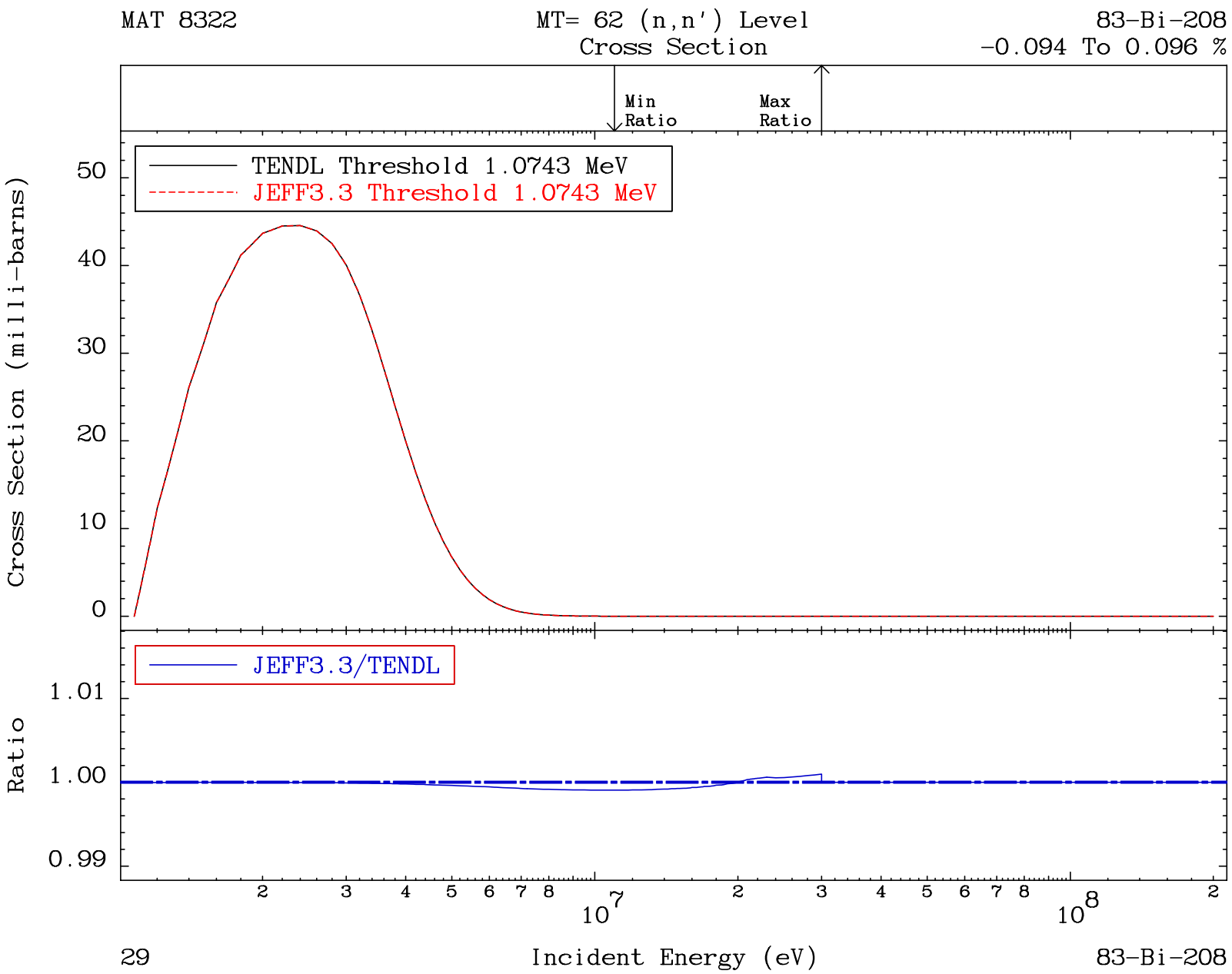

MAT 8322
MT= 56 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 653.73 keV
JEFF3.3 Threshold 653.73 keV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
83-Bi-208

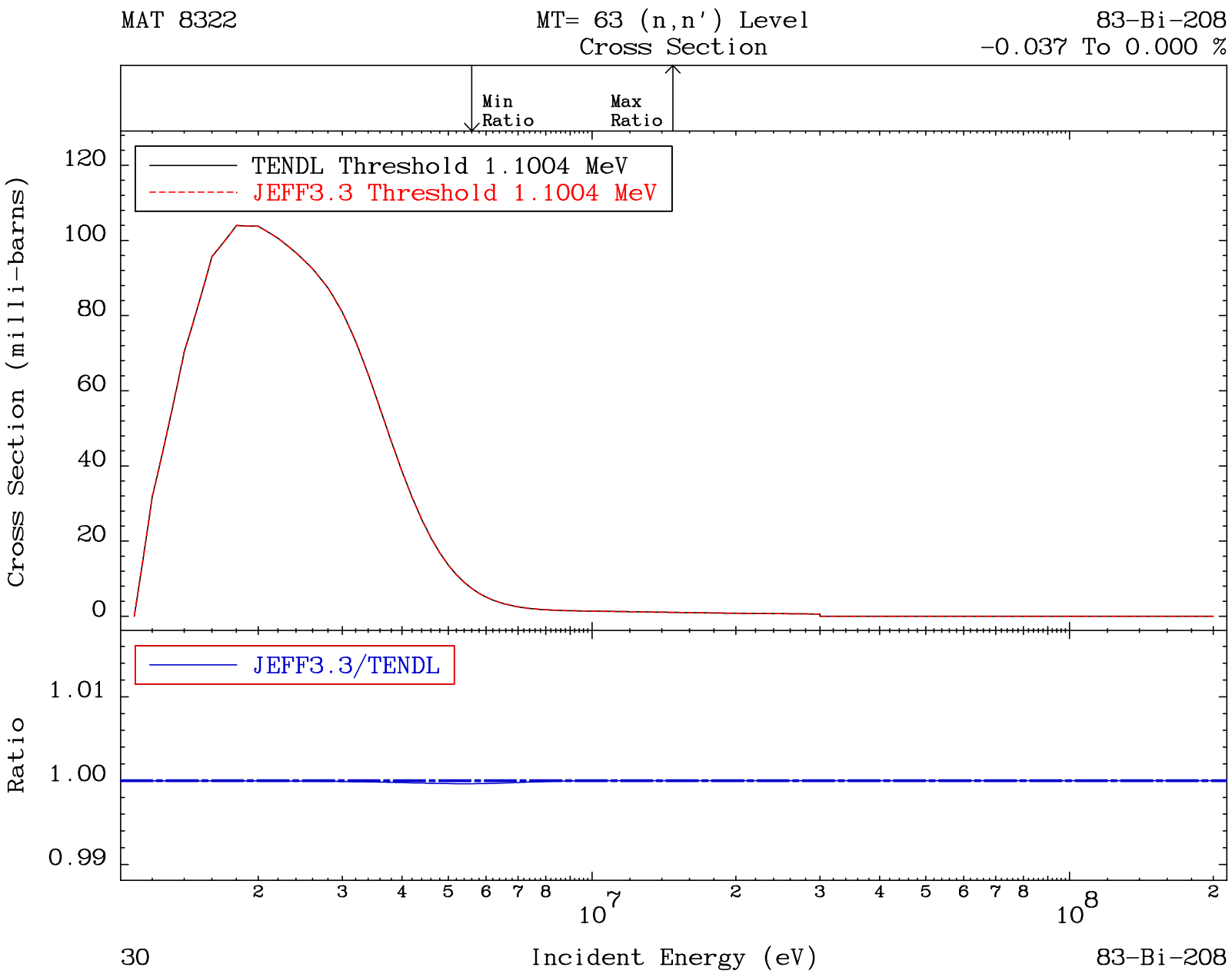

MAT 8322
MT= 57 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 890.66 keV
JEFF3.3 Threshold 890.66 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
83-Bi-208

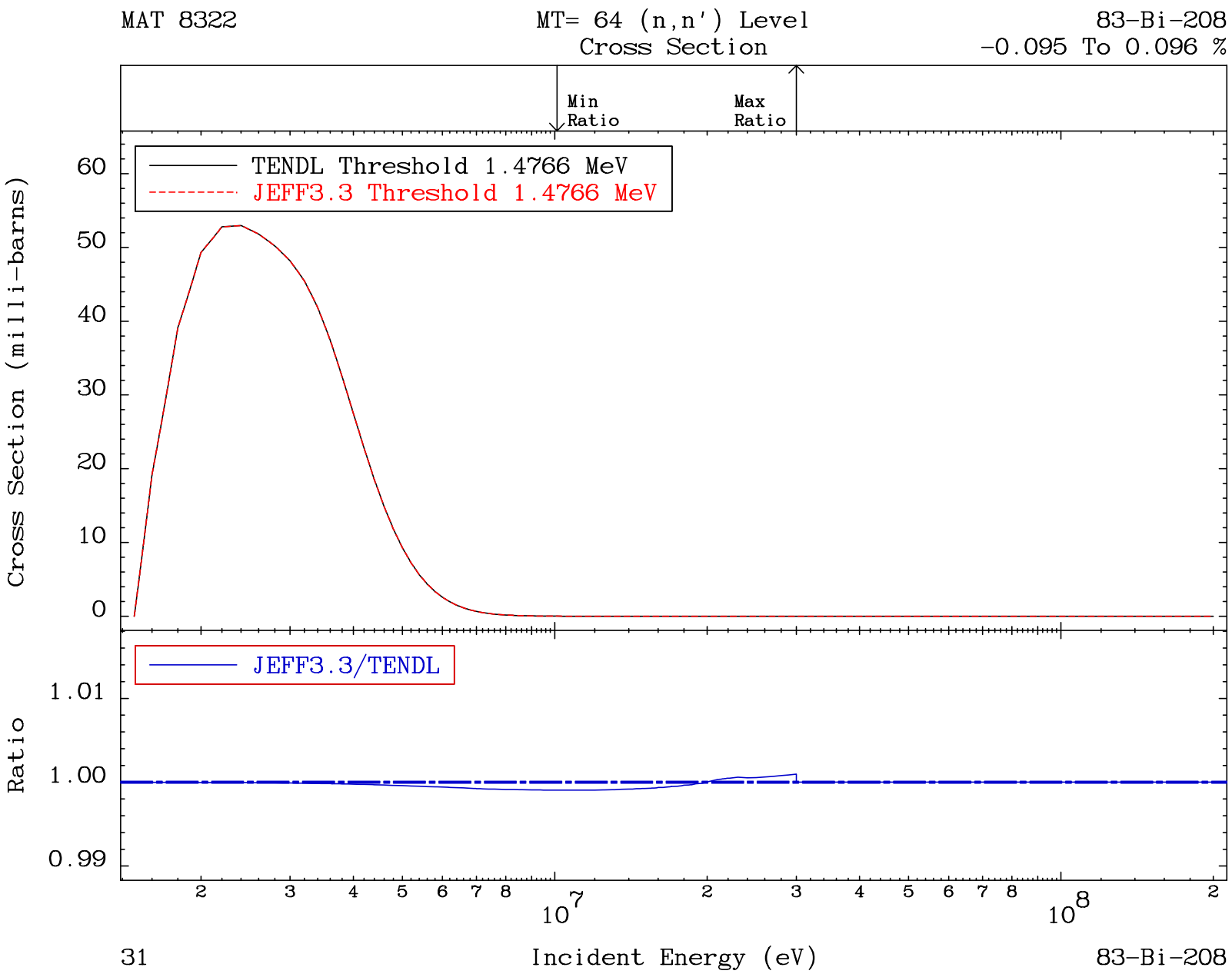

MAT 8322
MT= 59 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.095 %
Min Ratio
Max Ratio
TENDL Threshold 940.81 keV
JEFF3.3 Threshold 940.81 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
83-Bi-208

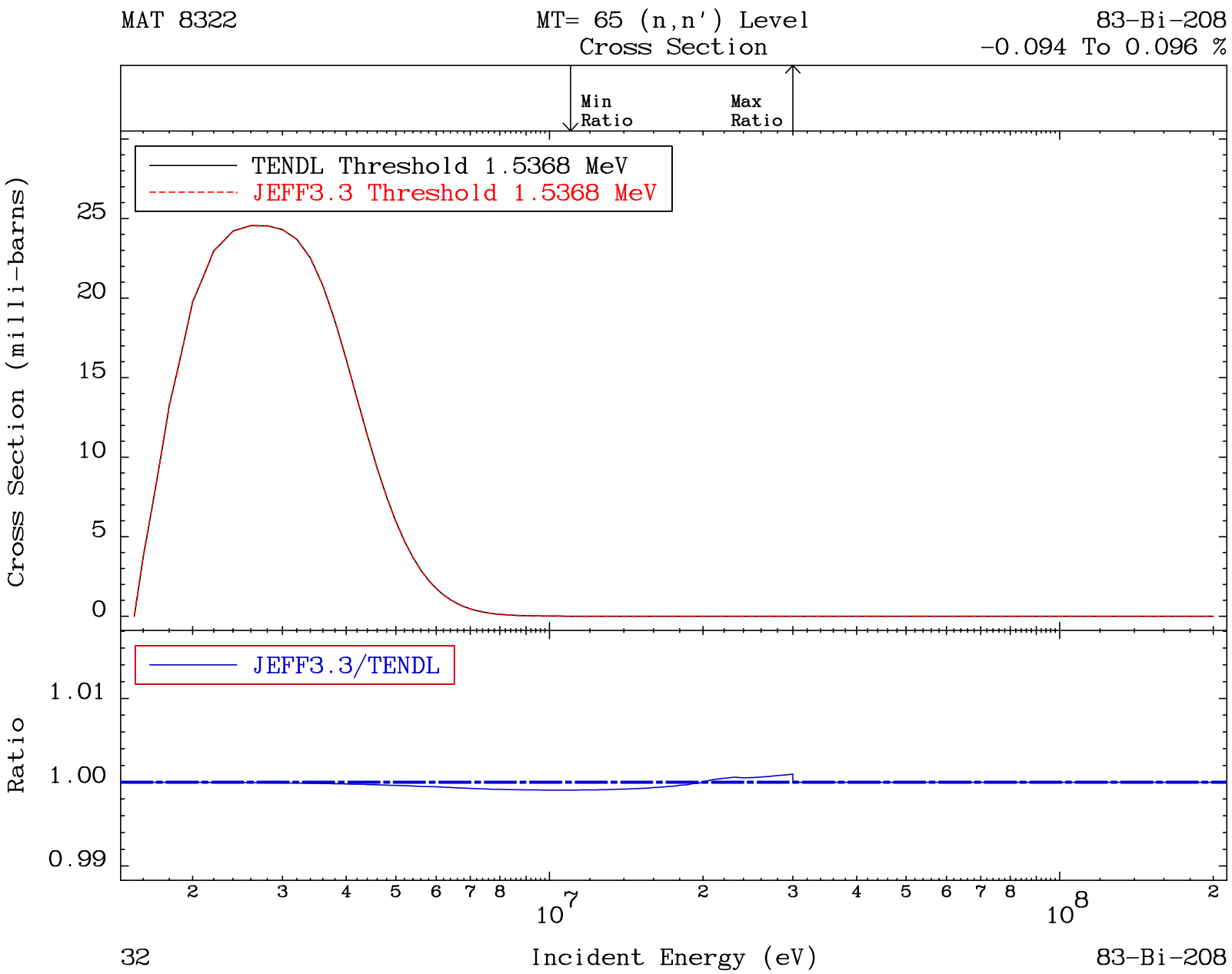

MAT 8322
MT= 60 (n,n') Level
Cross Section
83-Bi-208
-0.027 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 963.64 keV
JEFF3.3 Threshold 963.64 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
83-Bi-208

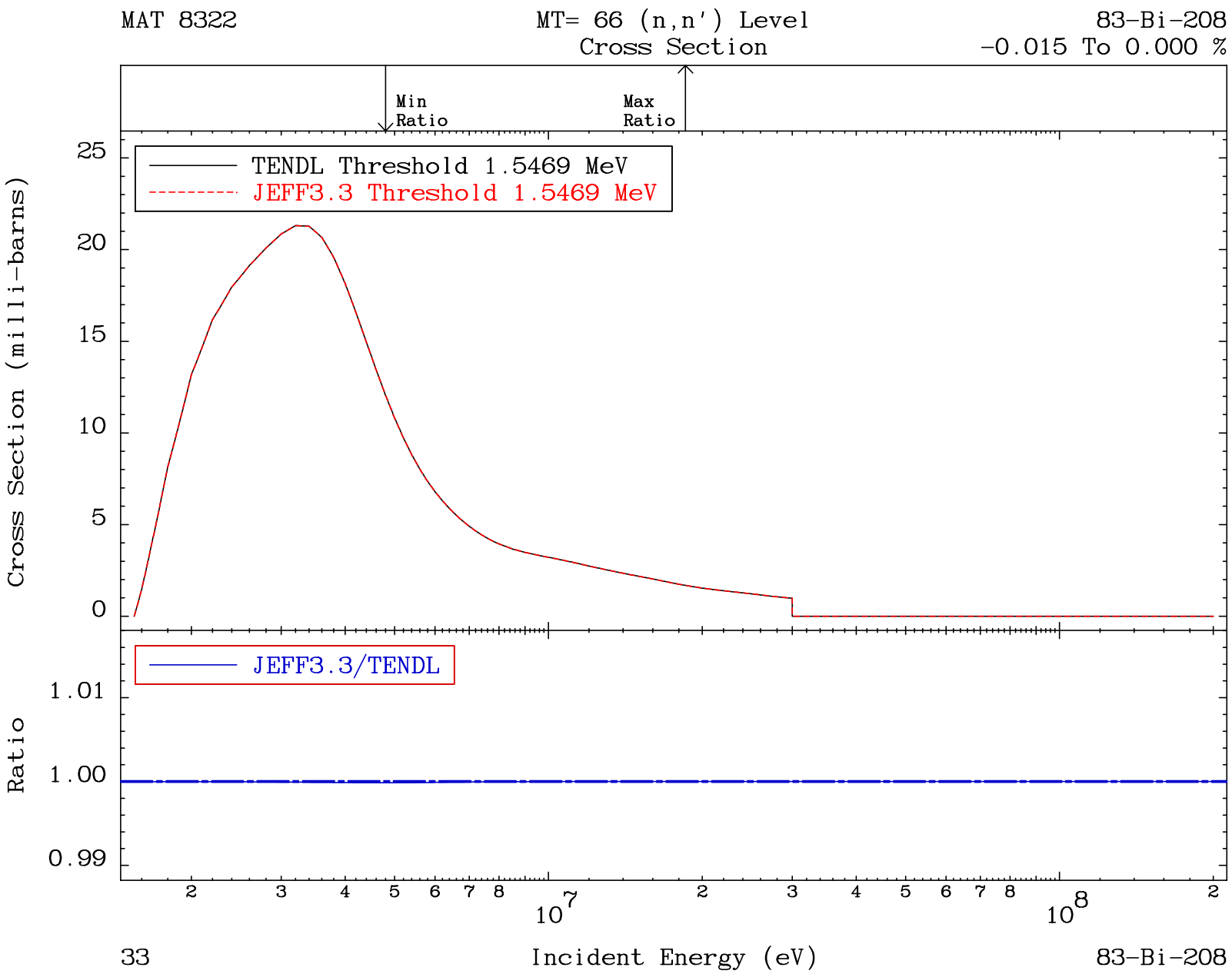

MAT 8322
MT= 61 (n,n') Level
Cross Section
83-Bi-208
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0383 MeV
JEFF3.3 Threshold 1.0383 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
83-Bi-208

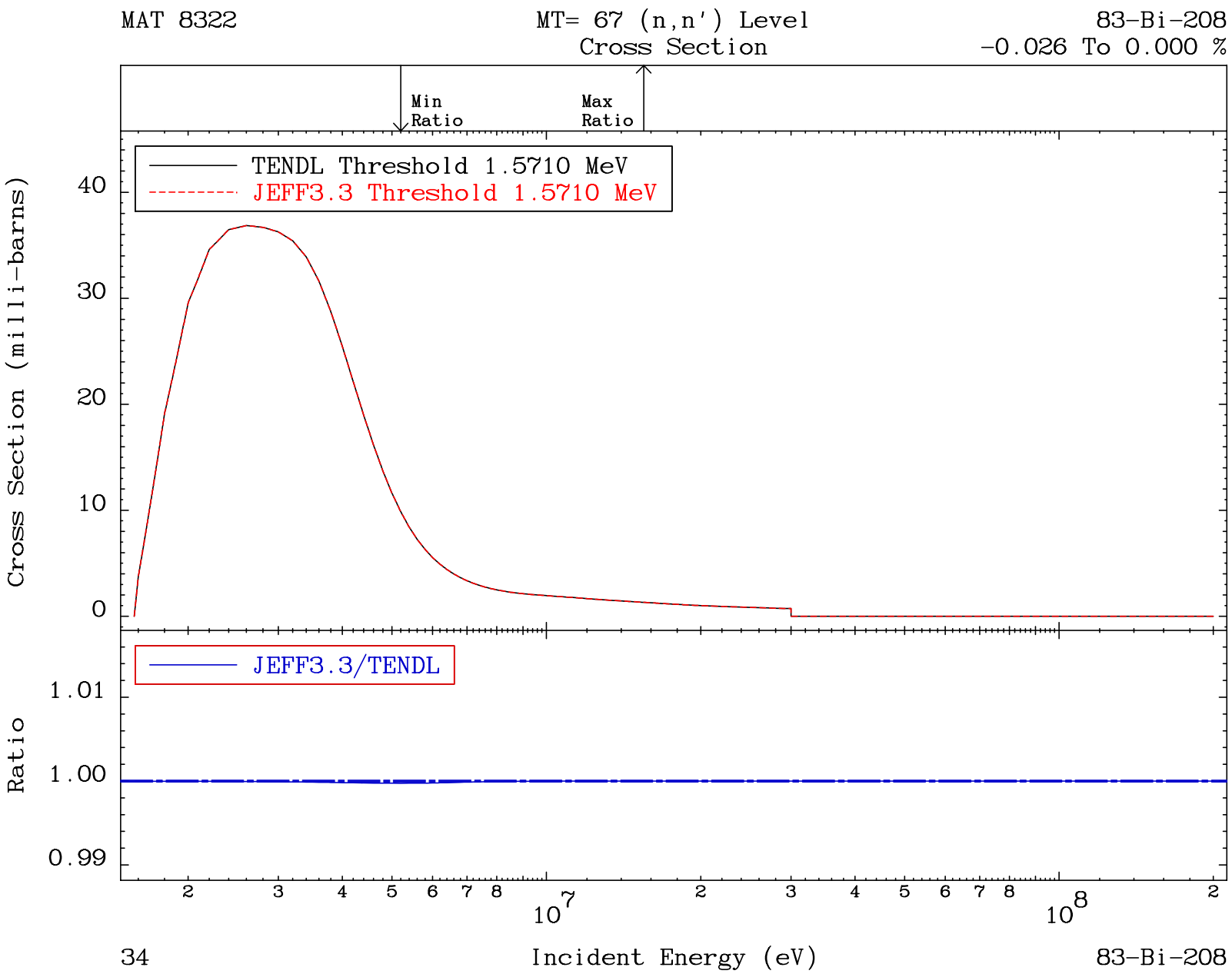

MAT 8322
MT= 62 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0743 MeV
JEFF3.3 Threshold 1.0743 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
83-Bi-208

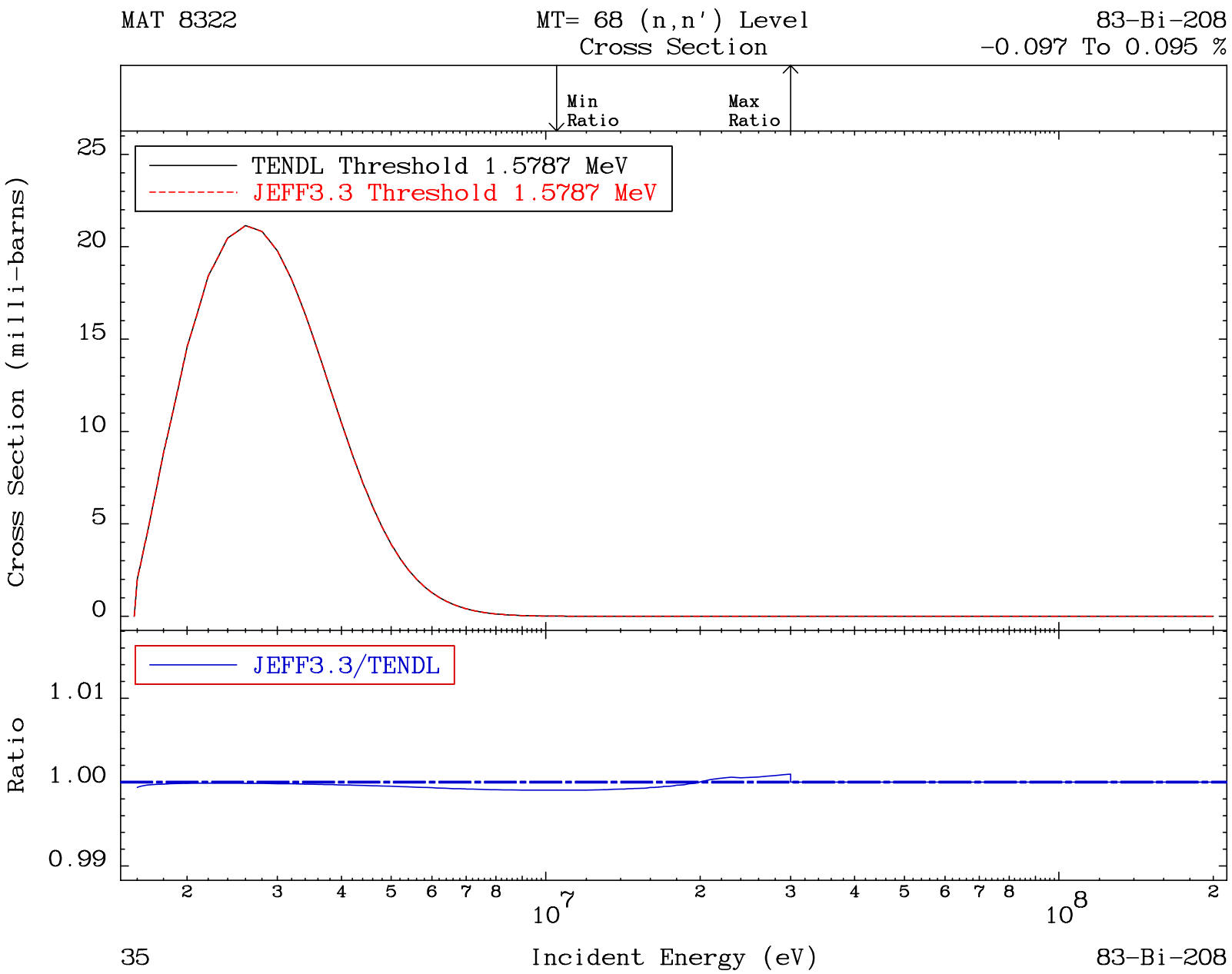

MAT 8322
MT= 63 (n,n') Level
Cross Section
83-Bi-208
-0.037 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.1004 MeV
JEFF3.3 Threshold 1.1004 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
83-Bi-208

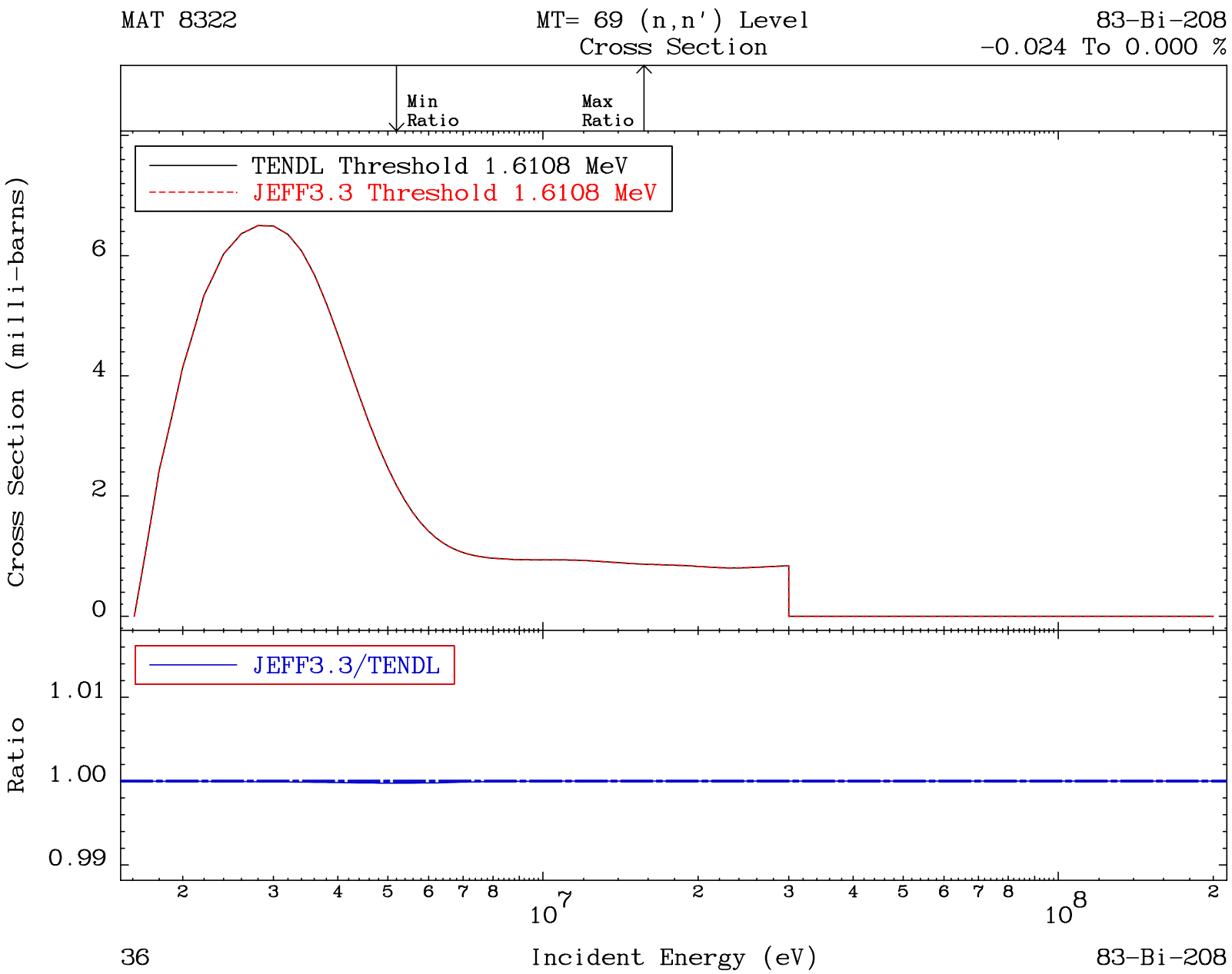

MAT 8322
MT= 64 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.4766 MeV
JEFF3.3 Threshold 1.4766 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
31
Incident Energy (eV)
83-Bi-208

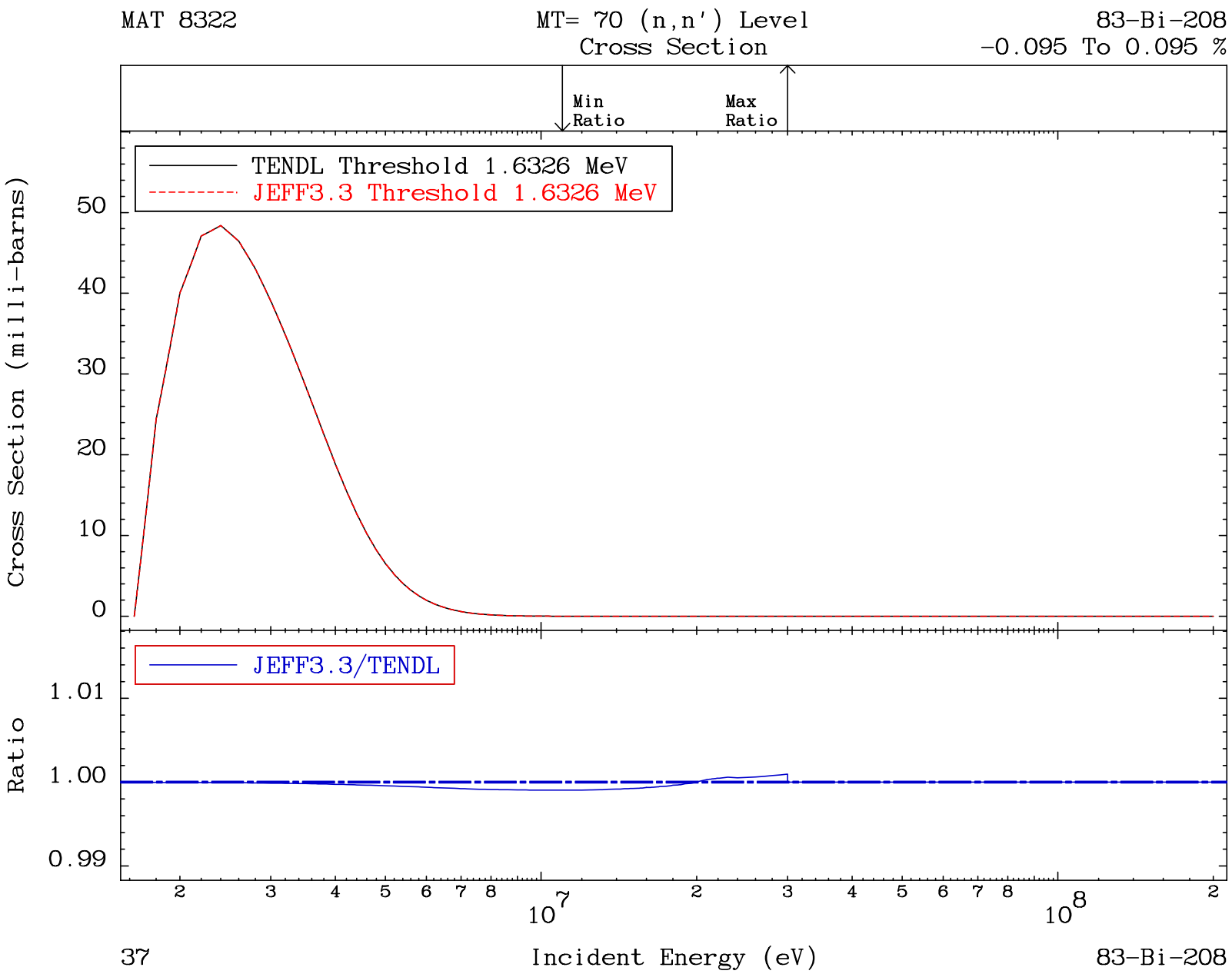

MAT 8322
MT= 65 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5368 MeV
JEFF3.3 Threshold 1.5368 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
83-Bi-208

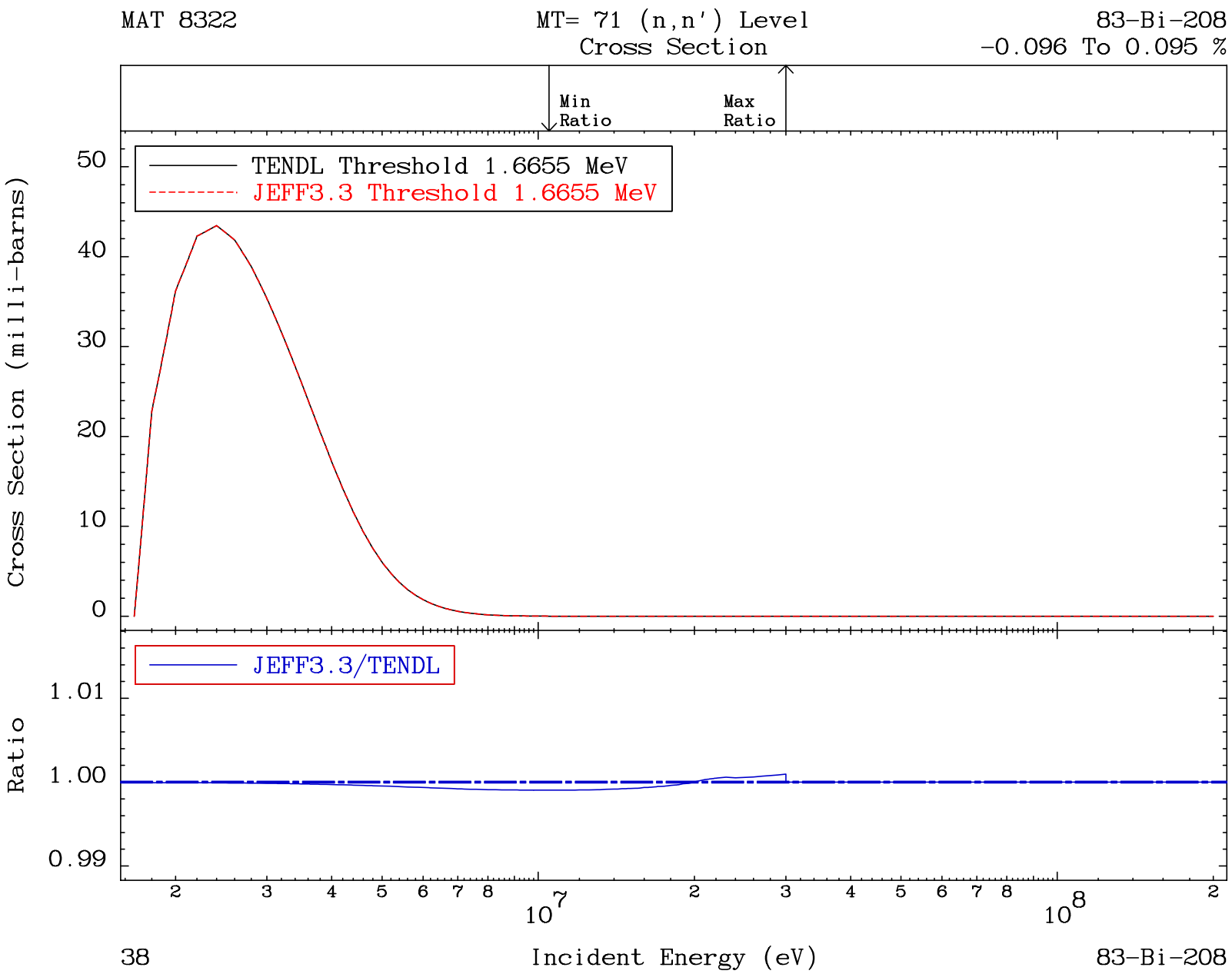

MAT 8322
MT= 66 (n,n') Level
Cross Section
83-Bi-208
-0.015 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5469 MeV
JEFF3.3 Threshold 1.5469 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
33
Incident Energy (eV)
83-Bi-208

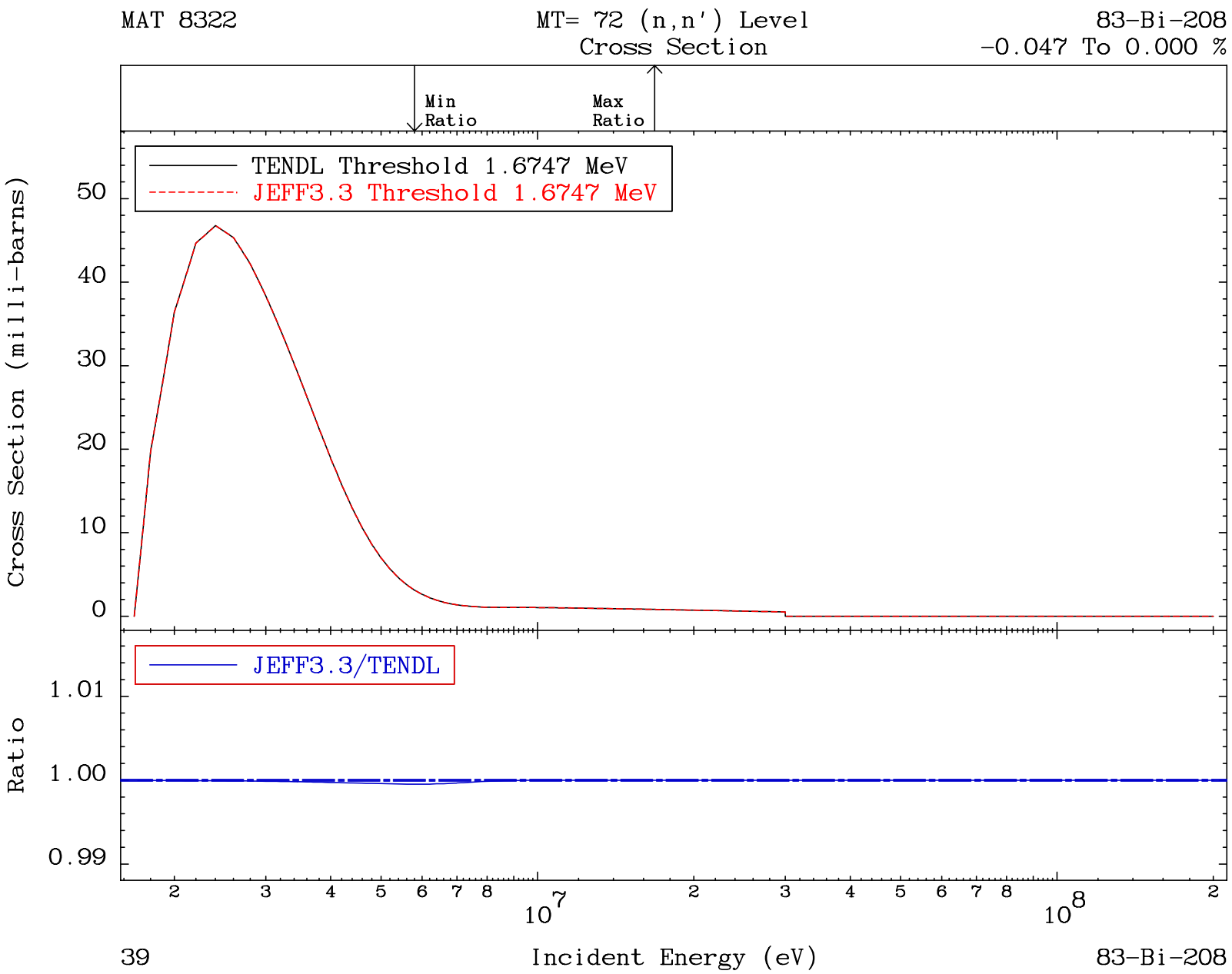

MAT 8322
MT= 67 (n,n') Level
Cross Section
83-Bi-208
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5710 MeV
JEFF3.3 Threshold 1.5710 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
34
Incident Energy (eV)
83-Bi-208

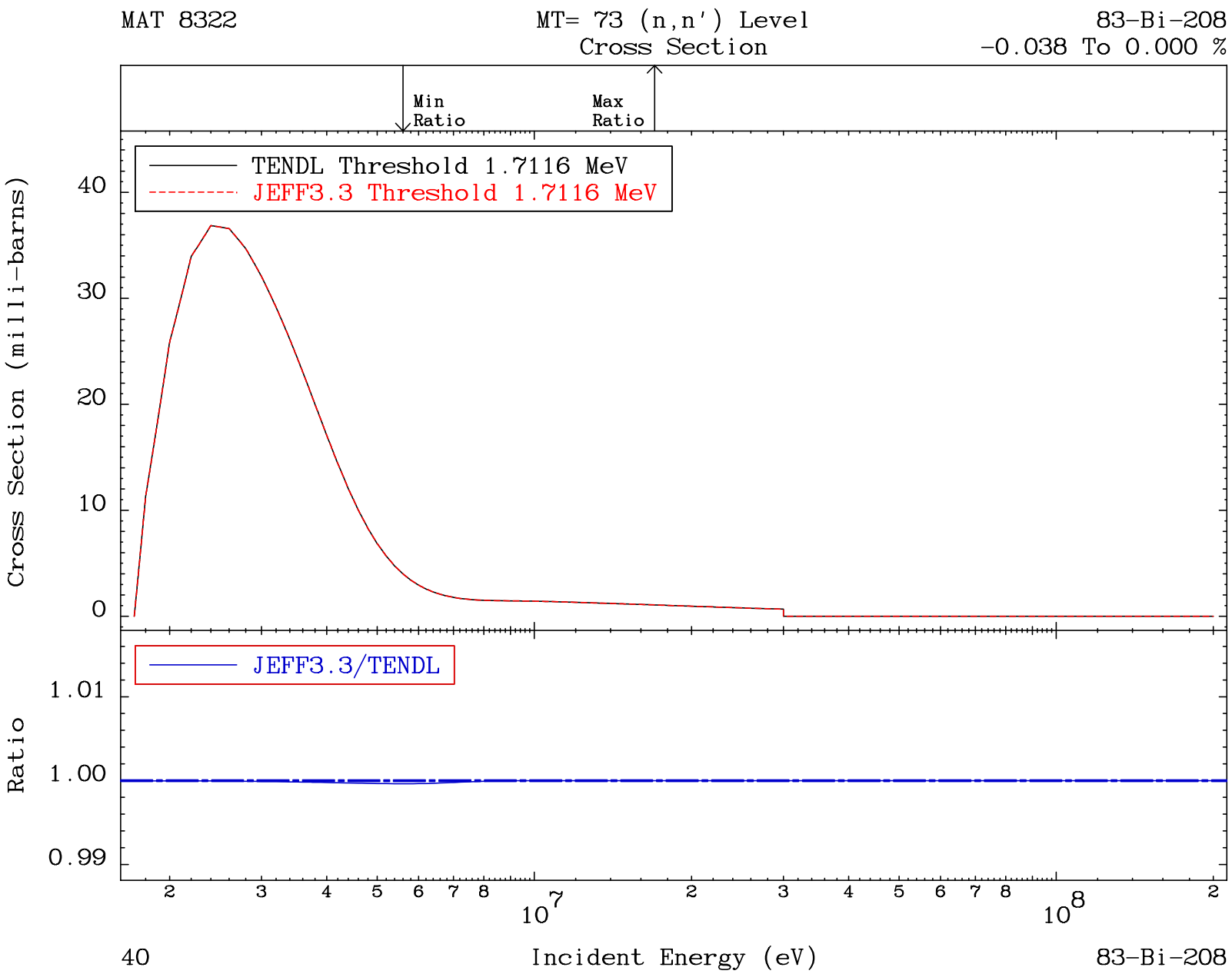

MAT 8322
MT= 68 (n,n') Level
Cross Section
83-Bi-208
-0.097 To 0.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.5787 MeV
JEFF3.3 Threshold 1.5787 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
35
Incident Energy (eV)
83-Bi-208

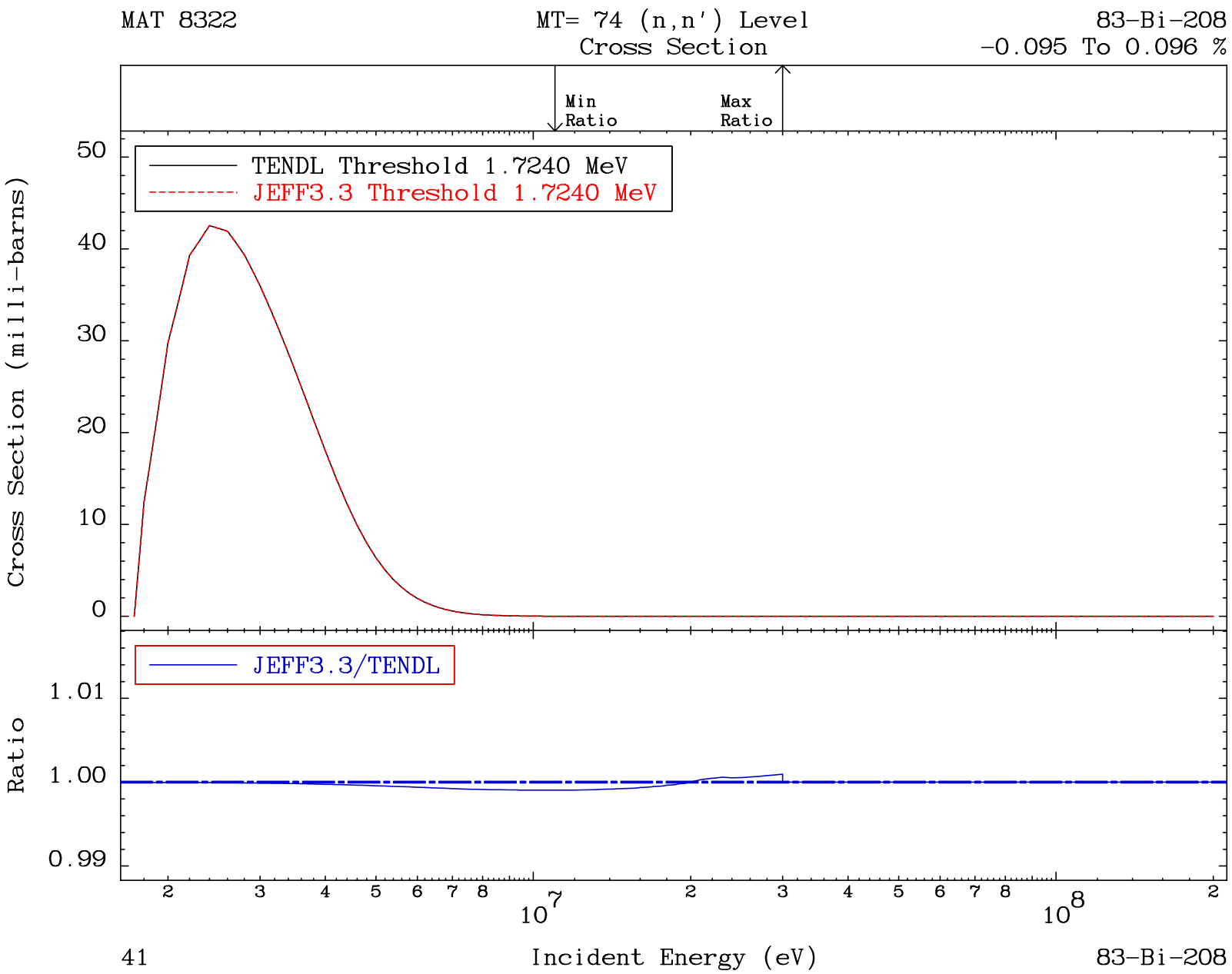

MAT 8322
MT= 69 (n,n') Level
Cross Section
83-Bi-208
-0.024 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6108 MeV
JEFF3.3 Threshold 1.6108 MeV
Cross Section (milli-barns)
0
2
4
6
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
36
Incident Energy (eV)
83-Bi-208

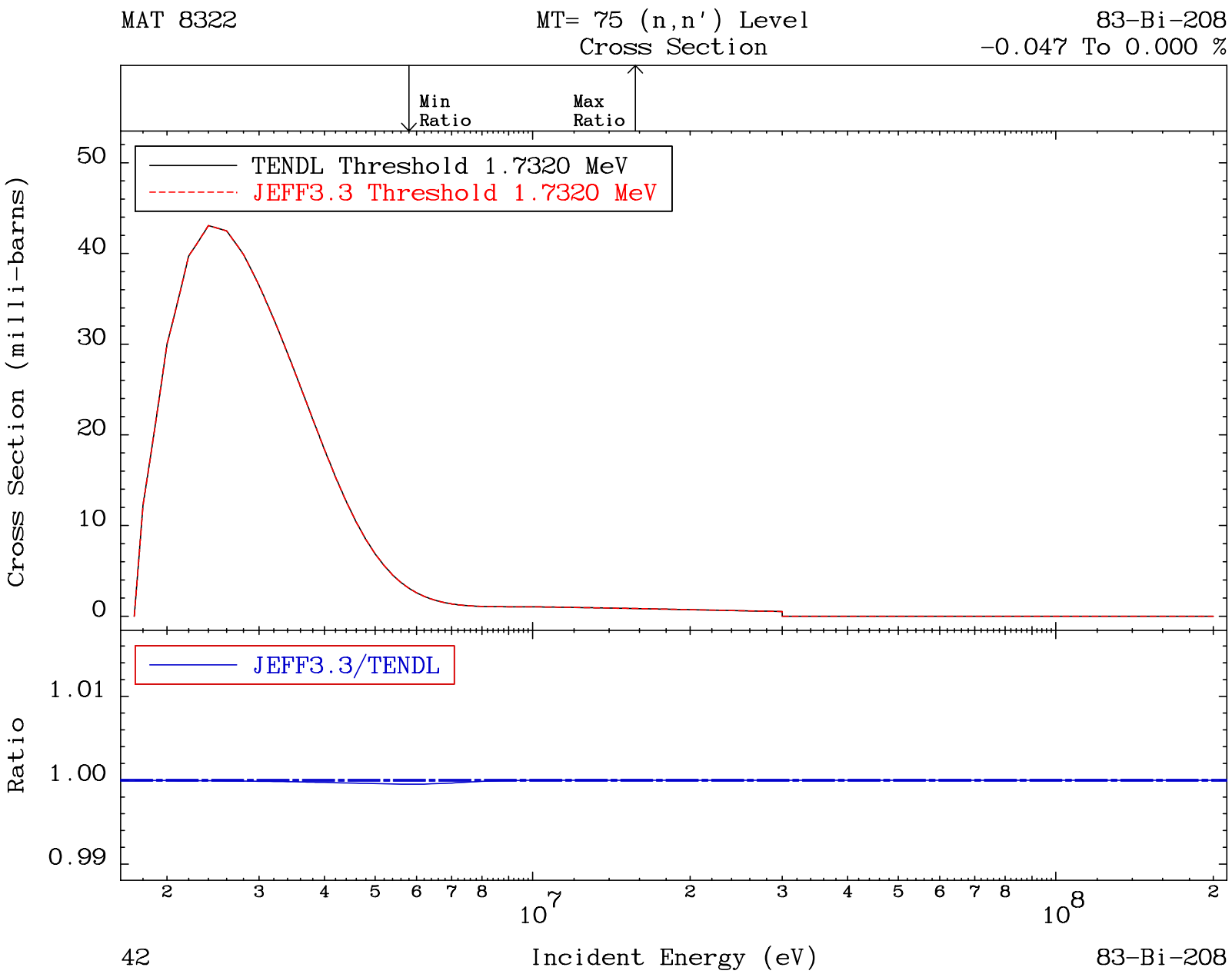

MAT 8322
MT= 70 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6326 MeV
JEFF3.3 Threshold 1.6326 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
83-Bi-208

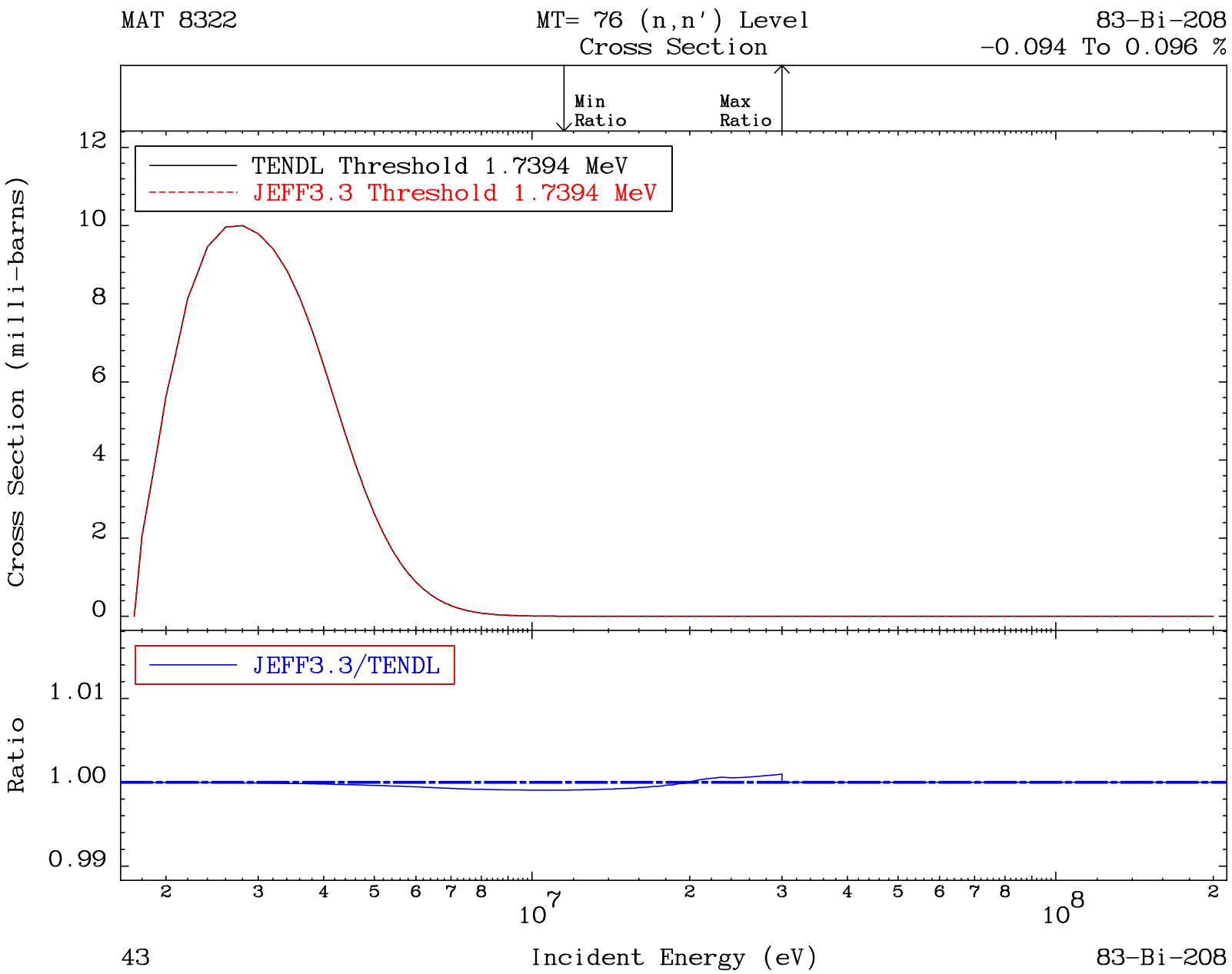

MAT 8322
MT= 71 (n,n') Level
Cross Section
83-Bi-208
-0.096 To 0.095 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6655 MeV
JEFF3.3 Threshold 1.6655 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
38
Incident Energy (eV)
83-Bi-208

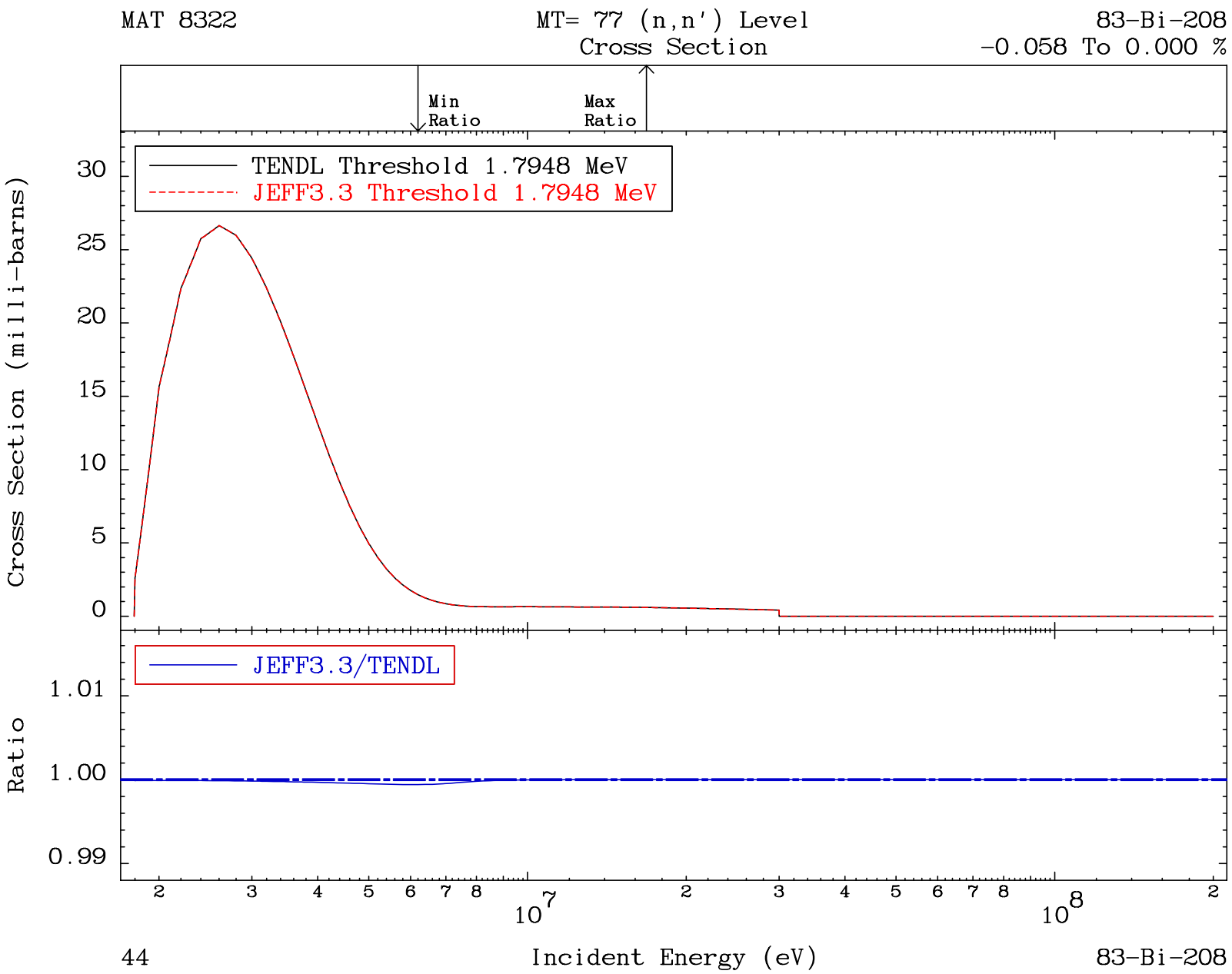

MAT 8322
MT= 72 (n,n') Level
Cross Section
83-Bi-208
-0.047 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.6747 MeV
JEFF3.3 Threshold 1.6747 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
39
Incident Energy (eV)
83-Bi-208

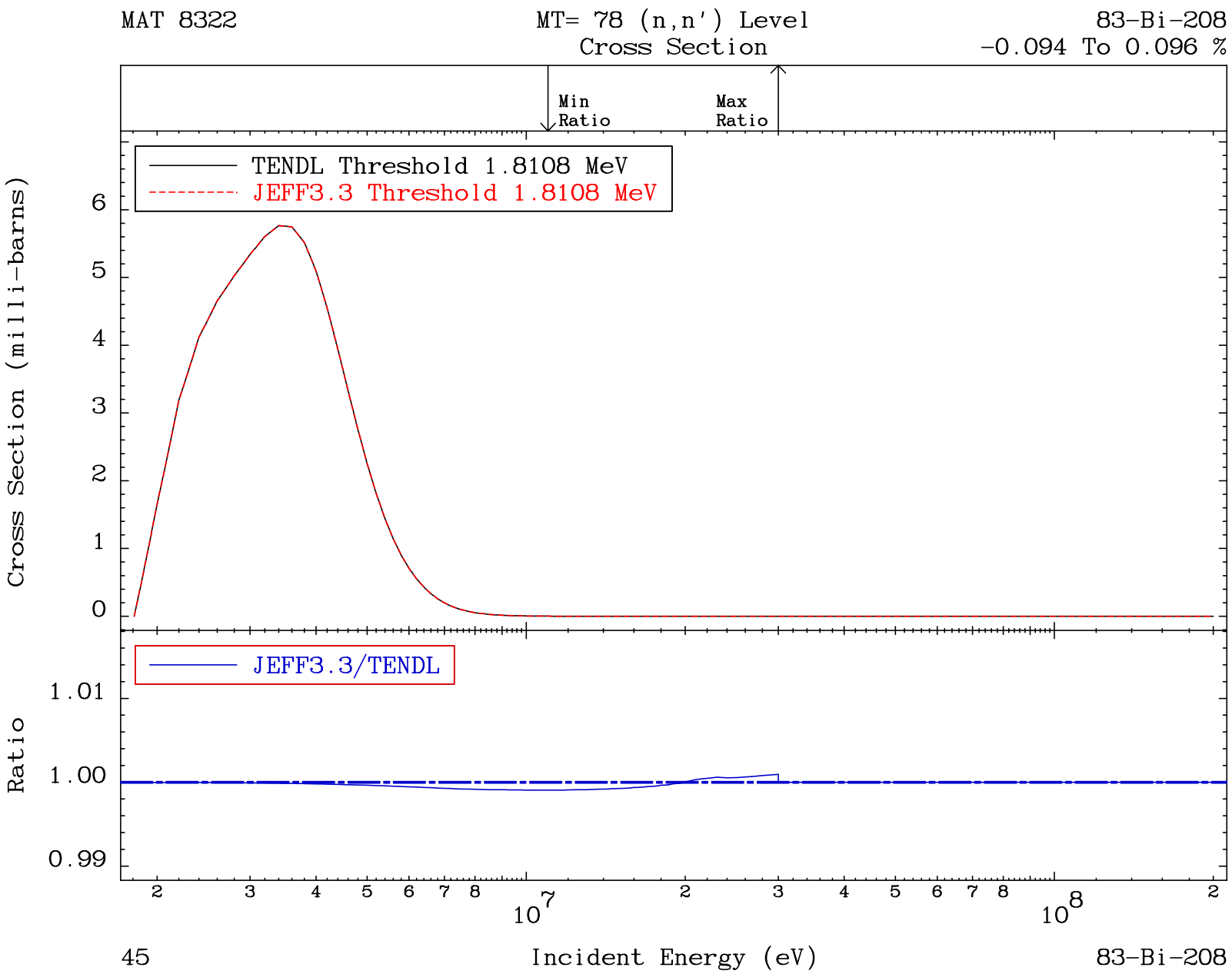

MAT 8322
MT= 73 (n,n') Level
Cross Section
83-Bi-208
-0.038 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.7116 MeV
JEFF3.3 Threshold 1.7116 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
40
Incident Energy (eV)
83-Bi-208

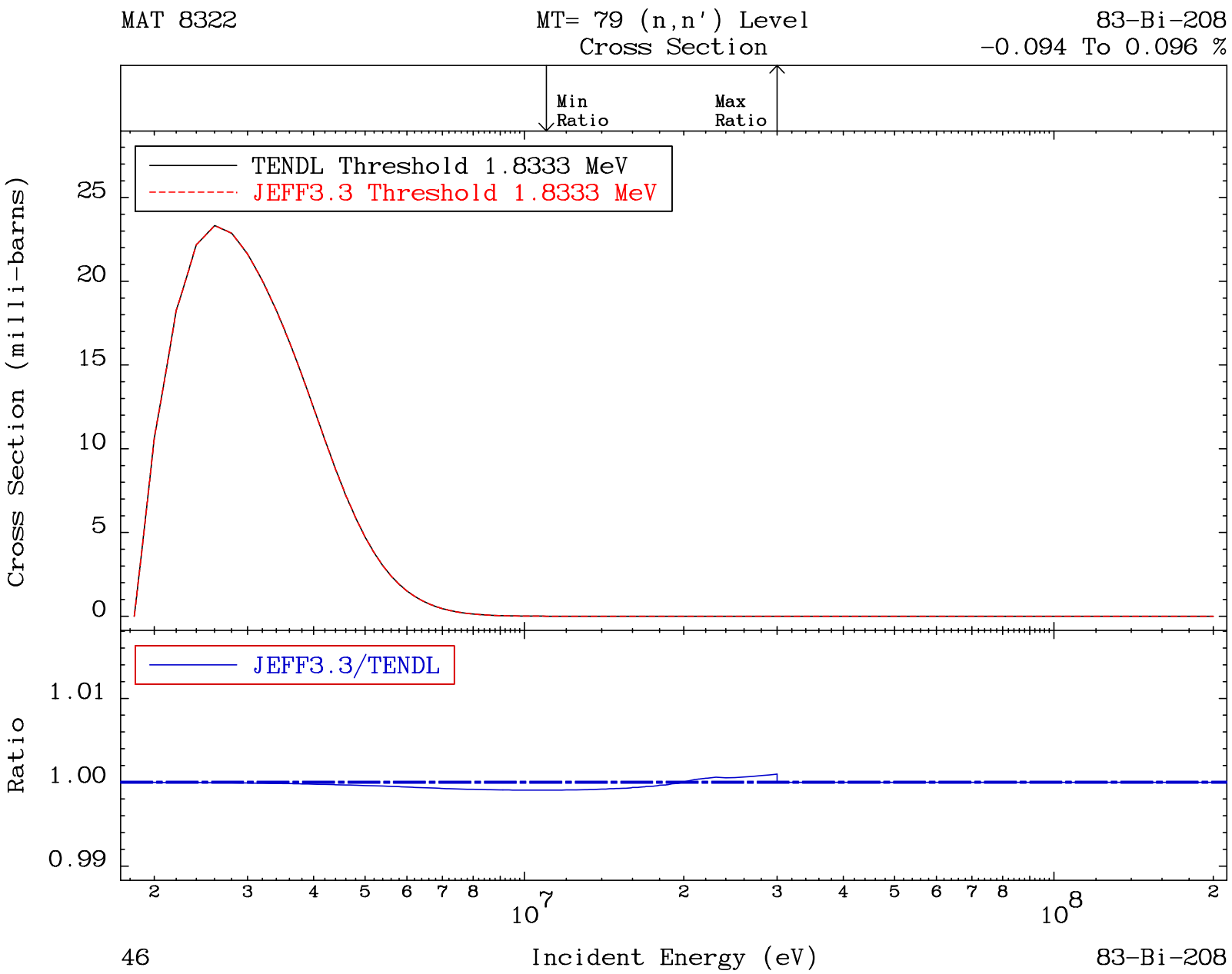

MAT 8322
MT= 74 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.7240 MeV
JEFF3.3 Threshold 1.7240 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
41
Incident Energy (eV)
83-Bi-208

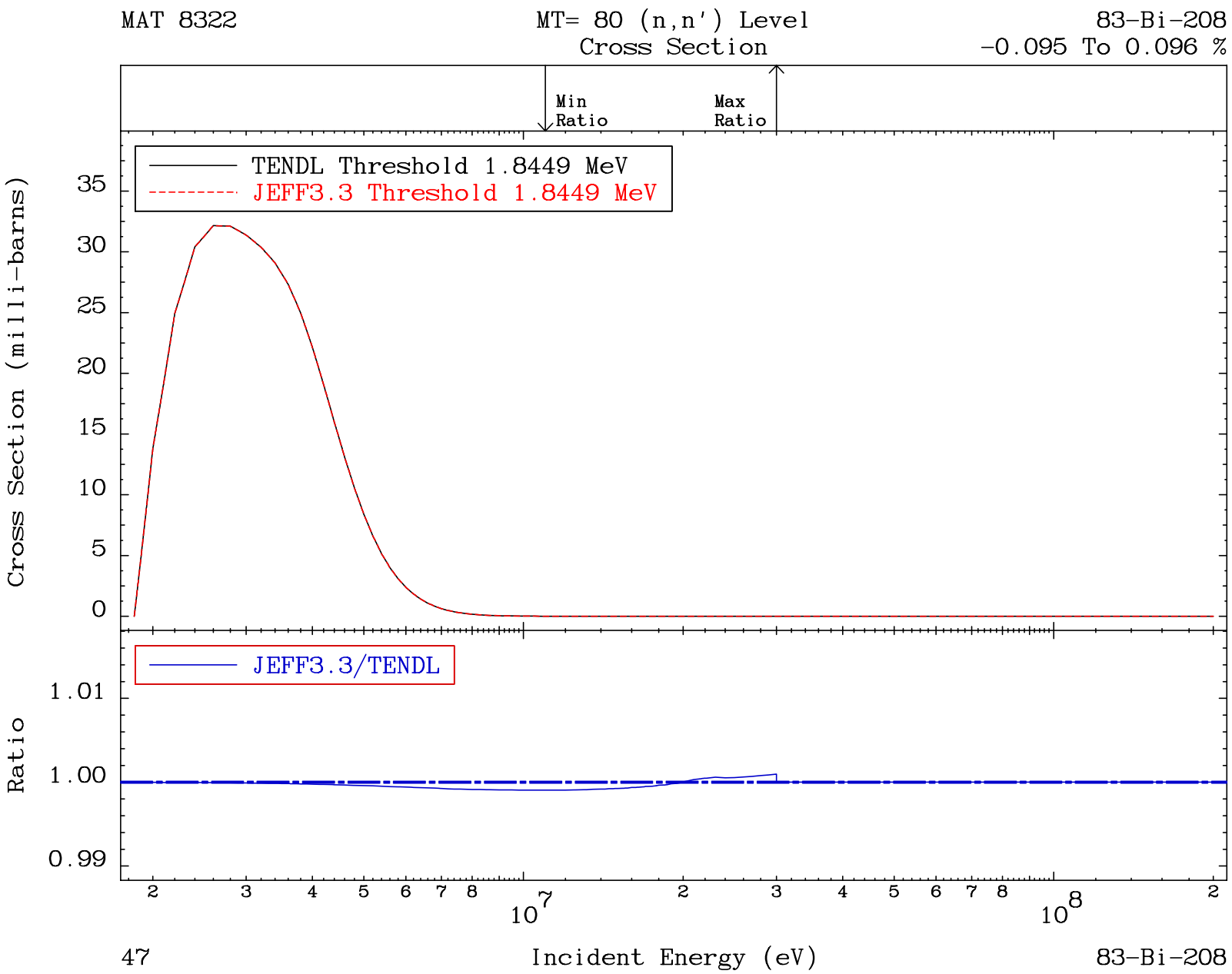

MAT 8322
MT= 75 (n,n') Level
Cross Section
83-Bi-208
-0.047 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.7320 MeV
JEFF3.3 Threshold 1.7320 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
42
Incident Energy (eV)
83-Bi-208

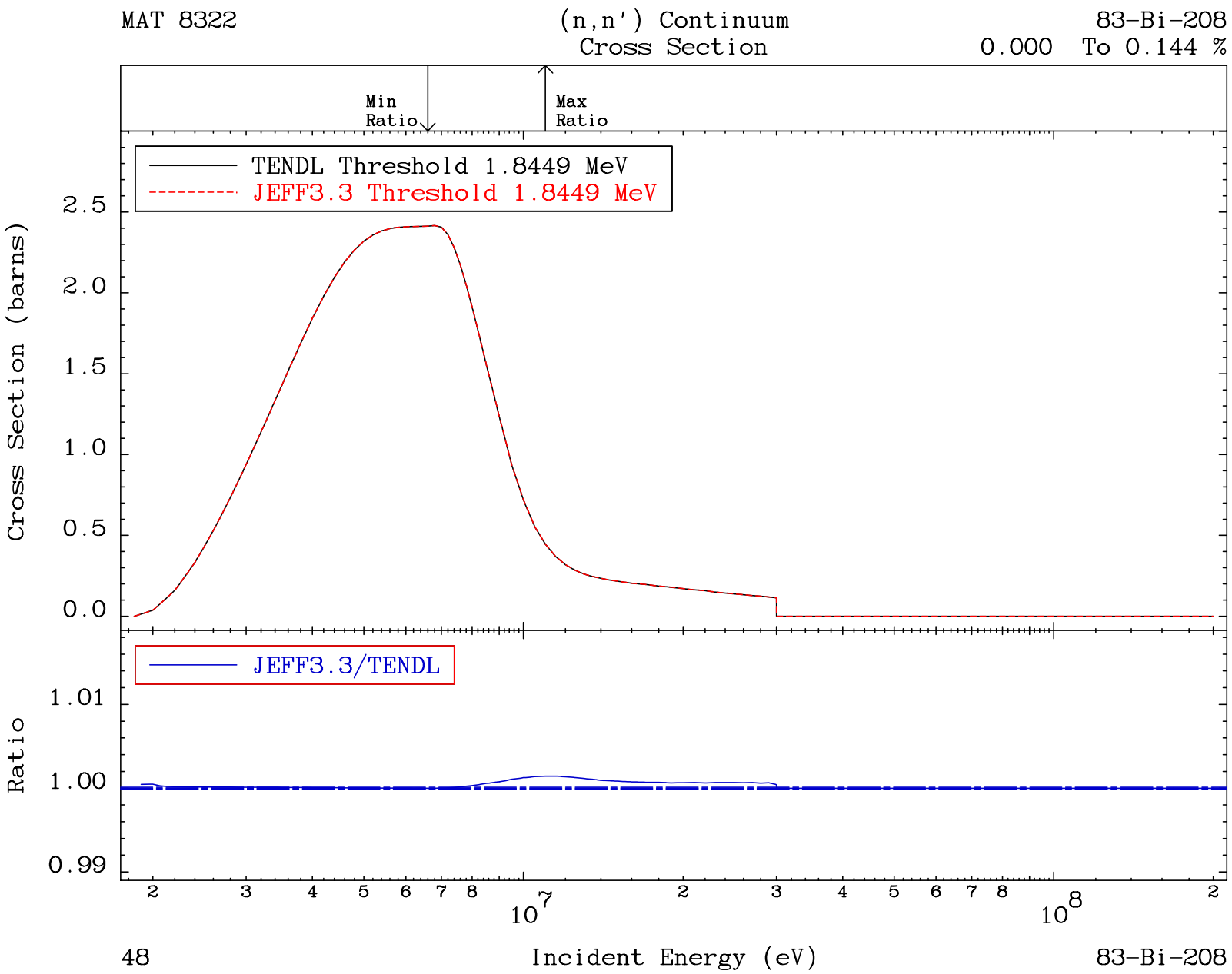

MAT 8322
MT= 76 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.7394 MeV
JEFF3.3 Threshold 1.7394 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
83-Bi-208

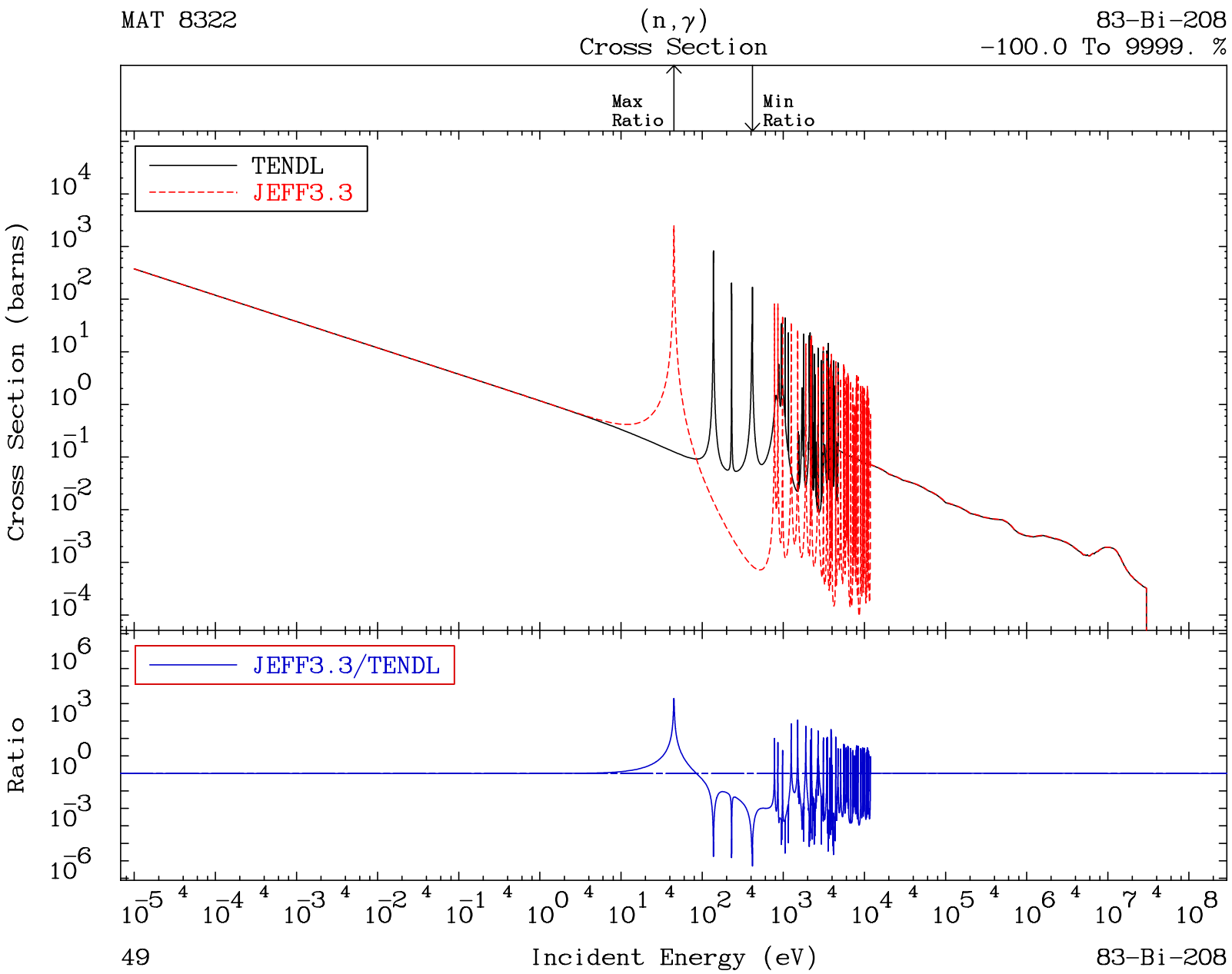

MAT 8322
MT= 77 (n,n') Level
Cross Section
83-Bi-208
-0.058 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.7948 MeV
JEFF3.3 Threshold 1.7948 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
44
Incident Energy (eV)
83-Bi-208

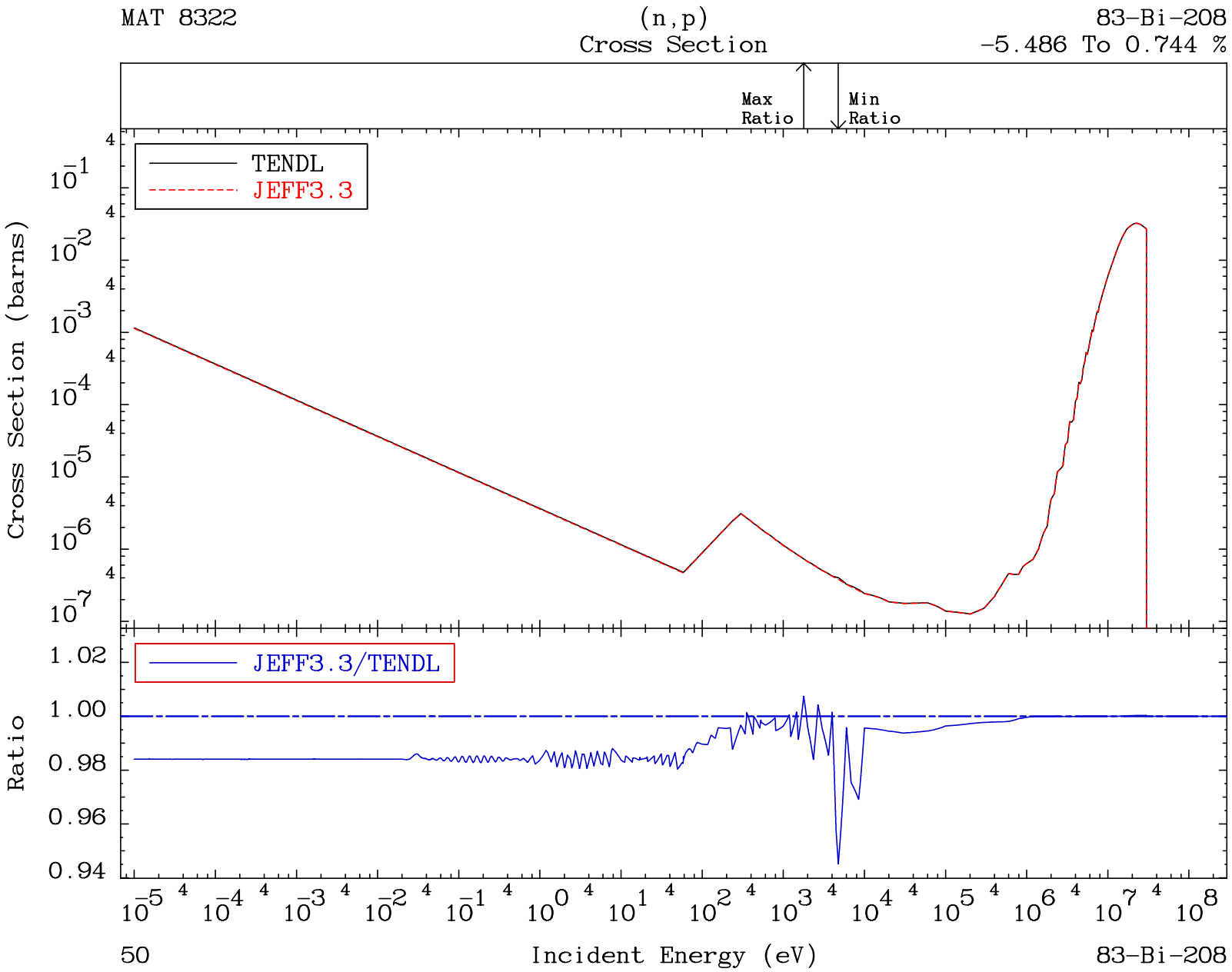

MAT 8322
MT= 78 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.8108 MeV
JEFF3.3 Threshold 1.8108 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
45
Incident Energy (eV)
83-Bi-208

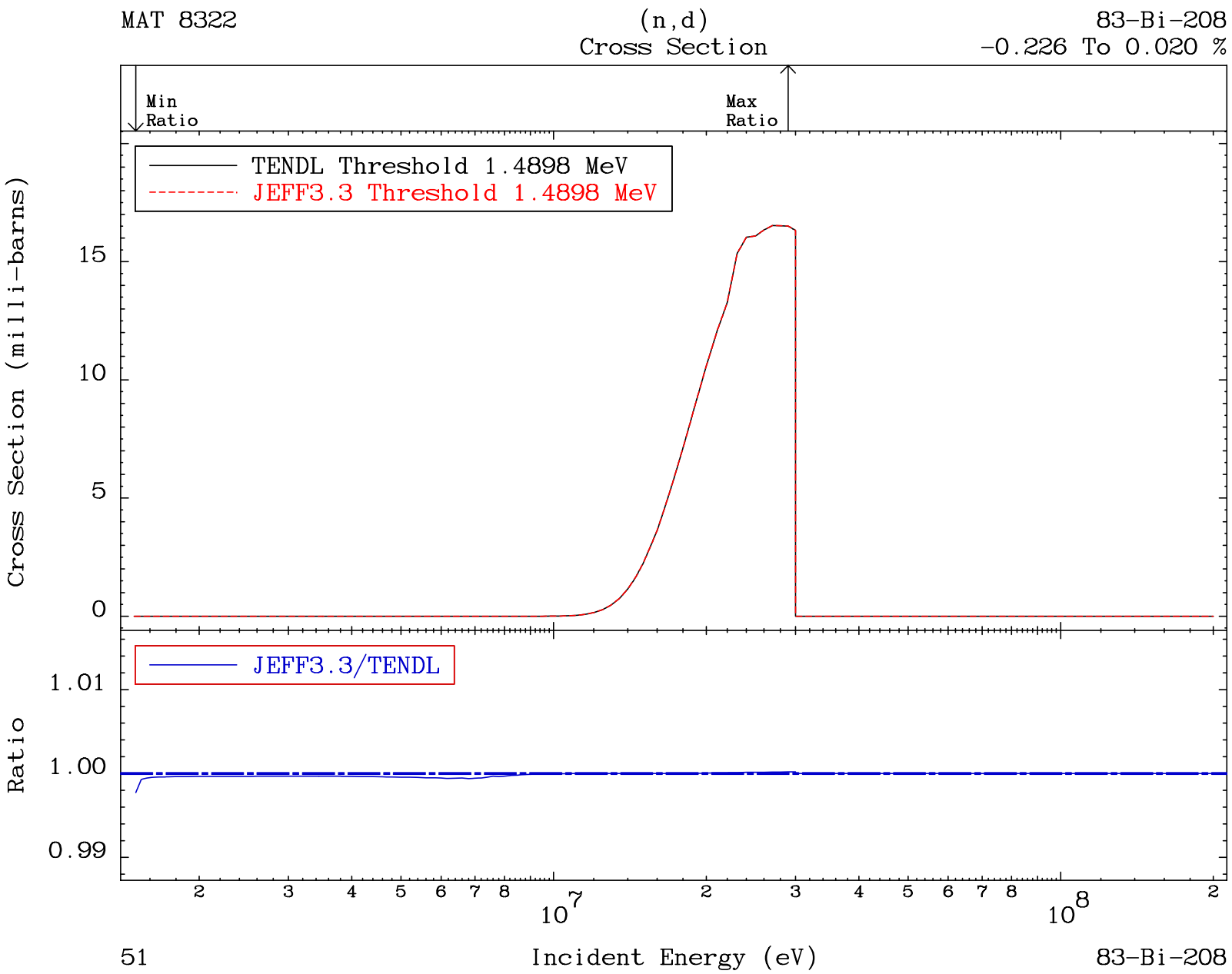

MAT 8322
MT= 79 (n,n') Level
Cross Section
83-Bi-208
-0.094 To 0.096 %
Min Ratio
Max Ratio
TENDL Threshold 1.8333 MeV
JEFF3.3 Threshold 1.8333 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
83-Bi-208

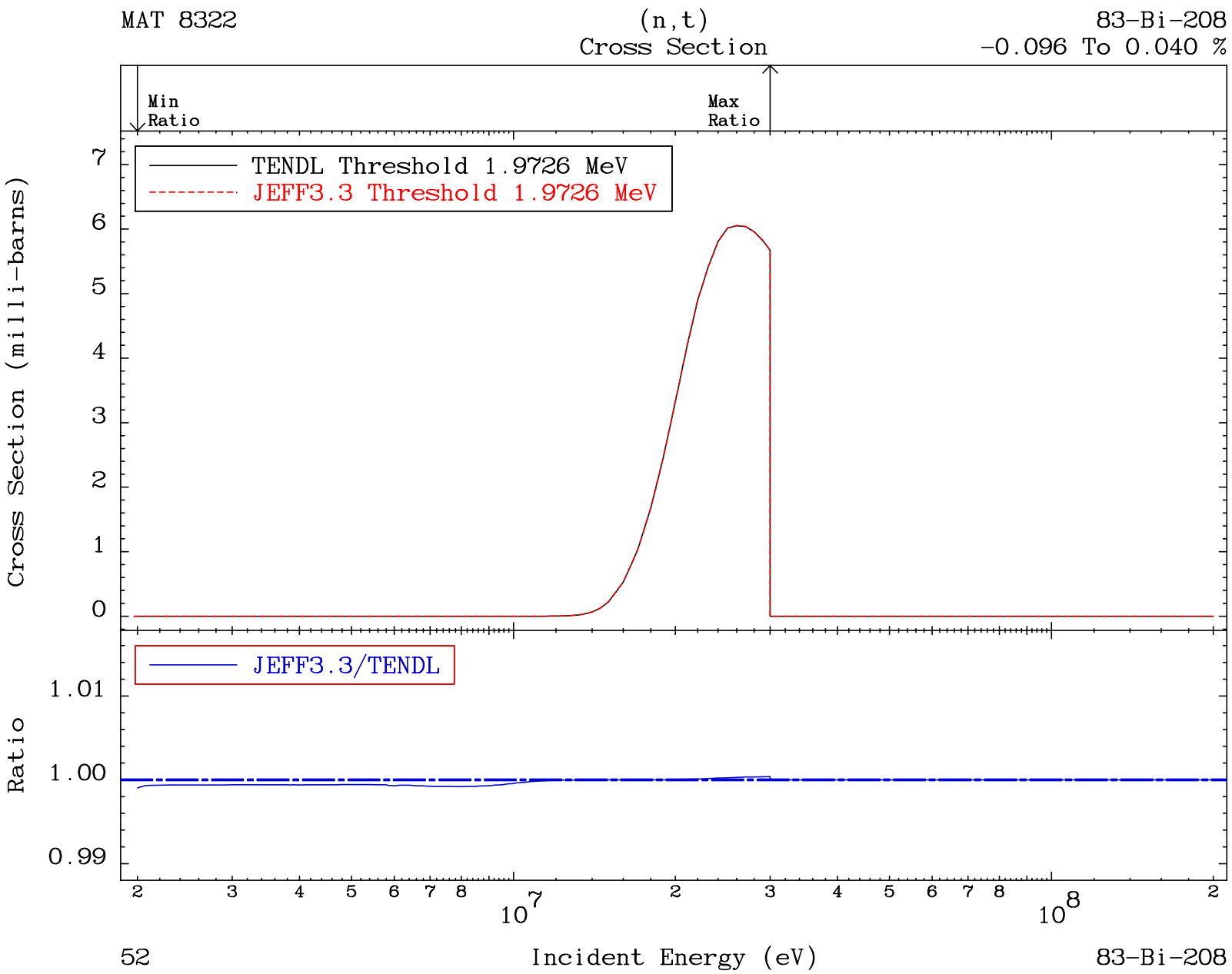

MAT 8322
MT= 80 (n,n') Level
Cross Section
83-Bi-208
-0.095 To 0.096 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.8449 MeV
JEFF3.3 Threshold 1.8449 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
47
Incident Energy (eV)
83-Bi-208

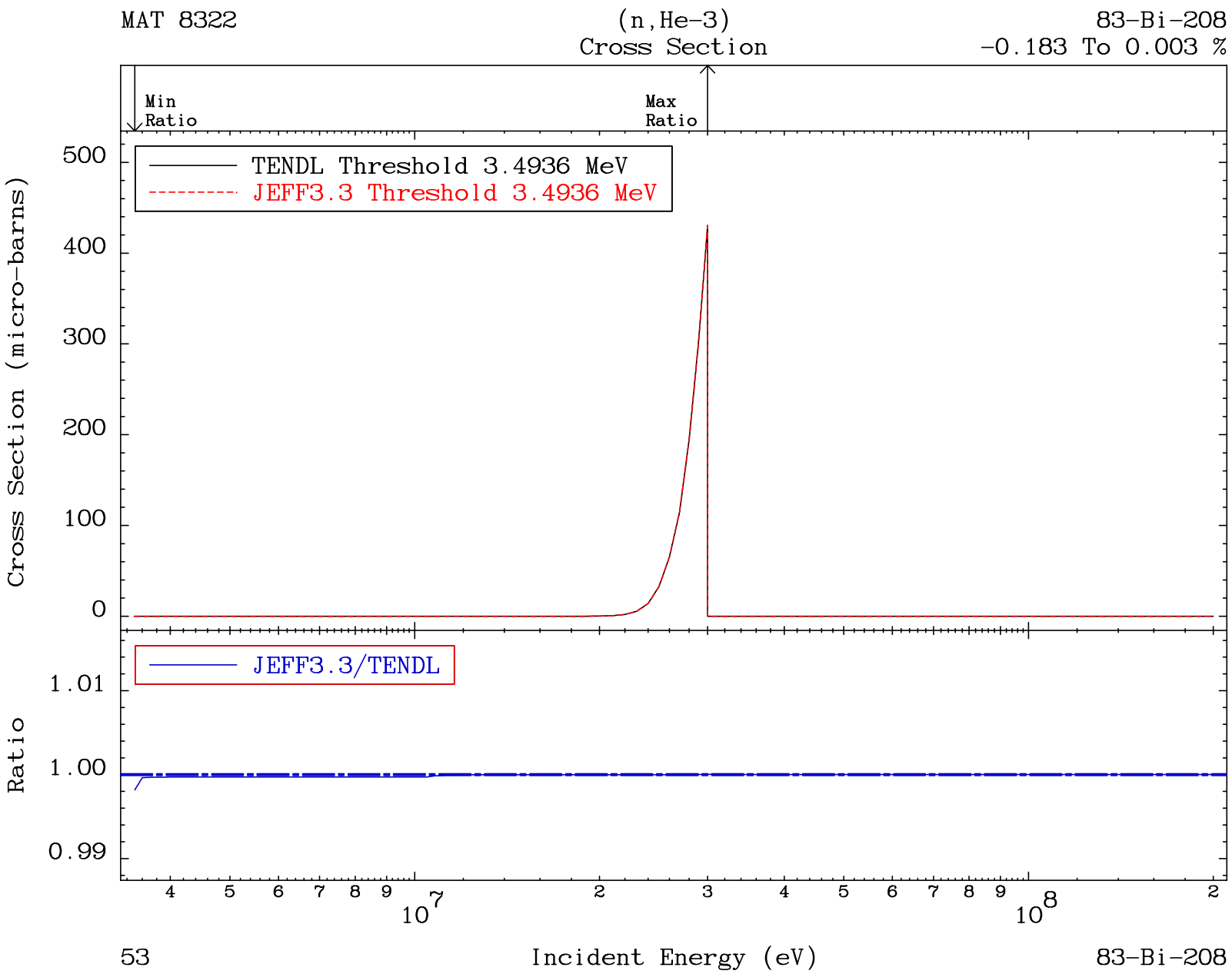

MAT 8322
(n,n') Continuum
Cross Section
83-Bi-208
0.000 To 0.144 %
Min Ratio
Max Ratio
TENDL Threshold 1.8449 MeV
JEFF3.3 Threshold 1.8449 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
83-Bi-208

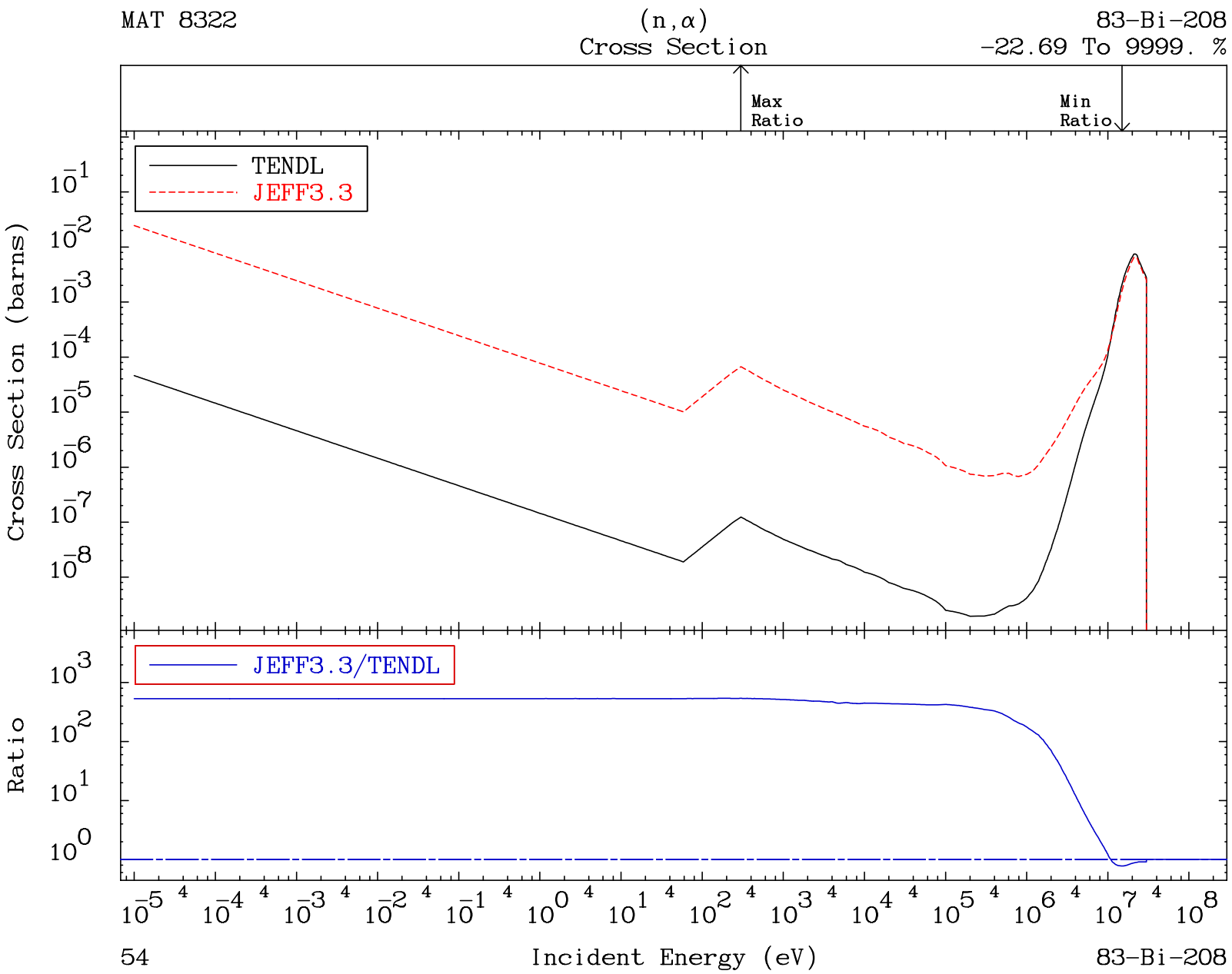

MAT 8322
(n,γ)
Cross Section
83-Bi-208
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
83-Bi-208

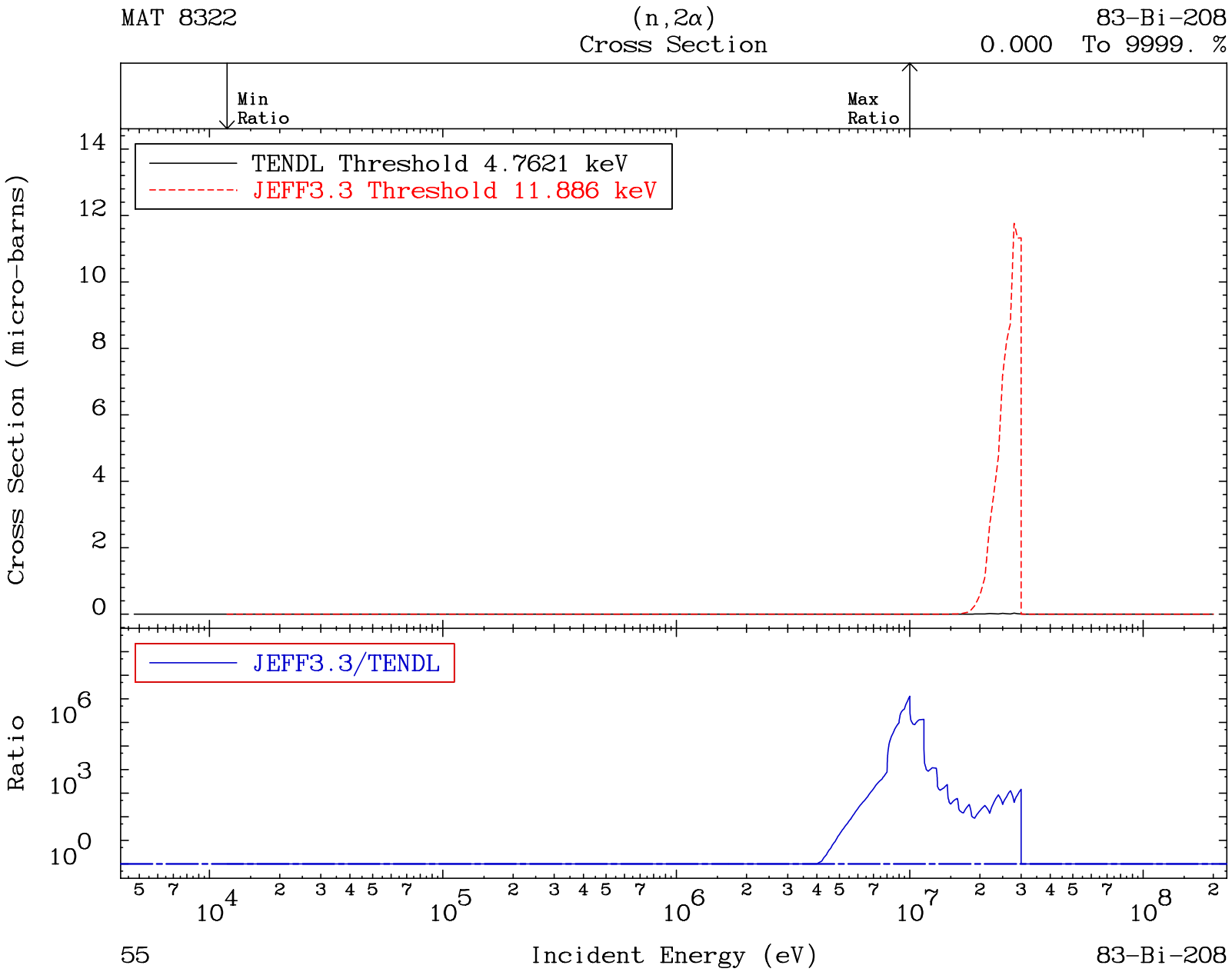

MAT 8322
(n,p)
Cross Section
83-Bi-208
-5.486 To 0.744 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
50
83-Bi-208

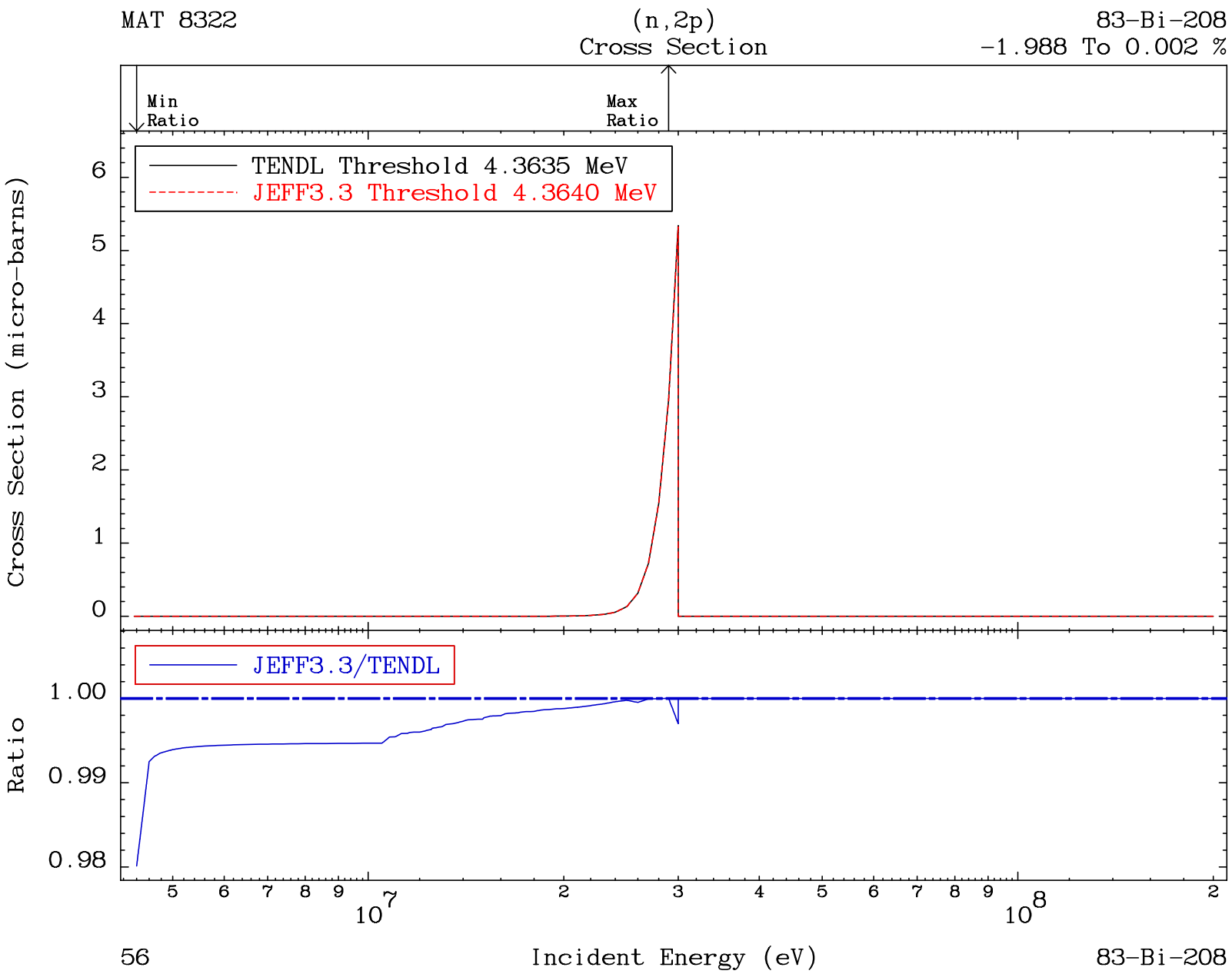

MAT 8322
(n,d)
Cross Section
83-Bi-208
-0.226 To 0.020 %
Min Ratio
Max Ratio
TENDL Threshold 1.4898 MeV
JEFF3.3 Threshold 1.4898 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
51
Incident Energy (eV)
83-Bi-208

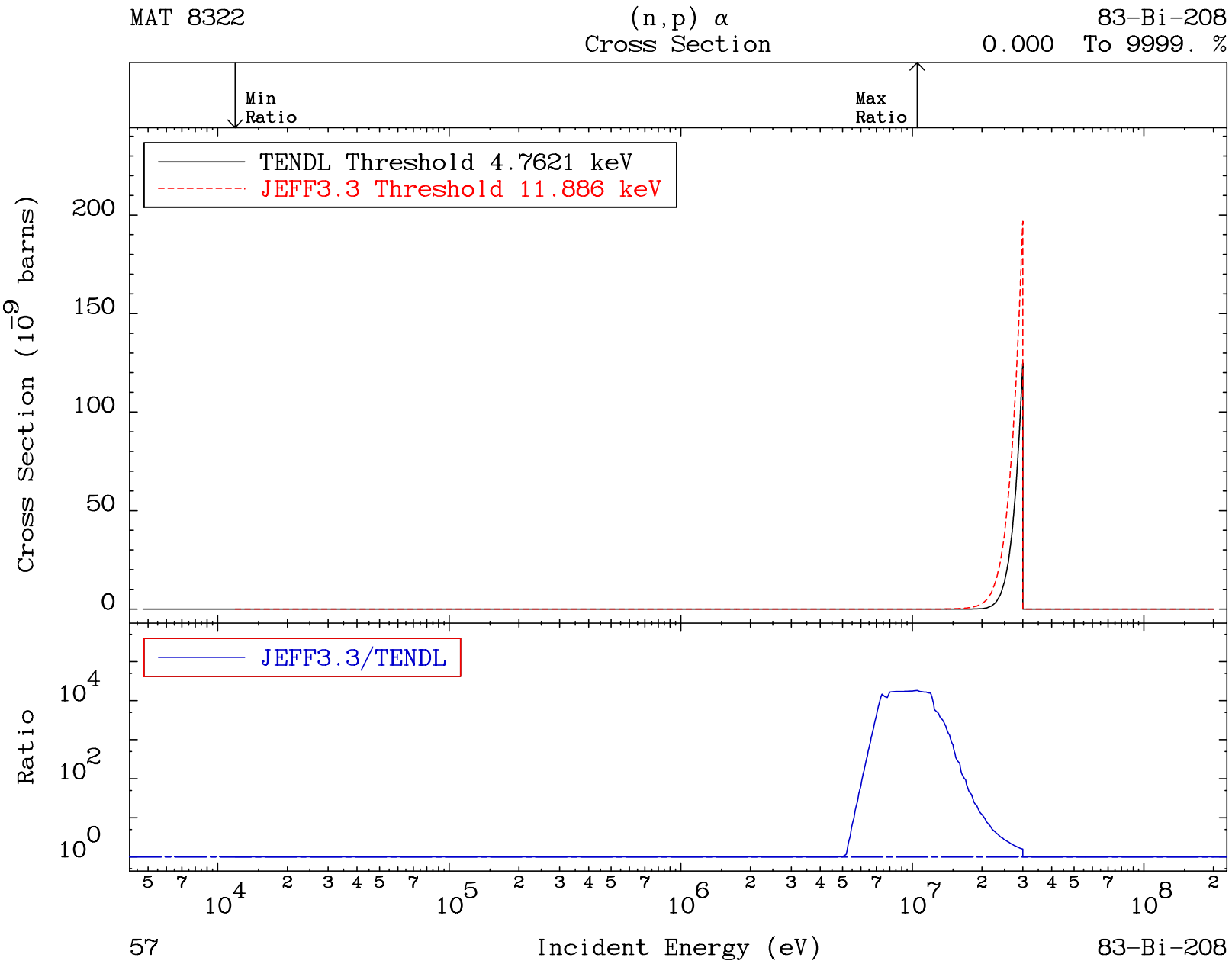

MAT 8322
(n,t)
Cross Section
83-Bi-208
-0.096 To 0.040 %
Min Ratio
Max Ratio
TENDL Threshold 1.9726 MeV
JEFF3.3 Threshold 1.9726 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
52
Incident Energy (eV)
83-Bi-208

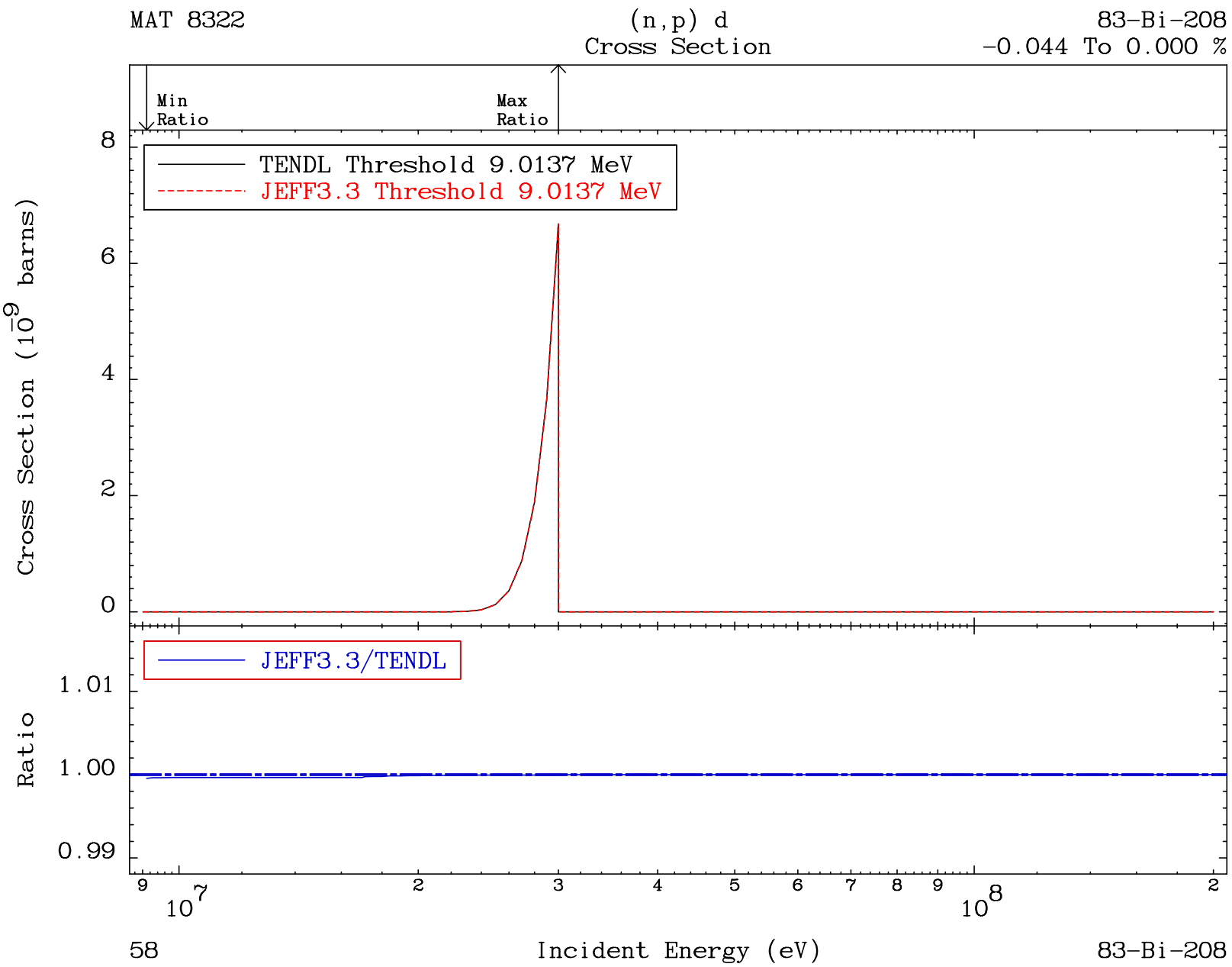

MAT 8322
(n,He-3)
Cross Section
83-Bi-208
-0.183 To 0.003 %
Min Ratio
Max Ratio
TENDL Threshold 3.4936 MeV
JEFF3.3 Threshold 3.4936 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
83-Bi-208

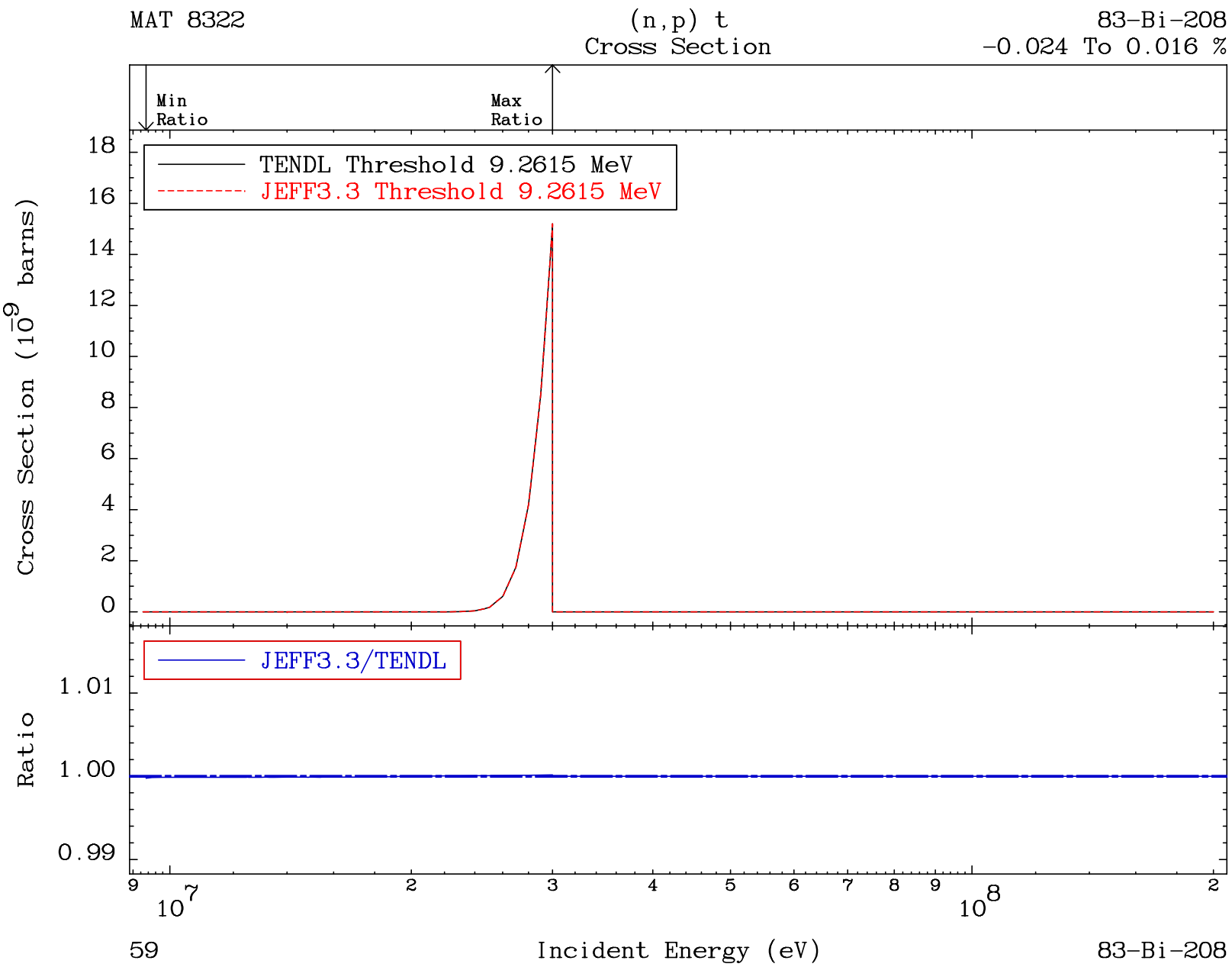

MAT 8322
(n,α)
Cross Section
83-Bi-208
-22.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
54
Incident Energy (eV)
83-Bi-208

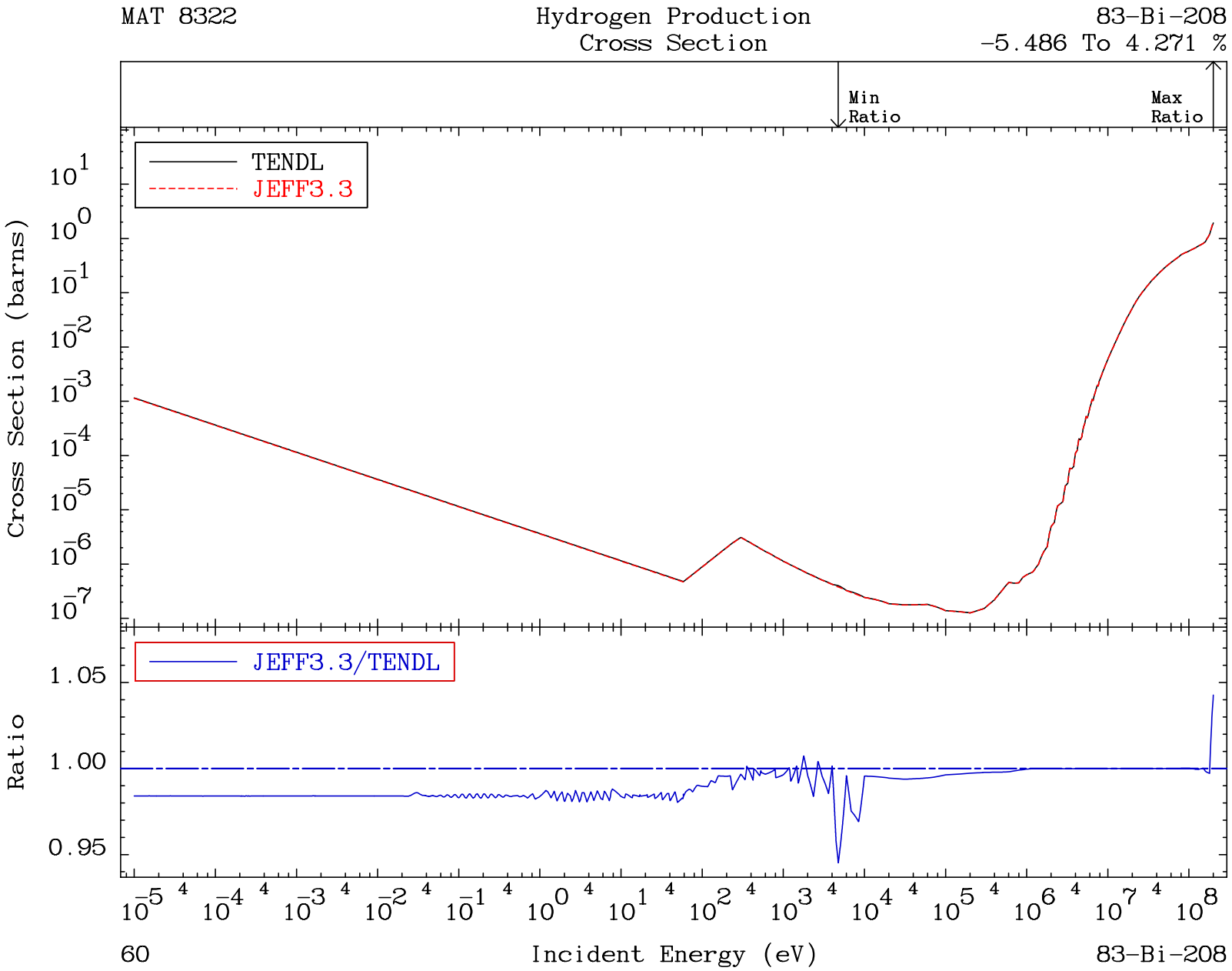

MAT 8322
(n,2α)
Cross Section
83-Bi-208
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.7621 keV
JEFF3.3 Threshold 11.886 keV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
83-Bi-208

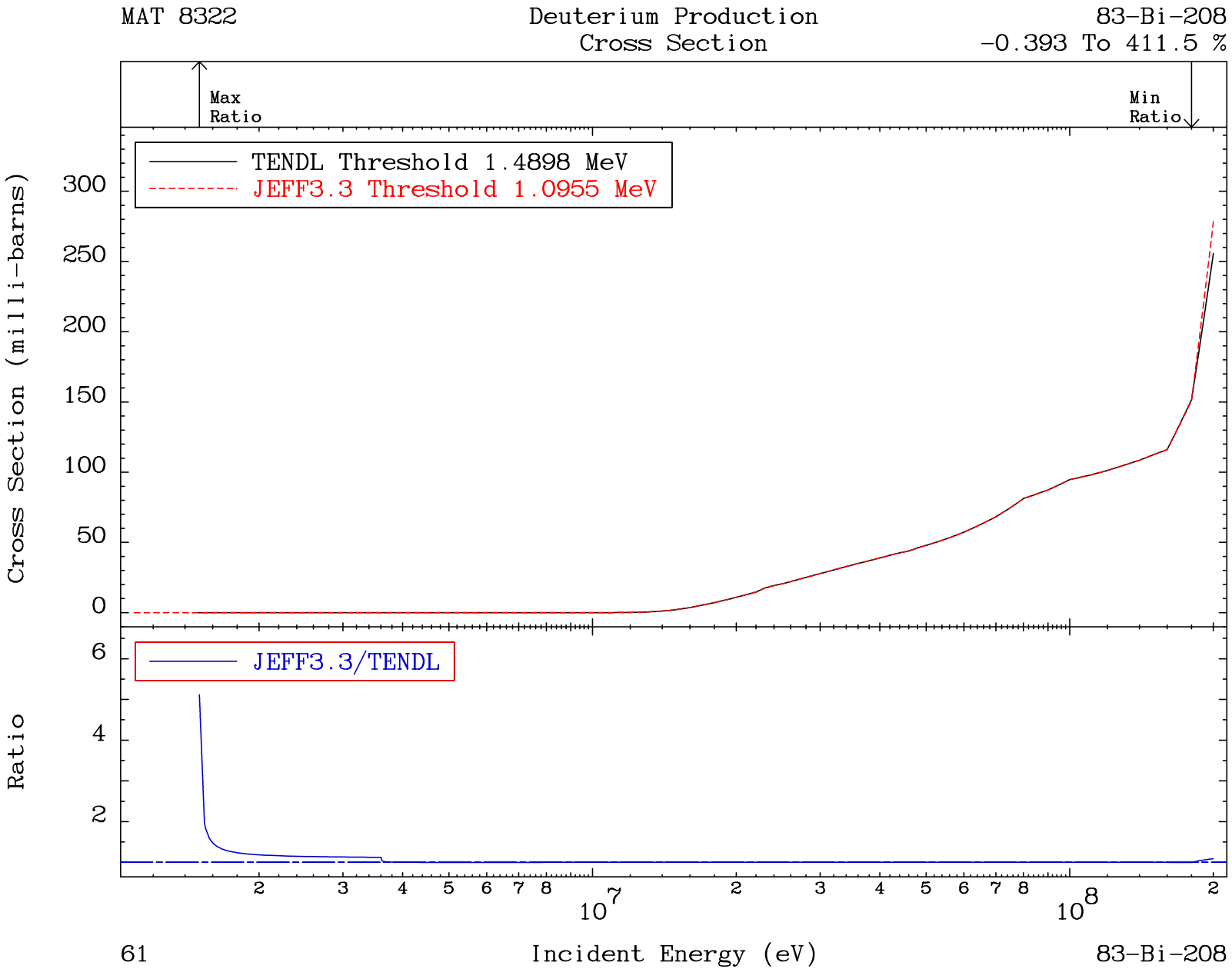

MAT 8322
(n,2p)
Cross Section
83-Bi-208
-1.988 To 0.002 %
Min Ratio
Max Ratio
TENDL Threshold 4.3635 MeV
JEFF3.3 Threshold 4.3640 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
0.98
0.99
1.00
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
83-Bi-208

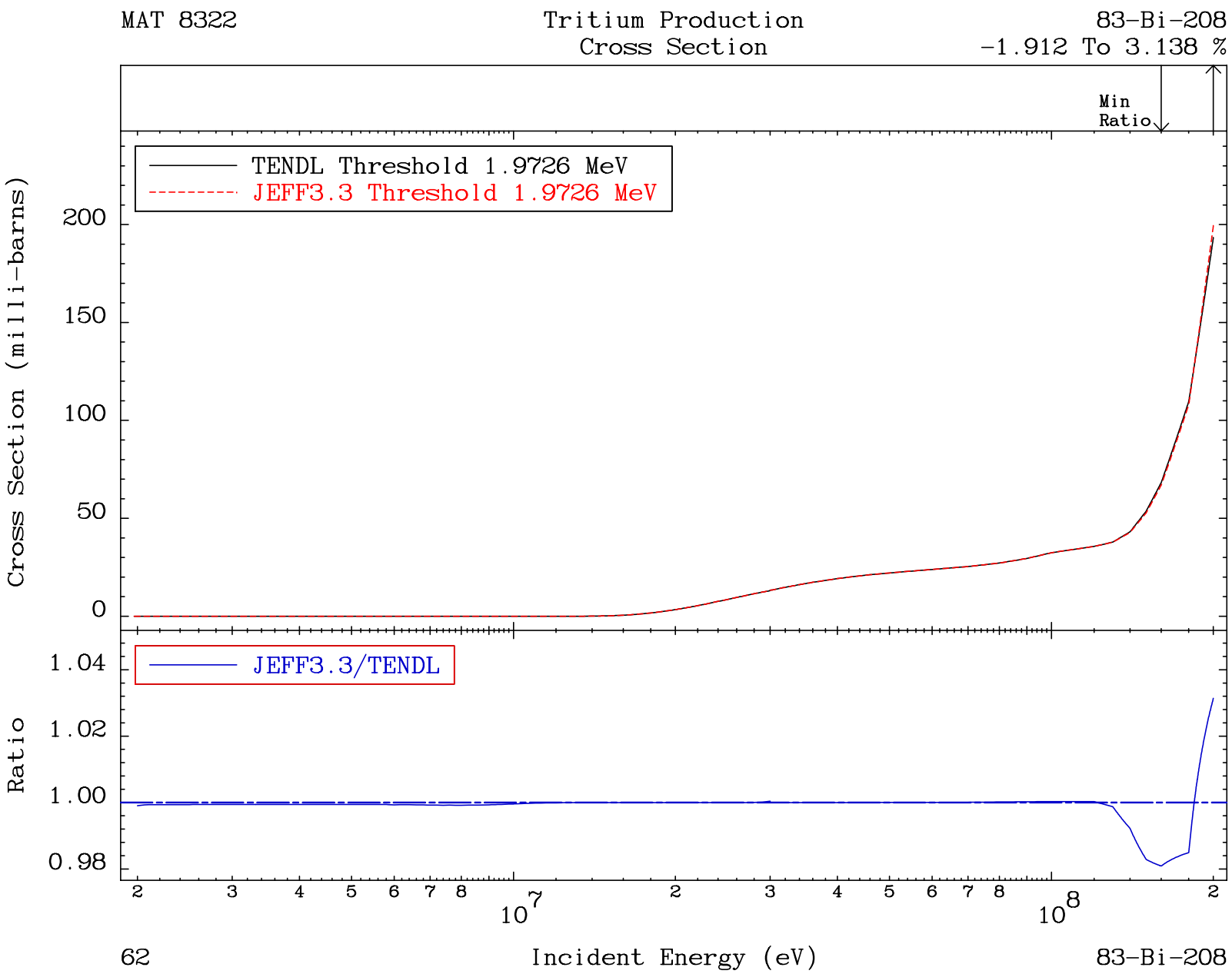

MAT 8322
(n,p) α
Cross Section
83-Bi-208
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.7621 keV
JEFF3.3 Threshold 11.886 keV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
57
Incident Energy (eV)
83-Bi-208

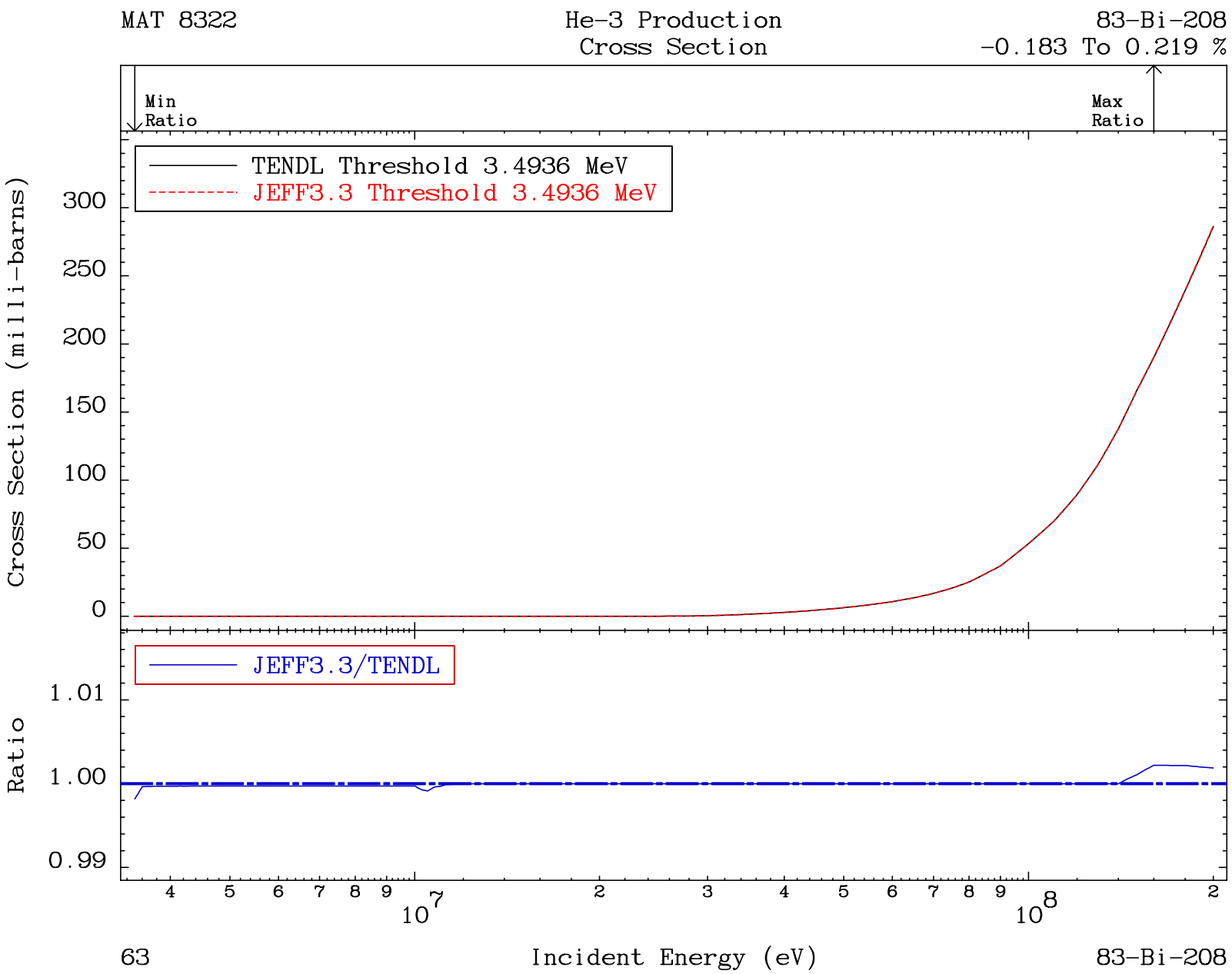

MAT 8322
(n,p) d
Cross Section
83-Bi-208
-0.044 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.0137 MeV
JEFF3.3 Threshold 9.0137 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
58
83-Bi-208

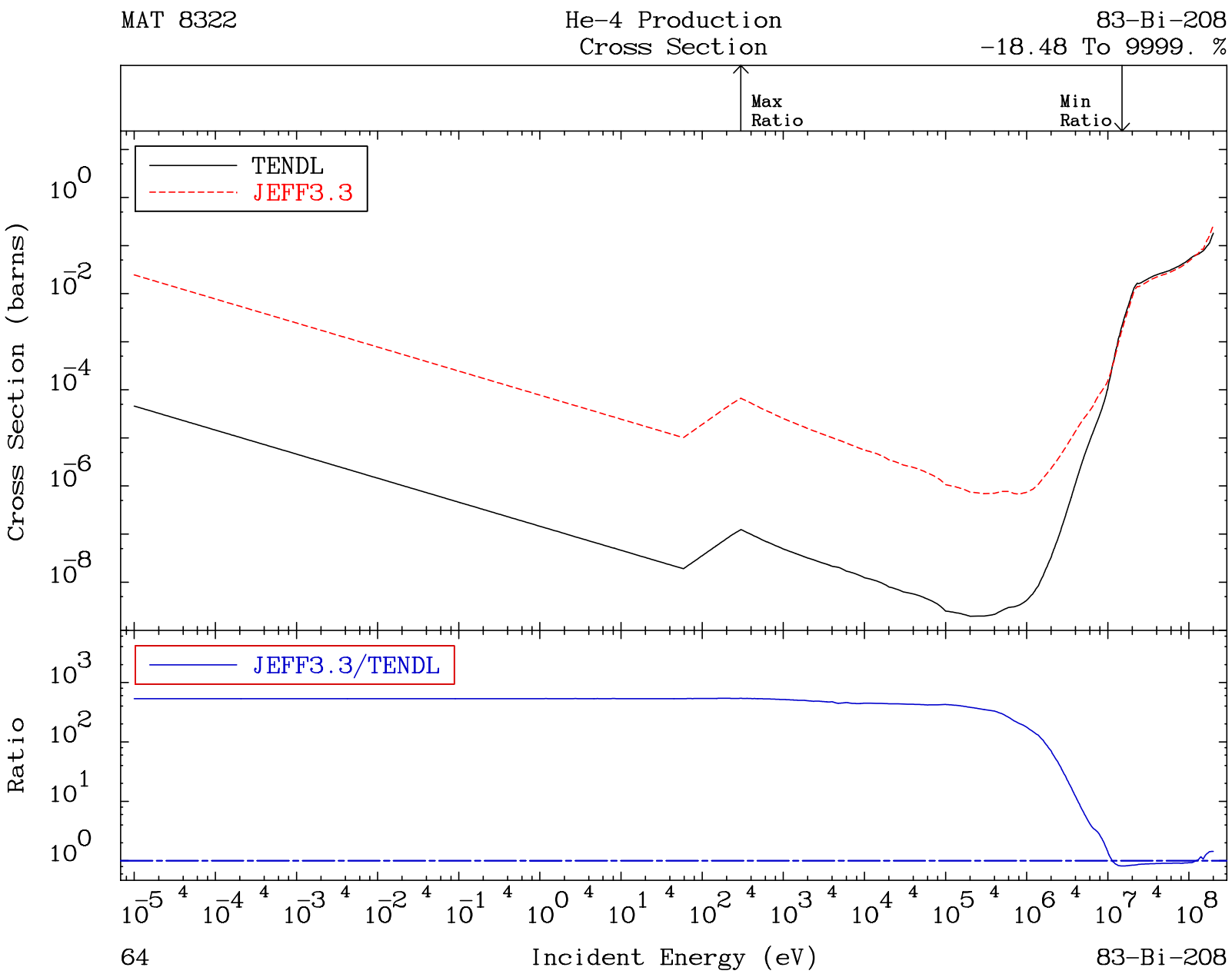

MAT 8322
(n,p) t
Cross Section
83-Bi-208
-0.024 To 0.016 %
Min Ratio
Max Ratio
TENDL Threshold 9.2615 MeV
JEFF3.3 Threshold 9.2615 MeV
Cross Section (10^{-9} barns)
18
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
59
Incident Energy (eV)
83-Bi-208

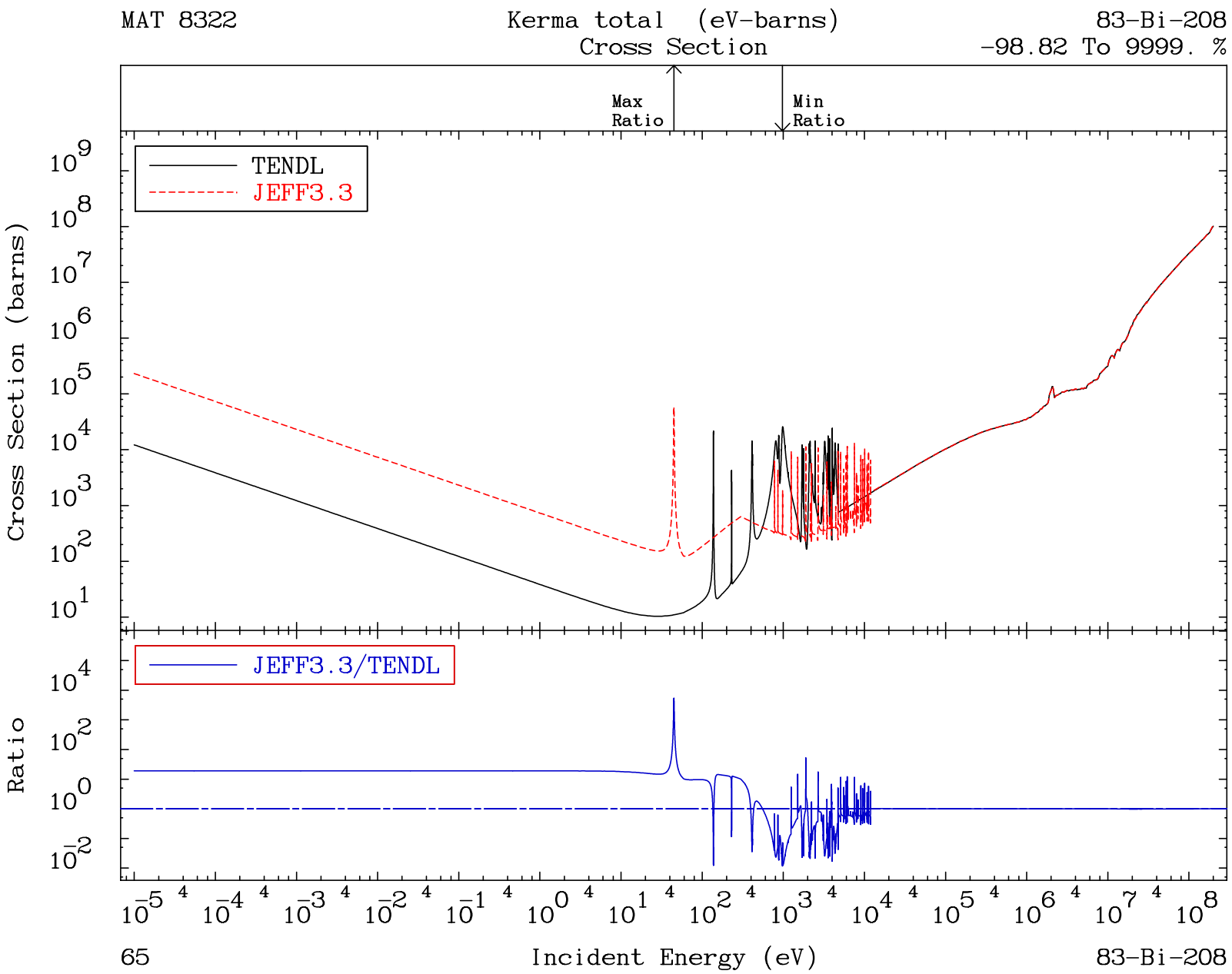

MAT 8322
Hydrogen Production
Cross Section
83-Bi-208
-5.486 To 4.271 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
60
83-Bi-208

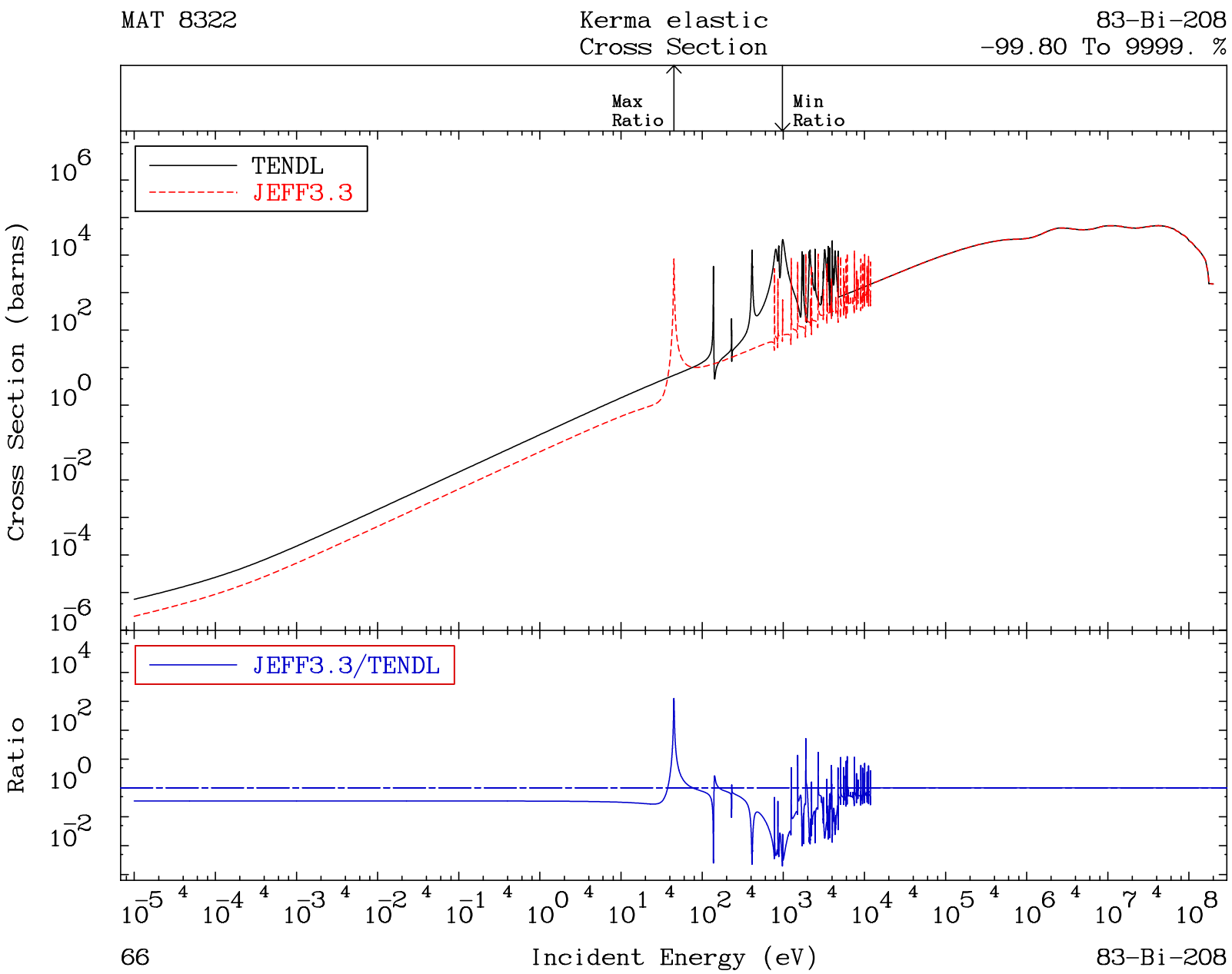

MAT 8322
Deuterium Production
Cross Section
83-Bi-208
-0.393 To 411.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4898 MeV
JEFF3.3 Threshold 1.0955 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
6
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
61
Incident Energy (eV)
83-Bi-208

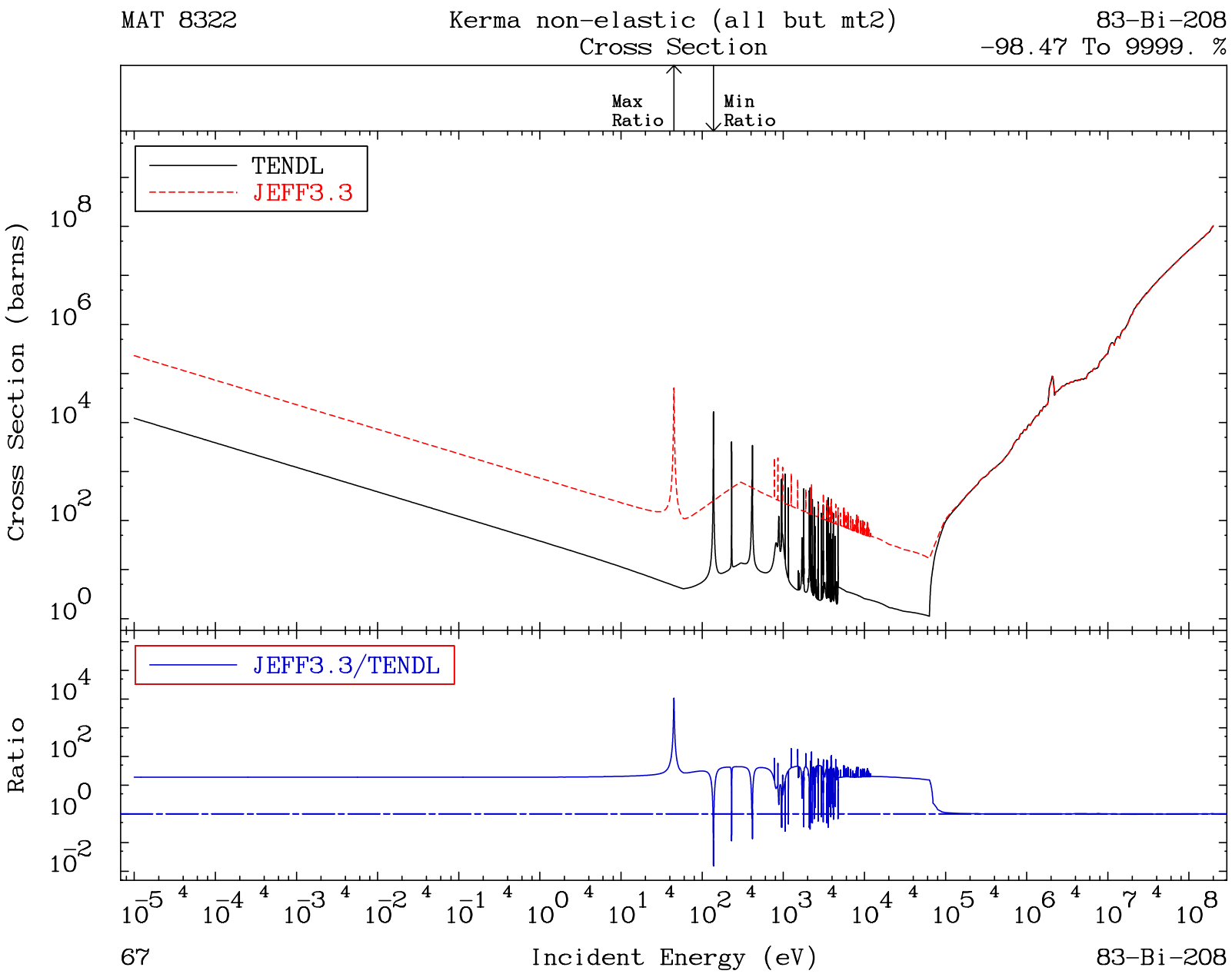

MAT 8322
Tritium Production
Cross Section
83-Bi-208
-1.912 To 3.138 %
Min
Ratio
TENDL Threshold 1.9726 MeV
JEFF3.3 Threshold 1.9726 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
62
Incident Energy (eV)
83-Bi-208

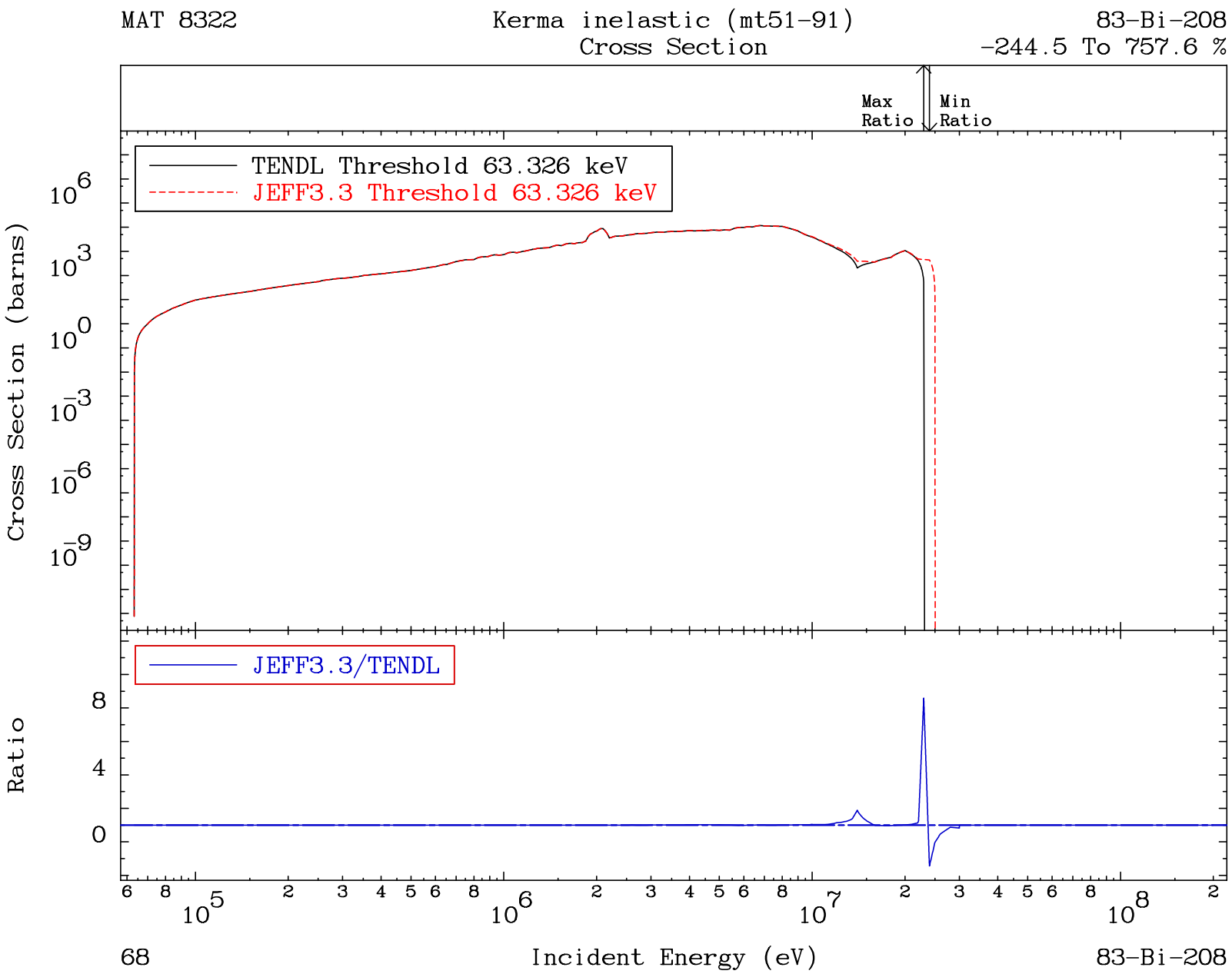

MAT 8322
He-3 Production
Cross Section
83-Bi-208
-0.183 To 0.219 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.4936 MeV
JEFF3.3 Threshold 3.4936 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
63
Incident Energy (eV)
83-Bi-208

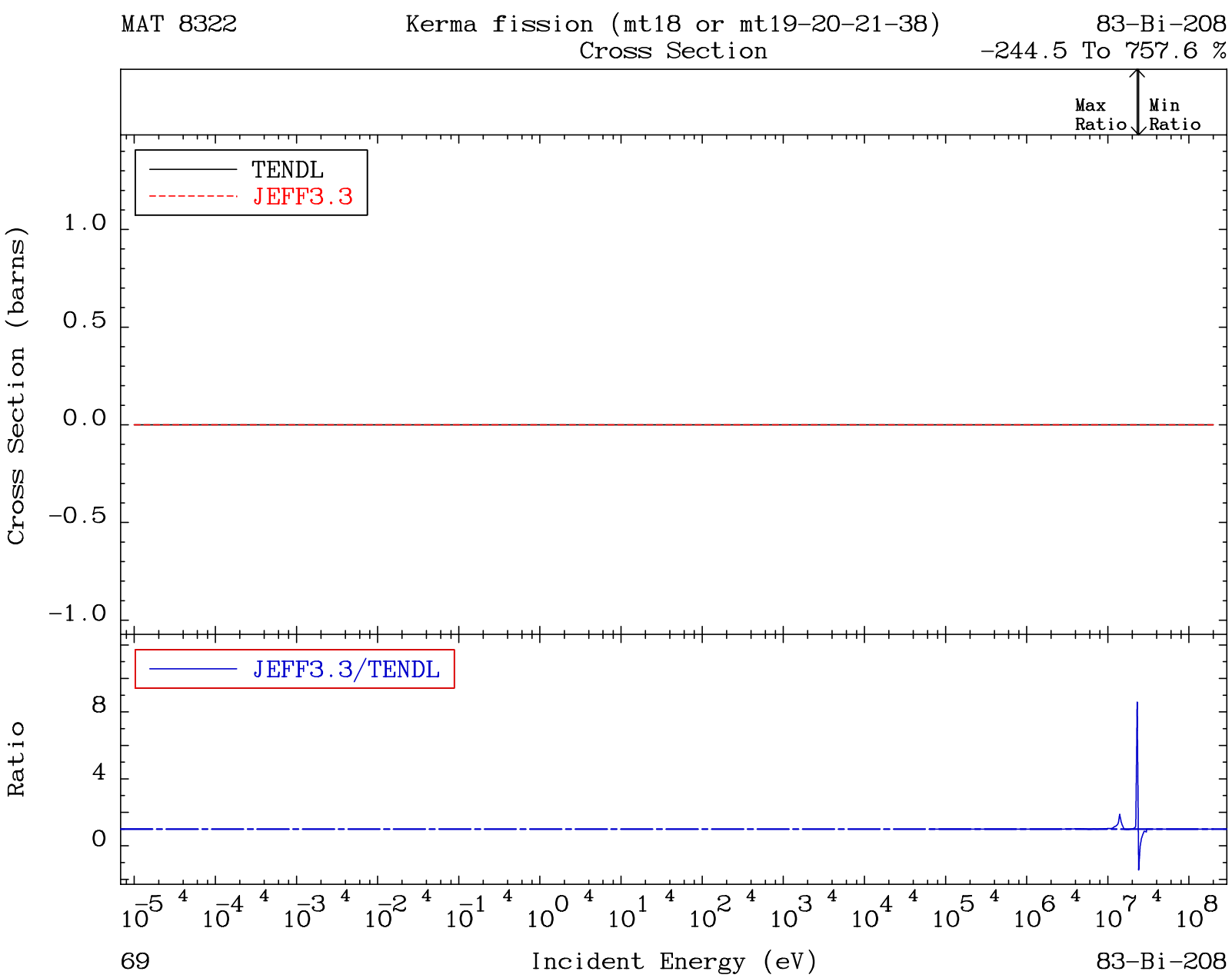

MAT 8322
He-4 Production
Cross Section
83-Bi-208
-18.48 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
83-Bi-208

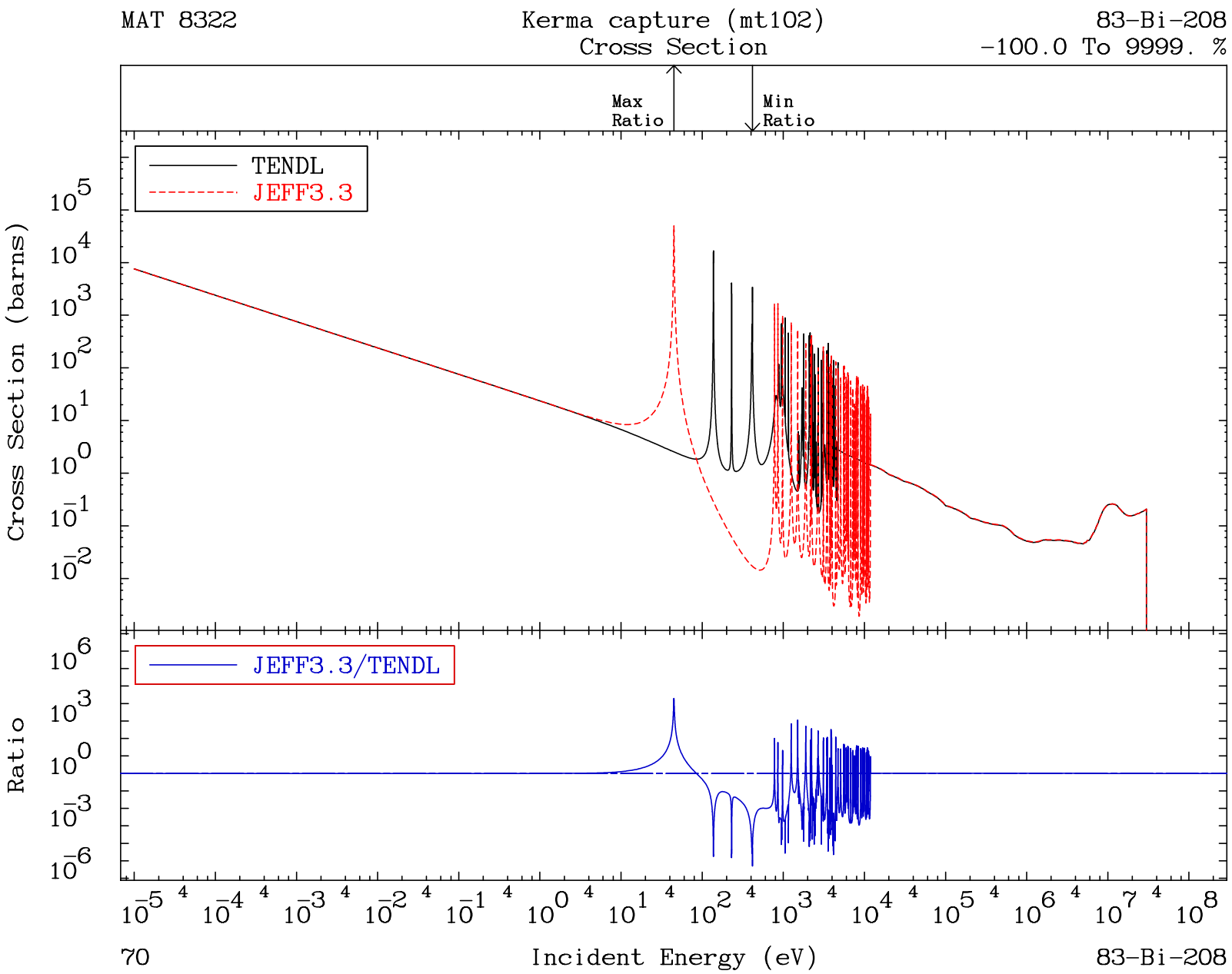

MAT 8322
Kerma total (eV-barns)
Cross Section
83-Bi-208
-98.82 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
83-Bi-208

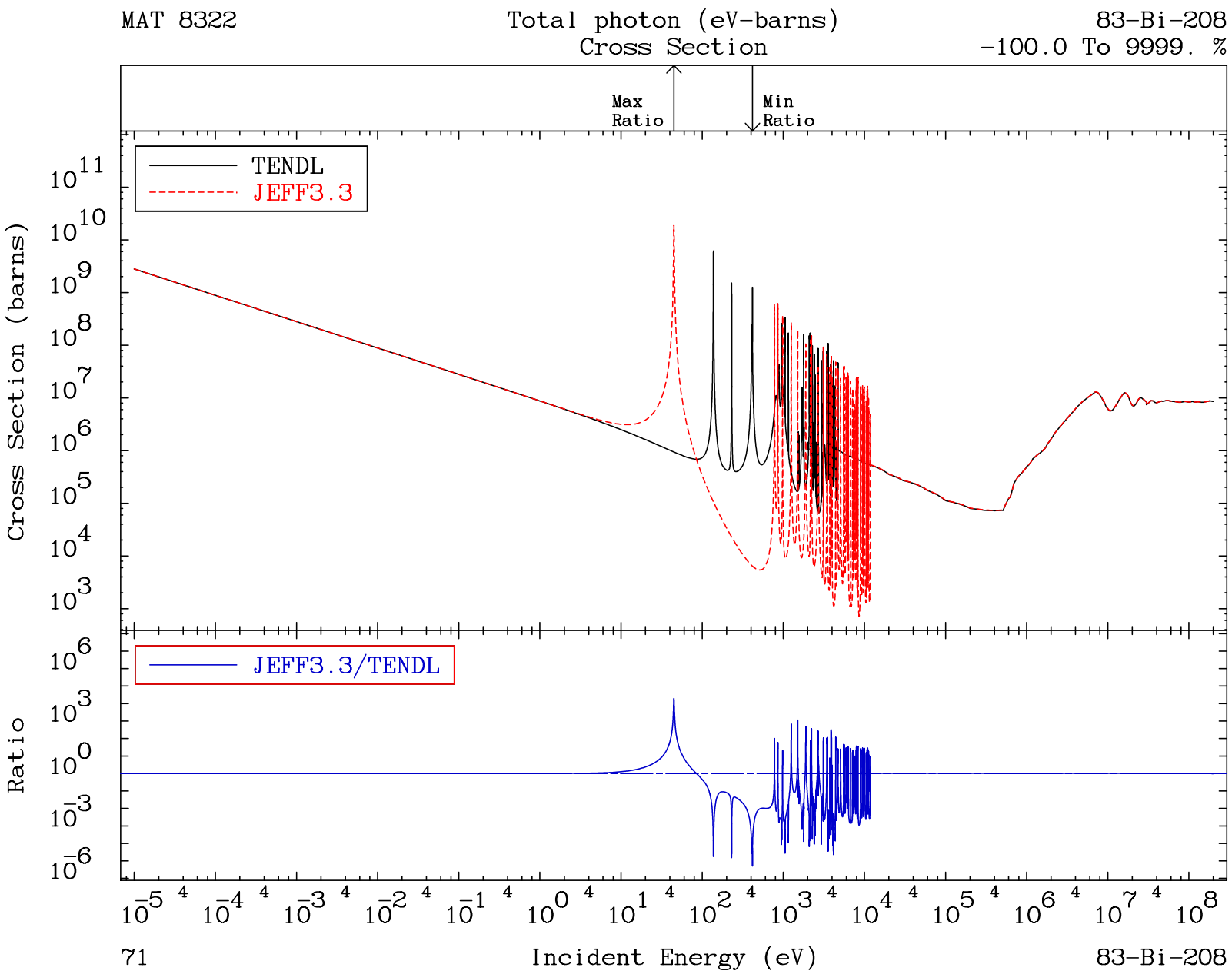

MAT 8322
Kerma elastic
Cross Section
83-Bi-208
-99.80 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
83-Bi-208

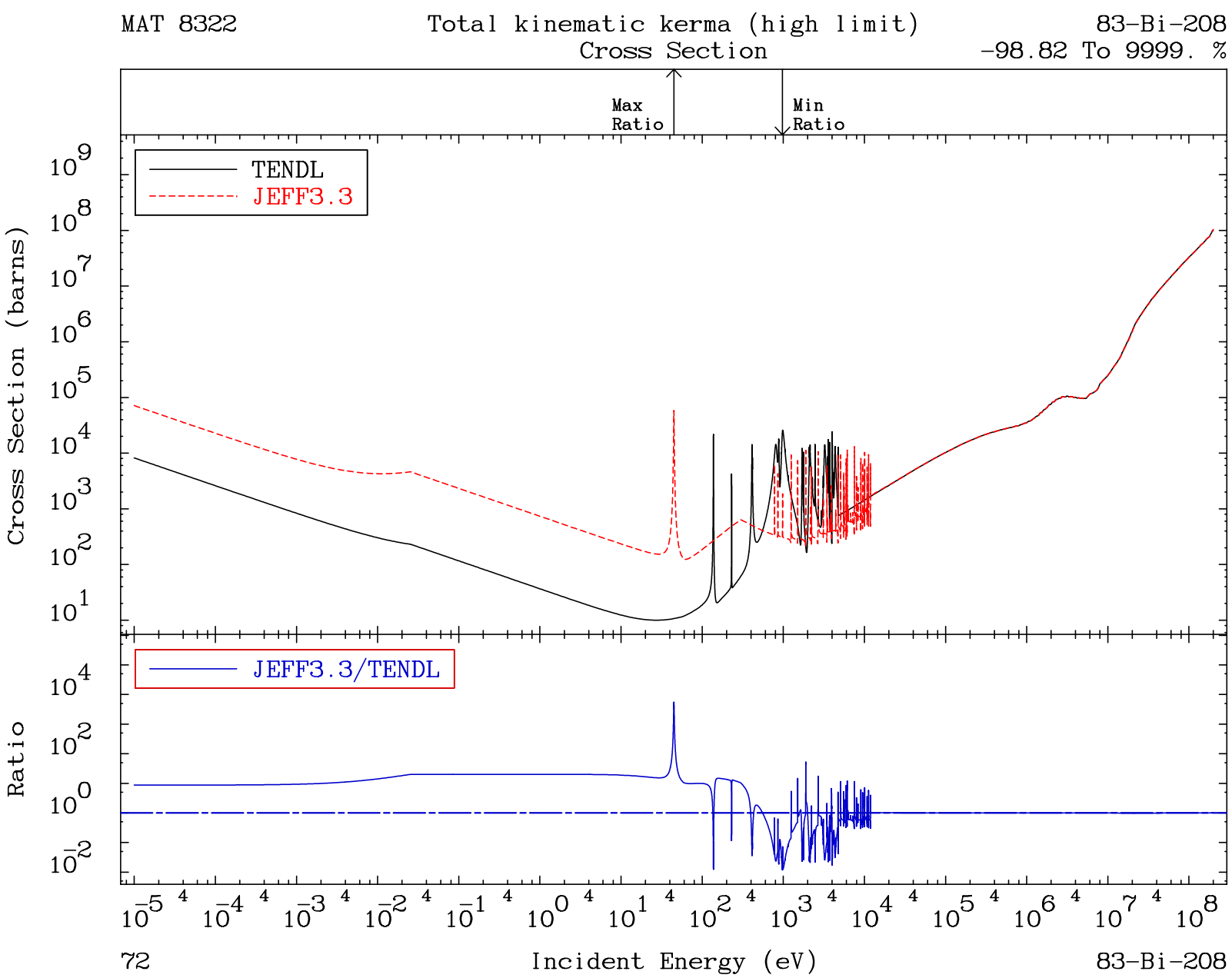

MAT 8322
Kerma non-elastic (all but mt2)
Cross Section
83-Bi-208
-98.47 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
83-Bi-208

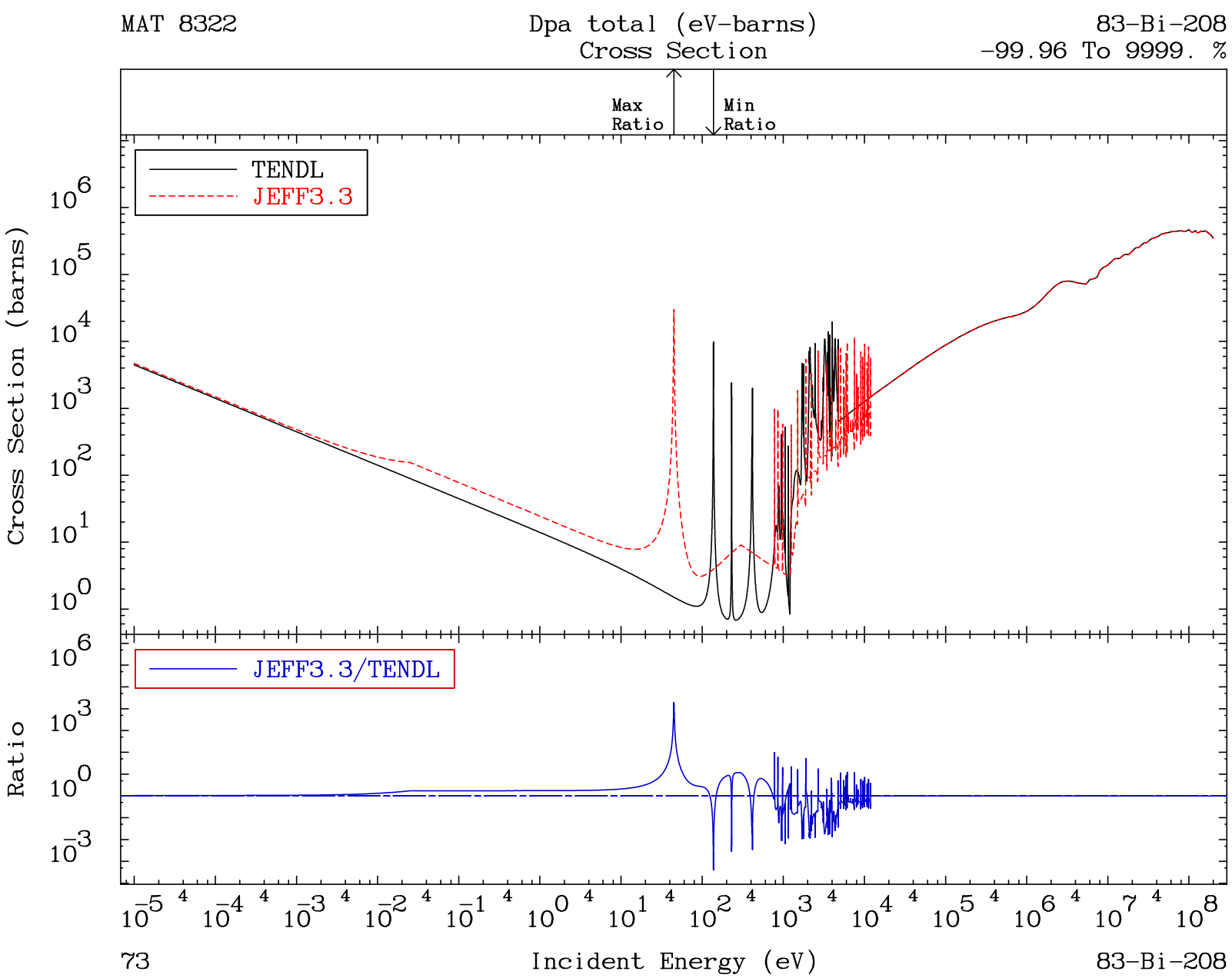

MAT 8322
Kerma inelastic (mt51-91)
Cross Section
83-Bi-208
-244.5 To 757.6 %
Max Ratio
Min Ratio
TENDL Threshold 63.326 keV
JEFF3.3 Threshold 63.326 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
83-Bi-208

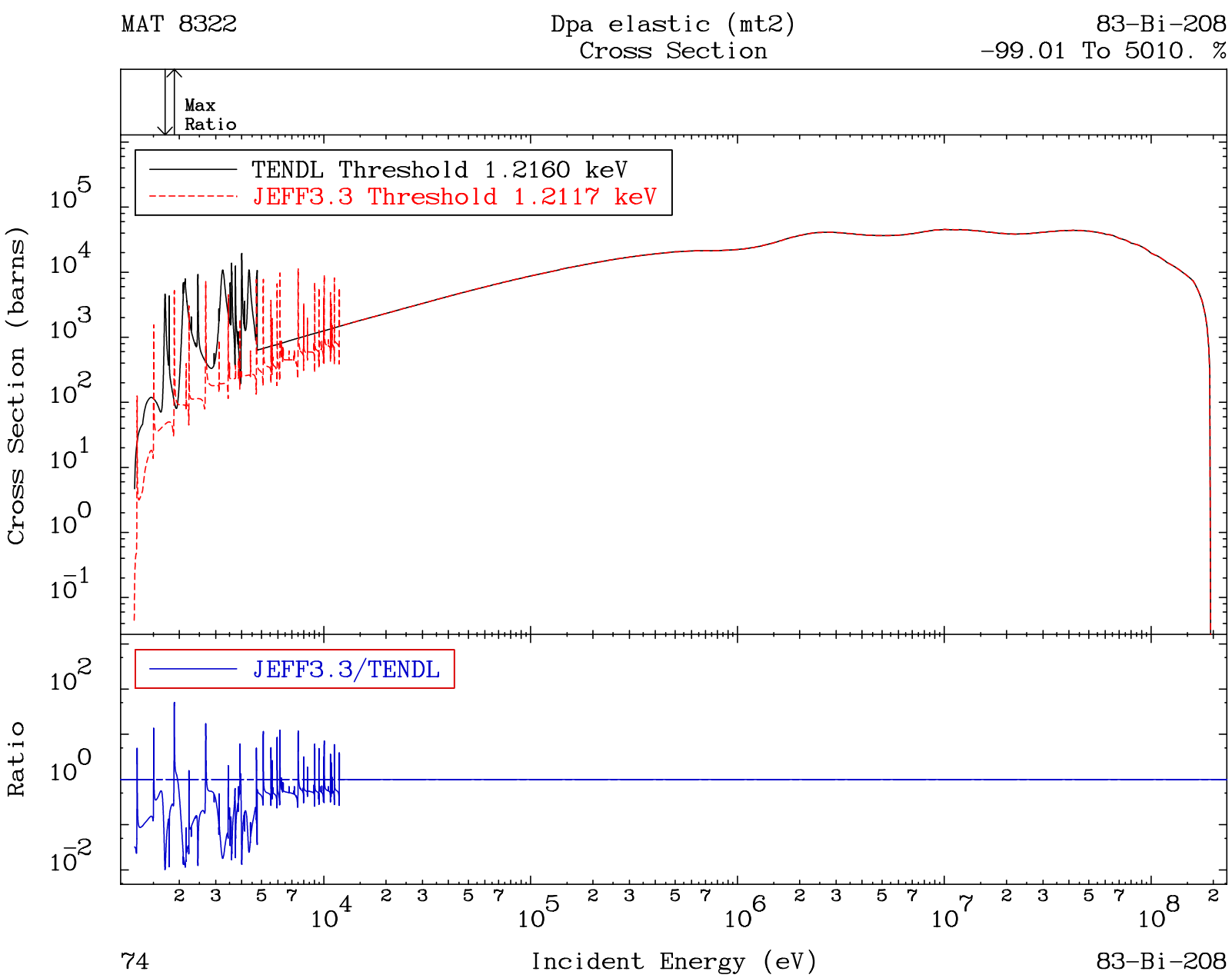

MAT 8322
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
83-Bi-208
-244.5 To 757.6 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
8
4
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
69
Incident Energy (eV)
83-Bi-208

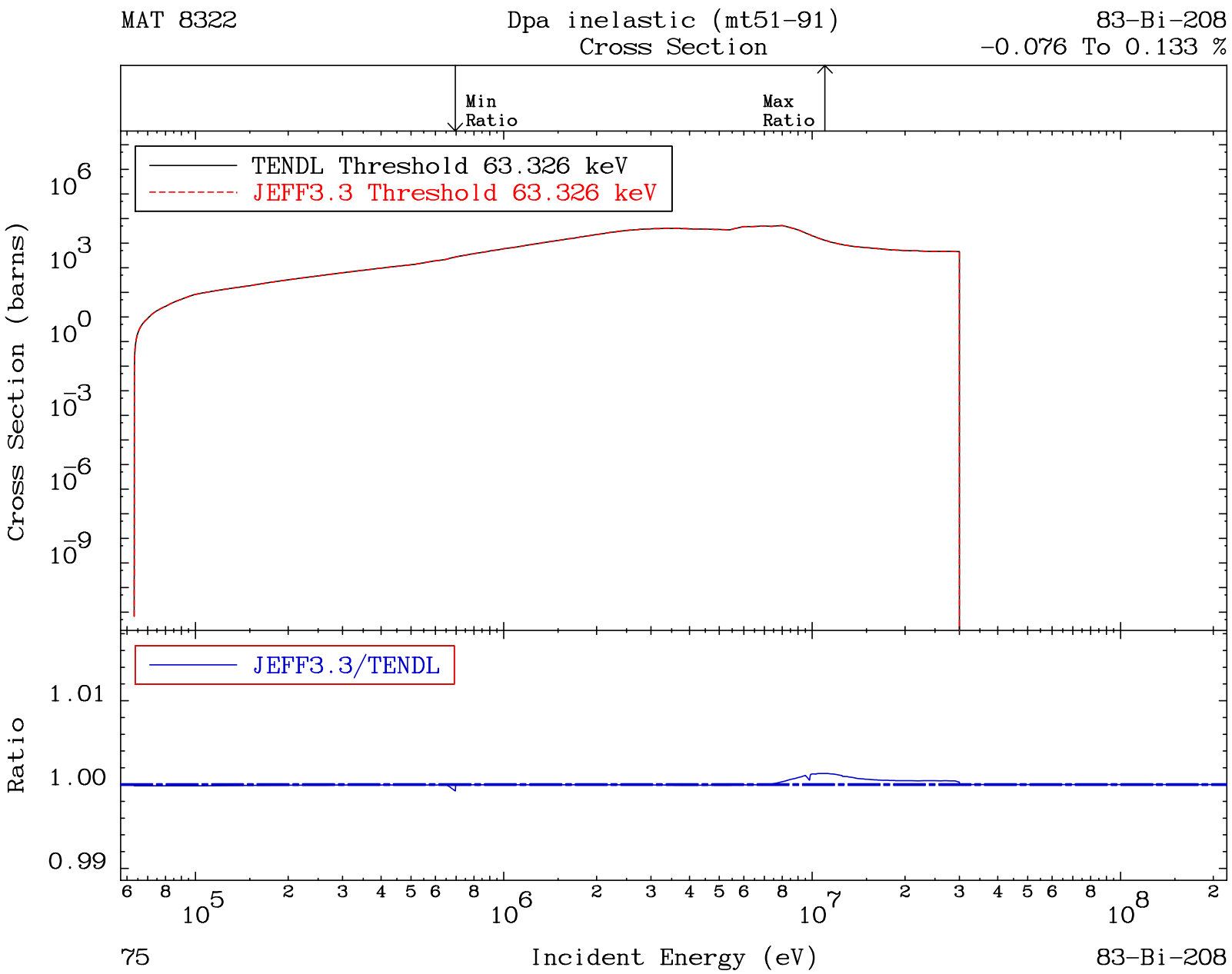

MAT 8322
Kerma capture (mt102)
Cross Section
83-Bi-208
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
83-Bi-208

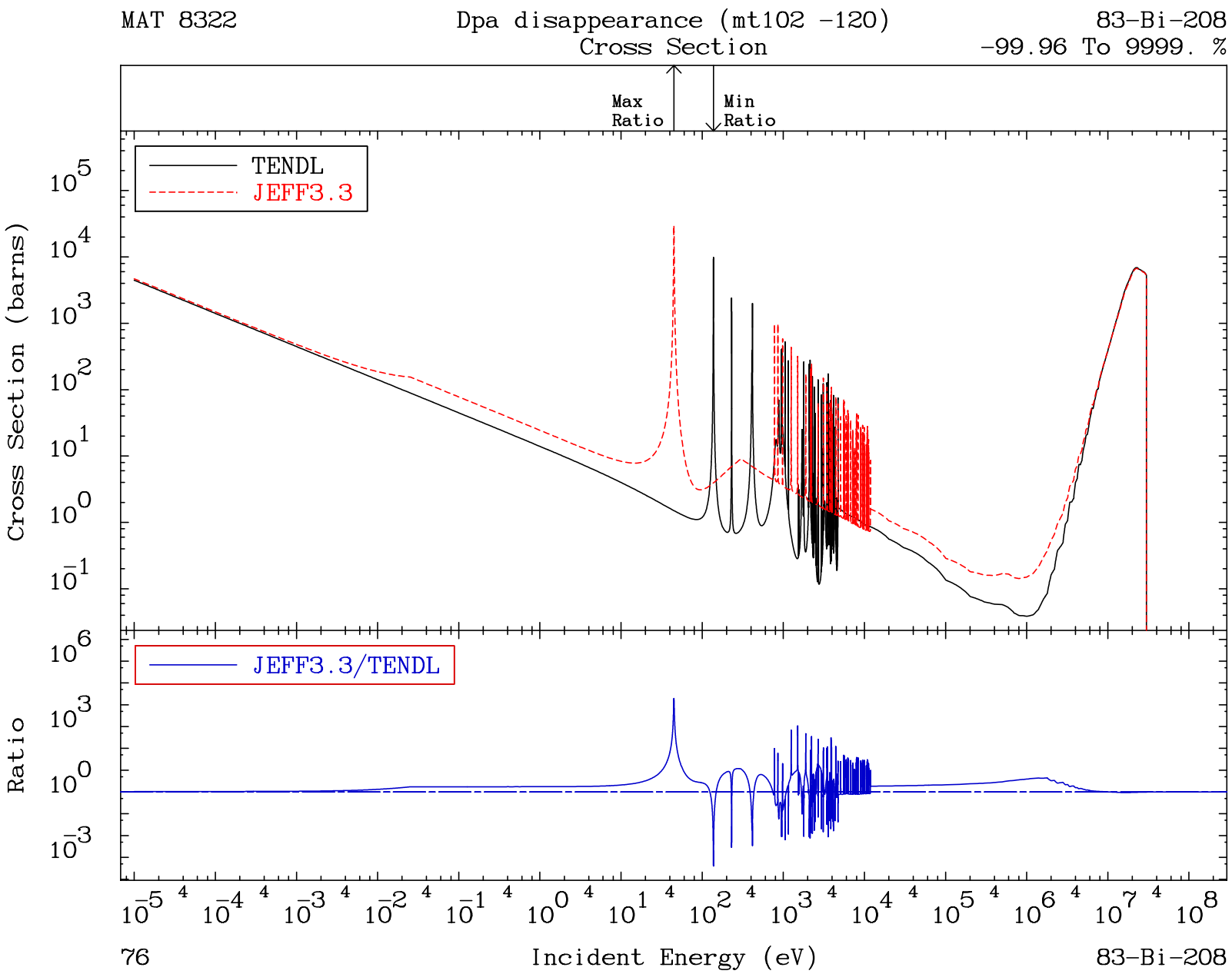

MAT 8322
Total photon (eV-barns)
Cross Section
83-Bi-208
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
83-Bi-208

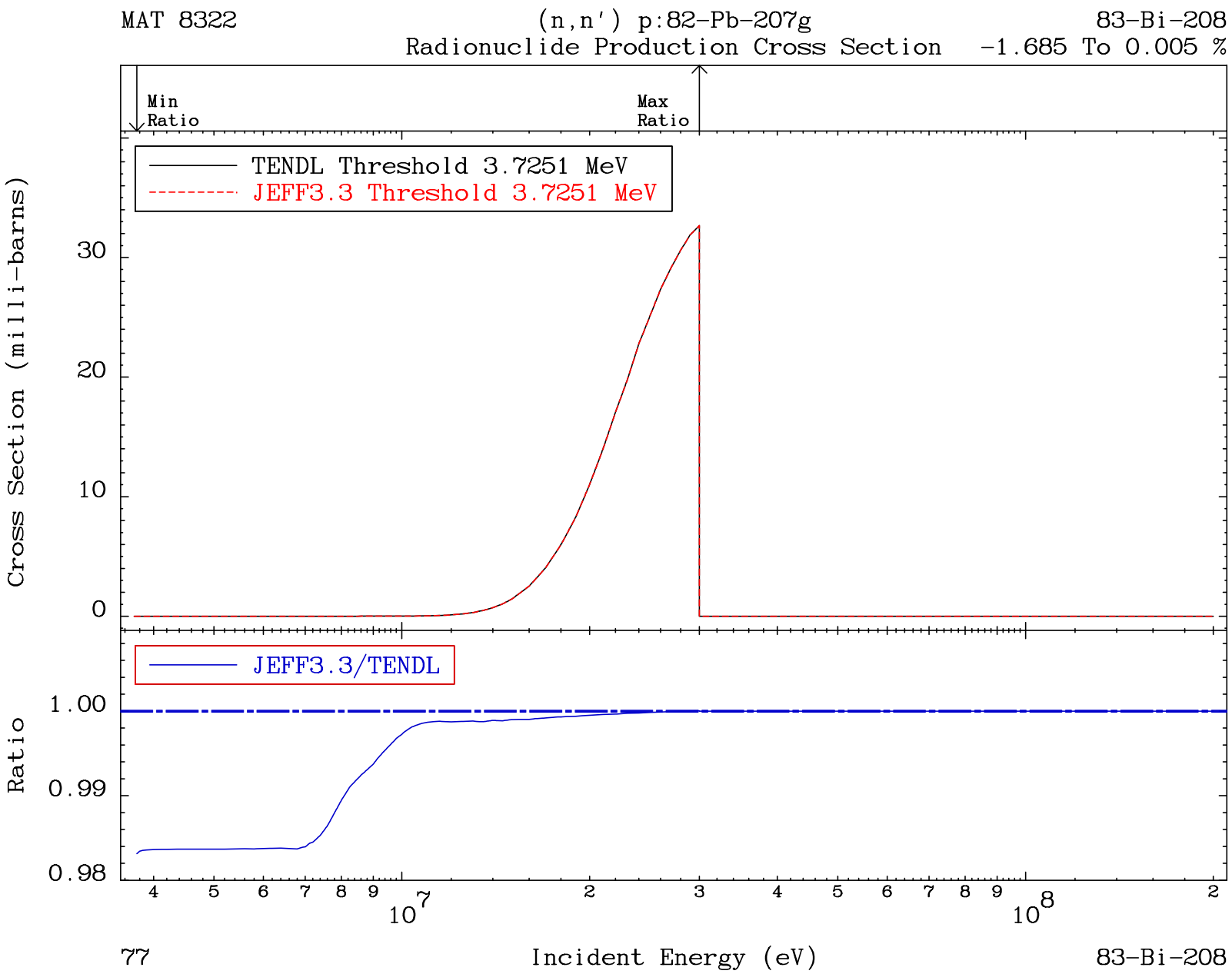

MAT 8322
Total kinematic kerma (high limit)
Cross Section
83-Bi-208
-98.82 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
83-Bi-208

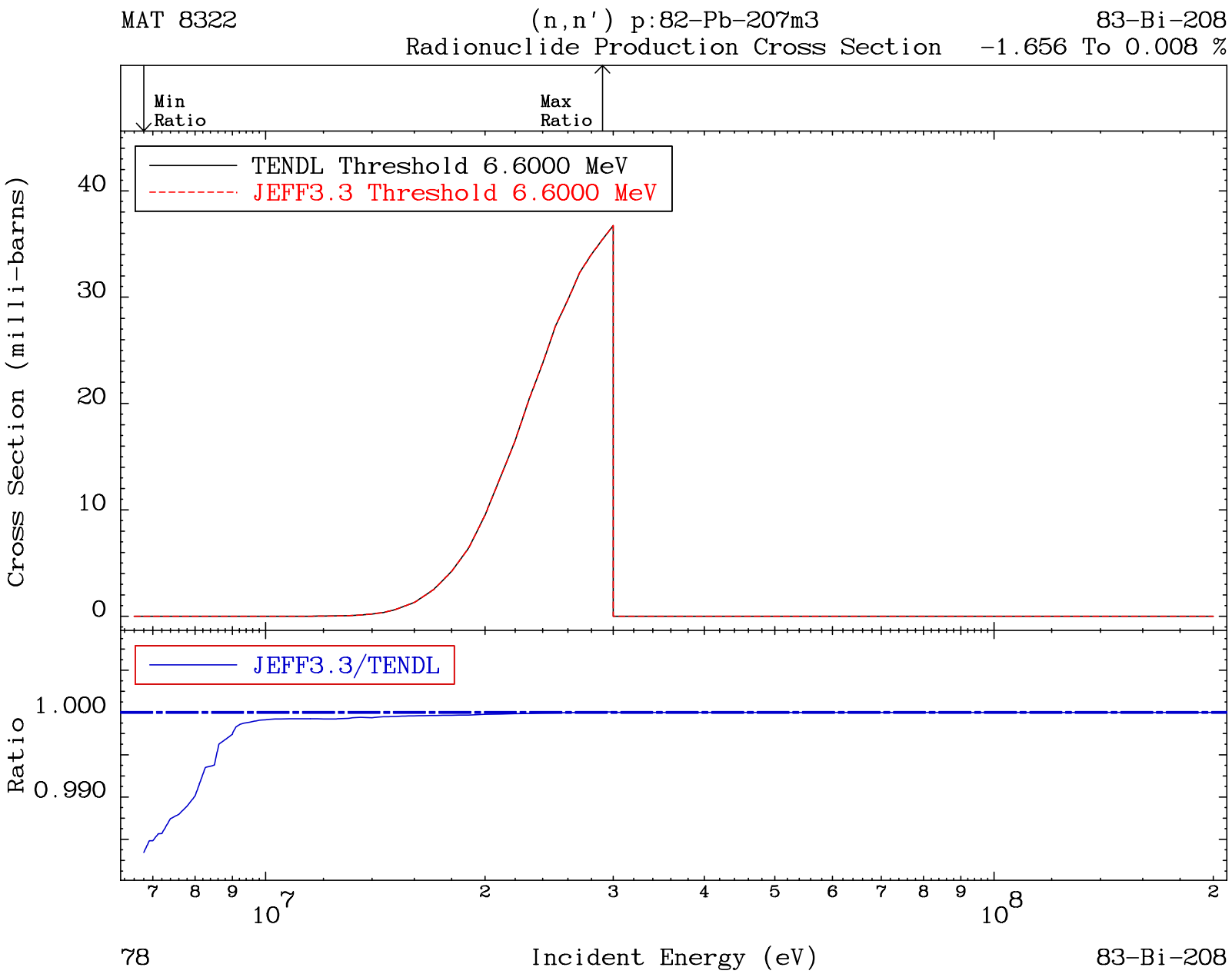

MAT 8322
Dpa total (eV-barns)
Cross Section
83-Bi-208
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
83-Bi-208

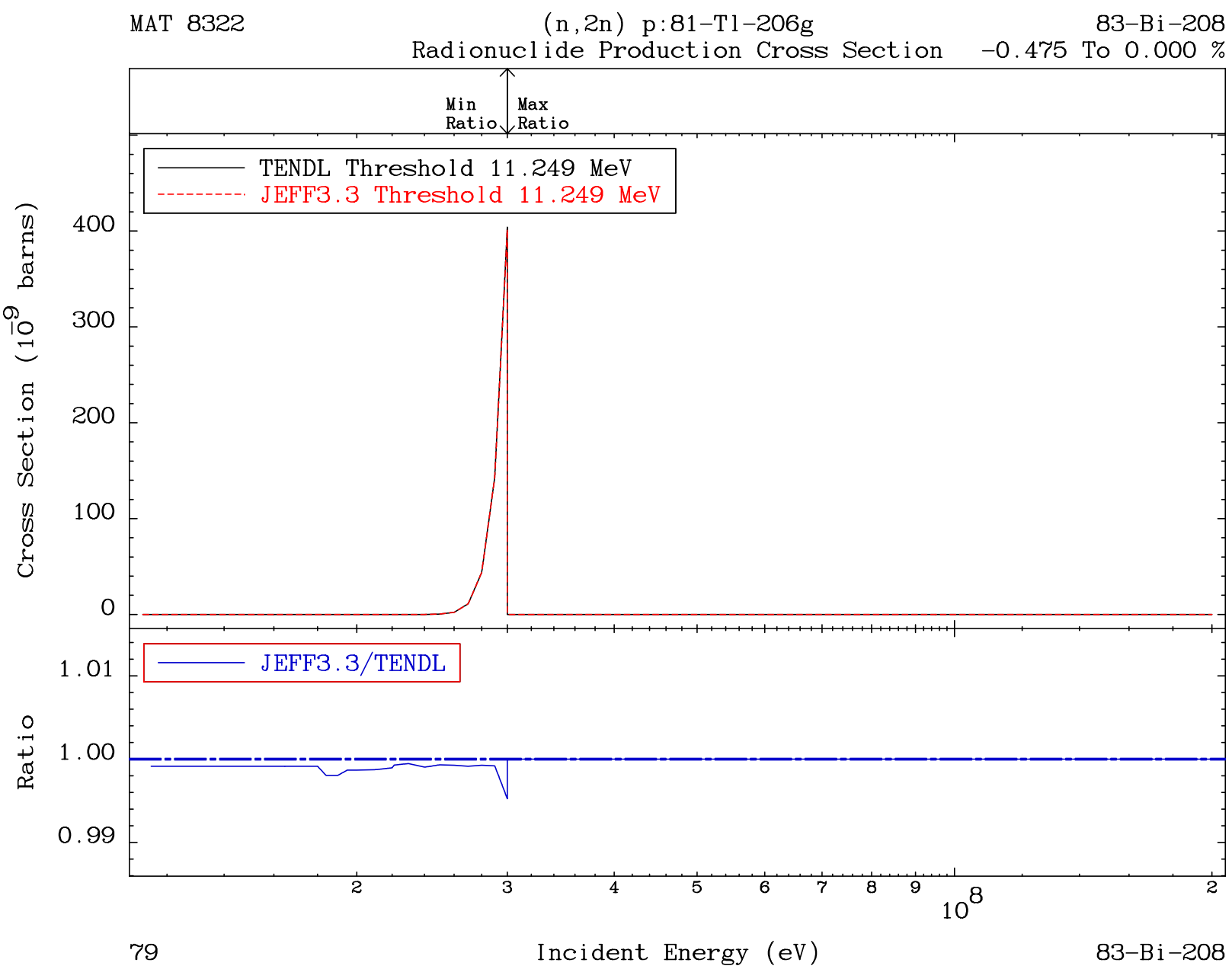

MAT 8322
Dpa elastic (mt2)
Cross Section
83-Bi-208
-99.01 To 5010. %
Max
Ratio
TENDL Threshold 1.2160 keV
JEFF3.3 Threshold 1.2117 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
83-Bi-208

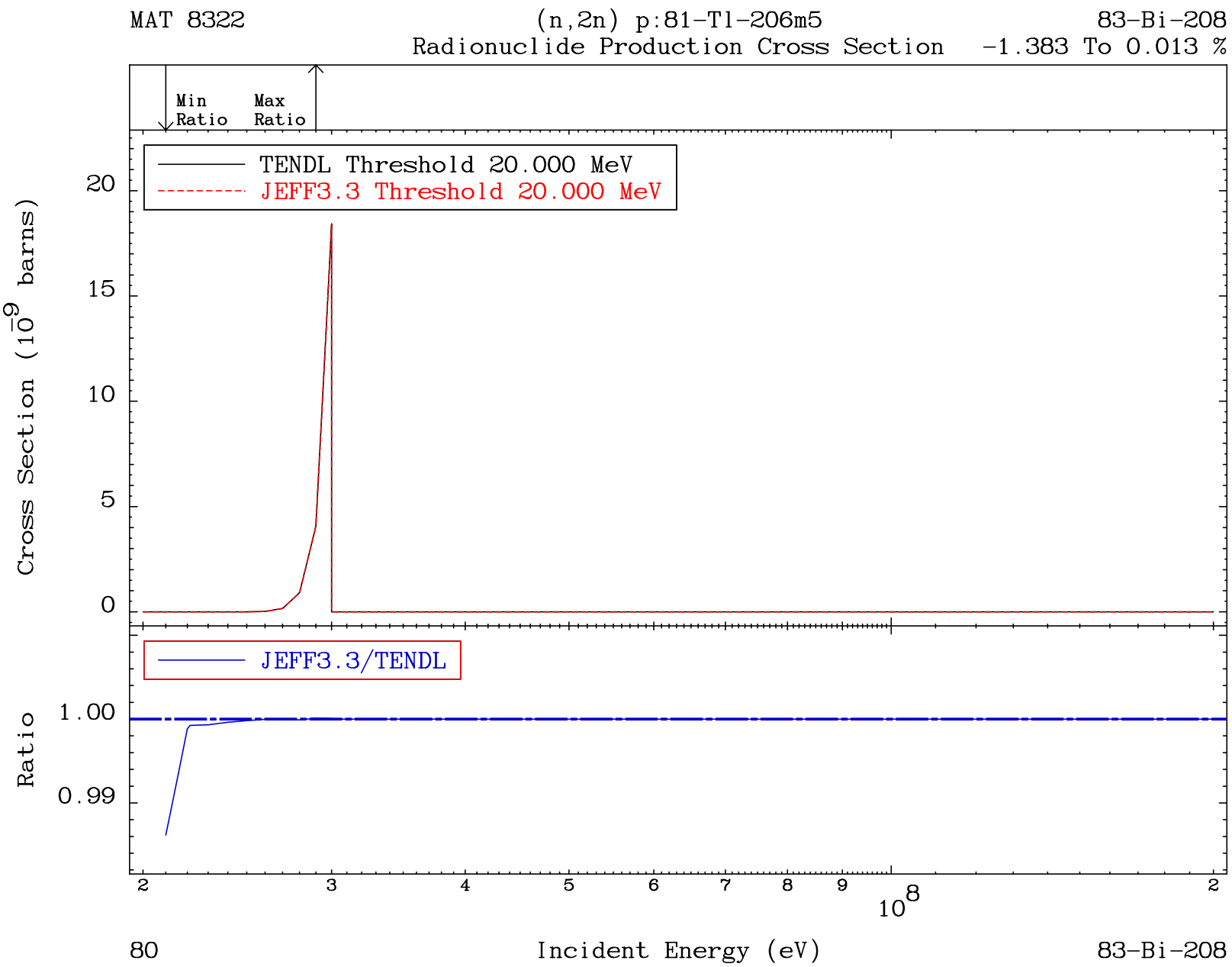

MAT 8322
Dpa inelastic (mt51-91)
Cross Section
83-Bi-208
-0.076 To 0.133 %
Min Ratio
Max Ratio
TENDL Threshold 63.326 keV
JEFF3.3 Threshold 63.326 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
83-Bi-208

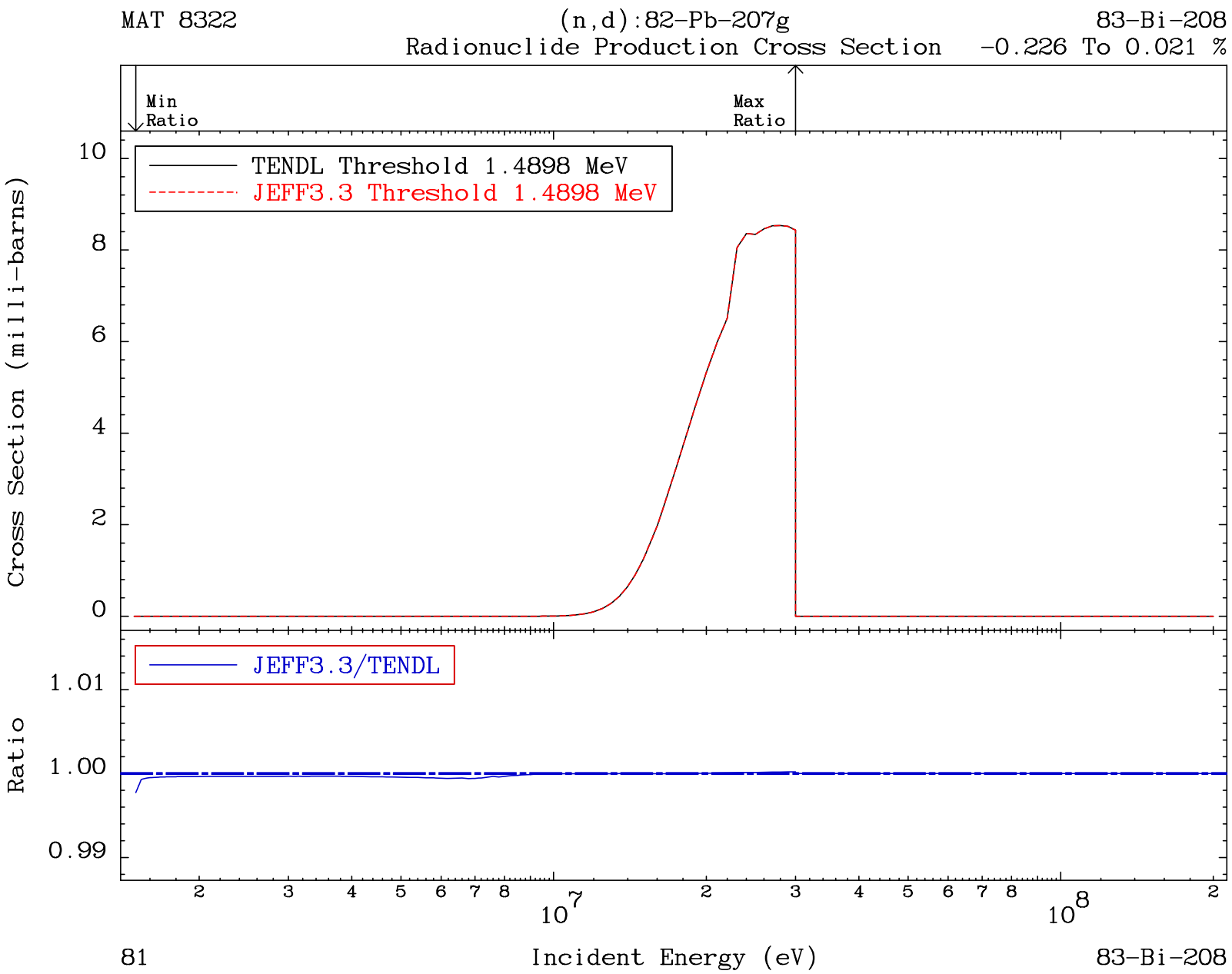

MAT 8322
Dpa disappearance (mt102 -120)
Cross Section
83-Bi-208
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
83-Bi-208

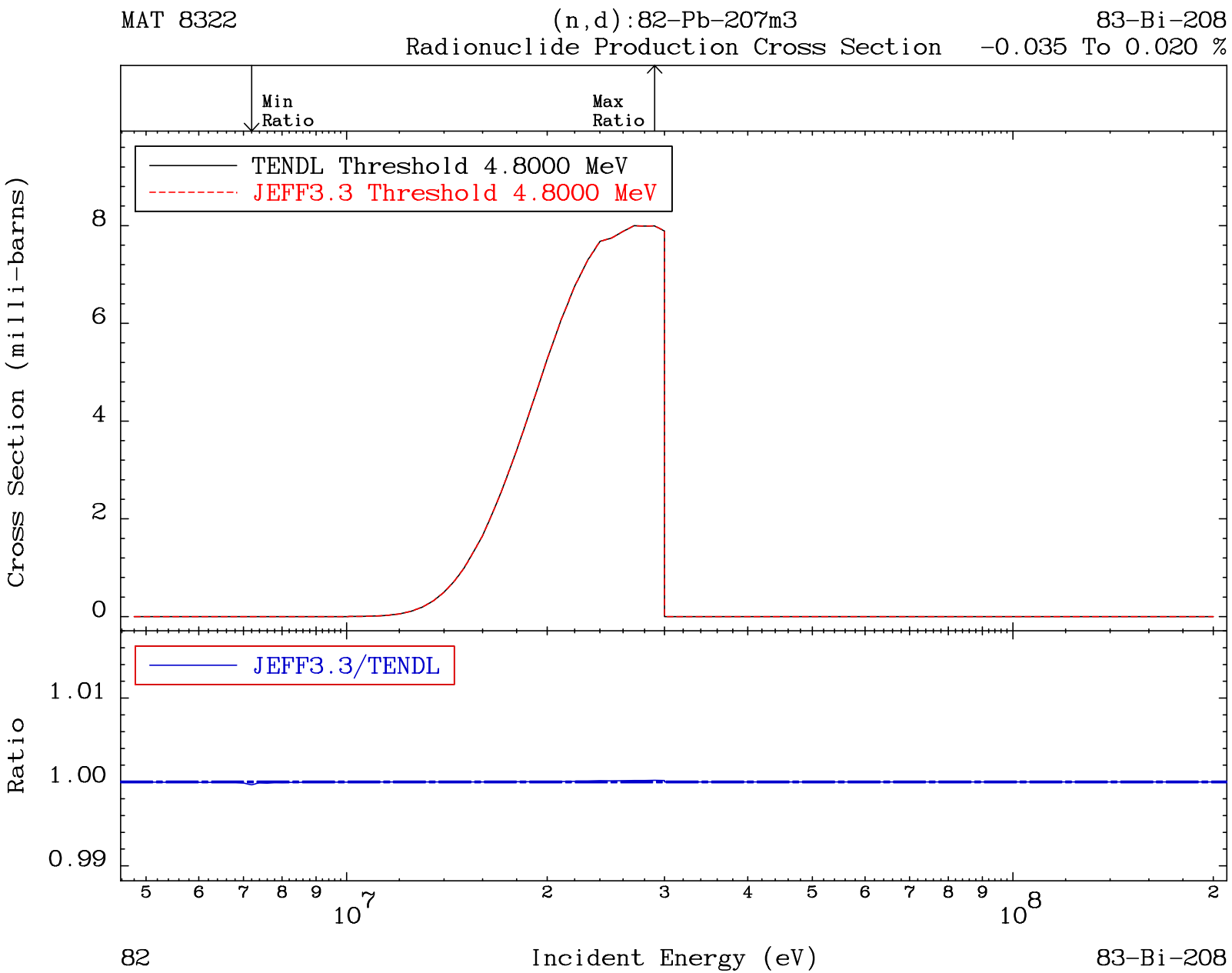

MAT 8322
(n,n') p:82-Pb-207g
83-Bi-208
Radionuclide Production Cross Section -1.685 To 0.005 %
Min Ratio
Max Ratio
TENDL Threshold 3.7251 MeV
JEFF3.3 Threshold 3.7251 MeV
Cross Section (milli-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
77
Incident Energy (eV)
83-Bi-208

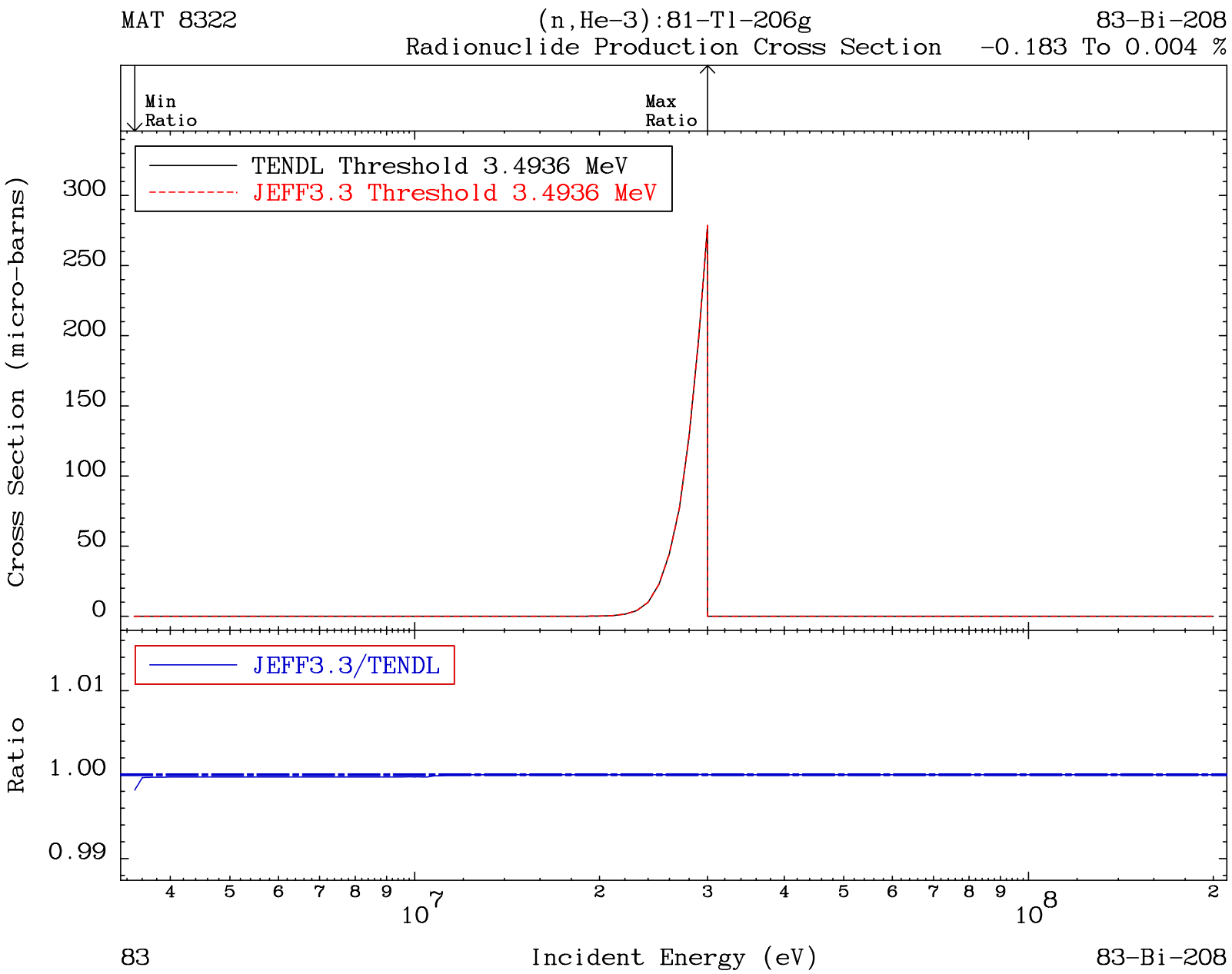

MAT 8322
(n,n') p:82-Pb-207m3
83-Bi-208
Radionuclide Production Cross Section -1.656 To 0.008 %
Min Ratio
Max Ratio
TENDL Threshold 6.6000 MeV
JEFF3.3 Threshold 6.6000 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.000
0.990
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
78
Incident Energy (eV)
83-Bi-208

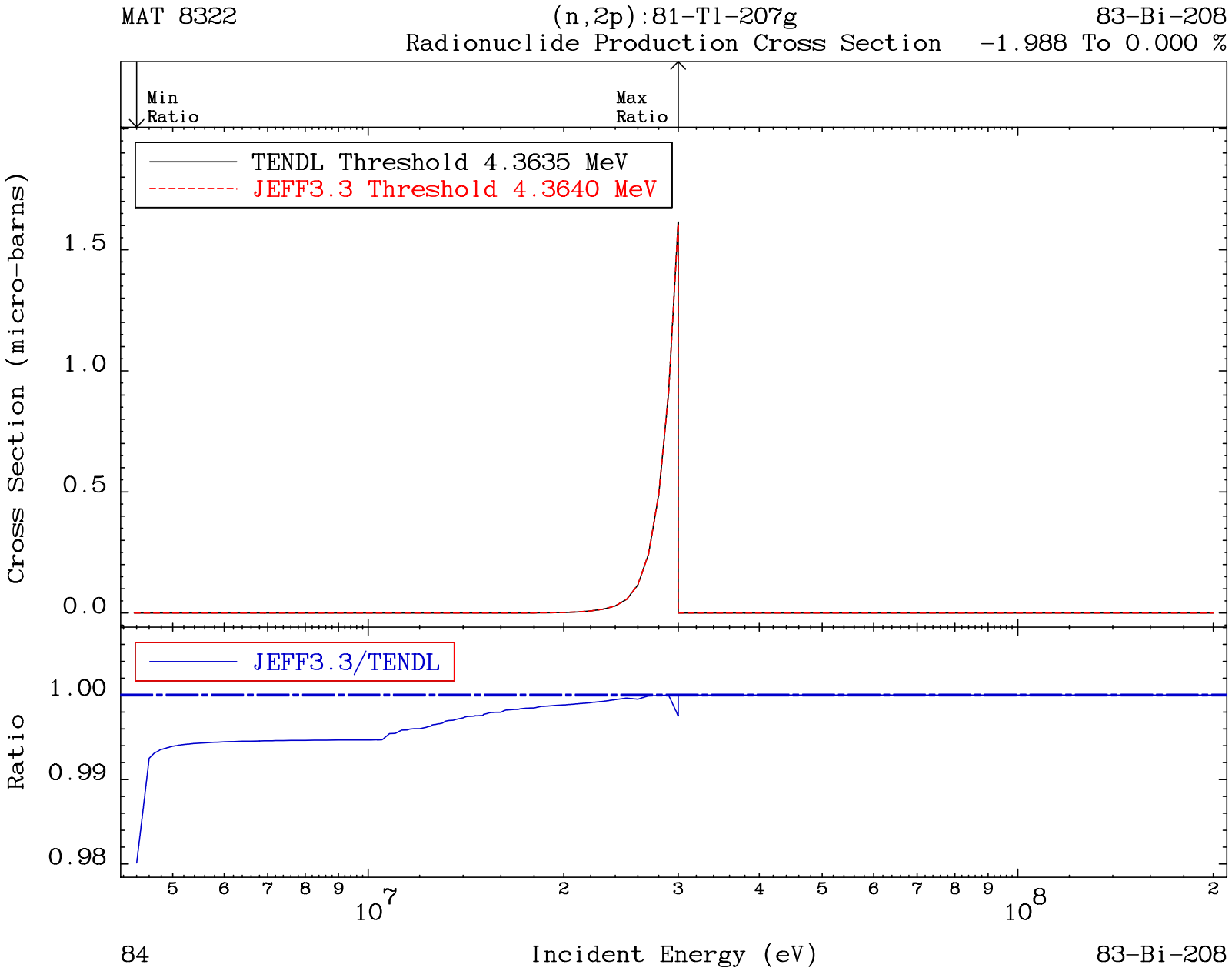

MAT 8322
(n,2n) p:81-Tl-206g
83-Bi-208
Radionuclide Production Cross Section
-0.475 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.249 MeV
JEFF3.3 Threshold 11.249 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
83-Bi-208

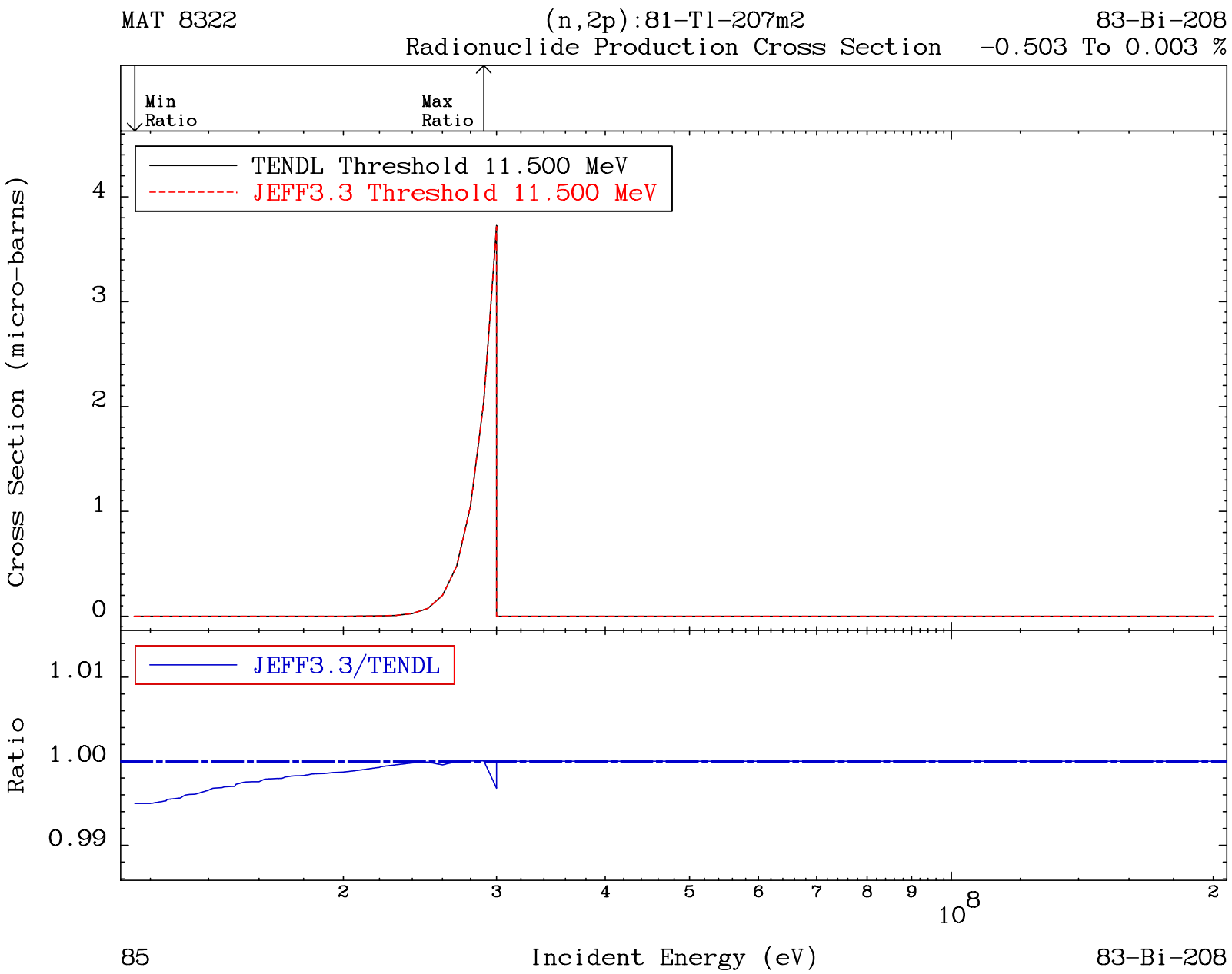

MAT 8322
(n,2n) p:81-Tl-206m5
83-Bi-208
Radionuclide Production Cross Section
-1.383 To 0.013 %
Min Ratio
Max Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 20.000 MeV
Cross Section (10^{-9} barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
83-Bi-208

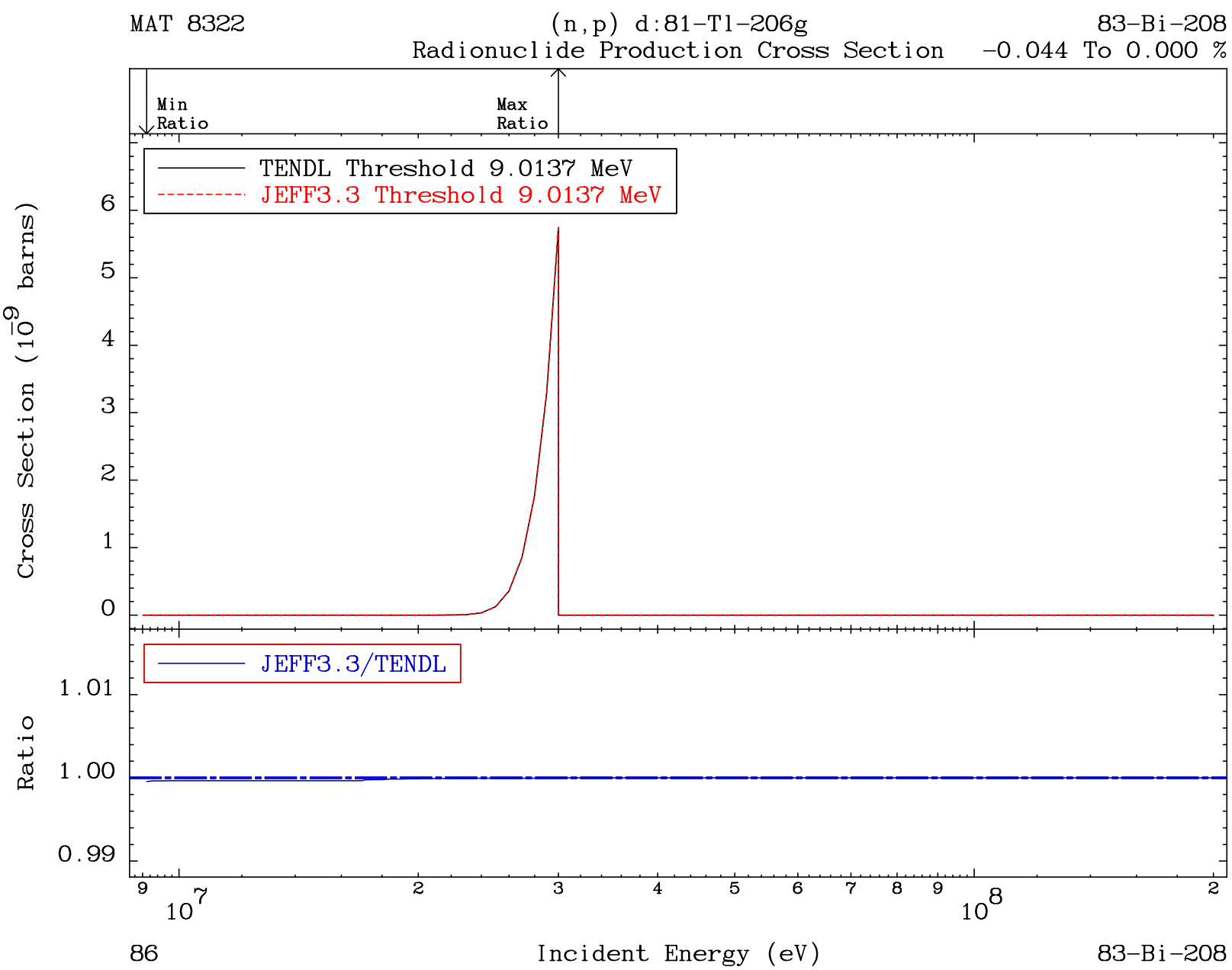

MAT 8322
(n,d):82-Pb-207g
83-Bi-208
Radionuclide Production Cross Section
-0.226 To 0.021 %
Min Ratio
Max Ratio
TENDL Threshold 1.4898 MeV
JEFF3.3 Threshold 1.4898 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
81
83-Bi-208

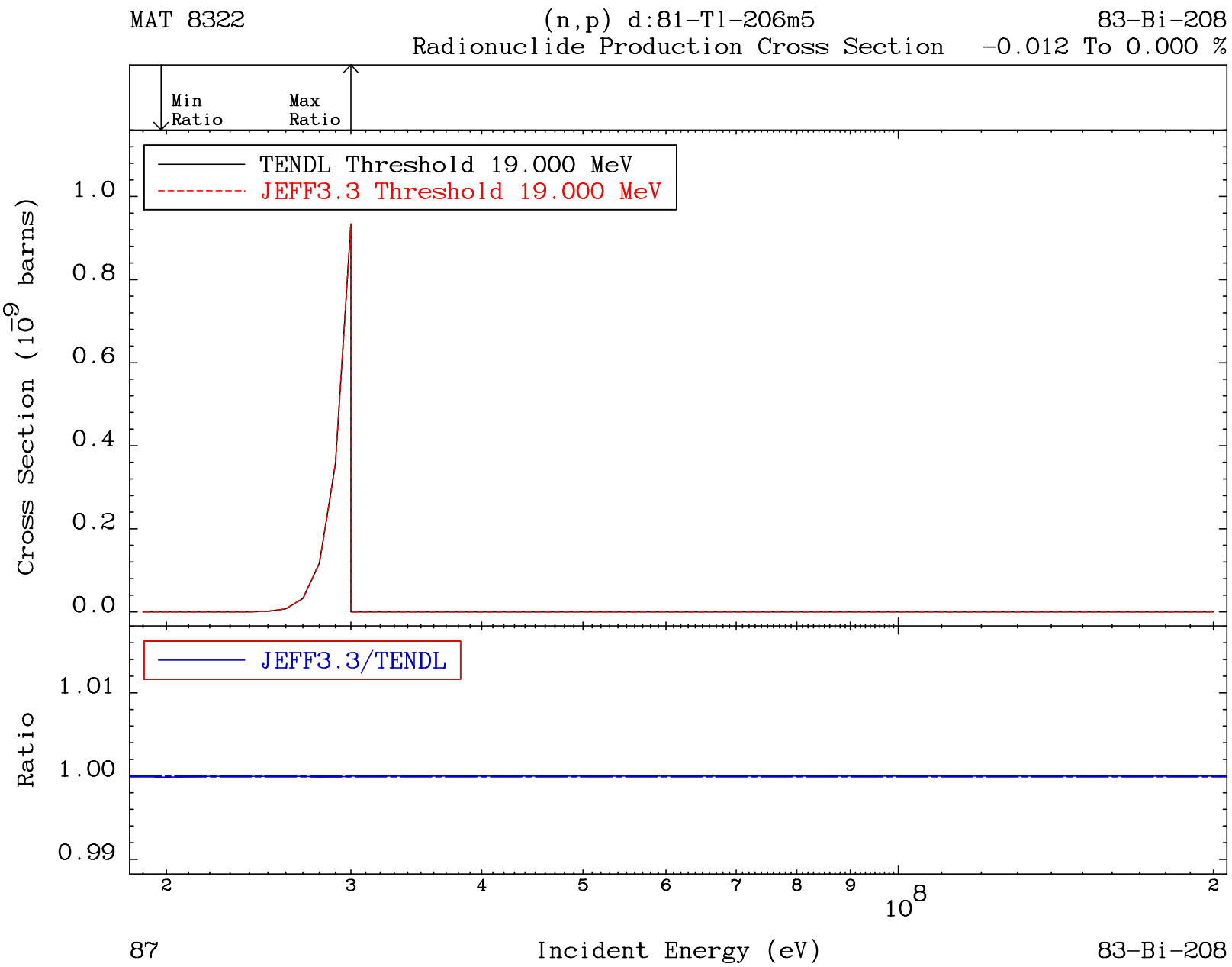

MAT 8322
(n,d):82-Pb-207m3
83-Bi-208
Radionuclide Production Cross Section
-0.035 To 0.020 %
Min Ratio
Max Ratio
TENDL Threshold 4.8000 MeV
JEFF3.3 Threshold 4.8000 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
82
Incident Energy (eV)
83-Bi-208


MAT 8322
(n,He-3):81-Tl-206g
83-Bi-208
Radionuclide Production Cross Section
-0.183 To 0.004 %
Min Ratio
Max Ratio
TENDL Threshold 3.4936 MeV
JEFF3.3 Threshold 3.4936 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
83-Bi-208


MAT 8322
(n,2p):81-Tl-207g
83-Bi-208
Radionuclide Production Cross Section
-1.988 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 4.3635 MeV
JEFF3.3 Threshold 4.3640 MeV
Cross Section (micro-barns)
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
84
Incident Energy (eV)
83-Bi-208


MAT 8322
(n,2p):81-Tl-207m2
83-Bi-208
Radionuclide Production Cross Section
-0.503 To 0.003 %
Min Ratio
Max Ratio
TENDL Threshold 11.500 MeV
JEFF3.3 Threshold 11.500 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
83-Bi-208


MAT 8322
(n,p) d:81-Tl-206g
83-Bi-208
Radionuclide Production Cross Section
-0.044 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.0137 MeV
JEFF3.3 Threshold 9.0137 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
86
Incident Energy (eV)
83-Bi-208


MAT 8322
(n,p) d:81-Tl-206m5
83-Bi-208
Radionuclide Production Cross Section
-0.012 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 19.000 MeV
Cross Section (10^{-9} barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
83-Bi-208