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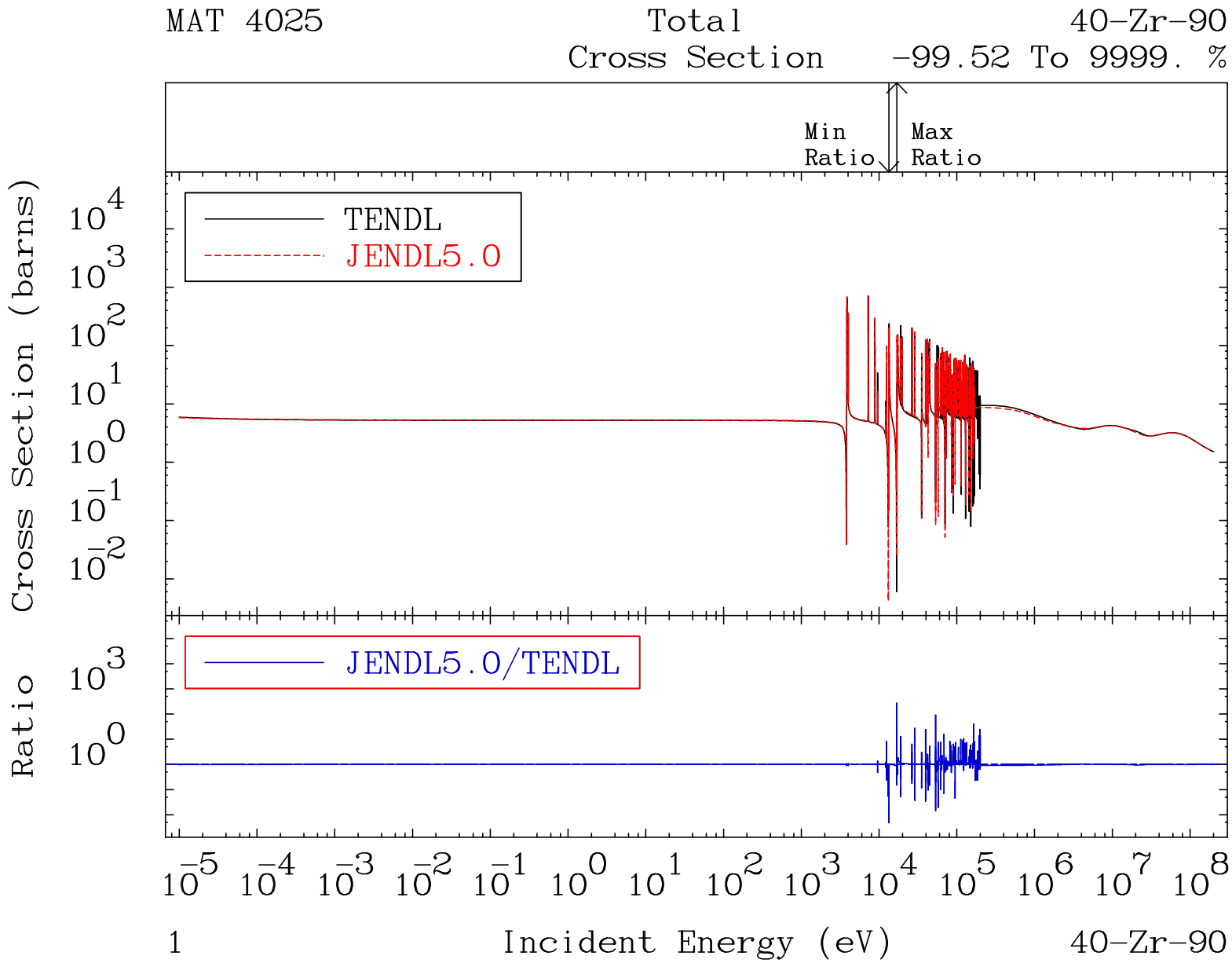
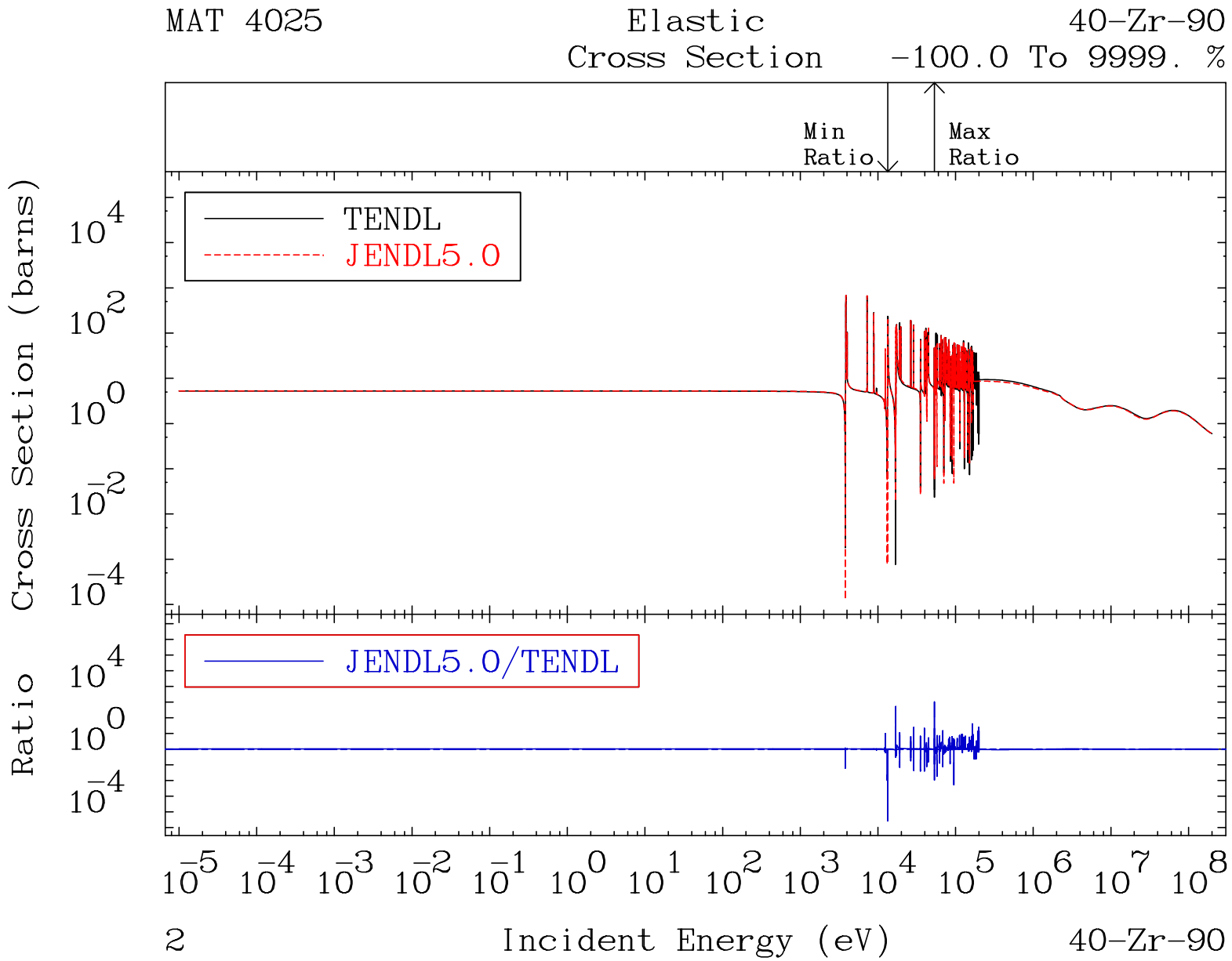
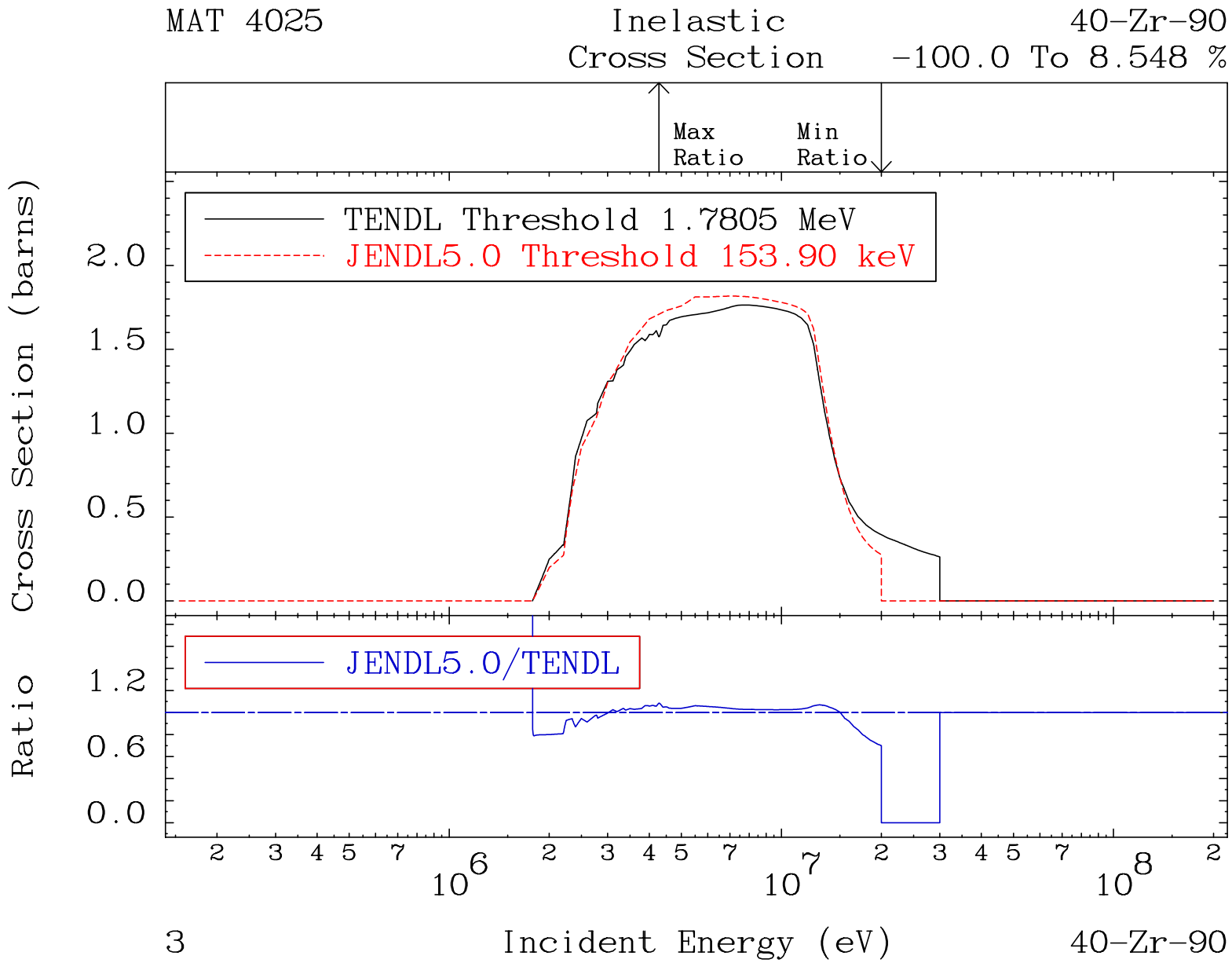
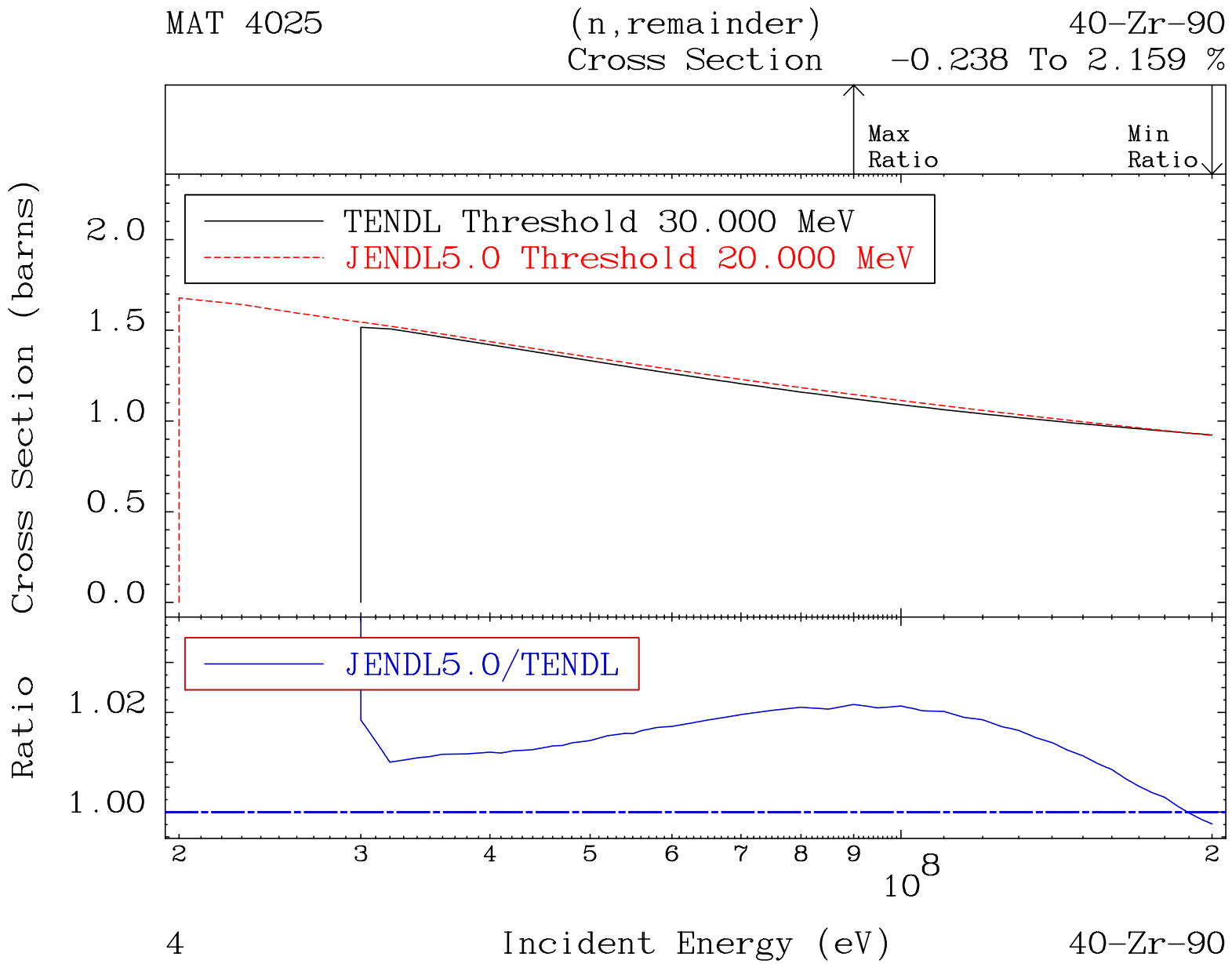
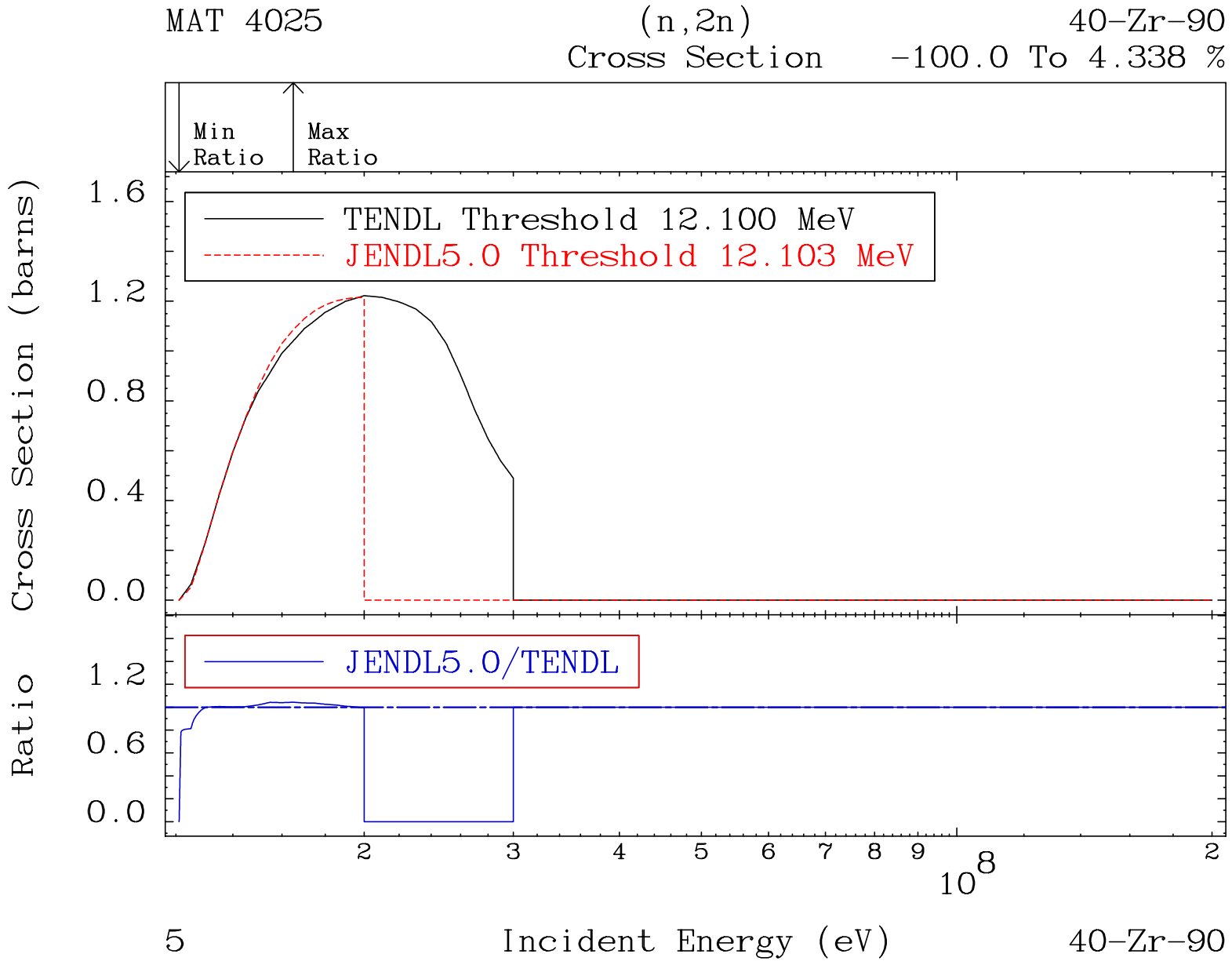
Press Mouse Button to Start

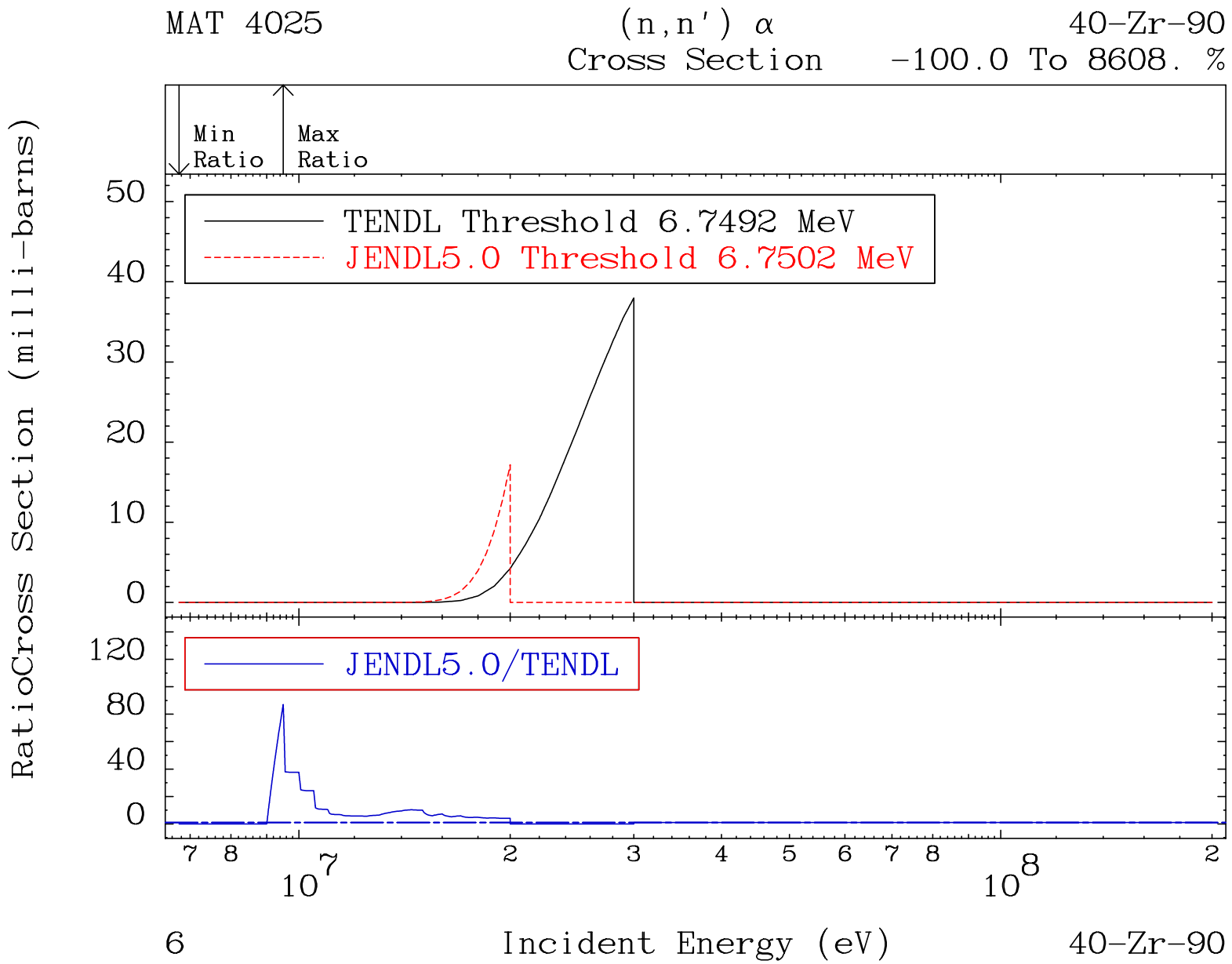

MAT 4025
Total
Cross Section
40-Zr-90
-99.52 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
40-Zr-90

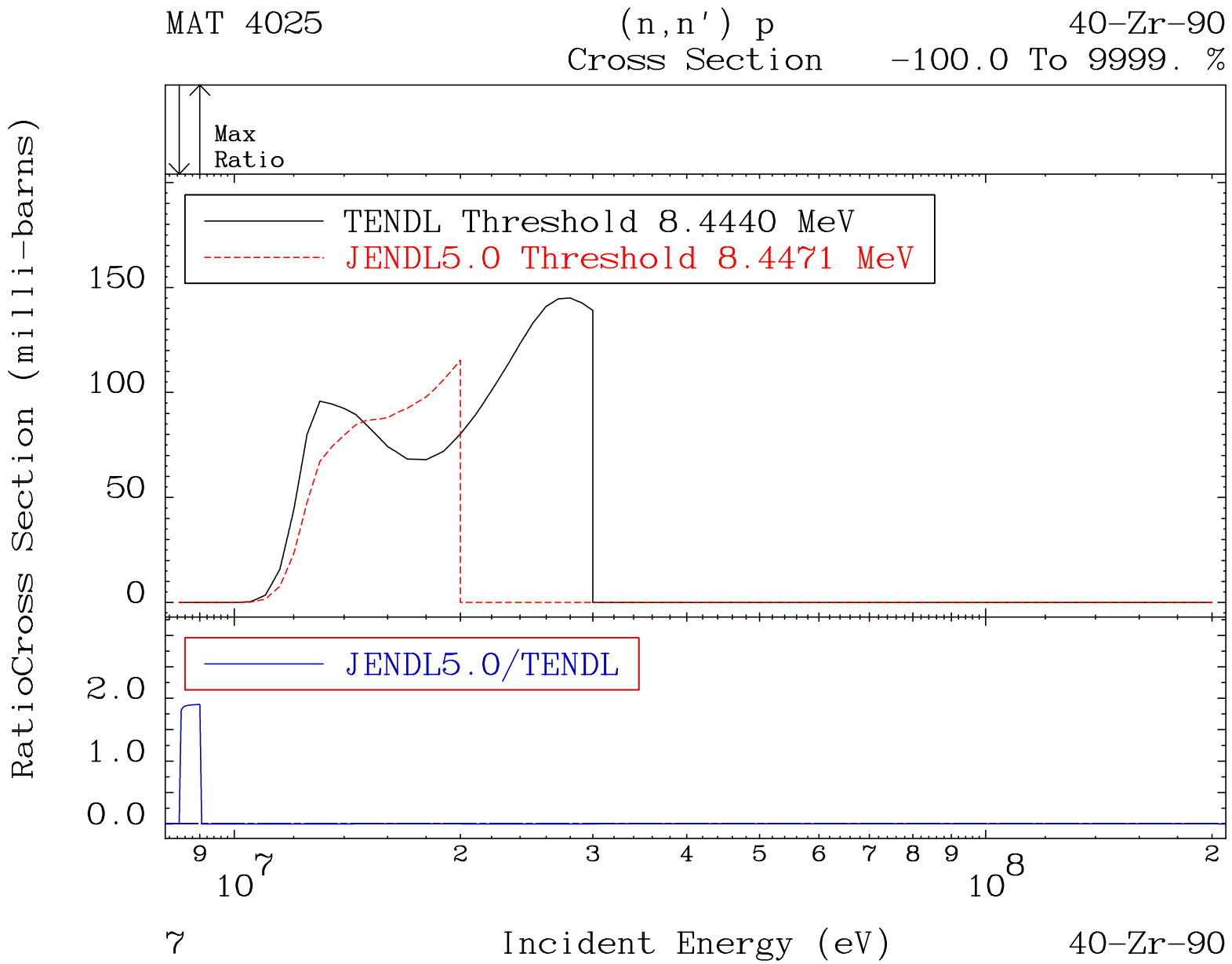

MAT 4025
Elastic
Cross Section
40-Zr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
40-Zr-90

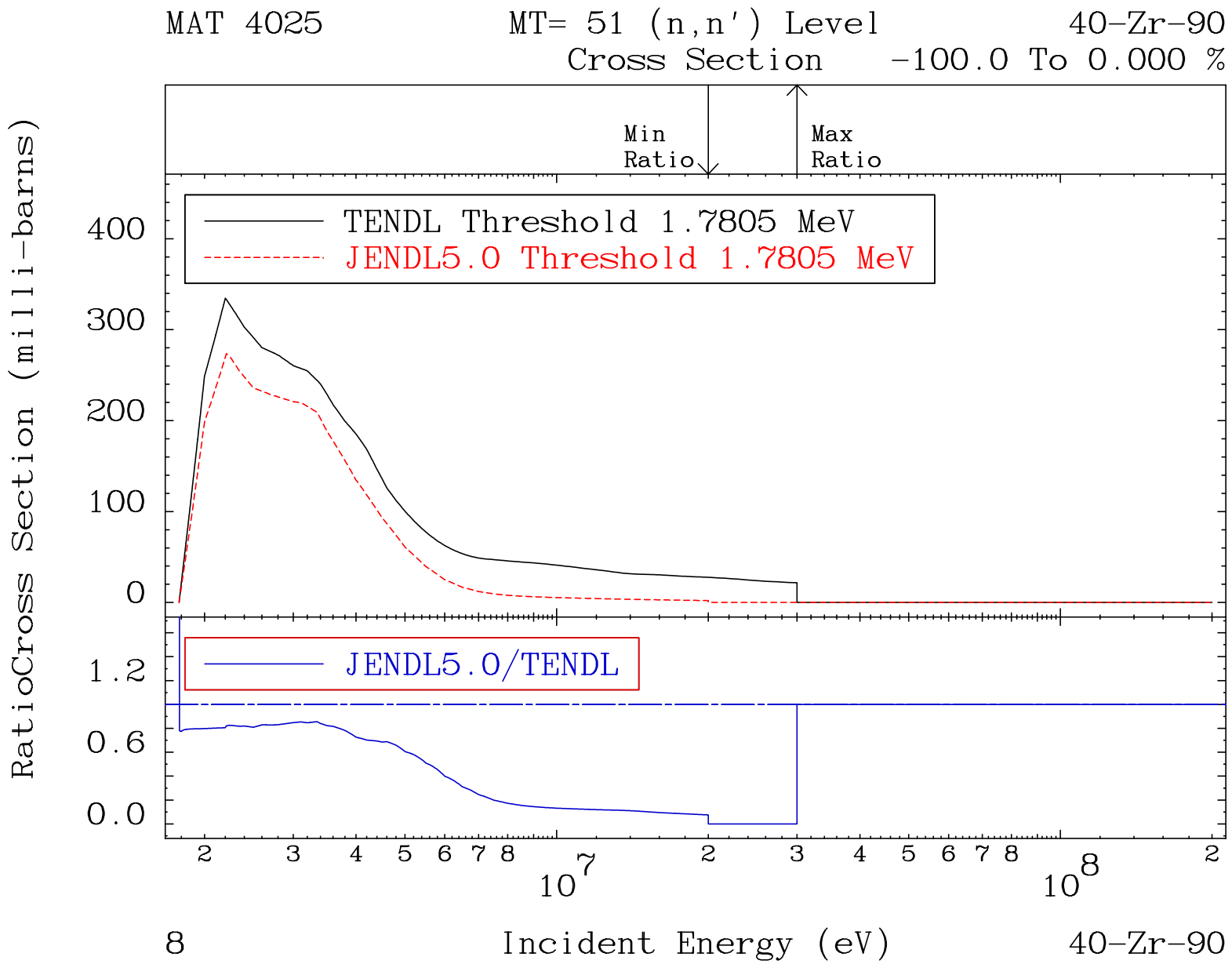

MAT 4025
Inelastic
Cross Section
40-Zr-90
-100.0 To 8.548 %
Max Ratio
Min Ratio
TENDL Threshold 1.7805 MeV
JENDL5.0 Threshold 153.90 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
3
Incident Energy (eV)
40-Zr-90

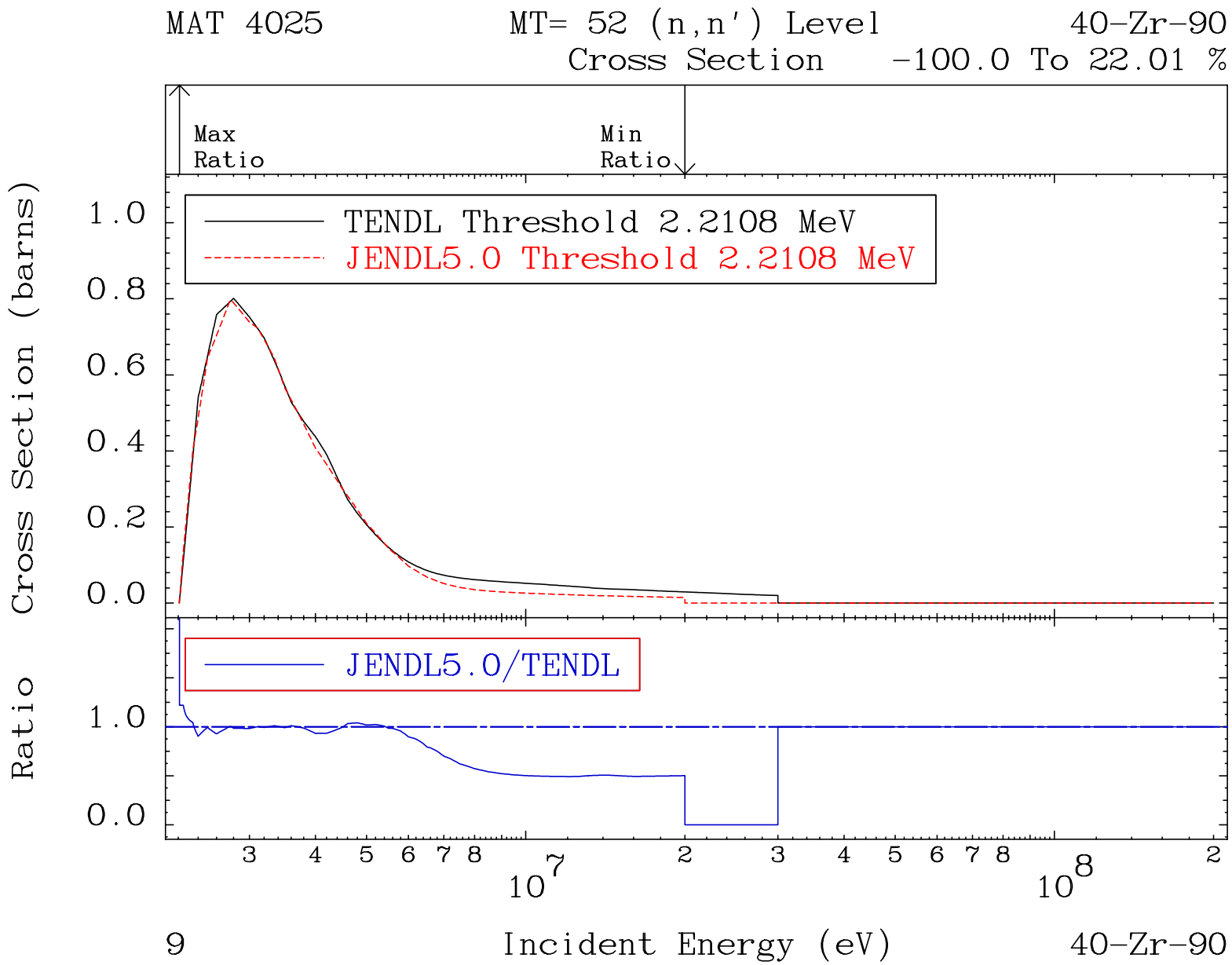

MAT 4025
(n,remainder)
Cross Section
40-Zr-90
-0.238 To 2.159 %
Max Ratio
Min Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.02
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
40-Zr-90

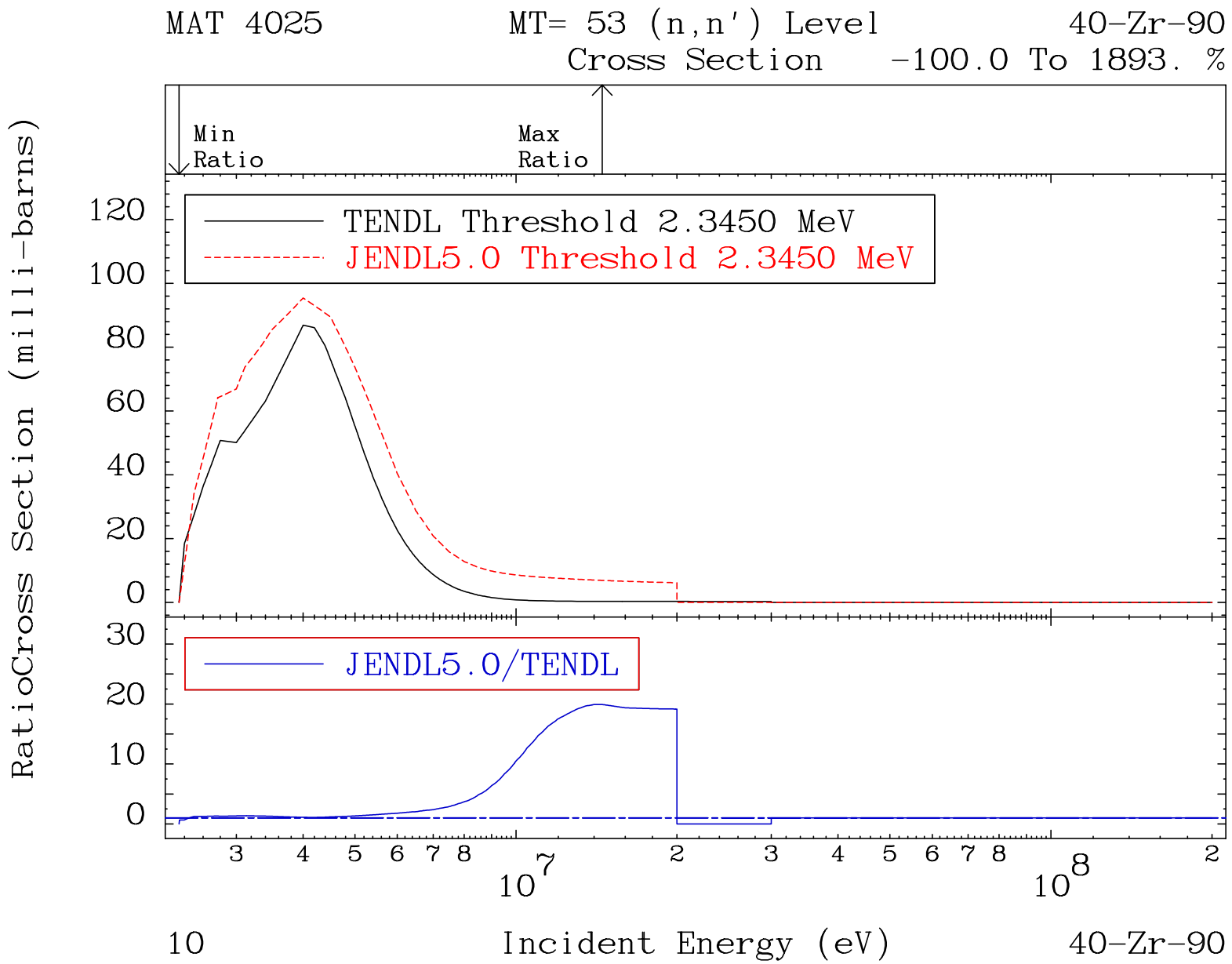

MAT 4025
(n,2n)
Cross Section
40-Zr-90
-100.0 To 4.338 %
Min Ratio
Max Ratio
TENDL Threshold 12.100 MeV
JENDL5.0 Threshold 12.103 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
40-Zr-90

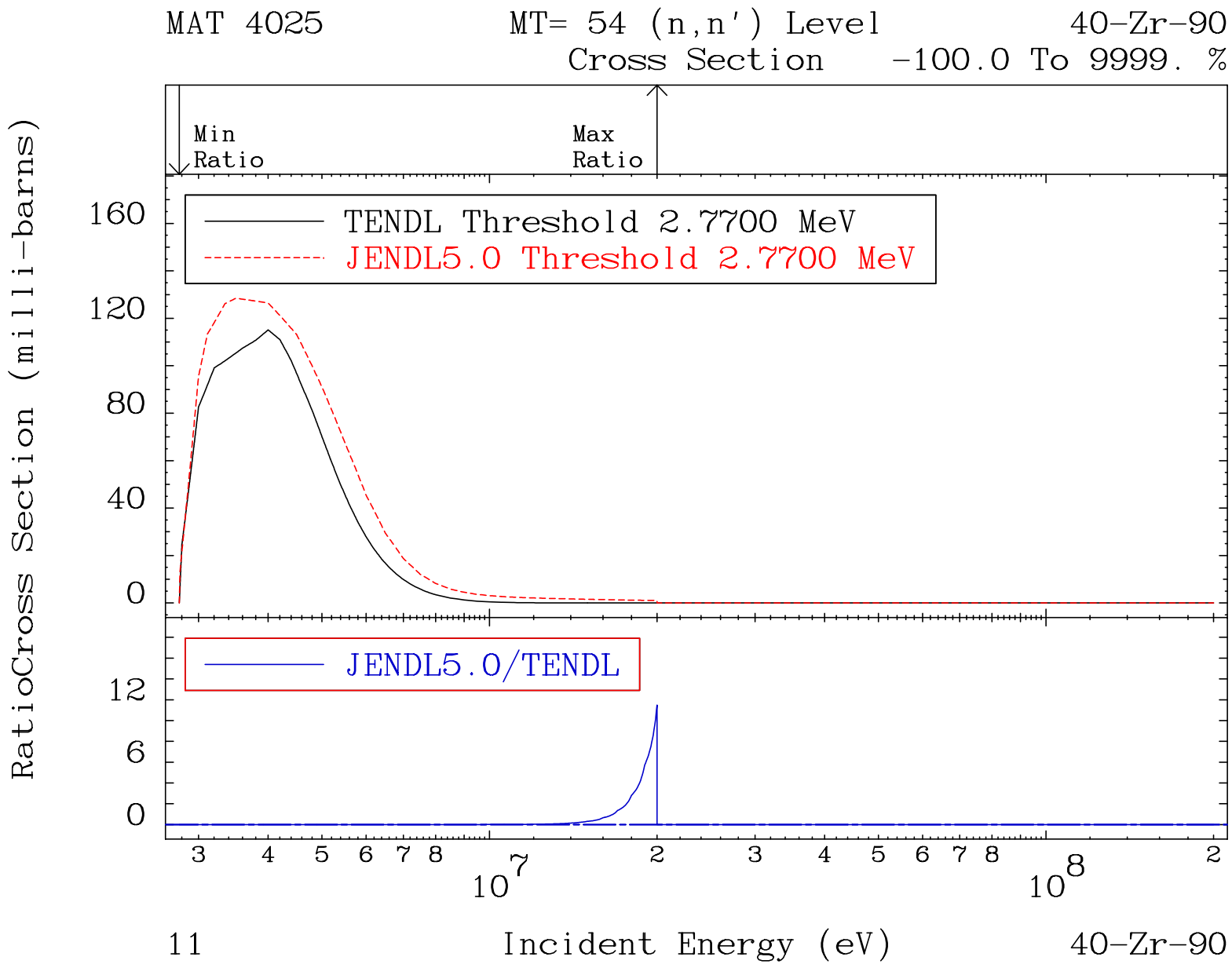

MAT 4025
(n,n') α
40-Zr-90
Cross Section
-100.0 To 8608. %
Min Ratio
Max Ratio
TENDL Threshold 6.7492 MeV
JENDL5.0 Threshold 6.7502 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
40-Zr-90

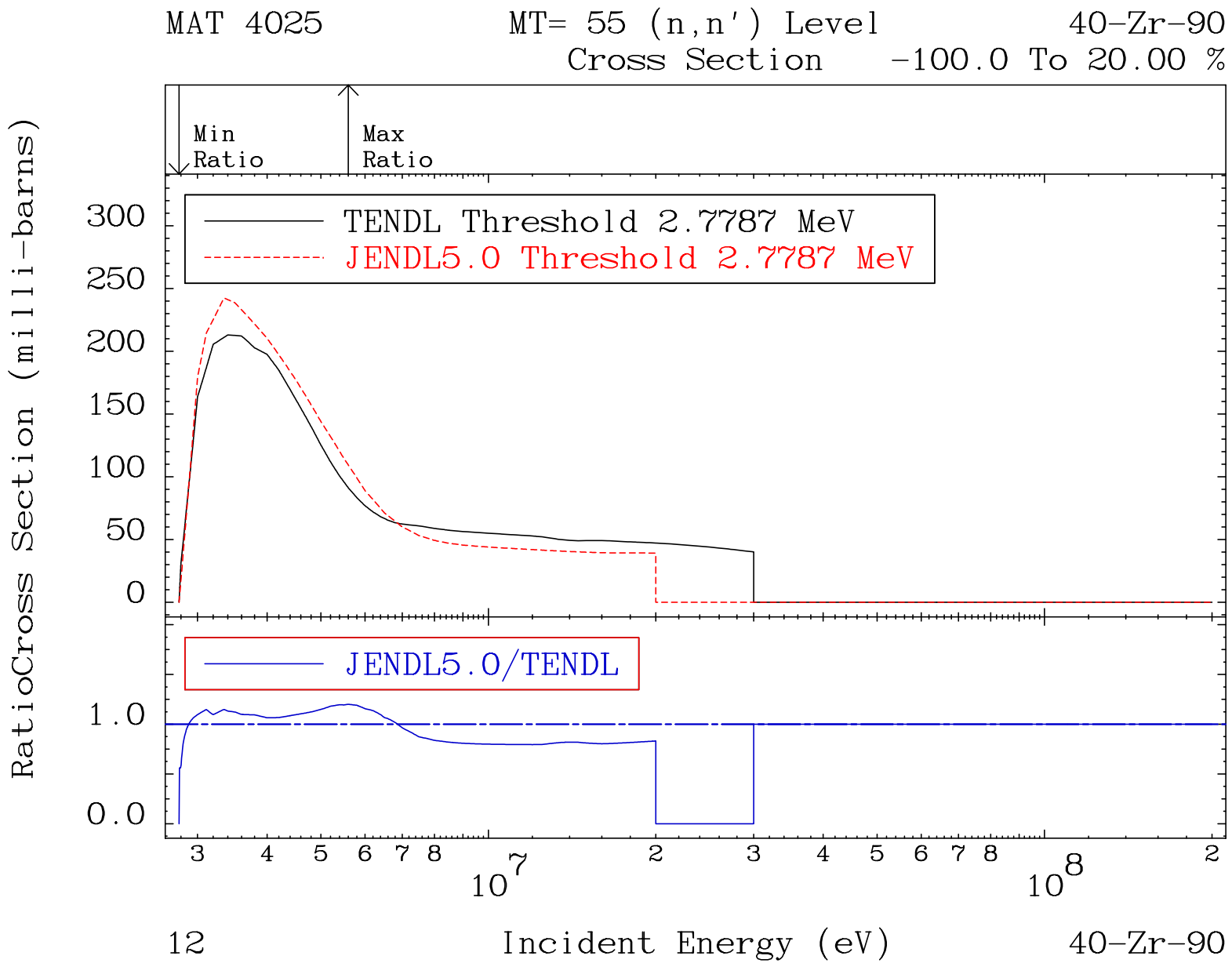

MAT 4025
(n,n') p
Cross Section
40-Zr-90
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.4440 MeV
JENDL5.0 Threshold 8.4471 MeV
150
100
50
0
JENDL5.0/TENDL
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
40-Zr-90
RatioCross Section (milli-barns)

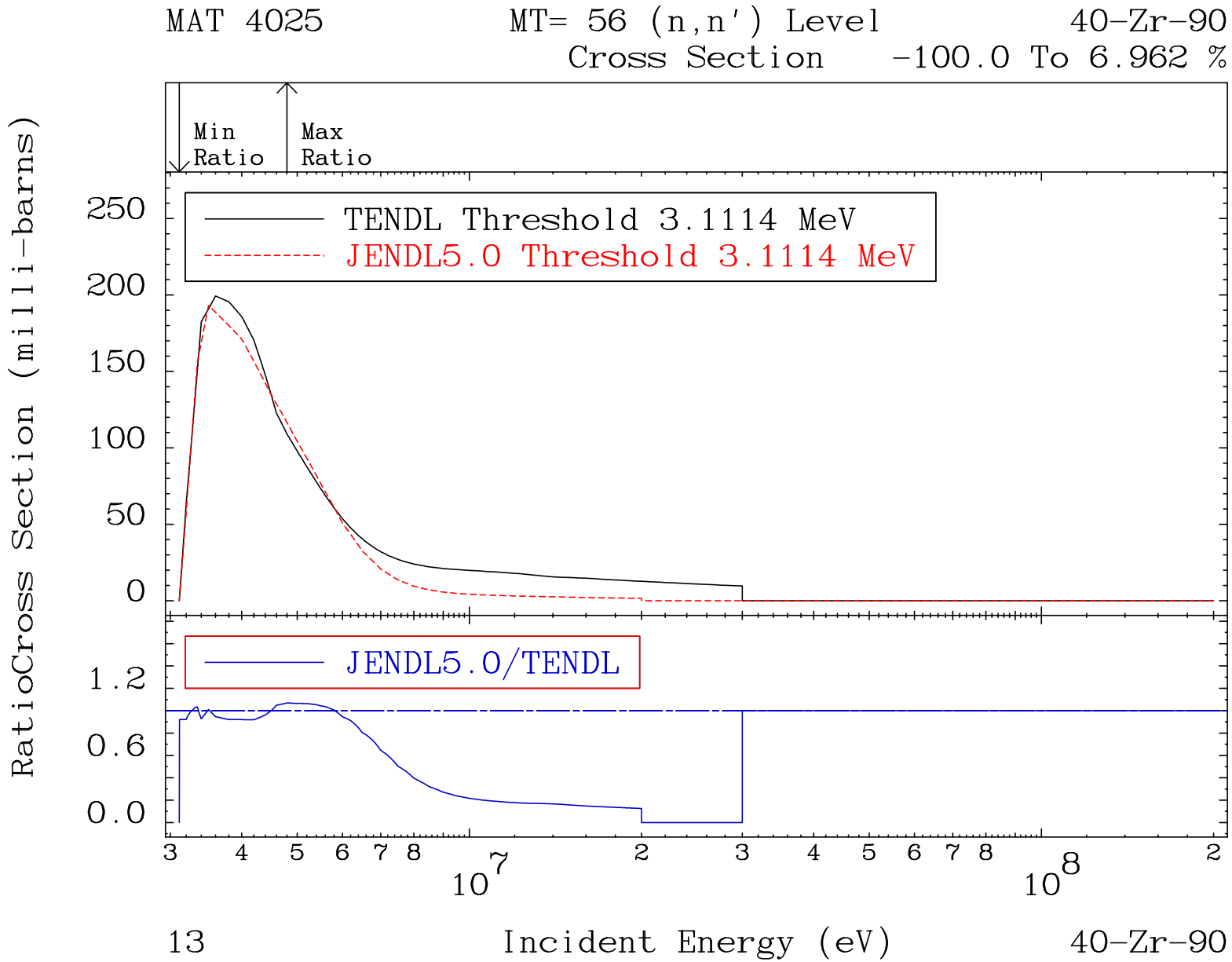

MAT 4025
MT= 51 (n,n') Level
40-Zr-90
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.7805 MeV
JENDL5.0 Threshold 1.7805 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
40-Zr-90

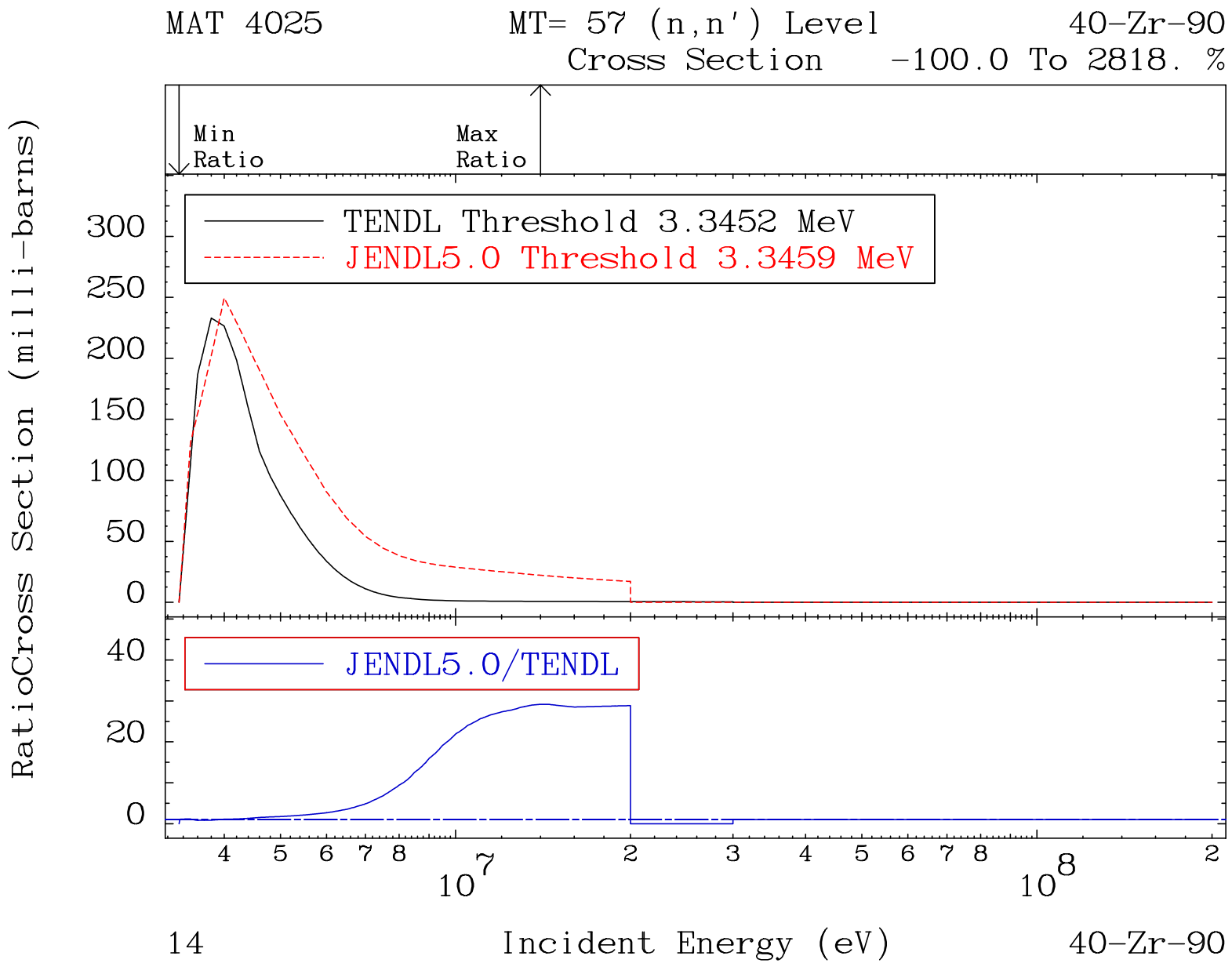

MAT 4025
MT= 52 (n,n') Level
40-Zr-90
Cross Section
-100.0 To 22.01 %
Max Ratio
Min Ratio
TENDL Threshold 2.2108 MeV
JENDL5.0 Threshold 2.2108 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
9
40-Zr-90

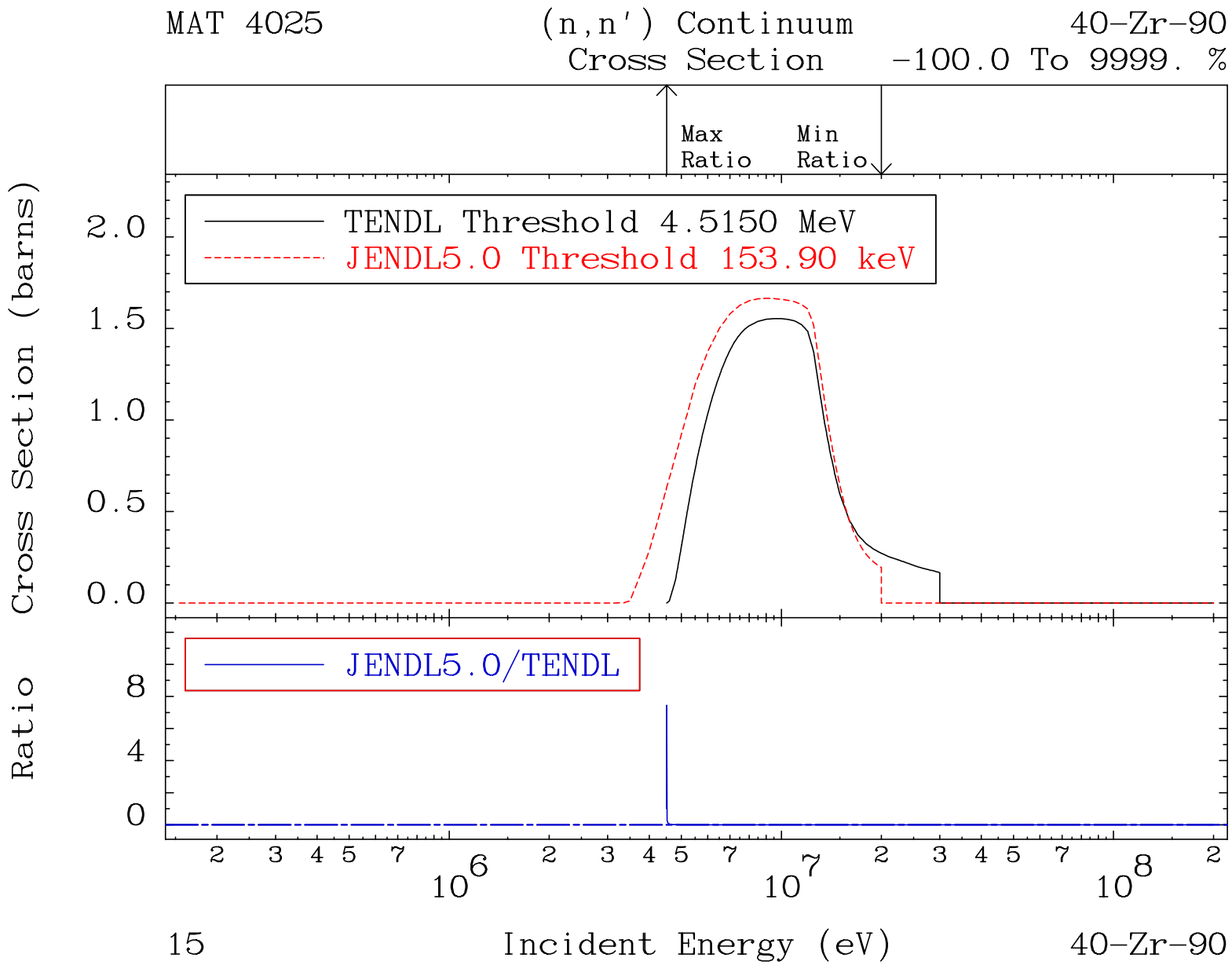

MAT 4025
MT= 53 (n,n') Level
40-Zr-90
Cross Section -100.0 To 1893. %
Min Ratio
Max Ratio
TENDL Threshold 2.3450 MeV
JENDL5.0 Threshold 2.3450 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
40-Zr-90

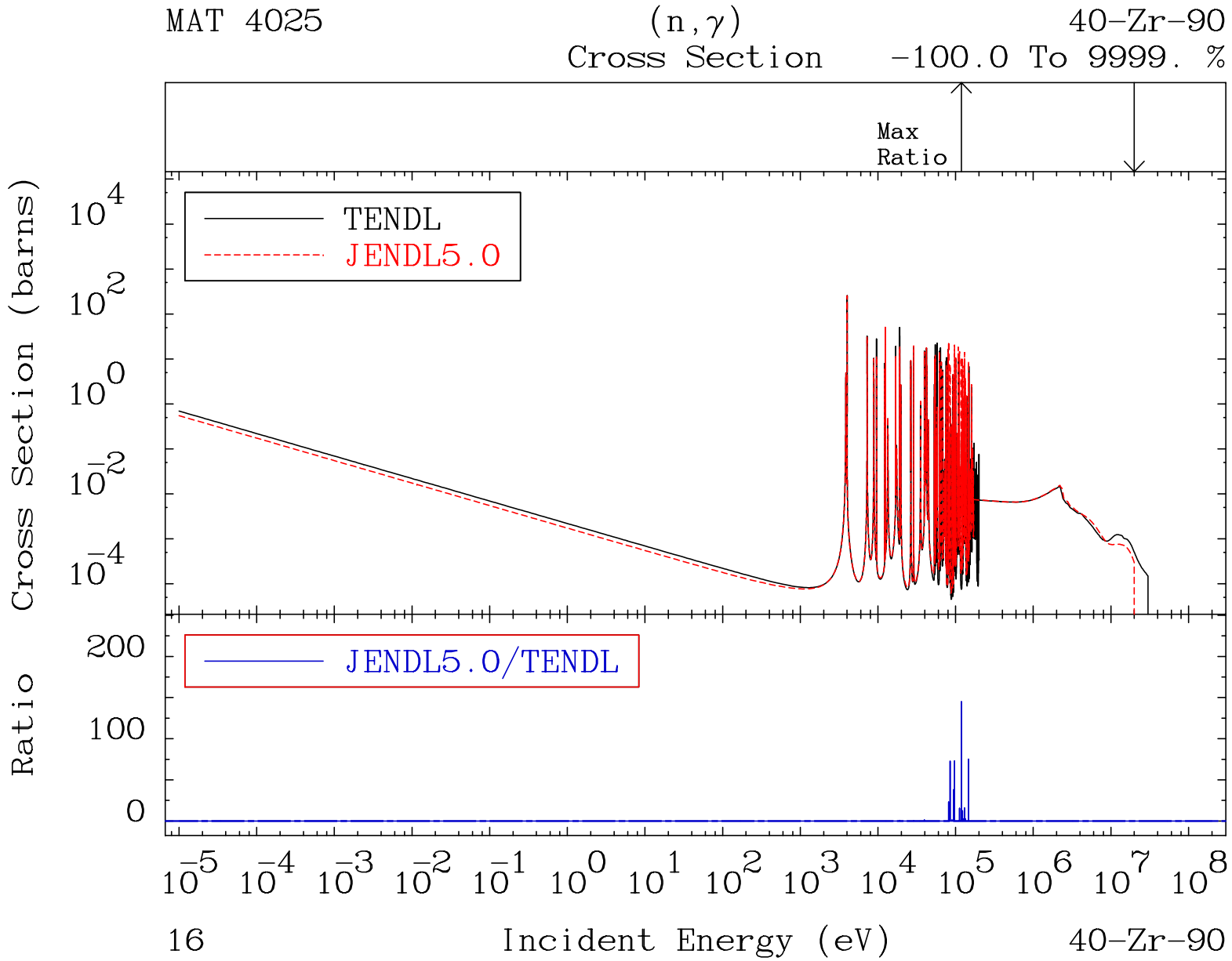

MAT 4025
MT= 54 (n,n') Level
40-Zr-90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.7700 MeV
JENDL5.0 Threshold 2.7700 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
12
6
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
40-Zr-90

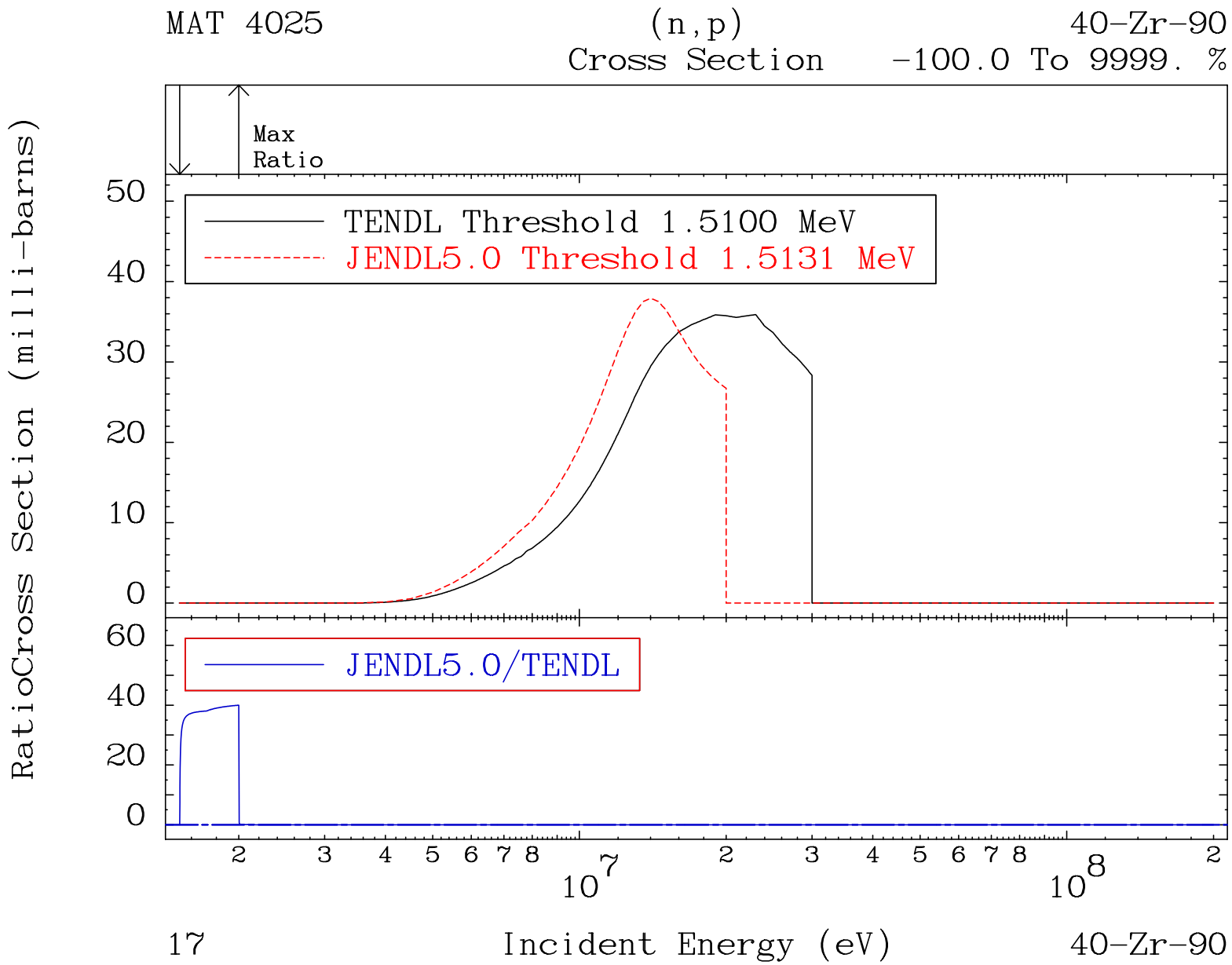

MAT 4025
MT= 55 (n,n') Level
40-Zr-90
Cross Section
-100.0 To 20.00 %
Min Ratio
Max Ratio
TENDL Threshold 2.7787 MeV
JENDL5.0 Threshold 2.7787 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
40-Zr-90

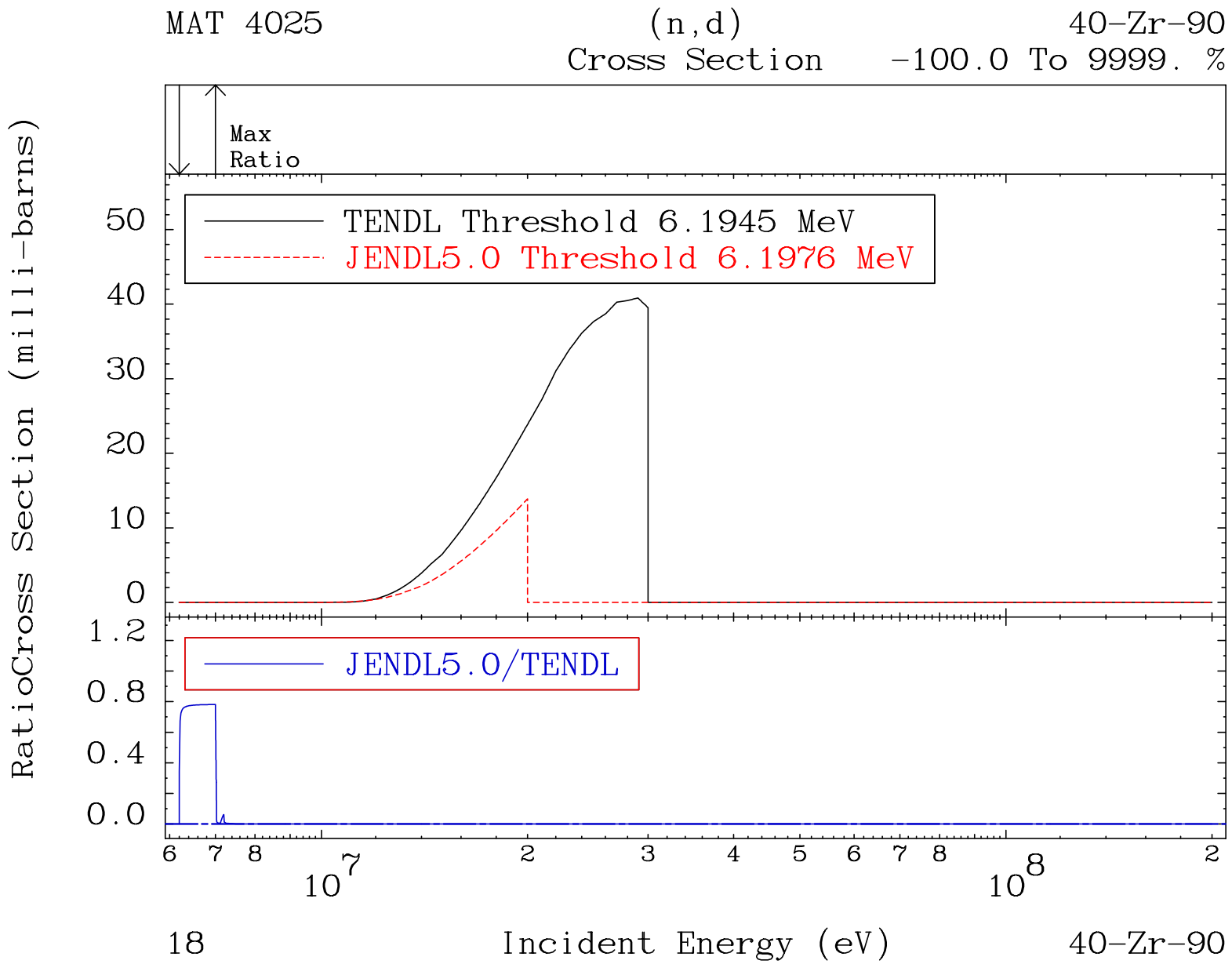

MAT 4025
MT= 56 (n,n') Level
40-Zr-90
Cross Section
-100.0 To 6.962 %
Min Ratio
Max Ratio
TENDL Threshold 3.1114 MeV
JENDL5.0 Threshold 3.1114 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
40-Zr-90

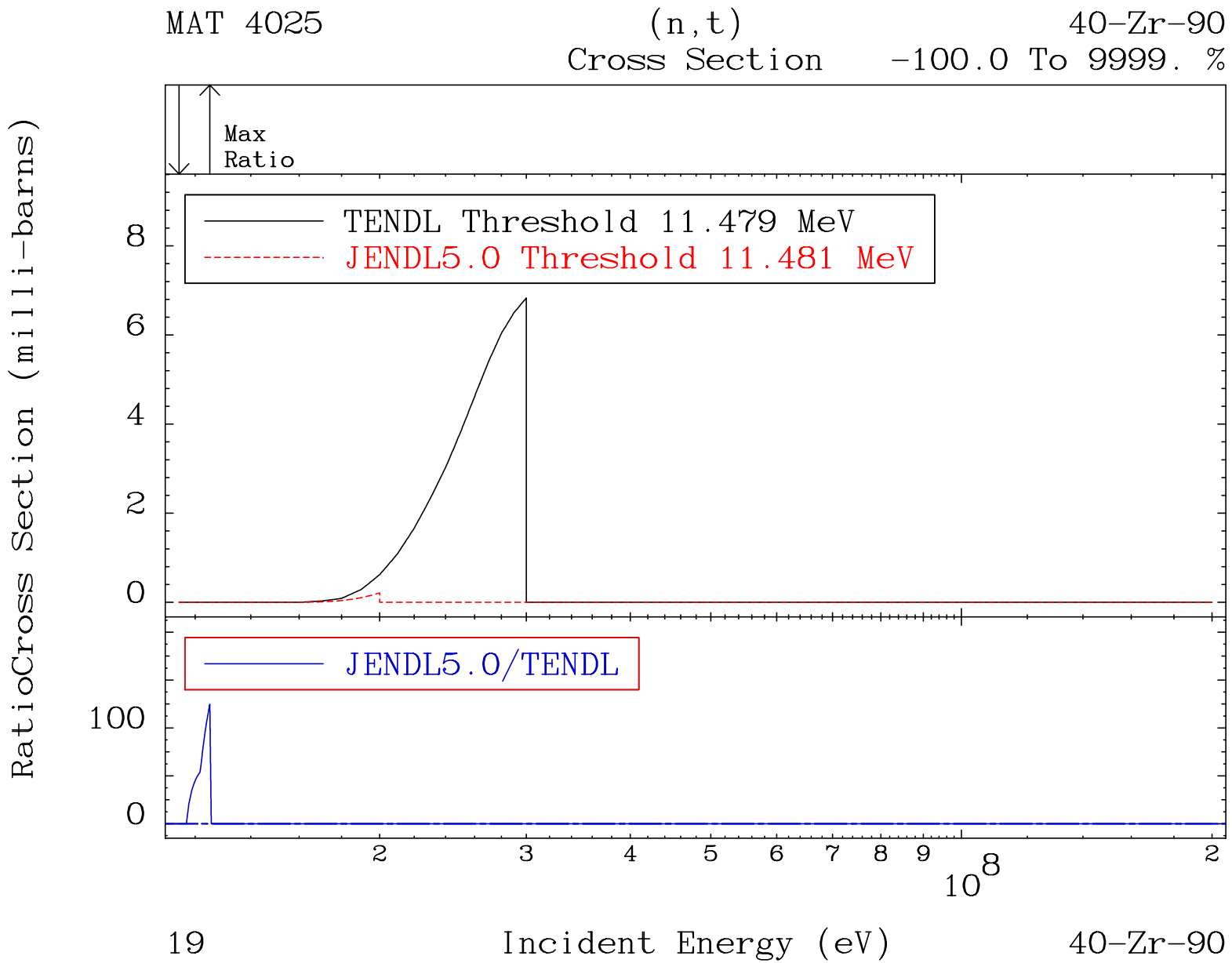

MAT 4025
MT= 57 (n,n') Level
40-Zr-90
Cross Section -100.0 To 2818. %
Min Ratio
Max Ratio
TENDL Threshold 3.3452 MeV
JENDL5.0 Threshold 3.3459 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
40
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
40-Zr-90

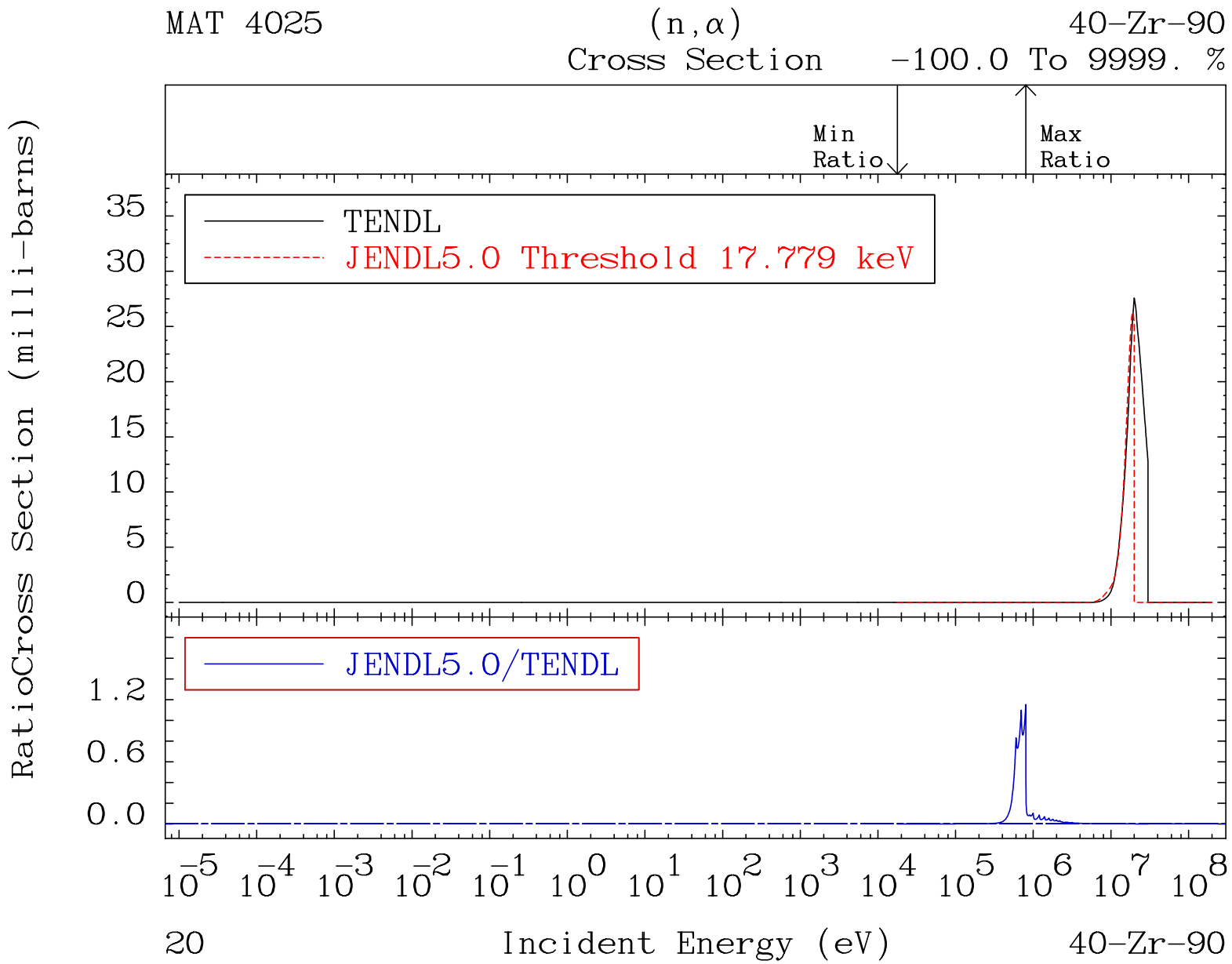

MAT 4025
(n,n') Continuum
Cross Section
40-Zr-90
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.5150 MeV
JENDL5.0 Threshold 153.90 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
8
4
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
15
40-Zr-90

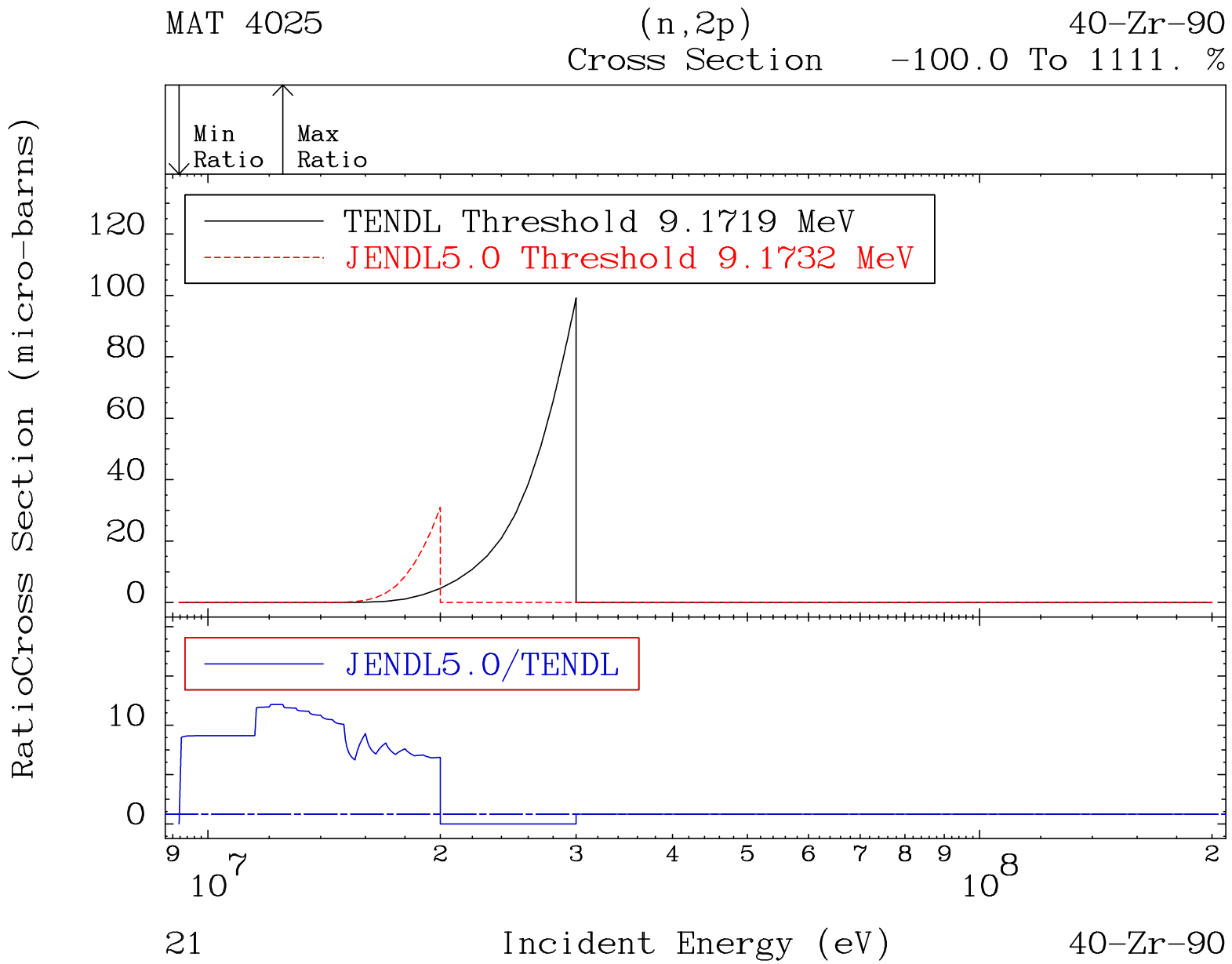

MAT 4025
(n,γ)
Cross Section
40-Zr-90
-100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
16
40-Zr-90

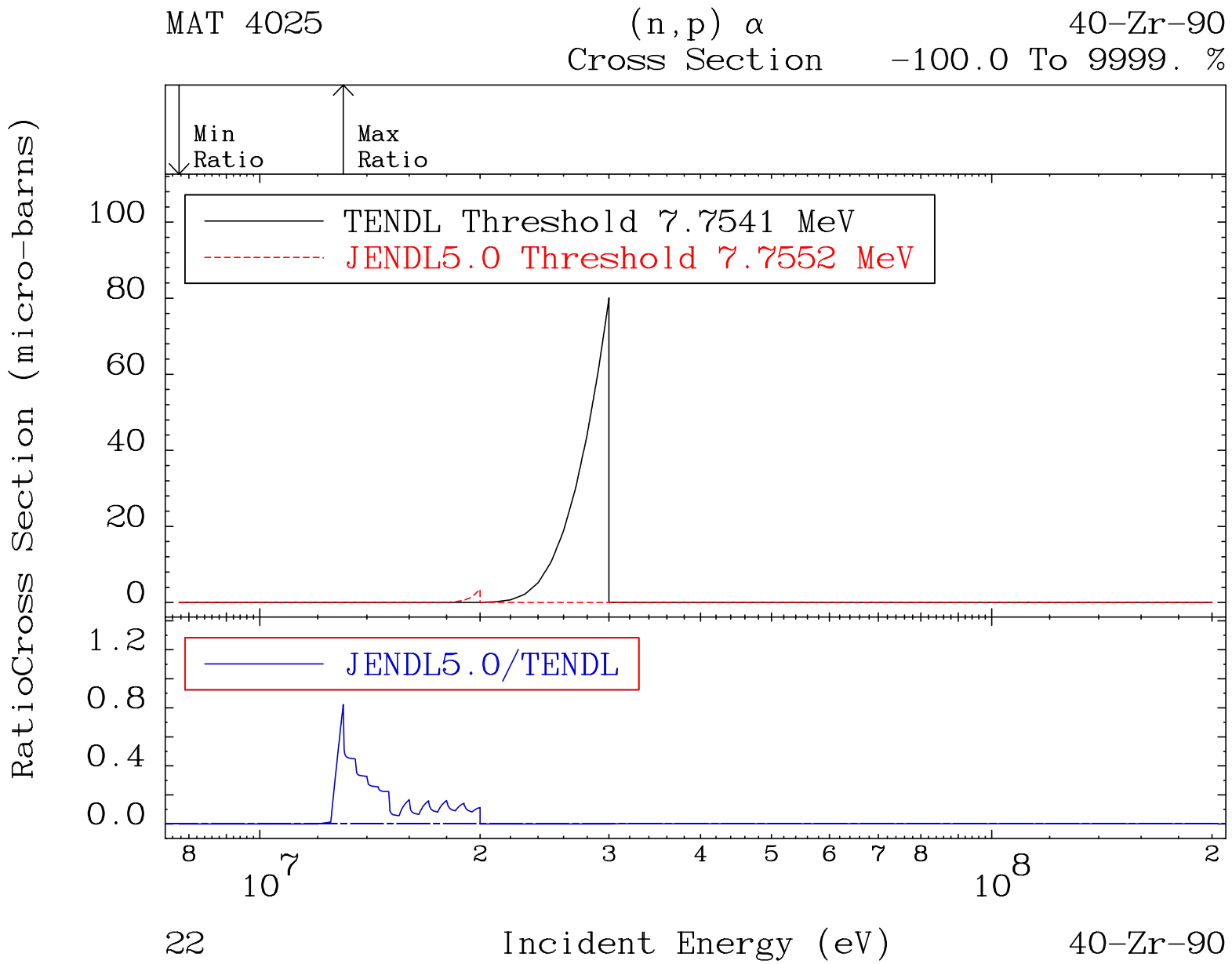

MAT 4025
(n,p)
40-Zr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 1.5100 MeV
JENDL5.0 Threshold 1.5131 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
60
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
40-Zr-90

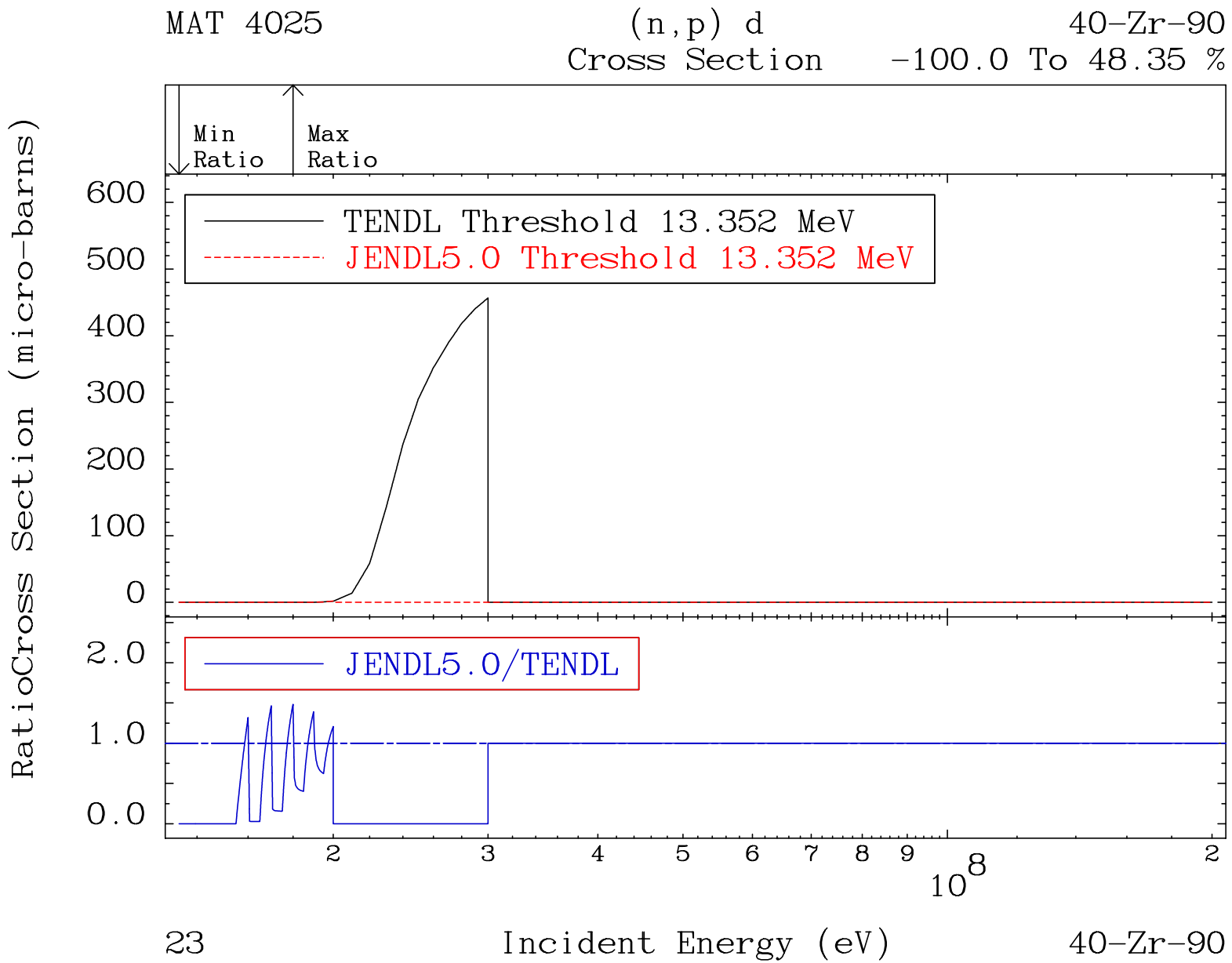

MAT 4025
(n,d)
40-Zr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.1945 MeV
JENDL5.0 Threshold 6.1976 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.8
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
40-Zr-90

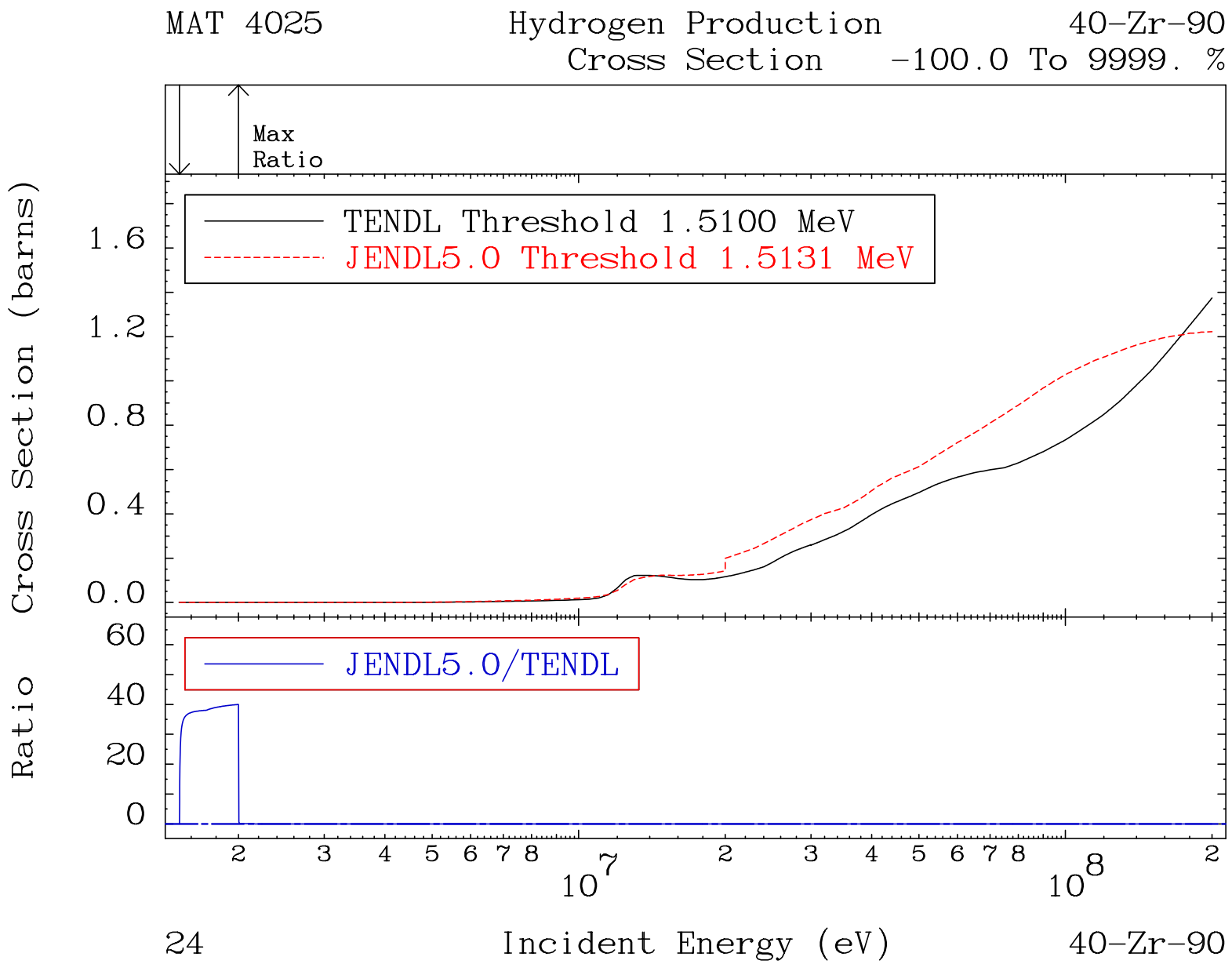

MAT 4025
(n,t)
40-Zr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 11.479 MeV
JENDL5.0 Threshold 11.481 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
100
0
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
40-Zr-90

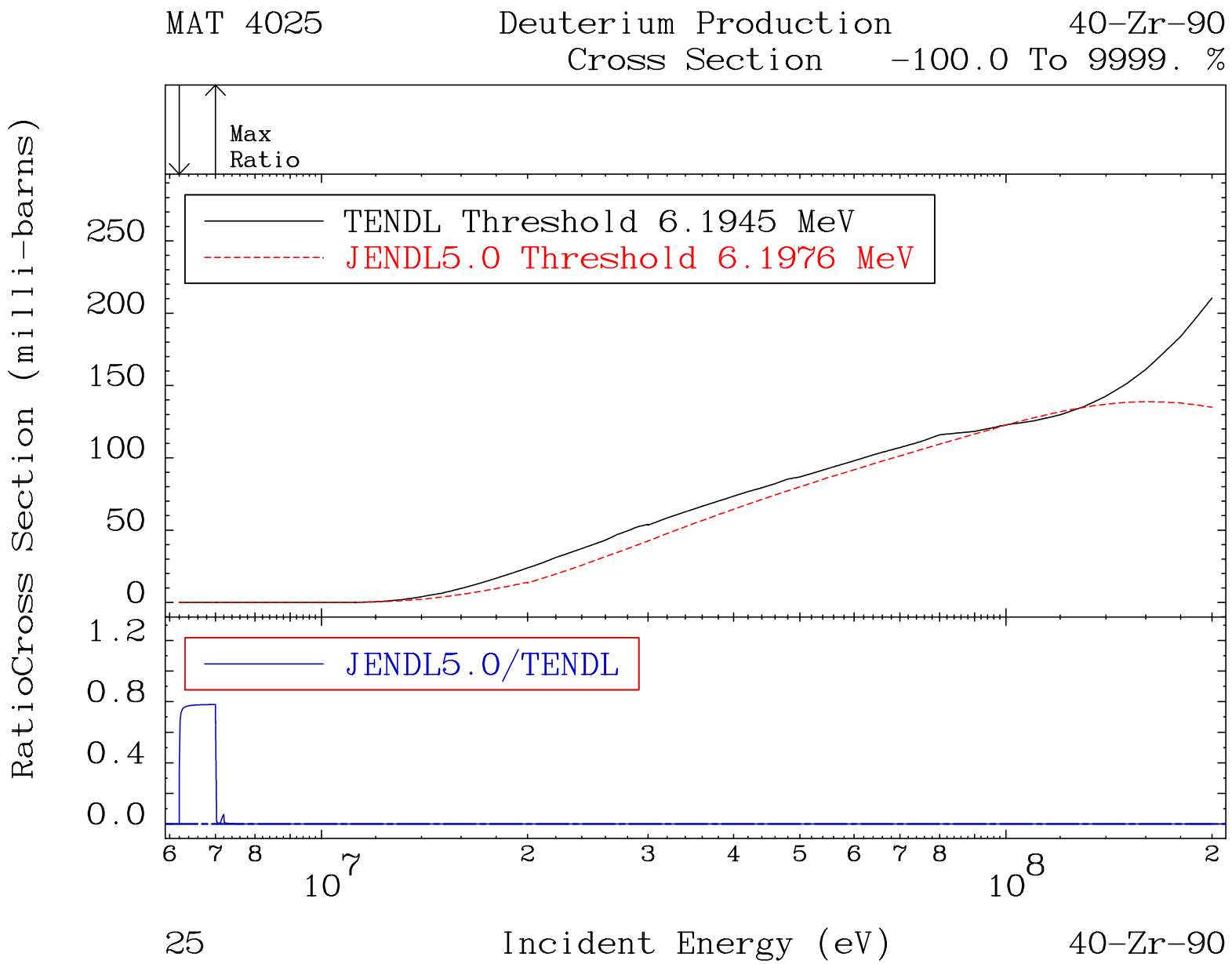

MAT 4025
(n,α)
40-Zr-90
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 17.779 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
20
Incident Energy (eV)
40-Zr-90

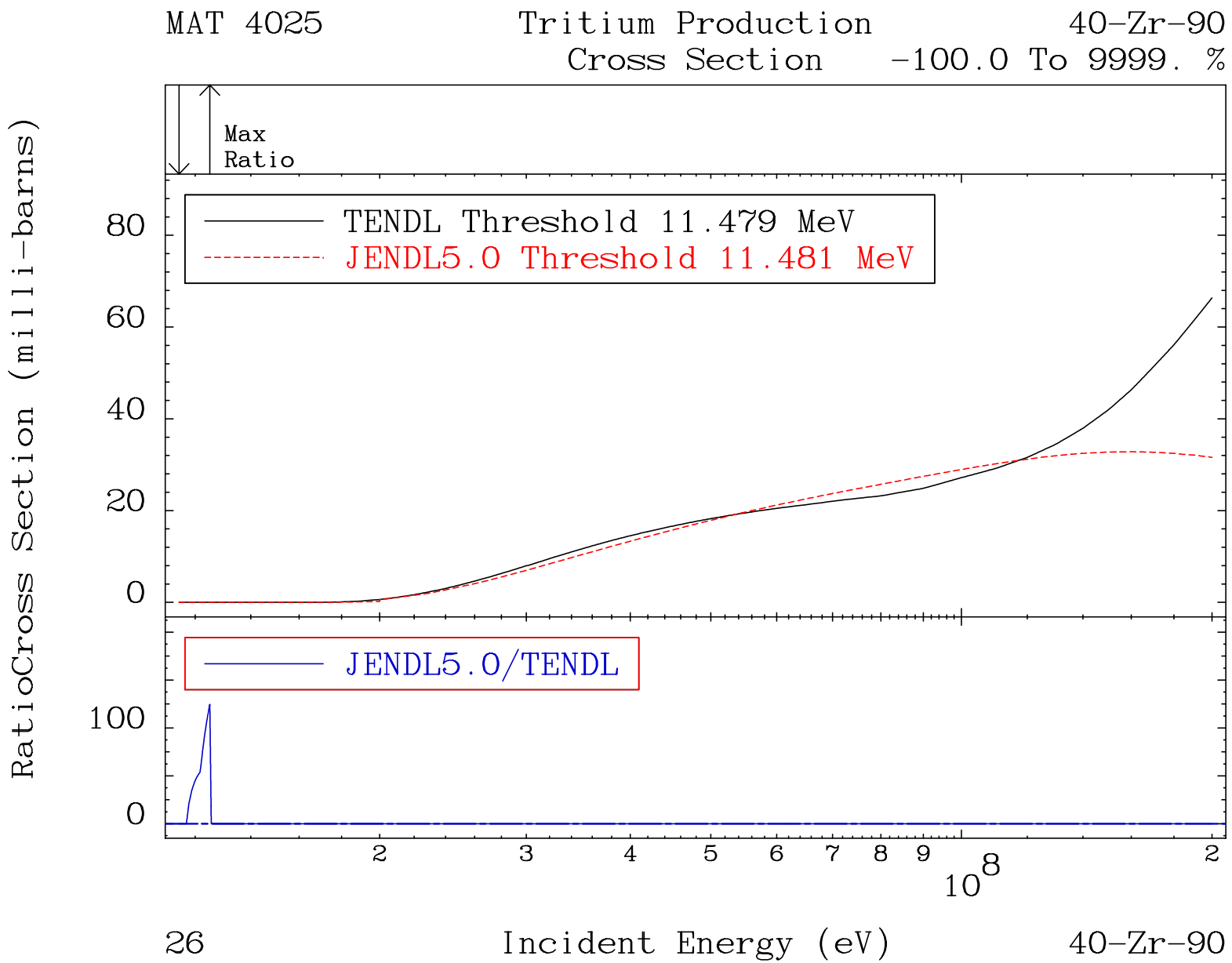

MAT 4025
(n,2p)
40-Zr-90
Cross Section
-100.0 To 1111. %
Min Ratio
Max Ratio
TENDL Threshold 9.1719 MeV
JENDL5.0 Threshold 9.1732 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
120
100
80
60
40
20
0
10
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
40-Zr-90

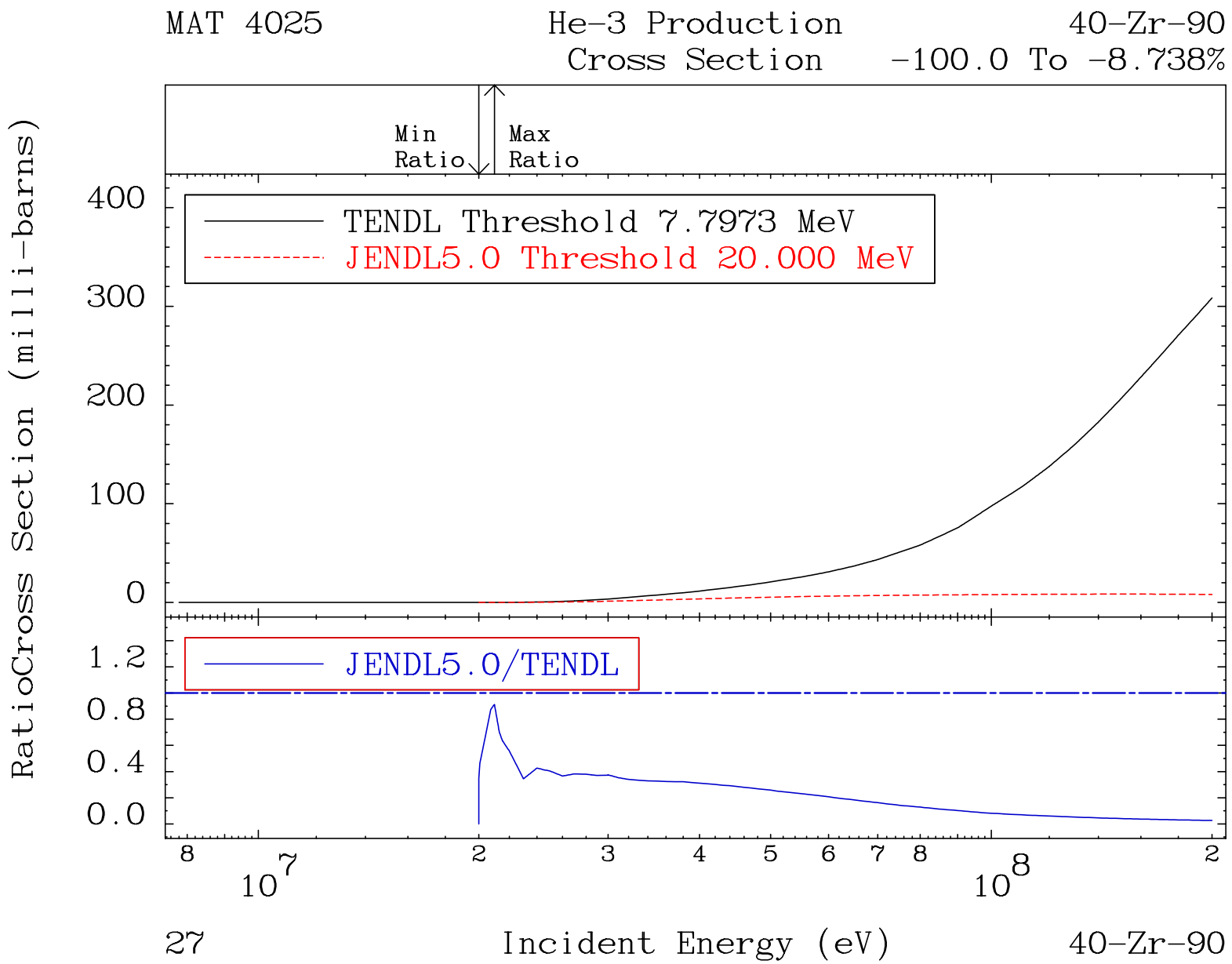

MAT 4025
(n,p) α
40-Zr-90
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.7541 MeV
JENDL5.0 Threshold 7.7552 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
1.2
0.8
0.4
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
40-Zr-90

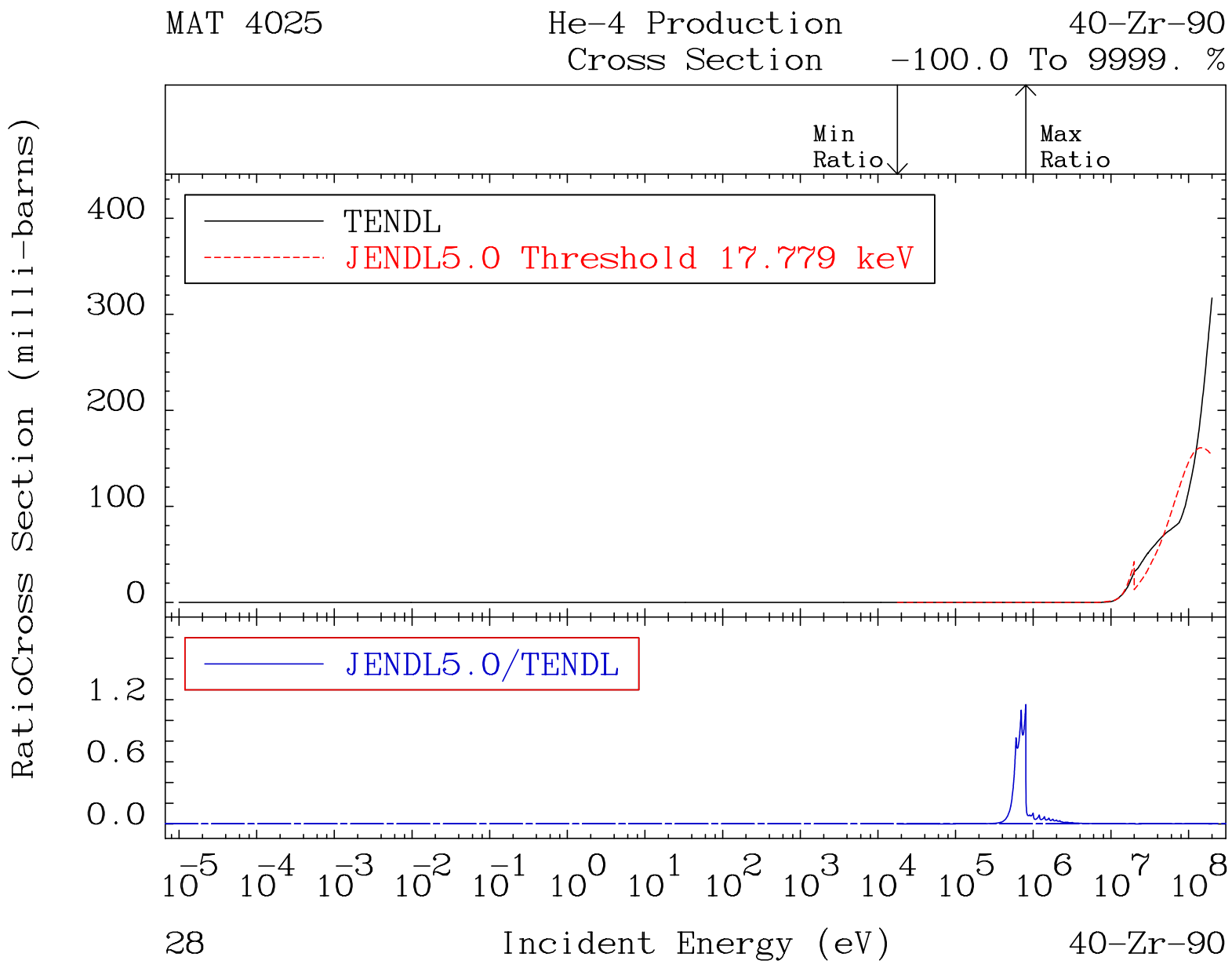

MAT 4025
(n,p) d
Cross Section
40-Zr-90
-100.0 To 48.35 %
Min Ratio
Max Ratio
TENDL Threshold 13.352 MeV
JENDL5.0 Threshold 13.352 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
600
500
400
300
200
100
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
23
Incident Energy (eV)
40-Zr-90

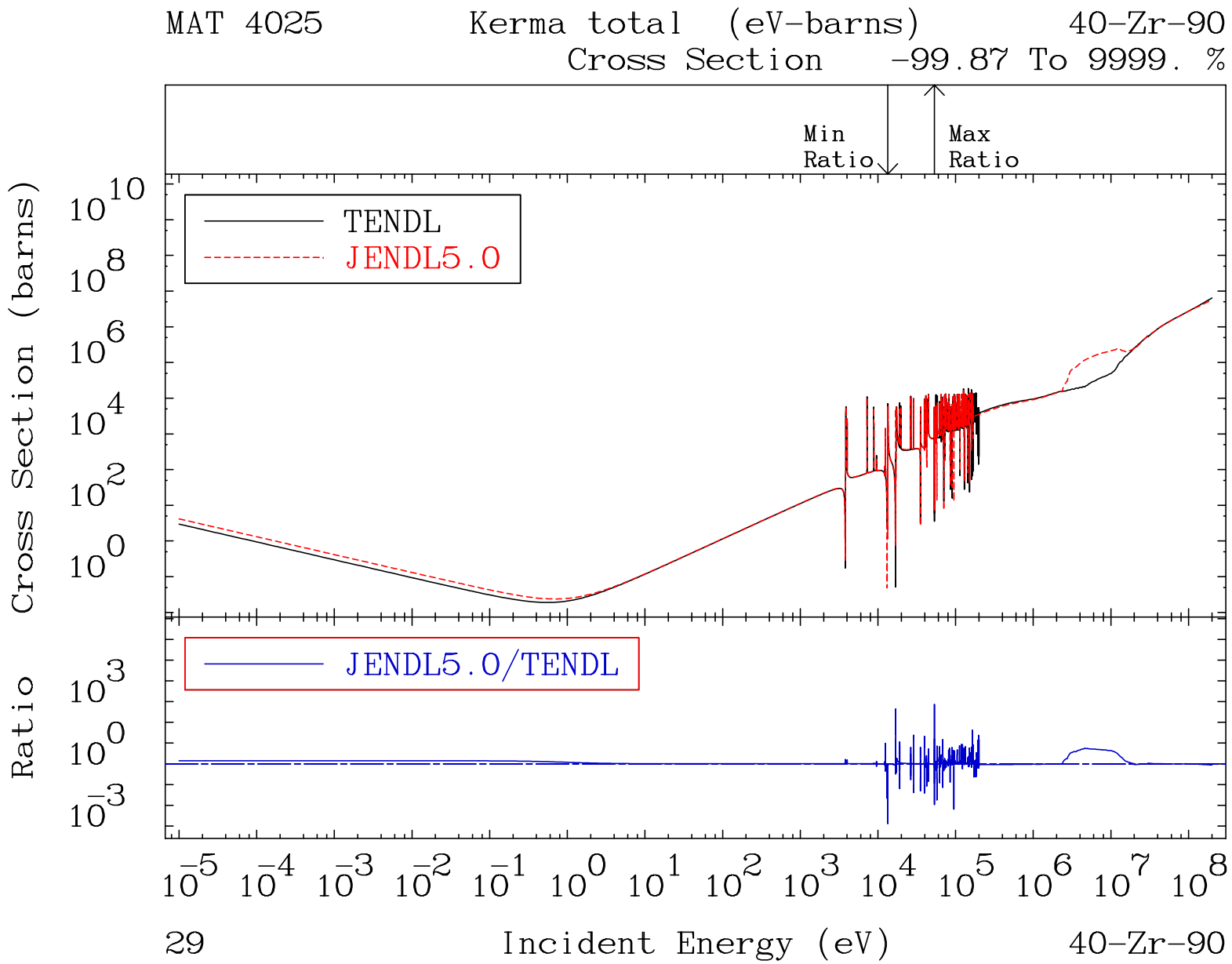

MAT 4025
Hydrogen Production
40-Zr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 1.5100 MeV
JENDL5.0 Threshold 1.5131 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
60
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
40-Zr-90

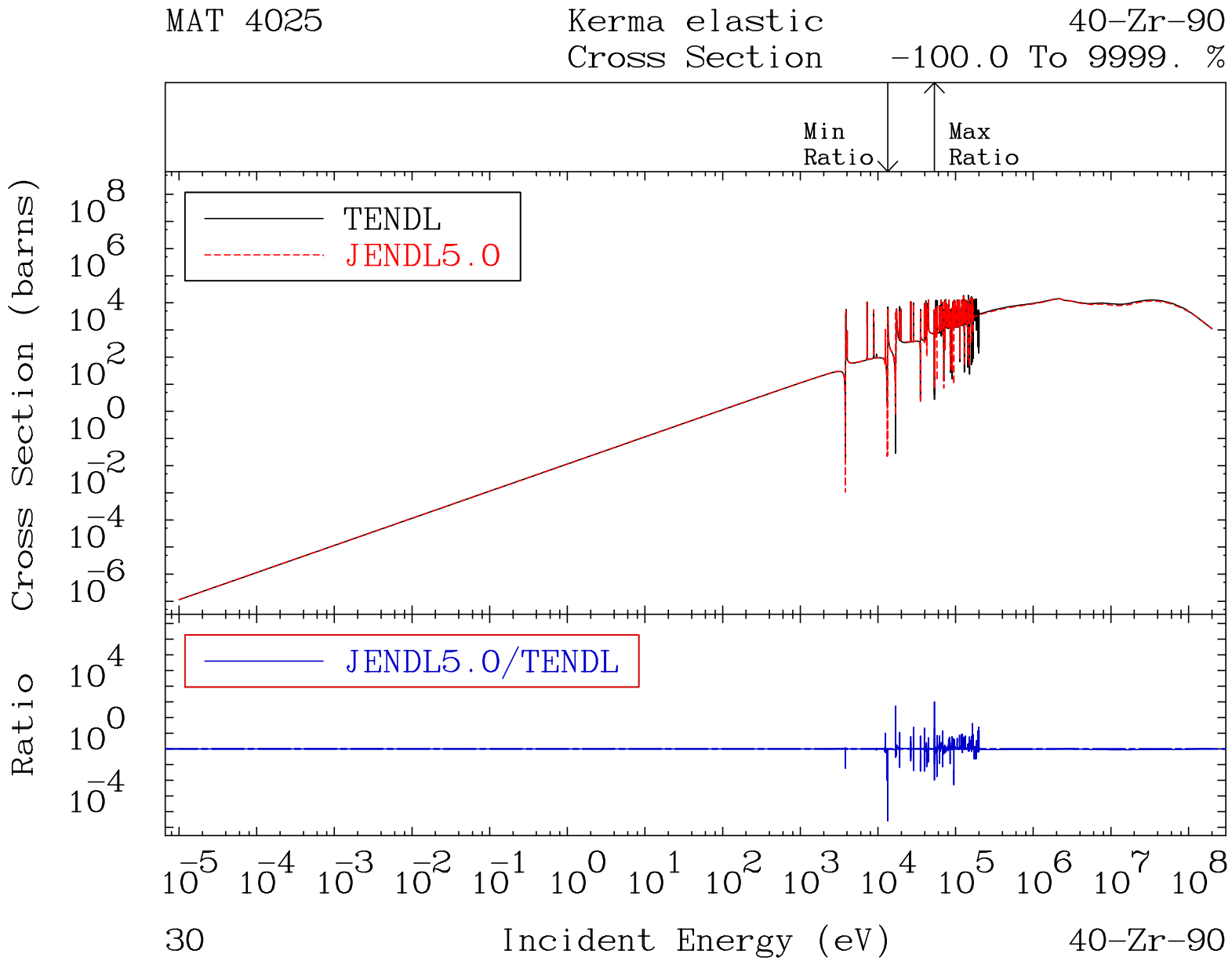

MAT 4025
Deuterium Production
40-Zr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.1945 MeV
JENDL5.0 Threshold 6.1976 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.8
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
40-Zr-90

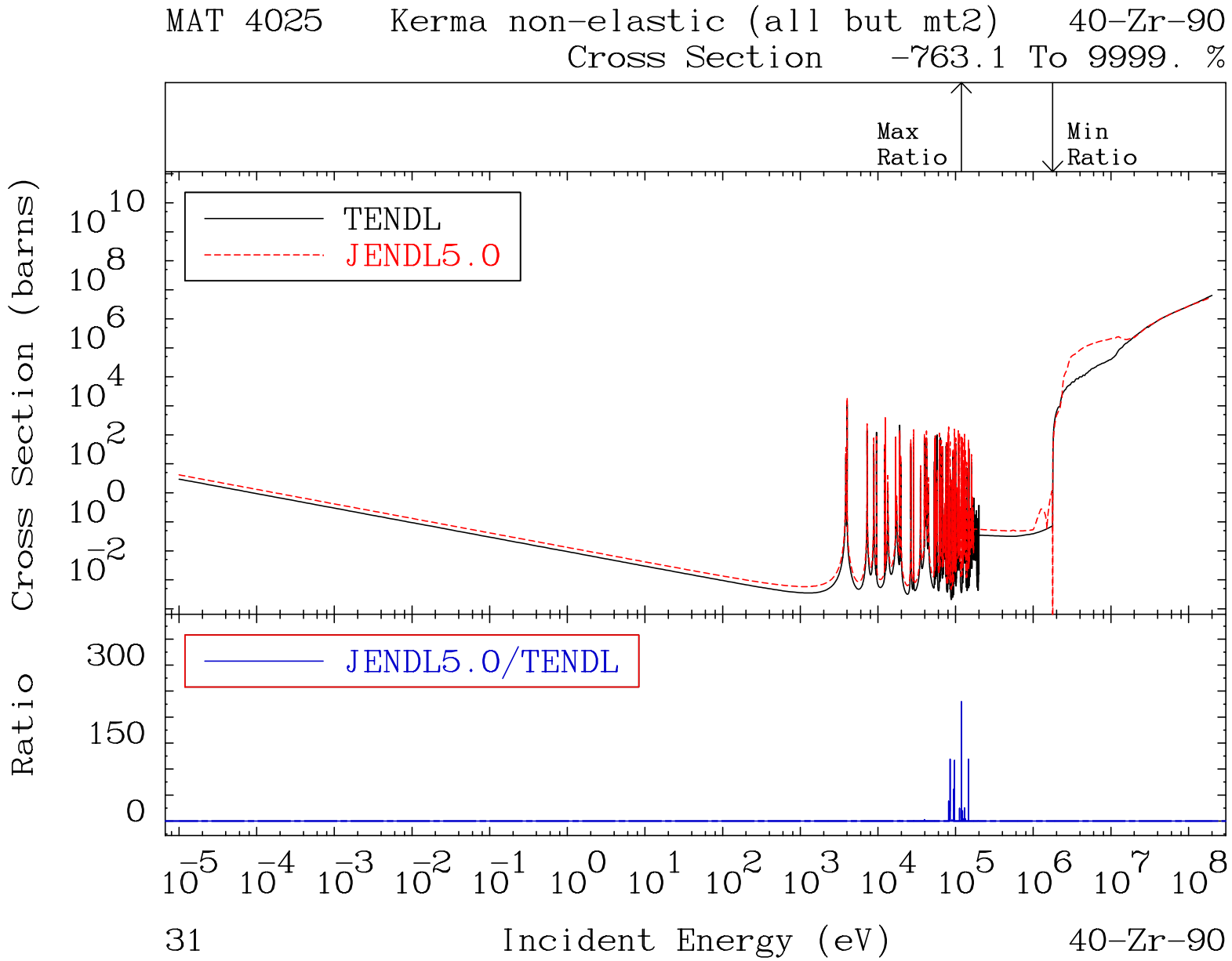

MAT 4025
Tritium Production
40-Zr-90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 11.479 MeV
JENDL5.0 Threshold 11.481 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
100
0
2
3
4
5
6
7
8
9
2
10^8
26
Incident Energy (eV)
40-Zr-90

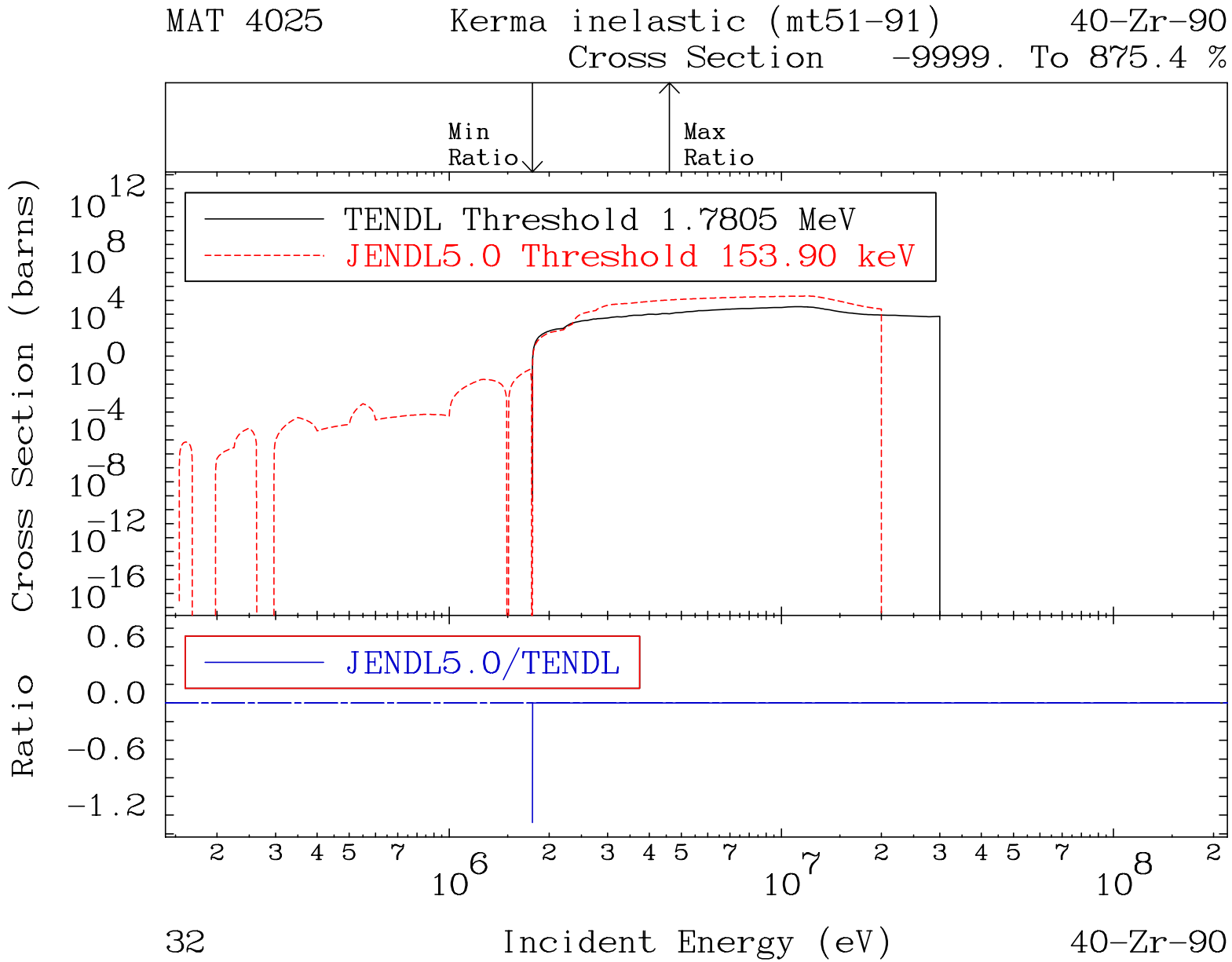

MAT 4025
He-3 Production
Cross Section
40-Zr-90
-100.0 To -8.738%
Min Ratio
Max Ratio
TENDL Threshold 7.7973 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.8
0.4
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
40-Zr-90

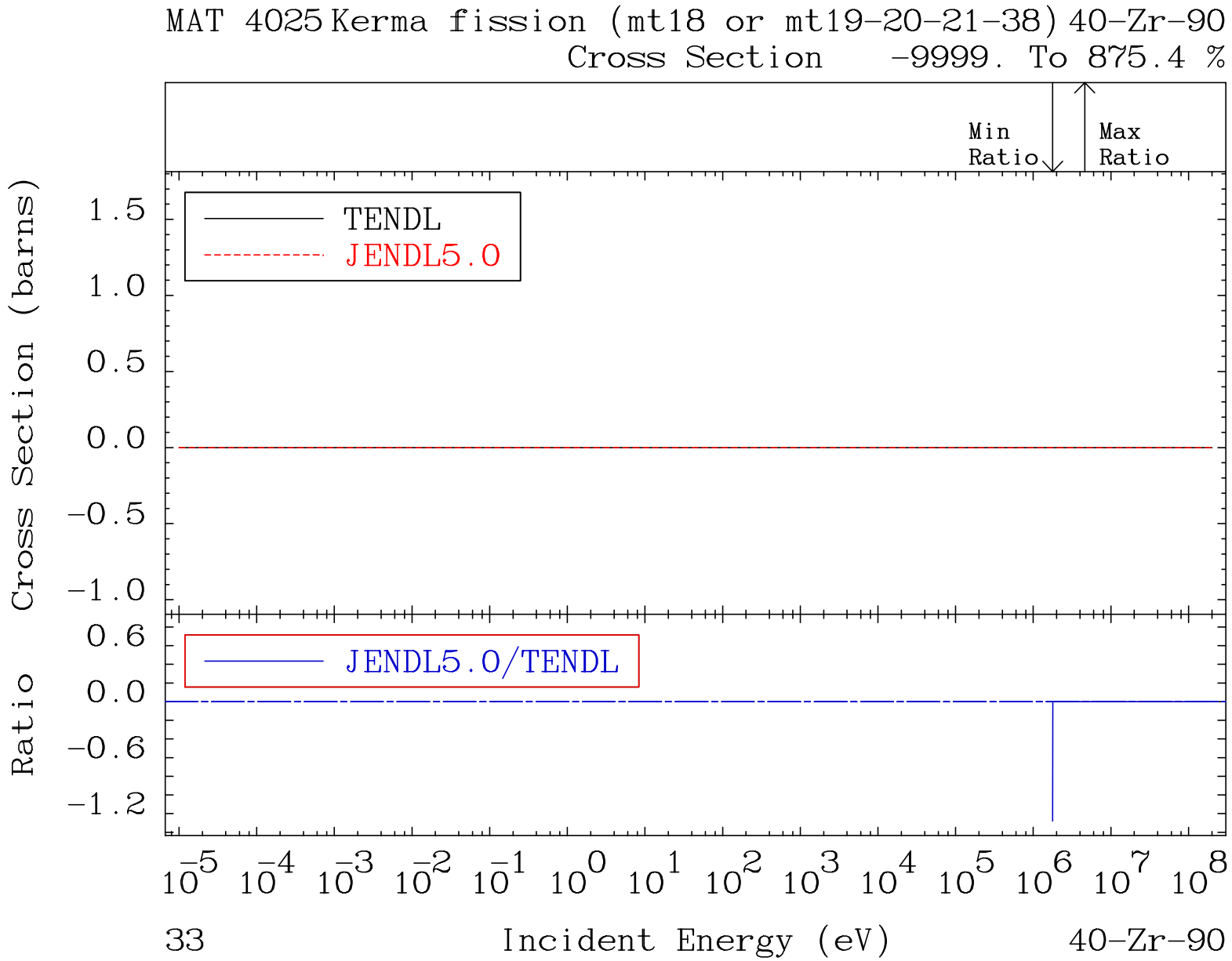

MAT 4025
He-4 Production
Cross Section
40-Zr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 17.779 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
40-Zr-90

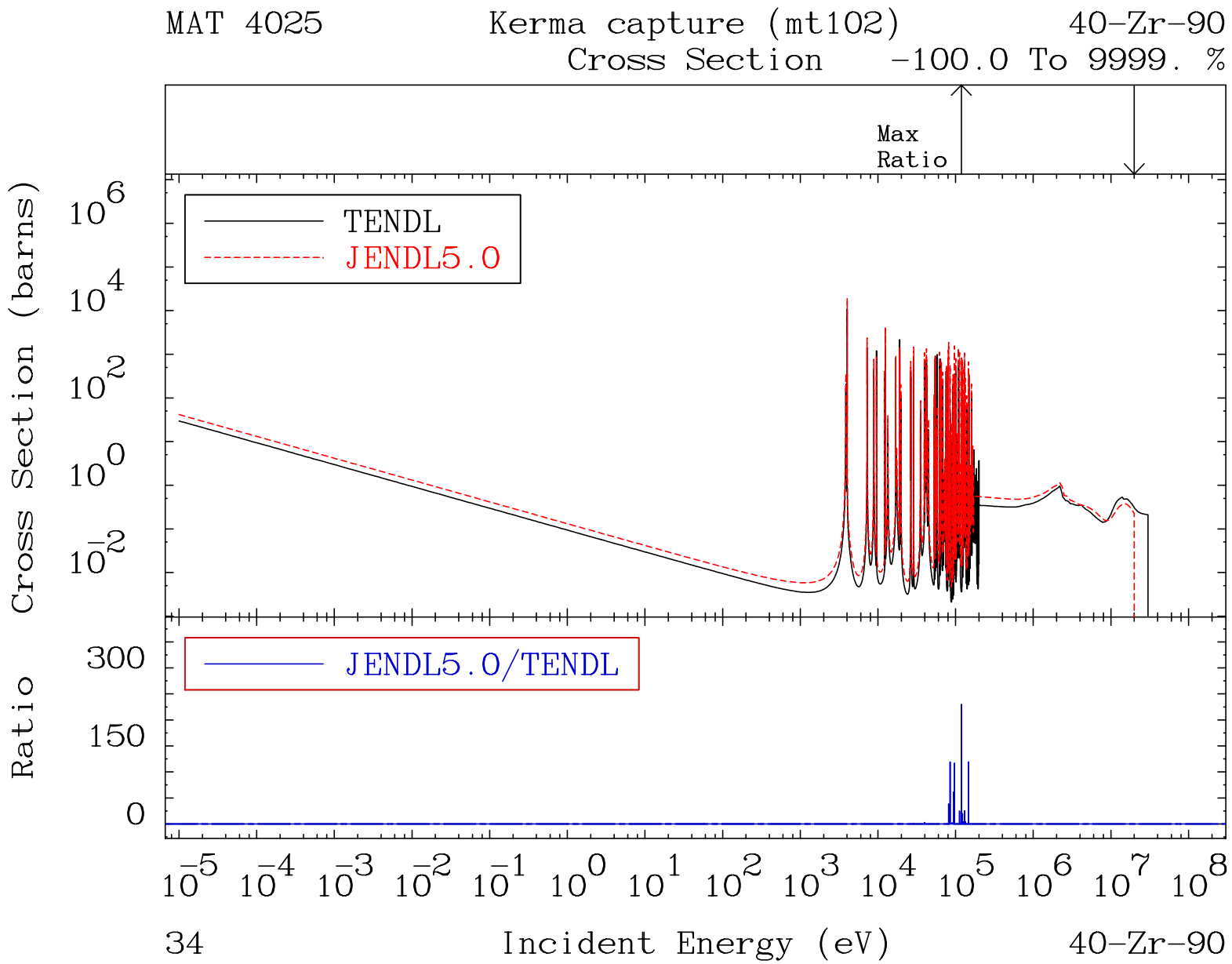

MAT 4025
Kerma total (eV-barns)
40-Zr-90
Cross Section -99.87 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
29
40-Zr-90

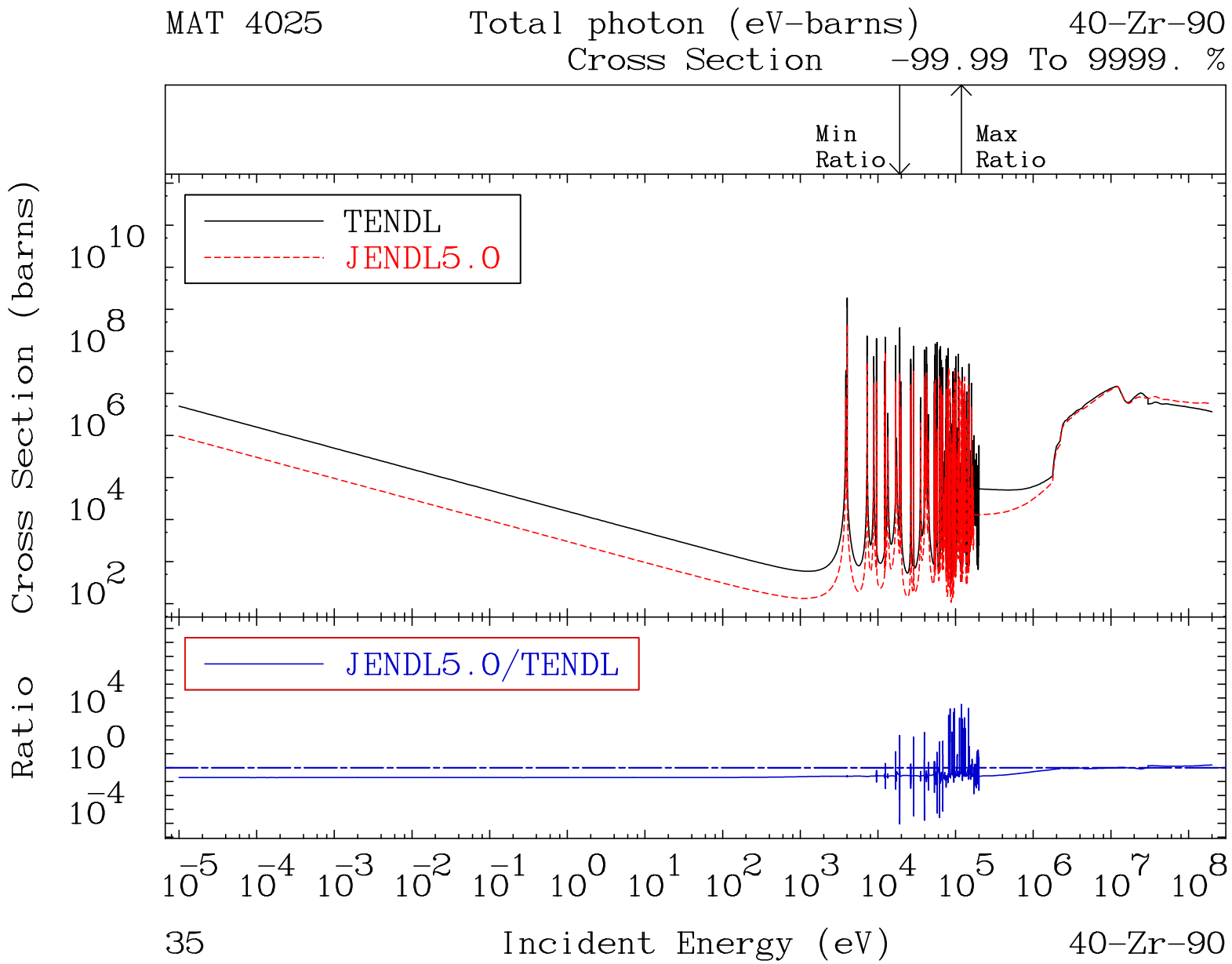

MAT 4025
Kerma elastic
Cross Section
40-Zr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
40-Zr-90

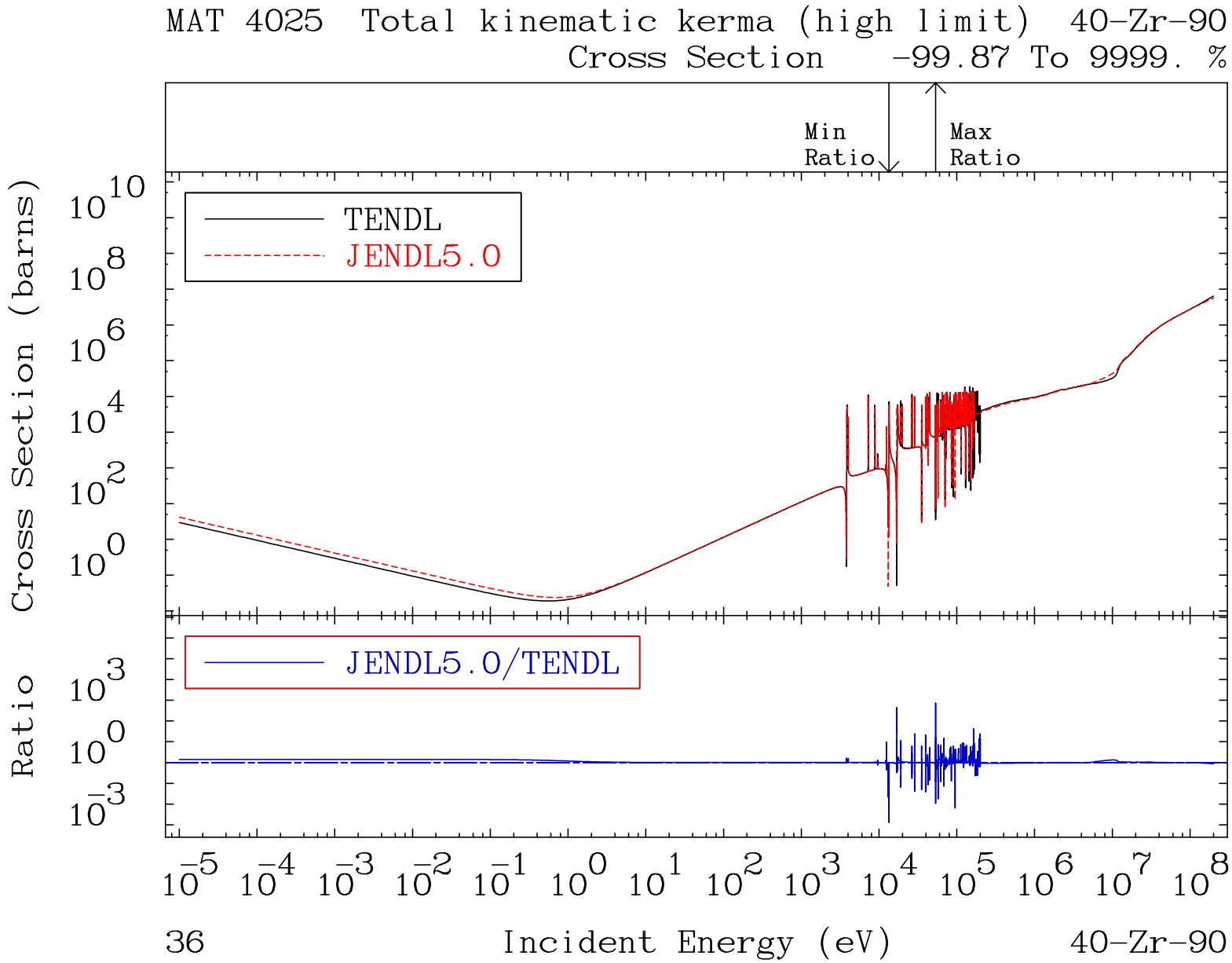

MAT 4025 Kerma non-elastic (all but mt2) 40-Zr-90
Cross Section -763.1 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
31
40-Zr-90

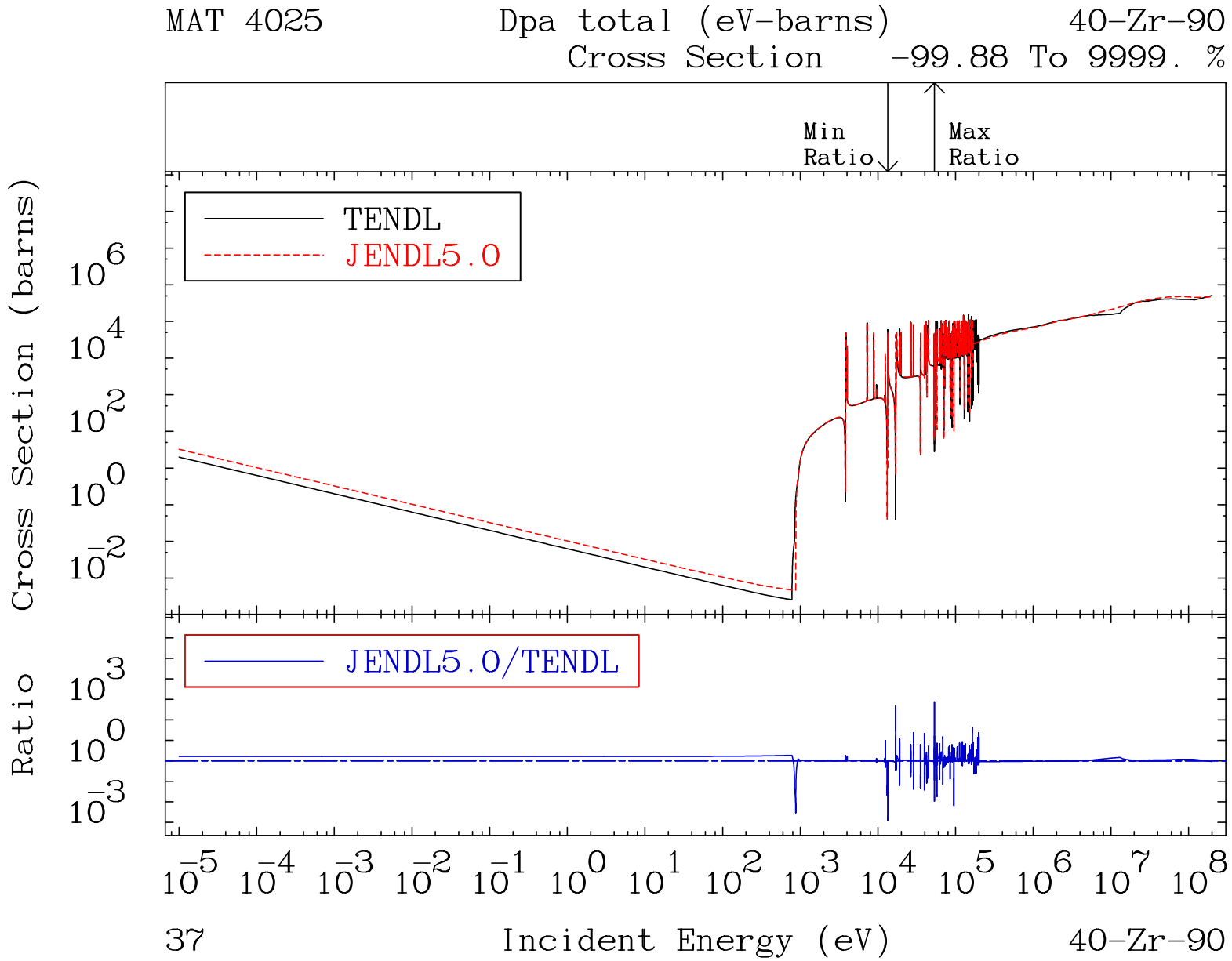

MAT 4025
Kerma inelastic (mt51-91)
40-Zr-90
Cross Section -9999. To 875.4 %
Min Ratio
Max Ratio
TENDL Threshold 1.7805 MeV
JENDL5.0 Threshold 153.90 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
40-Zr-90

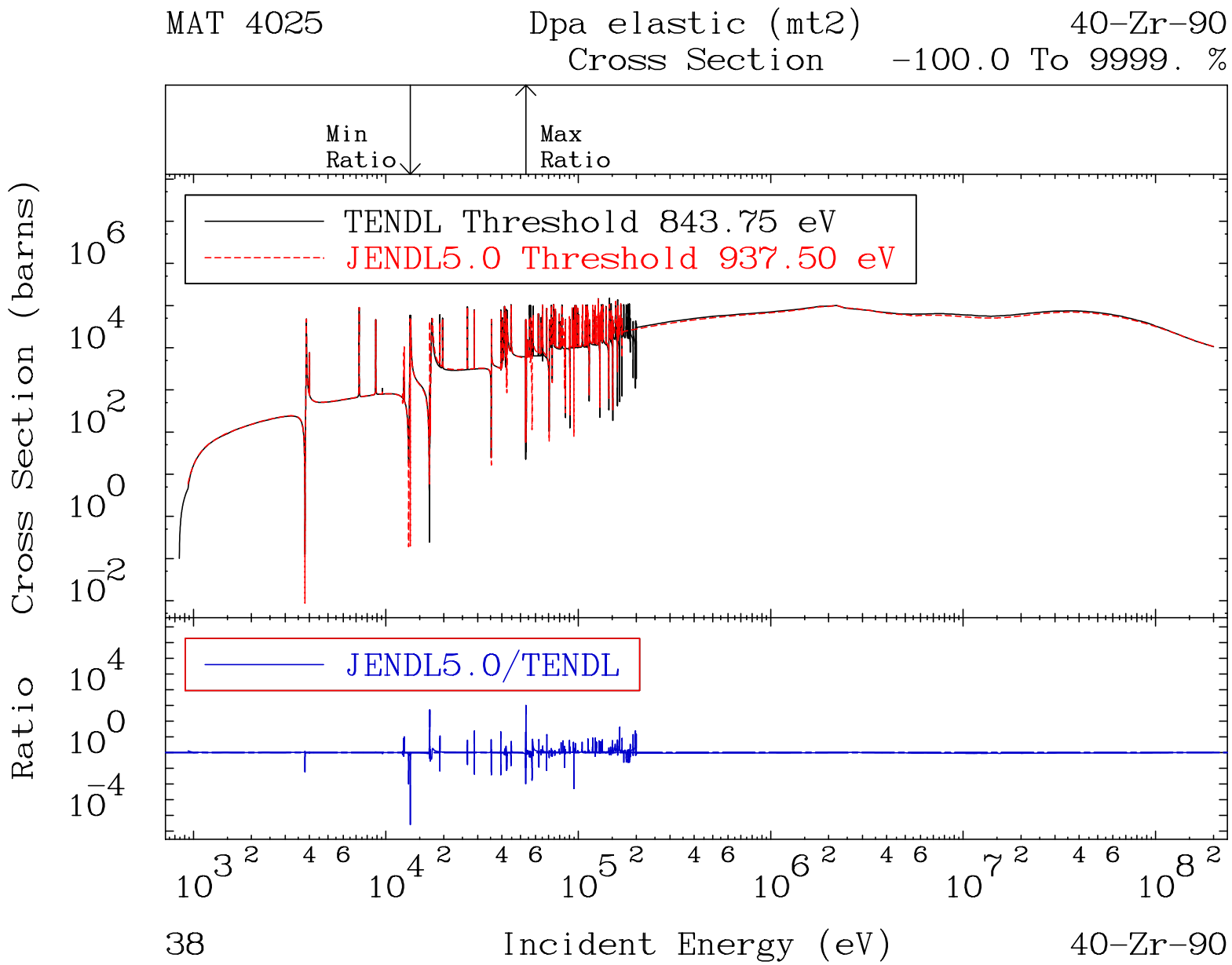

MAT 4025 Kerma fission (mt18 or mt19-20-21-38) 40-Zr-90
Cross Section -9999. To 875.4 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0.6
0.0
-0.6
-1.2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
40-Zr-90

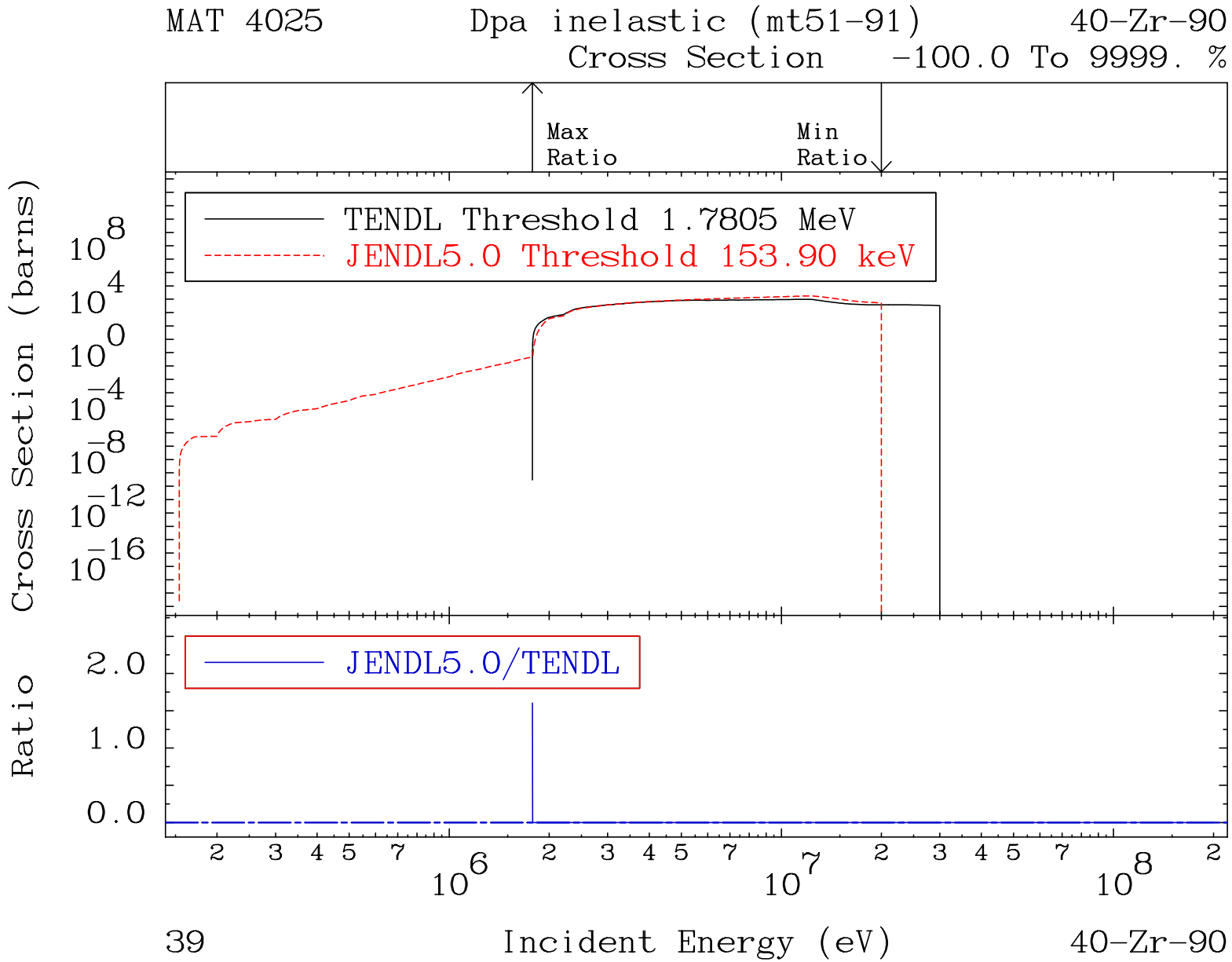

MAT 4025
Kerma capture (mt102)
40-Zr-90
Cross Section -100.0 To 9999. %
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
34
40-Zr-90

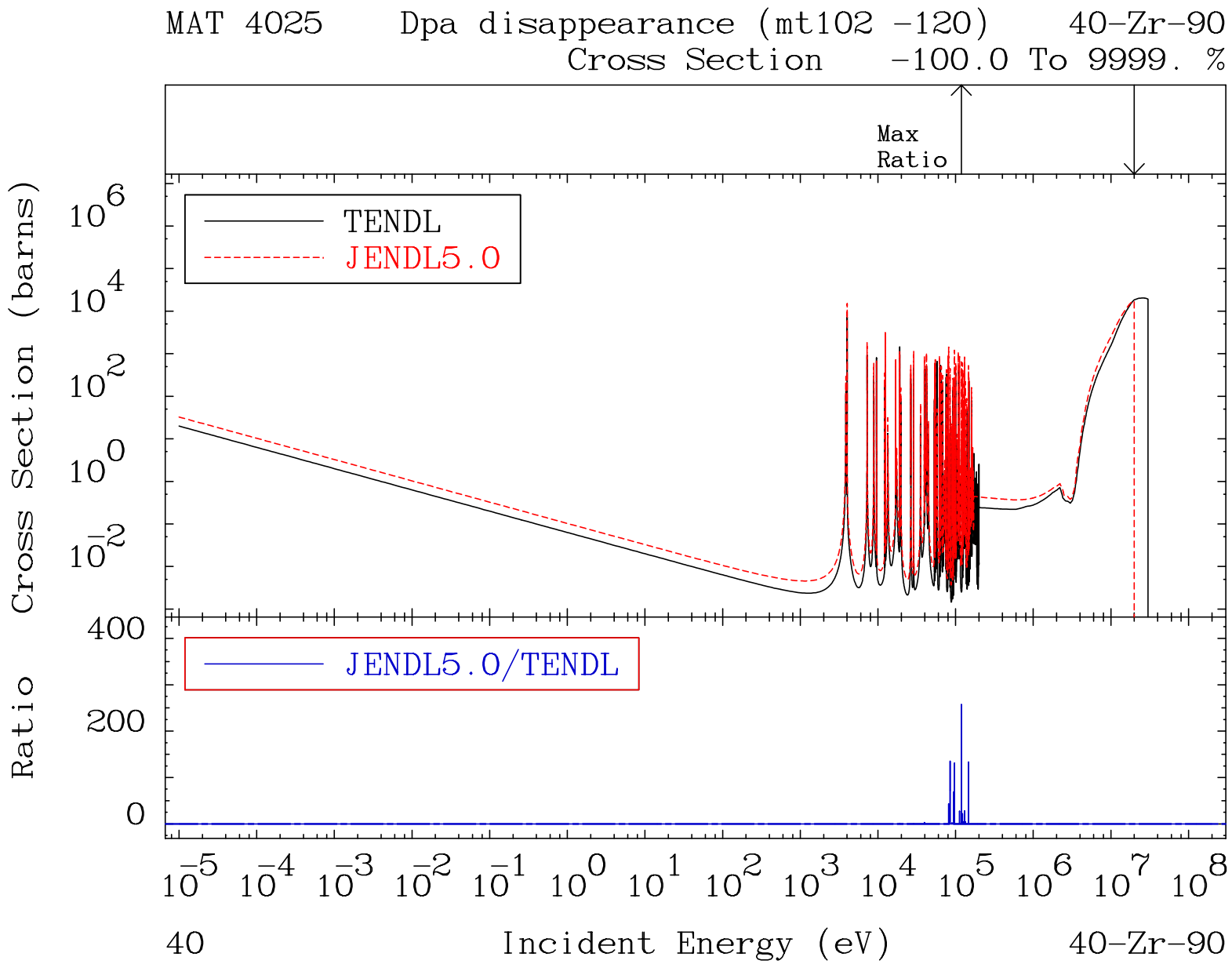

MAT 4025
Total photon (eV-barns)
40-Zr-90
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
35
40-Zr-90

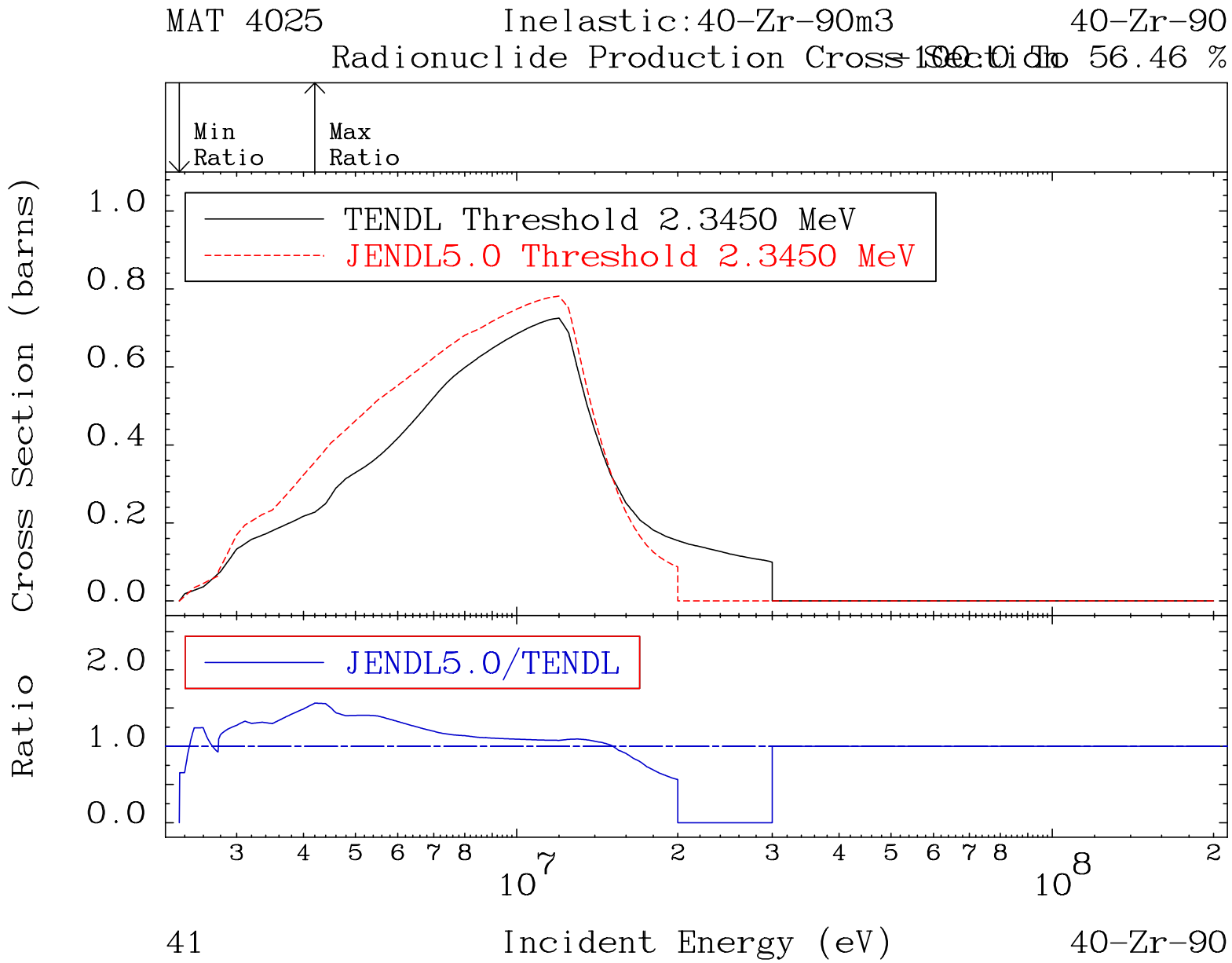

MAT 4025 Total kinematic kerma (high limit) 40-Zr-90
Cross Section -99.87 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
36
40-Zr-90

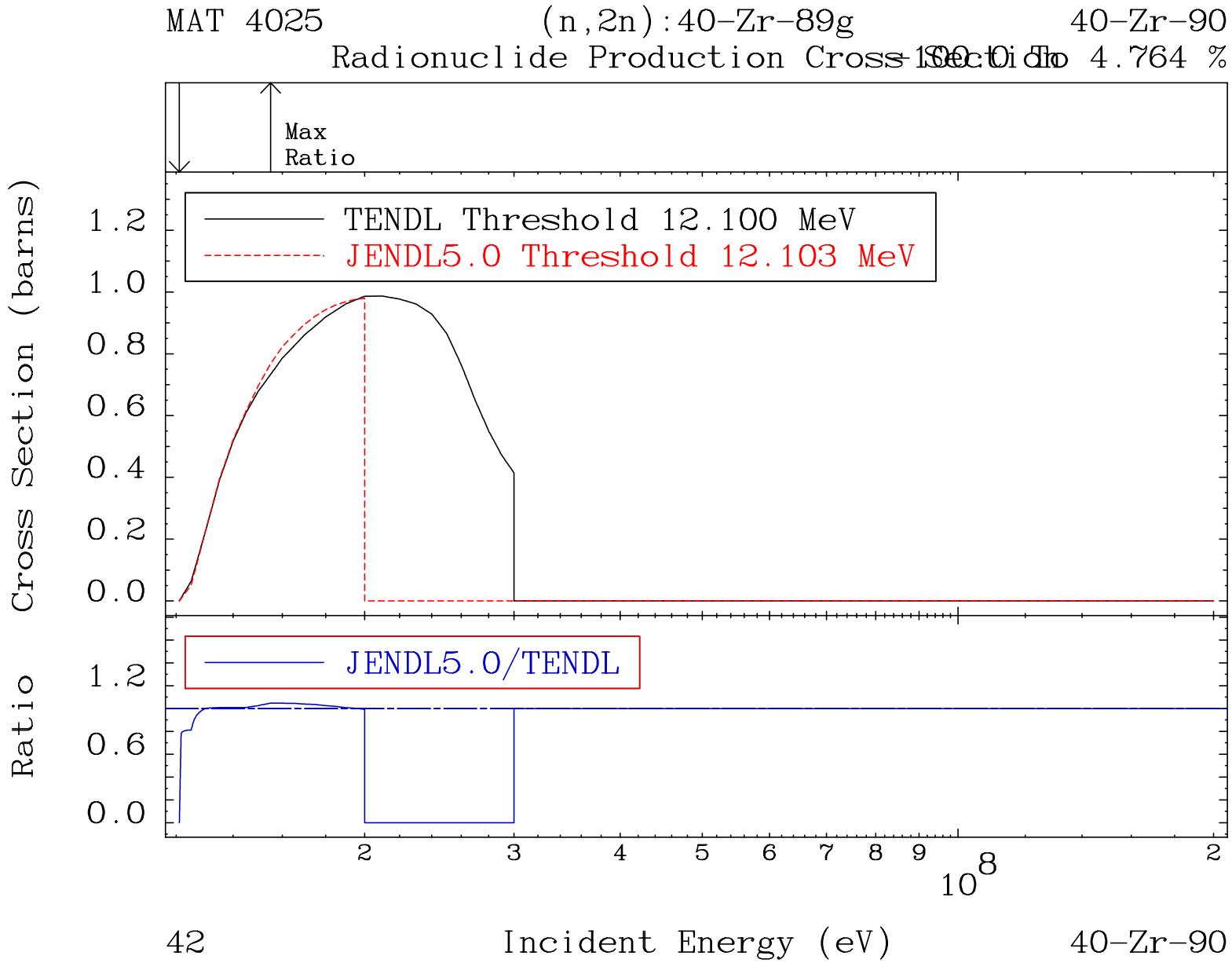

MAT 4025
Dpa total (eV-barns)
40-Zr-90
Cross Section
-99.88 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
37
40-Zr-90

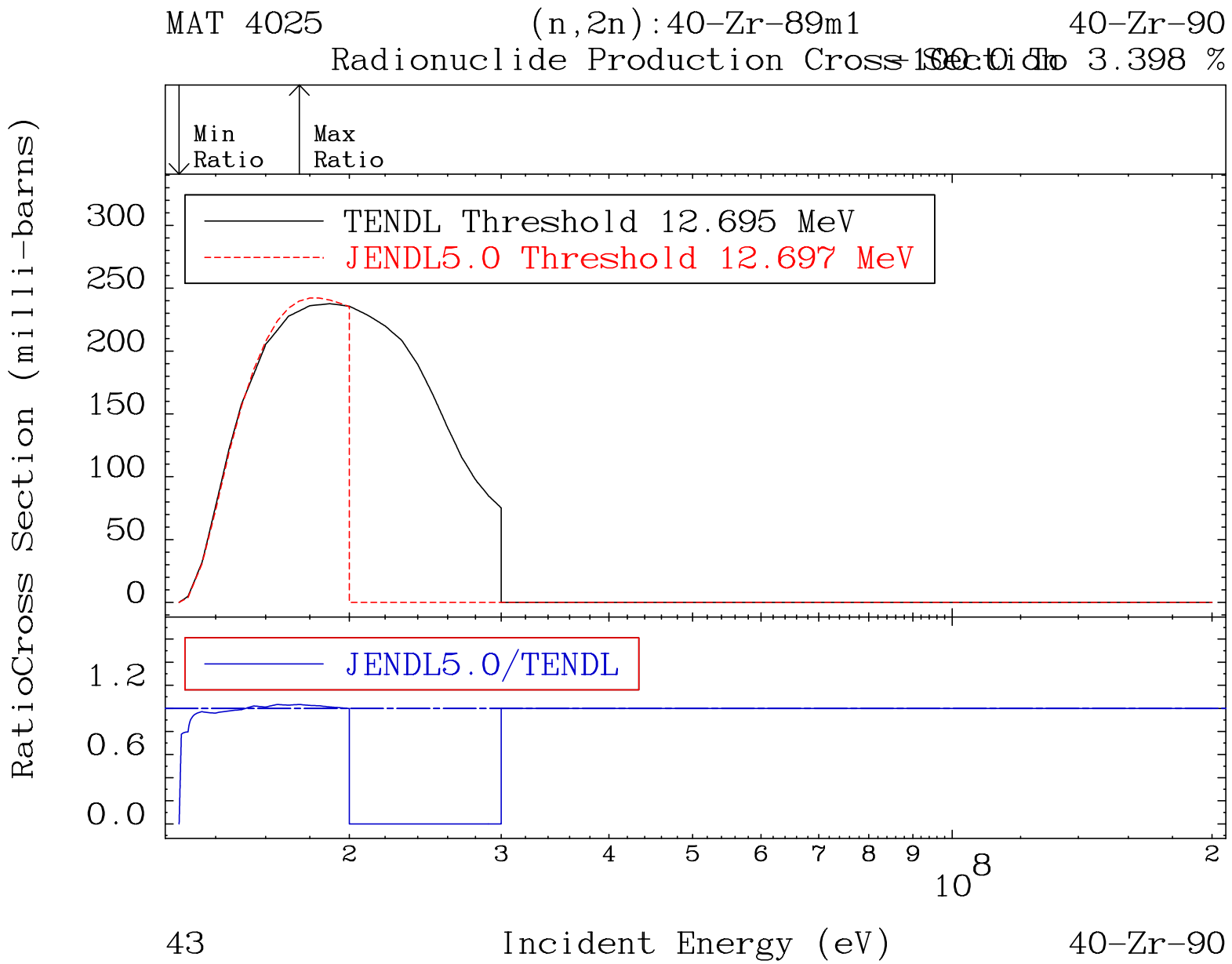

MAT 4025
Dpa elastic (mt2)
Cross Section
40-Zr-90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 843.75 eV
JENDL5.0 Threshold 937.50 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
40-Zr-90

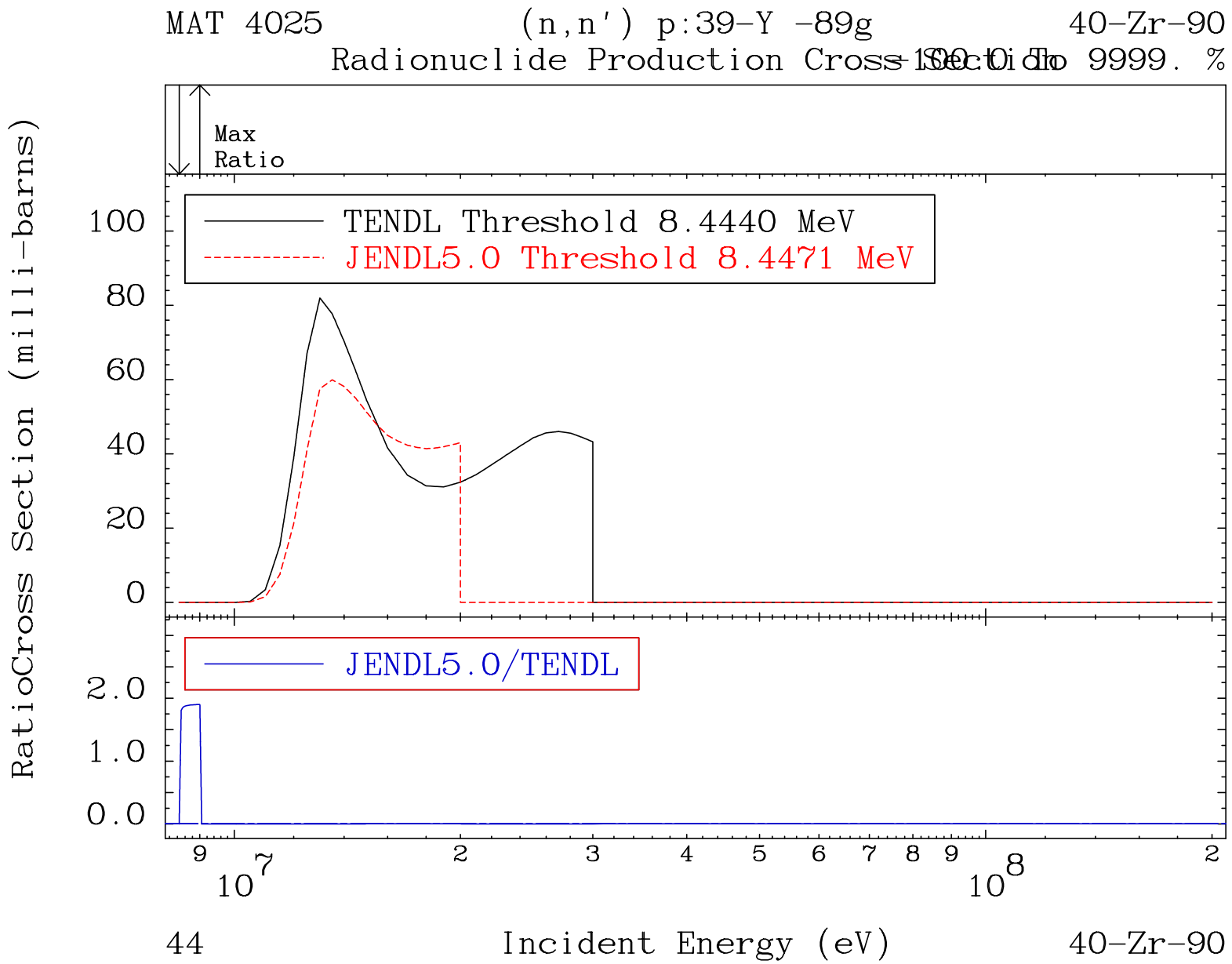

MAT 4025
Dpa inelastic (mt51-91)
40-Zr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.7805 MeV
JENDL5.0 Threshold 153.90 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
39
40-Zr-90

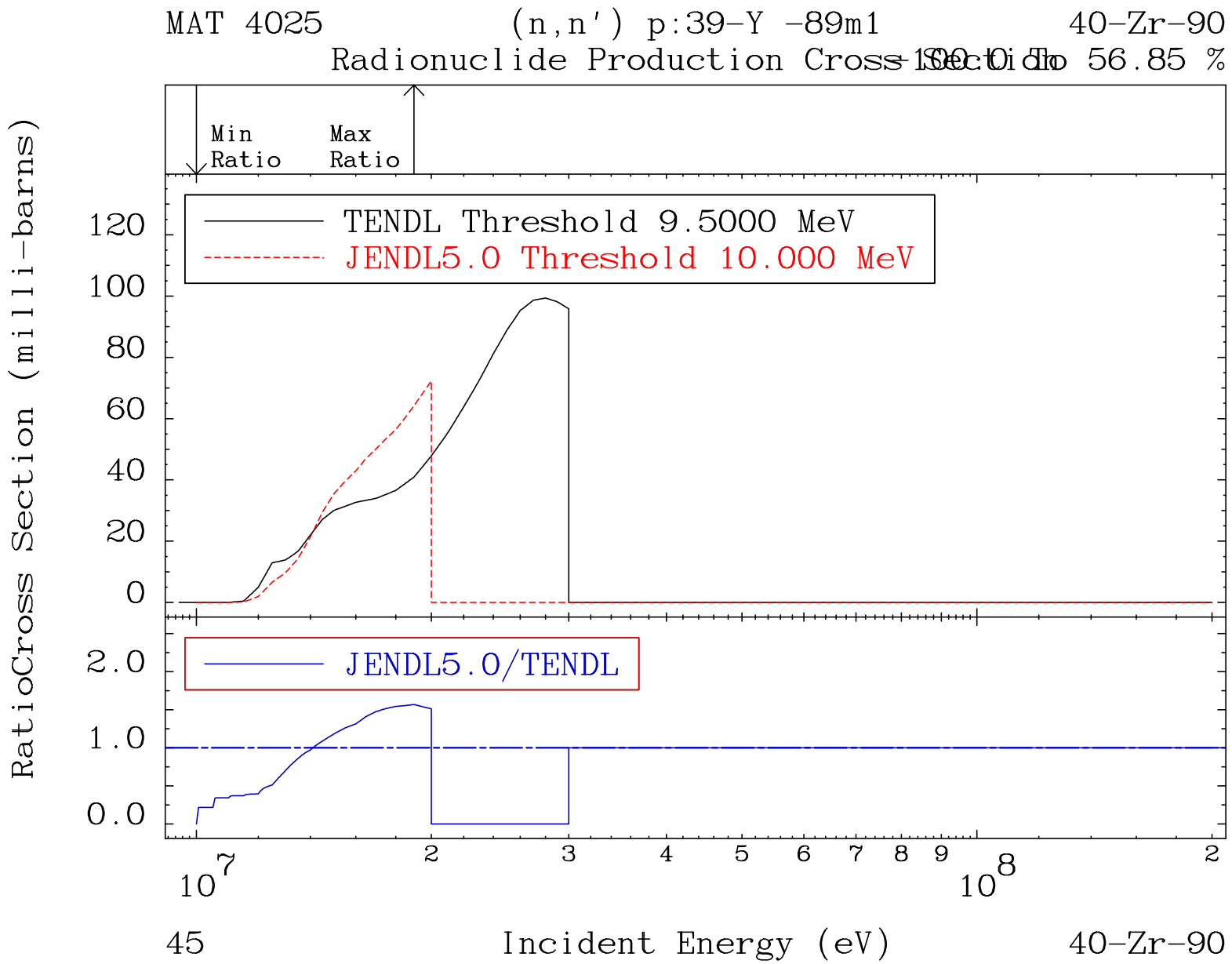

MAT 4025 Dpa disappearance (mt102 -120) 40-Zr-90
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
40-Zr-90

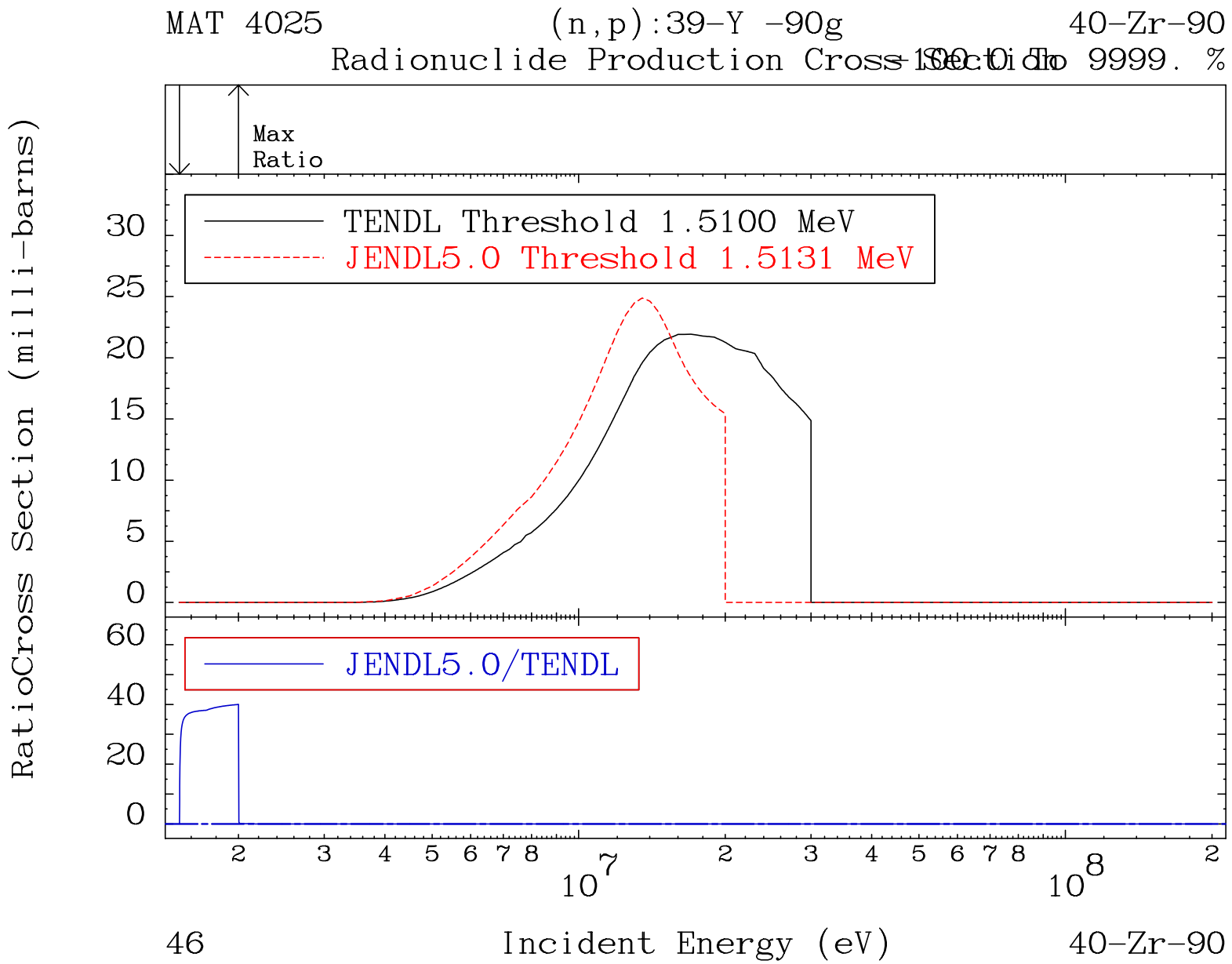

MAT 4025
Inelastic:40-Zr-90m3
40-Zr-90
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 2.3450 MeV
JENDL5.0 Threshold 2.3450 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
41
40-Zr-90

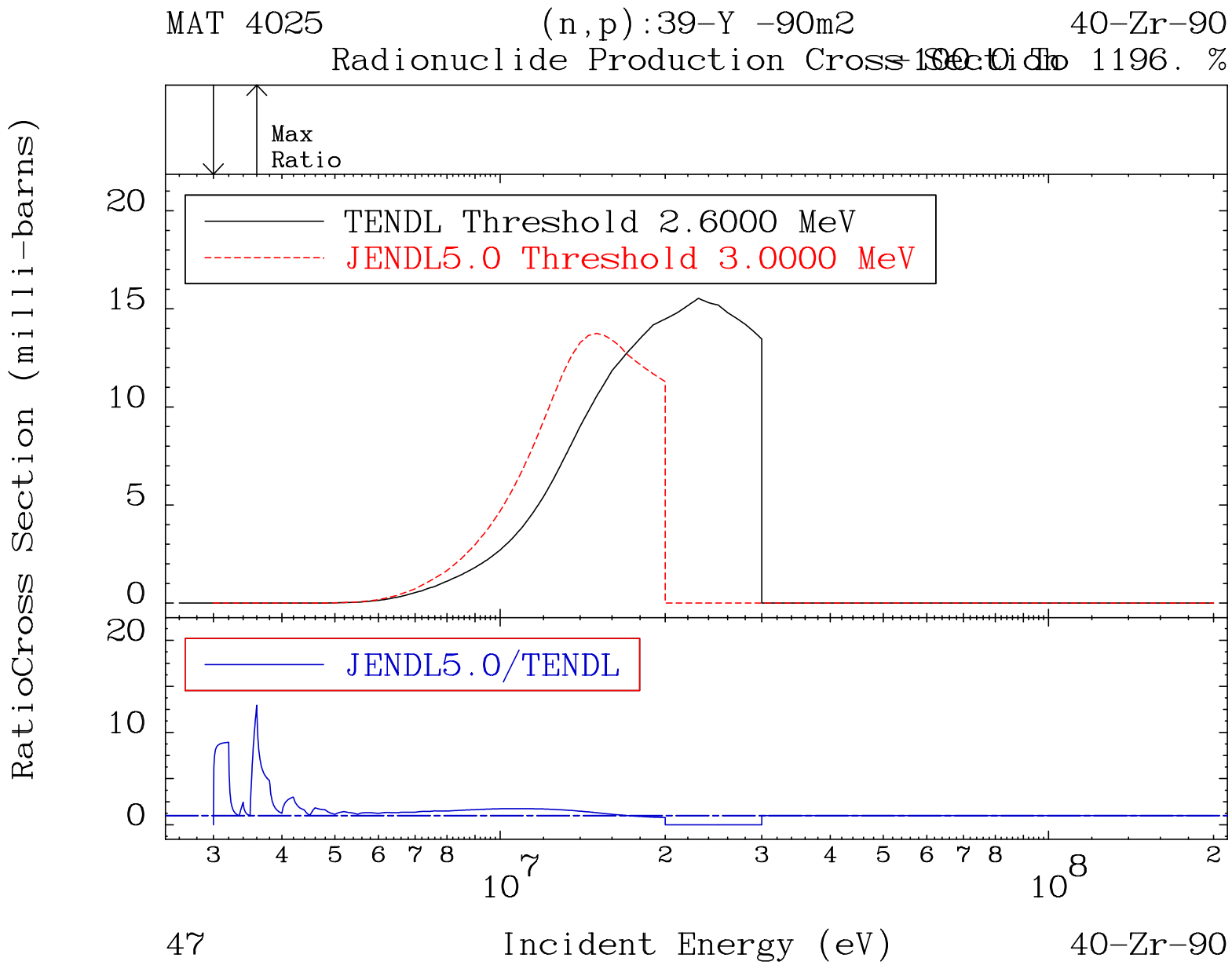

MAT 4025
(n,2n):40-Zr-89g
40-Zr-90
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 12.100 MeV
JENDL5.0 Threshold 12.103 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
42
Incident Energy (eV)
40-Zr-90

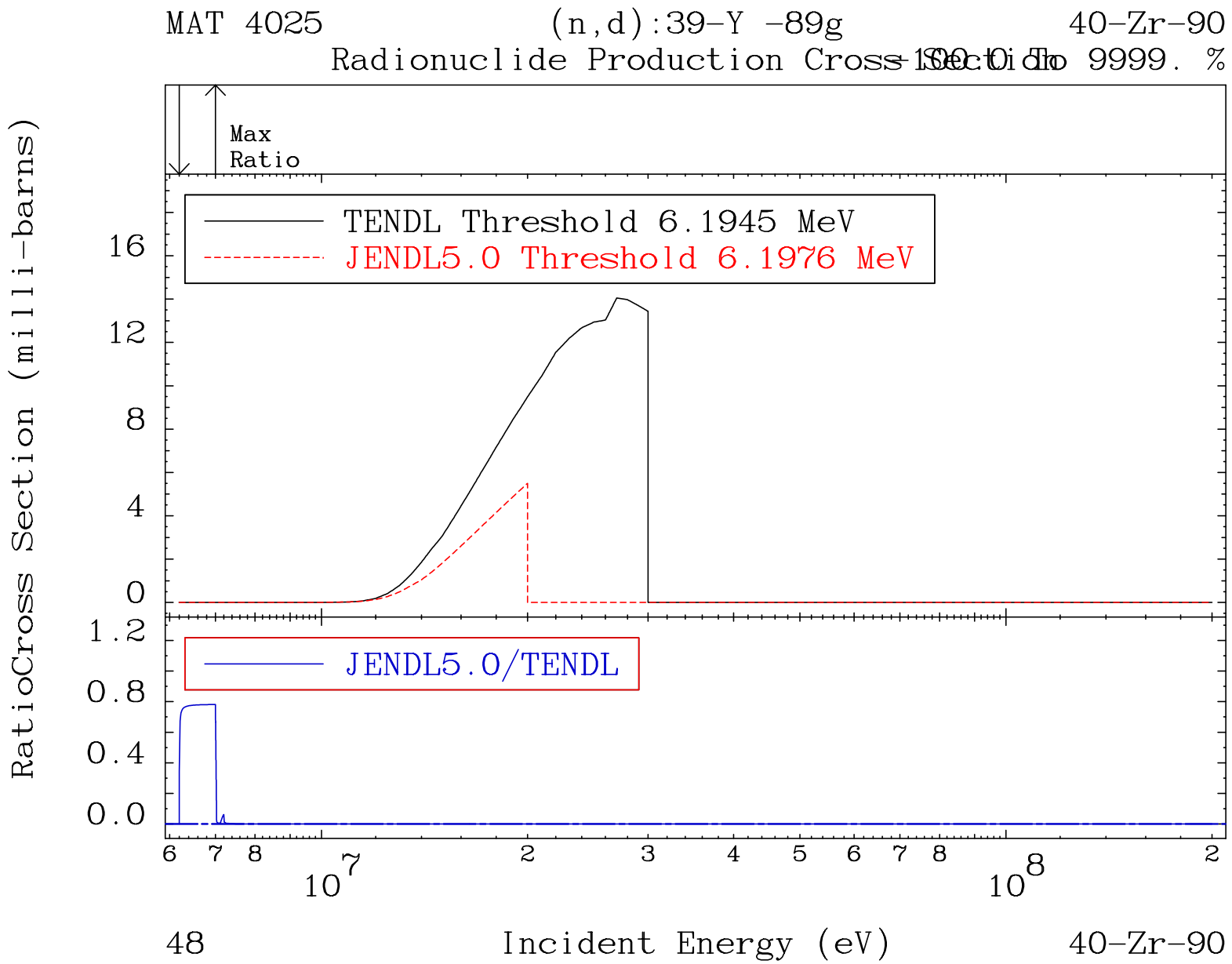

MAT 4025
(n,2n):40-Zr-89m1
40-Zr-90
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 12.695 MeV
JENDL5.0 Threshold 12.697 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
43
40-Zr-90

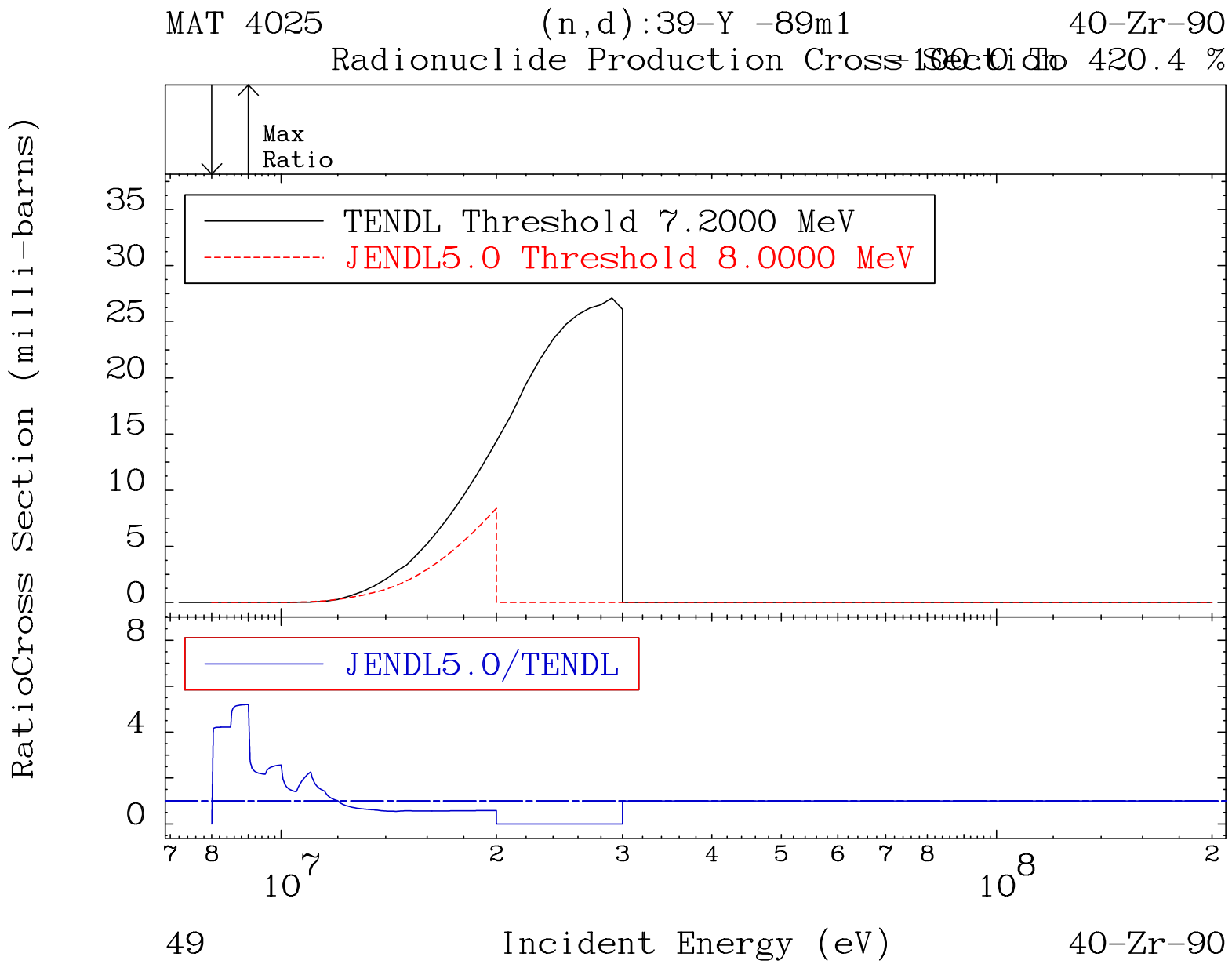

MAT 4025
(n,n') p:39-Y -89g
40-Zr-90
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 8.4440 MeV
JENDL5.0 Threshold 8.4471 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
40-Zr-90

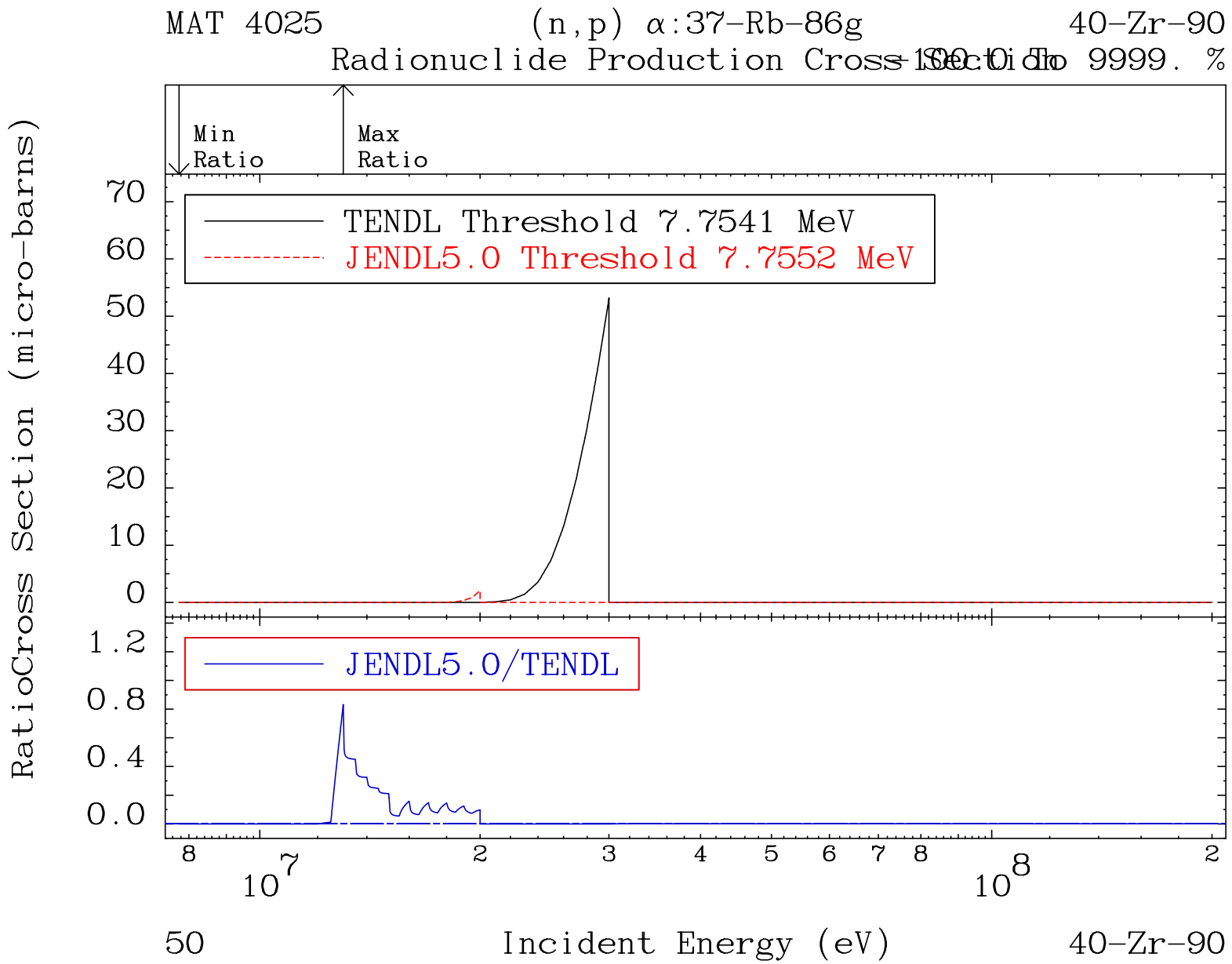

MAT 4025
(n,n') p:39-Y -89m1
40-Zr-90
Radionuclide Production Cross Section To 56.85 %
Min Ratio
Max Ratio
TENDL Threshold 9.5000 MeV
JENDL5.0 Threshold 10.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
40-Zr-90

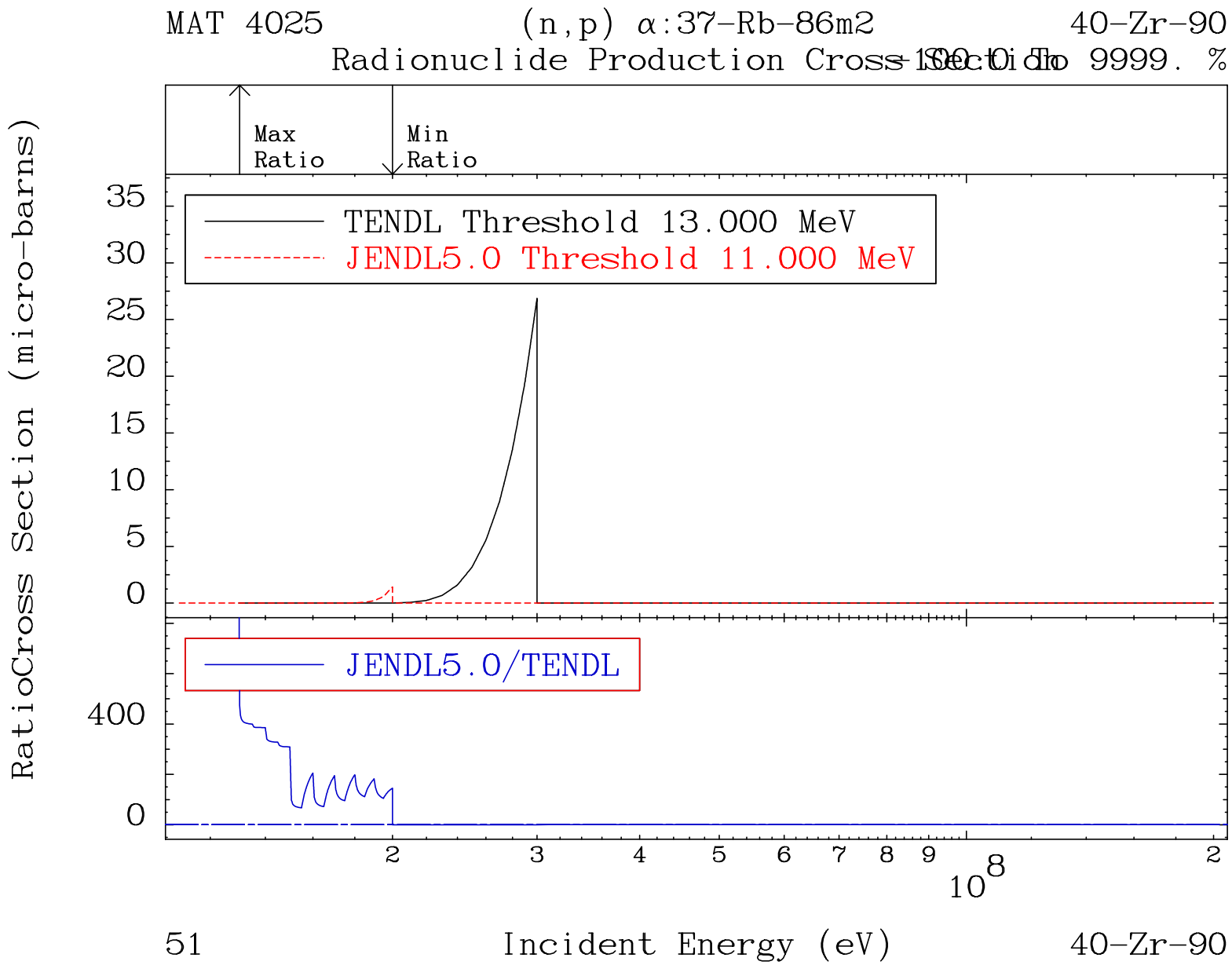

MAT 4025
(n,p):39-Y -90g
40-Zr-90
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 1.5100 MeV
JENDL5.0 Threshold 1.5131 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
60
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
40-Zr-90

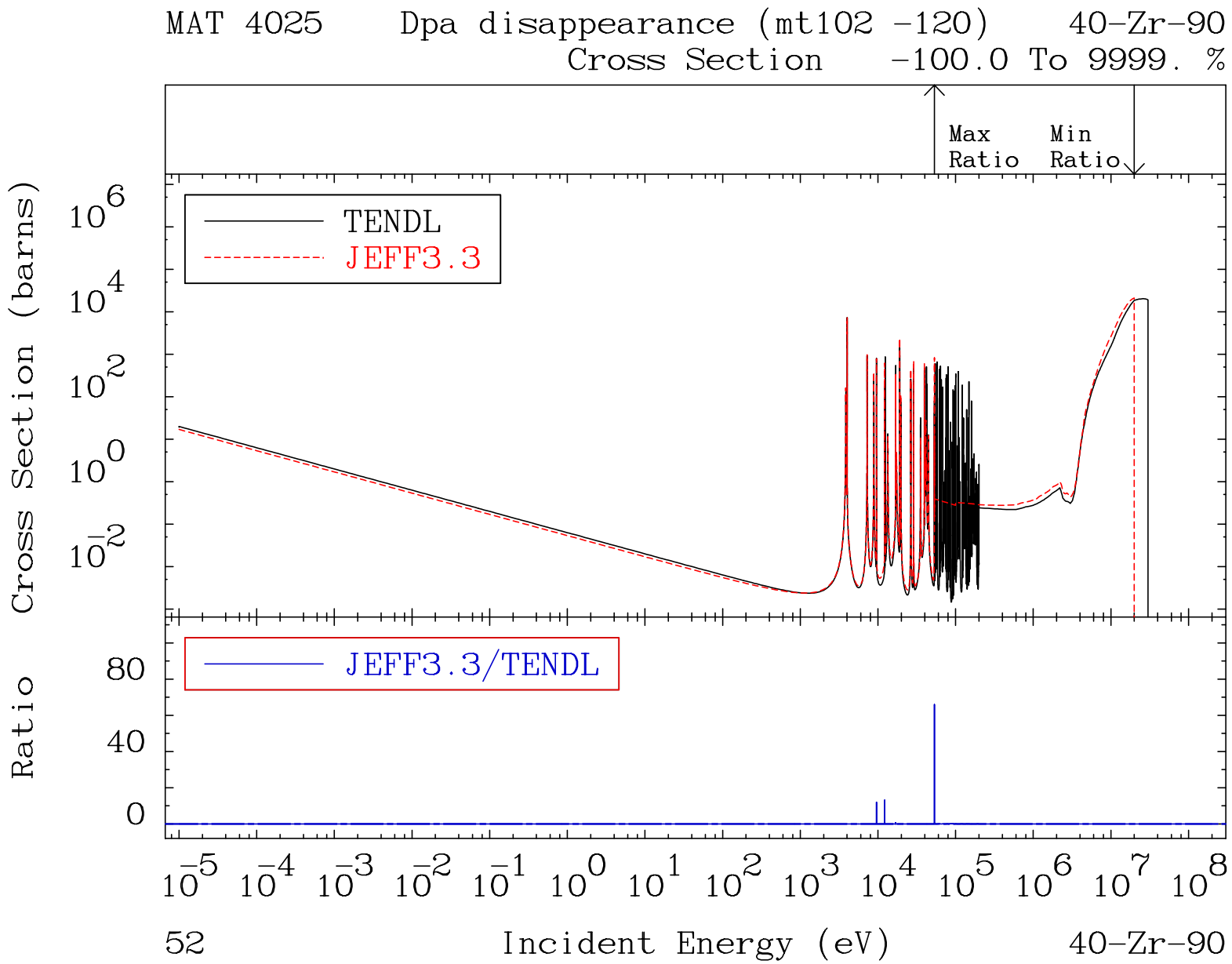

MAT 4025
(n,p):39-Y -90m2
40-Zr-90
Radionuclide Production Cross Section To 1196. %
Max
Ratio
TENDL Threshold 2.6000 MeV
JENDL5.0 Threshold 3.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
20
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
40-Zr-90


MAT 4025
(n,d):39-Y -89g
40-Zr-90
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 6.1945 MeV
JENDL5.0 Threshold 6.1976 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
0.8
0.4
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
40-Zr-90


MAT 4025
(n,d):39-Y -89m1
40-Zr-90
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 7.2000 MeV
JENDL5.0 Threshold 8.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
49
40-Zr-90


MAT 4025
(n,p) α:37-Rb-86g
40-Zr-90
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.7541 MeV
JENDL5.0 Threshold 7.7552 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
70
60
50
40
30
20
10
0
1.2
0.8
0.4
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
50
Incident Energy (eV)
40-Zr-90


MAT 4025
(n,p) α:37-Rb-86m2
40-Zr-90
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.000 MeV
JENDL5.0 Threshold 11.000 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
35
30
25
20
15
10
5
0
400
0
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
40-Zr-90


MAT 4025 Dpa disappearance (mt102 -120) 40-Zr-90
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
40-Zr-90