Program Complot
(Version 2021-1)
by
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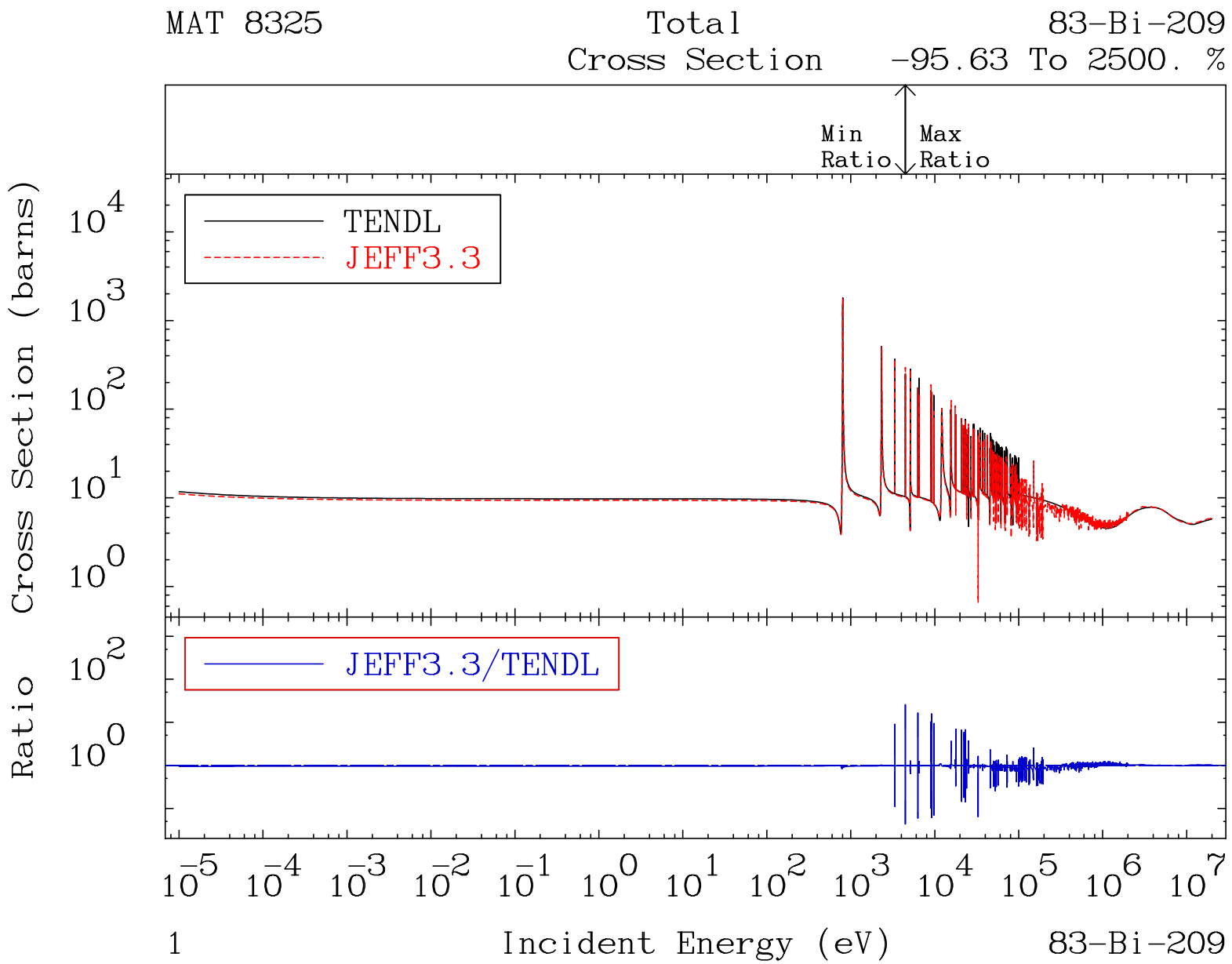
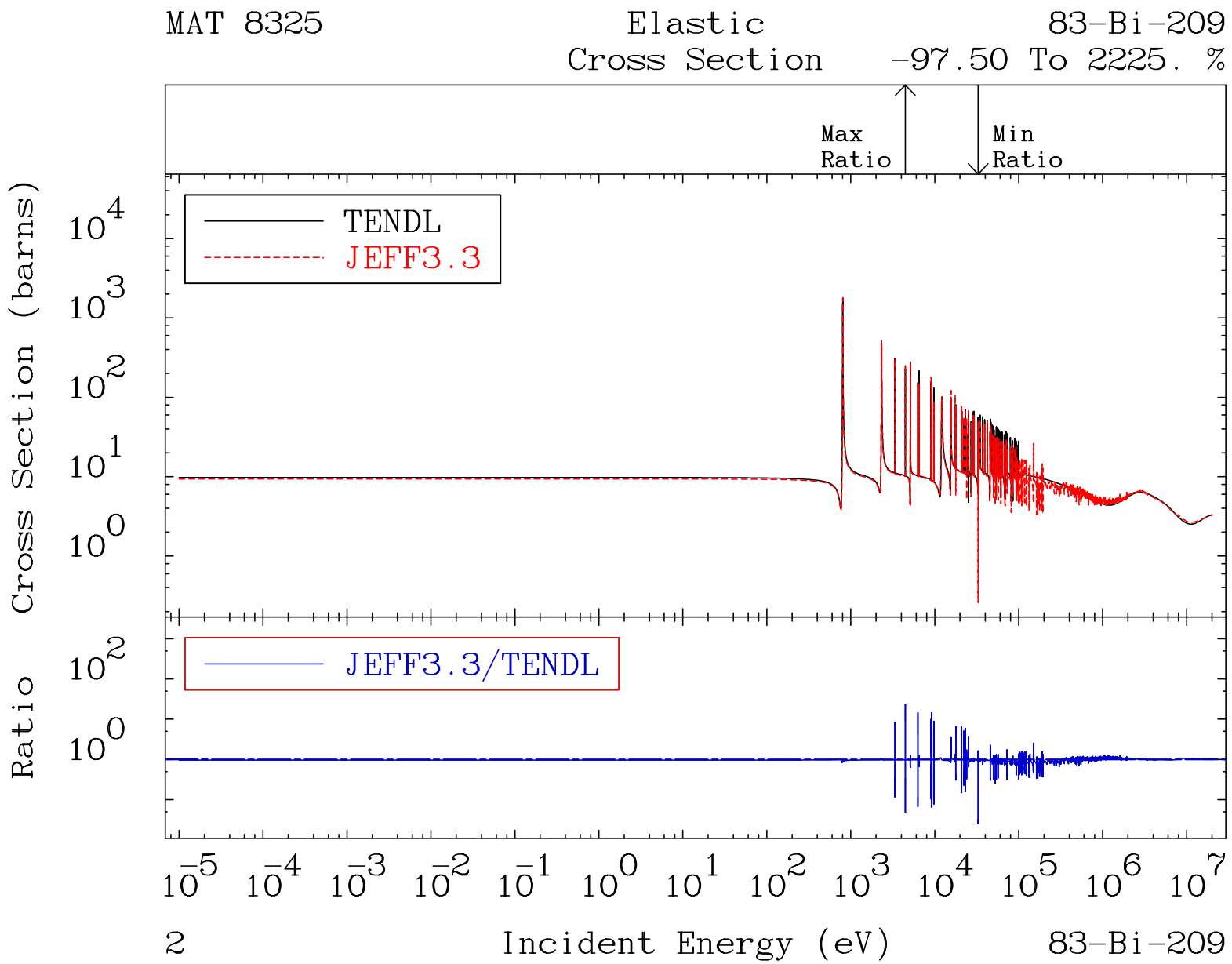
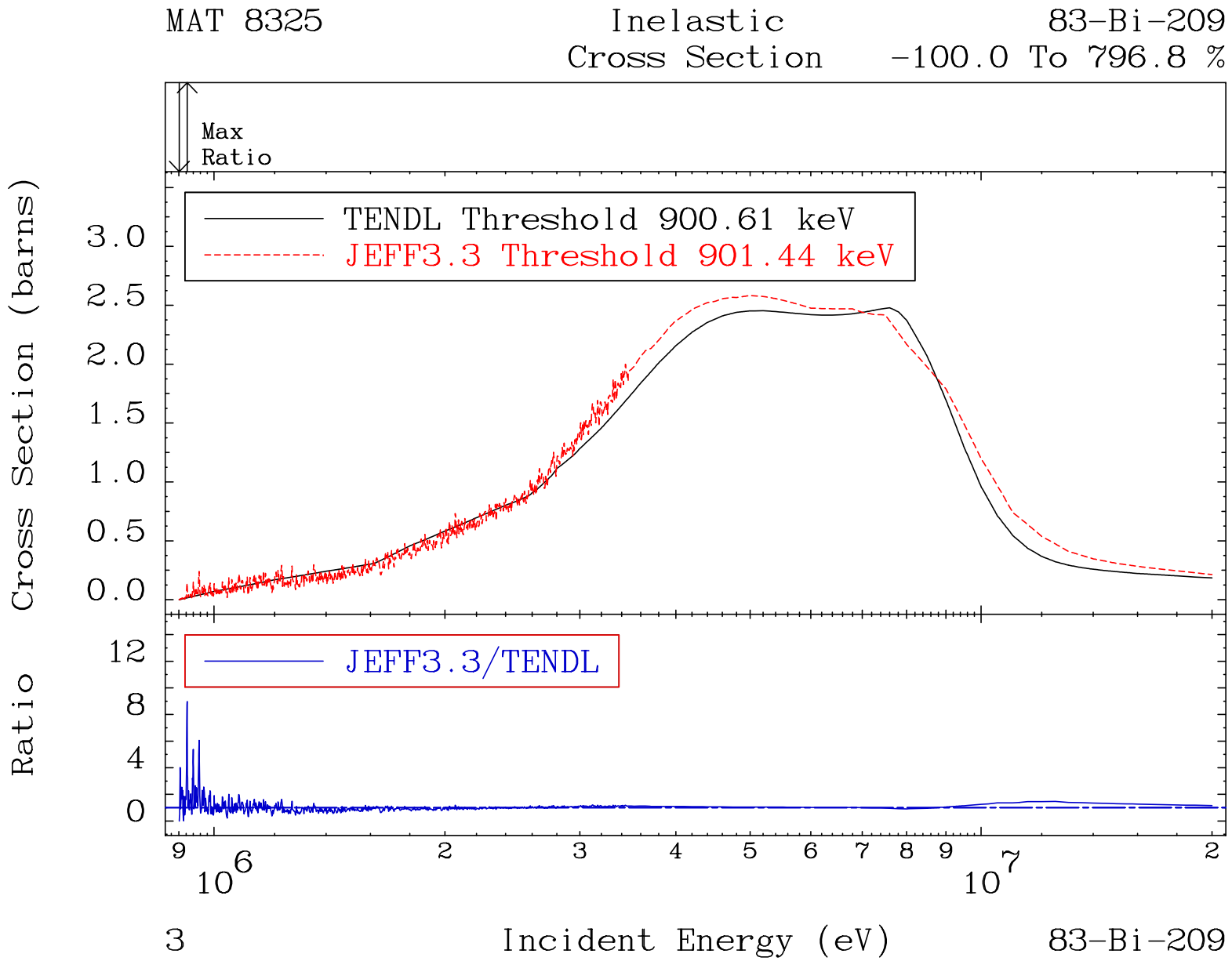
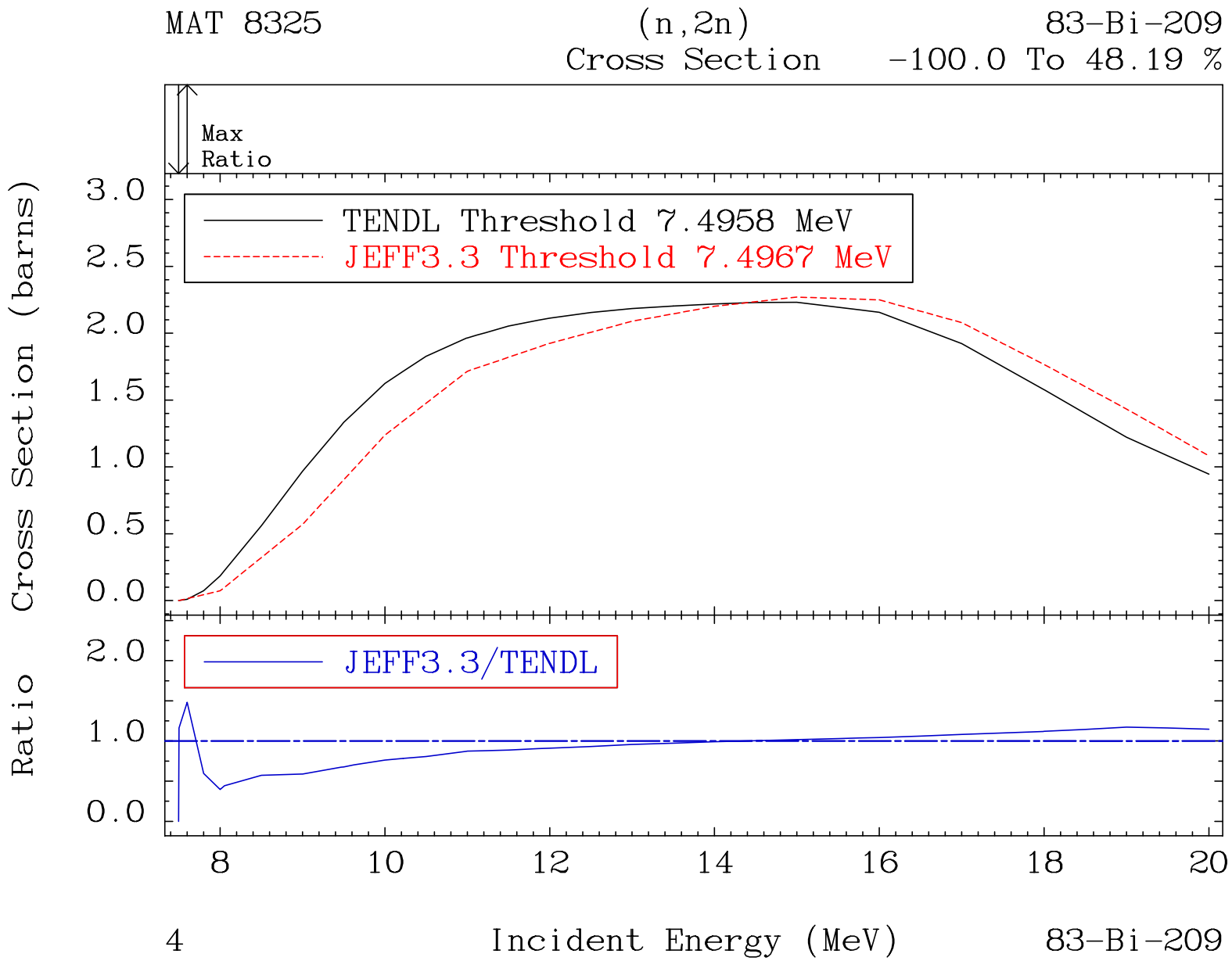
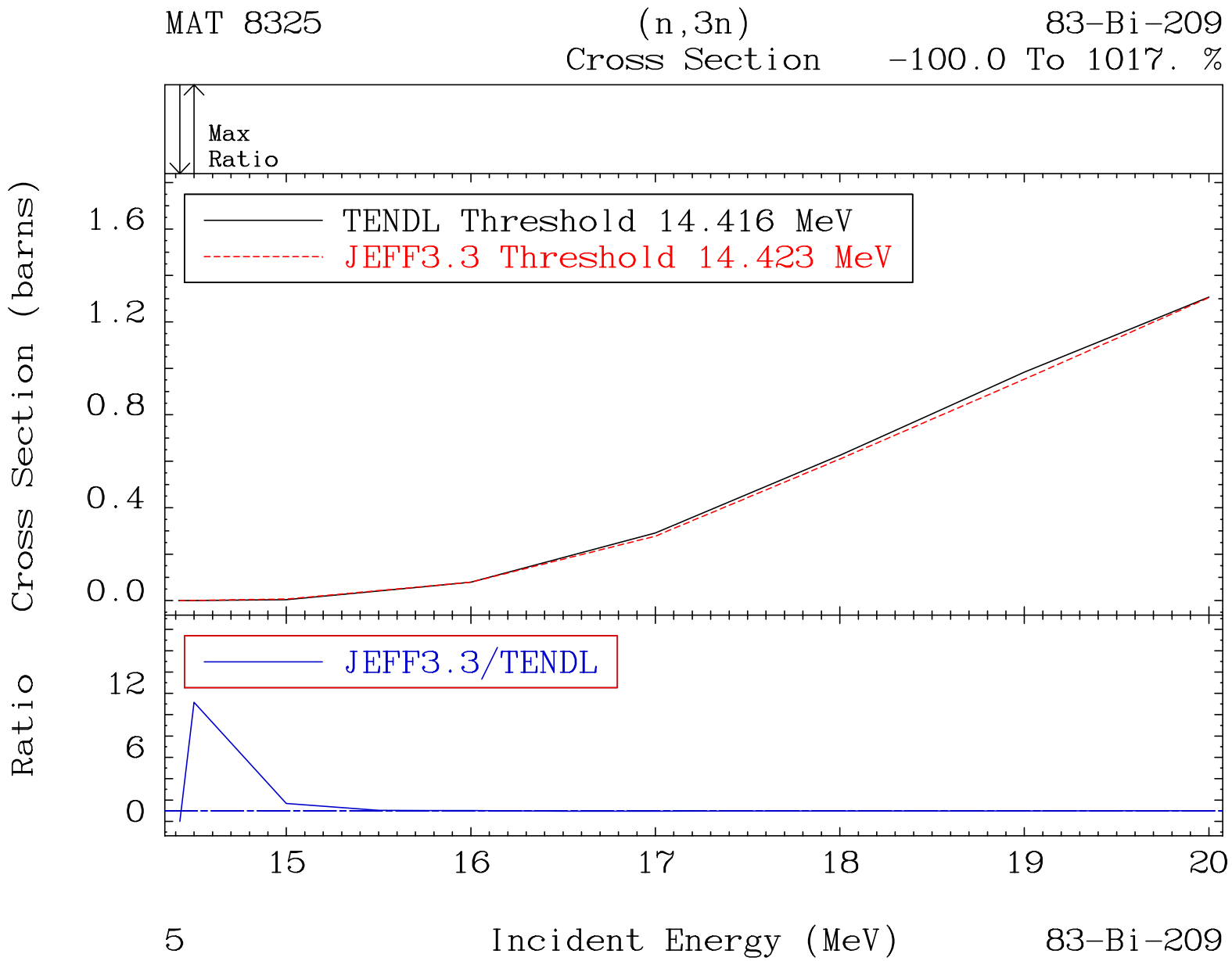
Press Mouse Button to Start

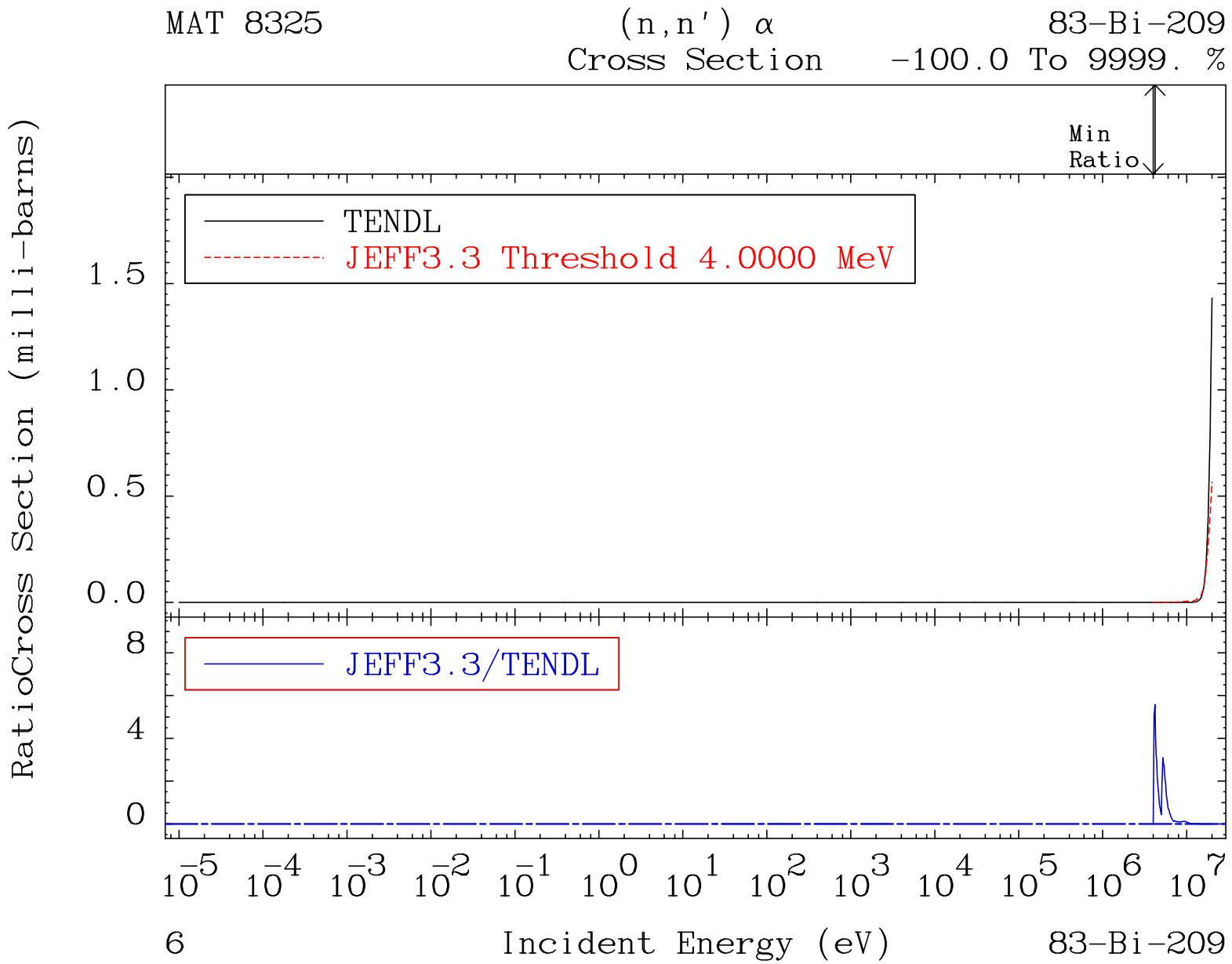

MAT 8325
Total
Cross Section
83-Bi-209
-95.63 To 2500. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
83-Bi-209

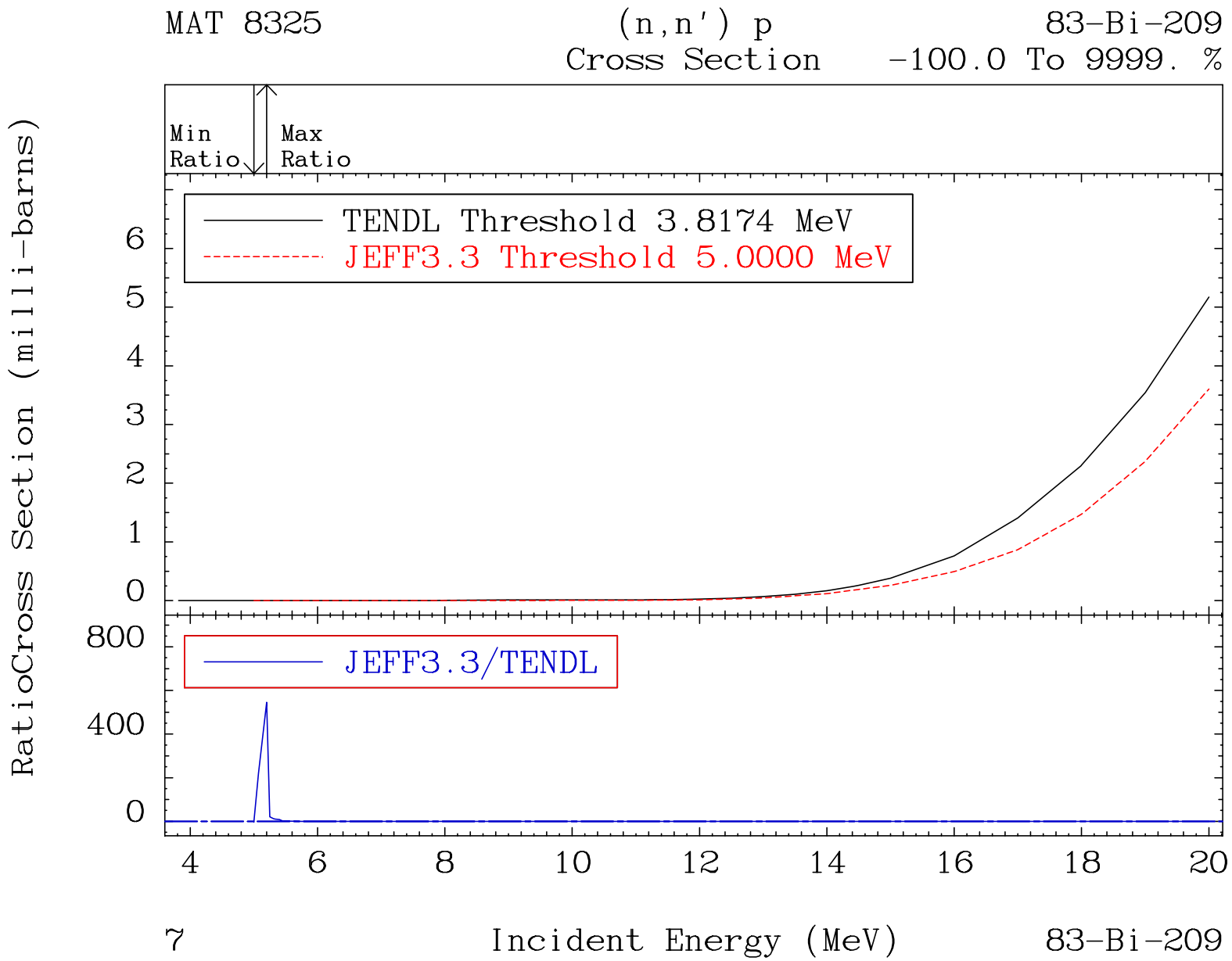

MAT 8325
Elastic
Cross Section
83-Bi-209
-97.50 To 2225. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
83-Bi-209

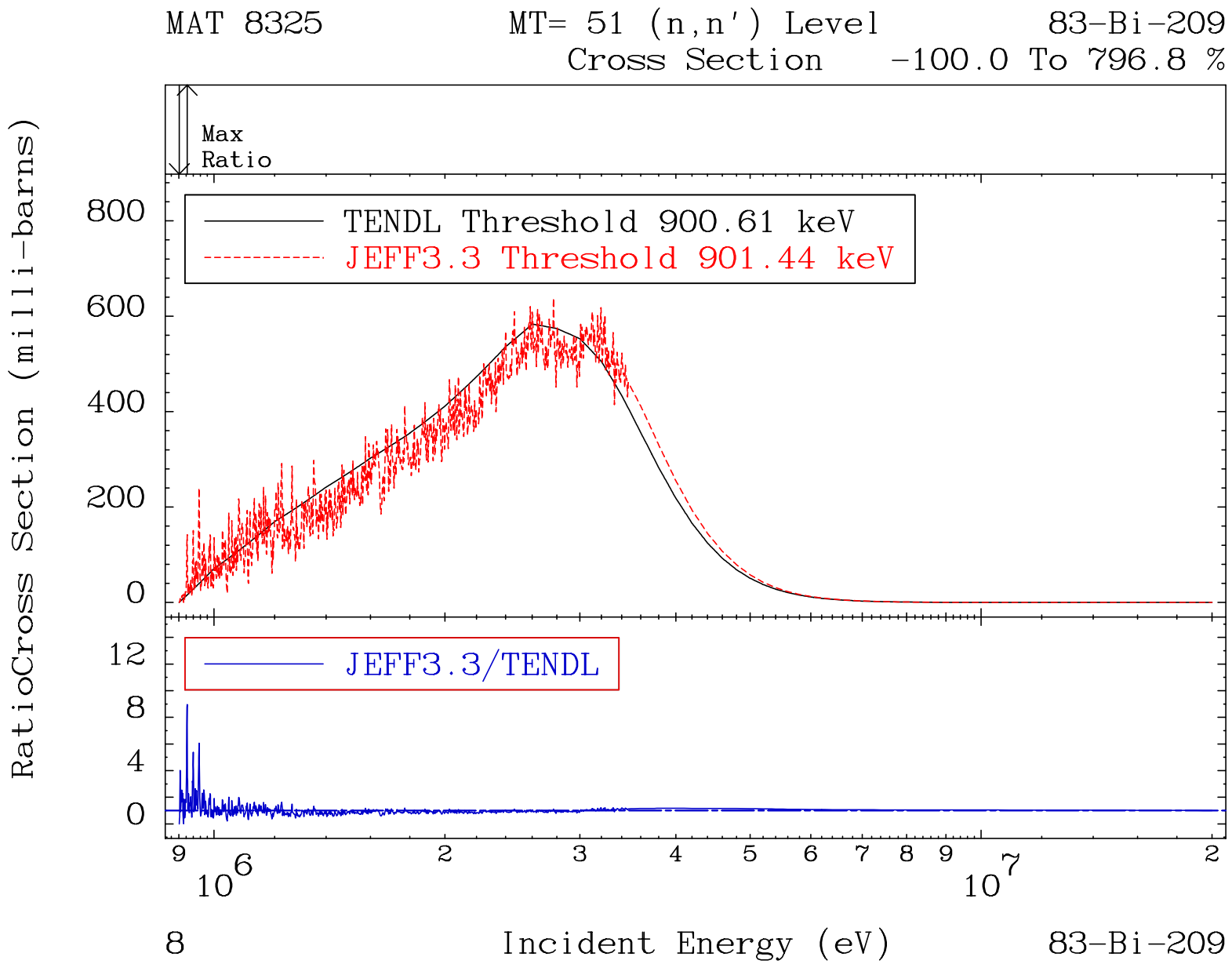

MAT 8325
Inelastic
Cross Section
83-Bi-209
-100.0 To 796.8 %
Max
Ratio
TENDL Threshold 900.61 keV
JEFF3.3 Threshold 901.44 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
12
8
4
0
9
10^6
2
3
4
5
6
7
8
9
10^7
2
3
Incident Energy (eV)
83-Bi-209

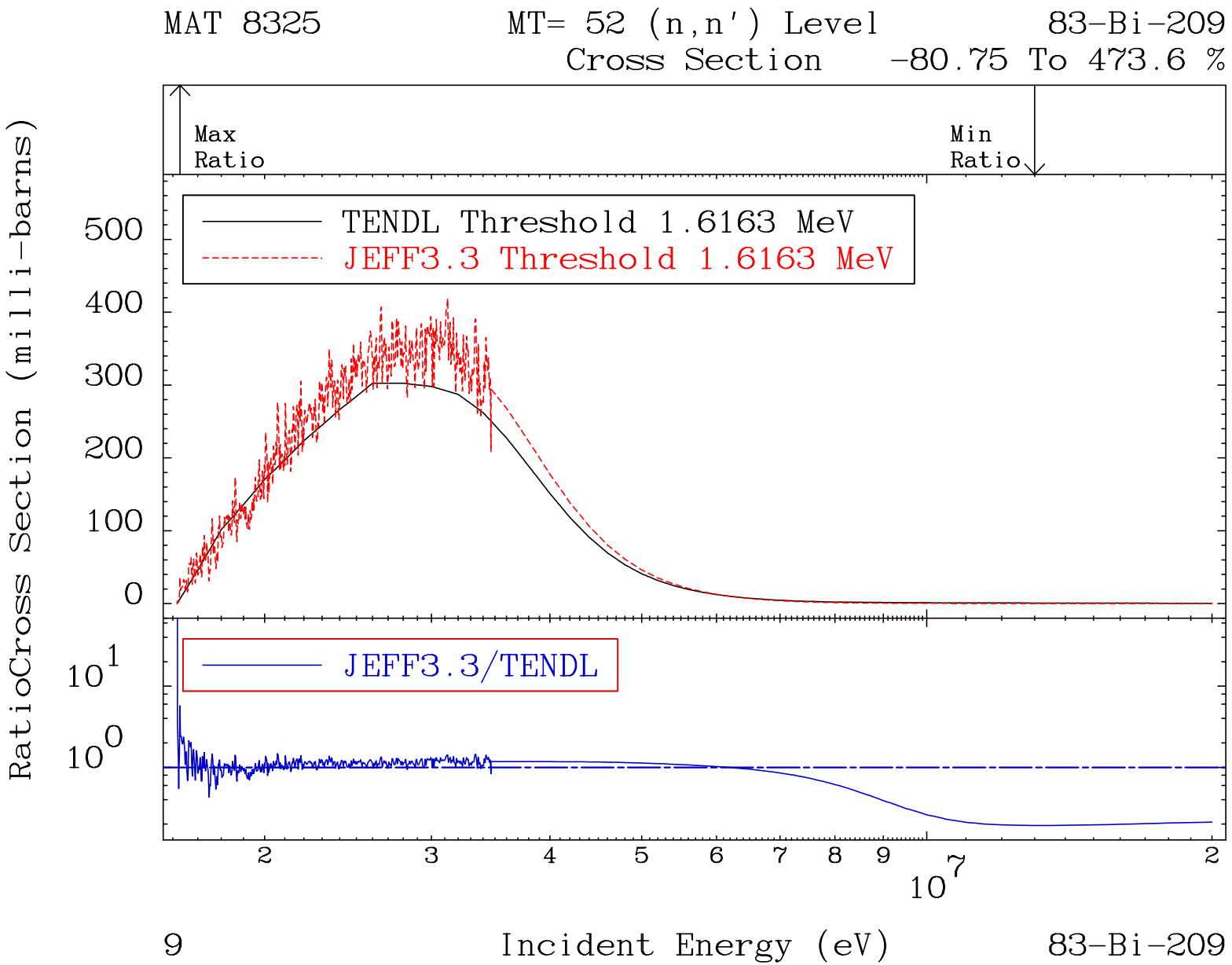

MAT 8325
(n,2n)
Cross Section
83-Bi-209
-100.0 To 48.19 %
Max
Ratio
TENDL Threshold 7.4958 MeV
JEFF3.3 Threshold 7.4967 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
8
10
12
14
16
18
20
Incident Energy (MeV)
4
83-Bi-209

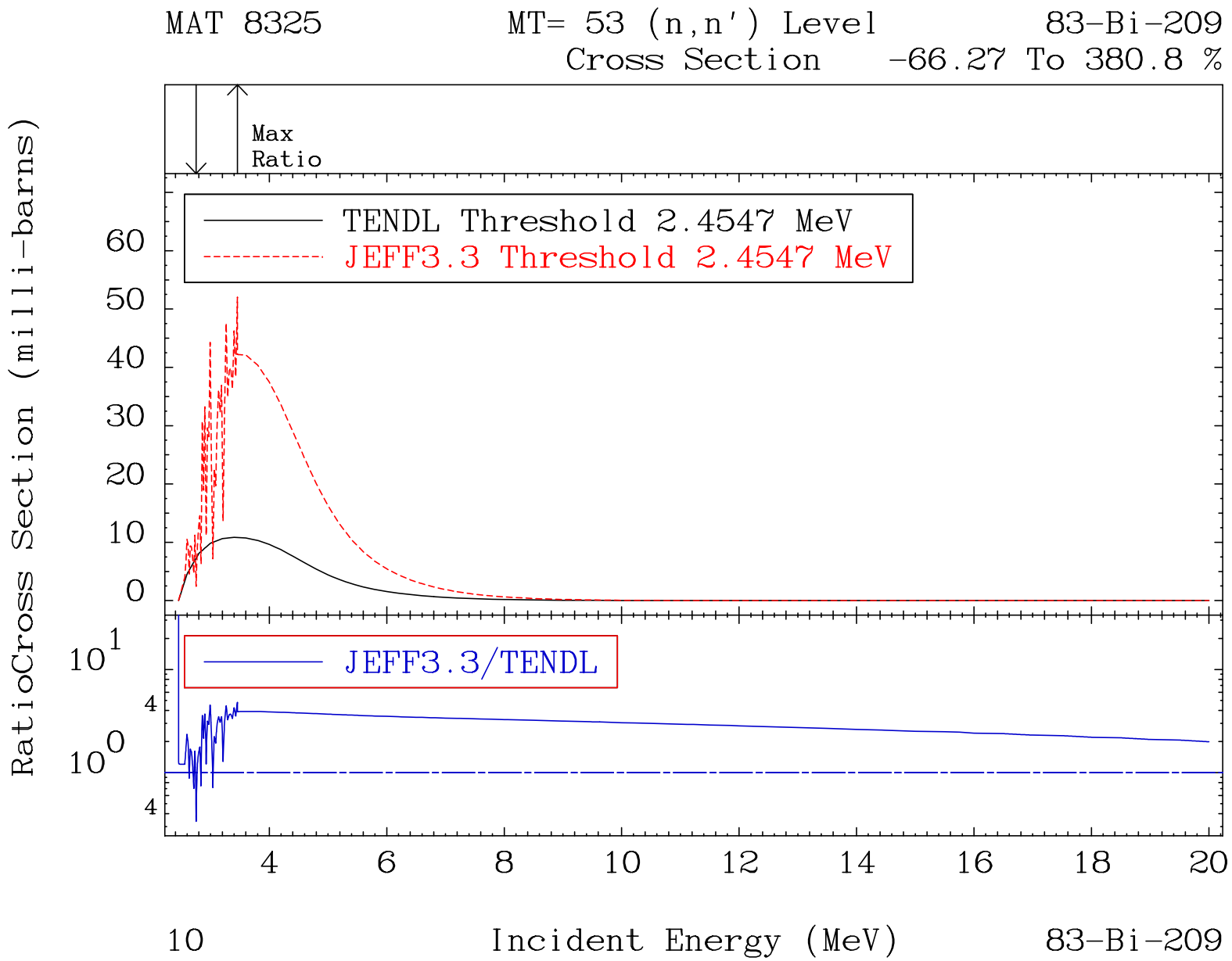

MAT 8325
(n,3n)
Cross Section
83-Bi-209
-100.0 To 1017. %
Max
Ratio
TENDL Threshold 14.416 MeV
JEFF3.3 Threshold 14.423 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
12
6
0
15
16
17
18
19
20
5
Incident Energy (MeV)
83-Bi-209

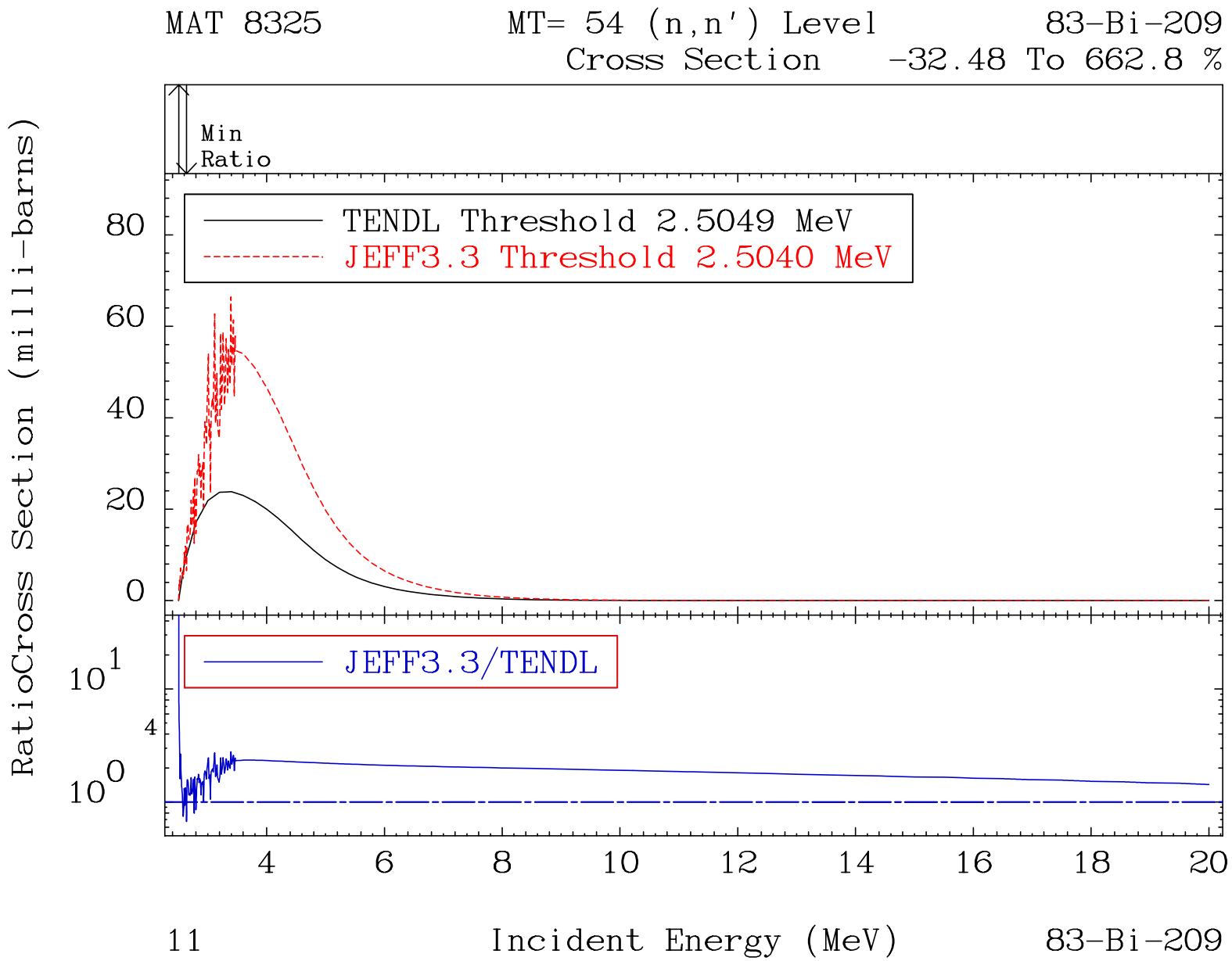

MAT 8325
(n,n') α
Cross Section
83-Bi-209
-100.0 To 9999. %
Min
Ratio
TENDL
JEFF3.3 Threshold 4.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
8
4
0
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107
Incident Energy (eV)
6
83-Bi-209

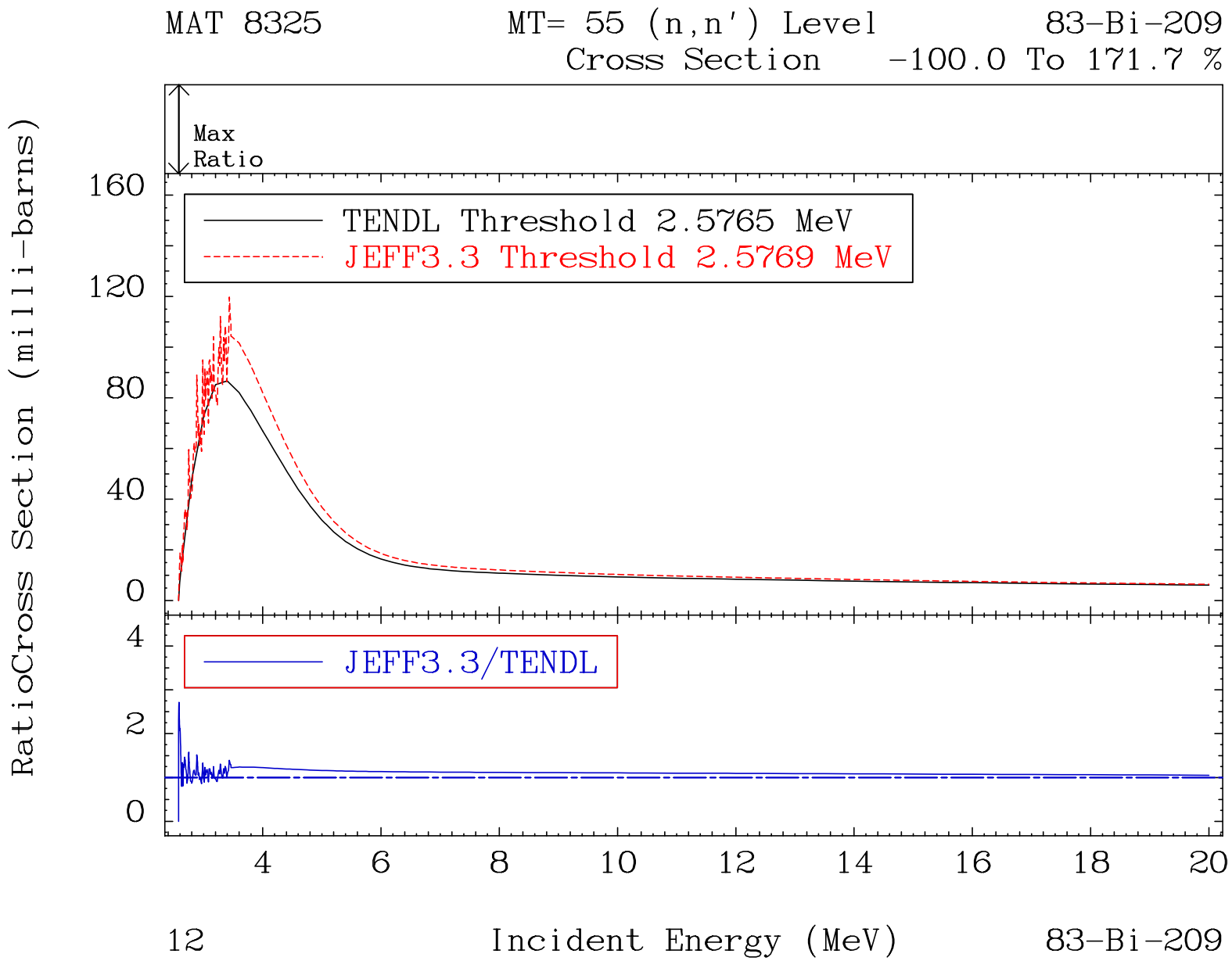

MAT 8325
(n,n') p
Cross Section
83-Bi-209
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.8174 MeV
JEFF3.3 Threshold 5.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
7
83-Bi-209

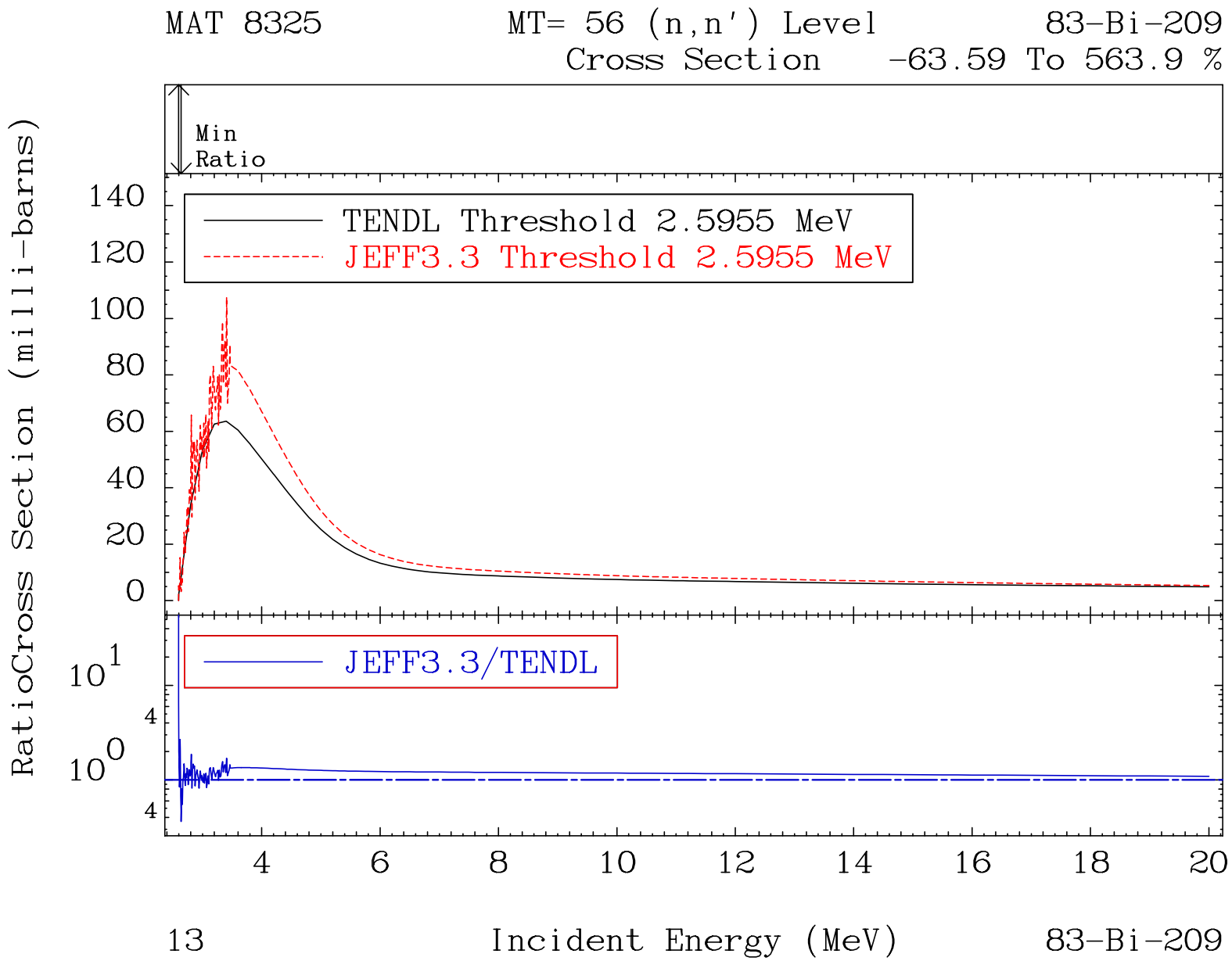

MAT 8325
MT= 51 (n,n') Level
Cross Section
83-Bi-209
-100.0 To 796.8 %
Max
Ratio
TENDL Threshold 900.61 keV
JEFF3.3 Threshold 901.44 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
12
8
4
0
9
2
3
4
5
6
7
8
9
2
10^6
10^7
8
Incident Energy (eV)
83-Bi-209

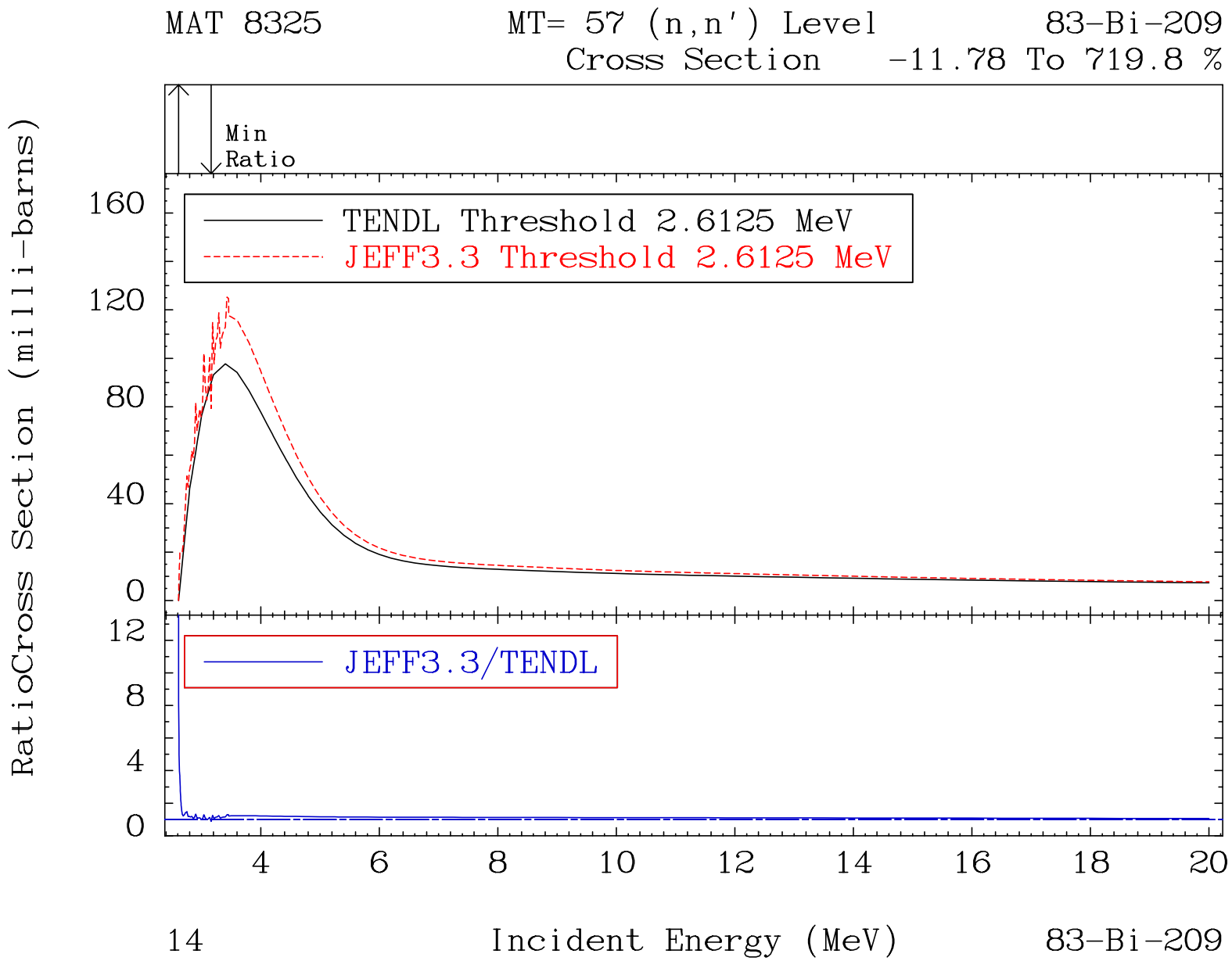

MAT 8325
MT= 52 (n,n') Level
Cross Section
83-Bi-209
-80.75 To 473.6 %
Max Ratio
Min Ratio
TENDL Threshold 1.6163 MeV
JEFF3.3 Threshold 1.6163 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^1
10^0
2
3
4
5
6
7
8
9
10^7
2
9
Incident Energy (eV)
83-Bi-209

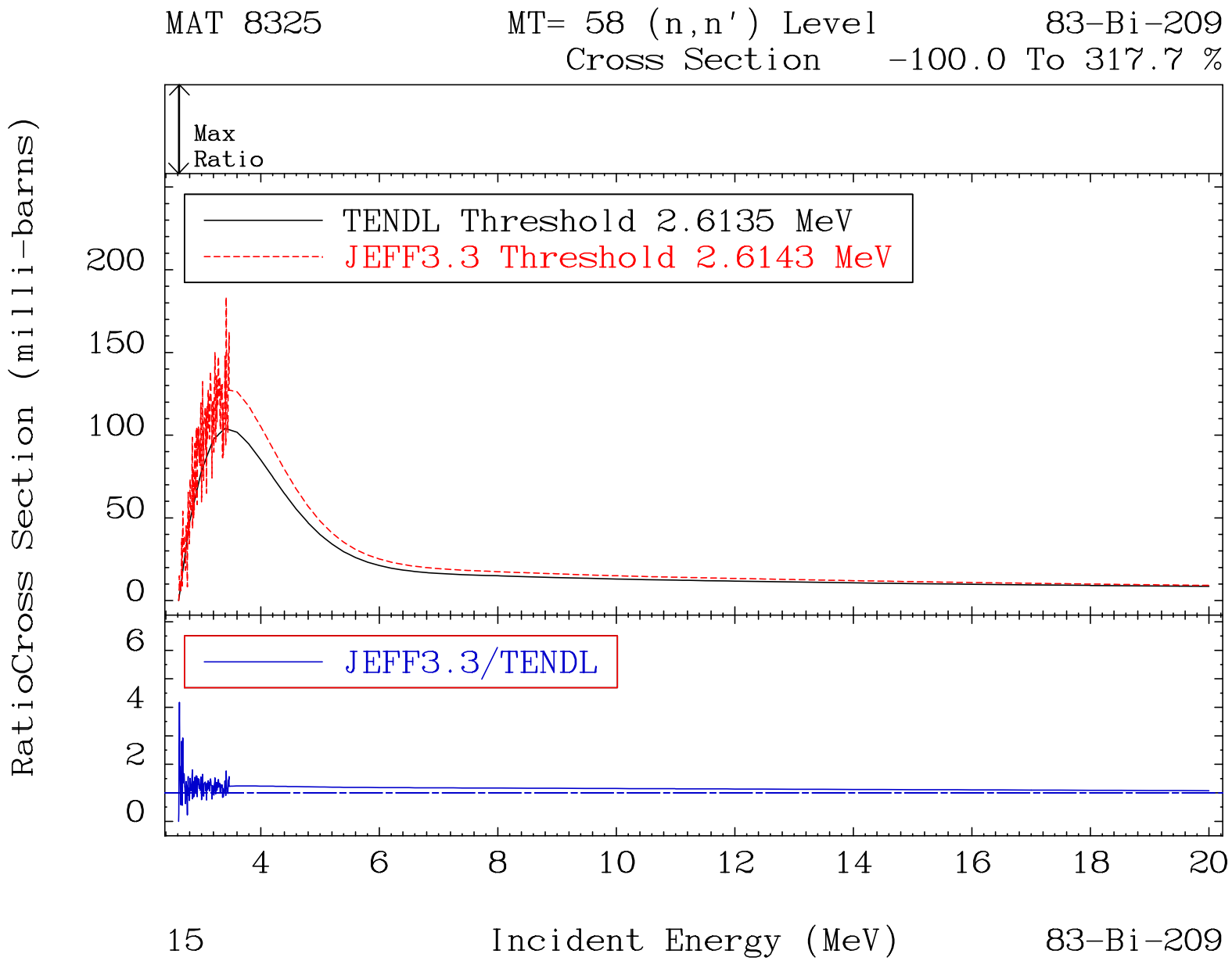

MAT 8325
MT= 53 (n,n') Level
Cross Section
83-Bi-209
-66.27 To 380.8 %
Max
Ratio
TENDL Threshold 2.4547 MeV
JEFF3.3 Threshold 2.4547 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
10^1
10^0
4
4
4
6
8
10
12
14
16
18
20
10
Incident Energy (MeV)
83-Bi-209

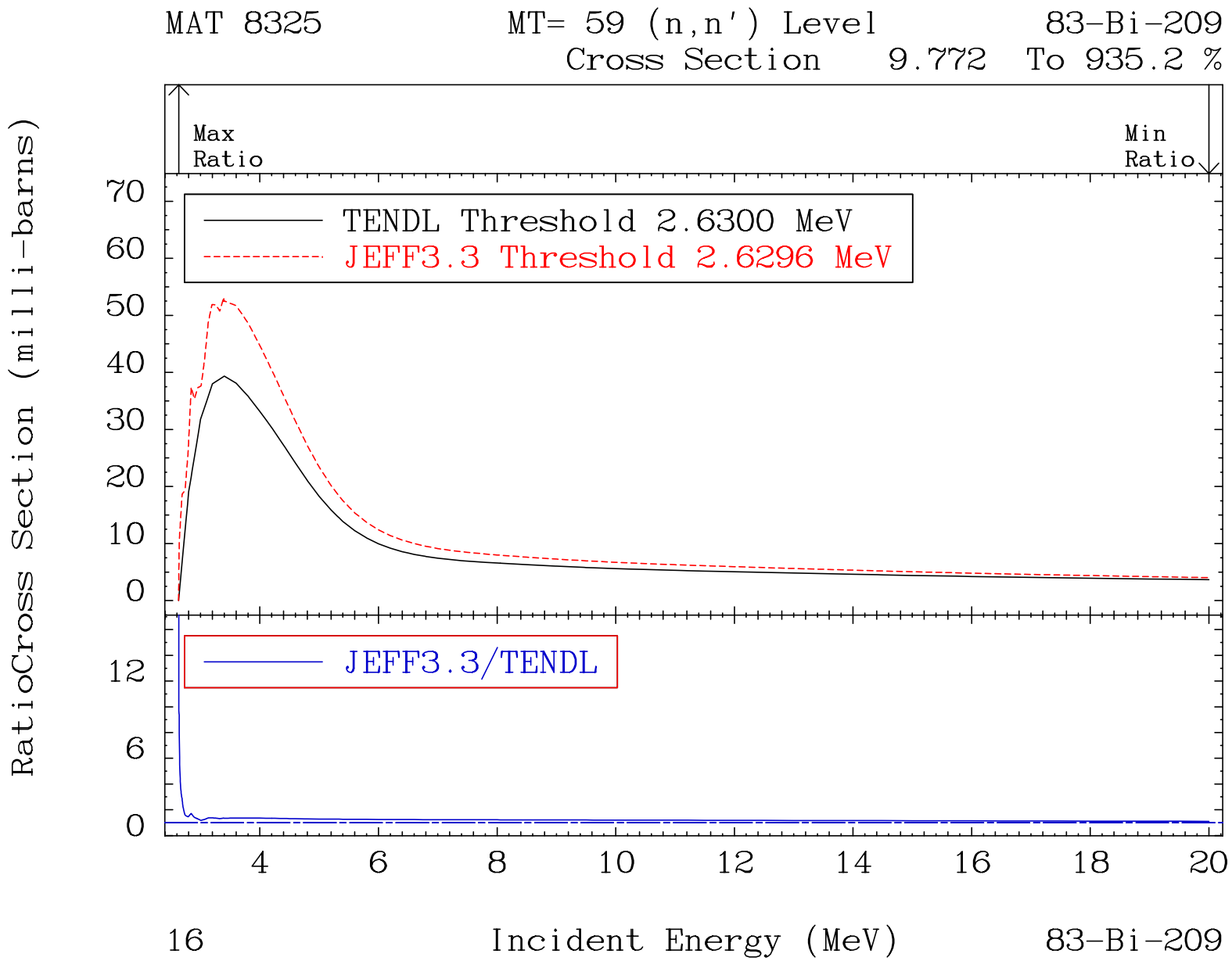

MAT 8325
MT= 54 (n,n') Level
83-Bi-209
Cross Section -32.48 To 662.8 %
Min
Ratio
TENDL Threshold 2.5049 MeV
JEFF3.3 Threshold 2.5040 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^1
10^0
4
4
6
8
10
12
14
16
18
20
11
Incident Energy (MeV)
83-Bi-209

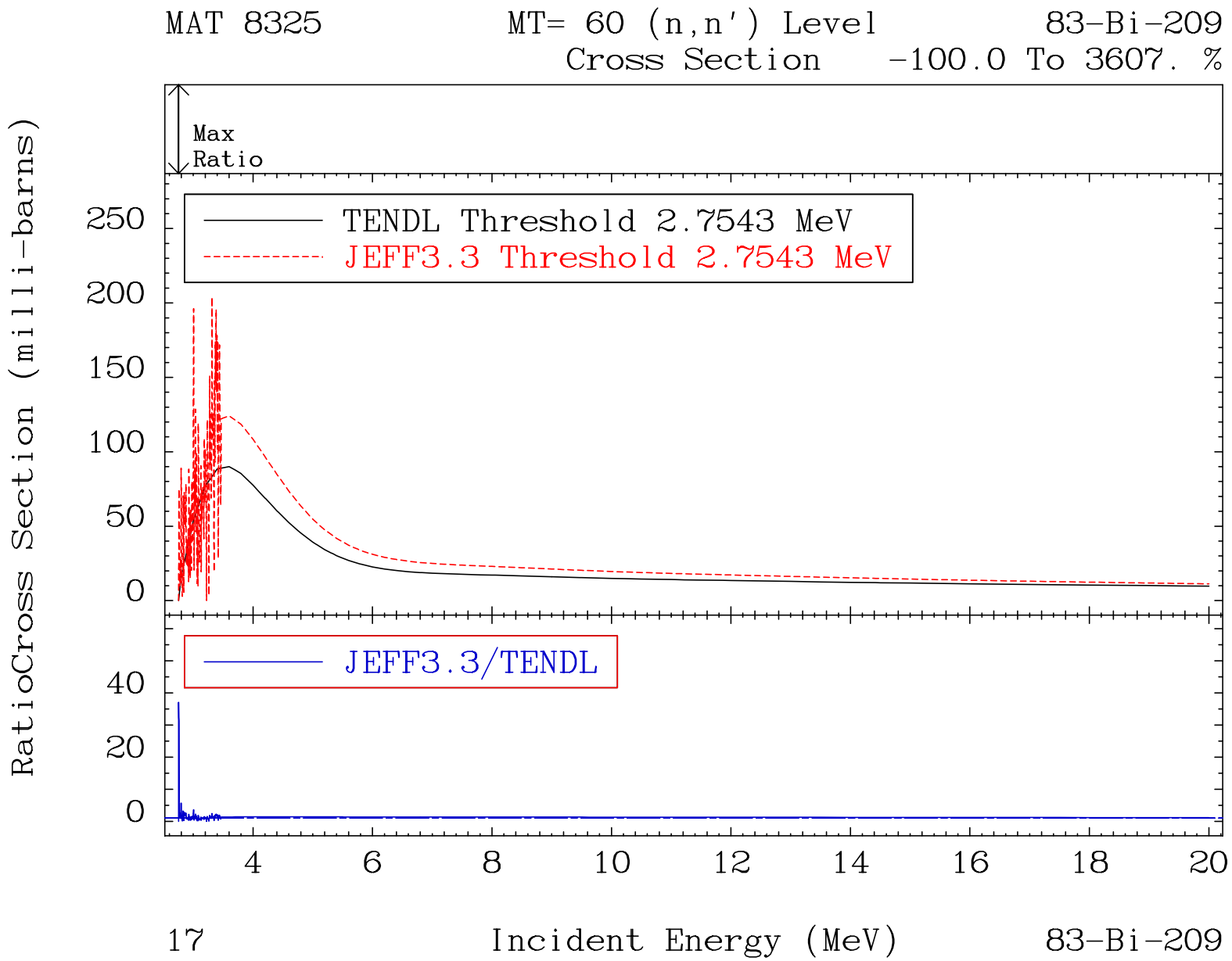

MAT 8325
MT= 55 (n,n') Level
83-Bi-209
Cross Section -100.0 To 171.7 %
Max
Ratio
TENDL Threshold 2.5765 MeV
JEFF3.3 Threshold 2.5769 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
2
0
4
6
8
10
12
14
16
18
20
12
Incident Energy (MeV)
83-Bi-209

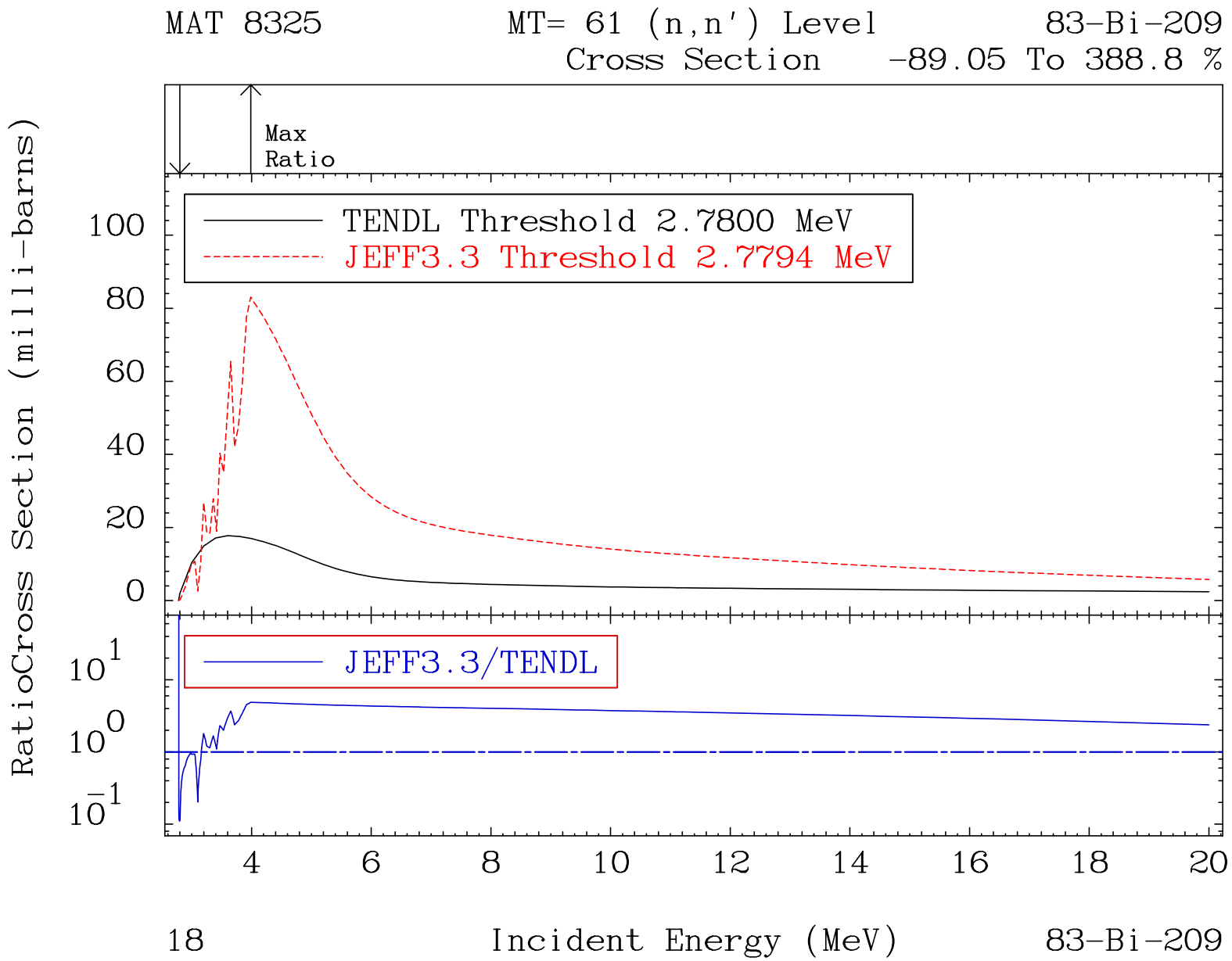

MAT 8325
MT= 56 (n,n') Level
83-Bi-209
Cross Section -63.59 To 563.9 %
Min
Ratio
TENDL Threshold 2.5955 MeV
JEFF3.3 Threshold 2.5955 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^1
10^0
4
4
4
6
8
10
12
14
16
18
20
13
Incident Energy (MeV)
83-Bi-209

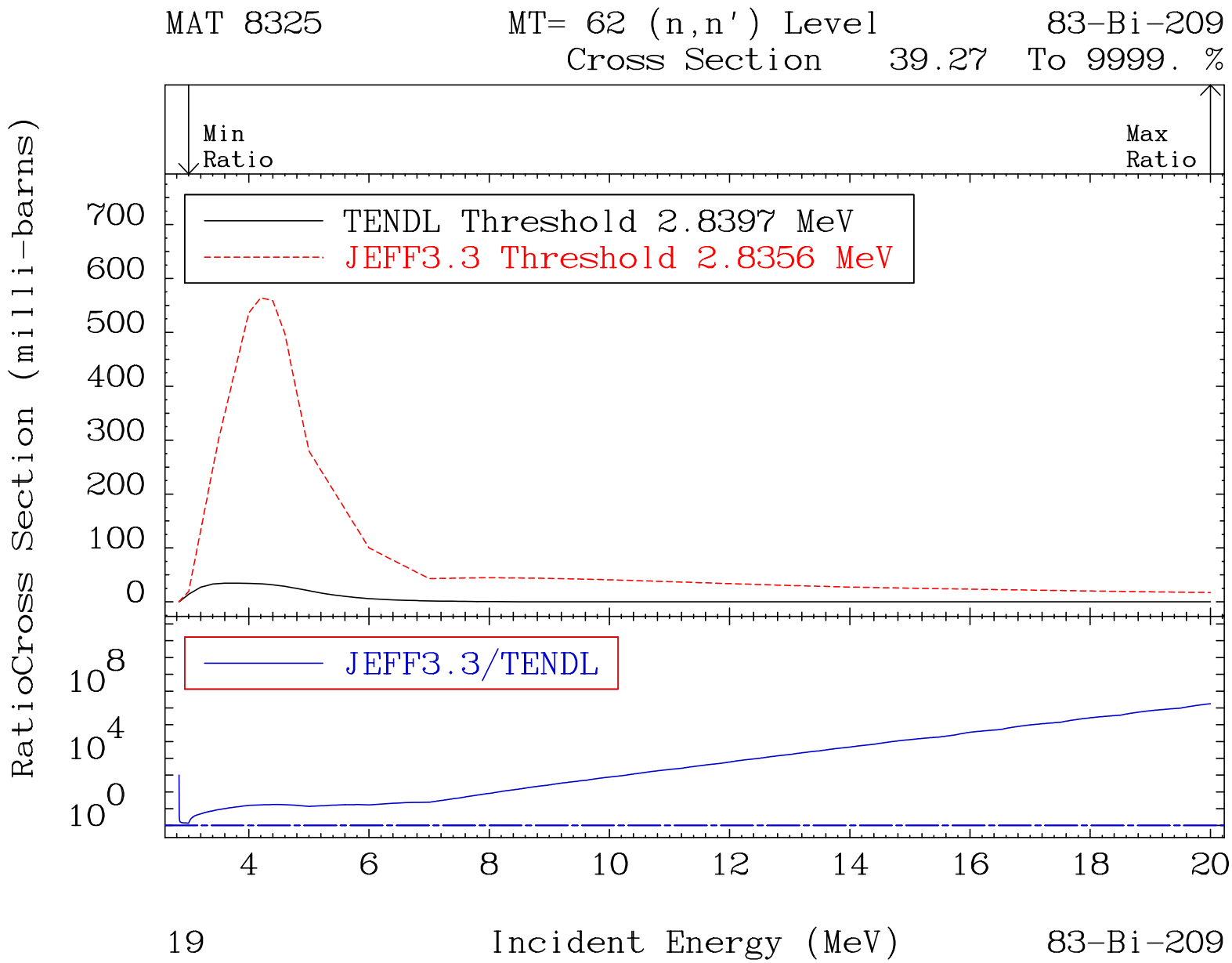

MAT 8325
MT= 57 (n,n') Level
83-Bi-209
Cross Section -11.78 To 719.8 %
Min
Ratio
TENDL Threshold 2.6125 MeV
JEFF3.3 Threshold 2.6125 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
12
8
4
0
4
6
8
10
12
14
16
18
20
14
Incident Energy (MeV)
83-Bi-209

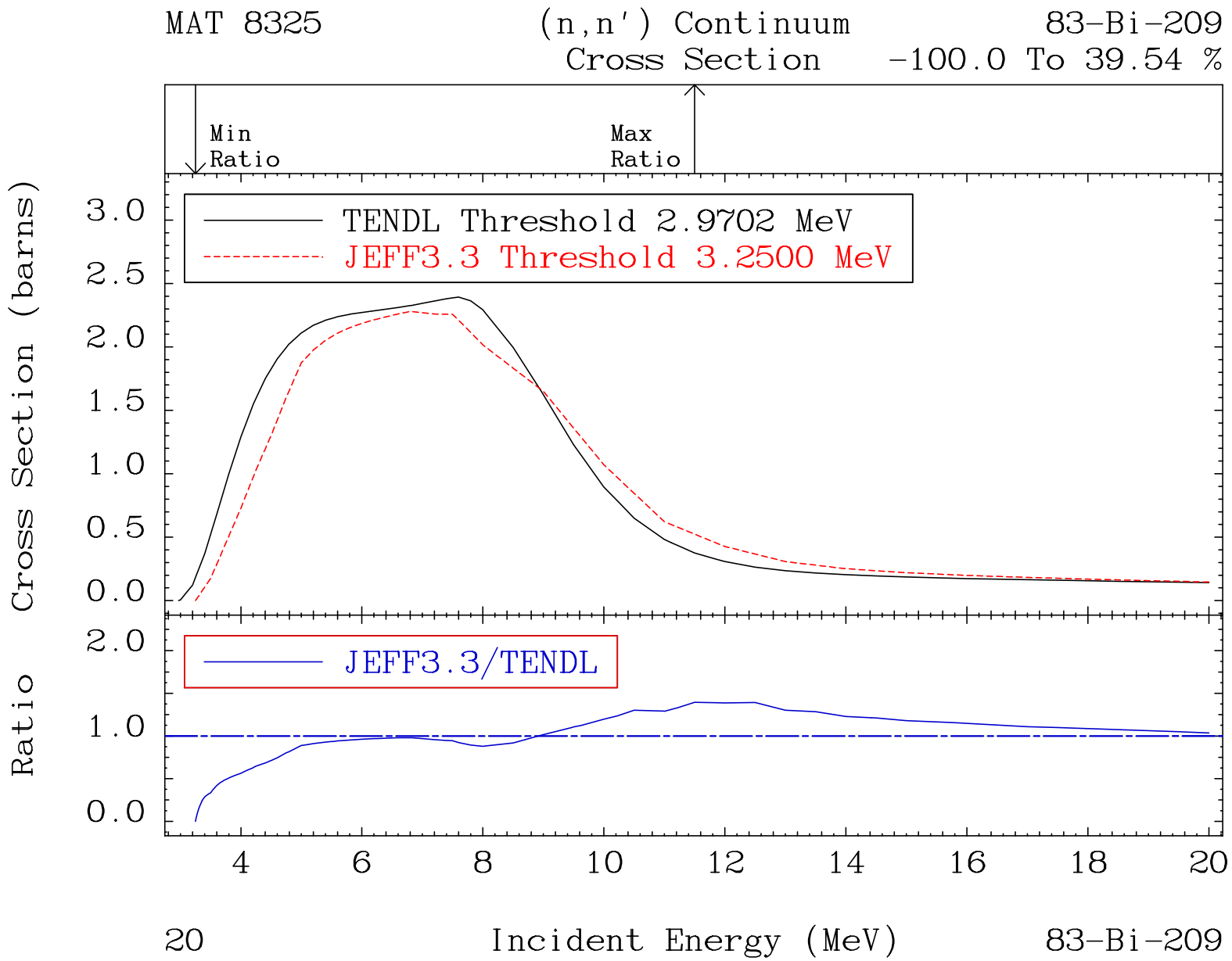

MAT 8325
MT= 58 (n,n') Level
83-Bi-209
Cross Section
-100.0 To 317.7 %
Max
Ratio
TENDL Threshold 2.6135 MeV
JEFF3.3 Threshold 2.6143 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
6
4
2
0
4
6
8
10
12
14
16
18
20
15
Incident Energy (MeV)
83-Bi-209

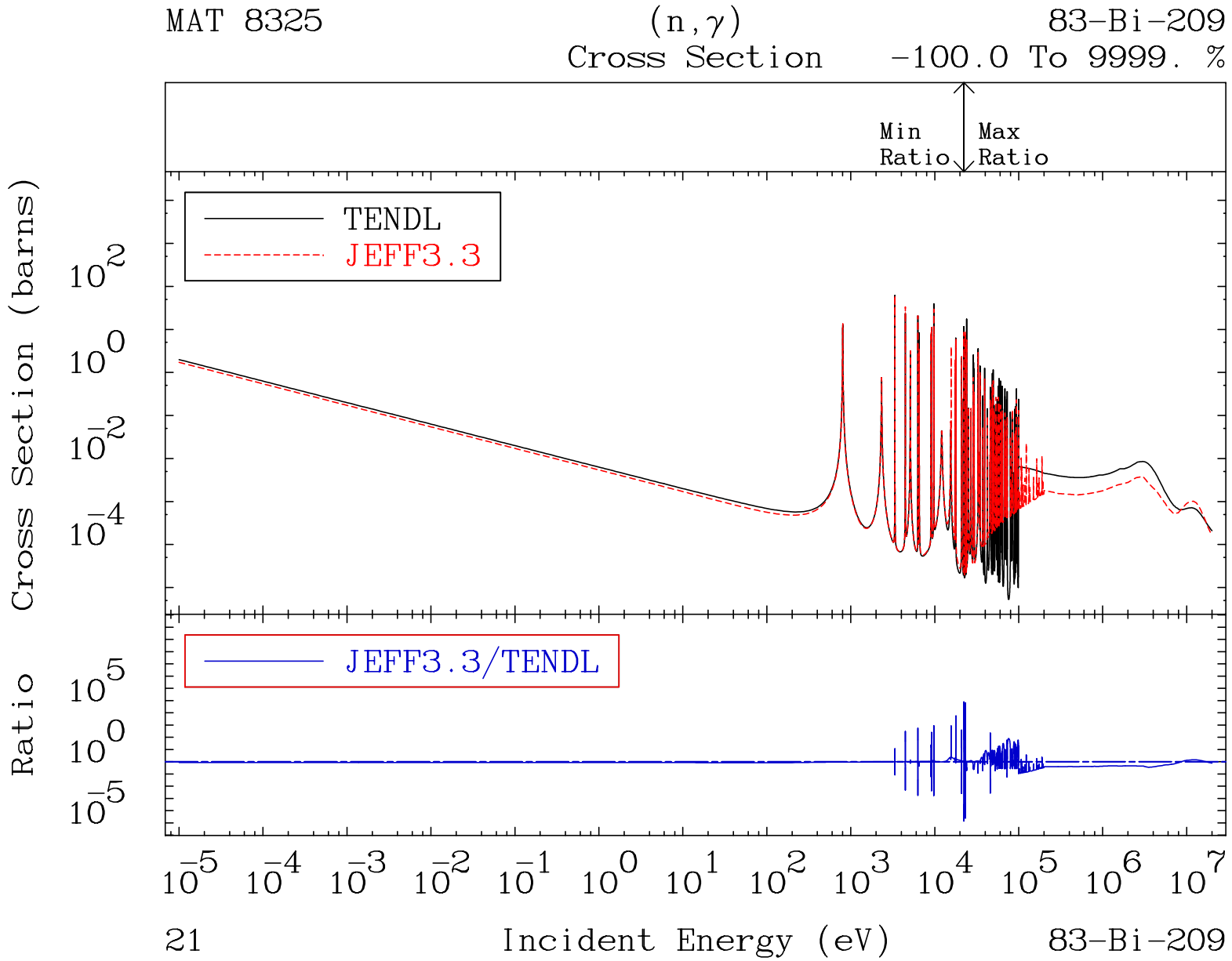

MAT 8325
MT= 59 (n,n') Level
Cross Section 9.772 To 935.2 %
83-Bi-209
Max Ratio
Min Ratio
TENDL Threshold 2.6300 MeV
JEFF3.3 Threshold 2.6296 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
12
6
0
4
6
8
10
12
14
16
18
20
16
Incident Energy (MeV)
83-Bi-209

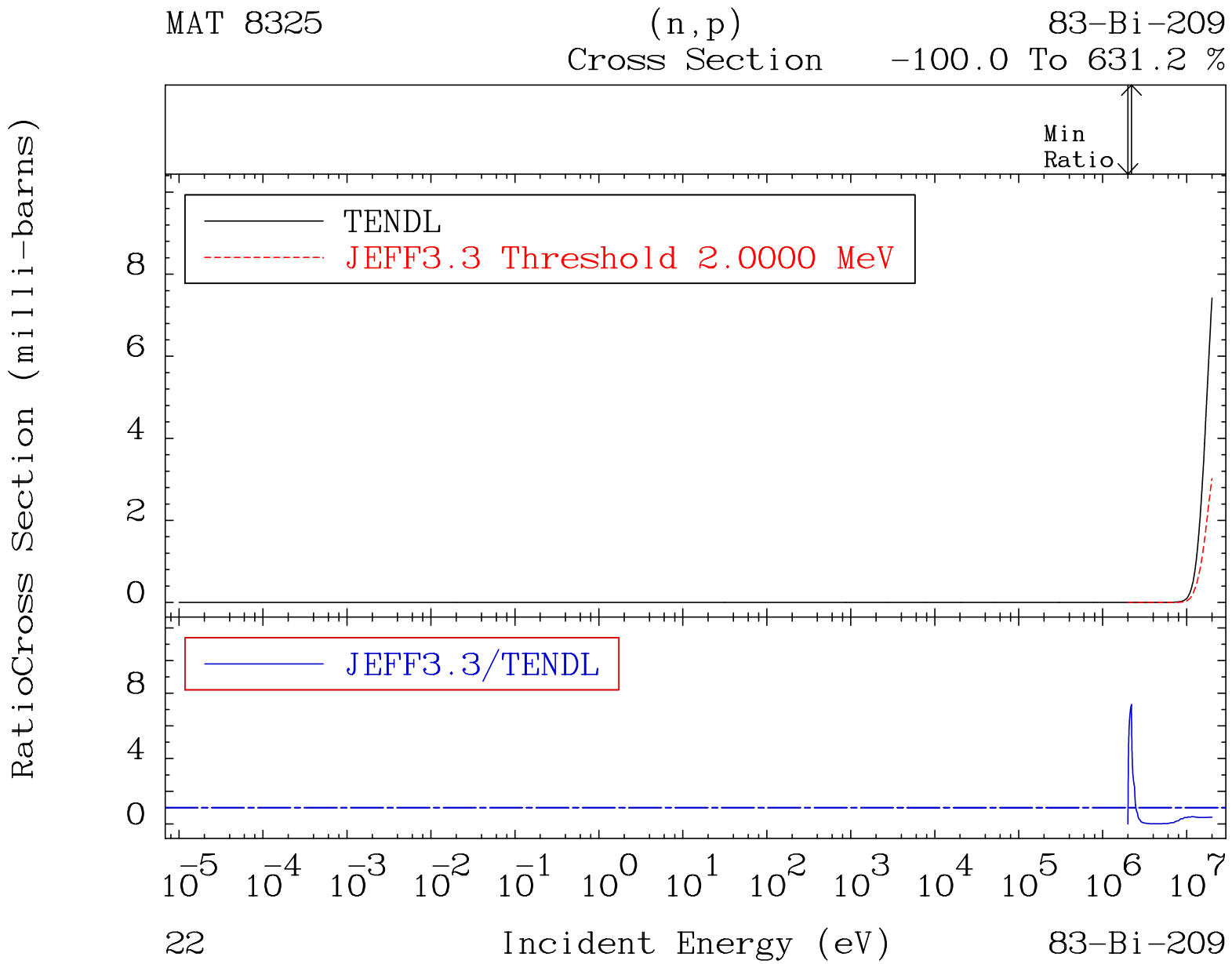

MAT 8325
MT= 60 (n,n') Level
83-Bi-209
Cross Section -100.0 To 3607. %
Max
Ratio
TENDL Threshold 2.7543 MeV
JEFF3.3 Threshold 2.7543 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
40
20
0
4
6
8
10
12
14
16
18
20
17
Incident Energy (MeV)
83-Bi-209

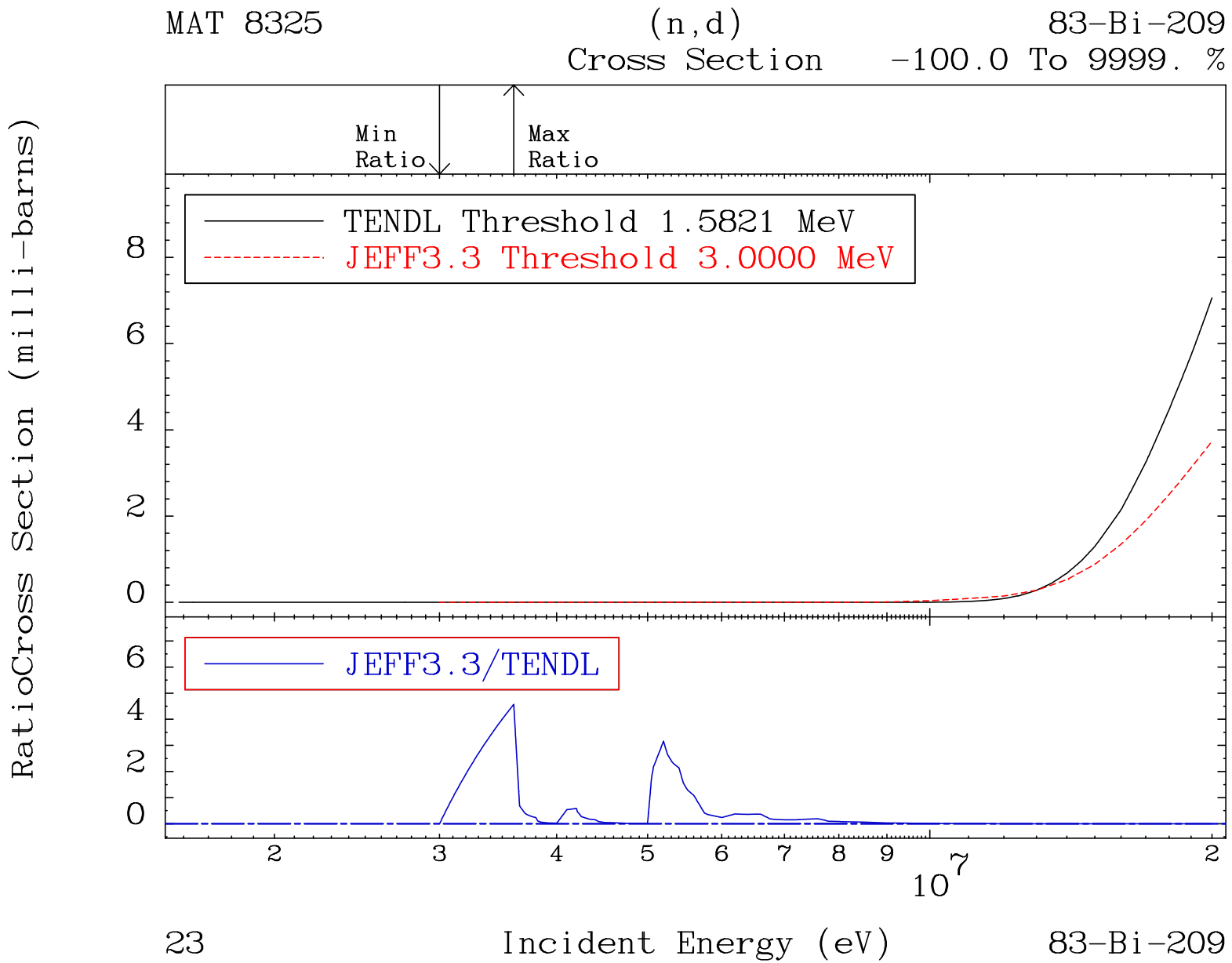

MAT 8325
MT= 61 (n,n') Level
83-Bi-209
Cross Section -89.05 To 388.8 %
Max
Ratio
TENDL Threshold 2.7800 MeV
JEFF3.3 Threshold 2.7794 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^{1}
10^{0}
10^{-1}
4
6
8
10
12
14
16
18
20
18
Incident Energy (MeV)
83-Bi-209

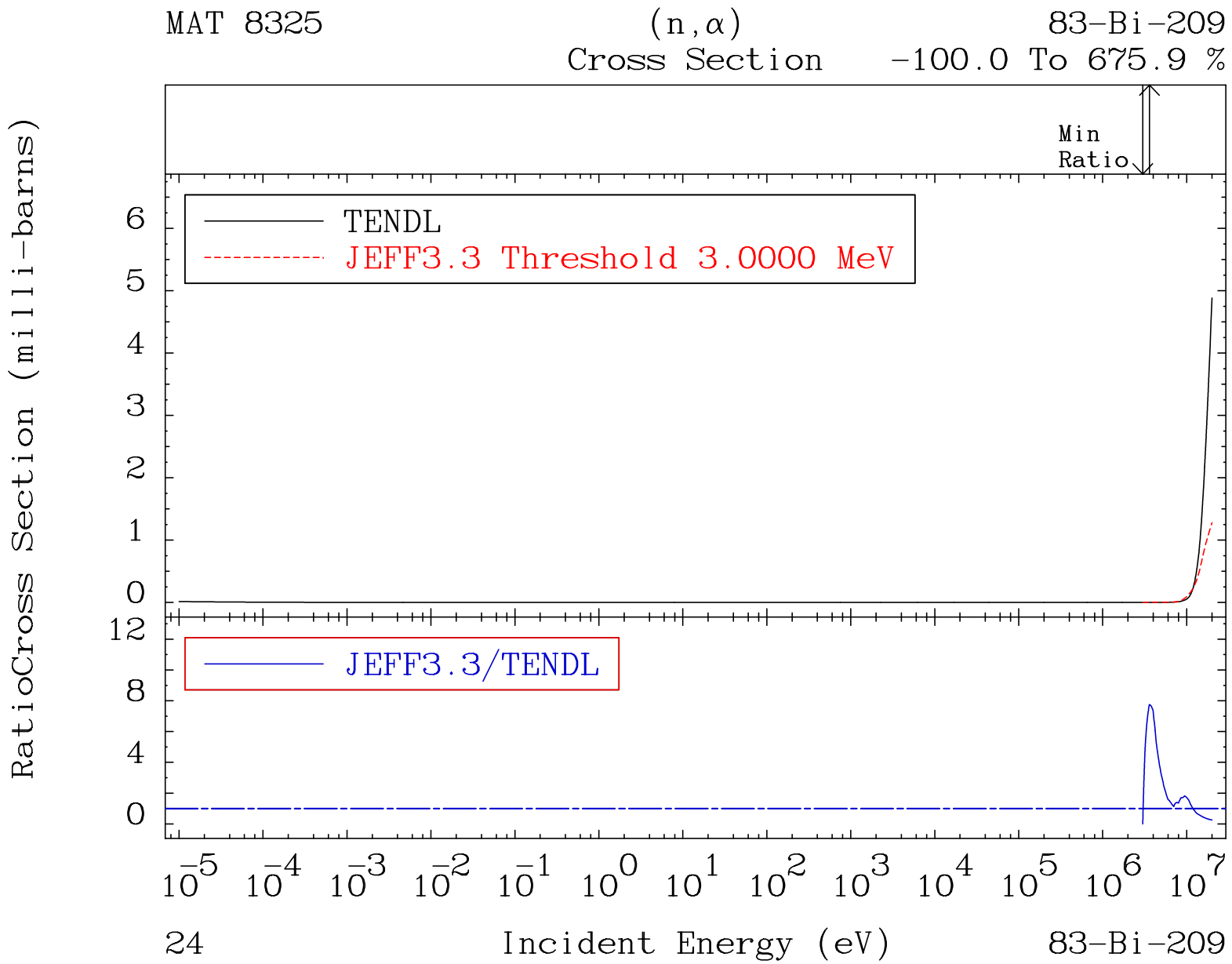

MAT 8325
MT= 62 (n,n') Level
Cross Section 39.27 To 9999. %
83-Bi-209
Min Ratio
Max Ratio
TENDL Threshold 2.8397 MeV
JEFF3.3 Threshold 2.8356 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
10^8
10^4
10^0
4
6
8
10
12
14
16
18
20
19
Incident Energy (MeV)
83-Bi-209

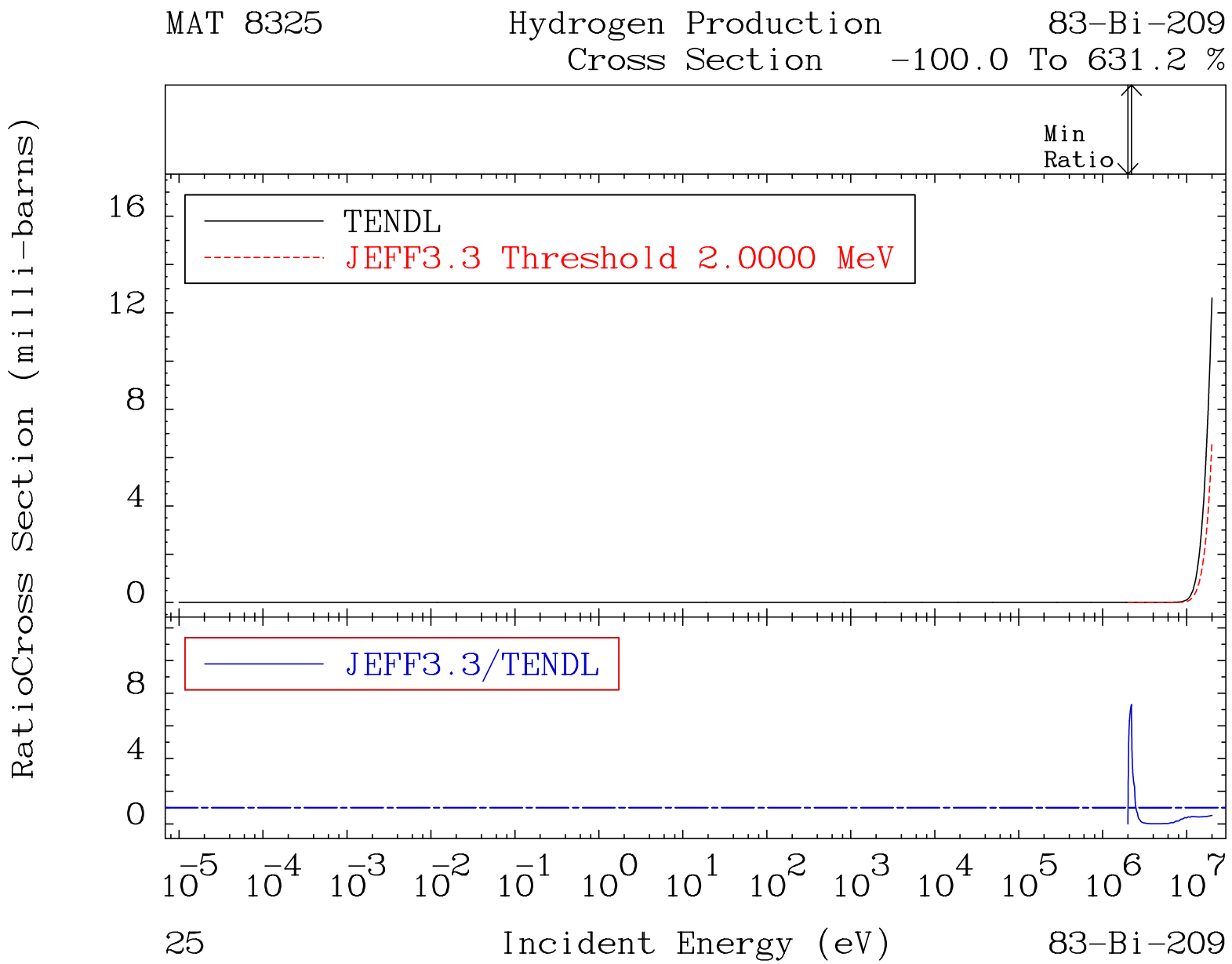

MAT 8325
(n,n') Continuum
Cross Section
83-Bi-209
-100.0 To 39.54 %
Min Ratio
Max Ratio
TENDL Threshold 2.9702 MeV
JEFF3.3 Threshold 3.2500 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (MeV)
20
83-Bi-209

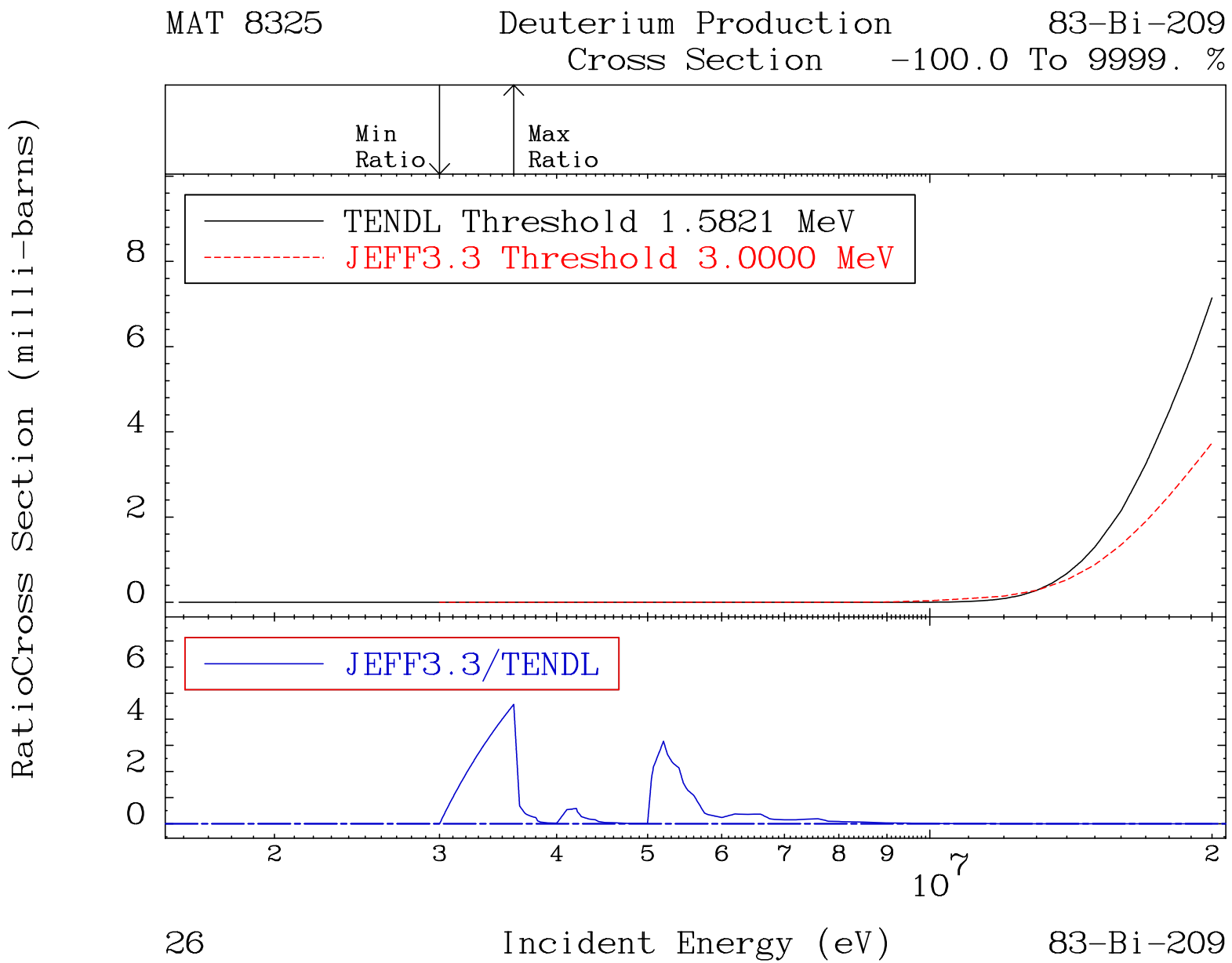

MAT 8325
(n,γ)
Cross Section
83-Bi-209
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
21
83-Bi-209

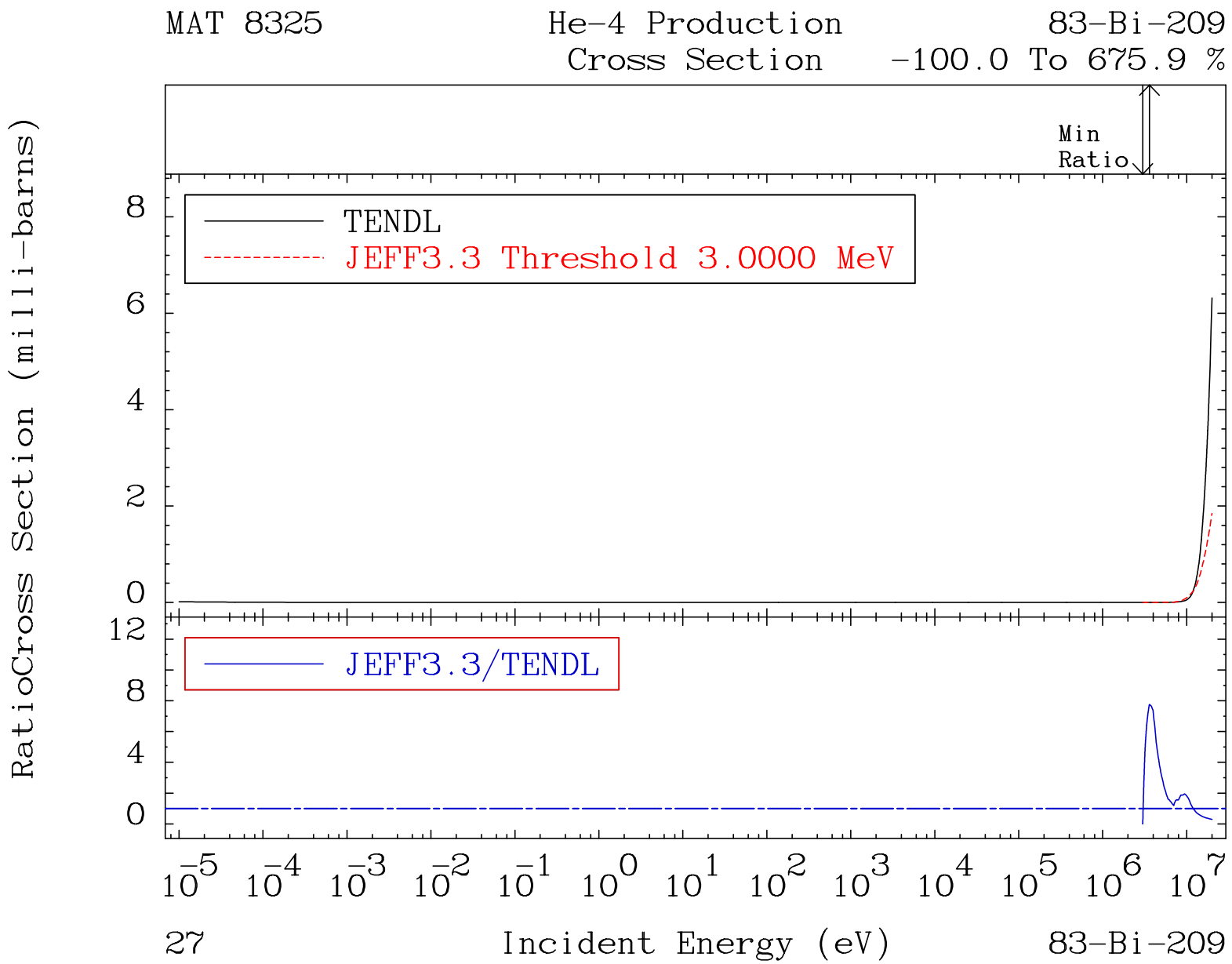

MAT 8325
(n,p)
Cross Section
83-Bi-209
-100.0 To 631.2 %
Min
Ratio
TENDL
JEFF3.3 Threshold 2.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22
83-Bi-209

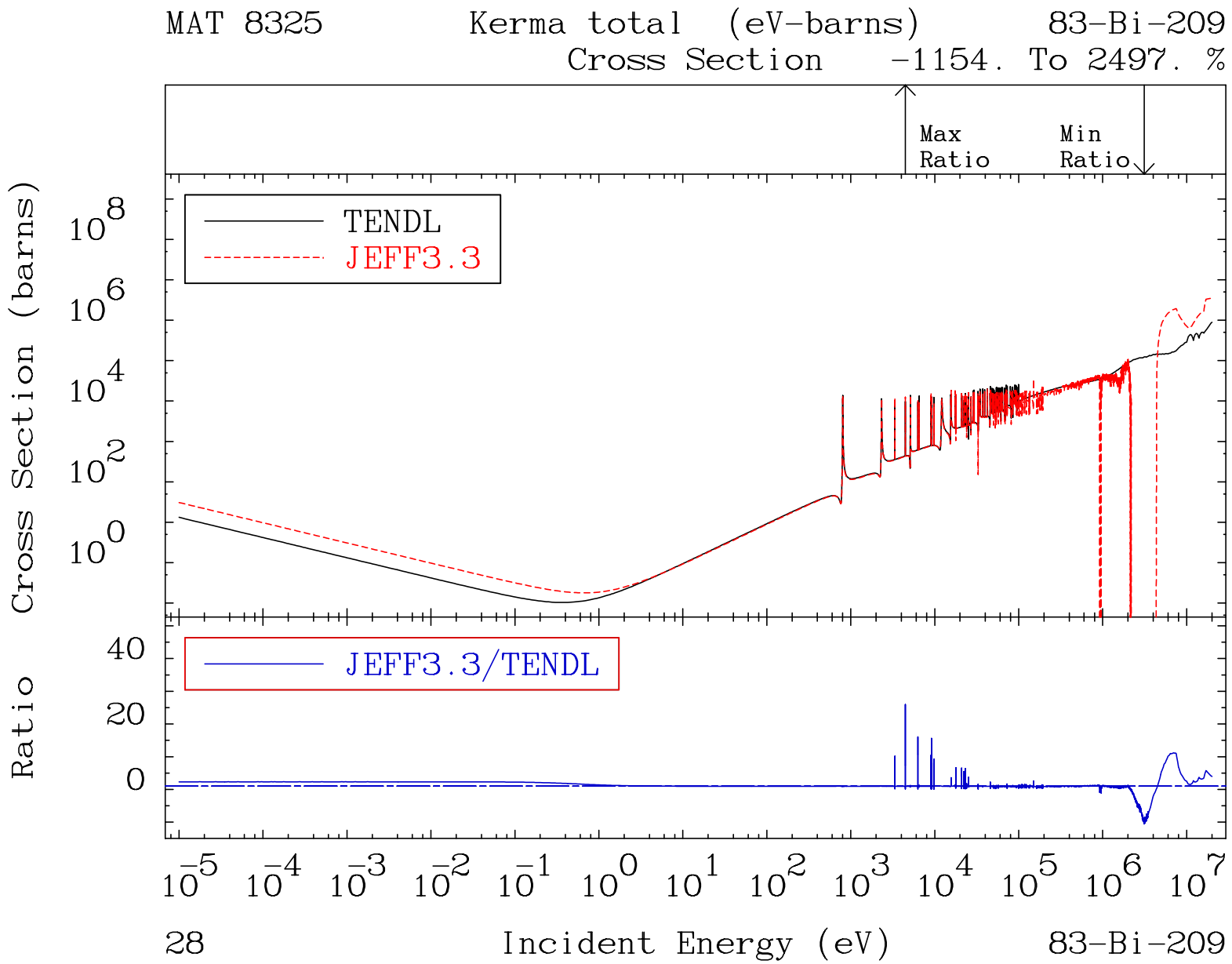

MAT 8325
(n,d)
83-Bi-209
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5821 MeV
JEFF3.3 Threshold 3.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
0
2
4
6
8
2
3
4
5
6
7
8
9
10^7
2
23
Incident Energy (eV)
83-Bi-209

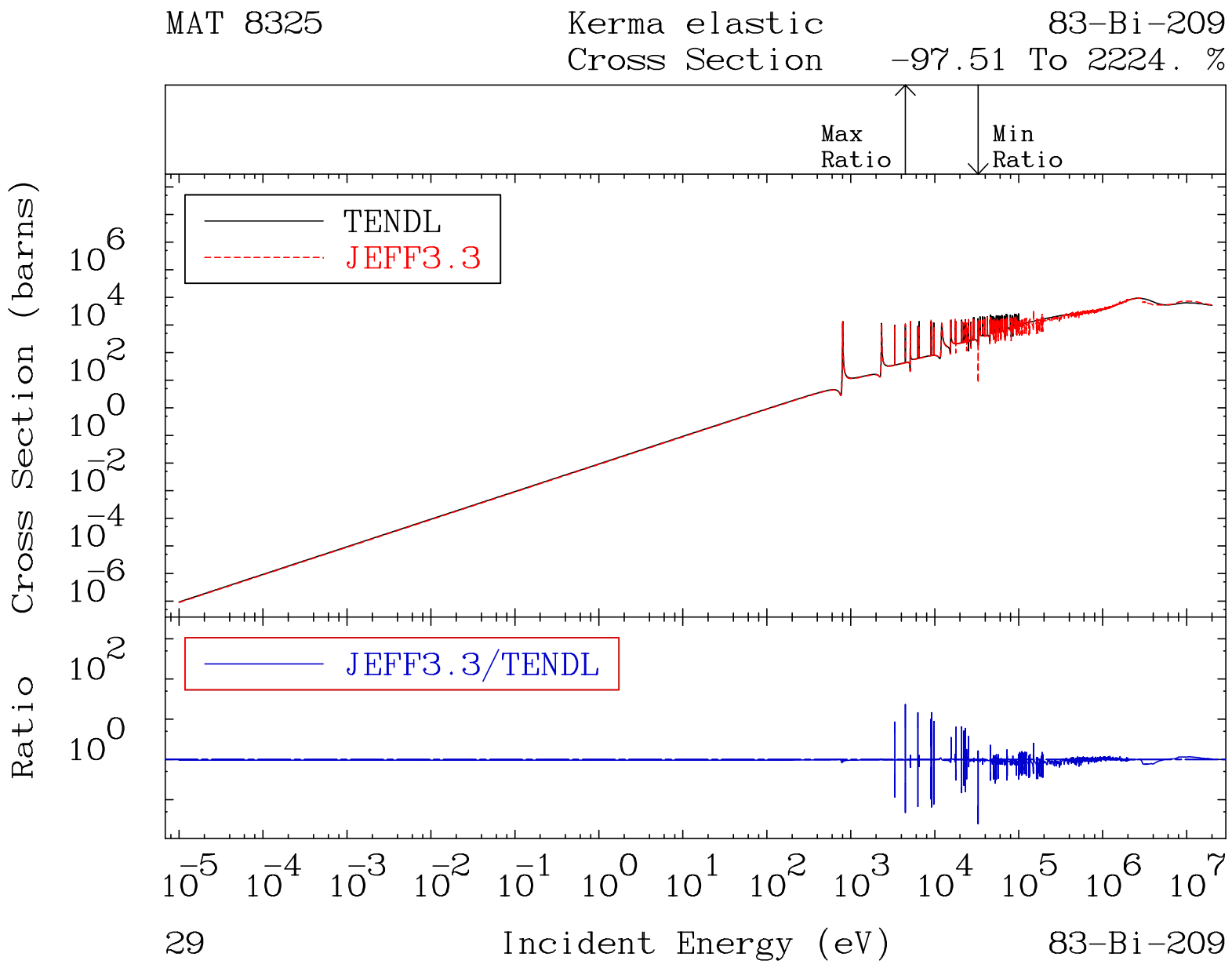

MAT 8325
(n,α)
Cross Section
83-Bi-209
-100.0 To 675.9 %
Min
Ratio
TENDL
JEFF3.3 Threshold 3.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
83-Bi-209

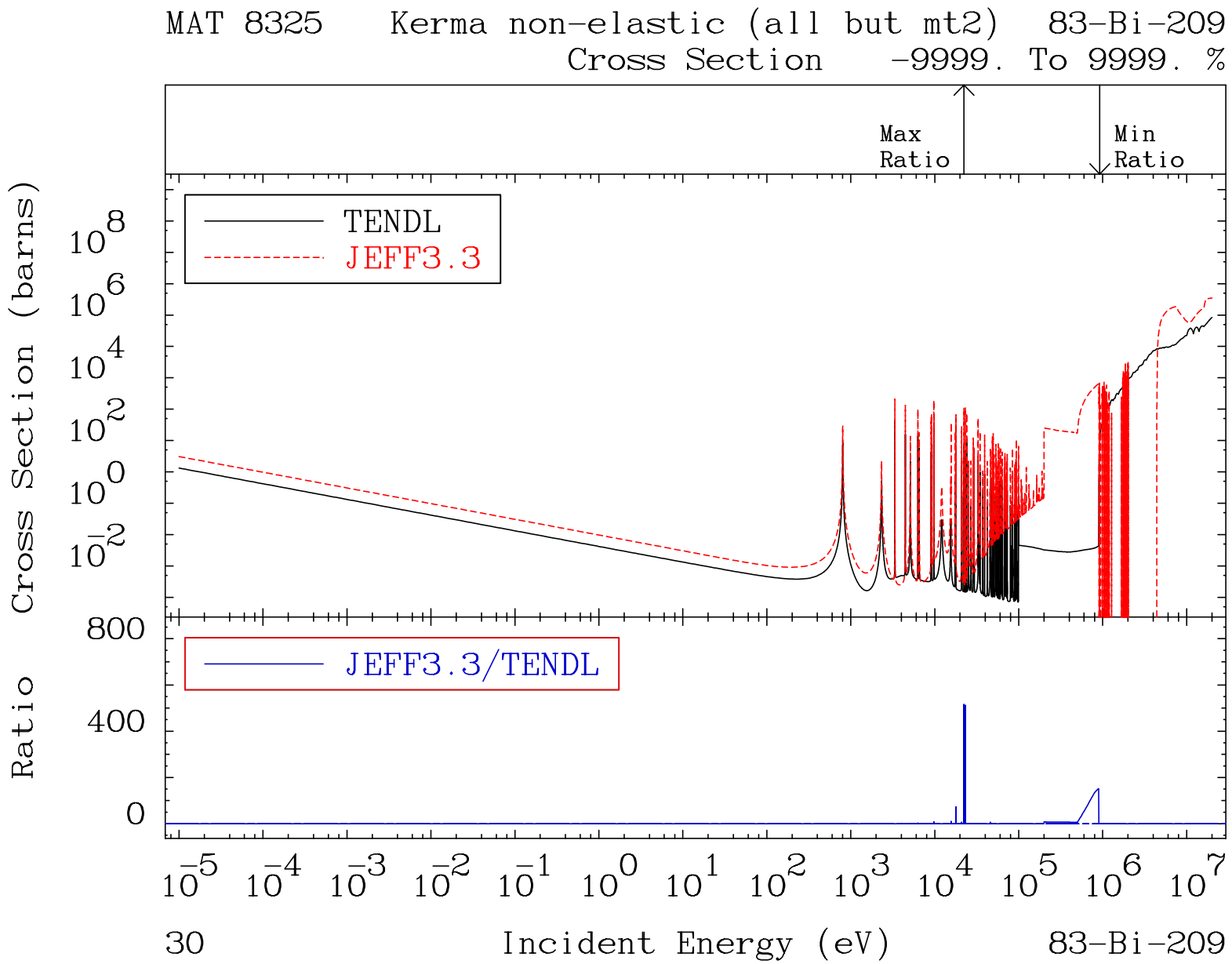

MAT 8325
Hydrogen Production
83-Bi-209
Cross Section -100.0 To 631.2 %
Min
Ratio
TENDL
JEFF3.3 Threshold 2.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
8
4
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7}
25
Incident Energy (eV)
83-Bi-209

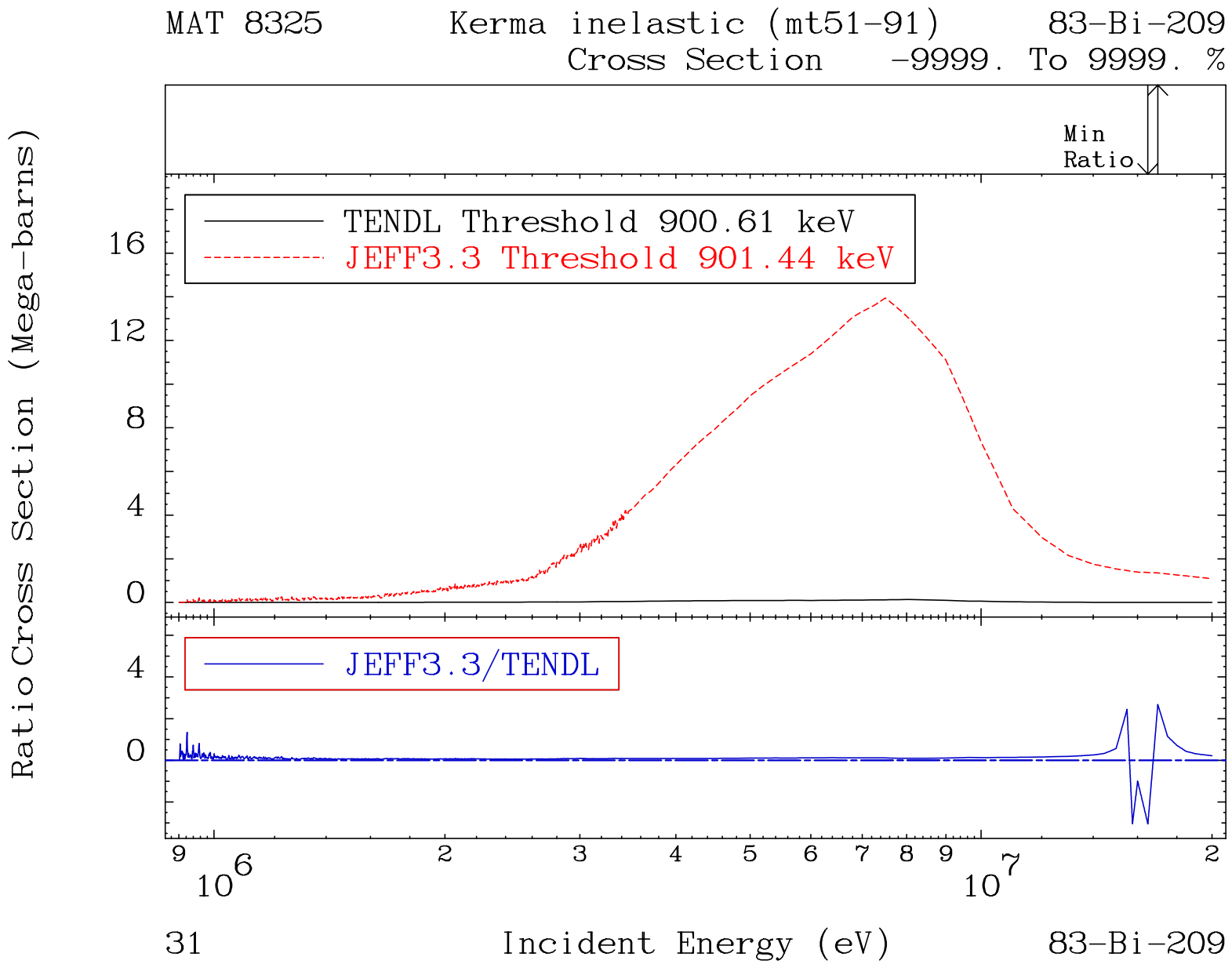

MAT 8325
Deuterium Production
83-Bi-209
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5821 MeV
JEFF3.3 Threshold 3.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
0
2
4
6
8
2
3
4
5
6
7
8
9
10 7
2
26
Incident Energy (eV)
83-Bi-209

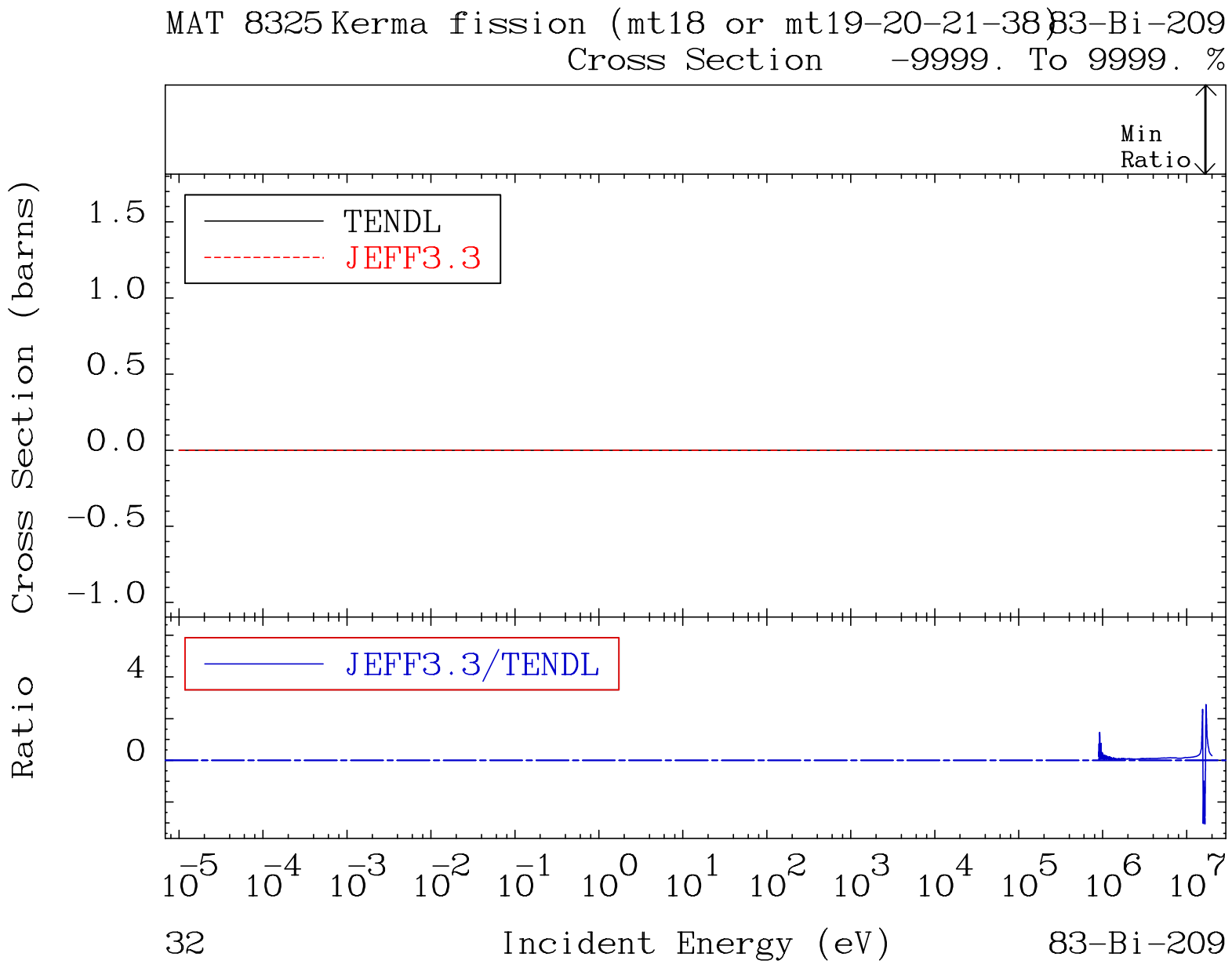

MAT 8325
He-4 Production
Cross Section
83-Bi-209
-100.0 To 675.9 %
Min
Ratio
TENDL
JEFF3.3 Threshold 3.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
83-Bi-209

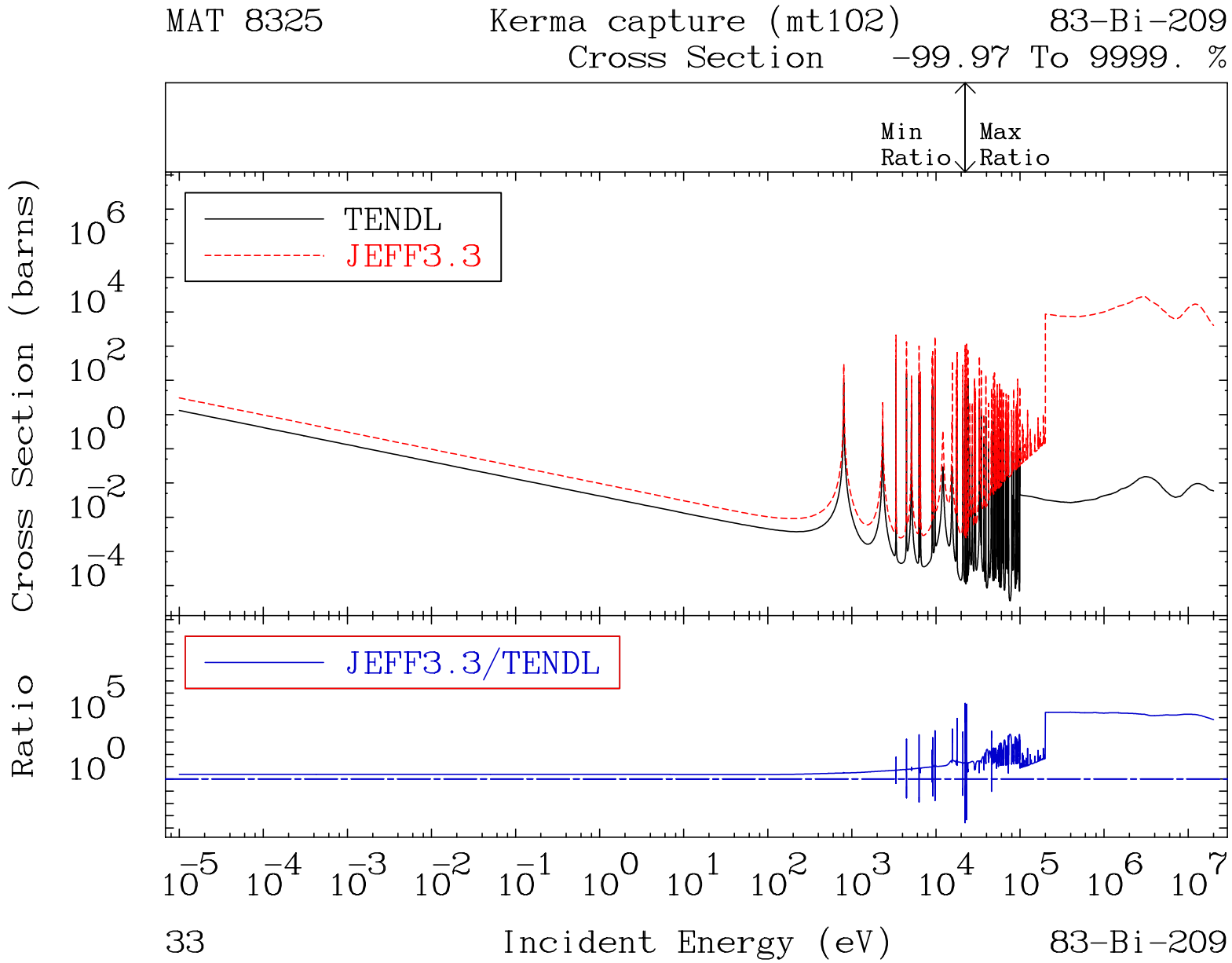

MAT 8325
Kerma total (eV-barns)
83-Bi-209
Cross Section -1154. To 2497. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
28
83-Bi-209

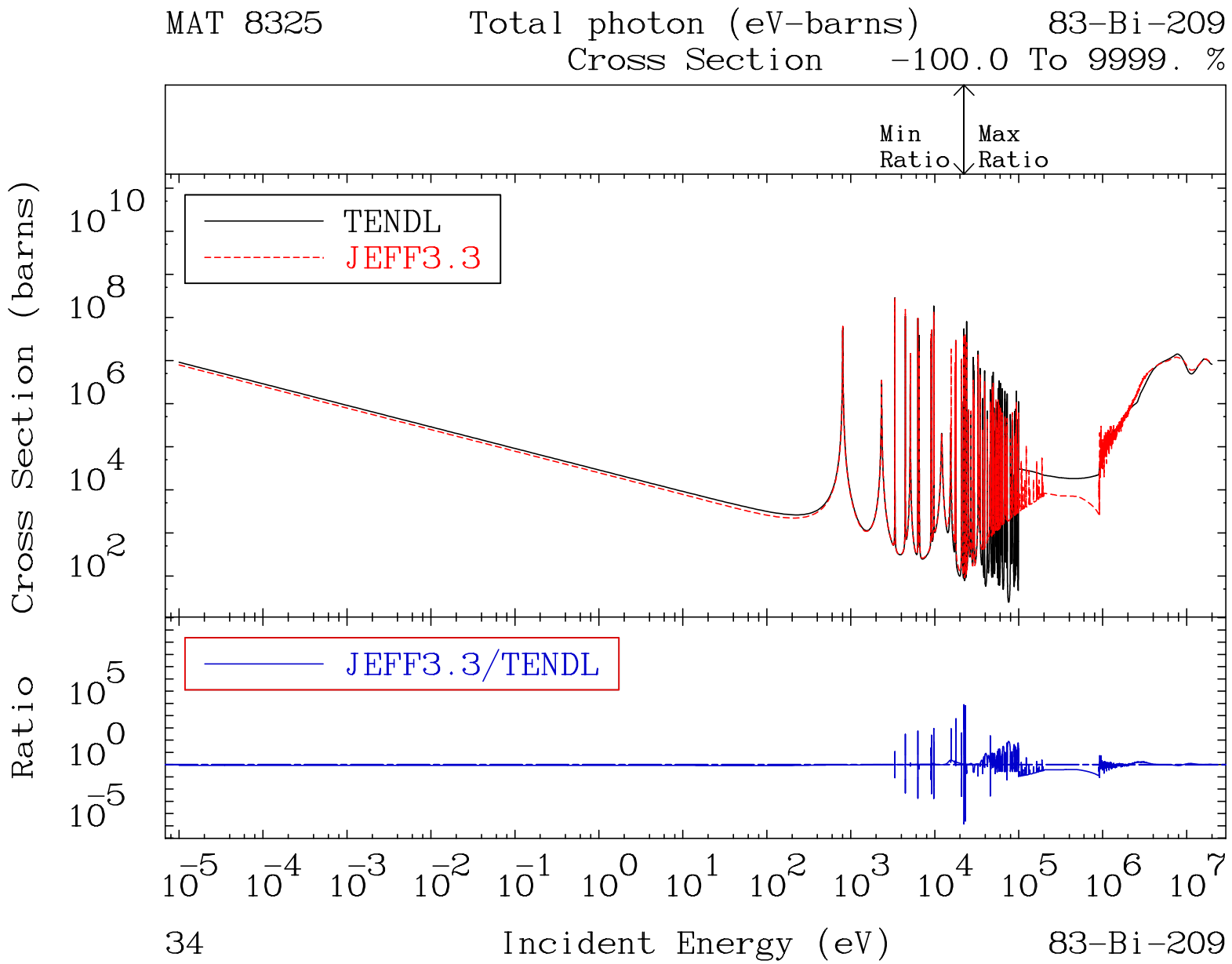

MAT 8325
Kerma elastic
Cross Section
83-Bi-209
-97.51 To 2224. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
83-Bi-209

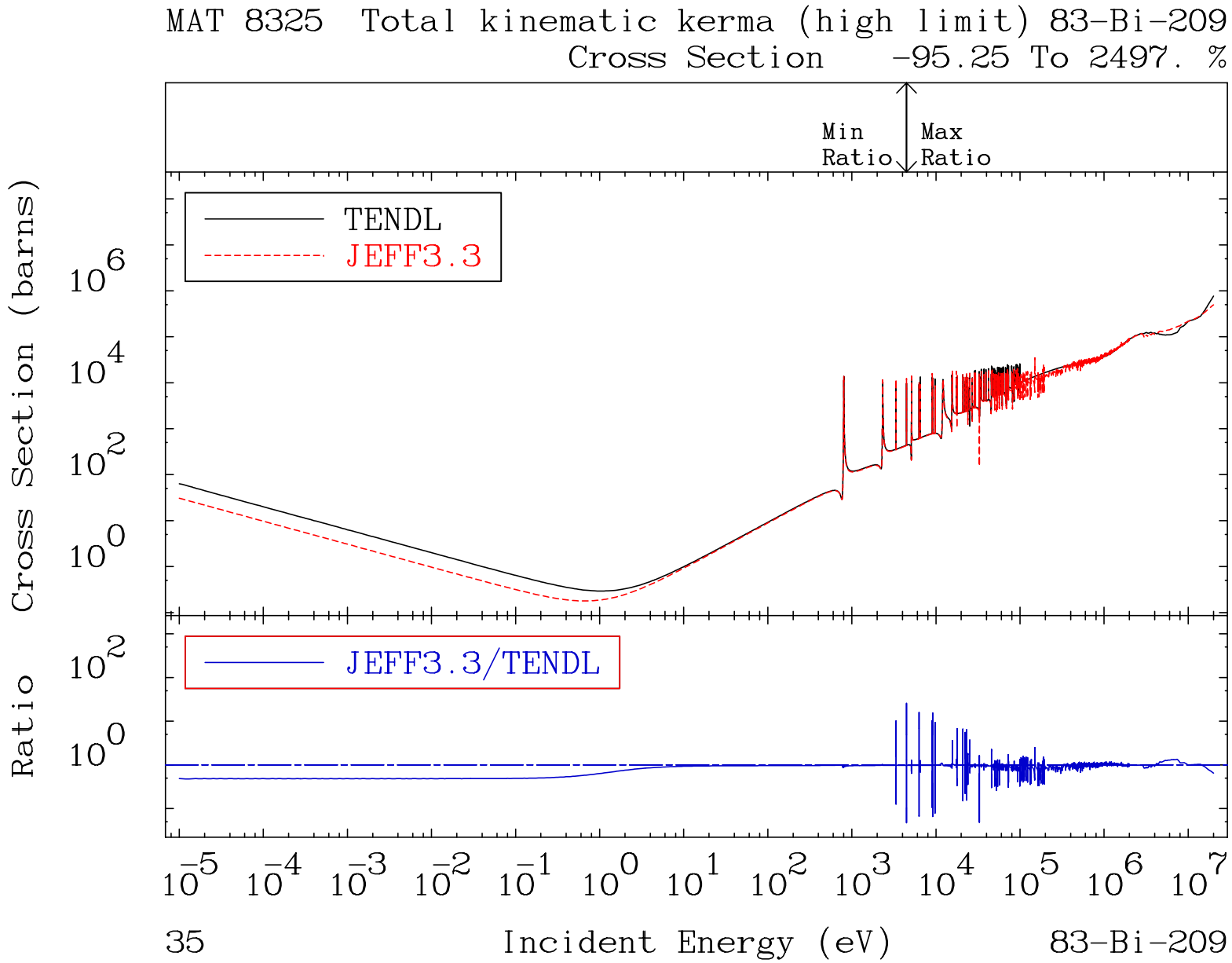

MAT 8325 Kerma non-elastic (all but mt2) 83-Bi-209
Cross Section -9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
83-Bi-209

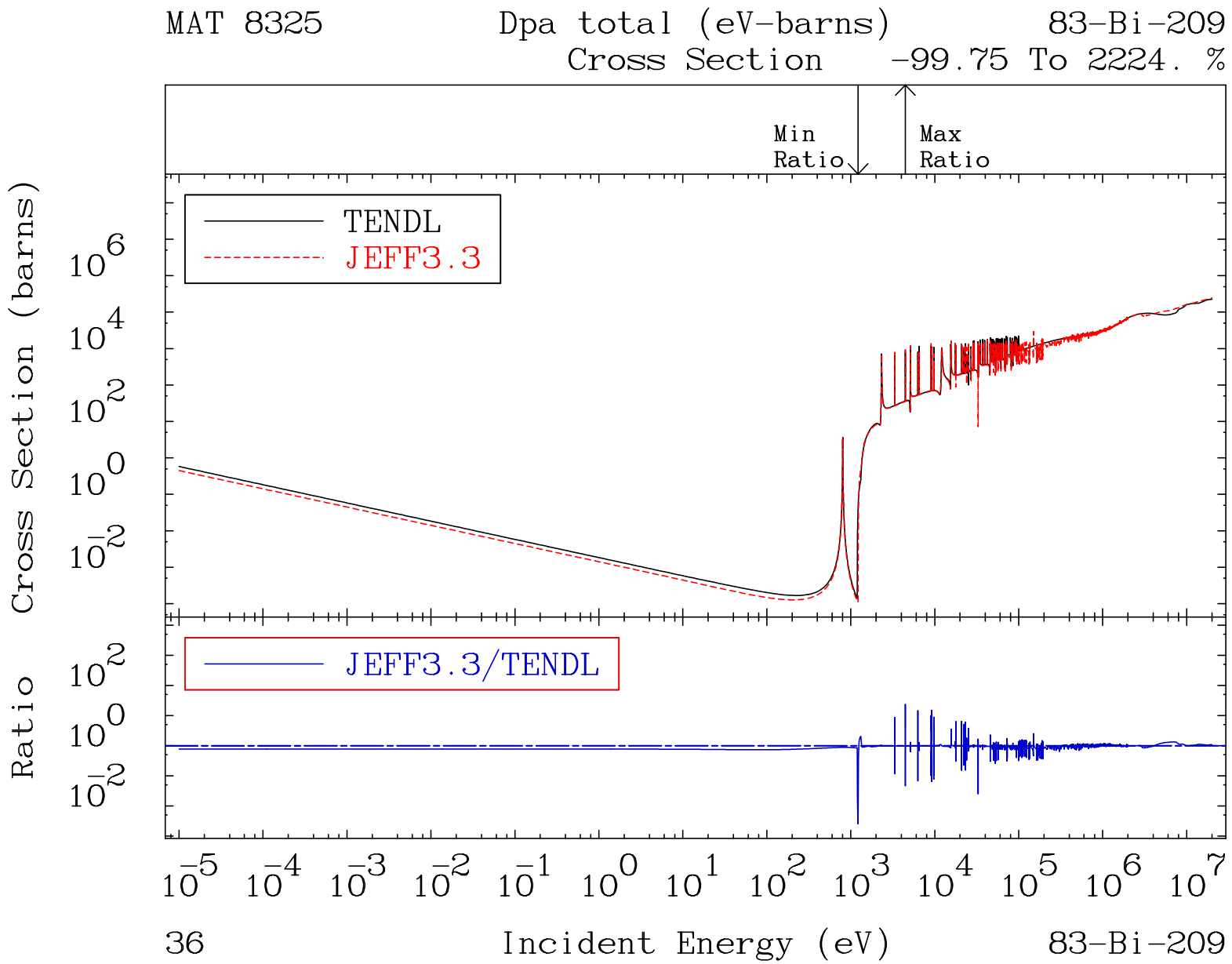

MAT 8325
Kerma inelastic (mt51-91)
83-Bi-209
Cross Section -9999. To 9999. %
Min Ratio
TENDL Threshold 900.61 keV
JEFF3.3 Threshold 901.44 keV
JEFF3.3/TENDL
Ratio Cross Section (Mega-barns)
16
12
8
4
0
4
0
9
2
3
4
5
6
7
8
9
2
10^6
10^7
31
Incident Energy (eV)
83-Bi-209

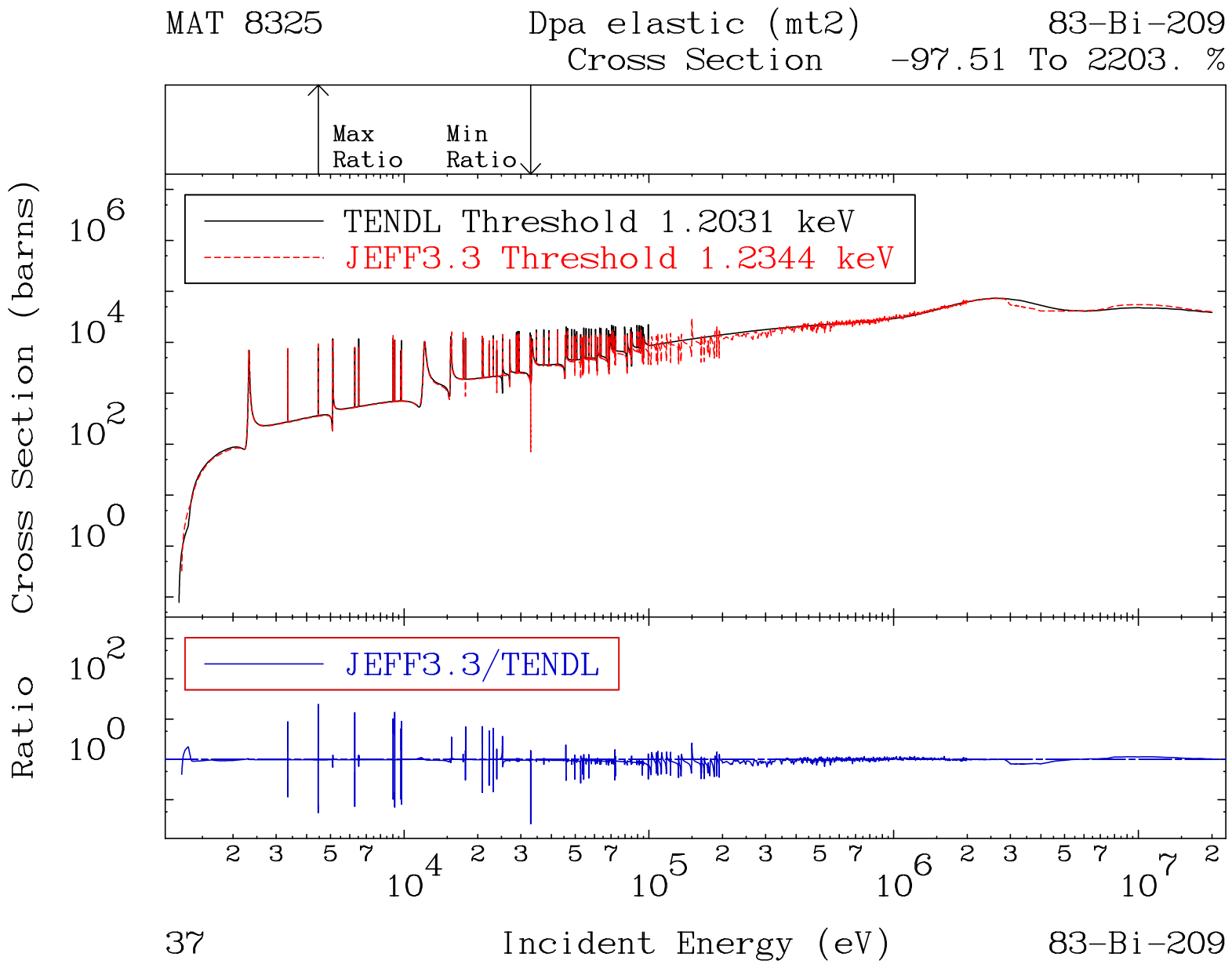

MAT 8325 Kerma fission (mt18 or mt19-20-21-38) 83-Bi-209
Cross Section -9999. To 9999. %
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
4
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7}
32
Incident Energy (eV)
83-Bi-209

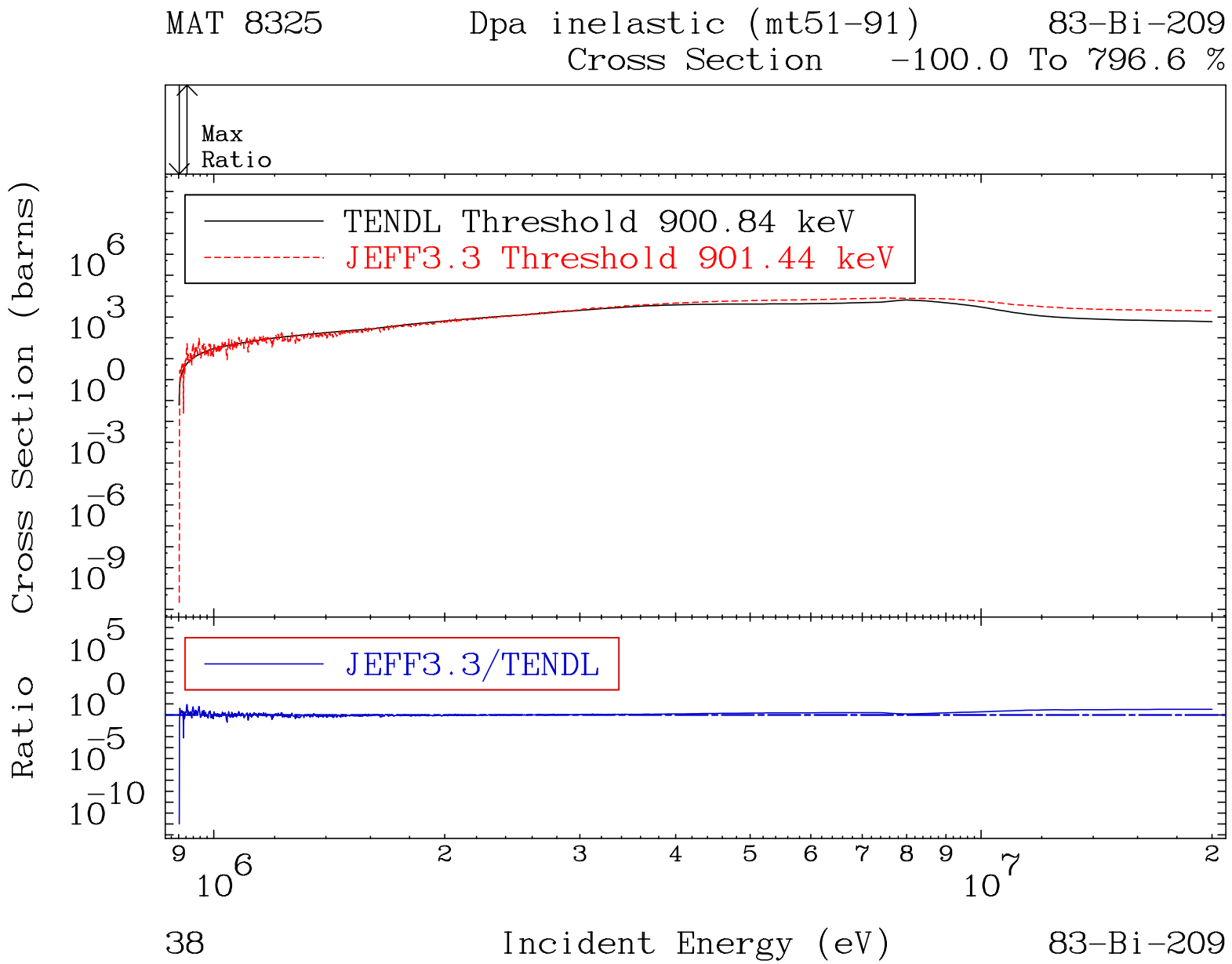

MAT 8325
Kerma capture (mt102)
83-Bi-209
Cross Section -99.97 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
83-Bi-209

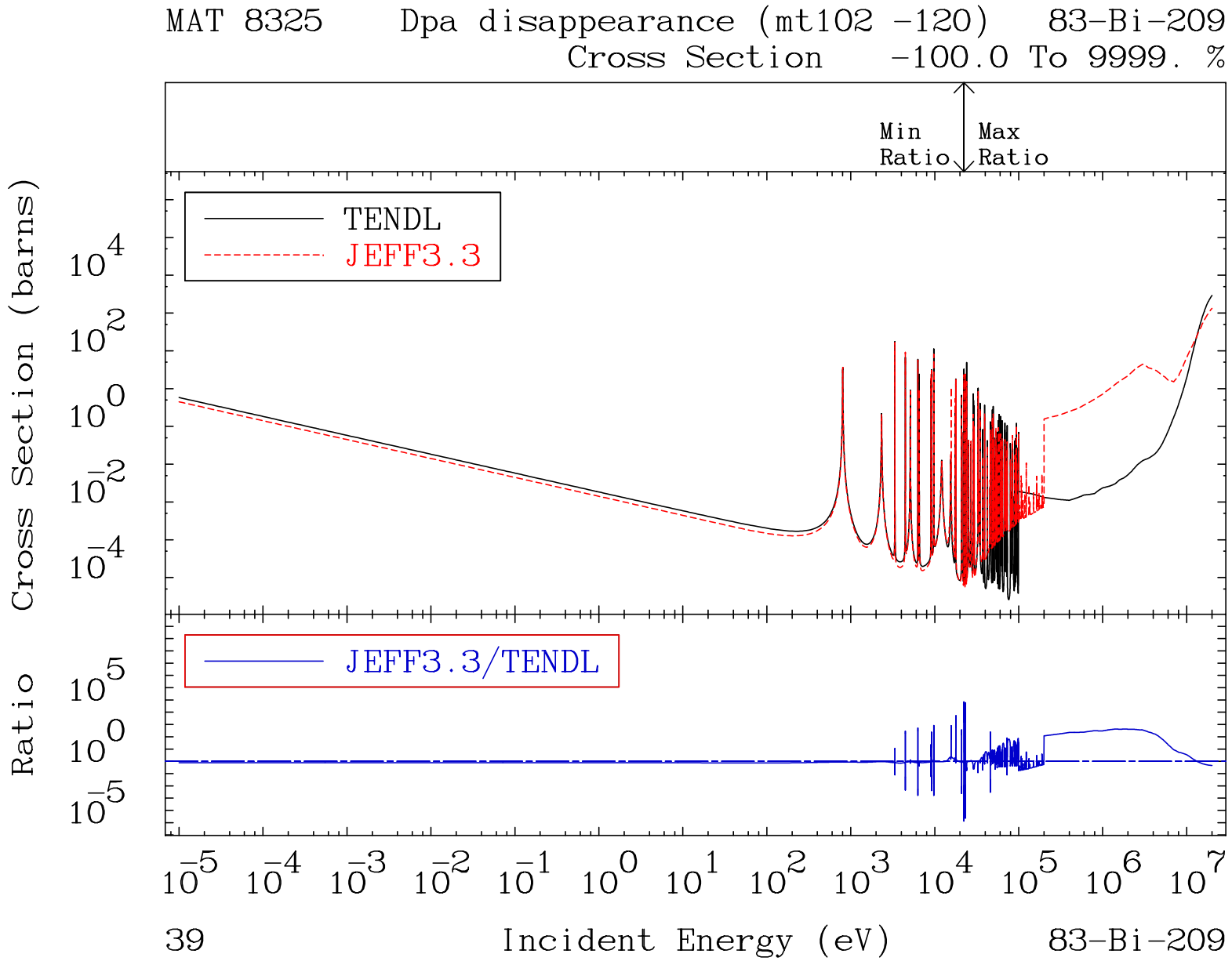

MAT 8325
Total photon (eV-barns)
83-Bi-209
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
83-Bi-209

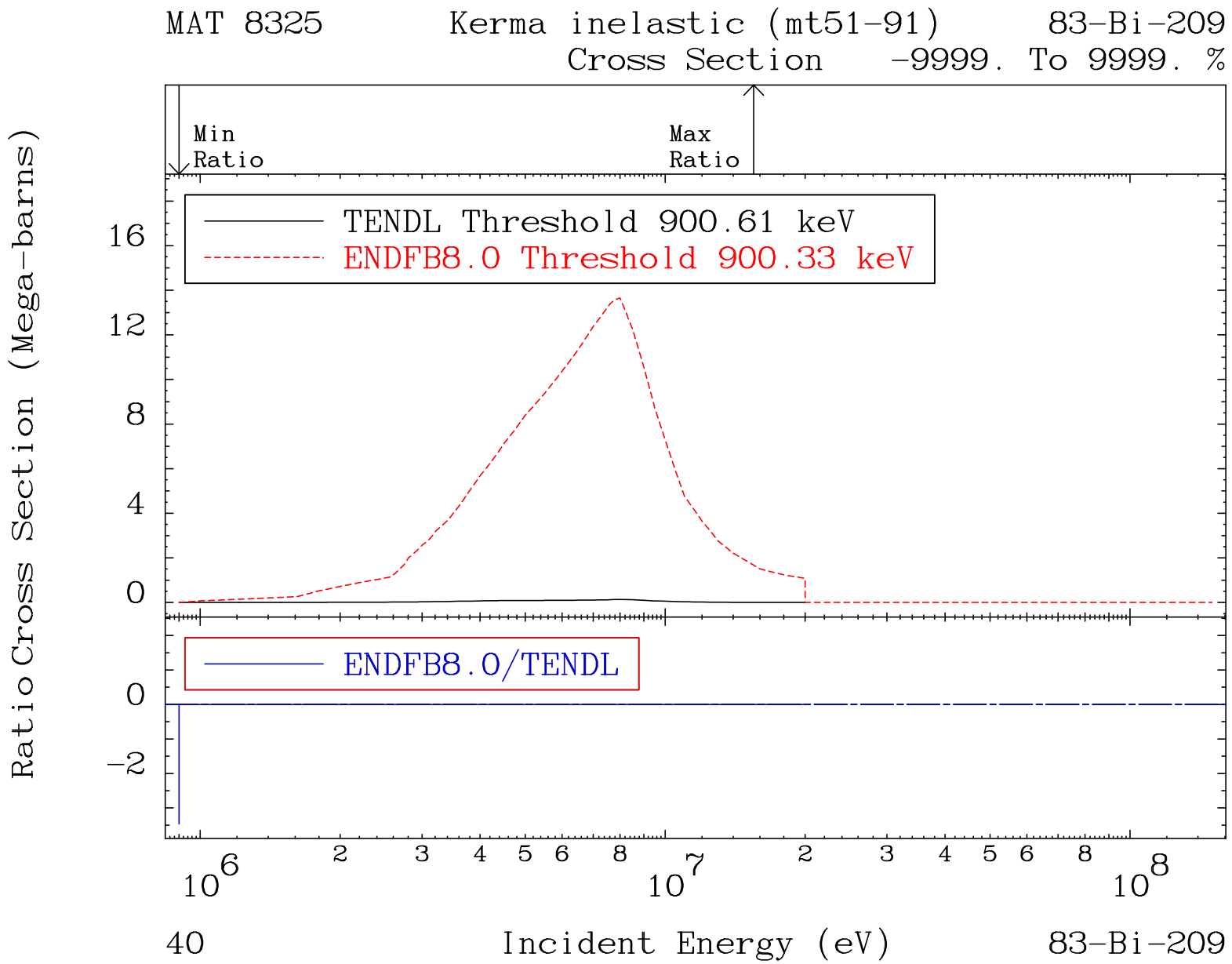

MAT 8325 Total kinematic kerma (high limit) 83-Bi-209
Cross Section -95.25 To 2497. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
83-Bi-209

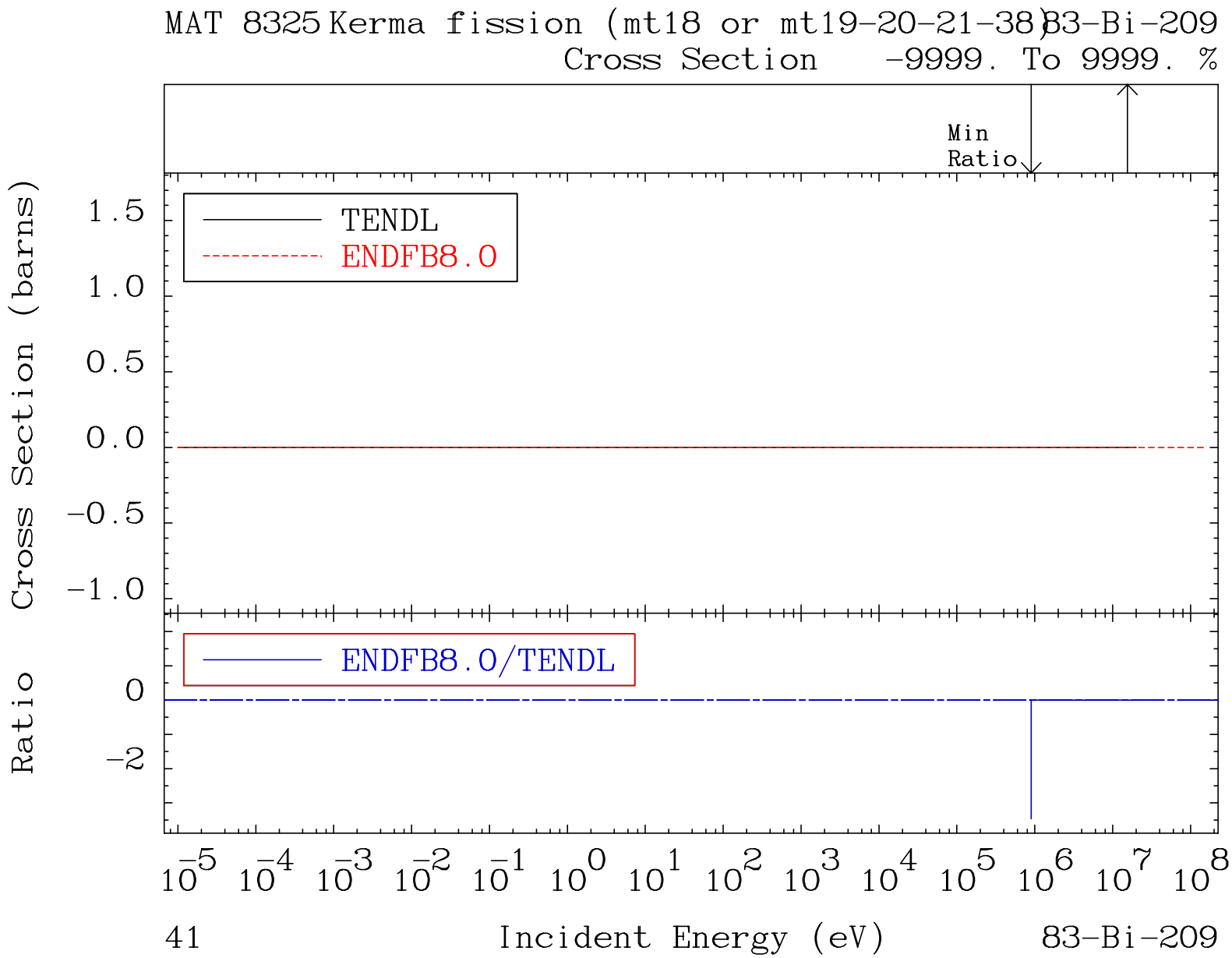

MAT 8325
Dpa total (eV-barns)
83-Bi-209
Cross Section -99.75 To 2224. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
83-Bi-209

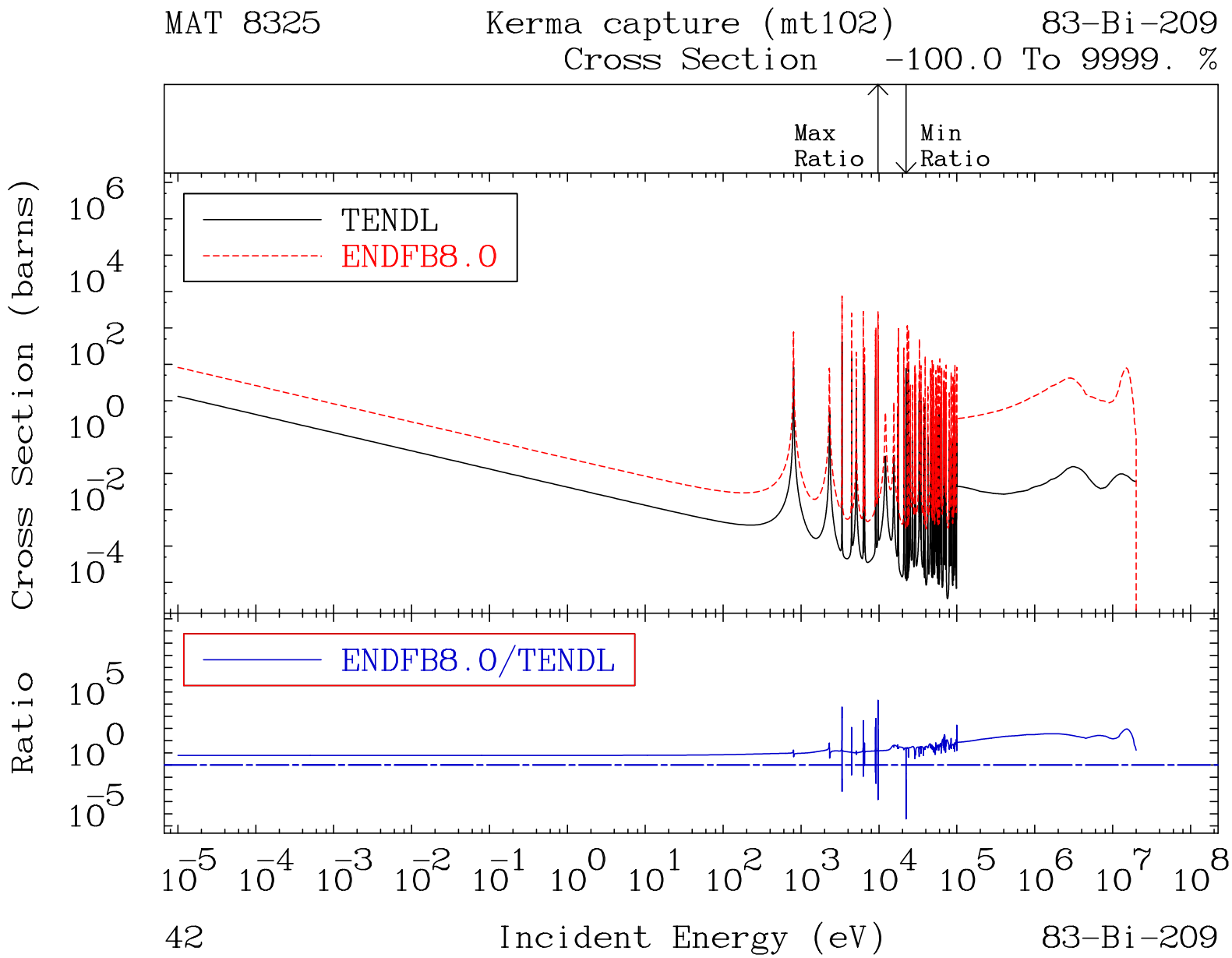

MAT 8325
Dpa elastic (mt2)
Cross Section
83-Bi-209
-97.51 To 2203. %
Max Ratio
Min Ratio
TENDL Threshold 1.2031 keV
JEFF3.3 Threshold 1.2344 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
37
83-Bi-209

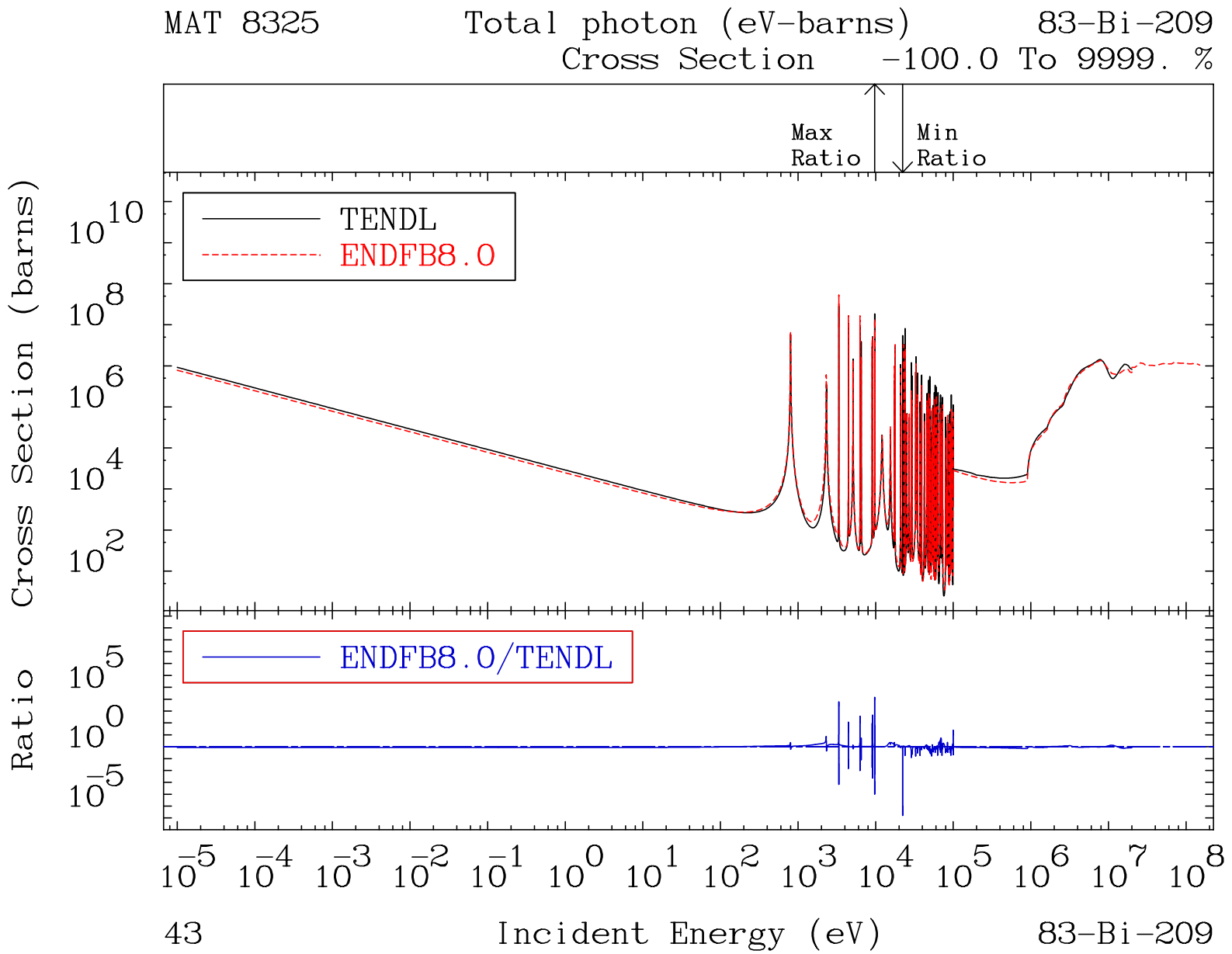

MAT 8325
Dpa inelastic (mt51-91)
83-Bi-209
Cross Section
-100.0 To 796.6 %
Max
Ratio
TENDL Threshold 900.84 keV
JEFF3.3 Threshold 901.44 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
83-Bi-209

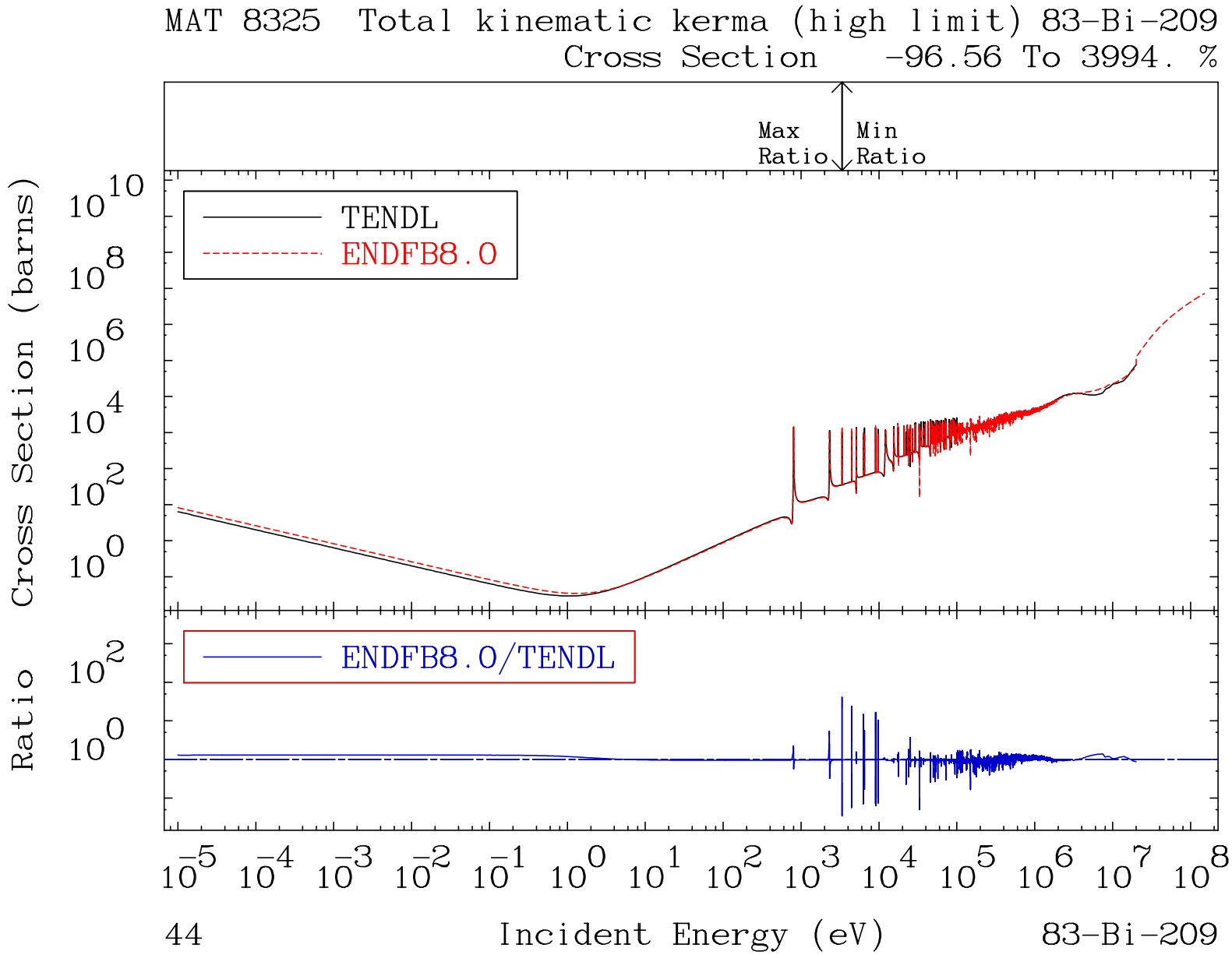

MAT 8325 Dpa disappearance (mt102 -120) 83-Bi-209
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
39
83-Bi-209

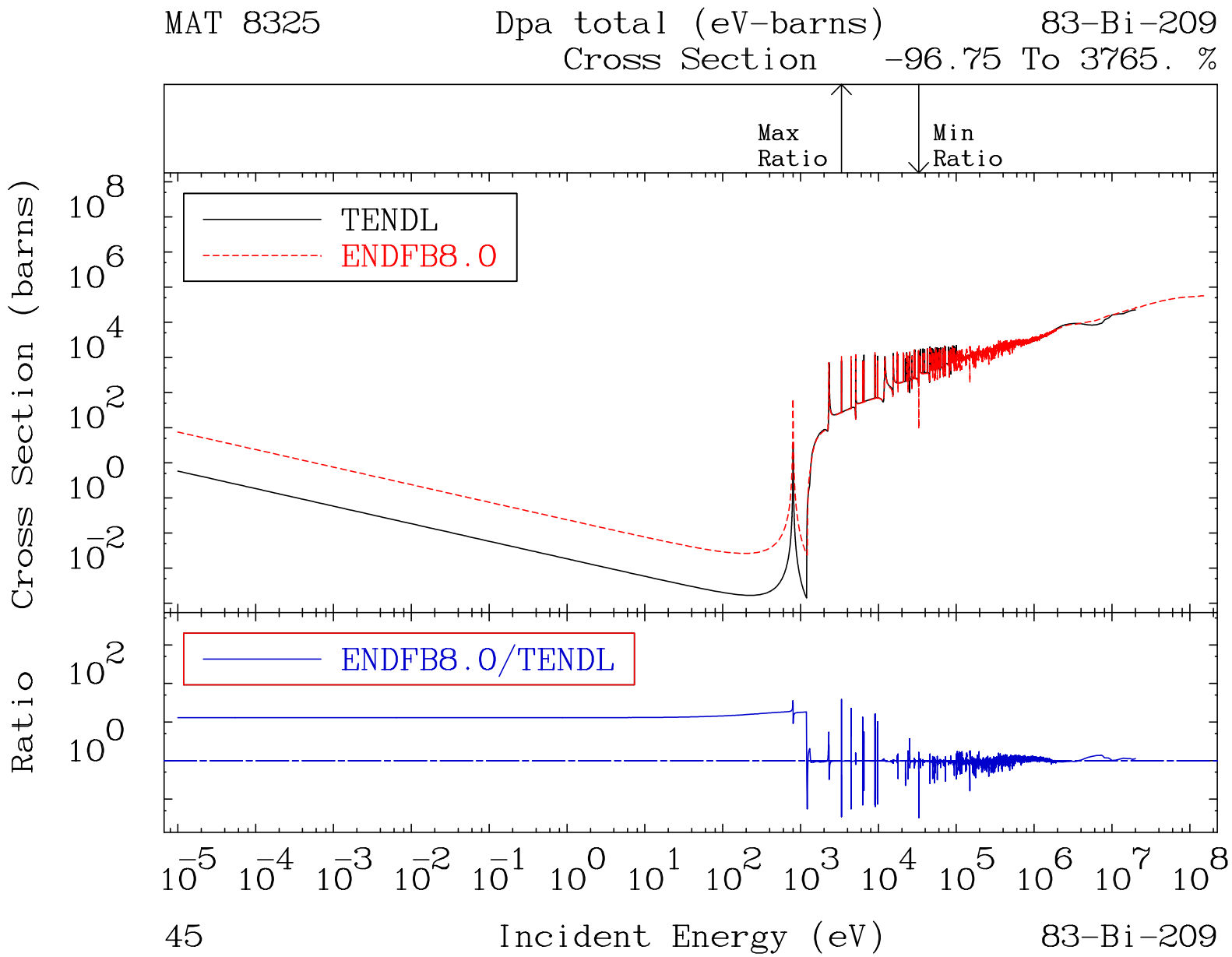

MAT 8325
Kerma inelastic (mt51-91)
83-Bi-209
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 900.61 keV
ENDFB8.0 Threshold 900.33 keV
ENDFB8.0/TENDL
Ratio Cross Section (Mega-barns)
16
12
8
4
0
0
-2
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
40
Incident Energy (eV)
83-Bi-209

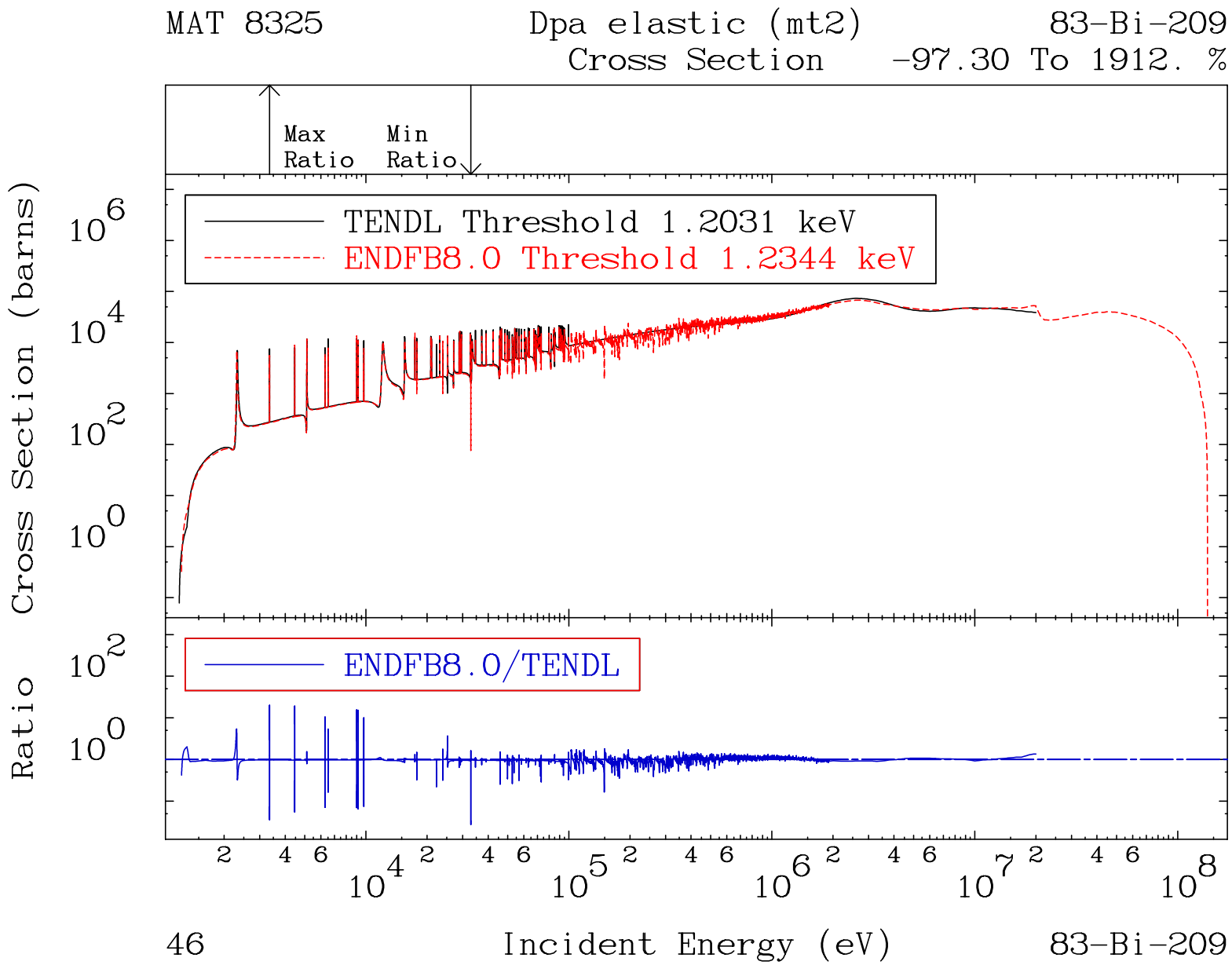

MAT 8325 Kerma fission (mt18 or mt19-20-21-38) 83-Bi-209
Cross Section -9999. To 9999. %
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-2
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
41
Incident Energy (eV)
83-Bi-209

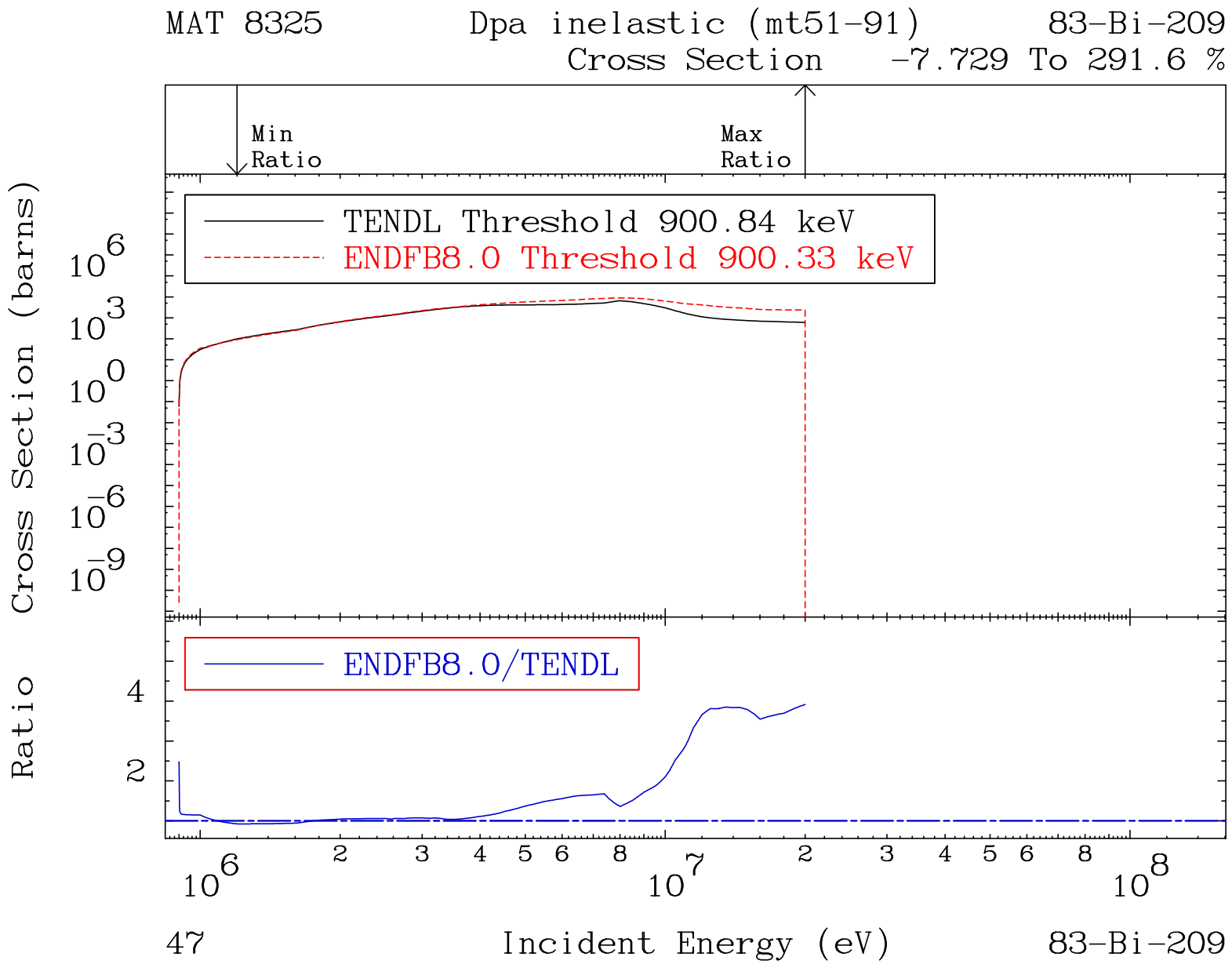

MAT 8325
Kerma capture (mt102)
83-Bi-209
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
42
83-Bi-209

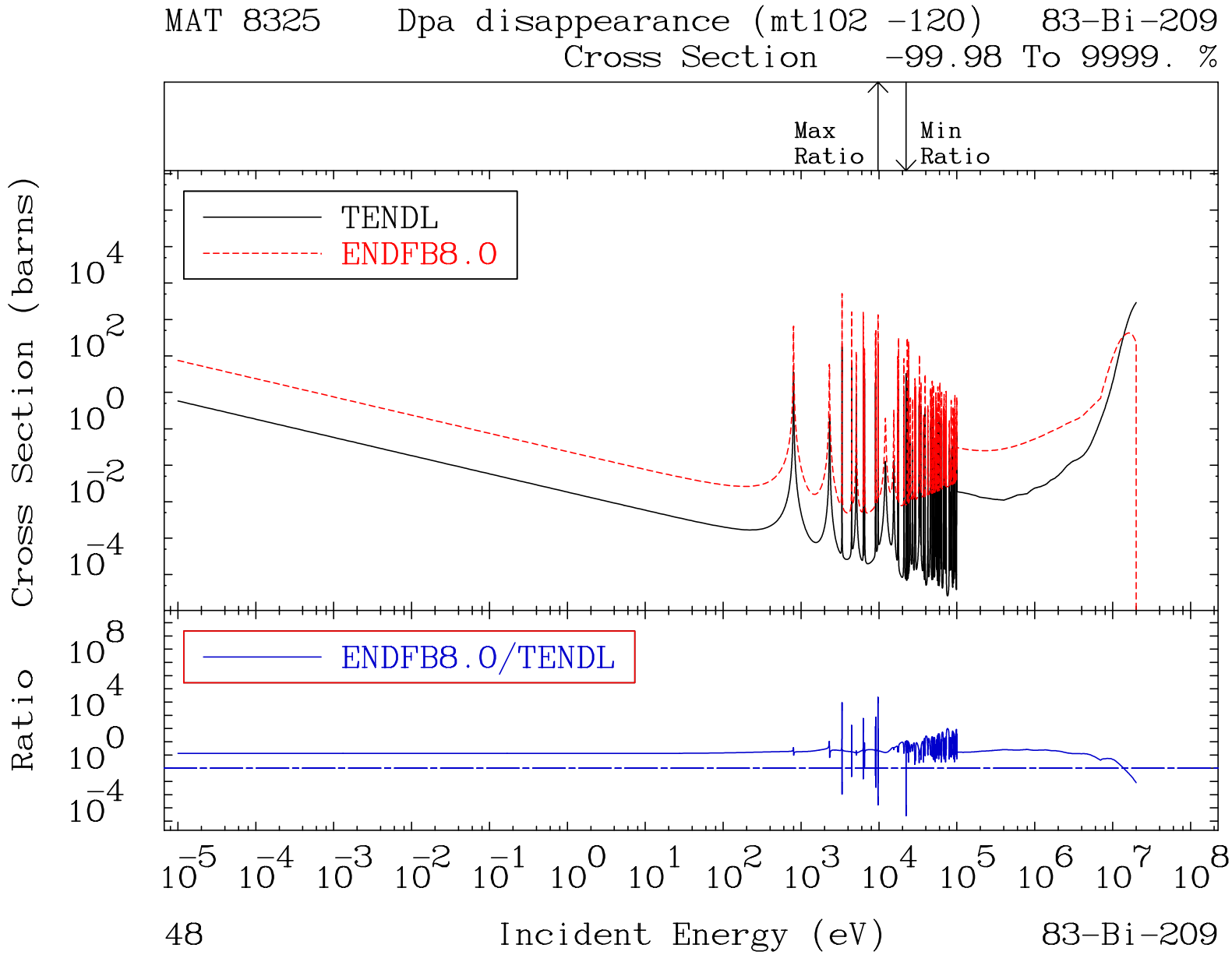

MAT 8325
Total photon (eV-barns)
83-Bi-209
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
83-Bi-209


MAT 8325 Total kinematic kerma (high limit) 83-Bi-209
Cross Section -96.56 To 3994. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
44
83-Bi-209


MAT 8325
Dpa total (eV-barns)
83-Bi-209
Cross Section -96.75 To 3765. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
45
83-Bi-209


MAT 8325
Dpa elastic (mt2)
Cross Section
83-Bi-209
-97.30 To 1912. %
Max Ratio
Min Ratio
TENDL Threshold 1.2031 keV
ENDFB8.0 Threshold 1.2344 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
83-Bi-209


MAT 8325
Dpa inelastic (mt51-91)
83-Bi-209
Cross Section
-7.729 To 291.6 %
Min Ratio
Max Ratio
TENDL Threshold 900.84 keV
ENDFB8.0 Threshold 900.33 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
47
83-Bi-209


MAT 8325 Dpa disappearance (mt102 -120) 83-Bi-209
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
83-Bi-209