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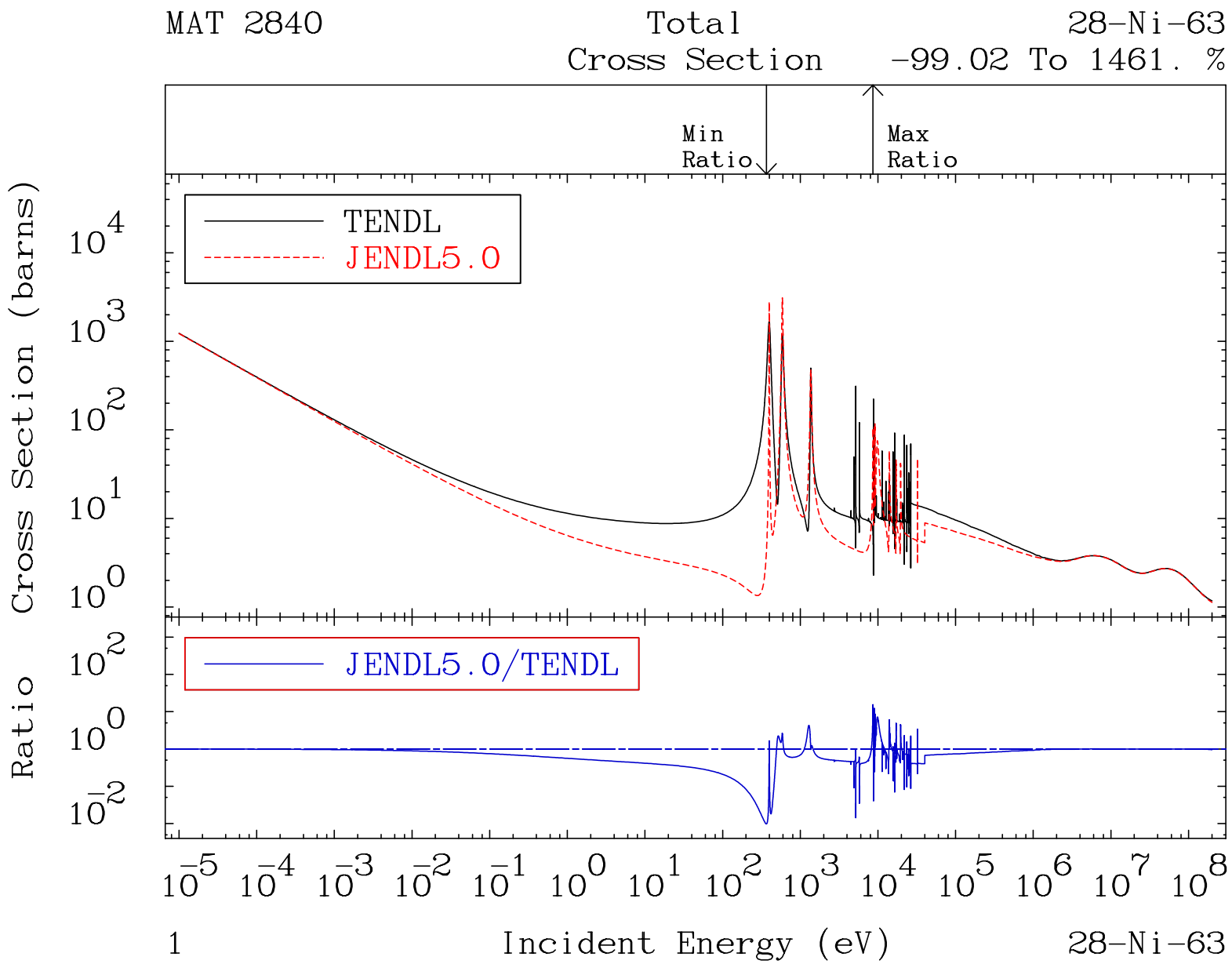
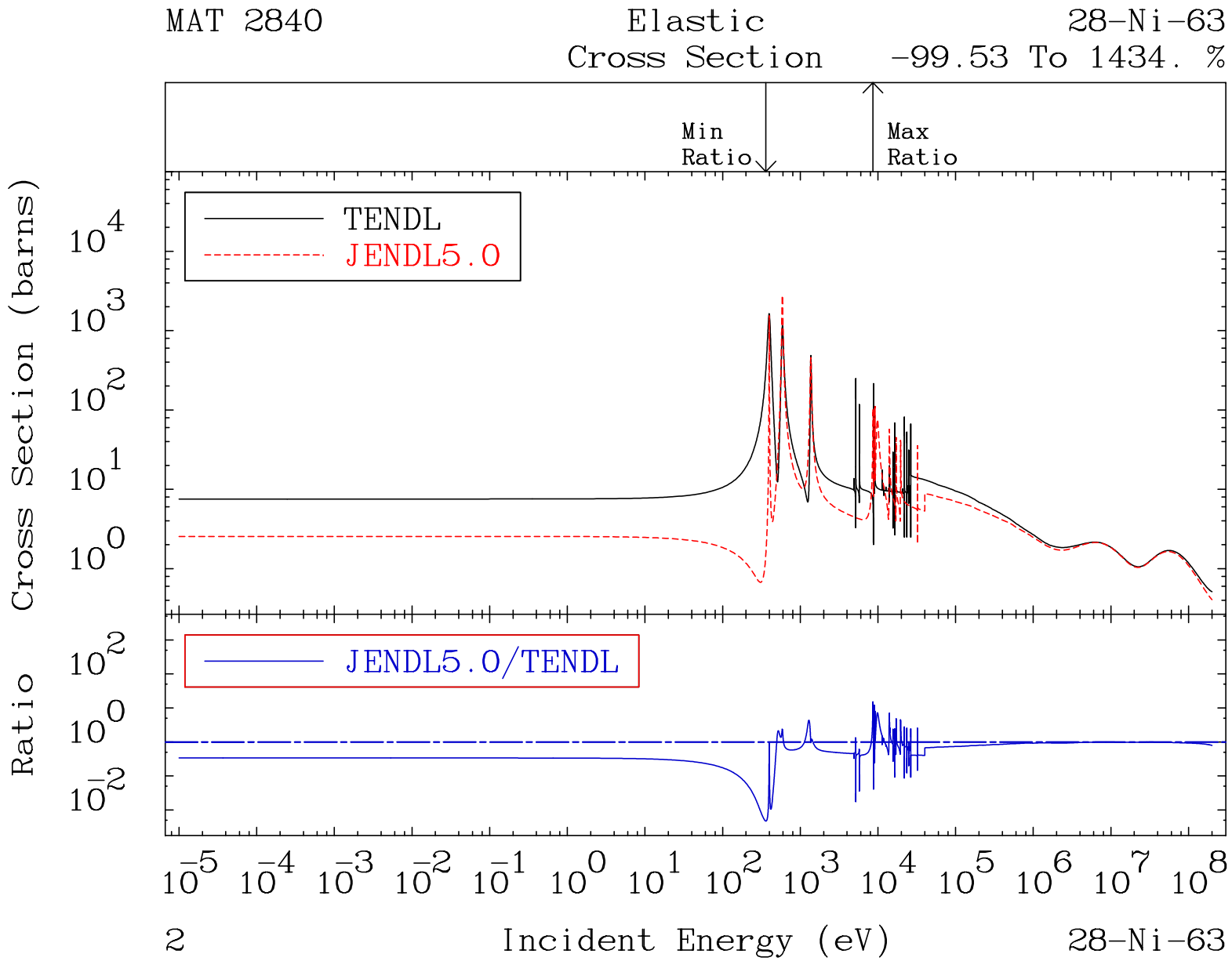
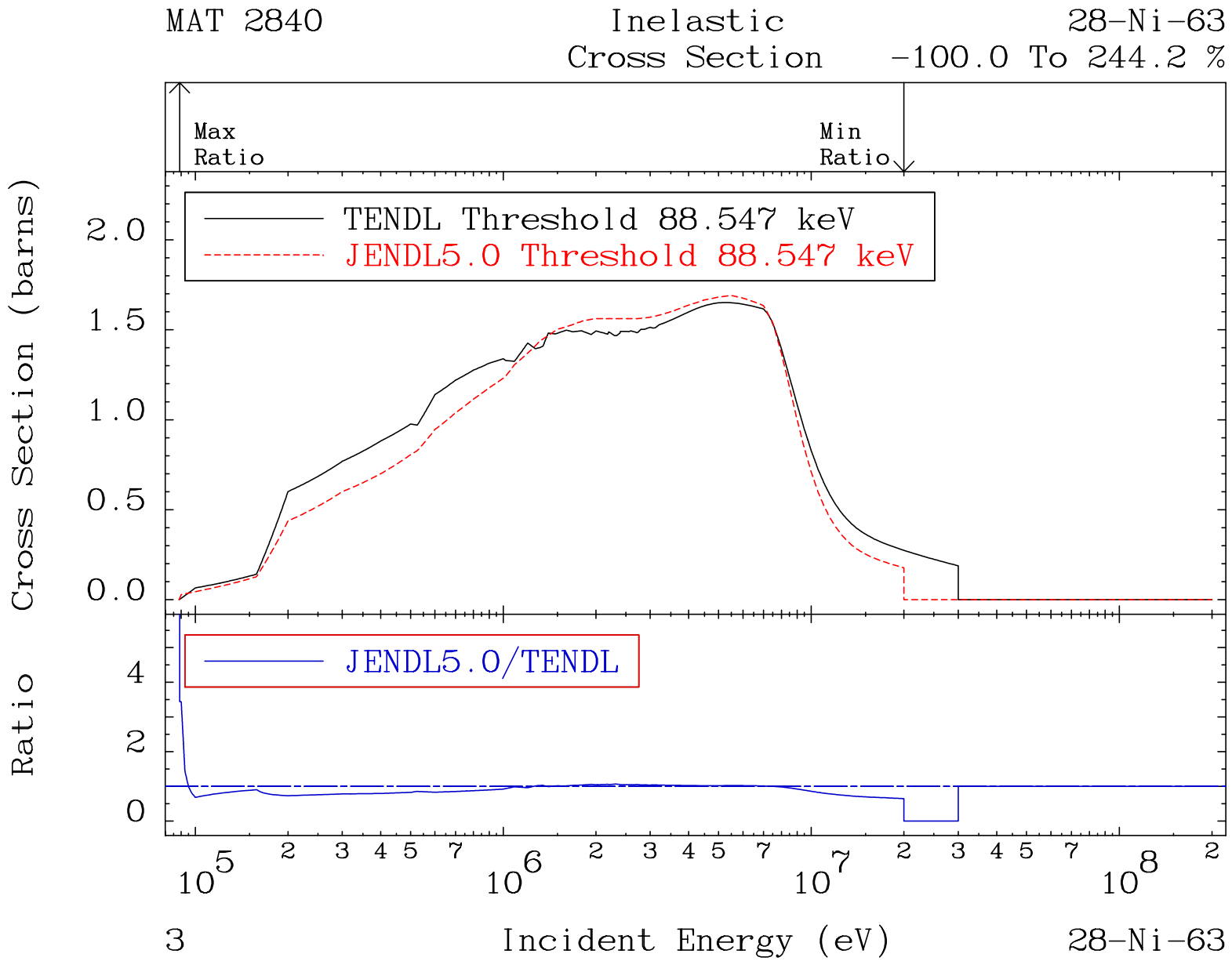
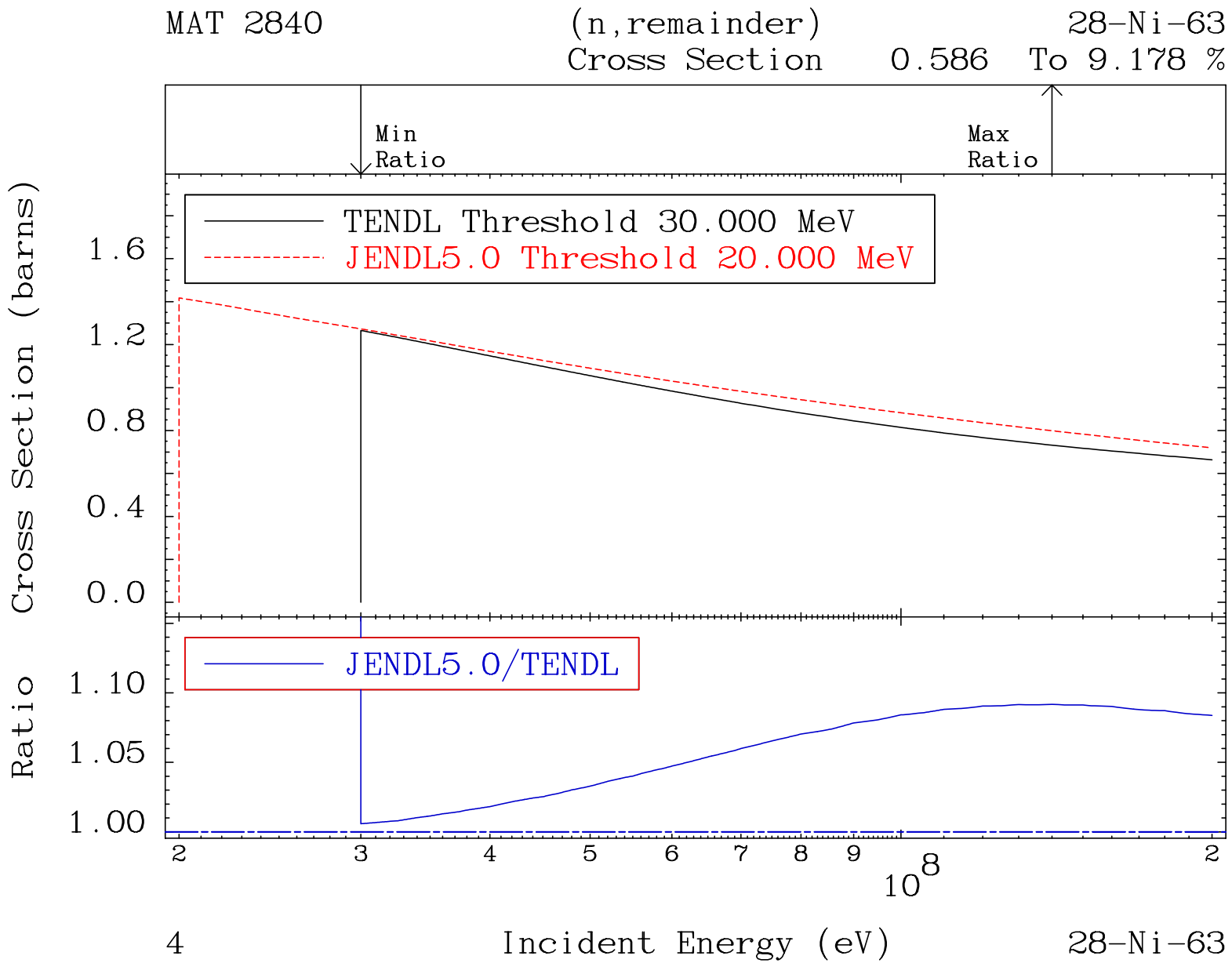
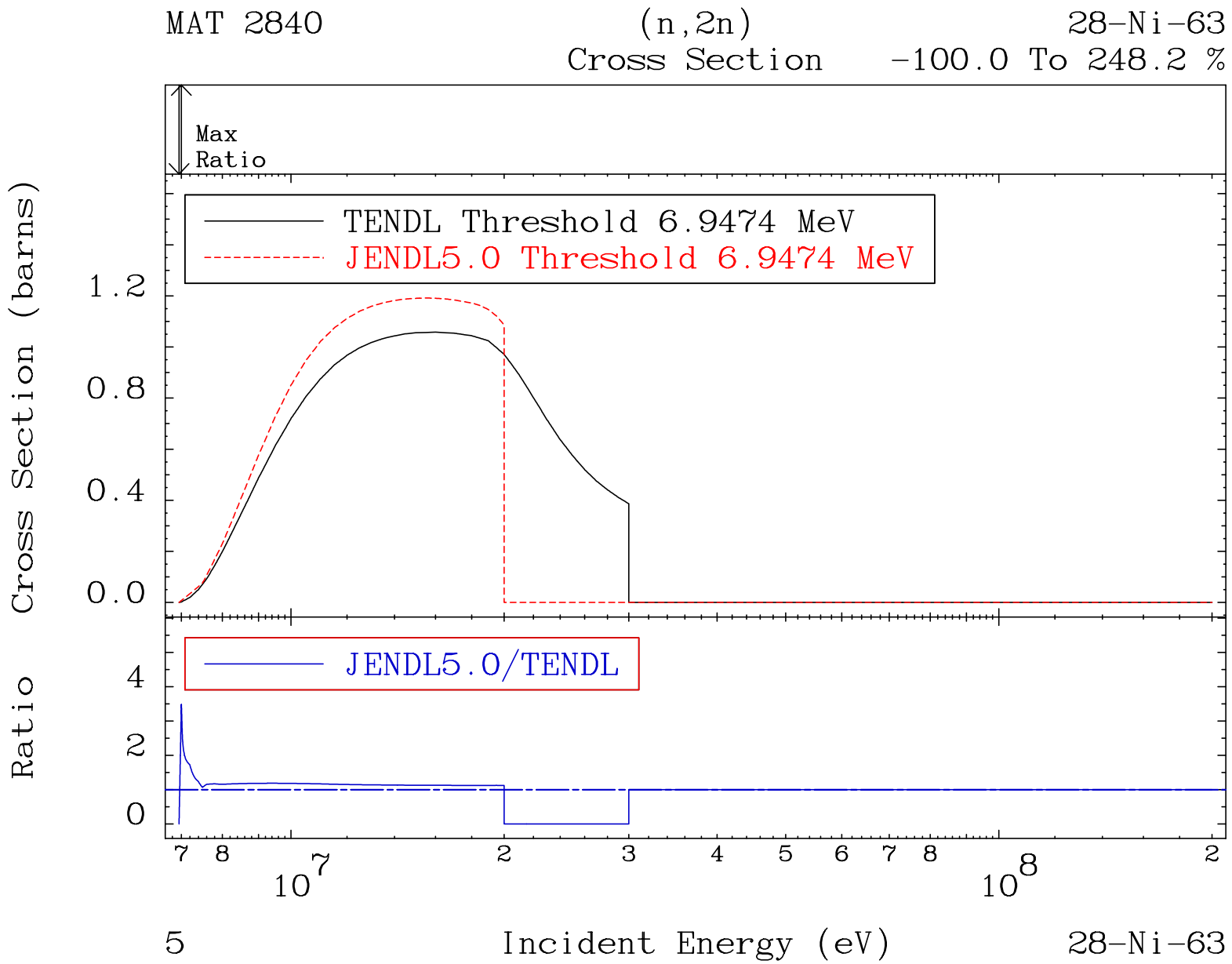
Press Mouse Button to Start

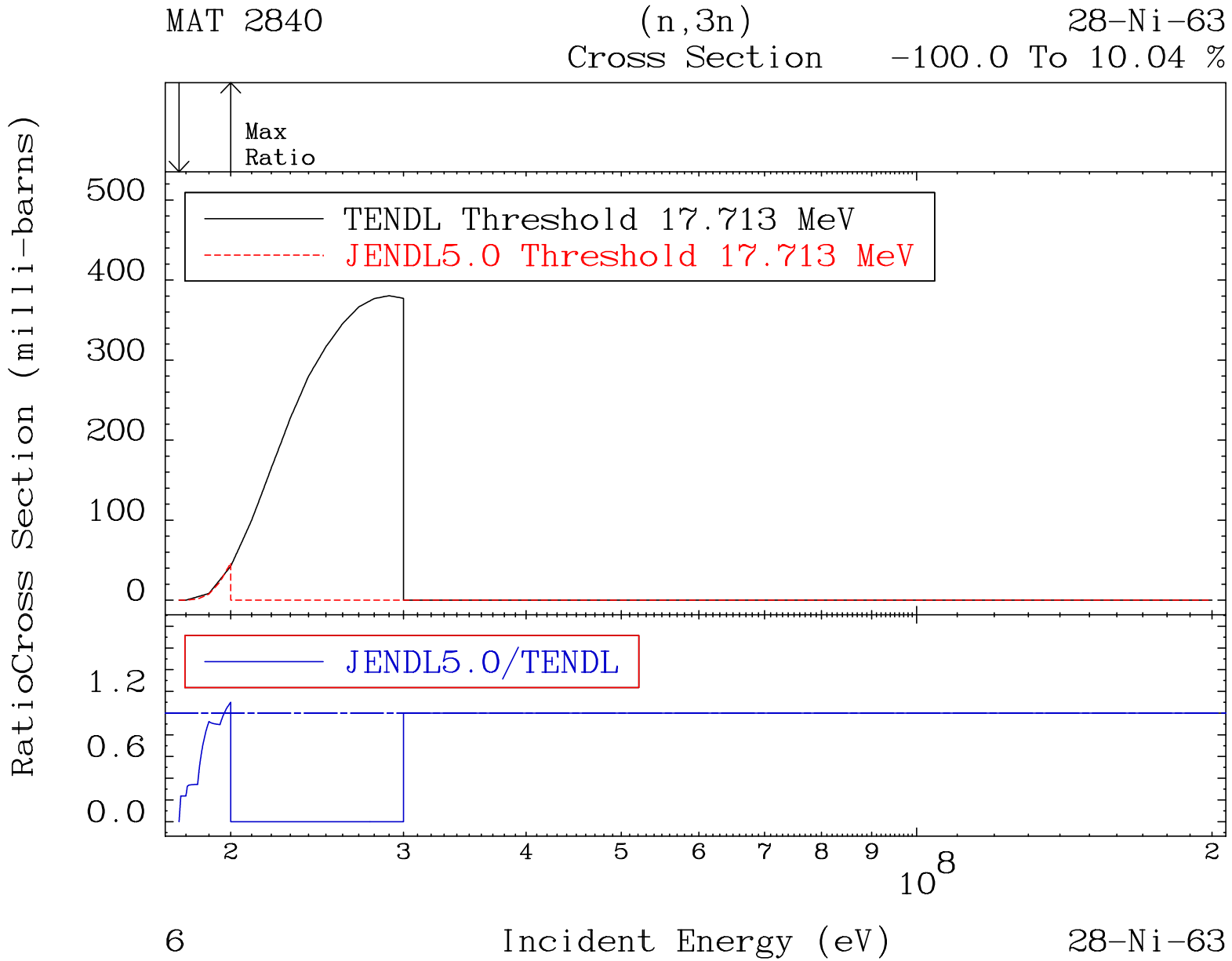

MAT 2840
Total
Cross Section
28-Ni-63
-99.02 To 1461. %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
28-Ni-63

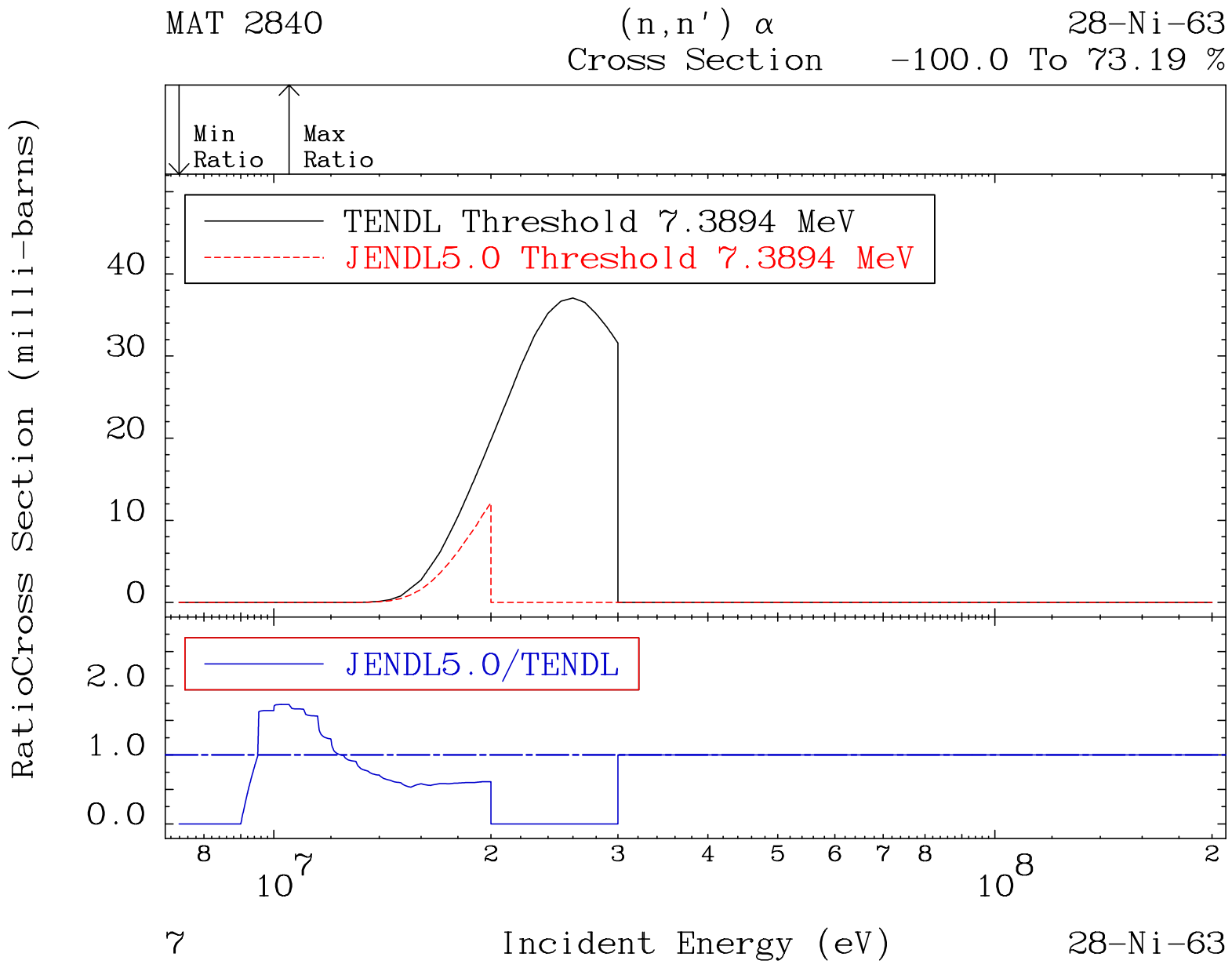

MAT 2840
Elastic
Cross Section
28-Ni-63
-99.53 To 1434. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
28-Ni-63

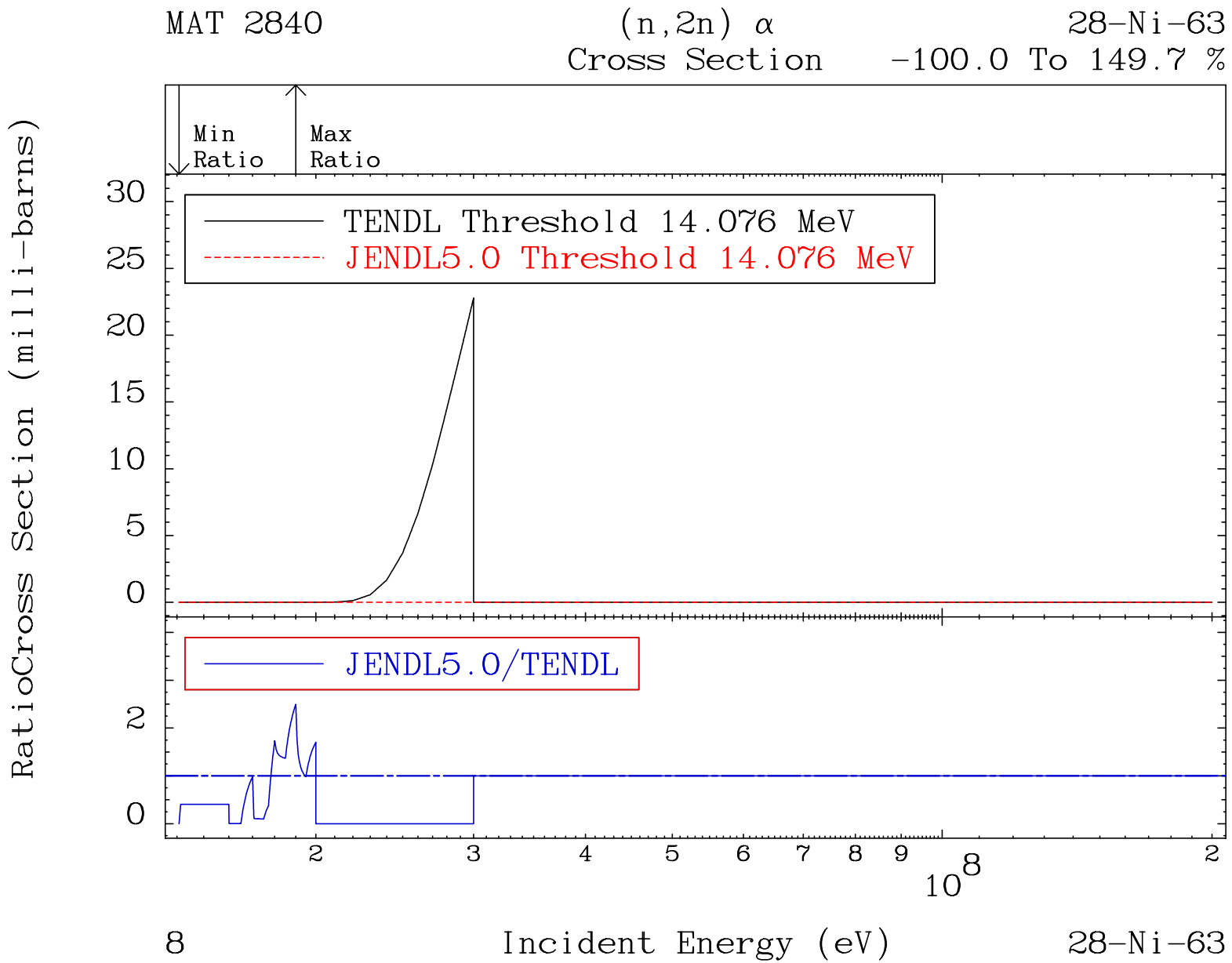

MAT 2840
Inelastic
Cross Section
28-Ni-63
-100.0 To 244.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 88.547 keV
JENDL5.0 Threshold 88.547 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
4
2
0
10^5
10^6
10^7
10^8
2 3 4 5 7
Incident Energy (eV)
3
28-Ni-63

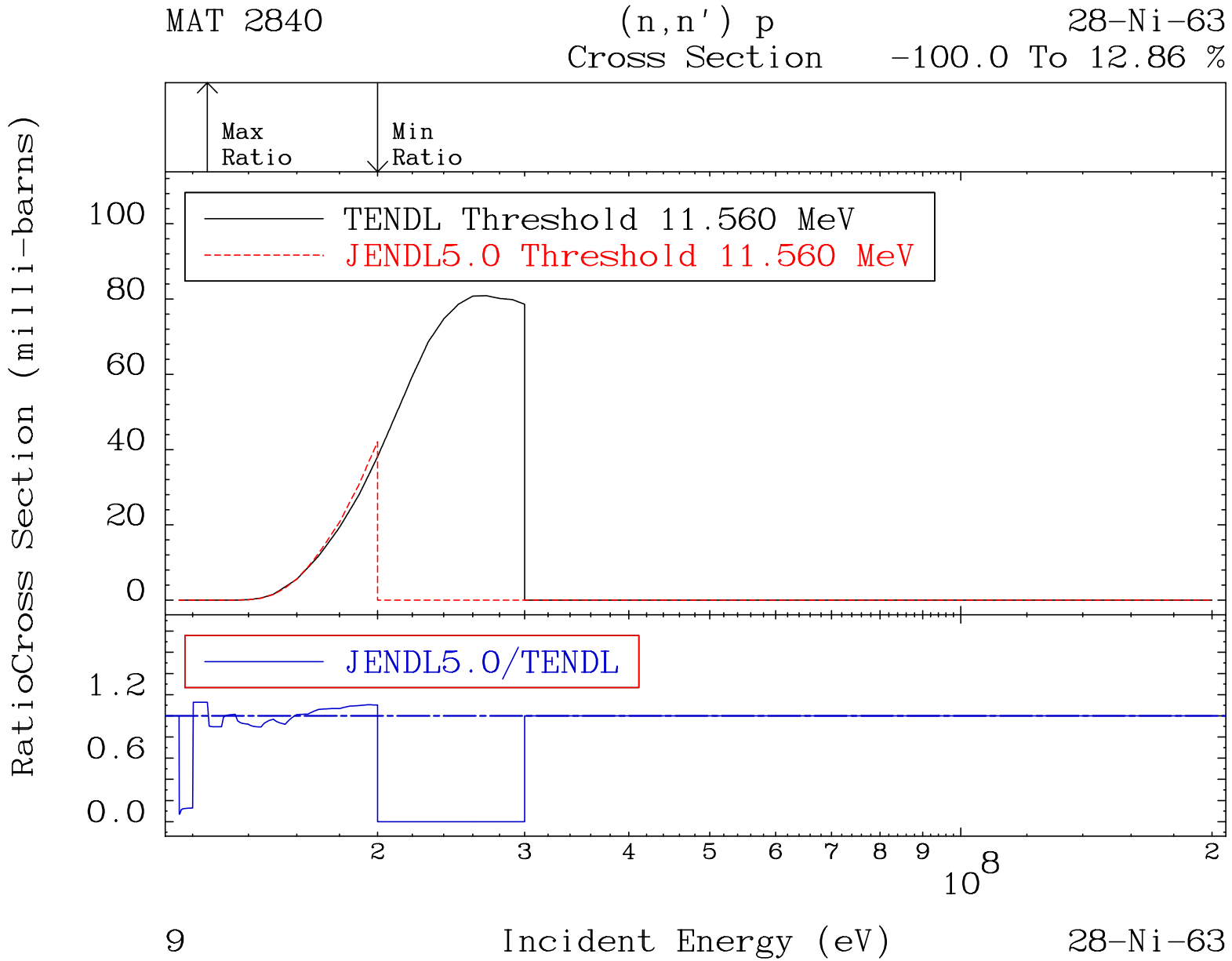

MAT 2840
(n,remainder)
28-Ni-63
Cross Section 0.586 To 9.178 %
Min Ratio
Max Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.10
1.05
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
28-Ni-63

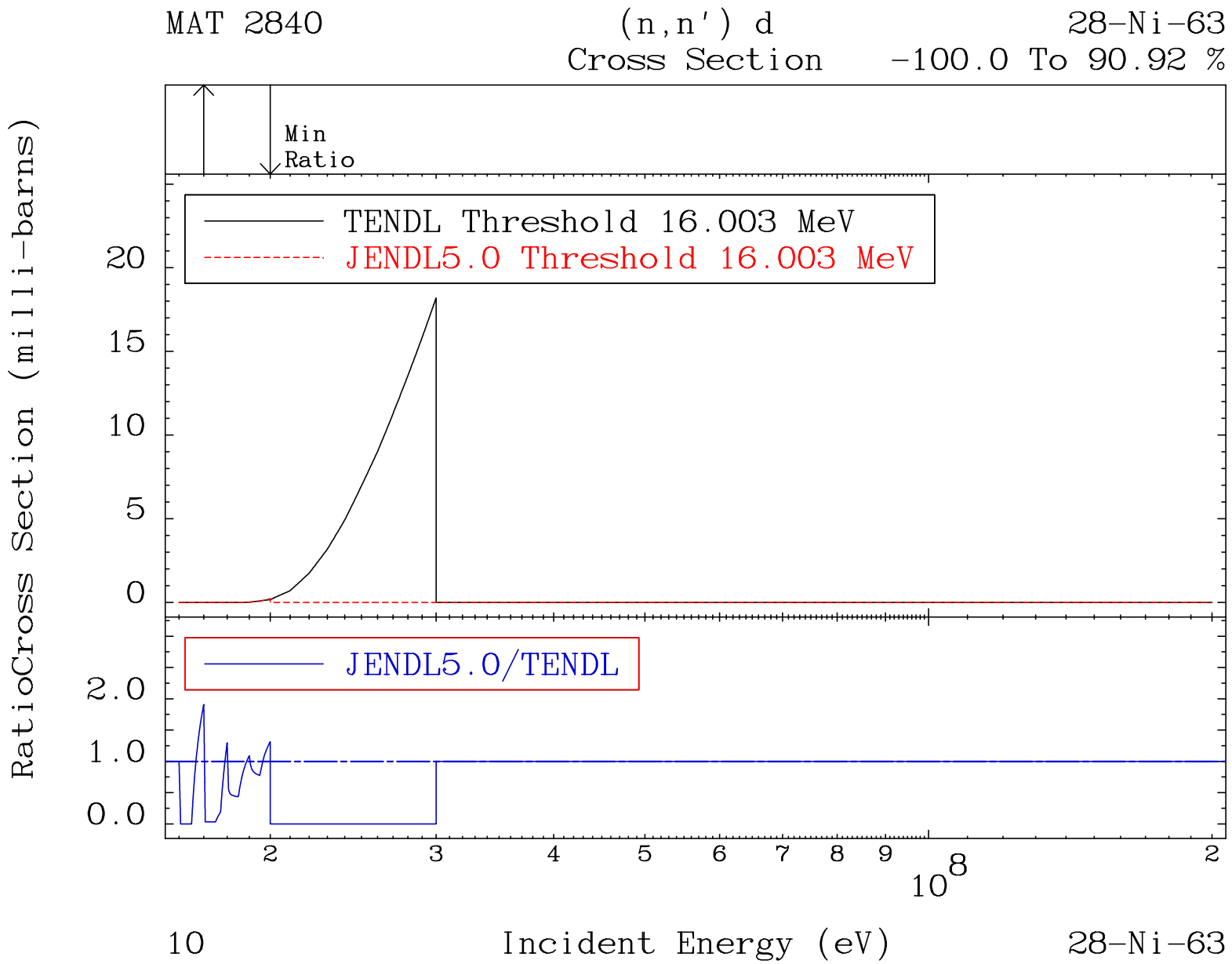

MAT 2840
(n,2n)
Cross Section
28-Ni-63
-100.0 To 248.2 %
Max
Ratio
TENDL Threshold 6.9474 MeV
JENDL5.0 Threshold 6.9474 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
0.8
0.4
0.0
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
5
28-Ni-63

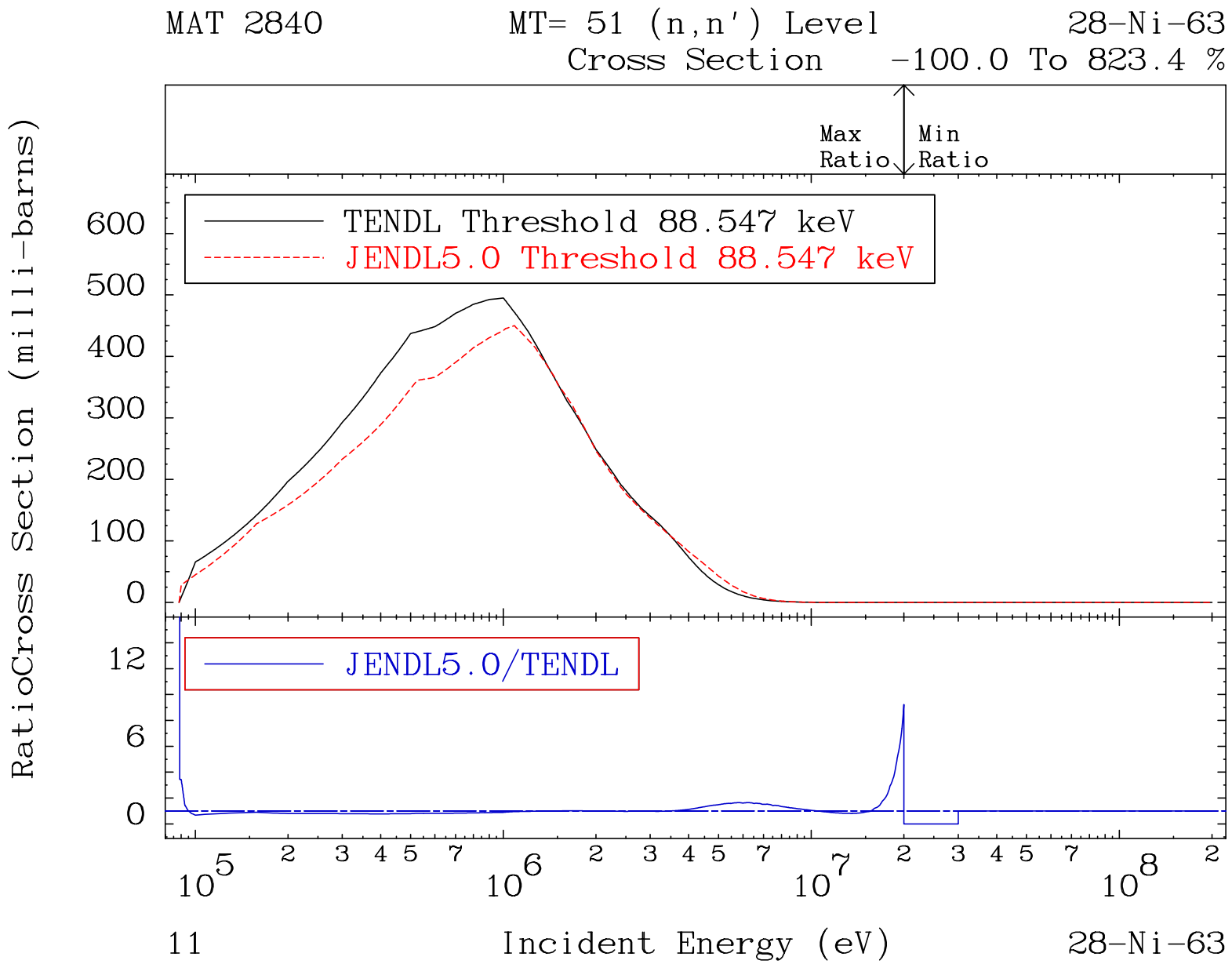

MAT 2840
(n,3n)
Cross Section
28-Ni-63
-100.0 To 10.04 %
Max
Ratio
TENDL Threshold 17.713 MeV
JENDL5.0 Threshold 17.713 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
28-Ni-63

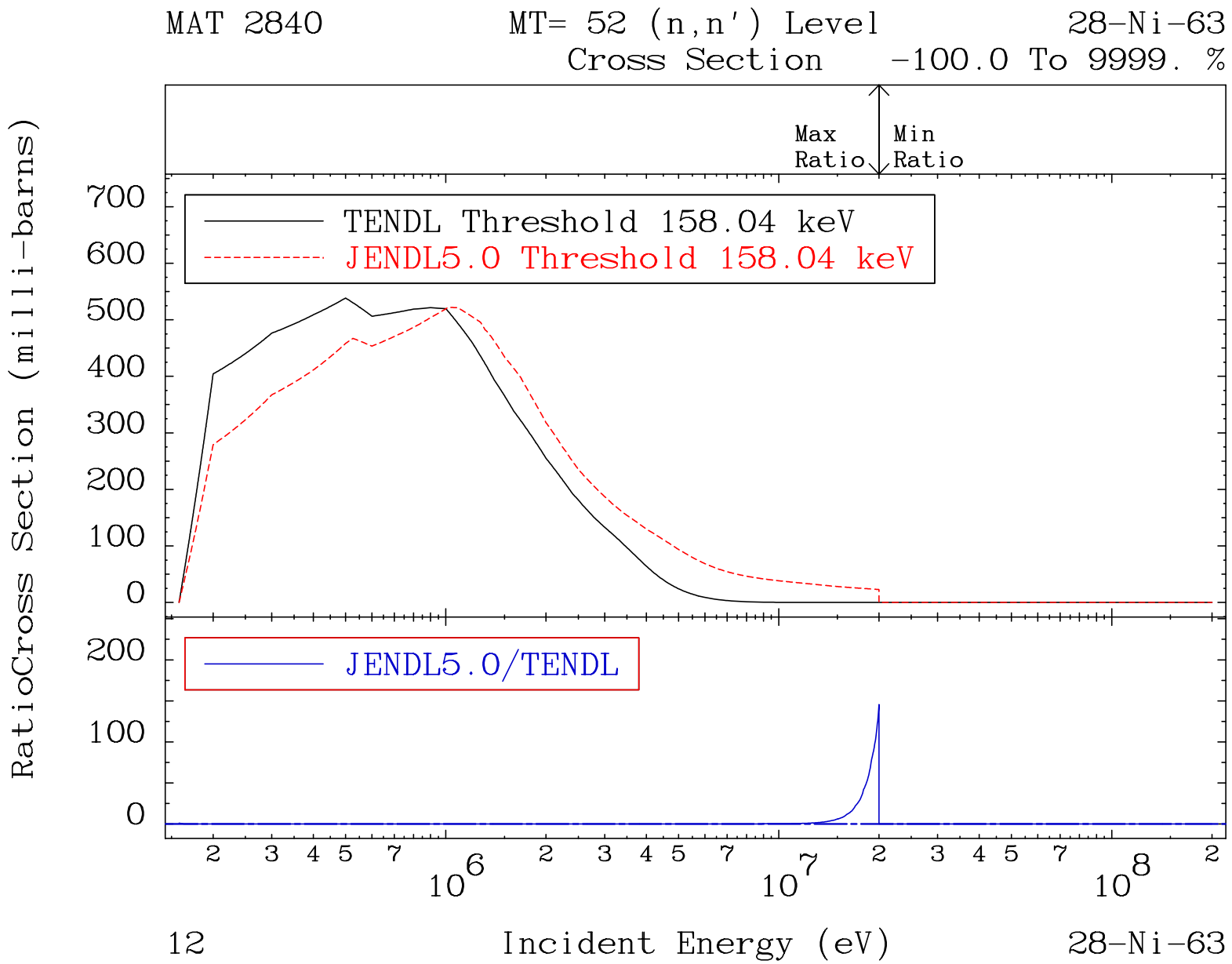

MAT 2840
(n,n') α
Cross Section
28-Ni-63
-100.0 To 73.19 %
Min Ratio
Max Ratio
TENDL Threshold 7.3894 MeV
JENDL5.0 Threshold 7.3894 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
28-Ni-63

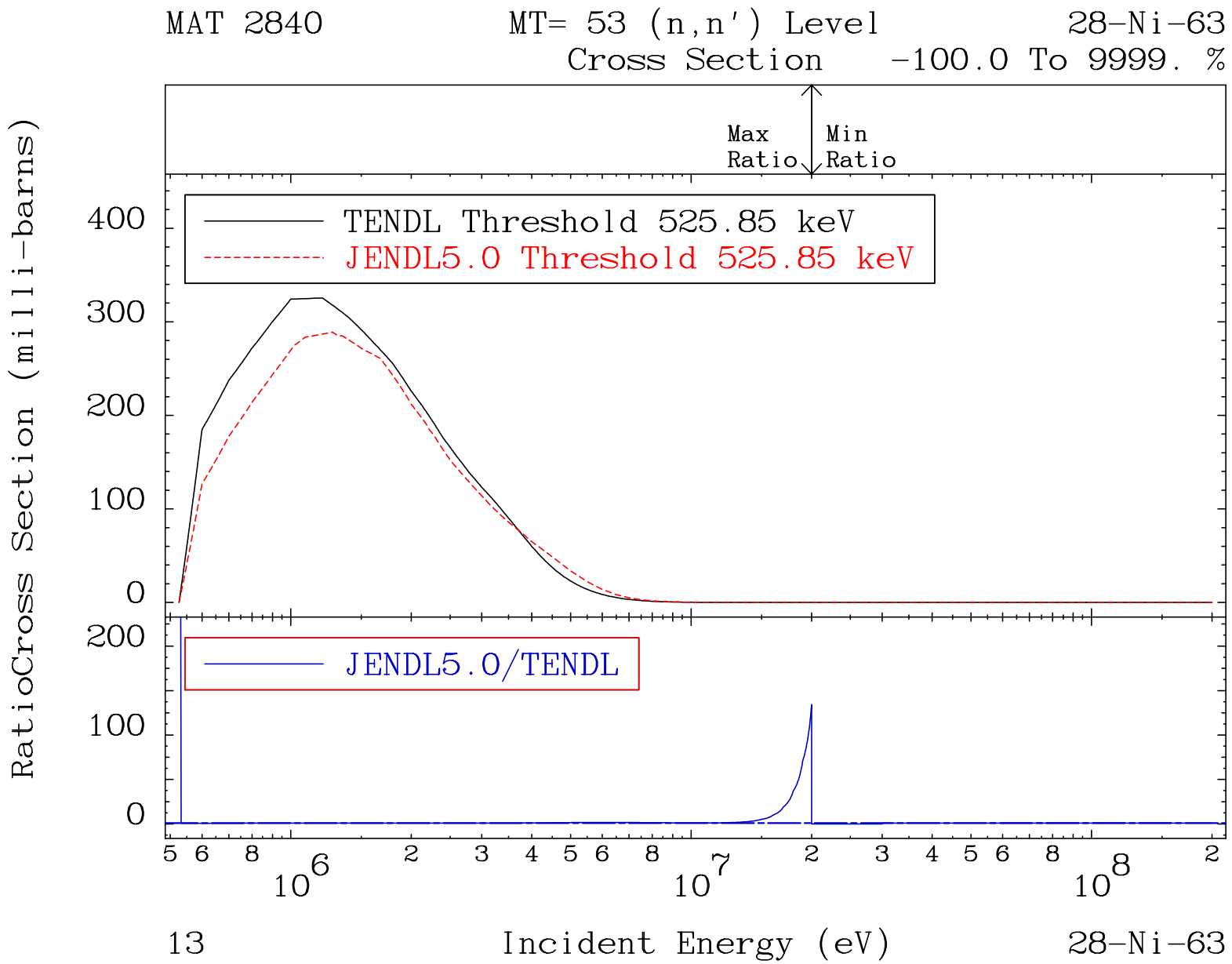

MAT 2840
(n,2n) α
28-Ni-63
Cross Section
-100.0 To 149.7 %
Min Ratio
Max Ratio
TENDL Threshold 14.076 MeV
JENDL5.0 Threshold 14.076 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2
0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
28-Ni-63

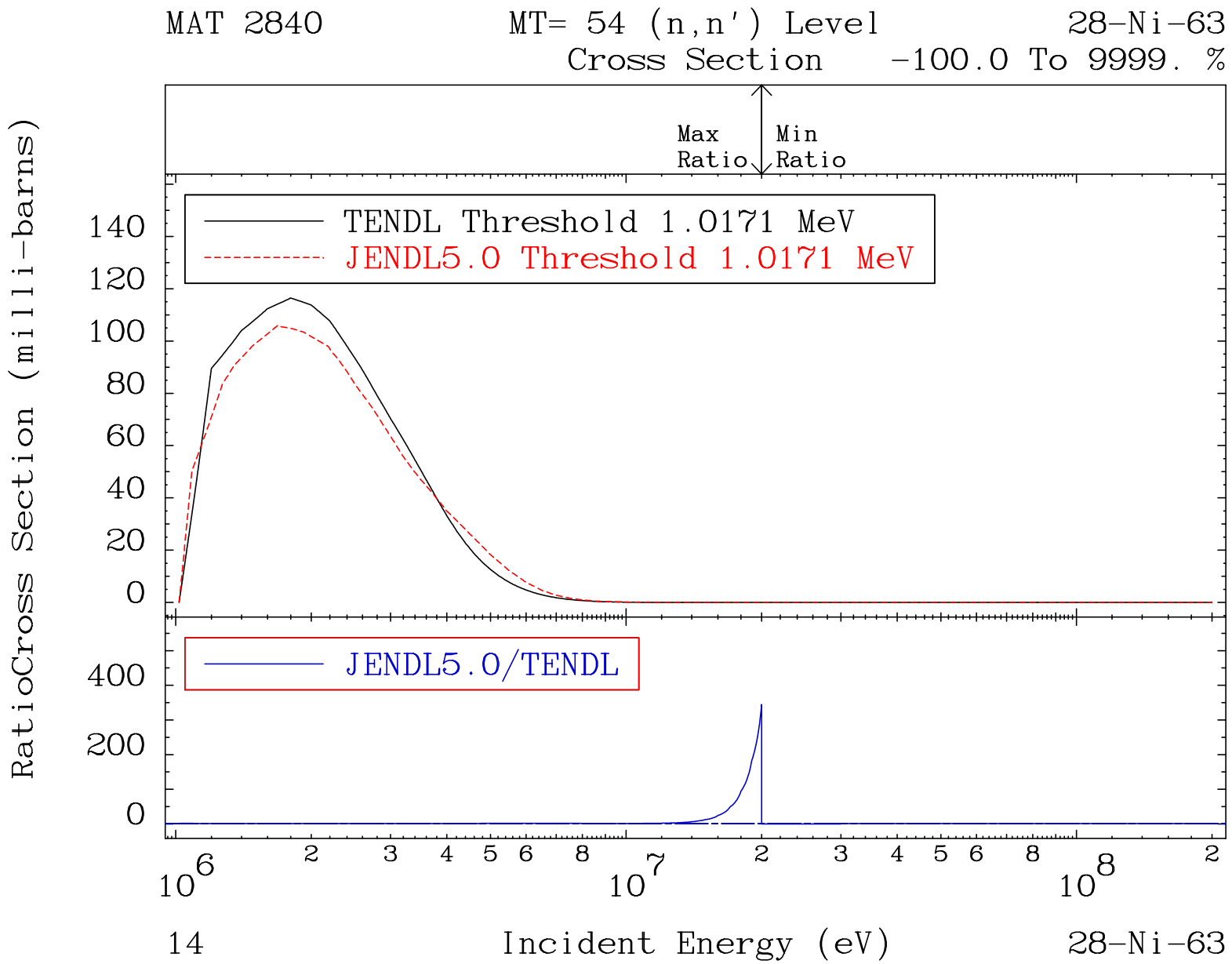

MAT 2840
(n,n') p
Cross Section
28-Ni-63
-100.0 To 12.86 %
Max Ratio
Min Ratio
TENDL Threshold 11.560 MeV
JENDL5.0 Threshold 11.560 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
9
Incident Energy (eV)
28-Ni-63

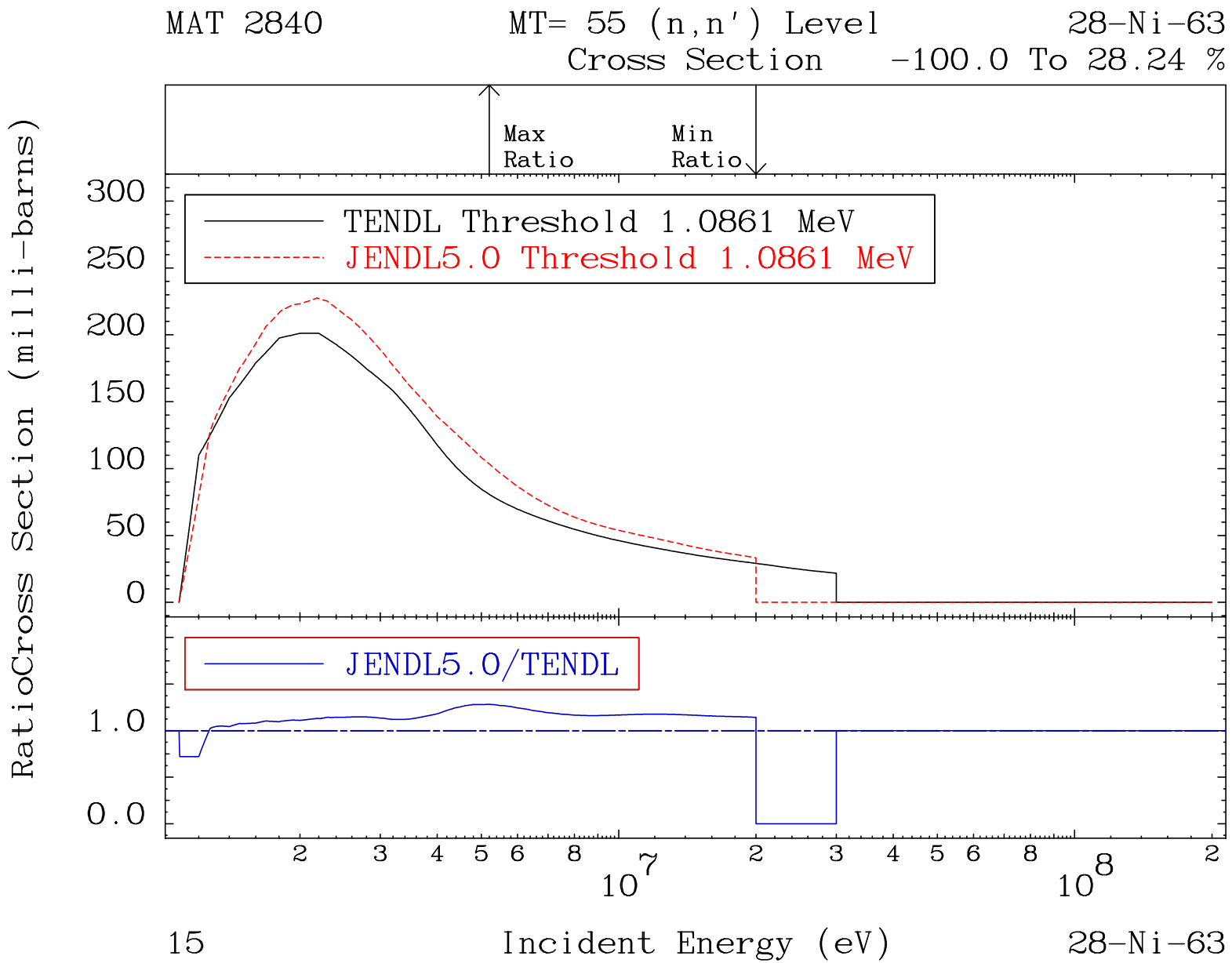

MAT 2840
(n,n') d
Cross Section
28-Ni-63
-100.0 To 90.92 %
Min
Ratio
TENDL Threshold 16.003 MeV
JENDL5.0 Threshold 16.003 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
28-Ni-63

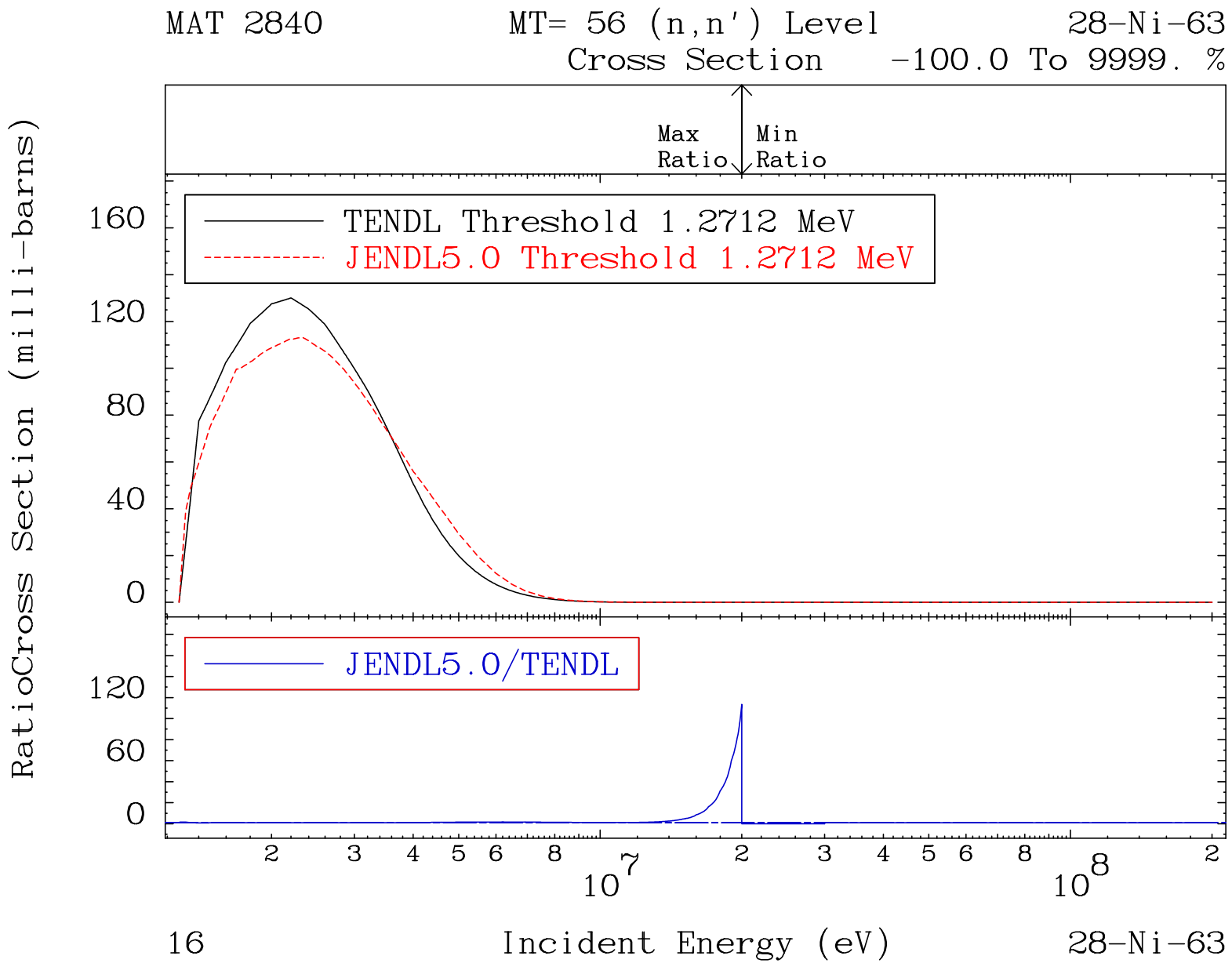

MAT 2840
MT= 51 (n,n') Level
28-Ni-63
Cross Section -100.0 To 823.4 %
Max Ratio
Min Ratio
TENDL Threshold 88.547 keV
JENDL5.0 Threshold 88.547 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
12
6
0
10^5
10^6
10^7
10^8
2 3 4 5 7
11
Incident Energy (eV)
28-Ni-63

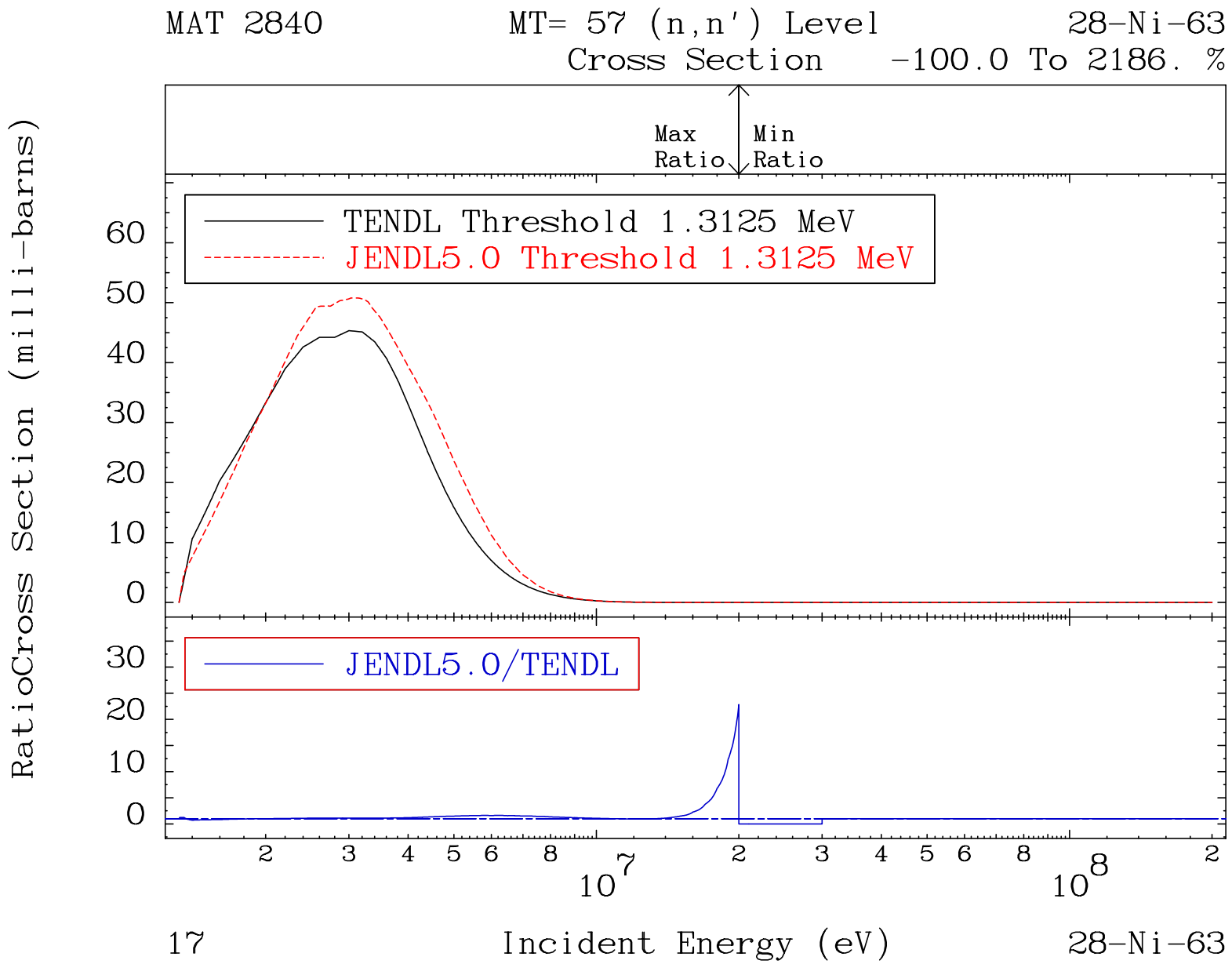

MAT 2840
MT= 52 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 158.04 keV
JENDL5.0 Threshold 158.04 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
200
100
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
12
Incident Energy (eV)
28-Ni-63

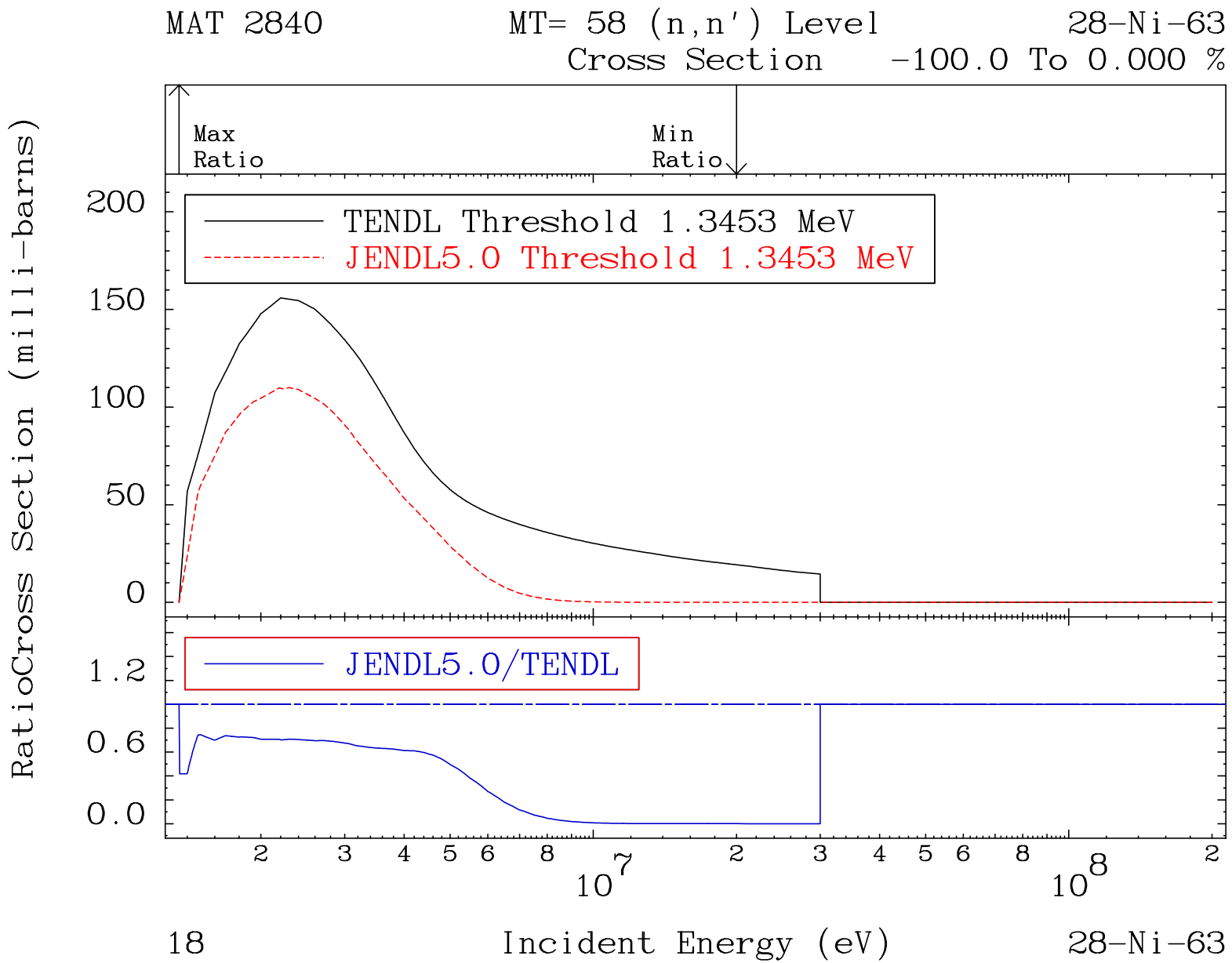

MAT 2840
MT= 53 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 525.85 keV
JENDL5.0 Threshold 525.85 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
200
100
0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
28-Ni-63

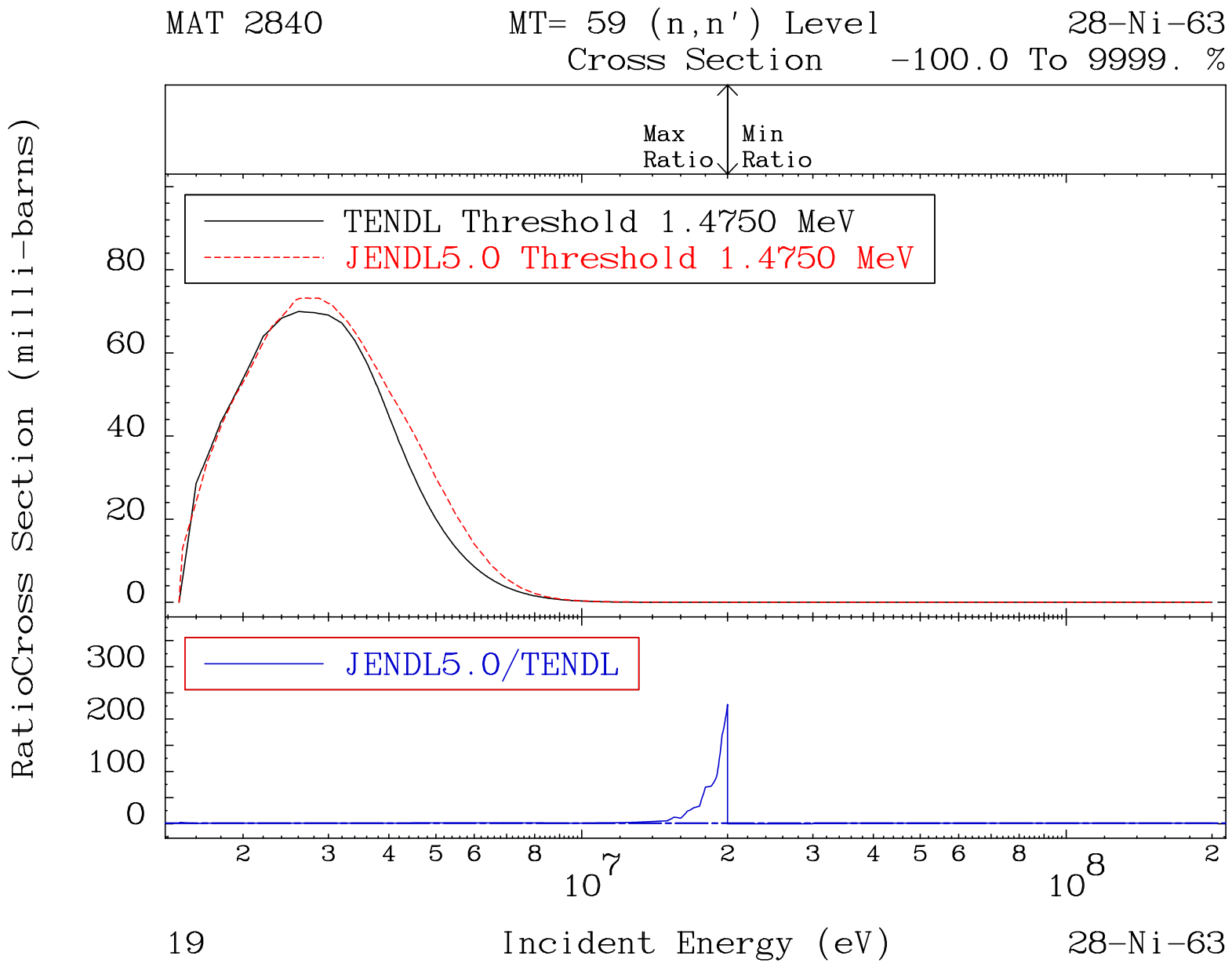

MAT 2840
MT= 54 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.0171 MeV
JENDL5.0 Threshold 1.0171 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
400
200
0
10^6
10^7
10^8
2 3 4 5 6 8
14
Incident Energy (eV)
28-Ni-63

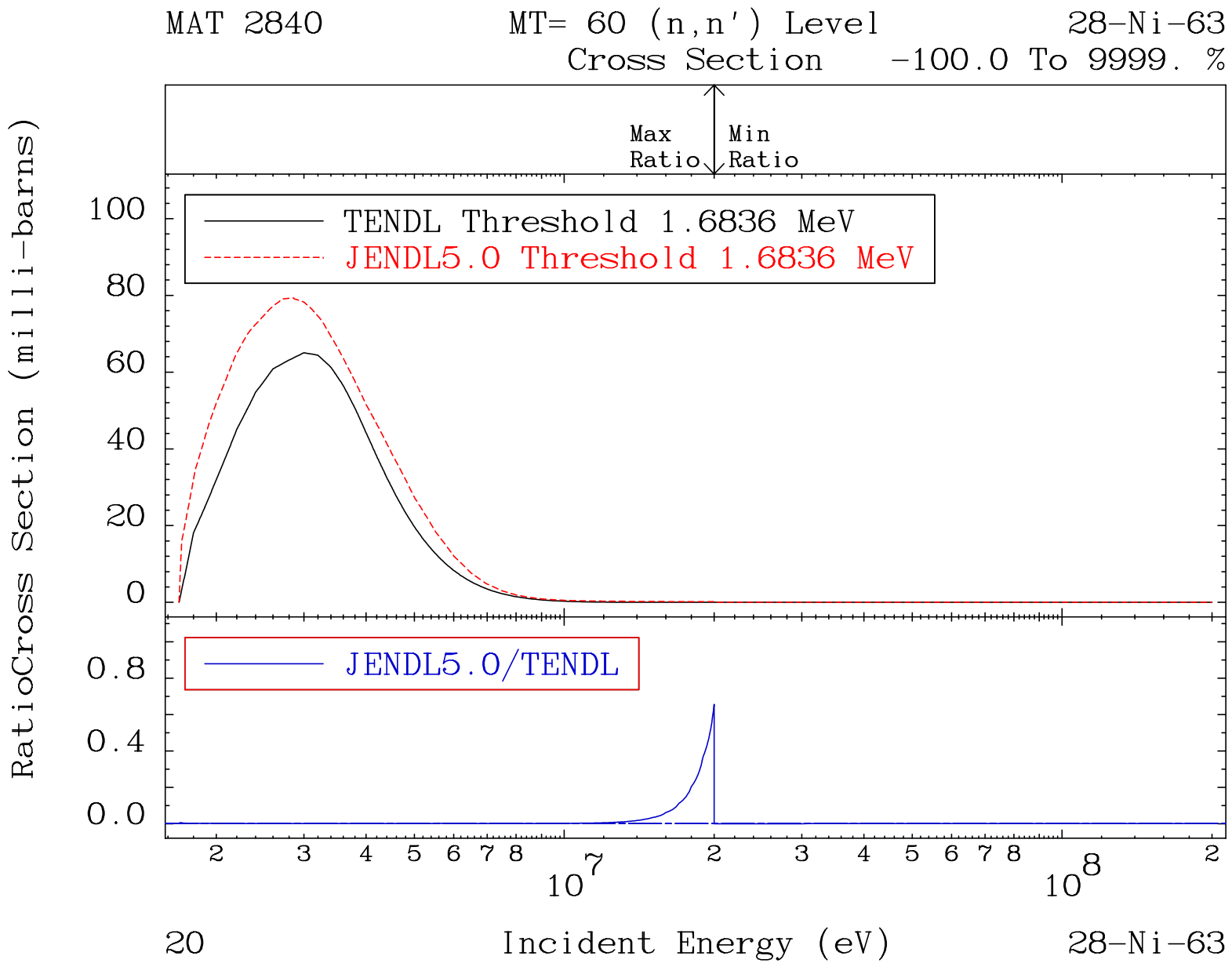

MAT 2840
MT= 55 (n,n') Level
28-Ni-63
Cross Section -100.0 To 28.24 %
Max Ratio
Min Ratio
TENDL Threshold 1.0861 MeV
JENDL5.0 Threshold 1.0861 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
28-Ni-63

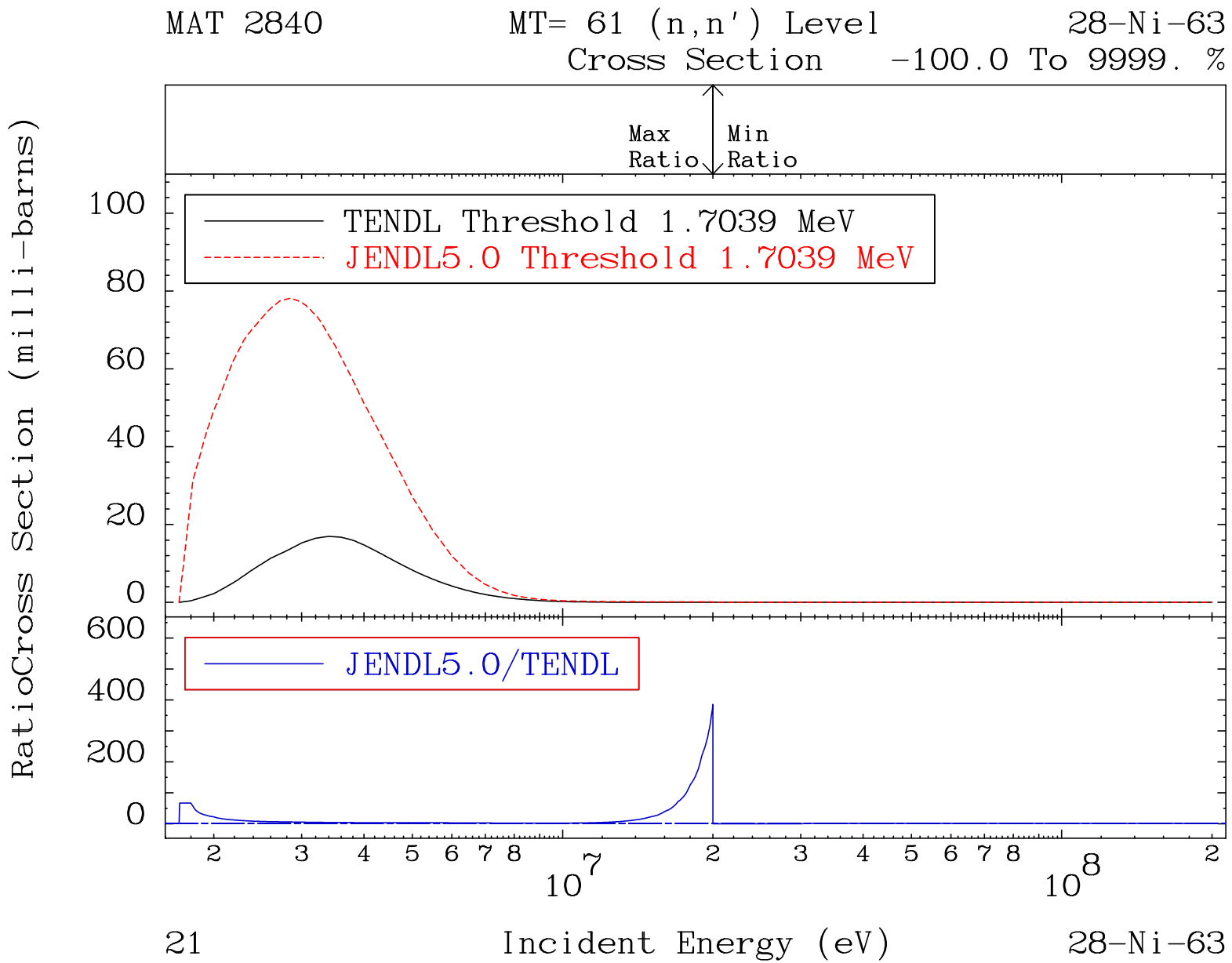

MAT 2840
MT= 56 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.2712 MeV
JENDL5.0 Threshold 1.2712 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
120
60
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
28-Ni-63

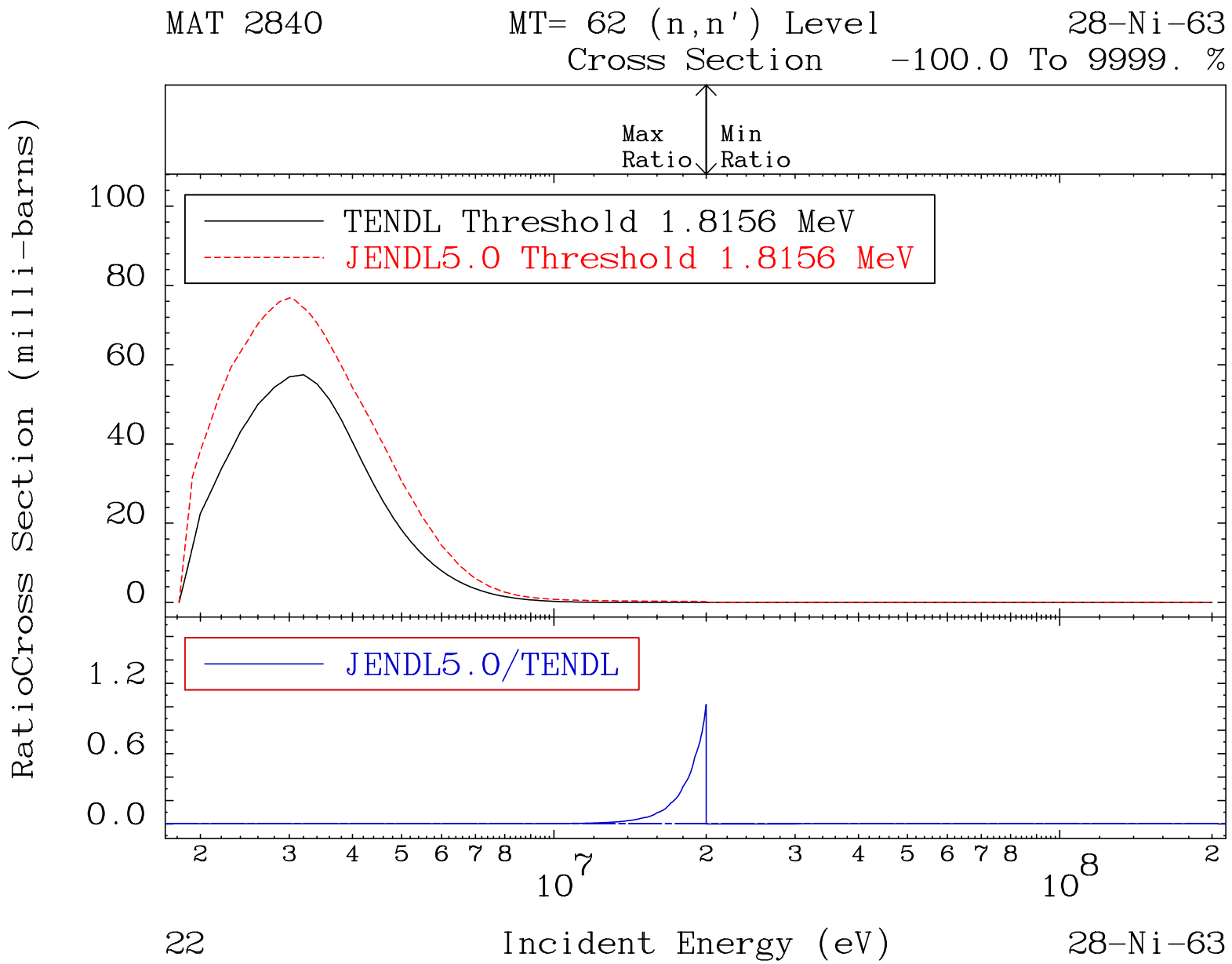

MAT 2840
MT= 57 (n,n') Level
28-Ni-63
Cross Section -100.0 To 2186. %
Max Ratio
Min Ratio
TENDL Threshold 1.3125 MeV
JENDL5.0 Threshold 1.3125 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
30
20
10
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
28-Ni-63

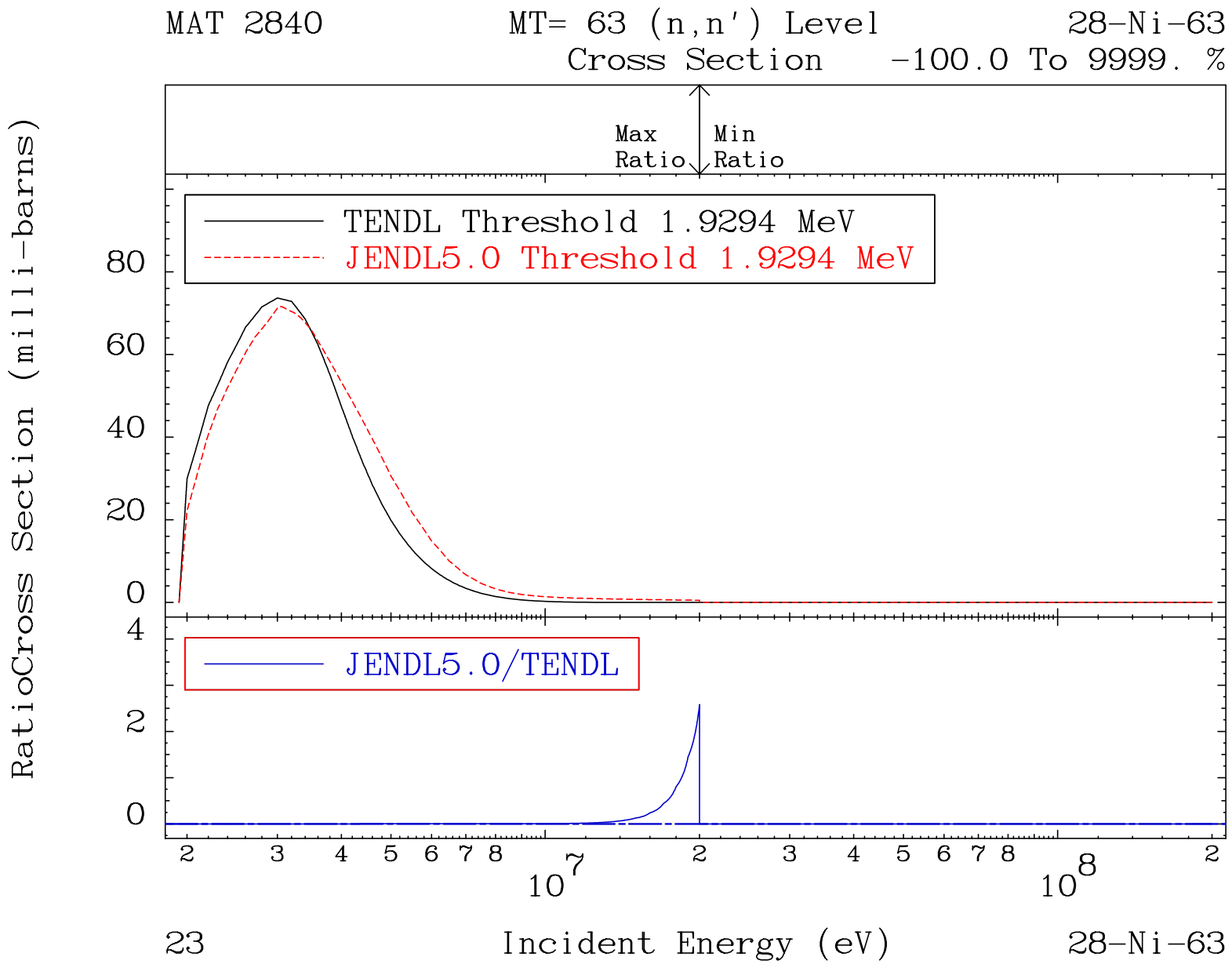

MAT 2840
MT= 58 (n,n') Level
28-Ni-63
Cross Section -100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 1.3453 MeV
JENDL5.0 Threshold 1.3453 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
28-Ni-63

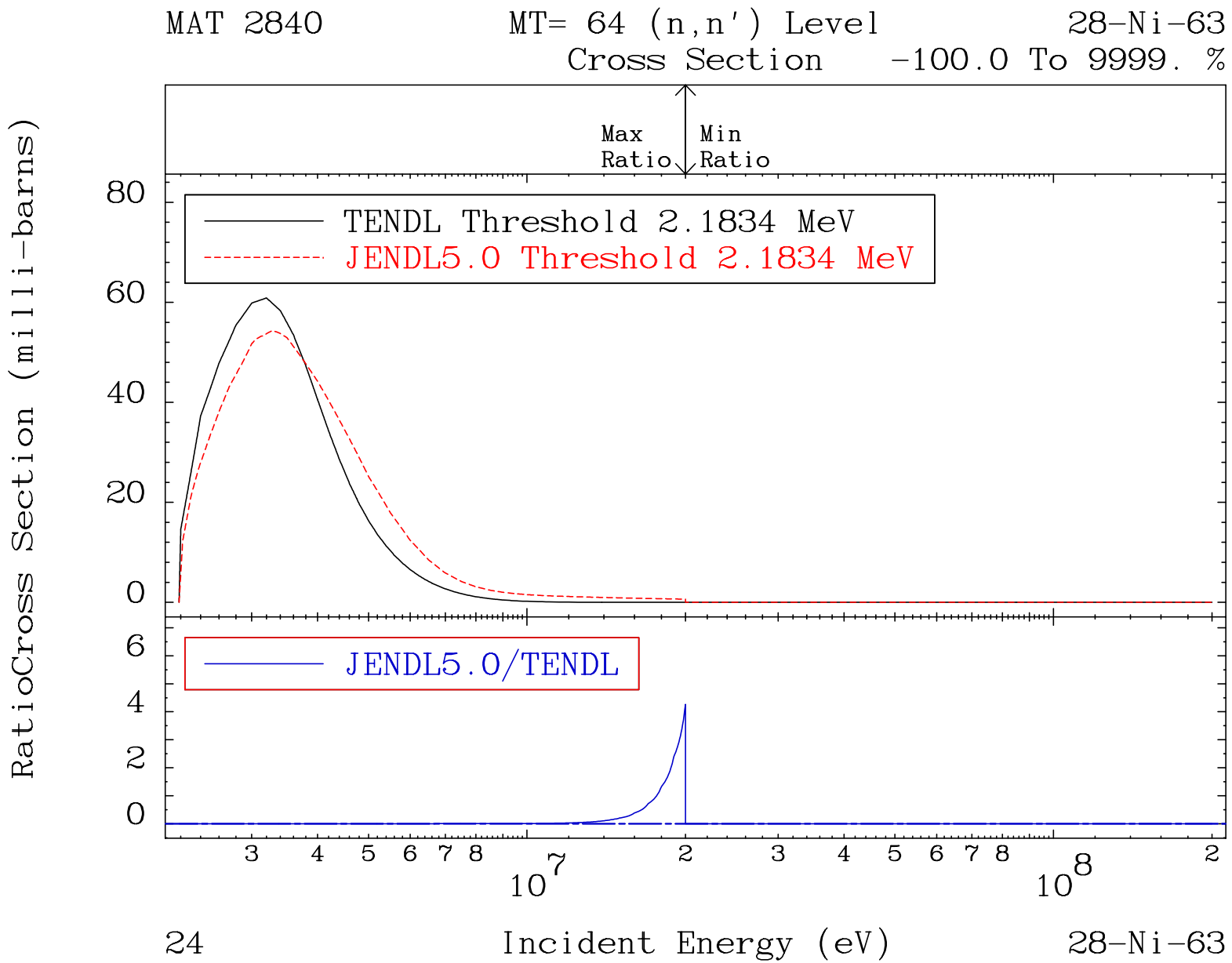

MAT 2840
MT= 59 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4750 MeV
JENDL5.0 Threshold 1.4750 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
300
200
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
28-Ni-63

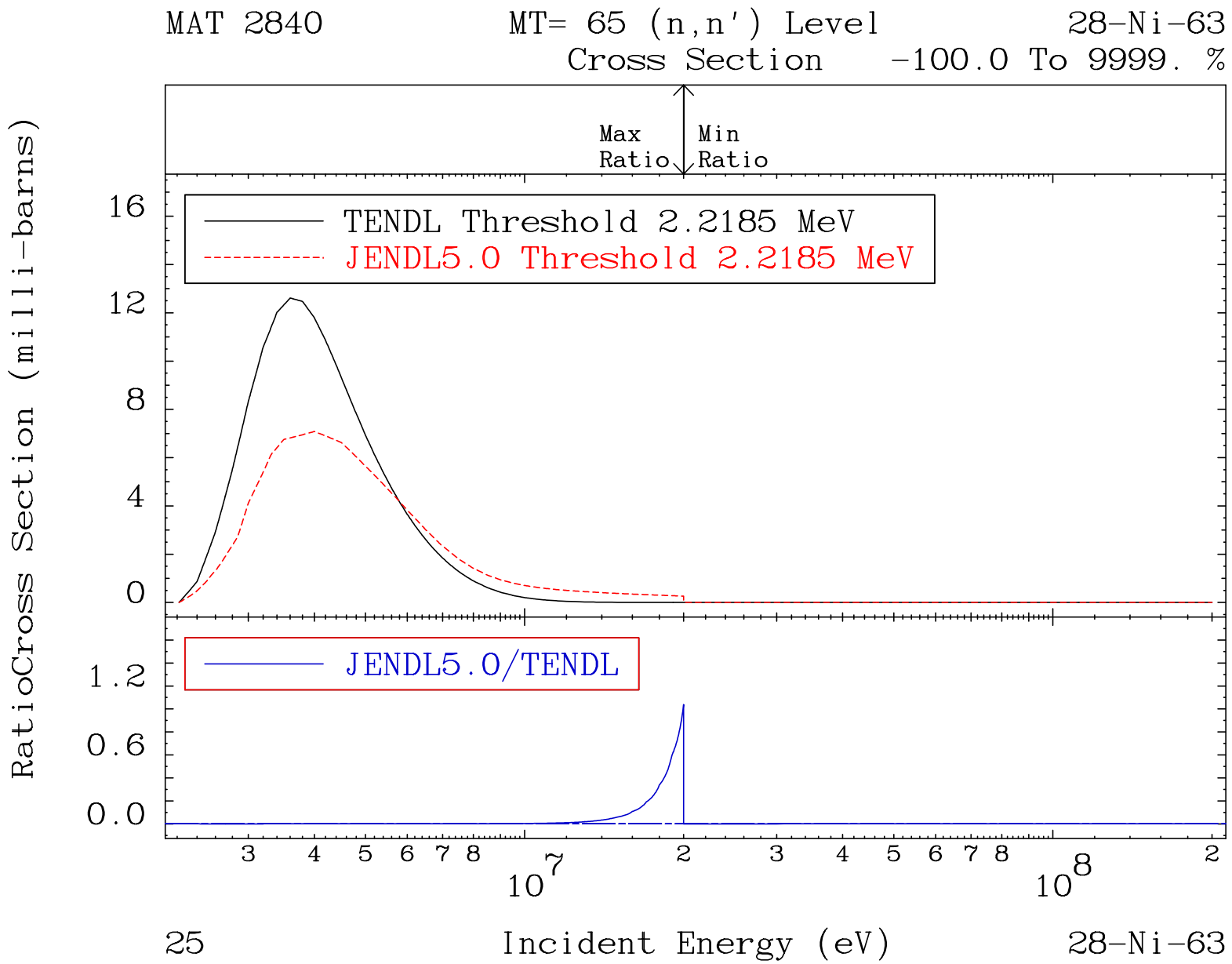

MAT 2840
MT= 60 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.6836 MeV
JENDL5.0 Threshold 1.6836 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
28-Ni-63

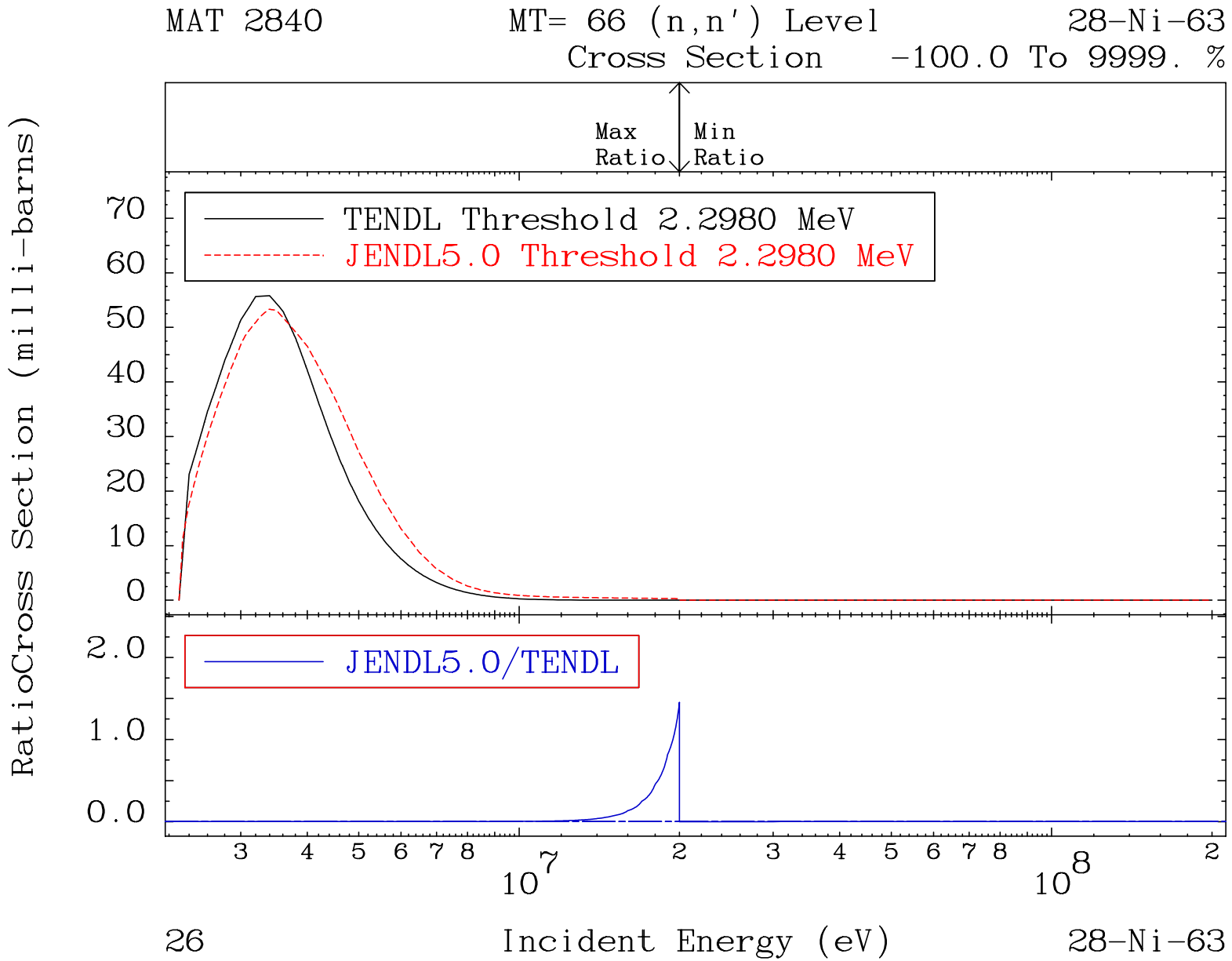

MAT 2840
MT= 61 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.7039 MeV
JENDL5.0 Threshold 1.7039 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
600
400
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
28-Ni-63

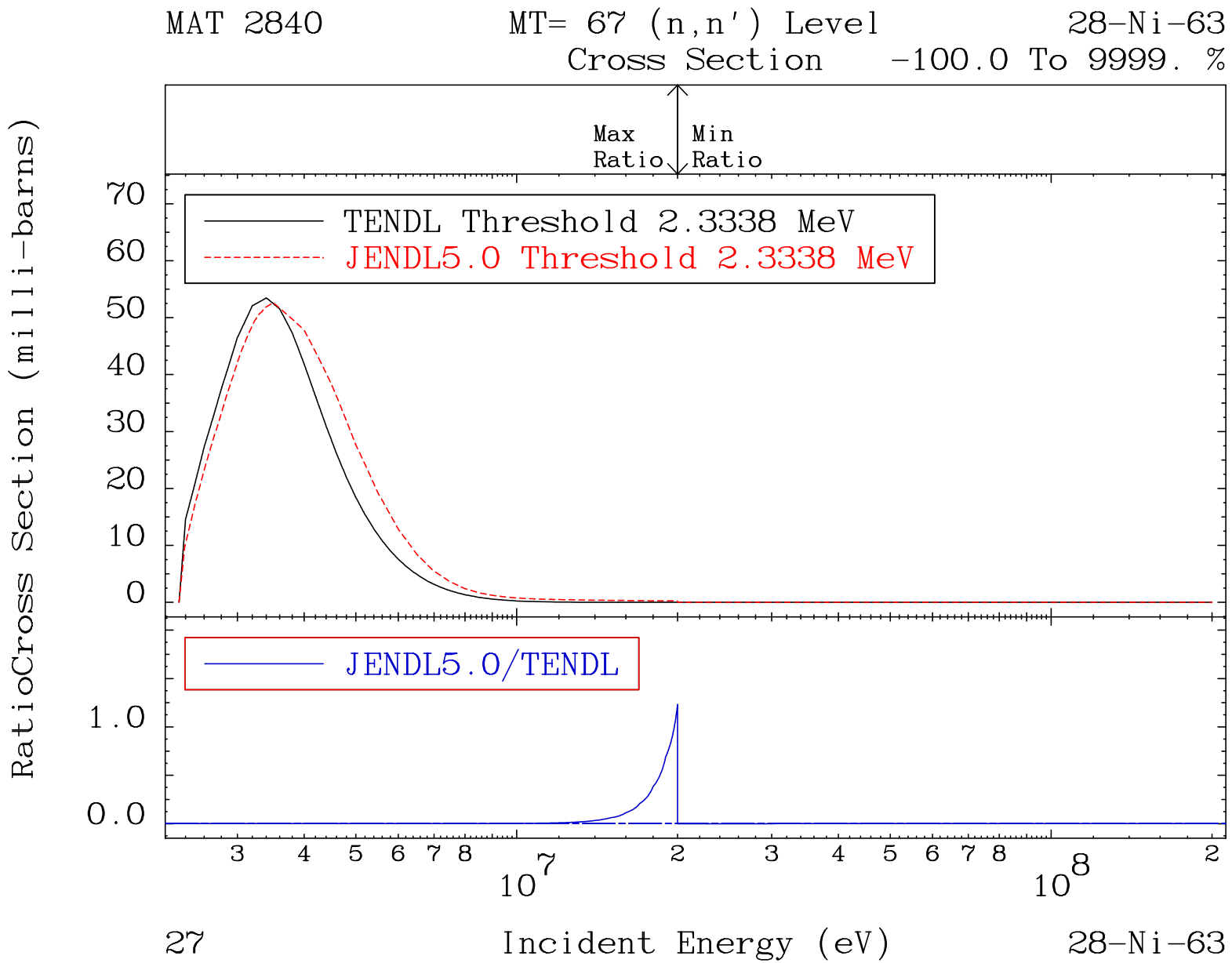

MAT 2840
MT= 62 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8156 MeV
JENDL5.0 Threshold 1.8156 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
28-Ni-63

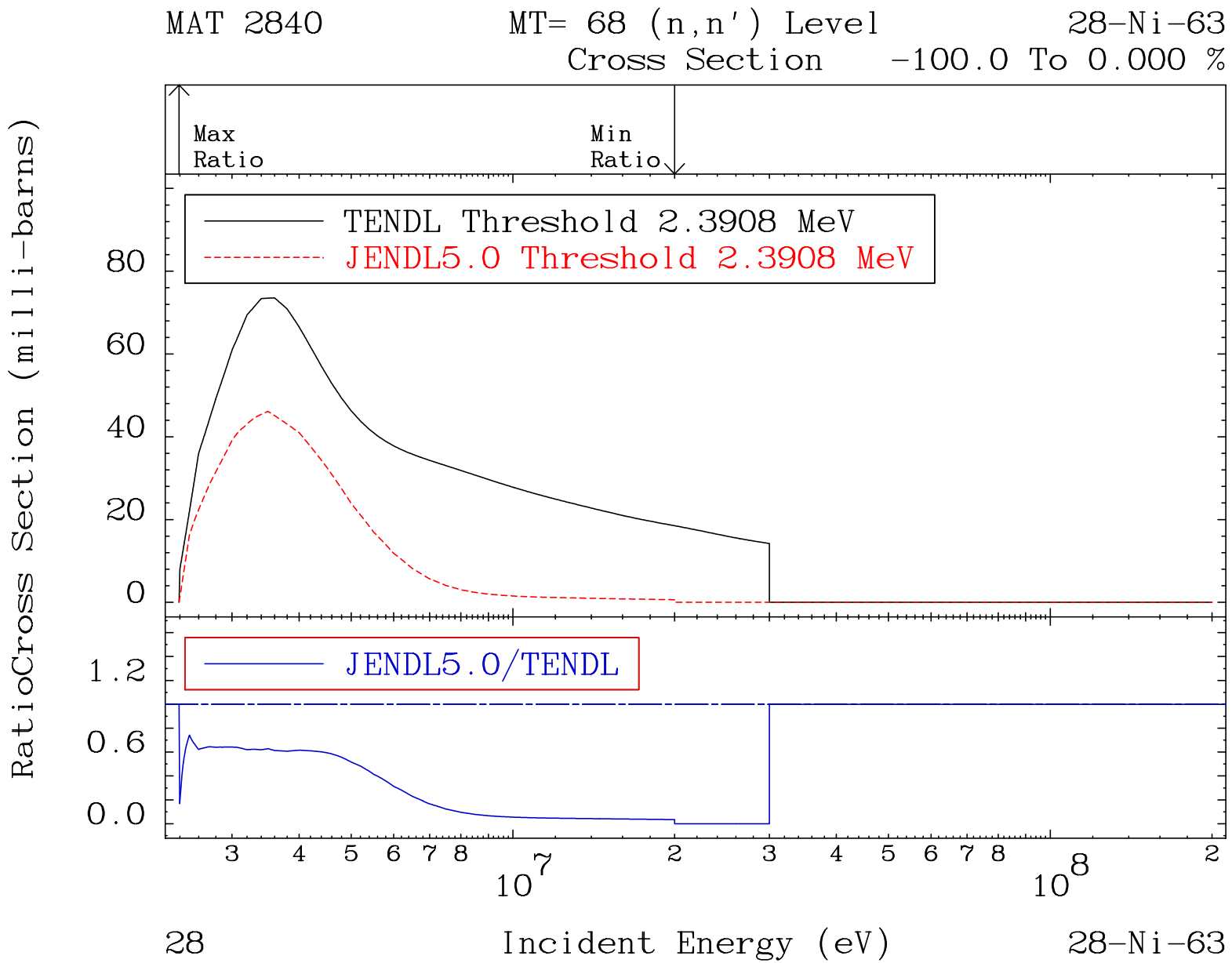

MAT 2840
MT= 63 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.9294 MeV
JENDL5.0 Threshold 1.9294 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
28-Ni-63

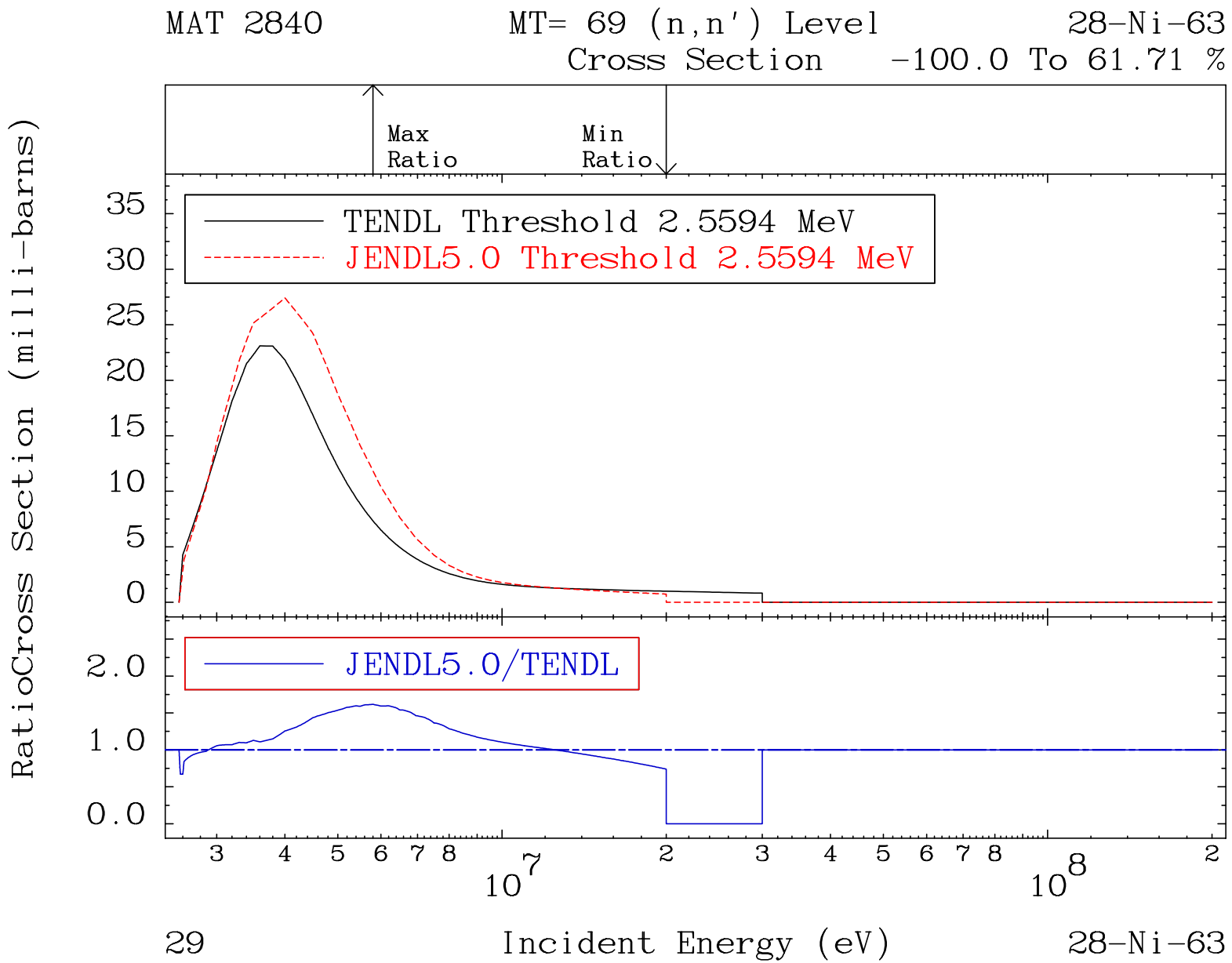

MAT 2840
MT= 64 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.1834 MeV
JENDL5.0 Threshold 2.1834 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
28-Ni-63

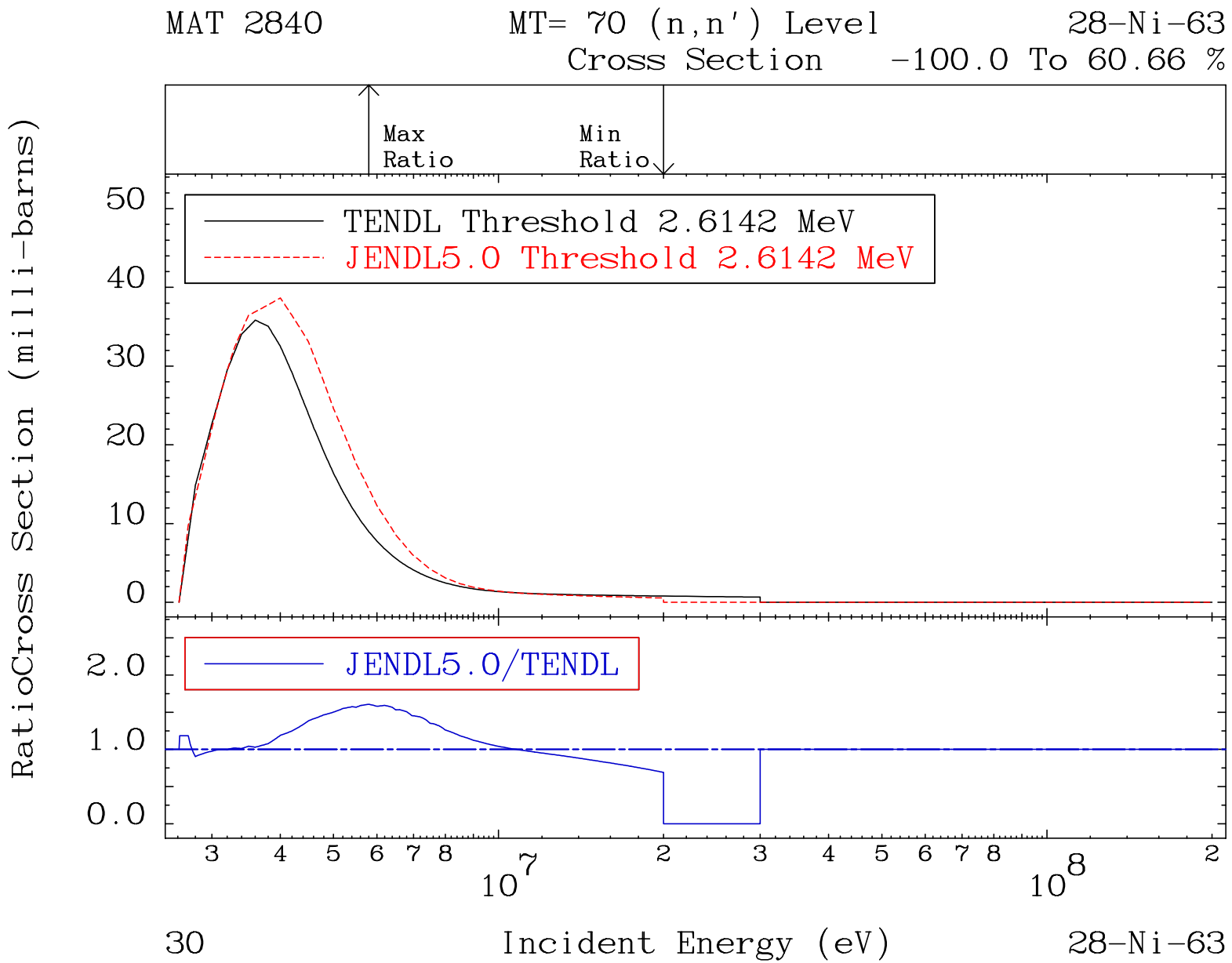

MAT 2840
MT= 65 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.2185 MeV
JENDL5.0 Threshold 2.2185 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
25
28-Ni-63

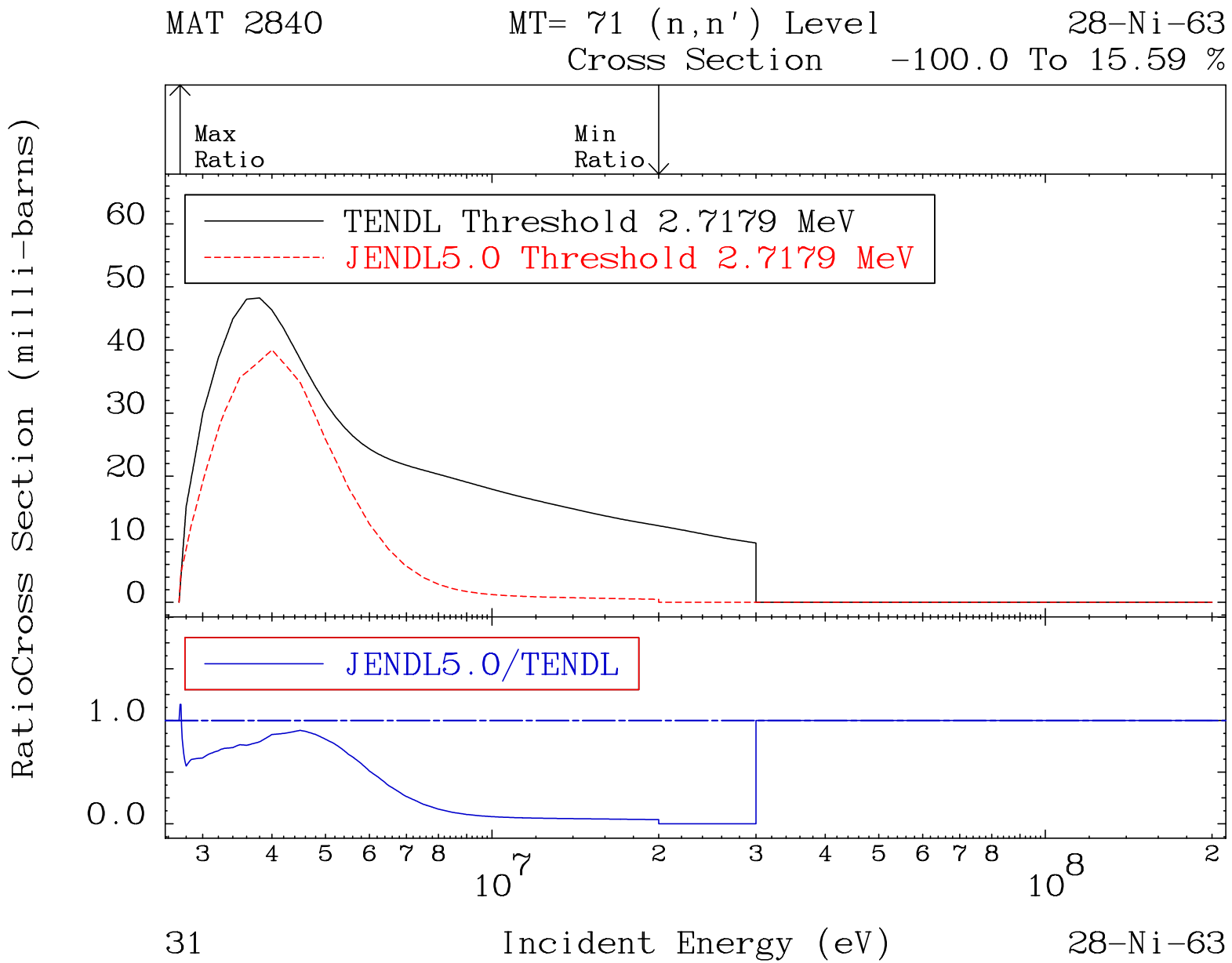

MAT 2840
MT= 66 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.2980 MeV
JENDL5.0 Threshold 2.2980 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
28-Ni-63

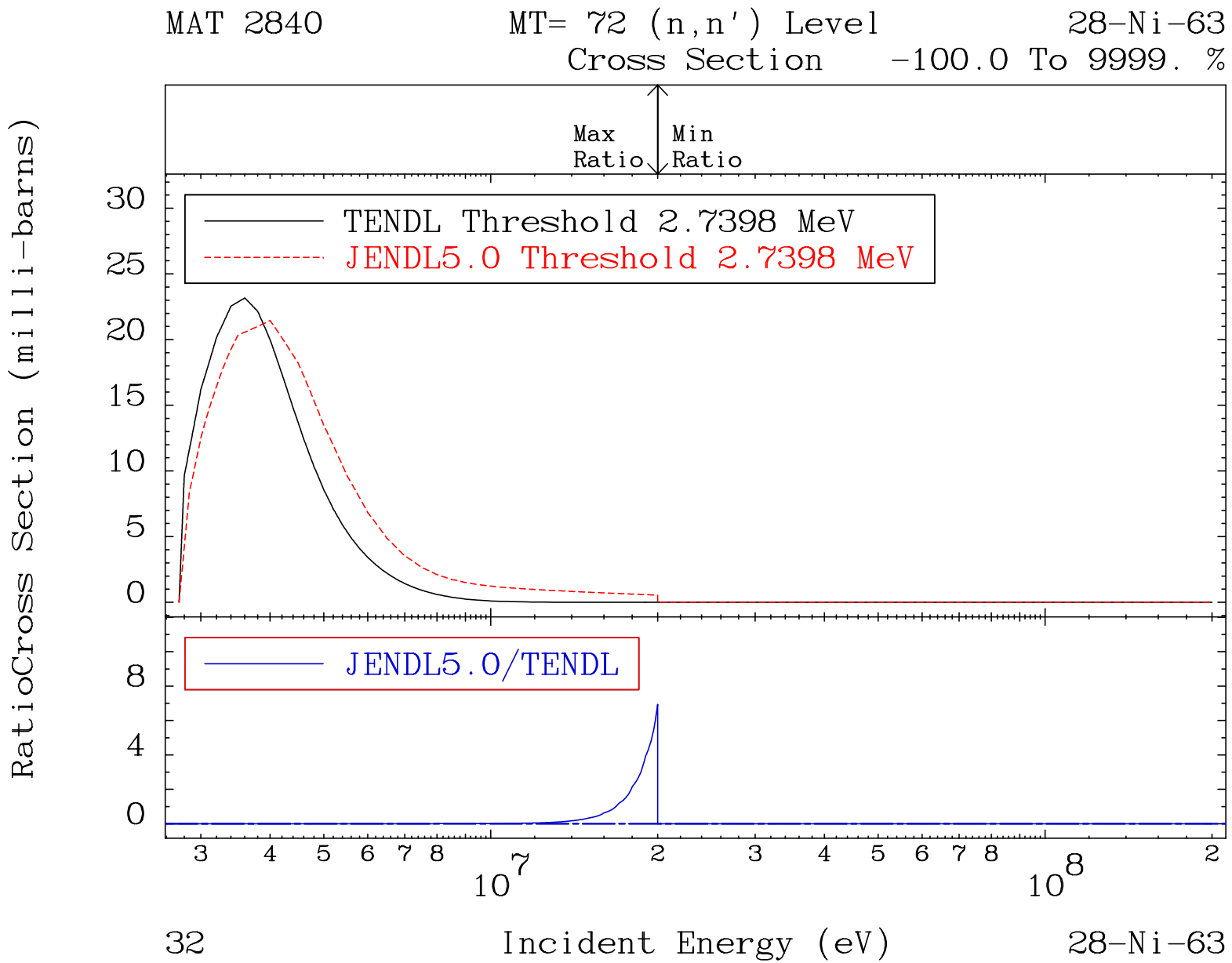

MAT 2840
MT= 67 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.3338 MeV
JENDL5.0 Threshold 2.3338 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
28-Ni-63

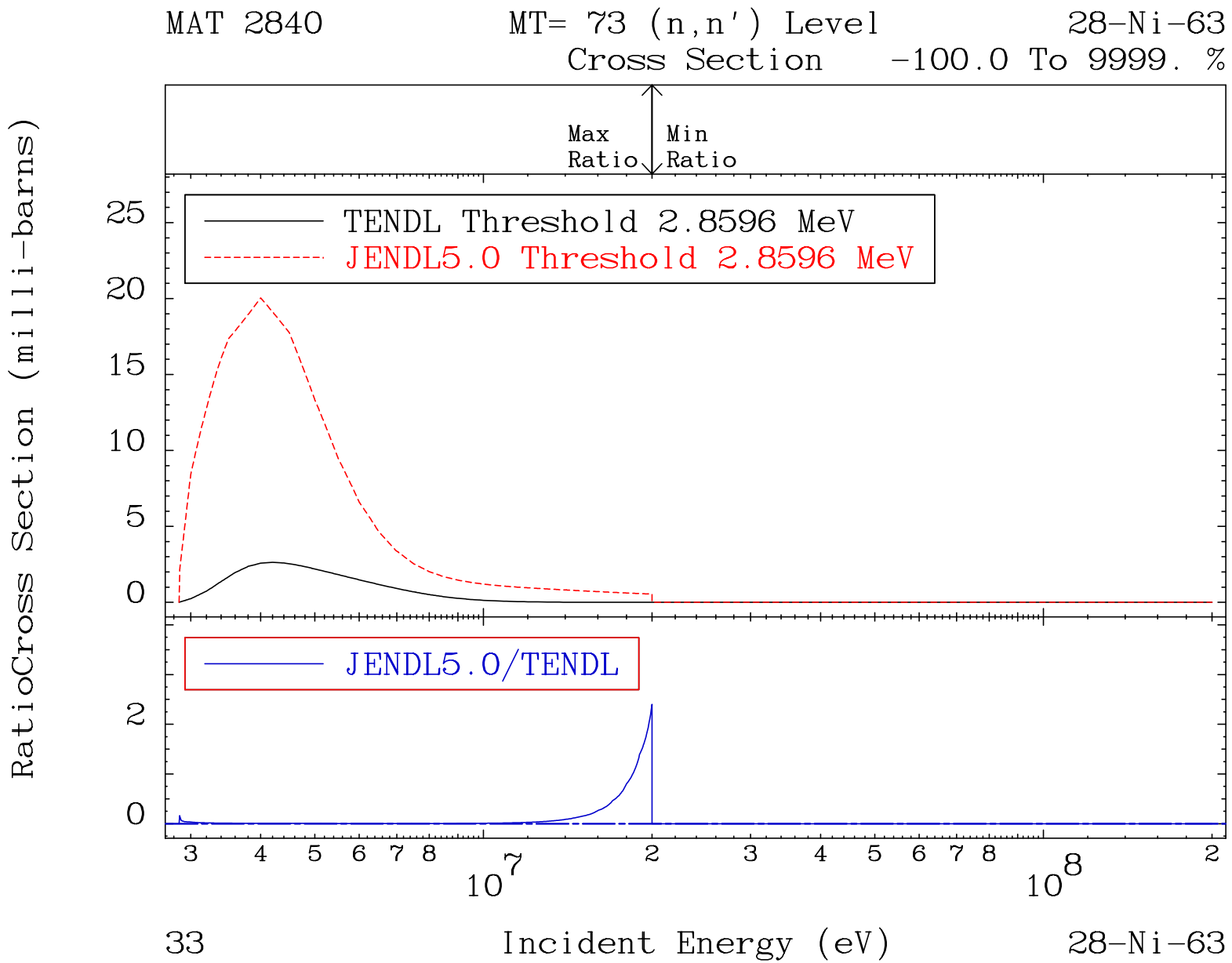

MAT 2840
MT= 68 (n,n') Level
28-Ni-63
Cross Section -100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 2.3908 MeV
JENDL5.0 Threshold 2.3908 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
28-Ni-63

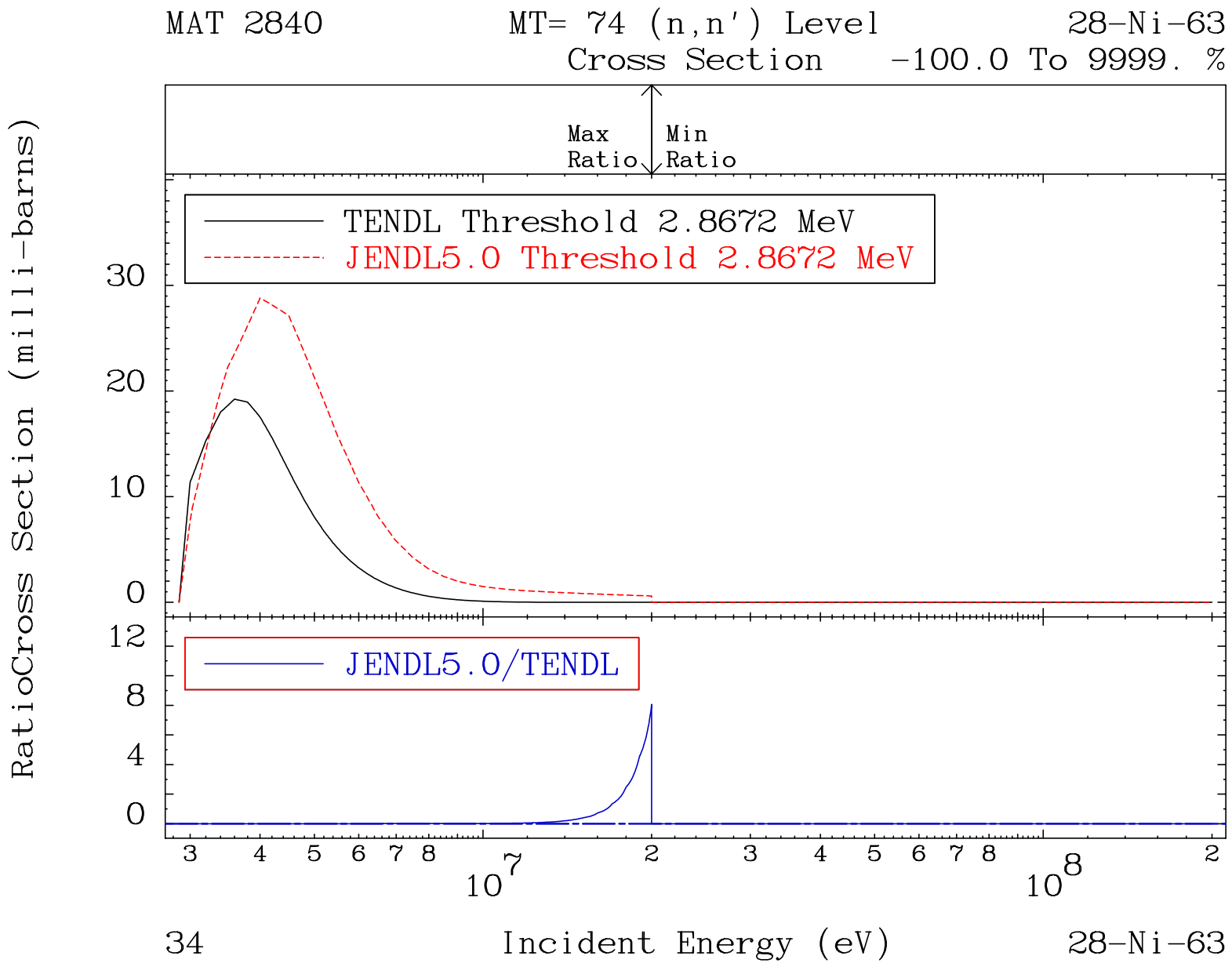

MAT 2840
MT= 69 (n,n') Level
28-Ni-63
Cross Section -100.0 To 61.71 %
Max Ratio
Min Ratio
TENDL Threshold 2.5594 MeV
JENDL5.0 Threshold 2.5594 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
28-Ni-63

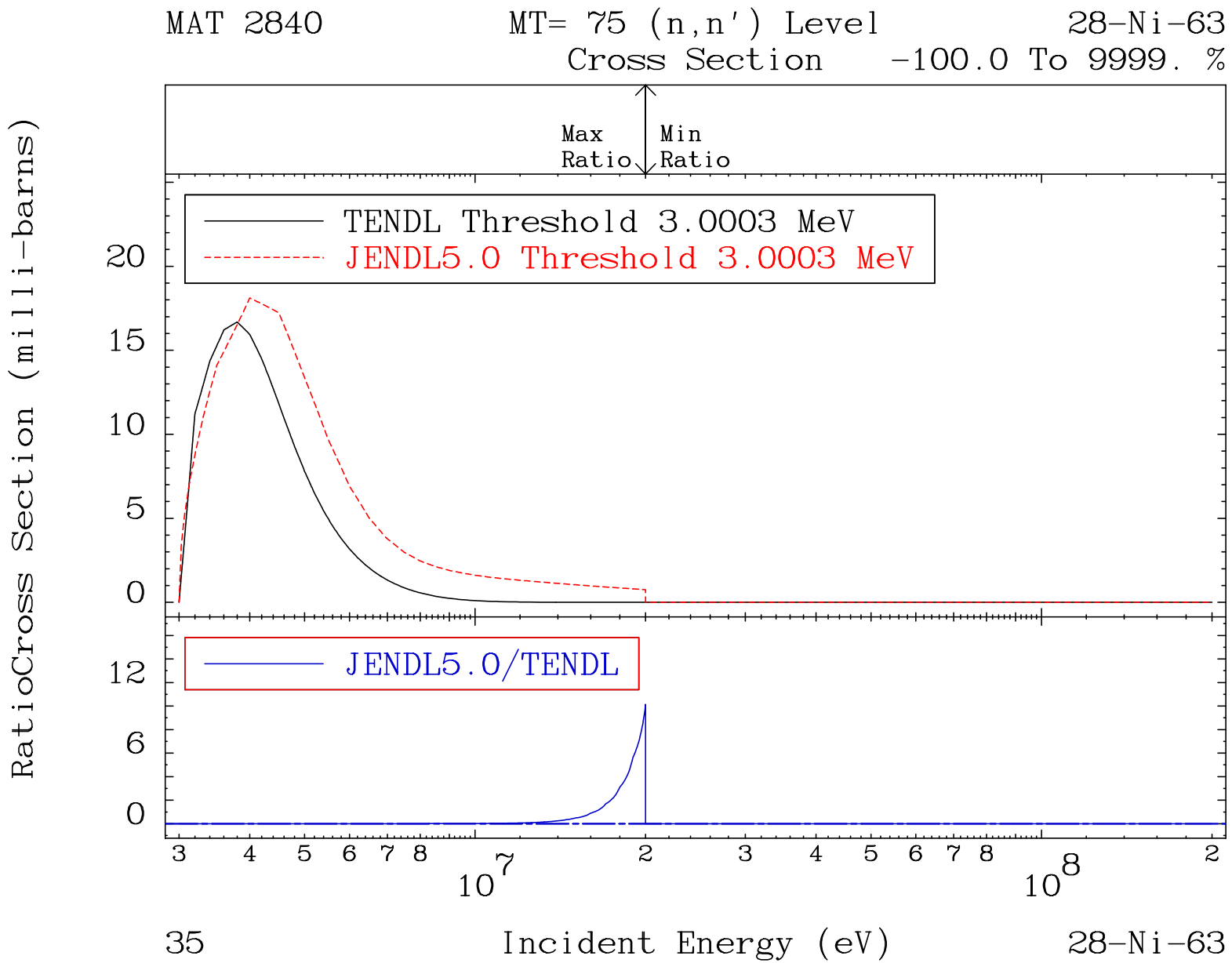

MAT 2840
MT= 70 (n,n') Level
28-Ni-63
Cross Section
-100.0 To 60.66 %
Max Ratio
Min Ratio
TENDL Threshold 2.6142 MeV
JENDL5.0 Threshold 2.6142 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
28-Ni-63

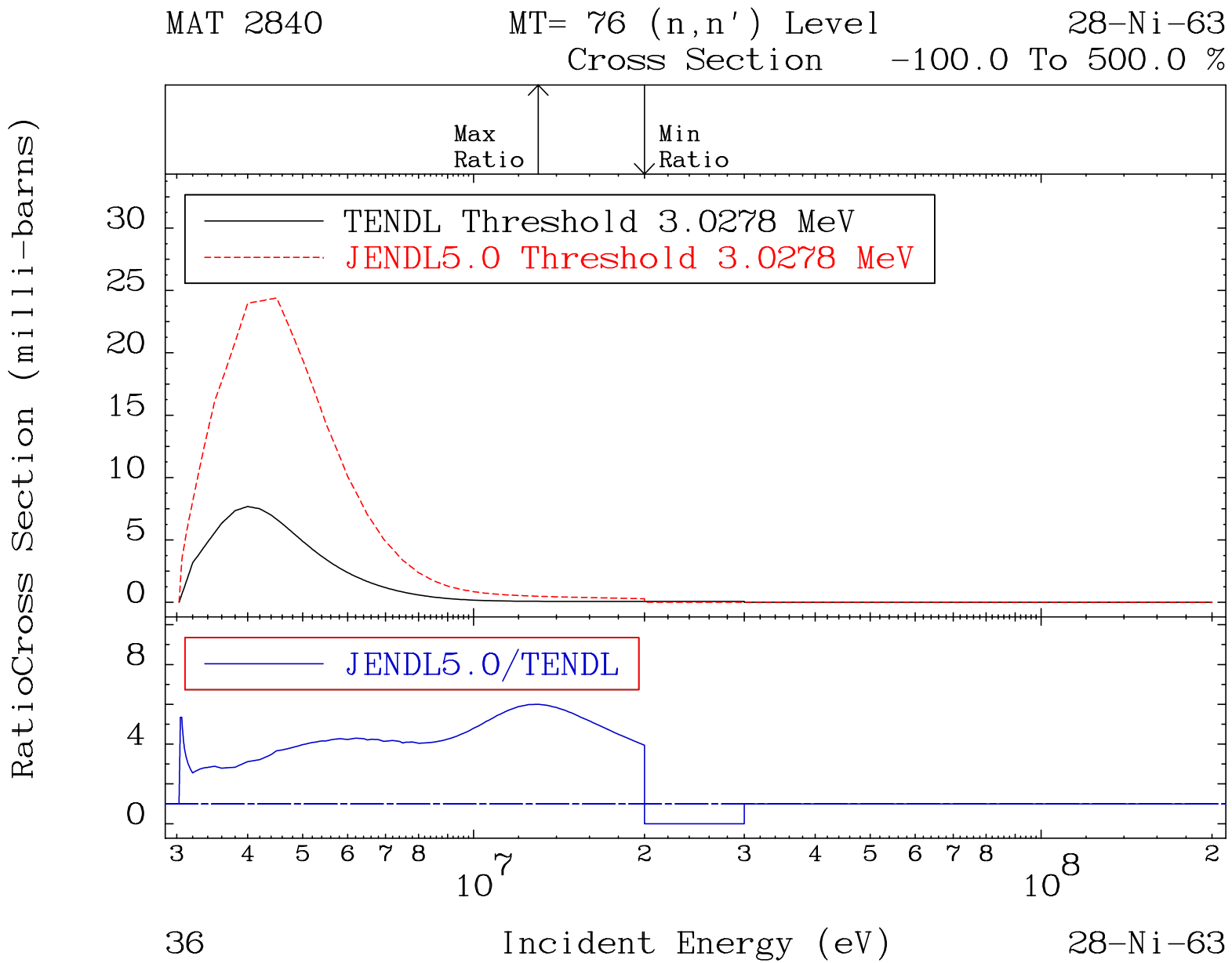

MAT 2840
MT= 71 (n,n') Level
28-Ni-63
Cross Section -100.0 To 15.59 %
Max Ratio
Min Ratio
TENDL Threshold 2.7179 MeV
JENDL5.0 Threshold 2.7179 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
28-Ni-63

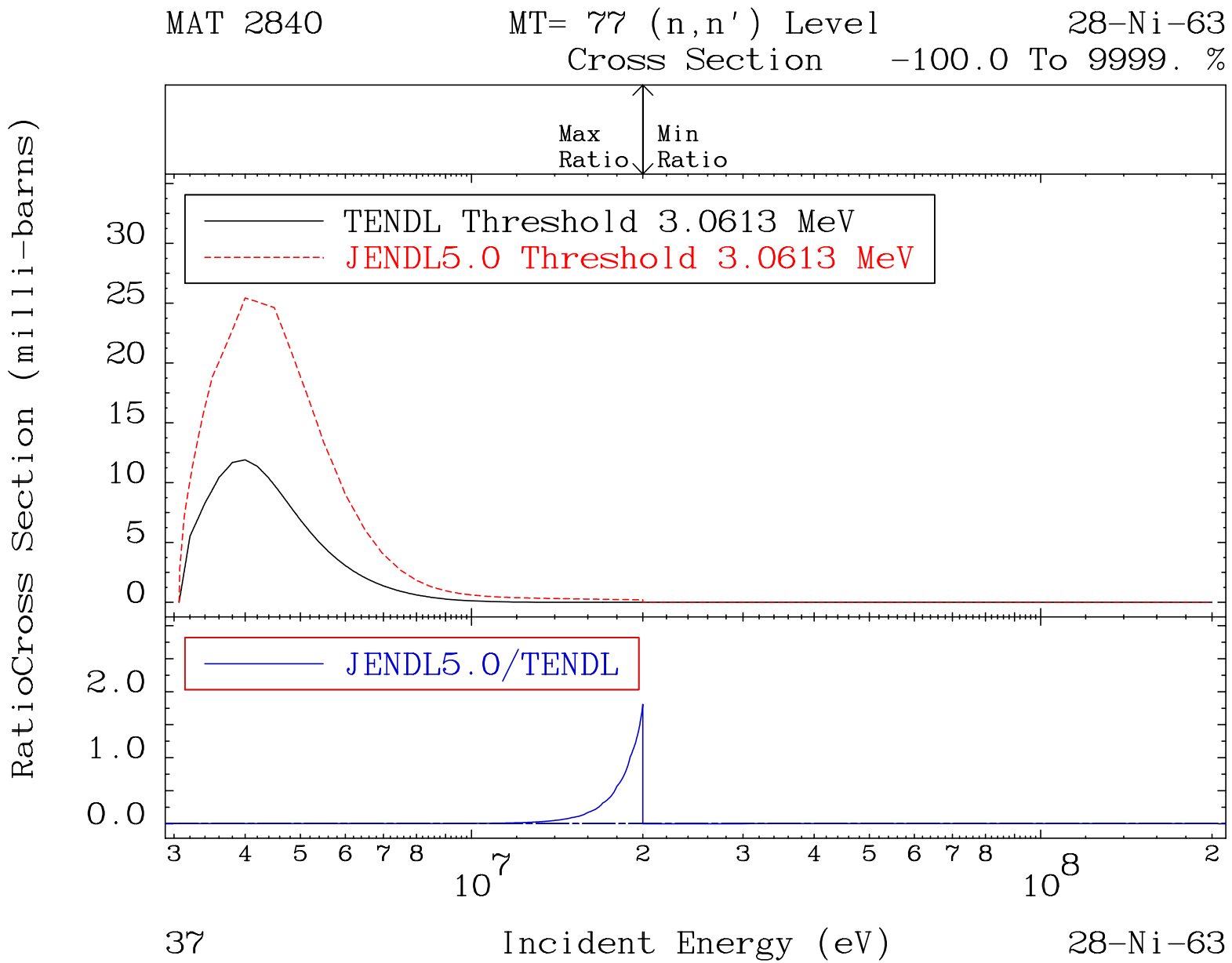

MAT 2840
MT= 72 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7398 MeV
JENDL5.0 Threshold 2.7398 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
28-Ni-63

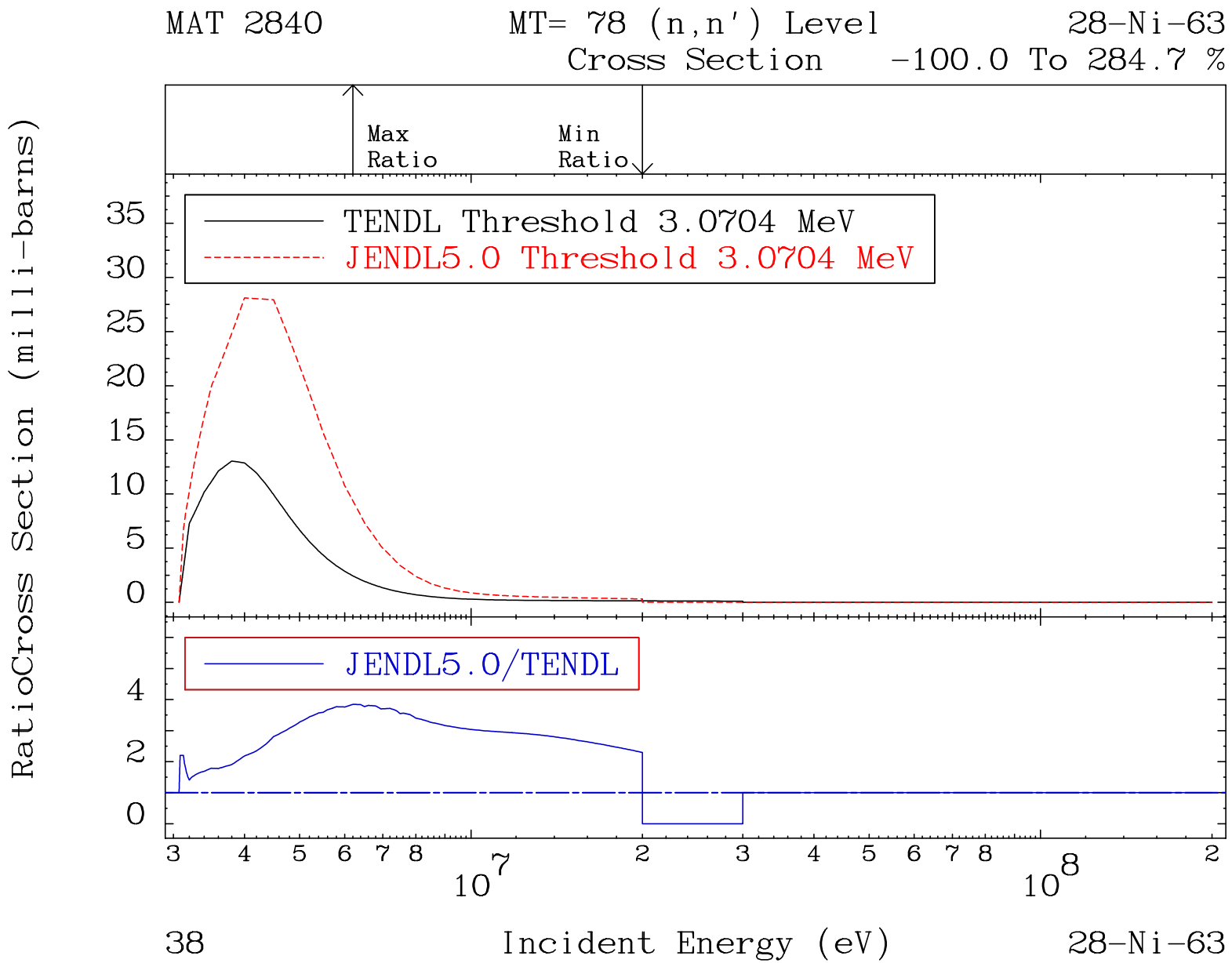

MAT 2840
MT= 73 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8596 MeV
JENDL5.0 Threshold 2.8596 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
28-Ni-63

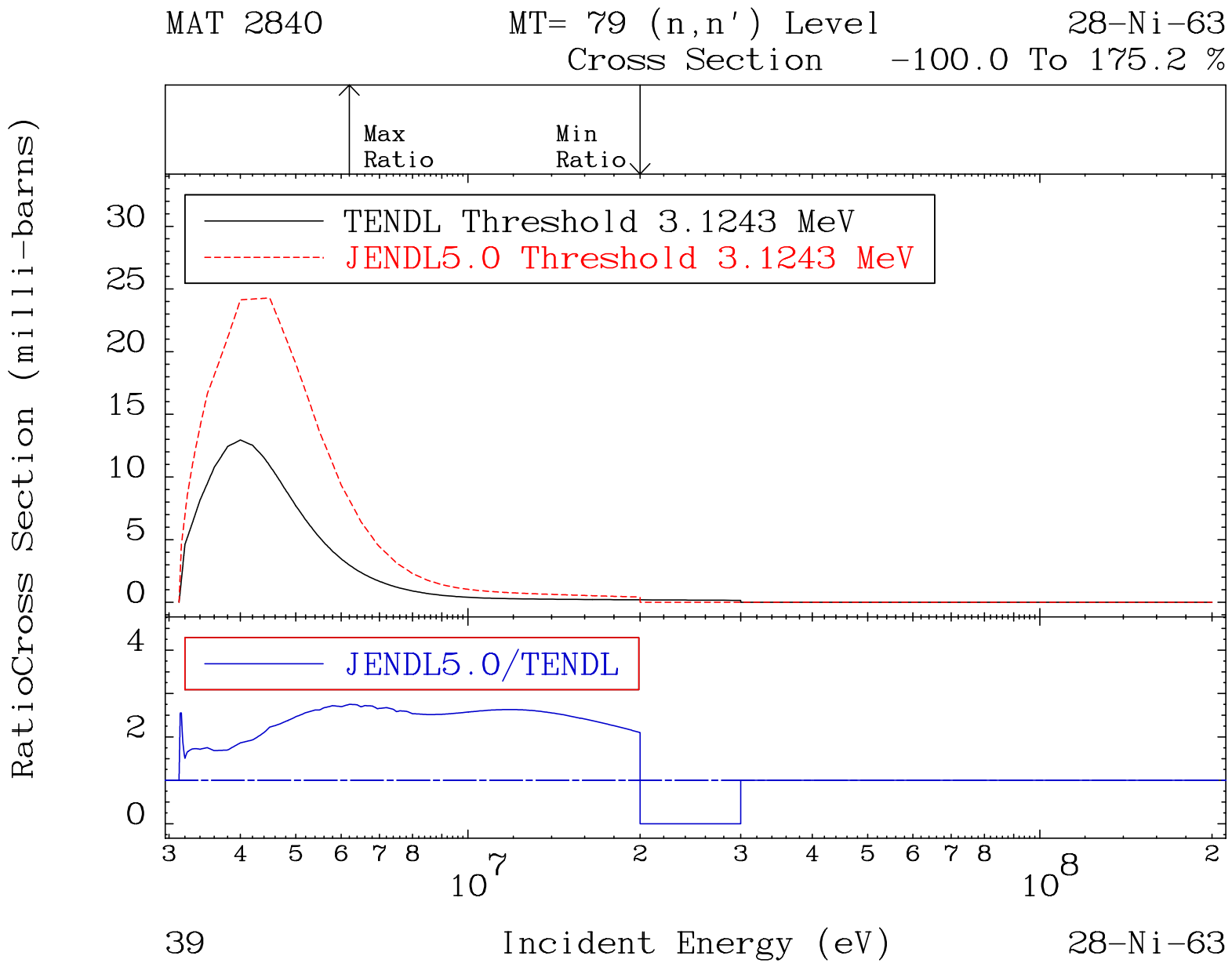

MAT 2840
MT= 74 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8672 MeV
JENDL5.0 Threshold 2.8672 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
12
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
28-Ni-63

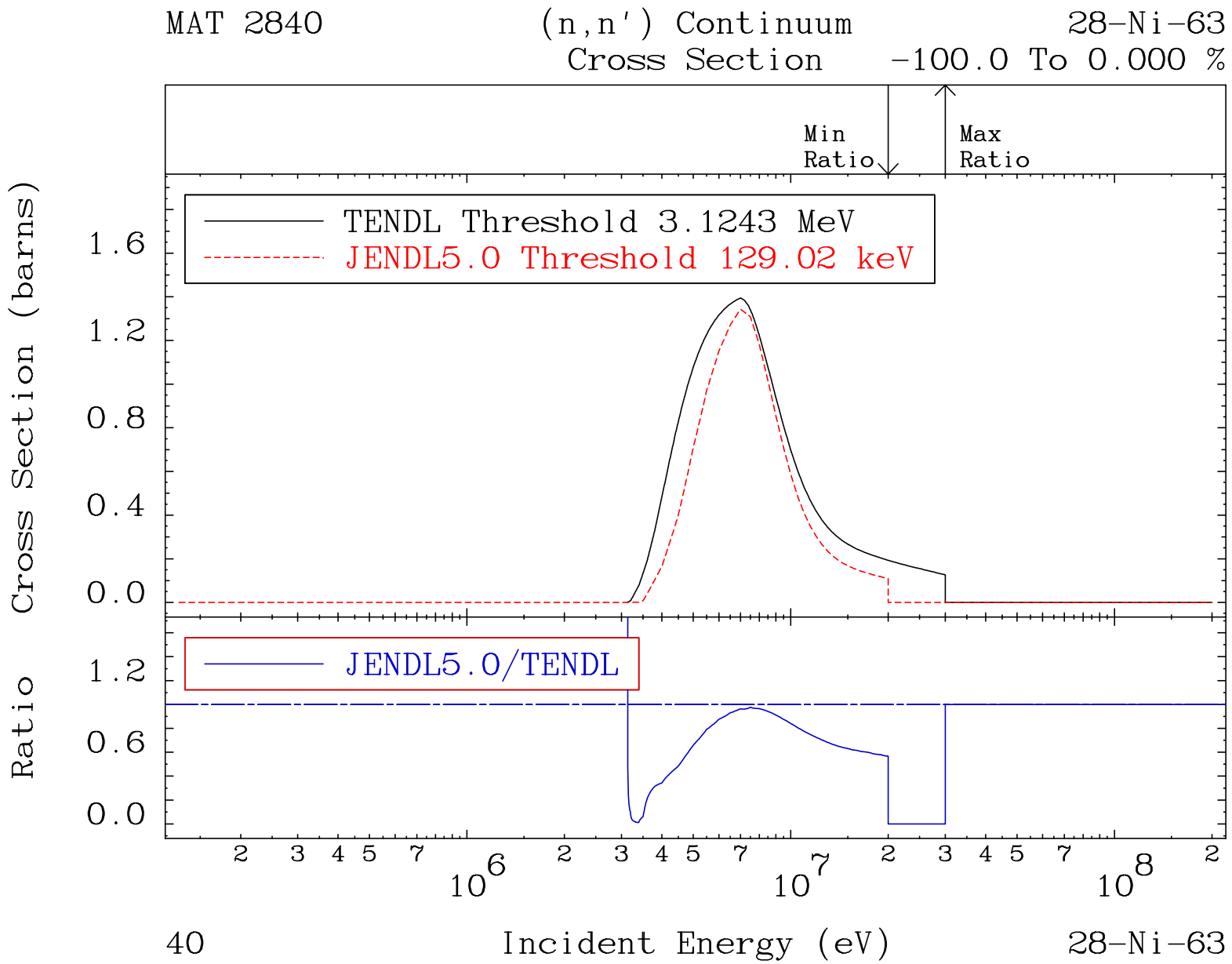

MAT 2840
MT= 75 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.0003 MeV
JENDL5.0 Threshold 3.0003 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
12
6
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
28-Ni-63

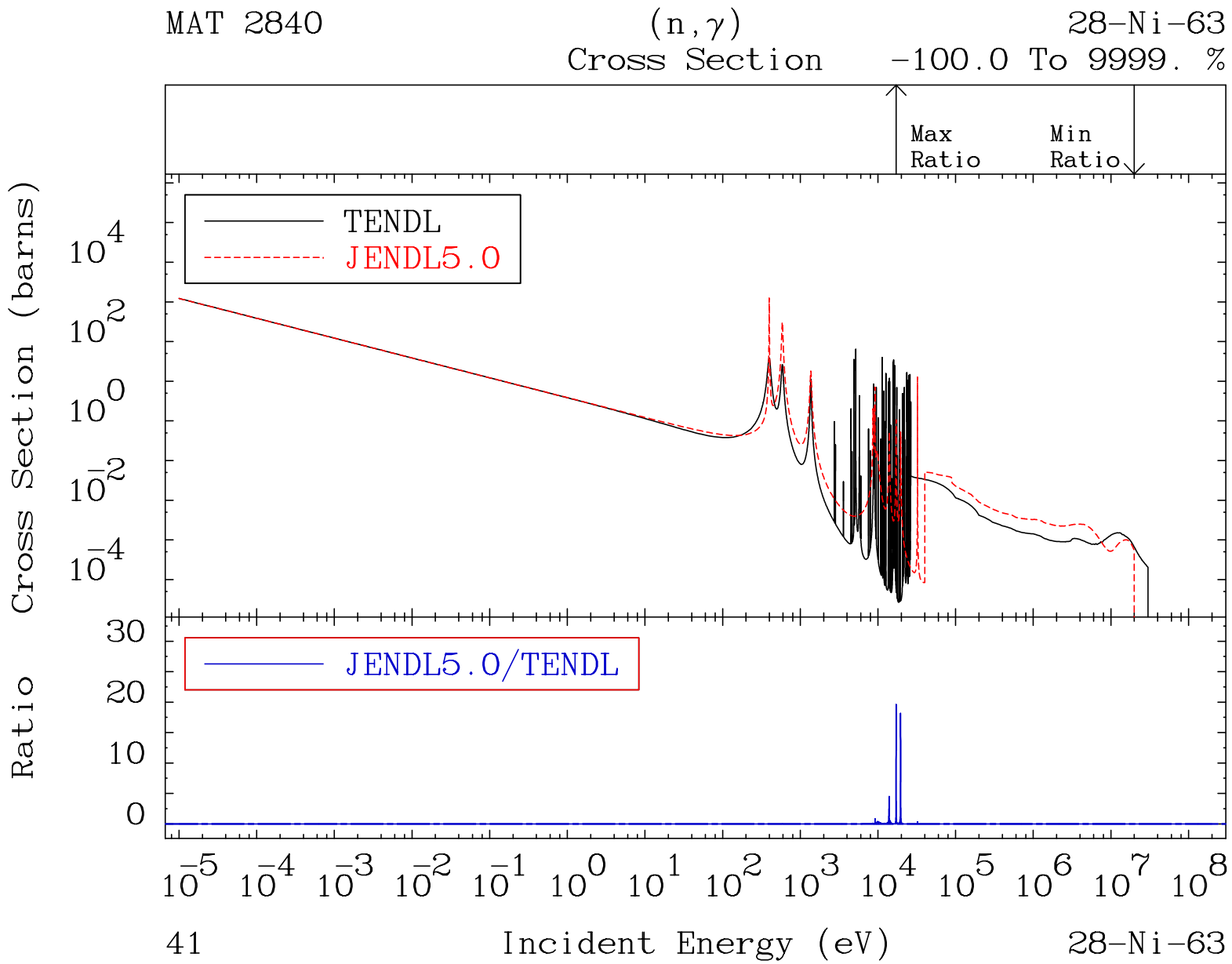

MAT 2840
MT= 76 (n,n') Level
28-Ni-63
Cross Section -100.0 To 500.0 %
Max Ratio
Min Ratio
TENDL Threshold 3.0278 MeV
JENDL5.0 Threshold 3.0278 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
28-Ni-63

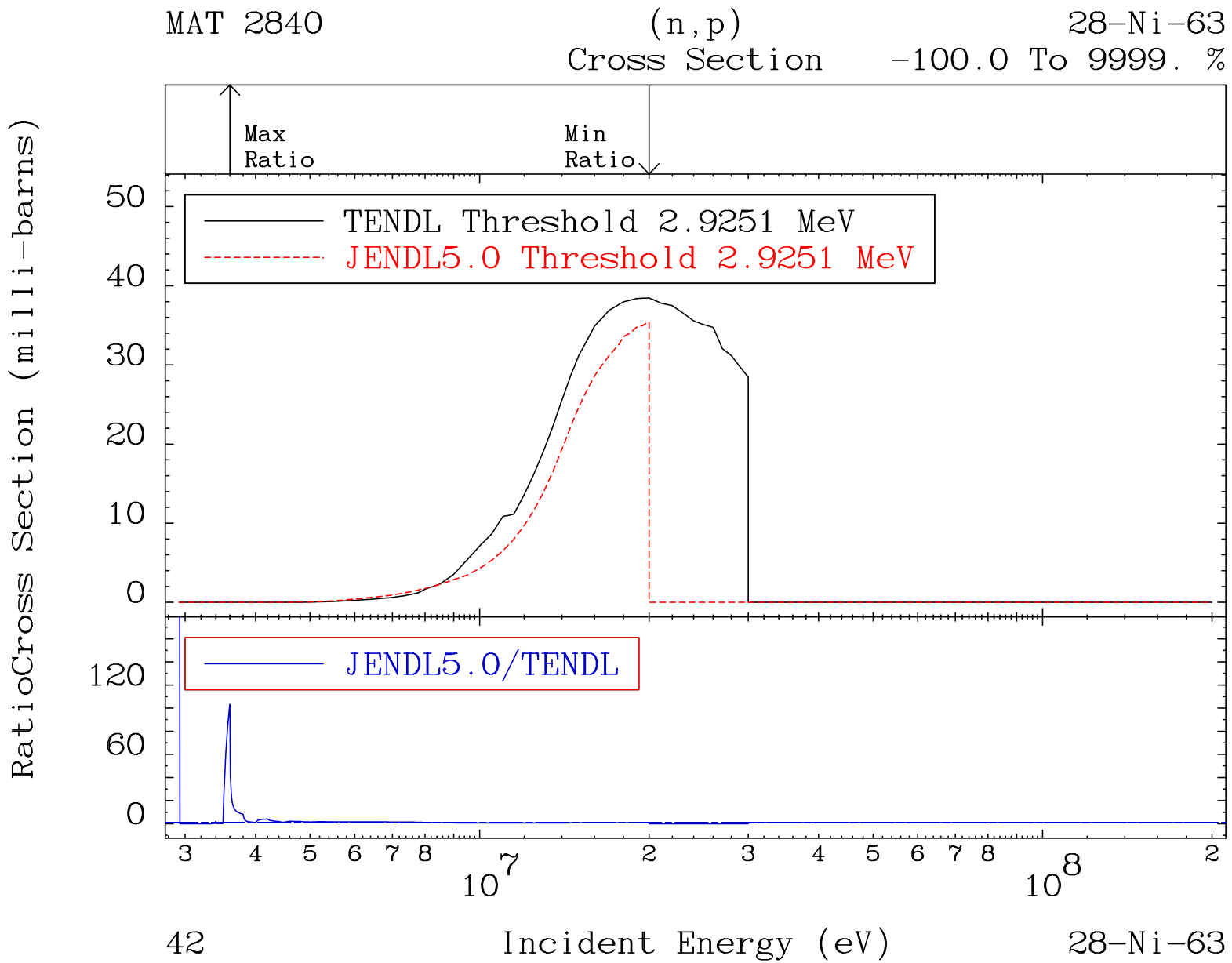

MAT 2840
MT= 77 (n,n') Level
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.0613 MeV
JENDL5.0 Threshold 3.0613 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
28-Ni-63

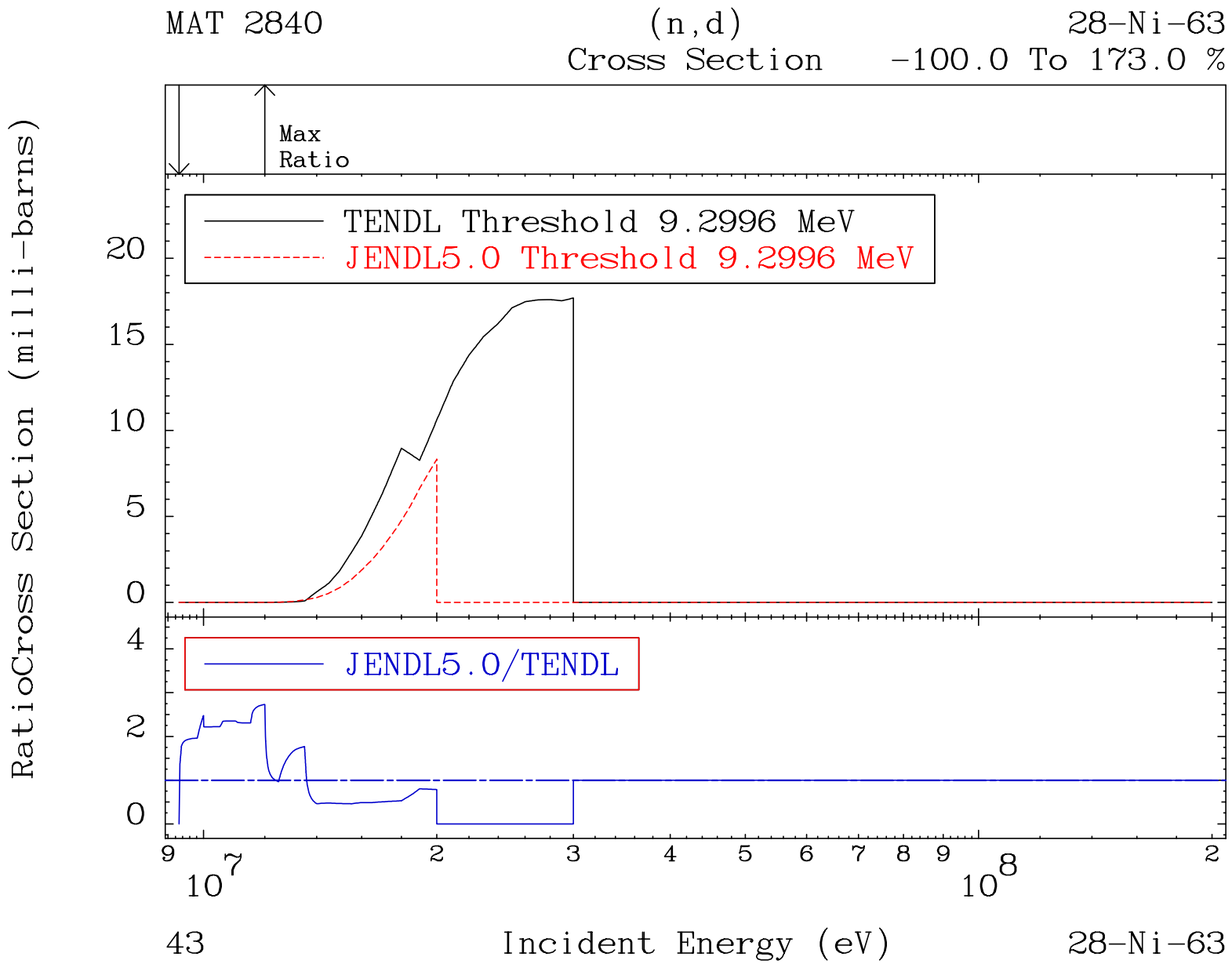

MAT 2840
MT= 78 (n,n') Level
28-Ni-63
Cross Section -100.0 To 284.7 %
Max Ratio
Min Ratio
TENDL Threshold 3.0704 MeV
JENDL5.0 Threshold 3.0704 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
38
28-Ni-63

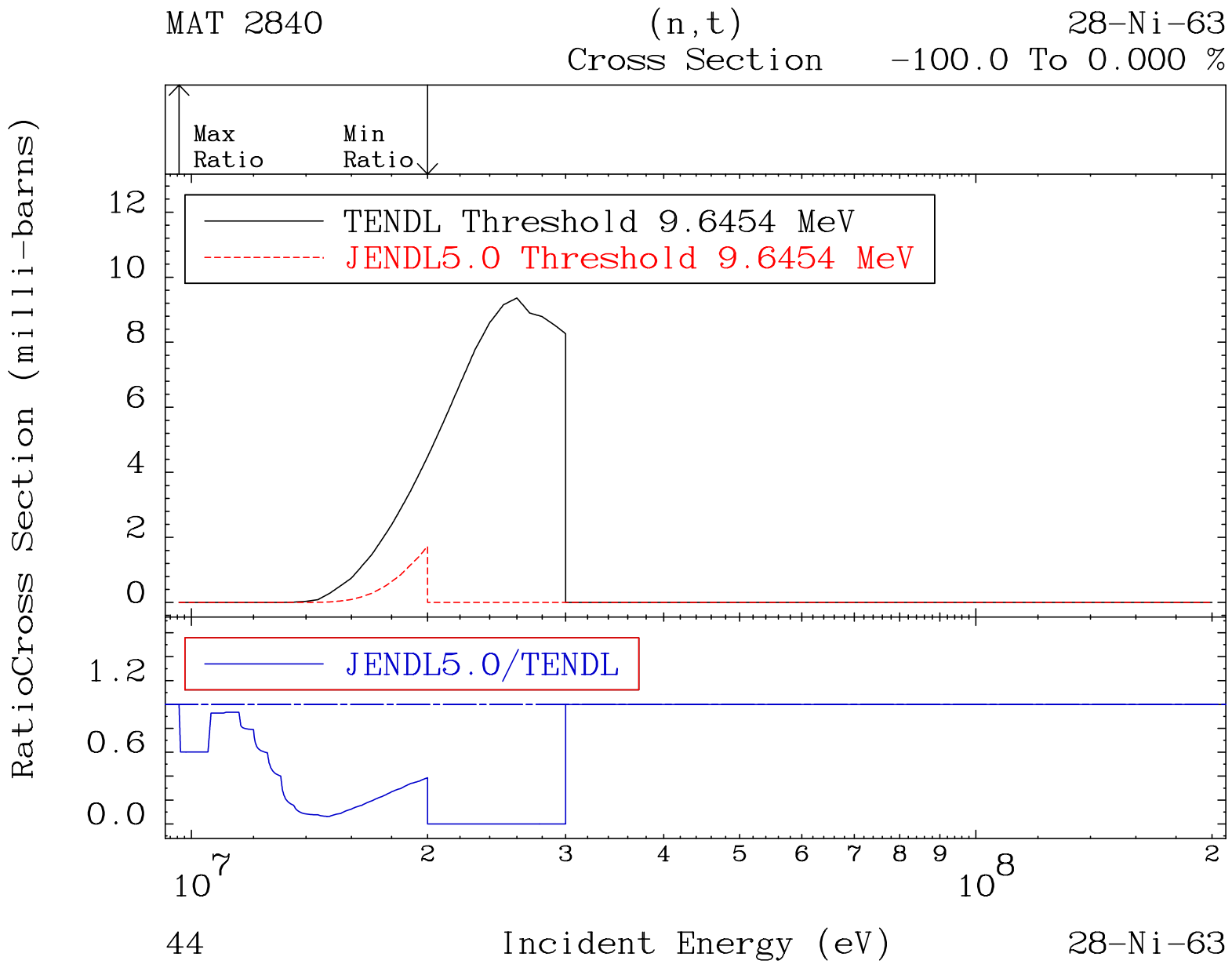

MAT 2840
MT= 79 (n,n') Level
28-Ni-63
Cross Section -100.0 To 175.2 %
Max Ratio
Min Ratio
TENDL Threshold 3.1243 MeV
JENDL5.0 Threshold 3.1243 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
28-Ni-63

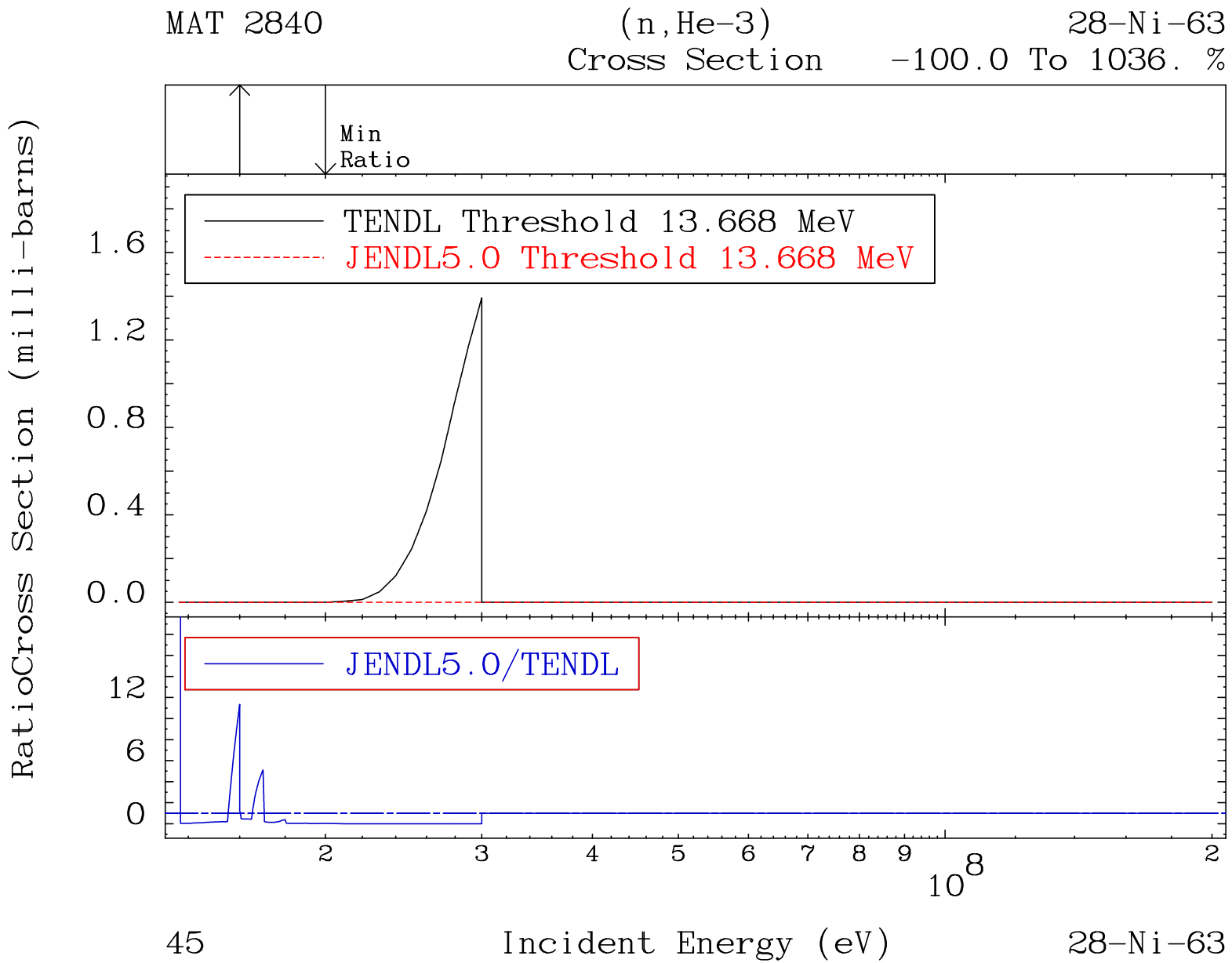

MAT 2840
(n,n') Continuum
Cross Section
28-Ni-63
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 3.1243 MeV
JENDL5.0 Threshold 129.02 keV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
40
Incident Energy (eV)
28-Ni-63

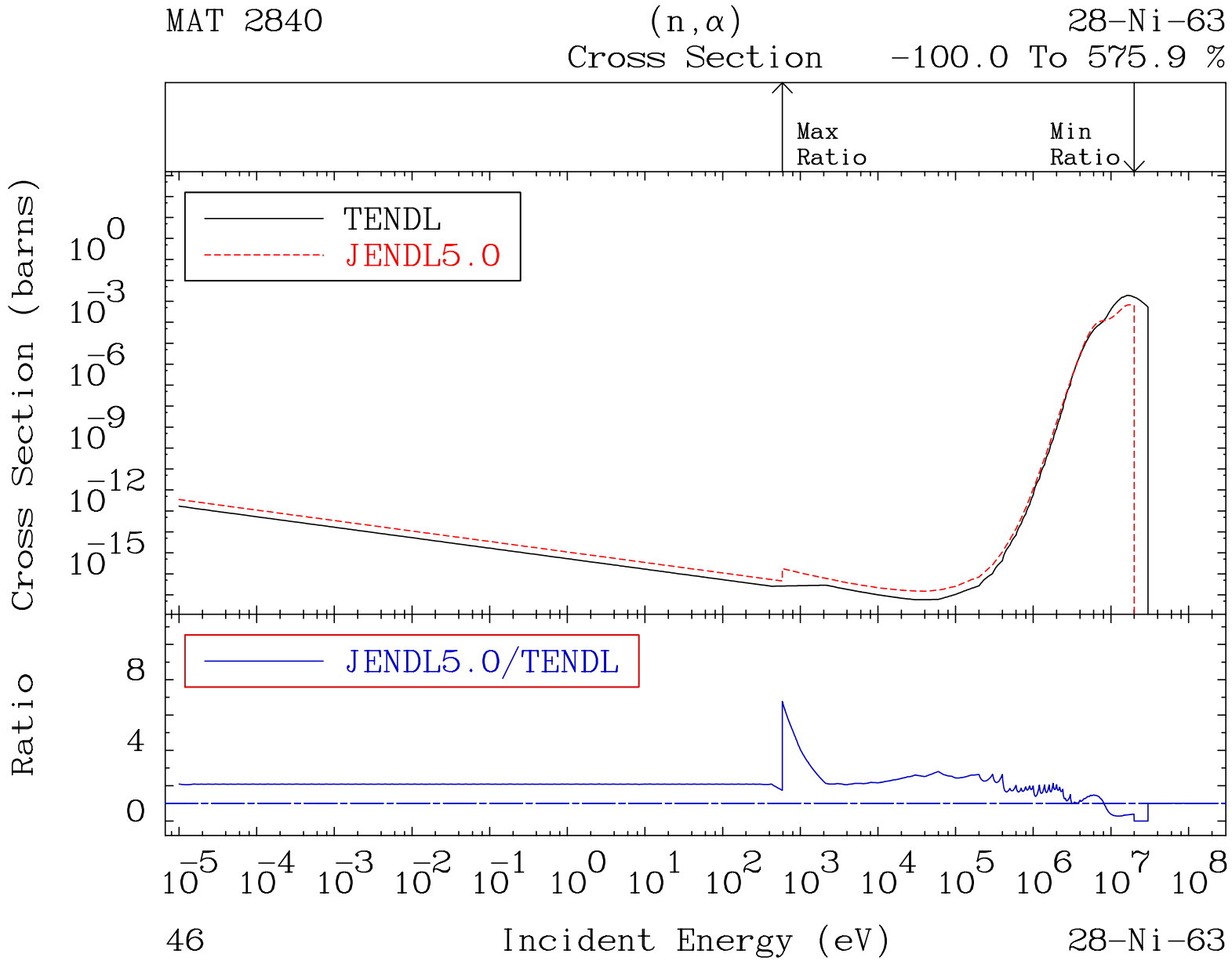

MAT 2840
(n,γ)
Cross Section
28-Ni-63
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
28-Ni-63

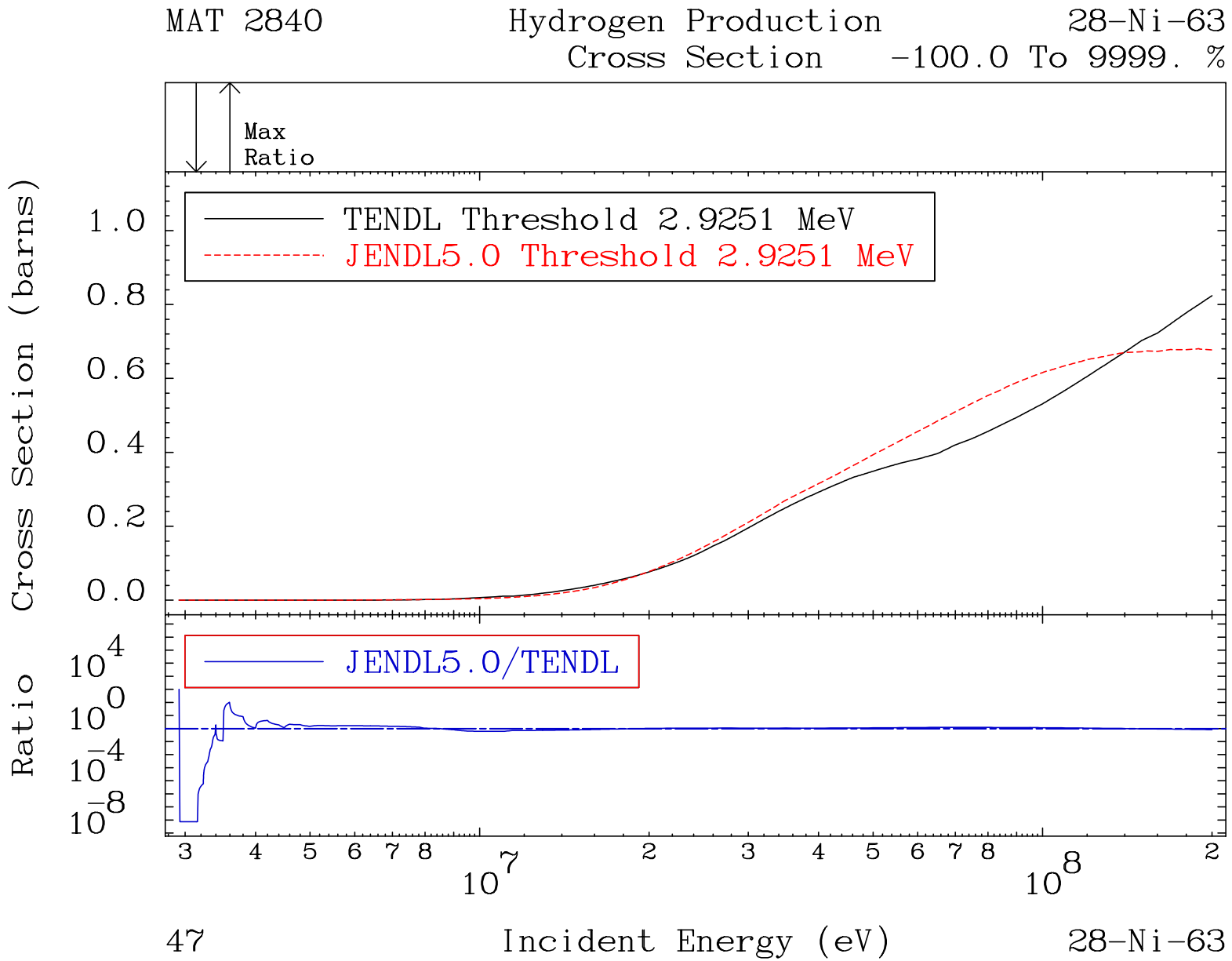

MAT 2840
(n,p)
28-Ni-63
Cross Section
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 2.9251 MeV
JENDL5.0 Threshold 2.9251 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
120
60
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
28-Ni-63

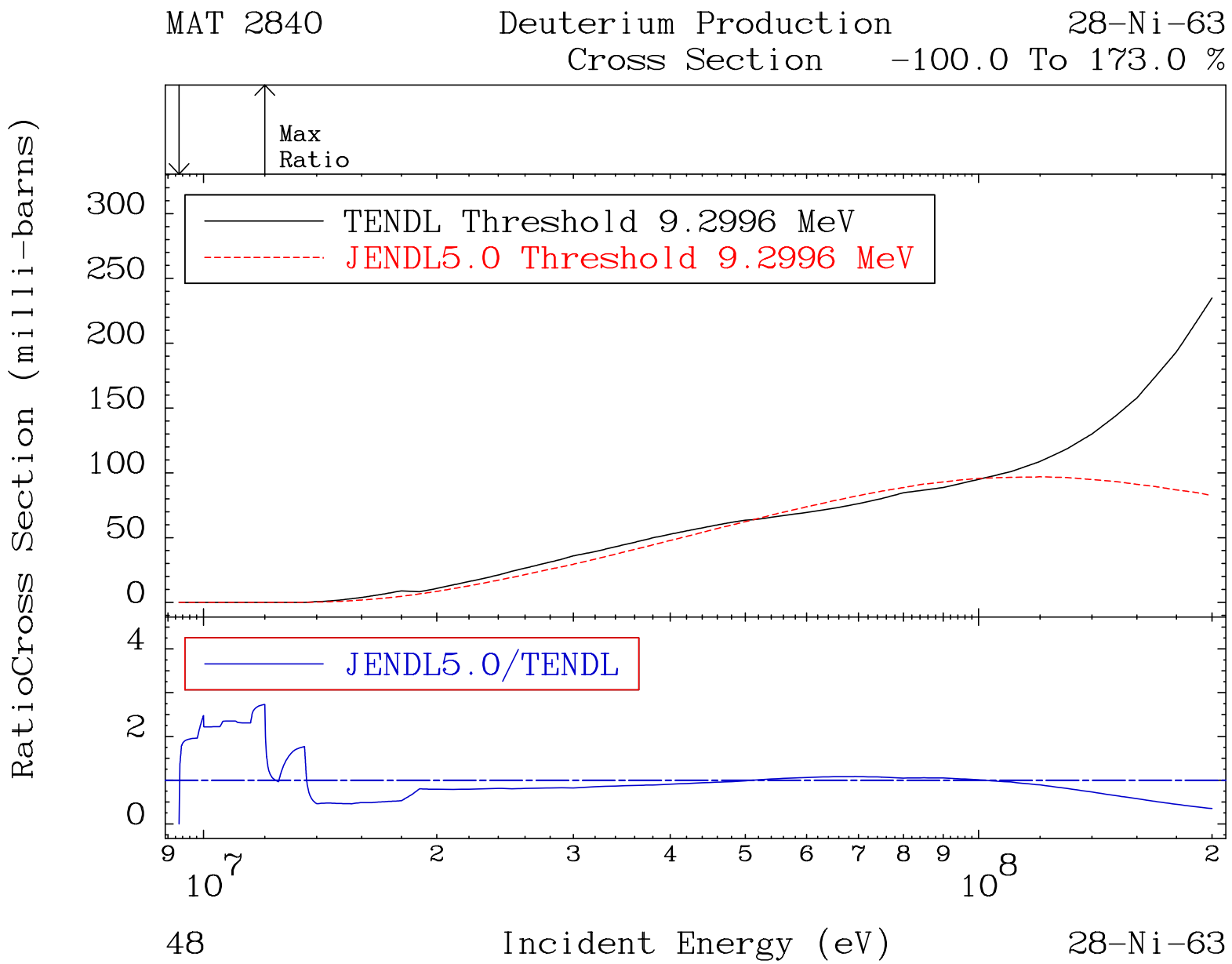

MAT 2840
(n,d)
28-Ni-63
Cross Section
-100.0 To 173.0 %
Max
Ratio
TENDL Threshold 9.2996 MeV
JENDL5.0 Threshold 9.2996 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
4
2
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
43
Incident Energy (eV)
28-Ni-63

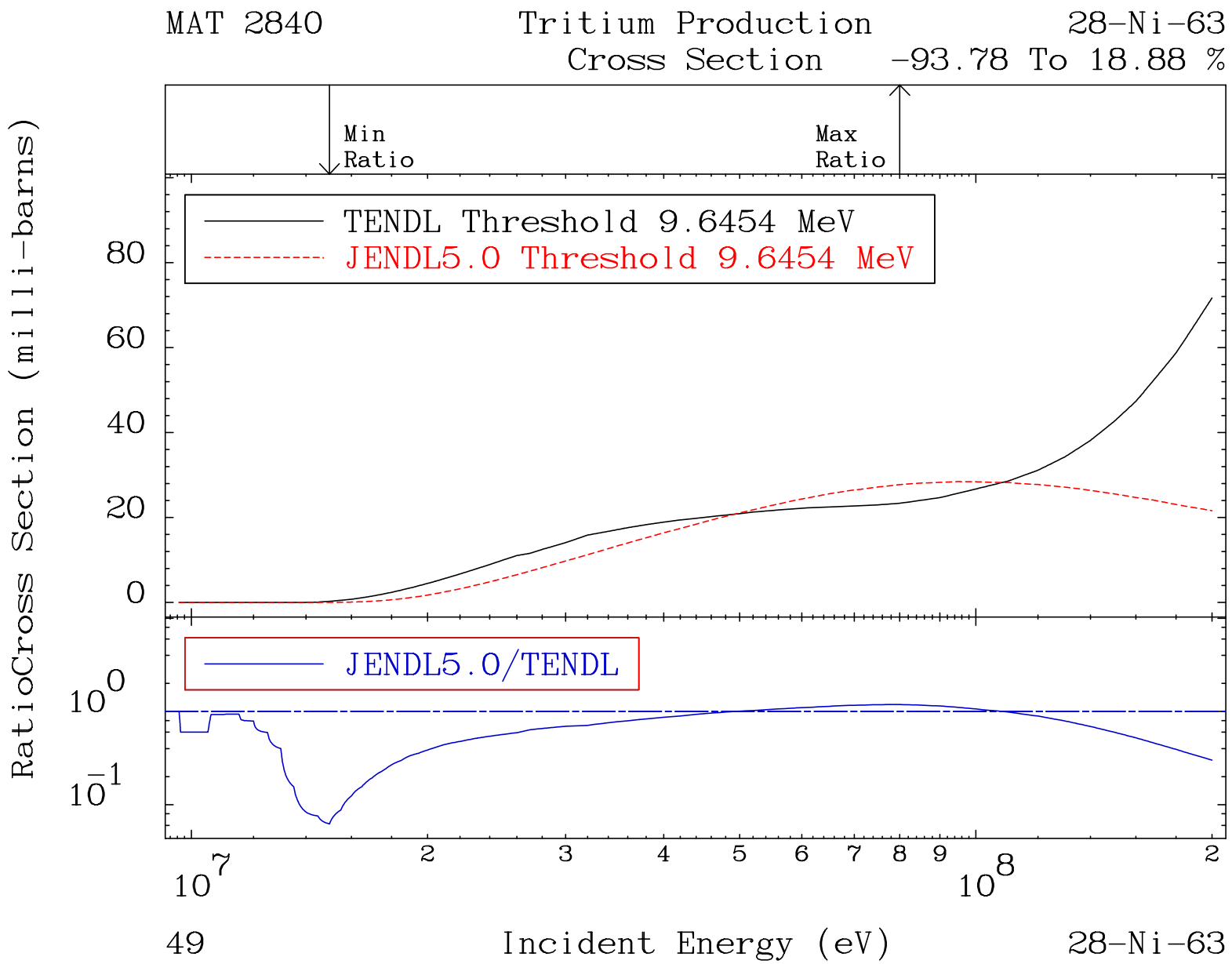

MAT 2840
(n,t)
Cross Section
28-Ni-63
-100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 9.6454 MeV
JENDL5.0 Threshold 9.6454 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
1.2
0.6
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
28-Ni-63

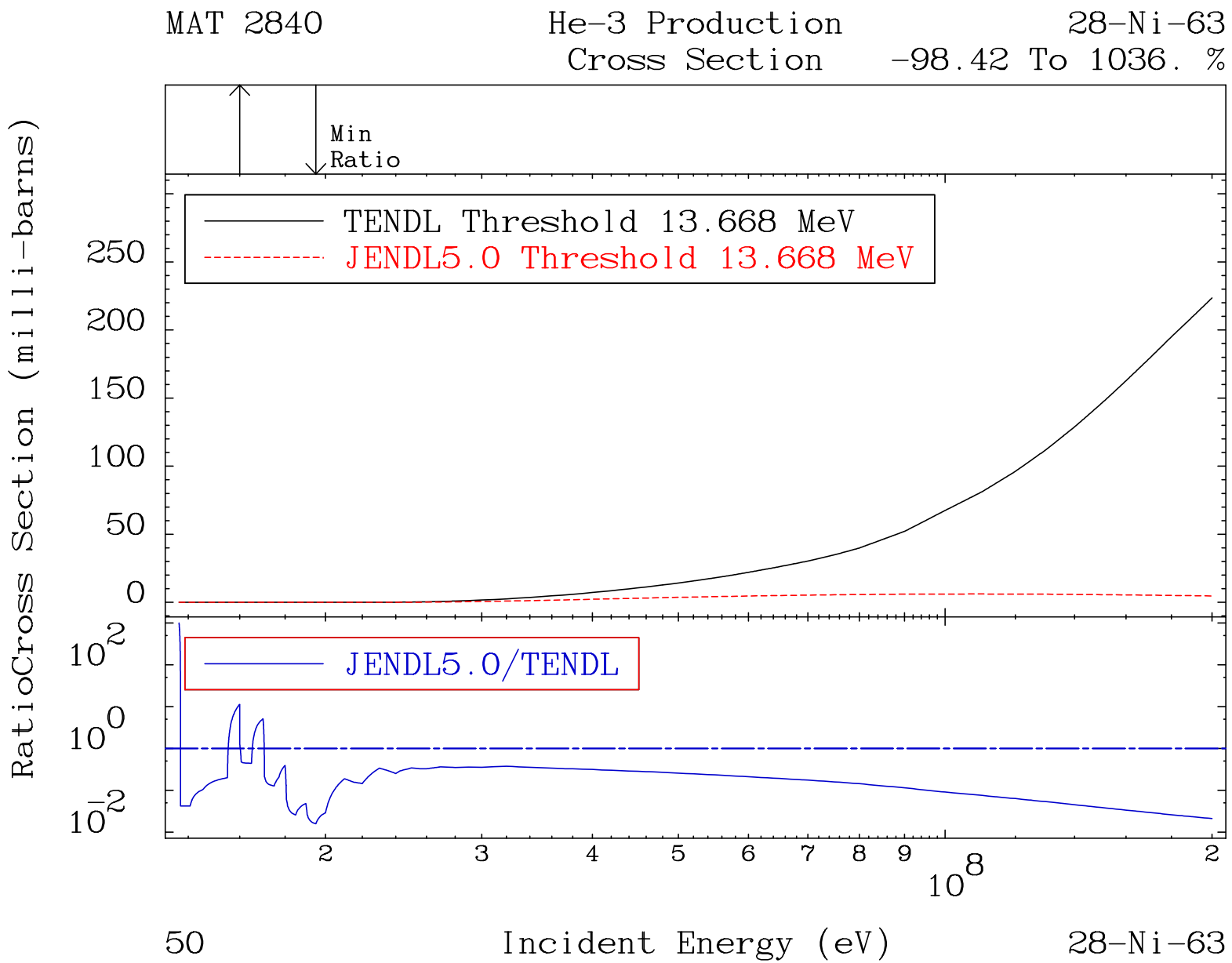

MAT 2840
(n,He-3)
28-Ni-63
Cross Section
-100.0 To 1036. %
Min
Ratio
TENDL Threshold 13.668 MeV
JENDL5.0 Threshold 13.668 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
28-Ni-63

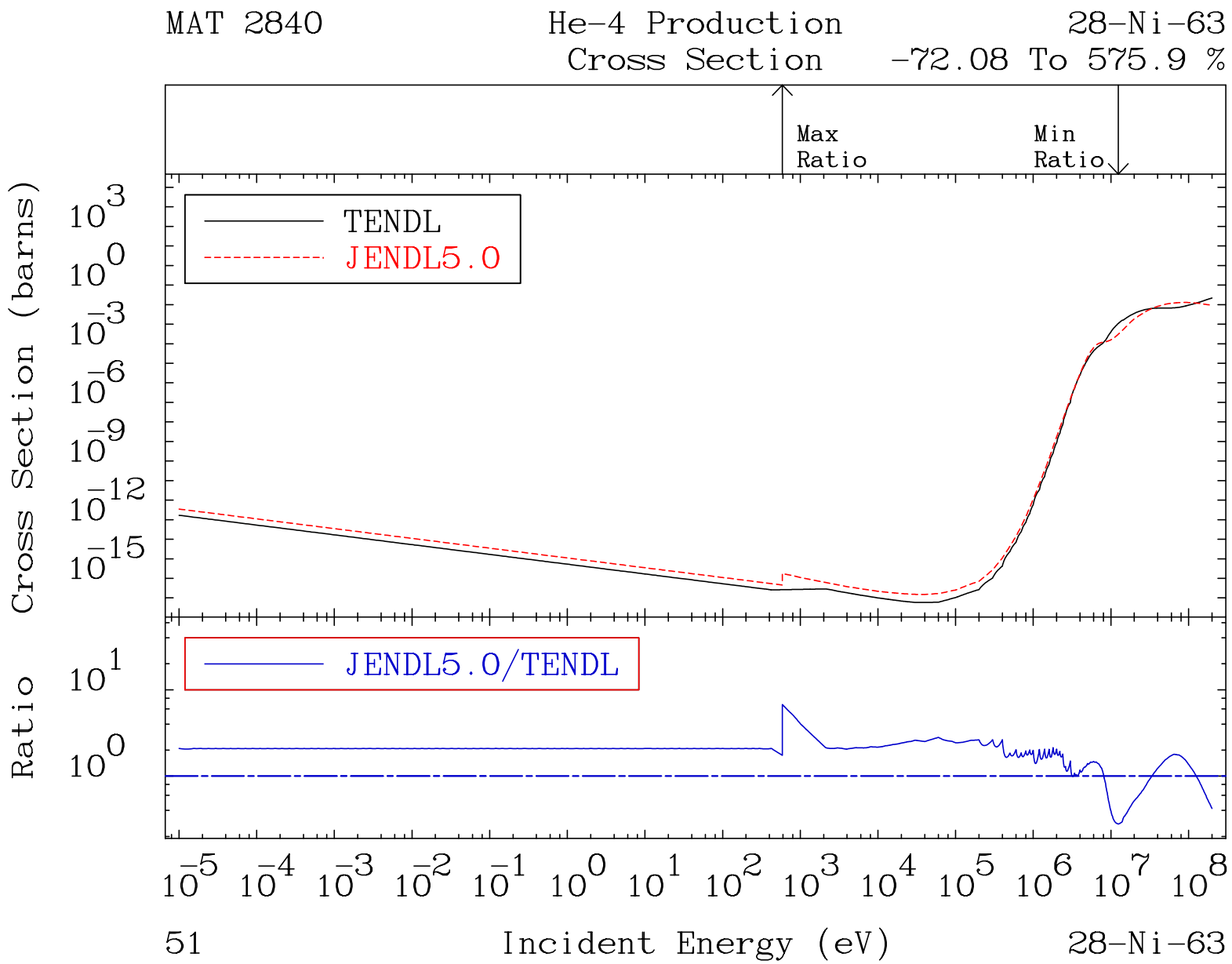

MAT 2840
(n,α)
Cross Section
28-Ni-63
-100.0 To 575.9 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^0
10^-3
10^-6
10^-9
10^-12
10^-15
JENDL5.0/TENDL
Ratio
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
46
Incident Energy (eV)
28-Ni-63

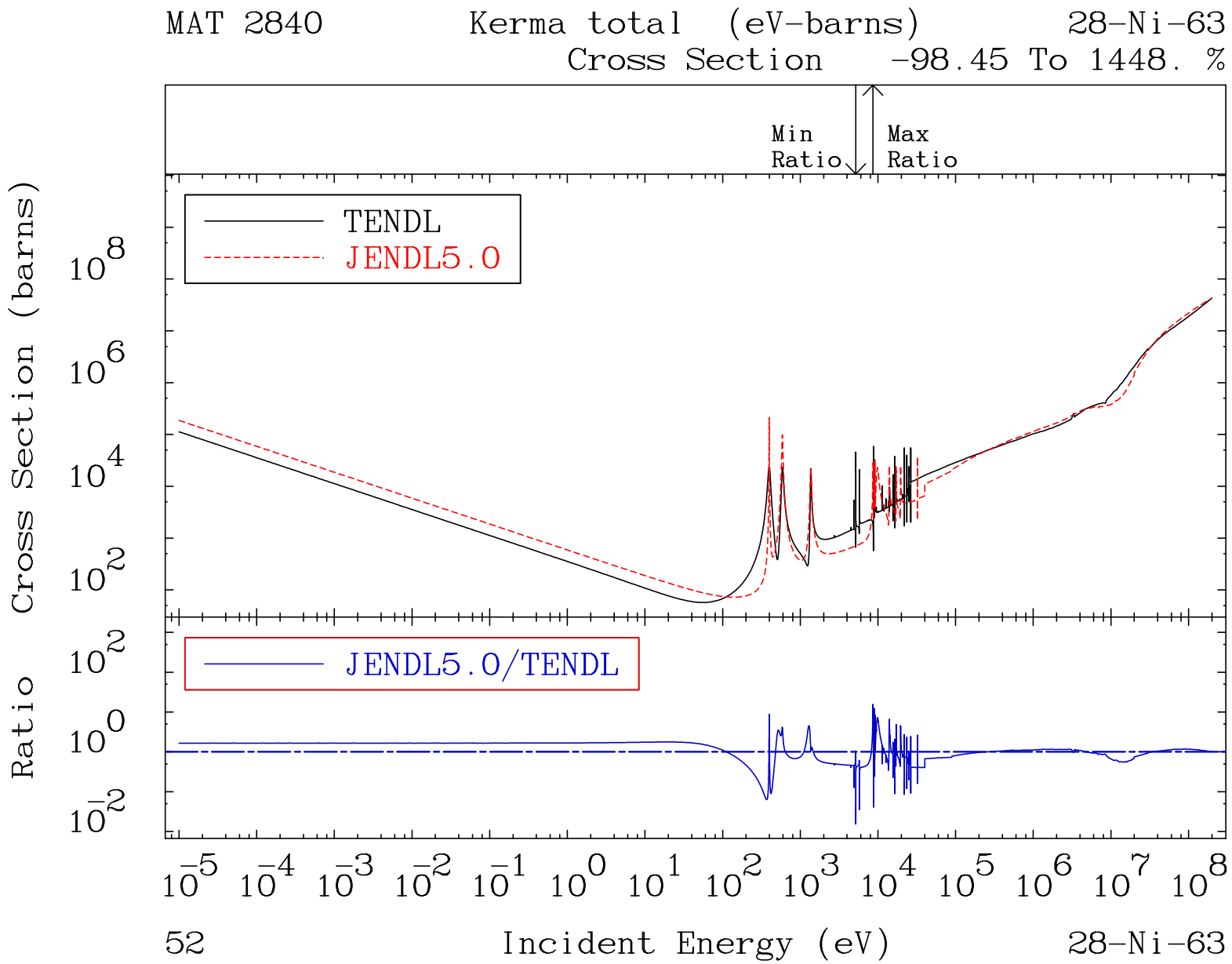

MAT 2840
Hydrogen Production
28-Ni-63
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 2.9251 MeV
JENDL5.0 Threshold 2.9251 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
10^4
10^0
10^-4
10^-8
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
28-Ni-63

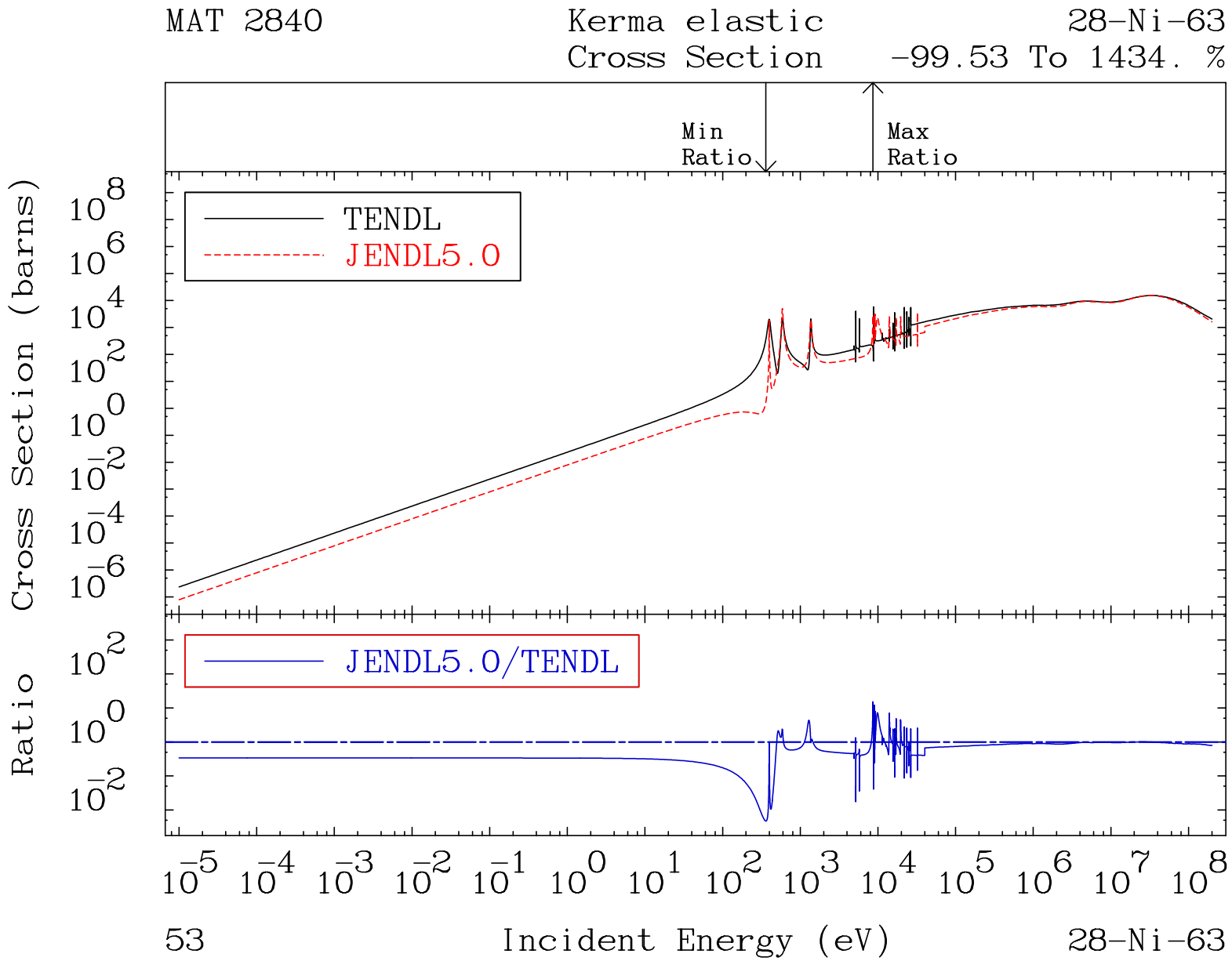

MAT 2840
Deuterium Production
28-Ni-63
Cross Section -100.0 To 173.0 %
Max
Ratio
TENDL Threshold 9.2996 MeV
JENDL5.0 Threshold 9.2996 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
28-Ni-63

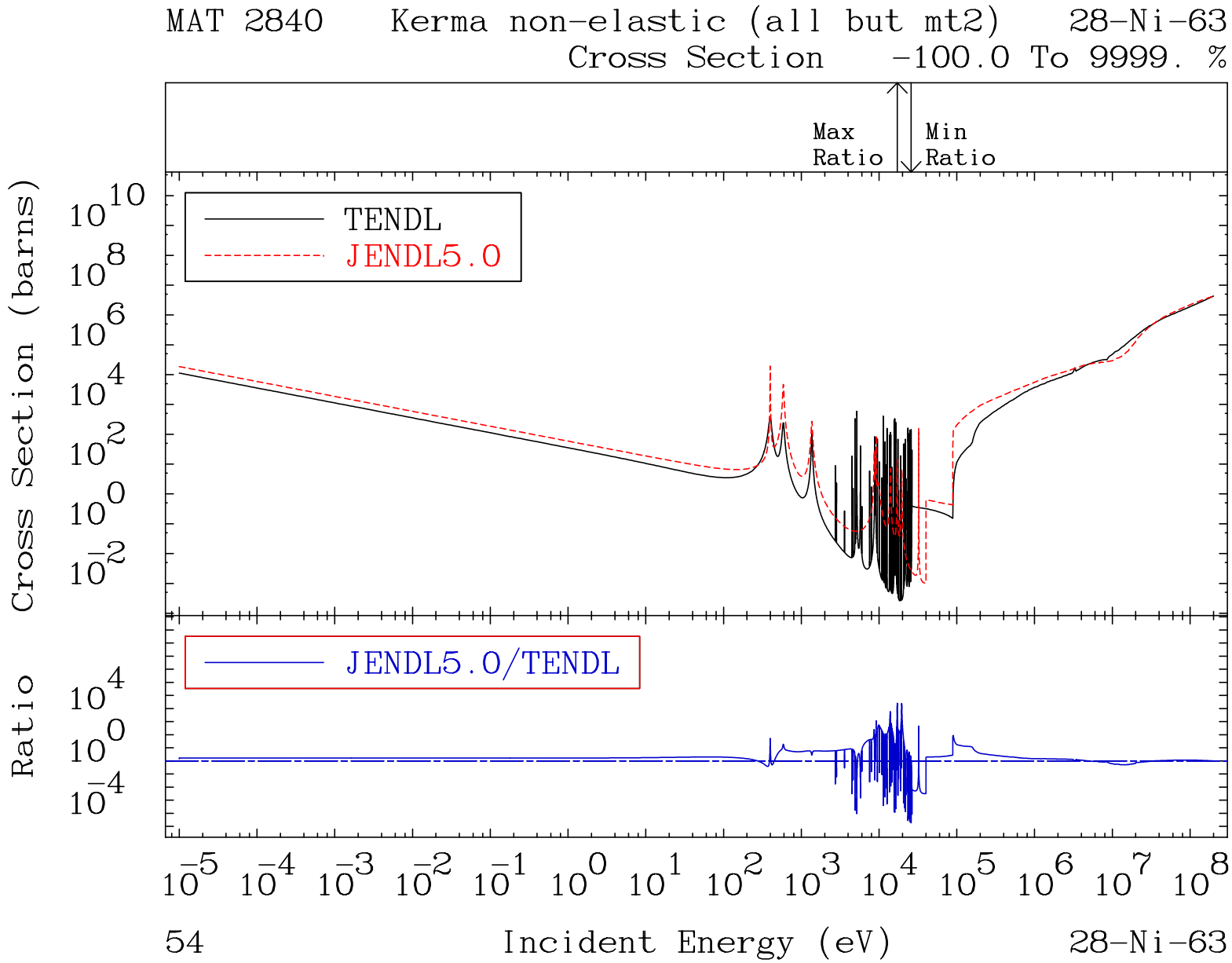

MAT 2840
Tritium Production
28-Ni-63
Cross Section
-93.78 To 18.88 %
Min Ratio
Max Ratio
TENDL Threshold 9.6454 MeV
JENDL5.0 Threshold 9.6454 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
28-Ni-63

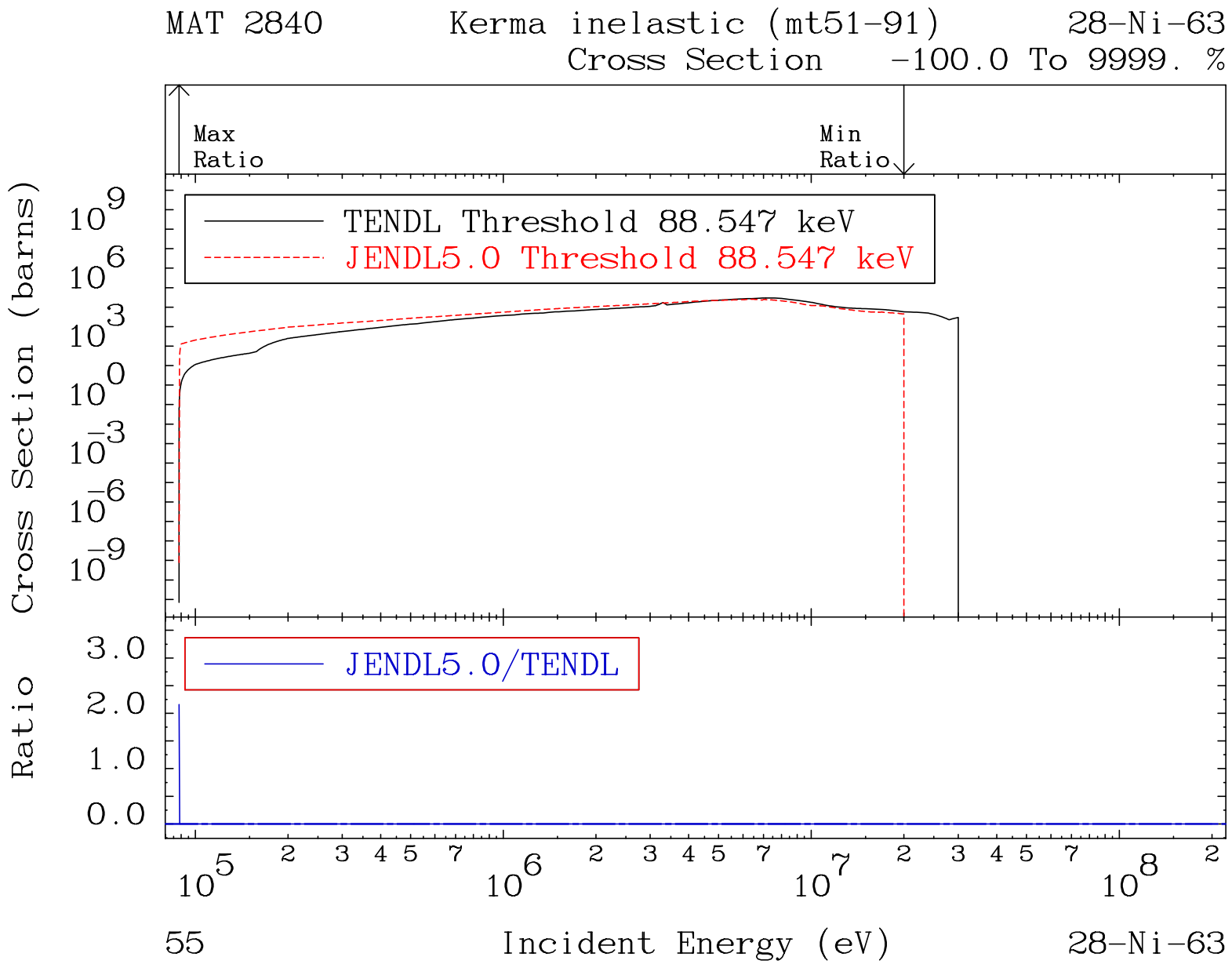

MAT 2840
He-3 Production
Cross Section
28-Ni-63
-98.42 To 1036. %
Min
Ratio
TENDL Threshold 13.668 MeV
JENDL5.0 Threshold 13.668 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
28-Ni-63

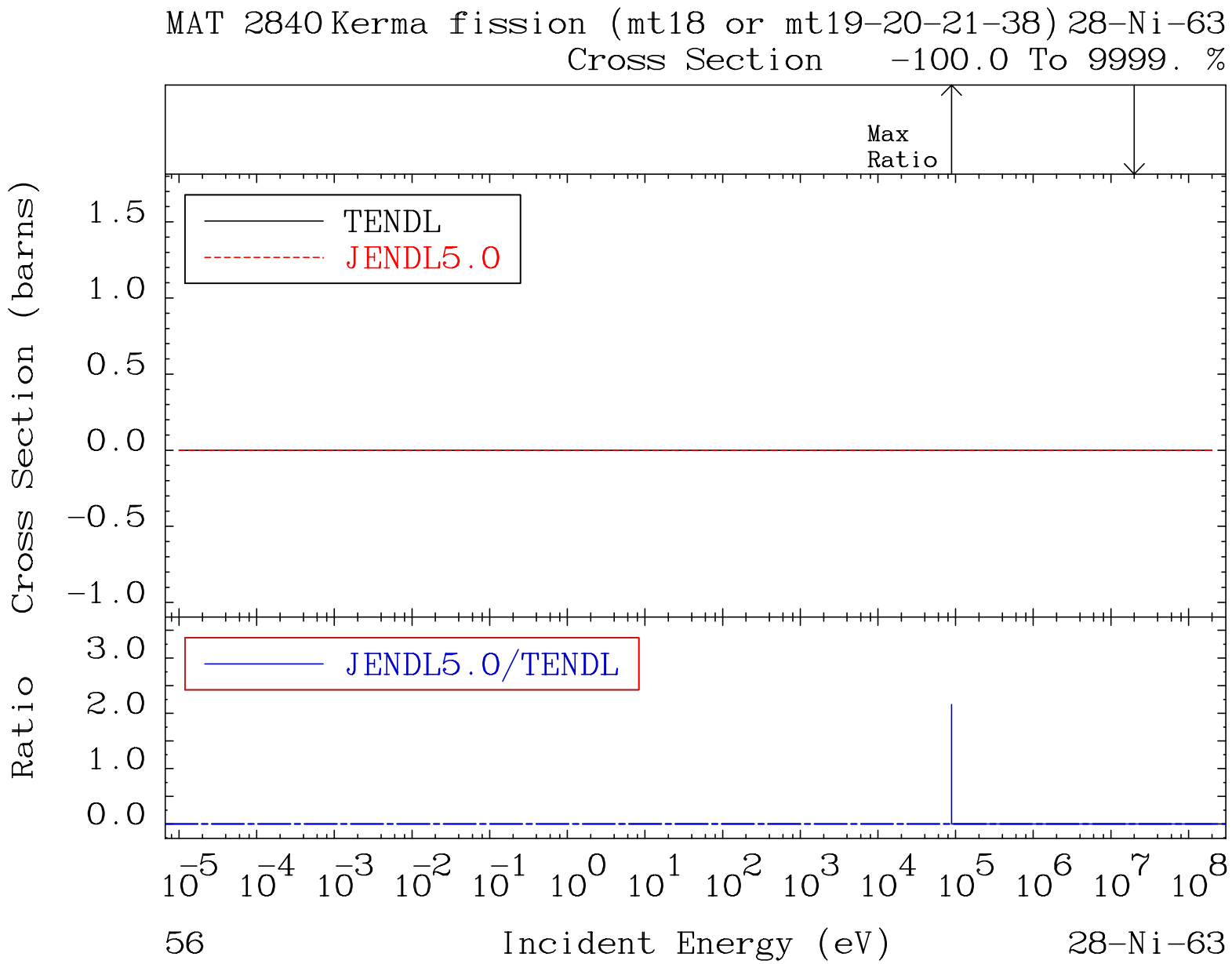

MAT 2840
He-4 Production
Cross Section
28-Ni-63
-72.08 To 575.9 %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
51
28-Ni-63

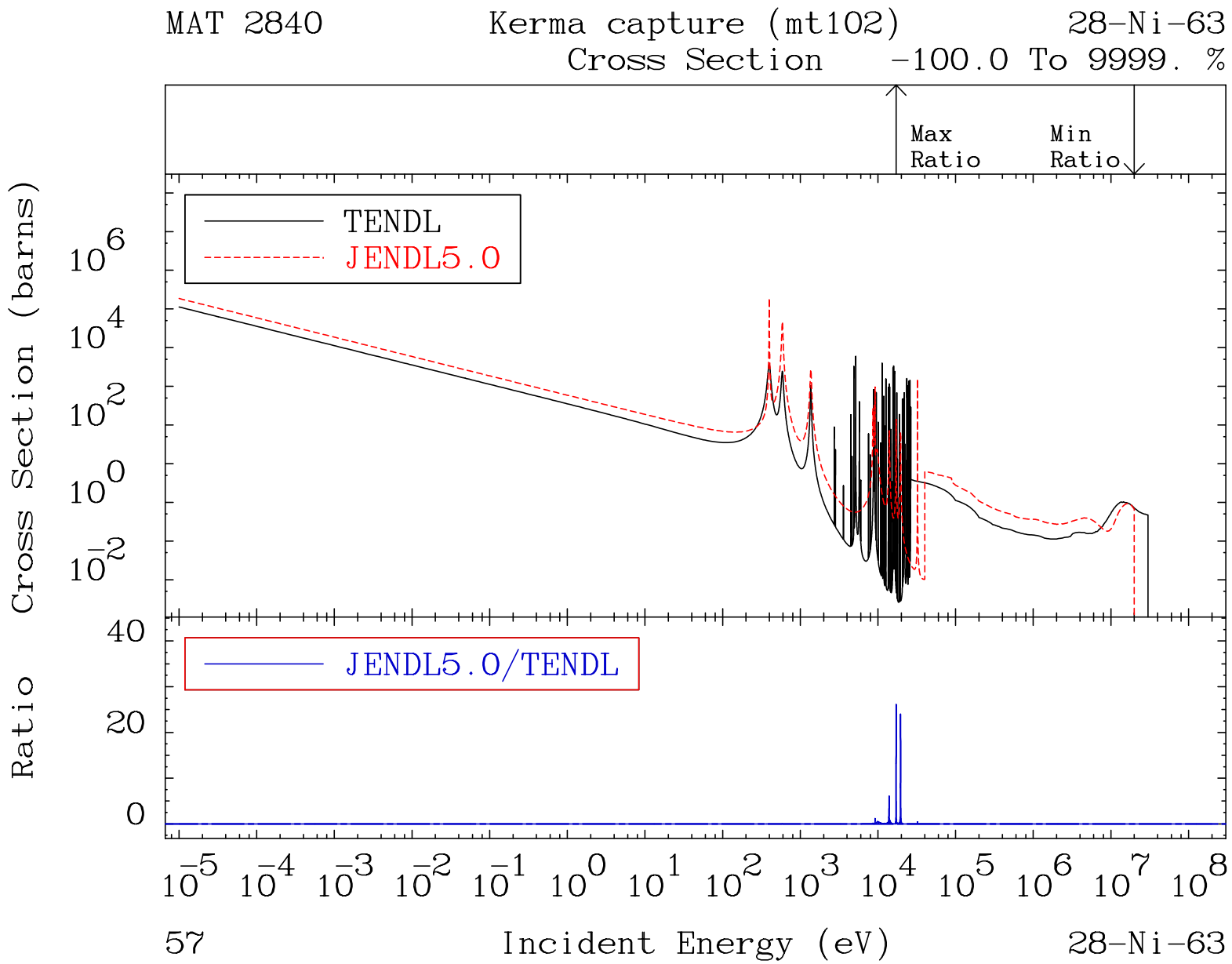

MAT 2840
Kerma total (eV-barns)
28-Ni-63
Cross Section -98.45 To 1448. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
28-Ni-63

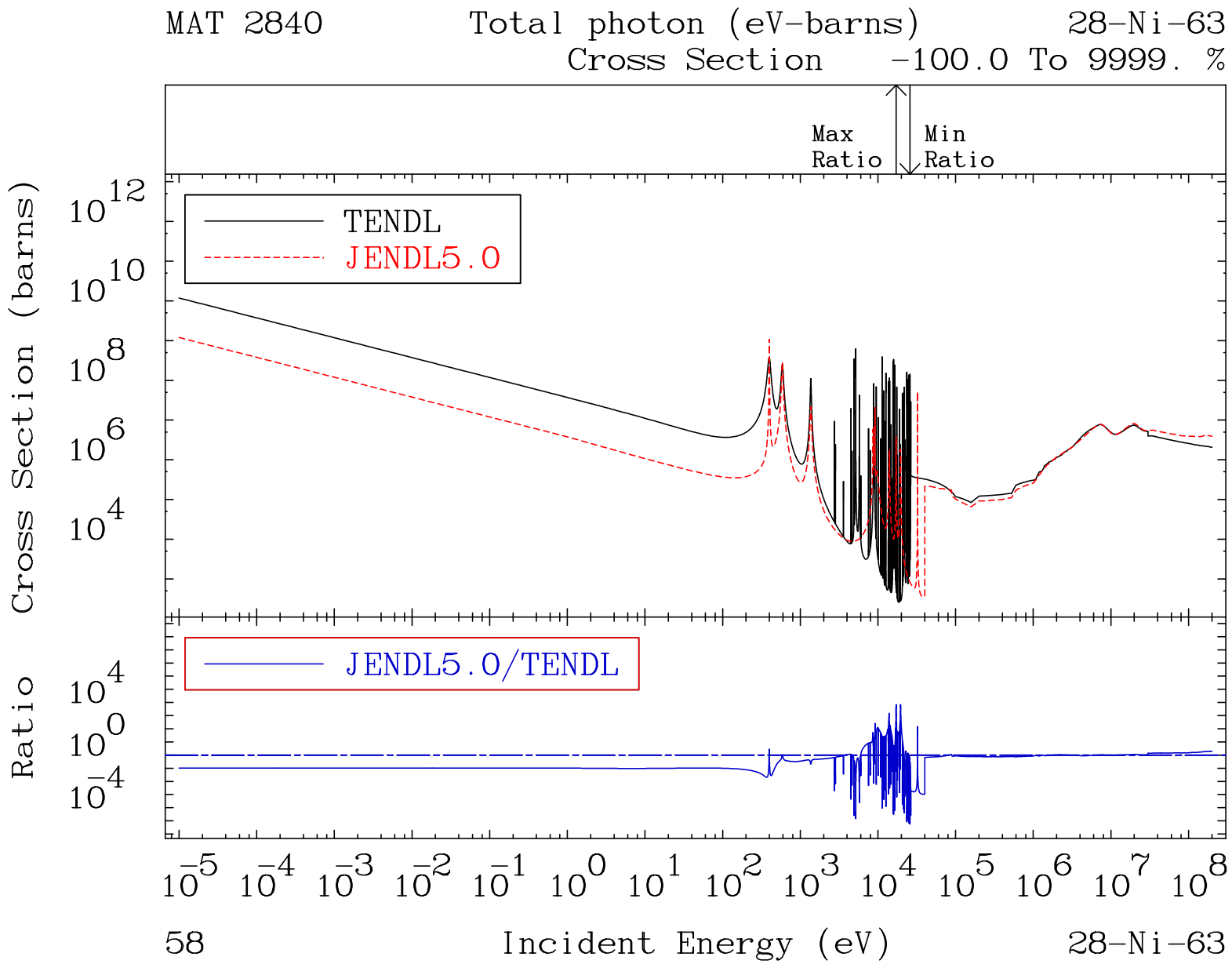

MAT 2840
Kerma elastic
Cross Section
28-Ni-63
-99.53 To 1434. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
28-Ni-63

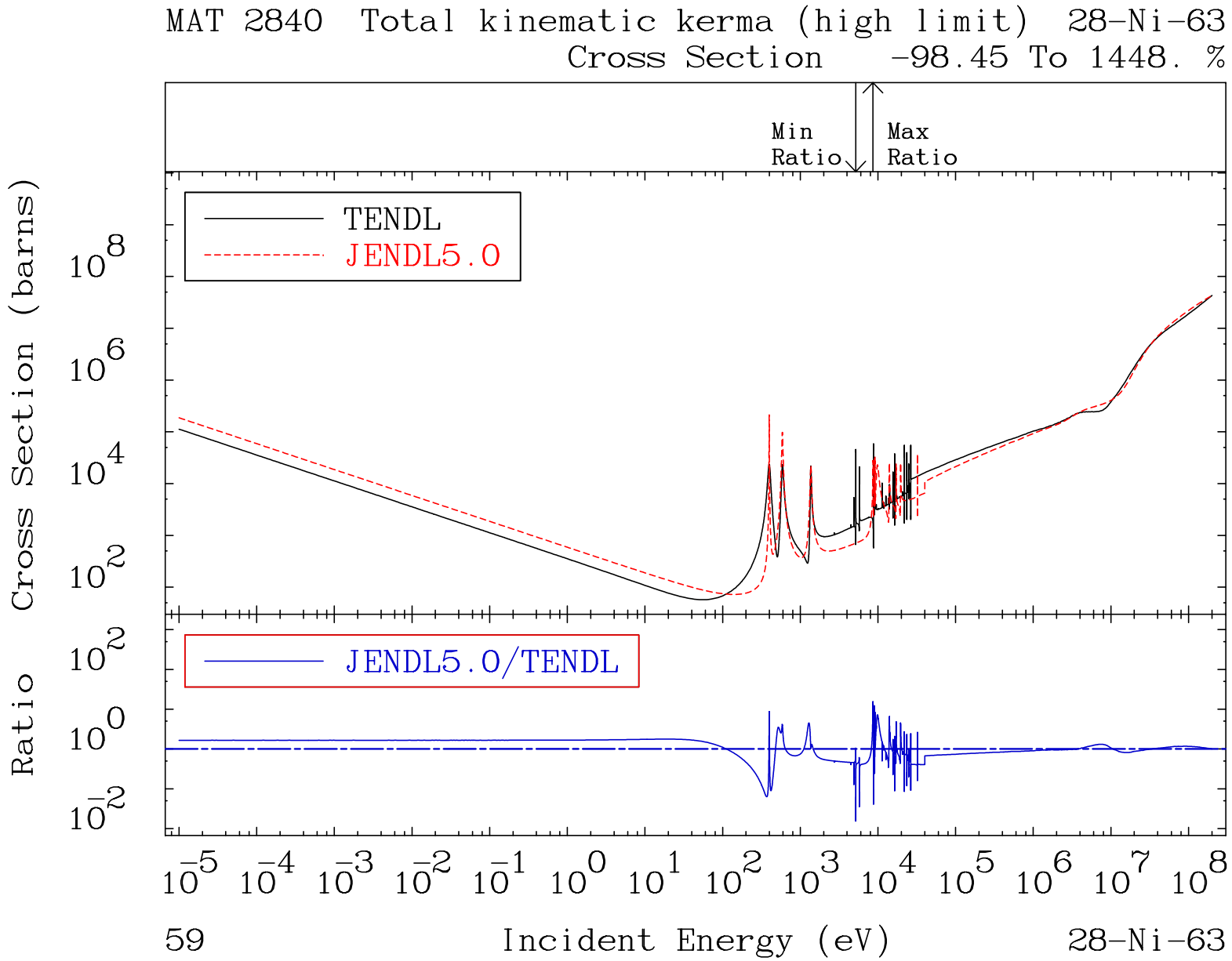

MAT 2840 Kerma non-elastic (all but mt2) 28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
54
28-Ni-63

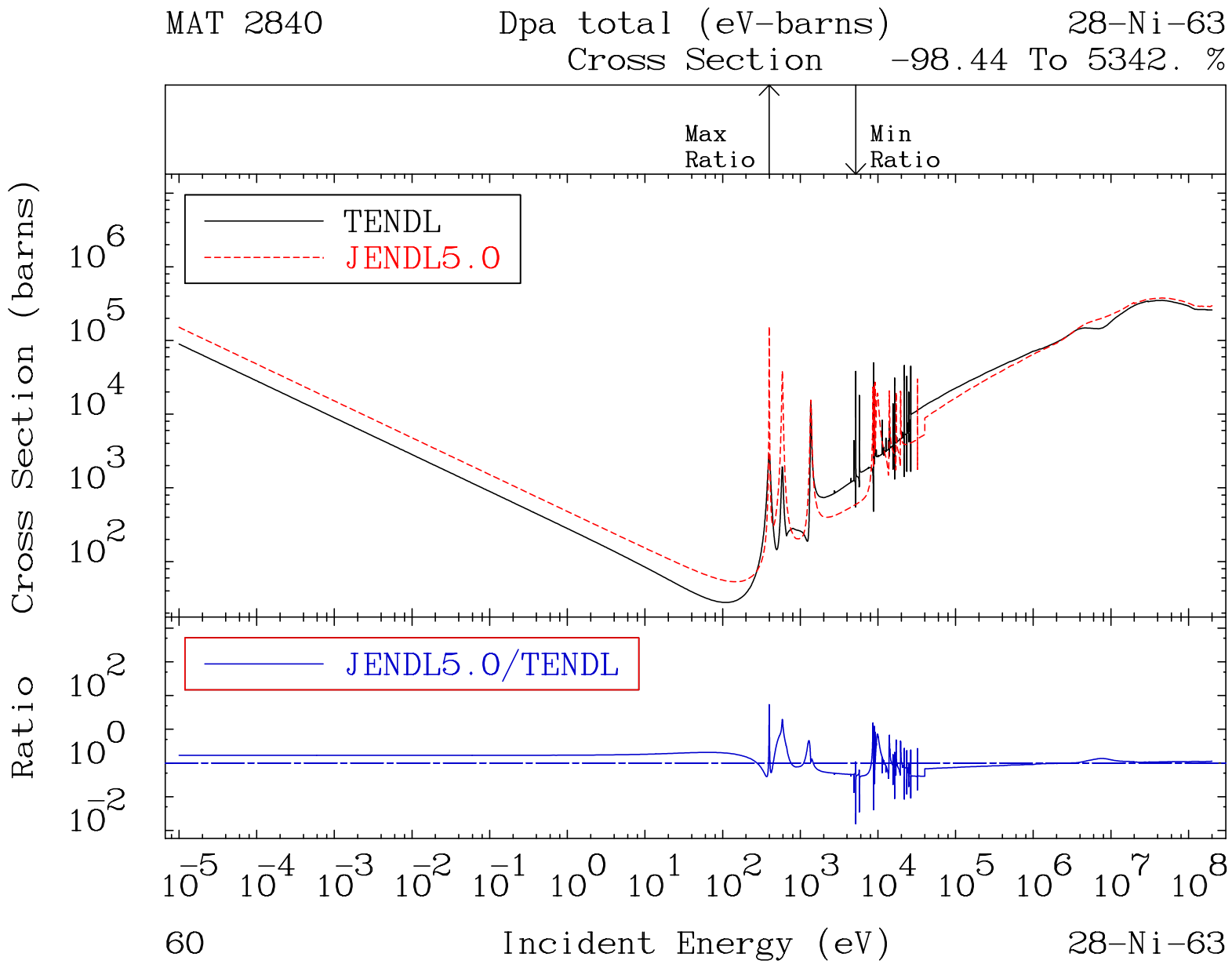

MAT 2840
Kerma inelastic (mt51-91)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 88.547 keV
JENDL5.0 Threshold 88.547 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
28-Ni-63

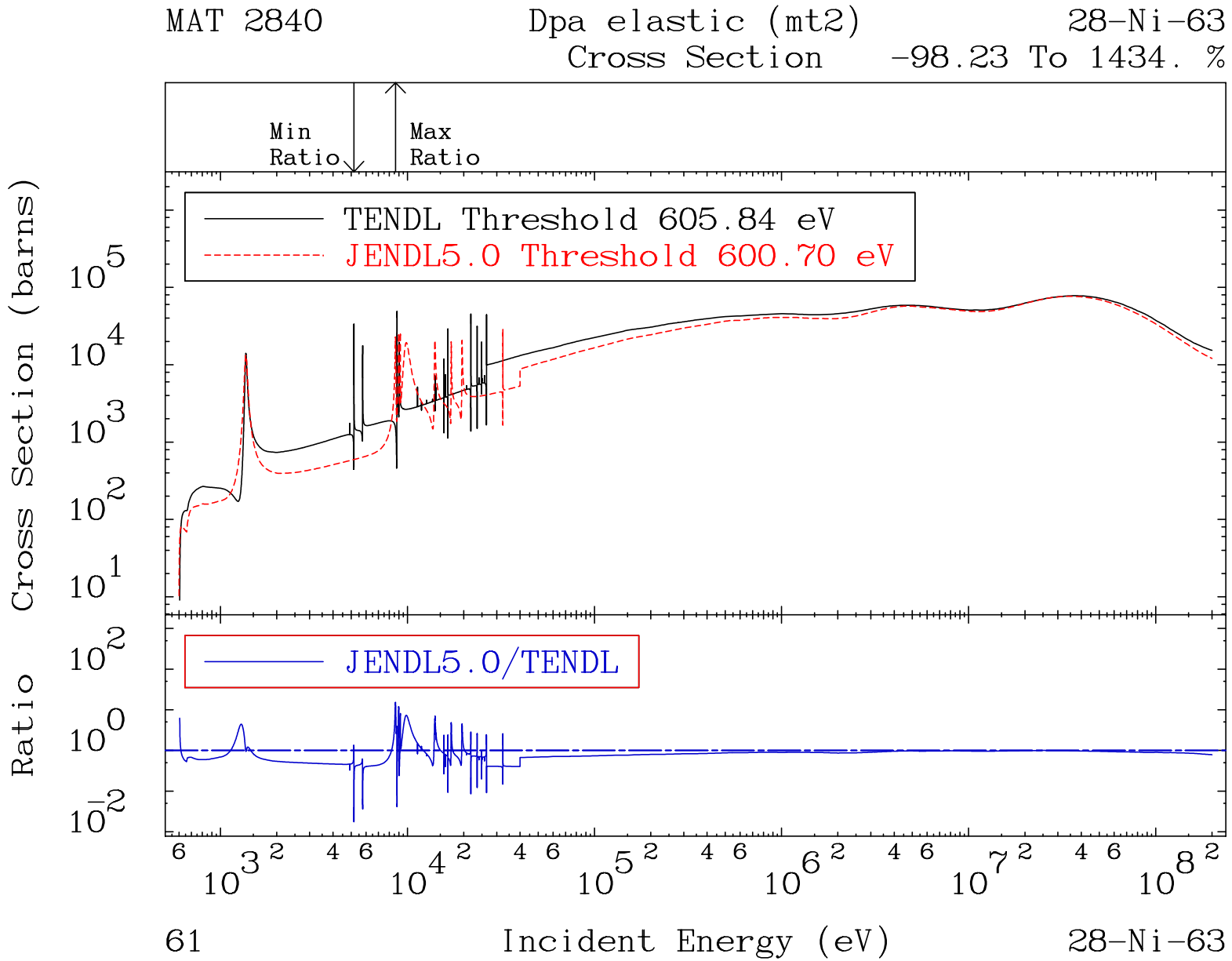

MAT 2840 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-63
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
56
Incident Energy (eV)
28-Ni-63

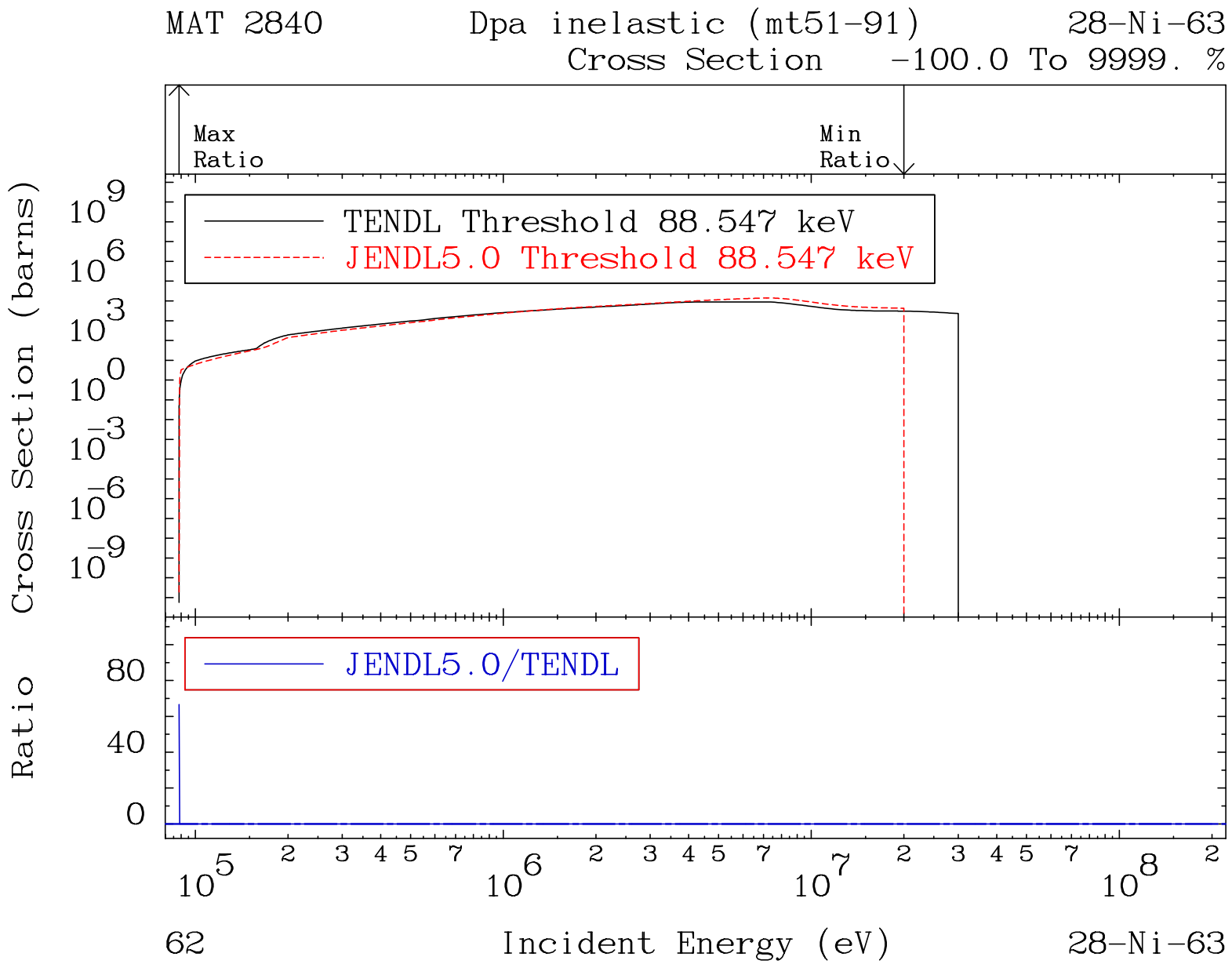

MAT 2840
Kerma capture (mt102)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
57
28-Ni-63

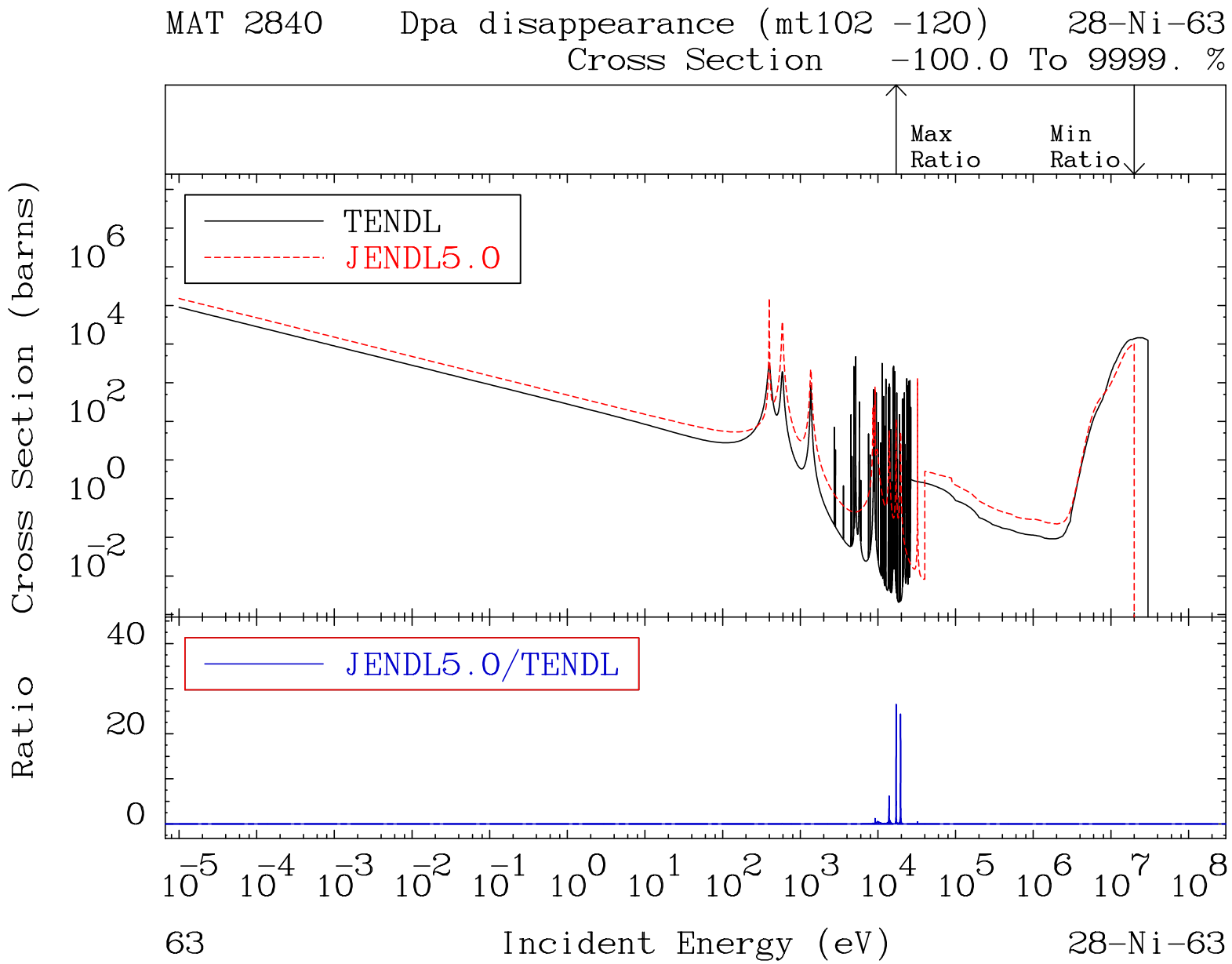

MAT 2840
Total photon (eV-barns)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
58
Incident Energy (eV)
28-Ni-63

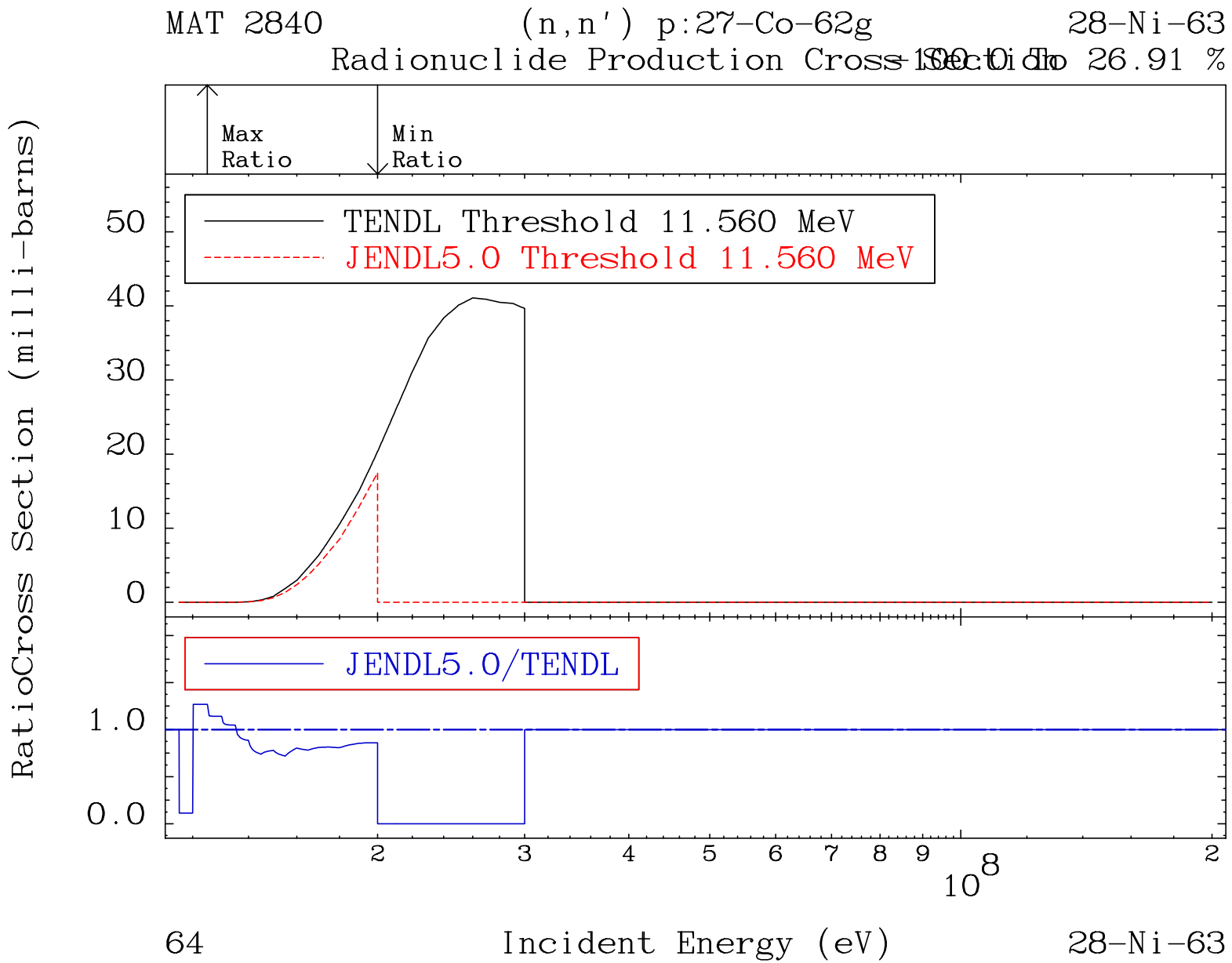

MAT 2840 Total kinematic kerma (high limit) 28-Ni-63
Cross Section -98.45 To 1448. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
28-Ni-63

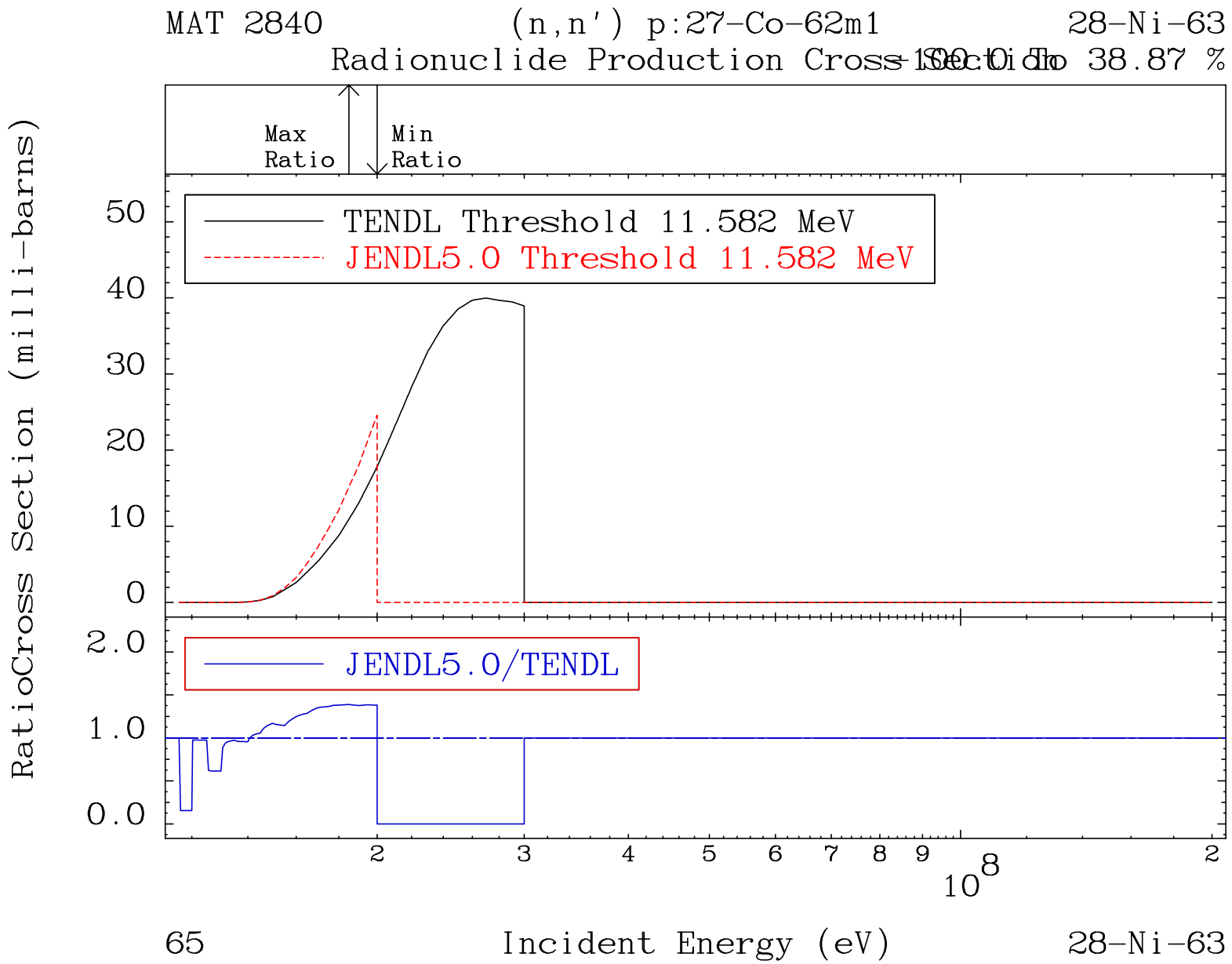

MAT 2840
Dpa total (eV-barns)
28-Ni-63
Cross Section -98.44 To 5342. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
28-Ni-63

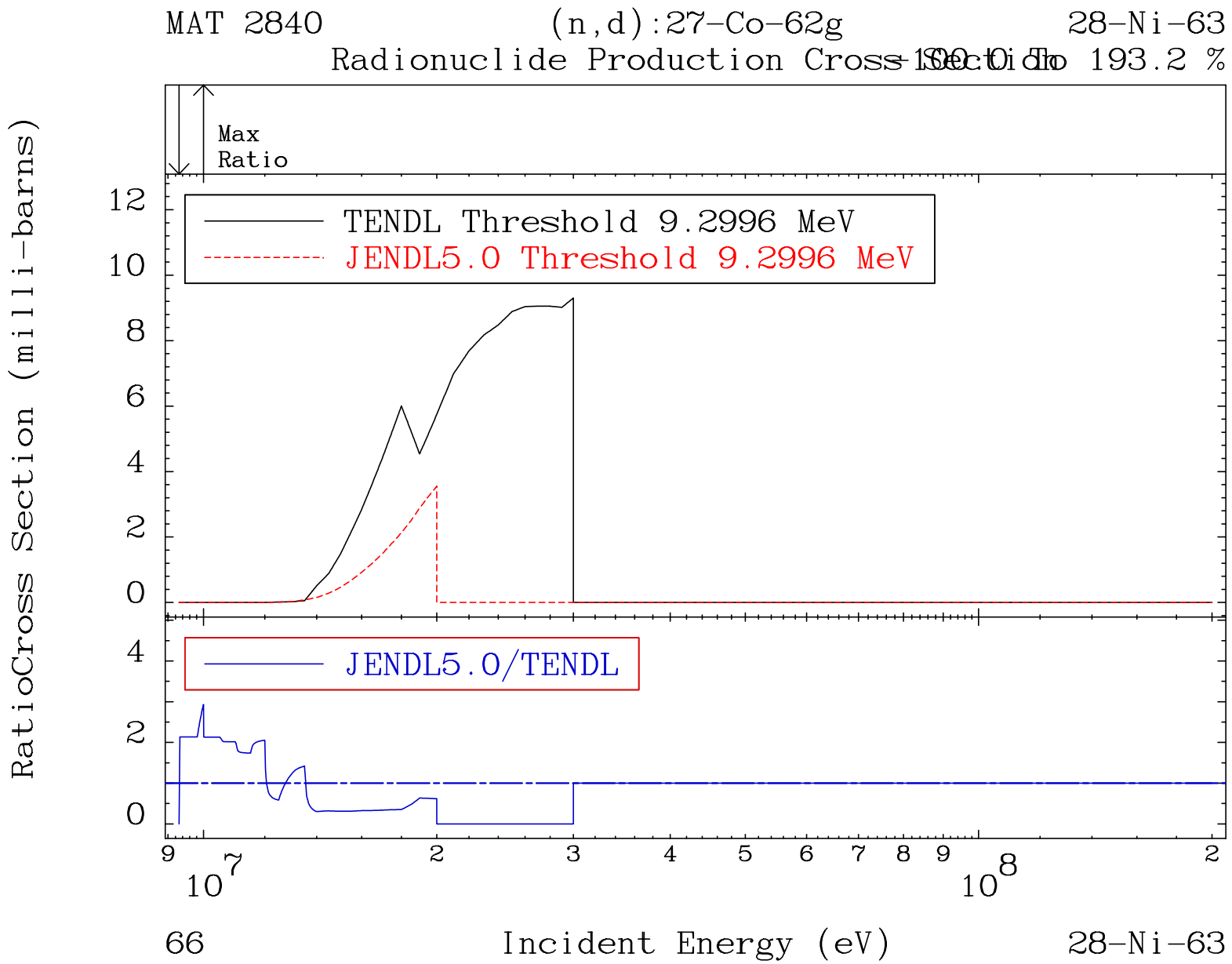

MAT 2840
Dpa elastic (mt2)
Cross Section
28-Ni-63
-98.23 To 1434. %
Min Ratio
Max Ratio
TENDL Threshold 605.84 eV
JENDL5.0 Threshold 600.70 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
28-Ni-63

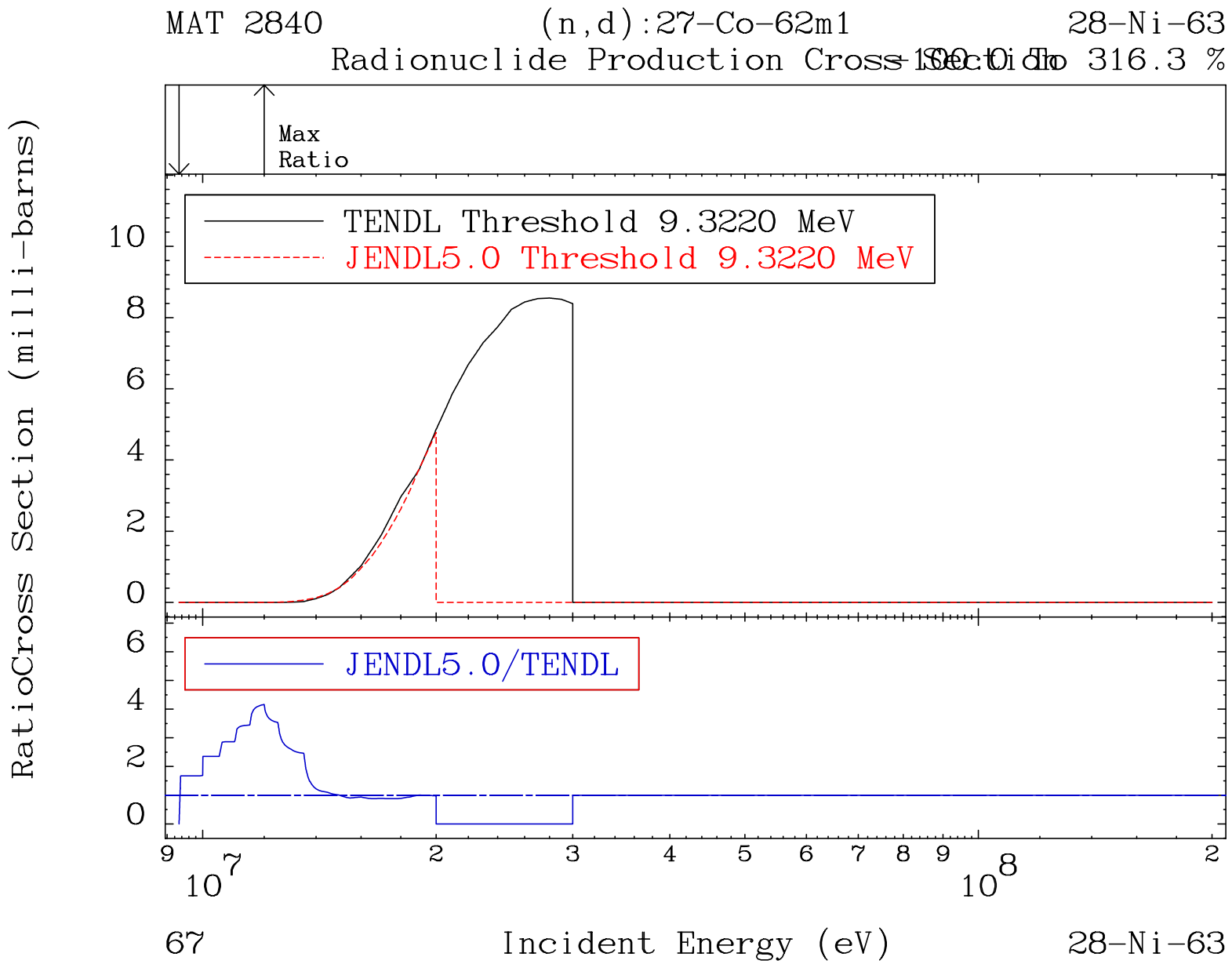

MAT 2840
Dpa inelastic (mt51-91)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 88.547 keV
JENDL5.0 Threshold 88.547 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
28-Ni-63

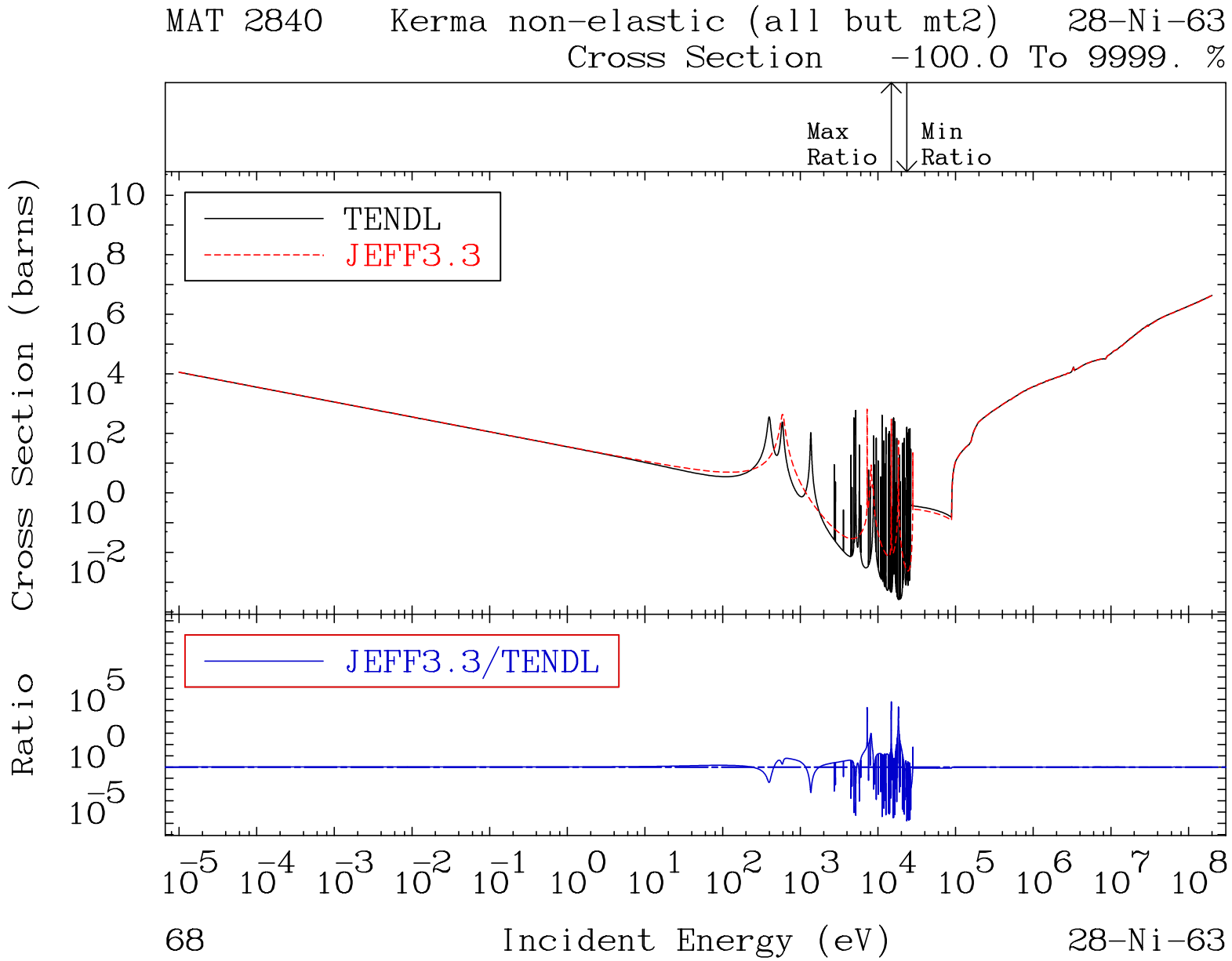

MAT 2840 Dpa disappearance (mt102 -120) 28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
28-Ni-63

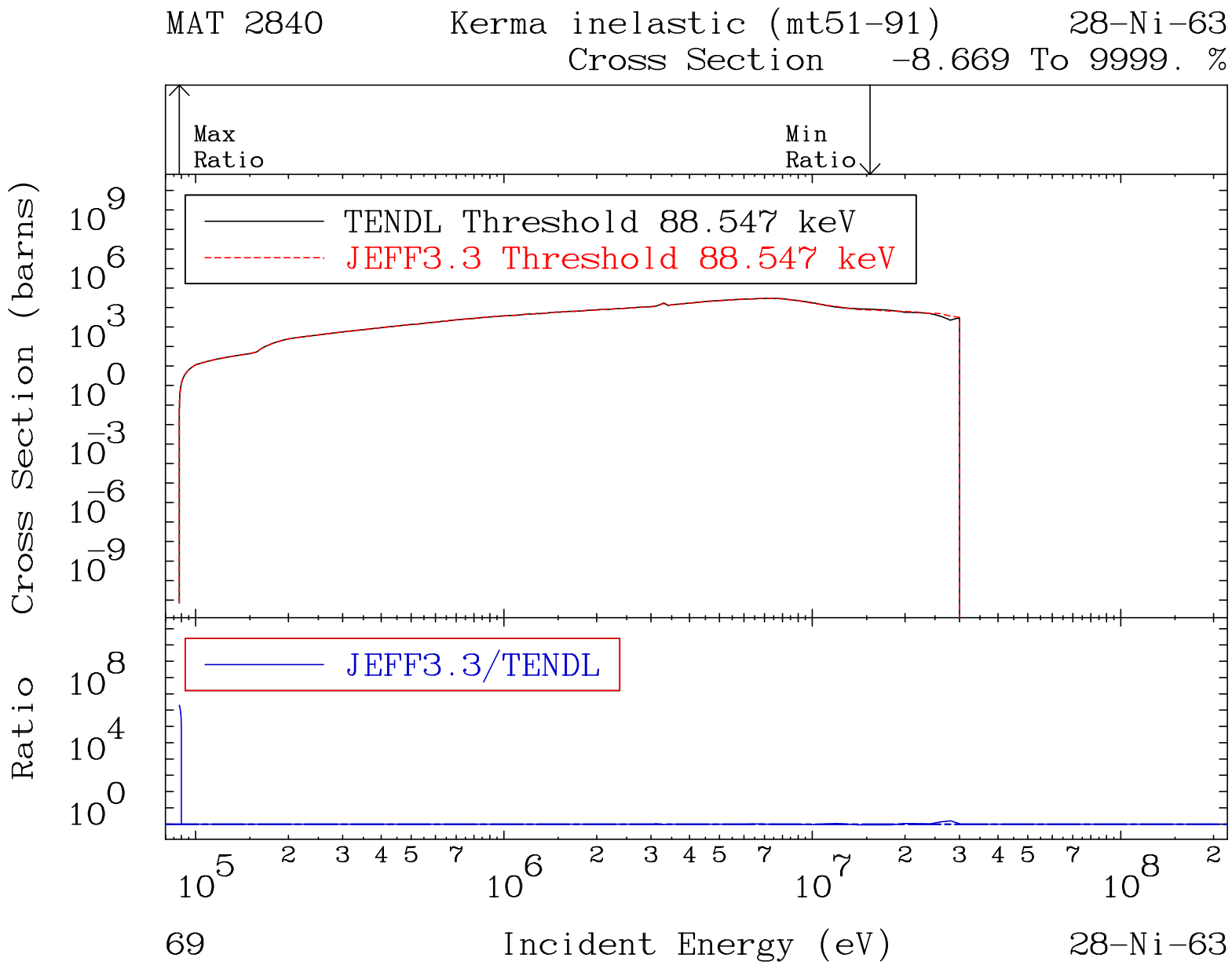

MAT 2840
(n,n') p:27-Co-62g
28-Ni-63
Radionuclide Production Cross Section To 26.91 %
Max Ratio
Min Ratio
TENDL Threshold 11.560 MeV
JENDL5.0 Threshold 11.560 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
64
Incident Energy (eV)
28-Ni-63

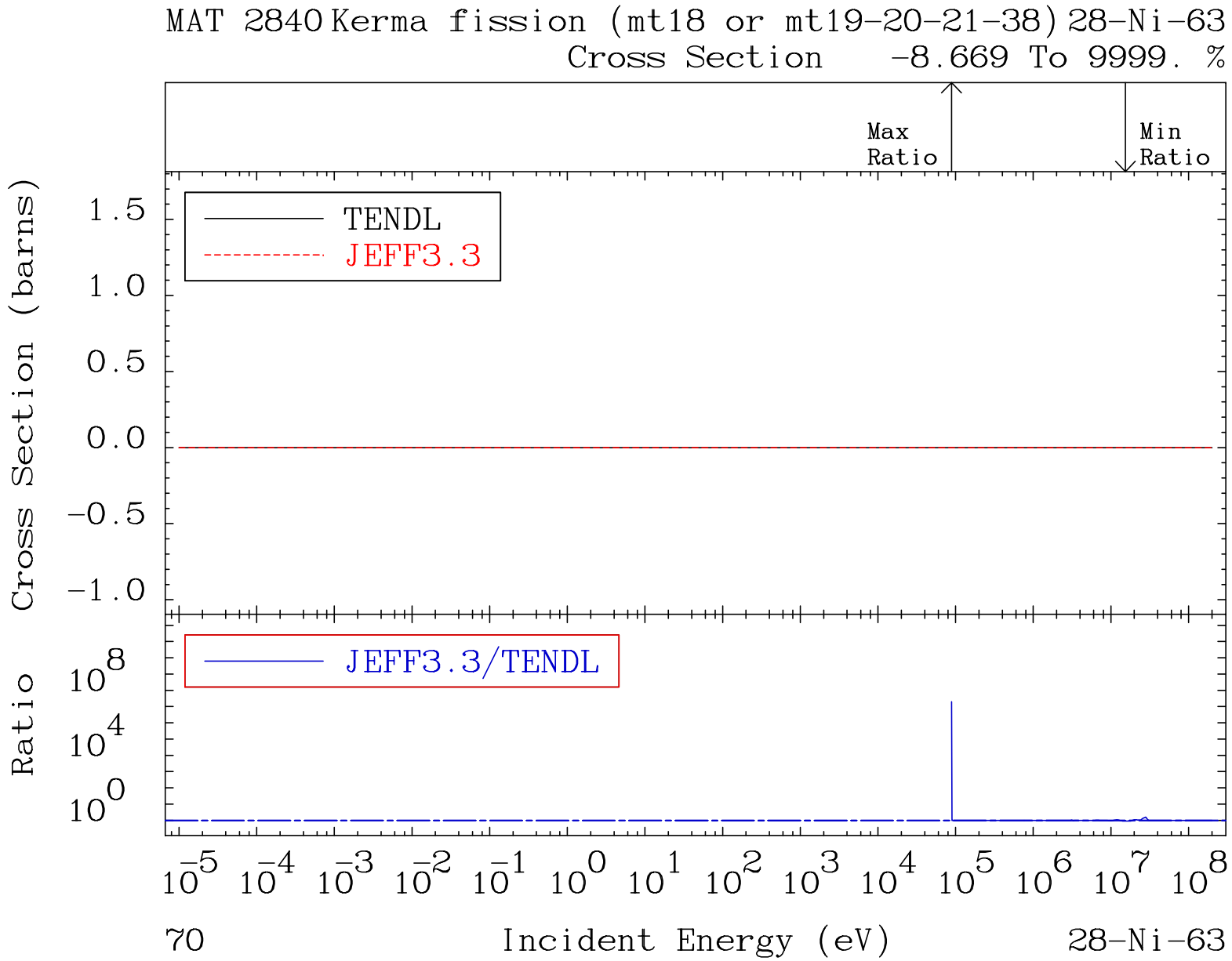

MAT 2840
(n,n') p:27-Co-62m1
28-Ni-63
Radionuclide Production Cross Section To 38.87 %
Max Ratio
Min Ratio
TENDL Threshold 11.582 MeV
JENDL5.0 Threshold 11.582 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
65
Incident Energy (eV)
28-Ni-63

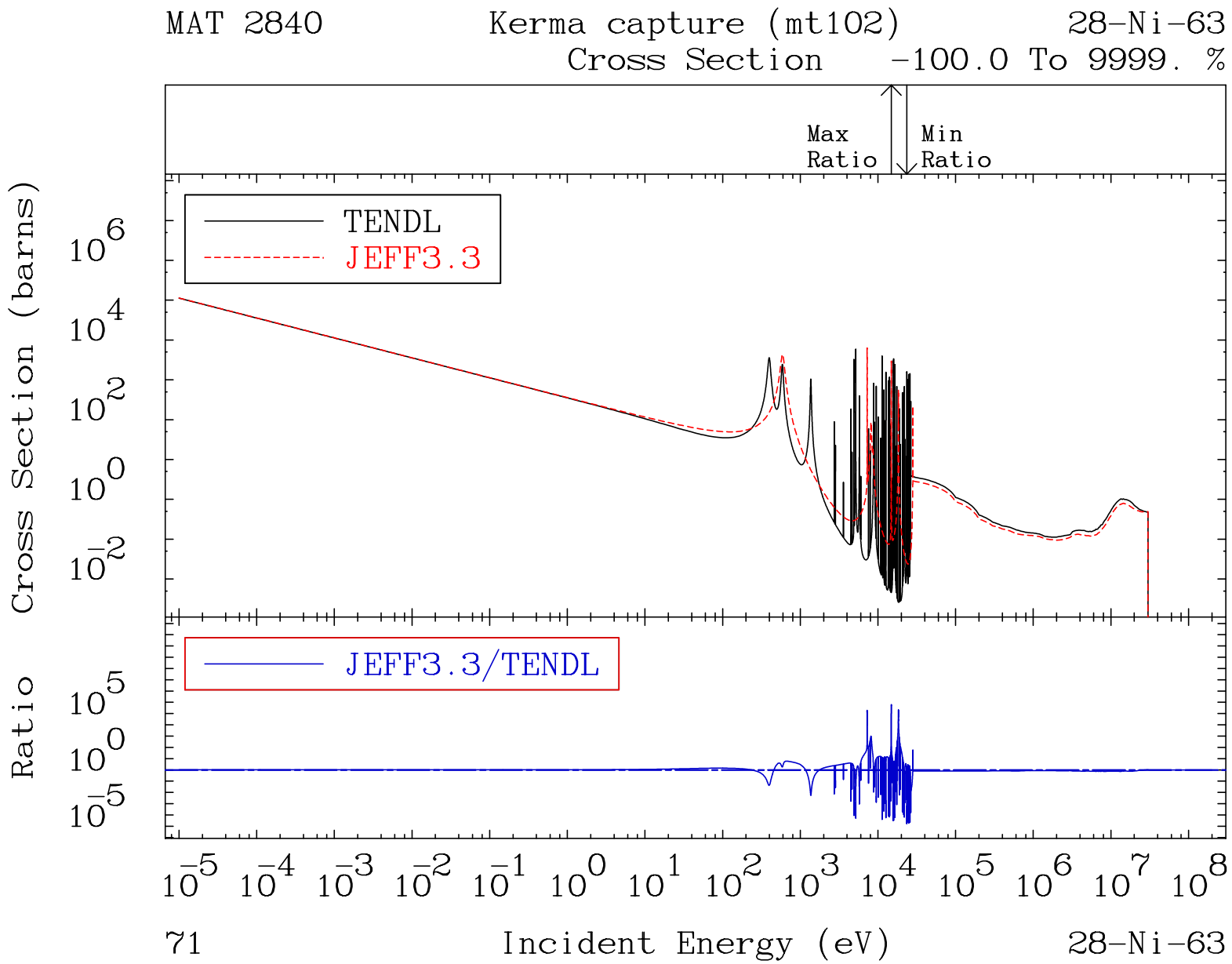

MAT 2840
(n,d):27-Co-62g
28-Ni-63
Radionuclide Production Cross Section To 193.2 %
Max
Ratio
TENDL Threshold 9.2996 MeV
JENDL5.0 Threshold 9.2996 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
66
28-Ni-63

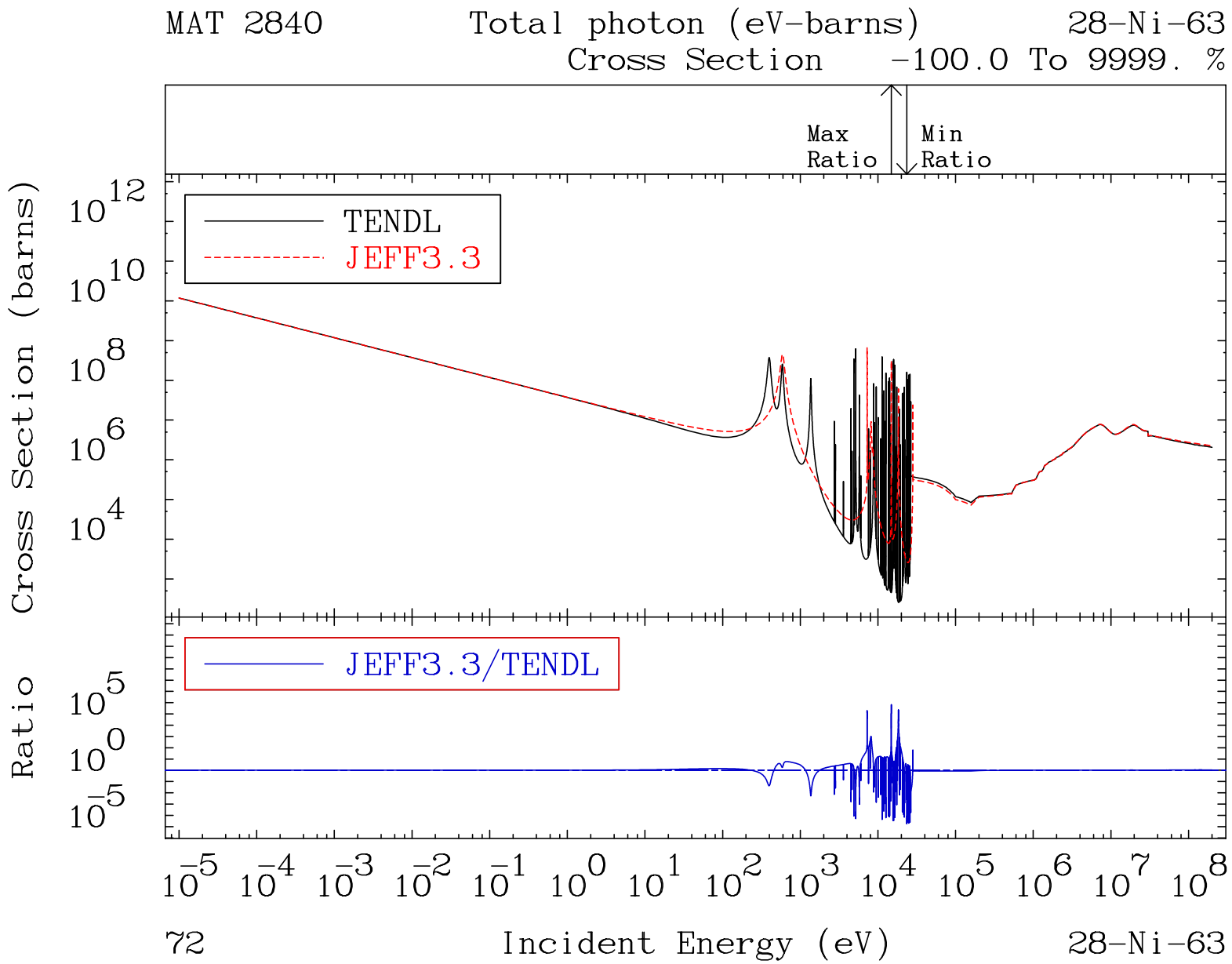

MAT 2840
(n,d):27-Co-62m1
28-Ni-63
Radionuclide Production Cross Section To 316.3 %
Max
Ratio
TENDL Threshold 9.3220 MeV
JENDL5.0 Threshold 9.3220 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
67
28-Ni-63

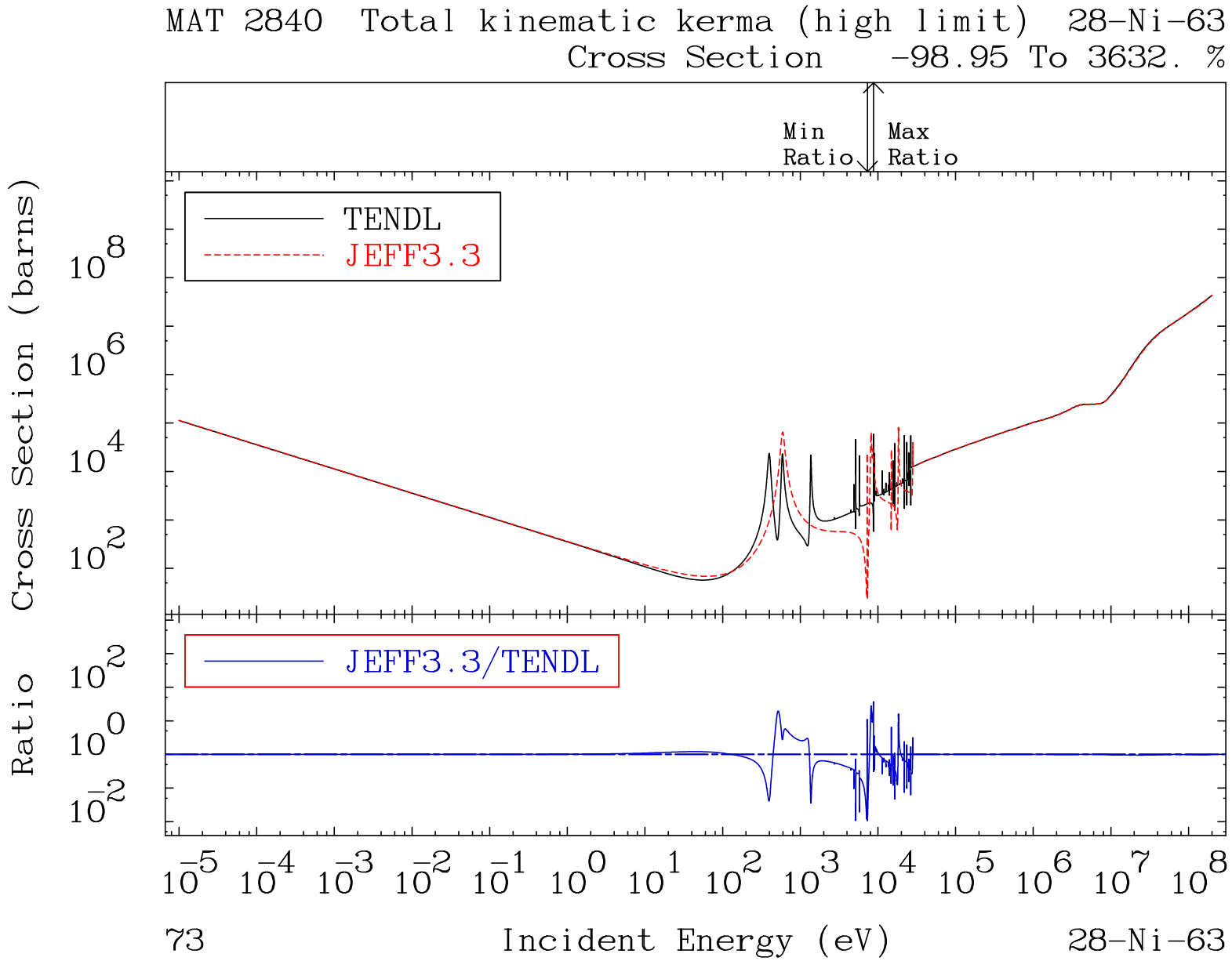

MAT 2840 Kerma non-elastic (all but mt2) 28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
28-Ni-63

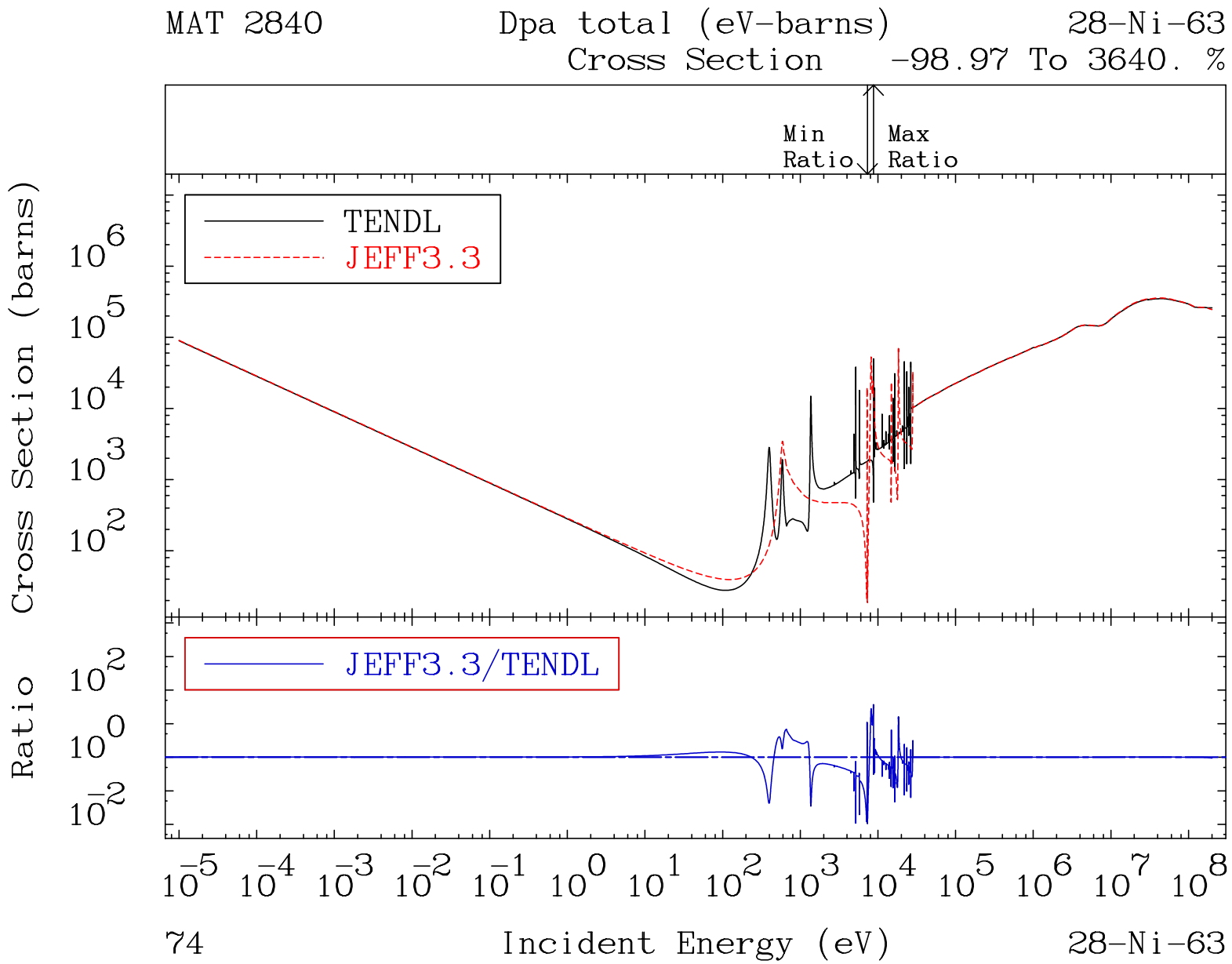

MAT 2840
Kerma inelastic (mt51-91)
28-Ni-63
Cross Section -8.669 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 88.547 keV
JEFF3.3 Threshold 88.547 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
28-Ni-63

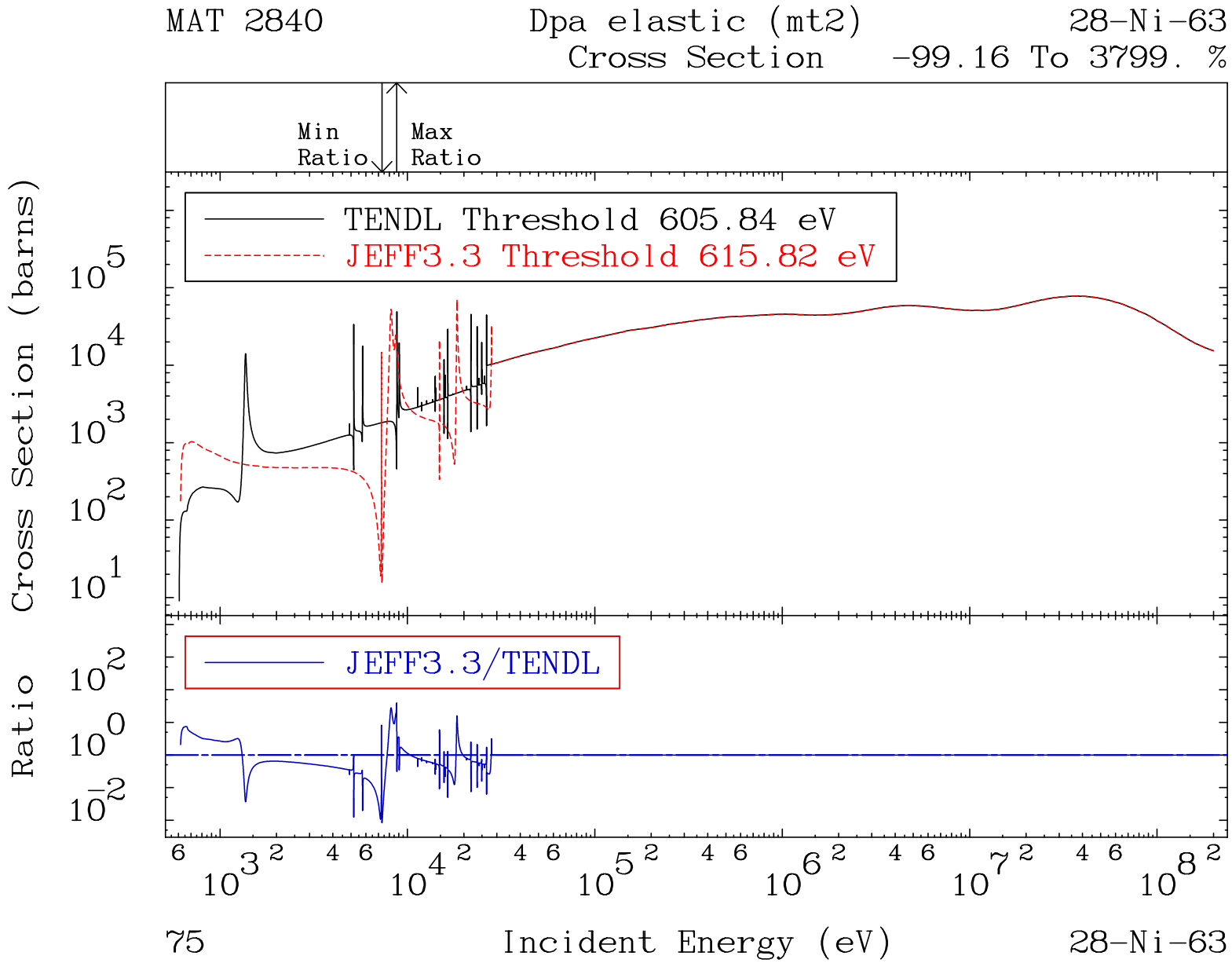

MAT 2840 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-63
Cross Section -8.669 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{8}
10^{4}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
70
Incident Energy (eV)
28-Ni-63

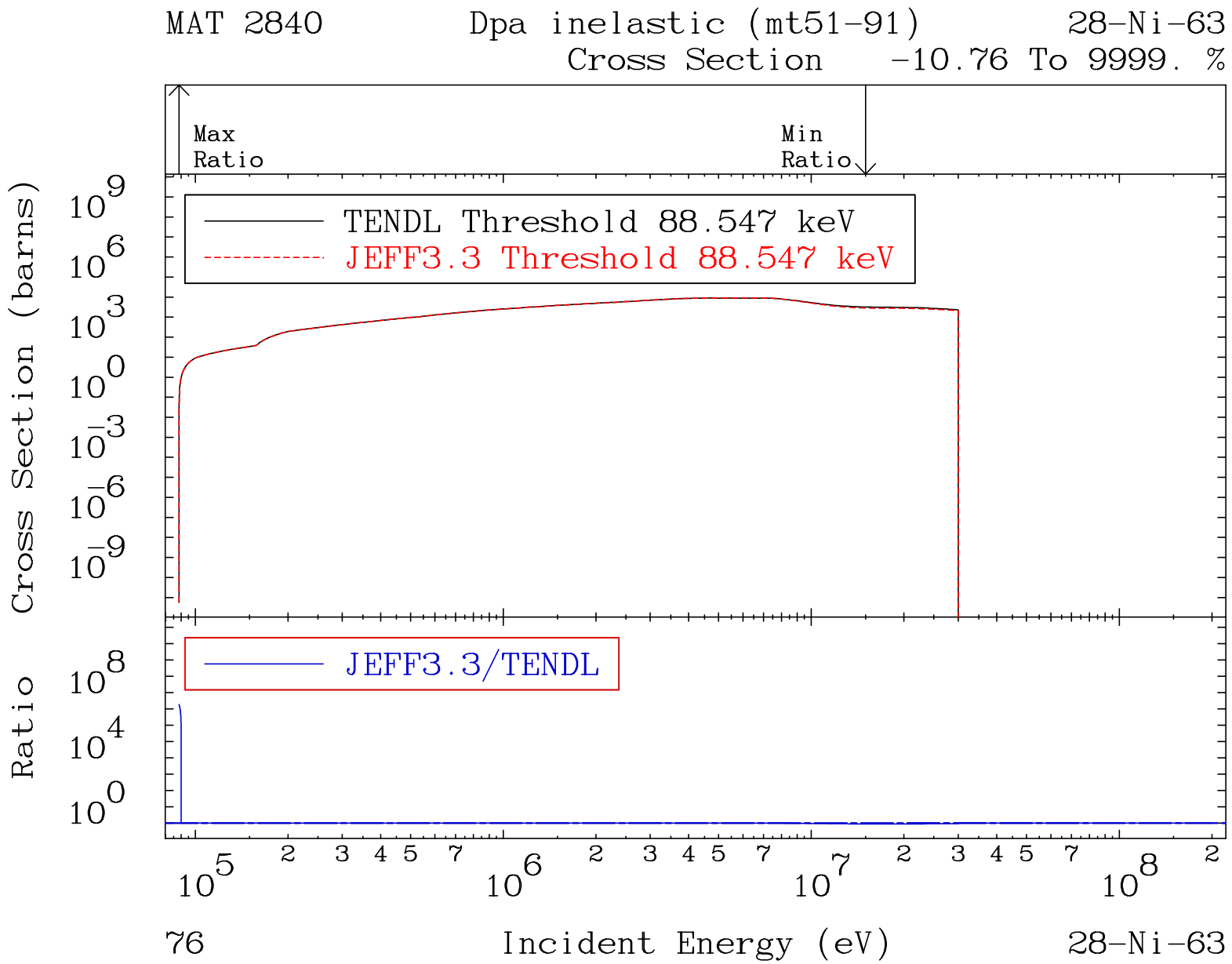

MAT 2840
Kerma capture (mt102)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
28-Ni-63

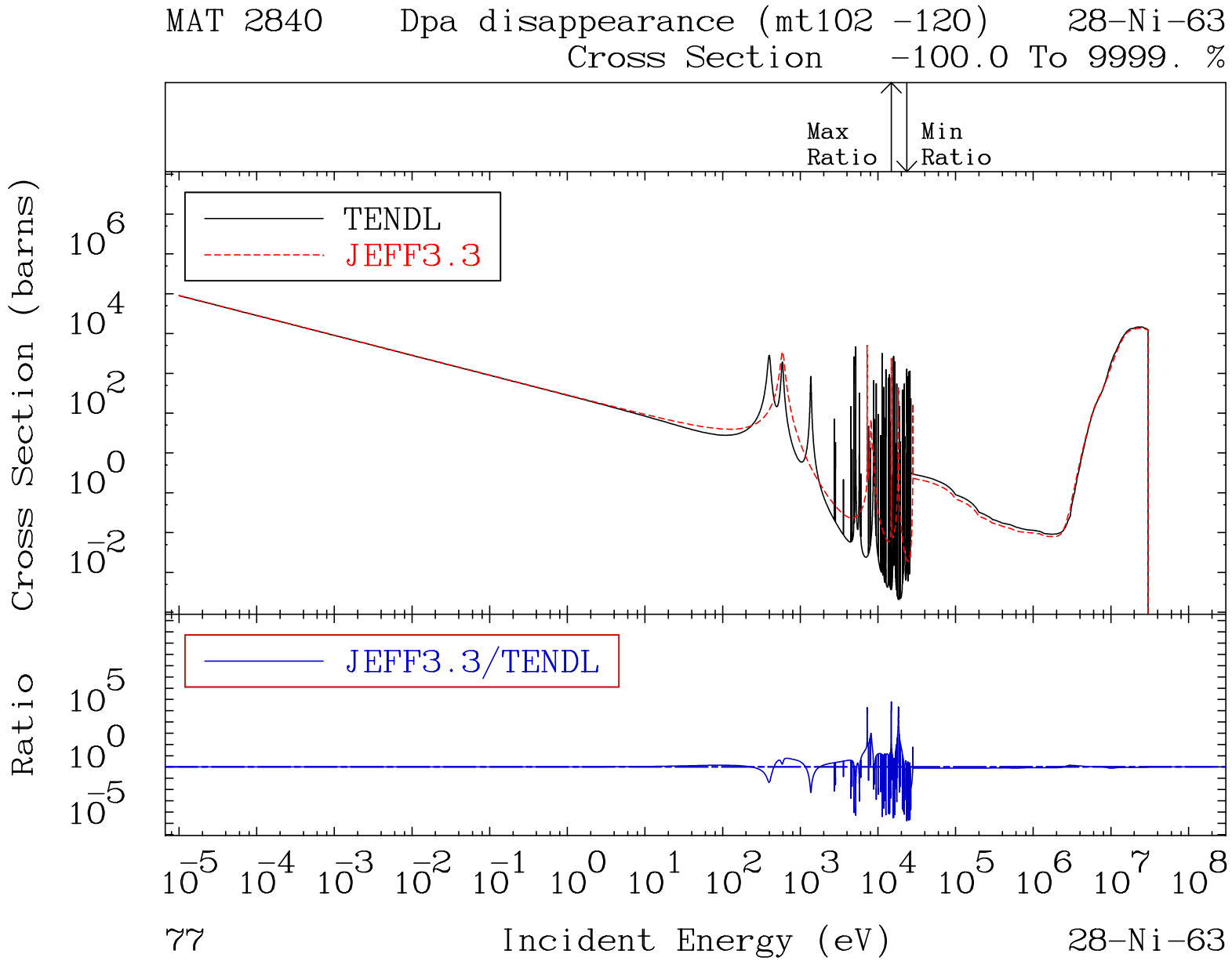

MAT 2840
Total photon (eV-barns)
28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
28-Ni-63

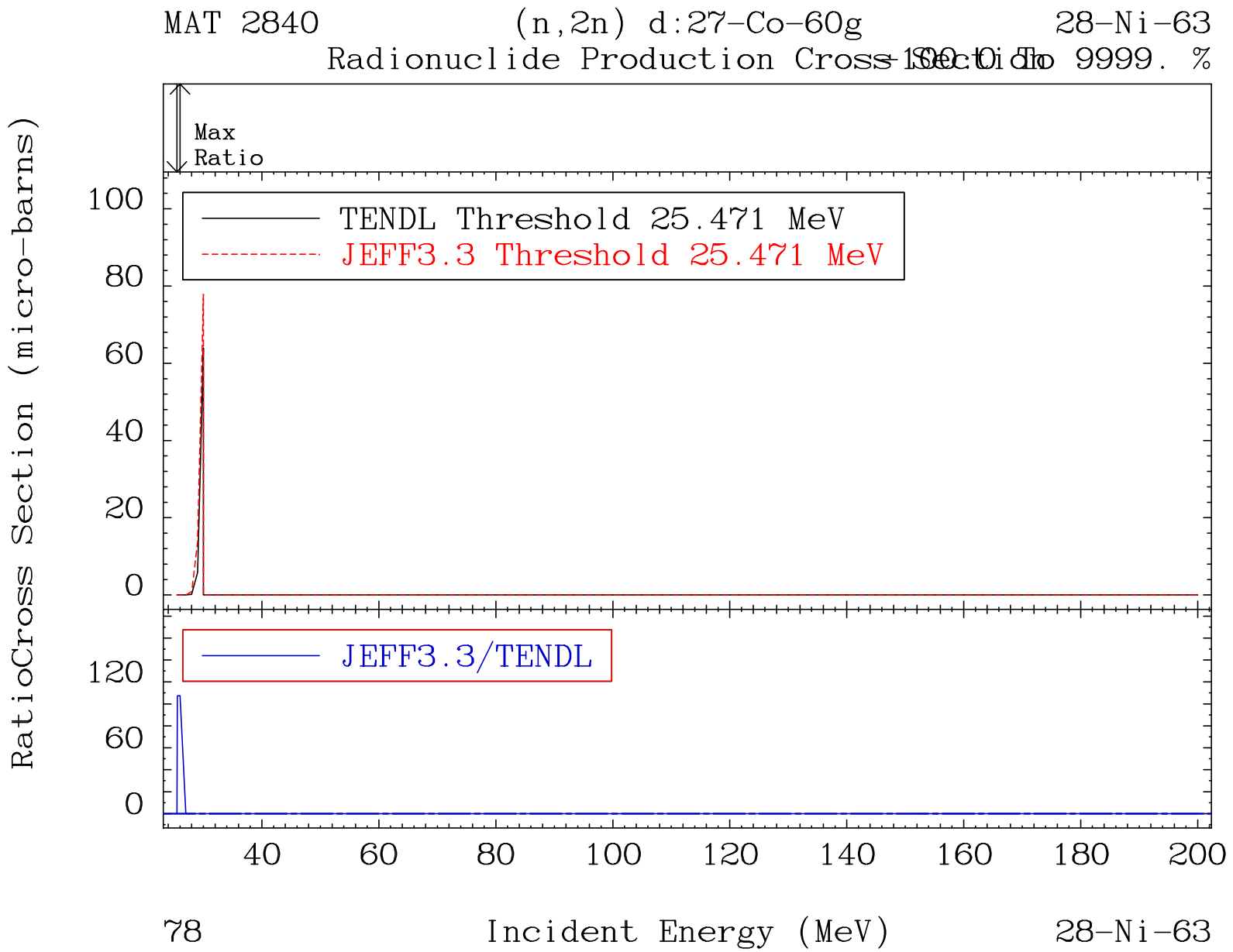

MAT 2840 Total kinematic kerma (high limit) 28-Ni-63
Cross Section -98.95 To 3632. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
28-Ni-63

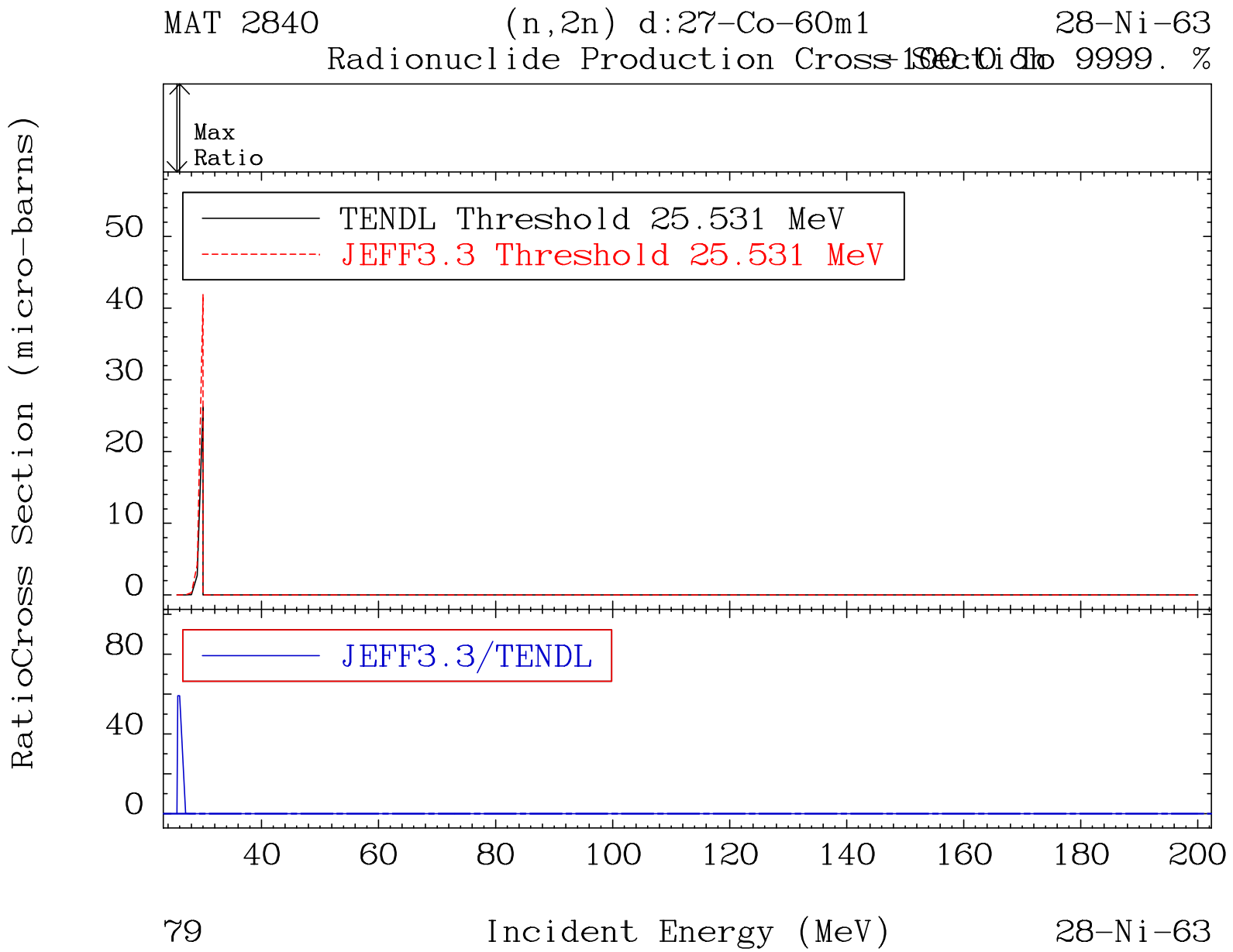

MAT 2840
Dpa total (eV-barns)
28-Ni-63
Cross Section
-98.97 To 3640. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
28-Ni-63

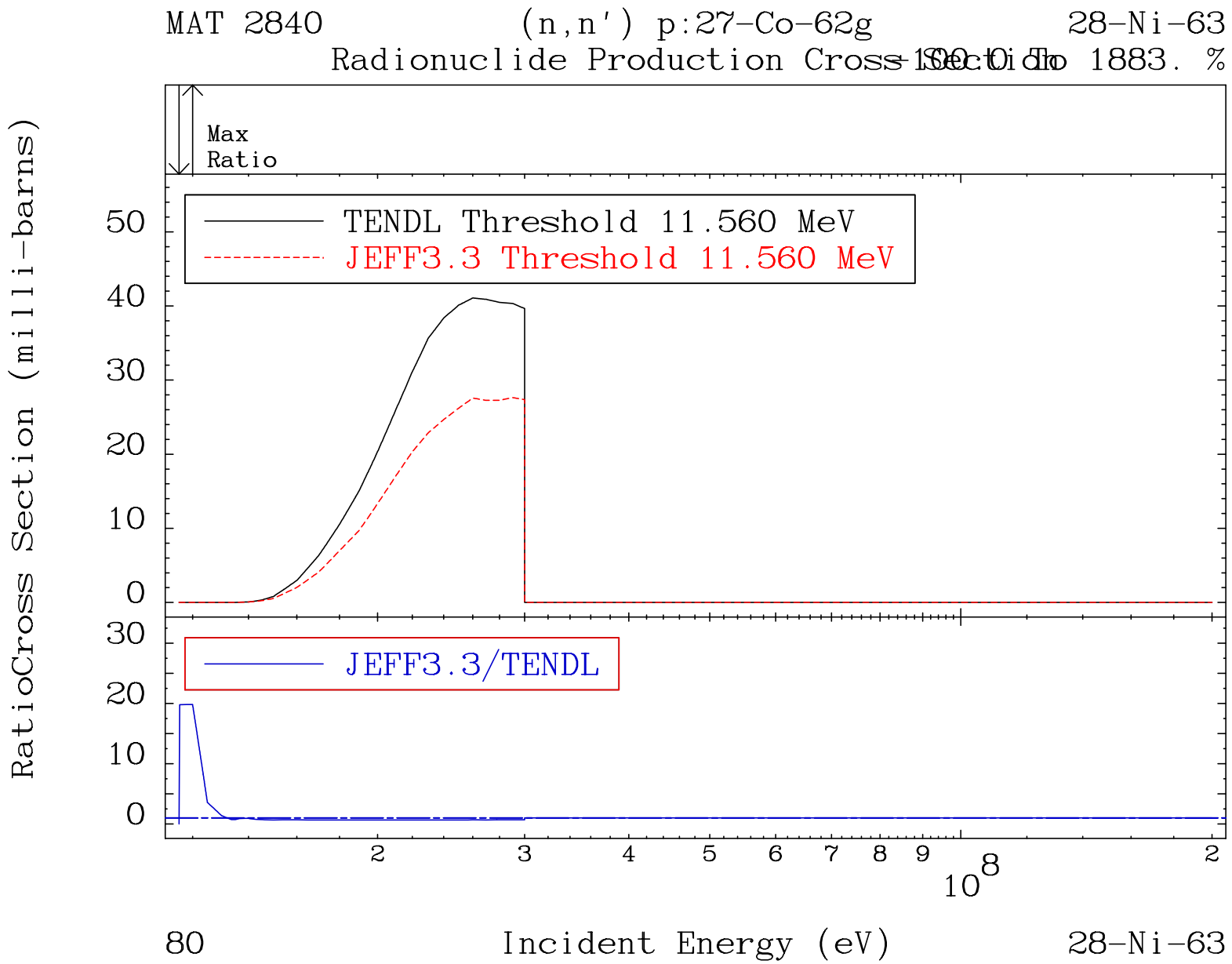

MAT 2840
Dpa elastic (mt2)
Cross Section
28-Ni-63
-99.16 To 3799. %
Min Ratio
Max Ratio
TENDL Threshold 605.84 eV
JEFF3.3 Threshold 615.82 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
28-Ni-63

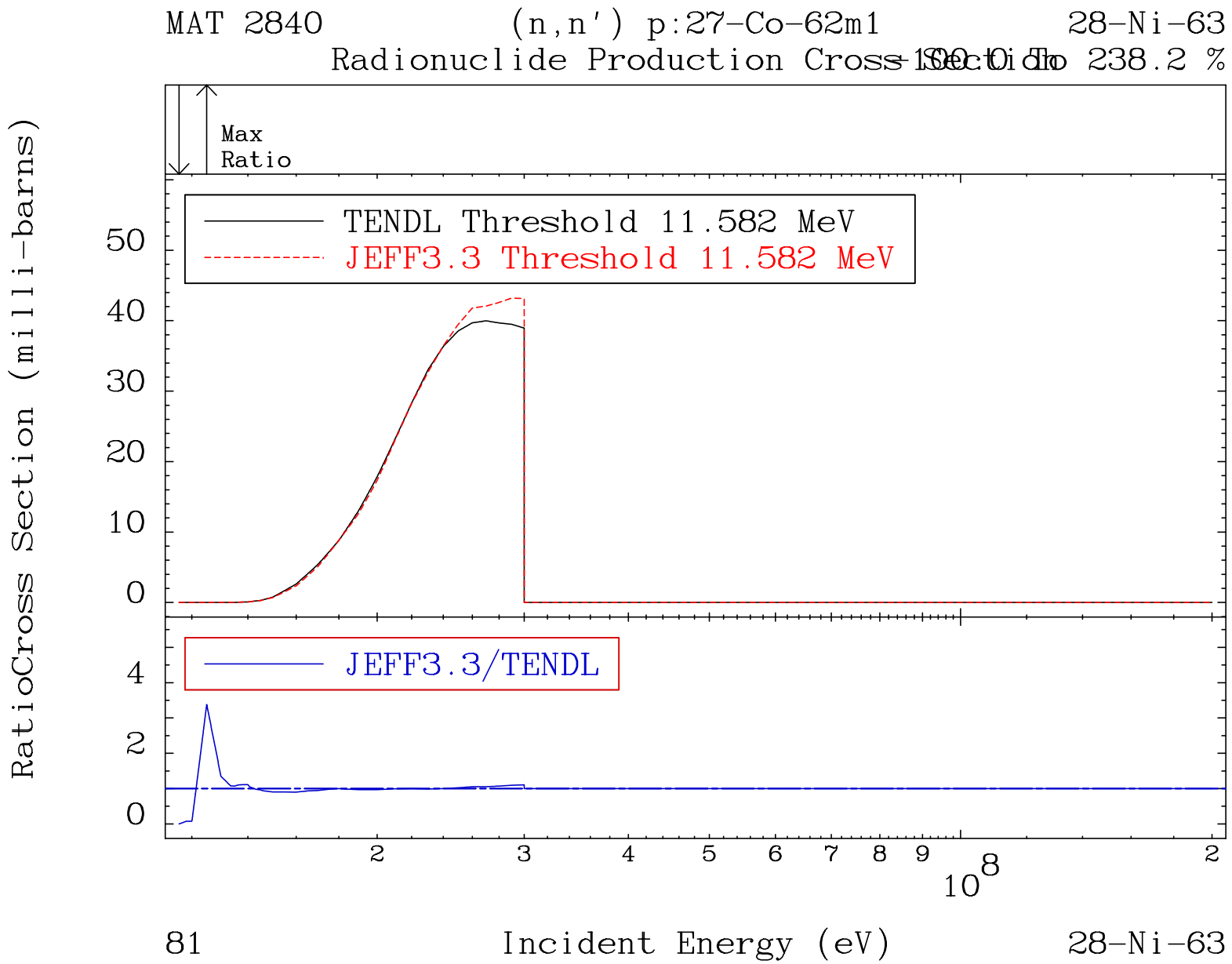

MAT 2840
Dpa inelastic (mt51-91)
28-Ni-63
Cross Section
-10.76 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 88.547 keV
JEFF3.3 Threshold 88.547 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
28-Ni-63

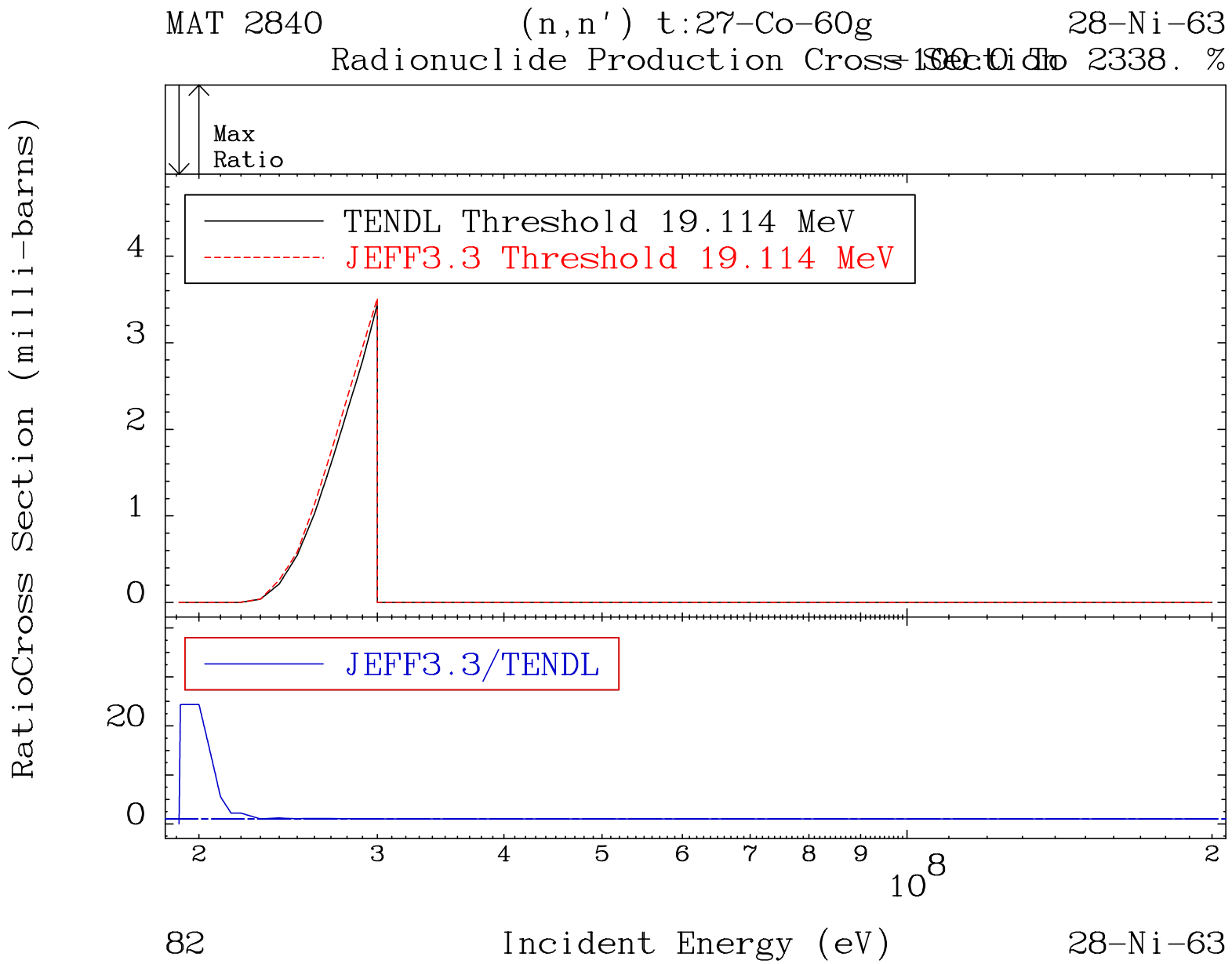

MAT 2840 Dpa disappearance (mt102 -120) 28-Ni-63
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
28-Ni-63

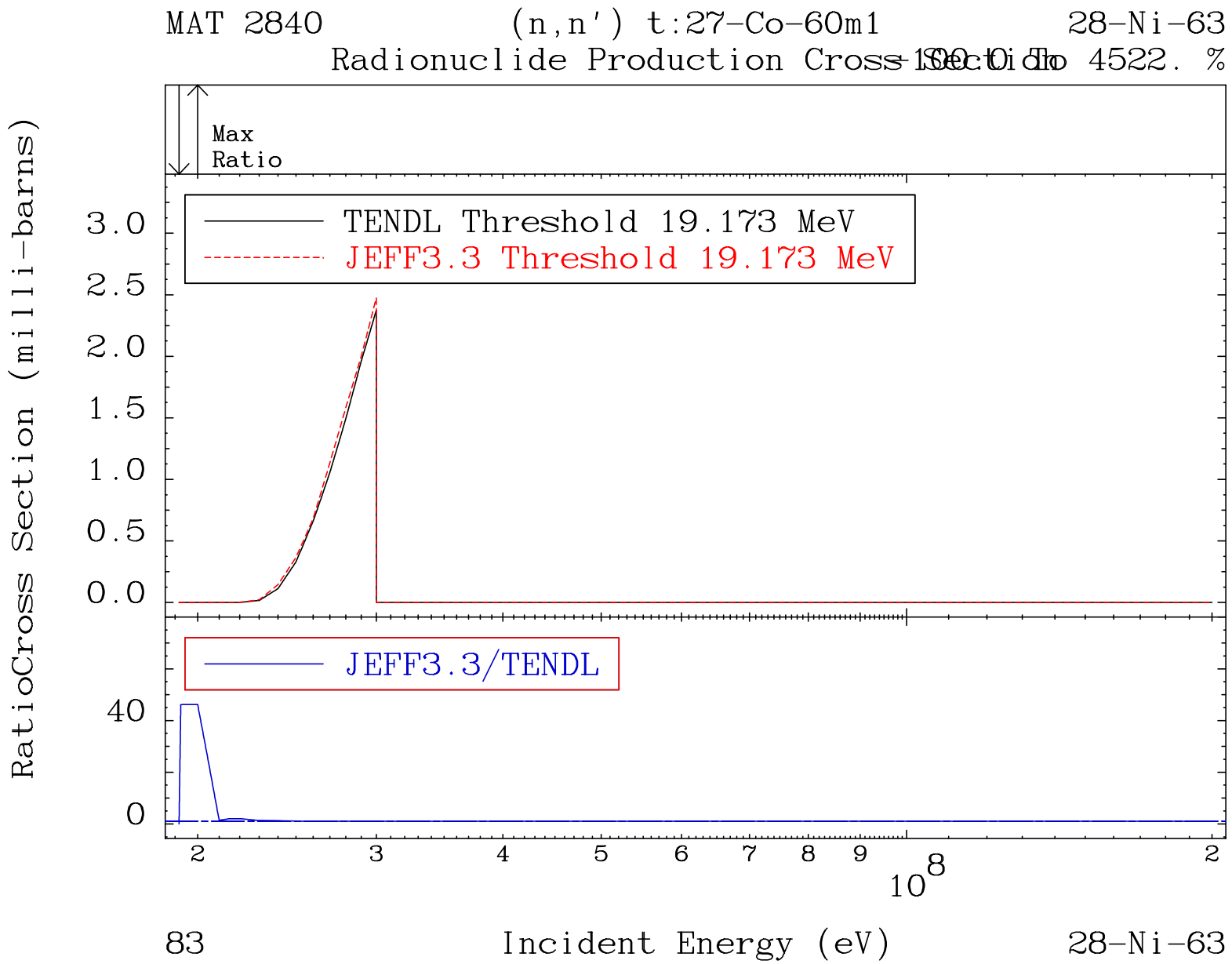

MAT 2840
(n,2n) d:27-Co-60g
28-Ni-63
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 25.471 MeV
JEFF3.3 Threshold 25.471 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
120
60
0
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
28-Ni-63

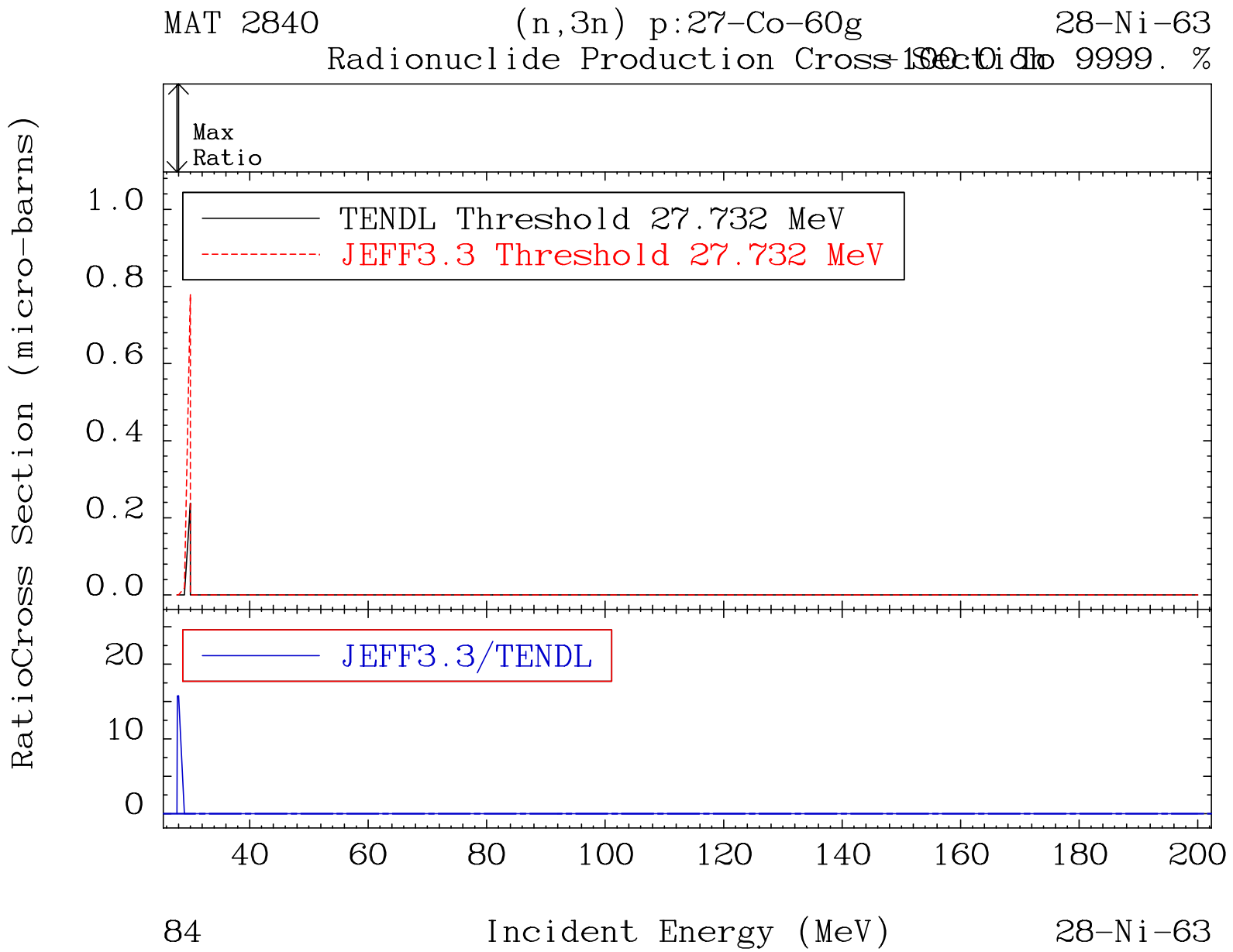

MAT 2840
(n,2n) d:27-Co-60m1
28-Ni-63
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 25.531 MeV
JEFF3.3 Threshold 25.531 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
50
40
30
20
10
0
80
40
0
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
28-Ni-63

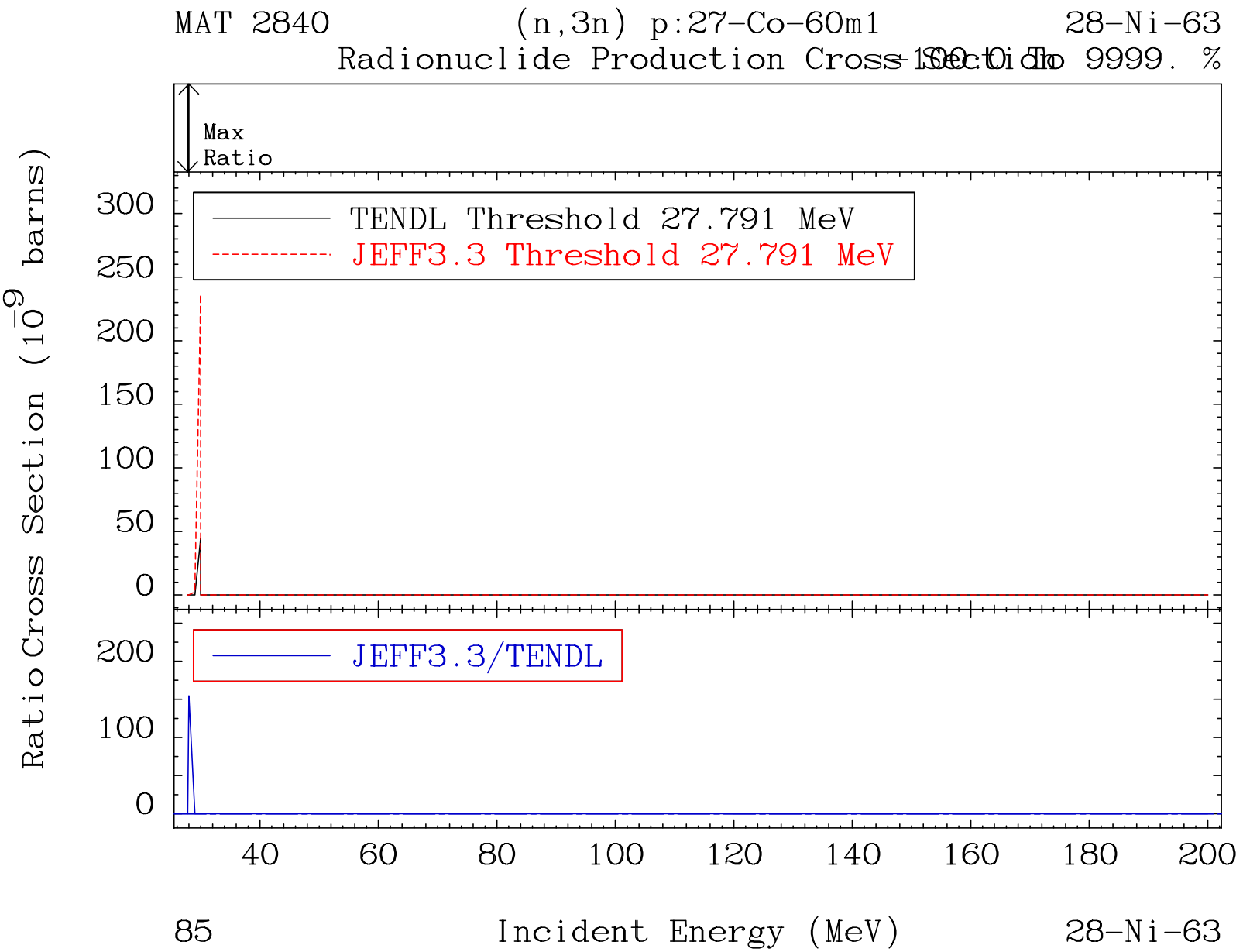

MAT 2840
(n,n') p:27-Co-62g
28-Ni-63
Radionuclide Production Cross Section To 1883. %
Max
Ratio
TENDL Threshold 11.560 MeV
JEFF3.3 Threshold 11.560 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
30
20
10
0
2
3
4
5
6
7
8
9
2
10^8
80
Incident Energy (eV)
28-Ni-63

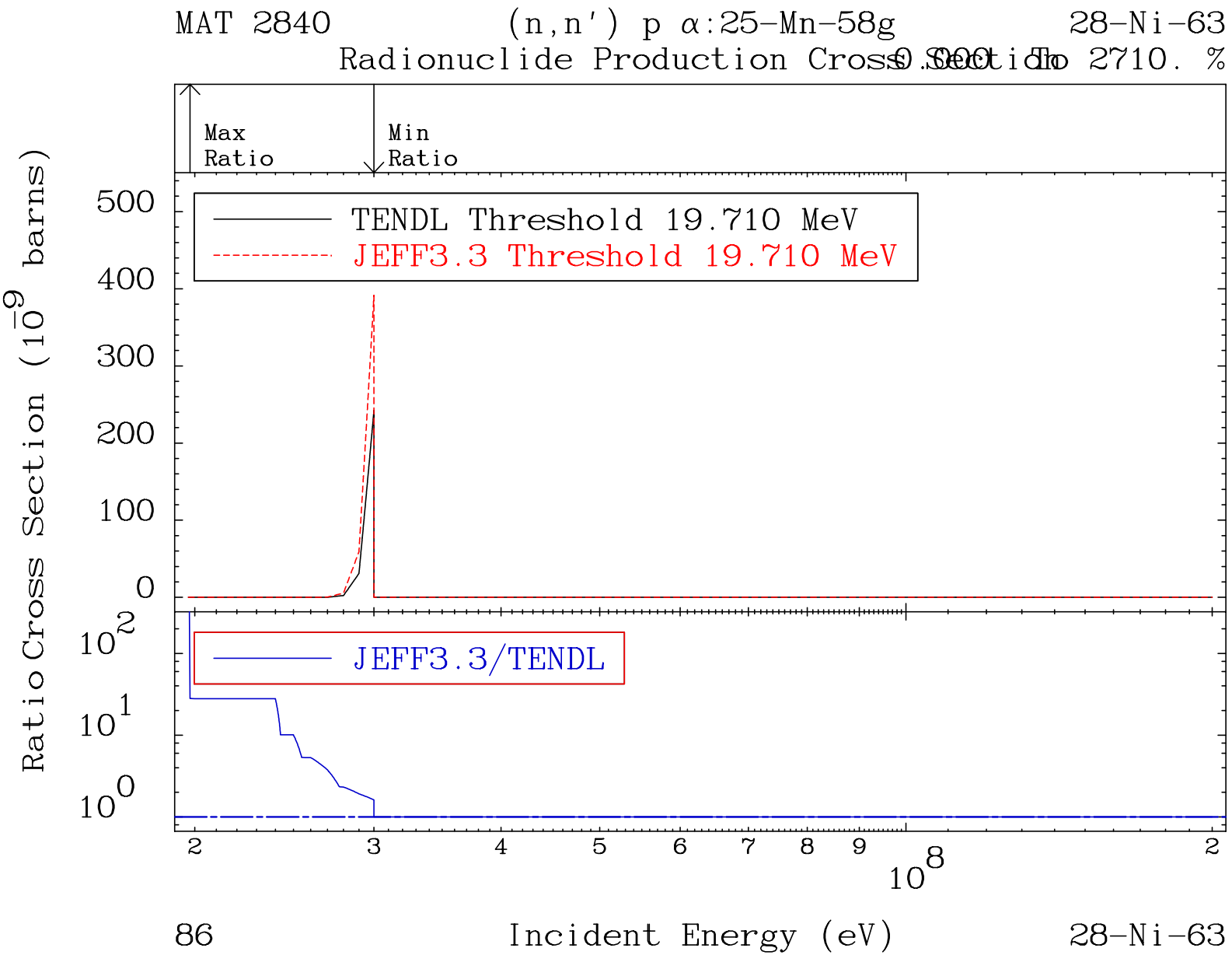

MAT 2840
(n,n') p:27-Co-62m1
28-Ni-63
Radionuclide Production Cross Section To 238.2 %
Max
Ratio
TENDL Threshold 11.582 MeV
JEFF3.3 Threshold 11.582 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
4
2
0
2
3
4
5
6
7
8
9
2
10^8
81
Incident Energy (eV)
28-Ni-63

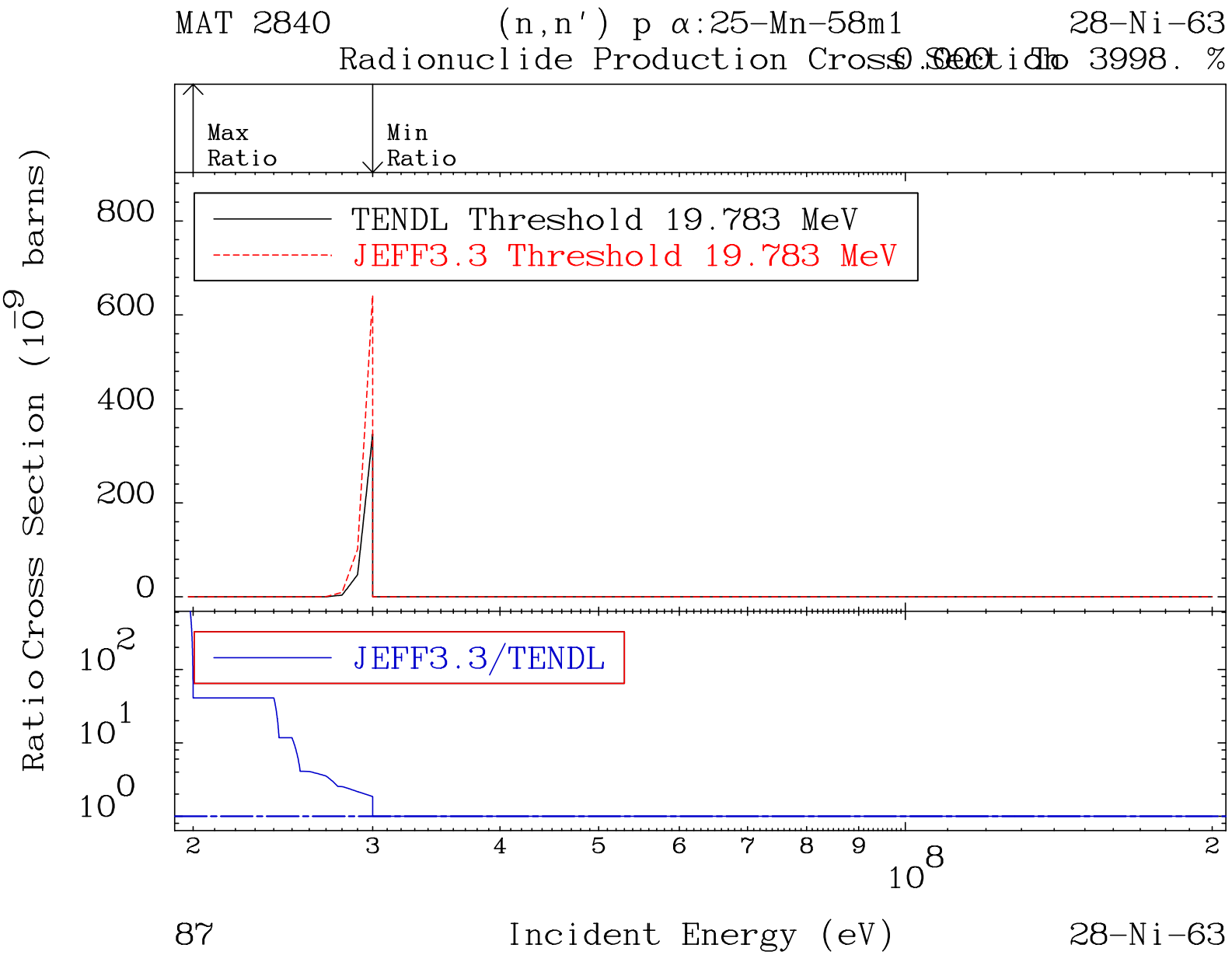

MAT 2840
(n,n') t:27-Co-60g
28-Ni-63
Radionuclide Production Cross Section To 2338. %
Max
Ratio
TENDL Threshold 19.114 MeV
JEFF3.3 Threshold 19.114 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
82
28-Ni-63

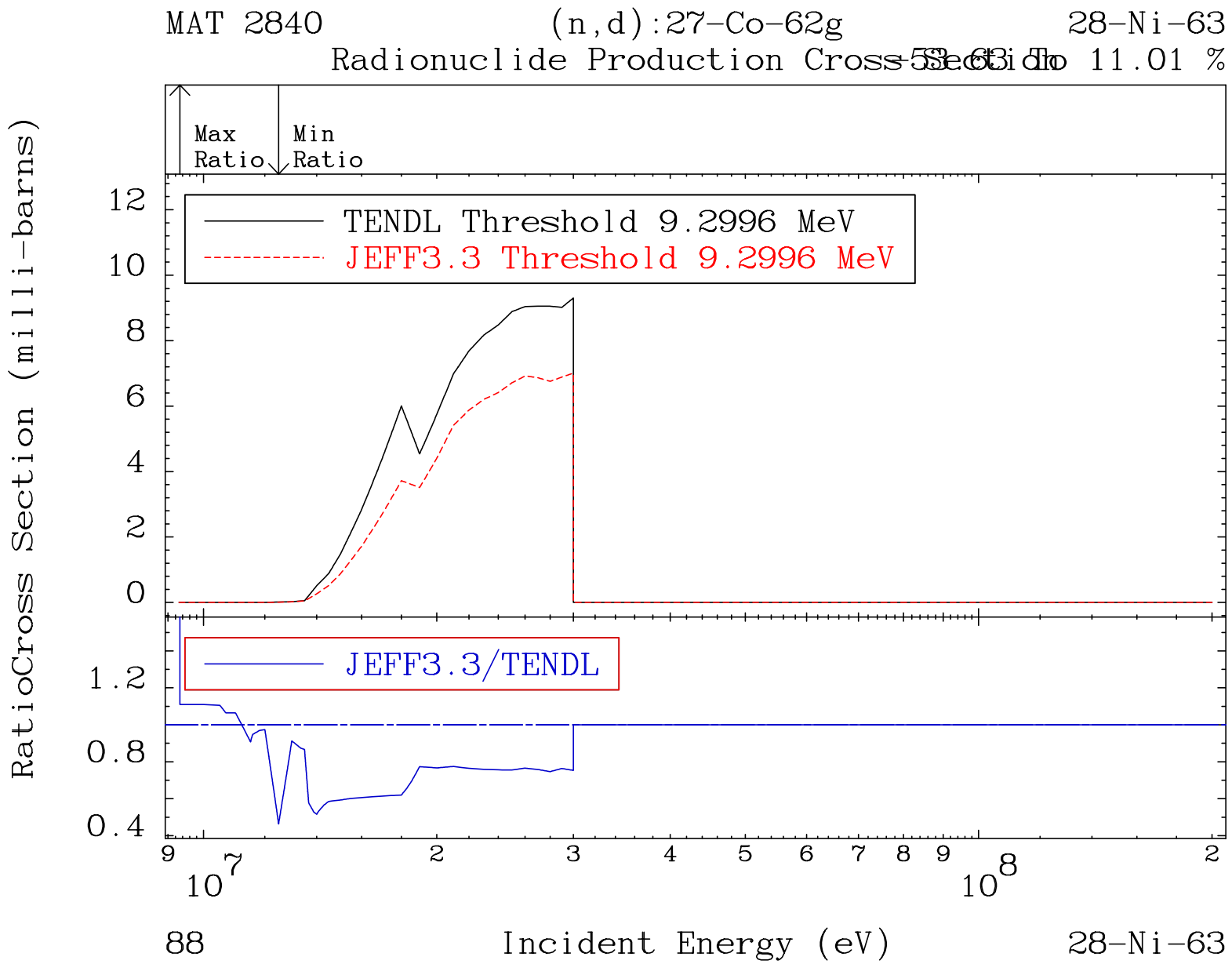

MAT 2840
(n,n') t:27-Co-60m1
28-Ni-63
Radionuclide Production Cross Section To 4522. %
Max
Ratio
TENDL Threshold 19.173 MeV
JEFF3.3 Threshold 19.173 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
40
0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
28-Ni-63

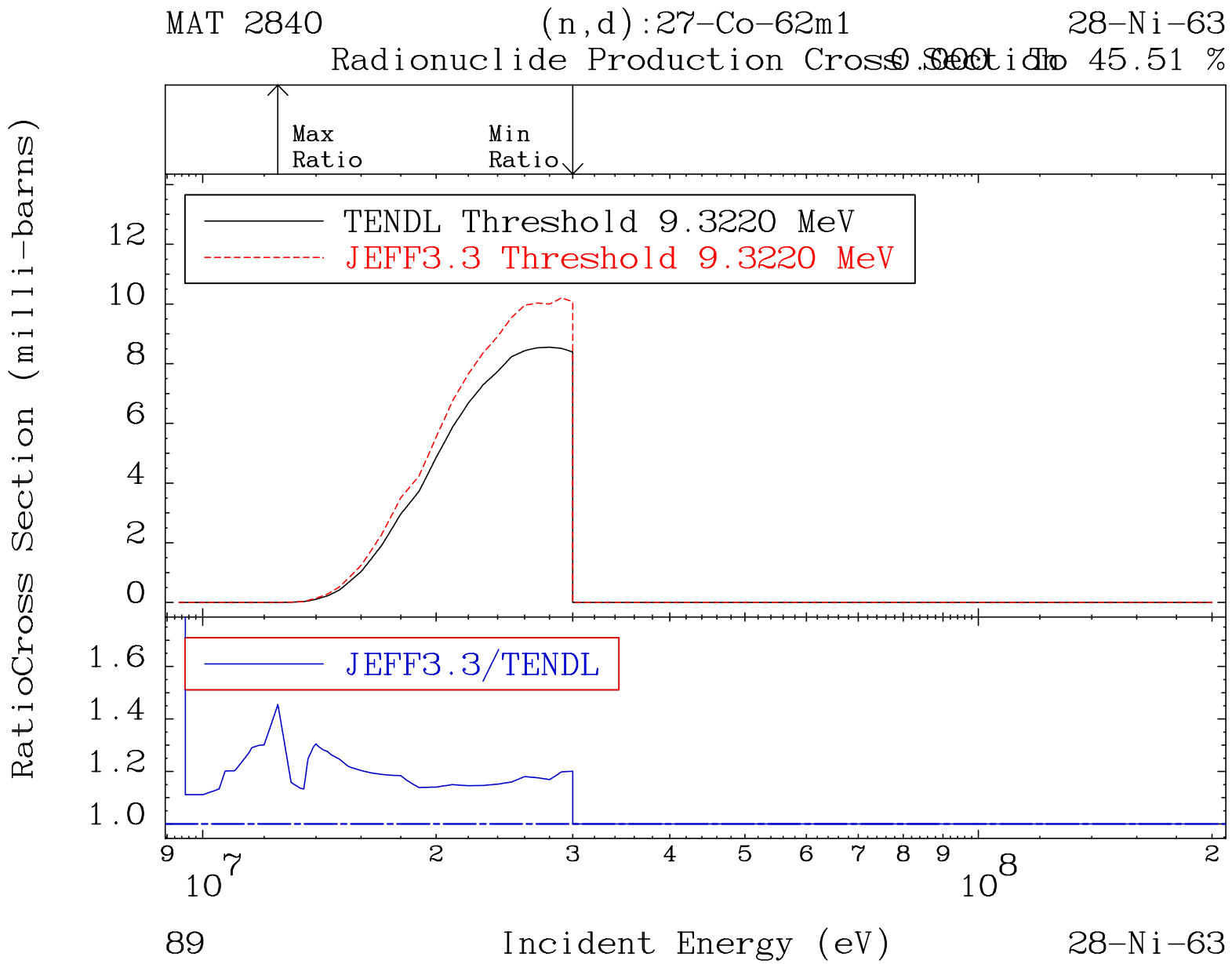

MAT 2840
(n,3n) p:27-Co-60g
28-Ni-63
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 27.732 MeV
JEFF3.3 Threshold 27.732 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
20
10
0
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
28-Ni-63

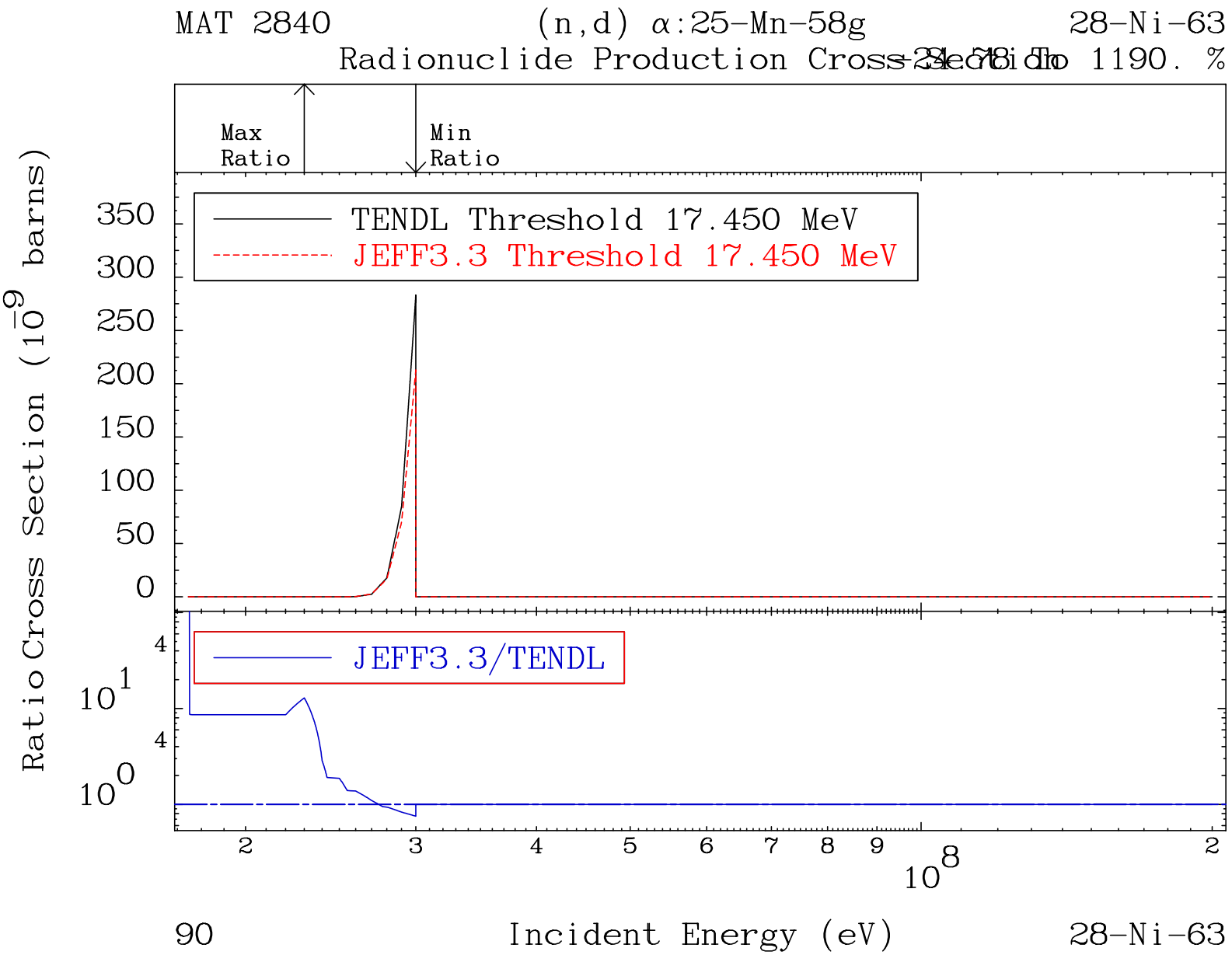

MAT 2840
(n,3n) p:27-Co-60m1
28-Ni-63
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 27.791 MeV
JEFF3.3 Threshold 27.791 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
200
100
0
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
28-Ni-63

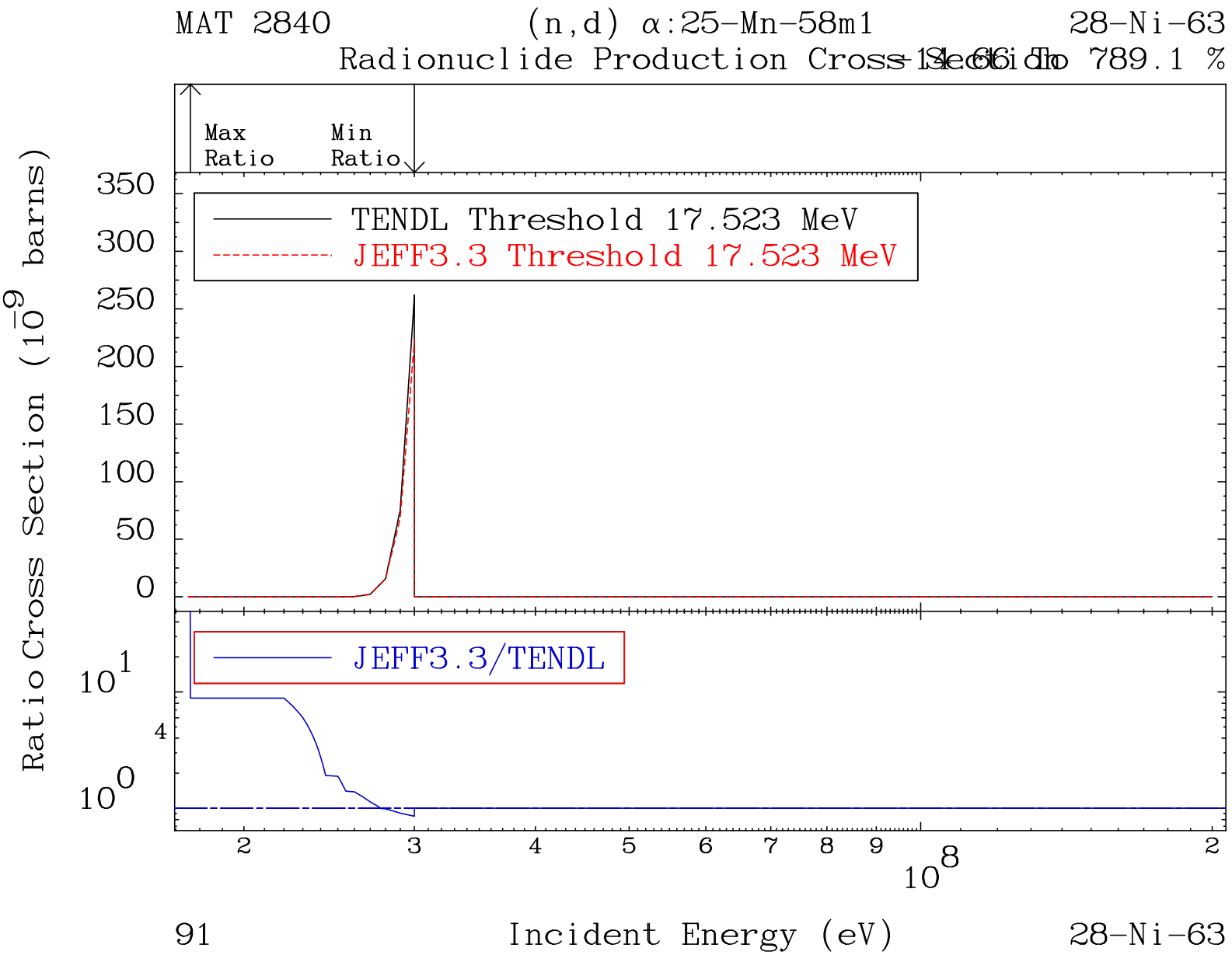

MAT 2840
(n,n') p α:25-Mn-58g
28-Ni-63
Radionuclide Production Cross Section
0.000 To 2710. %
Max Ratio
Min Ratio
TENDL Threshold 19.710 MeV
JEFF3.3 Threshold 19.710 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
500
400
300
200
100
0
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
86
Incident Energy (eV)
28-Ni-63


MAT 2840
(n,n') p α:25-Mn-58m1
28-Ni-63
Radionuclide Production Cross Section
0.000 To 3998. %
Max Ratio
Min Ratio
TENDL Threshold 19.783 MeV
JEFF3.3 Threshold 19.783 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
800
600
400
200
0
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
87
Incident Energy (eV)
28-Ni-63


MAT 2840
(n,d):27-Co-62g
28-Ni-63
Radionuclide Production Cross Section To 11.01 %
Max Ratio
Min Ratio
TENDL Threshold 9.2996 MeV
JEFF3.3 Threshold 9.2996 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
88
28-Ni-63


MAT 2840
(n,d):27-Co-62m1
28-Ni-63
Radionuclide Production Cross Section
0.000 To 45.51 %
Max Ratio
Min Ratio
TENDL Threshold 9.3220 MeV
JEFF3.3 Threshold 9.3220 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
89
28-Ni-63


MAT 2840
(n,d) α:25-Mn-58g
28-Ni-63
Radionuclide Production Cross Section To 1190. %
Max Ratio
Min Ratio
TENDL Threshold 17.450 MeV
JEFF3.3 Threshold 17.450 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
350
300
250
200
150
100
50
0
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
28-Ni-63


MAT 2840
(n,d) α:25-Mn-58m1
28-Ni-63
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 17.523 MeV
JEFF3.3 Threshold 17.523 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
91
28-Ni-63