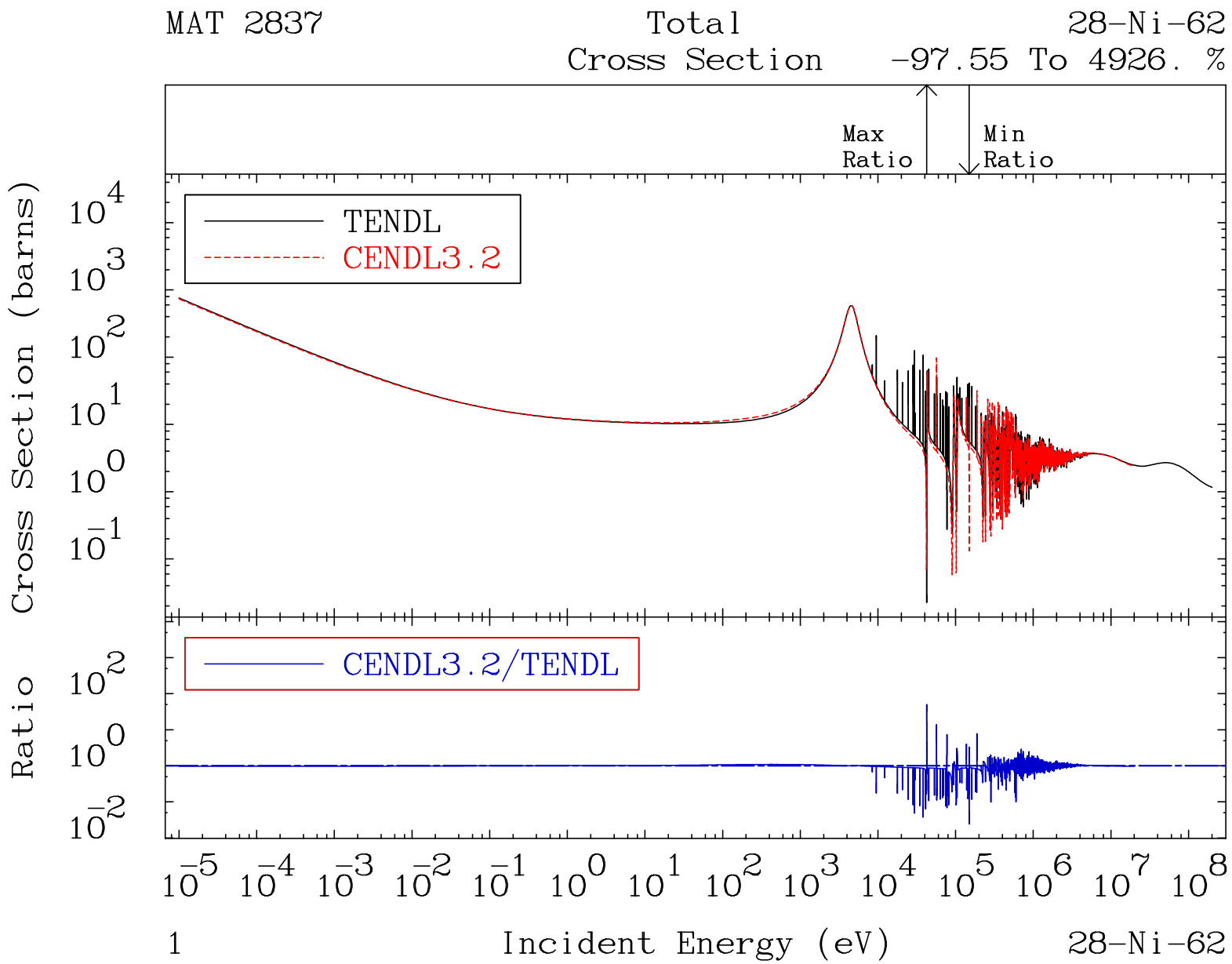
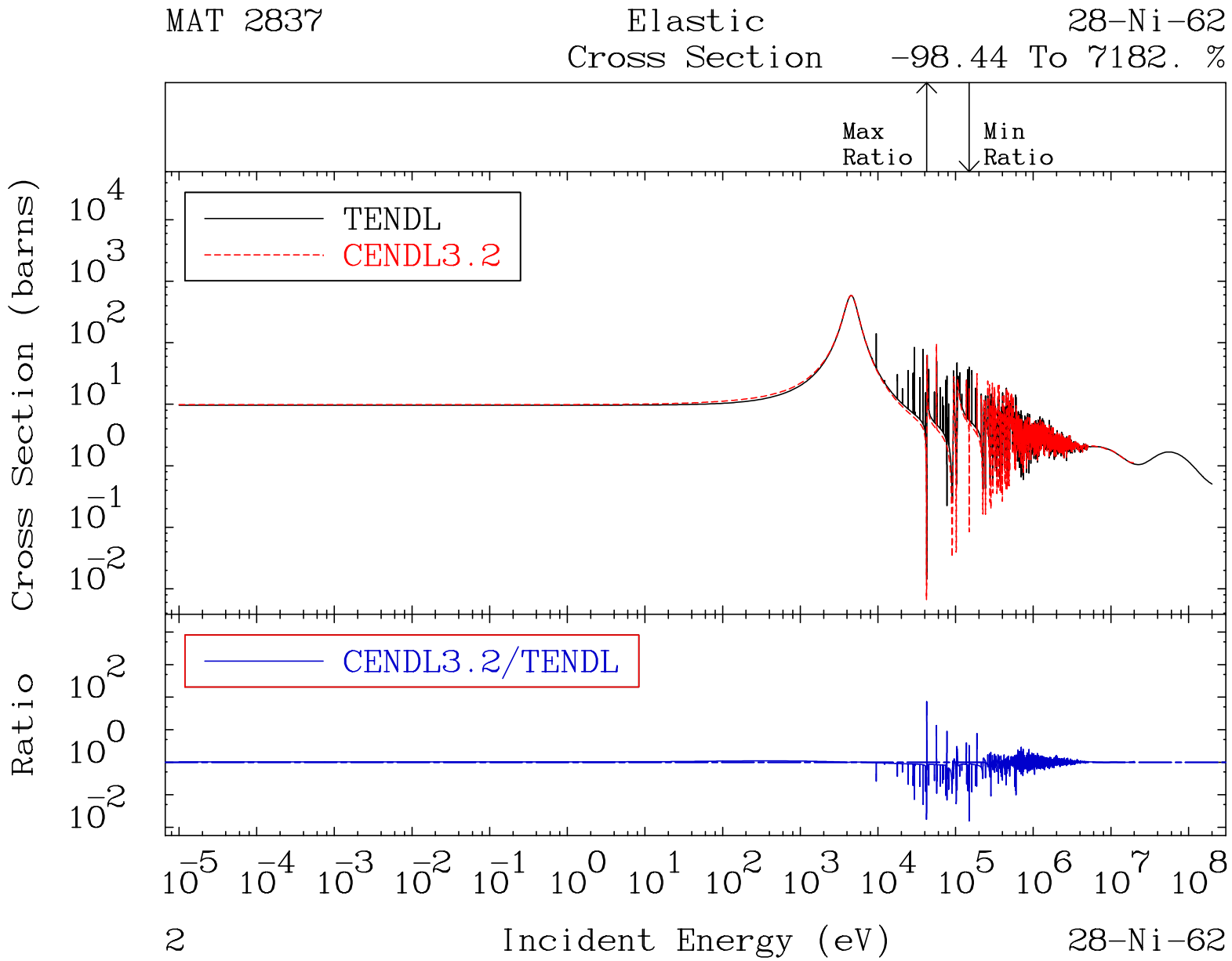
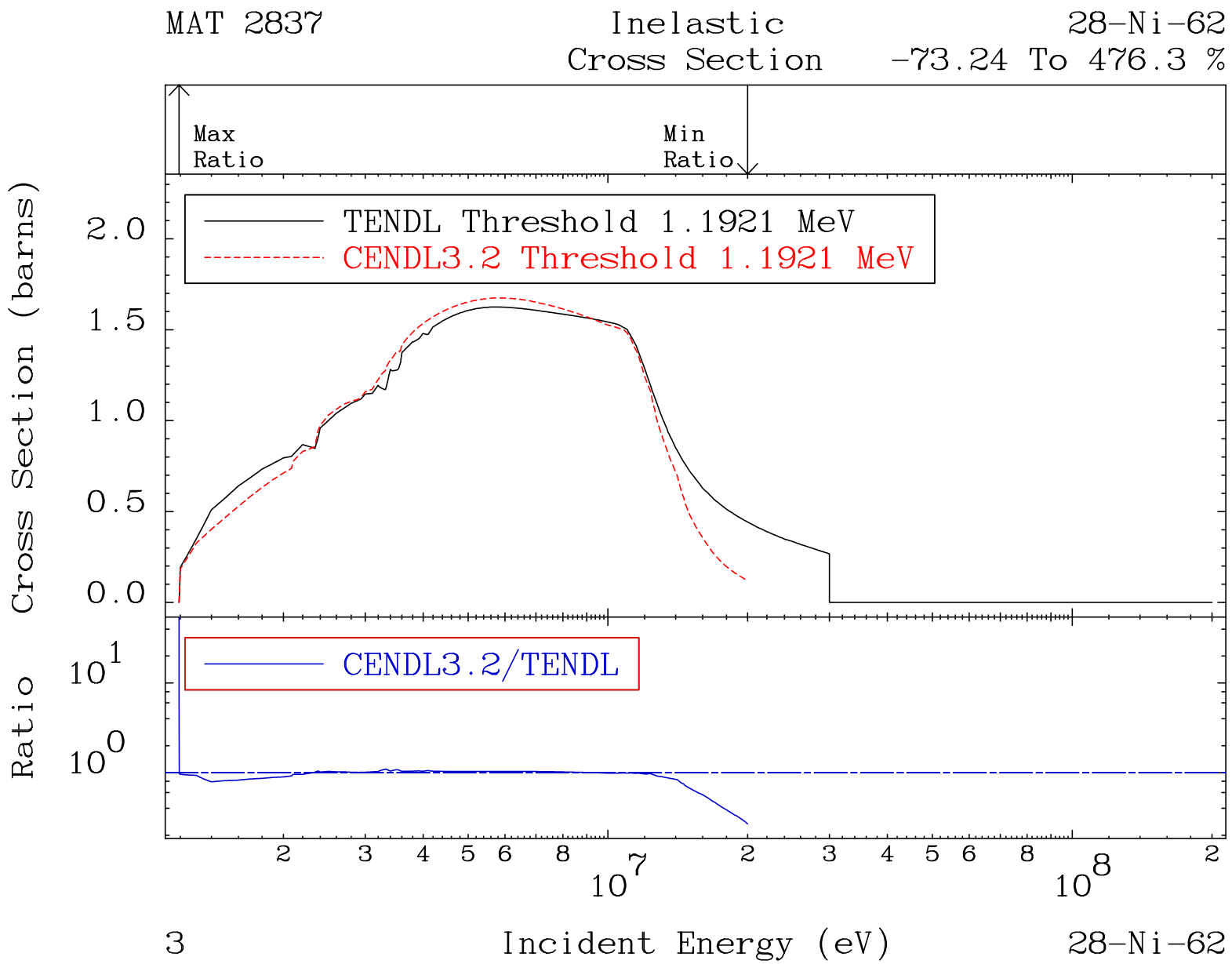
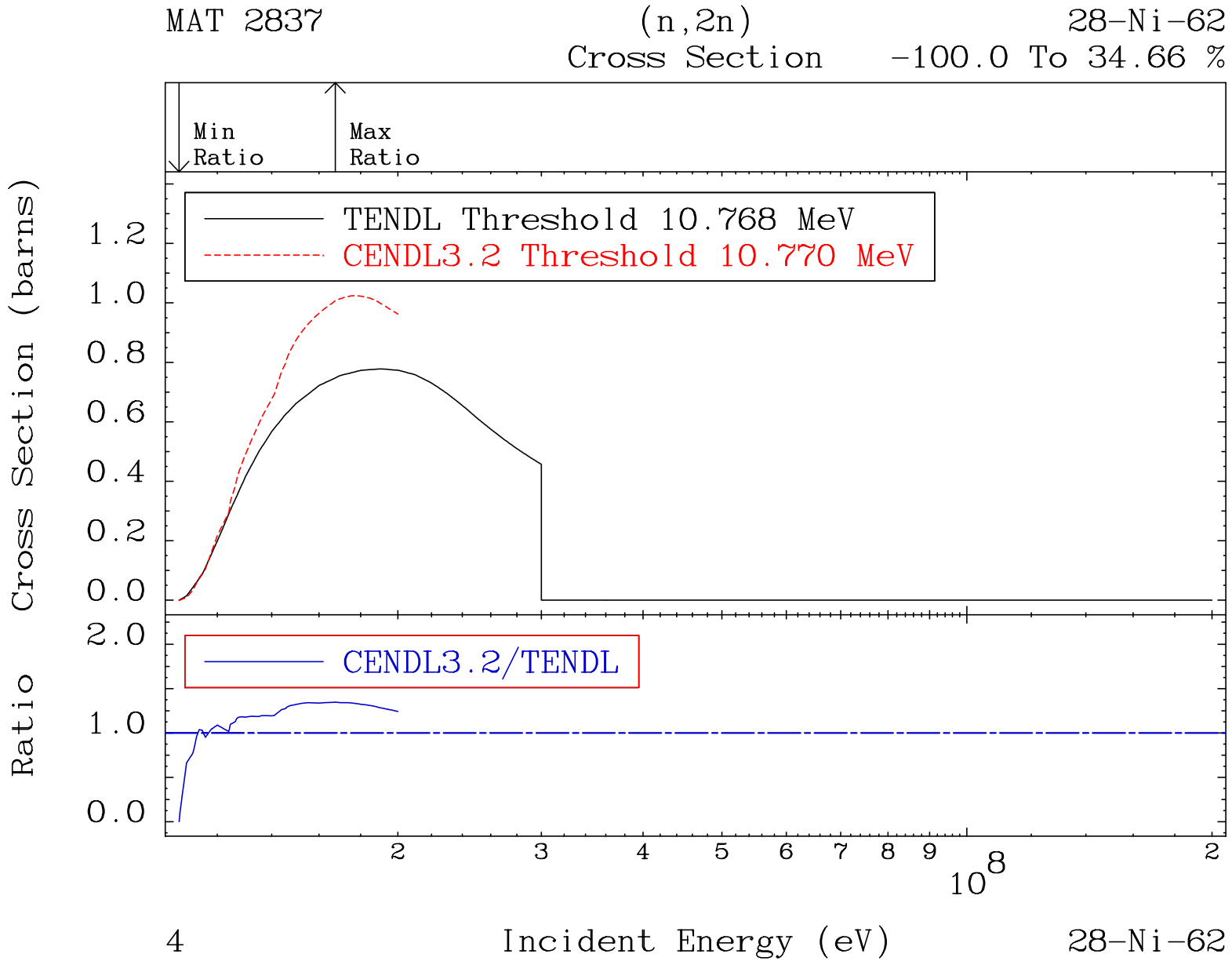
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

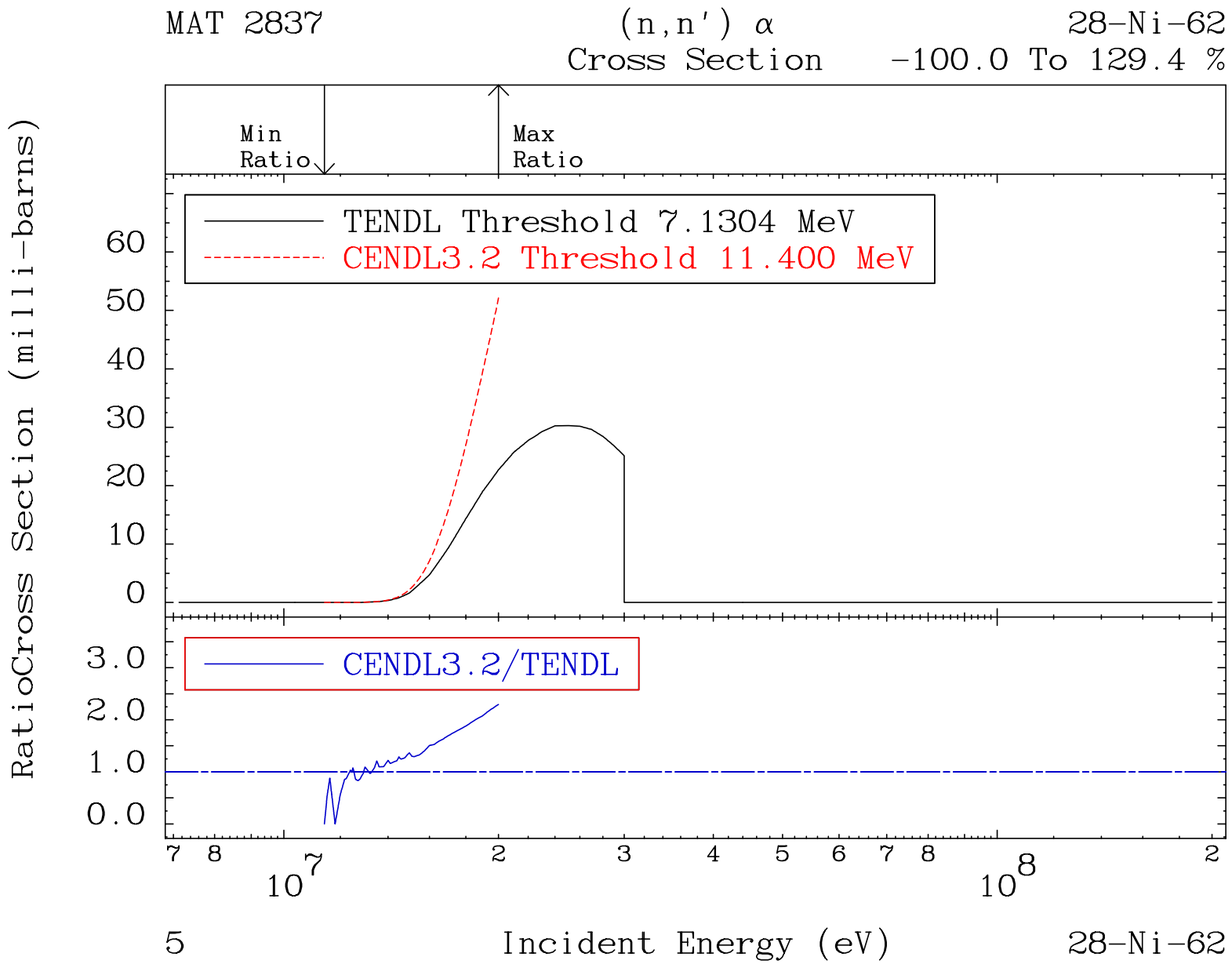
Press Mouse Button to Start

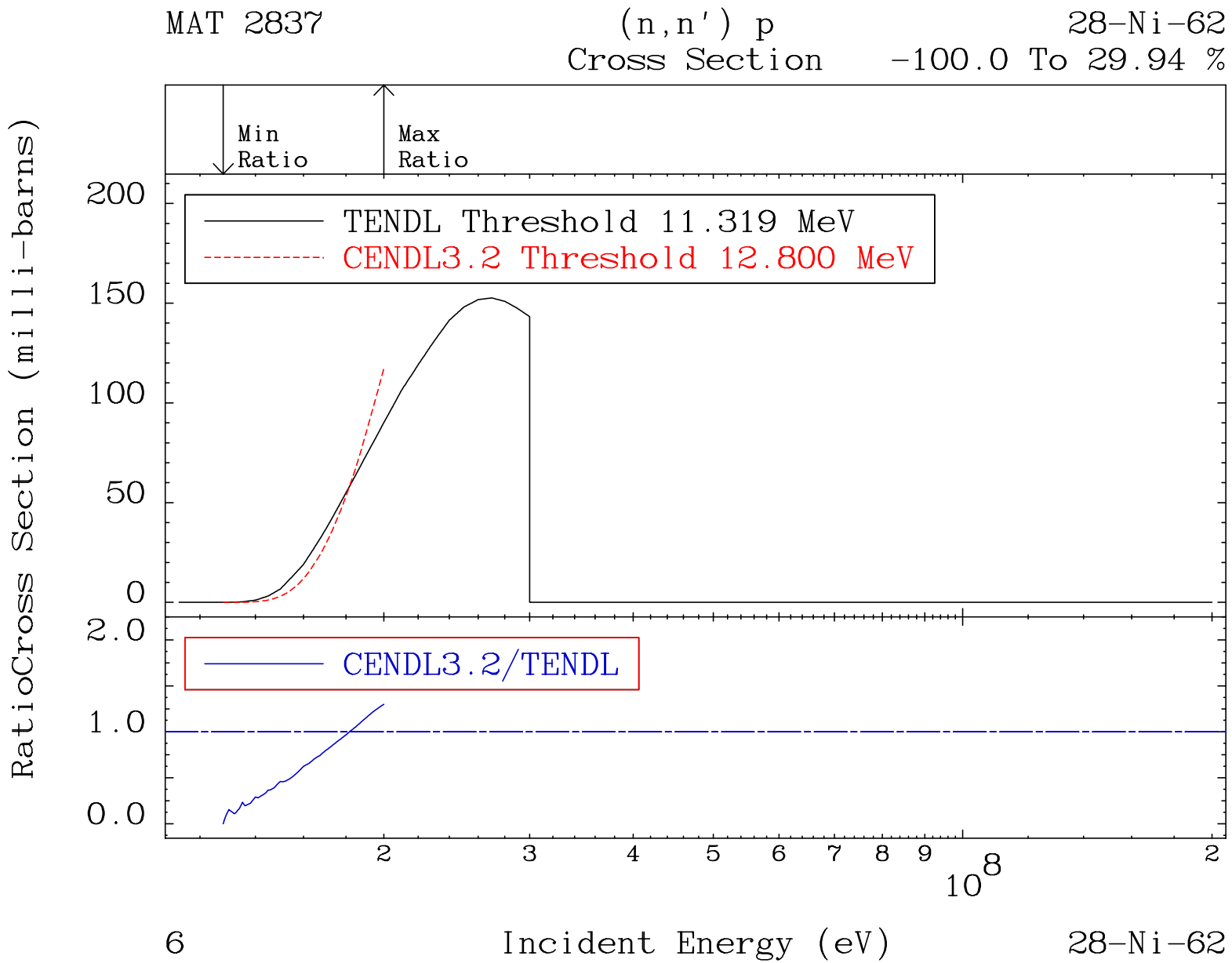

MAT 2837
Total
Cross Section
28-Ni-62
-97.55 To 4926. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
28-Ni-62

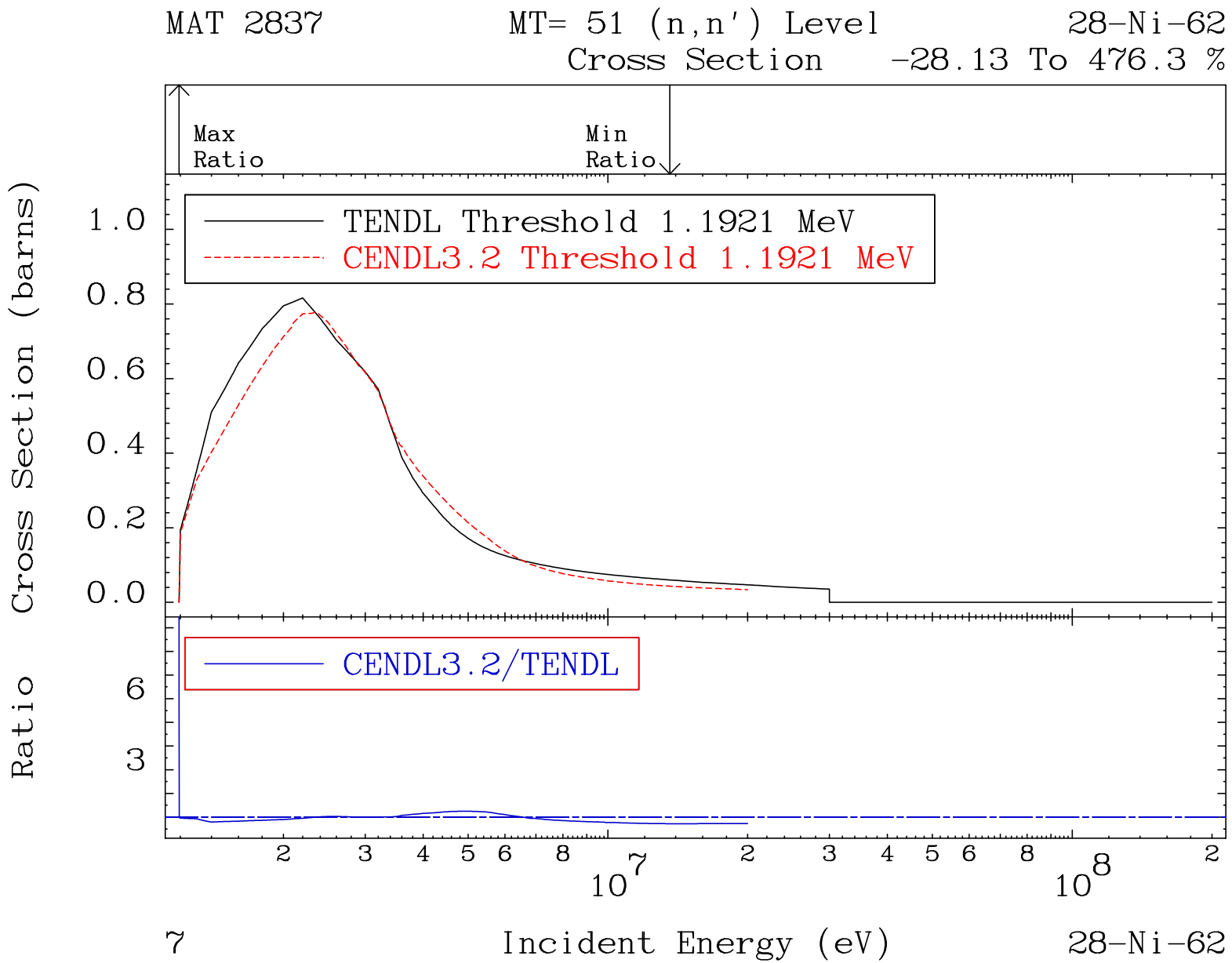

MAT 2837
Elastic
Cross Section
28-Ni-62
-98.44 To 7182. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
28-Ni-62

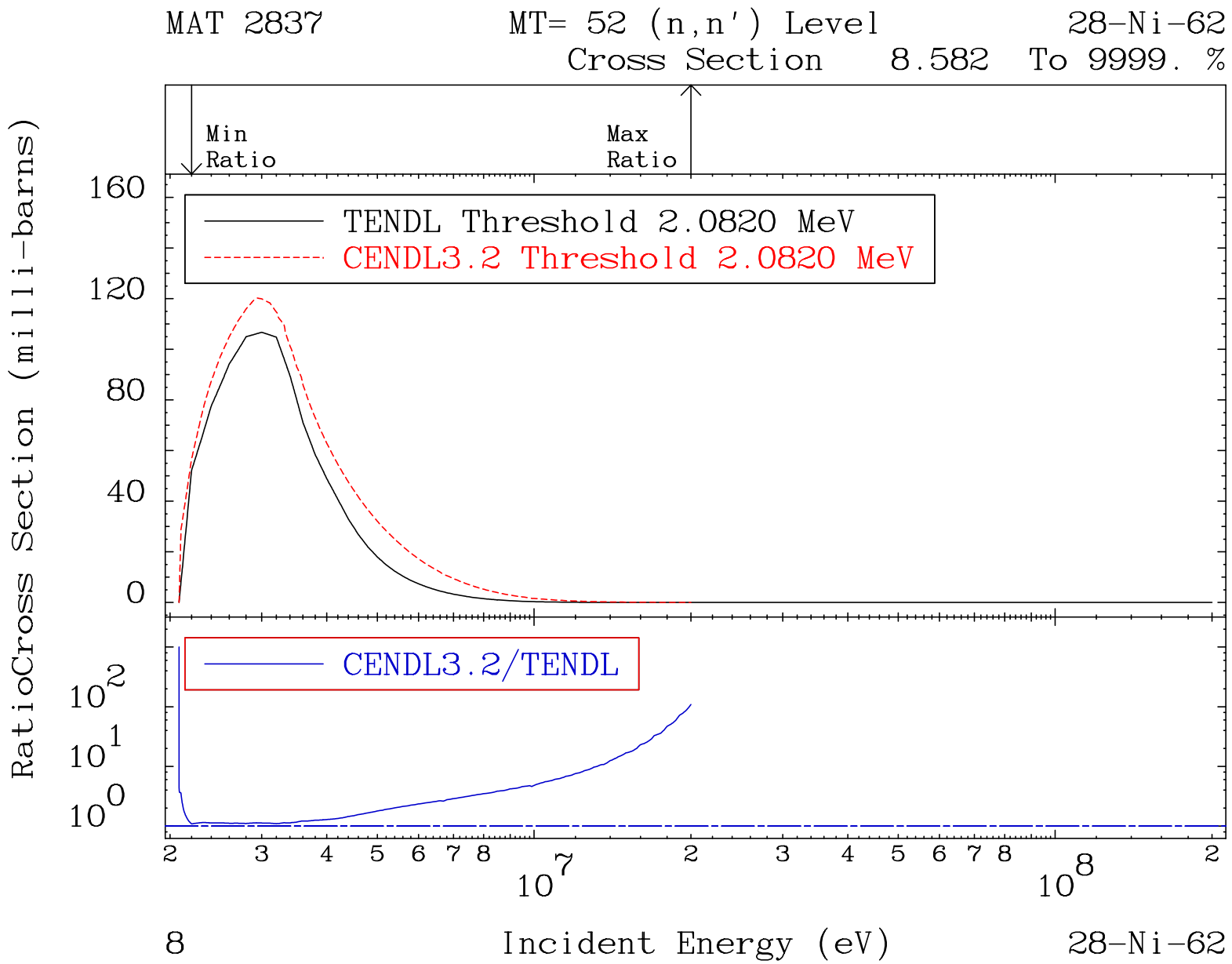

MAT 2837
Inelastic
Cross Section
28-Ni-62
-73.24 To 476.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1921 MeV
CENDL3.2 Threshold 1.1921 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
10^1
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
28-Ni-62

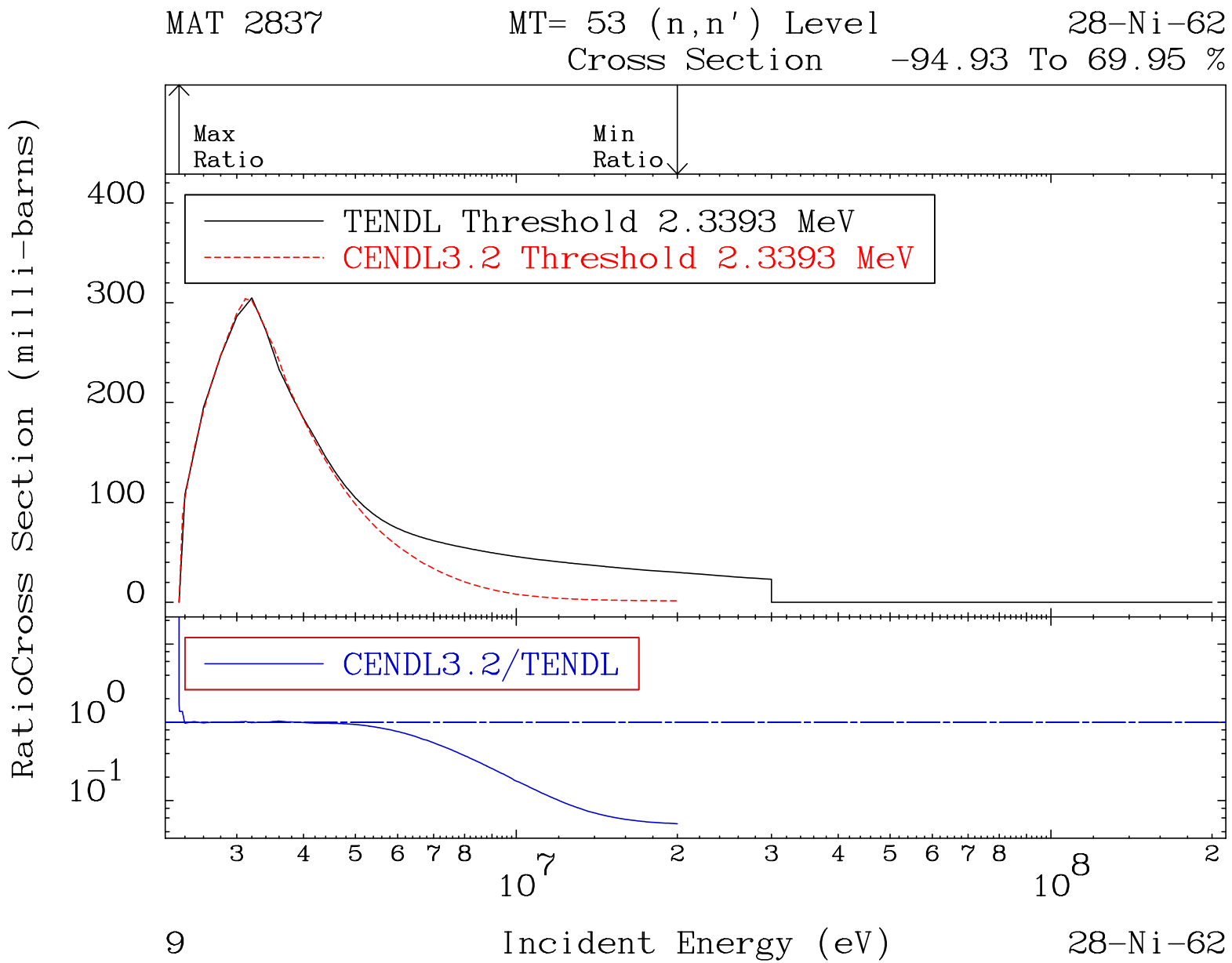

MAT 2837
(n,2n)
Cross Section
28-Ni-62
-100.0 To 34.66 %
Min Ratio
Max Ratio
TENDL Threshold 10.768 MeV
CENDL3.2 Threshold 10.770 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
Incident Energy (eV)
4
28-Ni-62

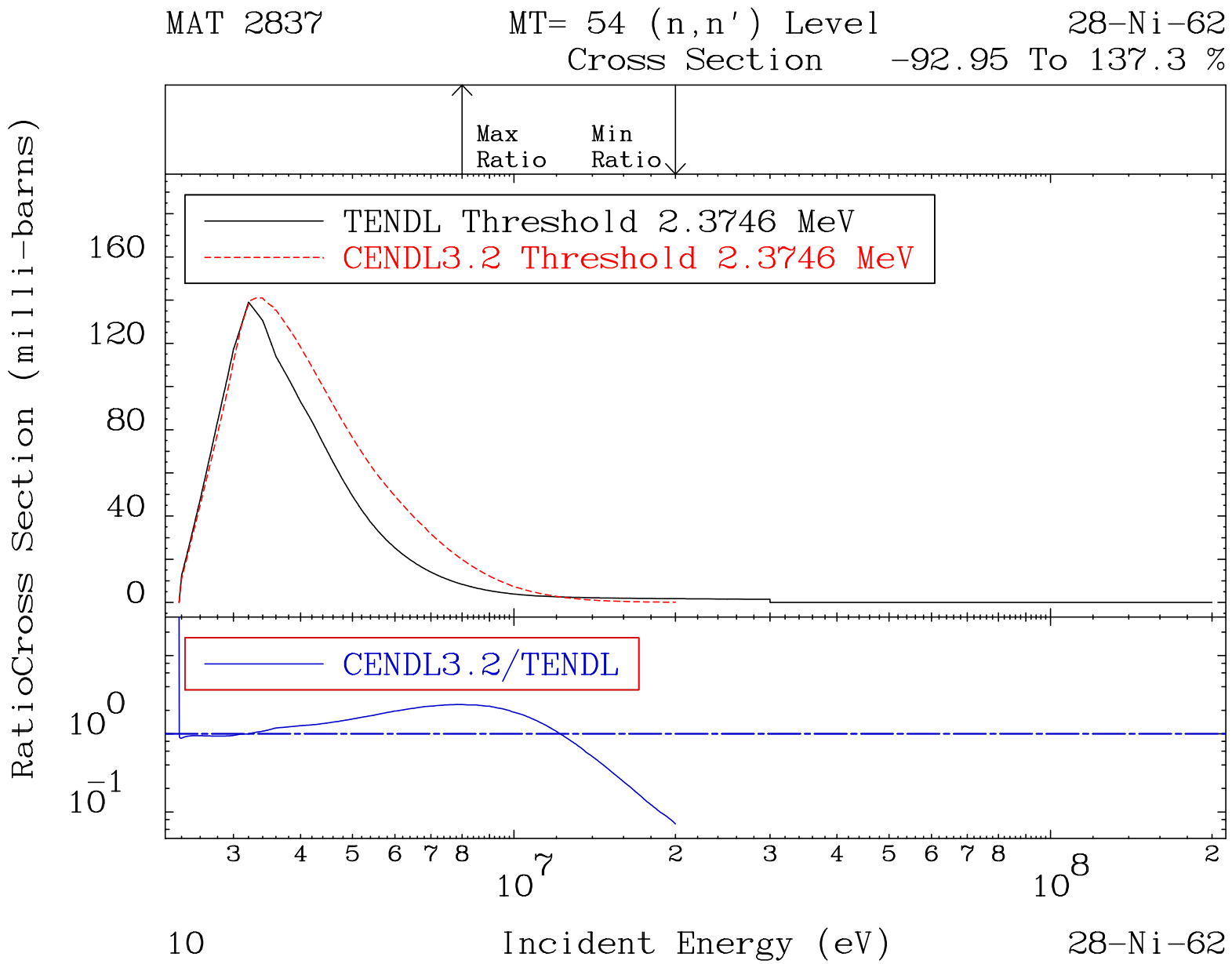

MAT 2837
(n,n') α
Cross Section
28-Ni-62
-100.0 To 129.4 %
Min Ratio
Max Ratio
TENDL Threshold 7.1304 MeV
CENDL3.2 Threshold 11.400 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
5
Incident Energy (eV)
28-Ni-62

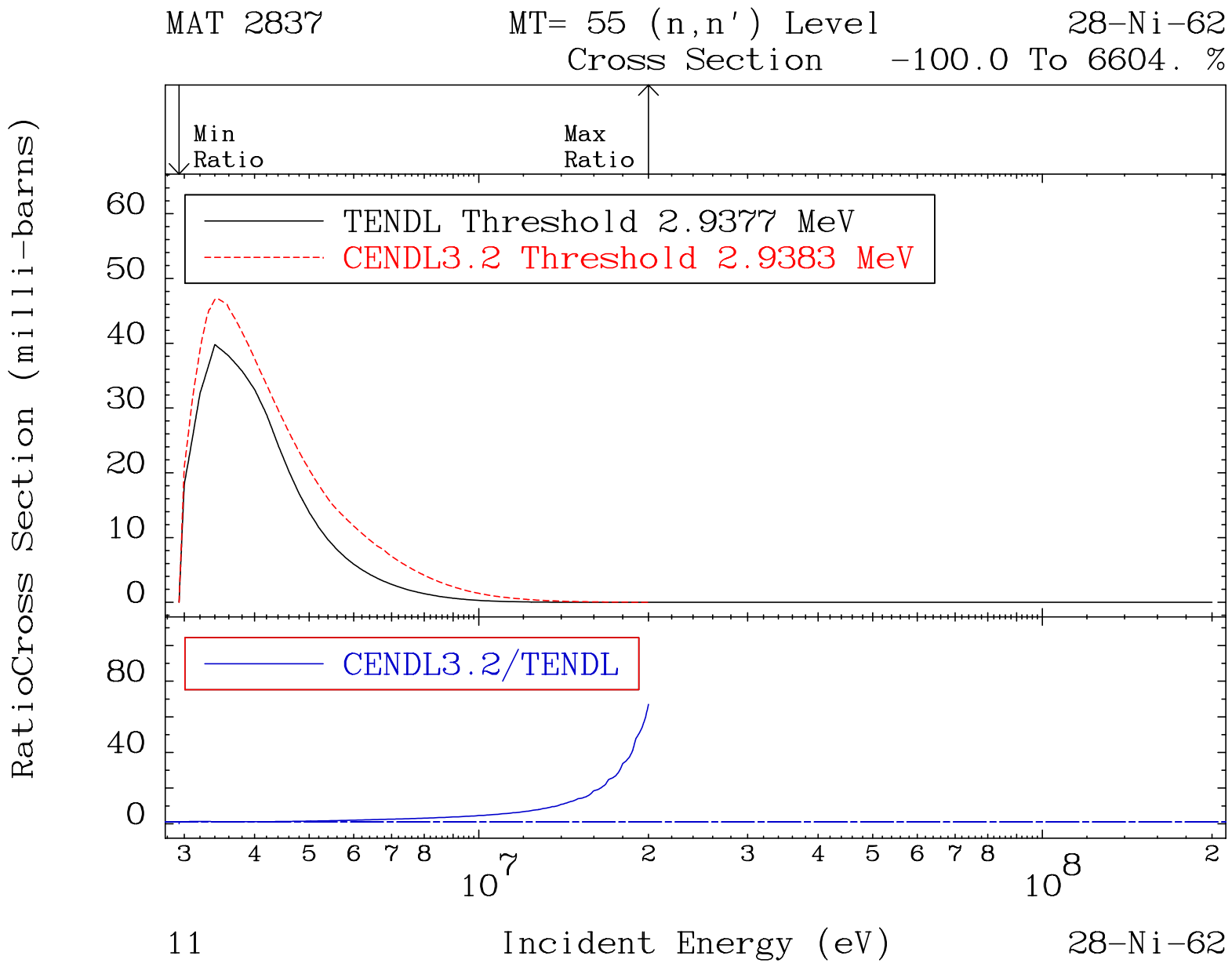

MAT 2837
(n,n') p
Cross Section
28-Ni-62
-100.0 To 29.94 %
Min Ratio
Max Ratio
TENDL Threshold 11.319 MeV
CENDL3.2 Threshold 12.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
28-Ni-62

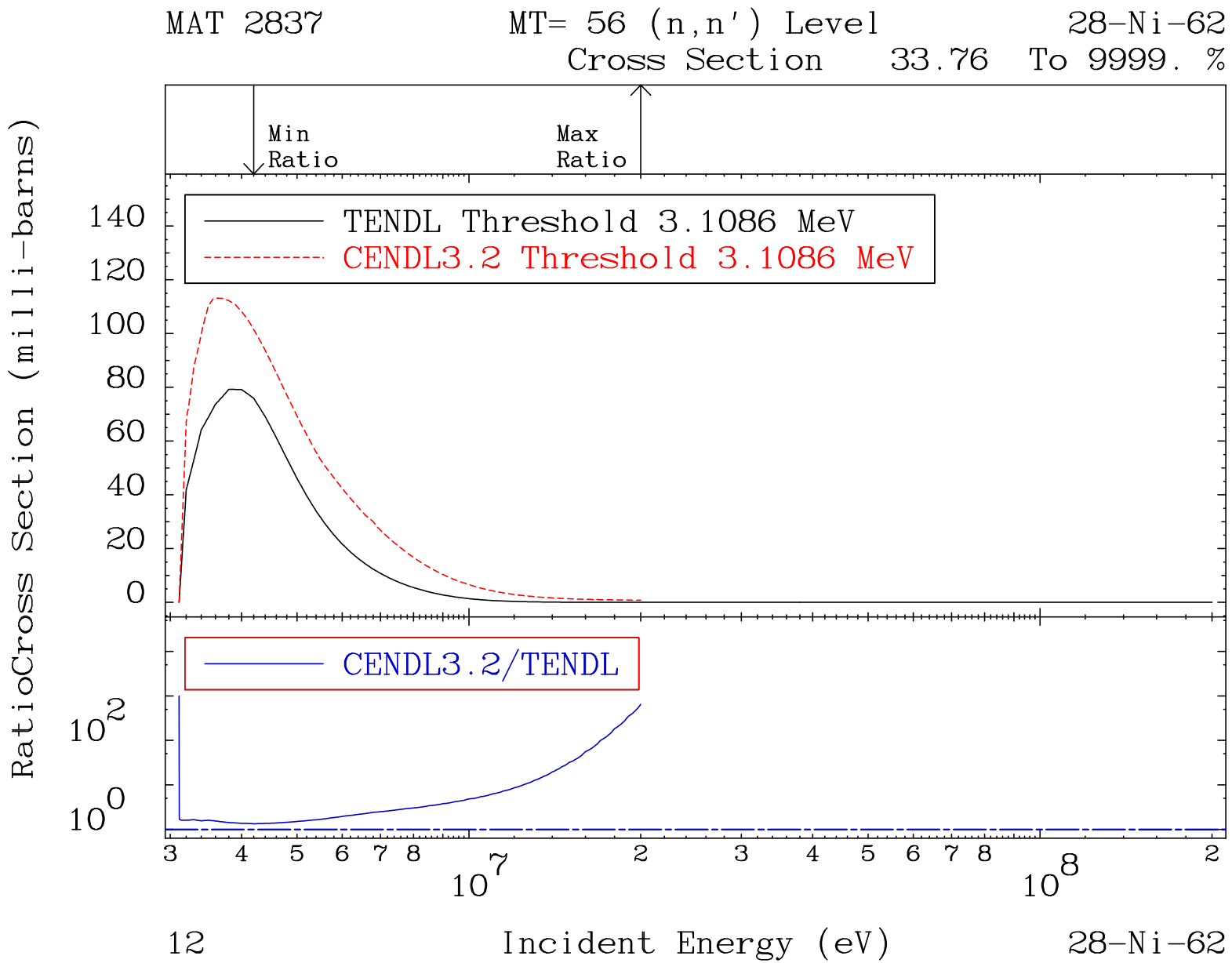

MAT 2837
MT= 51 (n,n') Level
28-Ni-62
Cross Section -28.13 To 476.3 %
Max Ratio
Min Ratio
TENDL Threshold 1.1921 MeV
CENDL3.2 Threshold 1.1921 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
6
3
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
7
Incident Energy (eV)
28-Ni-62

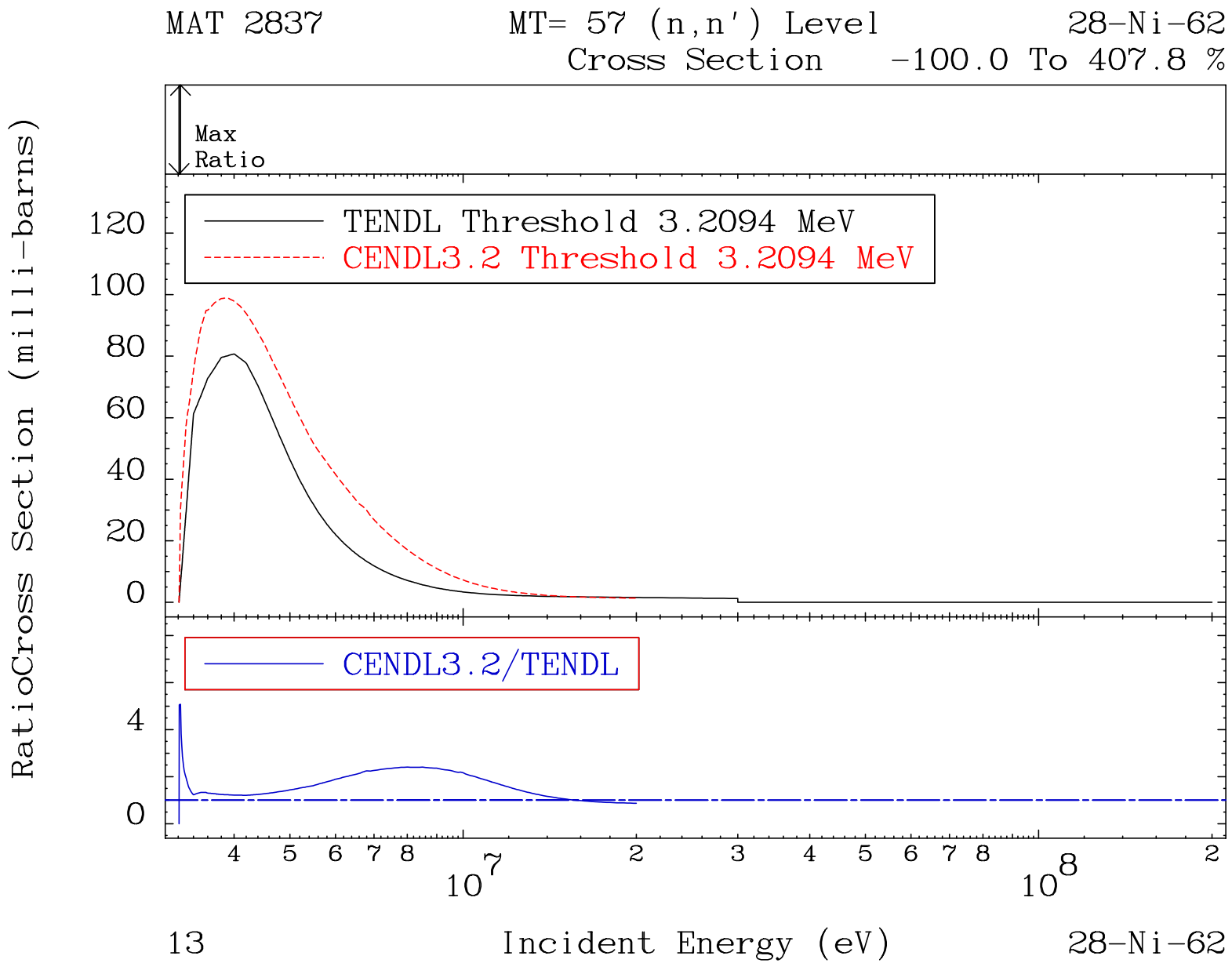

MAT 2837
MT= 52 (n,n') Level
28-Ni-62
Cross Section 8.582 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0820 MeV
CENDL3.2 Threshold 2.0820 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^2
10^1
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
28-Ni-62

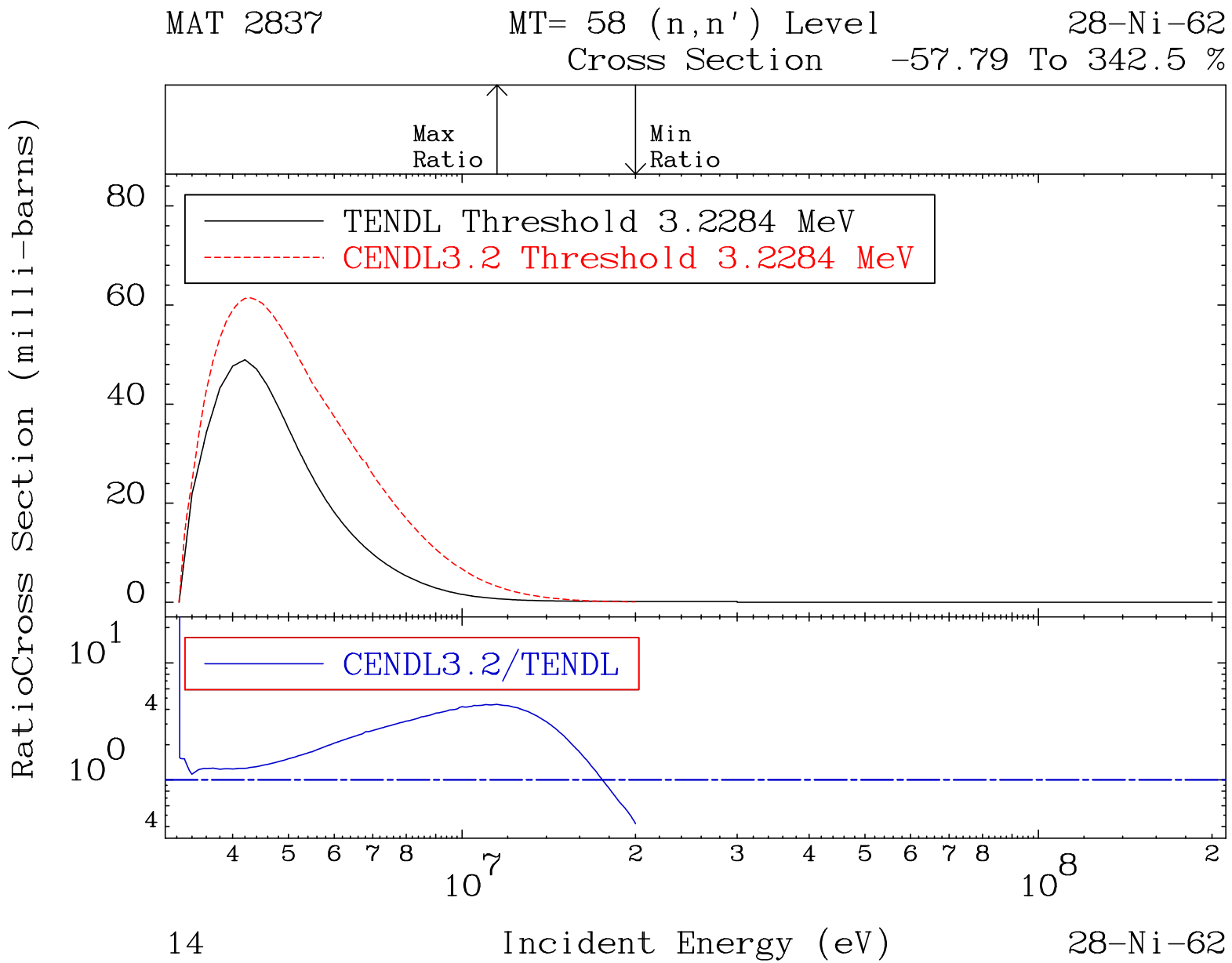

MAT 2837
MT= 53 (n,n') Level
28-Ni-62
Cross Section
-94.93 To 69.95 %
Max Ratio
Min Ratio
TENDL Threshold 2.3393 MeV
CENDL3.2 Threshold 2.3393 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^{0}
10^{-1}
3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
Incident Energy (eV)
9
28-Ni-62

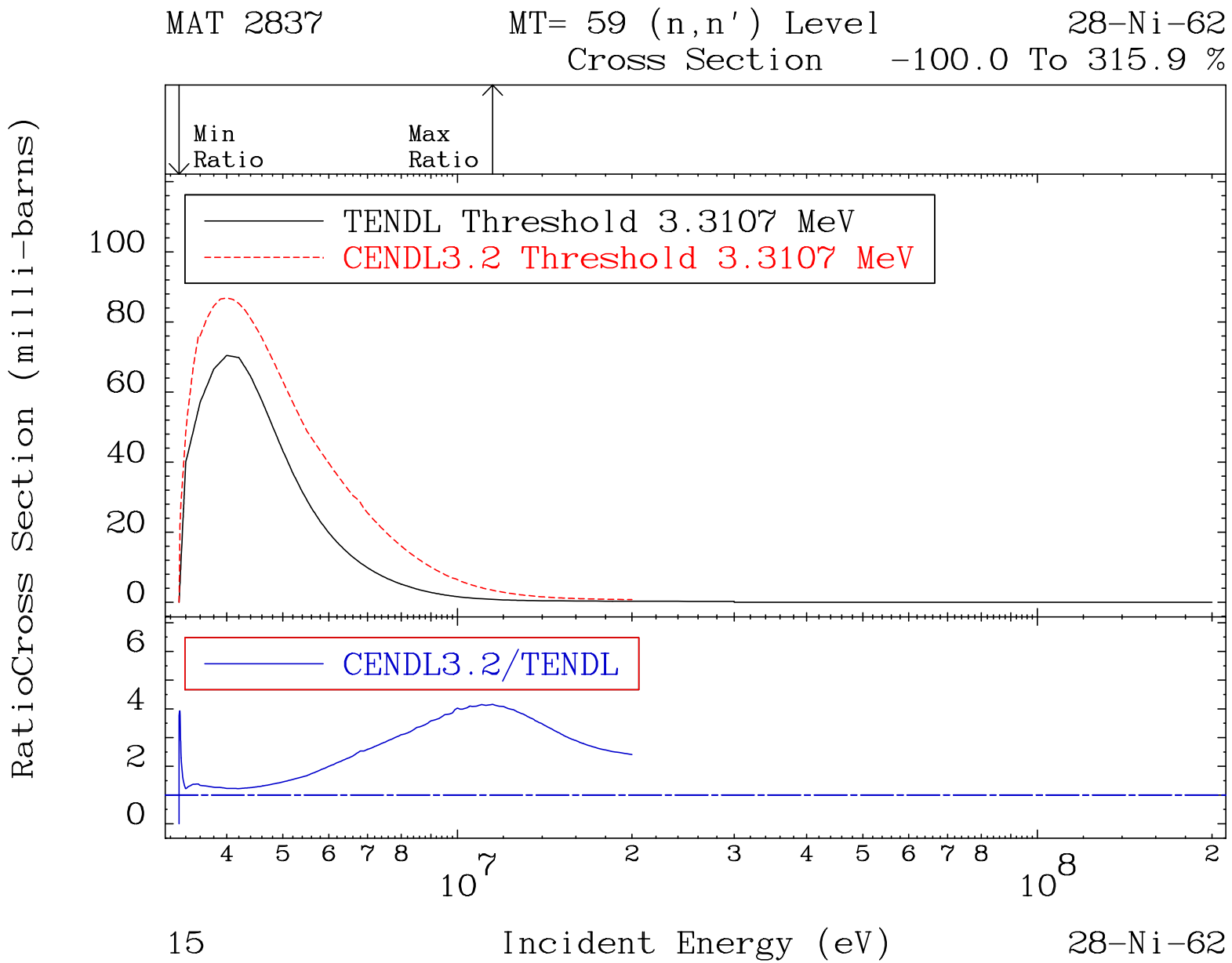

MAT 2837
MT= 54 (n,n') Level
28-Ni-62
Cross Section -92.95 To 137.3 %
Max Ratio
Min Ratio
TENDL Threshold 2.3746 MeV
CENDL3.2 Threshold 2.3746 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^0
10^{-1}
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
28-Ni-62

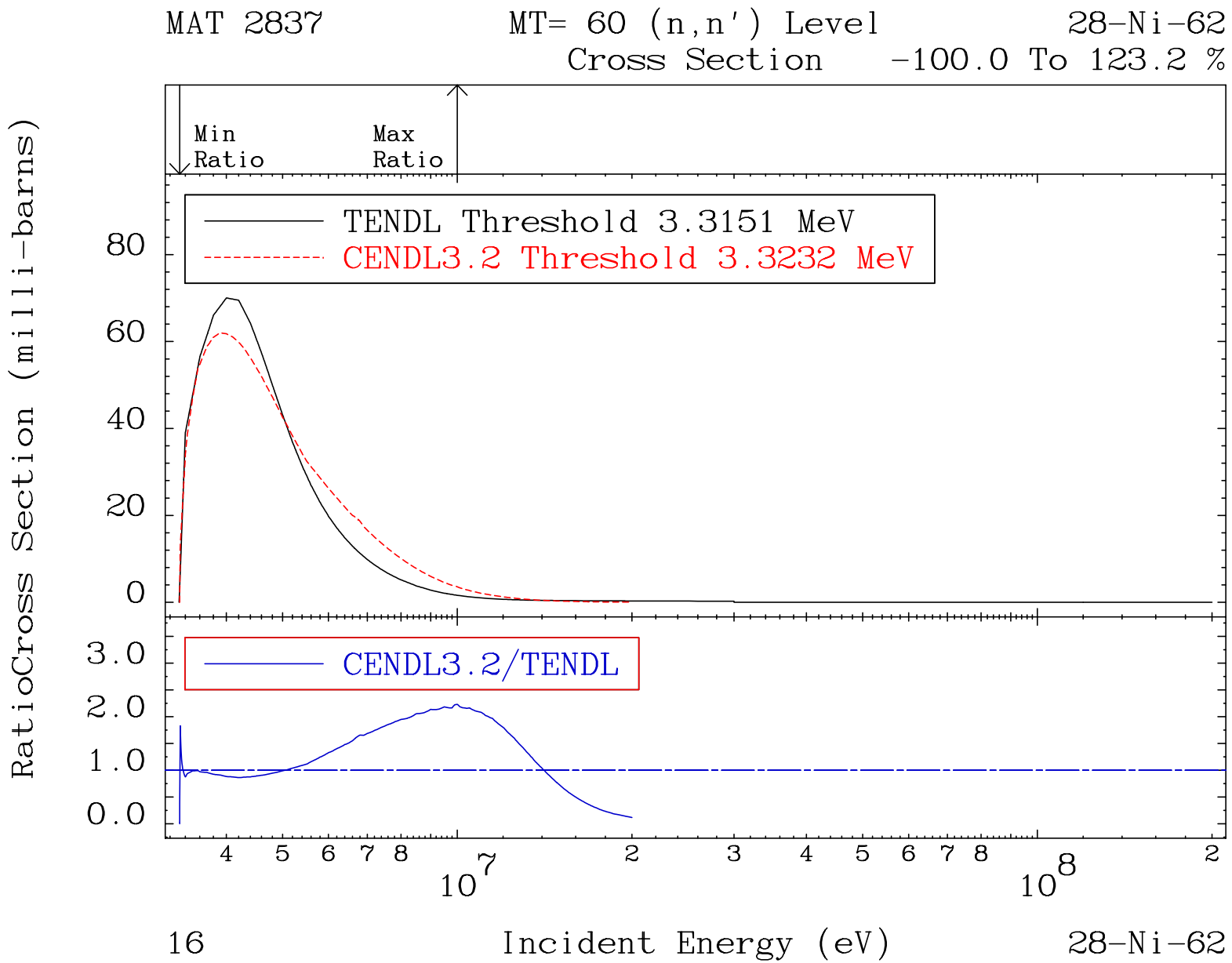

MAT 2837
MT= 55 (n,n') Level
28-Ni-62
Cross Section -100.0 To 6604. %
Min Ratio
Max Ratio
TENDL Threshold 2.9377 MeV
CENDL3.2 Threshold 2.9383 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
11
28-Ni-62

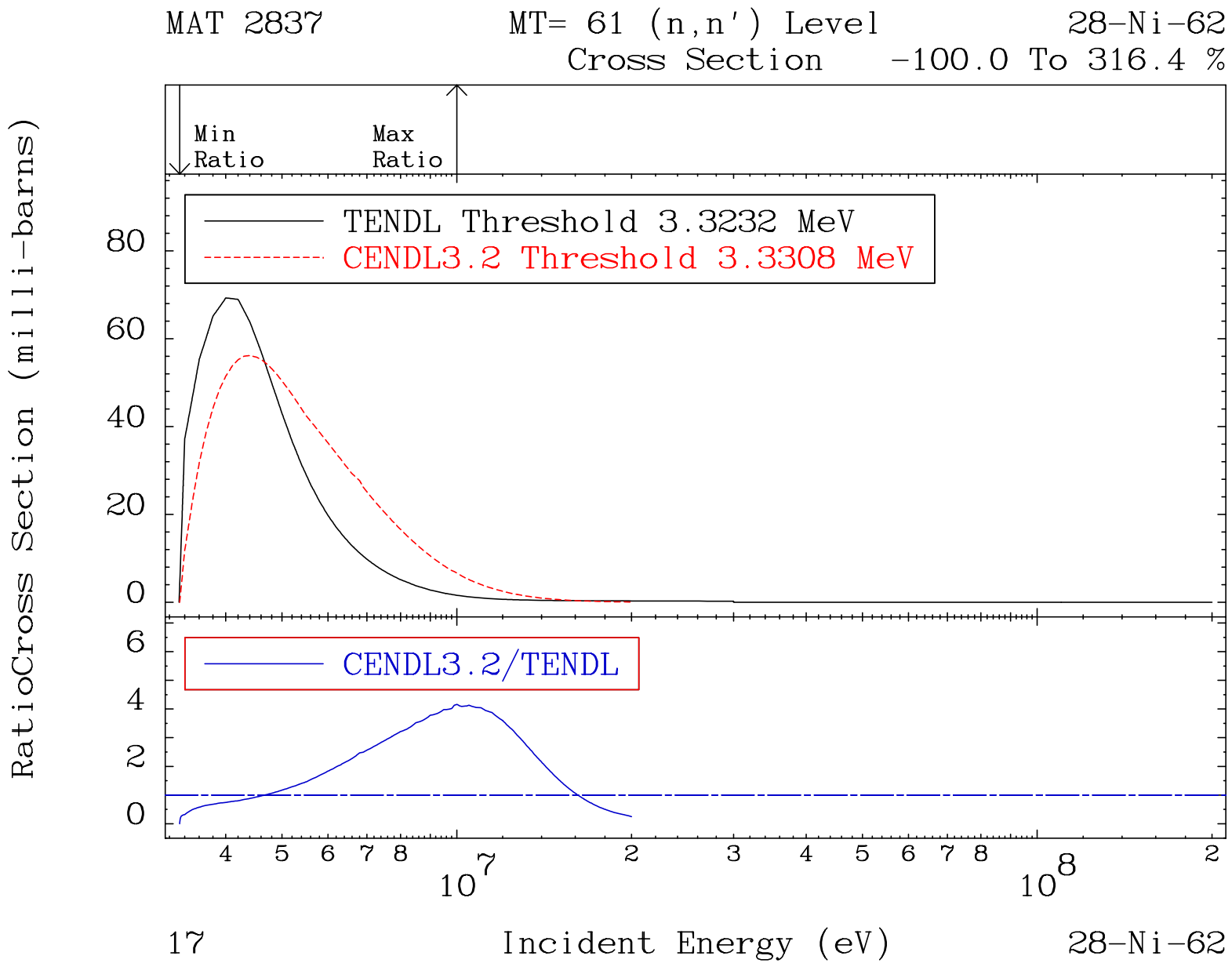

MAT 2837
MT= 56 (n,n') Level
28-Ni-62
Cross Section 33.76 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1086 MeV
CENDL3.2 Threshold 3.1086 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^2
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
28-Ni-62

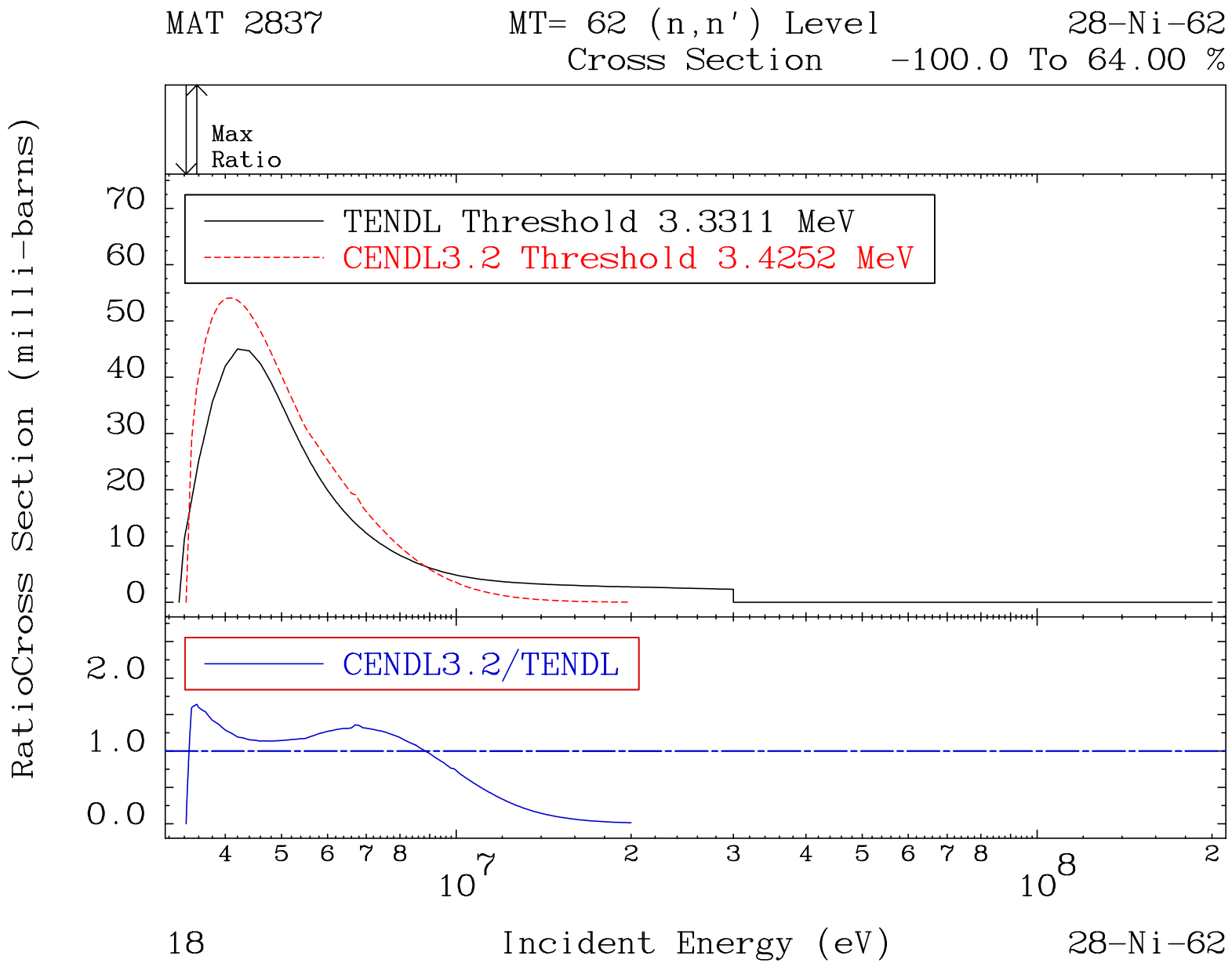

MAT 2837
MT= 57 (n,n') Level
28-Ni-62
Cross Section -100.0 To 407.8 %
Max
Ratio
TENDL Threshold 3.2094 MeV
CENDL3.2 Threshold 3.2094 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
28-Ni-62

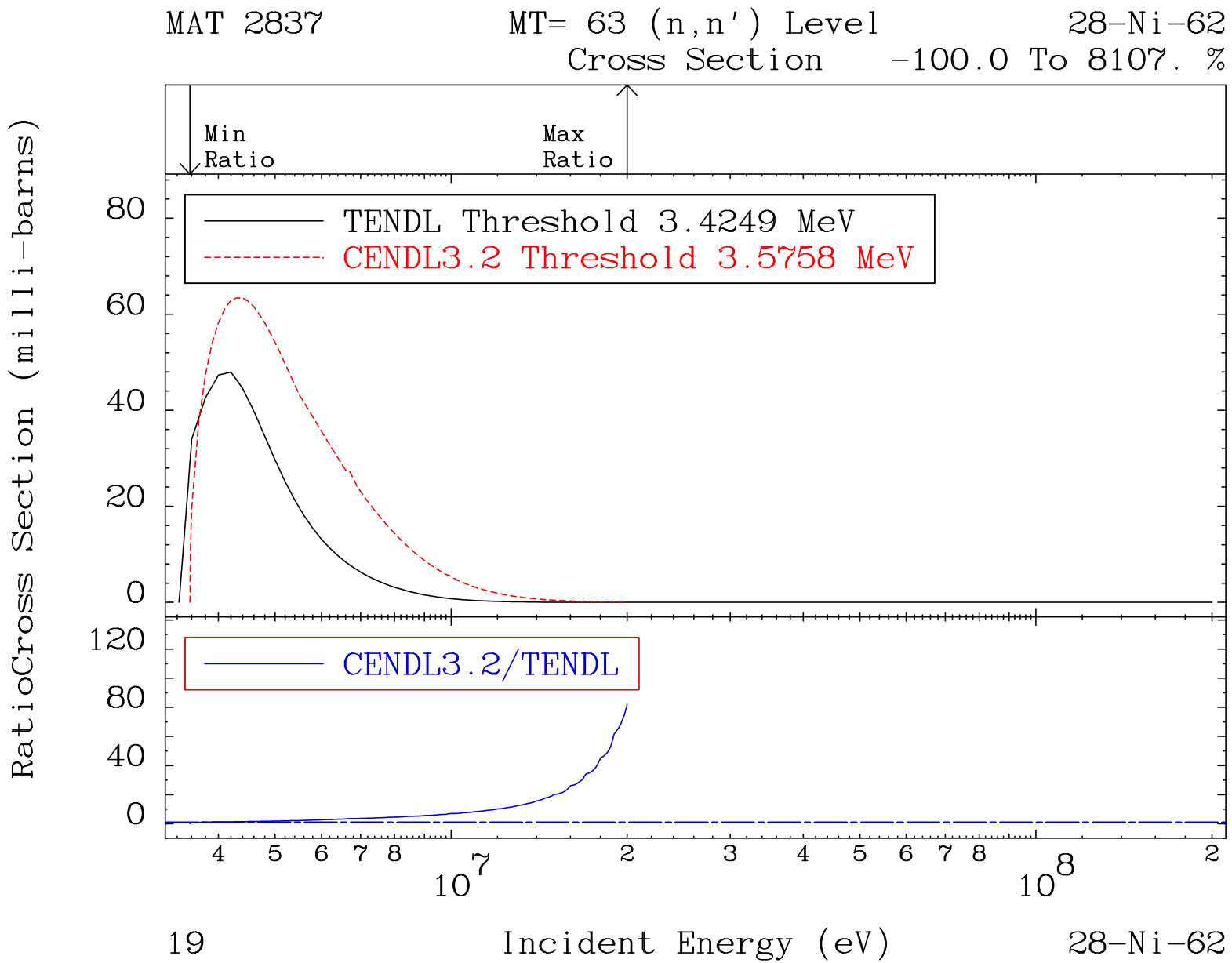

MAT 2837
MT= 58 (n,n') Level
28-Ni-62
Cross Section -57.79 To 342.5 %
Max Ratio
Min Ratio
TENDL Threshold 3.2284 MeV
CENDL3.2 Threshold 3.2284 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
28-Ni-62

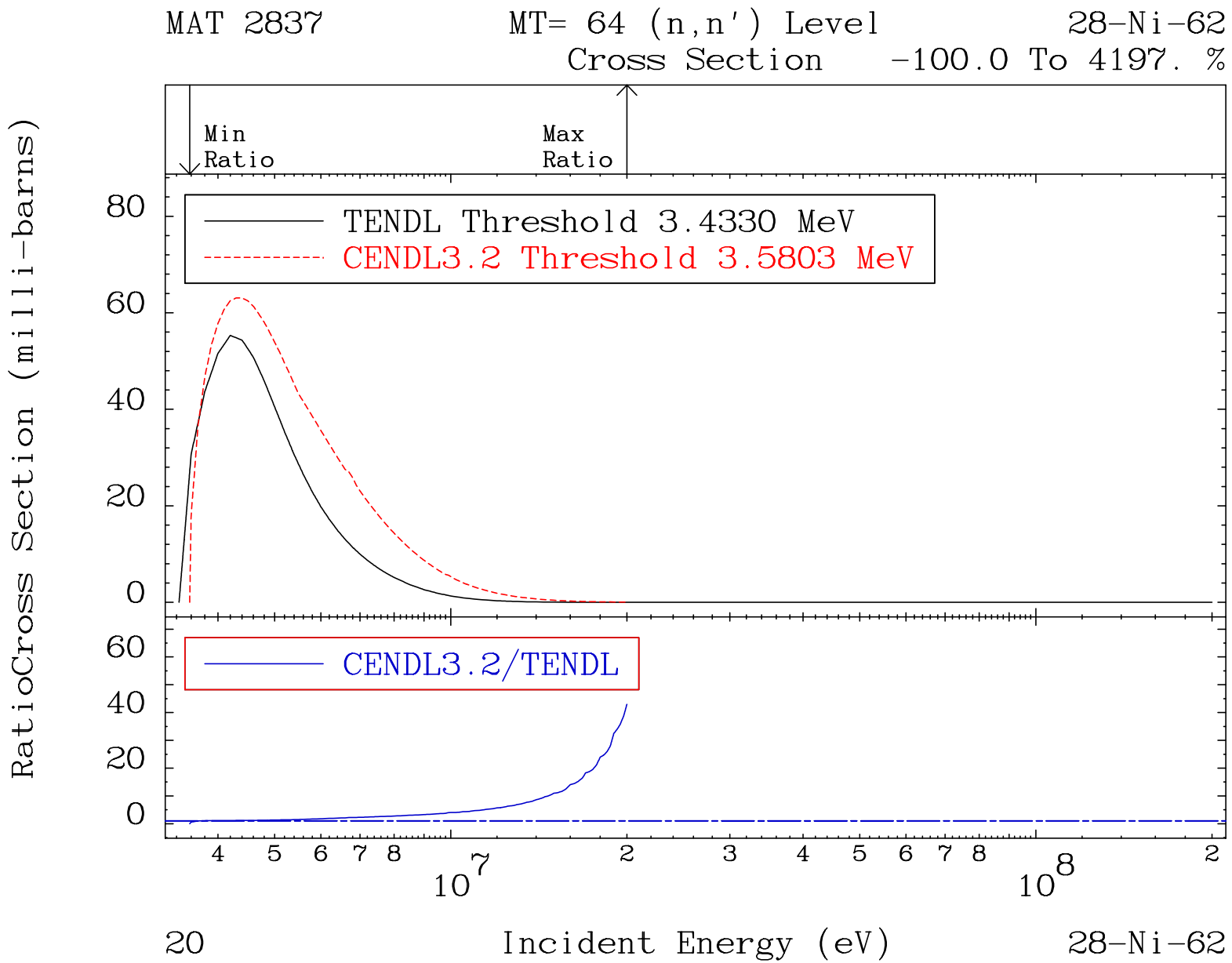

MAT 2837
MT= 59 (n,n') Level
28-Ni-62
Cross Section -100.0 To 315.9 %
Min Ratio
Max Ratio
TENDL Threshold 3.3107 MeV
CENDL3.2 Threshold 3.3107 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
6
4
2
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
28-Ni-62

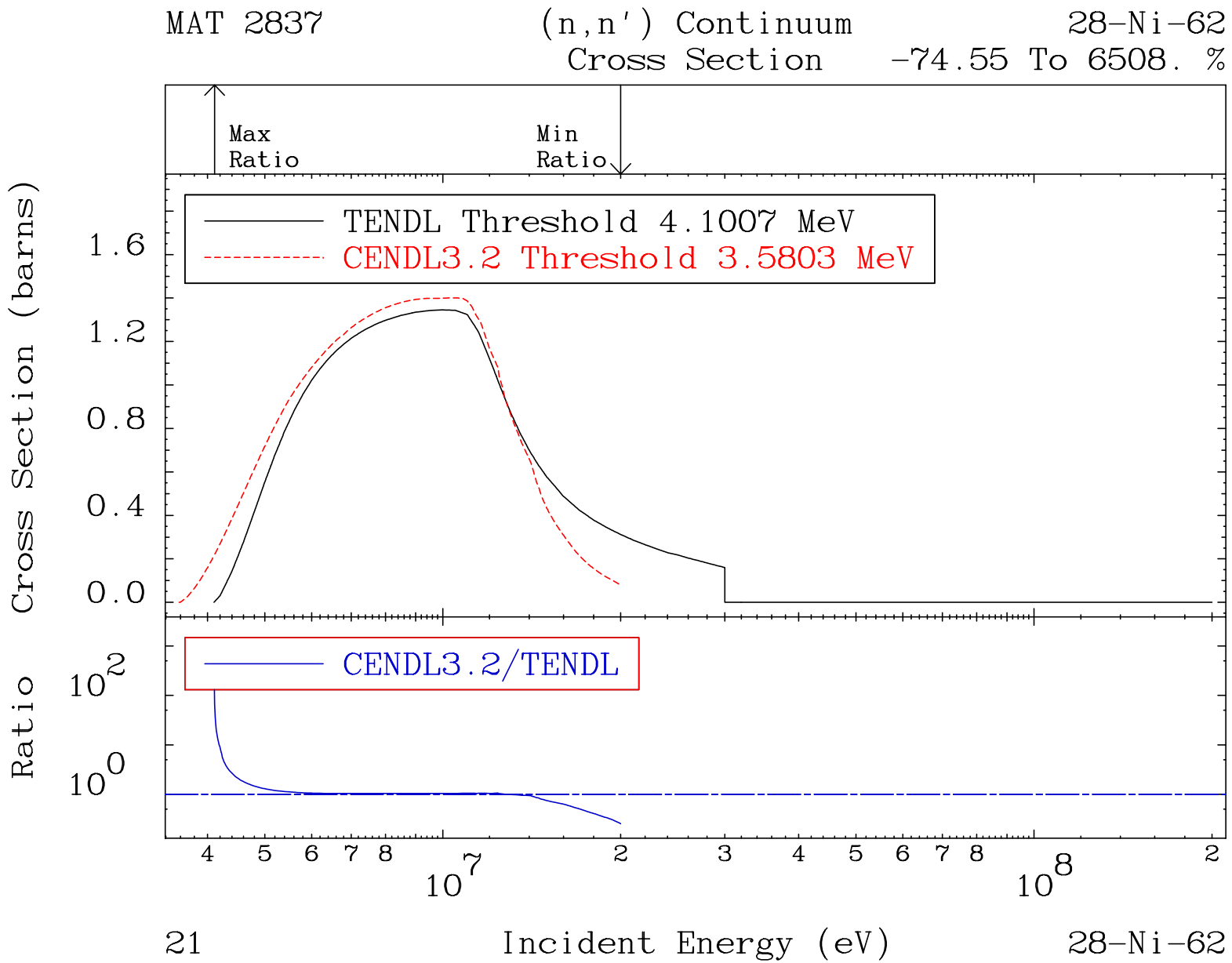

MAT 2837
MT= 60 (n,n') Level
28-Ni-62
Cross Section -100.0 To 123.2 %
Min Ratio
Max Ratio
TENDL Threshold 3.3151 MeV
CENDL3.2 Threshold 3.3232 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
28-Ni-62

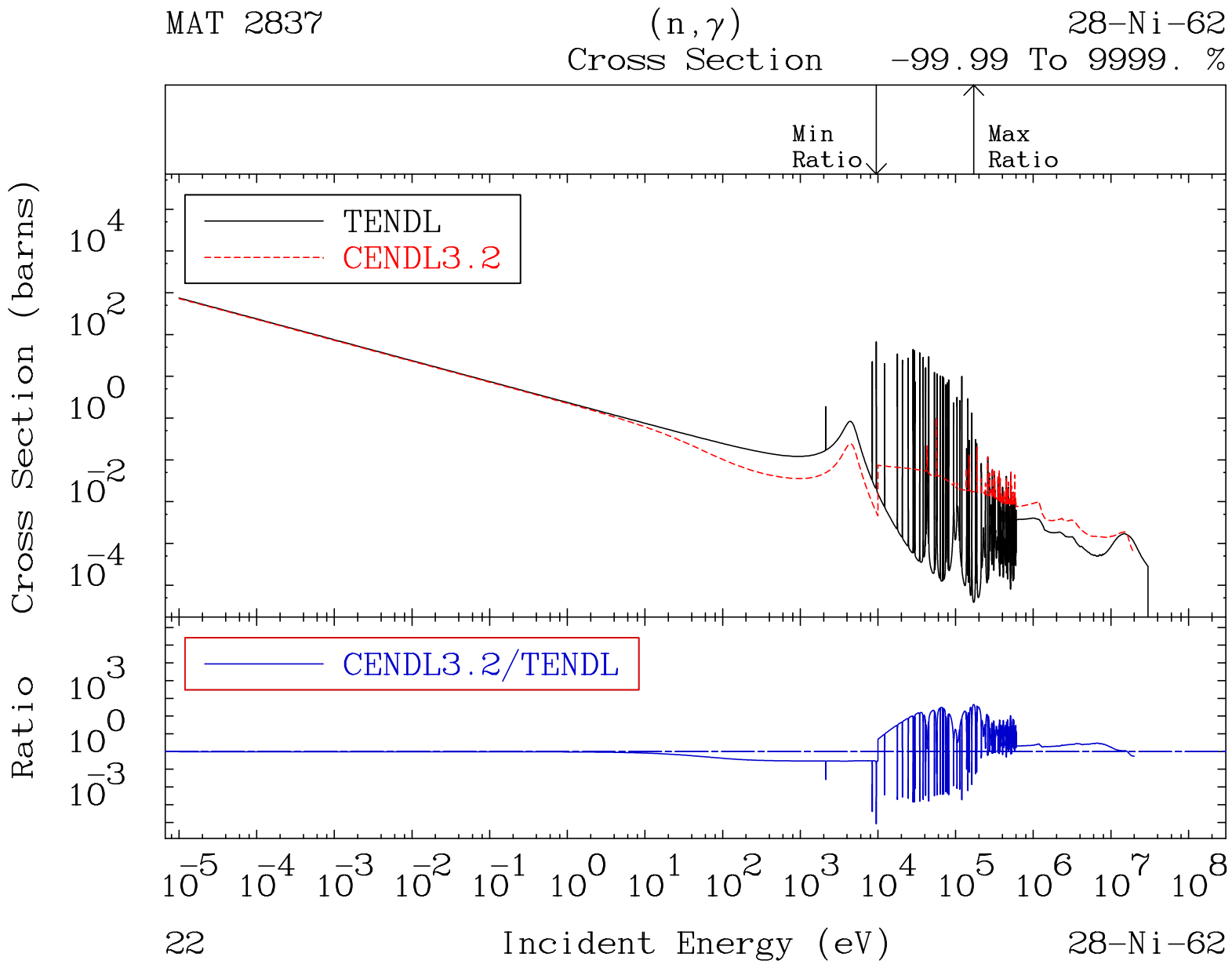

MAT 2837
MT= 61 (n,n') Level
28-Ni-62
Cross Section -100.0 To 316.4 %
Min Ratio
Max Ratio
TENDL Threshold 3.3232 MeV
CENDL3.2 Threshold 3.3308 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
6
4
2
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
17
Incident Energy (eV)
28-Ni-62

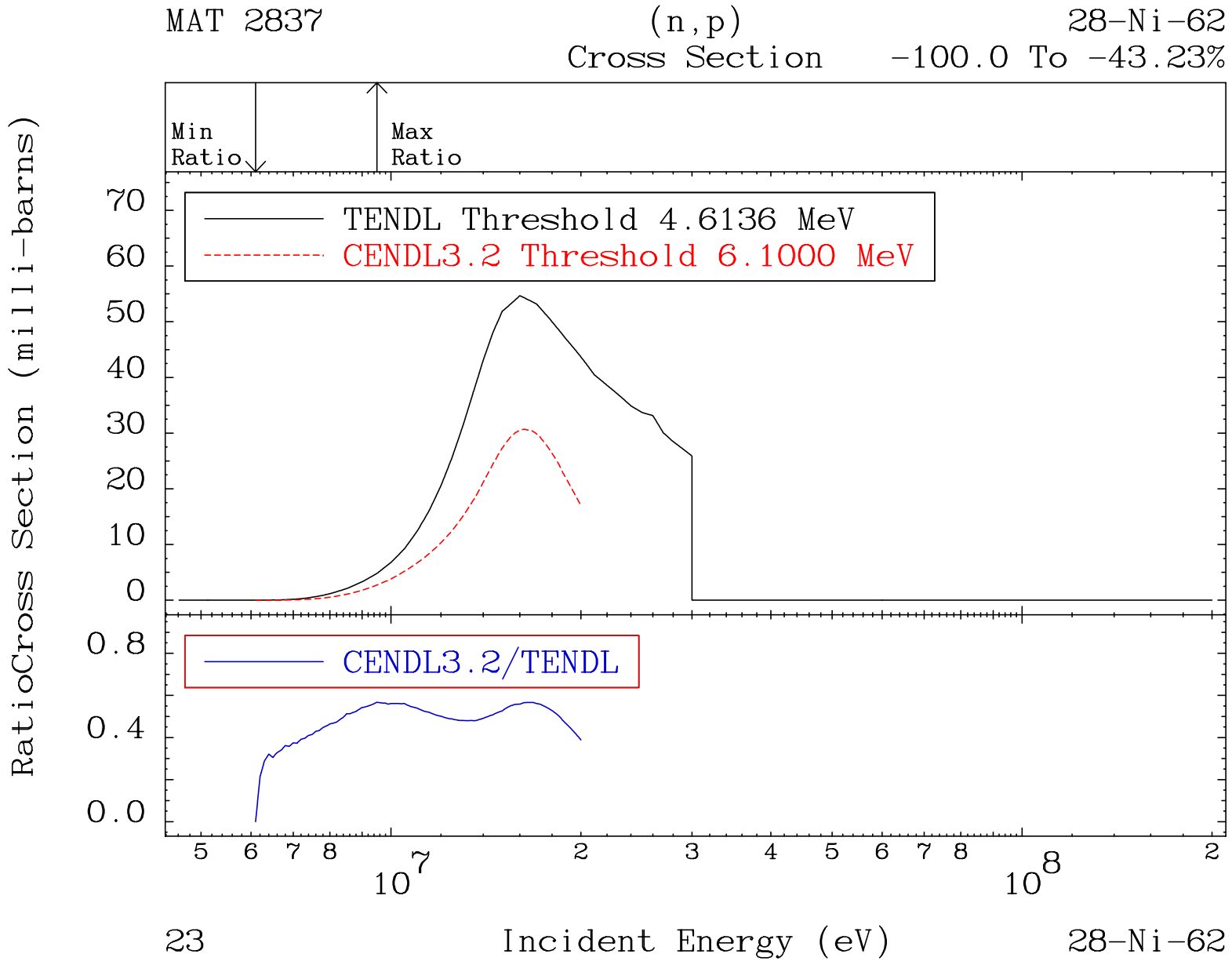

MAT 2837
MT= 62 (n,n') Level
28-Ni-62
Cross Section
-100.0 To 64.00 %
Max
Ratio
TENDL Threshold 3.3311 MeV
CENDL3.2 Threshold 3.4252 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
28-Ni-62

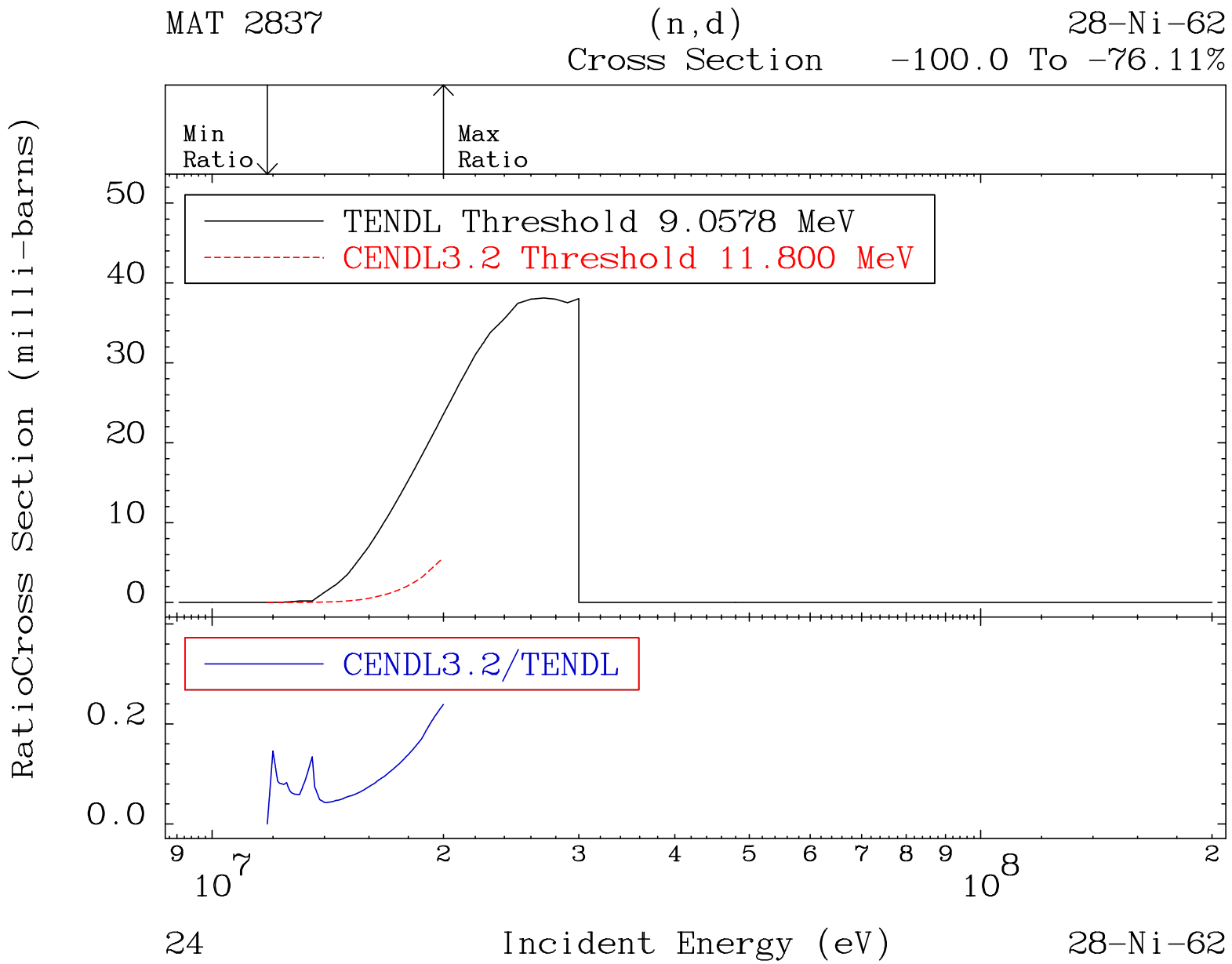

MAT 2837
MT= 63 (n,n') Level
28-Ni-62
Cross Section -100.0 To 8107. %
Min Ratio
Max Ratio
TENDL Threshold 3.4249 MeV
CENDL3.2 Threshold 3.5758 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
120
80
40
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
28-Ni-62

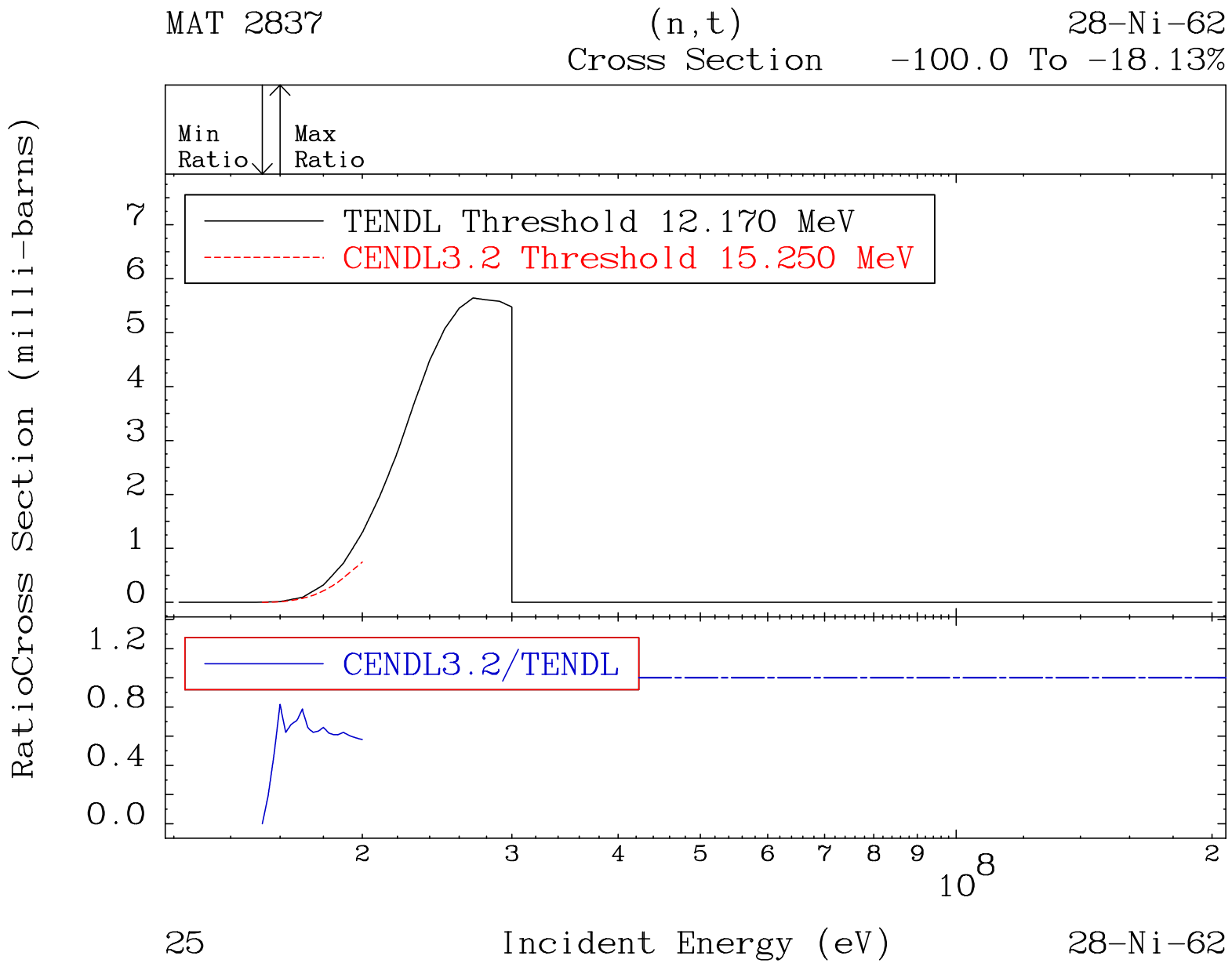

MAT 2837
MT= 64 (n,n') Level
28-Ni-62
Cross Section -100.0 To 4197. %
Min Ratio
Max Ratio
TENDL Threshold 3.4330 MeV
CENDL3.2 Threshold 3.5803 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
60
40
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
28-Ni-62

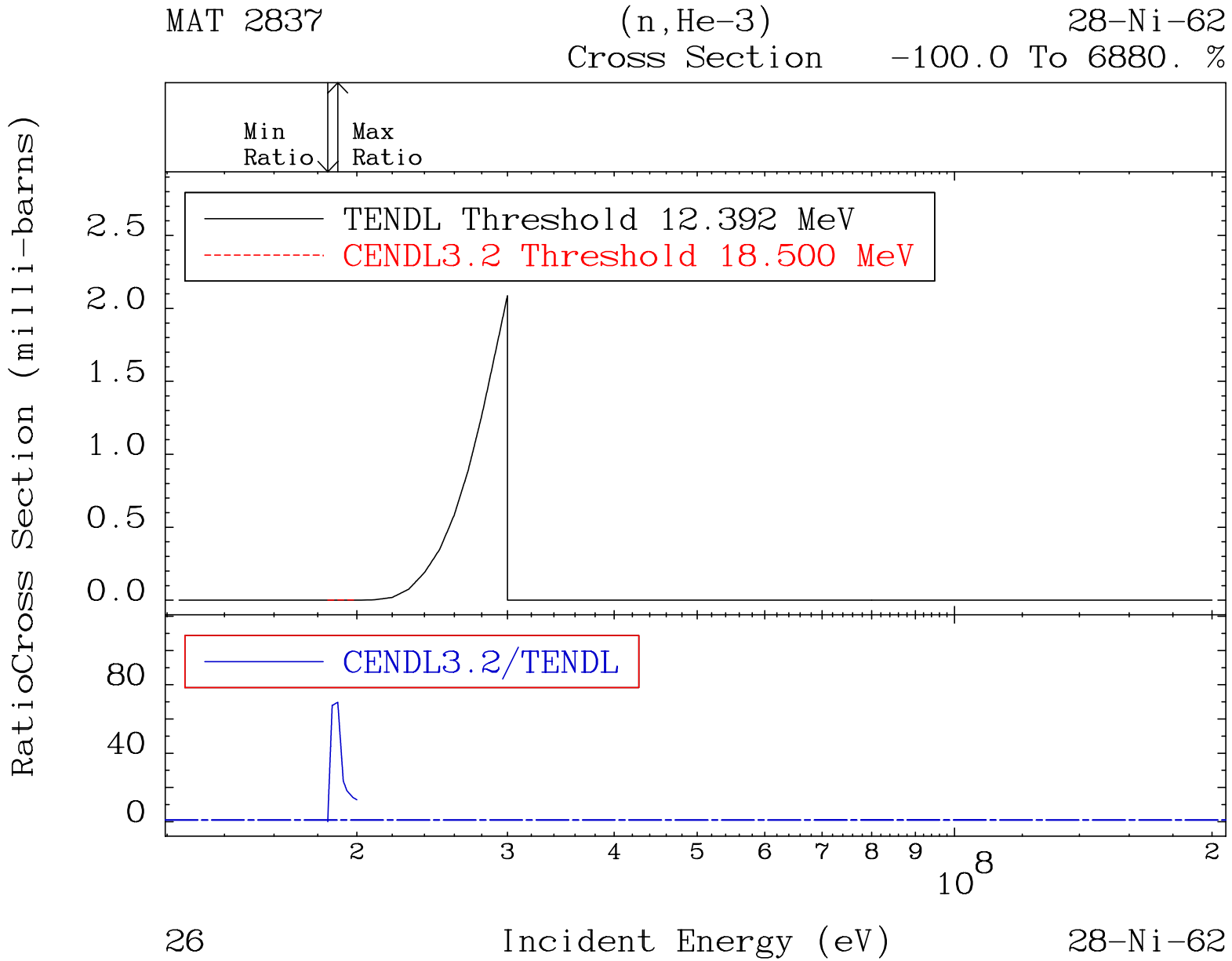

MAT 2837
(n,n') Continuum
Cross Section
28-Ni-62
-74.55 To 6508. %
Max Ratio
Min Ratio
TENDL Threshold 4.1007 MeV
CENDL3.2 Threshold 3.5803 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
CENDL3.2/TENDL
Ratio
10^2
10^0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
28-Ni-62

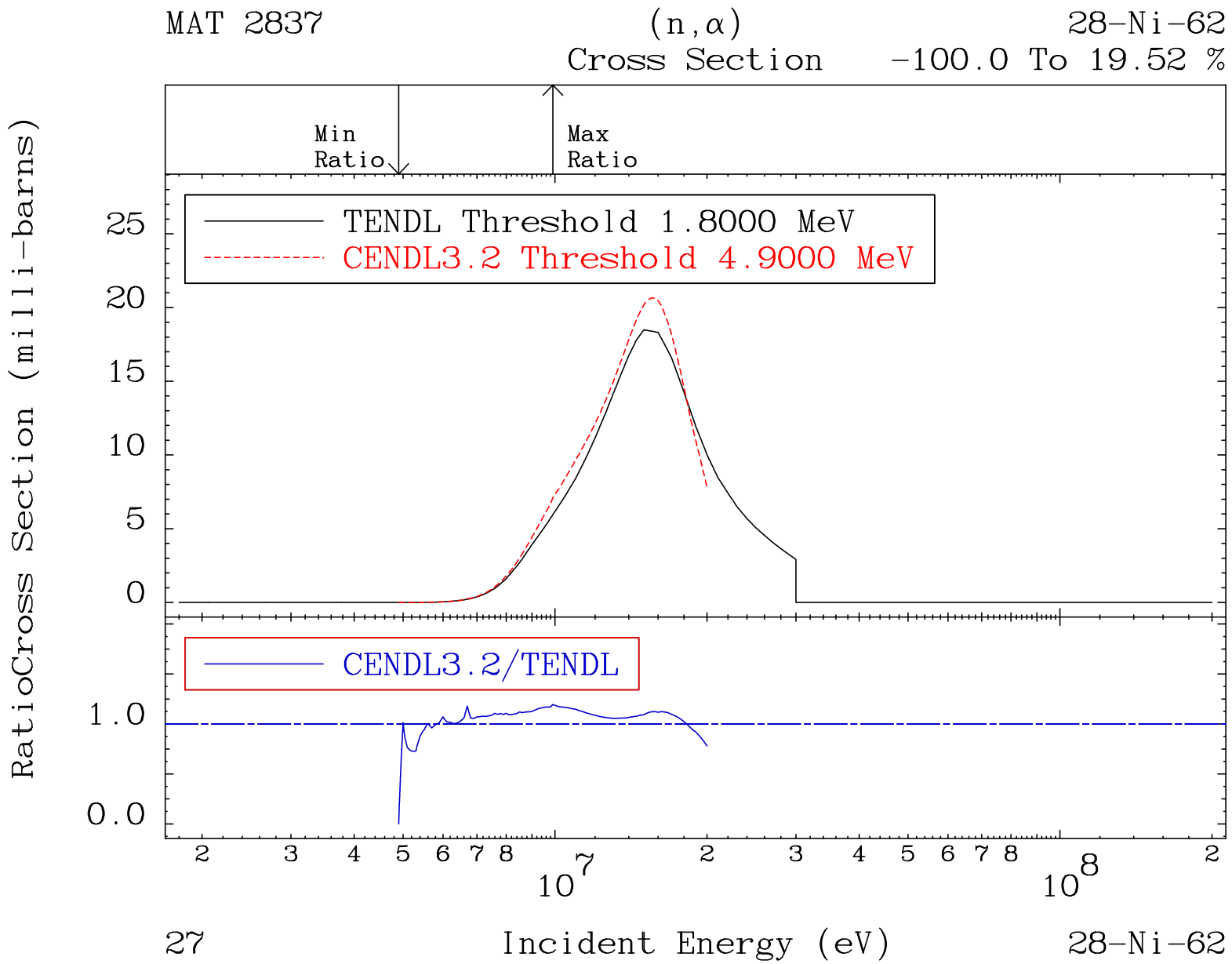

MAT 2837
(n,γ)
28-Ni-62
Cross Section
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22
28-Ni-62

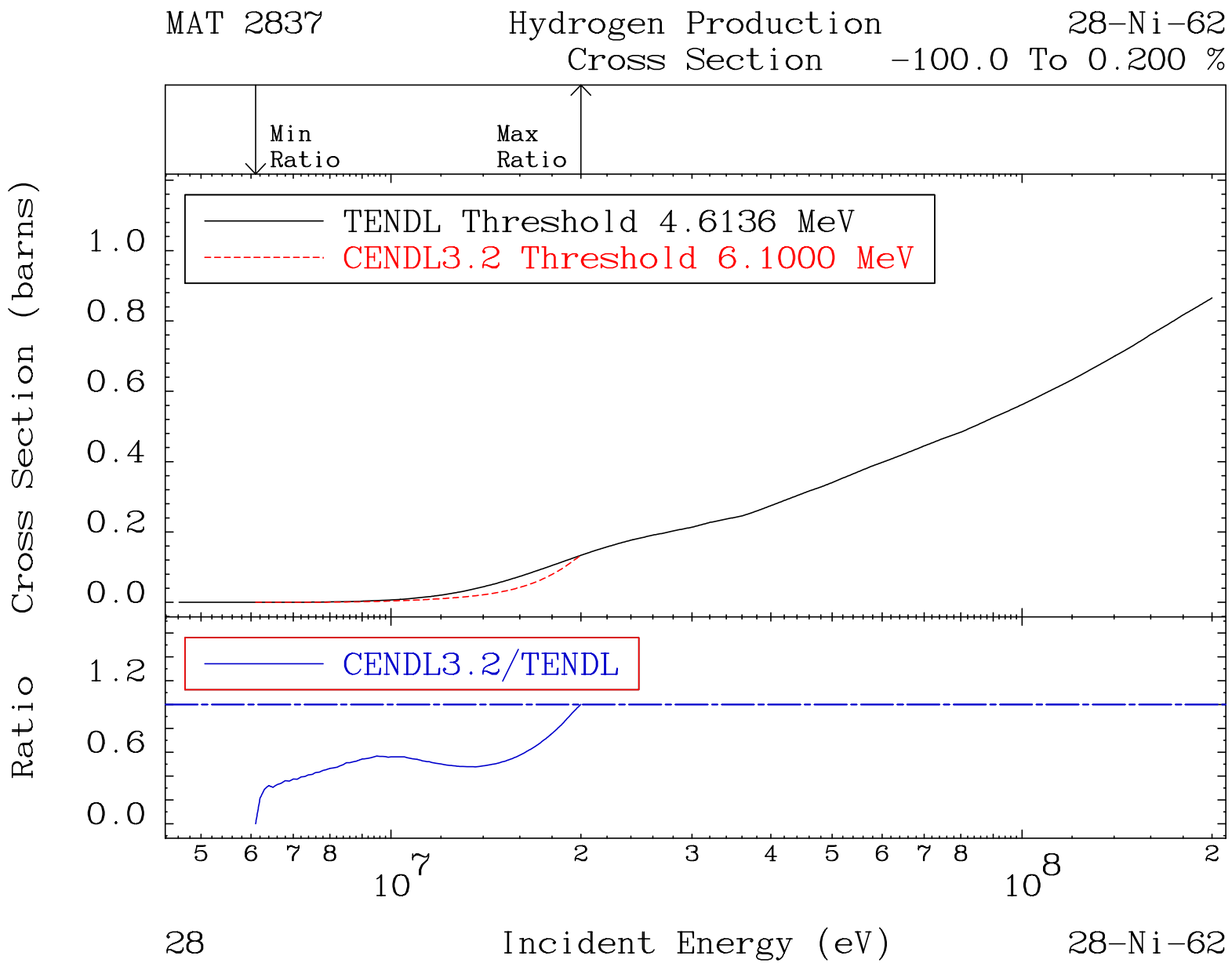

MAT 2837
(n,p)
28-Ni-62
Cross Section
-100.0 To -43.23%
Min Ratio
Max Ratio
TENDL Threshold 4.6136 MeV
CENDL3.2 Threshold 6.1000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.8
0.4
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
28-Ni-62

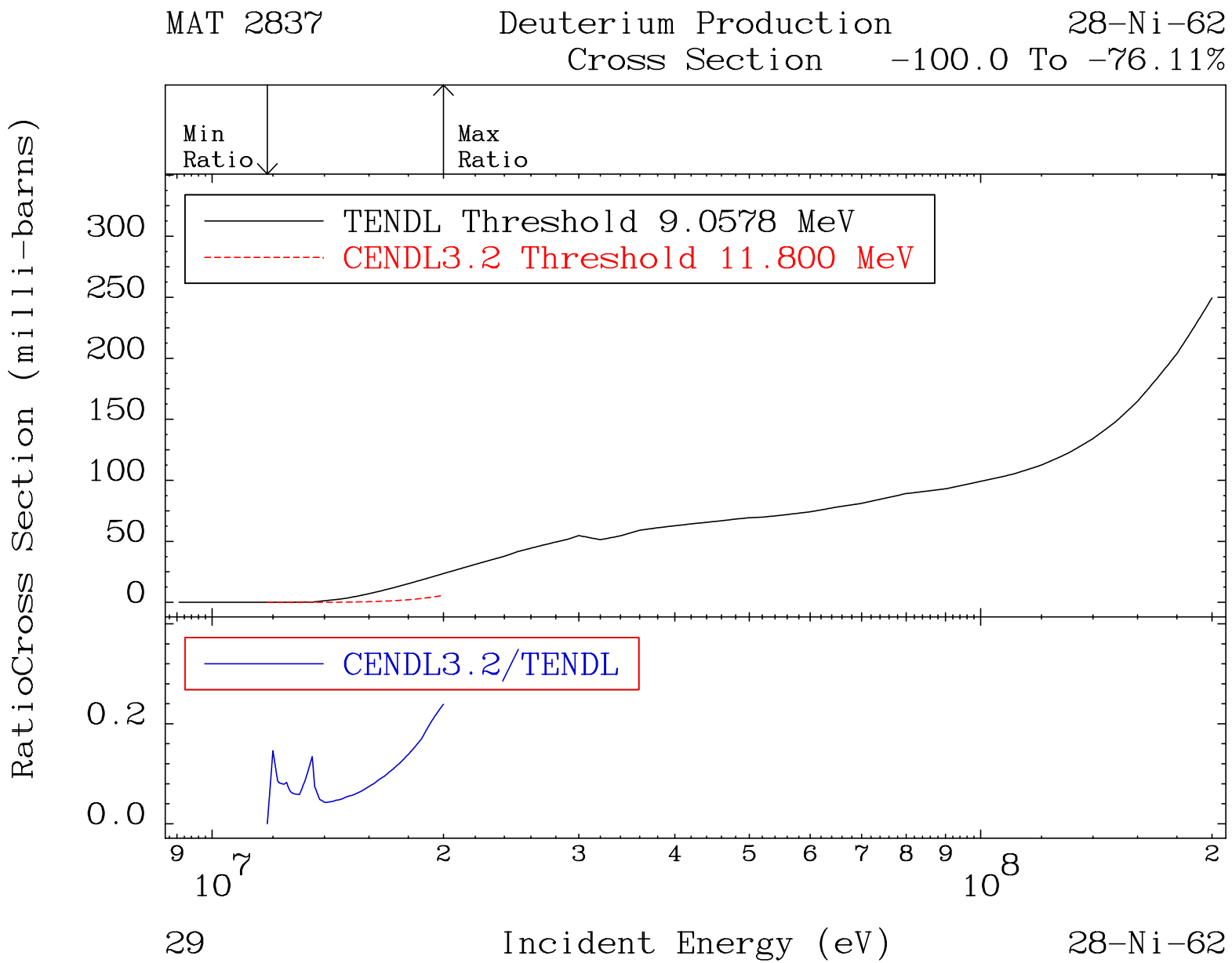

MAT 2837
(n,d)
28-Ni-62
Cross Section
-100.0 To -76.11%
Min Ratio
Max Ratio
TENDL Threshold 9.0578 MeV
CENDL3.2 Threshold 11.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
0.2
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
28-Ni-62

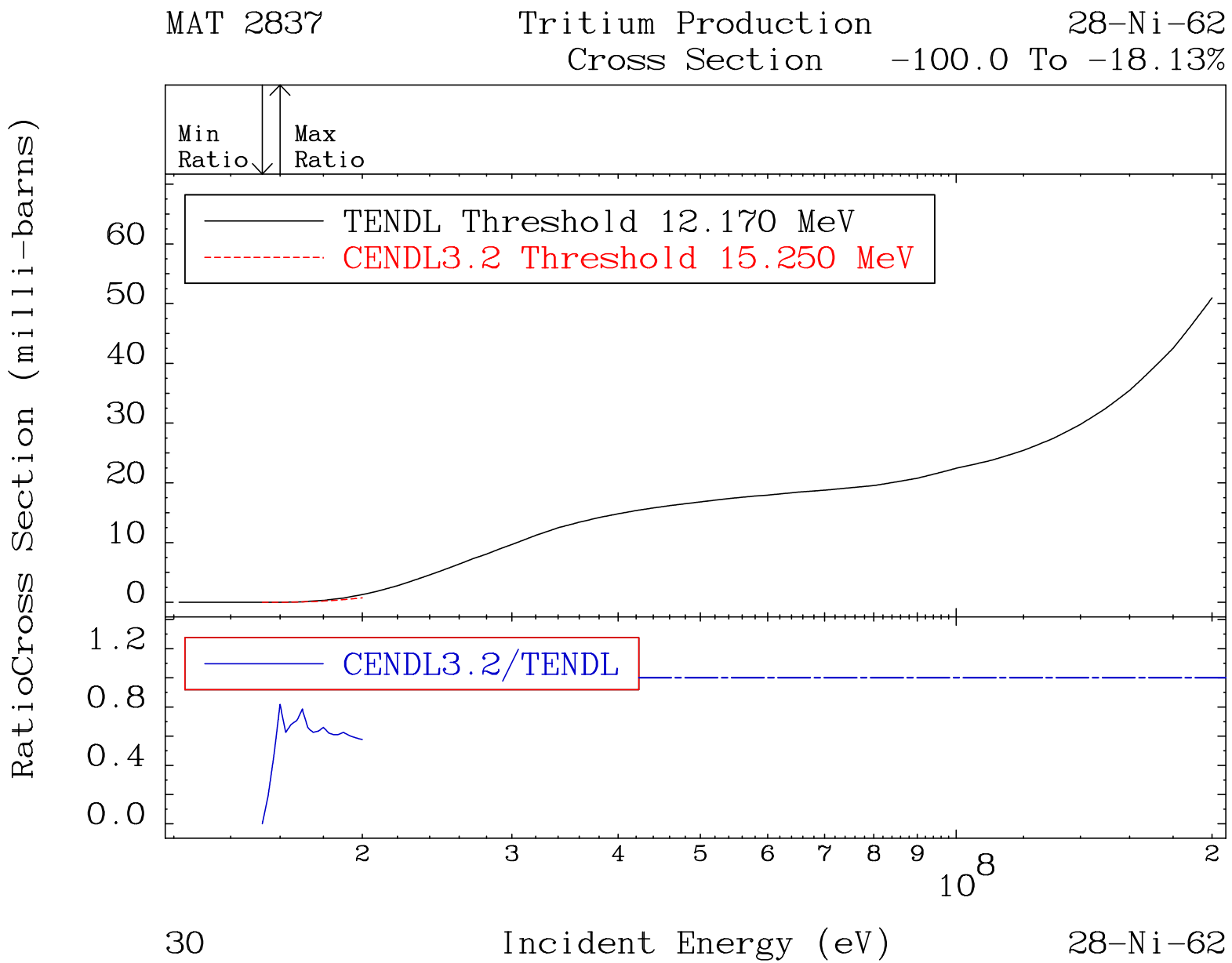

MAT 2837
(n,t)
28-Ni-62
Cross Section
-100.0 To -18.13%
Min Ratio
Max Ratio
TENDL Threshold 12.170 MeV
CENDL3.2 Threshold 15.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
28-Ni-62

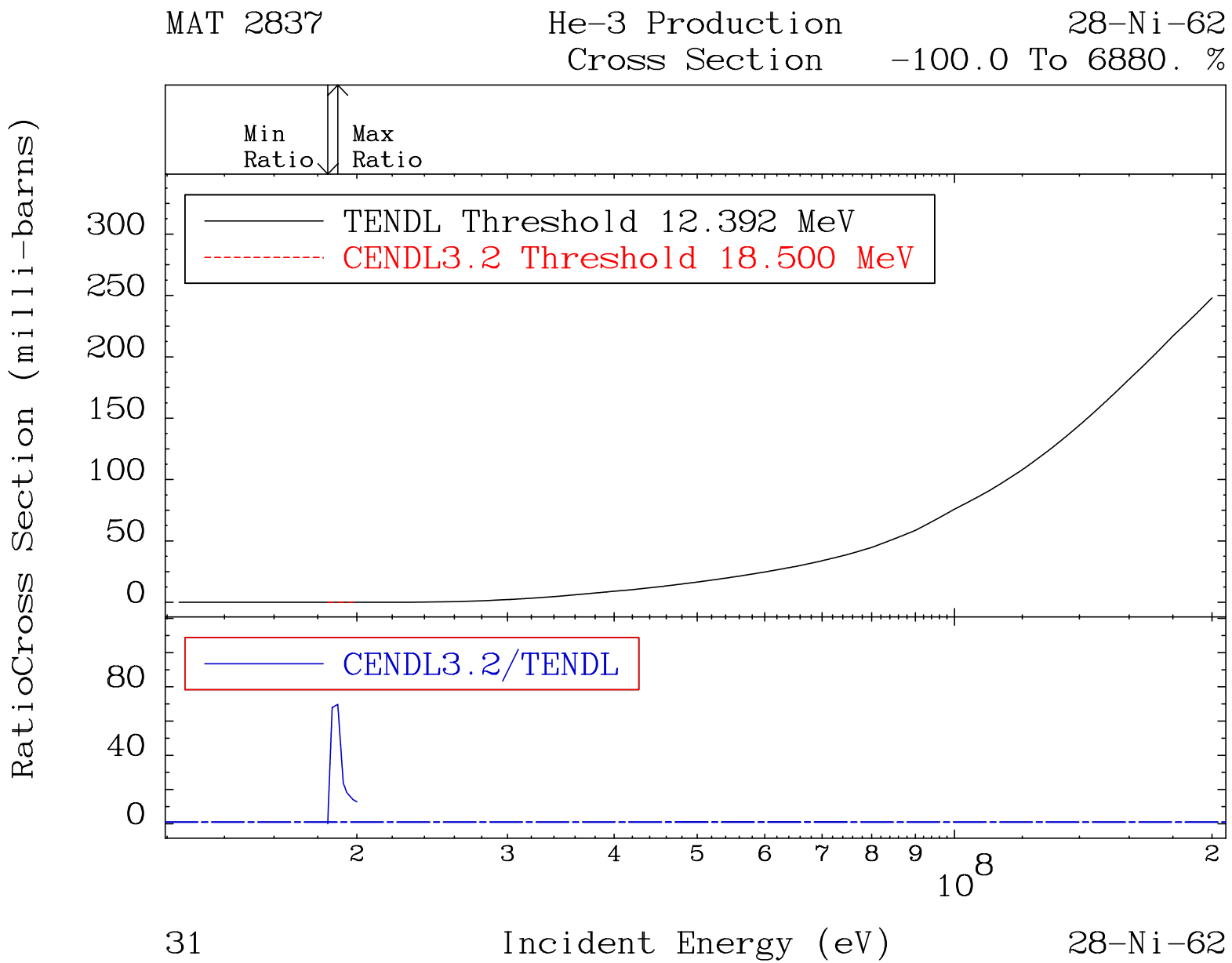

MAT 2837
(n,He-3)
28-Ni-62
Cross Section
-100.0 To 6880. %
Min Ratio
Max Ratio
TENDL Threshold 12.392 MeV
CENDL3.2 Threshold 18.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
26
Incident Energy (eV)
28-Ni-62

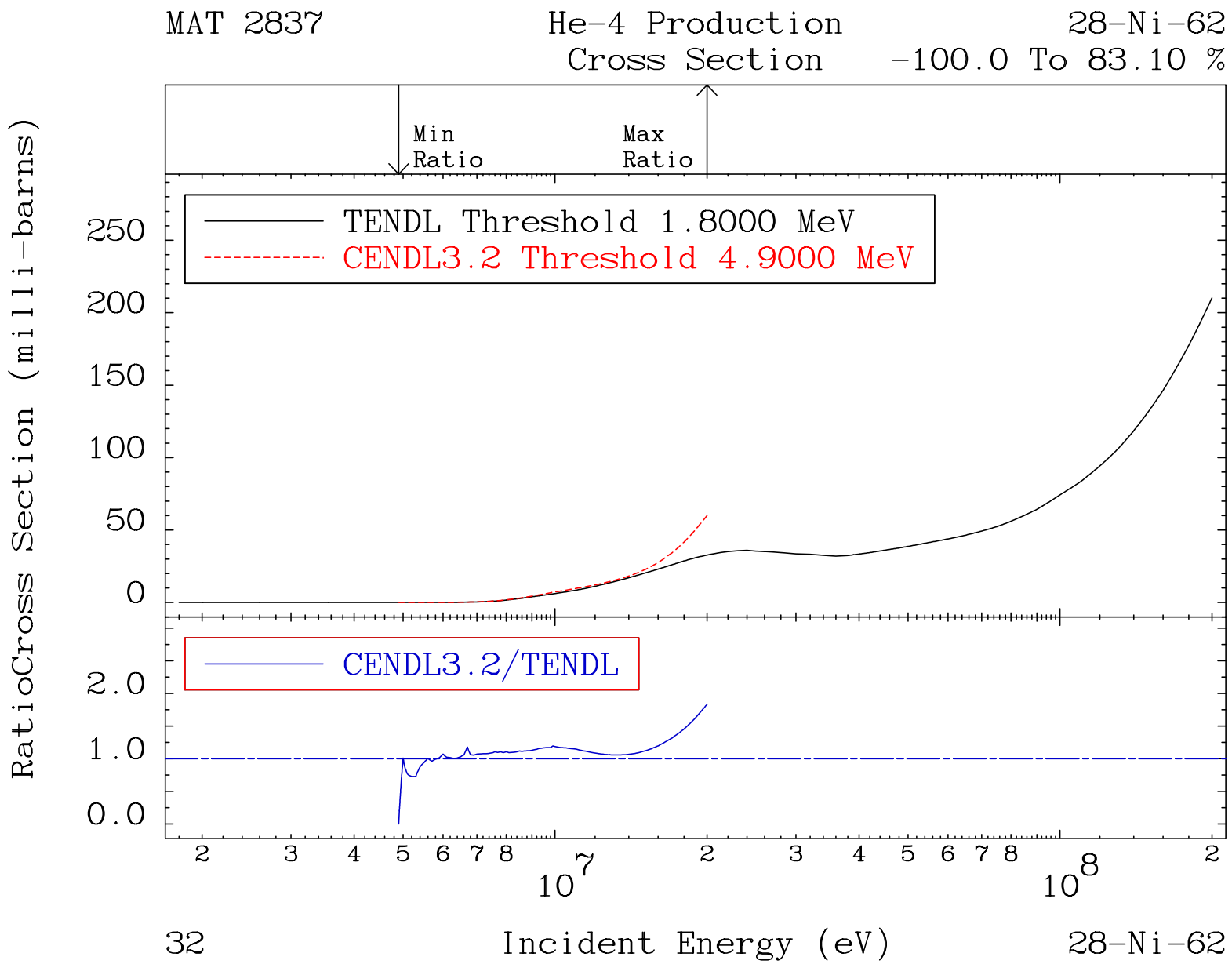

MAT 2837
(n,α)
28-Ni-62
Cross Section
-100.0 To 19.52 %
Min Ratio
Max Ratio
TENDL Threshold 1.8000 MeV
CENDL3.2 Threshold 4.9000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
28-Ni-62

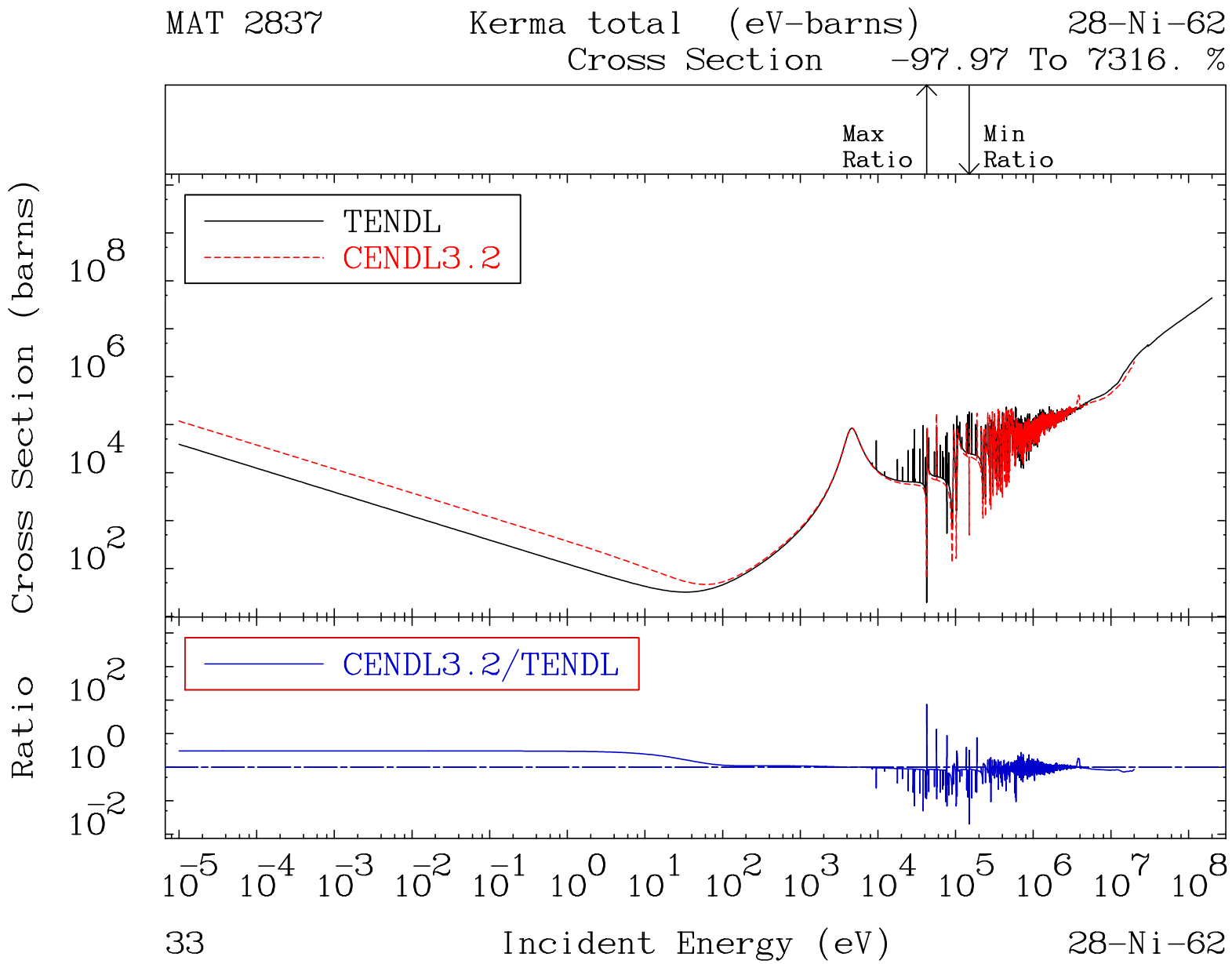

MAT 2837
Hydrogen Production
28-Ni-62
Cross Section
-100.0 To 0.200 %
Min Ratio
Max Ratio
TENDL Threshold 4.6136 MeV
CENDL3.2 Threshold 6.1000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
1.2
0.6
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
28-Ni-62

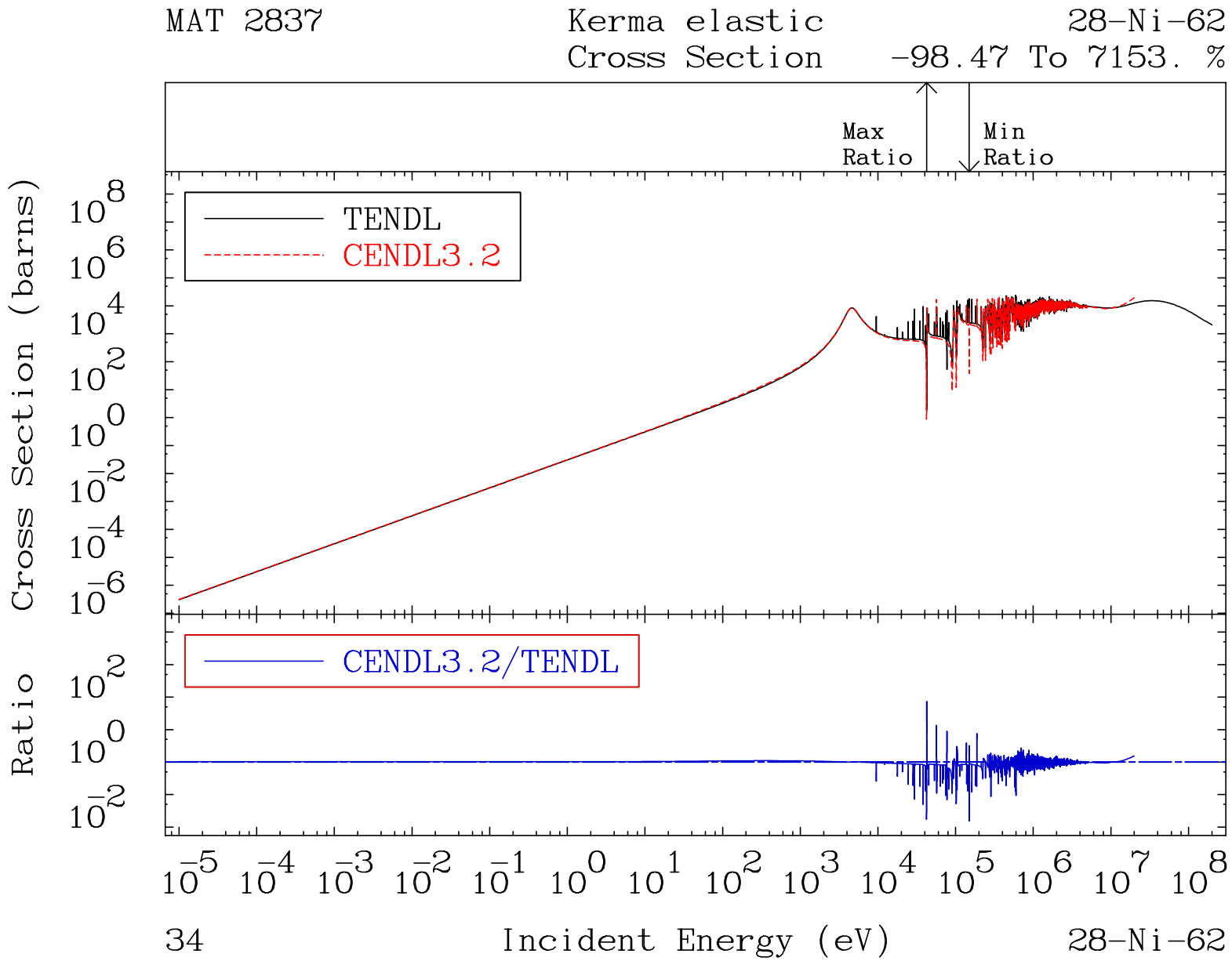

MAT 2837
Deuterium Production
28-Ni-62
Cross Section -100.0 To -76.11%
Min Ratio
Max Ratio
TENDL Threshold 9.0578 MeV
CENDL3.2 Threshold 11.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
0.2
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
28-Ni-62

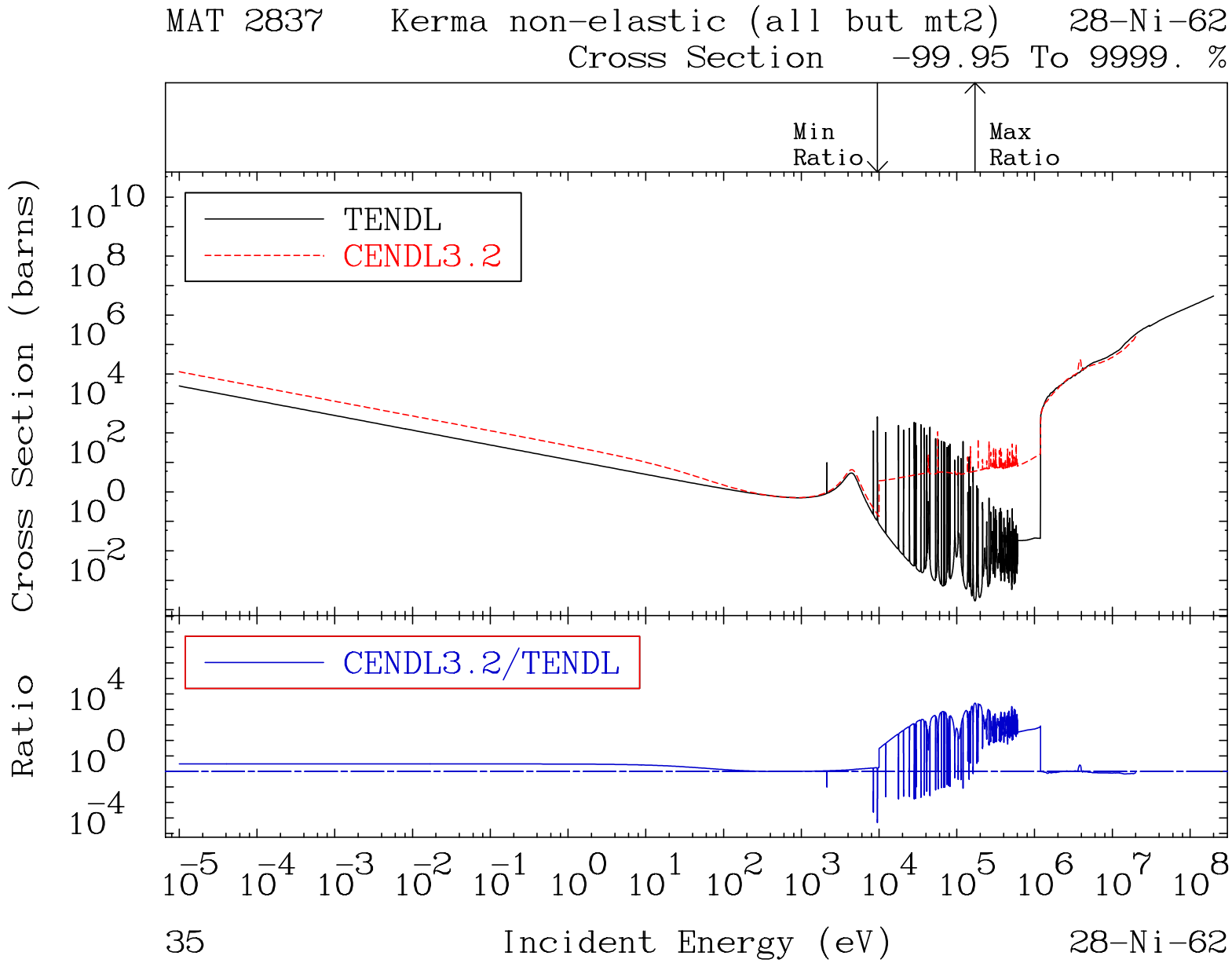

MAT 2837
Tritium Production
28-Ni-62
Cross Section -100.0 To -18.13%
Min Ratio
Max Ratio
TENDL Threshold 12.170 MeV
CENDL3.2 Threshold 15.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
28-Ni-62

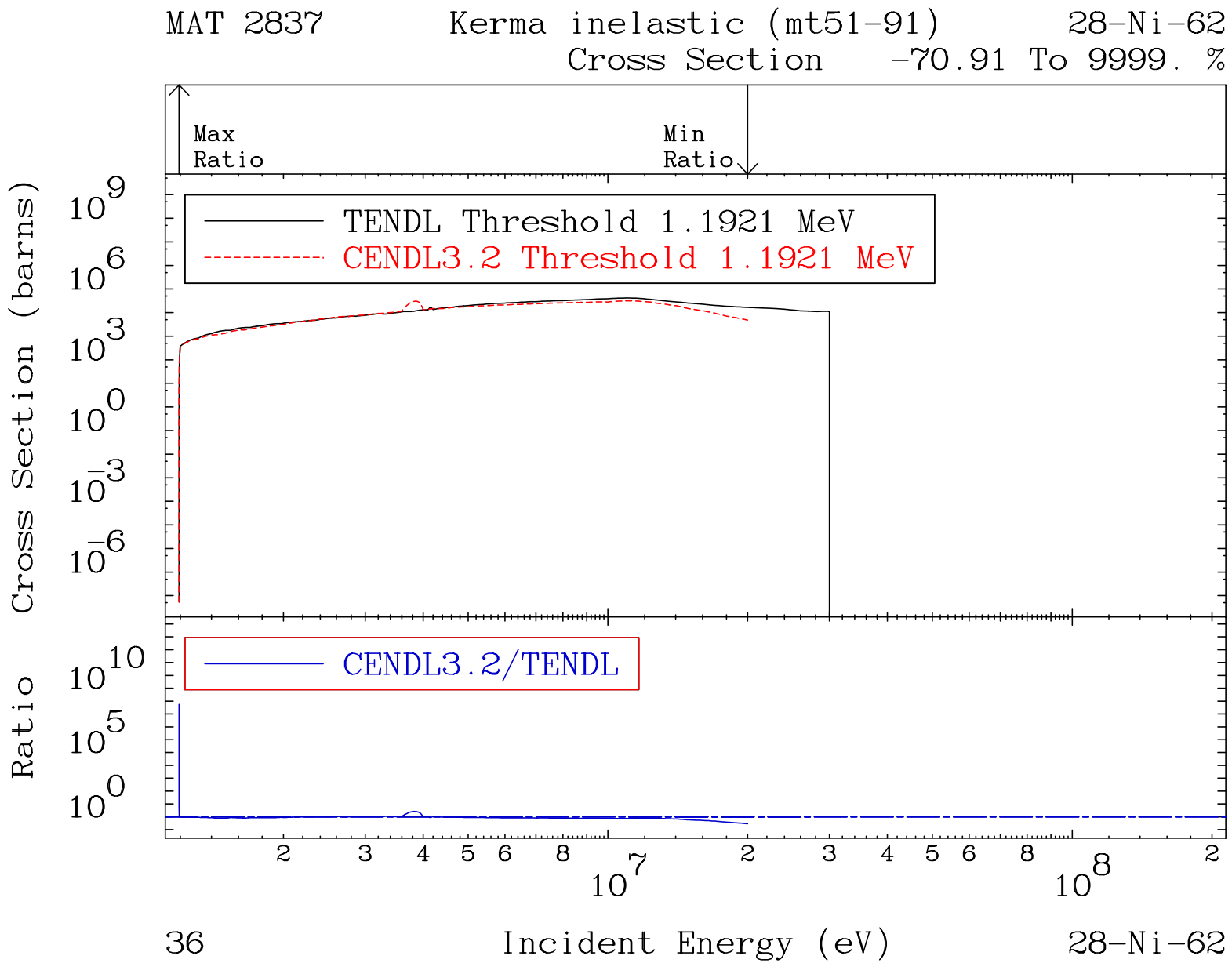

MAT 2837
He-3 Production
Cross Section
28-Ni-62
-100.0 To 6880. %
Min Ratio
Max Ratio
TENDL Threshold 12.392 MeV
CENDL3.2 Threshold 18.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
31
Incident Energy (eV)
28-Ni-62

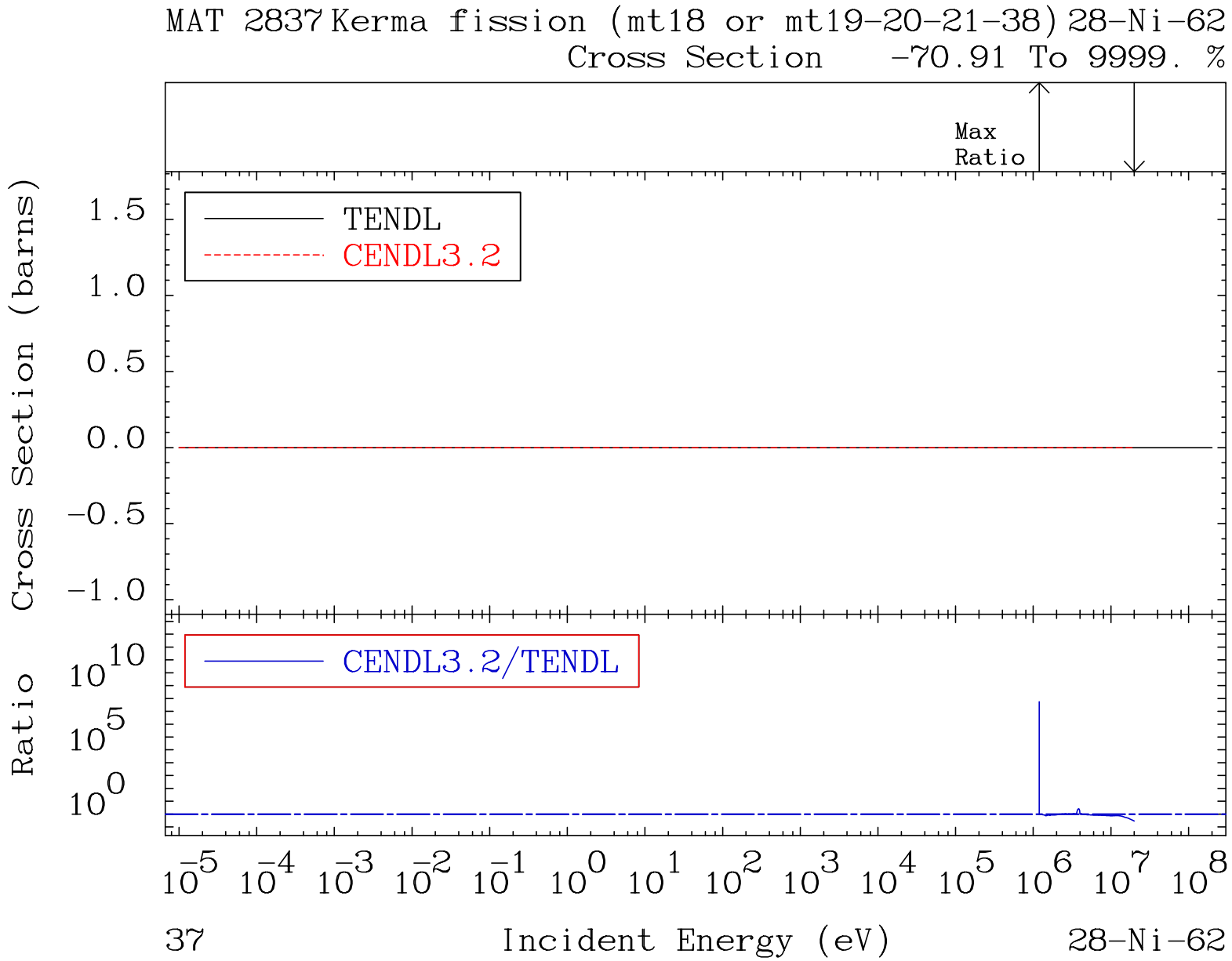

MAT 2837
He-4 Production
Cross Section
28-Ni-62
-100.0 To 83.10 %
Min Ratio
Max Ratio
TENDL Threshold 1.8000 MeV
CENDL3.2 Threshold 4.9000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
28-Ni-62

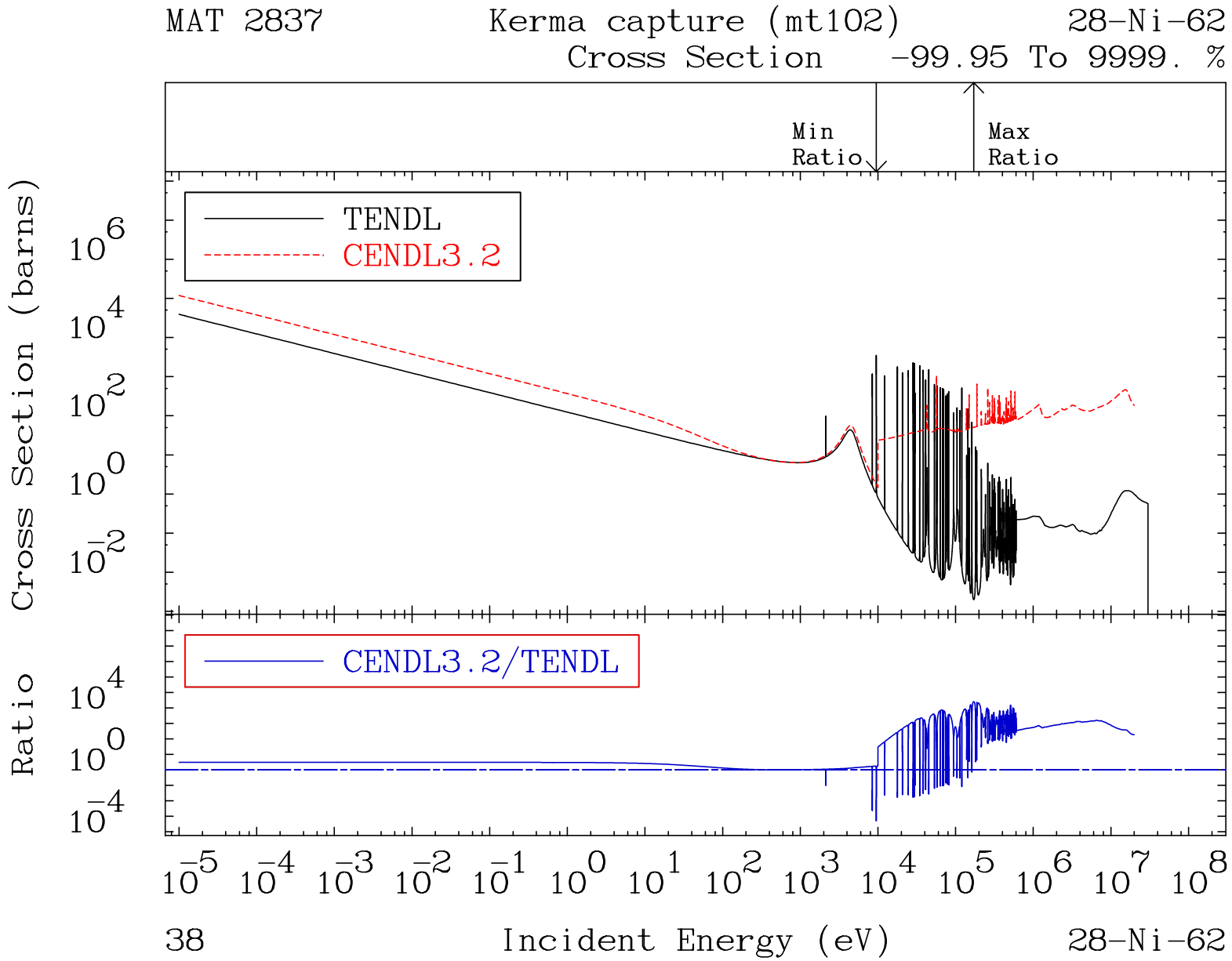

MAT 2837
Kerma total (eV-barns)
28-Ni-62
Cross Section -97.97 To 7316. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
33
28-Ni-62

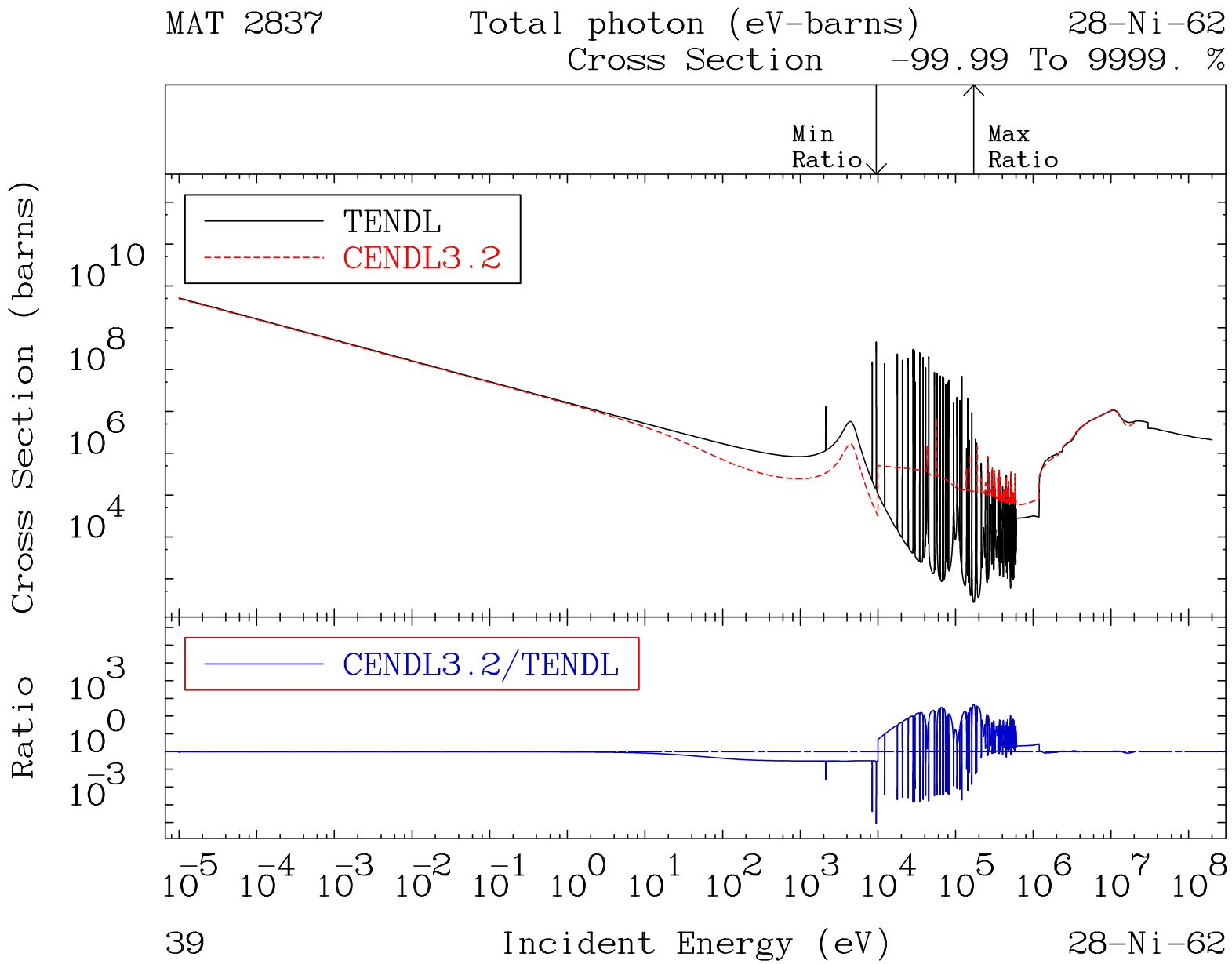

MAT 2837
Kerma elastic
Cross Section
28-Ni-62
-98.47 To 7153. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
28-Ni-62

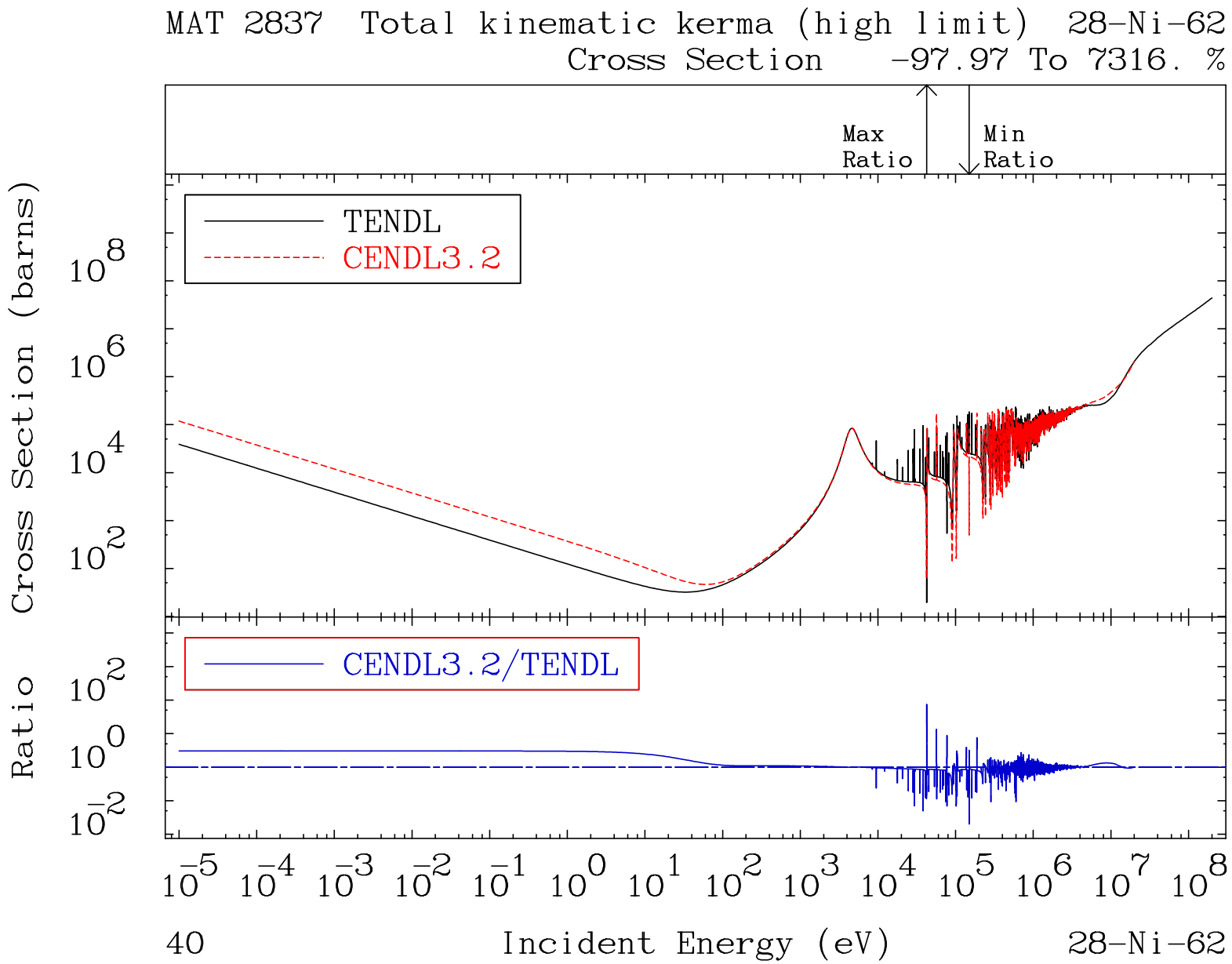

MAT 2837 Kerma non-elastic (all but mt2) 28-Ni-62
Cross Section -99.95 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
28-Ni-62

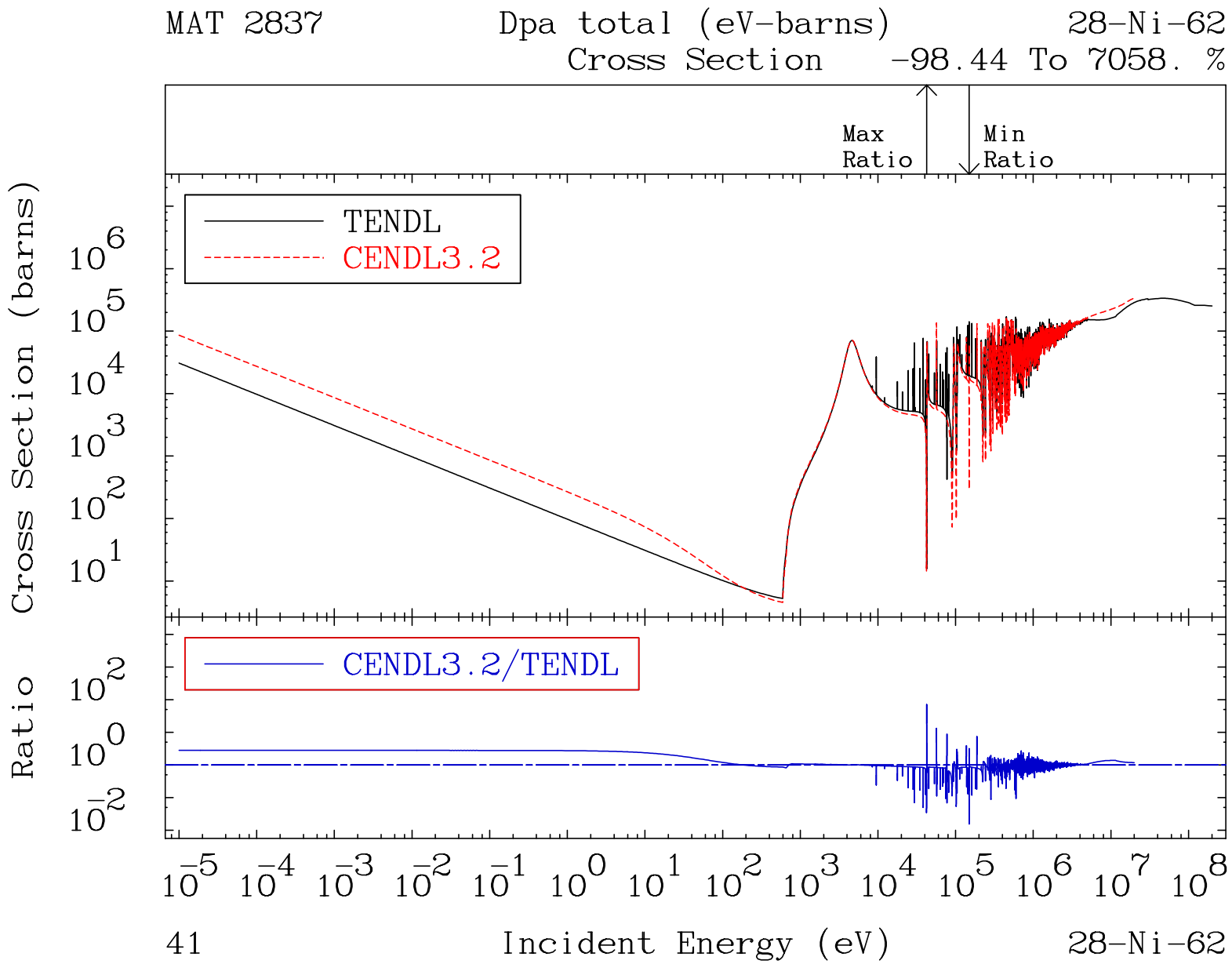

MAT 2837
Kerma inelastic (mt51-91)
28-Ni-62
Cross Section -70.91 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1921 MeV
CENDL3.2 Threshold 1.1921 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
28-Ni-62

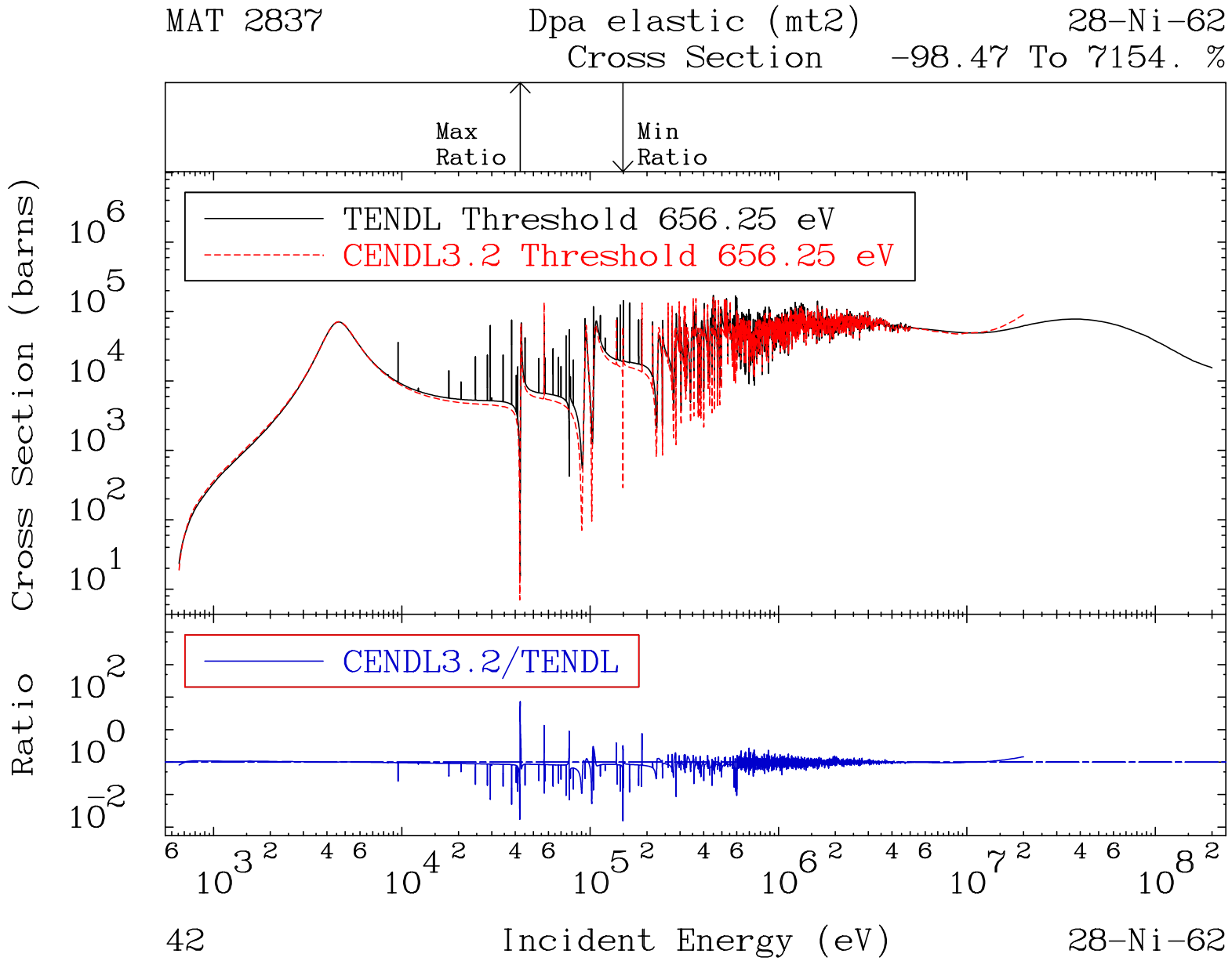

MAT 2837 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-62
Cross Section -70.91 To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{10}
10^{5}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
37
Incident Energy (eV)
28-Ni-62

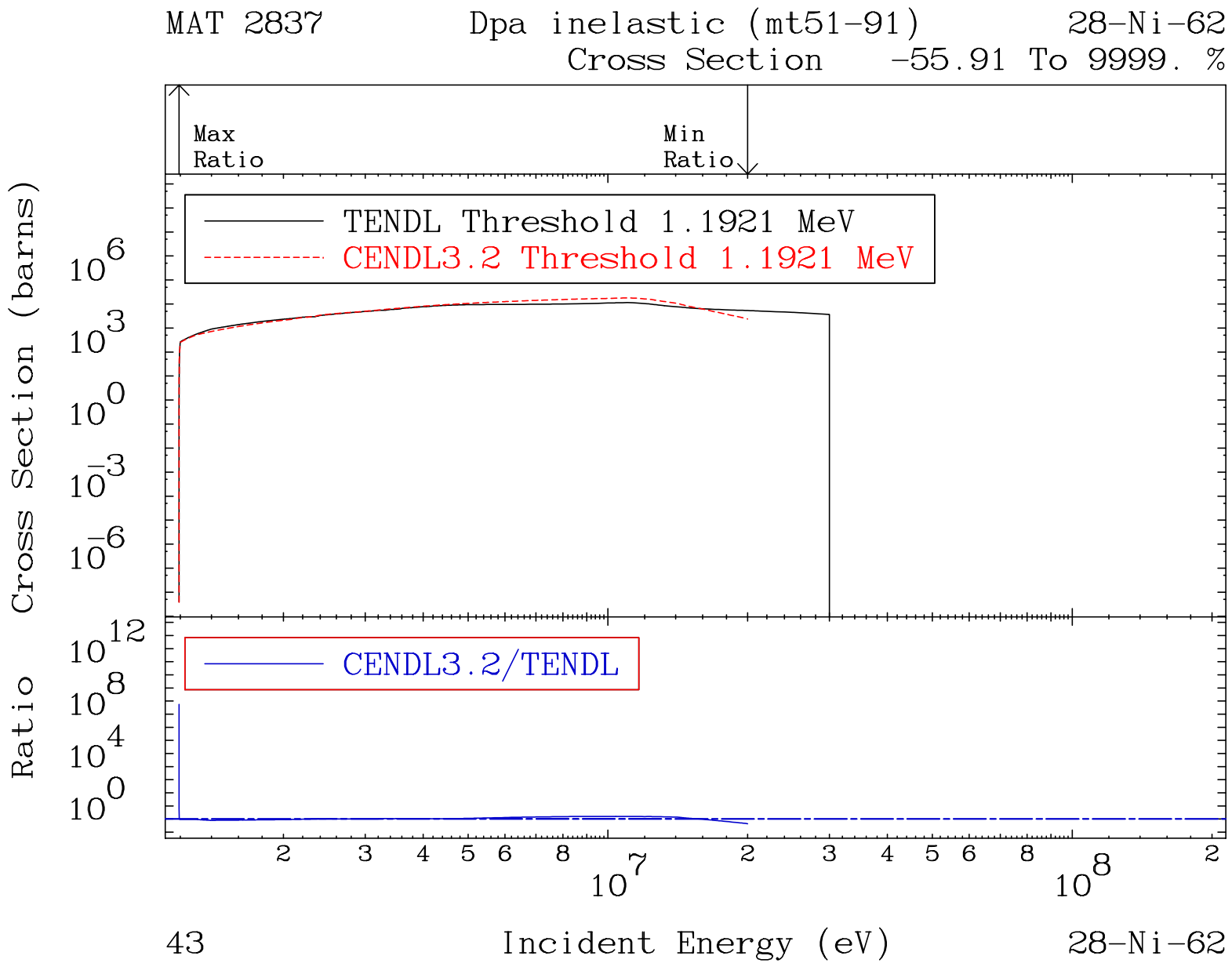

MAT 2837
Kerma capture (mt102)
28-Ni-62
Cross Section -99.95 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
28-Ni-62

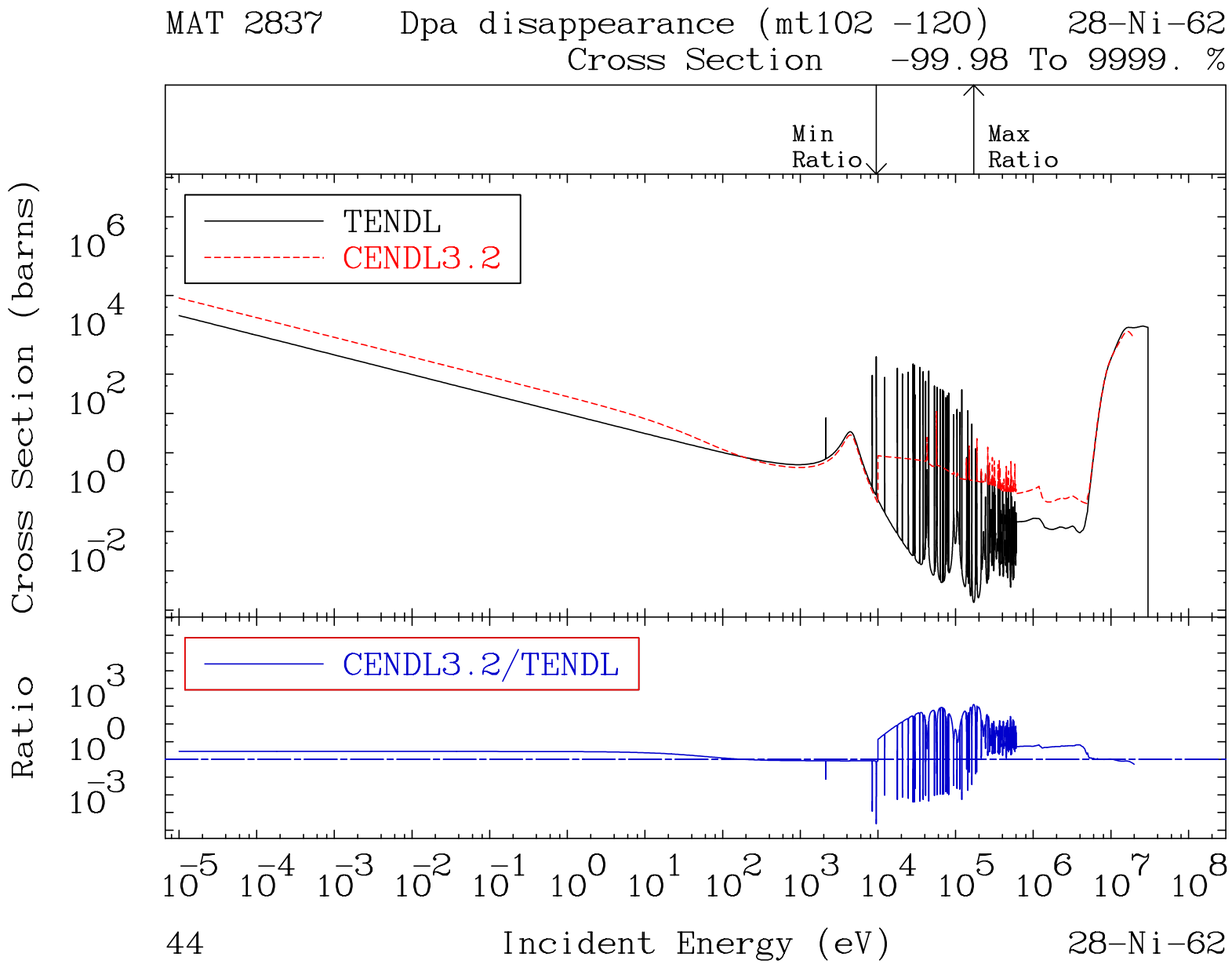

MAT 2837
Total photon (eV-barns)
28-Ni-62
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^{10}
10^{8}
10^{6}
10^{4}
CENDL3.2/TENDL
Ratio
10^{3}
10^{0}
10^{-3}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
39
Incident Energy (eV)
28-Ni-62

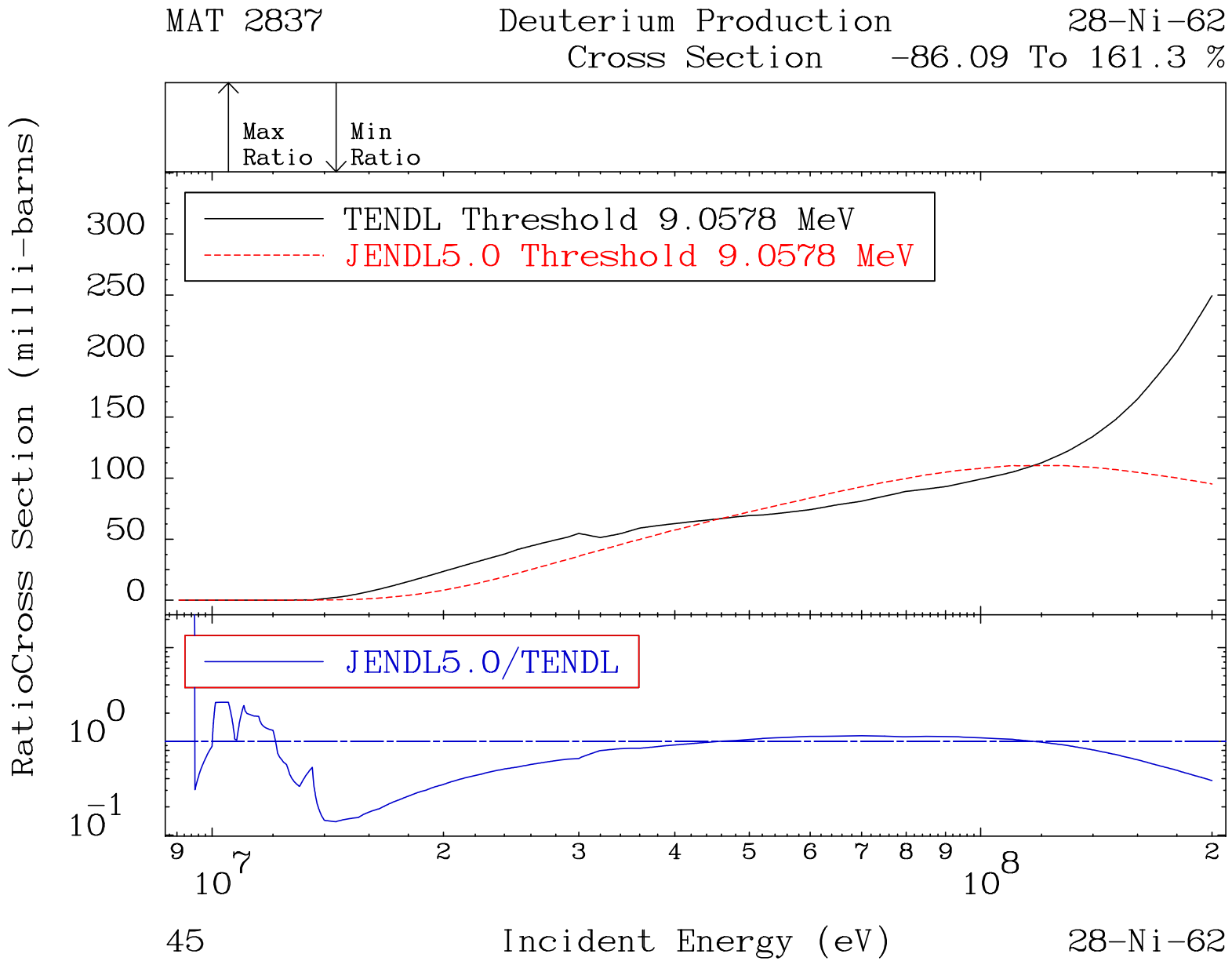

MAT 2837 Total kinematic kerma (high limit) 28-Ni-62
Cross Section -97.97 To 7316. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
Ratio
CENDL3.2/TENDL
Incident Energy (eV)
40
28-Ni-62

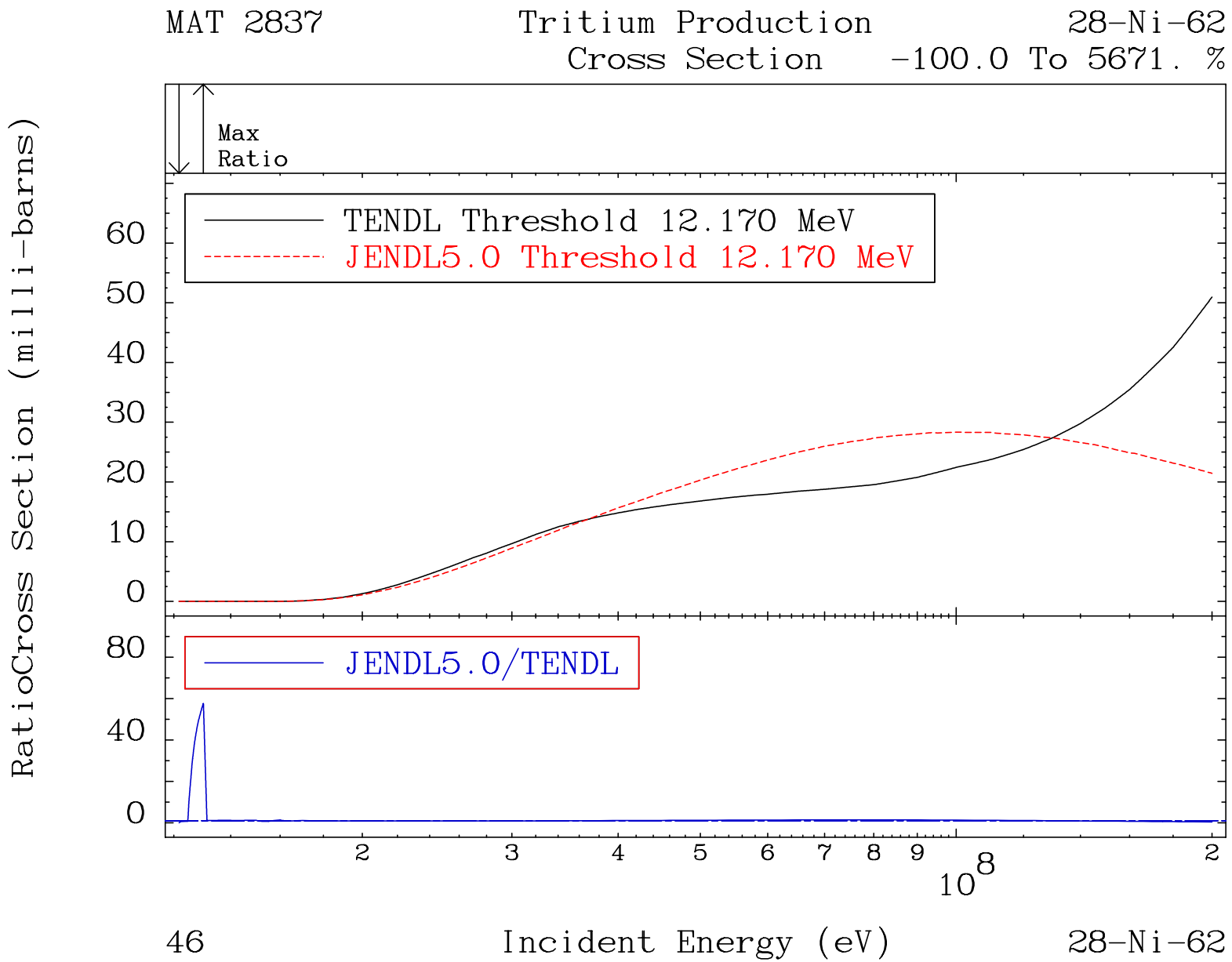

MAT 2837
Dpa total (eV-barns)
28-Ni-62
Cross Section -98.44 To 7058. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
41
28-Ni-62

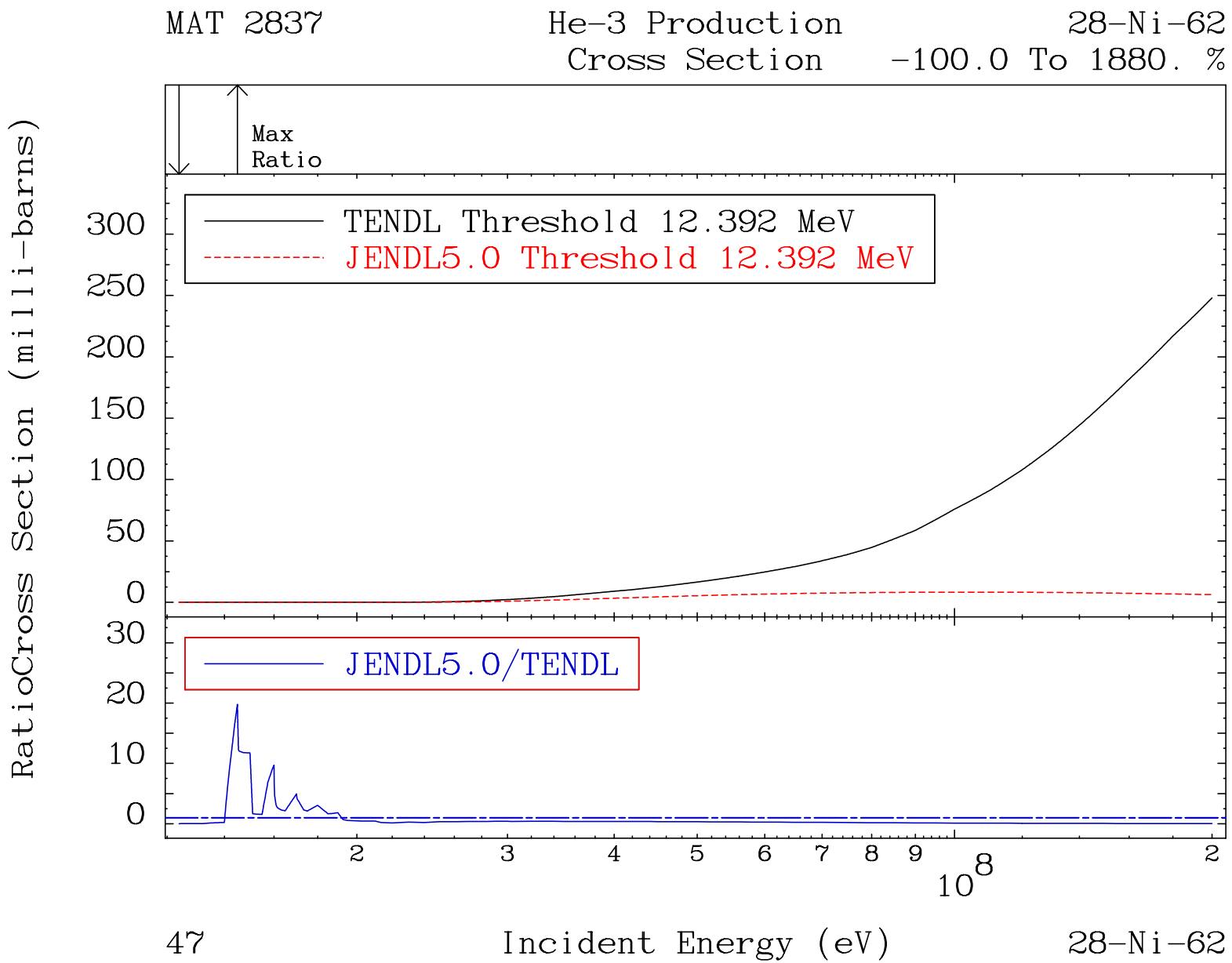

MAT 2837
Dpa elastic (mt2)
Cross Section
28-Ni-62
-98.47 To 7154. %
Max Ratio
Min Ratio
TENDL Threshold 656.25 eV
CENDL3.2 Threshold 656.25 eV
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
42
28-Ni-62

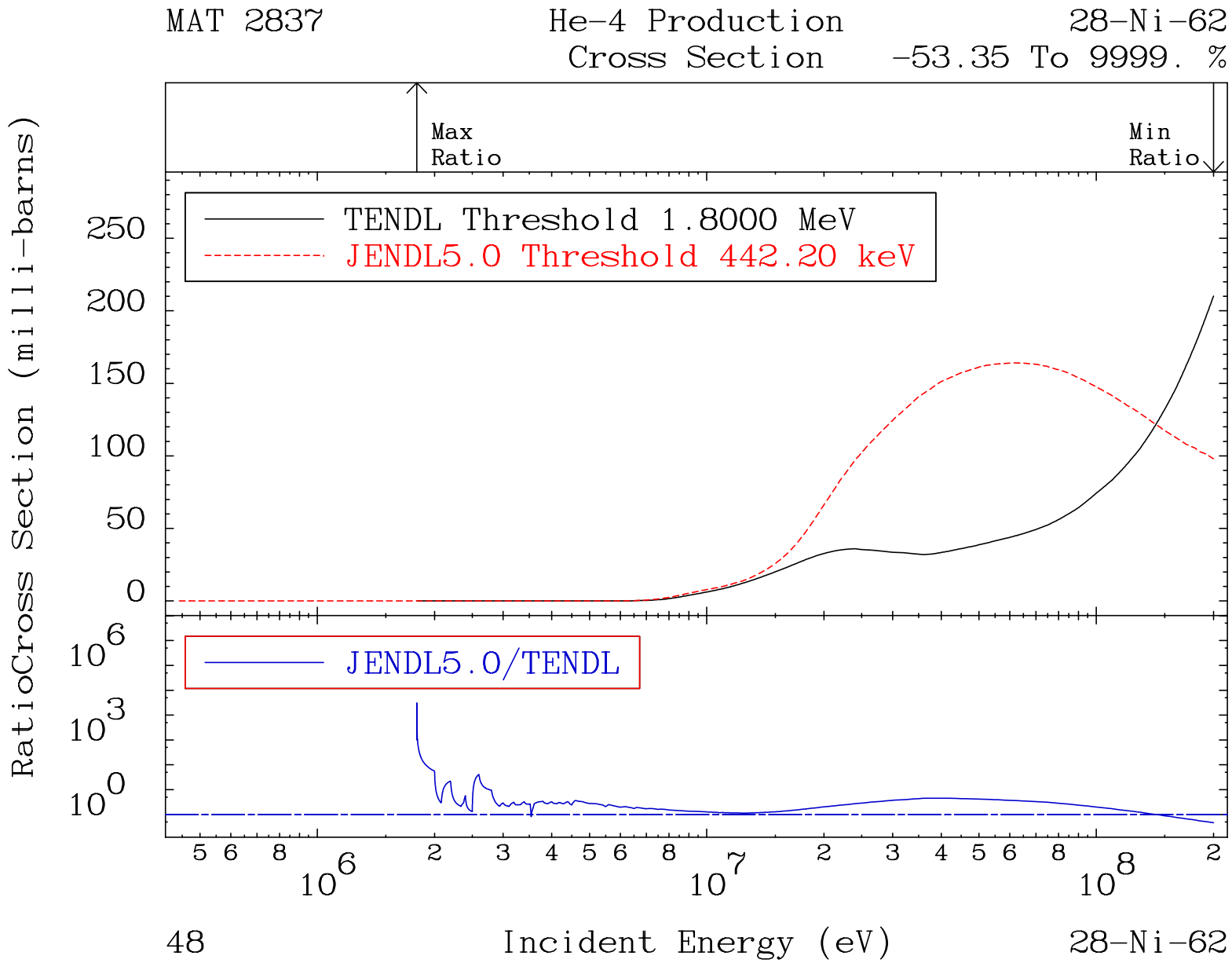

MAT 2837
Dpa inelastic (mt51-91)
28-Ni-62
Cross Section -55.91 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1921 MeV
CENDL3.2 Threshold 1.1921 MeV
CENDL3.2/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
43
28-Ni-62

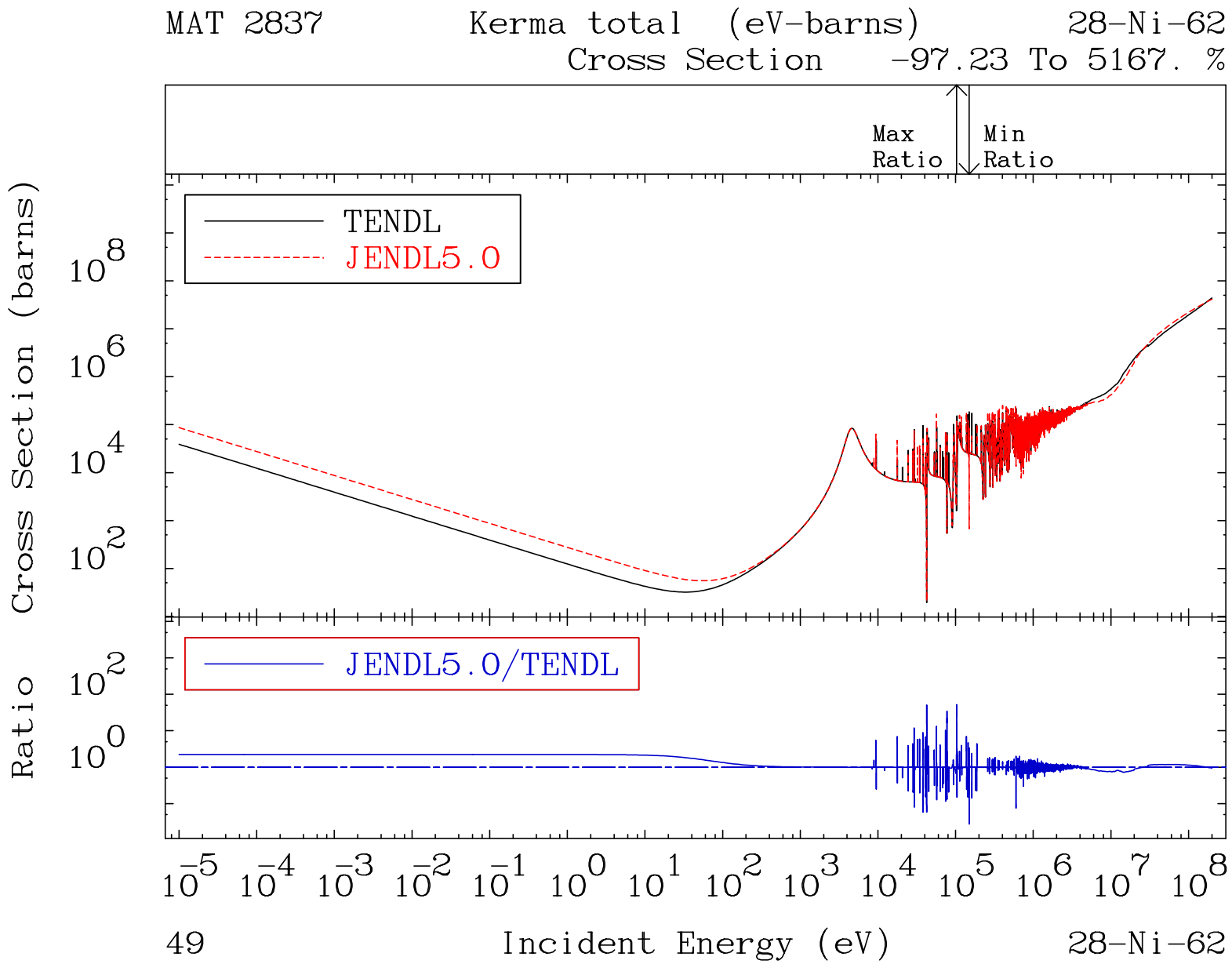

MAT 2837 Dpa disappearance (mt102 -120) 28-Ni-62
Cross Section -99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
28-Ni-62

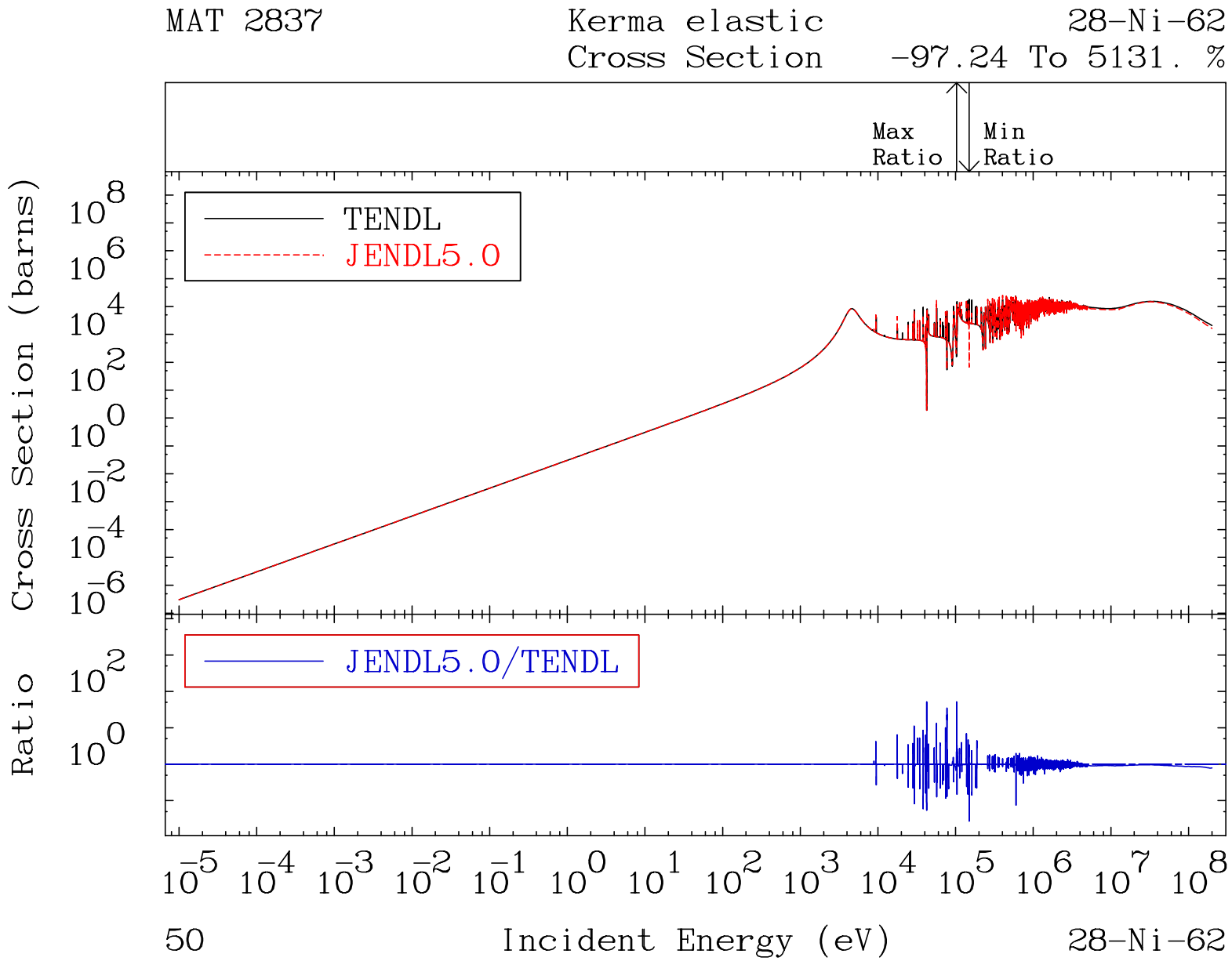

MAT 2837
Deuterium Production
28-Ni-62
Cross Section -86.09 To 161.3 %
Max Ratio
Min Ratio
TENDL Threshold 9.0578 MeV
JENDL5.0 Threshold 9.0578 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^0
10^-1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
28-Ni-62

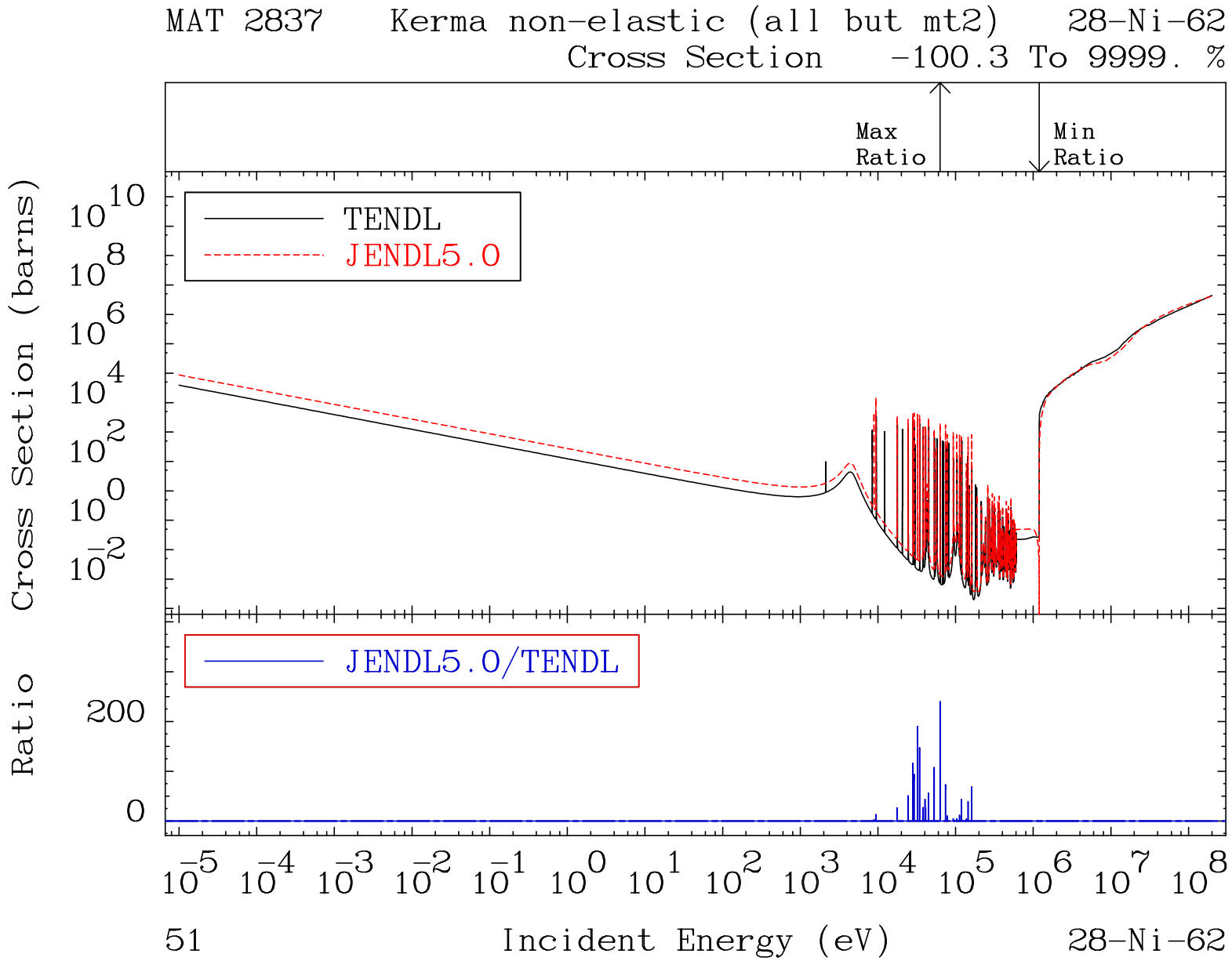

MAT 2837
Tritium Production
28-Ni-62
Cross Section
-100.0 To 5671. %
Max
Ratio
TENDL Threshold 12.170 MeV
JENDL5.0 Threshold 12.170 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
46
Incident Energy (eV)
28-Ni-62

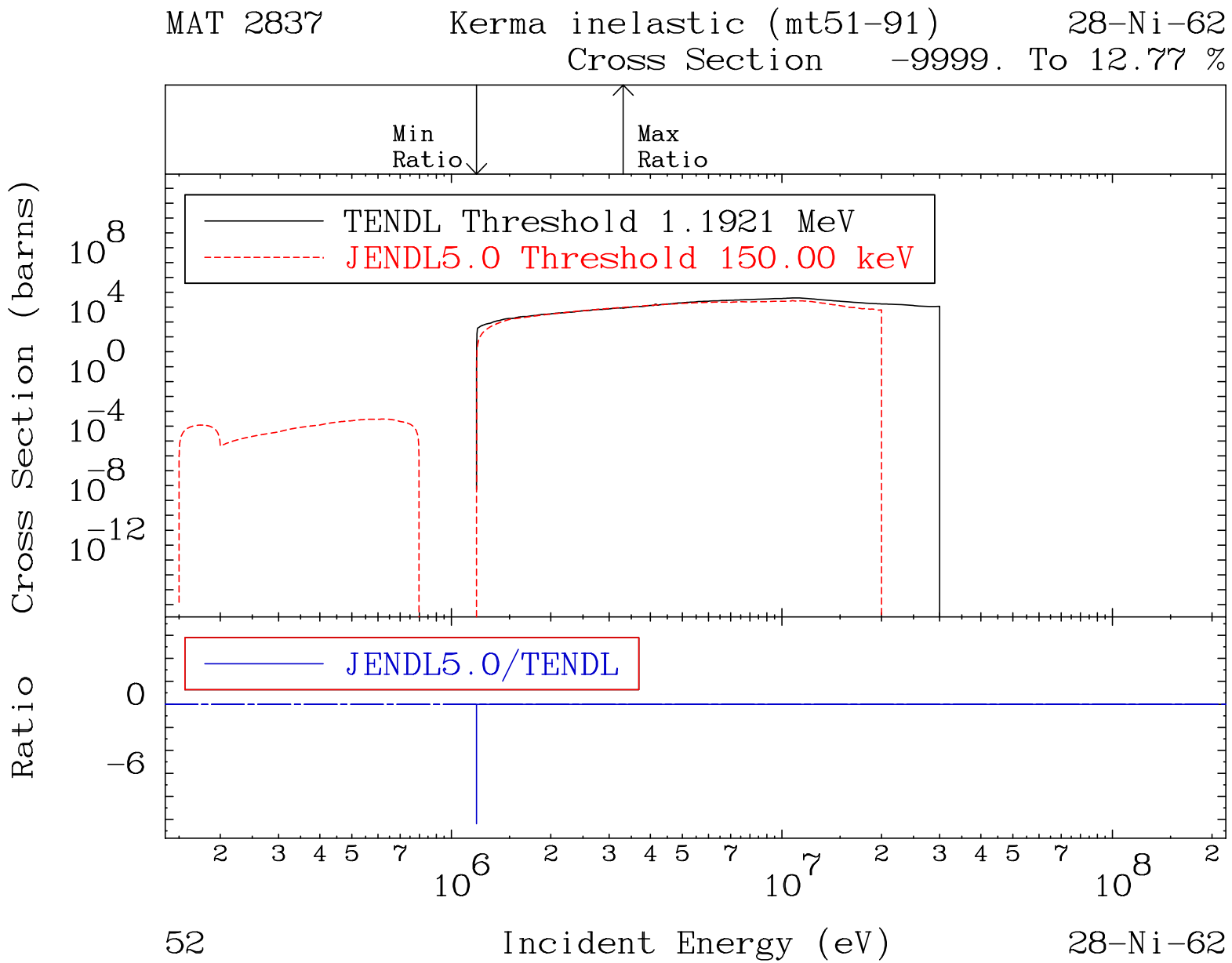

MAT 2837
He-3 Production
Cross Section
28-Ni-62
-100.0 To 1880. %
Max
Ratio
TENDL Threshold 12.392 MeV
JENDL5.0 Threshold 12.392 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
30
20
10
0
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
28-Ni-62

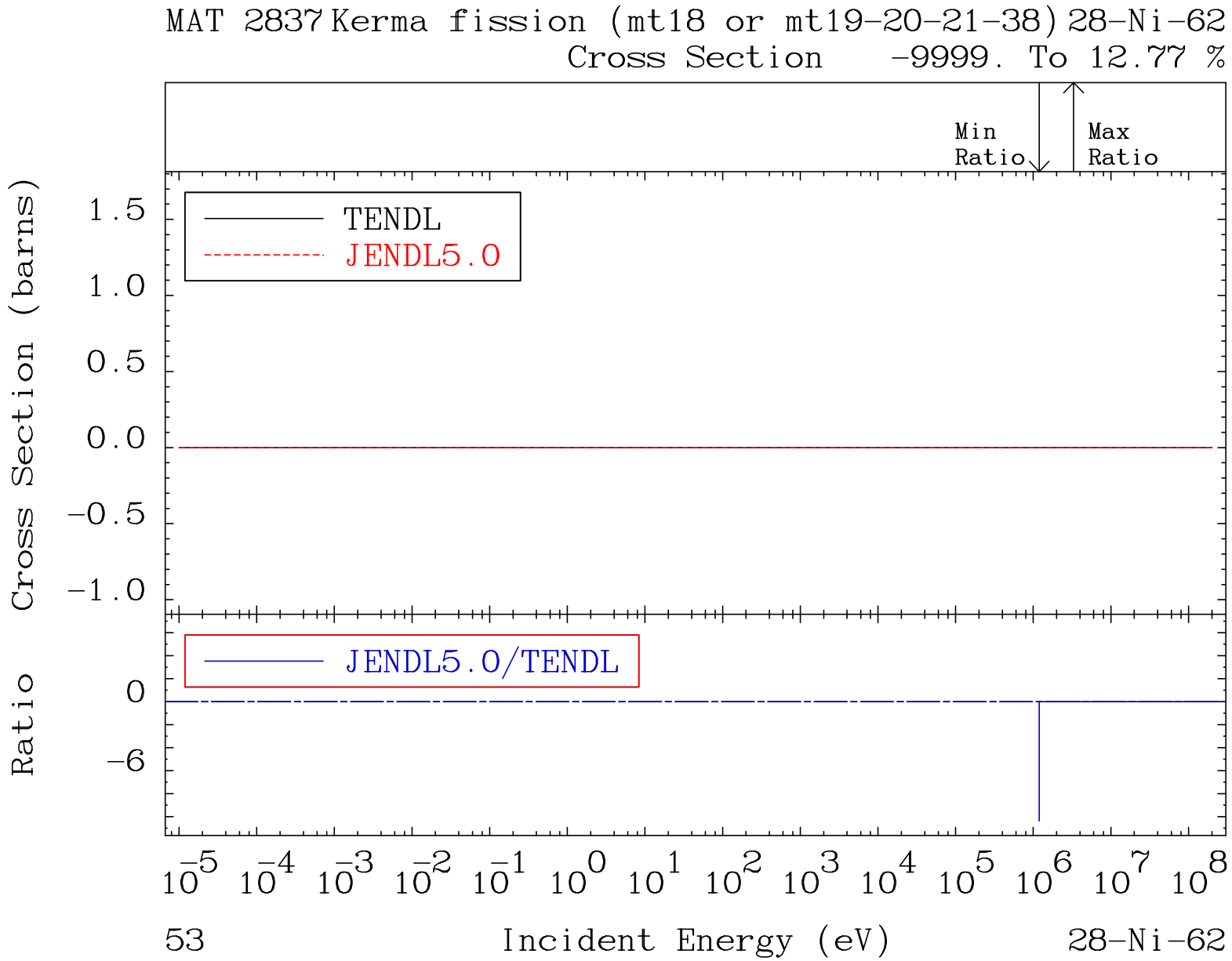

MAT 2837
He-4 Production
Cross Section
28-Ni-62
-53.35 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8000 MeV
JENDL5.0 Threshold 442.20 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^6
10^3
10^0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
48
Incident Energy (eV)
28-Ni-62

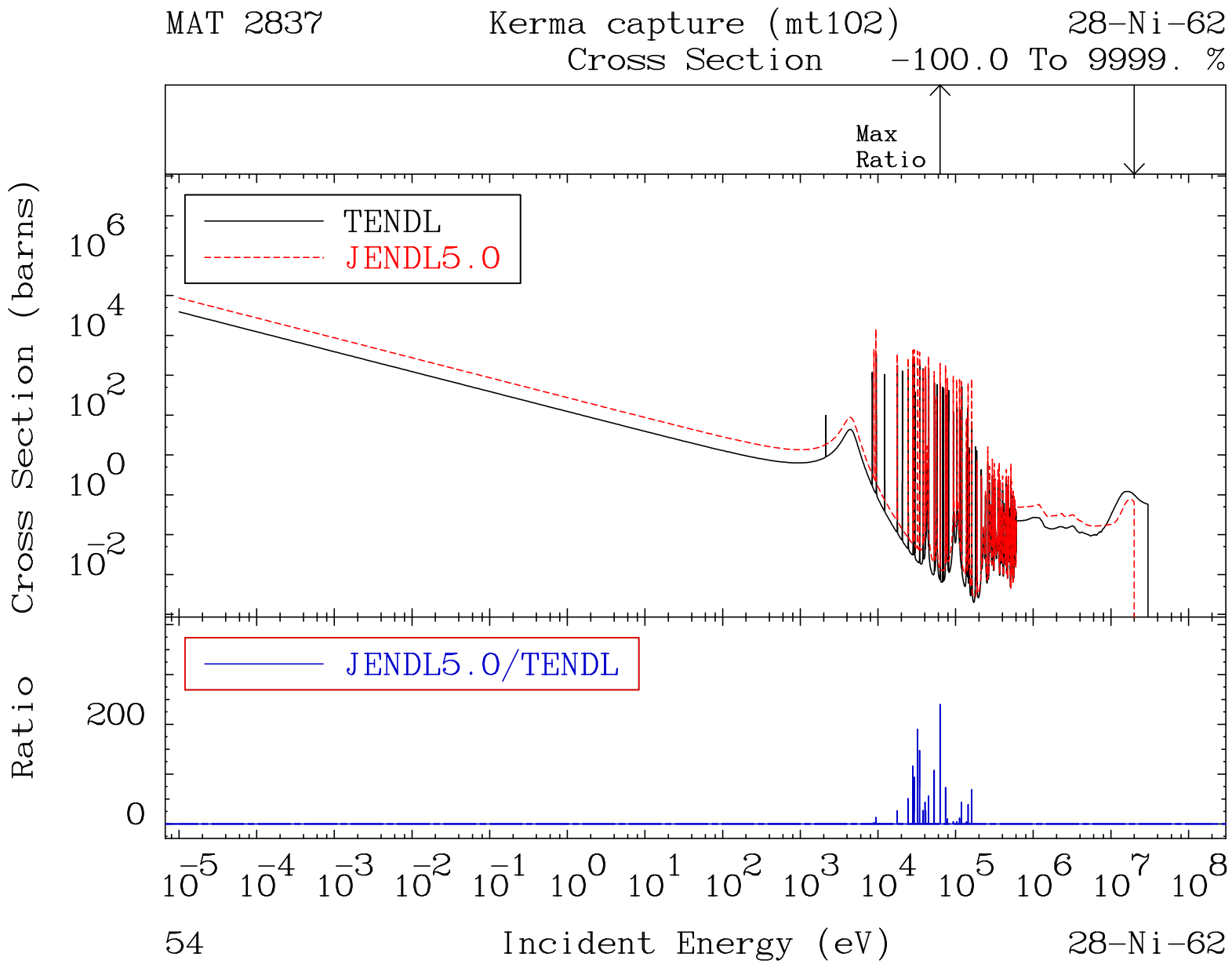

MAT 2837
Kerma total (eV-barns)
28-Ni-62
Cross Section -97.23 To 5167. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
49
28-Ni-62

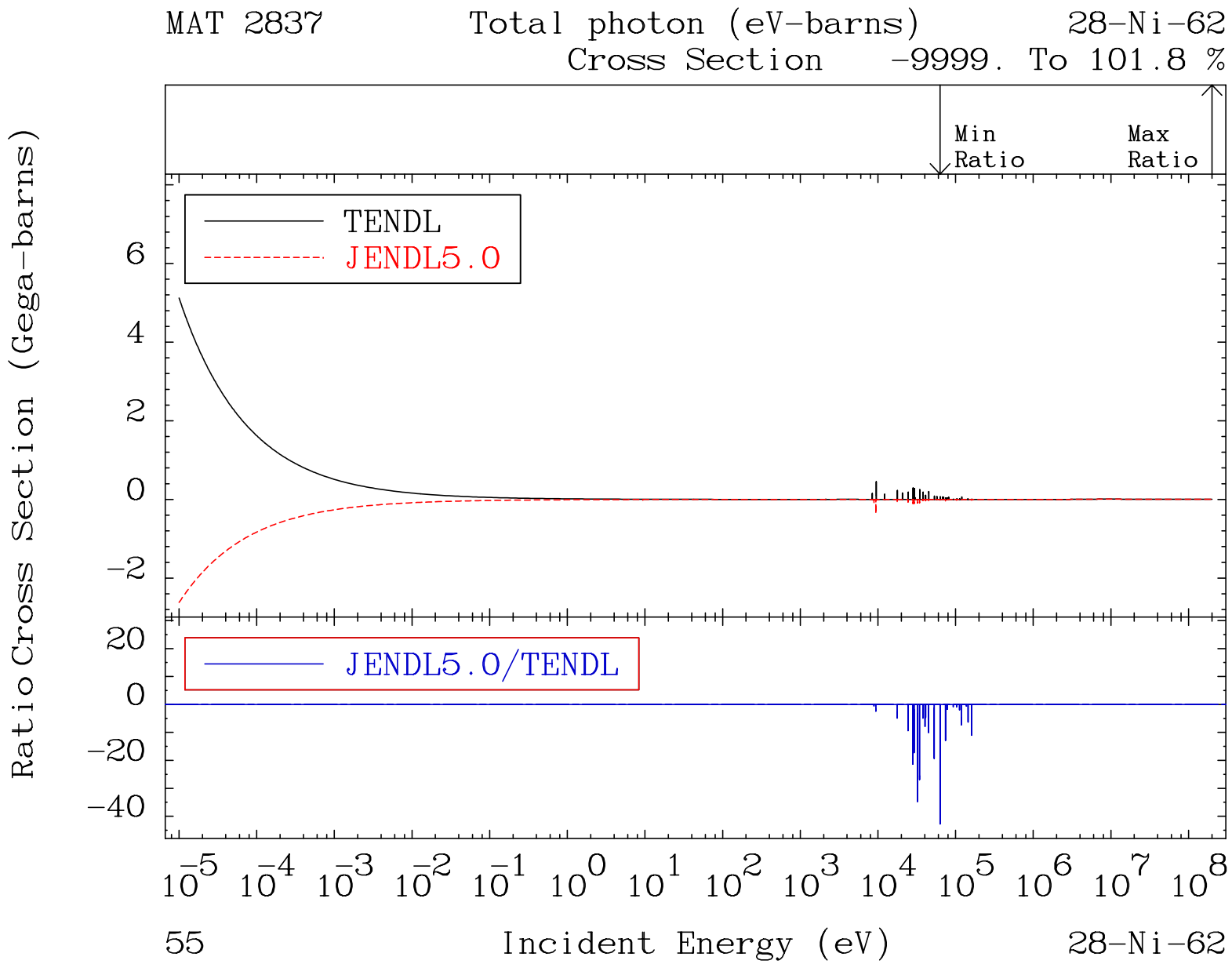

MAT 2837
Kerma elastic
Cross Section
28-Ni-62
-97.24 To 5131. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
28-Ni-62

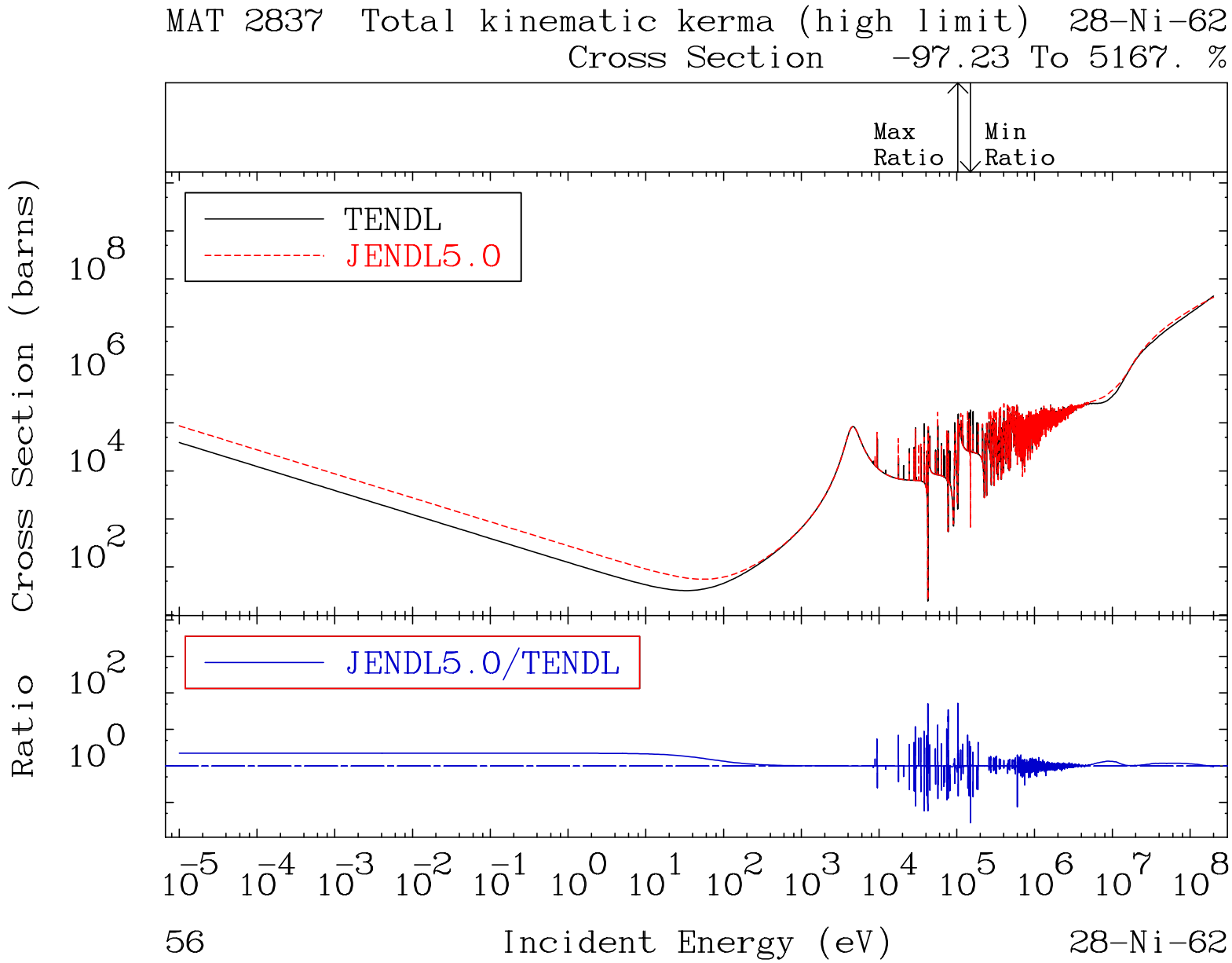

MAT 2837 Kerma non-elastic (all but mt2) 28-Ni-62
Cross Section -100.3 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
28-Ni-62

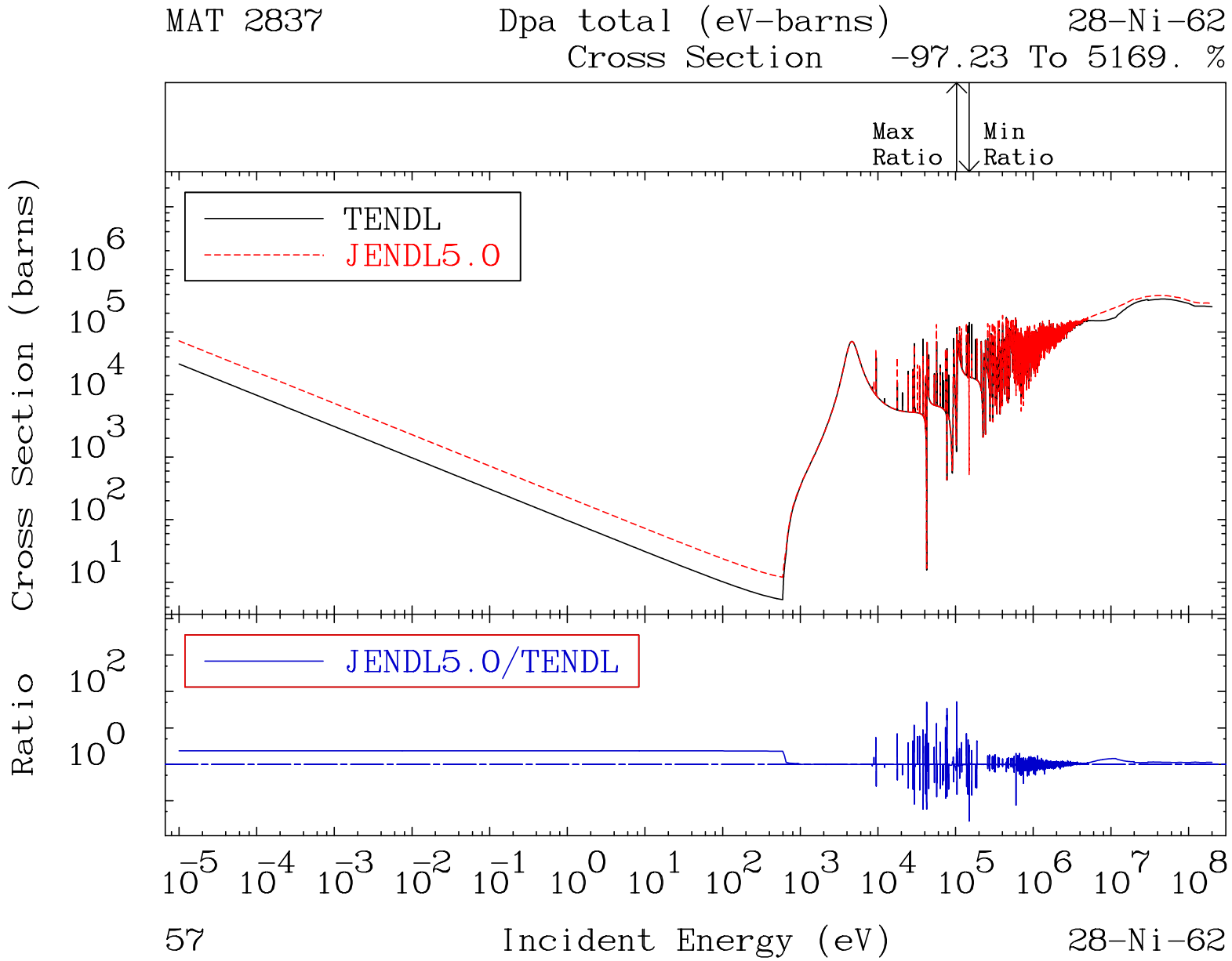

MAT 2837
Kerma inelastic (mt51-91)
28-Ni-62
Cross Section -9999. To 12.77 %
Min Ratio
Max Ratio
TENDL Threshold 1.1921 MeV
JENDL5.0 Threshold 150.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
28-Ni-62

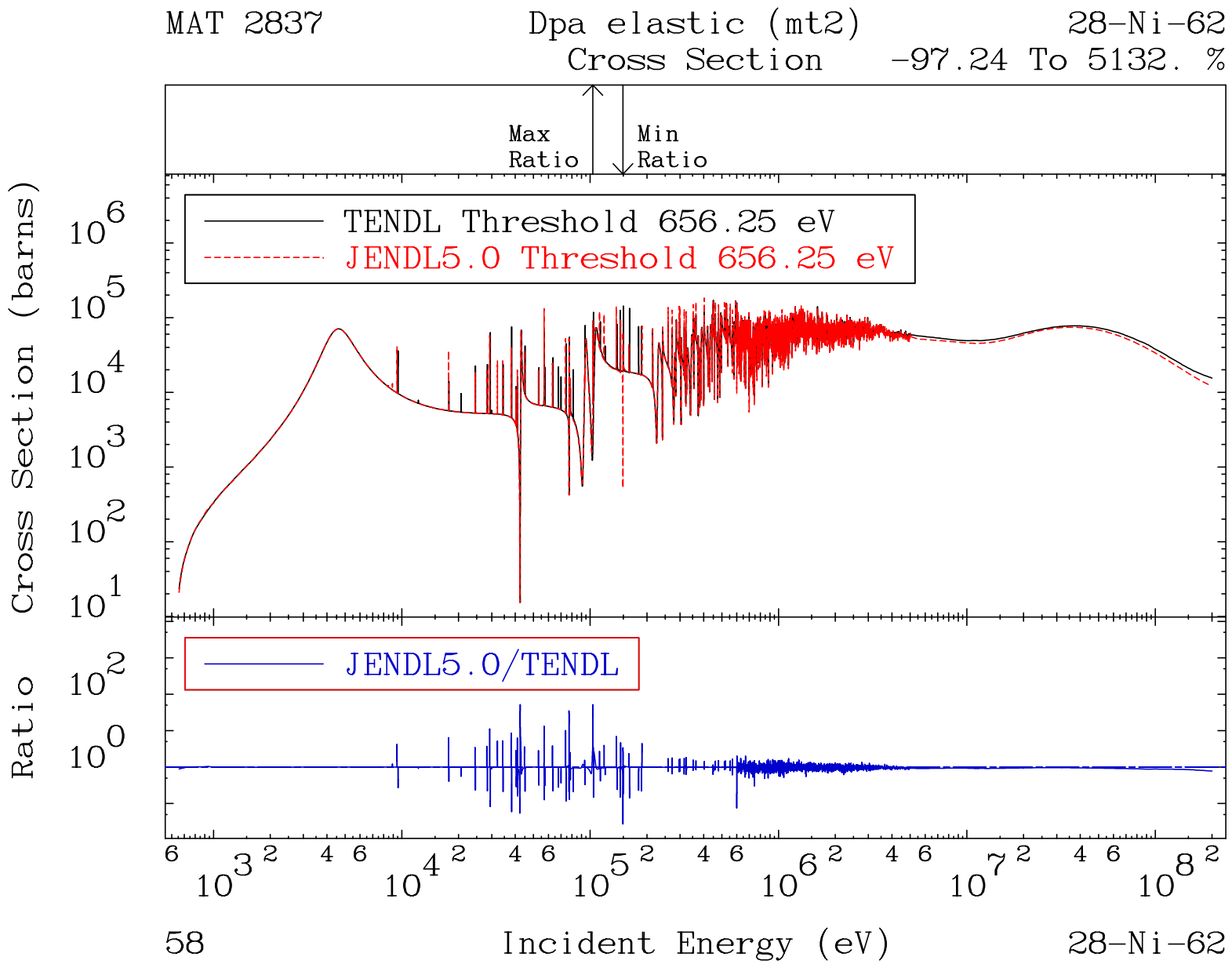

MAT 2837 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-62
Cross Section -9999. To 12.77 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-6
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
53
Incident Energy (eV)
28-Ni-62

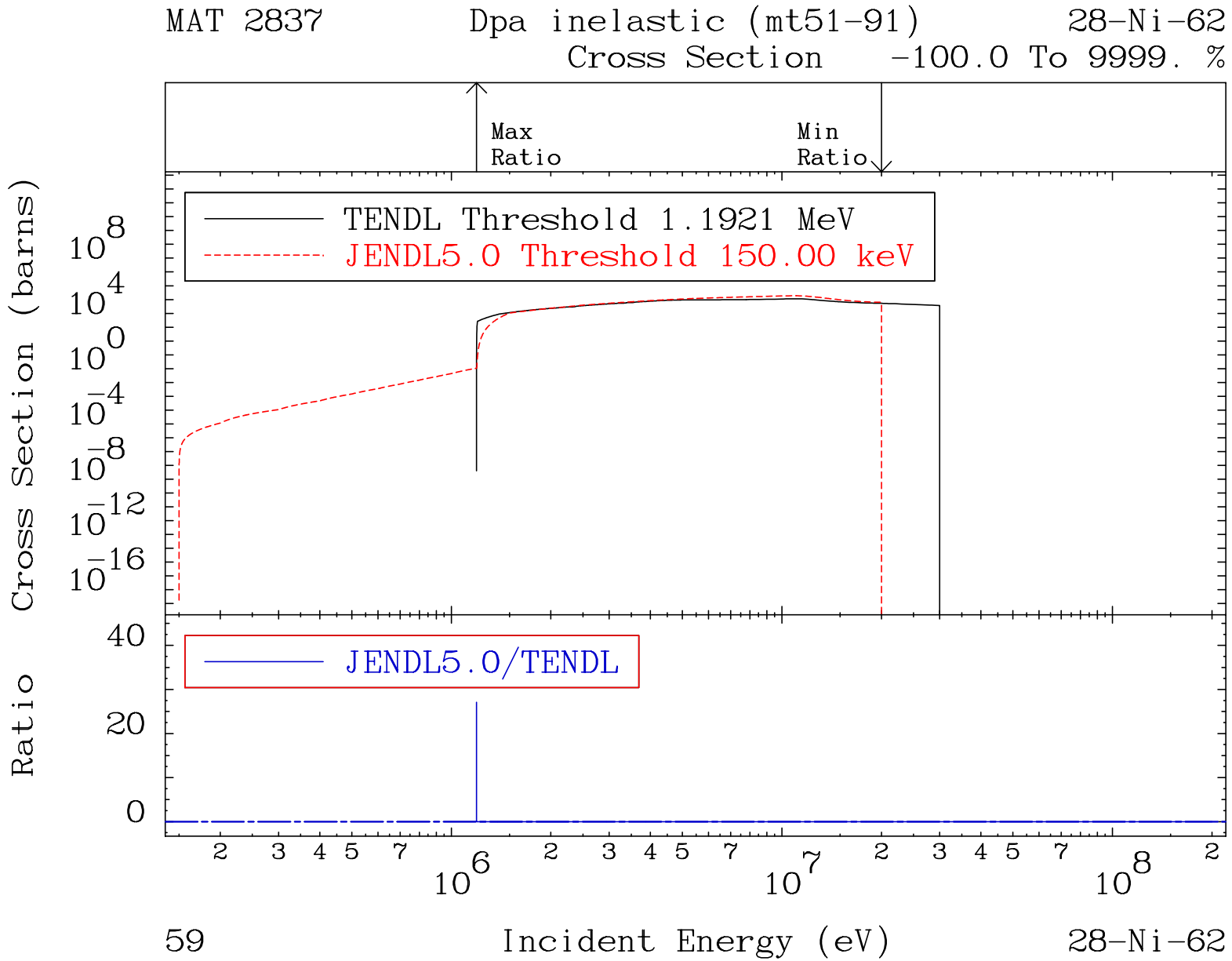

MAT 2837
Kerma capture (mt102)
28-Ni-62
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
28-Ni-62

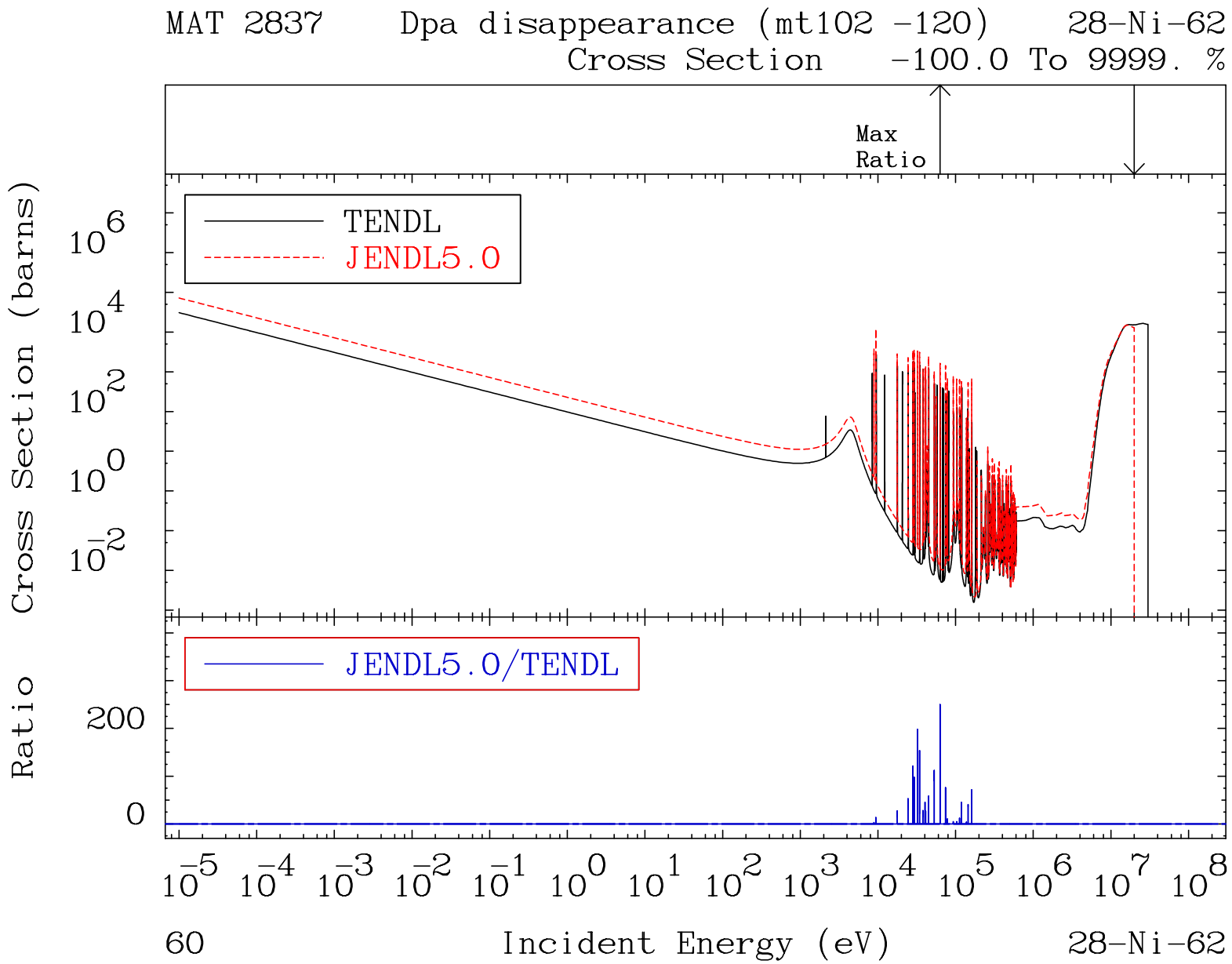

MAT 2837
Total photon (eV-barns)
28-Ni-62
Cross Section -9999. To 101.8 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Gega-barns)
6
4
2
0
-2
20
0
-20
-40
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
55
Incident Energy (eV)
28-Ni-62

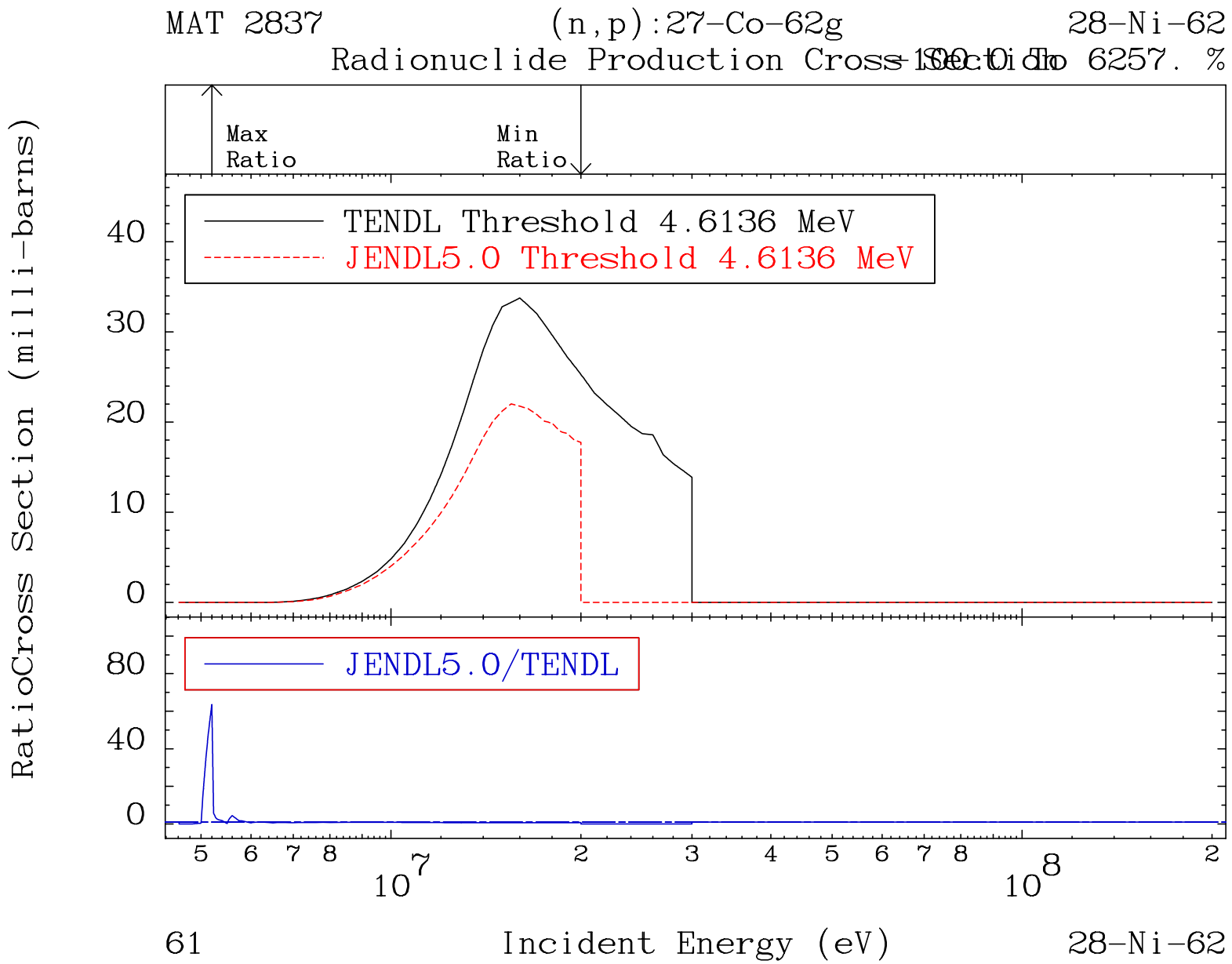

MAT 2837 Total kinematic kerma (high limit) 28-Ni-62
Cross Section -97.23 To 5167. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
56
28-Ni-62

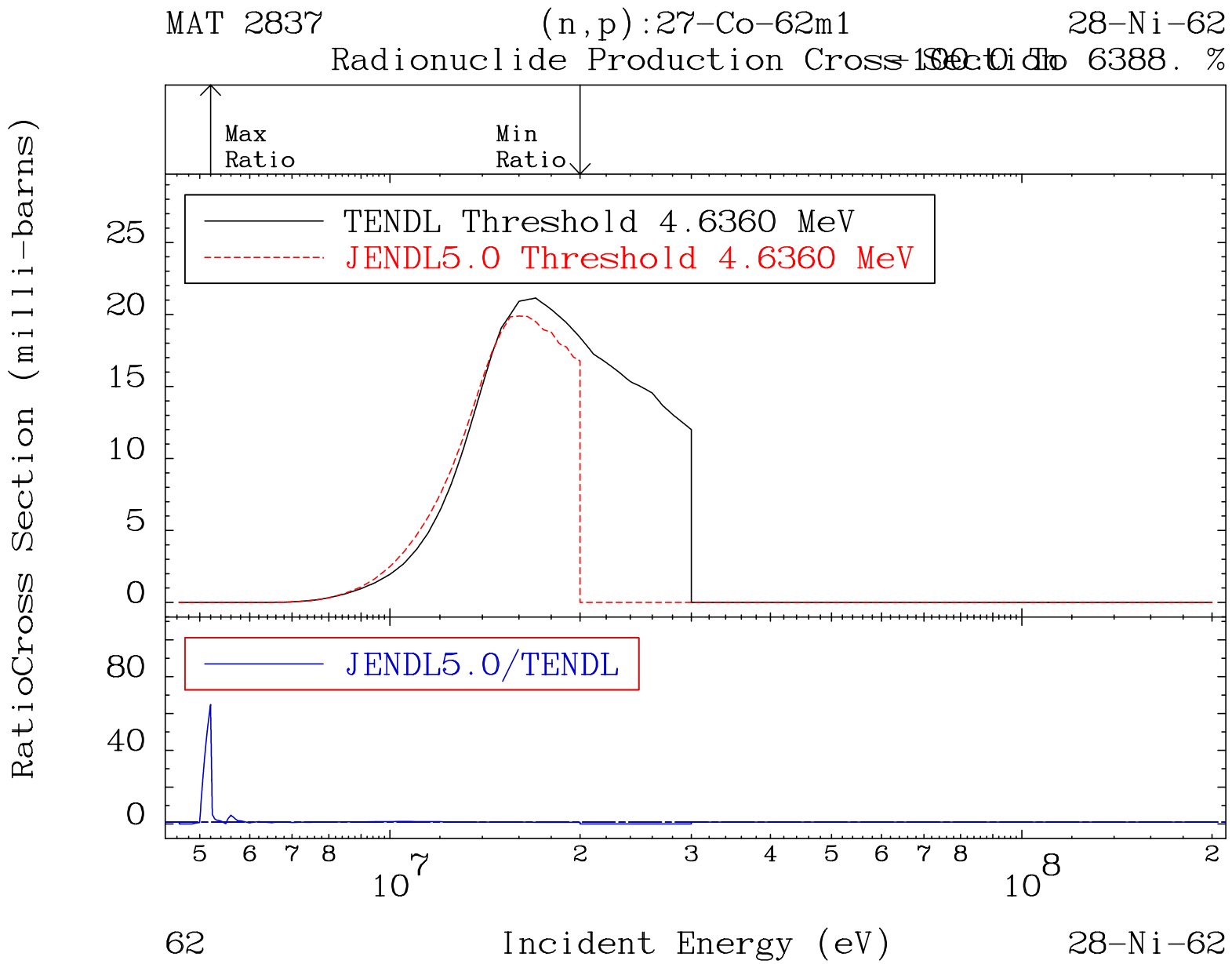

MAT 2837
Dpa total (eV-barns)
28-Ni-62
Cross Section -97.23 To 5169. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
57
28-Ni-62

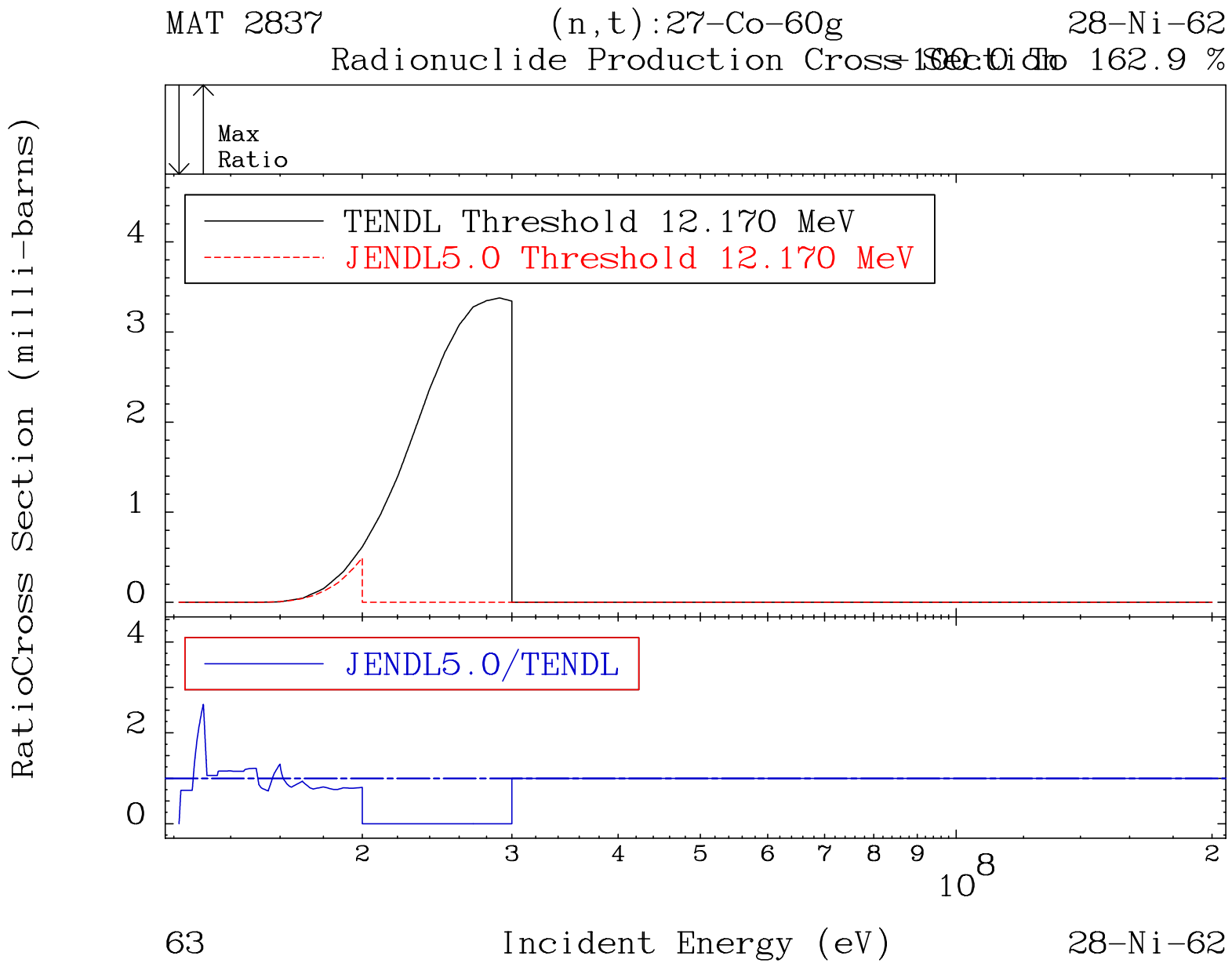

MAT 2837
Dpa elastic (mt2)
Cross Section
28-Ni-62
-97.24 To 5132. %
Max Ratio
Min Ratio
TENDL Threshold 656.25 eV
JENDL5.0 Threshold 656.25 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
28-Ni-62

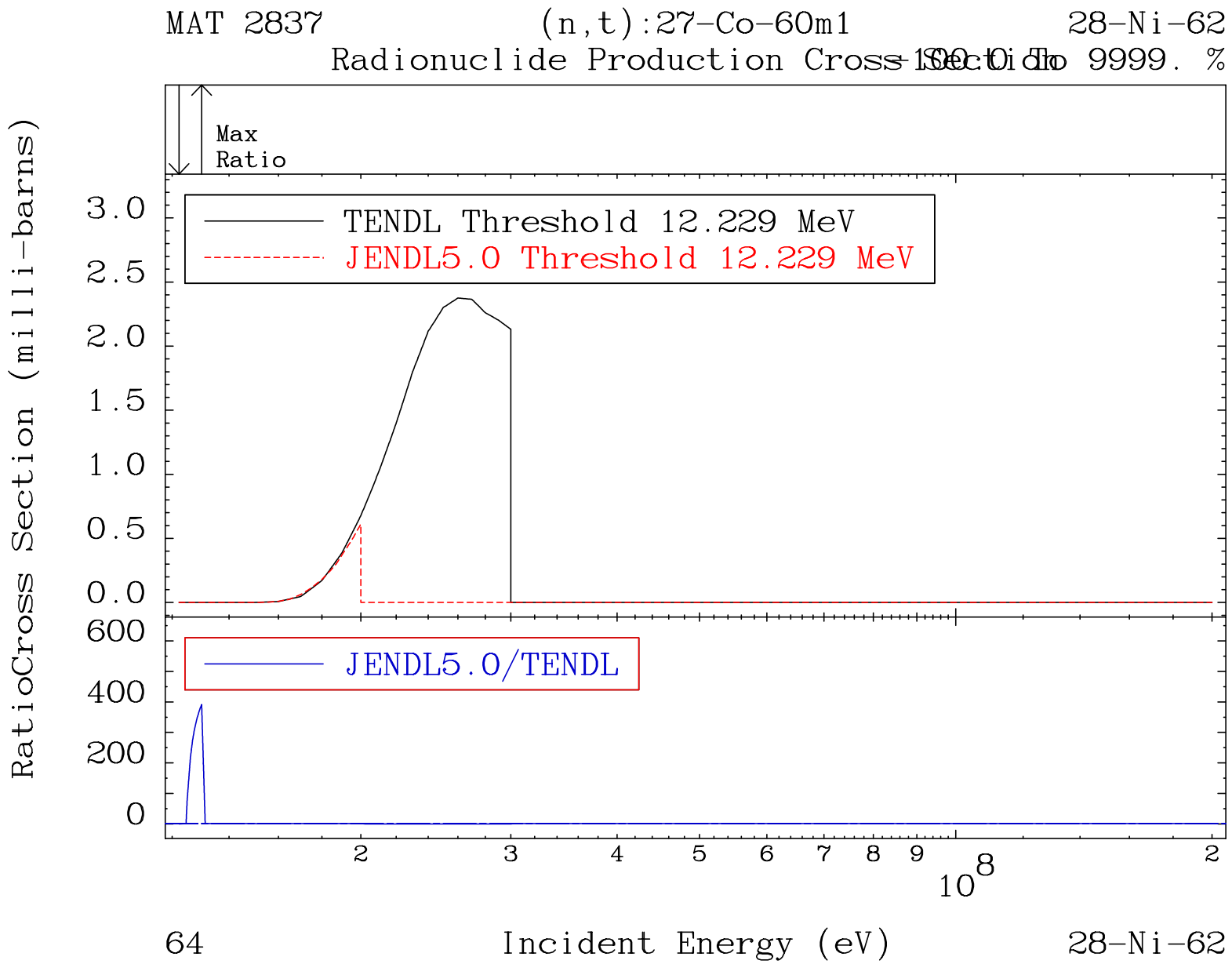

MAT 2837
Dpa inelastic (mt51-91)
28-Ni-62
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1921 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
59
Incident Energy (eV)
28-Ni-62

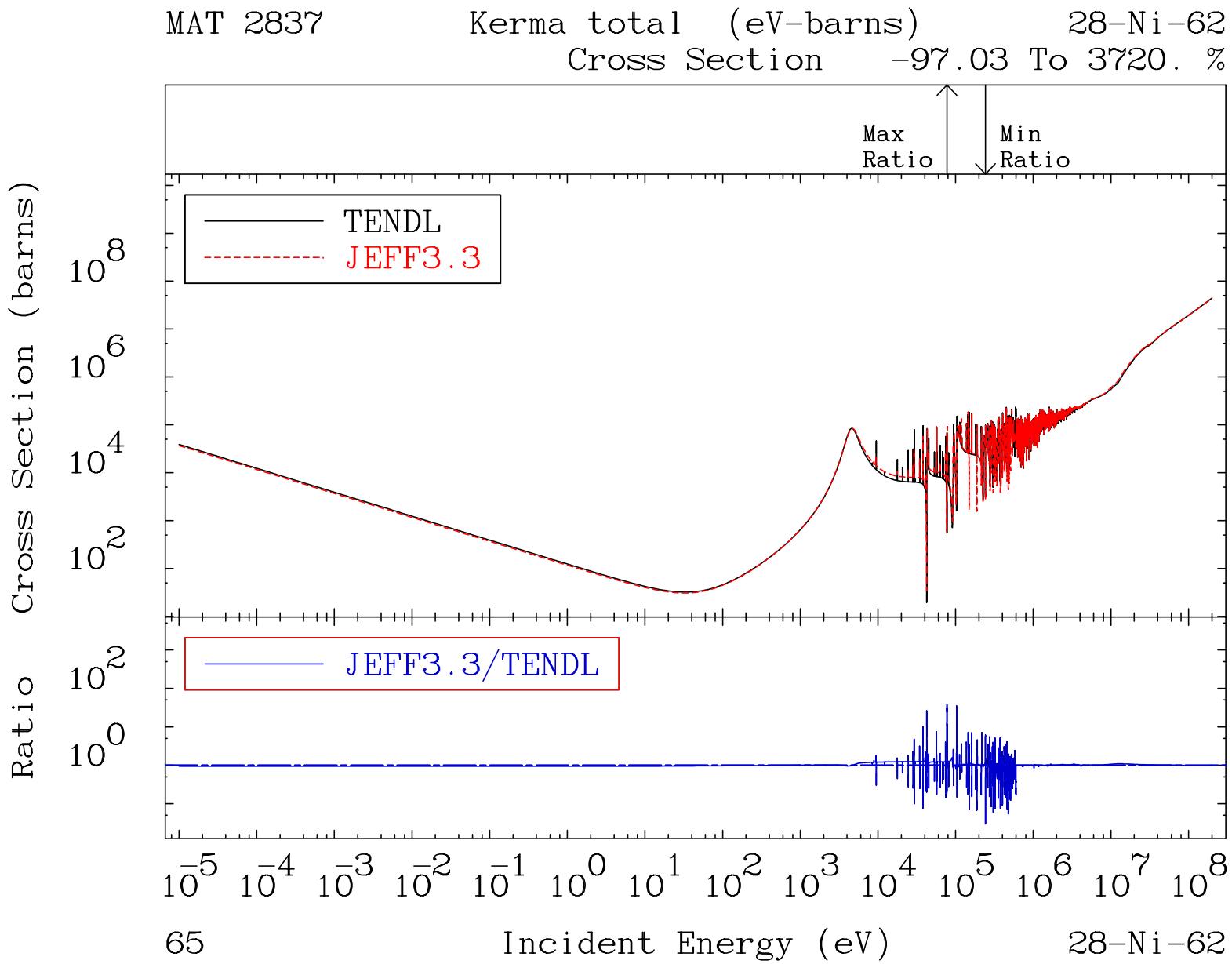

MAT 2837 Dpa disappearance (mt102 -120) 28-Ni-62
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
28-Ni-62

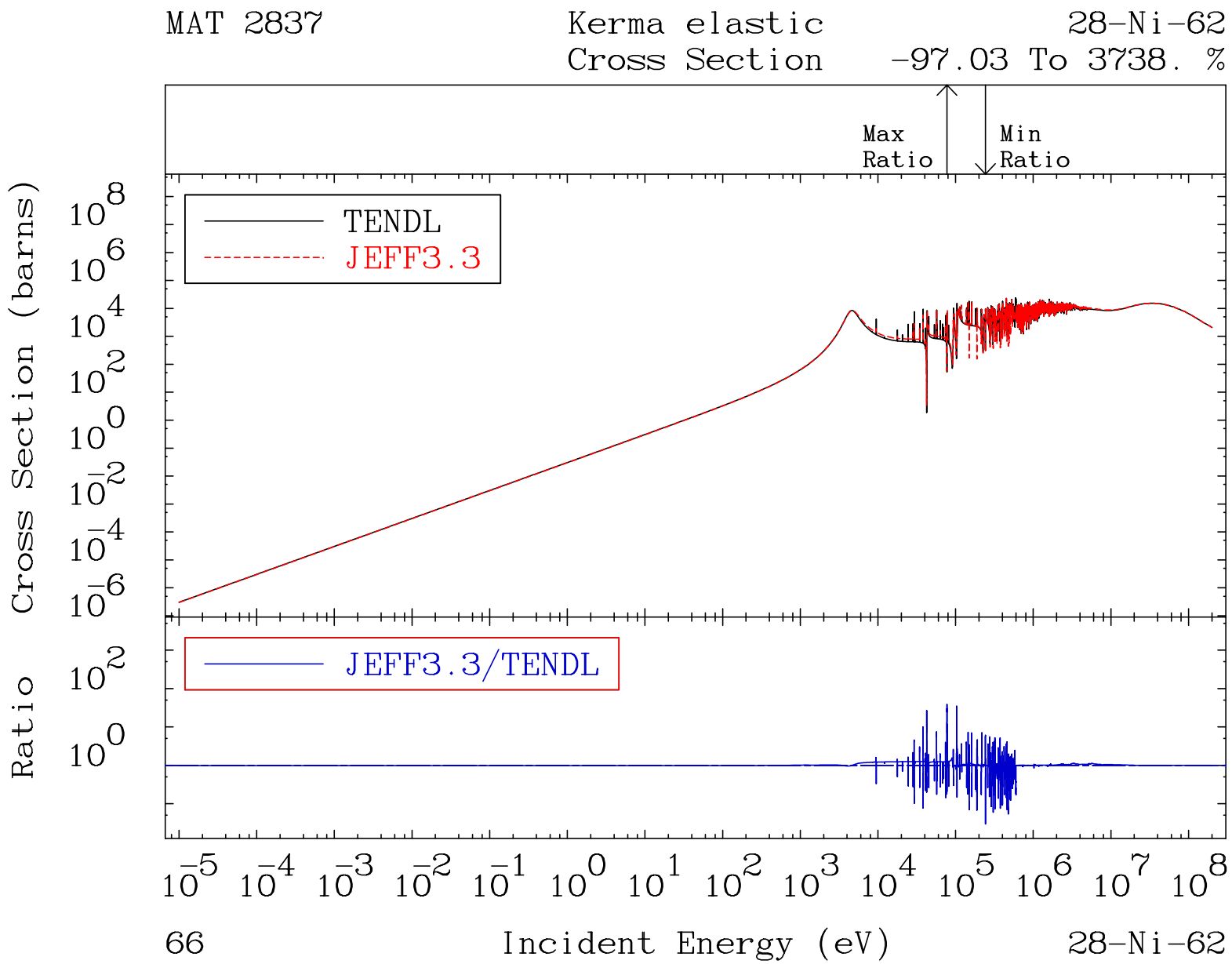

MAT 2837
(n,p):27-Co-62g
28-Ni-62
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 4.6136 MeV
JENDL5.0 Threshold 4.6136 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
61
28-Ni-62

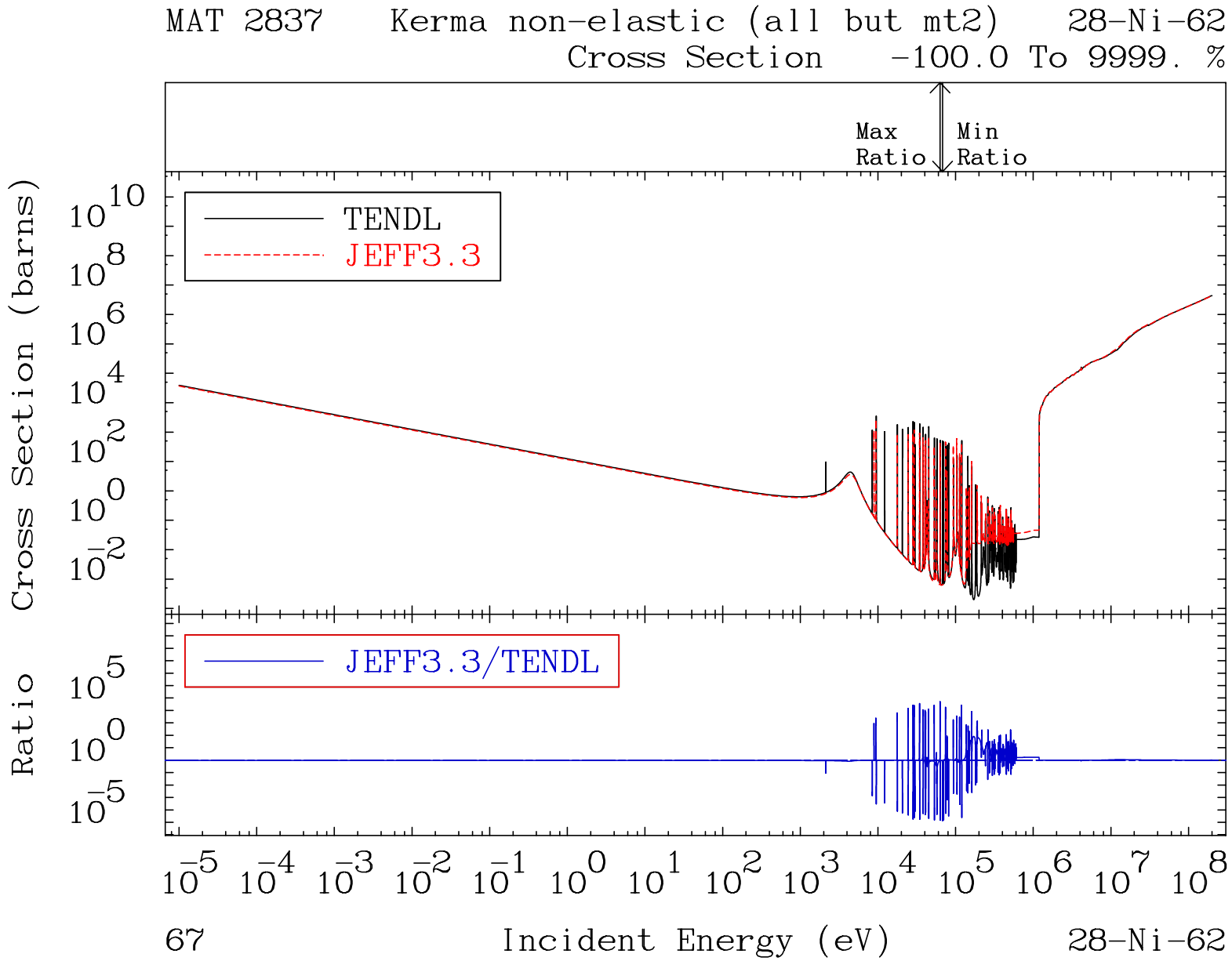

MAT 2837
(n,p):27-Co-62m1
28-Ni-62
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 4.6360 MeV
JENDL5.0 Threshold 4.6360 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
62
28-Ni-62

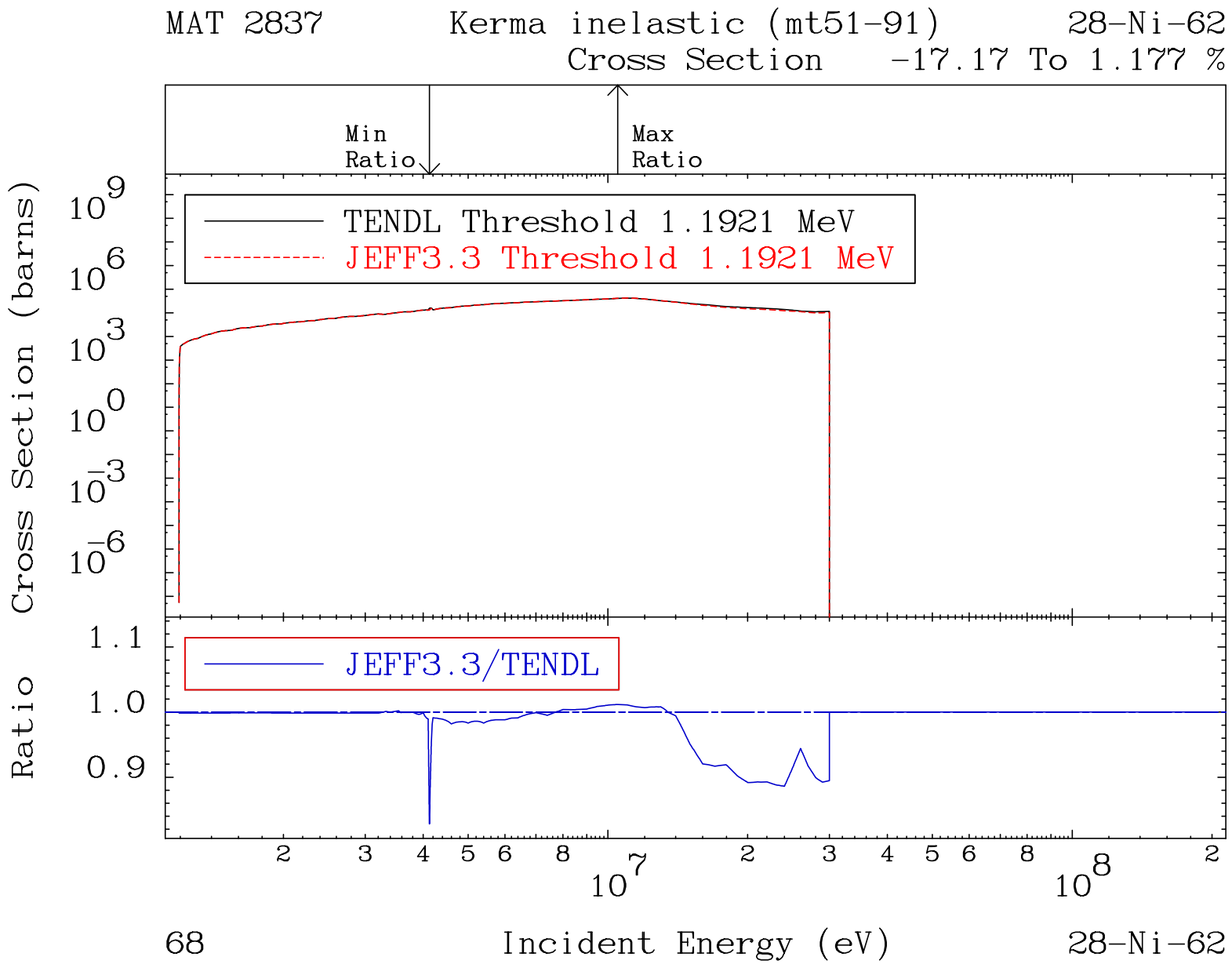

MAT 2837
(n,t):27-Co-60g
28-Ni-62
Radionuclide Production Cross Section To 162.9 %
Max
Ratio
TENDL Threshold 12.170 MeV
JENDL5.0 Threshold 12.170 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
63
28-Ni-62

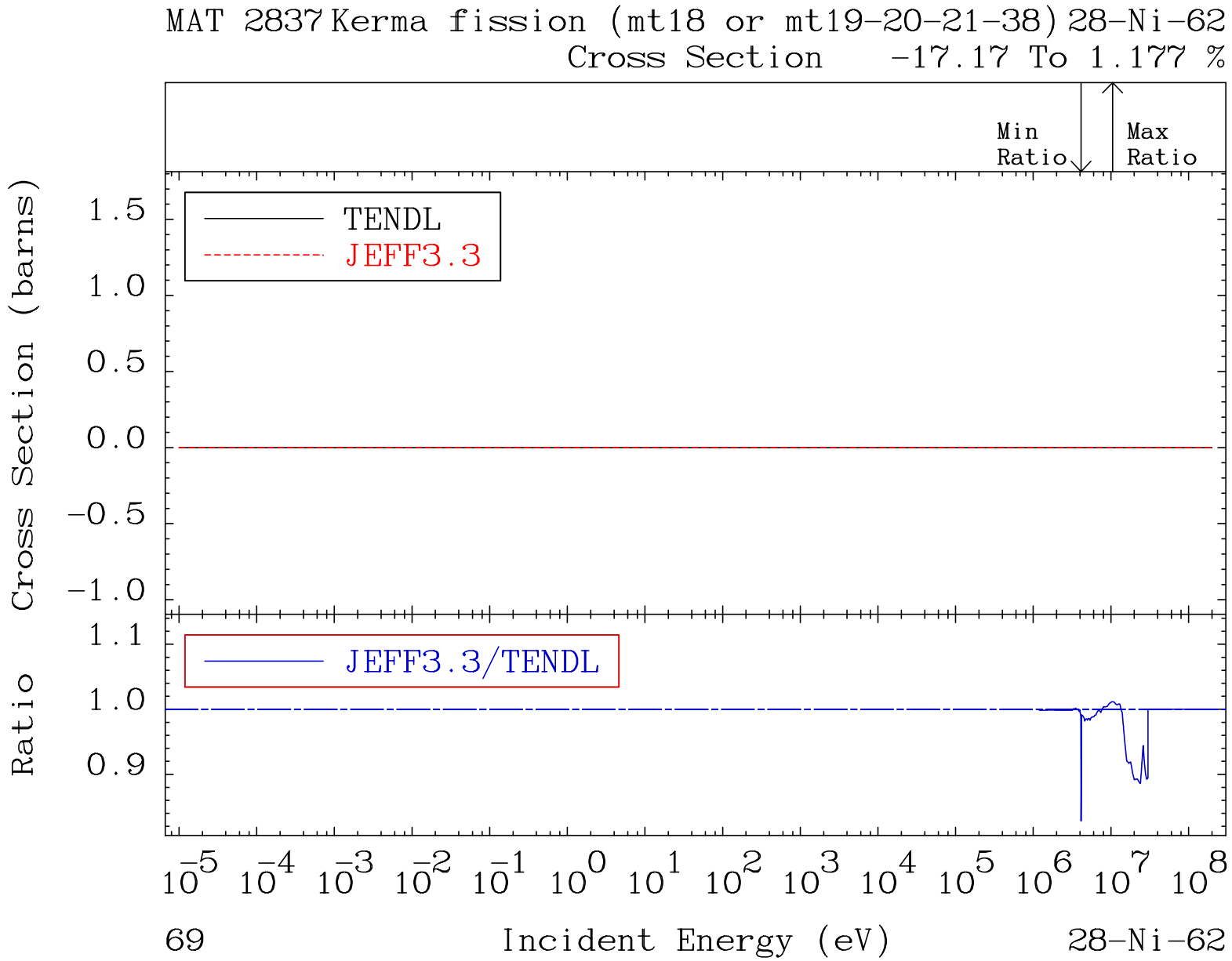

MAT 2837
(n,t):27-Co-60m1
28-Ni-62
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 12.229 MeV
JENDL5.0 Threshold 12.229 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
600
400
200
0
2
3
4
5
6
7
8
9
2
10^8
64
Incident Energy (eV)
28-Ni-62

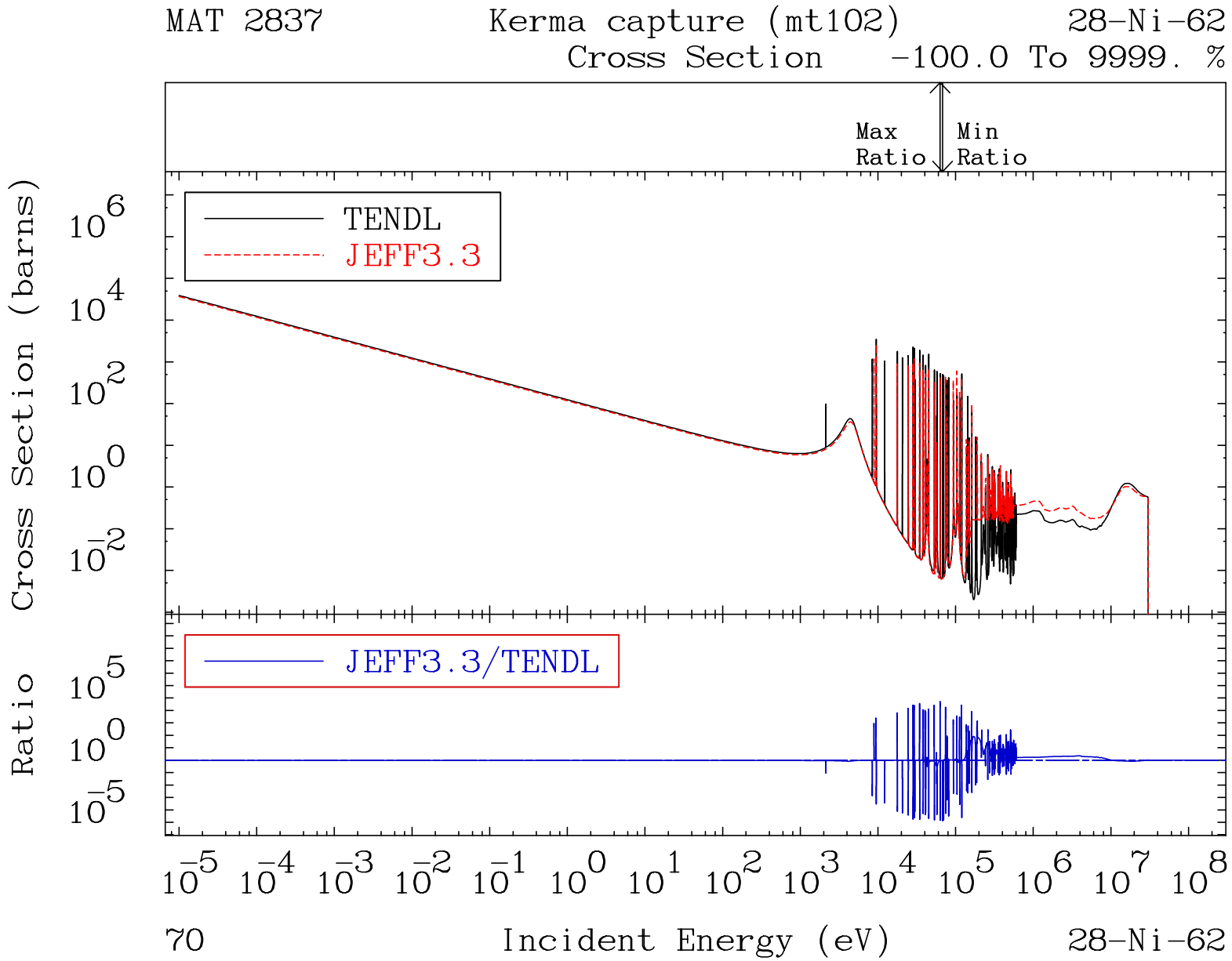

MAT 2837
Kerma total (eV-barns)
28-Ni-62
Cross Section -97.03 To 3720. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
28-Ni-62

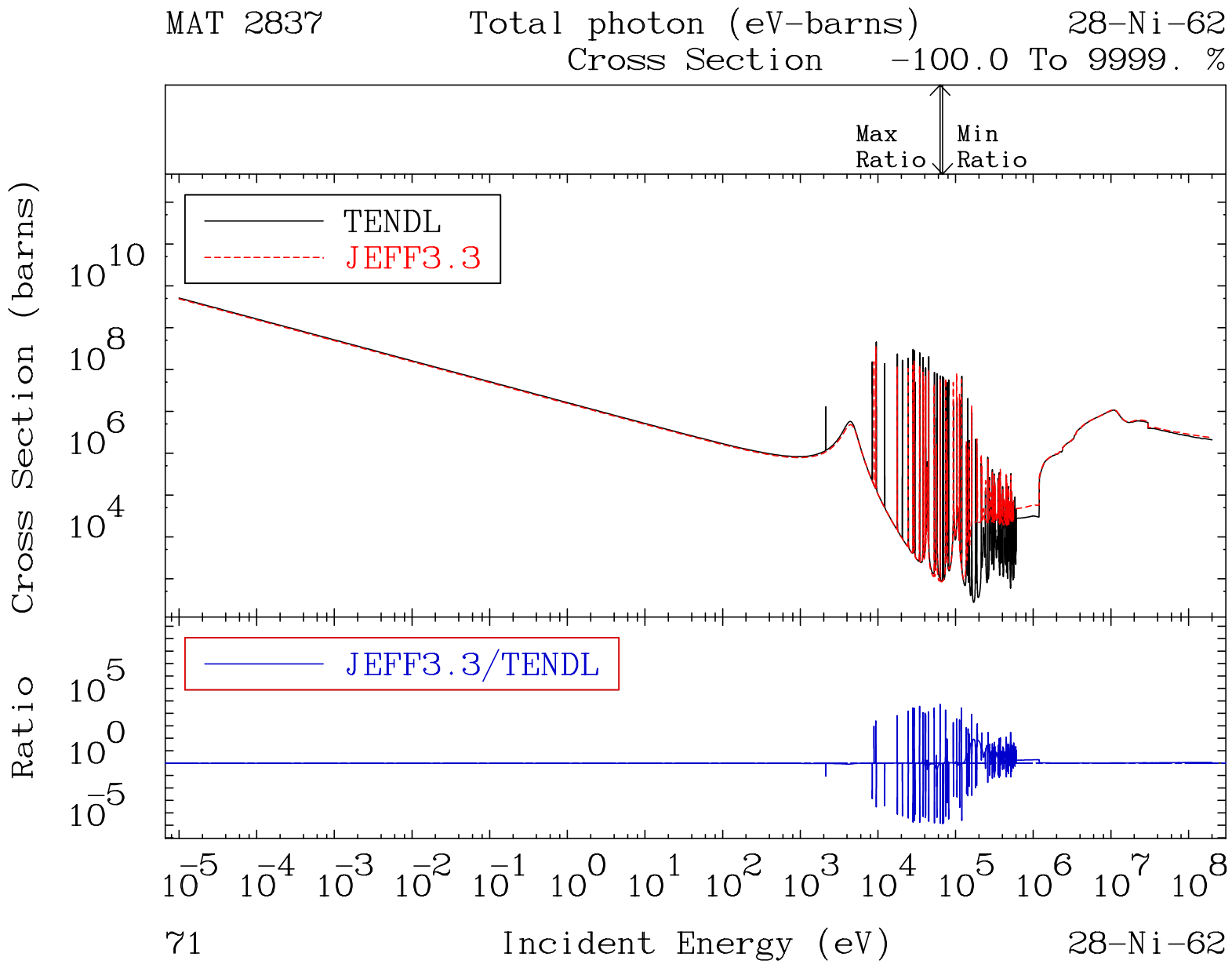

MAT 2837
Kerma elastic
Cross Section
28-Ni-62
-97.03 To 3738. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
28-Ni-62

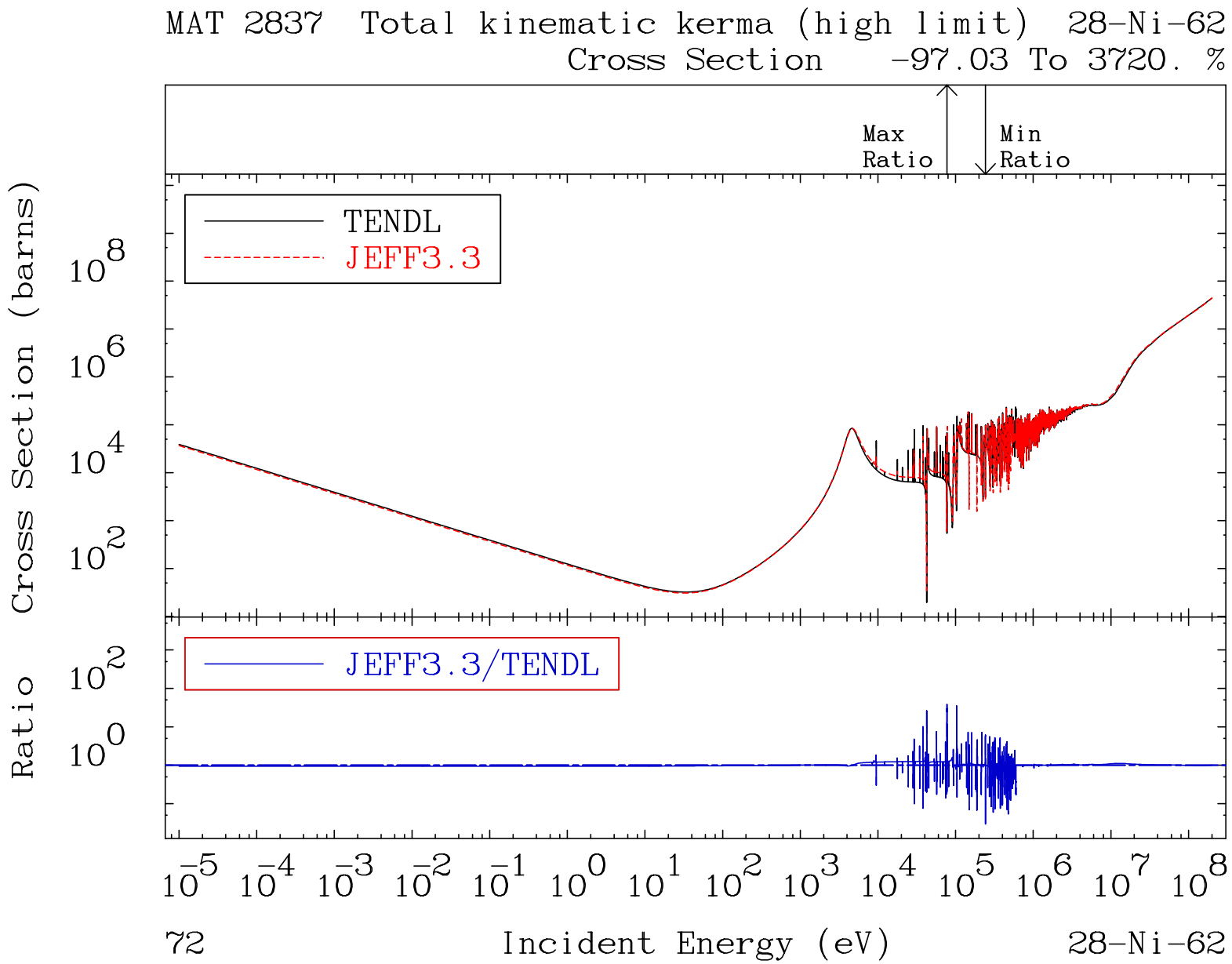

MAT 2837 Kerma non-elastic (all but mt2) 28-Ni-62
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
28-Ni-62

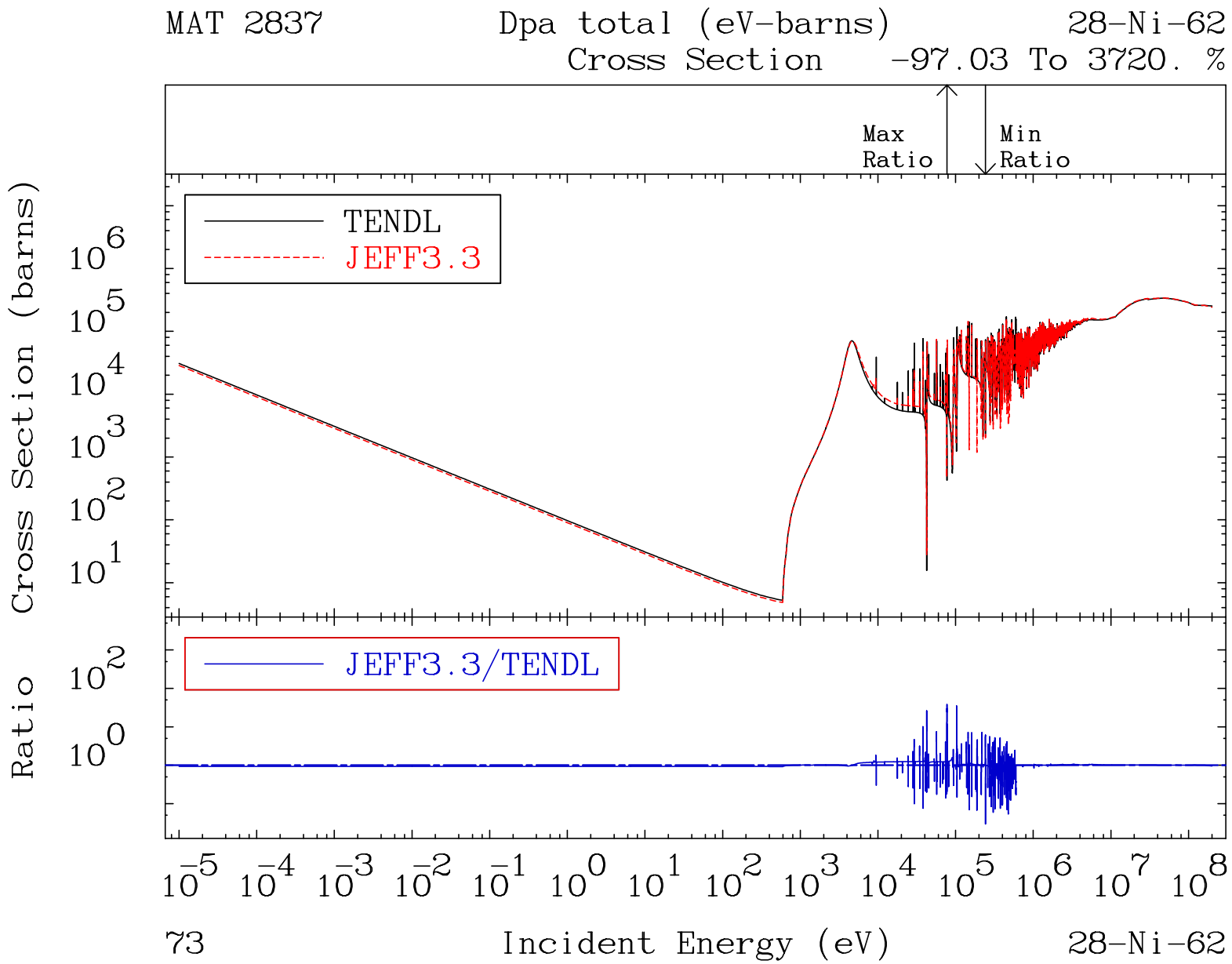

MAT 2837
Kerma inelastic (mt51-91)
28-Ni-62
Cross Section -17.17 To 1.177 %
Min Ratio
Max Ratio
TENDL Threshold 1.1921 MeV
JEFF3.3 Threshold 1.1921 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
28-Ni-62

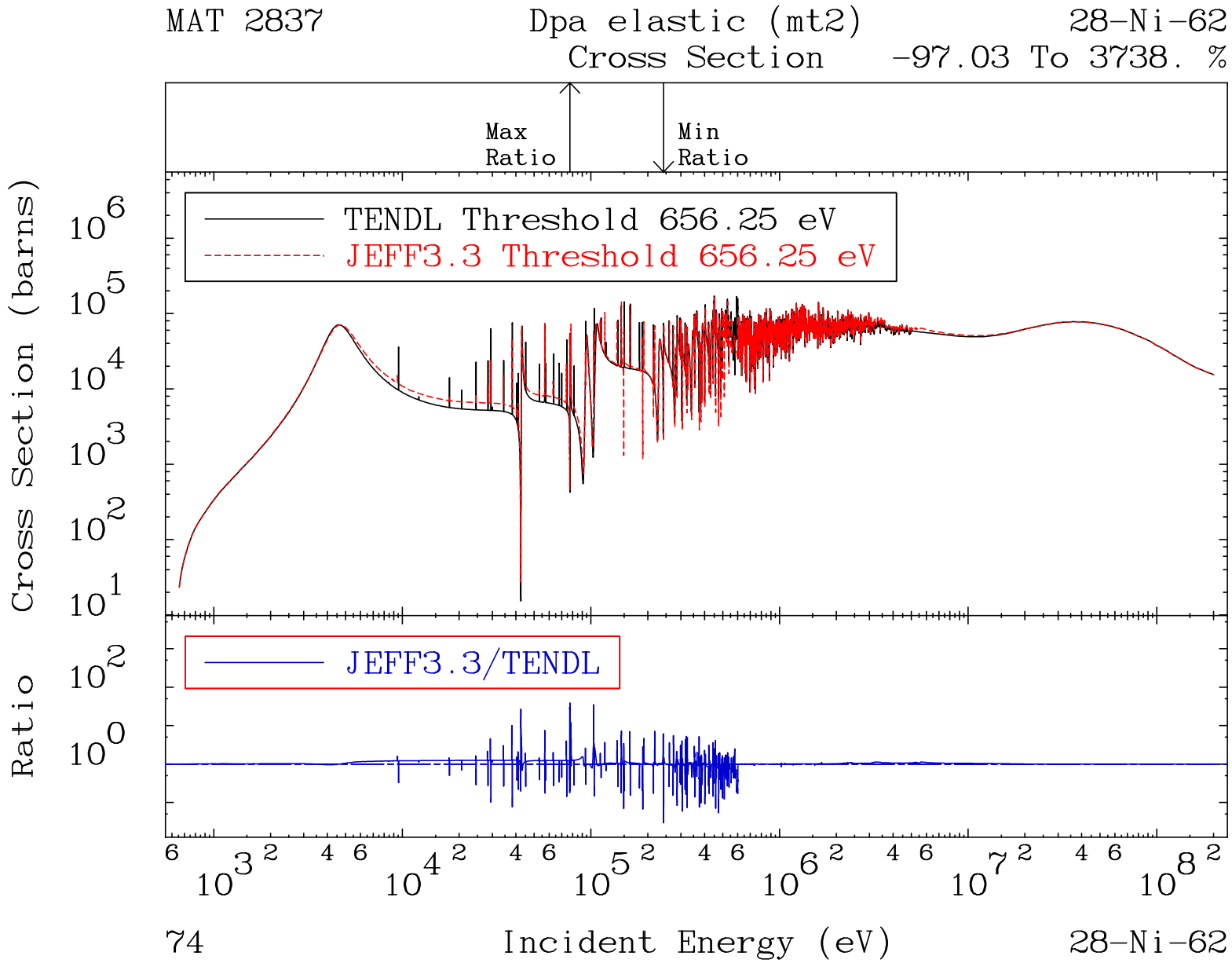

MAT 2837 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-62
Cross Section -17.17 To 1.177 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.1
1.0
0.9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
69
Incident Energy (eV)
28-Ni-62

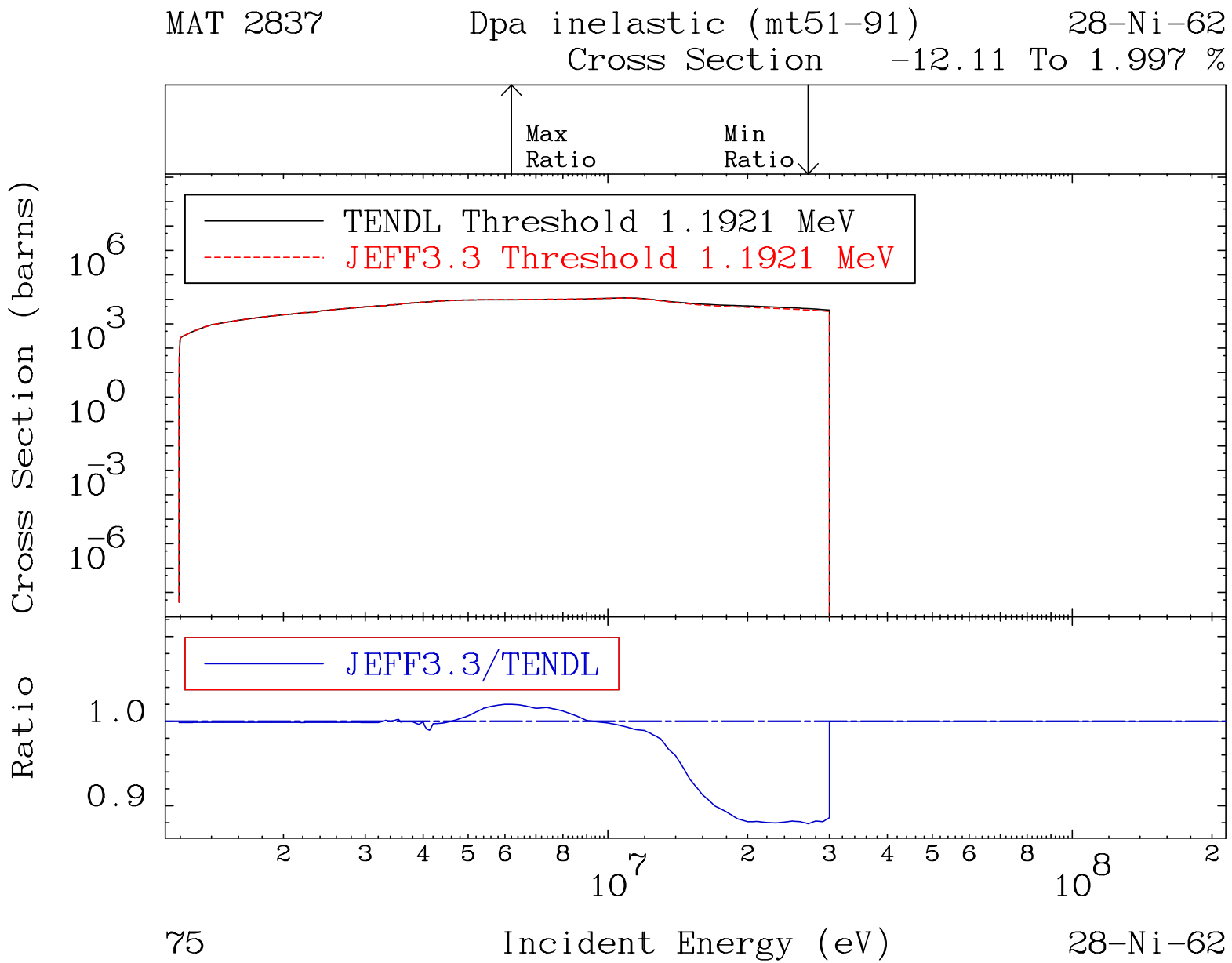

MAT 2837
Kerma capture (mt102)
28-Ni-62
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
28-Ni-62

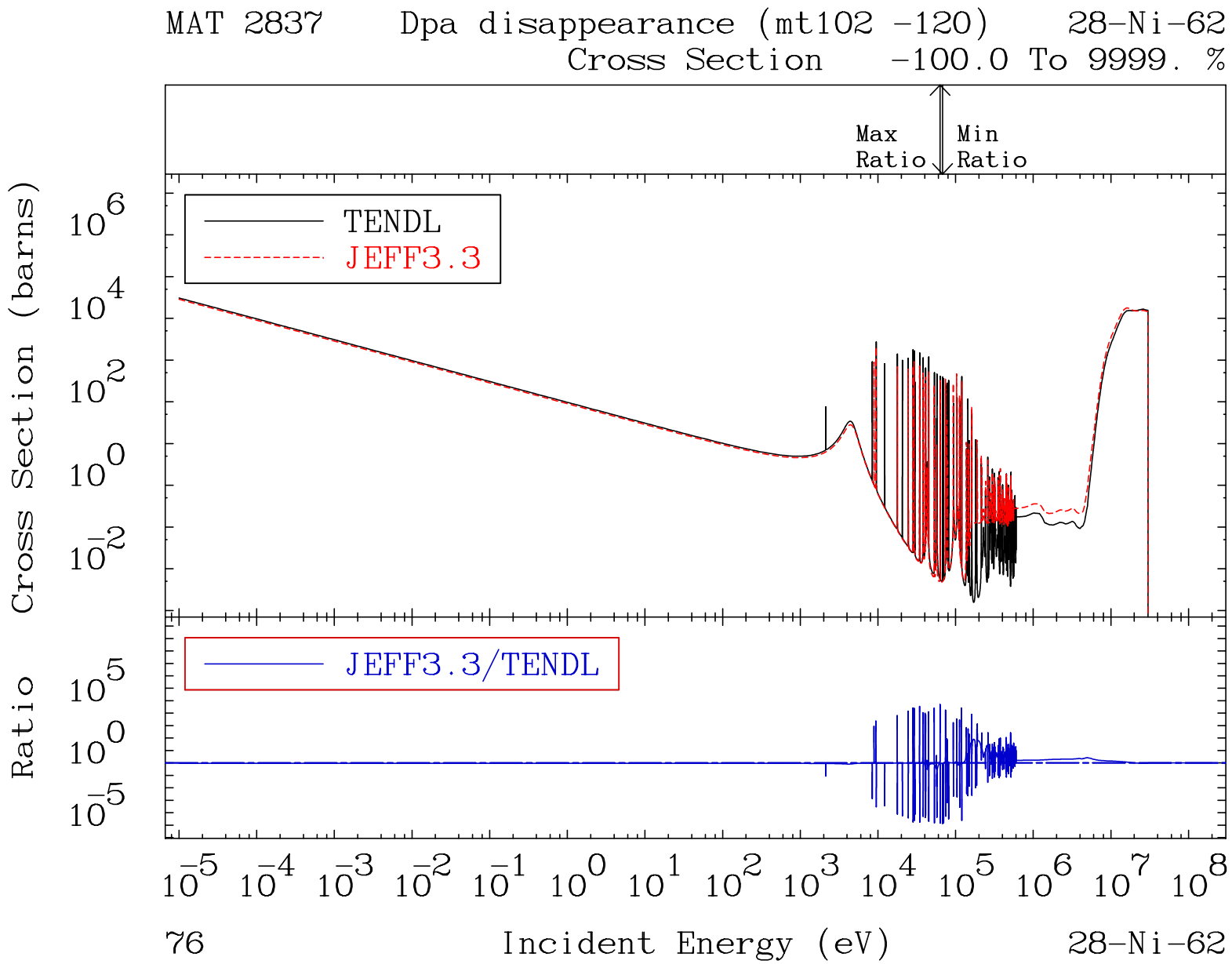

MAT 2837
Total photon (eV-barns)
28-Ni-62
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
28-Ni-62

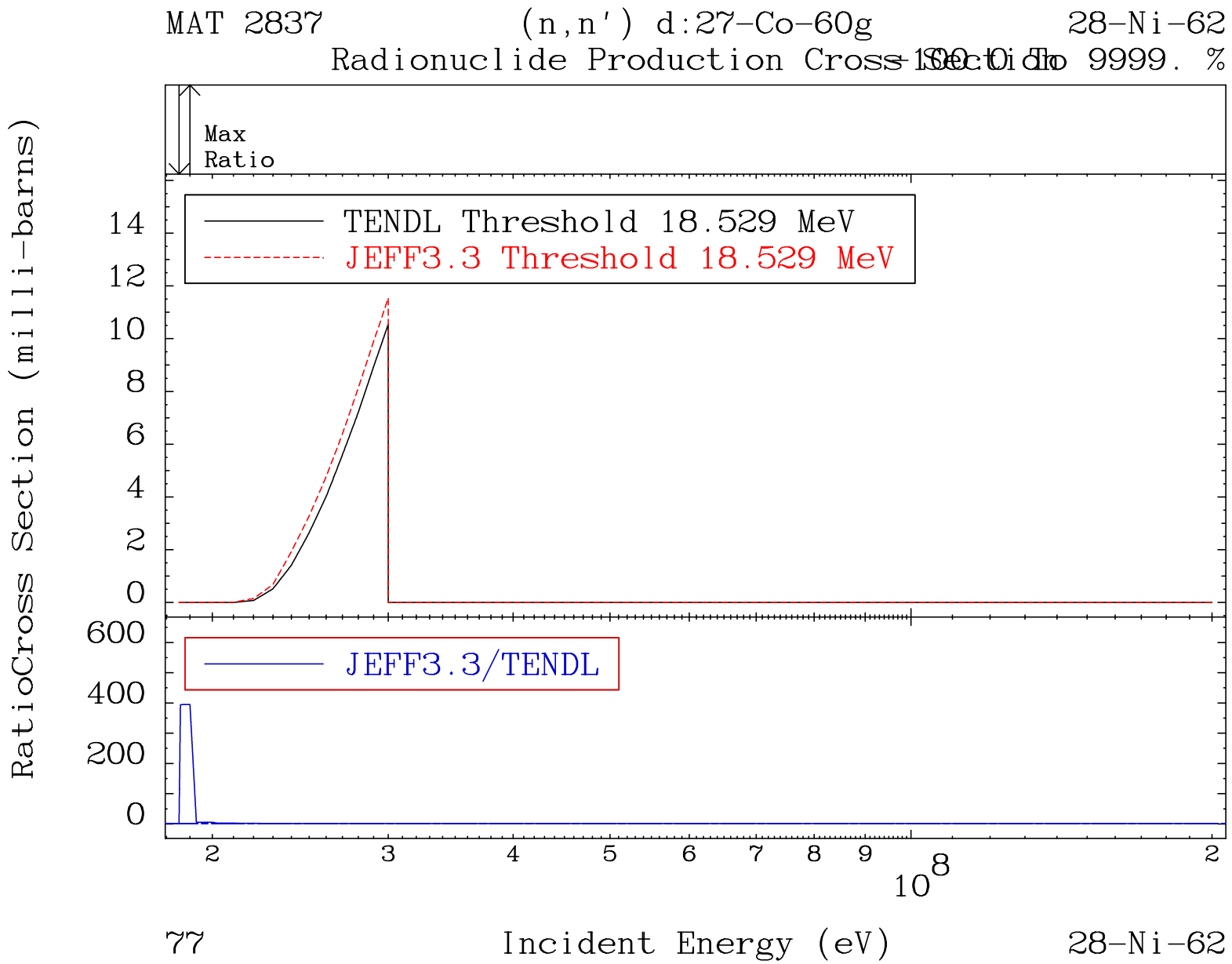

MAT 2837 Total kinematic kerma (high limit) 28-Ni-62
Cross Section -97.03 To 3720. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
28-Ni-62

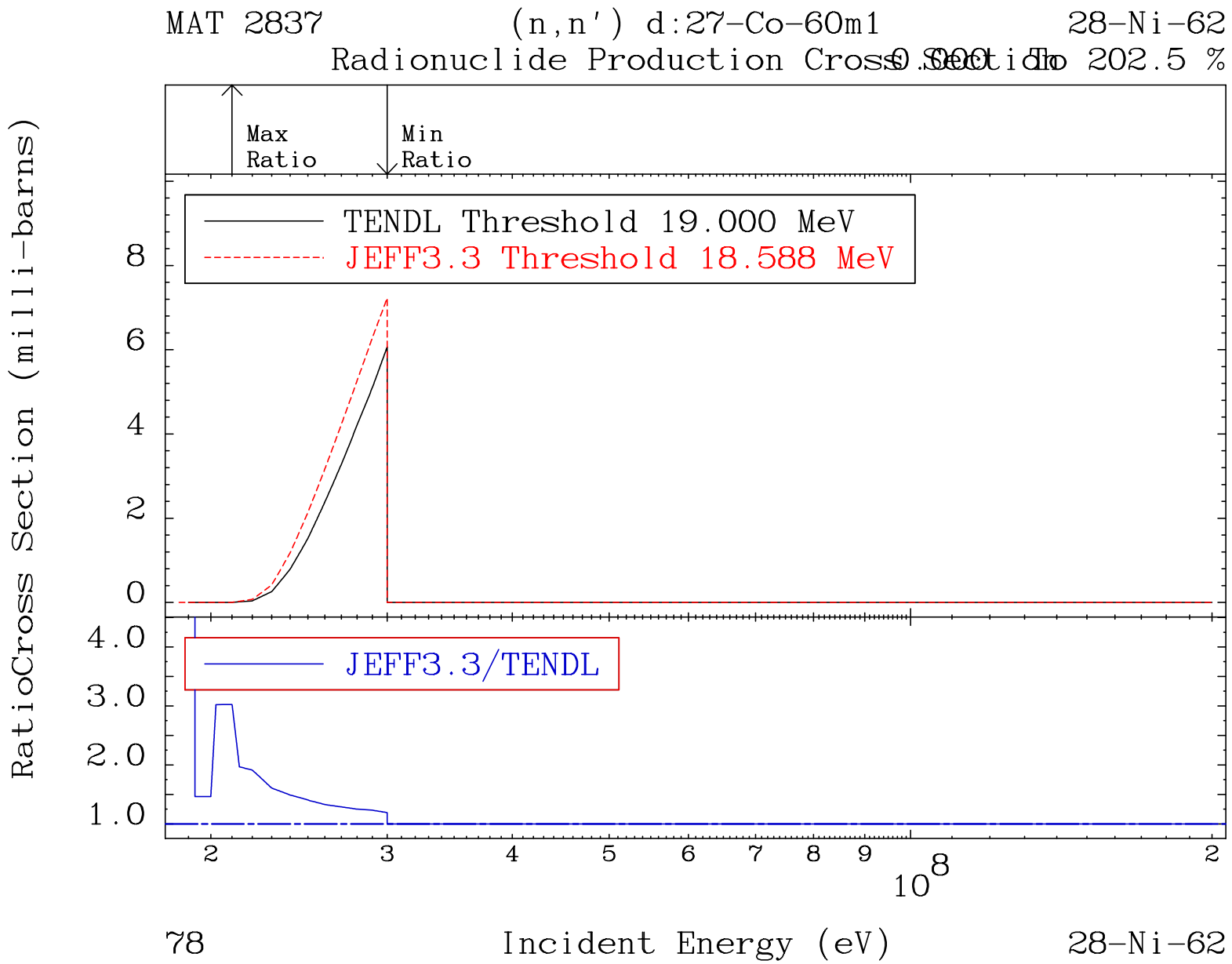

MAT 2837
Dpa total (eV-barns)
28-Ni-62
Cross Section -97.03 To 3720. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
28-Ni-62

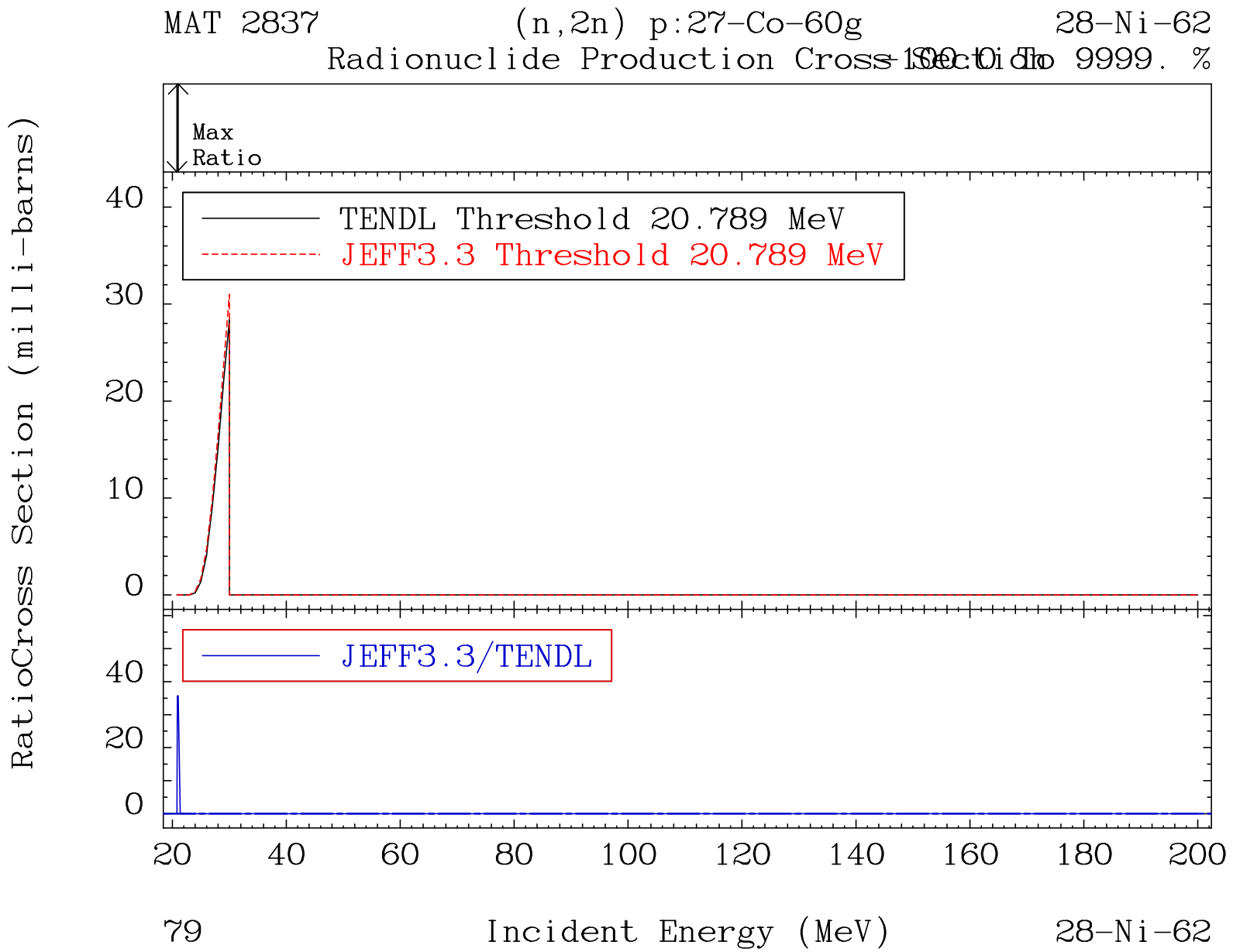

MAT 2837
Dpa elastic (mt2)
Cross Section
28-Ni-62
-97.03 To 3738. %
Max Ratio
Min Ratio
TENDL Threshold 656.25 eV
JEFF3.3 Threshold 656.25 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
28-Ni-62

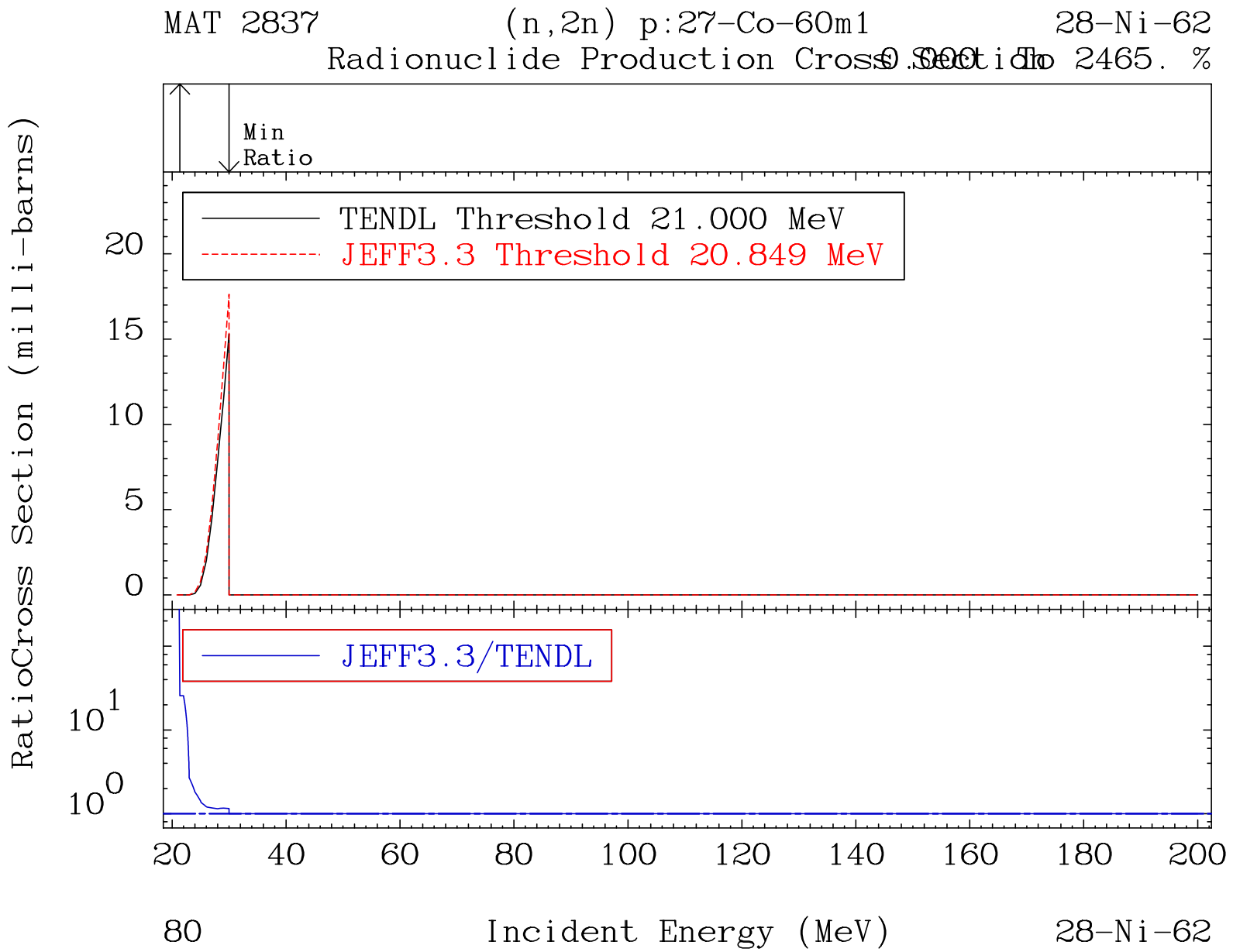

MAT 2837
Dpa inelastic (mt51-91)
28-Ni-62
Cross Section -12.11 To 1.997 %
Max Ratio
Min Ratio
TENDL Threshold 1.1921 MeV
JEFF3.3 Threshold 1.1921 MeV
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
JEFF3.3/TENDL
Ratio
1.0
0.9
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
75
Incident Energy (eV)
28-Ni-62

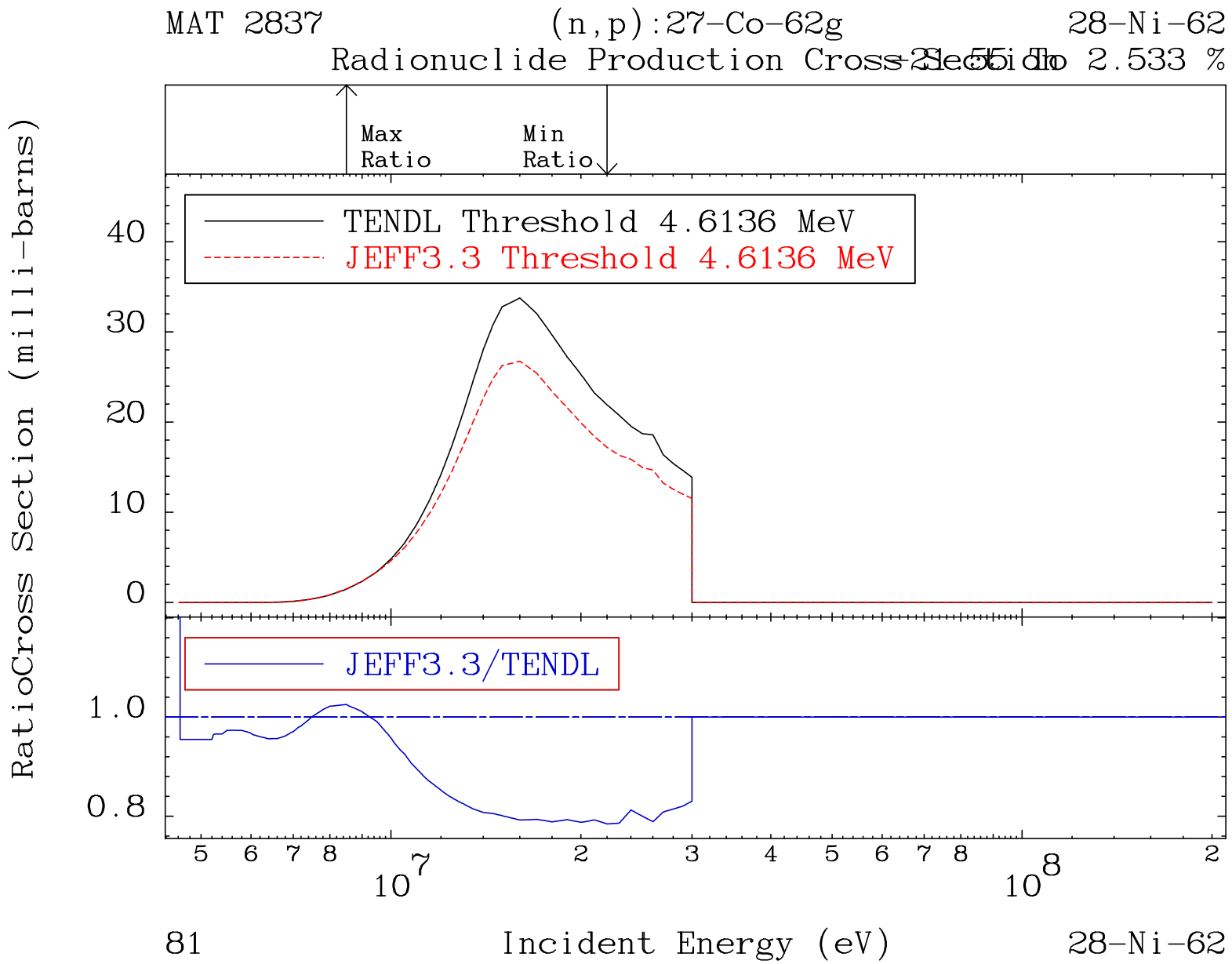

MAT 2837 Dpa disappearance (mt102 -120) 28-Ni-62
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
28-Ni-62

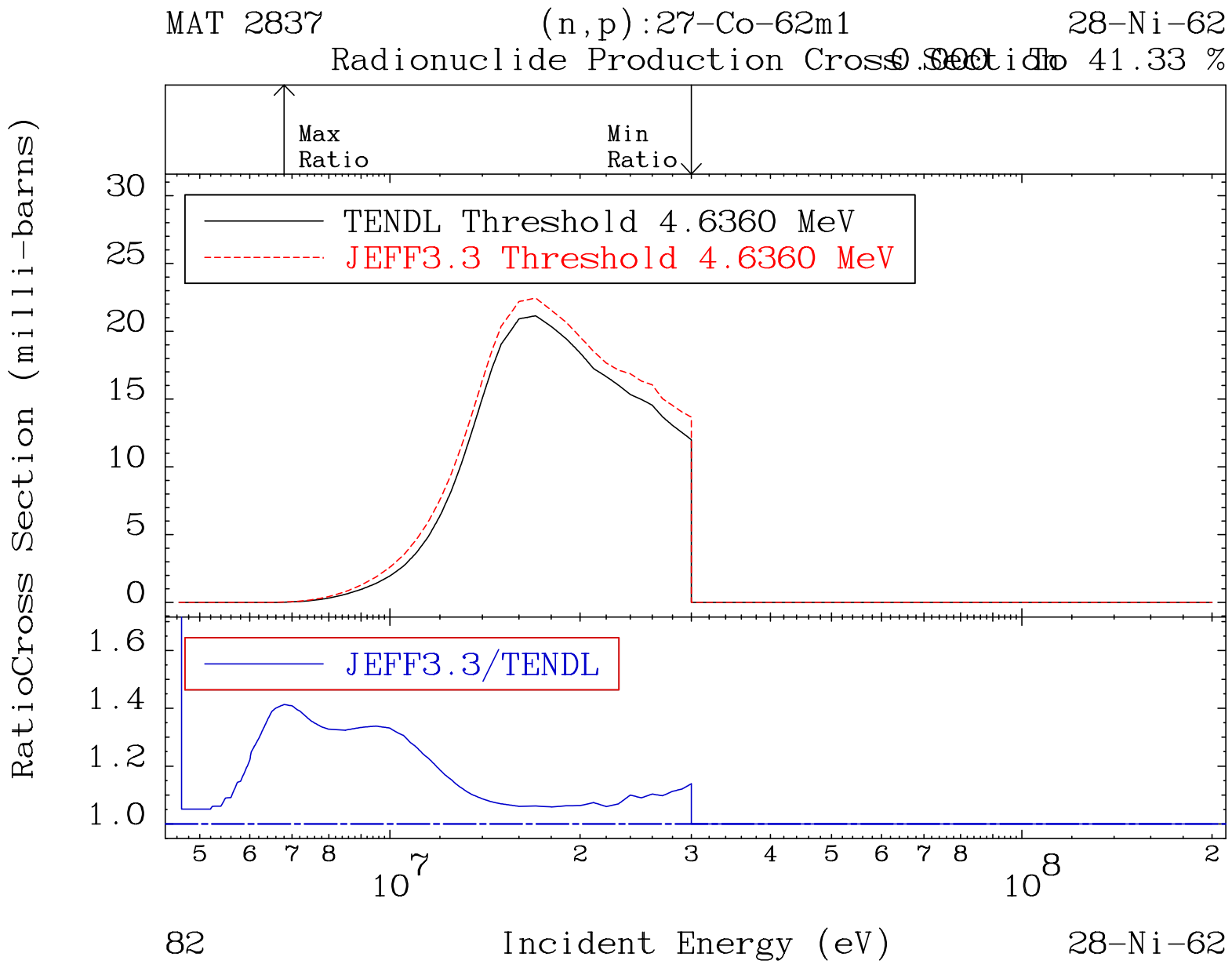

MAT 2837
(n,n') d:27-Co-60g
28-Ni-62
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 18.529 MeV
JEFF3.3 Threshold 18.529 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
600
400
200
0
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
28-Ni-62

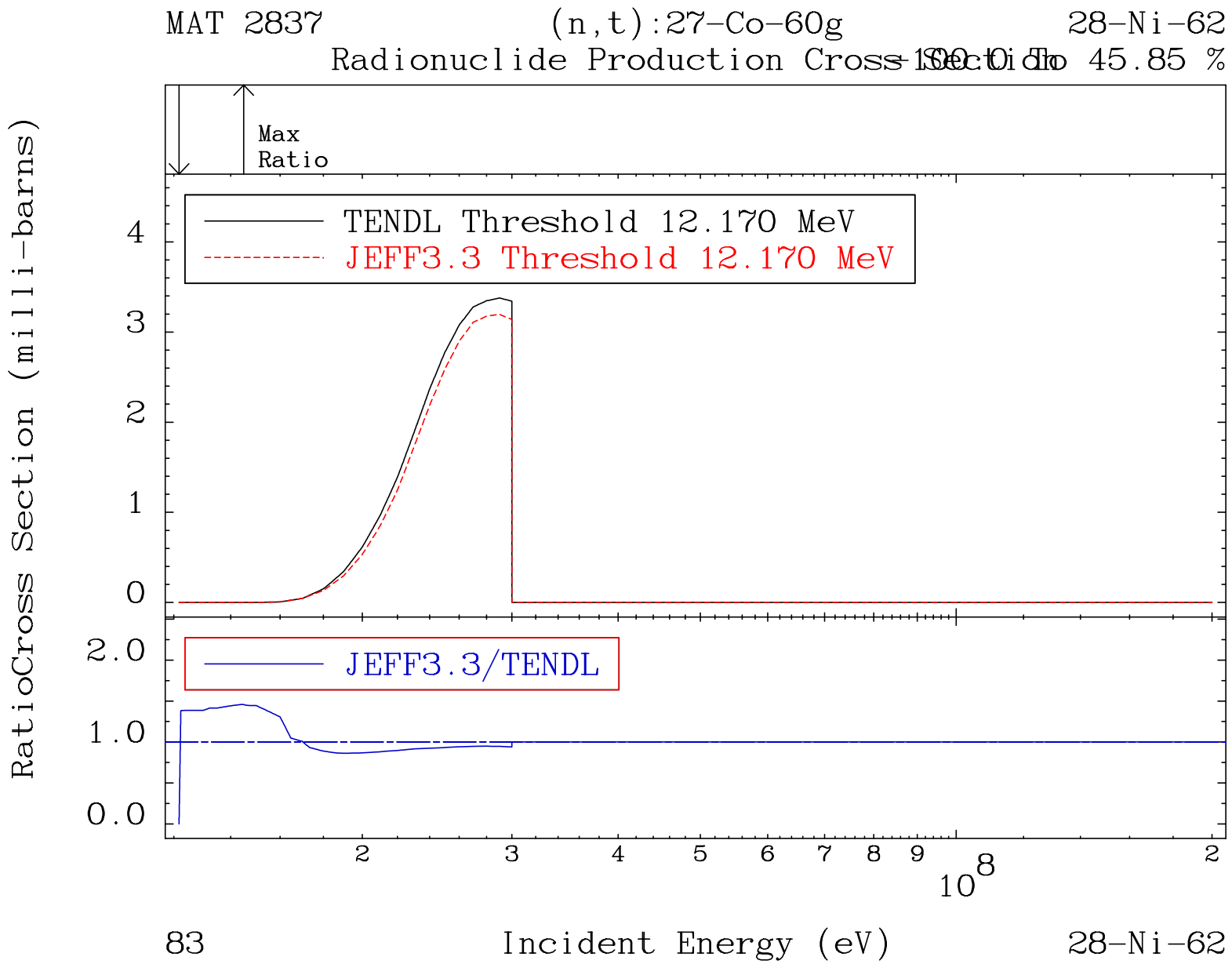

MAT 2837
(n,n') d:27-Co-60m1
28-Ni-62
Radionuclide Production Cross Section
0.000 To 202.5 %
Max Ratio
Min Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 18.588 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
78
28-Ni-62

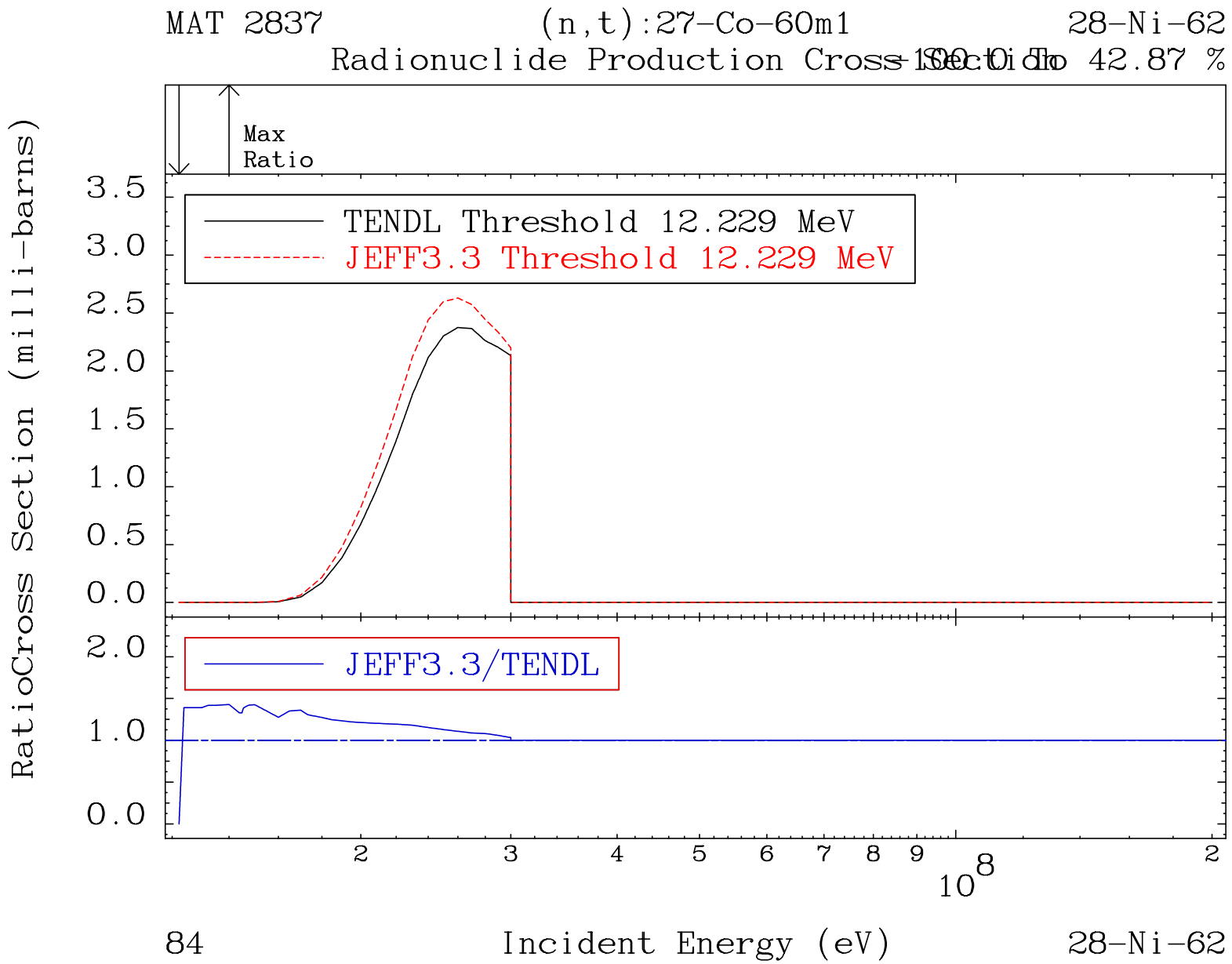

MAT 2837
(n,2n) p:27-Co-60g
28-Ni-62
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 20.789 MeV
JEFF3.3 Threshold 20.789 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
79
28-Ni-62

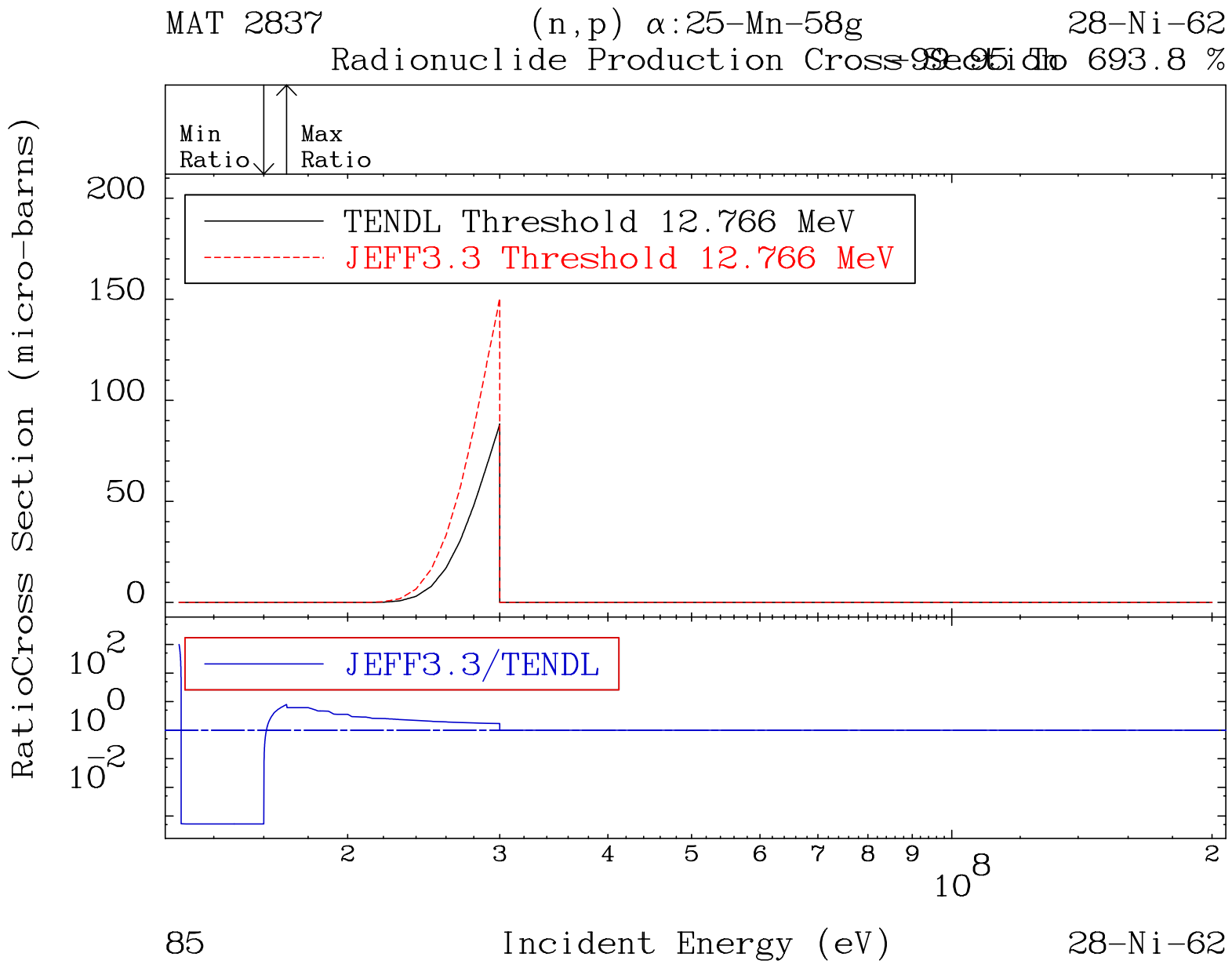

MAT 2837
(n,2n) p:27-Co-60m1
28-Ni-62
Radionuclide Production Cross Section
0.000 To 2465. %
Min
Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 20.849 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
10^1
10^0
20
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
28-Ni-62

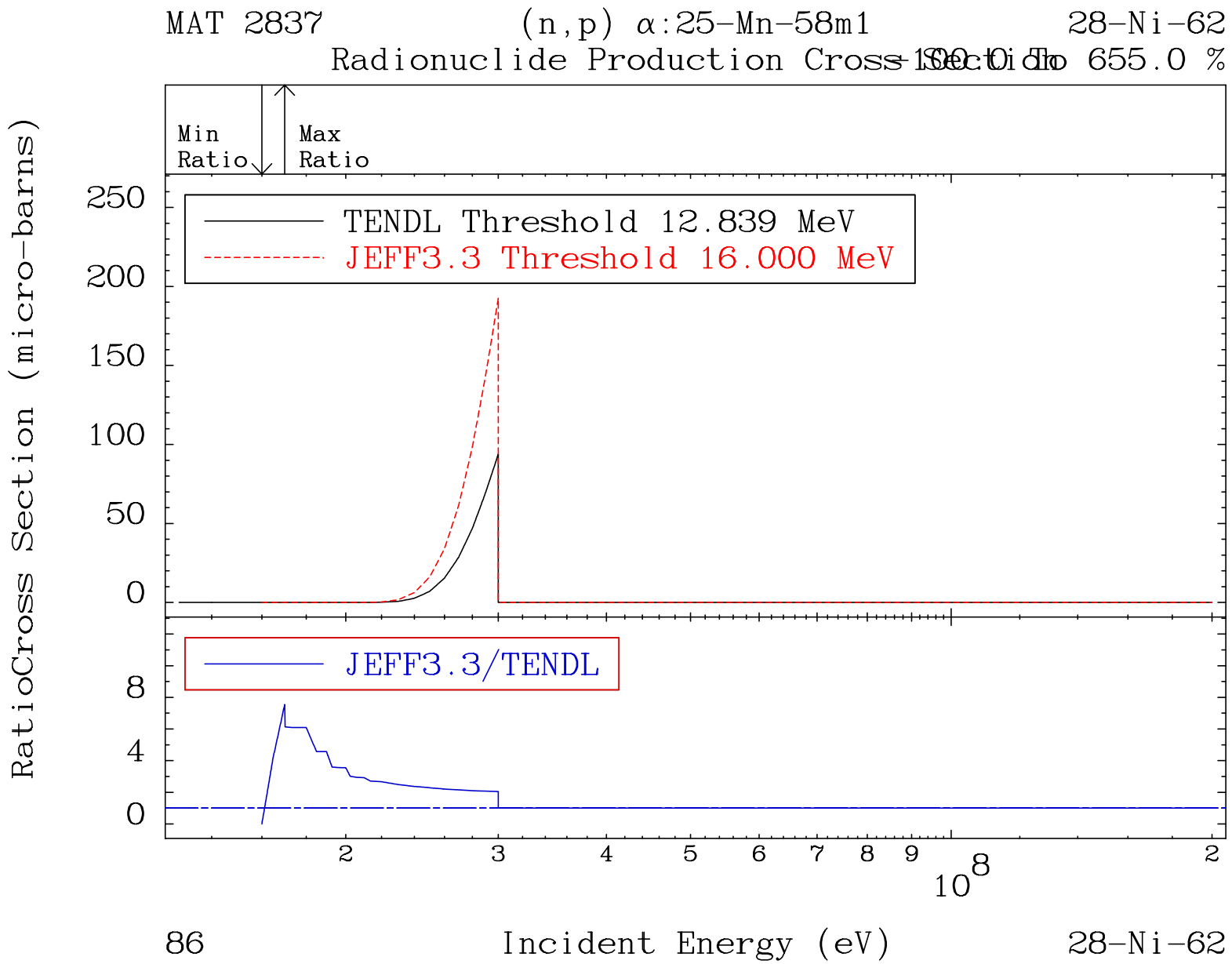

MAT 2837
(n,p):27-Co-62g
28-Ni-62
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 4.6136 MeV
JEFF3.3 Threshold 4.6136 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
81
28-Ni-62


MAT 2837
(n,p):27-Co-62m1
28-Ni-62
Radionuclide Production Cross Section
0.000 To 41.33 %
Max Ratio
Min Ratio
TENDL Threshold 4.6360 MeV
JEFF3.3 Threshold 4.6360 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.6
1.4
1.2
1.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
82
Incident Energy (eV)
28-Ni-62


MAT 2837
(n,t):27-Co-60g
28-Ni-62
Radionuclide Production Cross Section To 45.85 %
Max
Ratio
TENDL Threshold 12.170 MeV
JEFF3.3 Threshold 12.170 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
83
28-Ni-62


MAT 2837
(n,t):27-Co-60m1
28-Ni-62
Radionuclide Production Cross Section To 42.87 %
Max
Ratio
TENDL Threshold 12.229 MeV
JEFF3.3 Threshold 12.229 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
84
Incident Energy (eV)
28-Ni-62


MAT 2837
(n,p) α:25-Mn-58g
28-Ni-62
Radionuclide Production Cross Section To 693.8 %
Min Ratio
Max Ratio
TENDL Threshold 12.766 MeV
JEFF3.3 Threshold 12.766 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
28-Ni-62


MAT 2837
(n,p) α:25-Mn-58m1
28-Ni-62
Radionuclide Production Cross Section To 655.0 %
Min Ratio
Max Ratio
TENDL Threshold 12.839 MeV
JEFF3.3 Threshold 16.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
250
200
150
100
50
0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
86
Incident Energy (eV)
28-Ni-62