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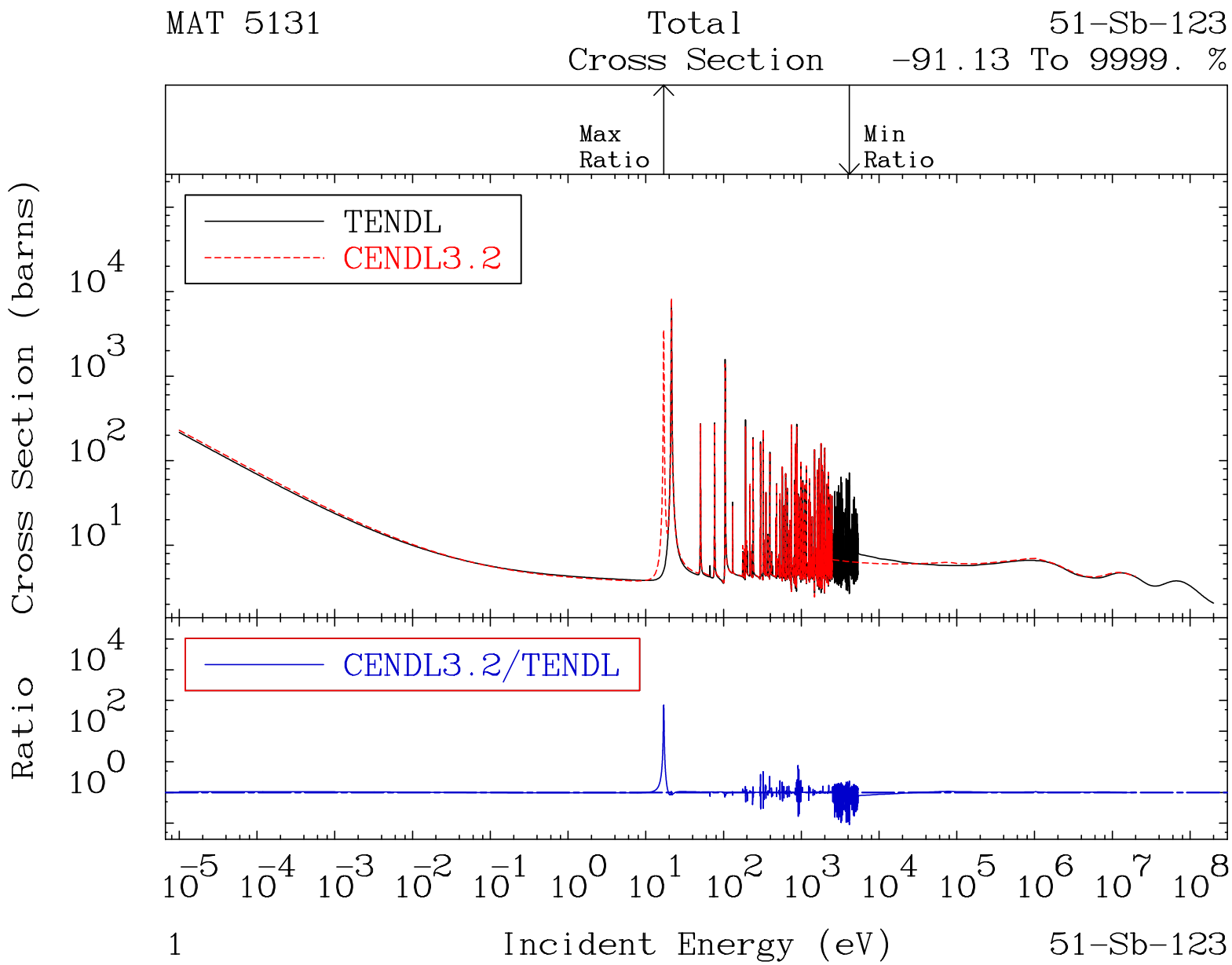
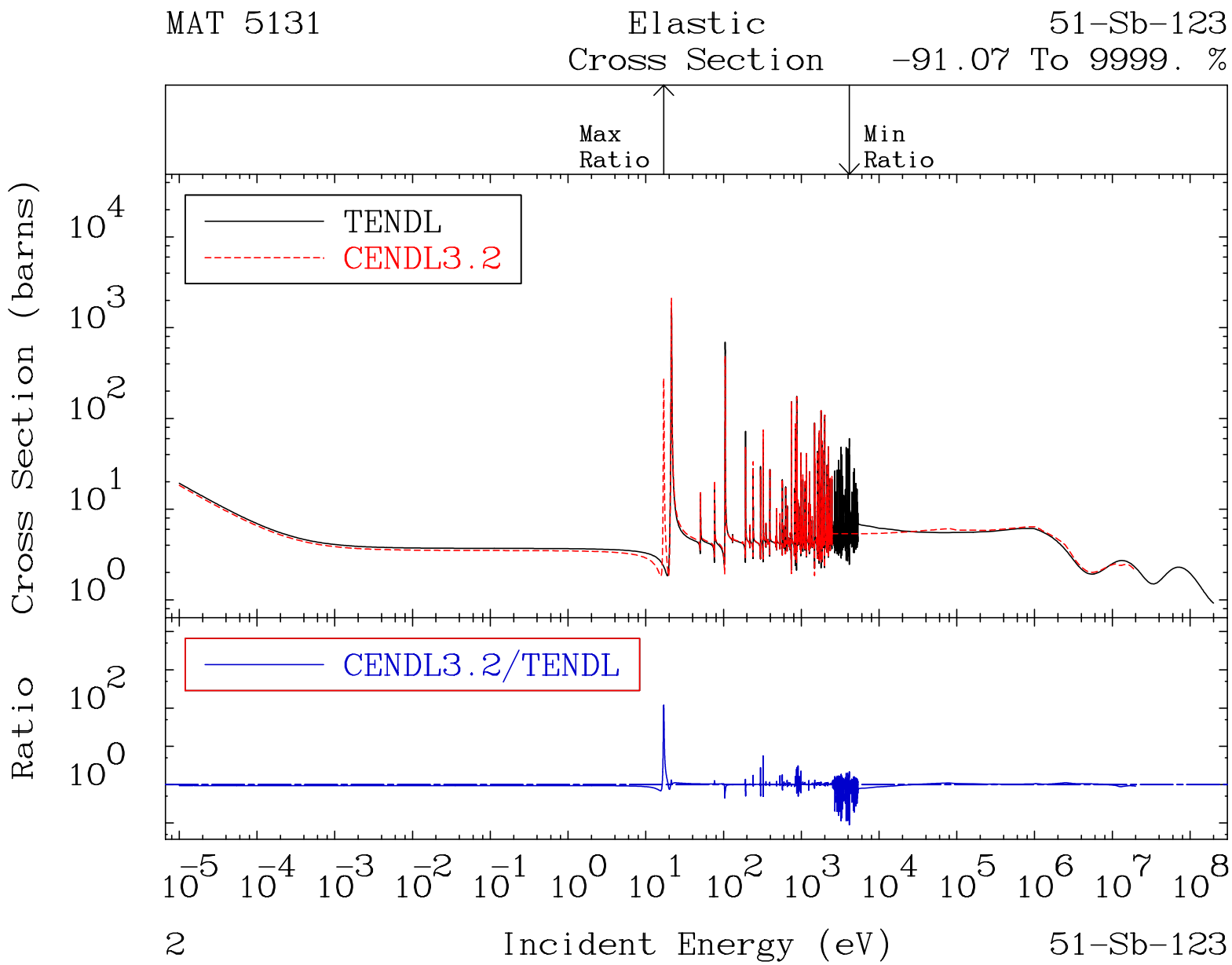
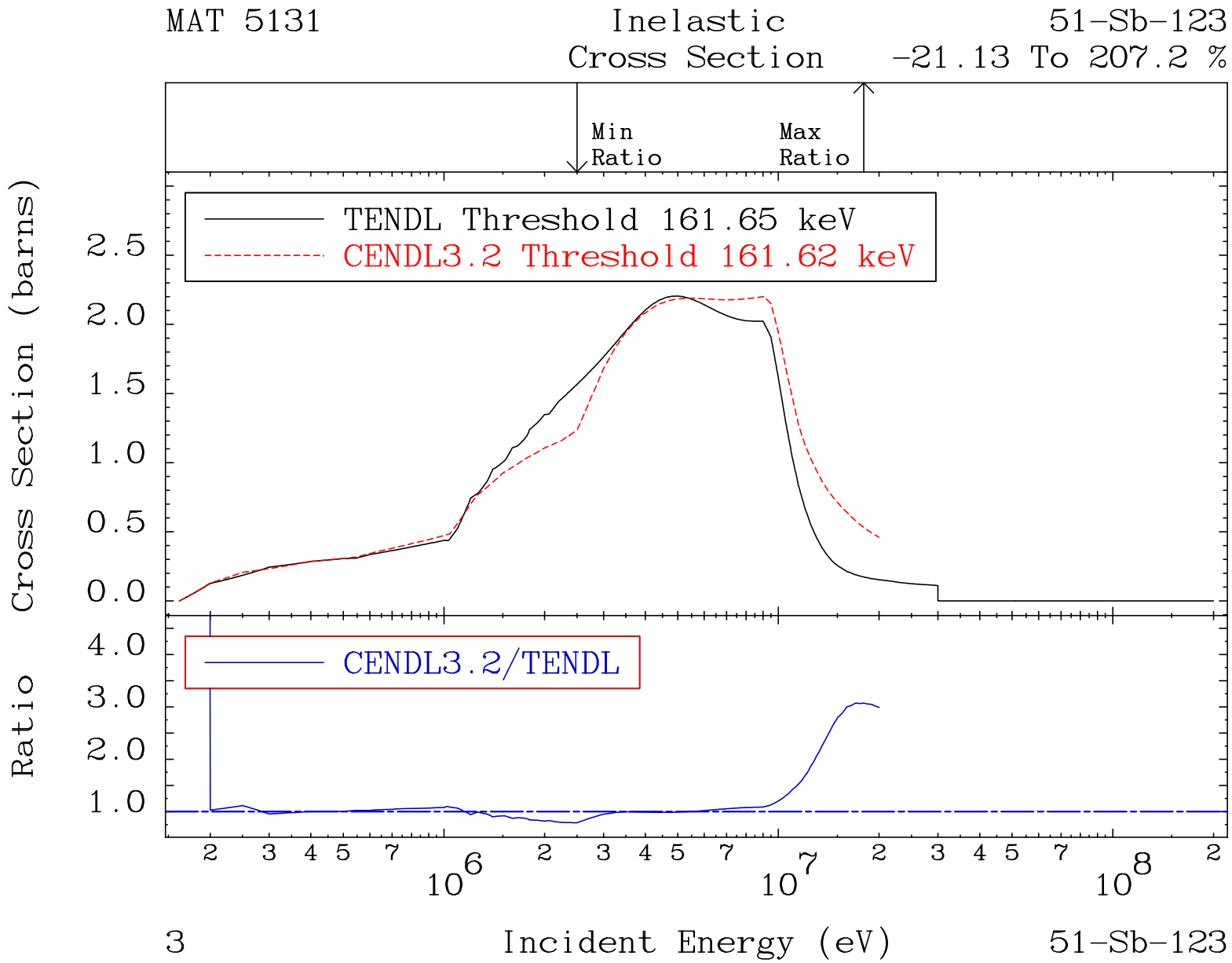
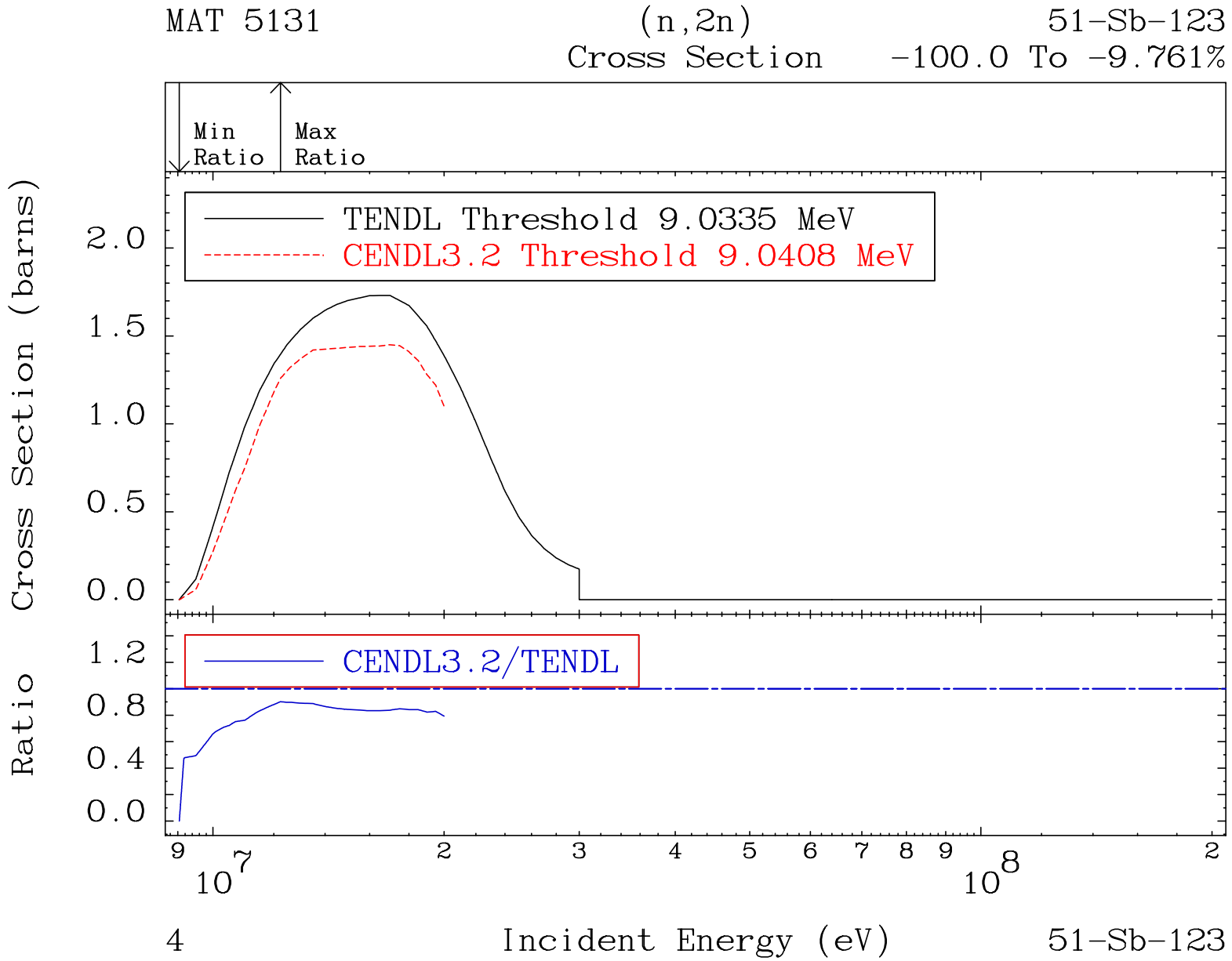
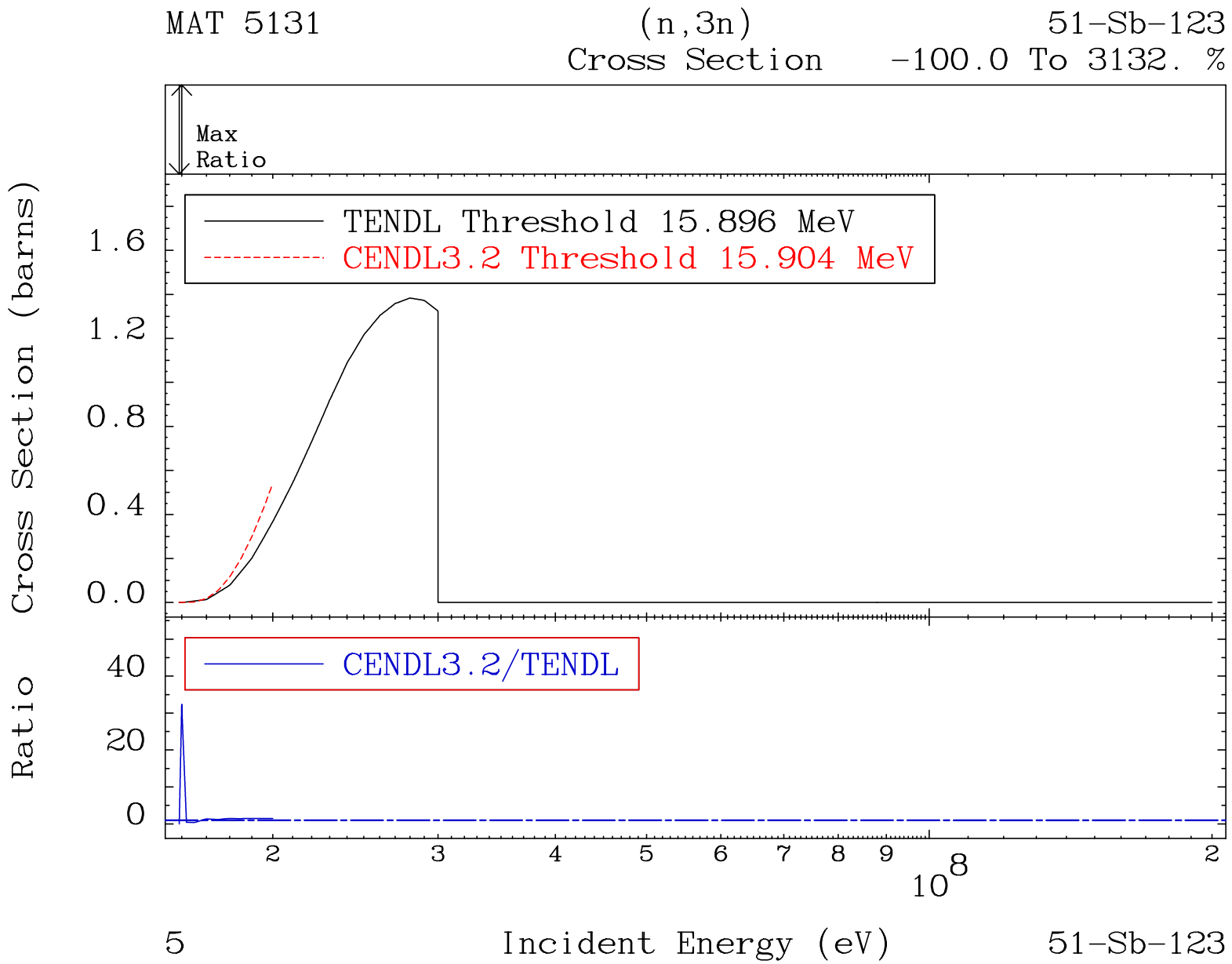
Press Mouse Button to Start

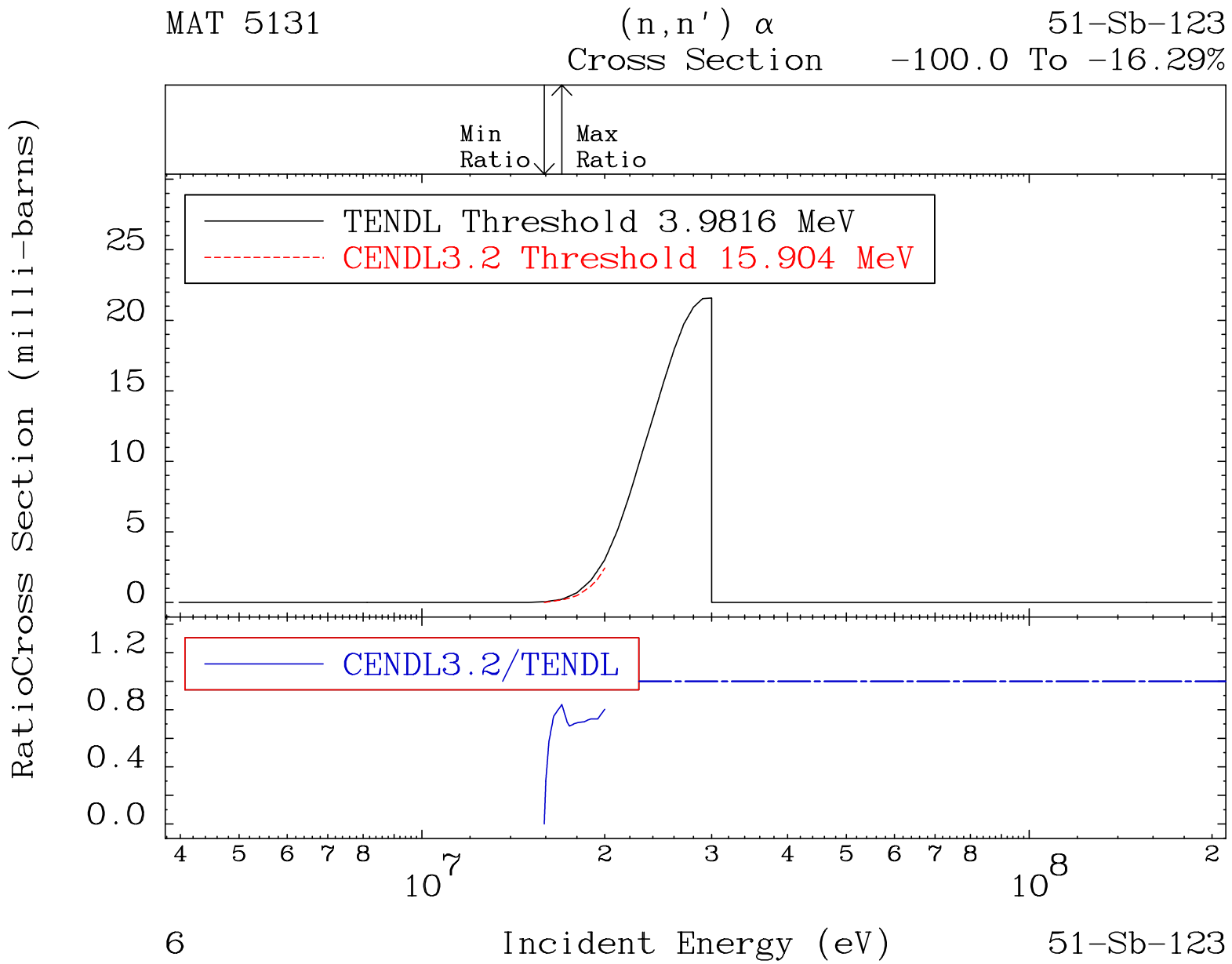

MAT 5131
Total
Cross Section
51-Sb-123
-91.13 To 9999. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
51-Sb-123

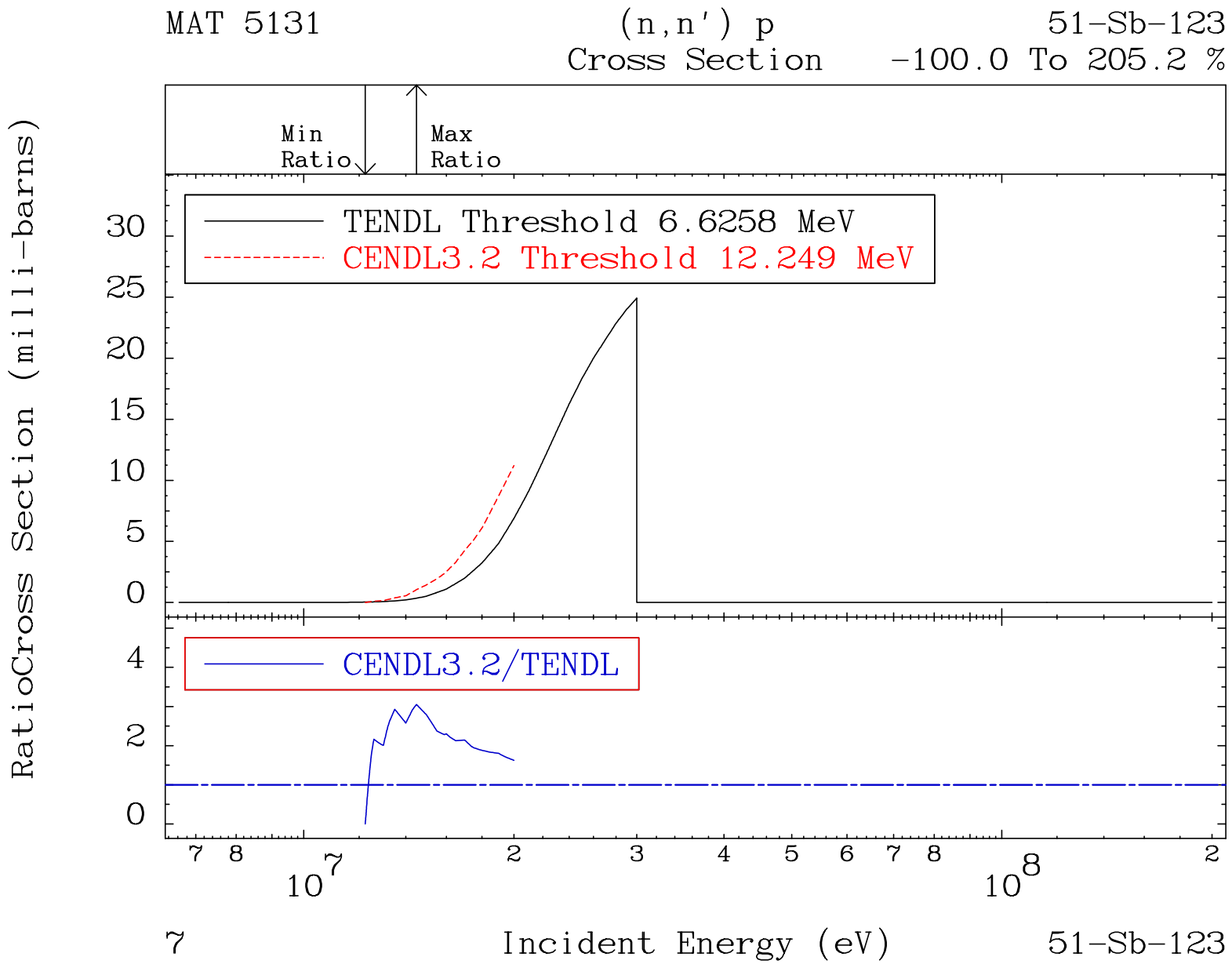

MAT 5131
Elastic
Cross Section
51-Sb-123
-91.07 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
51-Sb-123

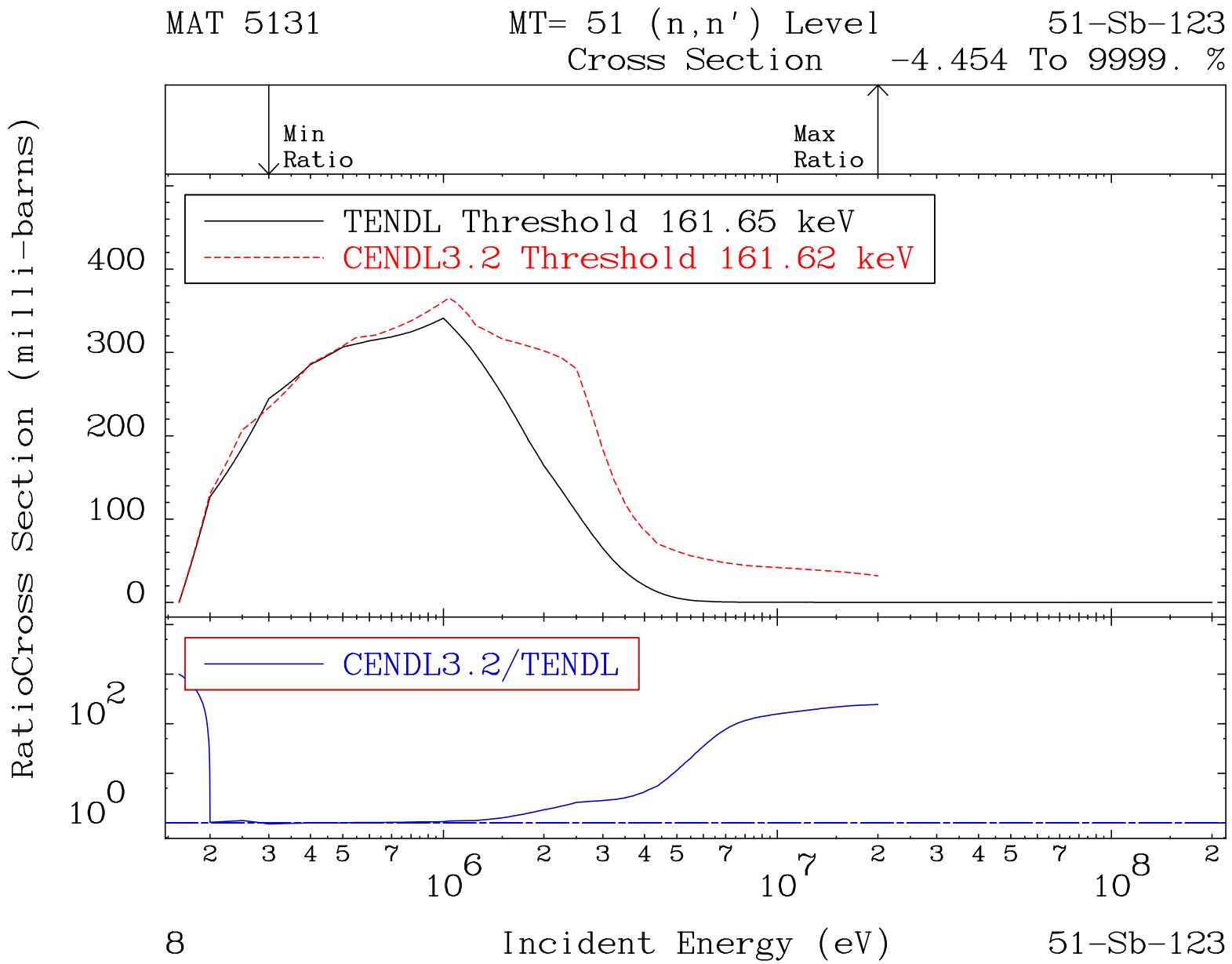

MAT 5131
Inelastic
Cross Section
51-Sb-123
-21.13 To 207.2 %
Min
Ratio
Max
Ratio
TENDL Threshold 161.65 keV
CENDL3.2 Threshold 161.62 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
51-Sb-123

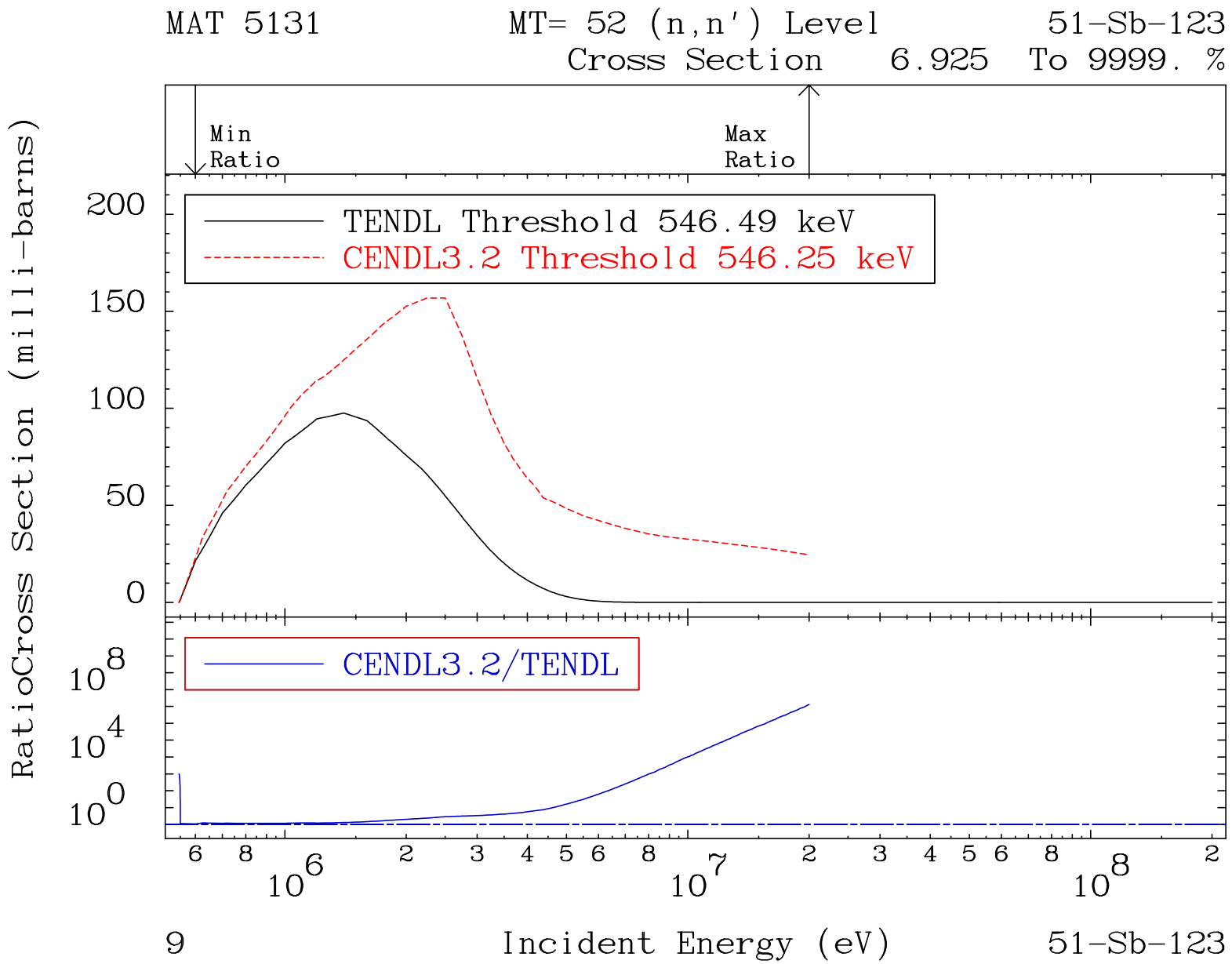

MAT 5131
(n,2n)
Cross Section
51-Sb-123
-100.0 To -9.761%
Min Ratio
Max Ratio
TENDL Threshold 9.0335 MeV
CENDL3.2 Threshold 9.0408 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.2
0.8
0.4
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
51-Sb-123

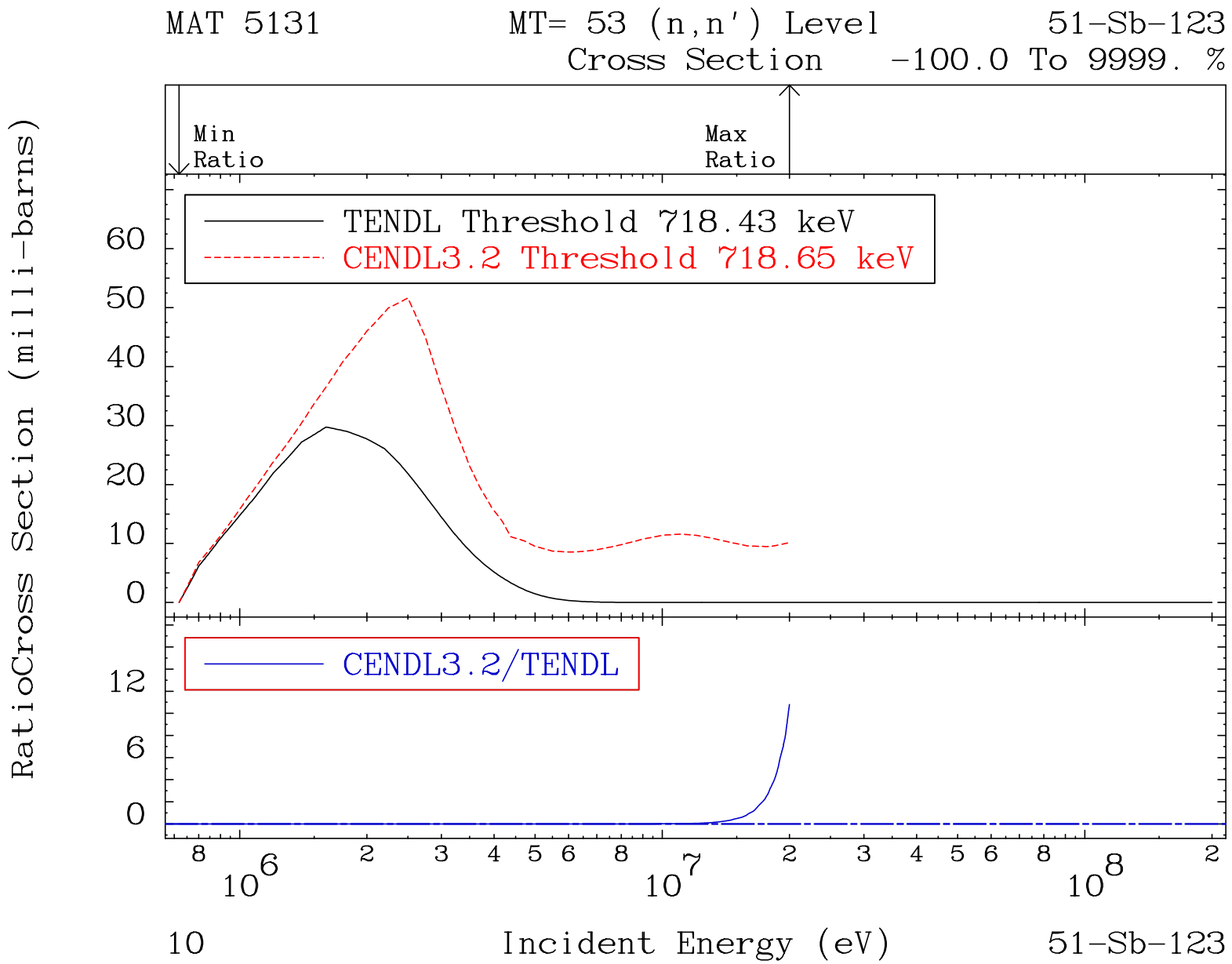

MAT 5131
(n,3n)
Cross Section
51-Sb-123
-100.0 To 3132. %
Max
Ratio
TENDL Threshold 15.896 MeV
CENDL3.2 Threshold 15.904 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
CENDL3.2/TENDL
Ratio
40
20
0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
51-Sb-123

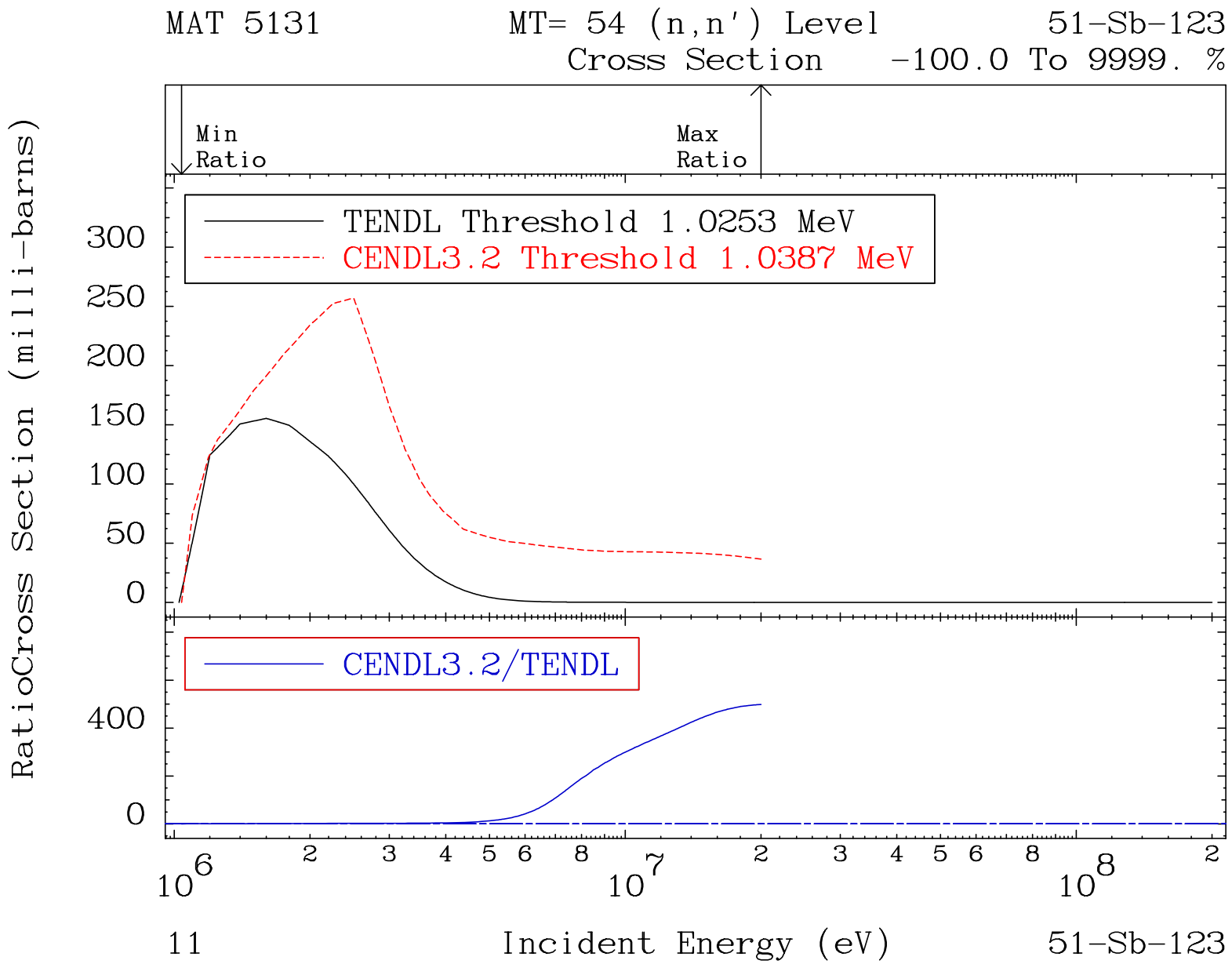

MAT 5131
(n,n') α
Cross Section
51-Sb-123
-100.0 To -16.29%
Min Ratio
Max Ratio
TENDL Threshold 3.9816 MeV
CENDL3.2 Threshold 15.904 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.2
0.8
0.4
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
6
51-Sb-123

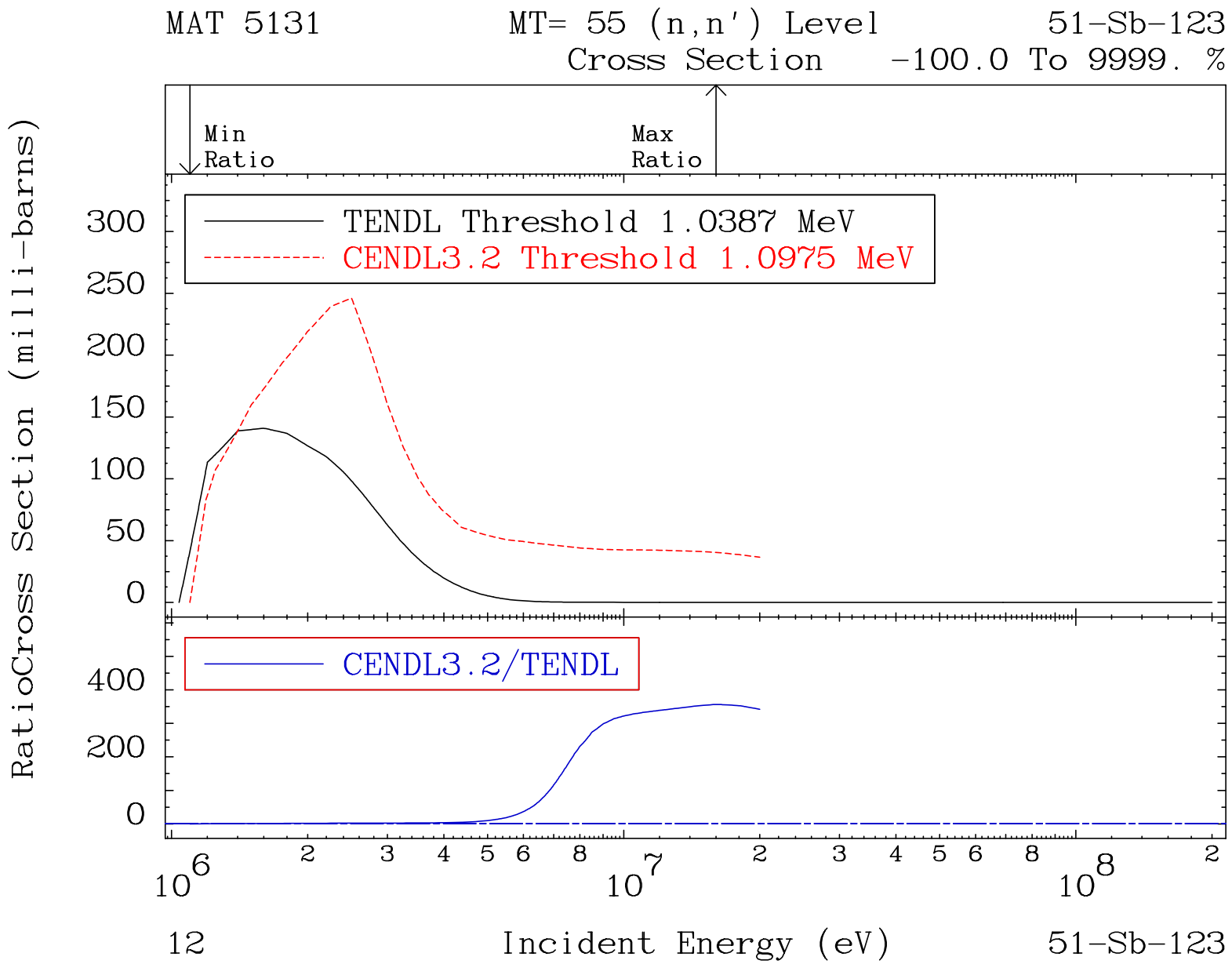

MAT 5131
(n,n') p
Cross Section
51-Sb-123
-100.0 To 205.2 %
Min Ratio
Max Ratio
TENDL Threshold 6.6258 MeV
CENDL3.2 Threshold 12.249 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51-Sb-123

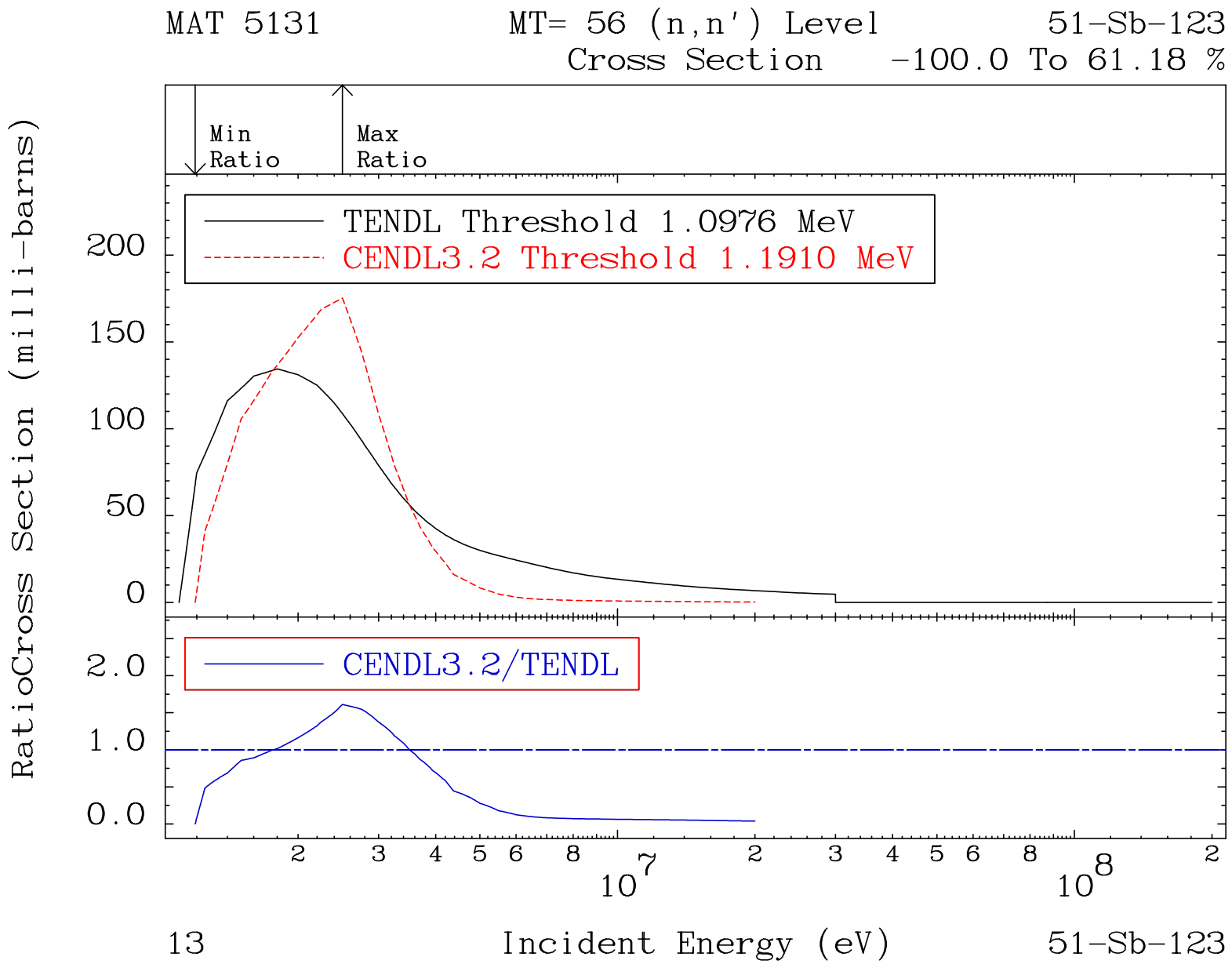

MAT 5131
MT= 51 (n,n') Level
51-Sb-123
Cross Section -4.454 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 161.65 keV
CENDL3.2 Threshold 161.62 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^2
10^0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
8
51-Sb-123

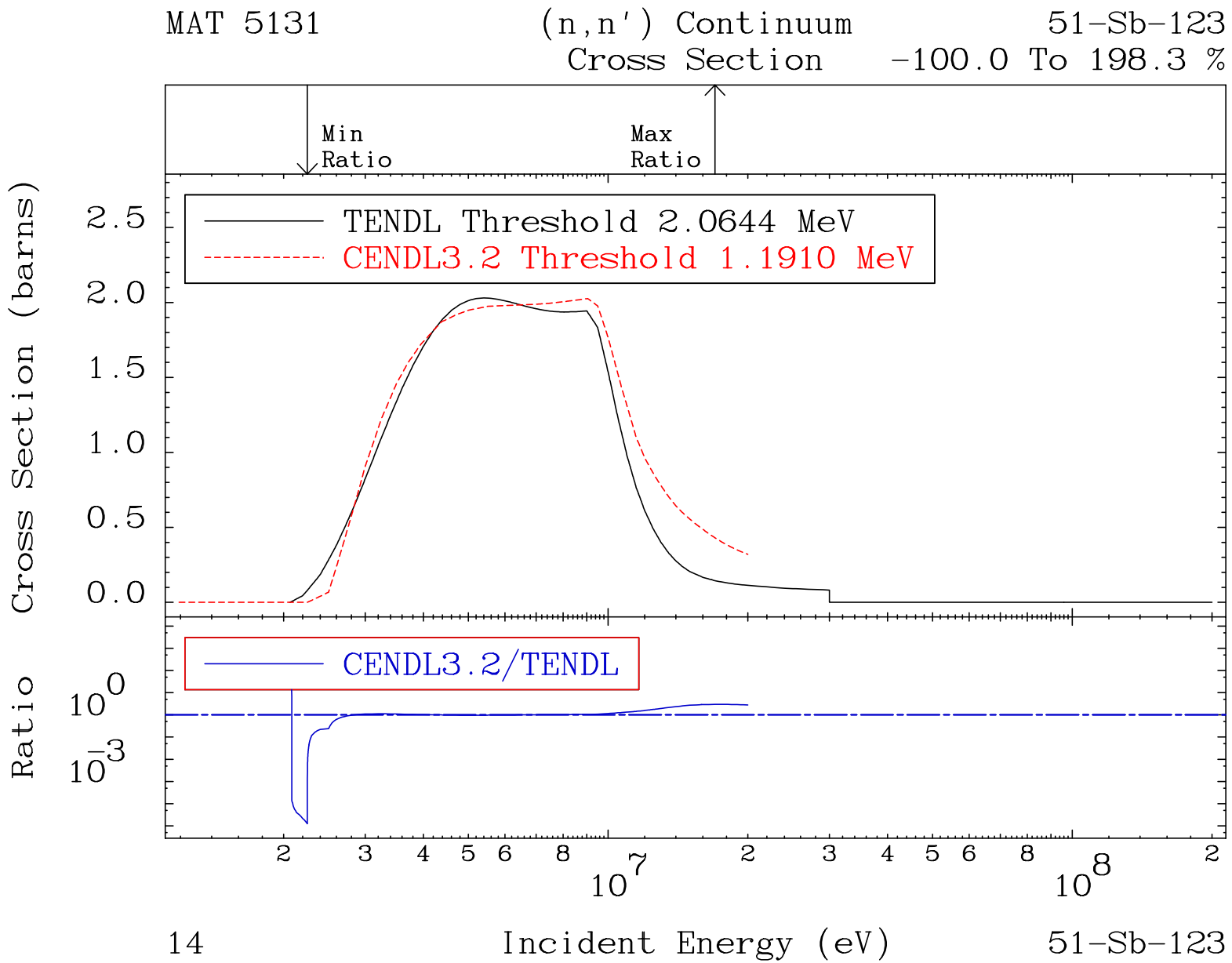

MAT 5131
MT= 52 (n,n') Level
51-Sb-123
Cross Section 6.925 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 546.49 keV
CENDL3.2 Threshold 546.25 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^8
10^4
10^0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
9
51-Sb-123

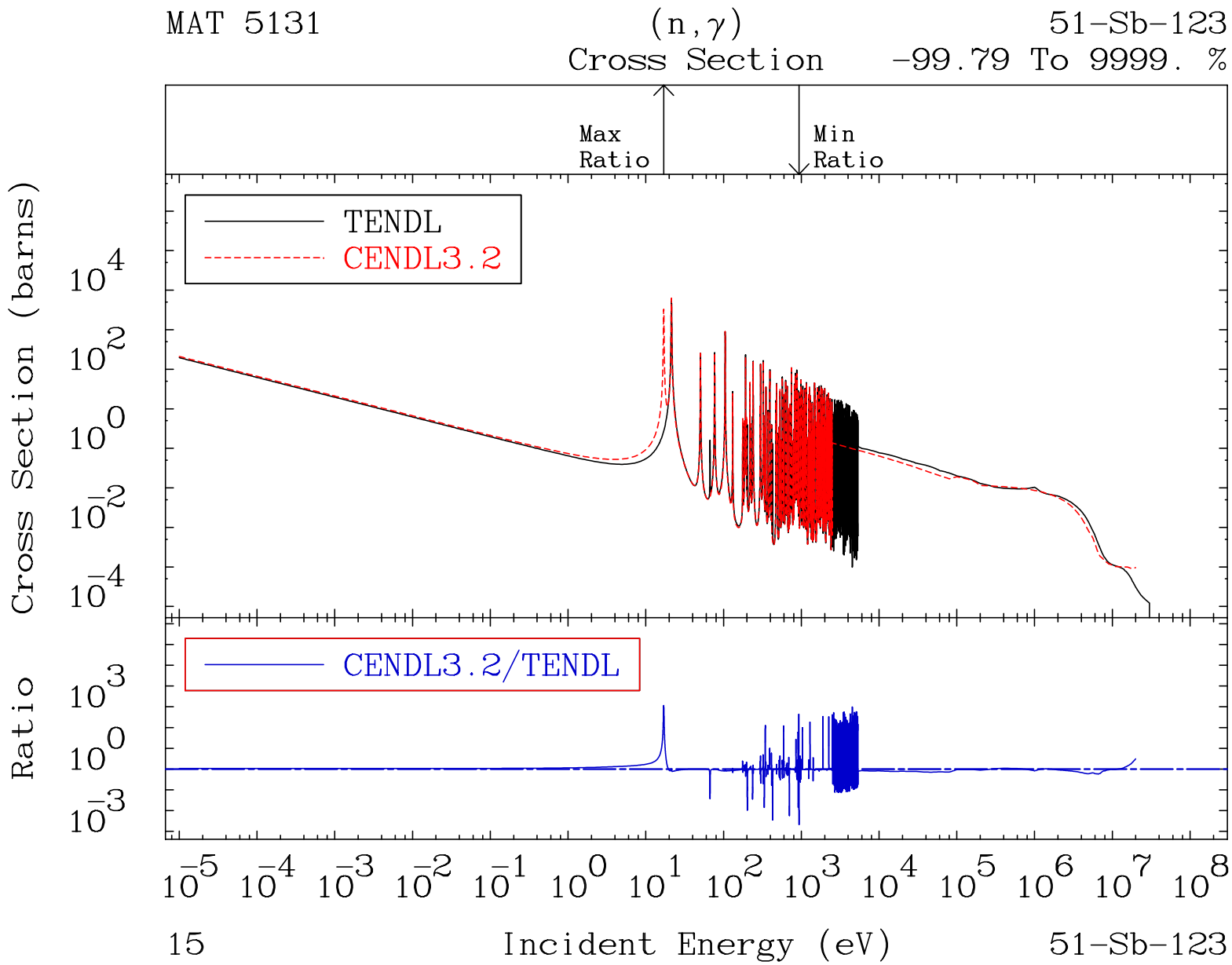

MAT 5131
MT= 53 (n,n') Level
51-Sb-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 718.43 keV
CENDL3.2 Threshold 718.65 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51-Sb-123

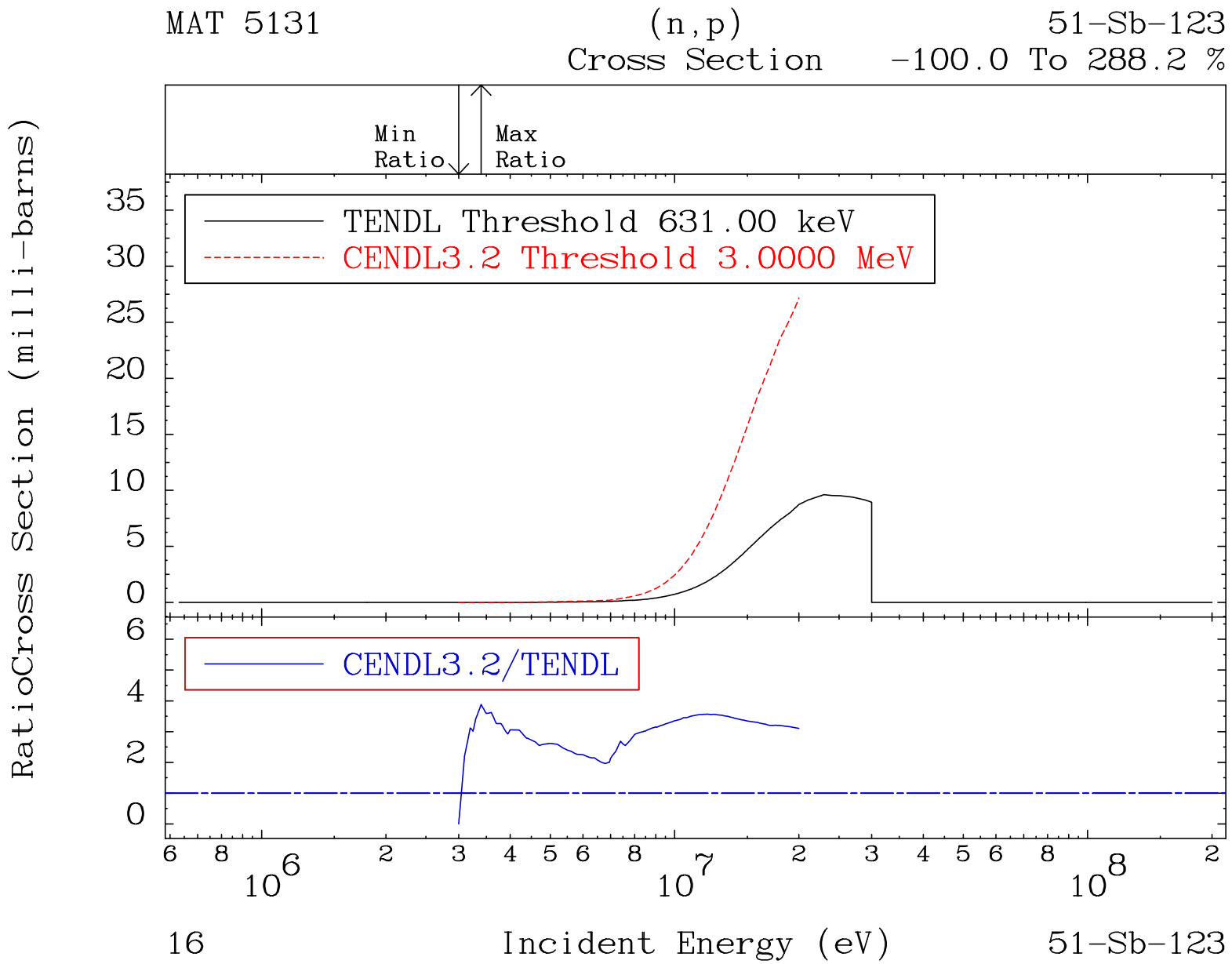

MAT 5131
MT= 54 (n,n') Level
51-Sb-123
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0253 MeV
CENDL3.2 Threshold 1.0387 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
400
0
10^6
10^7
10^8
Incident Energy (eV)
11
51-Sb-123

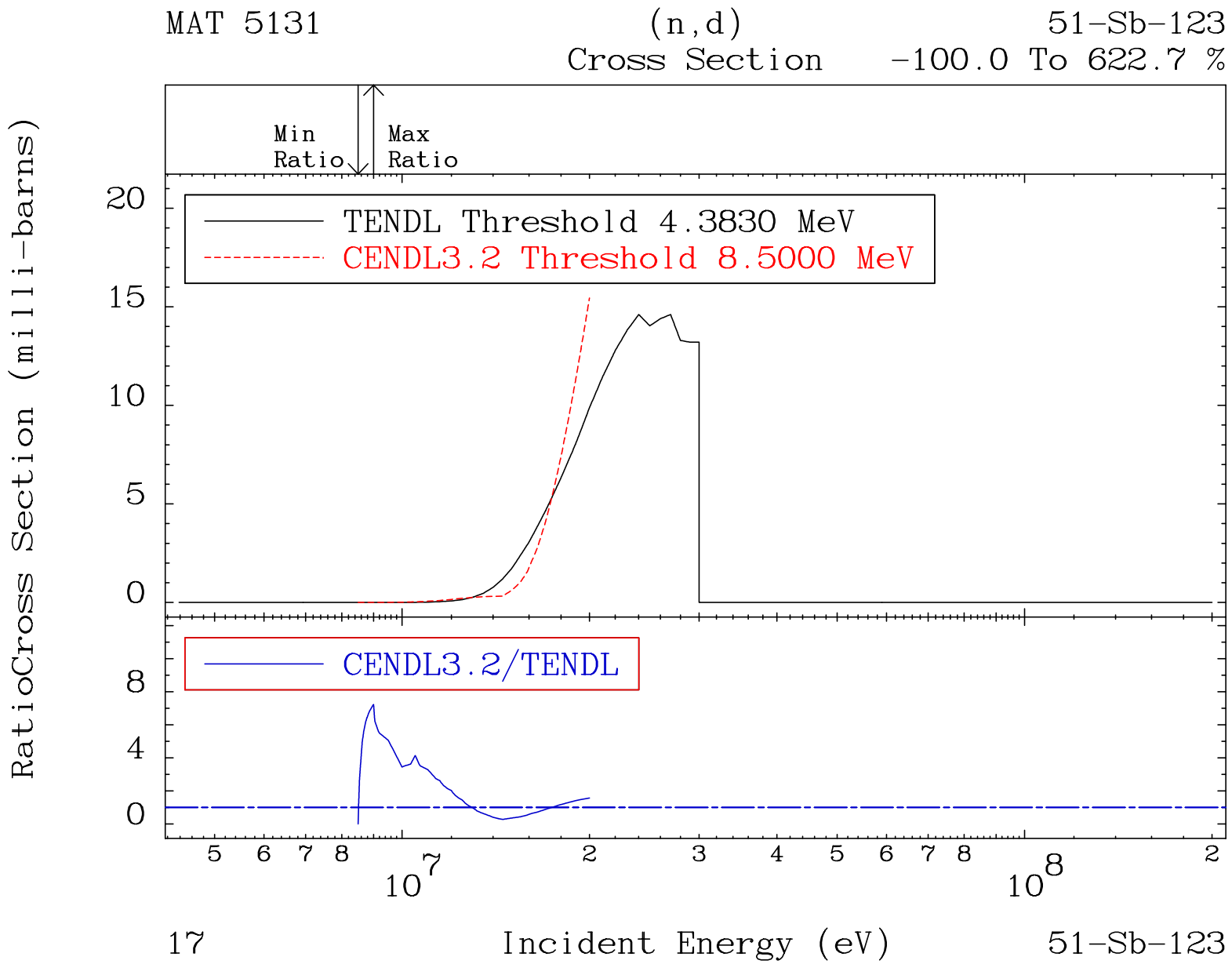

MAT 5131
MT= 55 (n,n') Level
51-Sb-123
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0387 MeV
CENDL3.2 Threshold 1.0975 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
400
200
0
2 3 4 5 6 8
10^6
10^7
10^8
12
Incident Energy (eV)
51-Sb-123

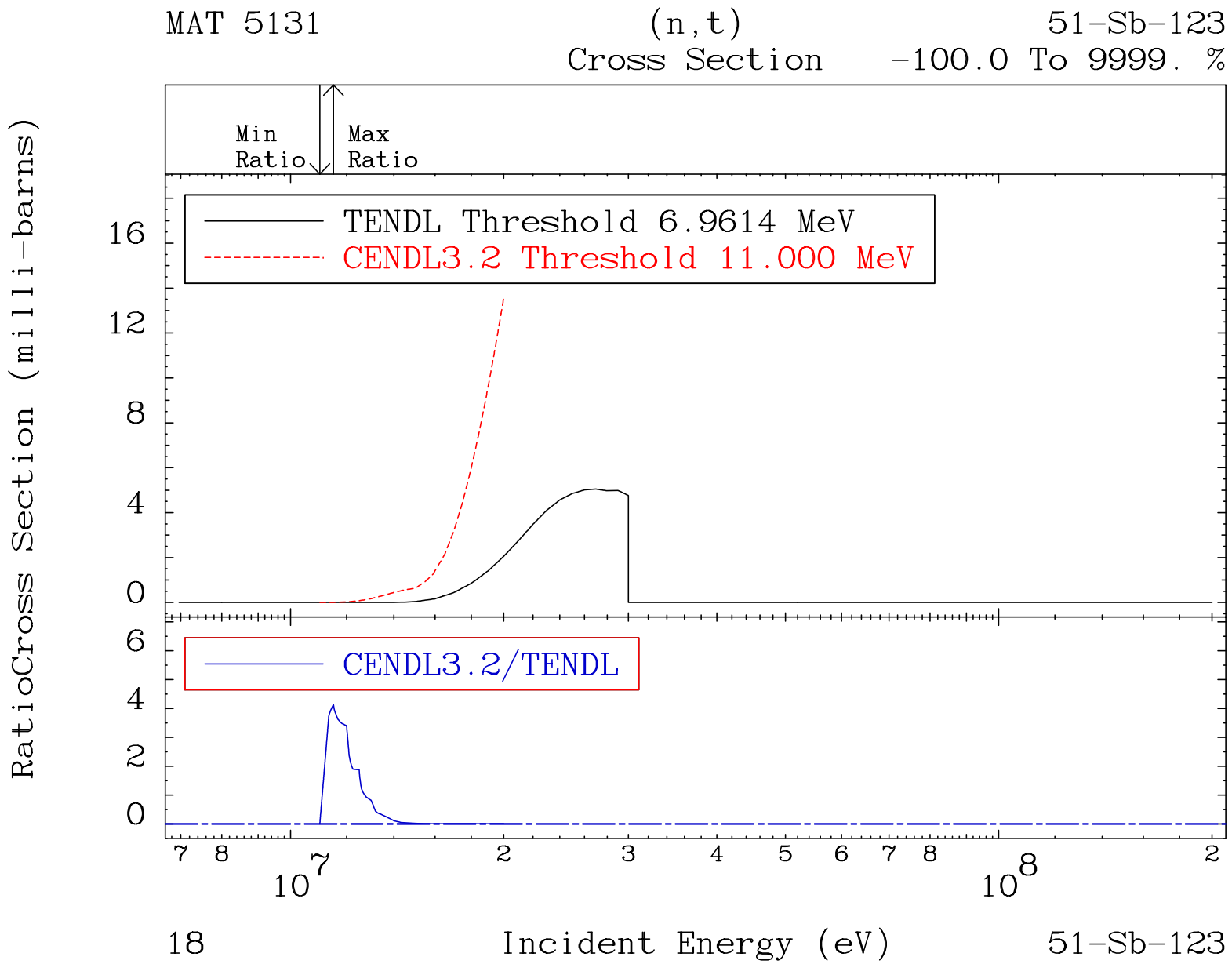

MAT 5131
MT= 56 (n,n') Level
51-Sb-123
Cross Section
-100.0 To 61.18 %
Min Ratio
Max Ratio
TENDL Threshold 1.0976 MeV
CENDL3.2 Threshold 1.1910 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
13
Incident Energy (eV)
51-Sb-123

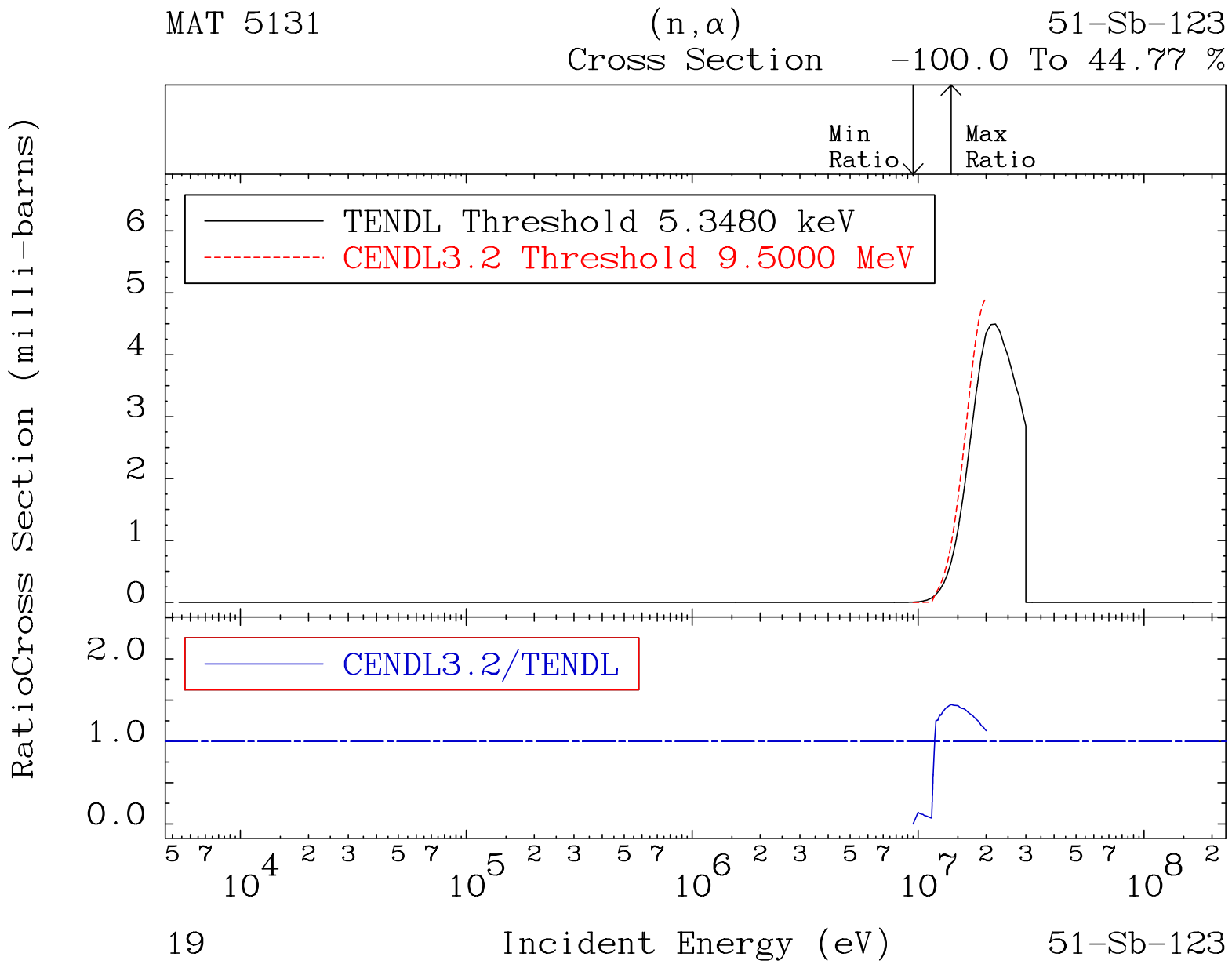

MAT 5131
(n,n') Continuum
Cross Section
51-Sb-123
-100.0 To 198.3 %
Min Ratio
Max Ratio
TENDL Threshold 2.0644 MeV
CENDL3.2 Threshold 1.1910 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
10^0
10^-3
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
51-Sb-123

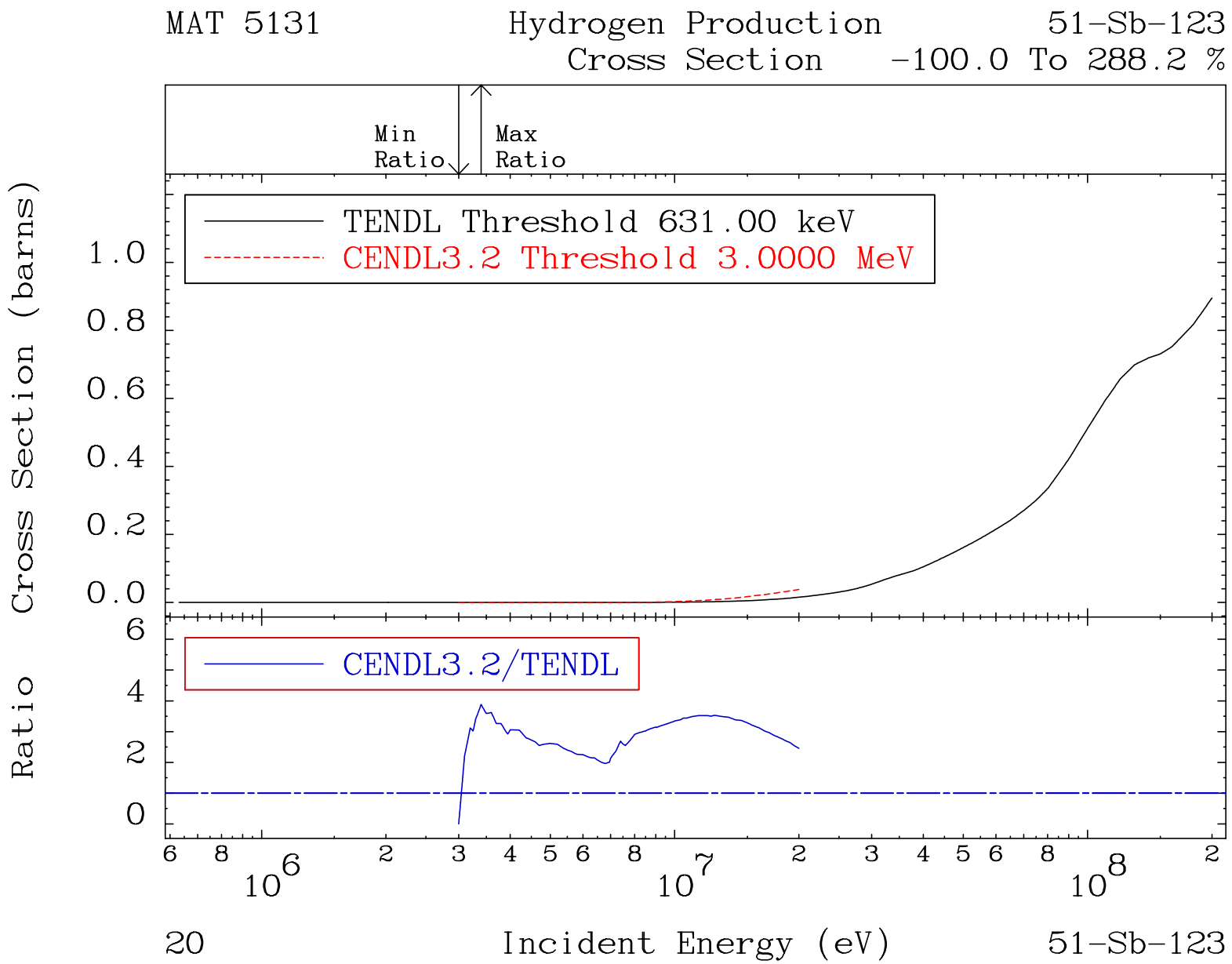

MAT 5131
(n,γ)
Cross Section
51-Sb-123
-99.79 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
15
51-Sb-123

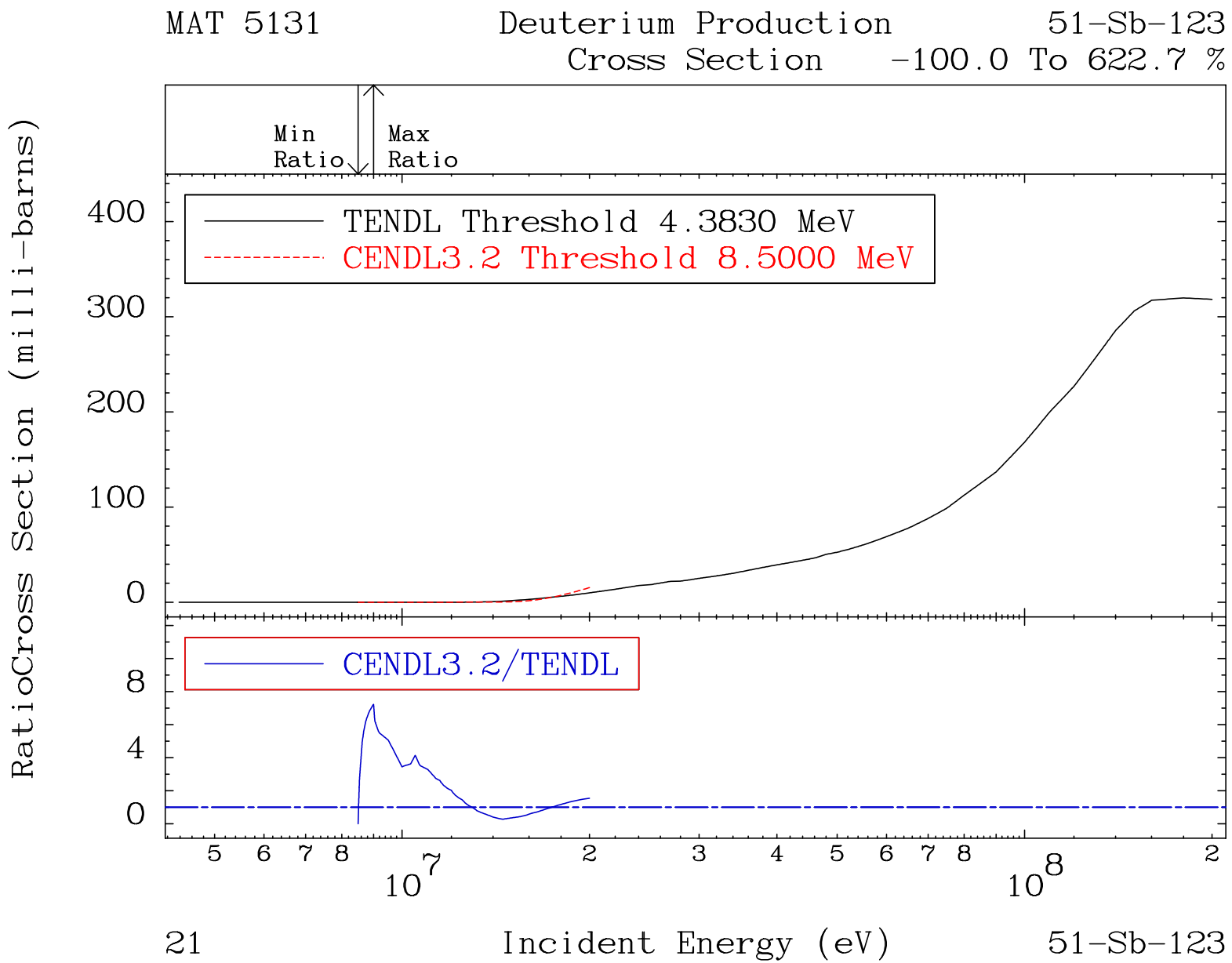

MAT 5131
(n,p)
Cross Section
51-Sb-123
-100.0 To 288.2 %
Min Ratio
Max Ratio
TENDL Threshold 631.00 keV
CENDL3.2 Threshold 3.0000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
6
4
2
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
51-Sb-123

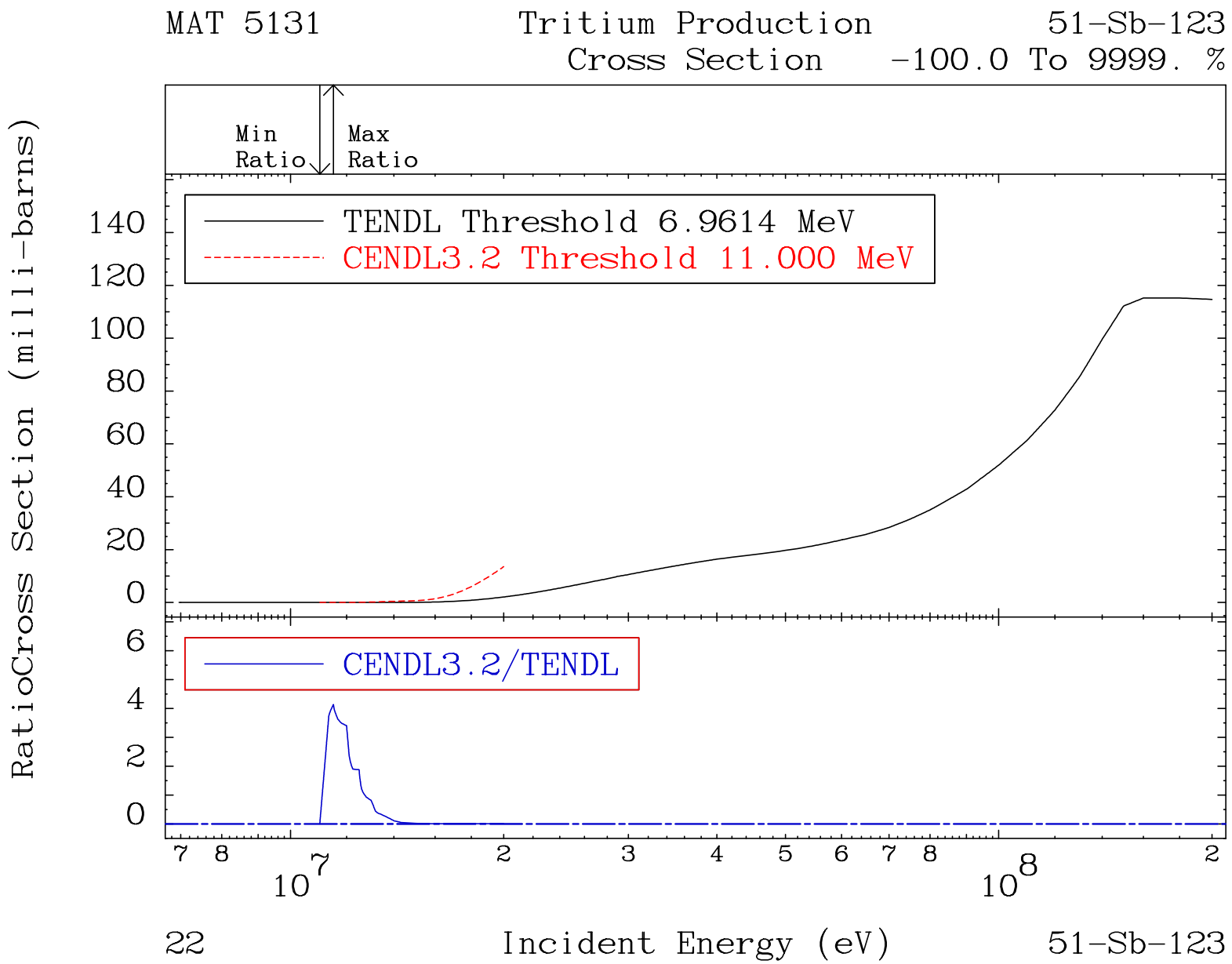

MAT 5131
(n,d)
Cross Section
51-Sb-123
-100.0 To 622.7 %
Min Ratio
Max Ratio
TENDL Threshold 4.3830 MeV
CENDL3.2 Threshold 8.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
17
51-Sb-123

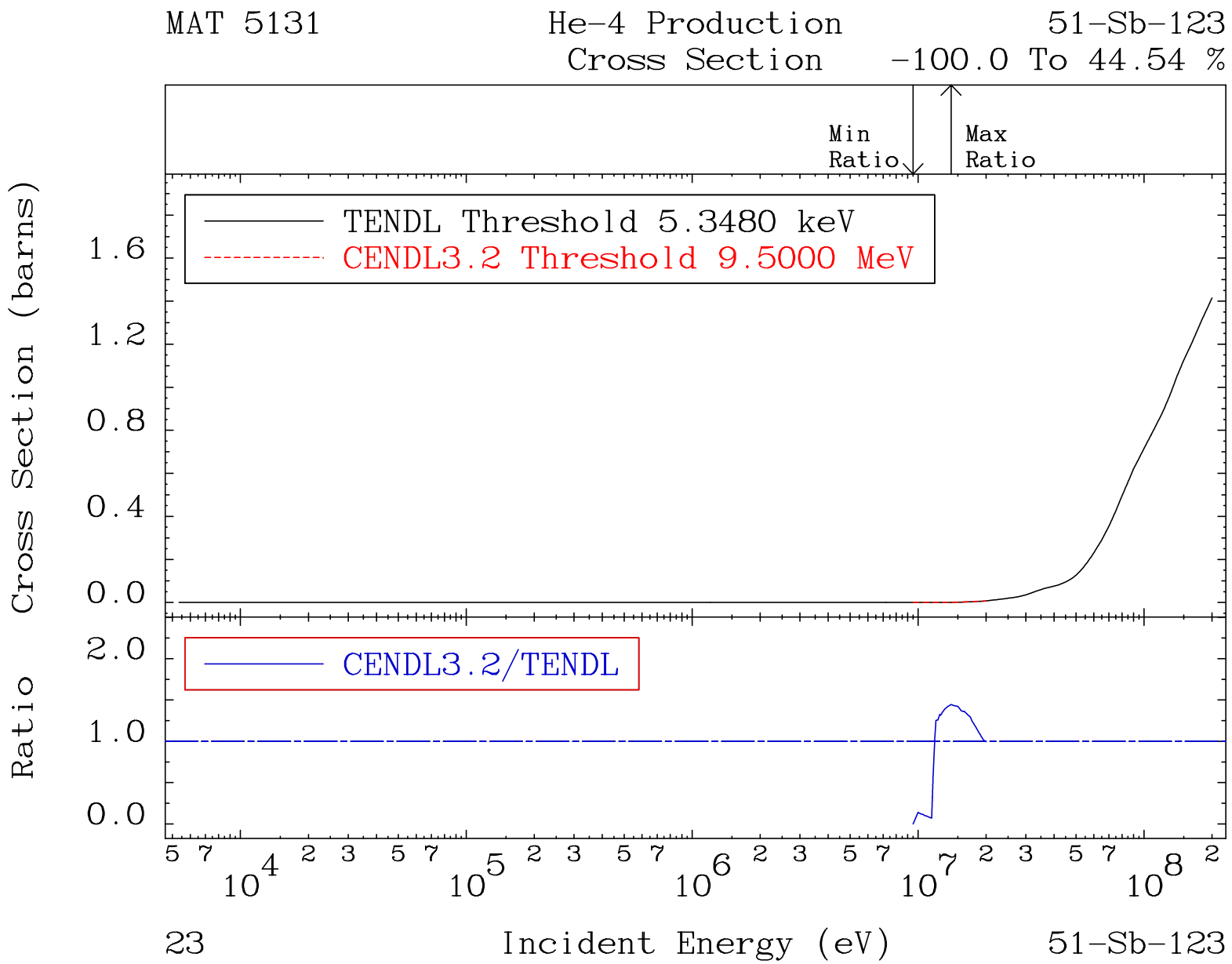

MAT 5131
(n,t)
Cross Section
51-Sb-123
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.9614 MeV
CENDL3.2 Threshold 11.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
6
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
51-Sb-123

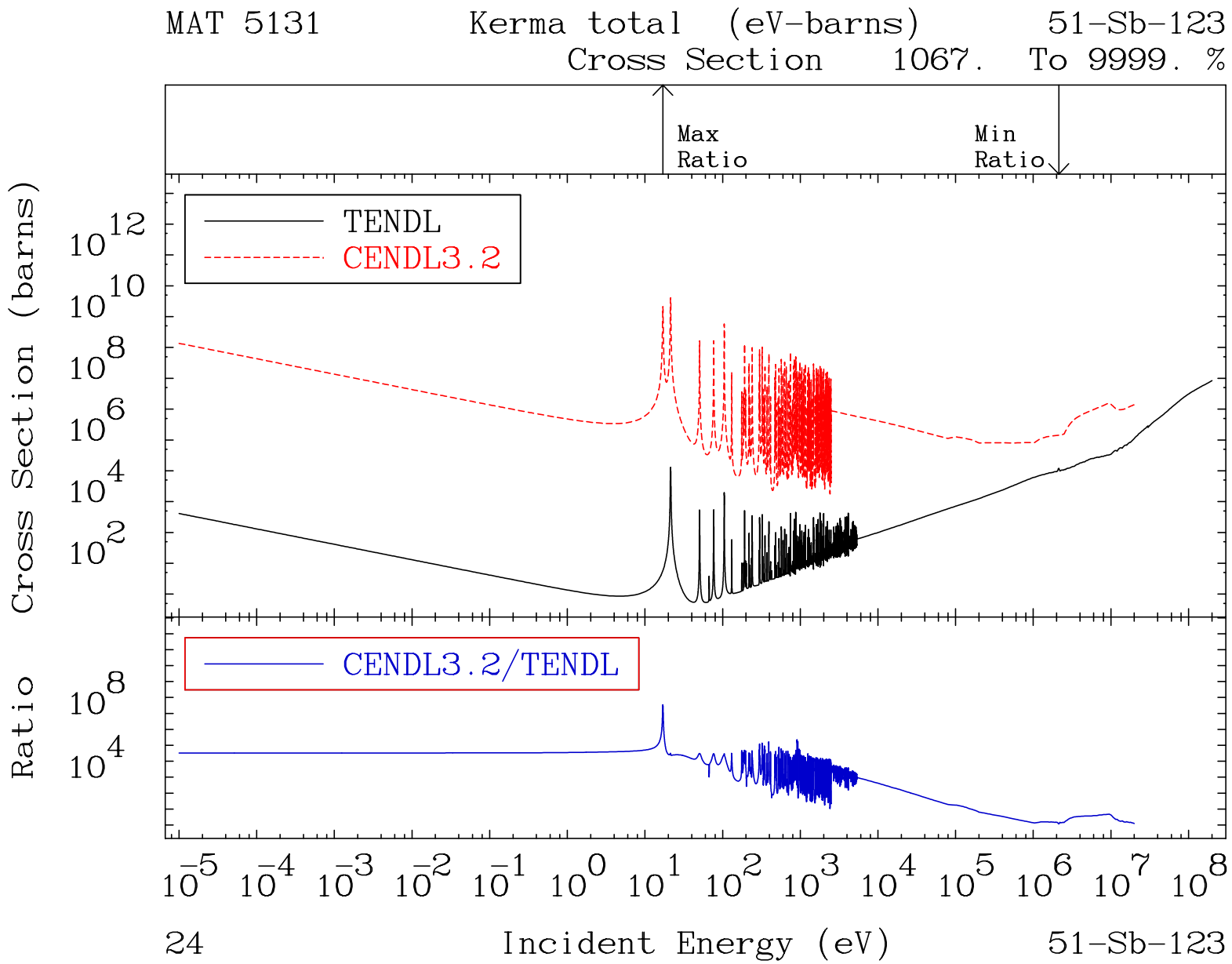

MAT 5131
(n,α)
Cross Section
51-Sb-123
-100.0 To 44.77 %
Min Ratio
Max Ratio
TENDL Threshold 5.3480 keV
CENDL3.2 Threshold 9.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
19
51-Sb-123

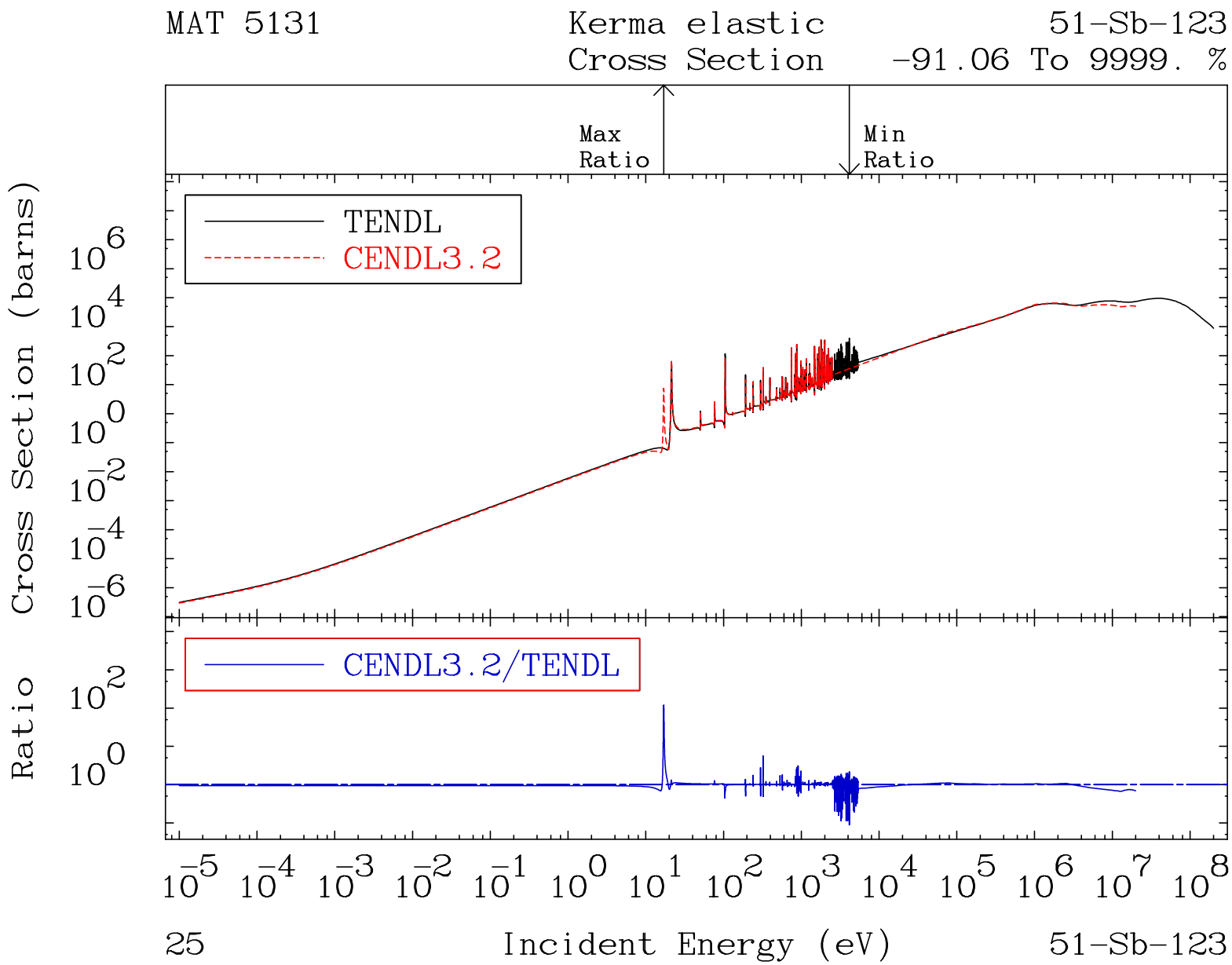

MAT 5131
Hydrogen Production
51-Sb-123
Cross Section
-100.0 To 288.2 %
Min Ratio
Max Ratio
TENDL Threshold 631.00 keV
CENDL3.2 Threshold 3.0000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
6
4
2
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
51-Sb-123

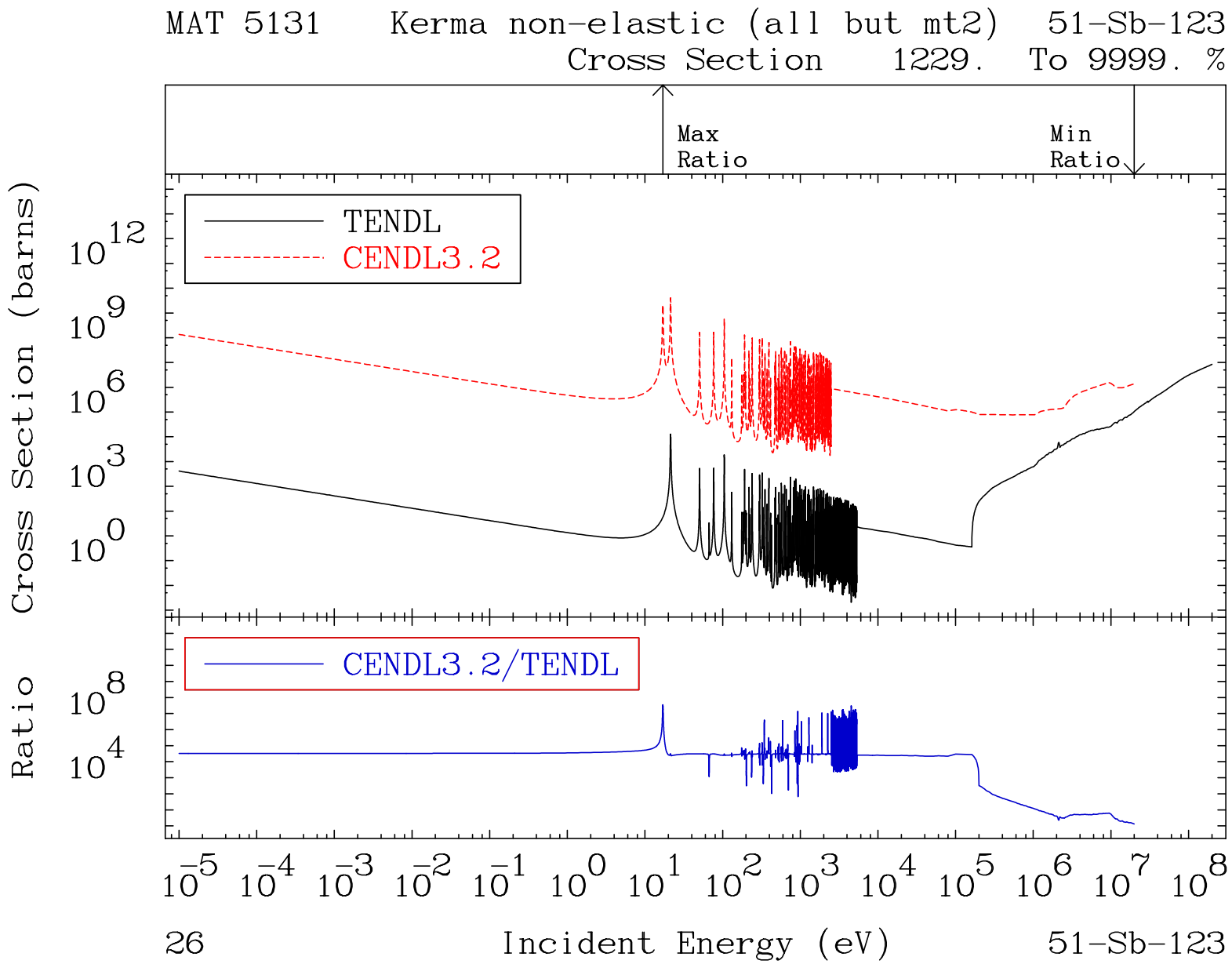

MAT 5131
Deuterium Production
51-Sb-123
Cross Section
-100.0 To 622.7 %
Min Ratio
Max Ratio
TENDL Threshold 4.3830 MeV
CENDL3.2 Threshold 8.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
51-Sb-123

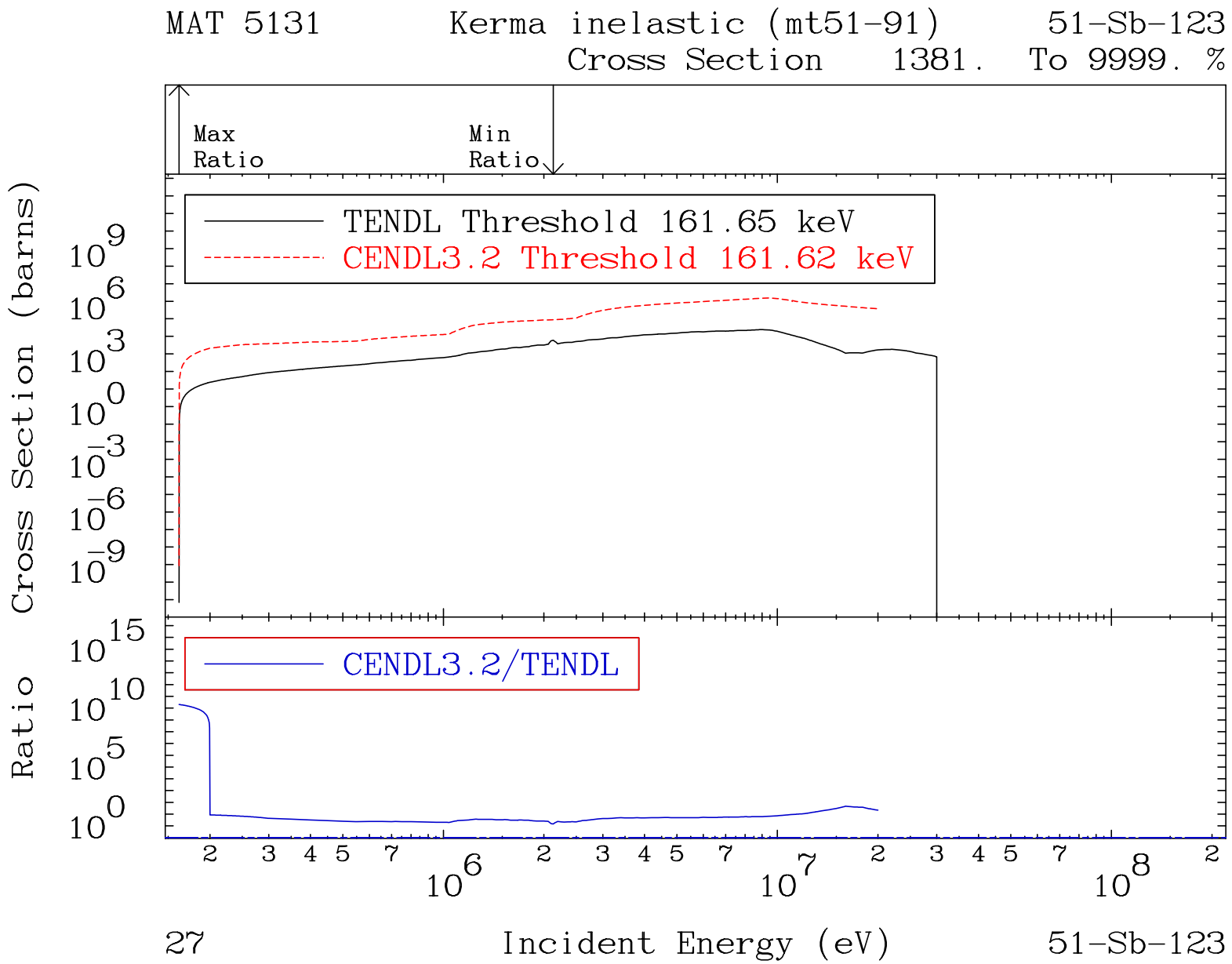

MAT 5131
Tritium Production
51-Sb-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.9614 MeV
CENDL3.2 Threshold 11.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
6
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
51-Sb-123

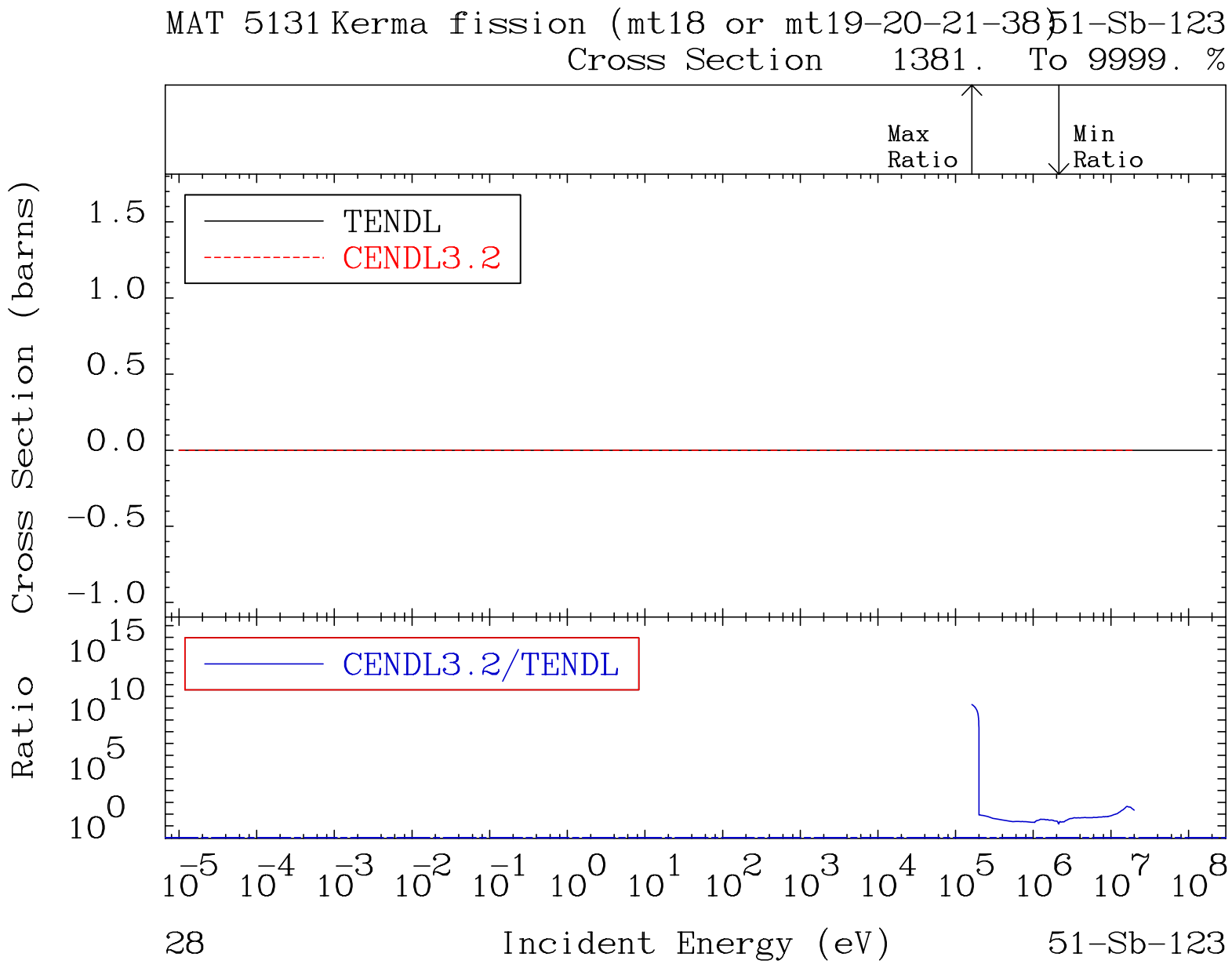

MAT 5131
He-4 Production
Cross Section
51-Sb-123
-100.0 To 44.54 %
Min Ratio
Max Ratio
TENDL Threshold 5.3480 keV
CENDL3.2 Threshold 9.5000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
2.0
1.0
0.0
5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
23
Incident Energy (eV)
51-Sb-123

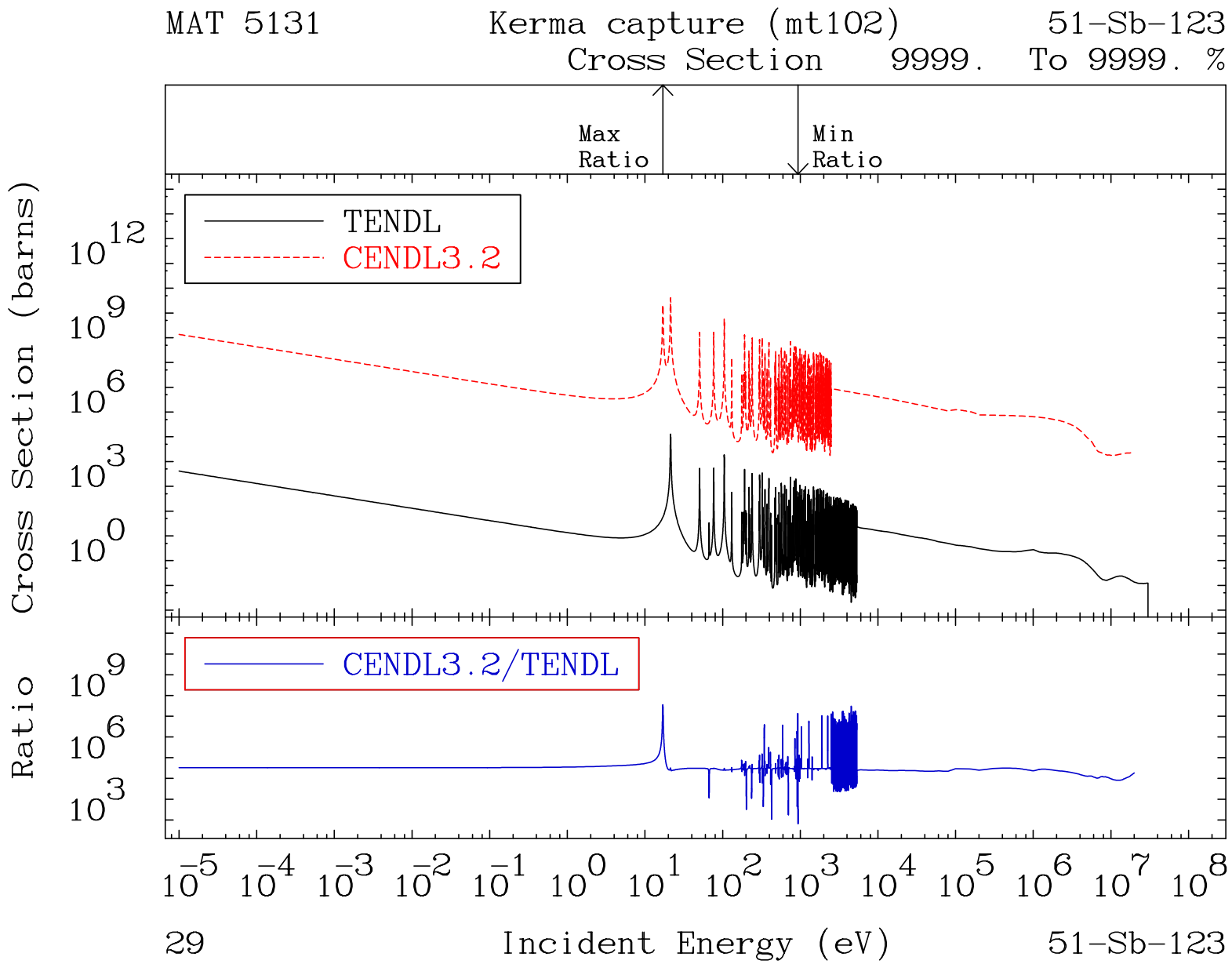

MAT 5131
Kerma total (eV-barns)
51-Sb-123
Cross Section 1067. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
24
51-Sb-123

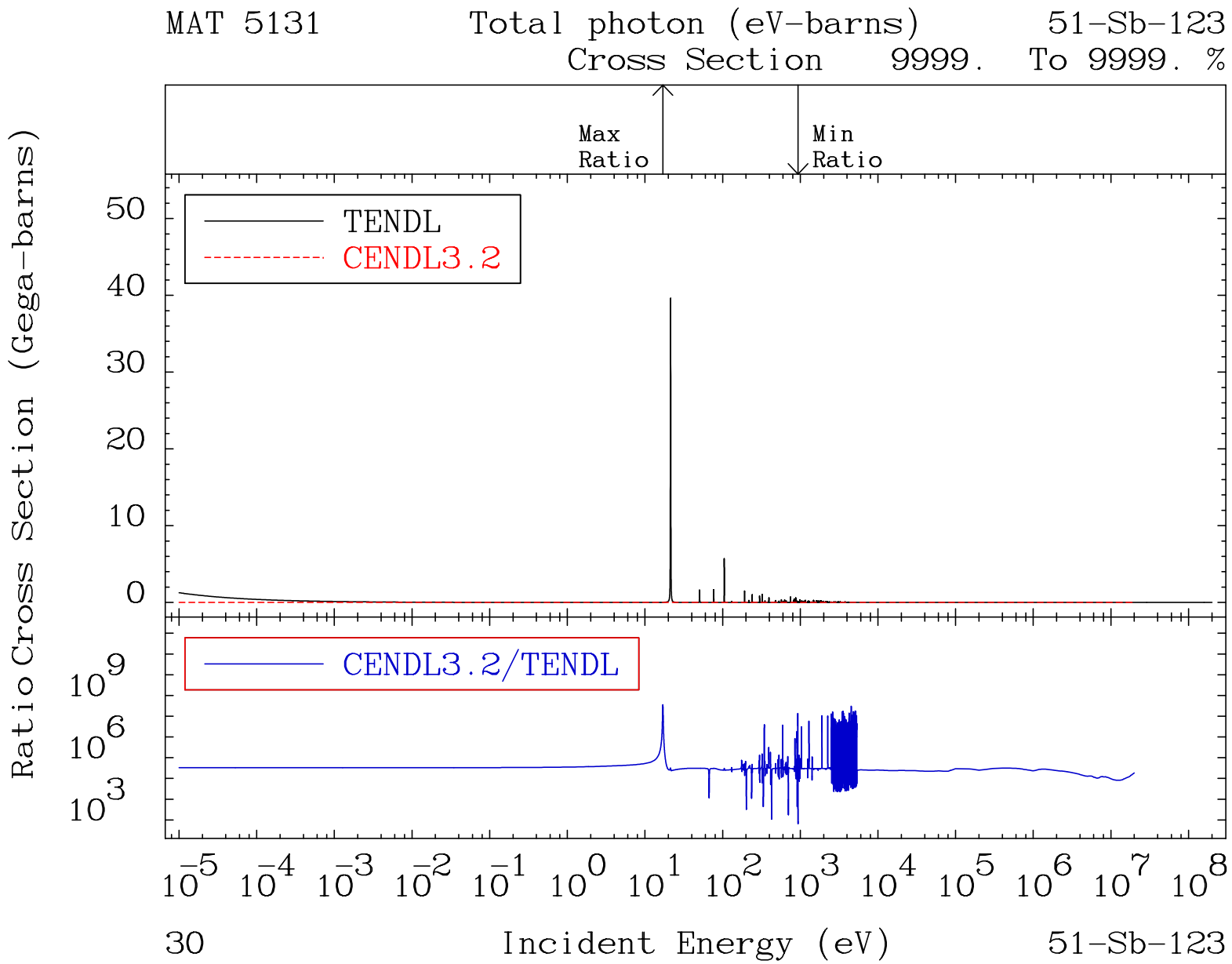

MAT 5131
Kerma elastic
Cross Section
51-Sb-123
-91.06 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
25
51-Sb-123

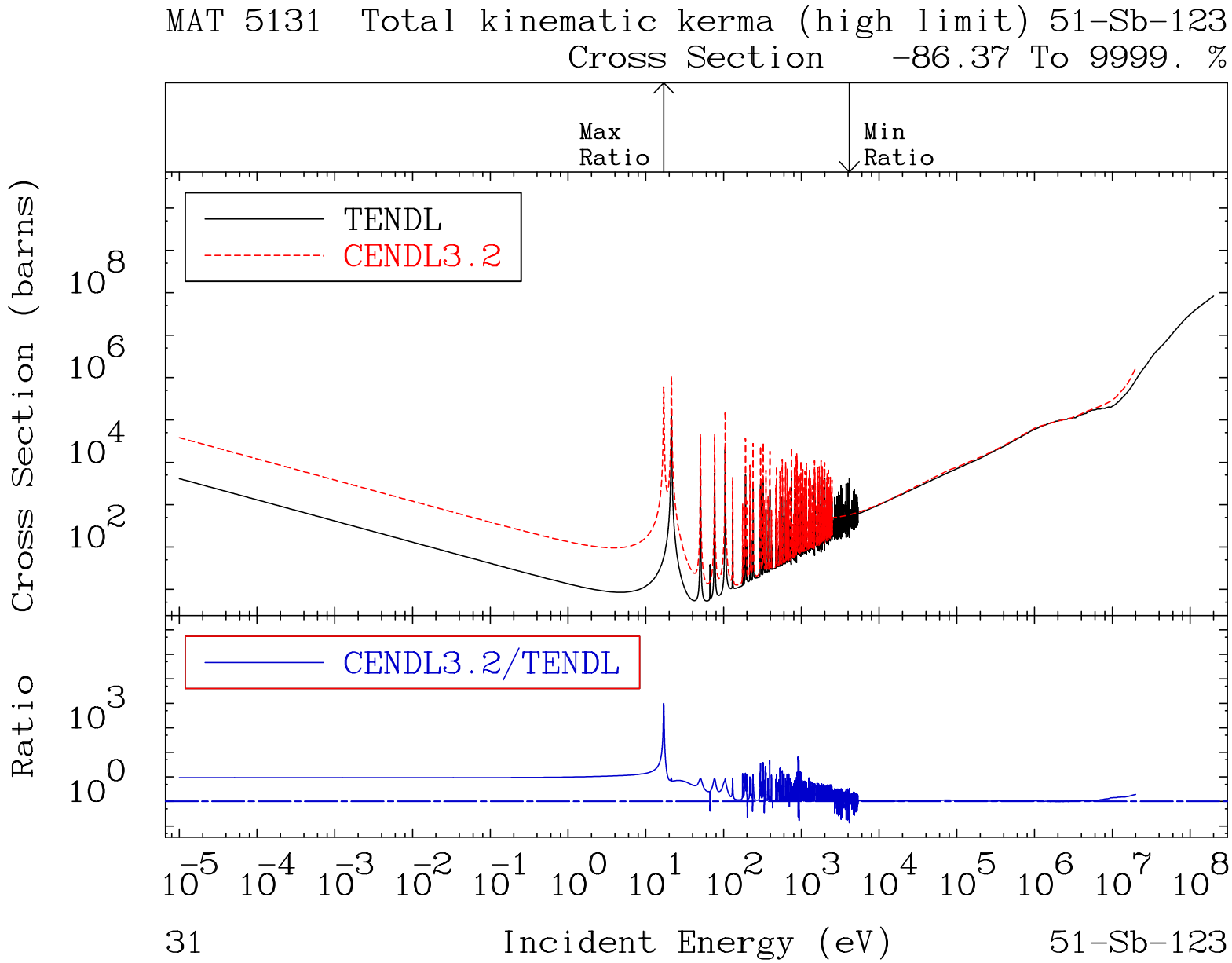

MAT 5131 Kerma non-elastic (all but mt2) 51-Sb-123
Cross Section 1229. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
26
51-Sb-123

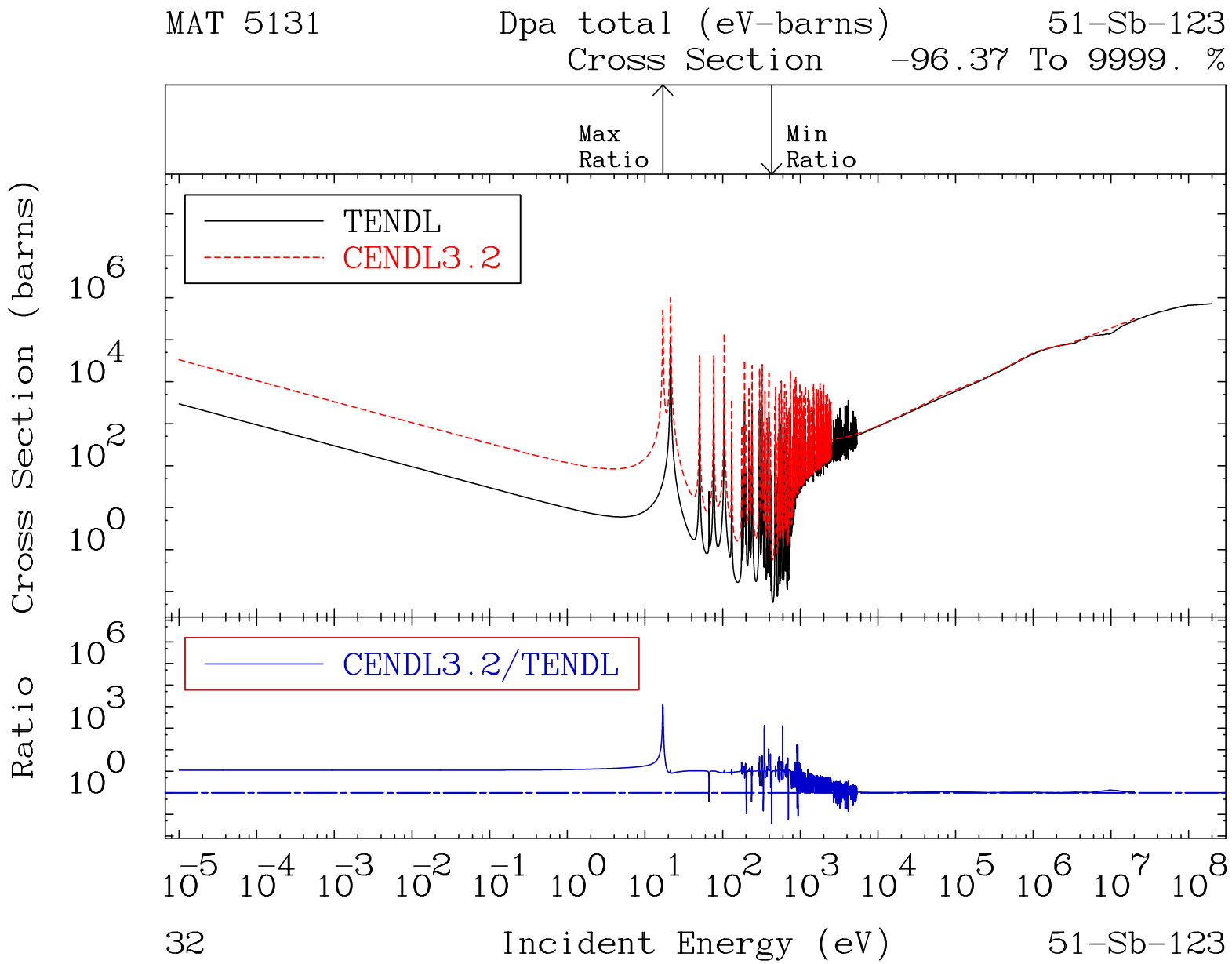

MAT 5131
Kerma inelastic (mt51-91)
51-Sb-123
Cross Section 1381. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 161.65 keV
CENDL3.2 Threshold 161.62 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
27
51-Sb-123

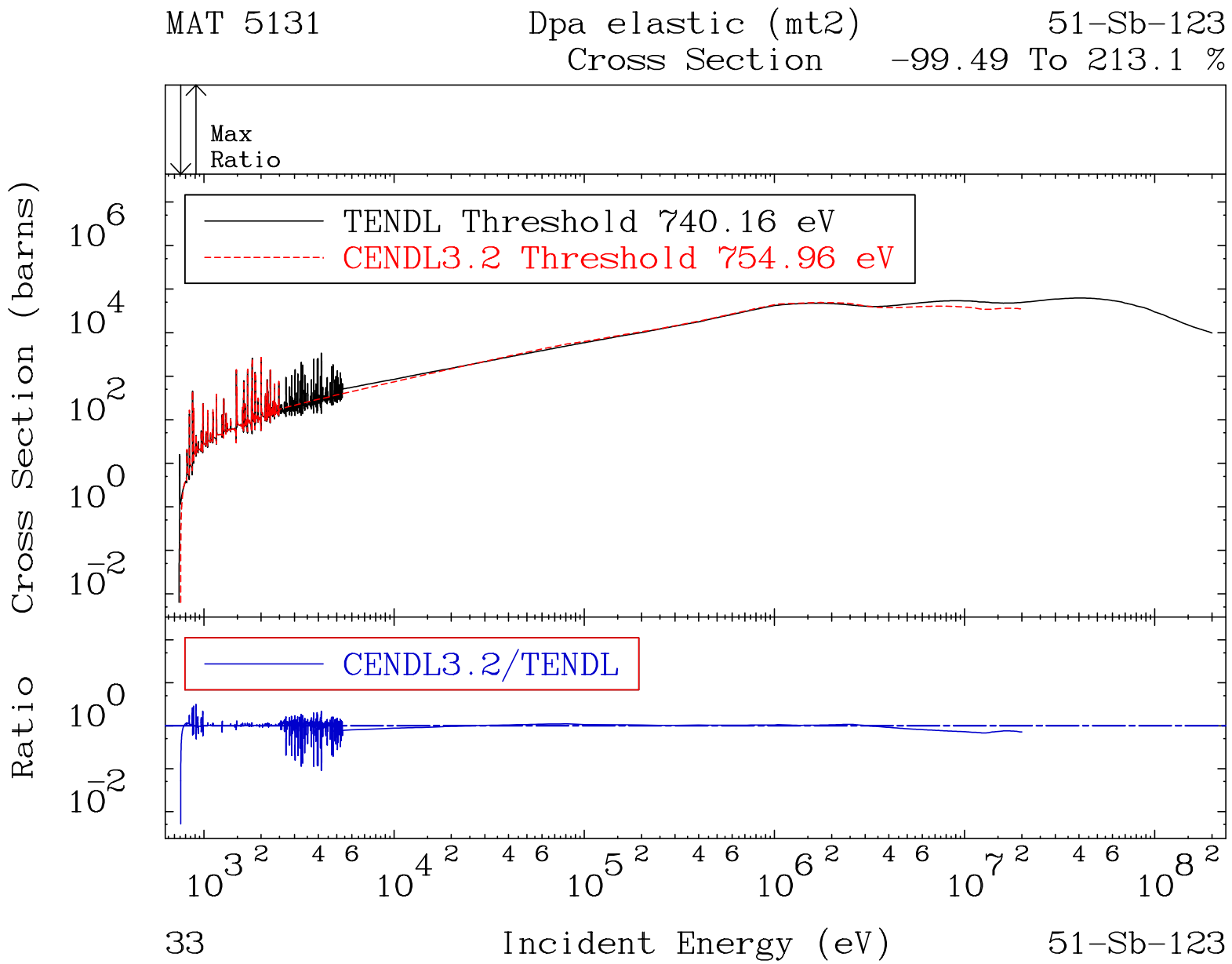

MAT 5131 Kerma fission (mt18 or mt19-20-21-38) 51-Sb-123
Cross Section 1381. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{15}
10^{10}
10^{5}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
28
Incident Energy (eV)
51-Sb-123

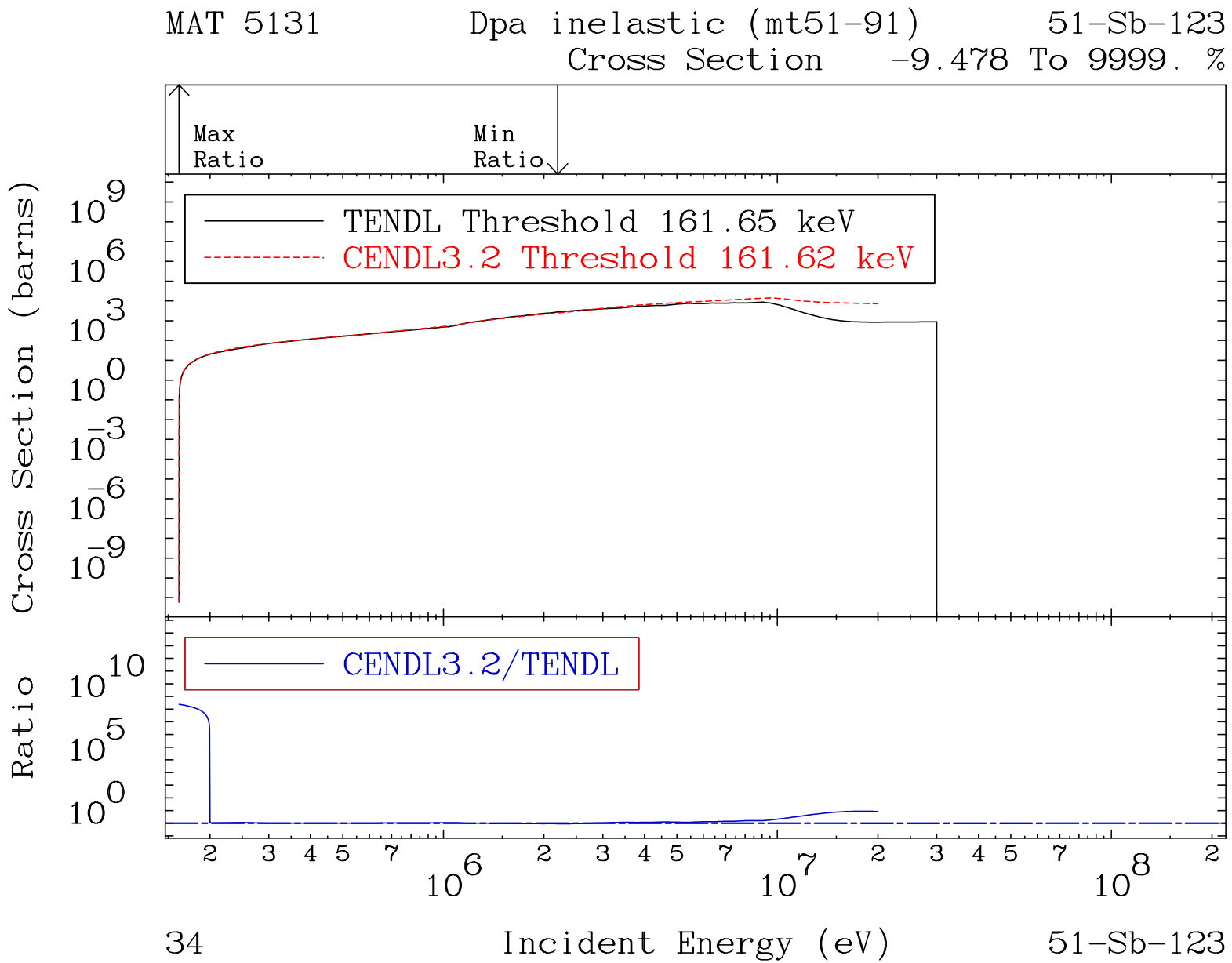

MAT 5131
Kerma capture (mt102)
51-Sb-123
Cross Section 9999. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
51-Sb-123

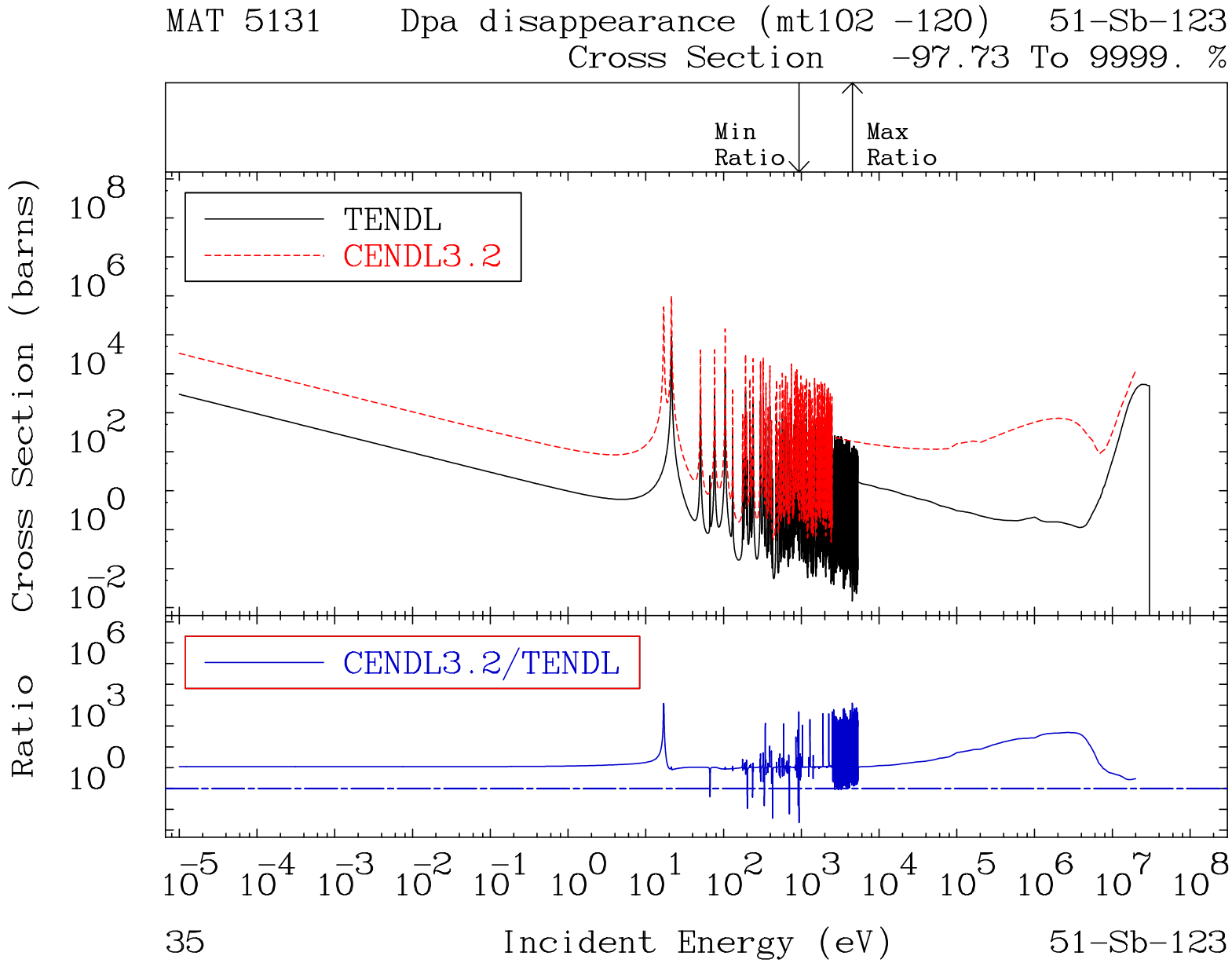

MAT 5131
Total photon (eV-barns)
51-Sb-123
Cross Section 9999. To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (Giga-barns)
50
40
30
20
10
0
10^9
10^6
10^3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
51-Sb-123

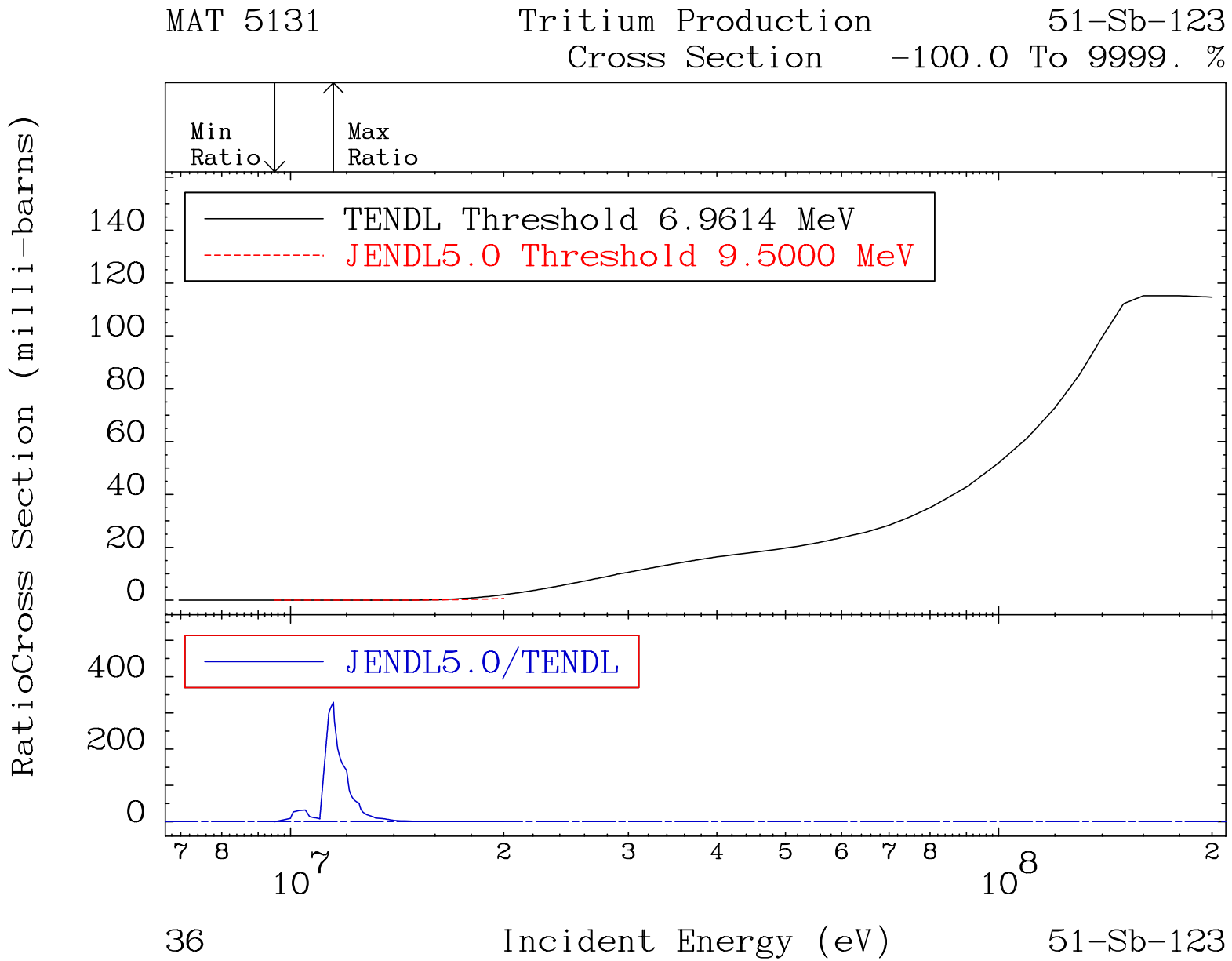

MAT 5131 Total kinematic kerma (high limit) 51-Sb-123
Cross Section -86.37 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
51-Sb-123

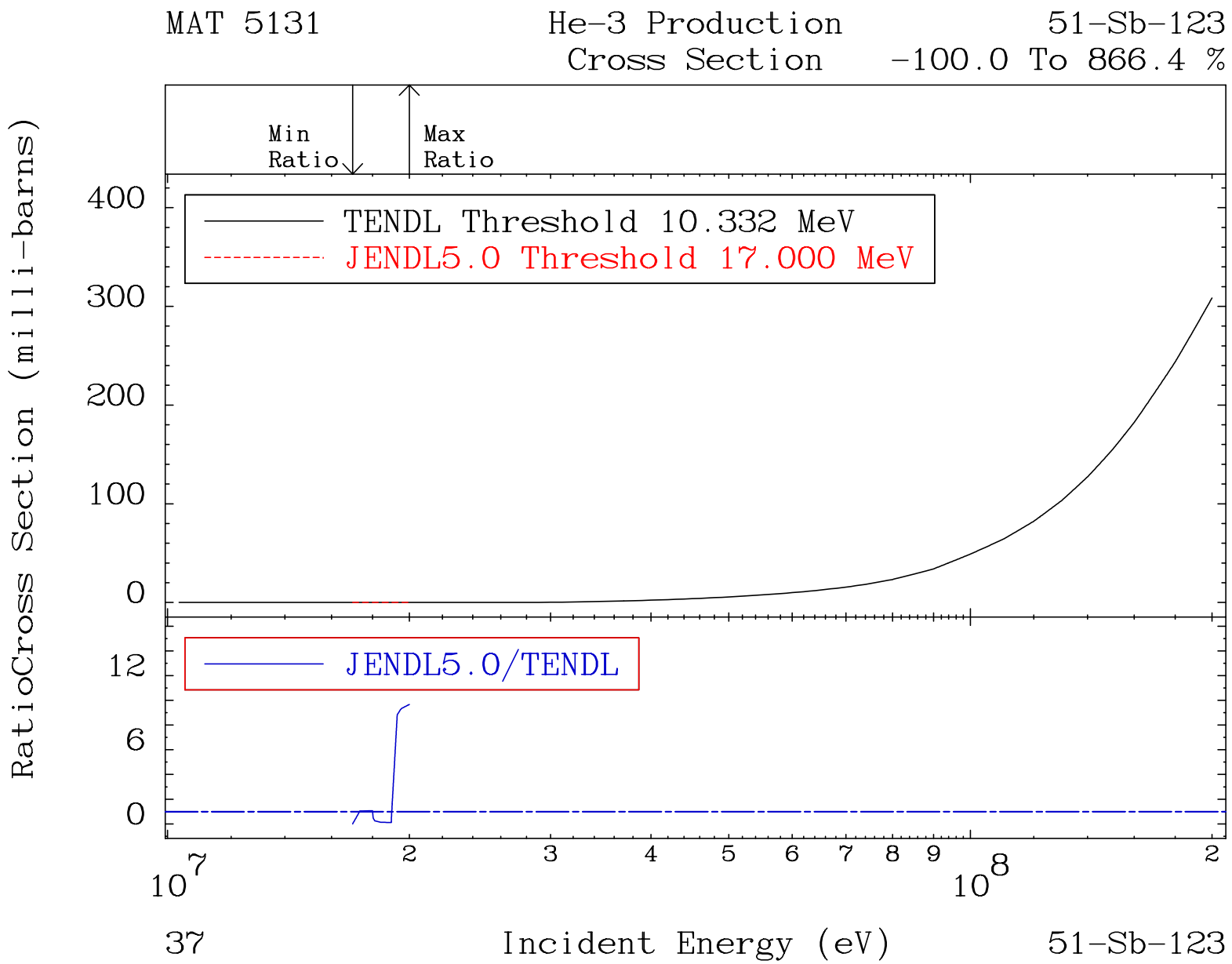

MAT 5131
Dpa total (eV-barns)
51-Sb-123
Cross Section -96.37 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
51-Sb-123

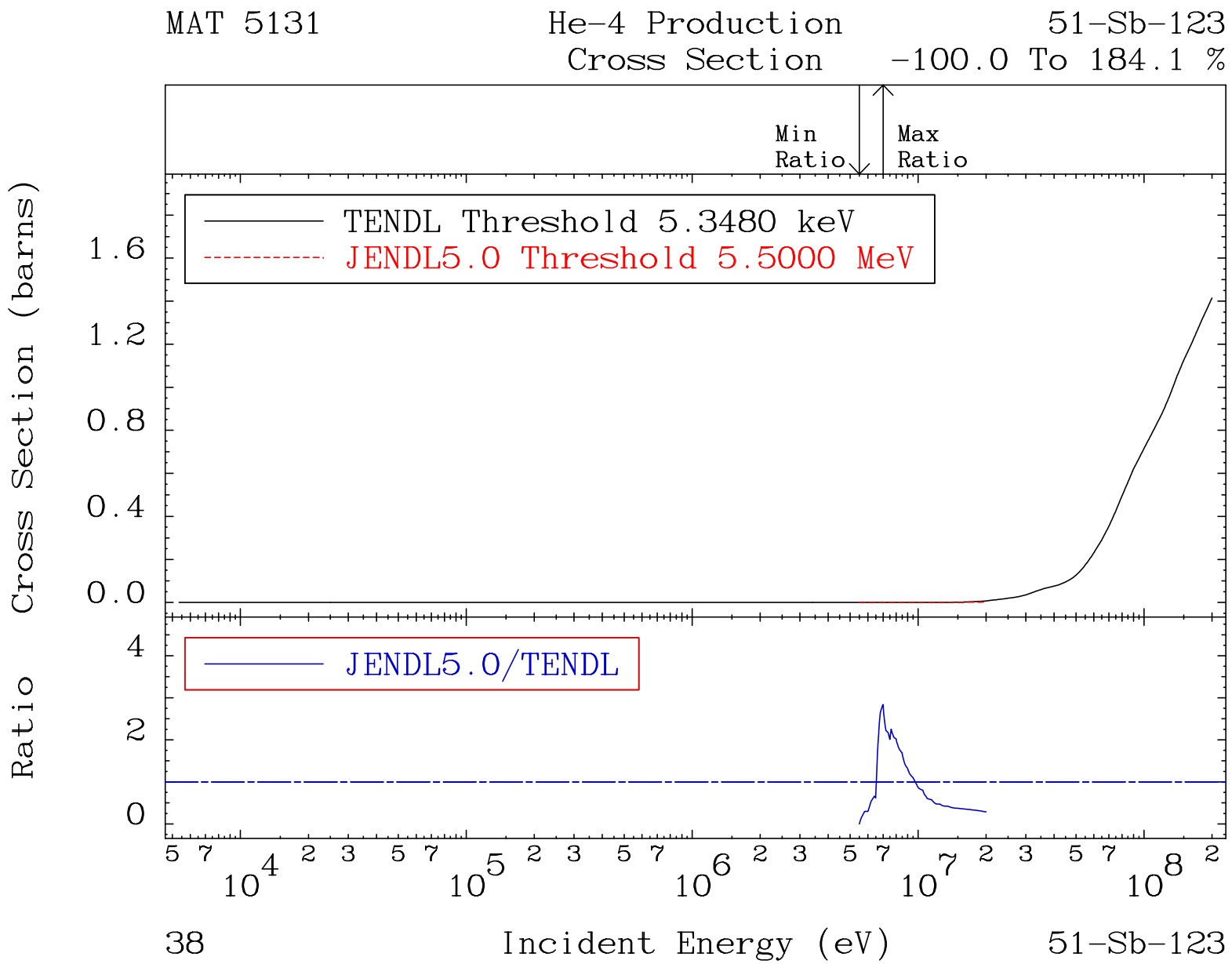

MAT 5131
Dpa elastic (mt2)
Cross Section
51-Sb-123
-99.49 To 213.1 %
Max
Ratio
TENDL Threshold 740.16 eV
CENDL3.2 Threshold 754.96 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
51-Sb-123

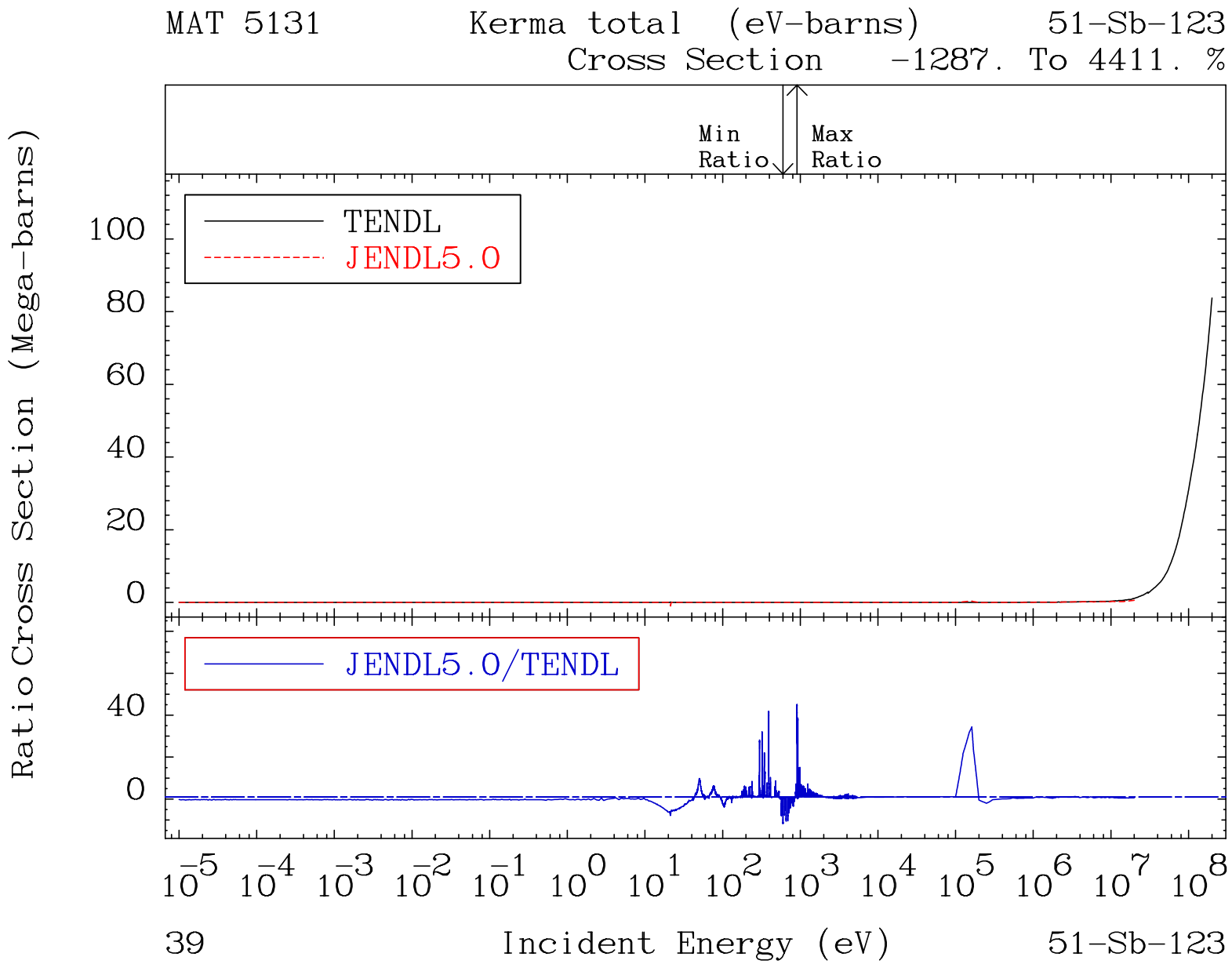

MAT 5131
Dpa inelastic (mt51-91)
51-Sb-123
Cross Section
-9.478 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 161.65 keV
CENDL3.2 Threshold 161.62 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
51-Sb-123

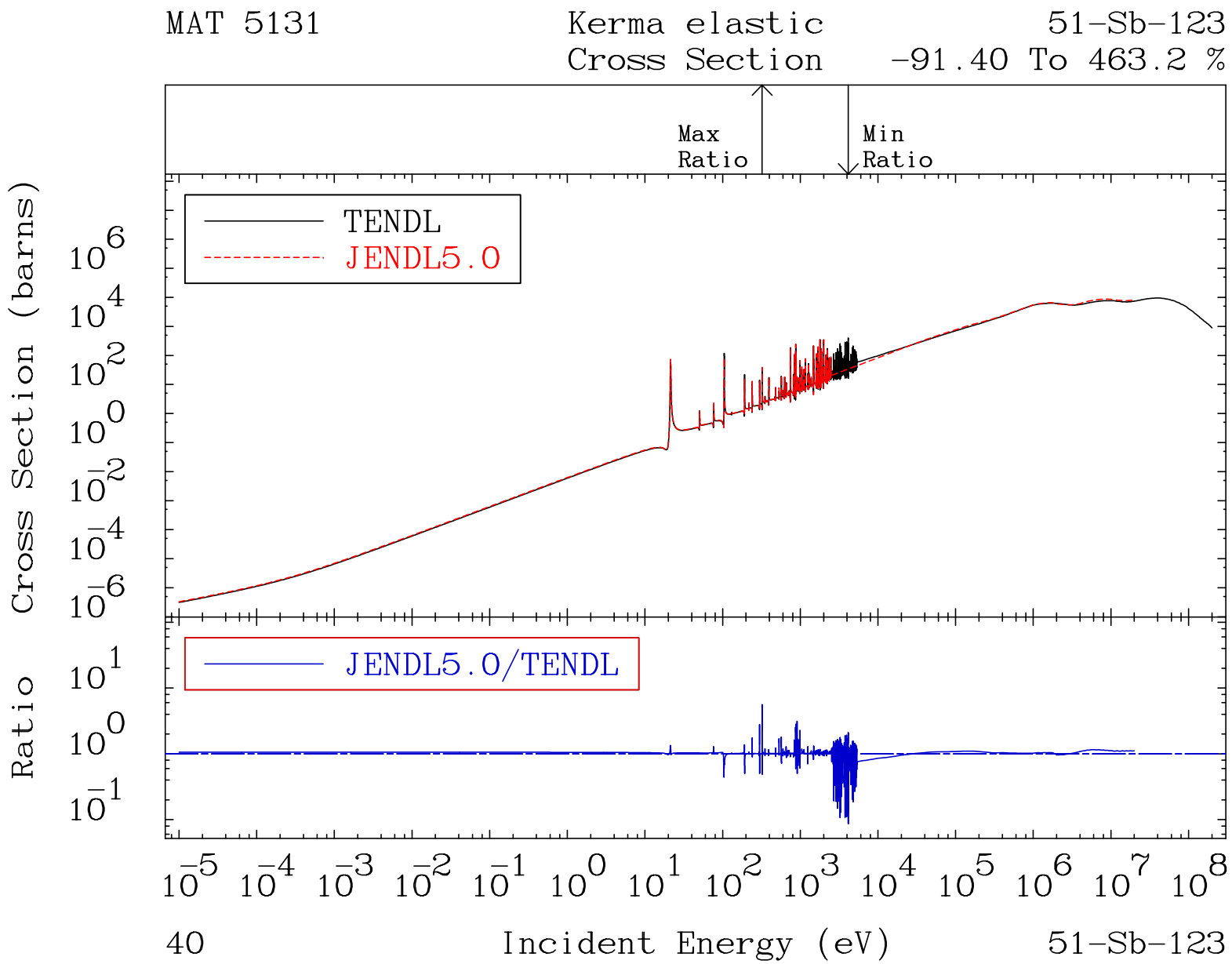

MAT 5131 Dpa disappearance (mt102 -120) 51-Sb-123
Cross Section -97.73 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
51-Sb-123

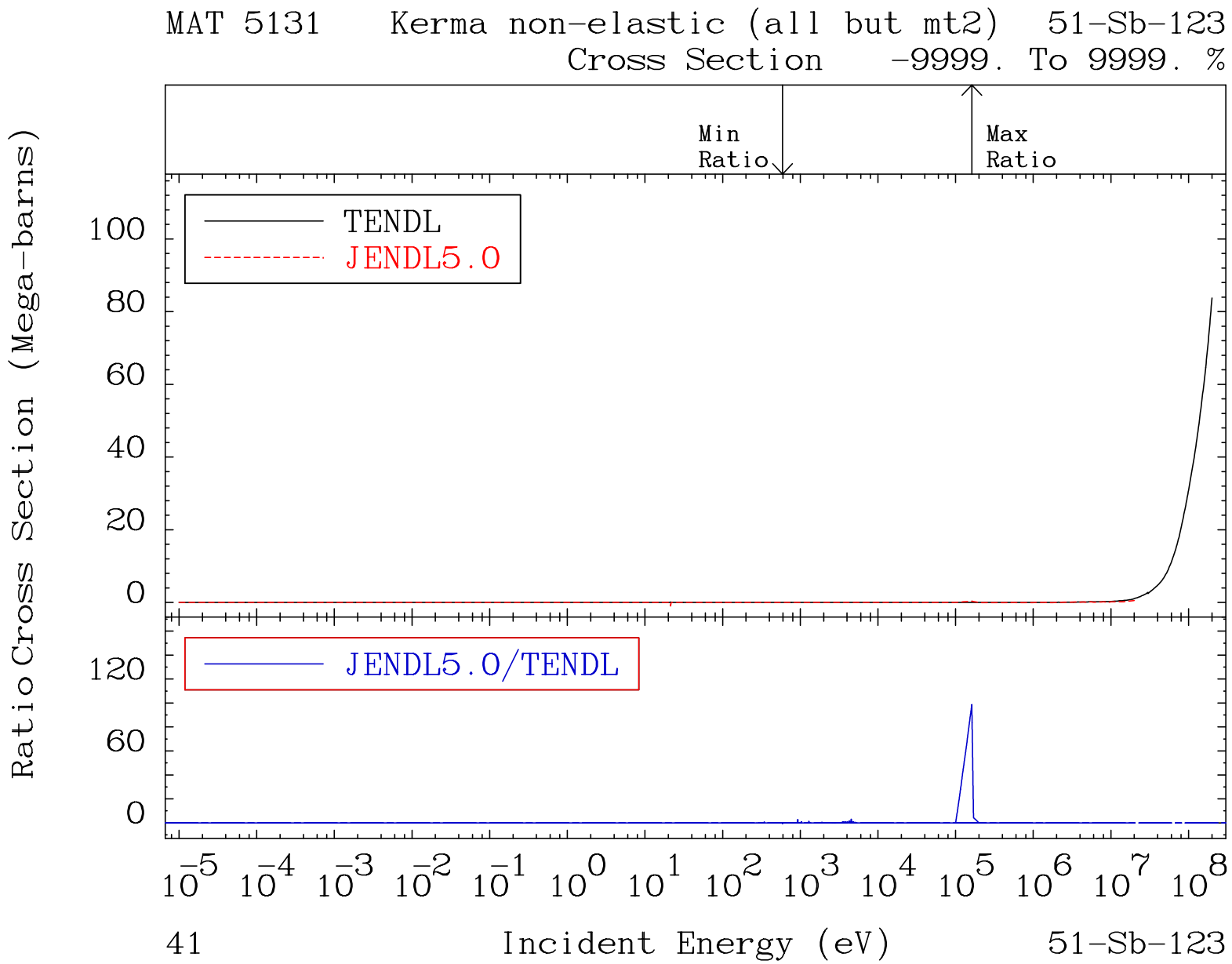

MAT 5131
Tritium Production
51-Sb-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.9614 MeV
JENDL5.0 Threshold 9.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
400
200
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
51-Sb-123

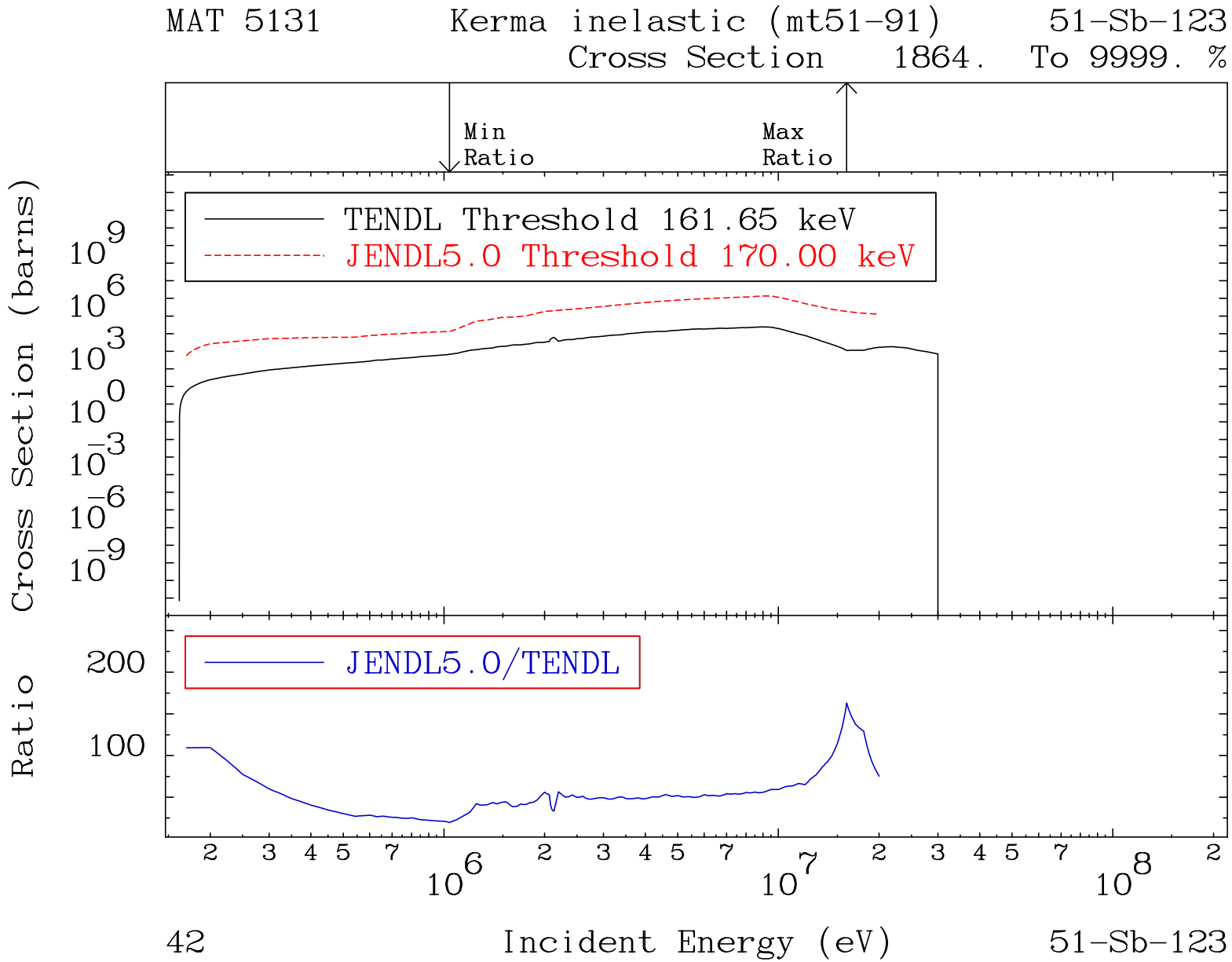

MAT 5131
He-3 Production
Cross Section
51-Sb-123
-100.0 To 866.4 %
Min Ratio
Max Ratio
TENDL Threshold 10.332 MeV
JENDL5.0 Threshold 17.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
12
6
0
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
51-Sb-123

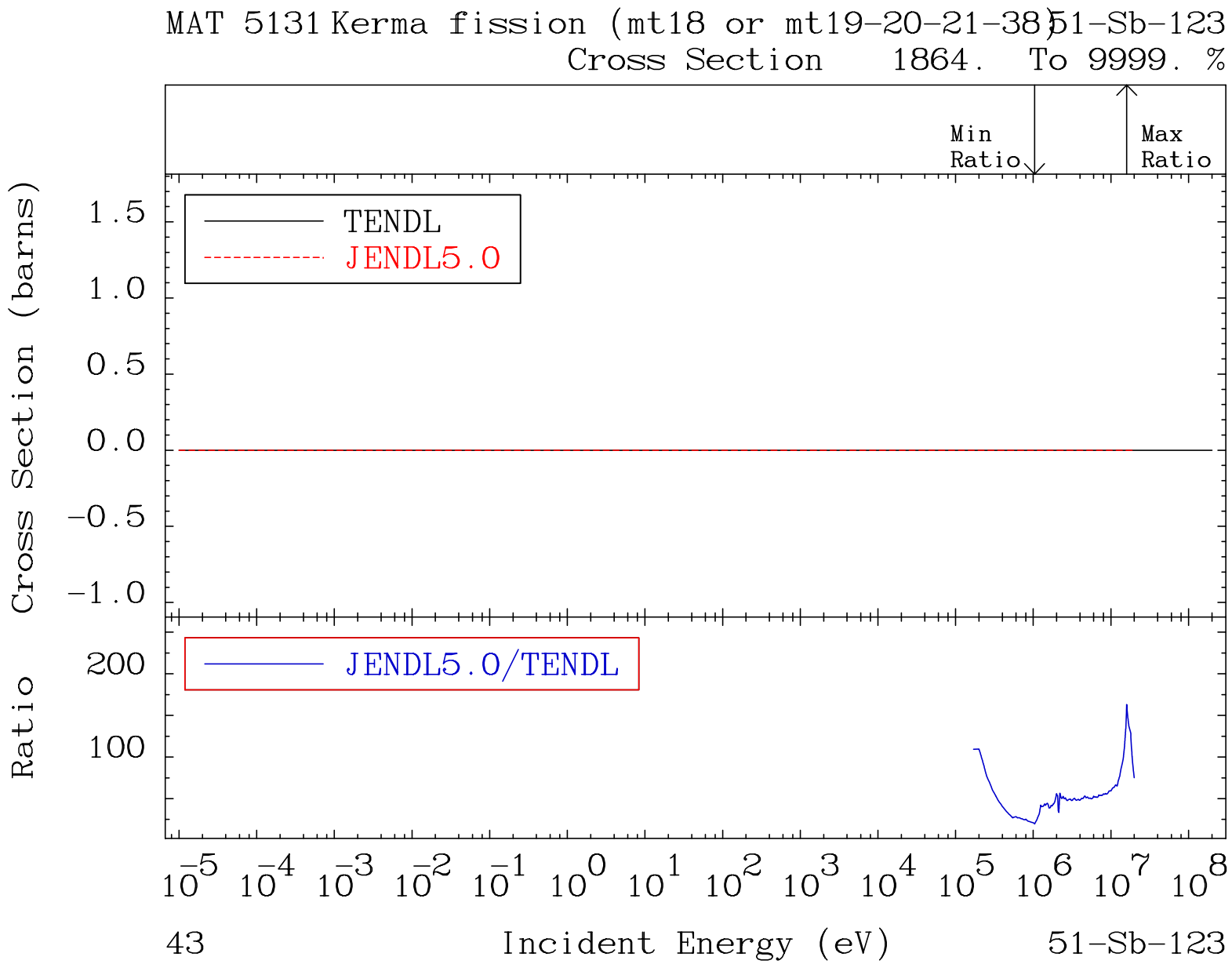

MAT 5131
He-4 Production
Cross Section
51-Sb-123
-100.0 To 184.1 %
Min Ratio
Max Ratio
TENDL Threshold 5.3480 keV
JENDL5.0 Threshold 5.5000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
4
2
0
5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
38
Incident Energy (eV)
51-Sb-123

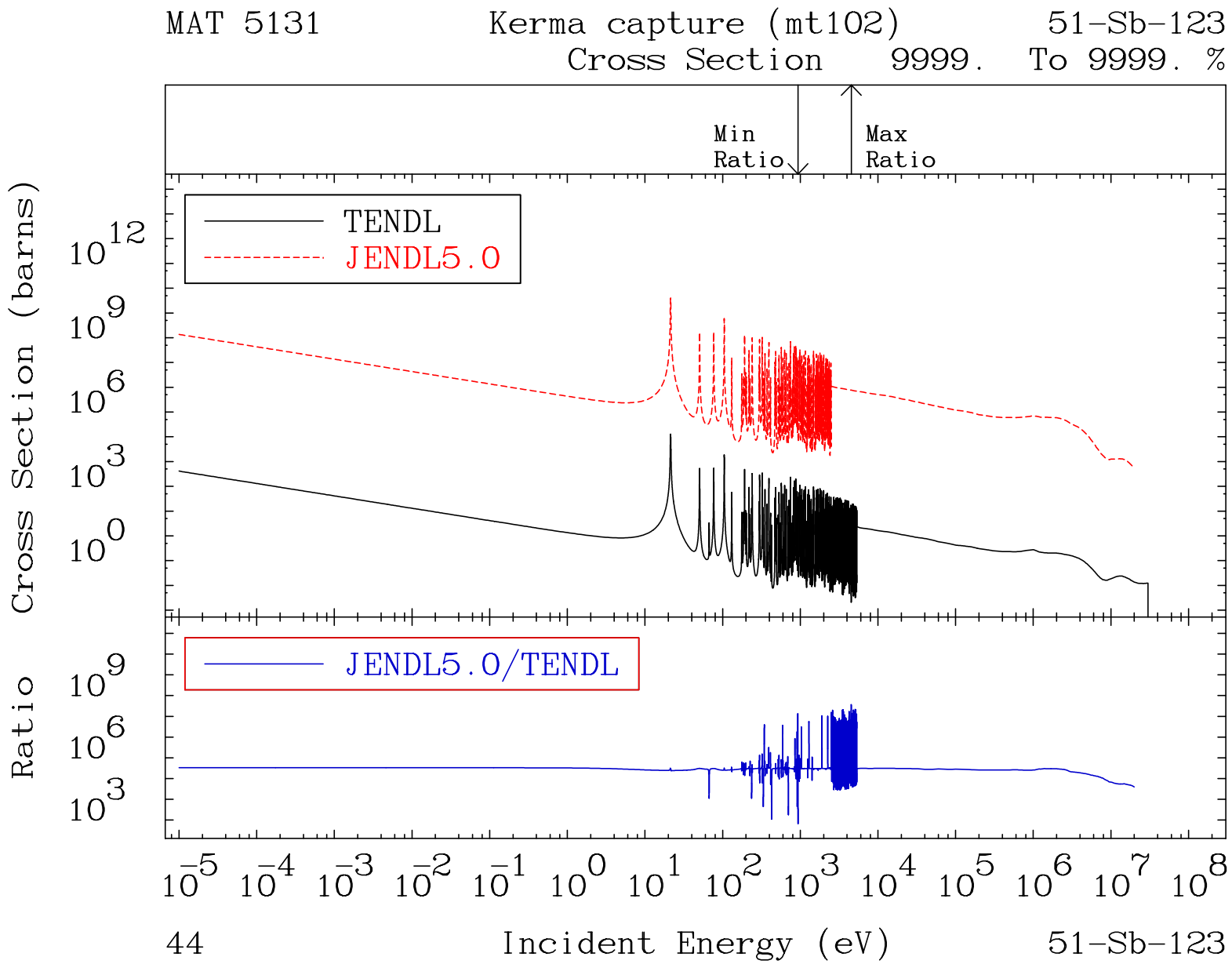

MAT 5131
Kerma total (eV-barns)
51-Sb-123
Cross Section -1287. To 4411. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
100
80
60
40
20
0
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
39
Incident Energy (eV)
51-Sb-123

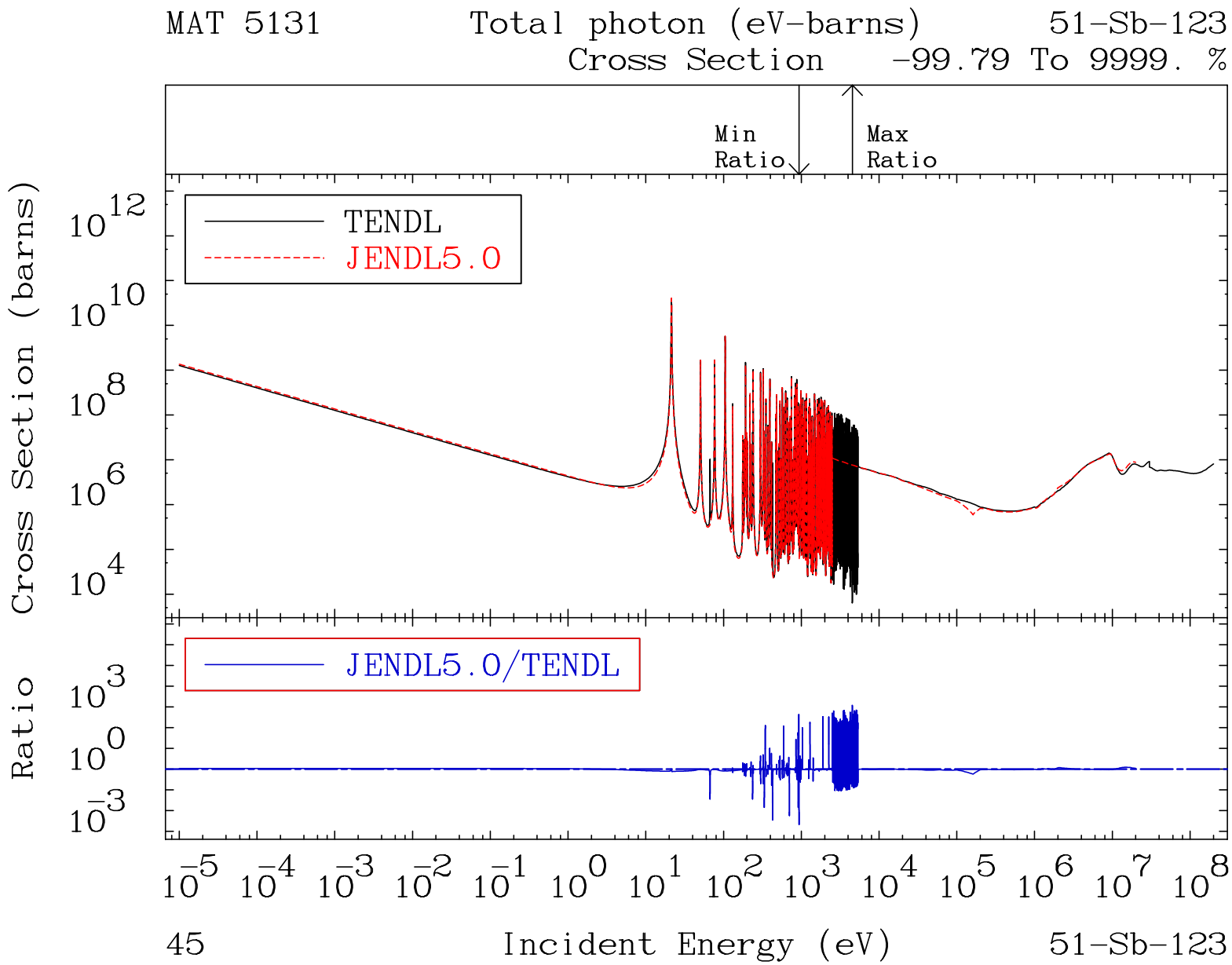

MAT 5131
Kerma elastic
Cross Section
51-Sb-123
-91.40 To 463.2 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
51-Sb-123

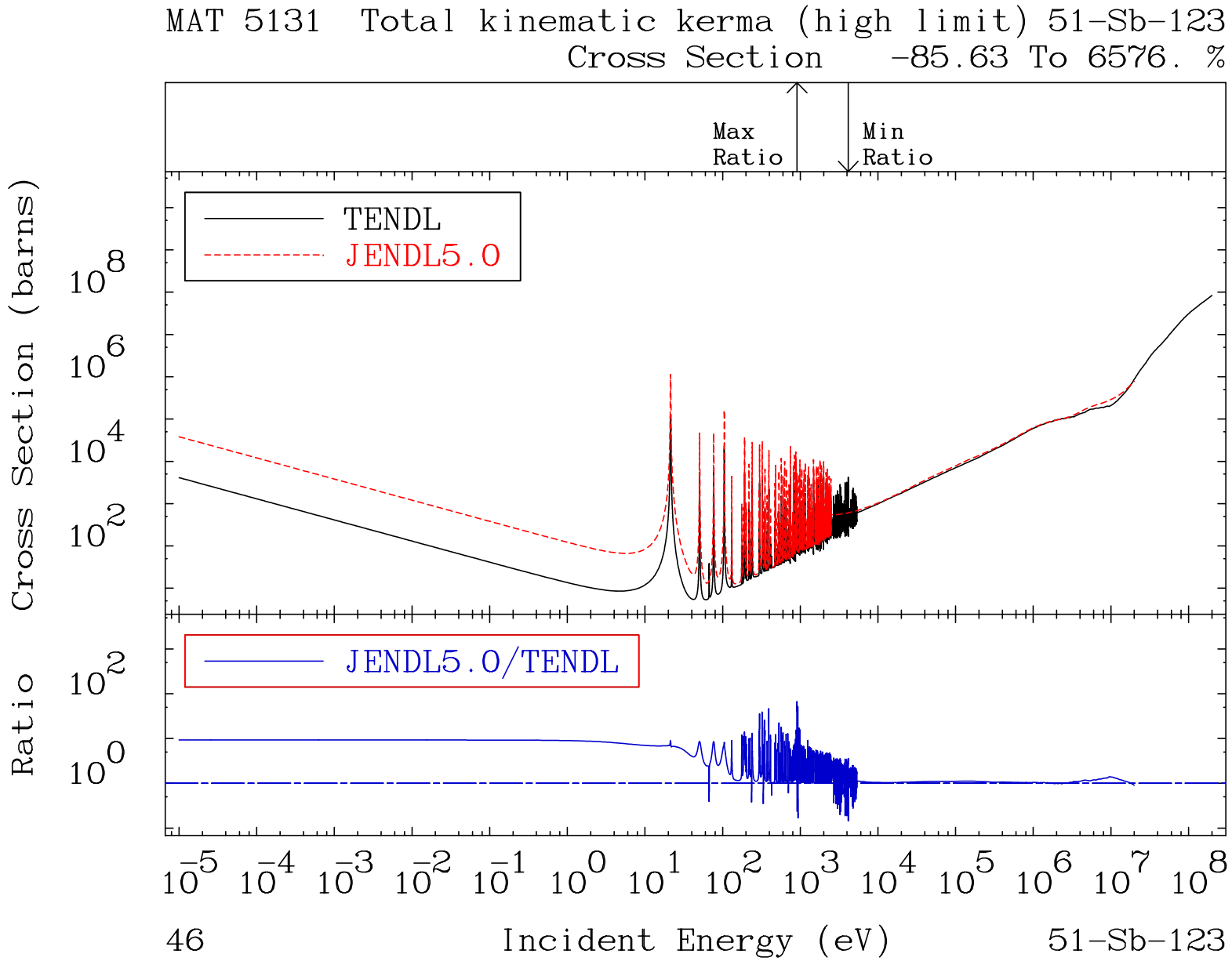

MAT 5131 Kerma non-elastic (all but mt2) 51-Sb-123
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
100
80
60
40
20
0
120
60
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
41
Incident Energy (eV)
51-Sb-123

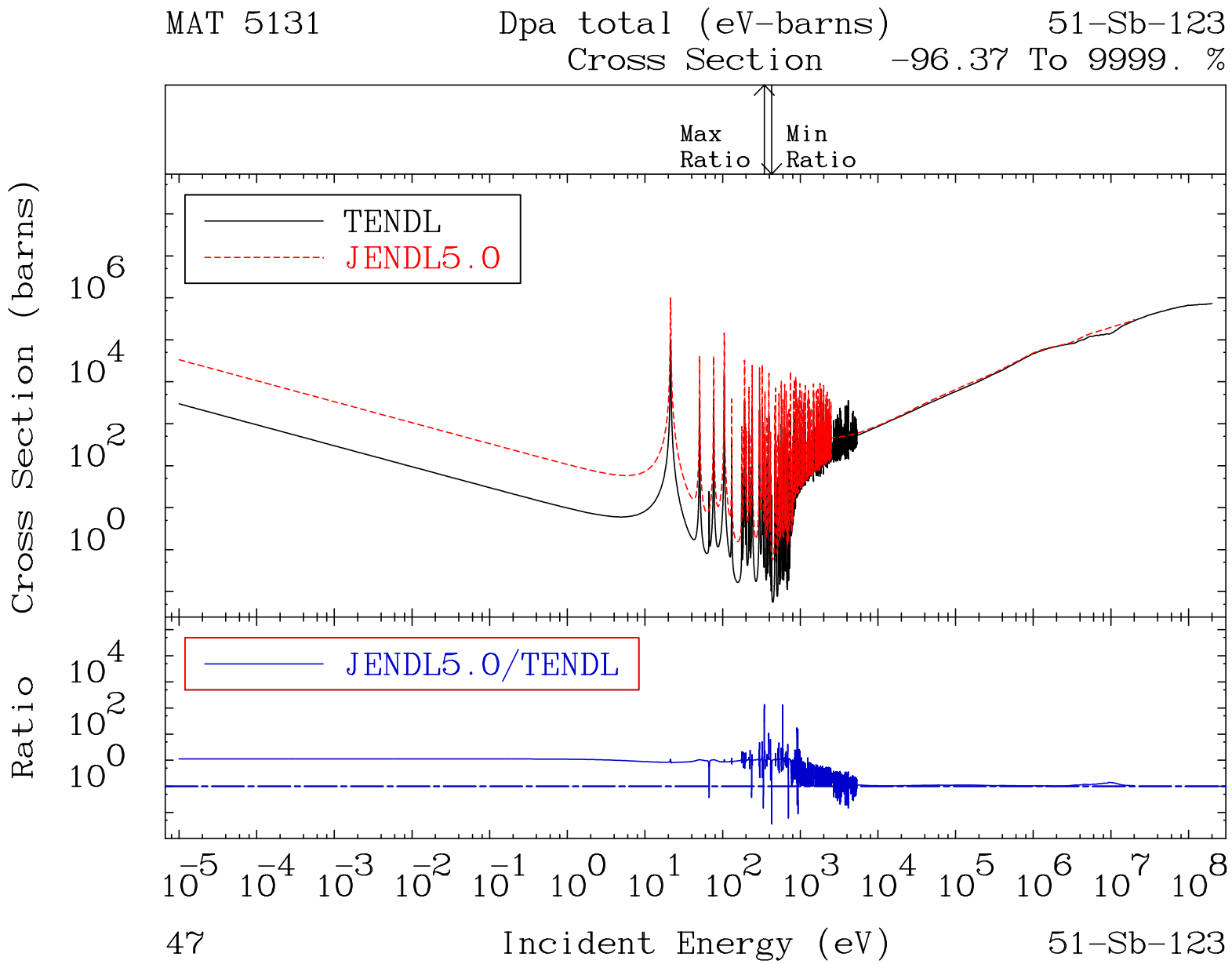

MAT 5131
Kerma inelastic (mt51-91)
51-Sb-123
Cross Section 1864. To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 161.65 keV
JENDL5.0 Threshold 170.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
42
51-Sb-123

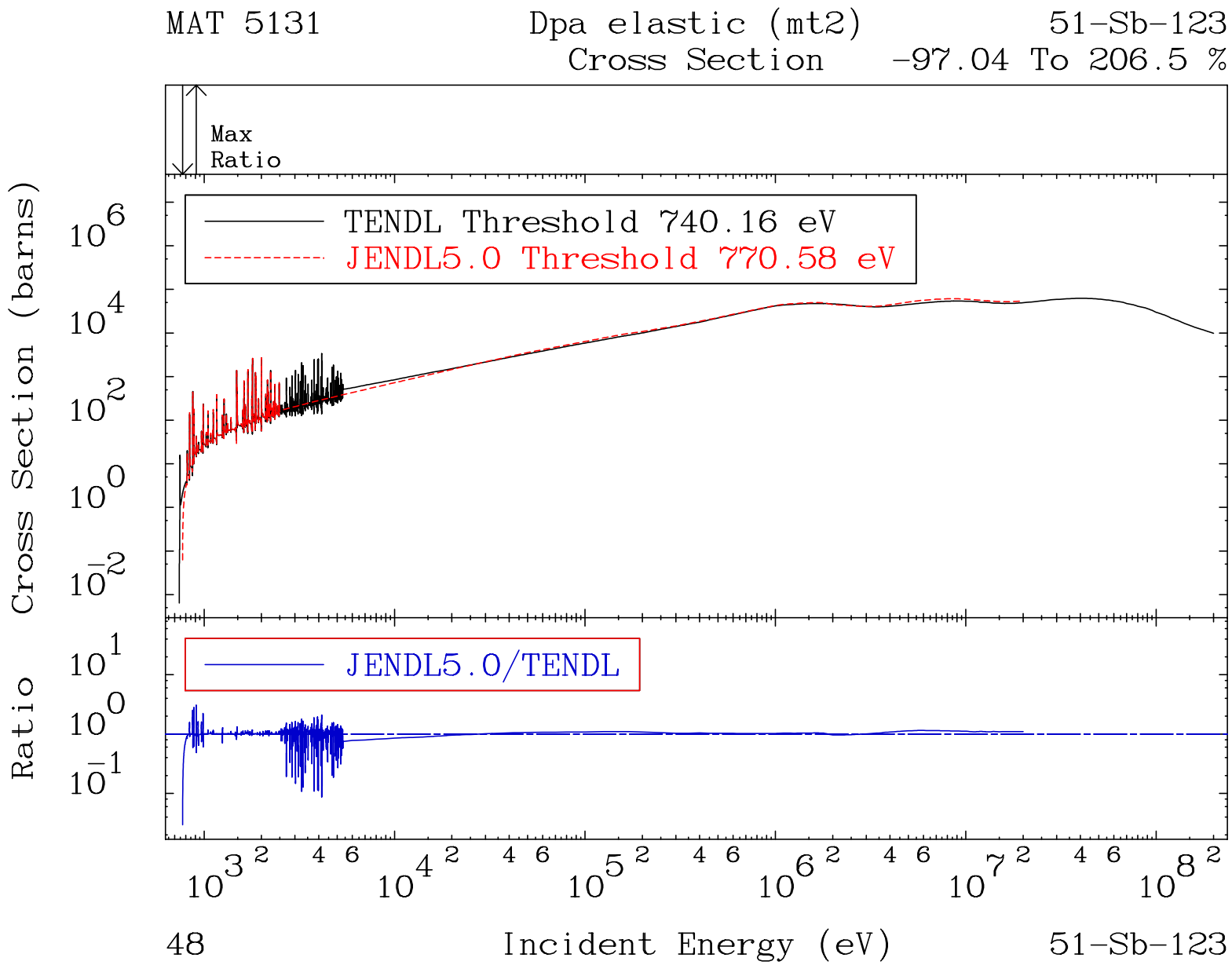

MAT 5131 Kerma fission (mt18 or mt19-20-21-38) 51-Sb-123
Cross Section 1864. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
200
100
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
43
Incident Energy (eV)
51-Sb-123

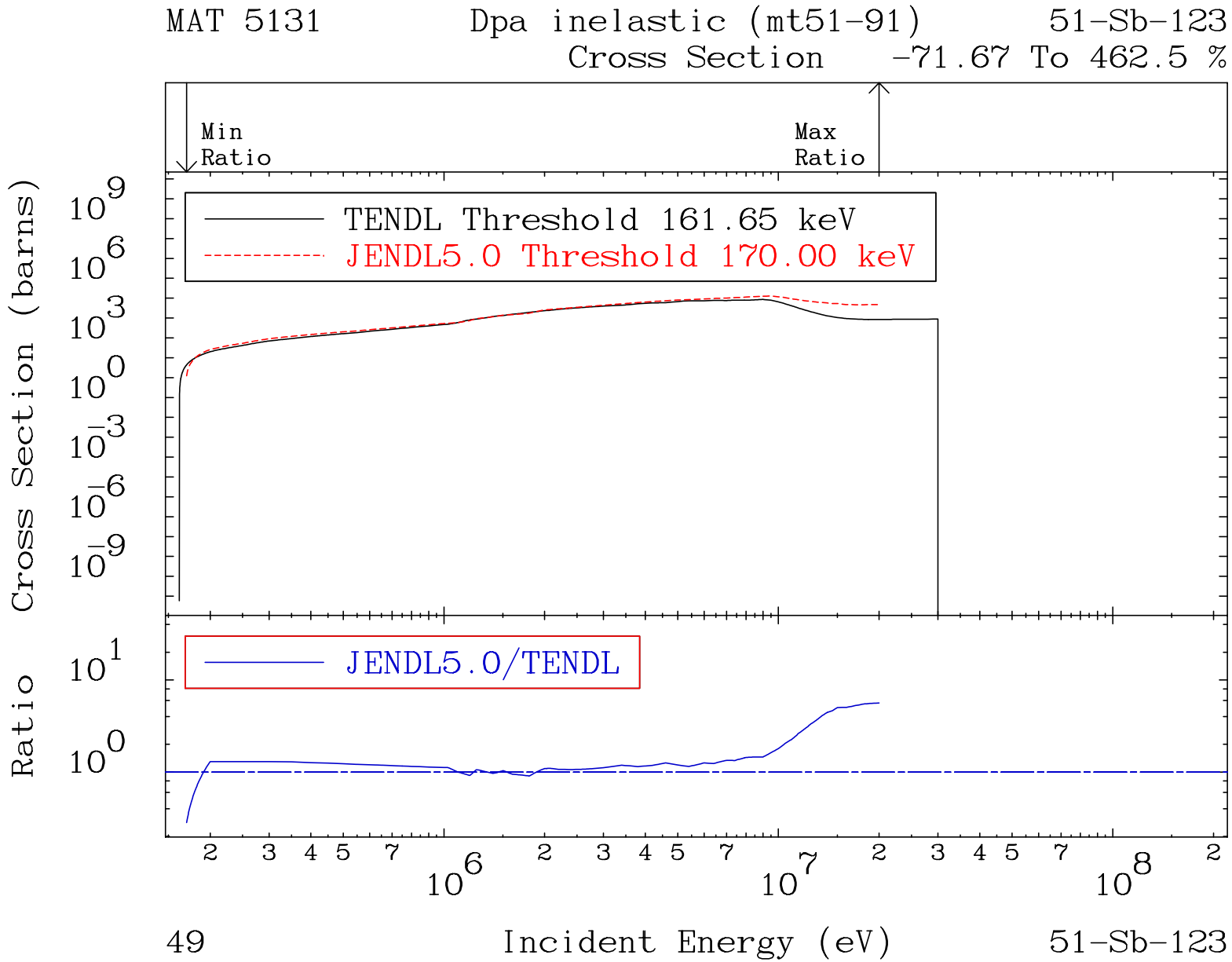

MAT 5131
Kerma capture (mt102)
51-Sb-123
Cross Section 9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
51-Sb-123

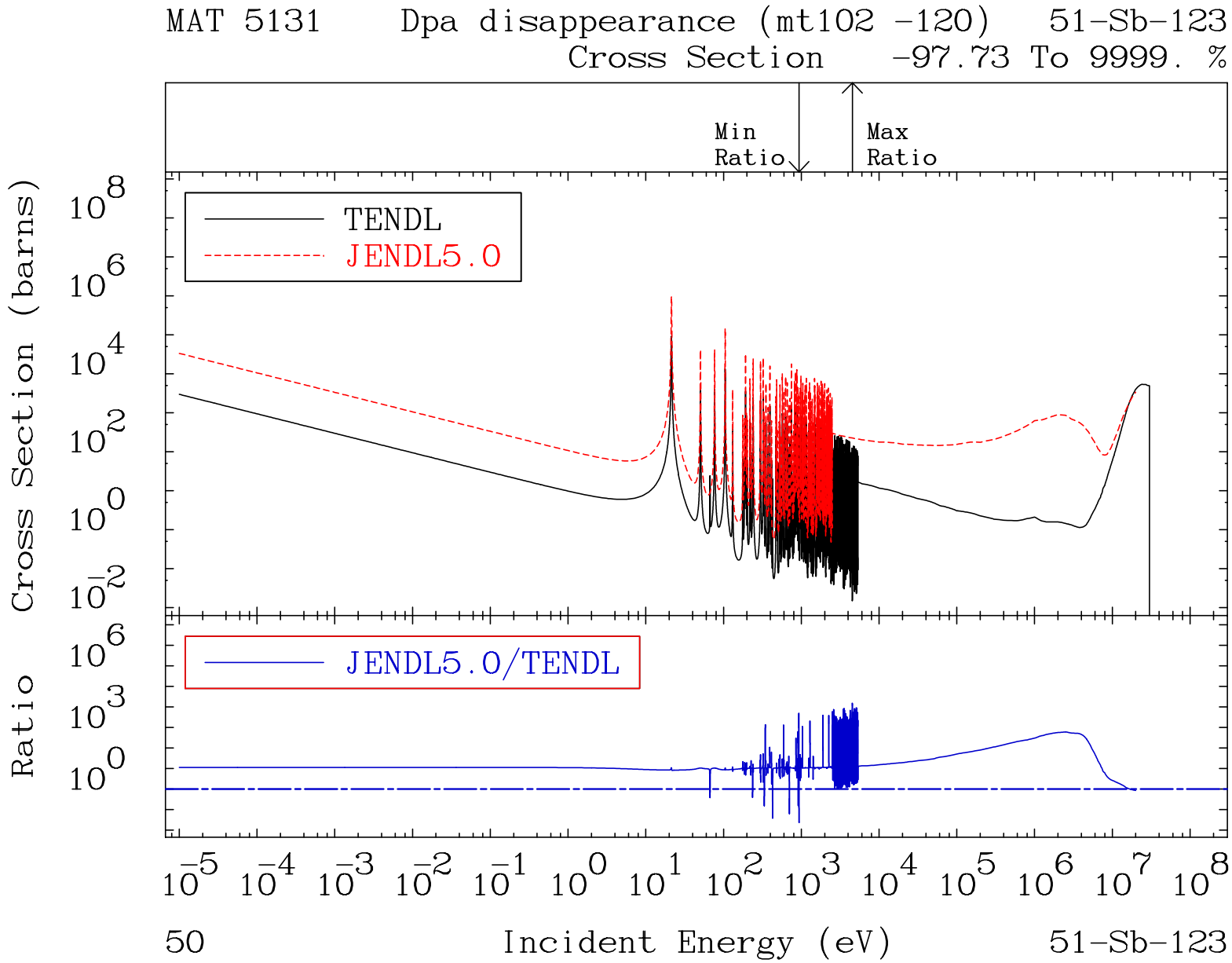

MAT 5131
Total photon (eV-barns)
51-Sb-123
Cross Section -99.79 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
51-Sb-123

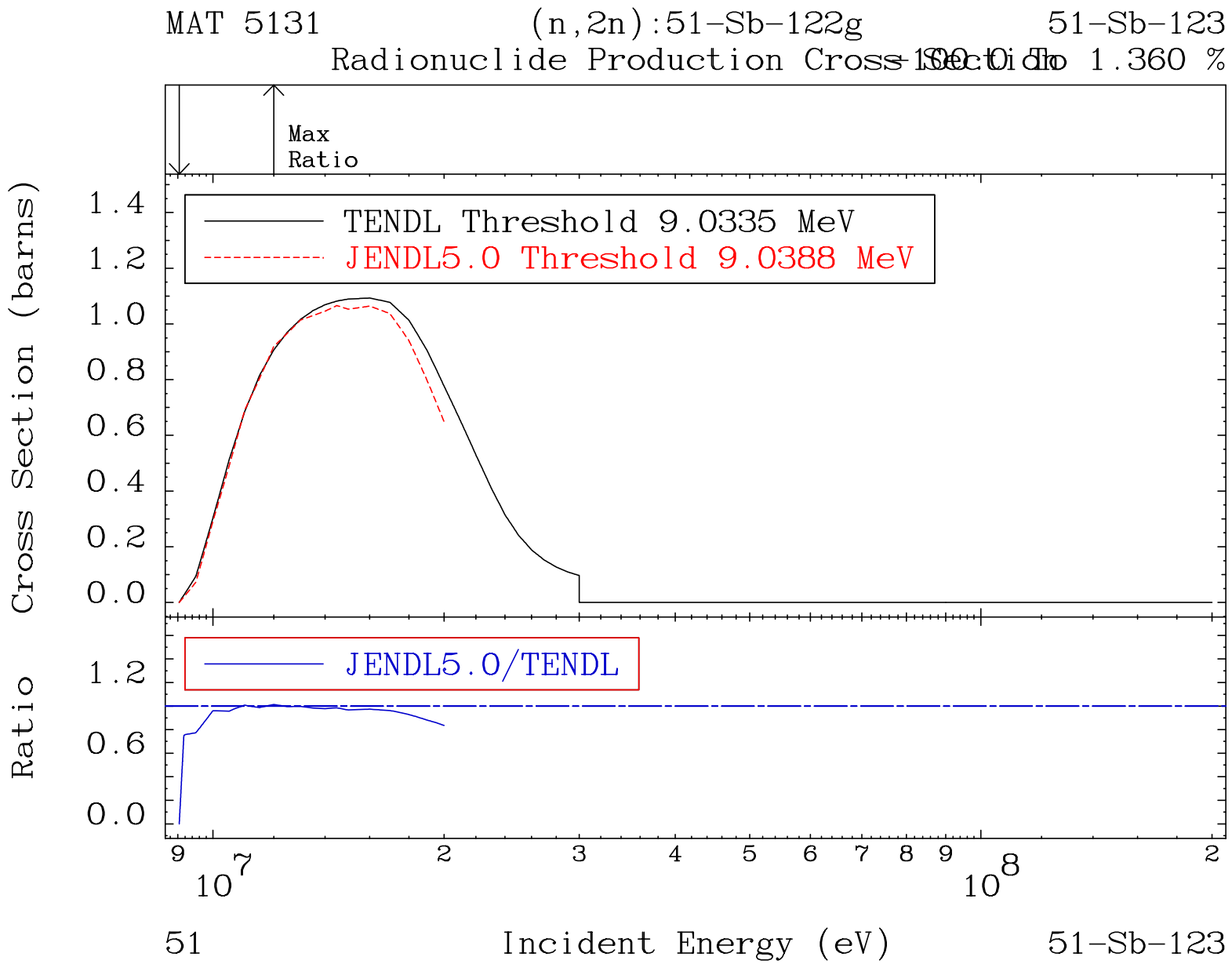

MAT 5131 Total kinematic kerma (high limit) 51-Sb-123
Cross Section -85.63 To 6576. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
46
51-Sb-123

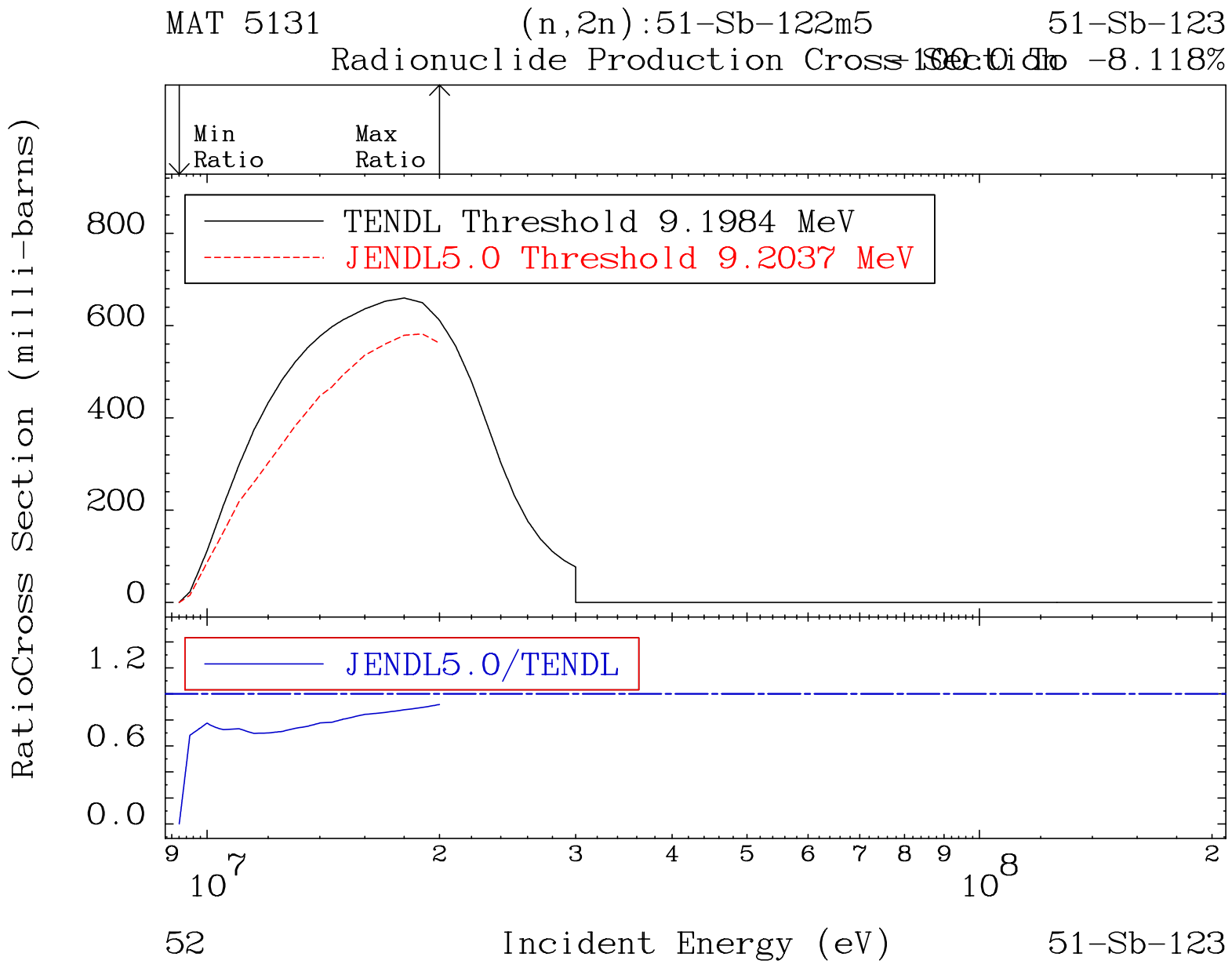

MAT 5131
Dpa total (eV-barns)
51-Sb-123
Cross Section
-96.37 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
47
51-Sb-123

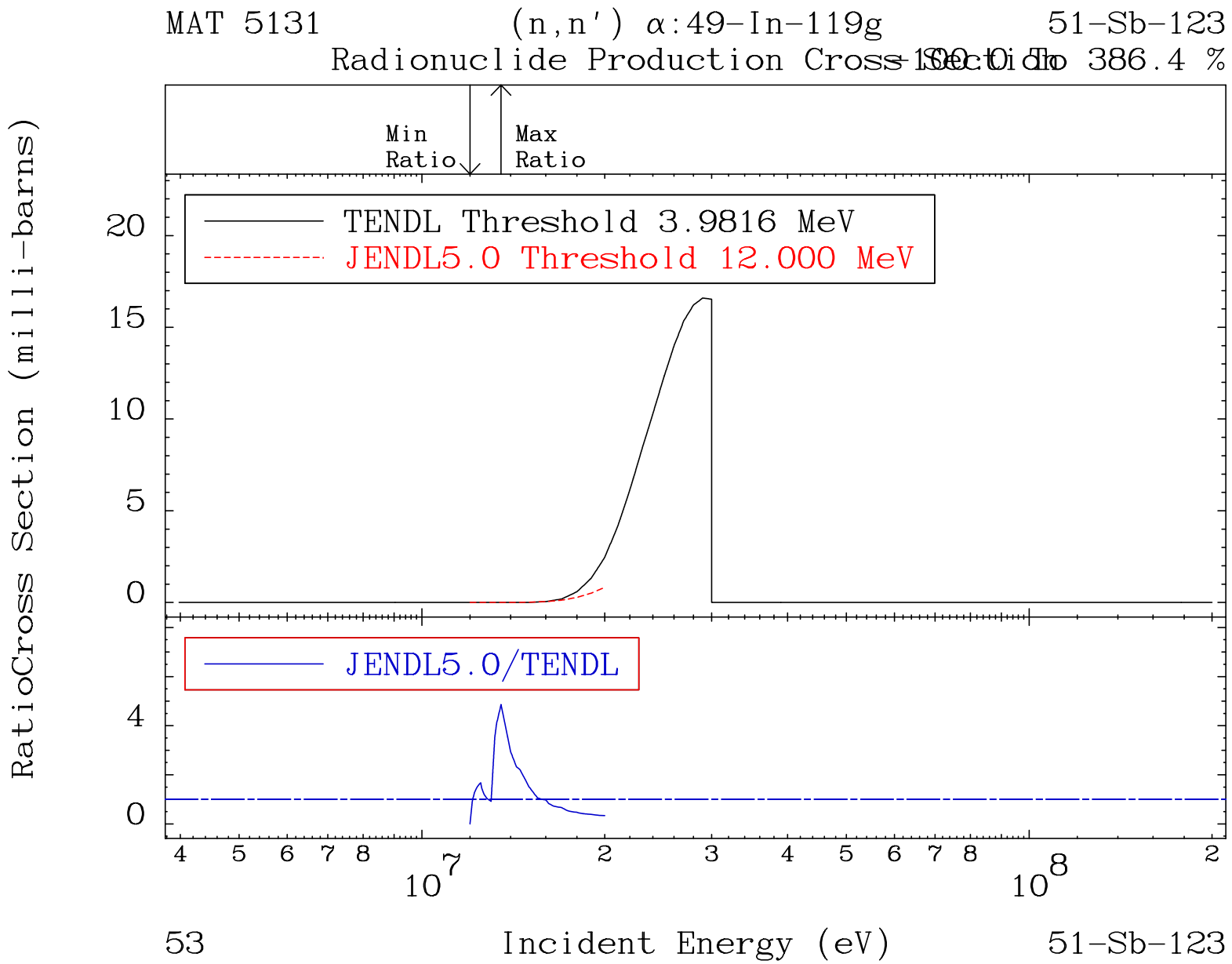

MAT 5131
Dpa elastic (mt2)
Cross Section
51-Sb-123
-97.04 To 206.5 %
Max
Ratio
TENDL Threshold 740.16 eV
JENDL5.0 Threshold 770.58 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
51-Sb-123

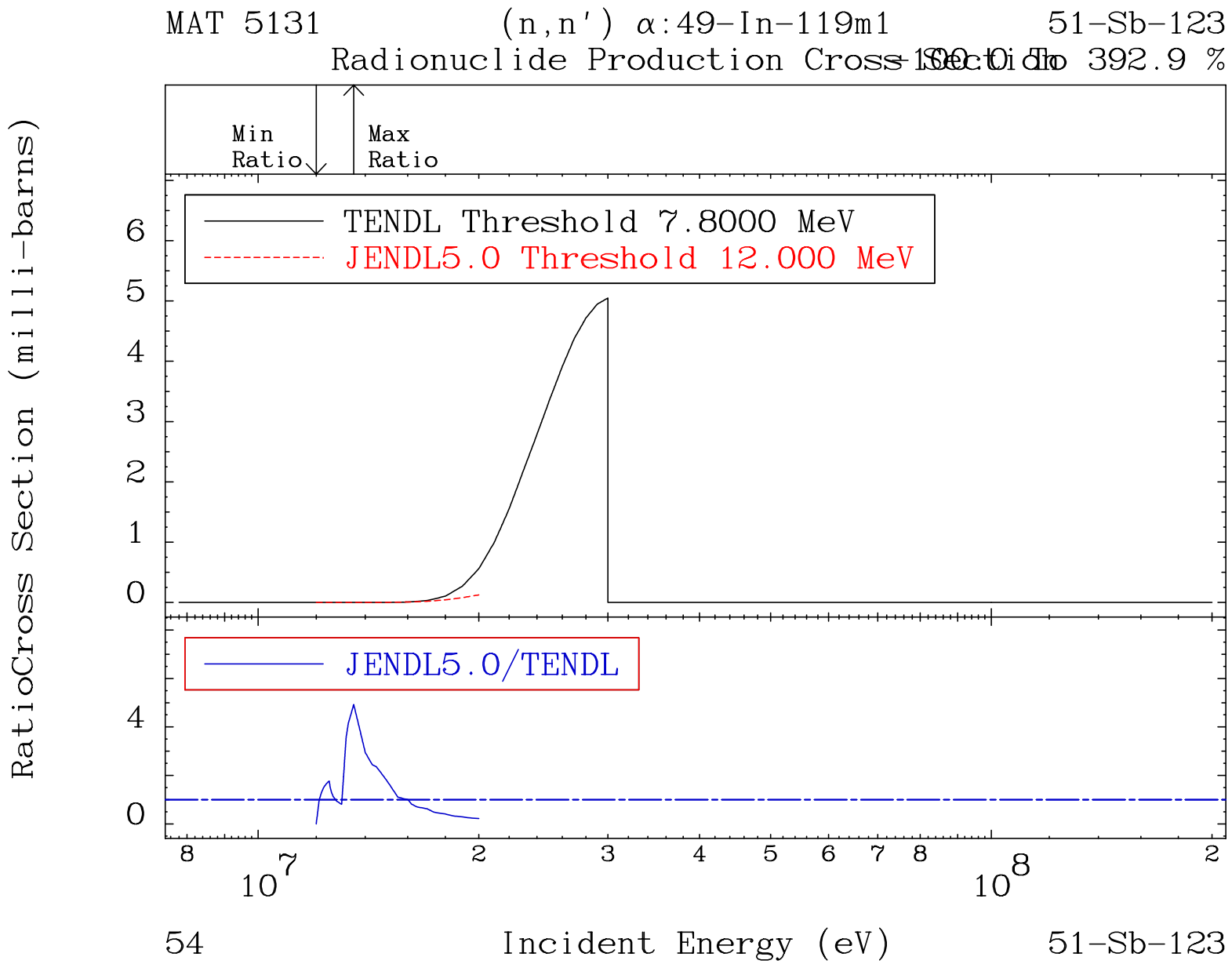

MAT 5131
Dpa inelastic (mt51-91)
51-Sb-123
Cross Section -71.67 To 462.5 %
Min Ratio
Max Ratio
TENDL Threshold 161.65 keV
JENDL5.0 Threshold 170.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
51-Sb-123

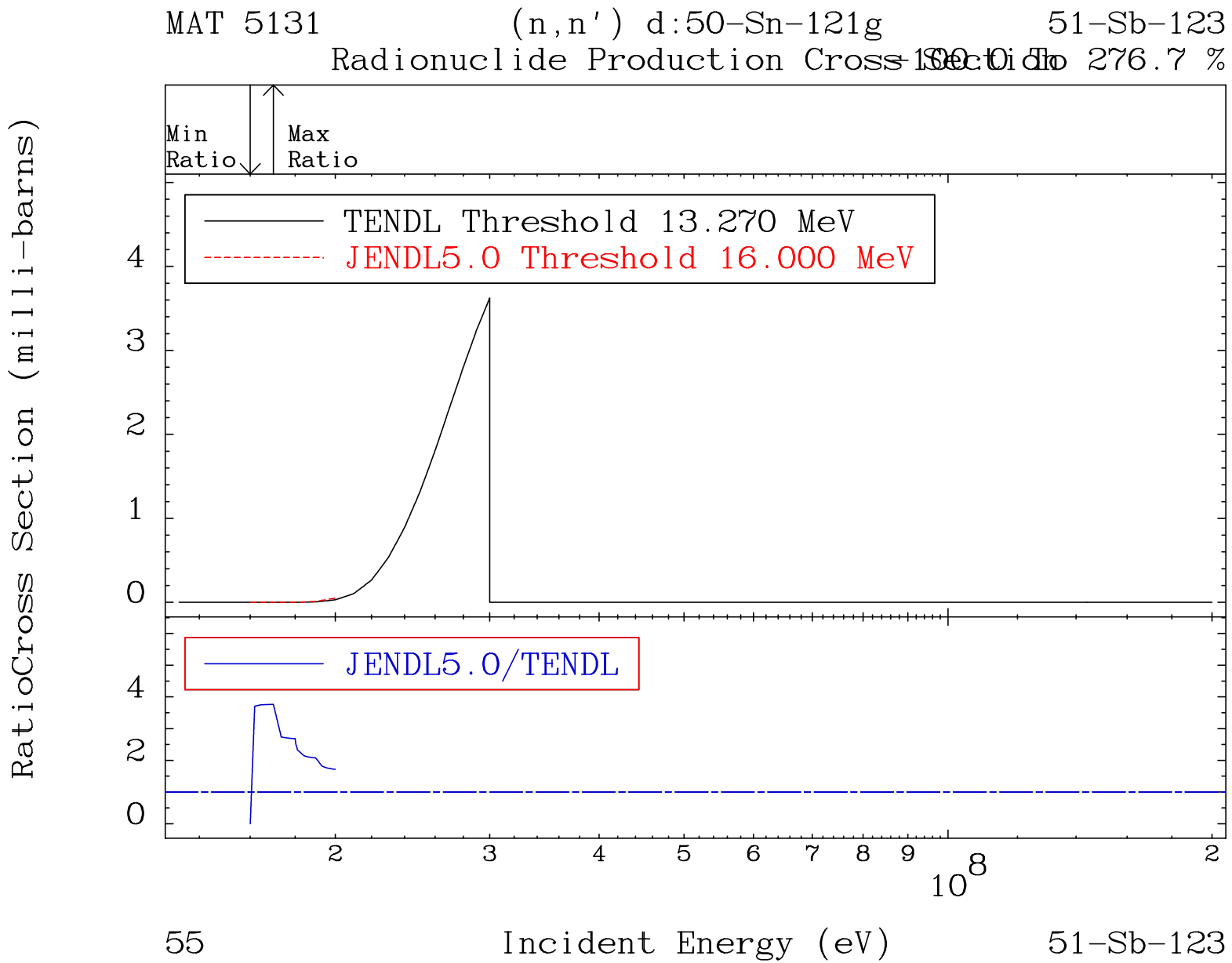

MAT 5131 Dpa disappearance (mt102 -120) 51-Sb-123
Cross Section -97.73 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
51-Sb-123

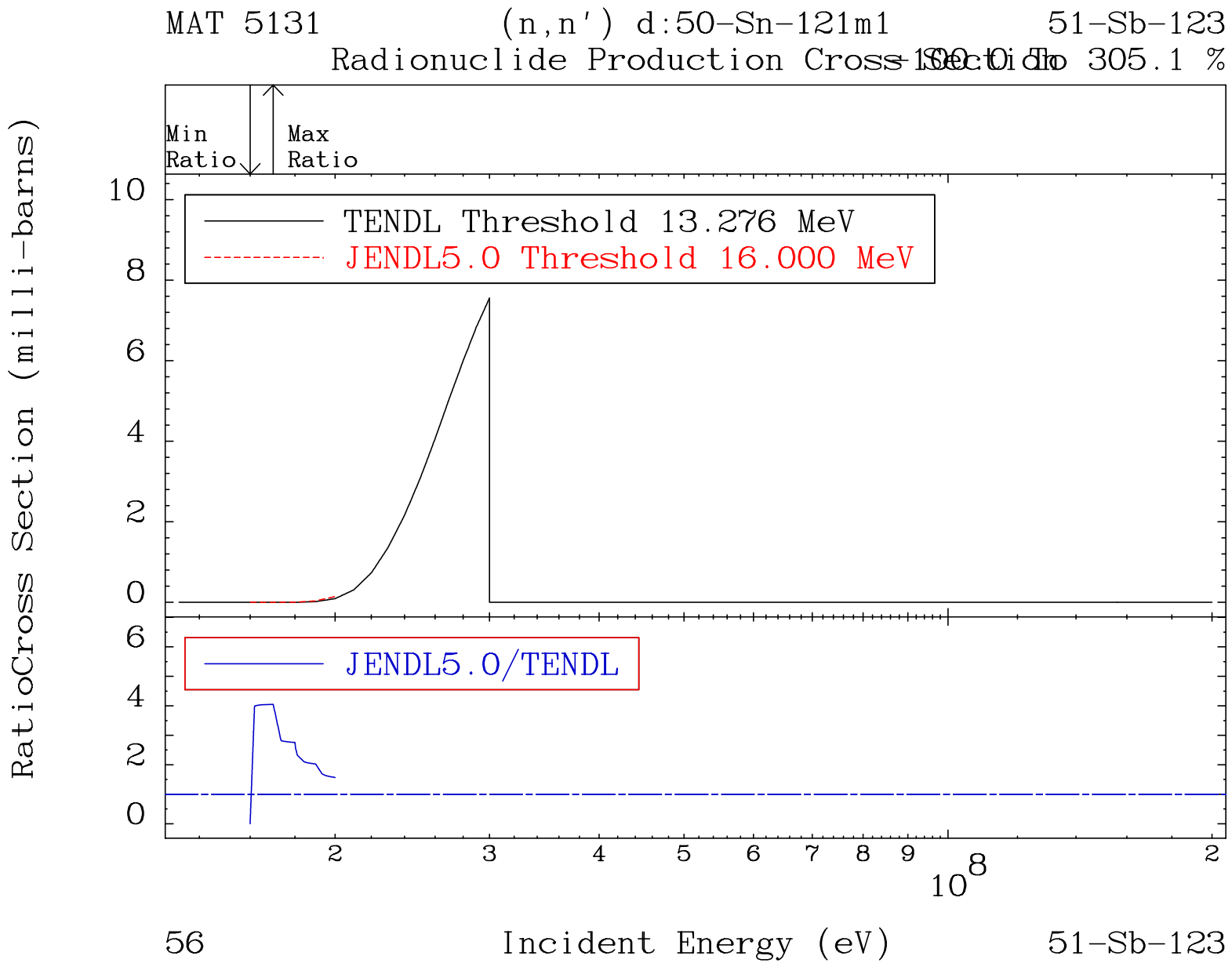

MAT 5131
(n,2n):51-Sb-122g
51-Sb-123
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 9.0335 MeV
JENDL5.0 Threshold 9.0388 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
51-Sb-123

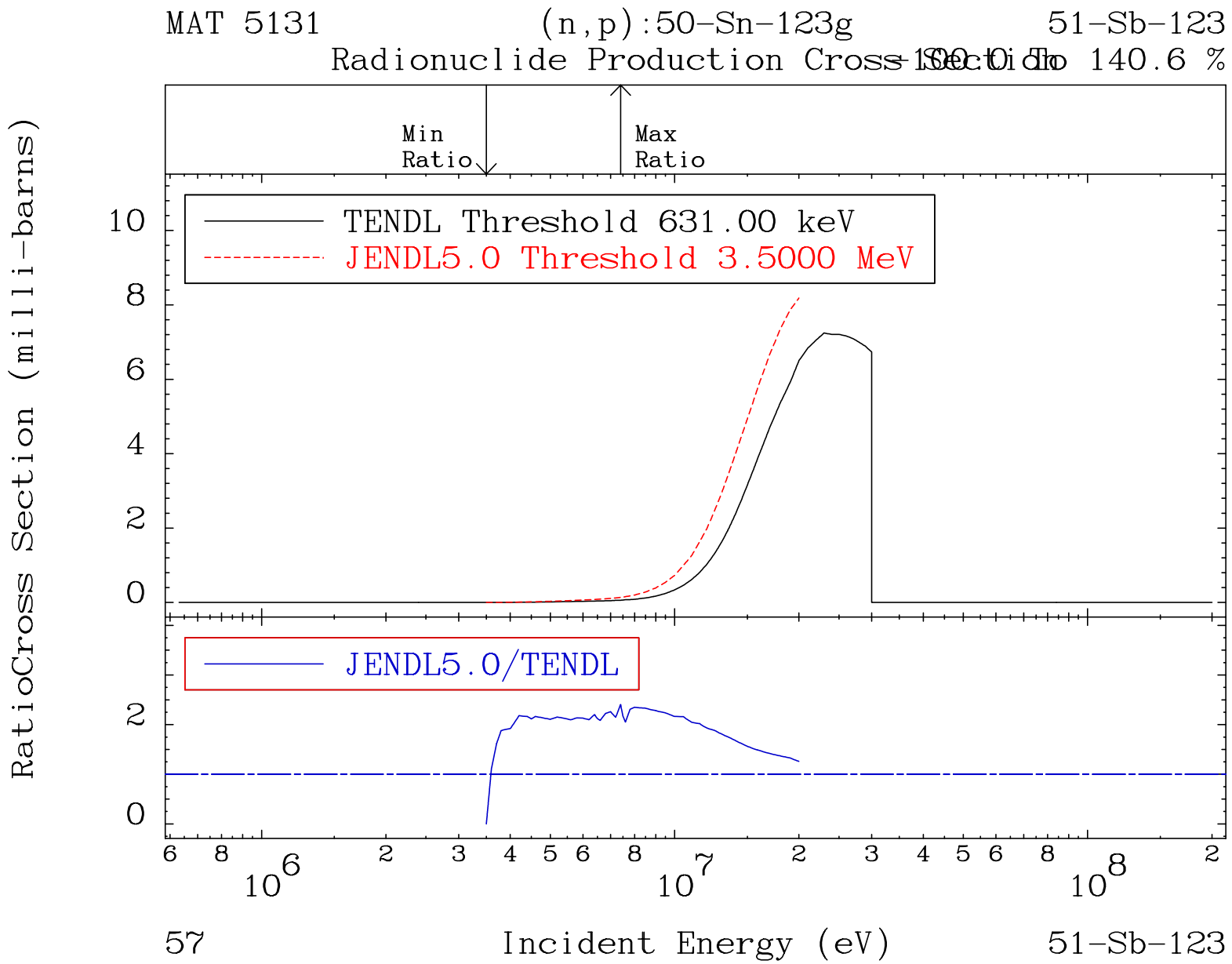

MAT 5131
(n,2n):51-Sb-122m5
51-Sb-123
Radionuclide Production Cross Section
-8.118%
Min Ratio
Max Ratio
TENDL Threshold 9.1984 MeV
JENDL5.0 Threshold 9.2037 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
51-Sb-123

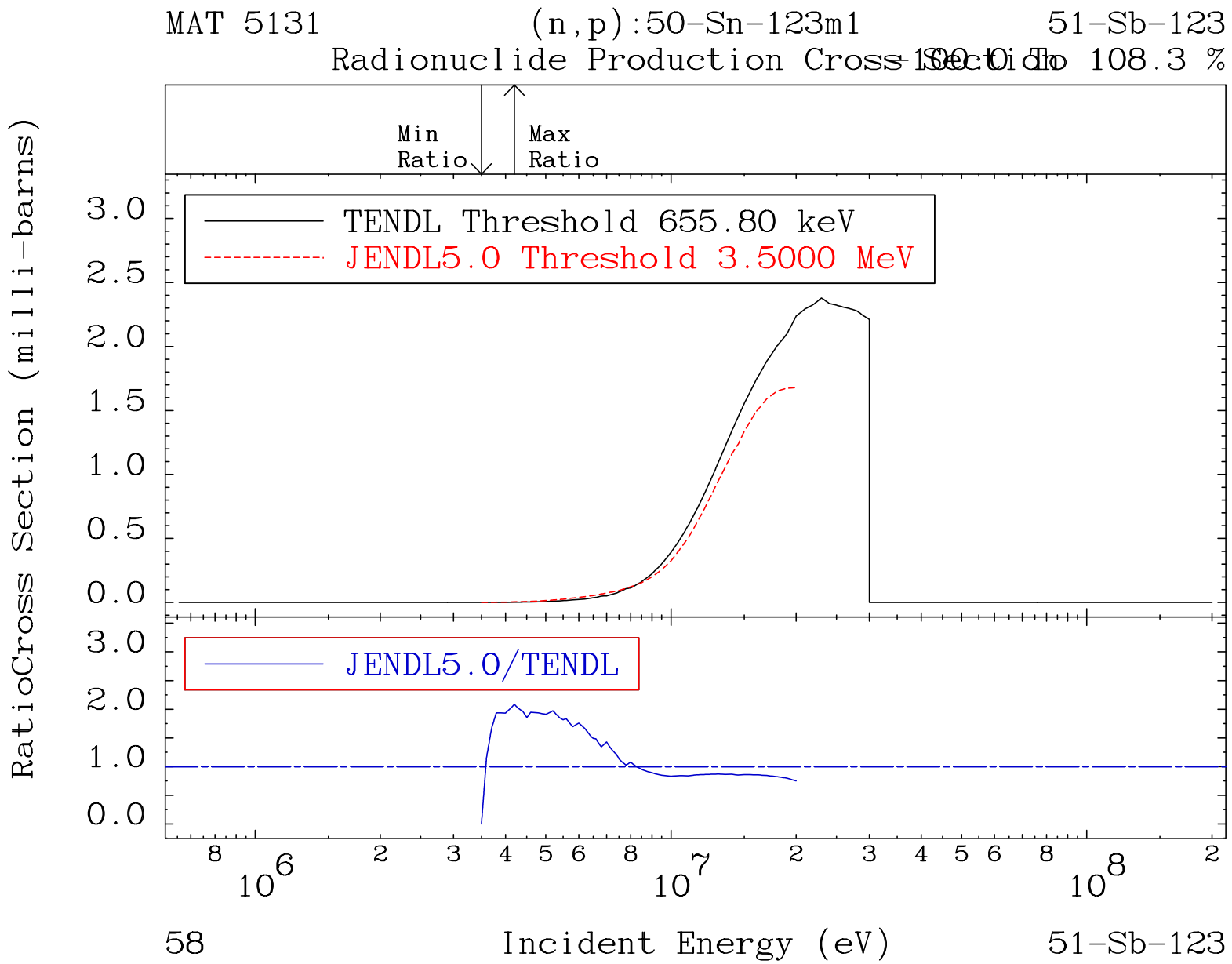

MAT 5131
(n,n') α:49-In-119g
51-Sb-123
Radionuclide Production Cross Section To 386.4 %
Min Ratio
Max Ratio
TENDL Threshold 3.9816 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
51-Sb-123

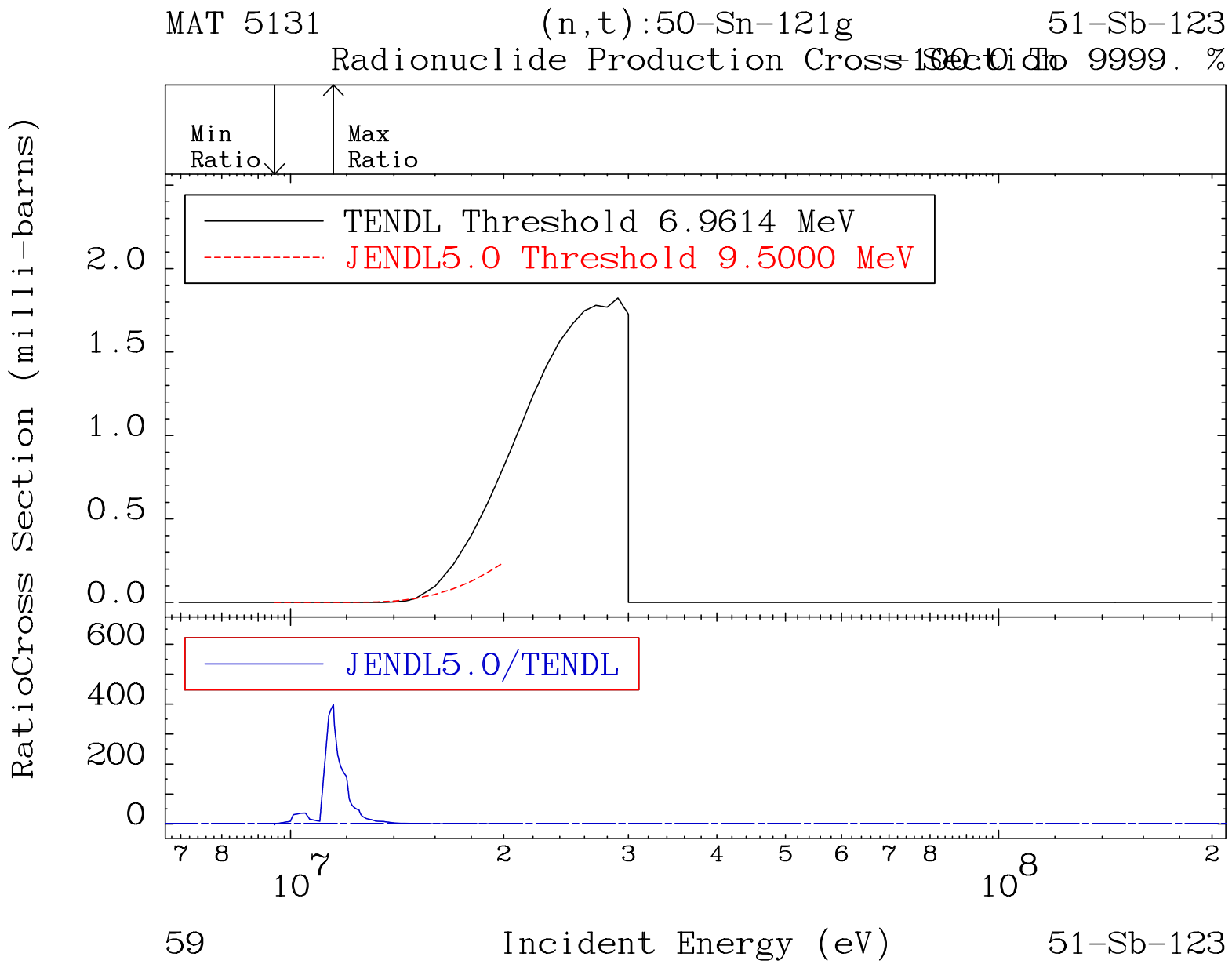

MAT 5131
(n,n') α:49-In-119m1
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 7.8000 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
54
51-Sb-123

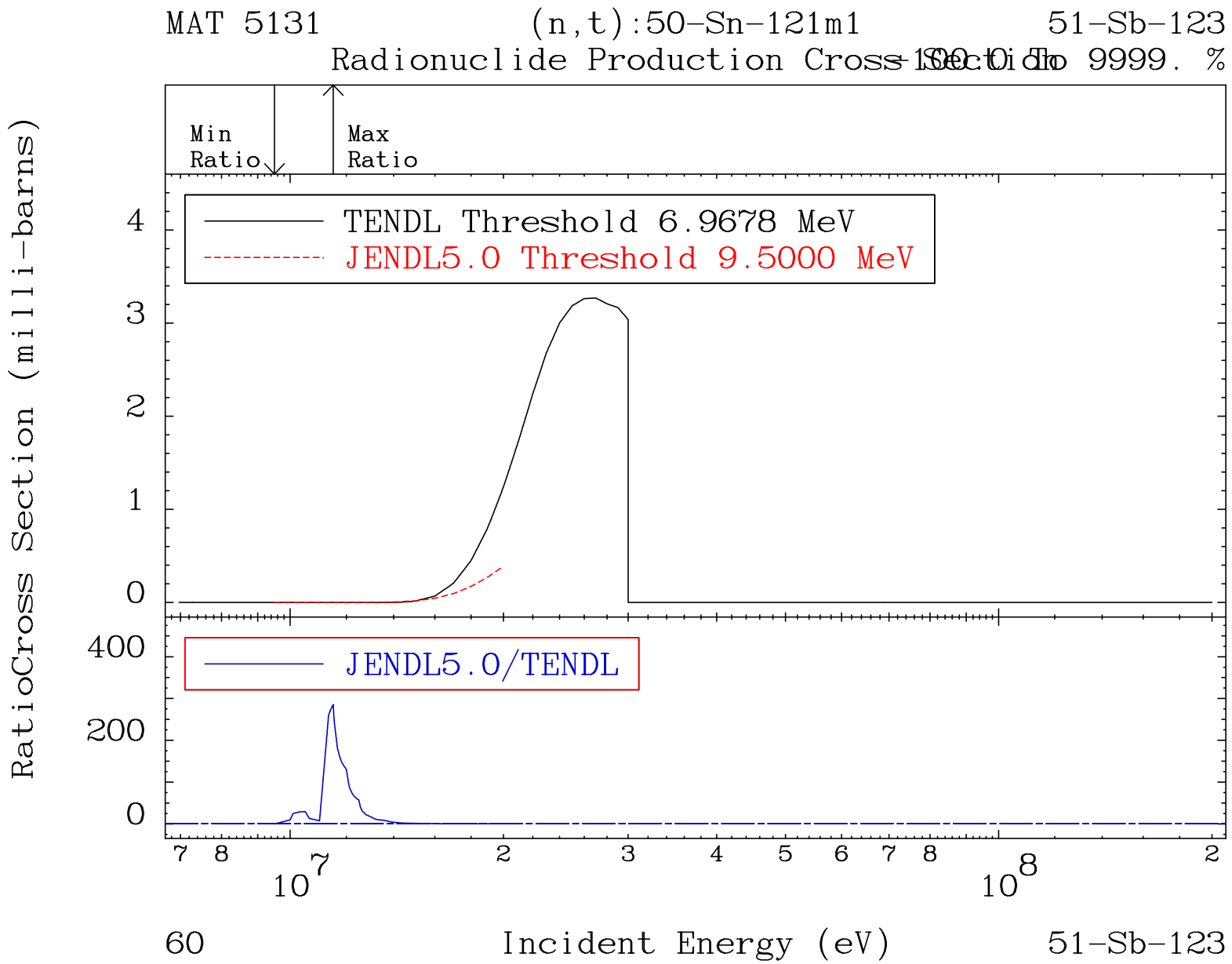

MAT 5131
(n,n') d:50-Sn-121g
51-Sb-123
Radionuclide Production Cross Section To 276.7 %
Min Ratio
Max Ratio
TENDL Threshold 13.270 MeV
JENDL5.0 Threshold 16.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
55
51-Sb-123

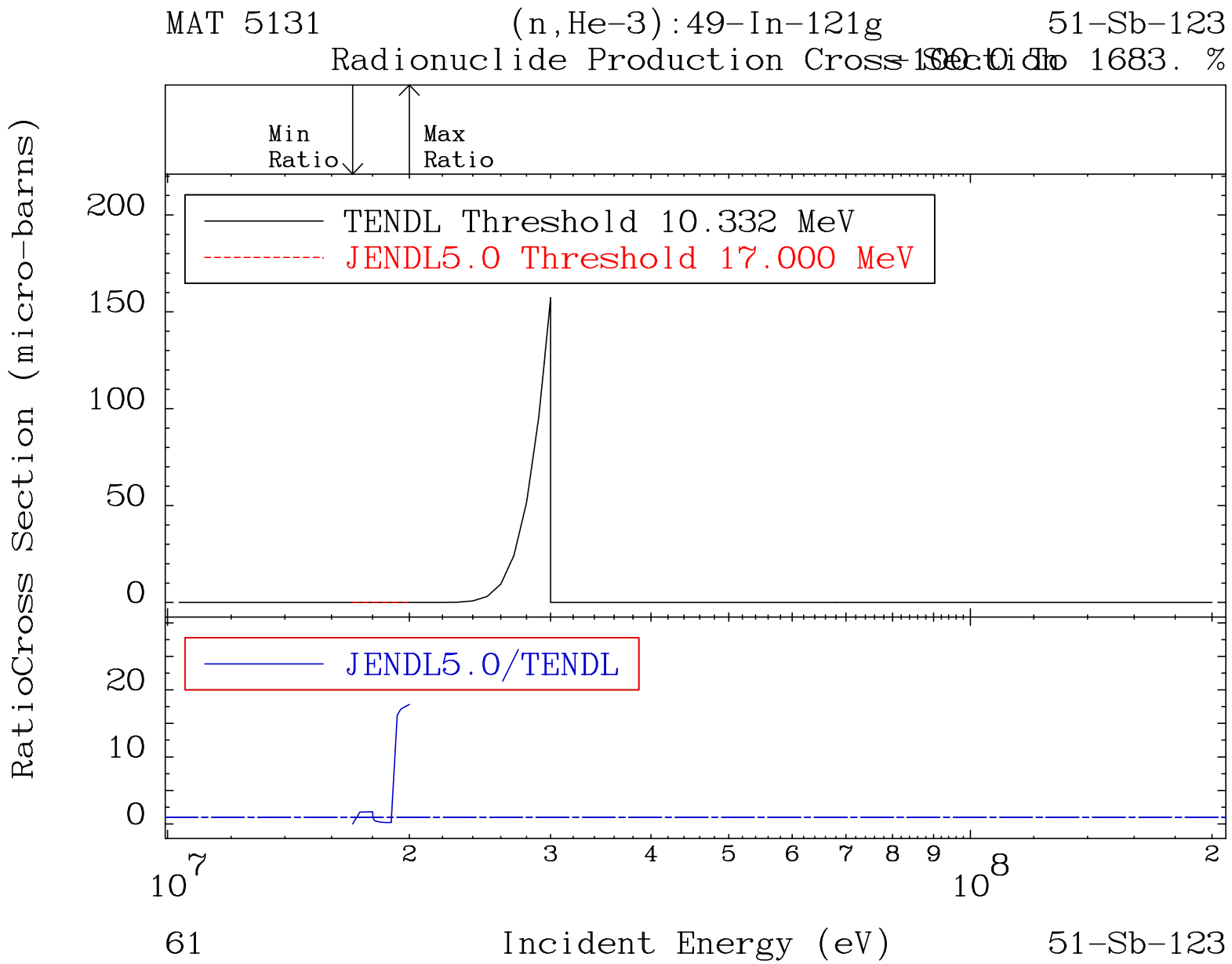

MAT 5131
(n,n') d:50-Sn-121m1
51-Sb-123
Radionuclide Production Cross Section To 305.1 %
Min Ratio
Max Ratio
TENDL Threshold 13.276 MeV
JENDL5.0 Threshold 16.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
56
51-Sb-123

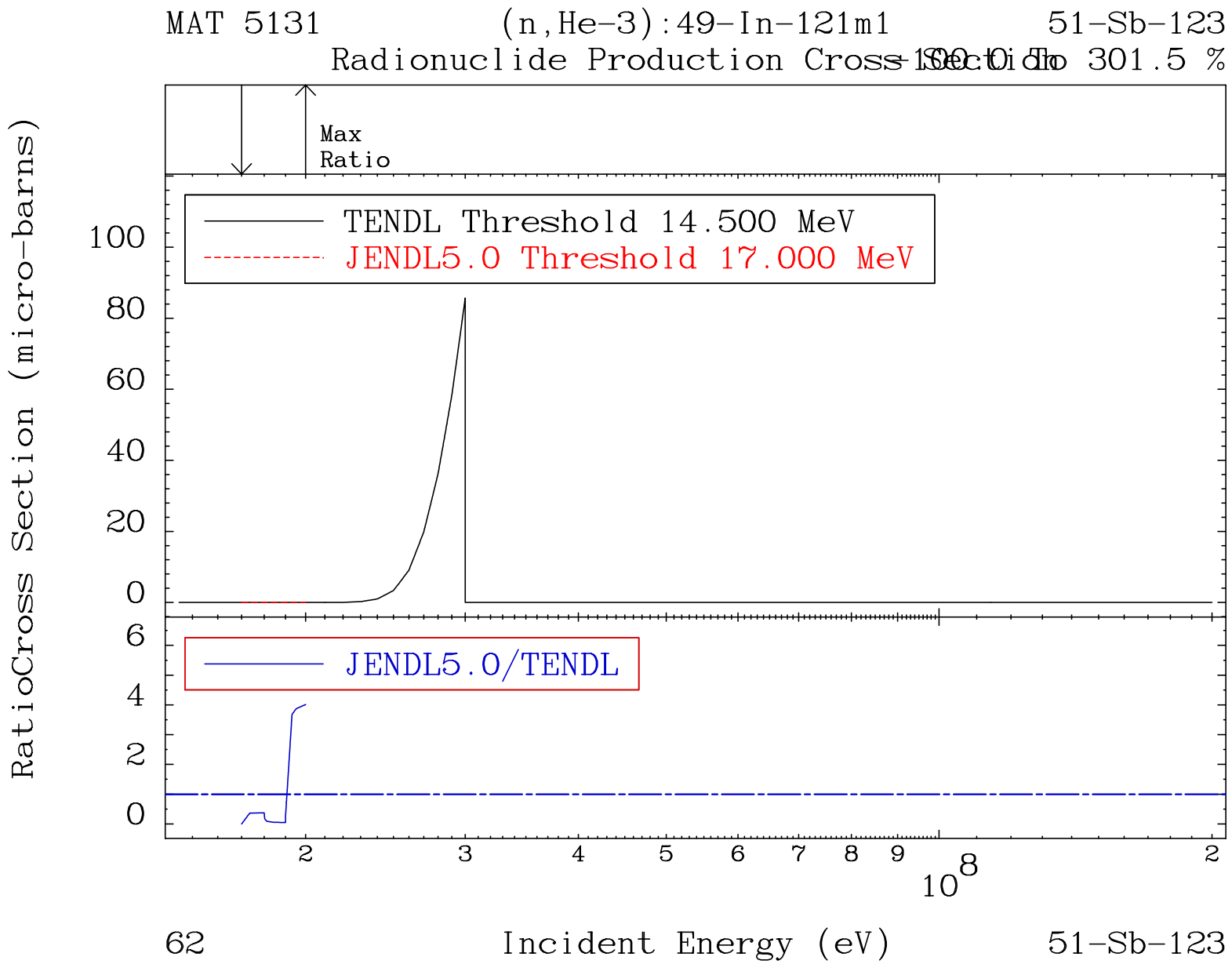

MAT 5131
(n,p):50-Sn-123g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 631.00 keV
JENDL5.0 Threshold 3.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
57
51-Sb-123

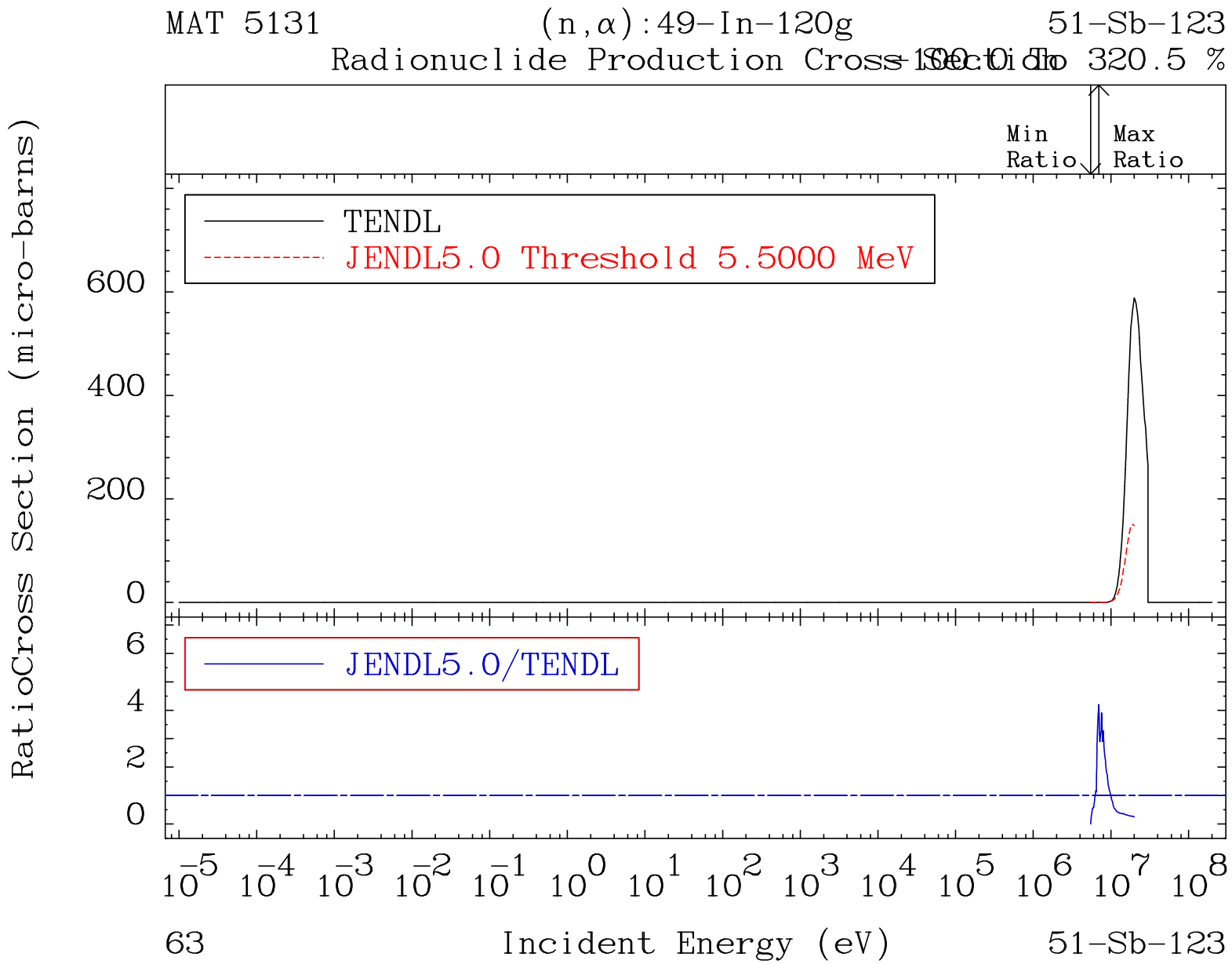

MAT 5131
(n,p):50-Sn-123m1
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 655.80 keV
JENDL5.0 Threshold 3.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
58
51-Sb-123

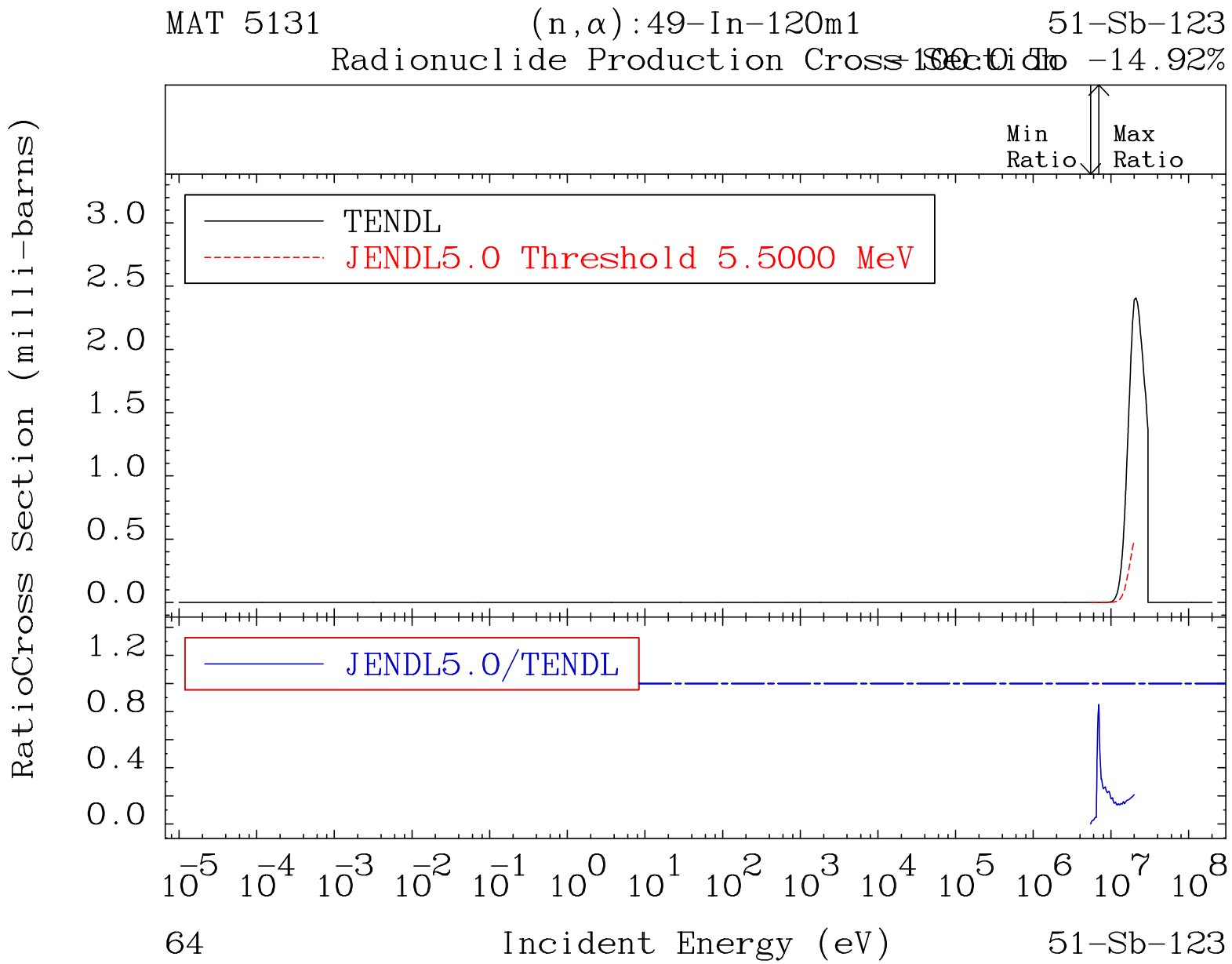

MAT 5131
(n,t):50-Sn-121g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 6.9614 MeV
JENDL5.0 Threshold 9.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
59
51-Sb-123


MAT 5131
(n,t):50-Sn-121m1
51-Sb-123
Radionuclide Production Cross Section
190.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.9678 MeV
JENDL5.0 Threshold 9.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
60
51-Sb-123

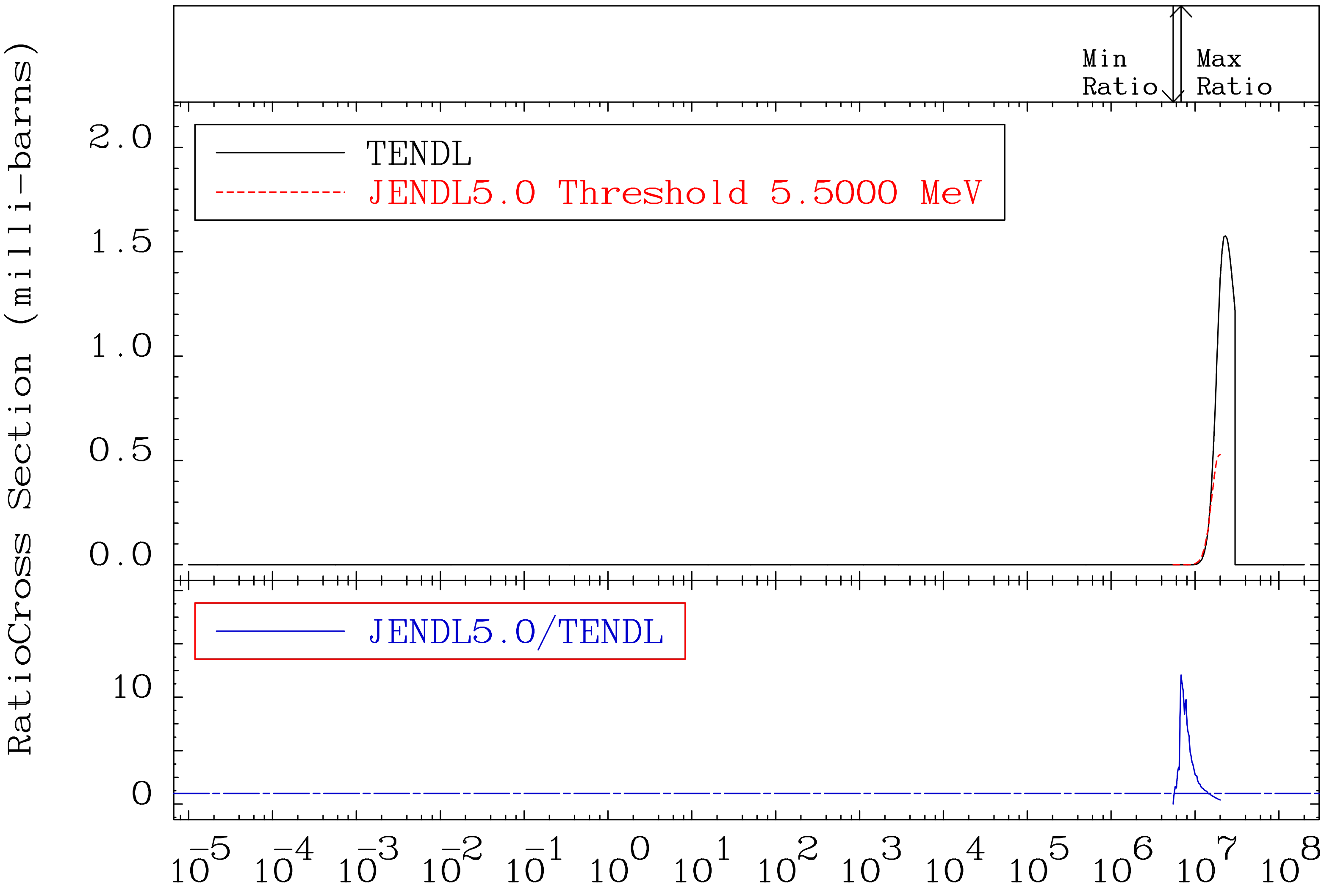

MAT 5131
(n,He-3):49-In-121g
51-Sb-123
Radionuclide Production Cross Section To 1683. %
Min Ratio
Max Ratio
TENDL Threshold 10.332 MeV
JENDL5.0 Threshold 17.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
20
10
0
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
51-Sb-123

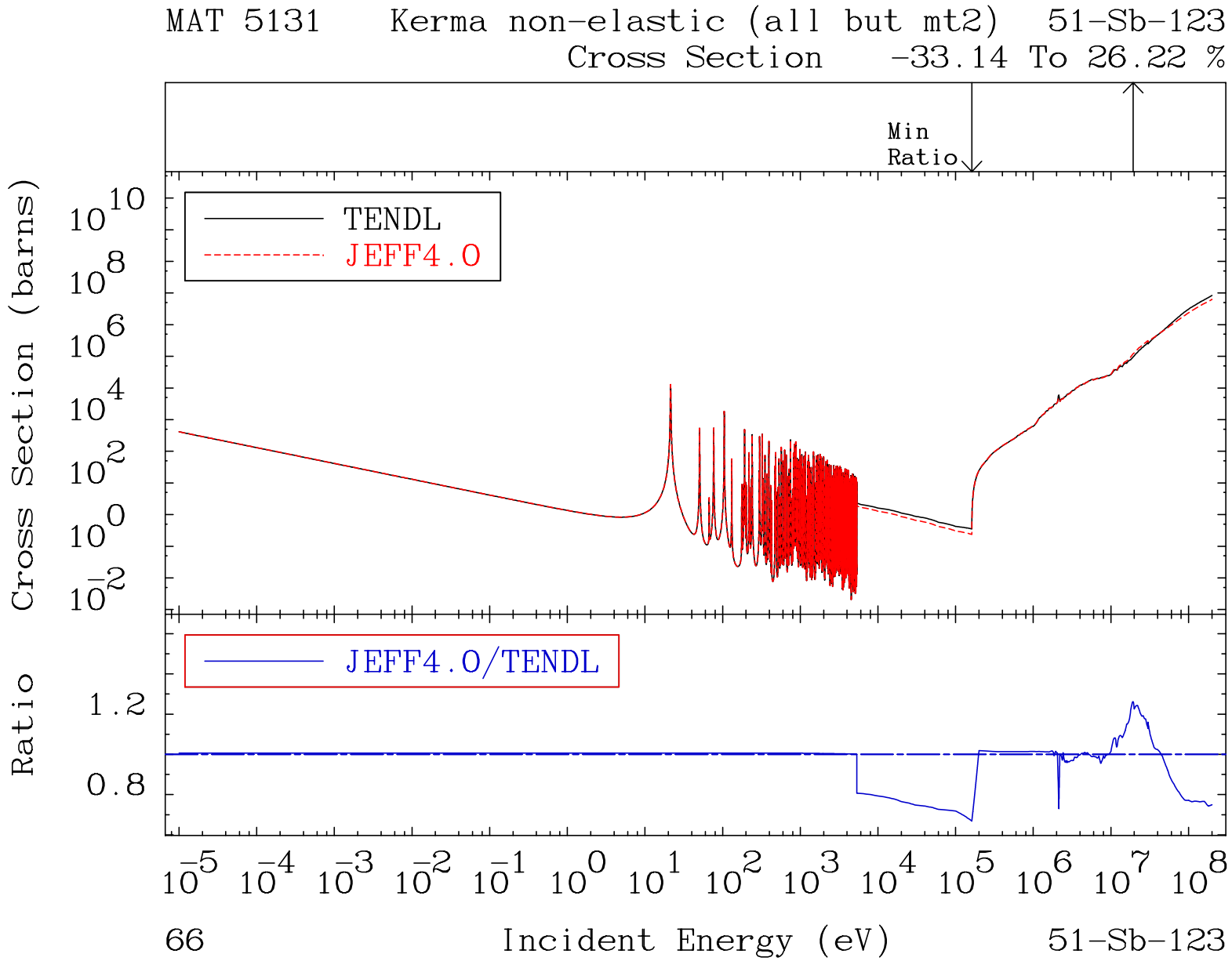

MAT 5131
(n,He-3):49-In-121m1
51-Sb-123
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 14.500 MeV
JENDL5.0 Threshold 17.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
51-Sb-123

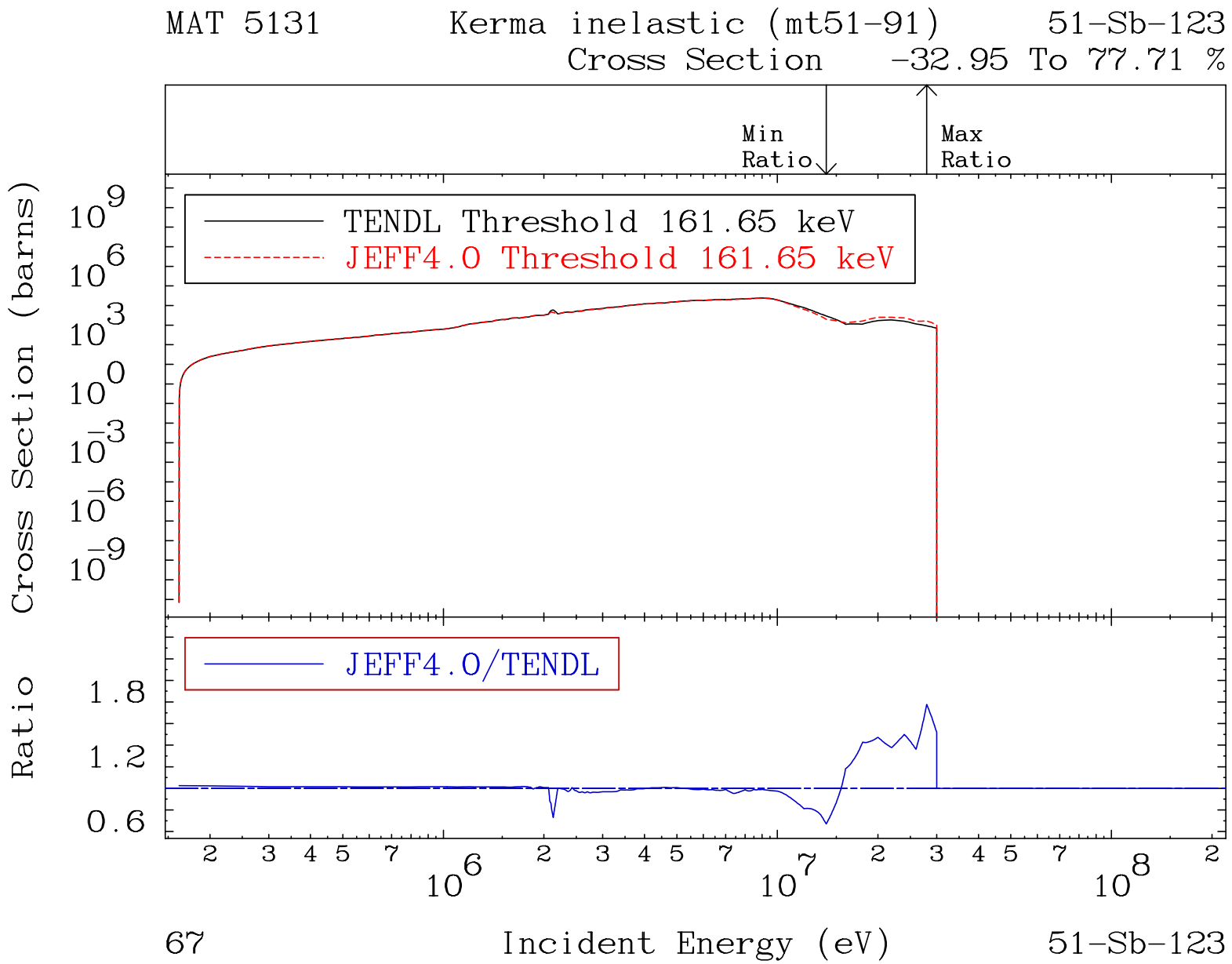

MAT 5131
(n,α):49-In-120g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 5.5000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
600
400
200
0
6
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
63
Incident Energy (eV)
51-Sb-123

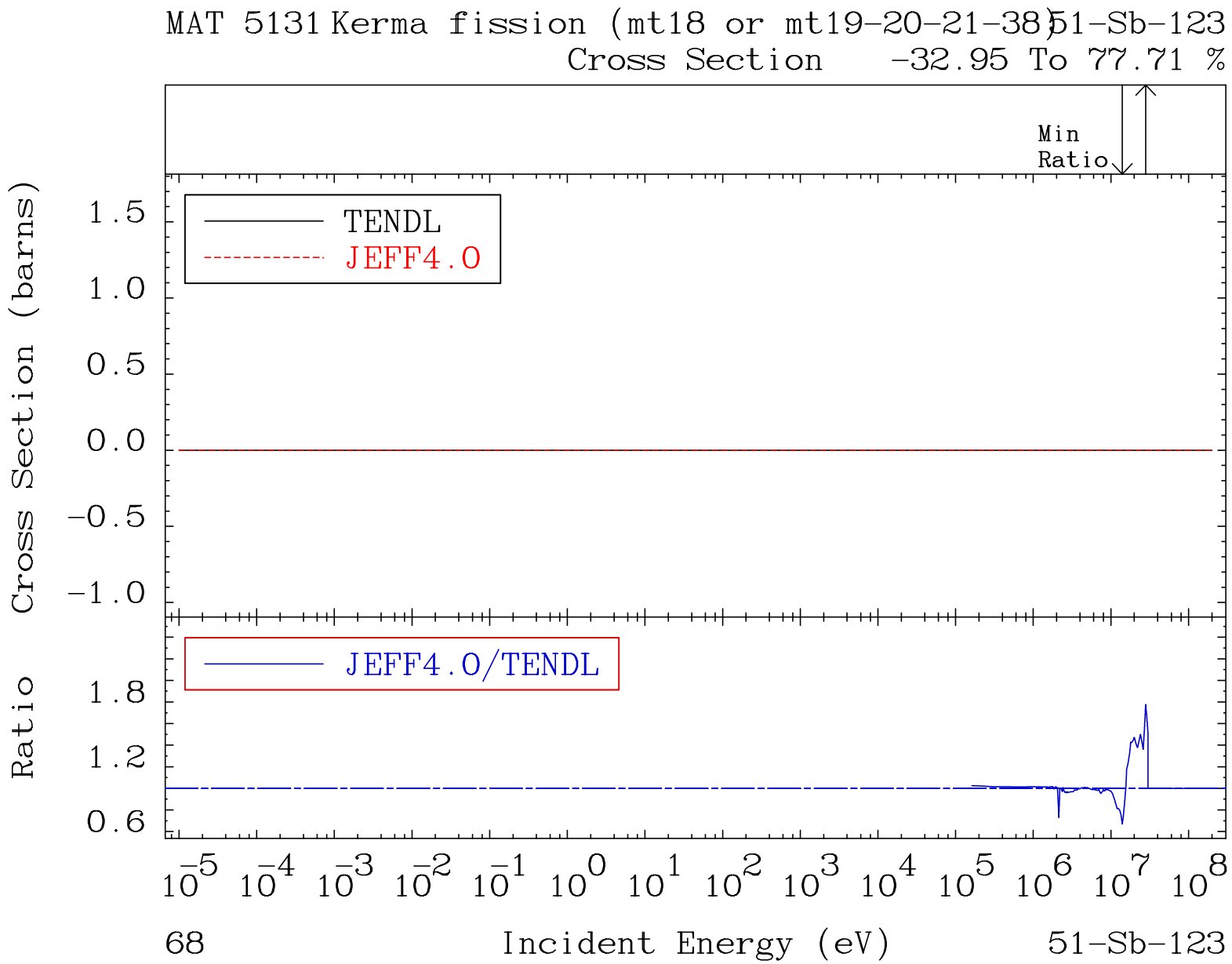

MAT 5131
(n,α):49-In-120m1
51-Sb-123
Radionuclide Production Cross Section
-14.92%
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 5.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
64
Incident Energy (eV)
51-Sb-123

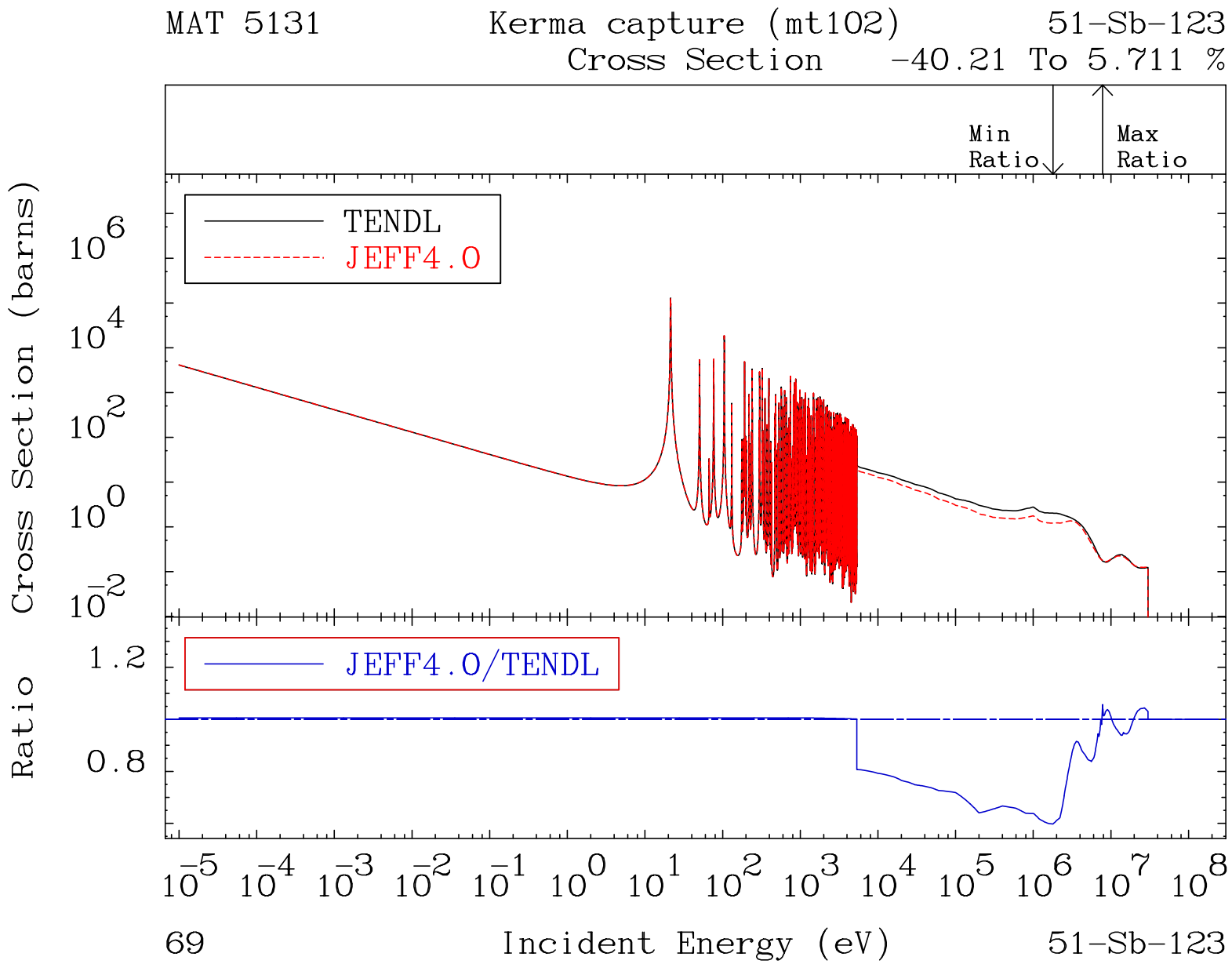
Radionuclide Production Cross Section -100.0 To 1108. %

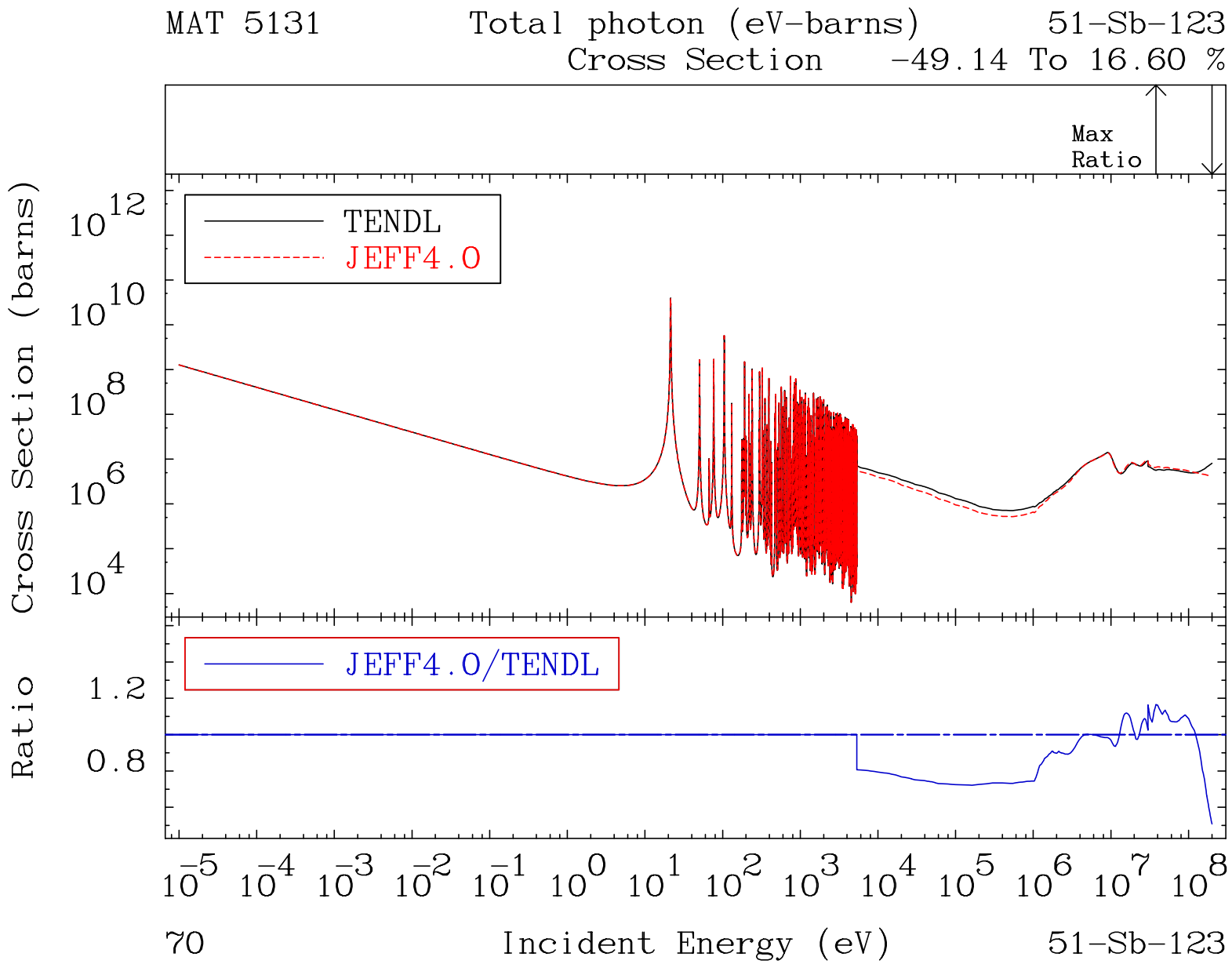


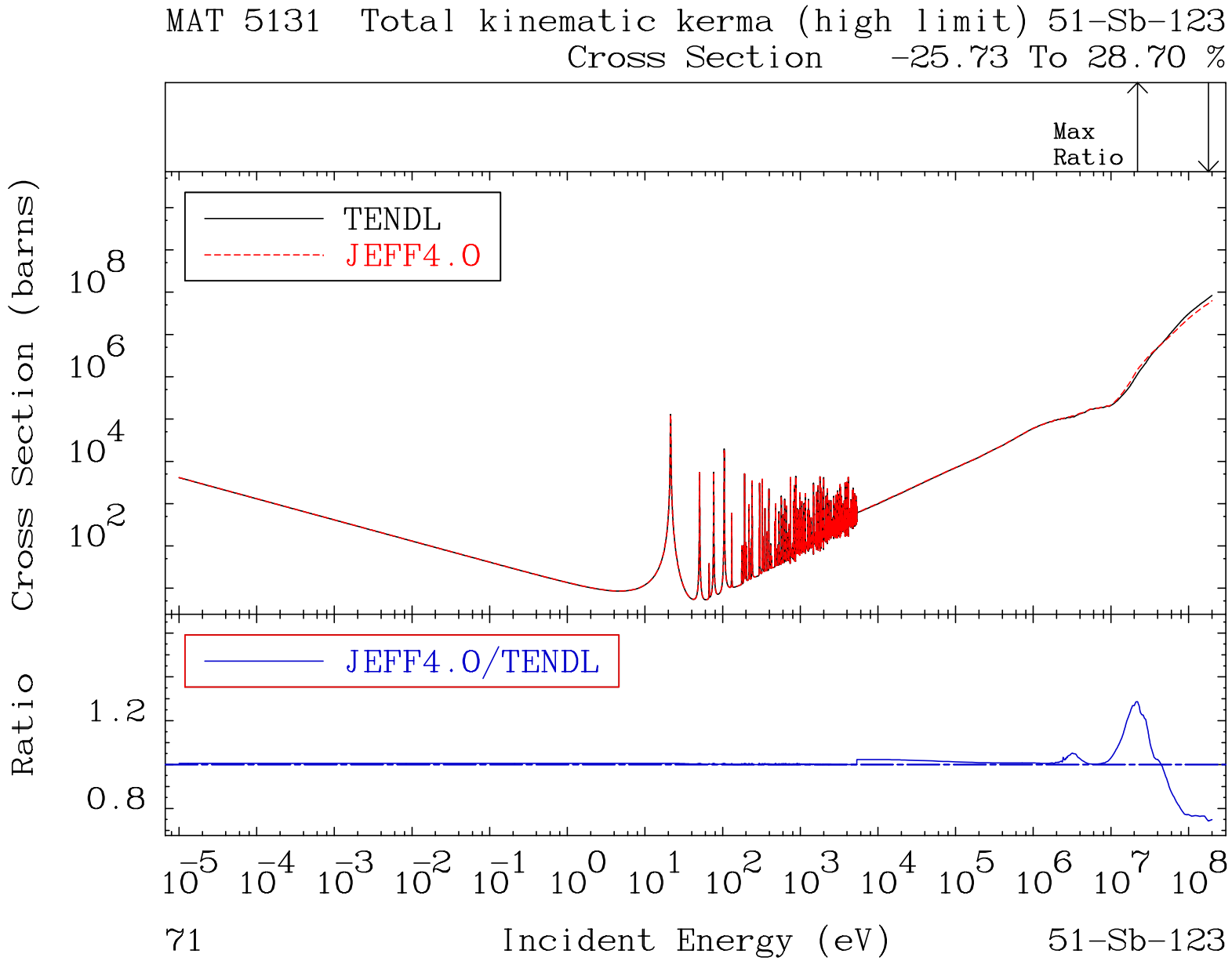

MAT 5131 Kerma non-elastic (all but mt2) 51-Sb-123
Cross Section -33.14 To 26.22 %
Min
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
51-Sb-123

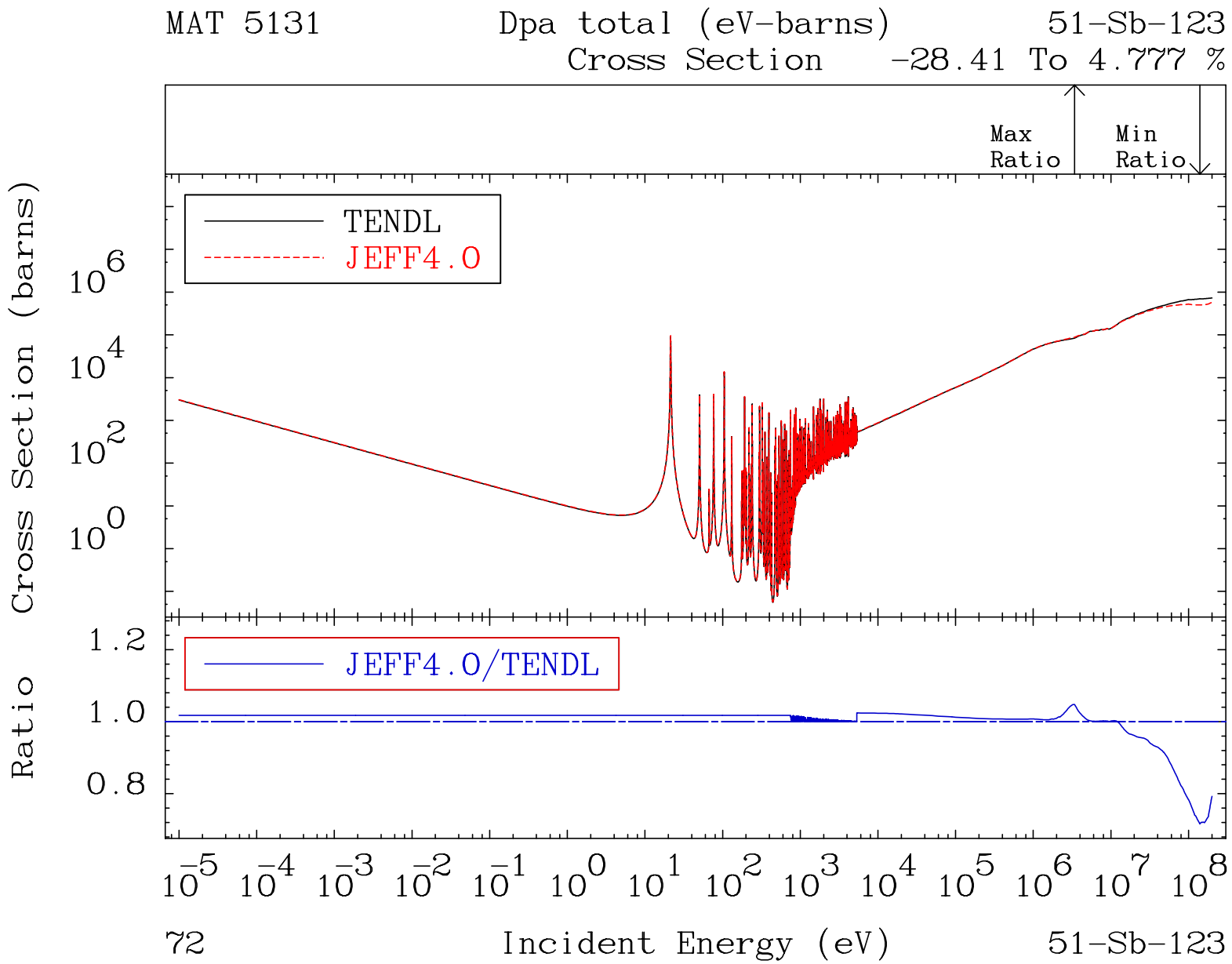

MAT 5131
Kerma inelastic (mt51-91)
51-Sb-123
Cross Section
-32.95 To 77.71 %
Min Ratio
Max Ratio
TENDL Threshold 161.65 keV
JEFF4.0 Threshold 161.65 keV
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
67
51-Sb-123

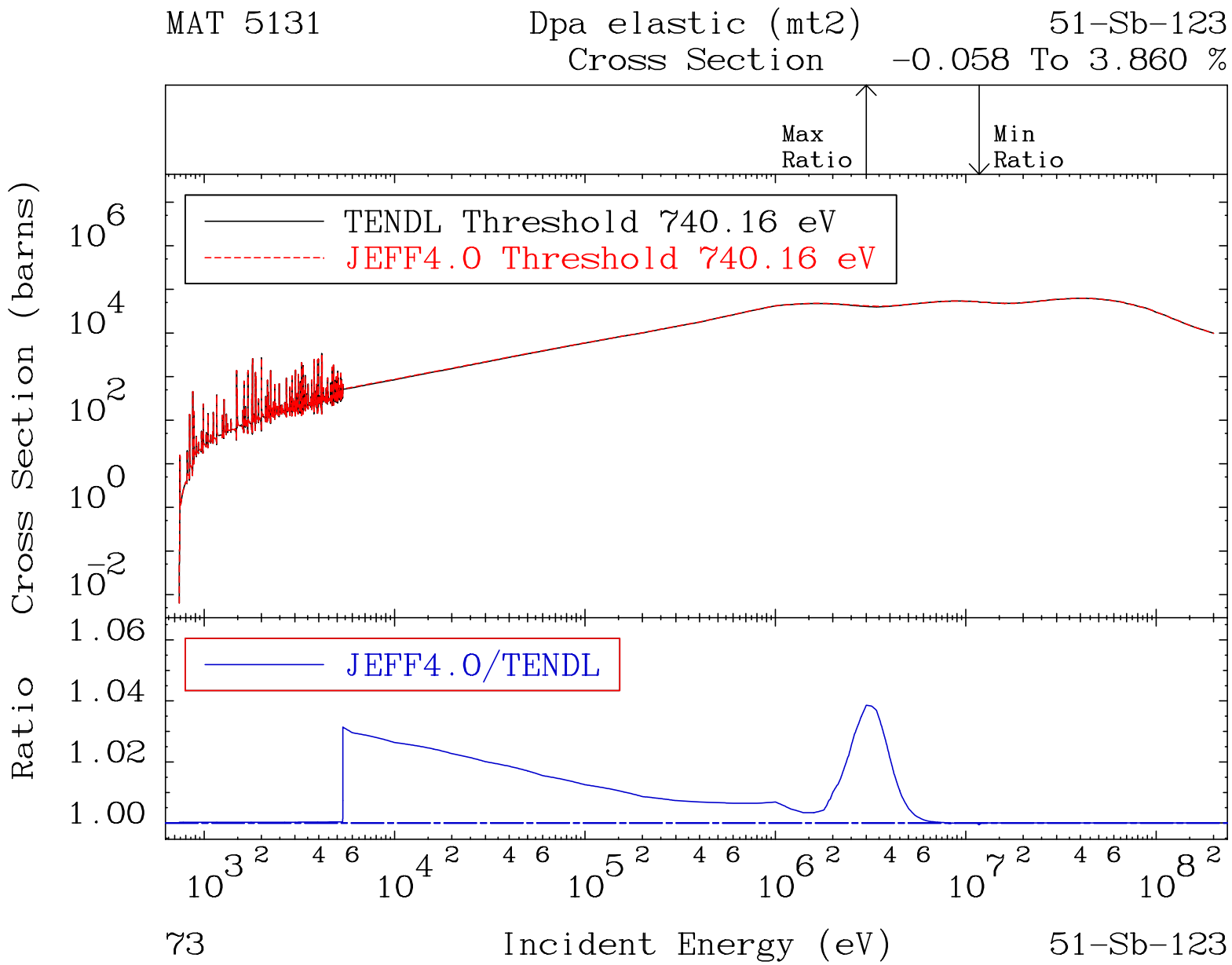

MAT 5131 Kerma fission (mt18 or mt19-20-21-38) 51-Sb-123
Cross Section -32.95 To 77.71 %
Min
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.8
1.2
0.6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
68
Incident Energy (eV)
51-Sb-123

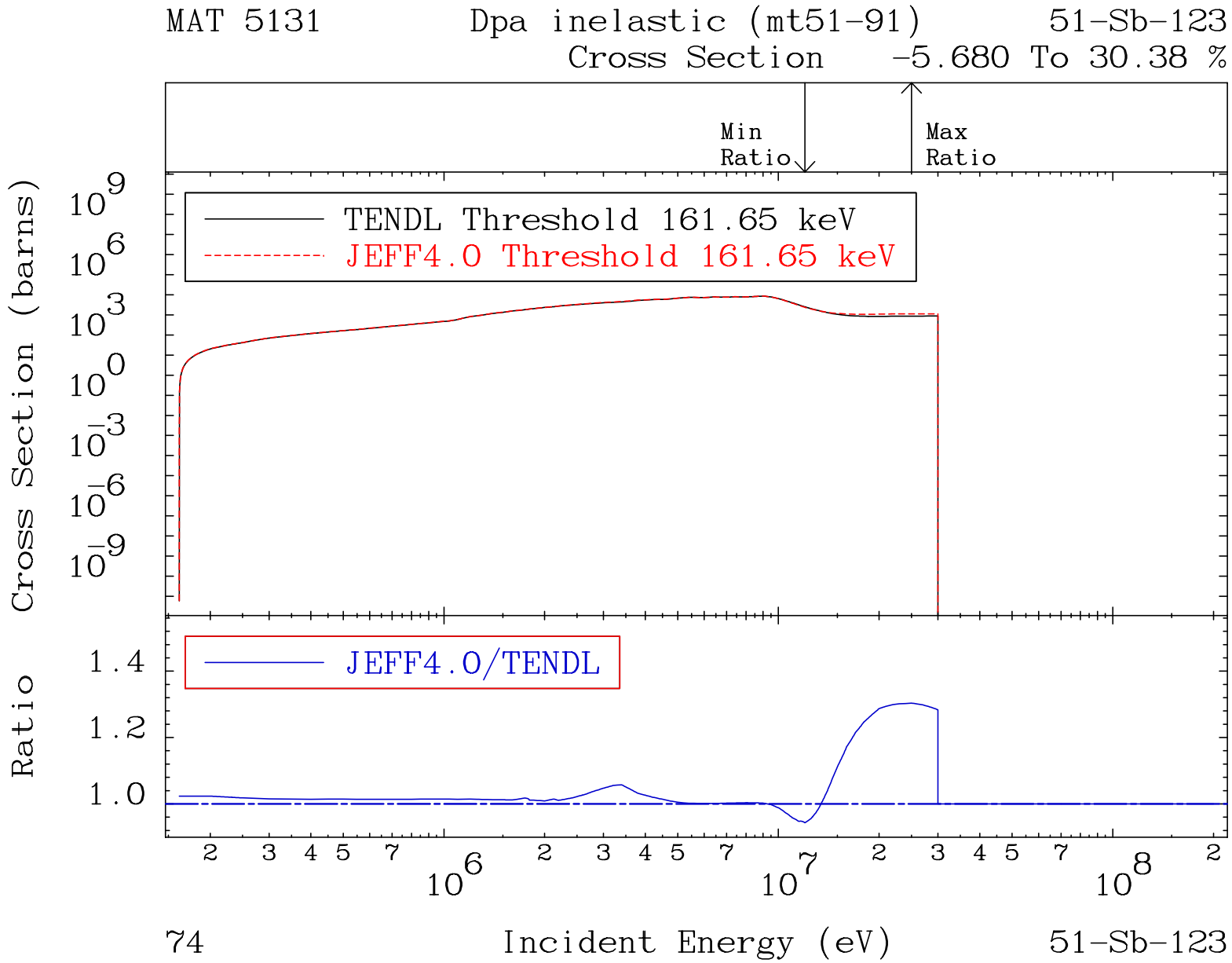

MAT 5131
Kerma capture (mt102)
51-Sb-123
Cross Section -40.21 To 5.711 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
69
51-Sb-123

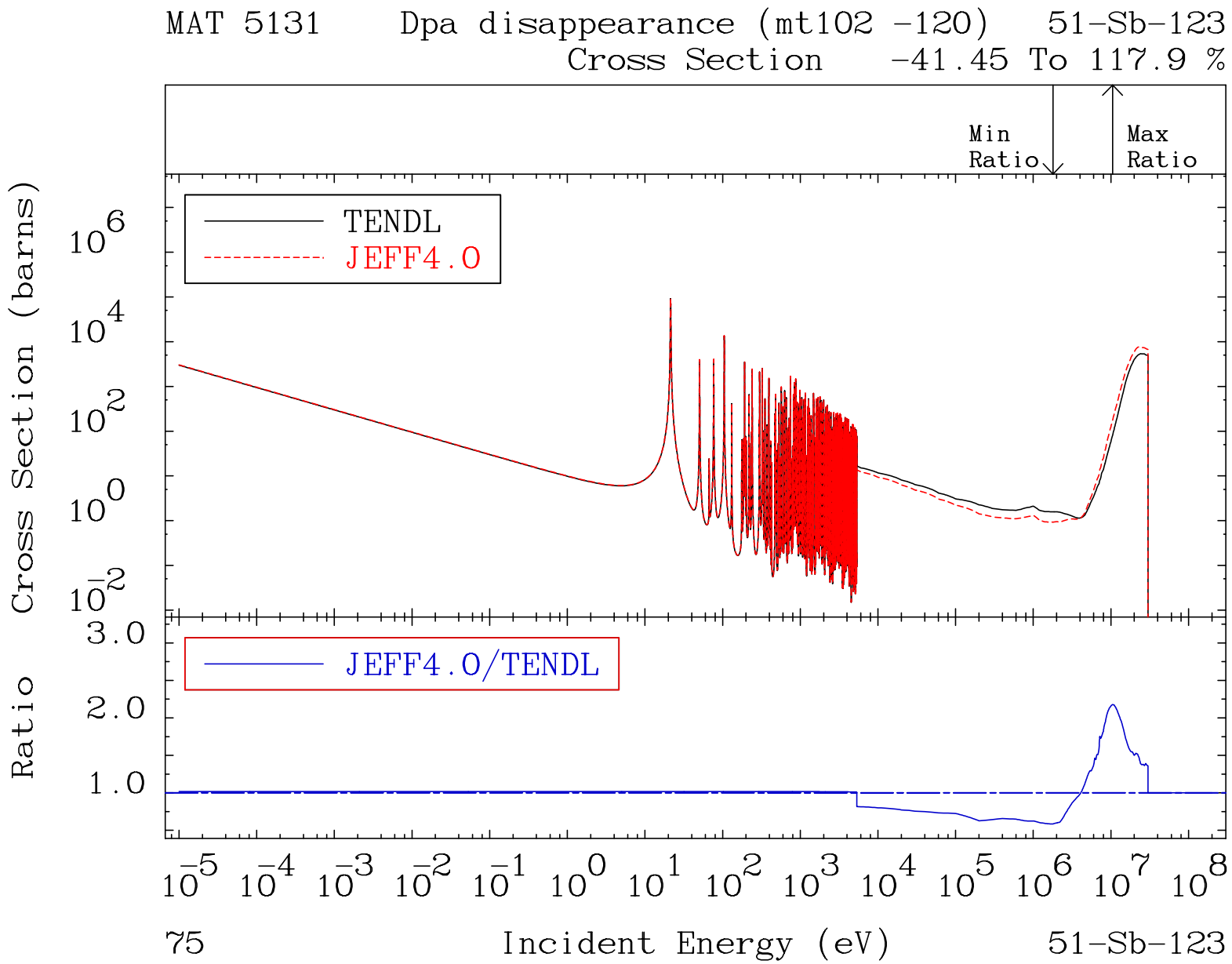

MAT 5131
Total photon (eV-barns)
51-Sb-123
Cross Section -49.14 To 16.60 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
70
51-Sb-123

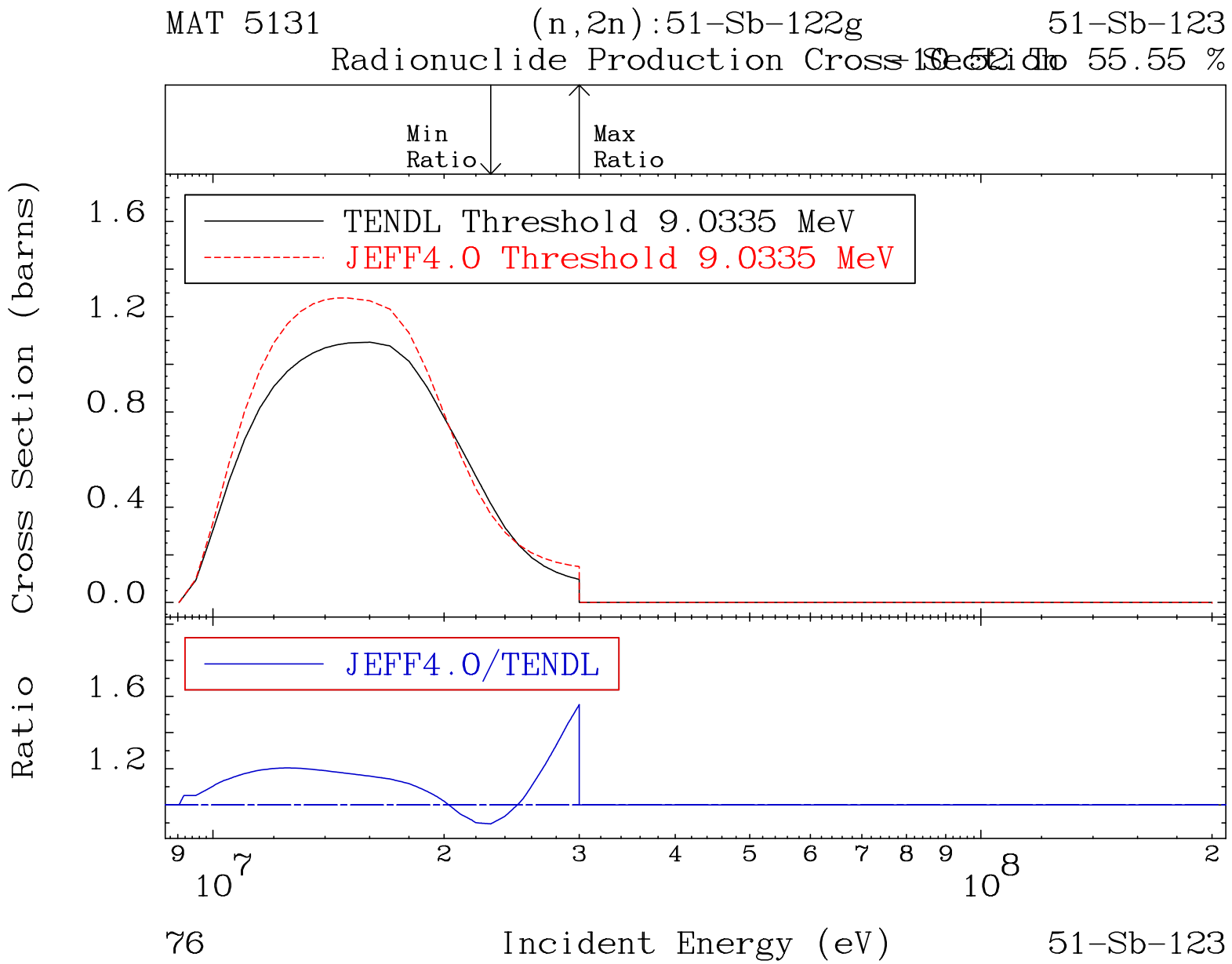

MAT 5131 Total kinematic kerma (high limit) 51-Sb-123
Cross Section -25.73 To 28.70 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^8
10^6
10^4
10^2
JEFF4.0/TENDL
Ratio
1.2
0.8
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
71
Incident Energy (eV)
51-Sb-123

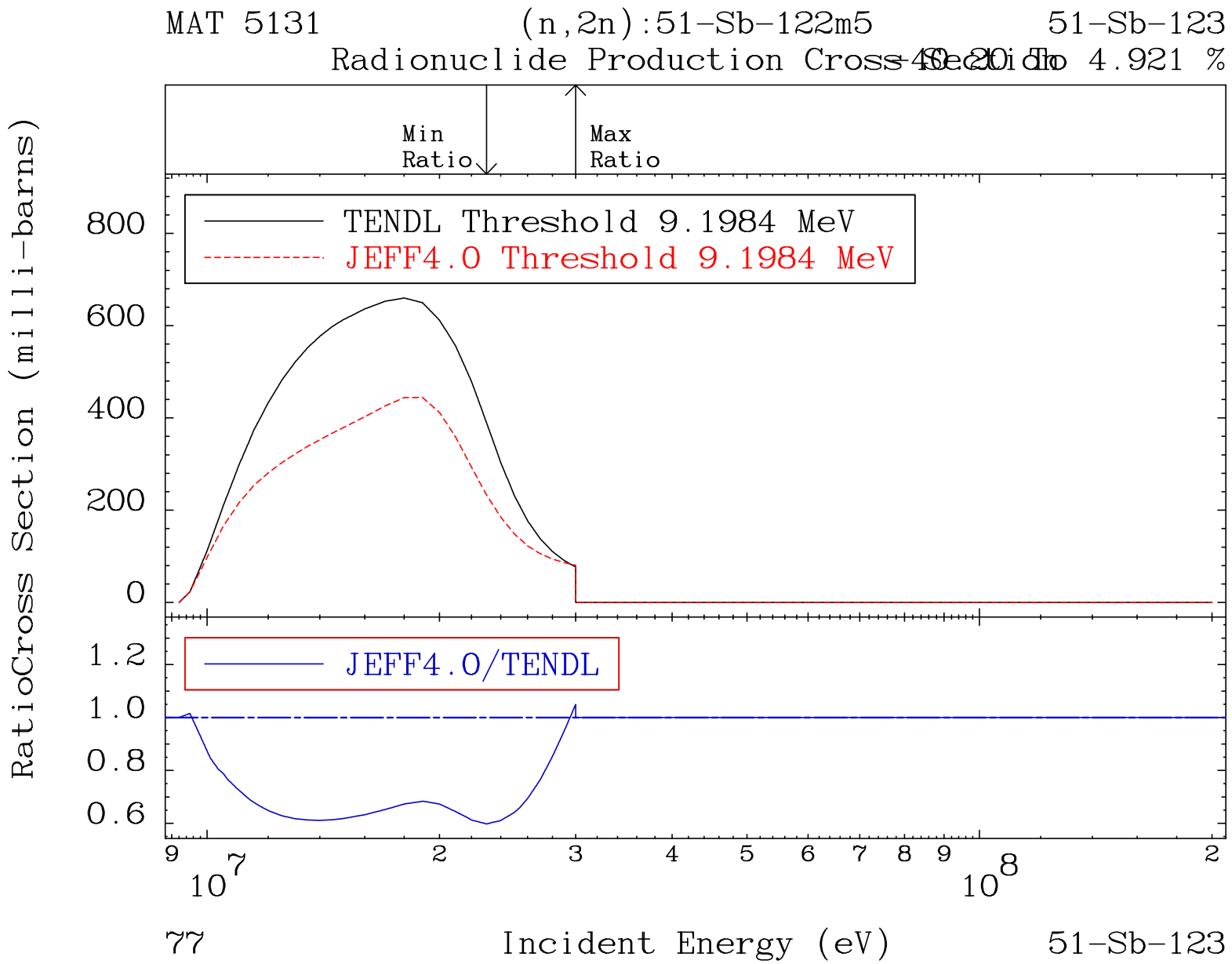

MAT 5131
Dpa total (eV-barns)
51-Sb-123
Cross Section
-28.41 To 4.777 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^6
10^4
10^2
10^0
JEFF4.0/TENDL
Ratio
1.2
1.0
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
72
Incident Energy (eV)
51-Sb-123

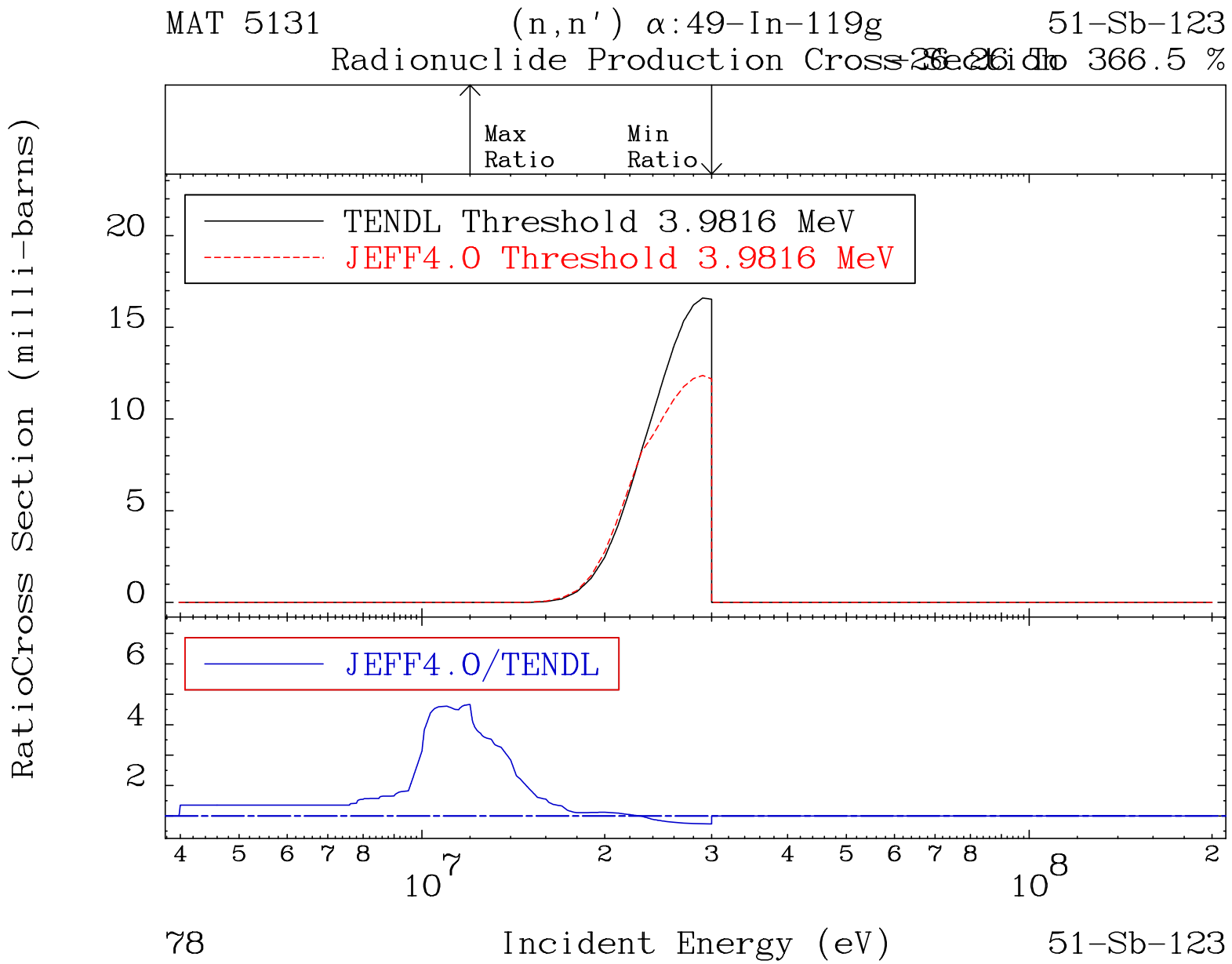

MAT 5131
Dpa elastic (mt2)
Cross Section
51-Sb-123
-0.058 To 3.860 %
Max Ratio
Min Ratio
TENDL Threshold 740.16 eV
JEFF4.0 Threshold 740.16 eV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
51-Sb-123

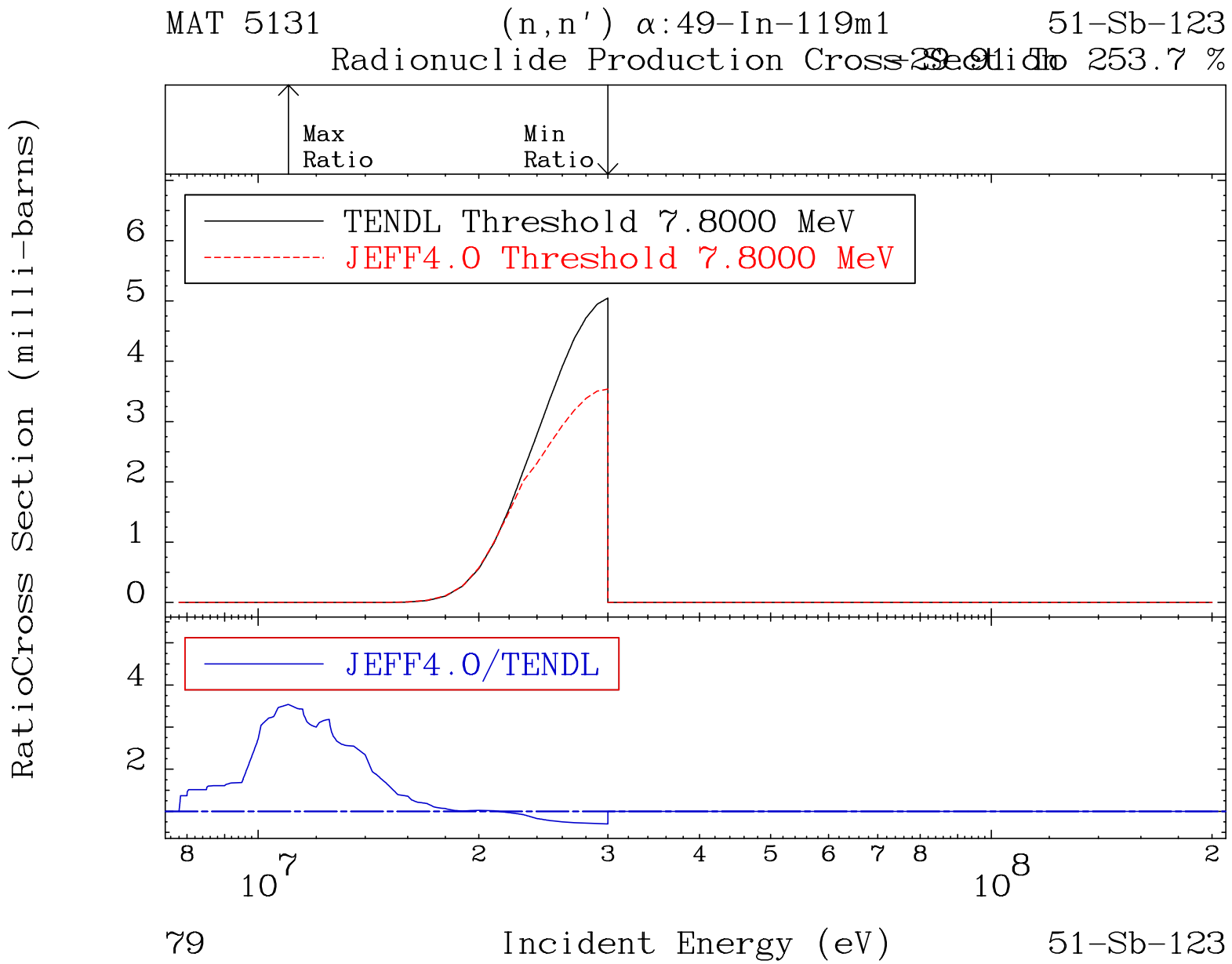

MAT 5131
Dpa inelastic (mt51-91)
51-Sb-123
Cross Section -5.680 To 30.38 %
Min Ratio
Max Ratio
TENDL Threshold 161.65 keV
JEFF4.0 Threshold 161.65 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
51-Sb-123

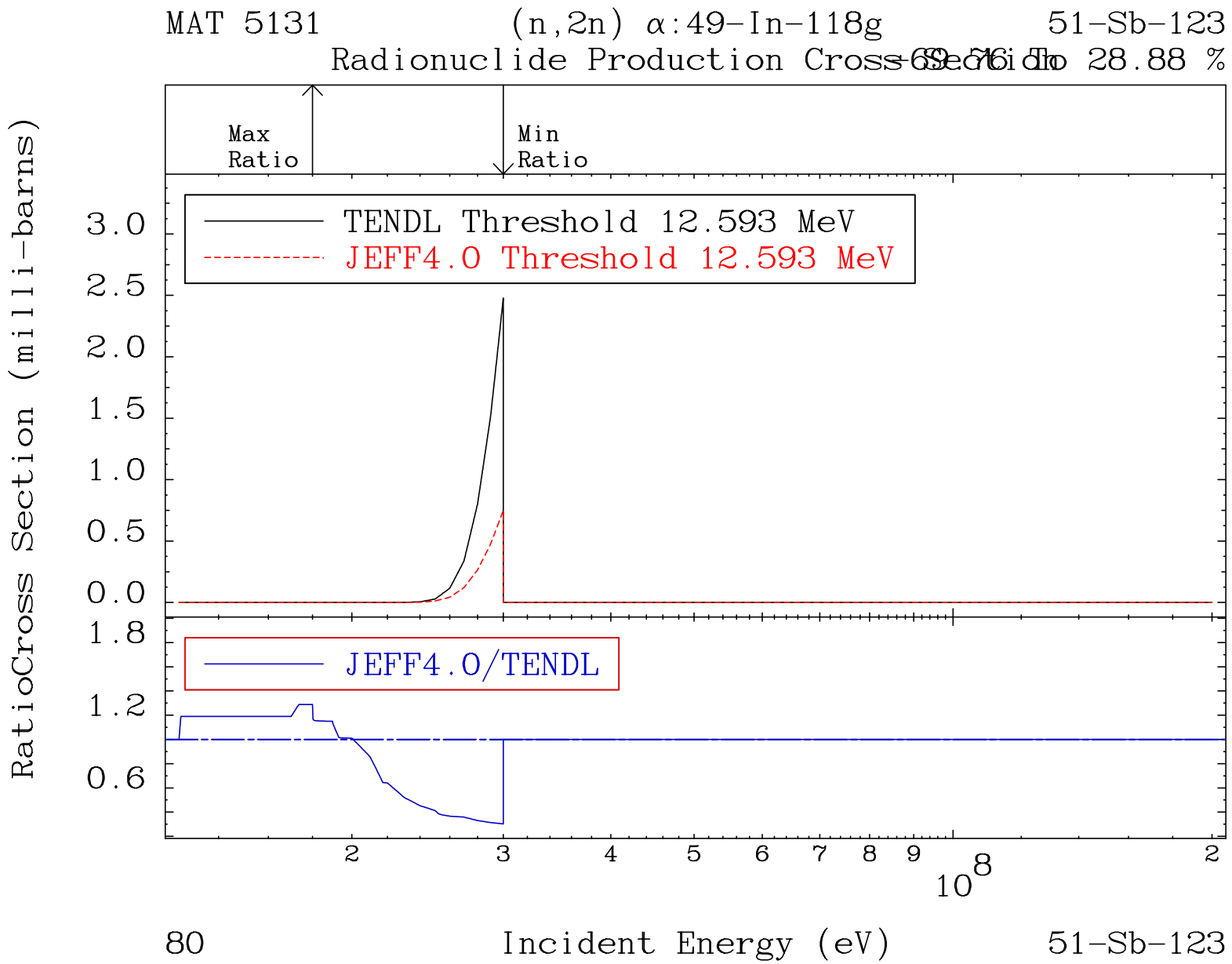

MAT 5131 Dpa disappearance (mt102 -120) 51-Sb-123
Cross Section -41.45 To 117.9 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
51-Sb-123

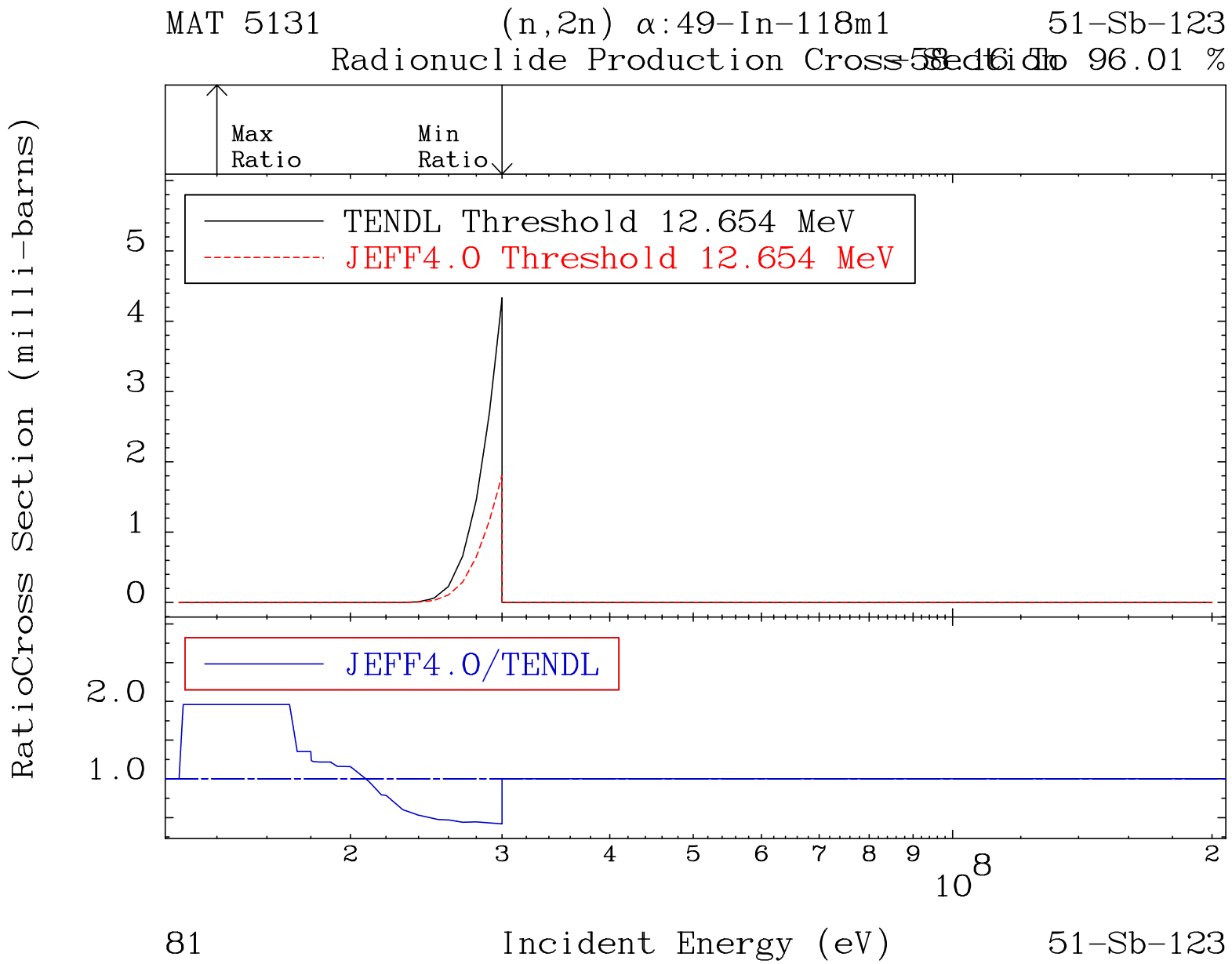

MAT 5131
(n,2n):51-Sb-122g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 9.0335 MeV
JEFF4.0 Threshold 9.0335 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
51-Sb-123

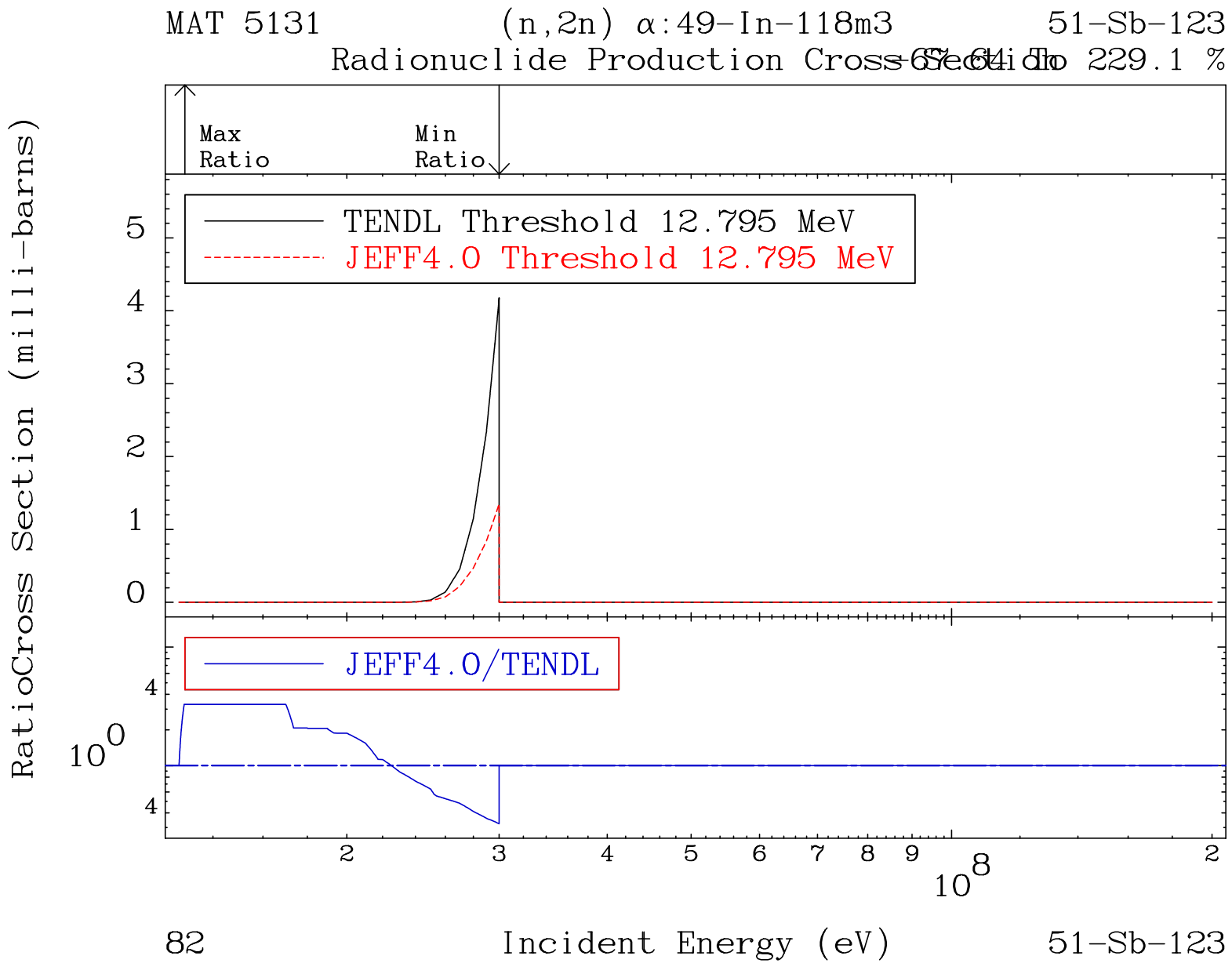

MAT 5131
(n,2n):51-Sb-122m5
51-Sb-123
Radionuclide Production Cross Section To 4.921 %
Min Ratio
Max Ratio
TENDL Threshold 9.1984 MeV
JEFF4.0 Threshold 9.1984 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
1.0
0.8
0.6
9
10^7
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
51-Sb-123

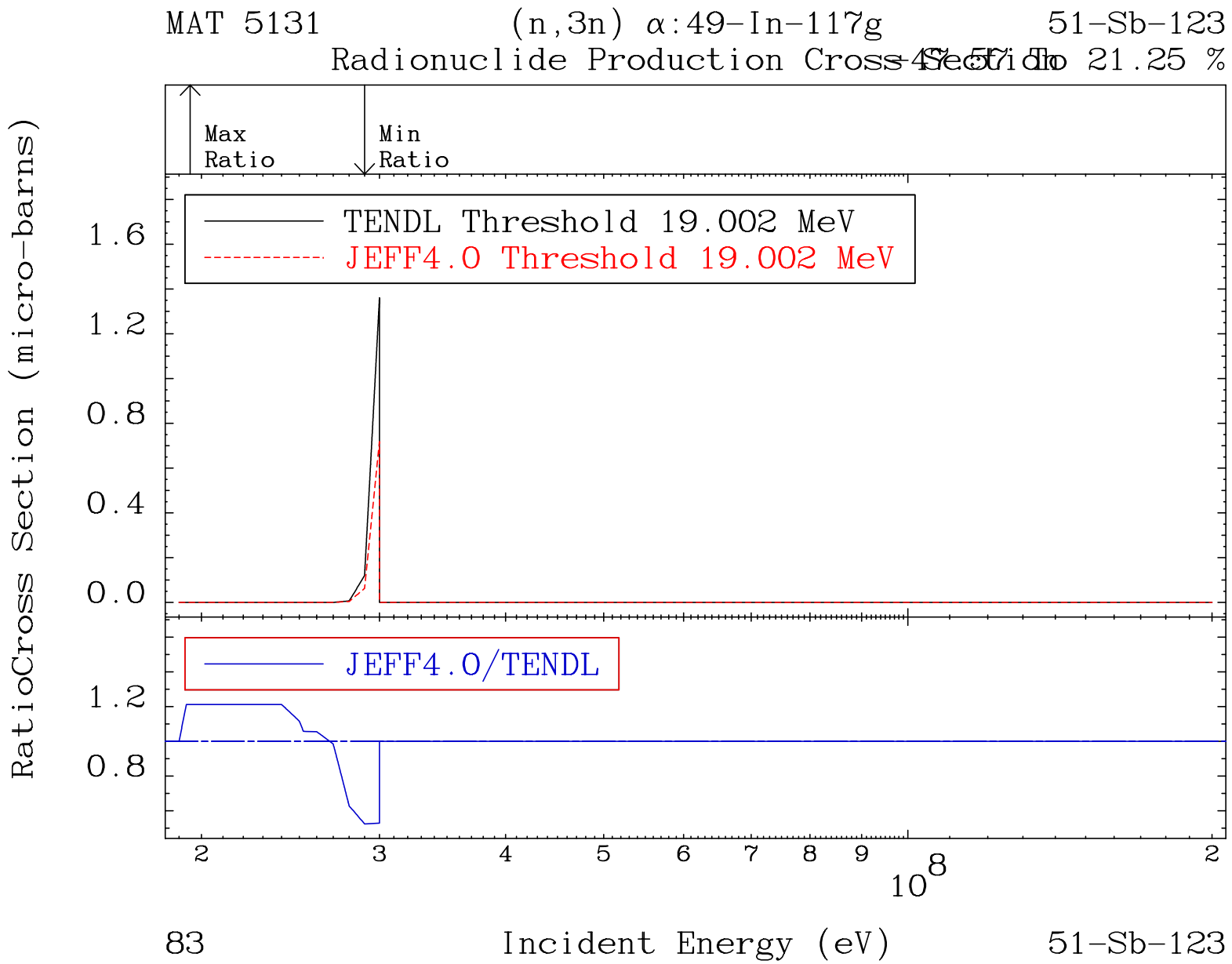

MAT 5131
(n,n') α:49-In-119g
51-Sb-123
Radionuclide Production Cross-Section To 366.5 %
Max Ratio
Min Ratio
TENDL Threshold 3.9816 MeV
JEFF4.0 Threshold 3.9816 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
6
4
2
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
78
Incident Energy (eV)
51-Sb-123

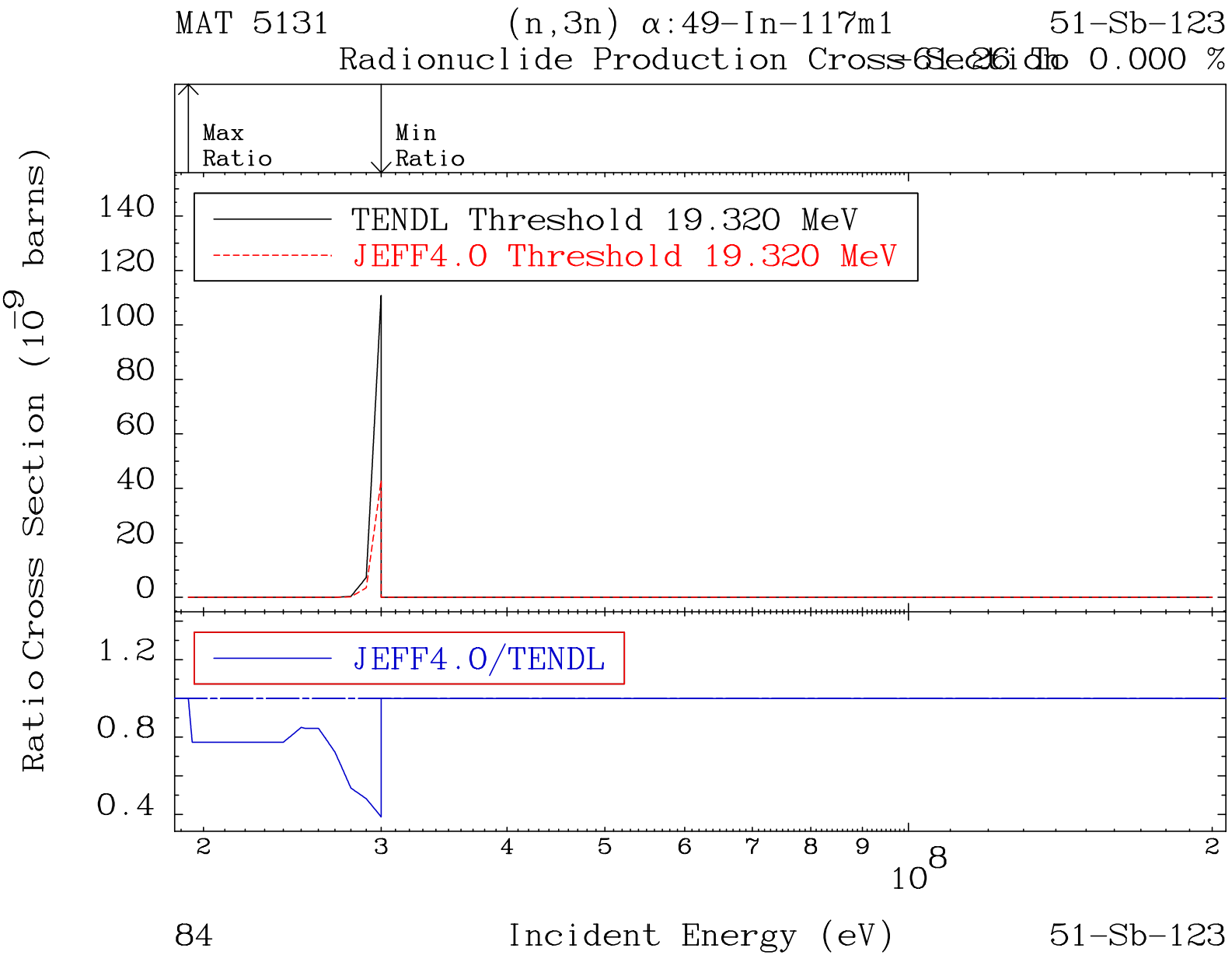

MAT 5131
(n,n') α:49-In-119m1
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.8000 MeV
JEFF4.0 Threshold 7.8000 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
79
51-Sb-123

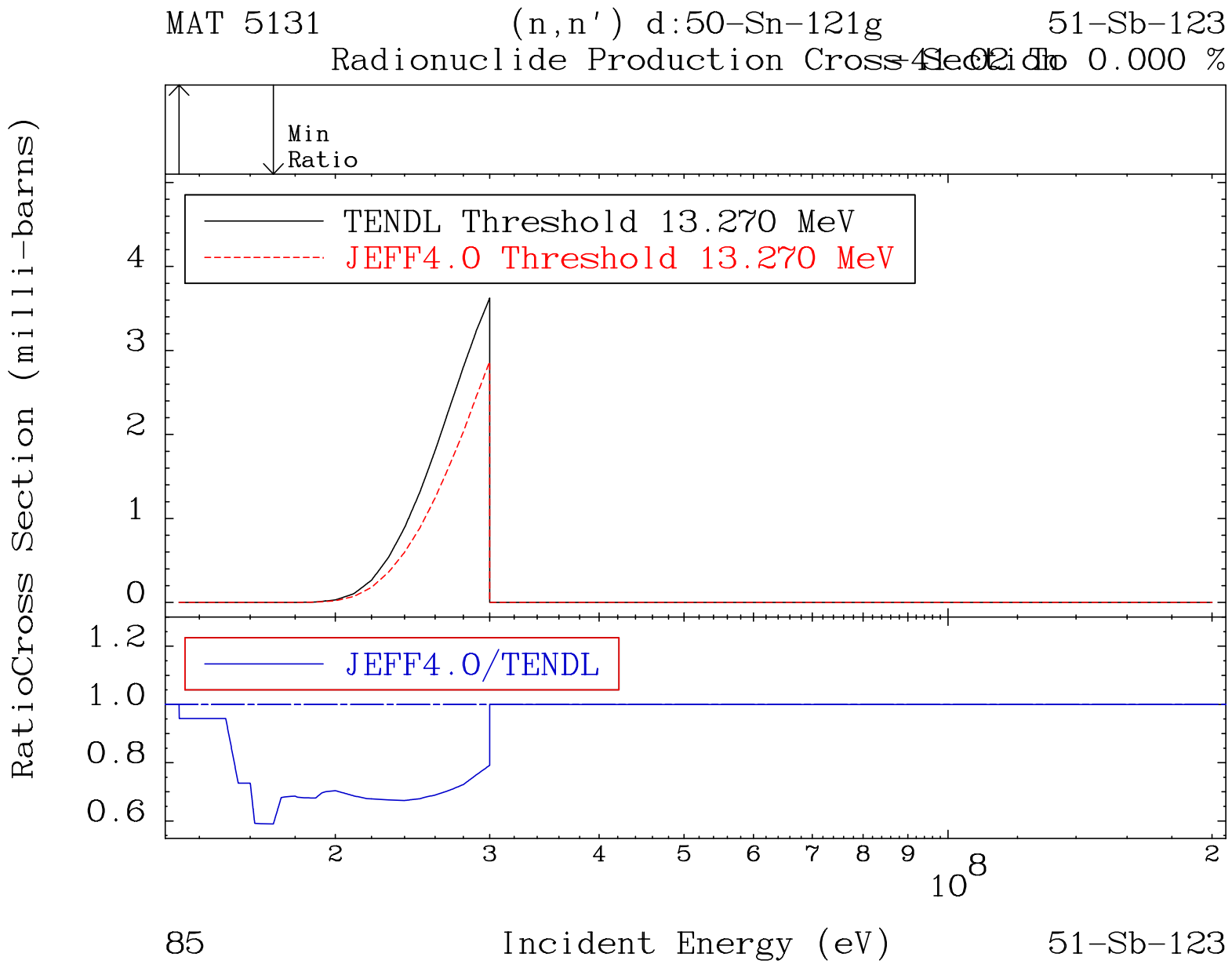

MAT 5131
(n,2n) α:49-In-118g
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.593 MeV
JEFF4.0 Threshold 12.593 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
80
51-Sb-123

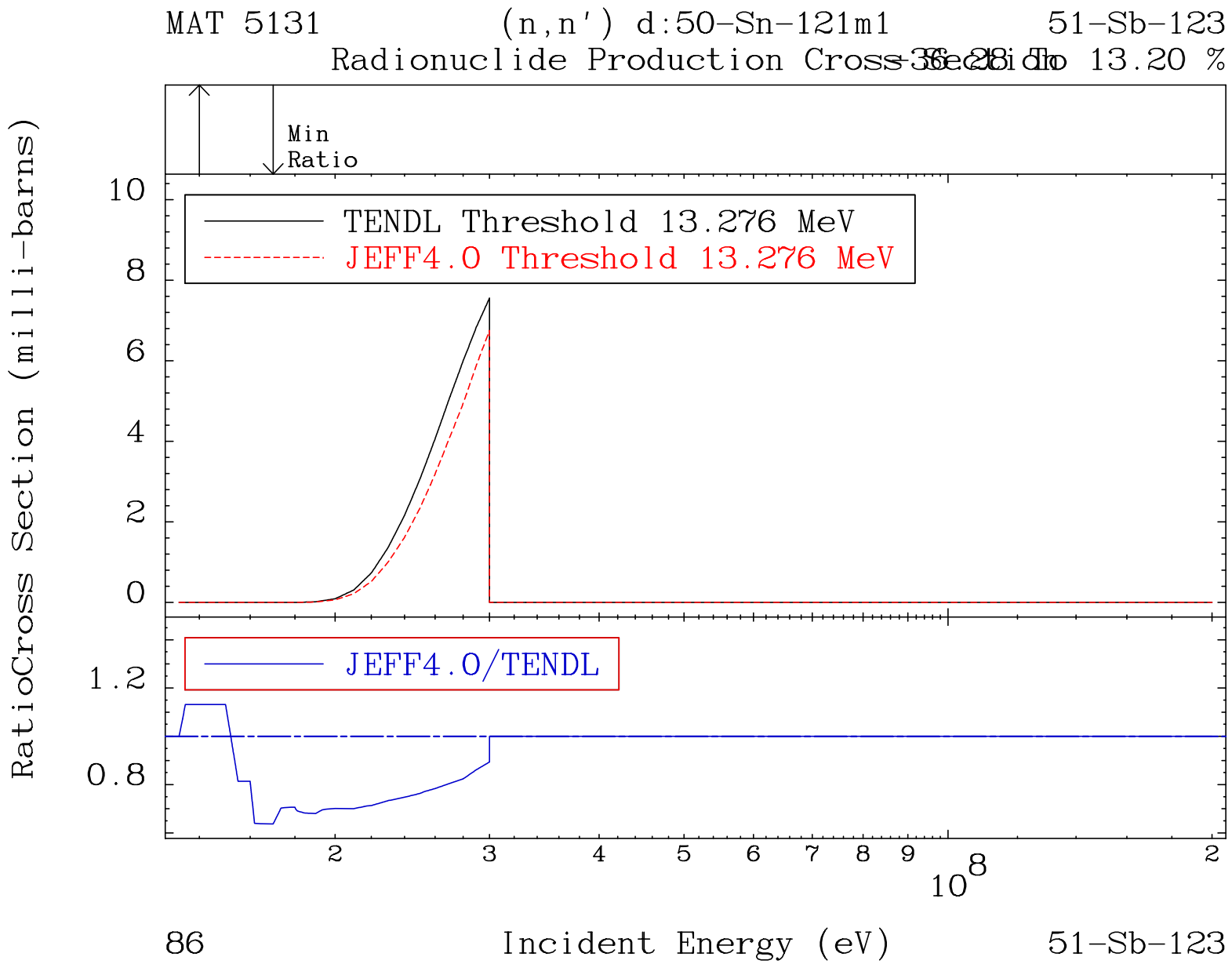

MAT 5131
(n,2n) α:49-In-118m1
51-Sb-123
Radionuclide Production Cross Section To 96.01 %
Max Ratio
Min Ratio
TENDL Threshold 12.654 MeV
JEFF4.0 Threshold 12.654 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
81
51-Sb-123

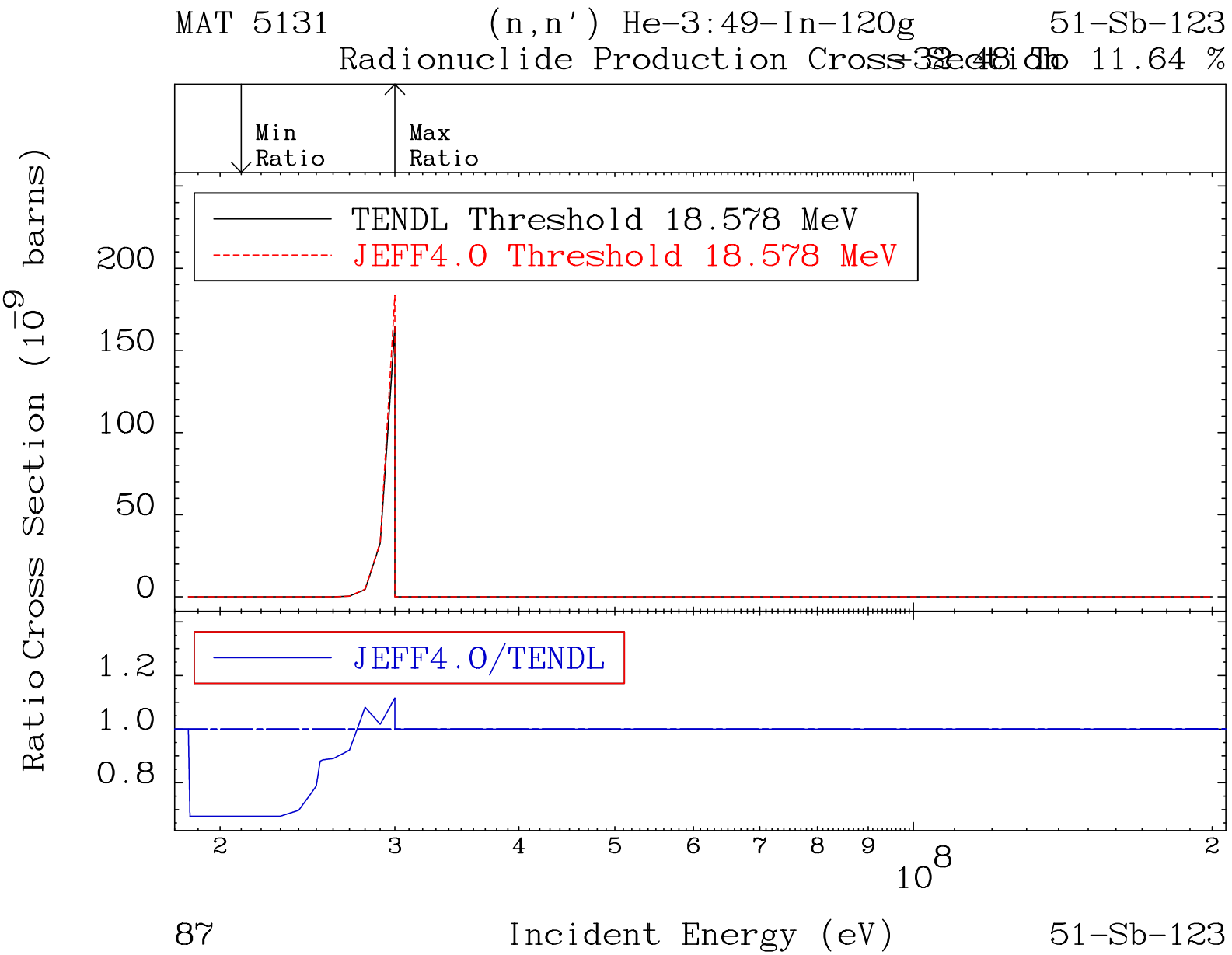

MAT 5131
(n,2n) α:49-In-118m3
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.795 MeV
JEFF4.0 Threshold 12.795 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
82
51-Sb-123

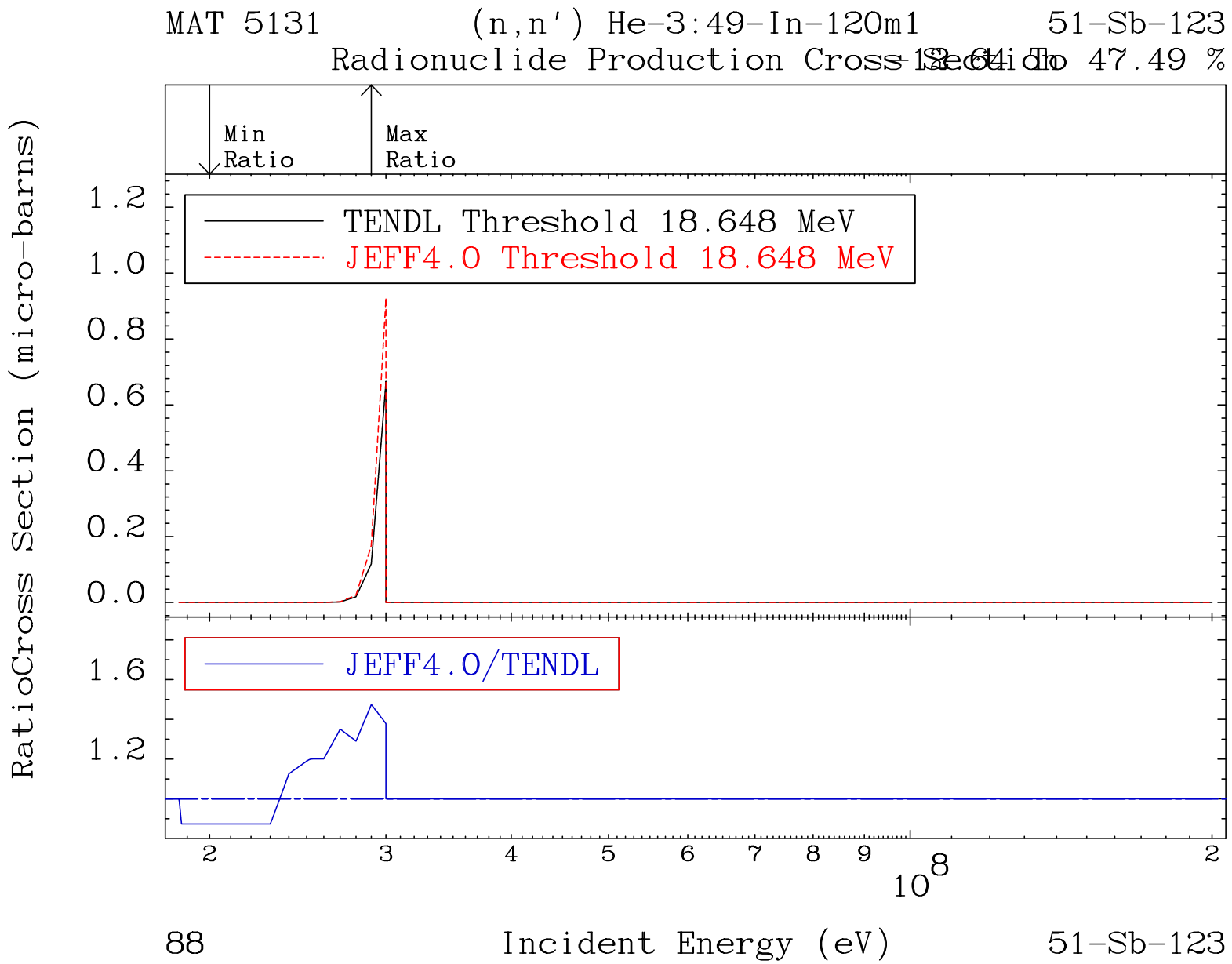

MAT 5131
(n,3n) α:49-In-117g
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 19.002 MeV
JEFF4.0 Threshold 19.002 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
1.6
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
51-Sb-123

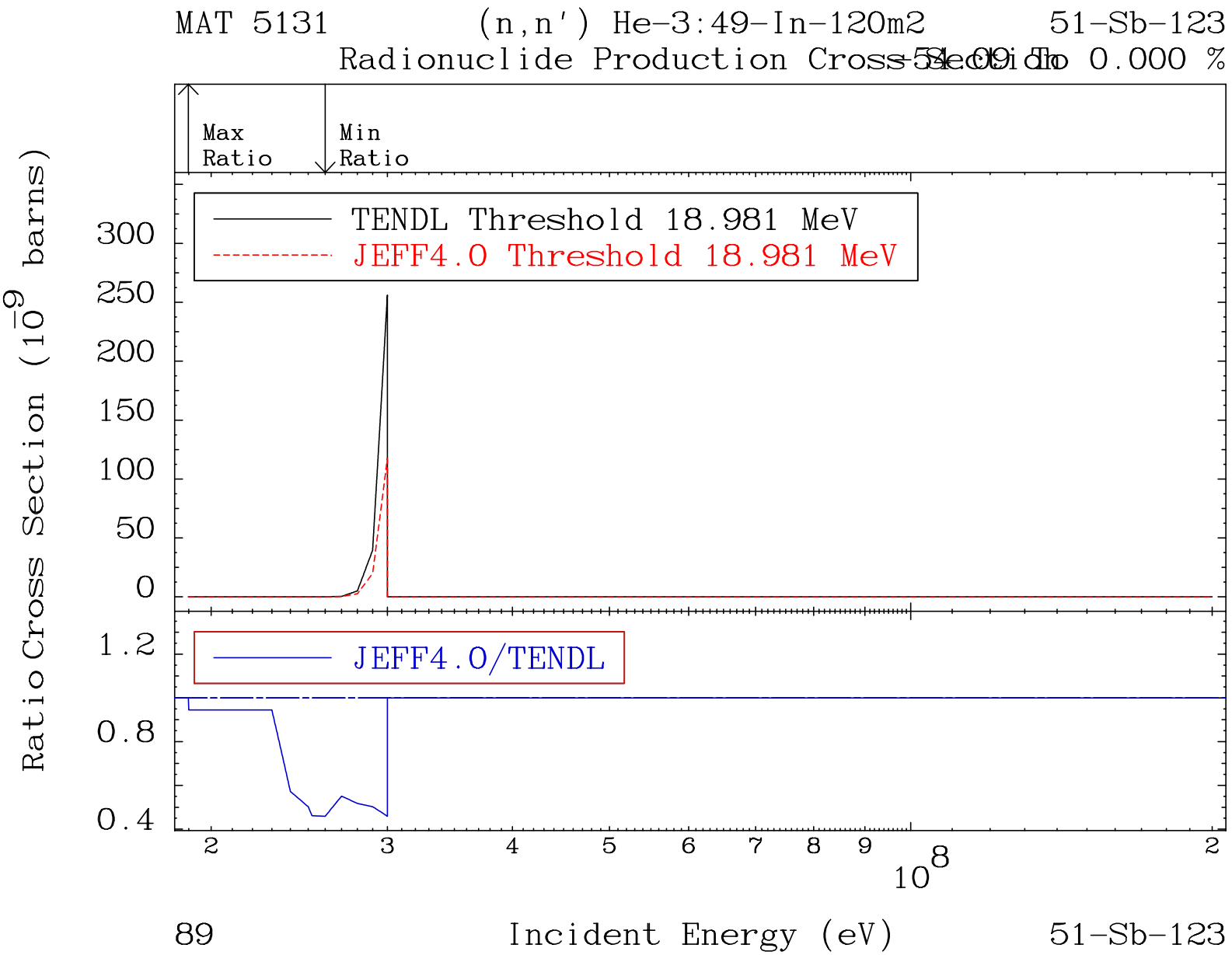

MAT 5131
(n,3n) α:49-In-117m1
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 19.320 MeV
JEFF4.0 Threshold 19.320 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
140
120
100
80
60
40
20
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
51-Sb-123

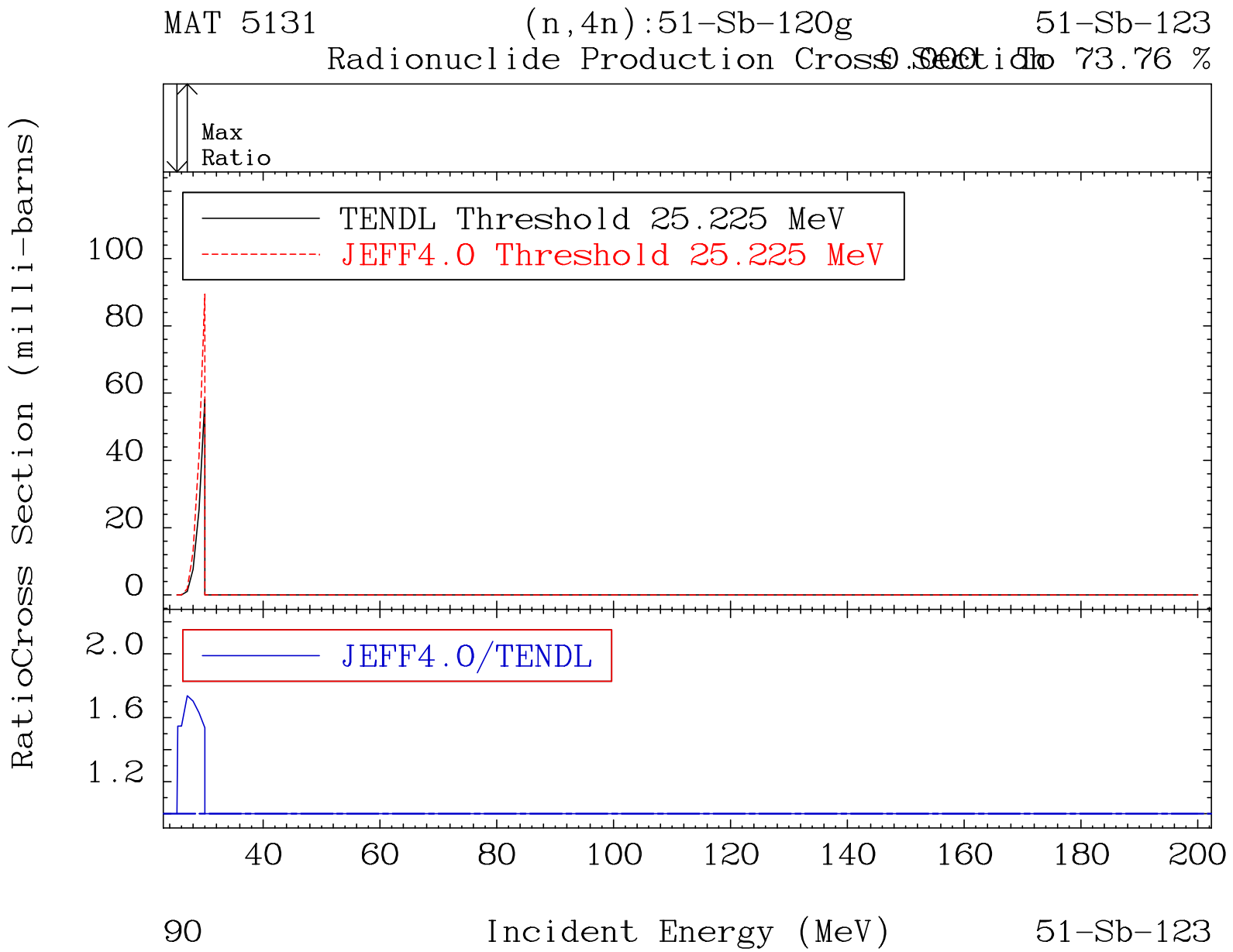

MAT 5131
(n,n') d:50-Sn-121g
51-Sb-123
Radionuclide Production Cross-Section Uncertainty 0.000 %
Min
Ratio
TENDL Threshold 13.270 MeV
JEFF4.0 Threshold 13.270 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
51-Sb-123

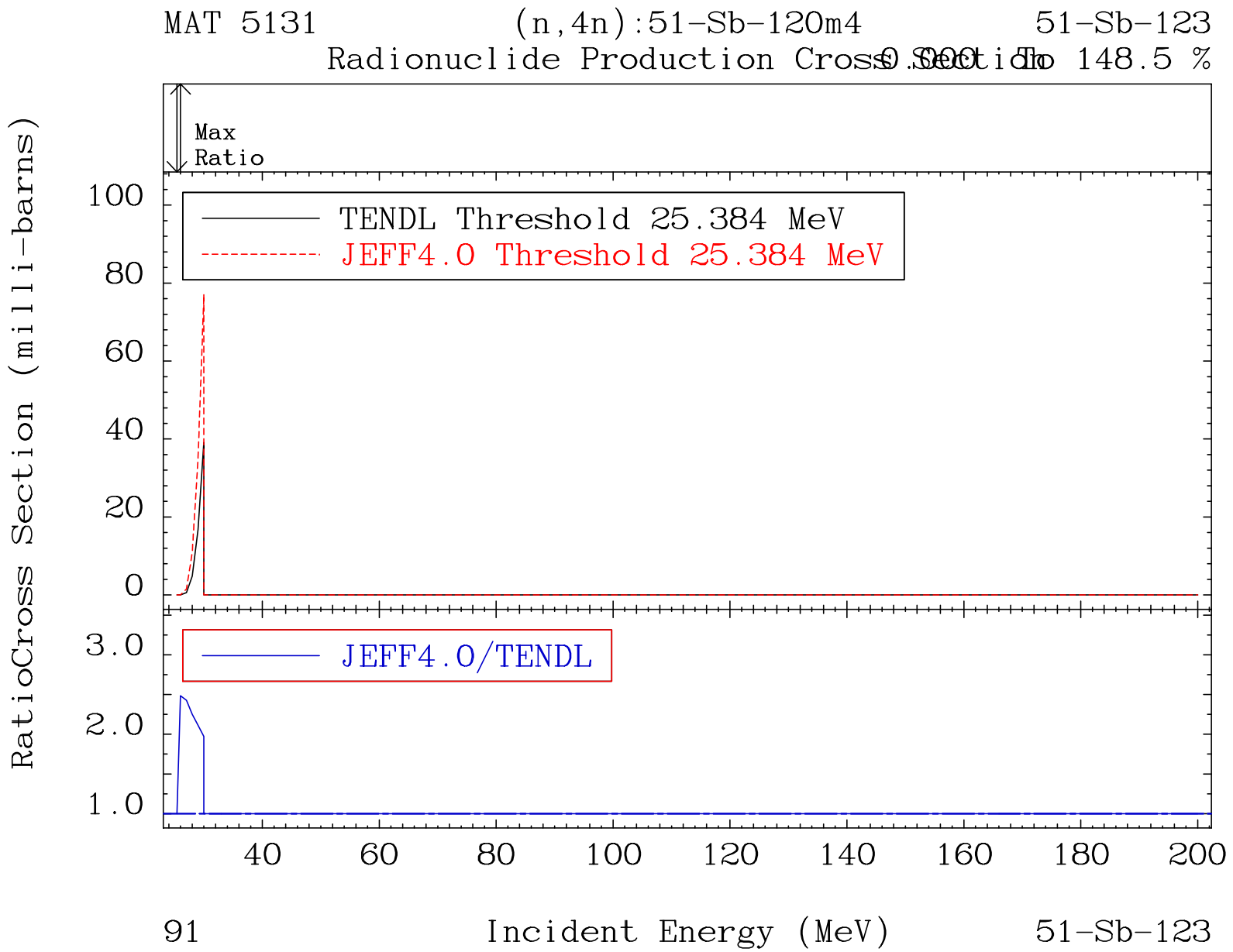

MAT 5131
(n,n') d:50-Sn-121m1
51-Sb-123
Radionuclide Production Cross-Section To 13.20 %
Min
Ratio
TENDL Threshold 13.276 MeV
JEFF4.0 Threshold 13.276 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
51-Sb-123

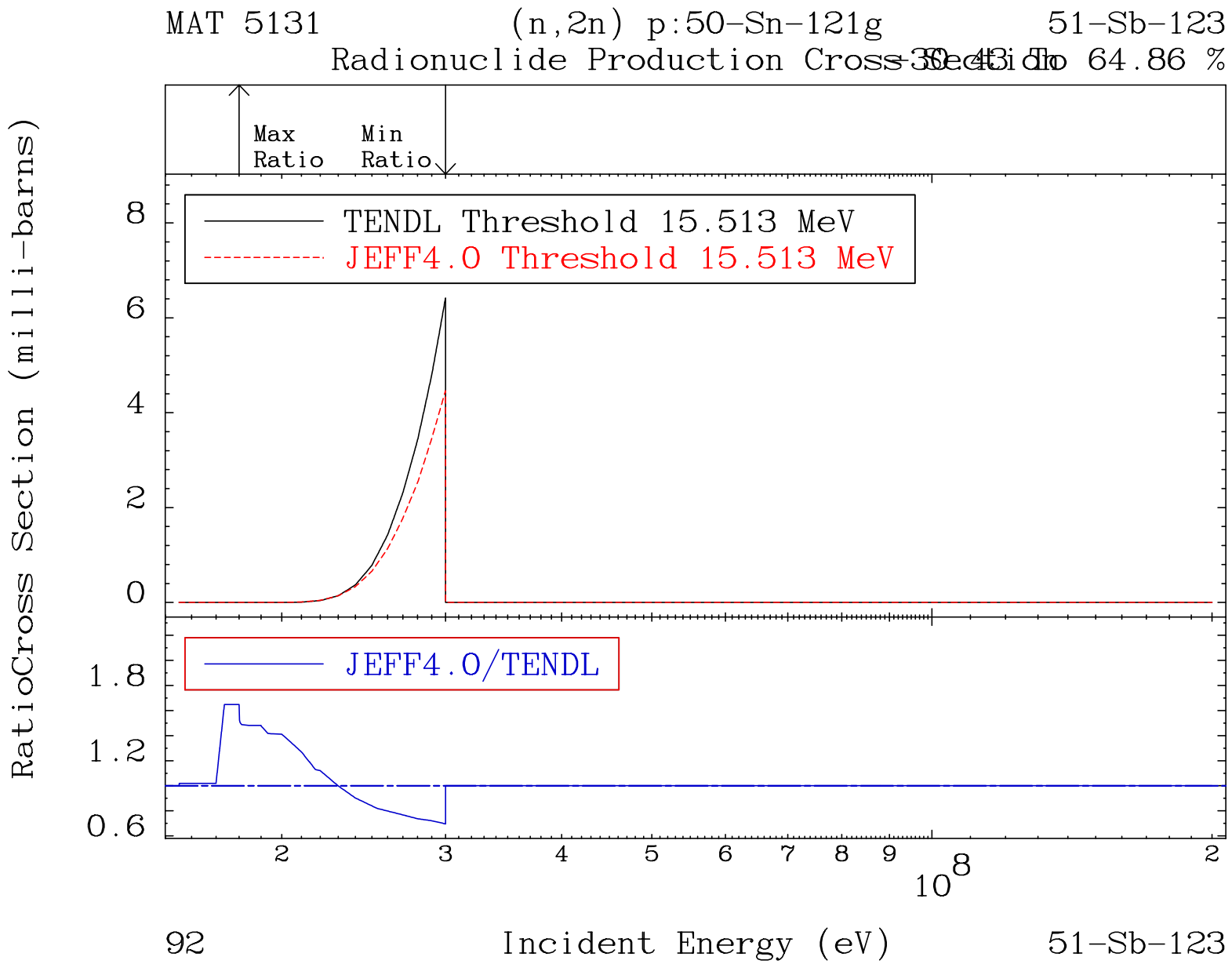

MAT 5131
(n,n') He-3:49-In-120g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 18.578 MeV
JEFF4.0 Threshold 18.578 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
200
150
100
50
0
1.2
1.0
0.8
2
3
4
5
6
7
8
9
2
10^8
87
Incident Energy (eV)
51-Sb-123

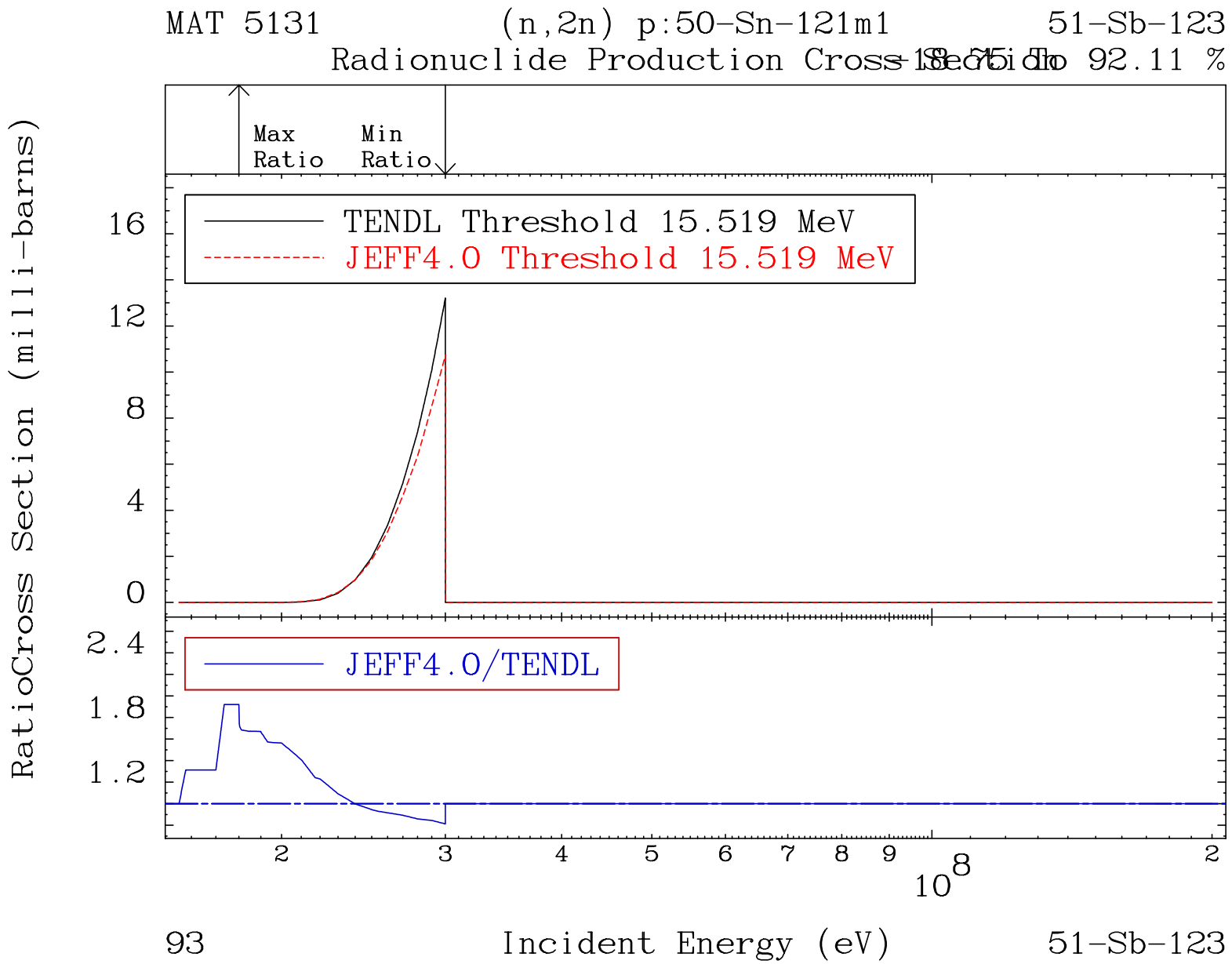

MAT 5131
(n,n') He-3:49-In-120m1
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 18.648 MeV
JEFF4.0 Threshold 18.648 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
88
51-Sb-123

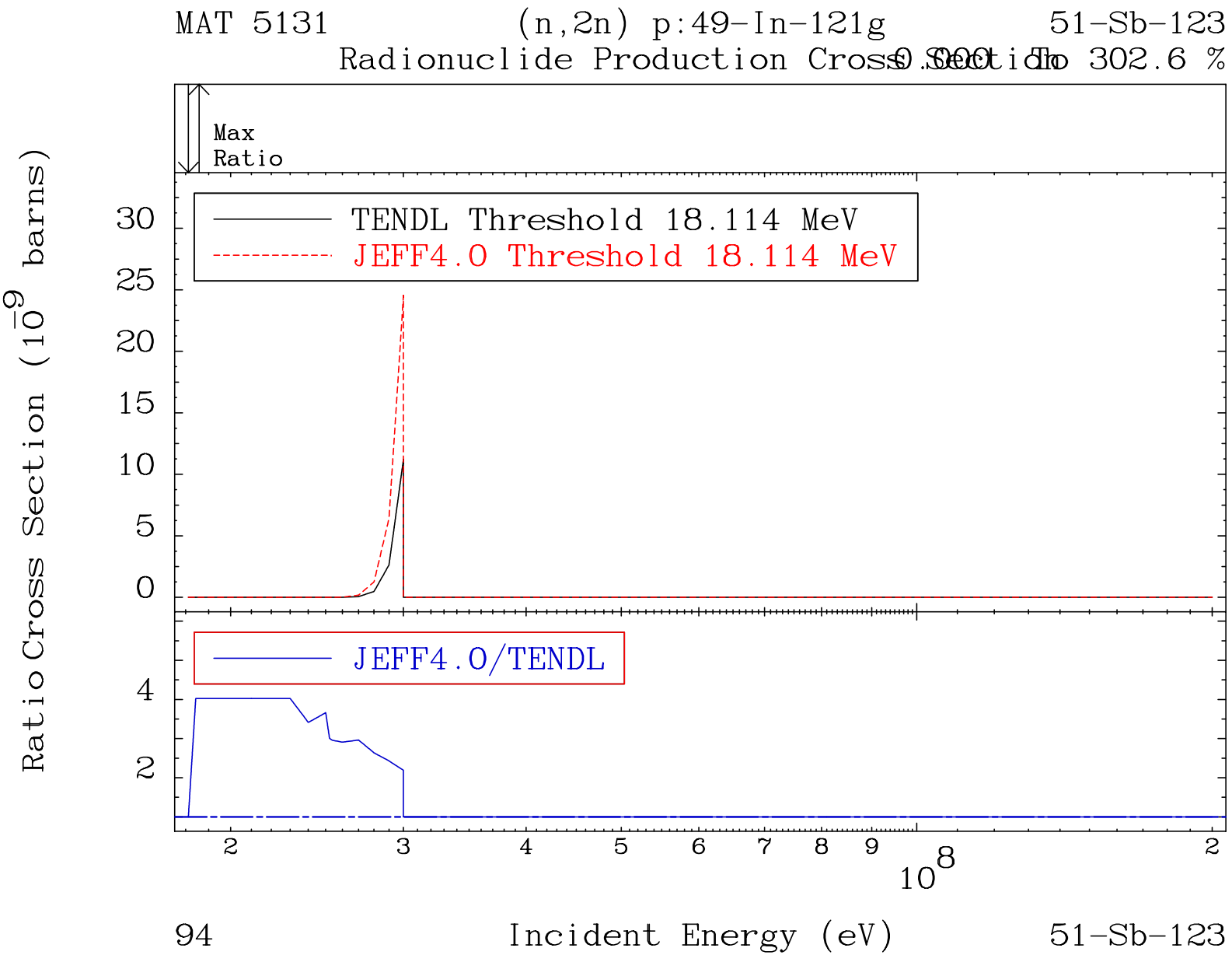

MAT 5131
(n,n') He-3:49-In-120m2
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 18.981 MeV
JEFF4.0 Threshold 18.981 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
89
51-Sb-123

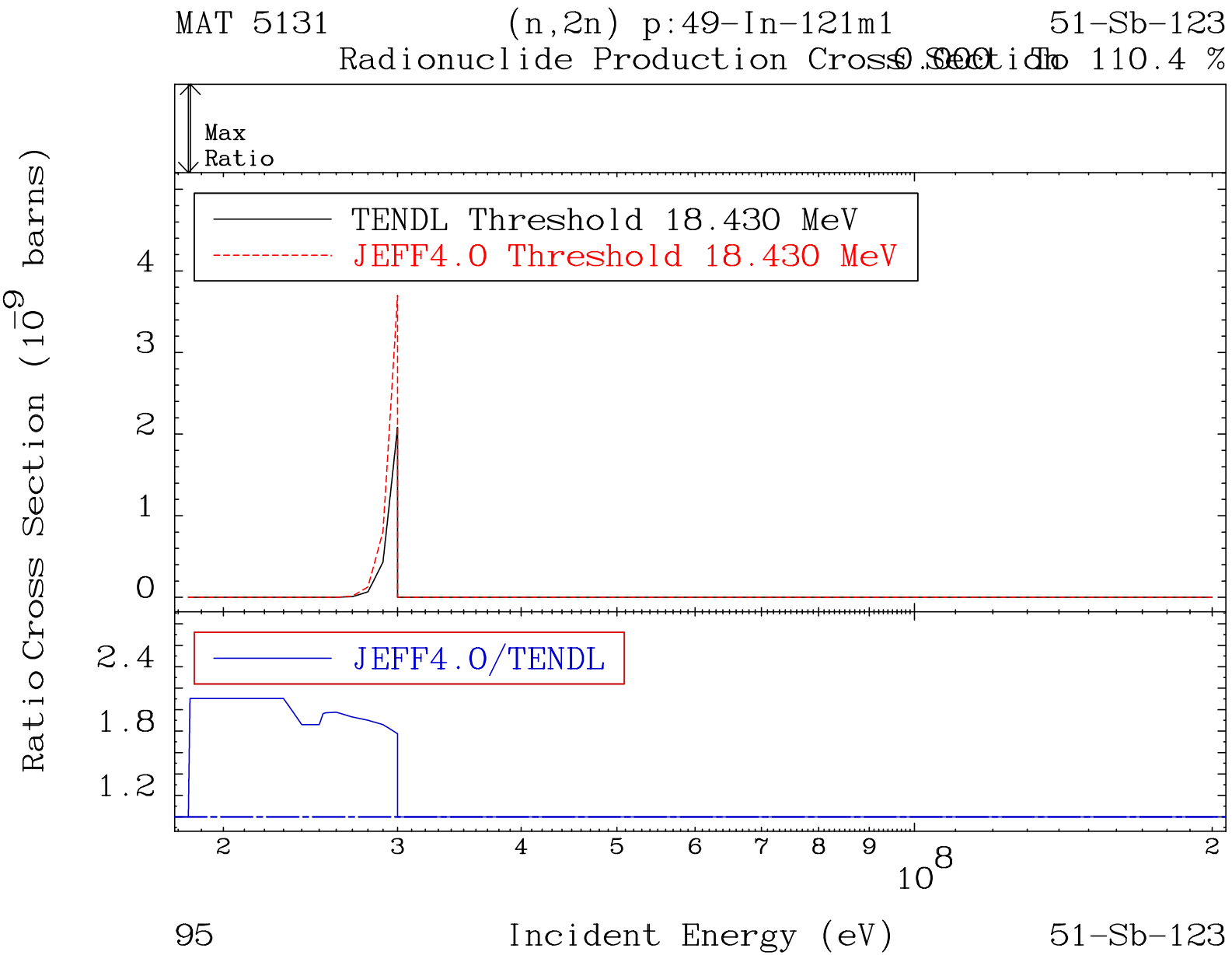

MAT 5131
(n,4n):51-Sb-120g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 73.76 %
Max
Ratio
TENDL Threshold 25.225 MeV
JEFF4.0 Threshold 25.225 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.6
1.2
40
60
80
100
120
140
160
180
200
90
Incident Energy (MeV)
51-Sb-123

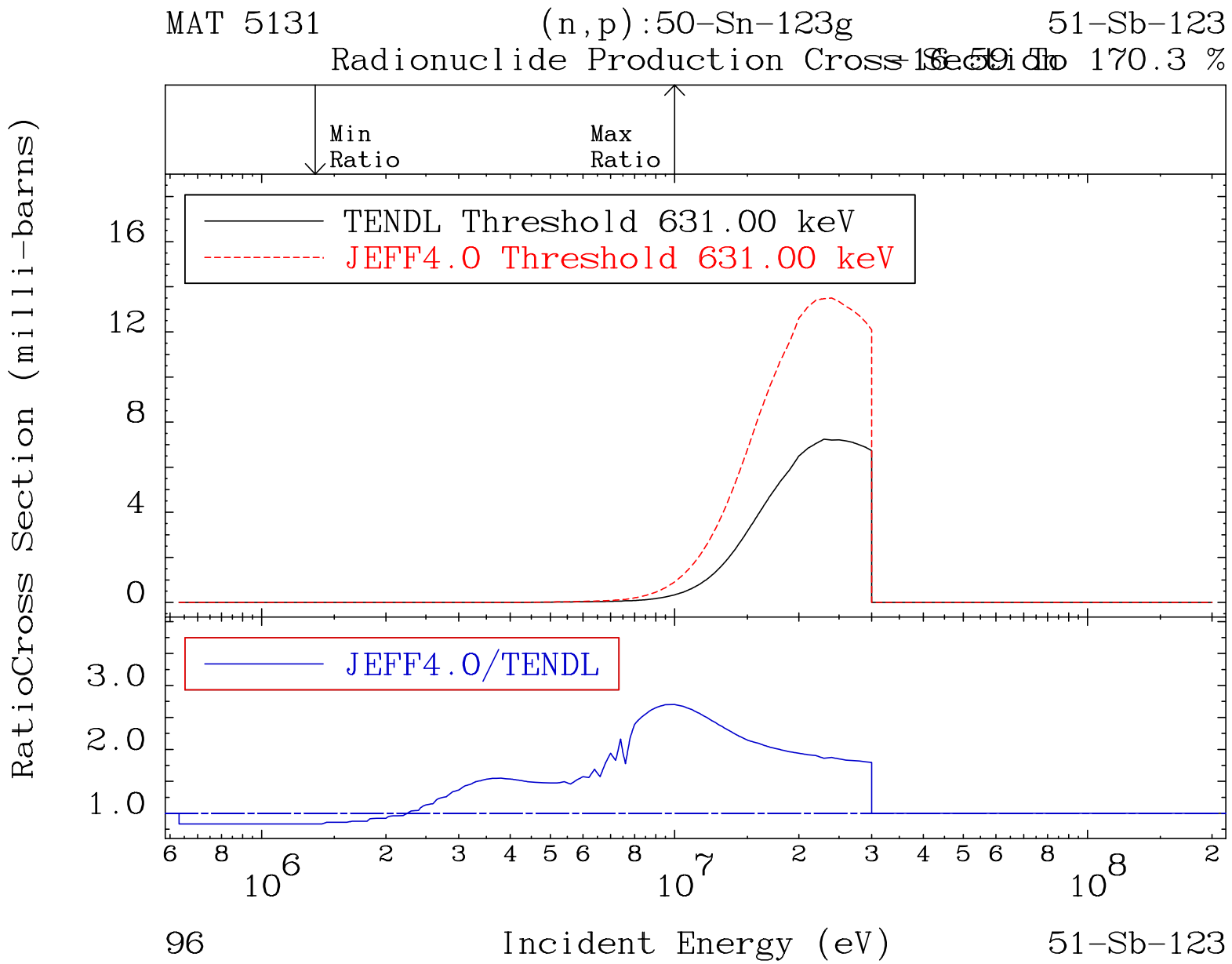

MAT 5131
(n,4n):51-Sb-120m4
51-Sb-123
Radionuclide Production Cross Section
0.000 To 148.5 %
Max
Ratio
TENDL Threshold 25.384 MeV
JEFF4.0 Threshold 25.384 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
3.0
2.0
1.0
40
60
80
100
120
140
160
180
200
91
Incident Energy (MeV)
51-Sb-123

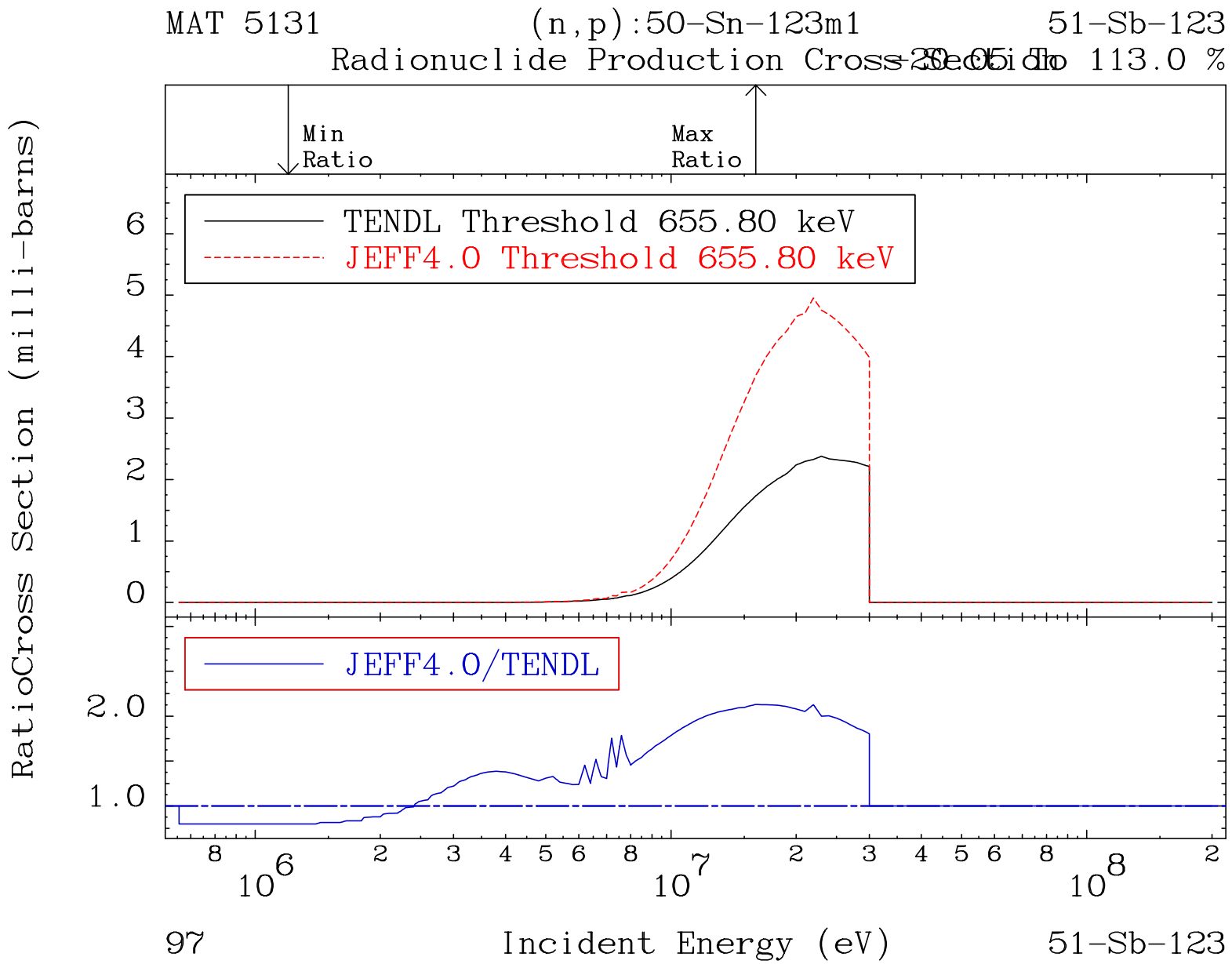

MAT 5131
(n,2n) p:50-Sn-121g
51-Sb-123
Radionuclide Production Cross Section To 64.86 %
Max Ratio
Min Ratio
TENDL Threshold 15.513 MeV
JEFF4.0 Threshold 15.513 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
92
51-Sb-123

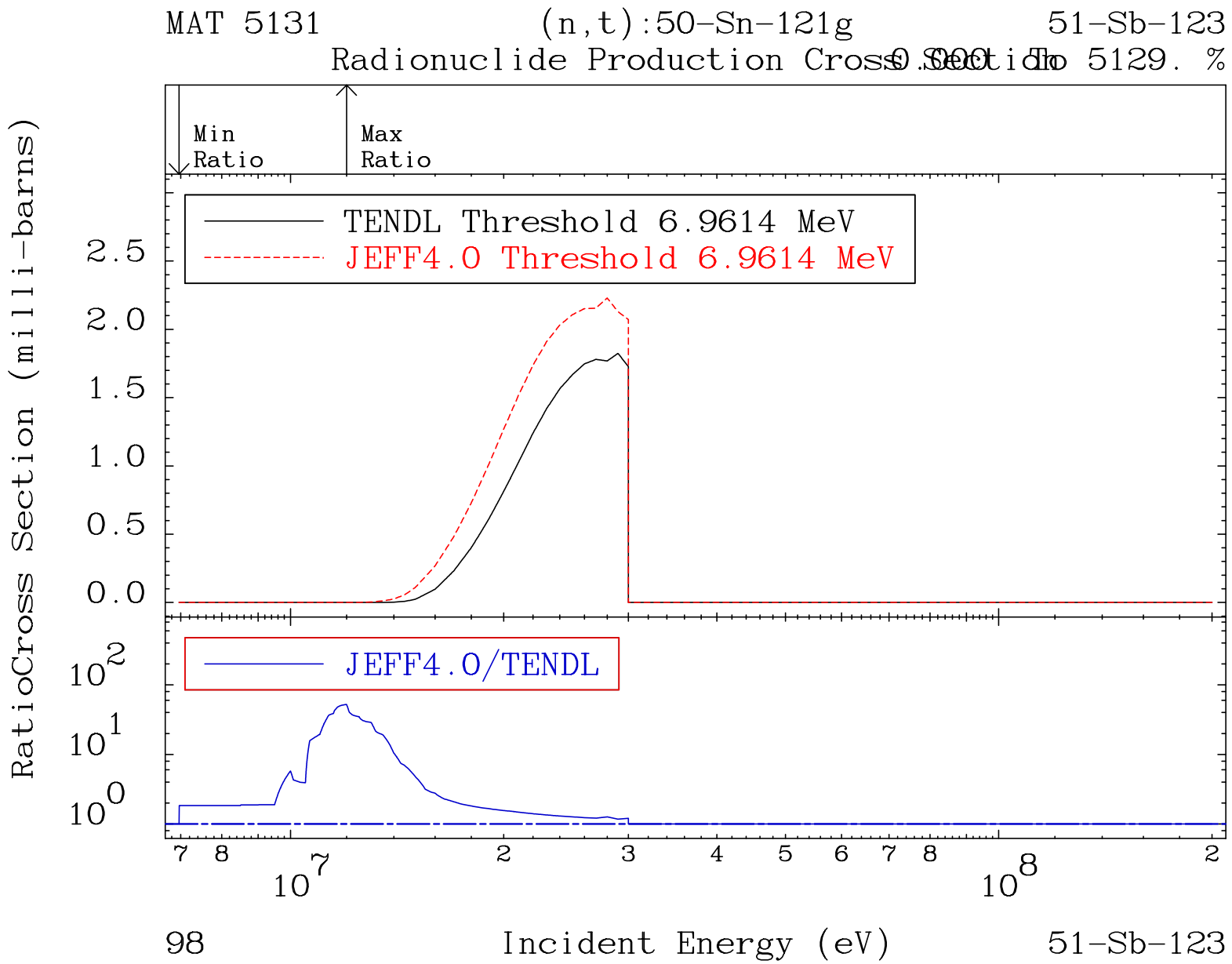

MAT 5131
(n,2n) p:50-Sn-121m1
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 15.519 MeV
JEFF4.0 Threshold 15.519 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
51-Sb-123

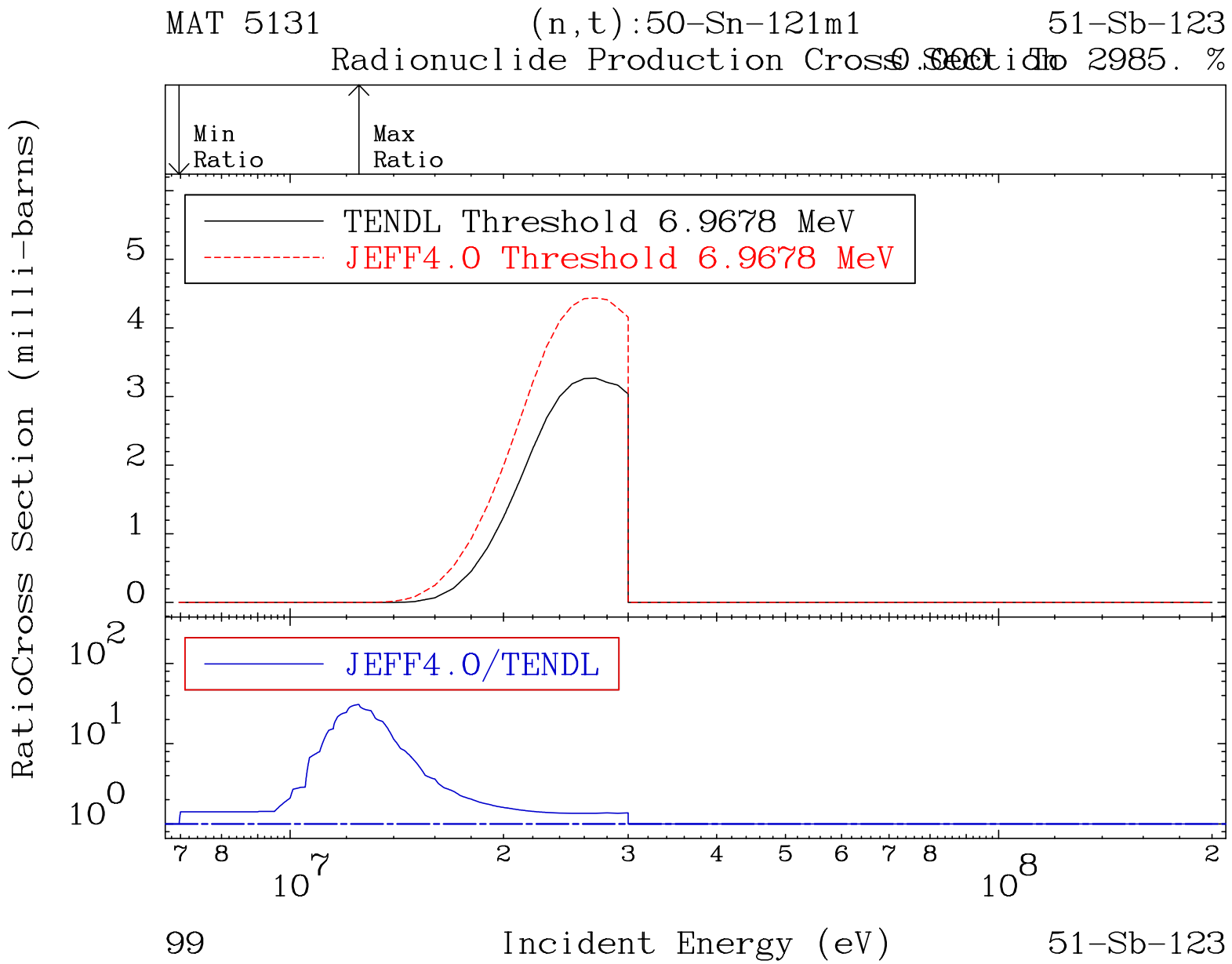

MAT 5131
(n,2n) p:49-In-121g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 302.6 %
Max
Ratio
TENDL Threshold 18.114 MeV
JEFF4.0 Threshold 18.114 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
4
2
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
51-Sb-123

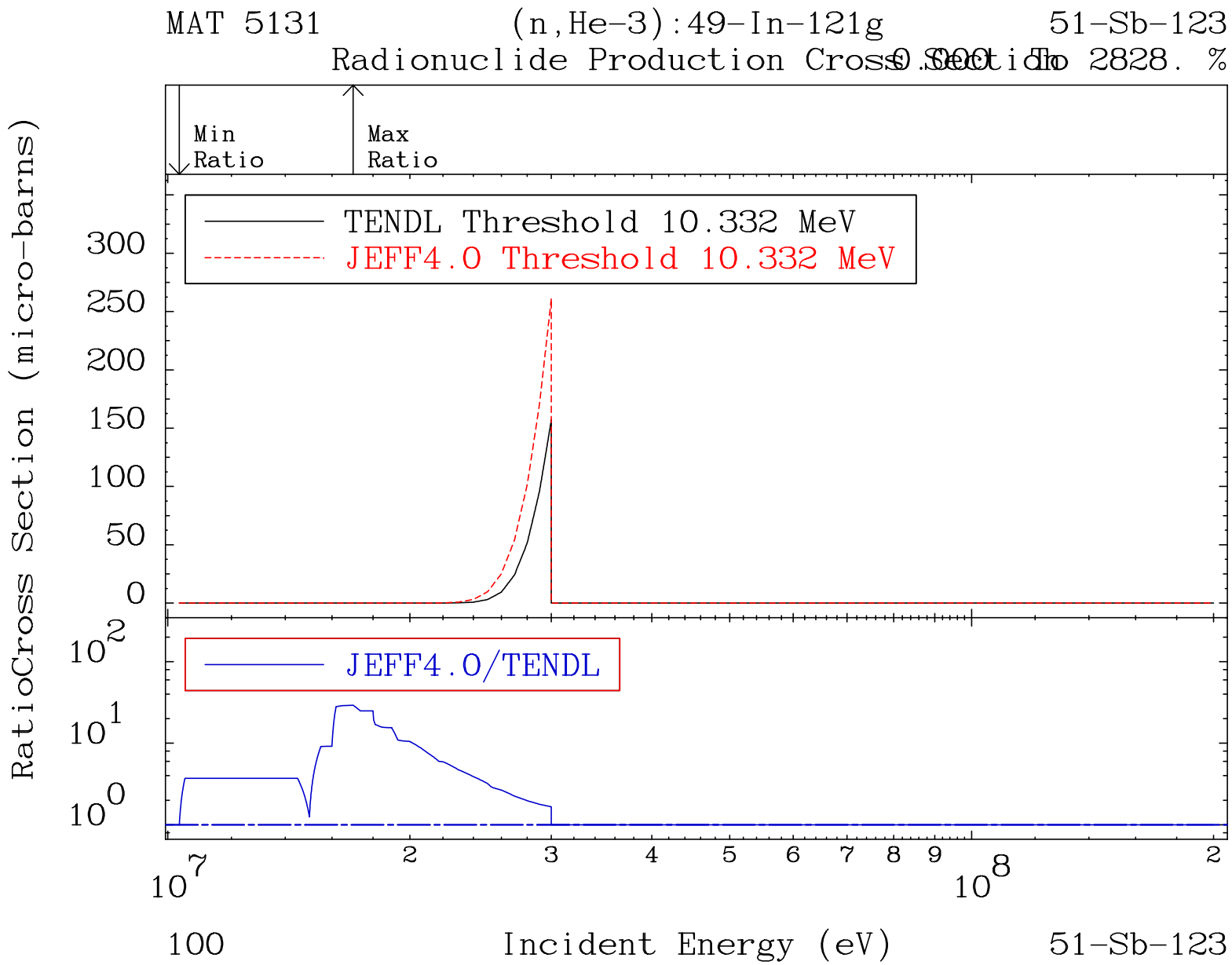

MAT 5131
(n,2n) p:49-In-121m1
51-Sb-123
Radionuclide Production Cross Section
0.000 To 110.4 %
Max
Ratio
TENDL Threshold 18.430 MeV
JEFF4.0 Threshold 18.430 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
4
3
2
1
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
51-Sb-123

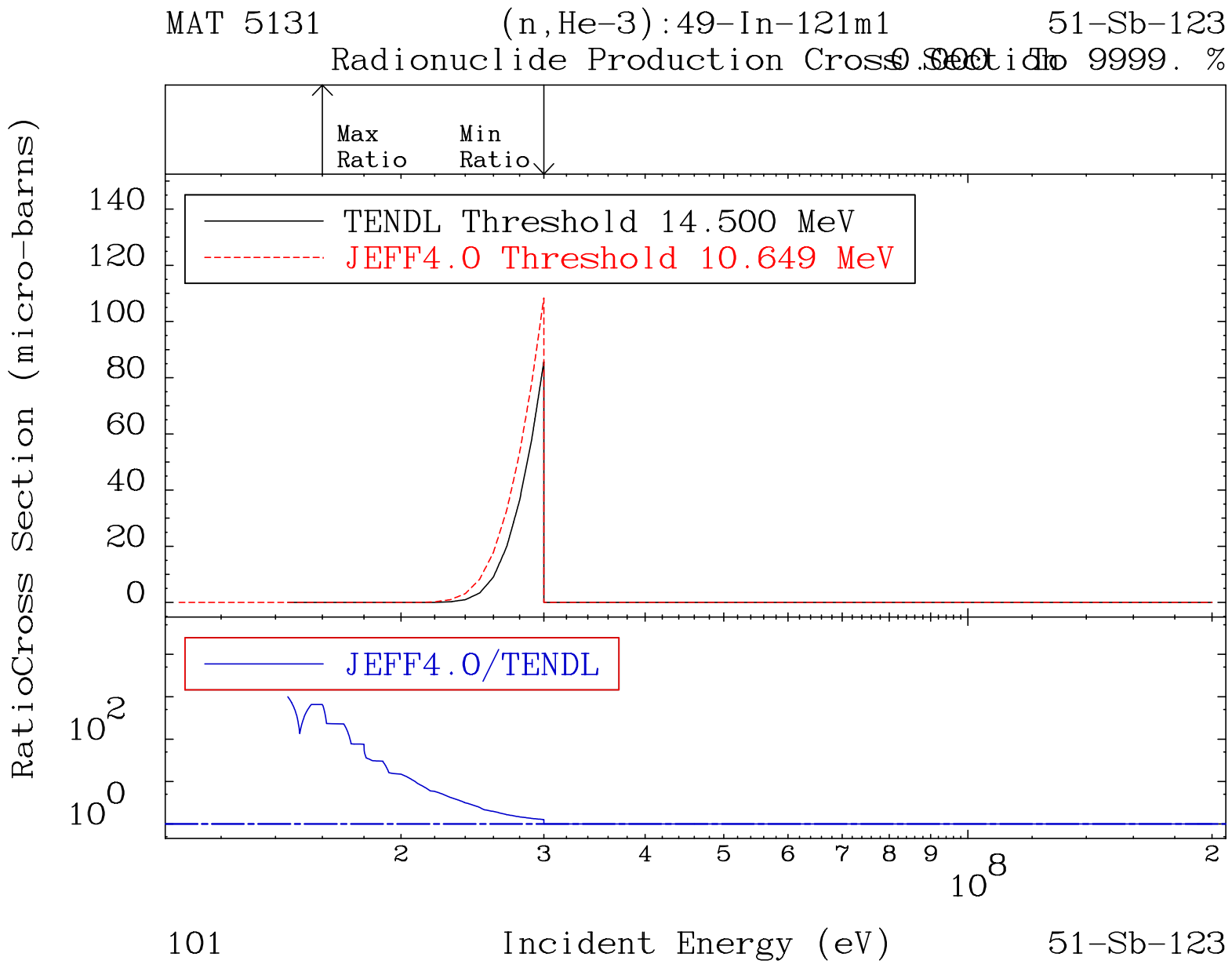

MAT 5131
(n,p):50-Sn-123g
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 631.00 keV
JEFF4.0 Threshold 631.00 keV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
96
51-Sb-123

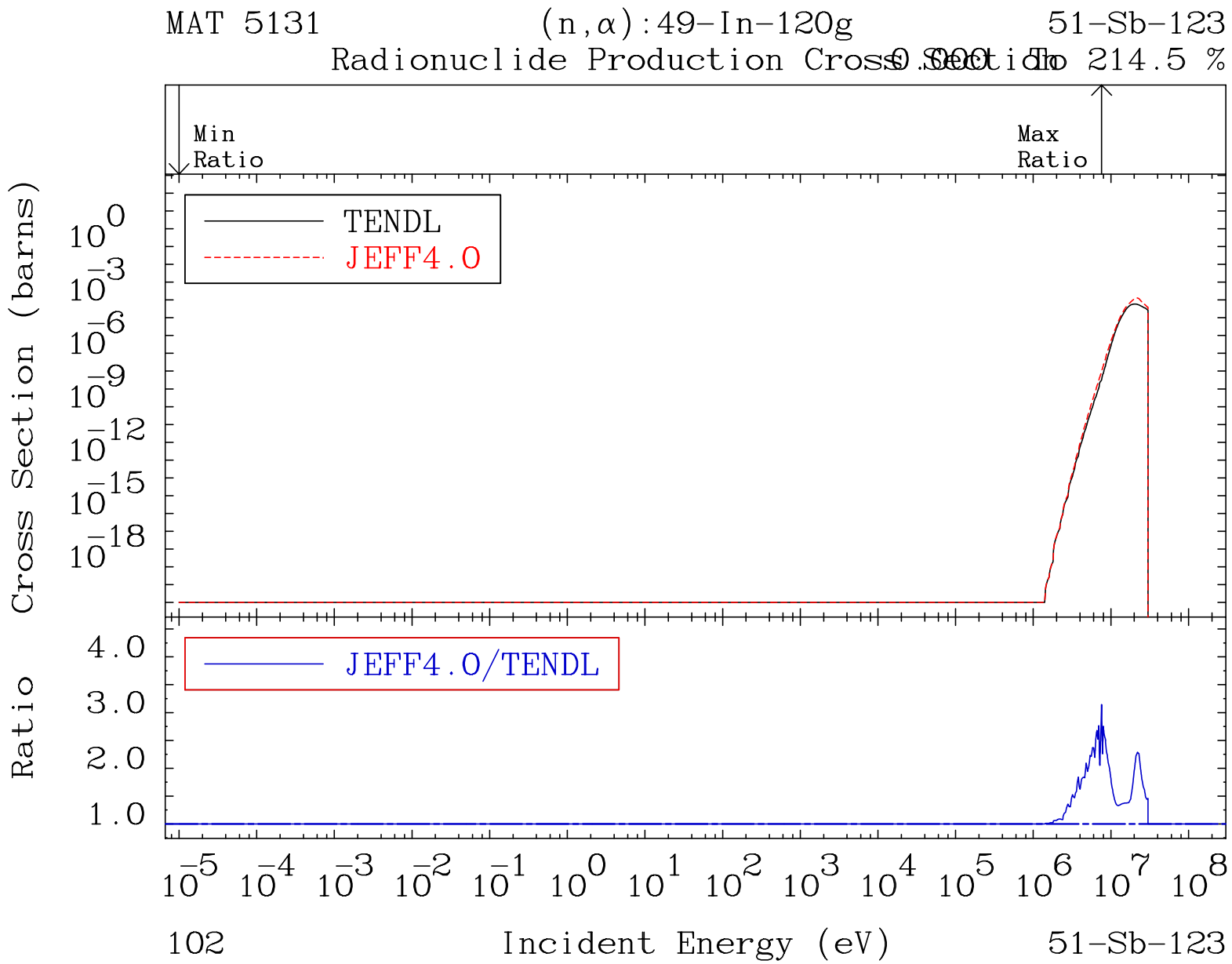

MAT 5131
(n,p):50-Sn-123m1
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 655.80 keV
JEFF4.0 Threshold 655.80 keV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
97
51-Sb-123

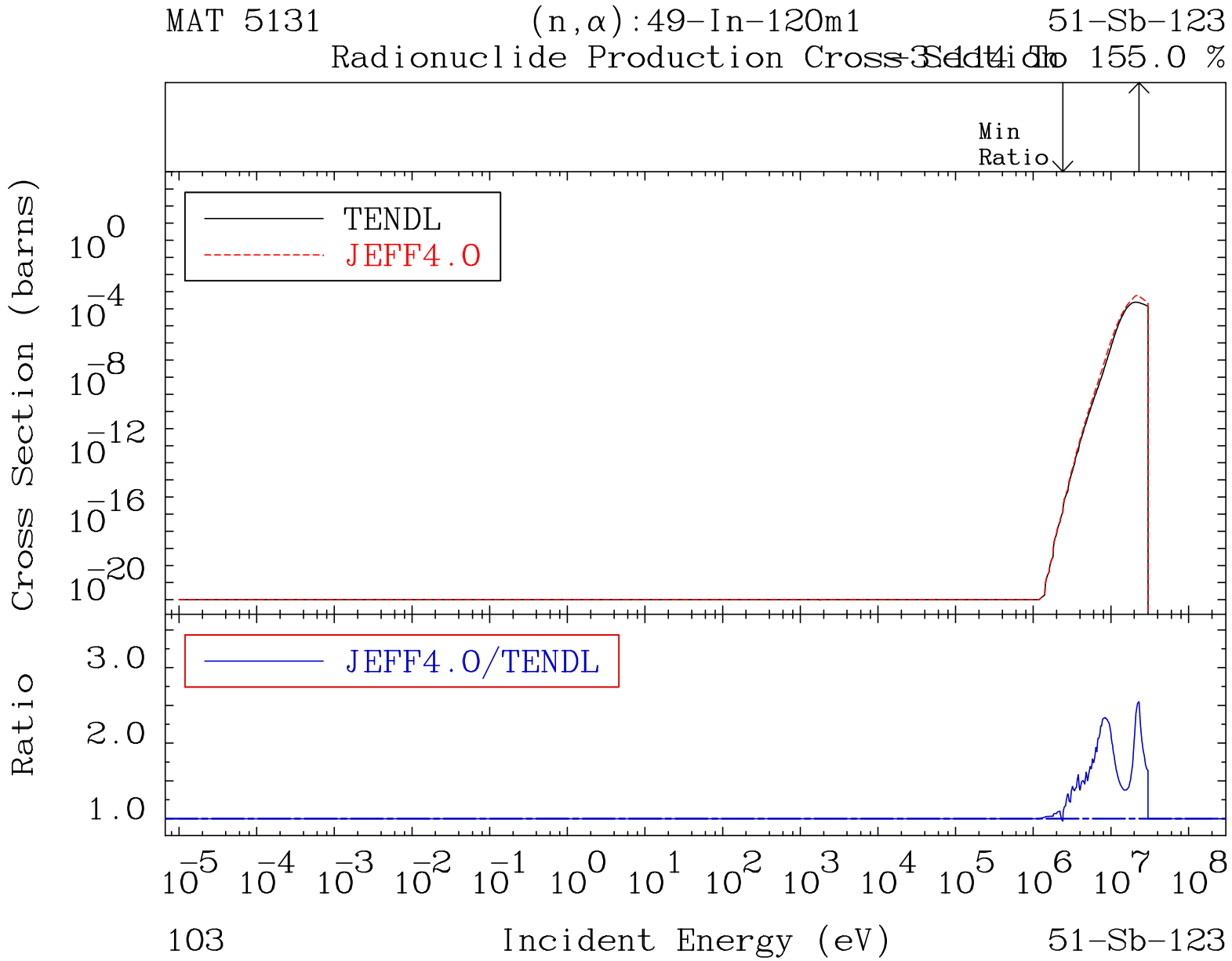

MAT 5131
(n,t):50-Sn-121g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 5129. %
Min Ratio
Max Ratio
TENDL Threshold 6.9614 MeV
JEFF4.0 Threshold 6.9614 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^1
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
98
Incident Energy (eV)
51-Sb-123

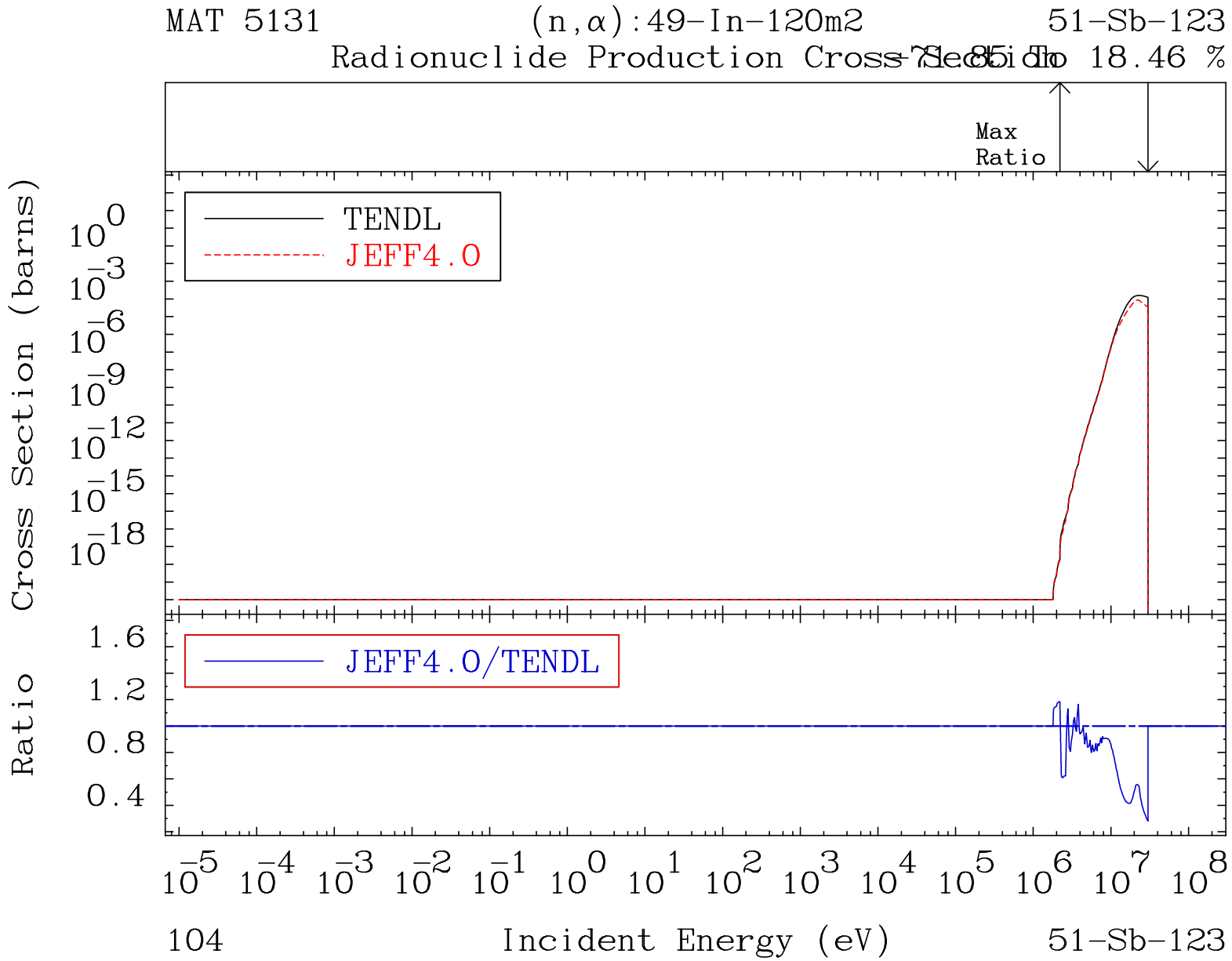

MAT 5131
(n,t):50-Sn-121m1
51-Sb-123
Radionuclide Production Cross Section
0.000 To 2985. %
Min Ratio
Max Ratio
TENDL Threshold 6.9678 MeV
JEFF4.0 Threshold 6.9678 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
99
51-Sb-123

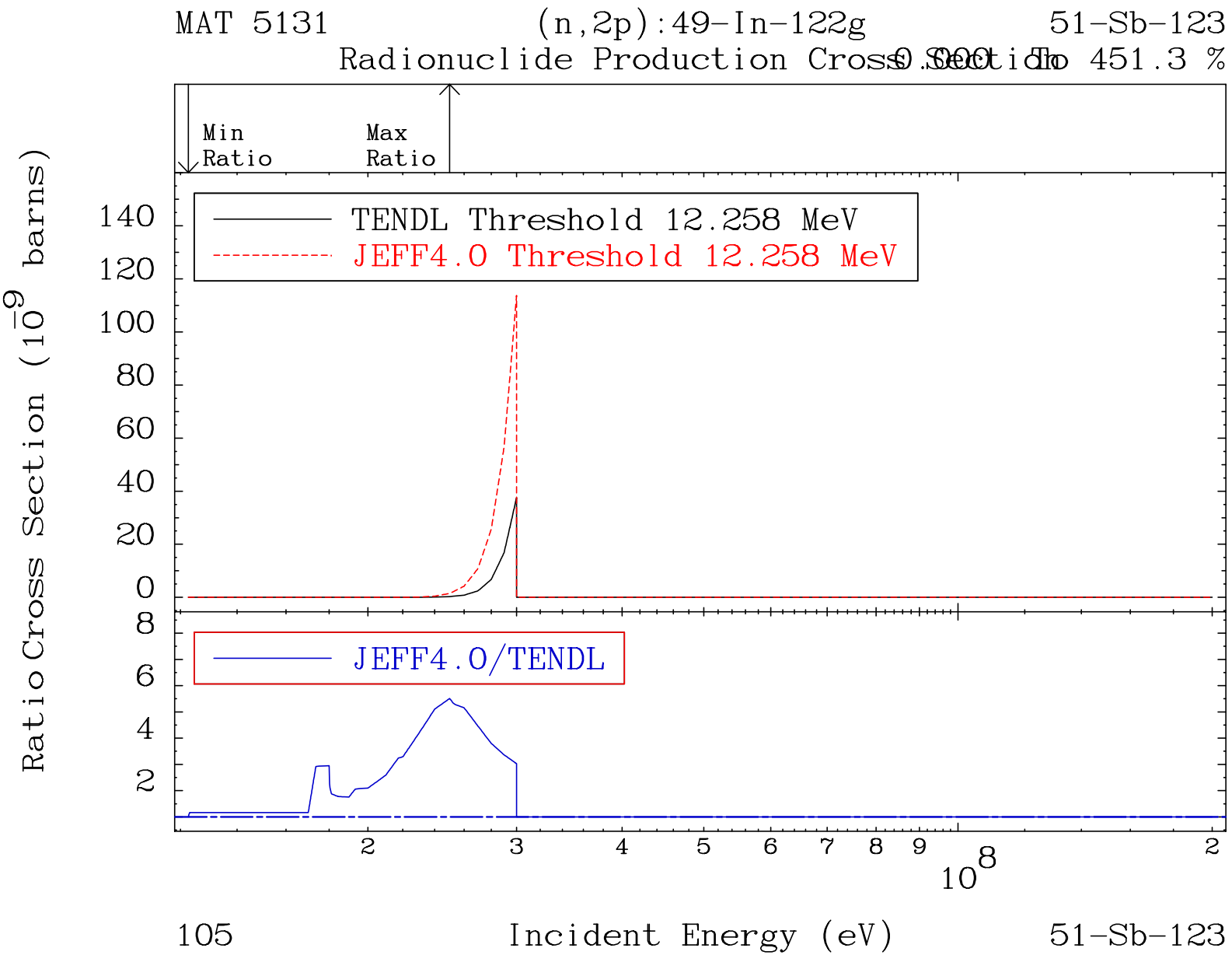

MAT 5131
(n,He-3):49-In-121g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 2828. %
Min Ratio
Max Ratio
TENDL Threshold 10.332 MeV
JEFF4.0 Threshold 10.332 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
300
250
200
150
100
50
0
10^2
10^1
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
100
Incident Energy (eV)
51-Sb-123

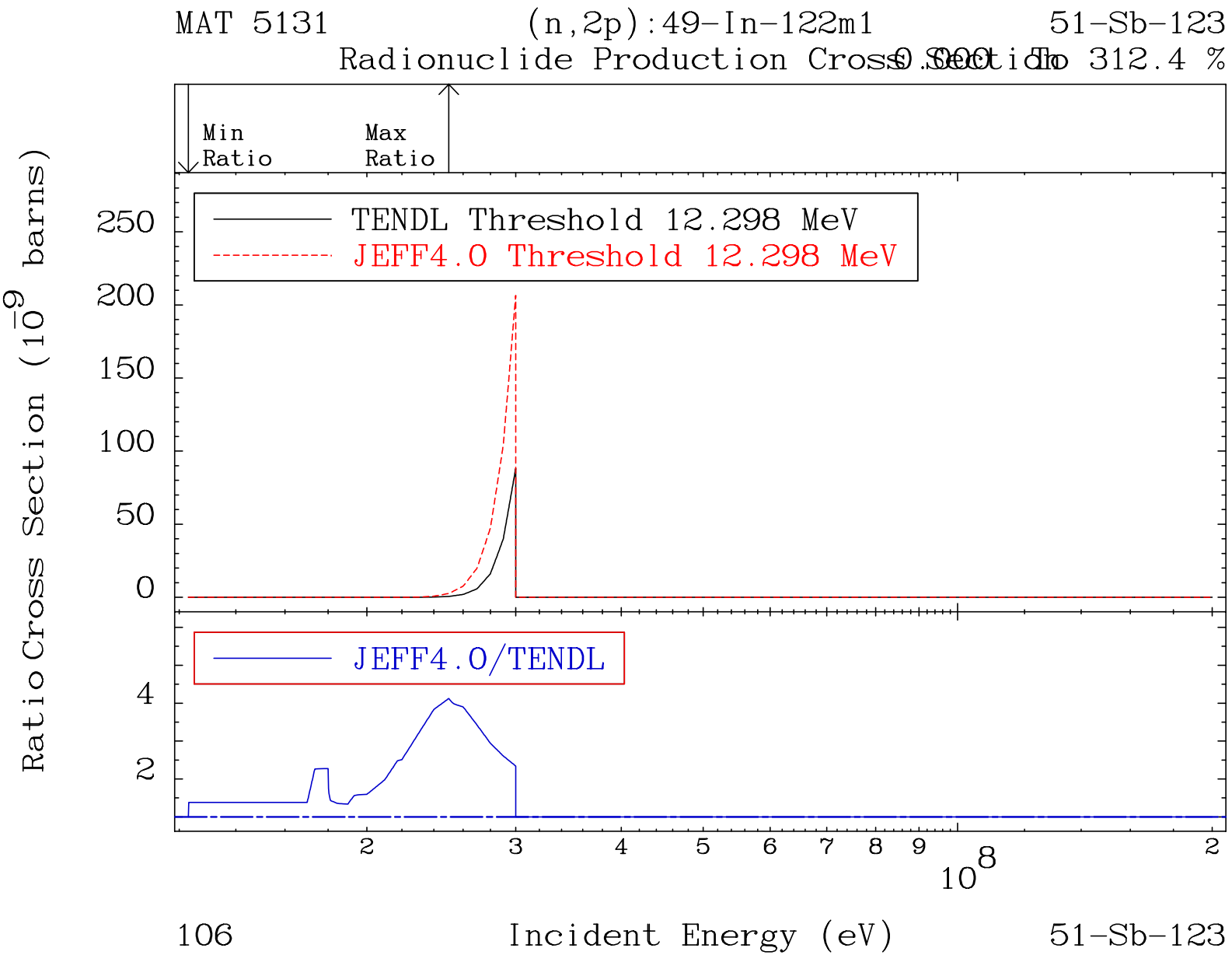

MAT 5131
(n,He-3):49-In-121m1
51-Sb-123
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
JEFF4.0 Threshold 10.649 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
140
120
100
80
60
40
20
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
51-Sb-123

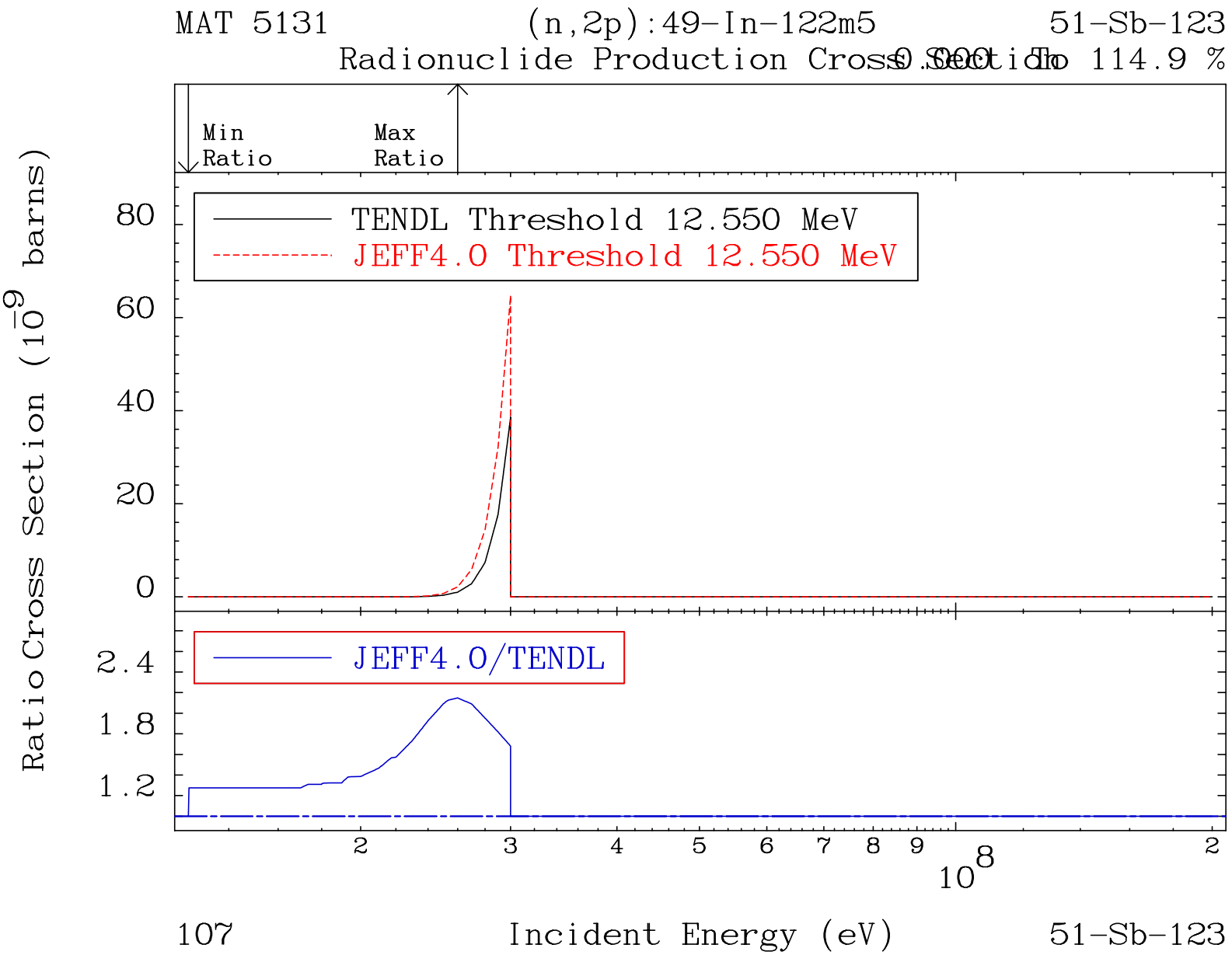

MAT 5131
(n,α):49-In-120g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 214.5 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
102
51-Sb-123

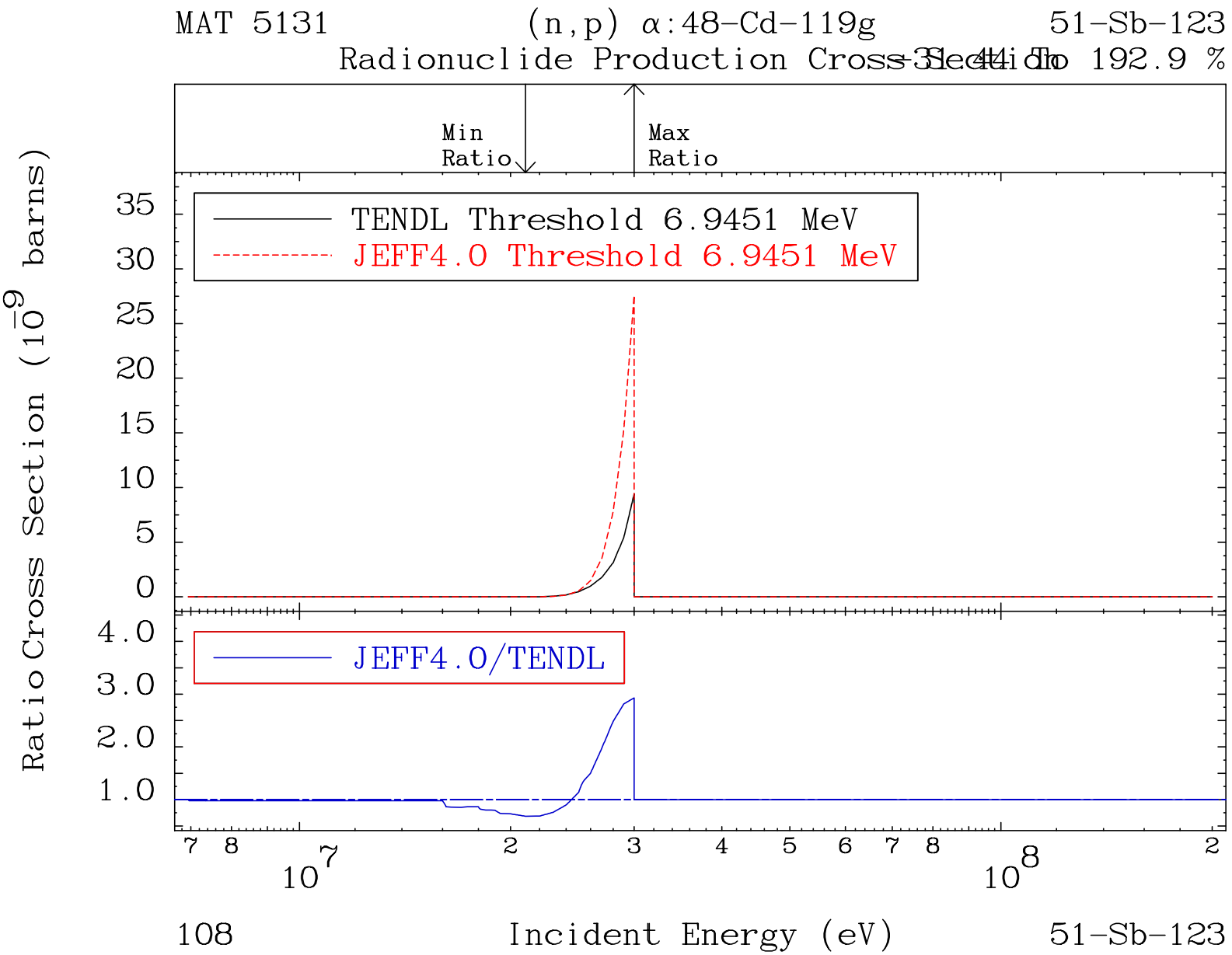

MAT 5131
(n,α):49-In-120m1
51-Sb-123
Radionuclide Production Cross Section
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
103
51-Sb-123

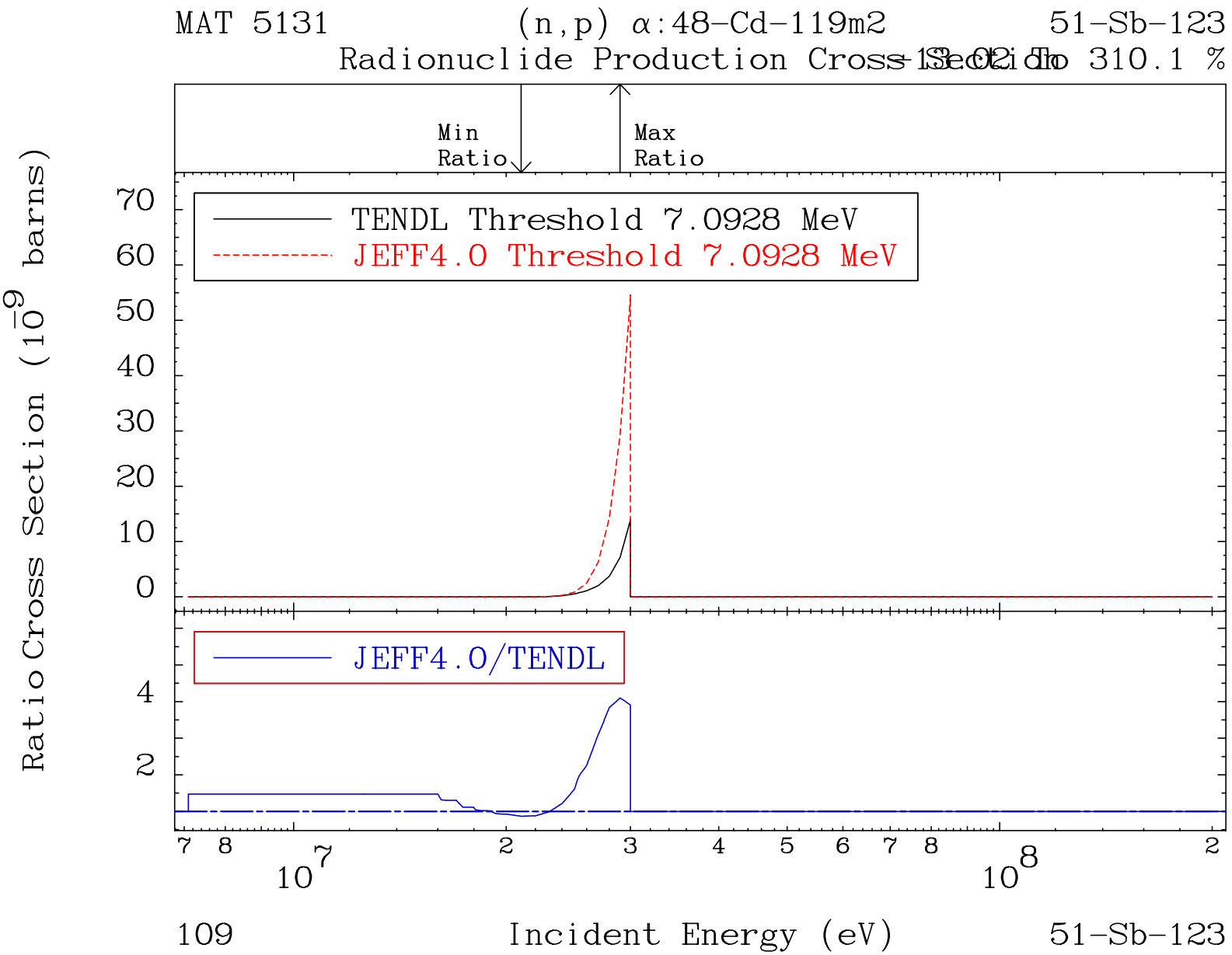

MAT 5131
(n,α):49-In-120m2
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
104
51-Sb-123

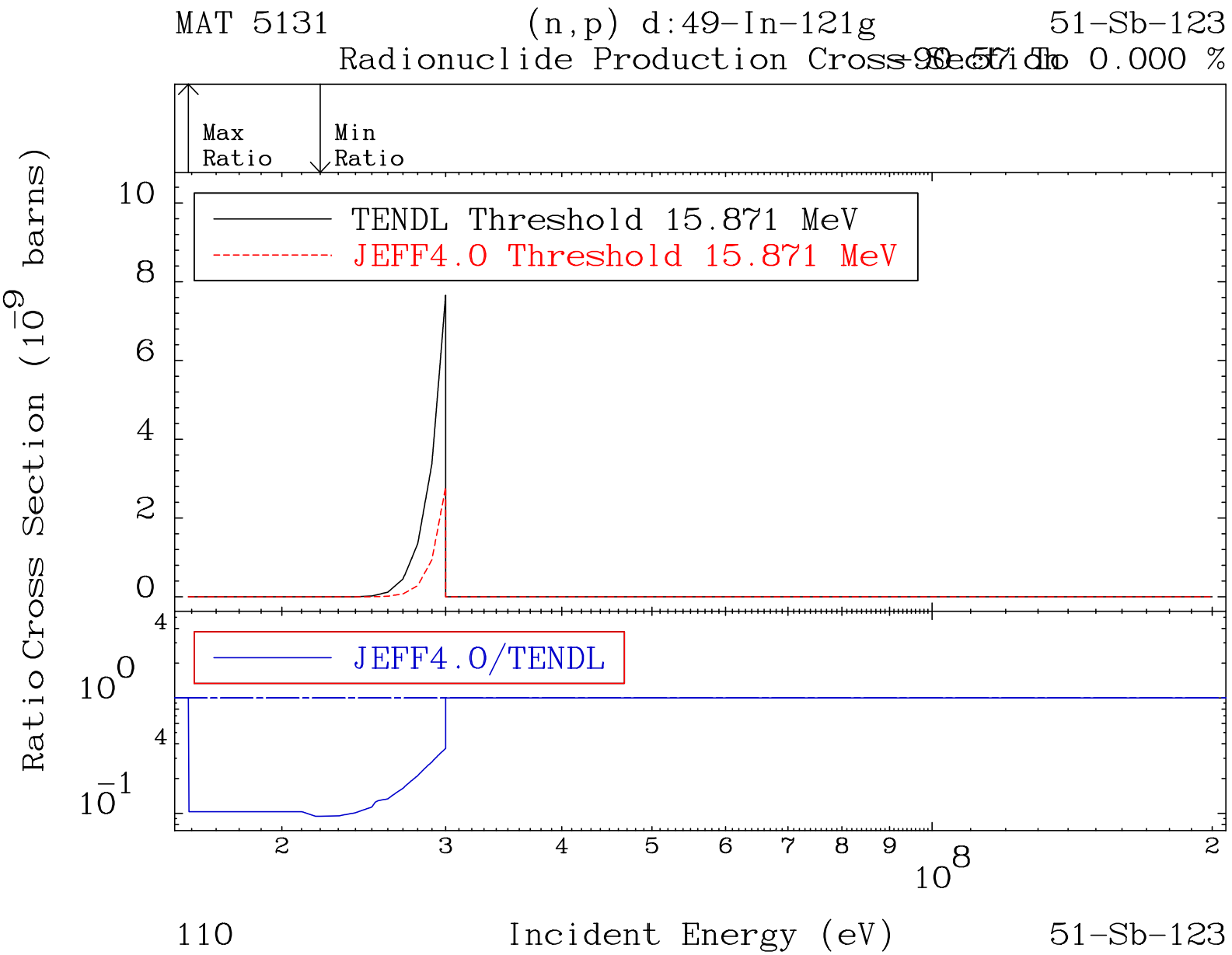

MAT 5131
(n,2p):49-In-122g
51-Sb-123
Radionuclide Production Cross Section
0.000 To 451.3 %
Min Ratio
Max Ratio
TENDL Threshold 12.258 MeV
JEFF4.0 Threshold 12.258 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
140
120
100
80
60
40
20
0
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
51-Sb-123

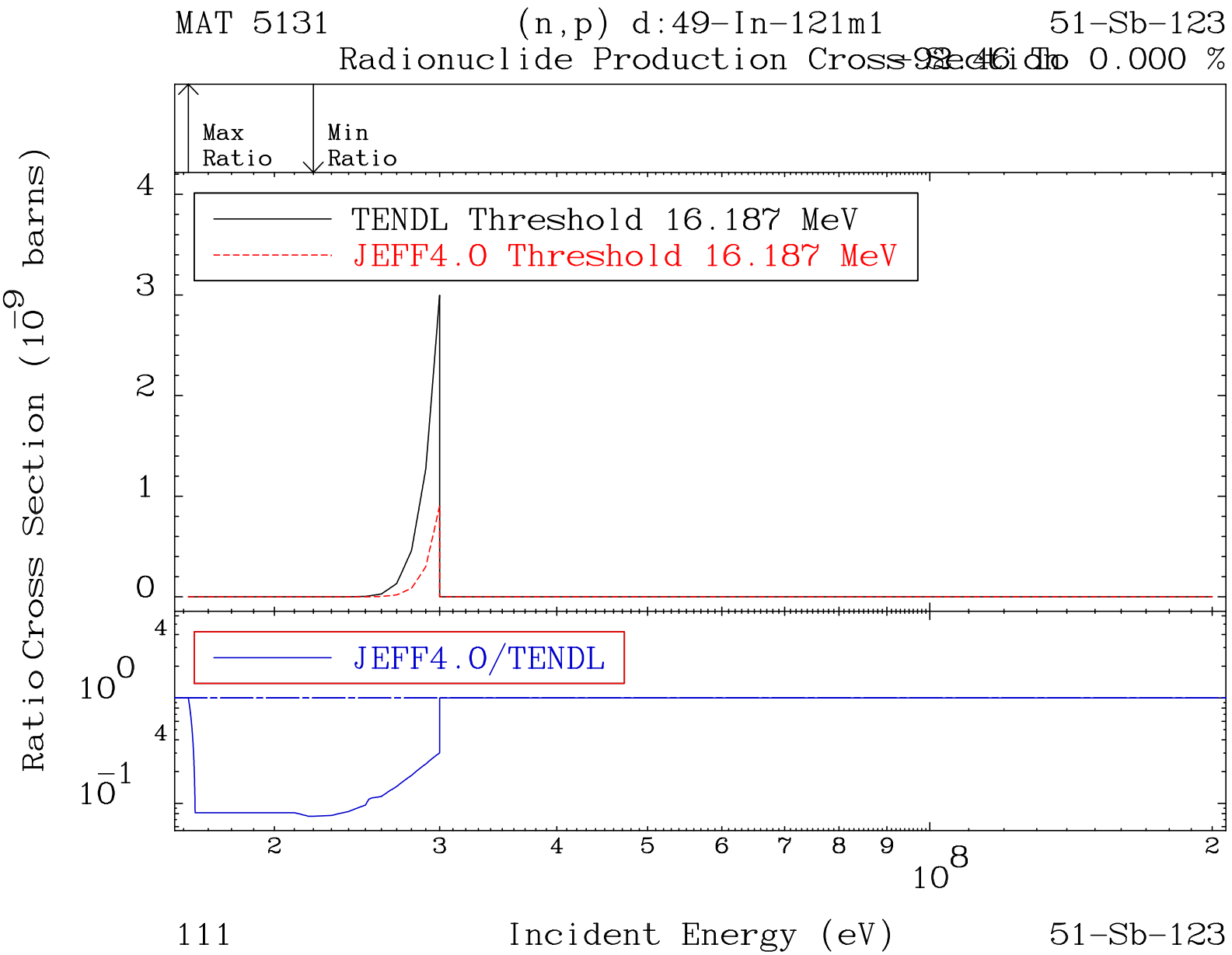

MAT 5131
(n,2p):49-In-122m1
51-Sb-123
Radionuclide Production Cross Section
0.000 To 312.4 %
Min Ratio
Max Ratio
TENDL Threshold 12.298 MeV
JEFF4.0 Threshold 12.298 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
250
200
150
100
50
0
4
2
2
3
4
5
6
7
8
9
2
10^8
106
Incident Energy (eV)
51-Sb-123


MAT 5131
(n,2p):49-In-122m5
51-Sb-123
Radionuclide Production Cross Section
0.000 To 114.9 %
Min Ratio
Max Ratio
TENDL Threshold 12.550 MeV
JEFF4.0 Threshold 12.550 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
80
60
40
20
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
107
Incident Energy (eV)
51-Sb-123


MAT 5131
(n,p) α:48-Cd-119g
51-Sb-123
Radionuclide Production Cross Section To 192.9 %
Min Ratio
Max Ratio
TENDL Threshold 6.9451 MeV
JEFF4.0 Threshold 6.9451 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
108
51-Sb-123


MAT 5131
(n,p) α:48-Cd-119m2
51-Sb-123
Radionuclide Production Cross Section To 310.1 %
Min Ratio
Max Ratio
TENDL Threshold 7.0928 MeV
JEFF4.0 Threshold 7.0928 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
109
51-Sb-123


MAT 5131
(n,p) d:49-In-121g
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 15.871 MeV
JEFF4.0 Threshold 15.871 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
110
51-Sb-123


MAT 5131
(n,p) d:49-In-121m1
51-Sb-123
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 16.187 MeV
JEFF4.0 Threshold 16.187 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
111
51-Sb-123