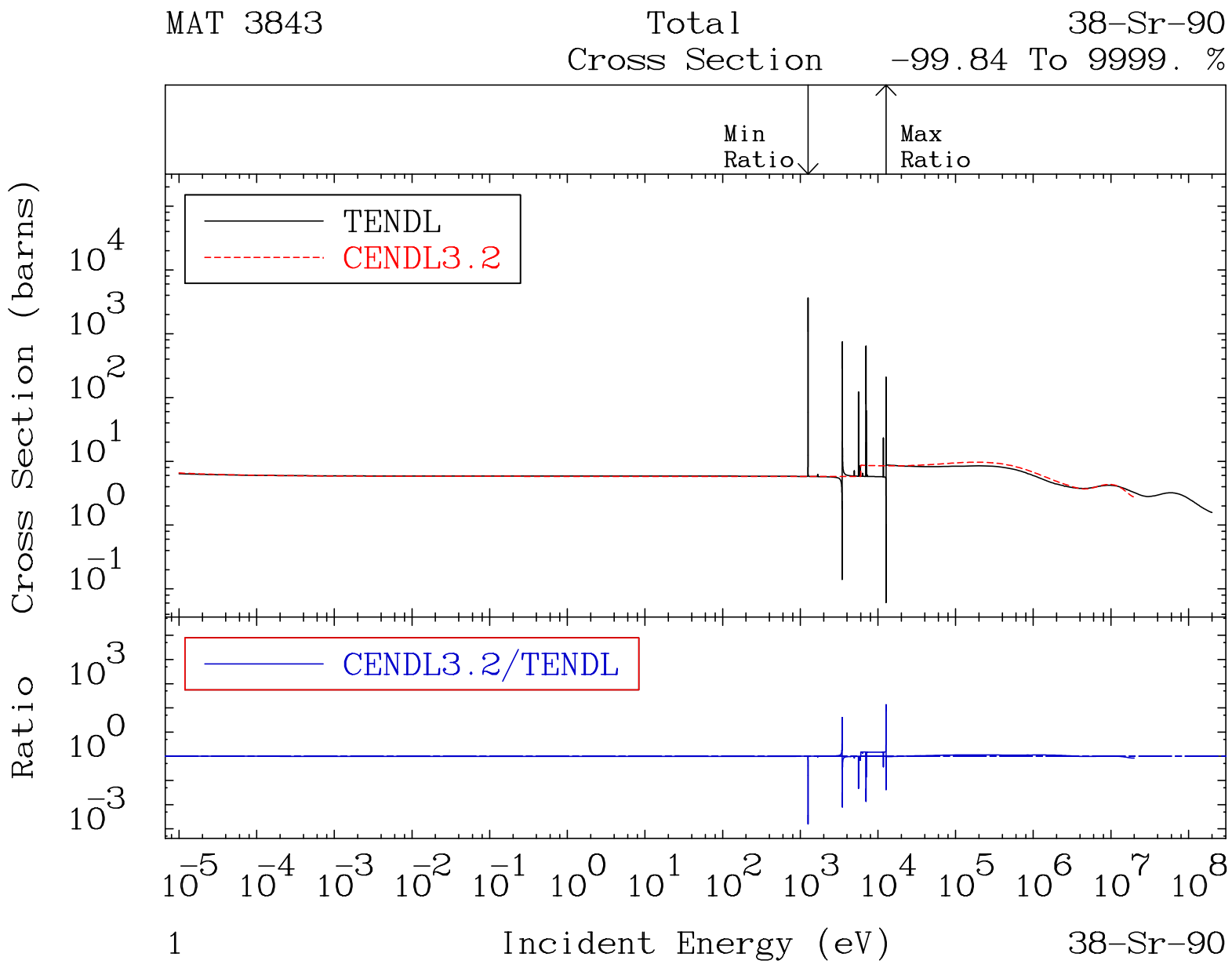
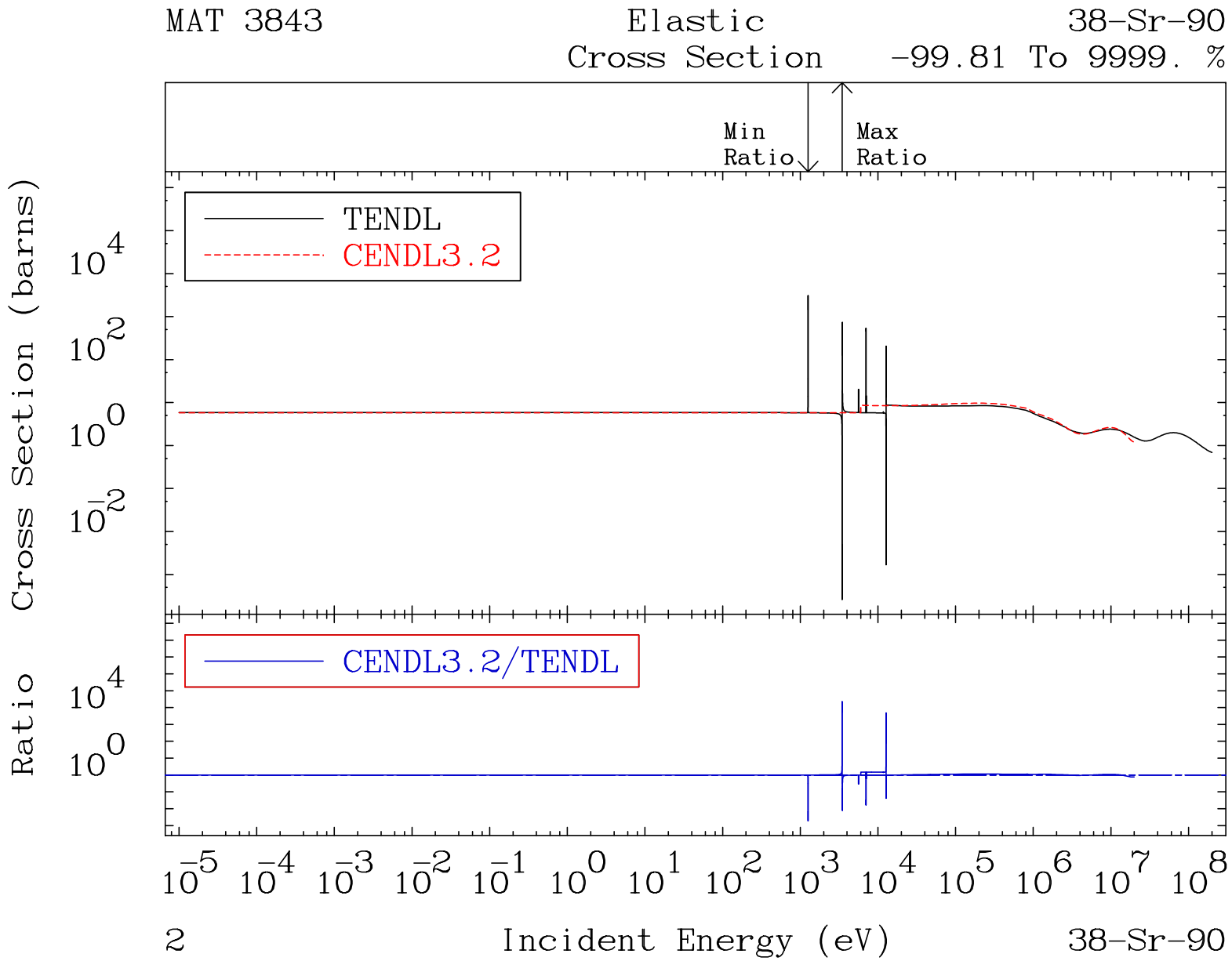
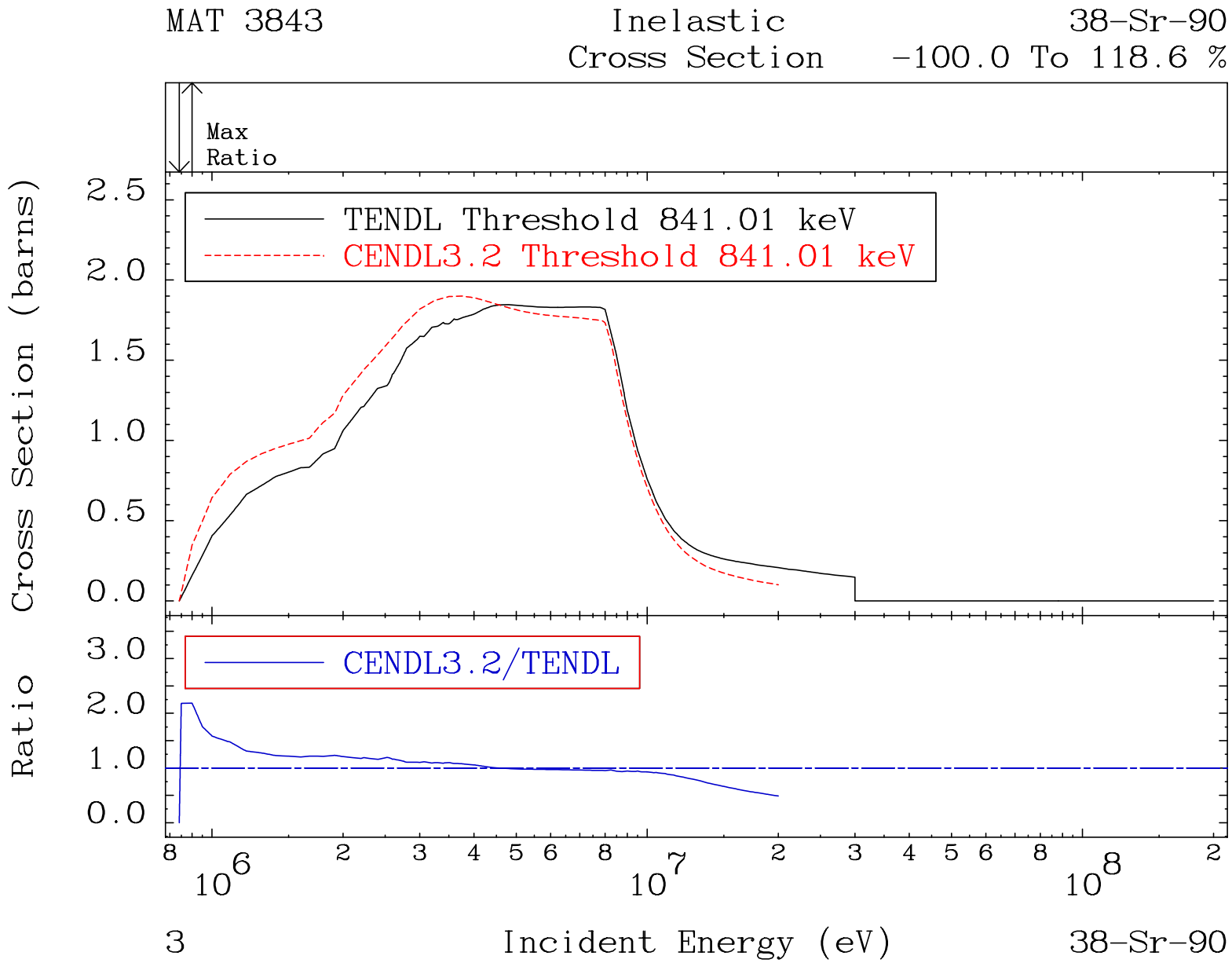
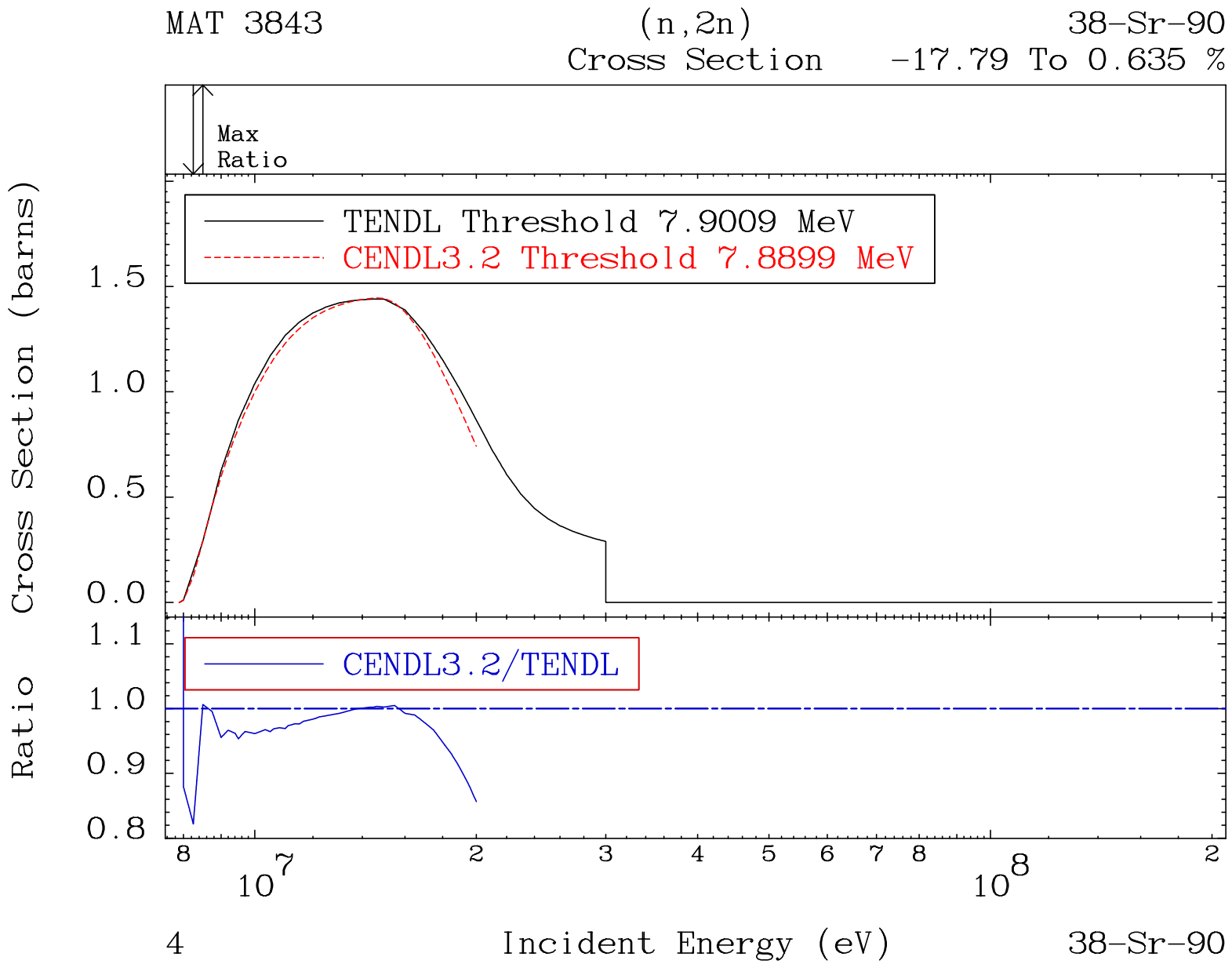
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

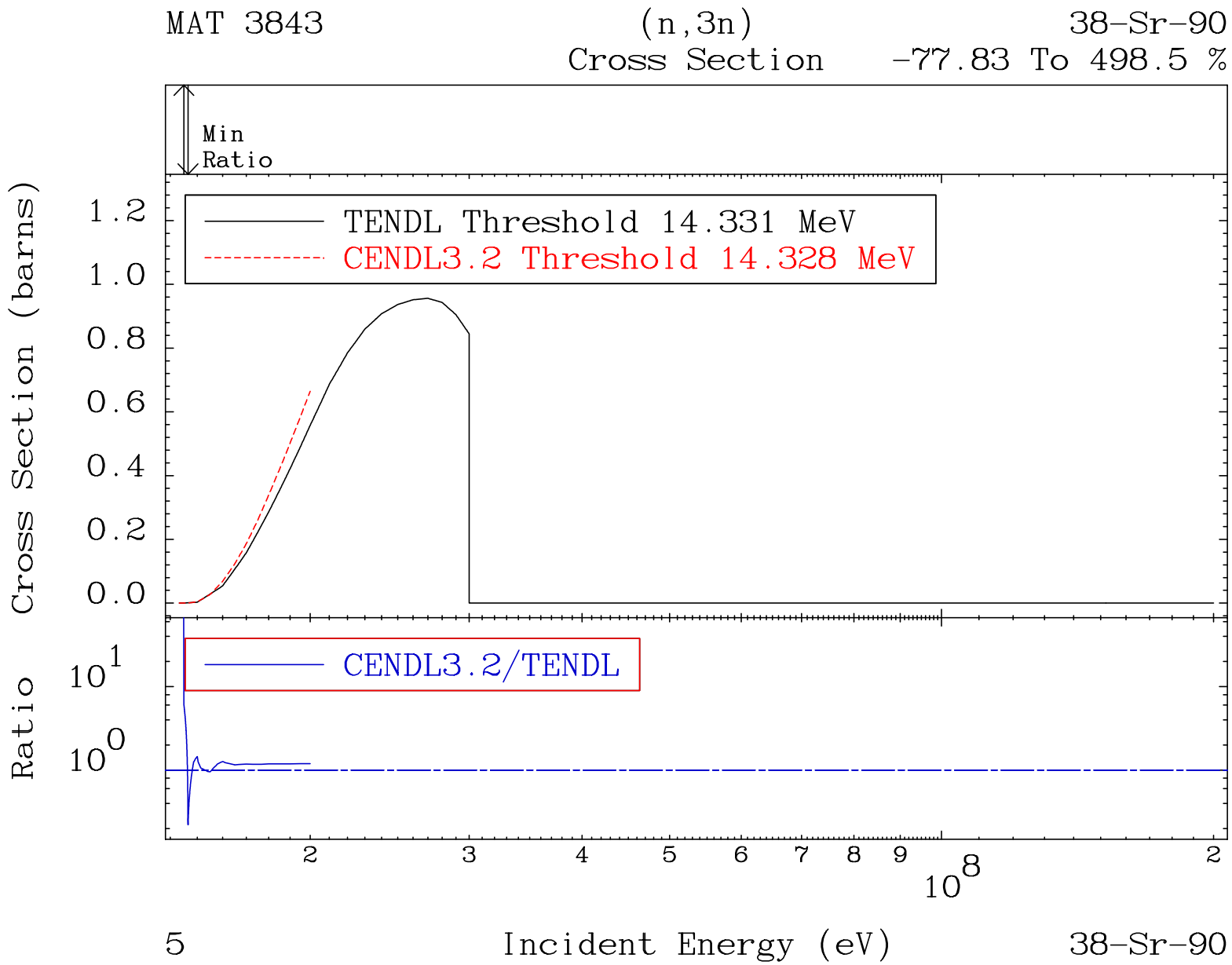
Press Mouse Button to Start

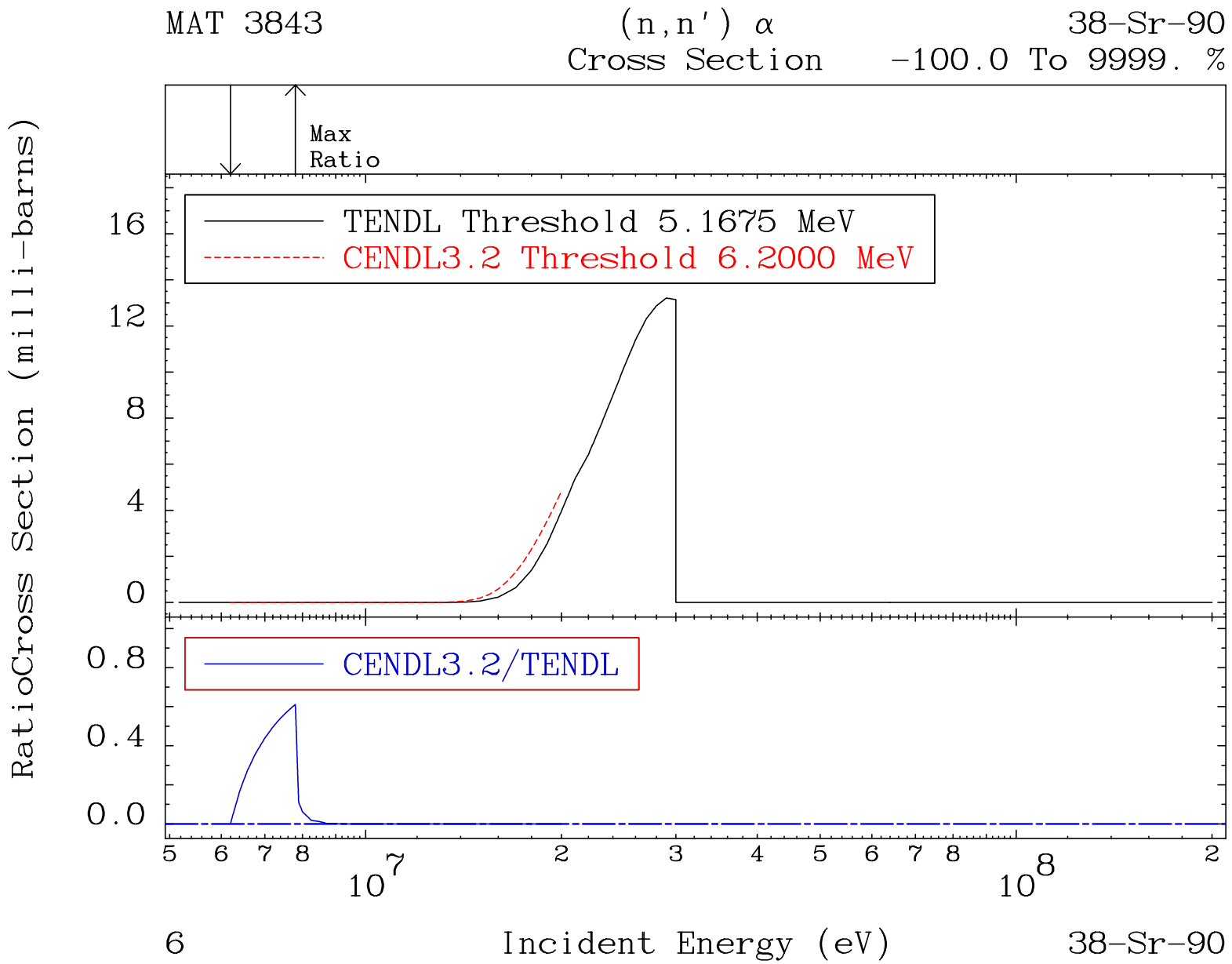

MAT 3843
Total
Cross Section
38-Sr-90
-99.84 To 9999. %
Min
Ratio
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
38-Sr-90

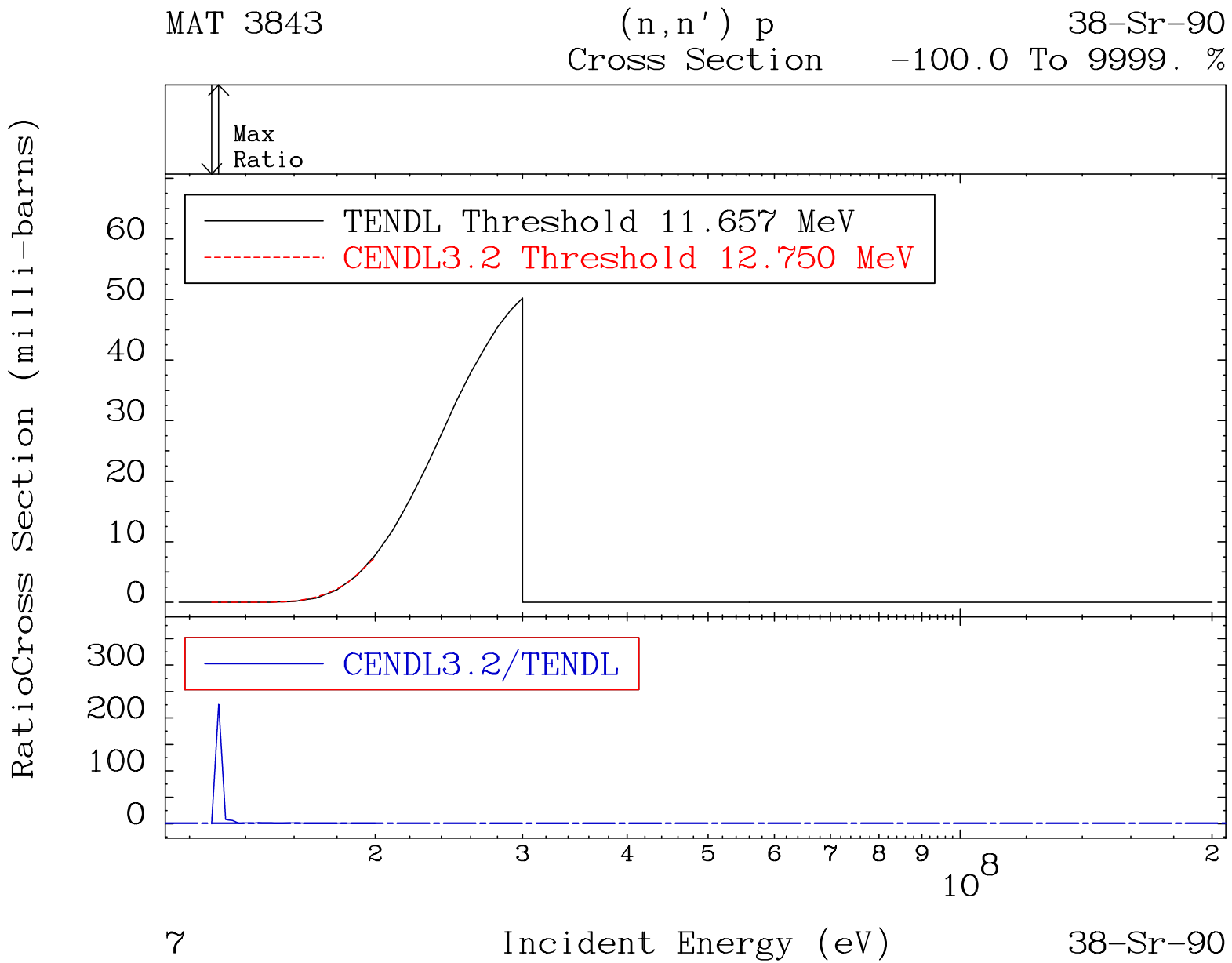

MAT 3843
Elastic
Cross Section
38-Sr-90
-99.81 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
38-Sr-90

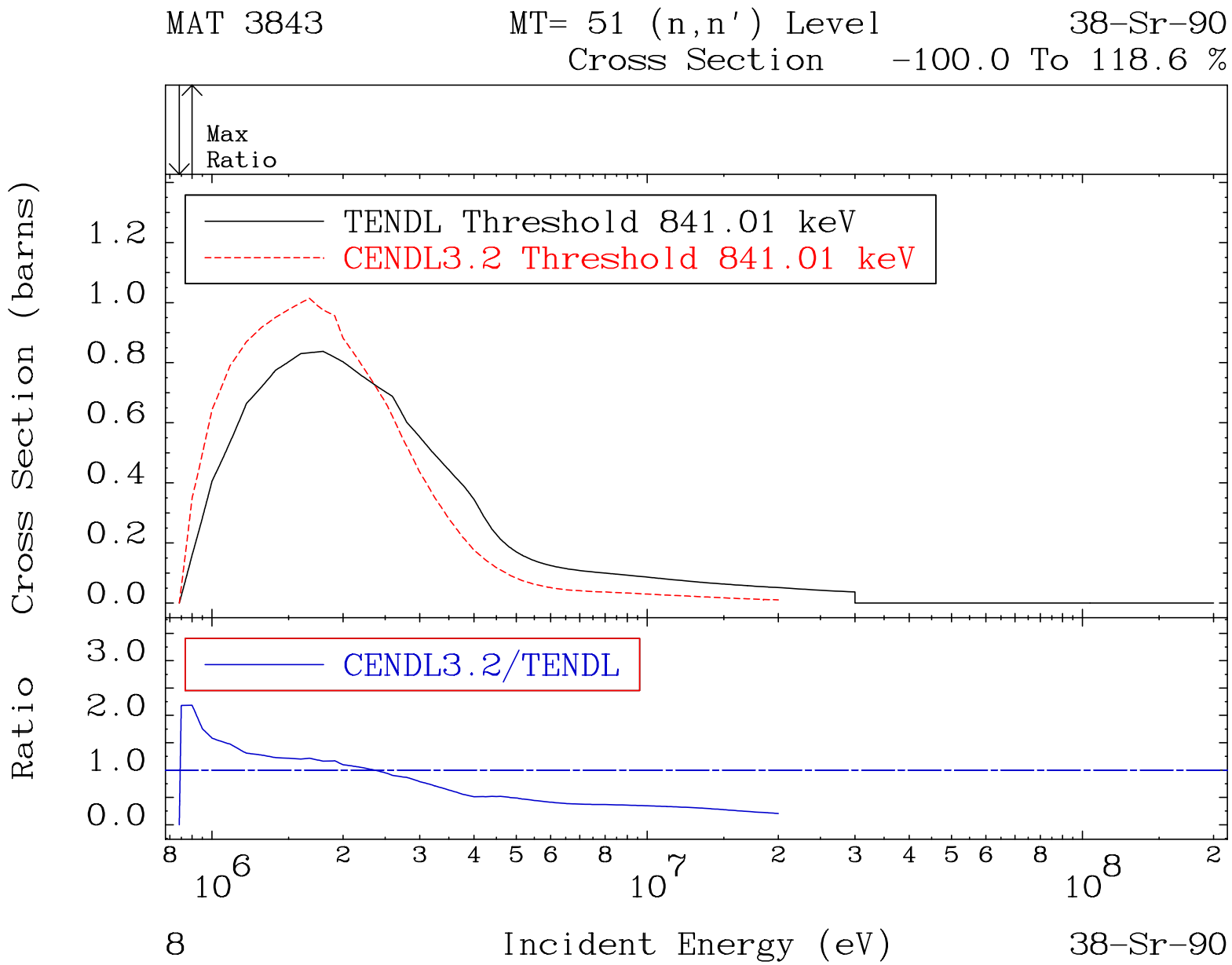

MAT 3843
Inelastic
Cross Section
38-Sr-90
-100.0 To 118.6 %
Max
Ratio
TENDL Threshold 841.01 keV
CENDL3.2 Threshold 841.01 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
38-Sr-90

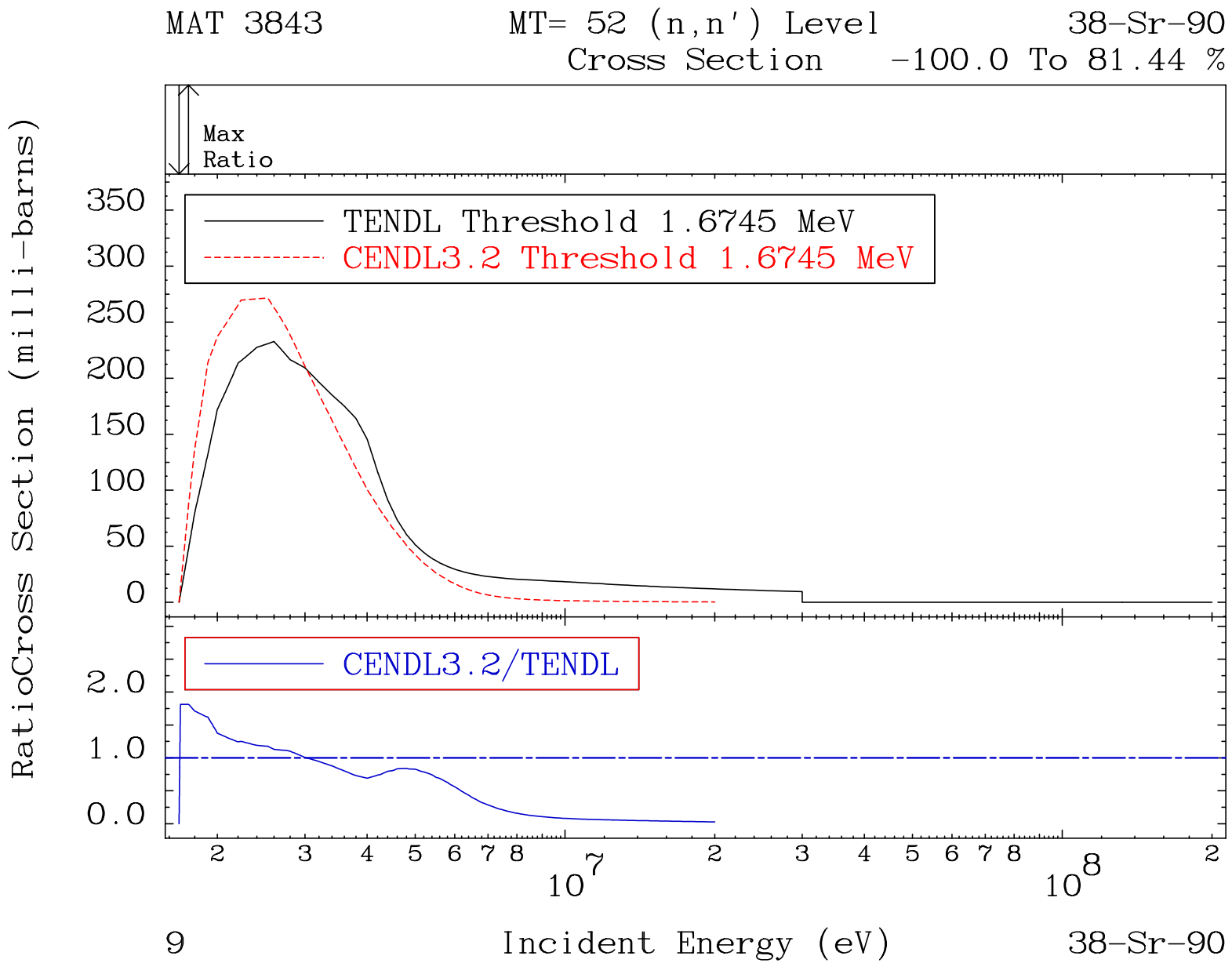

MAT 3843
(n,2n)
Cross Section
38-Sr-90
-17.79 To 0.635 %
Max
Ratio
TENDL Threshold 7.9009 MeV
CENDL3.2 Threshold 7.8899 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
1.1
1.0
0.9
0.8
8
2
3
4
5
6
7
8
2
10^7
10^8
4
Incident Energy (eV)
38-Sr-90

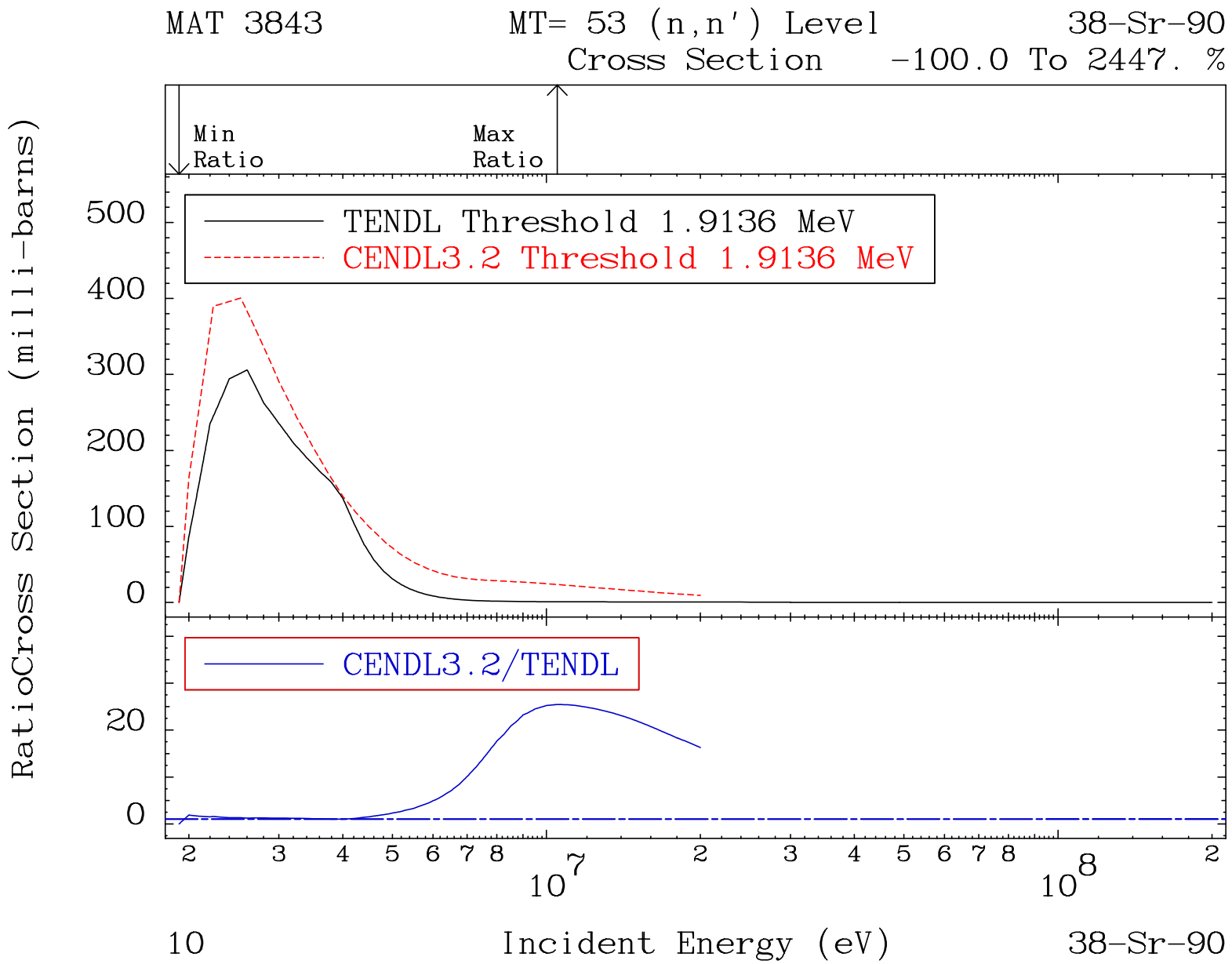

MAT 3843
(n,3n)
Cross Section
38-Sr-90
-77.83 To 498.5 %
Min
Ratio
TENDL Threshold 14.331 MeV
CENDL3.2 Threshold 14.328 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
38-Sr-90

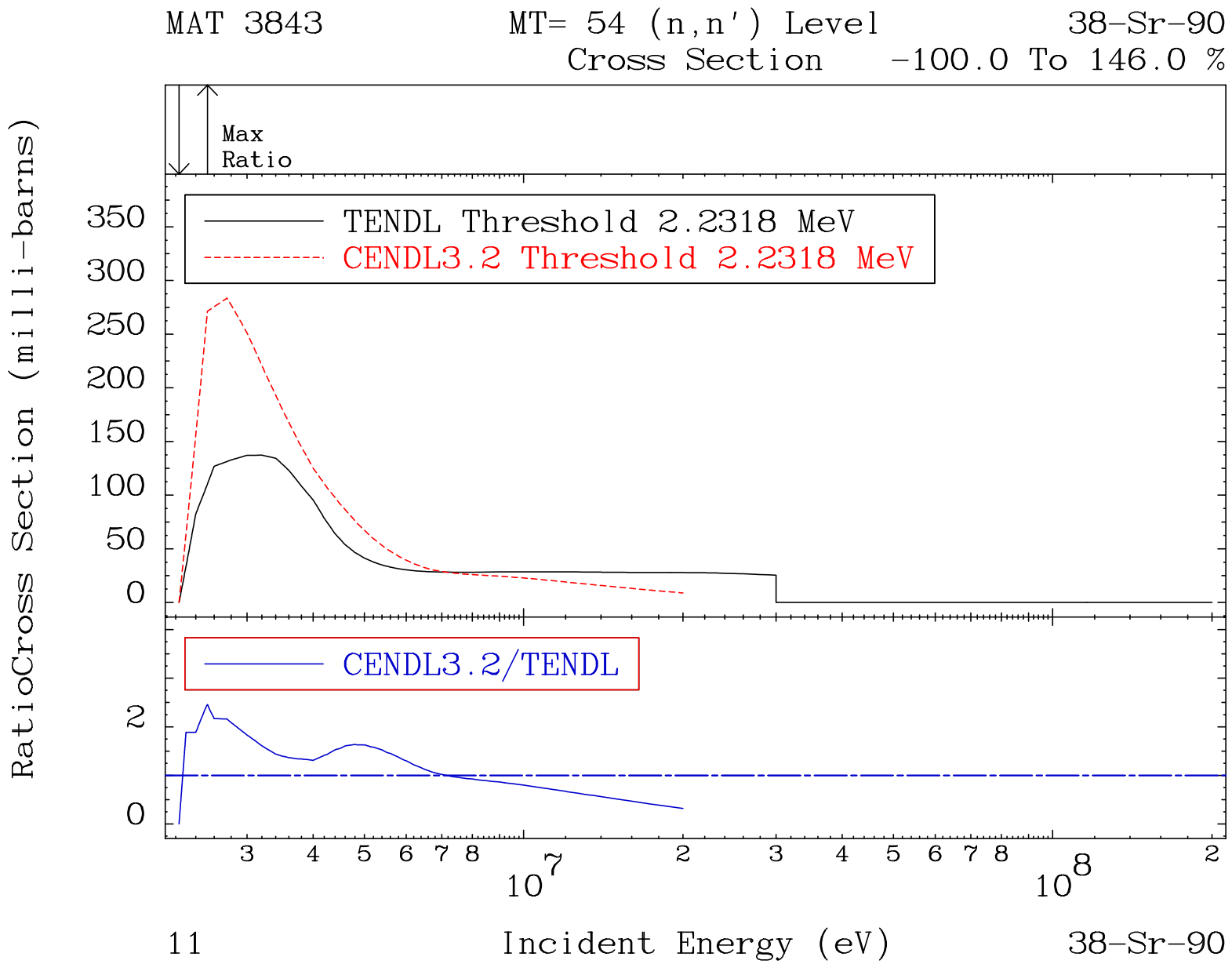

MAT 3843
(n,n') α
Cross Section
38-Sr-90
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 5.1675 MeV
CENDL3.2 Threshold 6.2000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
0.8
0.4
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
6
38-Sr-90

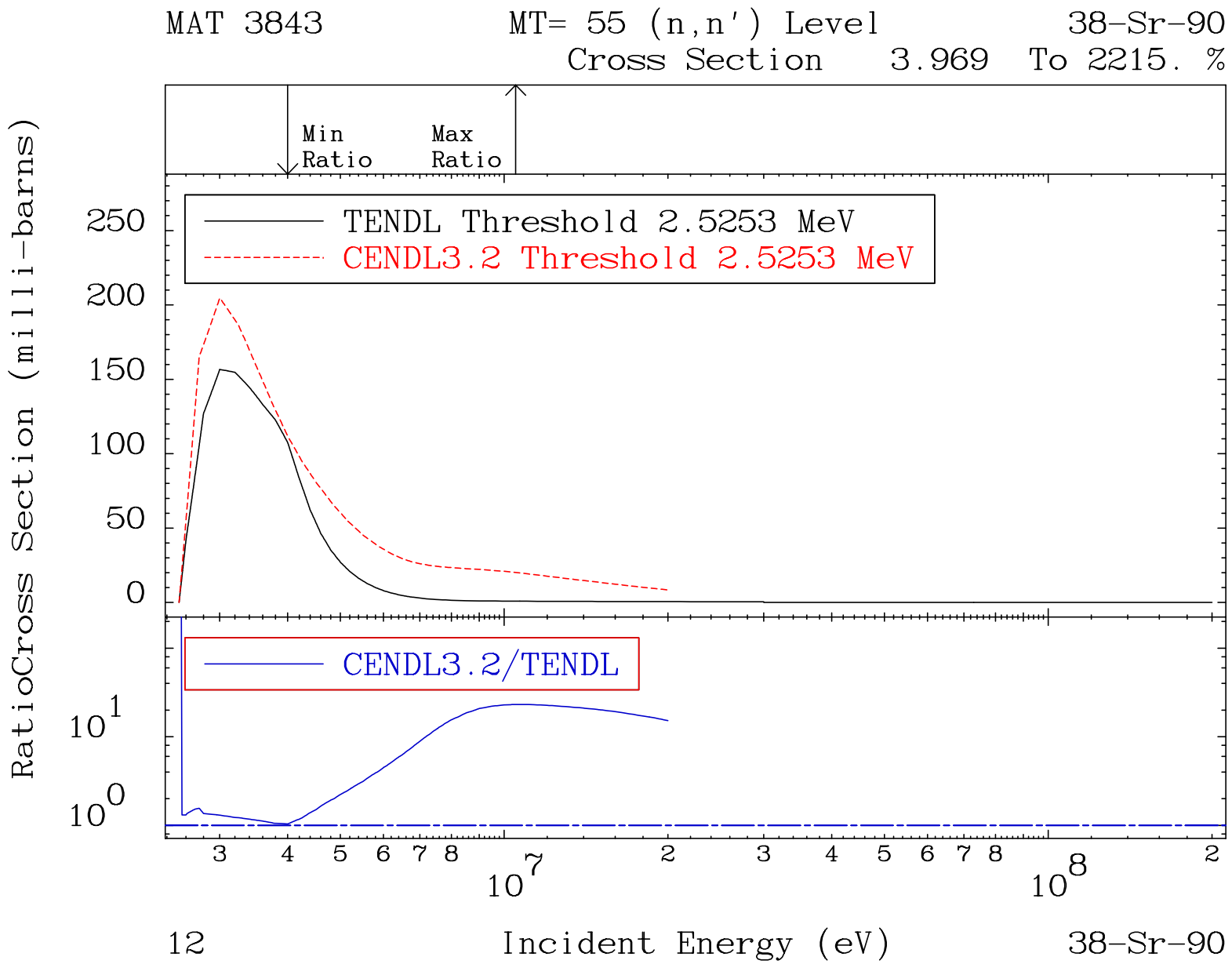

MAT 3843
(n,n') p
Cross Section
38-Sr-90
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 11.657 MeV
CENDL3.2 Threshold 12.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
300
200
100
0
2
3
4
5
6
7
8
9
2
10^8
7
Incident Energy (eV)
38-Sr-90

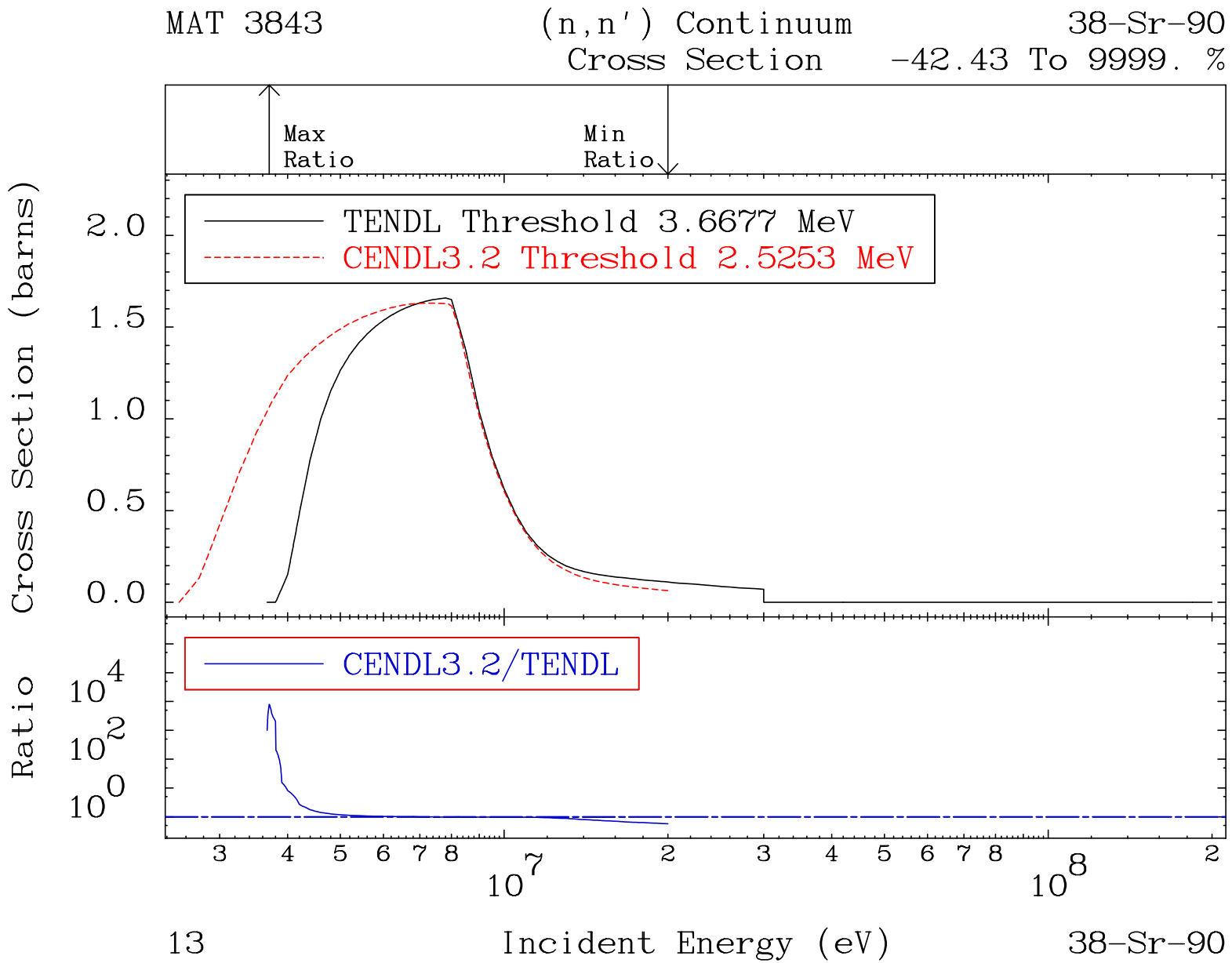

MAT 3843
MT= 51 (n,n') Level
38-Sr-90
Cross Section -100.0 To 118.6 %
Max
Ratio
TENDL Threshold 841.01 keV
CENDL3.2 Threshold 841.01 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
8
2
3
4
5
6
8
10^6
10^7
10^8
Incident Energy (eV)
38-Sr-90

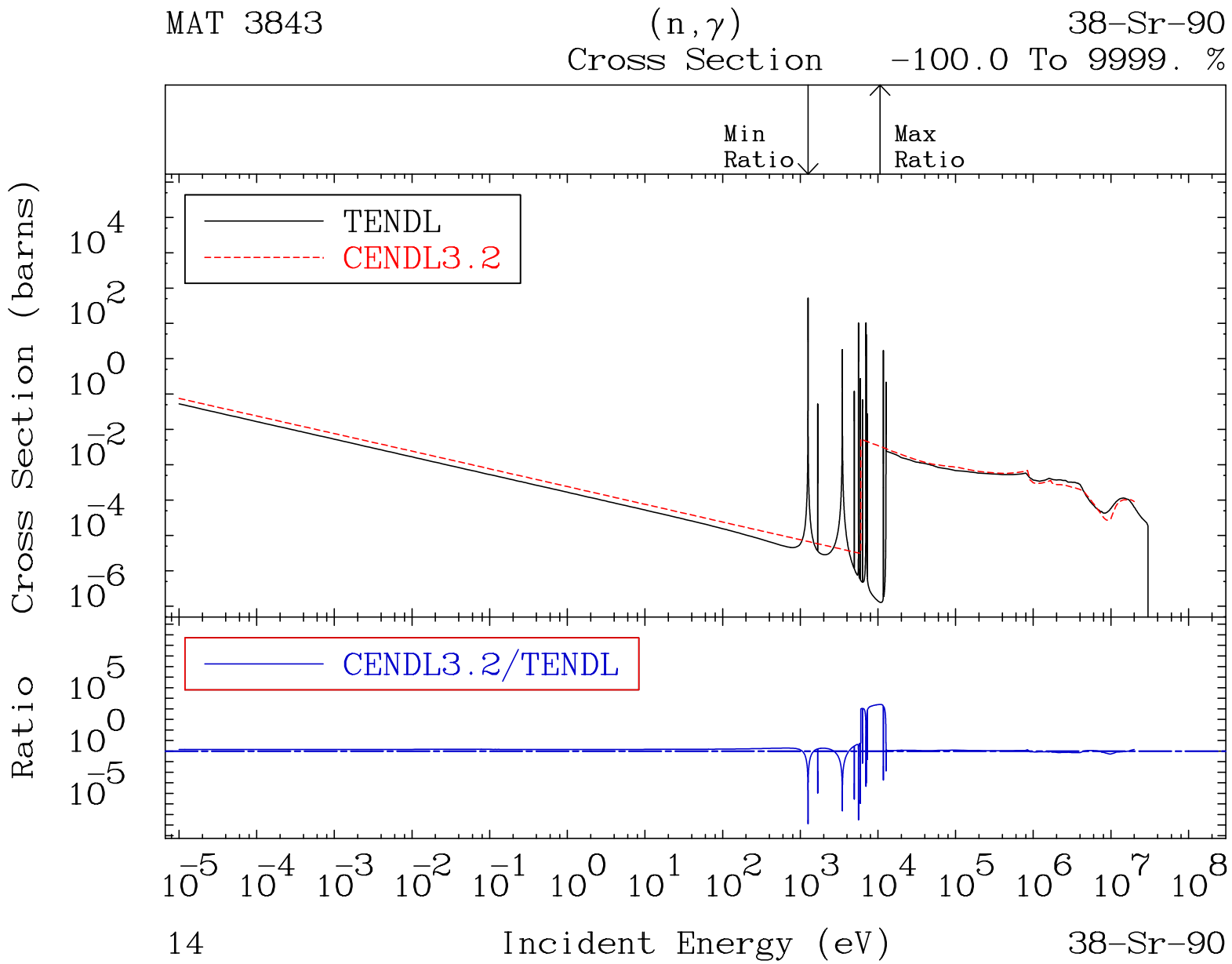

MAT 3843
MT= 52 (n,n') Level
38-Sr-90
Cross Section -100.0 To 81.44 %
Max
Ratio
TENDL Threshold 1.6745 MeV
CENDL3.2 Threshold 1.6745 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
38-Sr-90

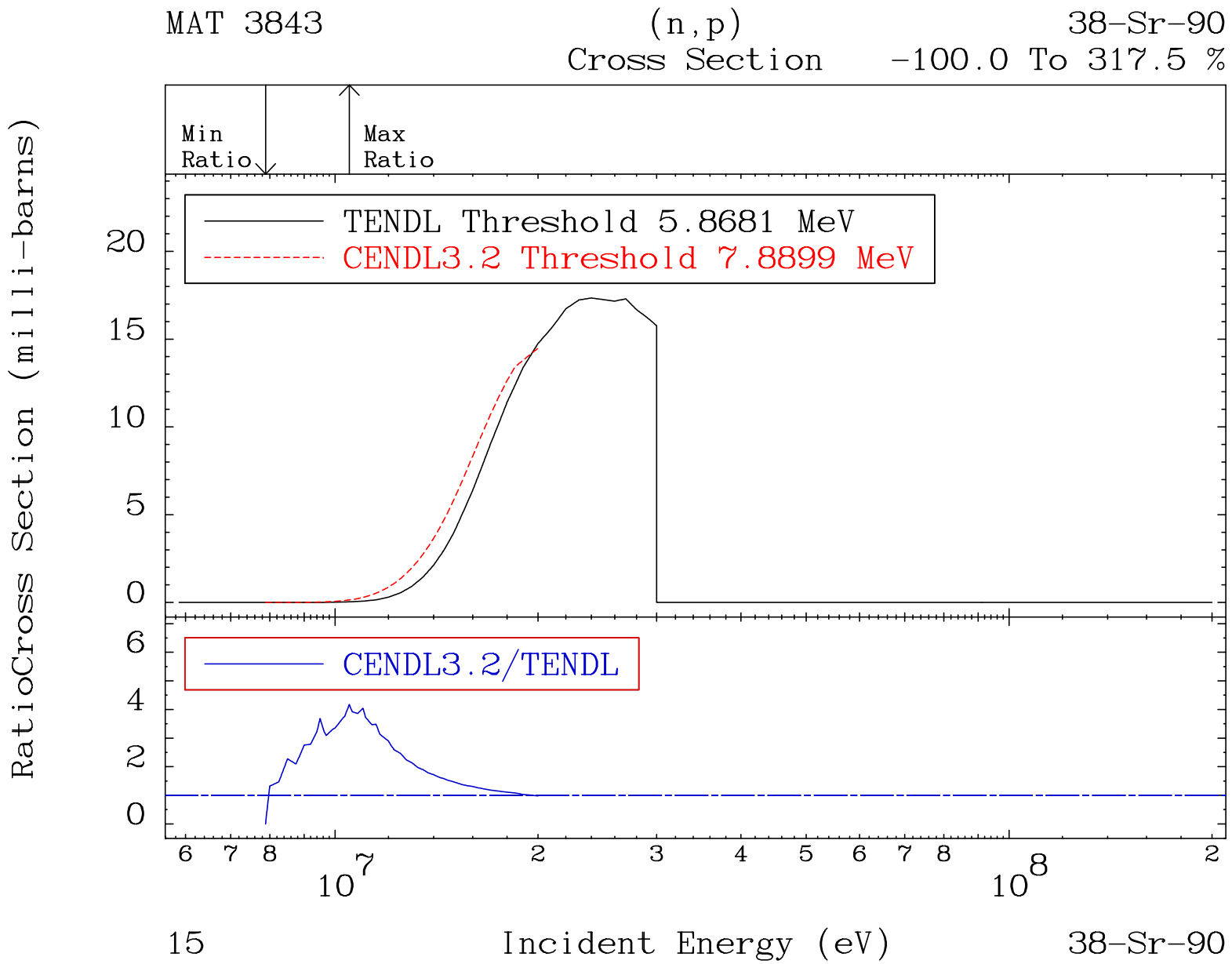

MAT 3843
MT= 53 (n,n') Level
38-Sr-90
Cross Section -100.0 To 2447. %
Min Ratio
Max Ratio
TENDL Threshold 1.9136 MeV
CENDL3.2 Threshold 1.9136 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
20
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
38-Sr-90

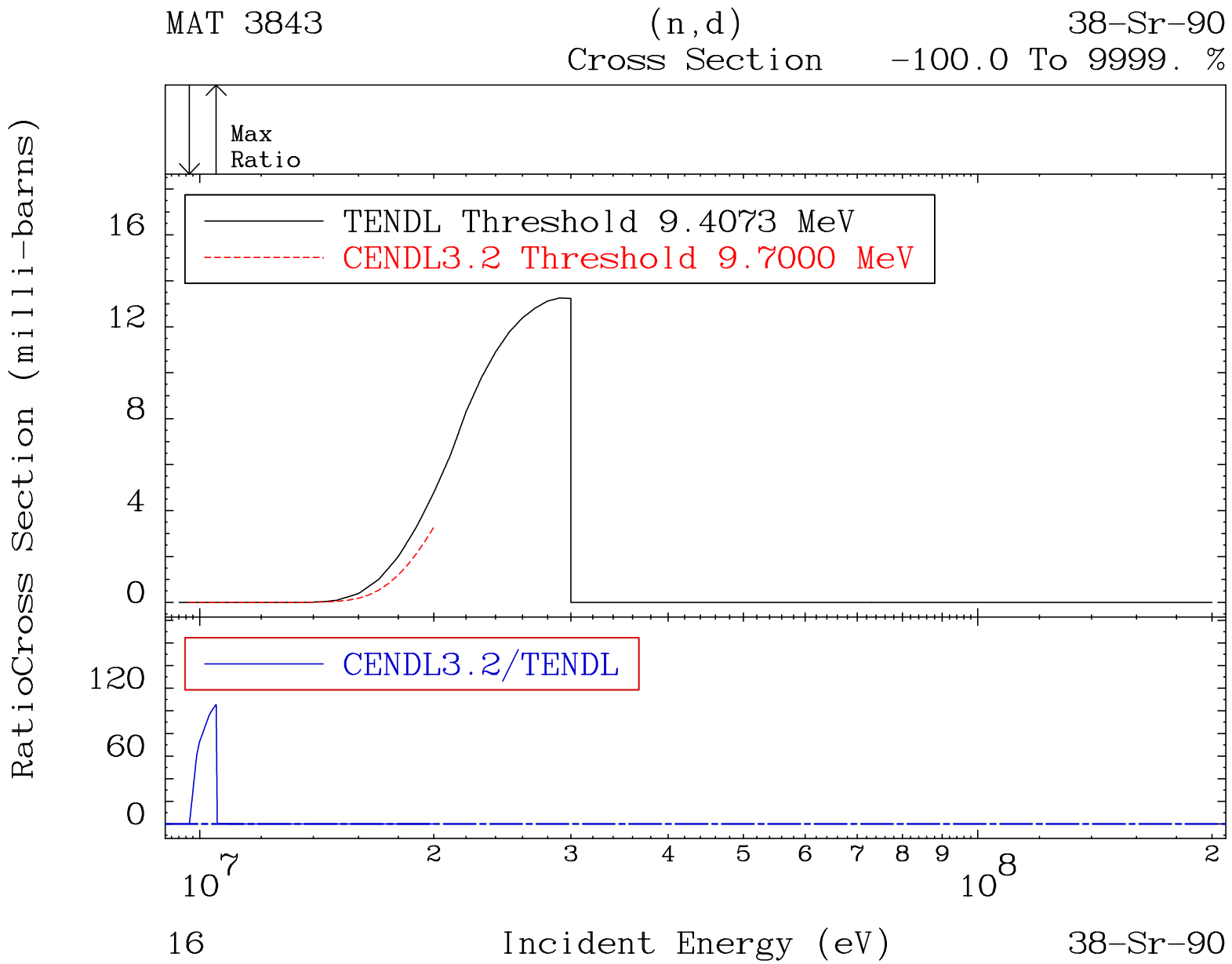

MAT 3843
MT= 54 (n,n') Level
38-Sr-90
Cross Section -100.0 To 146.0 %
Max
Ratio
TENDL Threshold 2.2318 MeV
CENDL3.2 Threshold 2.2318 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
38-Sr-90

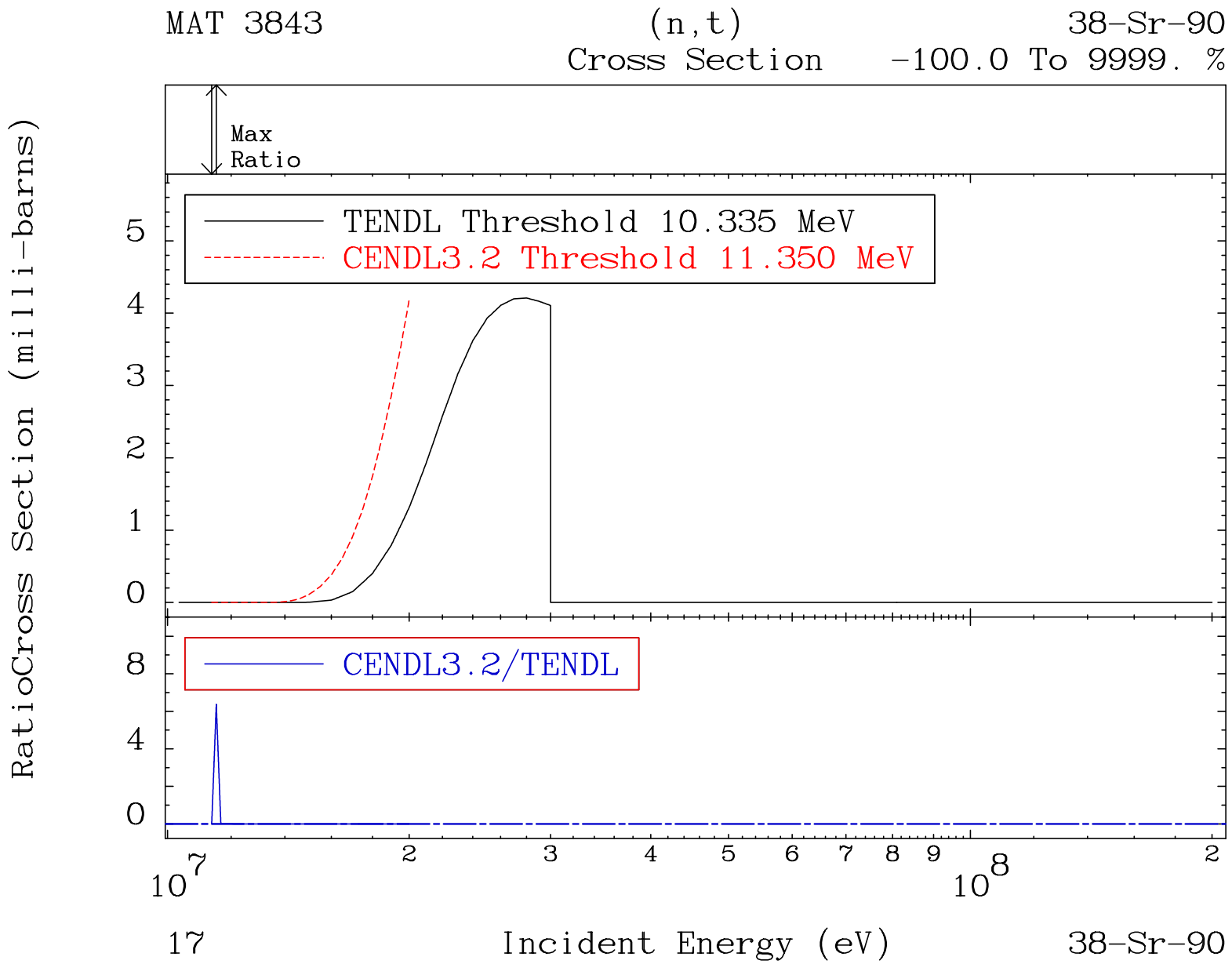

MAT 3843
MT= 55 (n,n') Level
38-Sr-90
Cross Section 3.969 To 2215. %
Min Ratio
Max Ratio
TENDL Threshold 2.5253 MeV
CENDL3.2 Threshold 2.5253 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
38-Sr-90

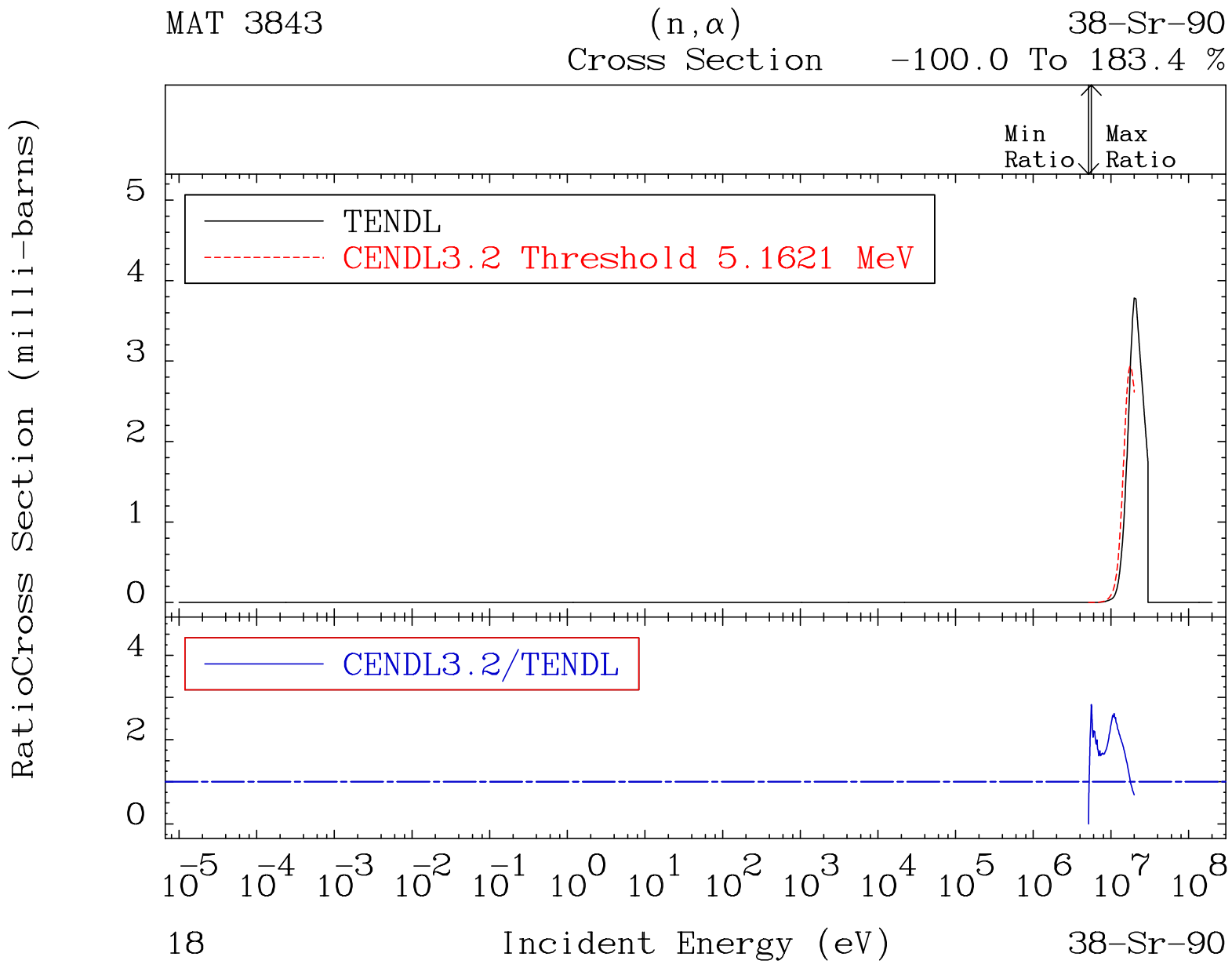

MAT 3843
(n,n') Continuum
Cross Section
38-Sr-90
-42.43 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.6677 MeV
CENDL3.2 Threshold 2.5253 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
38-Sr-90

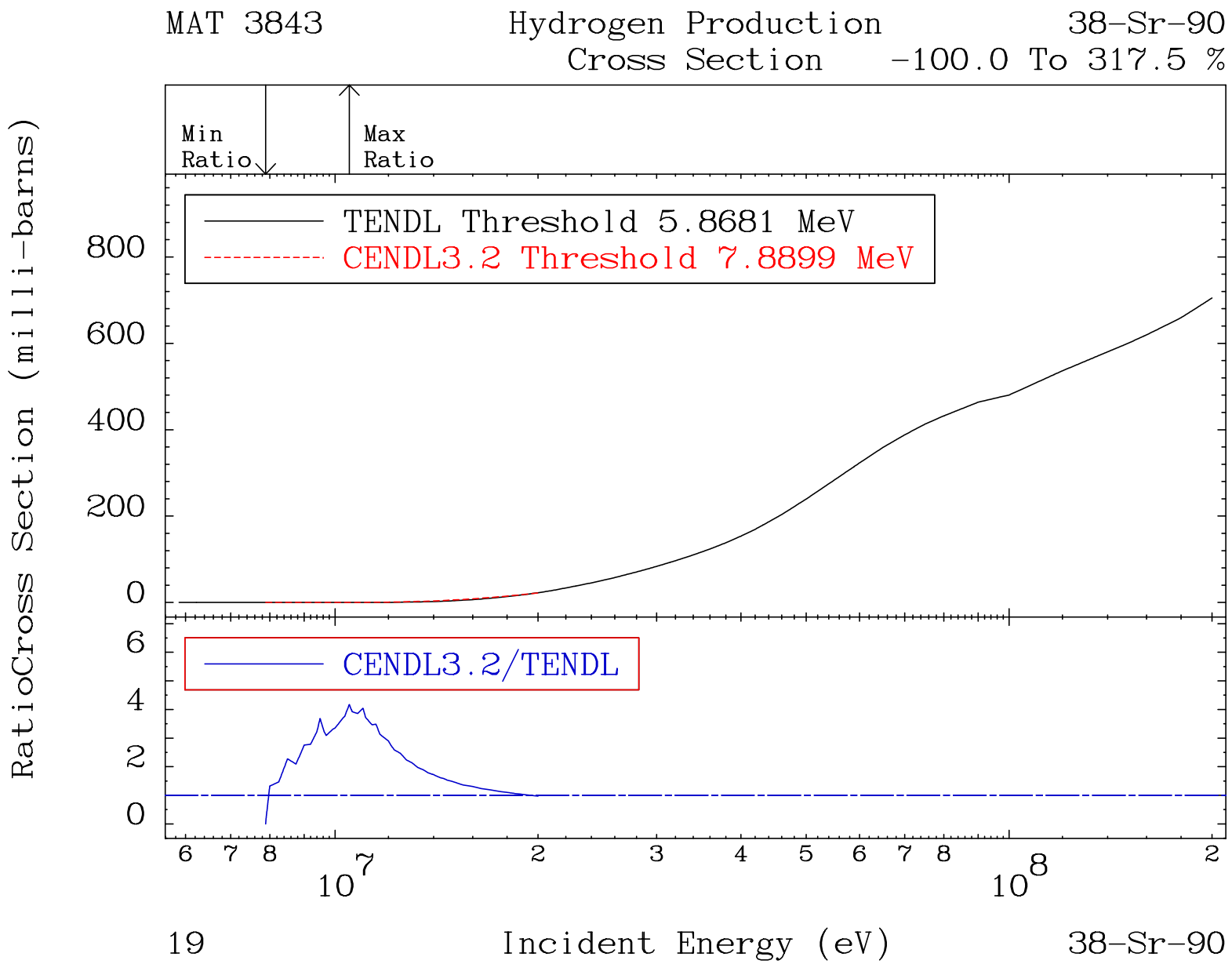

MAT 3843
(n,γ)
Cross Section
38-Sr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
14
38-Sr-90

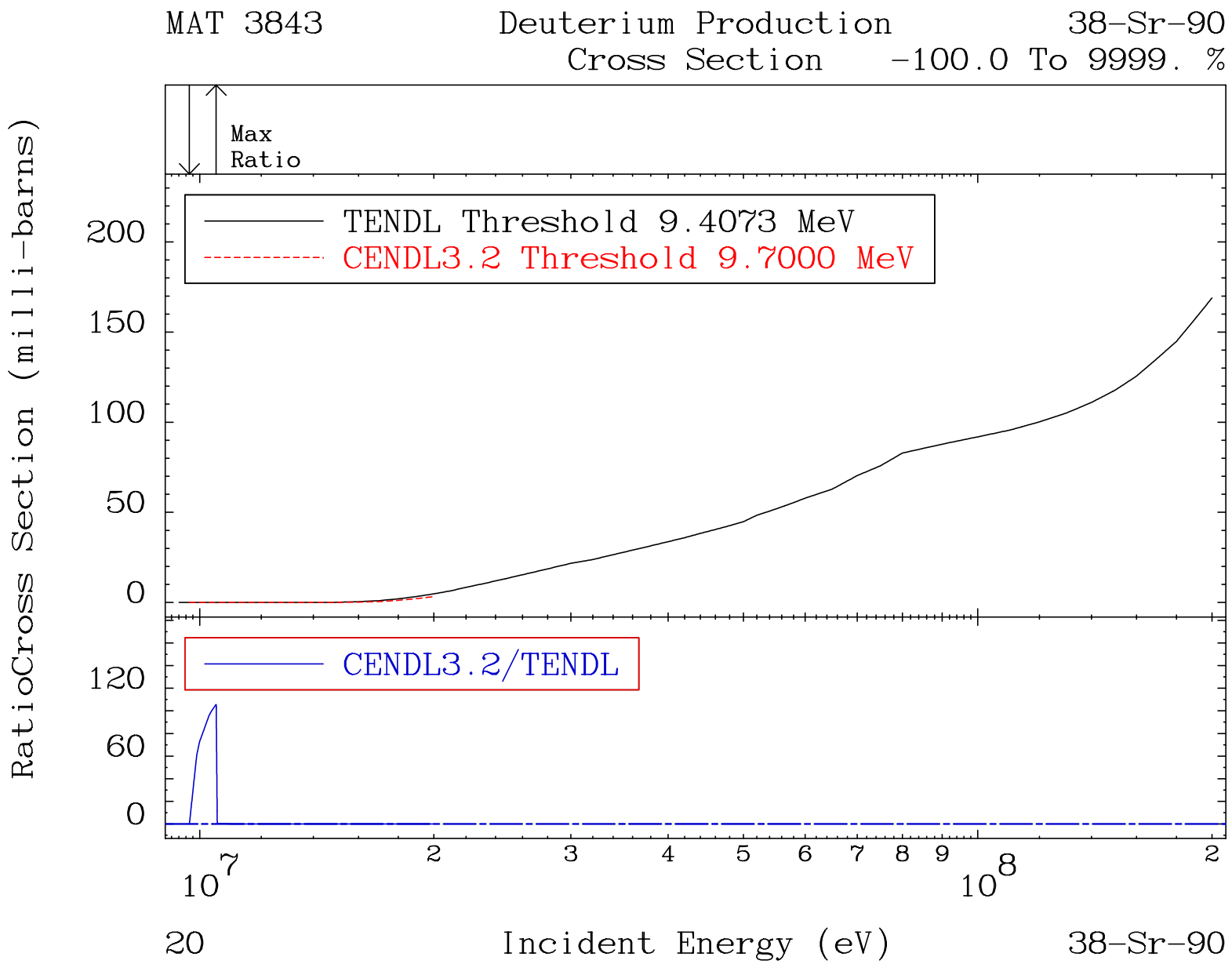

MAT 3843
(n,p)
38-Sr-90
Cross Section
-100.0 To 317.5 %
Min Ratio
Max Ratio
TENDL Threshold 5.8681 MeV
CENDL3.2 Threshold 7.8899 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
15
38-Sr-90

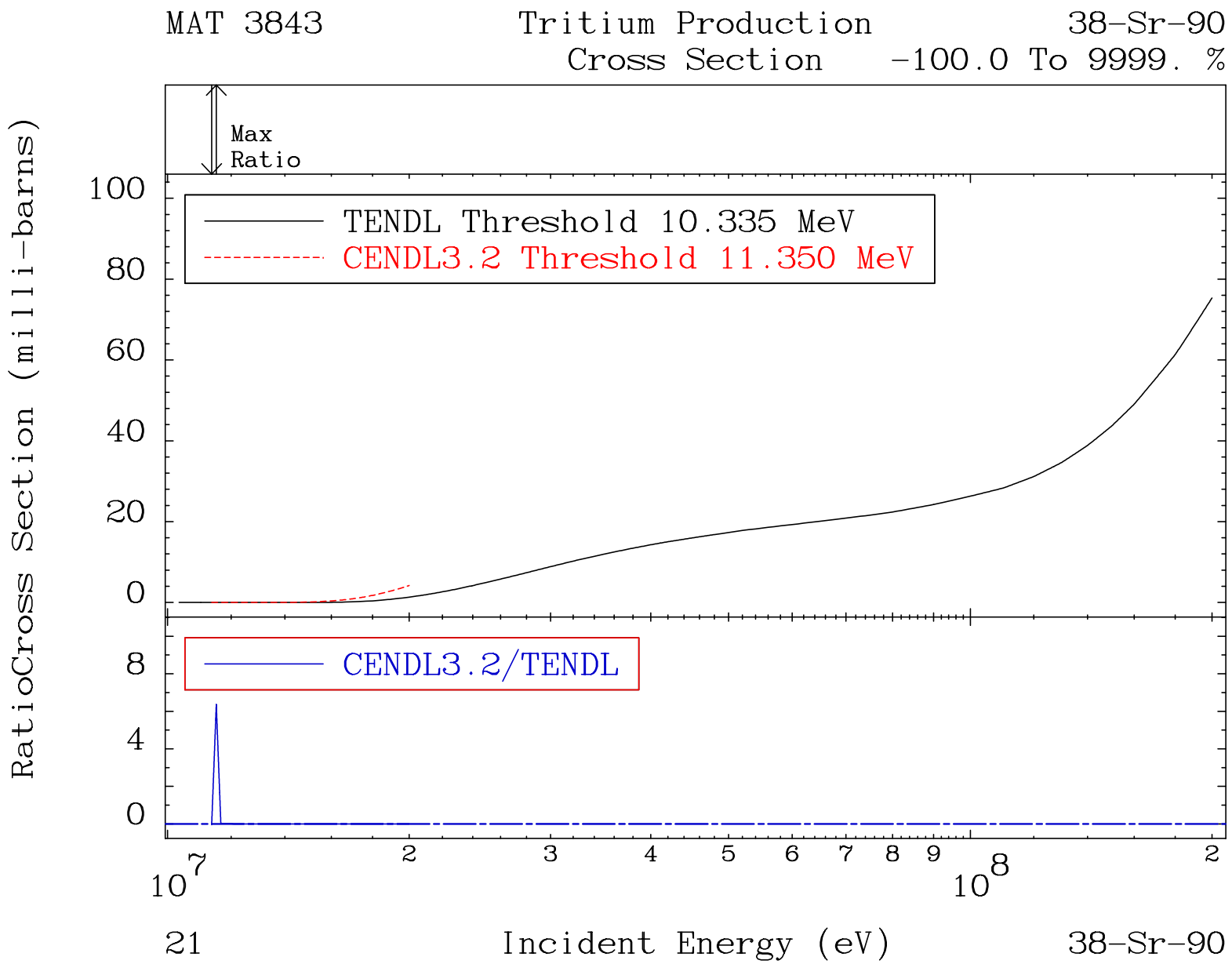

MAT 3843
(n,d)
Cross Section
38-Sr-90
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.4073 MeV
CENDL3.2 Threshold 9.7000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
120
60
0
10^7
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
38-Sr-90

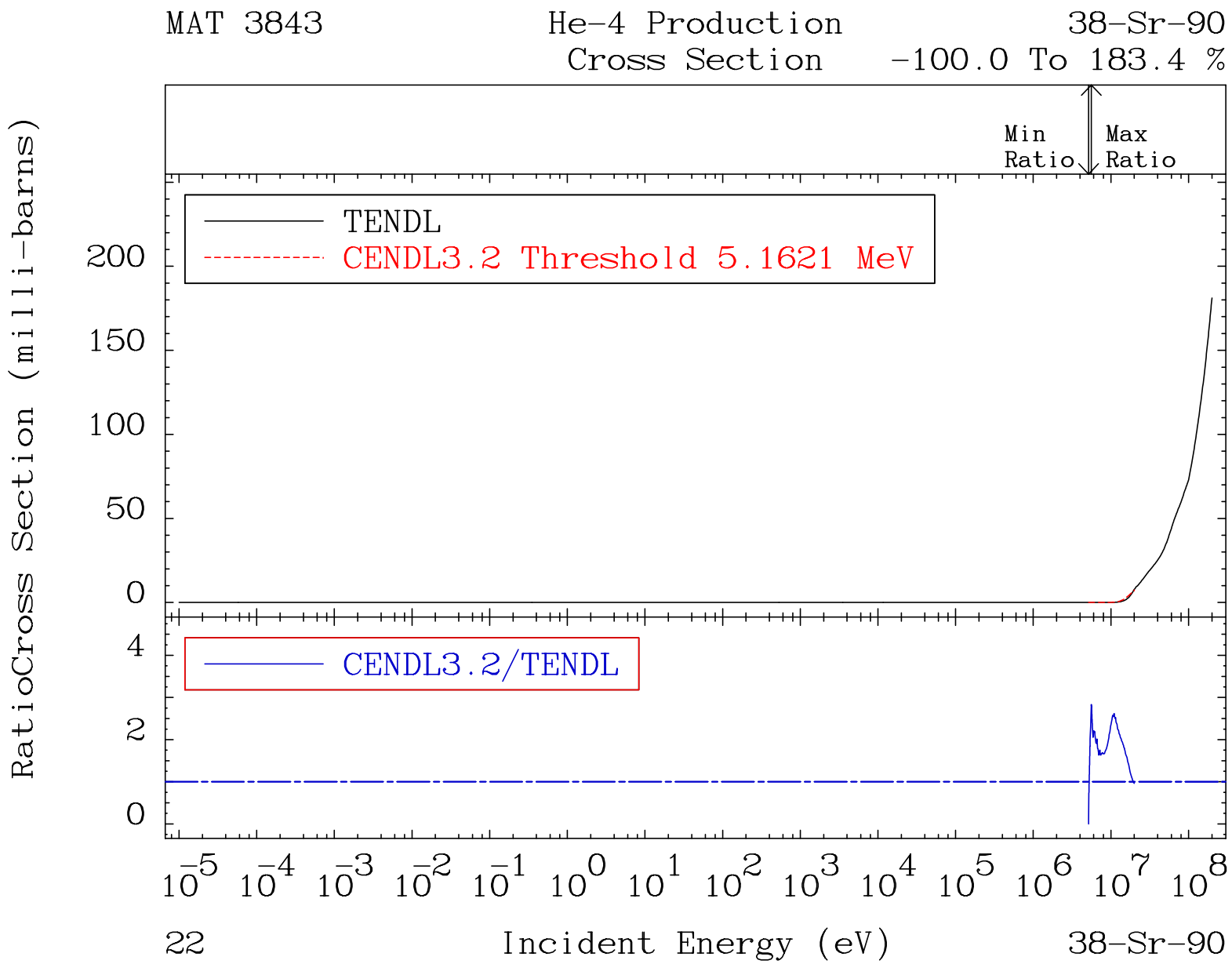

MAT 3843
(n,t)
38-Sr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.335 MeV
CENDL3.2 Threshold 11.350 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
17
38-Sr-90

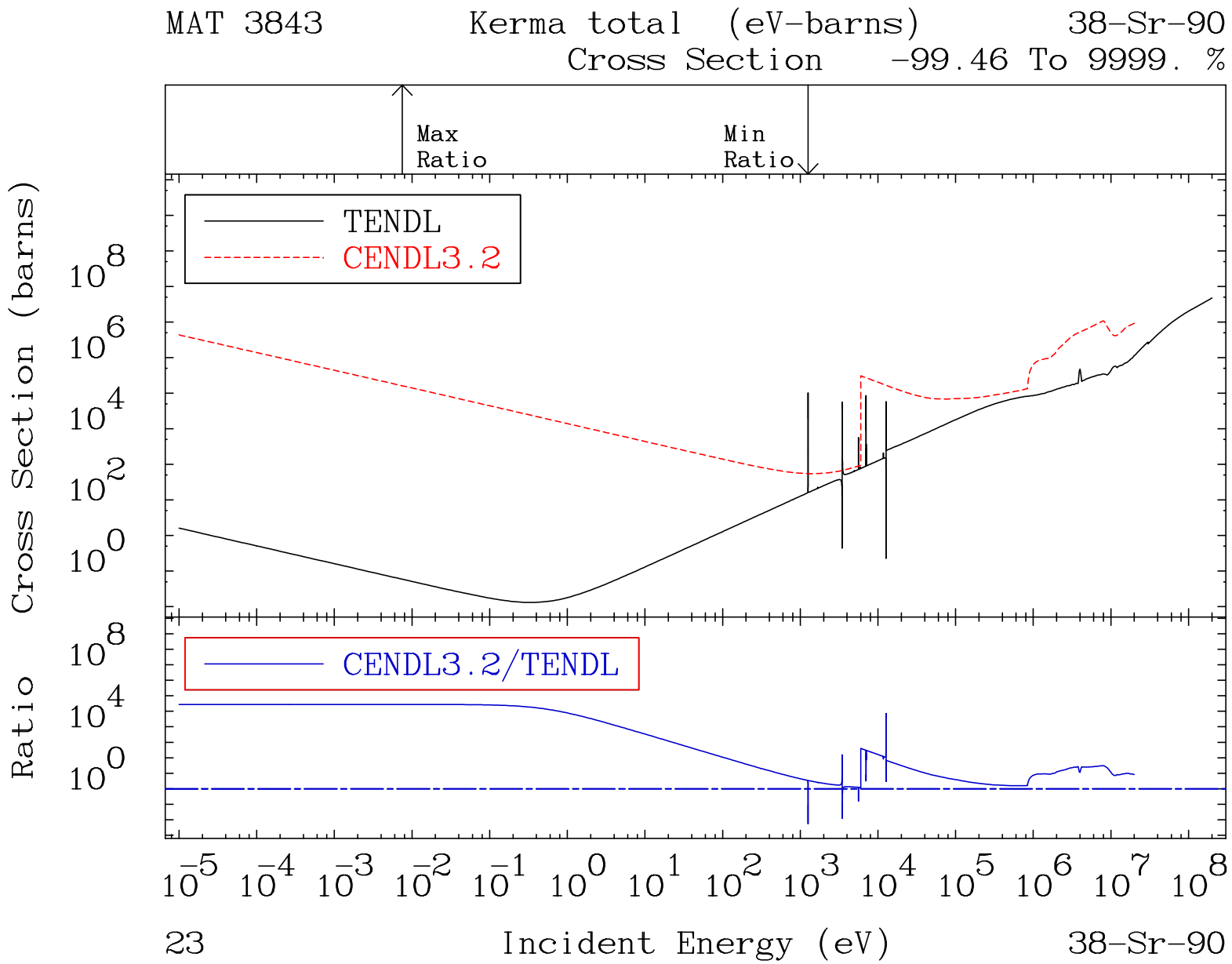

MAT 3843
(n,α)
Cross Section
38-Sr-90
-100.0 To 183.4 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 5.1621 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
38-Sr-90

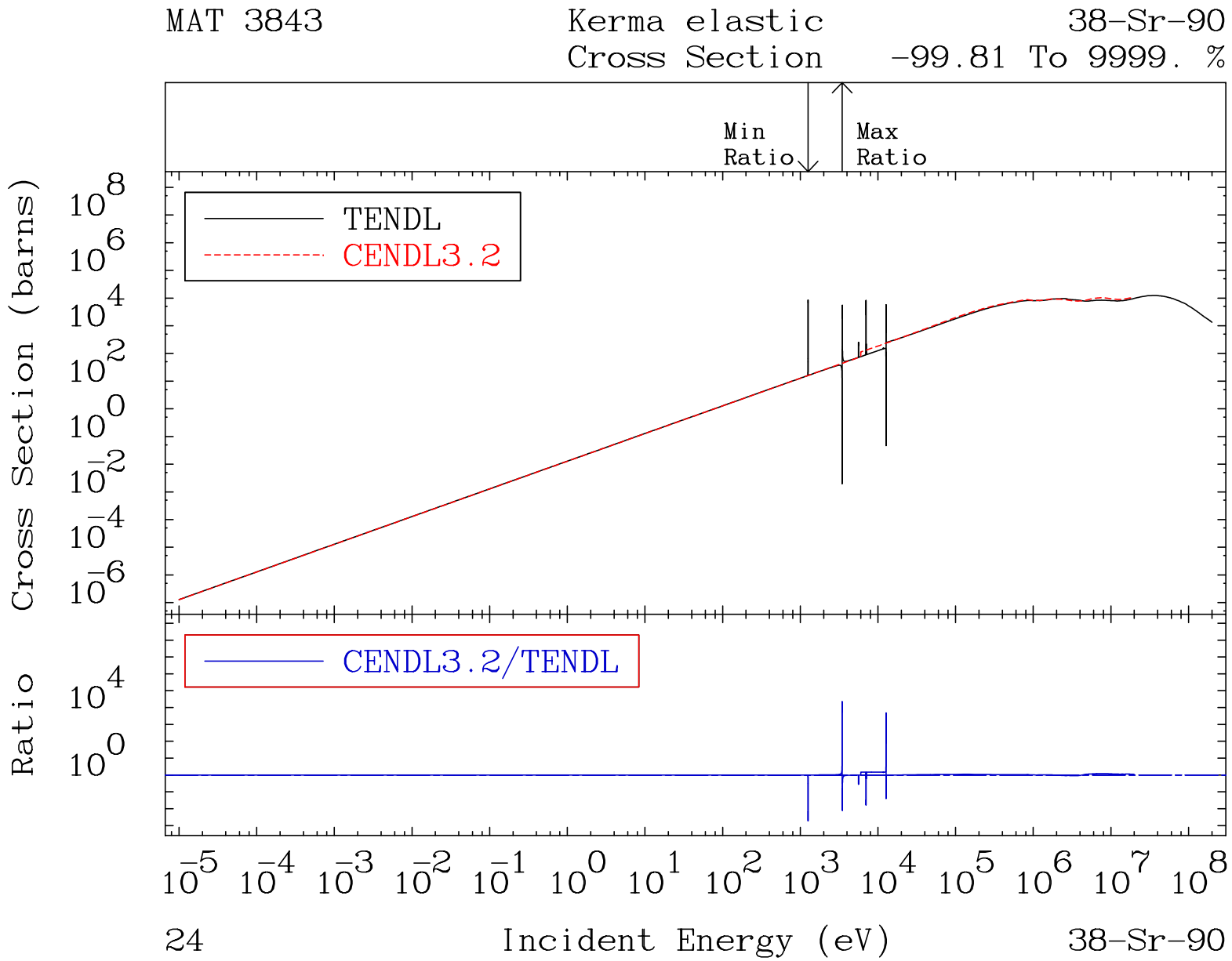

MAT 3843
Hydrogen Production
38-Sr-90
Cross Section
-100.0 To 317.5 %
Min Ratio
Max Ratio
TENDL Threshold 5.8681 MeV
CENDL3.2 Threshold 7.8899 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
6
4
2
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
38-Sr-90

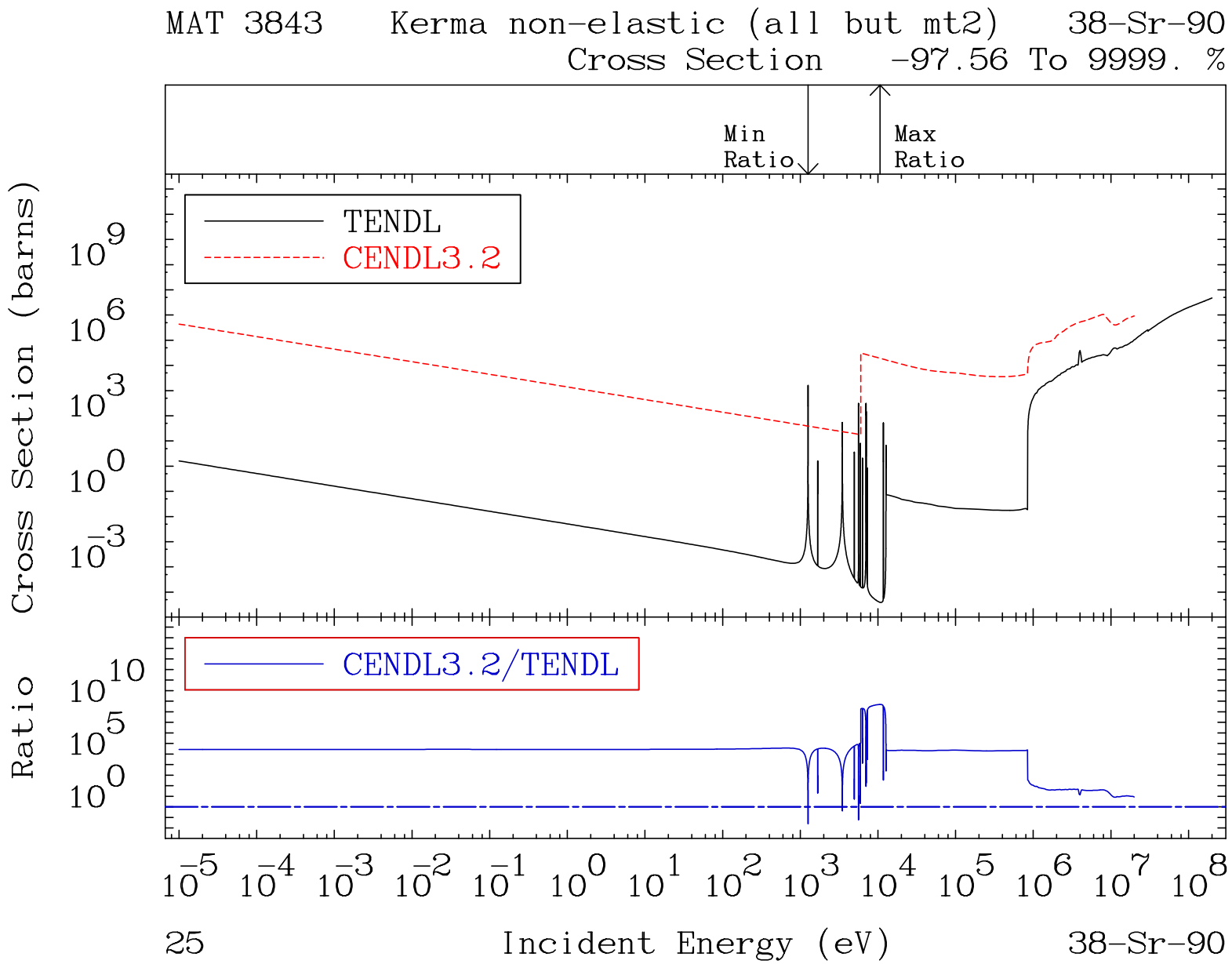

MAT 3843
Deuterium Production
38-Sr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.4073 MeV
CENDL3.2 Threshold 9.7000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
120
60
0
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
38-Sr-90

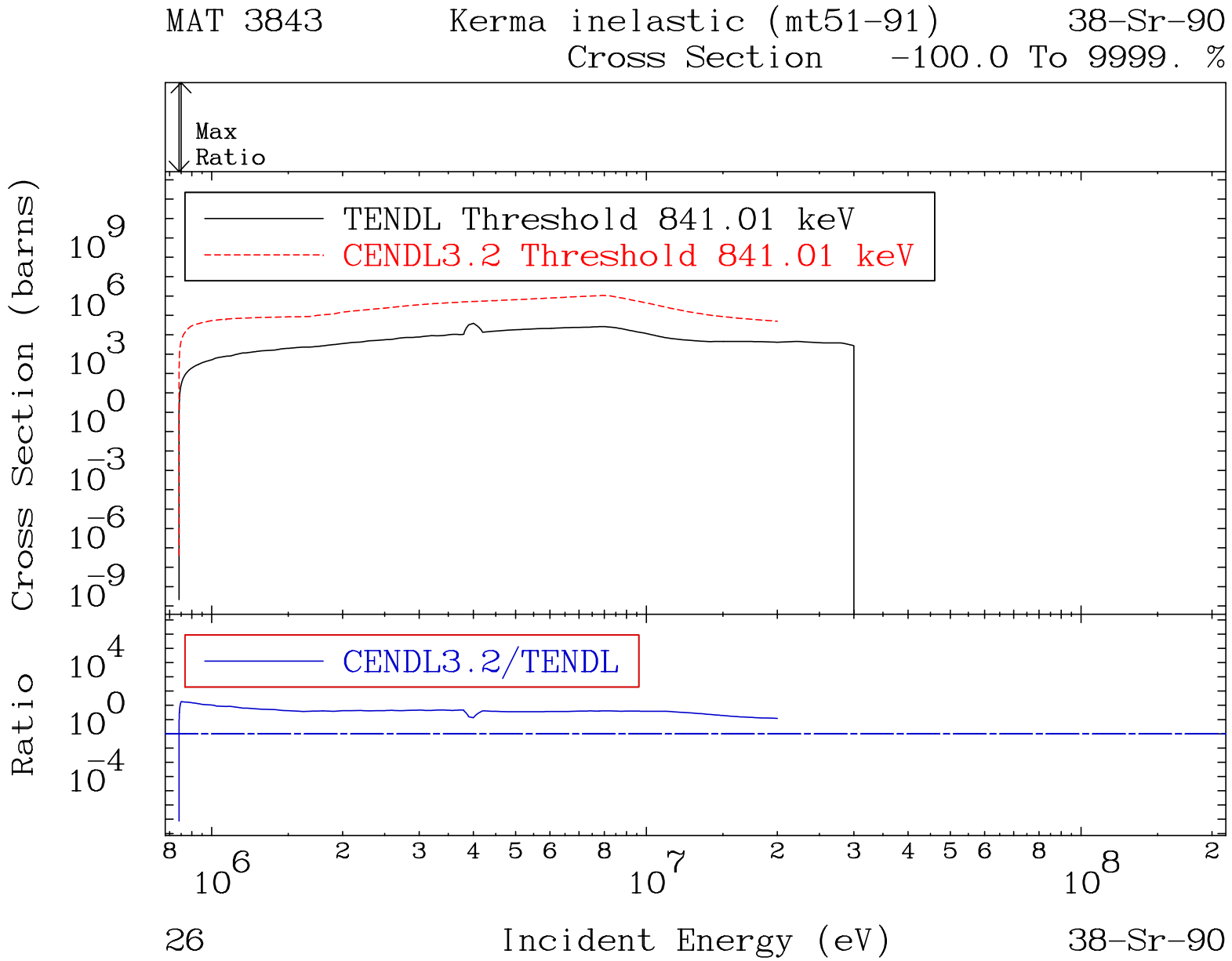

MAT 3843
Tritium Production
38-Sr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
100
80
60
40
20
0
TENDL Threshold 10.335 MeV
CENDL3.2 Threshold 11.350 MeV
8
4
0
CENDL3.2/TENDL
RatioCross Section (milli-barns)
10^7
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
38-Sr-90

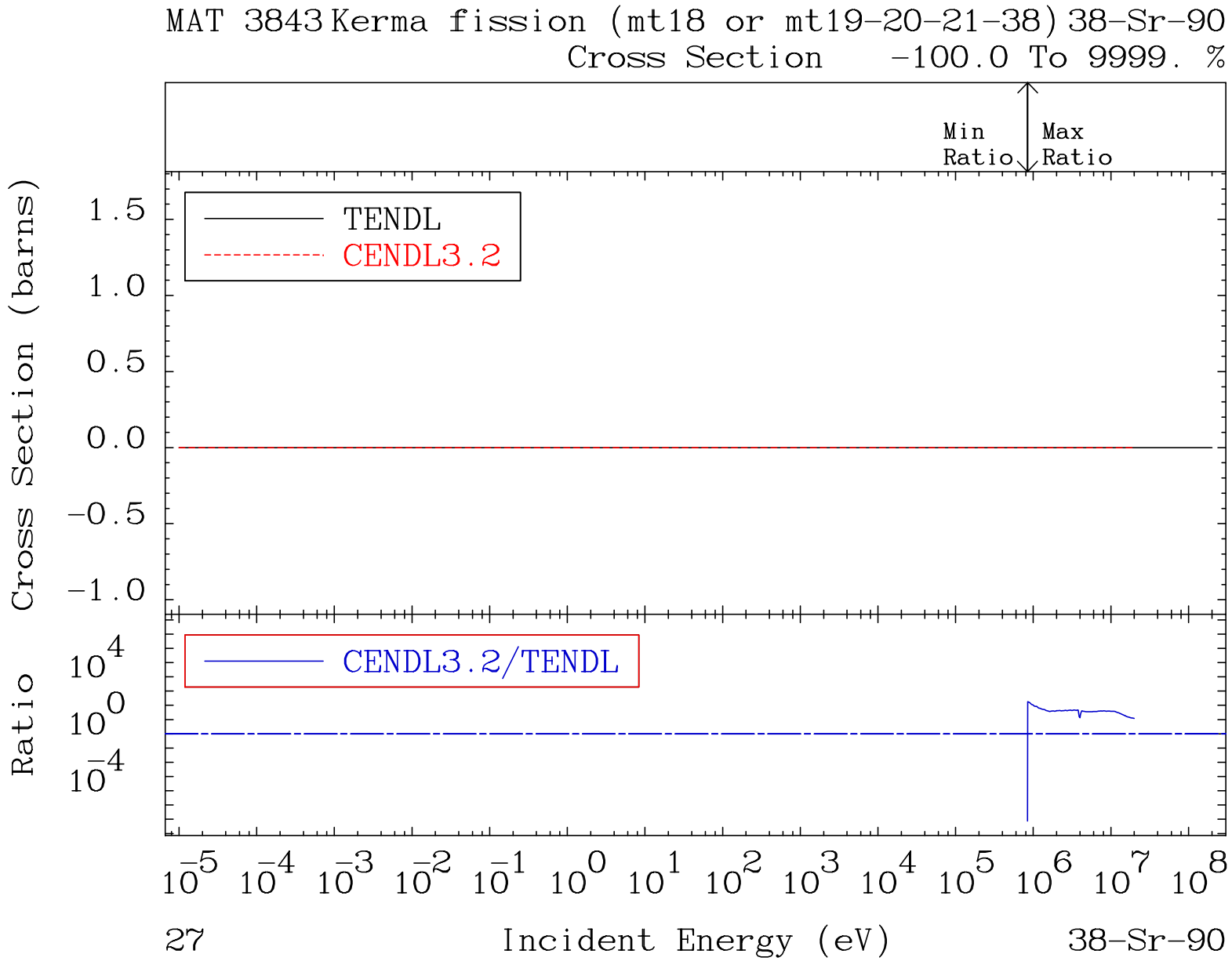

MAT 3843
He-4 Production
Cross Section
38-Sr-90
-100.0 To 183.4 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 5.1621 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
4
2
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
22
Incident Energy (eV)
38-Sr-90

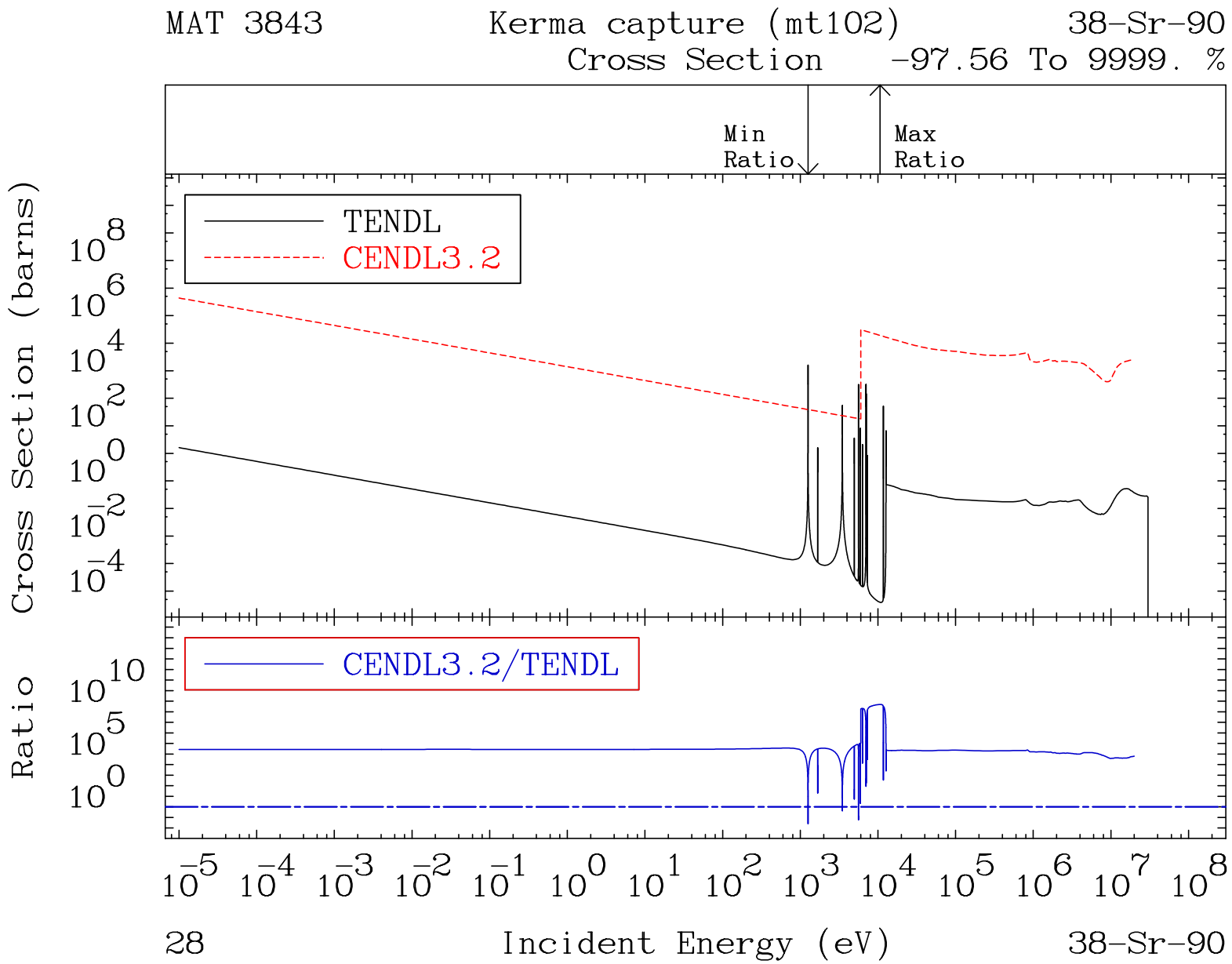

MAT 3843
Kerma total (eV-barns)
38-Sr-90
Cross Section -99.46 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
38-Sr-90

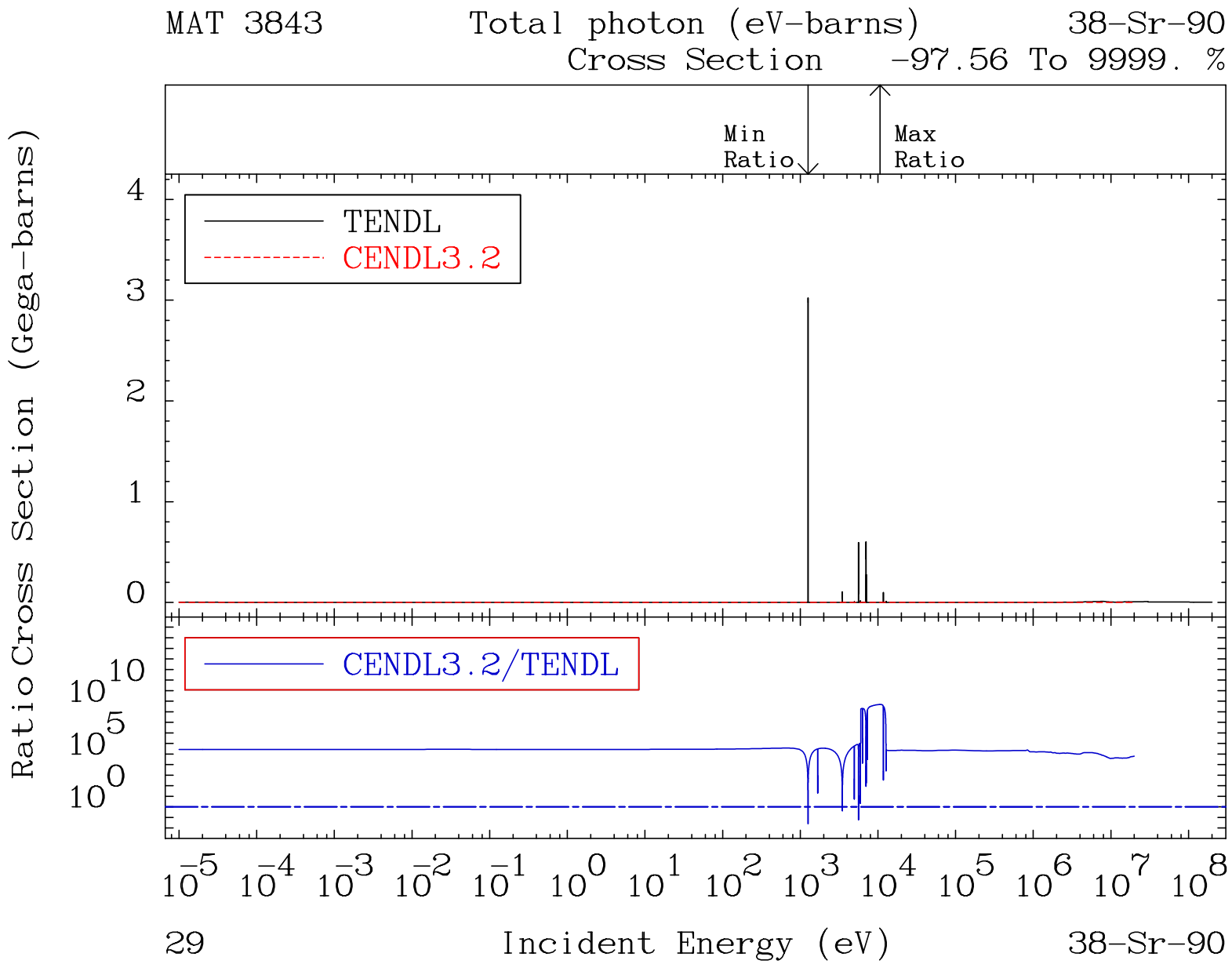

MAT 3843
Kerma elastic
Cross Section
38-Sr-90
-99.81 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
24
38-Sr-90

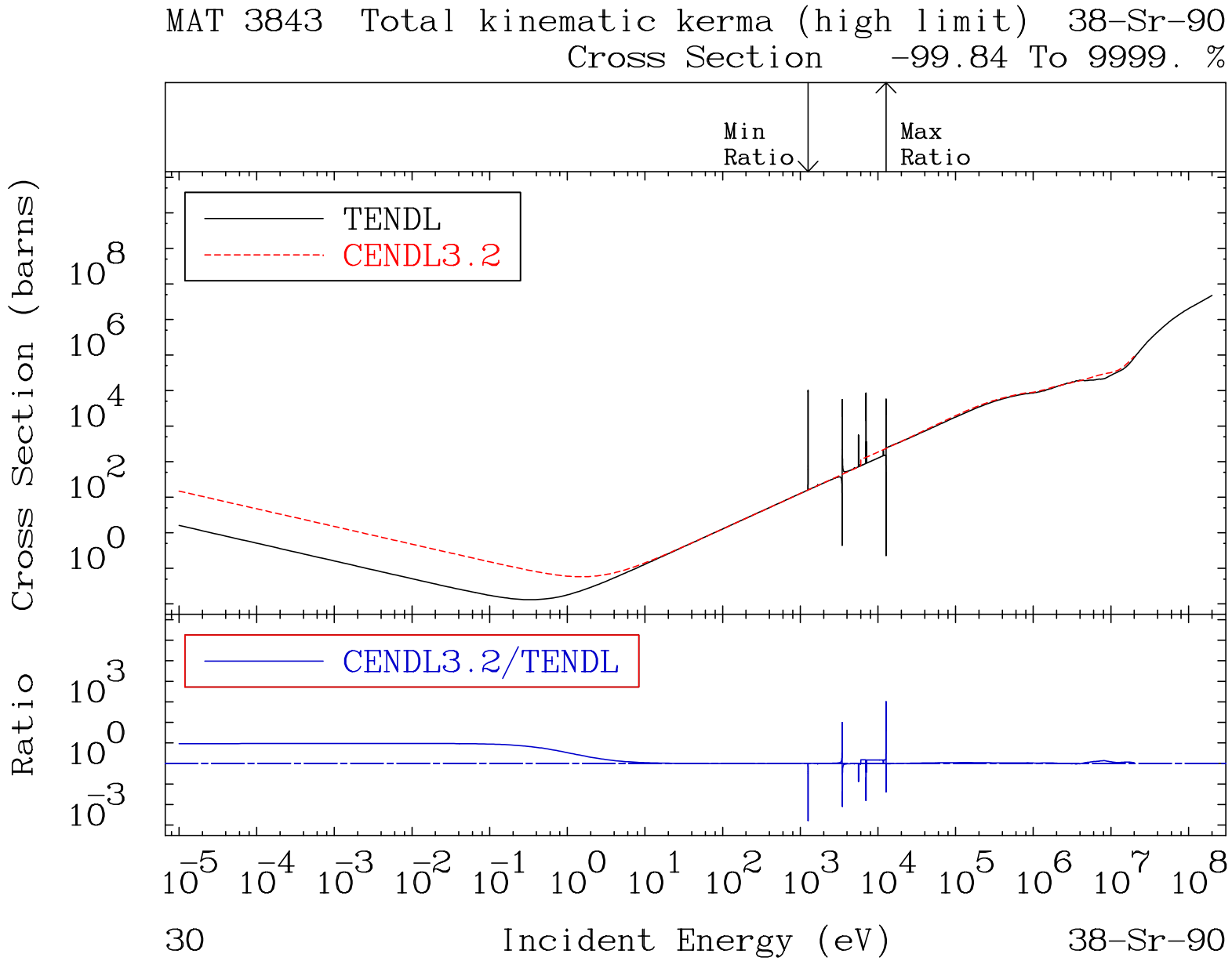

MAT 3843 Kerma non-elastic (all but mt2) 38-Sr-90
Cross Section -97.56 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
25
38-Sr-90

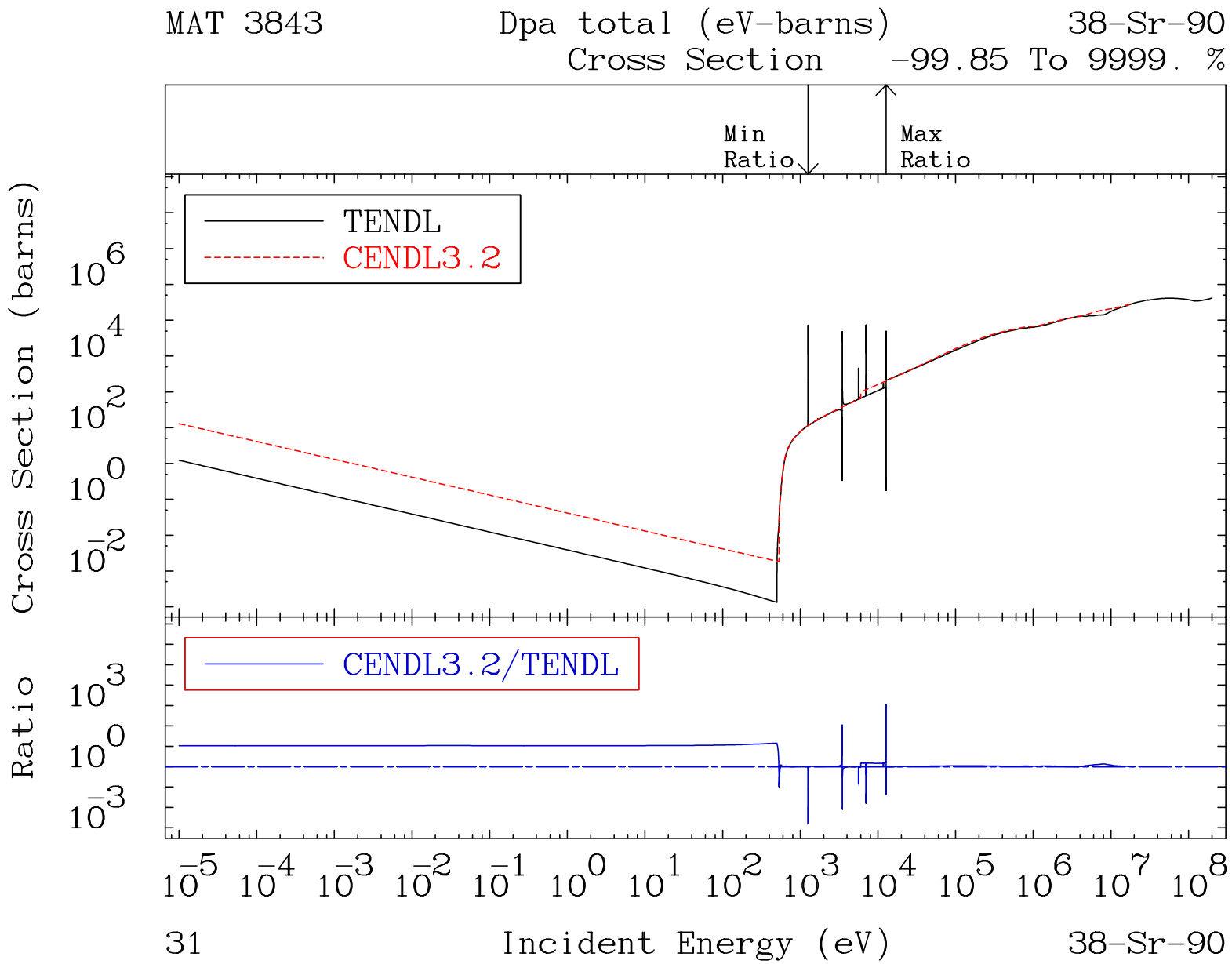

MAT 3843 Kerma inelastic (mt51-91) 38-Sr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 841.01 keV
CENDL3.2 Threshold 841.01 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
26
38-Sr-90

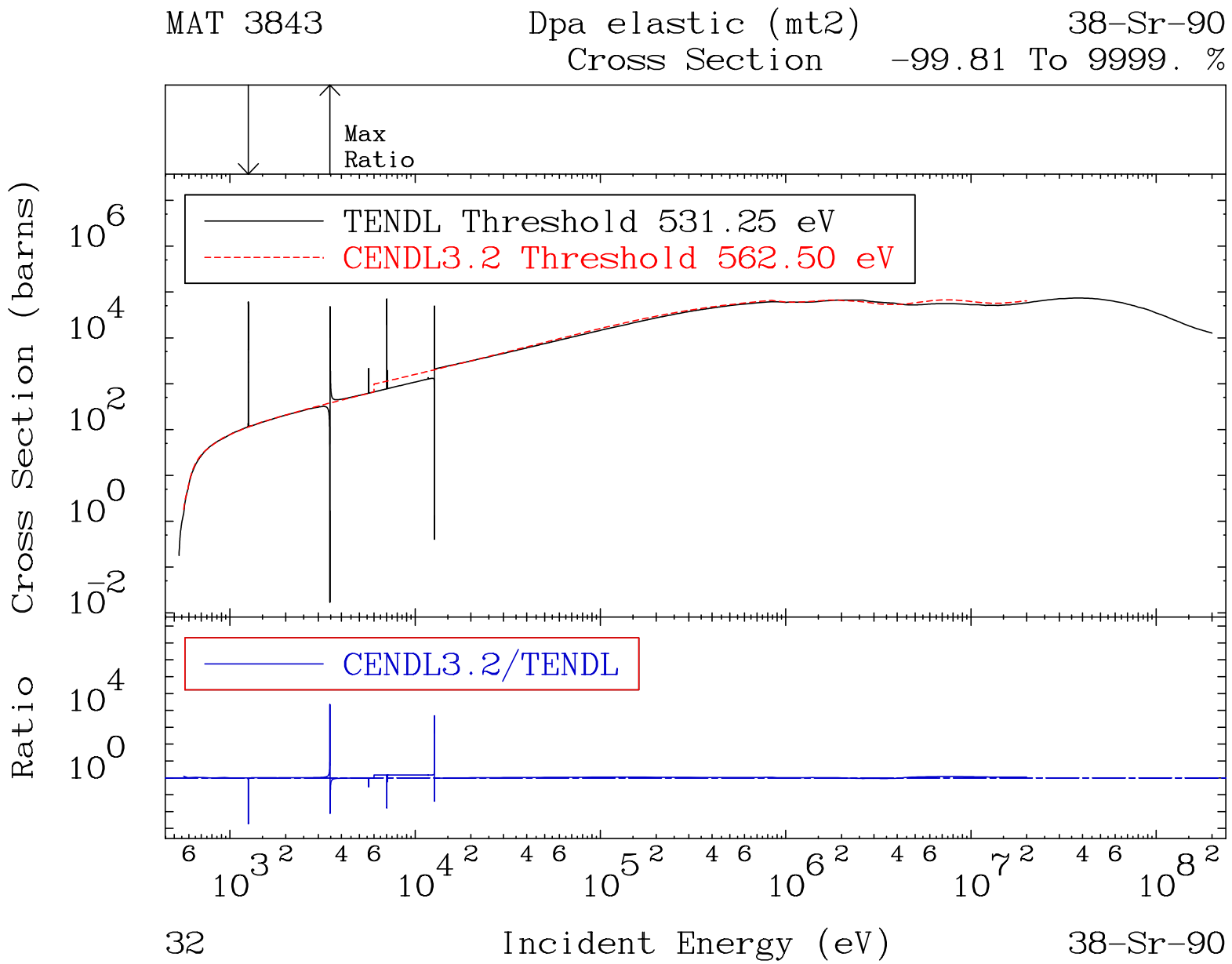

MAT 3843 Kerma fission (mt18 or mt19-20-21-38) 38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{4}
10^{0}
10^{-4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
27
Incident Energy (eV)
38-Sr-90

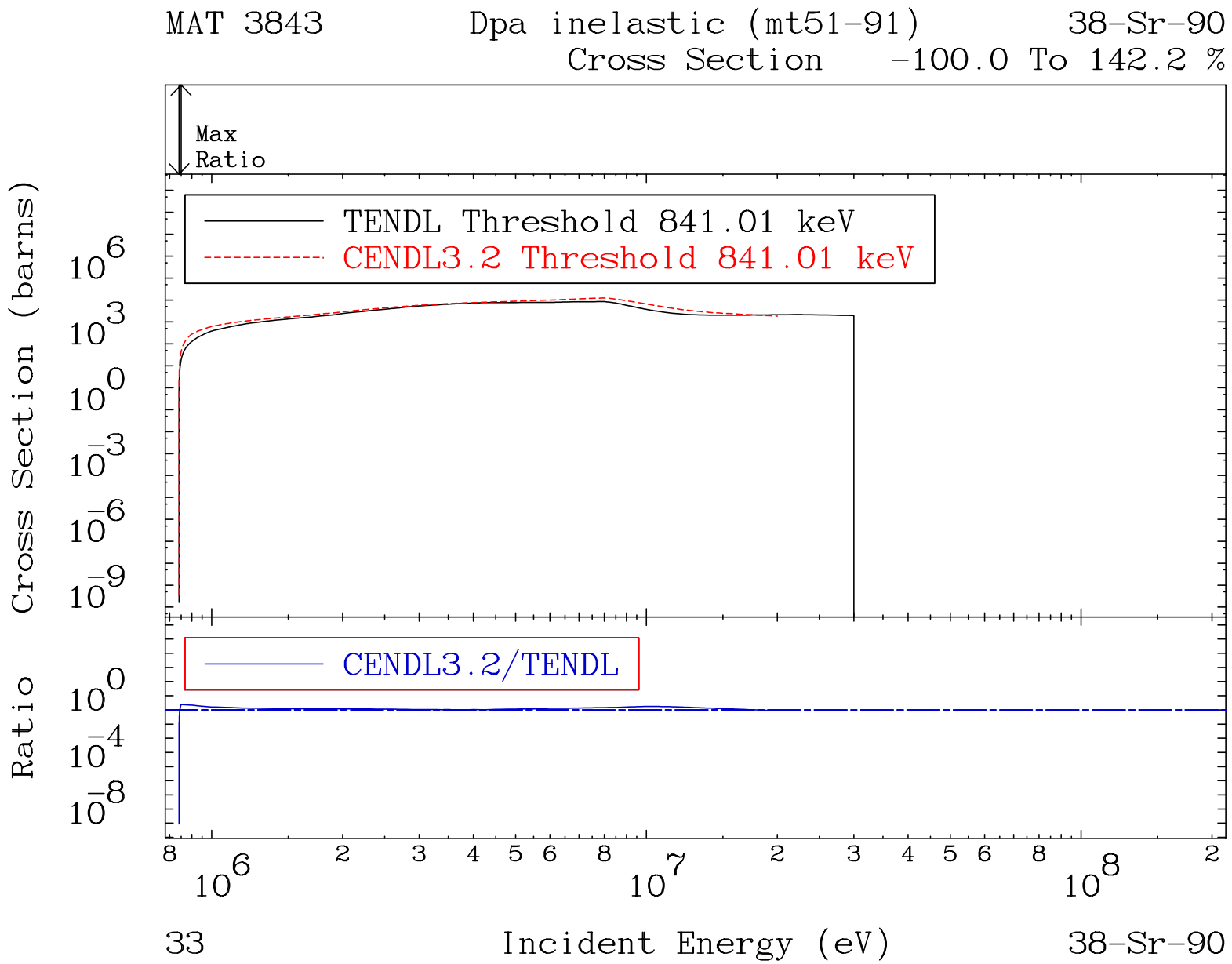

MAT 3843
Kerma capture (mt102)
38-Sr-90
Cross Section
-97.56 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
28
38-Sr-90

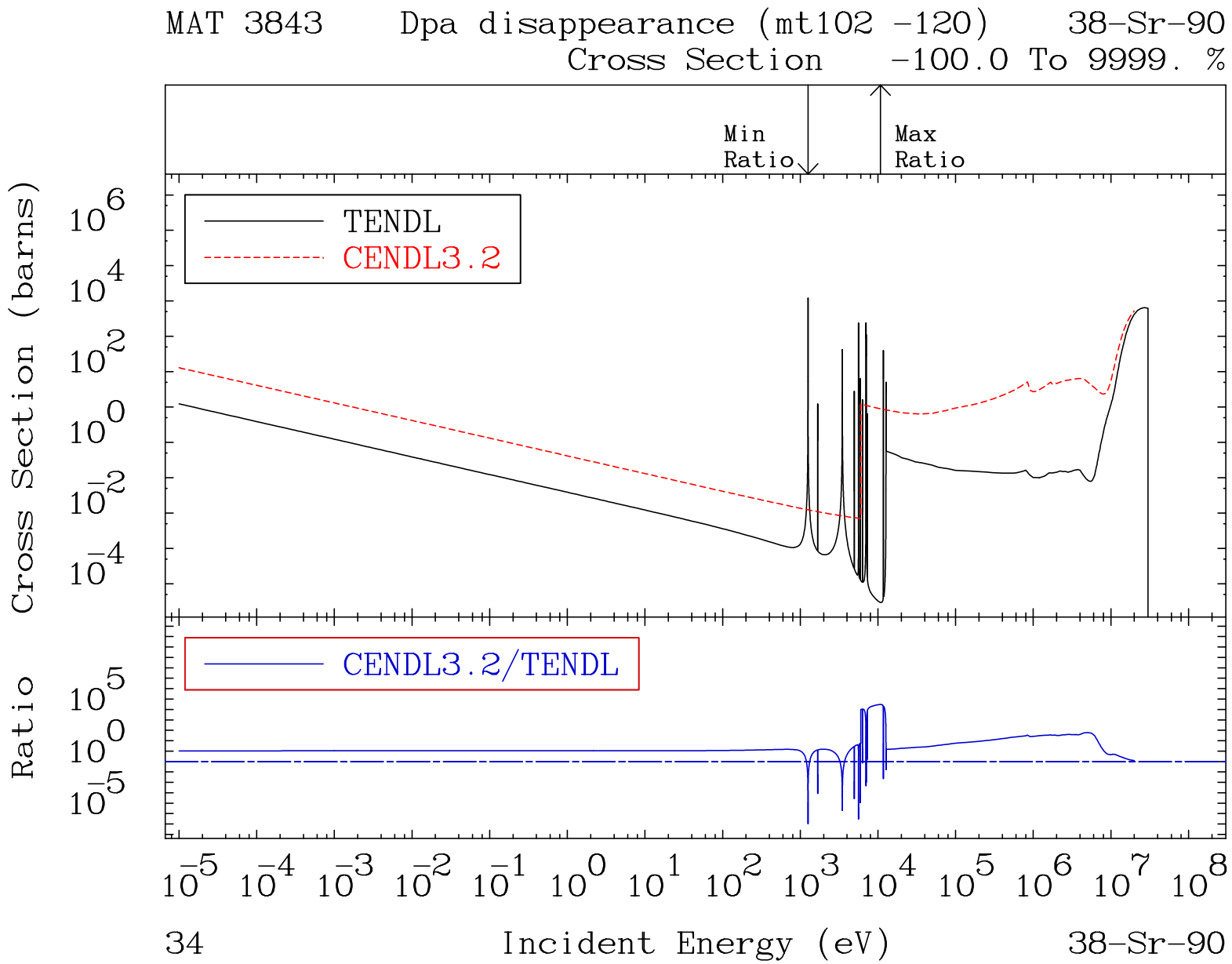

MAT 3843
Total photon (eV-barns)
38-Sr-90
Cross Section -97.56 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (Giga-barns)
Incident Energy (eV)
29
38-Sr-90

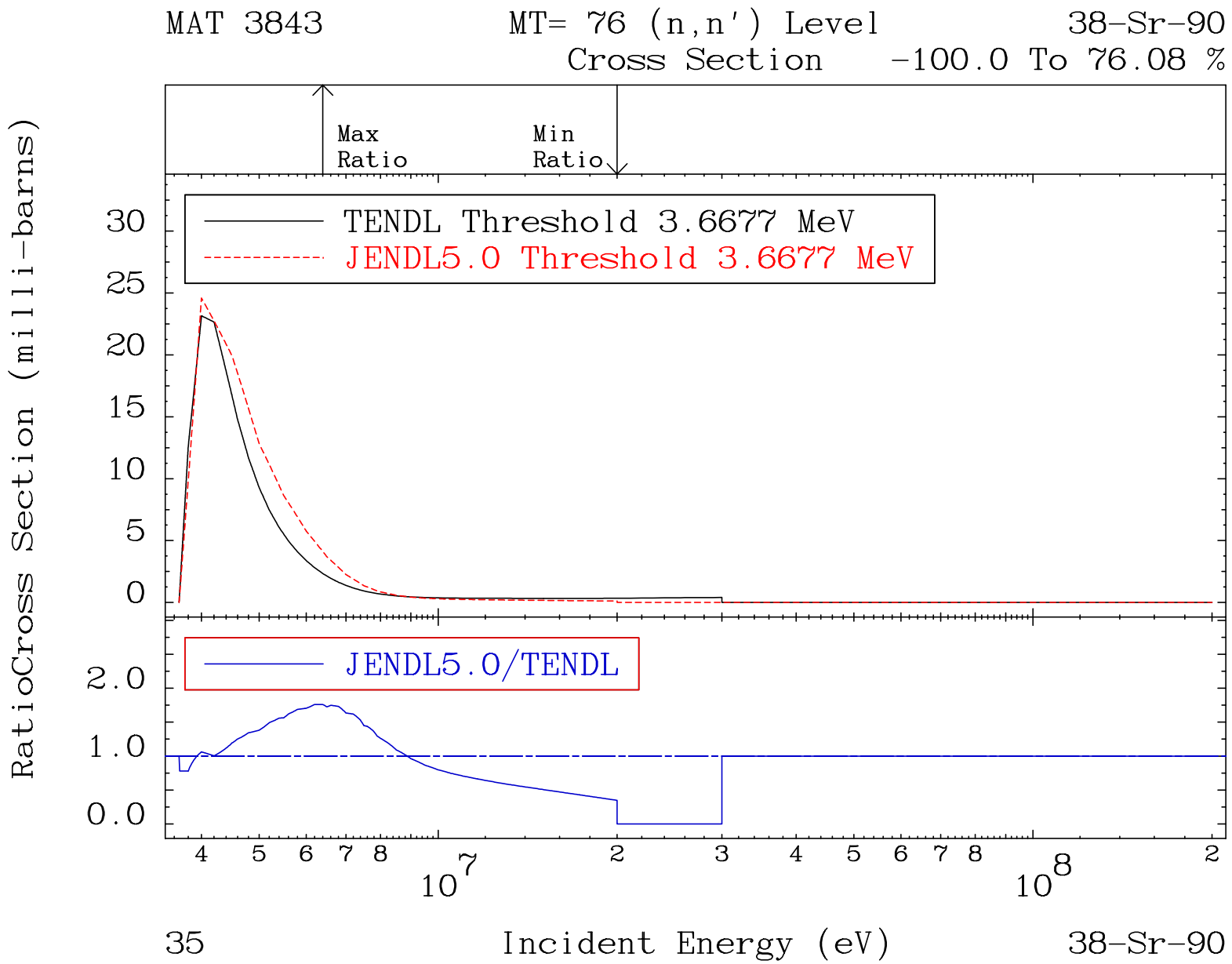

MAT 3843 Total kinematic kerma (high limit) 38-Sr-90
Cross Section -99.84 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
38-Sr-90

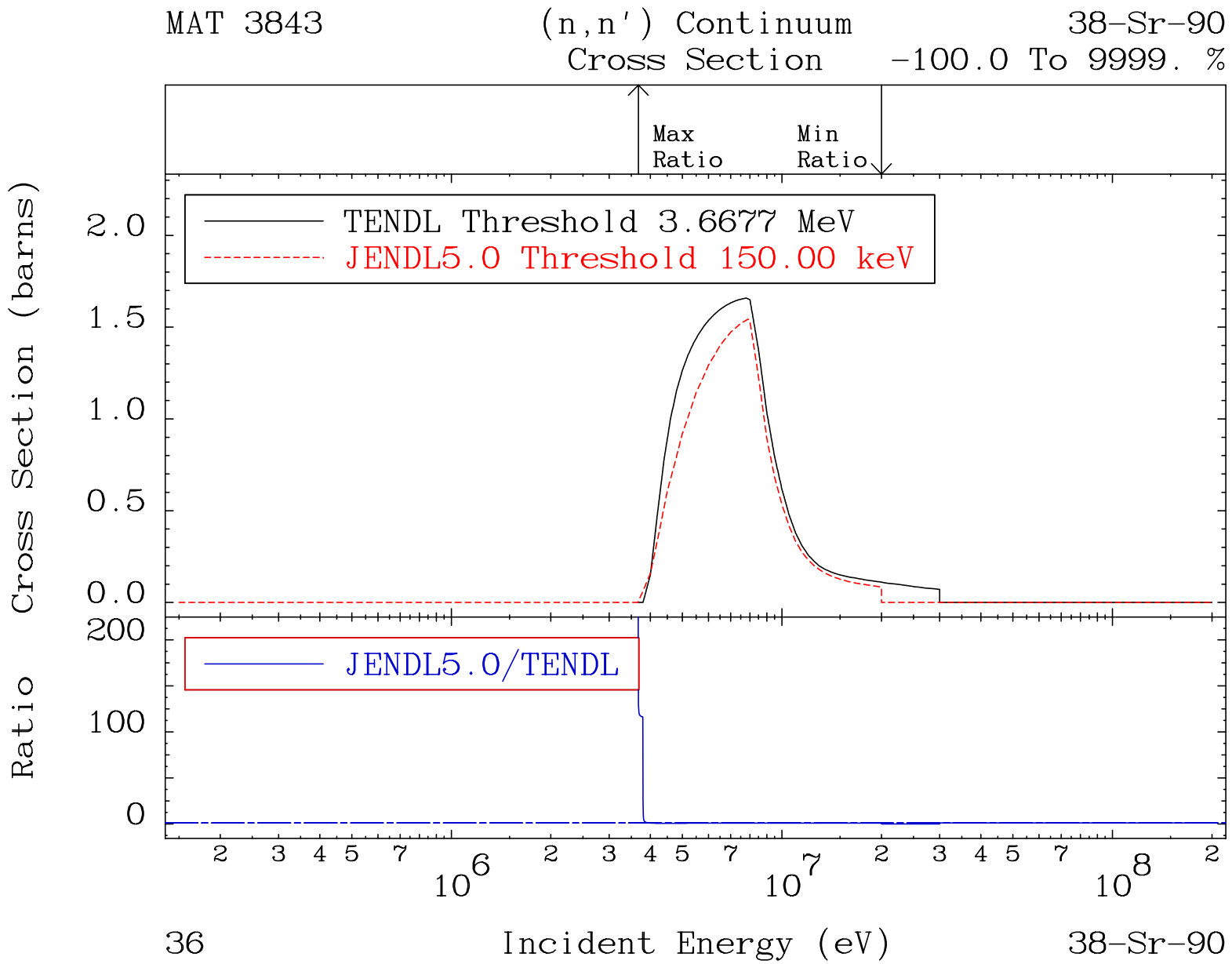

MAT 3843
Dpa total (eV-barns)
38-Sr-90
Cross Section -99.85 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
38-Sr-90

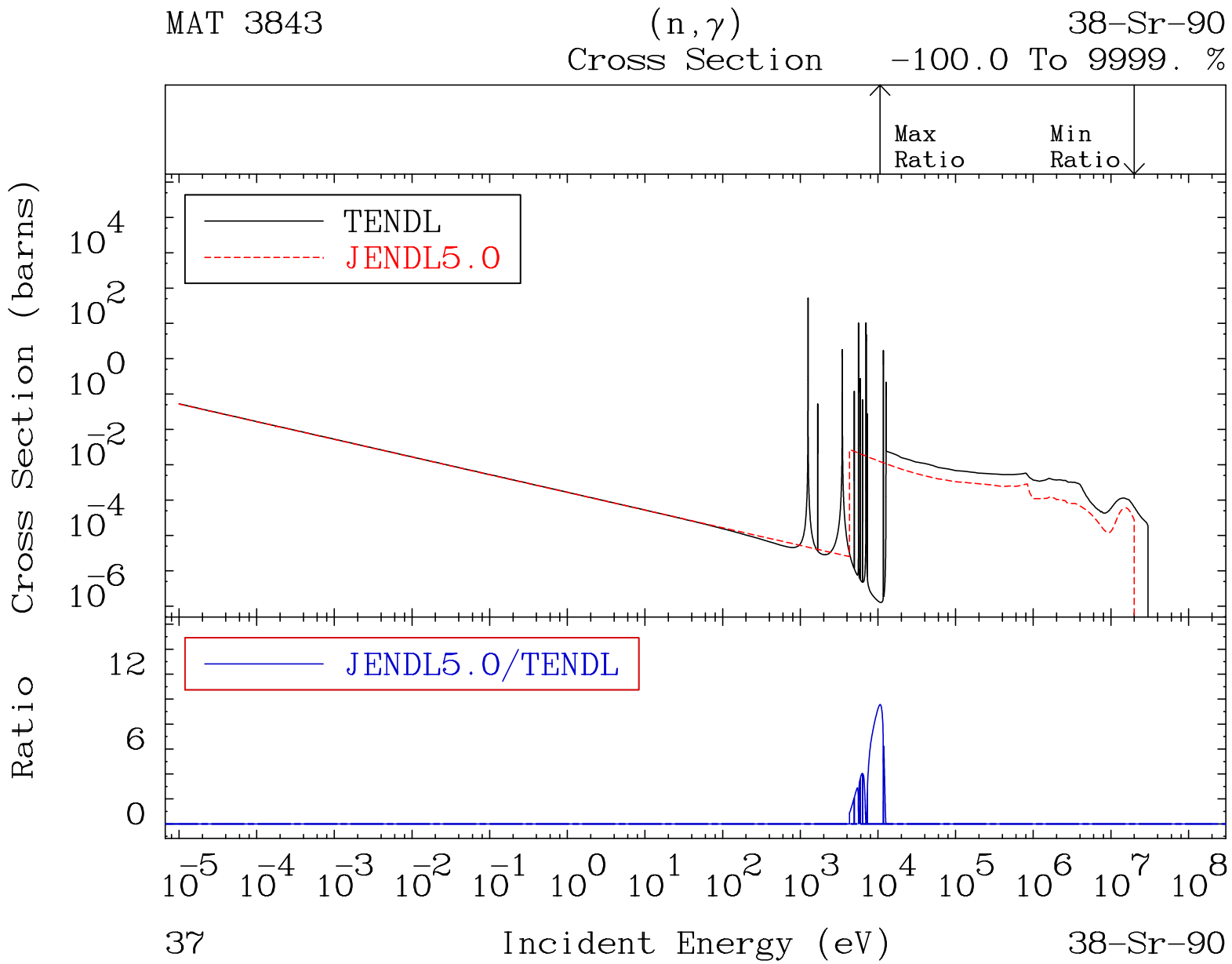

MAT 3843
Dpa elastic (mt2)
Cross Section
38-Sr-90
-99.81 To 9999. %
Max
Ratio
TENDL Threshold 531.25 eV
CENDL3.2 Threshold 562.50 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
38-Sr-90

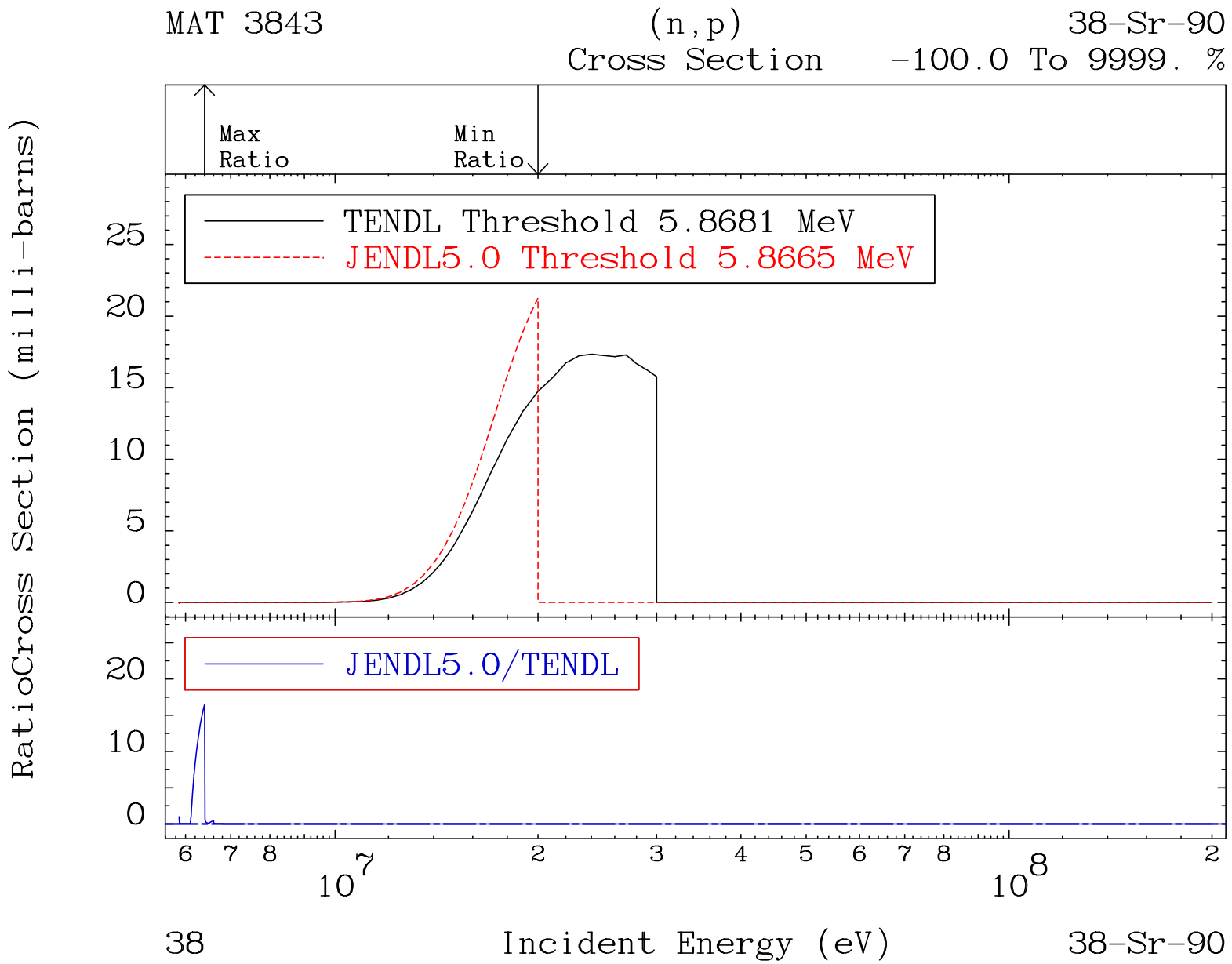

MAT 3843
Dpa inelastic (mt51-91)
38-Sr-90
Cross Section -100.0 To 142.2 %
Max
Ratio
TENDL Threshold 841.01 keV
CENDL3.2 Threshold 841.01 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
38-Sr-90

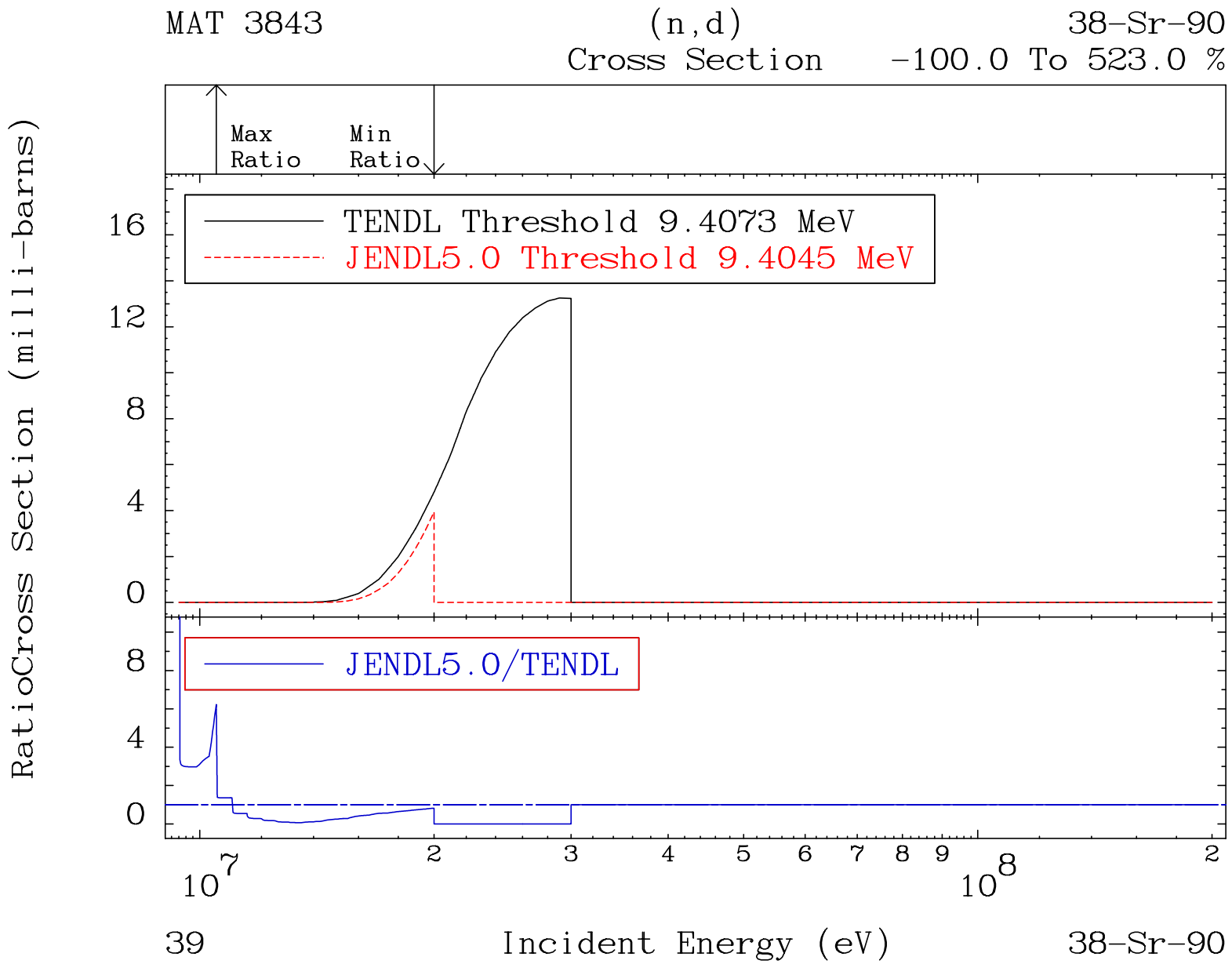

MAT 3843 Dpa disappearance (mt102 -120) 38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
34
38-Sr-90

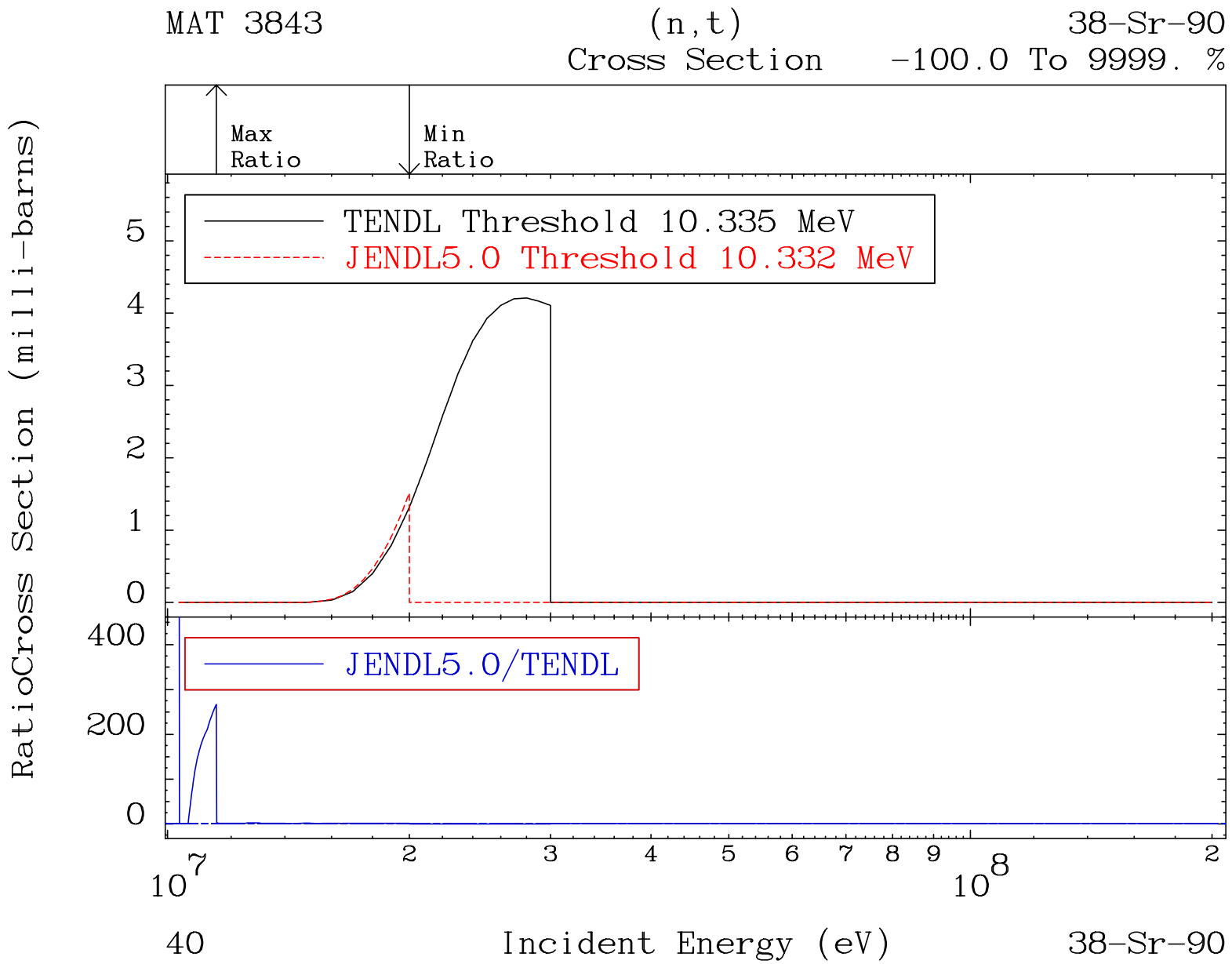

MAT 3843
MT= 76 (n,n') Level
38-Sr-90
Cross Section -100.0 To 76.08 %
Max Ratio
Min Ratio
TENDL Threshold 3.6677 MeV
JENDL5.0 Threshold 3.6677 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
38-Sr-90

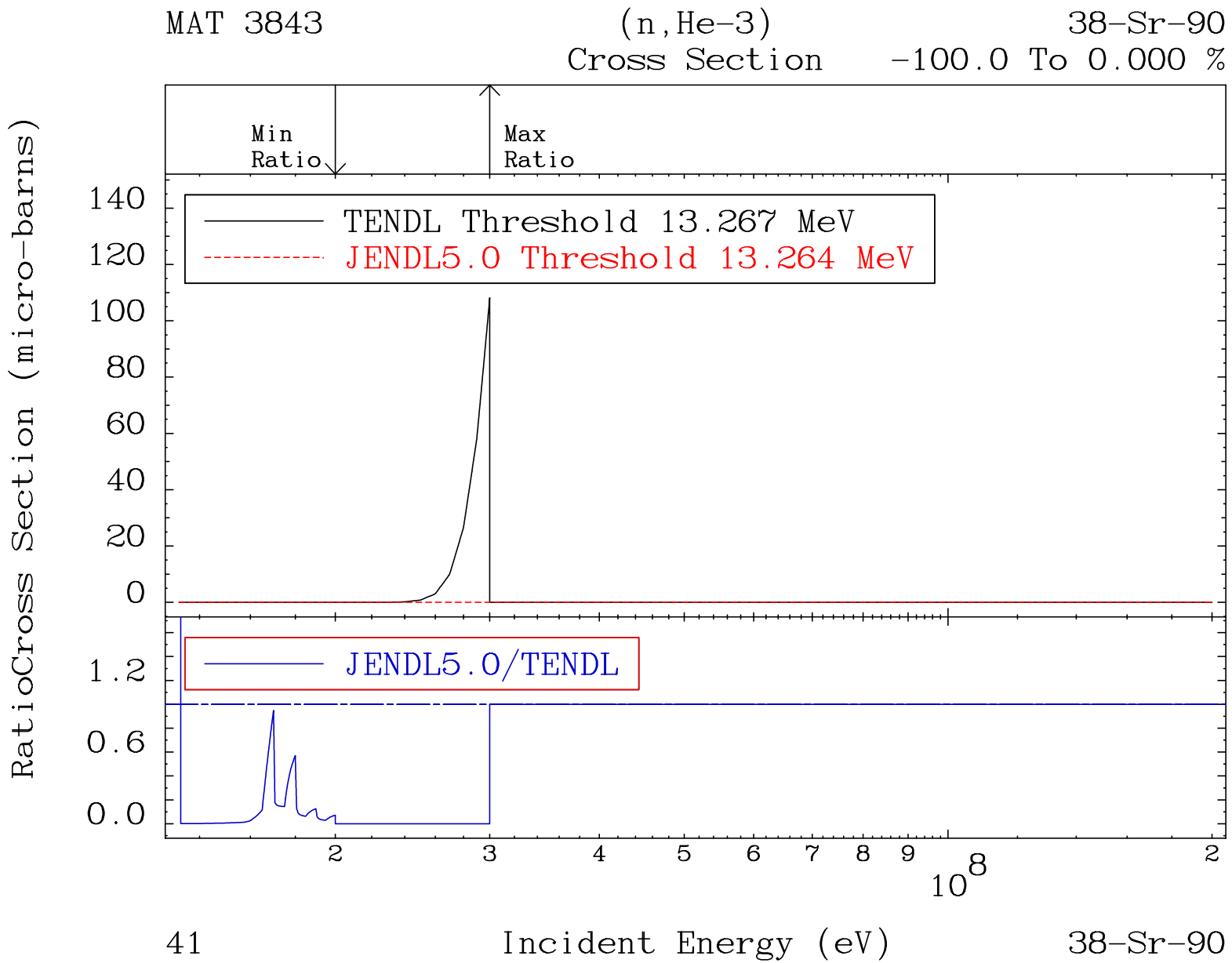

MAT 3843
(n,n') Continuum
Cross Section
38-Sr-90
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.6677 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
200
100
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
36
Incident Energy (eV)
38-Sr-90

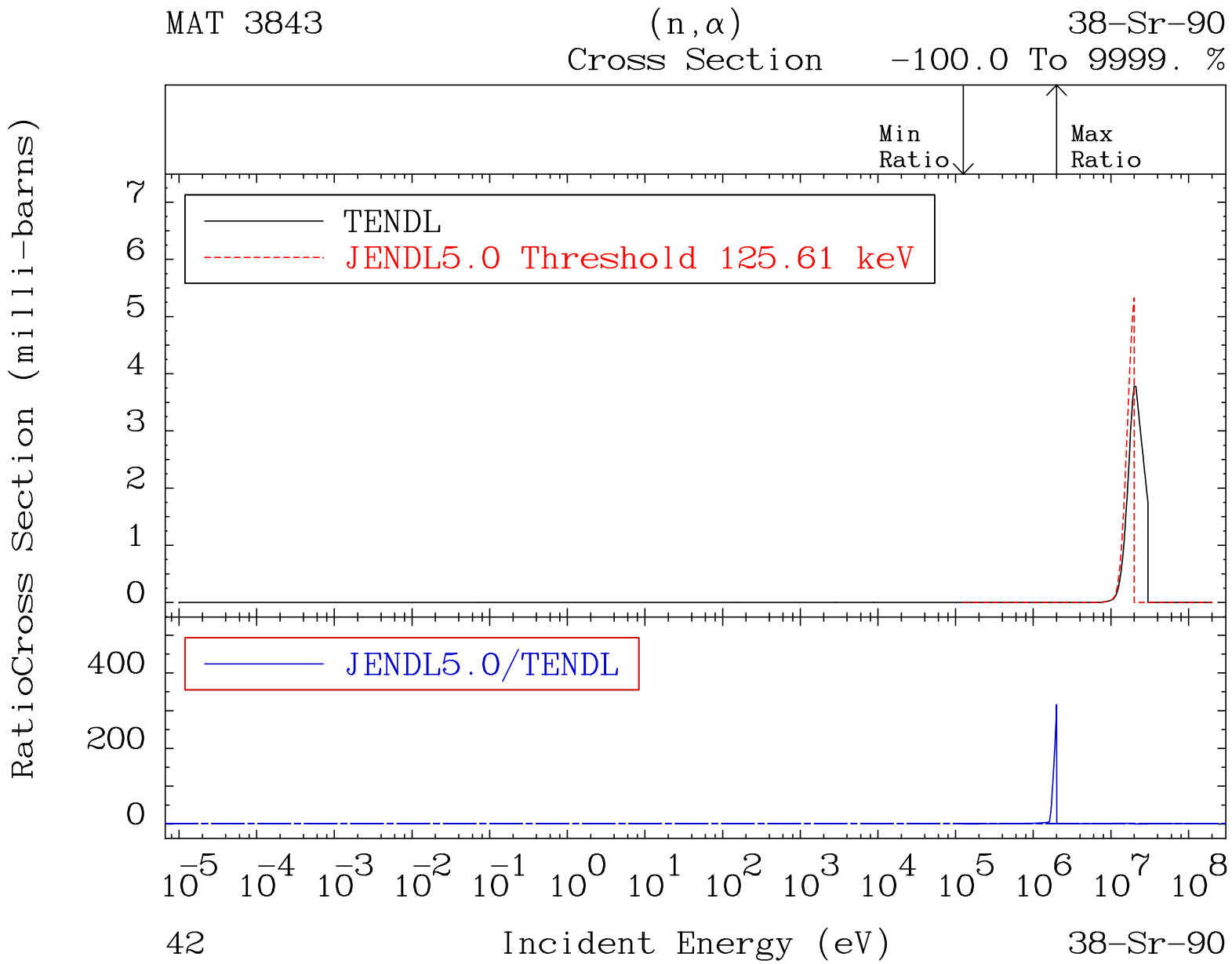

MAT 3843
(n,γ)
Cross Section
38-Sr-90
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
37
38-Sr-90

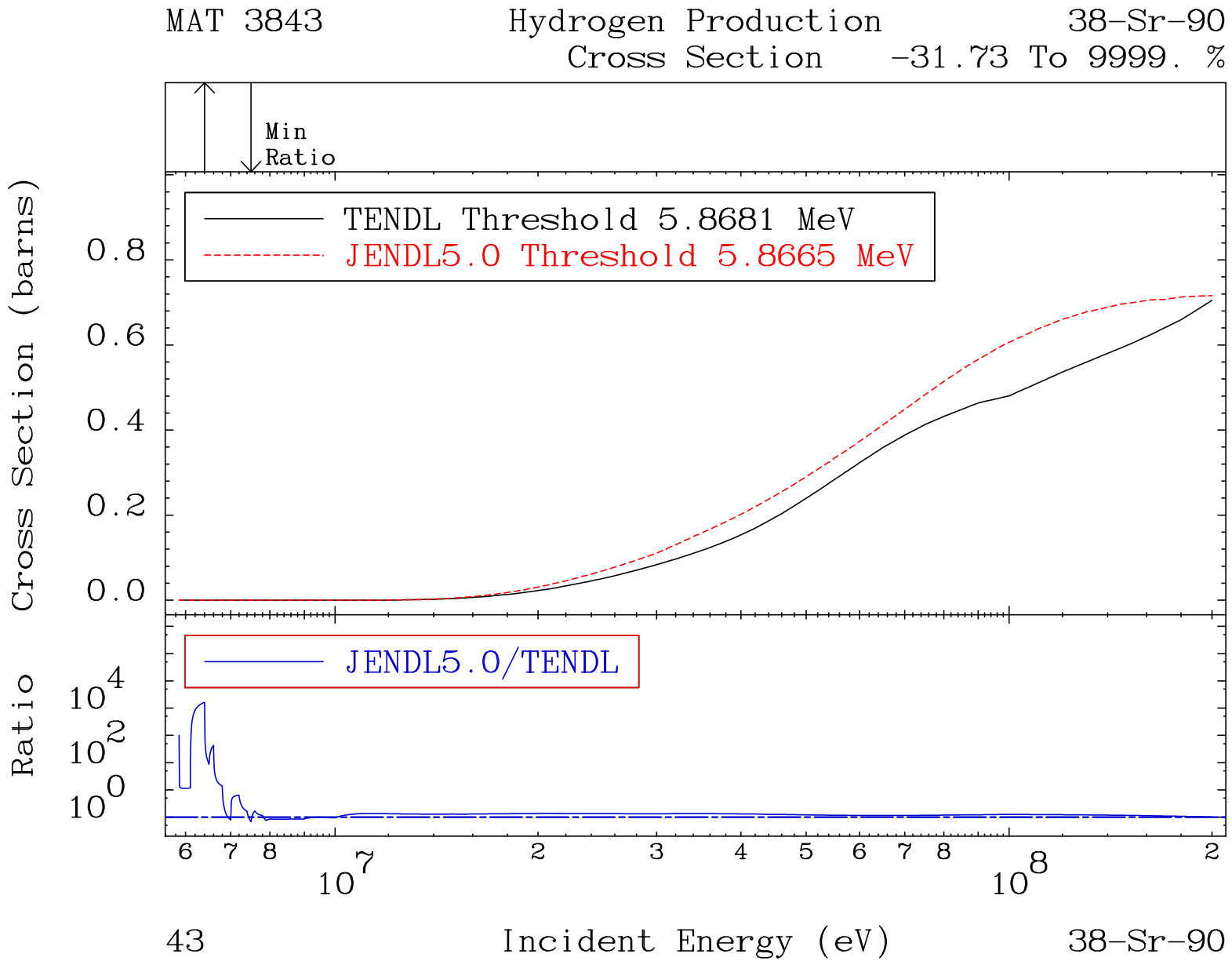

MAT 3843
(n,p)
38-Sr-90
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.8681 MeV
JENDL5.0 Threshold 5.8665 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
38
38-Sr-90

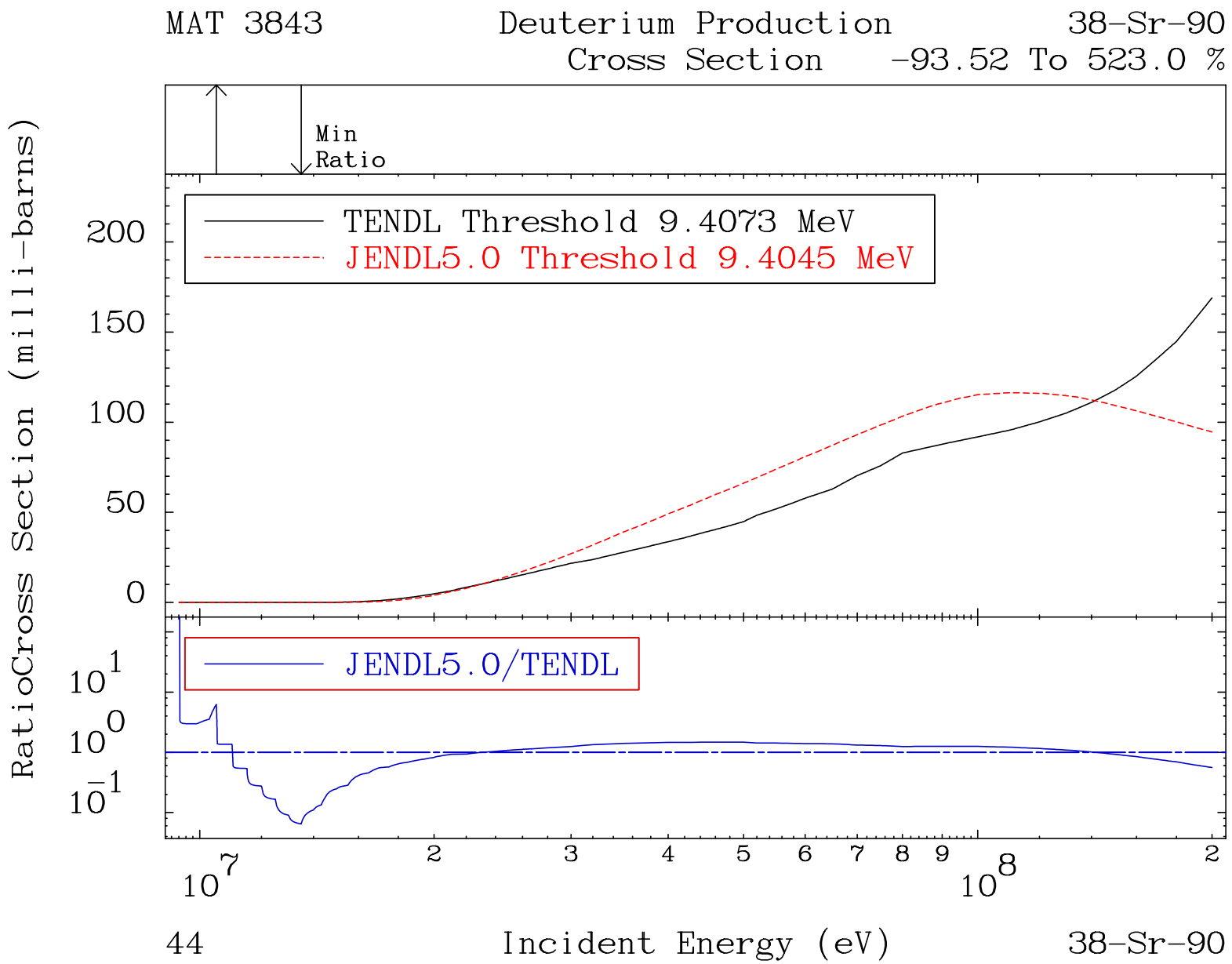

MAT 3843
(n,d)
38-Sr-90
Cross Section
-100.0 To 523.0 %
Max Ratio
Min Ratio
TENDL Threshold 9.4073 MeV
JENDL5.0 Threshold 9.4045 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
39
Incident Energy (eV)
38-Sr-90

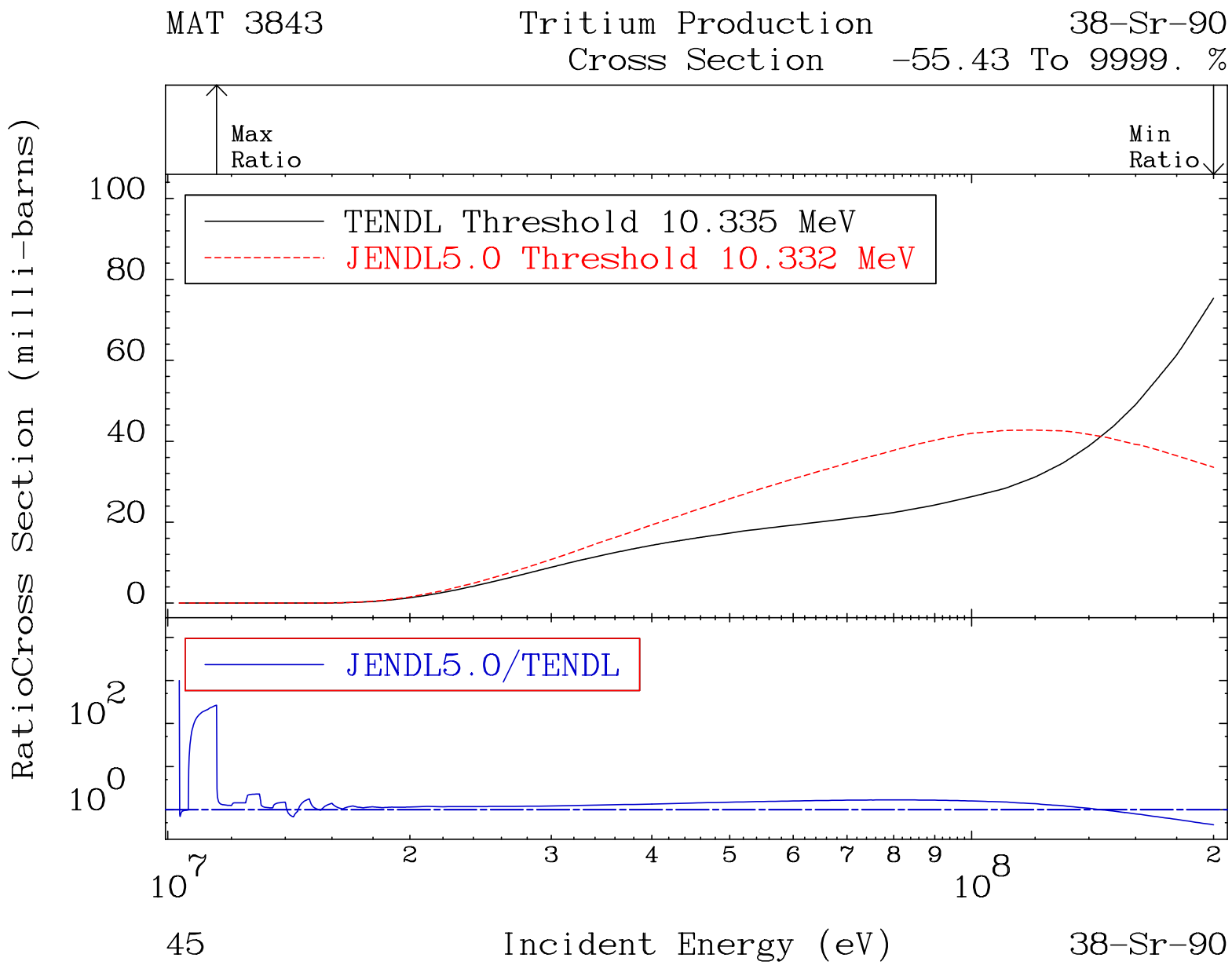

MAT 3843
(n,t)
Cross Section
38-Sr-90
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.335 MeV
JENDL5.0 Threshold 10.332 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
40
38-Sr-90

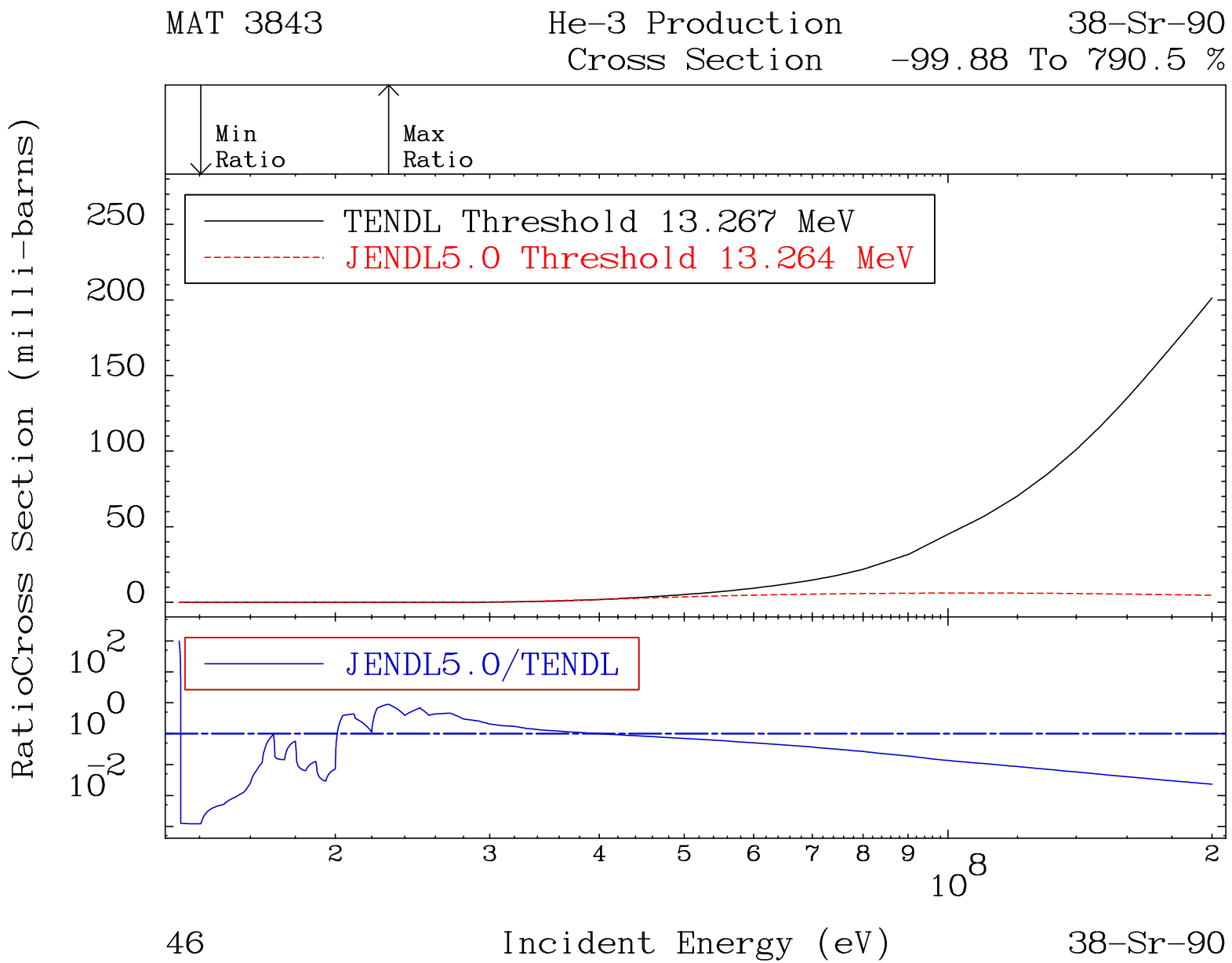

MAT 3843
(n,He-3)
Cross Section
38-Sr-90
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.267 MeV
JENDL5.0 Threshold 13.264 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
140
120
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
38-Sr-90

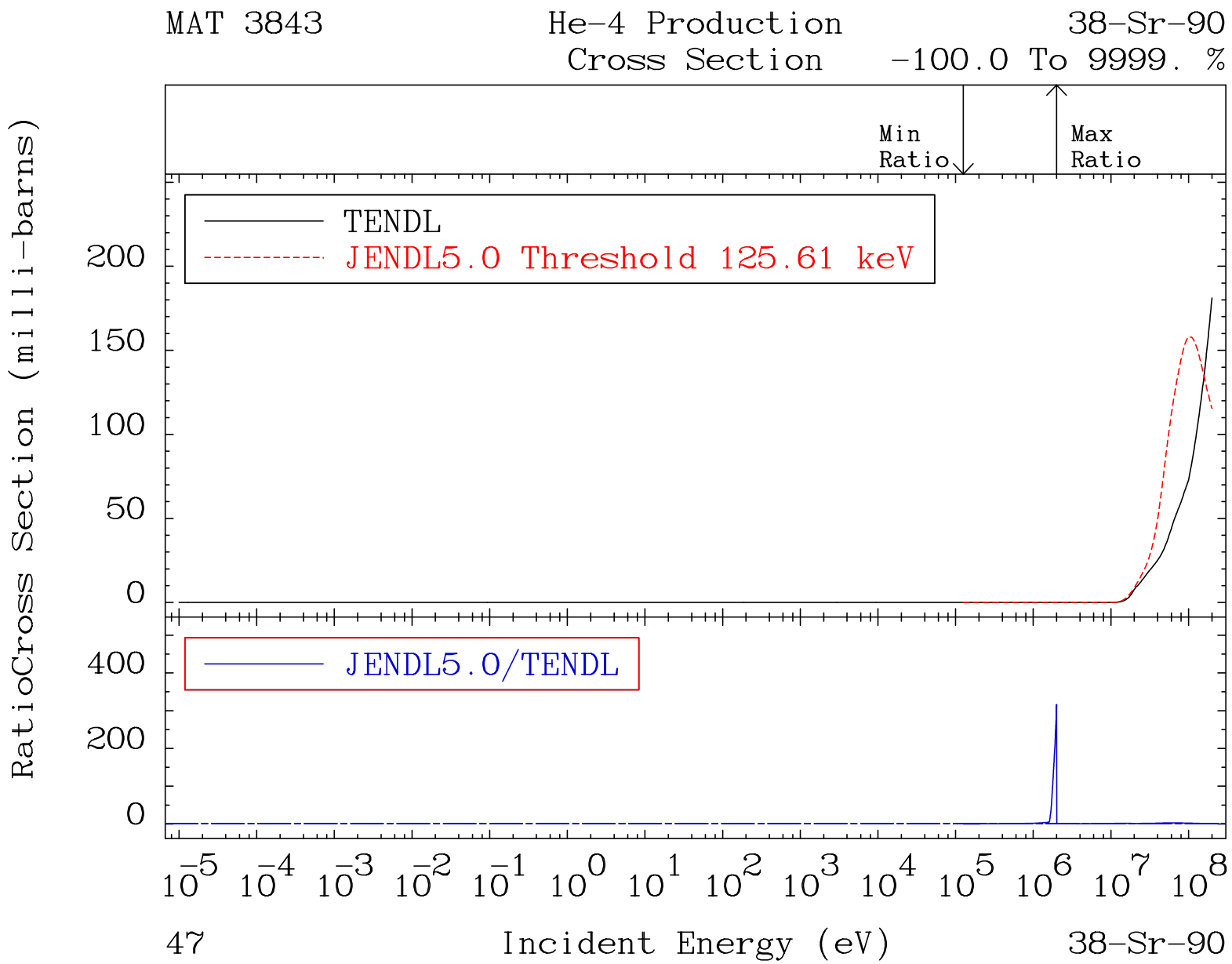

MAT 3843
(n,α)
Cross Section
38-Sr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 125.61 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
42
38-Sr-90

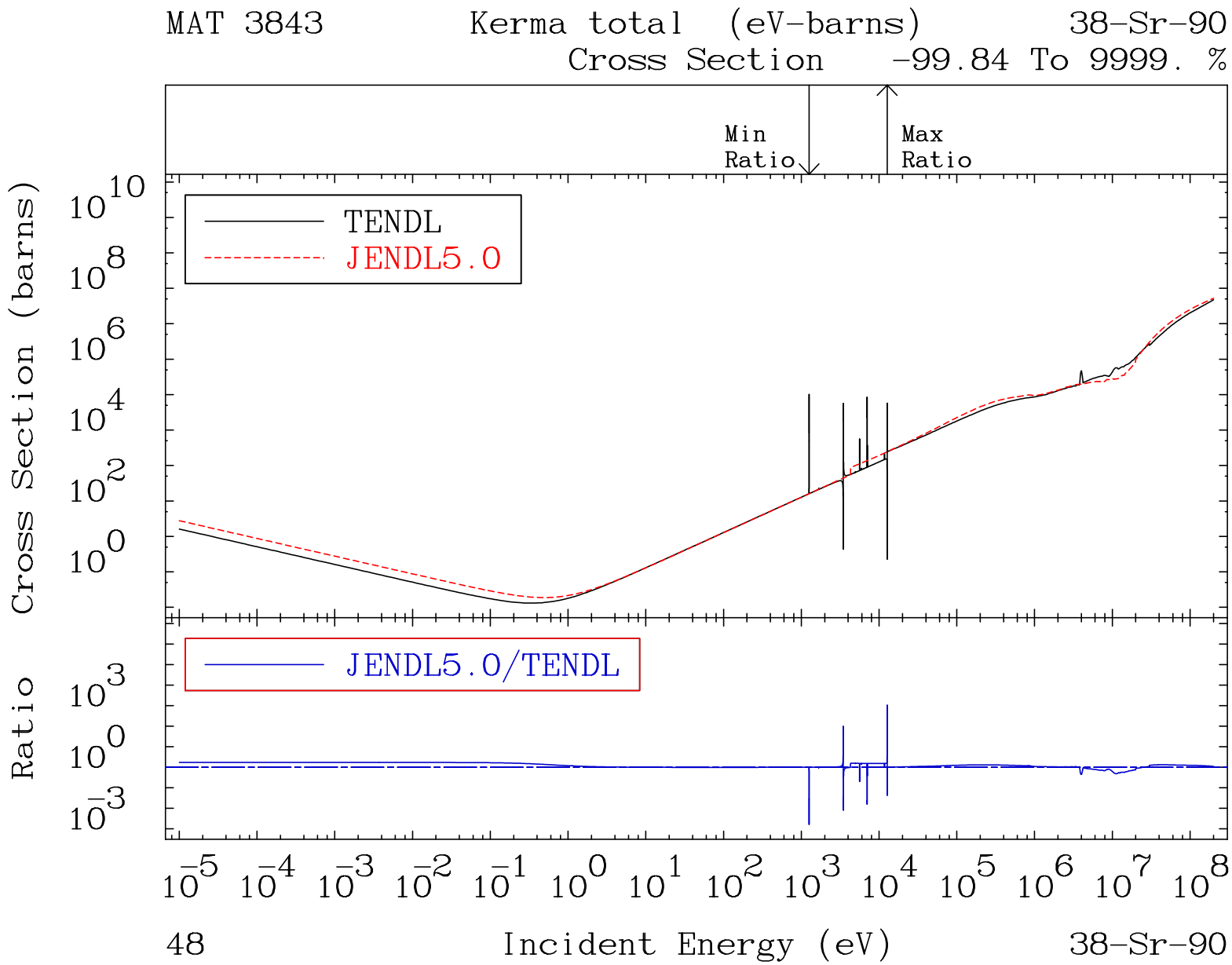

MAT 3843
Hydrogen Production
38-Sr-90
Cross Section
-31.73 To 9999. %
Min
Ratio
TENDL Threshold 5.8681 MeV
JENDL5.0 Threshold 5.8665 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
0.0
0.2
0.4
0.6
0.8
10^0
10^2
10^4
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
38-Sr-90

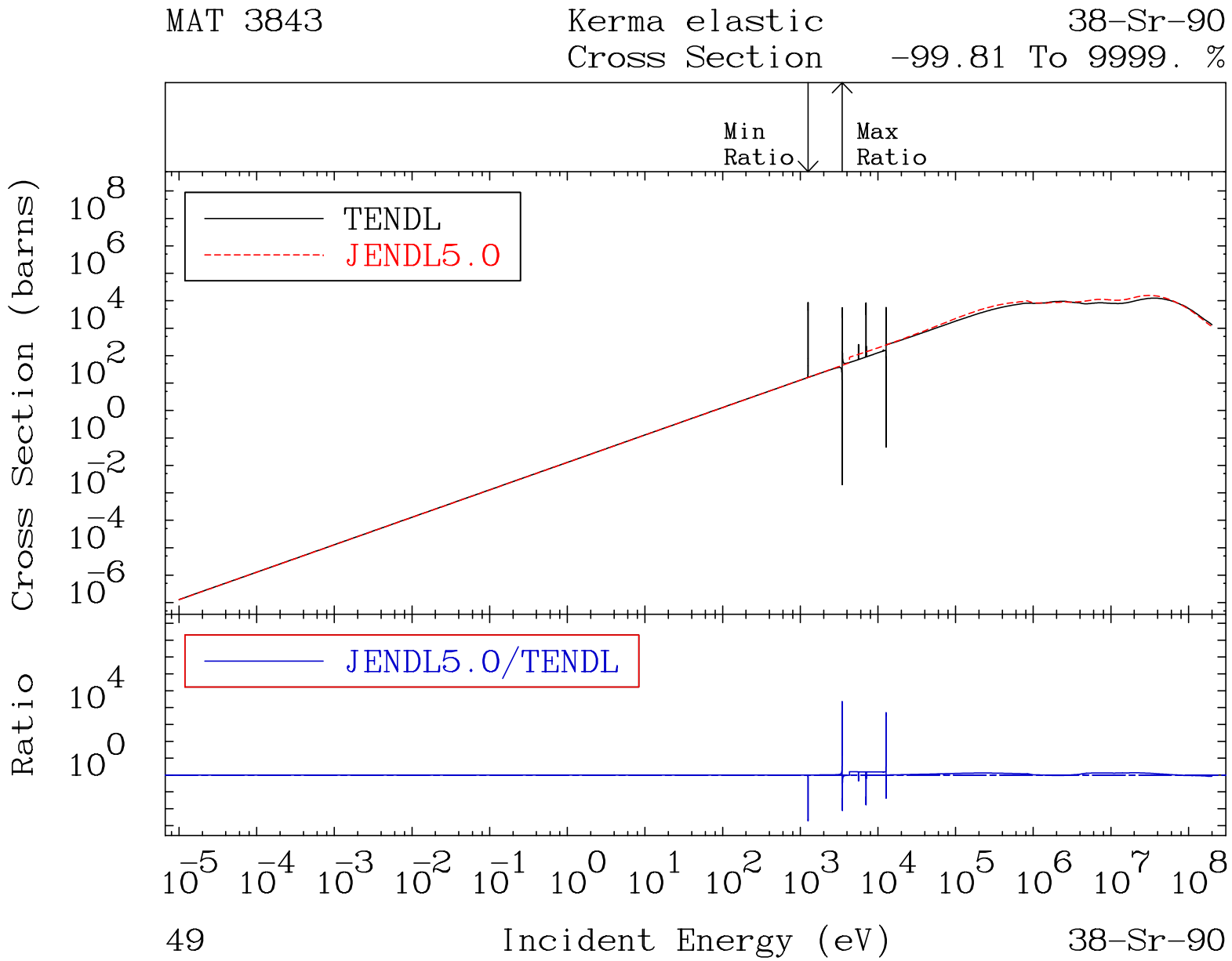

MAT 3843
Deuterium Production
38-Sr-90
Cross Section
-93.52 To 523.0 %
Min
Ratio
TENDL Threshold 9.4073 MeV
JENDL5.0 Threshold 9.4045 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
38-Sr-90

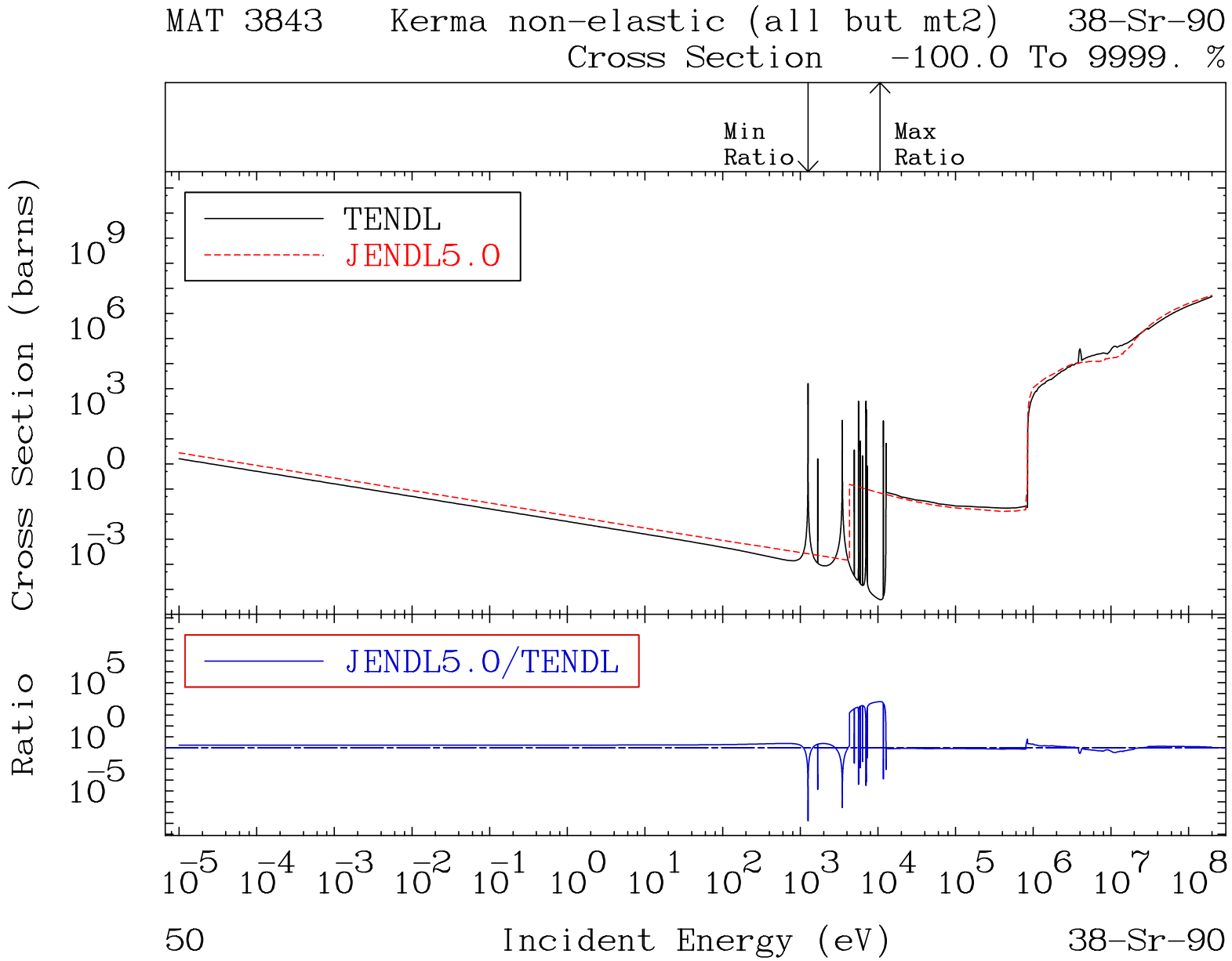

MAT 3843
Tritium Production
38-Sr-90
Cross Section
-55.43 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.335 MeV
JENDL5.0 Threshold 10.332 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
38-Sr-90

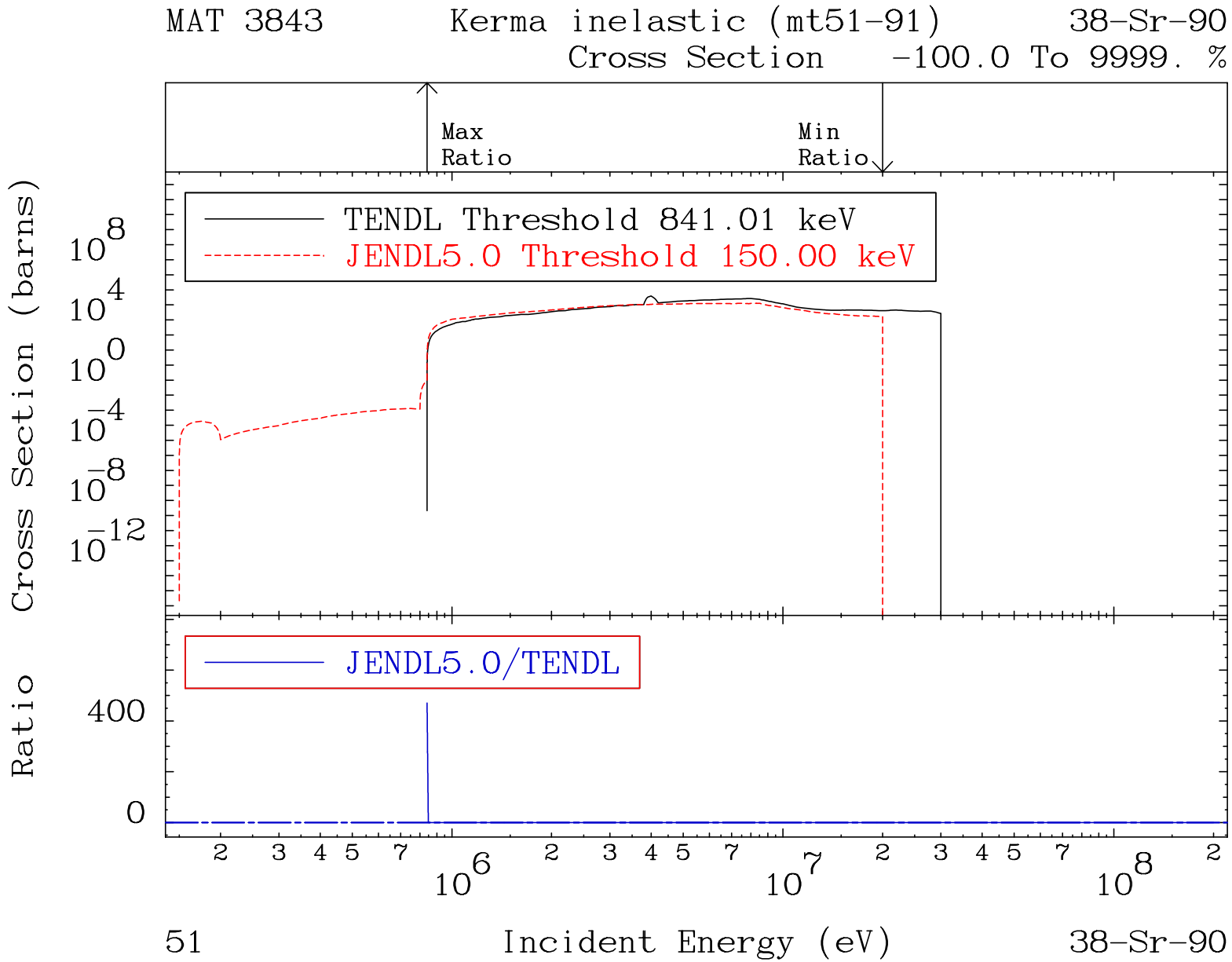

MAT 3843
He-3 Production
Cross Section
38-Sr-90
-99.88 To 790.5 %
Min Ratio
Max Ratio
TENDL Threshold 13.267 MeV
JENDL5.0 Threshold 13.264 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
38-Sr-90

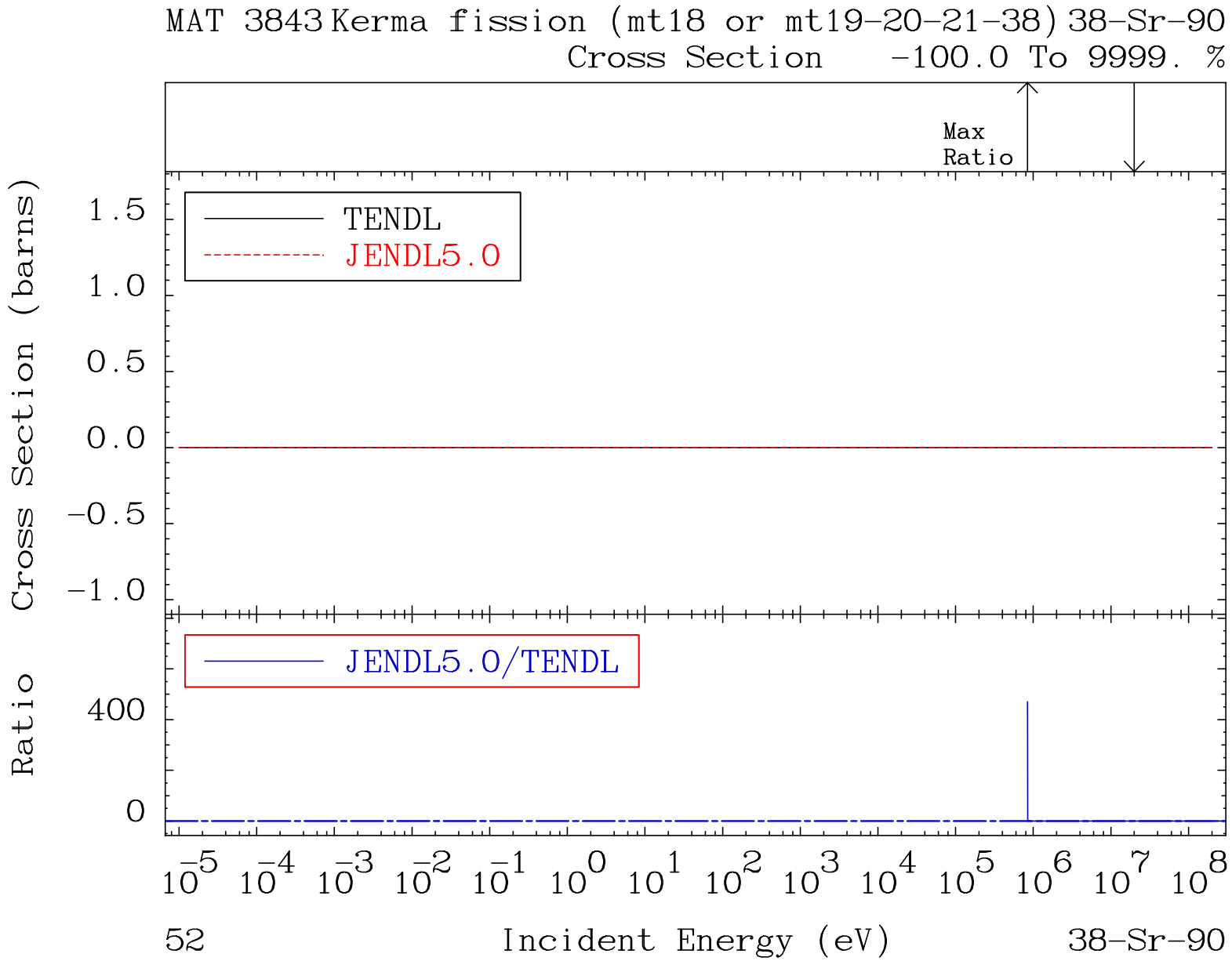

MAT 3843
He-4 Production
Cross Section
38-Sr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 125.61 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
400
200
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
47
Incident Energy (eV)
38-Sr-90

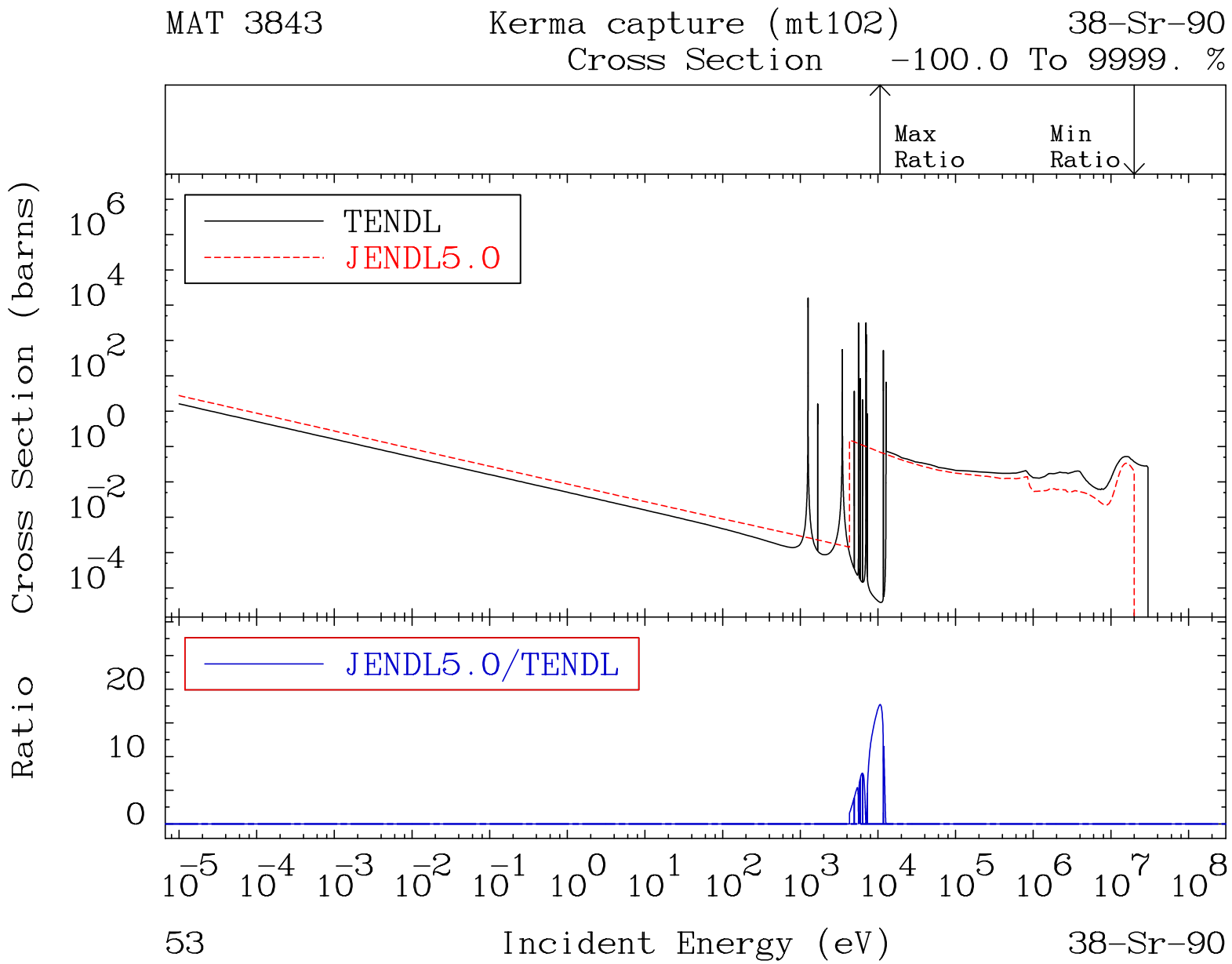

MAT 3843
Kerma total (eV-barns)
38-Sr-90
Cross Section -99.84 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
38-Sr-90

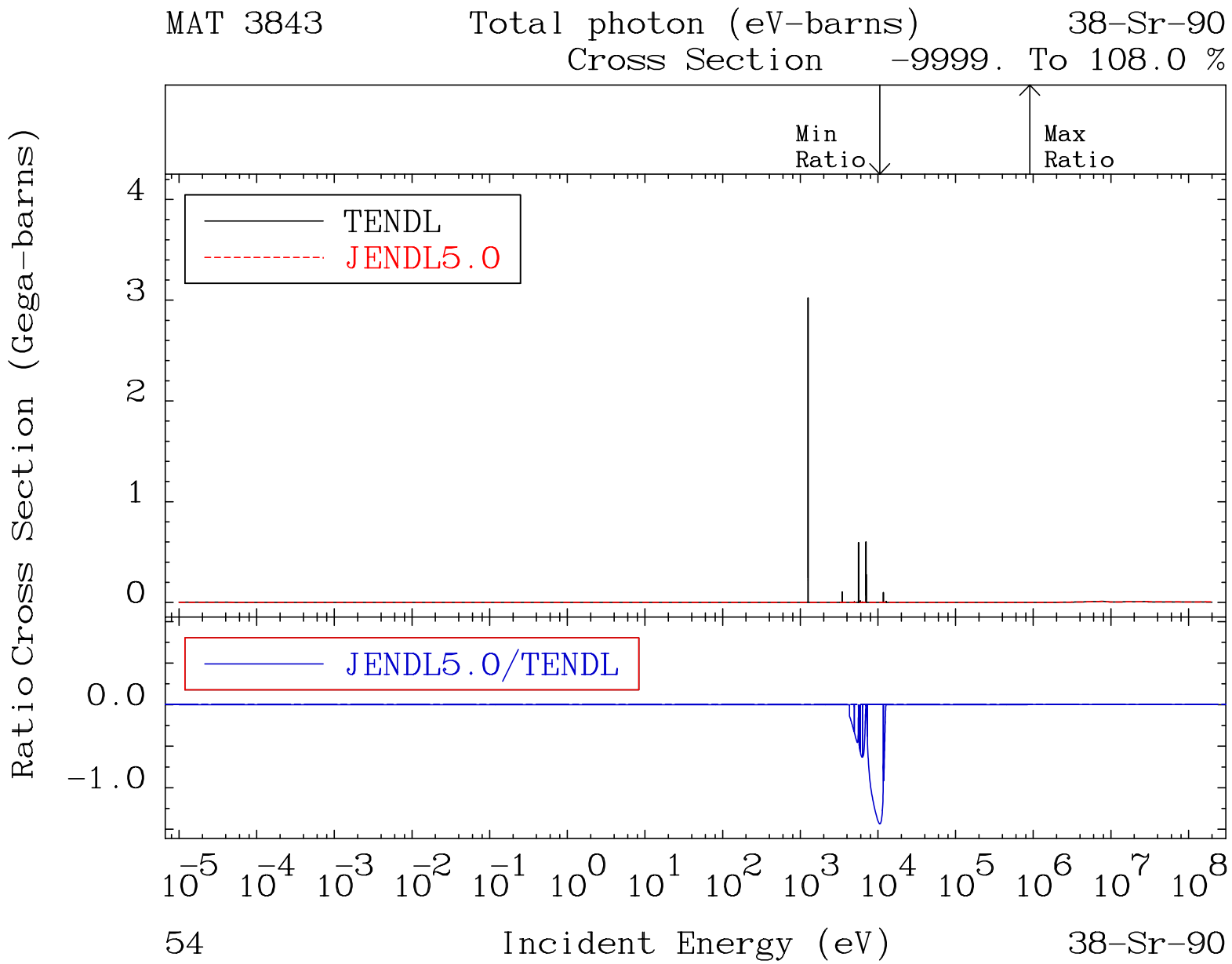

MAT 3843
Kerma elastic
Cross Section
38-Sr-90
-99.81 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
38-Sr-90

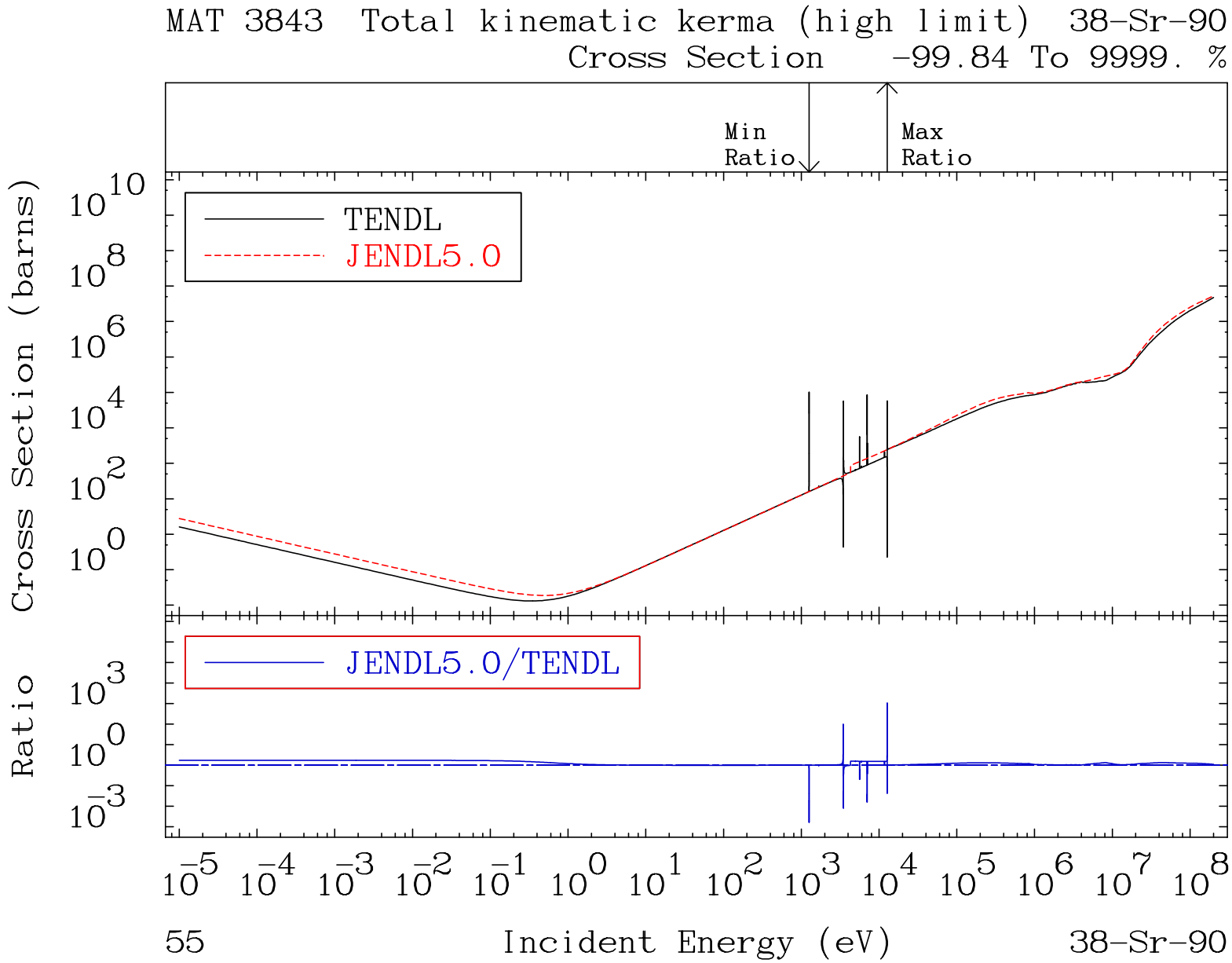

MAT 3843 Kerma non-elastic (all but mt2) 38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
38-Sr-90

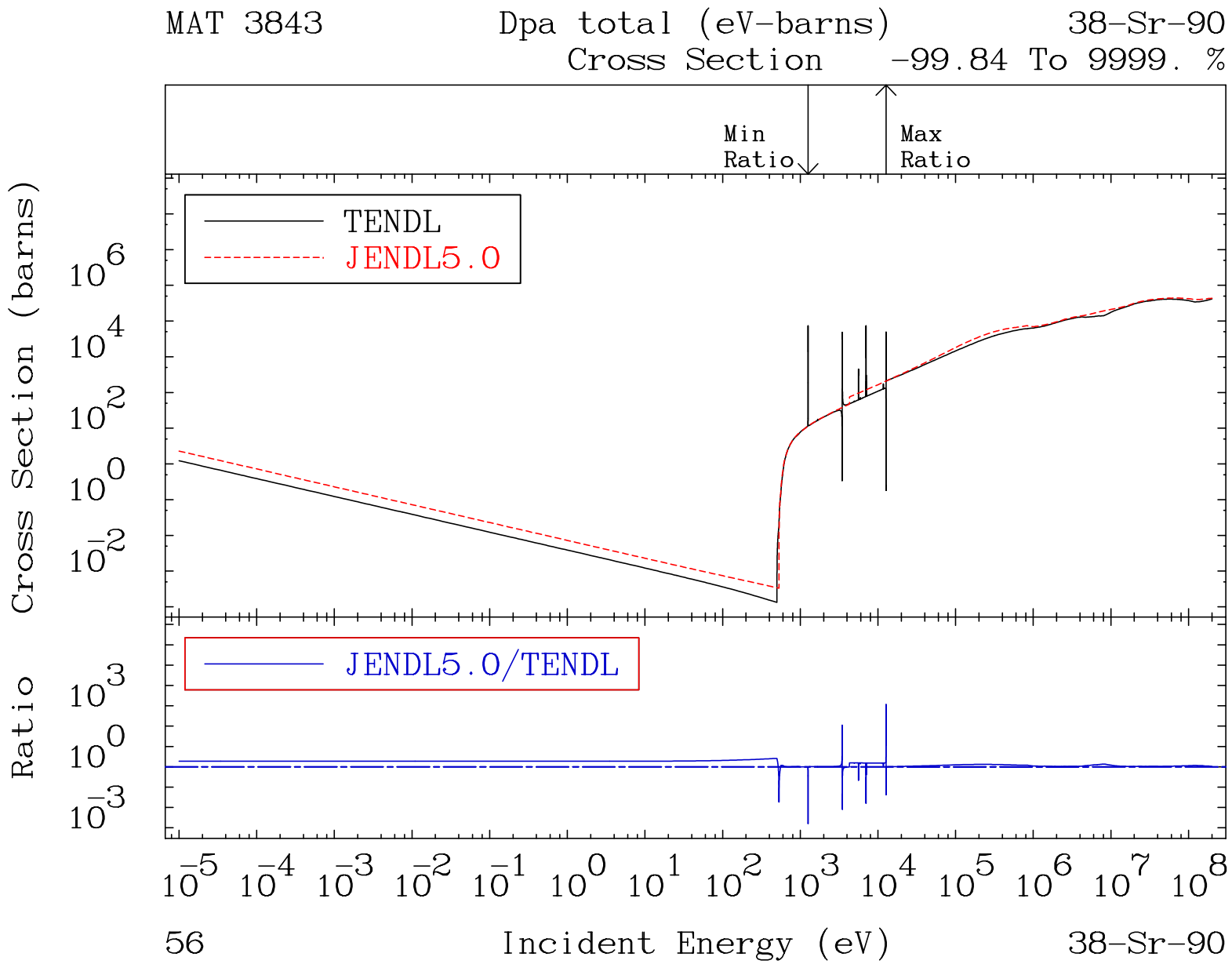

MAT 3843
Kerma inelastic (mt51-91)
38-Sr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 841.01 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
51
Incident Energy (eV)
38-Sr-90

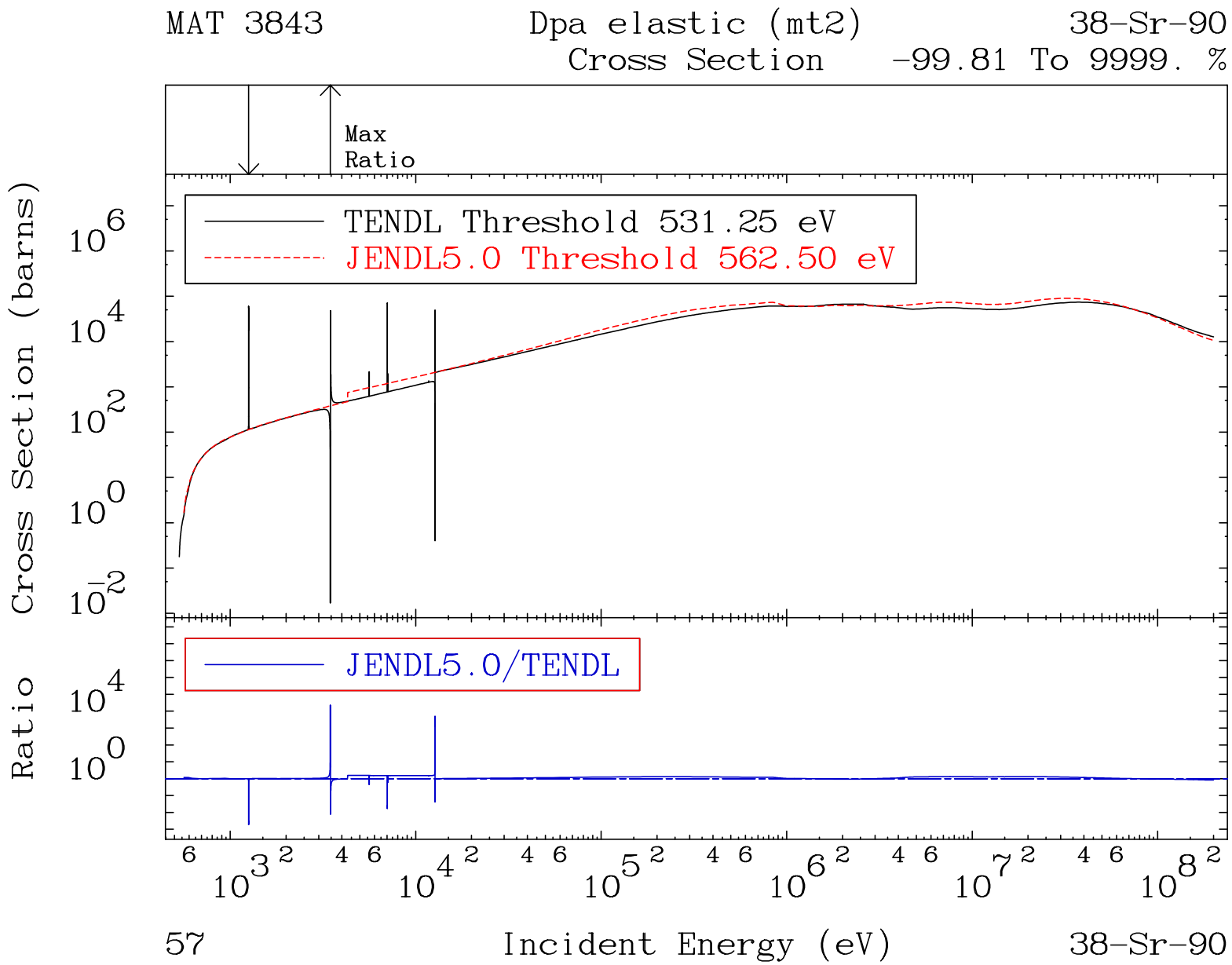

MAT 3843 Kerma fission (mt18 or mt19-20-21-38) 38-Sr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
400
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
52
Incident Energy (eV)
38-Sr-90

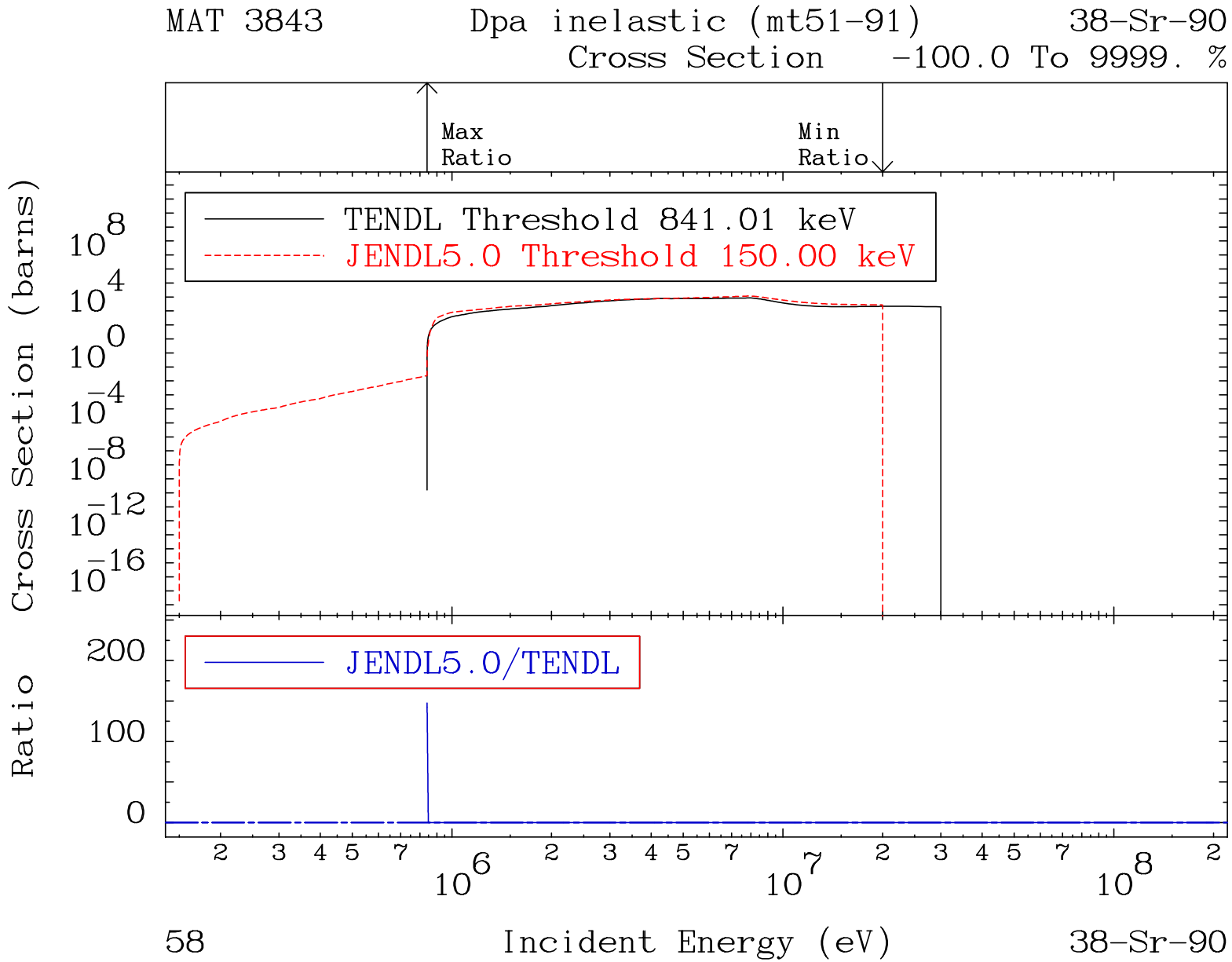

MAT 3843
Kerma capture (mt102)
38-Sr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
53
38-Sr-90

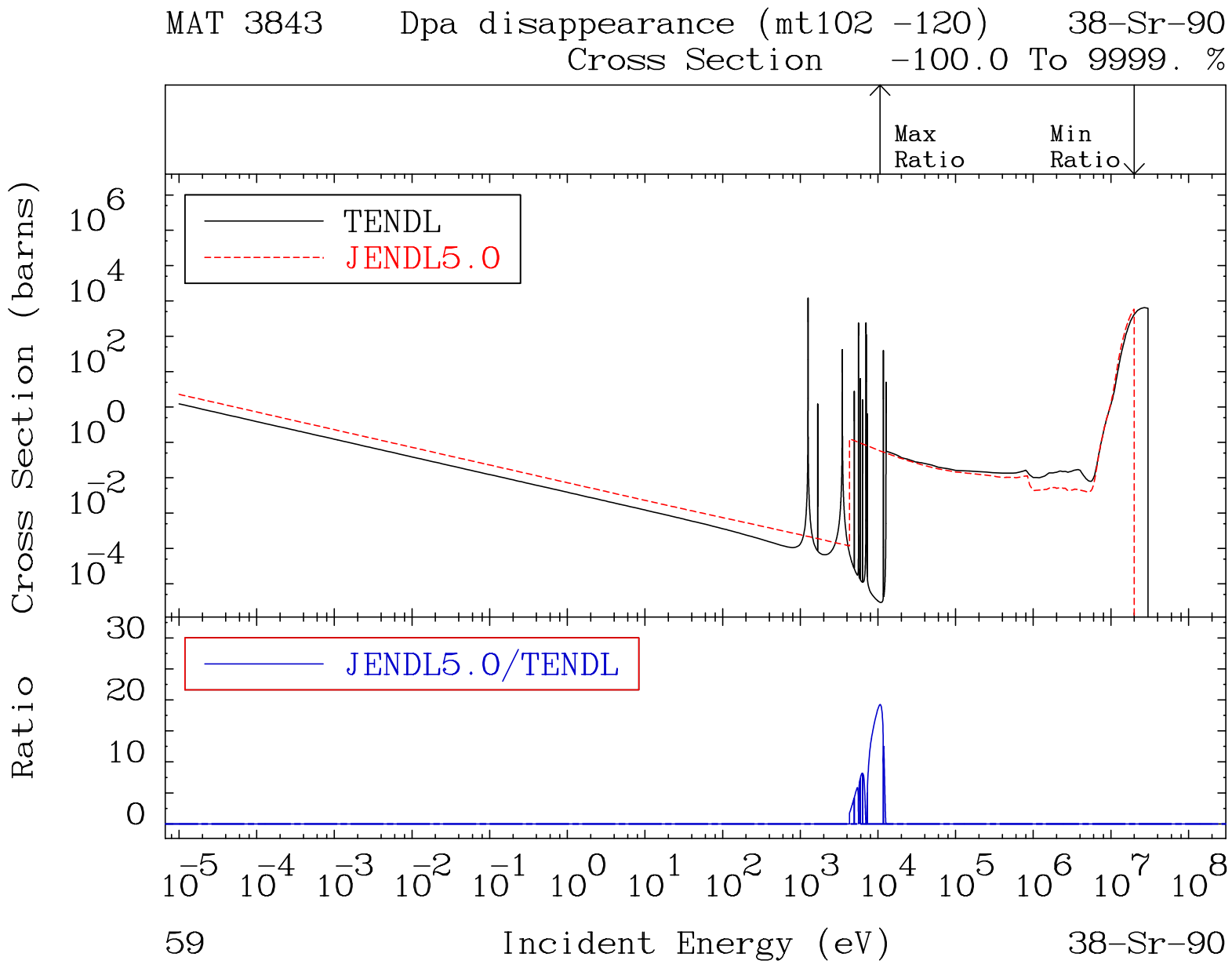

MAT 3843
Total photon (eV-barns)
38-Sr-90
Cross Section -9999. To 108.0 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Gega-barns)
4
3
2
1
0
0.0
-1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
38-Sr-90

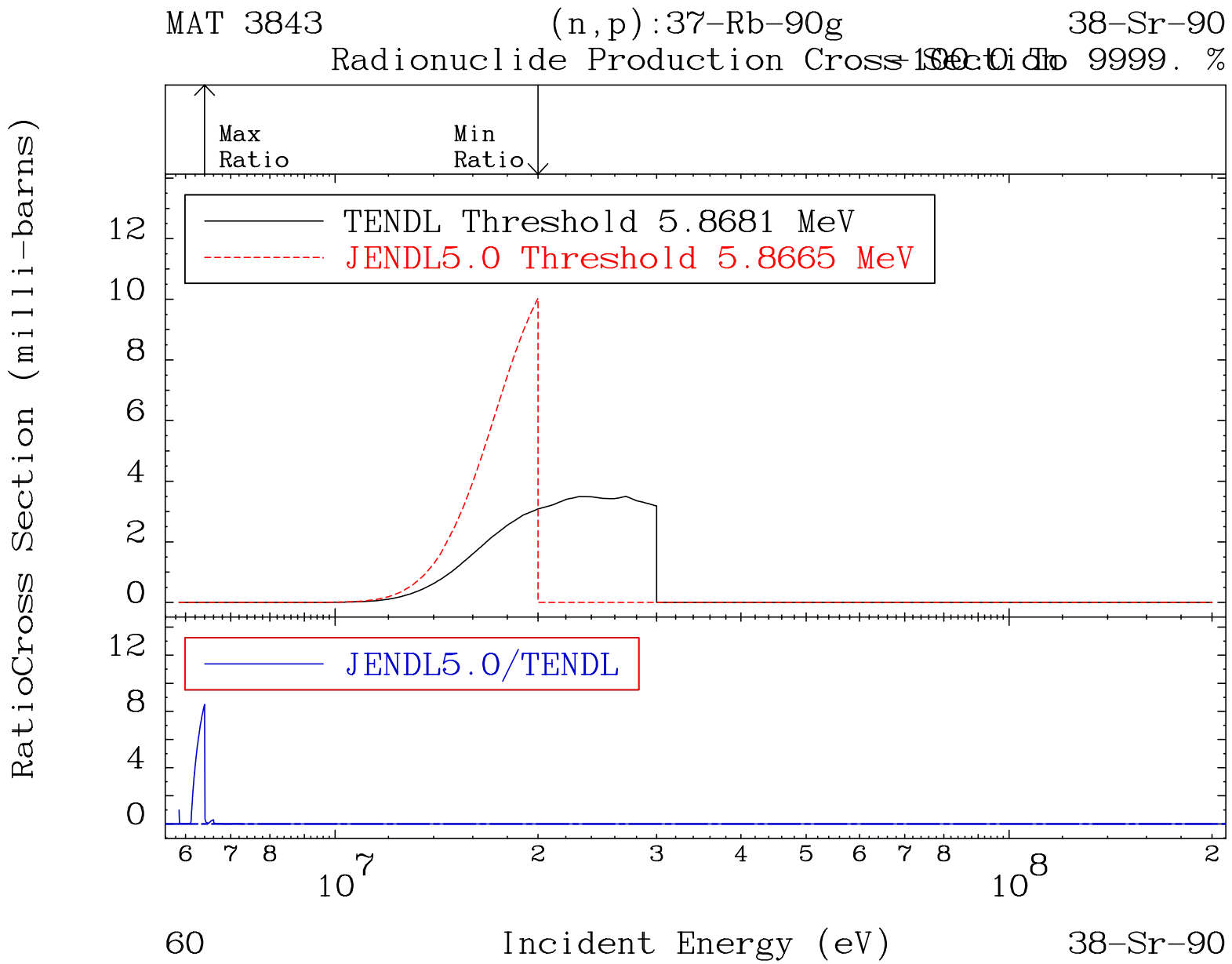

MAT 3843 Total kinematic kerma (high limit) 38-Sr-90
Cross Section -99.84 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
38-Sr-90

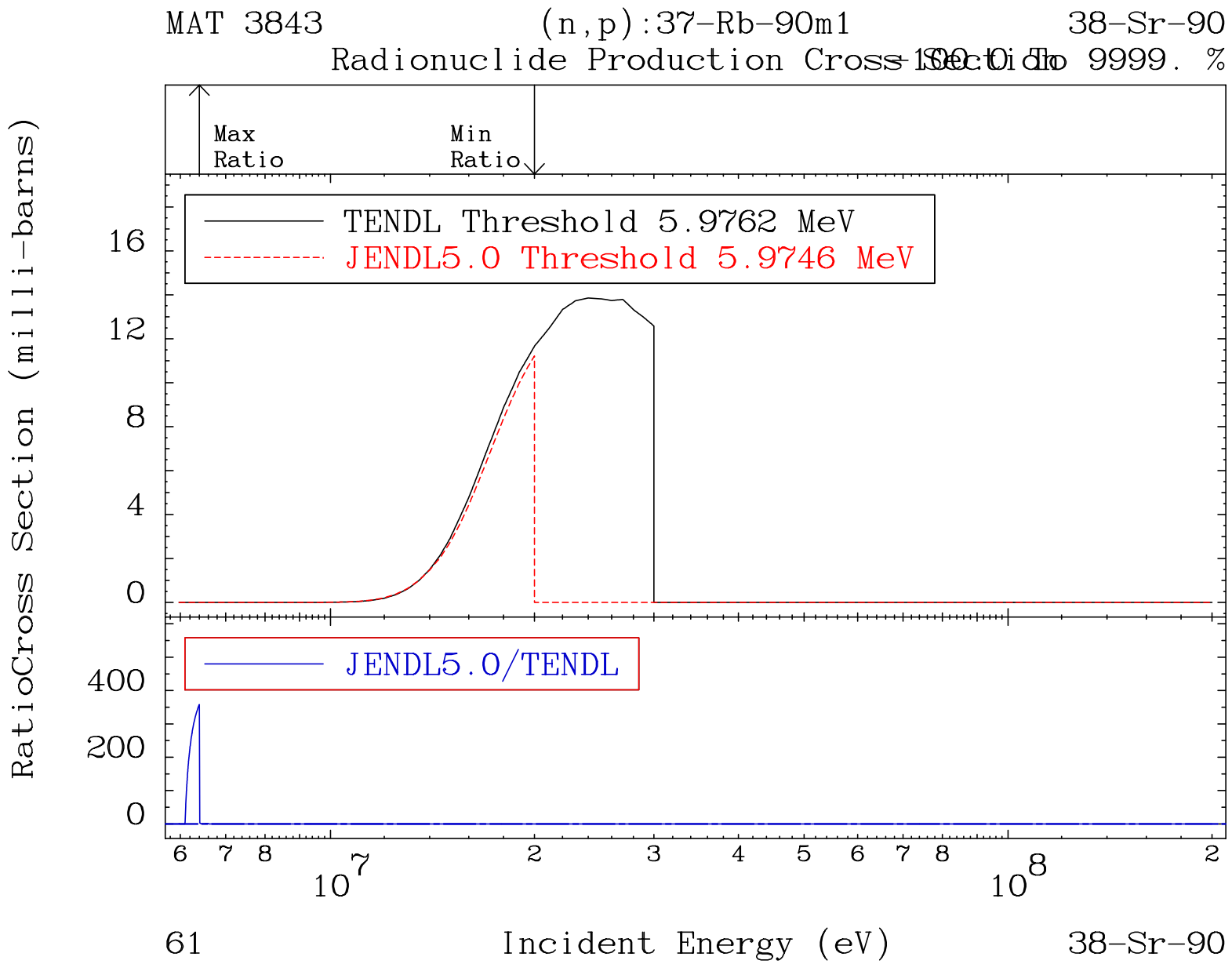

MAT 3843
Dpa total (eV-barns)
38-Sr-90
Cross Section -99.84 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
38-Sr-90

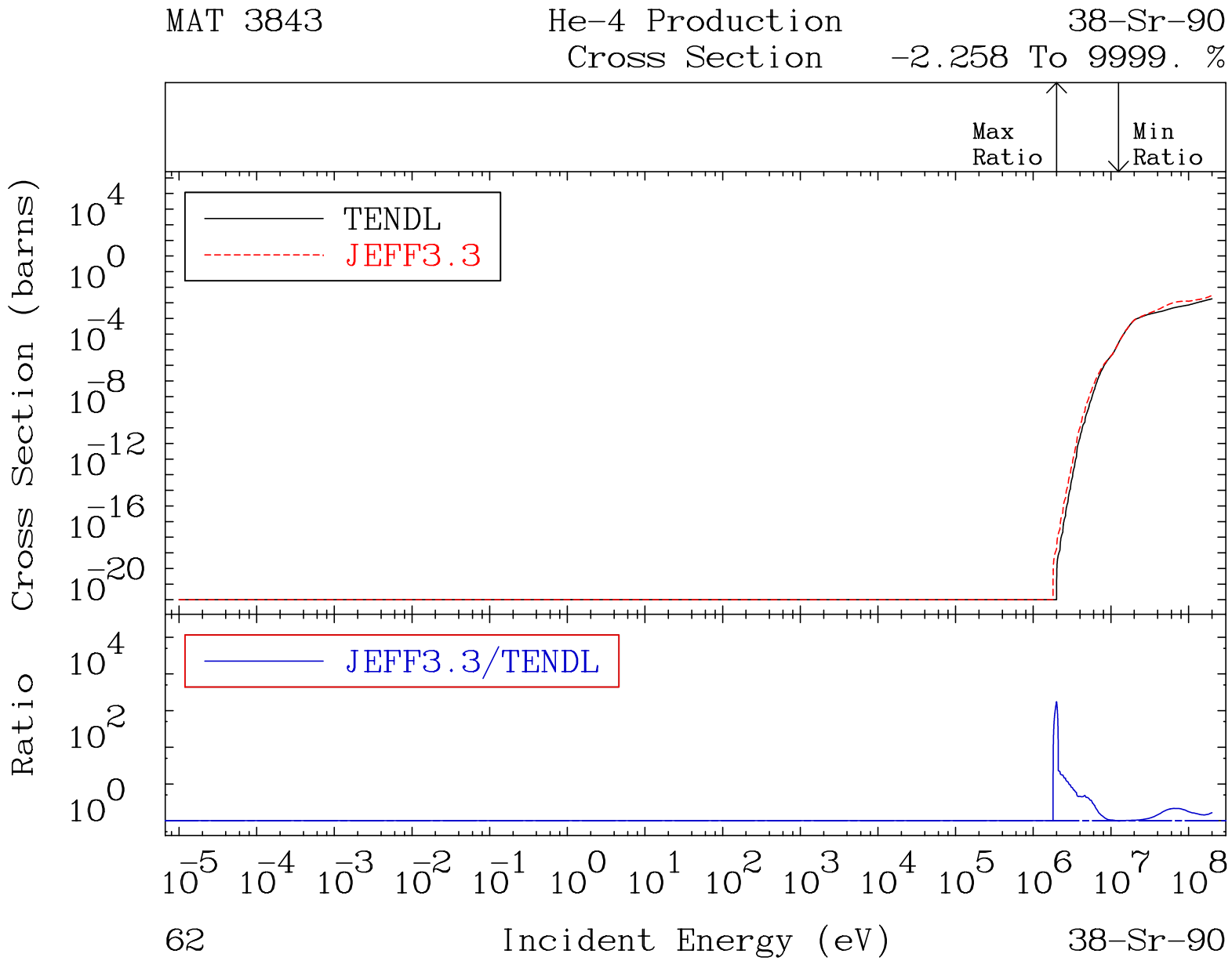

MAT 3843
Dpa elastic (mt2)
Cross Section
38-Sr-90
-99.81 To 9999. %
Max
Ratio
TENDL Threshold 531.25 eV
JENDL5.0 Threshold 562.50 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
38-Sr-90

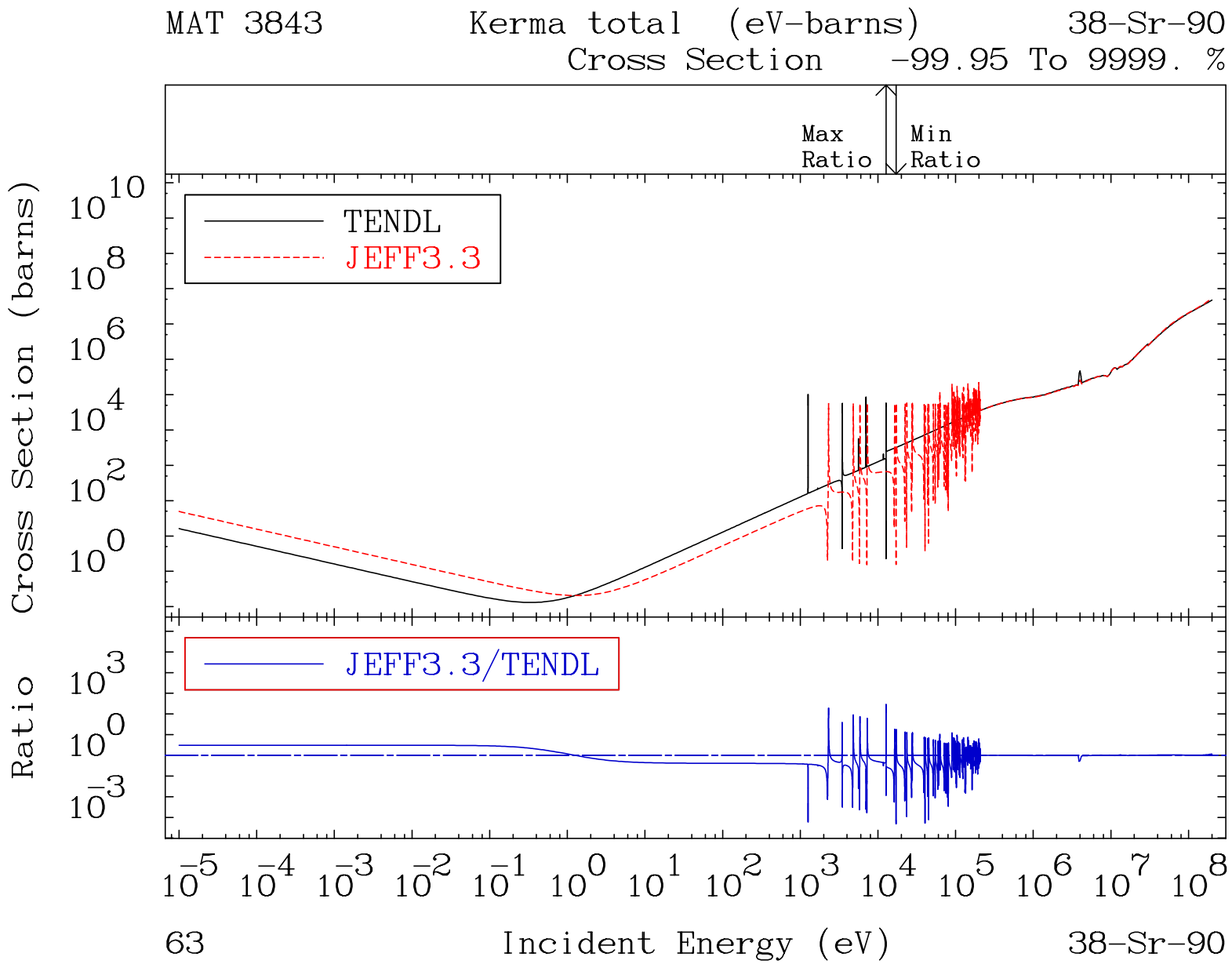

MAT 3843
Dpa inelastic (mt51-91)
38-Sr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 841.01 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
58
38-Sr-90

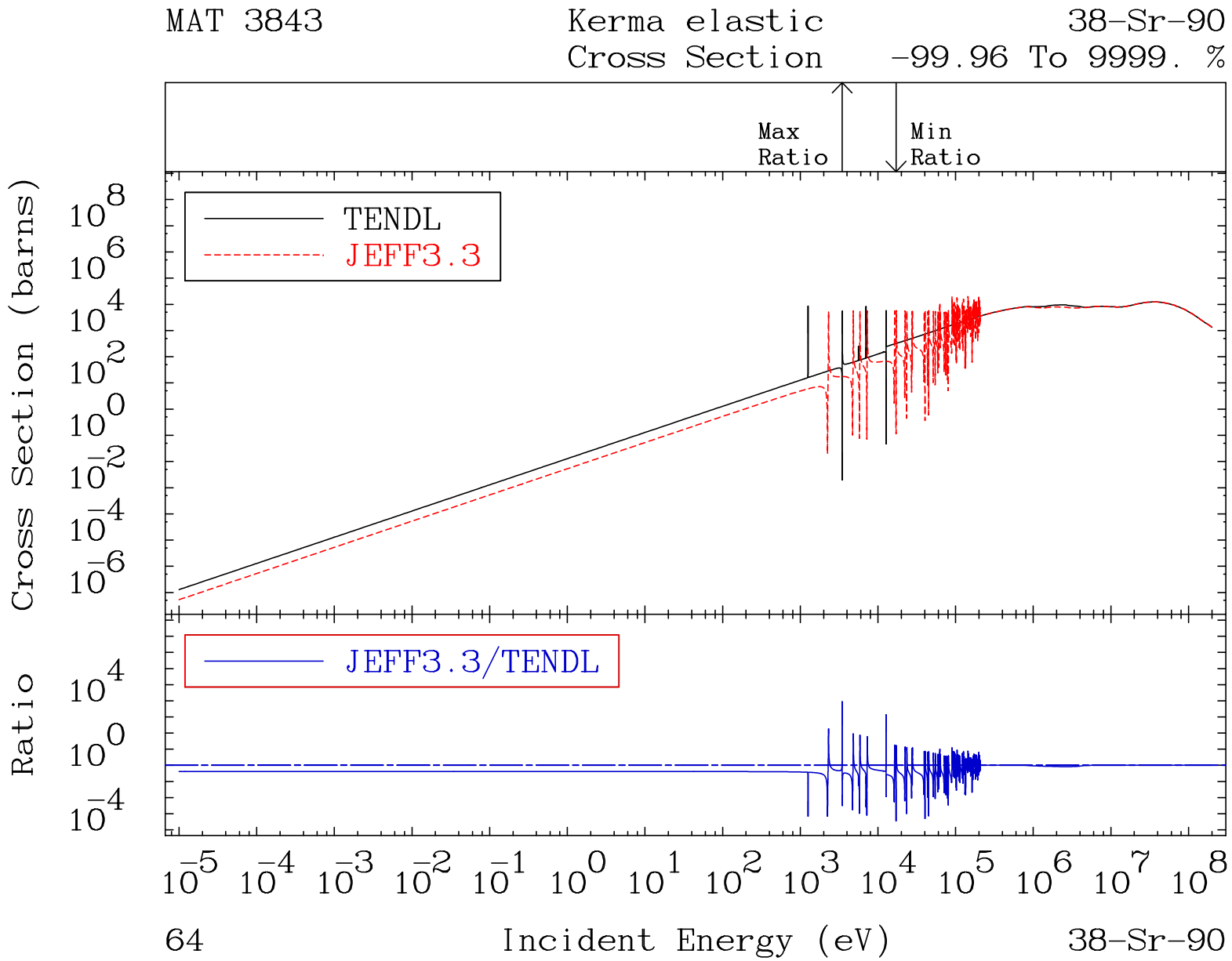

MAT 3843 Dpa disappearance (mt102 -120) 38-Sr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
38-Sr-90

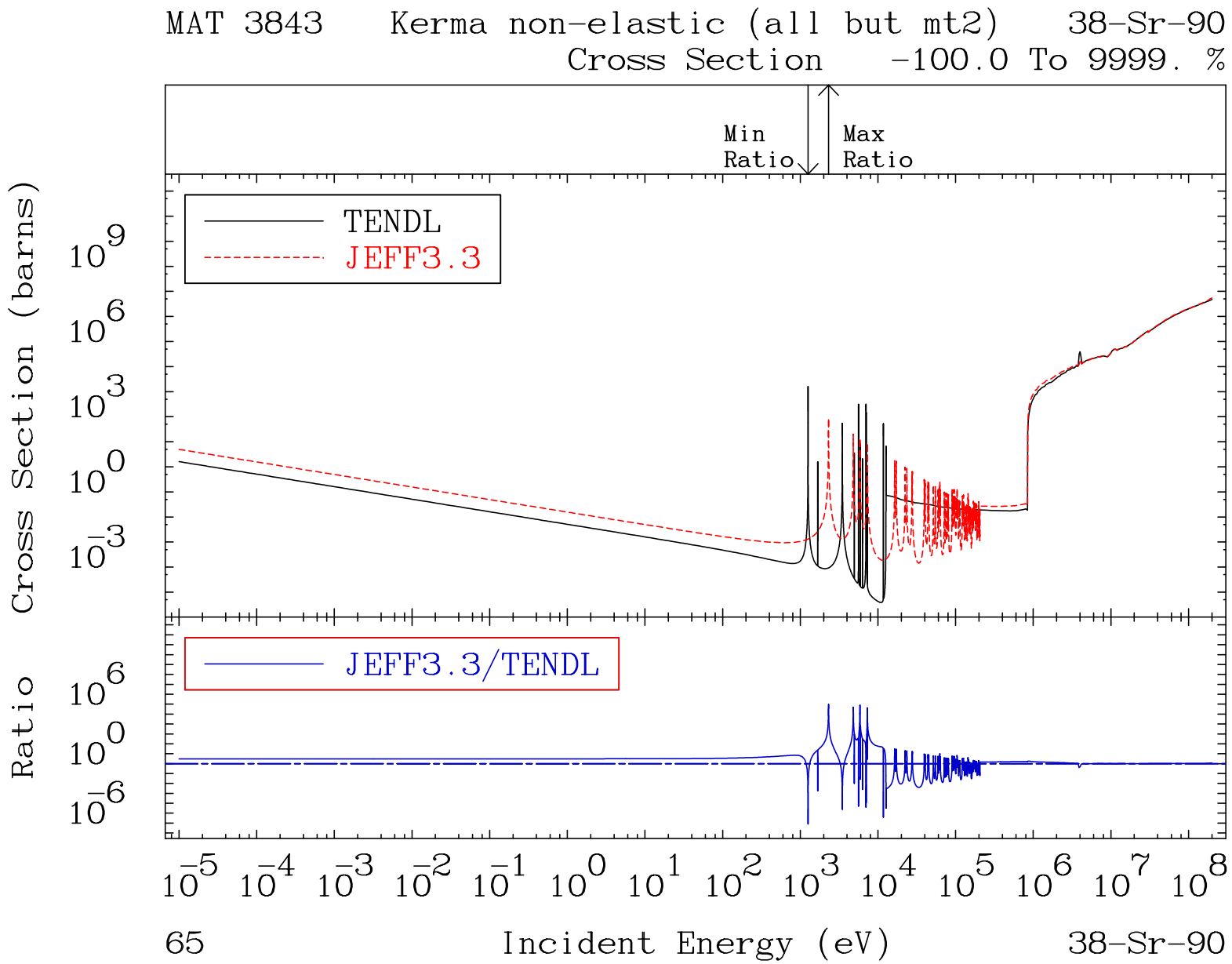

MAT 3843
(n,p):37-Rb-90g
38-Sr-90
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.8681 MeV
JENDL5.0 Threshold 5.8665 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
60
38-Sr-90

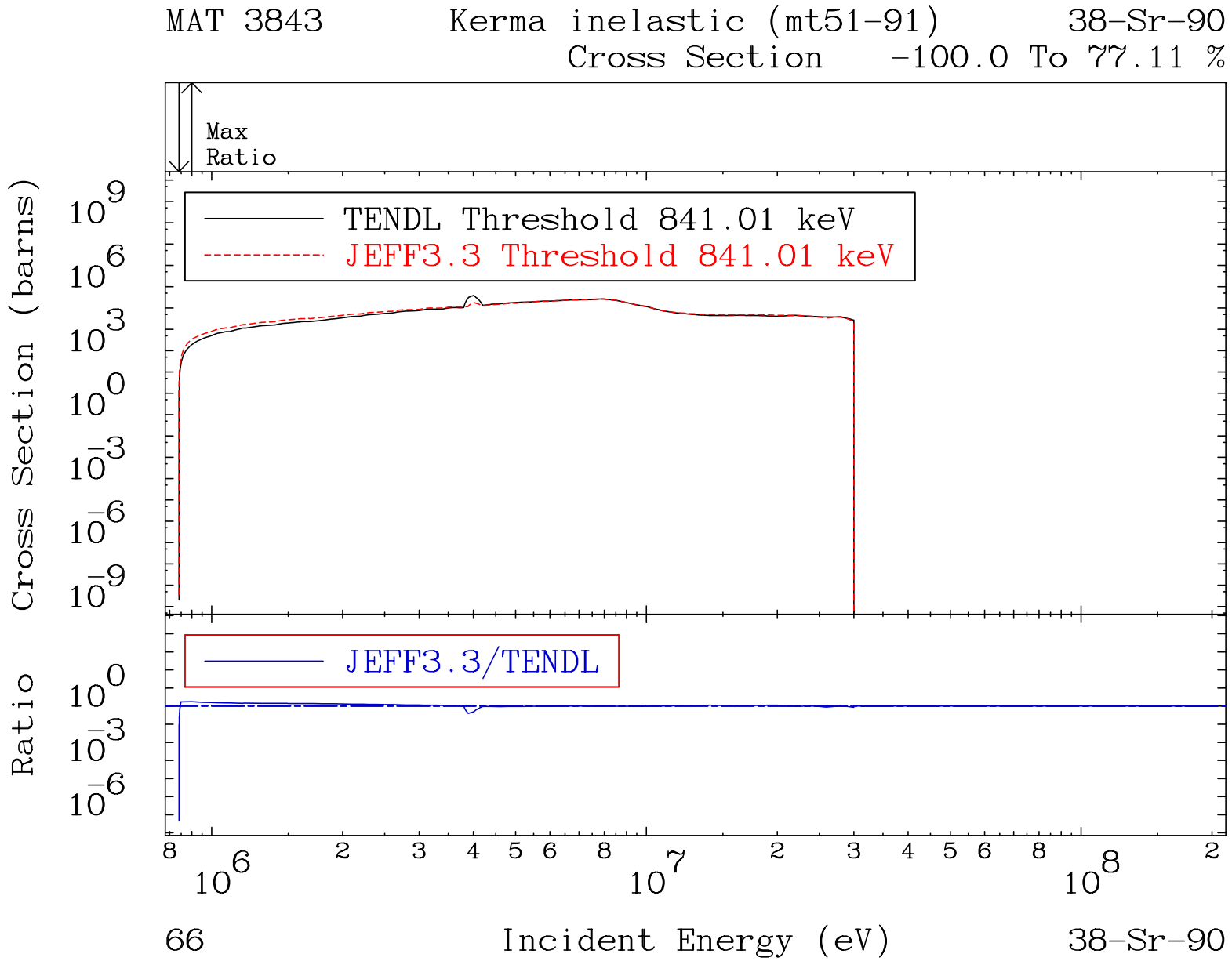

MAT 3843
(n,p):37-Rb-90m1
38-Sr-90
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 5.9762 MeV
JENDL5.0 Threshold 5.9746 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
61
38-Sr-90

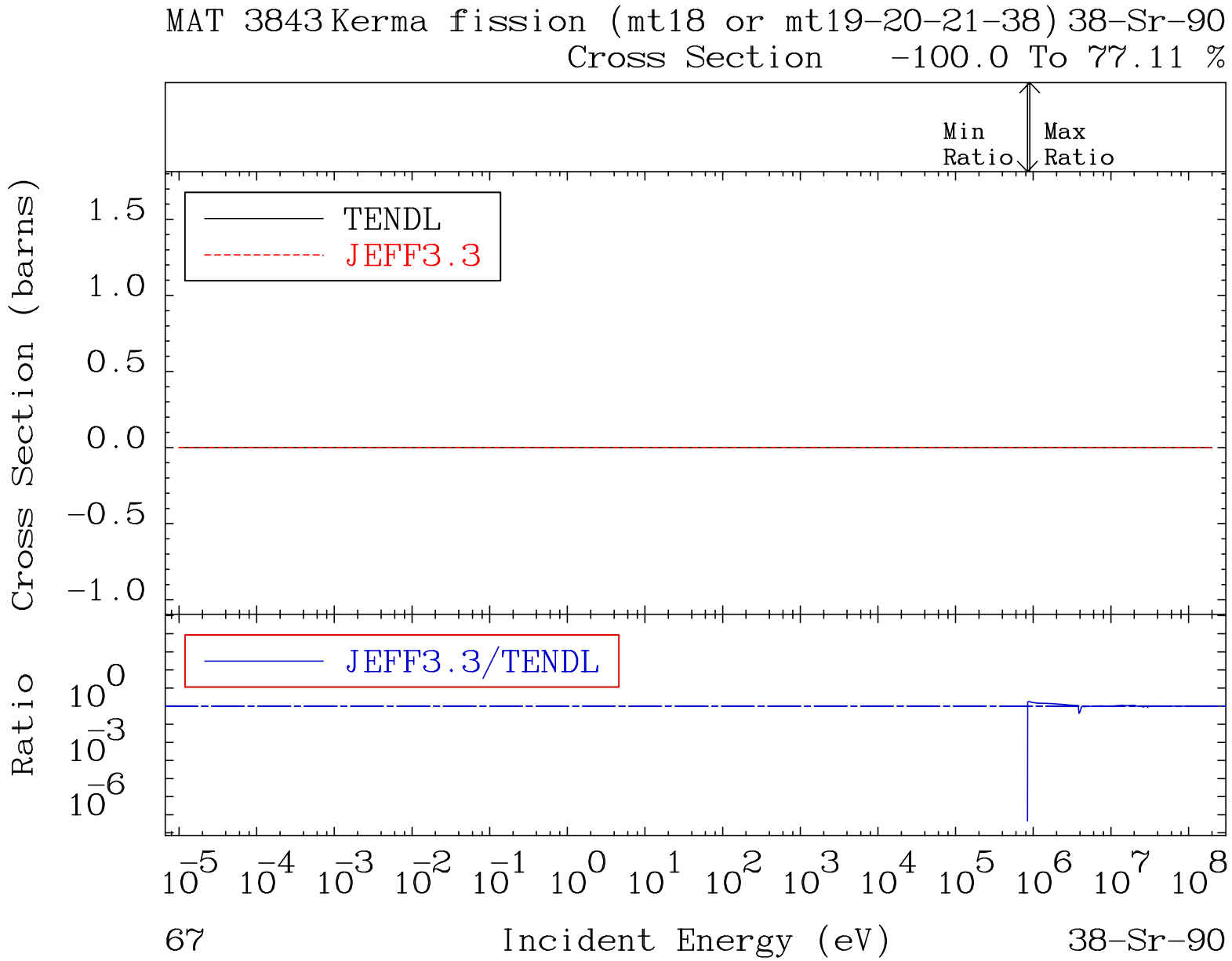

MAT 3843
He-4 Production
Cross Section
38-Sr-90
-2.258 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
38-Sr-90

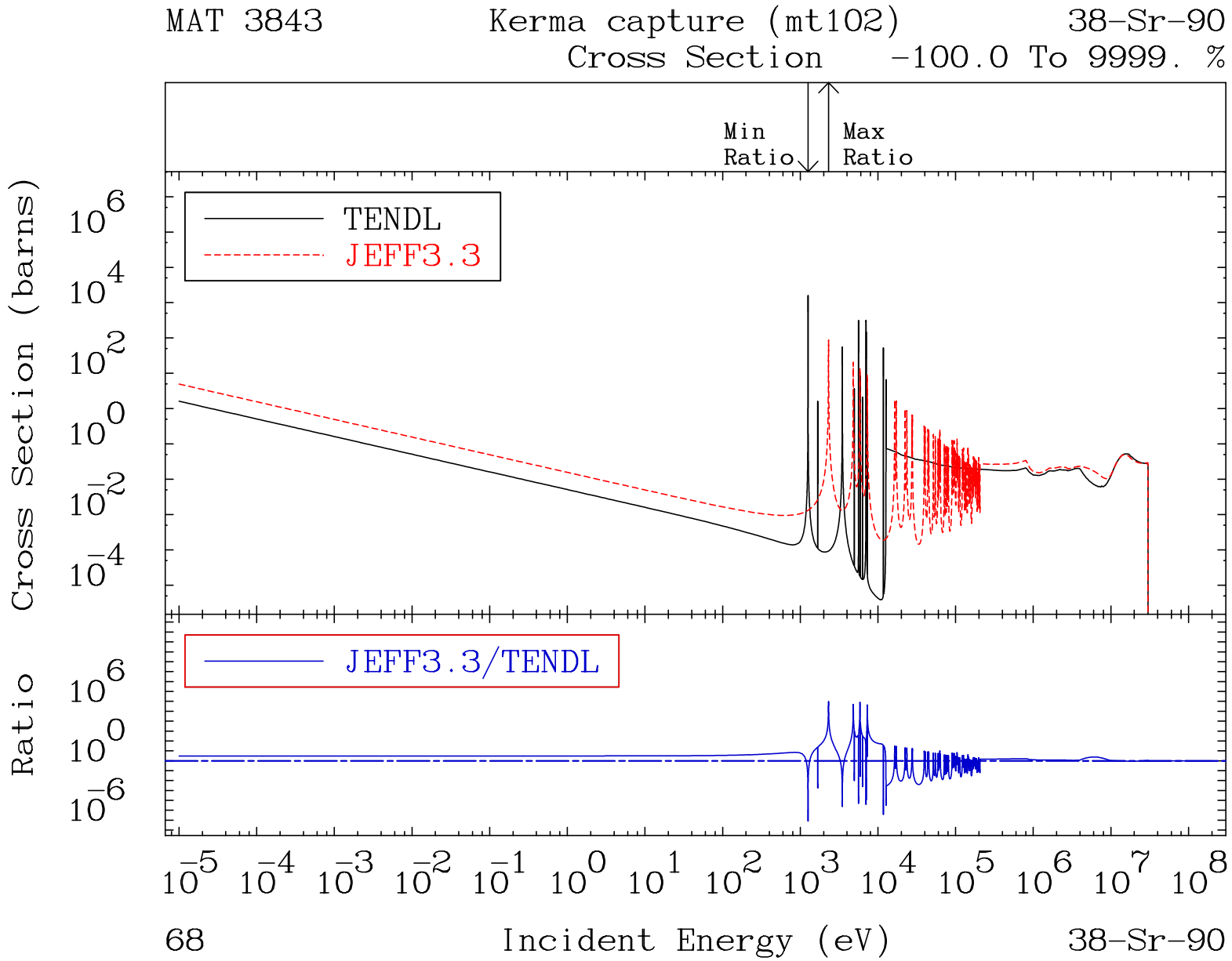

MAT 3843
Kerma total (eV-barns)
38-Sr-90
Cross Section -99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
38-Sr-90

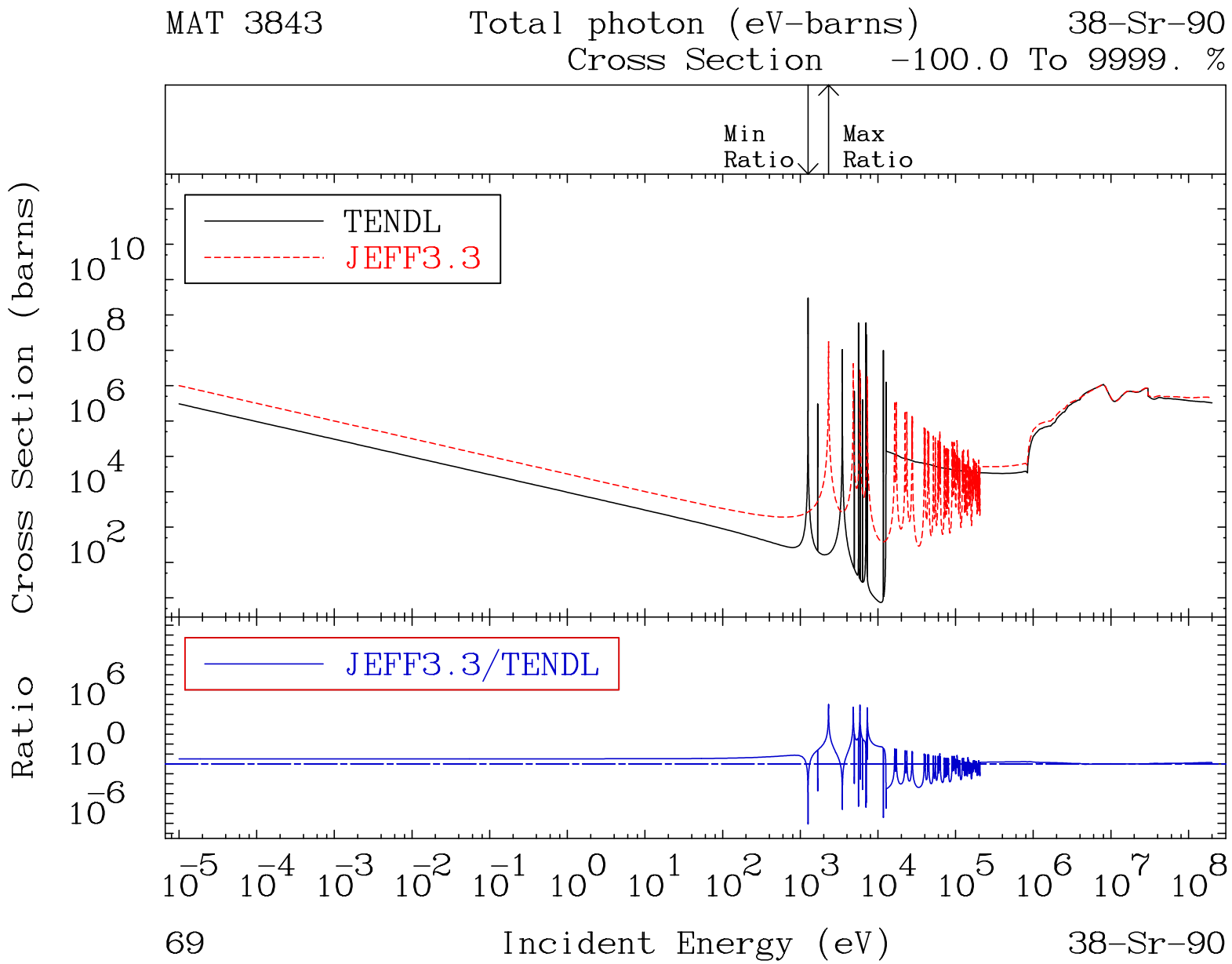

MAT 3843
Kerma elastic
Cross Section
38-Sr-90
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
38-Sr-90

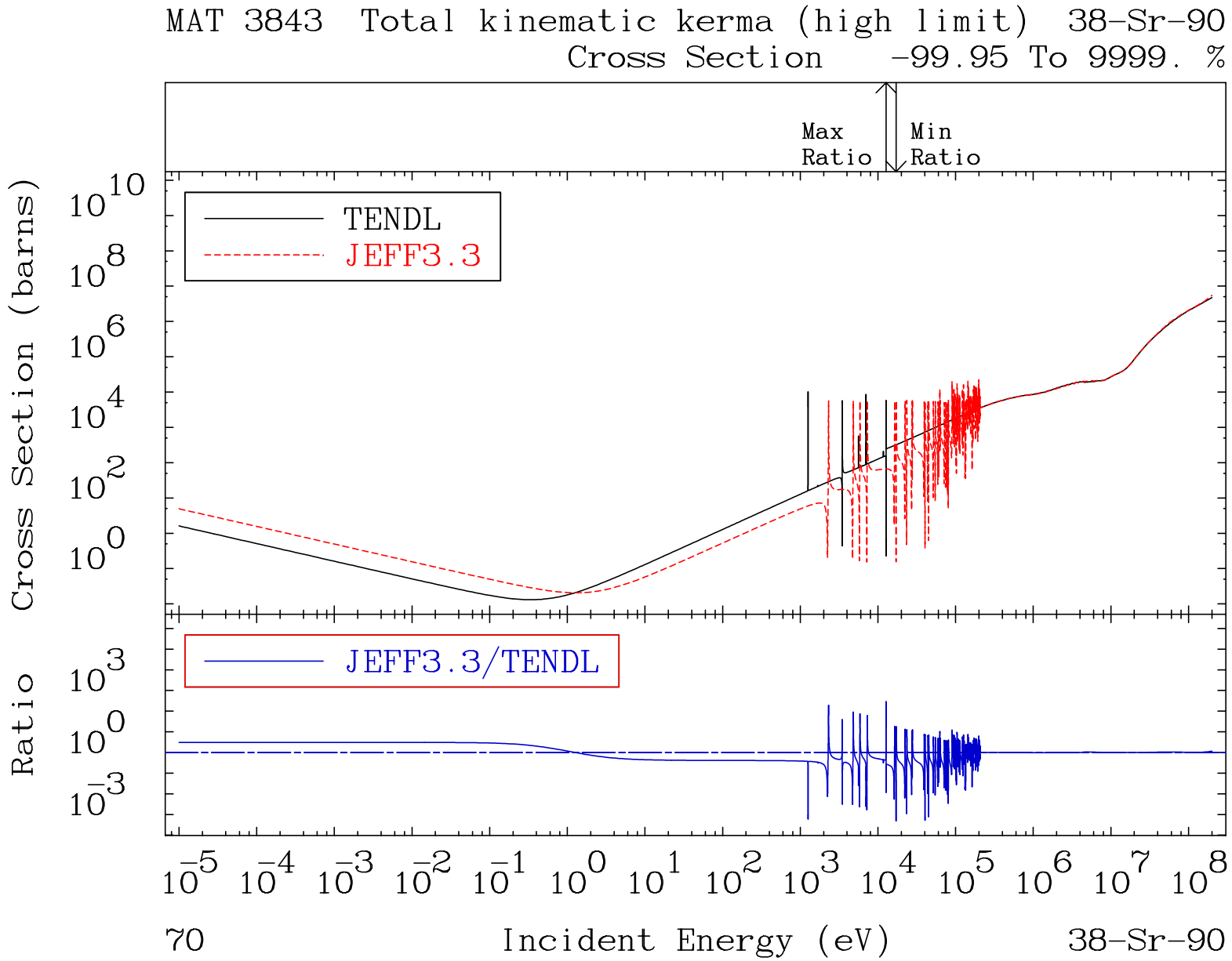

MAT 3843 Kerma non-elastic (all but mt2) 38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
38-Sr-90

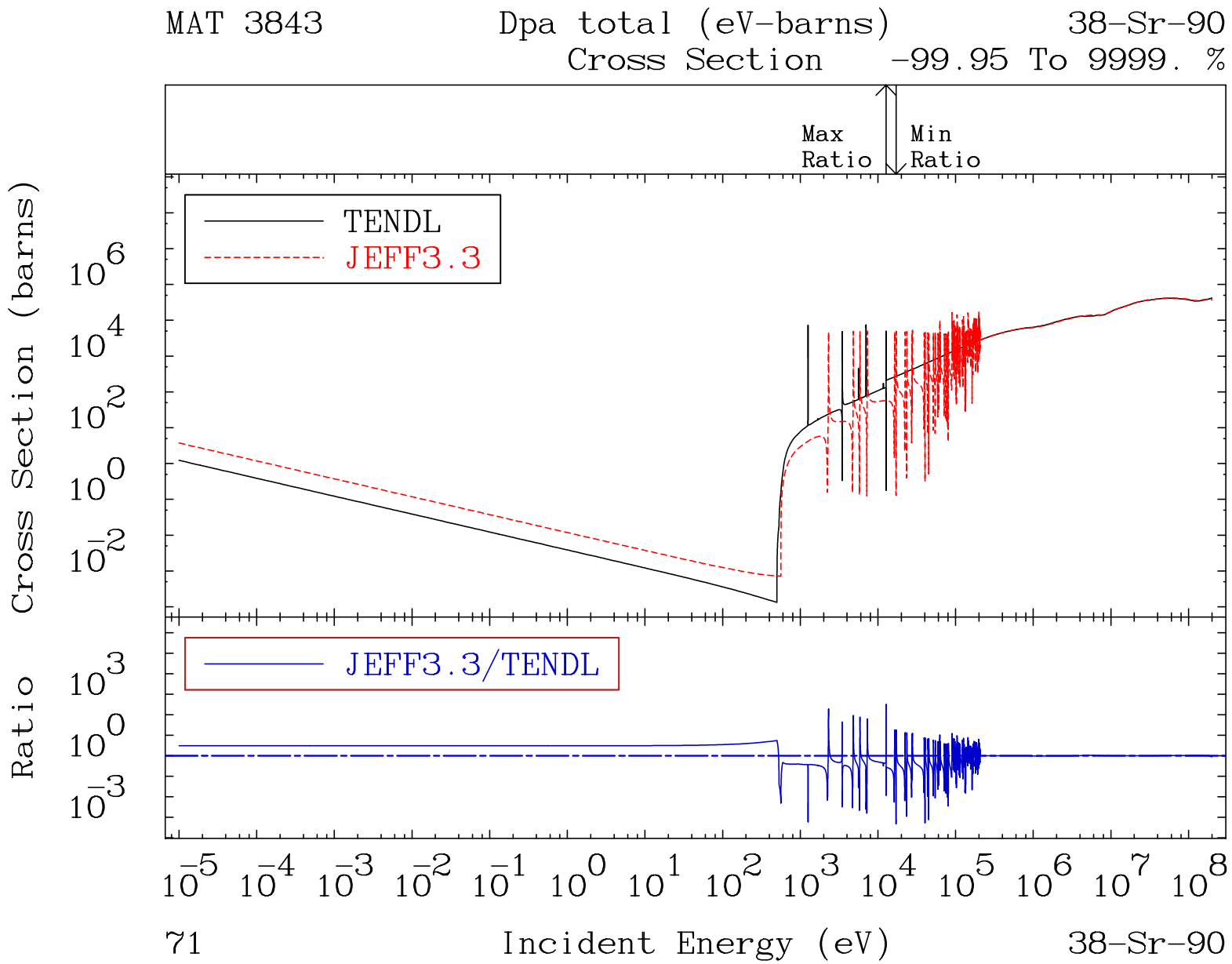

MAT 3843
Kerma inelastic (mt51-91)
38-Sr-90
Cross Section -100.0 To 77.11 %
Max
Ratio
TENDL Threshold 841.01 keV
JEFF3.3 Threshold 841.01 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
38-Sr-90

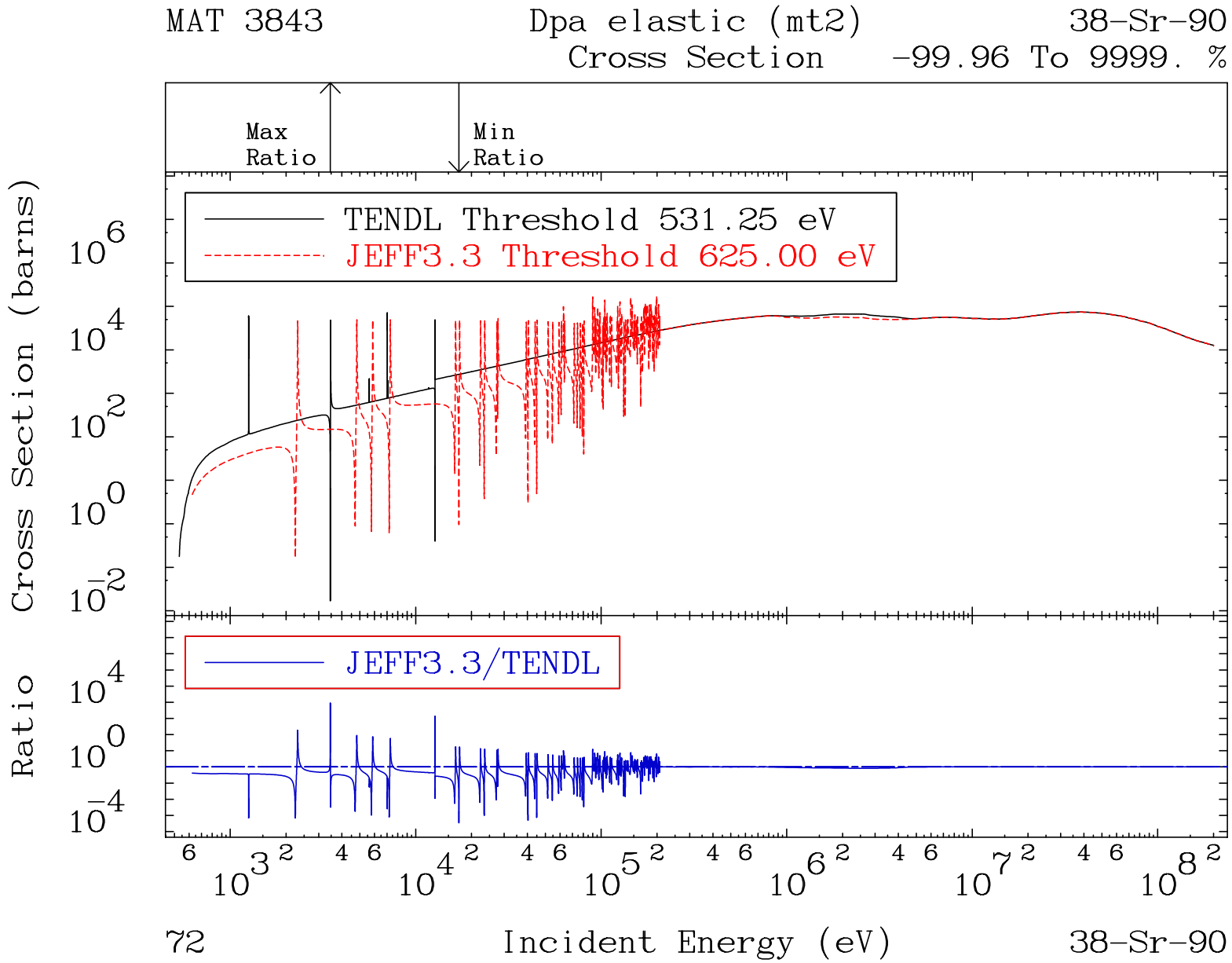

MAT 3843 Kerma fission (mt18 or mt19-20-21-38) 38-Sr-90
Cross Section -100.0 To 77.11 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-3}
10^{-6}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
67
Incident Energy (eV)
38-Sr-90

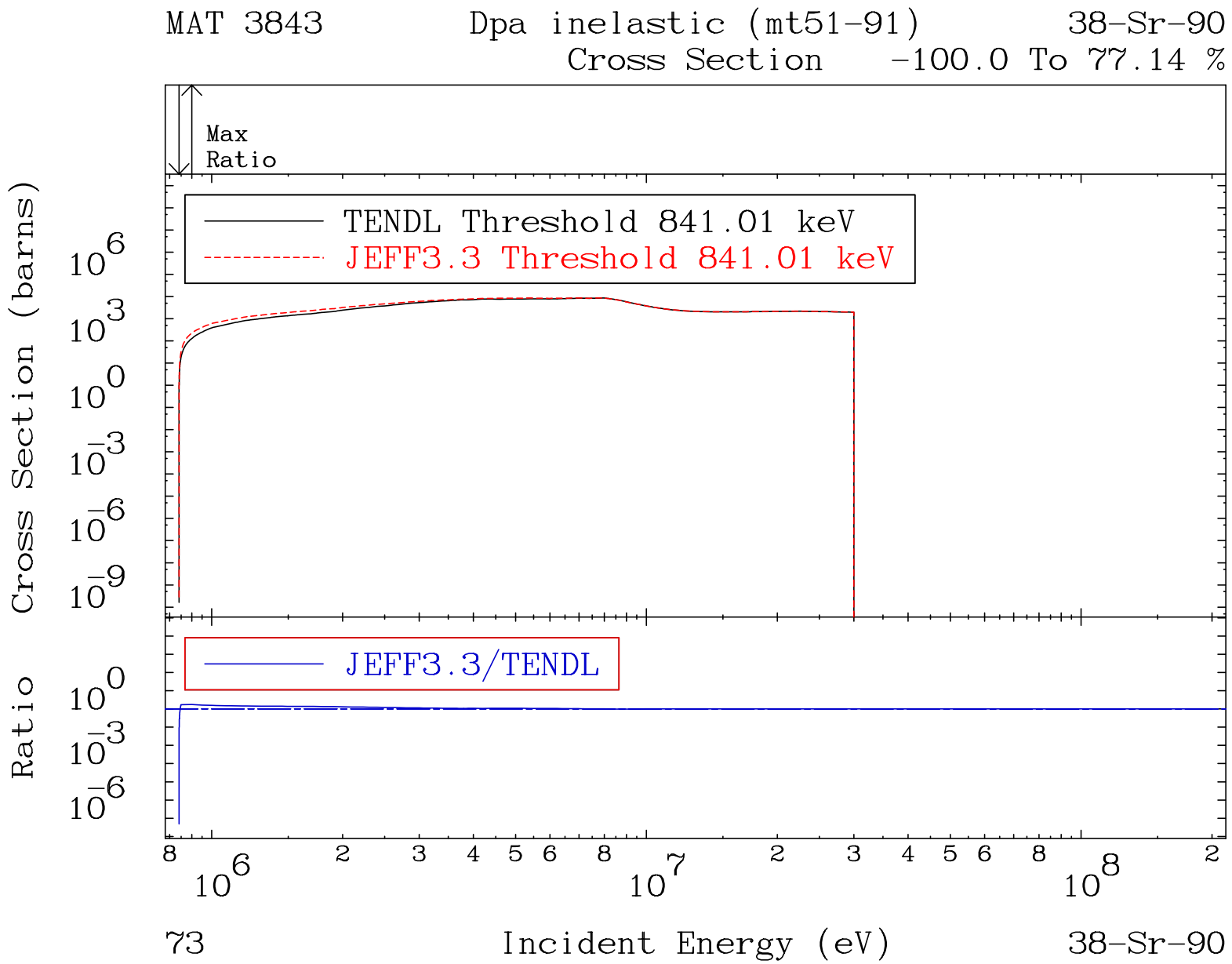

MAT 3843
Kerma capture (mt102)
38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
38-Sr-90

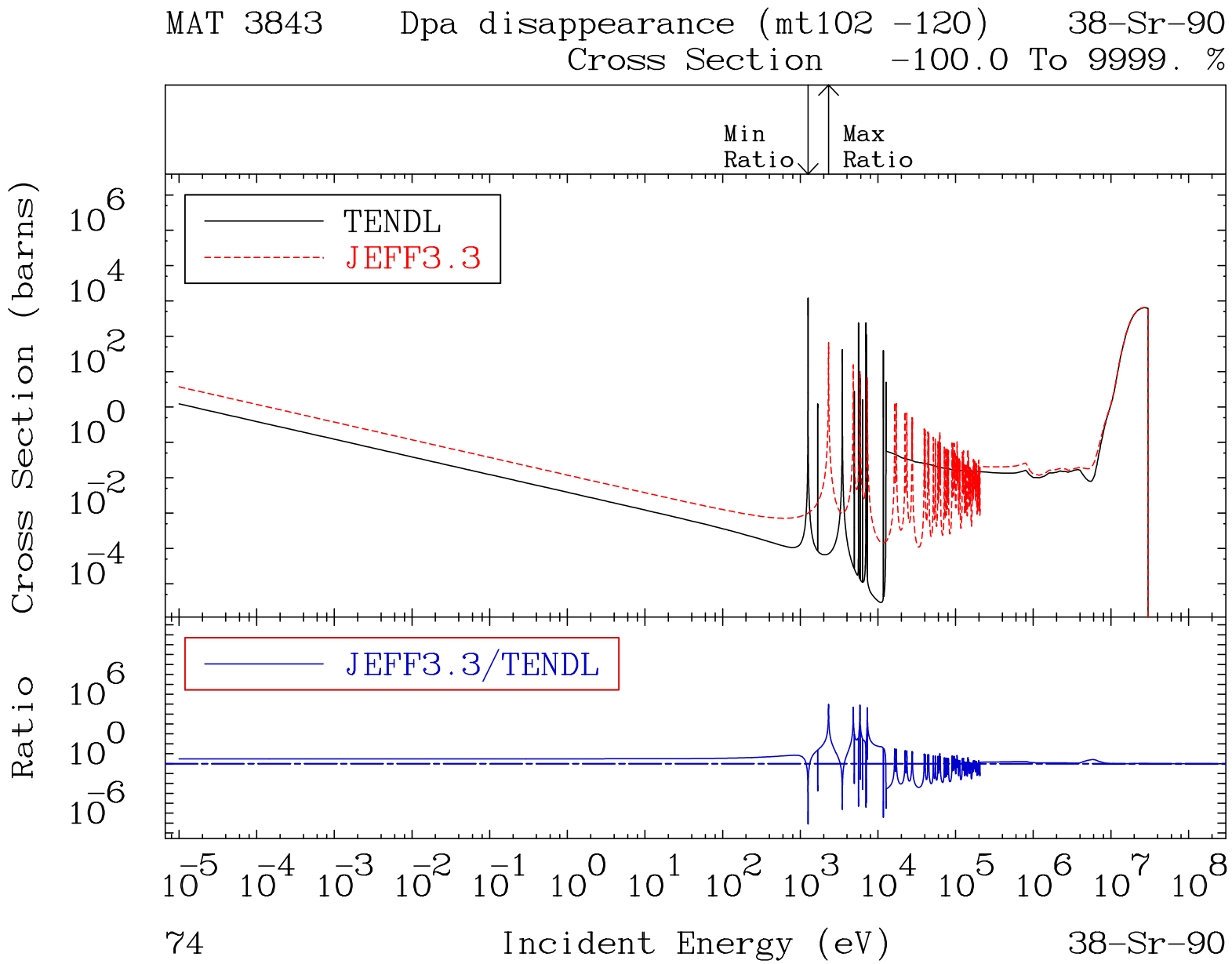

MAT 3843
Total photon (eV-barns)
38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
38-Sr-90

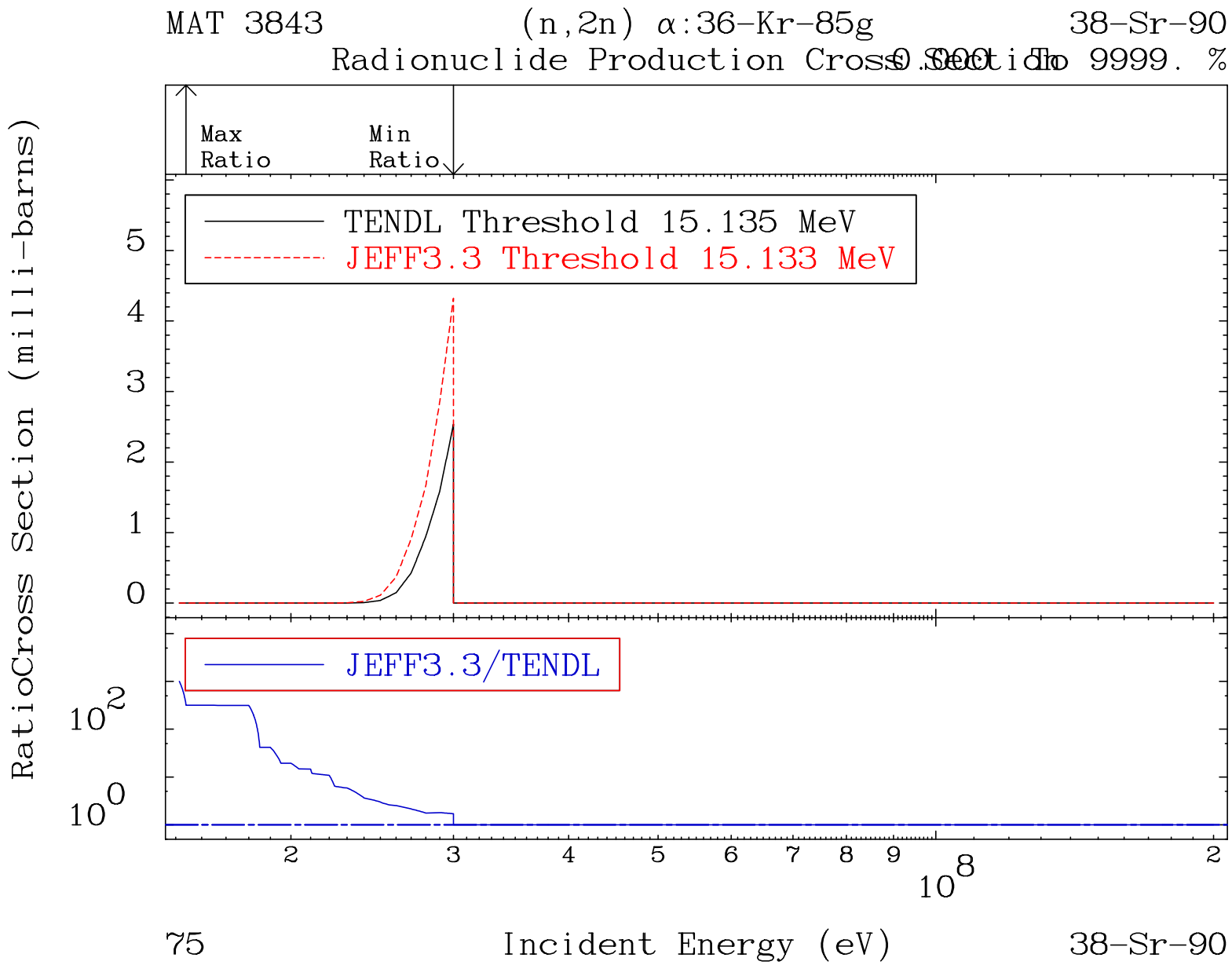

MAT 3843 Total kinematic kerma (high limit) 38-Sr-90
Cross Section -99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
38-Sr-90

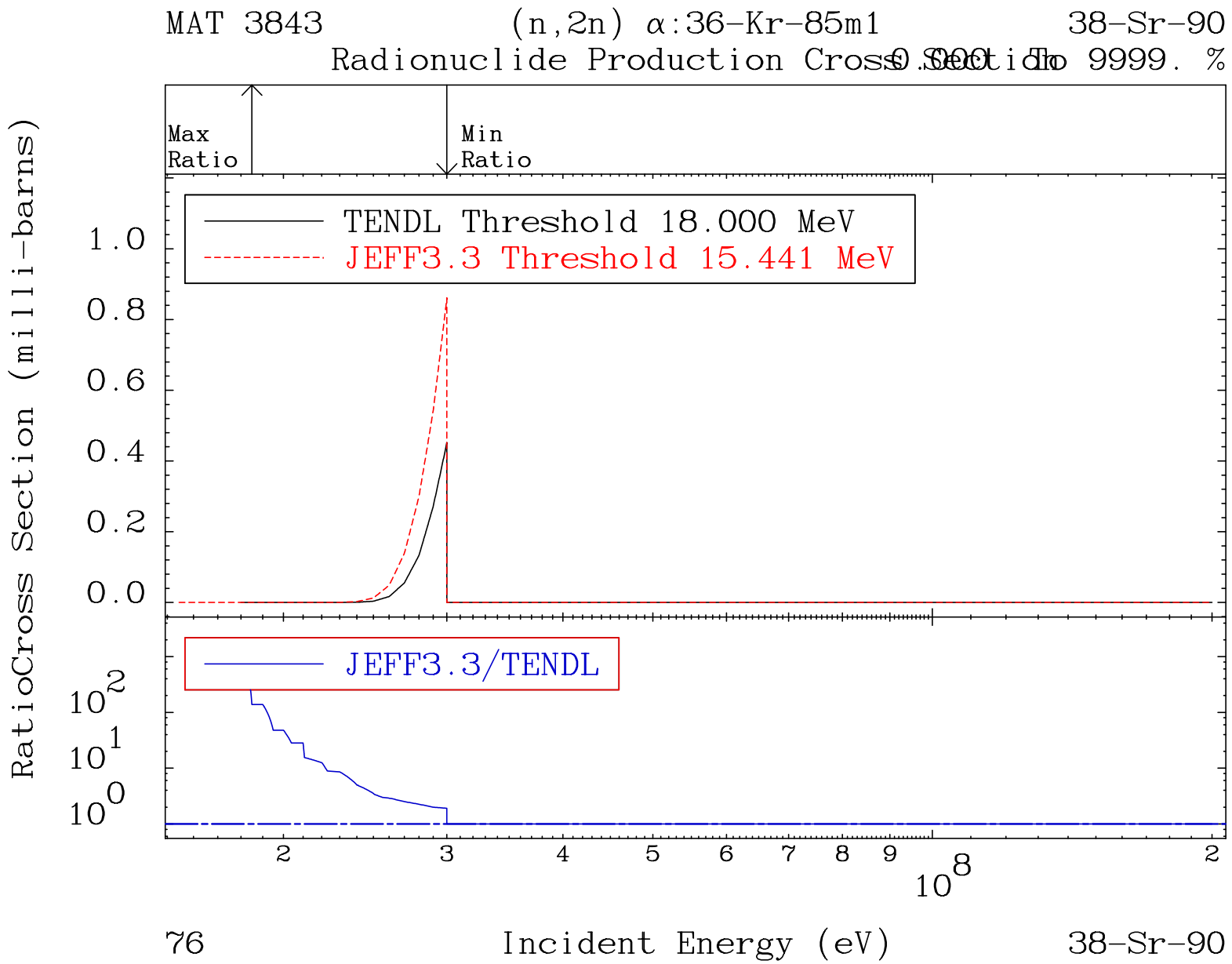

MAT 3843
Dpa total (eV-barns)
38-Sr-90
Cross Section -99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
38-Sr-90

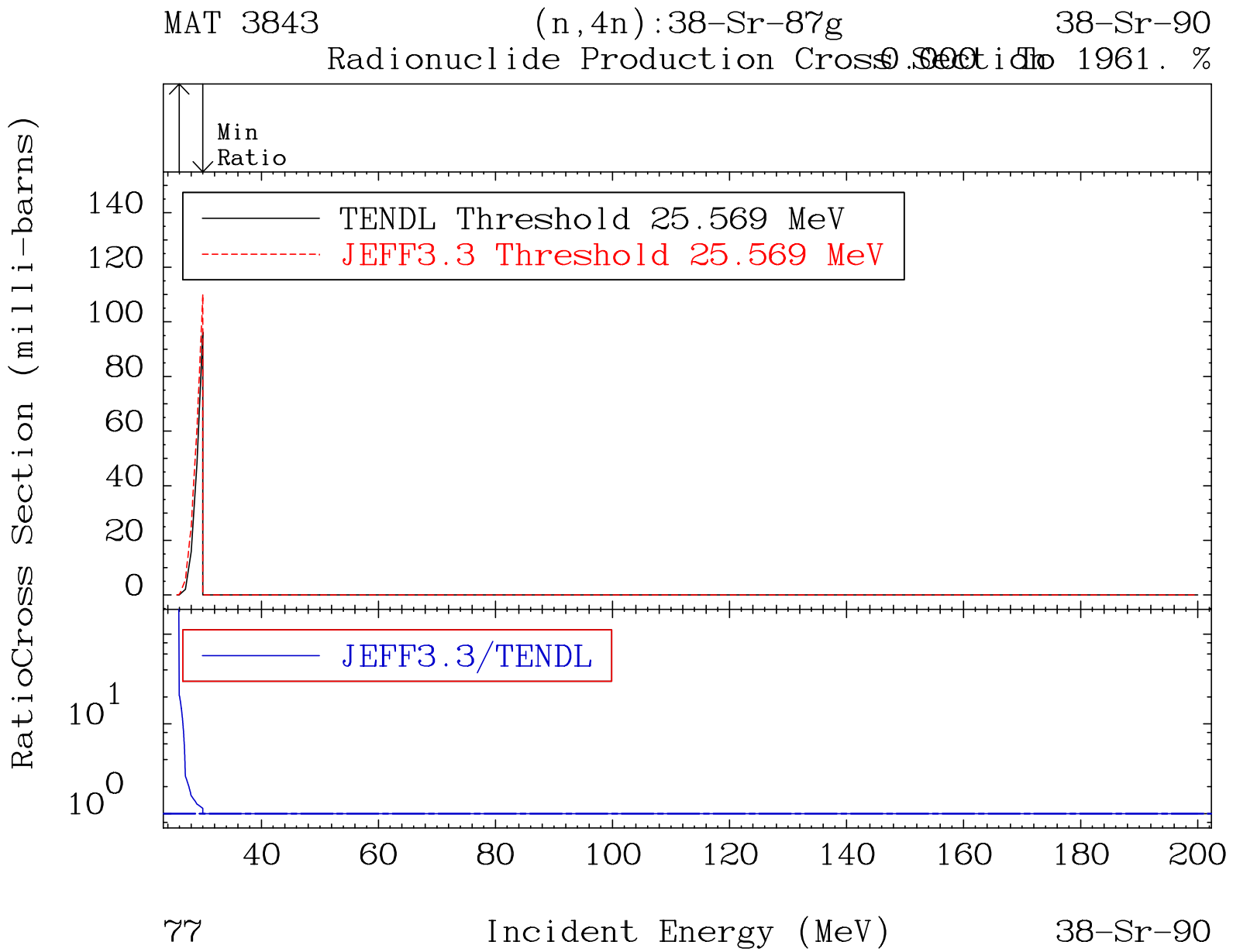

MAT 3843
Dpa elastic (mt2)
Cross Section
38-Sr-90
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 531.25 eV
JEFF3.3 Threshold 625.00 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
38-Sr-90

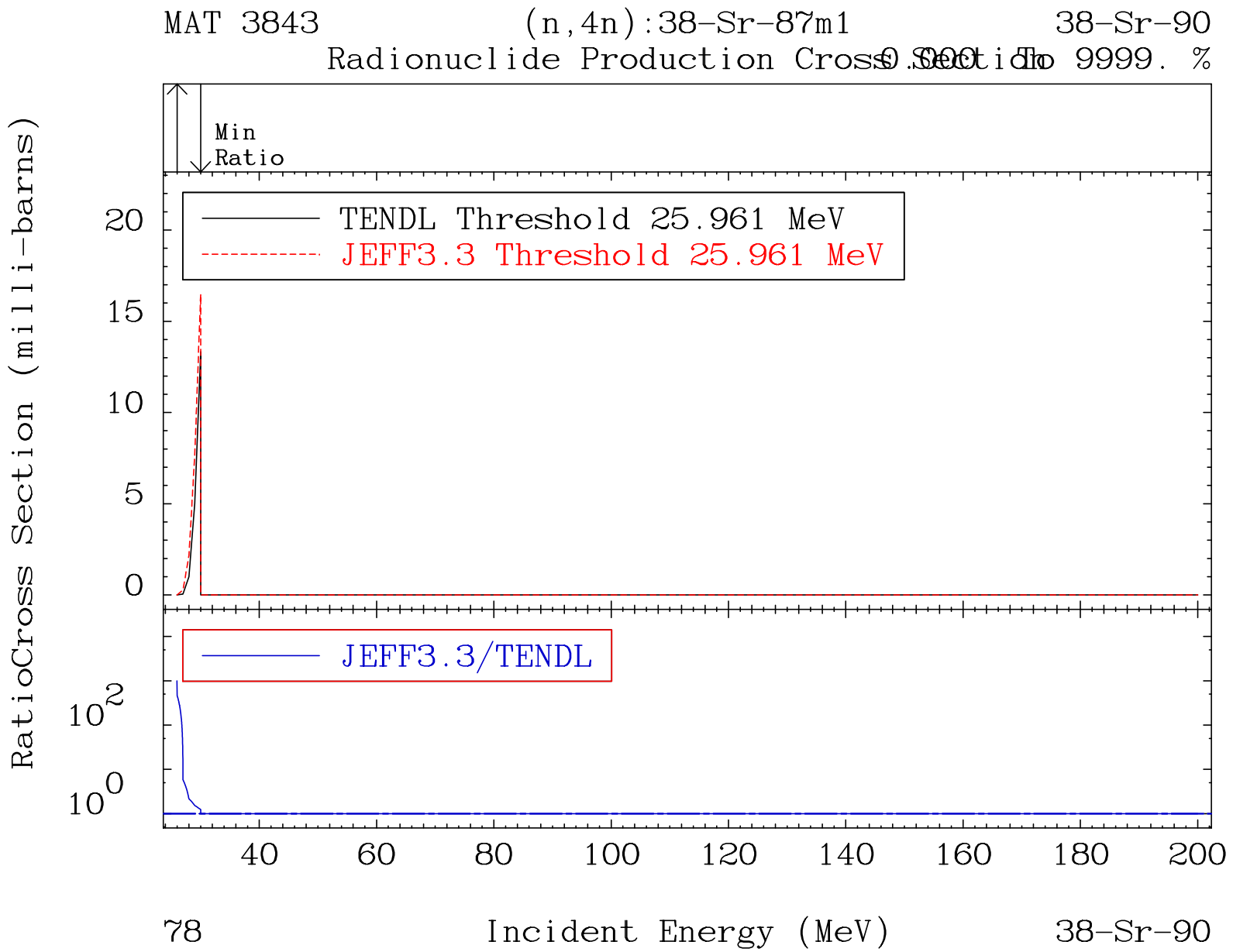

MAT 3843
Dpa inelastic (mt51-91)
38-Sr-90
Cross Section -100.0 To 77.14 %
Max
Ratio
TENDL Threshold 841.01 keV
JEFF3.3 Threshold 841.01 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
38-Sr-90

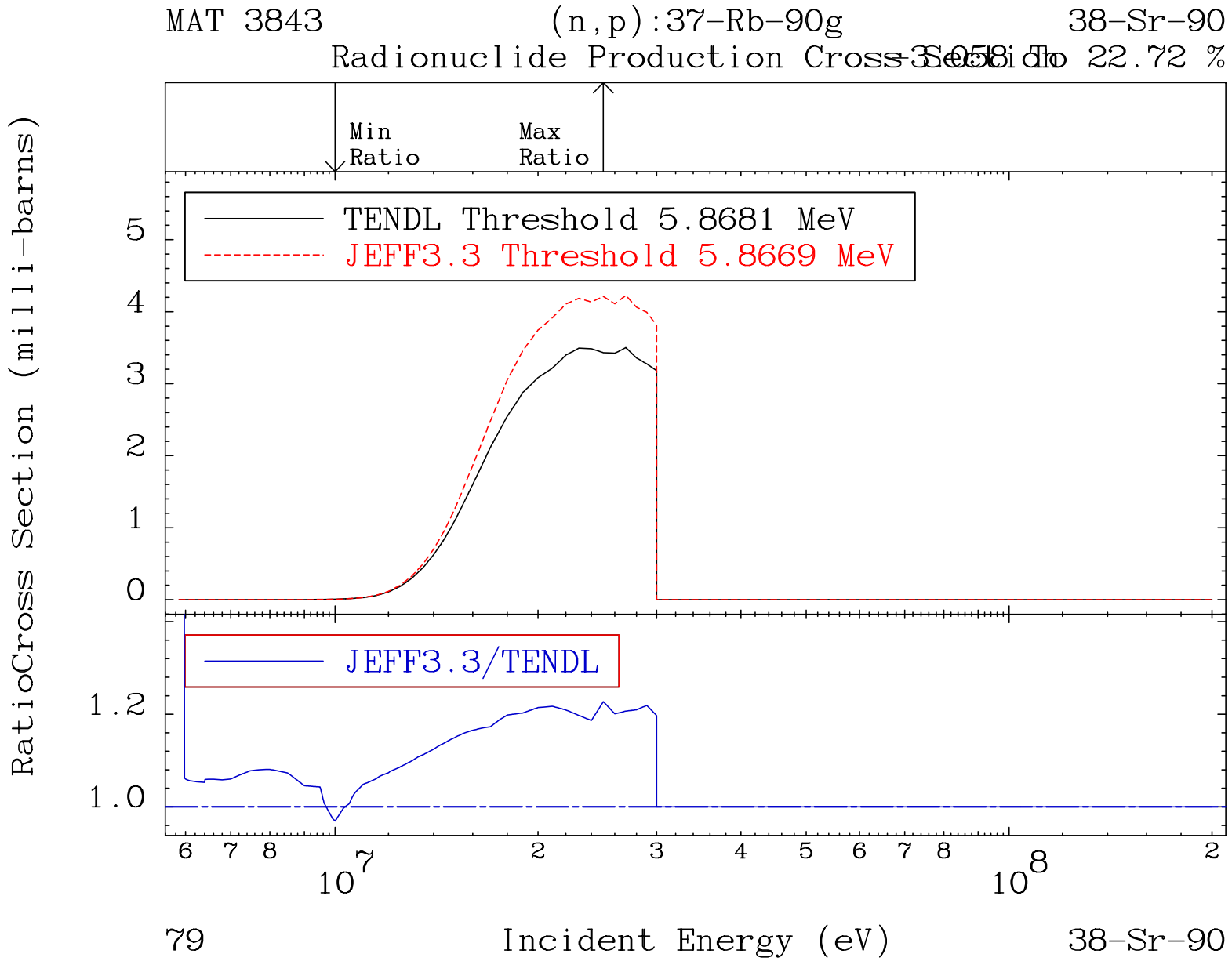

MAT 3843 Dpa disappearance (mt102 -120) 38-Sr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
38-Sr-90

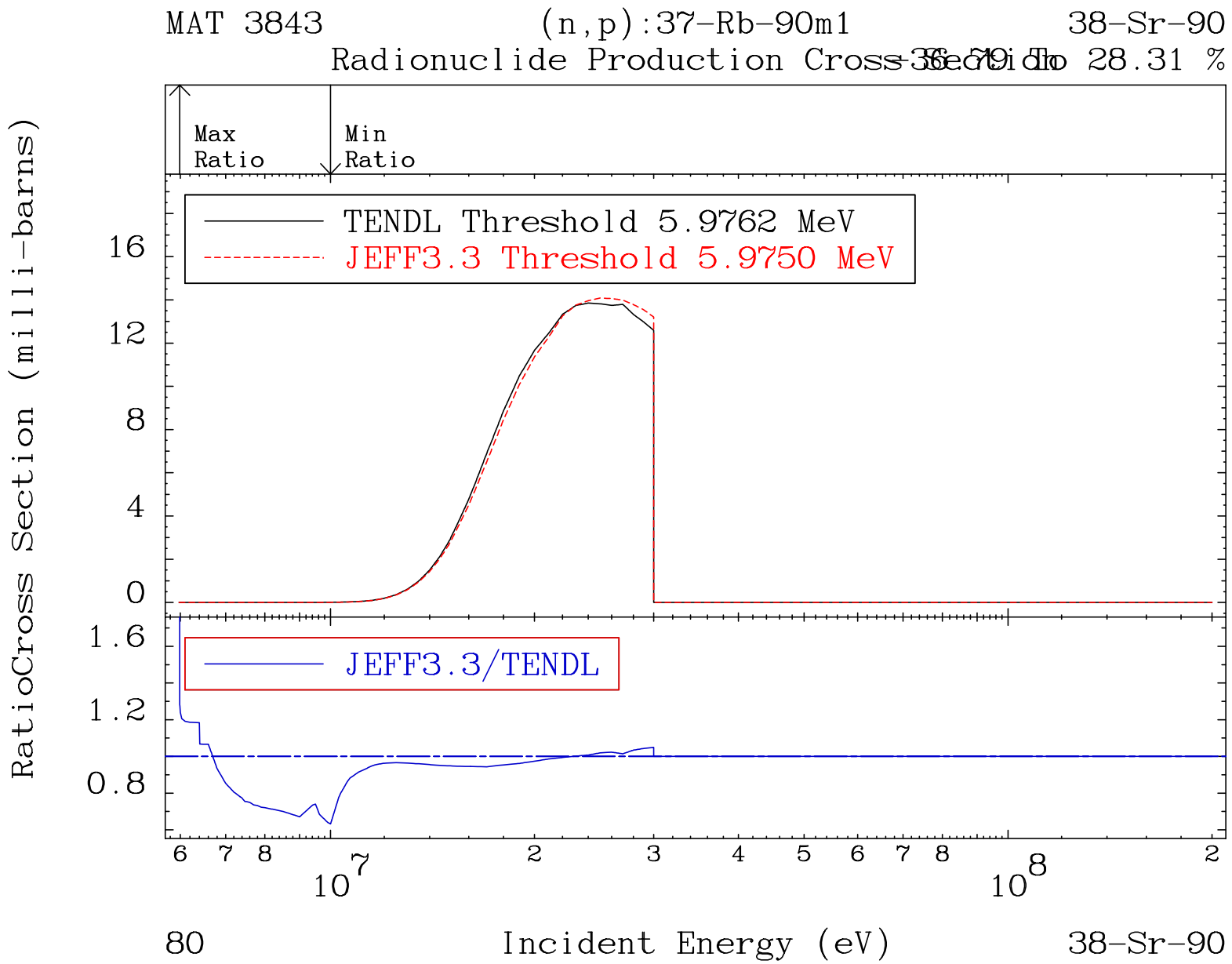

MAT 3843
(n,2n) α:36-Kr-85g
38-Sr-90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 15.135 MeV
JEFF3.3 Threshold 15.133 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
5
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
38-Sr-90

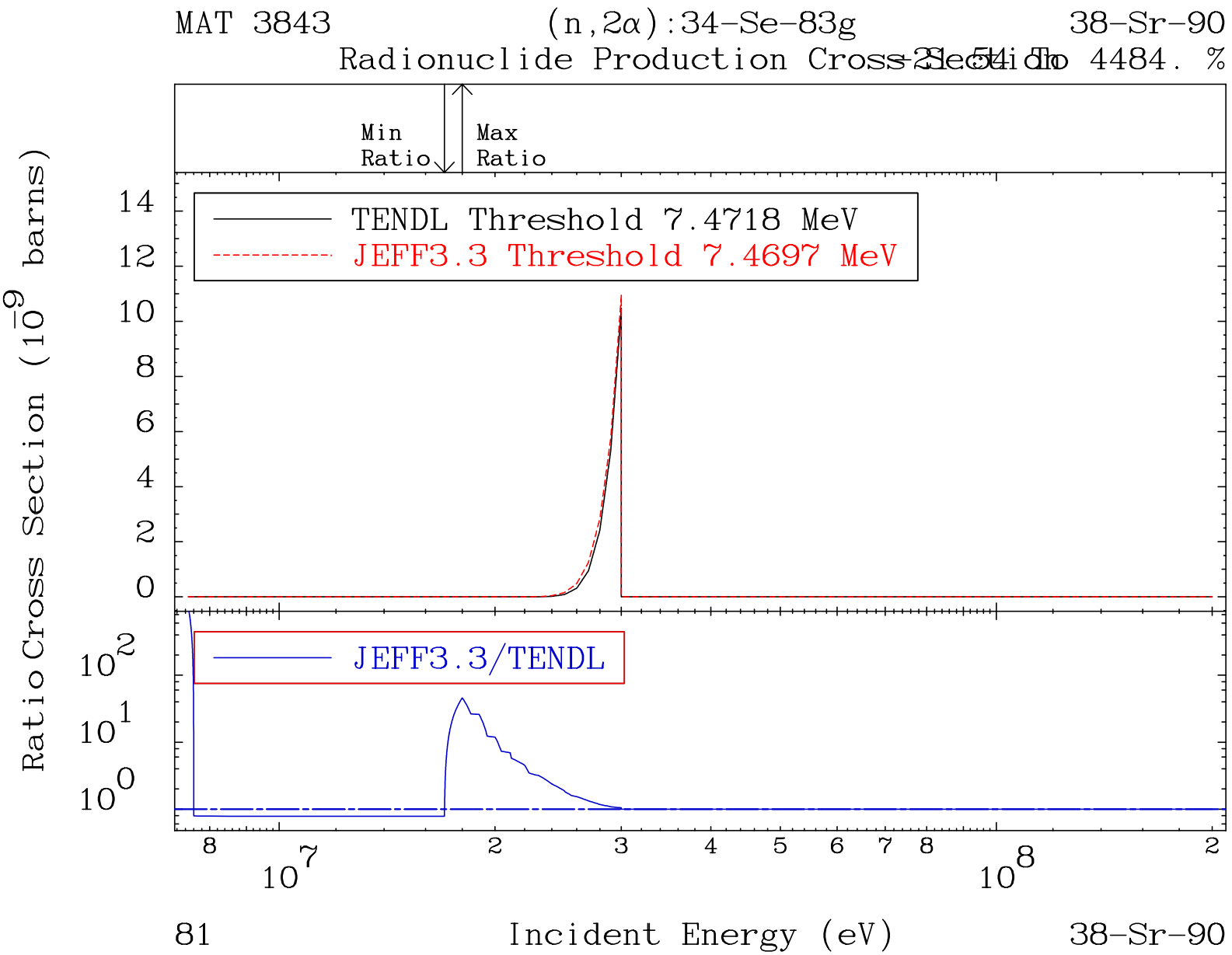

MAT 3843
(n,2n) α:36-Kr-85m1
38-Sr-90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 15.441 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
38-Sr-90

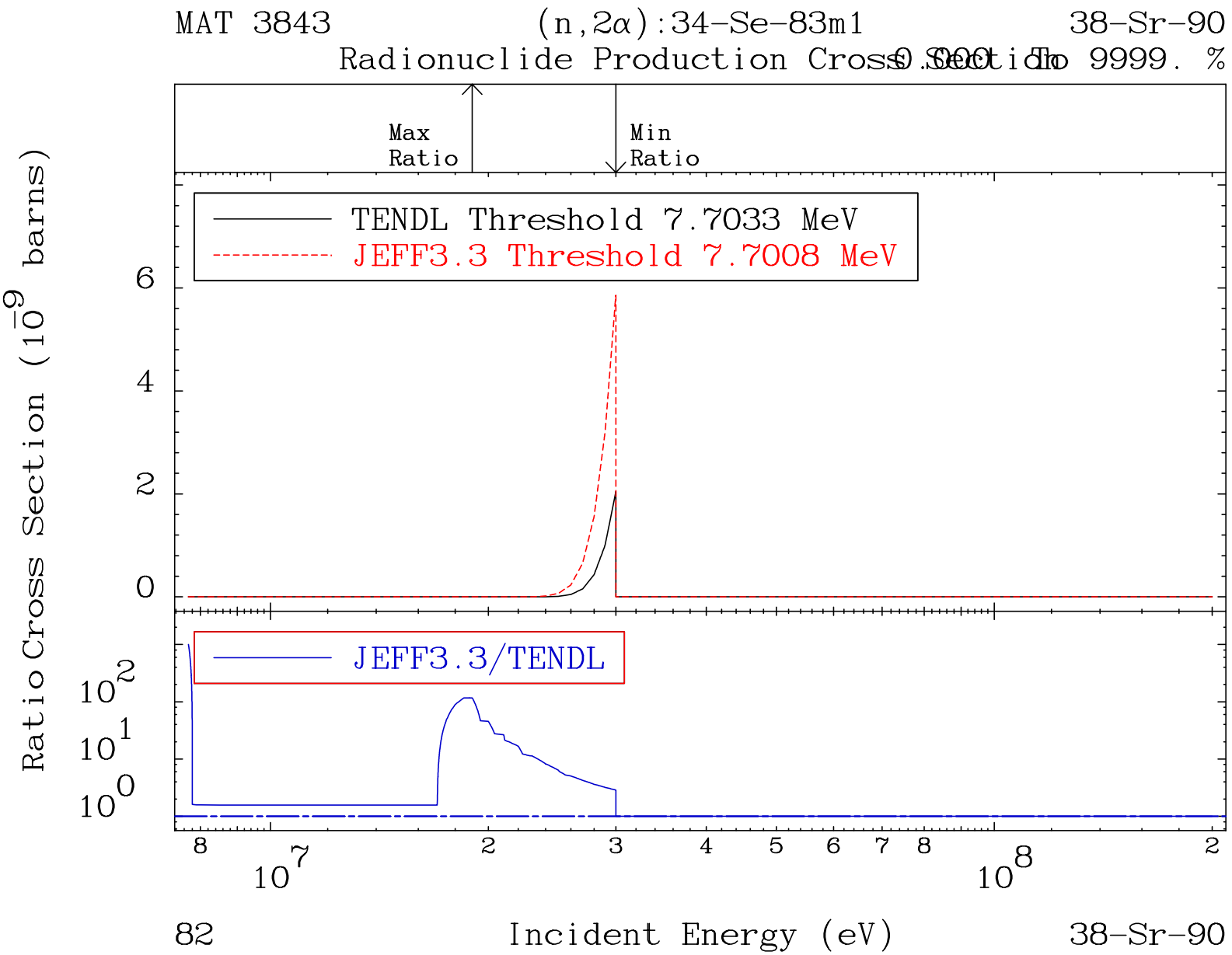

MAT 3843
(n,4n):38-Sr-87g
38-Sr-90
Radionuclide Production Cross Section To 1961. %
Min
Ratio
TENDL Threshold 25.569 MeV
JEFF3.3 Threshold 25.569 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^1
10^0
40
60
80
100
120
140
160
180
200
77
Incident Energy (MeV)
38-Sr-90


MAT 3843
(n,4n):38-Sr-87m1
38-Sr-90
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.961 MeV
JEFF3.3 Threshold 25.961 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
10^2
10^0
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
38-Sr-90


MAT 3843
(n,p):37-Rb-90g
38-Sr-90
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 5.8681 MeV
JEFF3.3 Threshold 5.8669 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
79
38-Sr-90


MAT 3843
(n,p):37-Rb-90m1
38-Sr-90
Radionuclide Production Cross-Section
Max Ratio
Min Ratio
TENDL Threshold 5.9762 MeV
JEFF3.3 Threshold 5.9750 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.6
1.2
0.8
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
80
Incident Energy (eV)
38-Sr-90


MAT 3843
(n,2α):34-Se-83g
38-Sr-90
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 7.4718 MeV
JEFF3.3 Threshold 7.4697 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
81
38-Sr-90


MAT 3843
(n,2α):34-Se-83m1
38-Sr-90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.7033 MeV
JEFF3.3 Threshold 7.7008 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
0
2
4
6
10^0
10^1
10^2
8
2
3
4
5
6
7
8
2
10^7
10^8
82
Incident Energy (eV)
38-Sr-90