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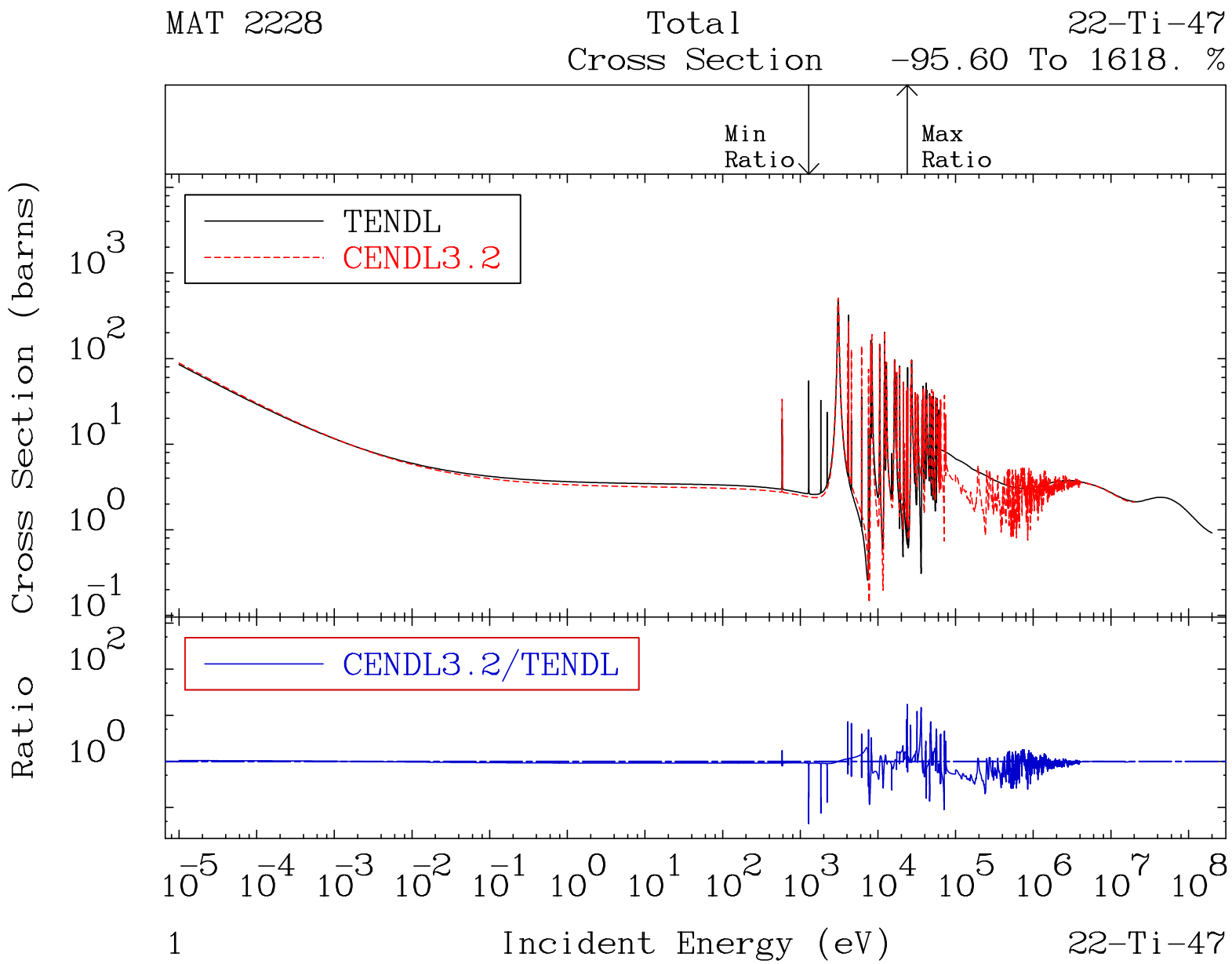
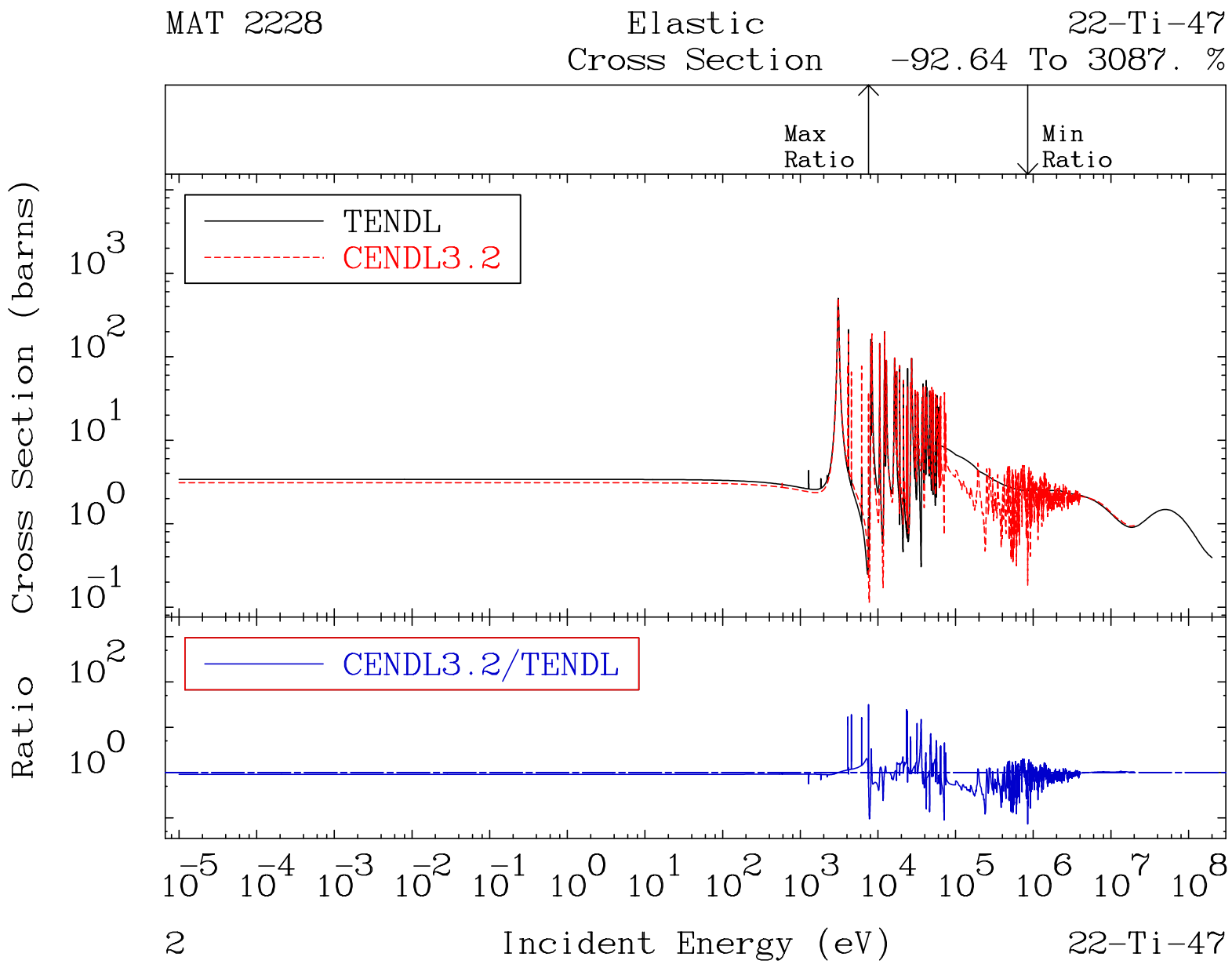
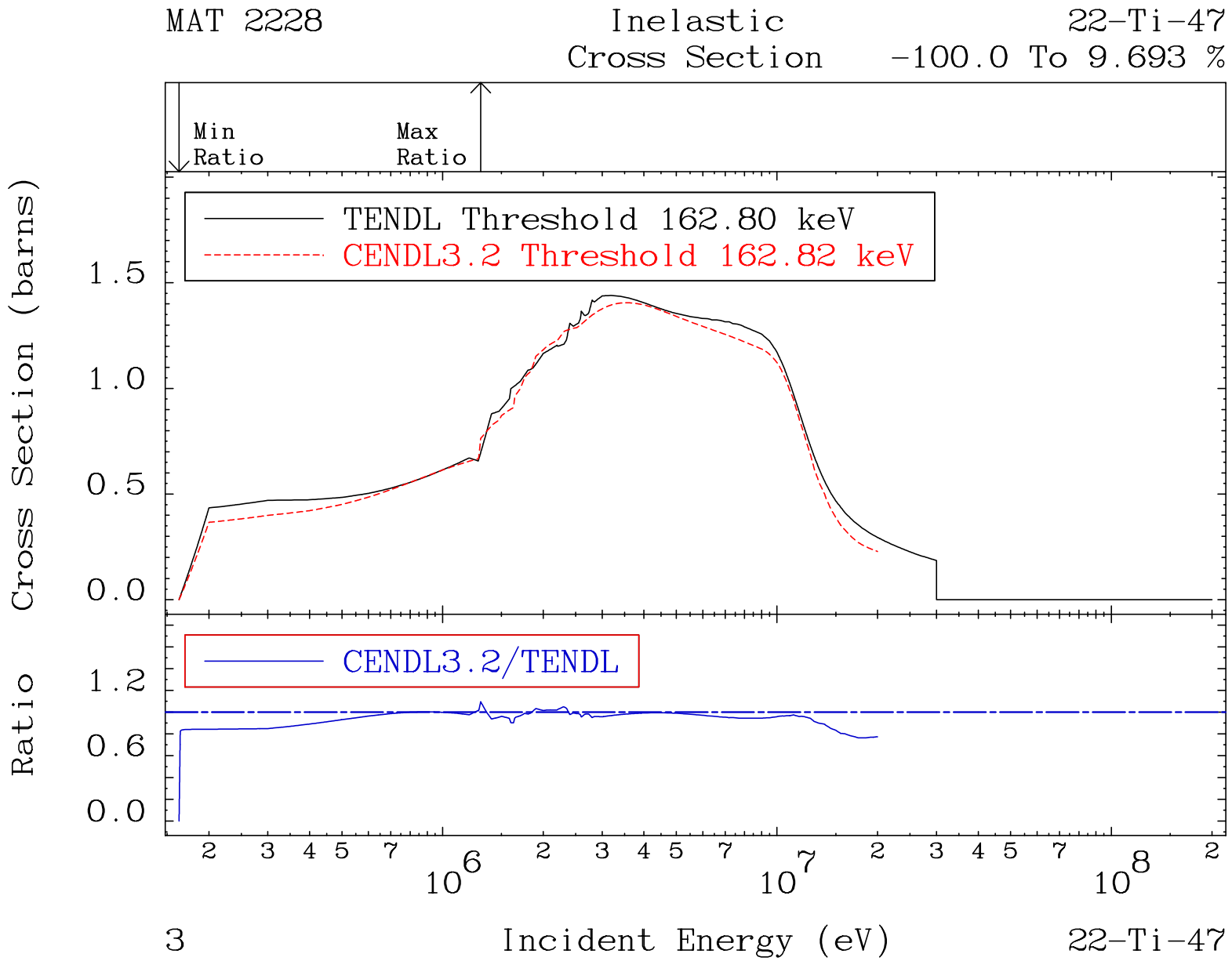
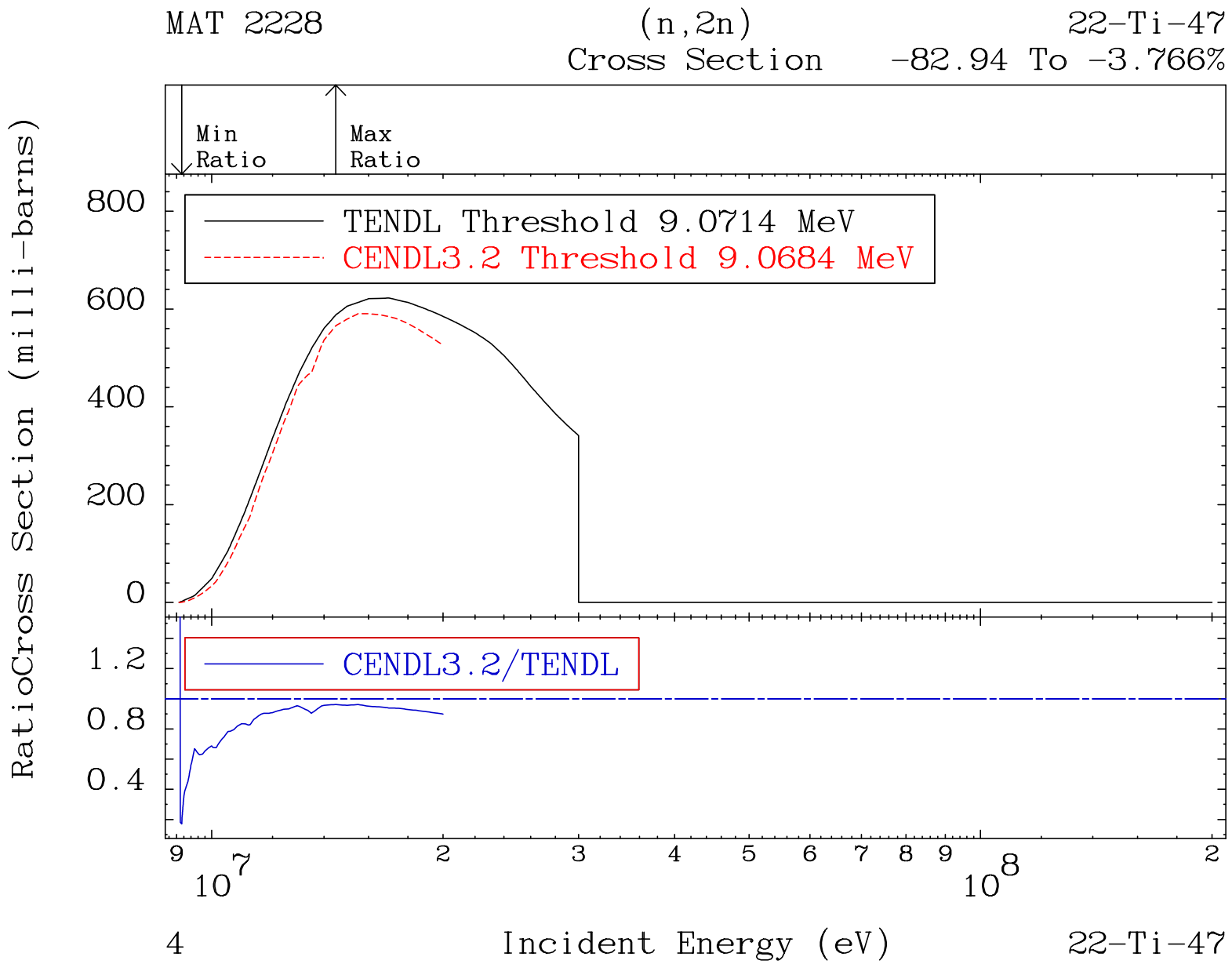
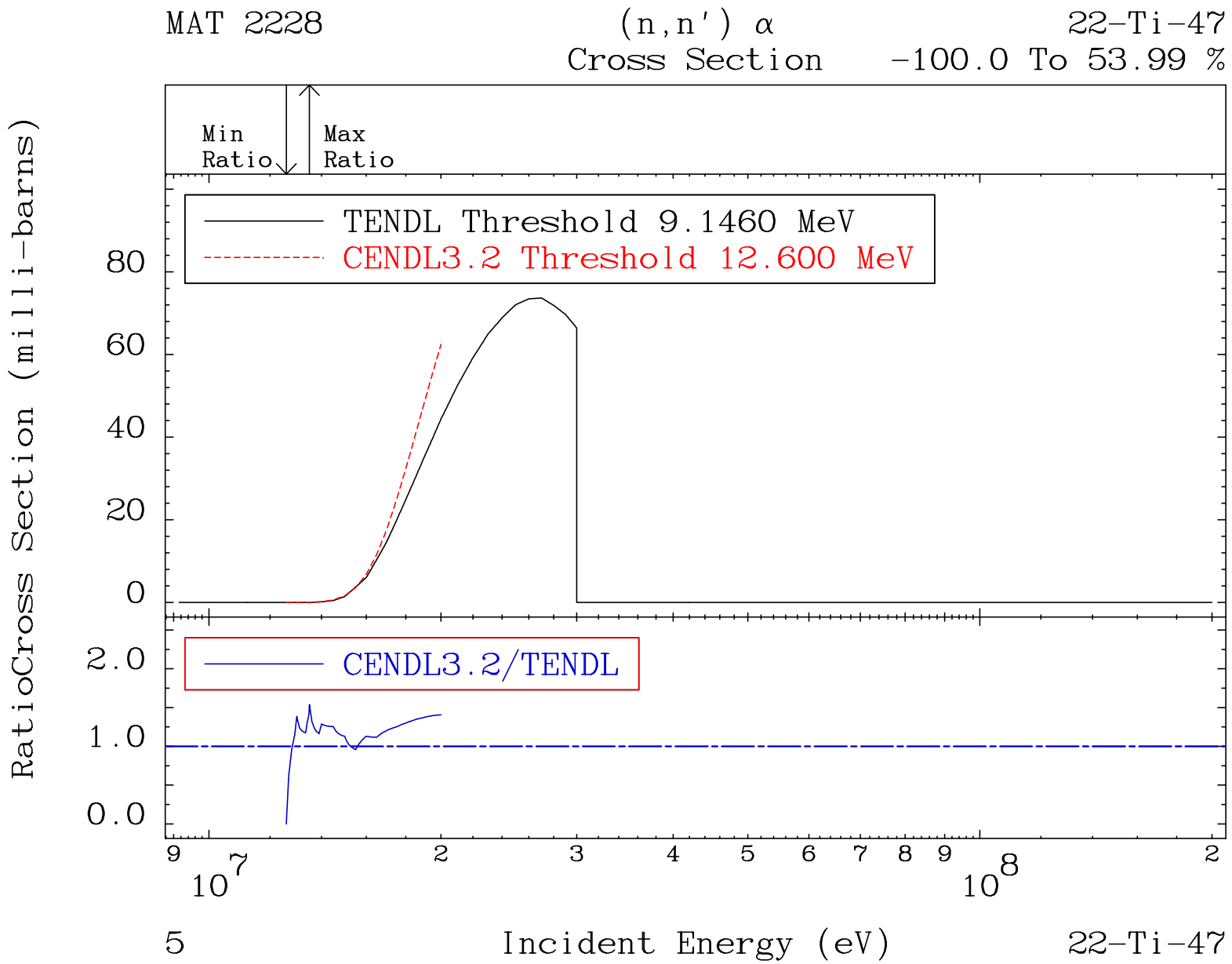
Press Mouse Button to Start

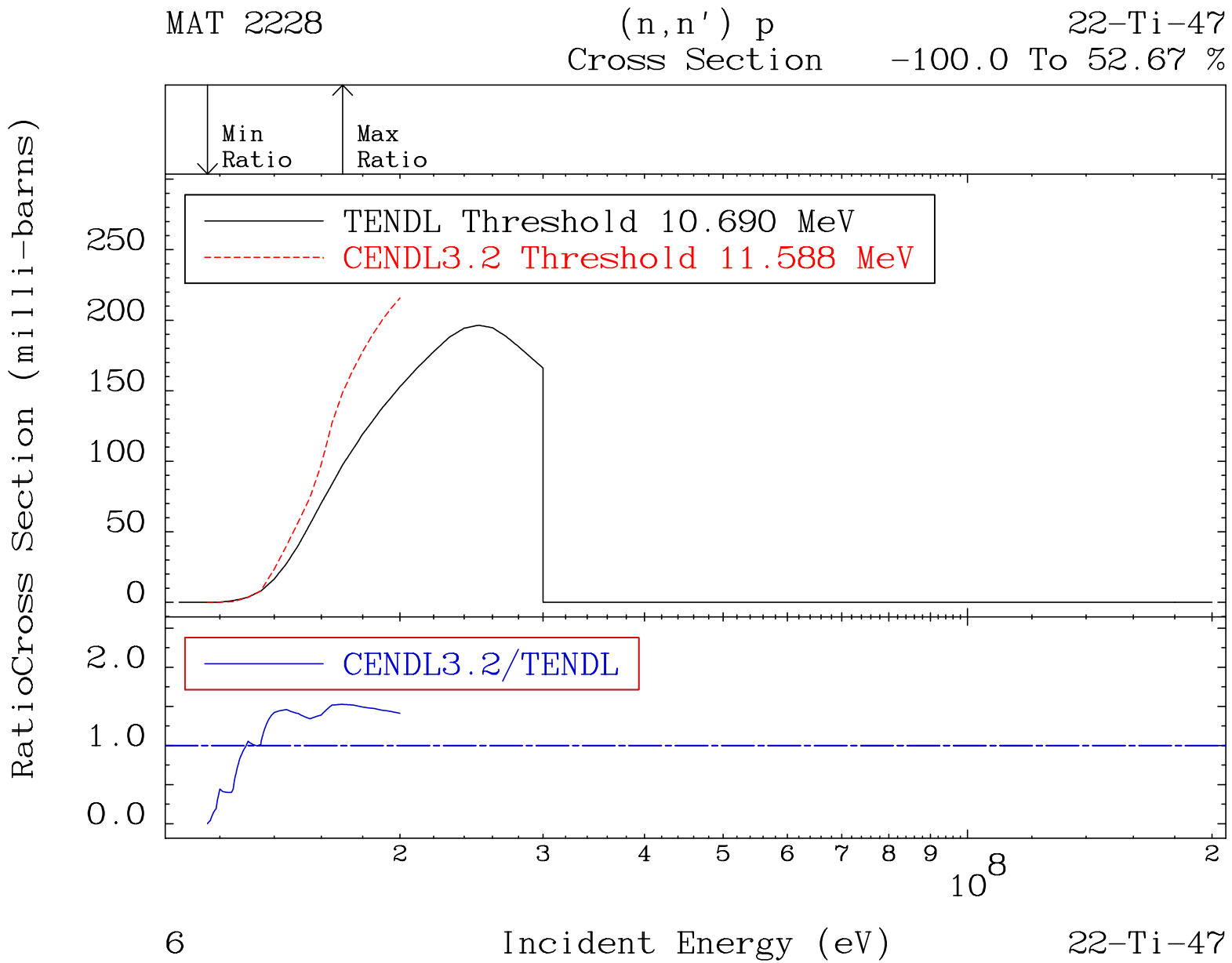

MAT 2228
Total
Cross Section
22-Ti-47
-95.60 To 1618. %
Min
Ratio
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
22-Ti-47

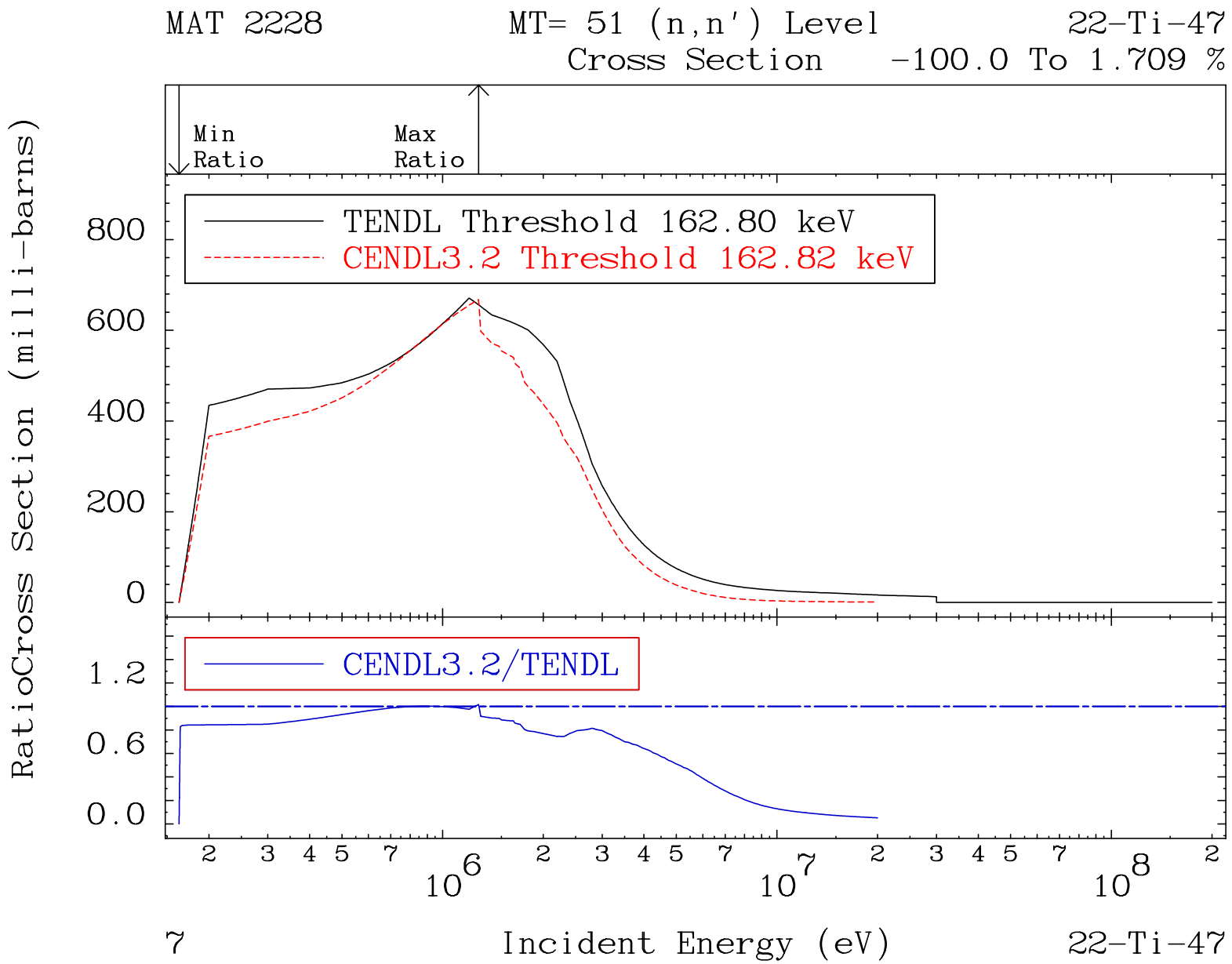

MAT 2228
Elastic
Cross Section
22-Ti-47
-92.64 To 3087. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
22-Ti-47

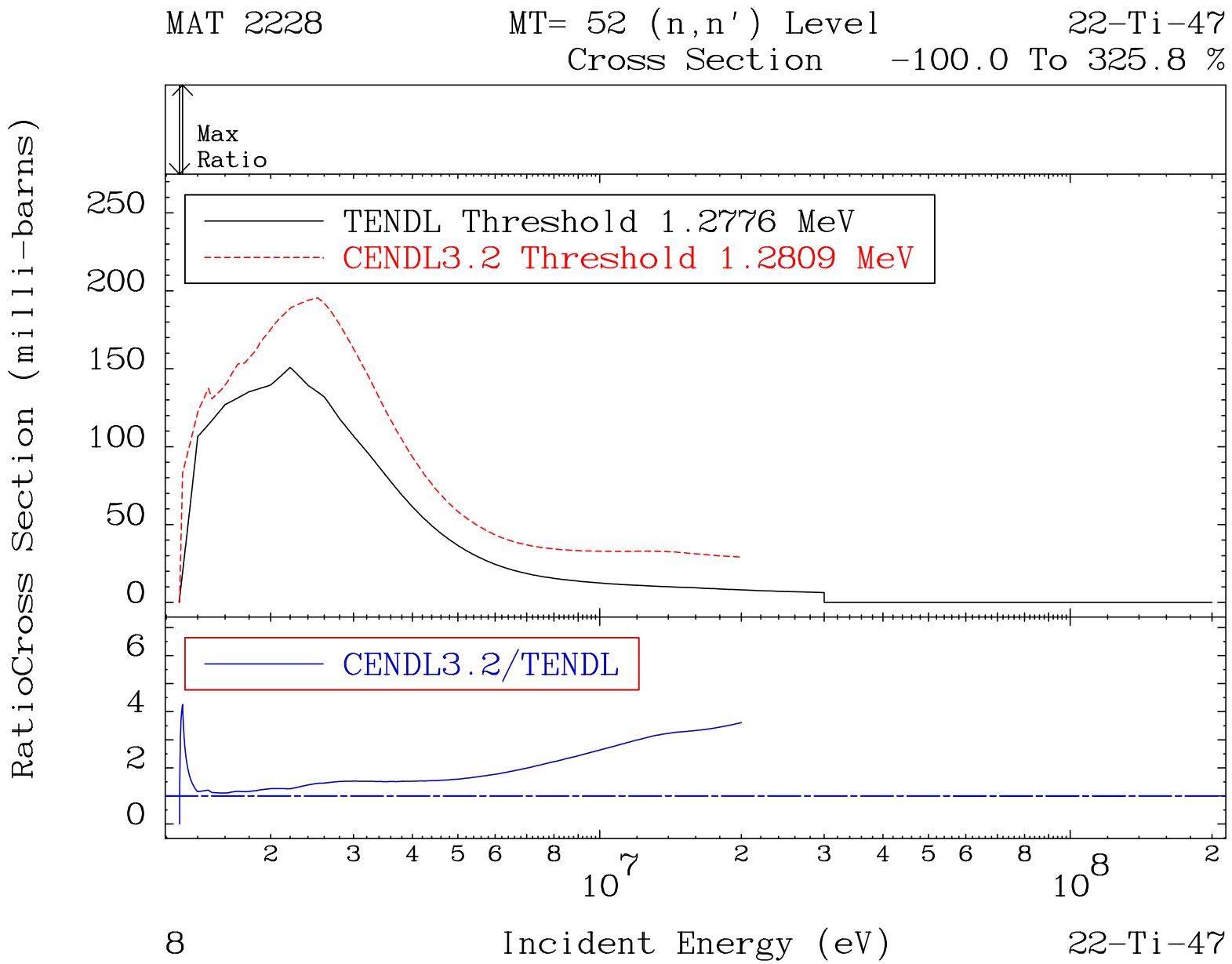

MAT 2228
Inelastic
Cross Section
22-Ti-47
-100.0 To 9.693 %
Min Ratio
Max Ratio
TENDL Threshold 162.80 keV
CENDL3.2 Threshold 162.82 keV
Cross Section (barns)
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
3
Incident Energy (eV)
22-Ti-47

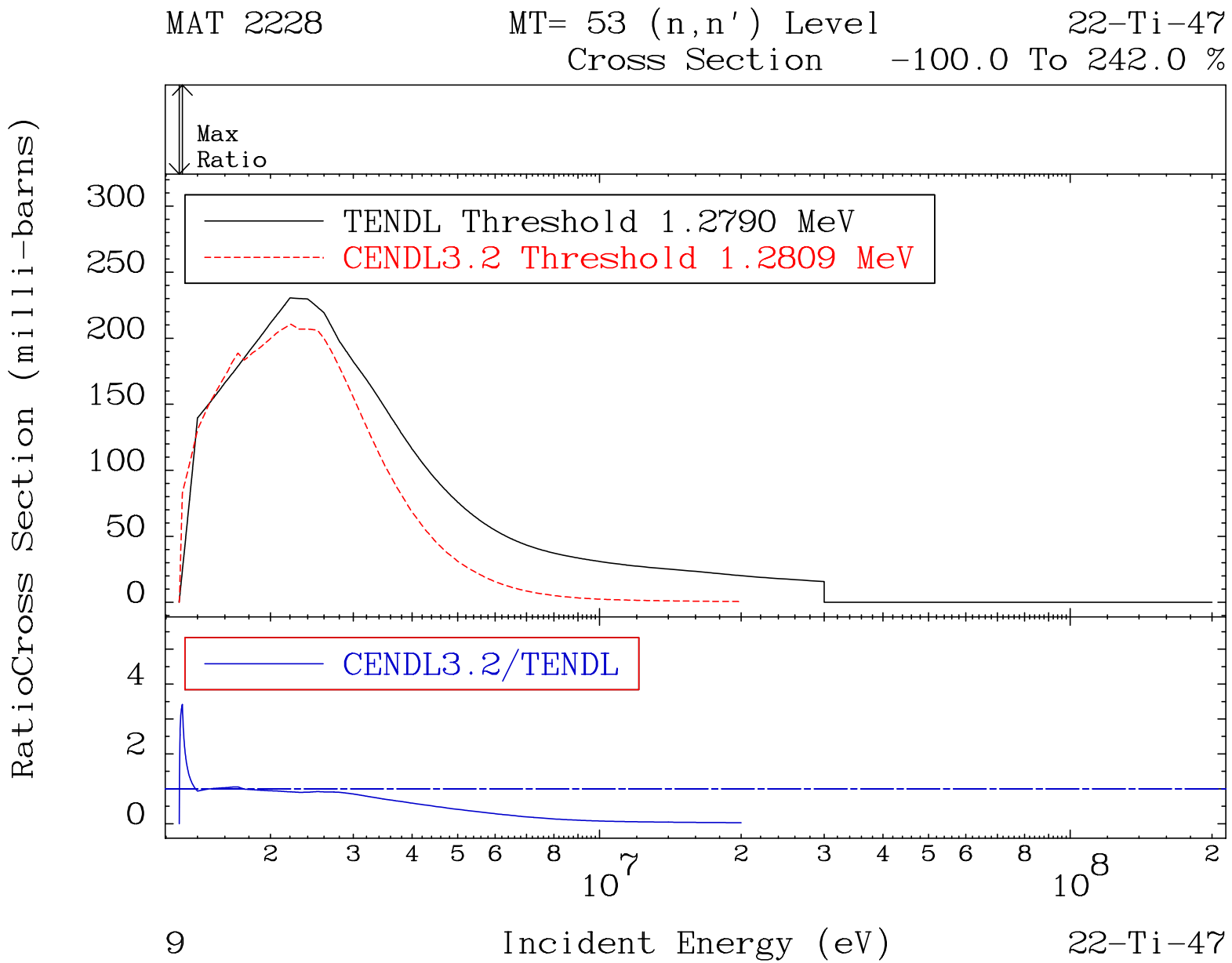

MAT 2228
(n,2n)
Cross Section
22-Ti-47
-82.94 To -3.766%
Min Ratio
Max Ratio
TENDL Threshold 9.0714 MeV
CENDL3.2 Threshold 9.0684 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
22-Ti-47

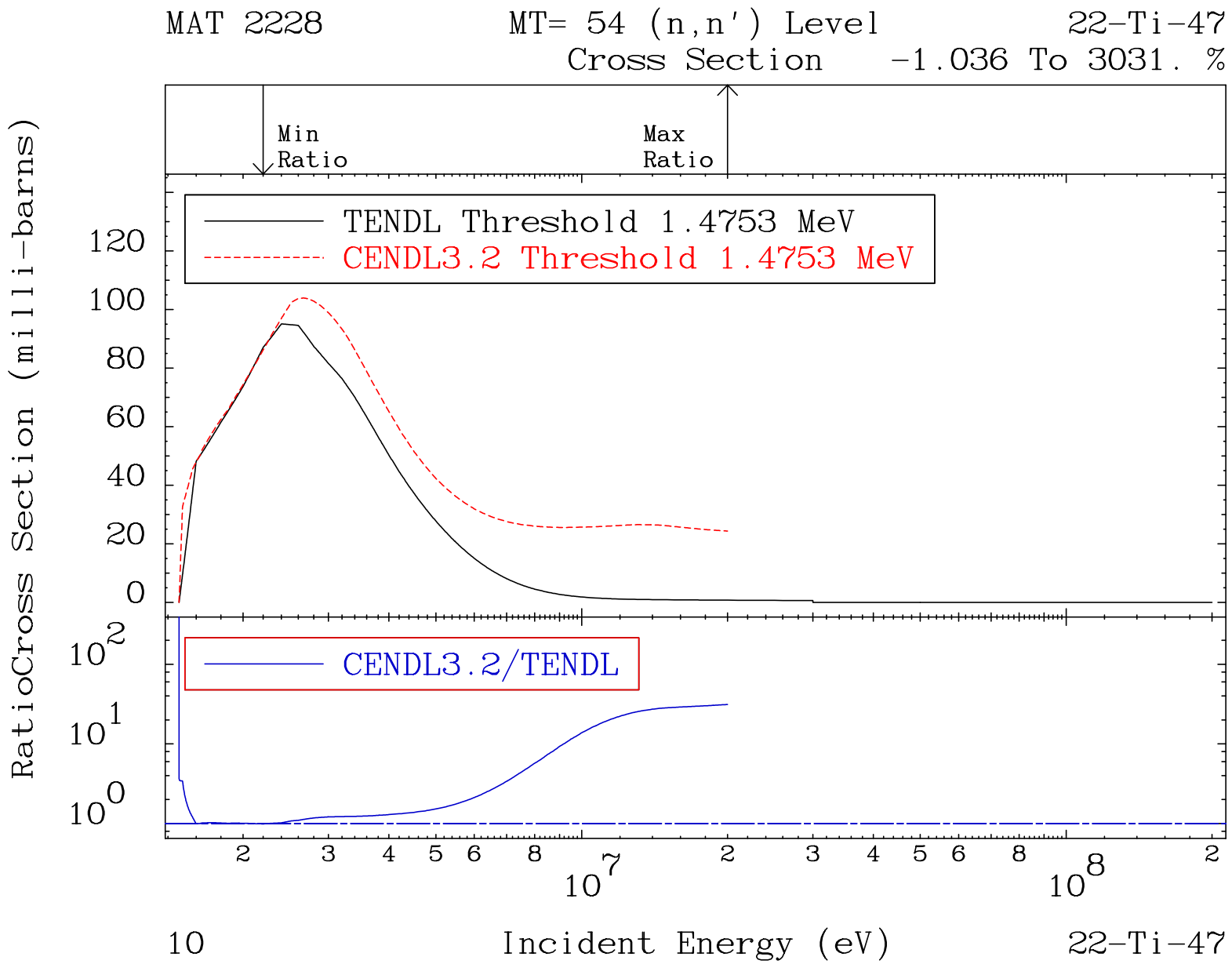

MAT 2228
(n,n') α
Cross Section
22-Ti-47
-100.0 To 53.99 %
Min Ratio
Max Ratio
TENDL Threshold 9.1460 MeV
CENDL3.2 Threshold 12.600 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22-Ti-47
5

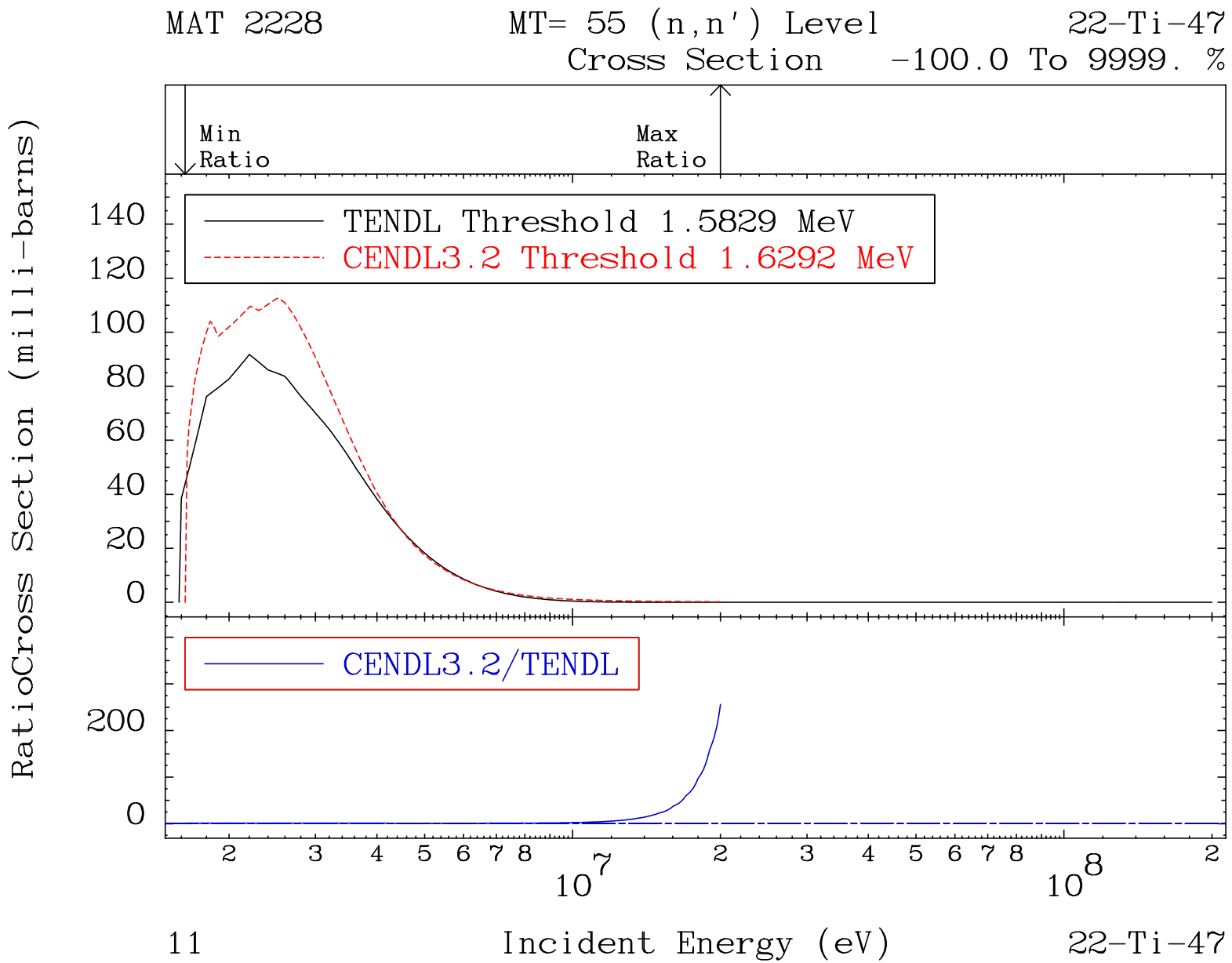

MAT 2228
(n,n') p
Cross Section
22-Ti-47
-100.0 To 52.67 %
Min Ratio
Max Ratio
TENDL Threshold 10.690 MeV
CENDL3.2 Threshold 11.588 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
22-Ti-47

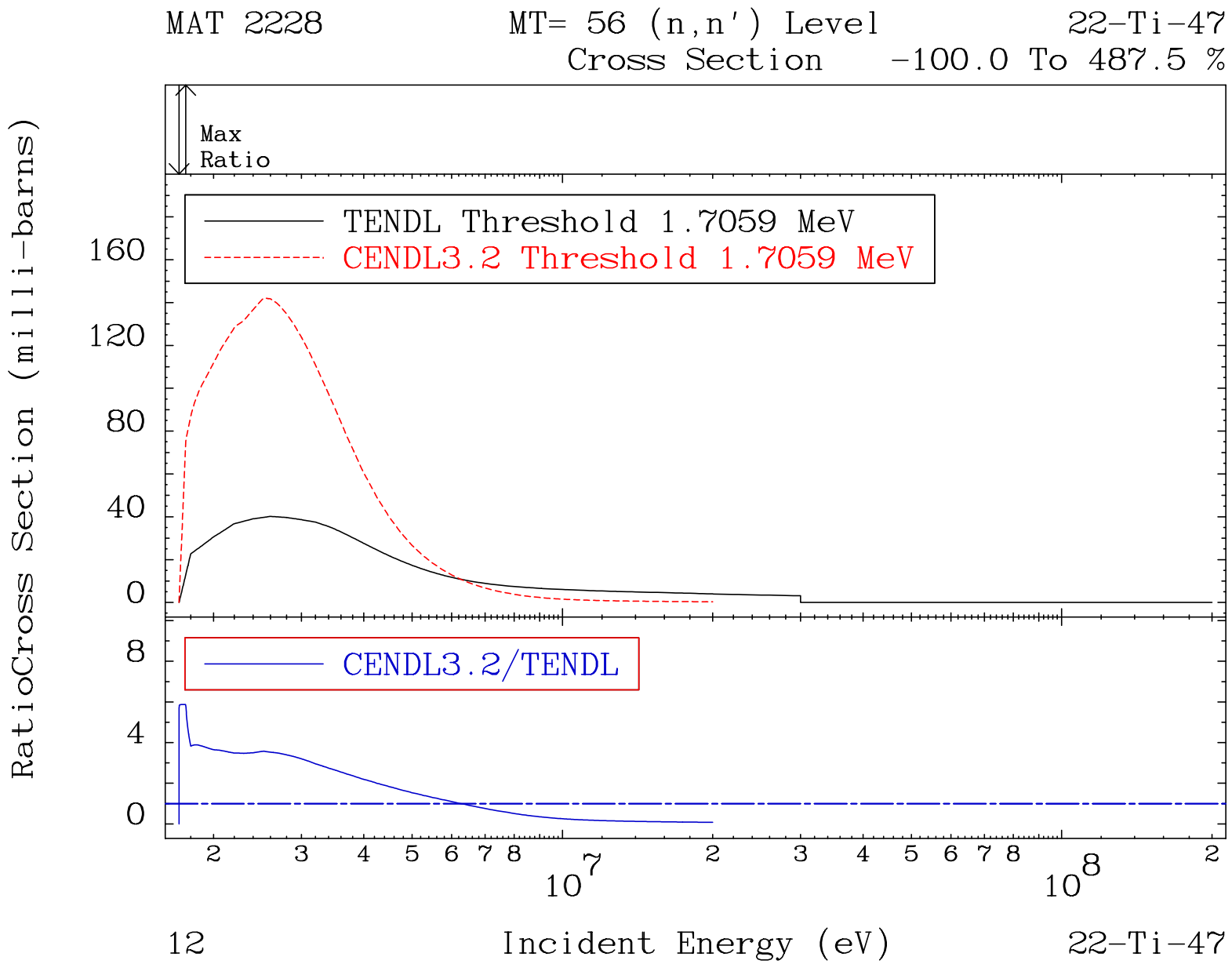

MAT 2228
MT= 51 (n,n') Level
22-Ti-47
Cross Section -100.0 To 1.709 %
Min Ratio
Max Ratio
TENDL Threshold 162.80 keV
CENDL3.2 Threshold 162.82 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
7
Incident Energy (eV)
22-Ti-47

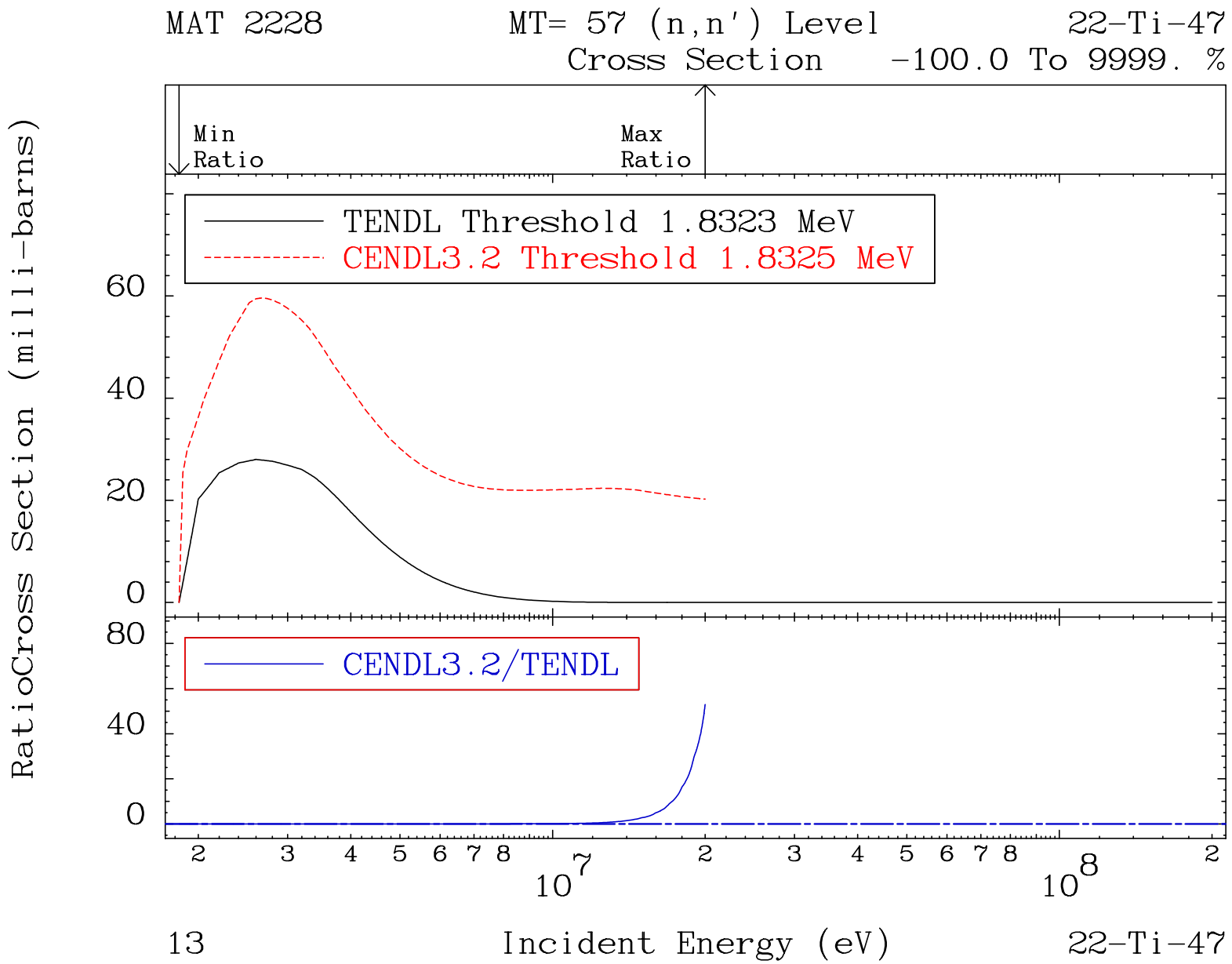

MAT 2228
MT= 52 (n,n') Level
22-Ti-47
Cross Section
-100.0 To 325.8 %
Max
Ratio
TENDL Threshold 1.2776 MeV
CENDL3.2 Threshold 1.2809 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
6
4
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
8
Incident Energy (eV)
22-Ti-47

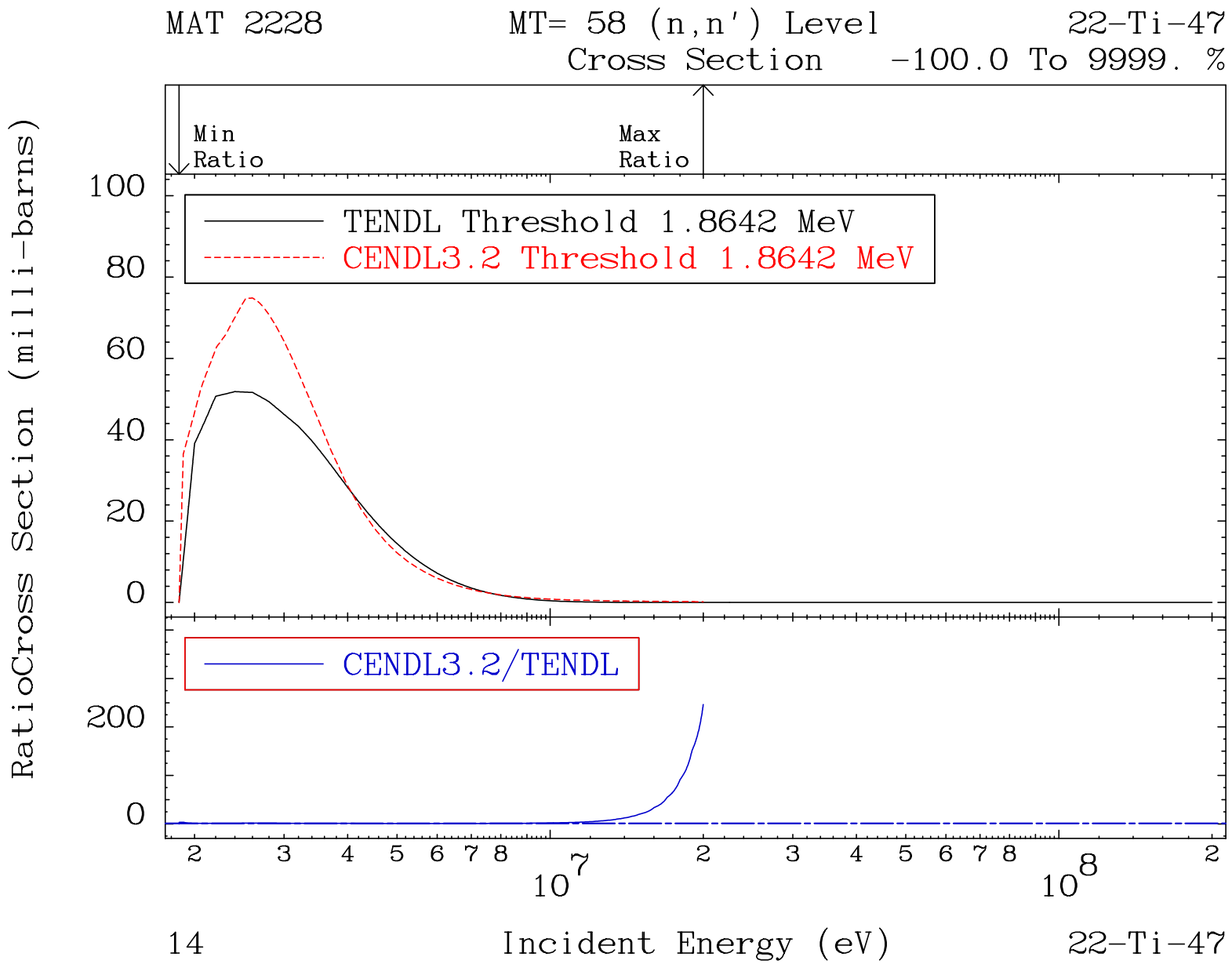

MAT 2228
MT= 53 (n,n') Level
22-Ti-47
Cross Section -100.0 To 242.0 %
Max
Ratio
TENDL Threshold 1.2790 MeV
CENDL3.2 Threshold 1.2809 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
9
22-Ti-47

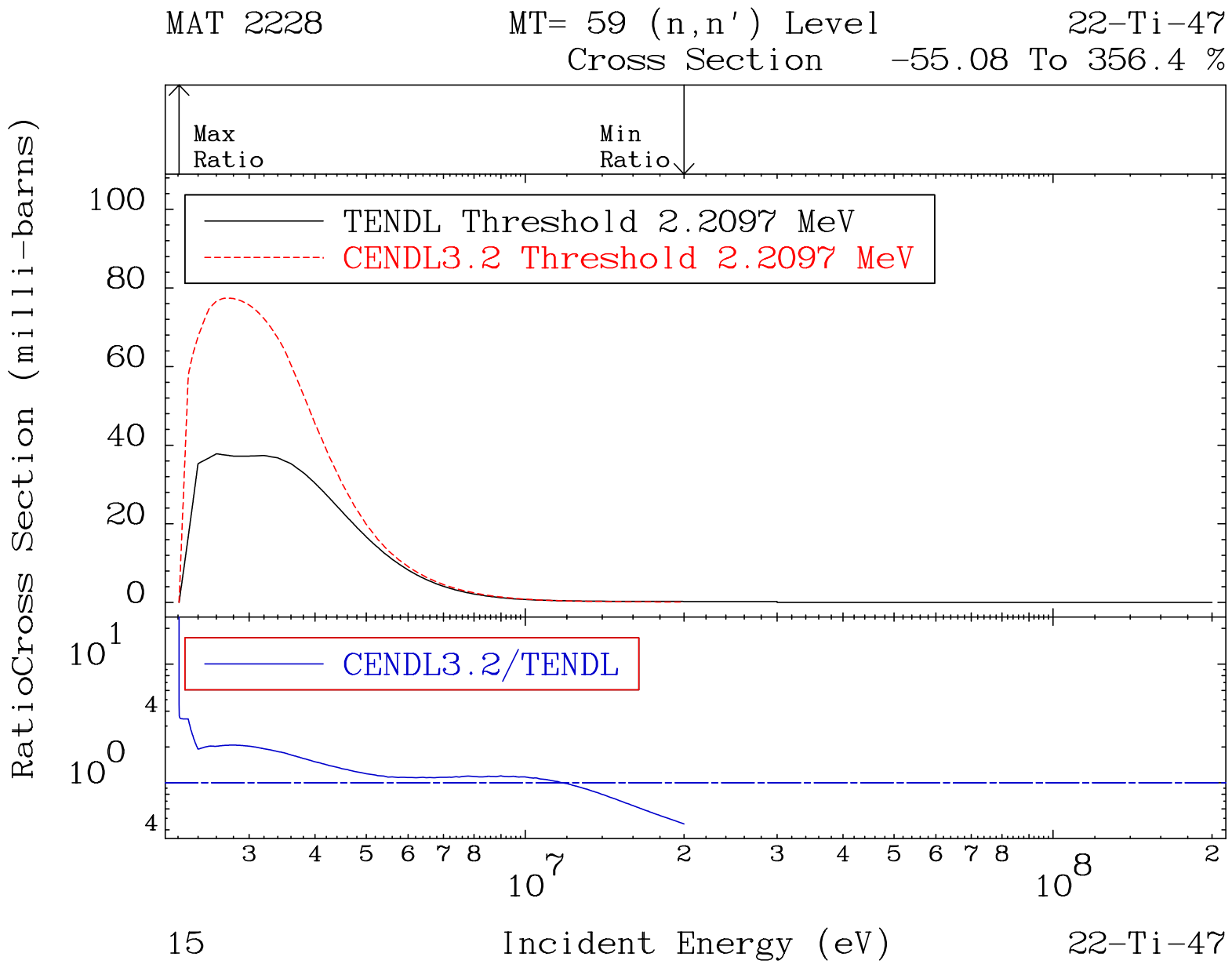

MAT 2228
MT= 54 (n,n') Level
22-Ti-47
Cross Section -1.036 To 3031. %
Min Ratio
Max Ratio
TENDL Threshold 1.4753 MeV
CENDL3.2 Threshold 1.4753 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10^2
10^1
10^0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
22-Ti-47

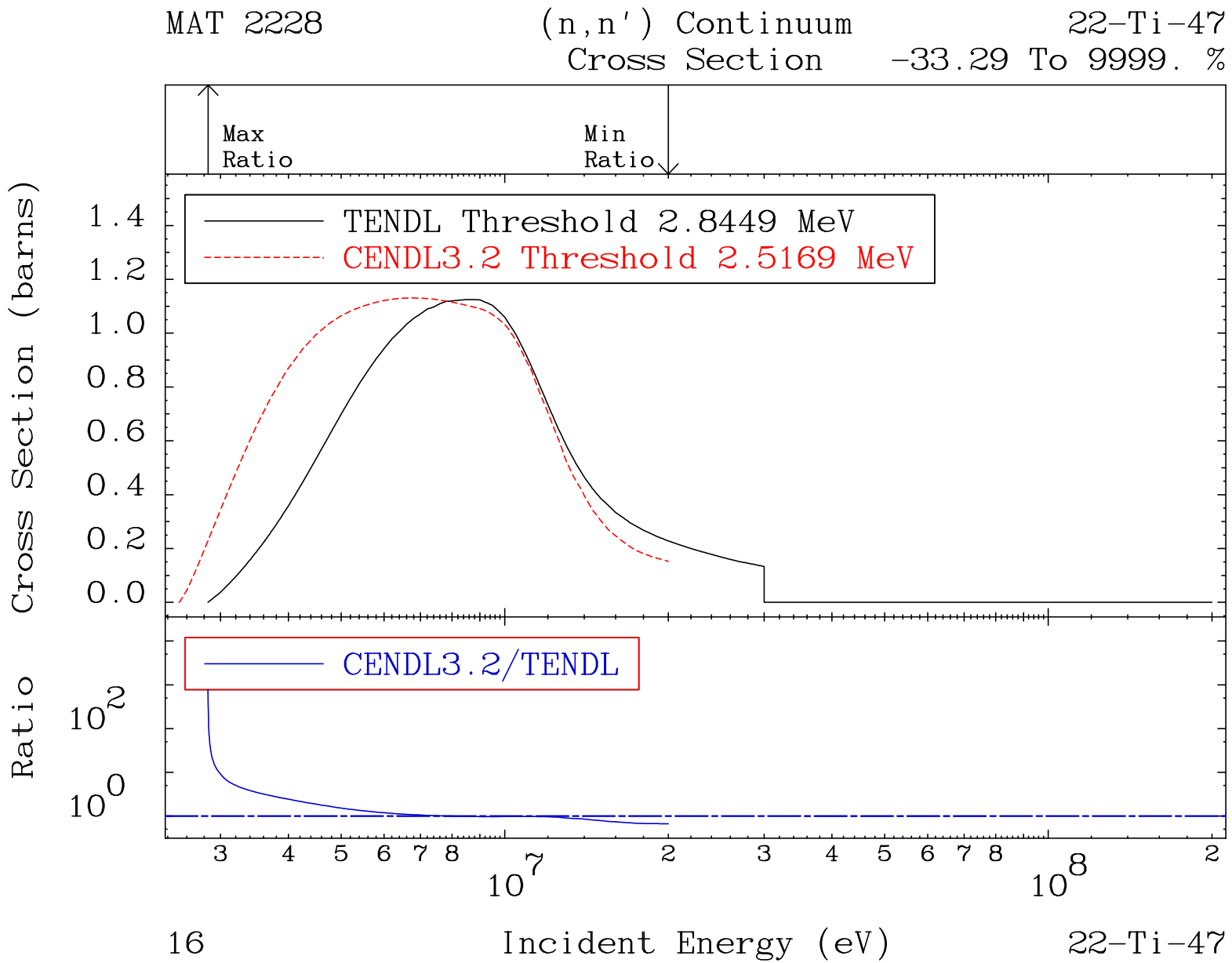

MAT 2228
MT= 55 (n,n') Level
22-Ti-47
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5829 MeV
CENDL3.2 Threshold 1.6292 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
22-Ti-47

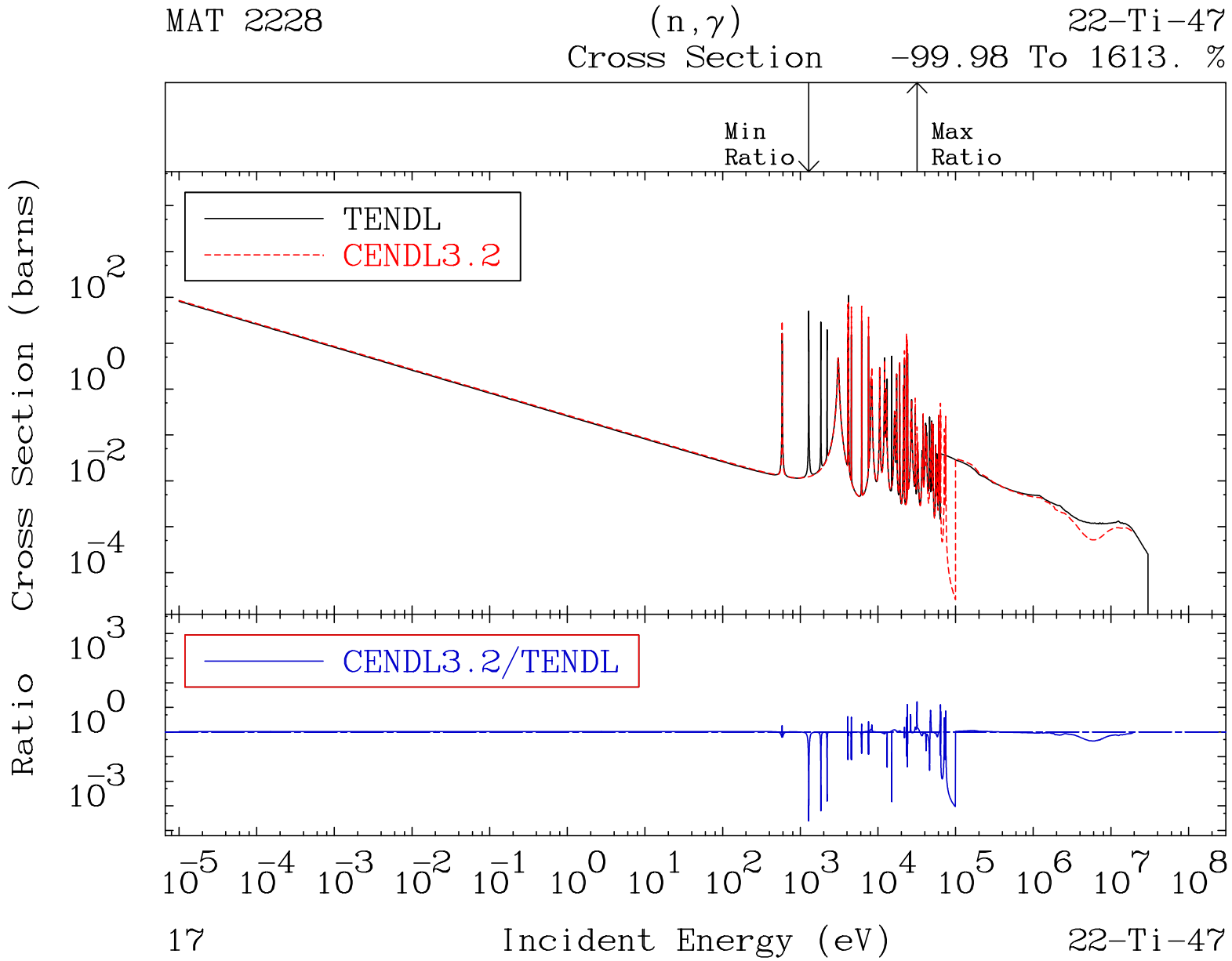

MAT 2228
MT= 56 (n,n') Level
22-Ti-47
Cross Section
-100.0 To 487.5 %
Max
Ratio
TENDL Threshold 1.7059 MeV
CENDL3.2 Threshold 1.7059 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
8
4
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
22-Ti-47

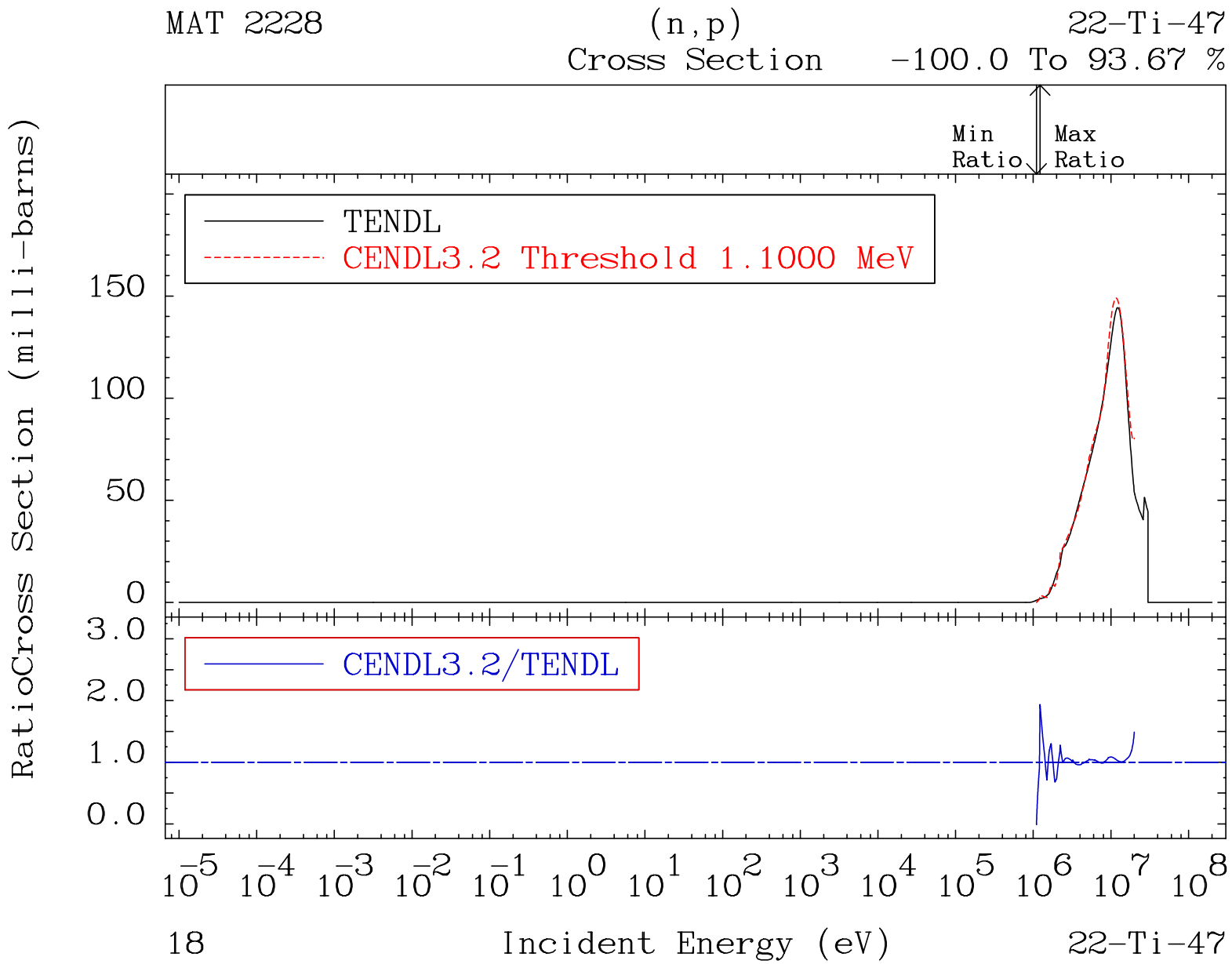

MAT 2228
MT= 57 (n,n') Level
22-Ti-47
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.8323 MeV
CENDL3.2 Threshold 1.8325 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
40
20
0
80
40
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
22-Ti-47

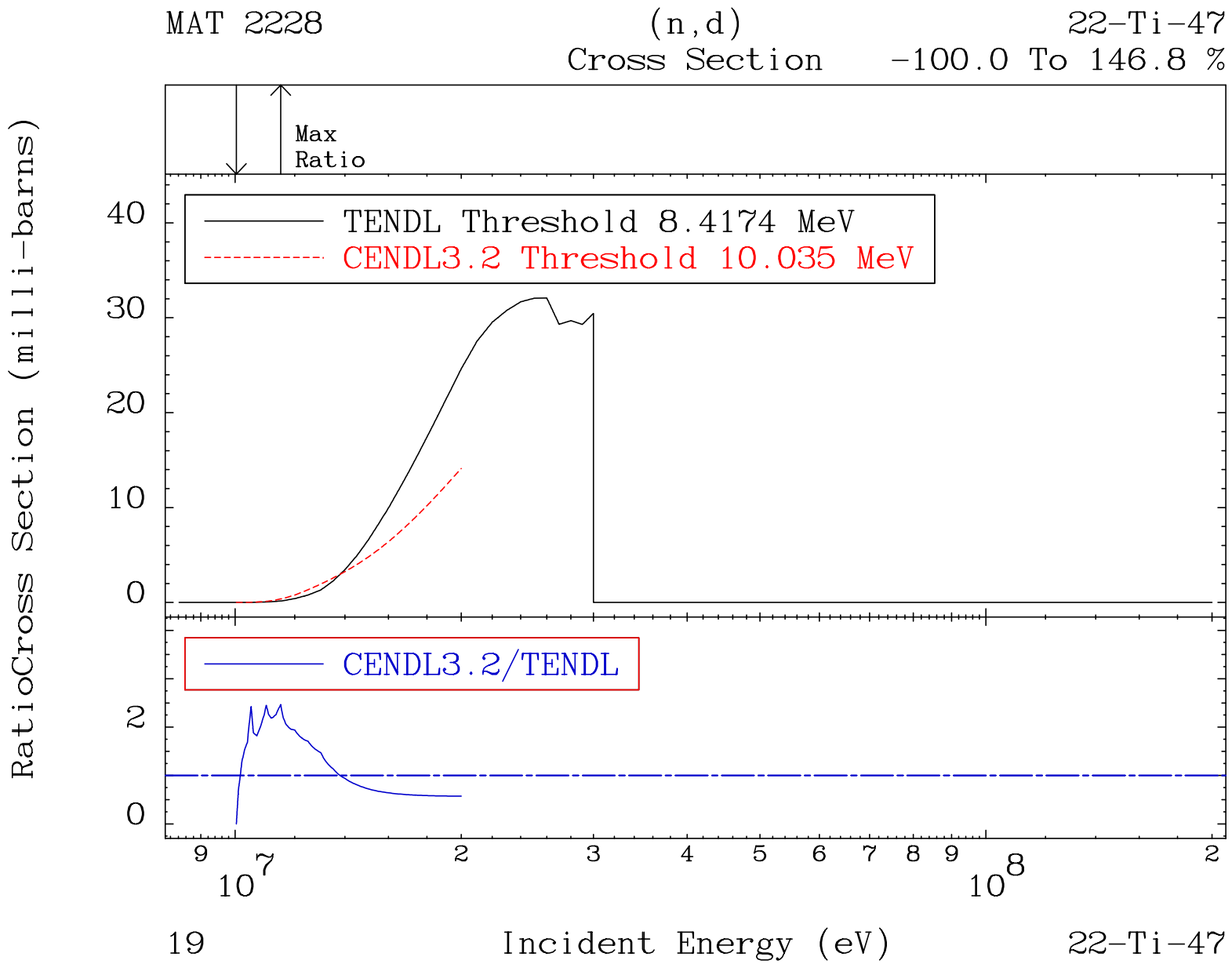

MAT 2228
MT= 58 (n,n') Level
22-Ti-47
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.8642 MeV
CENDL3.2 Threshold 1.8642 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
22-Ti-47

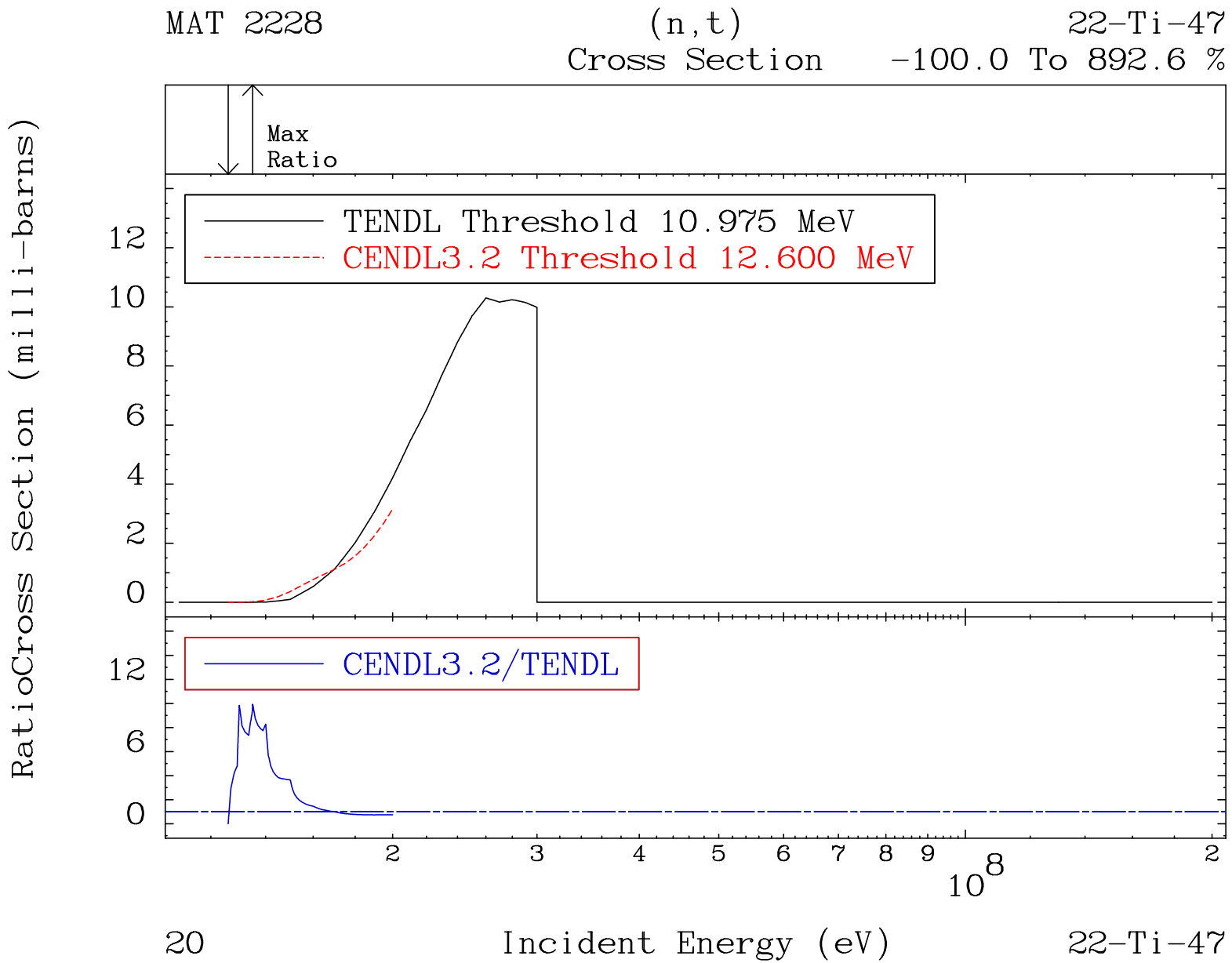

MAT 2228
MT= 59 (n,n') Level
22-Ti-47
Cross Section -55.08 To 356.4 %
Max Ratio
Min Ratio
TENDL Threshold 2.2097 MeV
CENDL3.2 Threshold 2.2097 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
15
22-Ti-47

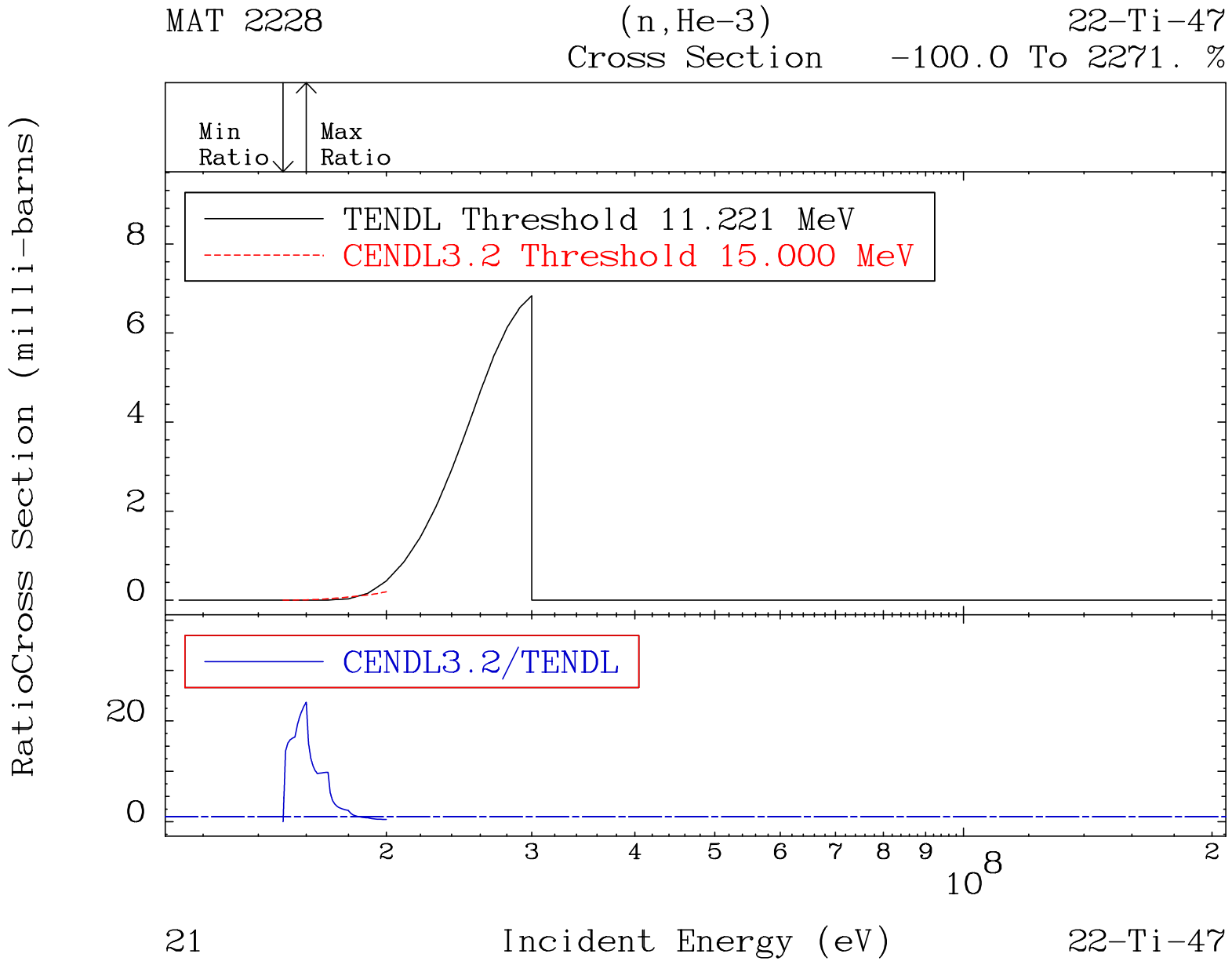

MAT 2228
(n,n') Continuum
Cross Section
22-Ti-47
-33.29 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8449 MeV
CENDL3.2 Threshold 2.5169 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
10^2
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
22-Ti-47

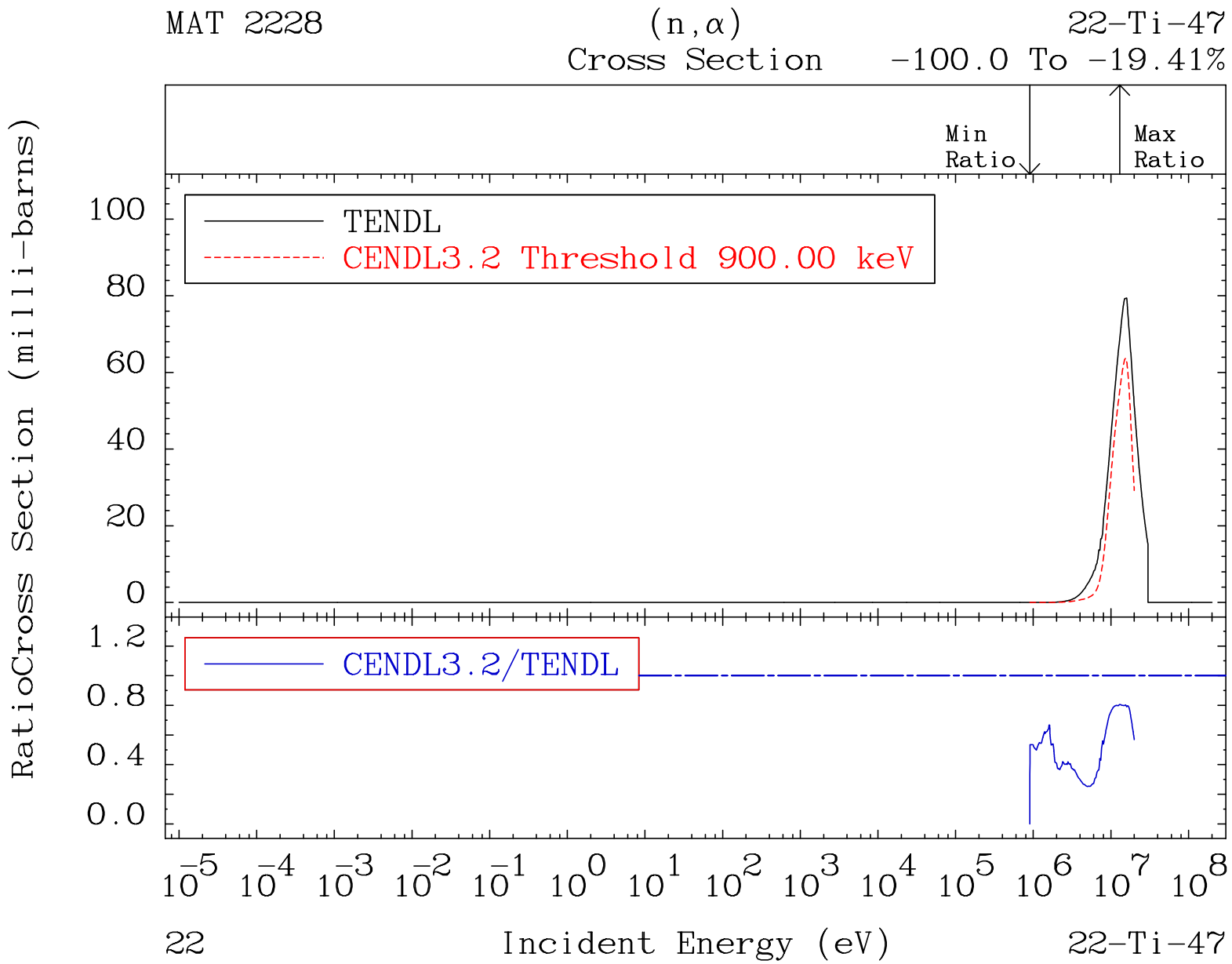

MAT 2228
(n,γ)
Cross Section
22-Ti-47
-99.98 To 1613. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
17
22-Ti-47

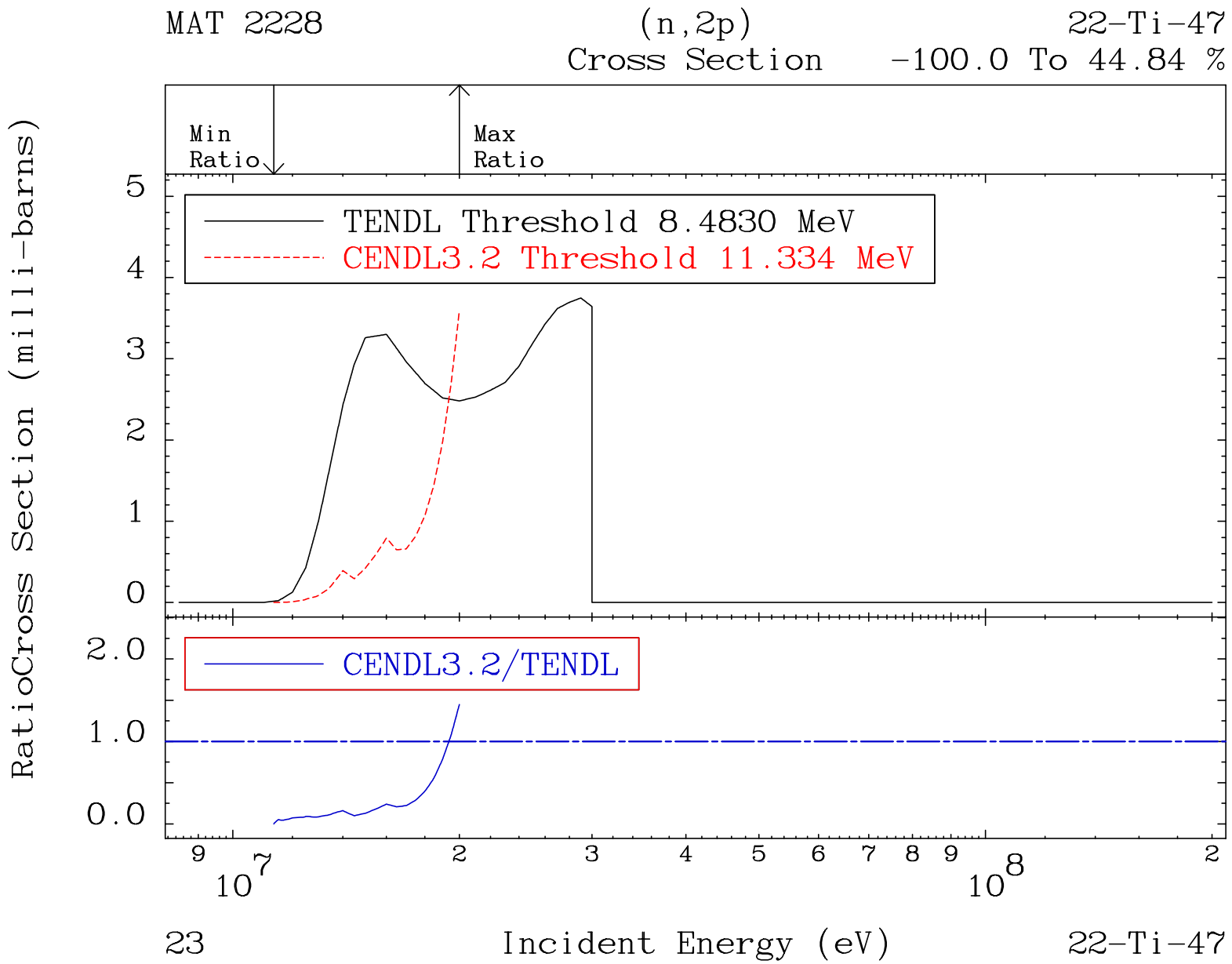

MAT 2228
(n,p)
22-Ti-47
Cross Section
-100.0 To 93.67 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.1000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
150
100
50
0
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
18
Incident Energy (eV)
22-Ti-47

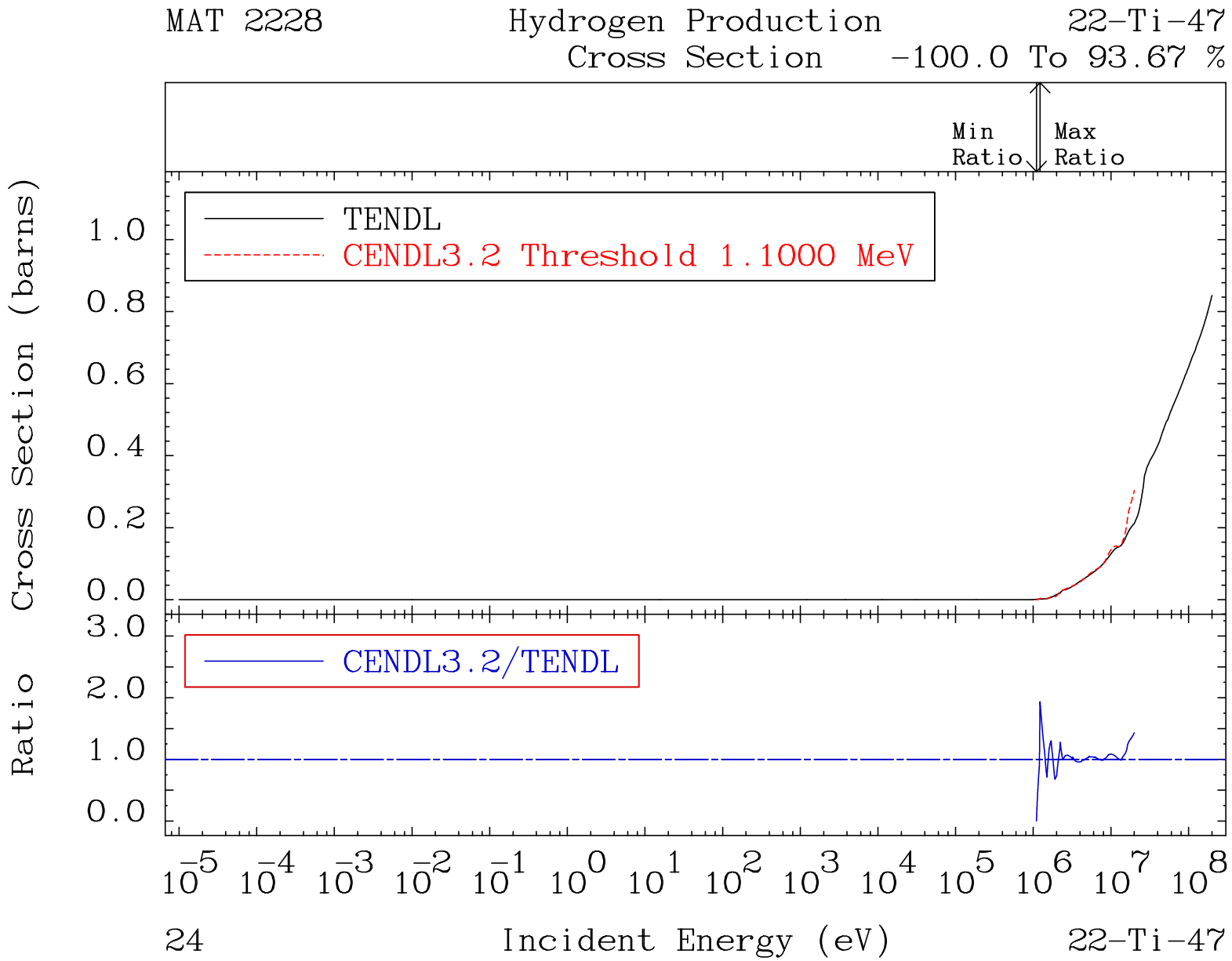

MAT 2228
(n,d)
22-Ti-47
Cross Section
-100.0 To 146.8 %
Max
Ratio
TENDL Threshold 8.4174 MeV
CENDL3.2 Threshold 10.035 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
22-Ti-47

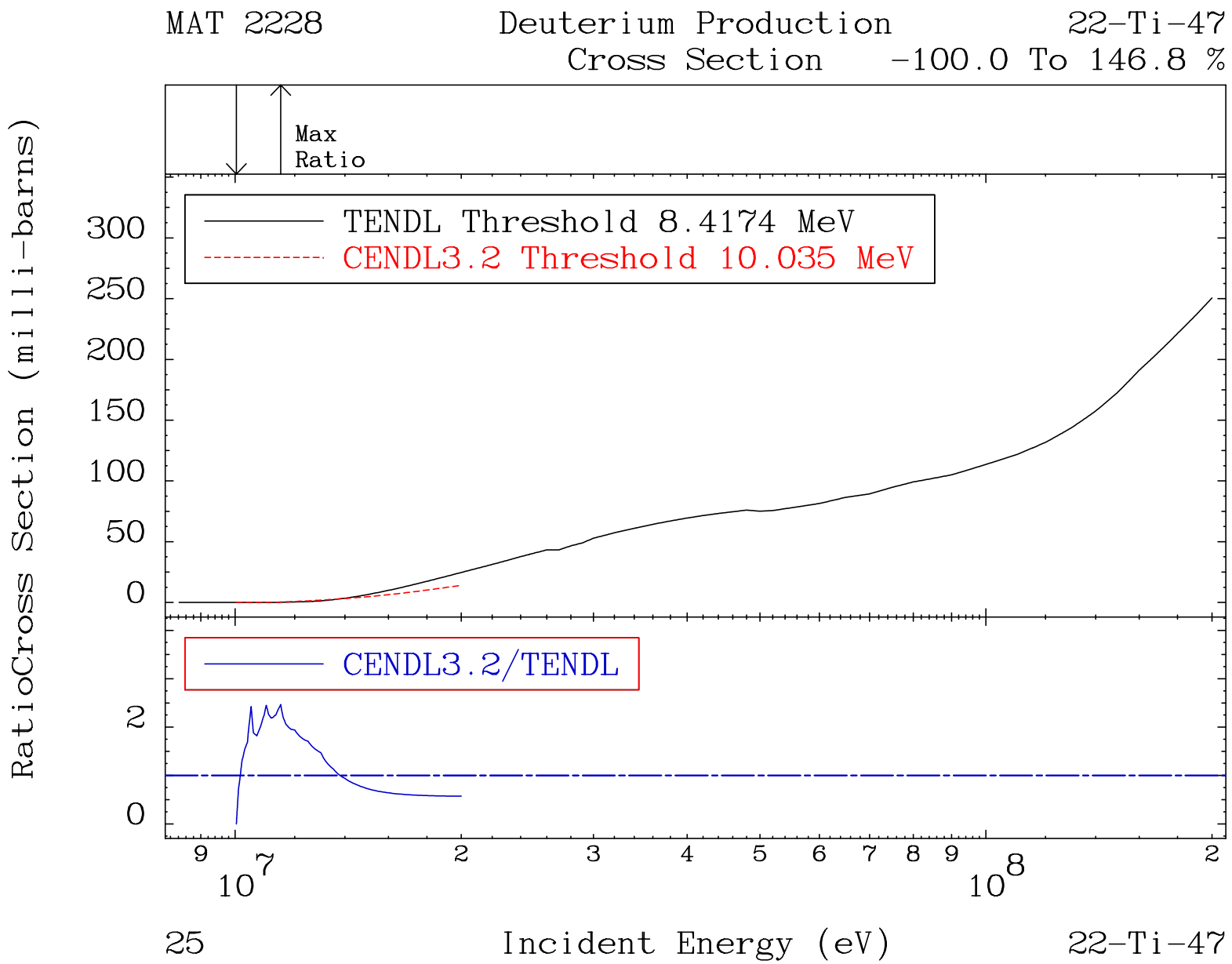

MAT 2228
(n,t)
22-Ti-47
Cross Section
-100.0 To 892.6 %
Max
Ratio
TENDL Threshold 10.975 MeV
CENDL3.2 Threshold 12.600 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
22-Ti-47

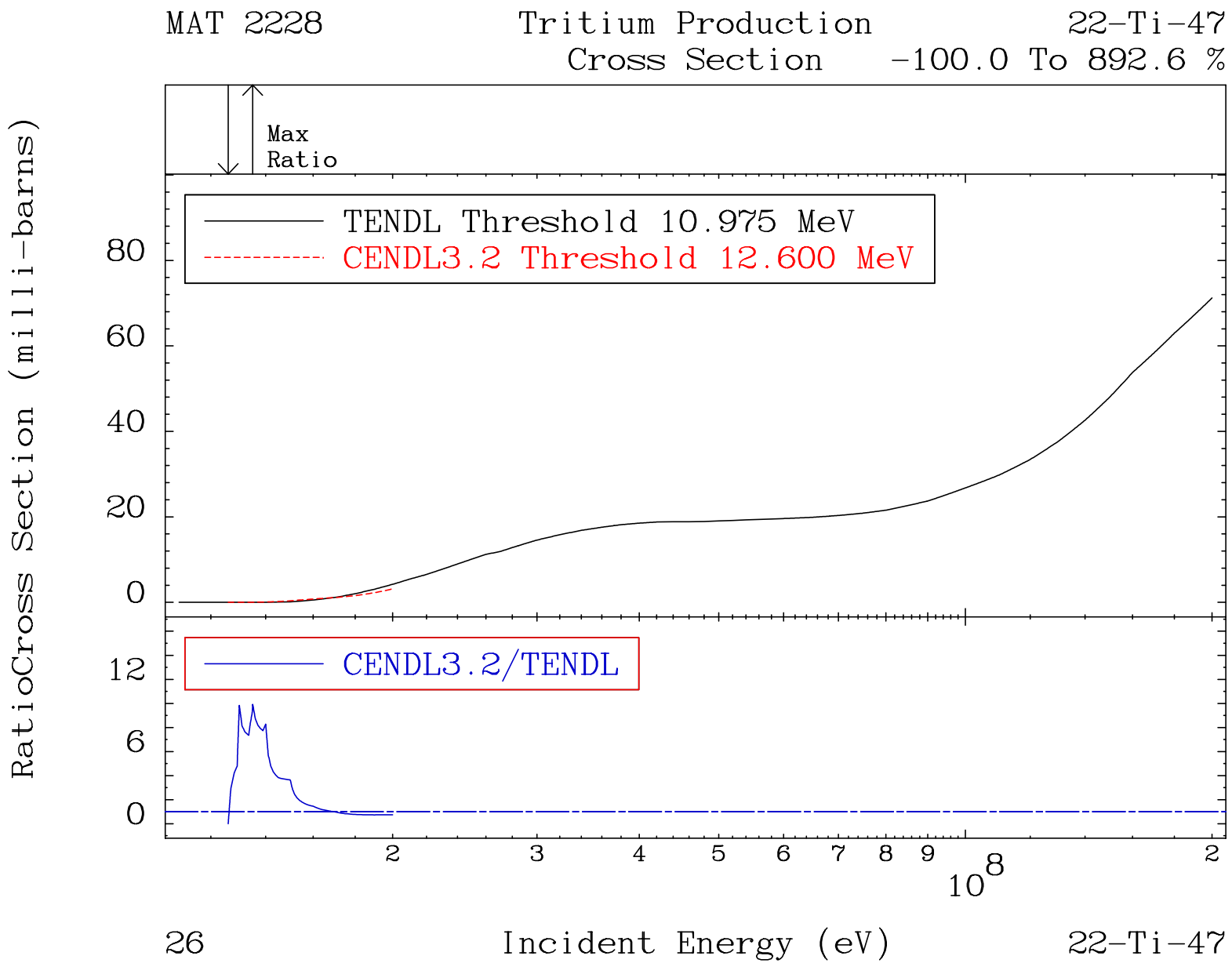

MAT 2228
(n,He-3)
Cross Section
22-Ti-47
-100.0 To 2271. %
Min Ratio
Max Ratio
TENDL Threshold 11.221 MeV
CENDL3.2 Threshold 15.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
20
0
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
22-Ti-47

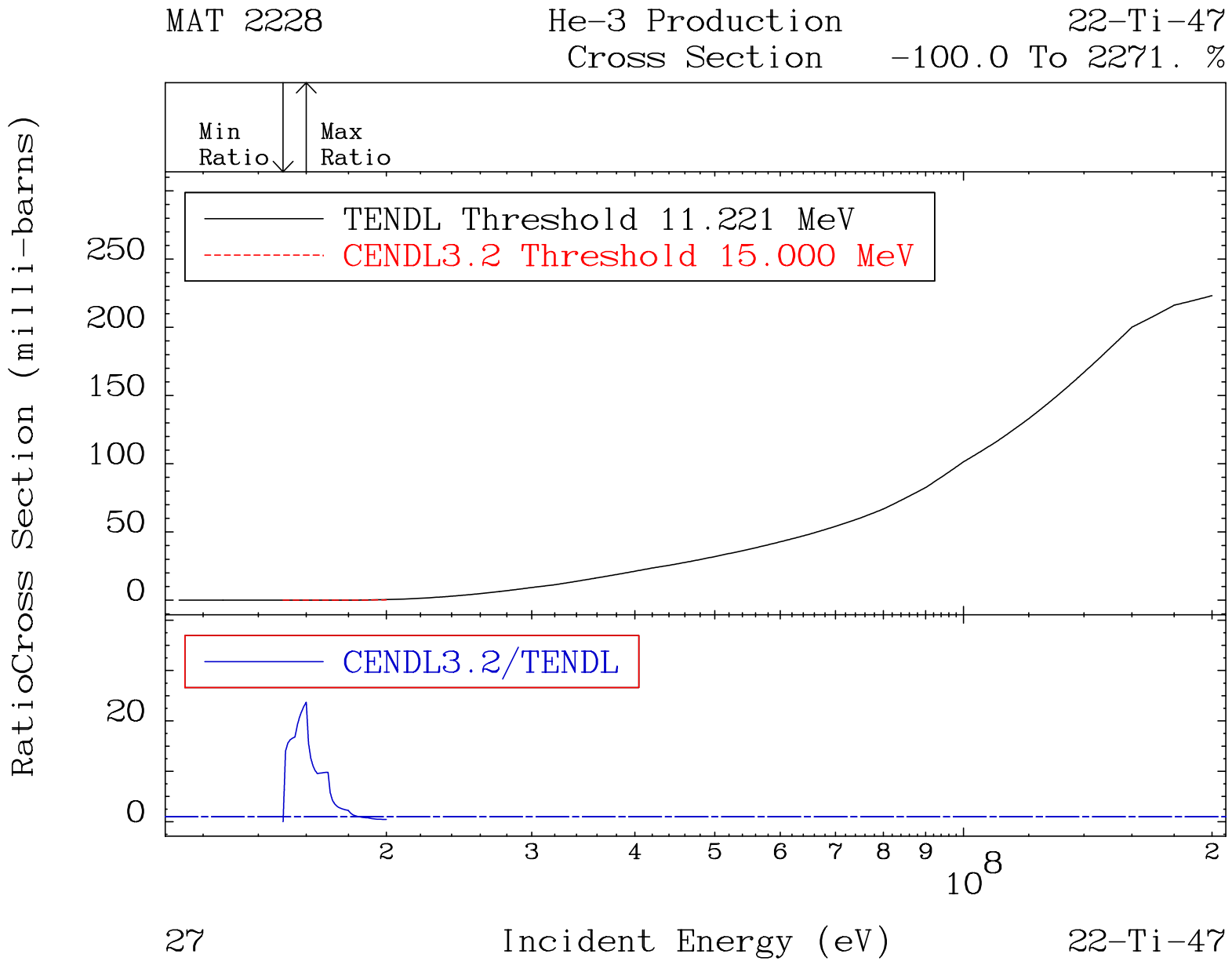

MAT 2228
(n,α)
Cross Section
22-Ti-47
-100.0 To -19.41%
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 900.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
22
Incident Energy (eV)
22-Ti-47

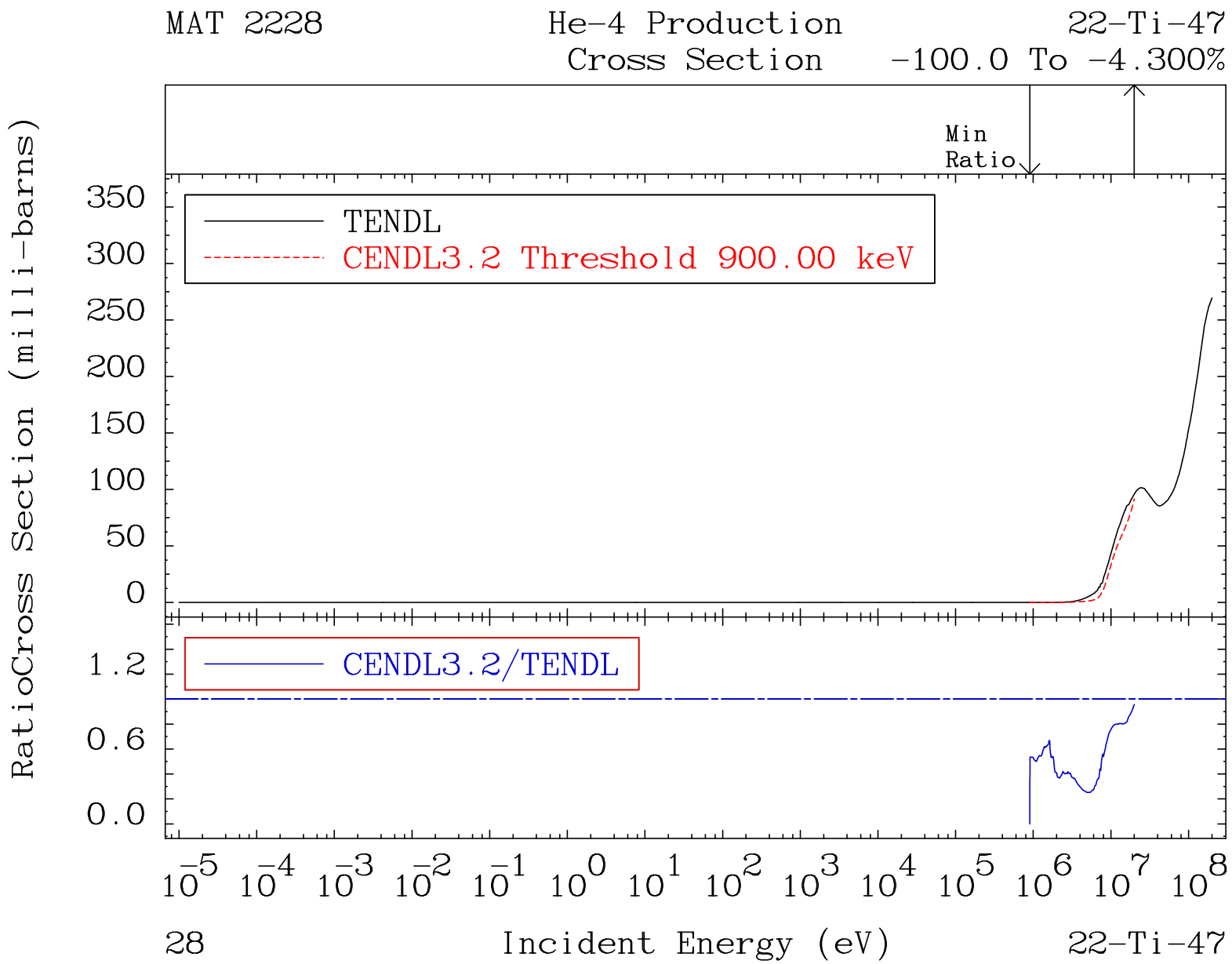

MAT 2228
(n,2p)
22-Ti-47
Cross Section
-100.0 To 44.84 %
Min Ratio
Max Ratio
TENDL Threshold 8.4830 MeV
CENDL3.2 Threshold 11.334 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
22-Ti-47

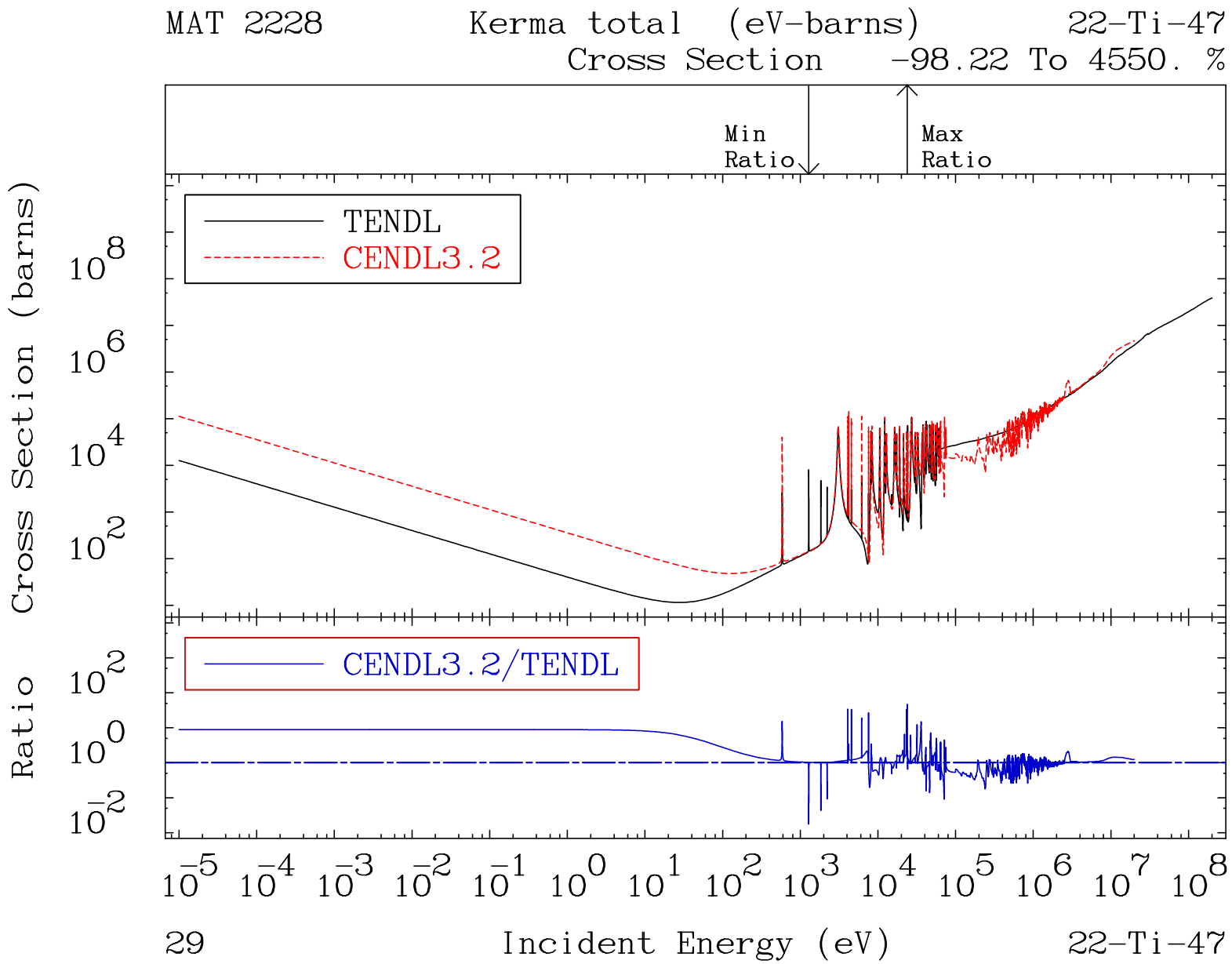

MAT 2228
Hydrogen Production
22-Ti-47
Cross Section
-100.0 To 93.67 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.1000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
24
Incident Energy (eV)
22-Ti-47

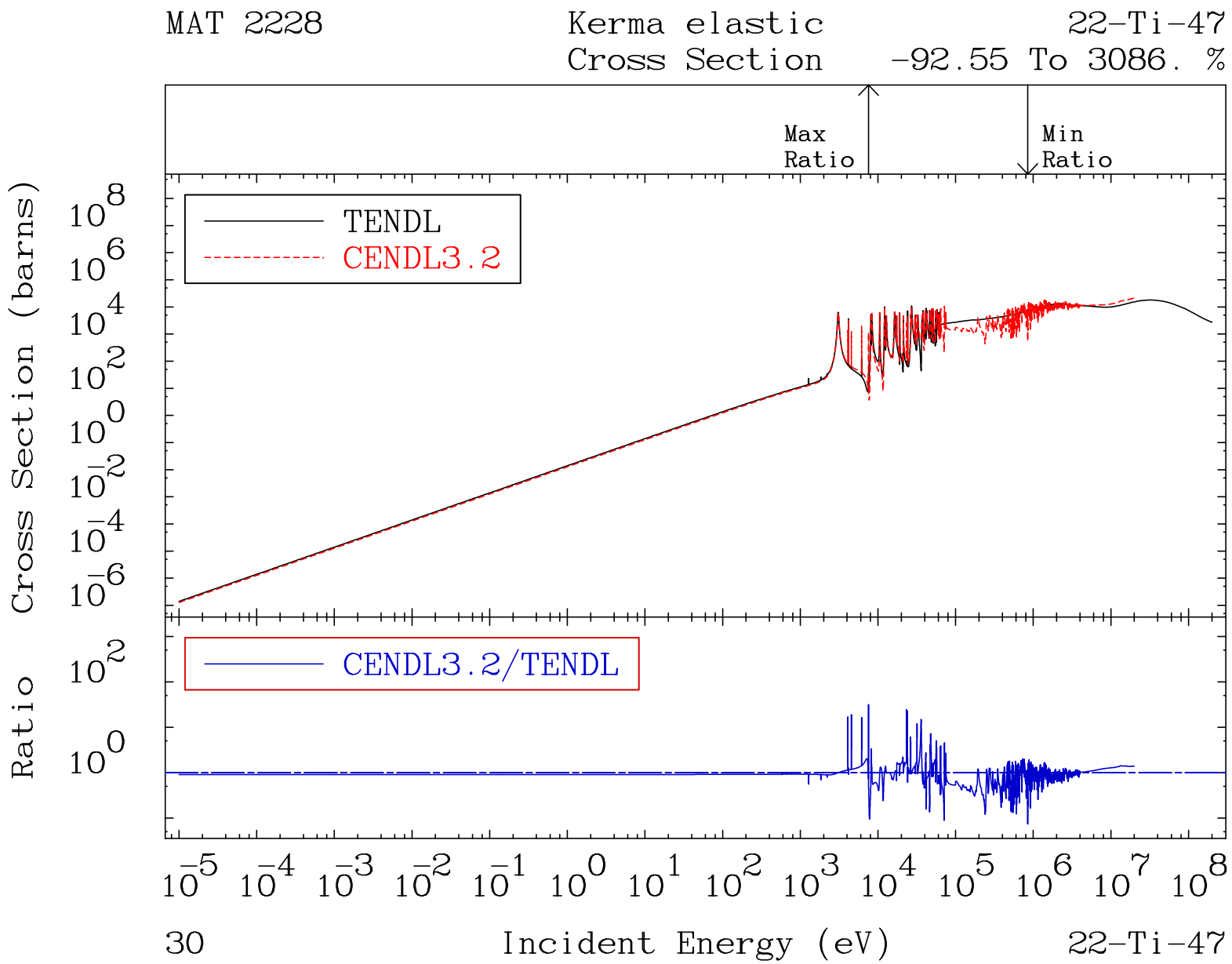

MAT 2228
Deuterium Production
22-Ti-47
Cross Section
-100.0 To 146.8 %
Max
Ratio
TENDL Threshold 8.4174 MeV
CENDL3.2 Threshold 10.035 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
22-Ti-47

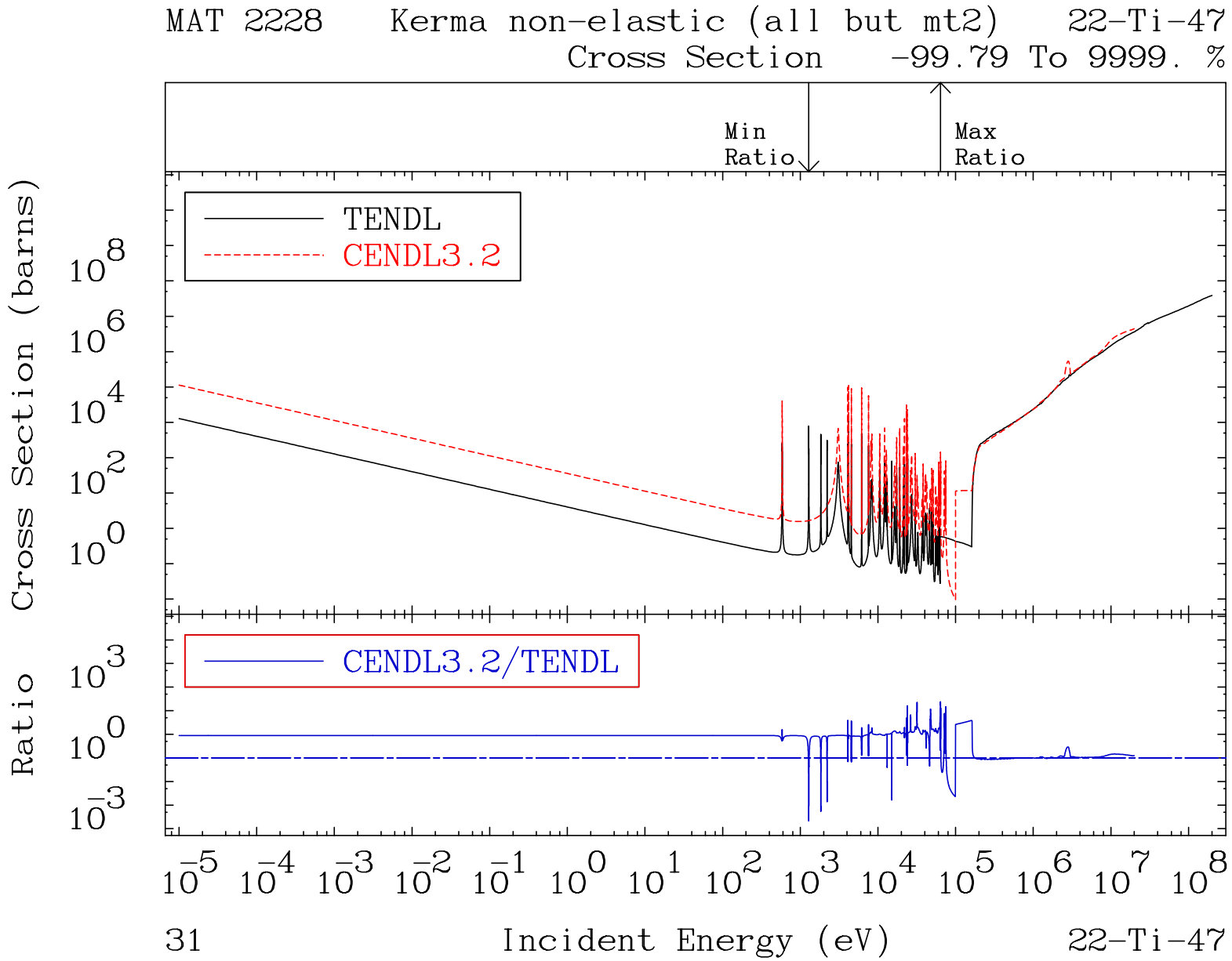

MAT 2228
Tritium Production
22-Ti-47
Cross Section
-100.0 To 892.6 %
Max
Ratio
TENDL Threshold 10.975 MeV
CENDL3.2 Threshold 12.600 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
22-Ti-47

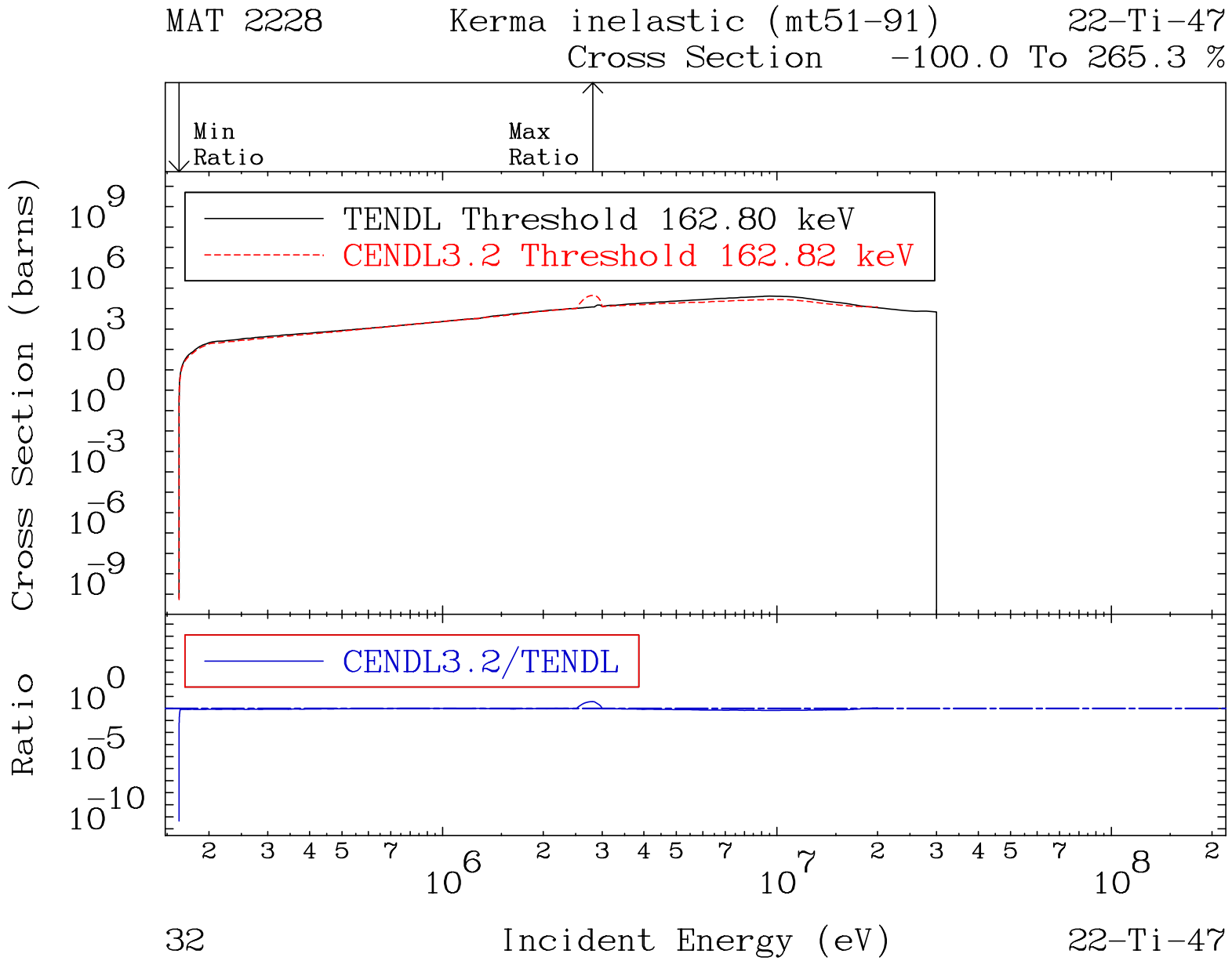

MAT 2228
He-3 Production
Cross Section
22-Ti-47
-100.0 To 2271. %
Min Ratio
Max Ratio
TENDL Threshold 11.221 MeV
CENDL3.2 Threshold 15.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
20
0
2
3
4
5
6
7
8
9
2
10^8
27
Incident Energy (eV)
22-Ti-47

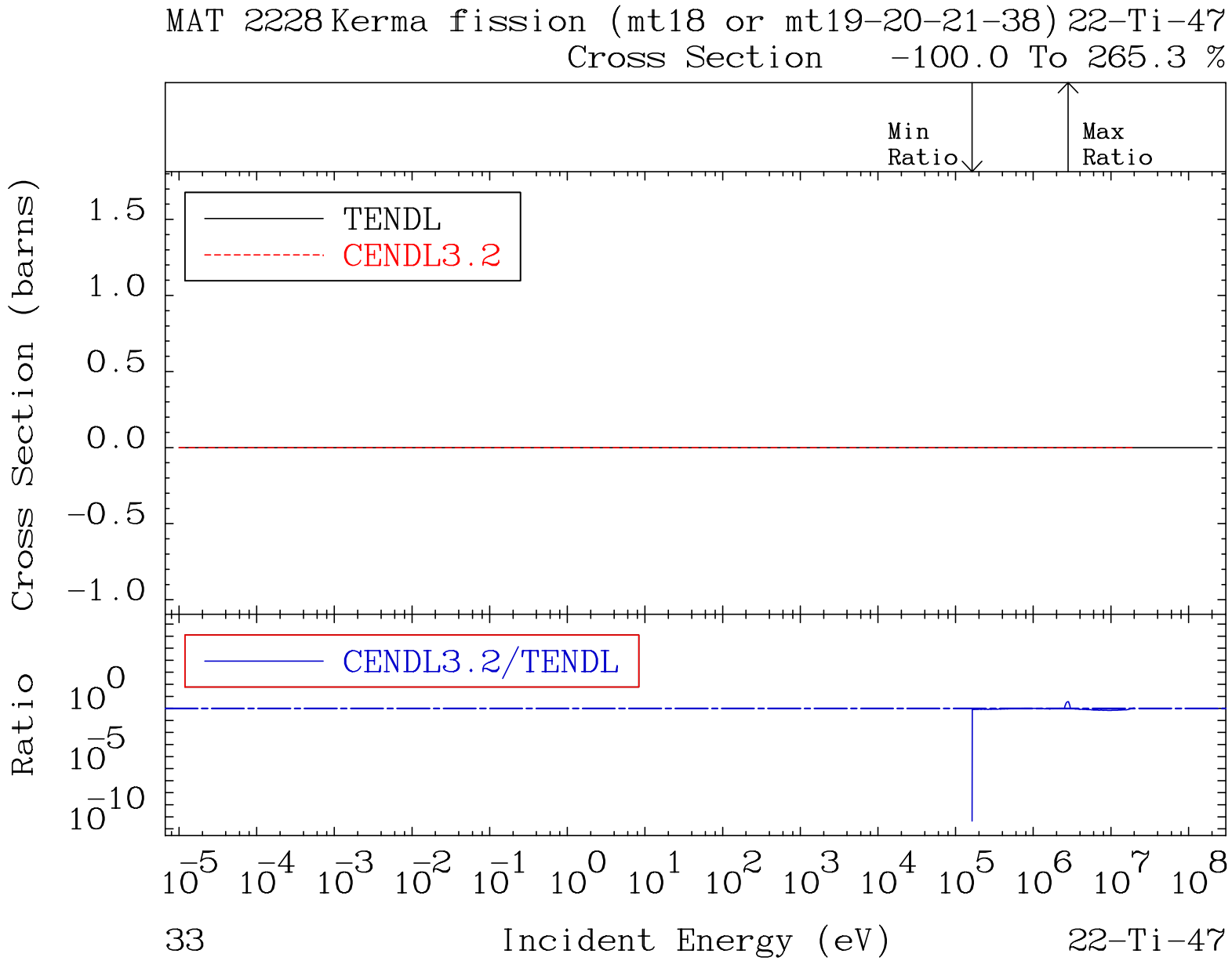

MAT 2228
He-4 Production
Cross Section
22-Ti-47
-100.0 To -4.300%
Min
Ratio
TENDL
CENDL3.2 Threshold 900.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
22-Ti-47

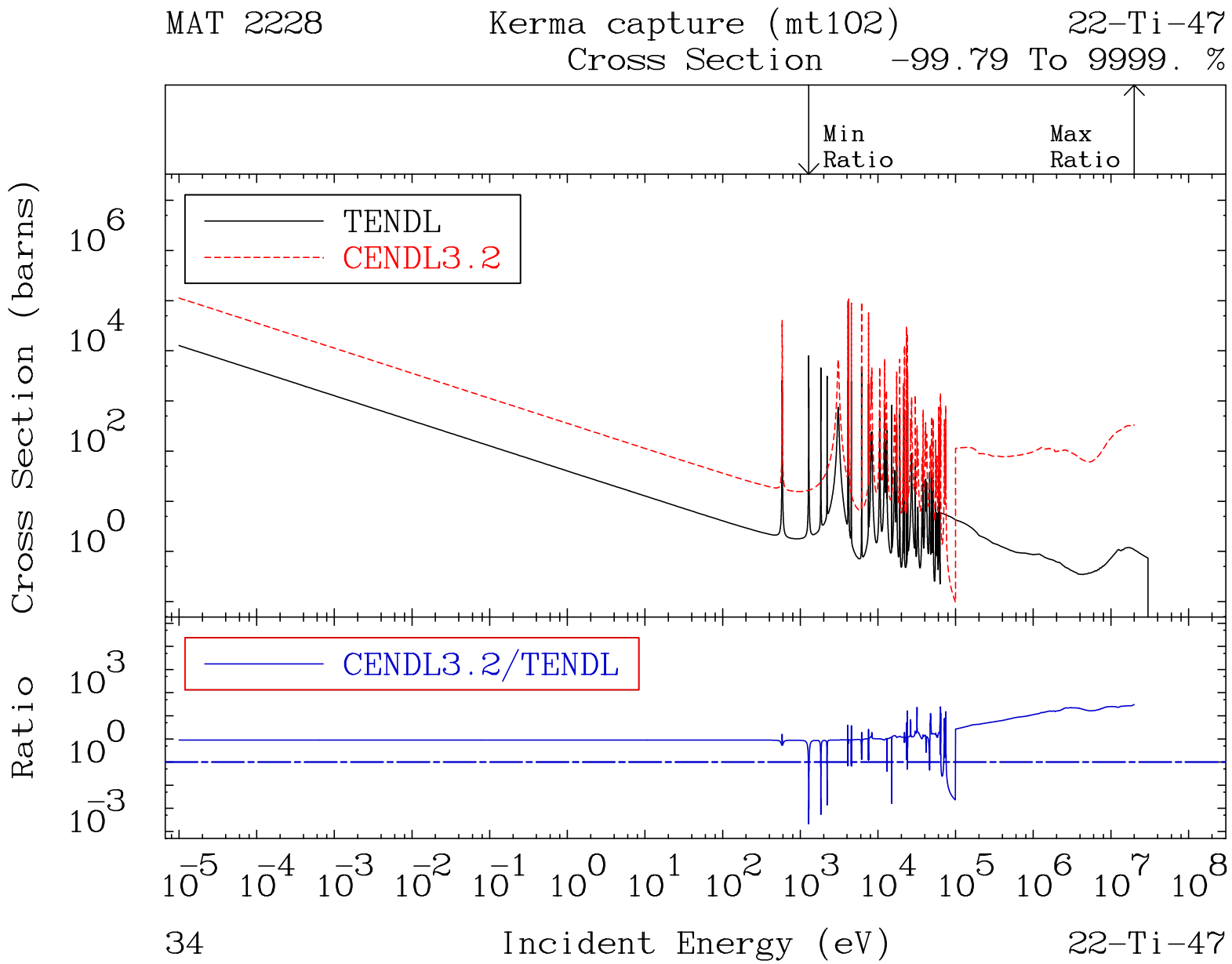

MAT 2228
Kerma total (eV-barns)
22-Ti-47
Cross Section -98.22 To 4550. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
29
22-Ti-47

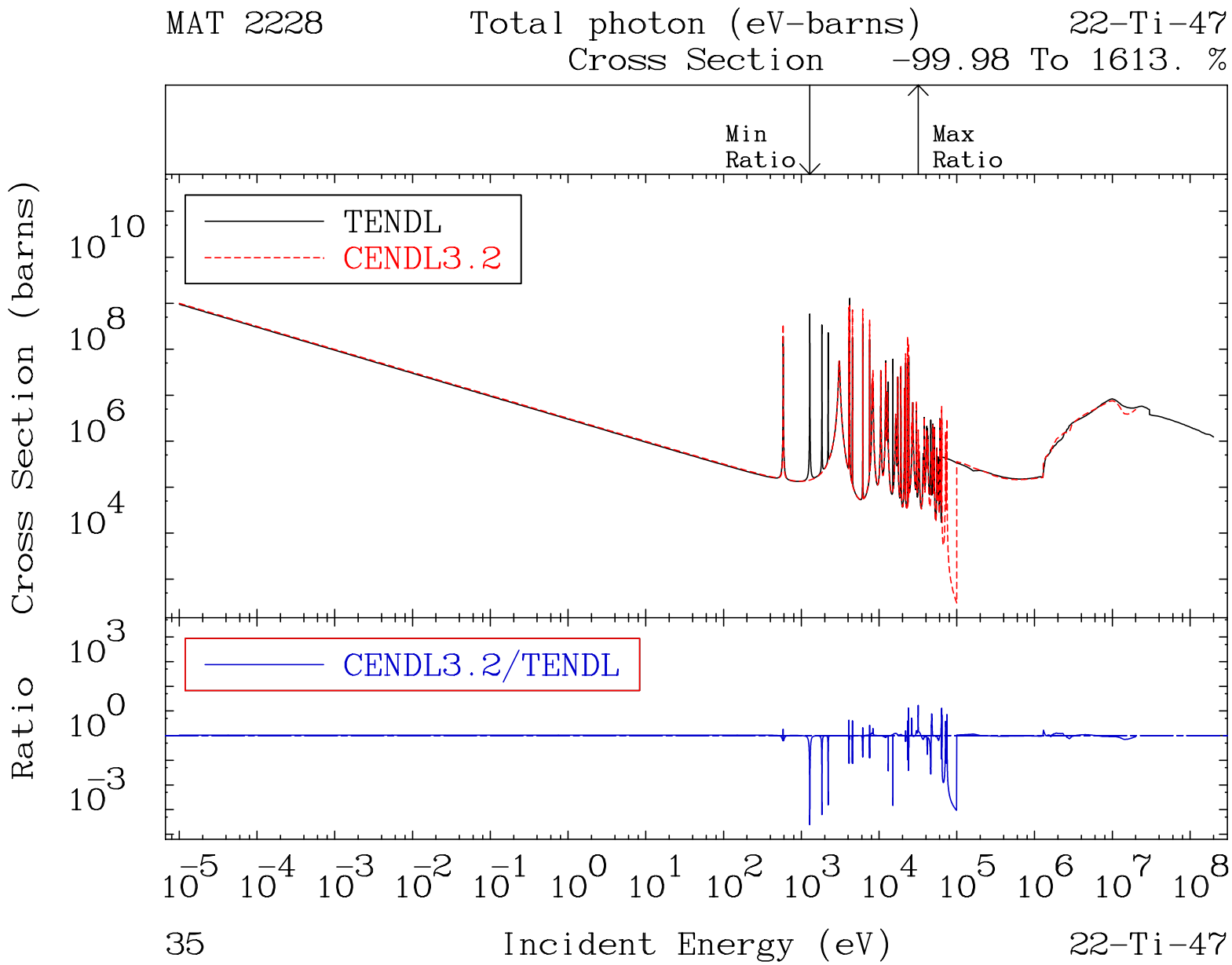

MAT 2228
Kerma elastic
Cross Section
22-Ti-47
-92.55 To 3086. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
22-Ti-47

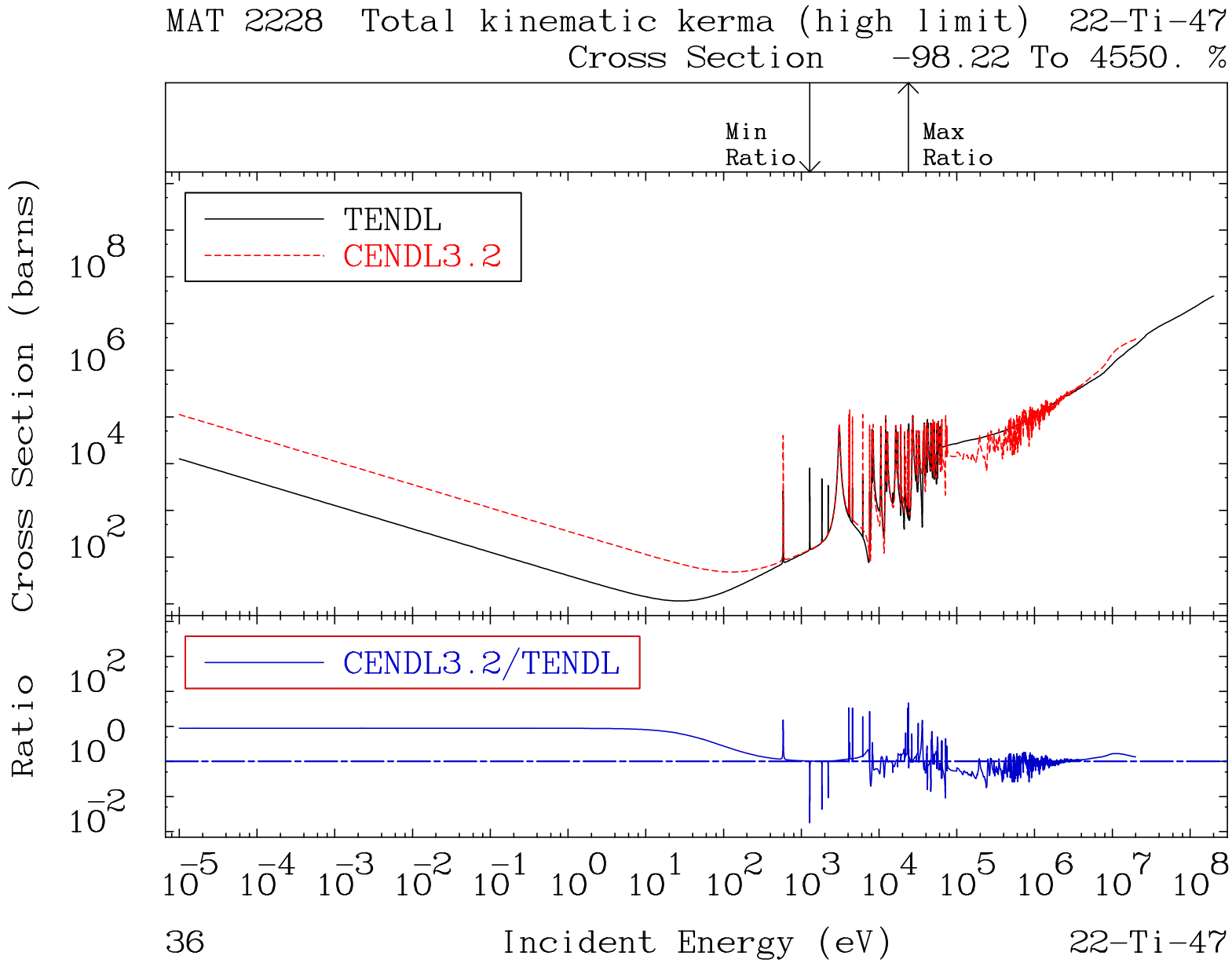

MAT 2228 Kerma non-elastic (all but mt2) 22-Ti-47
Cross Section -99.79 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
22-Ti-47

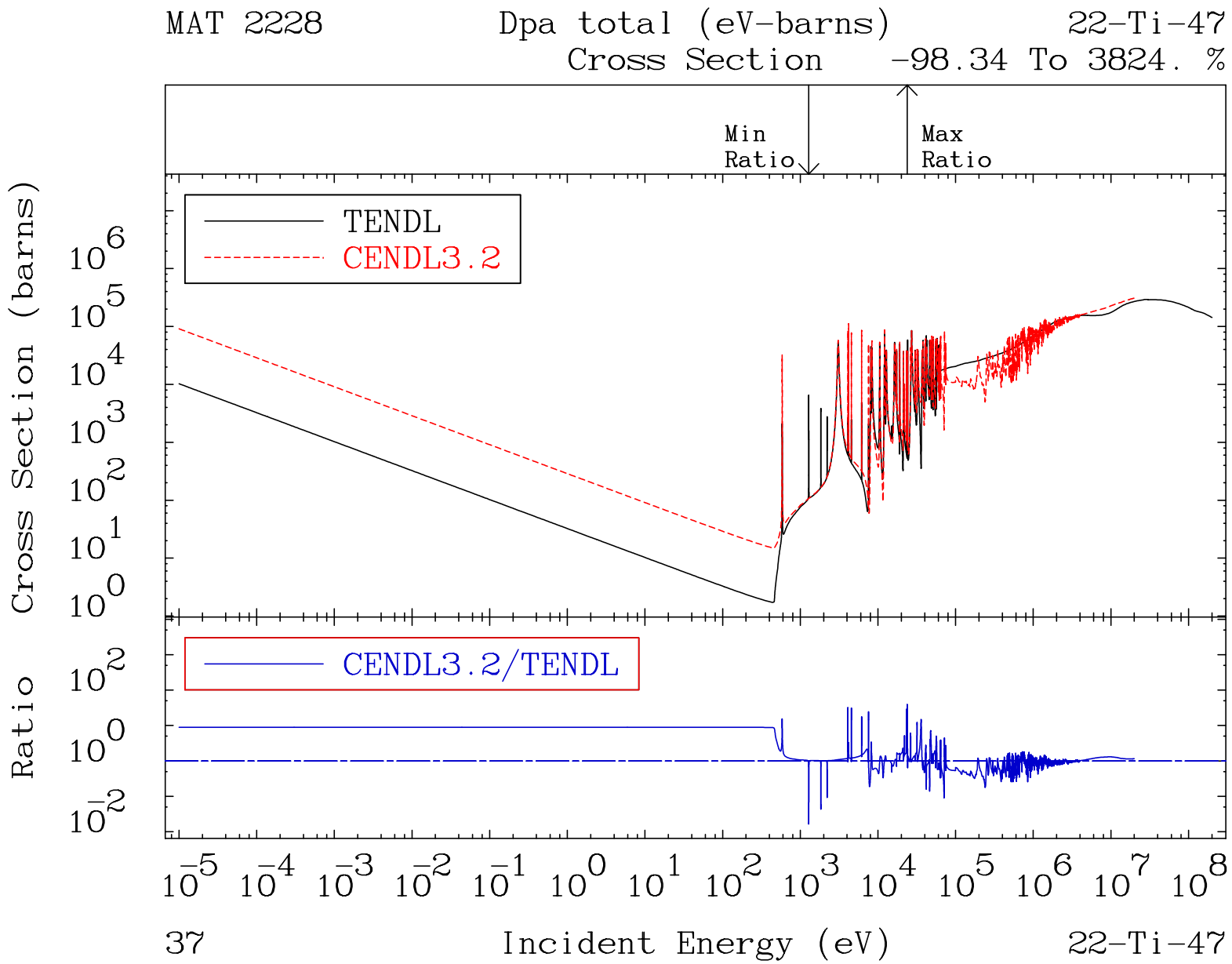

MAT 2228
Kerma inelastic (mt51-91)
22-Ti-47
Cross Section -100.0 To 265.3 %
Min Ratio
Max Ratio
TENDL Threshold 162.80 keV
CENDL3.2 Threshold 162.82 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
22-Ti-47

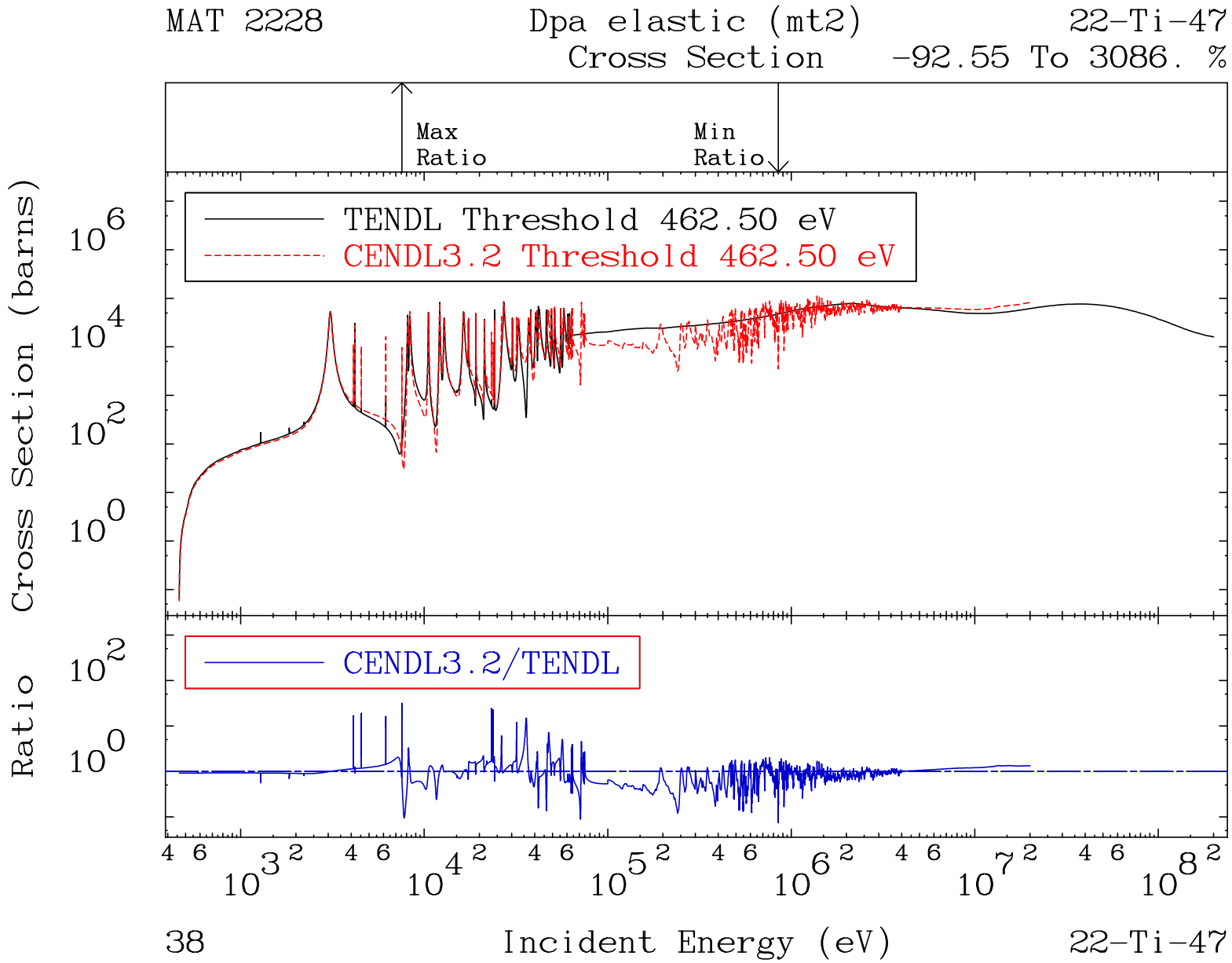

MAT 2228 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-47
Cross Section -100.0 To 265.3 %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-5}
10^{-10}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
33
Incident Energy (eV)
22-Ti-47

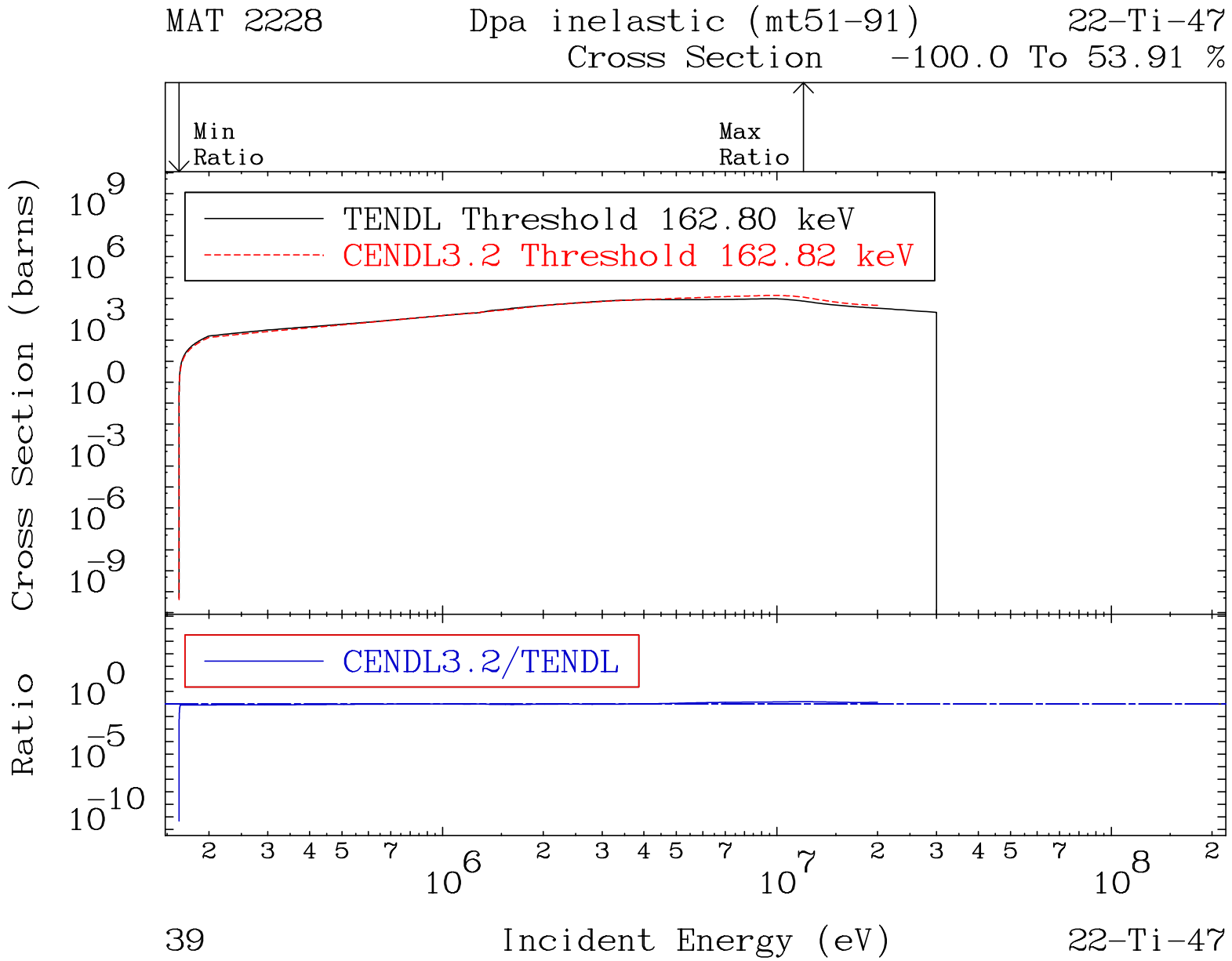

MAT 2228
Kerma capture (mt102)
22-Ti-47
Cross Section -99.79 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
22-Ti-47

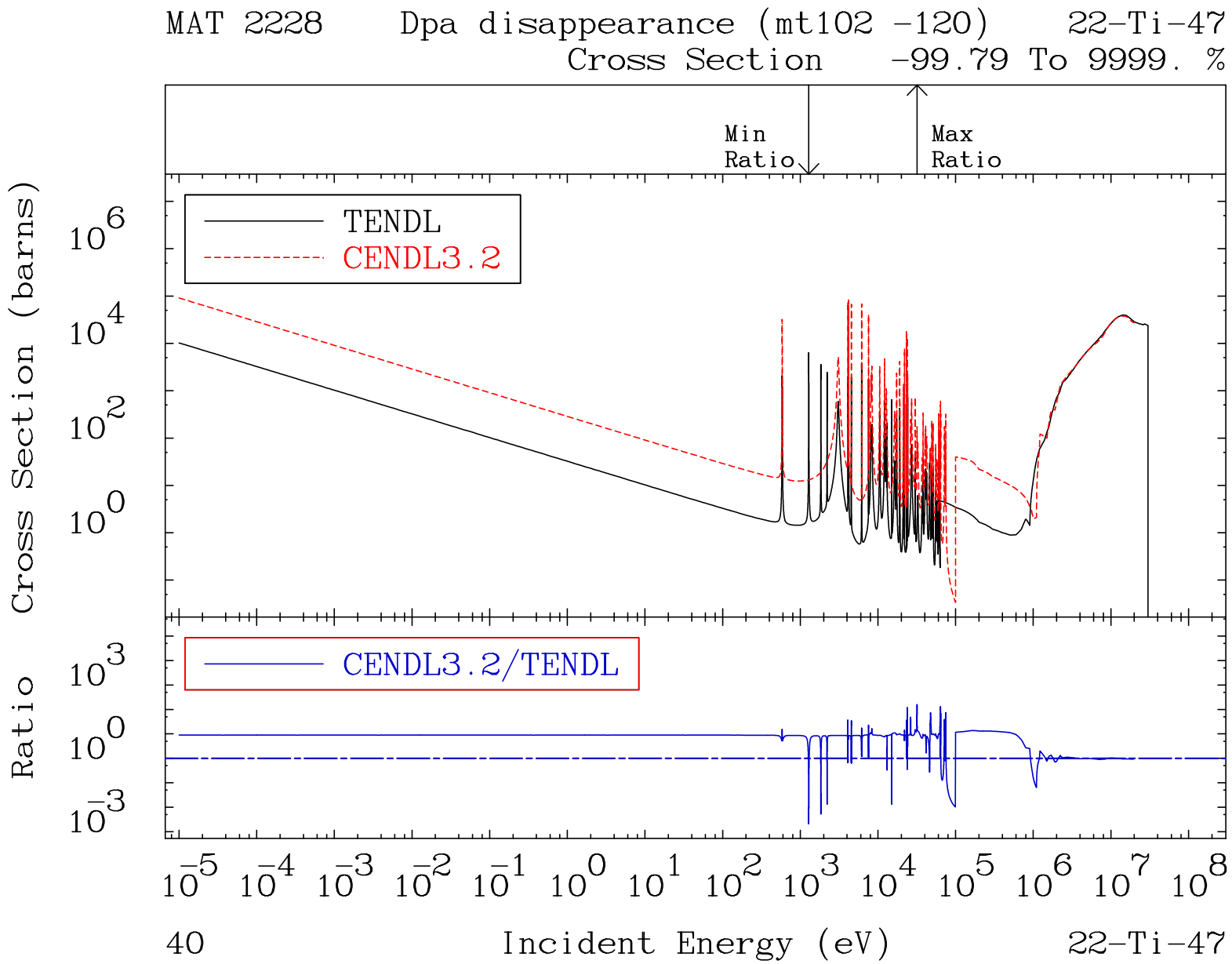

MAT 2228
Total photon (eV-barns)
22-Ti-47
Cross Section -99.98 To 1613. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
22-Ti-47

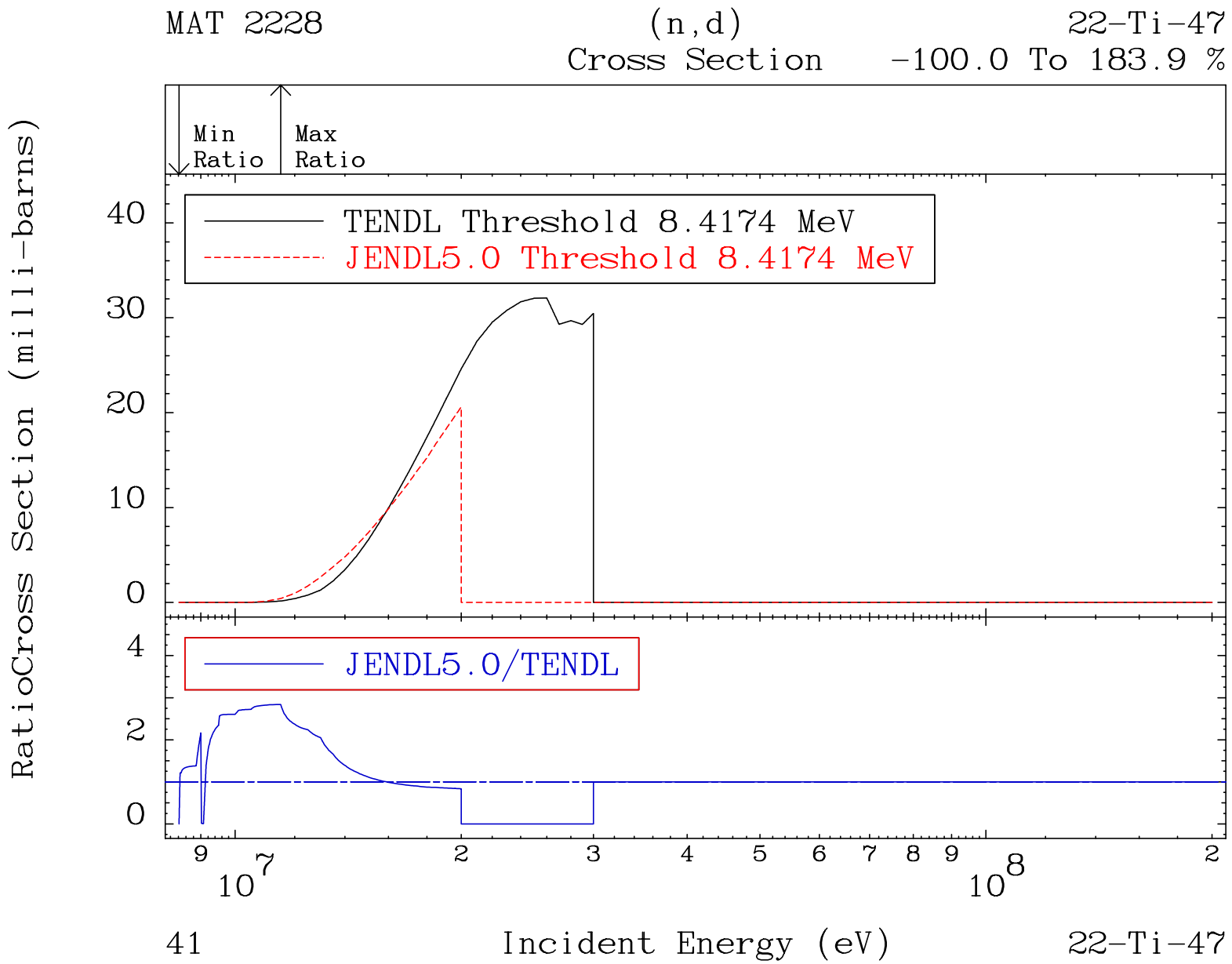

MAT 2228 Total kinematic kerma (high limit) 22-Ti-47
Cross Section -98.22 To 4550. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
36
22-Ti-47

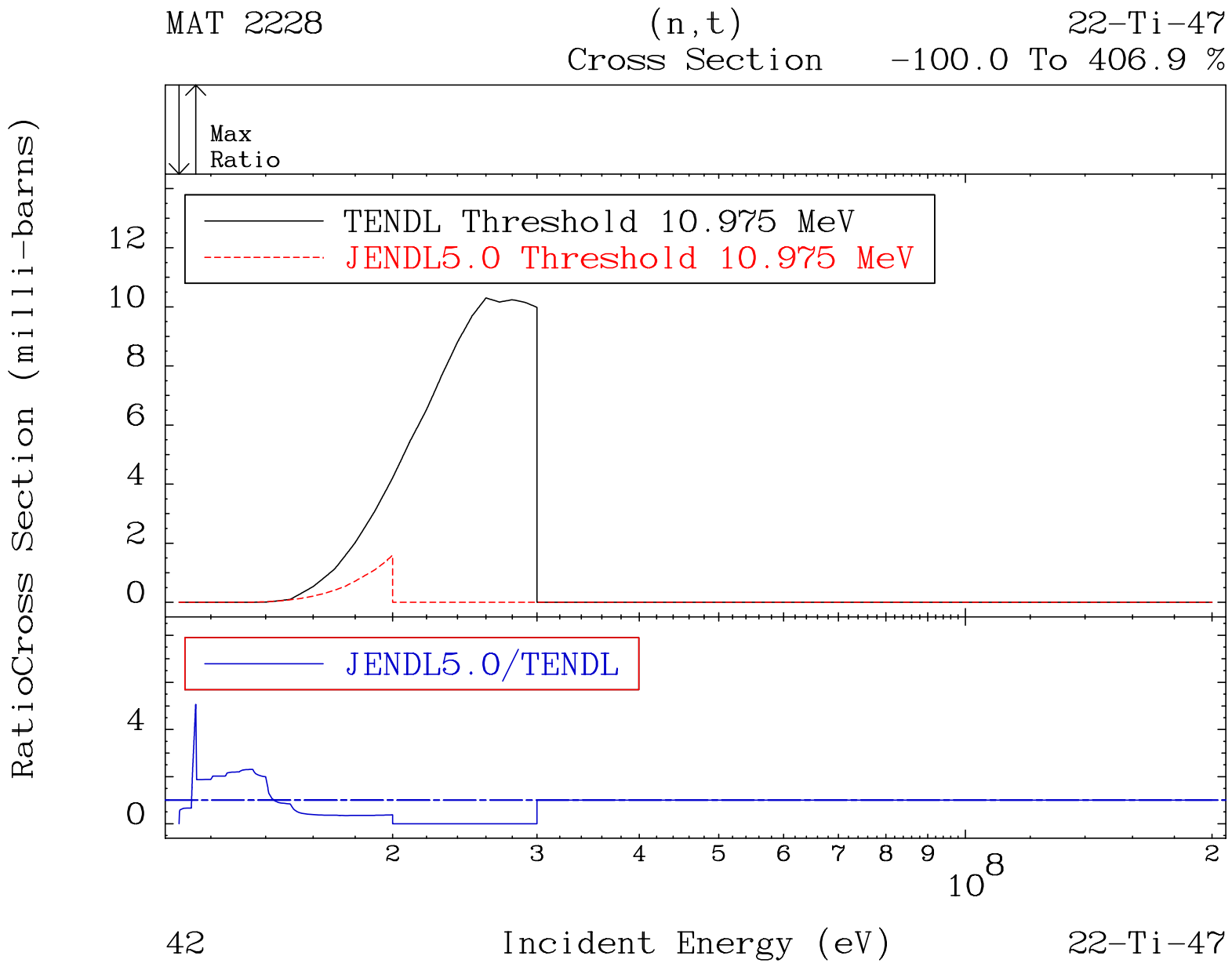

MAT 2228
Dpa total (eV-barns)
22-Ti-47
Cross Section
-98.34 To 3824. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
22-Ti-47

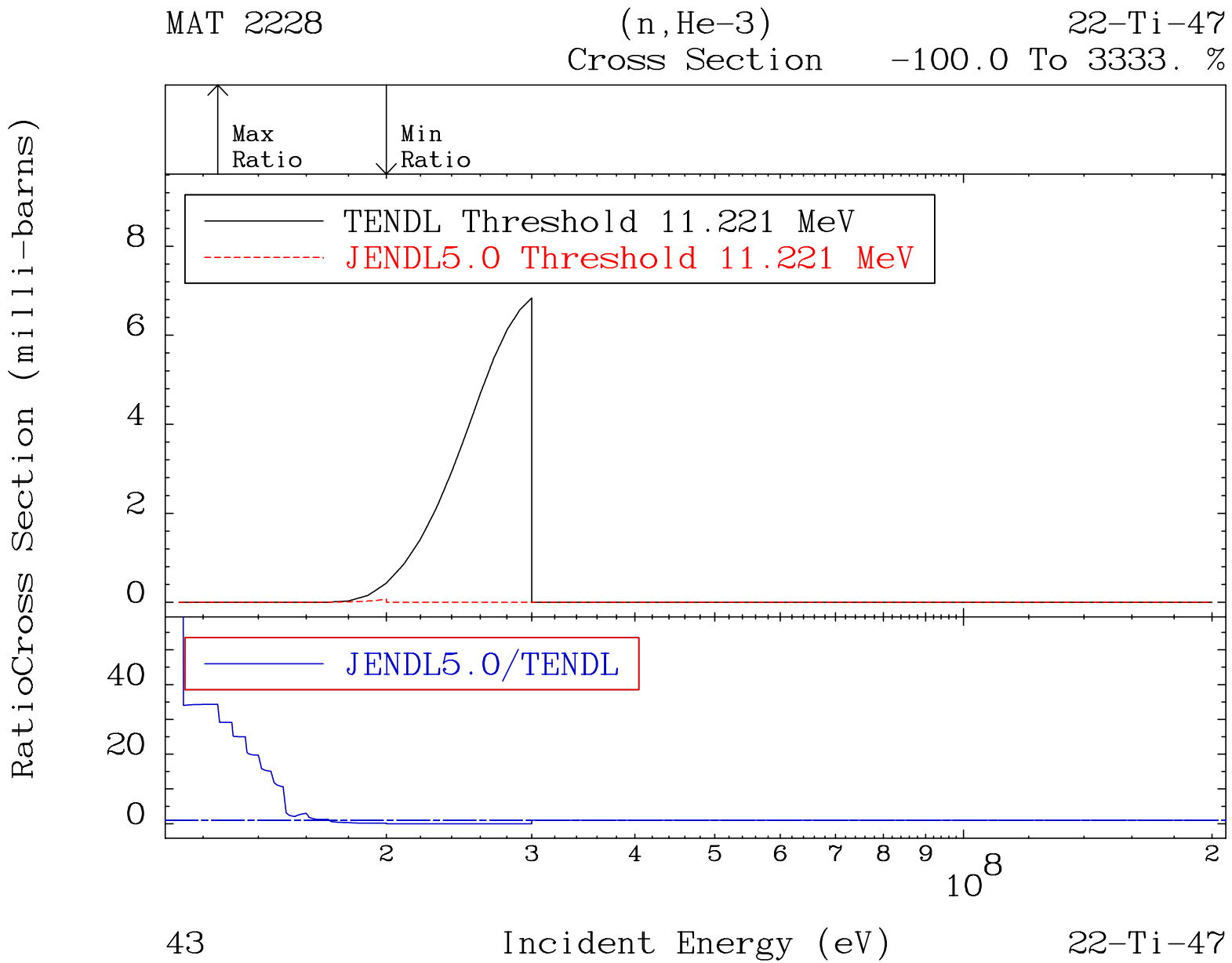

MAT 2228
Dpa elastic (mt2)
Cross Section
22-Ti-47
-92.55 To 3086. %
Max Ratio
Min Ratio
TENDL Threshold 462.50 eV
CENDL3.2 Threshold 462.50 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
22-Ti-47

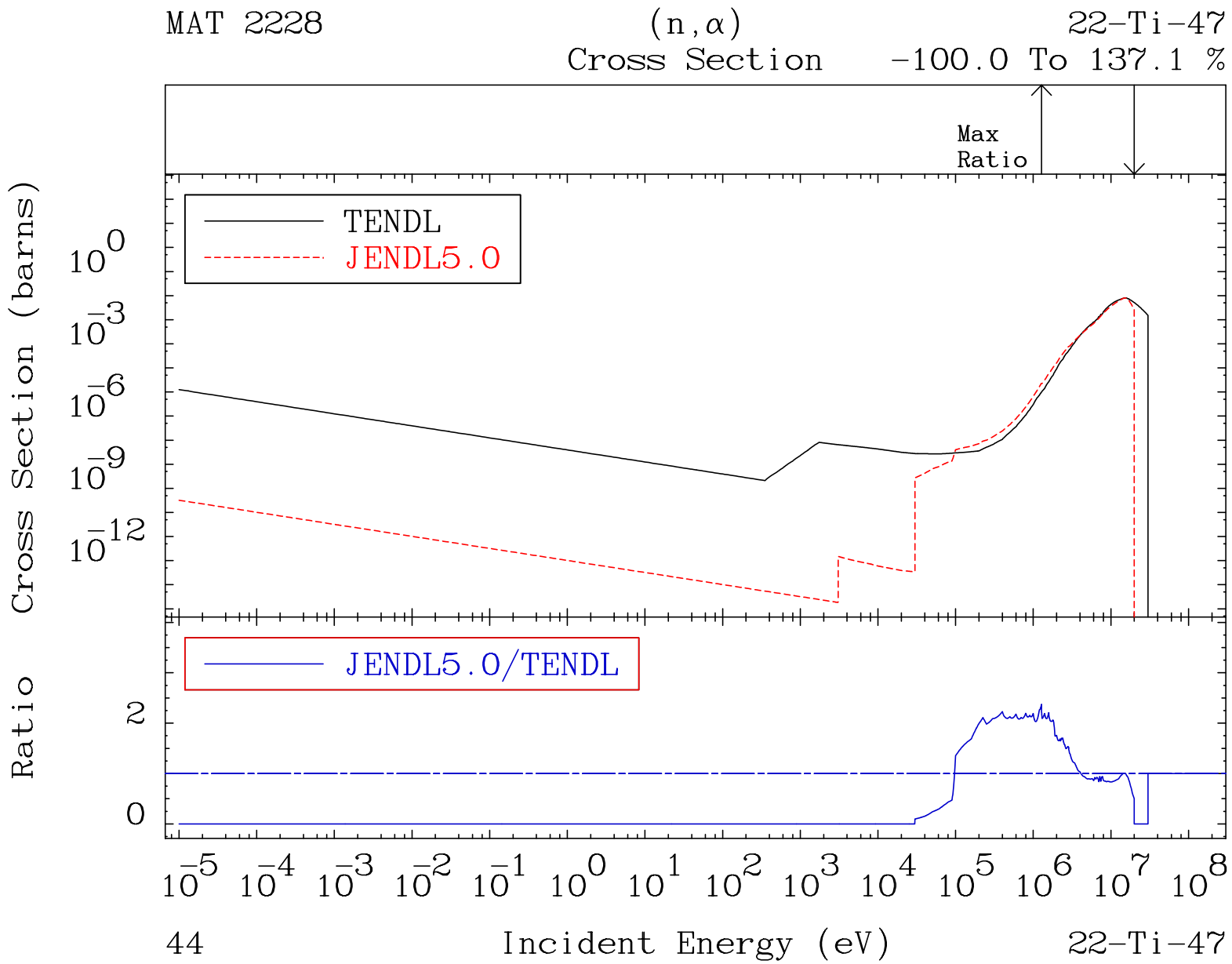

MAT 2228
Dpa inelastic (mt51-91)
22-Ti-47
Cross Section
-100.0 To 53.91 %
Min Ratio
Max Ratio
TENDL Threshold 162.80 keV
CENDL3.2 Threshold 162.82 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
22-Ti-47

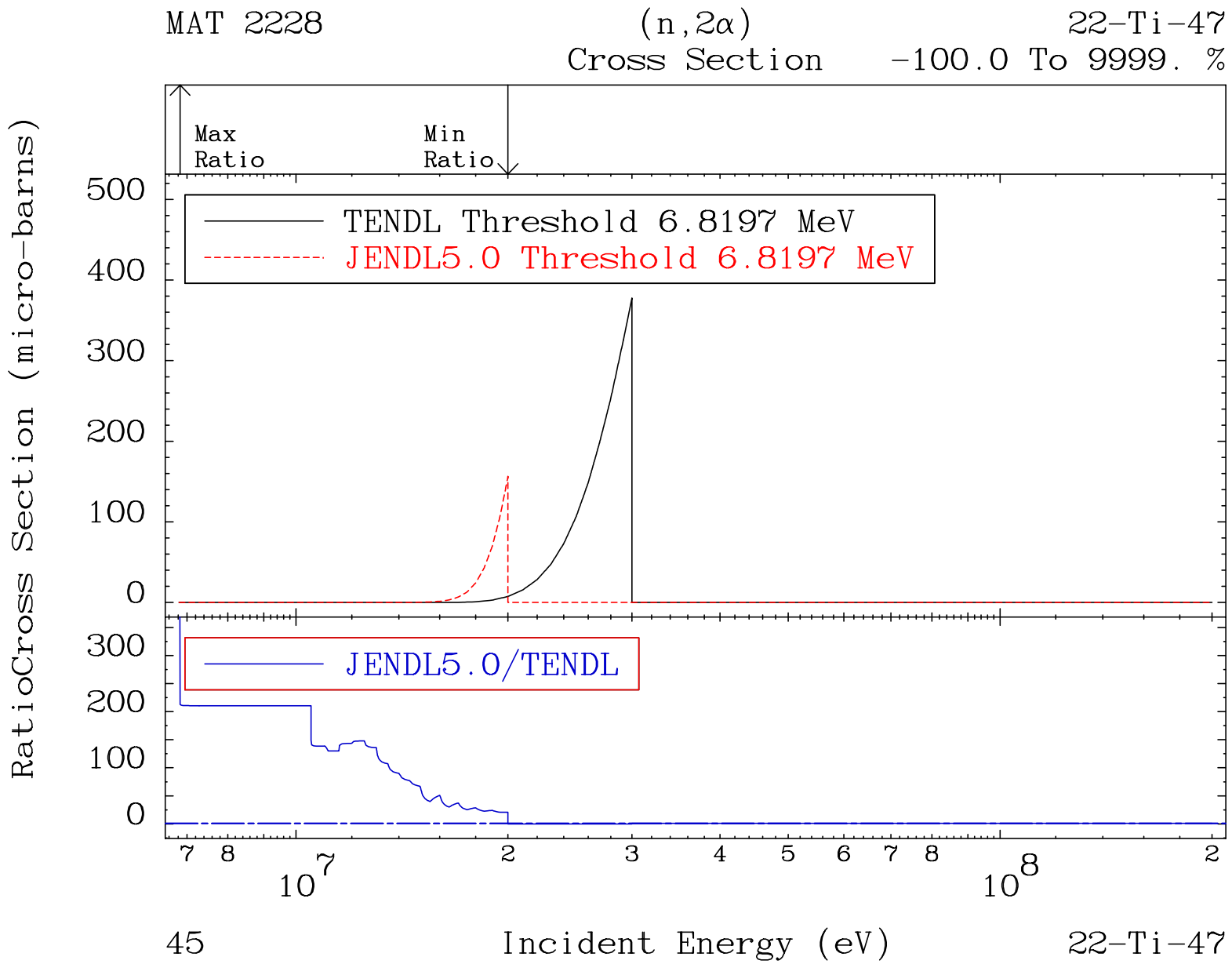

MAT 2228 Dpa disappearance (mt102 -120) 22-Ti-47
Cross Section -99.79 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
22-Ti-47

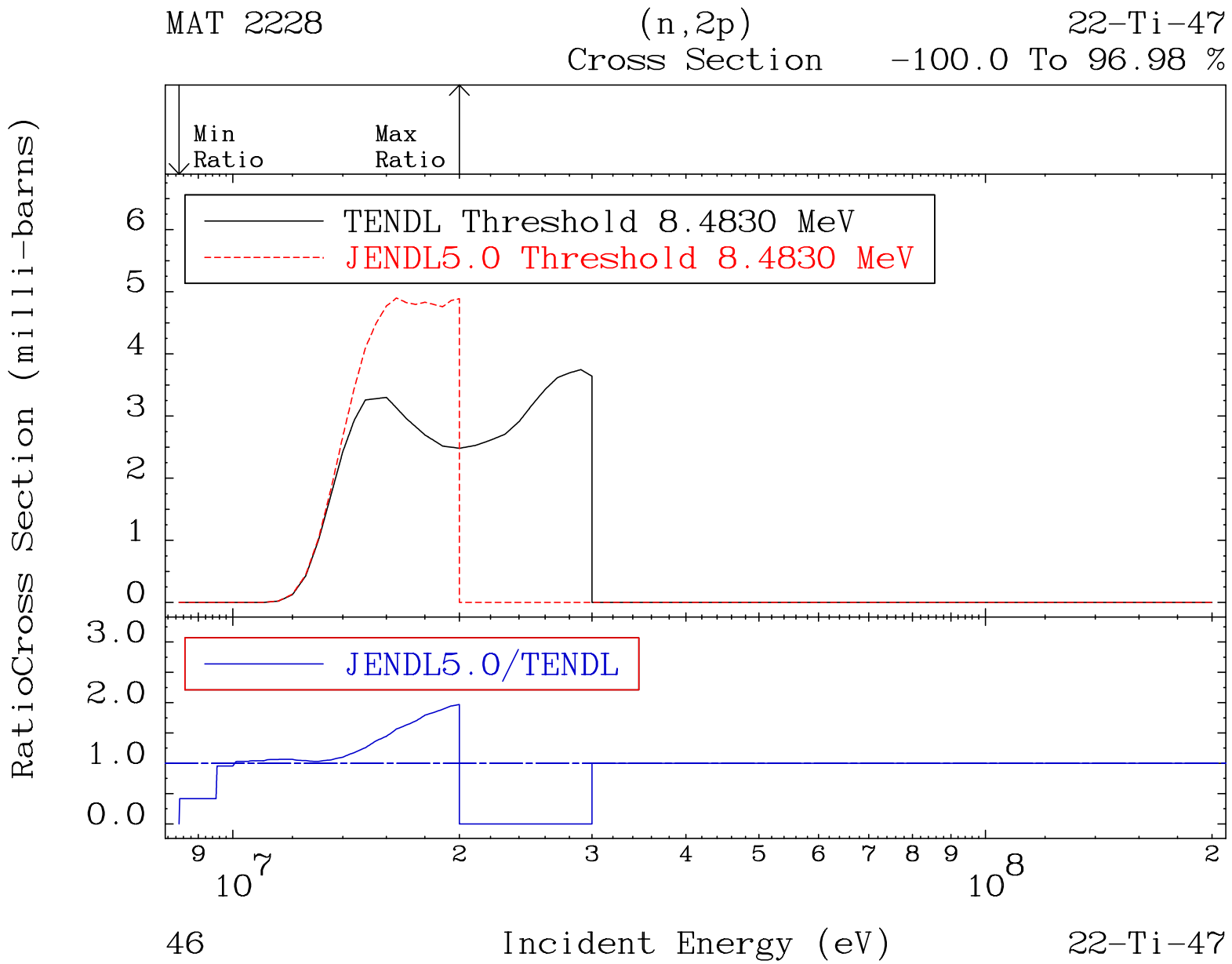

MAT 2228
(n,d)
22-Ti-47
Cross Section
-100.0 To 183.9 %
Min Ratio
Max Ratio
TENDL Threshold 8.4174 MeV
JENDL5.0 Threshold 8.4174 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
22-Ti-47

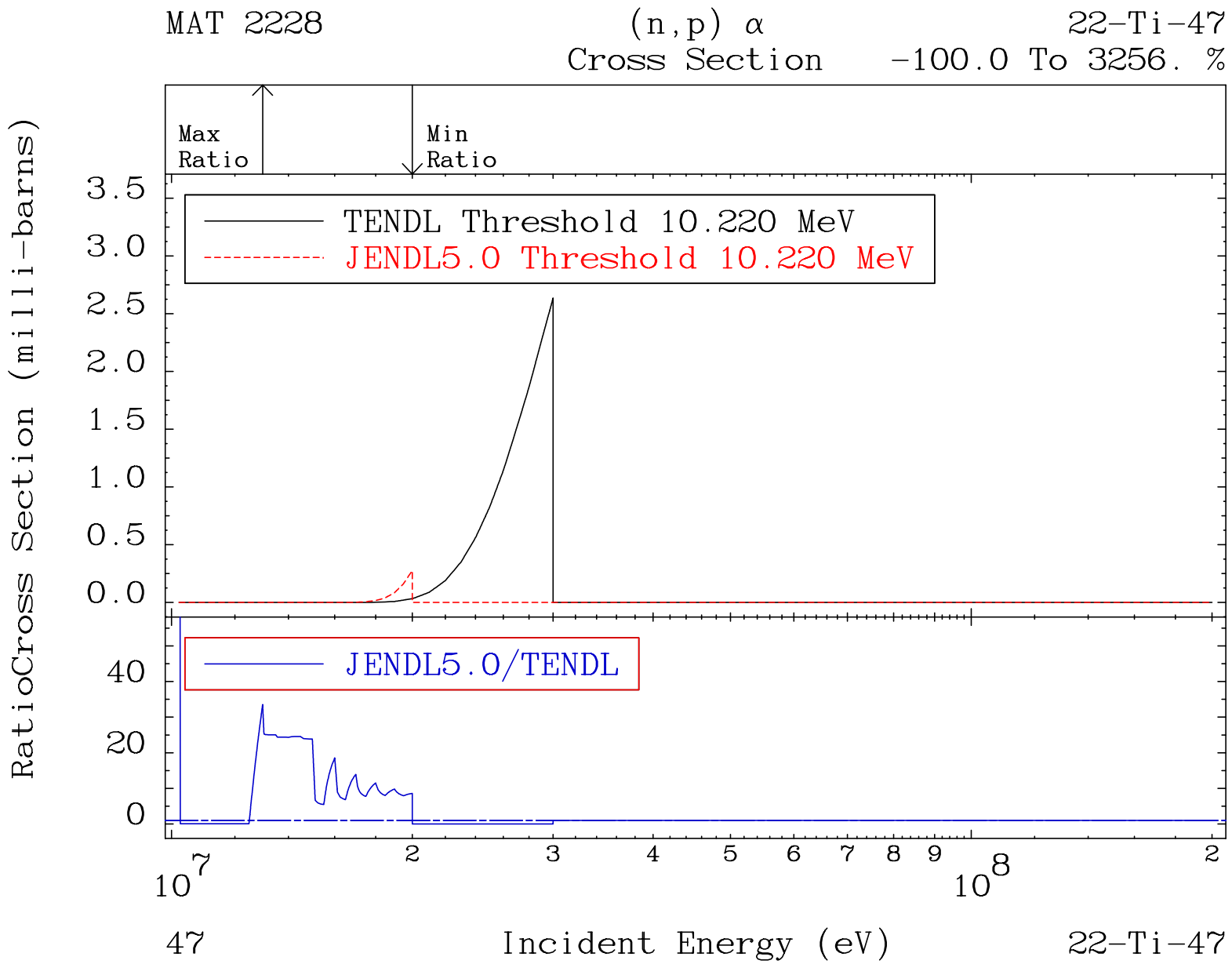

MAT 2228
(n,t)
22-Ti-47
Cross Section
-100.0 To 406.9 %
Max
Ratio
TENDL Threshold 10.975 MeV
JENDL5.0 Threshold 10.975 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
4
0
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
22-Ti-47

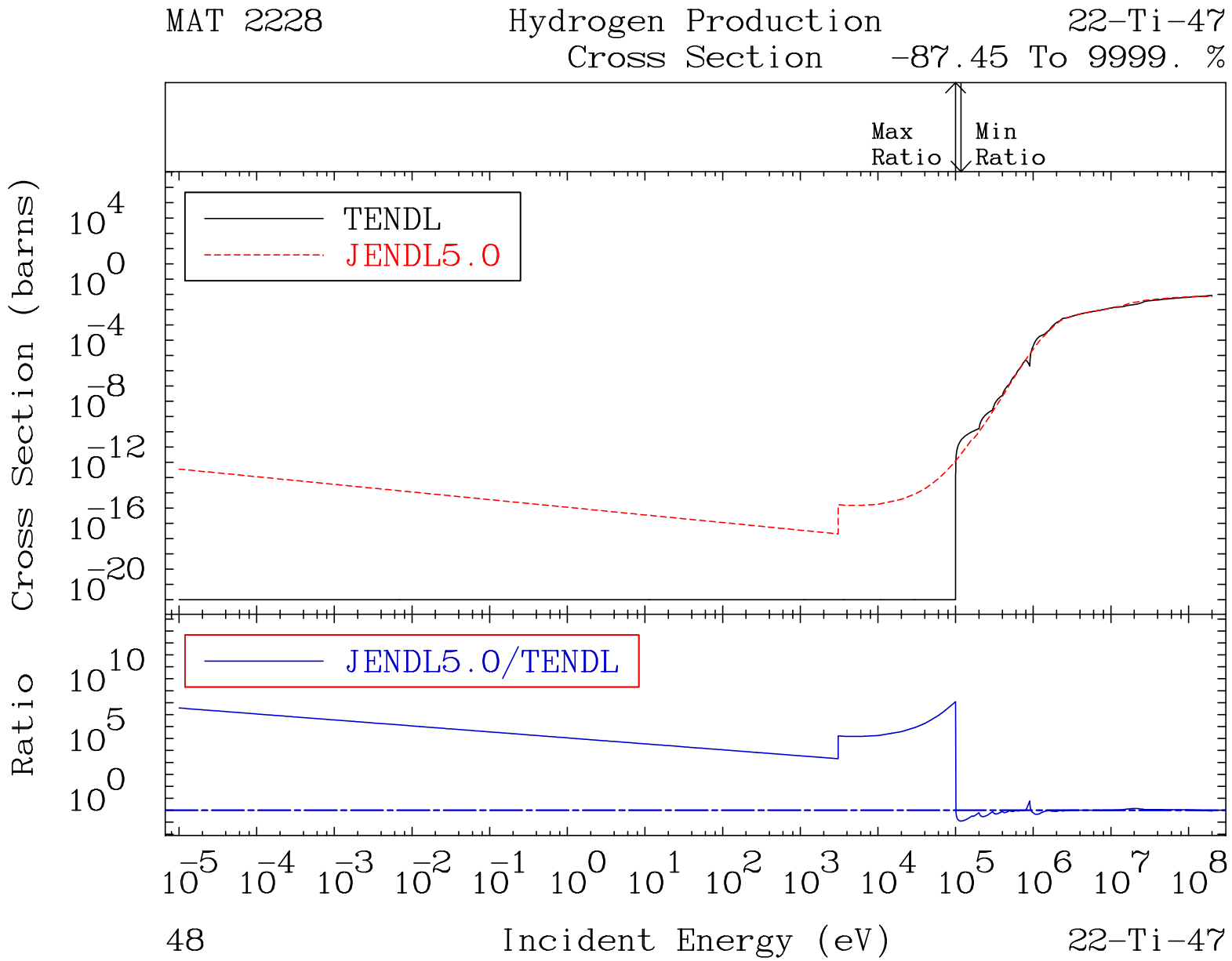

MAT 2228
(n,He-3)
Cross Section
22-Ti-47
-100.0 To 3333. %
Max Ratio
Min Ratio
TENDL Threshold 11.221 MeV
JENDL5.0 Threshold 11.221 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
43
Incident Energy (eV)
22-Ti-47

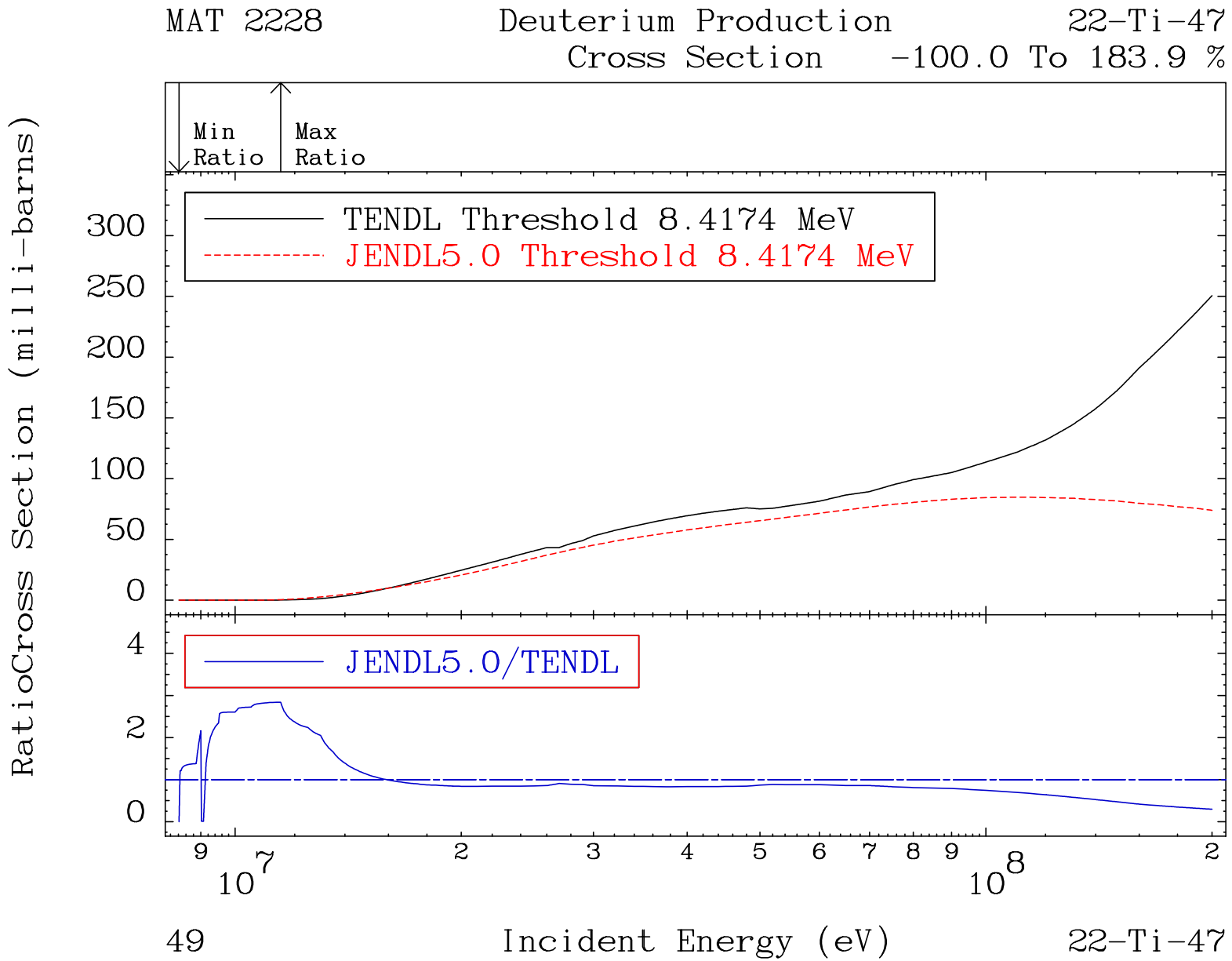

MAT 2228
(n,α)
22-Ti-47
Cross Section
-100.0 To 137.1 %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
22-Ti-47

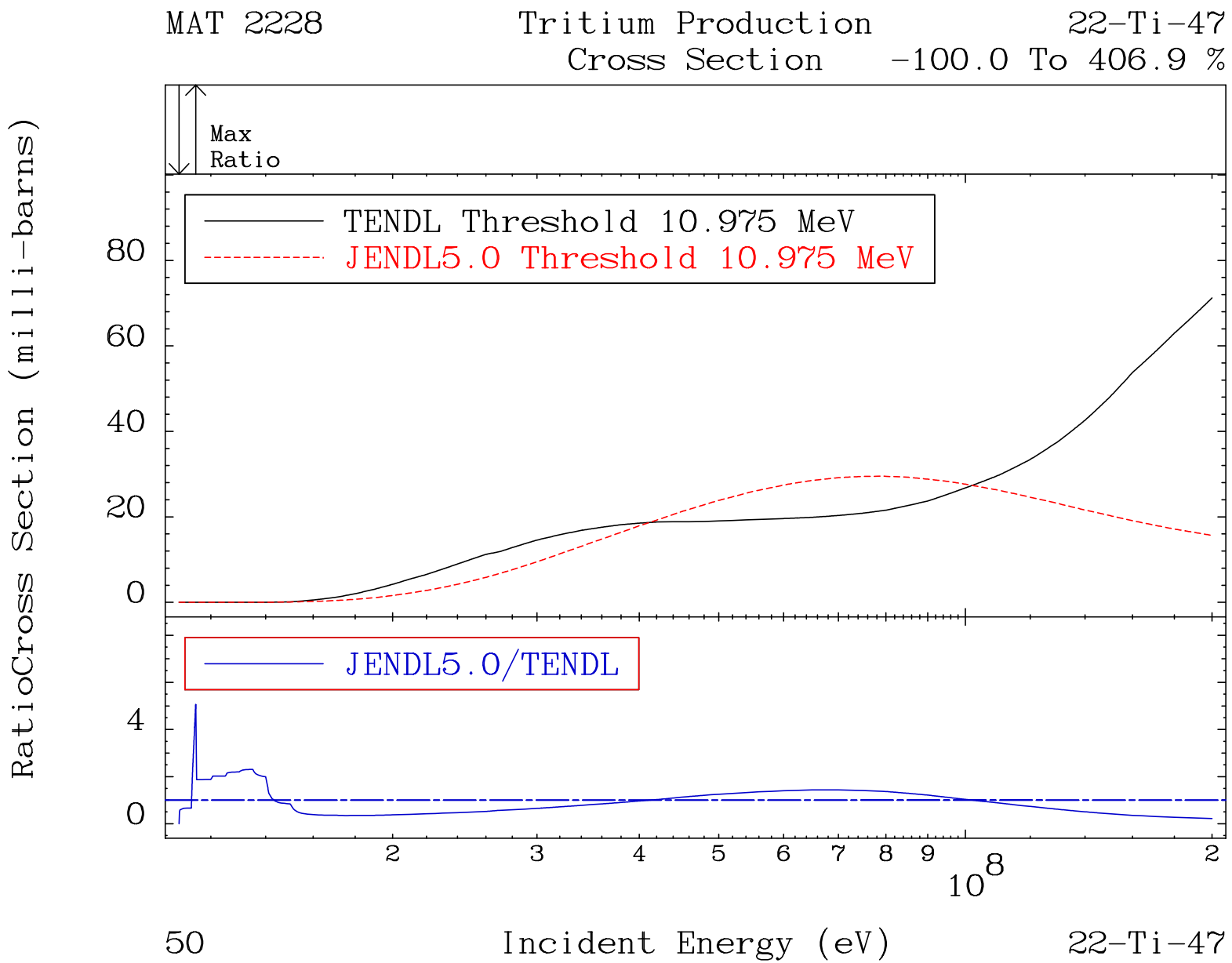

MAT 2228
(n,2α)
22-Ti-47
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8197 MeV
JENDL5.0 Threshold 6.8197 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
500
400
300
200
100
0
300
200
100
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
22-Ti-47

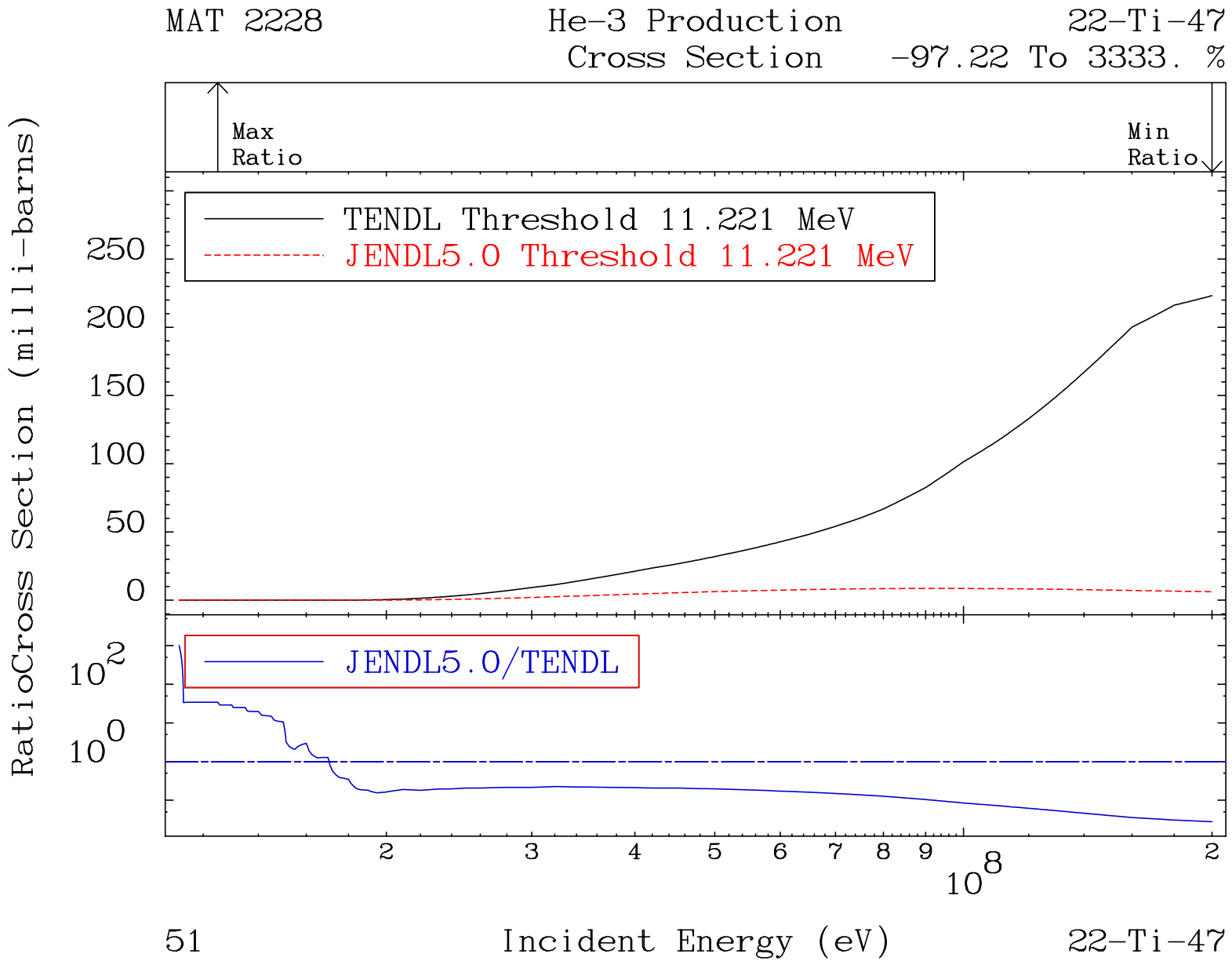

MAT 2228
(n,2p)
22-Ti-47
Cross Section
-100.0 To 96.98 %
Min Ratio
Max Ratio
TENDL Threshold 8.4830 MeV
JENDL5.0 Threshold 8.4830 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
46
22-Ti-47

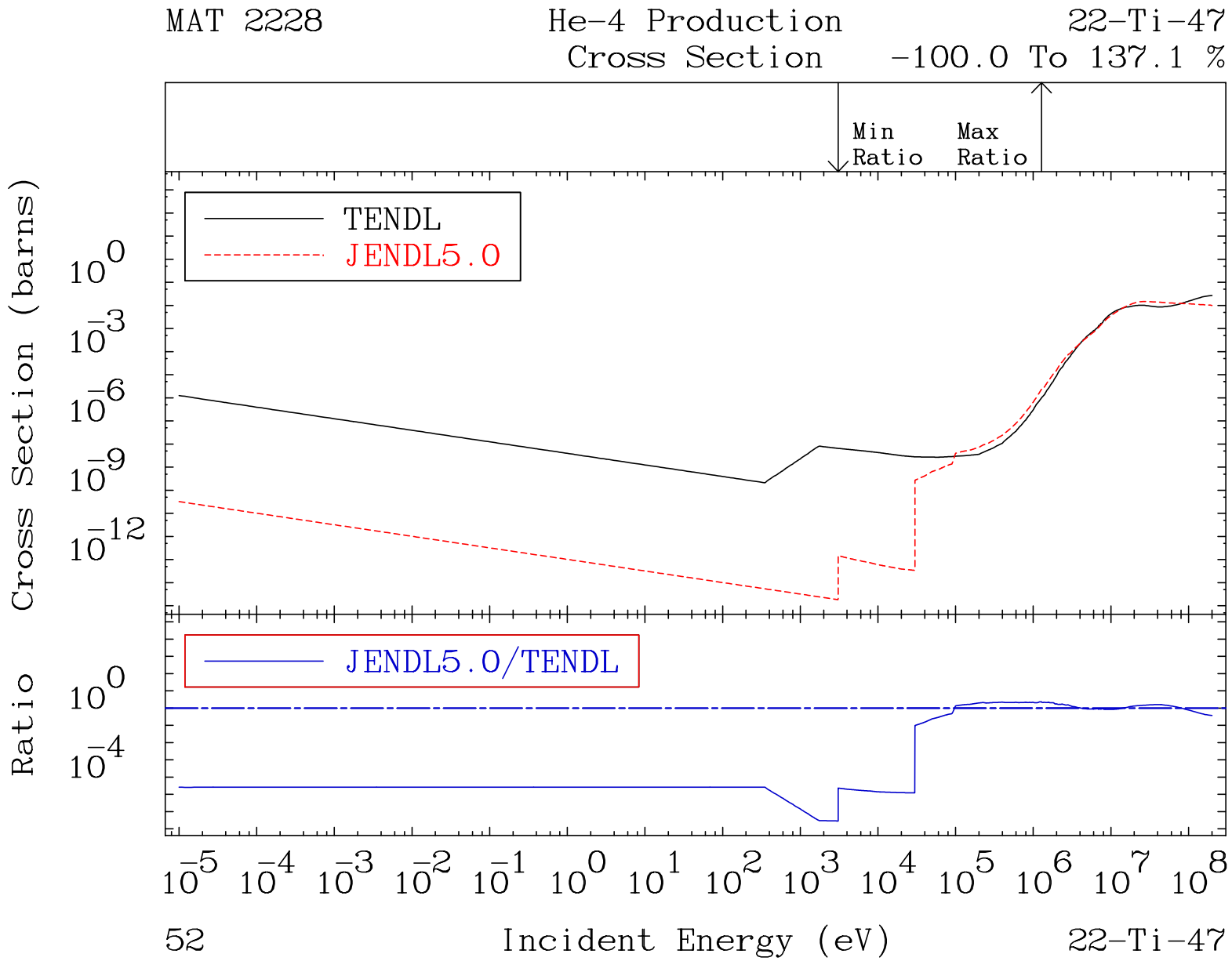

MAT 2228
(n,p) α
22-Ti-47
Cross Section
-100.0 To 3256. %
Max Ratio
Min Ratio
TENDL Threshold 10.220 MeV
JENDL5.0 Threshold 10.220 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
40
20
0
10^7
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
22-Ti-47

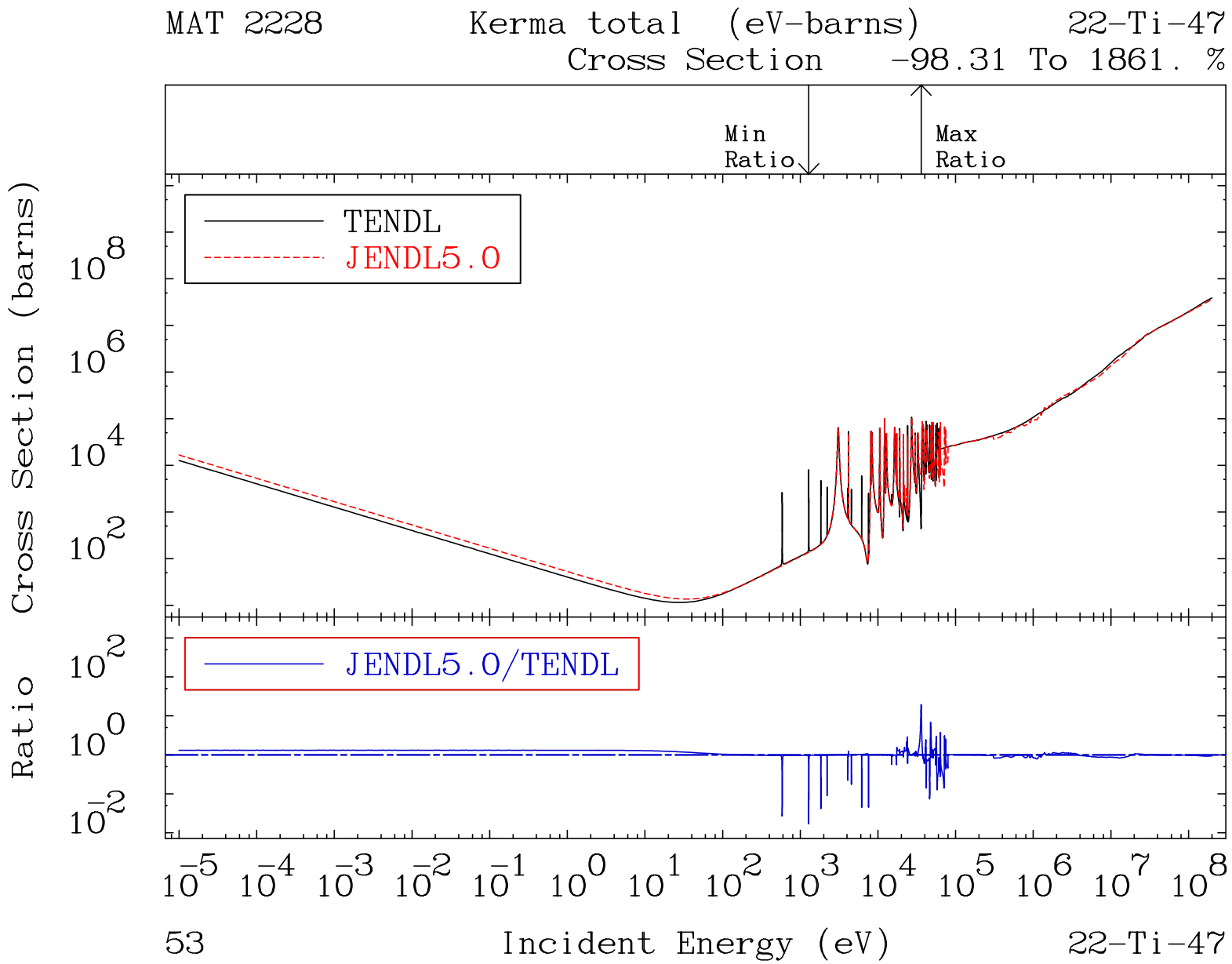

MAT 2228
Hydrogen Production
22-Ti-47
Cross Section
-87.45 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
22-Ti-47

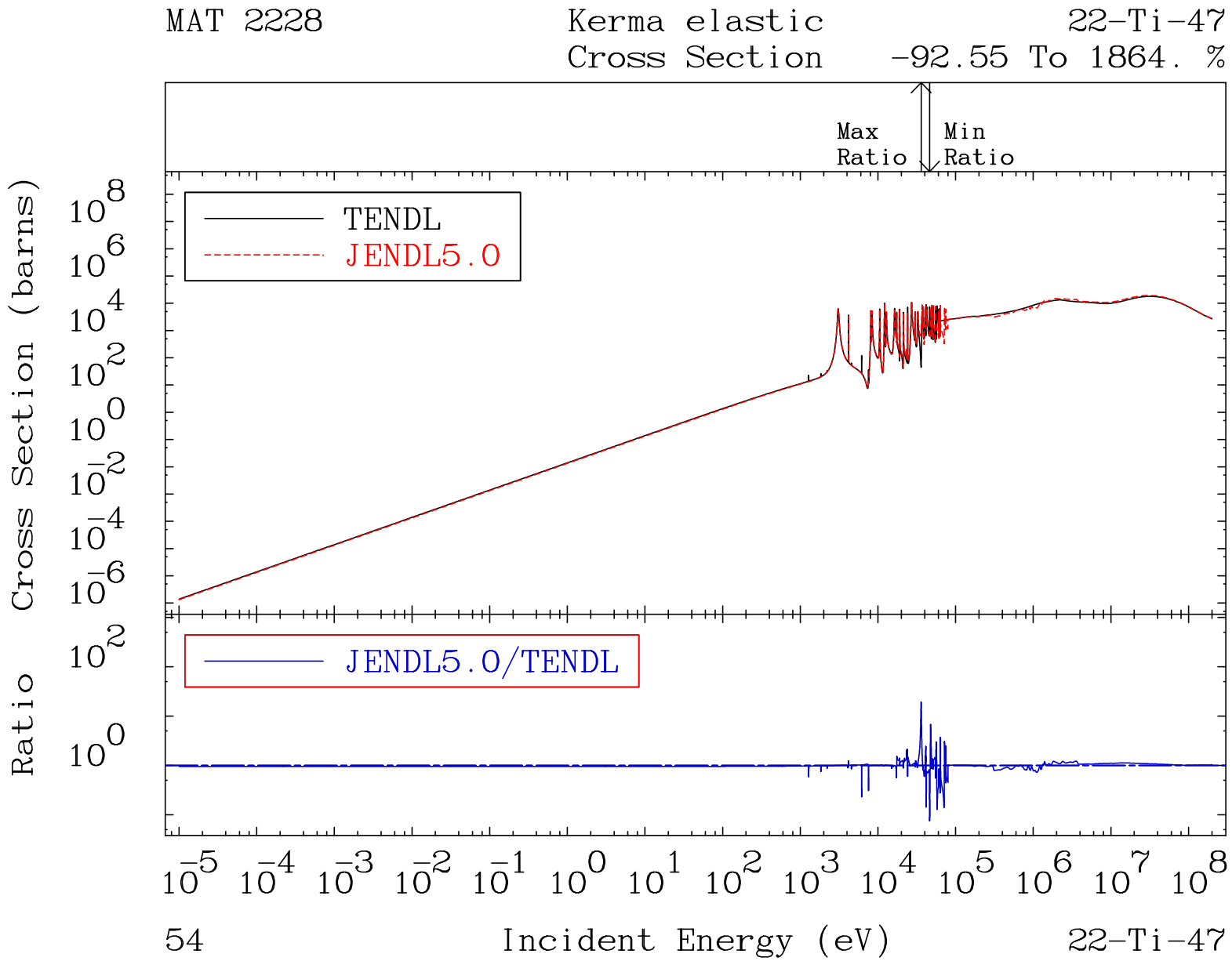

MAT 2228
Deuterium Production
22-Ti-47
Cross Section
-100.0 To 183.9 %
Min Ratio
Max Ratio
TENDL Threshold 8.4174 MeV
JENDL5.0 Threshold 8.4174 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
22-Ti-47

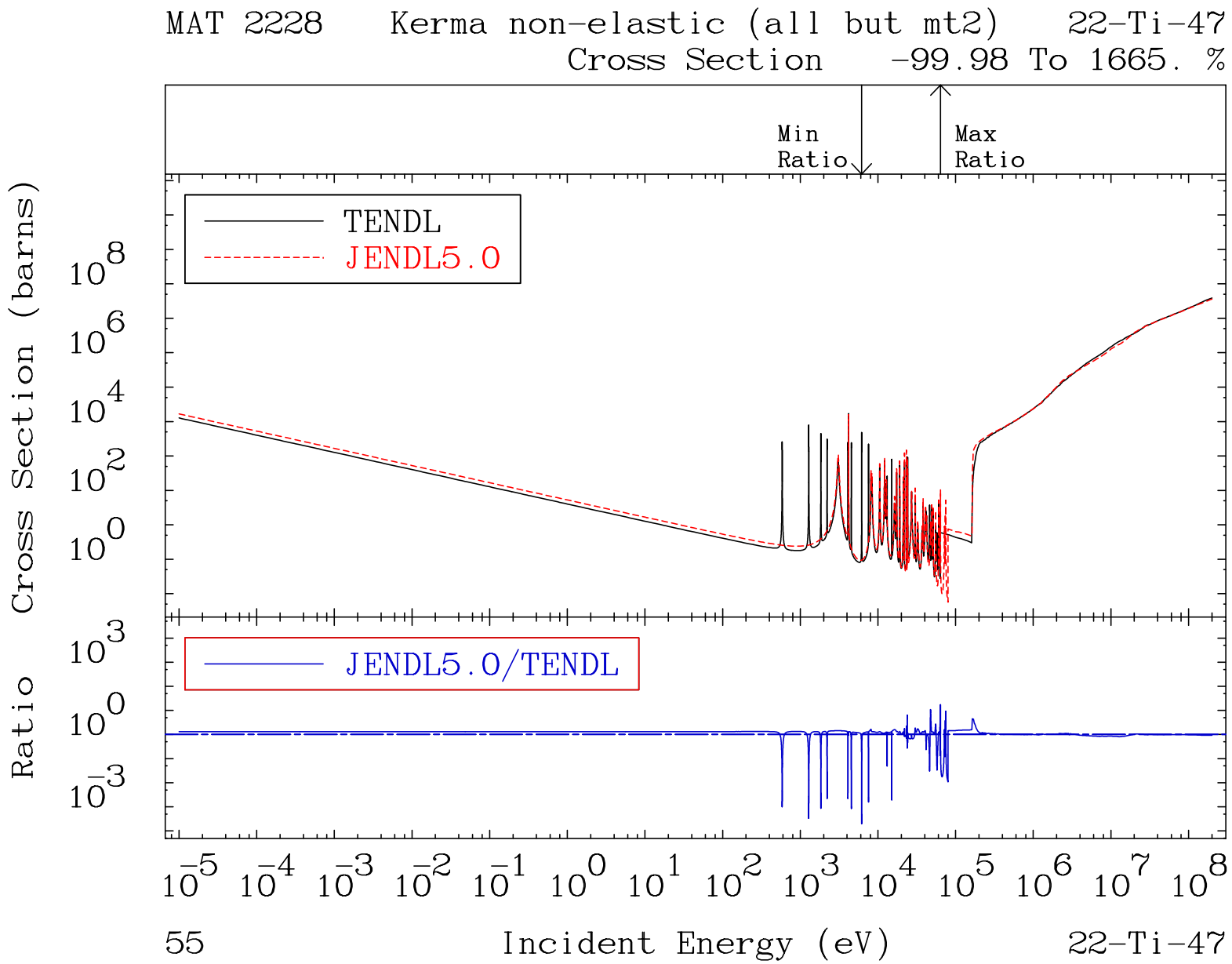

MAT 2228
Tritium Production
22-Ti-47
Cross Section
-100.0 To 406.9 %
Max
Ratio
TENDL Threshold 10.975 MeV
JENDL5.0 Threshold 10.975 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
0
2
3
4
5
6
7
8
9
2
10^8
50
Incident Energy (eV)
22-Ti-47

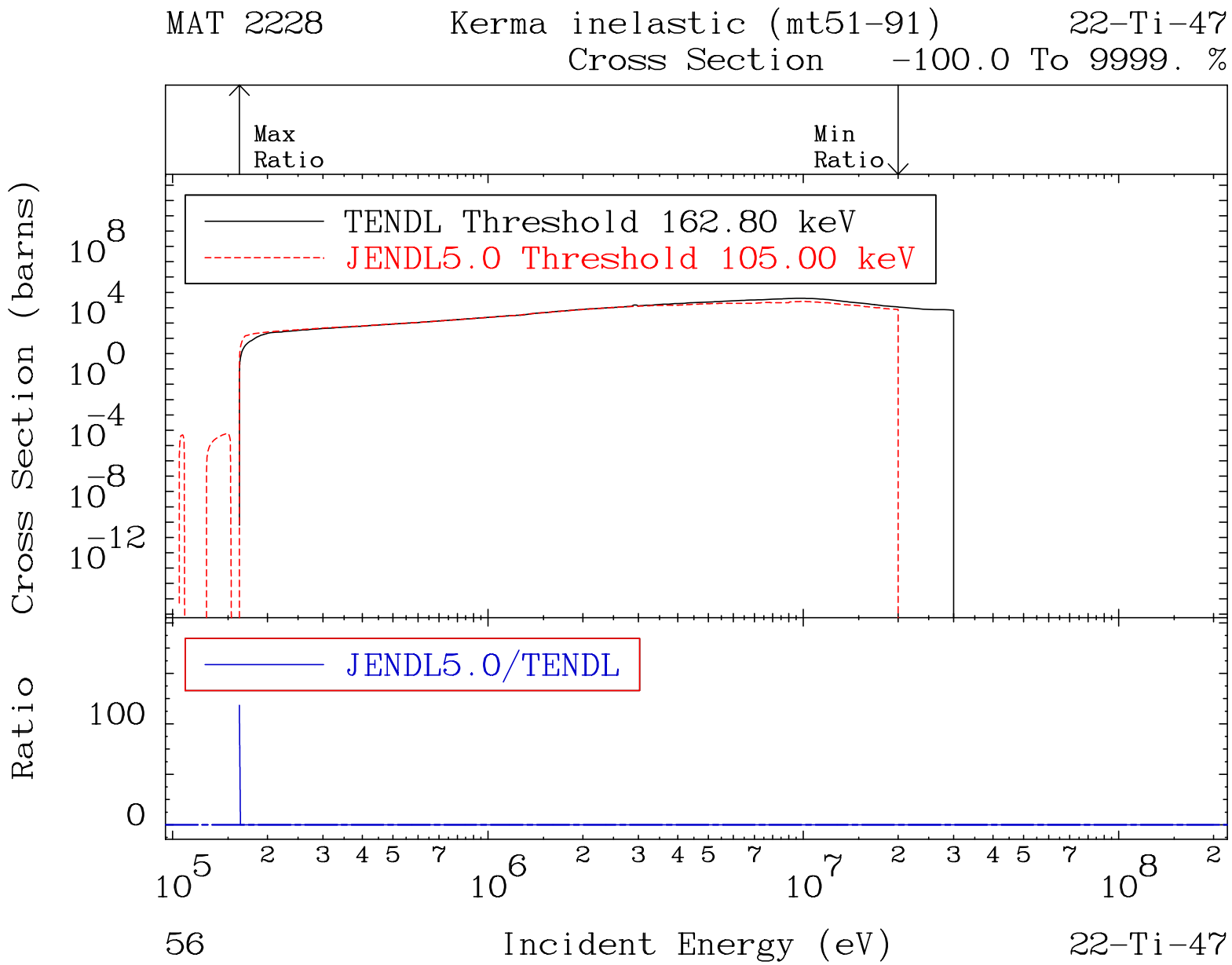

MAT 2228
He-3 Production
Cross Section
22-Ti-47
-97.22 To 3333. %
Max Ratio
Min Ratio
TENDL Threshold 11.221 MeV
JENDL5.0 Threshold 11.221 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
22-Ti-47

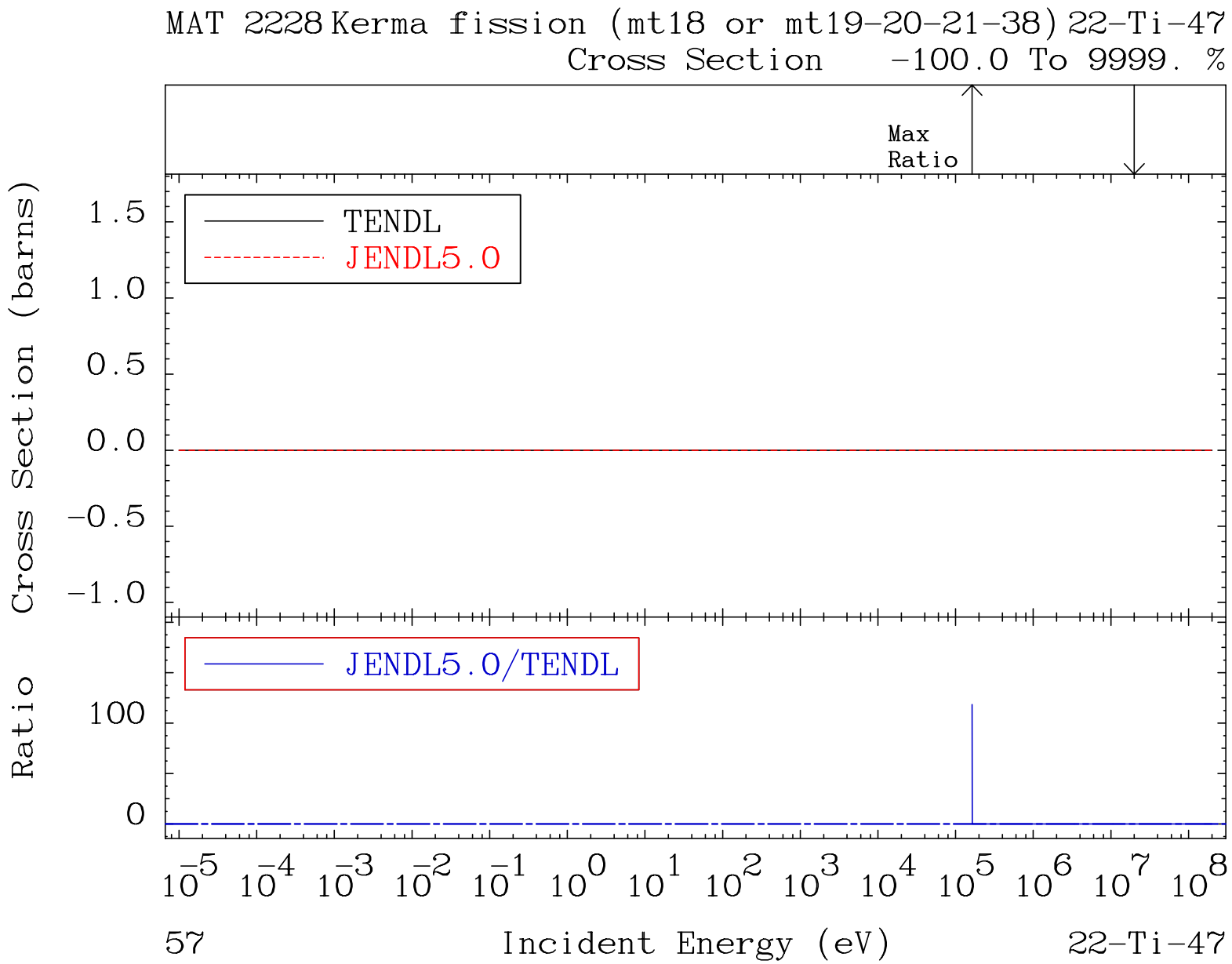

MAT 2228
He-4 Production
Cross Section
22-Ti-47
-100.0 To 137.1 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^0
10^-3
10^-6
10^-9
10^-12
JENDL5.0/TENDL
Ratio
10^0
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
52
Incident Energy (eV)
22-Ti-47

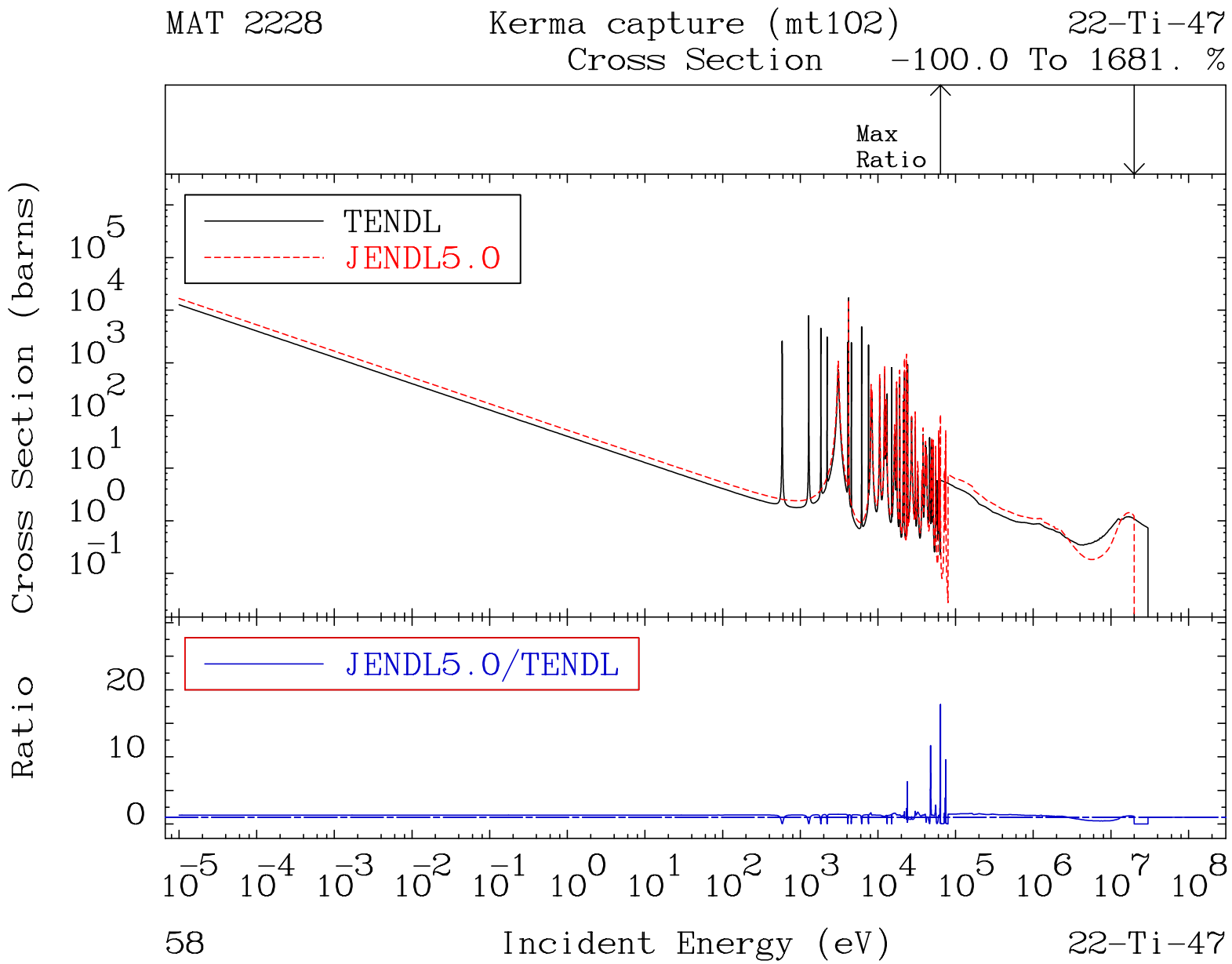

MAT 2228
Kerma total (eV-barns)
22-Ti-47
Cross Section -98.31 To 1861. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
53
22-Ti-47

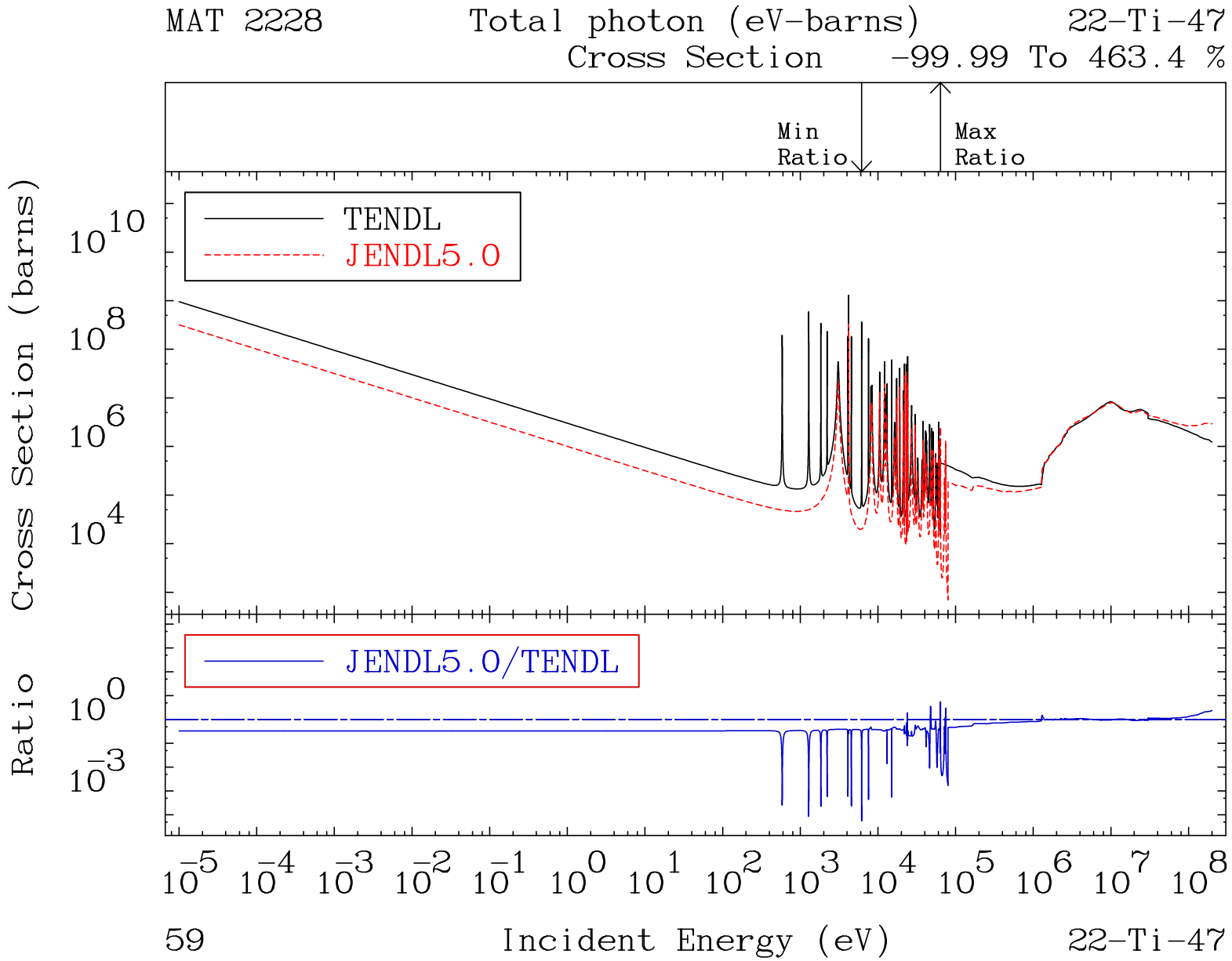

MAT 2228
Kerma elastic
Cross Section
22-Ti-47
-92.55 To 1864. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
22-Ti-47

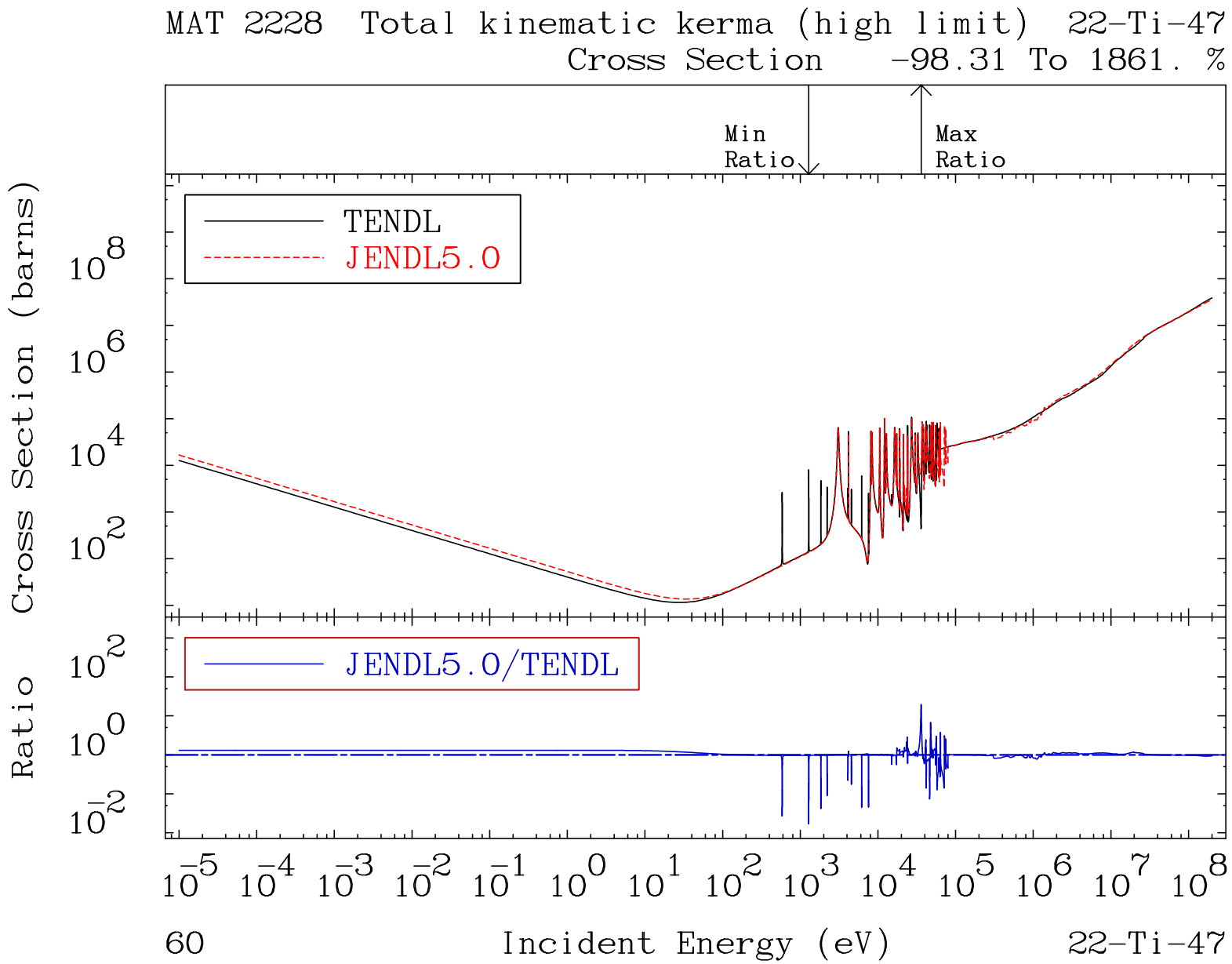

MAT 2228 Kerma non-elastic (all but mt2) 22-Ti-47
Cross Section -99.98 To 1665. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
22-Ti-47

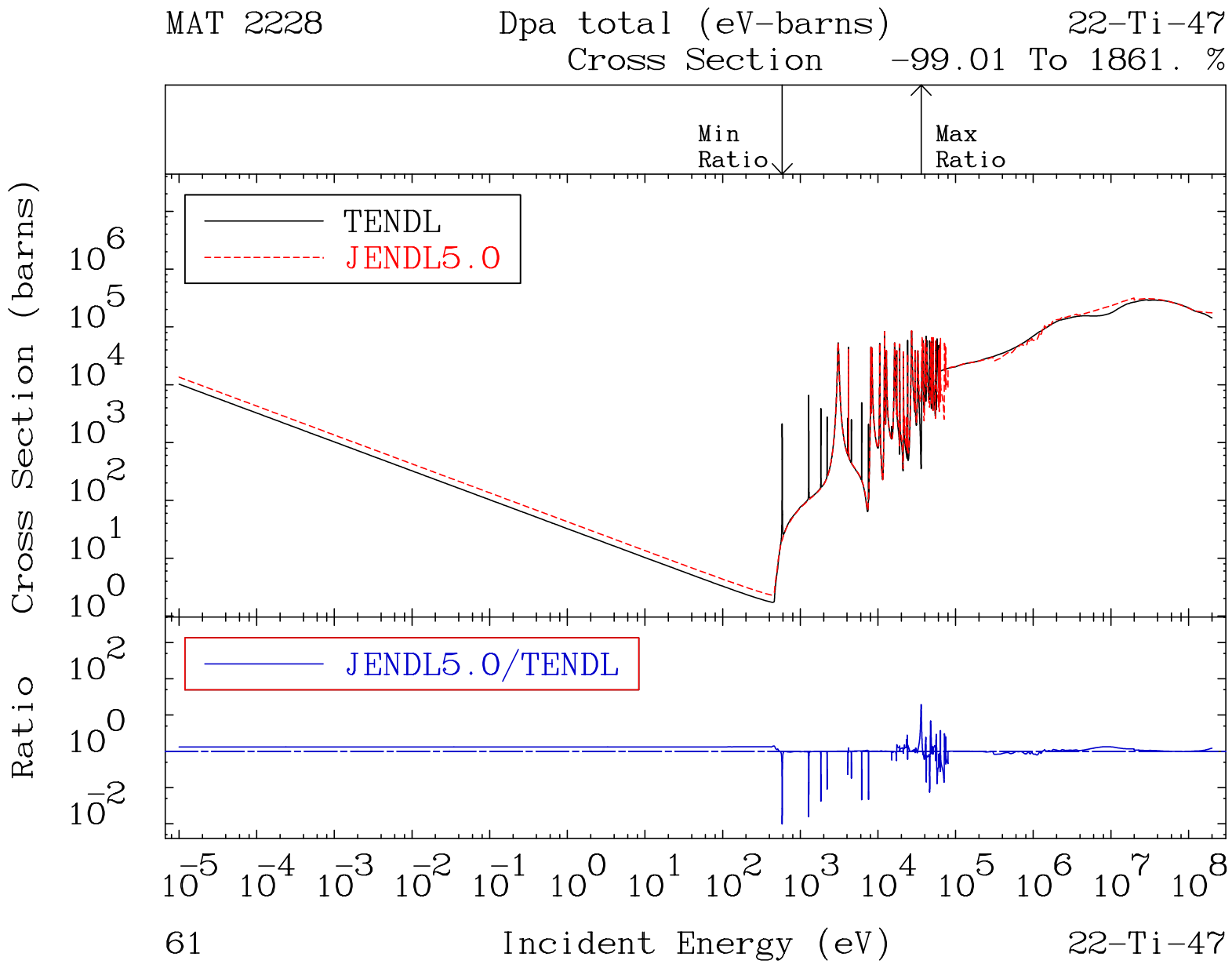

MAT 2228
Kerma inelastic (mt51-91)
22-Ti-47
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 162.80 keV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
22-Ti-47

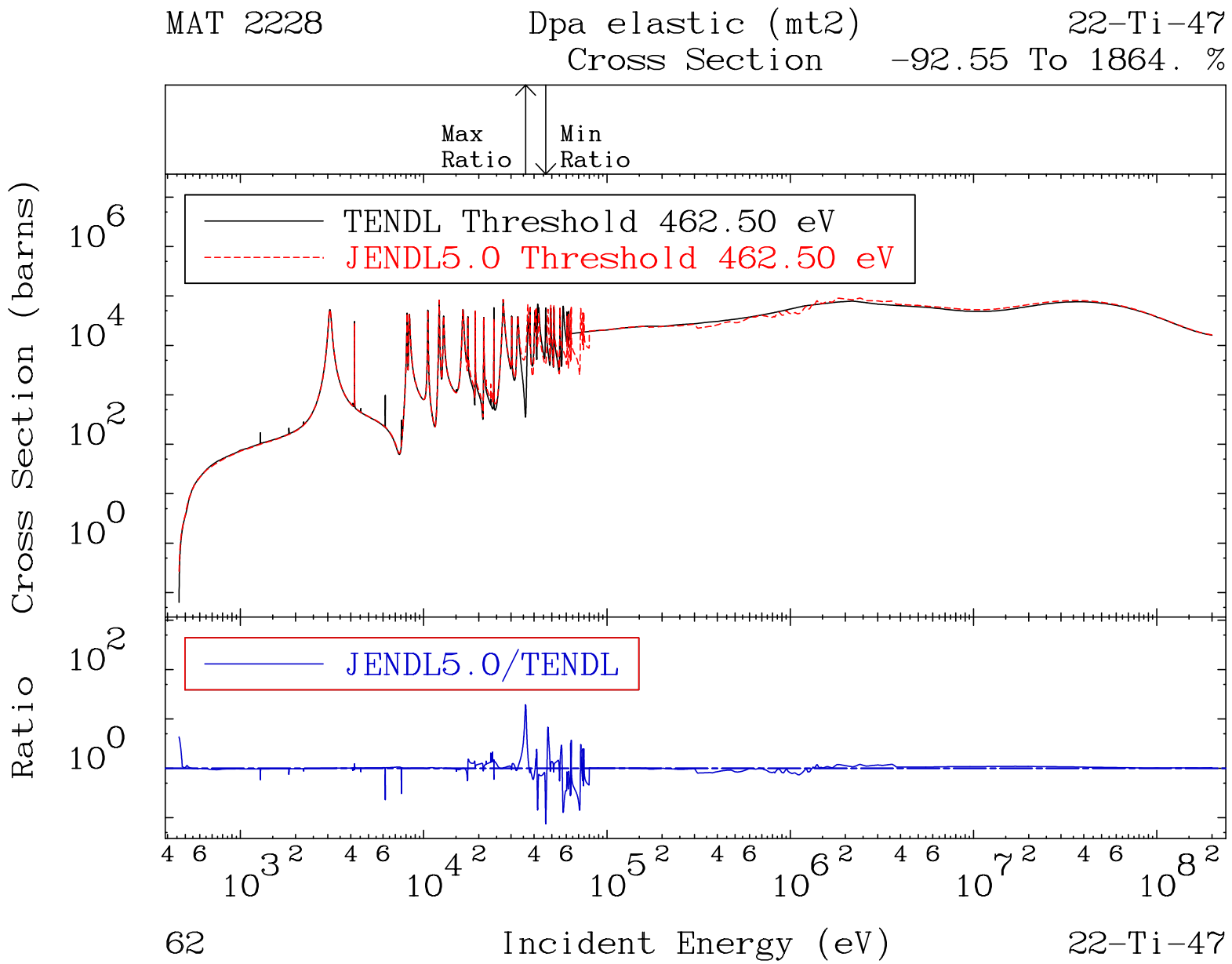

MAT 2228 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-47
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
100
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
57
Incident Energy (eV)
22-Ti-47

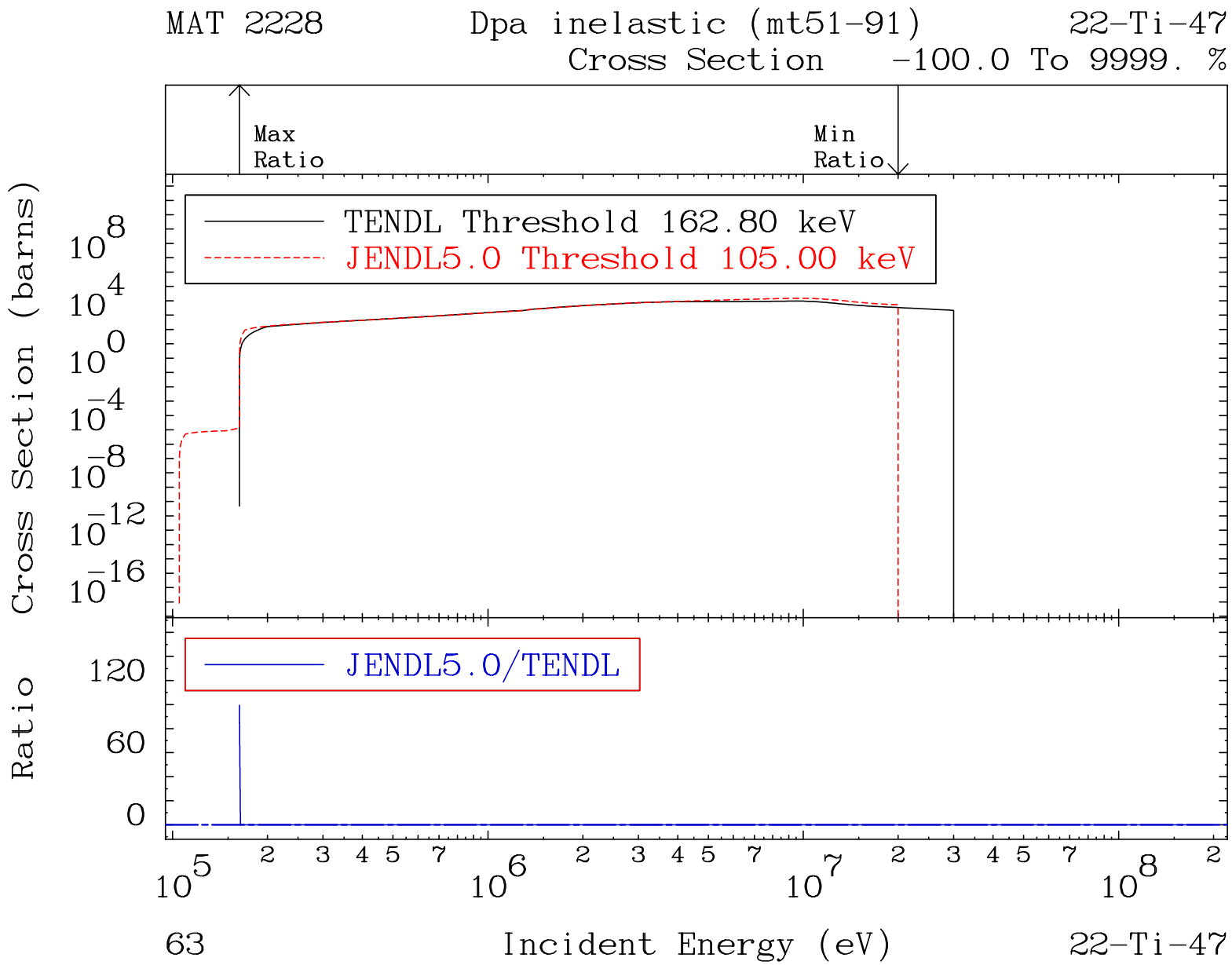

MAT 2228
Kerma capture (mt102)
22-Ti-47
Cross Section -100.0 To 1681. %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
58
22-Ti-47

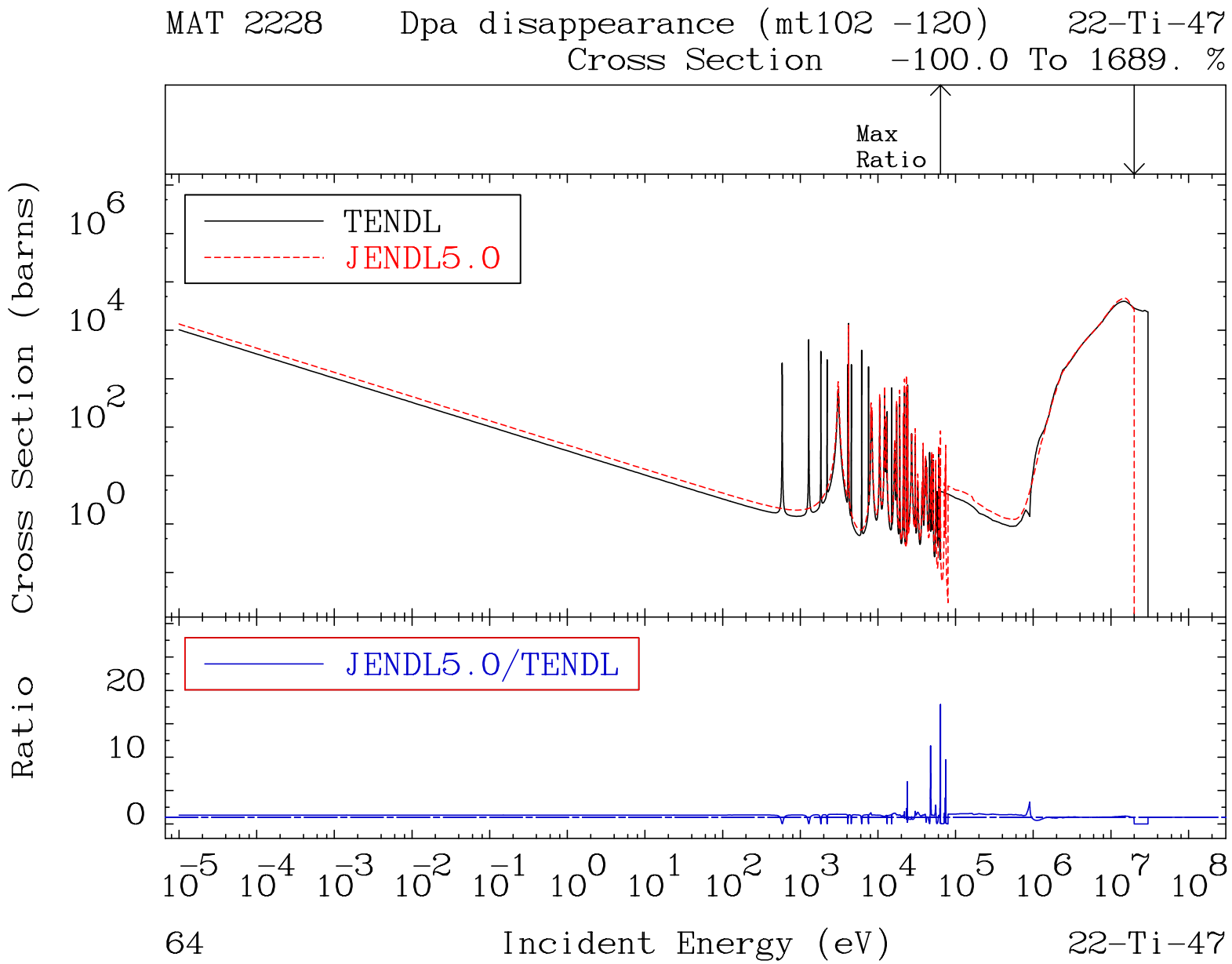

MAT 2228
Total photon (eV-barns)
22-Ti-47
Cross Section -99.99 To 463.4 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
22-Ti-47

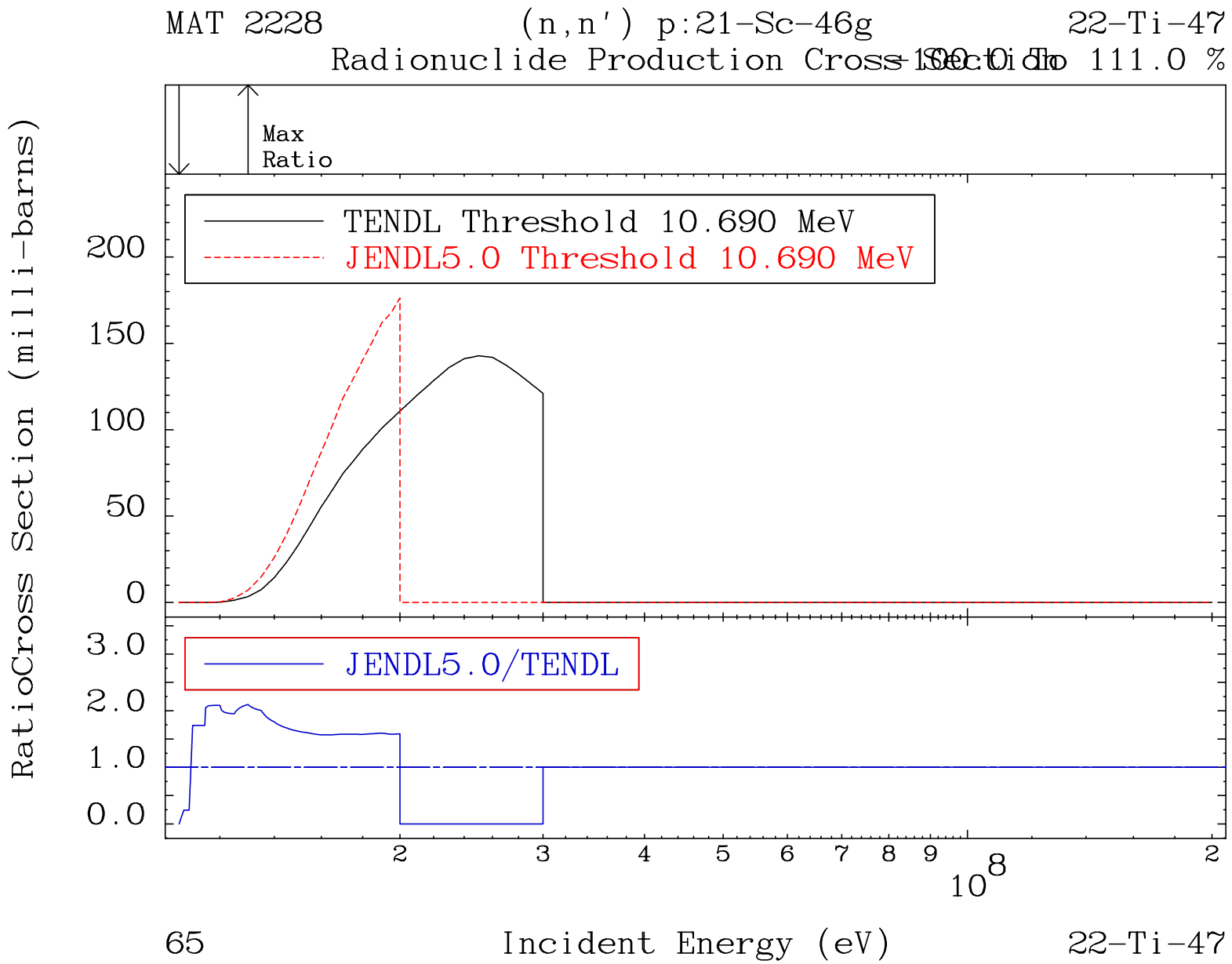

MAT 2228 Total kinematic kerma (high limit) 22-Ti-47
Cross Section -98.31 To 1861. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
22-Ti-47

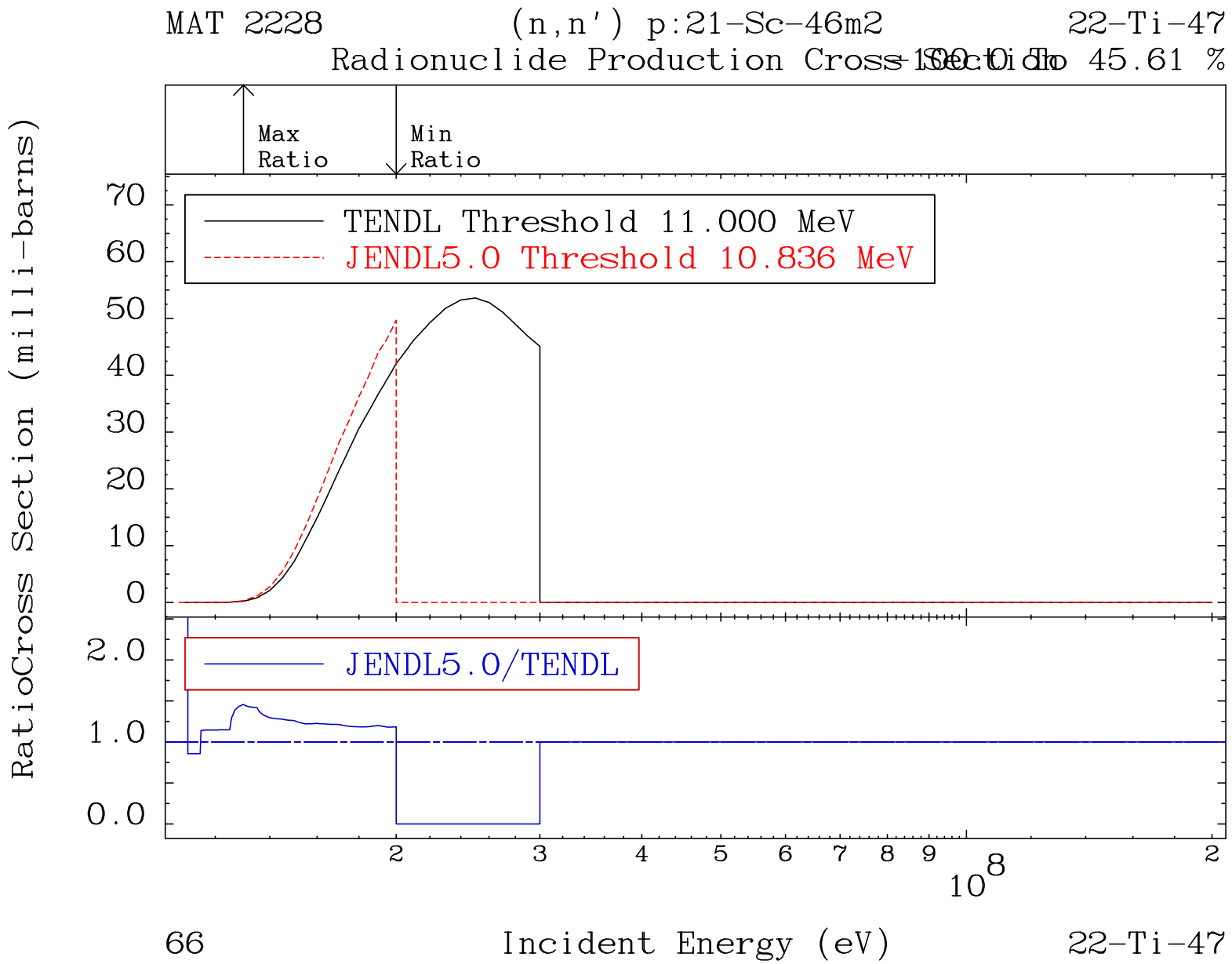

MAT 2228
Dpa total (eV-barns)
22-Ti-47
Cross Section -99.01 To 1861. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
22-Ti-47

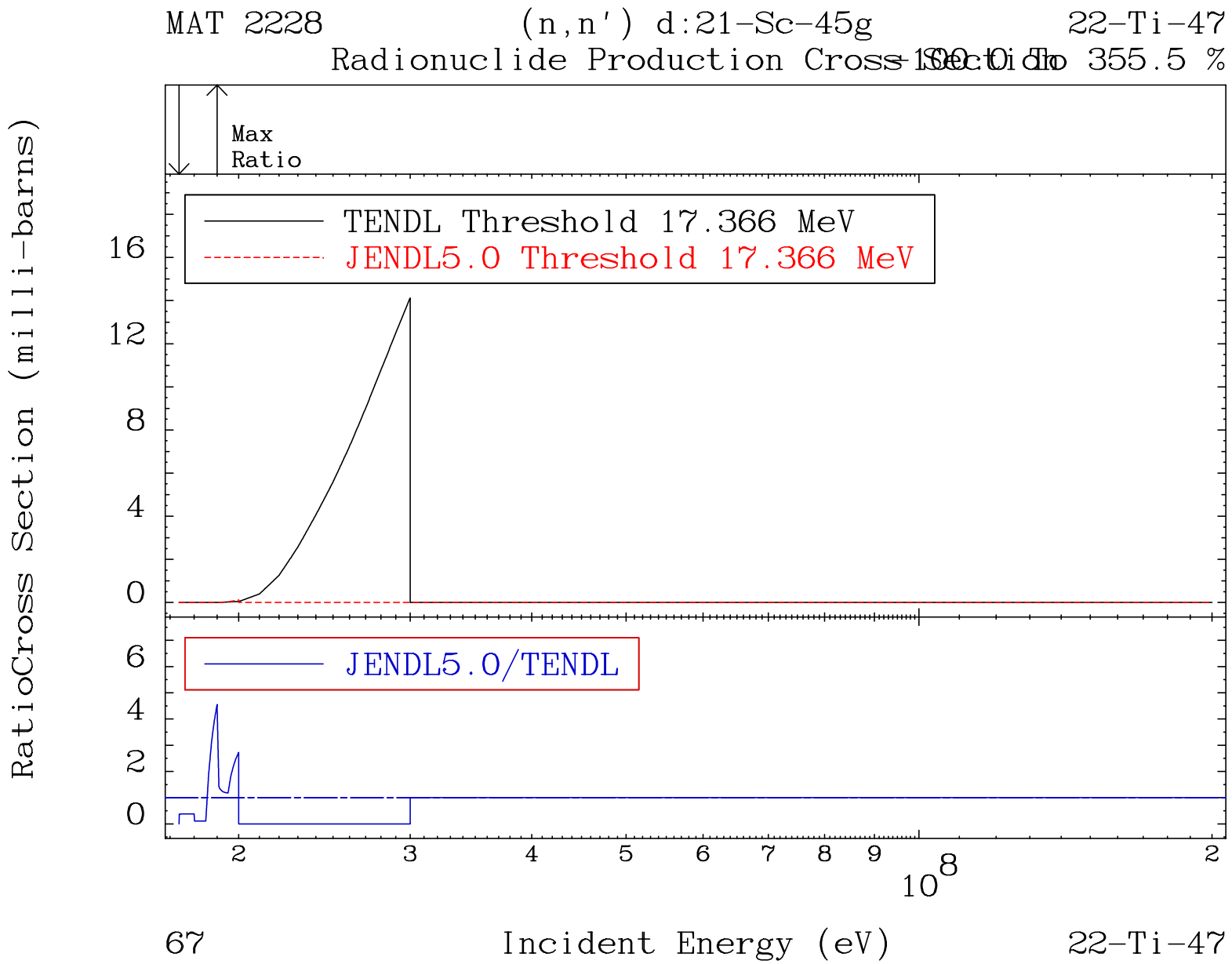

MAT 2228
Dpa elastic (mt2)
Cross Section
22-Ti-47
-92.55 To 1864. %
Max Ratio
Min Ratio
TENDL Threshold 462.50 eV
JENDL5.0 Threshold 462.50 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
22-Ti-47

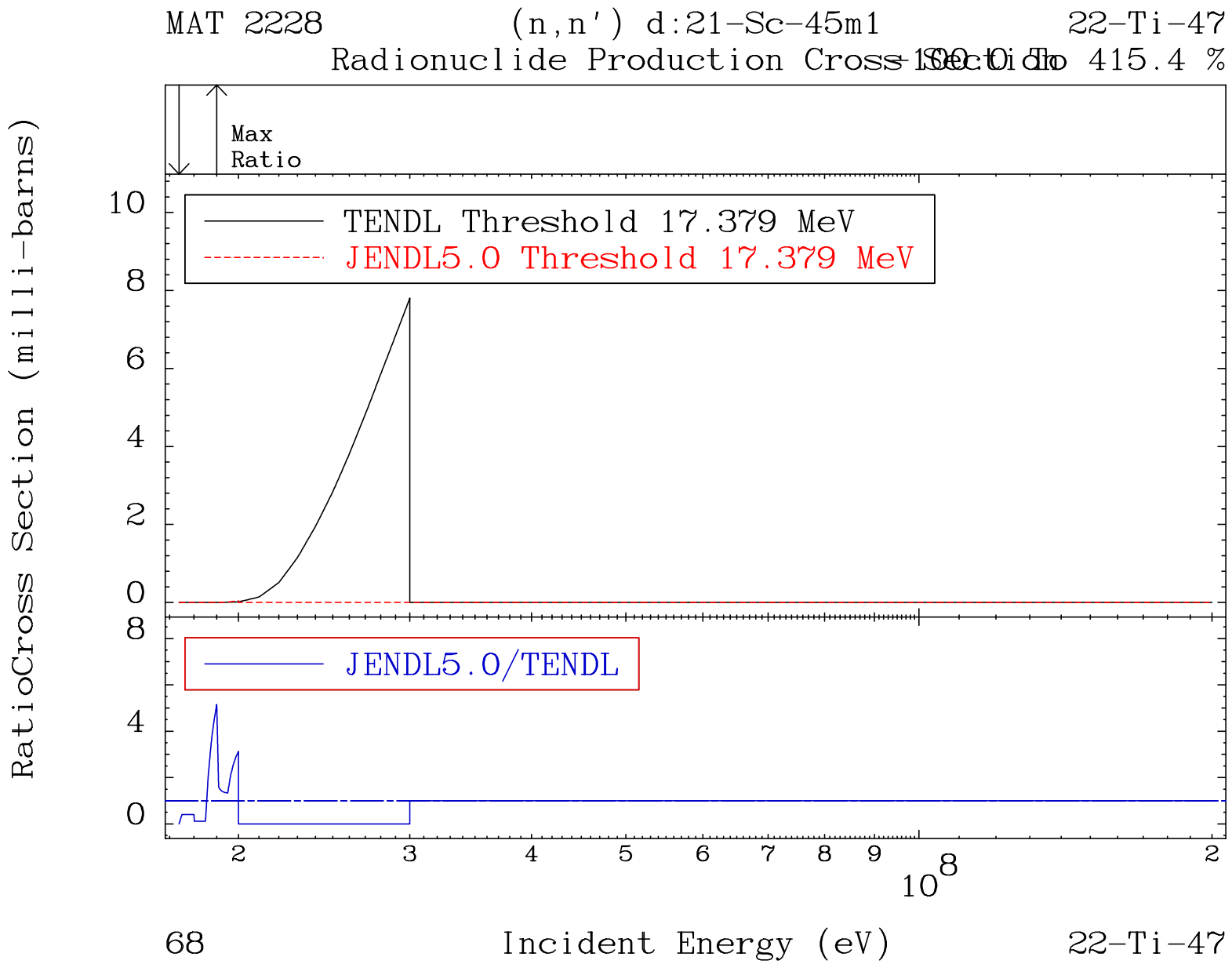

MAT 2228
Dpa inelastic (mt51-91)
22-Ti-47
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 162.80 keV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
22-Ti-47

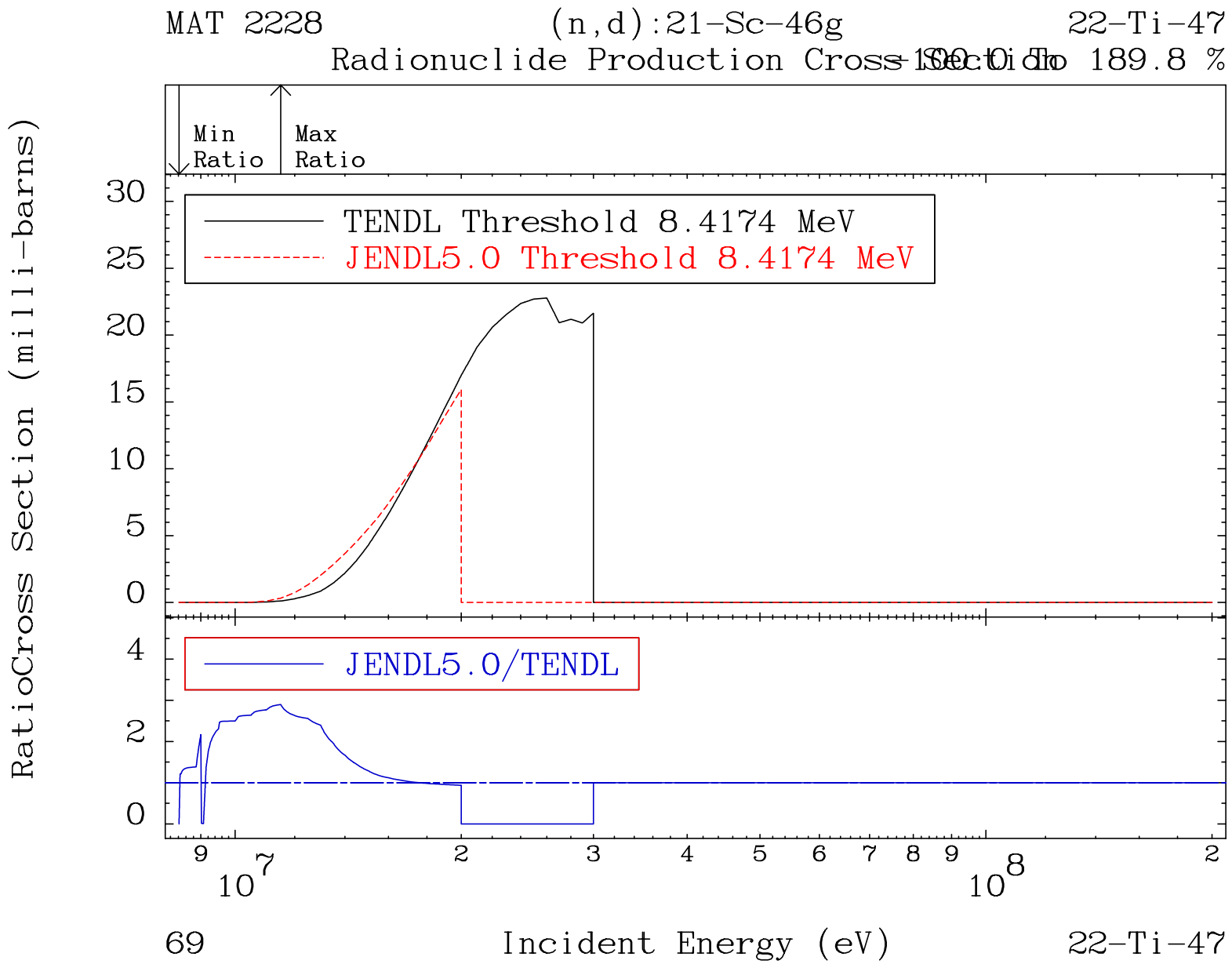

MAT 2228 Dpa disappearance (mt102 -120) 22-Ti-47
Cross Section -100.0 To 1689. %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
64
22-Ti-47

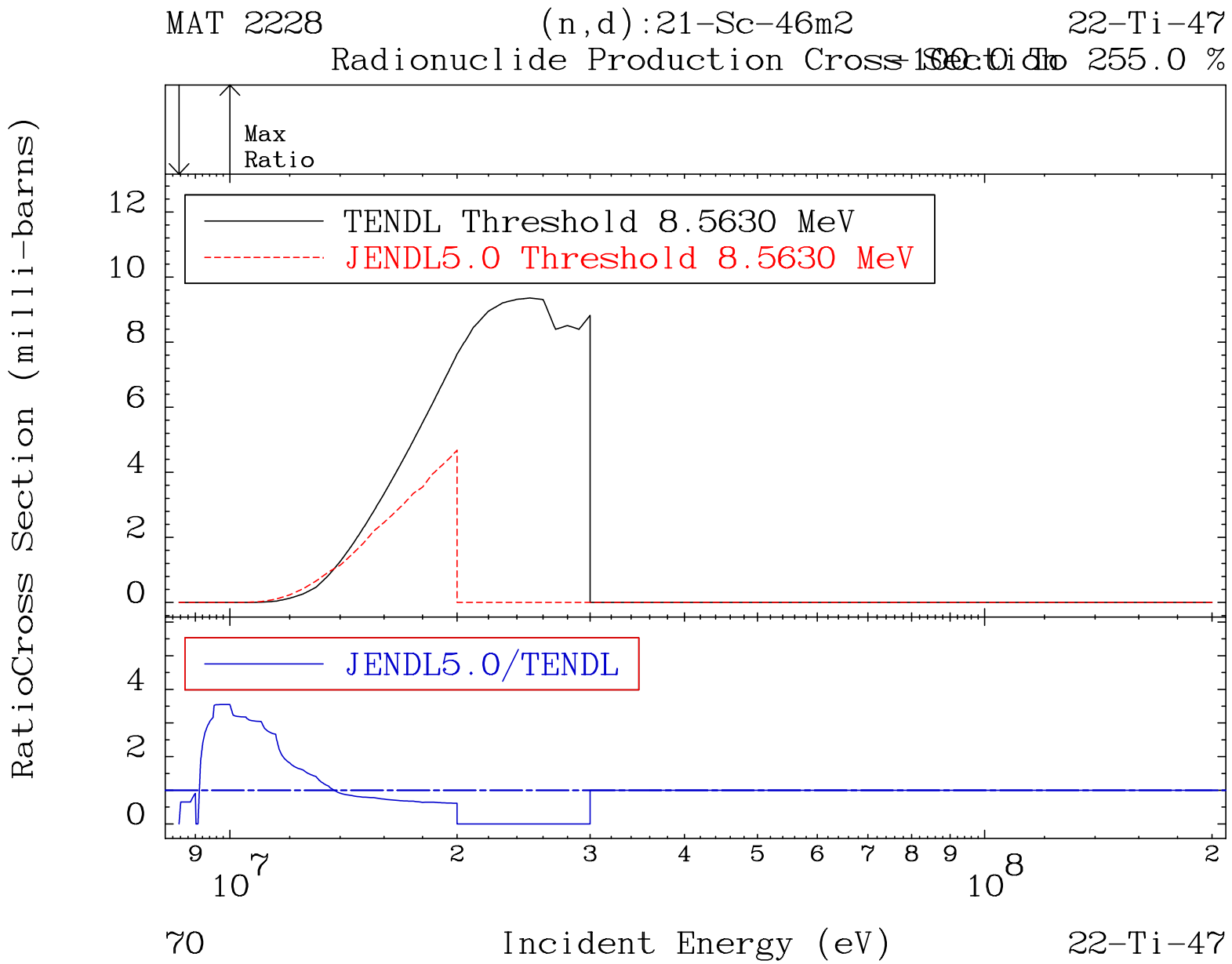

MAT 2228
(n,n') p:21-Sc-46g
22-Ti-47
Radionuclide Production Cross Section To 111.0 %
Max
Ratio
TENDL Threshold 10.690 MeV
JENDL5.0 Threshold 10.690 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
65
Incident Energy (eV)
22-Ti-47

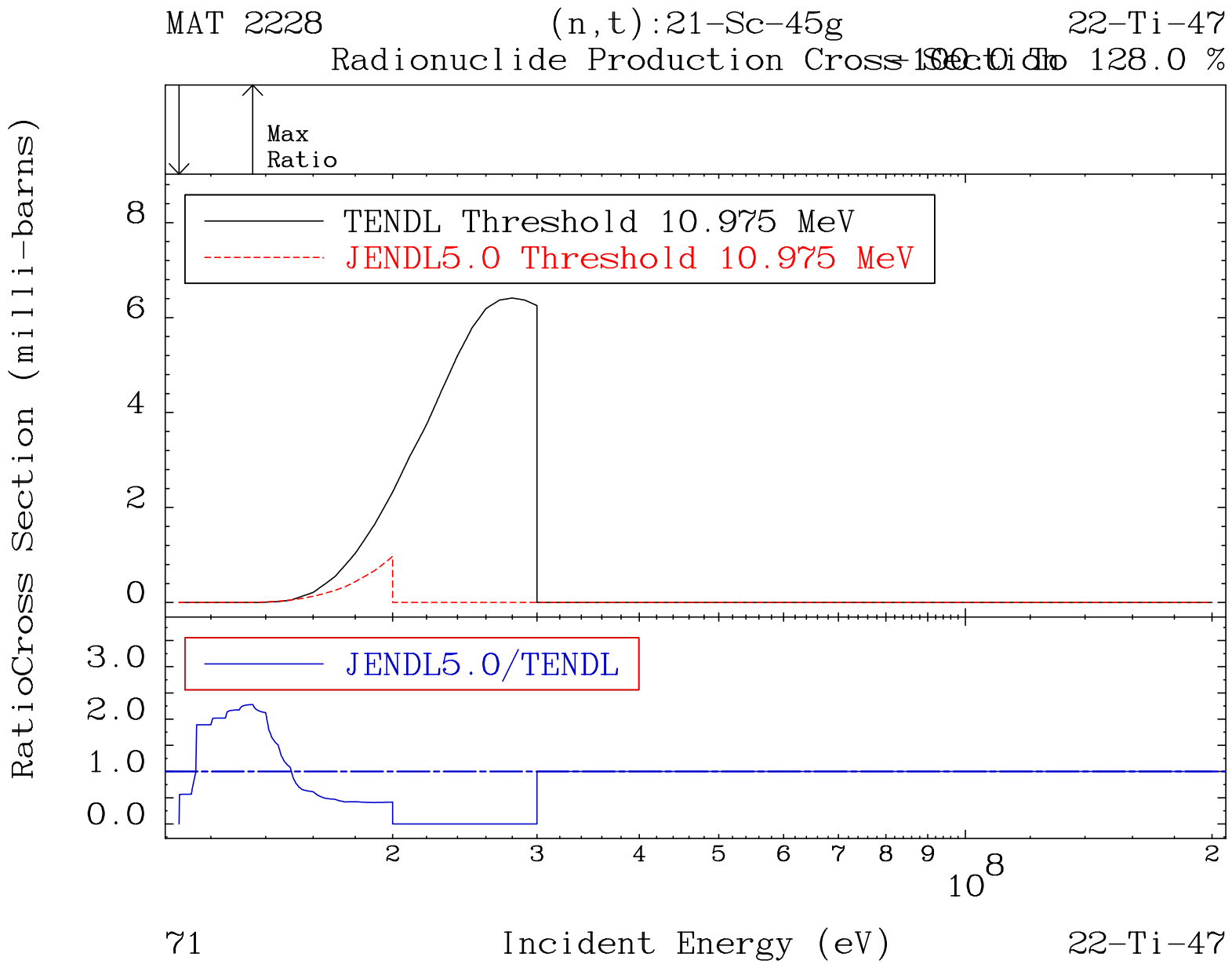

MAT 2228
(n,n') p:21-Sc-46m2
22-Ti-47
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 11.000 MeV
JENDL5.0 Threshold 10.836 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
66
22-Ti-47

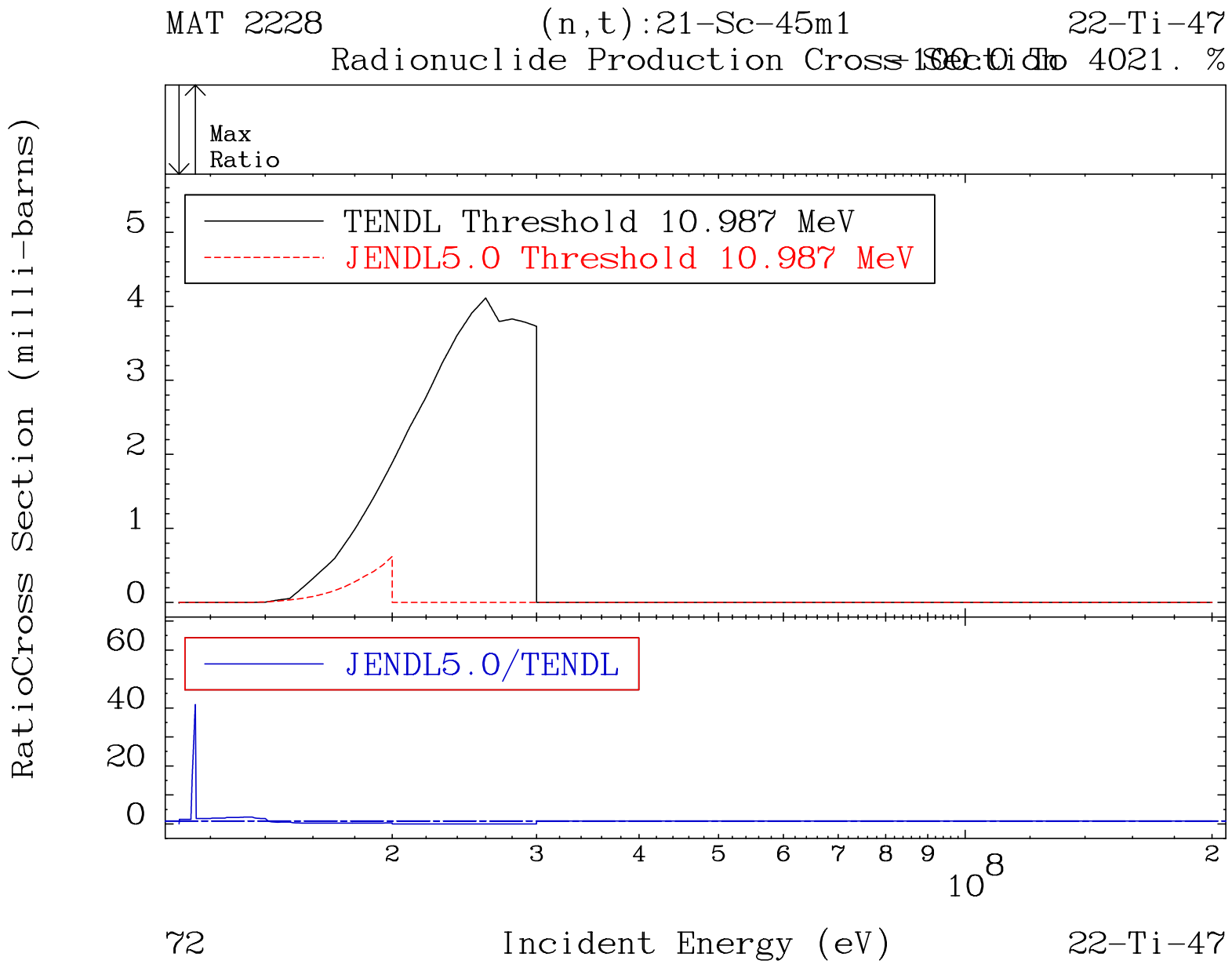

MAT 2228
(n,n') d:21-Sc-45g
22-Ti-47
Radionuclide Production Cross Section To 355.5 %
Max
Ratio
TENDL Threshold 17.366 MeV
JENDL5.0 Threshold 17.366 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
22-Ti-47

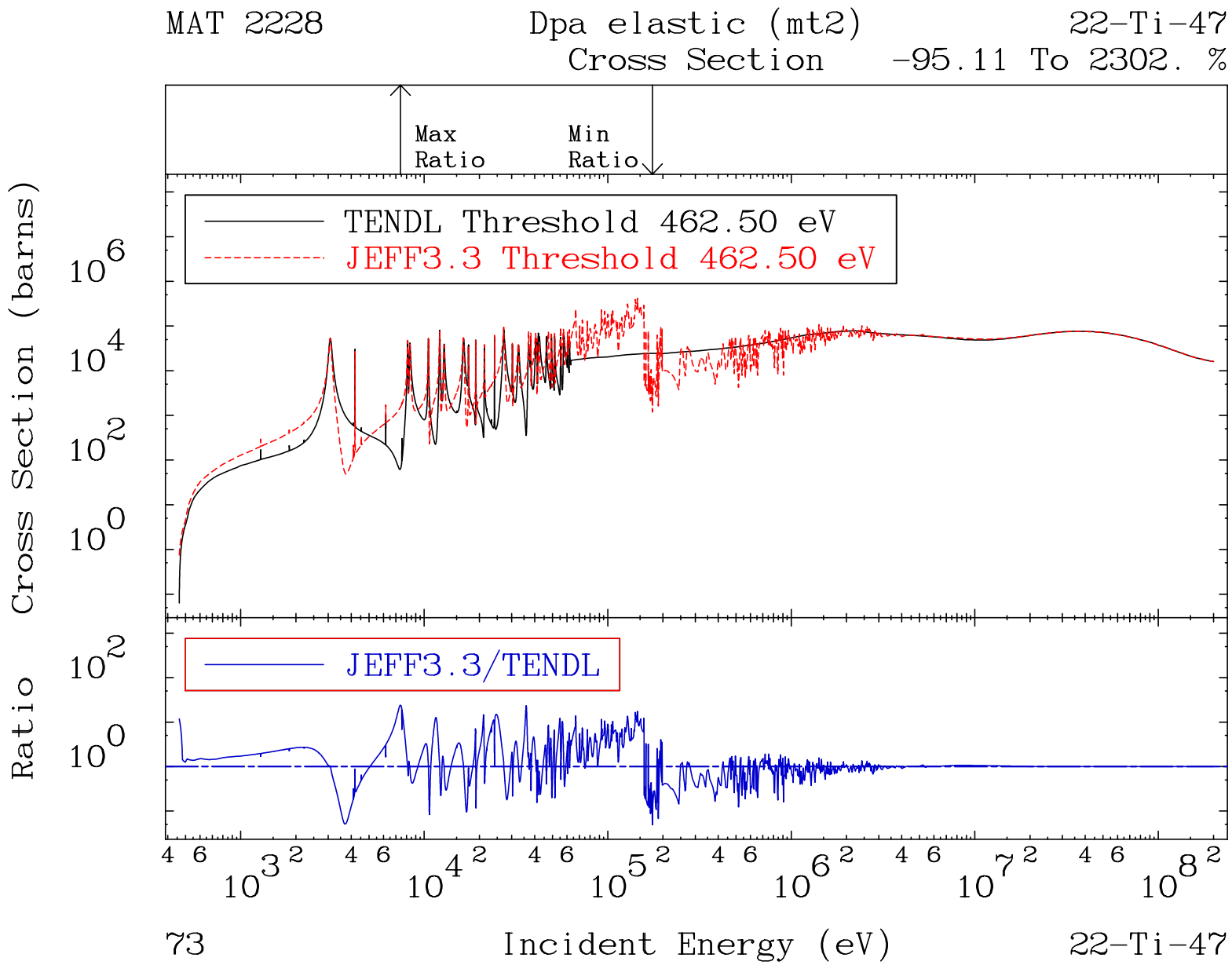

MAT 2228
(n,n') d:21-Sc-45m1
22-Ti-47
Radionuclide Production Cross Section
Max Ratio
TENDL Threshold 17.379 MeV
JENDL5.0 Threshold 17.379 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
68
22-Ti-47

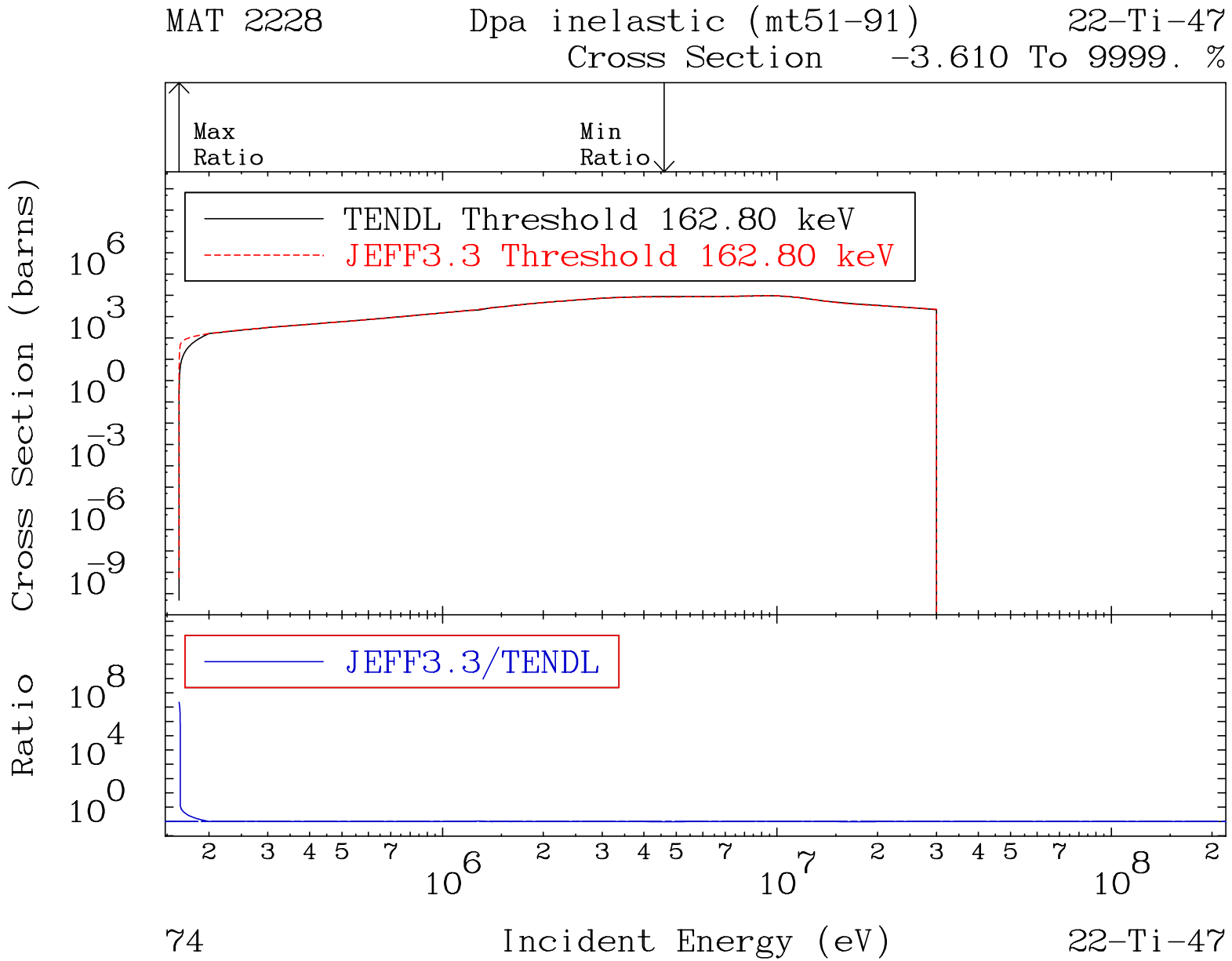

MAT 2228
(n,d):21-Sc-46g
22-Ti-47
Radionuclide Production Cross Section
Min Ratio = 100.0 To Max Ratio = 189.8 %
Min Ratio
Max Ratio
TENDL Threshold 8.4174 MeV
JENDL5.0 Threshold 8.4174 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
22-Ti-47

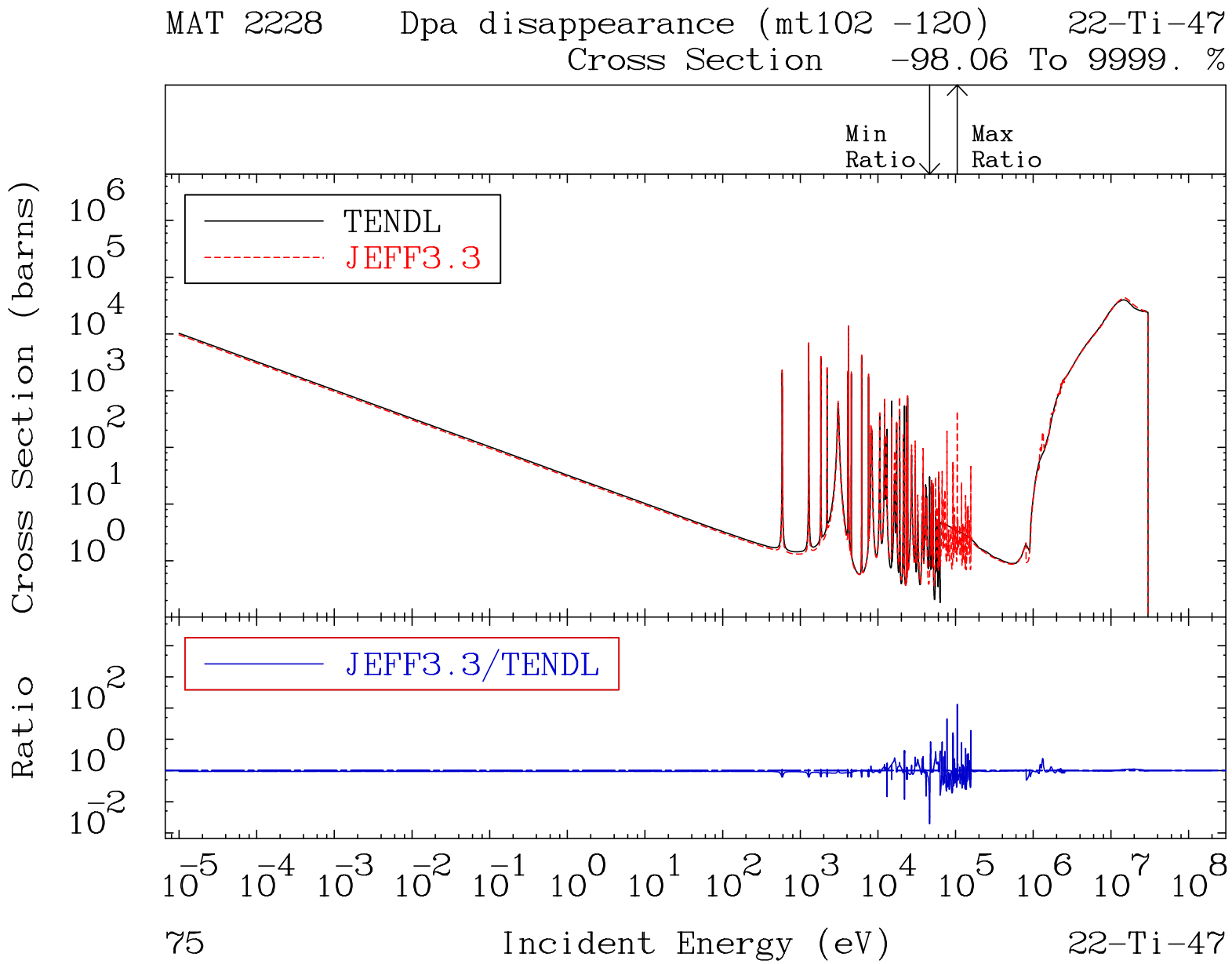

MAT 2228
(n,d):21-Sc-46m2
22-Ti-47
Radionuclide Production Cross Section To 255.0 %
Max
Ratio
TENDL Threshold 8.5630 MeV
JENDL5.0 Threshold 8.5630 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
70
22-Ti-47

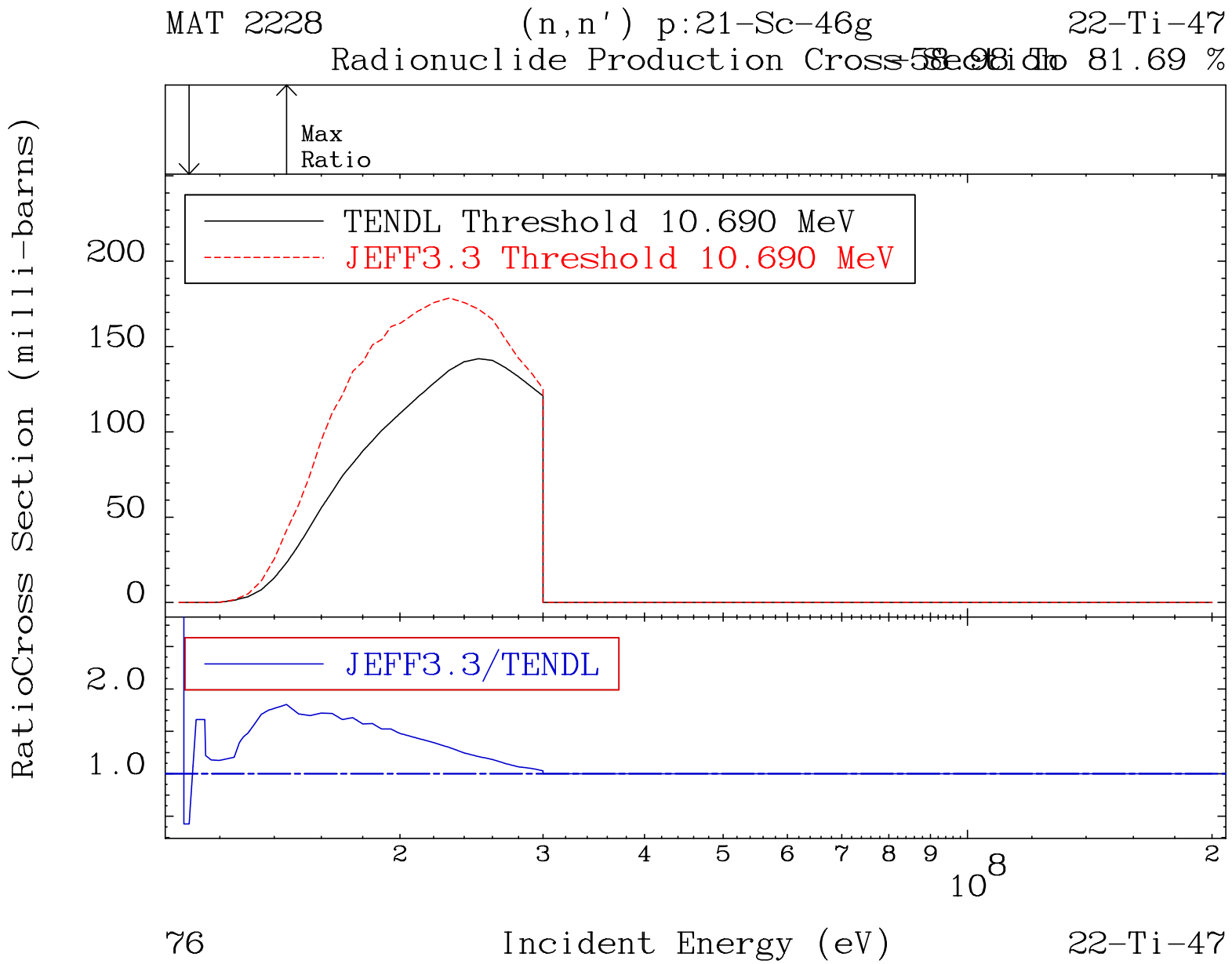

MAT 2228
(n,t):21-Sc-45g
22-Ti-47
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 10.975 MeV
JENDL5.0 Threshold 10.975 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
71
22-Ti-47

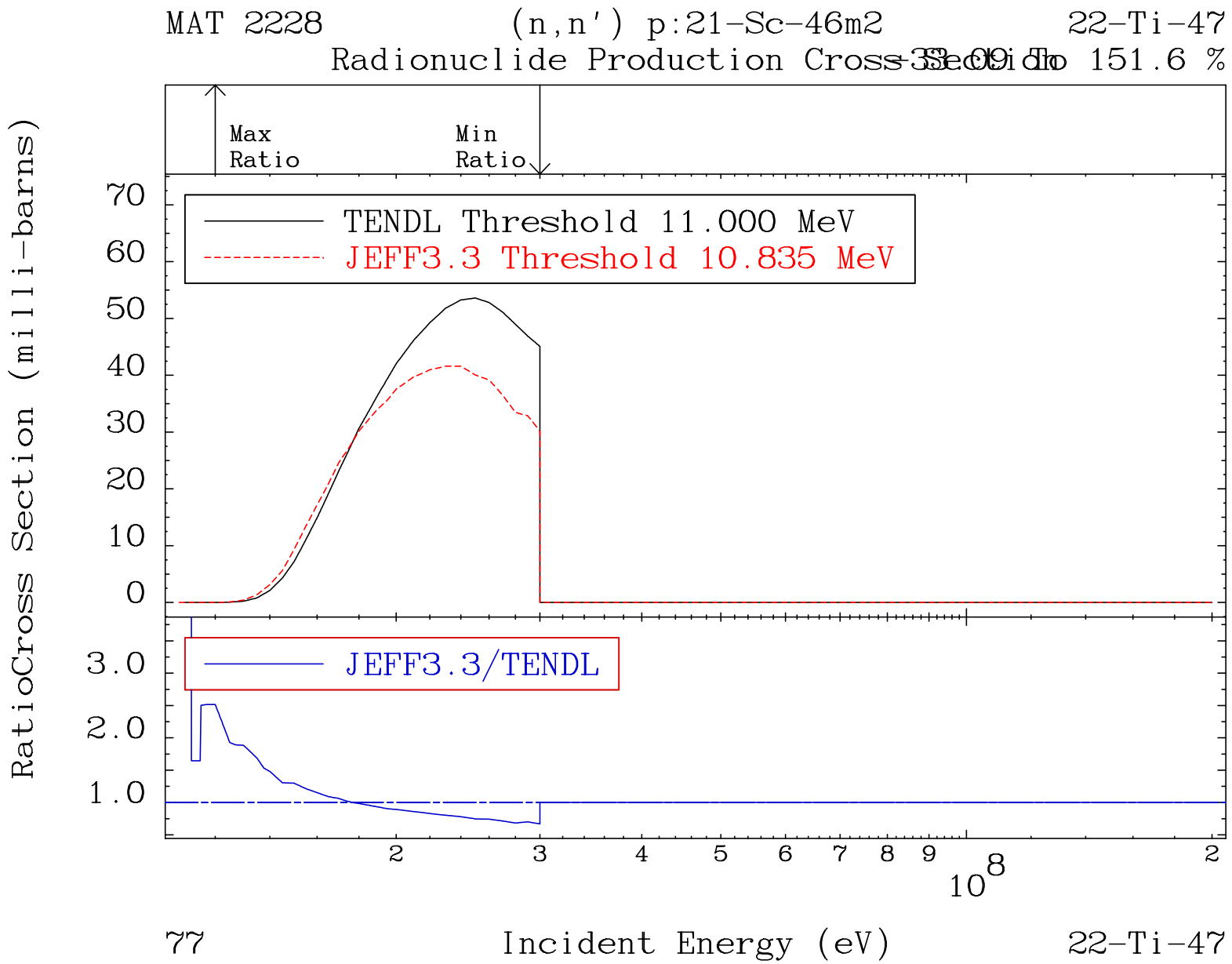

MAT 2228
(n,t):21-Sc-45m1
22-Ti-47
Radionuclide Production Cross Section To 4021. %
Max
Ratio
TENDL Threshold 10.987 MeV
JENDL5.0 Threshold 10.987 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
72
22-Ti-47

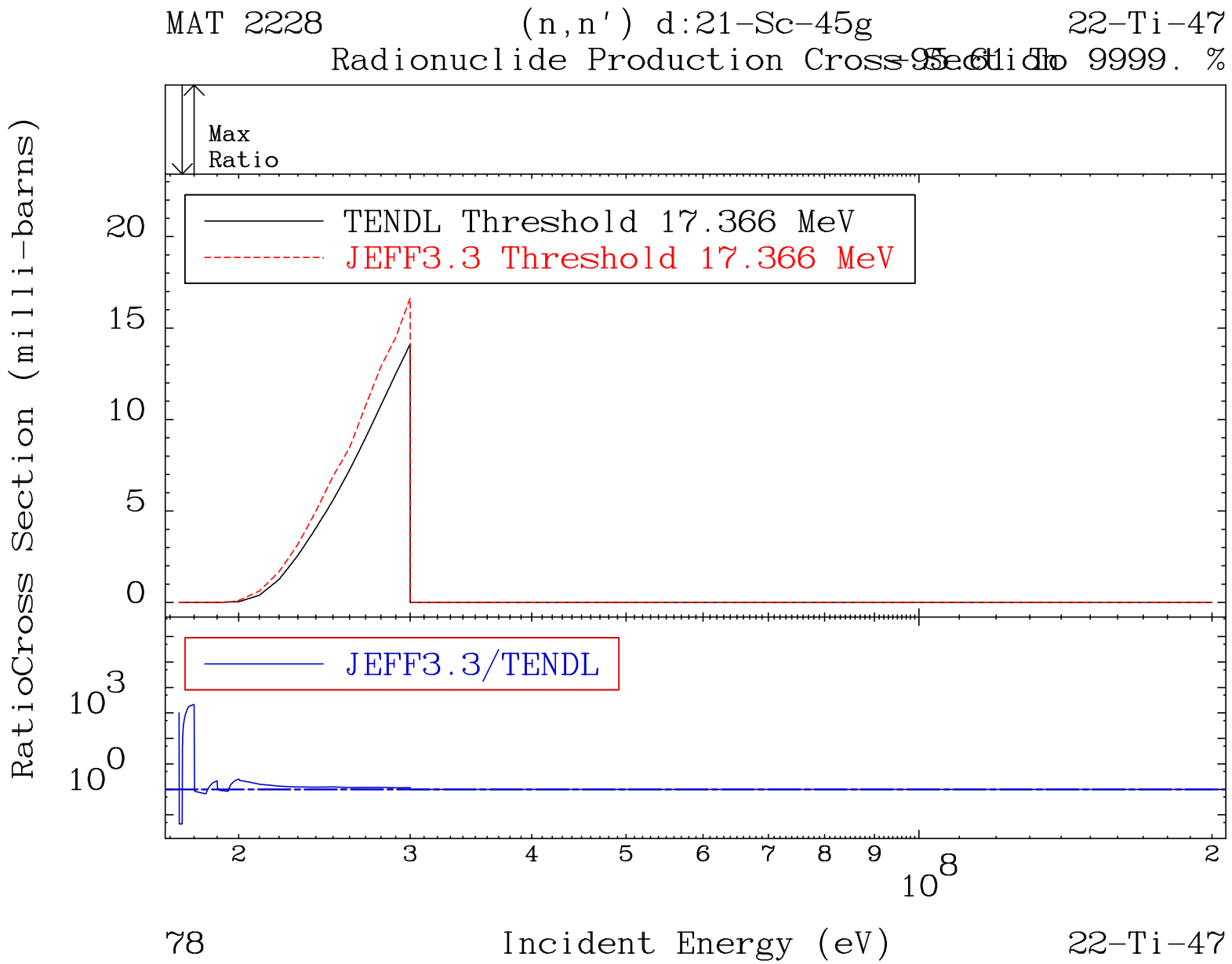

MAT 2228
Dpa elastic (mt2)
Cross Section
22-Ti-47
-95.11 To 2302. %
Max Ratio
Min Ratio
TENDL Threshold 462.50 eV
JEFF3.3 Threshold 462.50 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
22-Ti-47

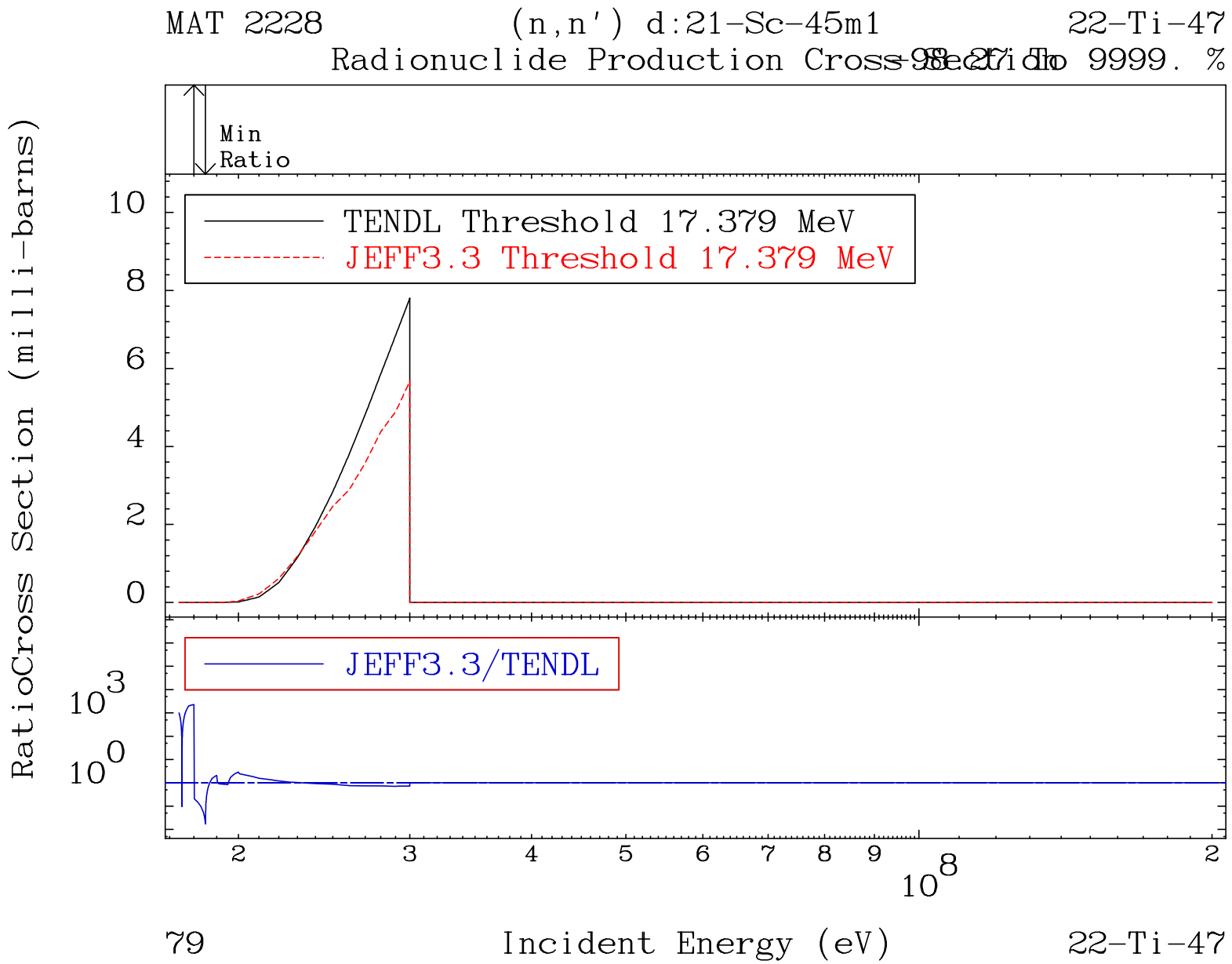

MAT 2228
Dpa inelastic (mt51-91)
22-Ti-47
Cross Section
-3.610 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 162.80 keV
JEFF3.3 Threshold 162.80 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
22-Ti-47

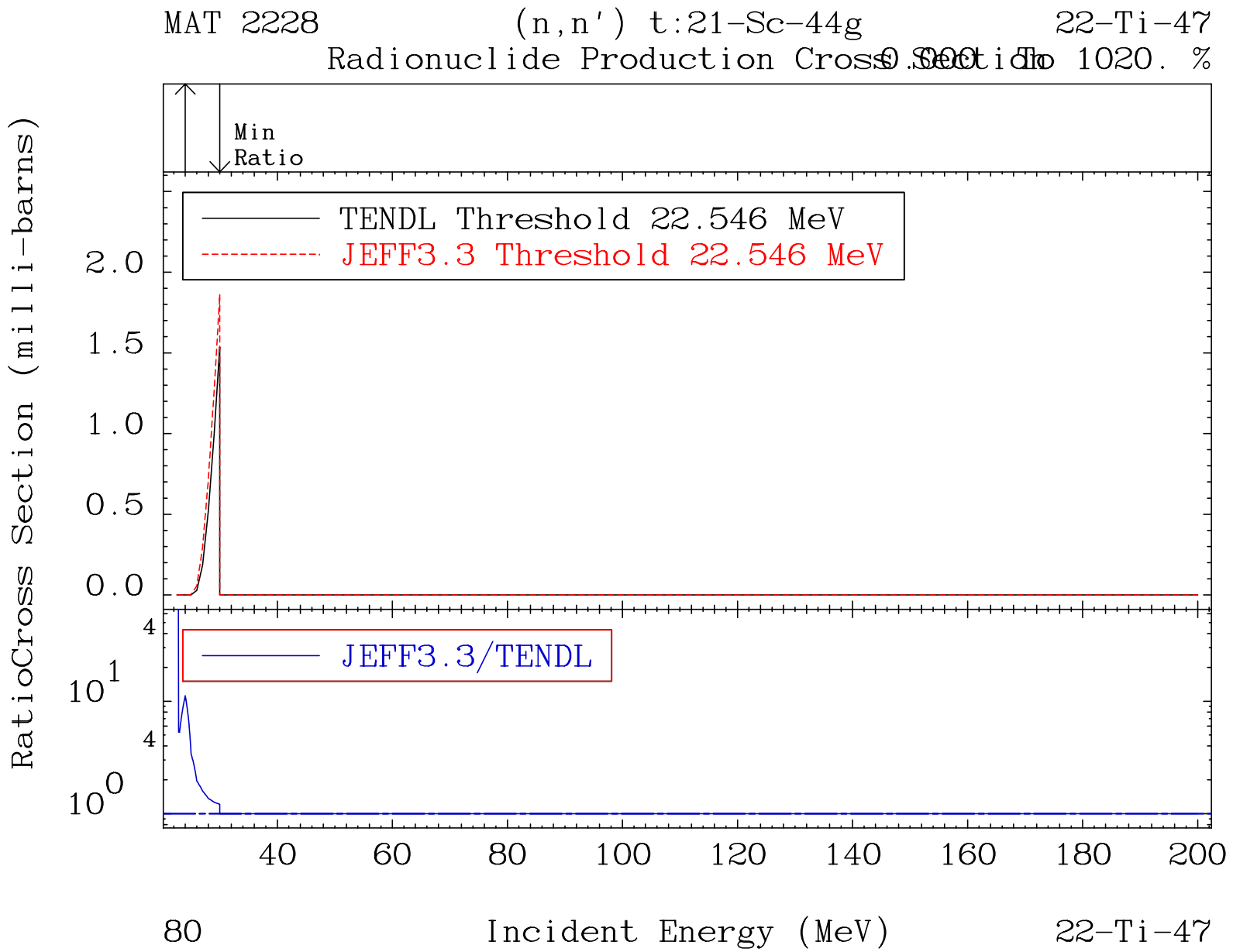

MAT 2228 Dpa disappearance (mt102 -120) 22-Ti-47
Cross Section -98.06 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
22-Ti-47

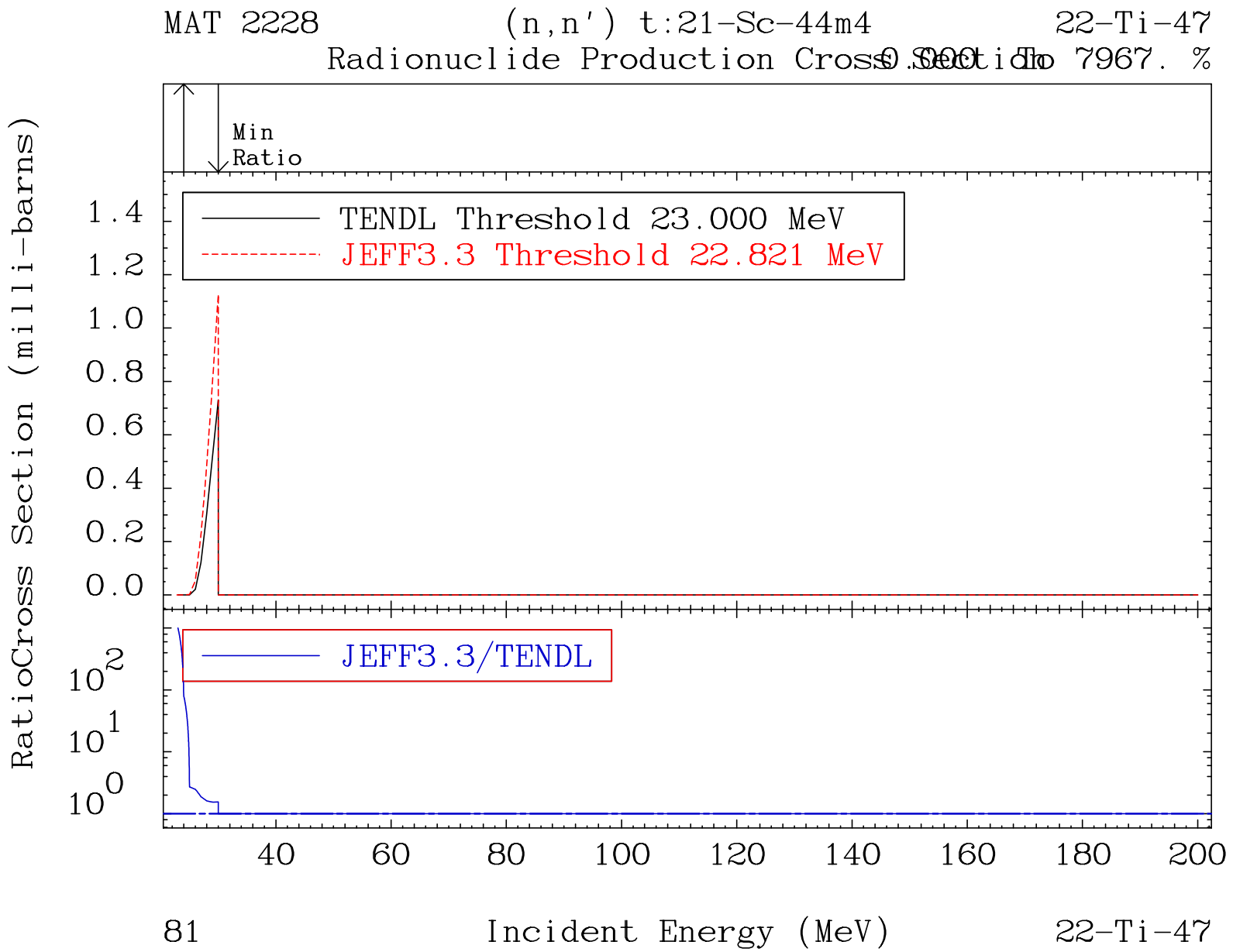

MAT 2228
(n,n') p:21-Sc-46g
22-Ti-47
Radionuclide Production Cross Section To 81.69 %
Max
Ratio
TENDL Threshold 10.690 MeV
JEFF3.3 Threshold 10.690 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
76
Incident Energy (eV)
22-Ti-47

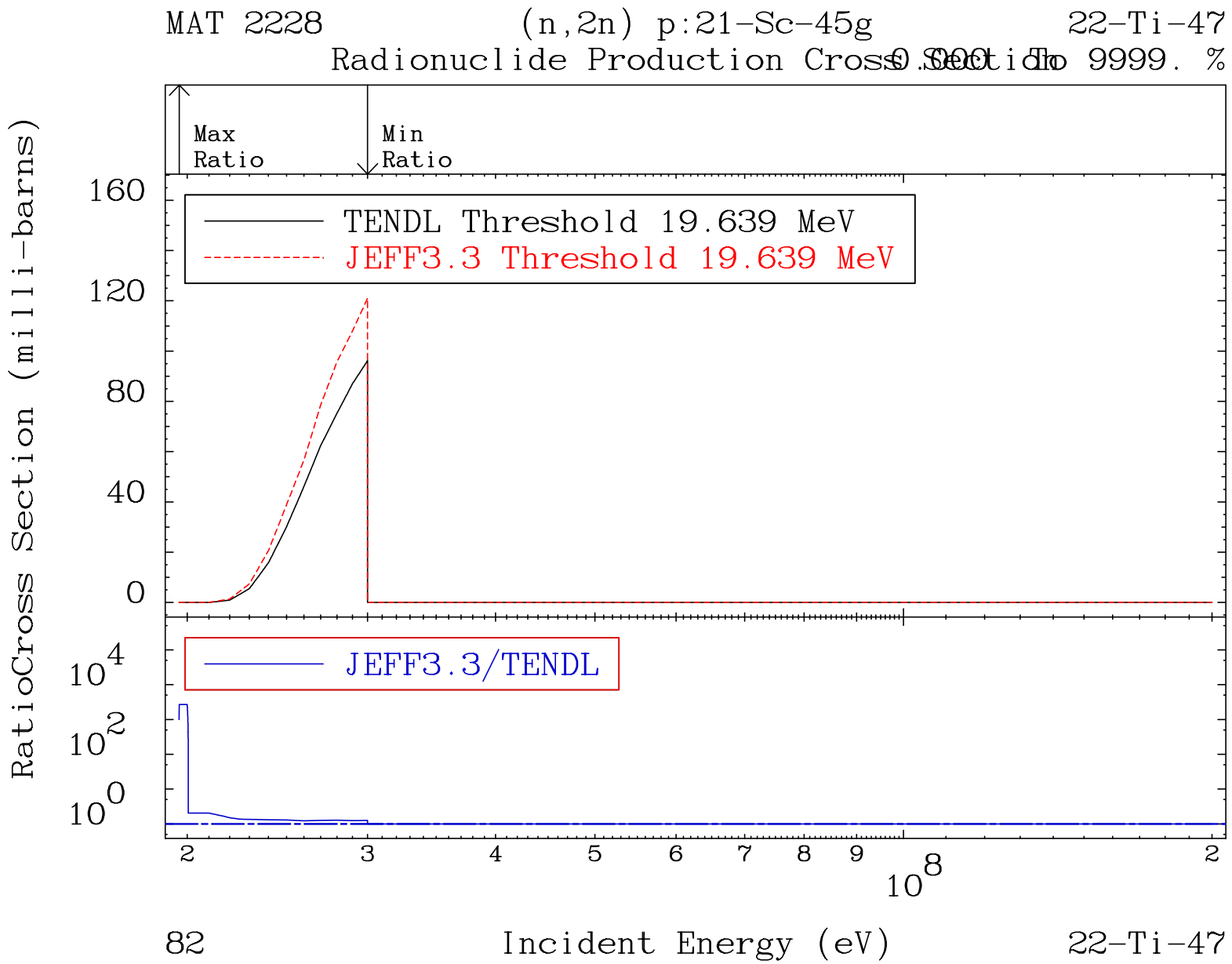

MAT 2228
(n,n') p:21-Sc-46m2
22-Ti-47
Radionuclide Production Cross Section To 151.6 %
Max Ratio
Min Ratio
TENDL Threshold 11.000 MeV
JEFF3.3 Threshold 10.835 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
22-Ti-47

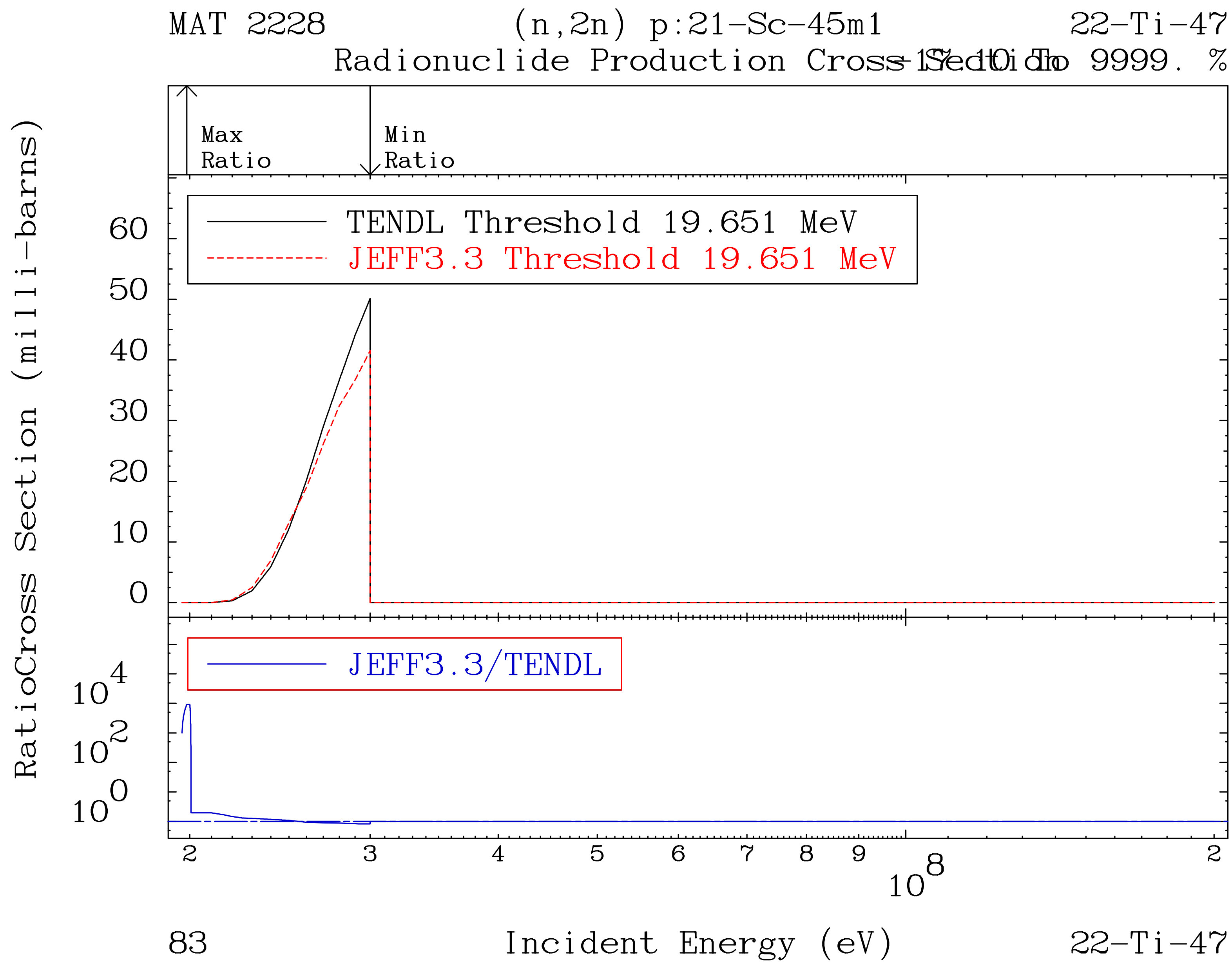

MAT 2228
(n,n') d:21-Sc-45g
22-Ti-47
Radionuclide Production Cross-Section
Max
Ratio
TENDL Threshold 17.366 MeV
JEFF3.3 Threshold 17.366 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
78
22-Ti-47

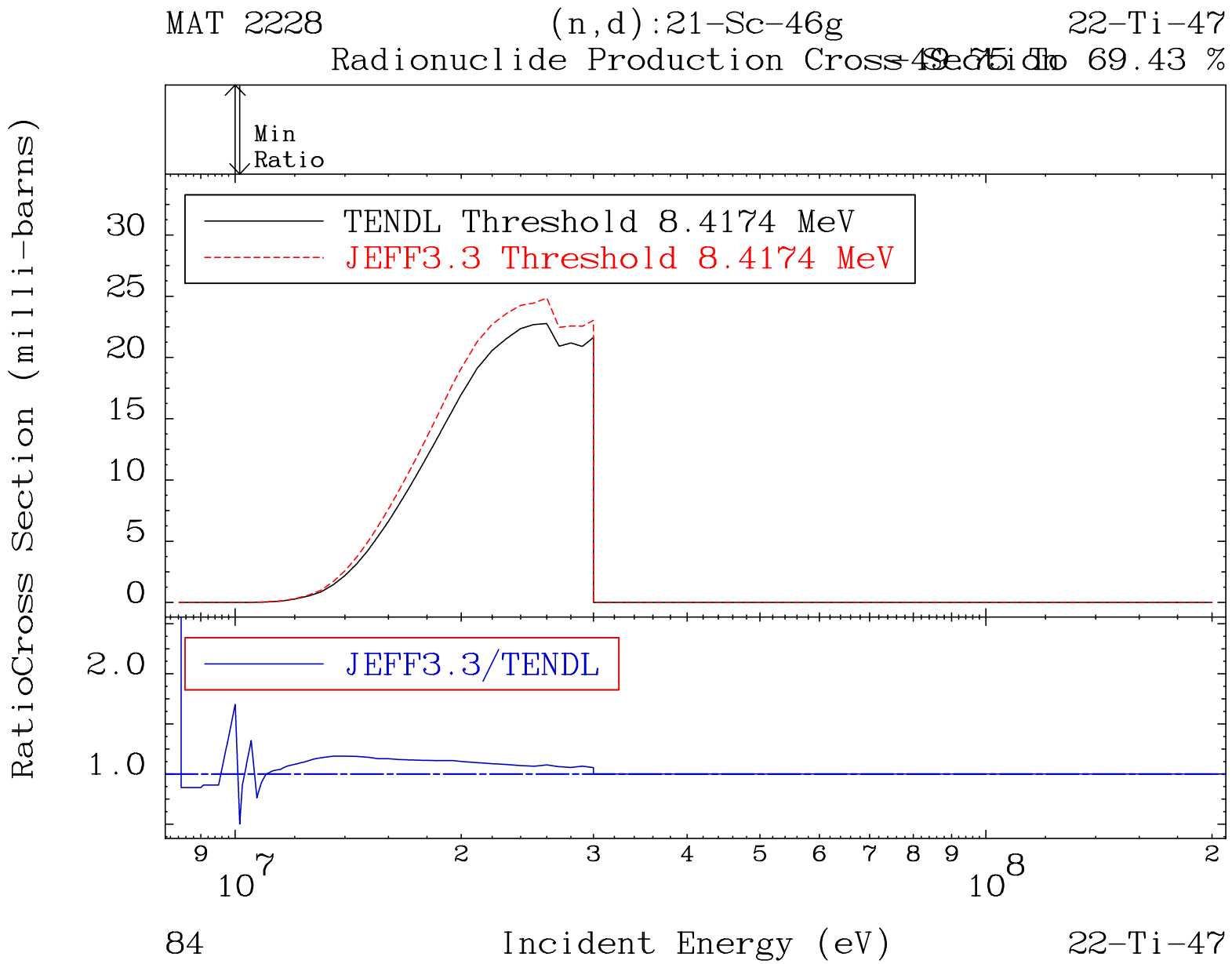

MAT 2228
(n,n') d:21-Sc-45m1
22-Ti-47
Radionuclide Production Cross Section 98.27 To 9999. %
Min
Ratio
TENDL Threshold 17.379 MeV
JEFF3.3 Threshold 17.379 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
22-Ti-47

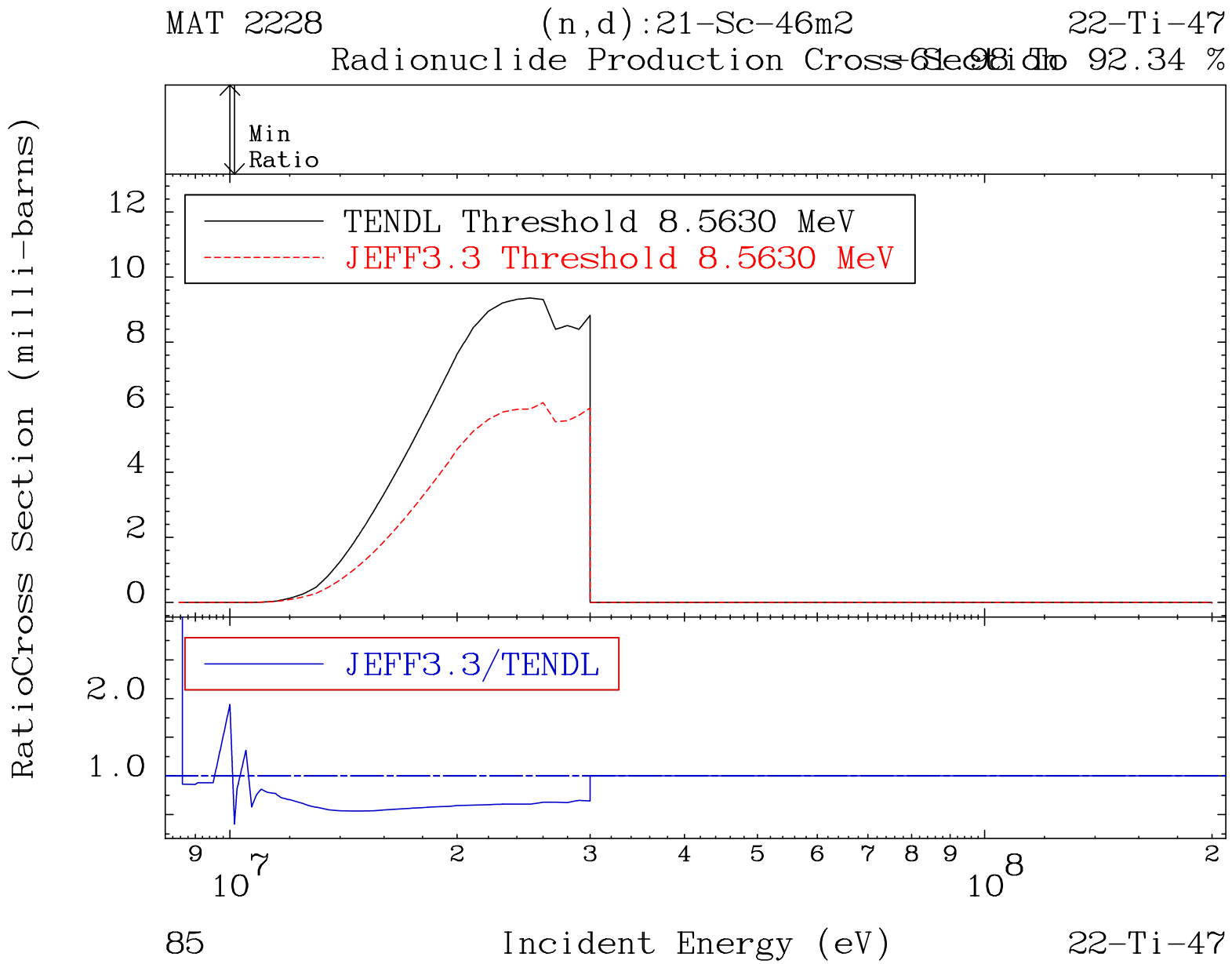

MAT 2228
(n,n') t:21-Sc-44g
22-Ti-47
Radionuclide Production Cross Section
0.000 To 1020. %
Min
Ratio
TENDL Threshold 22.546 MeV
JEFF3.3 Threshold 22.546 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
22-Ti-47

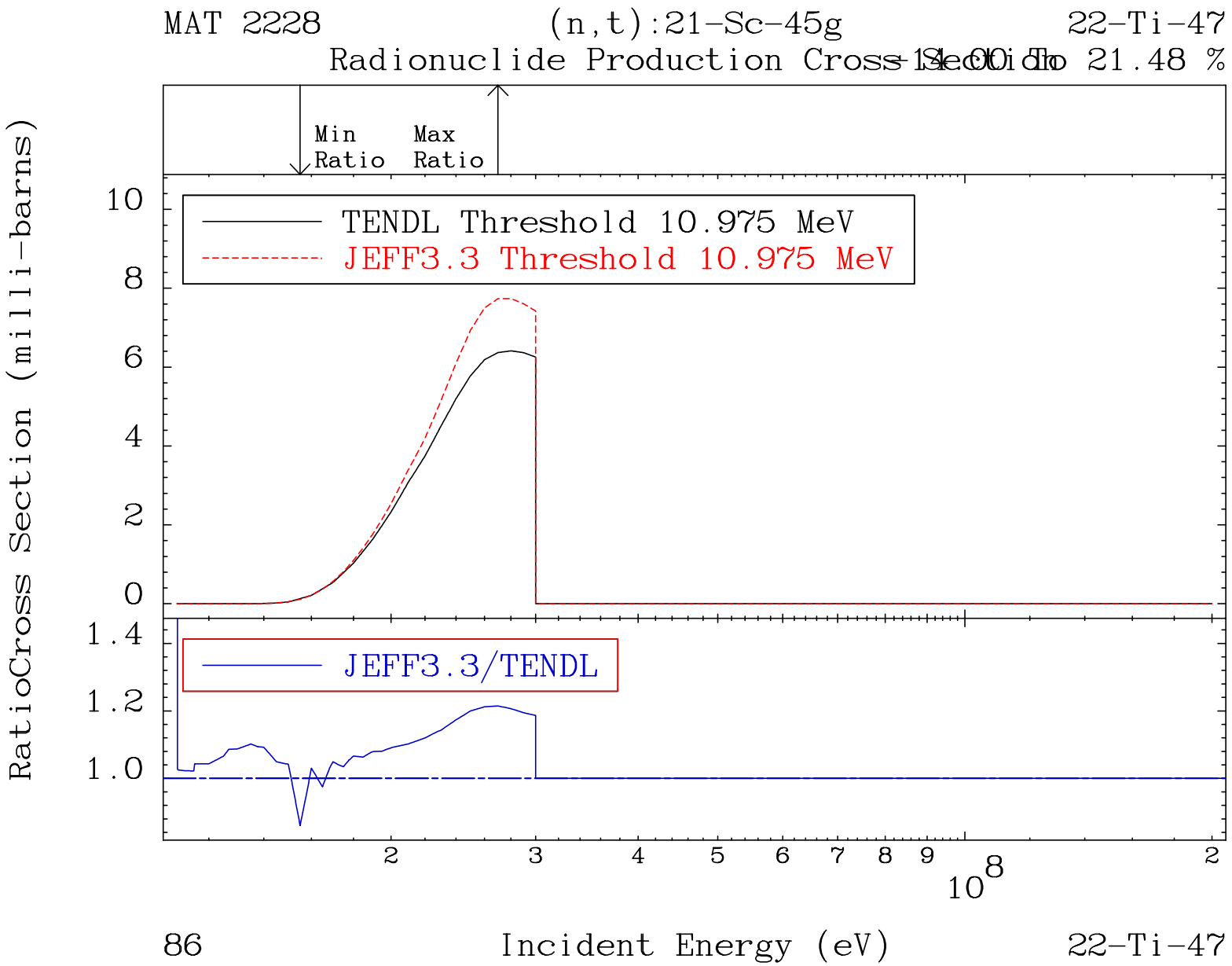

MAT 2228
(n,n') t:21-Sc-44m4
22-Ti-47
Radionuclide Production Cross Section
0.000 To 7967. %
Min
Ratio
TENDL Threshold 23.000 MeV
JEFF3.3 Threshold 22.821 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
22-Ti-47

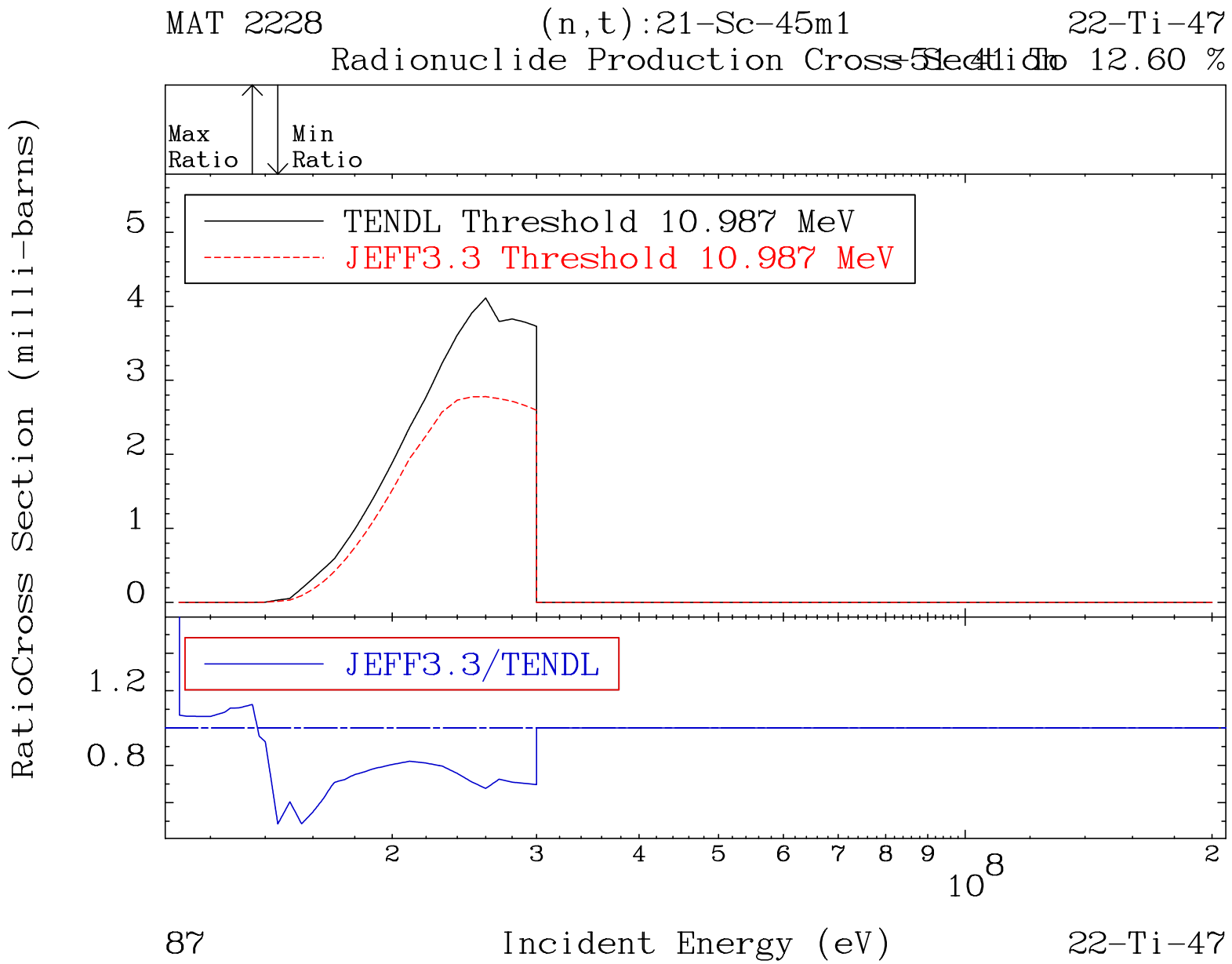

MAT 2228
(n,2n) p:21-Sc-45g
22-Ti-47
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.639 MeV
JEFF3.3 Threshold 19.639 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
22-Ti-47


MAT 2228
(n,2n) p:21-Sc-45m1
22-Ti-47
Radionuclide Production Cross Section
-17.10 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.651 MeV
JEFF3.3 Threshold 19.651 MeV
JEFF3.3/TENDL
Ratio
Cross Section (milli-barns)
60
50
40
30
20
10
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
83
22-Ti-47


MAT 2228
(n,d):21-Sc-46g
22-Ti-47
Radionuclide Production Cross-Section
49.75 To 69.43 %
Min
Ratio
TENDL Threshold 8.4174 MeV
JEFF3.3 Threshold 8.4174 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
22-Ti-47


MAT 2228
(n,d):21-Sc-46m2
22-Ti-47
Radionuclide Production Cross-Section To 92.34 %
Min
Ratio
TENDL Threshold 8.5630 MeV
JEFF3.3 Threshold 8.5630 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
22-Ti-47


MAT 2228
(n,t):21-Sc-45g
22-Ti-47
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.975 MeV
JEFF3.3 Threshold 10.975 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
86
22-Ti-47


MAT 2228
(n,t):21-Sc-45m1
22-Ti-47
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 10.987 MeV
JEFF3.3 Threshold 10.987 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
87
22-Ti-47