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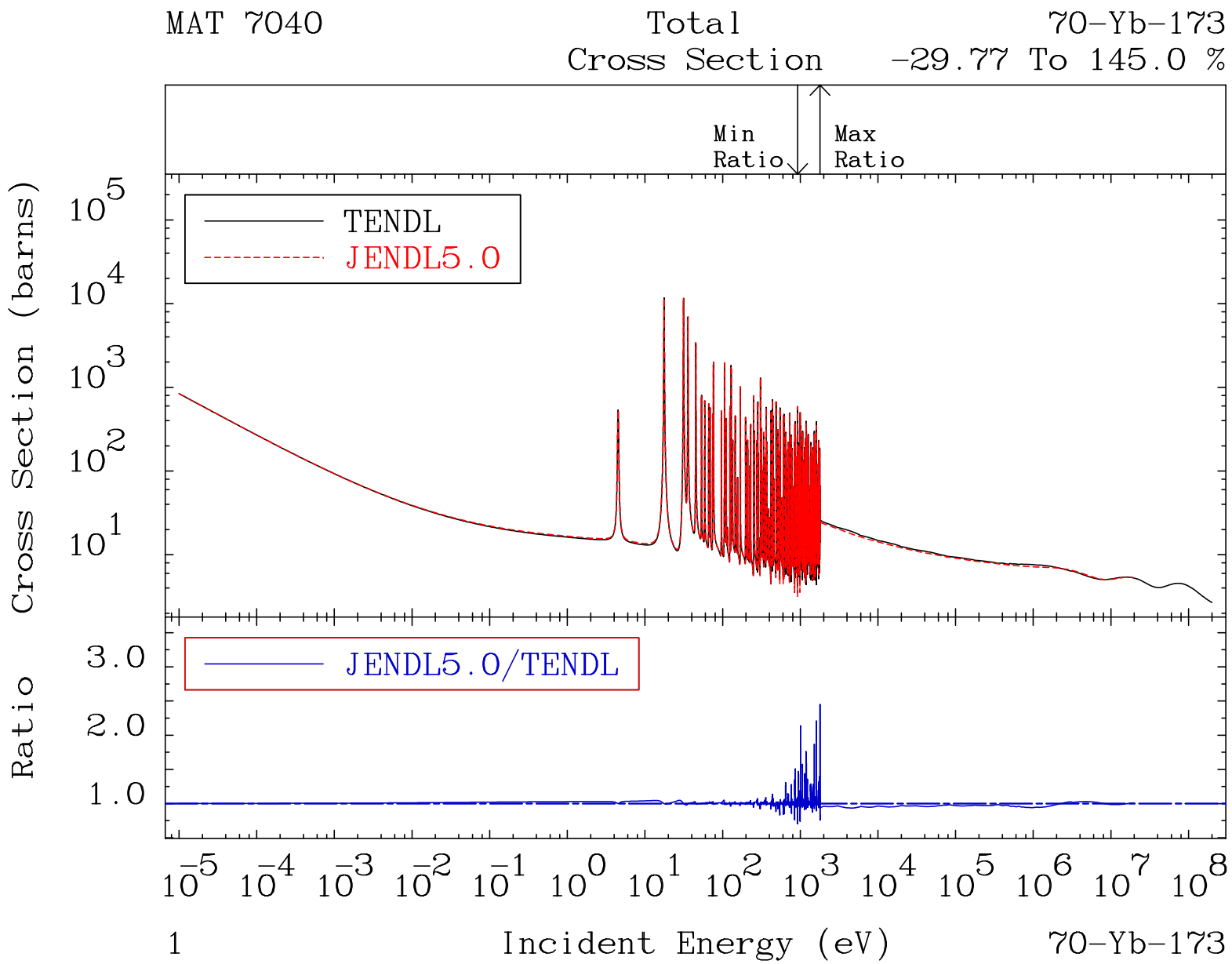
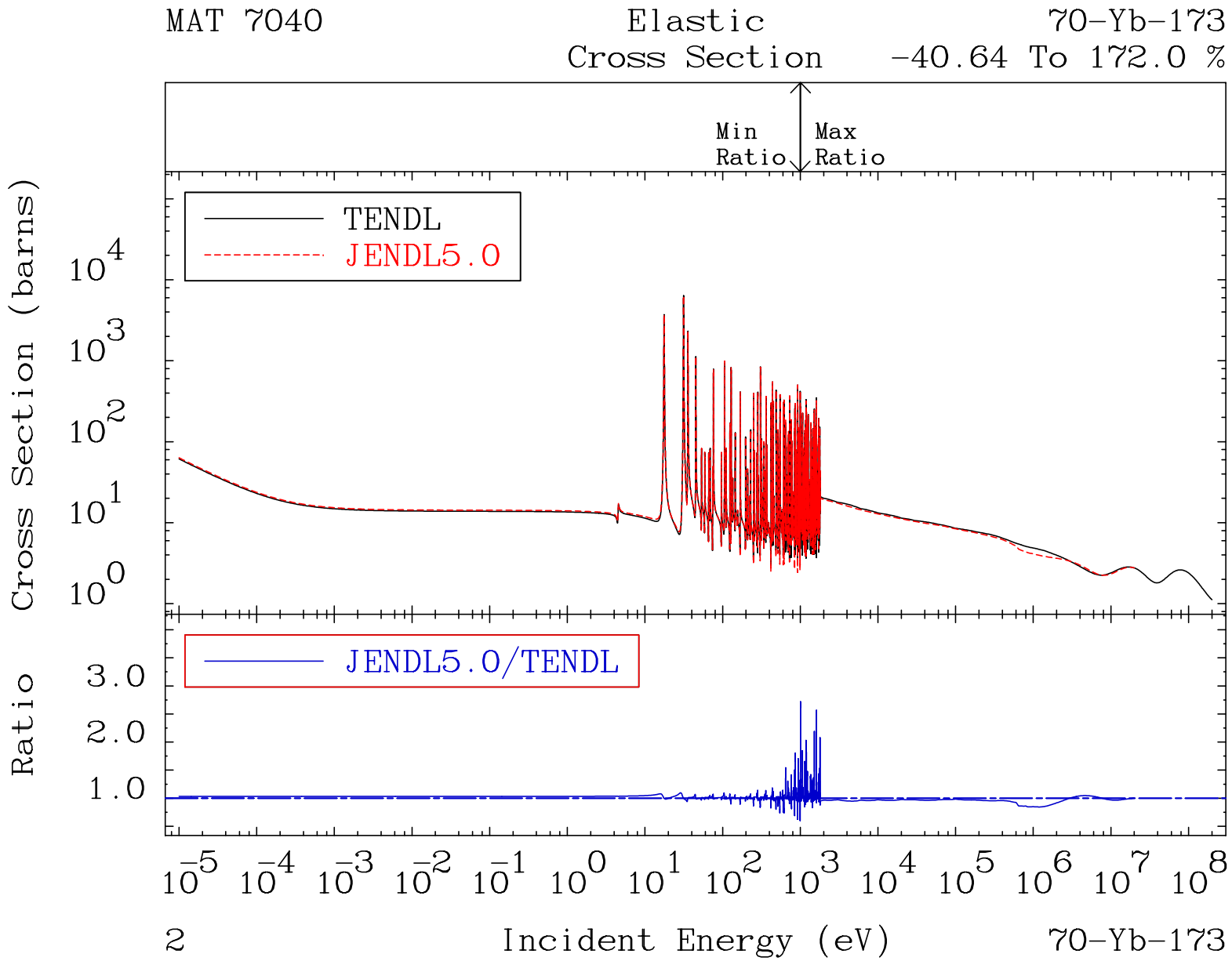
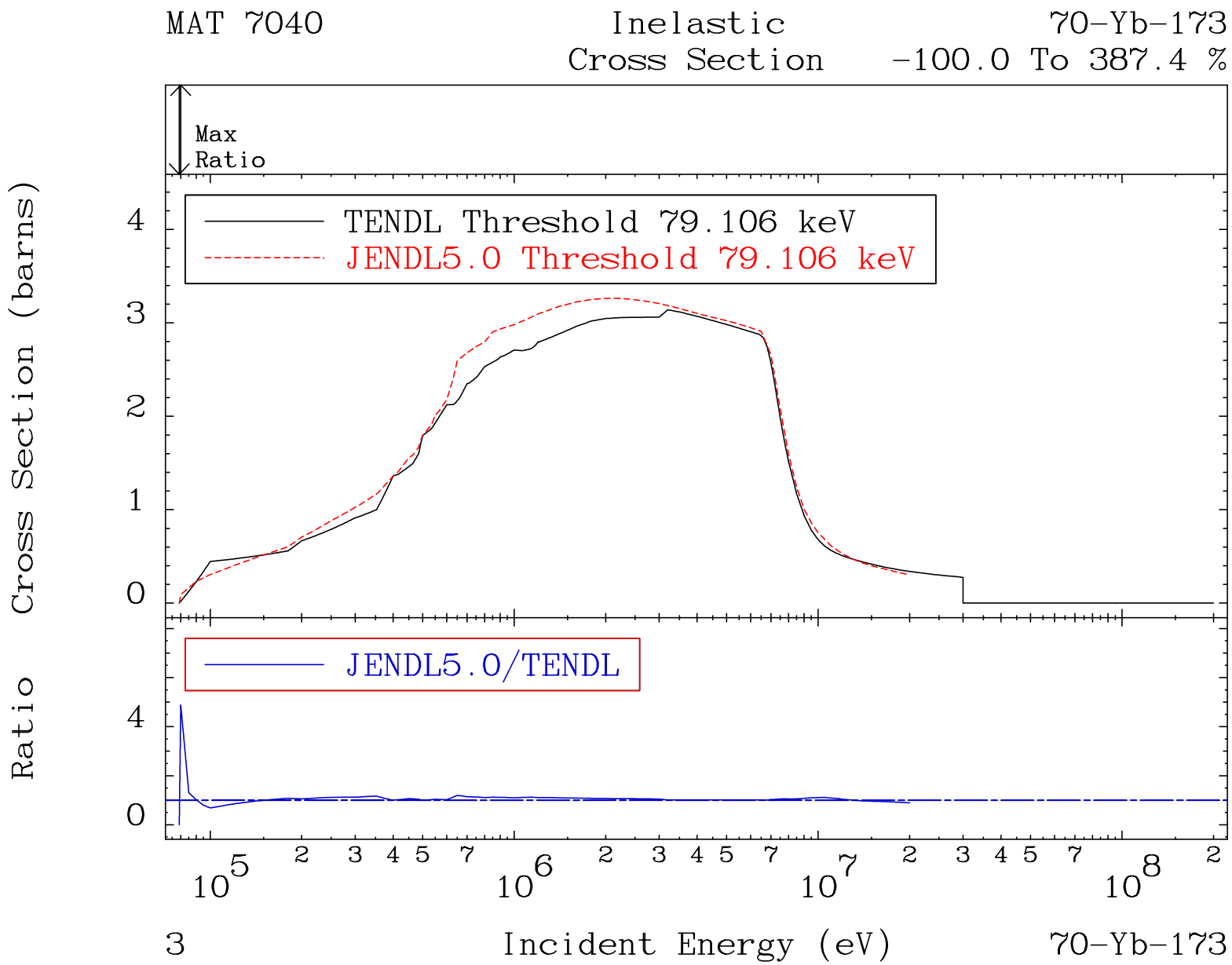
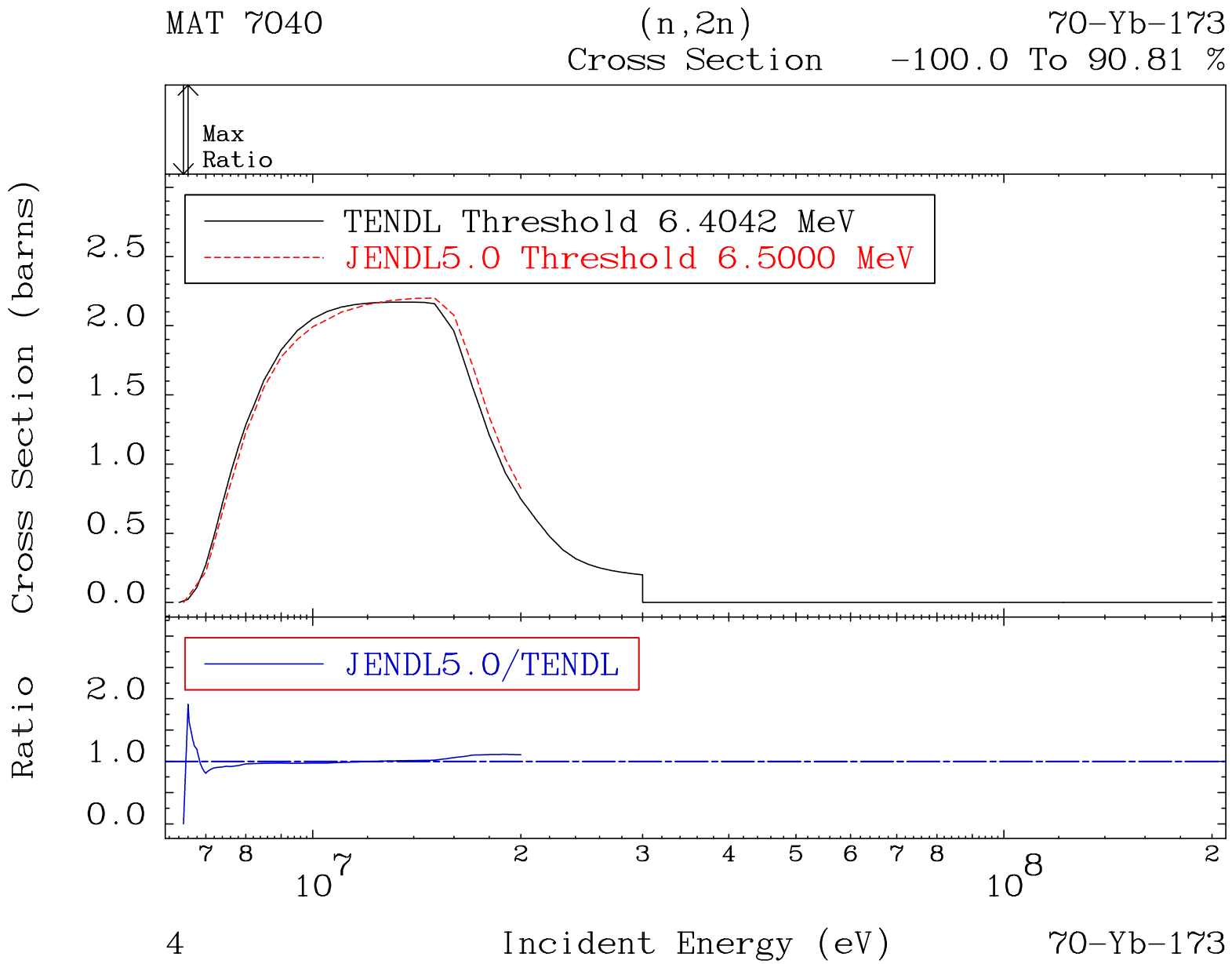
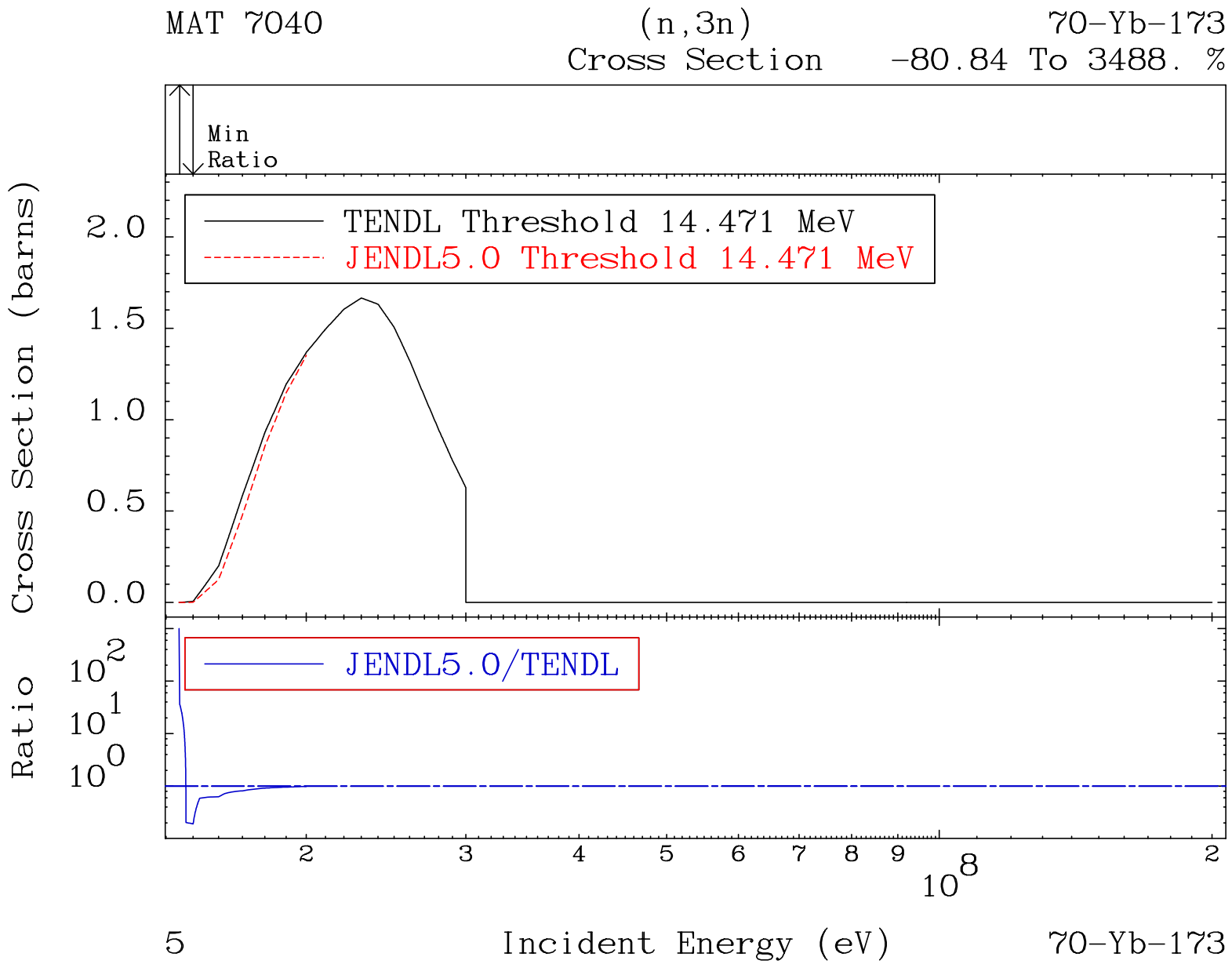
Press Mouse Button to Start

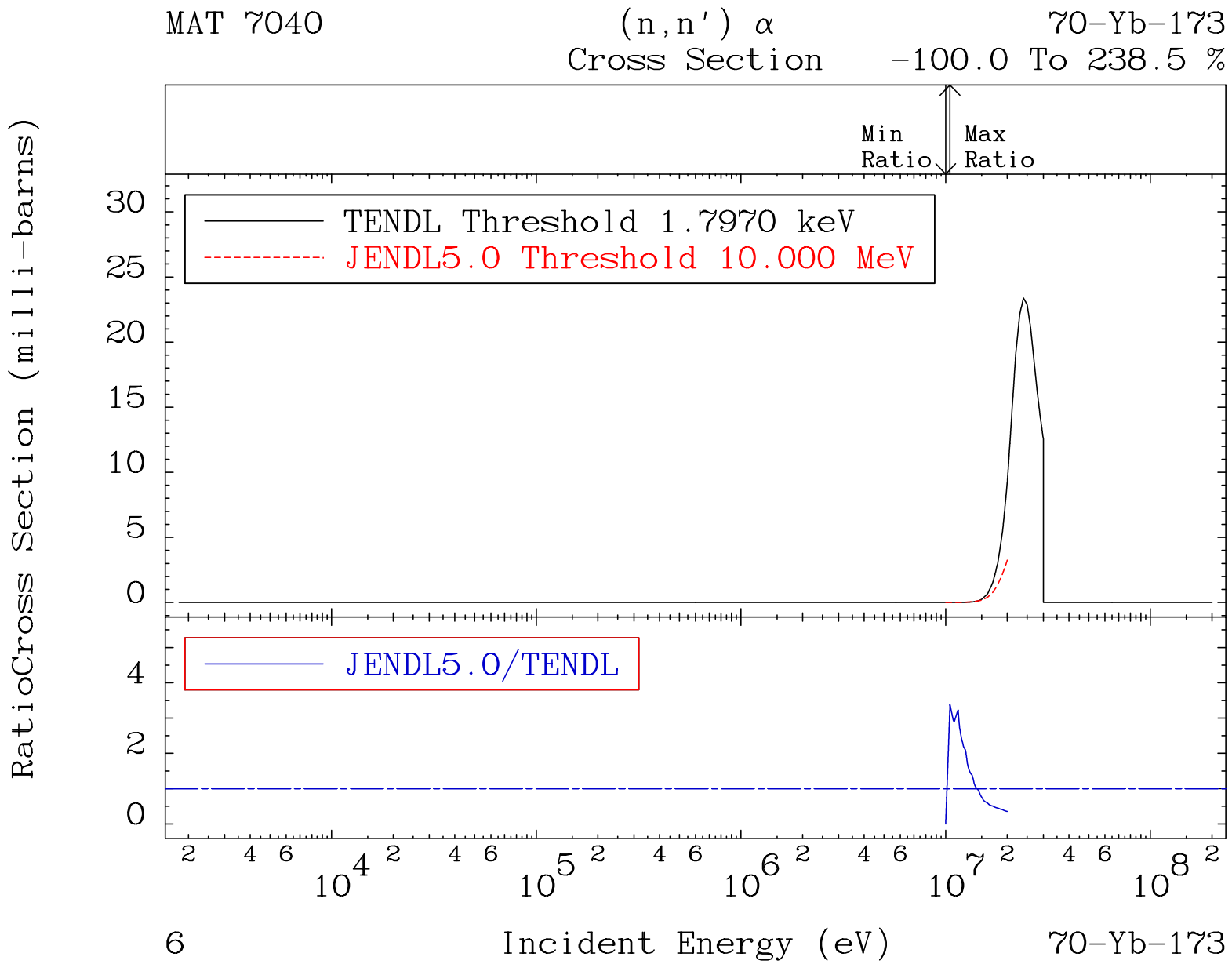

MAT 7040
Total
Cross Section
70-Yb-173
-29.77 To 145.0 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
1
70-Yb-173

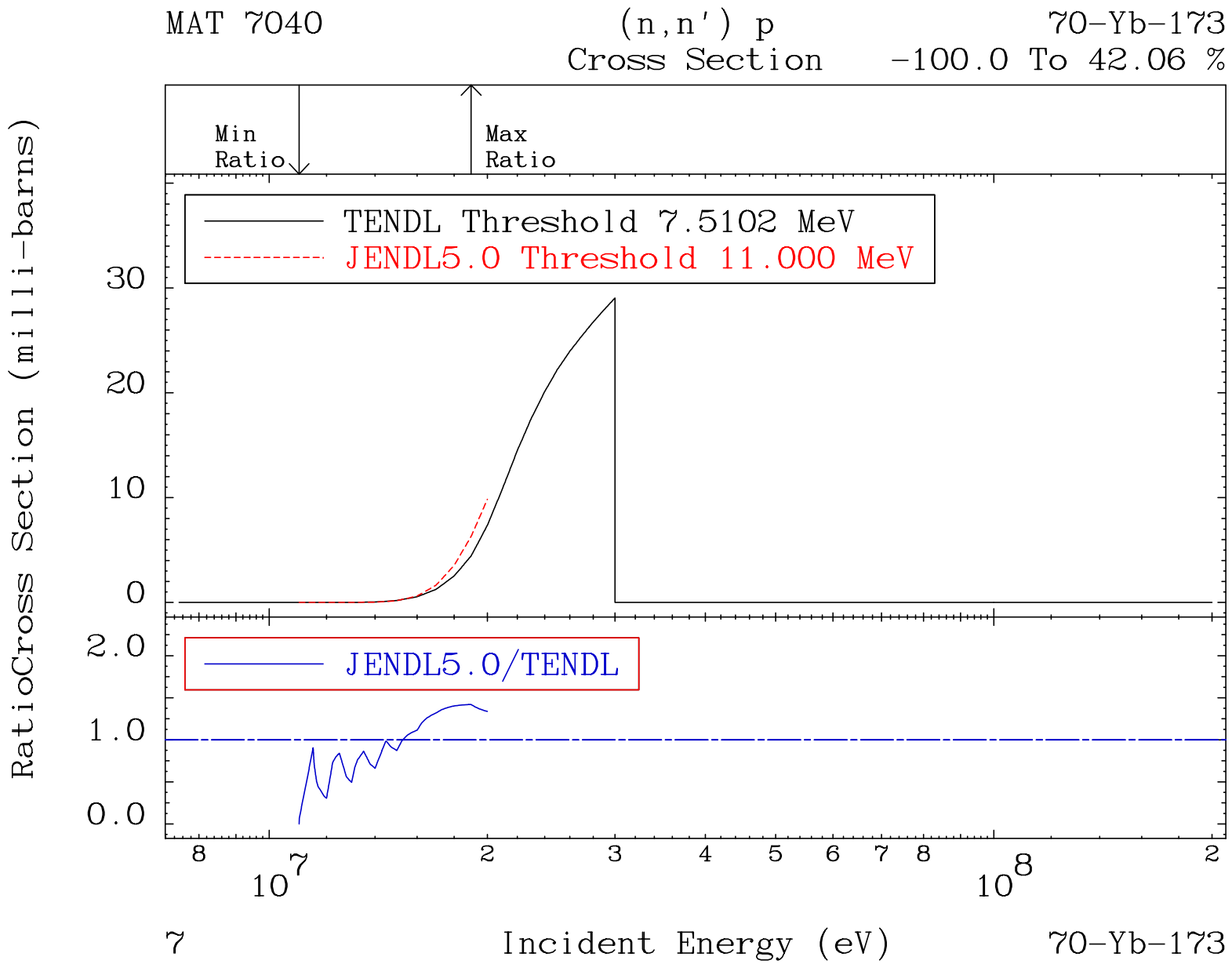

MAT 7040
Elastic
Cross Section
70-Yb-173
-40.64 To 172.0 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
70-Yb-173
2

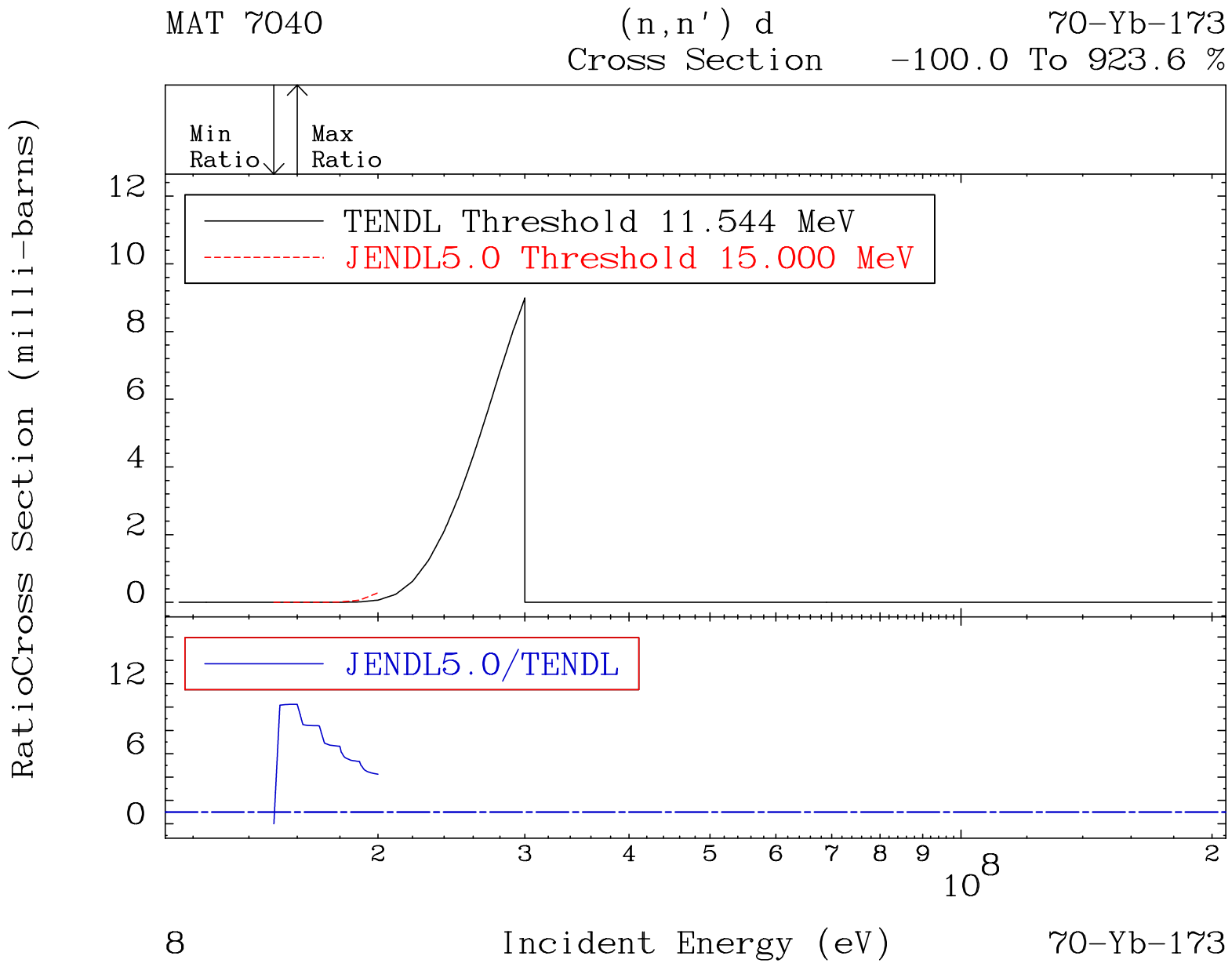

MAT 7040
Inelastic
Cross Section
70-Yb-173
-100.0 To 387.4 %
Max
Ratio
TENDL Threshold 79.106 keV
JENDL5.0 Threshold 79.106 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
70-Yb-173

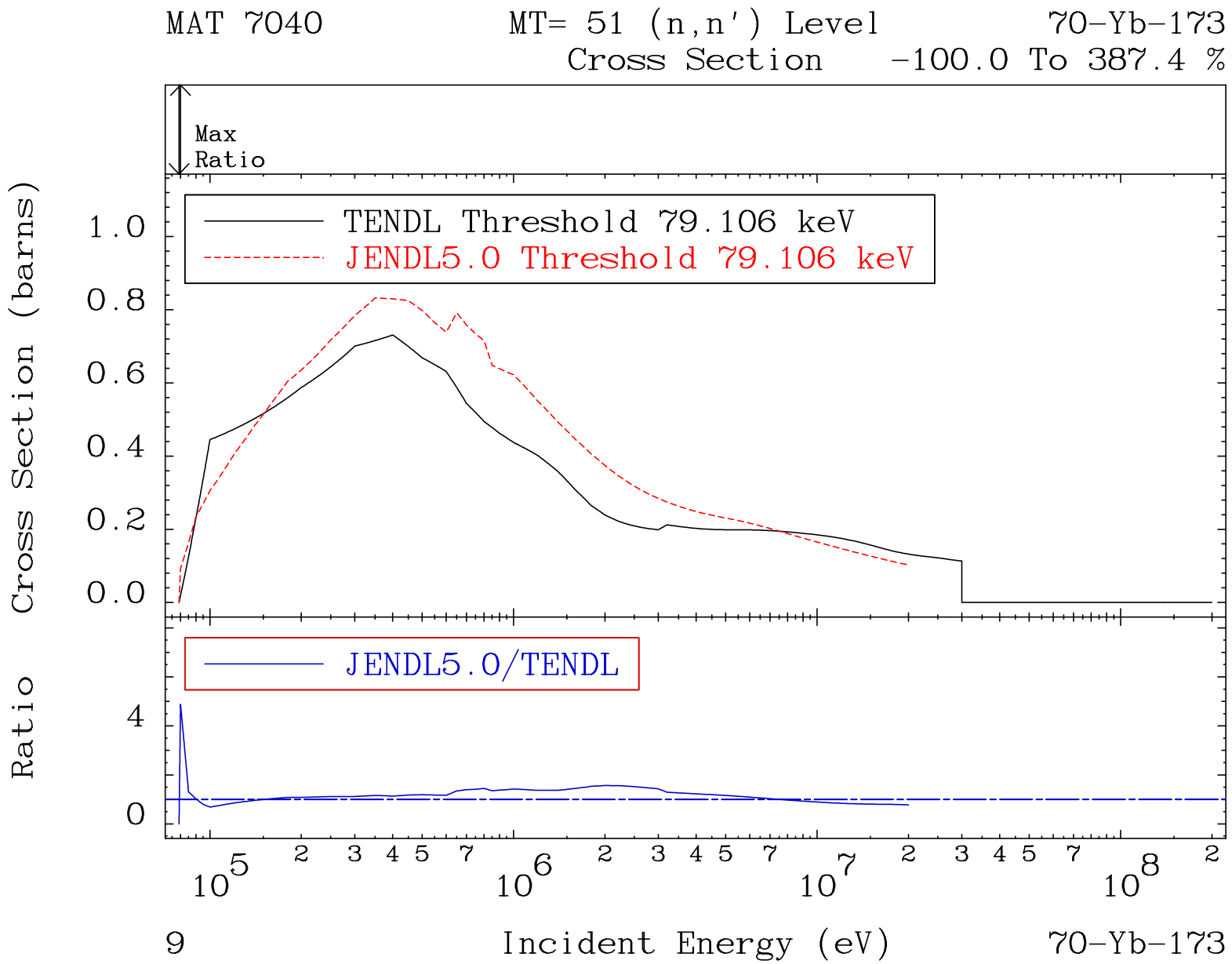

MAT 7040
(n,2n)
Cross Section
70-Yb-173
-100.0 To 90.81 %
Max
Ratio
TENDL Threshold 6.4042 MeV
JENDL5.0 Threshold 6.5000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
4
Incident Energy (eV)
70-Yb-173

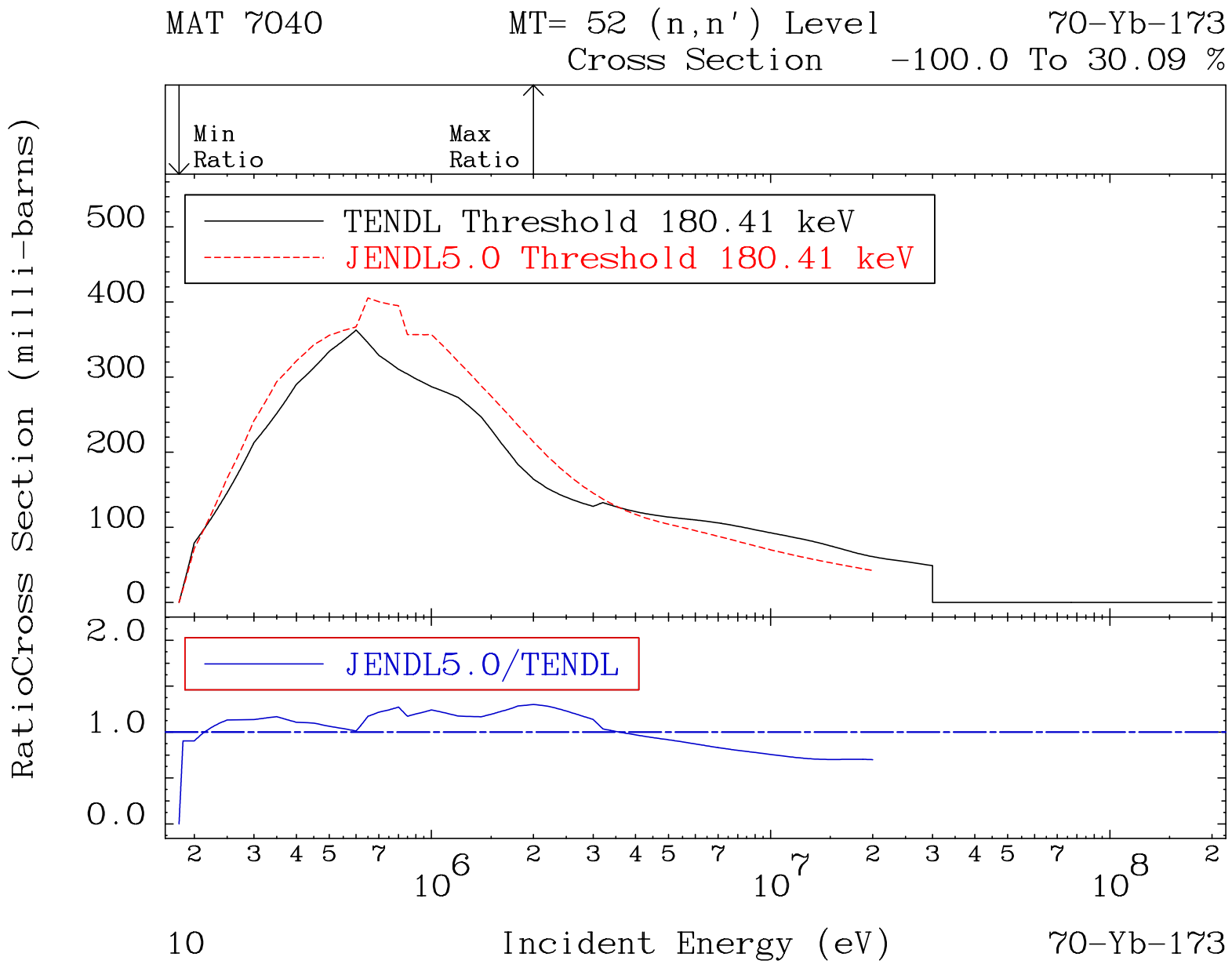

MAT 7040
(n,3n)
70-Yb-173
Cross Section
-80.84 To 3488. %
Min
Ratio
TENDL Threshold 14.471 MeV
JENDL5.0 Threshold 14.471 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
70-Yb-173

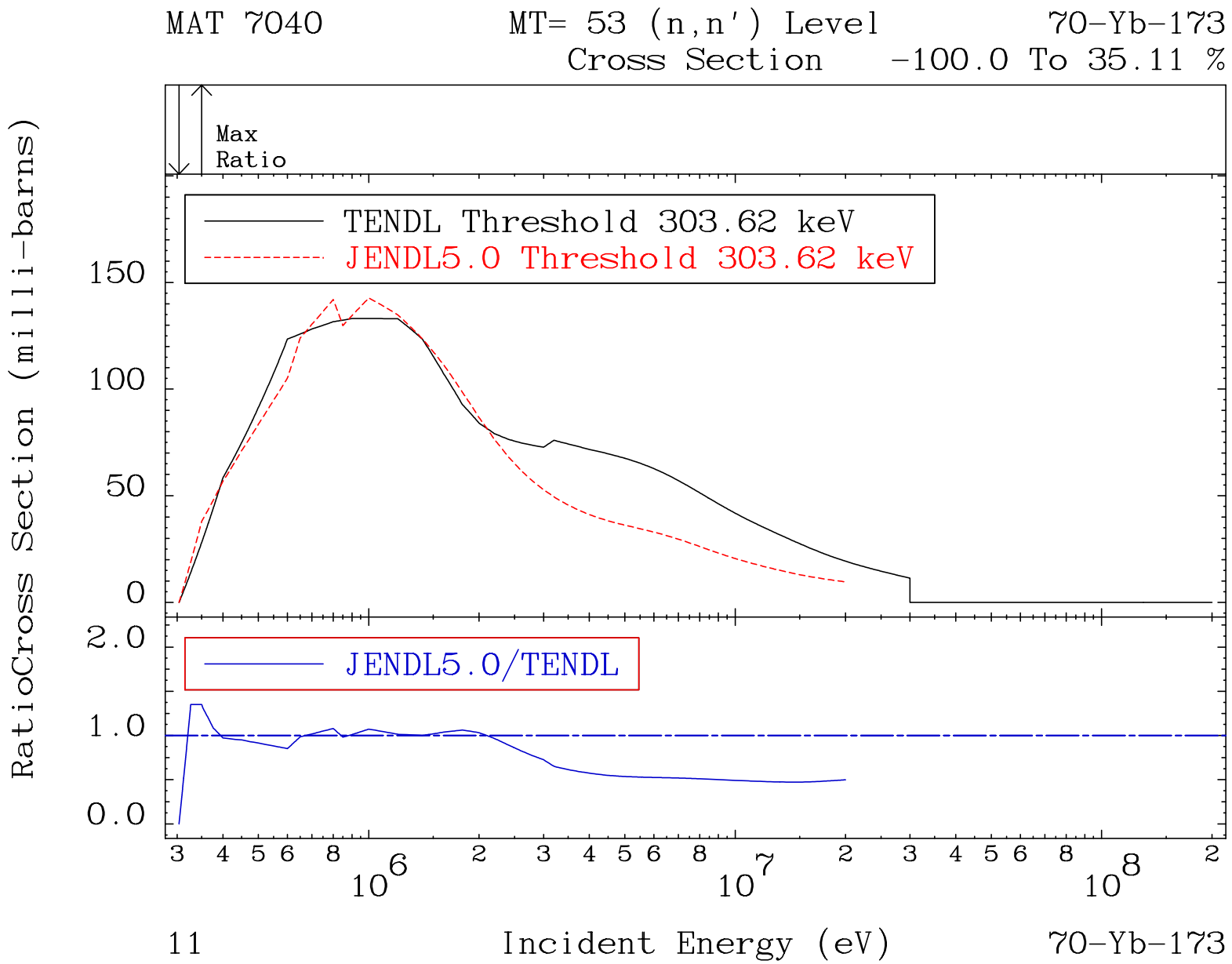

MAT 7040
(n,n') α
Cross Section
70-Yb-173
-100.0 To 238.5 %
Min Ratio
Max Ratio
TENDL Threshold 1.7970 keV
JENDL5.0 Threshold 10.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
70-Yb-173

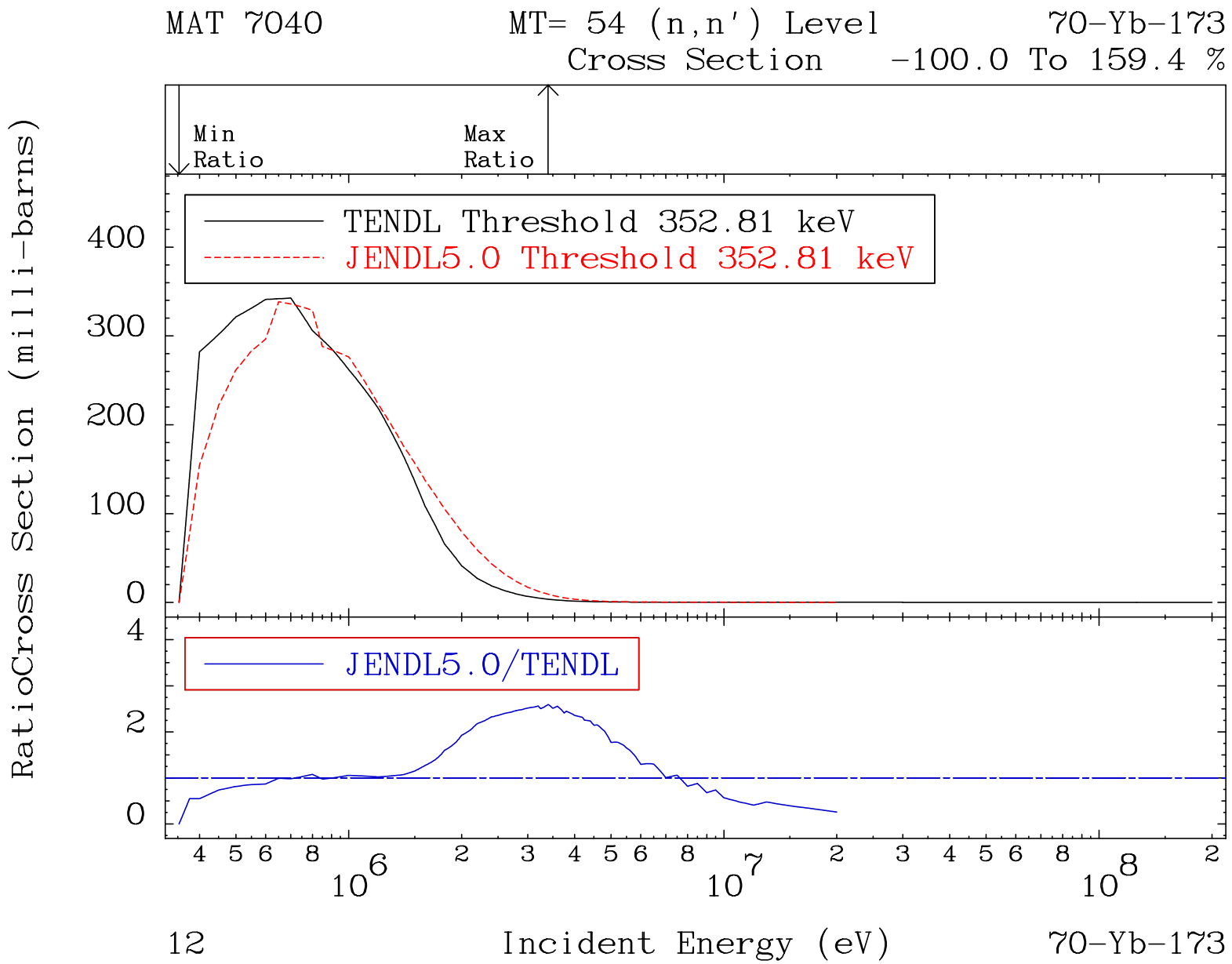

MAT 7040
(n,n') p
Cross Section
70-Yb-173
-100.0 To 42.06 %
Min Ratio
Max Ratio
TENDL Threshold 7.5102 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
70-Yb-173

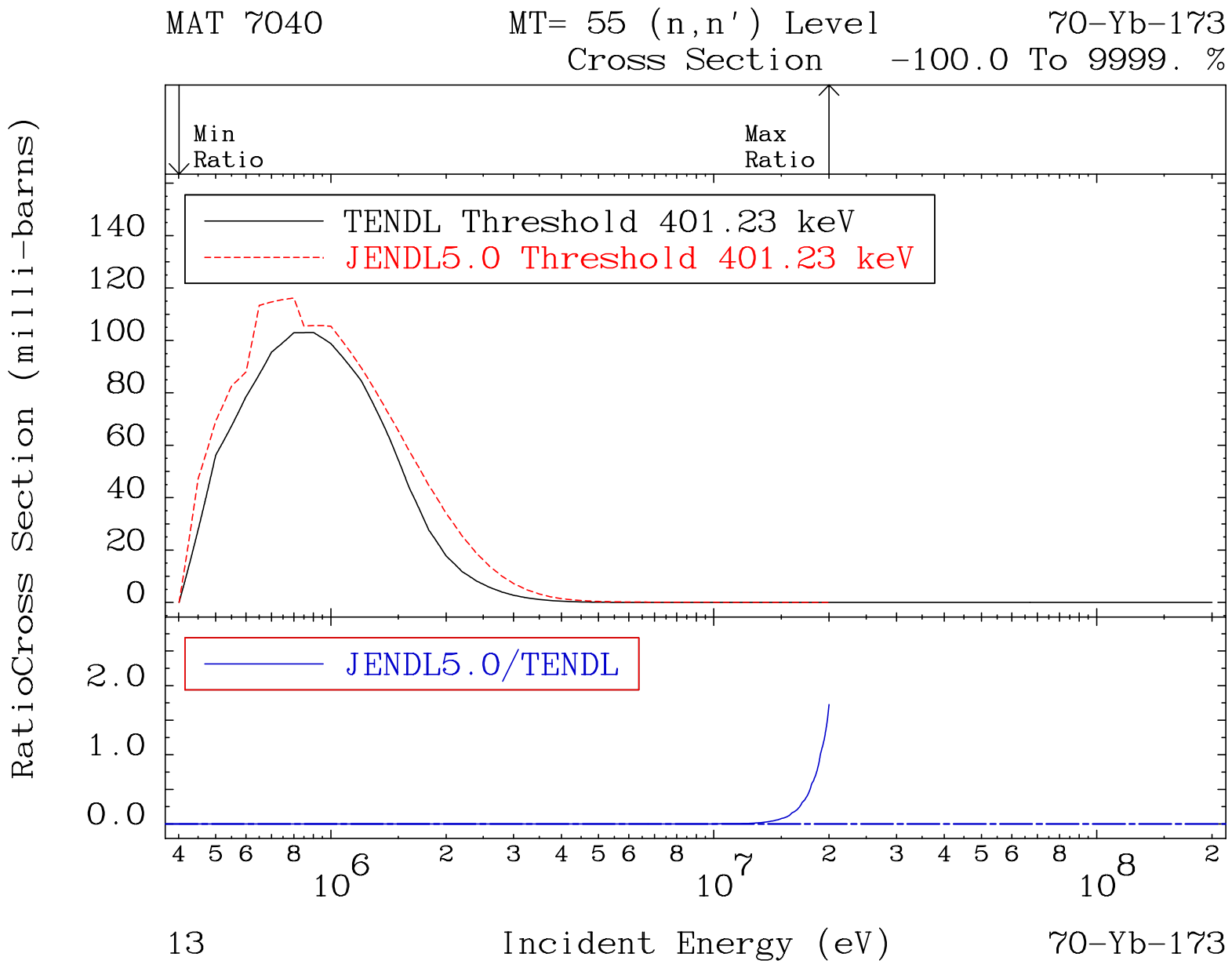

MAT 7040
(n,n') d
Cross Section
70-Yb-173
-100.0 To 923.6 %
Min Ratio
Max Ratio
TENDL Threshold 11.544 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
70-Yb-173

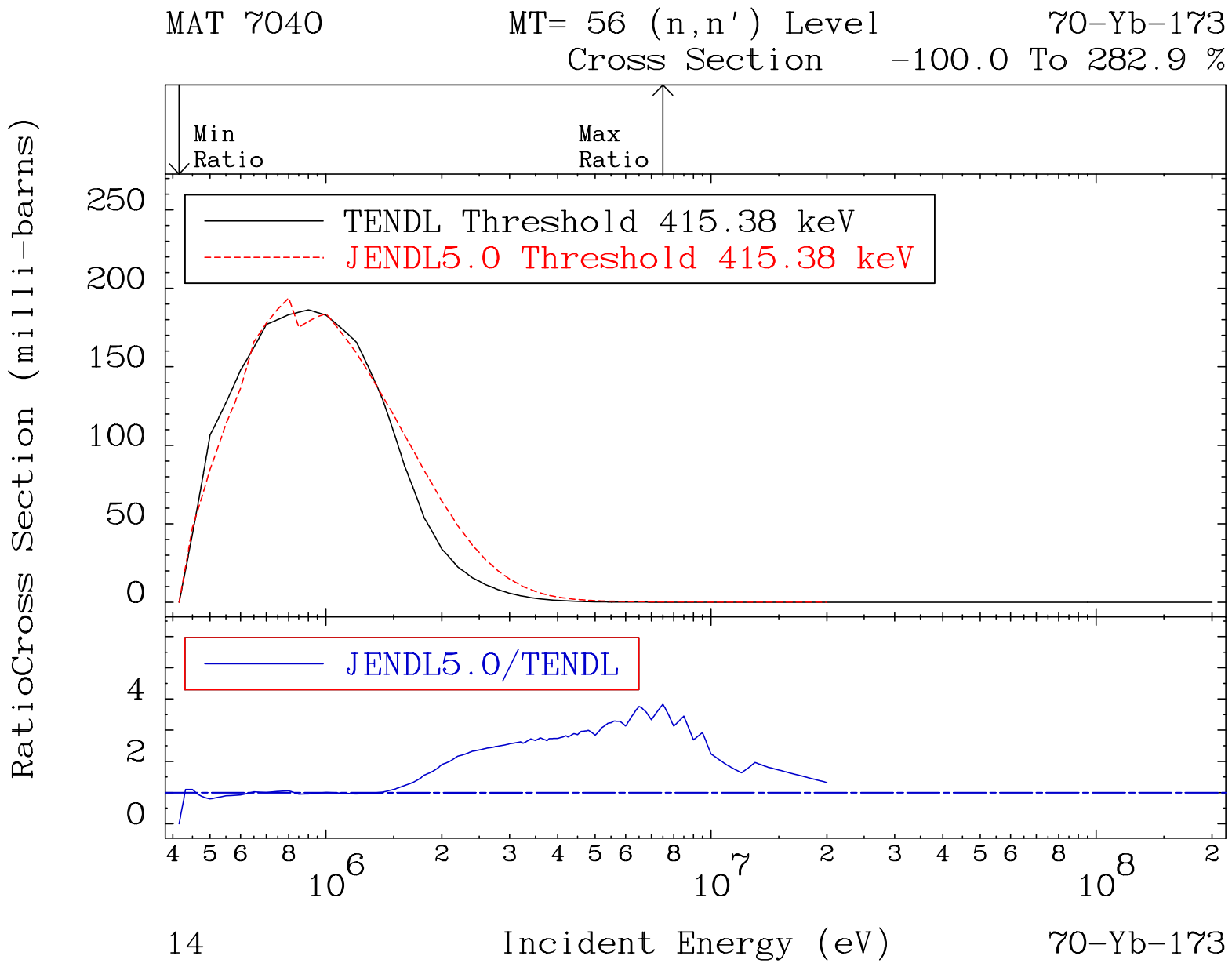

MAT 7040
MT= 51 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 387.4 %
Max
Ratio
TENDL Threshold 79.106 keV
JENDL5.0 Threshold 79.106 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
4
0
10^5
10^6
10^7
10^8
2 3 4 5 7
Incident Energy (eV)
9
70-Yb-173

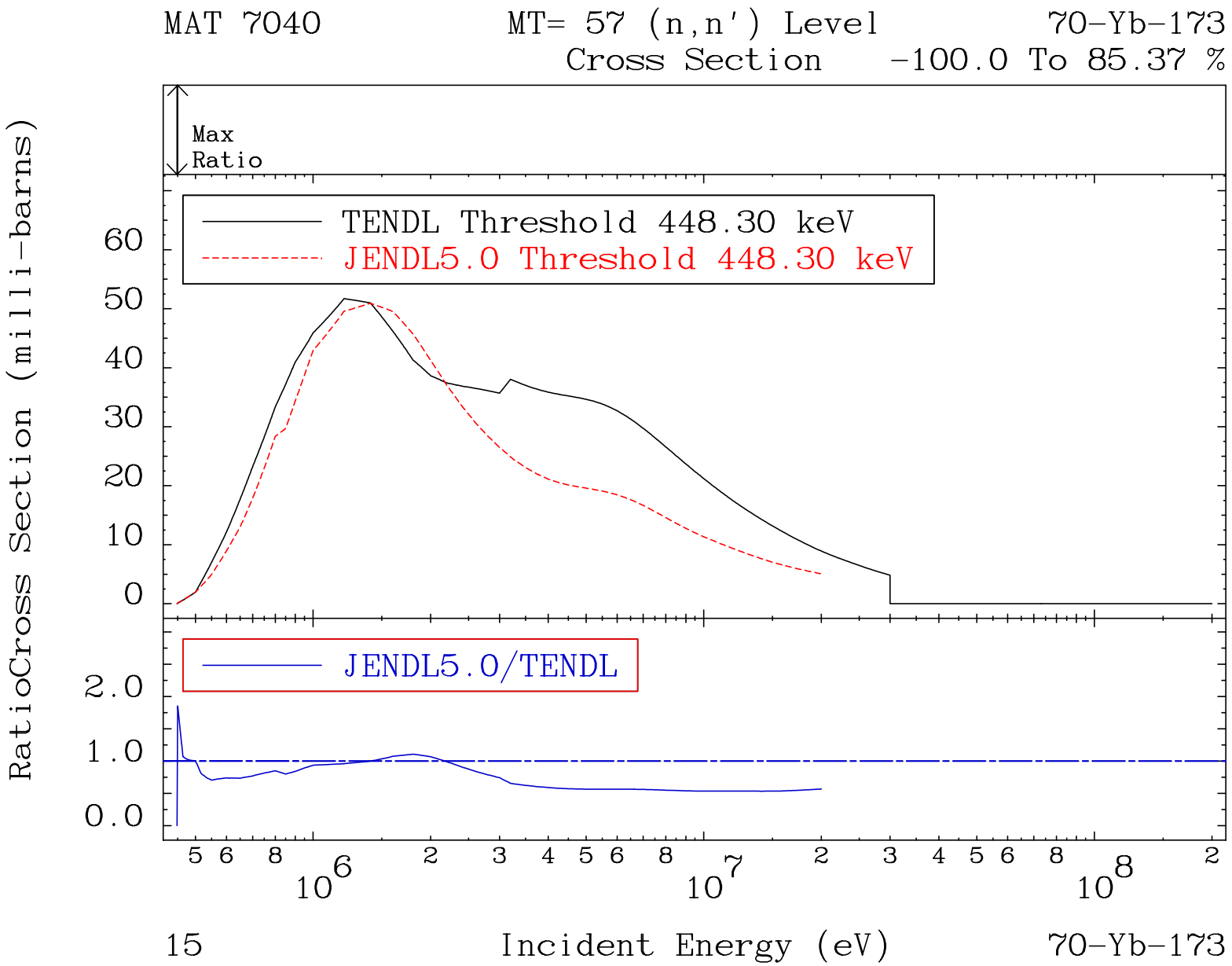

MAT 7040
MT= 52 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 30.09 %
Min Ratio
Max Ratio
TENDL Threshold 180.41 keV
JENDL5.0 Threshold 180.41 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
2.0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
10
Incident Energy (eV)
70-Yb-173

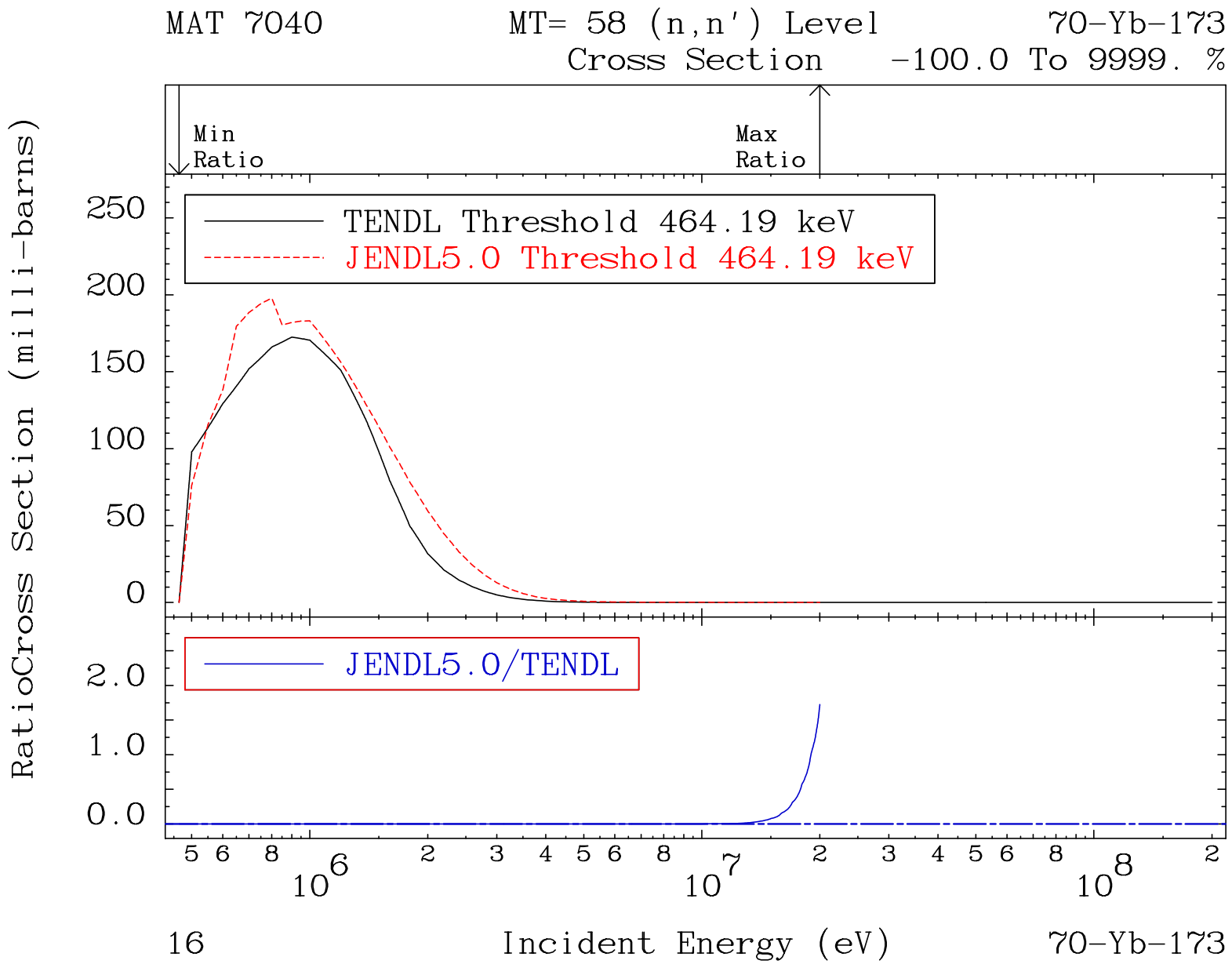

MAT 7040
MT= 53 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 35.11 %
Max
Ratio
TENDL Threshold 303.62 keV
JENDL5.0 Threshold 303.62 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
2.0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
70-Yb-173

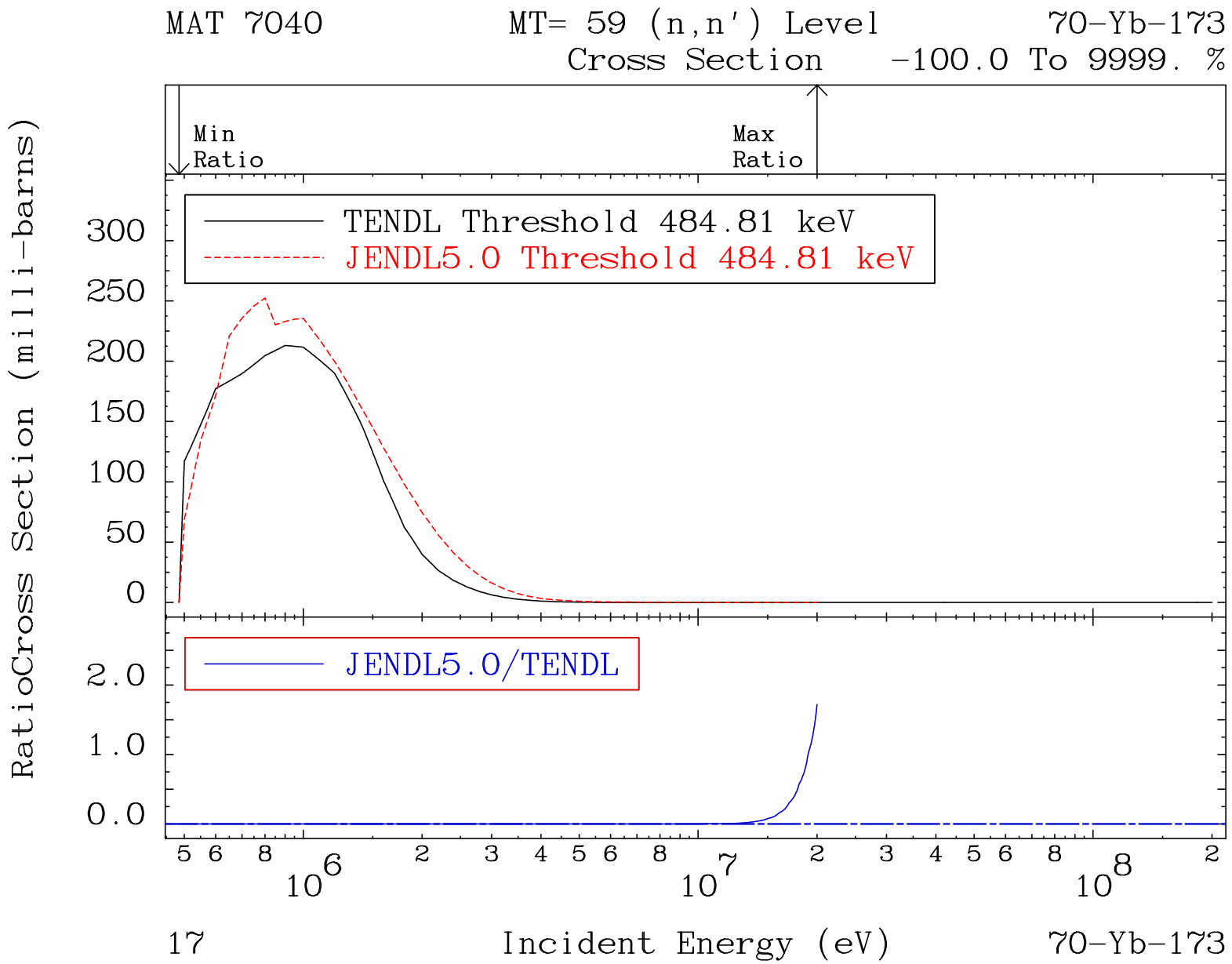

MAT 7040
MT= 54 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 159.4 %
Min Ratio
Max Ratio
TENDL Threshold 352.81 keV
JENDL5.0 Threshold 352.81 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
4
2
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
70-Yb-173

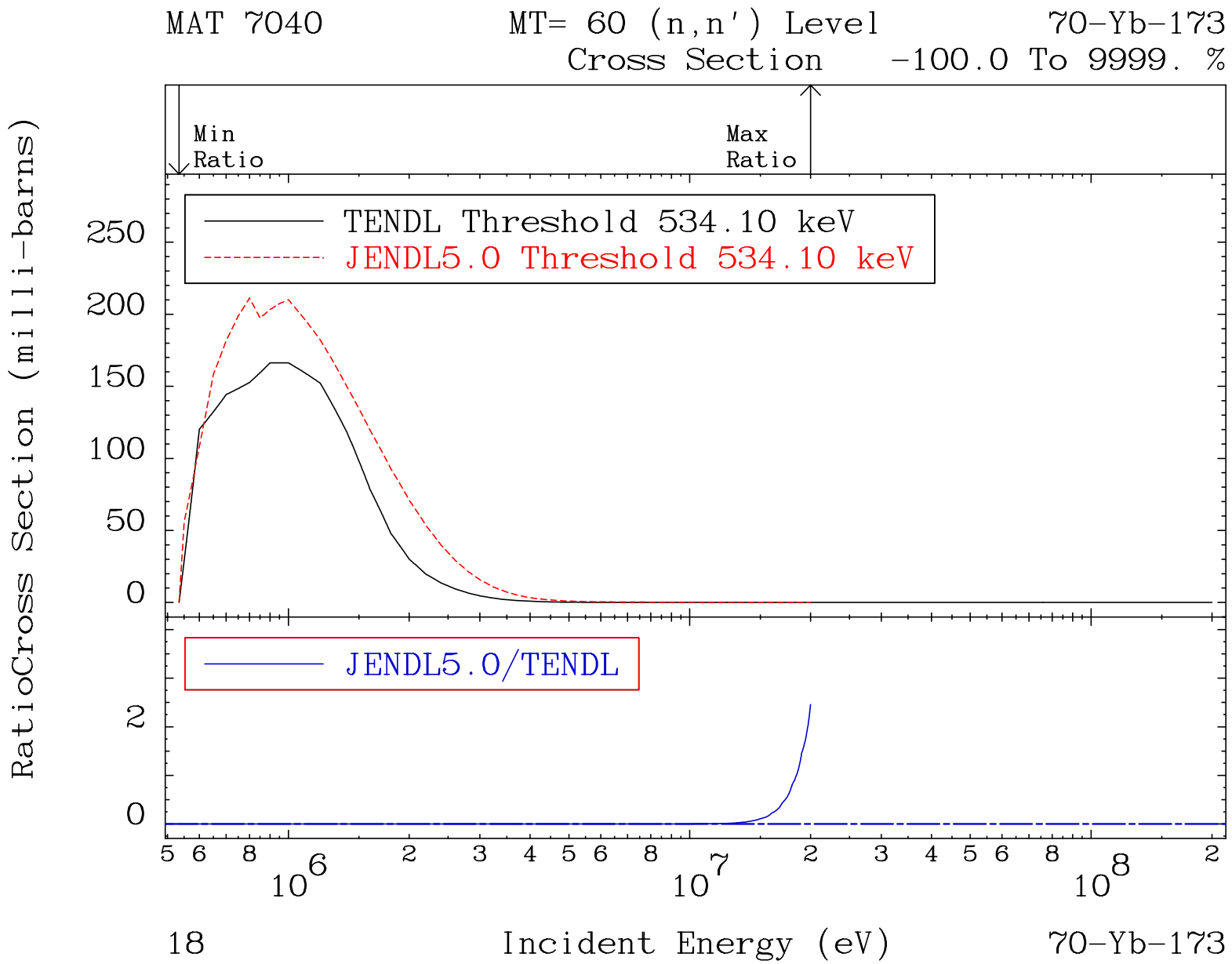

MAT 7040
MT= 55 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 401.23 keV
JENDL5.0 Threshold 401.23 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
13
70-Yb-173

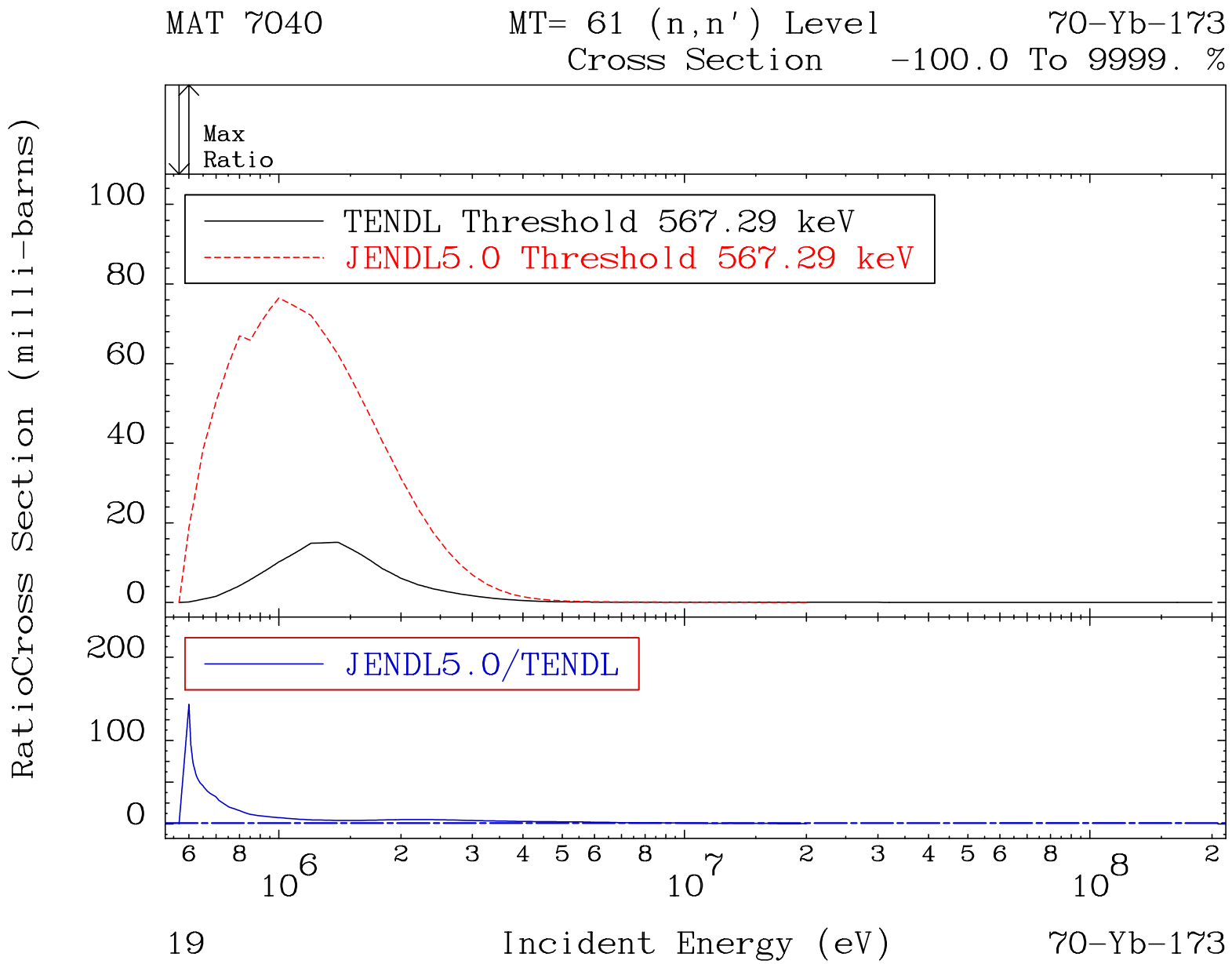

MAT 7040
MT= 56 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 282.9 %
Min Ratio
Max Ratio
TENDL Threshold 415.38 keV
JENDL5.0 Threshold 415.38 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
70-Yb-173

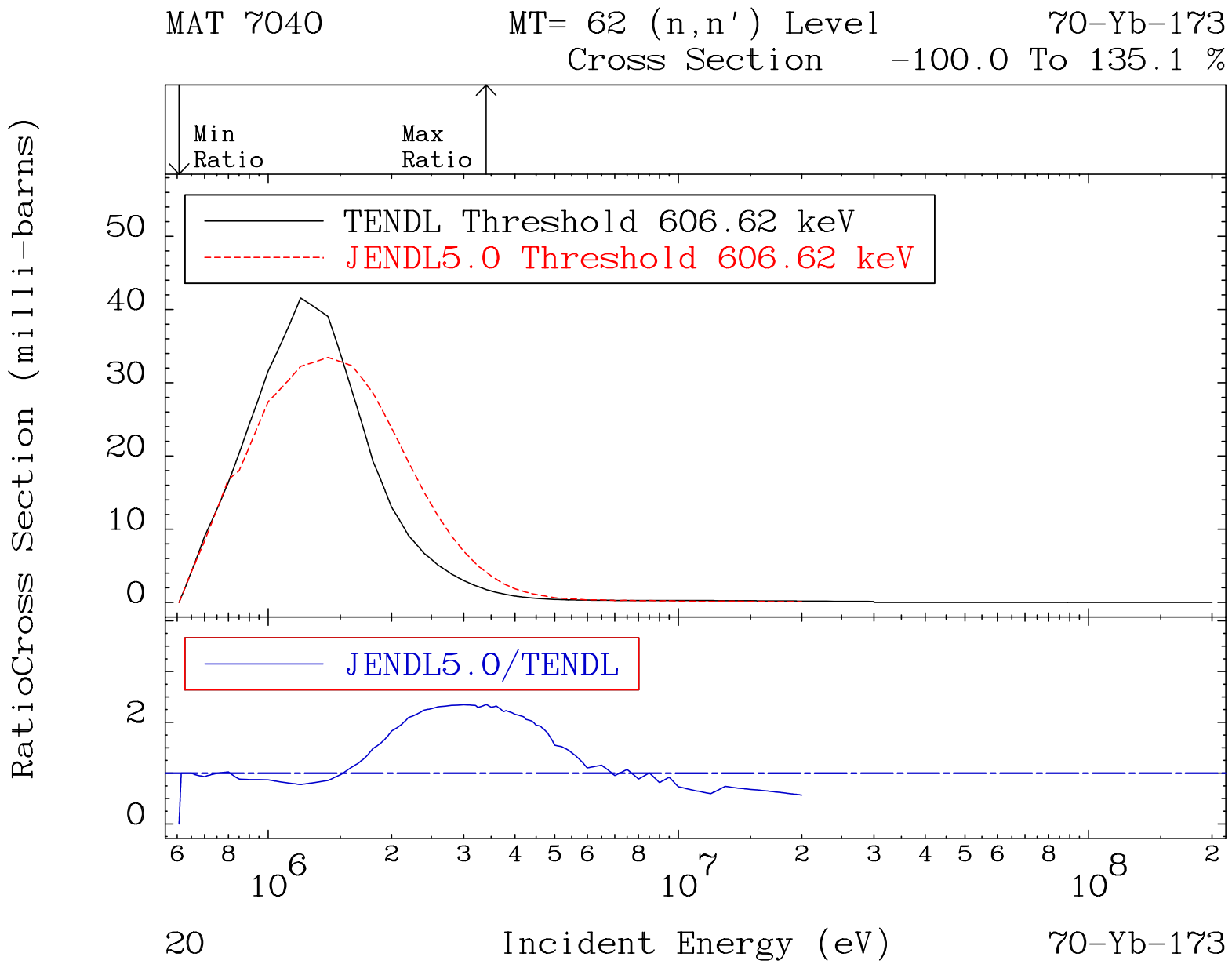

MAT 7040
MT= 57 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 85.37 %
Max
Ratio
TENDL Threshold 448.30 keV
JENDL5.0 Threshold 448.30 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
15
Incident Energy (eV)
70-Yb-173

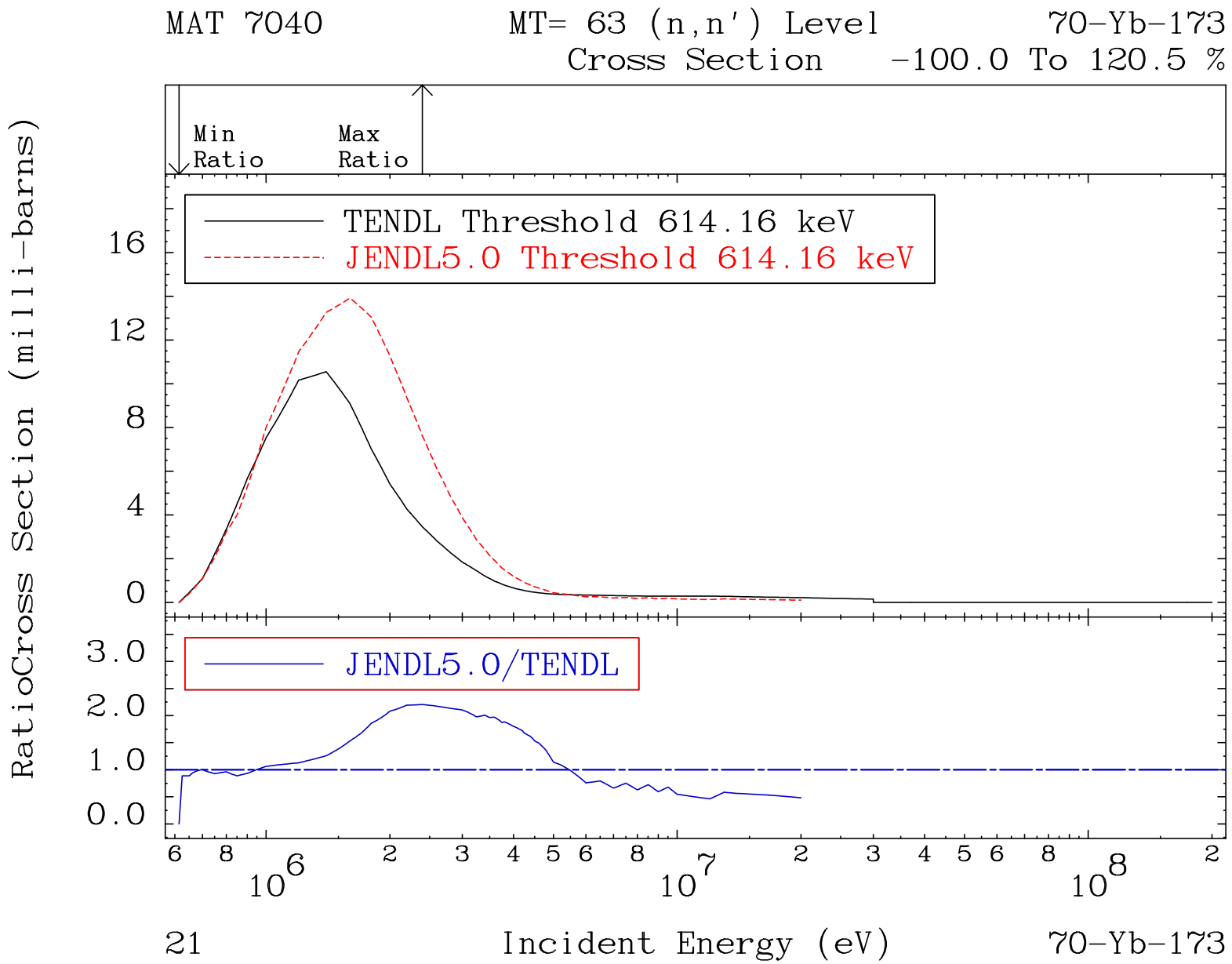

MAT 7040
MT= 58 (n,n') Level
70-Yb-173
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 464.19 keV
JENDL5.0 Threshold 464.19 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
70-Yb-173

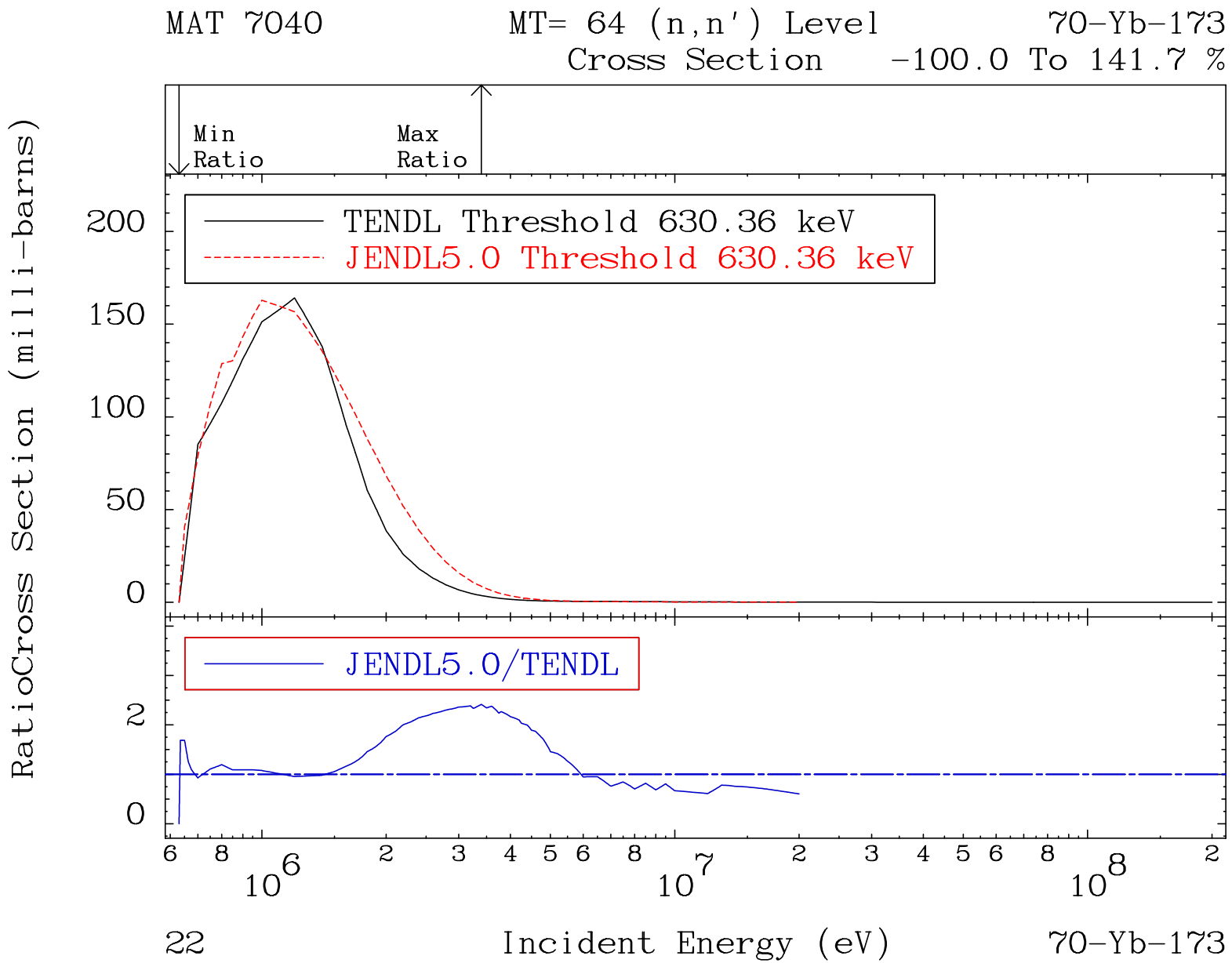

MAT 7040
MT= 59 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 484.81 keV
JENDL5.0 Threshold 484.81 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
70-Yb-173

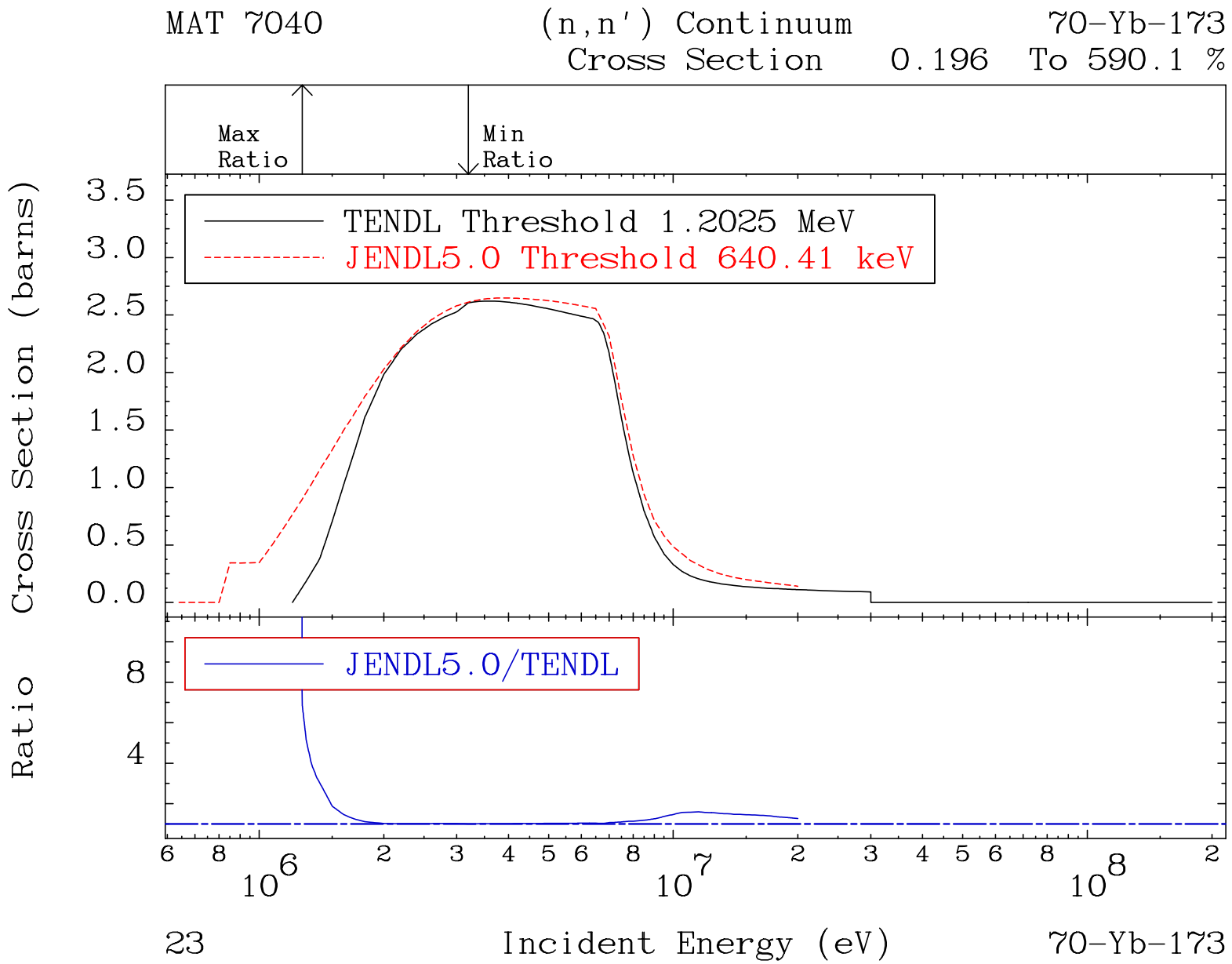

MAT 7040
MT= 60 (n,n') Level
70-Yb-173
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 534.10 keV
JENDL5.0 Threshold 534.10 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2
0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
70-Yb-173

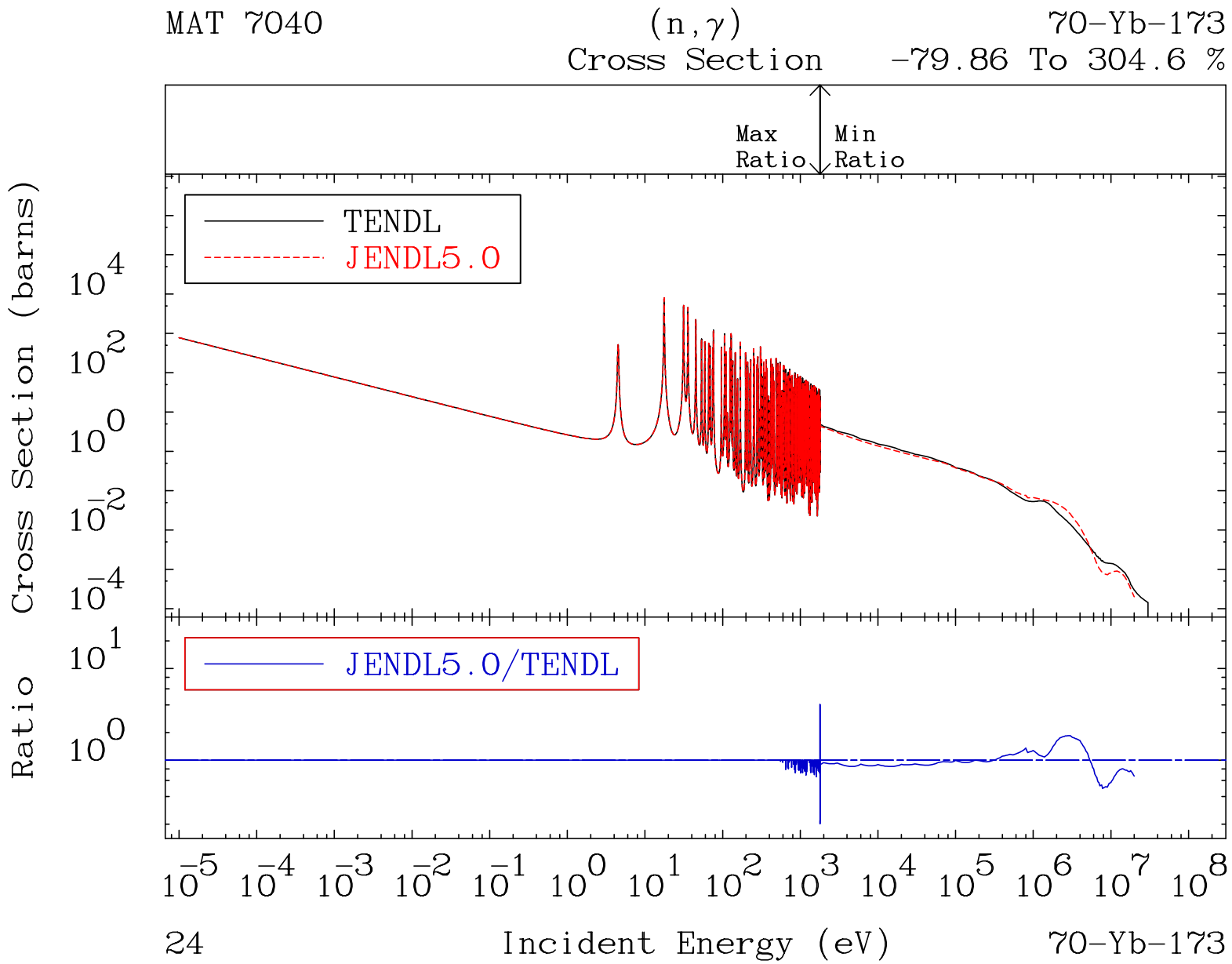

MAT 7040
MT= 61 (n,n') Level
70-Yb-173
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 567.29 keV
JENDL5.0 Threshold 567.29 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
100
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
70-Yb-173

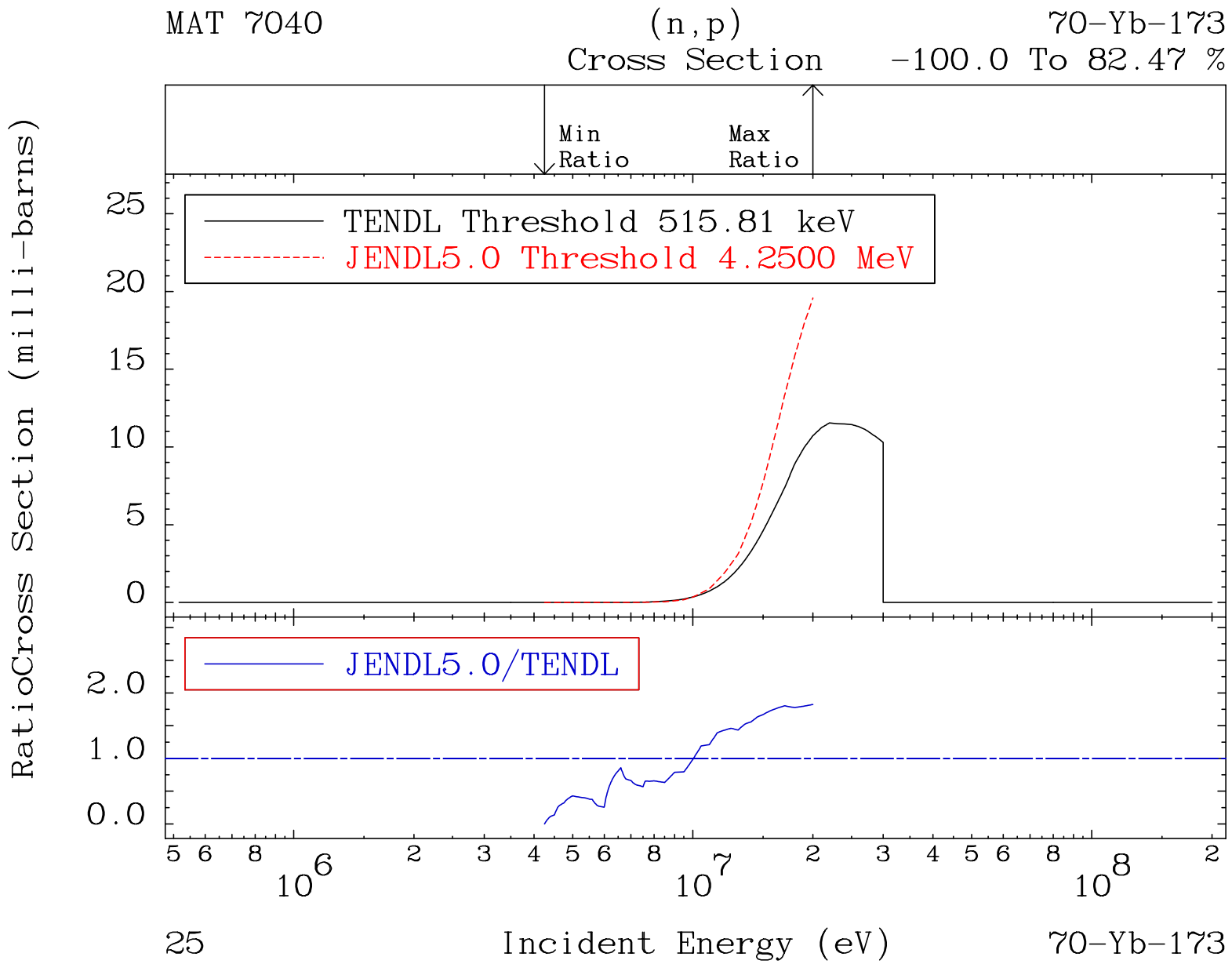

MAT 7040
MT= 62 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 135.1 %
Min Ratio
Max Ratio
TENDL Threshold 606.62 keV
JENDL5.0 Threshold 606.62 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
70-Yb-173

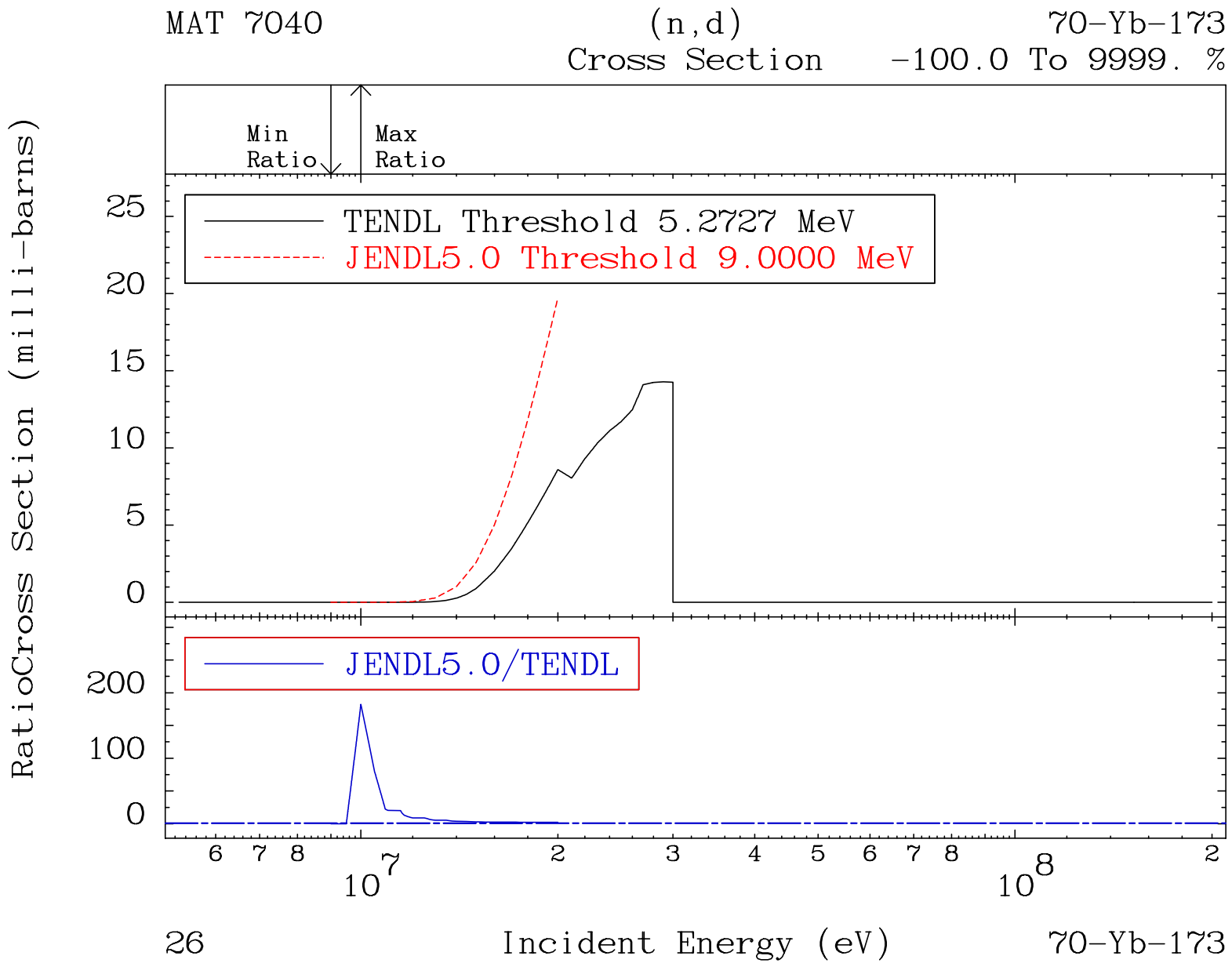

MAT 7040
MT= 63 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 120.5 %
Min Ratio
Max Ratio
TENDL Threshold 614.16 keV
JENDL5.0 Threshold 614.16 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
3.0
2.0
1.0
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
70-Yb-173

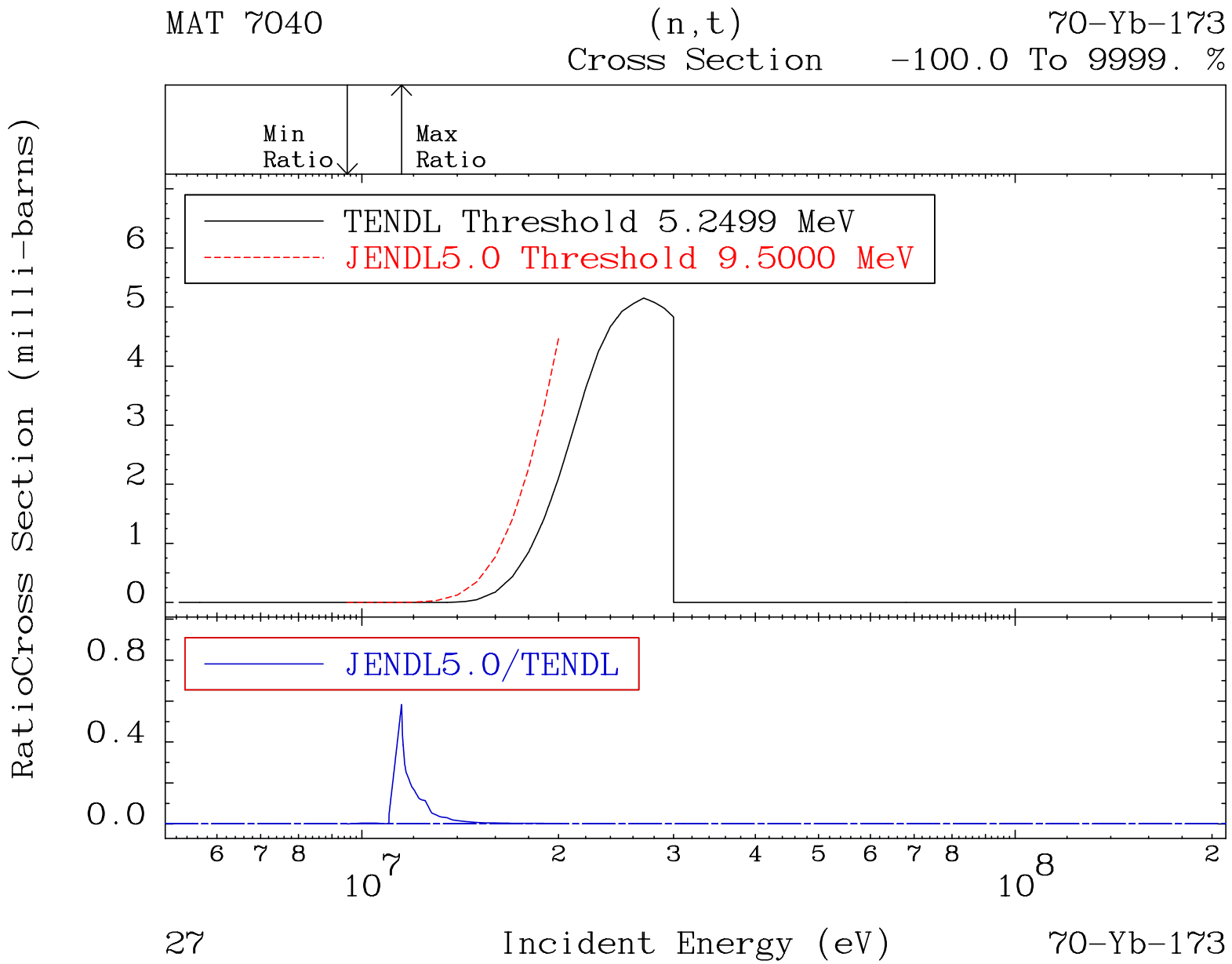

MAT 7040
MT= 64 (n,n') Level
70-Yb-173
Cross Section
-100.0 To 141.7 %
Min Ratio
Max Ratio
TENDL Threshold 630.36 keV
JENDL5.0 Threshold 630.36 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
70-Yb-173

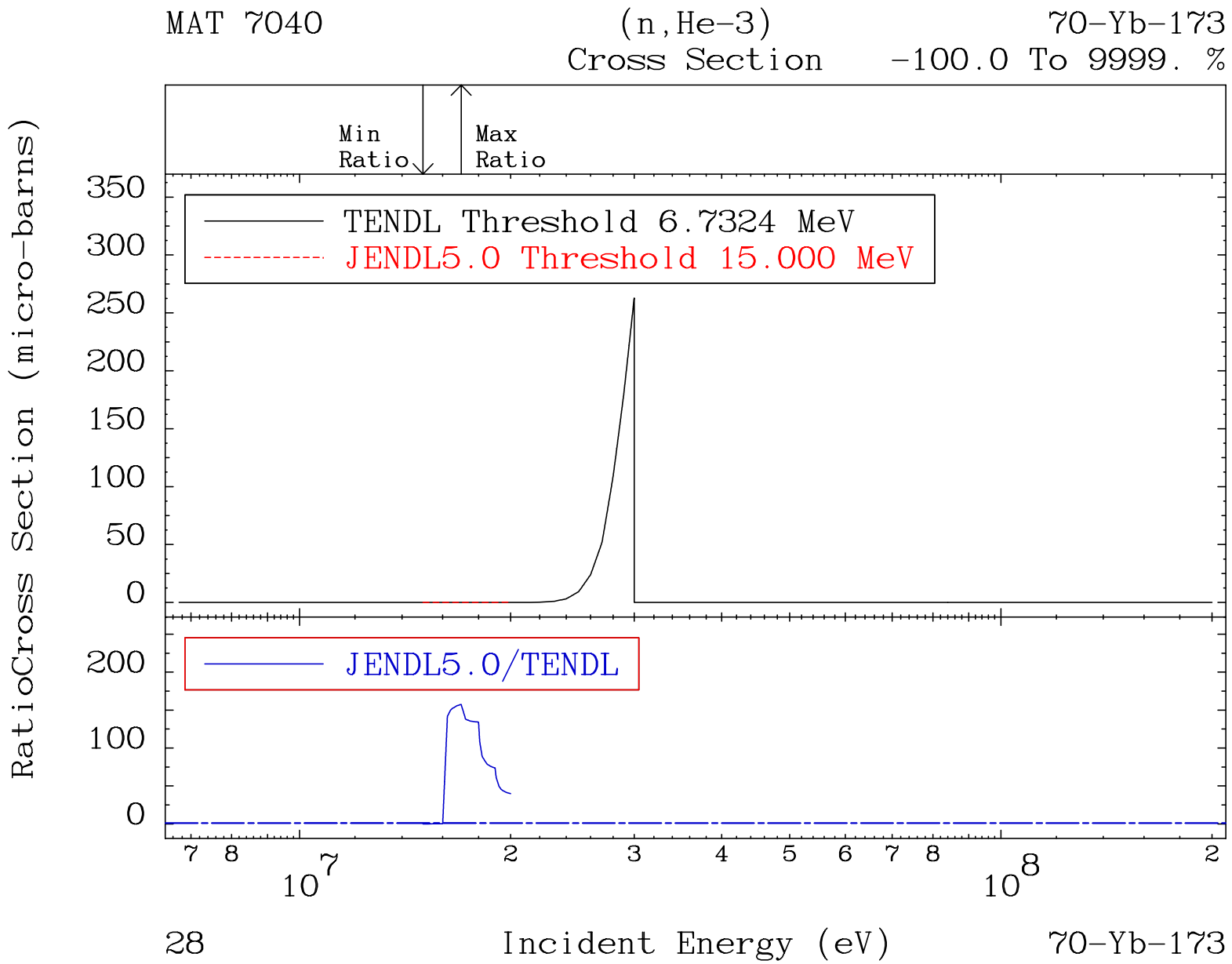

MAT 7040
(n,n') Continuum
Cross Section
70-Yb-173
0.196 To 590.1 %
Max Ratio
Min Ratio
TENDL Threshold 1.2025 MeV
JENDL5.0 Threshold 640.41 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
70-Yb-173

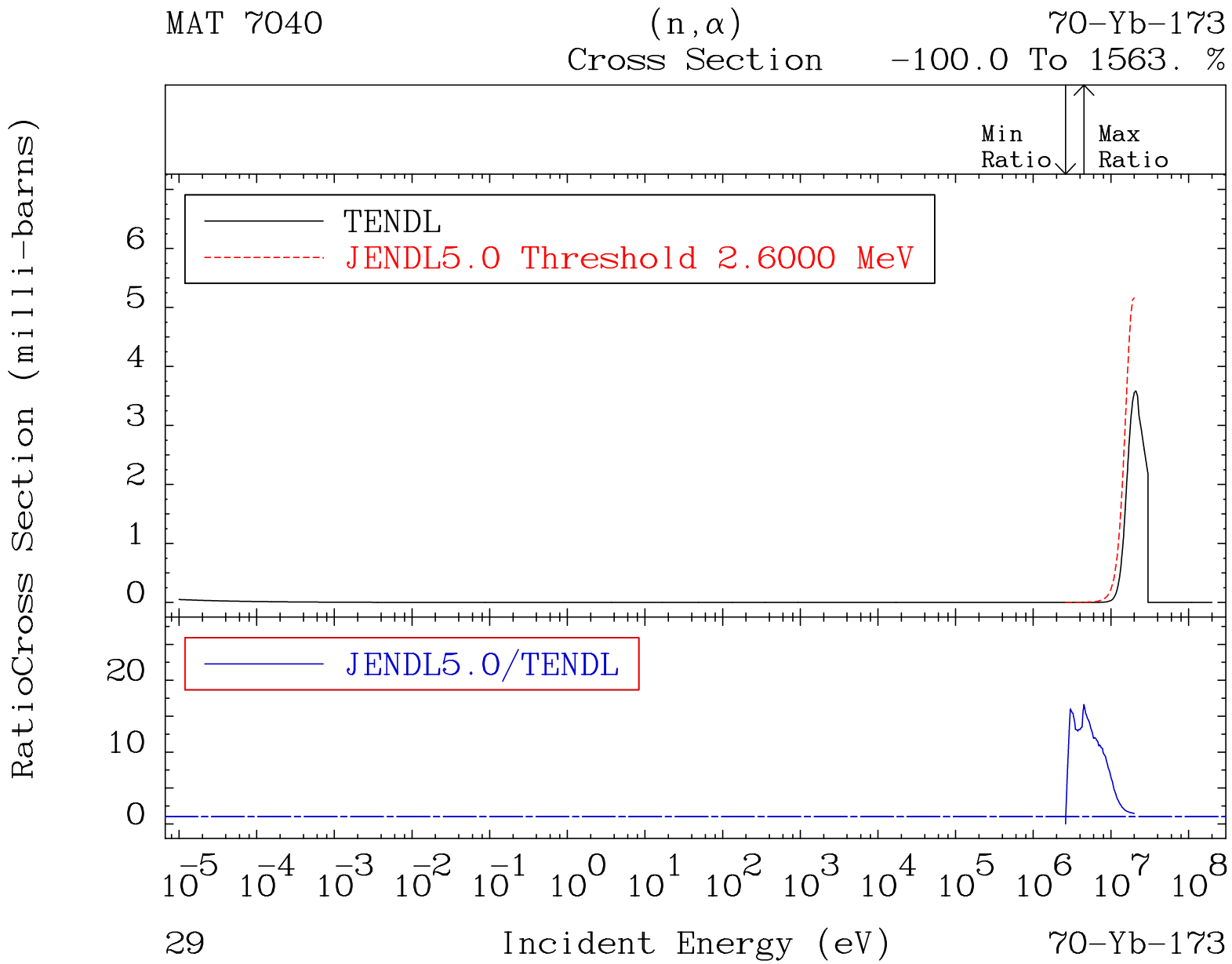

MAT 7040
(n,γ)
Cross Section
70-Yb-173
-79.86 To 304.6 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
24
70-Yb-173

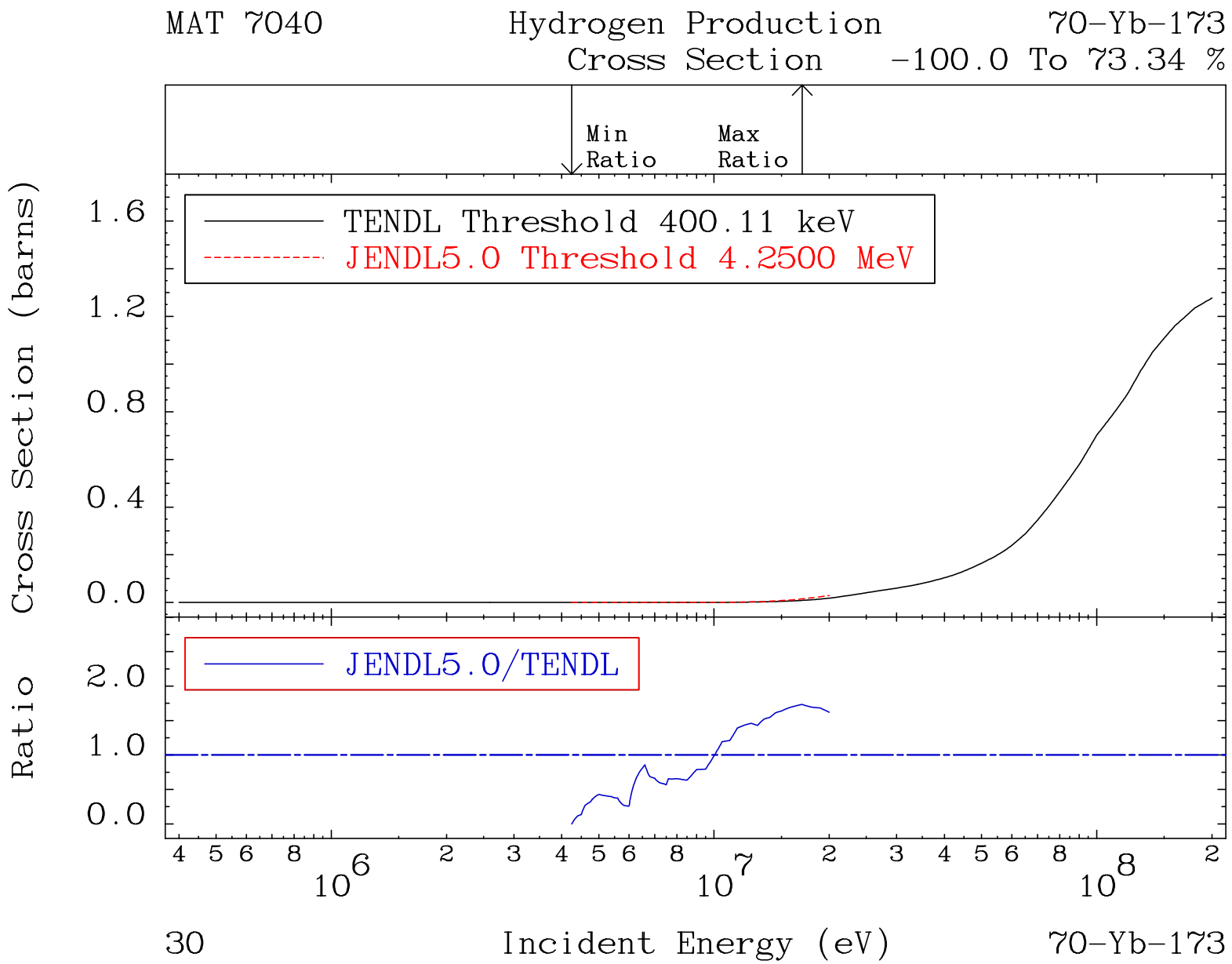

MAT 7040
(n,p)
Cross Section
70-Yb-173
-100.0 To 82.47 %
Min Ratio
Max Ratio
TENDL Threshold 515.81 keV
JENDL5.0 Threshold 4.2500 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
70-Yb-173

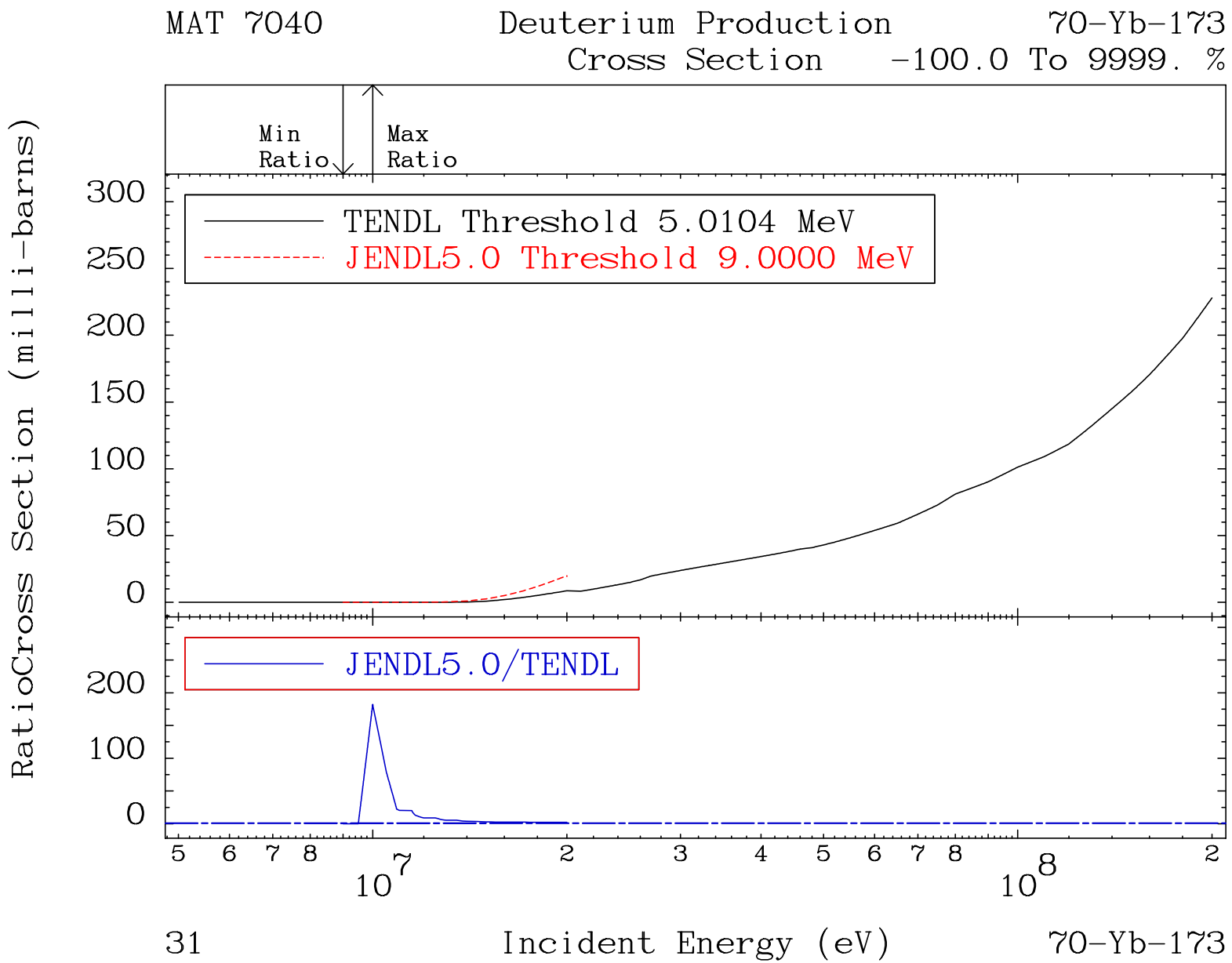

MAT 7040
(n,d)
70-Yb-173
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2727 MeV
JENDL5.0 Threshold 9.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
200
100
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
70-Yb-173

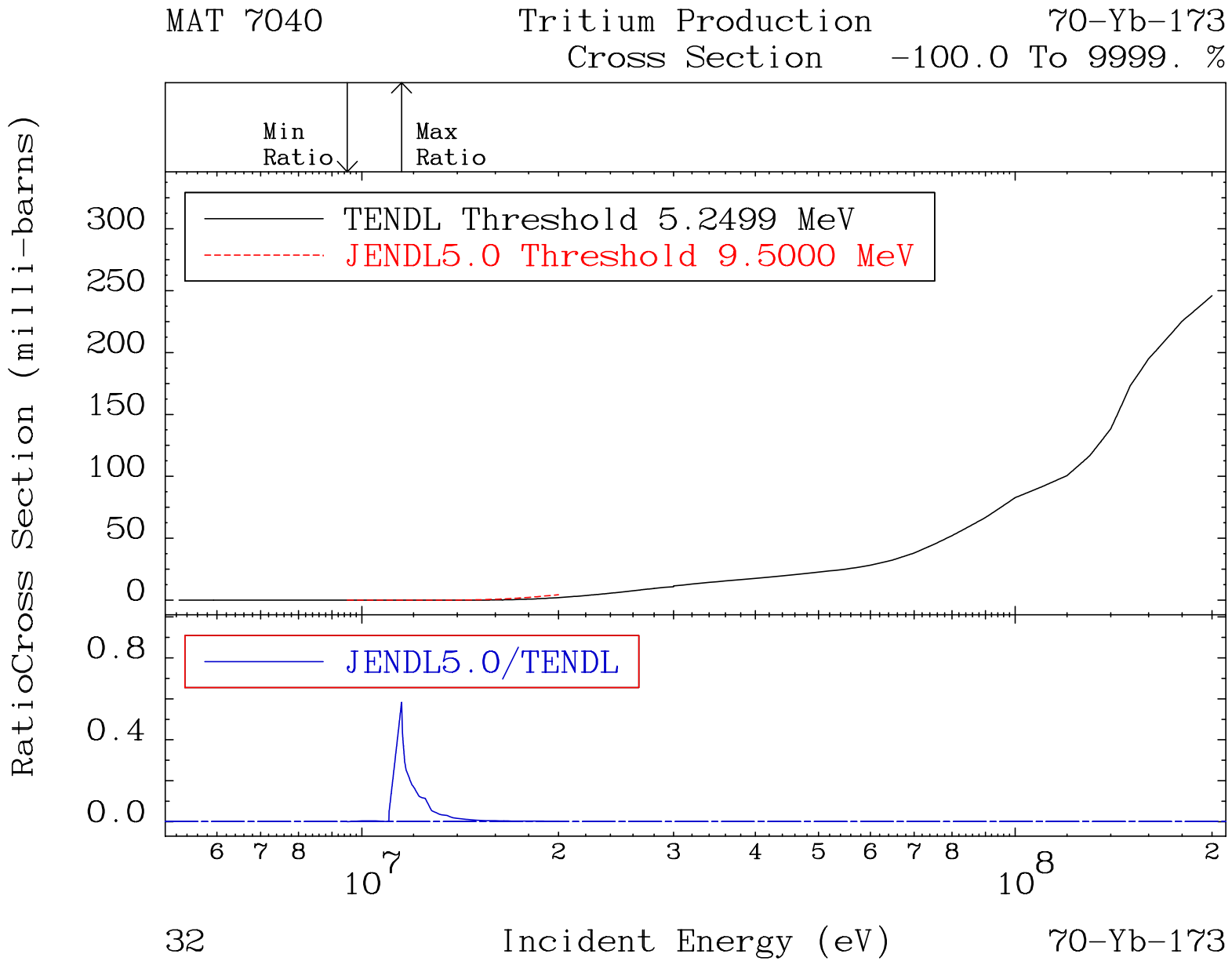

MAT 7040
(n,t)
Cross Section
70-Yb-173
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2499 MeV
JENDL5.0 Threshold 9.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
70-Yb-173

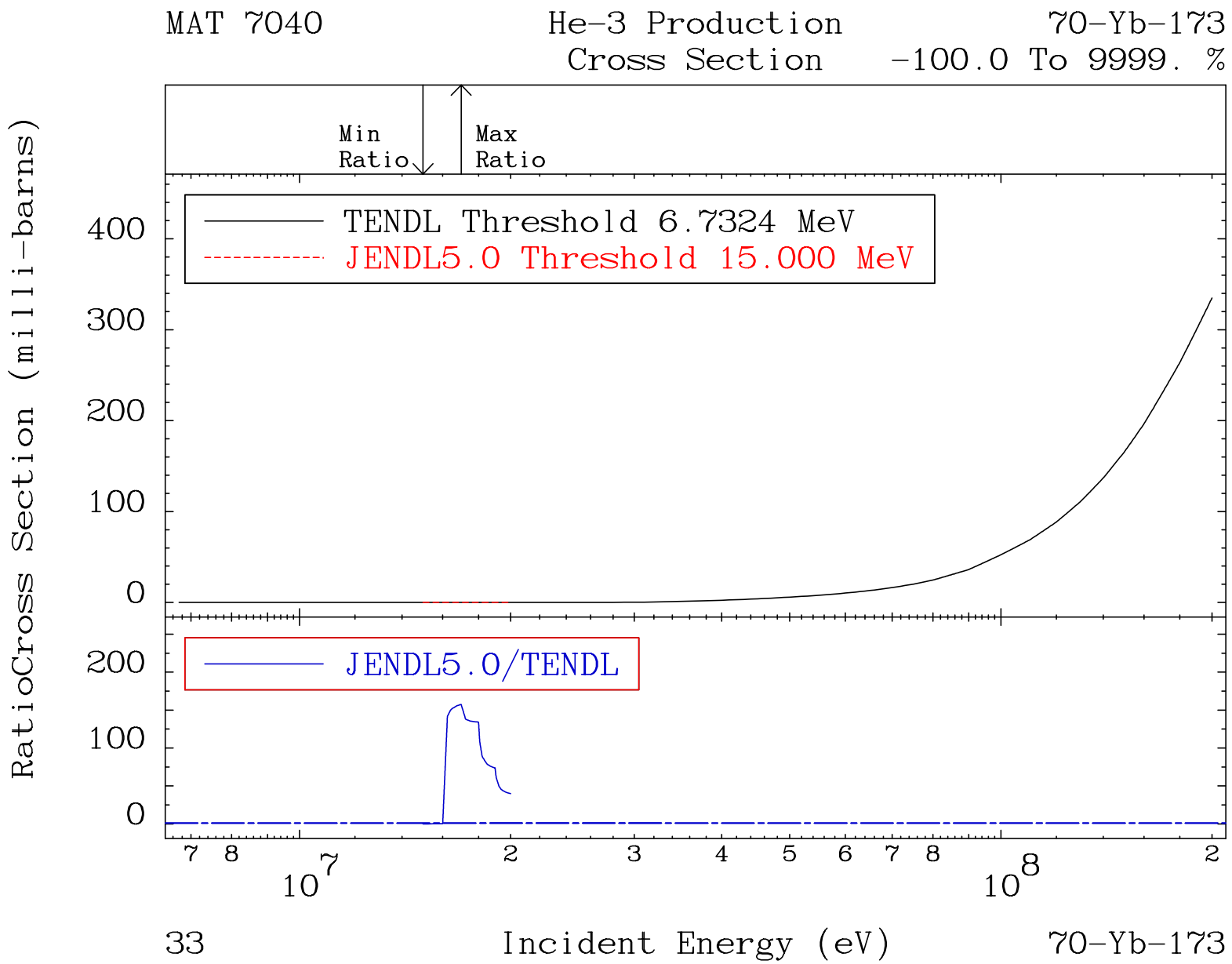

MAT 7040
(n,He-3)
70-Yb-173
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.7324 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
350
300
250
200
150
100
50
0
200
100
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
70-Yb-173

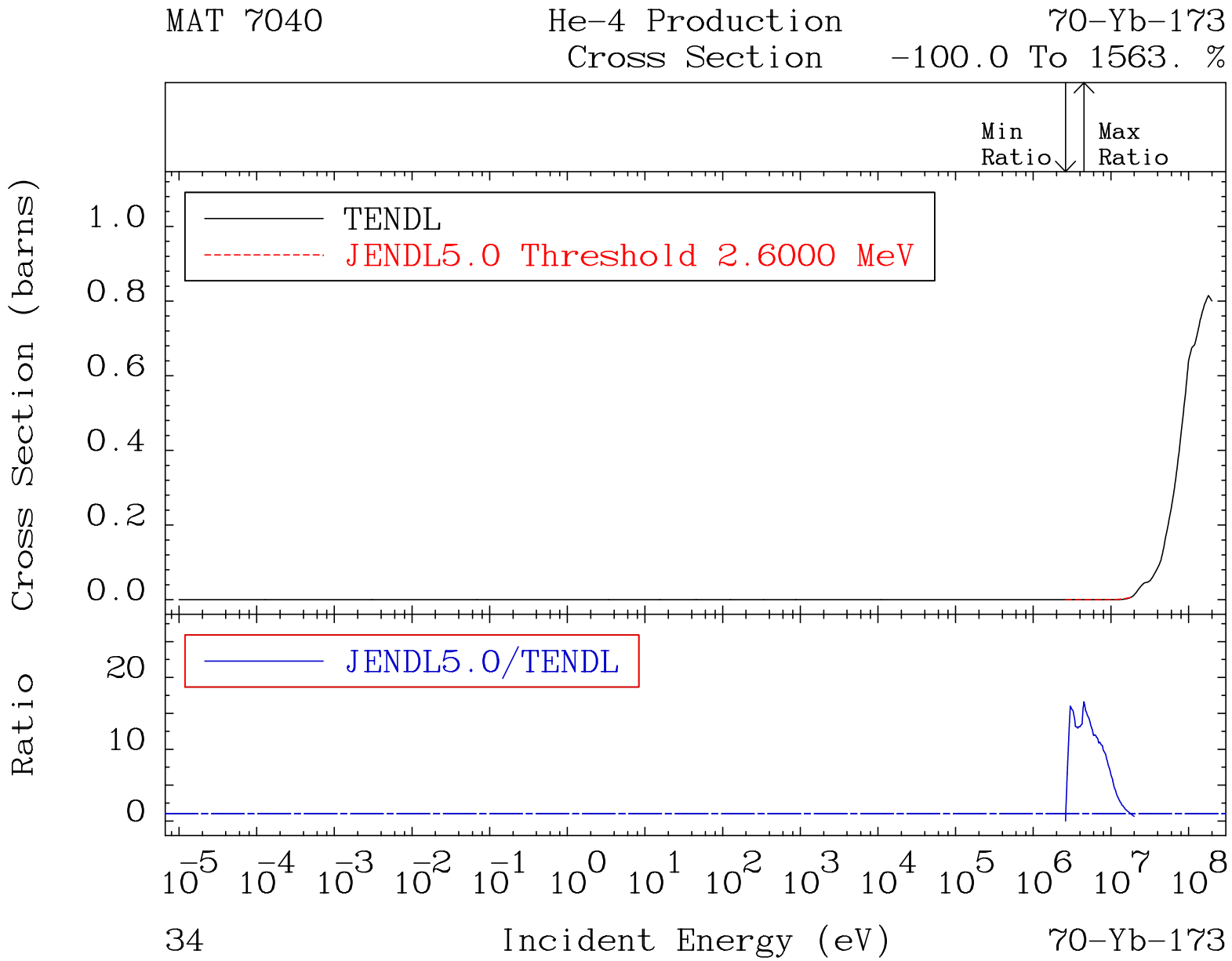

MAT 7040
(n,α)
70-Yb-173
Cross Section
-100.0 To 1563. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 2.6000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
29
70-Yb-173

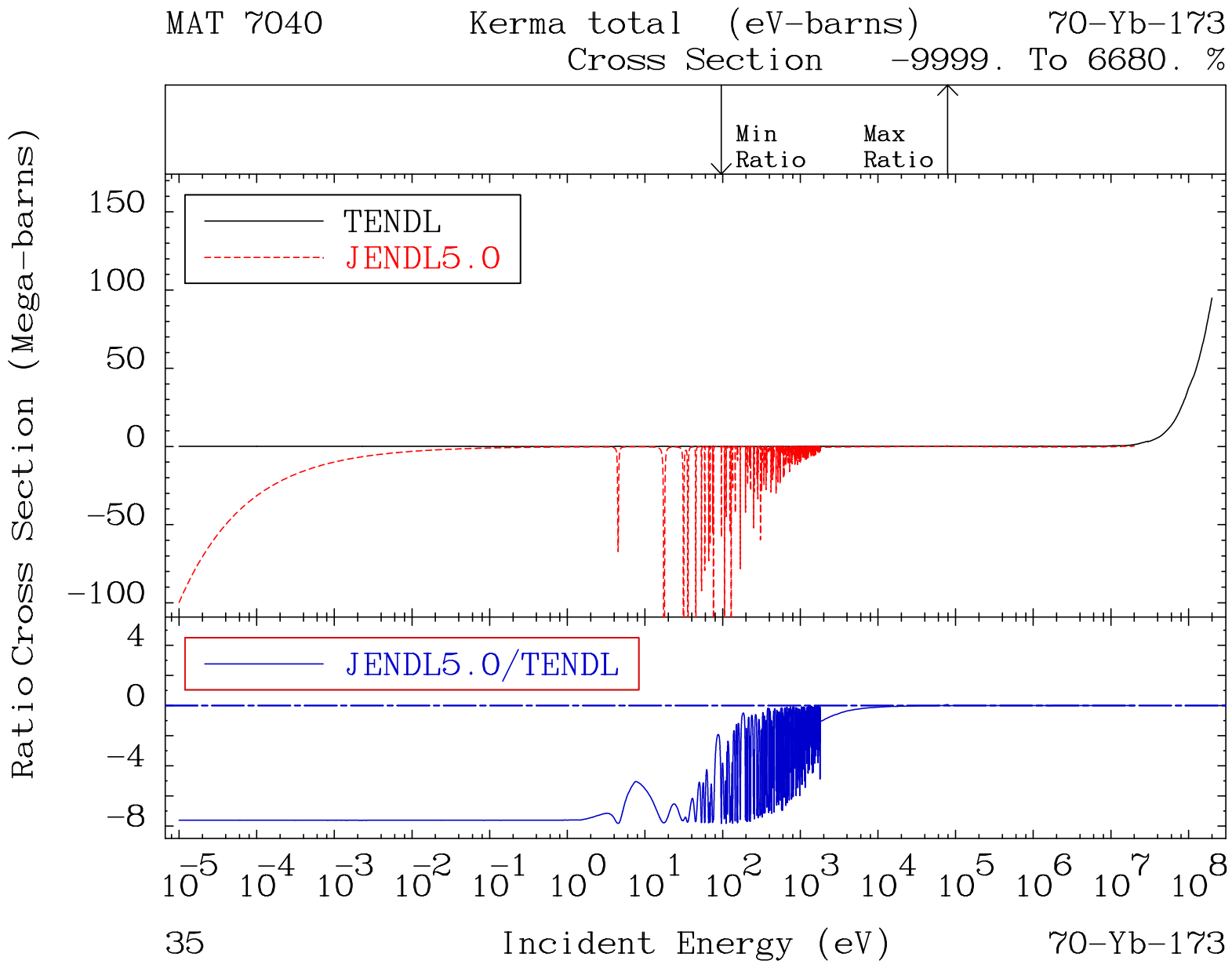

MAT 7040
Hydrogen Production
70-Yb-173
Cross Section
-100.0 To 73.34 %
Min Ratio
Max Ratio
TENDL Threshold 400.11 keV
JENDL5.0 Threshold 4.2500 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
2.0
1.0
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
30
Incident Energy (eV)
70-Yb-173

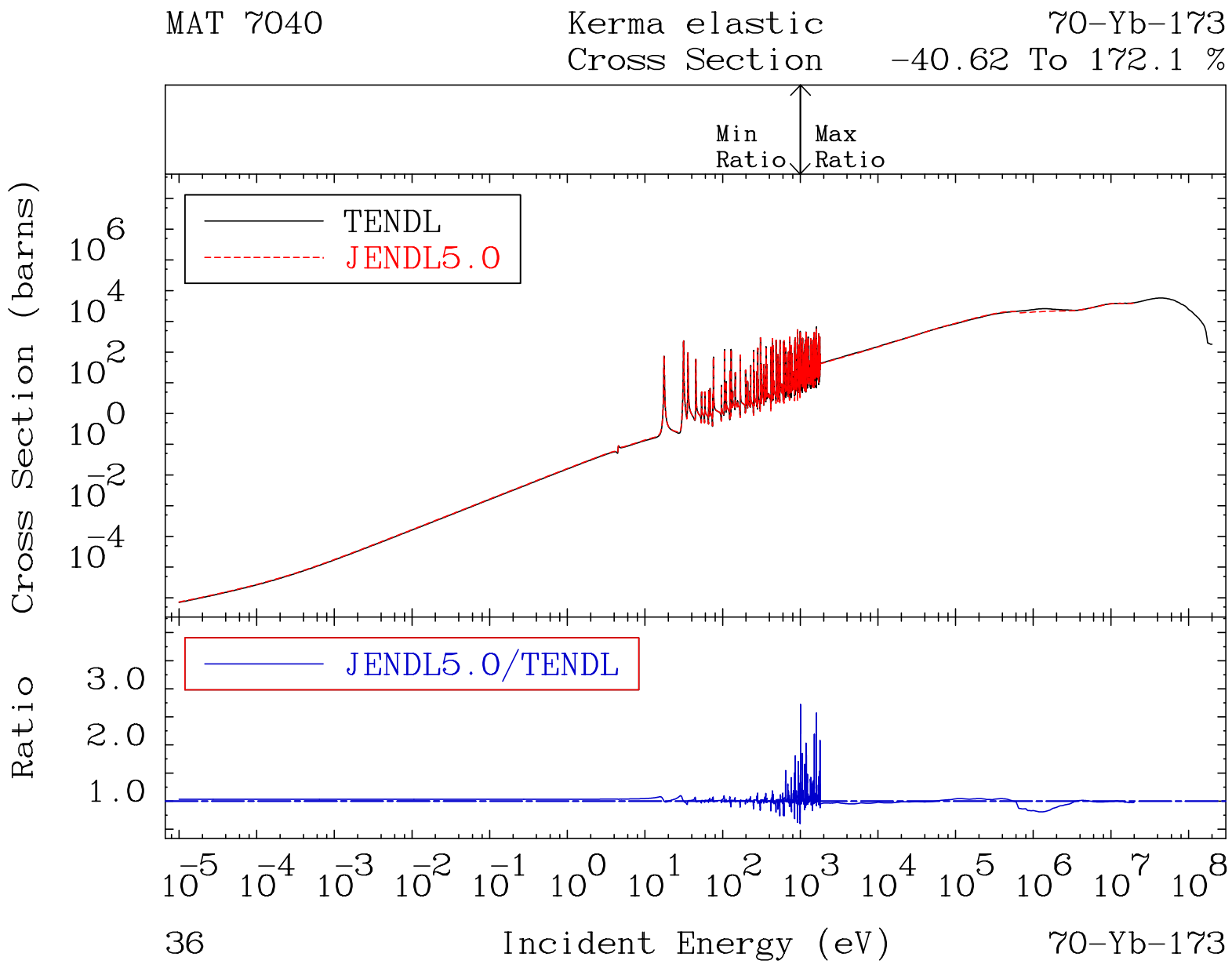

MAT 7040
Deuterium Production
70-Yb-173
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.0104 MeV
JENDL5.0 Threshold 9.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
200
100
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
70-Yb-173

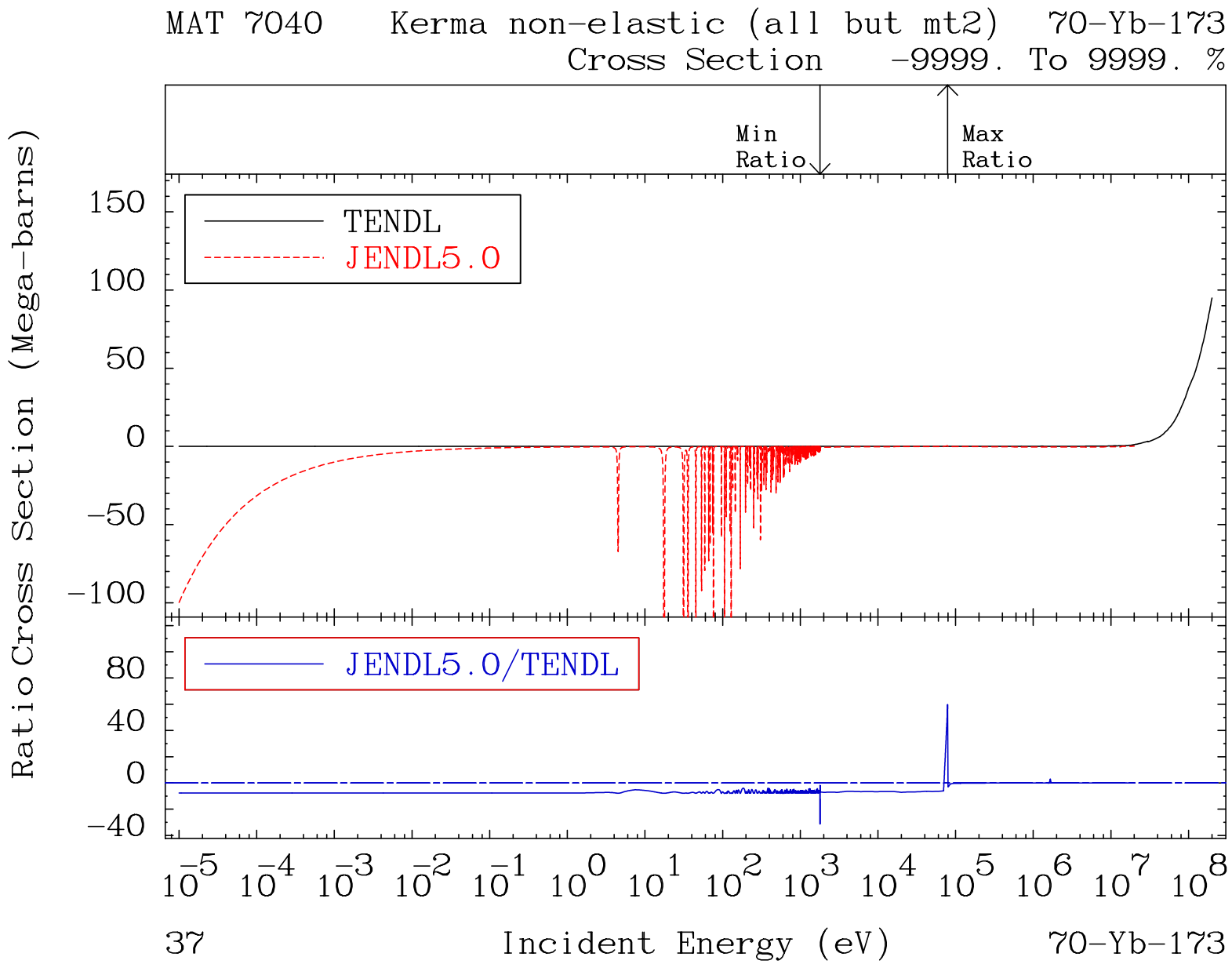

MAT 7040
Tritium Production
70-Yb-173
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2499 MeV
JENDL5.0 Threshold 9.5000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
0.8
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
70-Yb-173

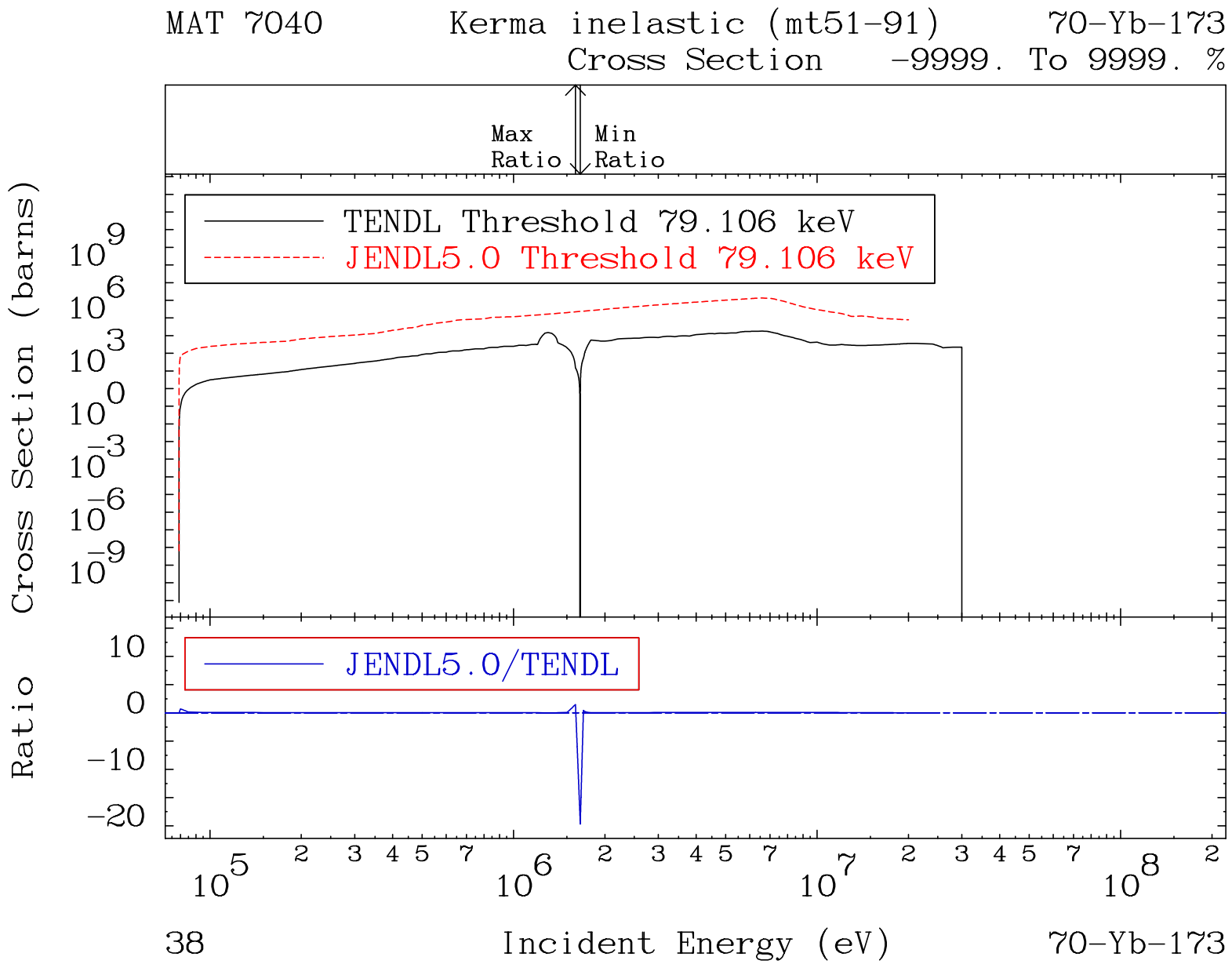

MAT 7040
He-3 Production
Cross Section
70-Yb-173
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.7324 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
200
100
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
70-Yb-173

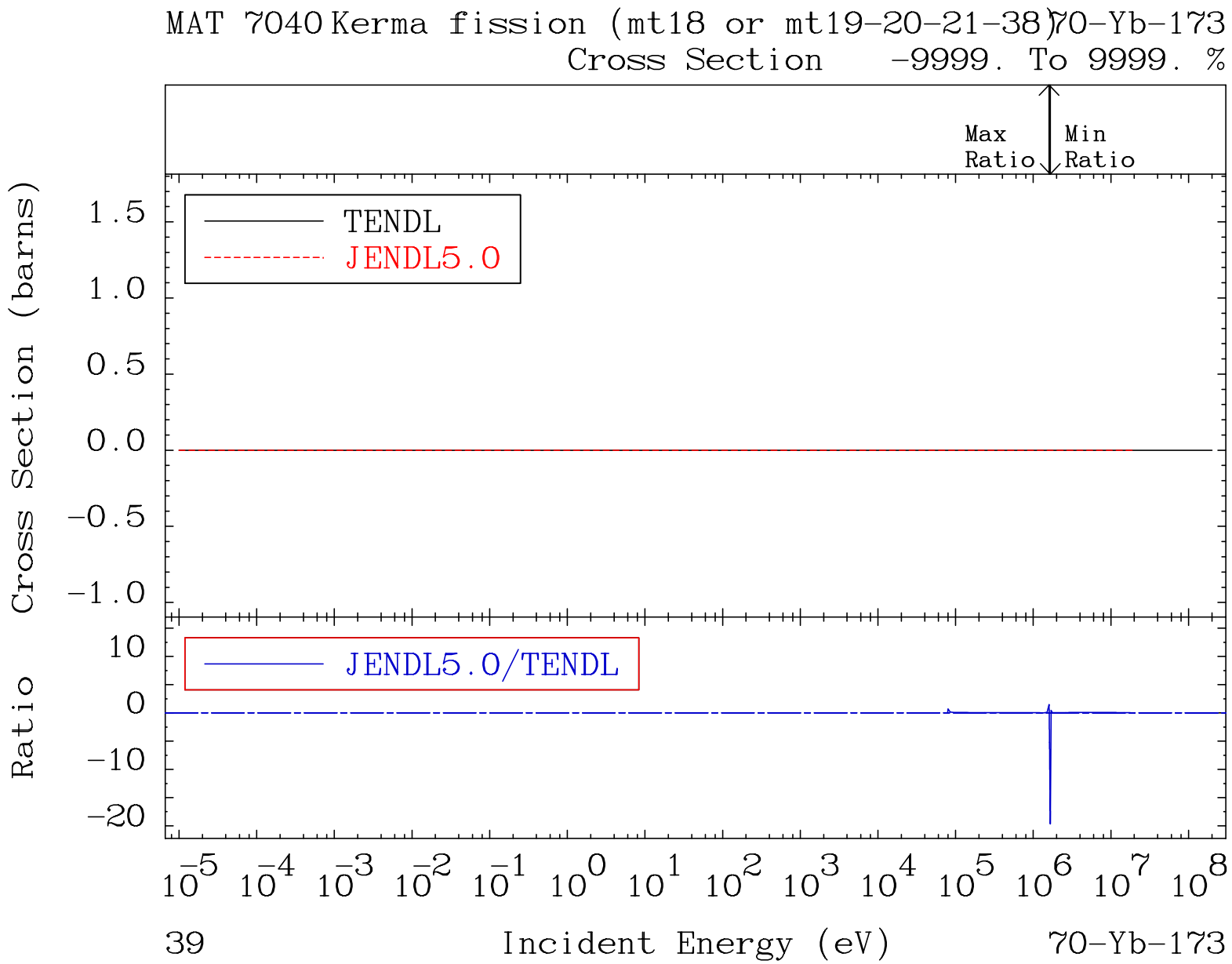

MAT 7040
He-4 Production
Cross Section
70-Yb-173
-100.0 To 1563. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 2.6000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
20
10
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
34
Incident Energy (eV)
70-Yb-173

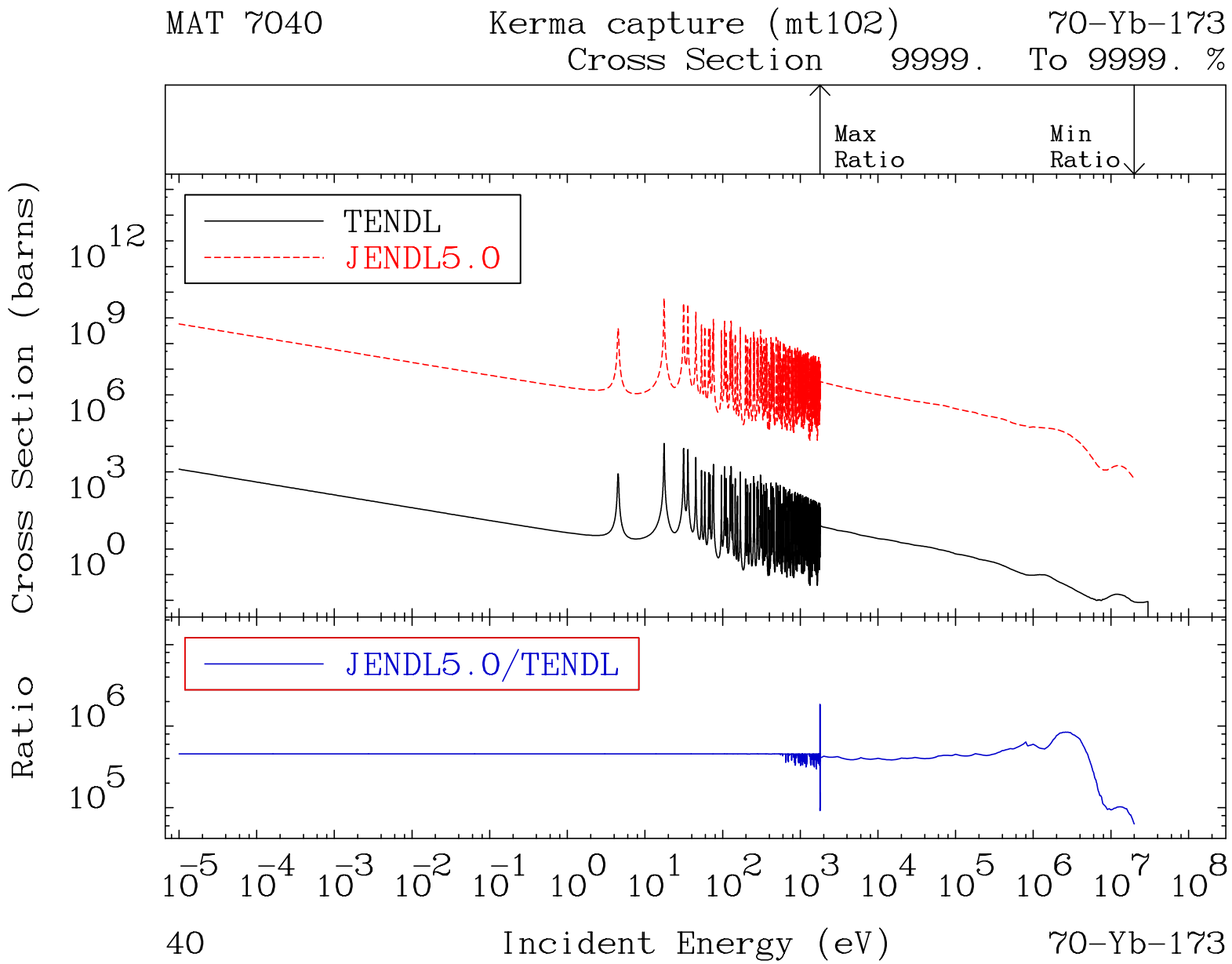

MAT 7040
Kerma total (eV-barns)
70-Yb-173
Cross Section -9999. To 6680. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
150
100
50
0
-50
-100
4
0
-4
-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
70-Yb-173

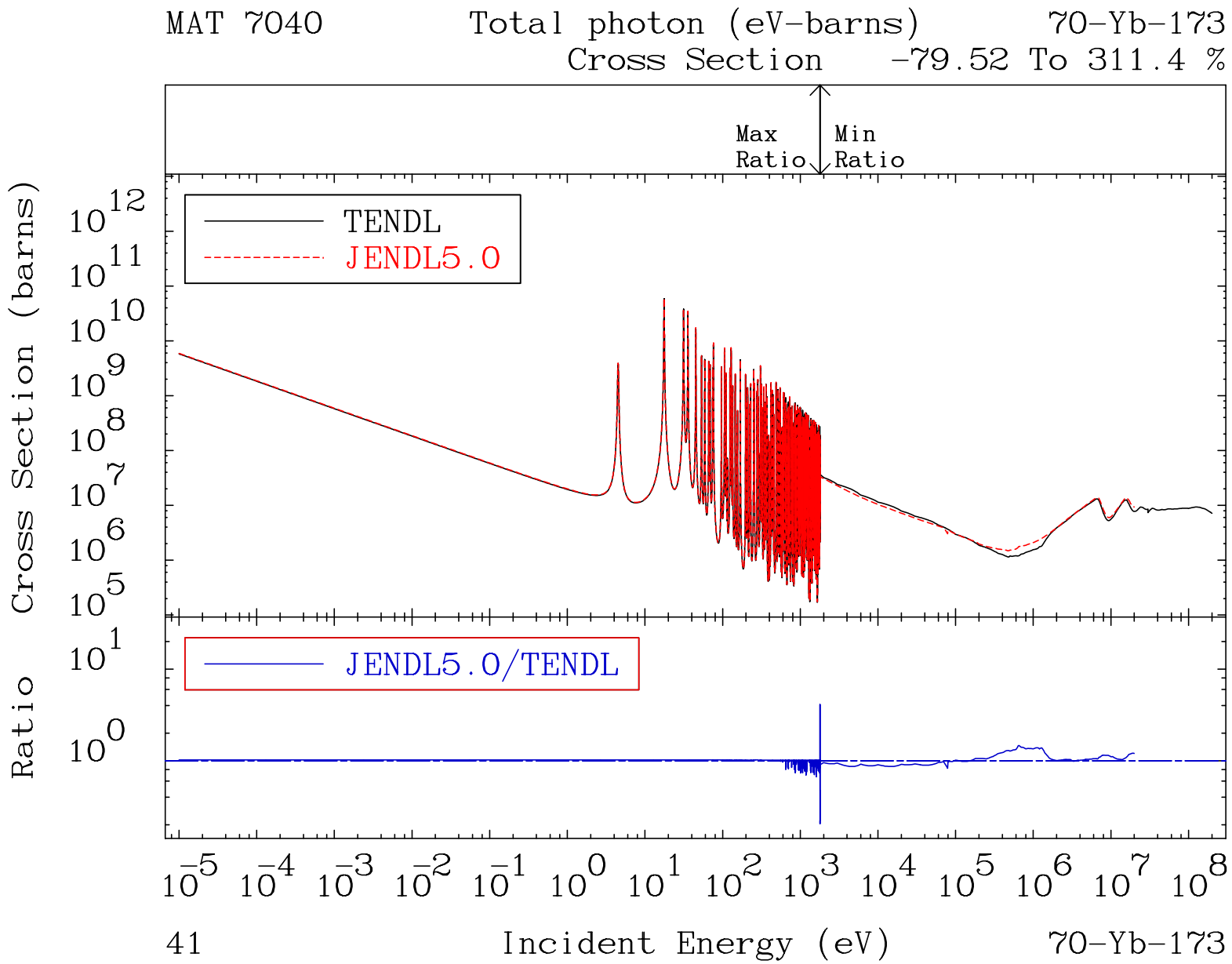

MAT 7040
Kerma elastic
Cross Section
70-Yb-173
-40.62 To 172.1 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
36
70-Yb-173

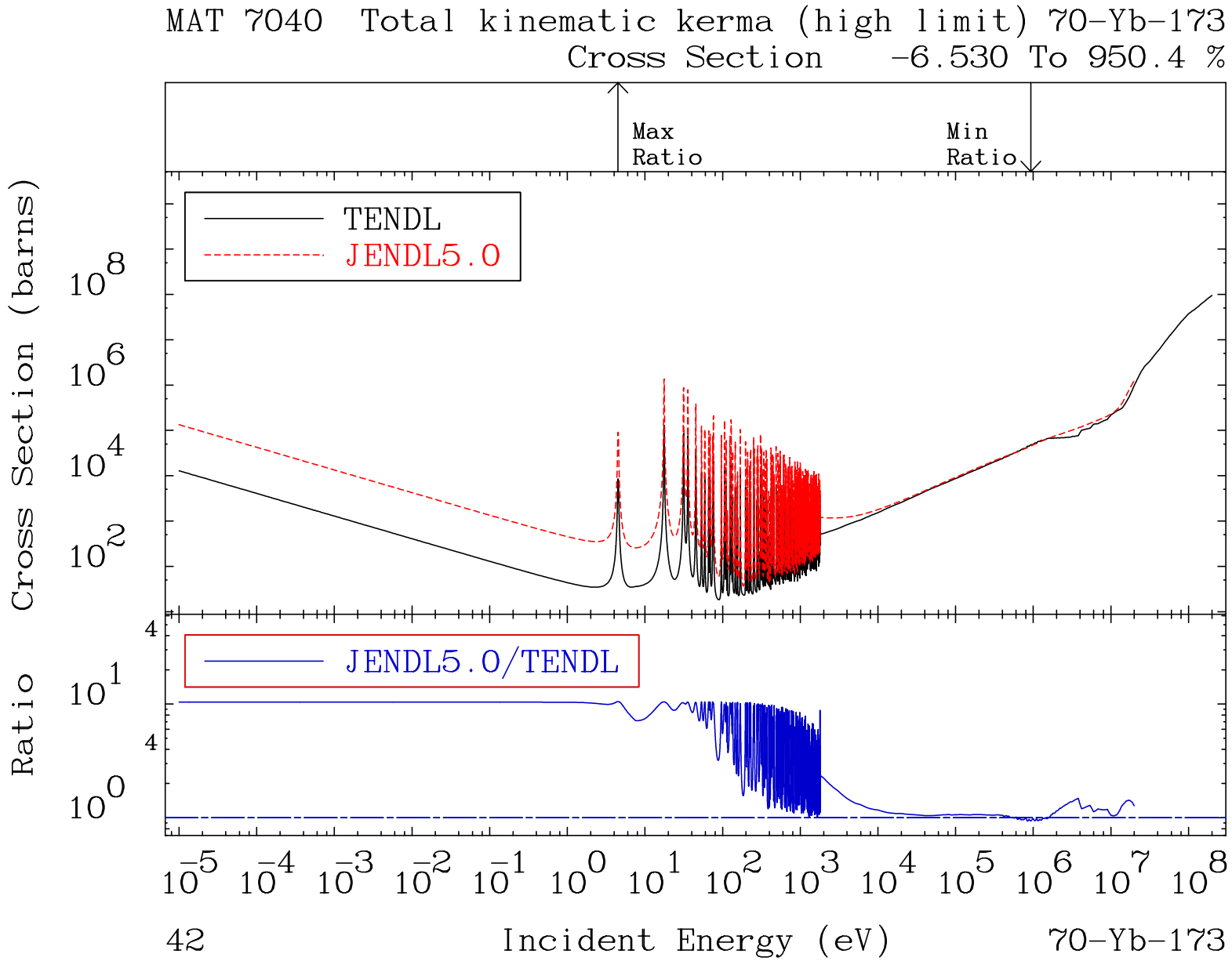

MAT 7040 Kerma non-elastic (all but mt2) 70-Yb-173
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
150
100
50
0
-50
-100
80
40
0
-40
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
37
Incident Energy (eV)
70-Yb-173

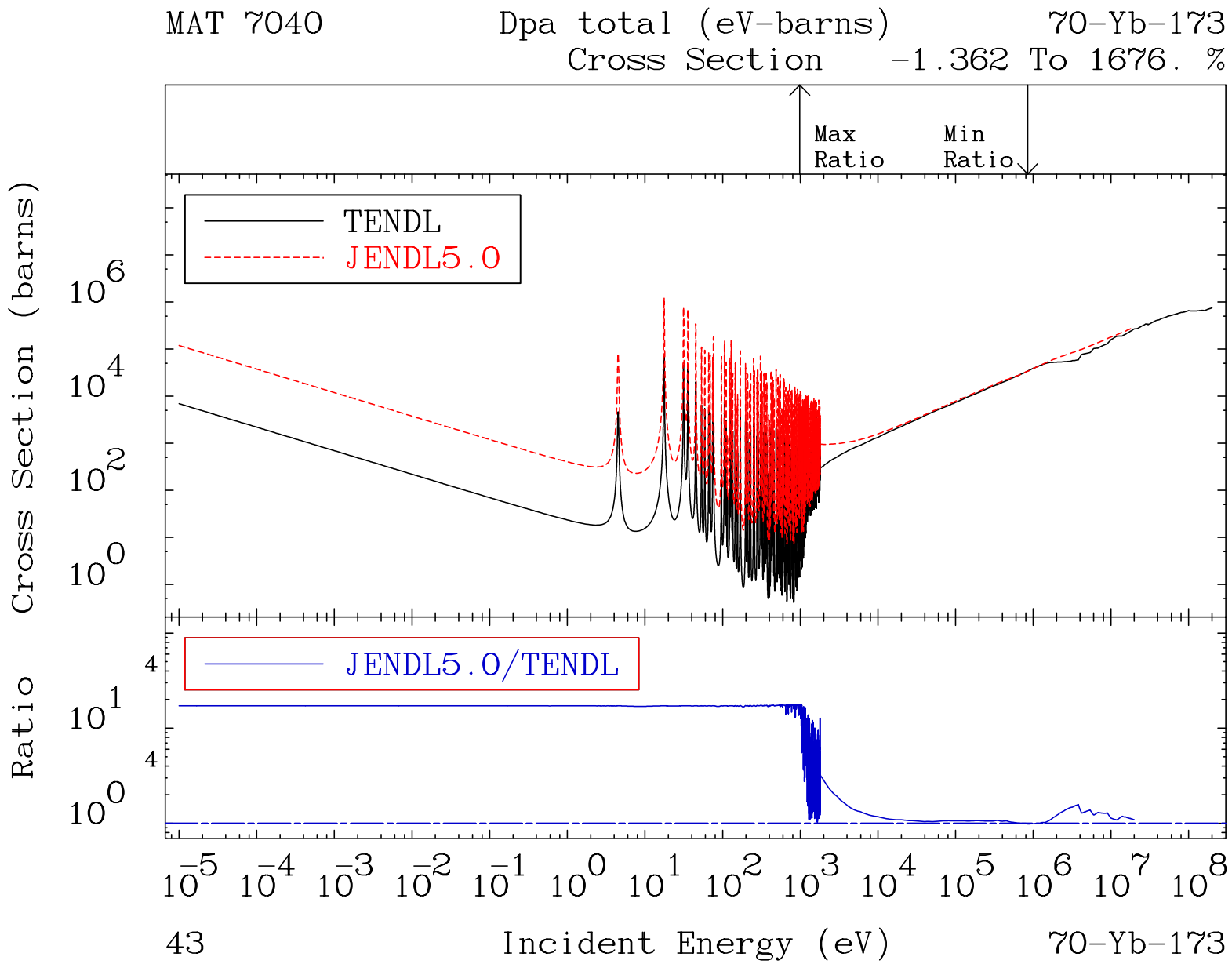

MAT 7040
Kerma inelastic (mt51-91)
70-Yb-173
Cross Section -9999. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 79.106 keV
JENDL5.0 Threshold 79.106 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
70-Yb-173

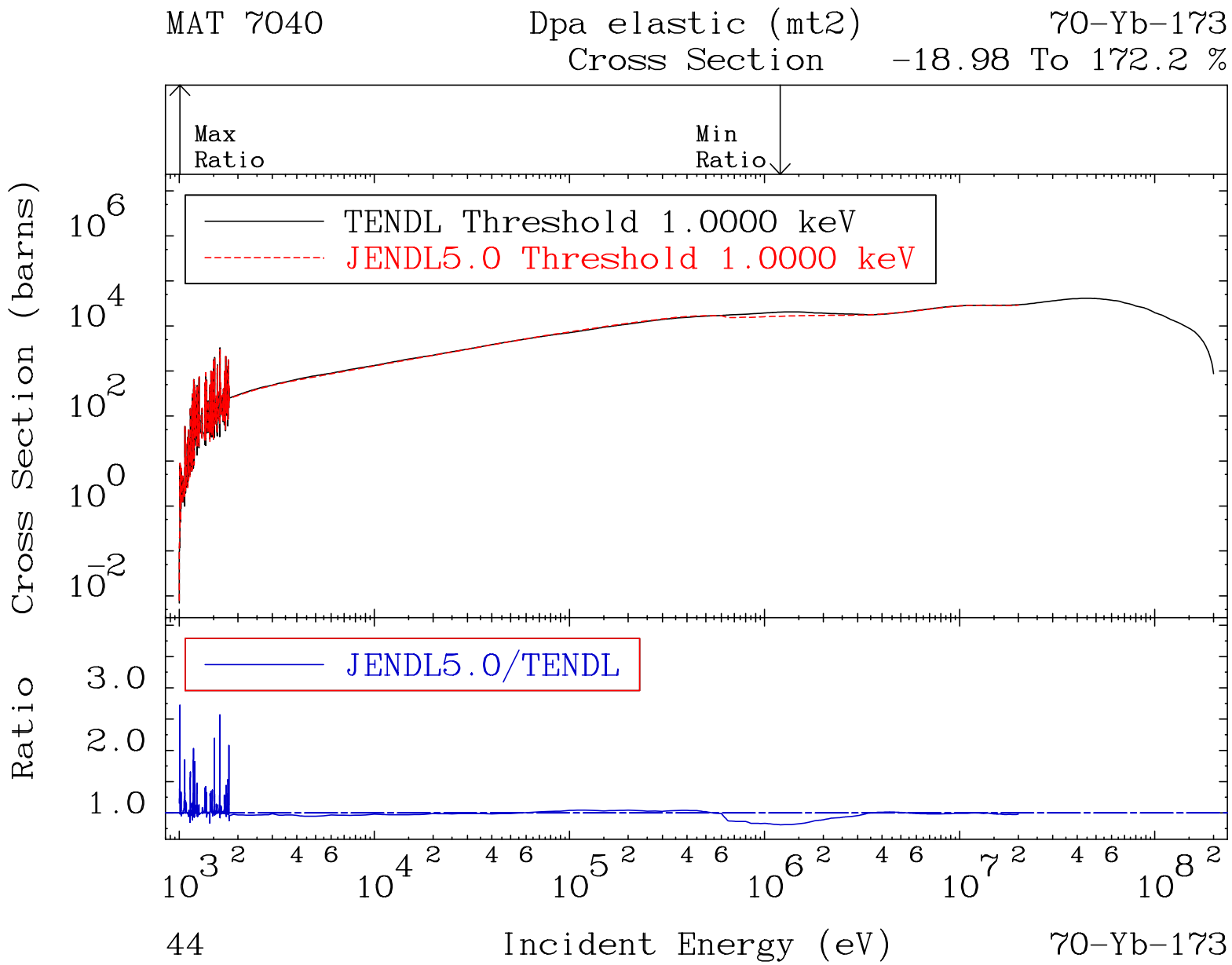

MAT 7040 Kerma fission (mt18 or mt19-20-21-38) 70-Yb-173
Cross Section -9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10
0
-10
-20
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
70-Yb-173

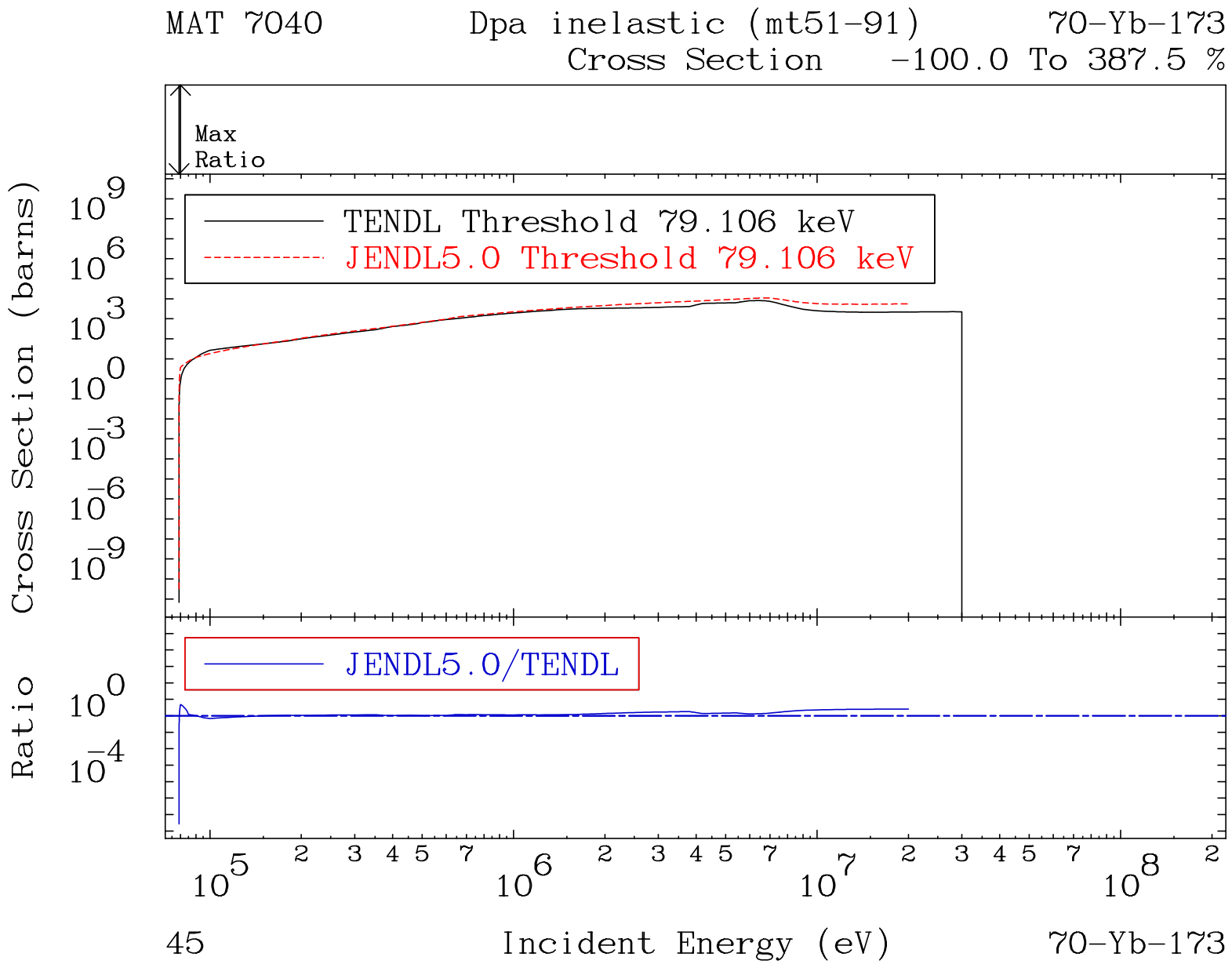

MAT 7040
Kerma capture (mt102)
70-Yb-173
Cross Section 9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
40
70-Yb-173

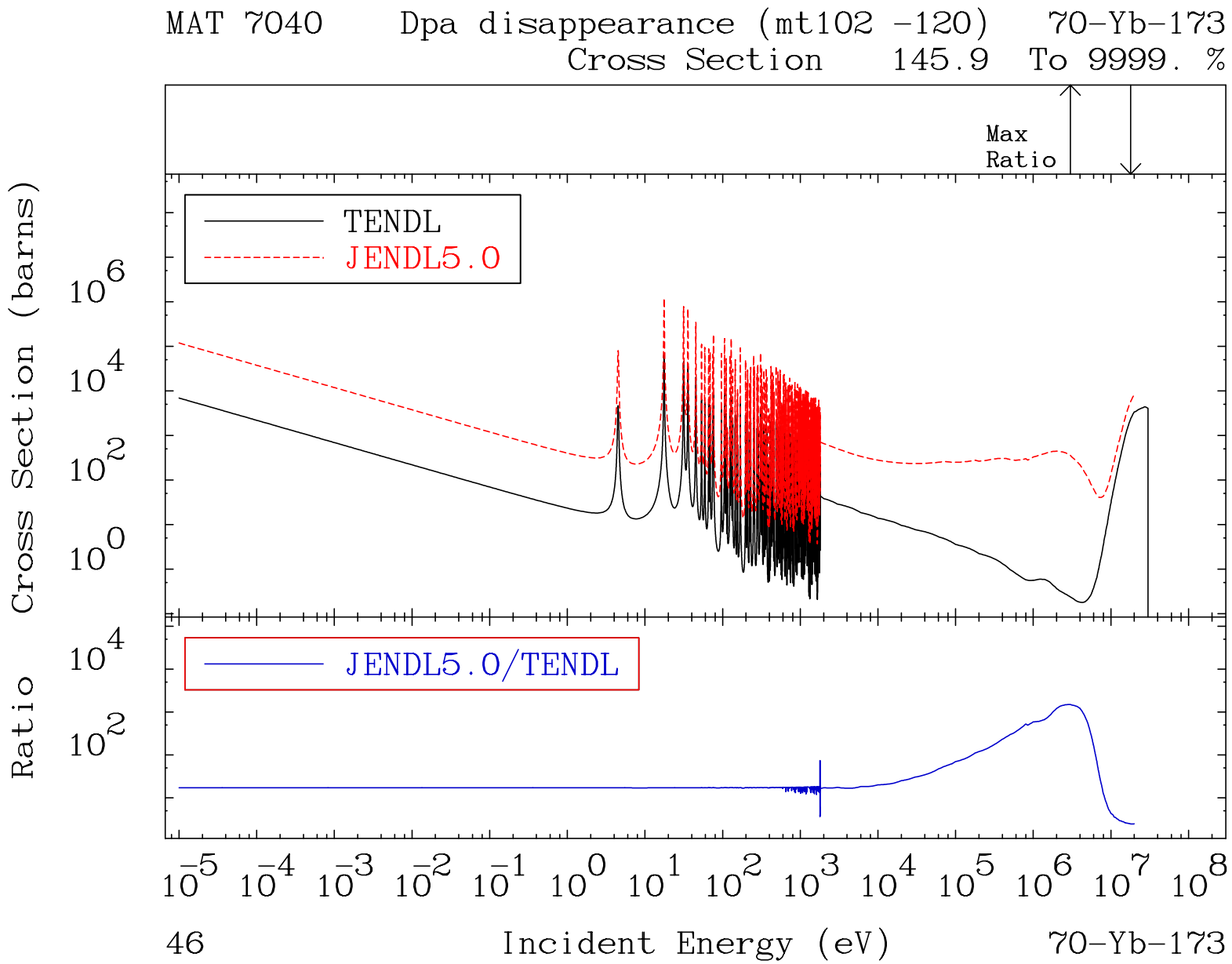

MAT 7040
Total photon (eV-barns)
70-Yb-173
Cross Section -79.52 To 311.4 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
70-Yb-173

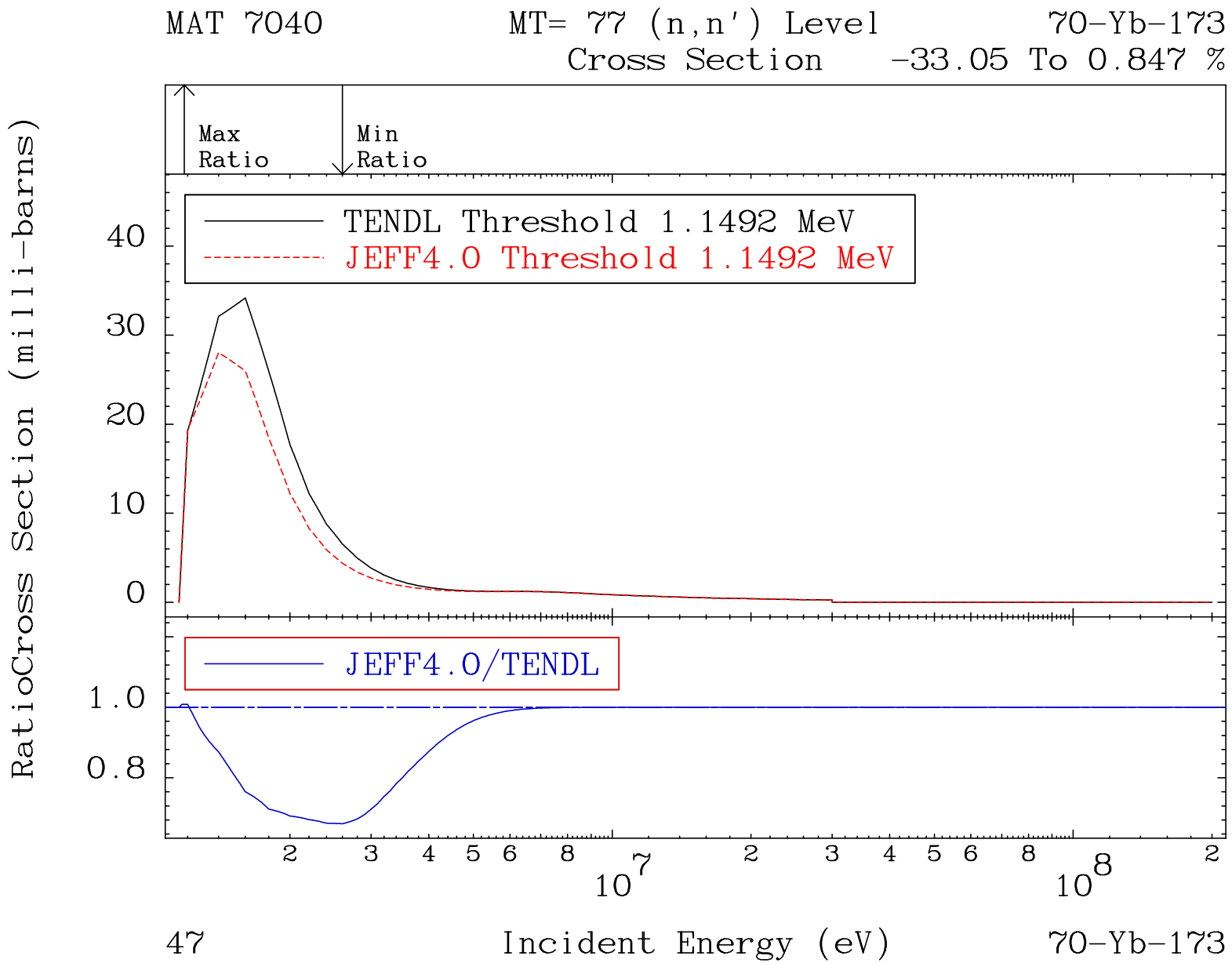

MAT 7040 Total kinematic kerma (high limit) 70-Yb-173
Cross Section -6.530 To 950.4 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
70-Yb-173

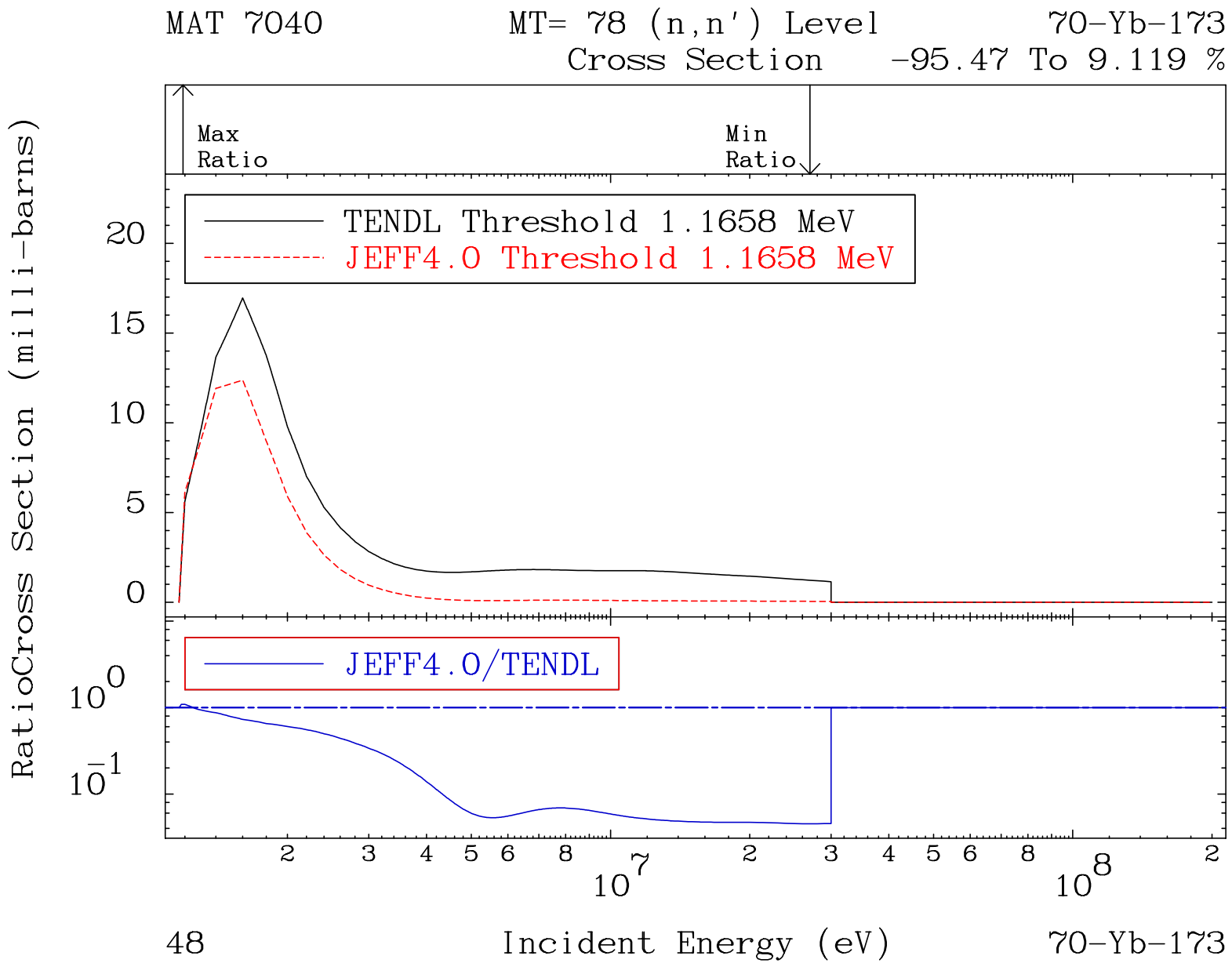

MAT 7040
Dpa total (eV-barns)
70-Yb-173
Cross Section
-1.362 To 1676. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
70-Yb-173

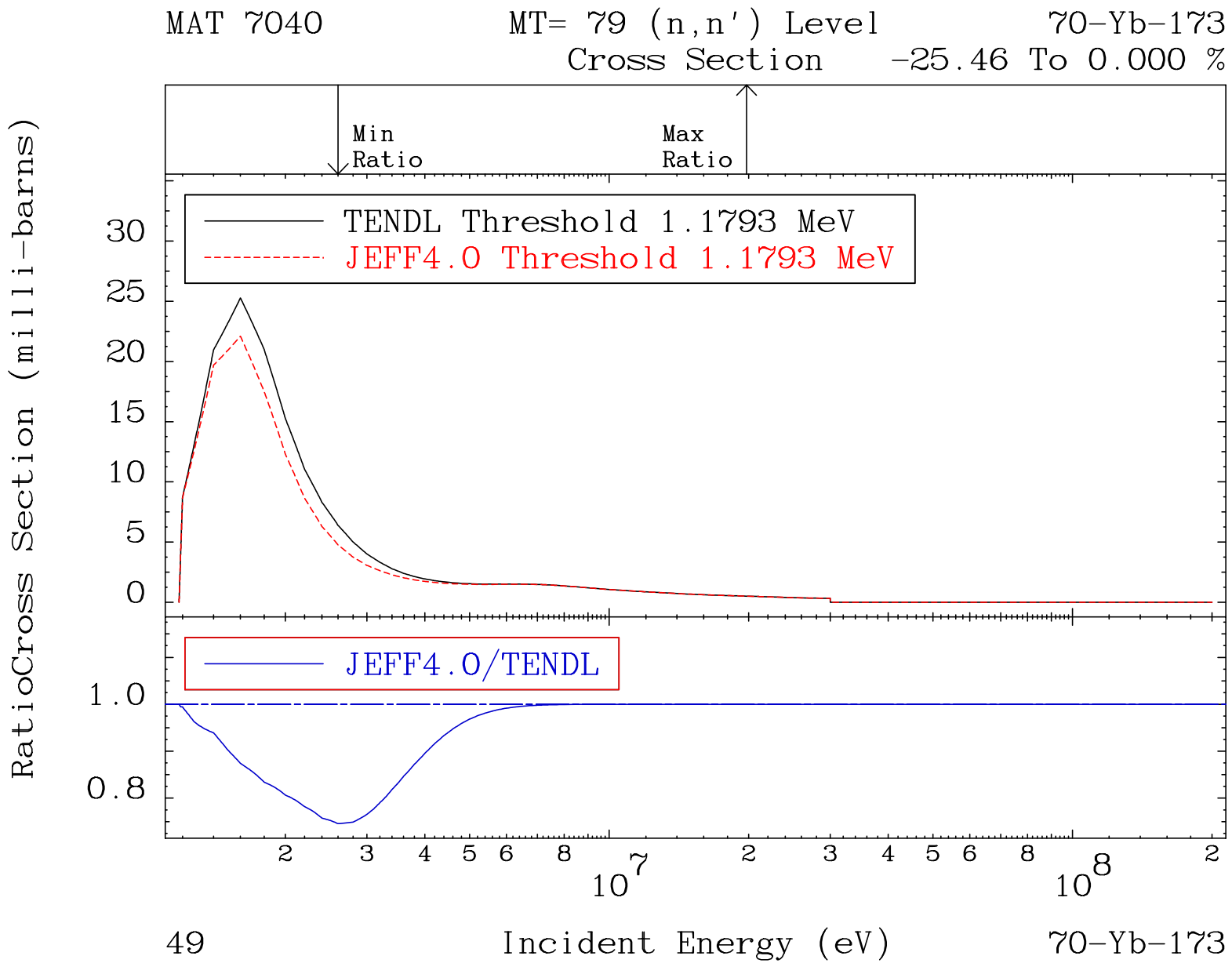

MAT 7040
Dpa elastic (mt2)
Cross Section
70-Yb-173
-18.98 To 172.2 %
Max Ratio
Min Ratio
TENDL Threshold 1.0000 keV
JENDL5.0 Threshold 1.0000 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
70-Yb-173

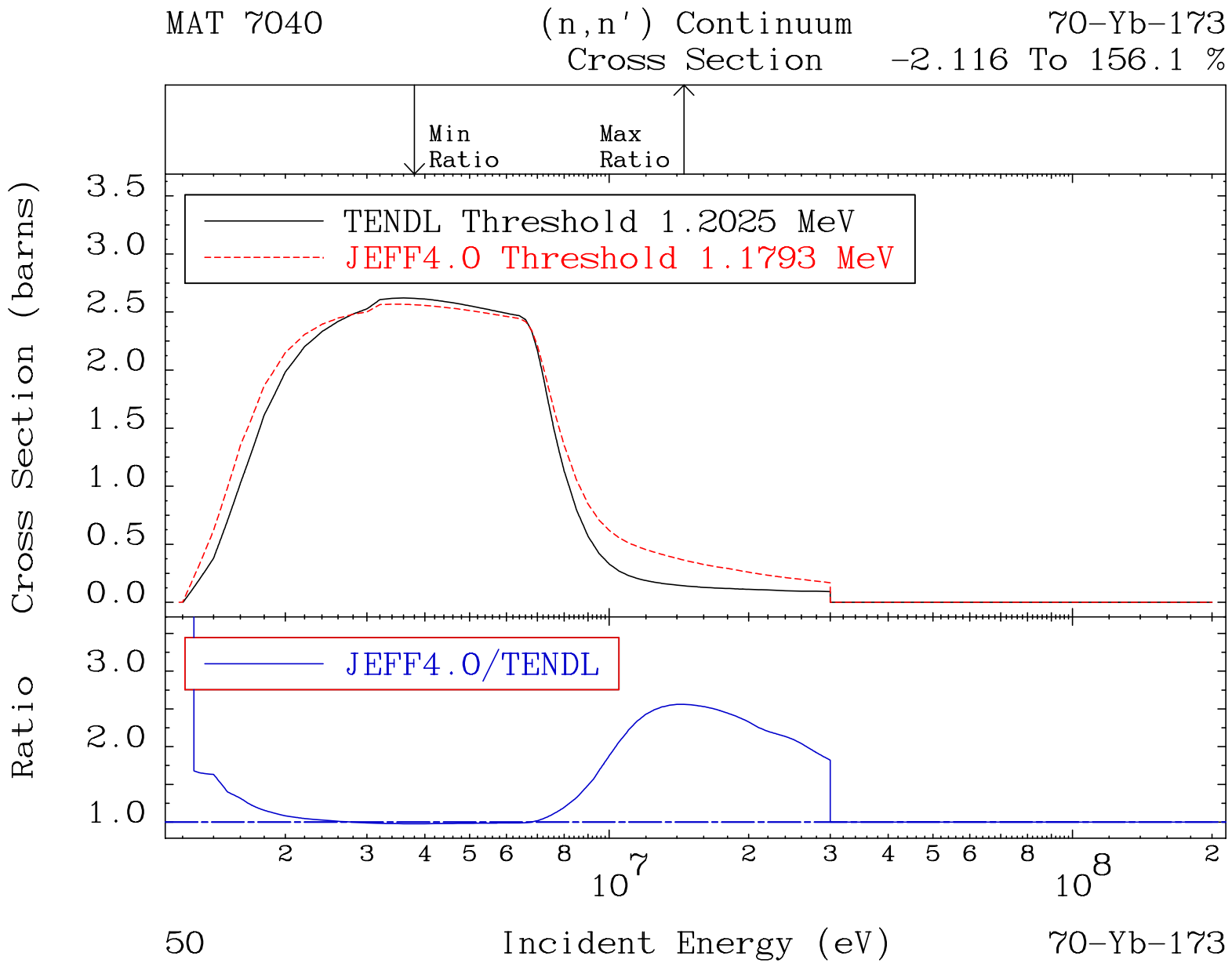

MAT 7040
Dpa inelastic (mt51-91)
70-Yb-173
Cross Section
-100.0 To 387.5 %
Max
Ratio
TENDL Threshold 79.106 keV
JENDL5.0 Threshold 79.106 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
70-Yb-173

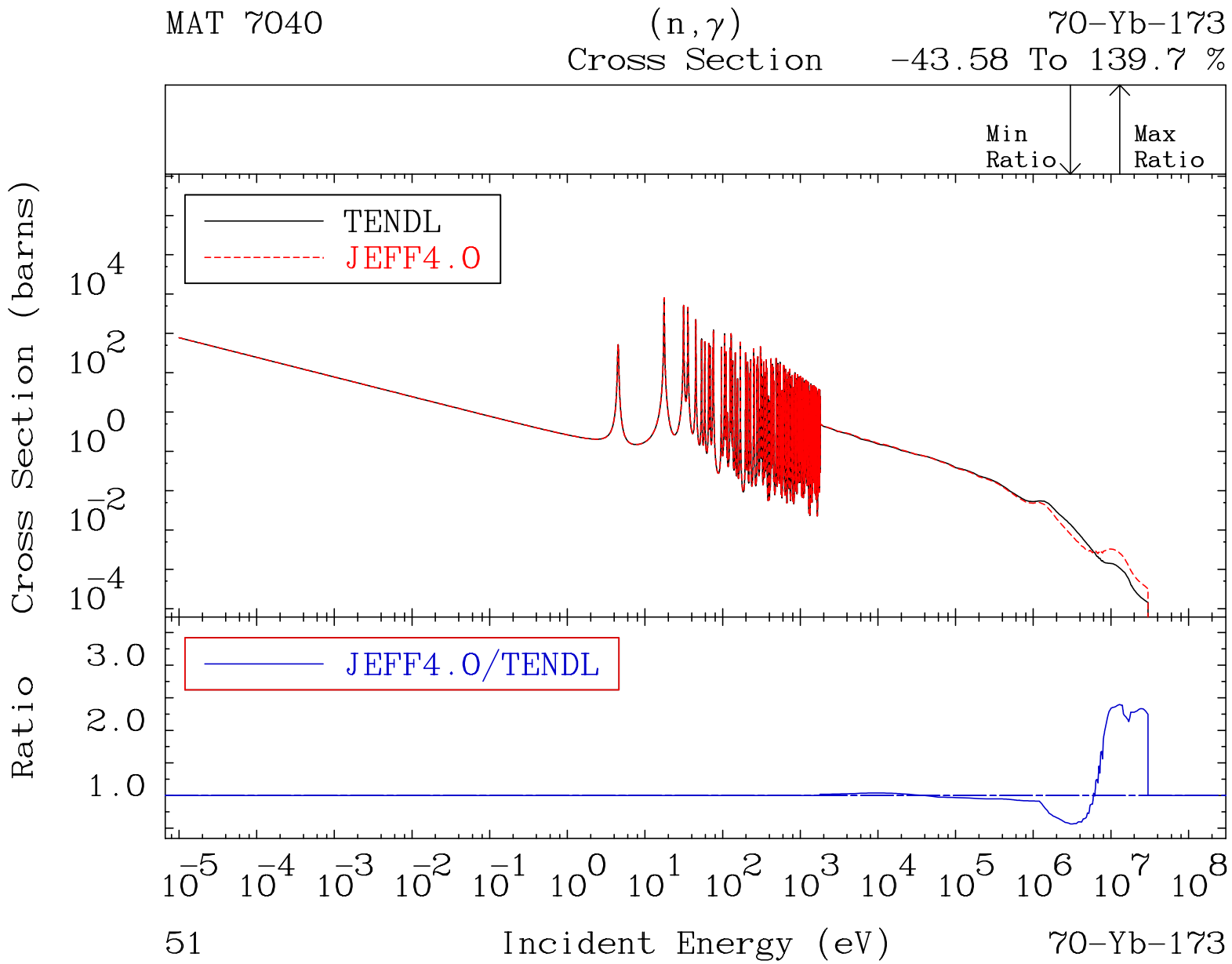

MAT 7040 Dpa disappearance (mt102 -120) 70-Yb-173
Cross Section 145.9 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
70-Yb-173

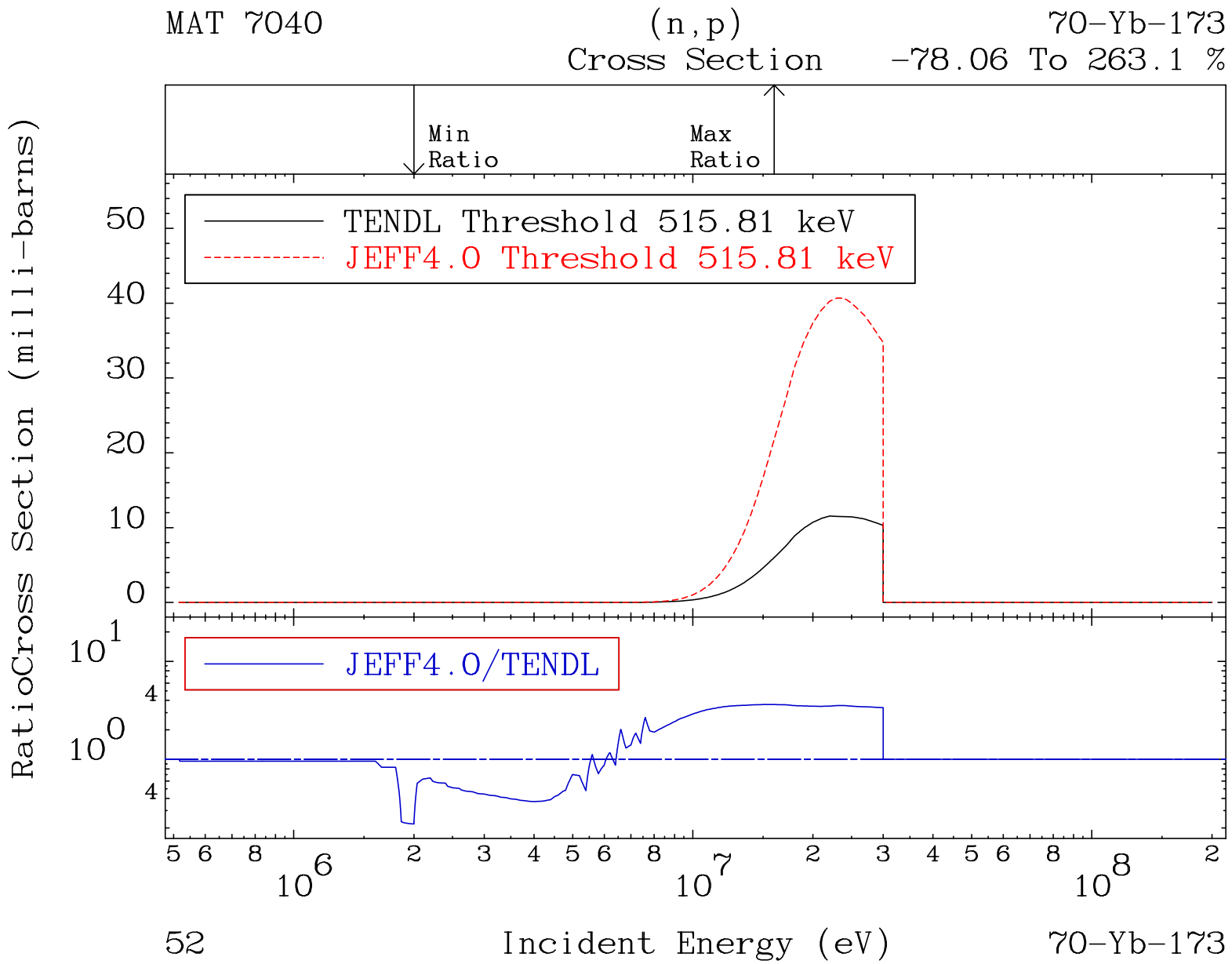

MAT 7040
MT= 77 (n,n') Level
70-Yb-173
Cross Section
-33.05 To 0.847 %
Max Ratio
Min Ratio
TENDL Threshold 1.1492 MeV
JEFF4.0 Threshold 1.1492 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.0
0.8
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
47
Incident Energy (eV)
70-Yb-173

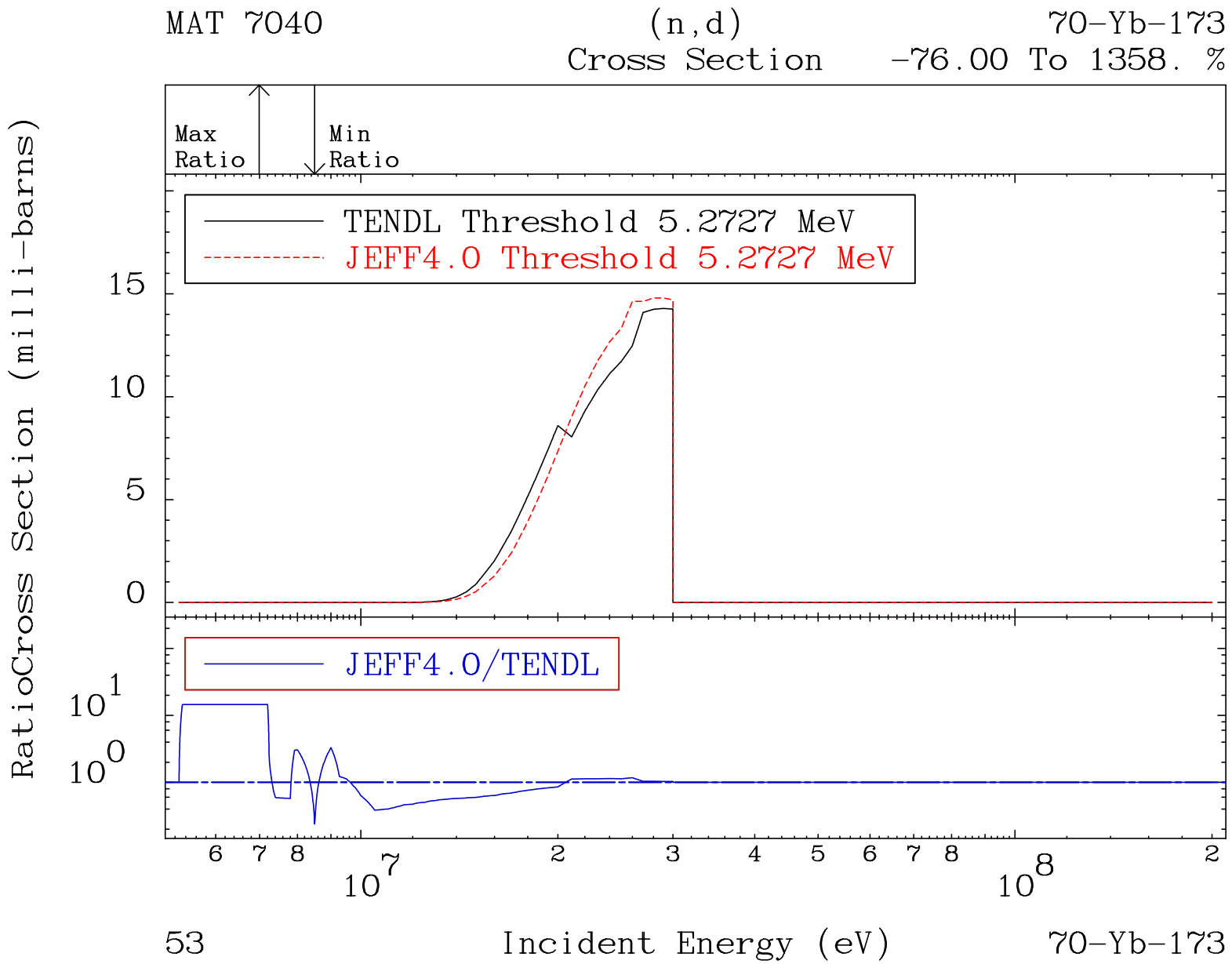

MAT 7040
MT= 78 (n,n') Level
70-Yb-173
Cross Section
-95.47 To 9.119 %
Max Ratio
Min Ratio
TENDL Threshold 1.1658 MeV
JEFF4.0 Threshold 1.1658 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
10^0
10^{-1}
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
48
Incident Energy (eV)
70-Yb-173

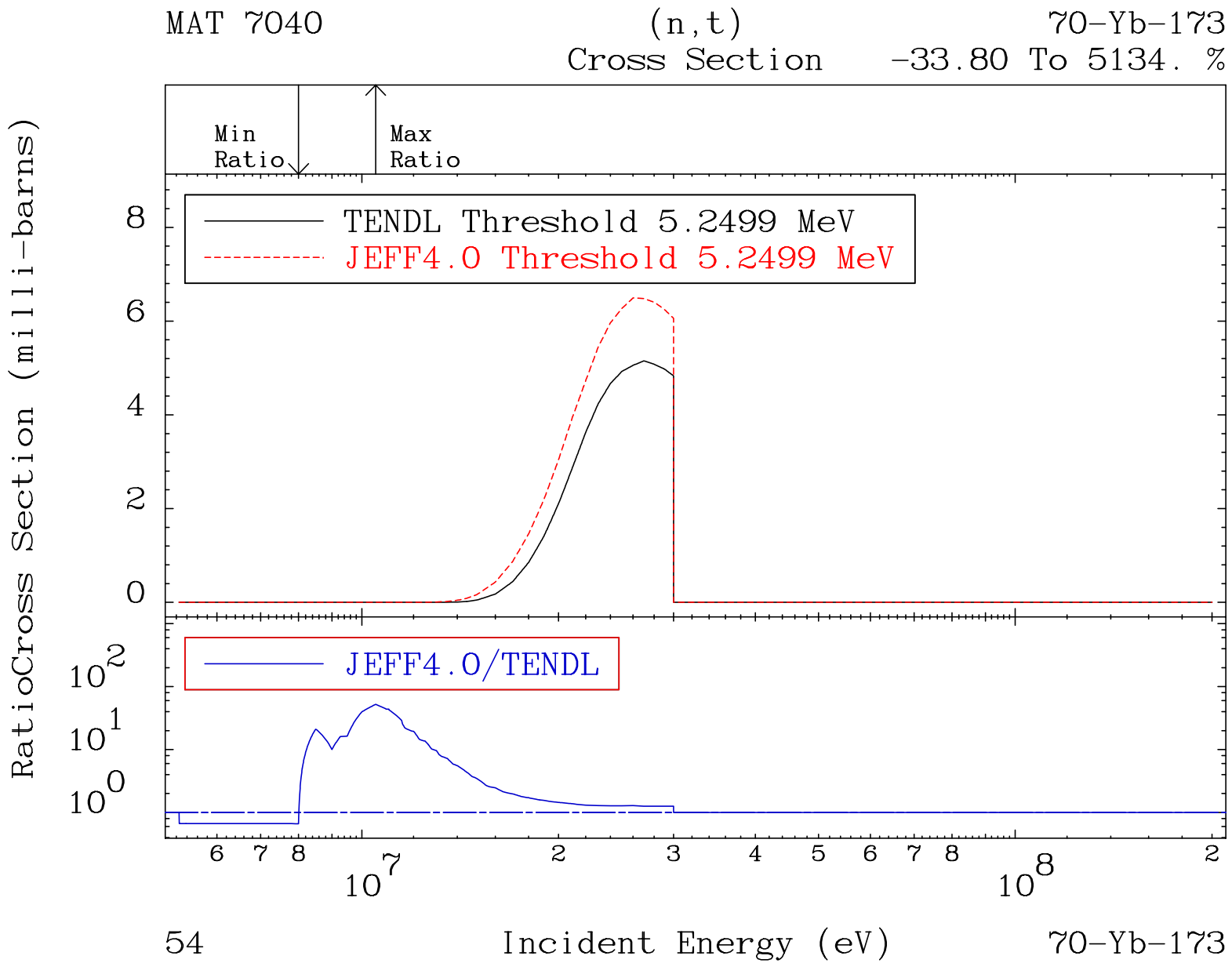

MAT 7040
MT= 79 (n,n') Level
70-Yb-173
Cross Section
-25.46 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.1793 MeV
JEFF4.0 Threshold 1.1793 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.0
0.8
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
49
Incident Energy (eV)
70-Yb-173

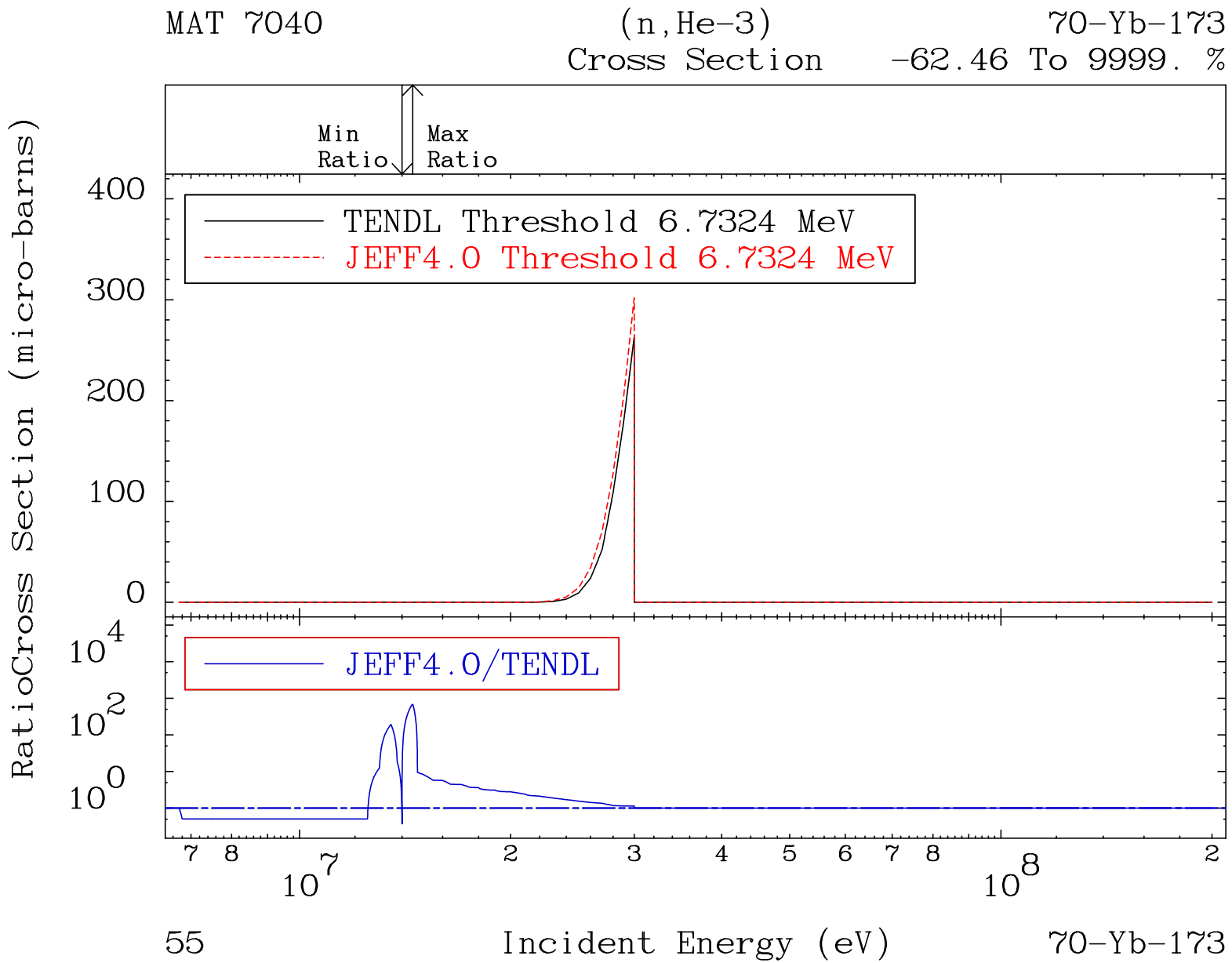

MAT 7040
(n,n') Continuum
Cross Section
70-Yb-173
-2.116 To 156.1 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2025 MeV
JEFF4.0 Threshold 1.1793 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
3
4
5
6
8
10^7
10^8
50
Incident Energy (eV)
70-Yb-173

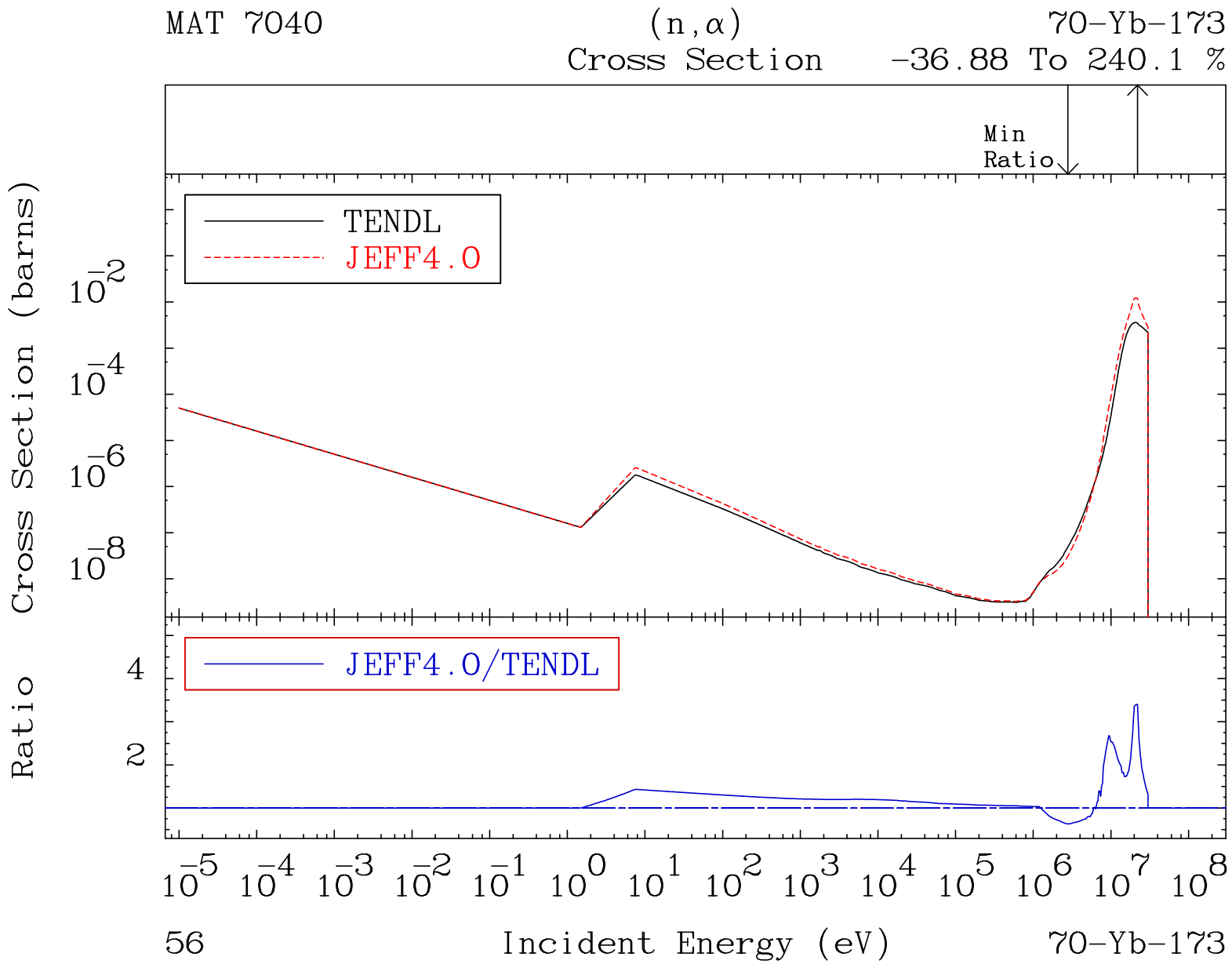

MAT 7040
(n,γ)
Cross Section
70-Yb-173
-43.58 To 139.7 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
JEFF4.0/TENDL
Ratio
3.0
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
51
Incident Energy (eV)
70-Yb-173

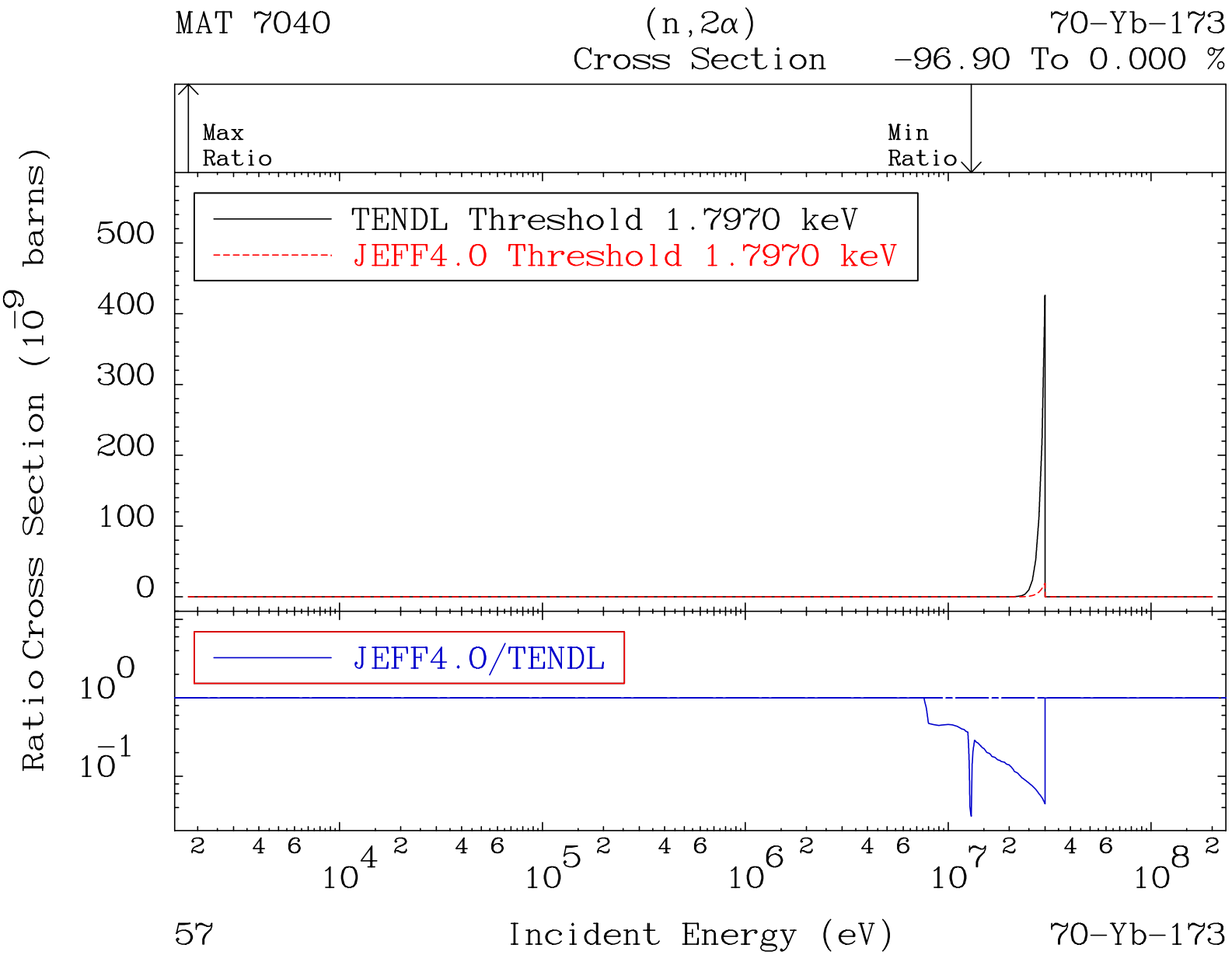

MAT 7040
(n,p)
70-Yb-173
Cross Section
-78.06 To 263.1 %
Min Ratio
Max Ratio
TENDL Threshold 515.81 keV
JEFF4.0 Threshold 515.81 keV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
10^1
10^0
4
4
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
52
Incident Energy (eV)
70-Yb-173

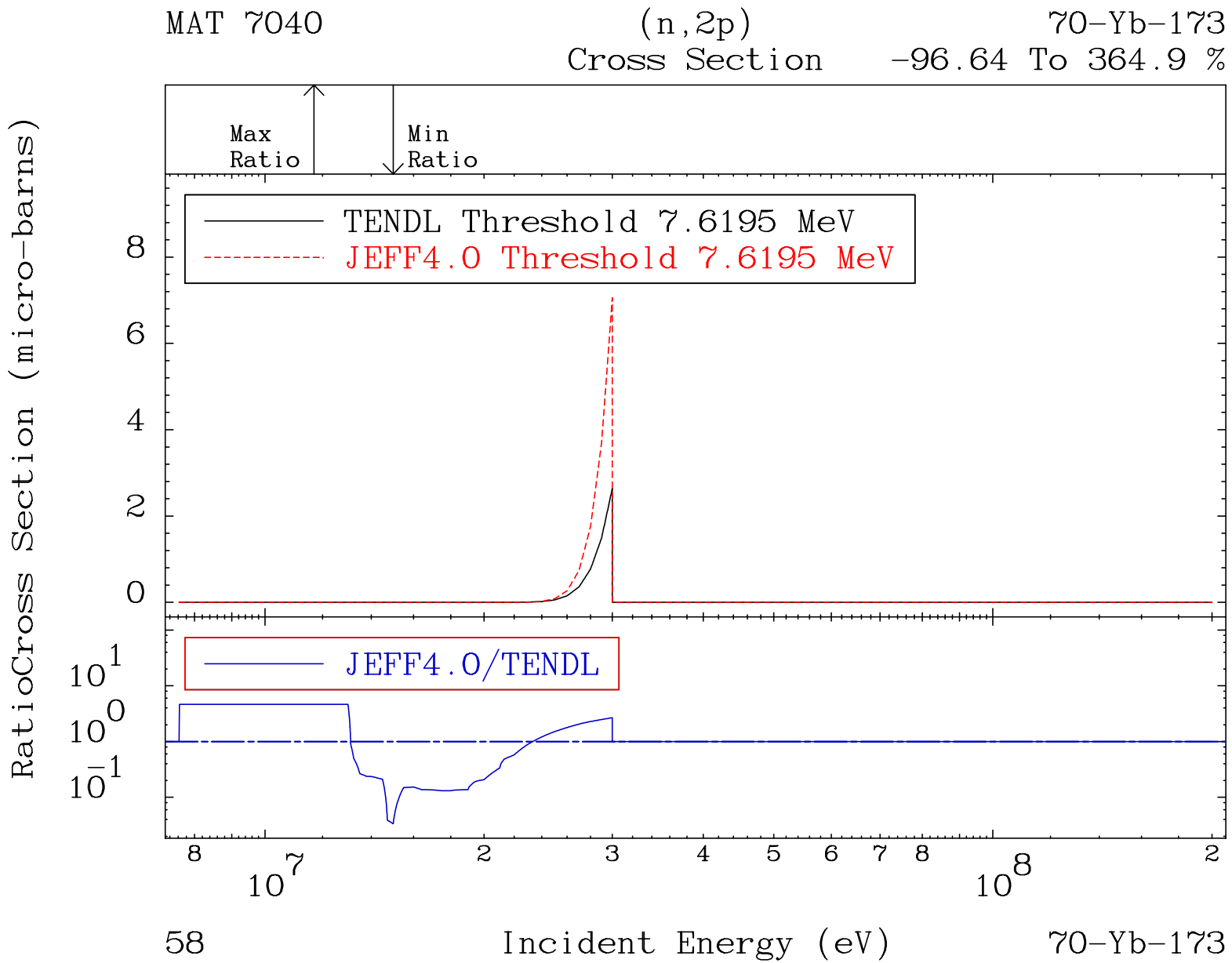

MAT 7040
(n,d)
70-Yb-173
Cross Section
-76.00 To 1358. %
Max Ratio
Min Ratio
TENDL Threshold 5.2727 MeV
JEFF4.0 Threshold 5.2727 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
15
10
5
0
10^1
10^0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
70-Yb-173

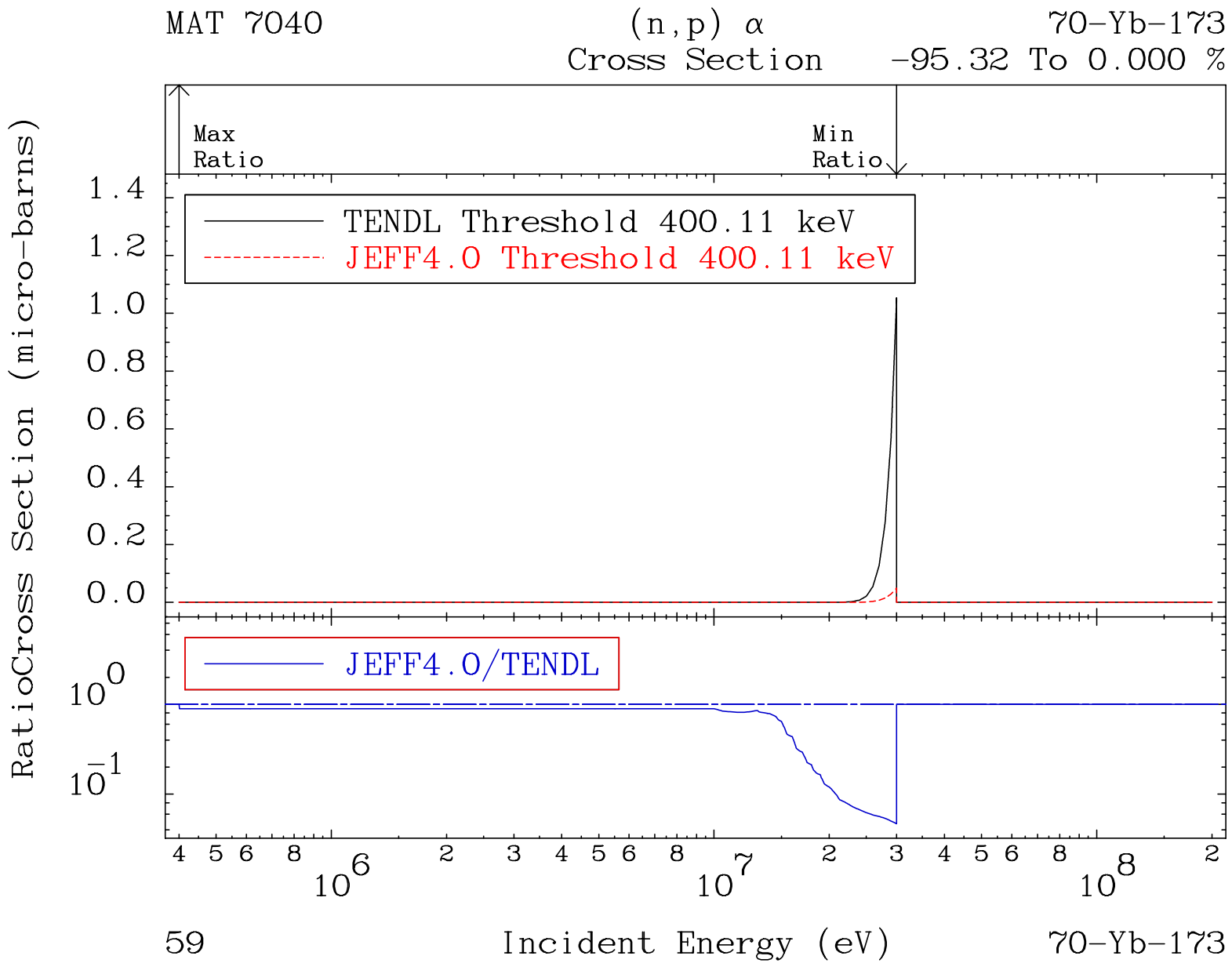

MAT 7040
(n,t)
Cross Section
70-Yb-173
-33.80 To 5134. %
Min Ratio
Max Ratio
TENDL Threshold 5.2499 MeV
JEFF4.0 Threshold 5.2499 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
54
70-Yb-173

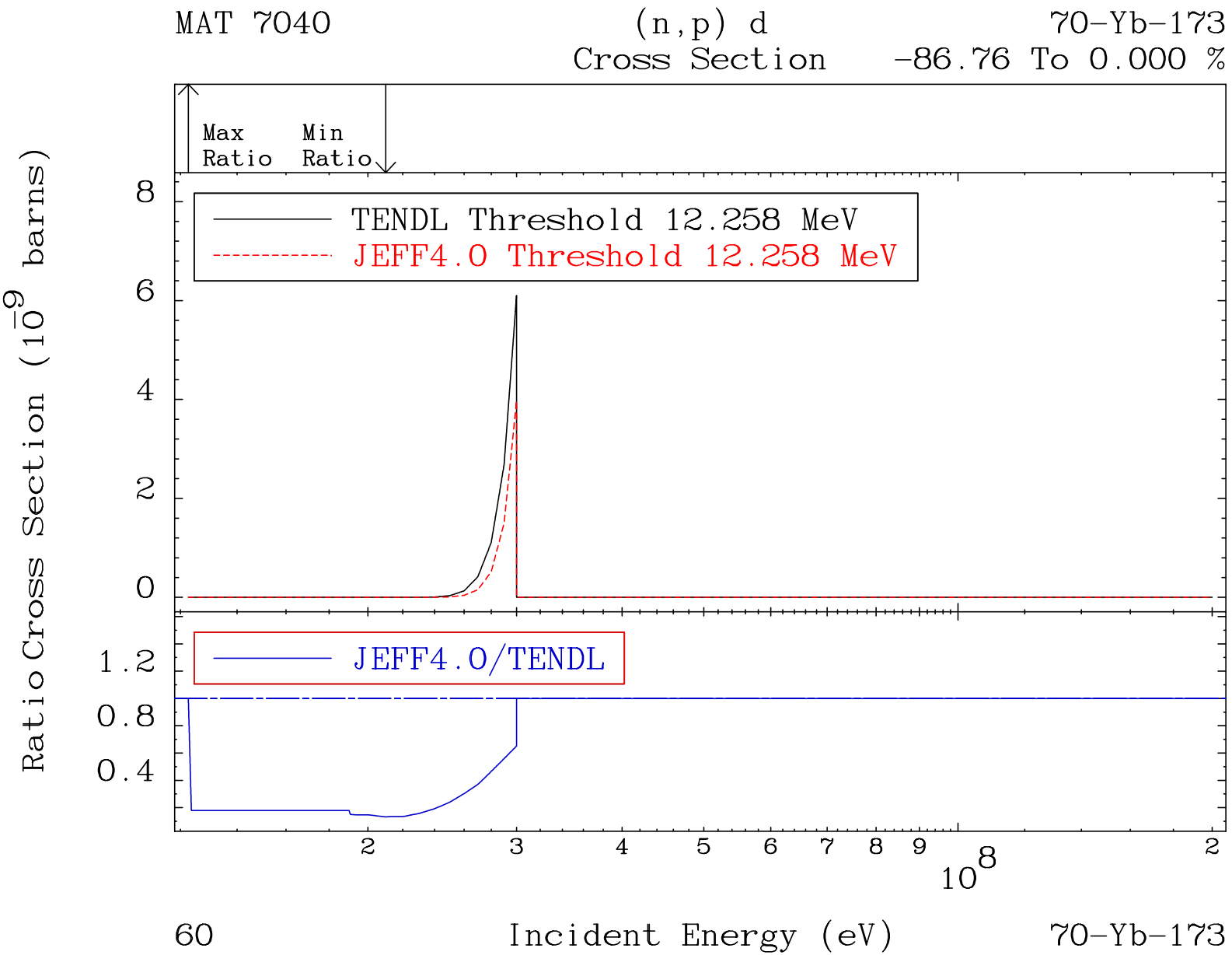

MAT 7040
(n,He-3)
70-Yb-173
Cross Section
-62.46 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.7324 MeV
JEFF4.0 Threshold 6.7324 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
10^4
10^2
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
55
Incident Energy (eV)
70-Yb-173

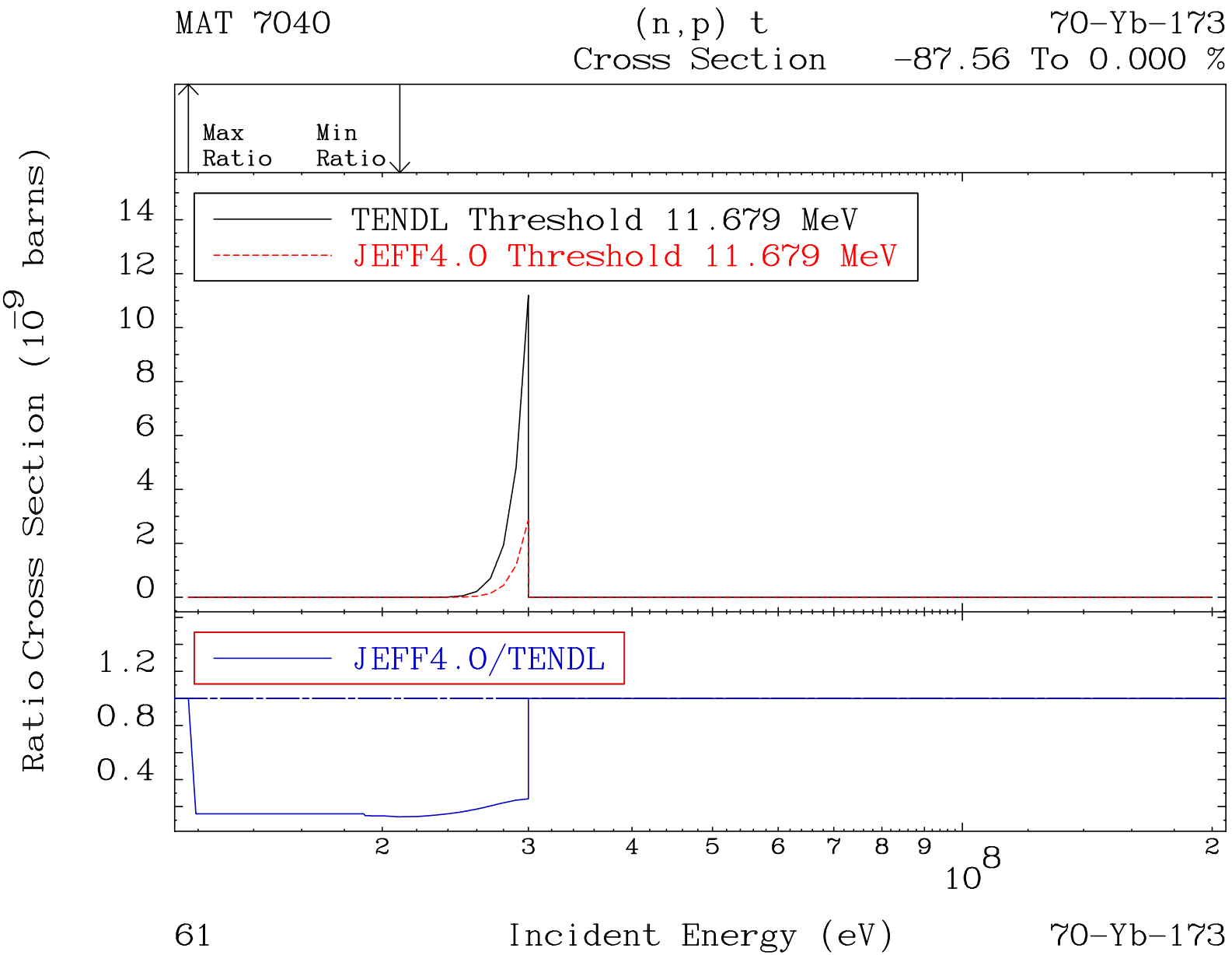

MAT 7040
(n,α)
Cross Section
70-Yb-173
-36.88 To 240.1 %
Min
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
JEFF4.0/TENDL
Ratio
4
2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
56
Incident Energy (eV)
70-Yb-173

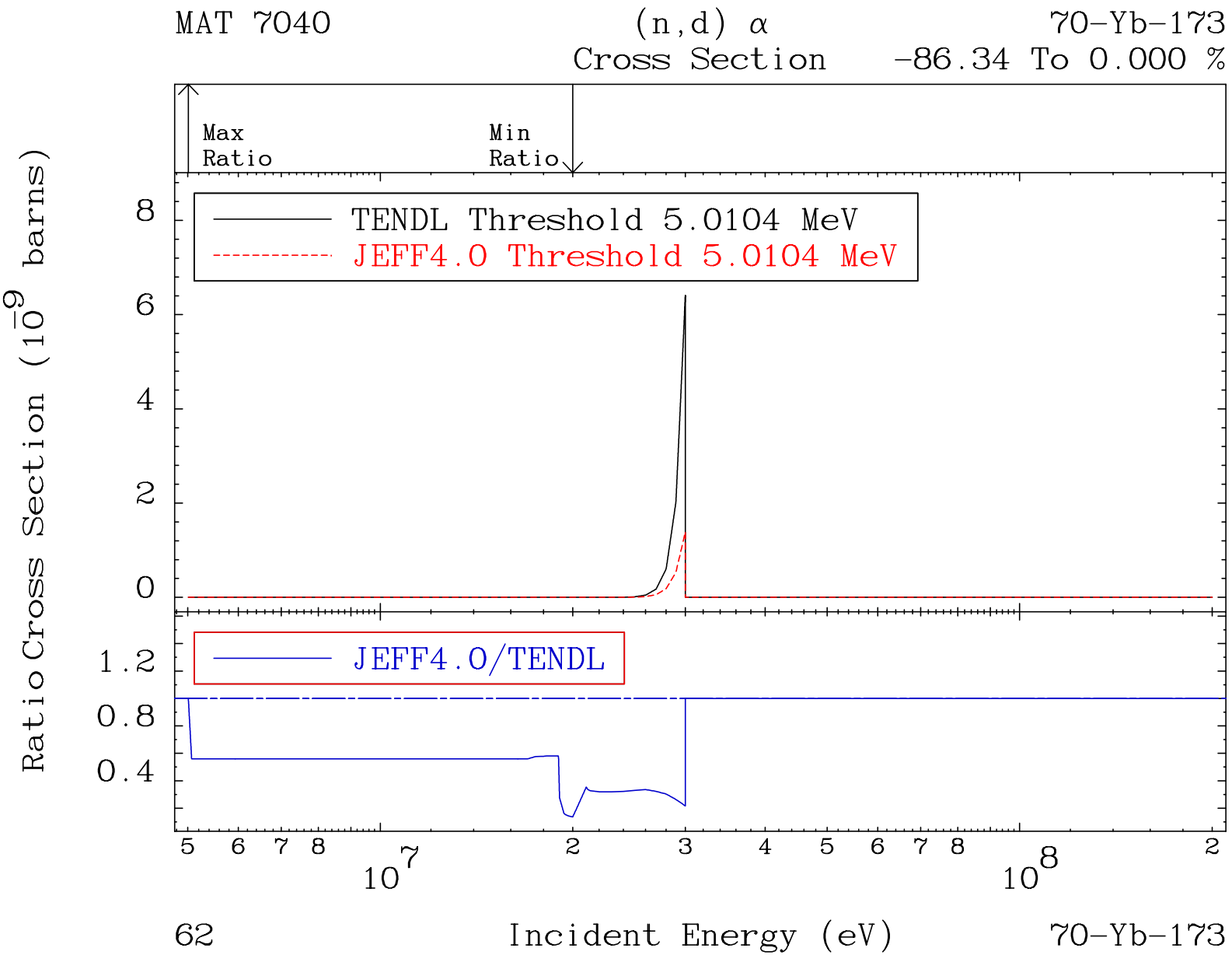

MAT 7040
(n,2α)
Cross Section
70-Yb-173
-96.90 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 1.7970 keV
JEFF4.0 Threshold 1.7970 keV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
500
400
300
200
100
0
10^0
10^-1
2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
57
Incident Energy (eV)
70-Yb-173

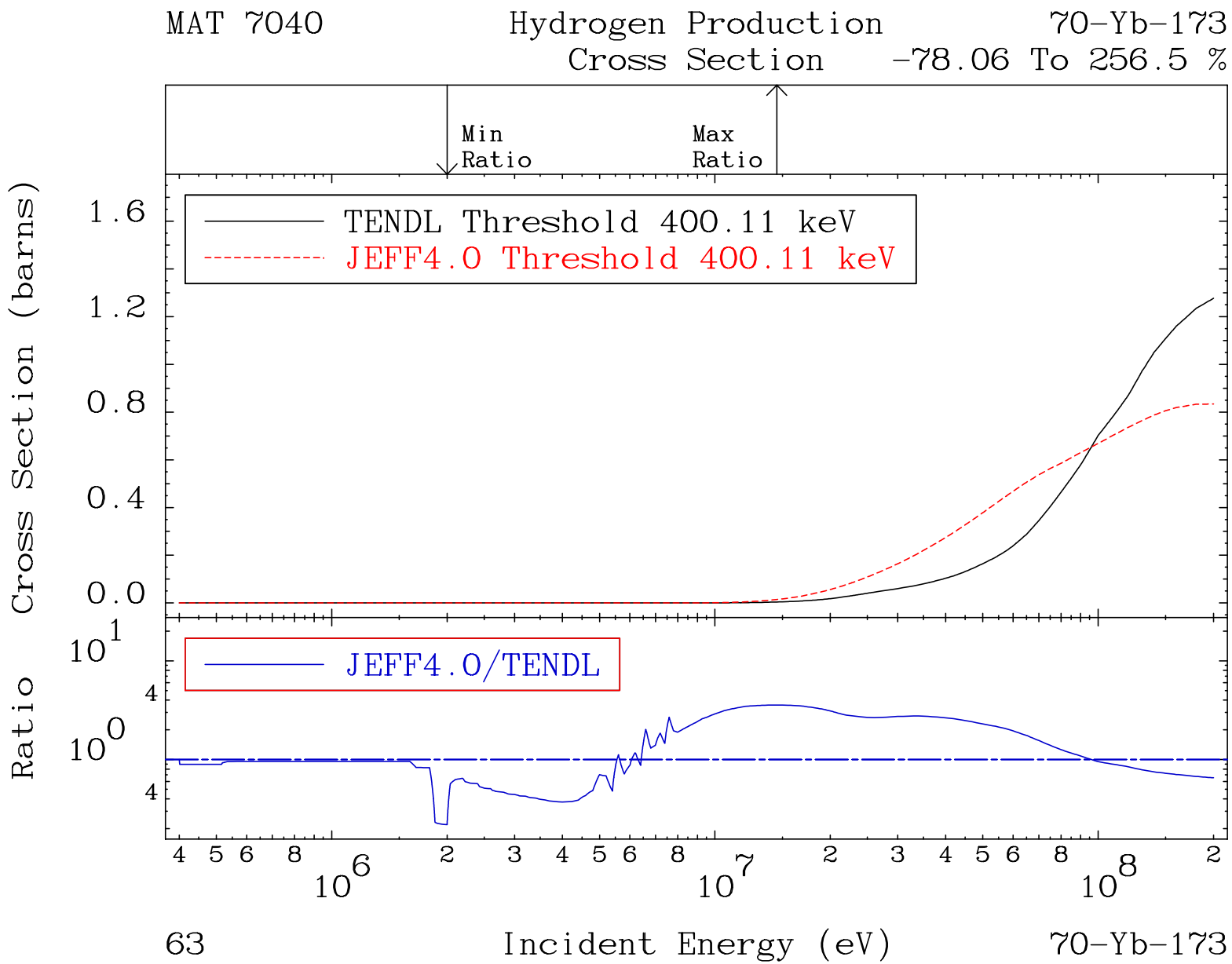

MAT 7040
(n,2p)
Cross Section
70-Yb-173
-96.64 To 364.9 %
Max Ratio
Min Ratio
TENDL Threshold 7.6195 MeV
JEFF4.0 Threshold 7.6195 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
58
70-Yb-173

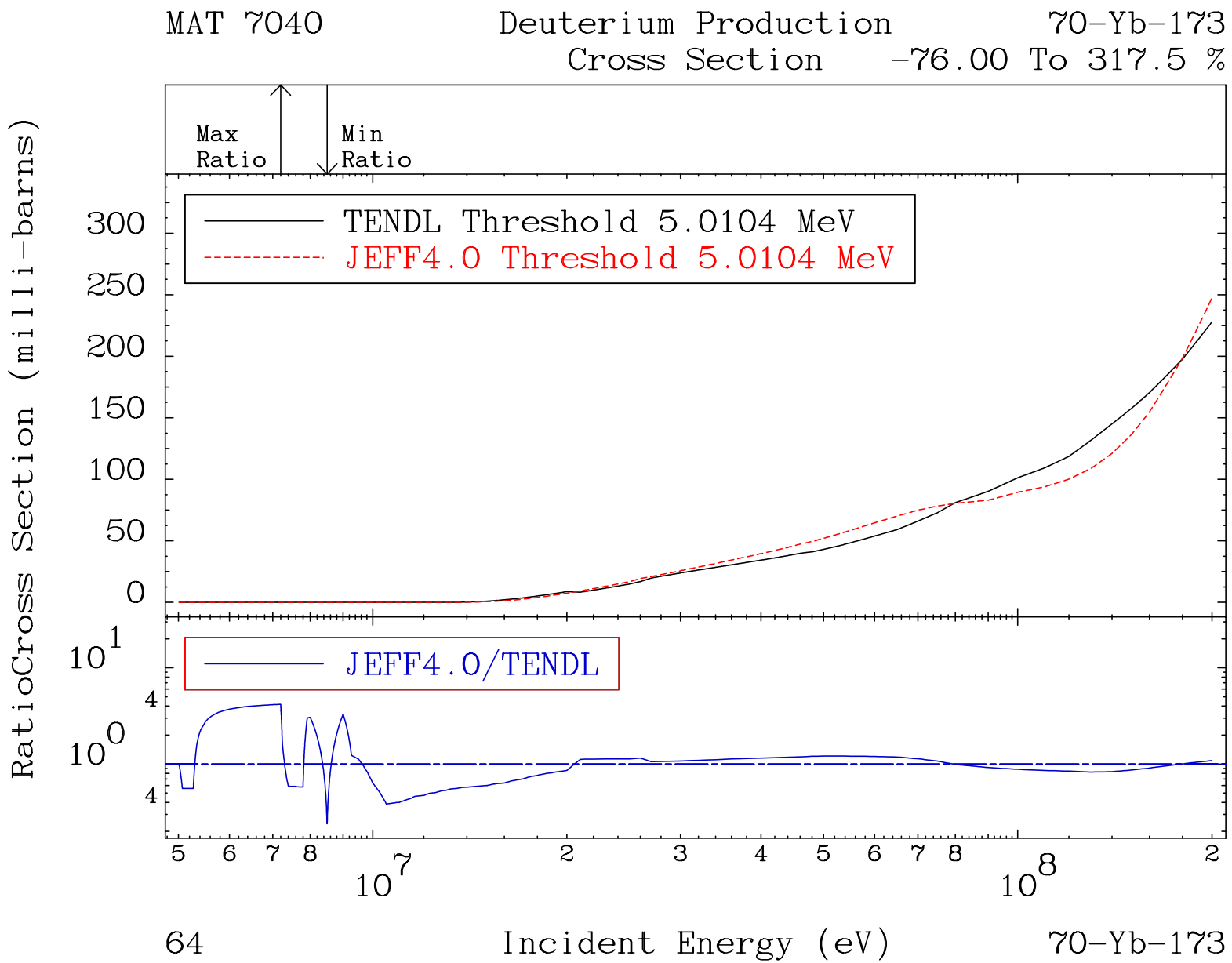

MAT 7040
(n,p) α
Cross Section
70-Yb-173
-95.32 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 400.11 keV
JEFF4.0 Threshold 400.11 keV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^0
10^-1
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
59
Incident Energy (eV)
70-Yb-173

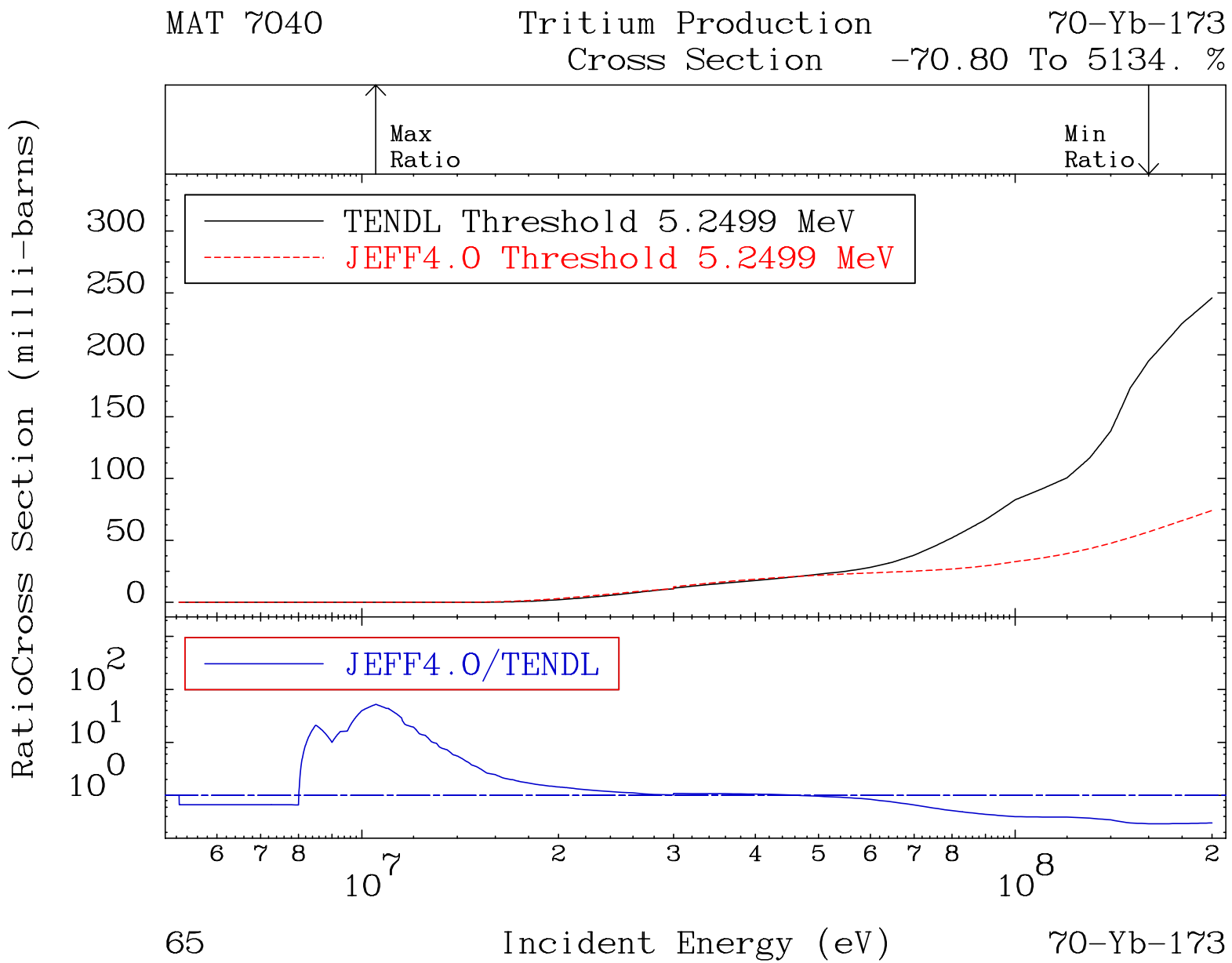

MAT 7040
(n,p) d
Cross Section
70-Yb-173
-86.76 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 12.258 MeV
JEFF4.0 Threshold 12.258 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
8
6
4
2
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
2
10^8
60
Incident Energy (eV)
70-Yb-173

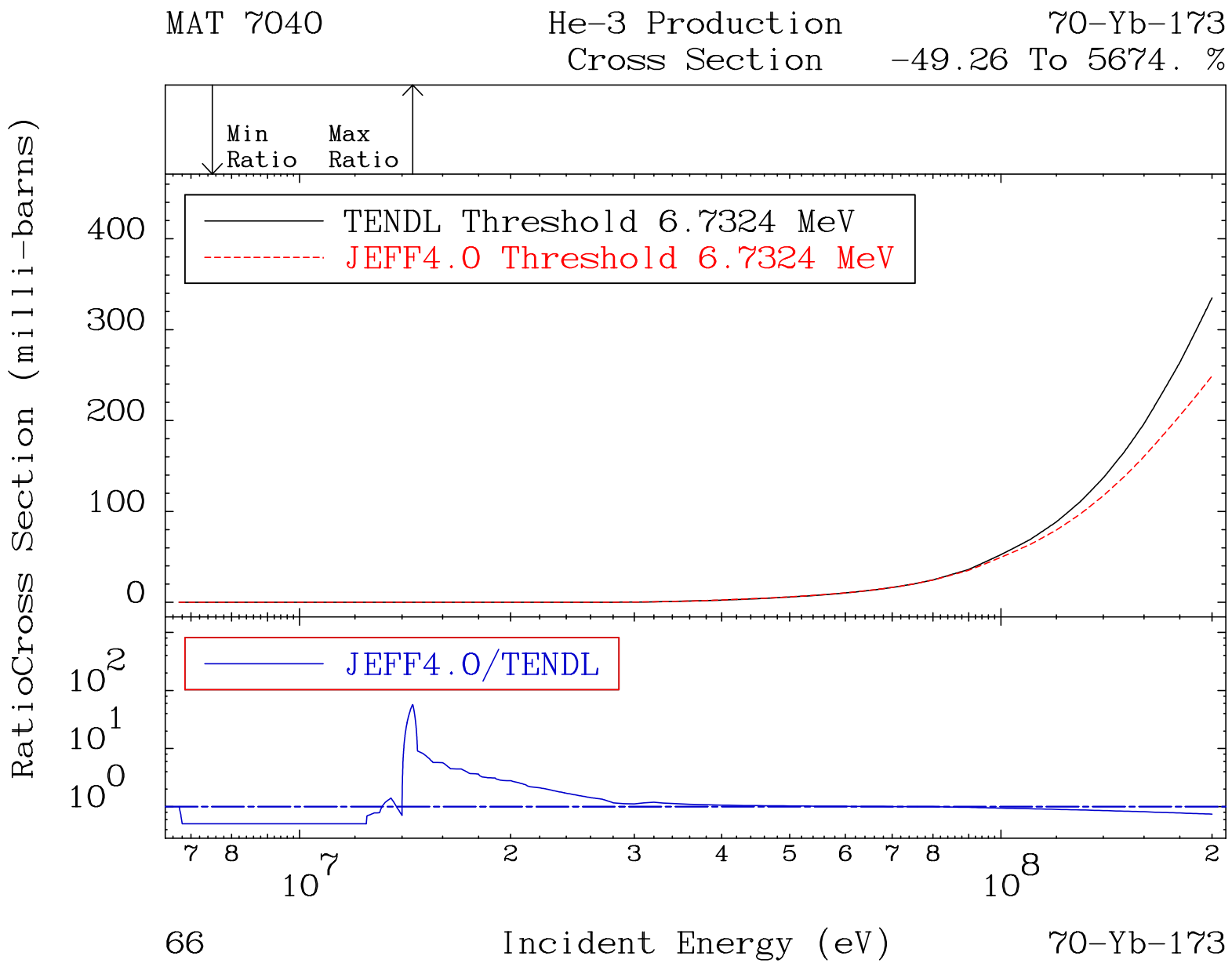

MAT 7040
(n,p) t
Cross Section
70-Yb-173
-87.56 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 11.679 MeV
JEFF4.0 Threshold 11.679 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
14
12
10
8
6
4
2
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
2
10^8
61
Incident Energy (eV)
70-Yb-173

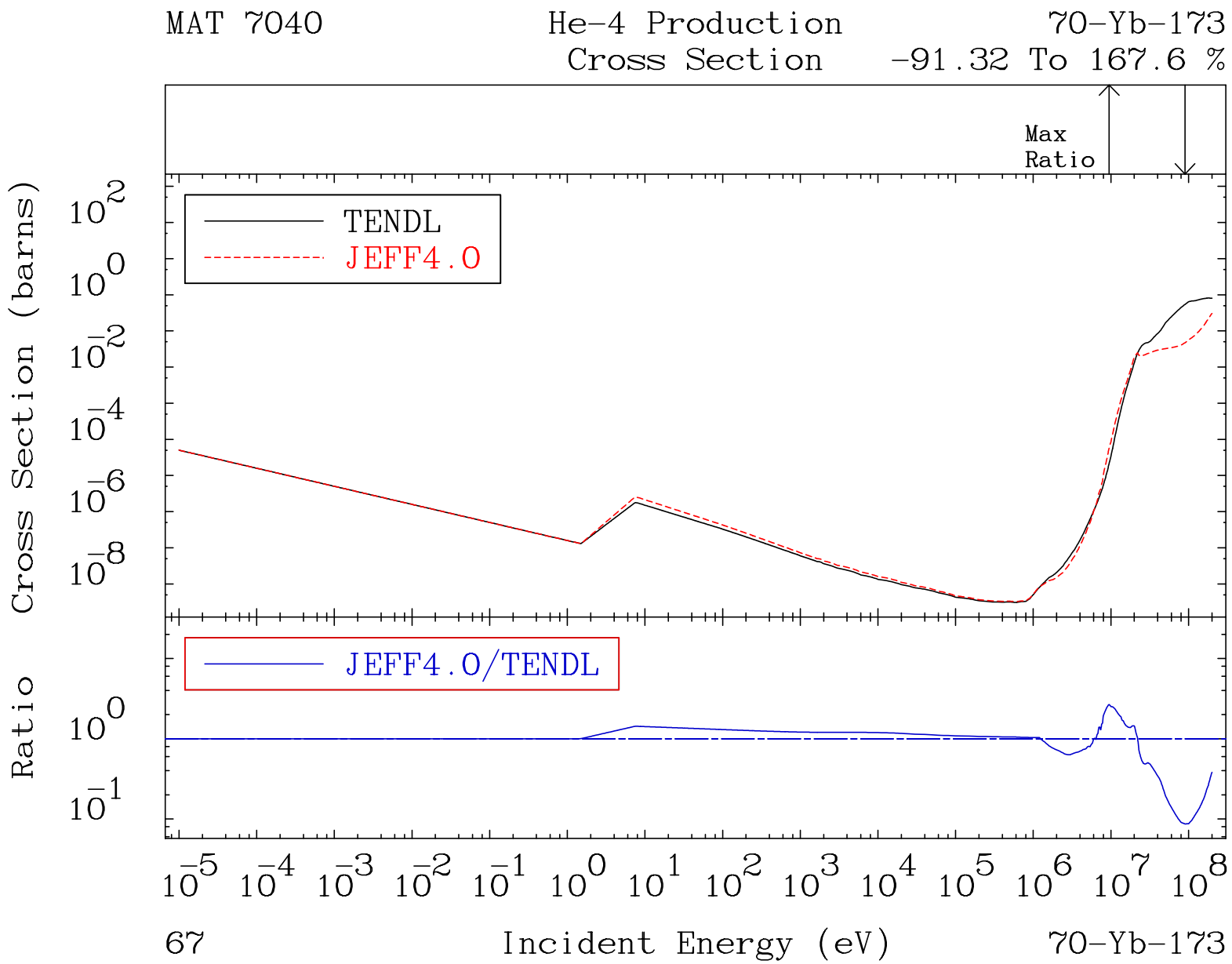

MAT 7040
(n,d) α
Cross Section
70-Yb-173
-86.34 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 5.0104 MeV
JEFF4.0 Threshold 5.0104 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
62
70-Yb-173

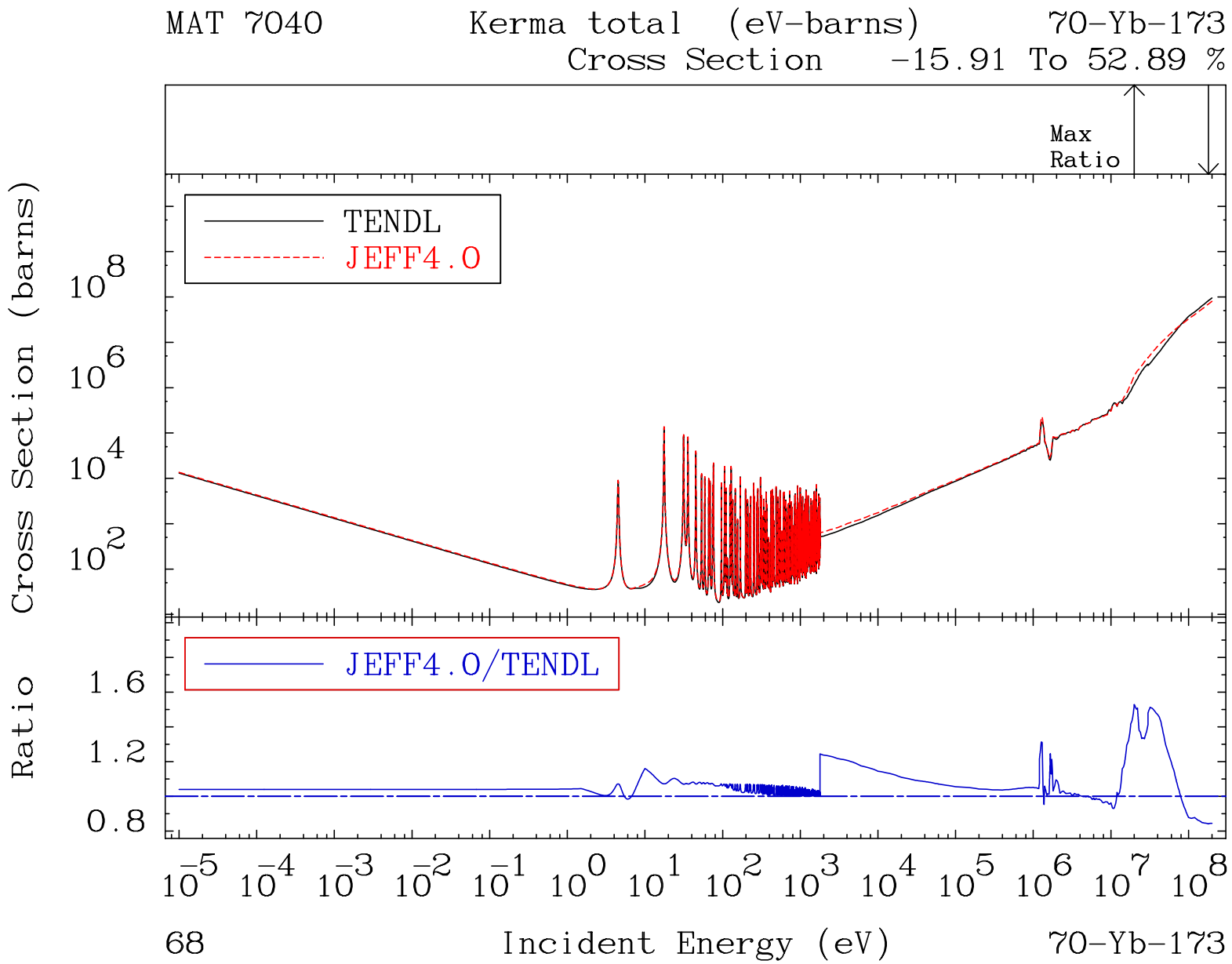

MAT 7040
Hydrogen Production
Cross Section
70-Yb-173
-78.06 To 256.5 %
Min Ratio
Max Ratio
TENDL Threshold 400.11 keV
JEFF4.0 Threshold 400.11 keV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
JEFF4.0/TENDL
Ratio
10^1
10^0
4
4
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
63
Incident Energy (eV)
70-Yb-173

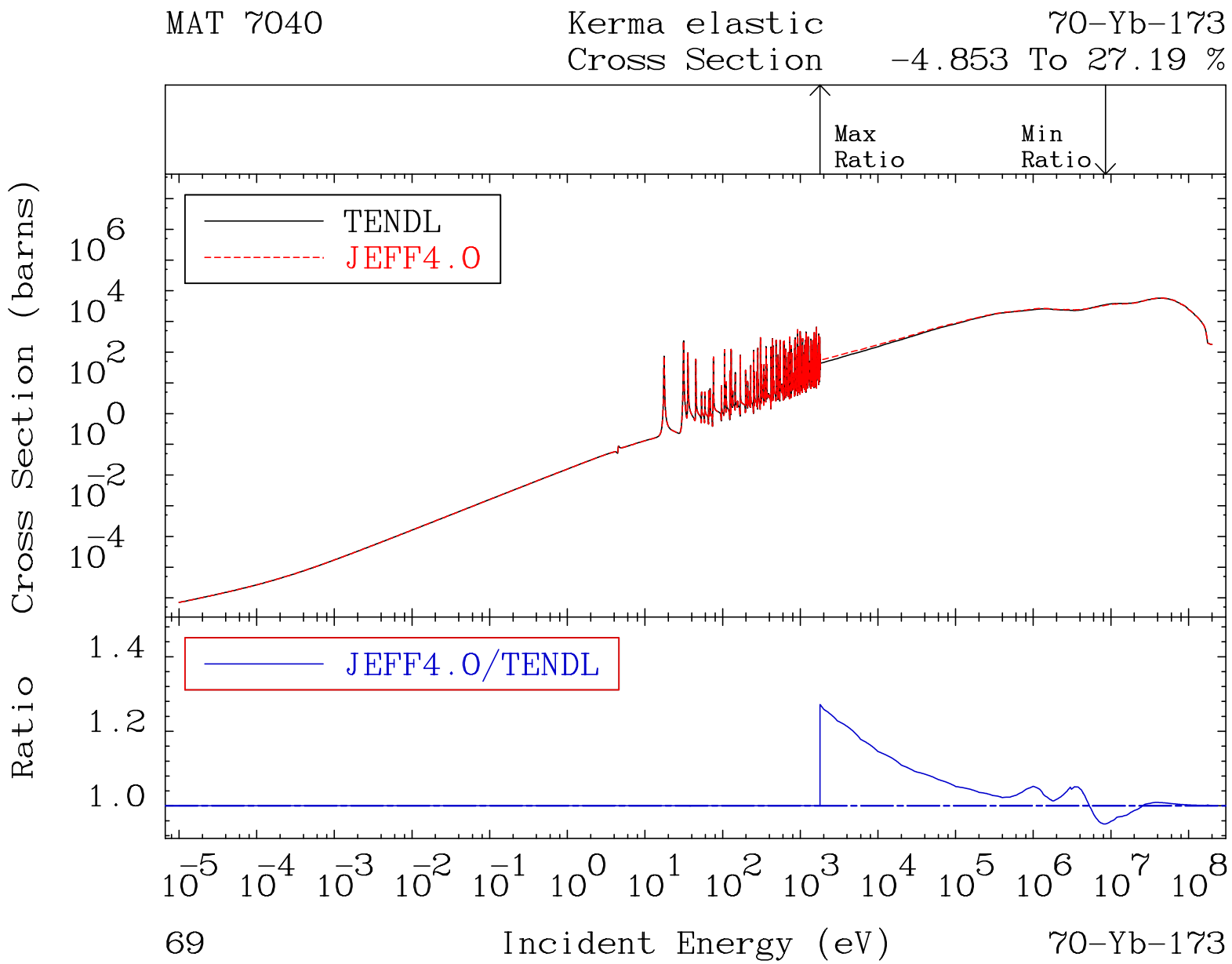

MAT 7040
Deuterium Production
70-Yb-173
Cross Section
-76.00 To 317.5 %
Max Ratio
Min Ratio
TENDL Threshold 5.0104 MeV
JEFF4.0 Threshold 5.0104 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^1
10^0
4
4
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
64
Incident Energy (eV)
70-Yb-173

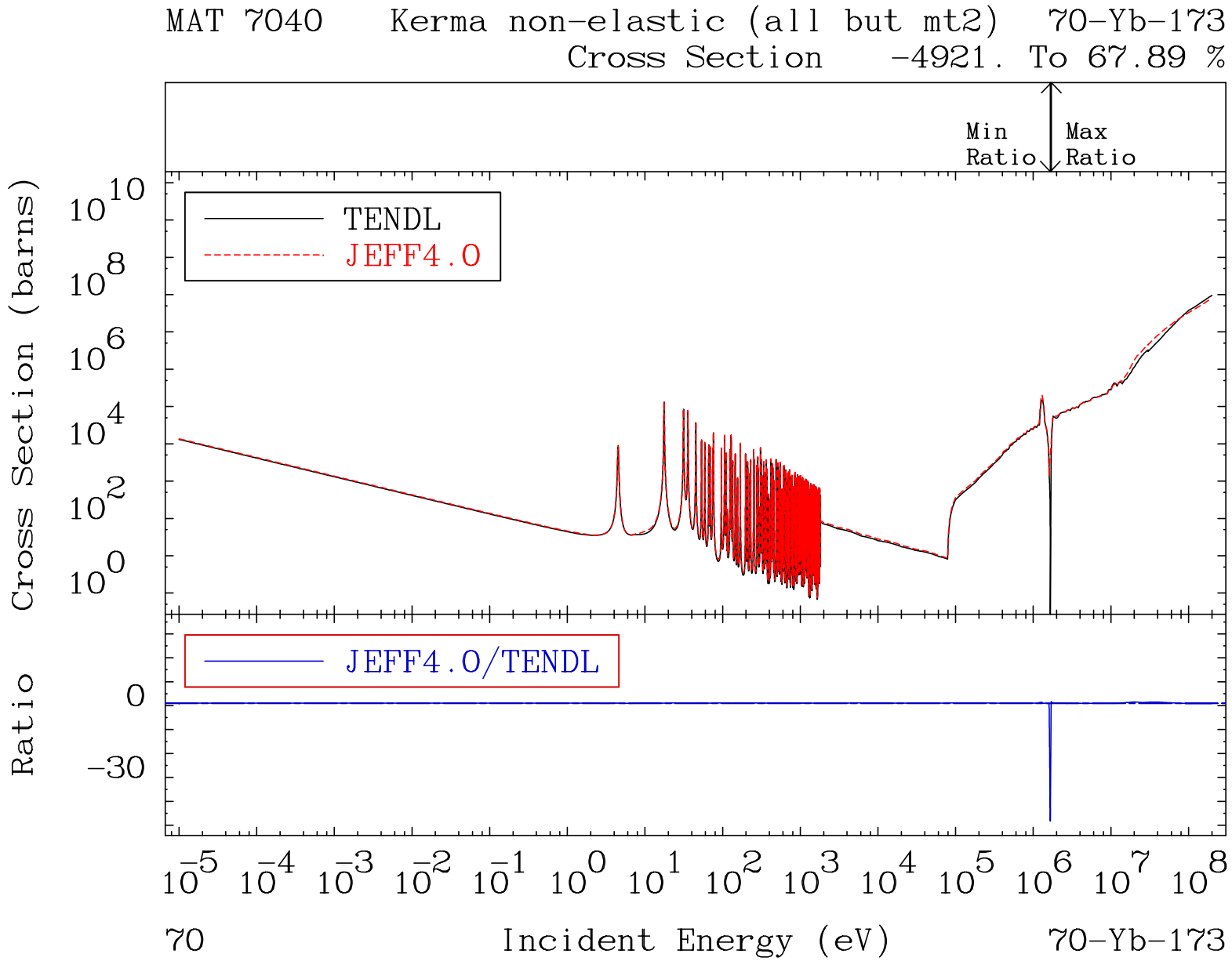

MAT 7040
Tritium Production
70-Yb-173
Cross Section
-70.80 To 5134. %
Max
Ratio
Min
Ratio
TENDL Threshold 5.2499 MeV
JEFF4.0 Threshold 5.2499 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^2
10^1
10^0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
70-Yb-173

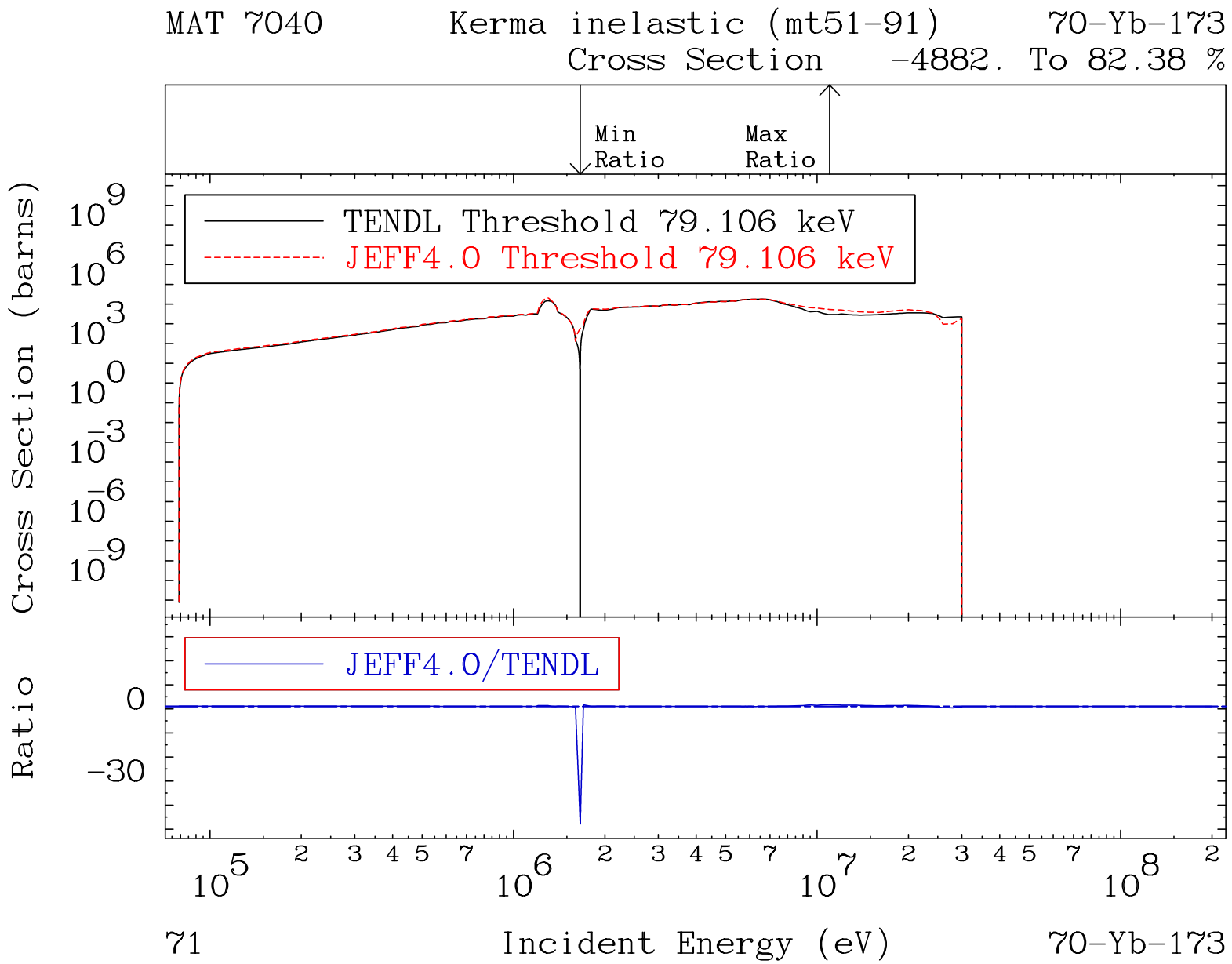

MAT 7040
He-3 Production
Cross Section
70-Yb-173
-49.26 To 5674. %
Min Ratio
Max Ratio
TENDL Threshold 6.7324 MeV
JEFF4.0 Threshold 6.7324 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^2
10^1
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
66
Incident Energy (eV)
70-Yb-173

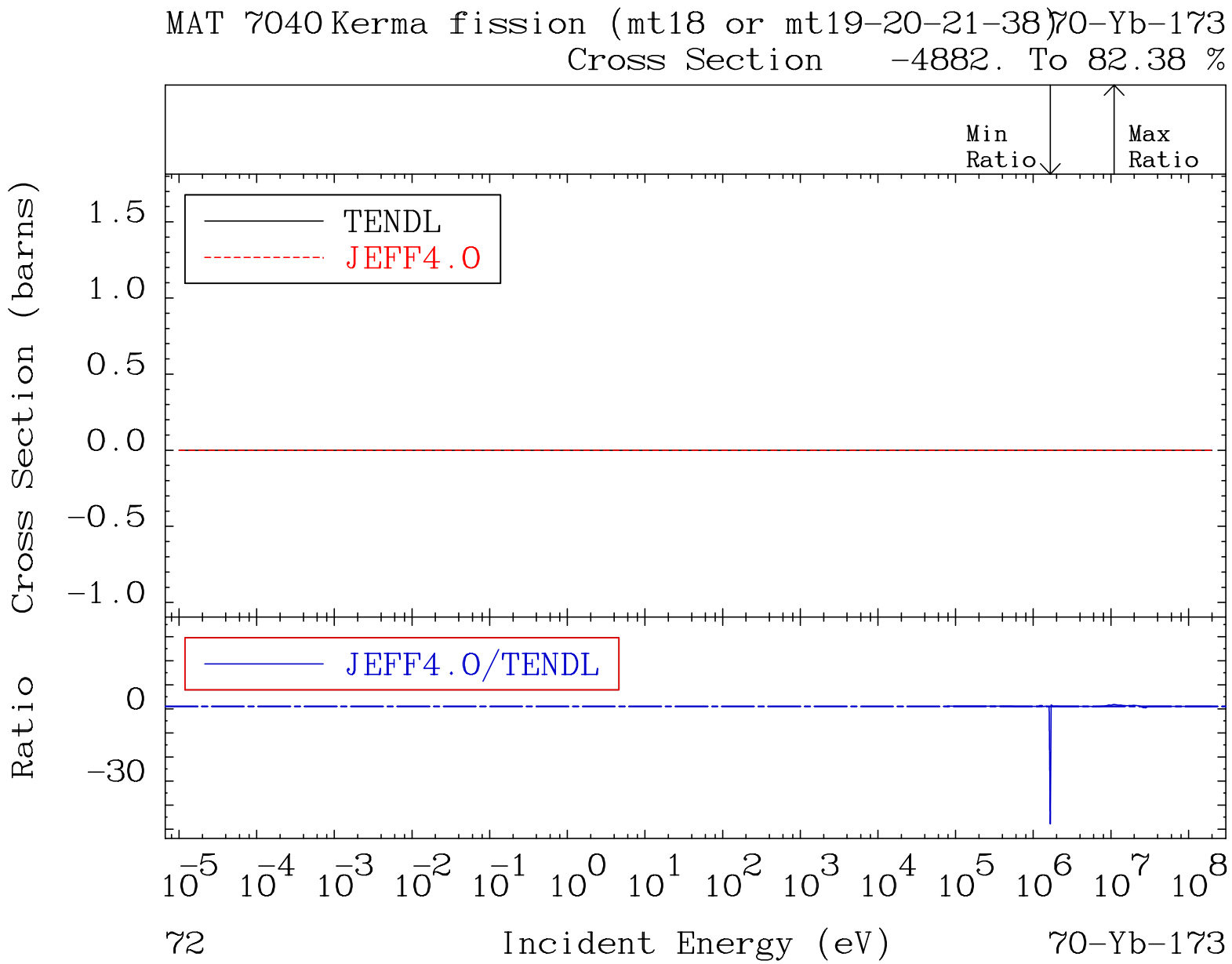

MAT 7040
He-4 Production
Cross Section
70-Yb-173
-91.32 To 167.6 %
Max
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
70-Yb-173

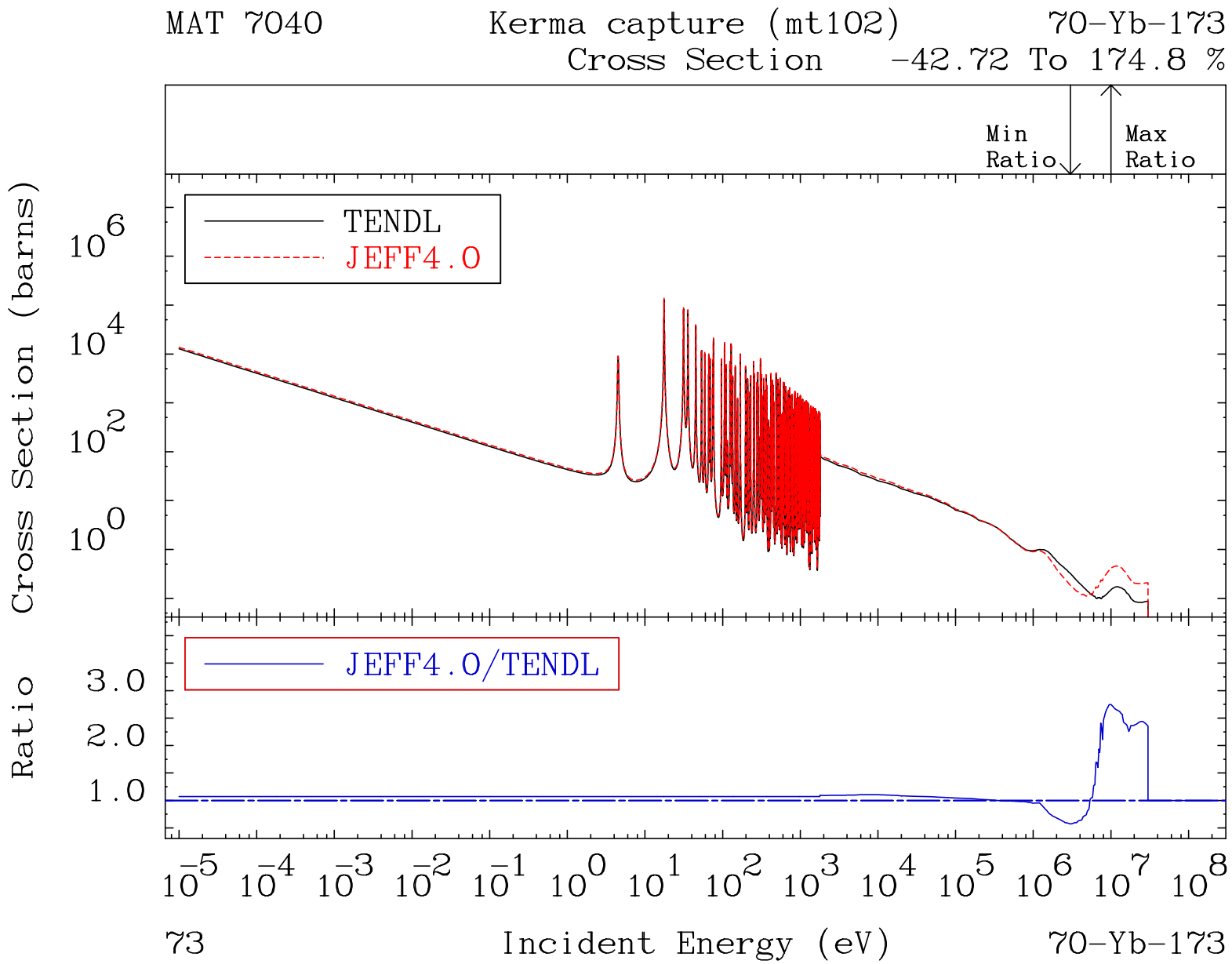

MAT 7040
Kerma total (eV-barns)
70-Yb-173
Cross Section -15.91 To 52.89 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^8
10^6
10^4
10^2
JEFF4.0/TENDL
Ratio
1.6
1.2
0.8
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
68
Incident Energy (eV)
70-Yb-173

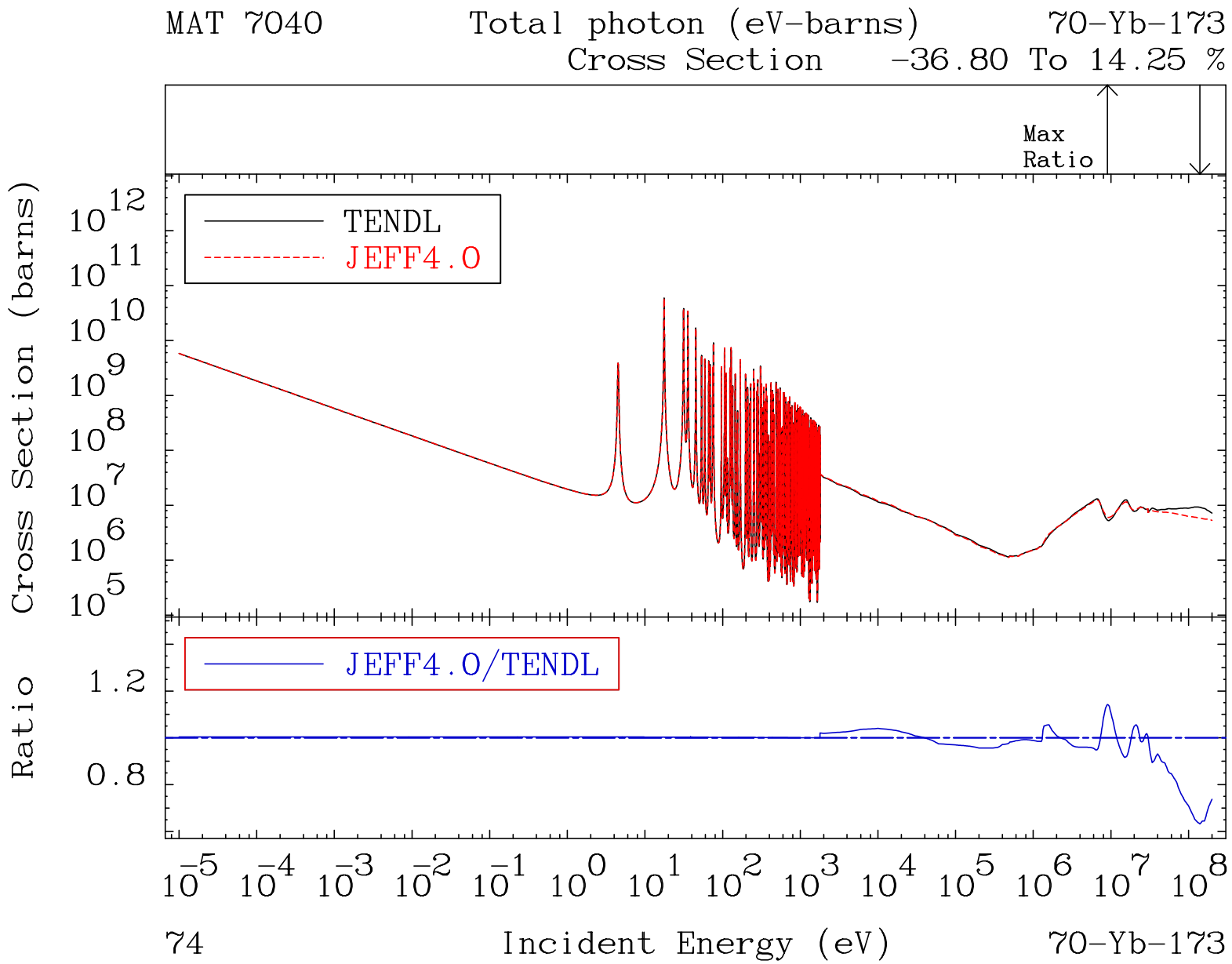

MAT 7040
Kerma elastic
Cross Section
70-Yb-173
-4.853 To 27.19 %
Max
Ratio
Min
Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
69
70-Yb-173

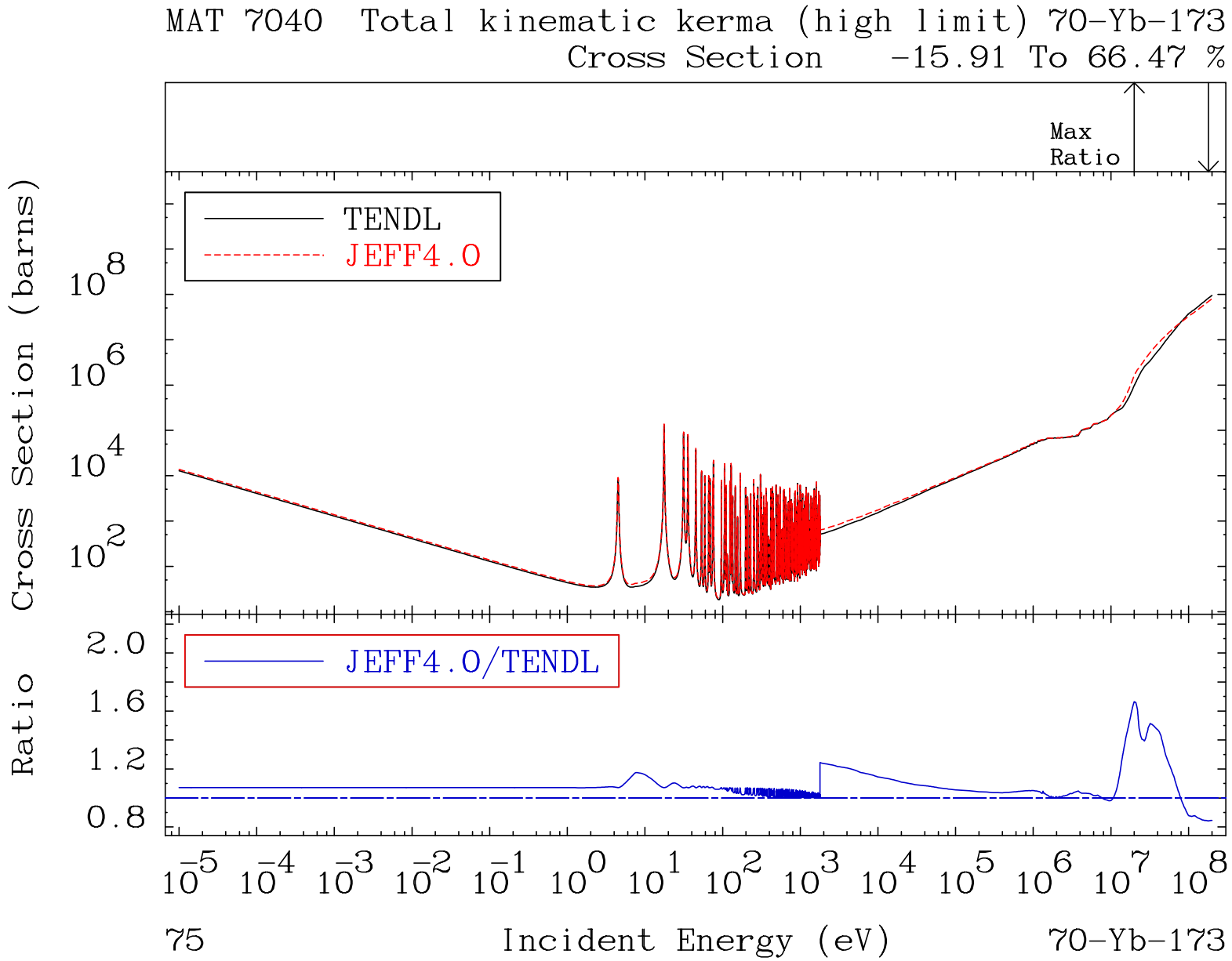

MAT 7040 Kerma non-elastic (all but mt2) 70-Yb-173
Cross Section -4921. To 67.89 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
70
70-Yb-173

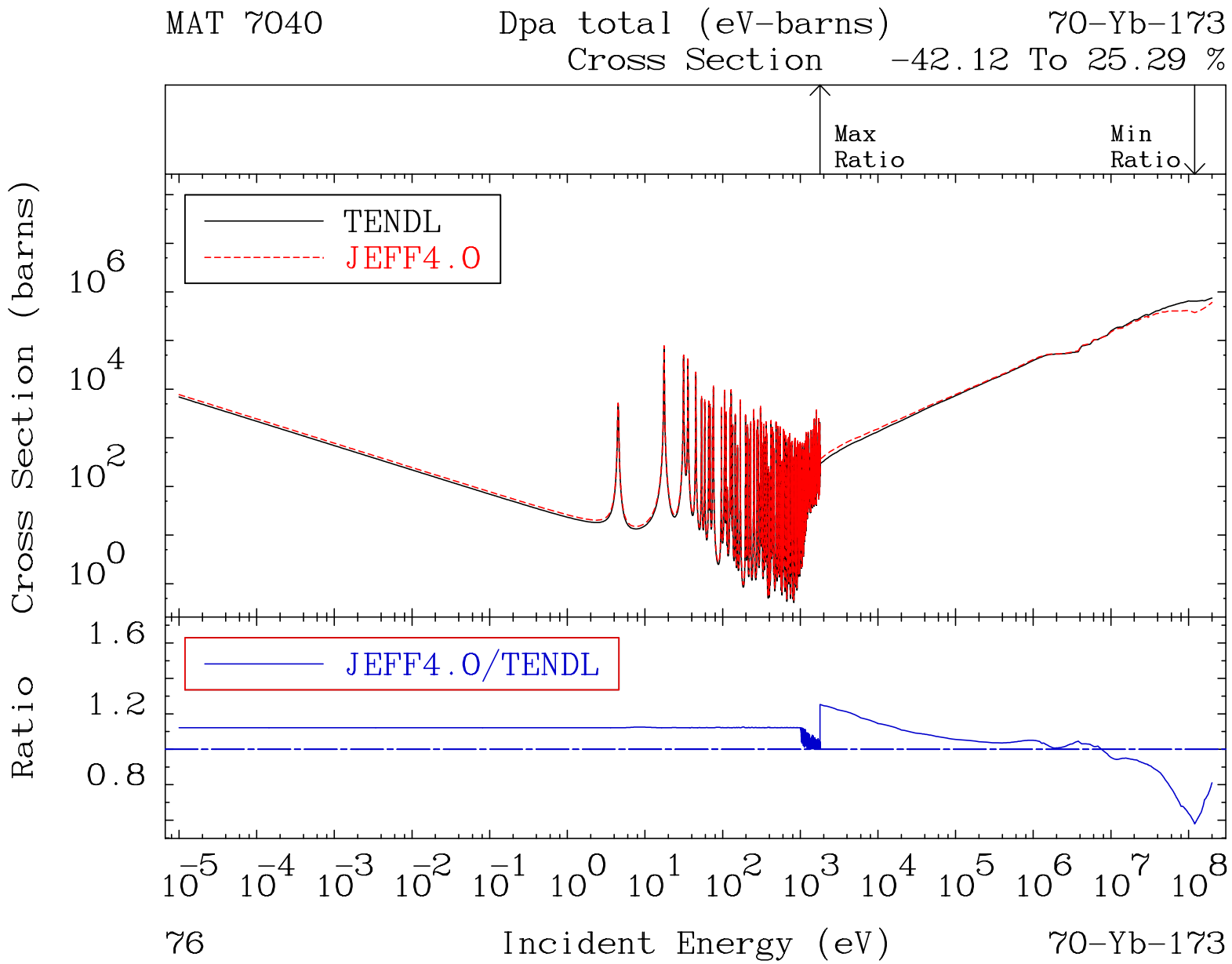

MAT 7040
Kerma inelastic (mt51-91)
70-Yb-173
Cross Section -4882. To 82.38 %
Min Ratio
Max Ratio
TENDL Threshold 79.106 keV
JEFF4.0 Threshold 79.106 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
70-Yb-173

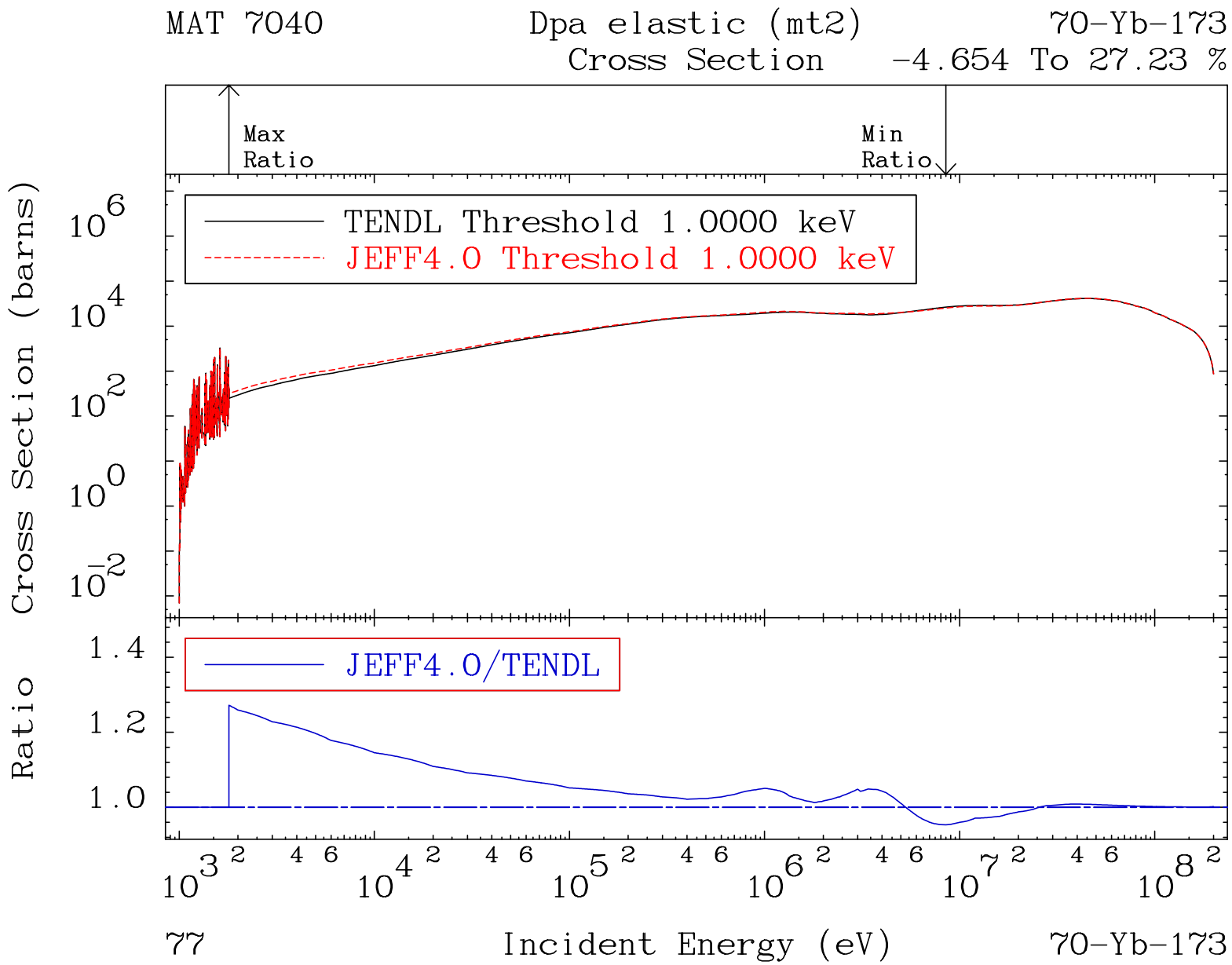

MAT 7040 Kerma fission (mt18 or mt19-20-21-38) 70-Yb-173
Cross Section -4882. To 82.38 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-30
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
72
Incident Energy (eV)
70-Yb-173

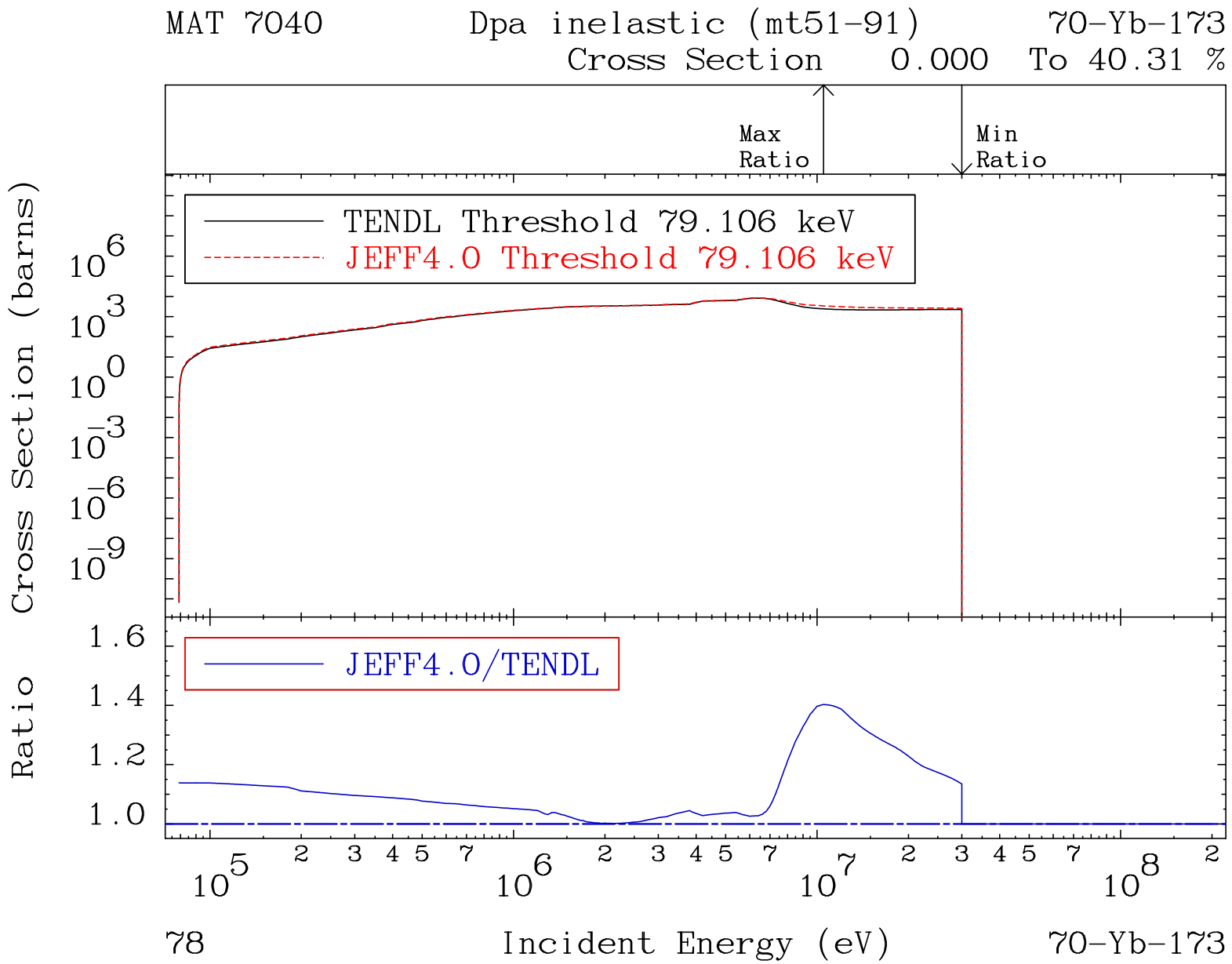

MAT 7040
Kerma capture (mt102)
70-Yb-173
Cross Section
-42.72 To 174.8 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
73
70-Yb-173

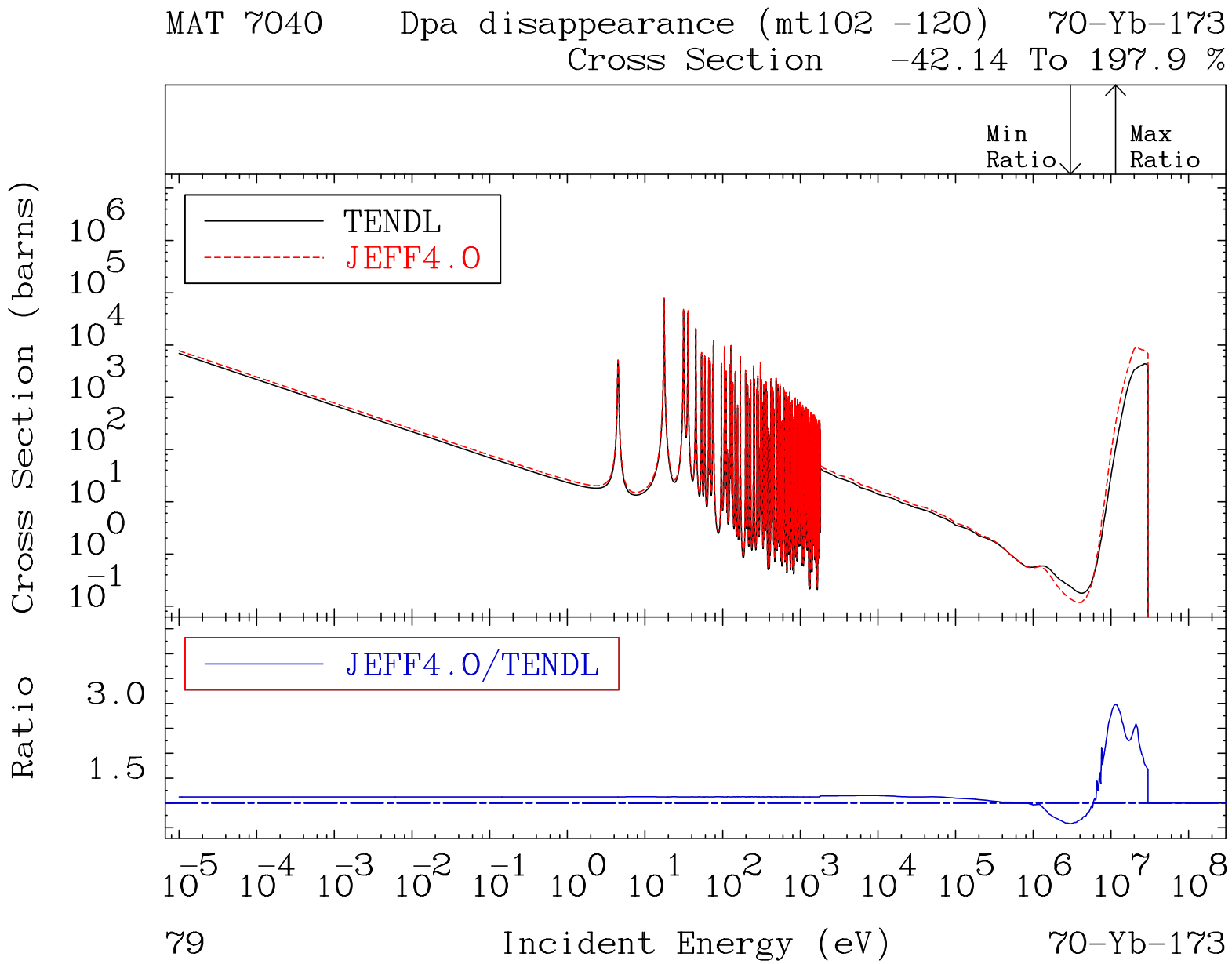

MAT 7040
Total photon (eV-barns)
70-Yb-173
Cross Section -36.80 To 14.25 %
Max
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
70-Yb-173

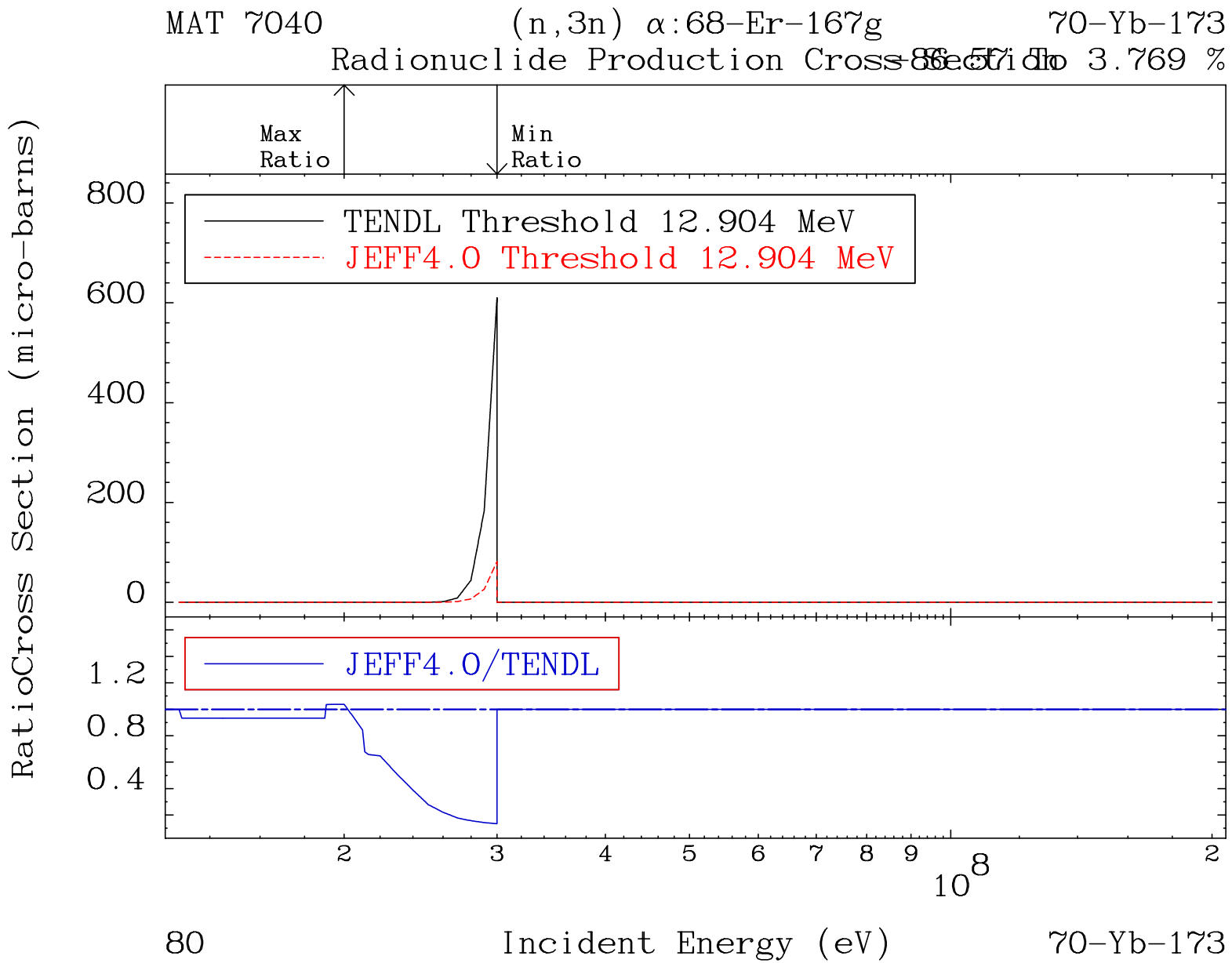

MAT 7040 Total kinematic kerma (high limit) 70-Yb-173
Cross Section -15.91 To 66.47 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^8
10^6
10^4
10^2
JEFF4.0/TENDL
Ratio
2.0
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
75
Incident Energy (eV)
70-Yb-173

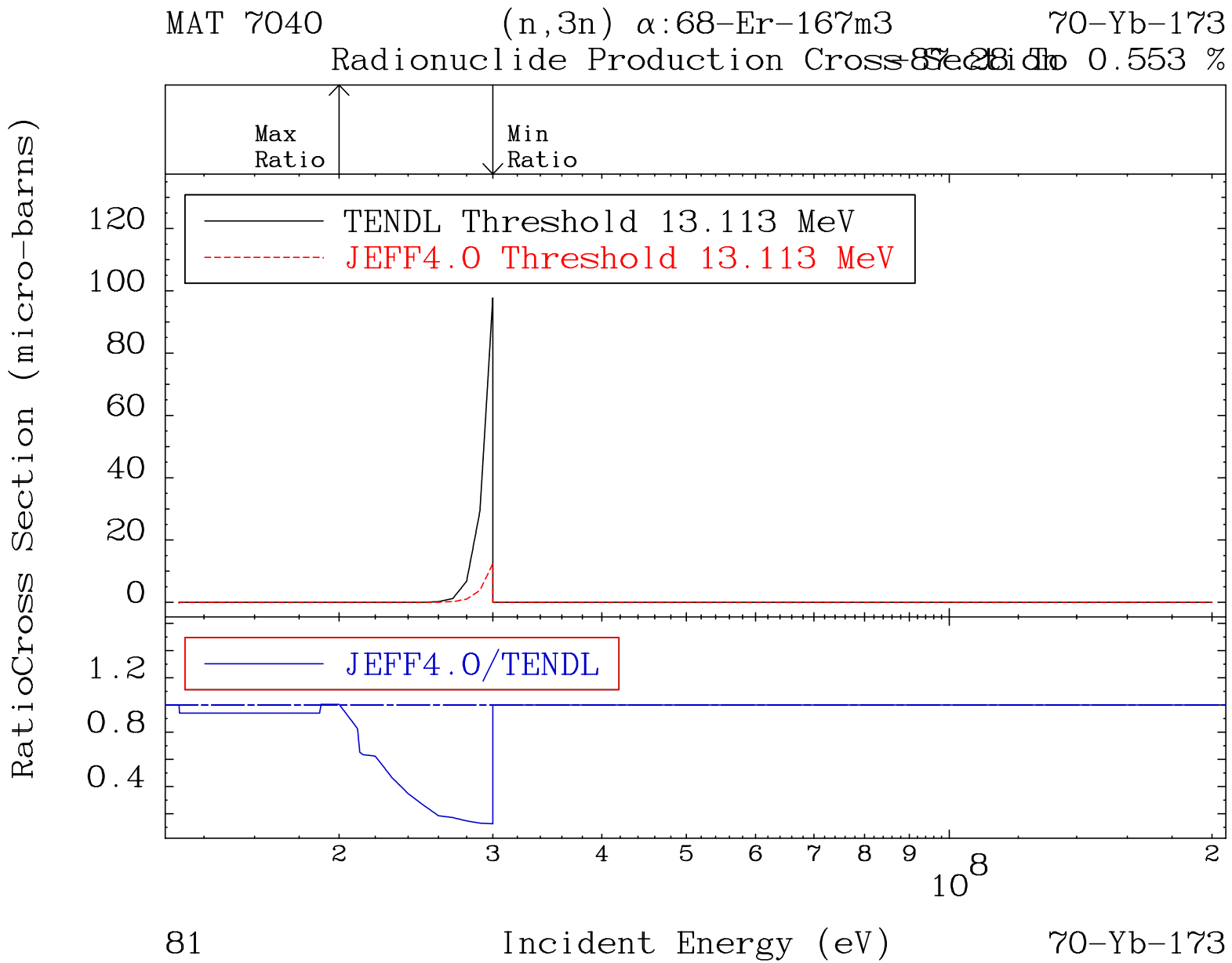

MAT 7040
Dpa total (eV-barns)
70-Yb-173
Cross Section
-42.12 To 25.29 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
70-Yb-173

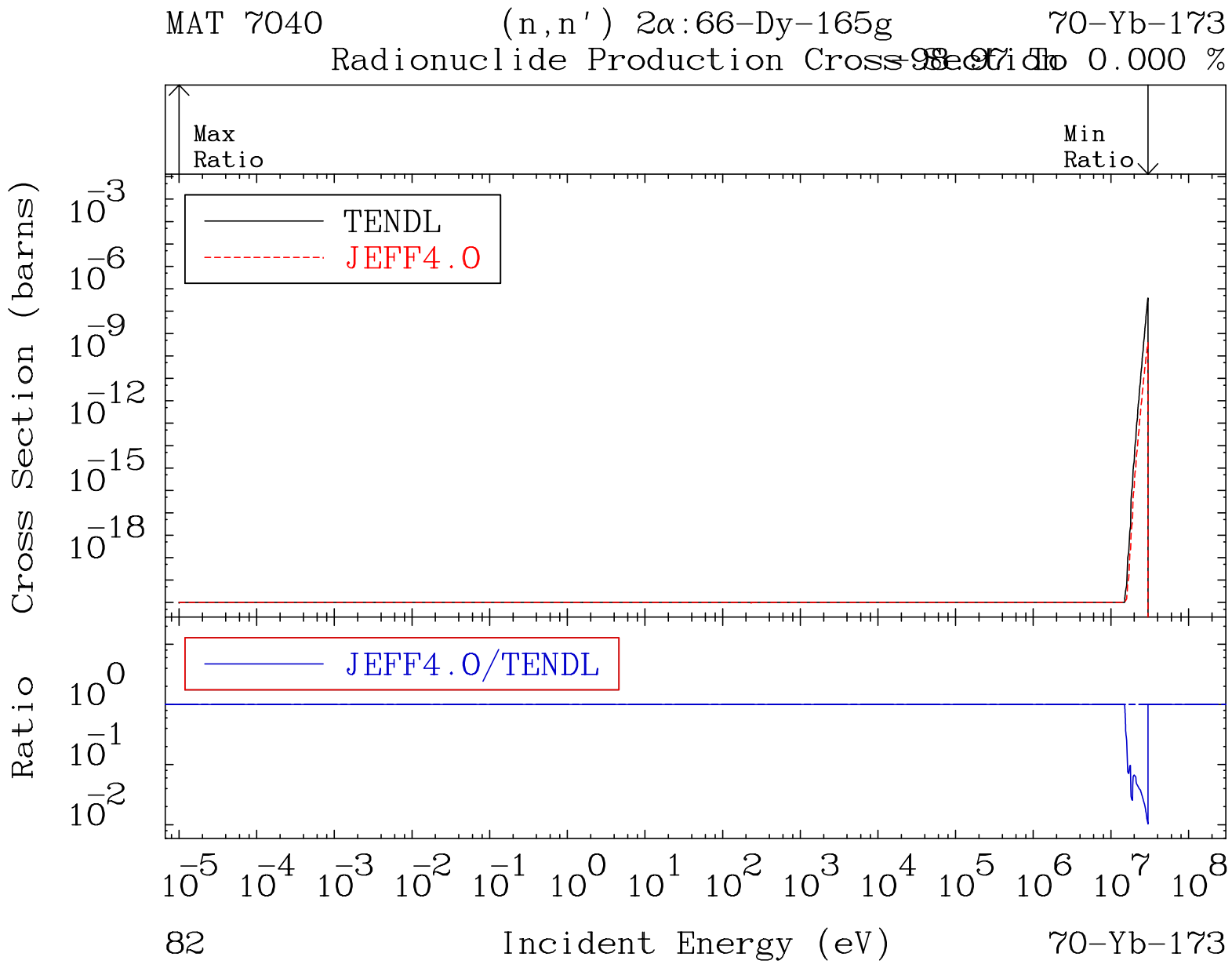

MAT 7040
Dpa elastic (mt2)
Cross Section
70-Yb-173
-4.654 To 27.23 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0000 keV
JEFF4.0 Threshold 1.0000 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
70-Yb-173

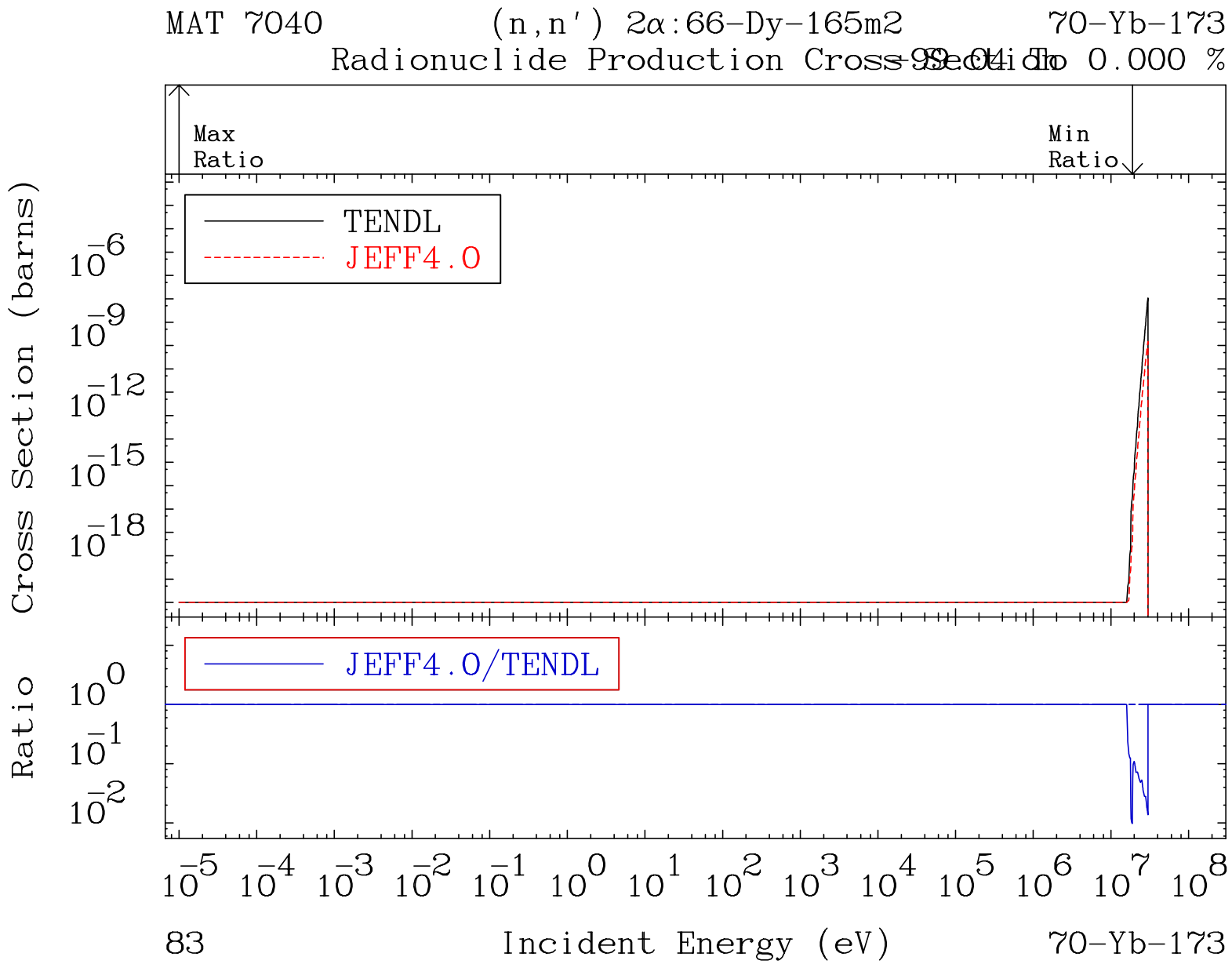

MAT 7040
Dpa inelastic (mt51-91)
70-Yb-173
Cross Section 0.000 To 40.31 %
Max Ratio
Min Ratio
TENDL Threshold 79.106 keV
JEFF4.0 Threshold 79.106 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
70-Yb-173

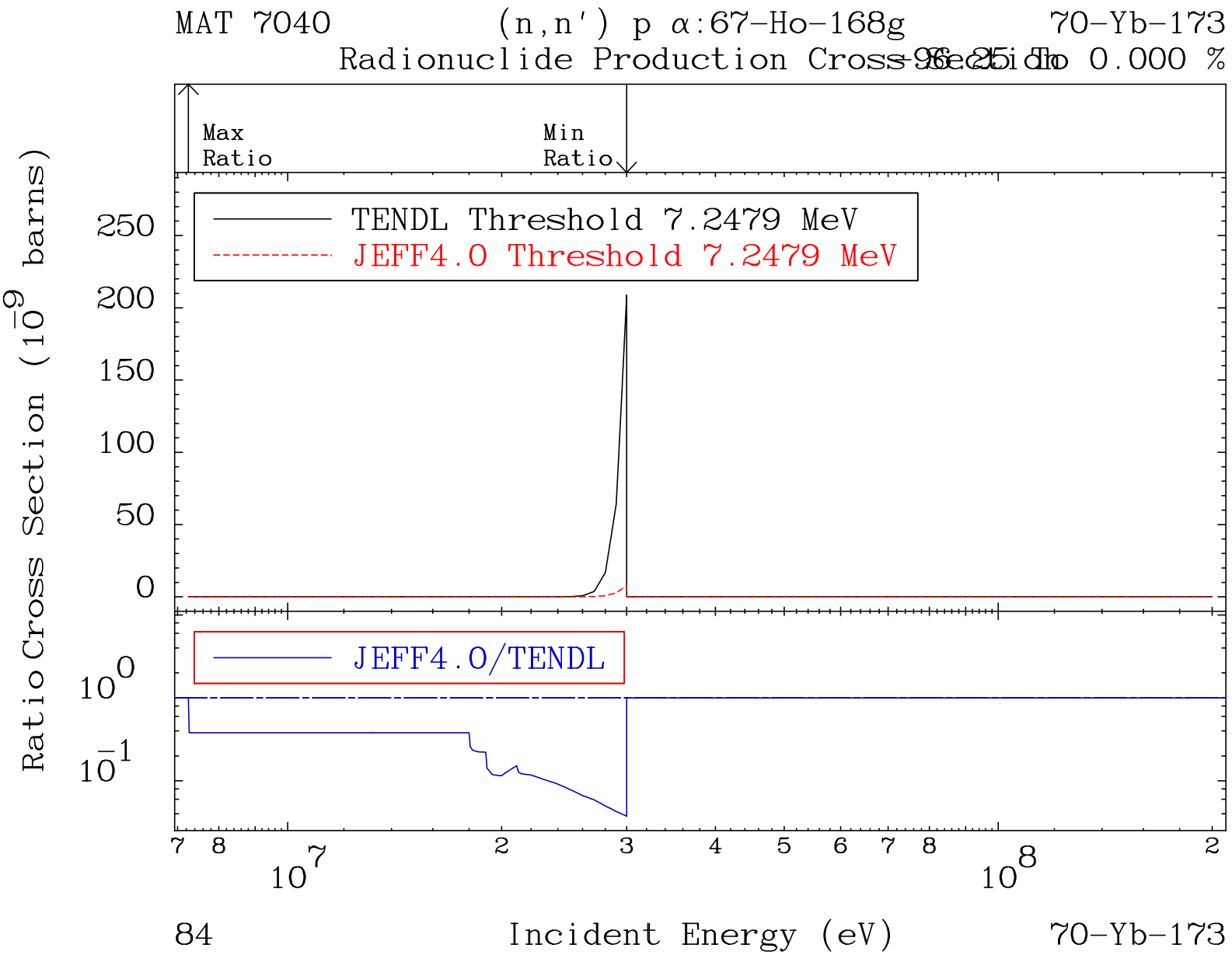

MAT 7040 Dpa disappearance (mt102 -120) 70-Yb-173
Cross Section -42.14 To 197.9 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
79
70-Yb-173

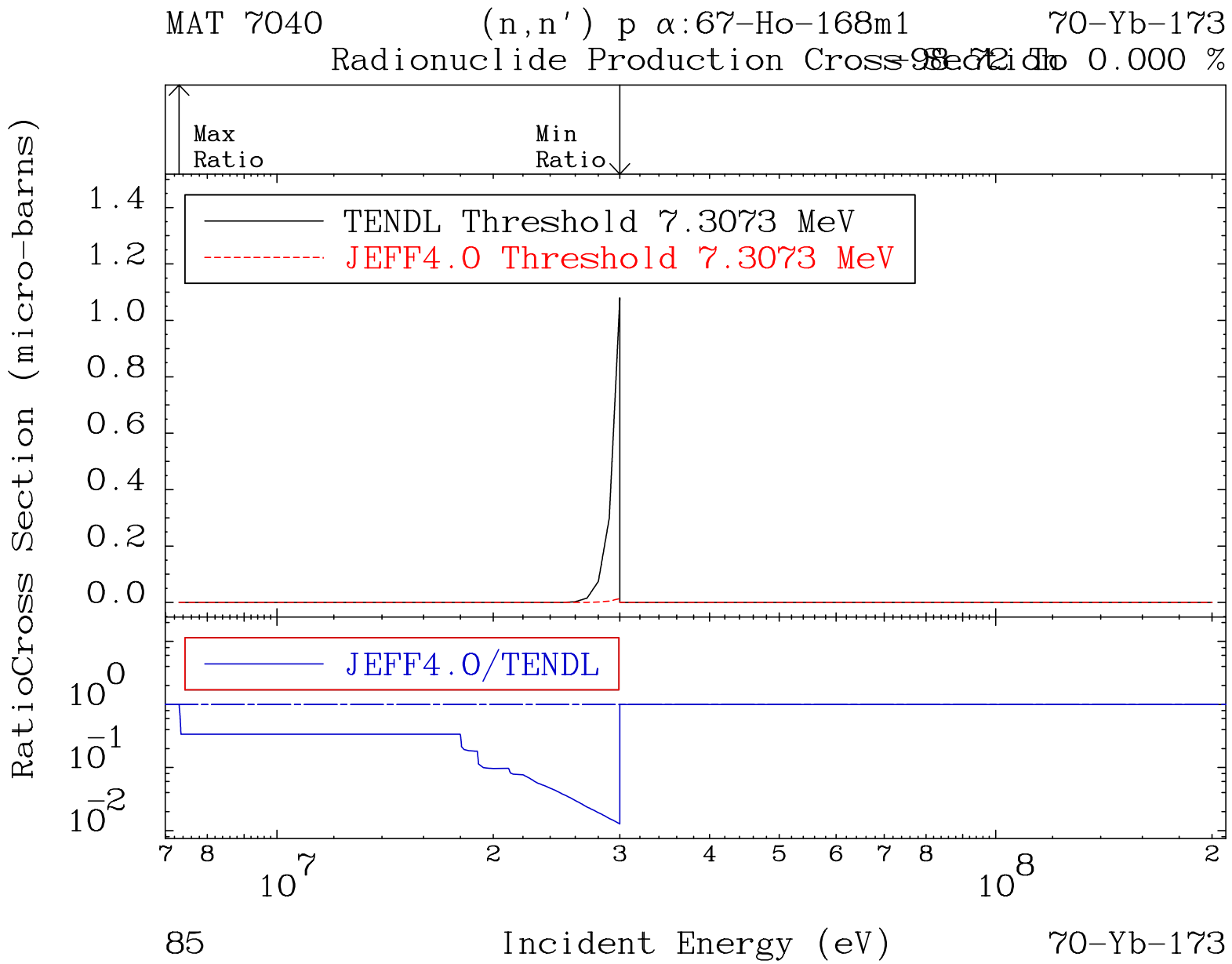

MAT 7040
(n,3n) α:68-Er-167g
70-Yb-173
Radionuclide Production Cross Section to 3.769 %
Max Ratio
Min Ratio
TENDL Threshold 12.904 MeV
JEFF4.0 Threshold 12.904 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
70-Yb-173

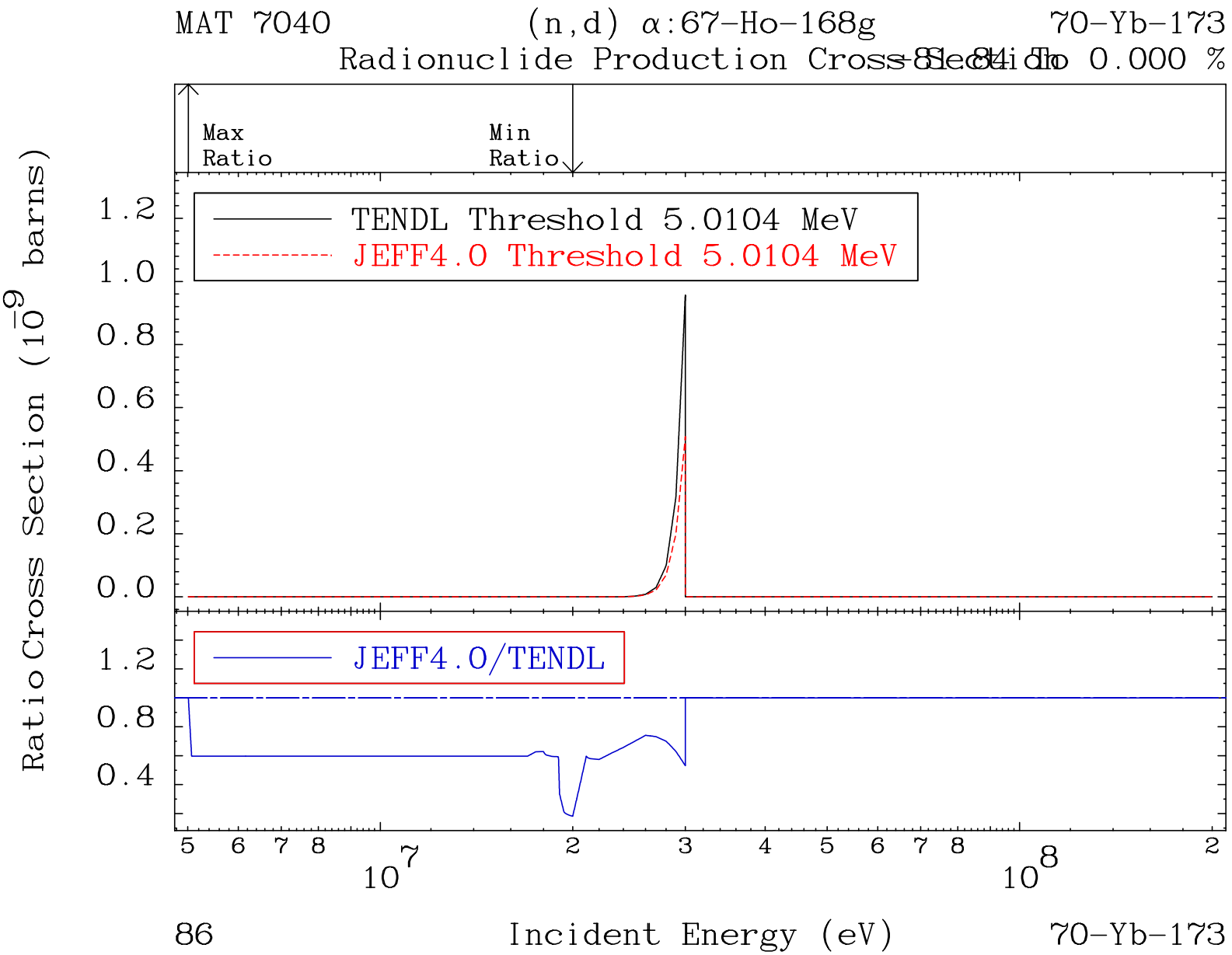

MAT 7040
(n,3n) α:68-Er-167m3
70-Yb-173
Radionuclide Production Cross Section To 0.553 %
Max Ratio
Min Ratio
TENDL Threshold 13.113 MeV
JEFF4.0 Threshold 13.113 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
120
100
80
60
40
20
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
70-Yb-173

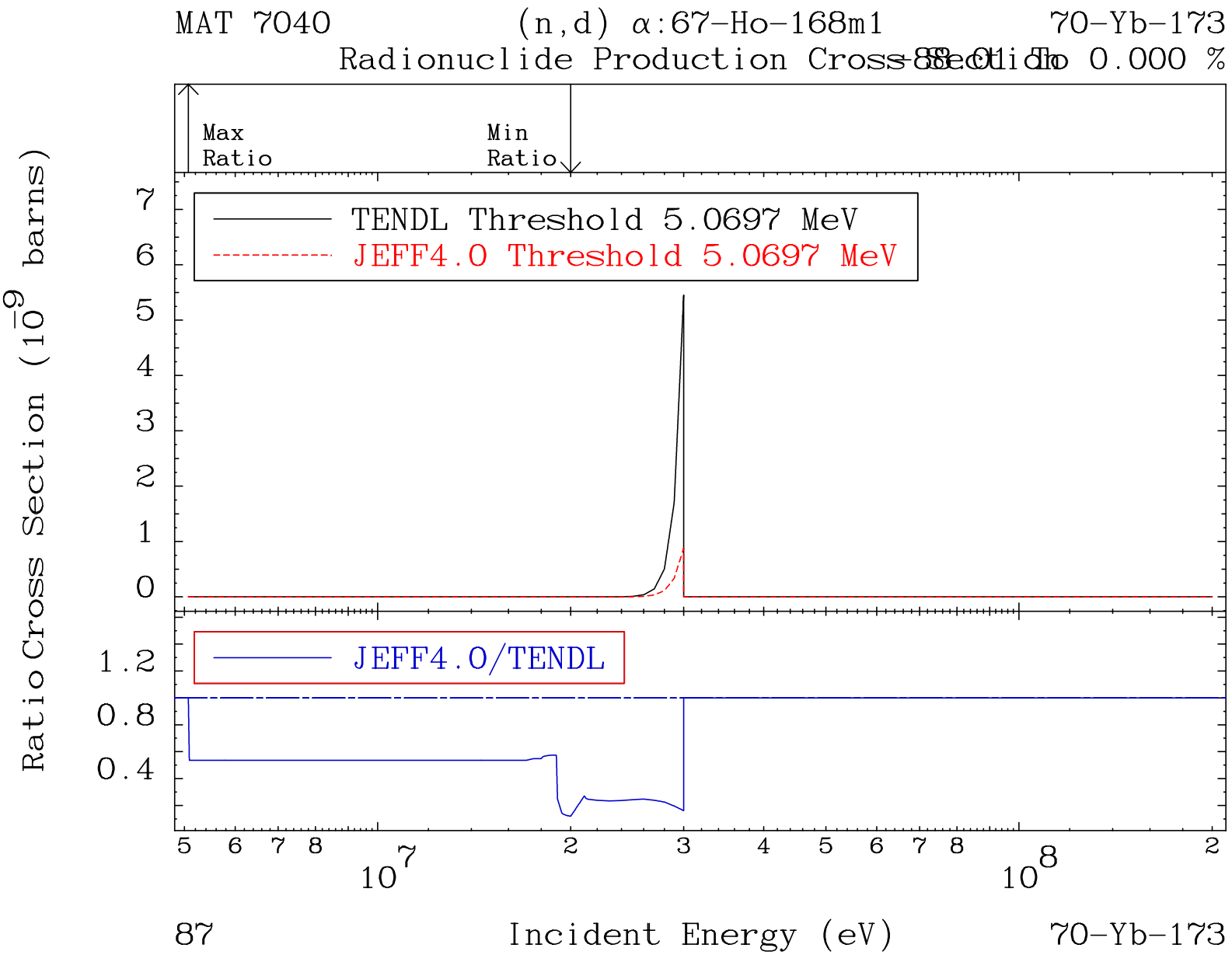

MAT 7040 (n,n') 2α:66-Dy-165g 70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
82
70-Yb-173


MAT 7040 (n,n') 2α:66-Dy-165m2 70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
83
70-Yb-173


MAT 7040 (n,n') p α:67-Ho-168g 70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 7.2479 MeV
JEFF4.0 Threshold 7.2479 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^{-9} barns)
250
200
150
100
50
0
10^{0}
10^{-1}
7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
84 Incident Energy (eV) 70-Yb-173


MAT 7040 (n,n') p α:67-Ho-168m1 70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 7.3073 MeV
JEFF4.0 Threshold 7.3073 MeV
JEFF4.0/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^0
10^-1
10^-2
7 8 10^7 2 3 4 5 6 7 8 10^8 2
85
Incident Energy (eV)
70-Yb-173


MAT 7040
(n,d) α:67-Ho-168g
70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 5.0104 MeV
JEFF4.0 Threshold 5.0104 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
86
70-Yb-173


MAT 7040
(n,d) α:67-Ho-168m1
70-Yb-173
Radionuclide Production Cross Section To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 5.0697 MeV
JEFF4.0 Threshold 5.0697 MeV
JEFF4.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
87
70-Yb-173