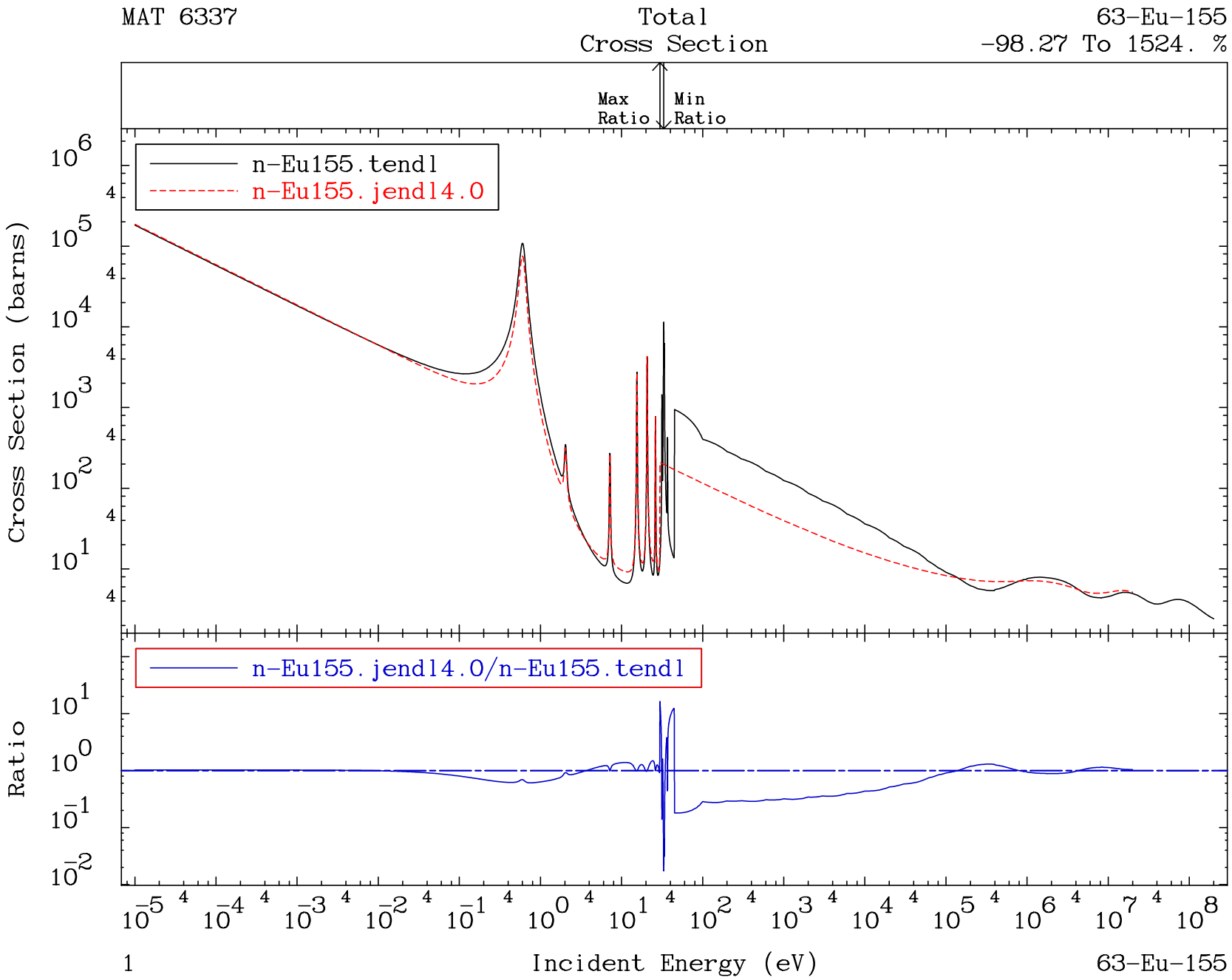
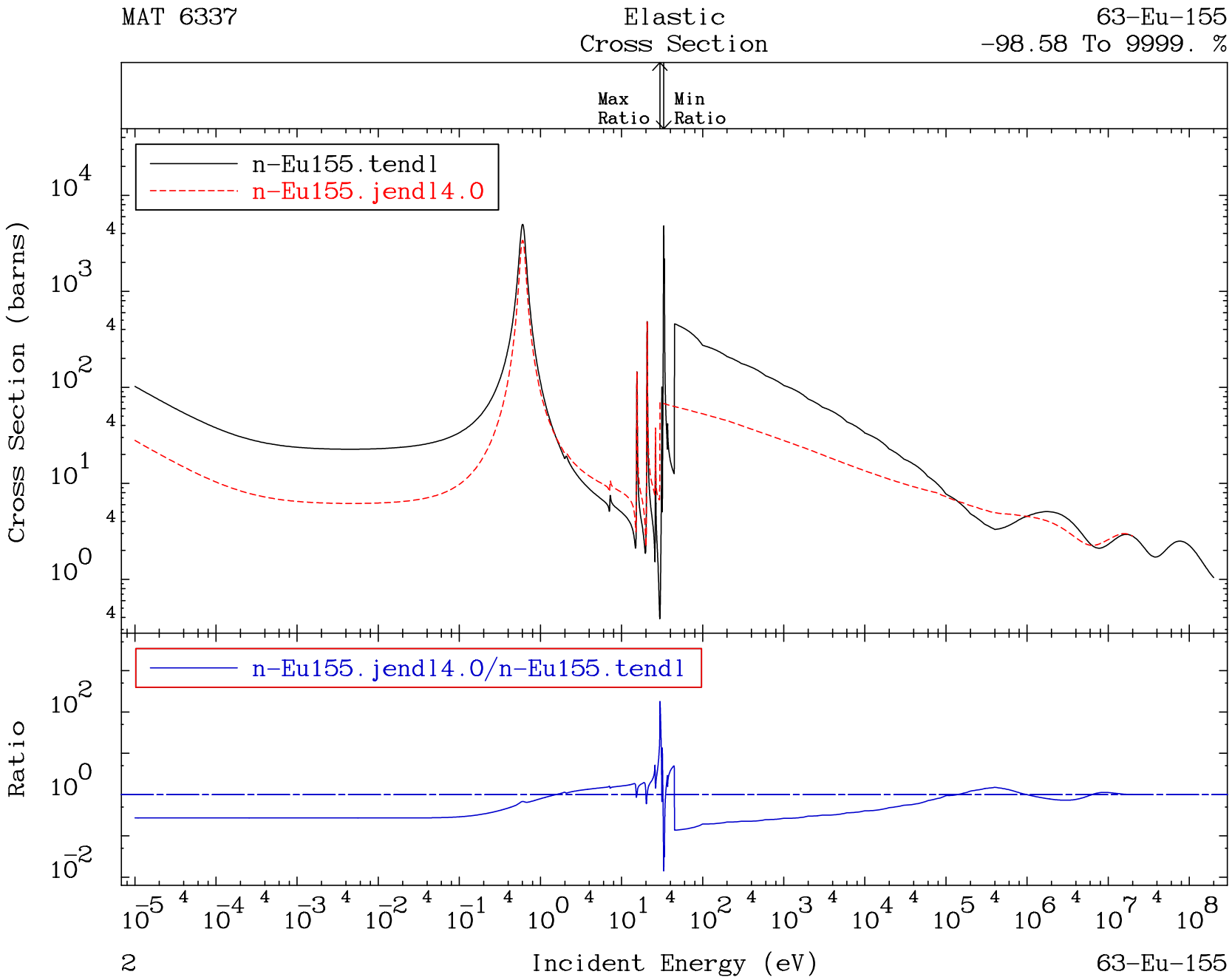
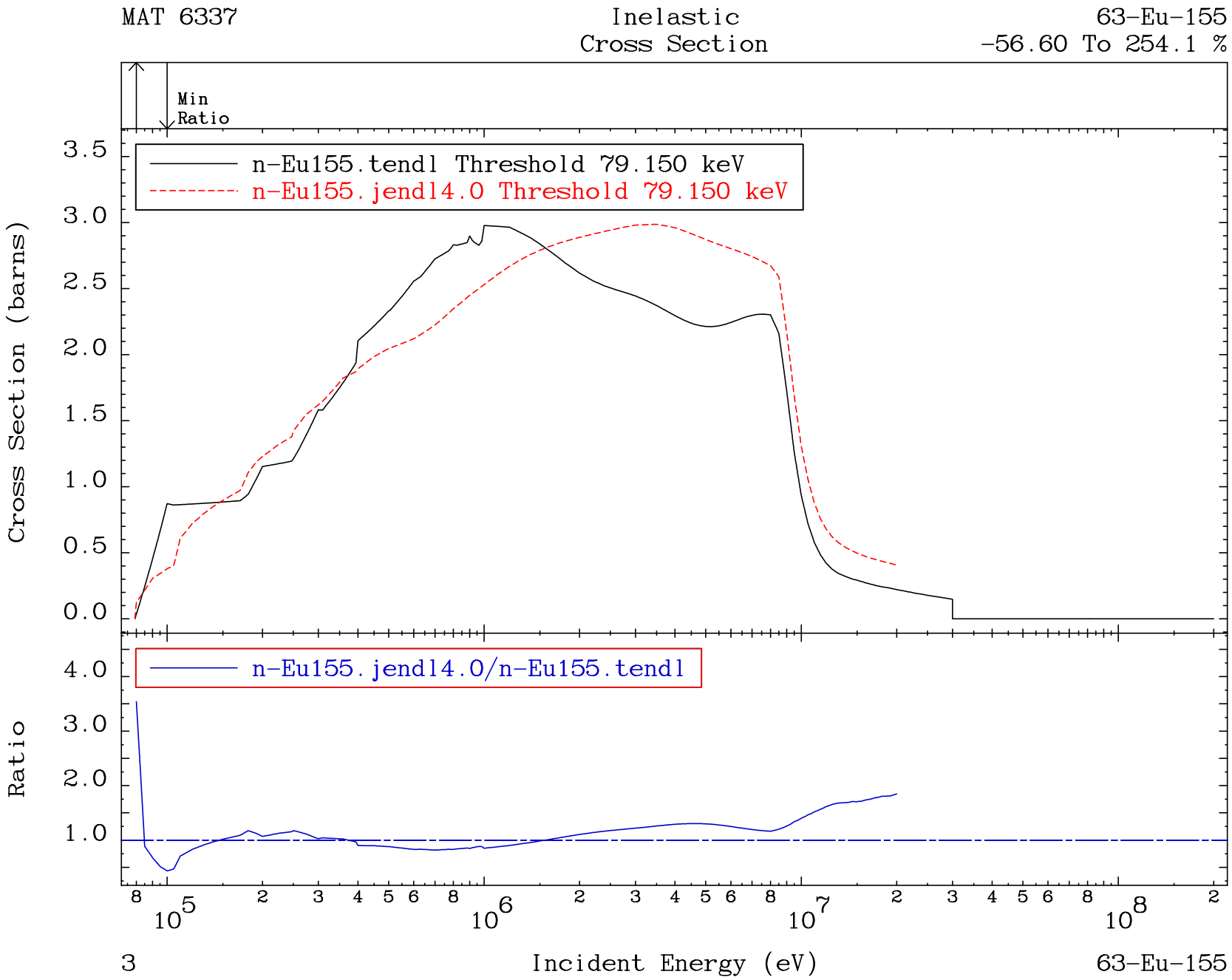
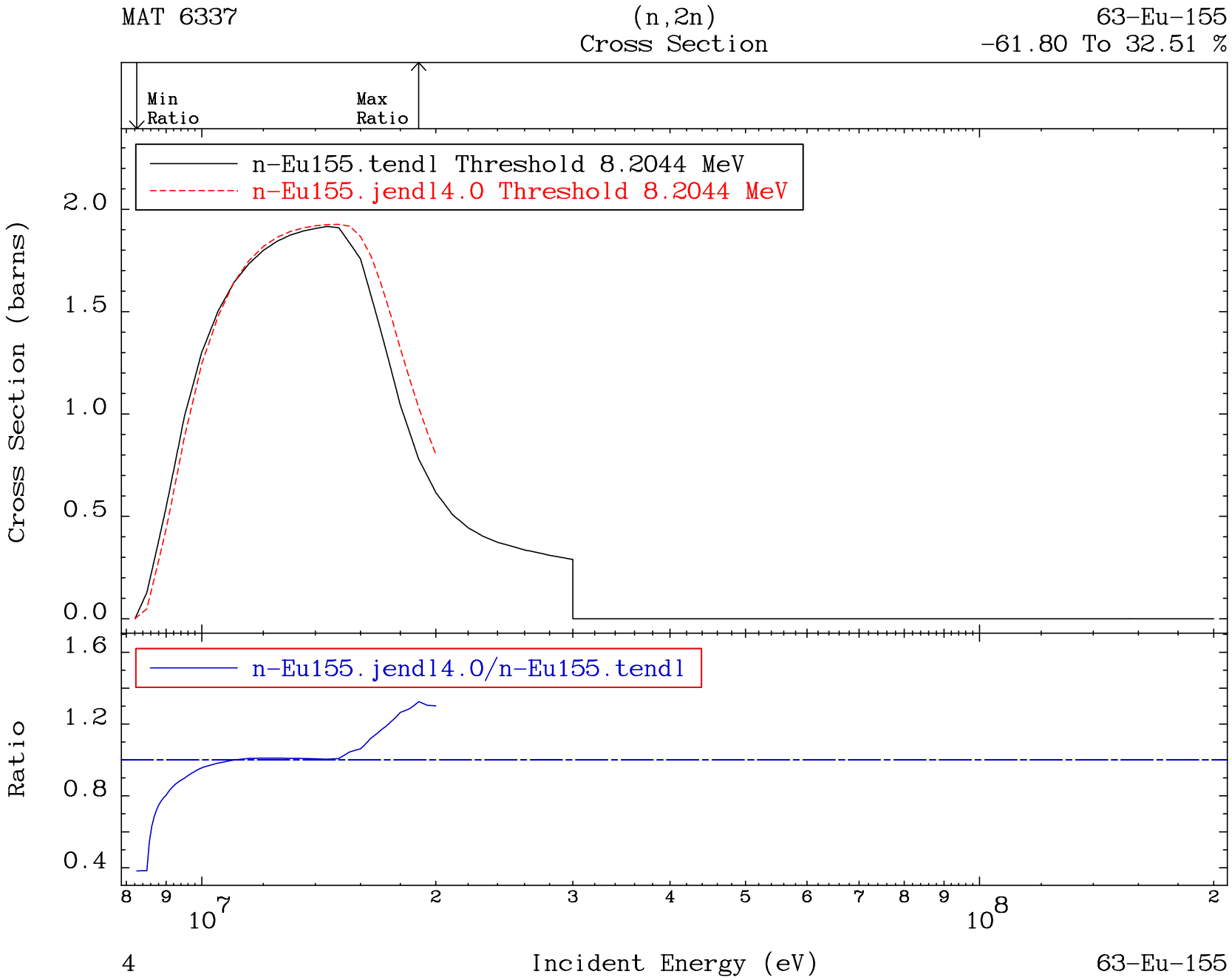
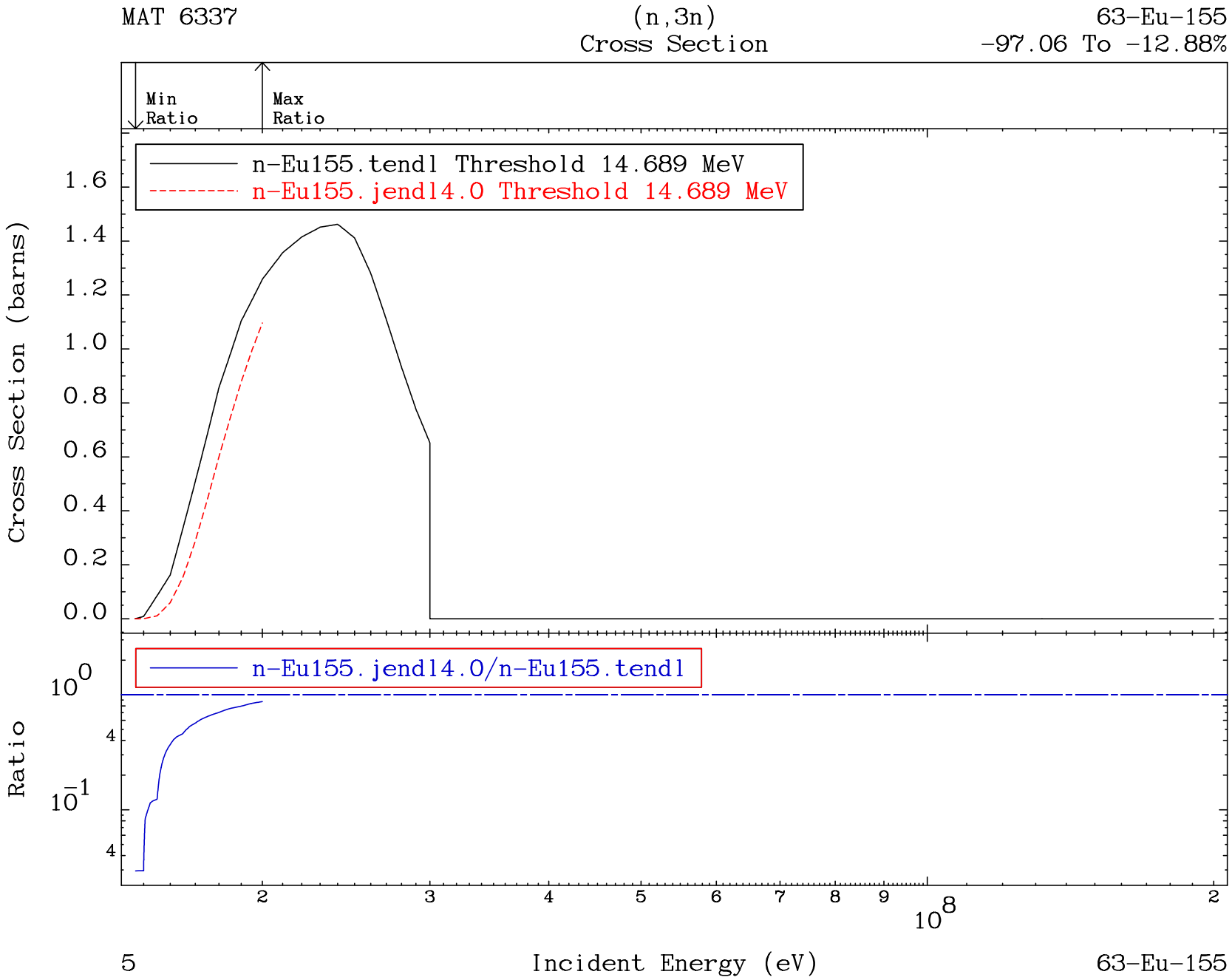
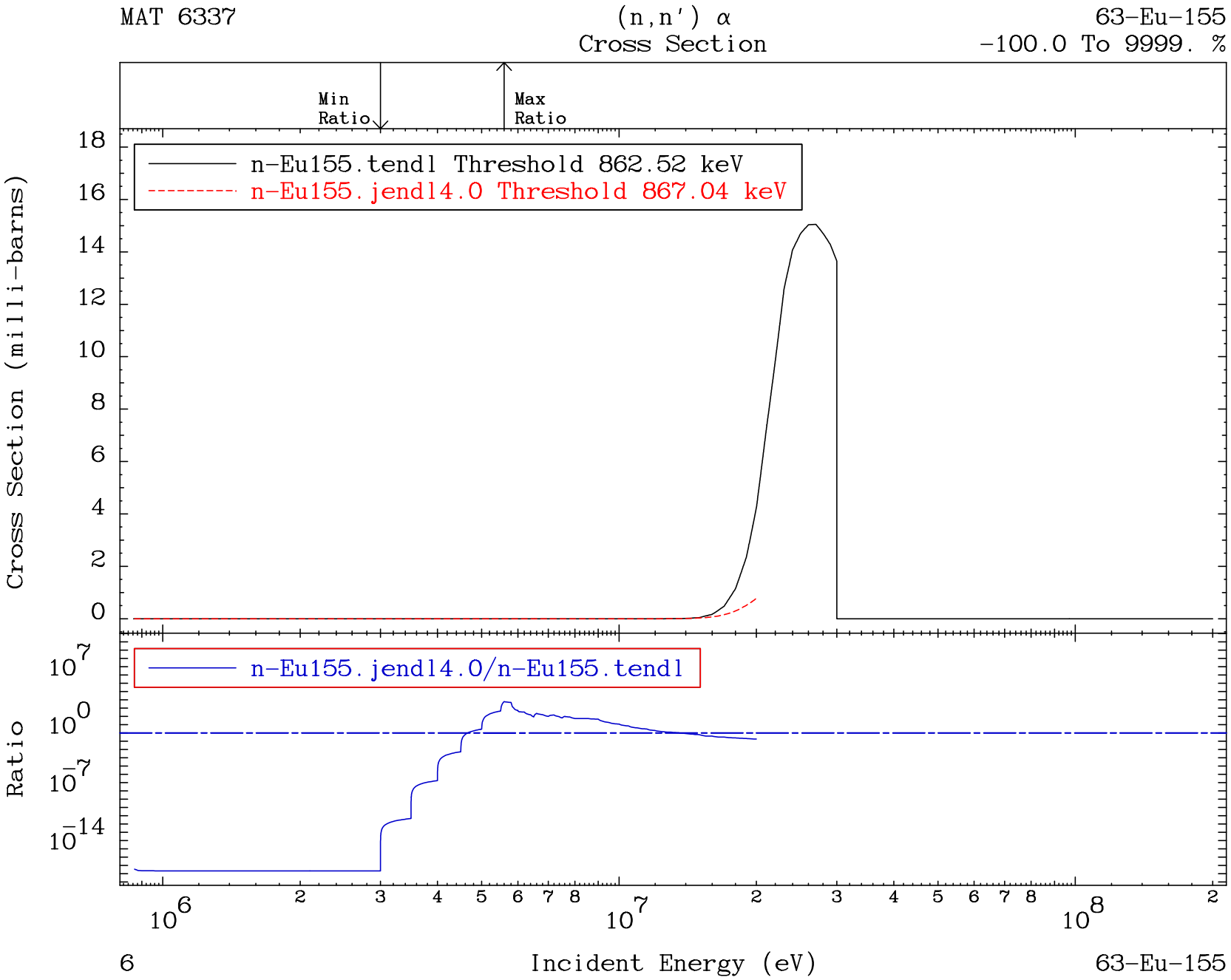

MAT 6337
Total
Cross Section
63-Eu-155
-98.27 To 1524. %
Max Ratio
Min Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
63-Eu-155
1

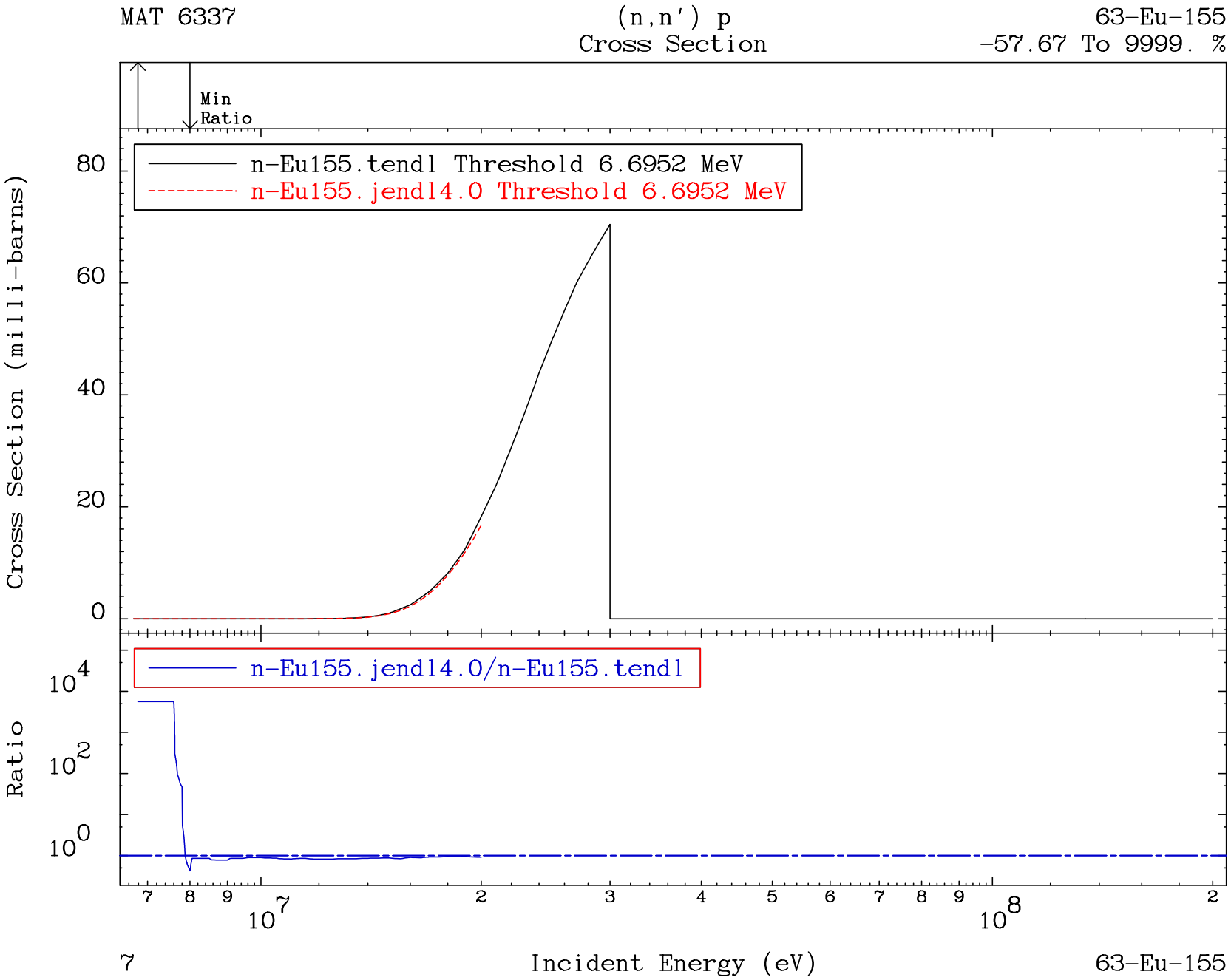

MAT 6337
Elastic
Cross Section
63-Eu-155
-98.58 To 9999. %
Max Ratio
Min Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
2
63-Eu-155

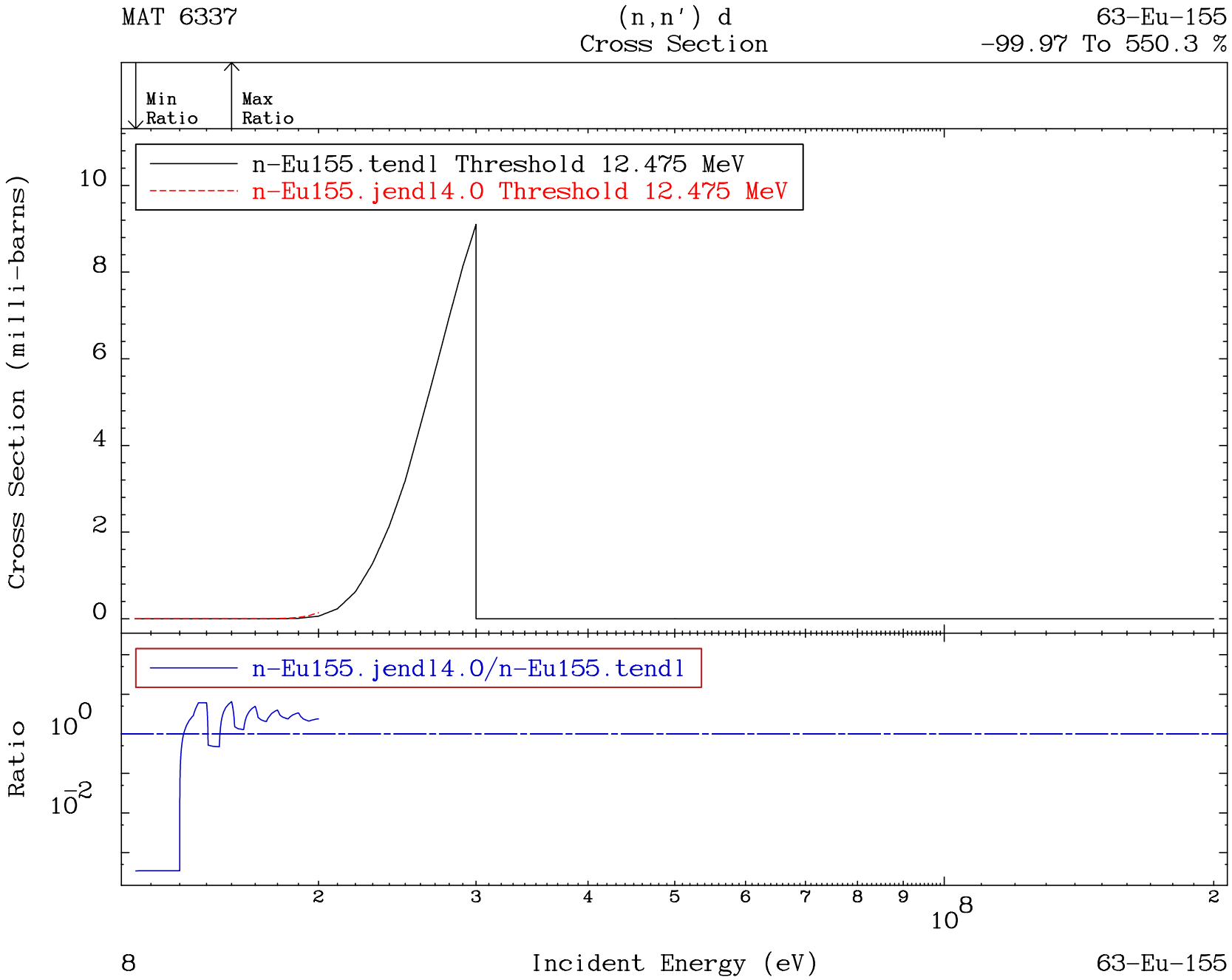

MAT 6337
Inelastic
Cross Section
63-Eu-155
-56.60 To 254.1 %
Min
Ratio
n-Eu155.tendl Threshold 79.150 keV
n-Eu155.jendl4.0 Threshold 79.150 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4.0
3.0
2.0
1.0
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
63-Eu-155

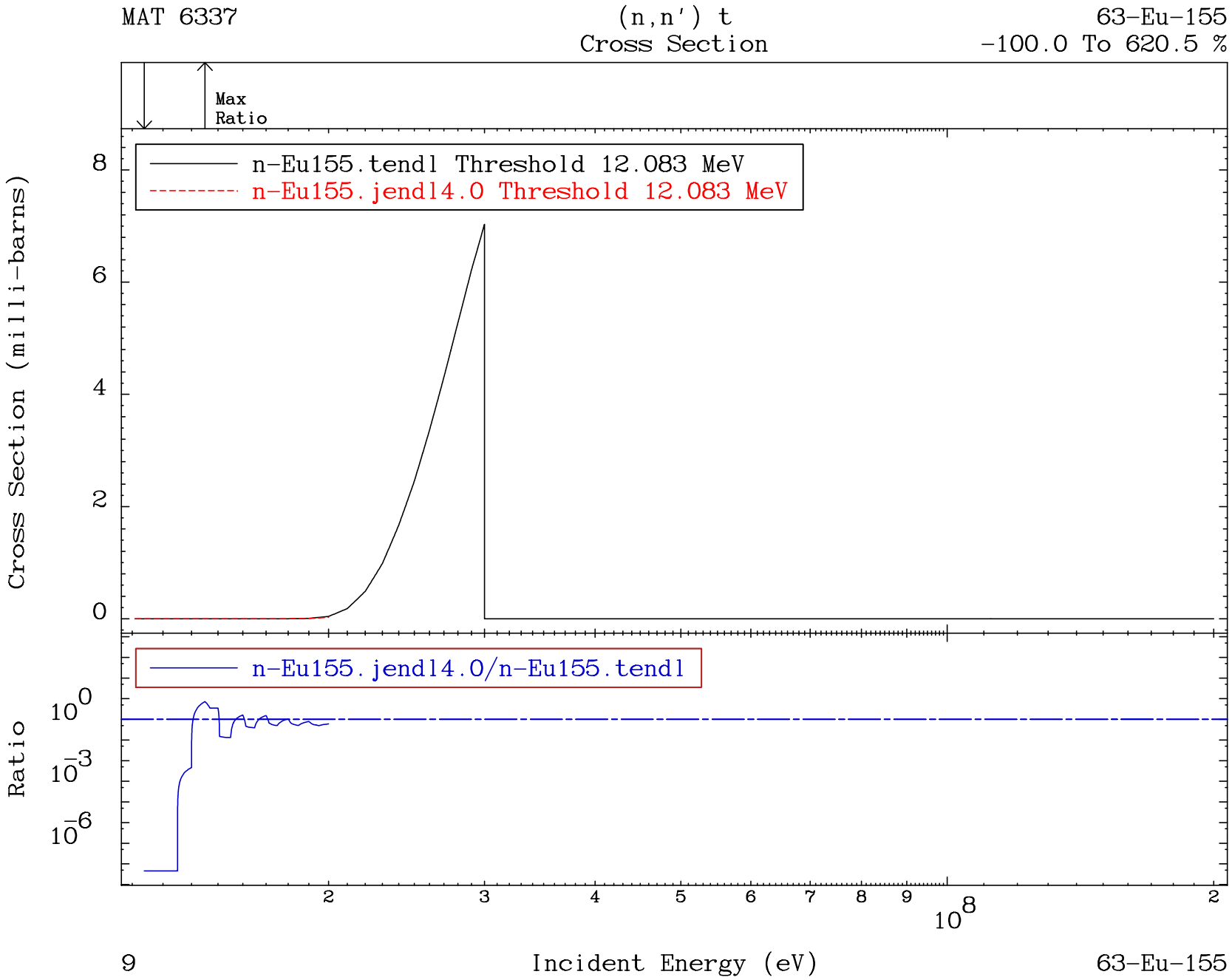

MAT 6337
(n,2n)
Cross Section
63-Eu-155
-61.80 To 32.51 %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 8.2044 MeV
n-Eu155.jendl4.0 Threshold 8.2044 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
1.6
1.2
0.8
0.4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
63-Eu-155

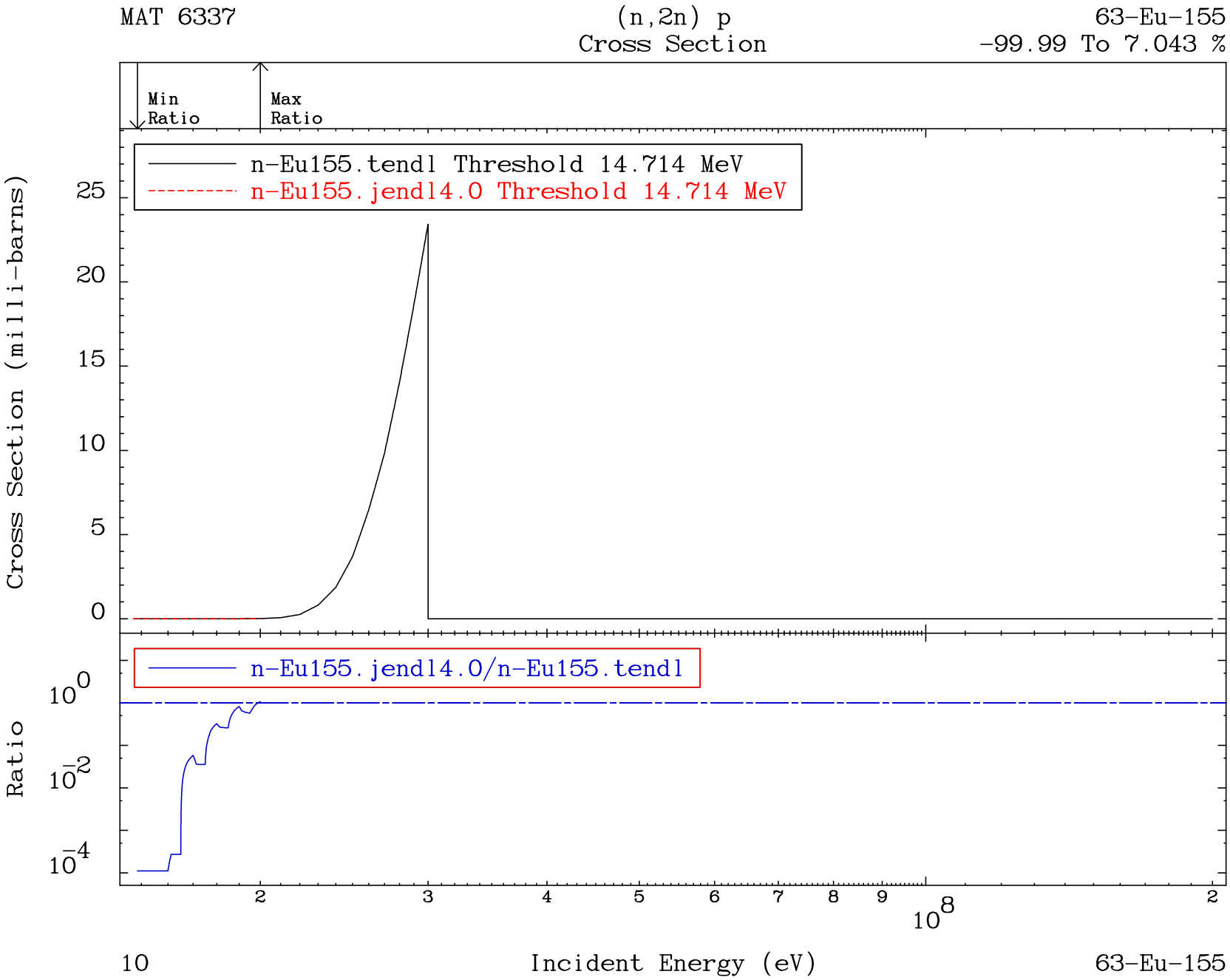

MAT 6337
(n,3n)
Cross Section
63-Eu-155
-97.06 To -12.88%
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 14.689 MeV
n-Eu155.jendl4.0 Threshold 14.689 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^0
10^-1
4
4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
63-Eu-155

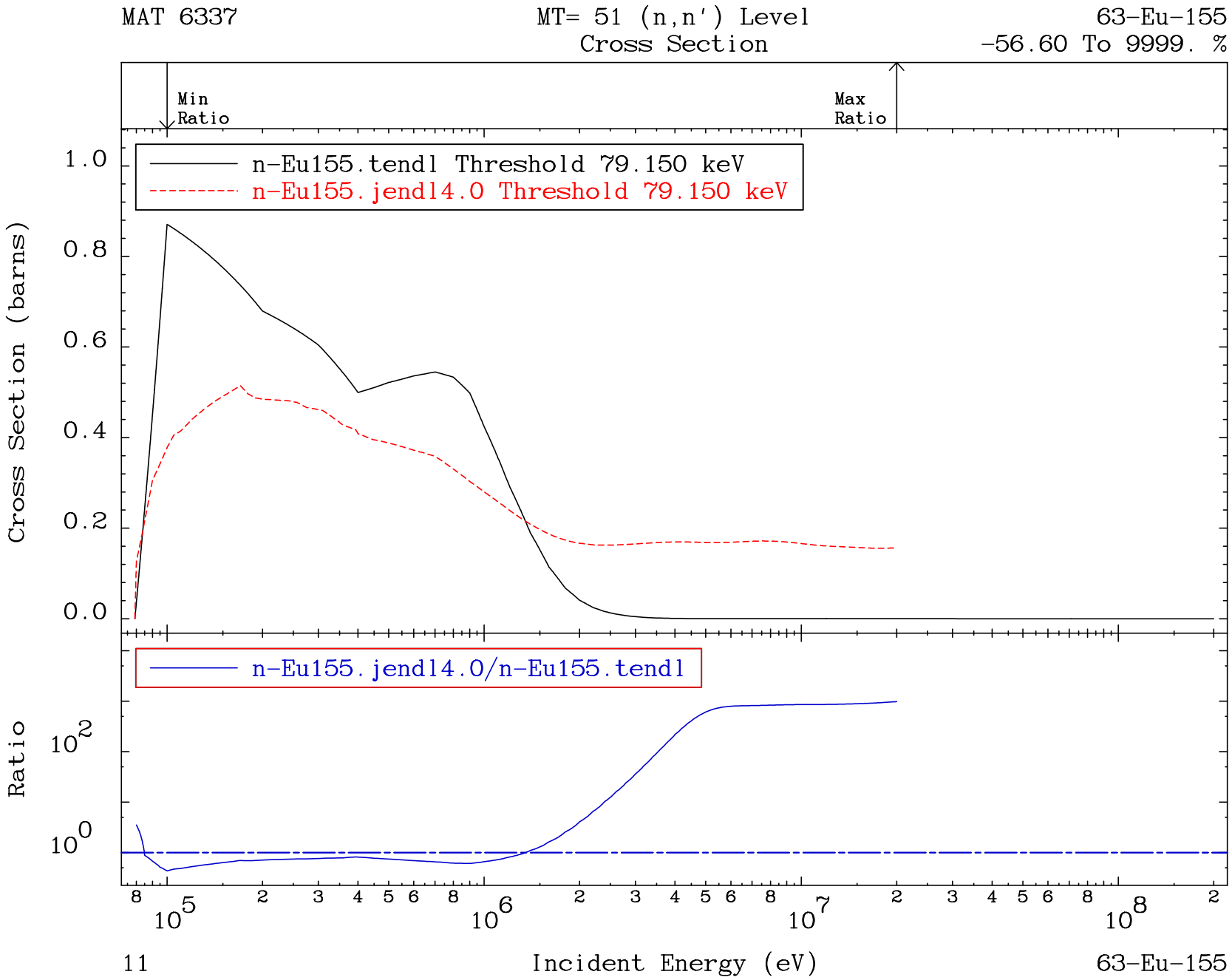

MAT 6337
(n,n') α
Cross Section
63-Eu-155
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 862.52 keV
n-Eu155.jendl4.0 Threshold 867.04 keV
Cross Section (milli-barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
6
63-Eu-155

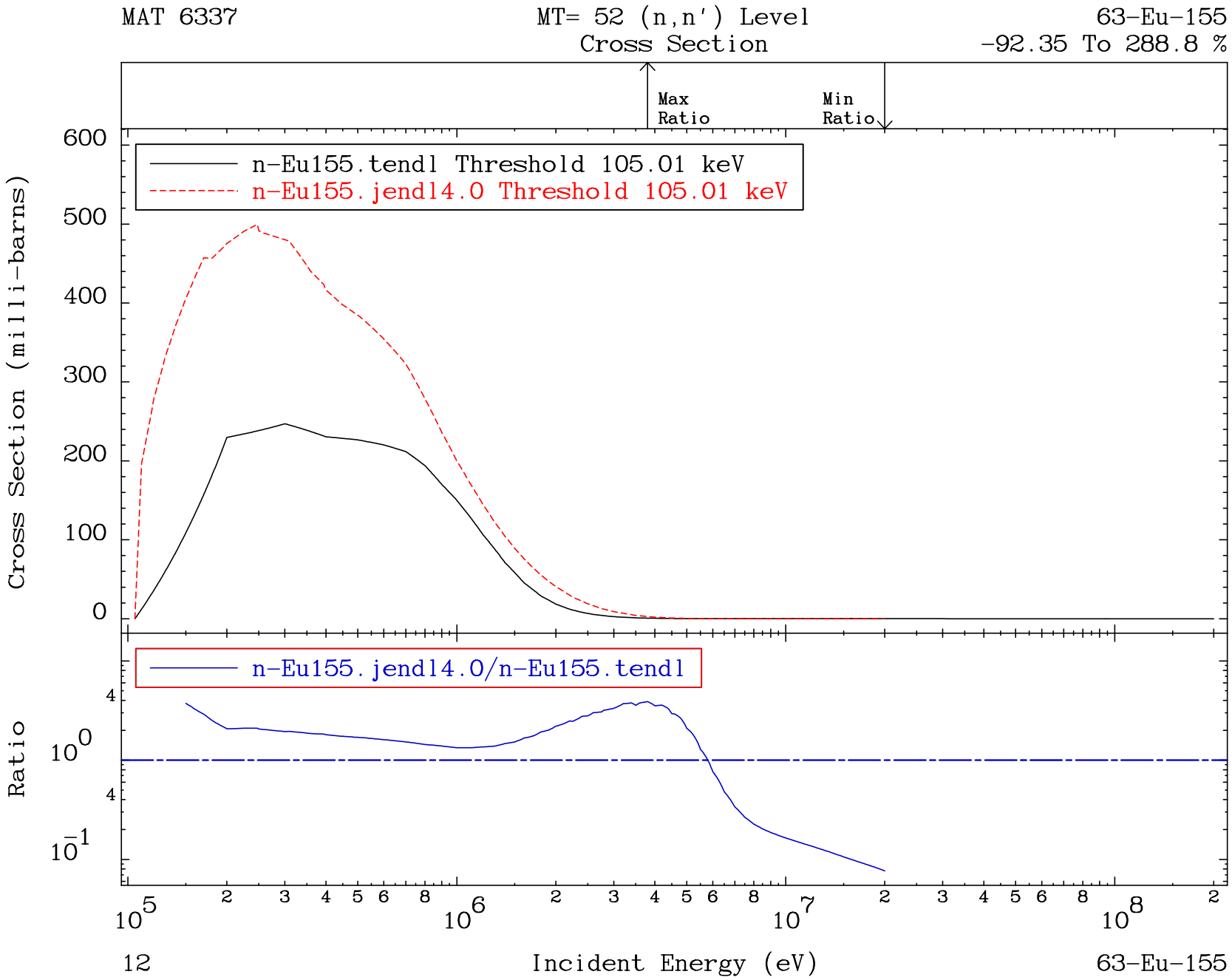

MAT 6337
(n,n') p
Cross Section
63-Eu-155
-57.67 To 9999. %
Min
Ratio
n-Eu155.tendl Threshold 6.6952 MeV
n-Eu155.jendl4.0 Threshold 6.6952 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
63-Eu-155

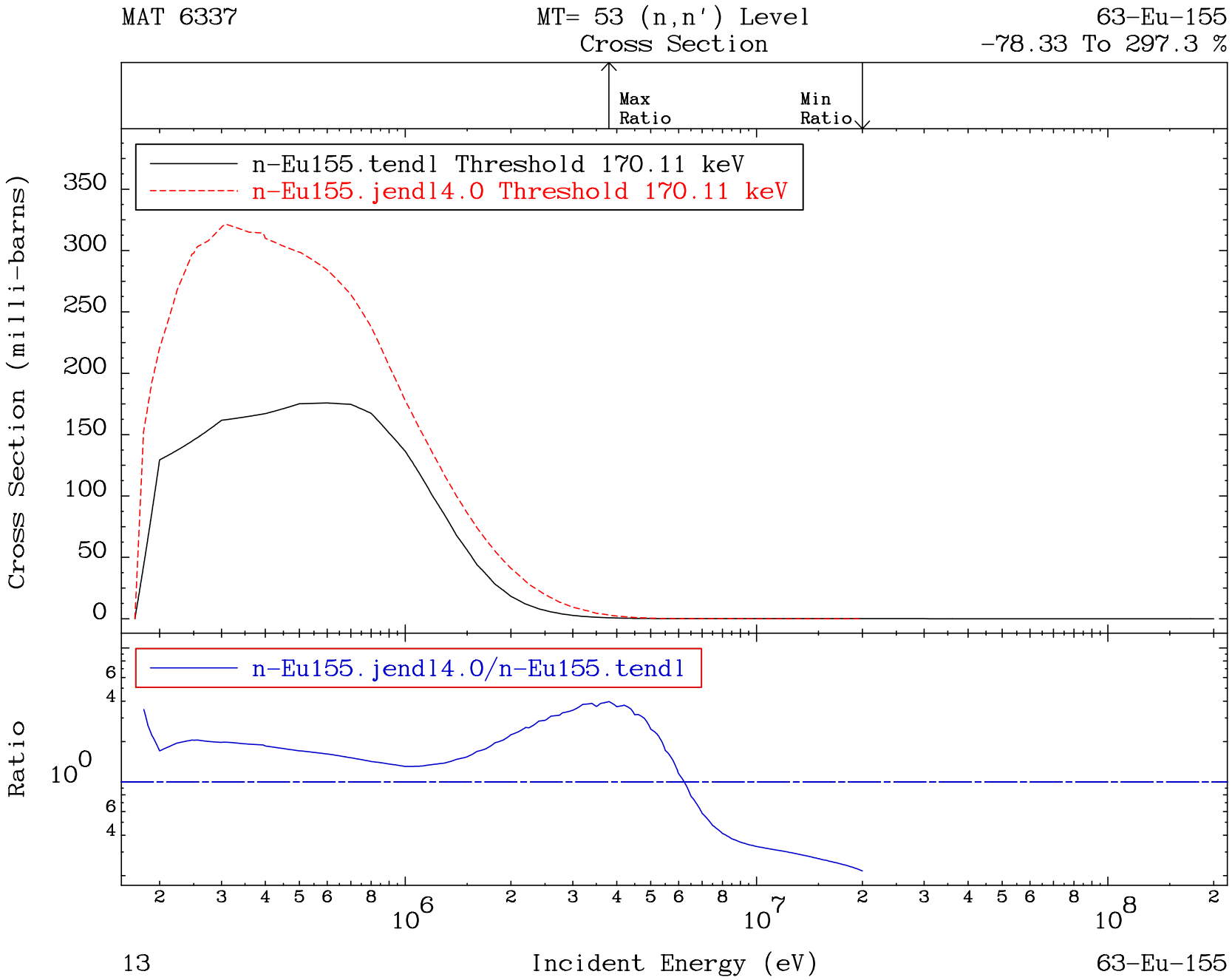

MAT 6337
(n,n') d
Cross Section
63-Eu-155
-99.97 To 550.3 %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 12.475 MeV
n-Eu155.jendl4.0 Threshold 12.475 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
63-Eu-155

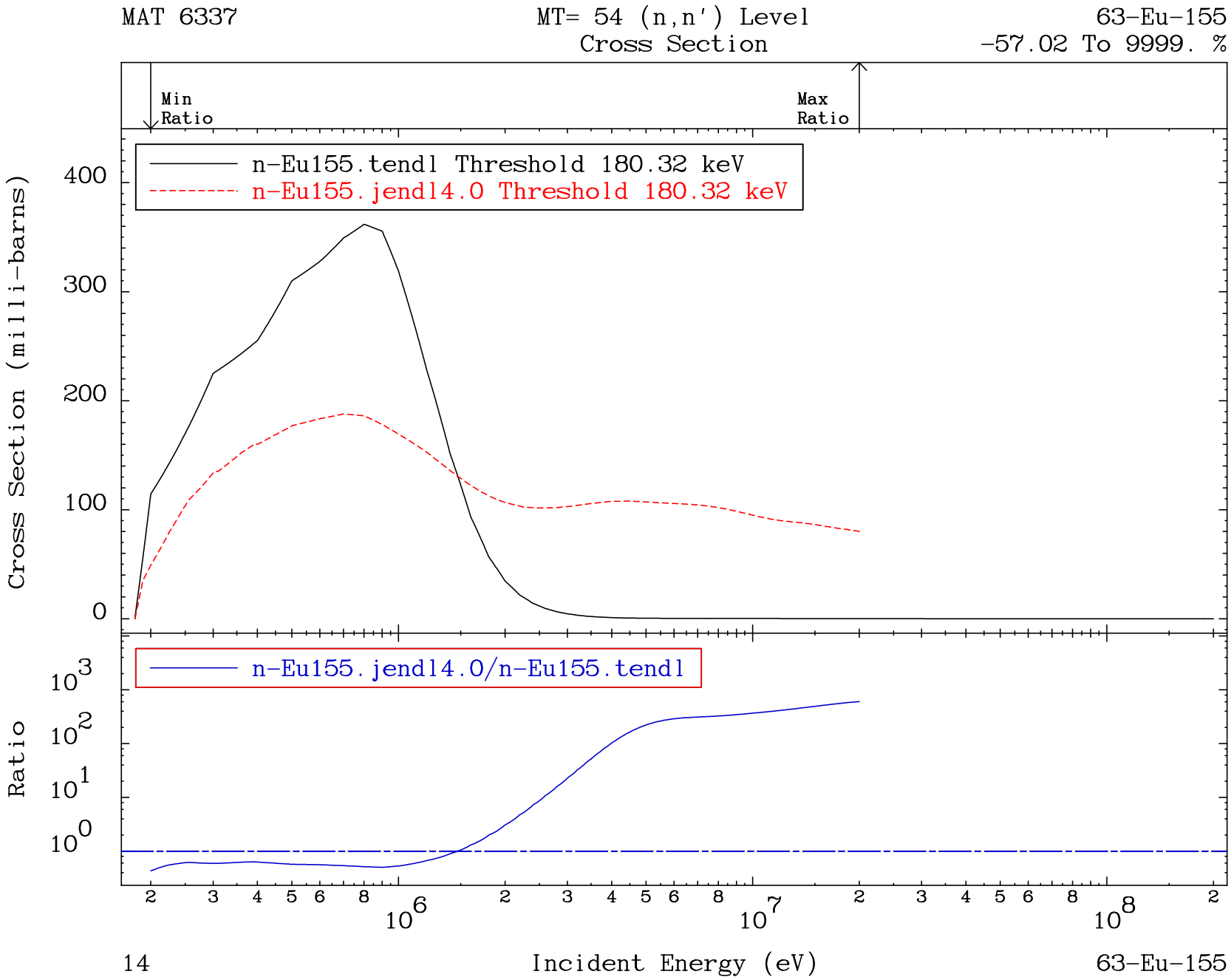

MAT 6337
(n,n') t
Cross Section
63-Eu-155
-100.0 To 620.5 %
Max
Ratio
n-Eu155.tendl Threshold 12.083 MeV
n-Eu155.jendl4.0 Threshold 12.083 MeV
Cross Section (milli-barns)
8
6
4
2
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
63-Eu-155

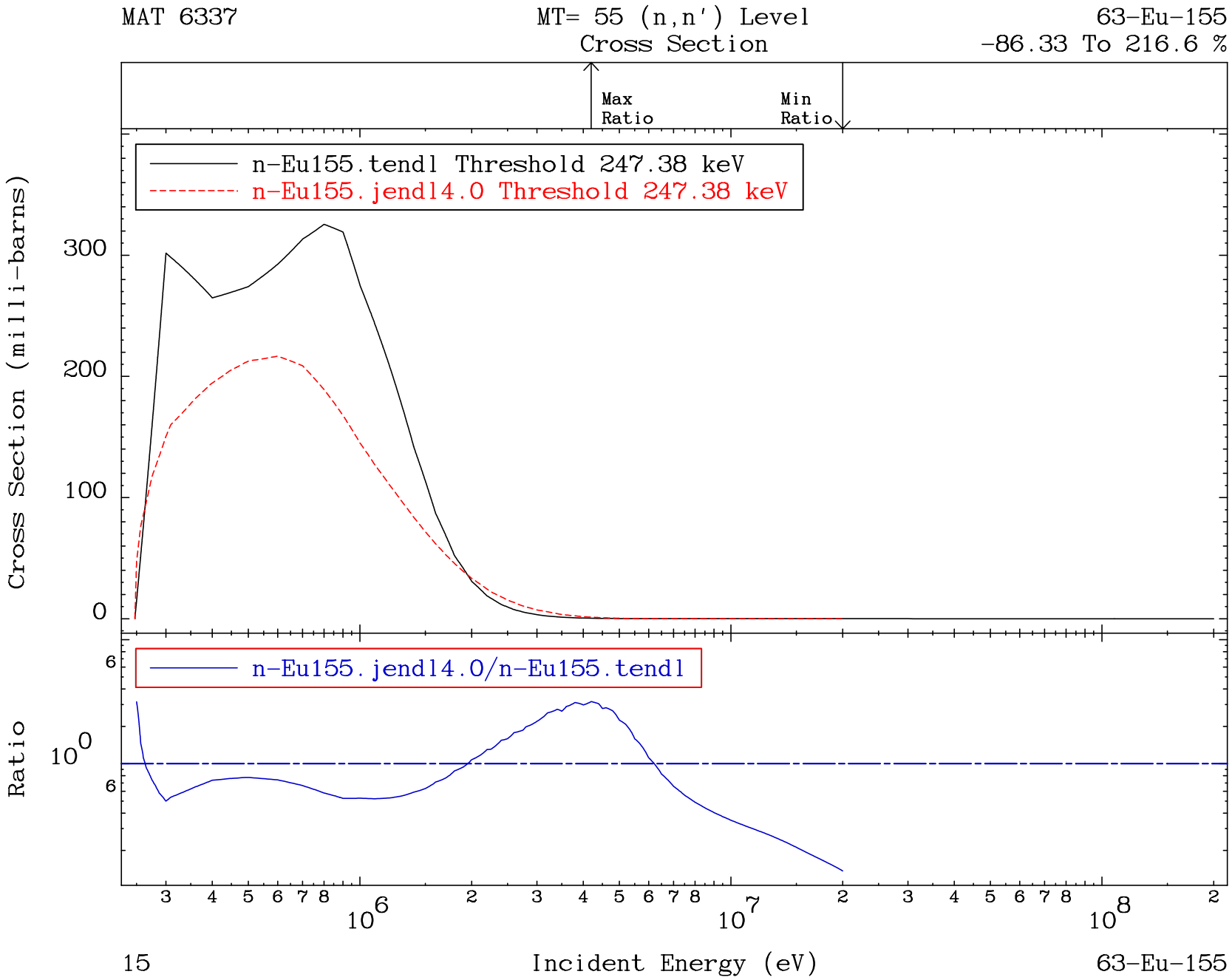

MAT 6337
(n,2n) p
Cross Section
63-Eu-155
-99.99 To 7.043 %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 14.714 MeV
n-Eu155.jendl4.0 Threshold 14.714 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
63-Eu-155

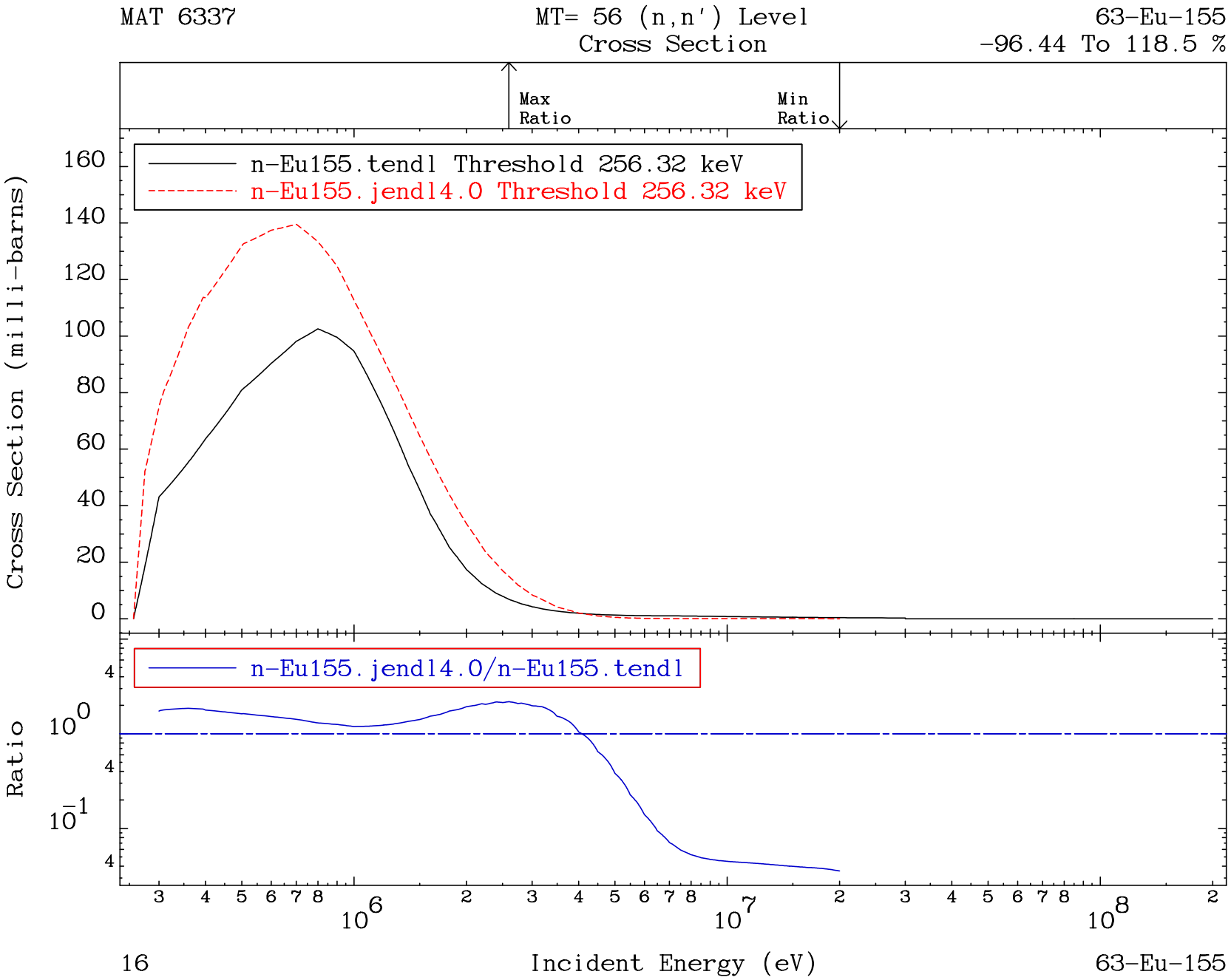

MAT 6337
MT= 51 (n,n') Level
Cross Section
63-Eu-155
-56.60 To 9999. %
Min
Ratio
Max
Ratio
n-Eu155.tendl Threshold 79.150 keV
n-Eu155.jendl4.0 Threshold 79.150 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^2
10^0
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
63-Eu-155

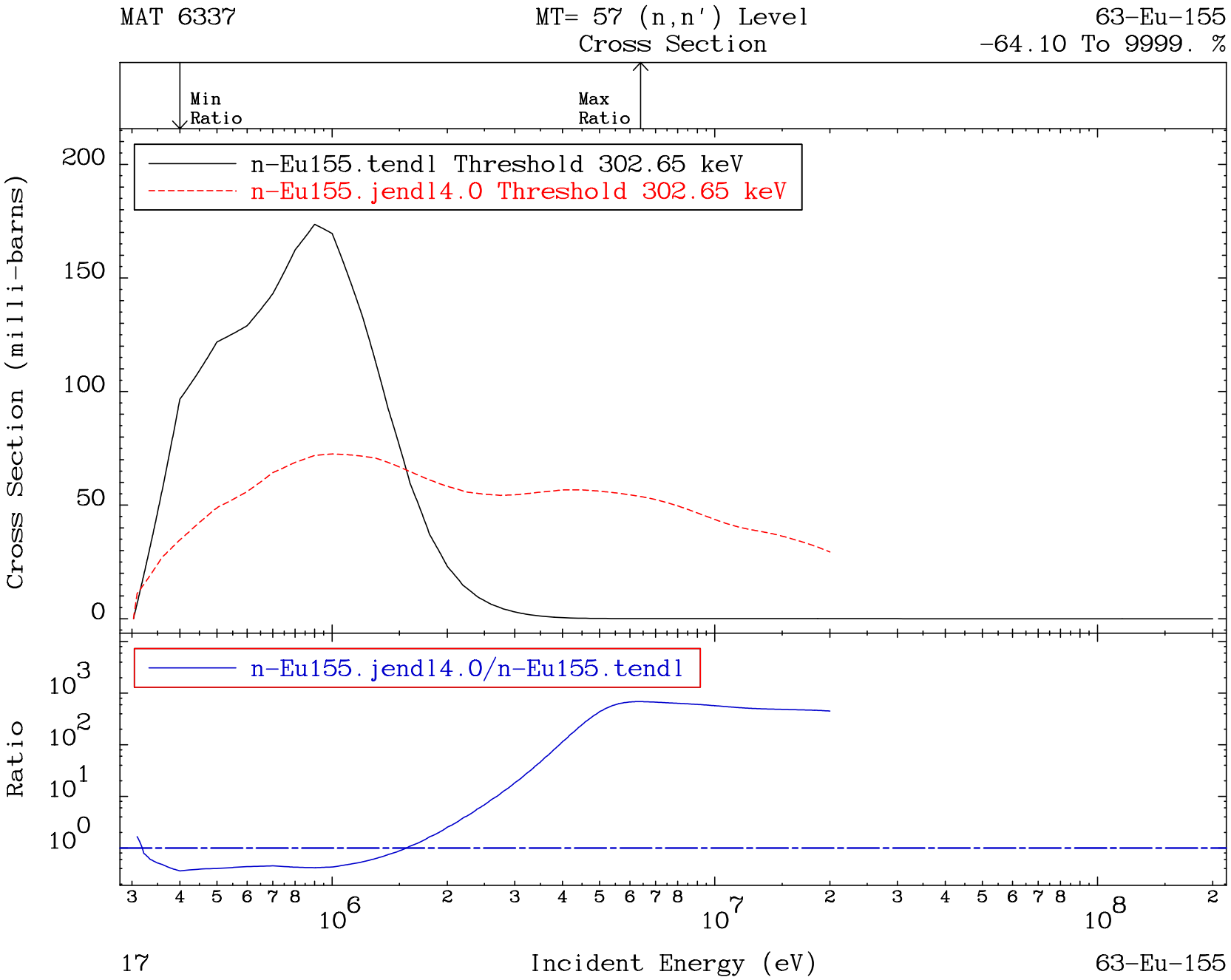

MAT 6337
MT= 52 (n,n') Level
Cross Section
63-Eu-155
-92.35 To 288.8 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 105.01 keV
n-Eu155.jendl4.0 Threshold 105.01 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4
10^{0}
4
10^{-1}
10^{5}
2
3
4
5
6
8
10^{6}
2
3
4
5
6
8
10^{7}
2
3
4
5
6
8
10^{8}
2
12
Incident Energy (eV)
63-Eu-155

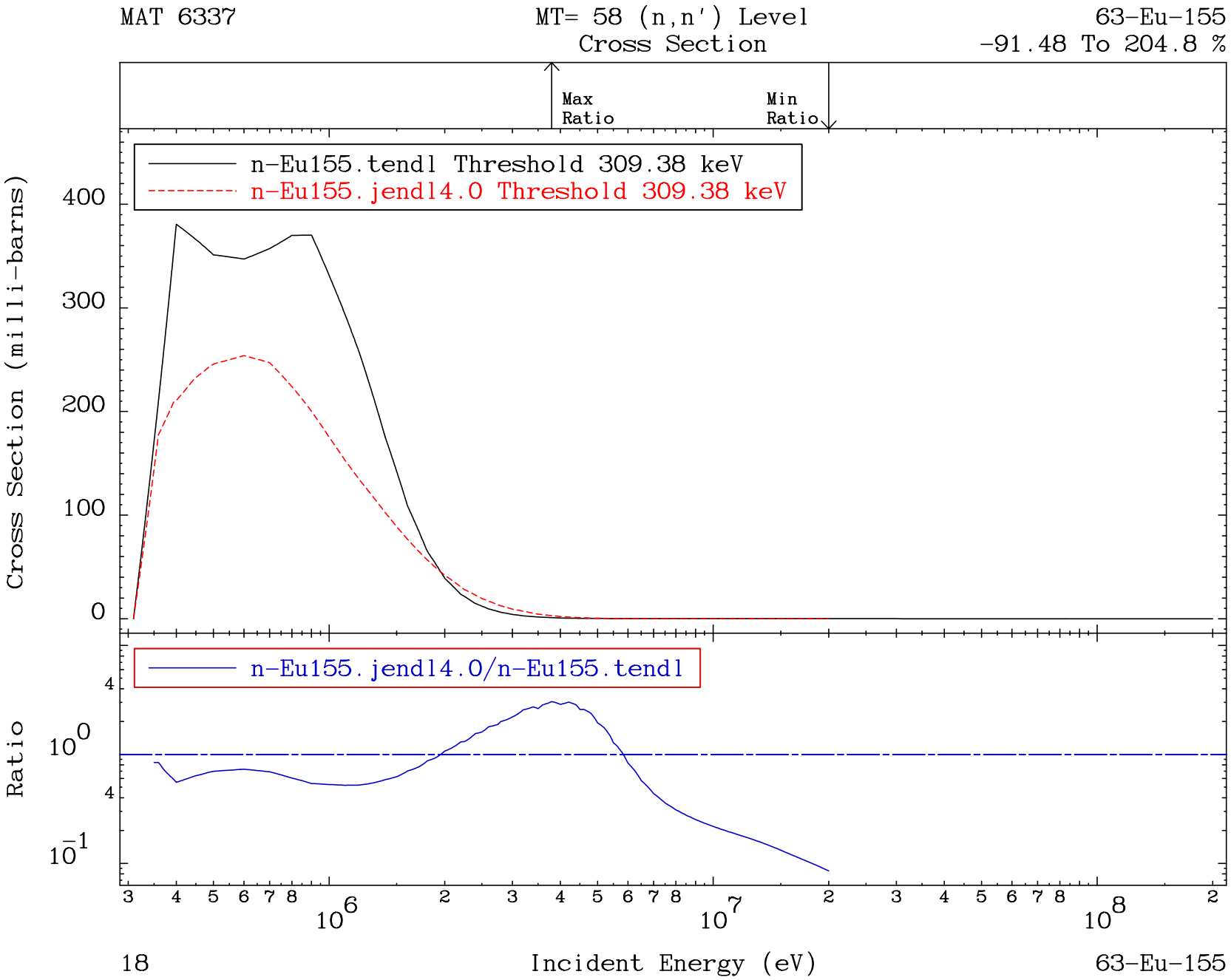

MAT 6337
MT= 53 (n,n') Level
Cross Section
63-Eu-155
-78.33 To 297.3 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 170.11 keV
n-Eu155.jendl4.0 Threshold 170.11 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
6
4
10^0
6
4
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
13
Incident Energy (eV)
63-Eu-155

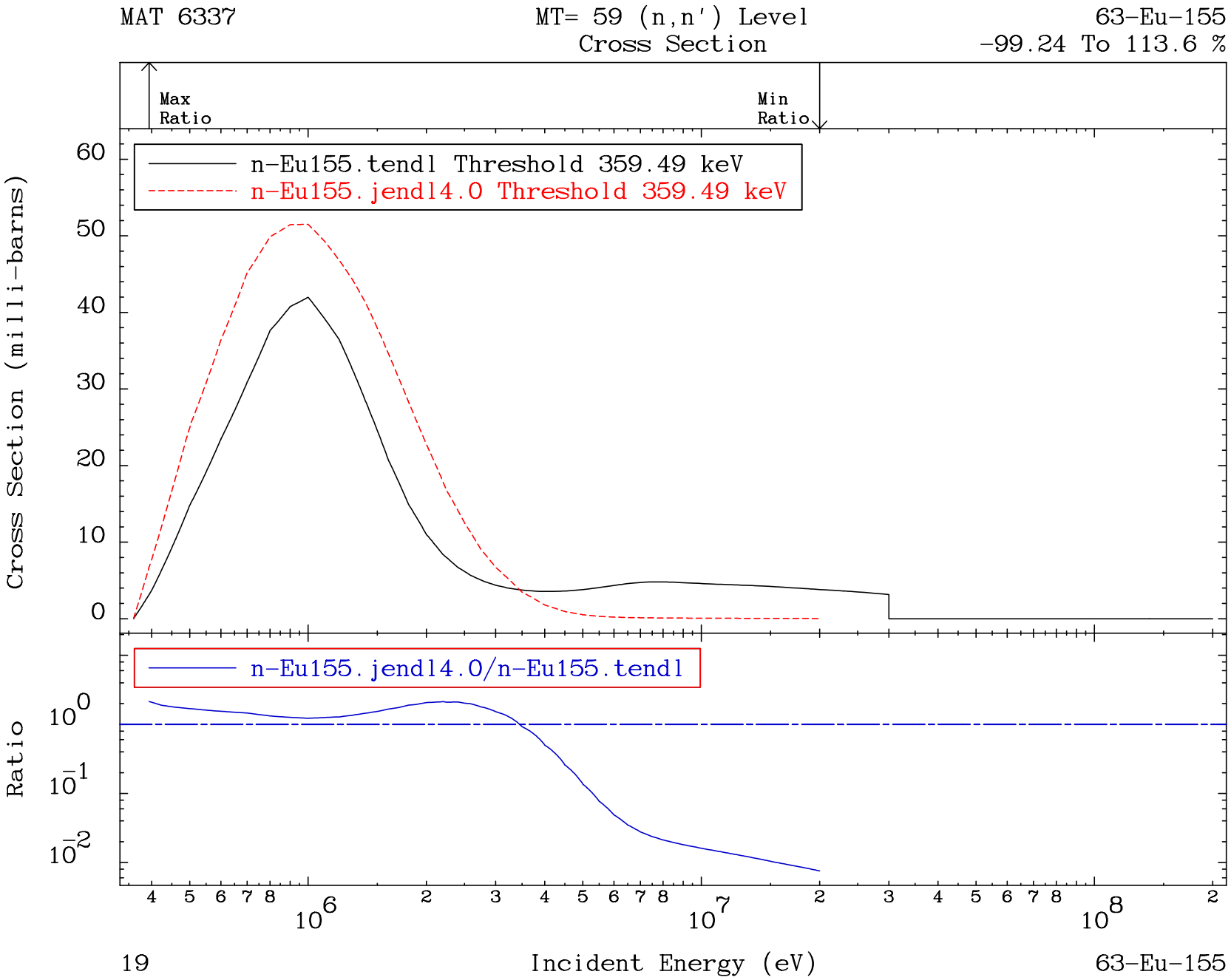

MAT 6337
MT= 54 (n,n') Level
Cross Section
63-Eu-155
-57.02 To 9999. %
Min
Ratio
Max
Ratio
n-Eu155.tendl Threshold 180.32 keV
n-Eu155.jendl4.0 Threshold 180.32 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^2
10^1
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
63-Eu-155

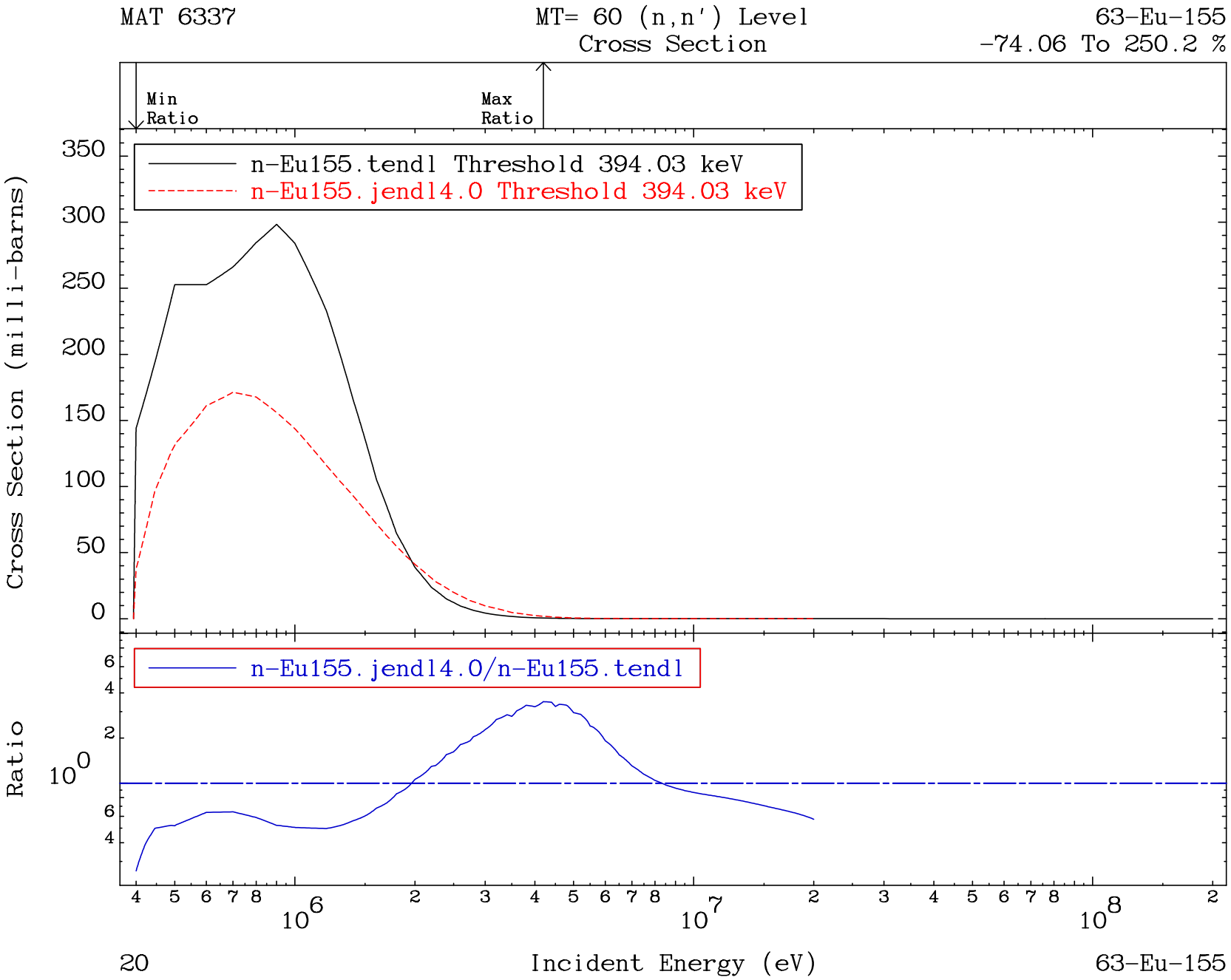

MAT 6337
MT= 55 (n,n') Level
Cross Section
63-Eu-155
-86.33 To 216.6 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 247.38 keV
n-Eu155.jendl4.0 Threshold 247.38 keV
Cross Section (milli-barns)
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
6
10^0
6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
63-Eu-155

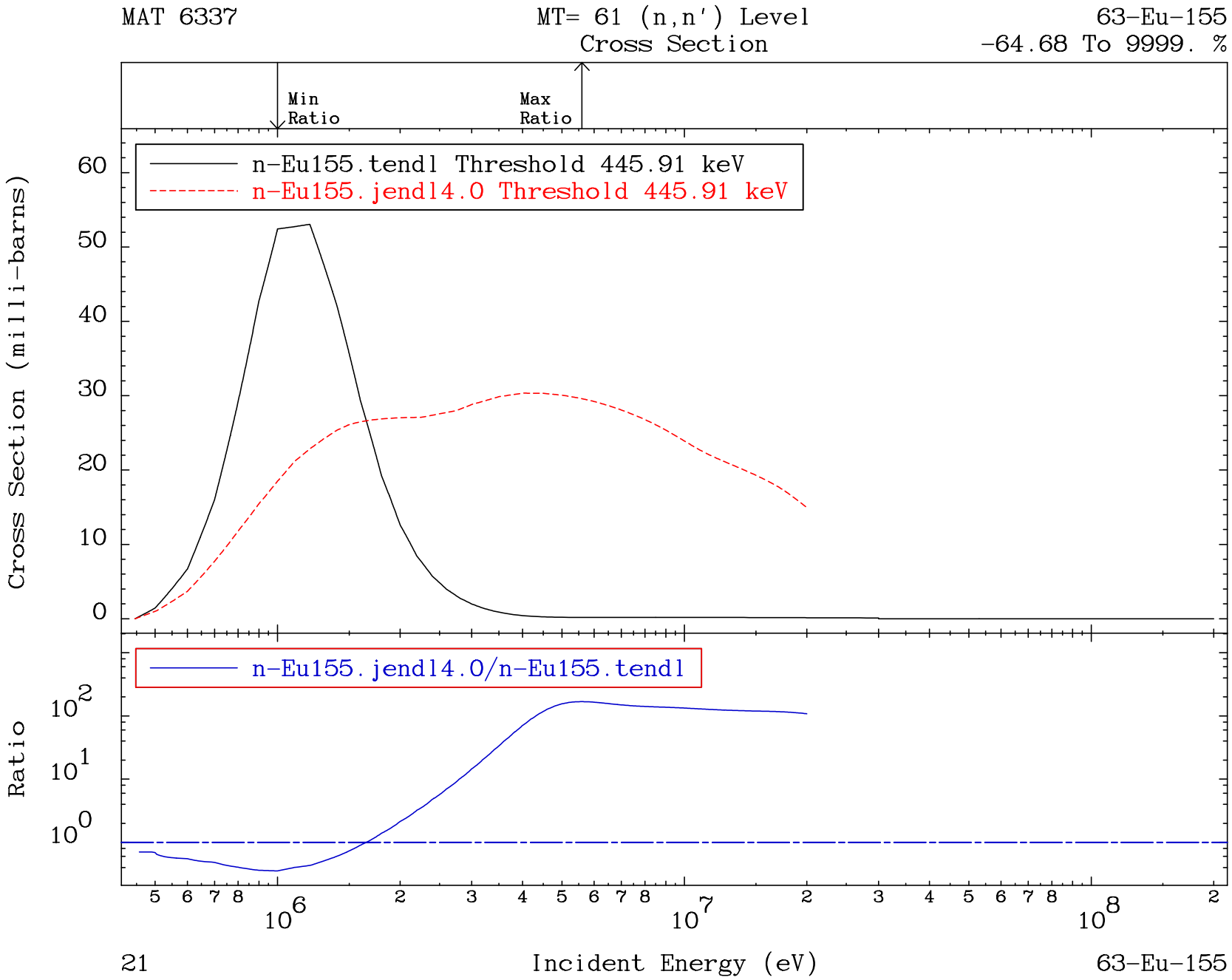

MAT 6337
MT= 56 (n,n') Level
Cross Section
63-Eu-155
-96.44 To 118.5 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 256.32 keV
n-Eu155.jendl4.0 Threshold 256.32 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^{0}
10^{-1}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
16
63-Eu-155

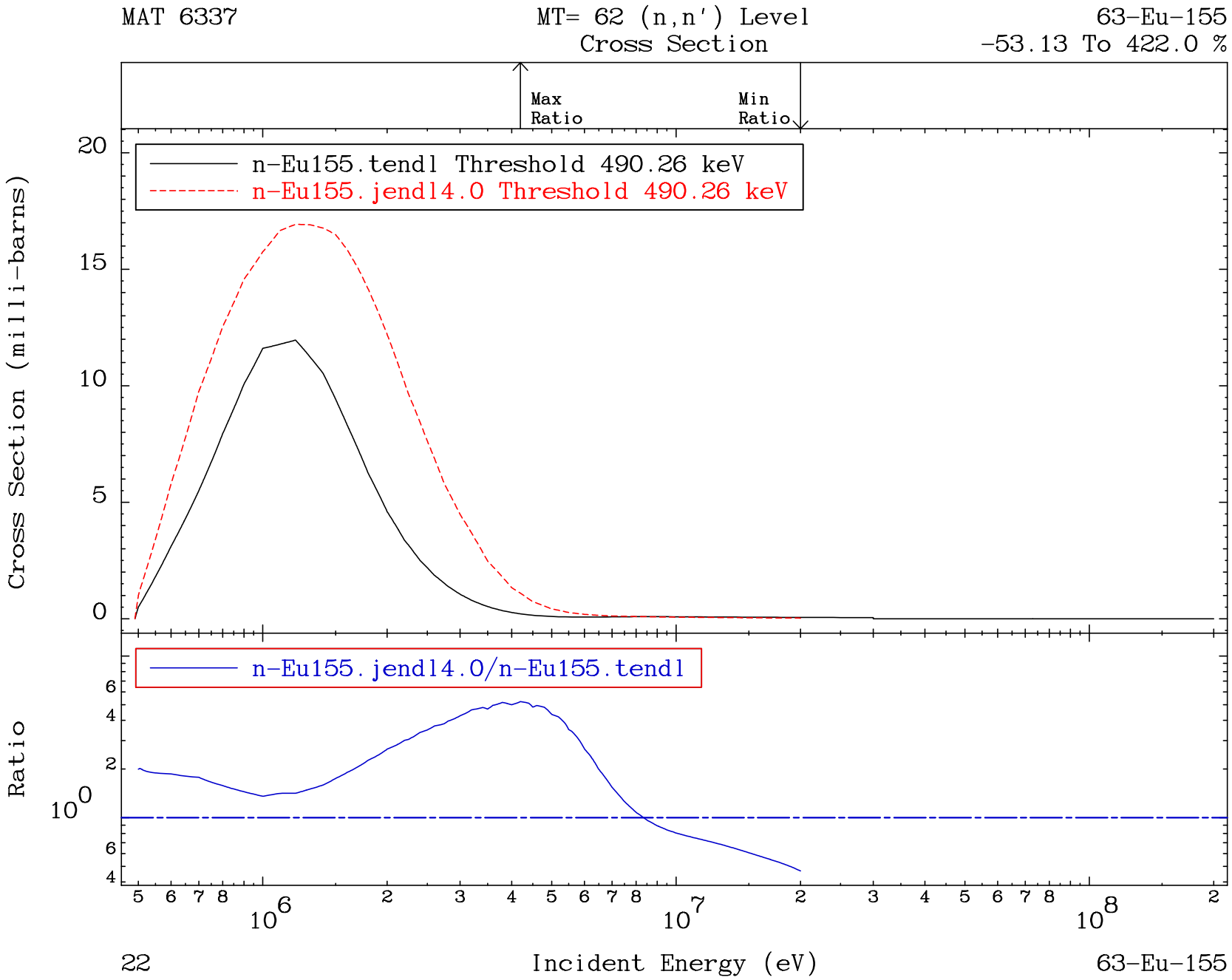

MAT 6337
MT= 57 (n,n') Level
Cross Section
63-Eu-155
-64.10 To 9999. %
Min
Ratio
Max
Ratio
n-Eu155.tendl Threshold 302.65 keV
n-Eu155.jendl4.0 Threshold 302.65 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
63-Eu-155

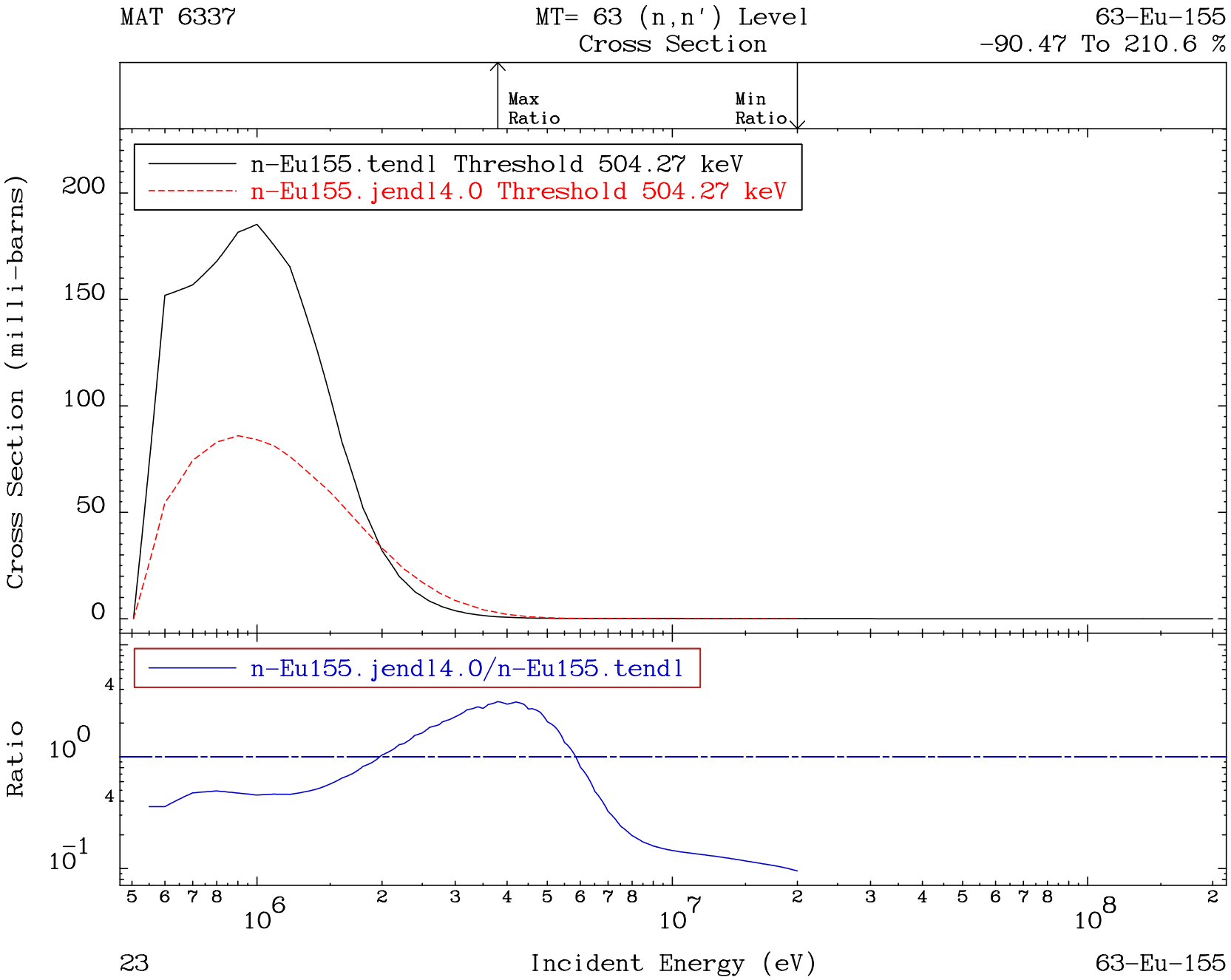

MAT 6337
MT= 58 (n,n') Level
Cross Section
63-Eu-155
-91.48 To 204.8 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 309.38 keV
n-Eu155.jendl4.0 Threshold 309.38 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4
10^0
4
10^{-1}
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
63-Eu-155

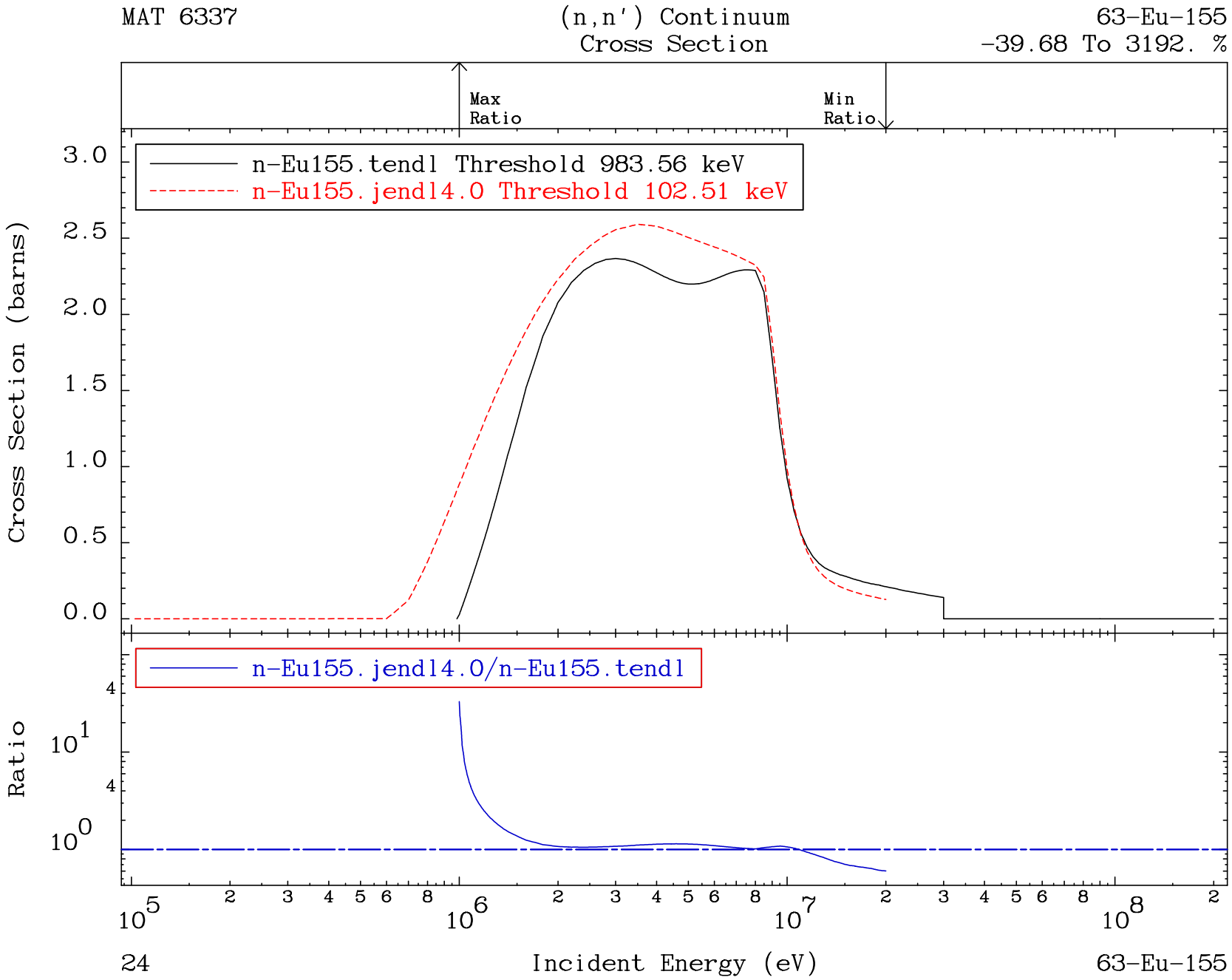

MAT 6337
MT= 59 (n,n') Level
Cross Section
63-Eu-155
-99.24 To 113.6 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 359.49 keV
n-Eu155.jendl4.0 Threshold 359.49 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^0
10^-1
10^-2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
63-Eu-155

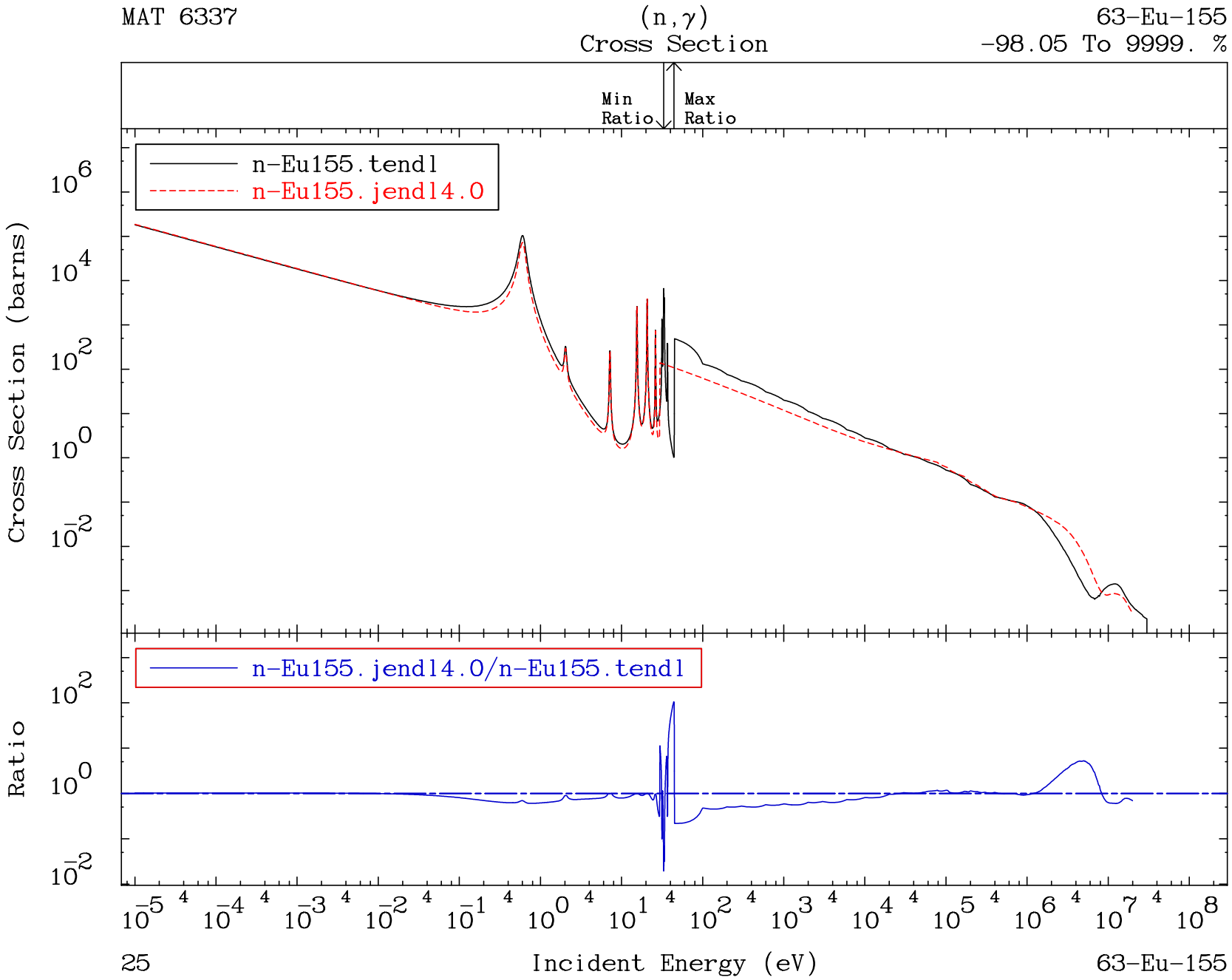

MAT 6337
MT= 60 (n,n') Level
Cross Section
63-Eu-155
-74.06 To 250.2 %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 394.03 keV
n-Eu155.jendl4.0 Threshold 394.03 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
6
4
2
10^0
6
4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
63-Eu-155

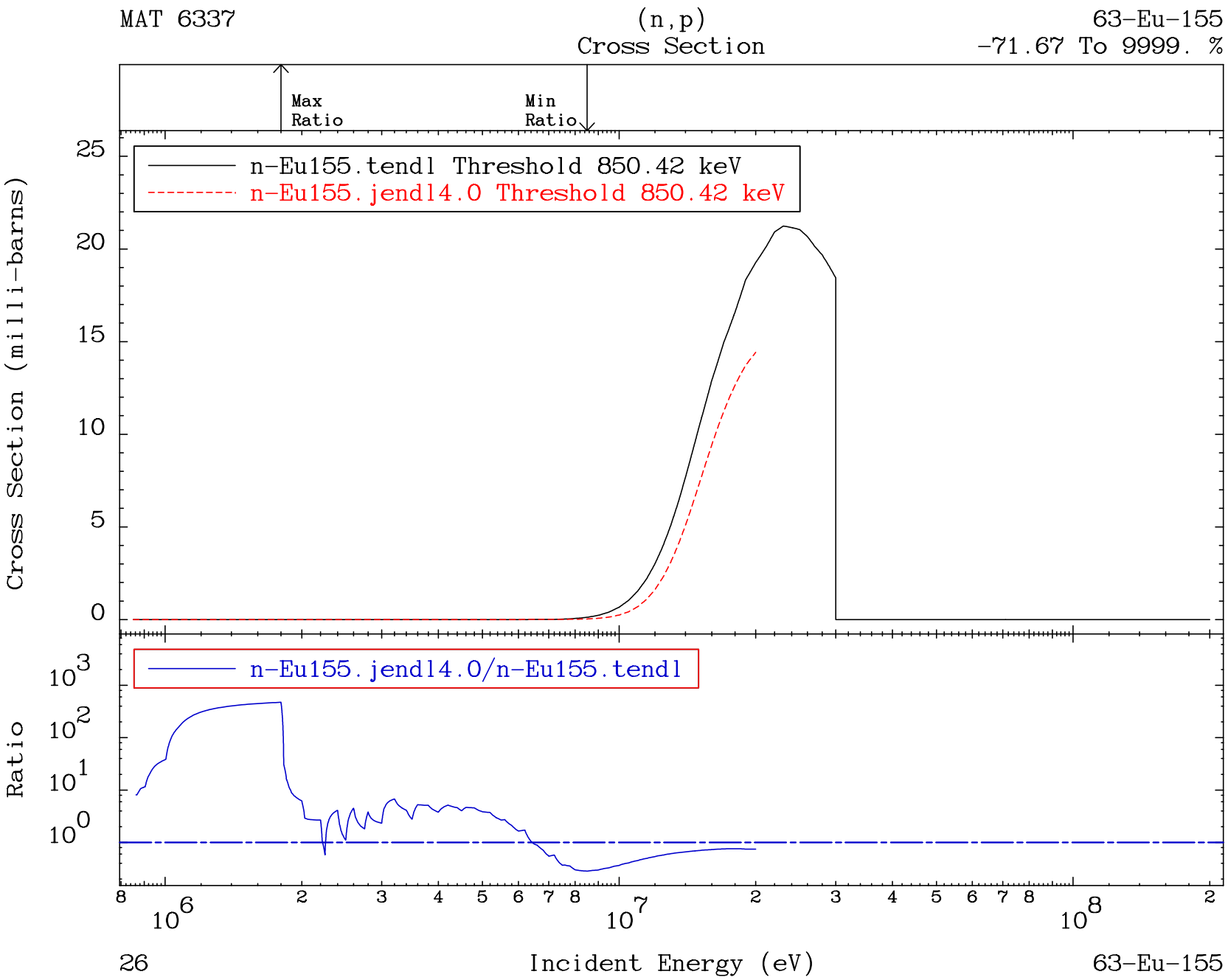

MAT 6337
MT= 61 (n,n') Level
Cross Section
63-Eu-155
-64.68 To 9999. %
Min
Ratio
Max
Ratio
n-Eu155.tendl Threshold 445.91 keV
n-Eu155.jendl4.0 Threshold 445.91 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^2
10^1
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
63-Eu-155

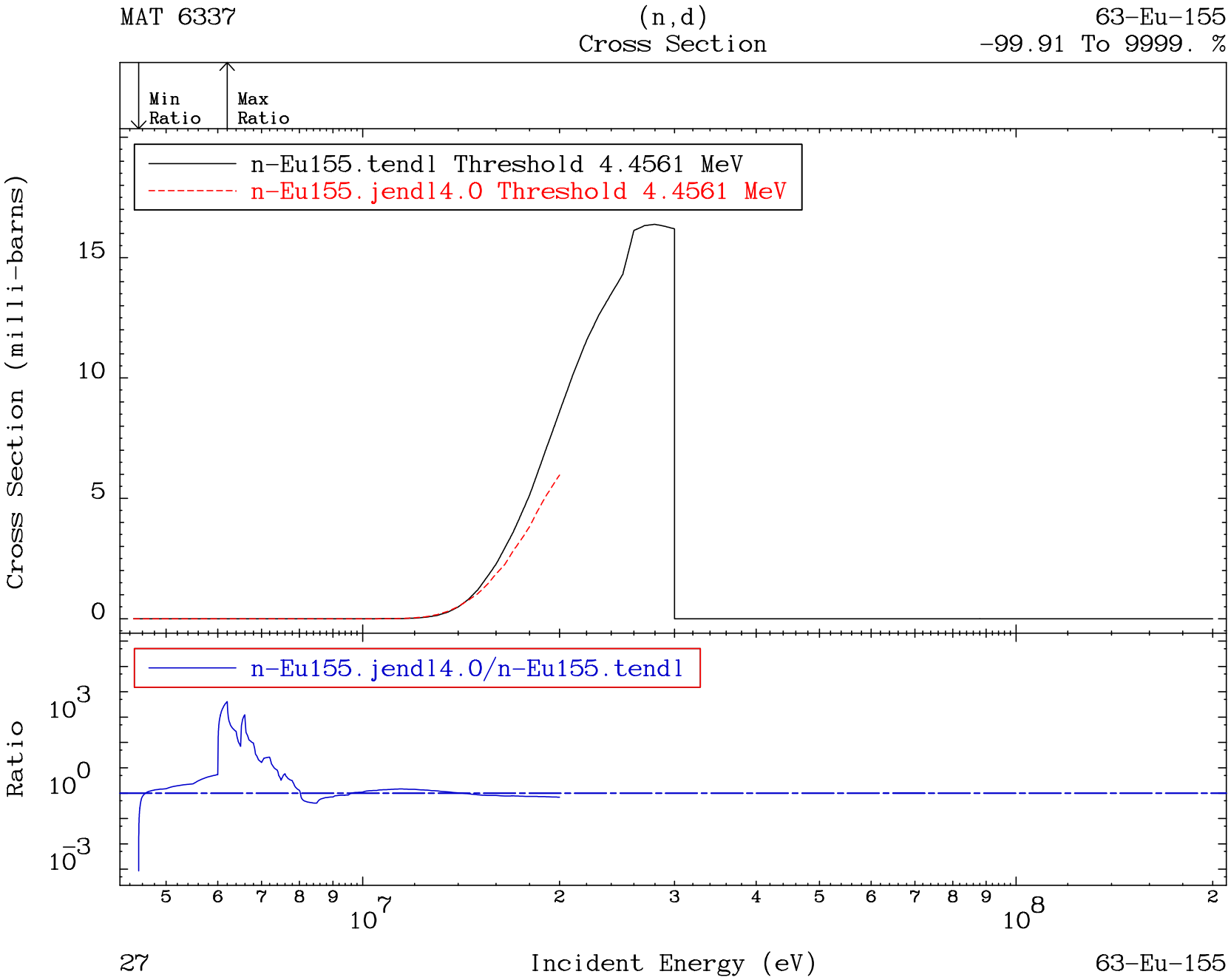

MAT 6337
MT= 62 (n,n') Level
Cross Section
63-Eu-155
-53.13 To 422.0 %
Max Ratio
Min Ratio
n-Eu155.tendl Threshold 490.26 keV
n-Eu155.jendl4.0 Threshold 490.26 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
6
4
2
10^0
6
4
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
63-Eu-155

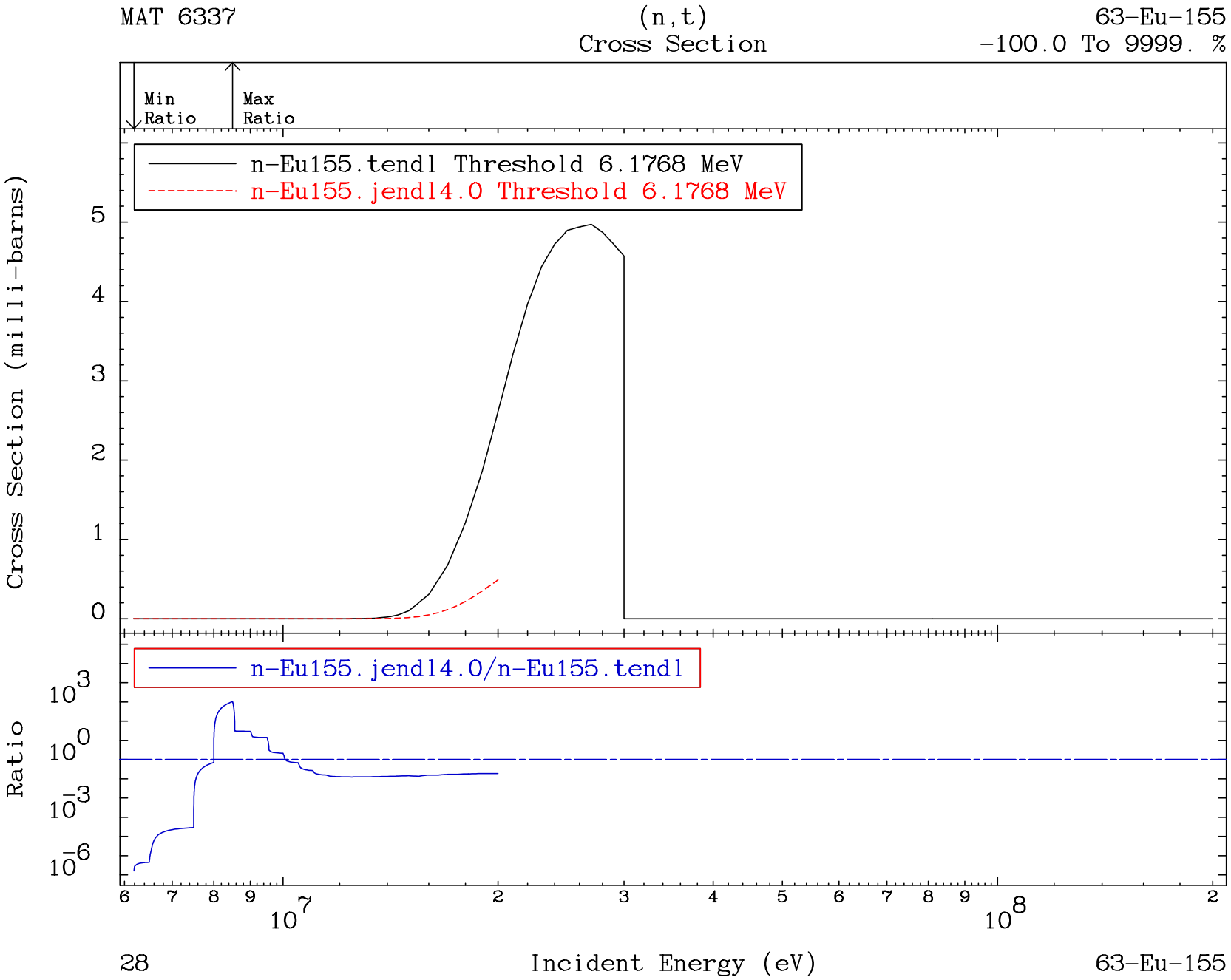

MAT 6337
MT= 63 (n,n') Level
Cross Section
63-Eu-155
-90.47 To 210.6 %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 504.27 keV
n-Eu155.jendl4.0 Threshold 504.27 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4
10^{0}
4
10^{-1}
5 6 7 8 10^{6} 2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
23
Incident Energy (eV)
63-Eu-155

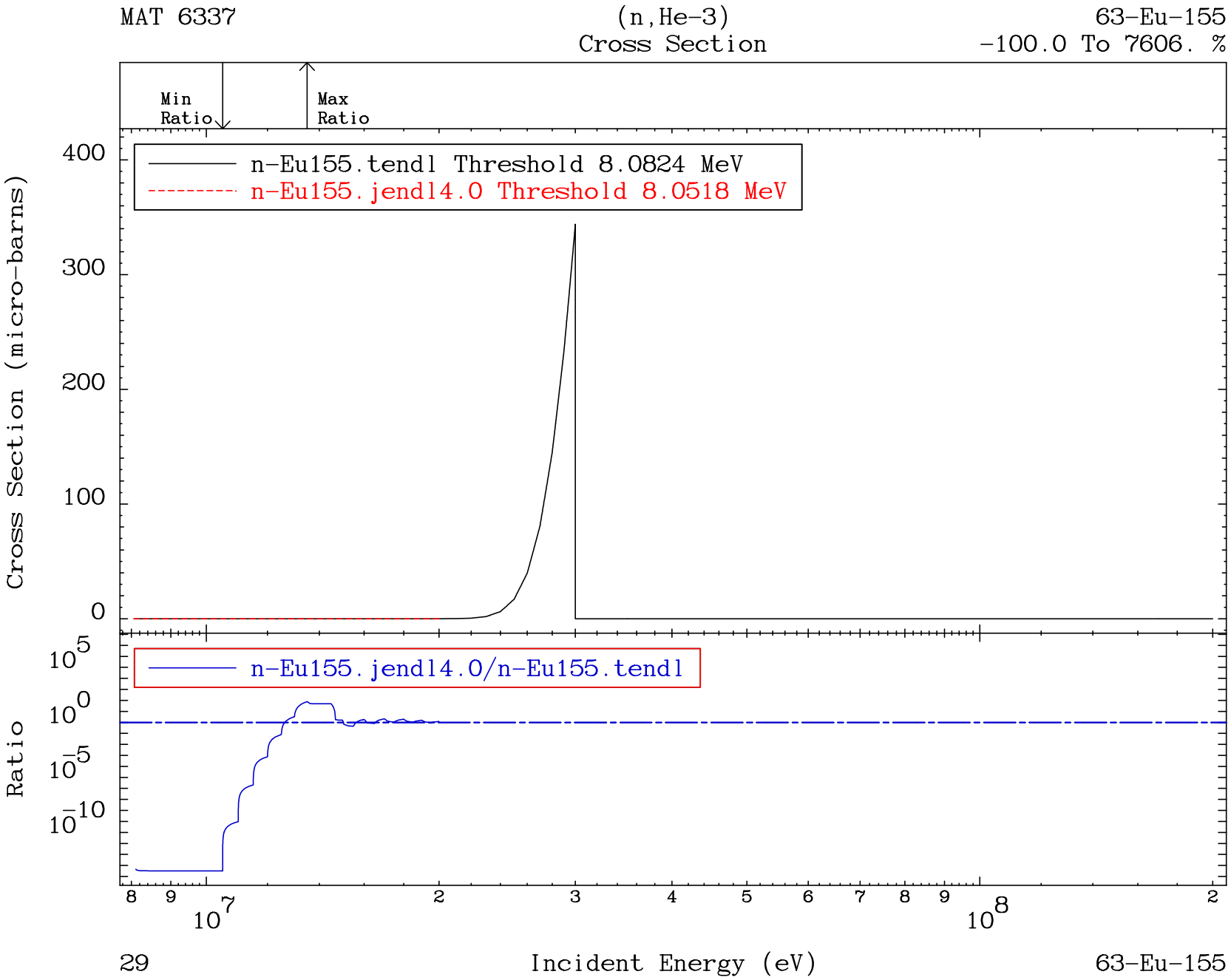

MAT 6337
(n,n') Continuum
Cross Section
63-Eu-155
-39.68 To 3192. %
Max
Ratio
Min
Ratio
n-Eu155.tendl Threshold 983.56 keV
n-Eu155.jendl4.0 Threshold 102.51 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4
10^1
4
10^0
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
24
Incident Energy (eV)
63-Eu-155

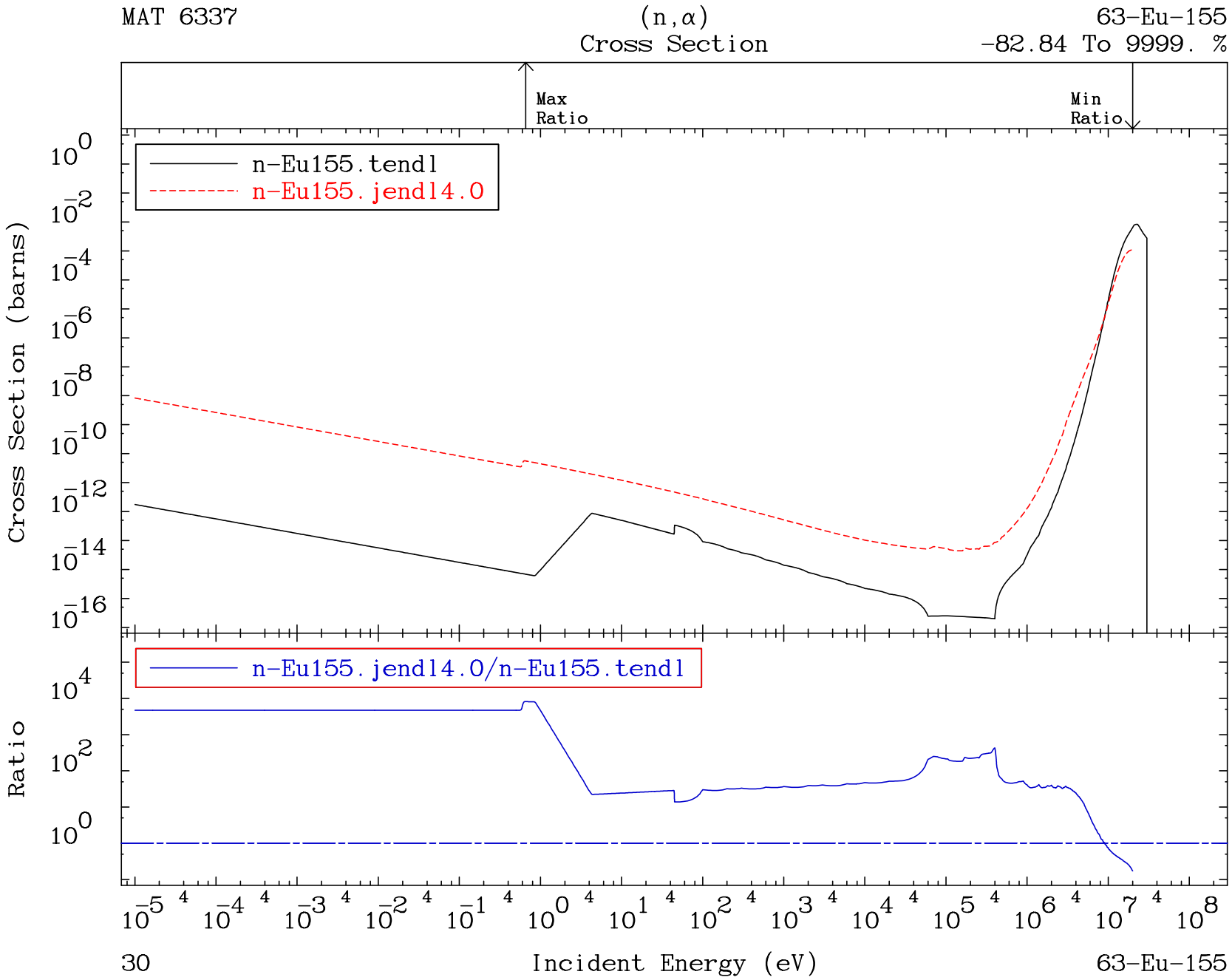

MAT 6337
(n,γ)
Cross Section
63-Eu-155
-98.05 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
25
63-Eu-155

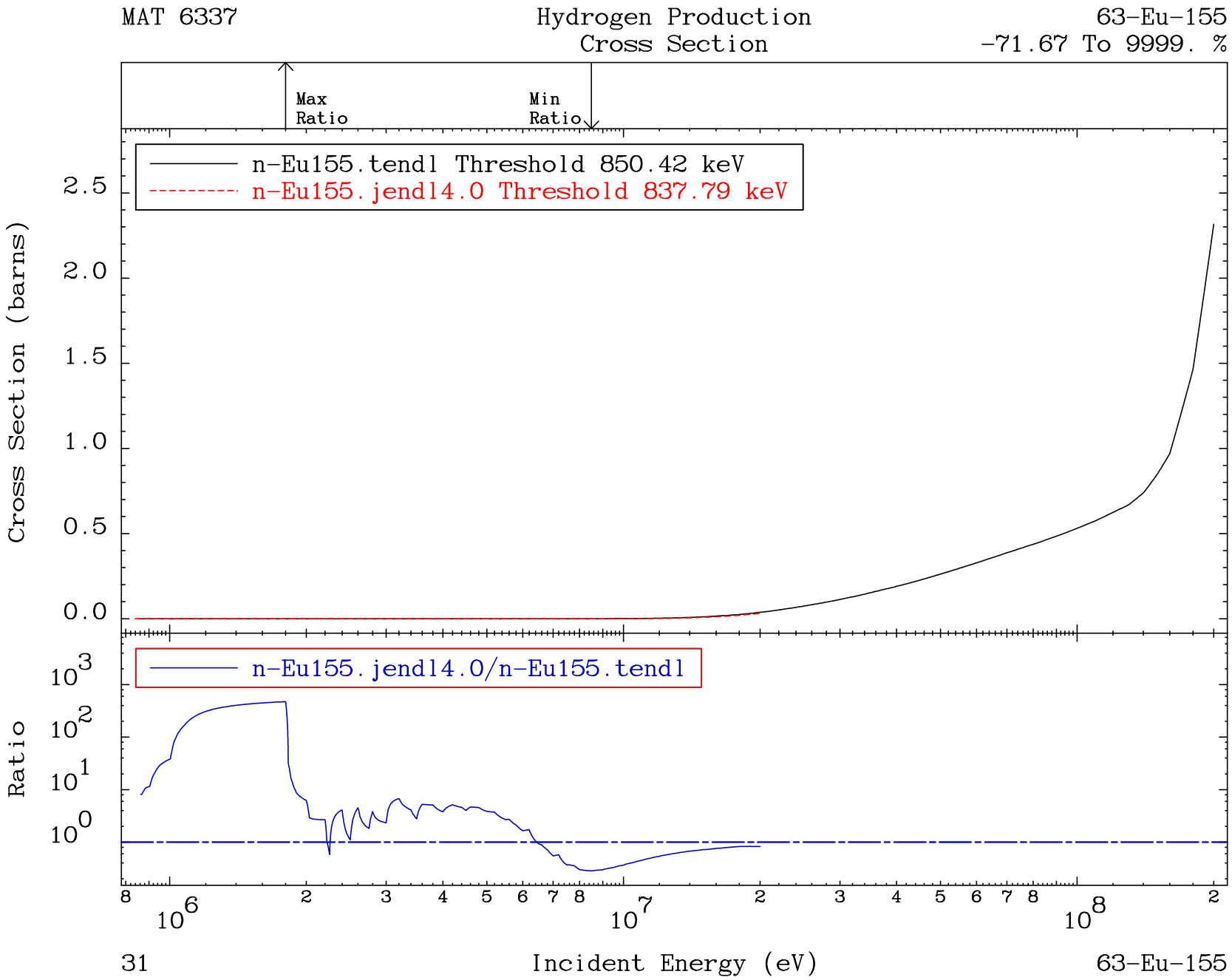

MAT 6337
(n,p)
Cross Section
63-Eu-155
-71.67 To 9999. %
Max Ratio
Min Ratio
n-Eu155.tendl Threshold 850.42 keV
n-Eu155.jendl4.0 Threshold 850.42 keV
Cross Section (milli-barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
26
63-Eu-155

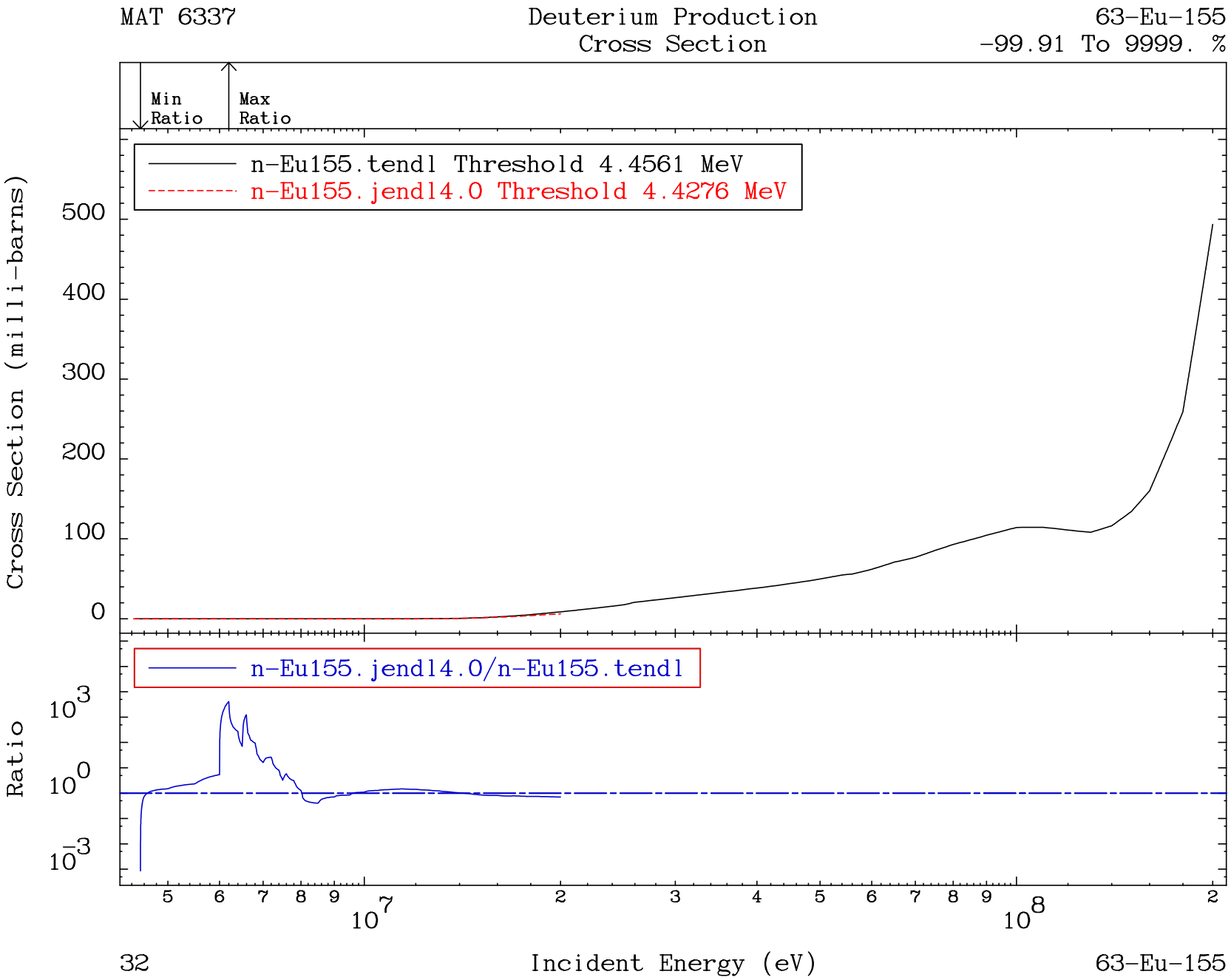

MAT 6337
(n,d)
Cross Section
63-Eu-155
-99.91 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 4.4561 MeV
n-Eu155.jendl4.0 Threshold 4.4561 MeV
Cross Section (milli-barns)
15
10
5
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^0
10^-3
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
63-Eu-155

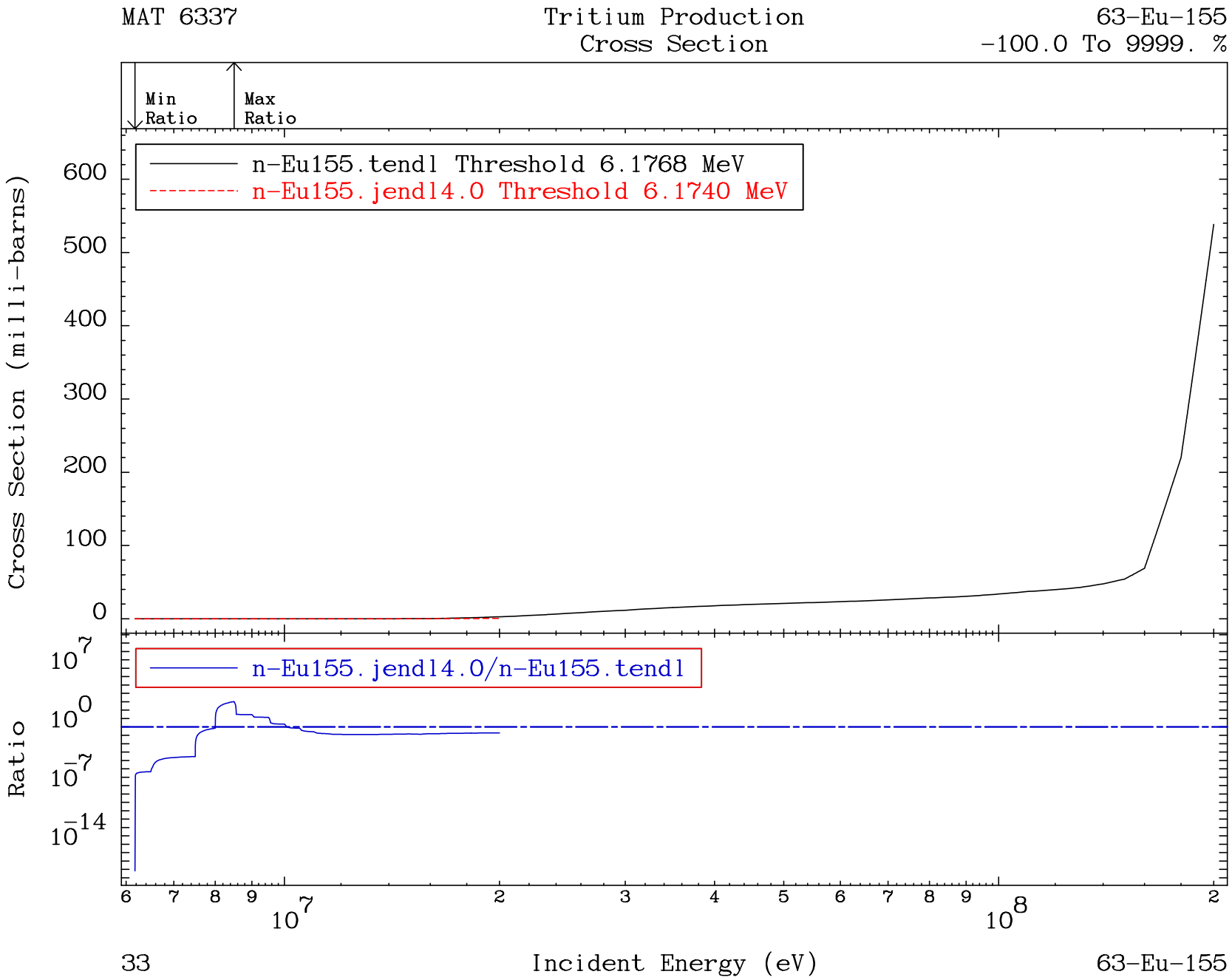

MAT 6337
(n,t)
Cross Section
63-Eu-155
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 6.1768 MeV
n-Eu155.jendl4.0 Threshold 6.1768 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^0
10^-3
10^-6
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
63-Eu-155

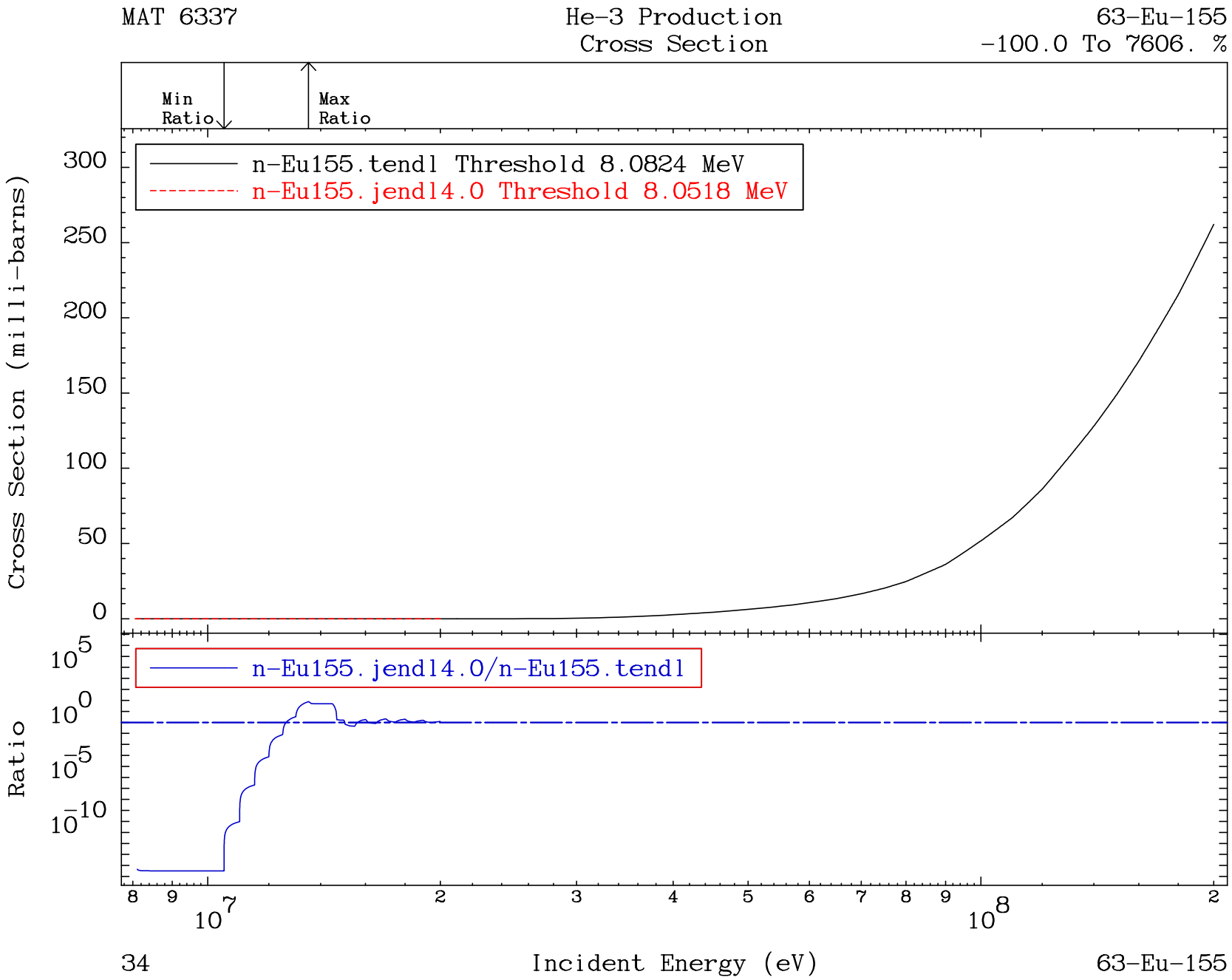

MAT 6337
(n,He-3)
Cross Section
63-Eu-155
-100.0 To 7606. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 8.0824 MeV
n-Eu155.jendl4.0 Threshold 8.0518 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^5
10^0
10^-5
10^-10
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
63-Eu-155

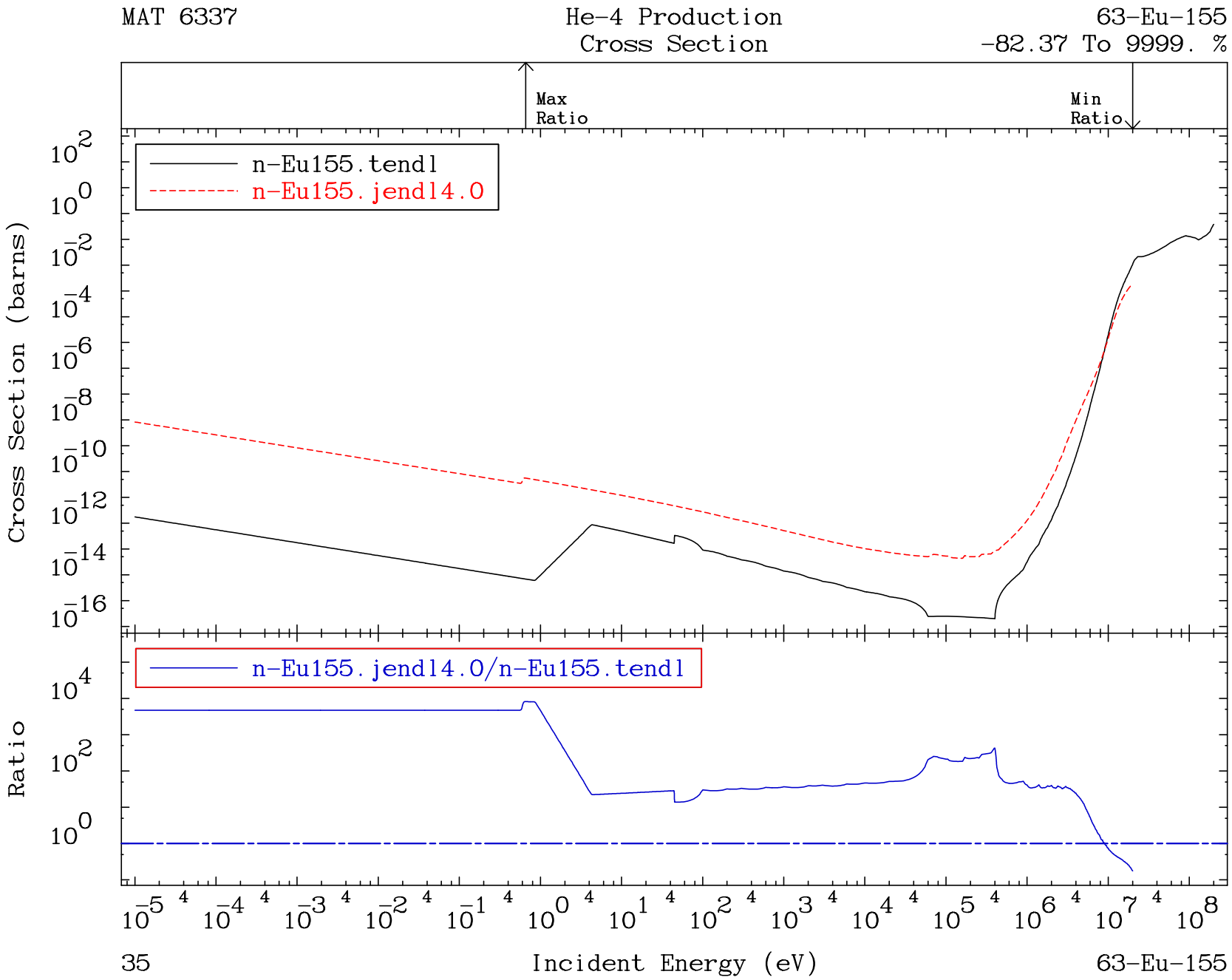

MAT 6337
(n,α)
Cross Section
63-Eu-155
-82.84 To 9999. %
Max Ratio
Min Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
30
63-Eu-155

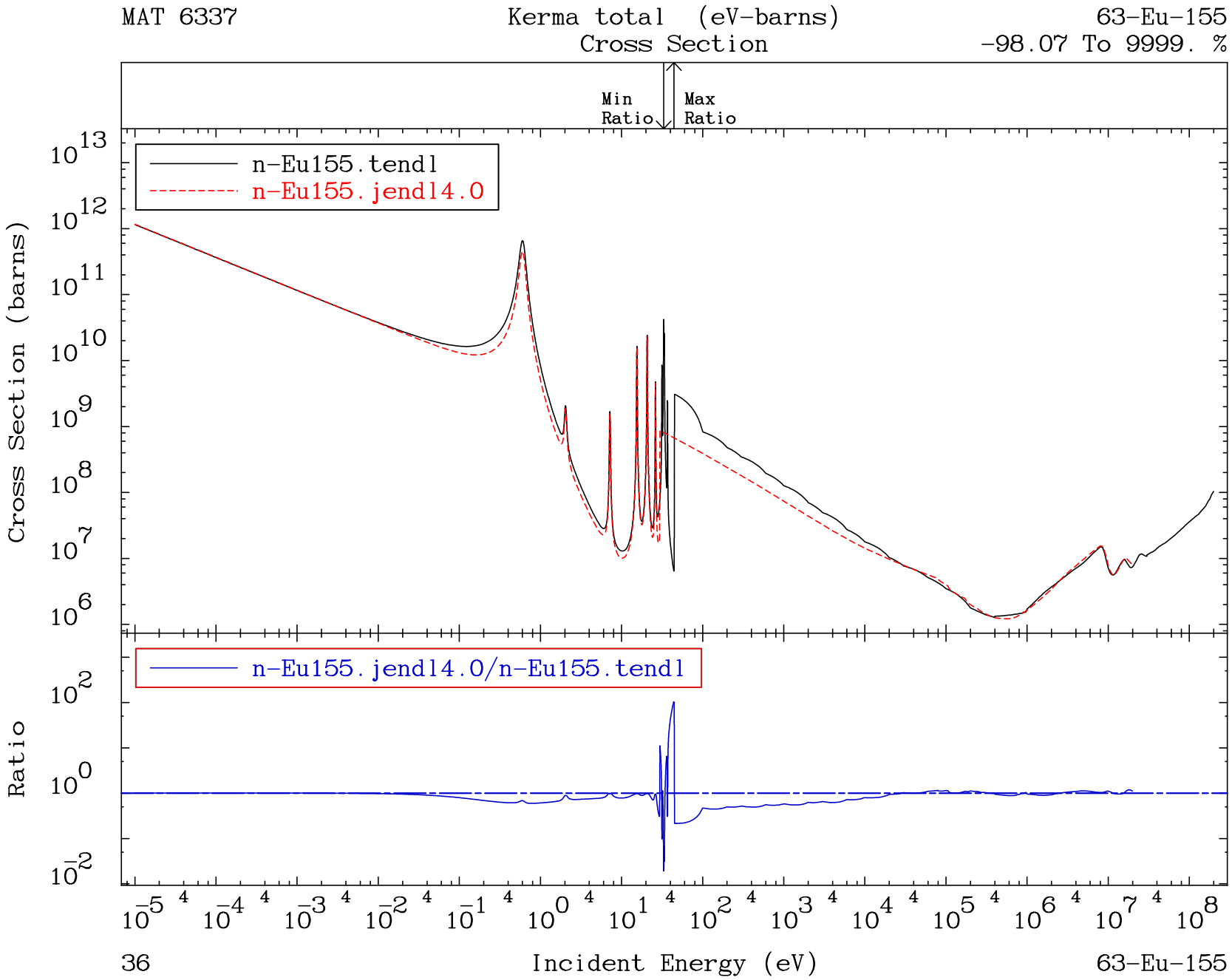

MAT 6337
Hydrogen Production
Cross Section
63-Eu-155
-71.67 To 9999. %
Max Ratio
Min Ratio
n-Eu155.tendl Threshold 850.42 keV
n-Eu155.jendl4.0 Threshold 837.79 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^2
10^1
10^0
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
31
Incident Energy (eV)
63-Eu-155

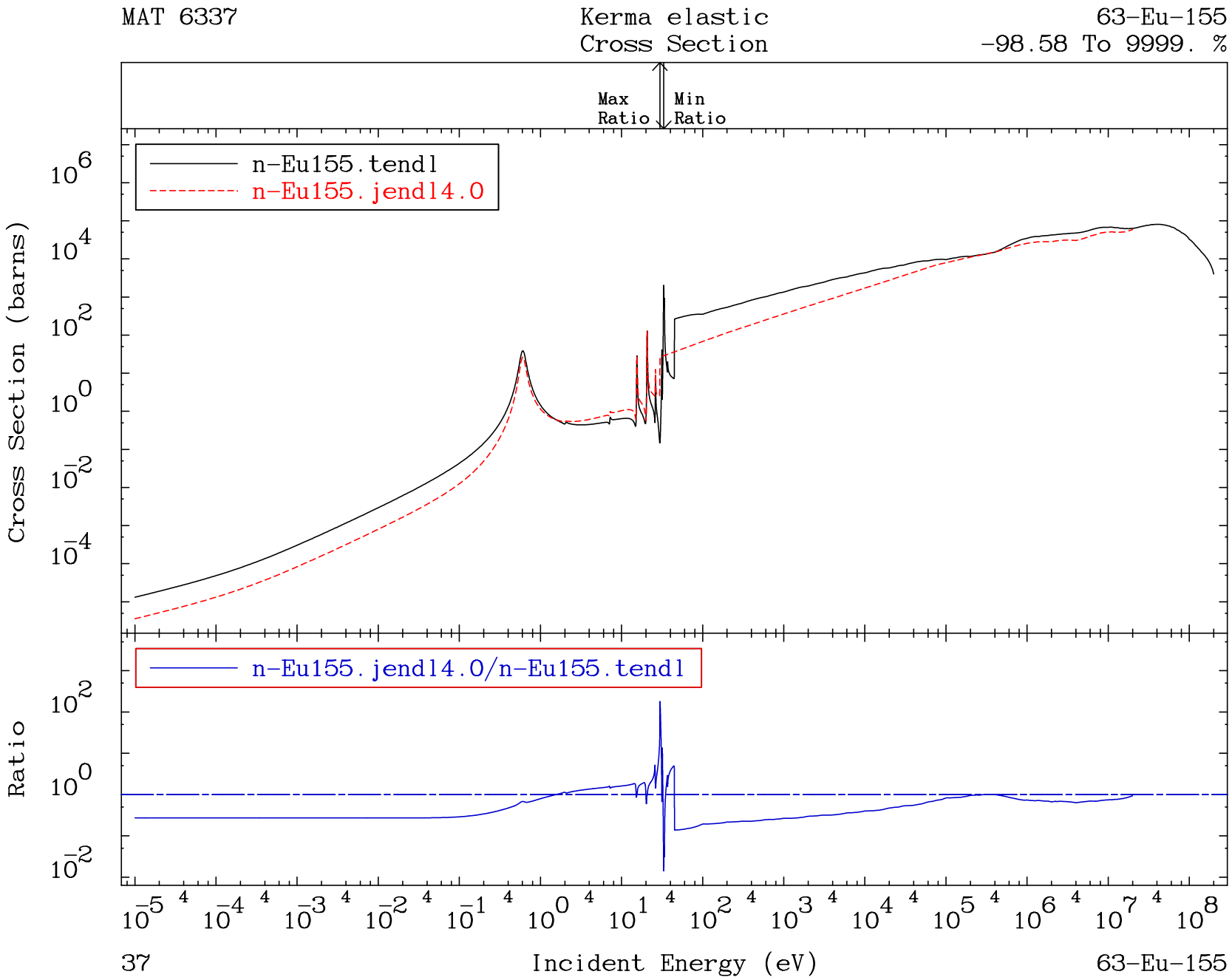

MAT 6337
Deuterium Production
Cross Section
63-Eu-155
-99.91 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 4.4561 MeV
n-Eu155.jendl4.0 Threshold 4.4276 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^3
10^0
10^-3
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
63-Eu-155

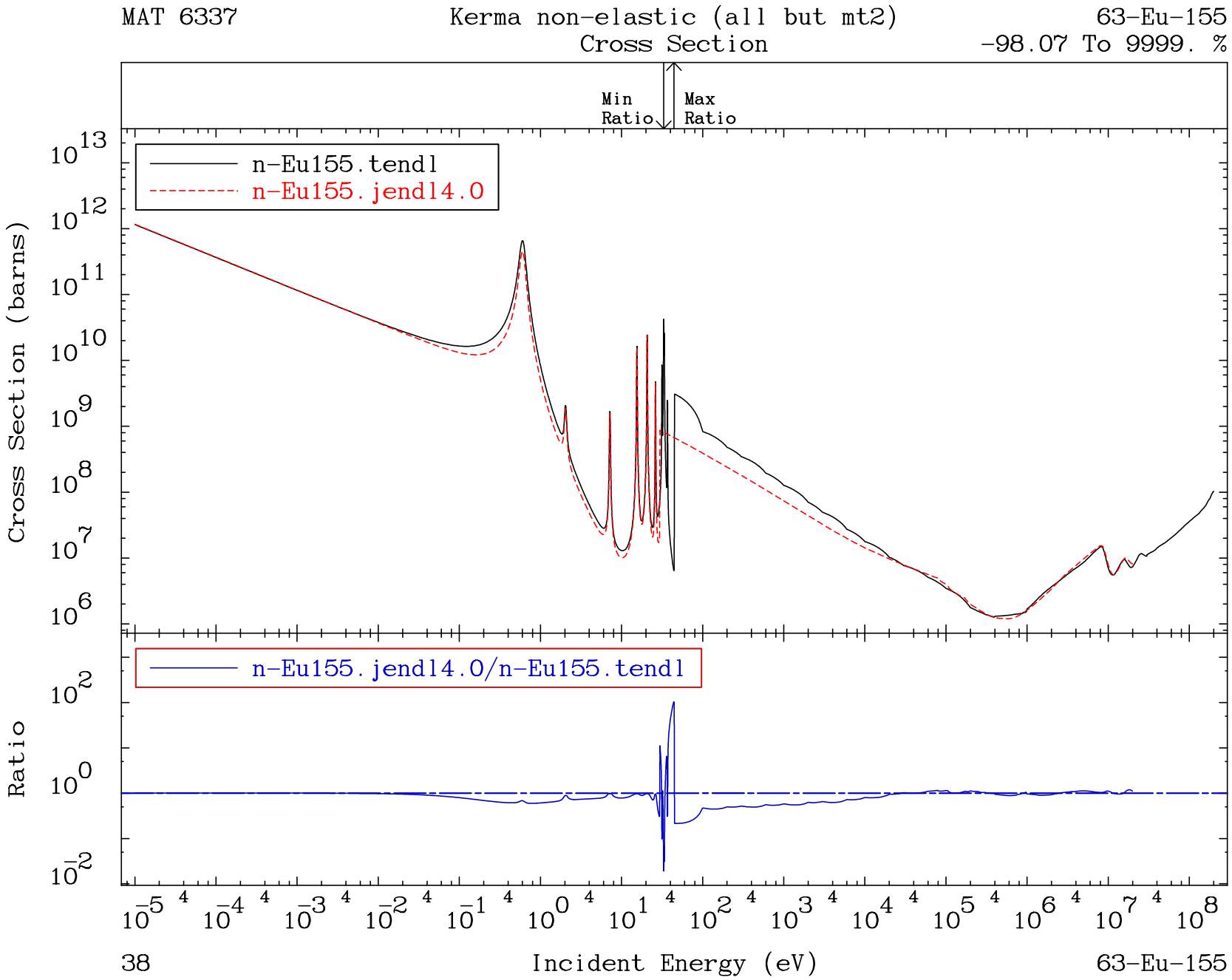

MAT 6337
Tritium Production
Cross Section
63-Eu-155
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 6.1768 MeV
n-Eu155.jendl4.0 Threshold 6.1740 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^7
10^0
10^-7
10^-14
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
63-Eu-155

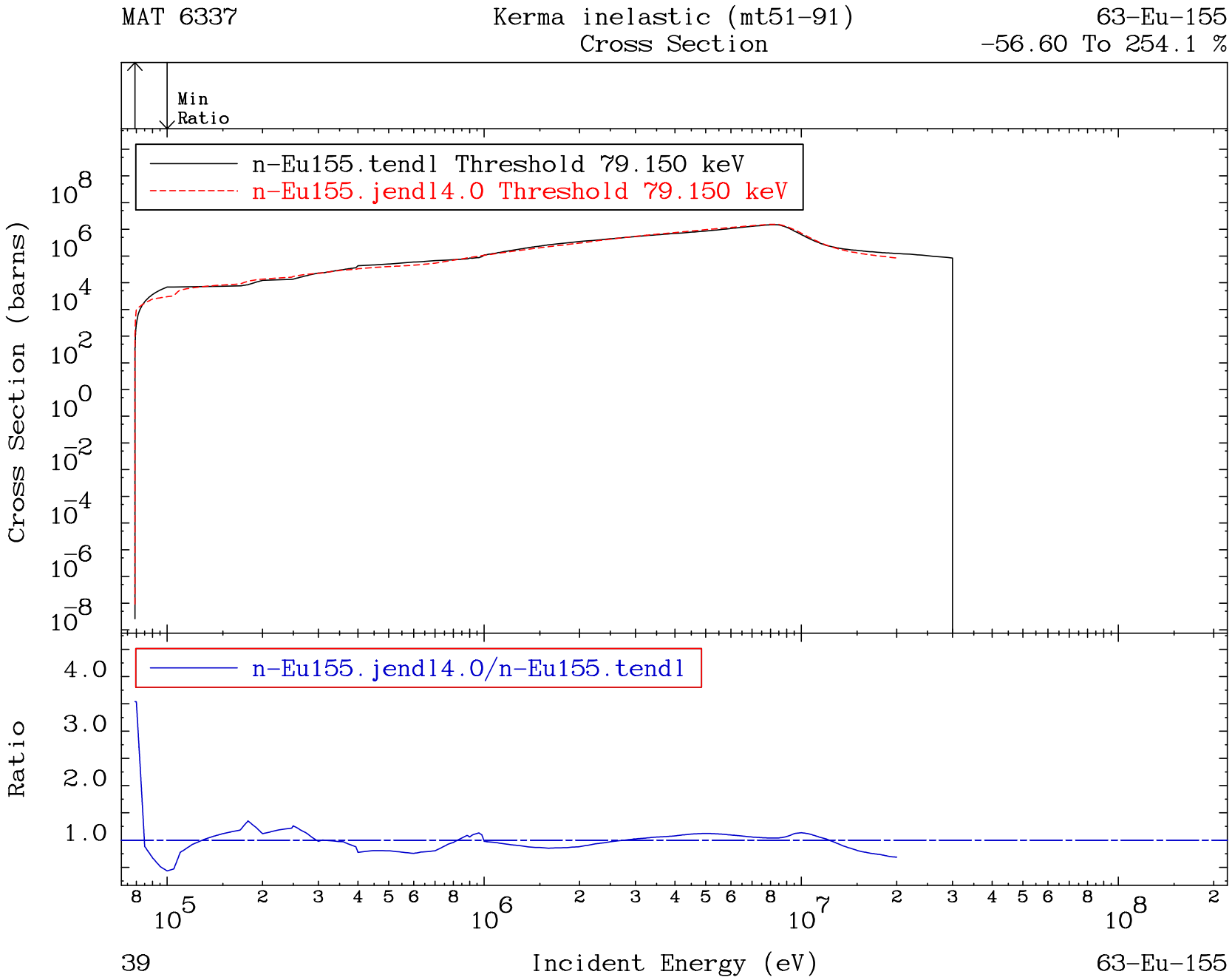

MAT 6337
He-3 Production
Cross Section
63-Eu-155
-100.0 To 7606. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 8.0824 MeV
n-Eu155.jendl4.0 Threshold 8.0518 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
10^5
10^0
10^-5
10^-10
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
63-Eu-155

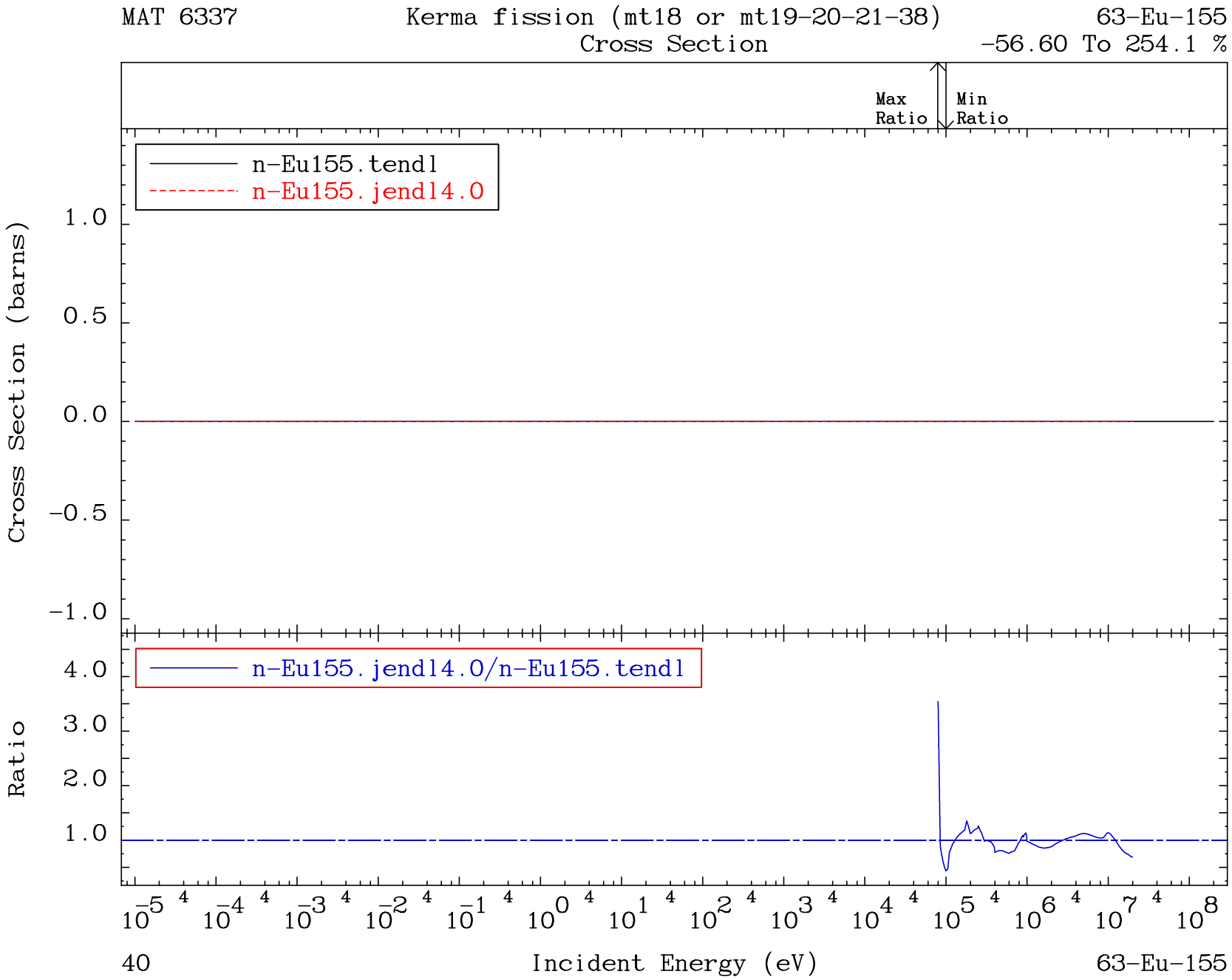

MAT 6337
He-4 Production
Cross Section
63-Eu-155
-82.37 To 9999. %
Max
Ratio
Min
Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
35
63-Eu-155

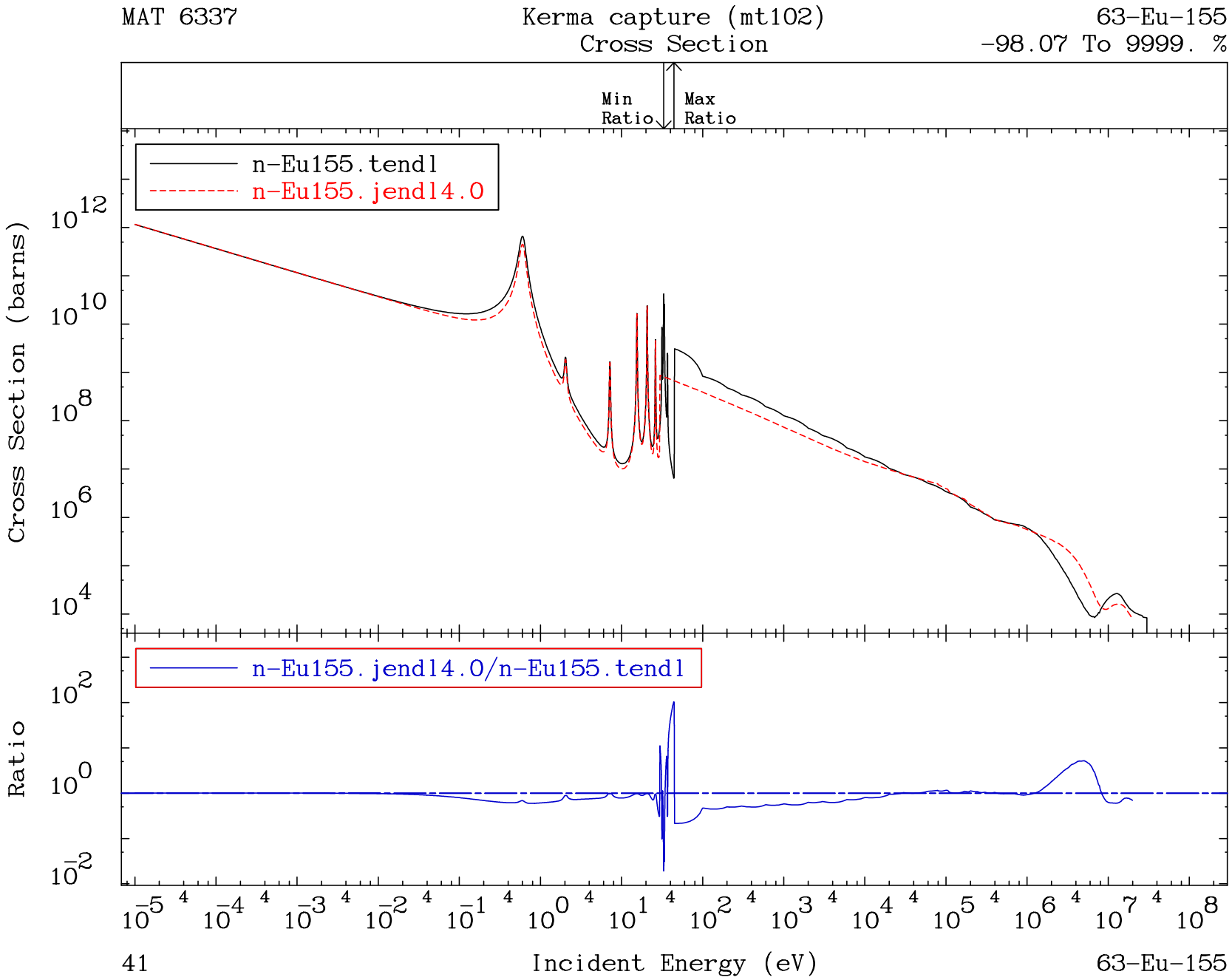

MAT 6337
Kerma total (eV-barns)
Cross Section
63-Eu-155
-98.07 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
36
Incident Energy (eV)
63-Eu-155

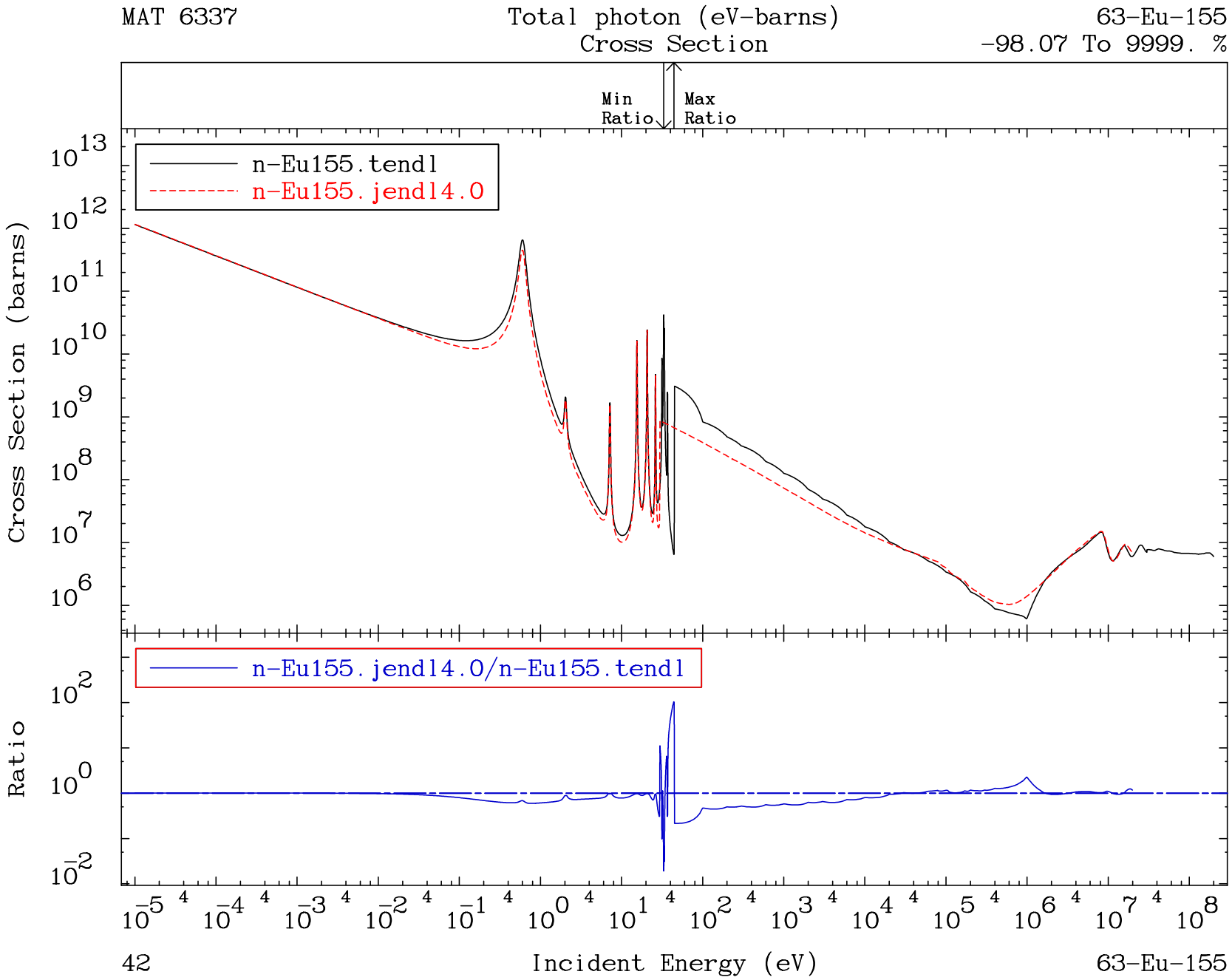

MAT 6337
Kerma elastic
Cross Section
63-Eu-155
-98.58 To 9999. %
Max Ratio
Min Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
37
63-Eu-155

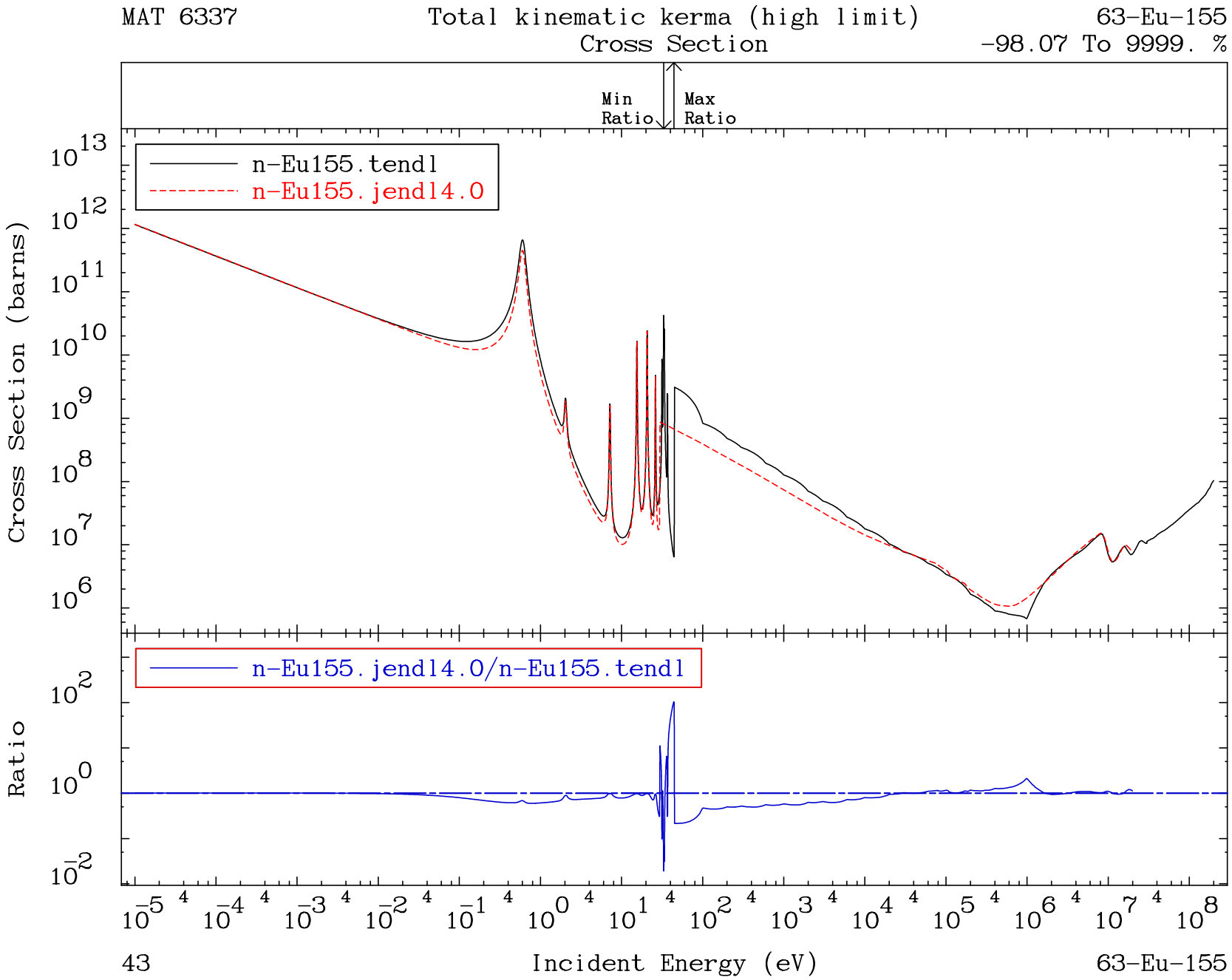

MAT 6337
Kerma non-elastic (all but mt2)
Cross Section
63-Eu-155
-98.07 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
38
Incident Energy (eV)
63-Eu-155

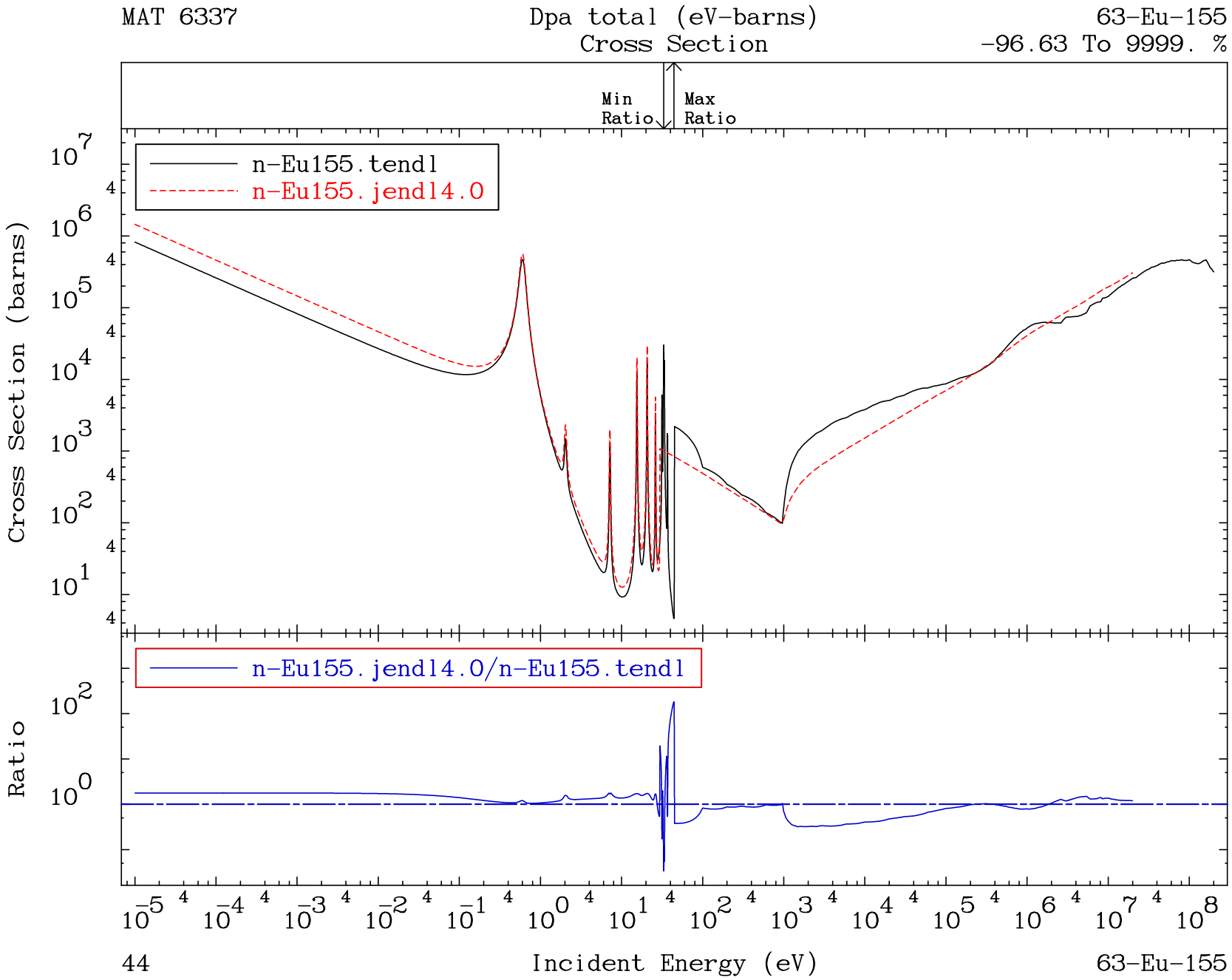

MAT 6337
Kerma inelastic (mt51-91)
Cross Section
63-Eu-155
-56.60 To 254.1 %
Min
Ratio
n-Eu155.tendl Threshold 79.150 keV
n-Eu155.jendl4.0 Threshold 79.150 keV
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
39
63-Eu-155

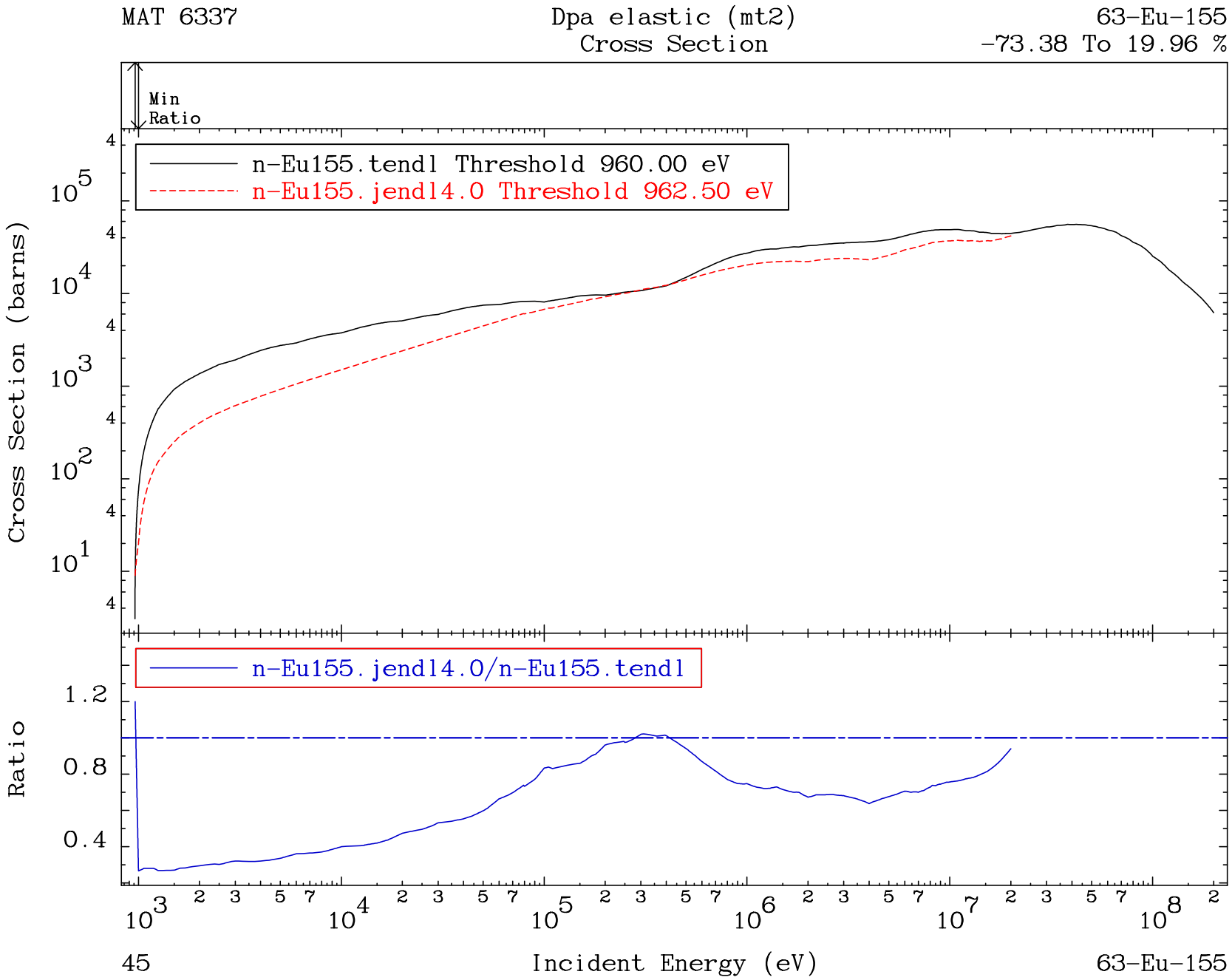

MAT 6337
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
63-Eu-155
-56.60 To 254.1 %
Max Ratio
Min Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
4.0
3.0
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
40
Incident Energy (eV)
63-Eu-155

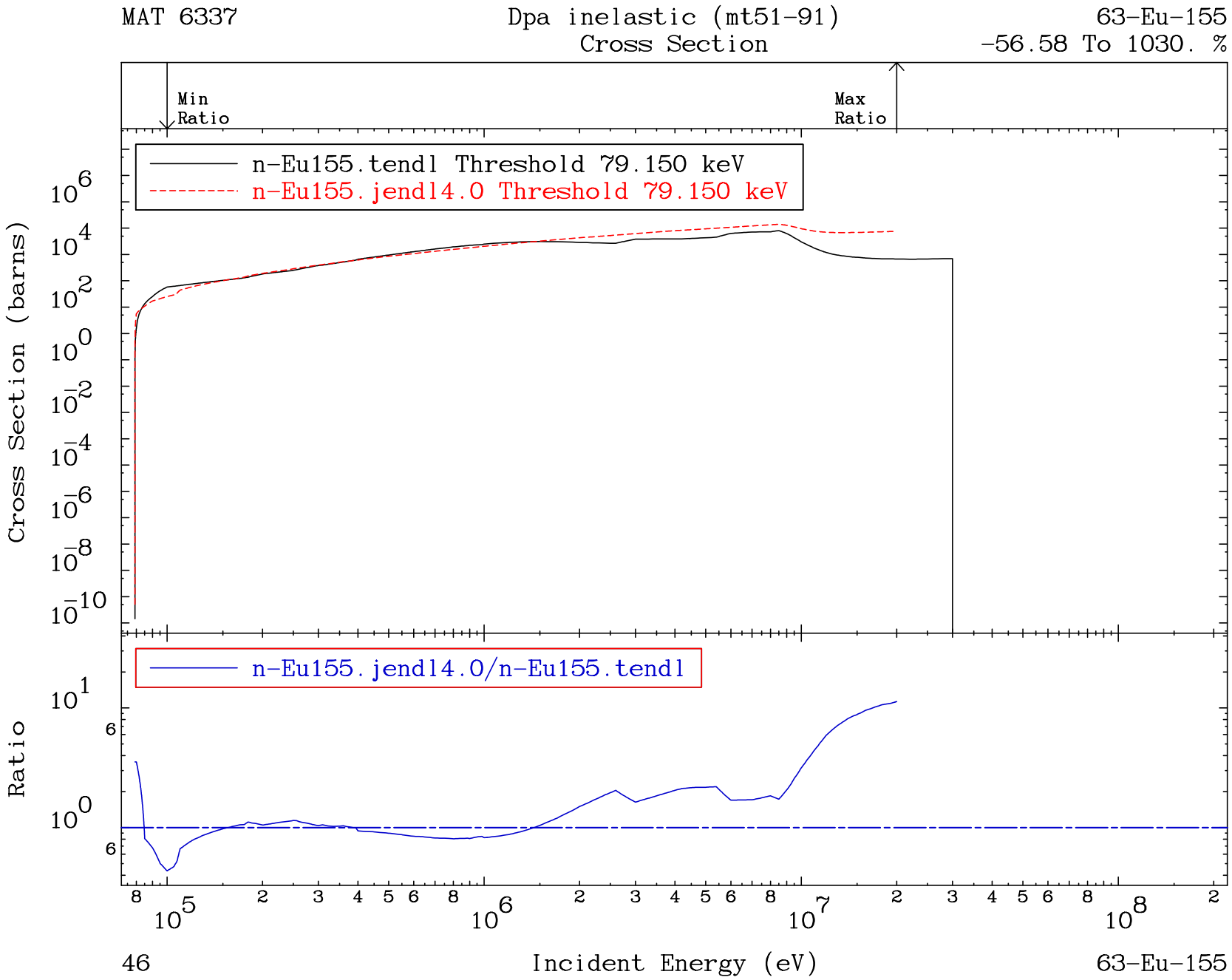

MAT 6337
Kerma capture (mt102)
Cross Section
63-Eu-155
-98.07 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
41
63-Eu-155

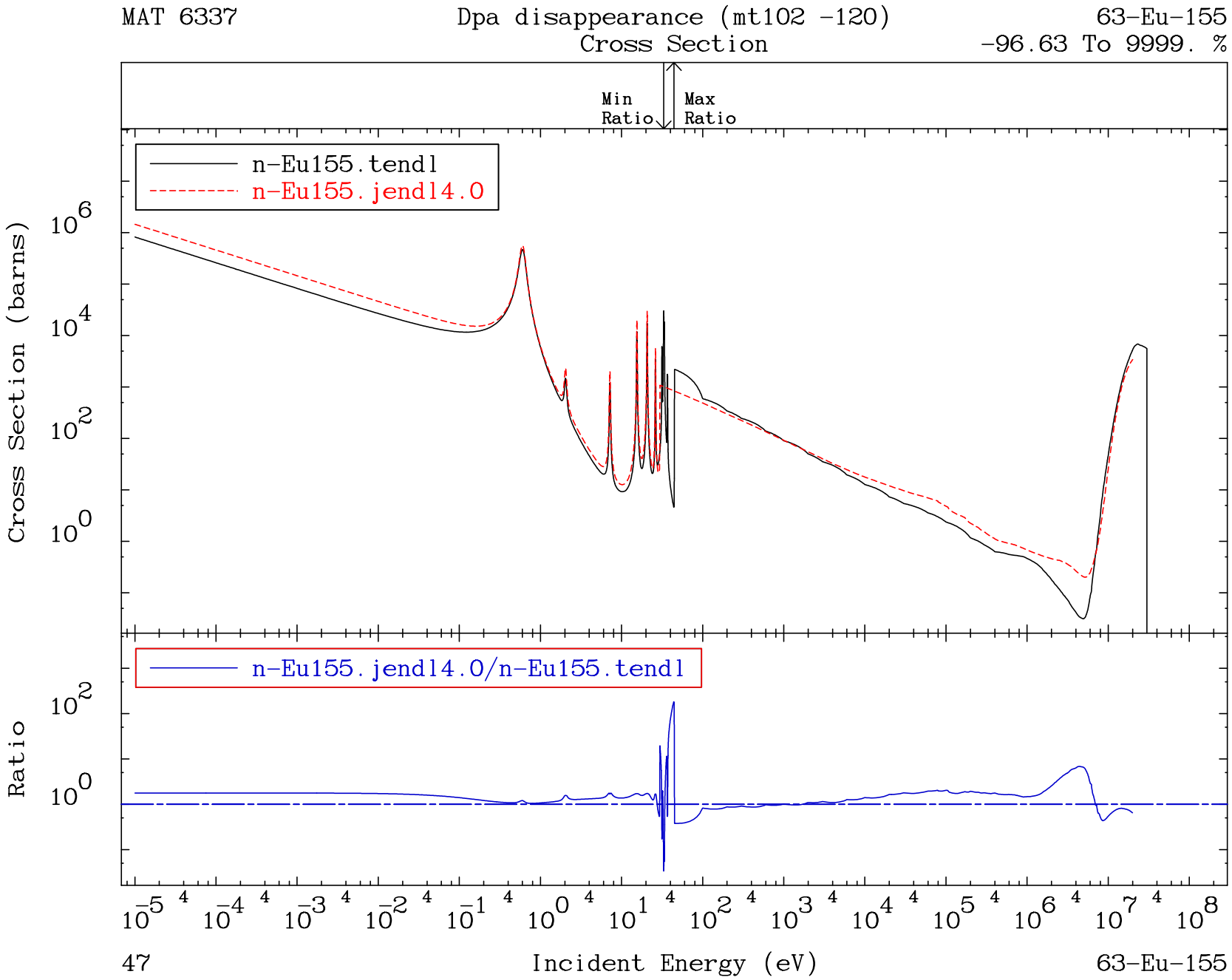

MAT 6337
Total photon (eV-barns)
Cross Section
63-Eu-155
-98.07 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
42
63-Eu-155


MAT 6337
Total kinematic kerma (high limit)
Cross Section
63-Eu-155
-98.07 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
43
63-Eu-155


MAT 6337
Dpa total (eV-barns)
Cross Section
63-Eu-155
-96.63 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
44
Incident Energy (eV)
63-Eu-155


MAT 6337
Dpa elastic (mt2)
Cross Section
63-Eu-155
-73.38 To 19.96 %
Min
Ratio
n-Eu155.tendl Threshold 960.00 eV
n-Eu155.jendl4.0 Threshold 962.50 eV
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
45
63-Eu-155


MAT 6337
Dpa inelastic (mt51-91)
Cross Section
63-Eu-155
-56.58 To 1030. %
Min Ratio
Max Ratio
n-Eu155.tendl Threshold 79.150 keV
n-Eu155.jendl4.0 Threshold 79.150 keV
Cross Section (barns)
n-Eu155.jendl4.0/n-Eu155.tendl
Ratio
Incident Energy (eV)
46
63-Eu-155


MAT 6337
Dpa disappearance (mt102 -120)
Cross Section
63-Eu-155
-96.63 To 9999. %
Min Ratio
Max Ratio
n-Eu155.tendl
n-Eu155.jendl4.0
Cross Section (barns)
10^6
10^4
10^2
10^0
n-Eu155.jendl4.0/n-Eu155.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
47
Incident Energy (eV)
63-Eu-155