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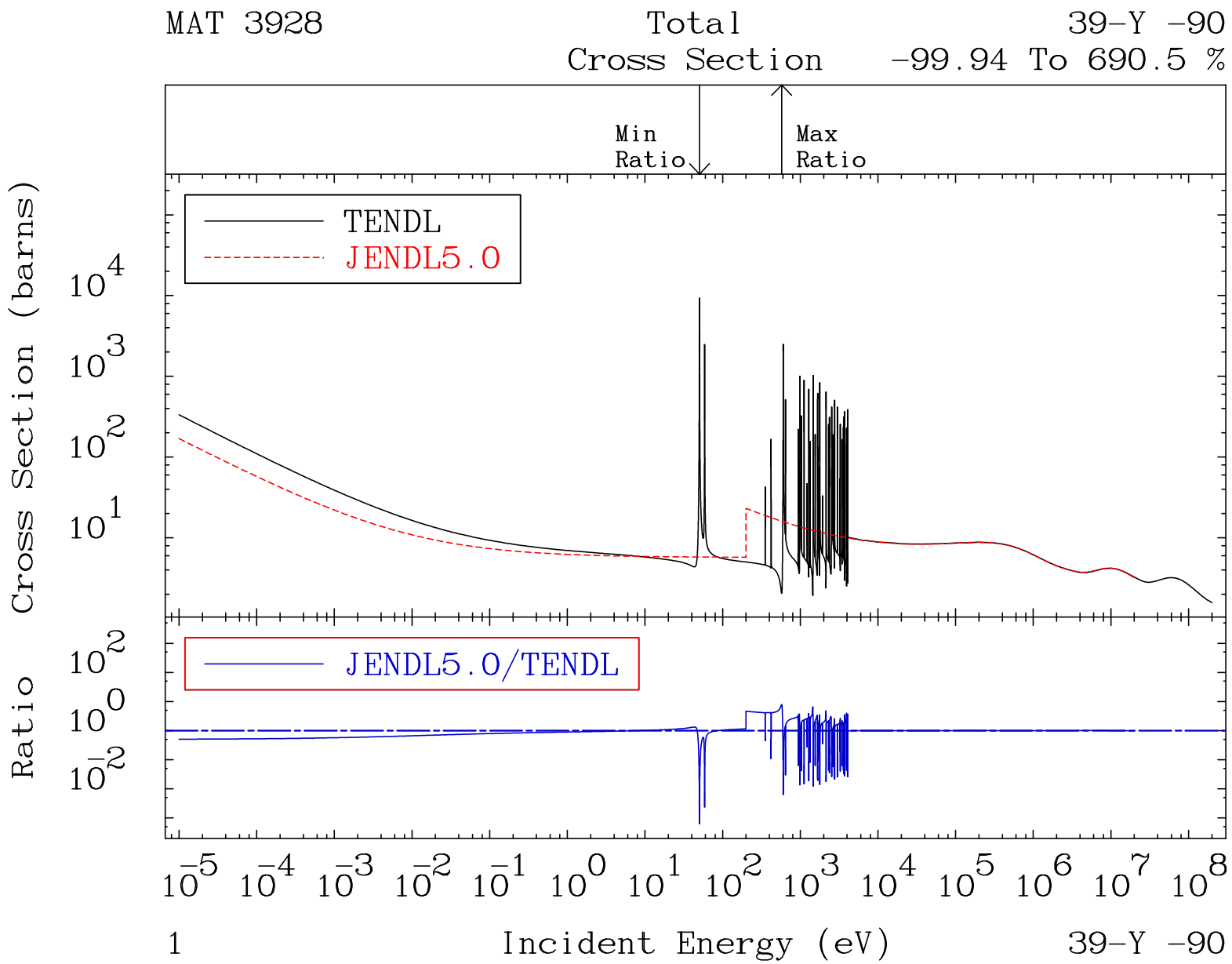
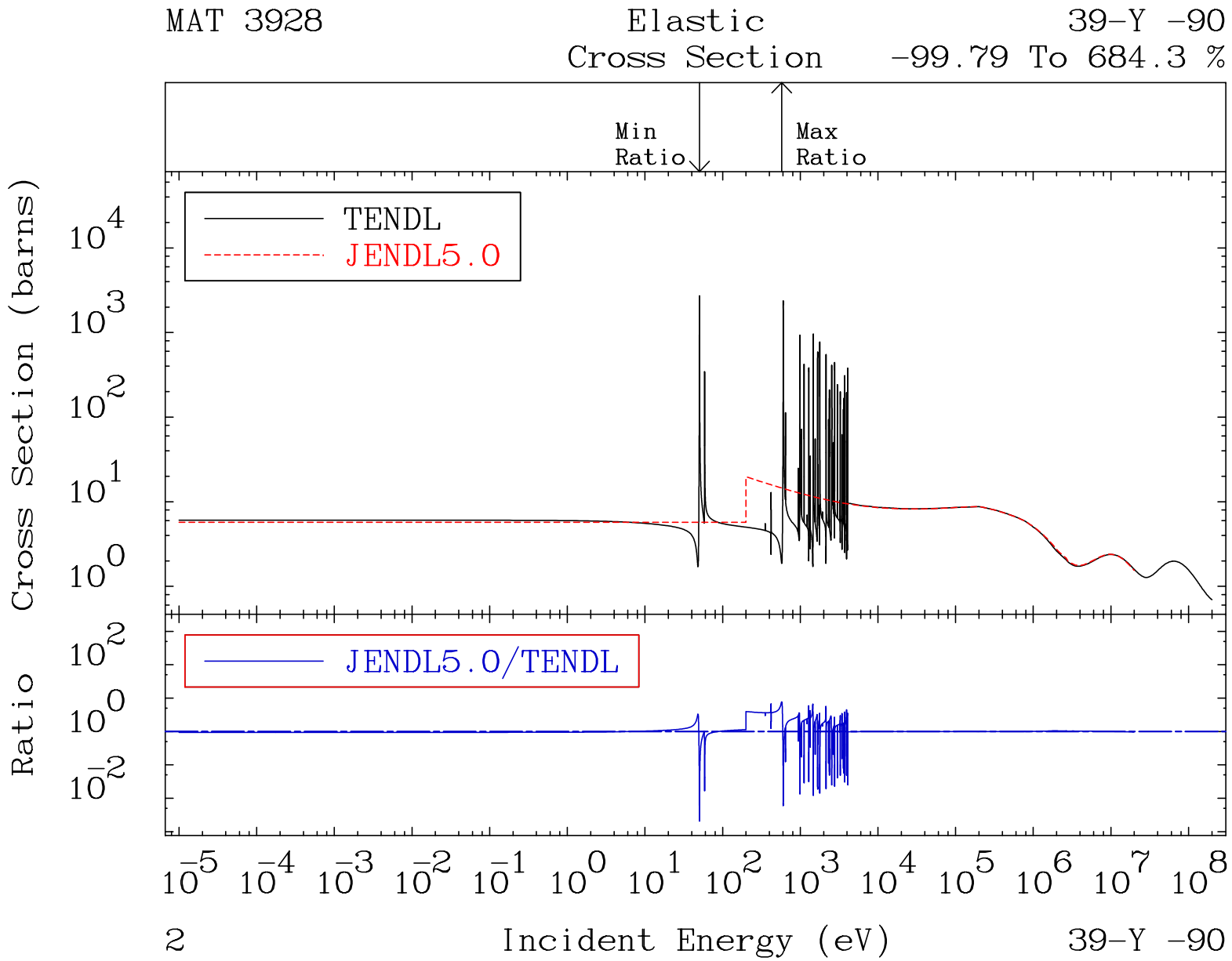
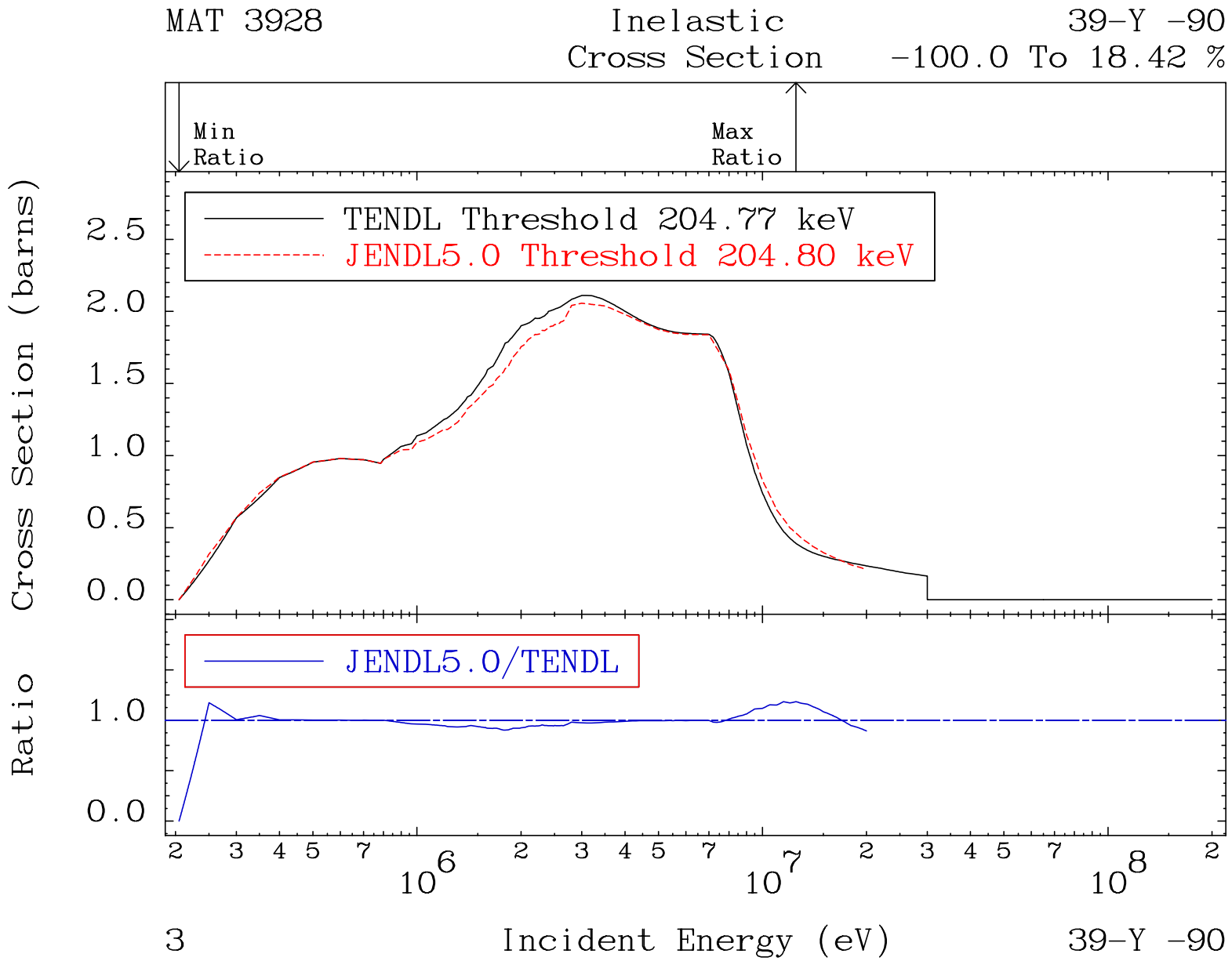
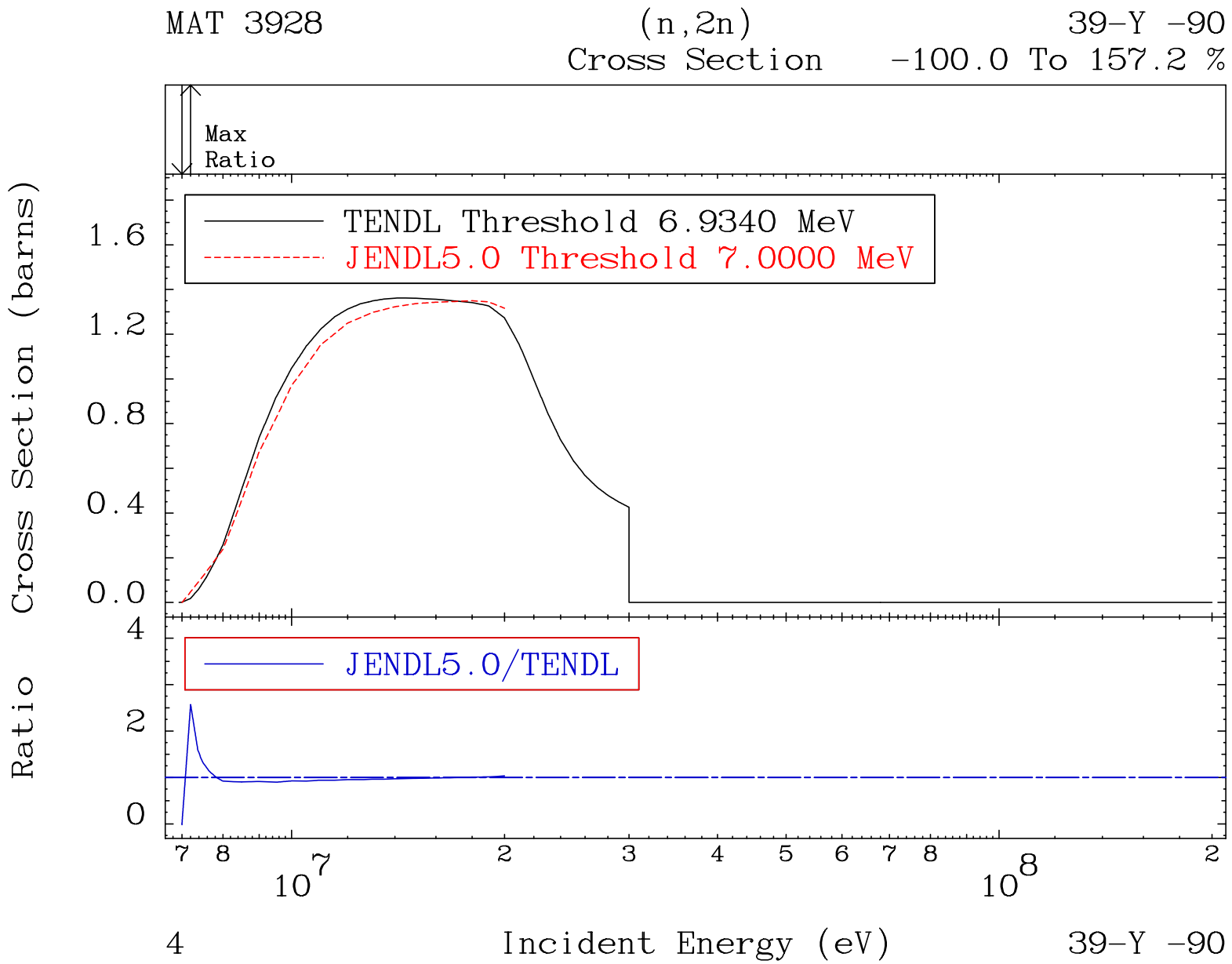
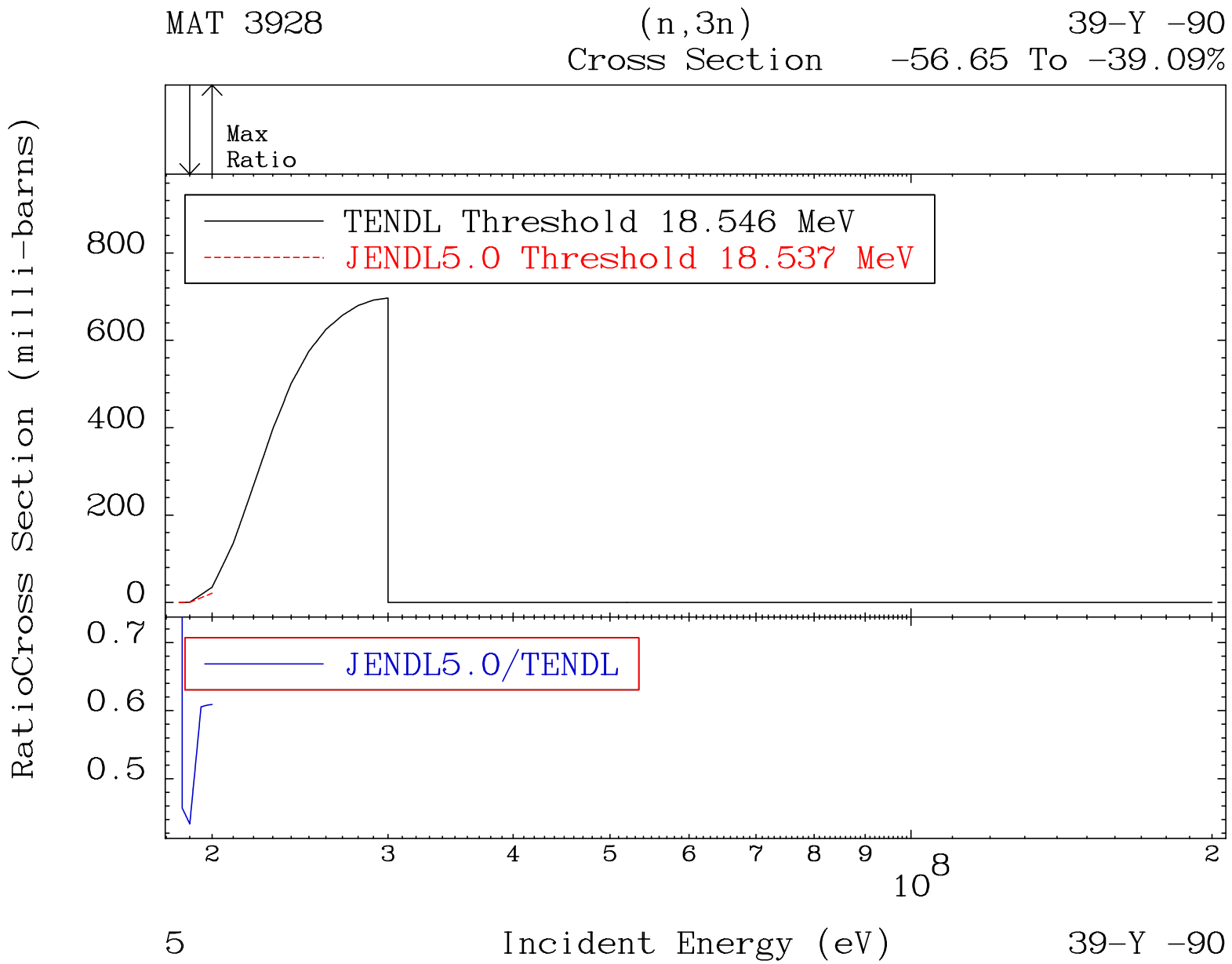
Press Mouse Button to Start

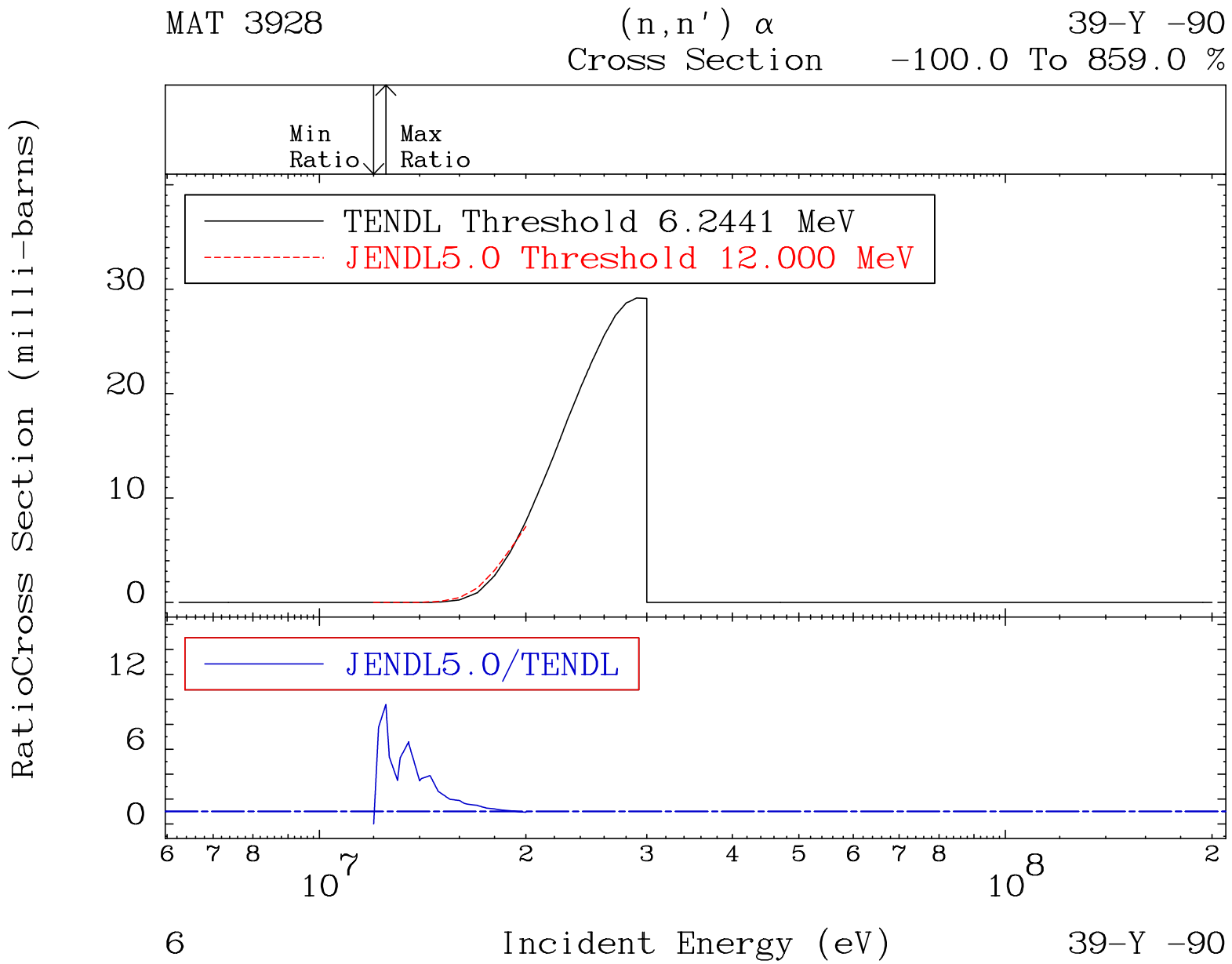

MAT 3928
Total
Cross Section
39-Y -90
-99.94 To 690.5 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
1
39-Y -90

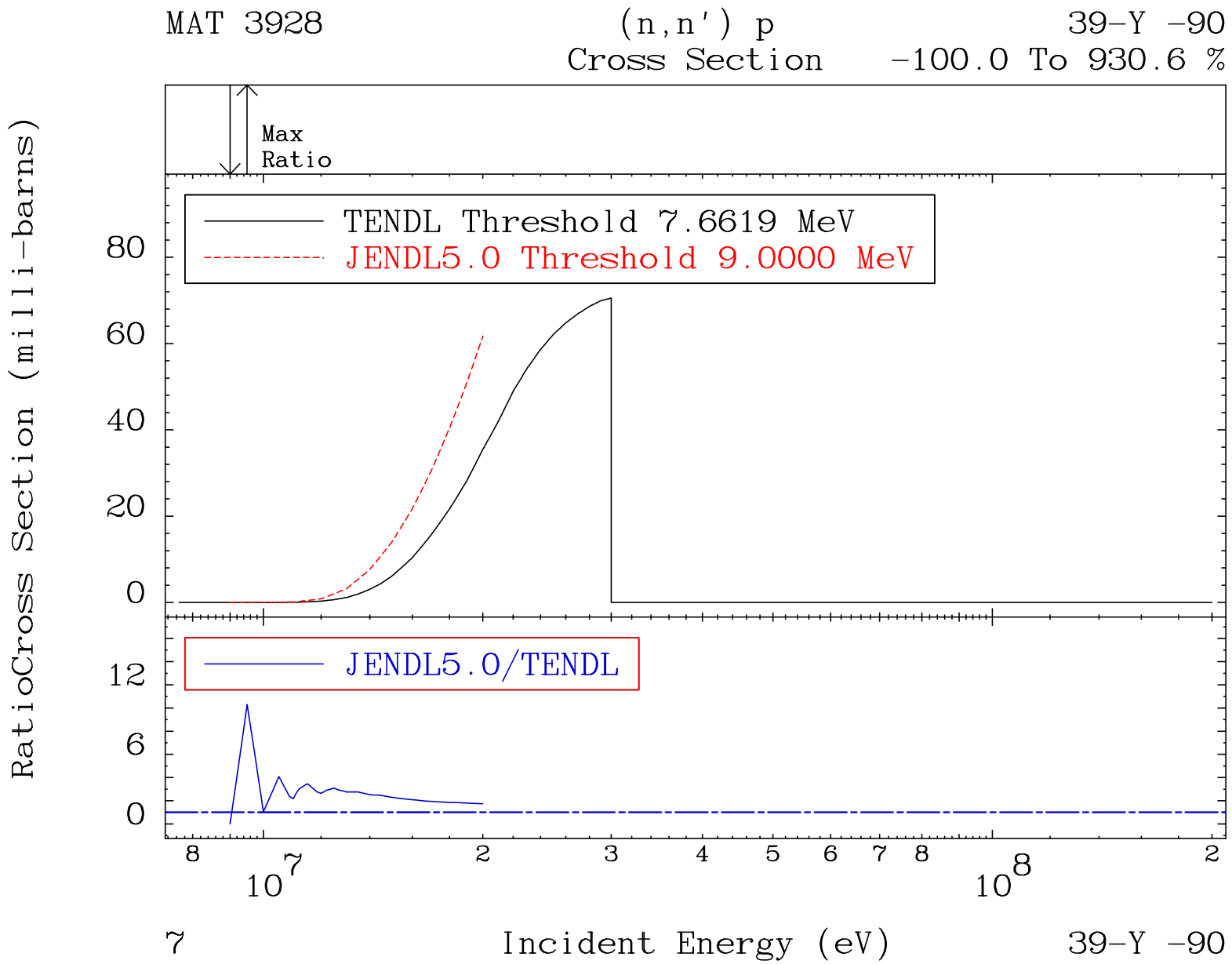

MAT 3928
Elastic
Cross Section
39-Y -90
-99.79 To 684.3 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
39-Y -90

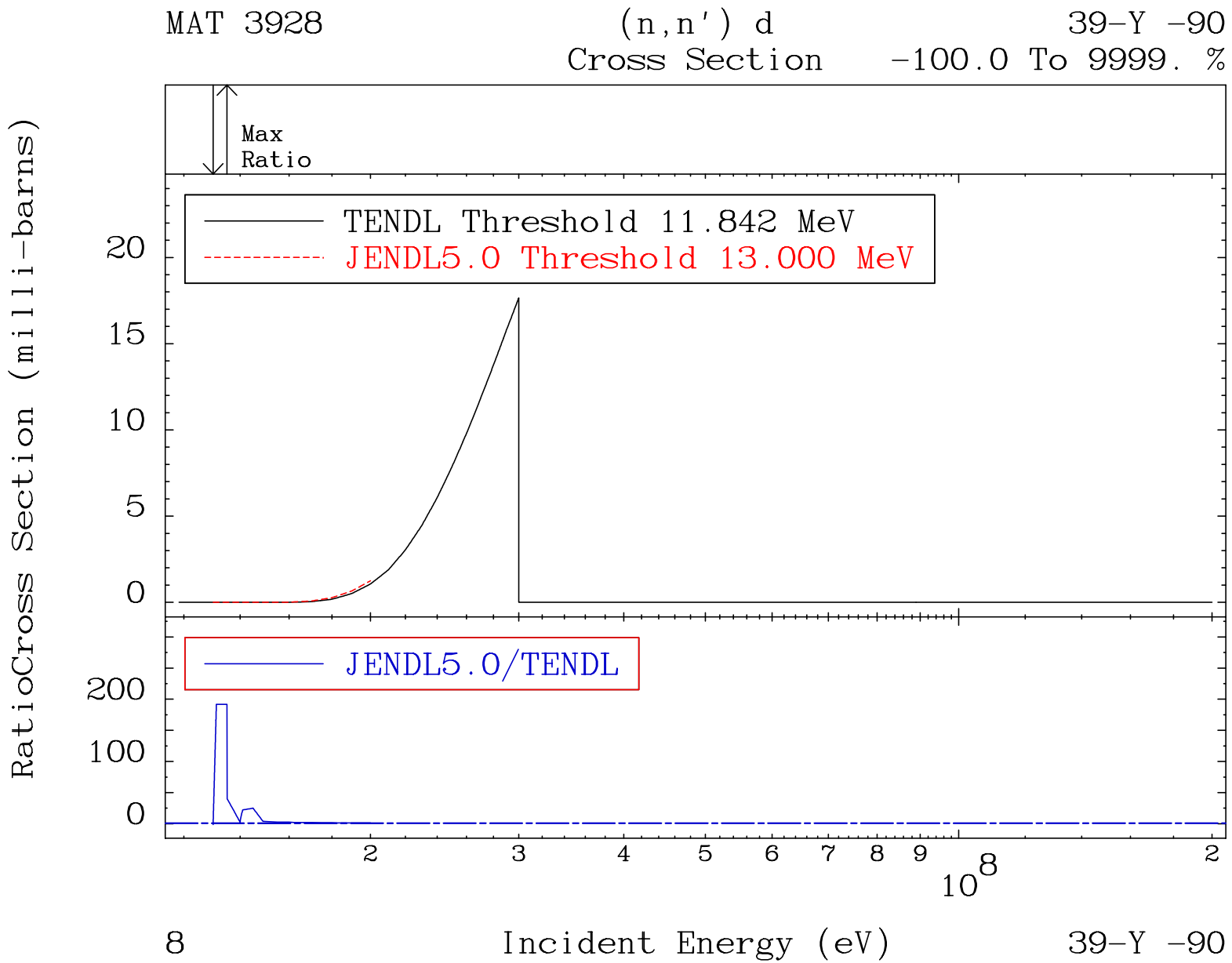

MAT 3928
Inelastic
Cross Section
39-Y -90
-100.0 To 18.42 %
Min
Ratio
Max
Ratio
TENDL Threshold 204.77 keV
JENDL5.0 Threshold 204.80 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
39-Y -90

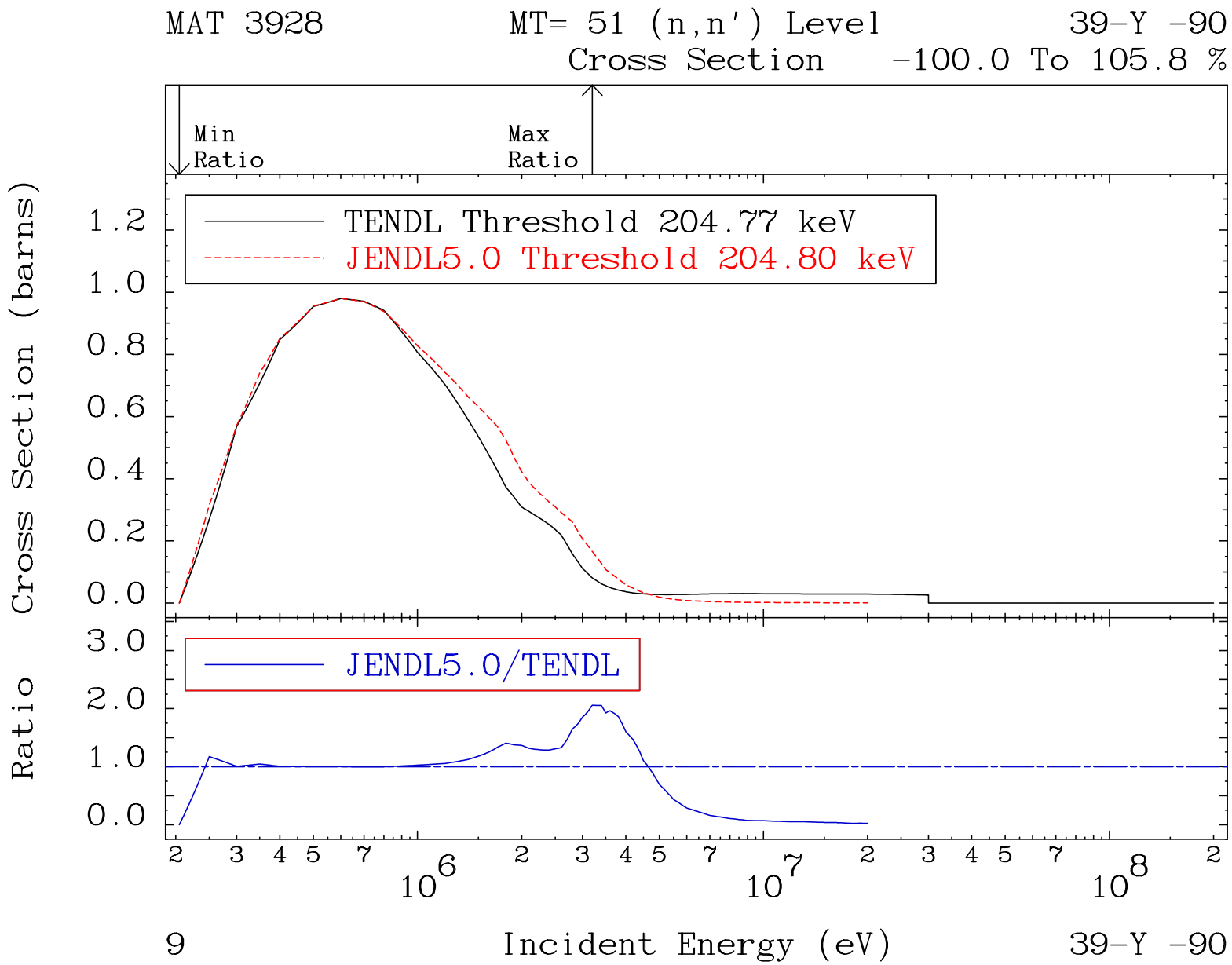

MAT 3928
(n,2n)
Cross Section
39-Y -90
-100.0 To 157.2 %
Max
Ratio
TENDL Threshold 6.9340 MeV
JENDL5.0 Threshold 7.0000 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
4
Incident Energy (eV)
39-Y -90

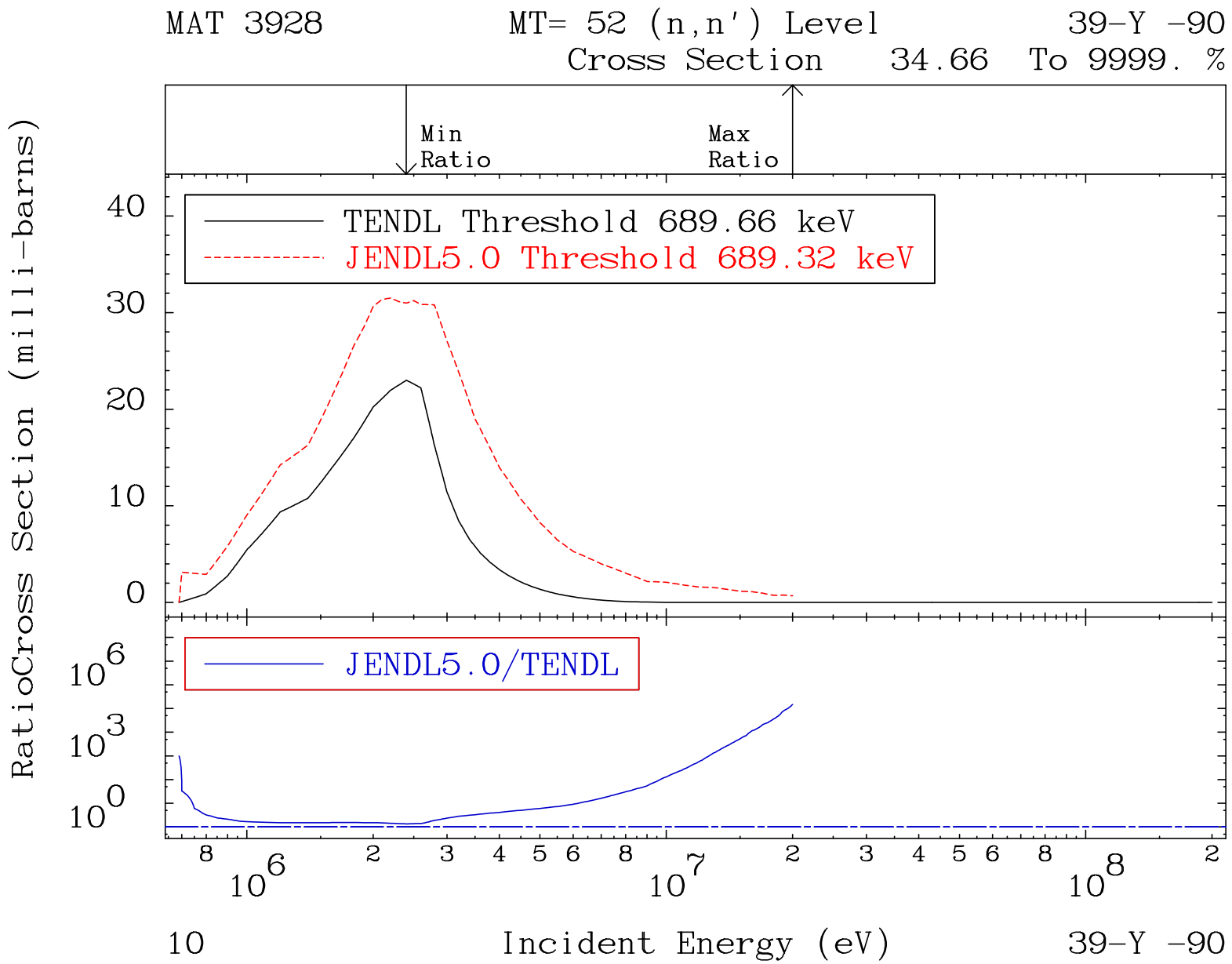

MAT 3928
(n,3n)
39-Y -90
Cross Section
-56.65 To -39.09%
Max
Ratio
TENDL Threshold 18.546 MeV
JENDL5.0 Threshold 18.537 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
0.7
0.6
0.5
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
39-Y -90

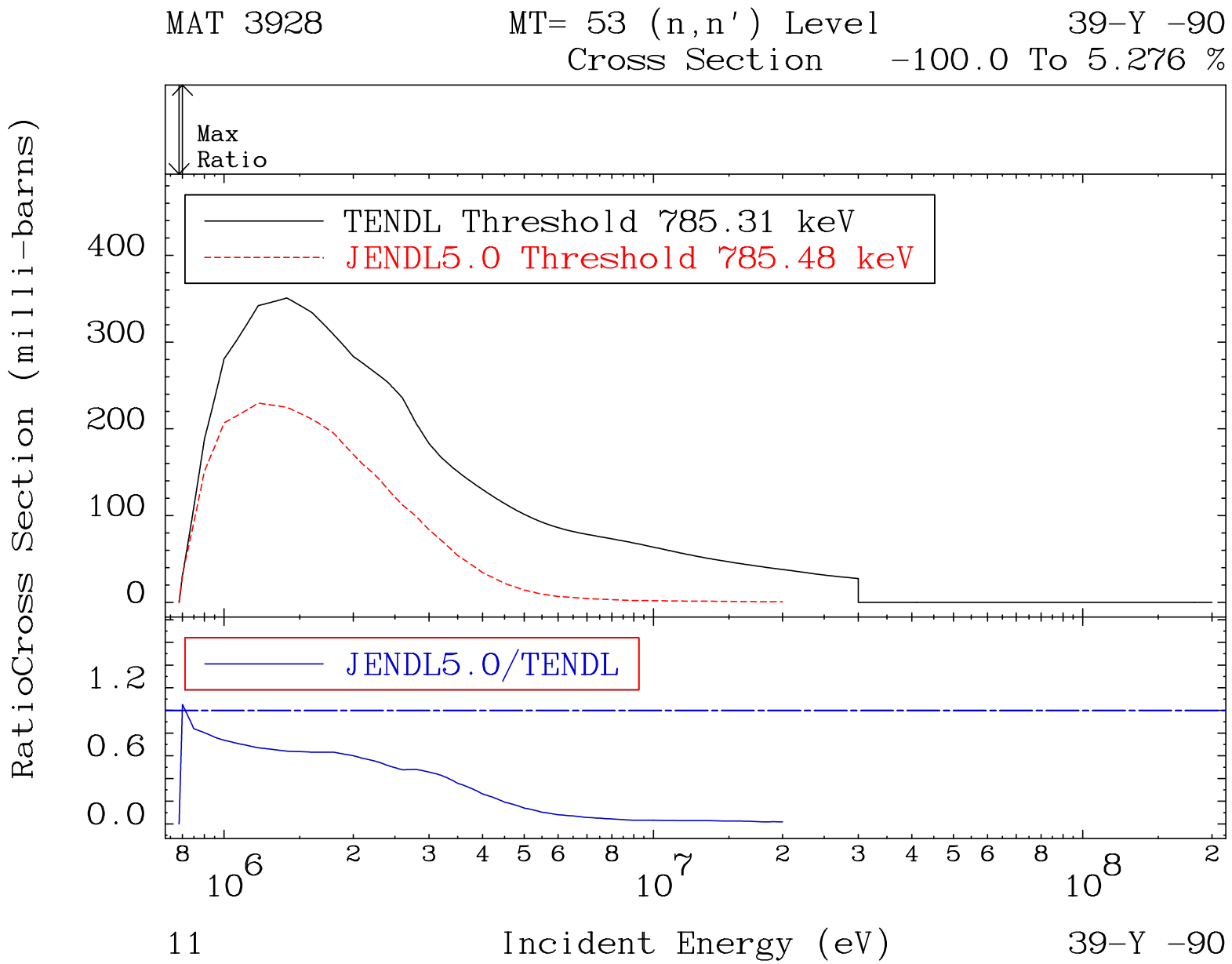

MAT 3928
(n,n') α
Cross Section
39-Y -90
-100.0 To 859.0 %
Min Ratio
Max Ratio
TENDL Threshold 6.2441 MeV
JENDL5.0 Threshold 12.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
39-Y -90

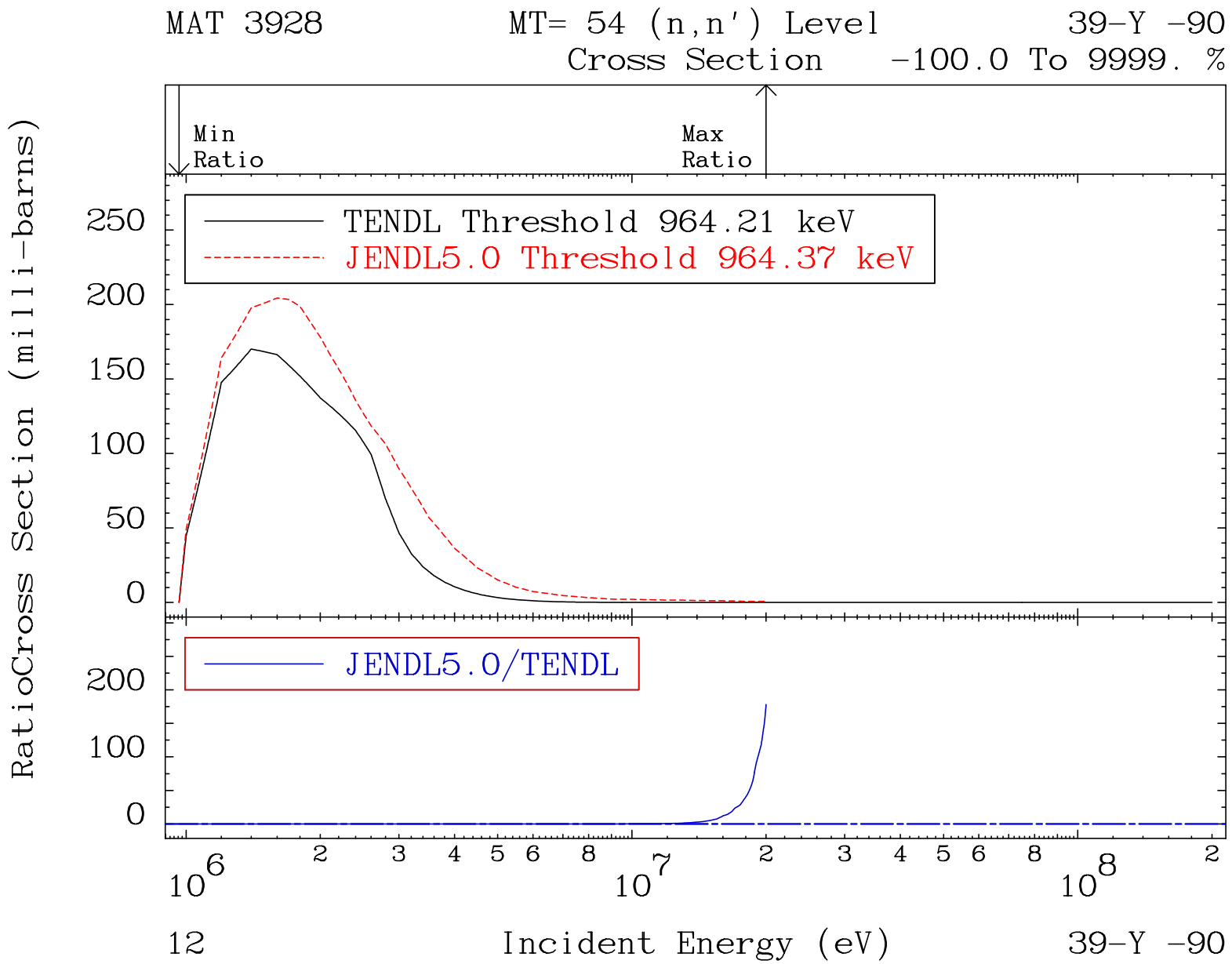

MAT 3928
(n,n') p
Cross Section
39-Y -90
-100.0 To 930.6 %
Max
Ratio
TENDL Threshold 7.6619 MeV
JENDL5.0 Threshold 9.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
12
6
0
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
39-Y -90

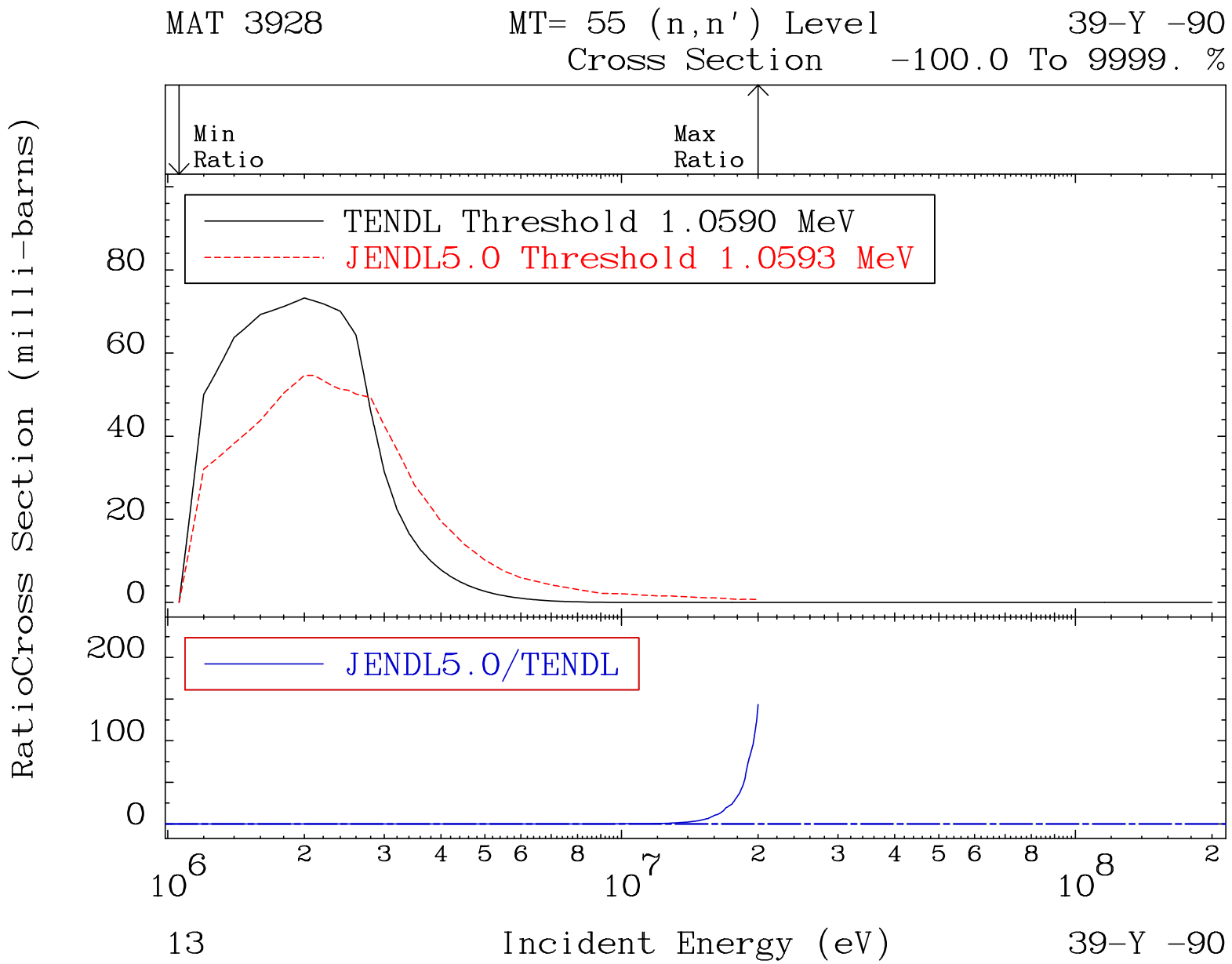

MAT 3928
(n,n') d
Cross Section
39-Y -90
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 11.842 MeV
JENDL5.0 Threshold 13.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
200
100
0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
39-Y -90

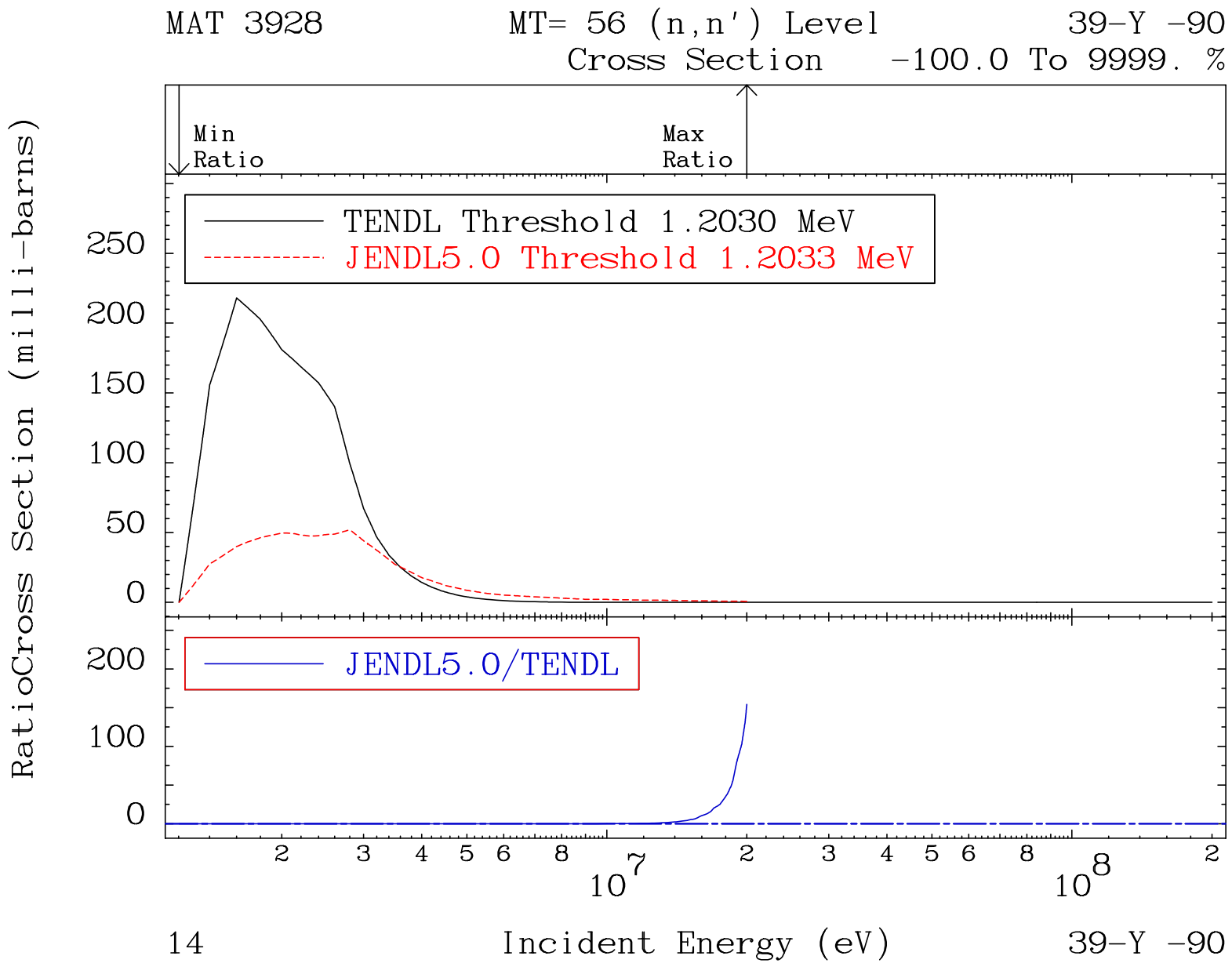

MAT 3928
MT= 51 (n,n') Level
39-Y -90
Cross Section -100.0 To 105.8 %
Min Ratio
Max Ratio
TENDL Threshold 204.77 keV
JENDL5.0 Threshold 204.80 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
9
39-Y -90

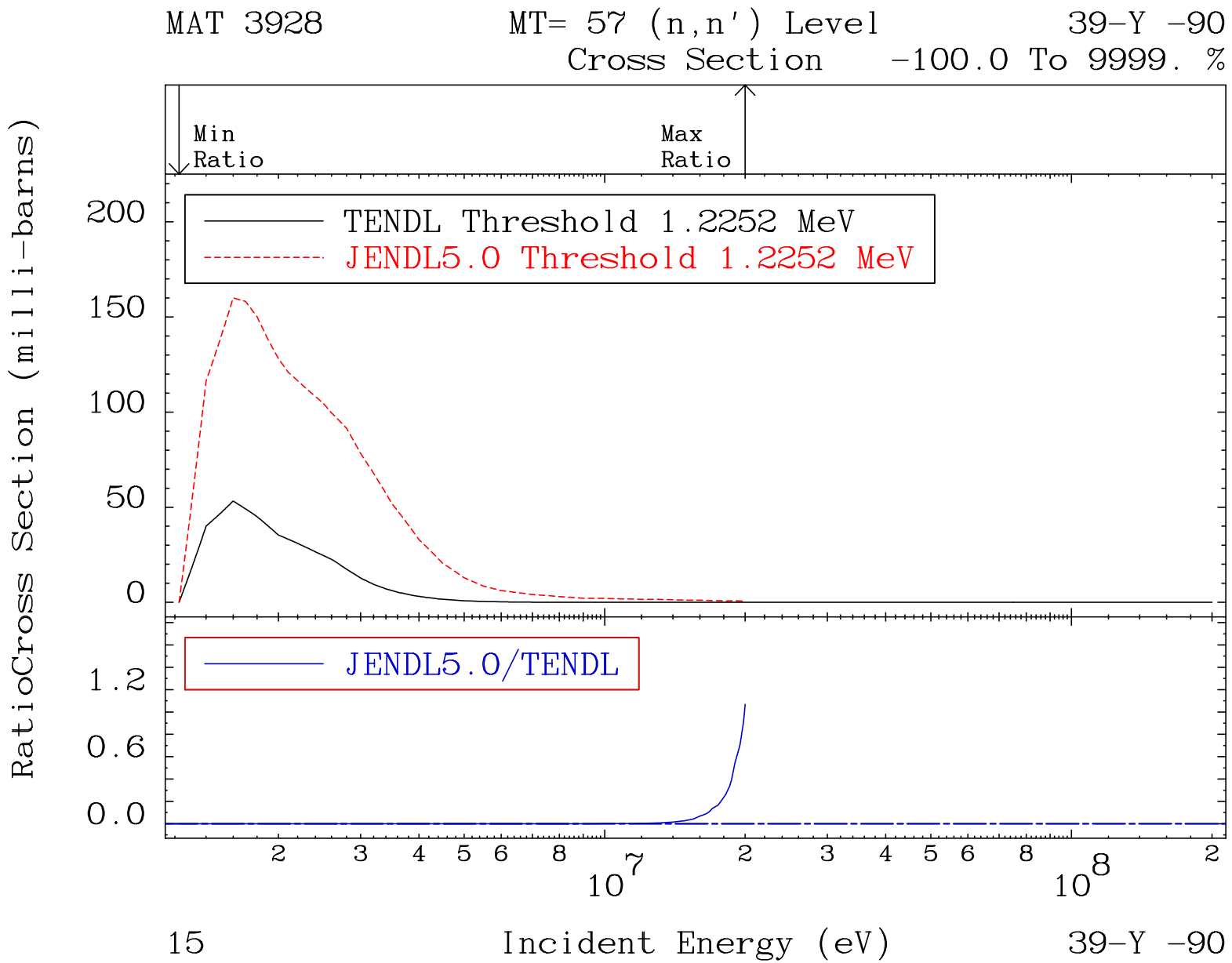

MAT 3928
MT= 52 (n,n') Level
39-Y -90
Cross Section 34.66 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 689.66 keV
JENDL5.0 Threshold 689.32 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
39-Y -90

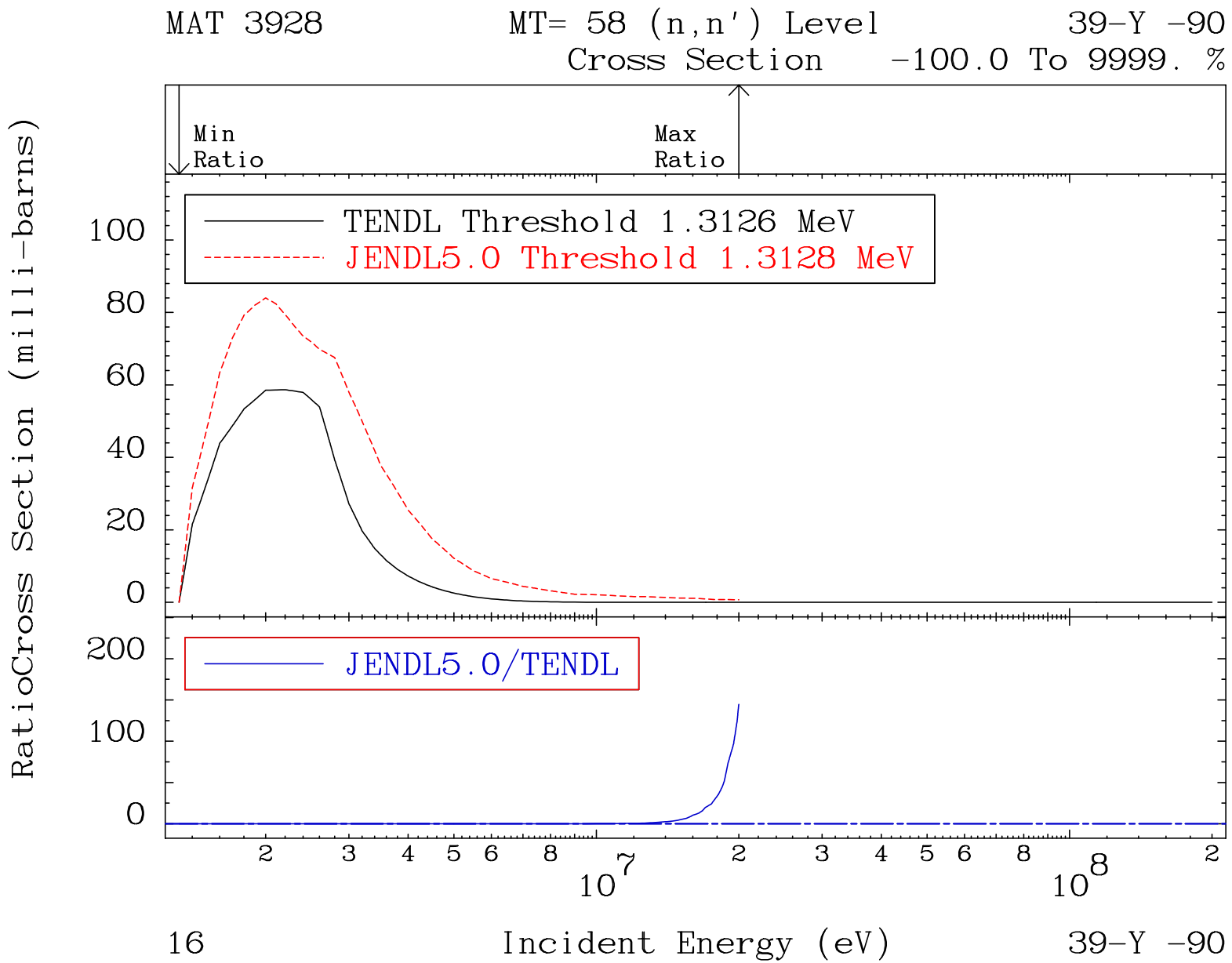

MAT 3928
MT= 53 (n,n') Level
39-Y -90
Cross Section -100.0 To 5.276 %
Max
Ratio
TENDL Threshold 785.31 keV
JENDL5.0 Threshold 785.48 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
39-Y -90

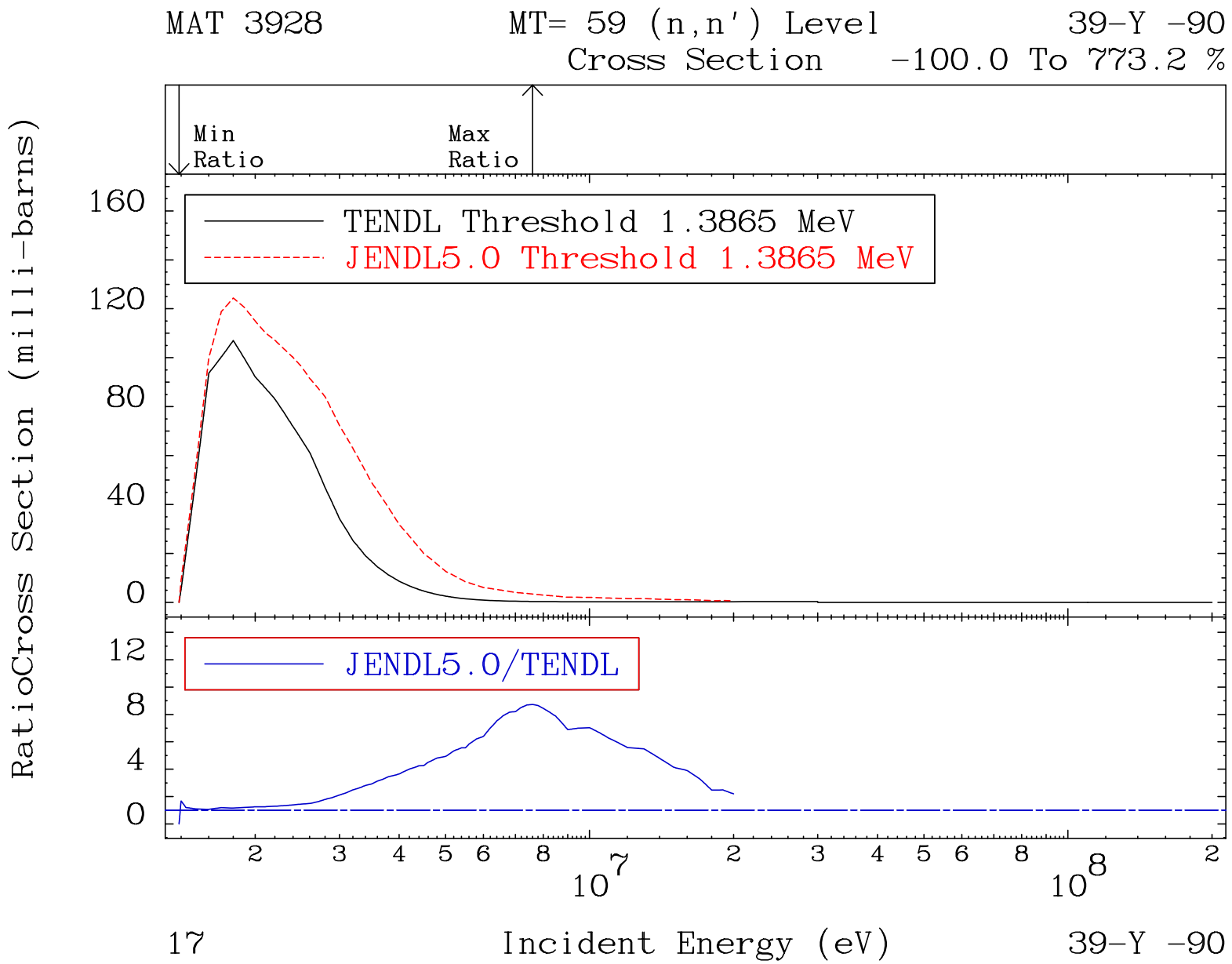

MAT 3928
MT= 54 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 964.21 keV
JENDL5.0 Threshold 964.37 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
200
100
0
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
12
Incident Energy (eV)
39-Y -90

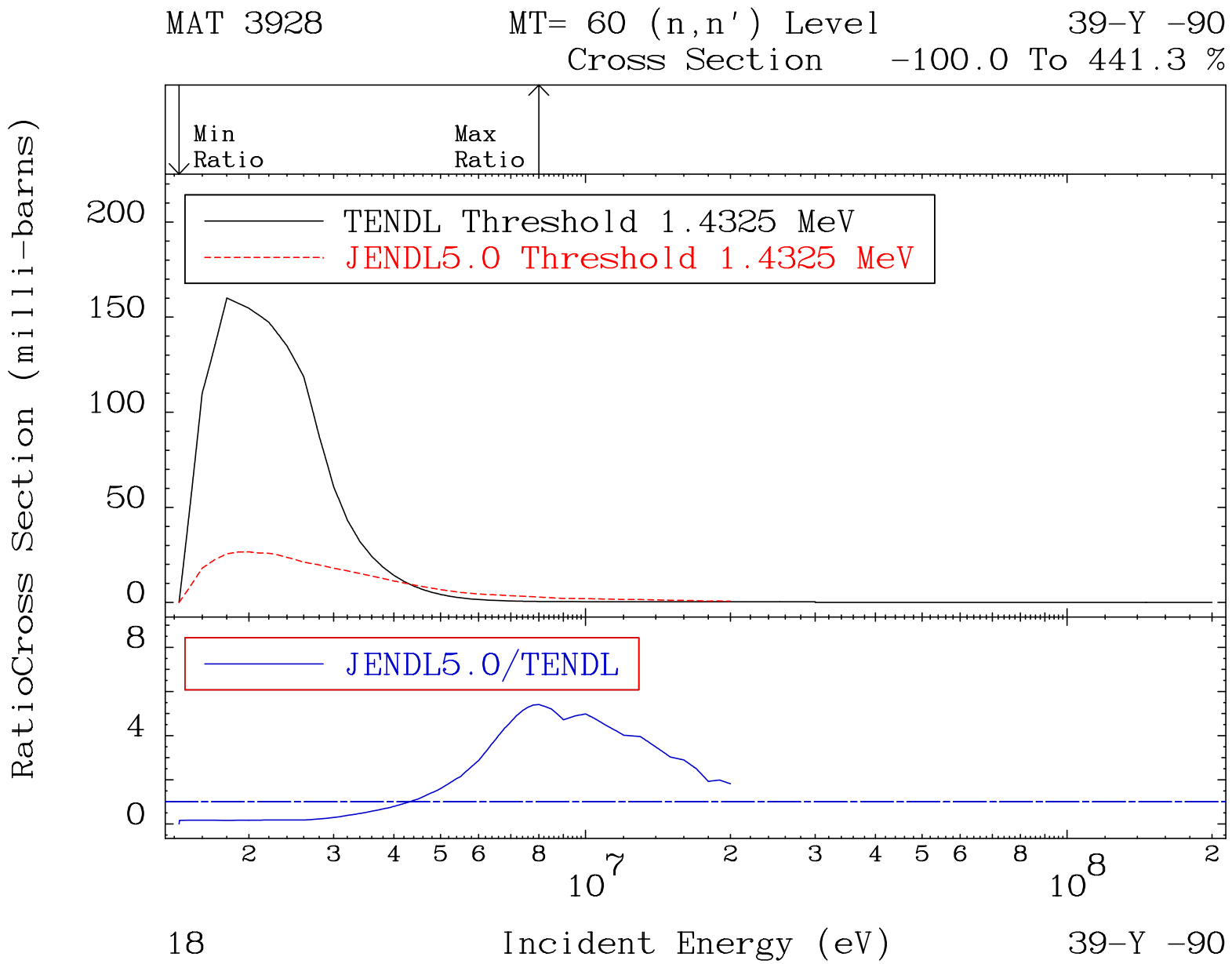

MAT 3928
MT= 55 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.0590 MeV
JENDL5.0 Threshold 1.0593 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
200
100
0
10^6
10^7
10^8
2 3 4 5 6 8
13
Incident Energy (eV)
39-Y -90

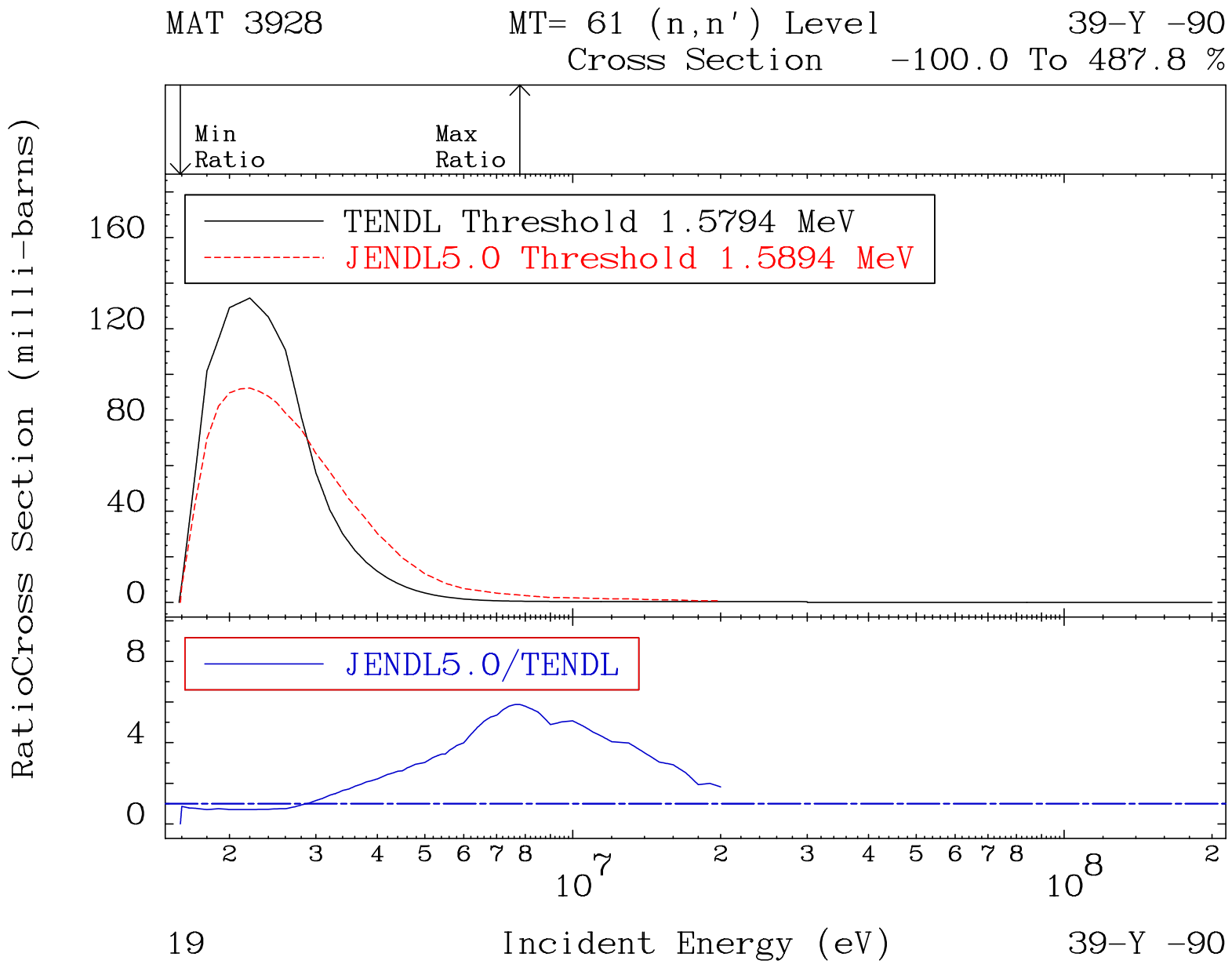

MAT 3928
MT= 56 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2030 MeV
JENDL5.0 Threshold 1.2033 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
200
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
39-Y -90

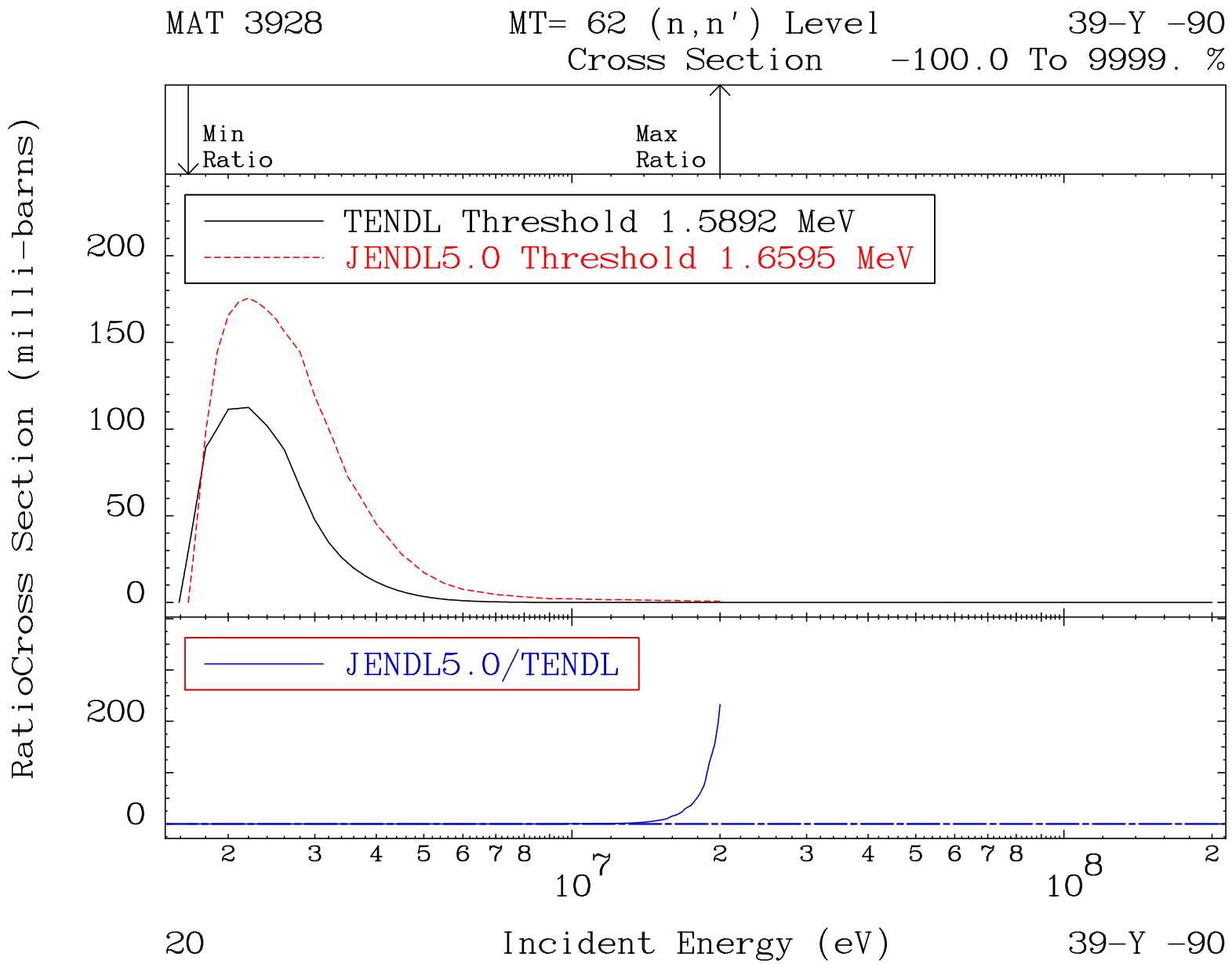

MAT 3928
MT= 57 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2252 MeV
JENDL5.0 Threshold 1.2252 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
39-Y -90

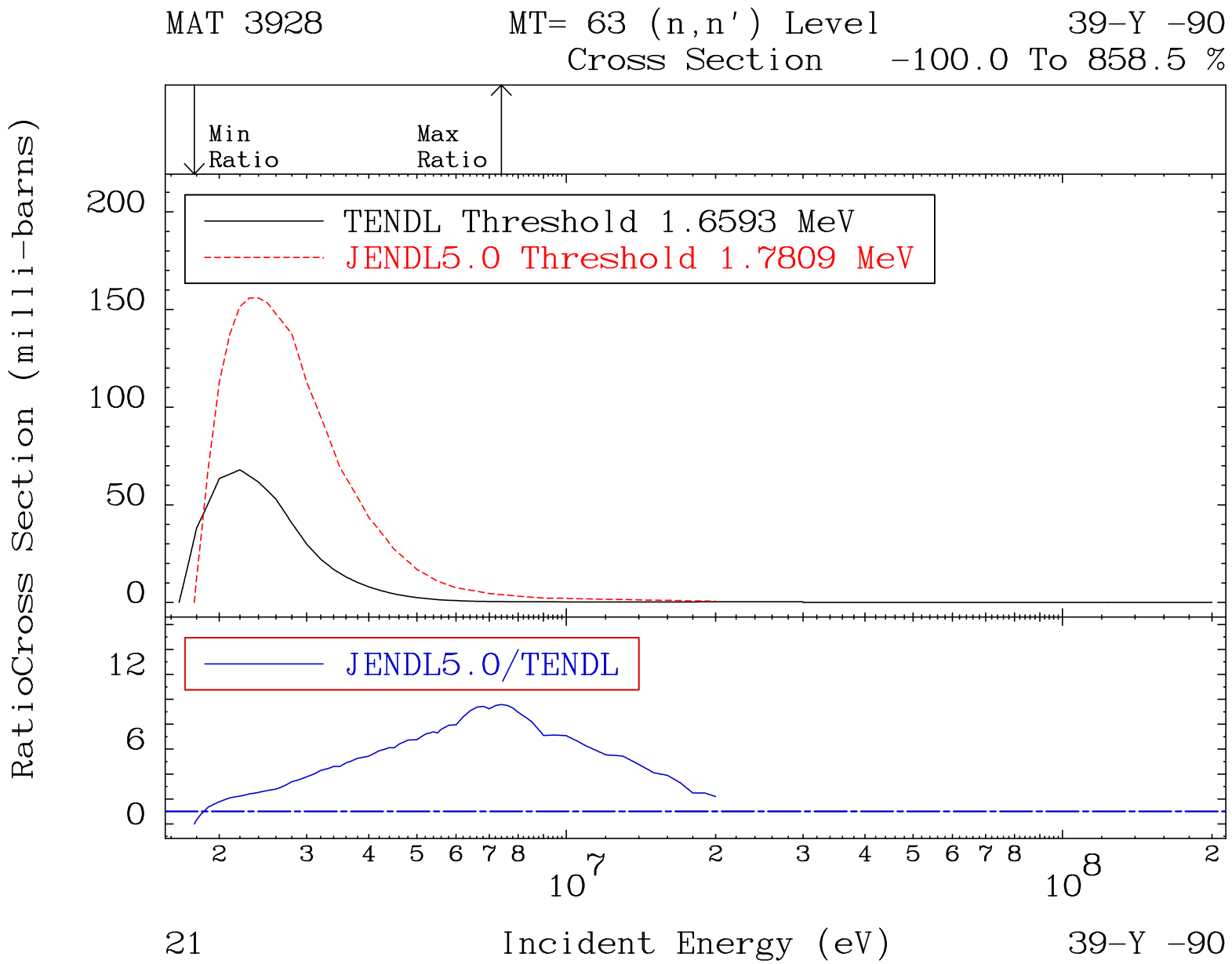

MAT 3928
MT= 58 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.3126 MeV
JENDL5.0 Threshold 1.3128 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
39-Y -90

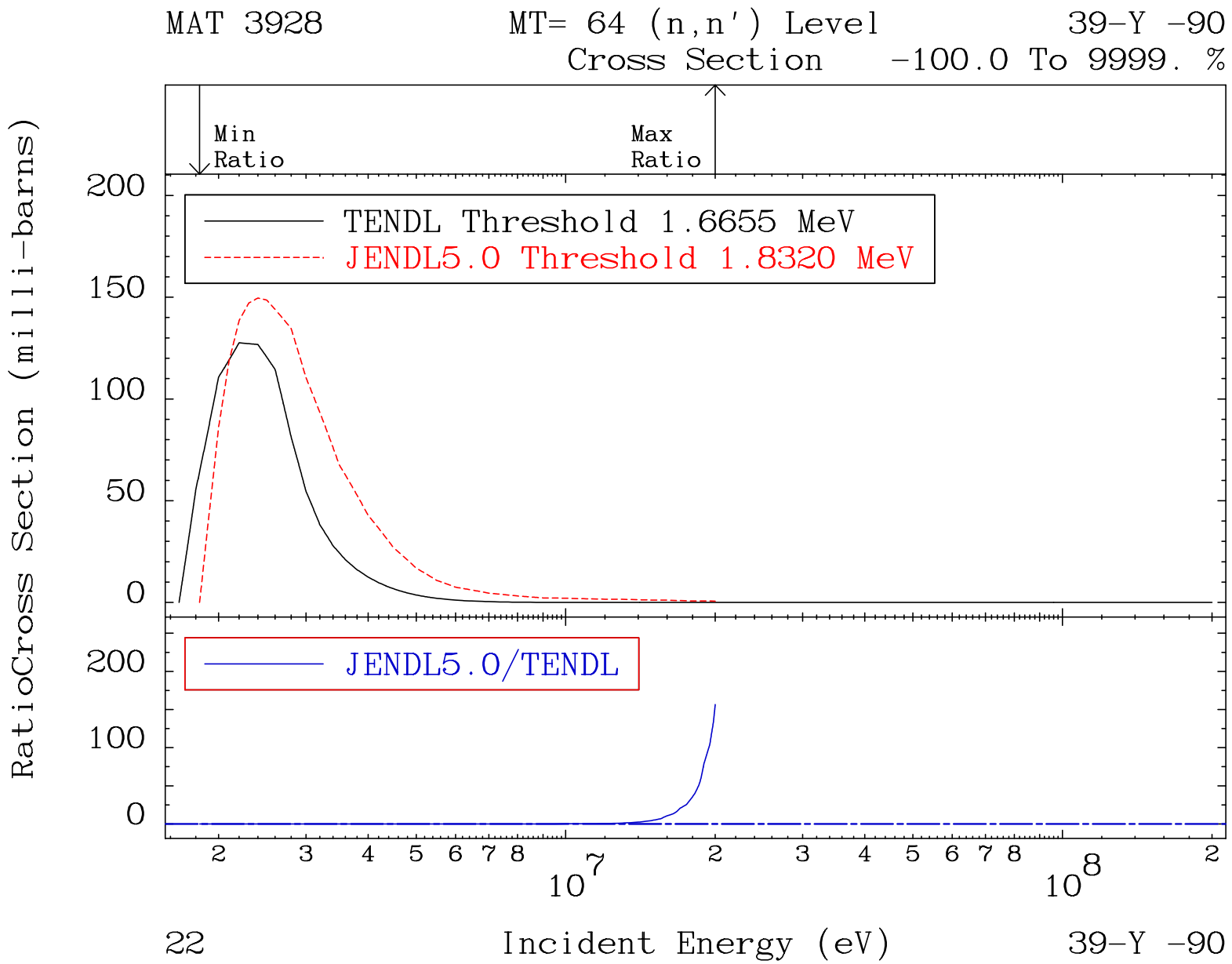

MAT 3928
MT= 59 (n,n') Level
39-Y -90
Cross Section -100.0 To 773.2 %
Min Ratio
Max Ratio
TENDL Threshold 1.3865 MeV
JENDL5.0 Threshold 1.3865 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
12
8
4
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
39-Y -90

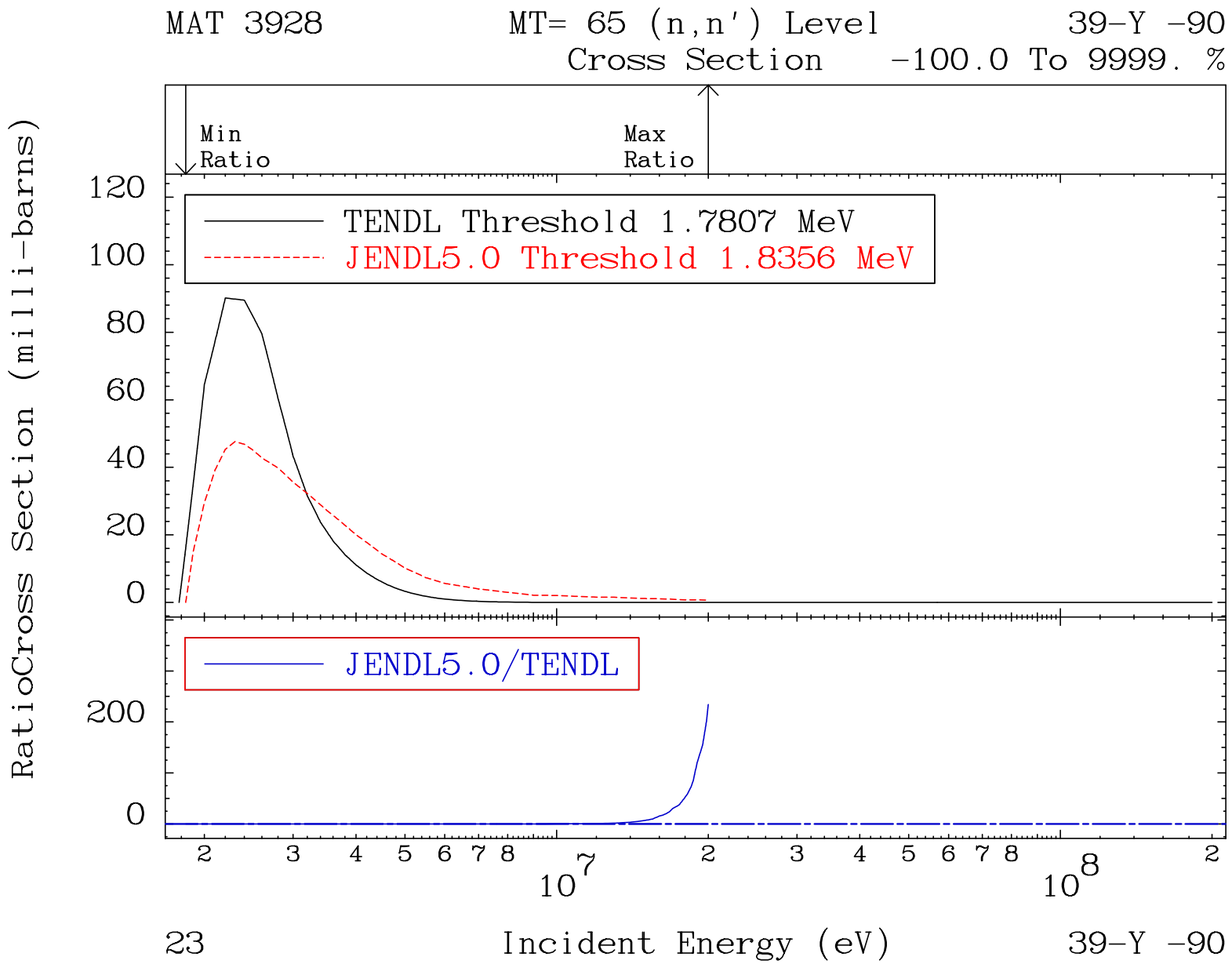

MAT 3928
MT= 60 (n,n') Level
39-Y -90
Cross Section -100.0 To 441.3 %
Min Ratio
Max Ratio
TENDL Threshold 1.4325 MeV
JENDL5.0 Threshold 1.4325 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
8
4
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
39-Y -90

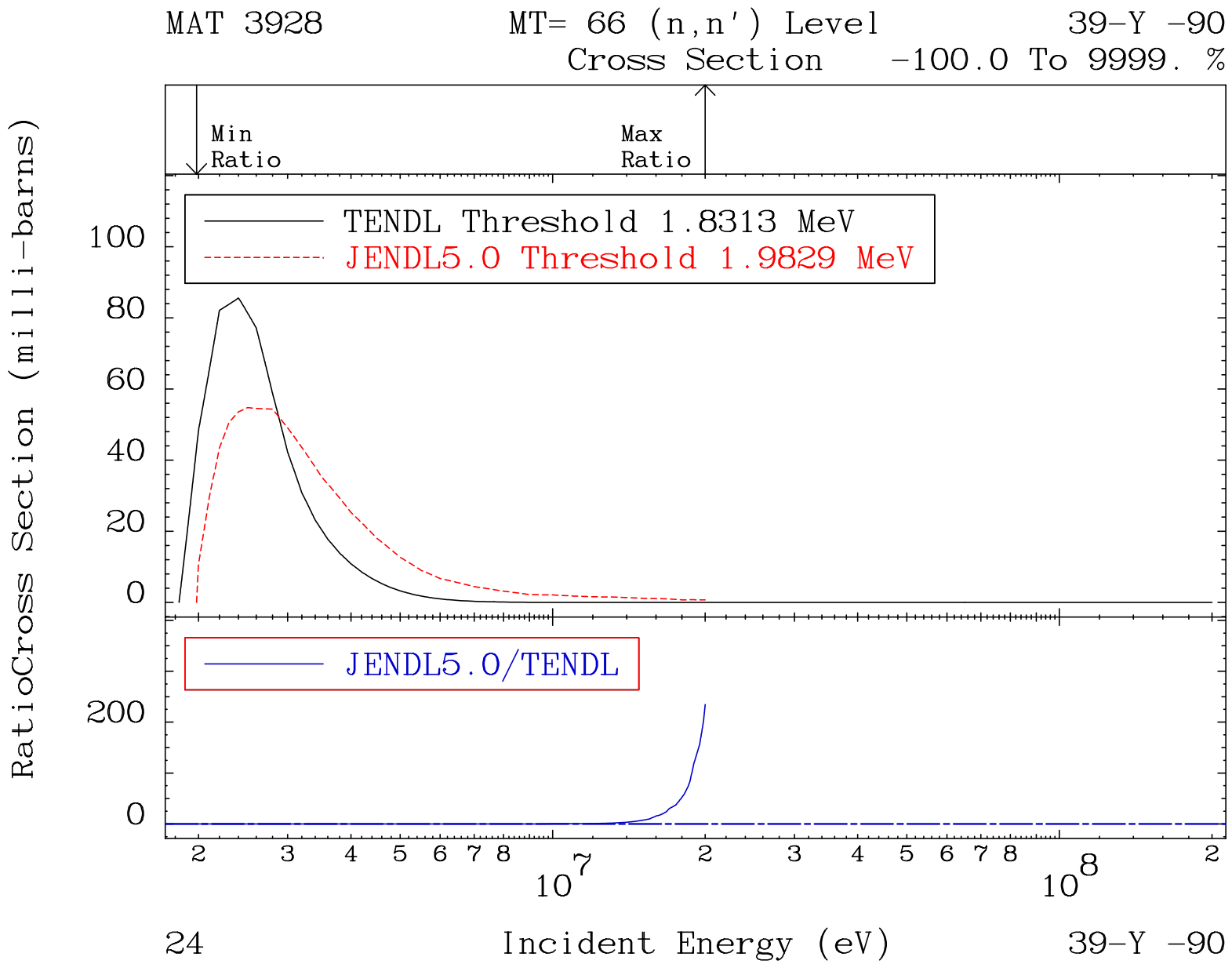

MAT 3928
MT= 61 (n,n') Level
39-Y -90
Cross Section -100.0 To 487.8 %
Min Ratio
Max Ratio
TENDL Threshold 1.5794 MeV
JENDL5.0 Threshold 1.5894 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
39-Y -90

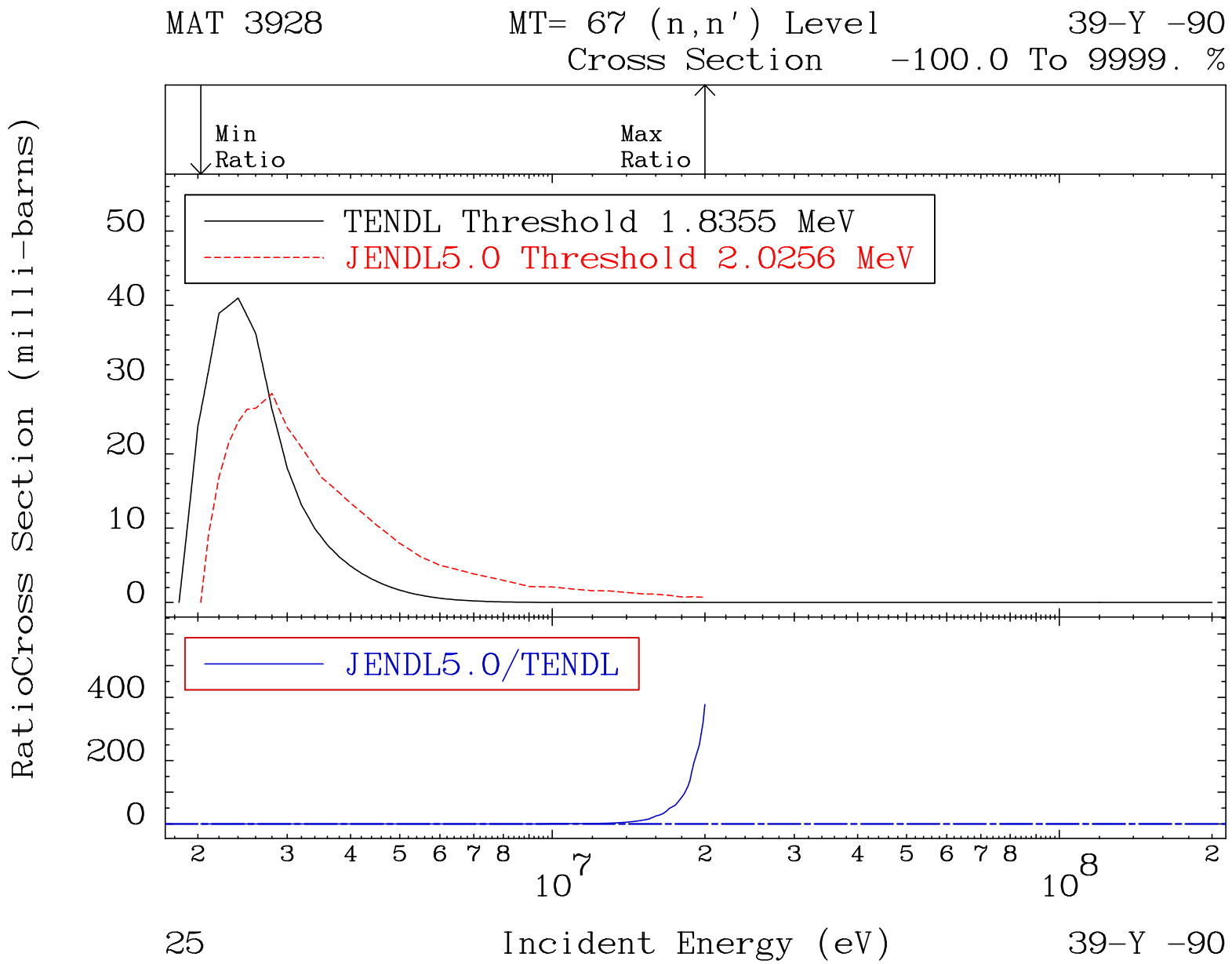

MAT 3928
MT= 62 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5892 MeV
JENDL5.0 Threshold 1.6595 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
39-Y -90

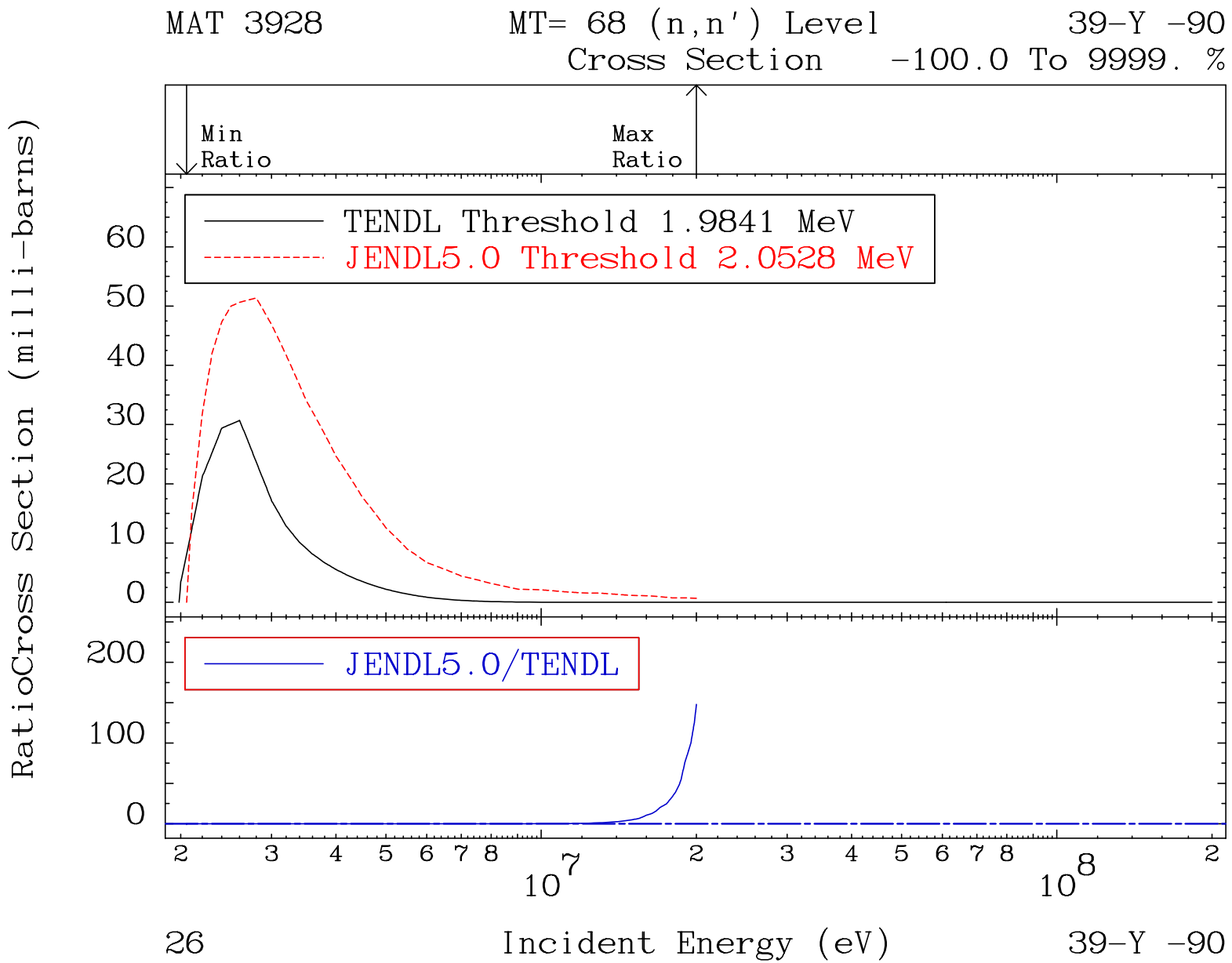

MAT 3928
MT= 63 (n,n') Level
39-Y -90
Cross Section -100.0 To 858.5 %
Min Ratio
Max Ratio
TENDL Threshold 1.6593 MeV
JENDL5.0 Threshold 1.7809 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
12
6
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
39-Y -90

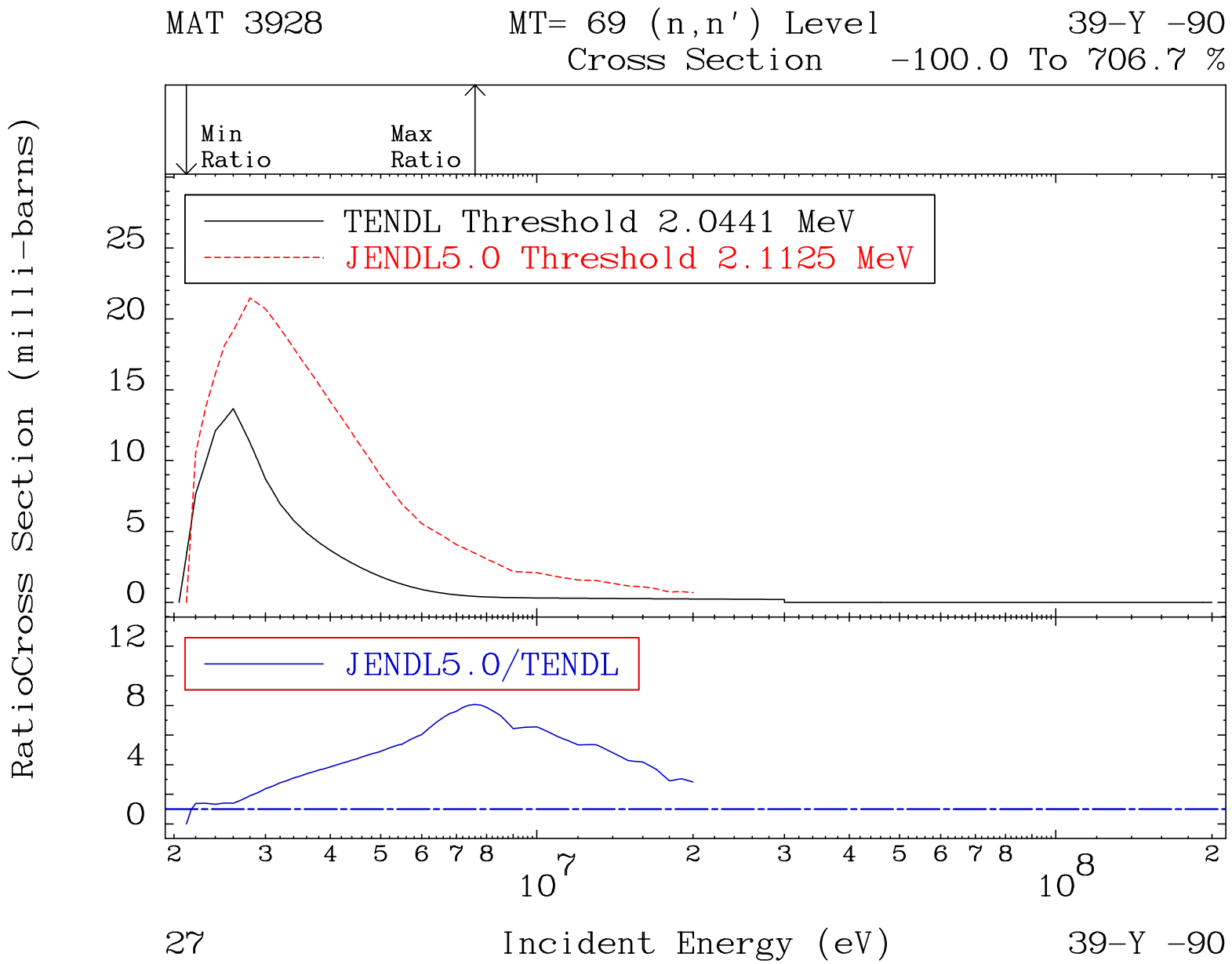

MAT 3928
MT= 64 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.6655 MeV
JENDL5.0 Threshold 1.8320 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
200
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
39-Y -90

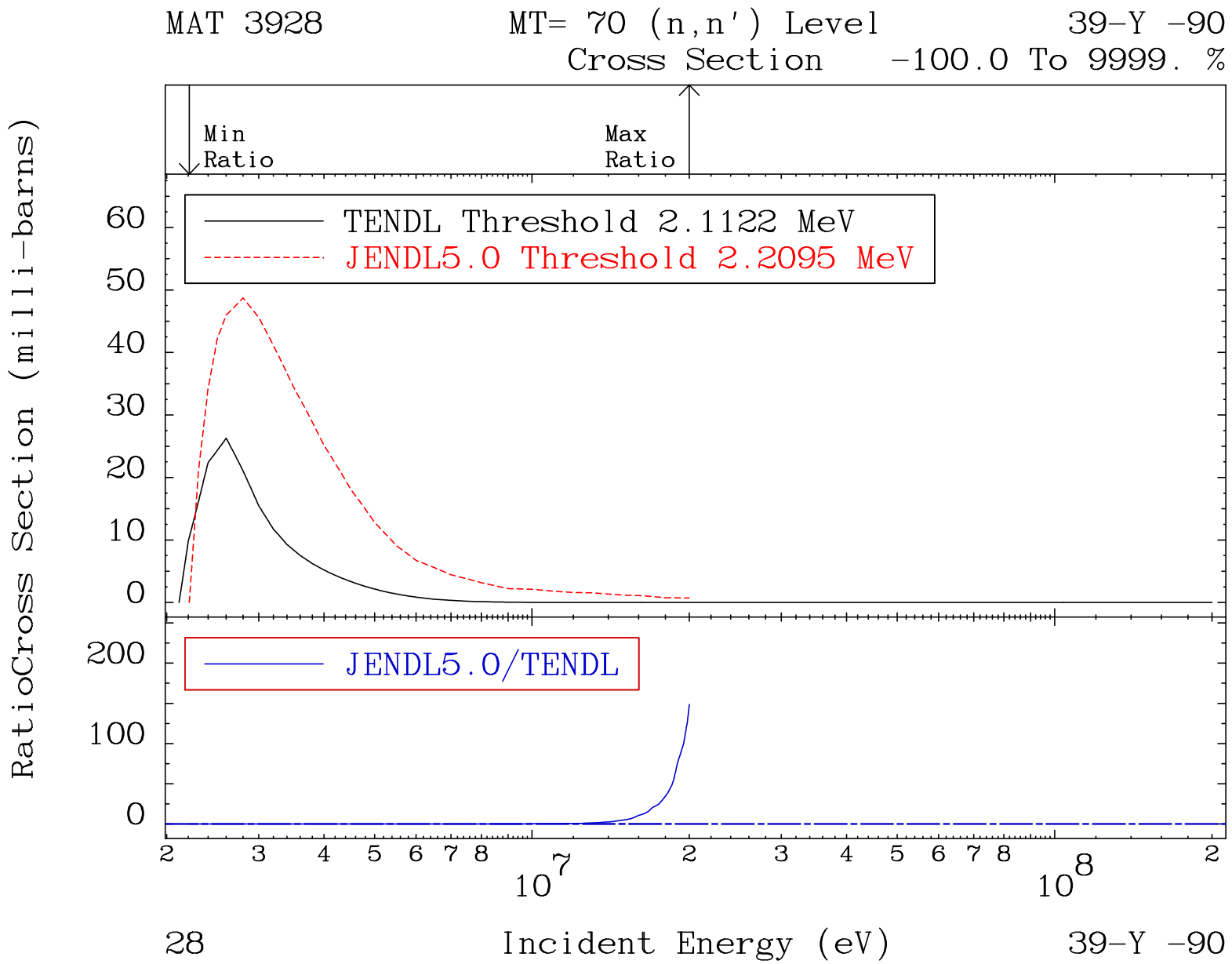

MAT 3928
MT= 65 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.7807 MeV
JENDL5.0 Threshold 1.8356 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
39-Y -90

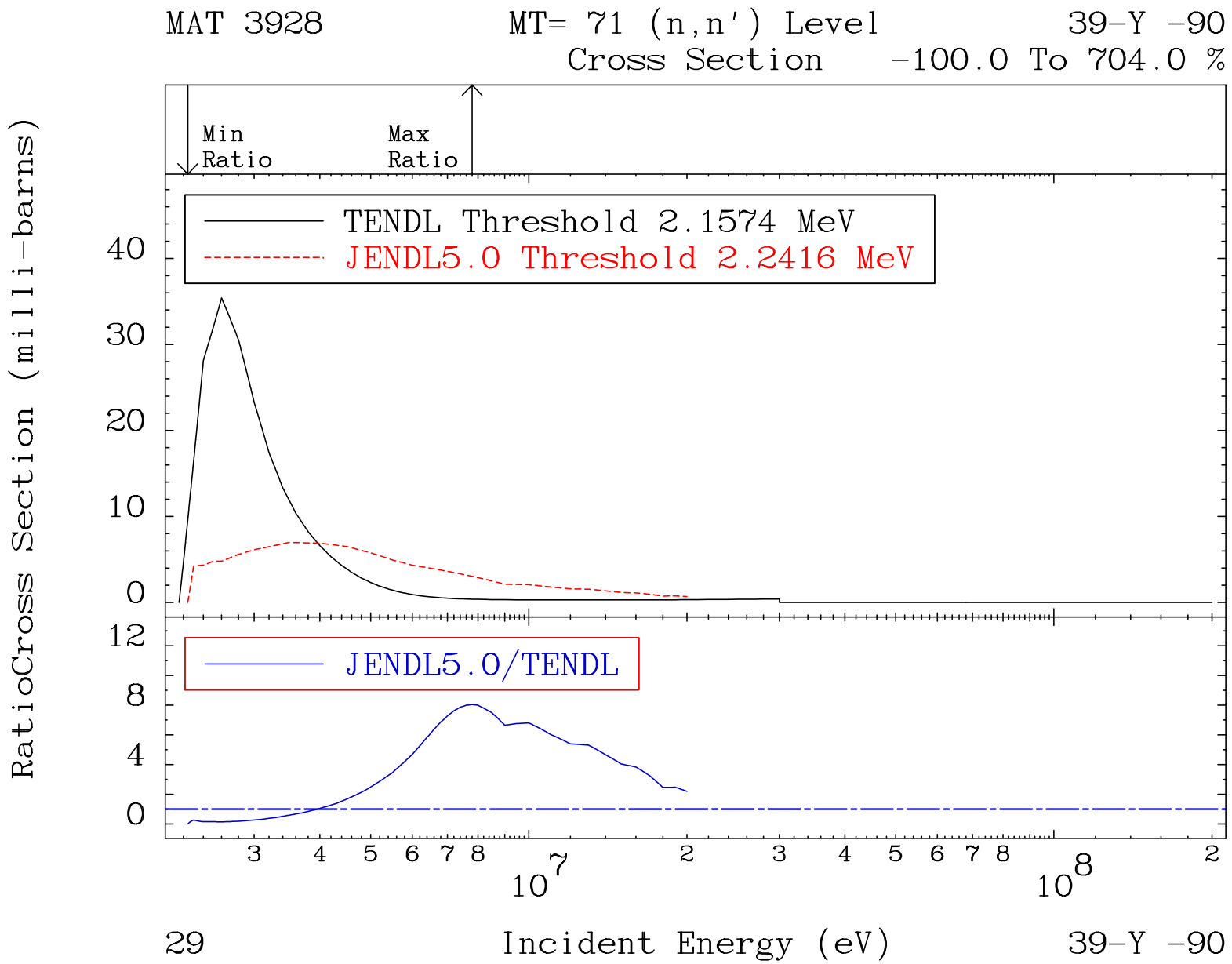

MAT 3928
MT= 66 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.8313 MeV
JENDL5.0 Threshold 1.9829 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
39-Y -90

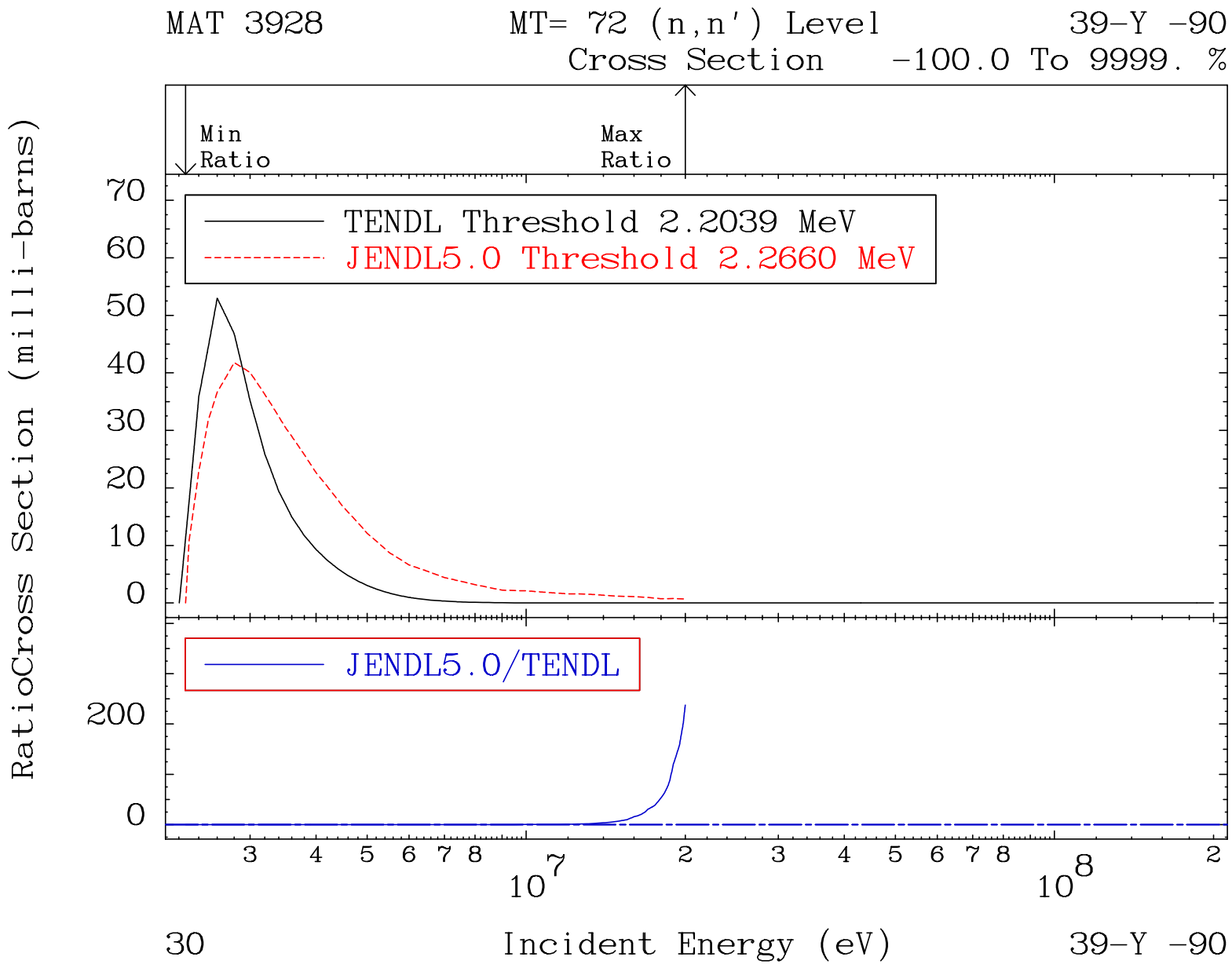

MAT 3928
MT= 67 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.8355 MeV
JENDL5.0 Threshold 2.0256 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
400
200
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
39-Y -90

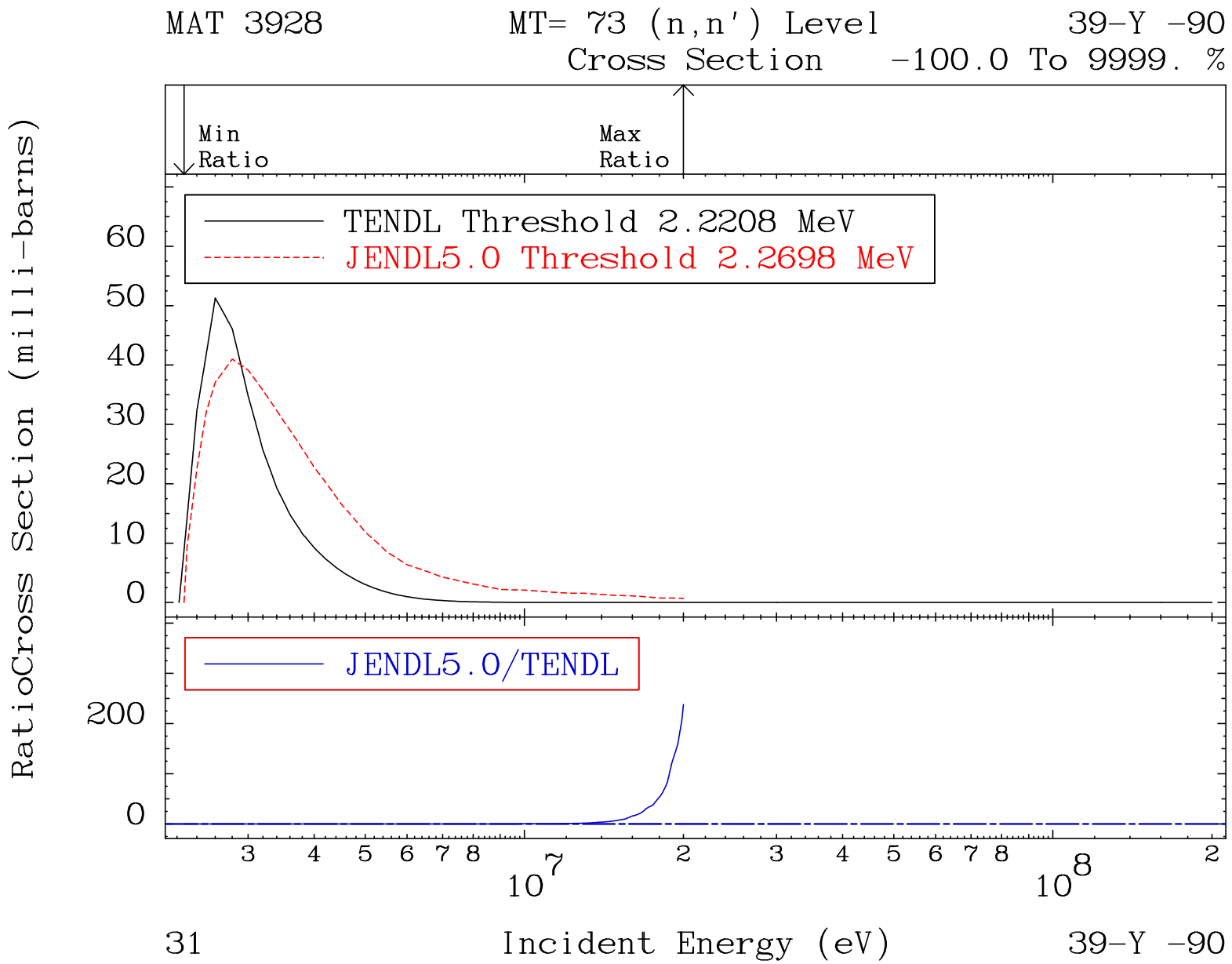

MAT 3928
MT= 68 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.9841 MeV
JENDL5.0 Threshold 2.0528 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
39-Y -90

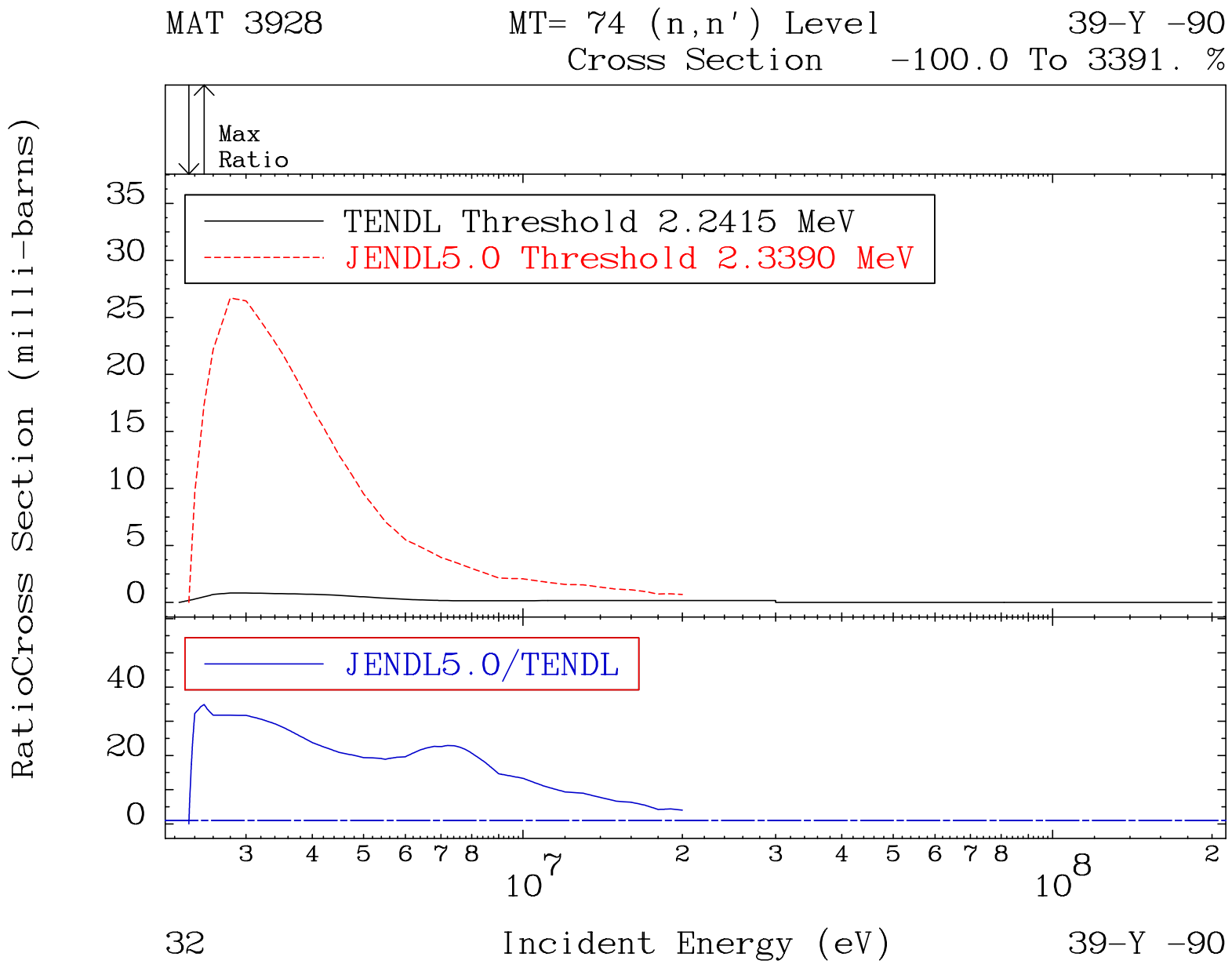

MAT 3928
MT= 69 (n,n') Level
39-Y -90
Cross Section -100.0 To 706.7 %
Min Ratio
Max Ratio
TENDL Threshold 2.0441 MeV
JENDL5.0 Threshold 2.1125 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
12
8
4
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
27
39-Y -90

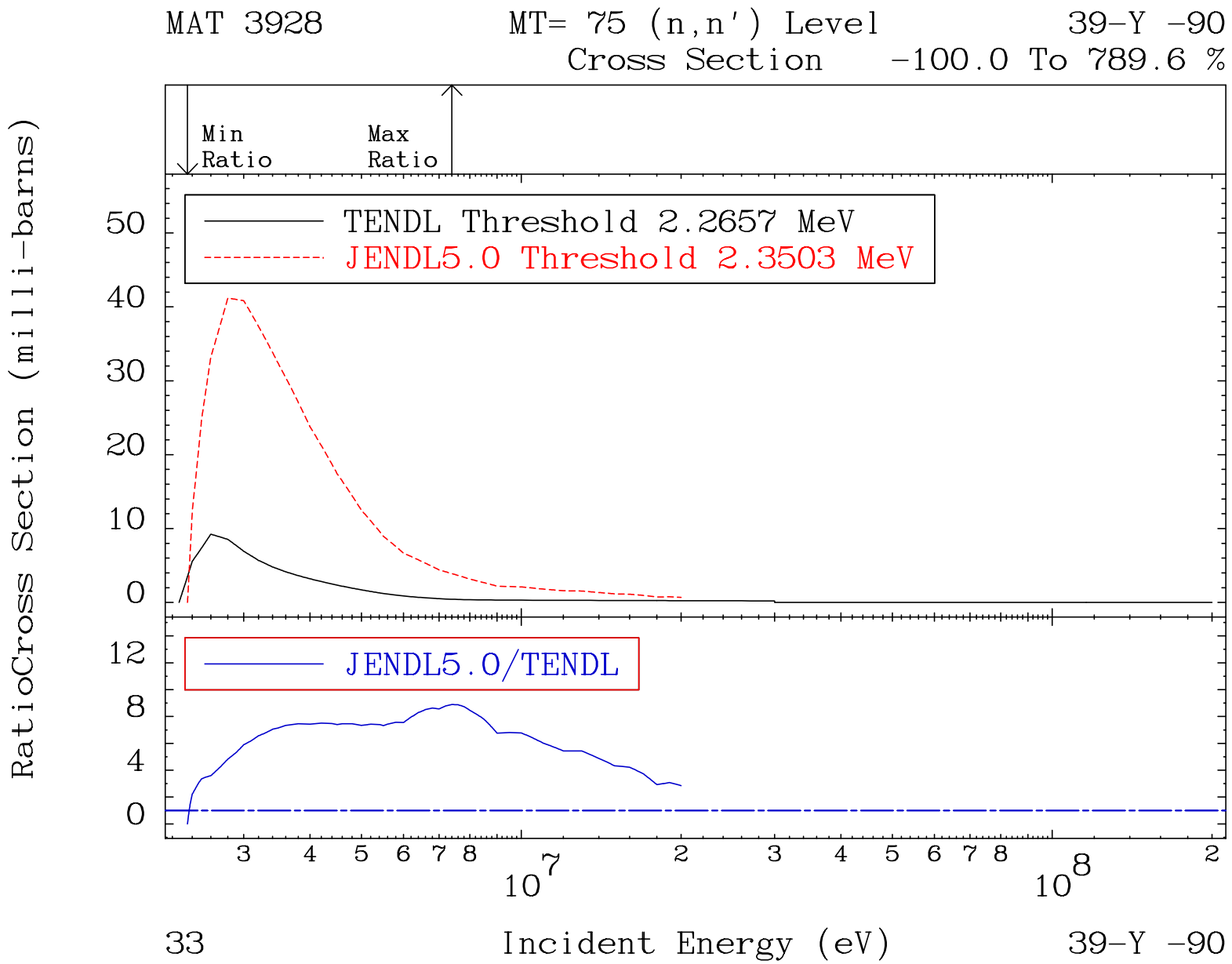

MAT 3928
MT= 70 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.1122 MeV
JENDL5.0 Threshold 2.2095 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
39-Y -90

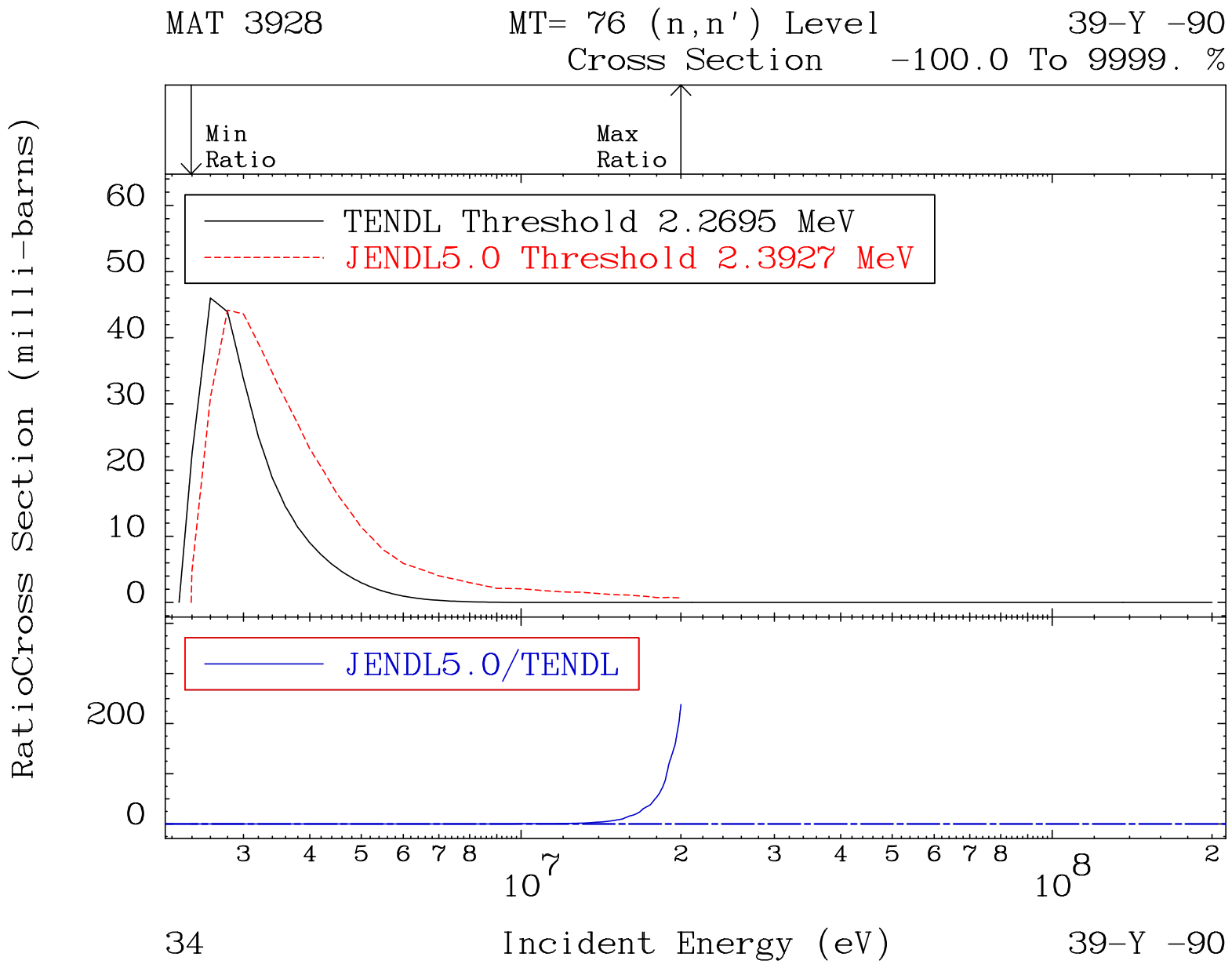

MAT 3928
MT= 71 (n,n') Level
39-Y -90
Cross Section -100.0 To 704.0 %
Min Ratio
Max Ratio
TENDL Threshold 2.1574 MeV
JENDL5.0 Threshold 2.2416 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
12
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
39-Y -90

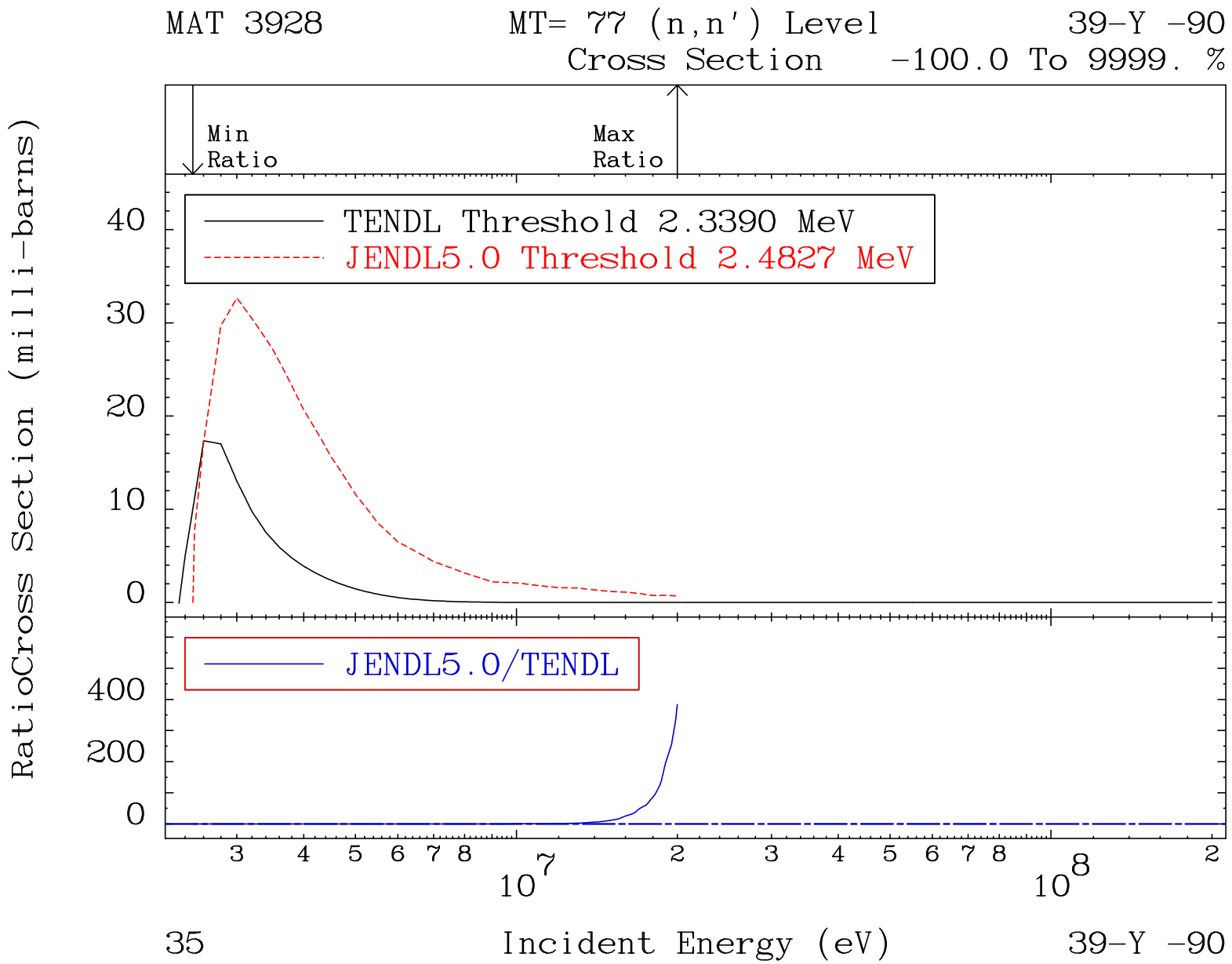

MAT 3928
MT= 72 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.2039 MeV
JENDL5.0 Threshold 2.2660 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
39-Y -90

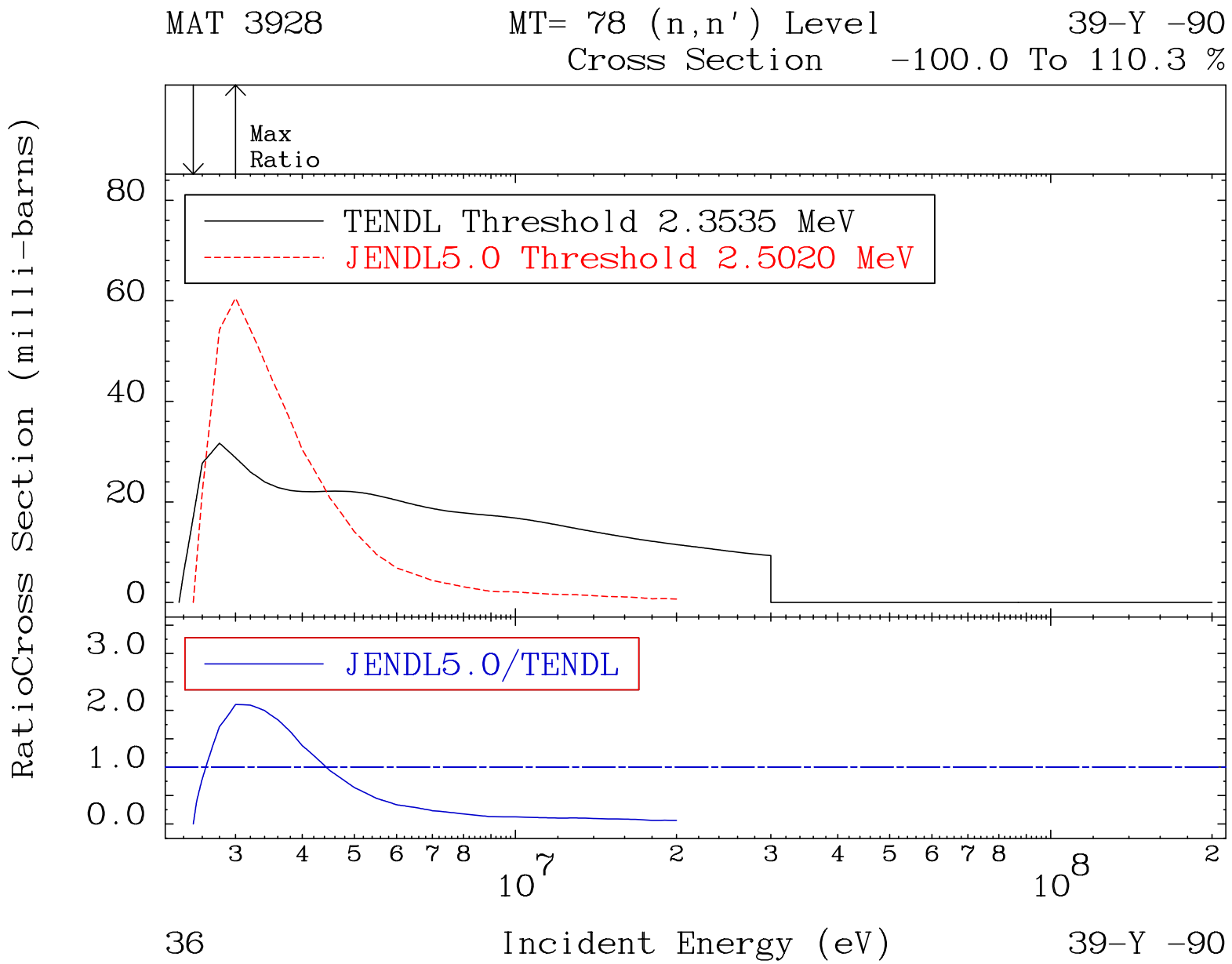

MAT 3928
MT= 73 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.2208 MeV
JENDL5.0 Threshold 2.2698 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
39-Y -90

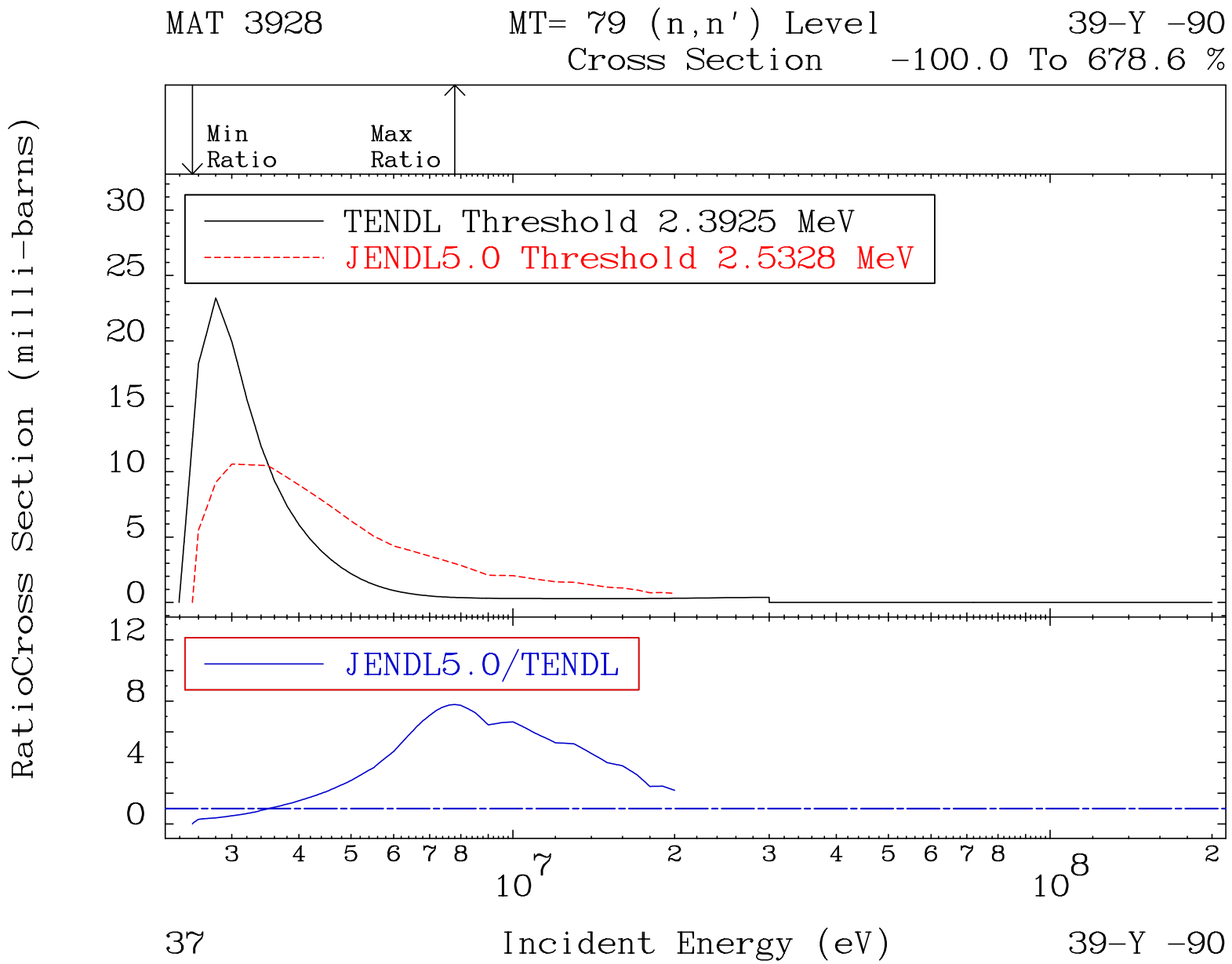

MAT 3928
MT= 74 (n,n') Level
39-Y -90
Cross Section -100.0 To 3391. %
Max
Ratio
TENDL Threshold 2.2415 MeV
JENDL5.0 Threshold 2.3390 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
40
20
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
39-Y -90

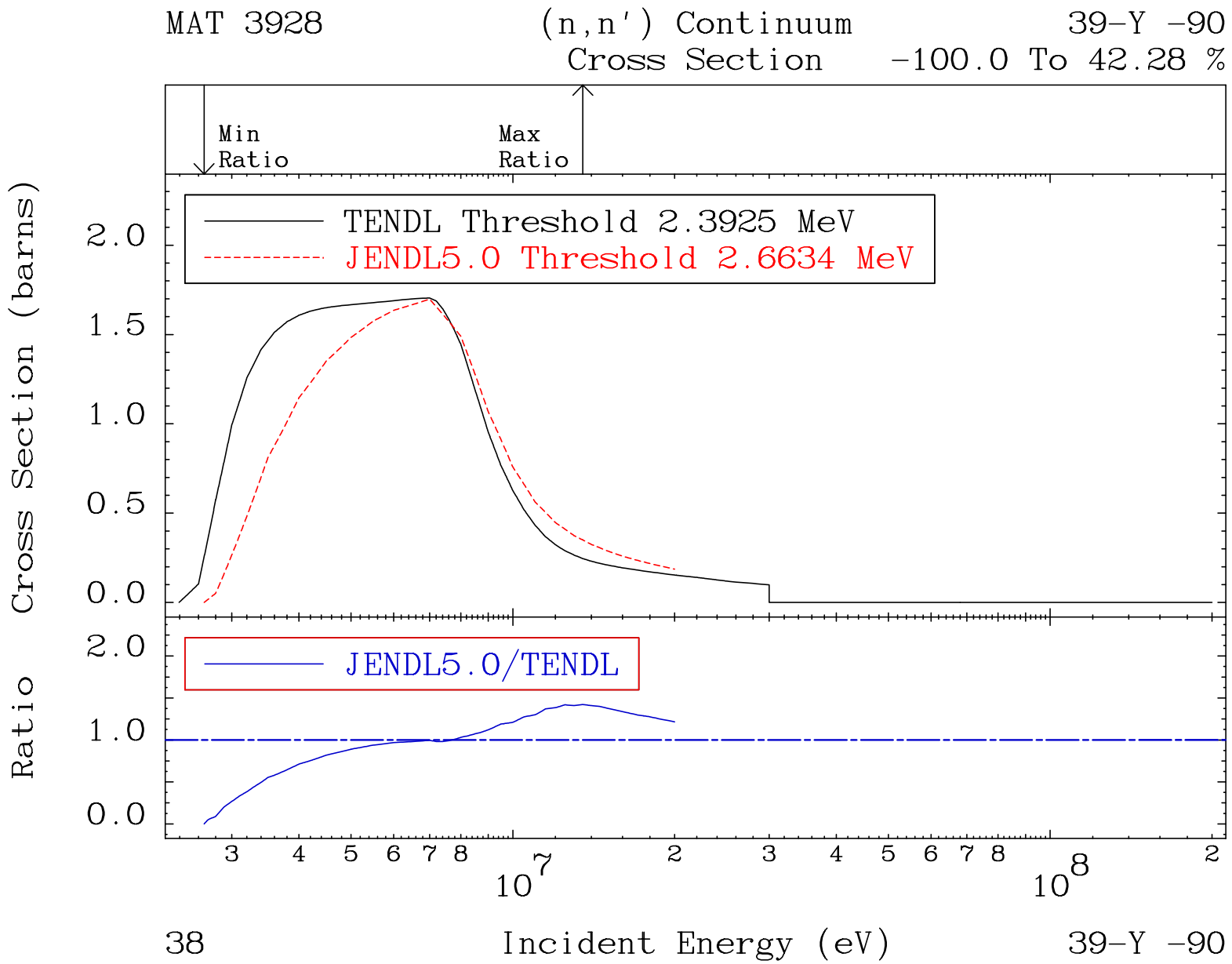

MAT 3928
MT= 75 (n,n') Level
39-Y -90
Cross Section -100.0 To 789.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.2657 MeV
JENDL5.0 Threshold 2.3503 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
12
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
39-Y -90

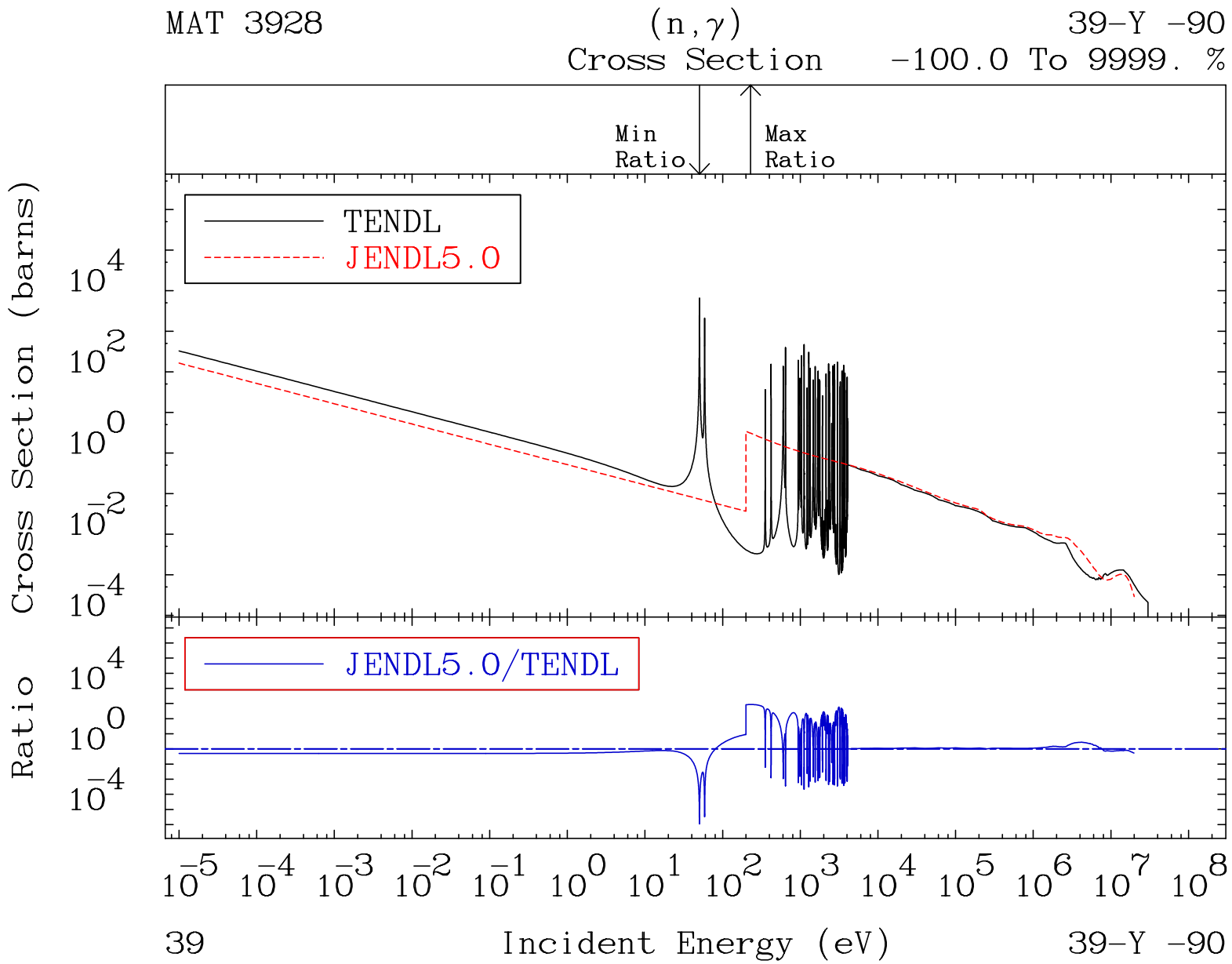

MAT 3928
MT= 76 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.2695 MeV
JENDL5.0 Threshold 2.3927 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
39-Y -90

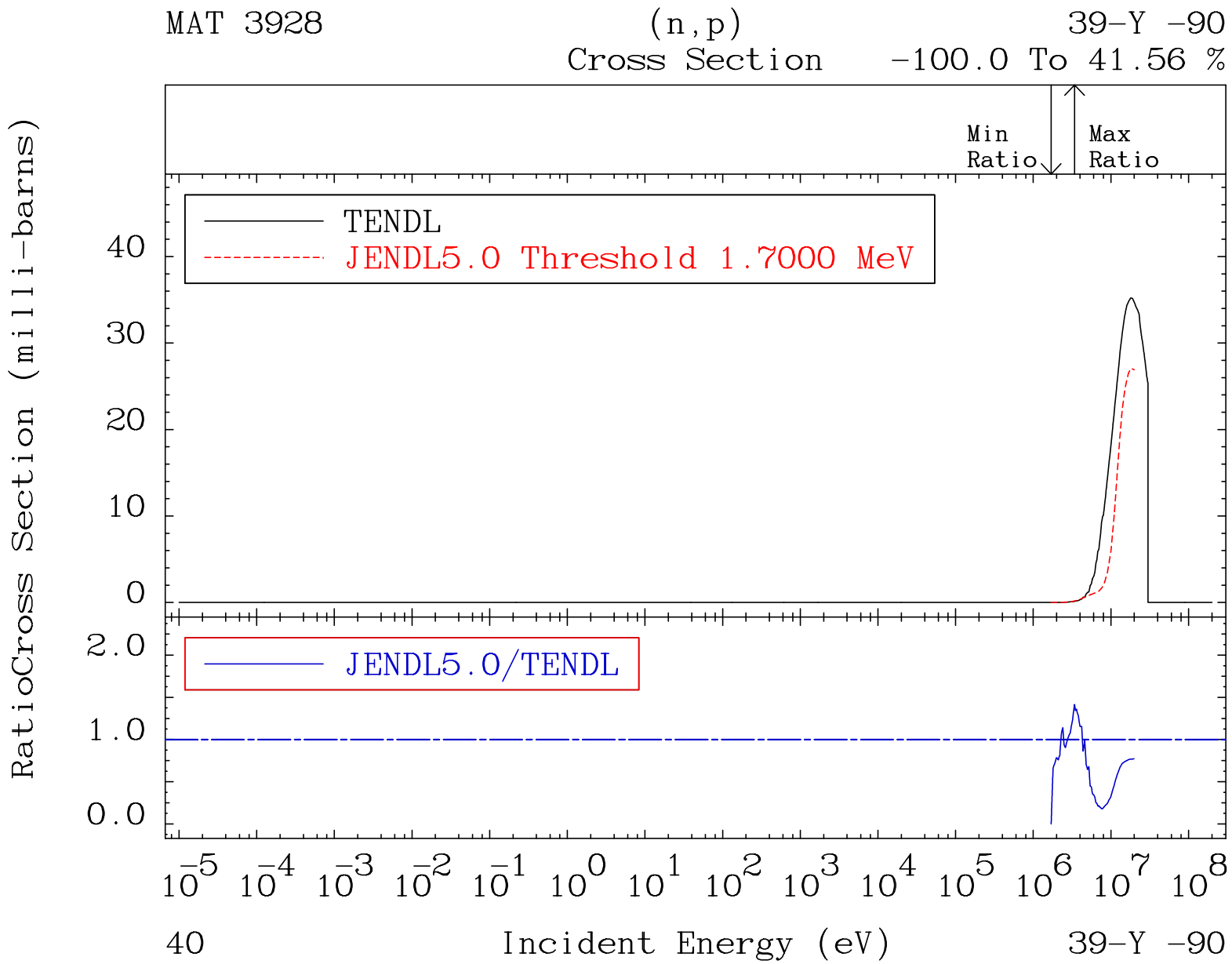

MAT 3928
MT= 77 (n,n') Level
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.3390 MeV
JENDL5.0 Threshold 2.4827 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
400
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
39-Y -90

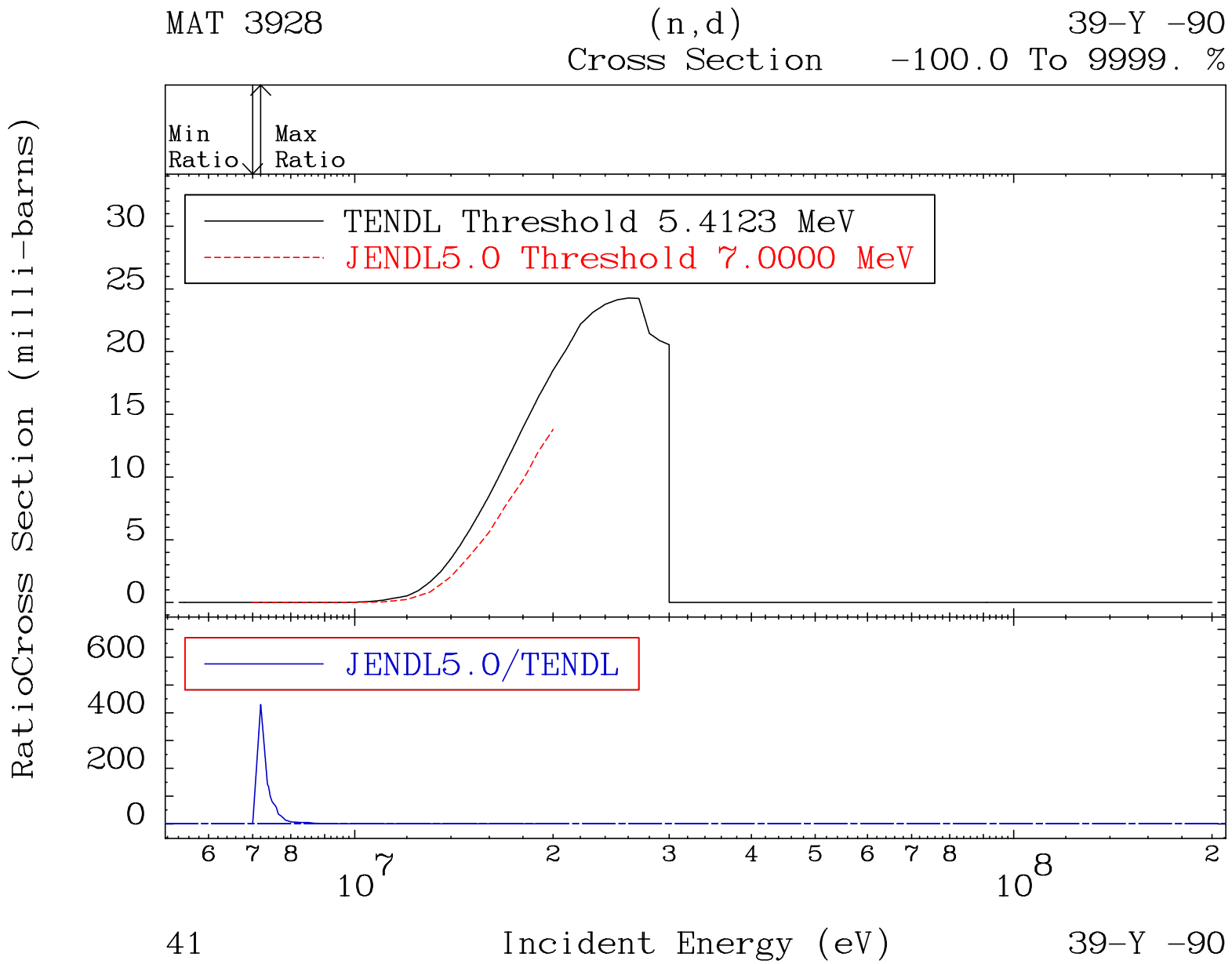

MAT 3928
MT= 78 (n,n') Level
39-Y -90
Cross Section -100.0 To 110.3 %
Max
Ratio
TENDL Threshold 2.3535 MeV
JENDL5.0 Threshold 2.5020 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
39-Y -90

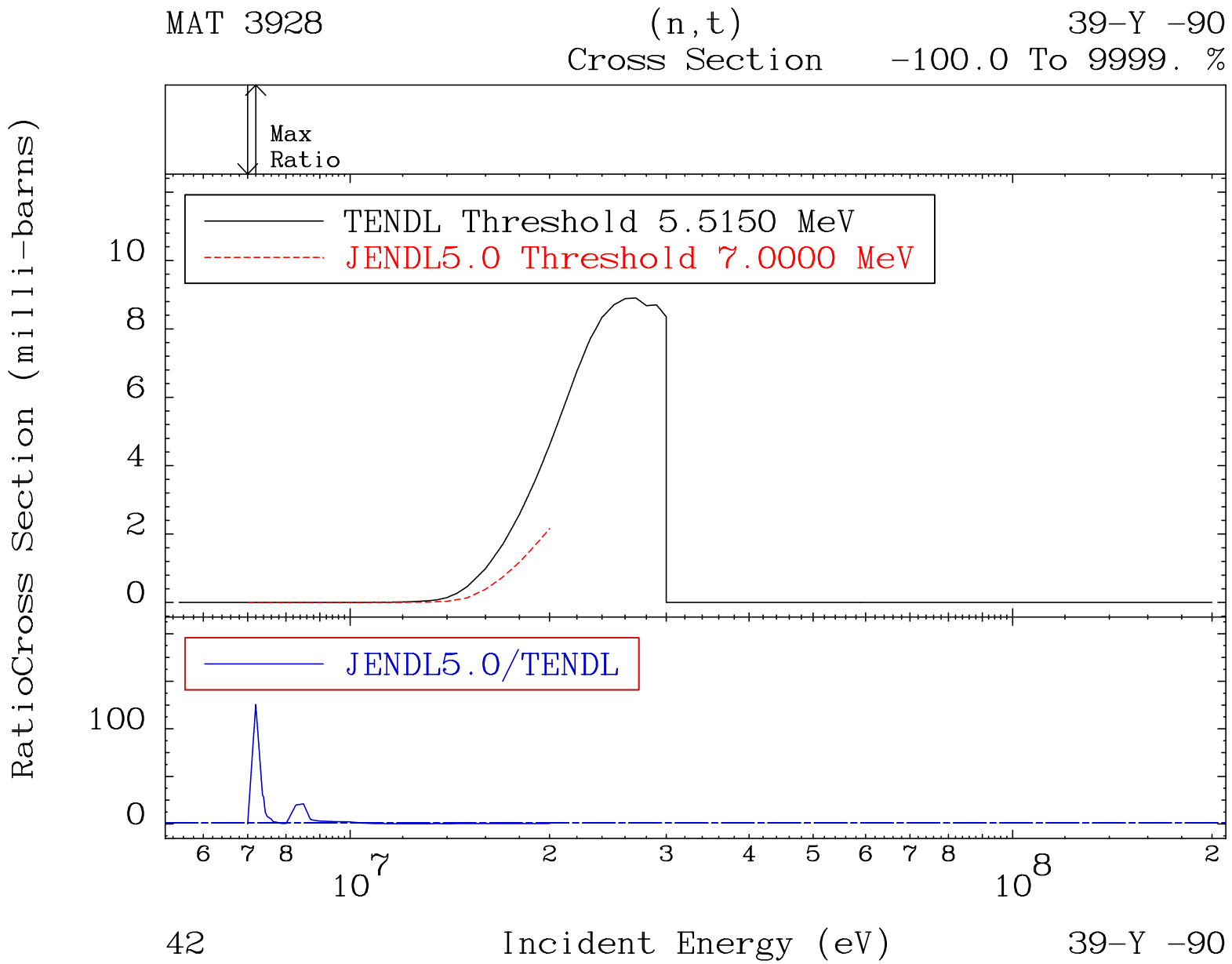

MAT 3928
MT= 79 (n,n') Level
39-Y -90
Cross Section -100.0 To 678.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.3925 MeV
JENDL5.0 Threshold 2.5328 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37
39-Y -90

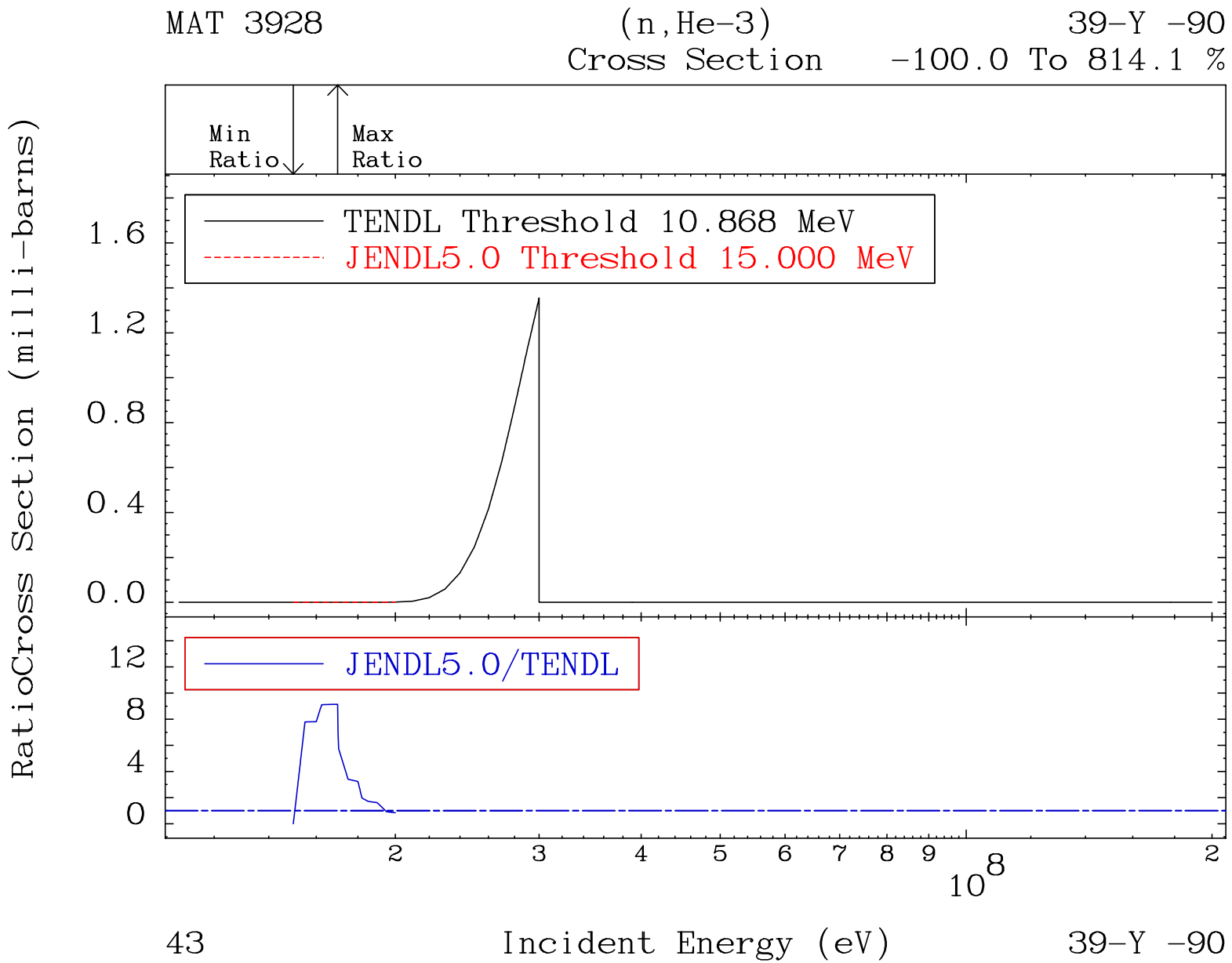

MAT 3928
(n,n') Continuum
39-Y -90
Cross Section
-100.0 To 42.28 %
Min Ratio
Max Ratio
TENDL Threshold 2.3925 MeV
JENDL5.0 Threshold 2.6634 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
39-Y -90

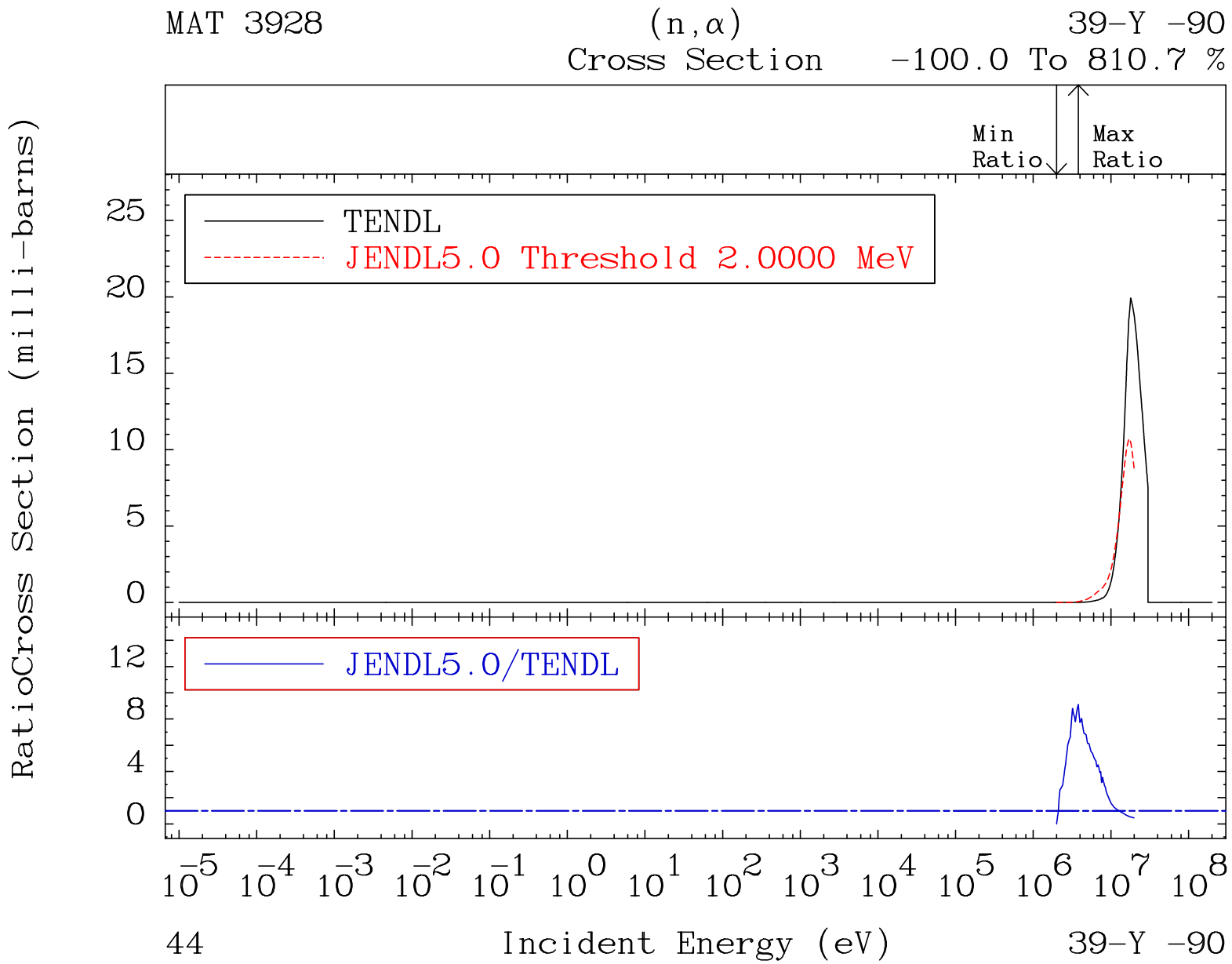

MAT 3928
(n,γ)
Cross Section
39-Y -90
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
39
39-Y -90

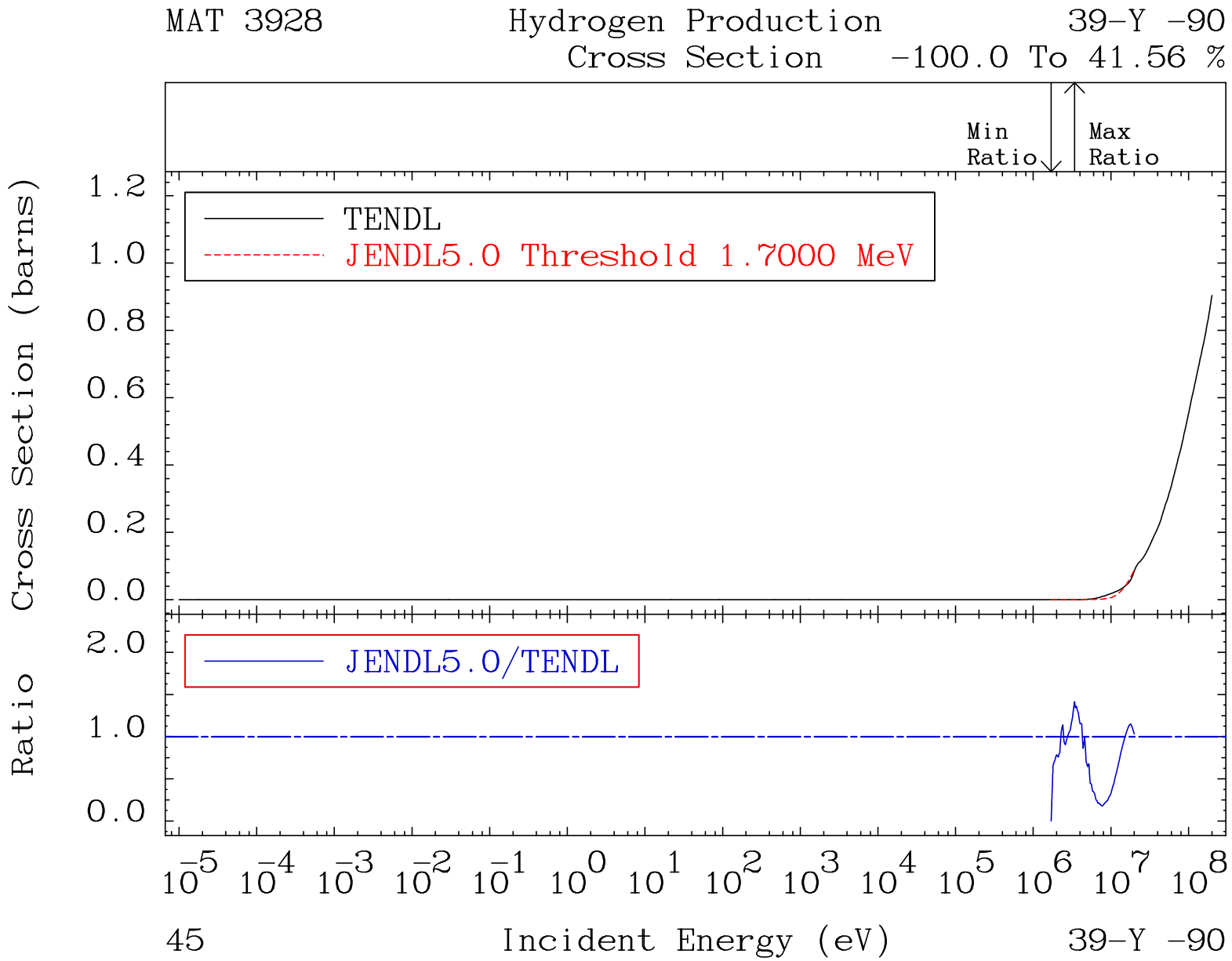

MAT 3928
(n,p)
Cross Section
39-Y -90
-100.0 To 41.56 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 1.7000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
40
39-Y -90

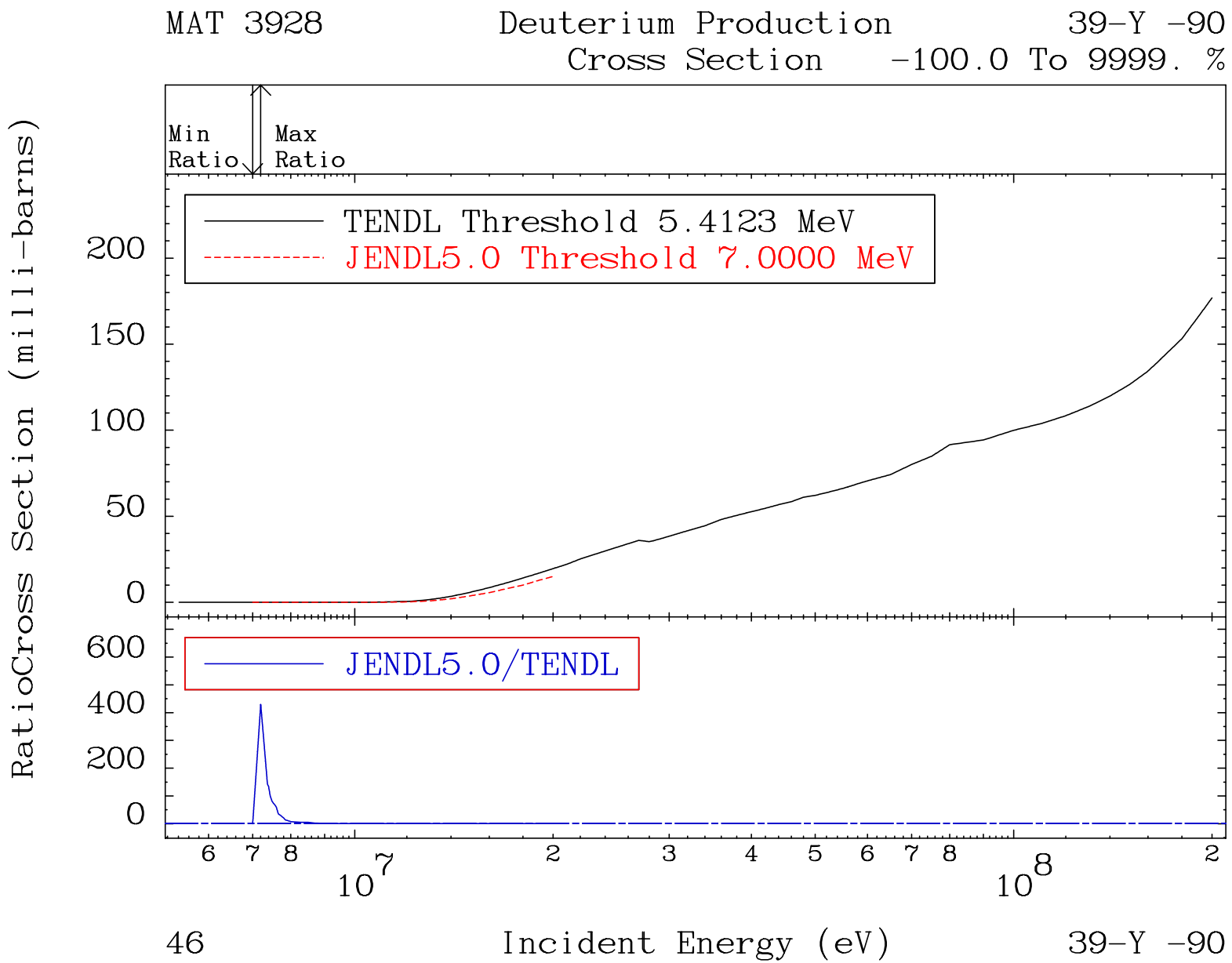

MAT 3928
(n,d)
39-Y -90
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.4123 MeV
JENDL5.0 Threshold 7.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
600
400
200
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
39-Y -90

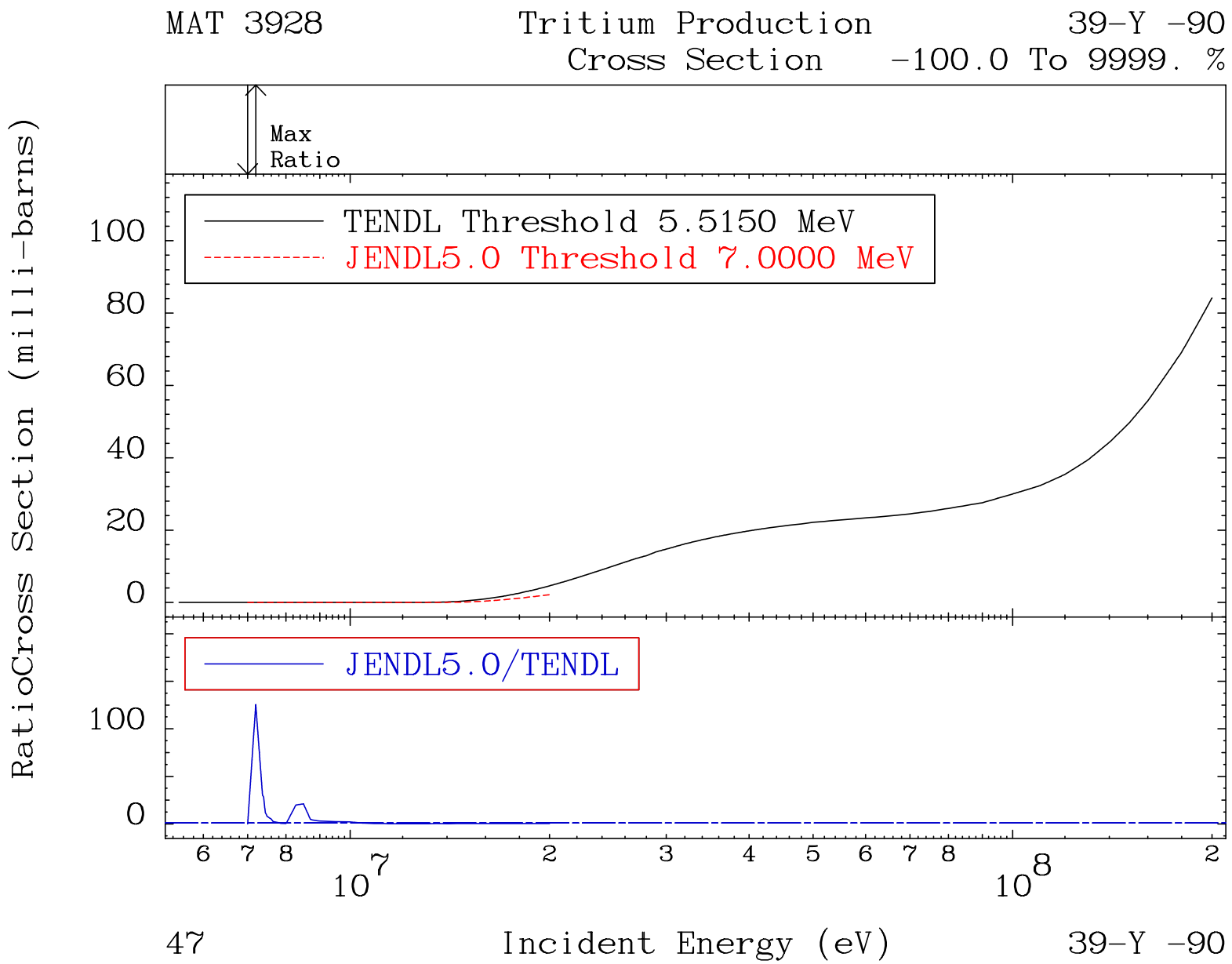

MAT 3928
(n,t)
39-Y -90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 5.5150 MeV
JENDL5.0 Threshold 7.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
100
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
39-Y -90

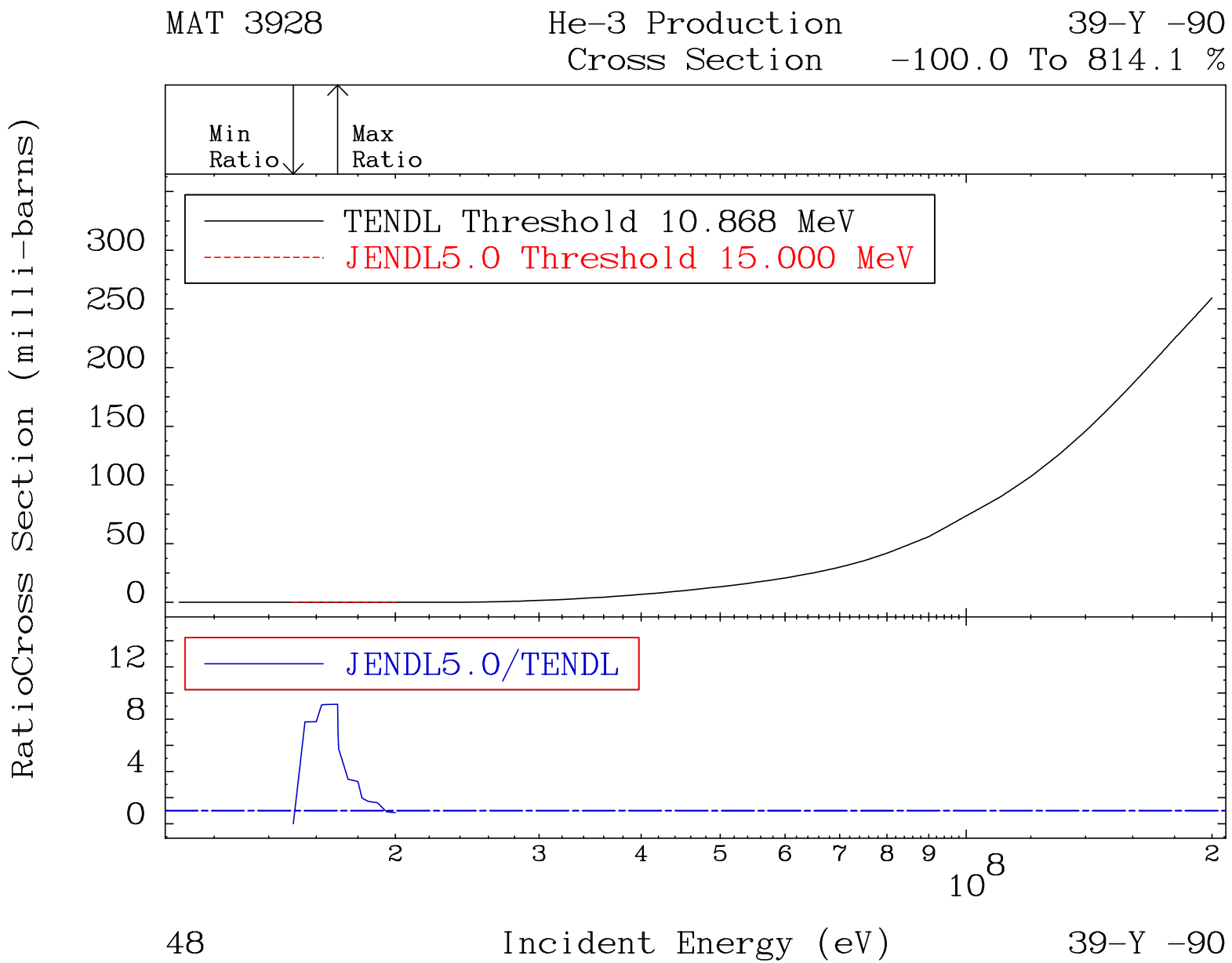

MAT 3928
(n,He-3)
Cross Section
39-Y -90
-100.0 To 814.1 %
Min Ratio
Max Ratio
TENDL Threshold 10.868 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
12
8
4
0
2
3
4
5
6
7
8
9
2
10^8
43
Incident Energy (eV)
39-Y -90

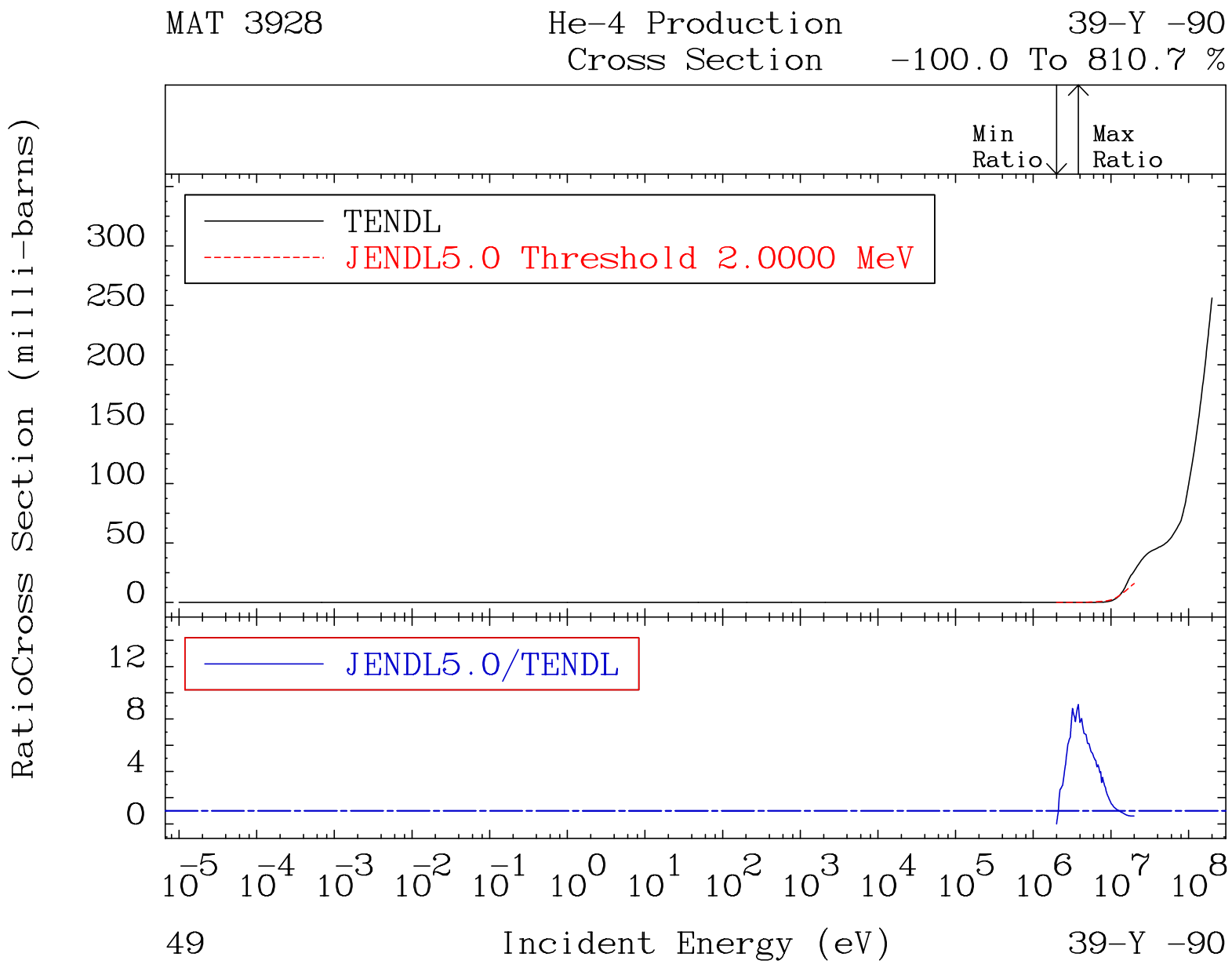

MAT 3928
(n,α)
Cross Section
39-Y -90
-100.0 To 810.7 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 2.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
12
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
44
Incident Energy (eV)
39-Y -90

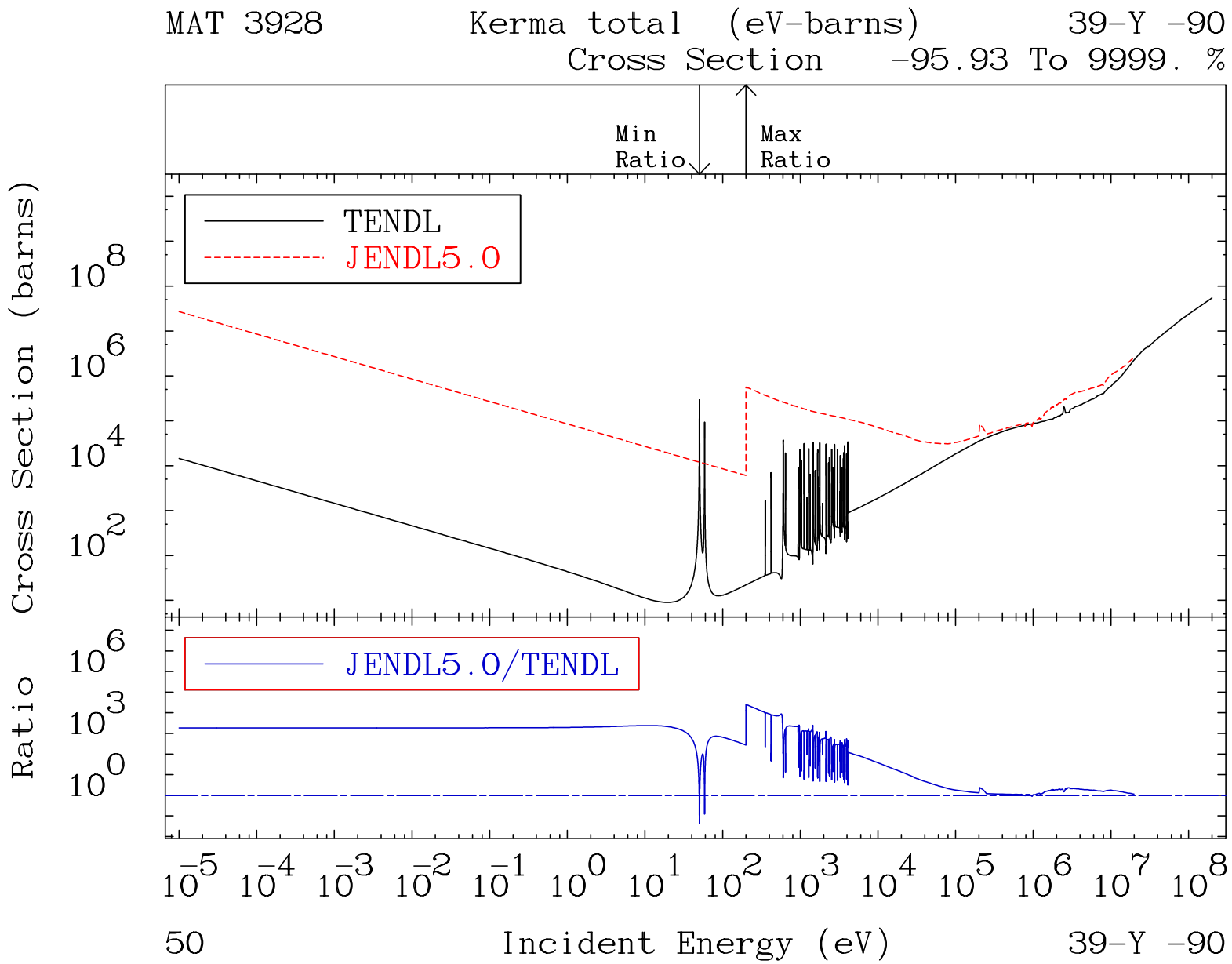

MAT 3928
Hydrogen Production
39-Y -90
Cross Section
-100.0 To 41.56 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 1.7000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
39-Y -90

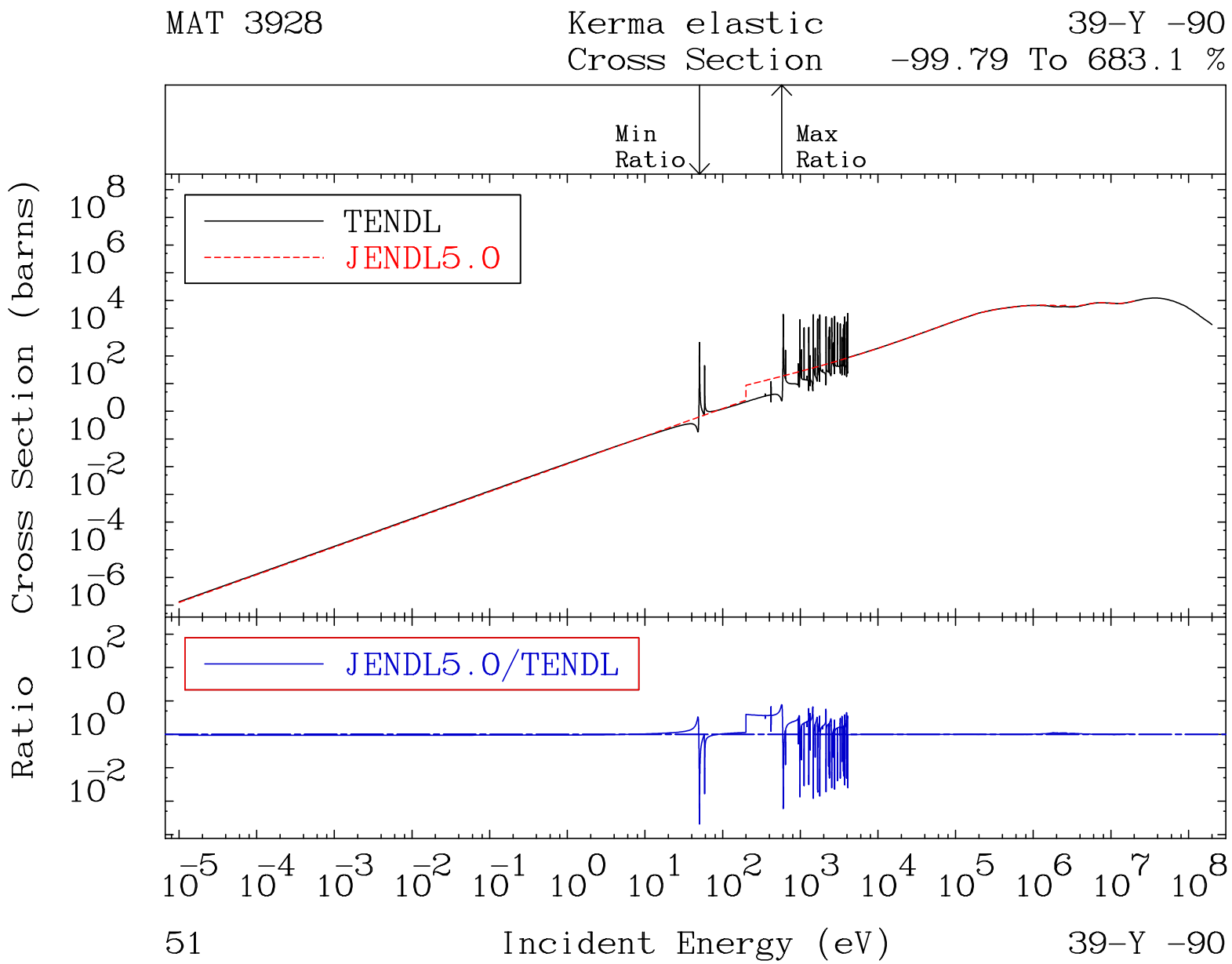

MAT 3928
Deuterium Production
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.4123 MeV
JENDL5.0 Threshold 7.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
600
400
200
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
39-Y -90

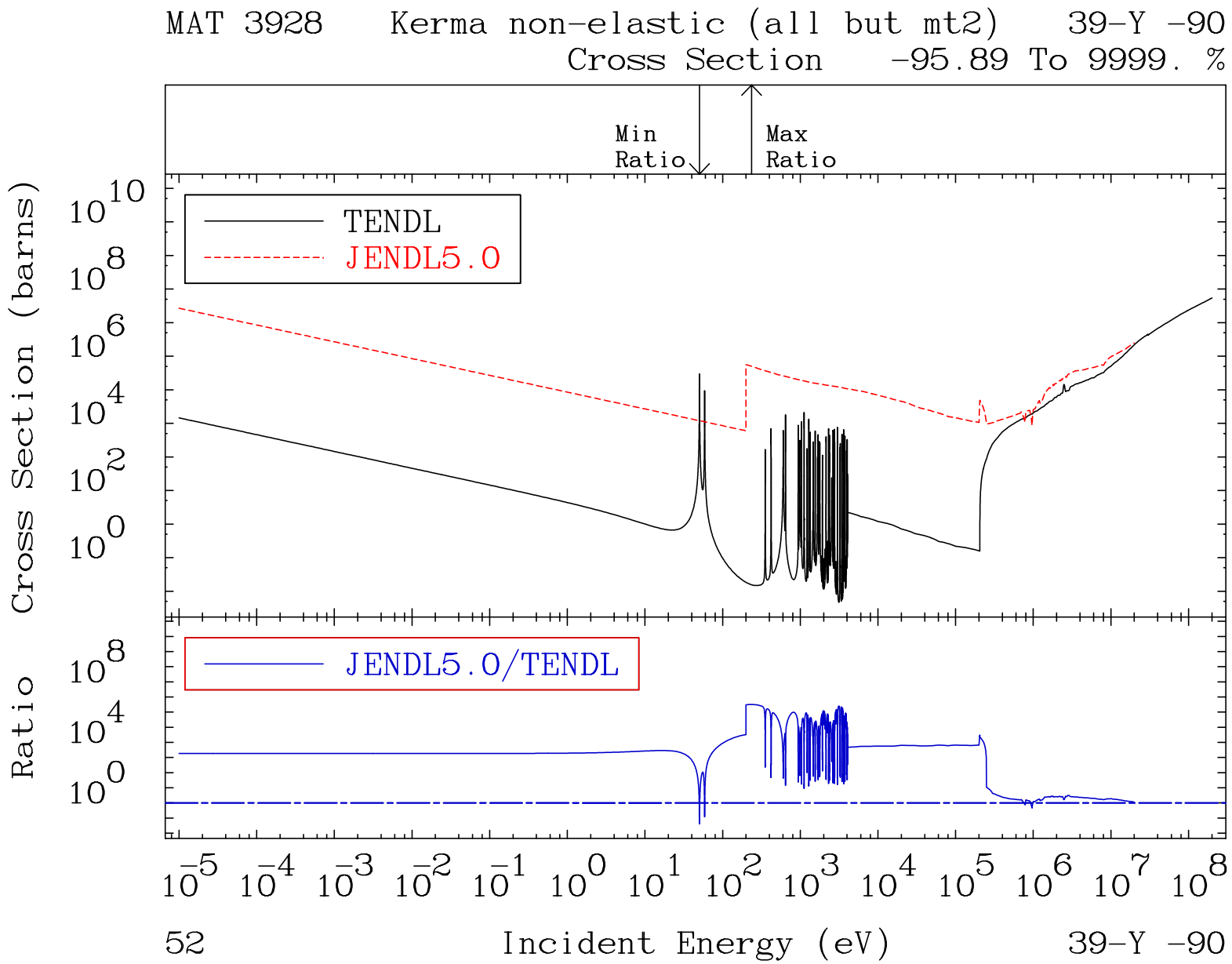

MAT 3928
Tritium Production
39-Y -90
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 5.5150 MeV
JENDL5.0 Threshold 7.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
100
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
47
Incident Energy (eV)
39-Y -90

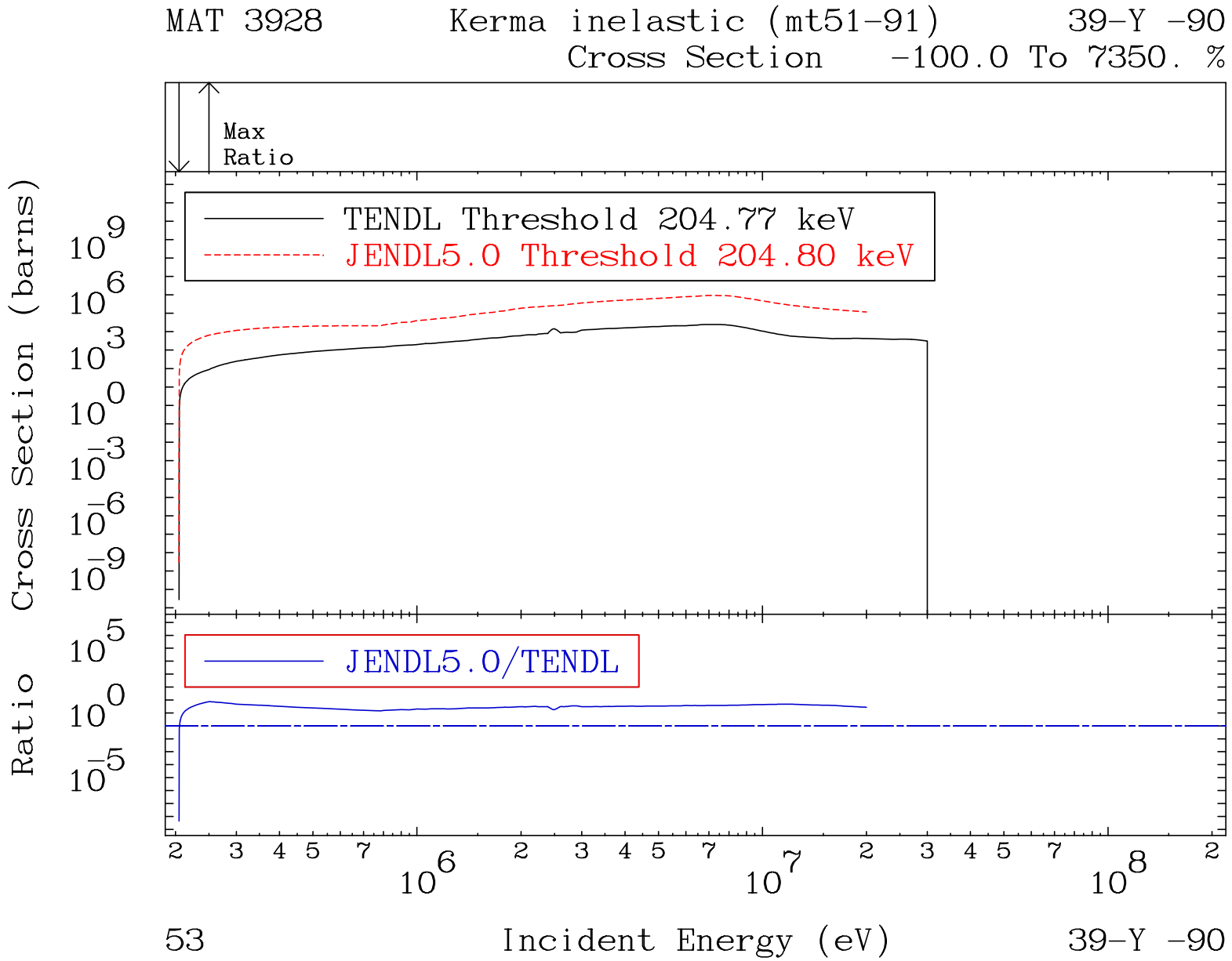

MAT 3928
He-3 Production
Cross Section
39-Y -90
-100.0 To 814.1 %
Min Ratio
Max Ratio
TENDL Threshold 10.868 MeV
JENDL5.0 Threshold 15.000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
12
8
4
0
2
3
4
5
6
7
8
9
2
10^8
48
Incident Energy (eV)
39-Y -90

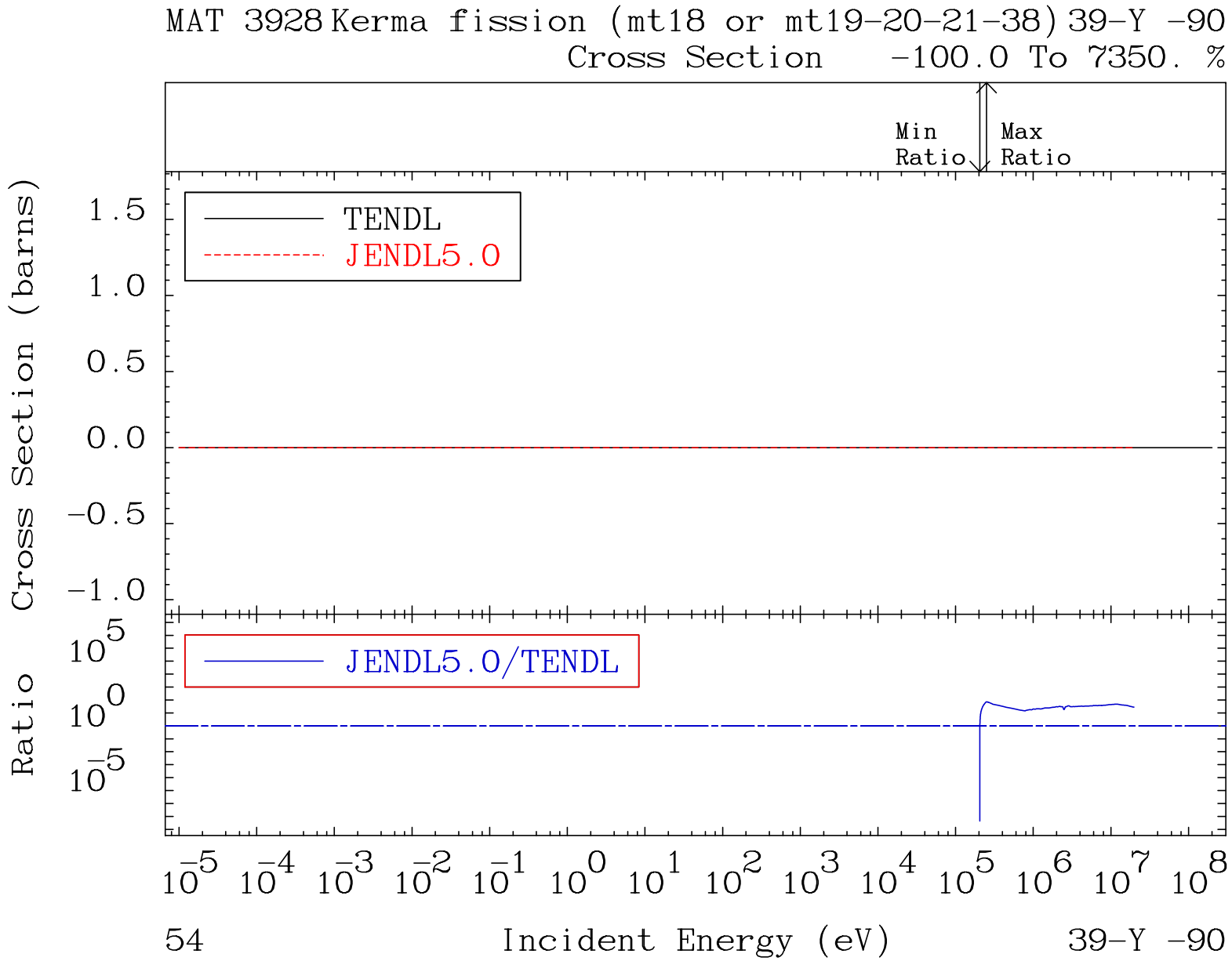

MAT 3928
He-4 Production
Cross Section
39-Y -90
-100.0 To 810.7 %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 2.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
12
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
49
Incident Energy (eV)
39-Y -90

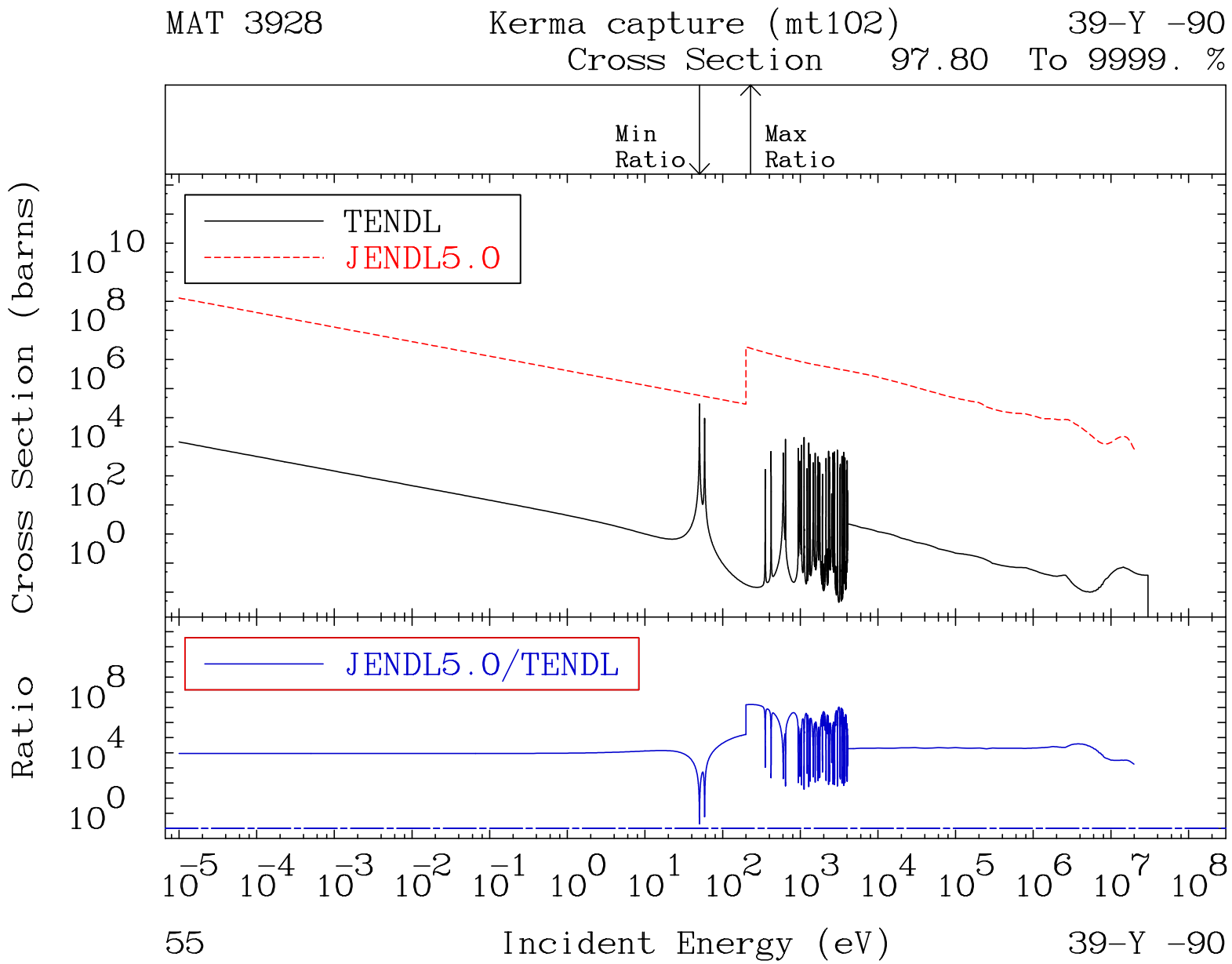

MAT 3928
Kerma total (eV-barns)
39-Y -90
Cross Section -95.93 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
50
39-Y -90

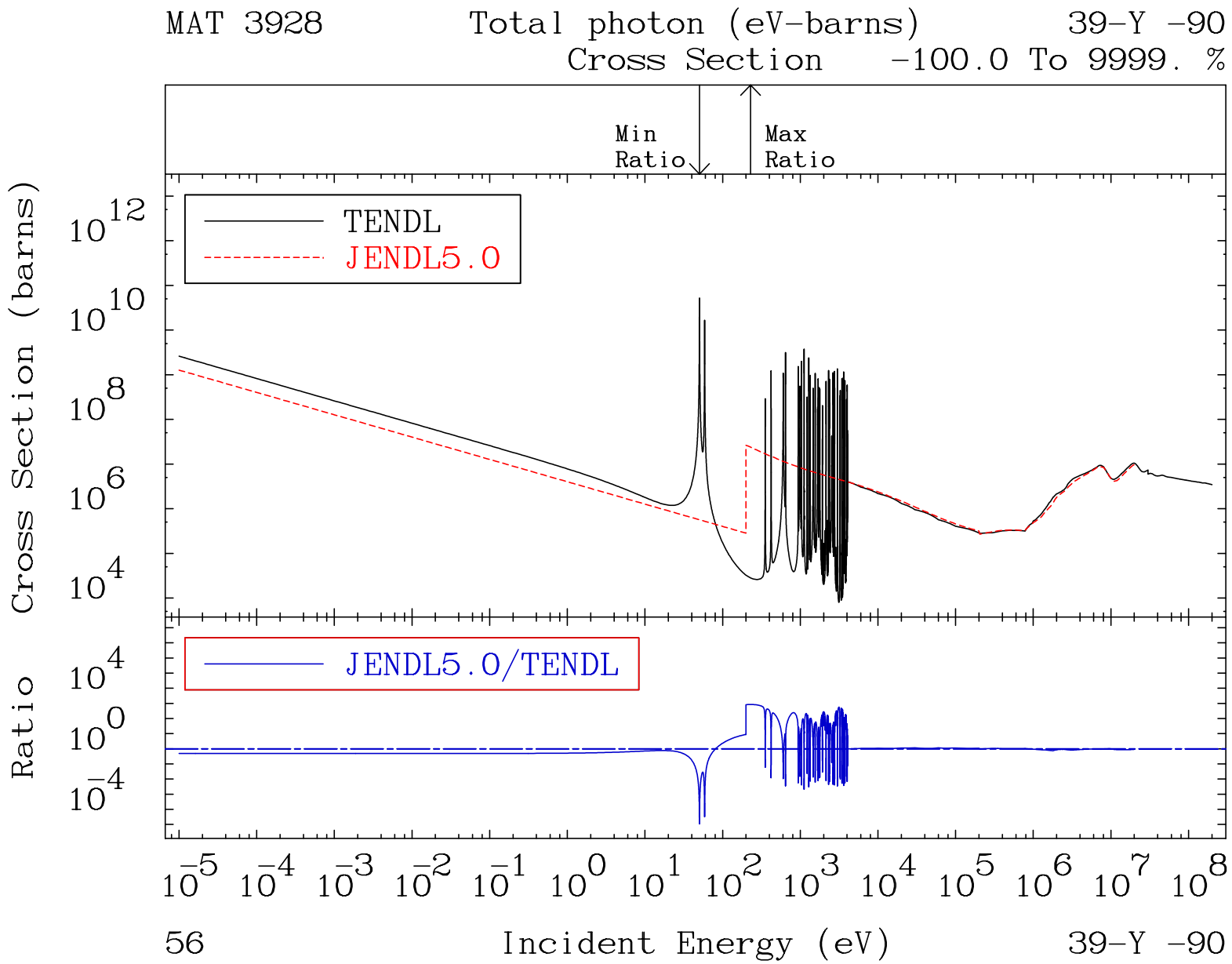

MAT 3928
Kerma elastic
Cross Section
39-Y -90
-99.79 To 683.1 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
39-Y -90

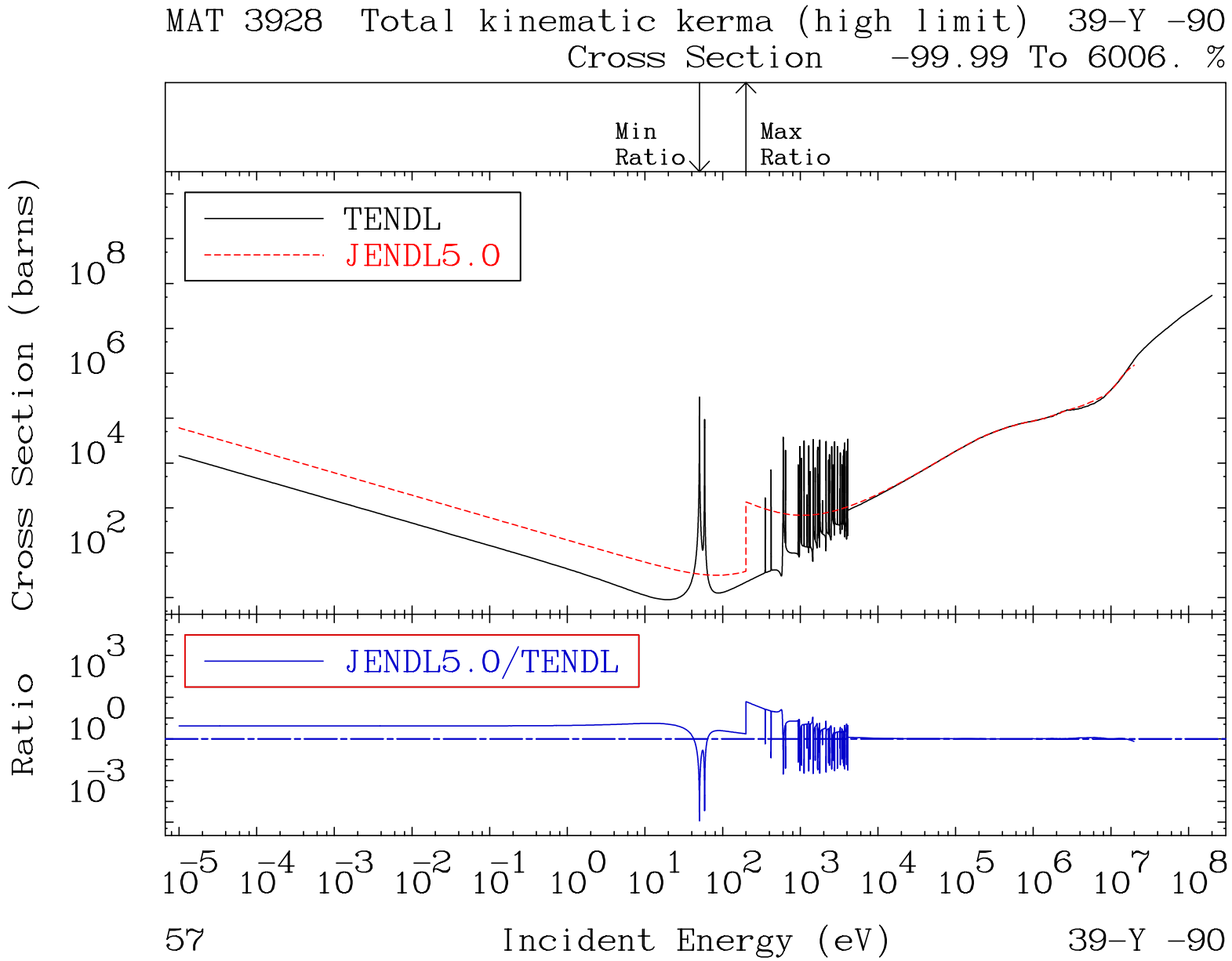

MAT 3928 Kerma non-elastic (all but mt2) 39-Y -90
Cross Section -95.89 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
39-Y -90

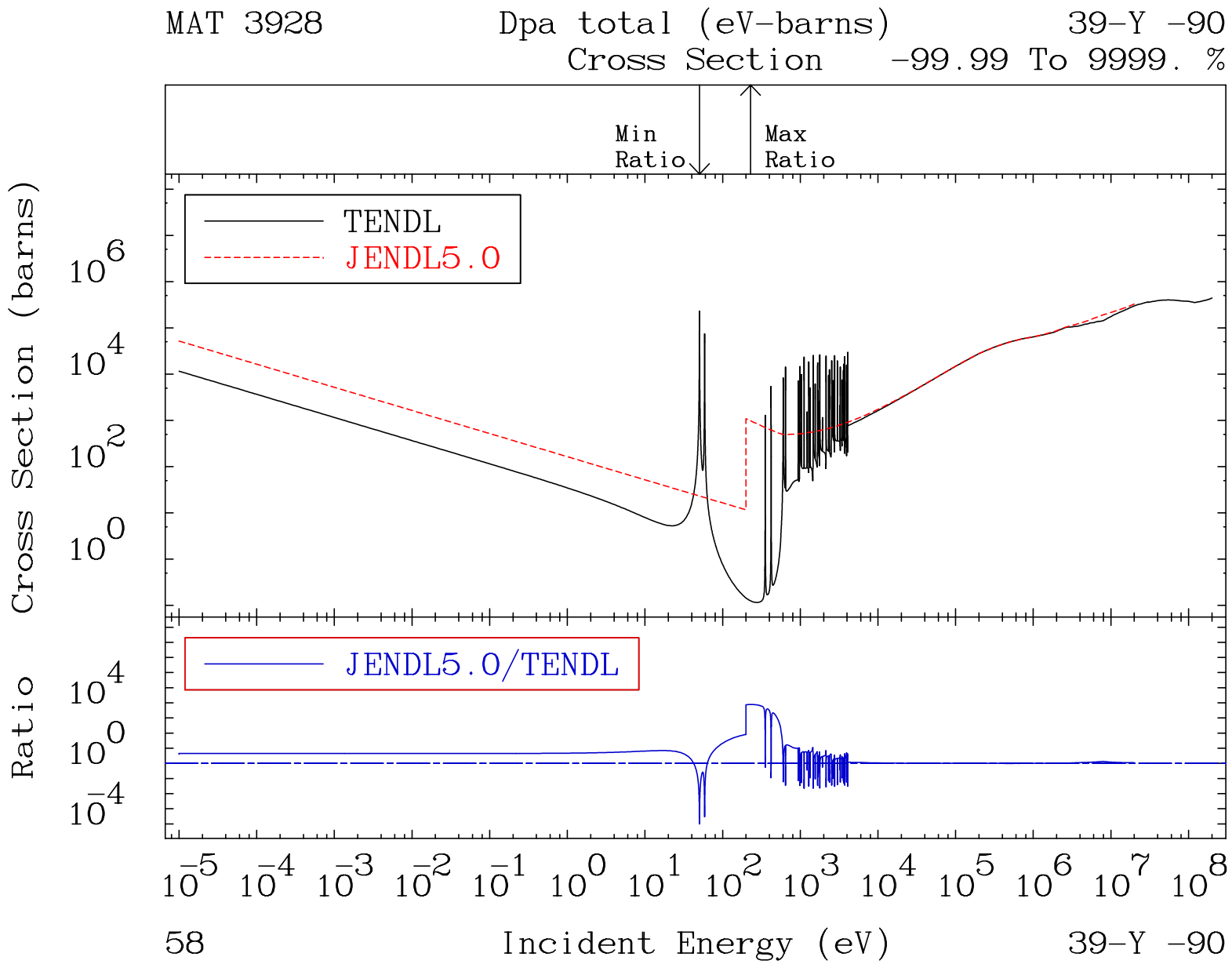

MAT 3928
Kerma inelastic (mt51-91)
39-Y -90
Cross Section -100.0 To 7350. %
Max
Ratio
TENDL Threshold 204.77 keV
JENDL5.0 Threshold 204.80 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
39-Y -90

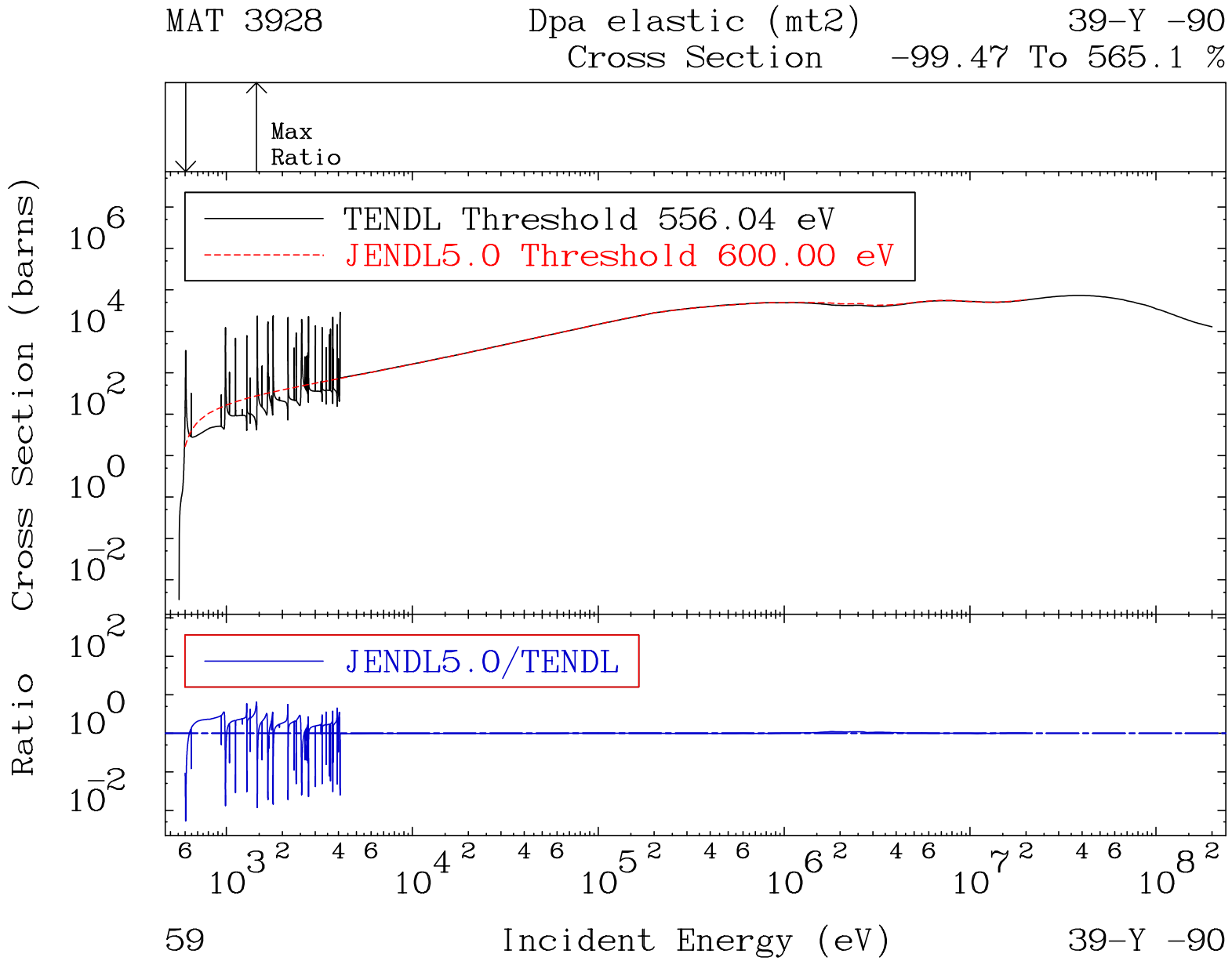

MAT 3928 Kerma fission (mt18 or mt19-20-21-38) 39-Y -90
Cross Section -100.0 To 7350. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{5}
10^{0}
10^{-5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
54
Incident Energy (eV)
39-Y -90

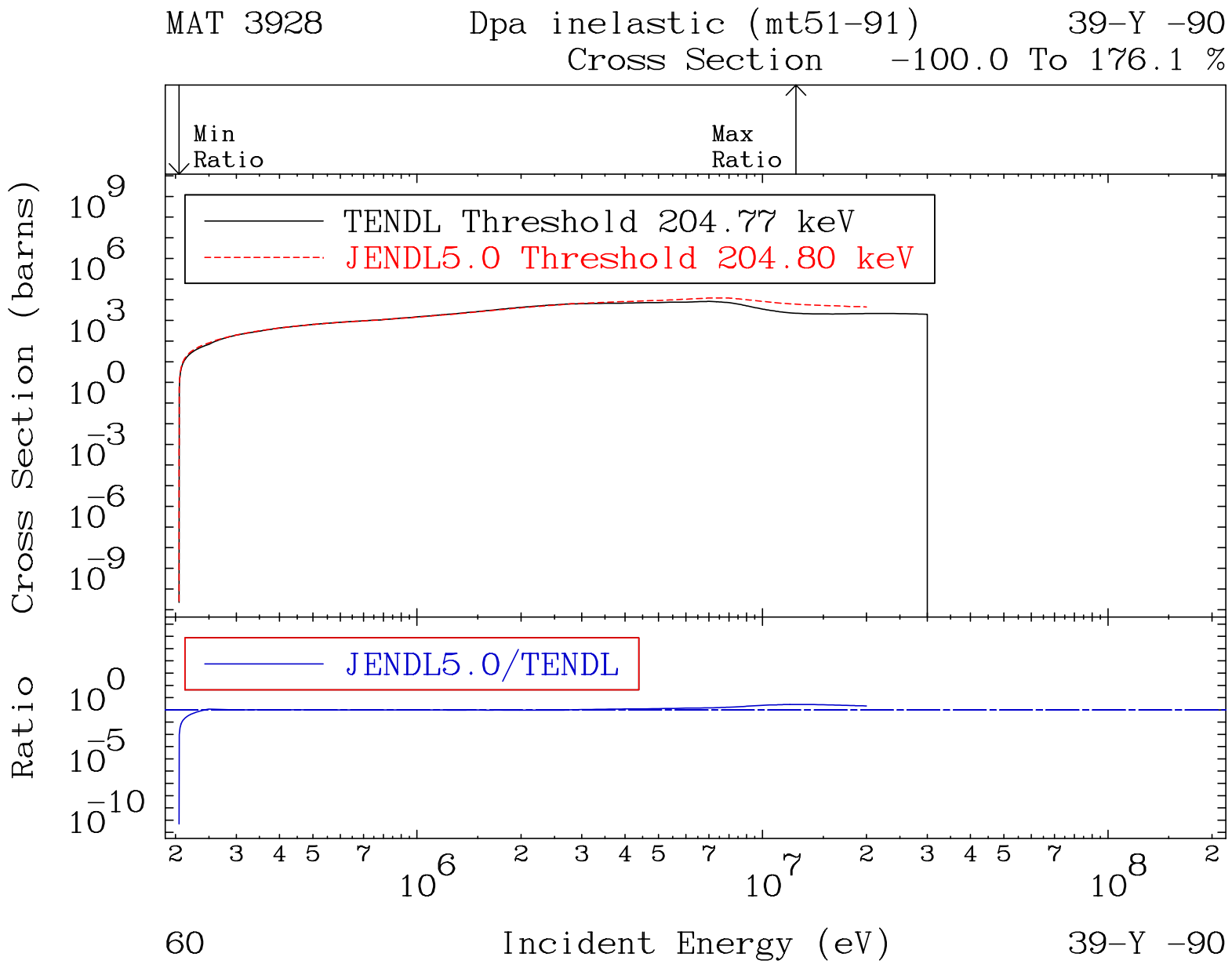

MAT 3928
Kerma capture (mt102)
39-Y -90
Cross Section 97.80 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
55
39-Y -90

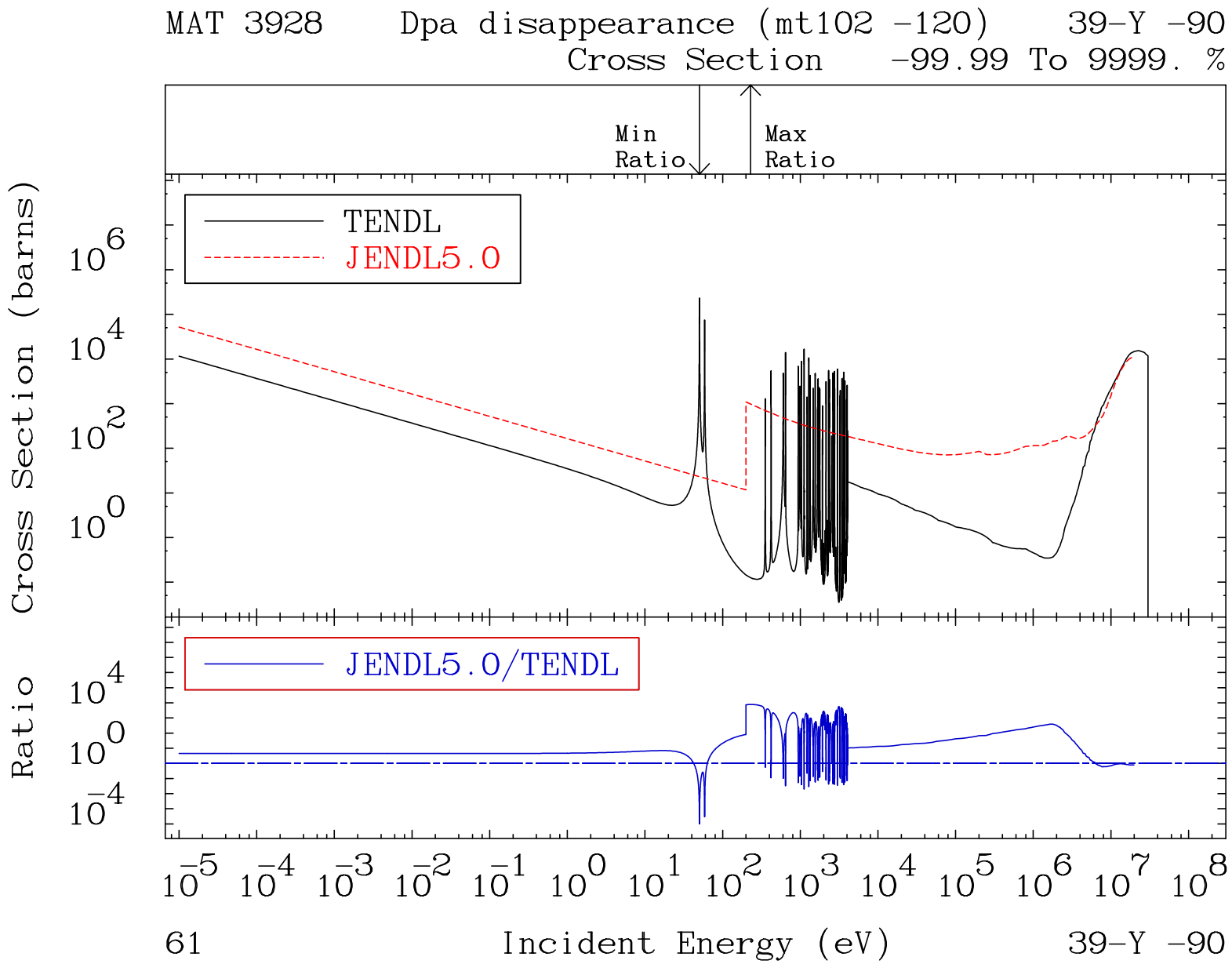

MAT 3928
Total photon (eV-barns)
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
39-Y -90

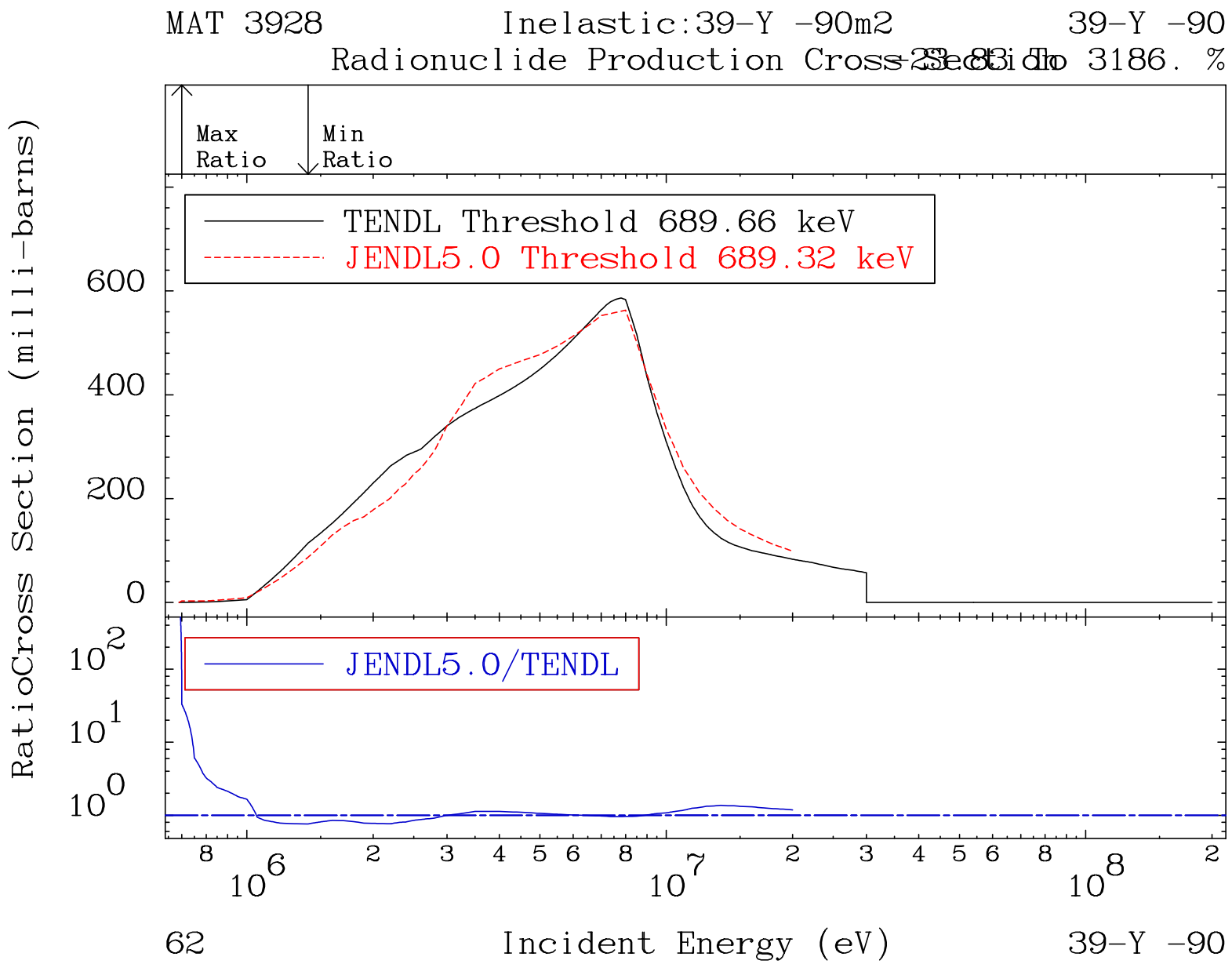

MAT 3928 Total kinematic kerma (high limit) 39-Y -90
Cross Section -99.99 To 6006. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
39-Y -90

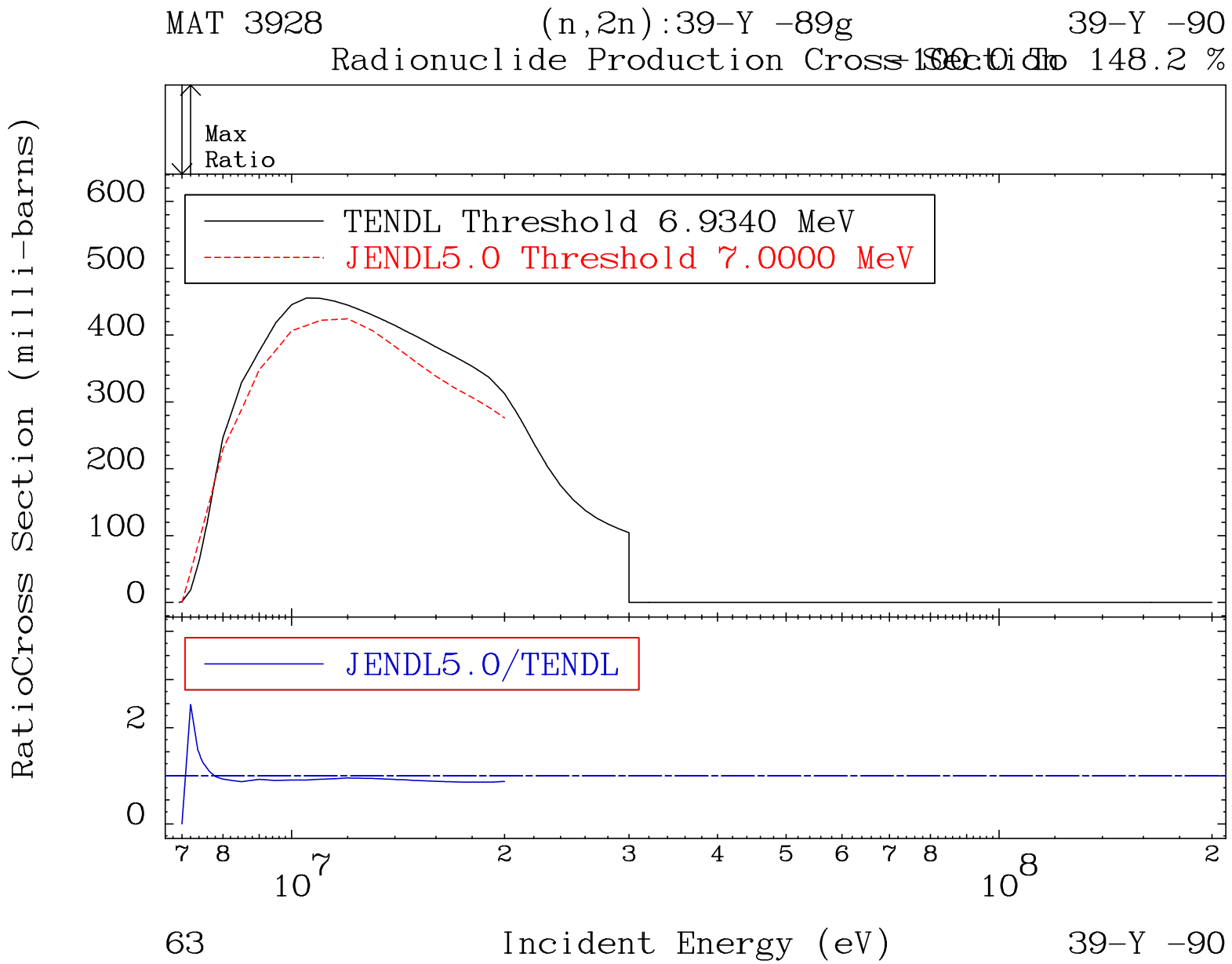

MAT 3928
Dpa total (eV-barns)
39-Y -90
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
58
Incident Energy (eV)
39-Y -90

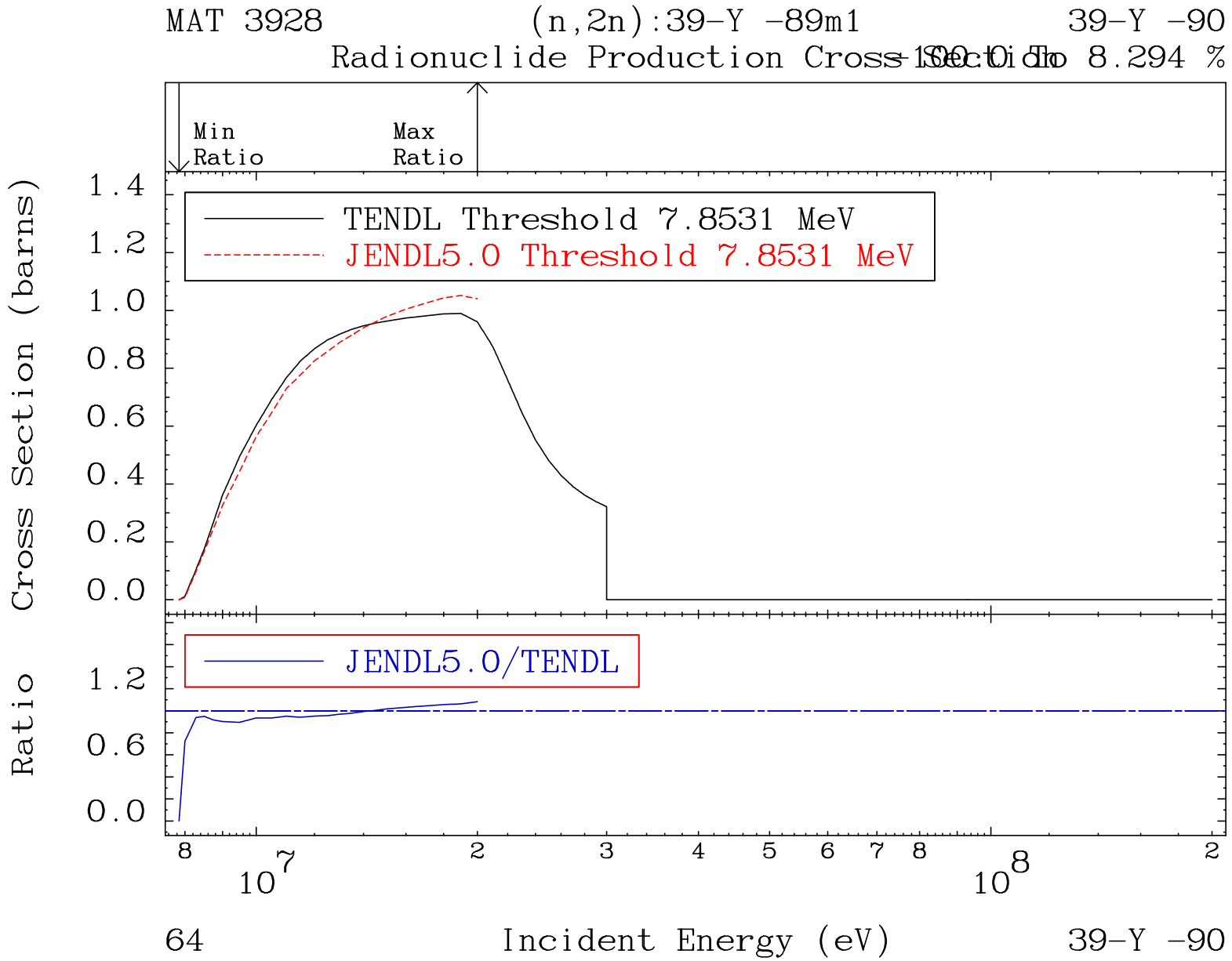

MAT 3928
Dpa elastic (mt2)
Cross Section
39-Y -90
-99.47 To 565.1 %
Max
Ratio
TENDL Threshold 556.04 eV
JENDL5.0 Threshold 600.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
39-Y -90

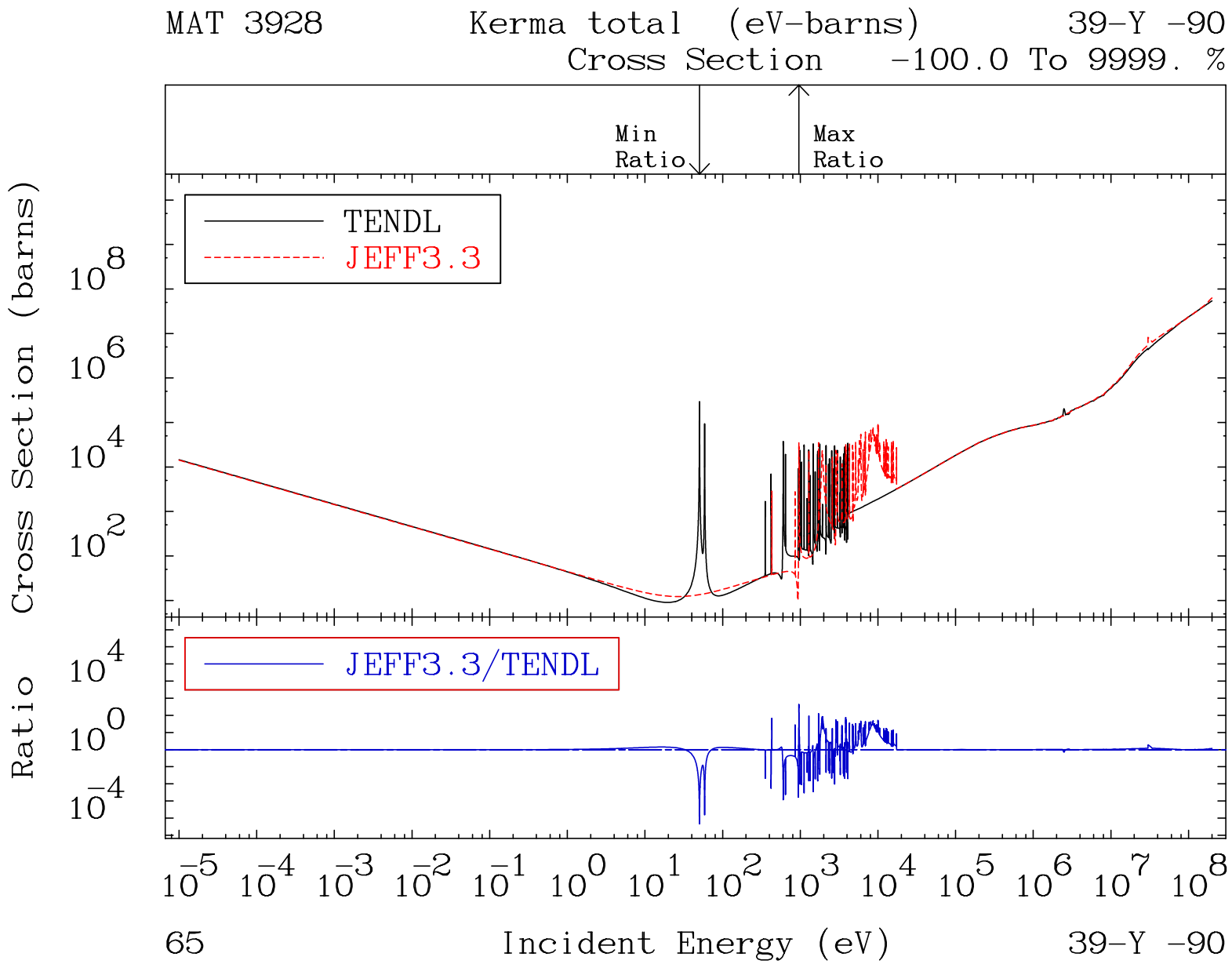

MAT 3928
Dpa inelastic (mt51-91)
39-Y -90
Cross Section -100.0 To 176.1 %
Min Ratio
Max Ratio
TENDL Threshold 204.77 keV
JENDL5.0 Threshold 204.80 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
39-Y -90

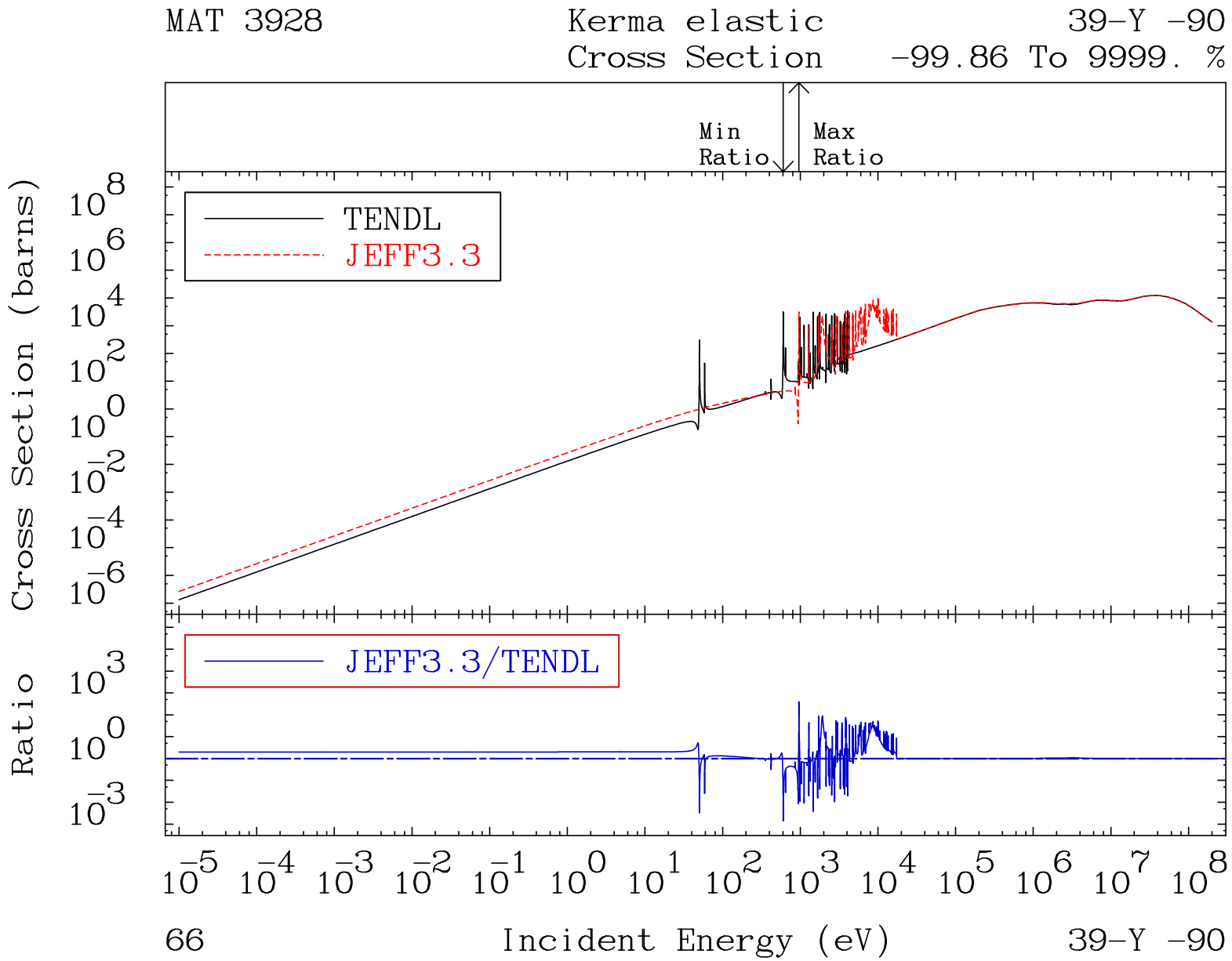

MAT 3928 Dpa disappearance (mt102 -120) 39-Y -90
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
61
39-Y -90

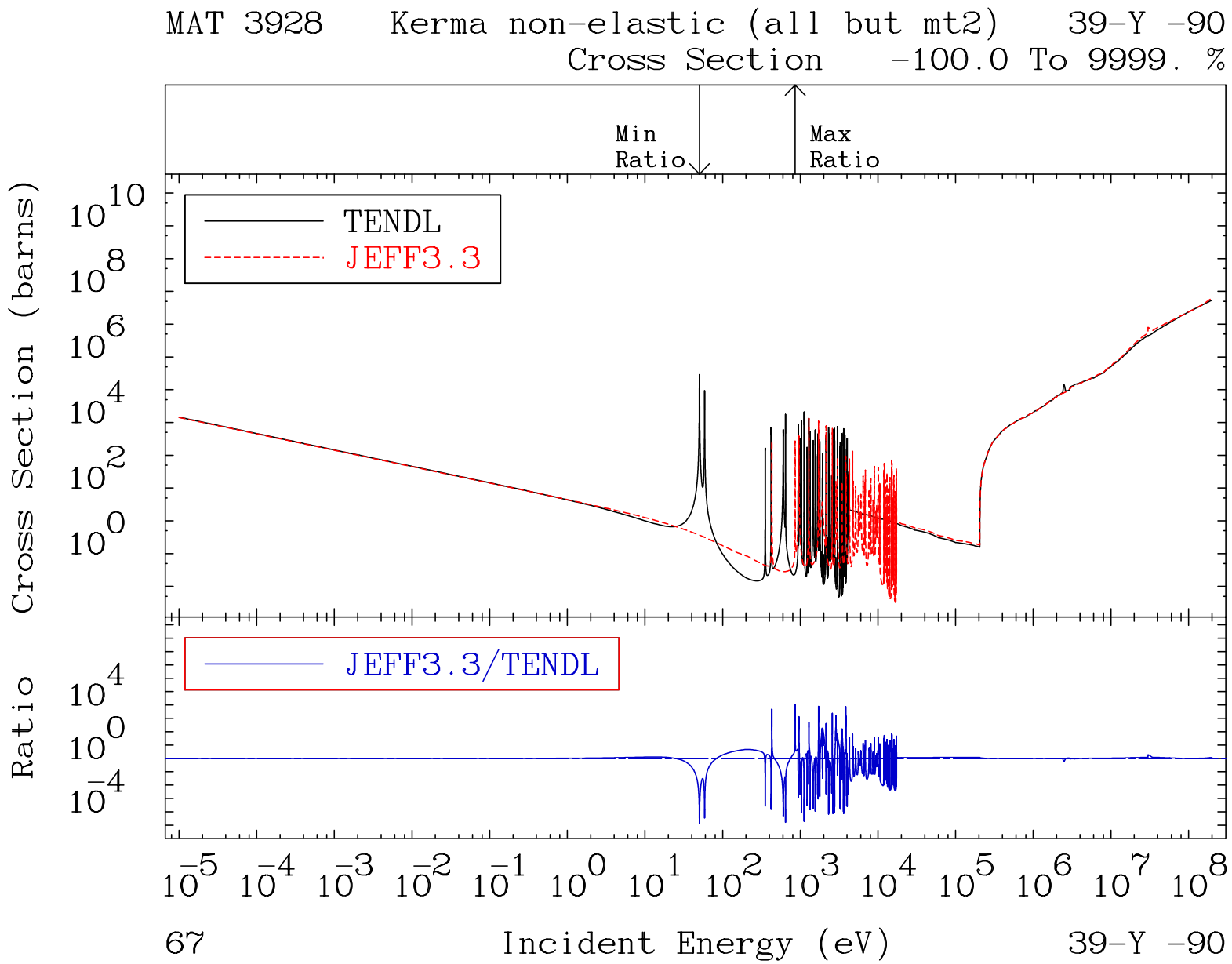

MAT 3928
Inelastic:39-Y -90m2
39-Y -90
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 689.66 keV
JENDL5.0 Threshold 689.32 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
400
200
0
10^2
10^1
10^0
10^6
10^7
10^8
62
Incident Energy (eV)
39-Y -90

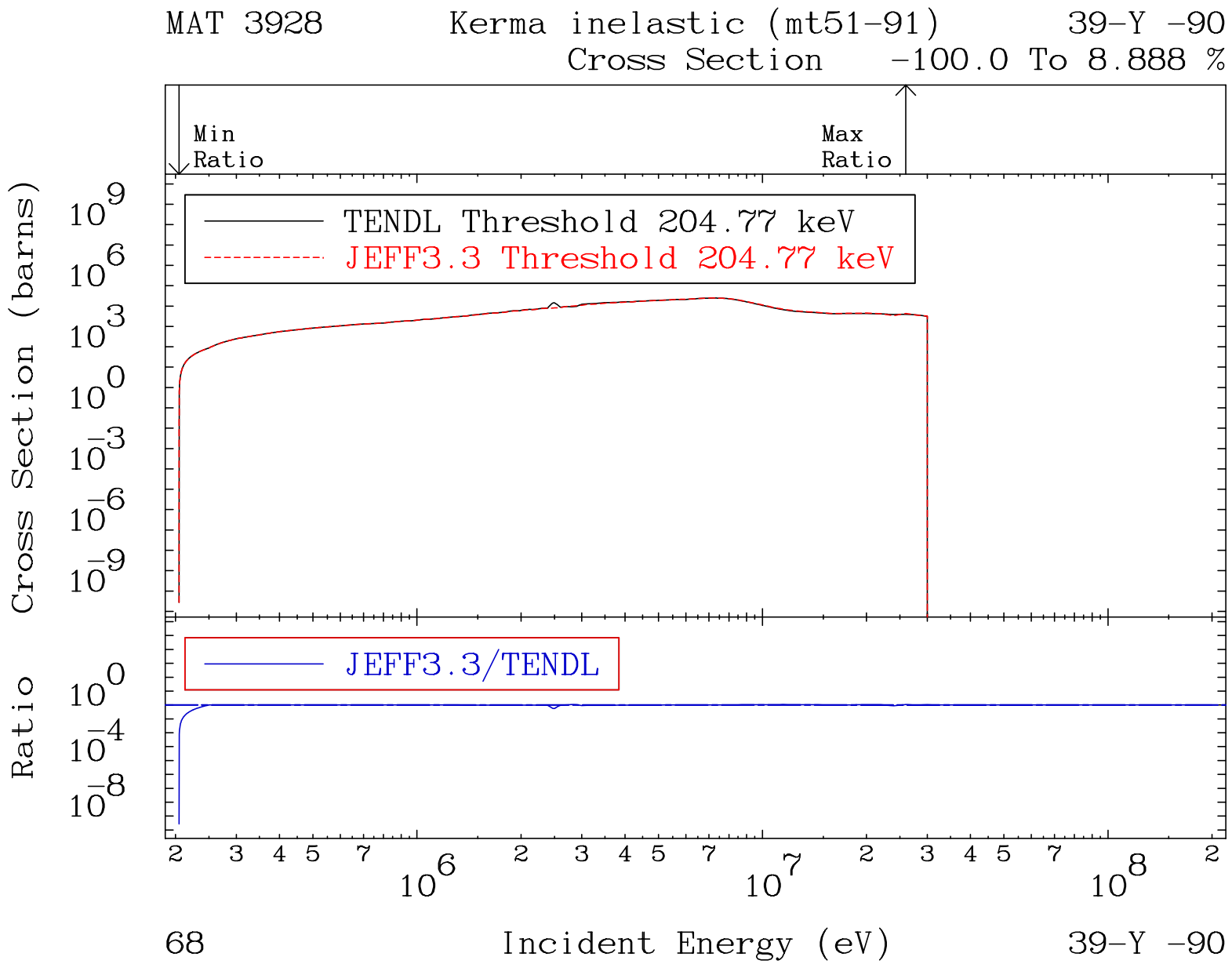

MAT 3928
(n,2n):39-Y -89g
39-Y -90
Radionuclide Production Cross Section To 148.2 %
Max
Ratio
600
500
400
300
200
100
0
TENDL Threshold 6.9340 MeV
JENDL5.0 Threshold 7.0000 MeV
JENDL5.0/TENDL
2
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
RatioCross Section (milli-barns)
63
Incident Energy (eV)
39-Y -90

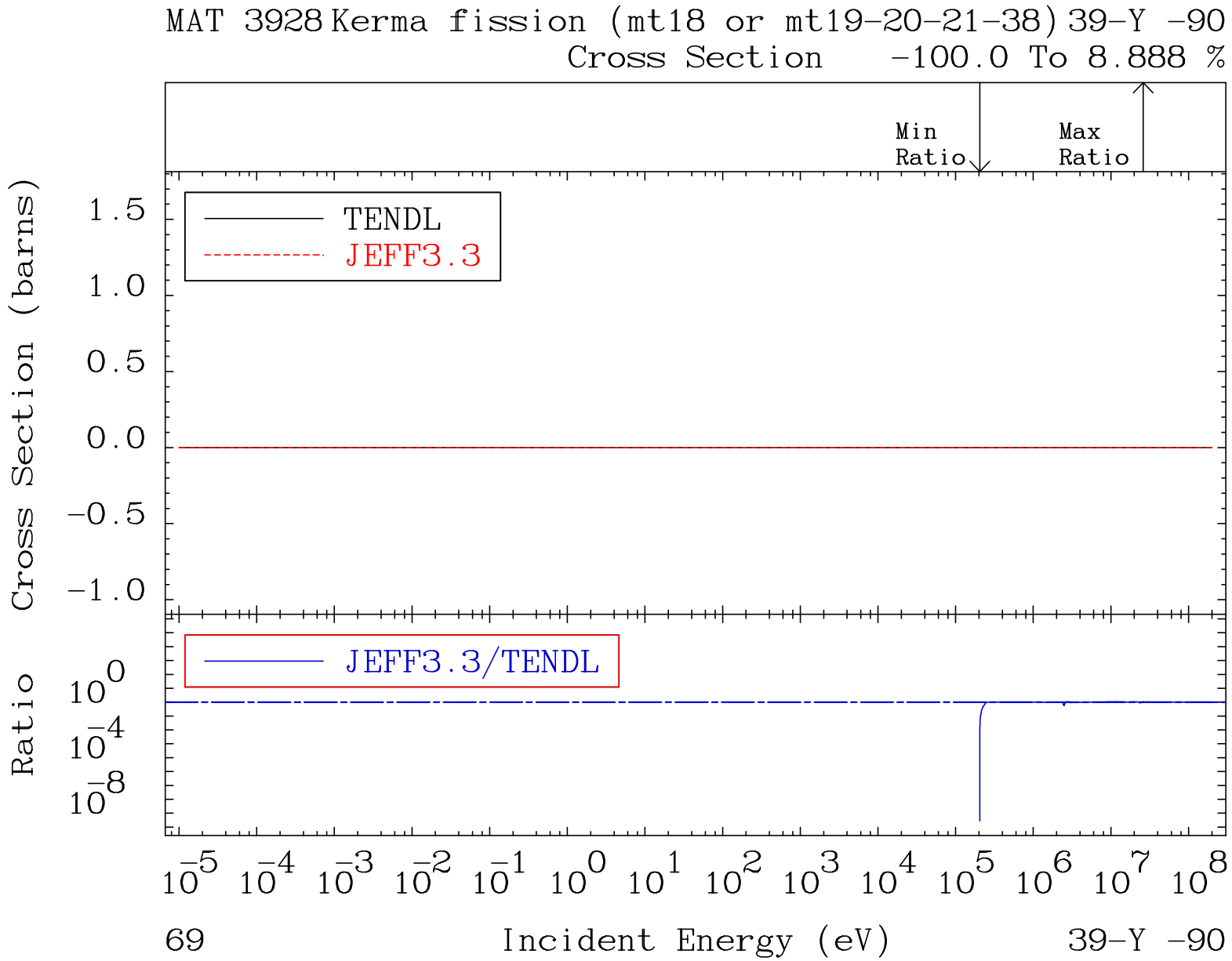

MAT 3928
(n,2n):39-Y -89m1
39-Y -90
Radionuclide Production Cross Section To 8.294 %
Min Ratio
Max Ratio
TENDL Threshold 7.8531 MeV
JENDL5.0 Threshold 7.8531 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
2
3
4
5
6
7
8
2
10^7
10^8
64
Incident Energy (eV)
39-Y -90

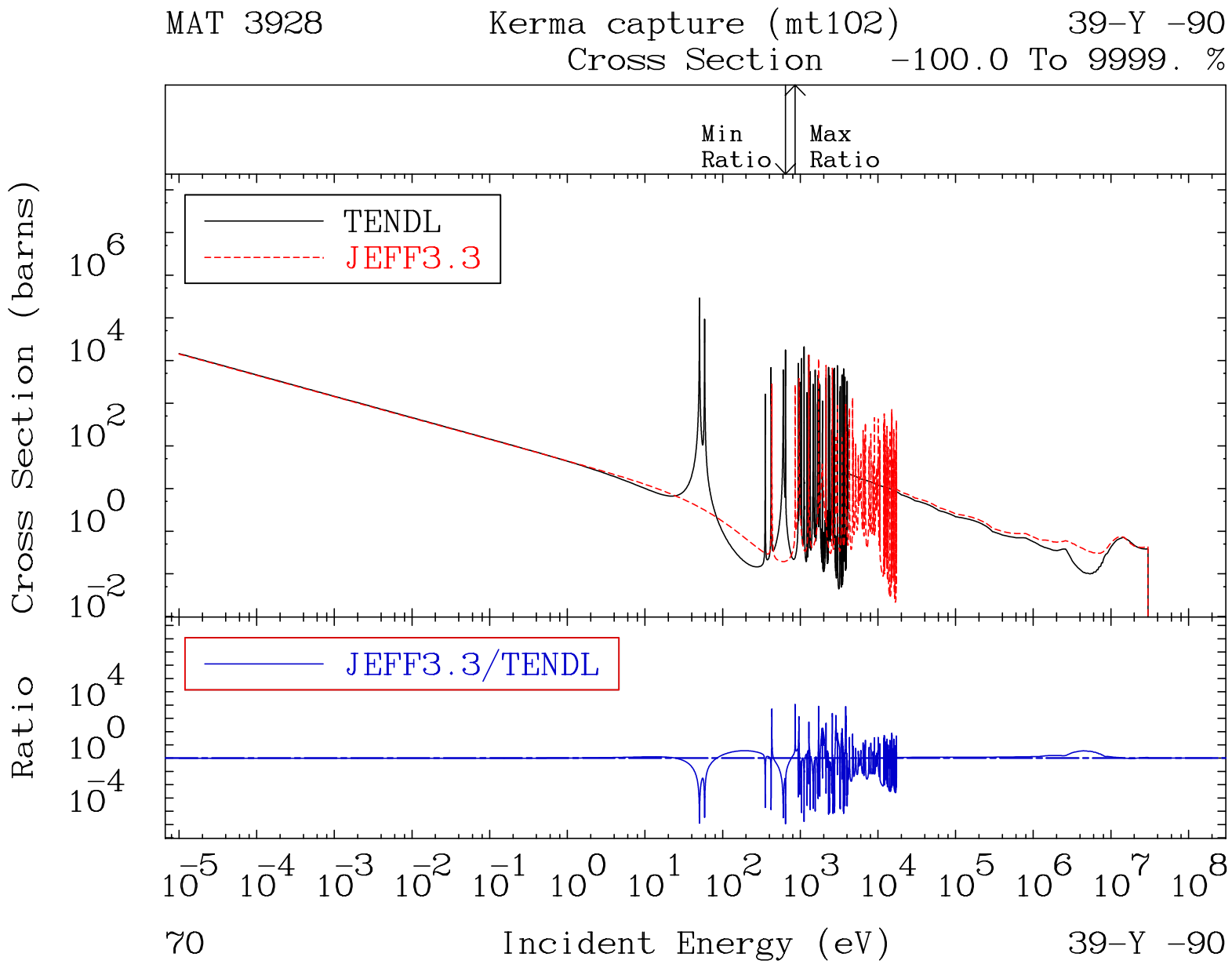

MAT 3928
Kerma total (eV-barns)
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
39-Y -90

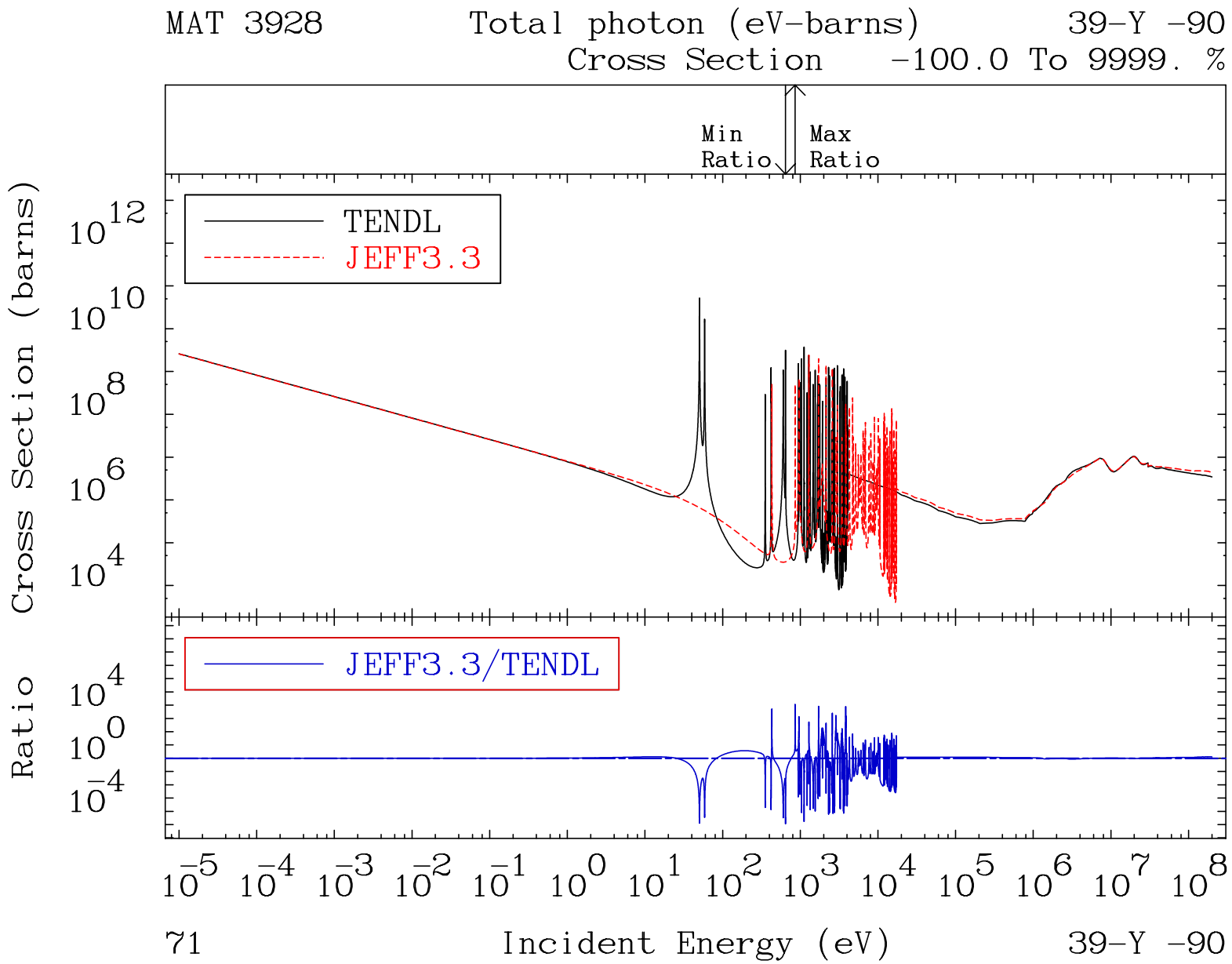

MAT 3928
Kerma elastic
Cross Section
39-Y -90
-99.86 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
39-Y -90

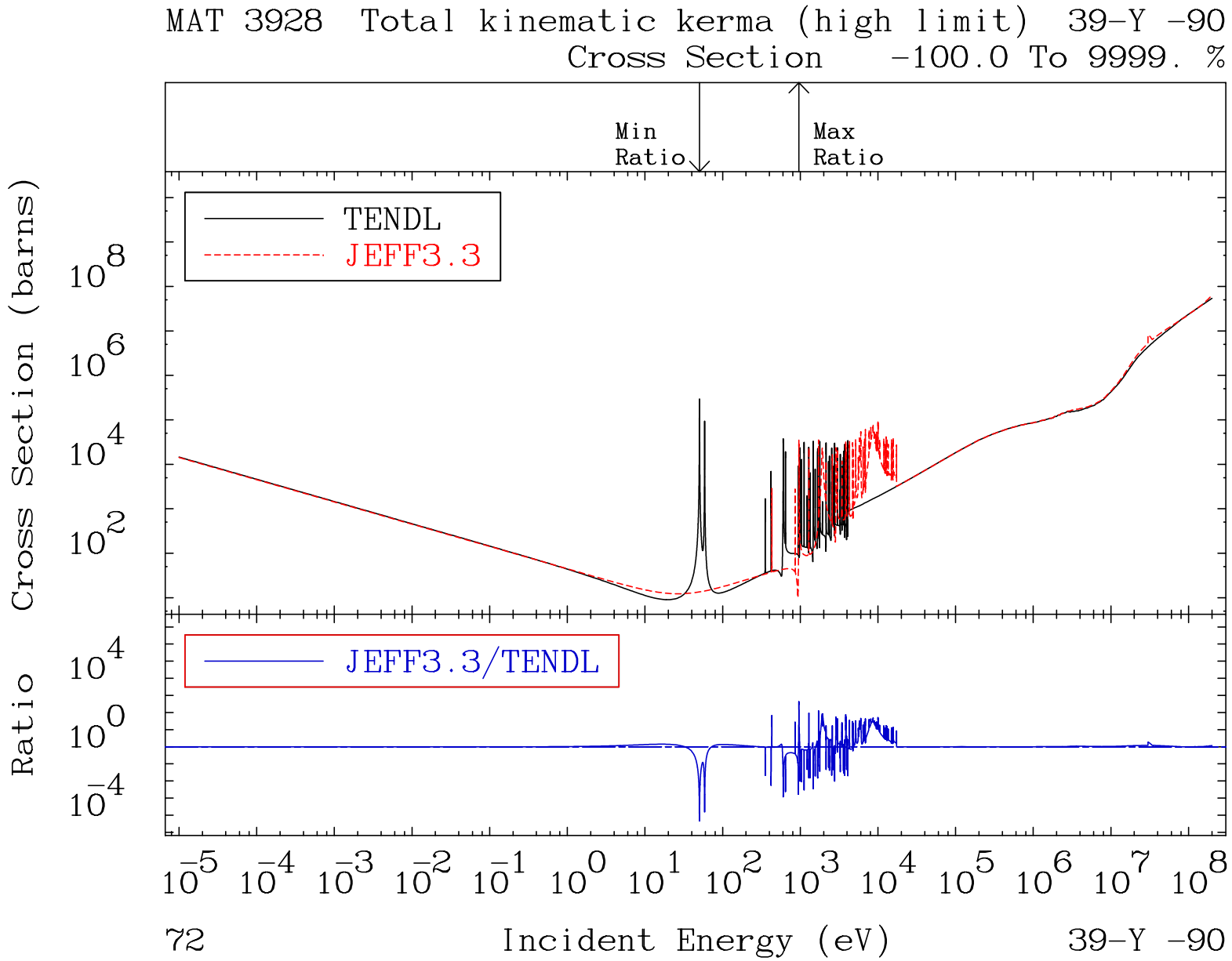

MAT 3928 Kerma non-elastic (all but mt2) 39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
39-Y -90

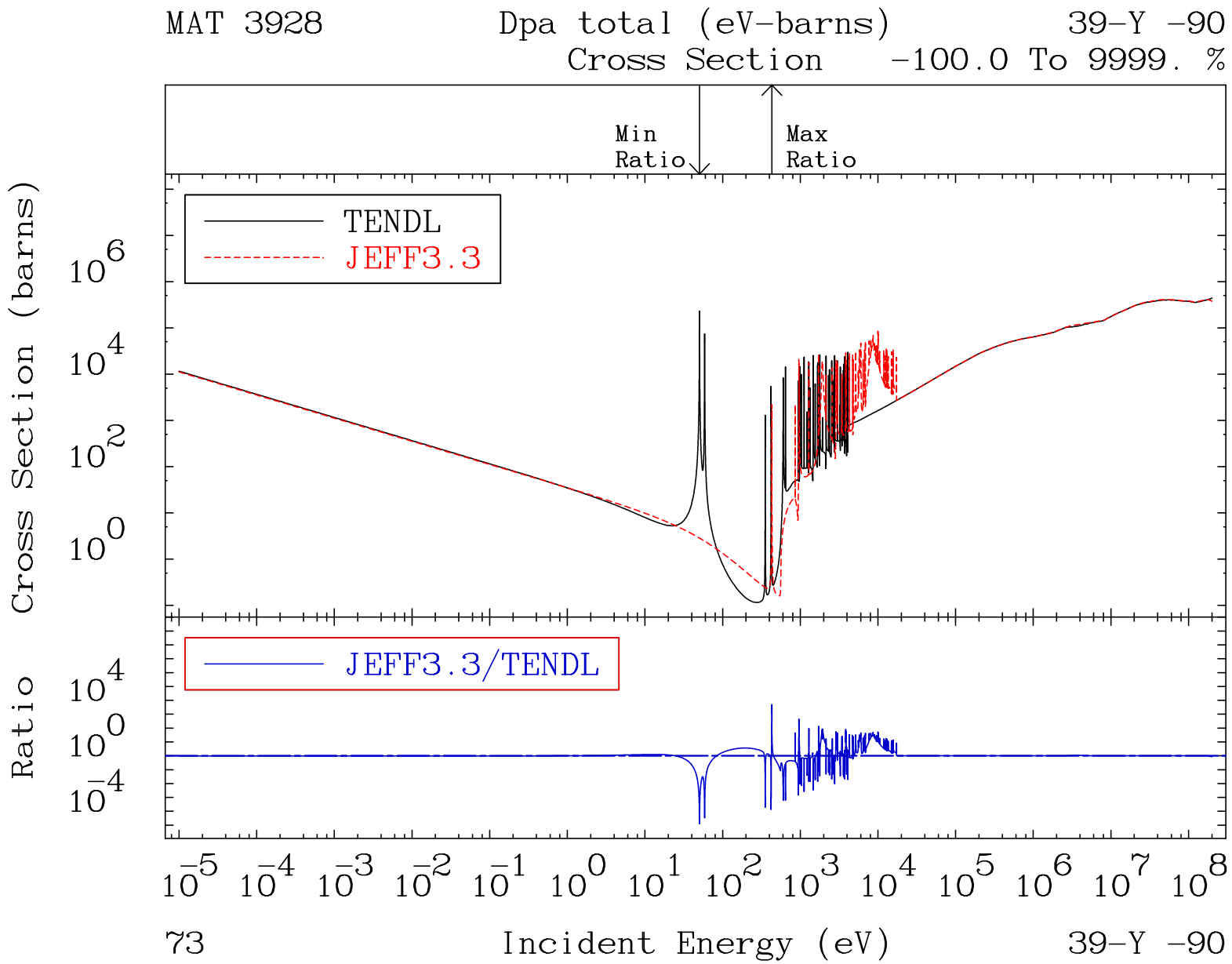

MAT 3928
Kerma inelastic (mt51-91)
39-Y -90
Cross Section -100.0 To 8.888 %
Min Ratio
Max Ratio
TENDL Threshold 204.77 keV
JEFF3.3 Threshold 204.77 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
39-Y -90

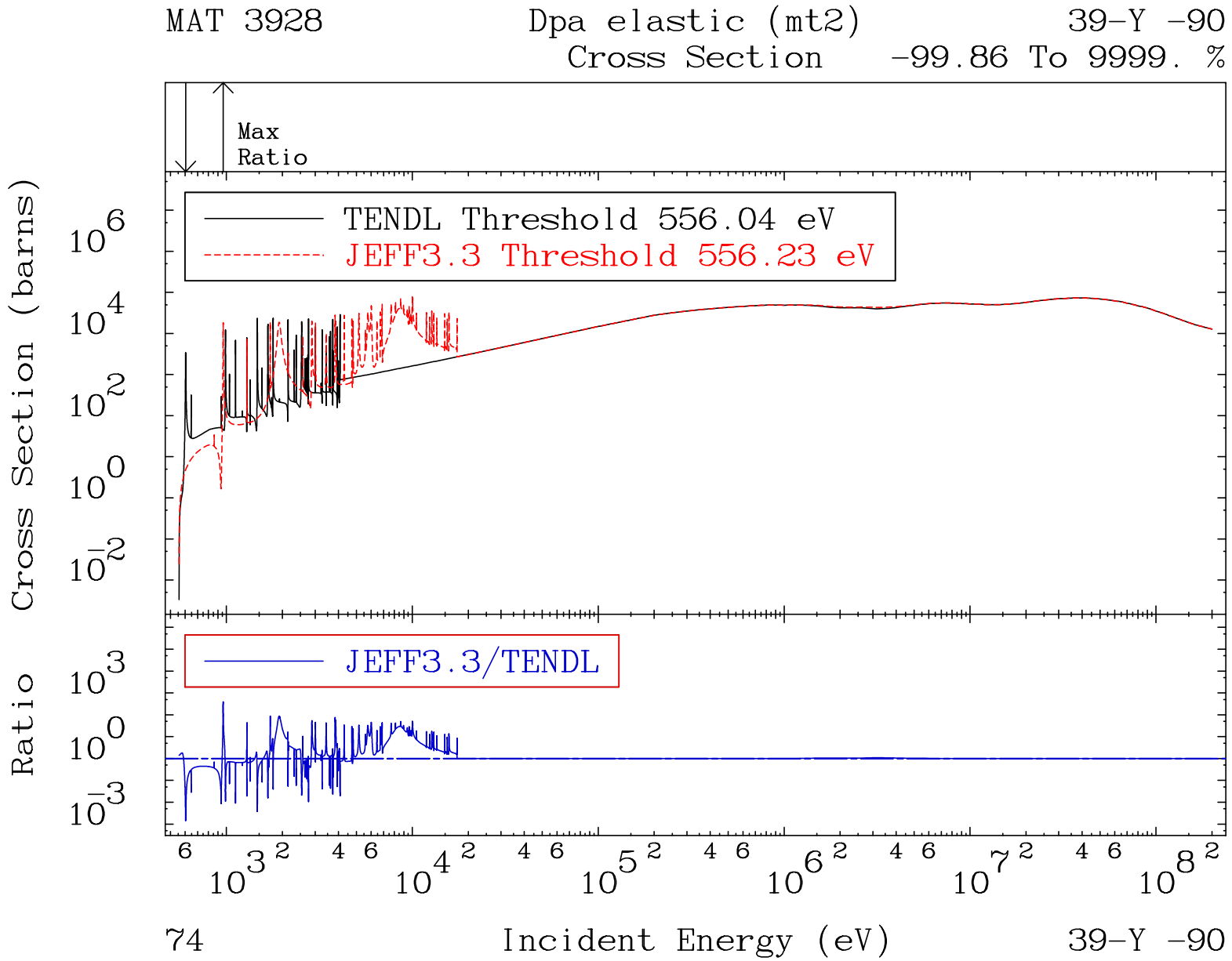

MAT 3928 Kerma fission (mt18 or mt19-20-21-38) 39-Y -90
Cross Section -100.0 To 8.888 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-4}
10^{-8}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
69
Incident Energy (eV)
39-Y -90

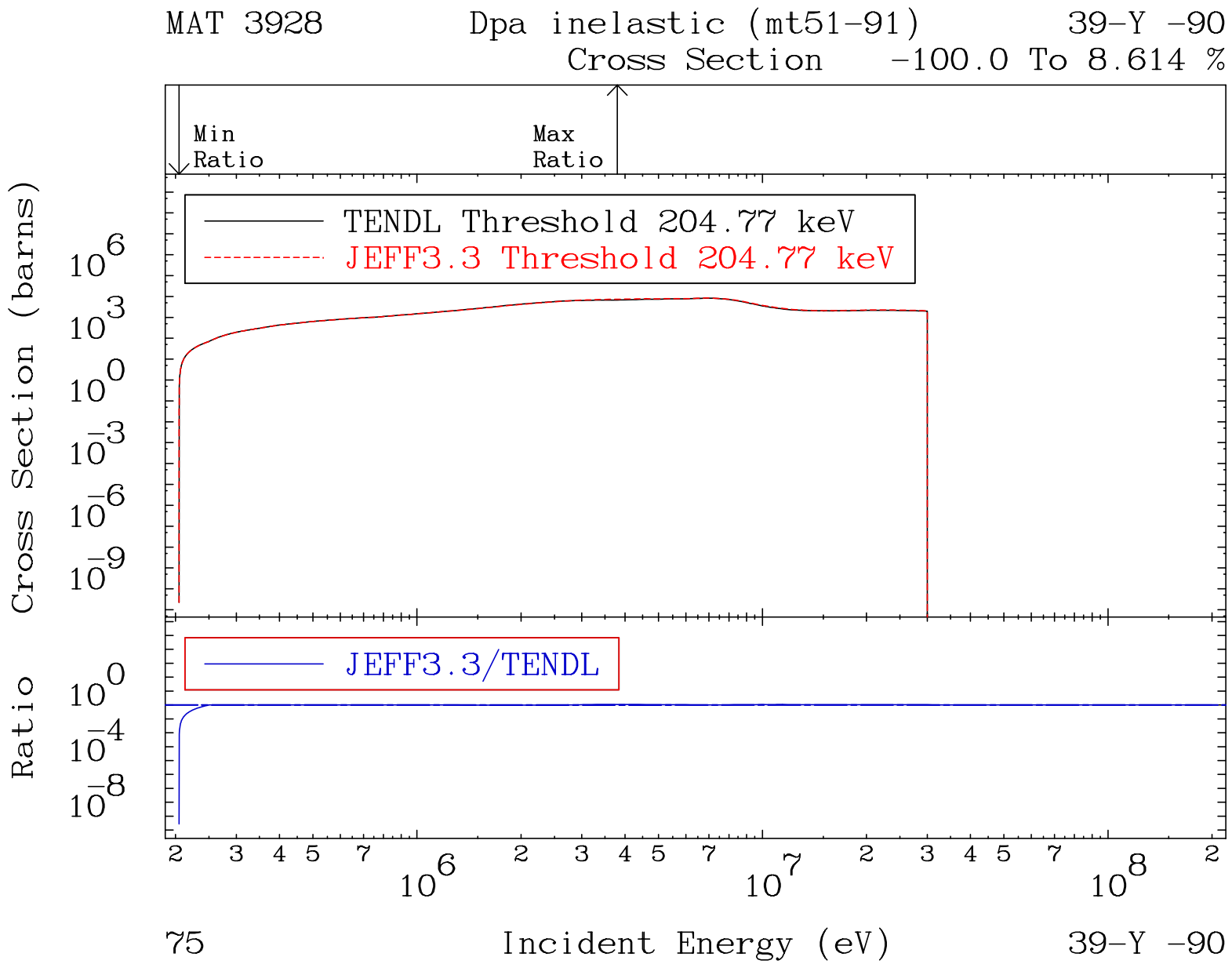

MAT 3928
Kerma capture (mt102)
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
39-Y -90

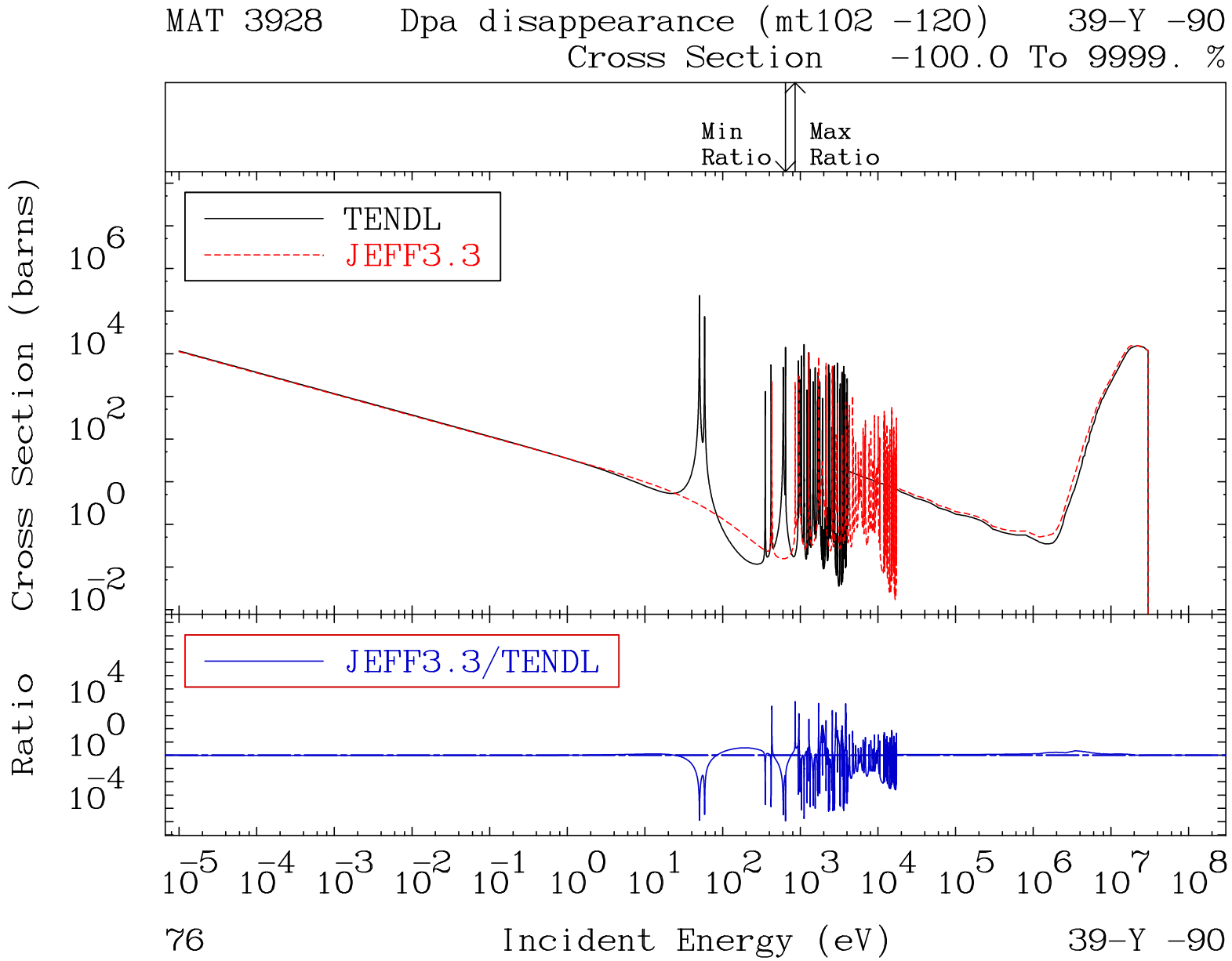

MAT 3928
Total photon (eV-barns)
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
39-Y -90

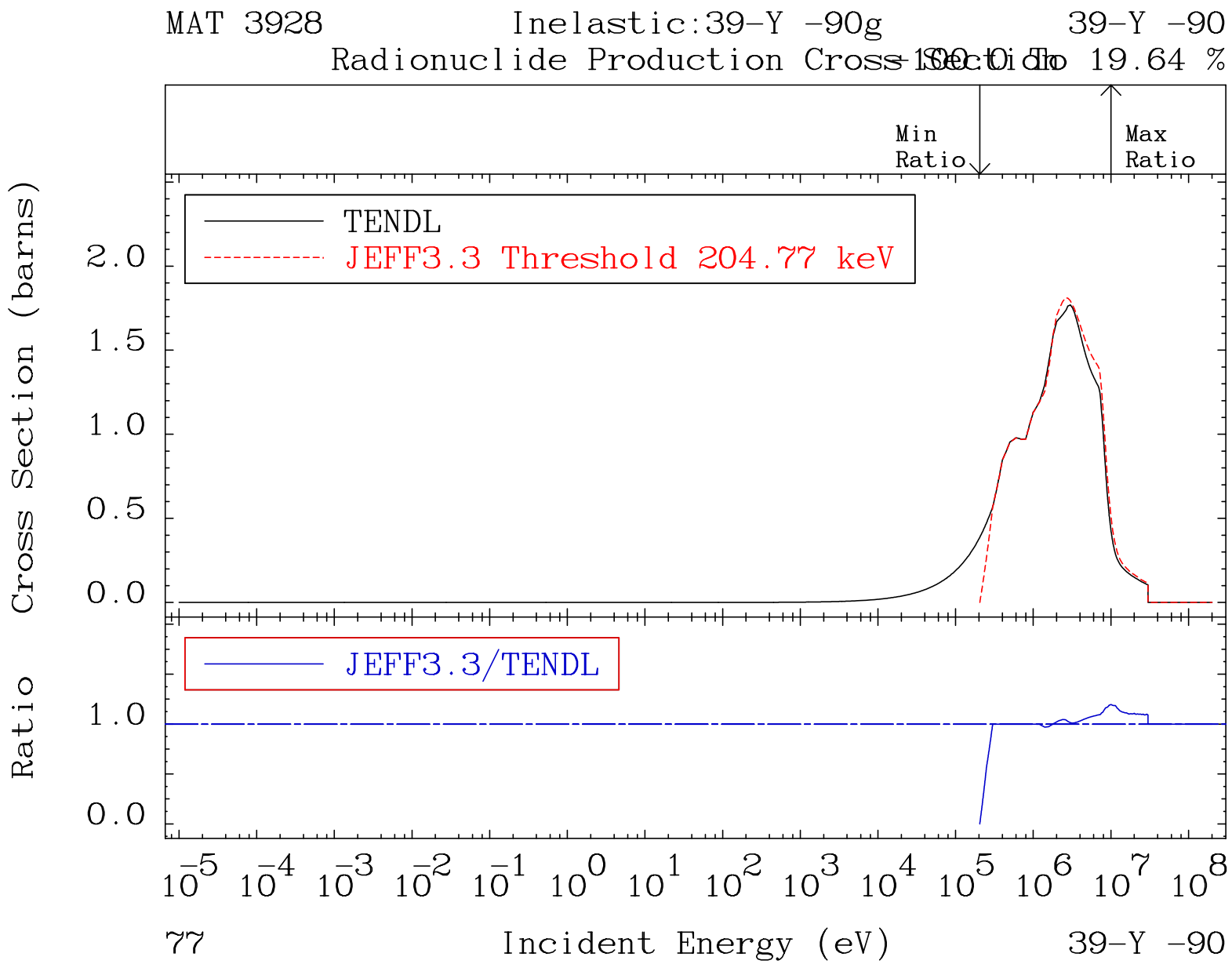

MAT 3928 Total kinematic kerma (high limit) 39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
39-Y -90

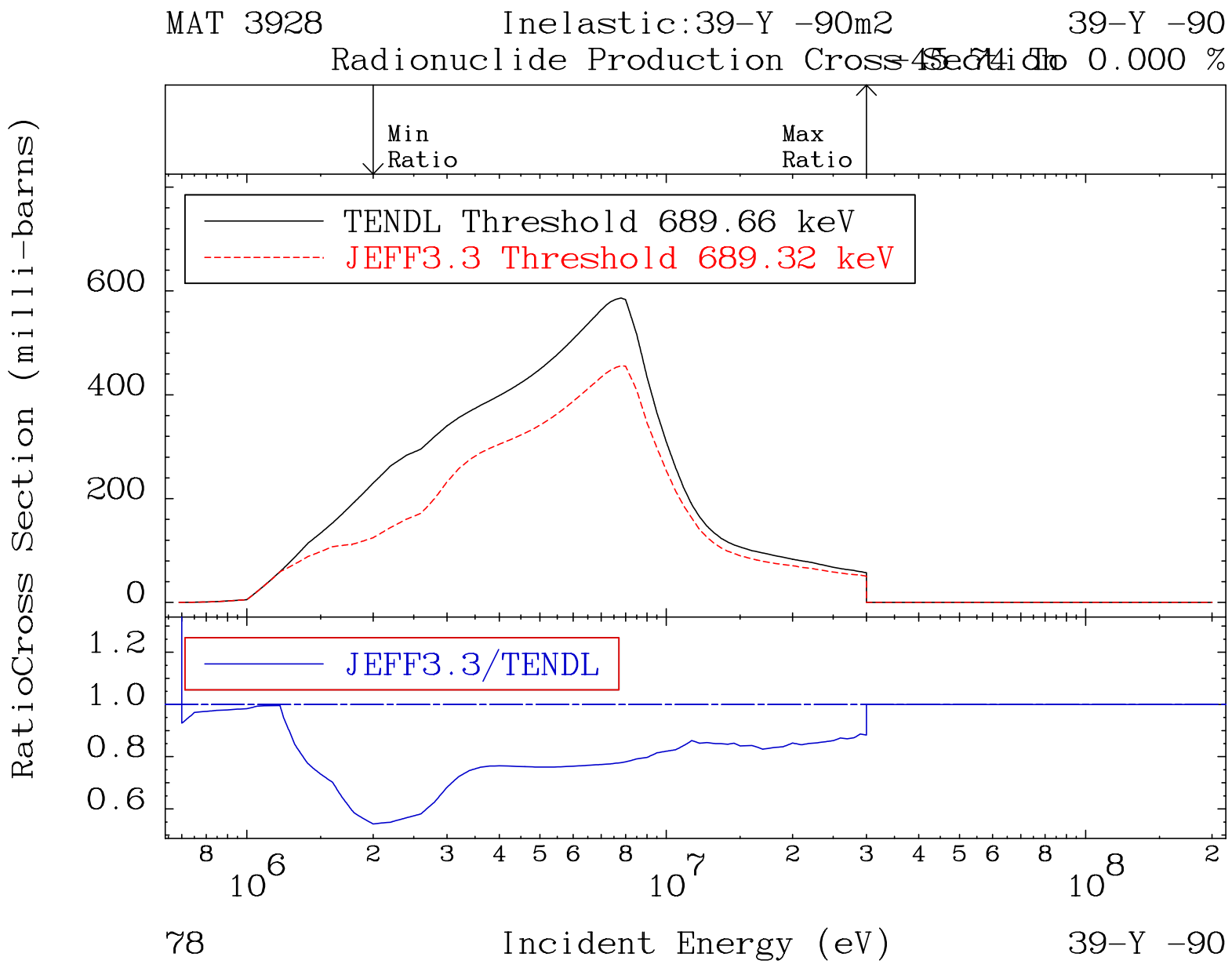

MAT 3928
Dpa total (eV-barns)
39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
39-Y -90

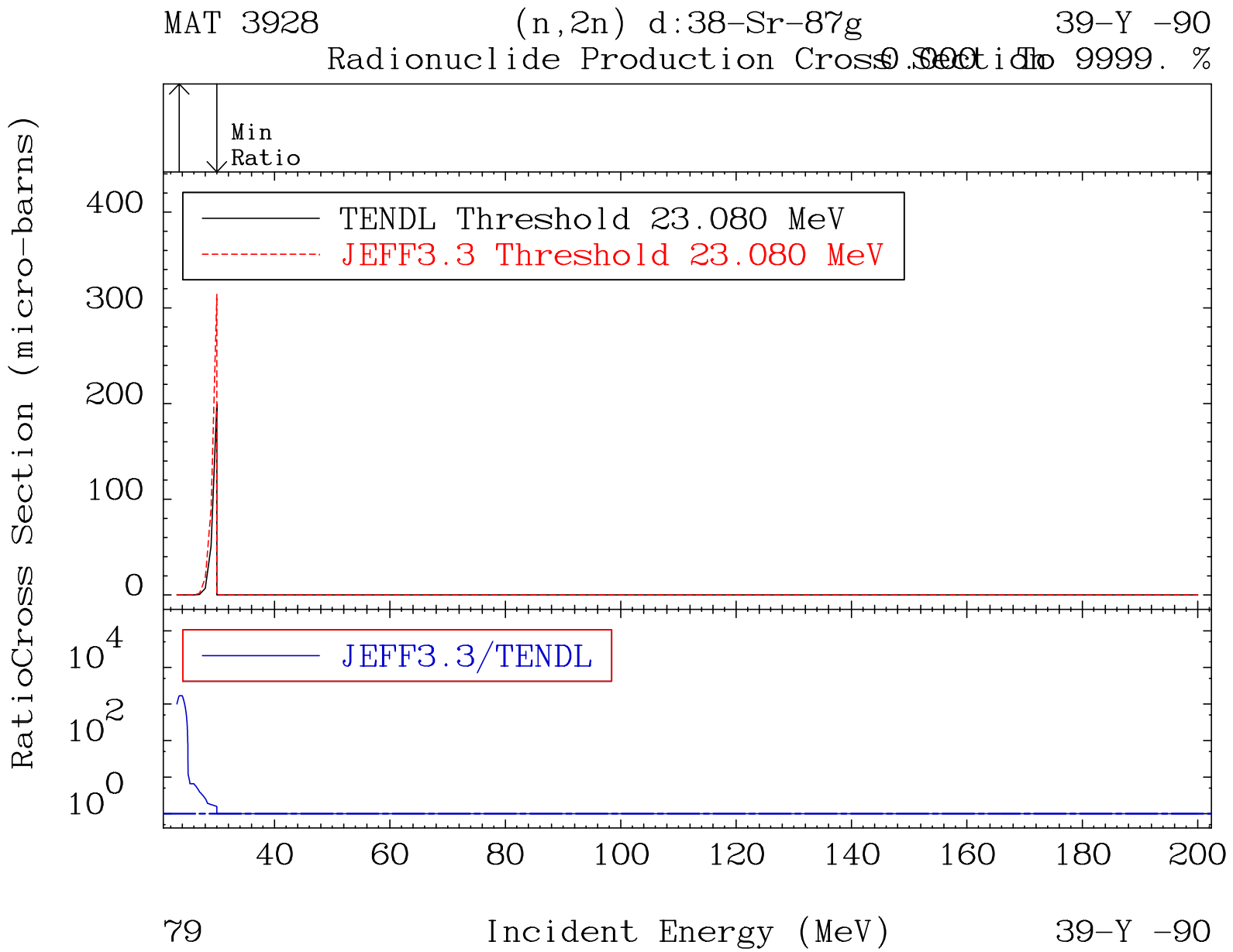

MAT 3928
Dpa elastic (mt2)
Cross Section
39-Y -90
-99.86 To 9999. %
Max
Ratio
TENDL Threshold 556.04 eV
JEFF3.3 Threshold 556.23 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
39-Y -90

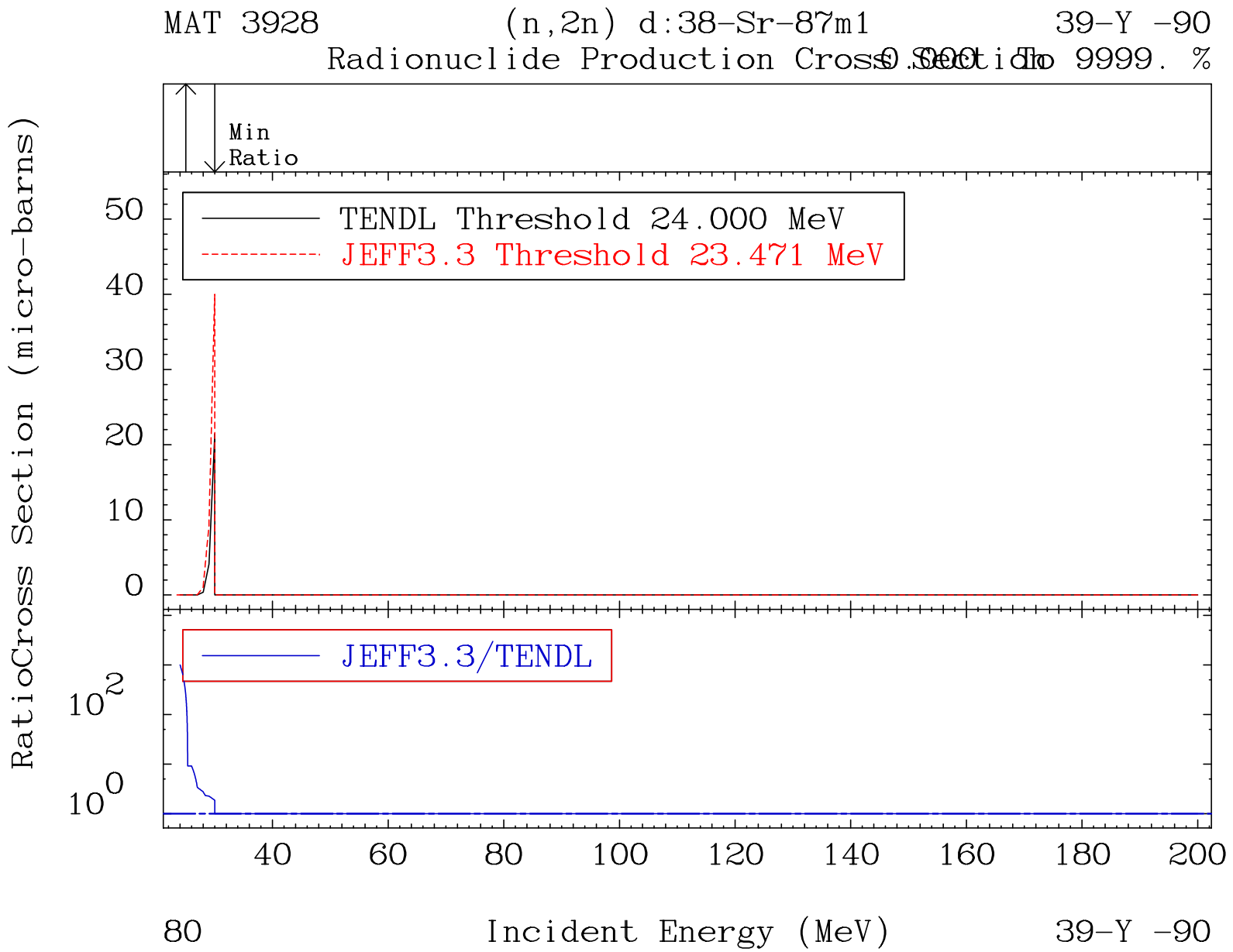

MAT 3928
Dpa inelastic (mt51-91)
39-Y -90
Cross Section -100.0 To 8.614 %
Min Ratio
Max Ratio
TENDL Threshold 204.77 keV
JEFF3.3 Threshold 204.77 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
39-Y -90

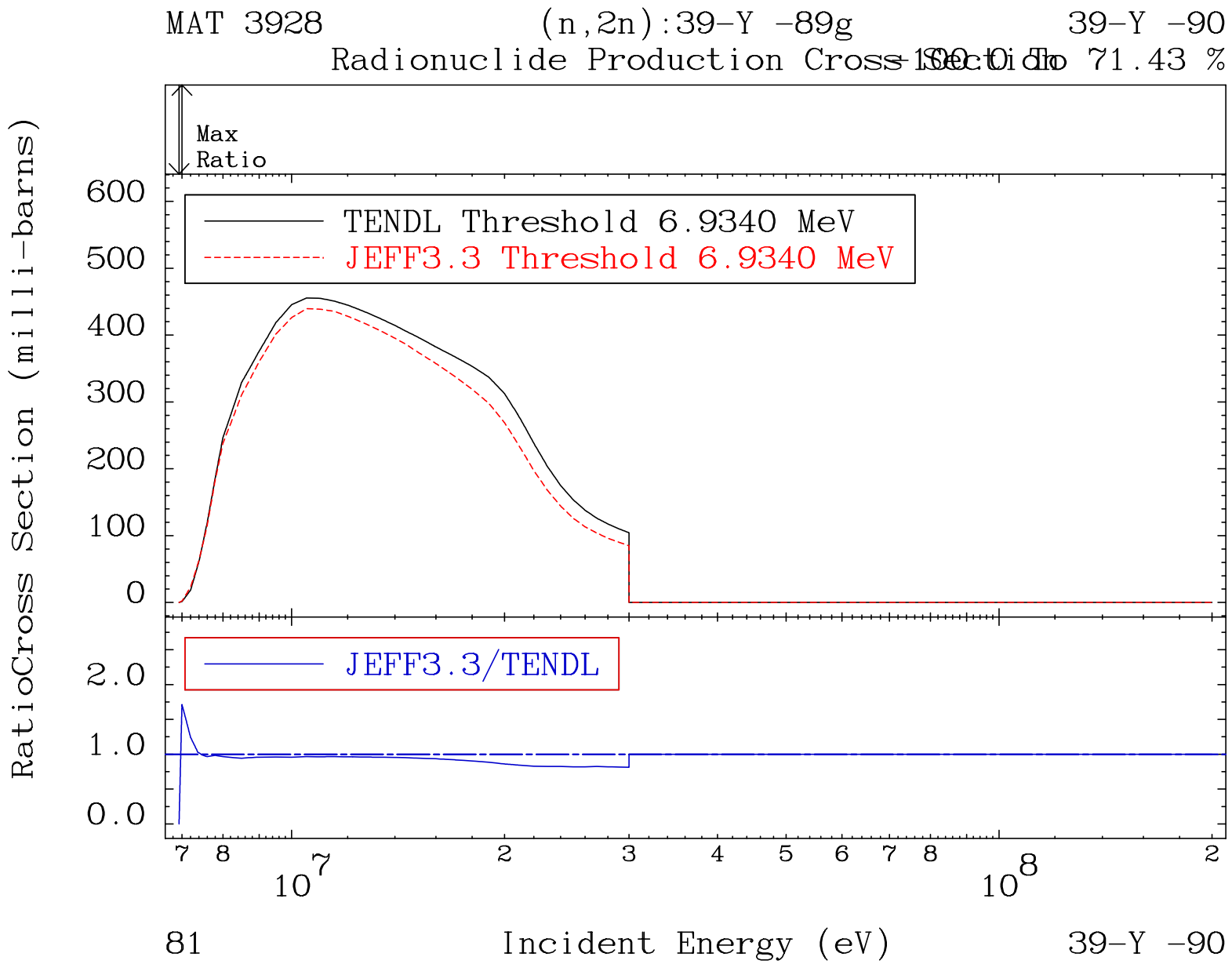

MAT 3928 Dpa disappearance (mt102 -120) 39-Y -90
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
39-Y -90

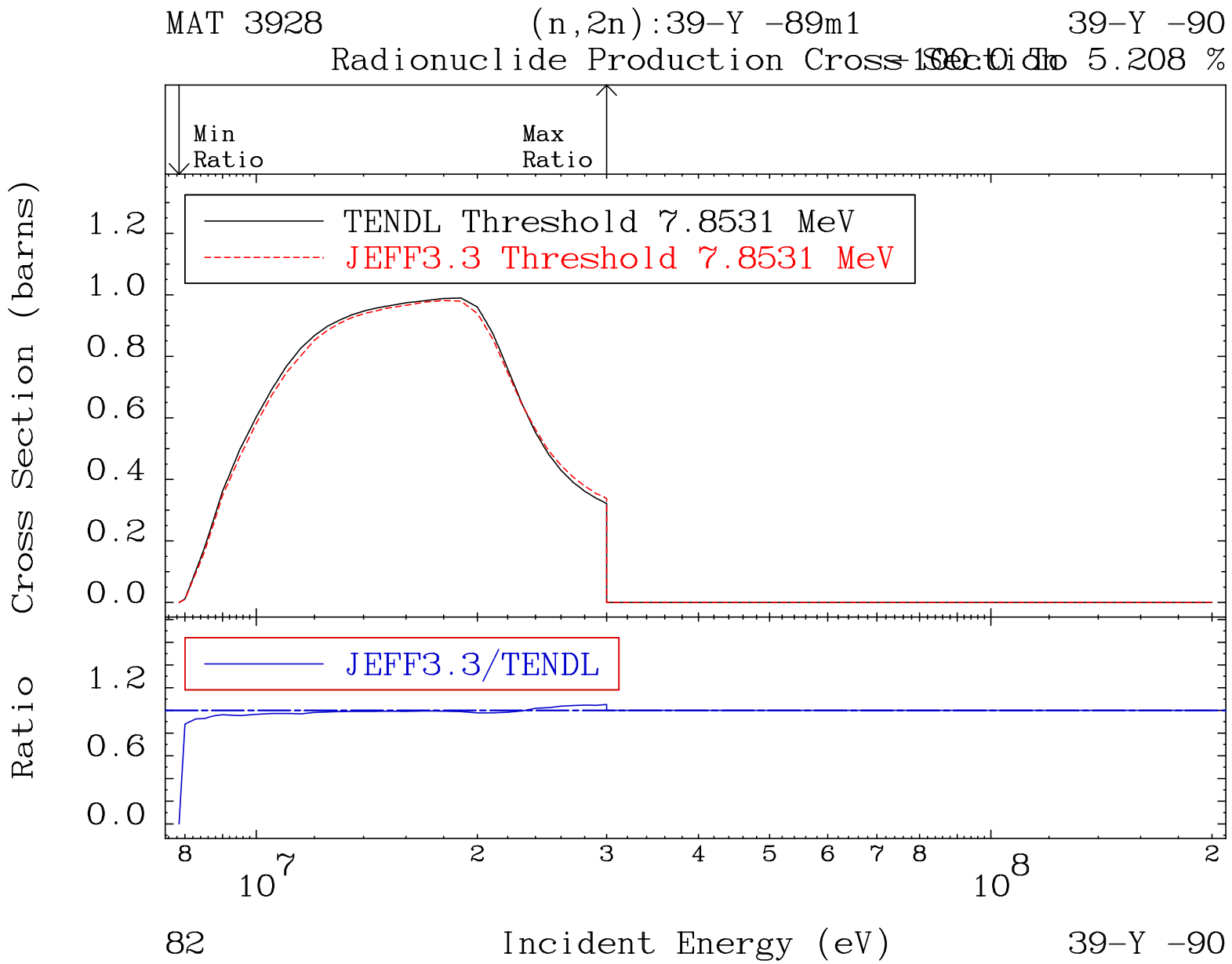

MAT 3928
Inelastic:39-Y -90g
39-Y -90
Radionuclide Production Cross Section To 19.64 %
Min Ratio
Max Ratio
TENDL
JEFF3.3 Threshold 204.77 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
77
Incident Energy (eV)
39-Y -90

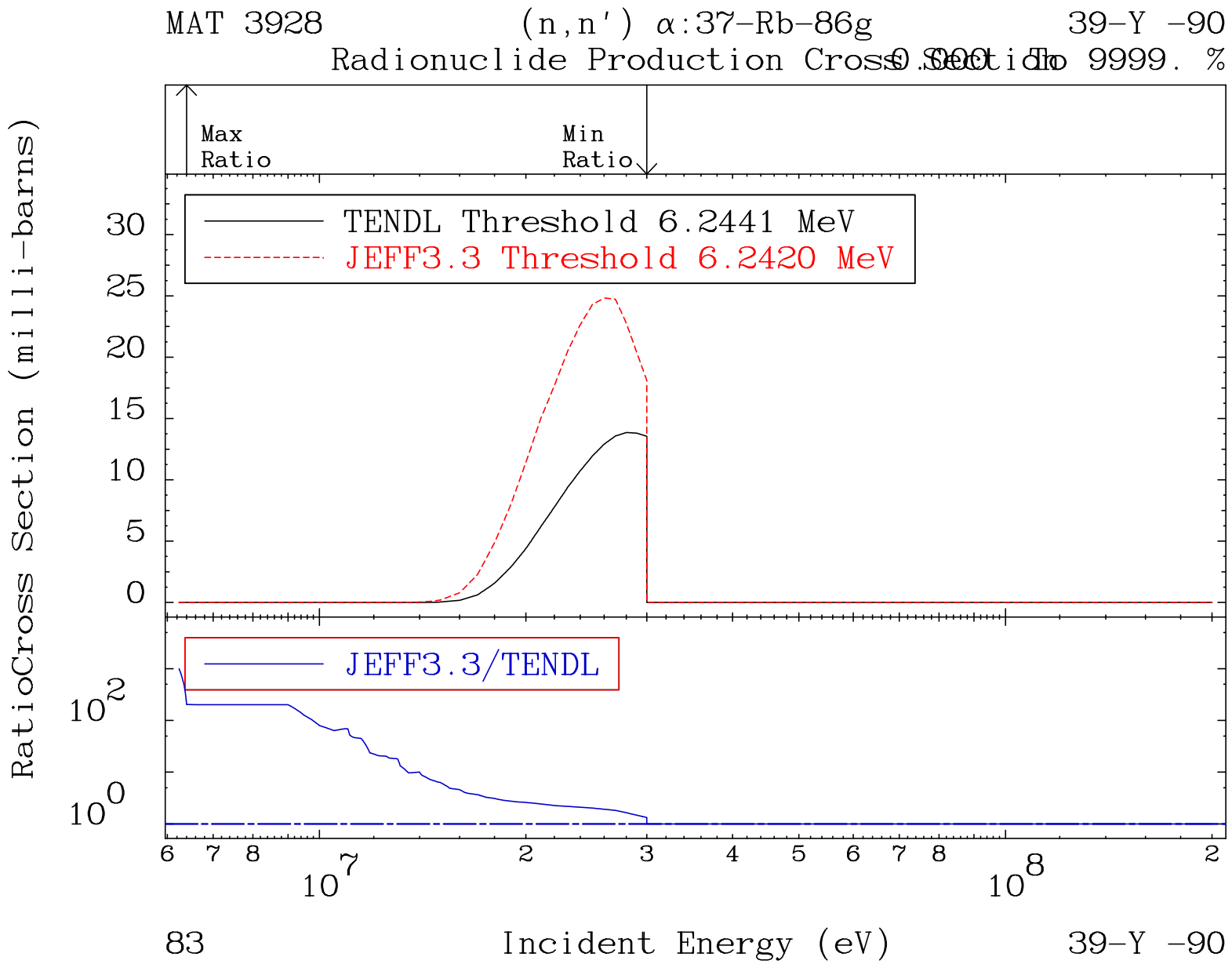

MAT 3928
Inelastic:39-Y -90m2
39-Y -90
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 689.66 keV
JEFF3.3 Threshold 689.32 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.2
1.0
0.8
0.6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
78
Incident Energy (eV)
39-Y -90

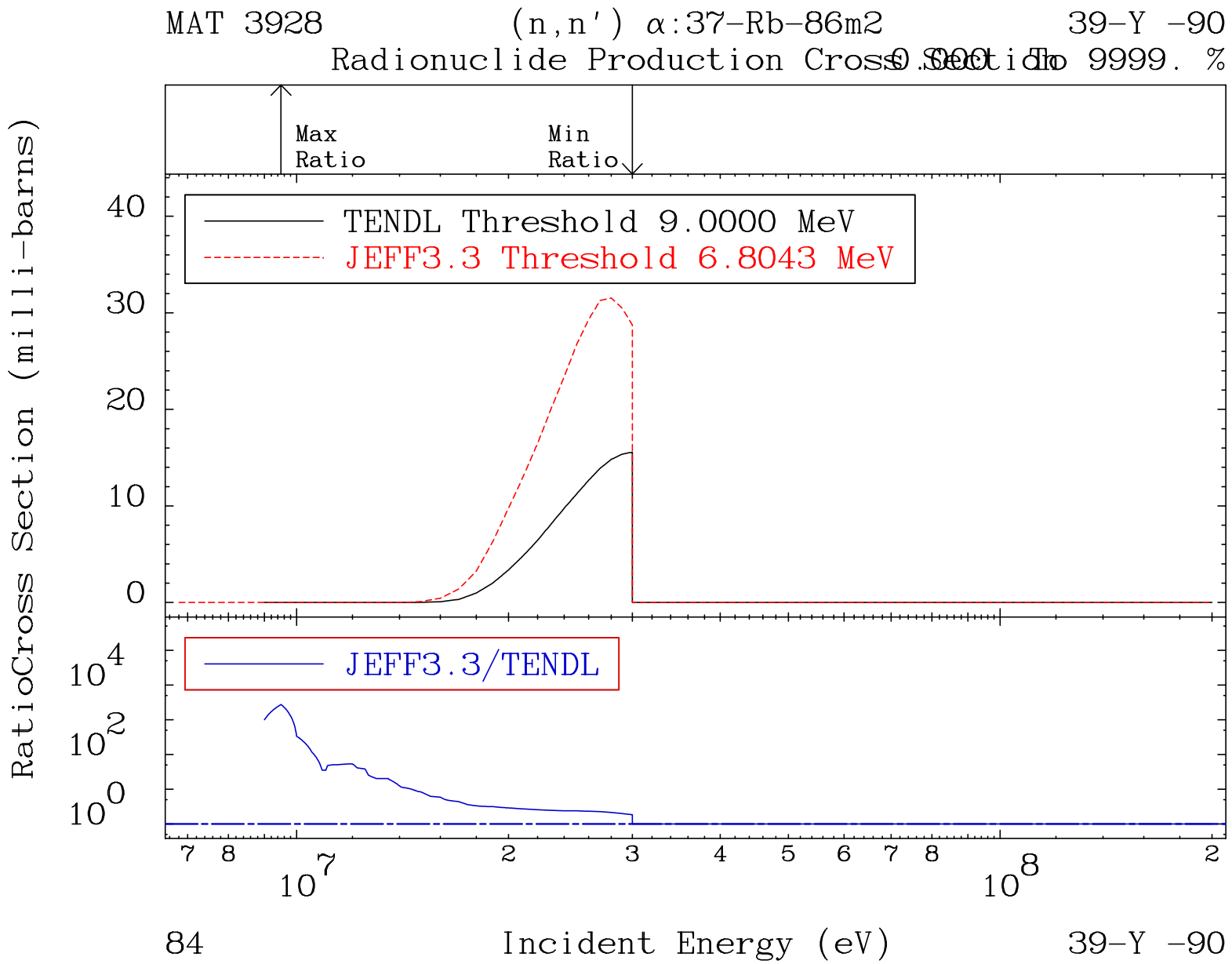

MAT 3928
(n,2n) d:38-Sr-87g
39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 23.080 MeV
JEFF3.3 Threshold 23.080 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
400
300
200
100
0
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
39-Y -90

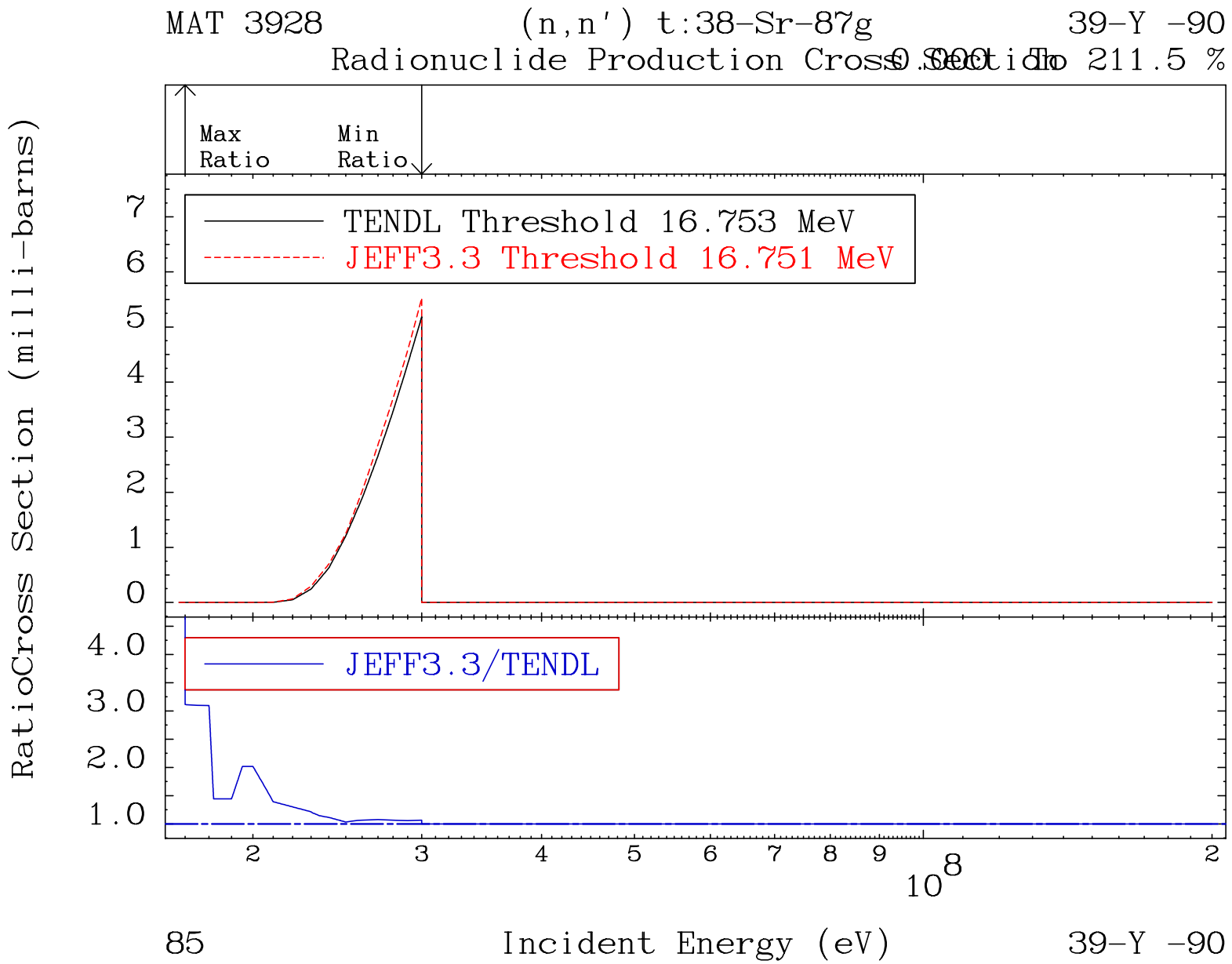

MAT 3928 (n,2n) d:38-Sr-87m1 39-Y -90
Radionuclide Production Cross Section To 9999. %
Min
Ratio
TENDL Threshold 24.000 MeV
JEFF3.3 Threshold 23.471 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
50
40
30
20
10
0
10^2
10^0
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
39-Y -90

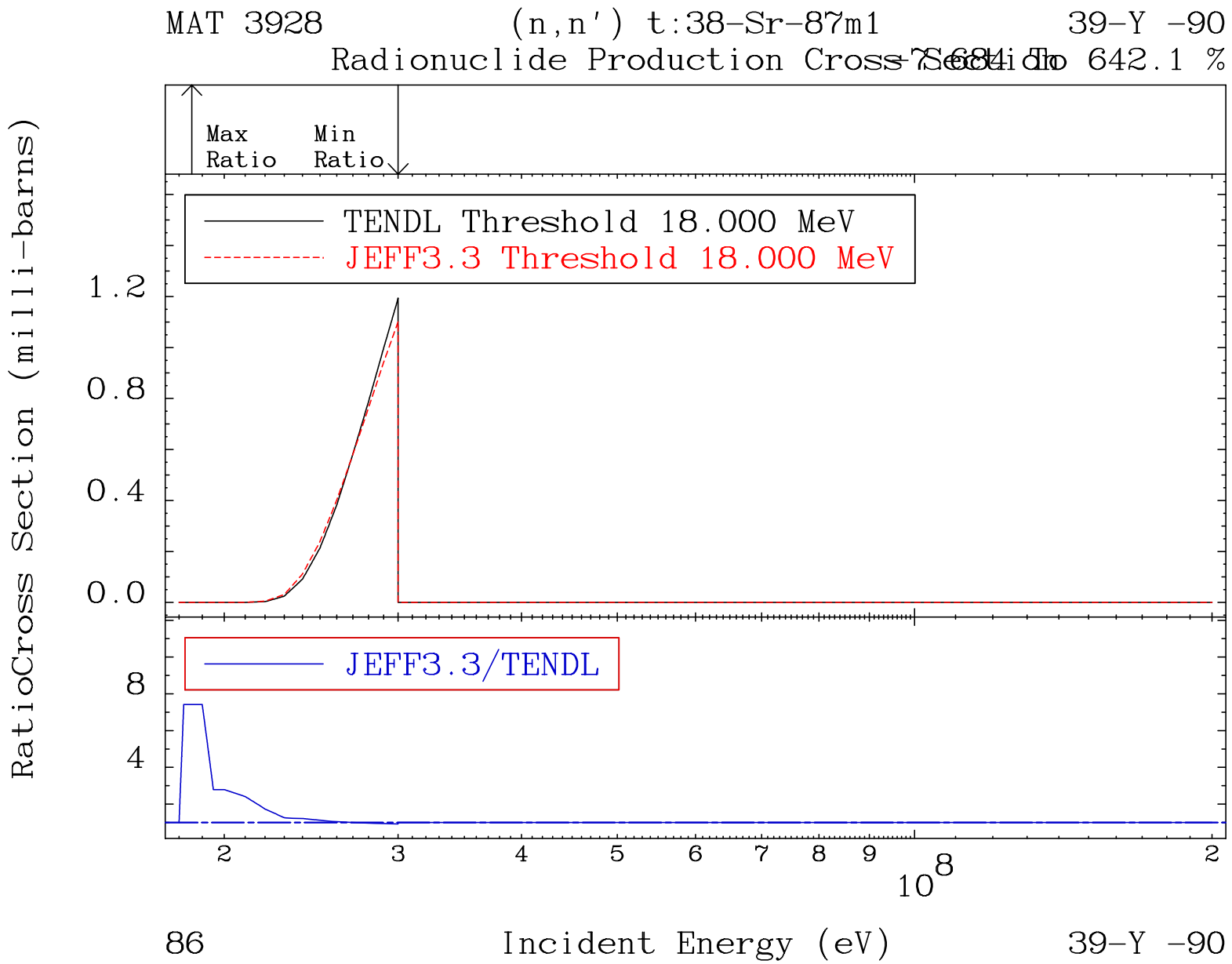

MAT 3928
(n,2n):39-Y -89g
39-Y -90
Radionuclide Production Cross Section To
Max
Ratio
TENDL Threshold 6.9340 MeV
JEFF3.3 Threshold 6.9340 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
2.0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
81
Incident Energy (eV)
39-Y -90

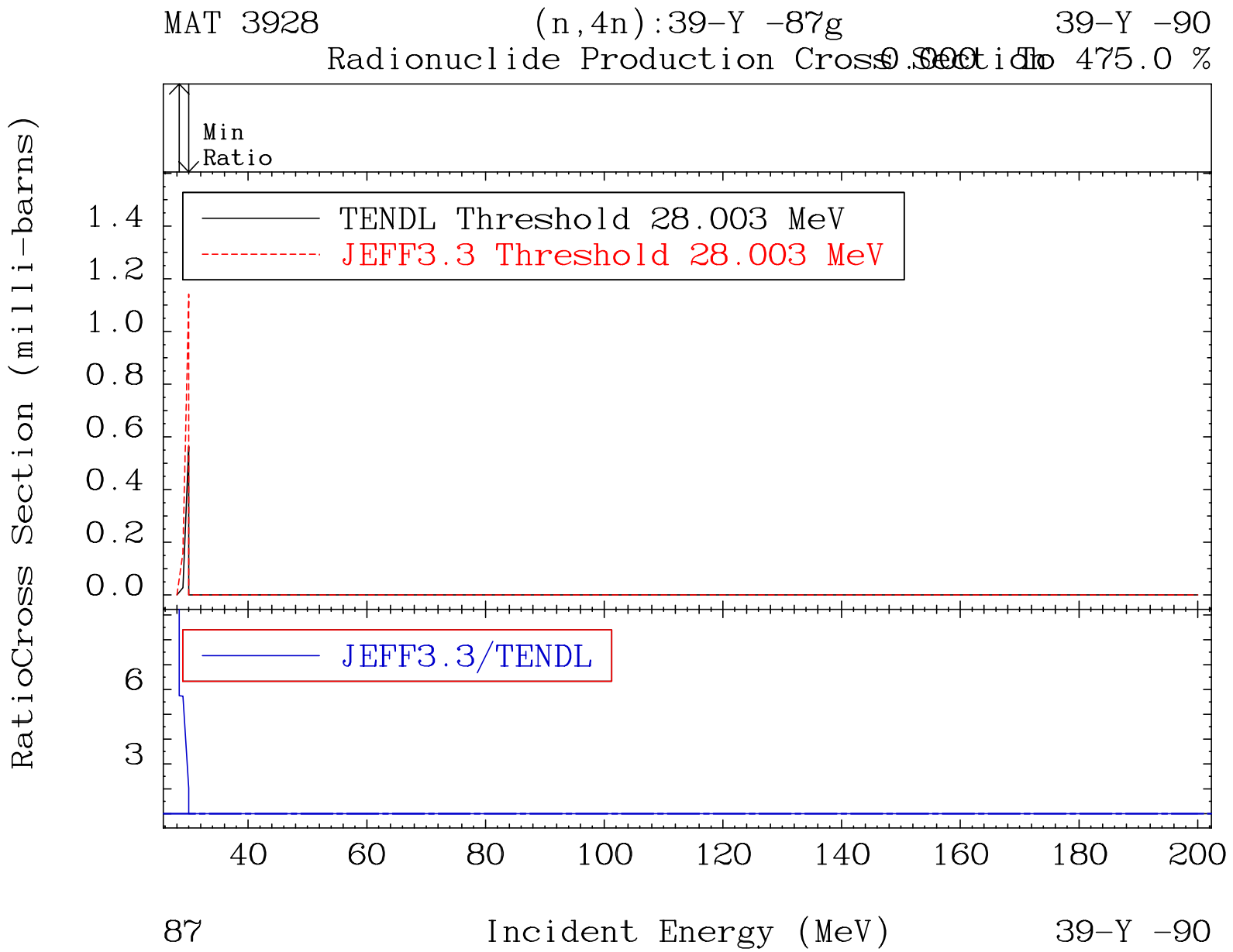

MAT 3928
(n,2n):39-Y -89m1
39-Y -90
Radionuclide Production Cross Section To 5.208 %
Min Ratio
Max Ratio
TENDL Threshold 7.8531 MeV
JEFF3.3 Threshold 7.8531 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
82
Incident Energy (eV)
39-Y -90

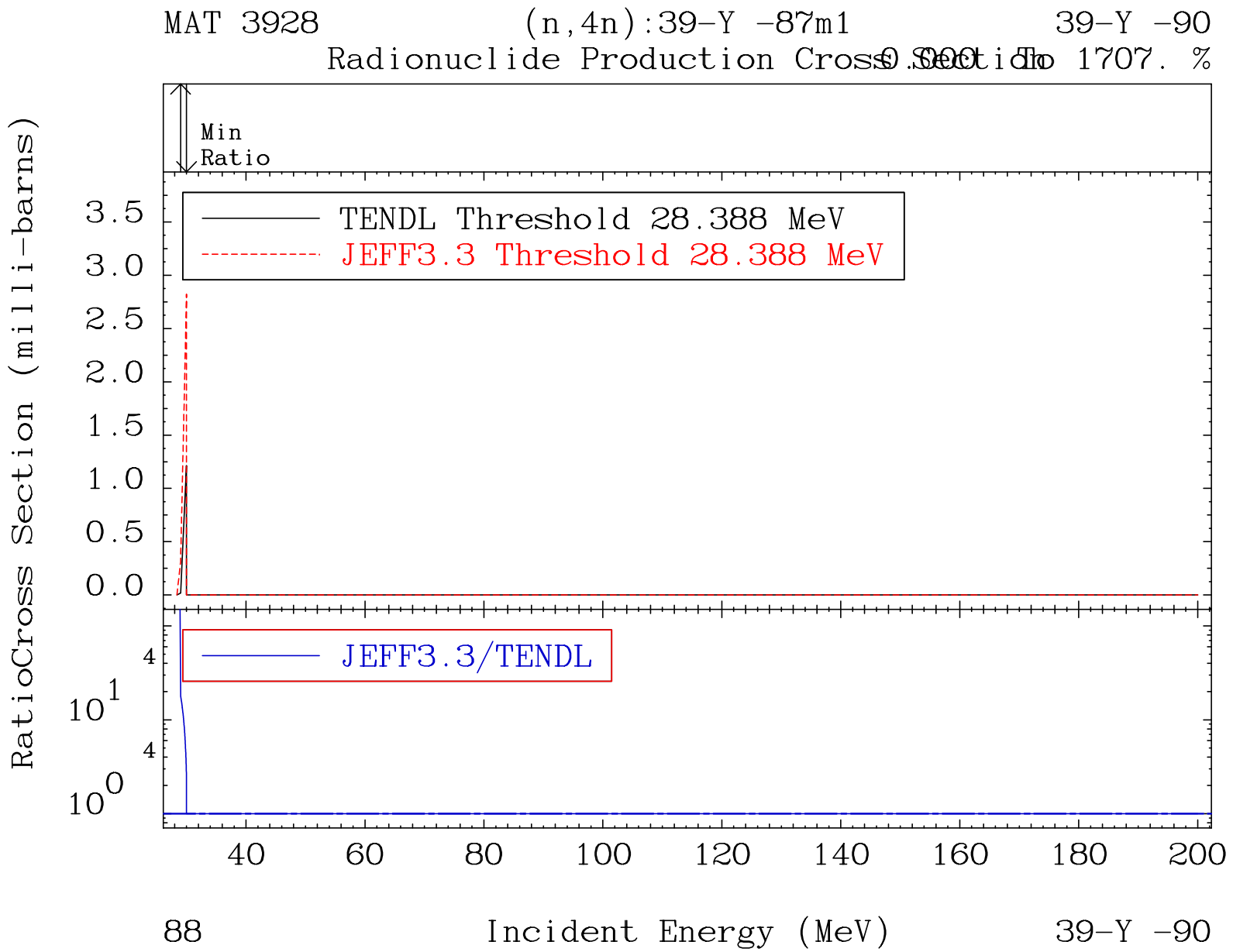

MAT 3928
(n,n') α:37-Rb-86g
39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.2441 MeV
JEFF3.3 Threshold 6.2420 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
10^2
10^0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
83
Incident Energy (eV)
39-Y -90

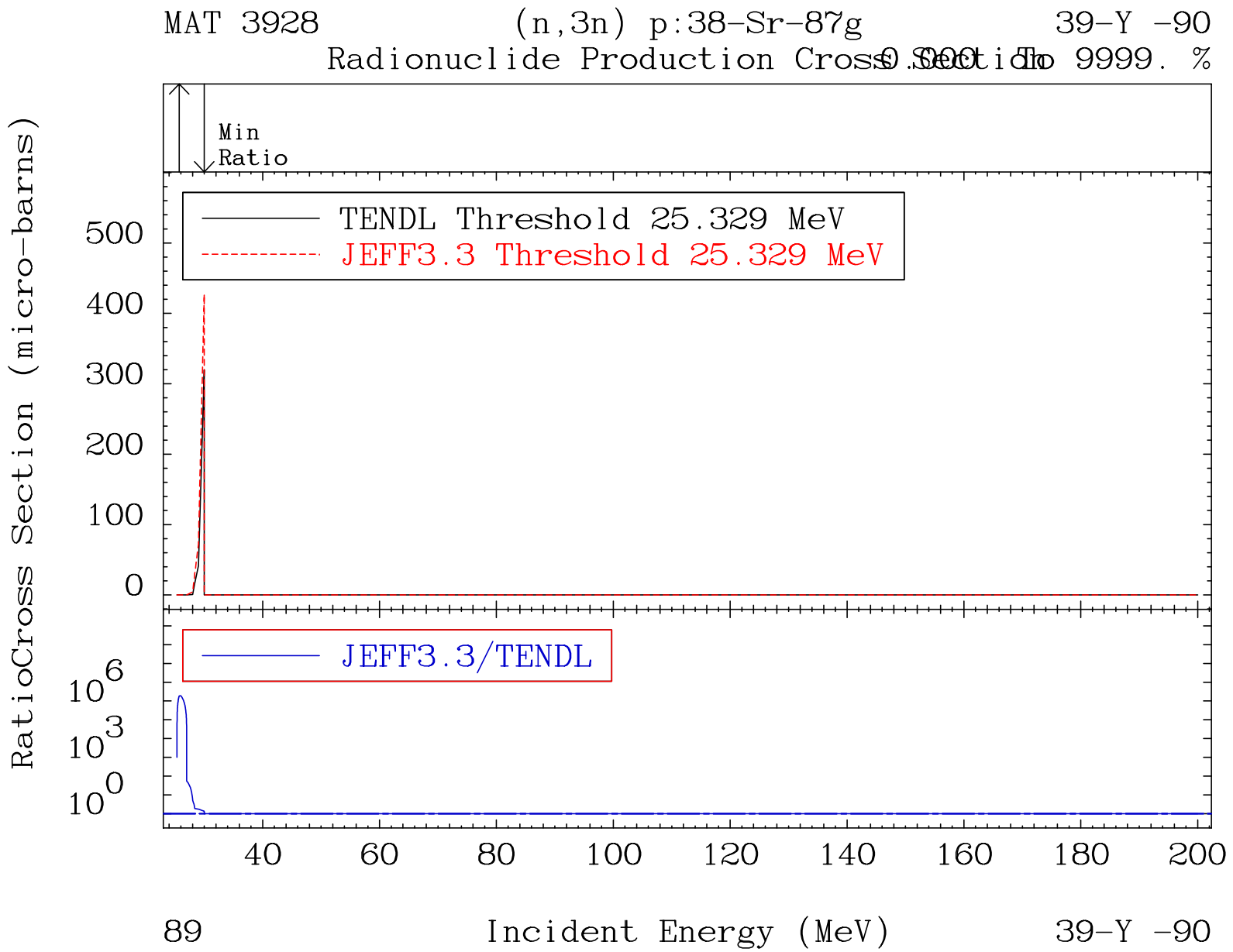

MAT 3928
(n,n') α:37-Rb-86m2
39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 6.8043 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^4
10^2
10^0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
84
Incident Energy (eV)
39-Y -90

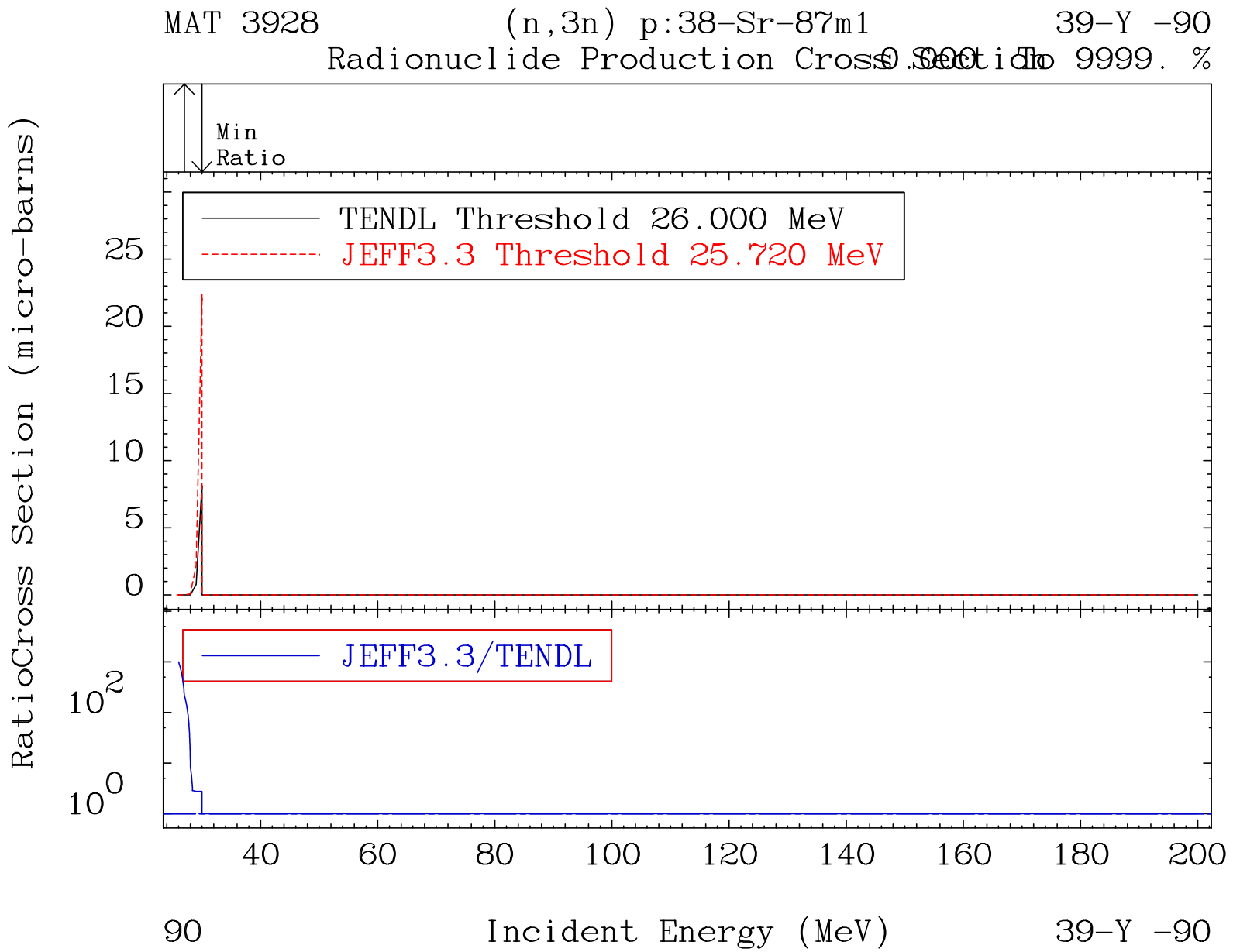

MAT 3928
(n,n') t:38-Sr-87g
39-Y -90
Radionuclide Production Cross Section To 211.5 %
Max Ratio
Min Ratio
TENDL Threshold 16.753 MeV
JEFF3.3 Threshold 16.751 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
39-Y -90

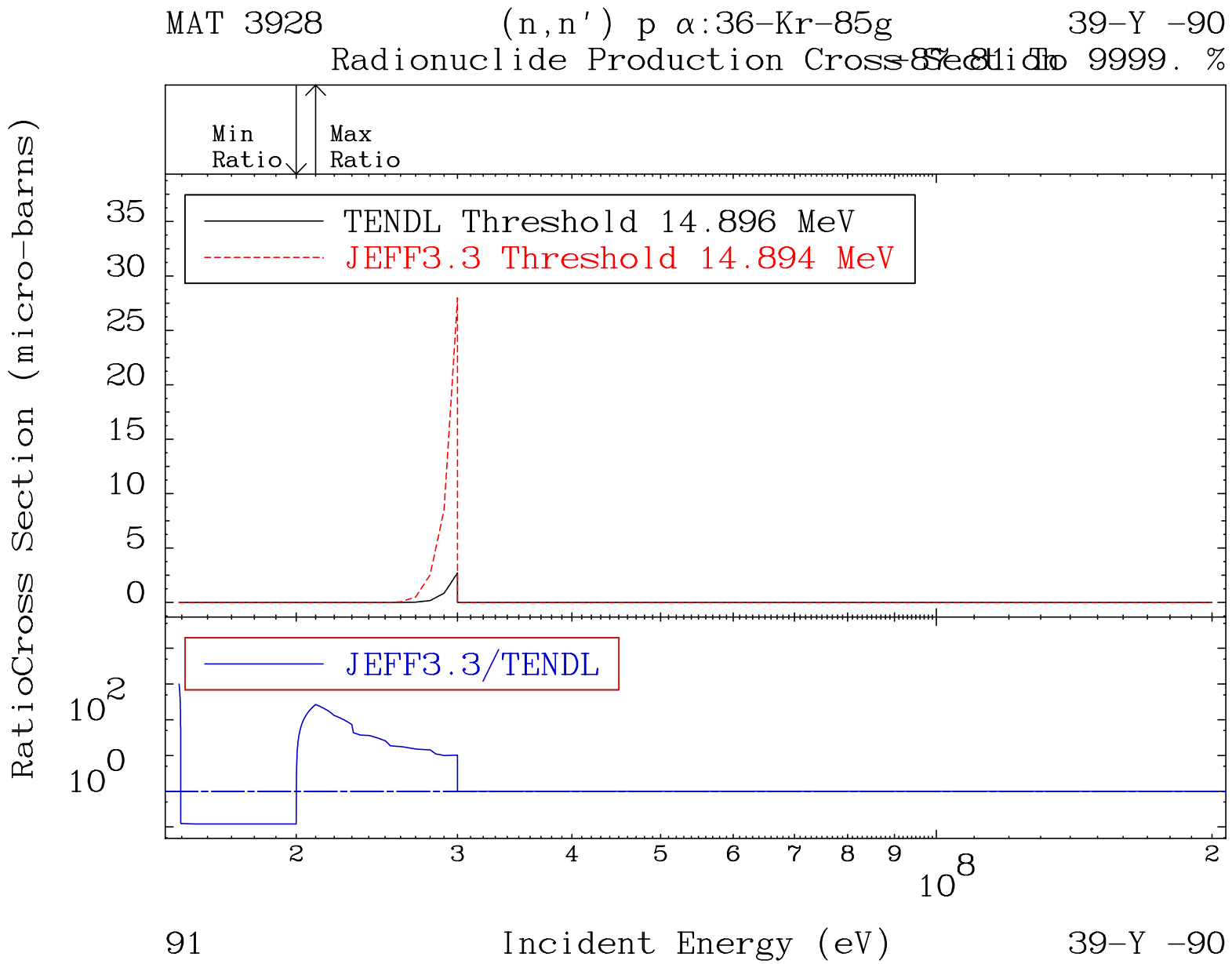

MAT 3928
(n,n') t:38-Sr-87m1
39-Y -90
Radionuclide Production Cross Section To 642.1 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 18.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
0.8
0.4
0.0
8
4
2
3
4
5
6
7
8
9
2
10^8
86
Incident Energy (eV)
39-Y -90

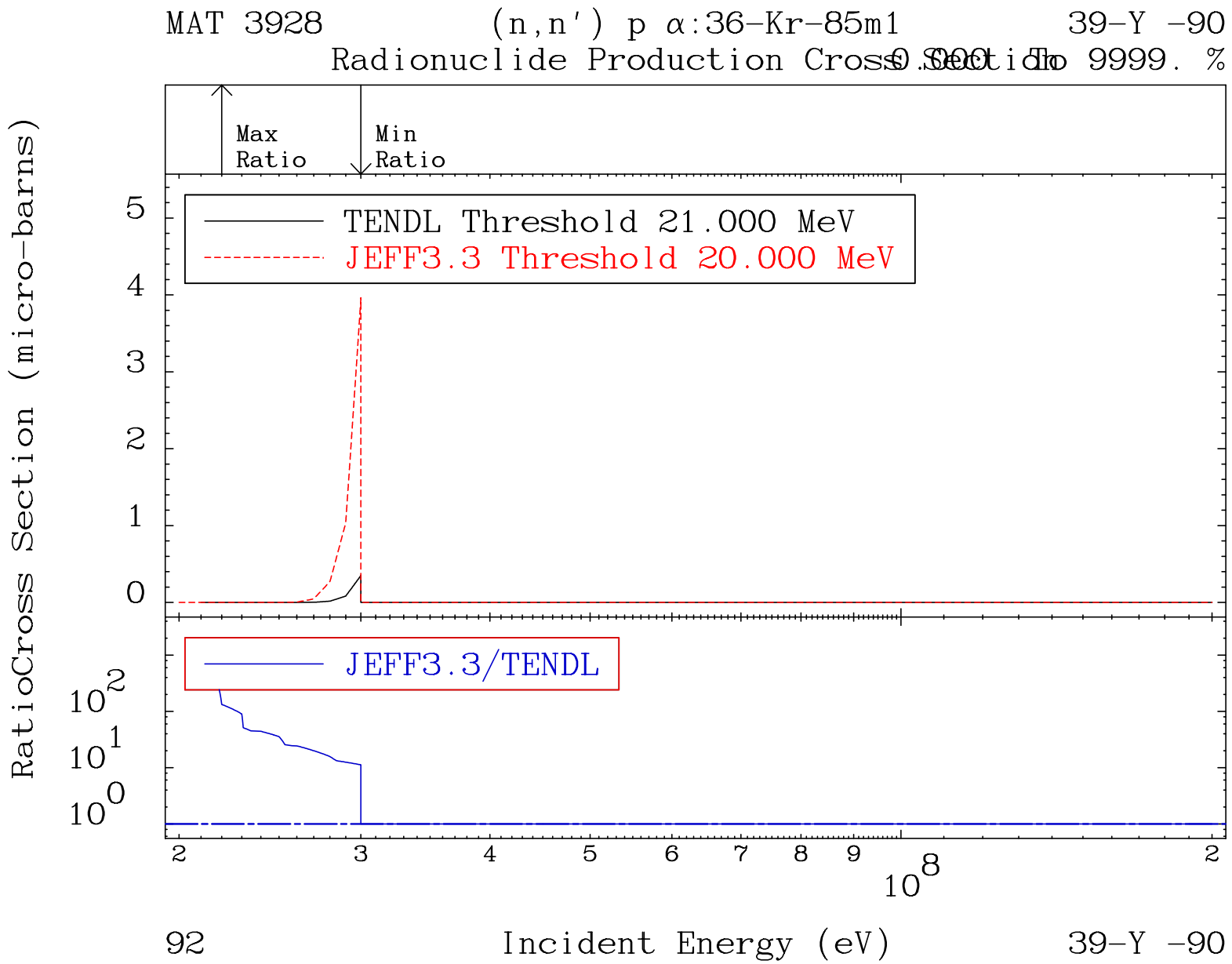

MAT 3928
(n,4n):39-Y -87g
39-Y -90
Radionuclide Production Cross Section
0.000 To 475.0 %
Min
Ratio
TENDL Threshold 28.003 MeV
JEFF3.3 Threshold 28.003 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6
3
40
60
80
100
120
140
160
180
200
87
Incident Energy (MeV)
39-Y -90

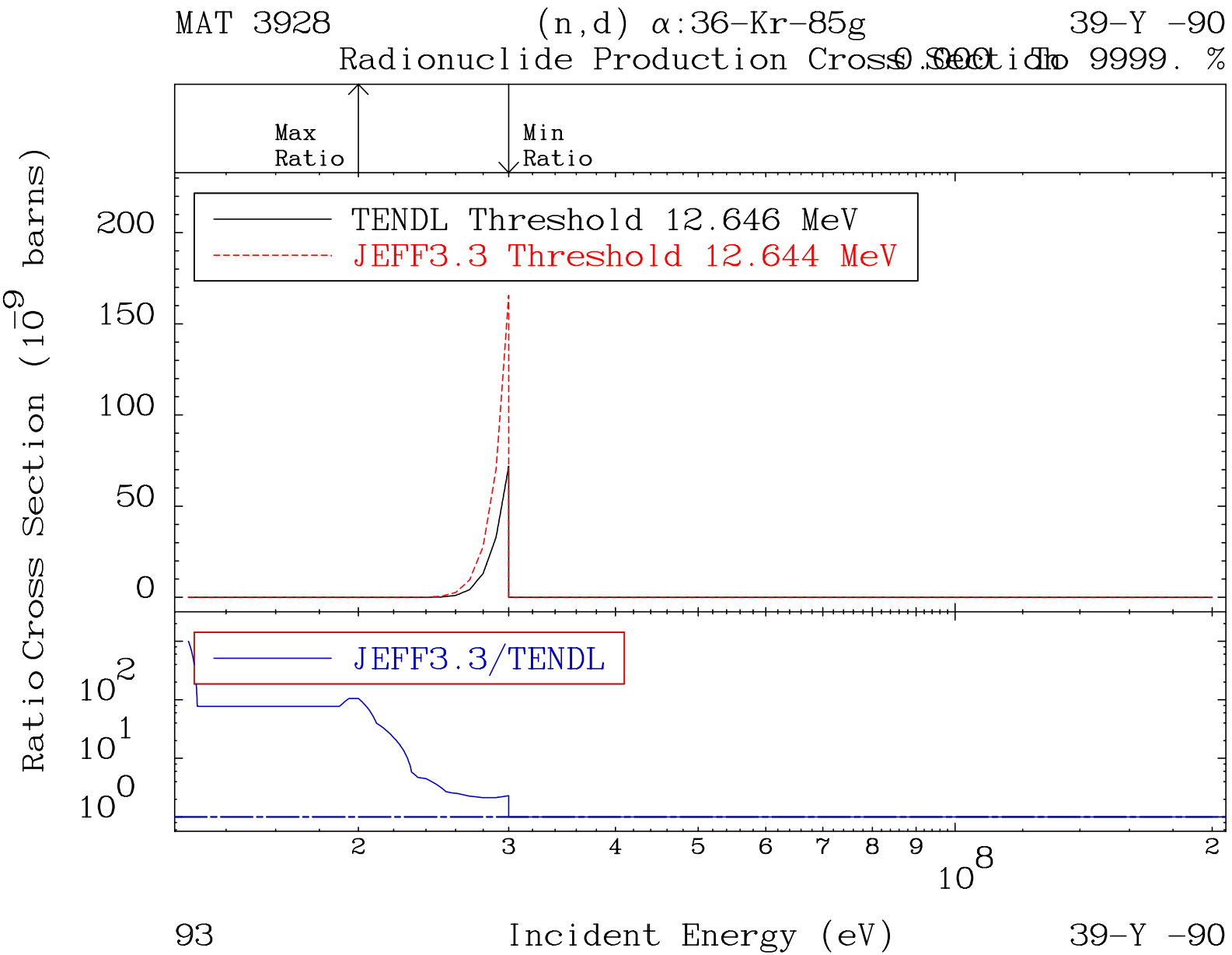

MAT 3928
(n,4n):39-Y -87m1
39-Y -90
Radionuclide Production Cross Section
0.000 To 1707. %
Min
Ratio
TENDL Threshold 28.388 MeV
JEFF3.3 Threshold 28.388 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^1
10^0
40
60
80
100
120
140
160
180
200
88
Incident Energy (MeV)
39-Y -90

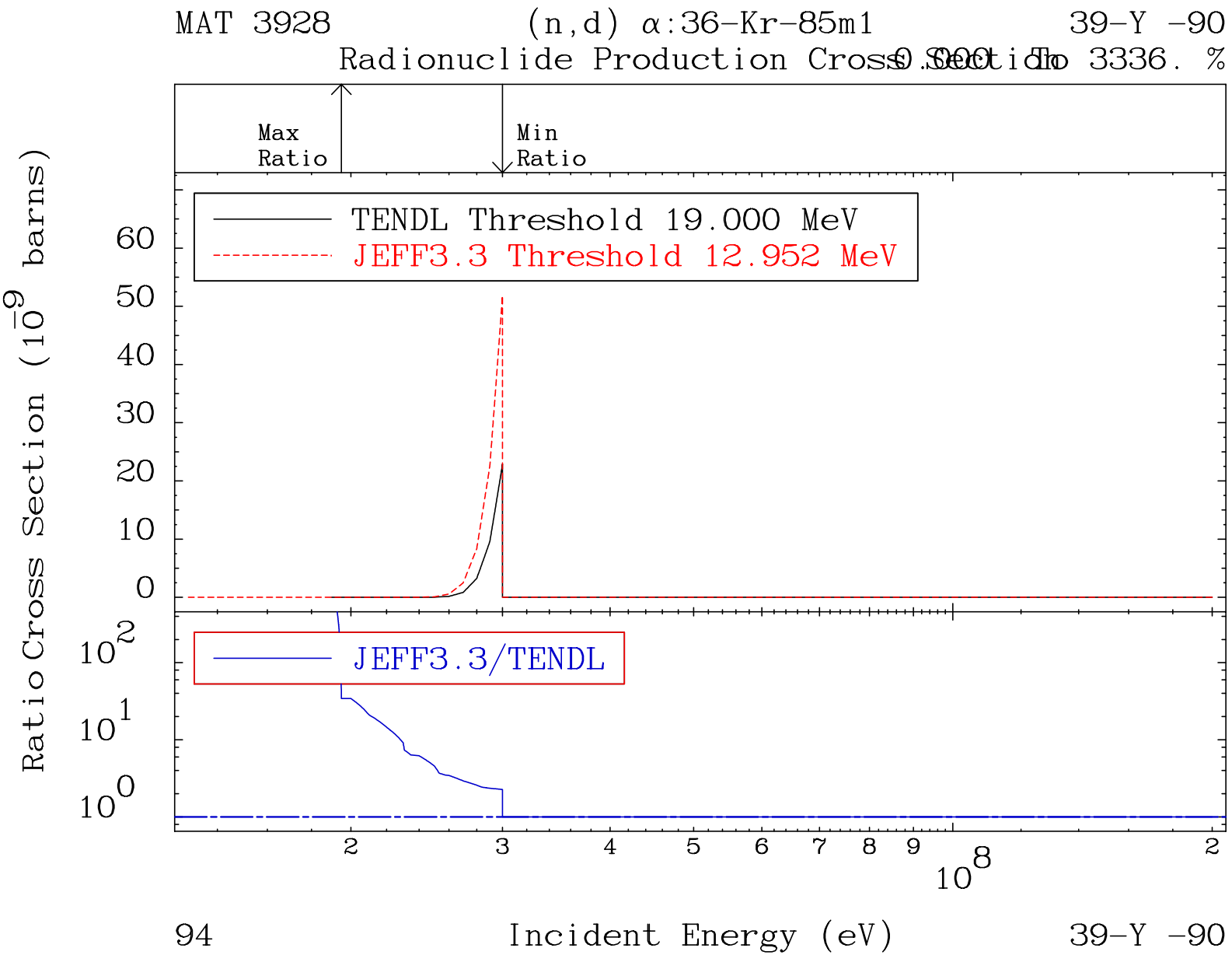

MAT 3928
(n,3n) p:38-Sr-87g
39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.329 MeV
JEFF3.3 Threshold 25.329 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
500
400
300
200
100
0
10^6
10^3
10^0
40
60
80
100
120
140
160
180
200
89
Incident Energy (MeV)
39-Y -90


MAT 3928 (n,3n) p:38-Sr-87m1 39-Y -90
Radionuclide Production Cross Section To 9999. %
Min
Ratio
TENDL Threshold 26.000 MeV
JEFF3.3 Threshold 25.720 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
25
20
15
10
5
0
10^2
10^0
40
60
80
100
120
140
160
180
200
90
Incident Energy (MeV)
39-Y -90


MAT 3928
(n,n') p α:36-Kr-85g
39-Y -90
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 14.896 MeV
JEFF3.3 Threshold 14.894 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
35
30
25
20
15
10
5
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
39-Y -90


MAT 3928 (n,n') p α:36-Kr-85m1 39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 20.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
92
39-Y -90


MAT 3928
(n,d) α:36-Kr-85g
39-Y -90
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.646 MeV
JEFF3.3 Threshold 12.644 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
200
150
100
50
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
39-Y -90


MAT 3928
(n,d) α:36-Kr-85m1
39-Y -90
Radionuclide Production Cross Section
0.000 To 3336. %
Max Ratio
Min Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 12.952 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
60
50
40
30
20
10
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
39-Y -90