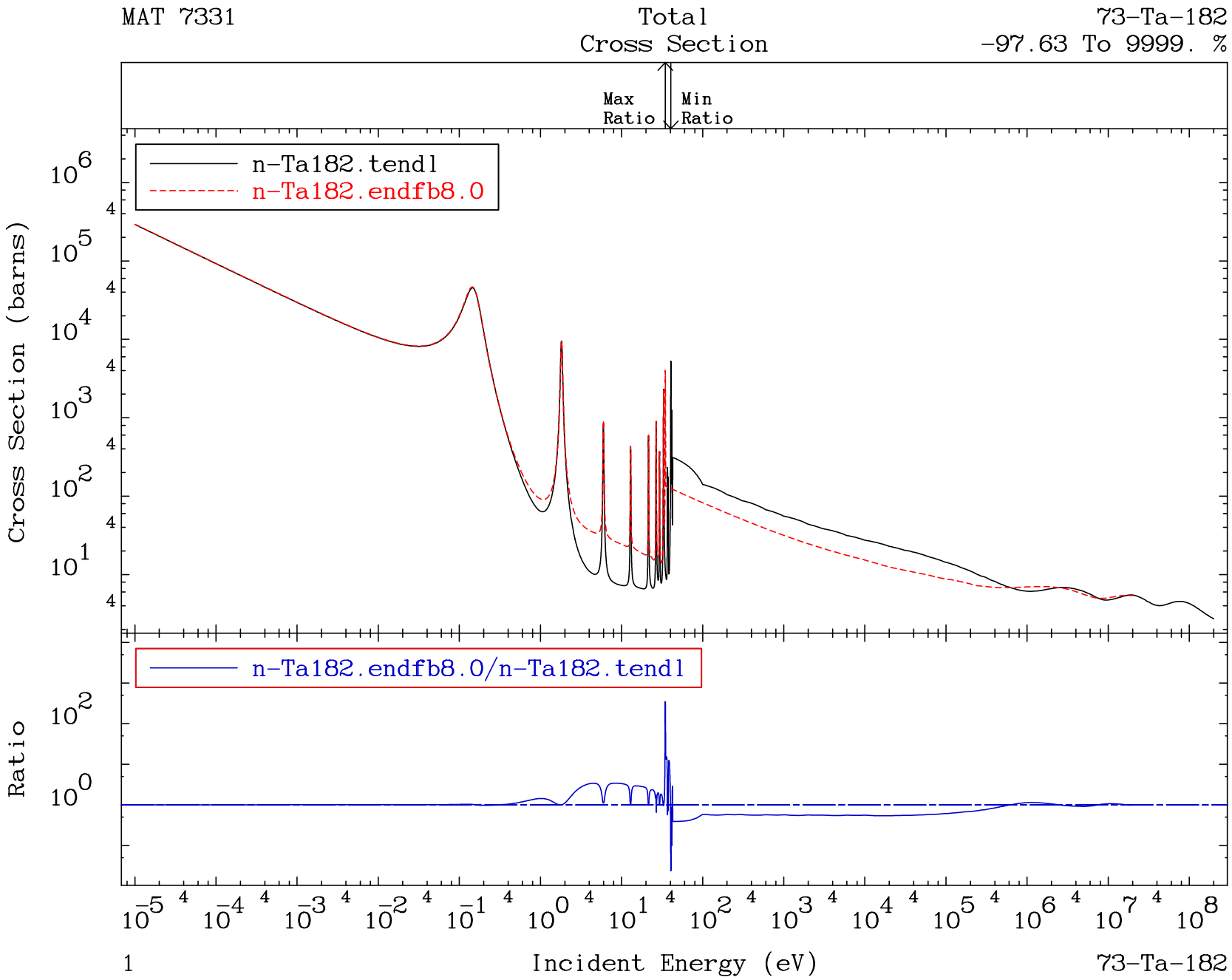
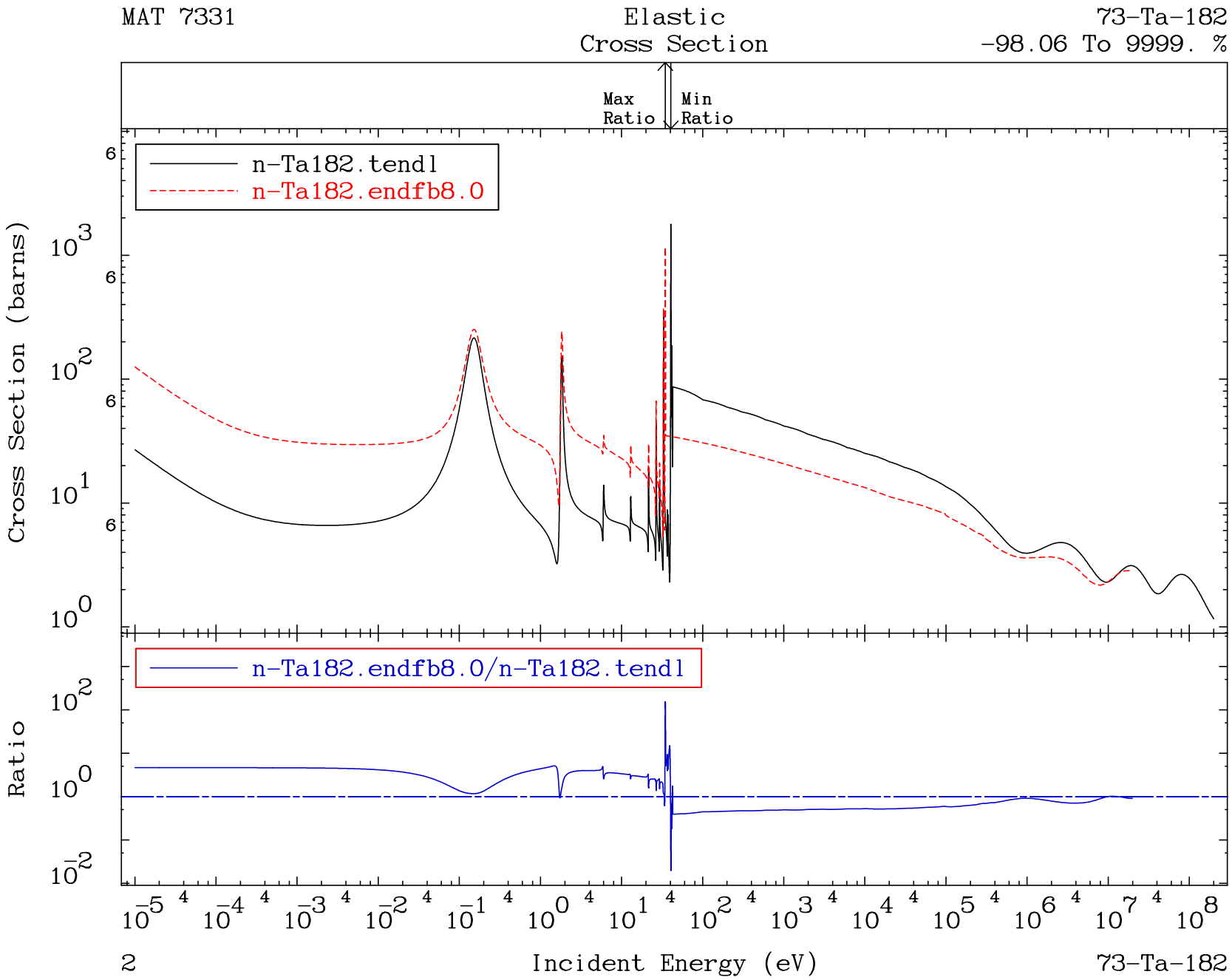
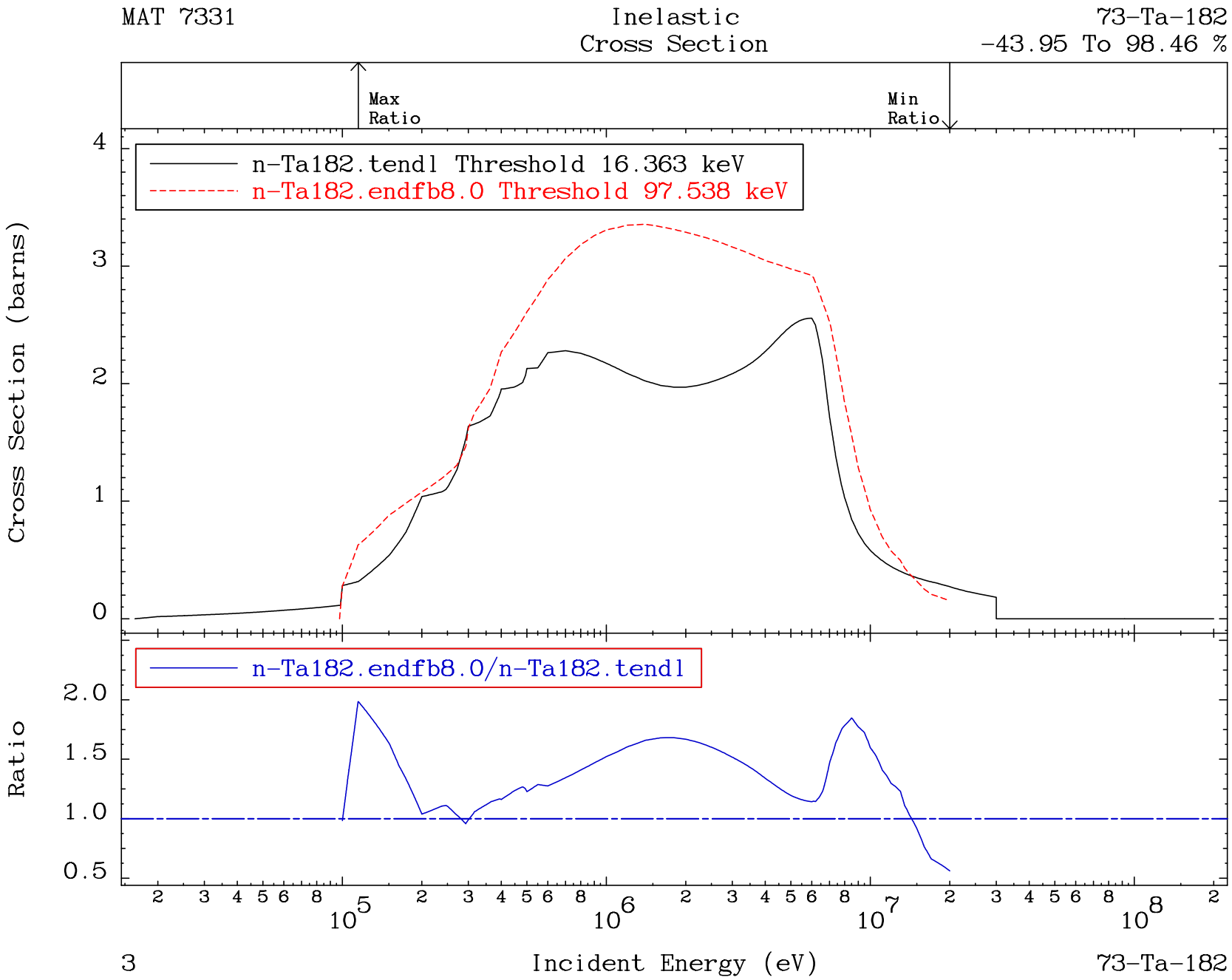
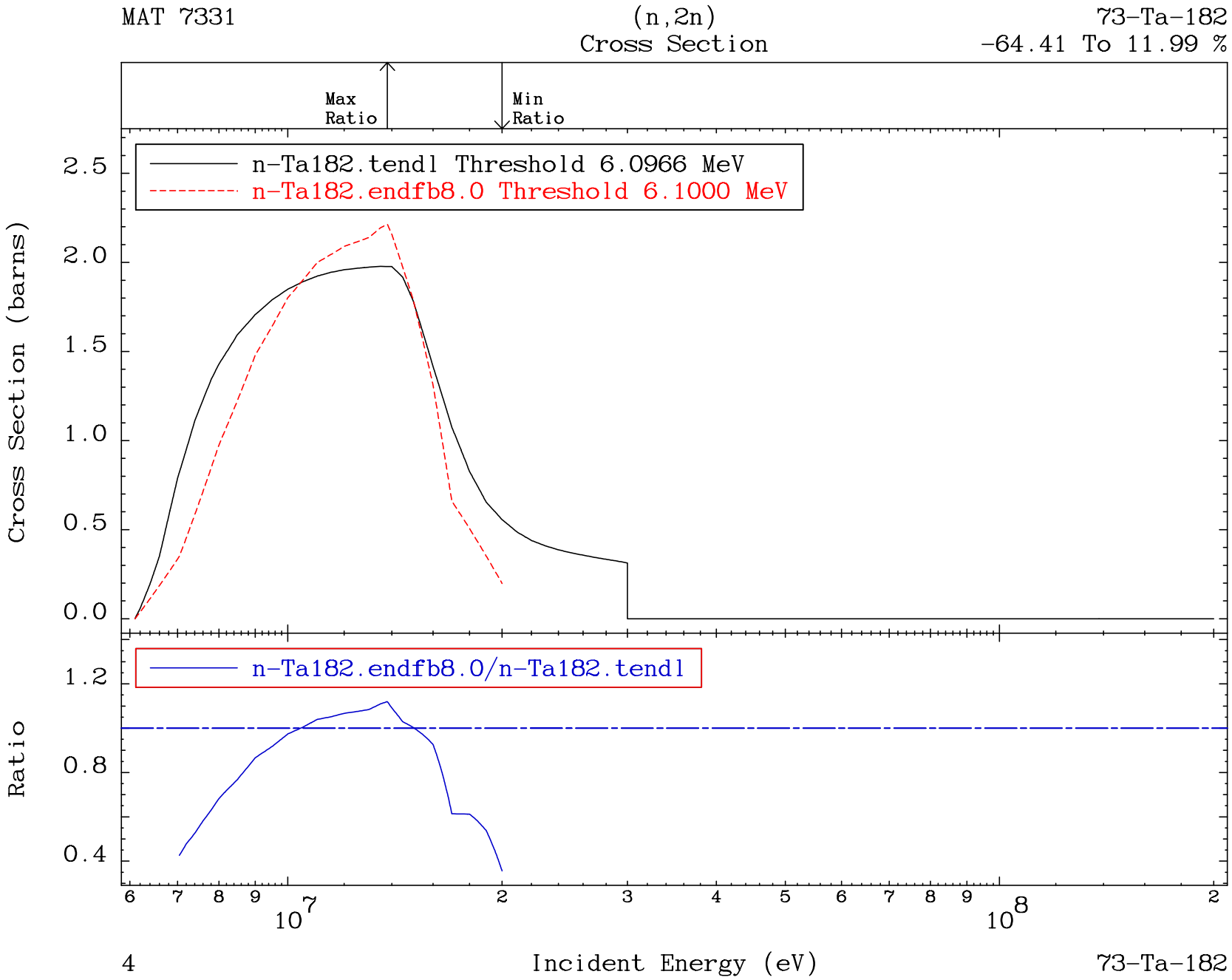
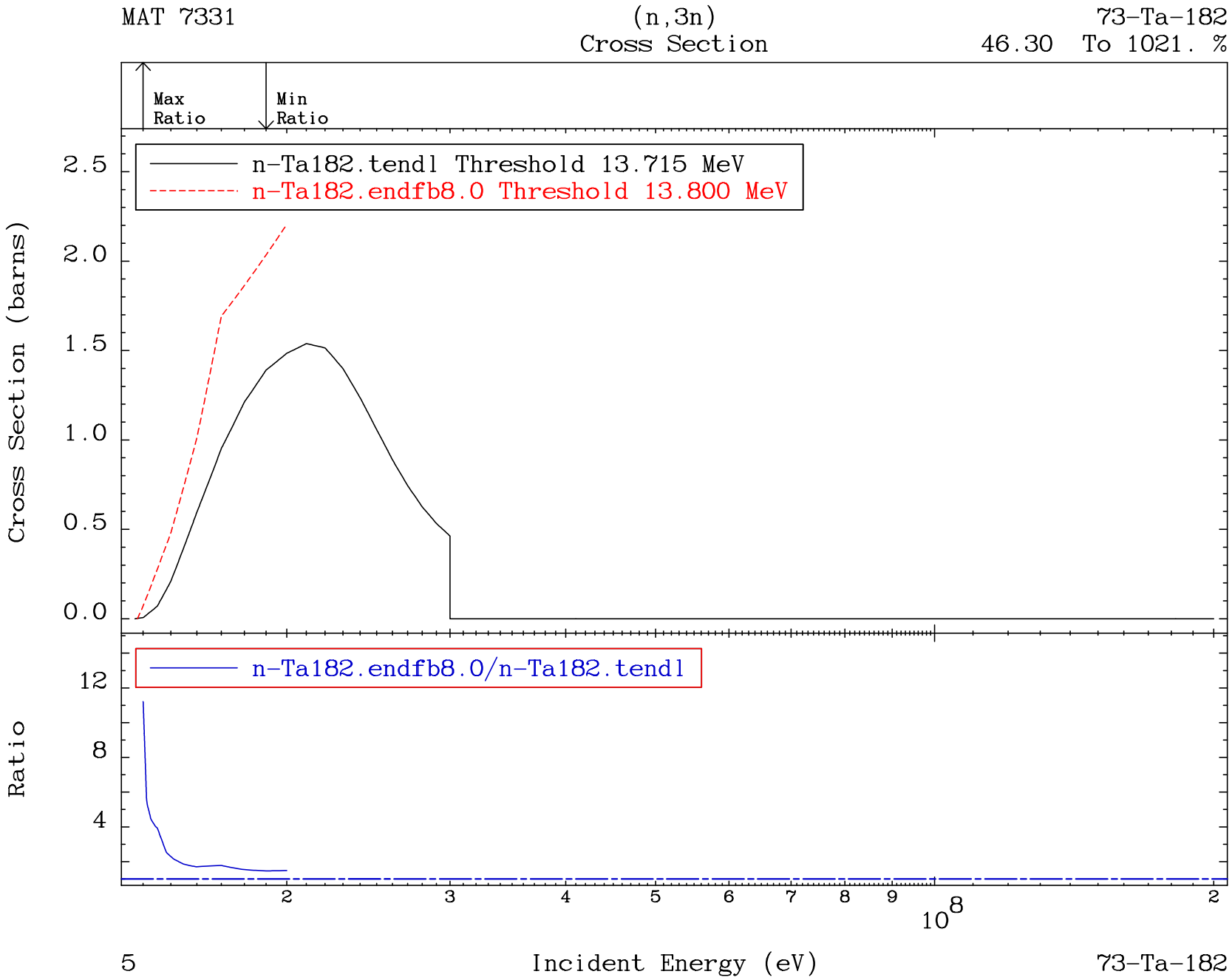
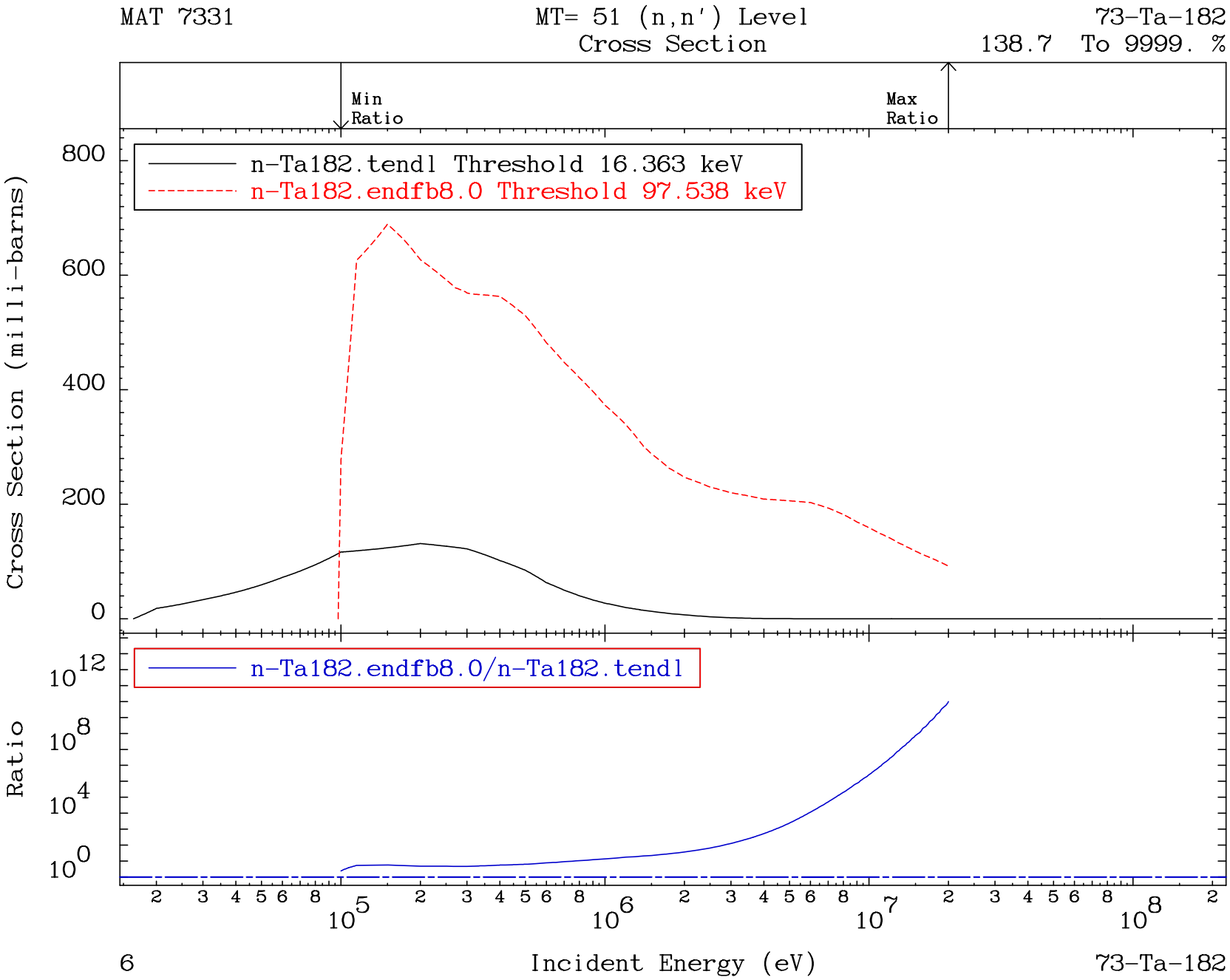

MAT 7331
Total
Cross Section
73-Ta-182
-97.63 To 9999. %
Max
Ratio
Min
Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
1
73-Ta-182

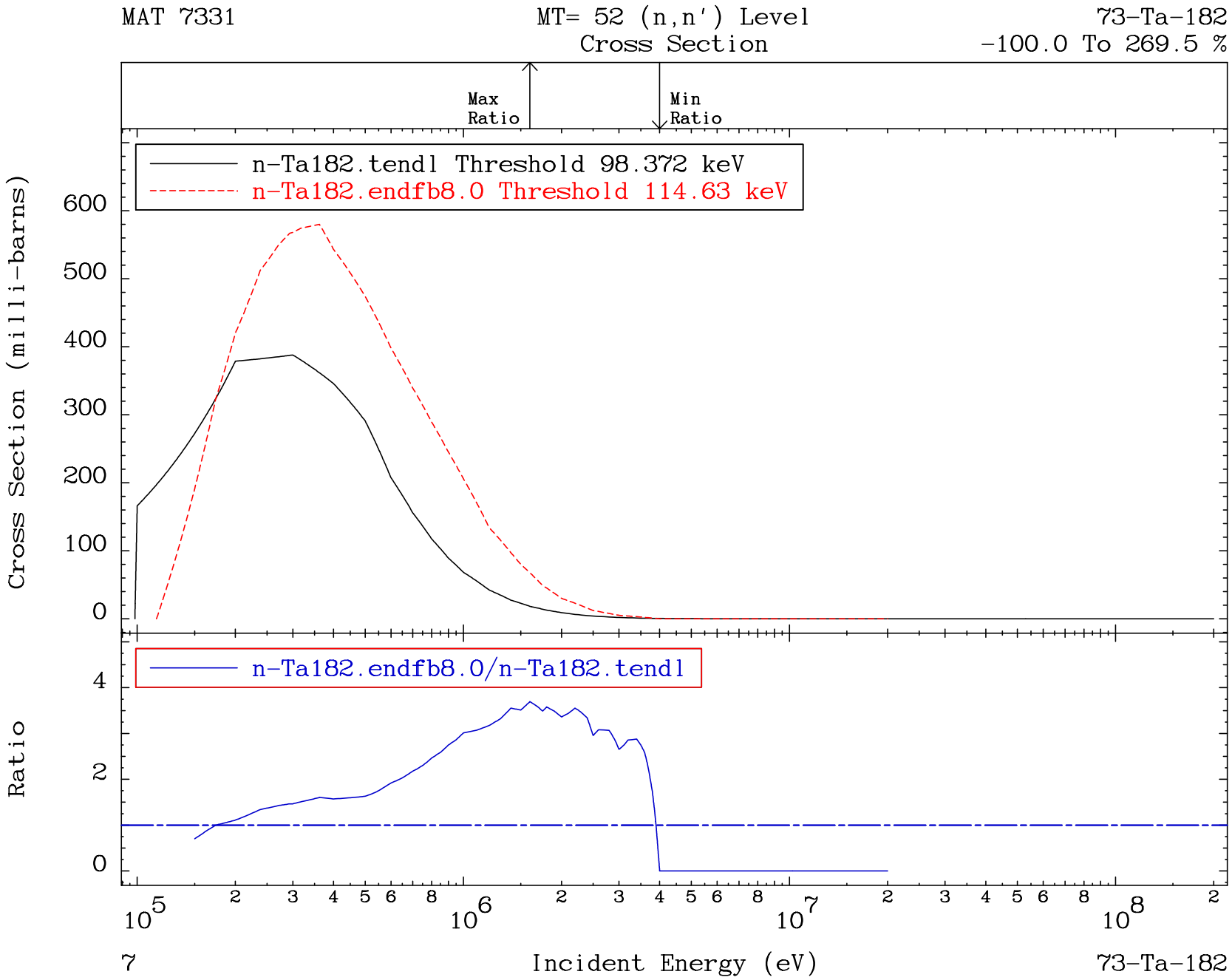

MAT 7331
Elastic
Cross Section
73-Ta-182
-98.06 To 9999. %
Max
Ratio
Min
Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
2
73-Ta-182

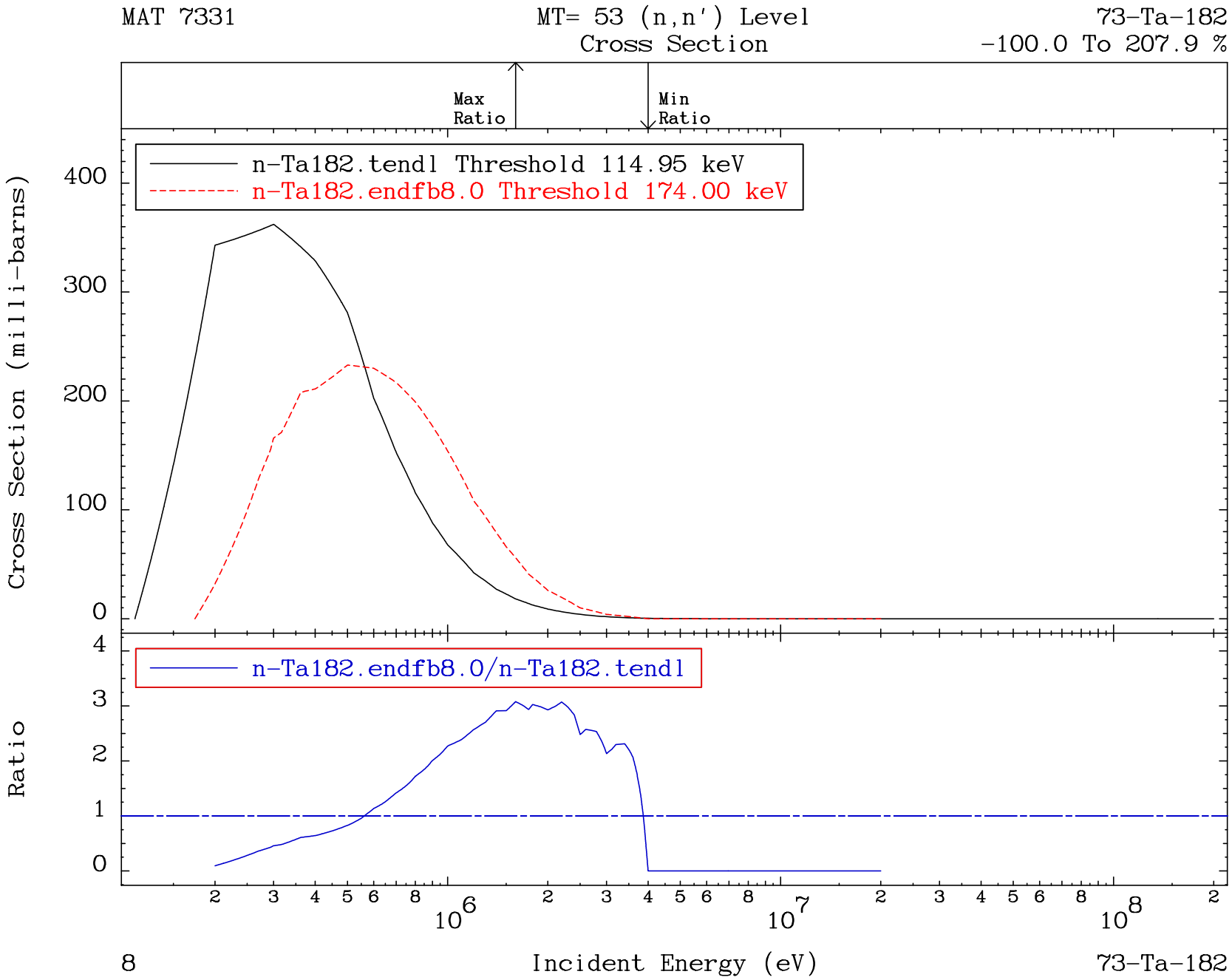

MAT 7331
Inelastic
Cross Section
73-Ta-182
-43.95 To 98.46 %
Max
Ratio
Min
Ratio
n-Ta182.tendl Threshold 16.363 keV
n-Ta182.endfb8.0 Threshold 97.538 keV
Cross Section (barns)
0
1
2
3
4
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
0.5
1.0
1.5
2.0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
73-Ta-182

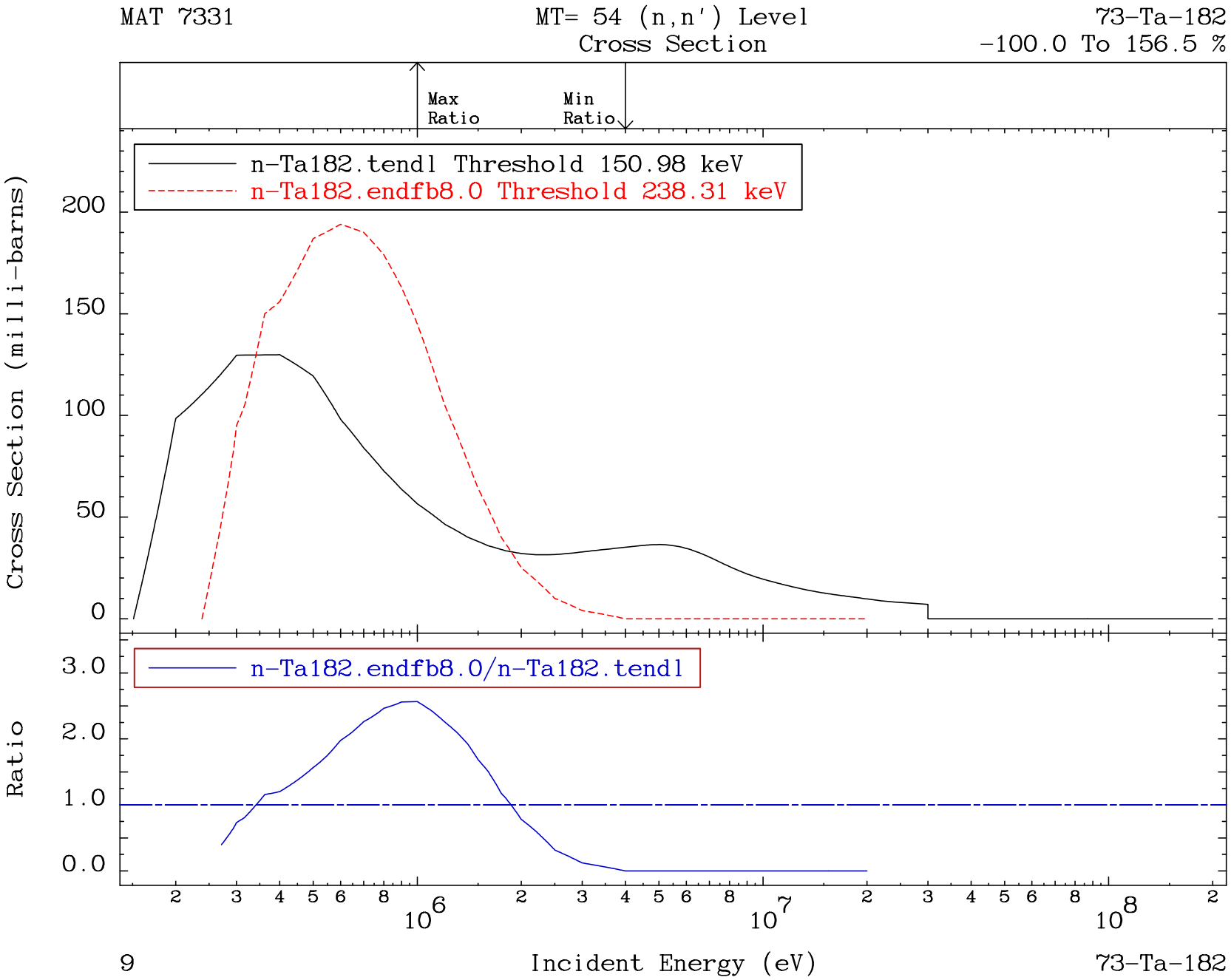

MAT 7331
(n,2n)
Cross Section
73-Ta-182
-64.41 To 11.99 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 6.0966 MeV
n-Ta182.endfb8.0 Threshold 6.1000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
1.2
0.8
0.4
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
73-Ta-182

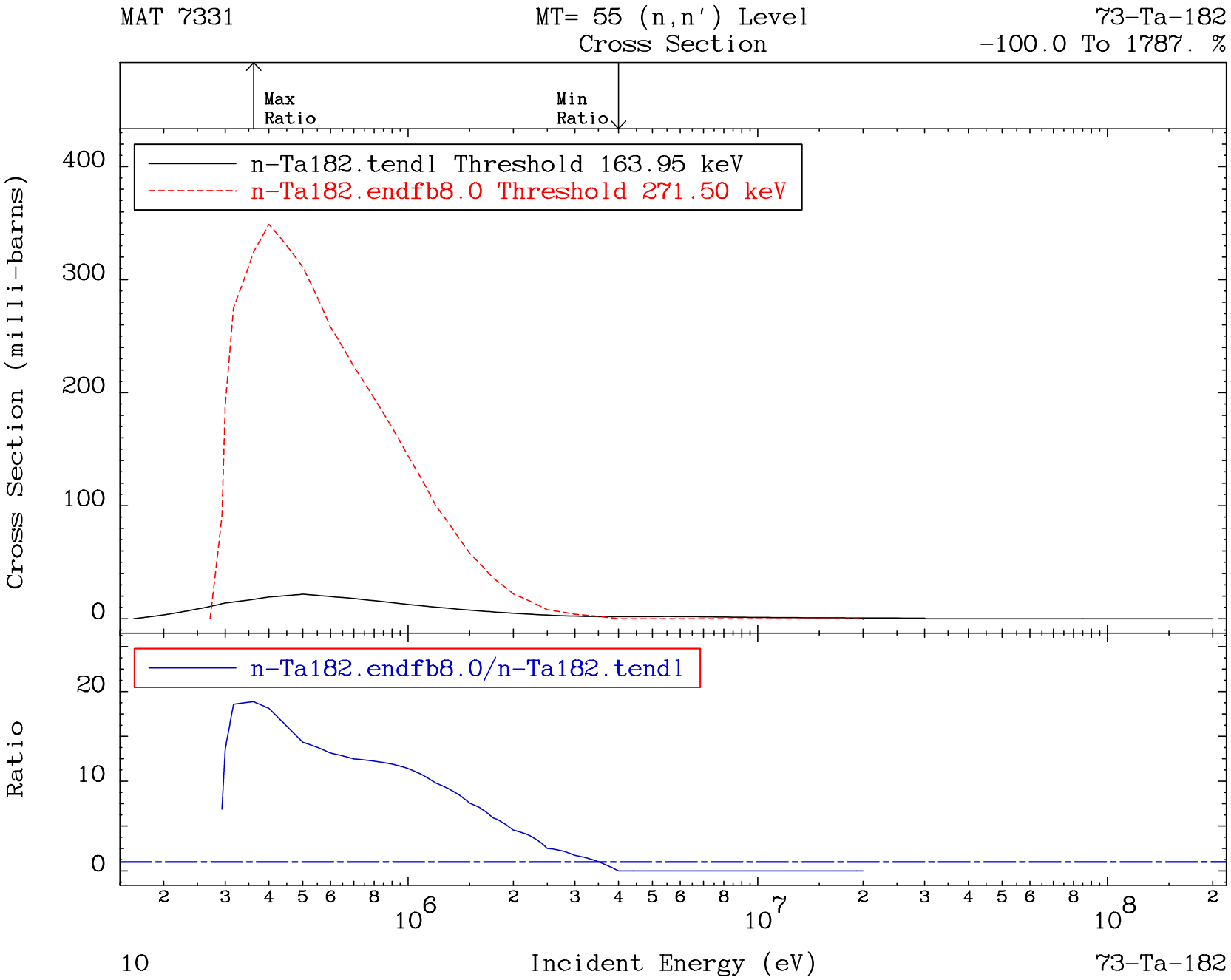

MAT 7331
(n,3n)
Cross Section
73-Ta-182
46.30 To 1021. %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 13.715 MeV
n-Ta182.endfb8.0 Threshold 13.800 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
12
8
4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
73-Ta-182

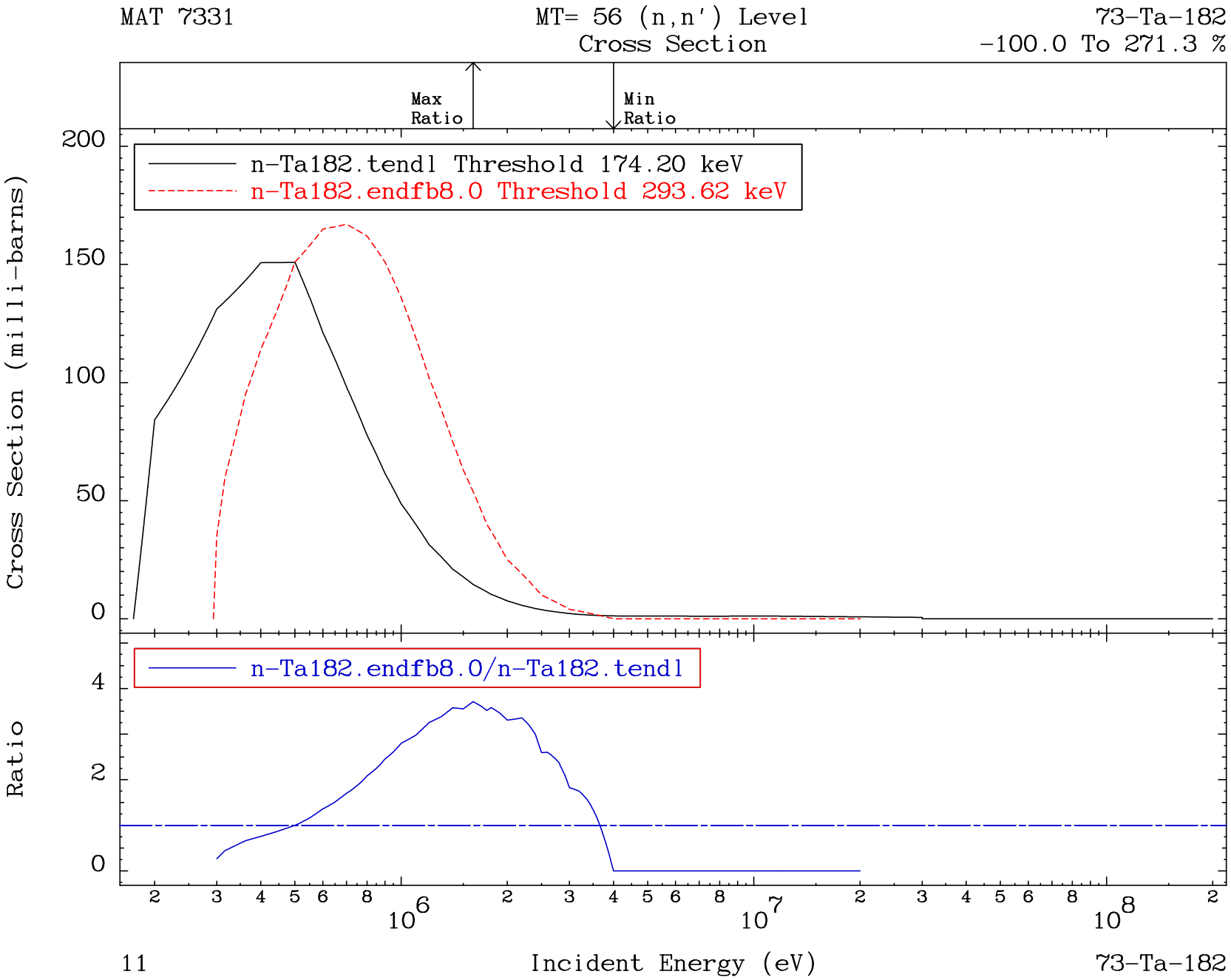

MAT 7331
MT= 51 (n,n') Level
Cross Section
73-Ta-182
138.7 To 9999. %
Min Ratio
Max Ratio
n-Ta182.tendl Threshold 16.363 keV
n-Ta182.endfb8.0 Threshold 97.538 keV
Cross Section (milli-barns)
800
600
400
200
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
10^12
10^8
10^4
10^0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
6
Incident Energy (eV)
73-Ta-182

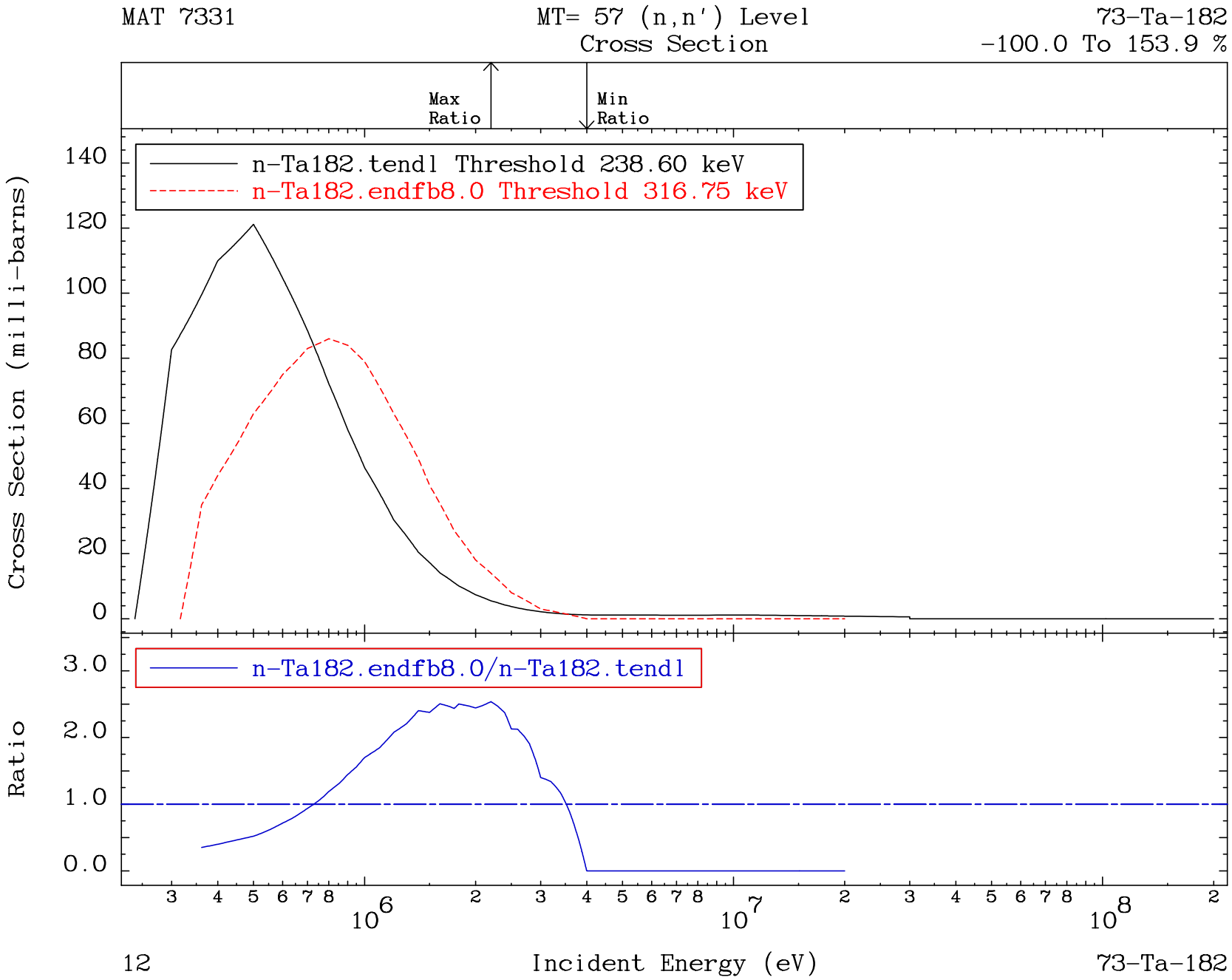

MAT 7331
MT= 52 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 269.5 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 98.372 keV
n-Ta182.endfb8.0 Threshold 114.63 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
4
2
0
10^5
2 3 4 5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
7
Incident Energy (eV)
73-Ta-182

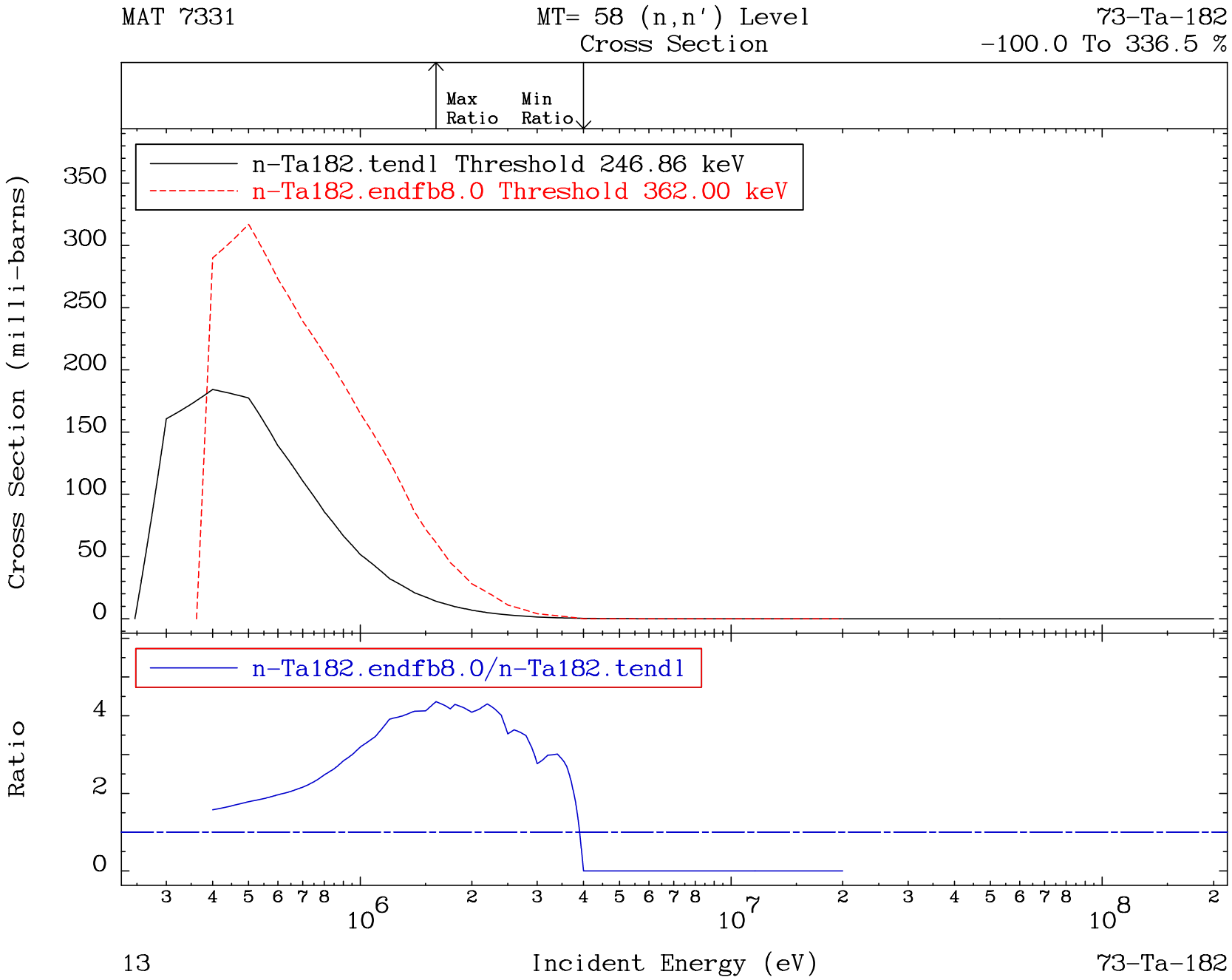

MAT 7331
MT= 53 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 207.9 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 114.95 keV
n-Ta182.endfb8.0 Threshold 174.00 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
4
3
2
1
0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
8
Incident Energy (eV)
73-Ta-182

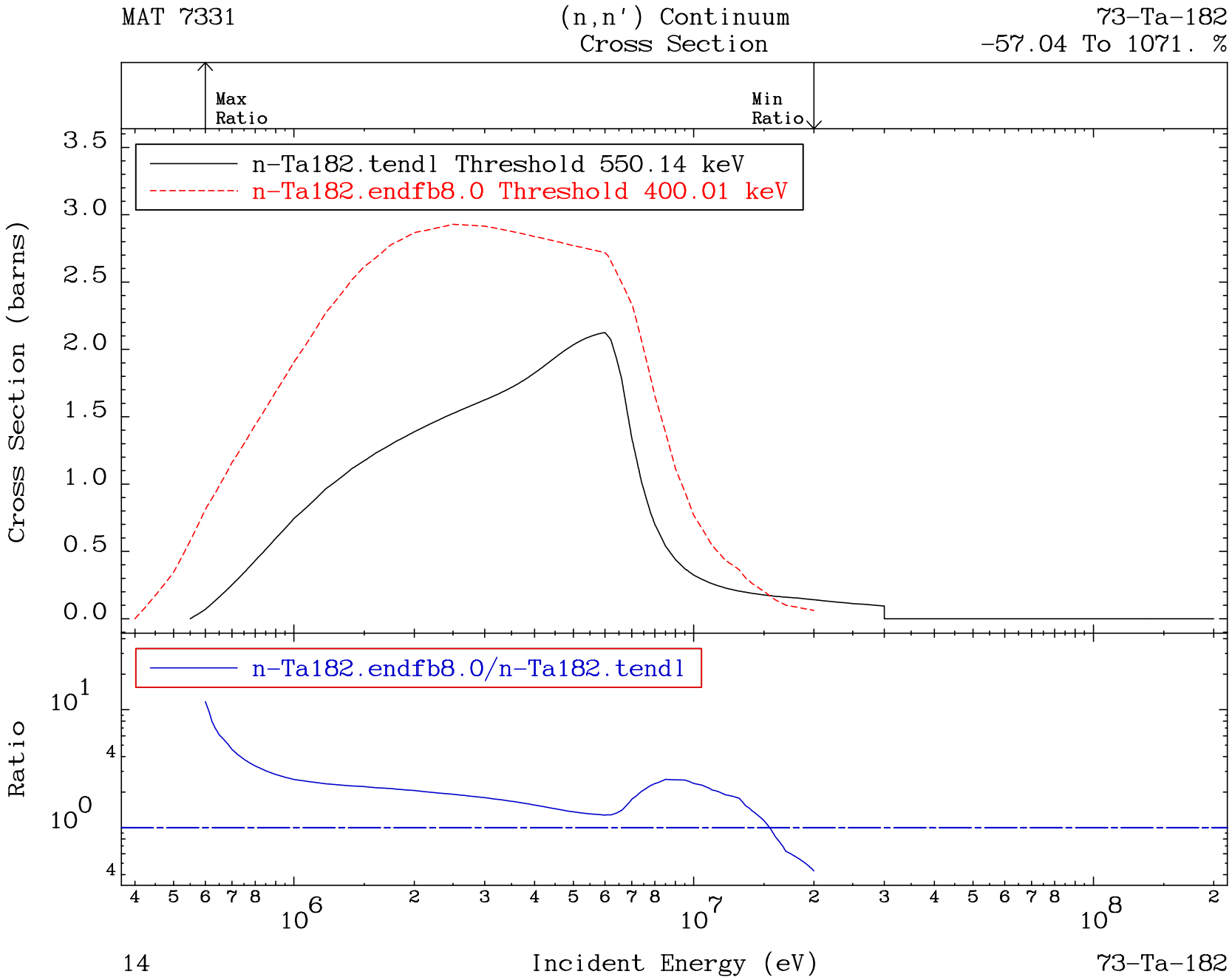

MAT 7331
MT= 54 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 156.5 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 150.98 keV
n-Ta182.endfb8.0 Threshold 238.31 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
3.0
2.0
1.0
0.0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
73-Ta-182

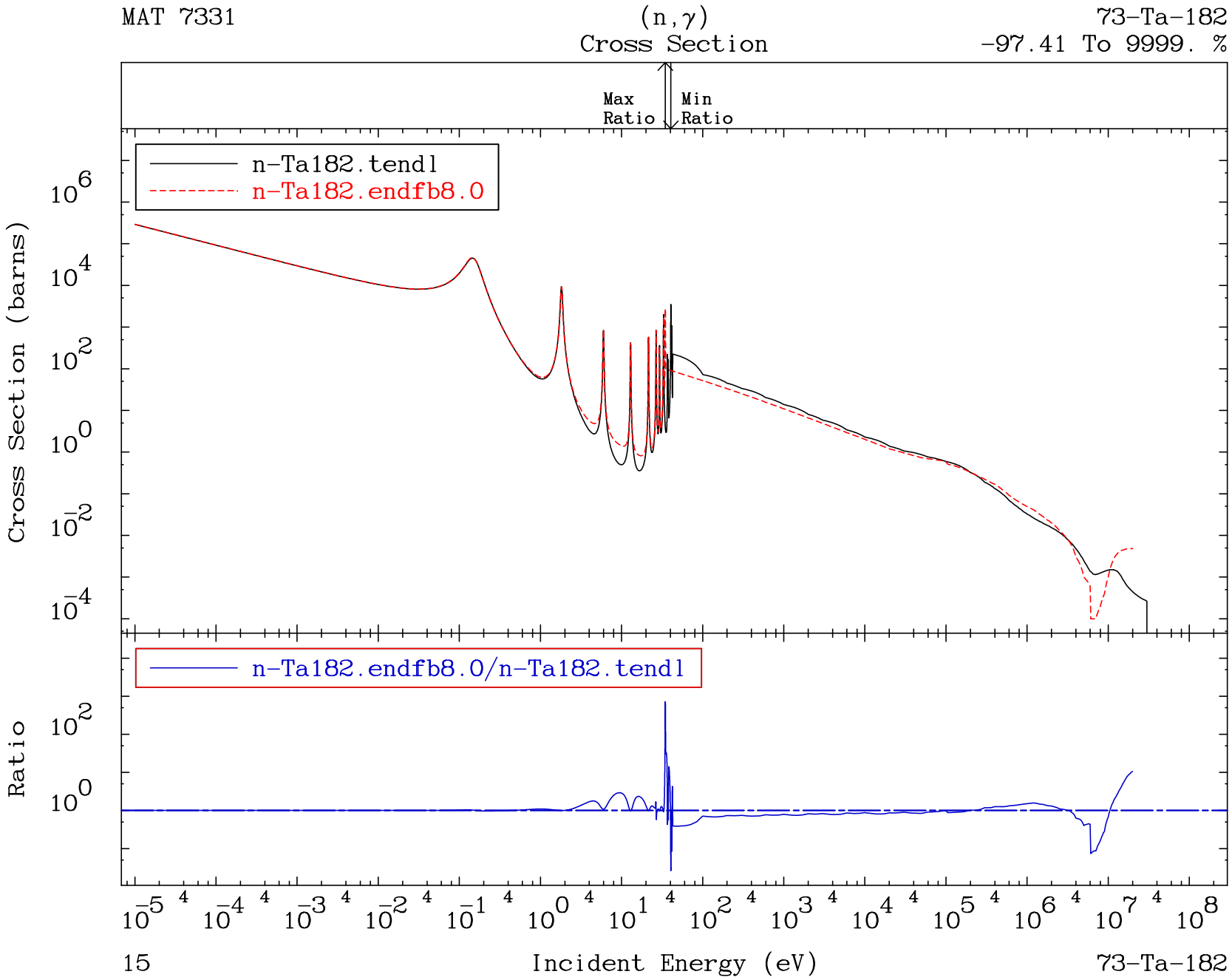

MAT 7331
MT= 55 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 1787. %
Max
Ratio
Min
Ratio
n-Ta182.tendl Threshold 163.95 keV
n-Ta182.endfb8.0 Threshold 271.50 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
20
10
0
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
10
Incident Energy (eV)
73-Ta-182

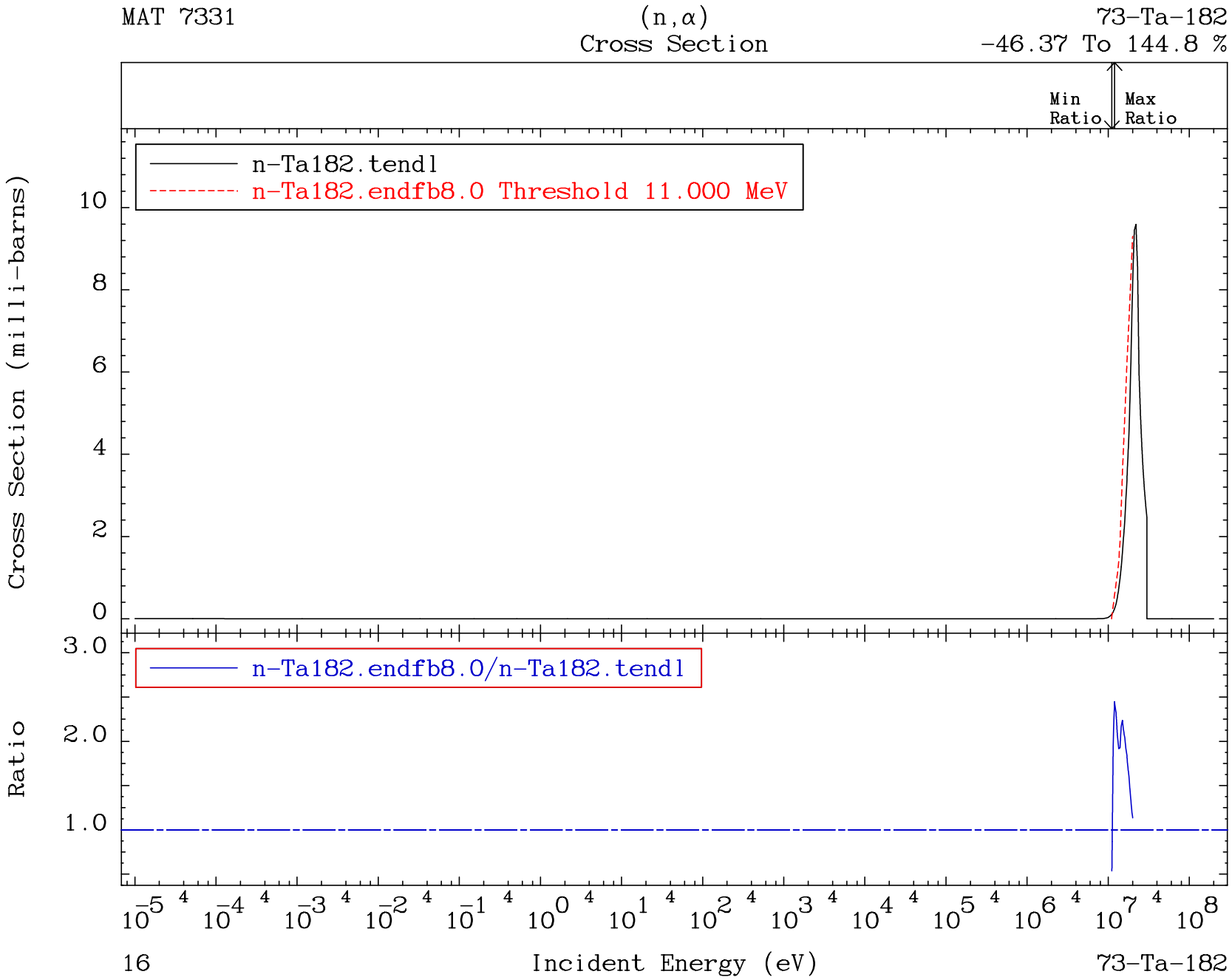

MAT 7331
MT= 56 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 271.3 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 174.20 keV
n-Ta182.endfb8.0 Threshold 293.62 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
4
2
0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
73-Ta-182

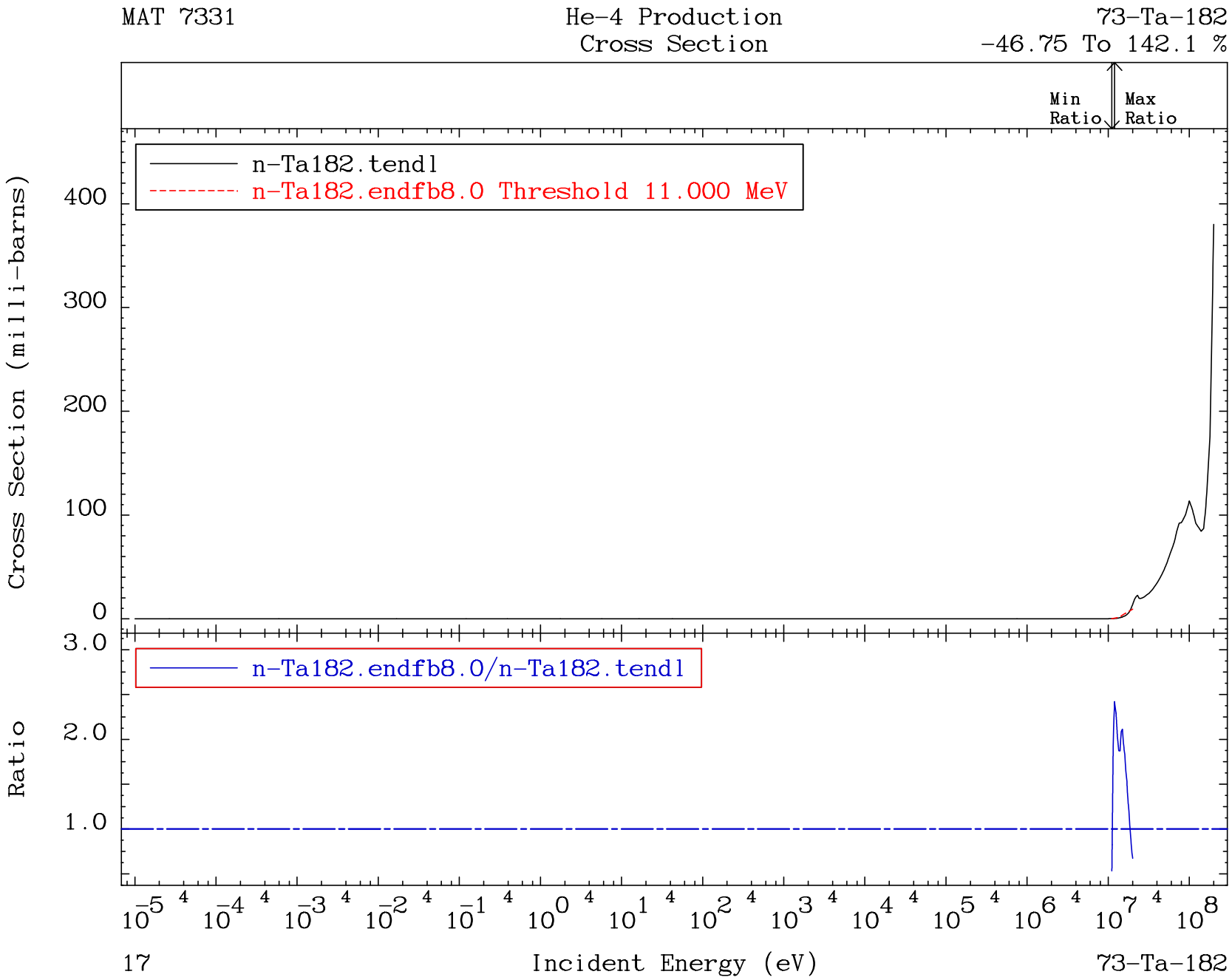

MAT 7331
MT= 57 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 153.9 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 238.60 keV
n-Ta182.endfb8.0 Threshold 316.75 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
3.0
2.0
1.0
0.0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
73-Ta-182

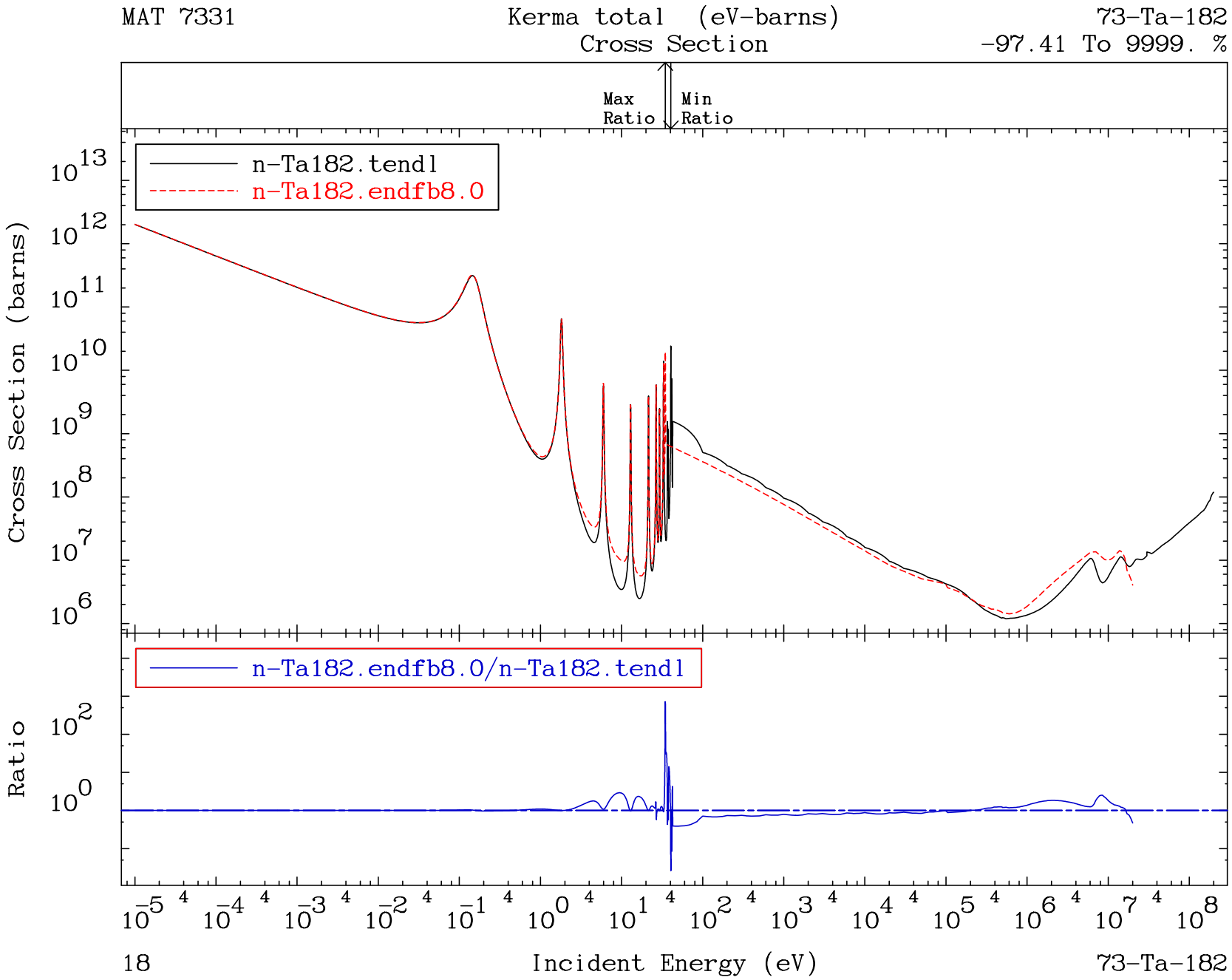

MAT 7331
MT= 58 (n,n') Level
Cross Section
73-Ta-182
-100.0 To 336.5 %
Max Ratio
Min Ratio
n-Ta182.tendl Threshold 246.86 keV
n-Ta182.endfb8.0 Threshold 362.00 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
4
2
0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
73-Ta-182

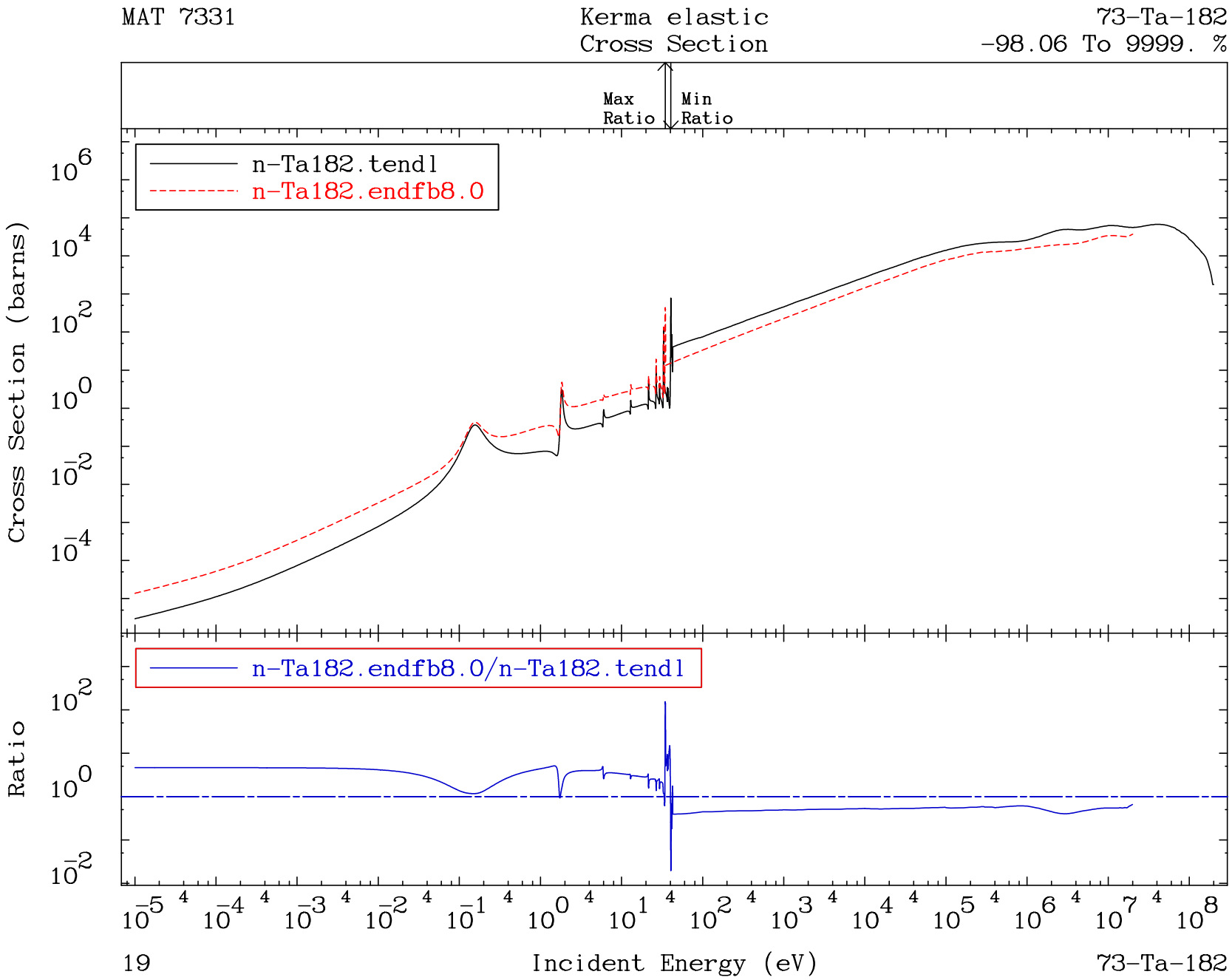

MAT 7331
(n,n') Continuum
Cross Section
73-Ta-182
-57.04 To 1071. %
Max
Ratio
Min
Ratio
n-Ta182.tendl Threshold 550.14 keV
n-Ta182.endfb8.0 Threshold 400.01 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
10^1
4
10^0
4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
73-Ta-182

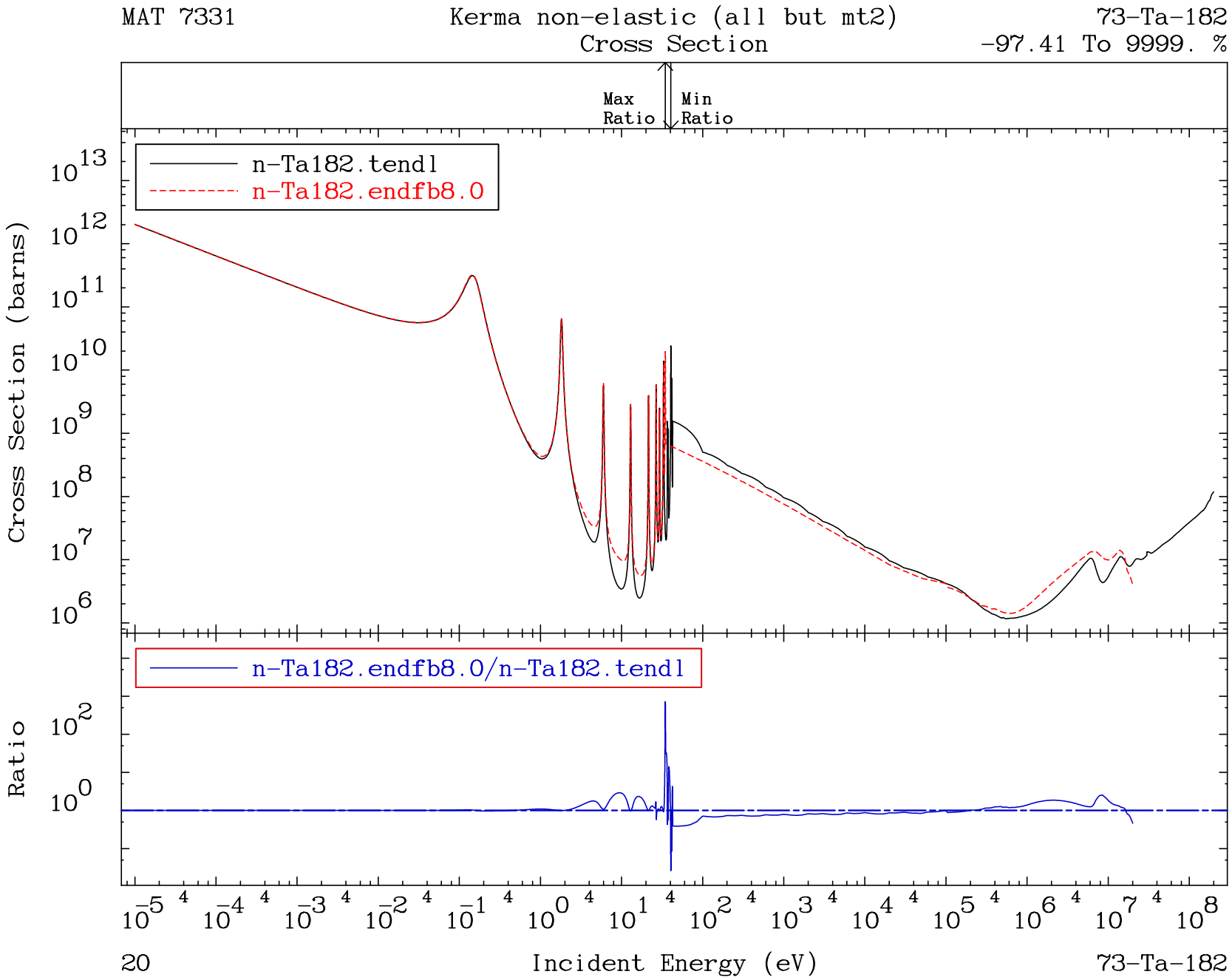

MAT 7331
(n,γ)
Cross Section
73-Ta-182
-97.41 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
15
73-Ta-182

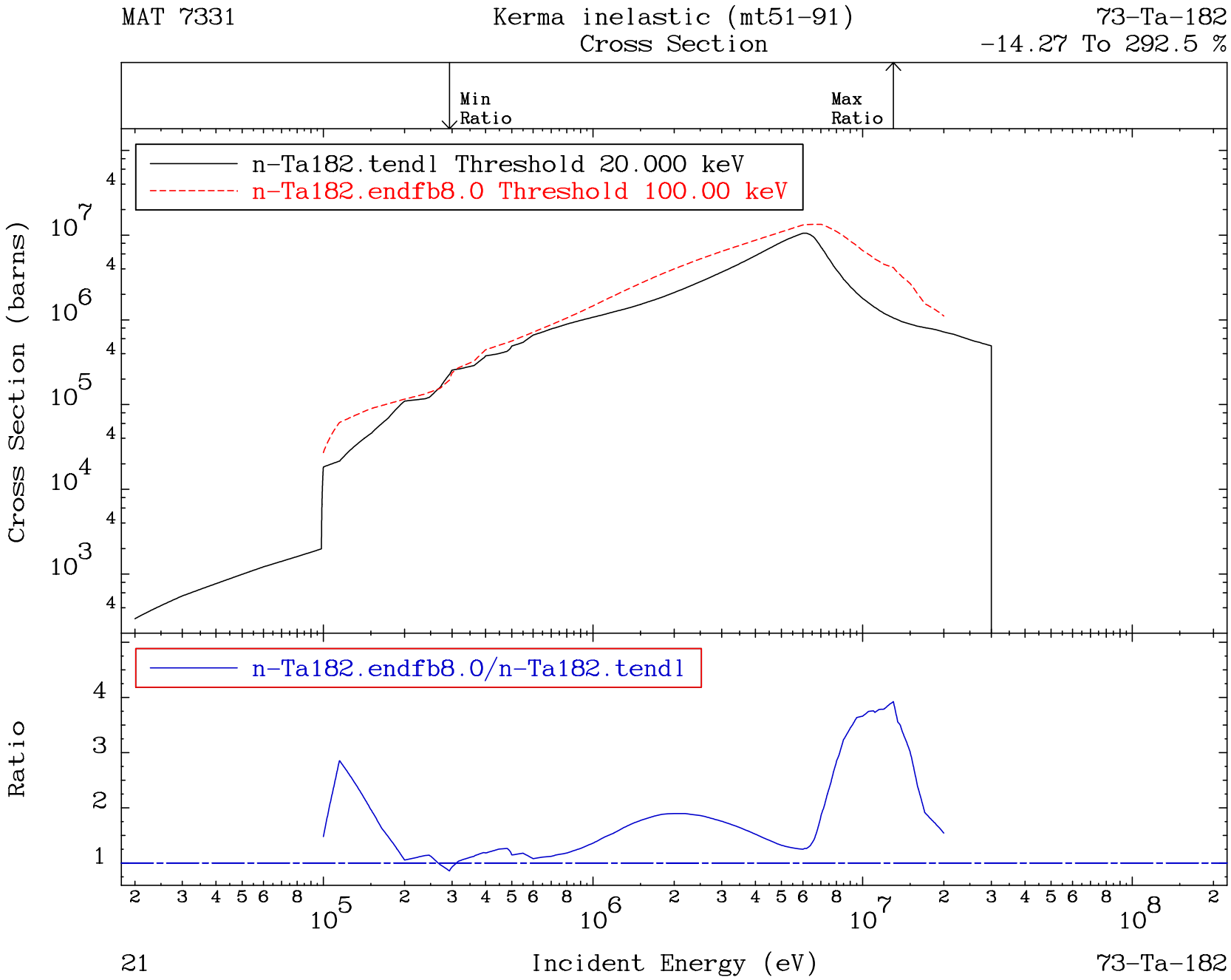

MAT 7331
(n,α)
Cross Section
73-Ta-182
-46.37 To 144.8 %
Min Ratio
Max Ratio
n-Ta182.tendl
n-Ta182.endfb8.0 Threshold 11.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
1.0
2.0
3.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
16
73-Ta-182

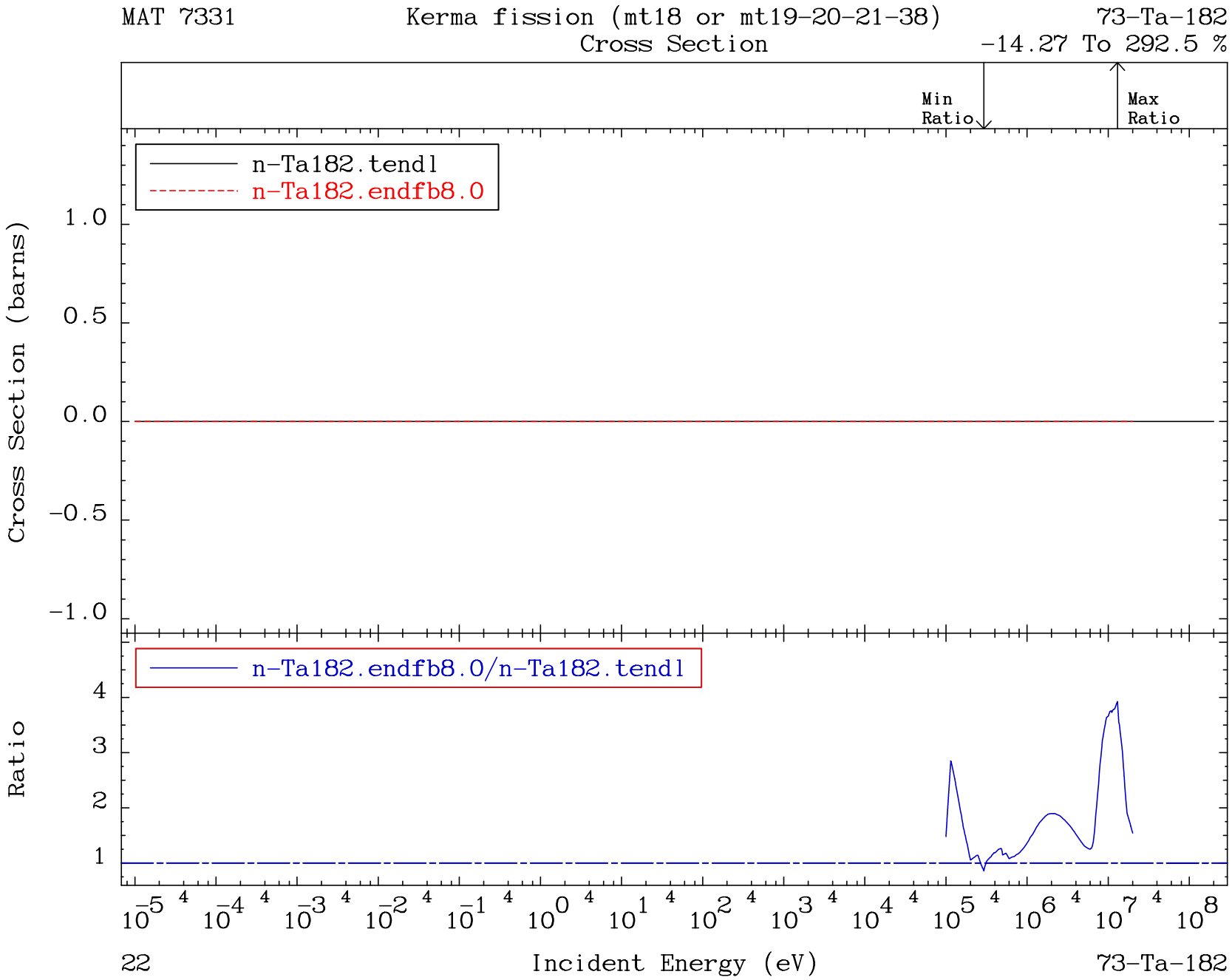

MAT 7331
He-4 Production
Cross Section
73-Ta-182
-46.75 To 142.1 %
Min Ratio
Max Ratio
n-Ta182.tendl
n-Ta182.endfb8.0 Threshold 11.000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
3.0
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
17
Incident Energy (eV)
73-Ta-182

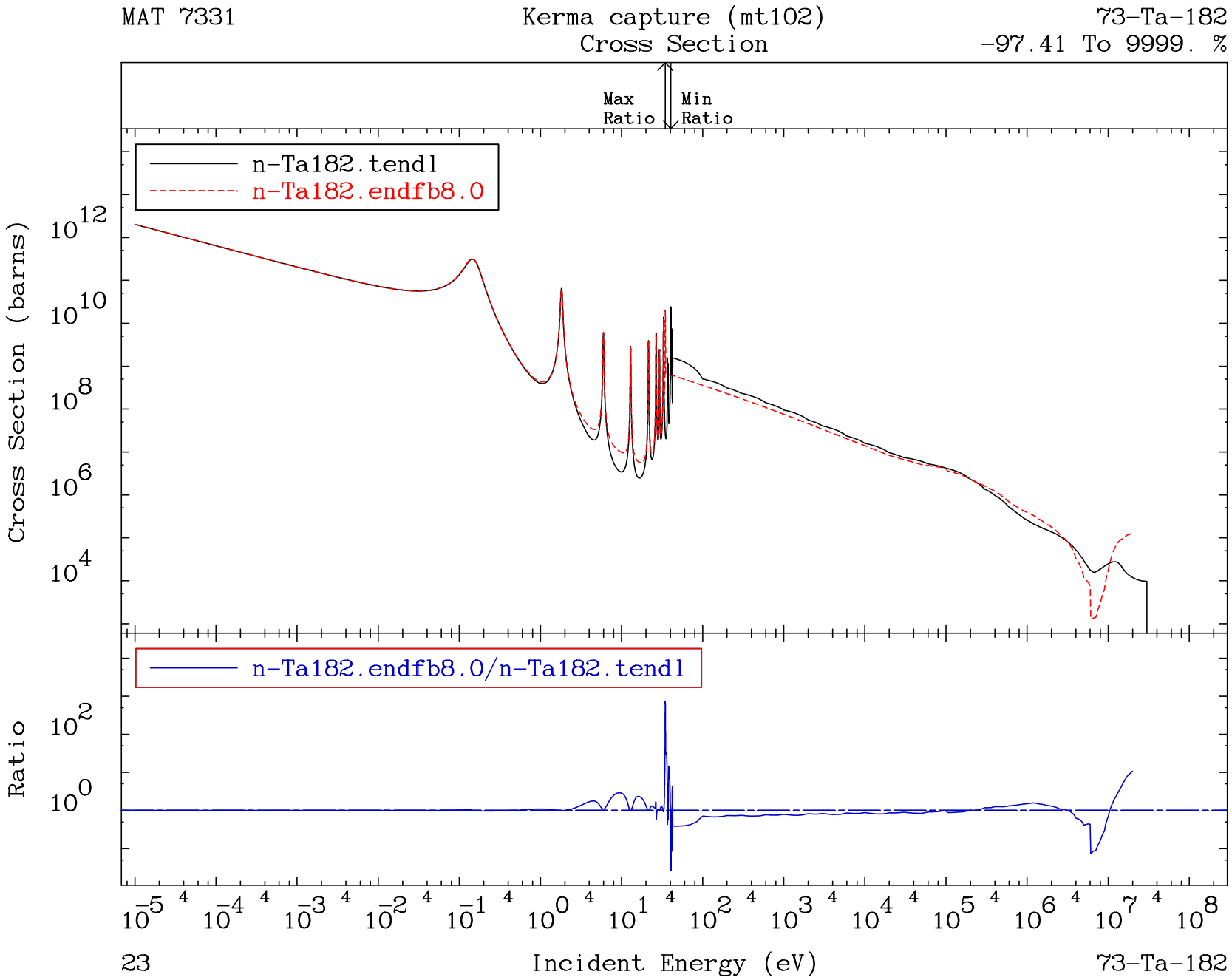

MAT 7331
Kerma total (eV-barns)
Cross Section
73-Ta-182
-97.41 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
18
73-Ta-182

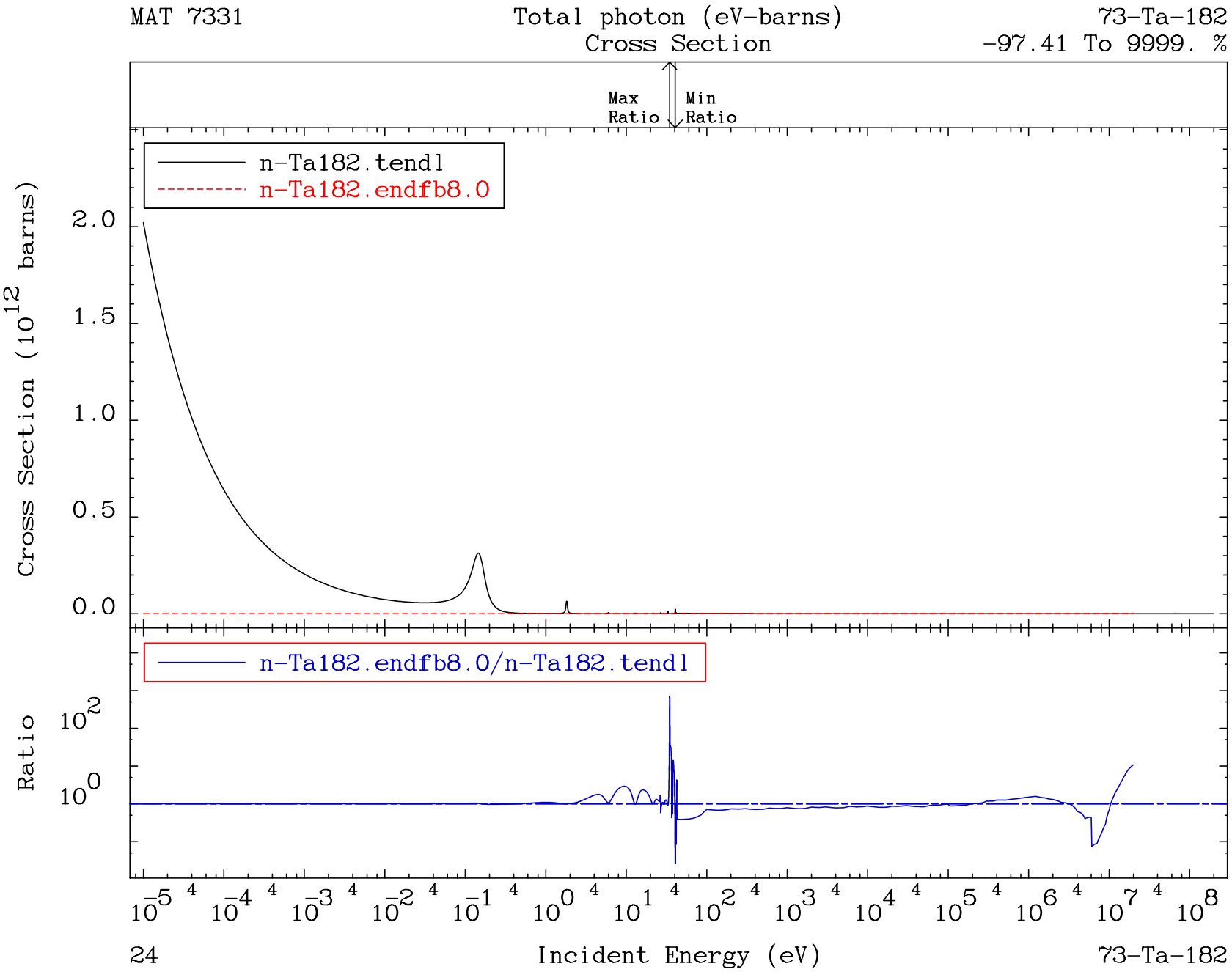

MAT 7331
Kerma elastic
Cross Section
73-Ta-182
-98.06 To 9999. %
Max
Ratio
Min
Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
19
73-Ta-182

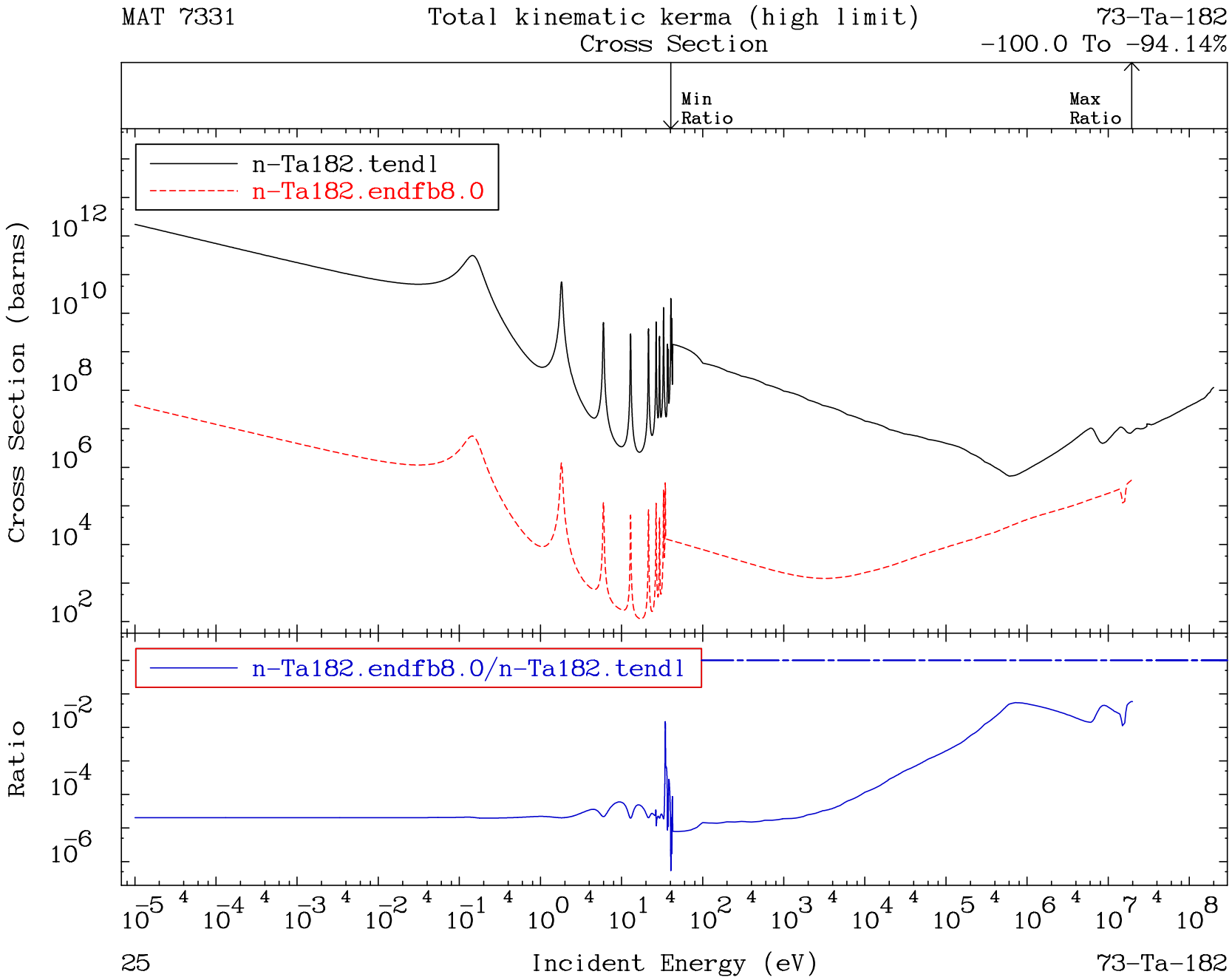

MAT 7331
Kerma non-elastic (all but mt2)
Cross Section
73-Ta-182
-97.41 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
20
73-Ta-182

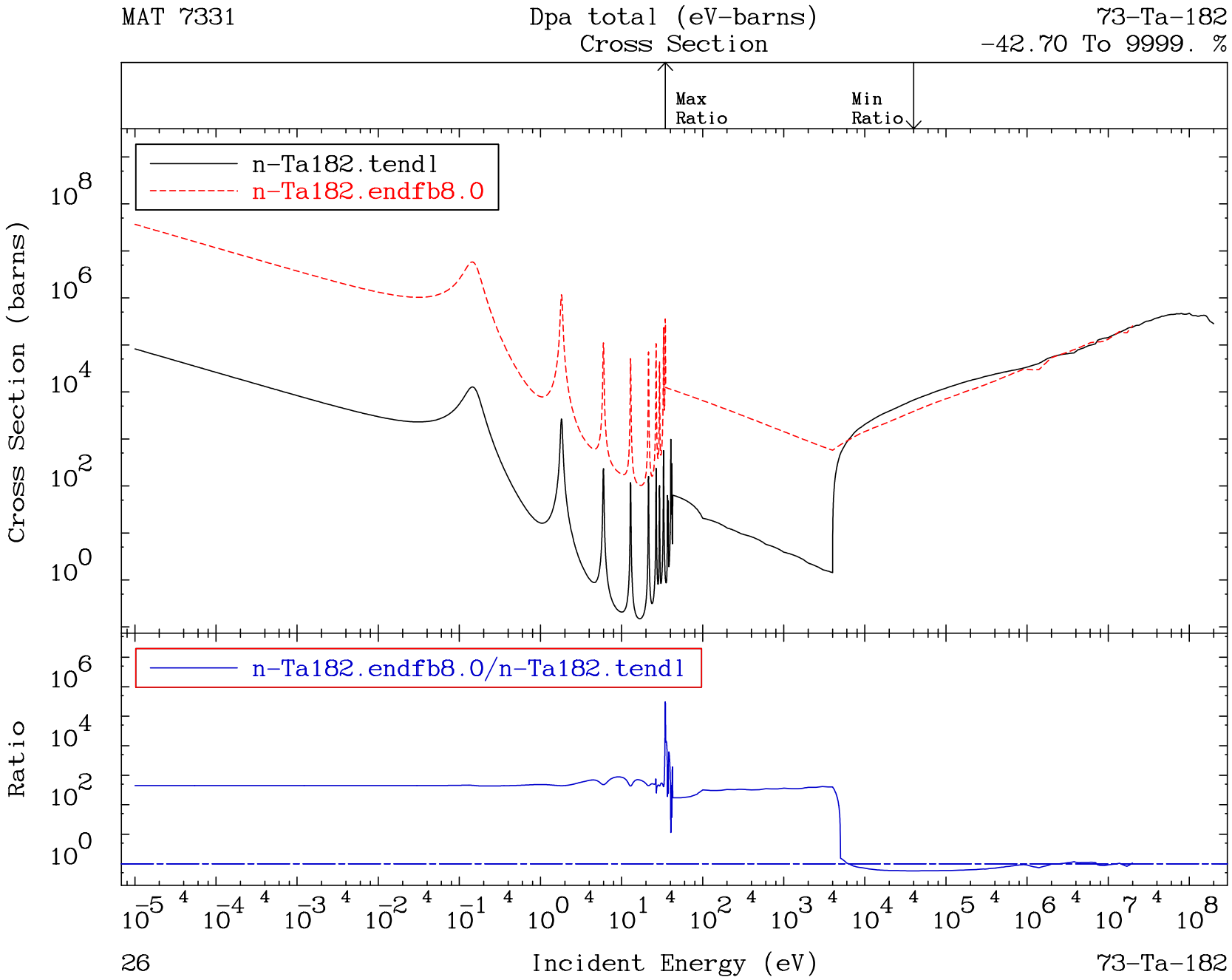

MAT 7331
Kerma inelastic (mt51-91)
Cross Section
73-Ta-182
-14.27 To 292.5 %
Min Ratio
Max Ratio
n-Ta182.tendl Threshold 20.000 keV
n-Ta182.endfb8.0 Threshold 100.00 keV
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
21
73-Ta-182

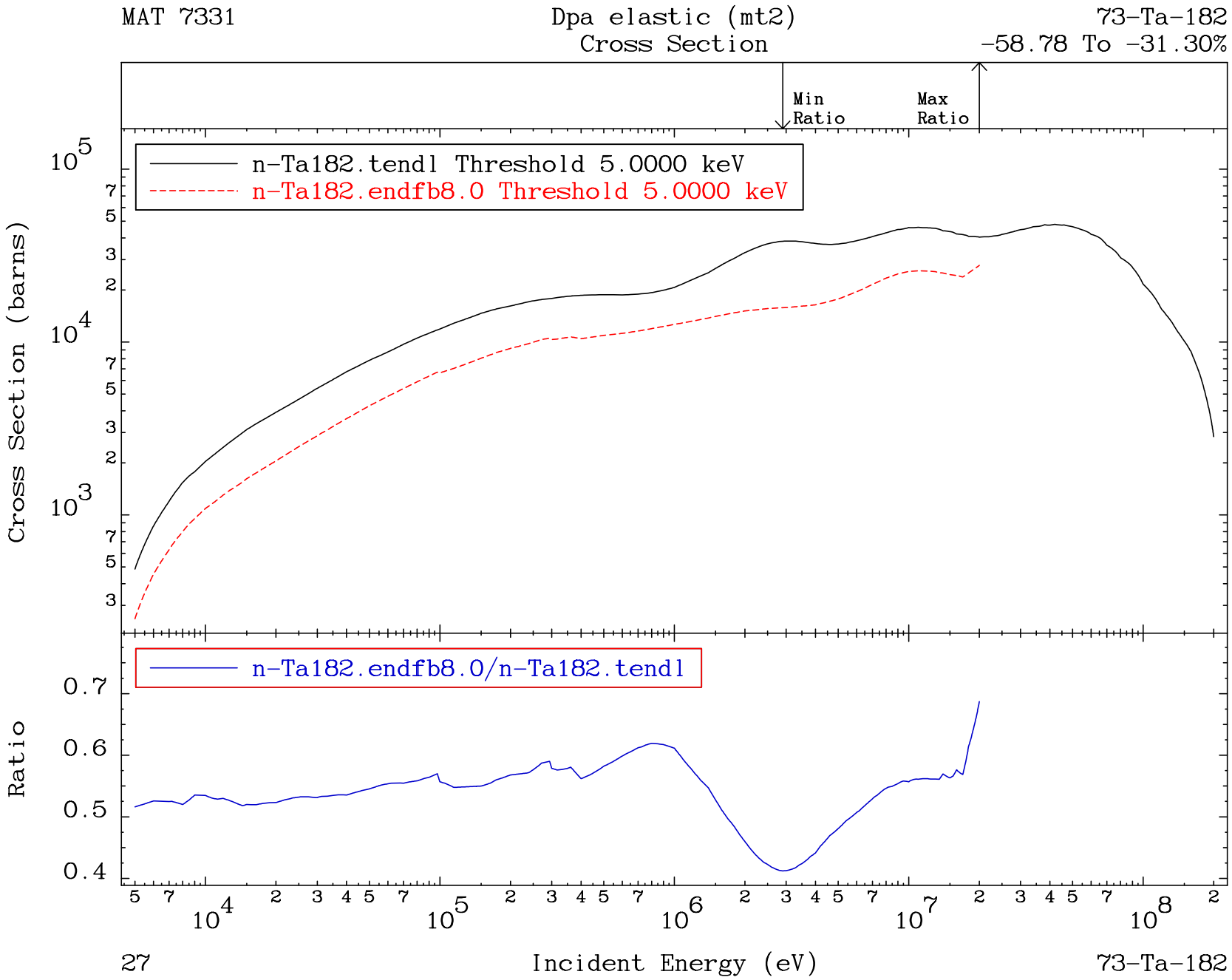

MAT 7331
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
73-Ta-182
-14.27 To 292.5 %
Min Ratio
Max Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
4
3
2
1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
22
Incident Energy (eV)
73-Ta-182

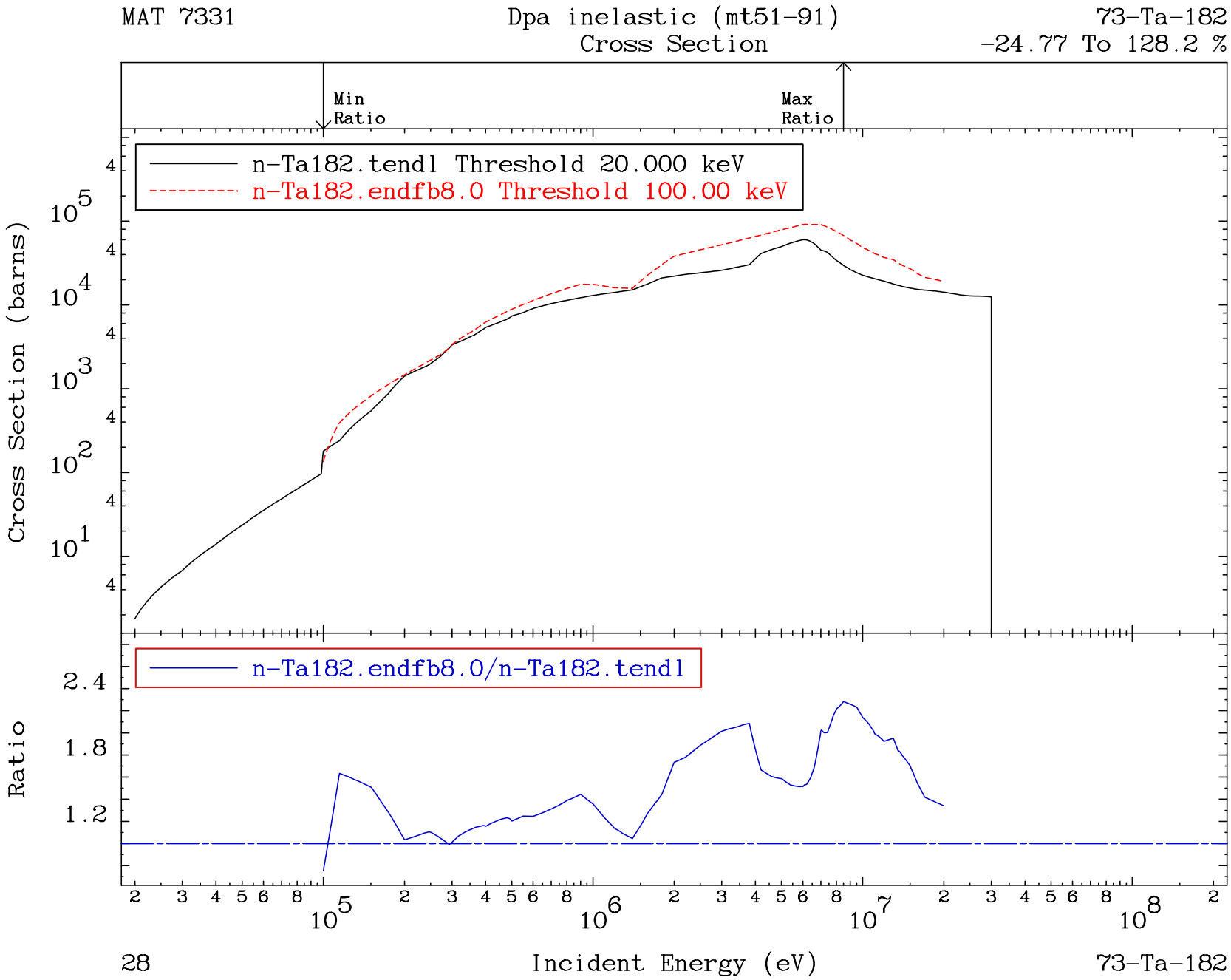

MAT 7331
Kerma capture (mt102)
Cross Section
73-Ta-182
-97.41 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
10^{12}
10^{10}
10^{8}
10^{6}
10^{4}
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
10^{2}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
23
Incident Energy (eV)
73-Ta-182

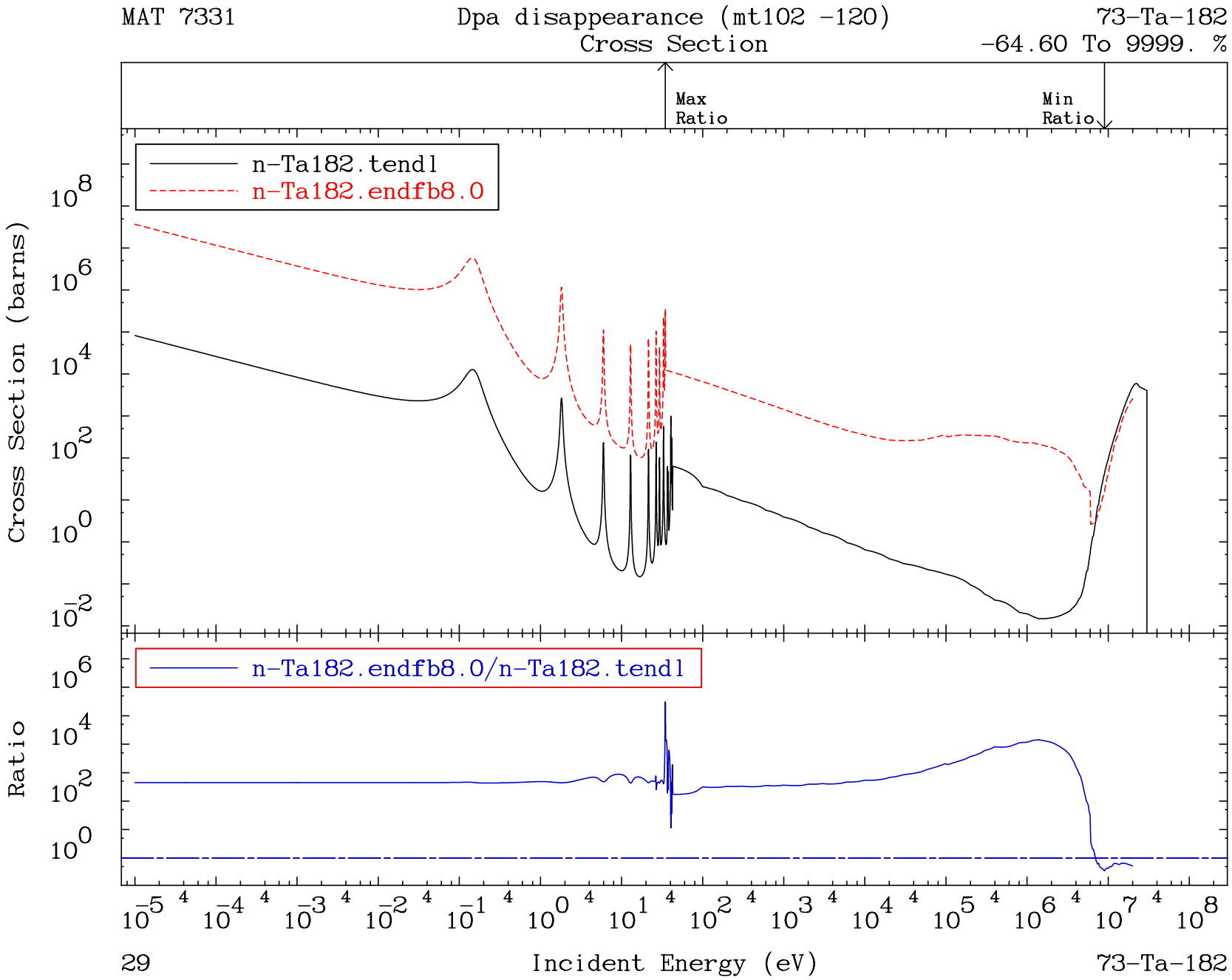

MAT 7331
Total photon (eV-barns)
Cross Section
73-Ta-182
-97.41 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (10^{12} barns)
2.0
1.5
1.0
0.5
0.0
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
10^{2}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
24
Incident Energy (eV)
73-Ta-182


MAT 7331
Total kinematic kerma (high limit)
Cross Section
73-Ta-182
-100.0 To -94.14%
Min Ratio
Max Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
25
73-Ta-182


MAT 7331
Dpa total (eV-barns)
Cross Section
73-Ta-182
-42.70 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
26
73-Ta-182


MAT 7331
Dpa elastic (mt2)
Cross Section
73-Ta-182
-58.78 To -31.30%
Min Ratio
Max Ratio
n-Ta182.tendl Threshold 5.0000 keV
n-Ta182.endfb8.0 Threshold 5.0000 keV
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
27
73-Ta-182


MAT 7331
Dpa inelastic (mt51-91)
Cross Section
73-Ta-182
-24.77 To 128.2 %
Min Ratio
Max Ratio
n-Ta182.tendl Threshold 20.000 keV
n-Ta182.endfb8.0 Threshold 100.00 keV
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
28
73-Ta-182


MAT 7331
Dpa disappearance (mt102 -120)
Cross Section
73-Ta-182
-64.60 To 9999. %
Max Ratio
Min Ratio
n-Ta182.tendl
n-Ta182.endfb8.0
Cross Section (barns)
n-Ta182.endfb8.0/n-Ta182.tendl
Ratio
Incident Energy (eV)
29
73-Ta-182