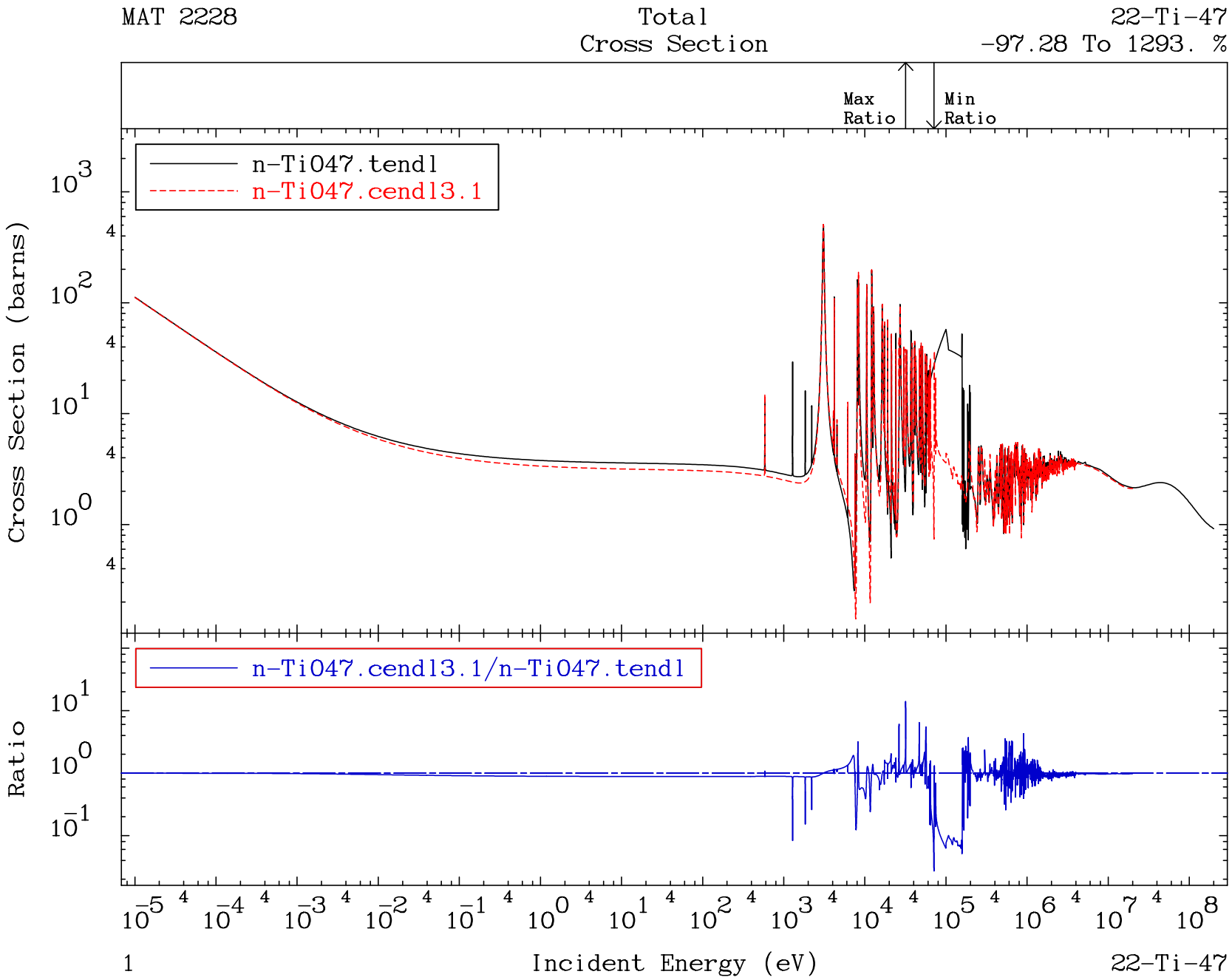
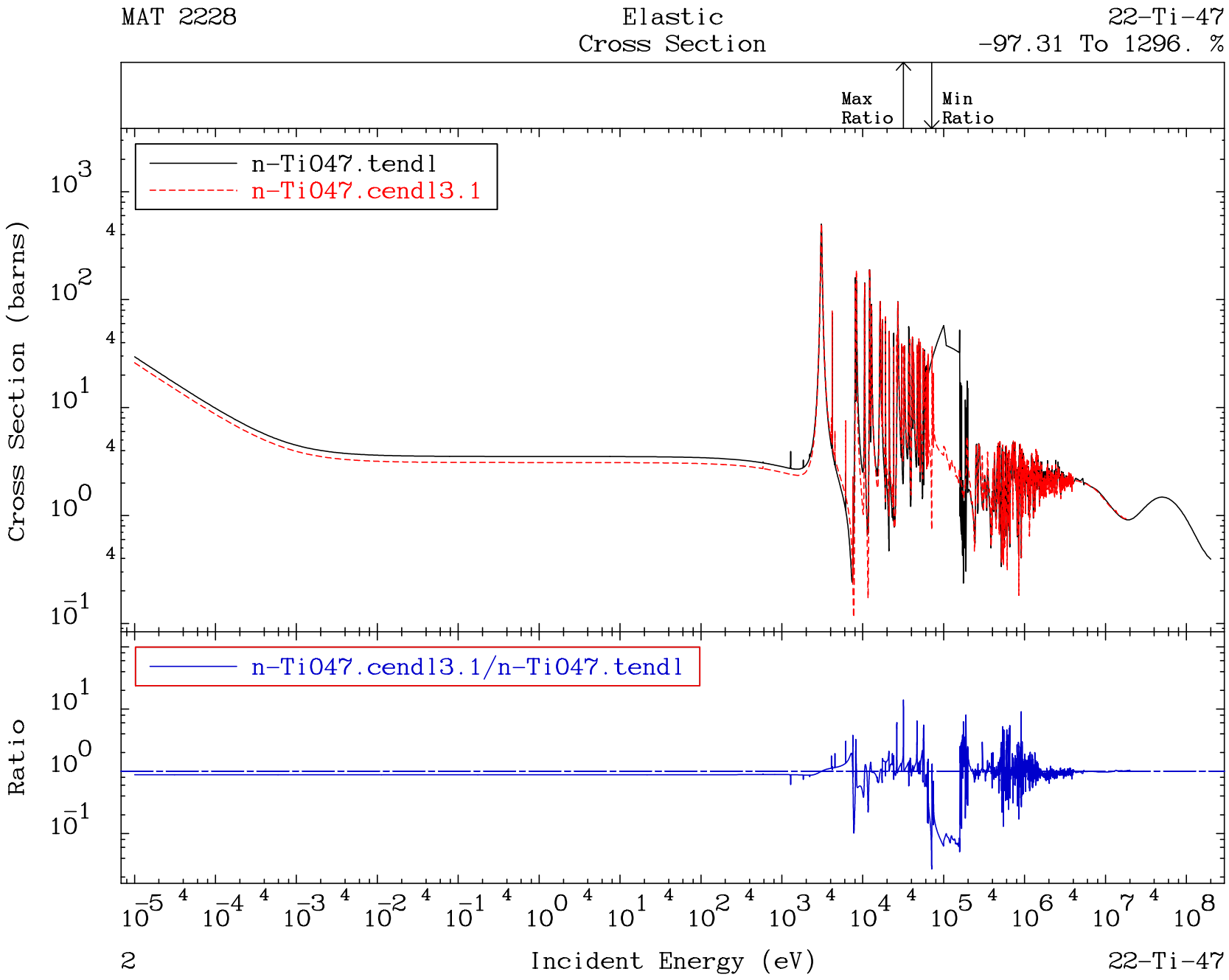
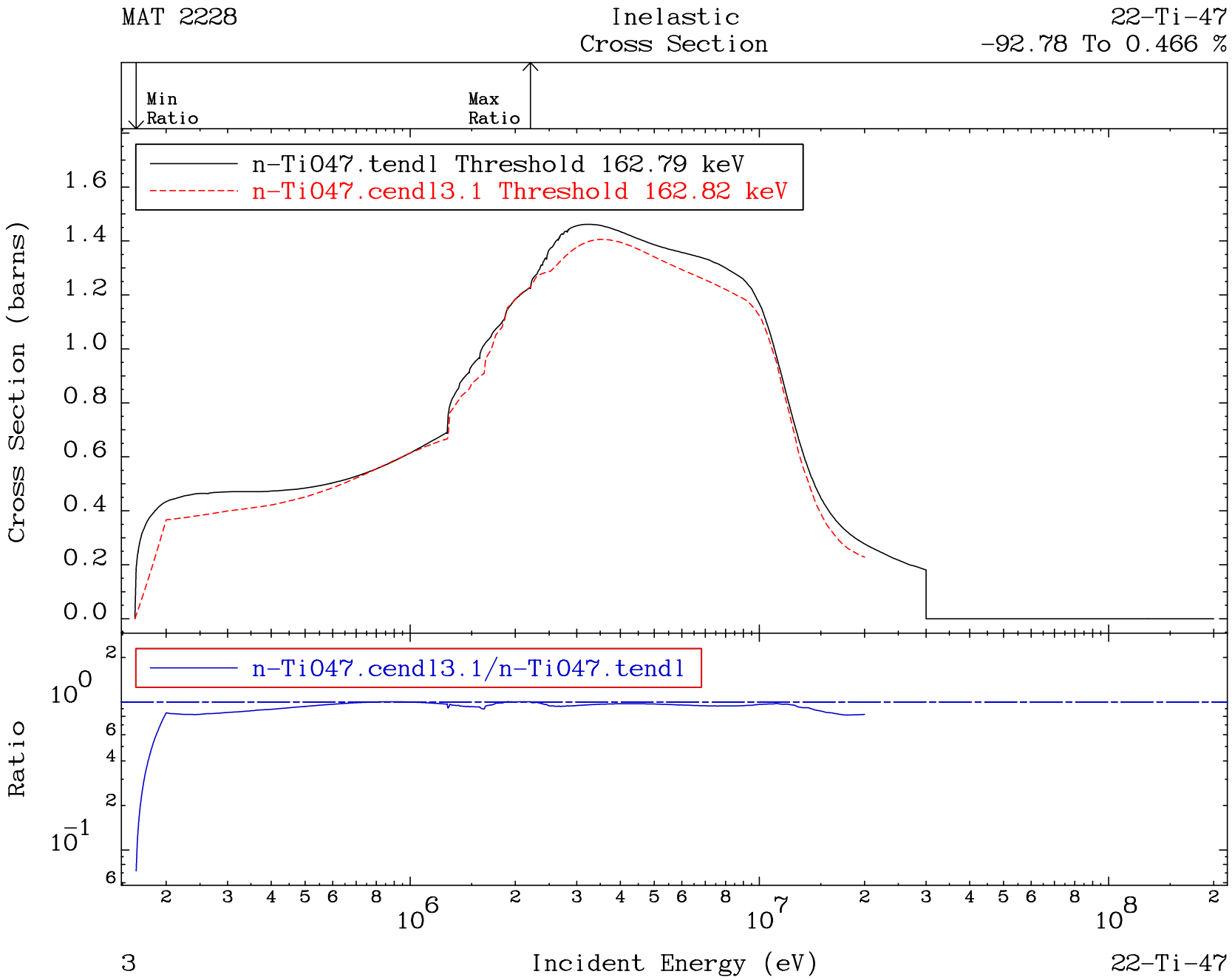
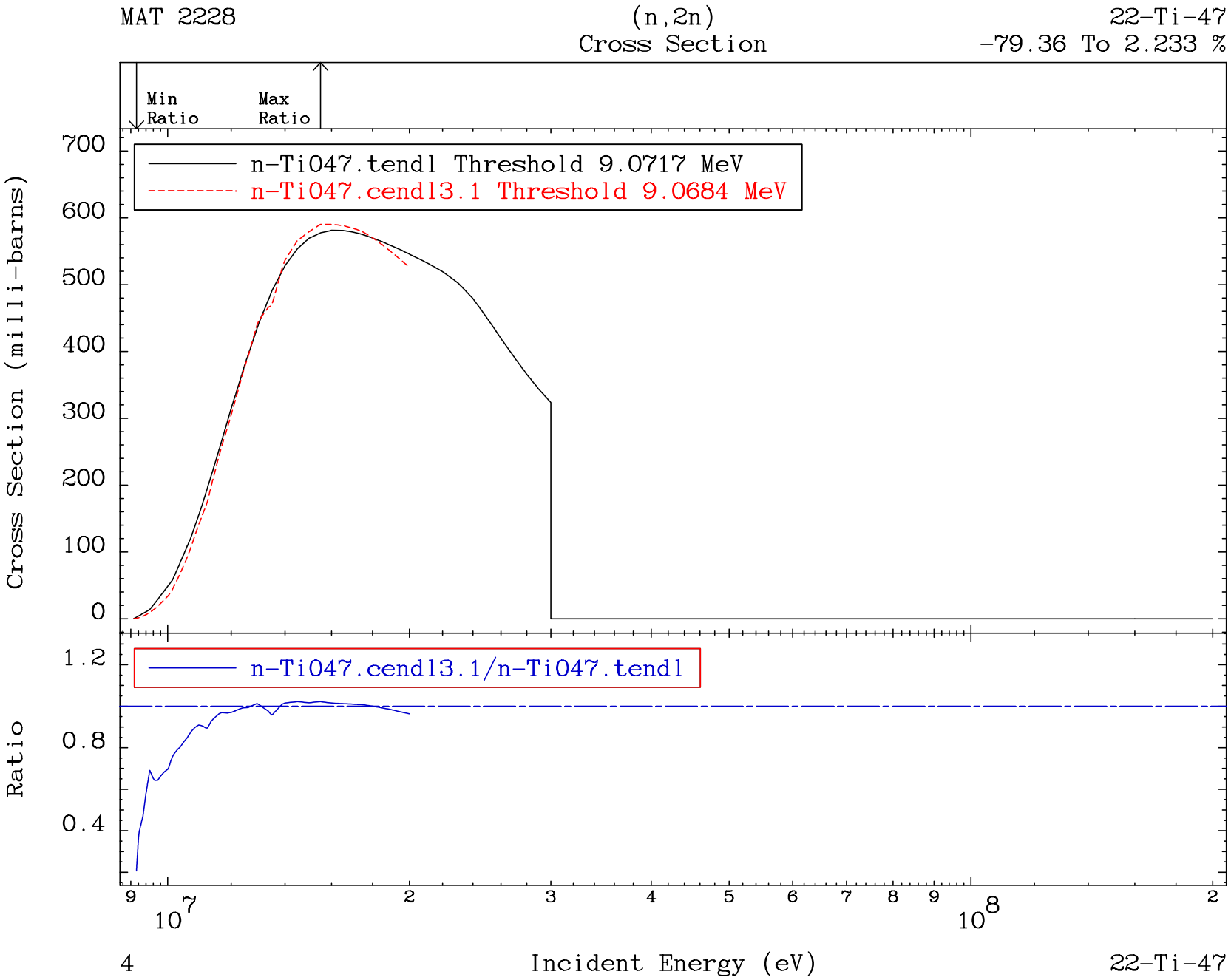
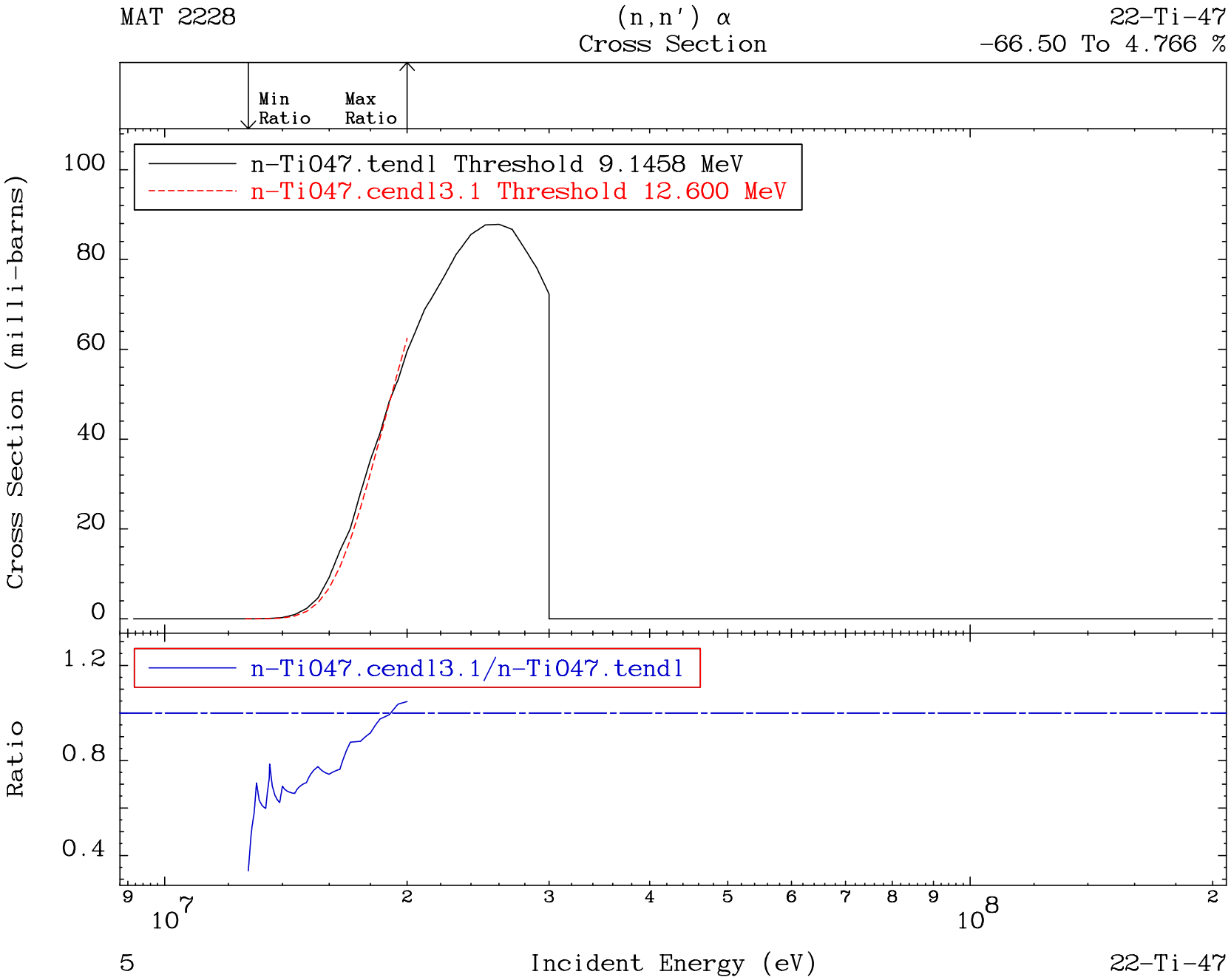
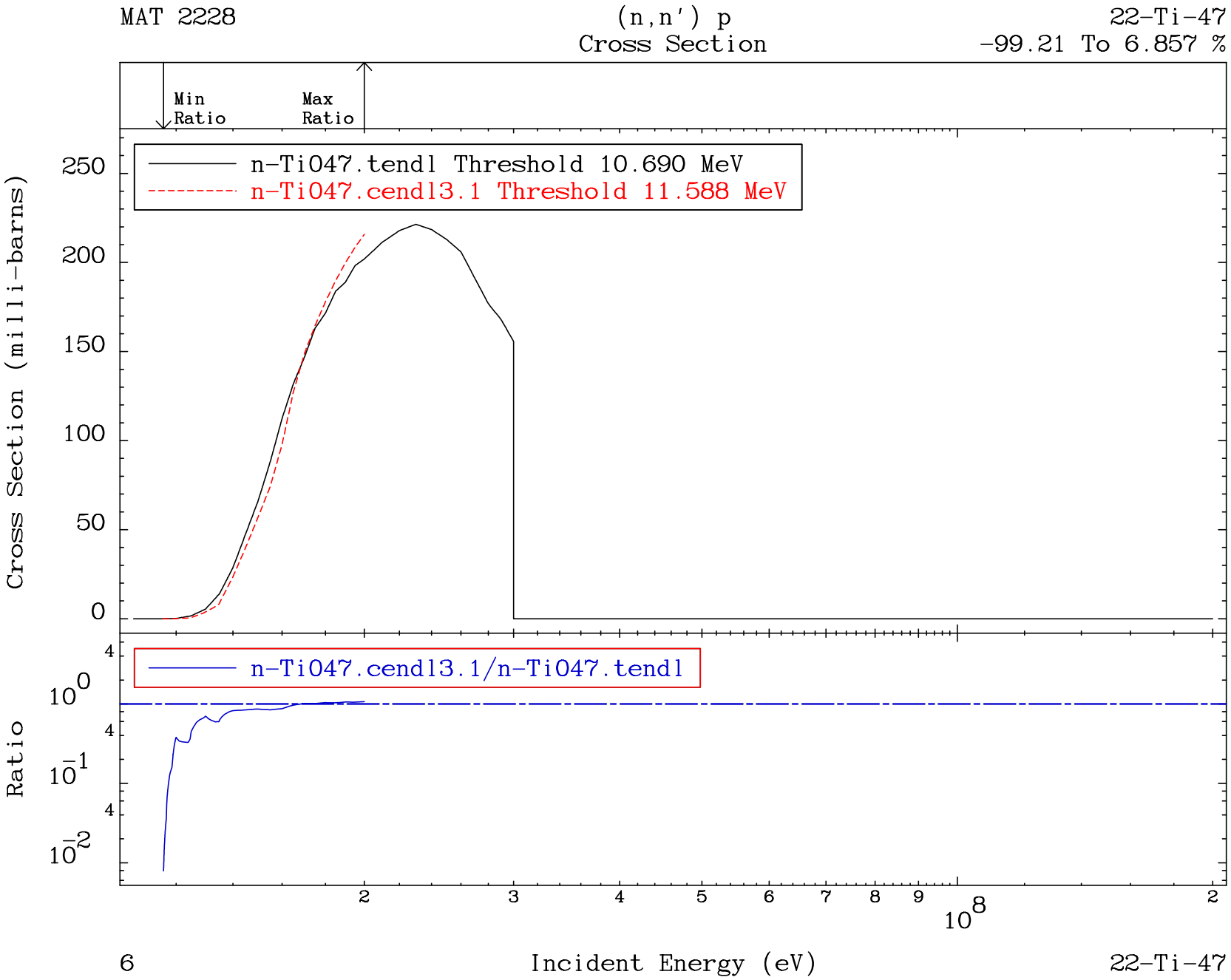

MAT 2228
Total
Cross Section
22-Ti-47
-97.28 To 1293. %
Max
Ratio
Min
Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
1
22-Ti-47

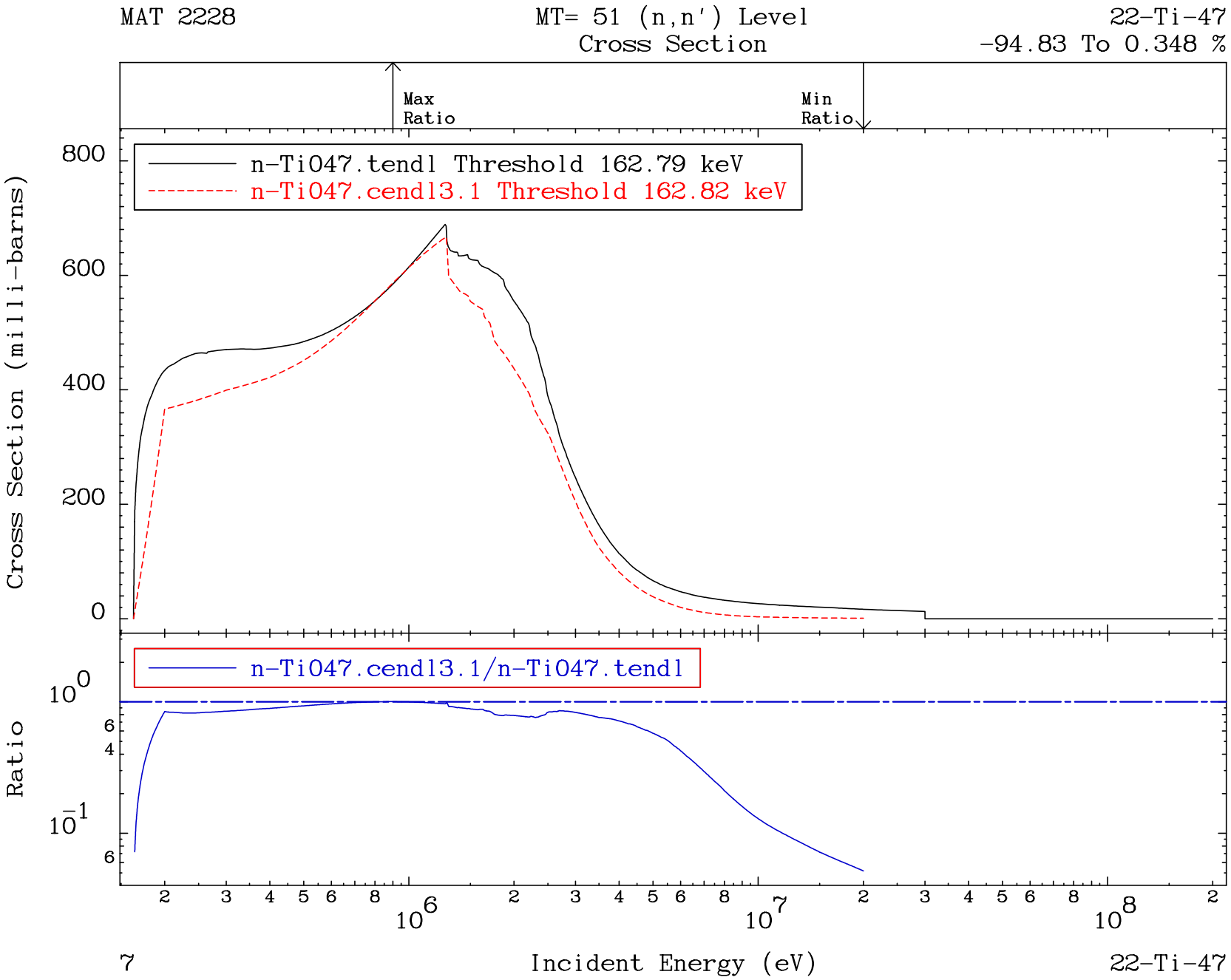

MAT 2228
Elastic
Cross Section
22-Ti-47
-97.31 To 1296. %
Max
Ratio
Min
Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
2
22-Ti-47

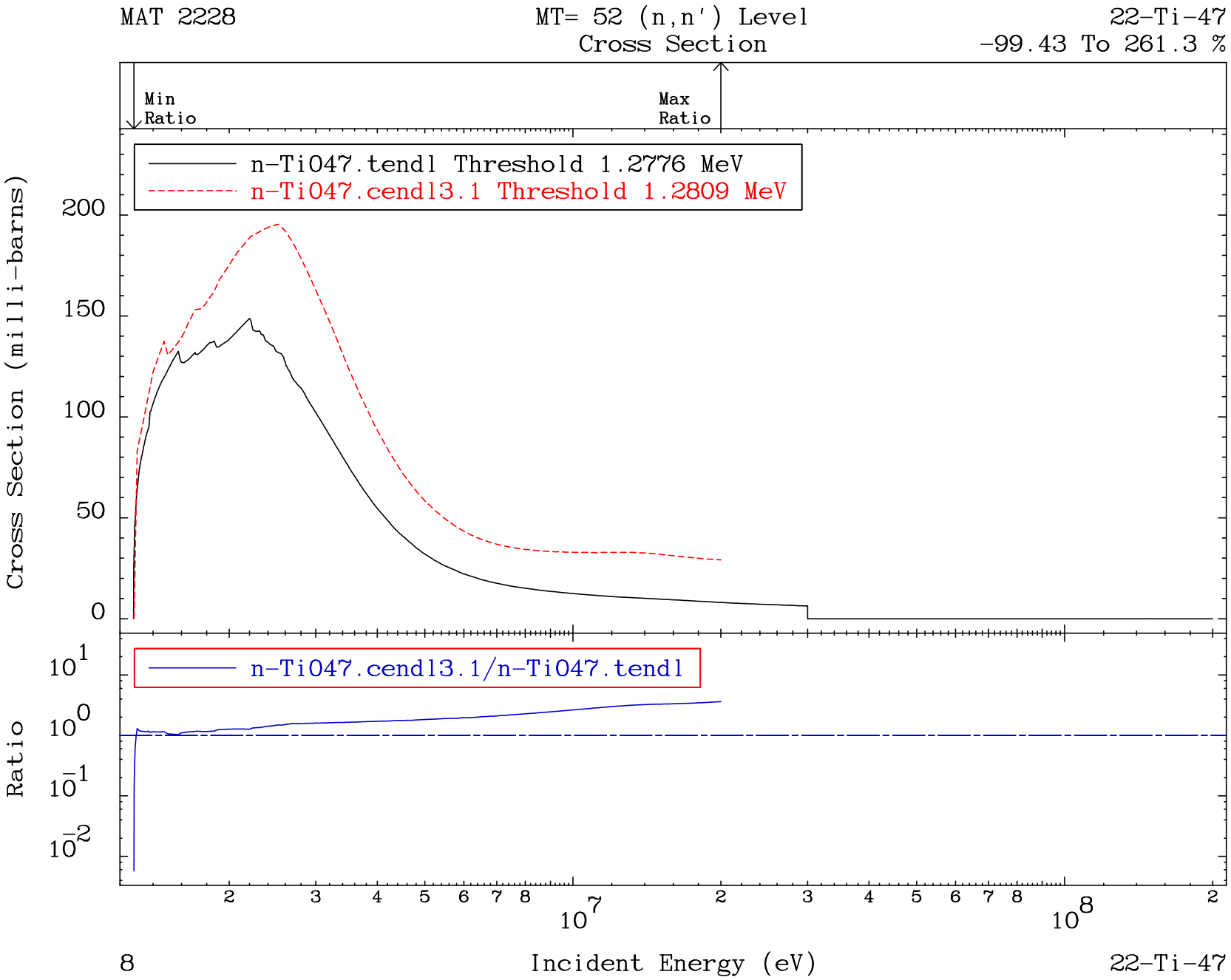

MAT 2228
Inelastic
Cross Section
22-Ti-47
-92.78 To 0.466 %
Min
Ratio
Max
Ratio
n-Ti047.tendl Threshold 162.79 keV
n-Ti047.cendl3.1 Threshold 162.82 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^{0}
10^{-1}
2
6
4
2
6
2 3 4 5 6 8 10^{6} 2 3 4 5 6 8 10^{7} 2 3 4 5 6 8 10^{8} 2
3
Incident Energy (eV)
22-Ti-47

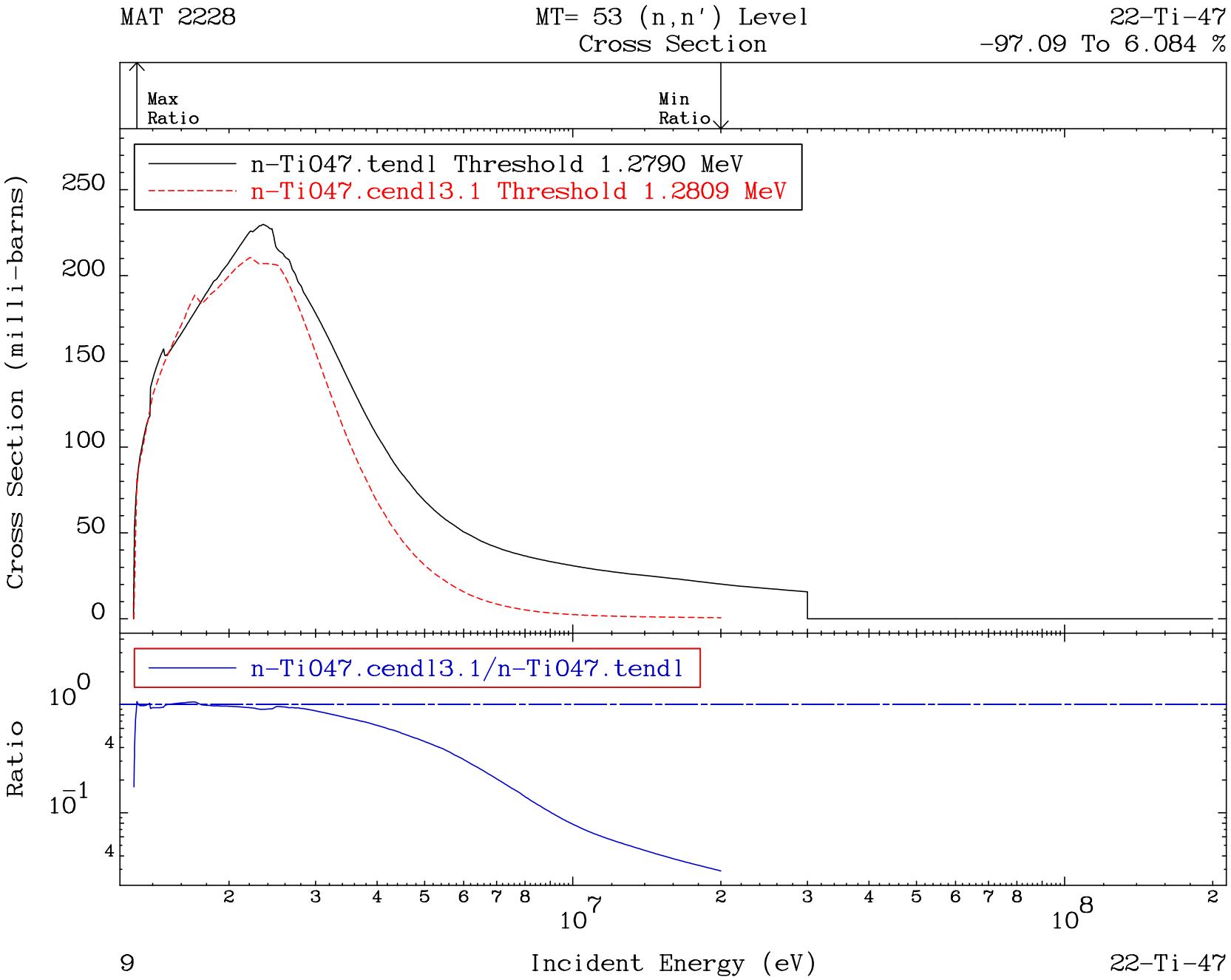

MAT 2228
(n,2n)
Cross Section
22-Ti-47
-79.36 To 2.233 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 9.0717 MeV
n-Ti047.cendl3.1 Threshold 9.0684 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
22-Ti-47

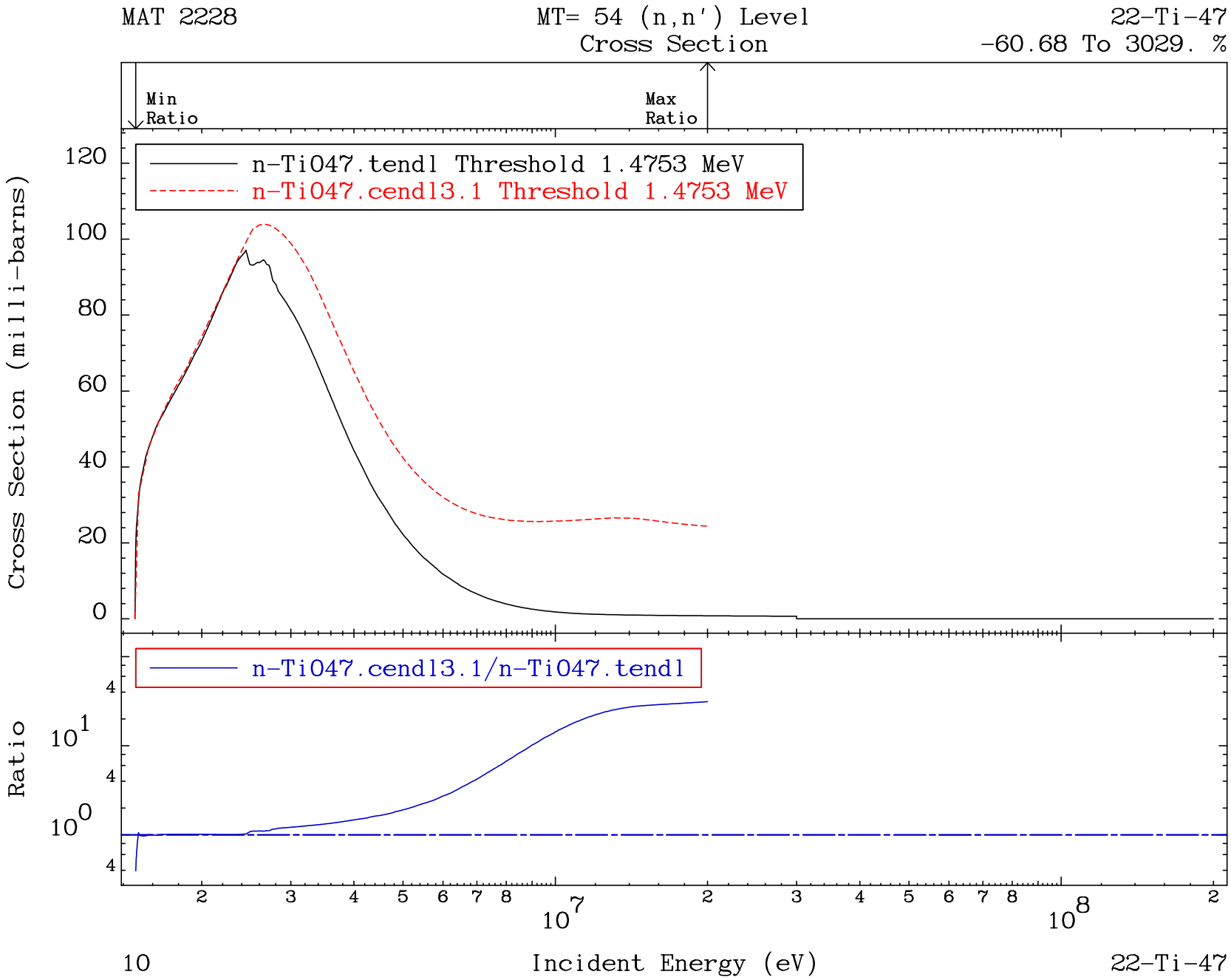

MAT 2228
(n,n') α
Cross Section
22-Ti-47
-66.50 To 4.766 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 9.1458 MeV
n-Ti047.cendl3.1 Threshold 12.600 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
22-Ti-47

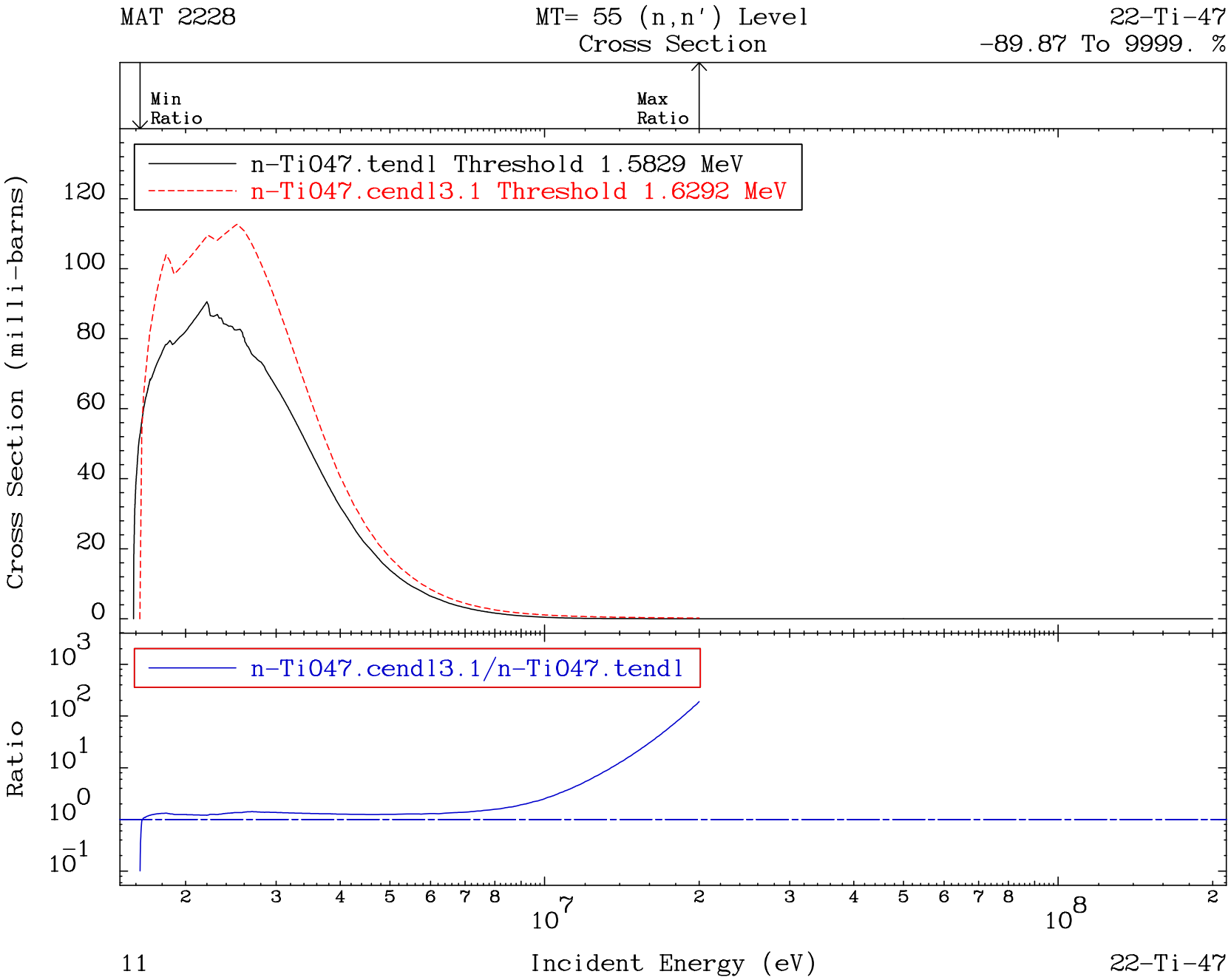

MAT 2228
(n,n') p
Cross Section
22-Ti-47
-99.21 To 6.857 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 10.690 MeV
n-Ti047.cendl3.1 Threshold 11.588 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
22-Ti-47

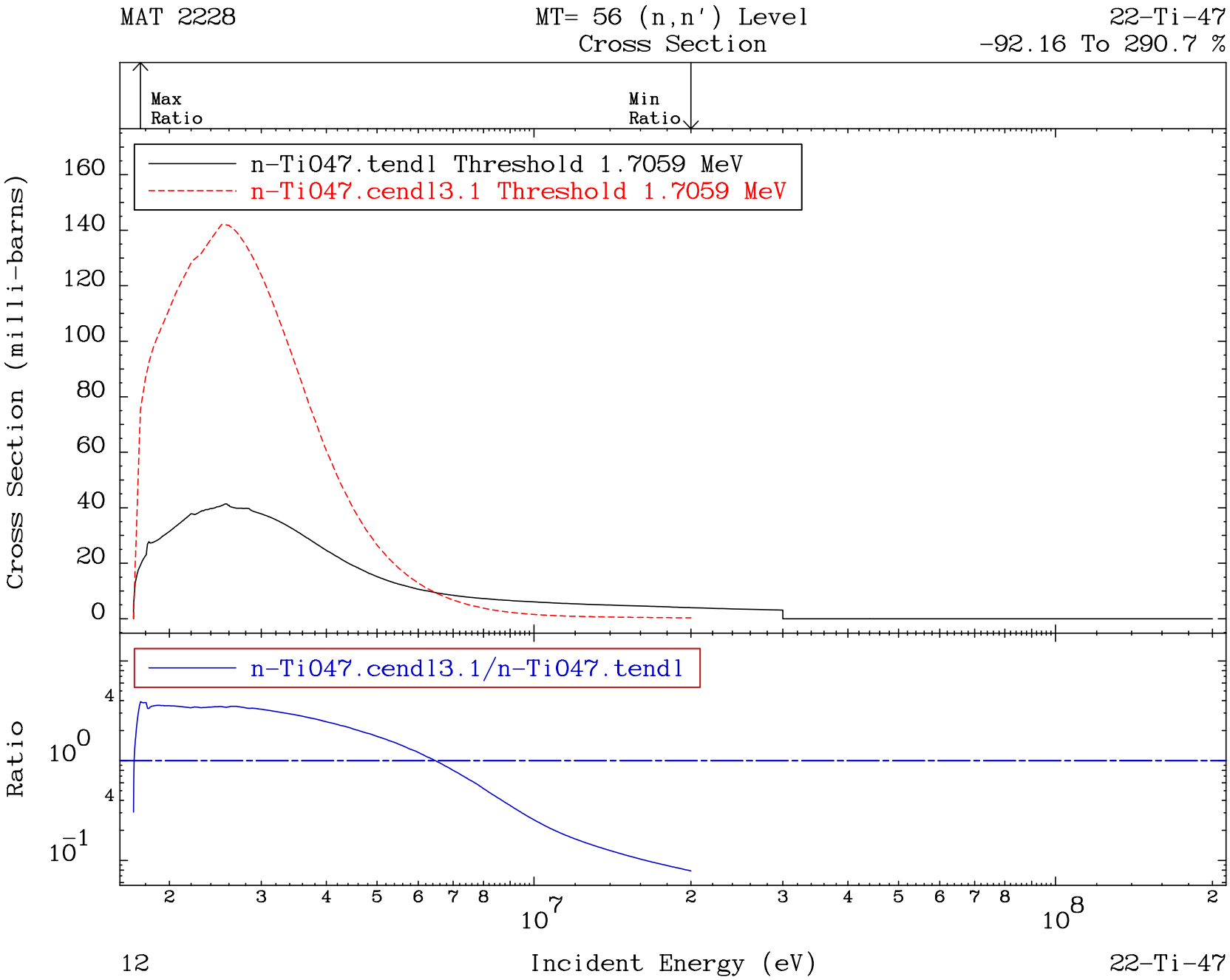

MAT 2228
MT= 51 (n,n') Level
Cross Section
22-Ti-47
-94.83 To 0.348 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 162.79 keV
n-Ti047.cendl3.1 Threshold 162.82 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
6
4
10^-1
6
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
7
22-Ti-47

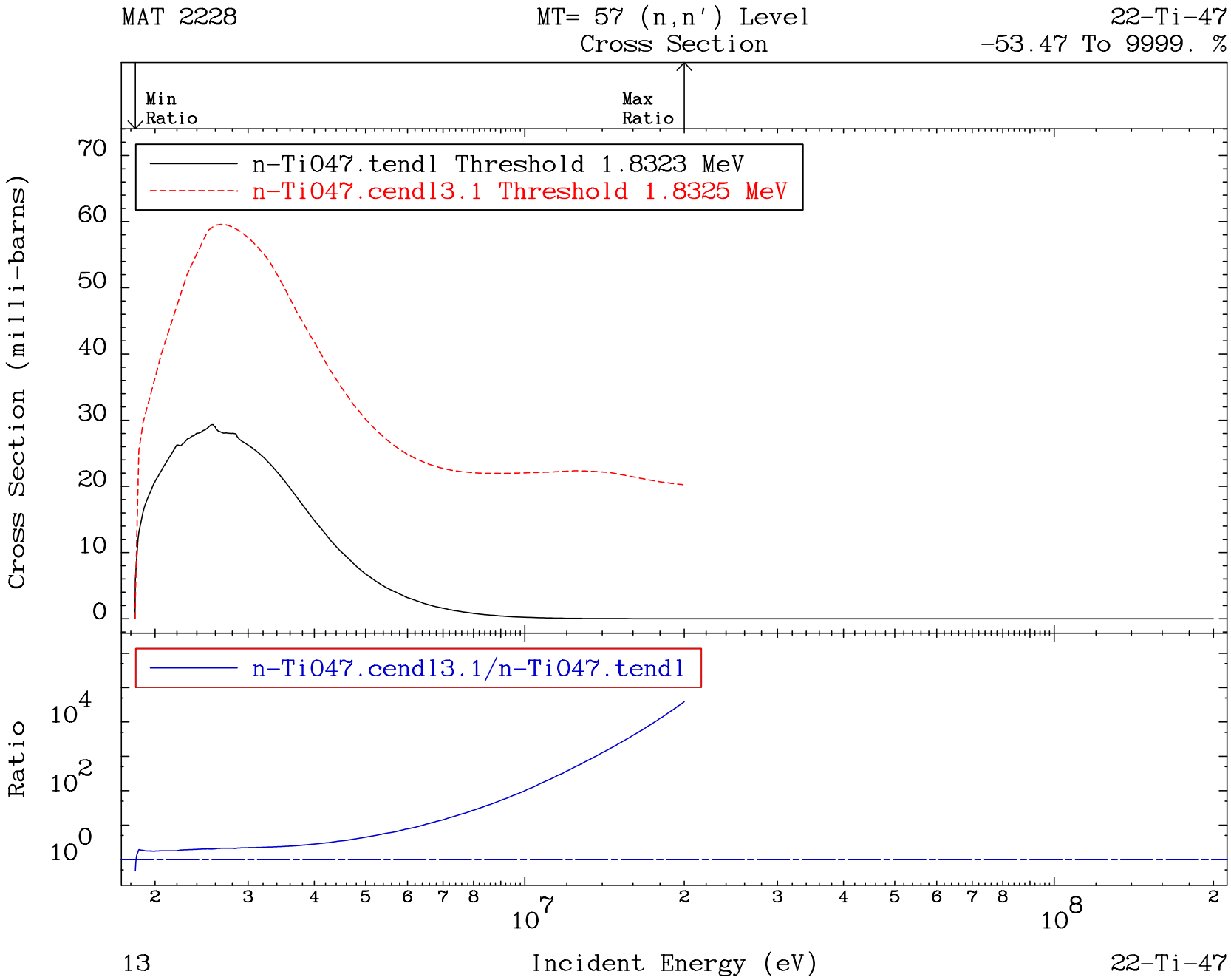

MAT 2228
MT= 52 (n,n') Level
Cross Section
22-Ti-47
-99.43 To 261.3 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 1.2776 MeV
n-Ti047.cendl3.1 Threshold 1.2809 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^1
10^0
10^-1
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
22-Ti-47

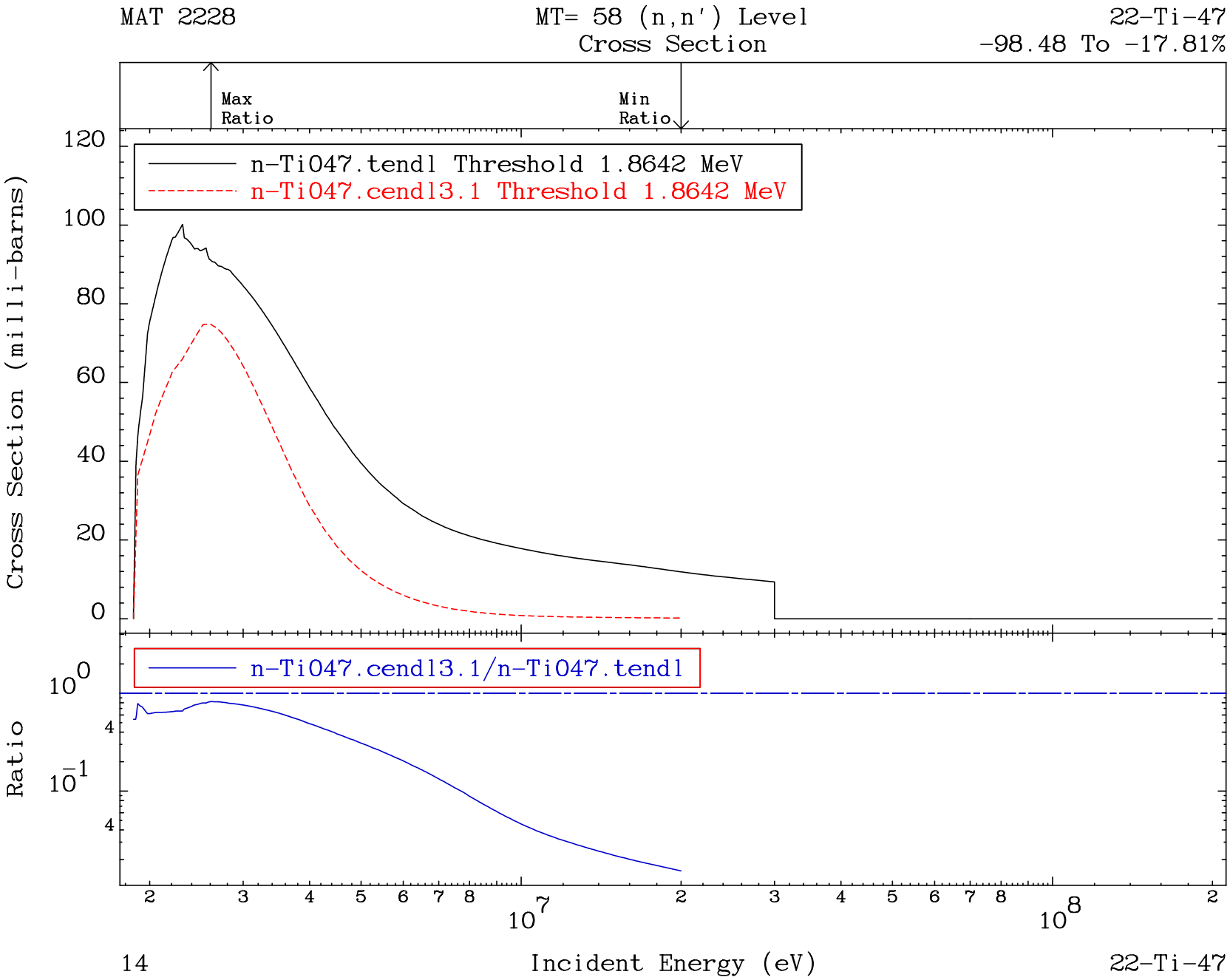

MAT 2228
MT= 53 (n,n') Level
Cross Section
22-Ti-47
-97.09 To 6.084 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 1.2790 MeV
n-Ti047.cendl3.1 Threshold 1.2809 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
4
10^-1
4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
22-Ti-47

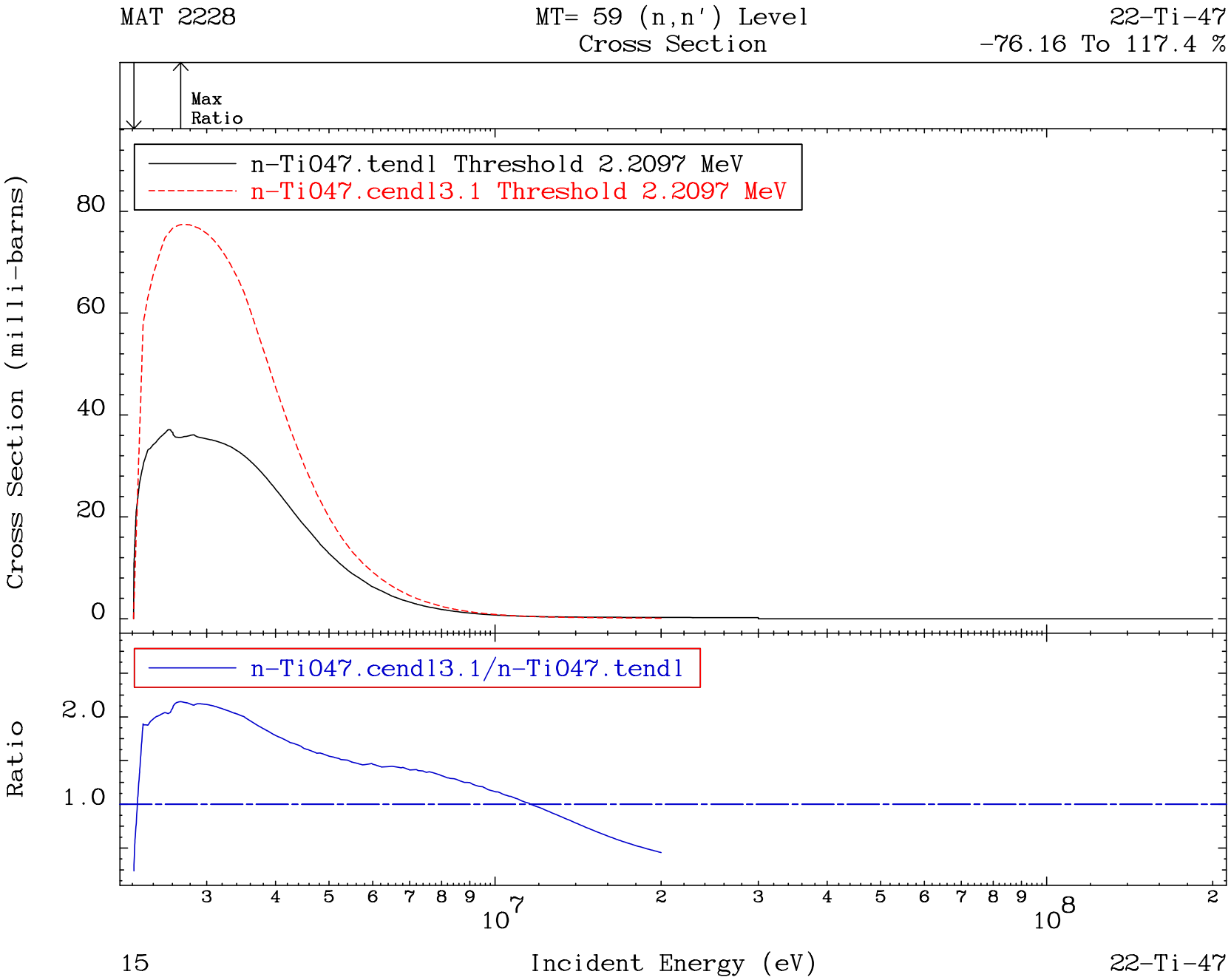

MAT 2228
MT= 54 (n,n') Level
Cross Section
22-Ti-47
-60.68 To 3029. %
Min
Ratio
Max
Ratio
n-Ti047.tendl Threshold 1.4753 MeV
n-Ti047.cendl3.1 Threshold 1.4753 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^1
10^0
4
2
3
4
5
6
7
8
10^7
10^8
10
Incident Energy (eV)
22-Ti-47

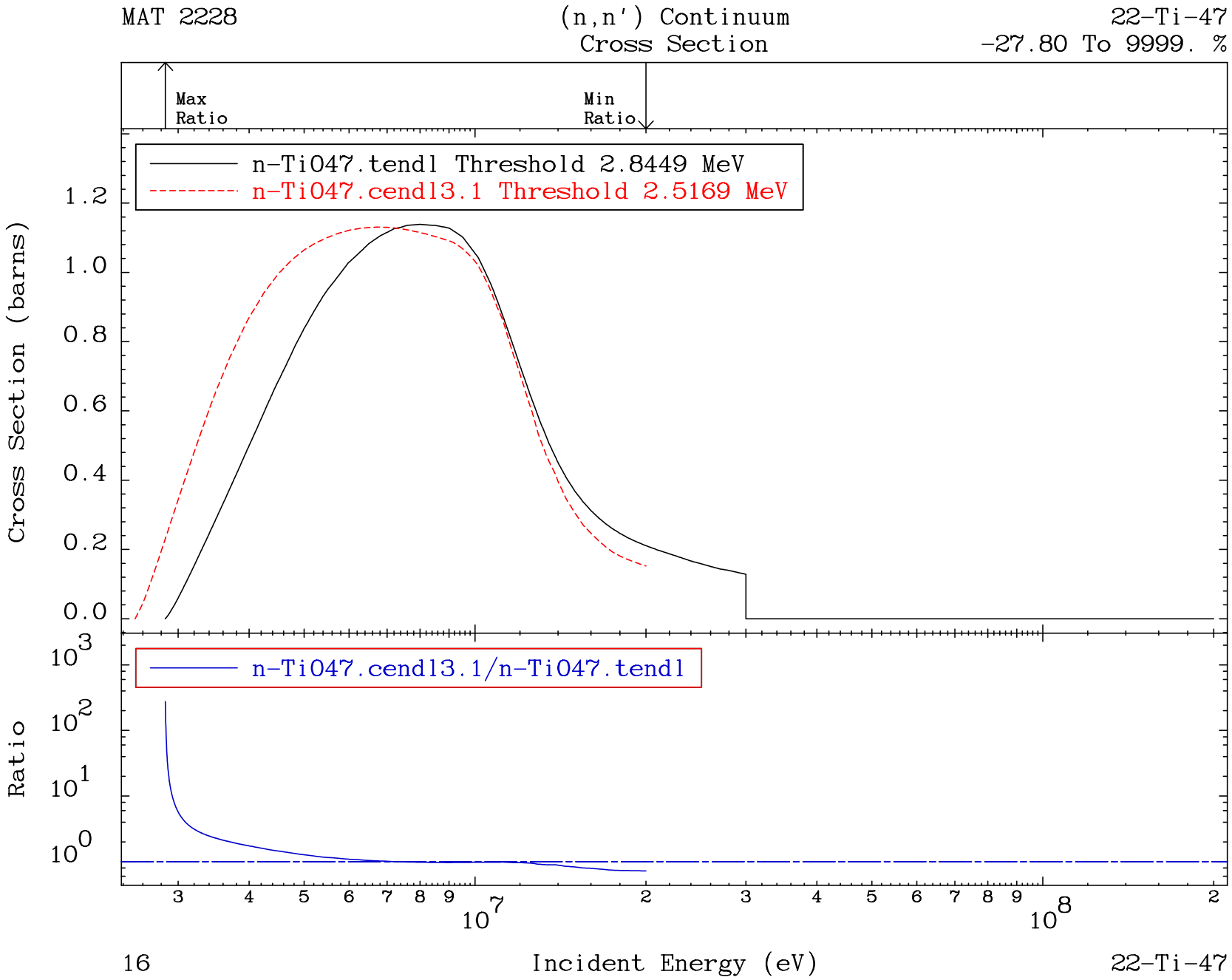

MAT 2228
MT= 55 (n,n') Level
Cross Section
22-Ti-47
-89.87 To 9999. %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 1.5829 MeV
n-Ti047.cendl3.1 Threshold 1.6292 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^3
10^2
10^1
10^0
10^-1
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
22-Ti-47

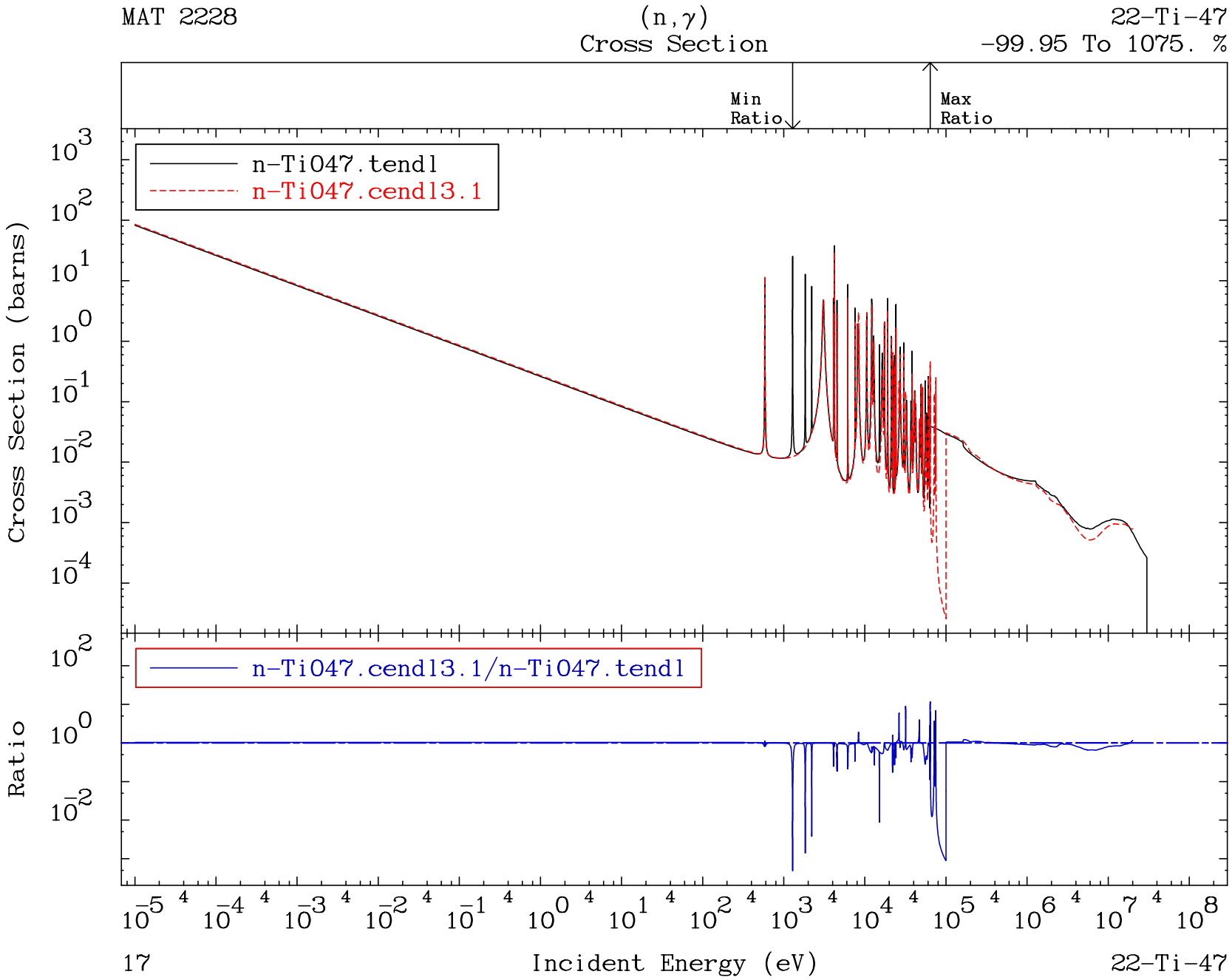

MAT 2228
MT= 56 (n,n') Level
Cross Section
22-Ti-47
-92.16 To 290.7 %
Max
Ratio
Min
Ratio
n-Ti047.tendl Threshold 1.7059 MeV
n-Ti047.cendl3.1 Threshold 1.7059 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
4
10^{0}
4
10^{-1}
2
3
4
5
6
7
8
10^{7}
2
3
4
5
6
7
8
10^{8}
2
12
Incident Energy (eV)
22-Ti-47

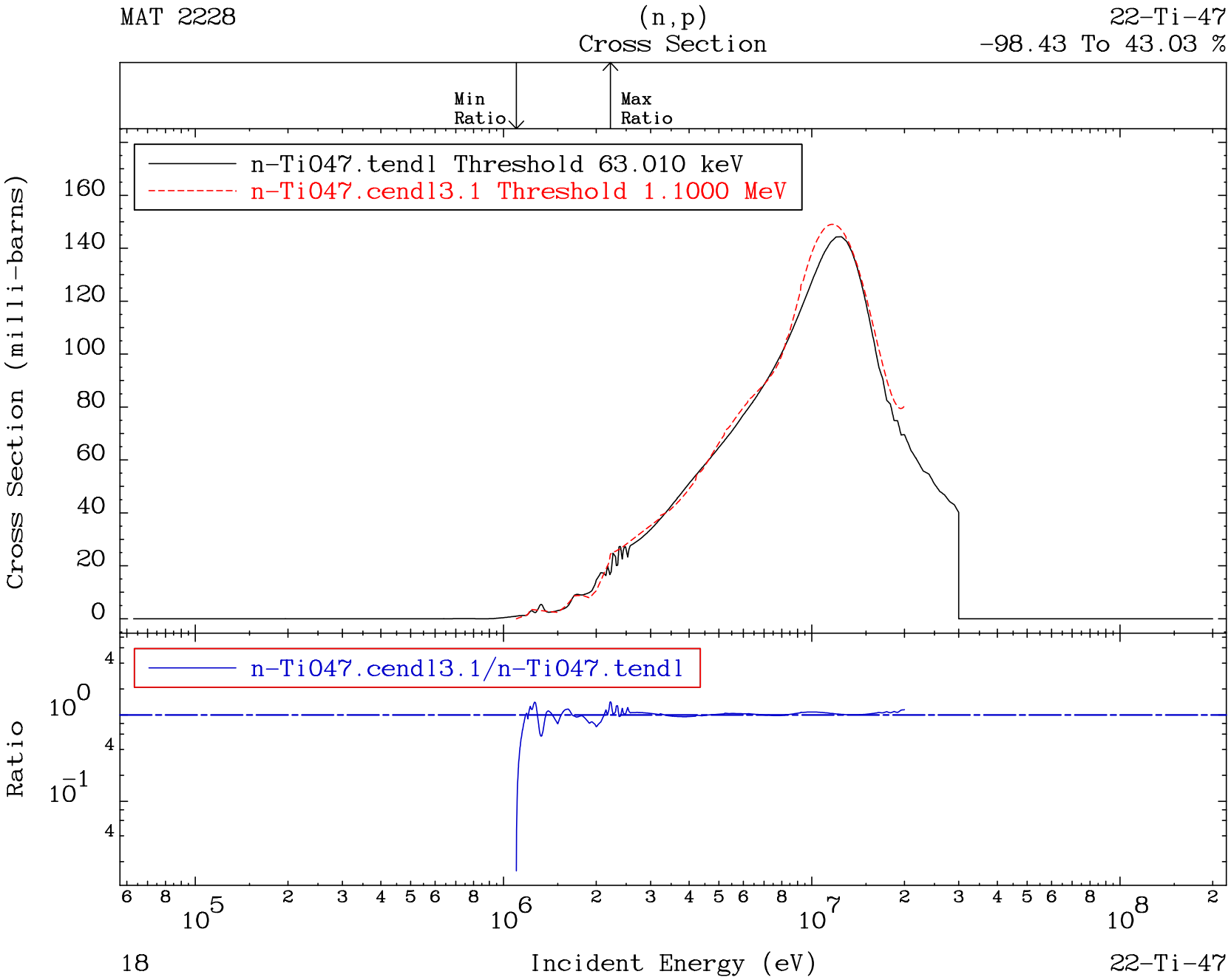

MAT 2228
MT= 57 (n,n') Level
Cross Section
22-Ti-47
-53.47 To 9999. %
Min
Ratio
Max
Ratio
n-Ti047.tendl Threshold 1.8323 MeV
n-Ti047.cendl3.1 Threshold 1.8325 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
22-Ti-47

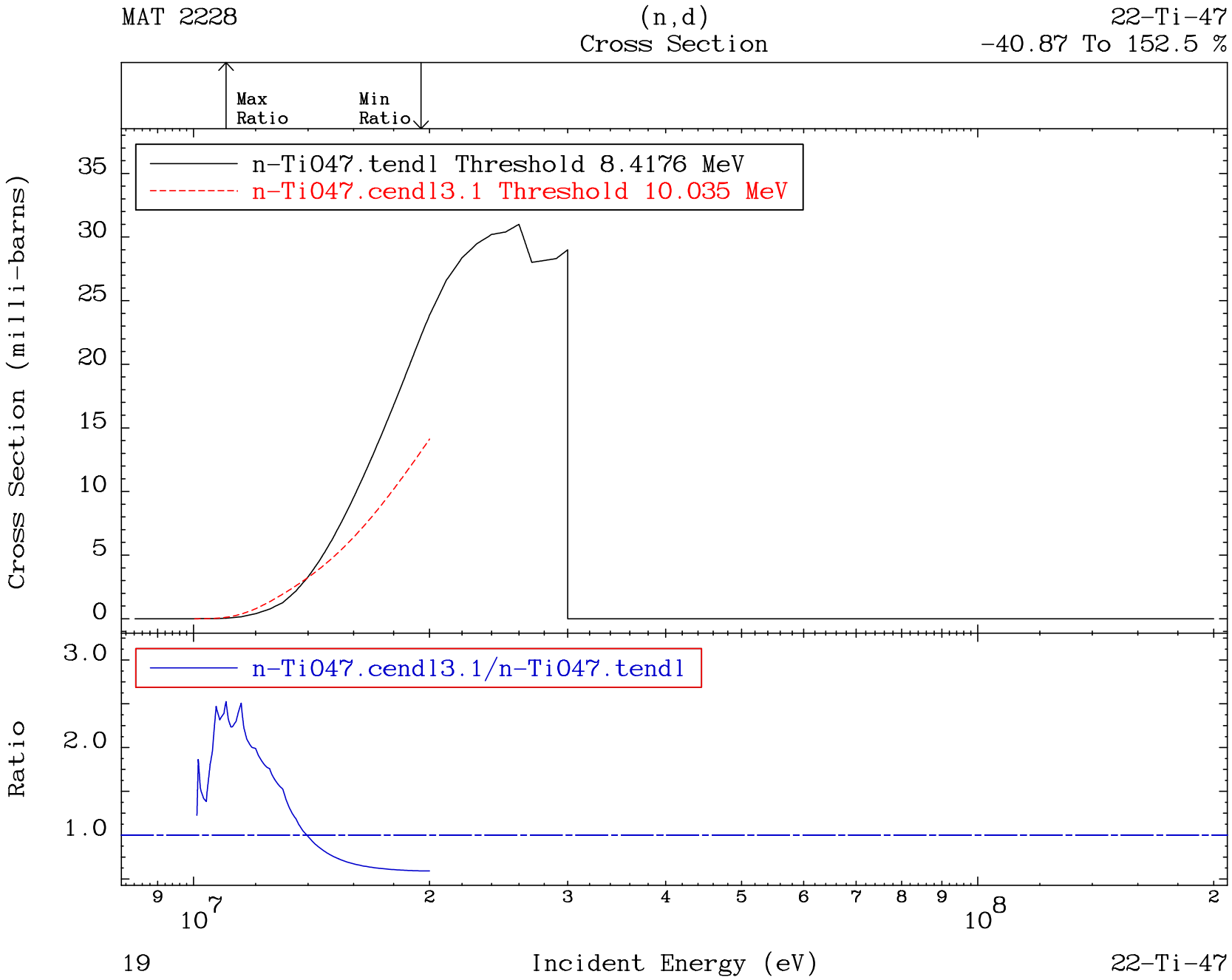

MAT 2228
MT= 58 (n,n') Level
Cross Section
22-Ti-47
-98.48 To -17.81%
Max
Ratio
Min
Ratio
n-Ti047.tendl Threshold 1.8642 MeV
n-Ti047.cendl3.1 Threshold 1.8642 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
4
10^-1
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
22-Ti-47

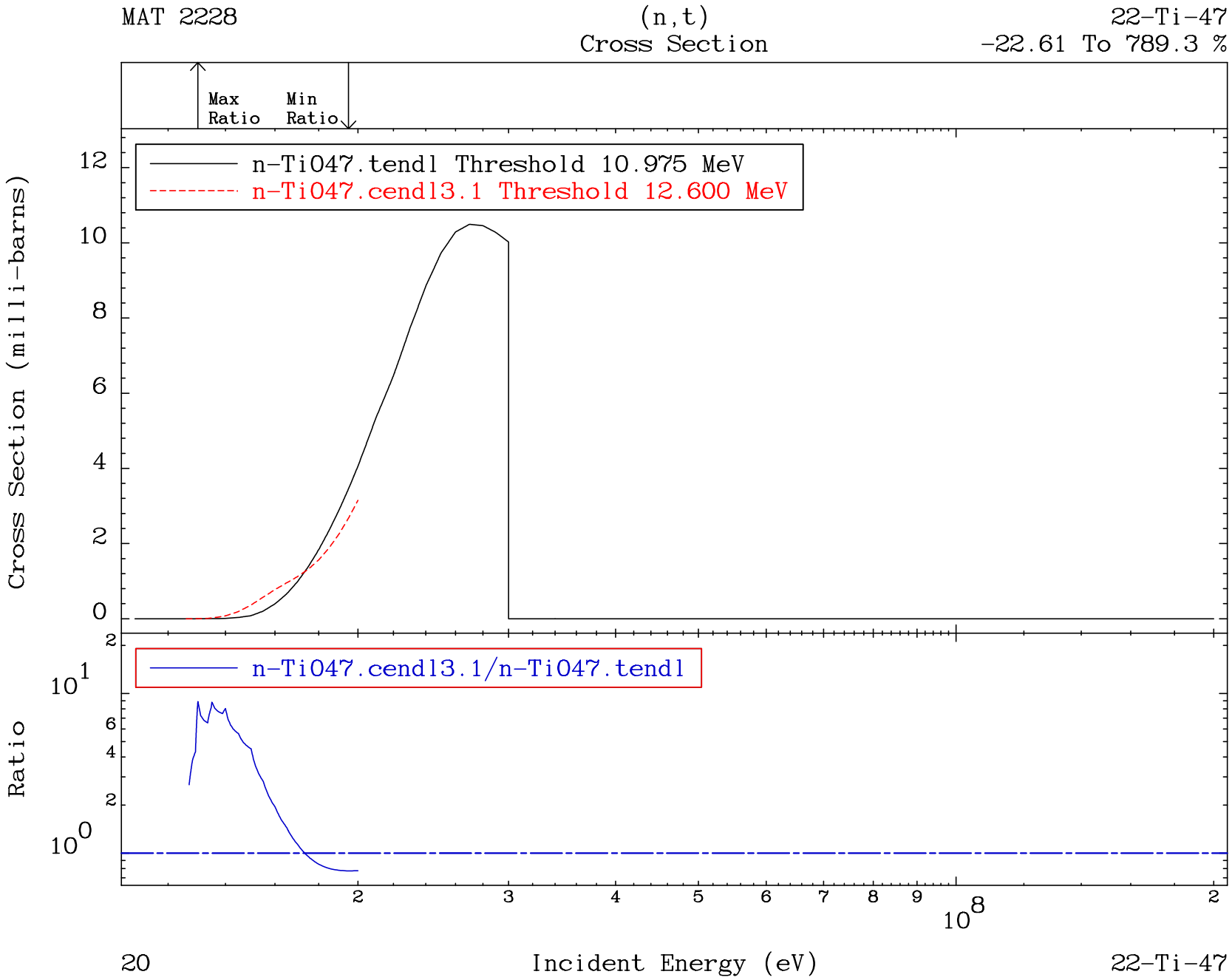

MAT 2228
MT= 59 (n,n') Level
Cross Section
22-Ti-47
-76.16 To 117.4 %
Max
Ratio
n-Ti047.tendl Threshold 2.2097 MeV
n-Ti047.cendl3.1 Threshold 2.2097 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
2.0
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
22-Ti-47

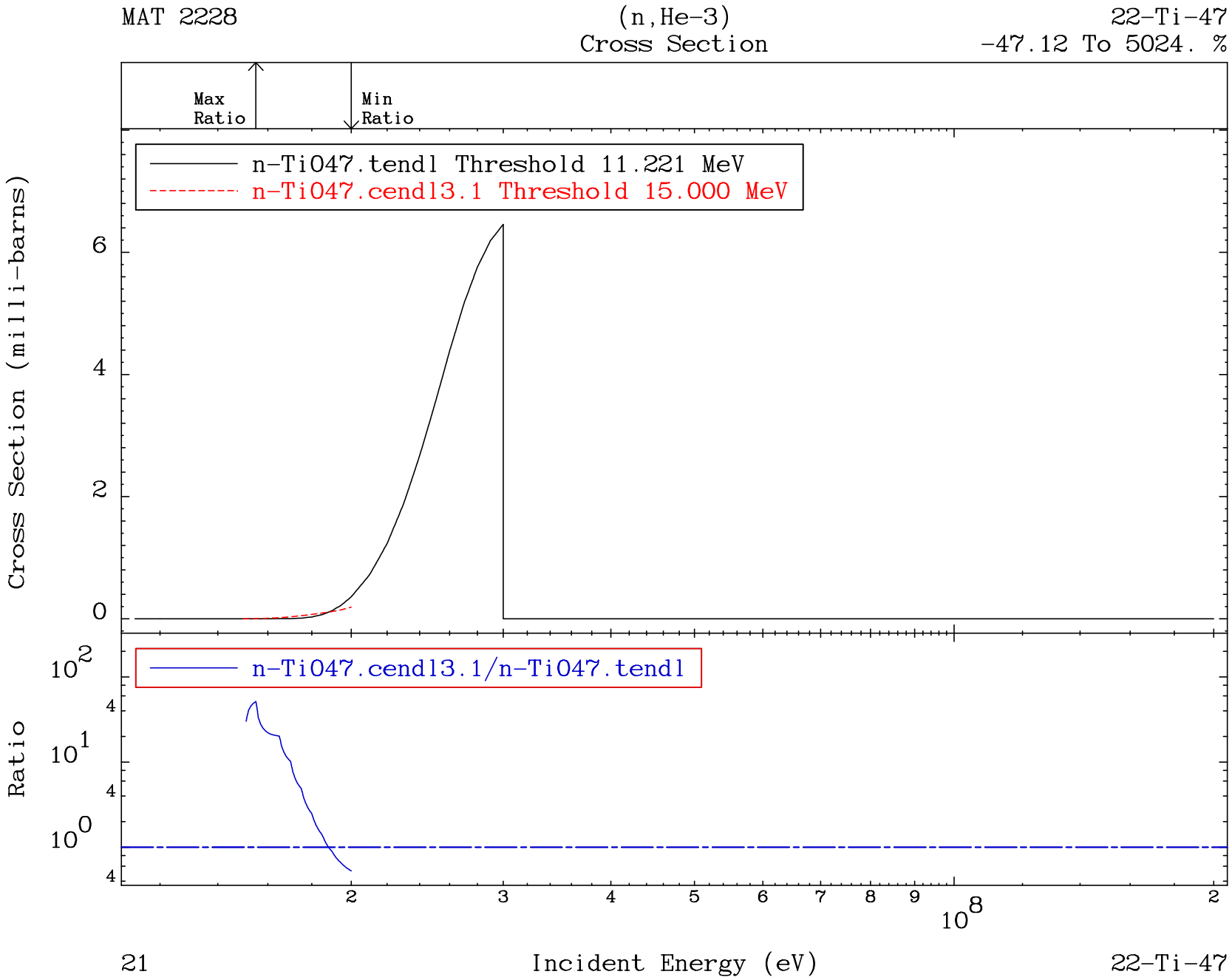

MAT 2228
(n,n') Continuum
Cross Section
22-Ti-47
-27.80 To 9999. %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 2.8449 MeV
n-Ti047.cendl3.1 Threshold 2.5169 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
22-Ti-47

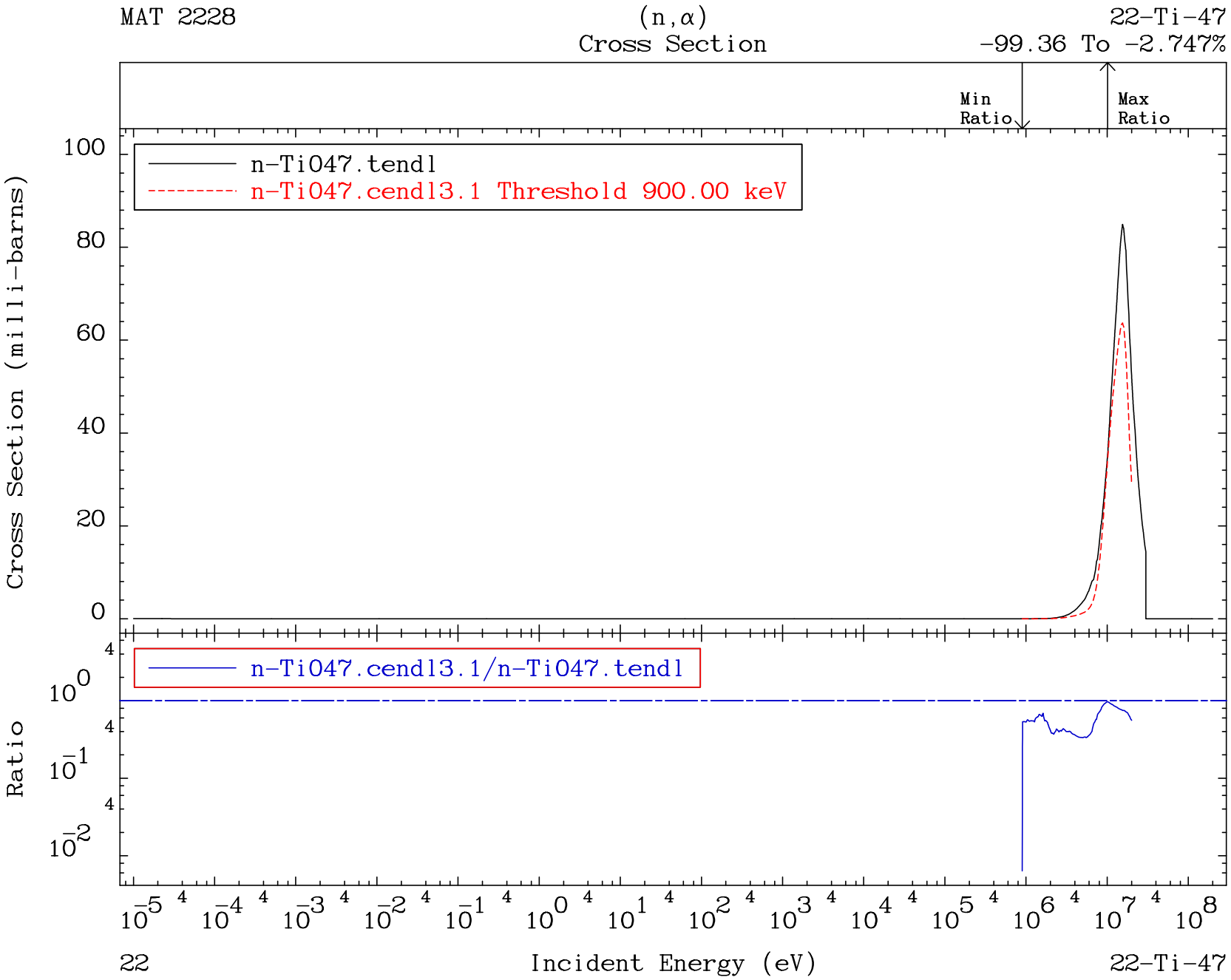

MAT 2228
(n,γ)
Cross Section
22-Ti-47
-99.95 To 1075. %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
17
22-Ti-47

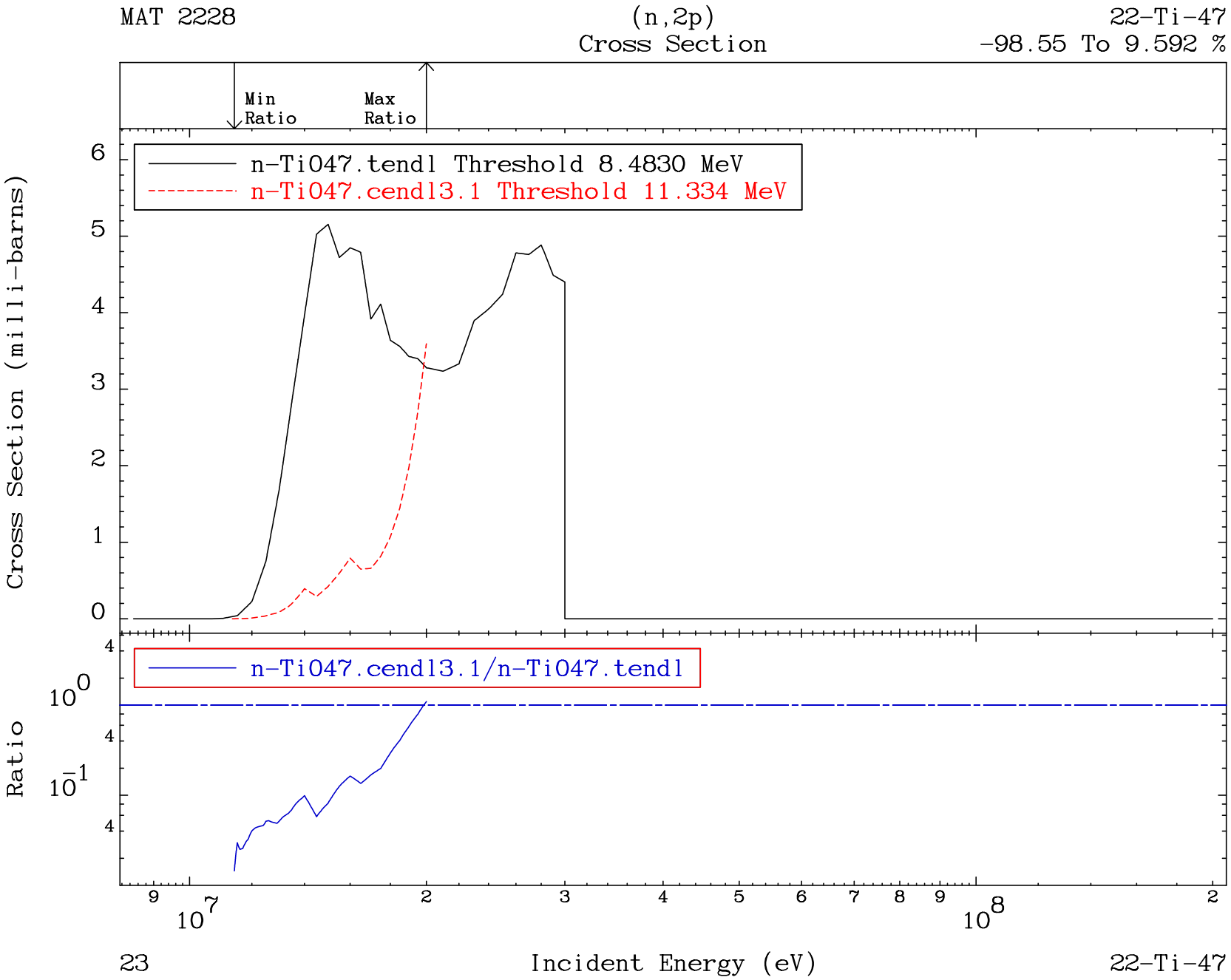

MAT 2228
(n,p)
Cross Section
22-Ti-47
-98.43 To 43.03 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 63.010 keV
n-Ti047.cendl3.1 Threshold 1.1000 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^{0}
10^{-1}
10^{5}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
18
22-Ti-47

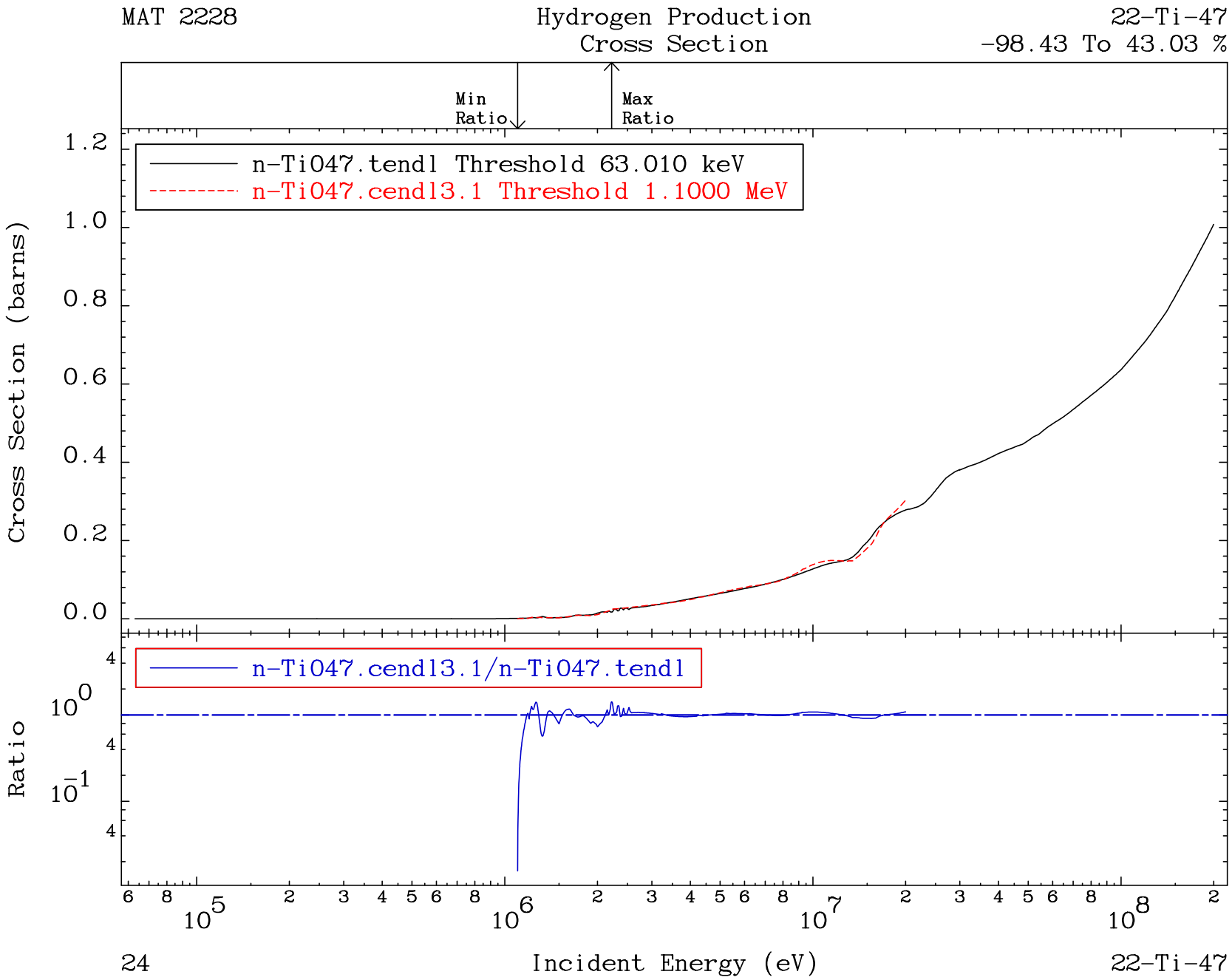

MAT 2228
(n,d)
Cross Section
22-Ti-47
-40.87 To 152.5 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 8.4176 MeV
n-Ti047.cendl3.1 Threshold 10.035 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
22-Ti-47

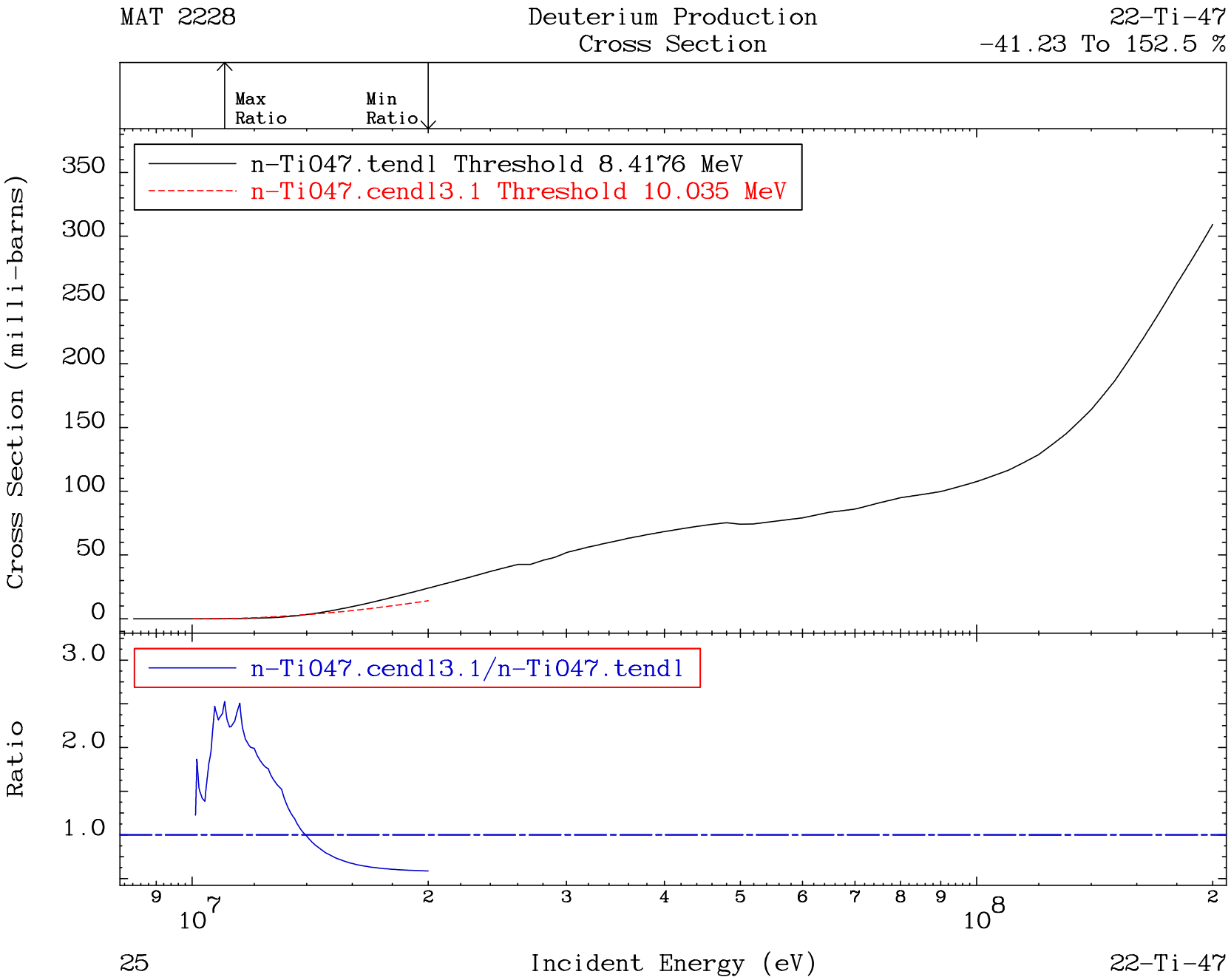

MAT 2228
(n,t)
Cross Section
22-Ti-47
-22.61 To 789.3 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 10.975 MeV
n-Ti047.cendl3.1 Threshold 12.600 MeV
Cross Section (milli-barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
20
22-Ti-47

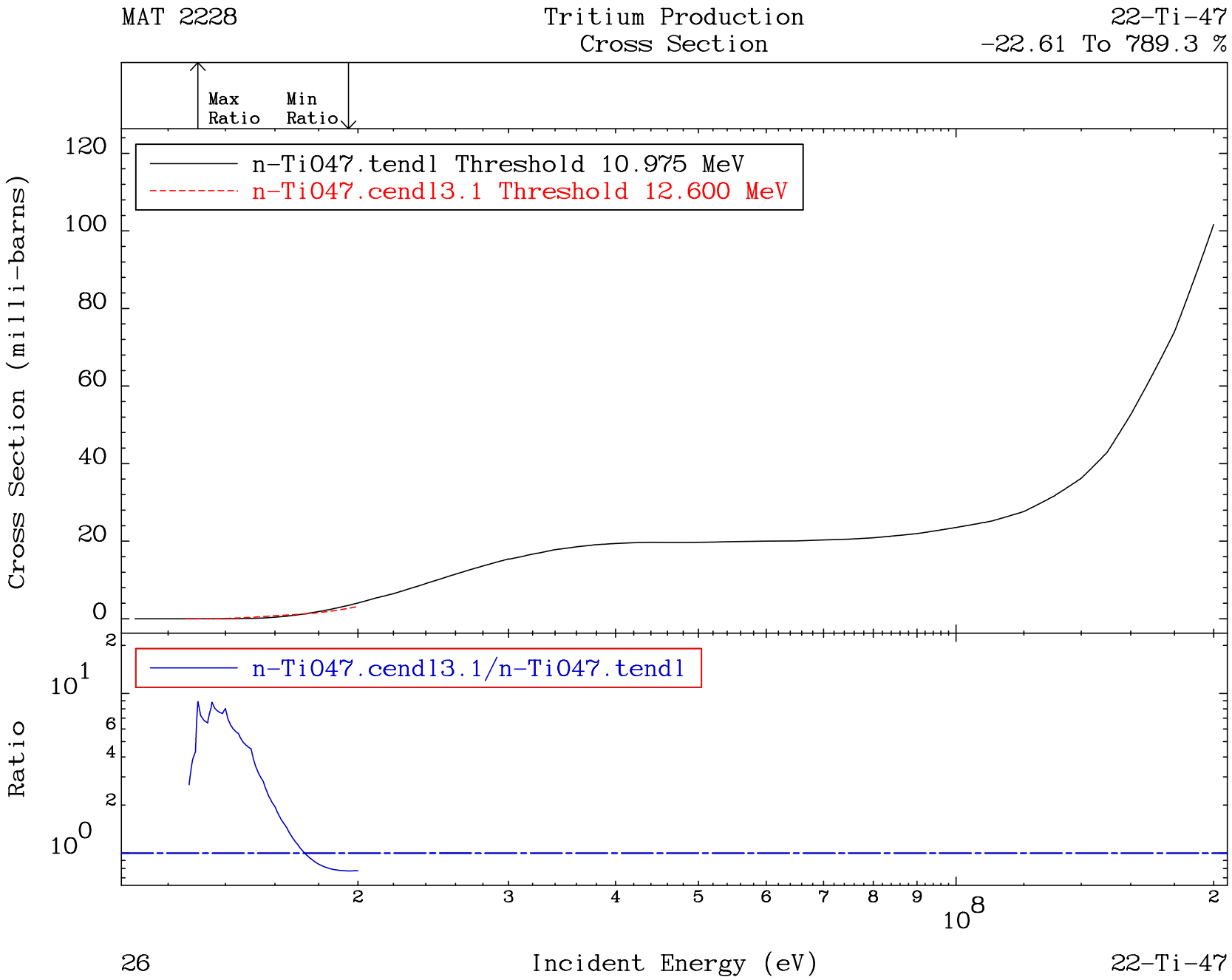

MAT 2228
(n,He-3)
Cross Section
22-Ti-47
-47.12 To 5024. %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 11.221 MeV
n-Ti047.cendl3.1 Threshold 15.000 MeV
Cross Section (milli-barns)
0
2
4
6
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
21
Incident Energy (eV)
22-Ti-47

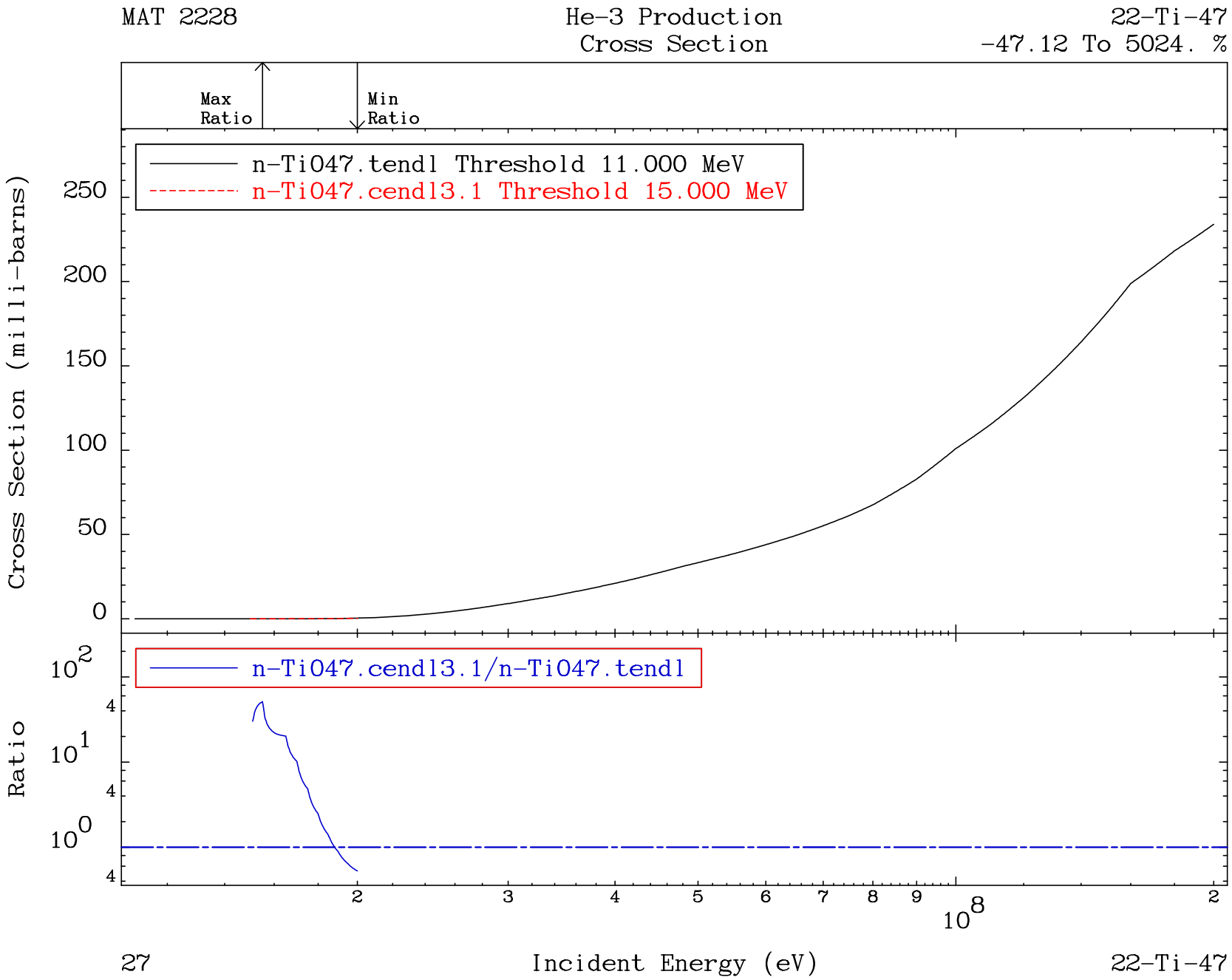

MAT 2228
(n,α)
Cross Section
22-Ti-47
-99.36 To -2.747%
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1 Threshold 900.00 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
10^-1
10^-2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
22
Incident Energy (eV)
22-Ti-47

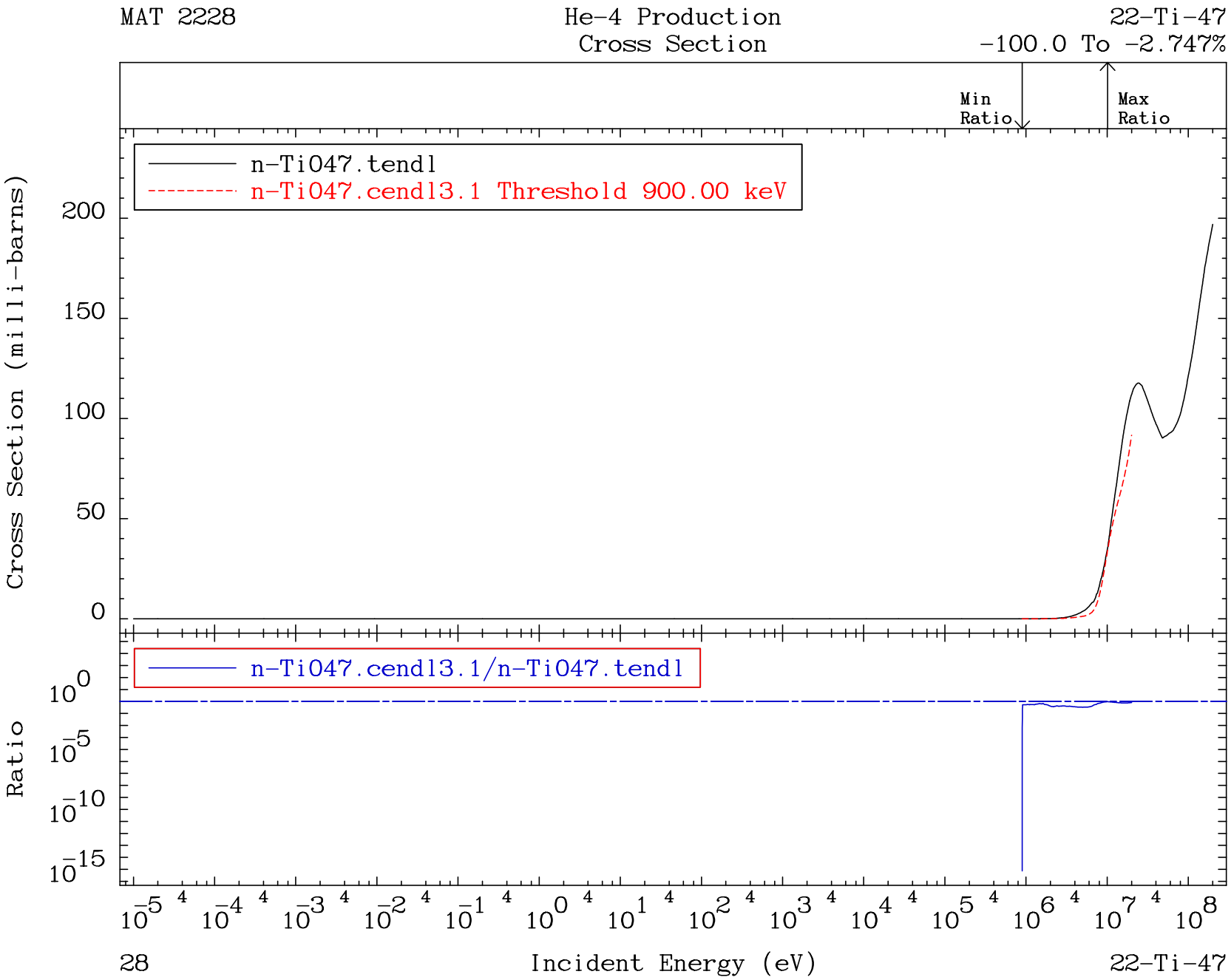

MAT 2228
(n,2p)
Cross Section
22-Ti-47
-98.55 To 9.592 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 8.4830 MeV
n-Ti047.cendl3.1 Threshold 11.334 MeV
Cross Section (milli-barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
23
22-Ti-47

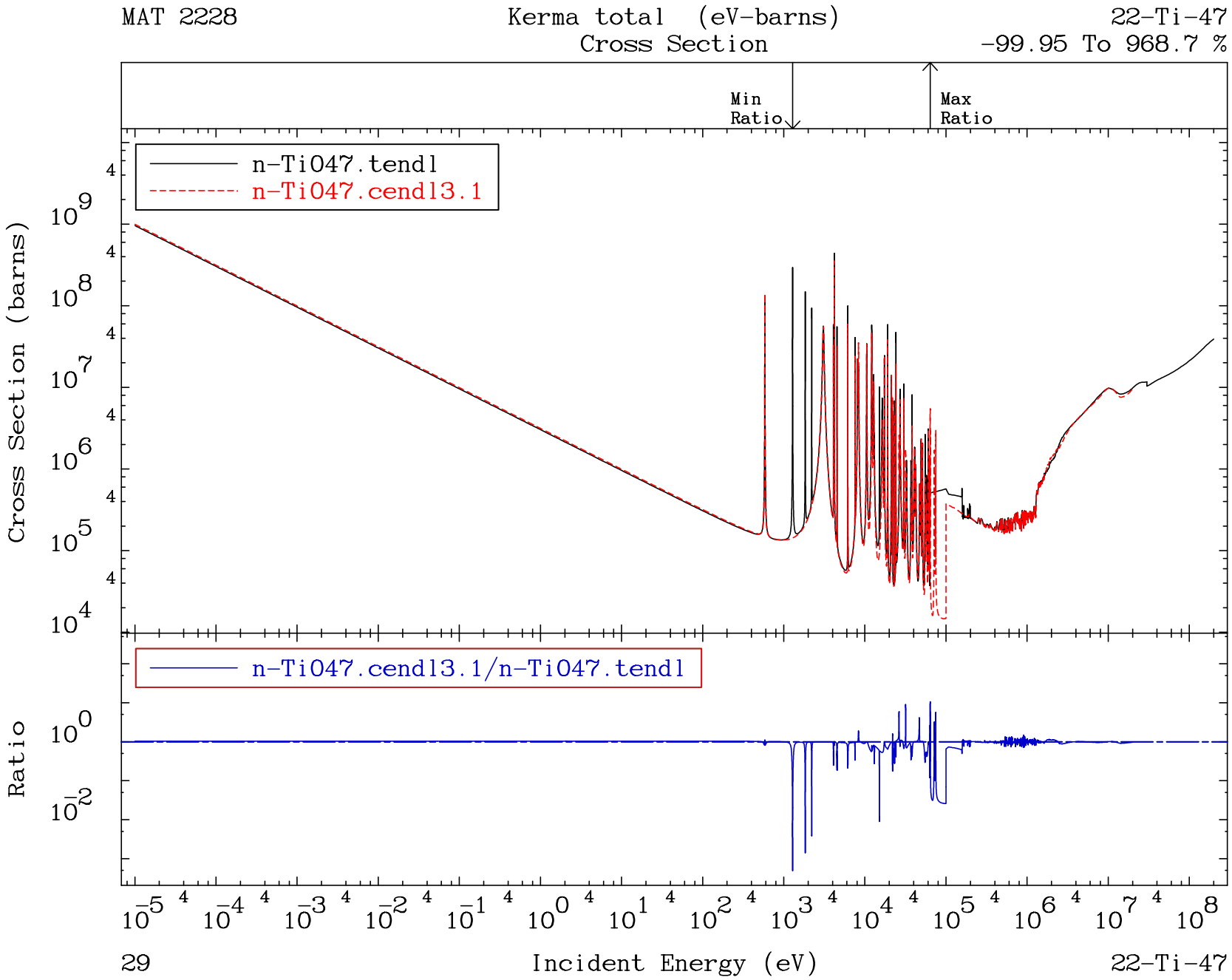

MAT 2228
Hydrogen Production
Cross Section
22-Ti-47
-98.43 To 43.03 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 63.010 keV
n-Ti047.cendl3.1 Threshold 1.1000 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^{0}
10^{-1}
10^{5}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
24
22-Ti-47

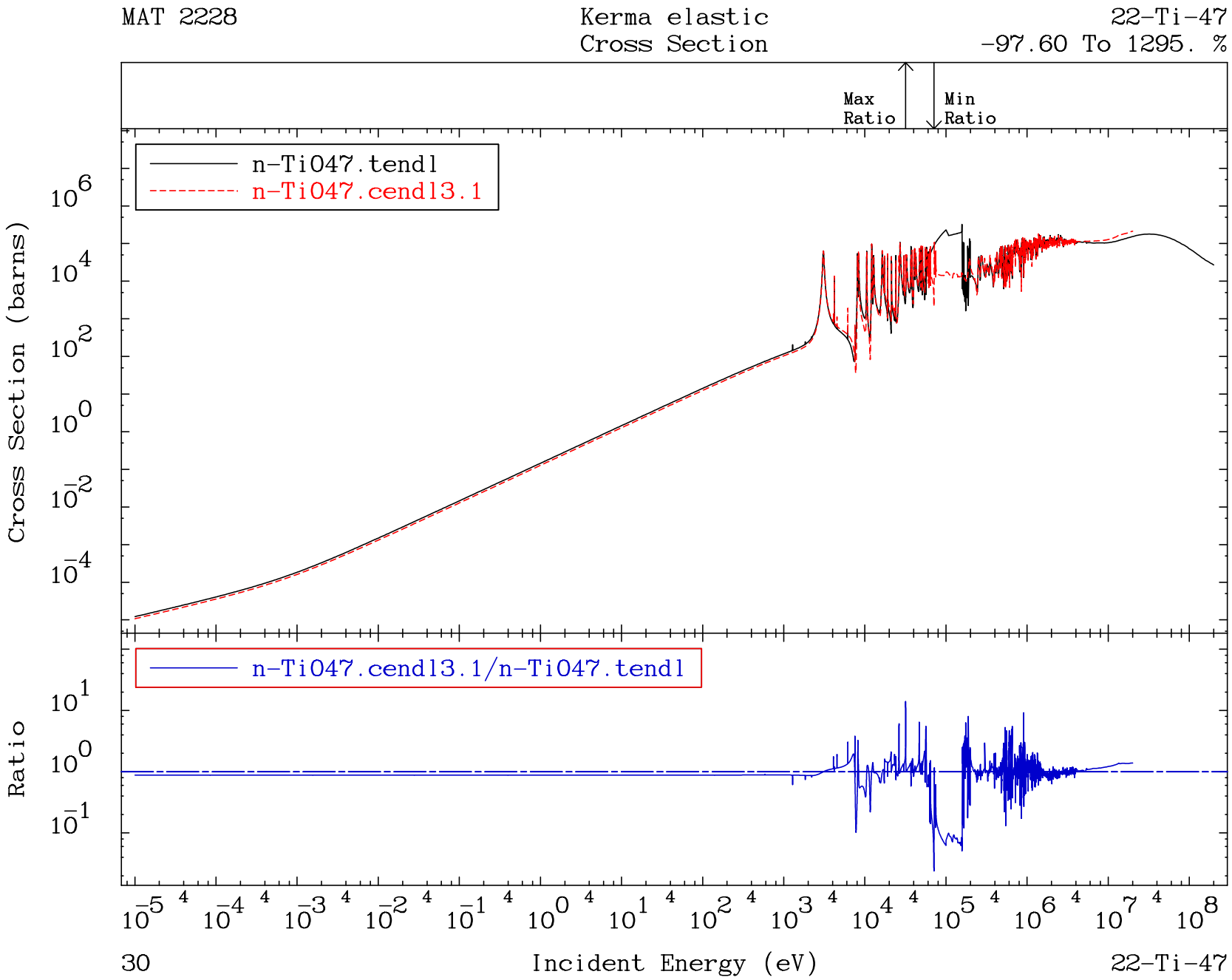

MAT 2228
Deuterium Production
Cross Section
22-Ti-47
-41.23 To 152.5 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 8.4176 MeV
n-Ti047.cendl3.1 Threshold 10.035 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
22-Ti-47

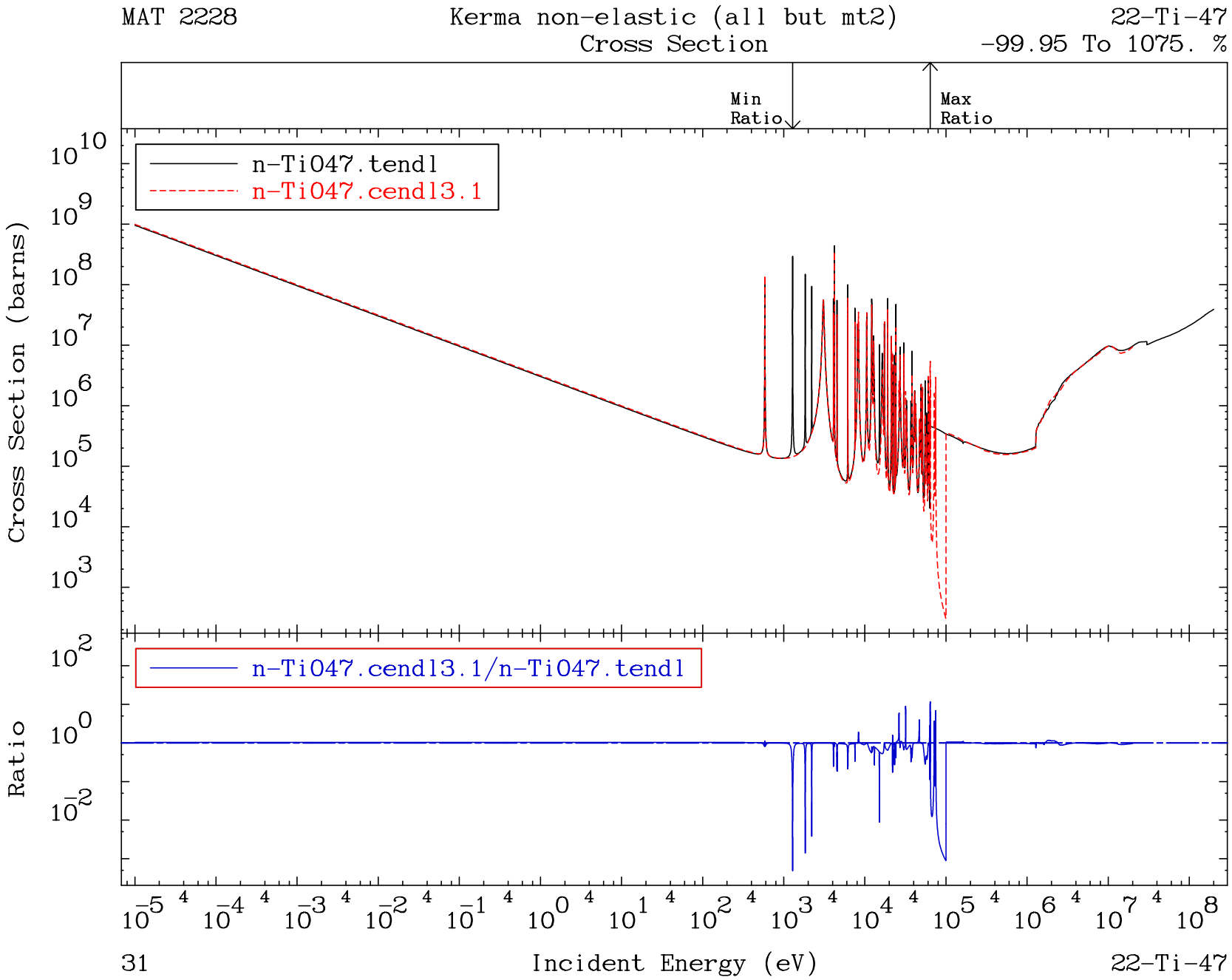

MAT 2228
Tritium Production
Cross Section
22-Ti-47
-22.61 To 789.3 %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 10.975 MeV
n-Ti047.cendl3.1 Threshold 12.600 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
22-Ti-47

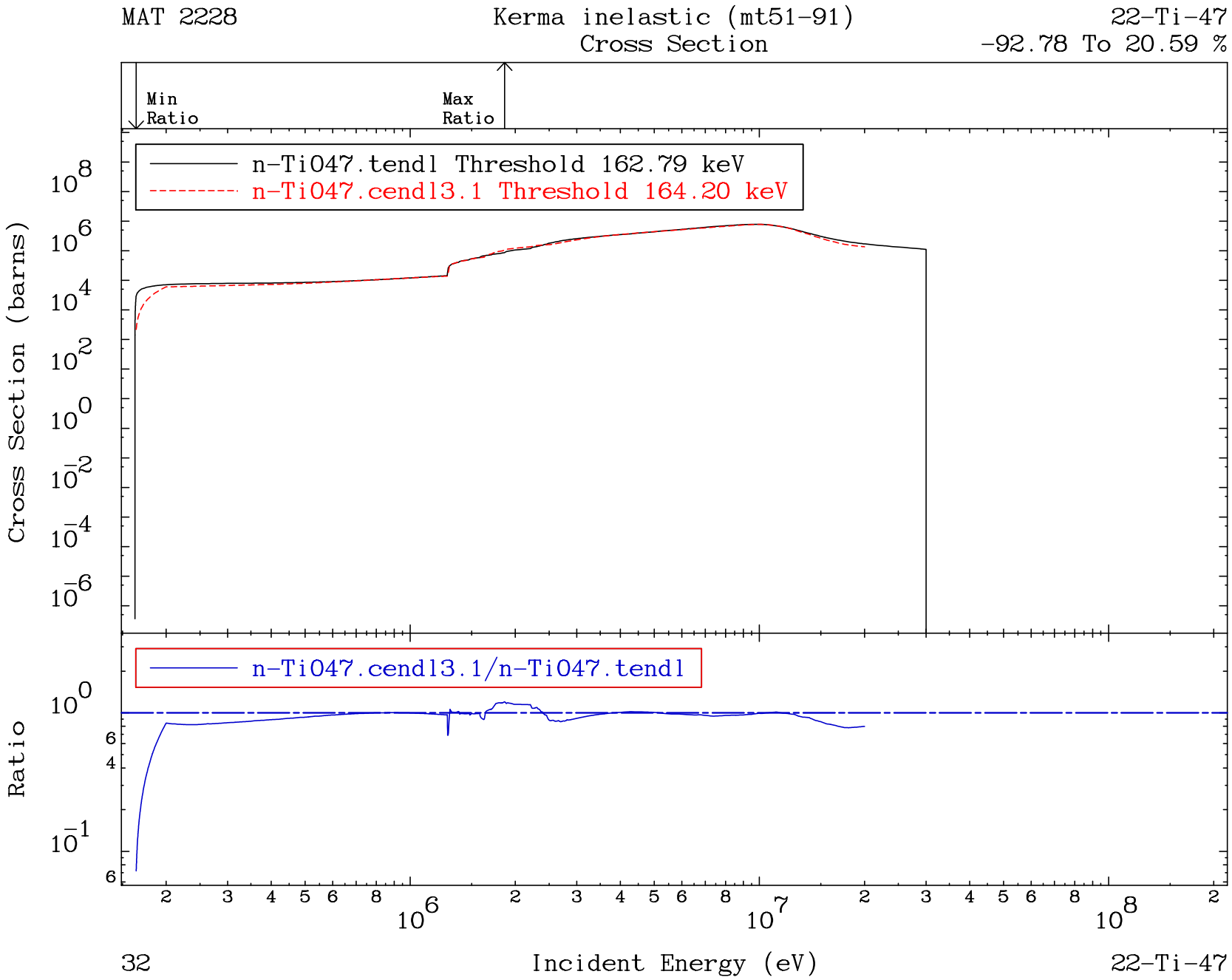

MAT 2228
He-3 Production
Cross Section
22-Ti-47
-47.12 To 5024. %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 11.000 MeV
n-Ti047.cendl3.1 Threshold 15.000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^2
10^1
10^0
4
4
4
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
22-Ti-47

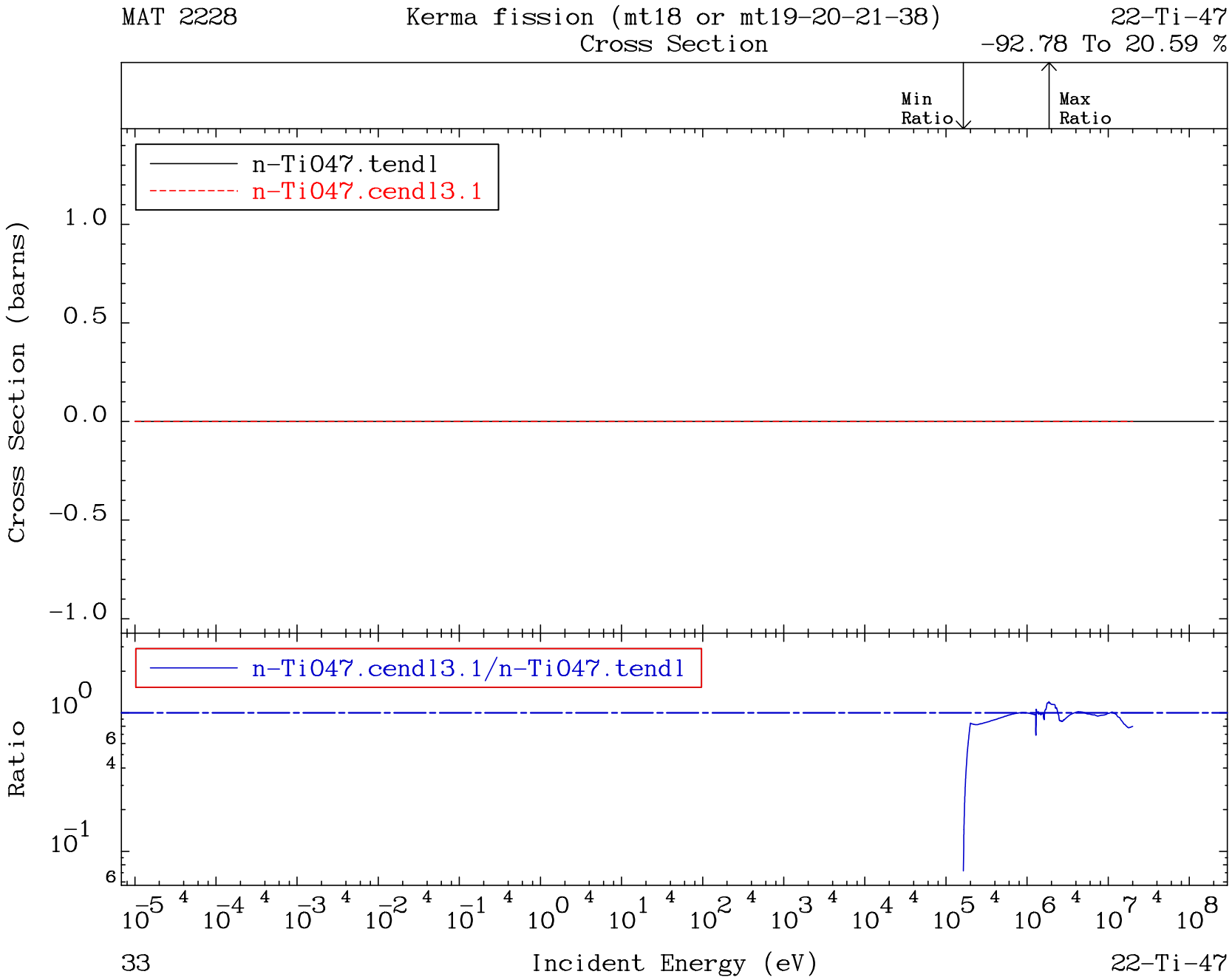

MAT 2228
He-4 Production
Cross Section
22-Ti-47
-100.0 To -2.747%
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1 Threshold 900.00 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
10^-5
10^-10
10^-15
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
22-Ti-47

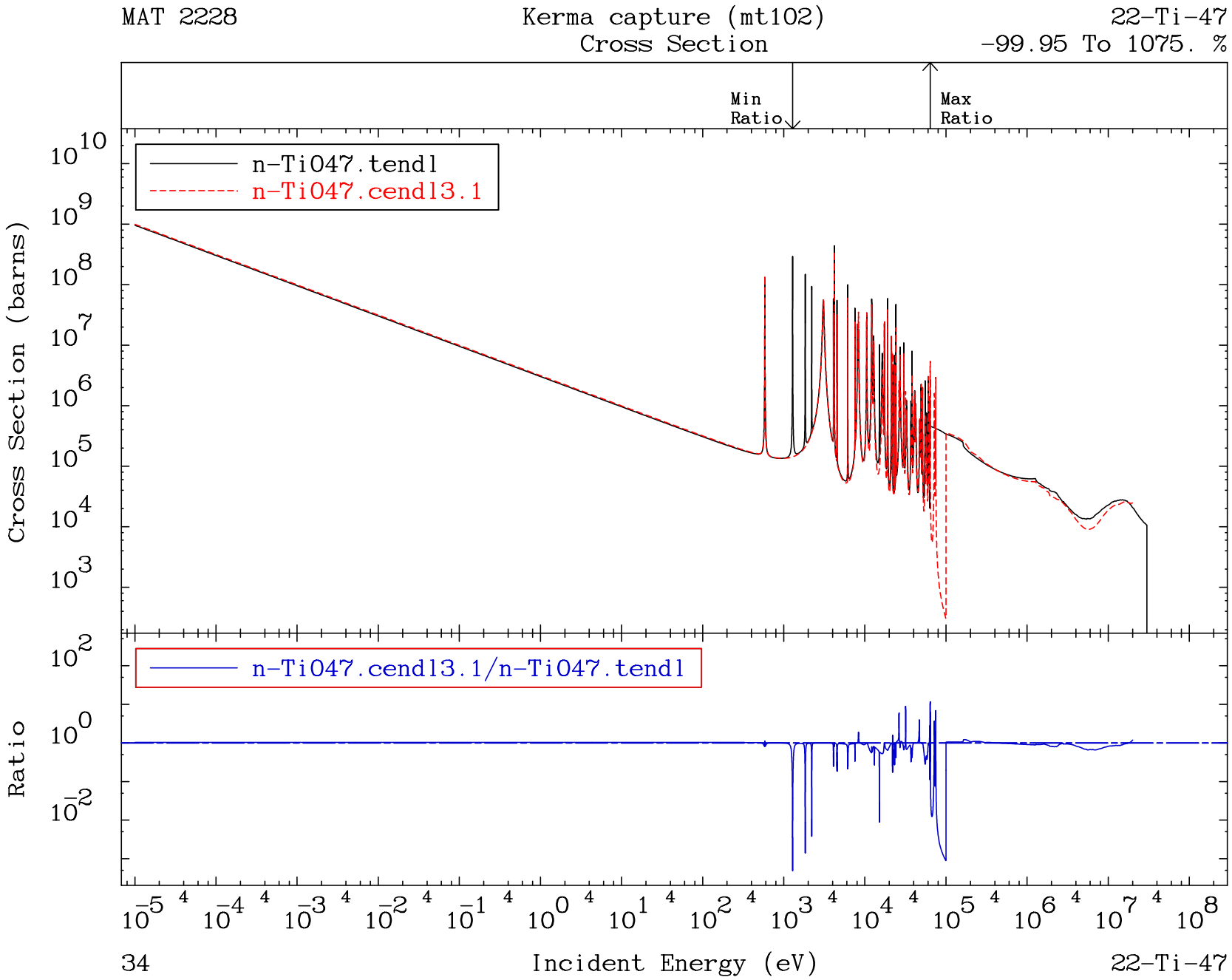

MAT 2228
Kerma total (eV-barns)
Cross Section
22-Ti-47
-99.95 To 968.7 %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
29
22-Ti-47

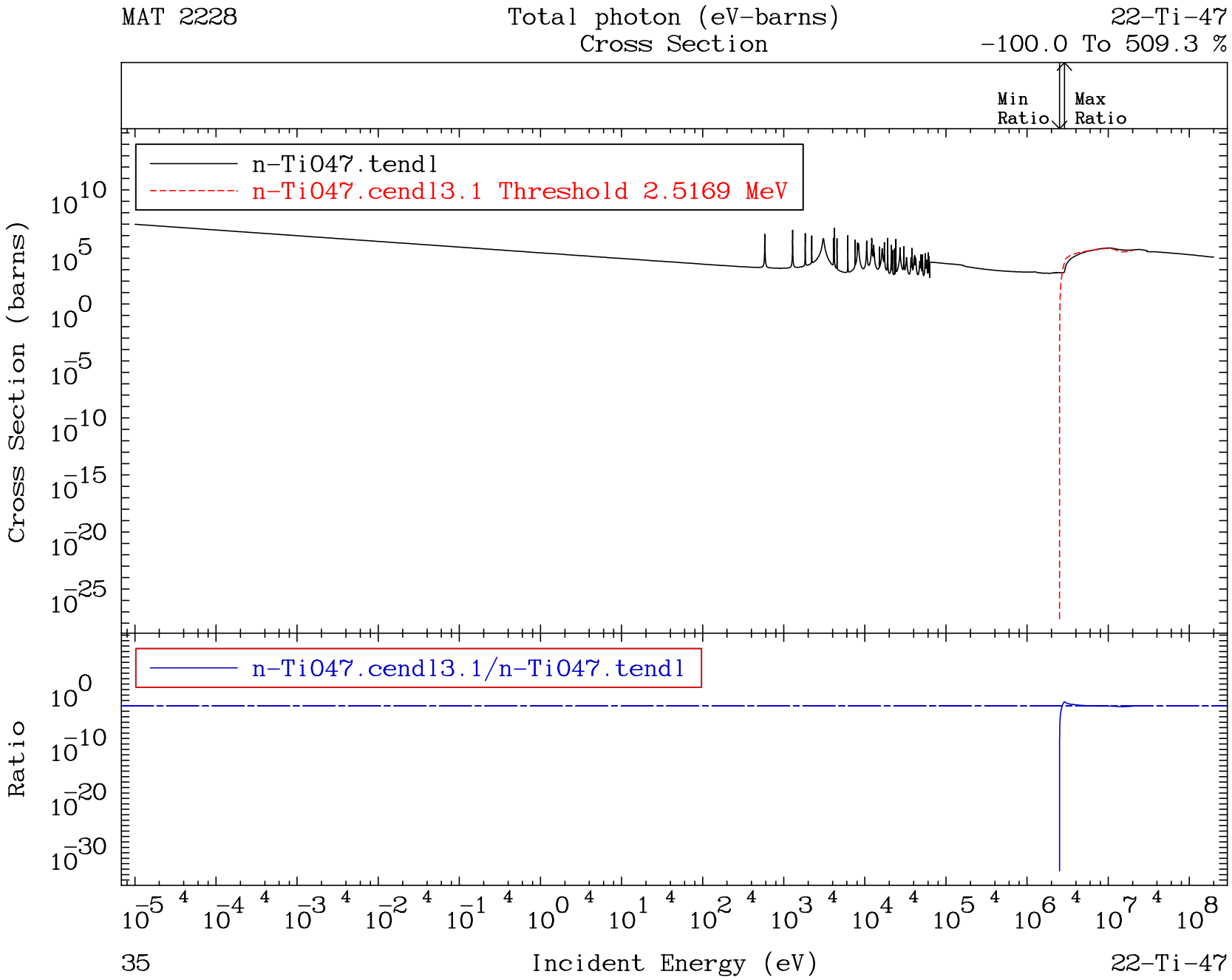

MAT 2228
Kerma elastic
Cross Section
22-Ti-47
-97.60 To 1295. %
Max
Ratio
Min
Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
Ratio
n-Ti047.cendl3.1/n-Ti047.tendl
Incident Energy (eV)
30
22-Ti-47

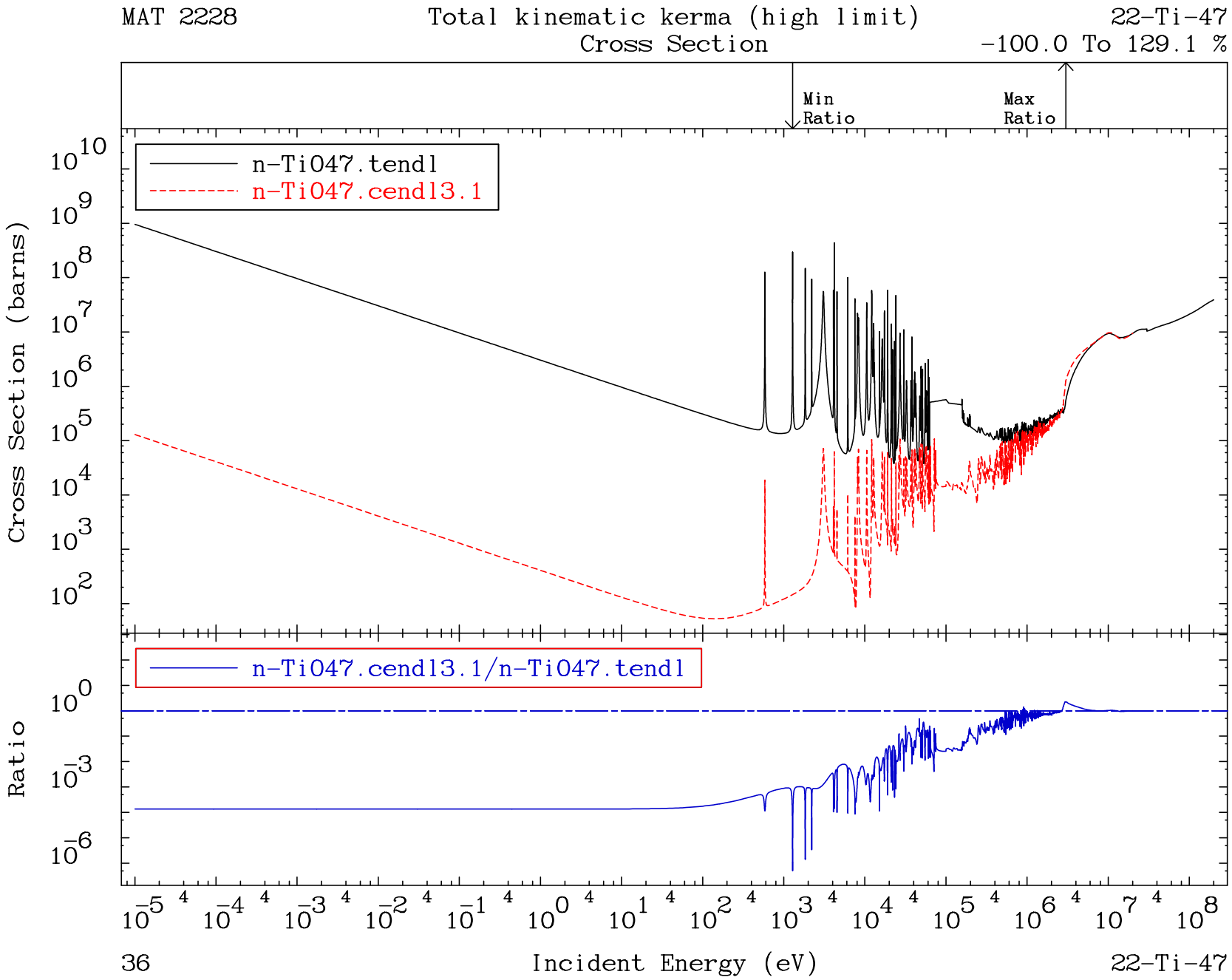

MAT 2228
Kerma non-elastic (all but mt2)
Cross Section
22-Ti-47
-99.95 To 1075. %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
31
22-Ti-47

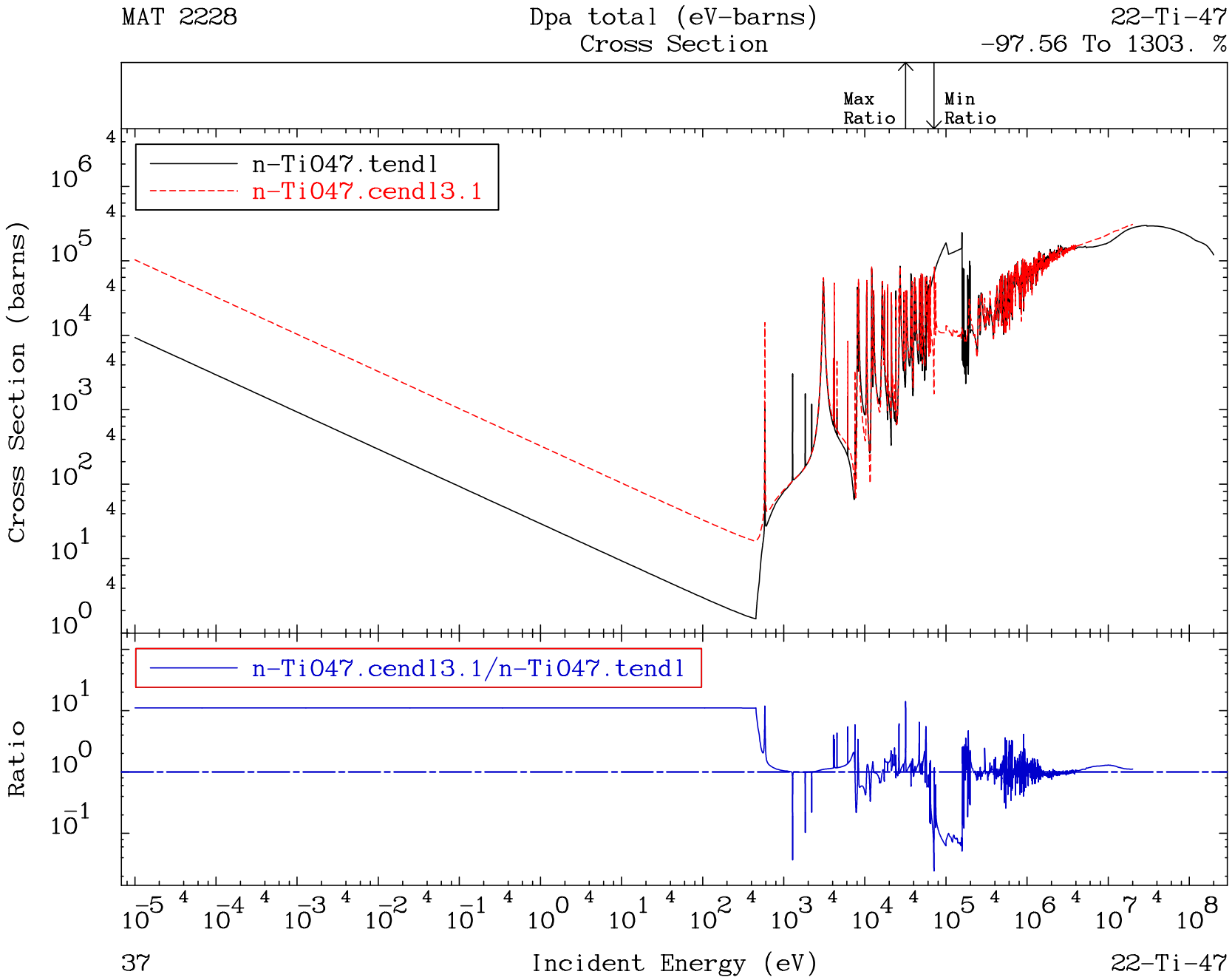

MAT 2228
Kerma inelastic (mt51-91)
Cross Section
22-Ti-47
-92.78 To 20.59 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 162.79 keV
n-Ti047.cendl3.1 Threshold 164.20 keV
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
32
22-Ti-47

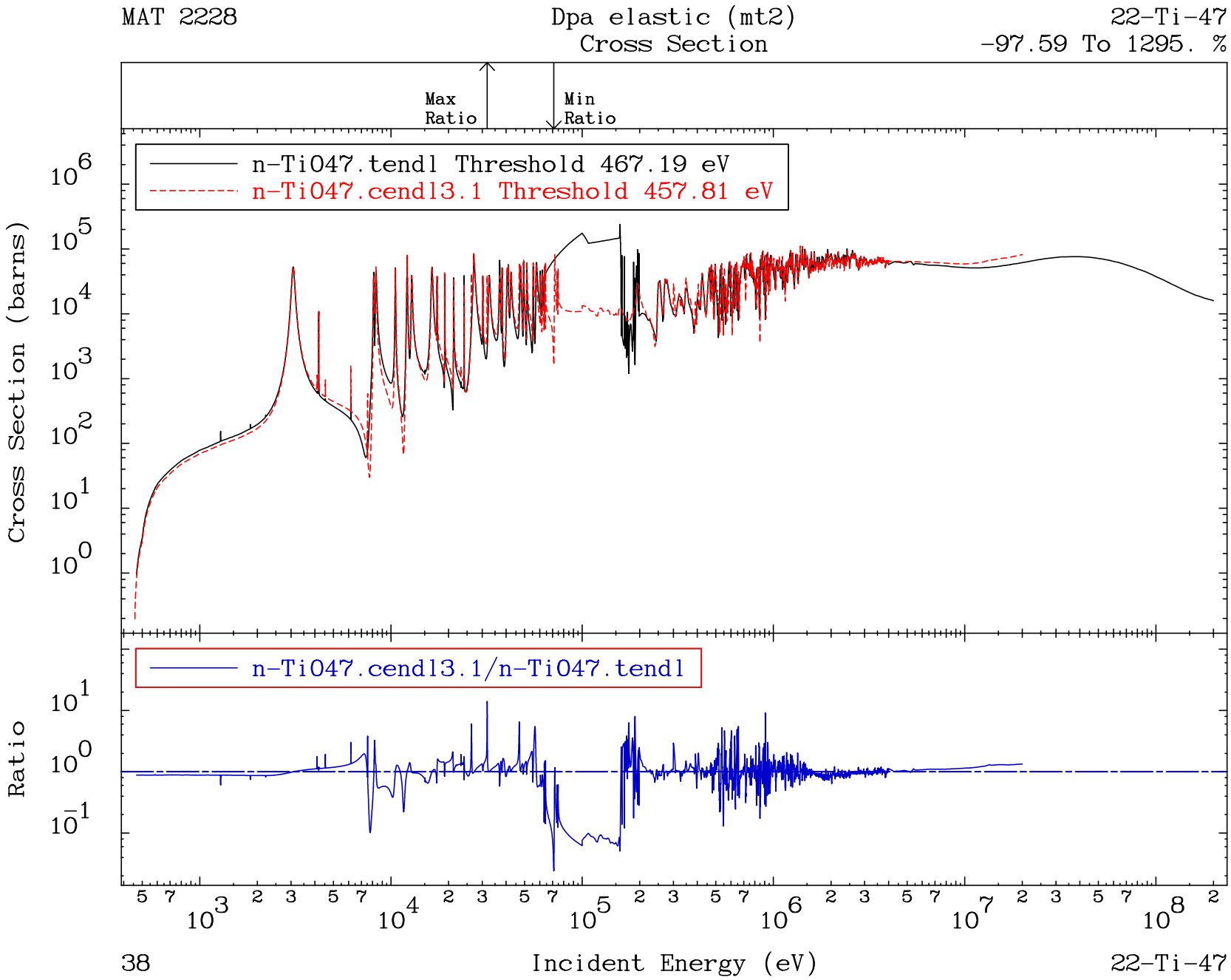

MAT 2228
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
22-Ti-47
-92.78 To 20.59 %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
10^0
10^-1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
22-Ti-47

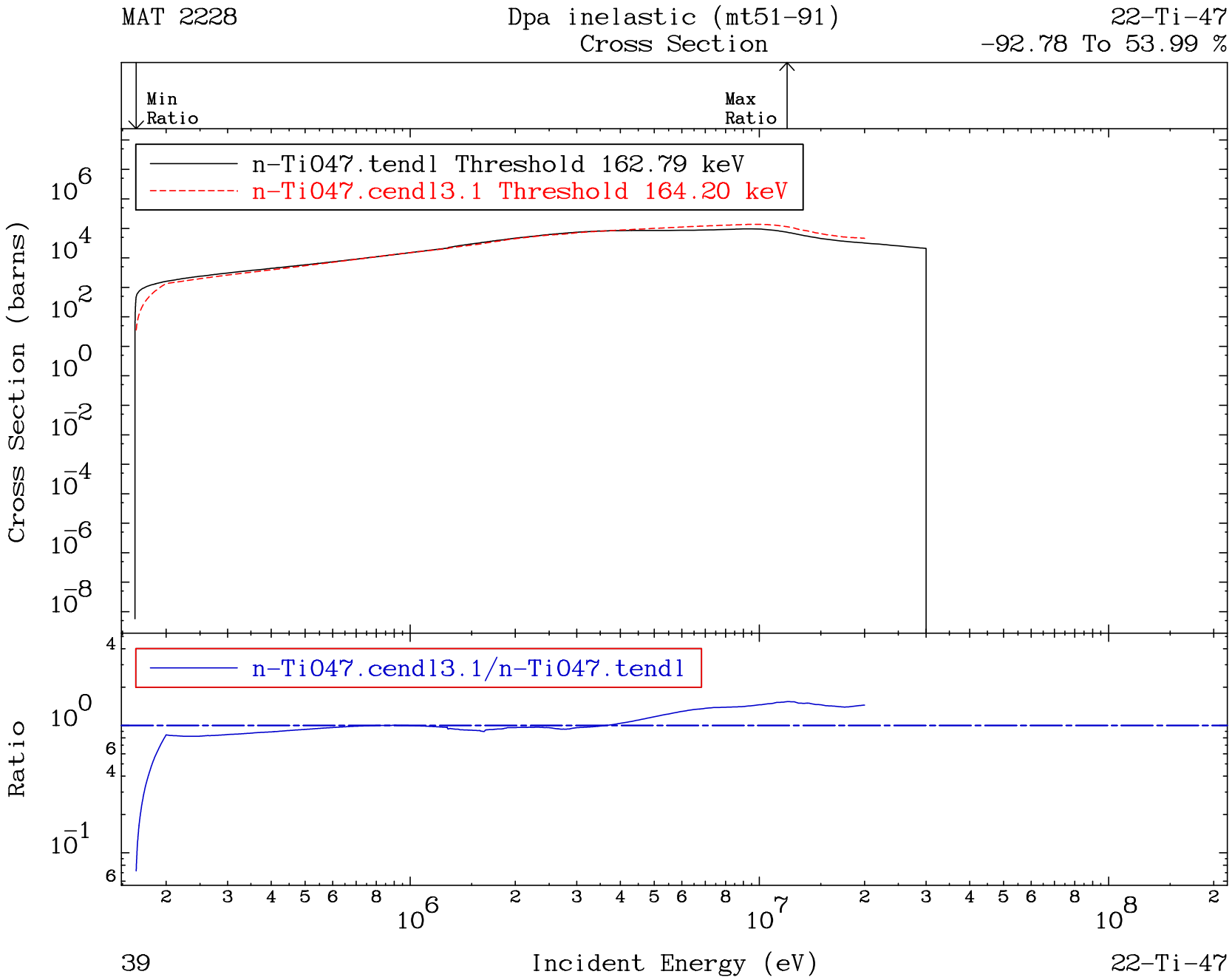

MAT 2228
Kerma capture (mt102)
Cross Section
22-Ti-47
-99.95 To 1075. %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
34
Incident Energy (eV)
22-Ti-47

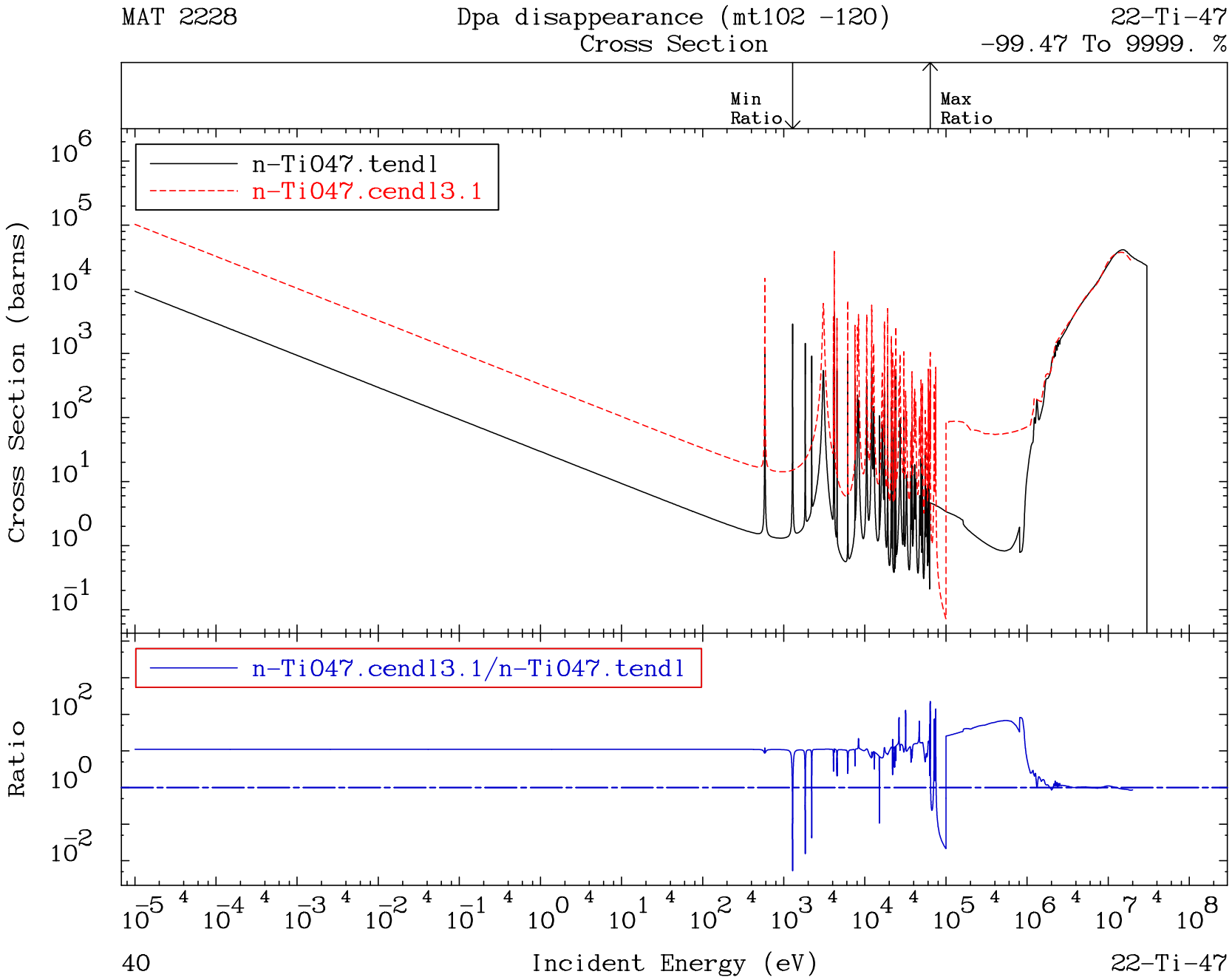

MAT 2228
Total photon (eV-barns)
Cross Section
22-Ti-47
-100.0 To 509.3 %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1 Threshold 2.5169 MeV
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
35
Incident Energy (eV)
22-Ti-47


MAT 2228
Total kinematic kerma (high limit)
Cross Section
22-Ti-47
-100.0 To 129.1 %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
36
22-Ti-47


MAT 2228
Dpa total (eV-barns)
Cross Section
22-Ti-47
-97.56 To 1303. %
Max Ratio
Min Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
37
22-Ti-47


MAT 2228
Dpa elastic (mt2)
Cross Section
22-Ti-47
-97.59 To 1295. %
Max Ratio
Min Ratio
n-Ti047.tendl Threshold 467.19 eV
n-Ti047.cendl3.1 Threshold 457.81 eV
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
38
22-Ti-47


MAT 2228
Dpa inelastic (mt51-91)
Cross Section
22-Ti-47
-92.78 To 53.99 %
Min Ratio
Max Ratio
n-Ti047.tendl Threshold 162.79 keV
n-Ti047.cendl3.1 Threshold 164.20 keV
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
39
22-Ti-47


MAT 2228
Dpa disappearance (mt102 -120)
Cross Section
22-Ti-47
-99.47 To 9999. %
Min Ratio
Max Ratio
n-Ti047.tendl
n-Ti047.cendl3.1
Cross Section (barns)
n-Ti047.cendl3.1/n-Ti047.tendl
Ratio
Incident Energy (eV)
40
22-Ti-47