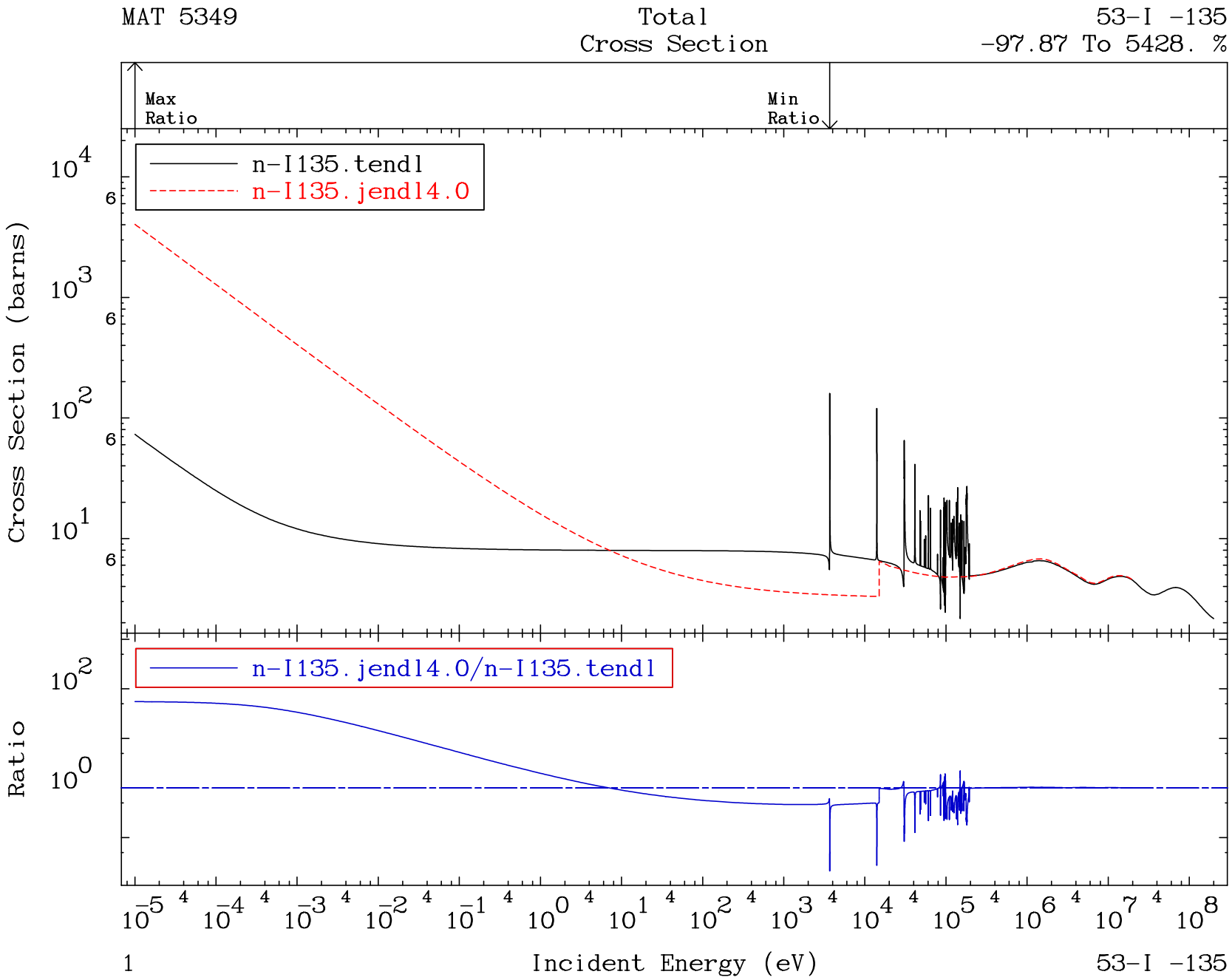
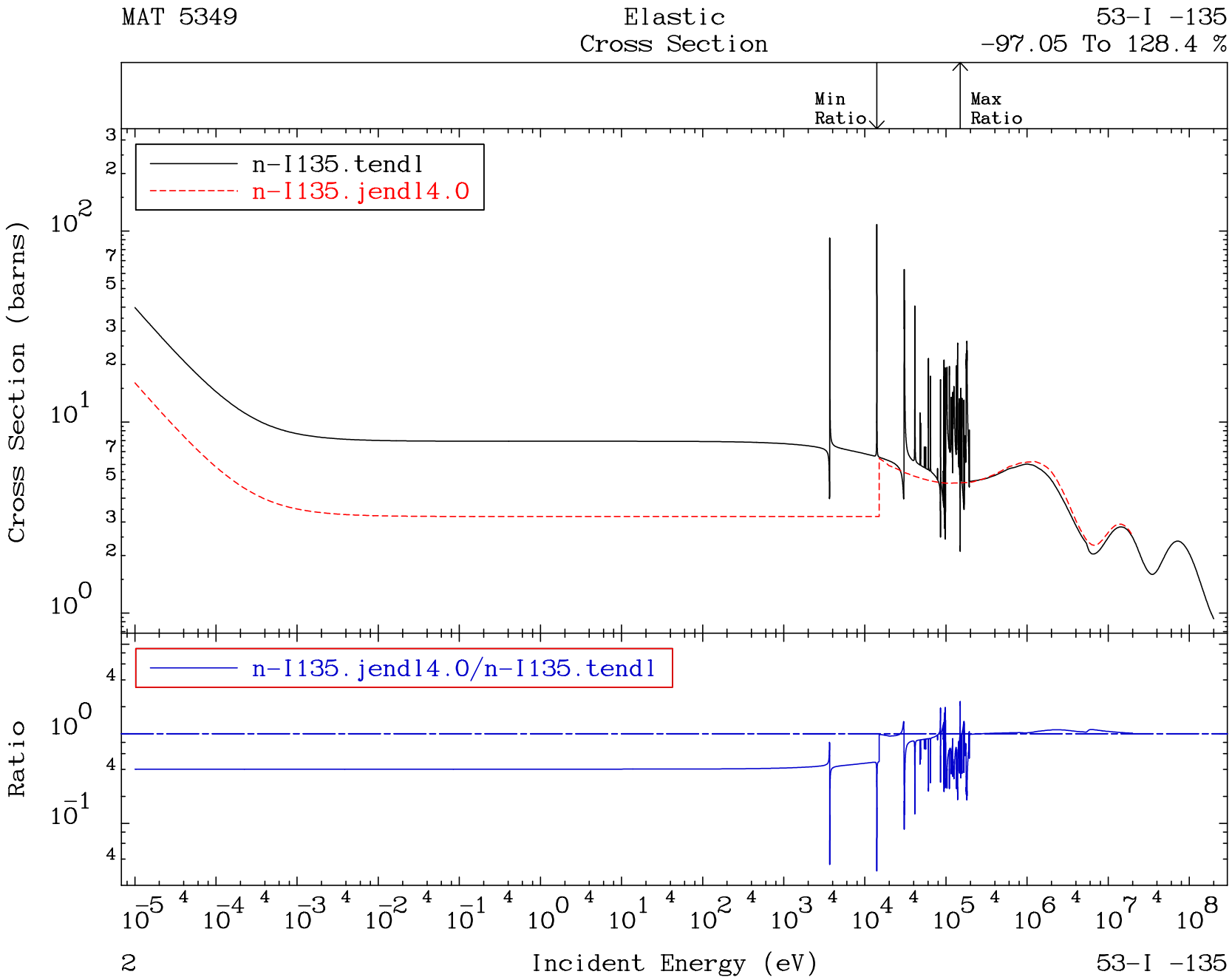
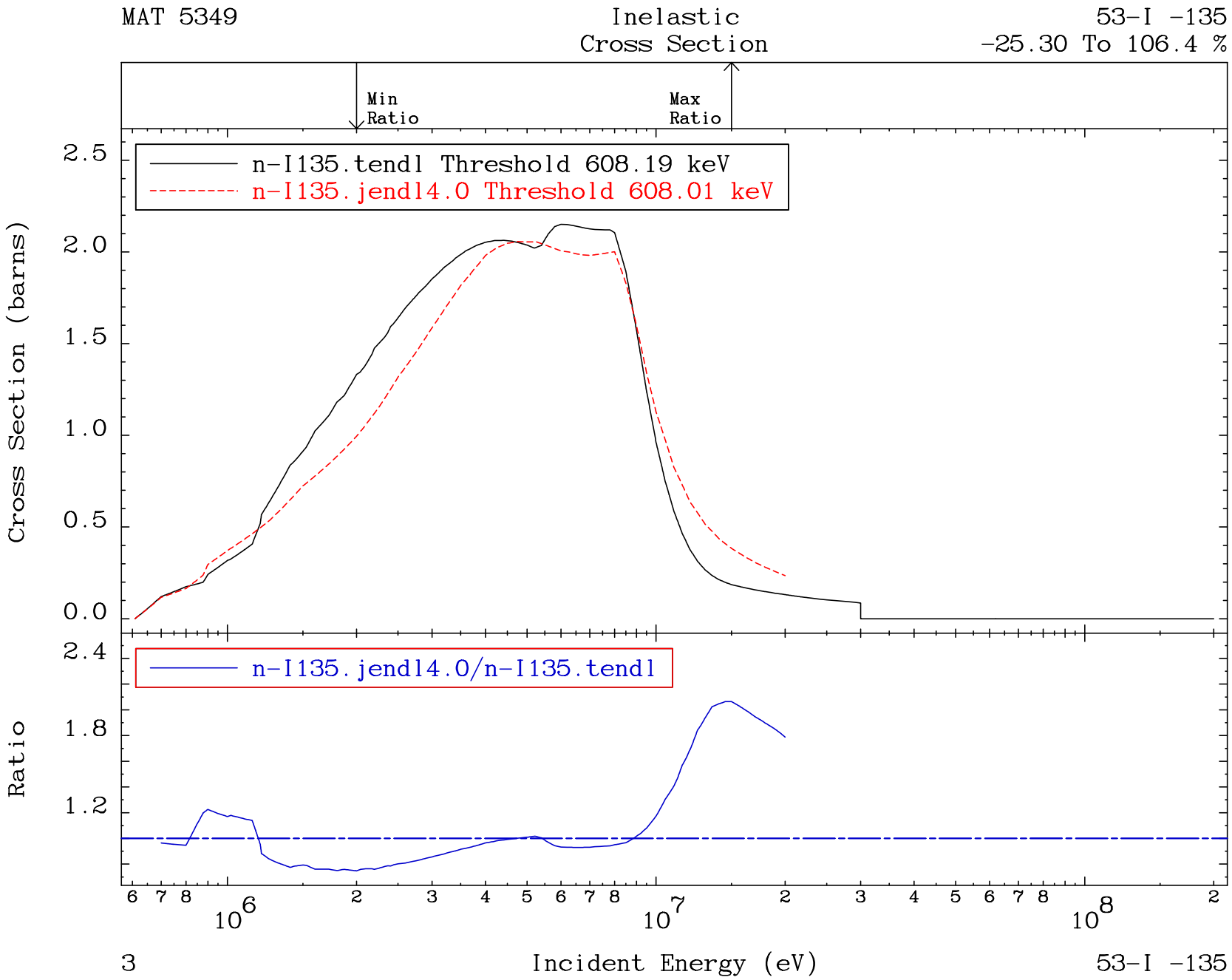
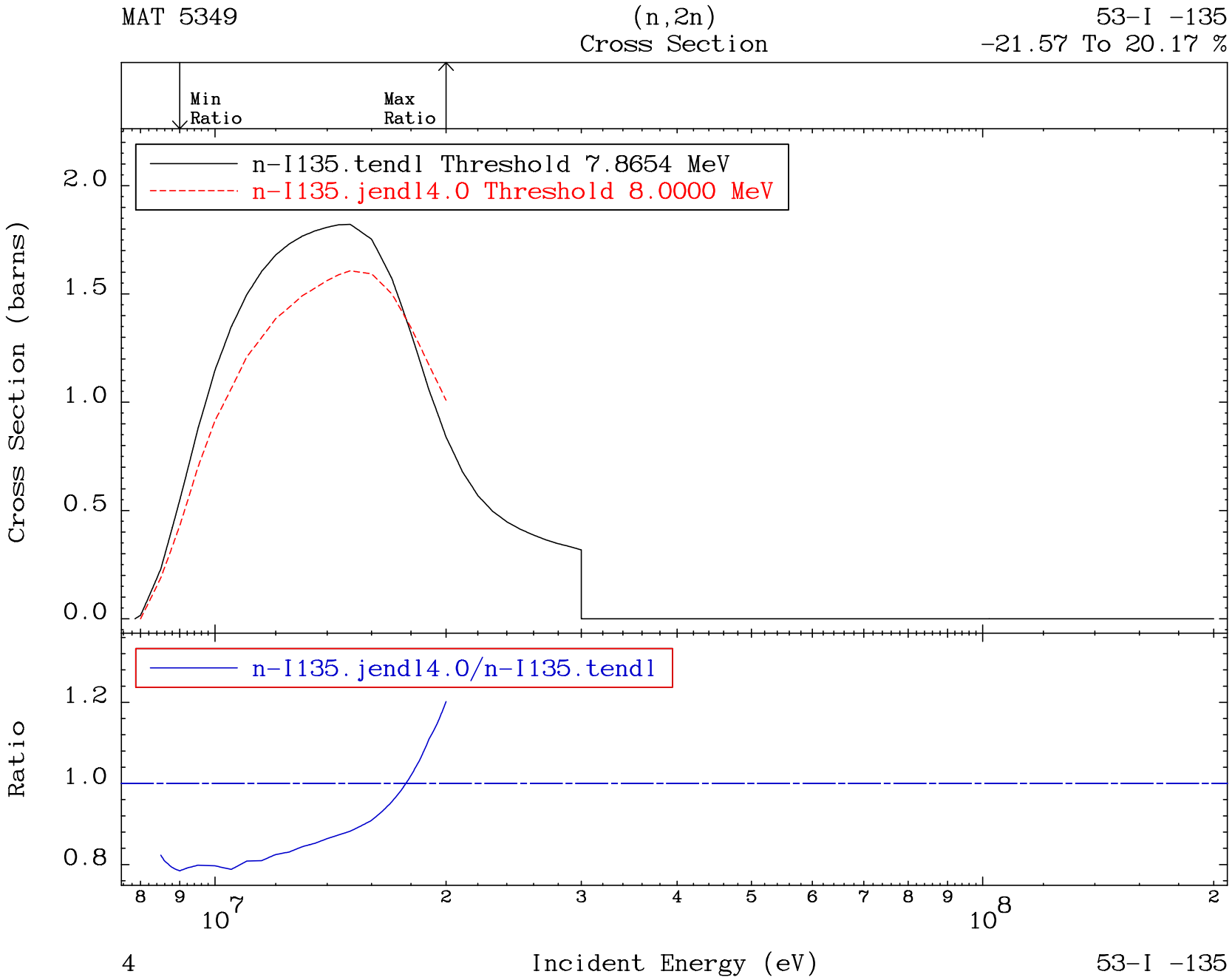
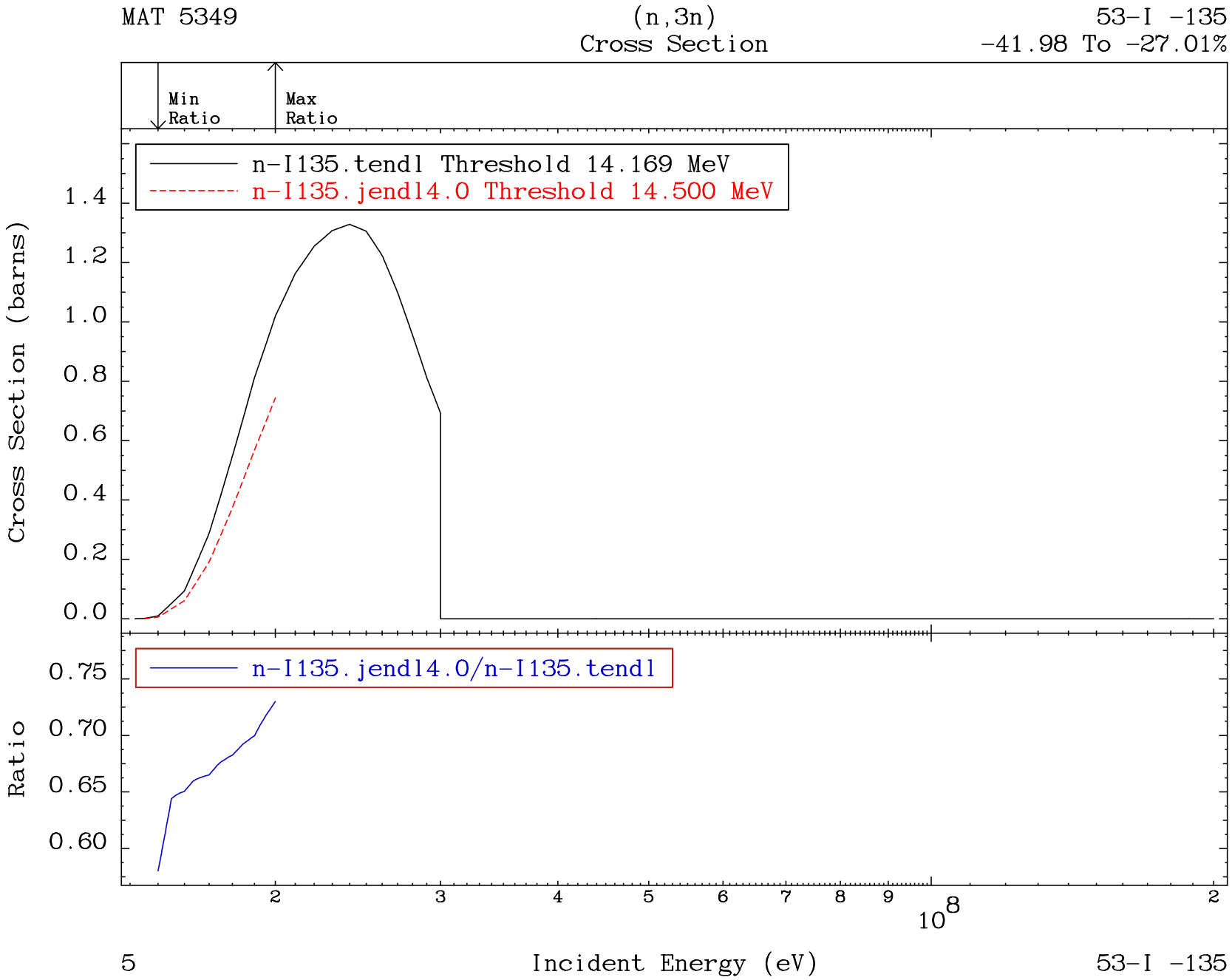
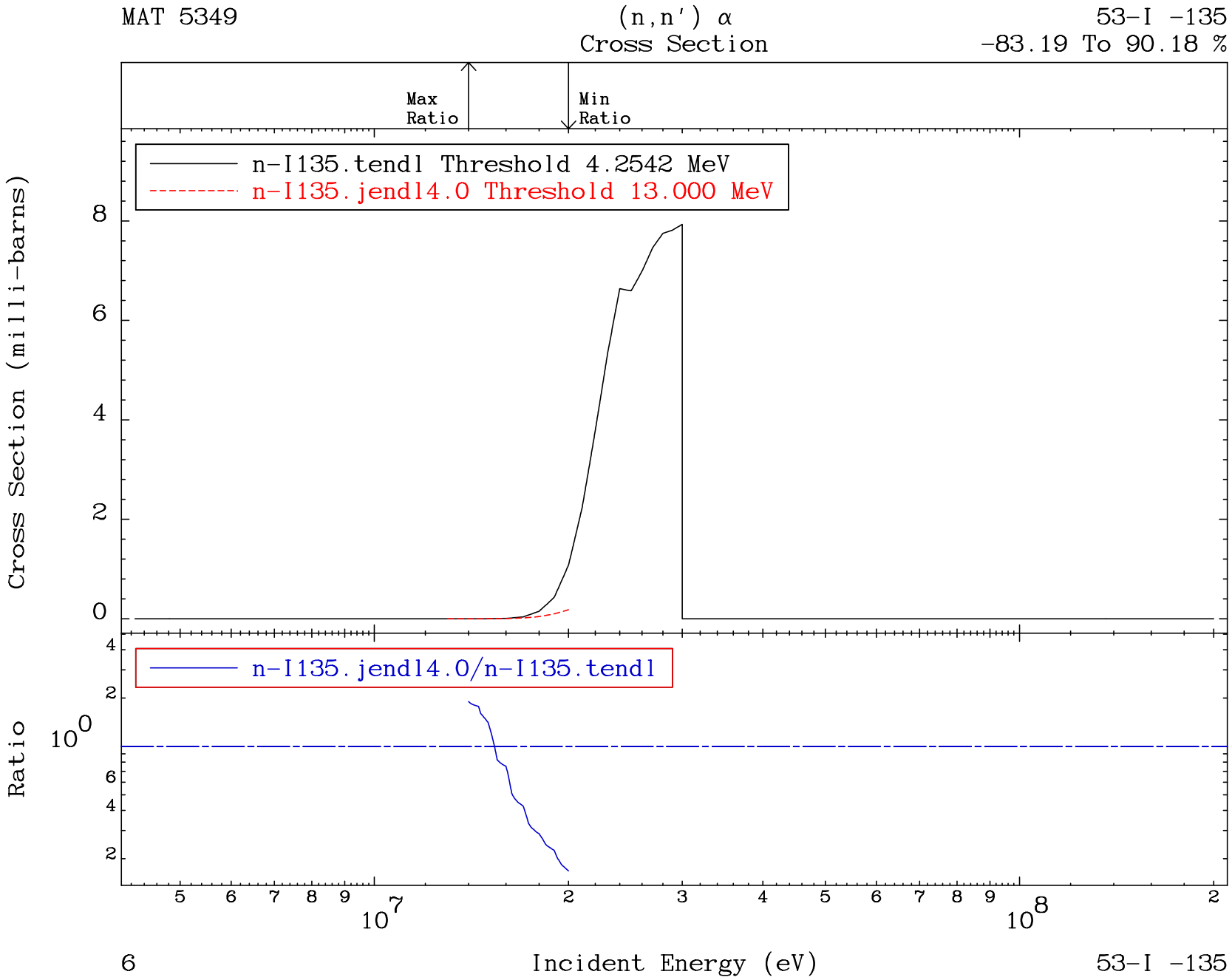

MAT 5349
Total
Cross Section
53-I -135
-97.87 To 5428. %
Max
Ratio
Min
Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
1
53-I -135

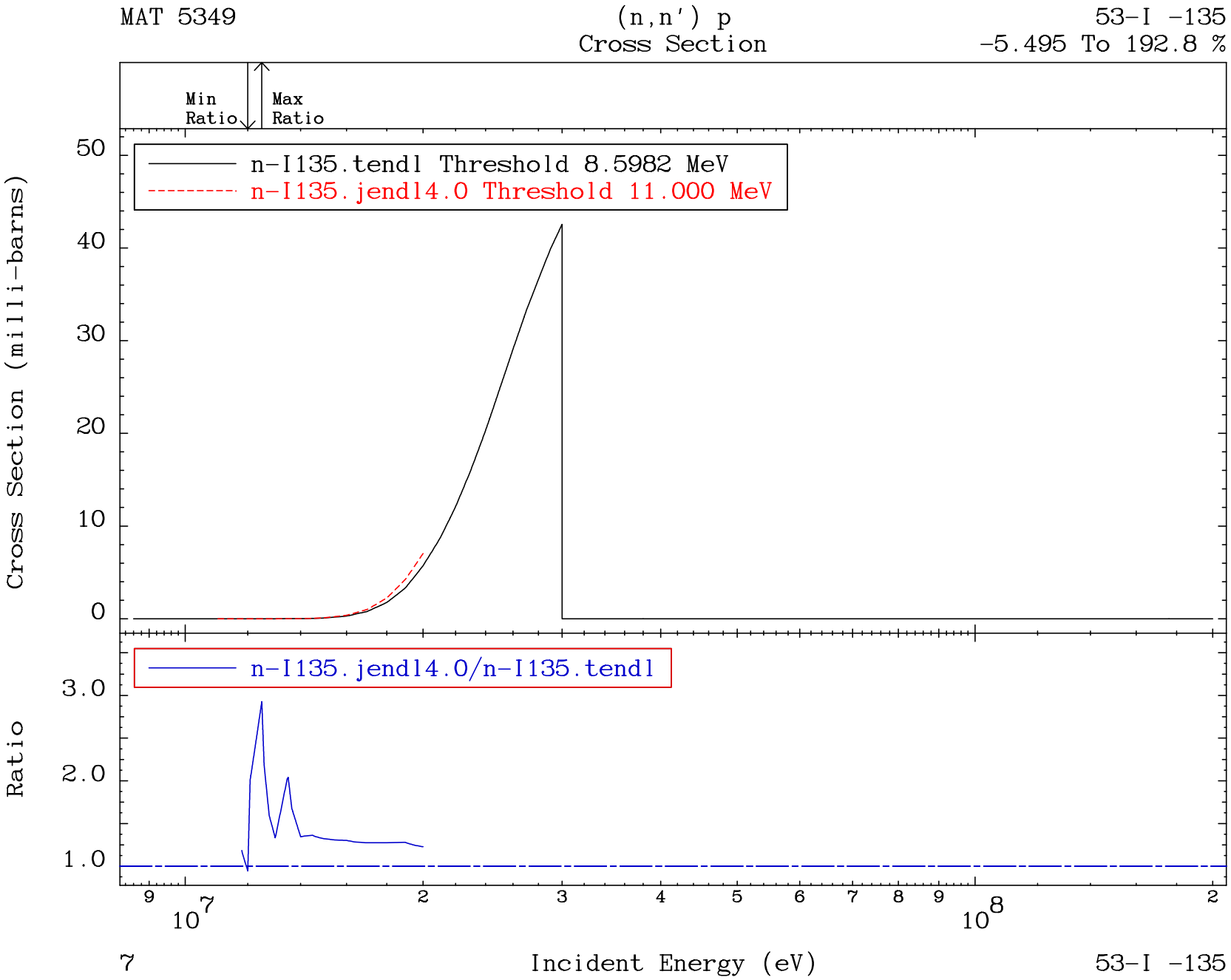

MAT 5349
Elastic
Cross Section
53-I -135
-97.05 To 128.4 %
Min
Ratio
Max
Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
2
53-I -135

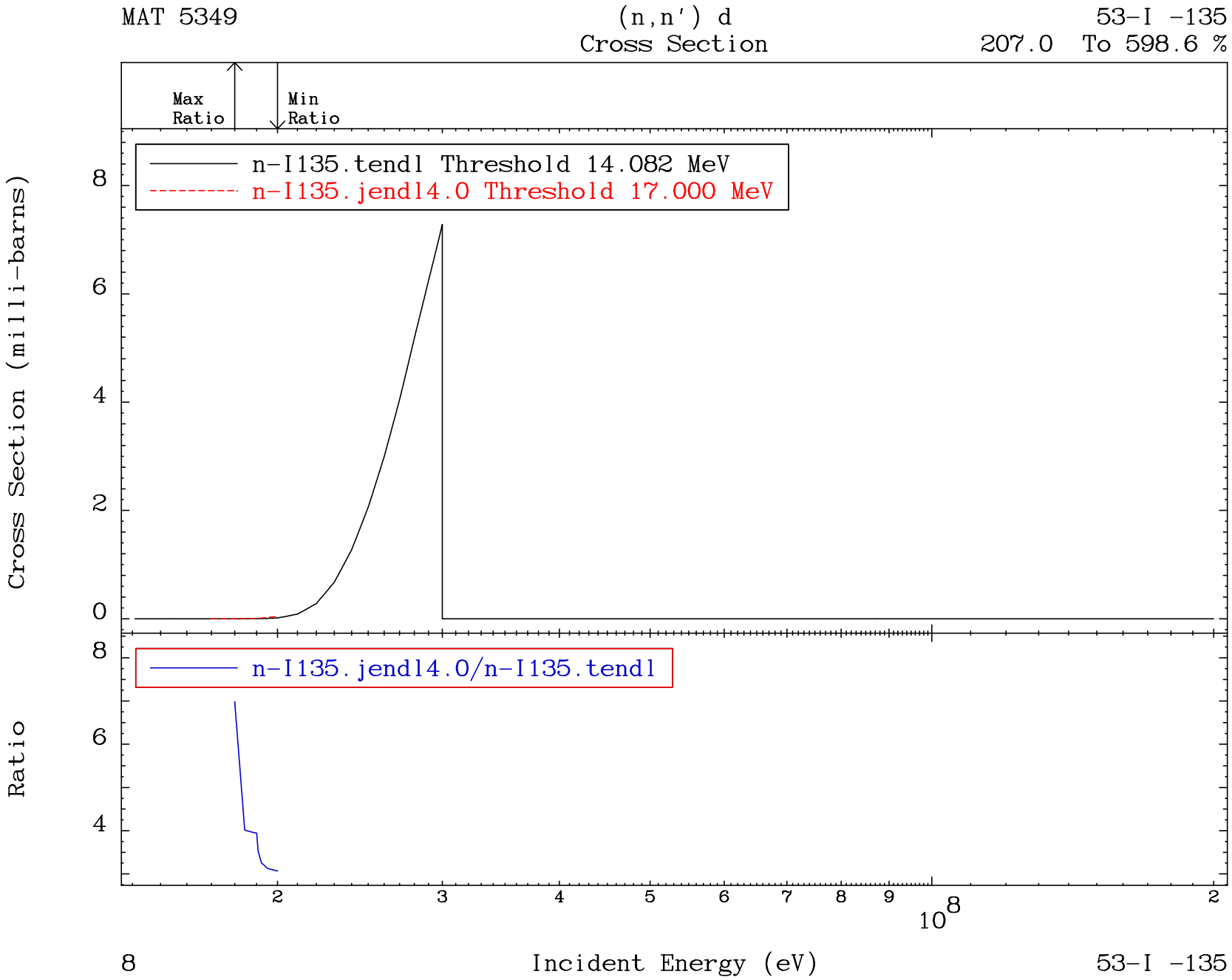

MAT 5349
Inelastic
Cross Section
53-I -135
-25.30 To 106.4 %
Min
Ratio
Max
Ratio
n-I135.tendl Threshold 608.19 keV
n-I135.jendl4.0 Threshold 608.01 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
2.4
1.8
1.2
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
53-I -135

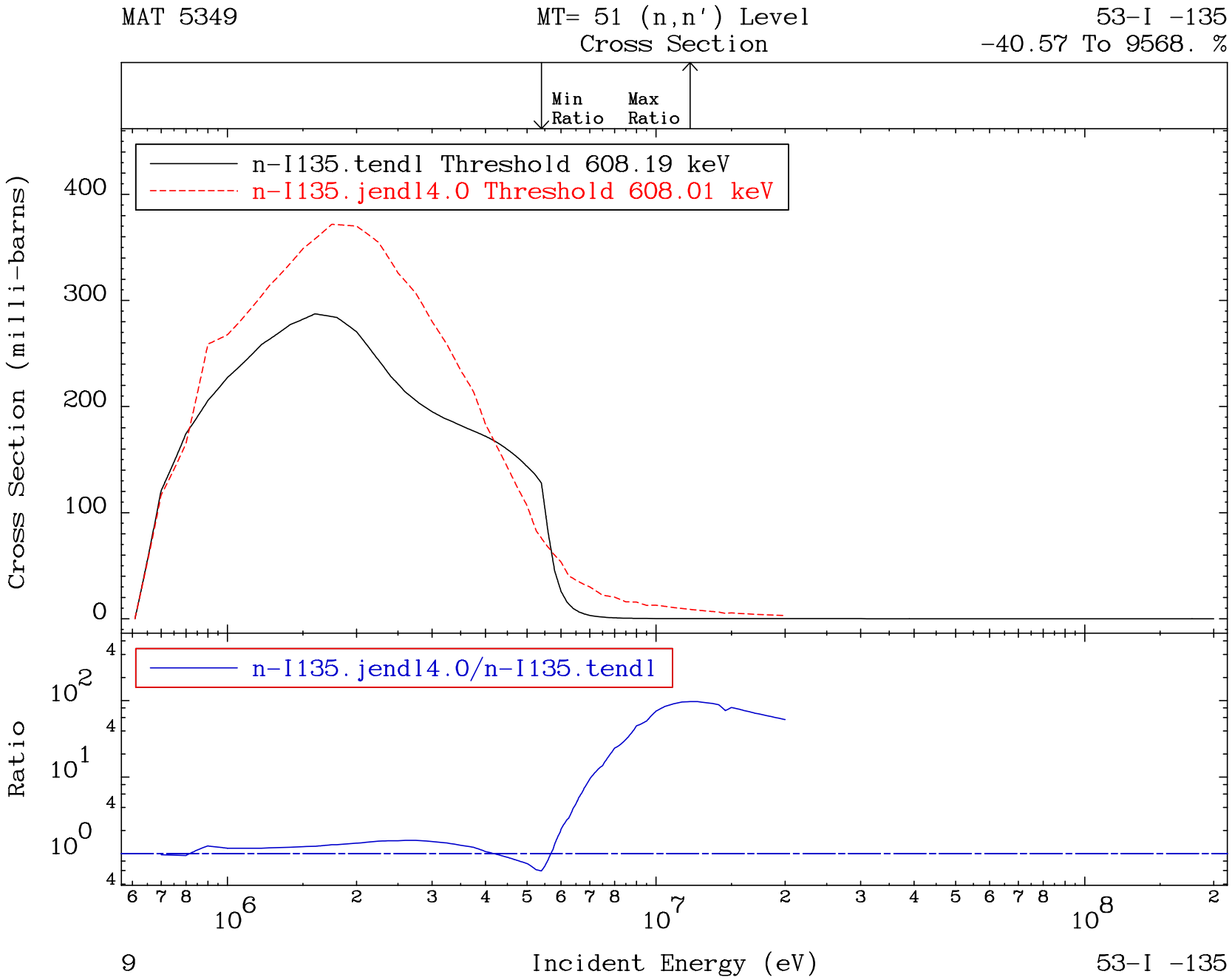

MAT 5349
(n,2n)
Cross Section
53-I -135
-21.57 To 20.17 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 7.8654 MeV
n-I135.jendl4.0 Threshold 8.0000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
1.2
1.0
0.8
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
53-I -135

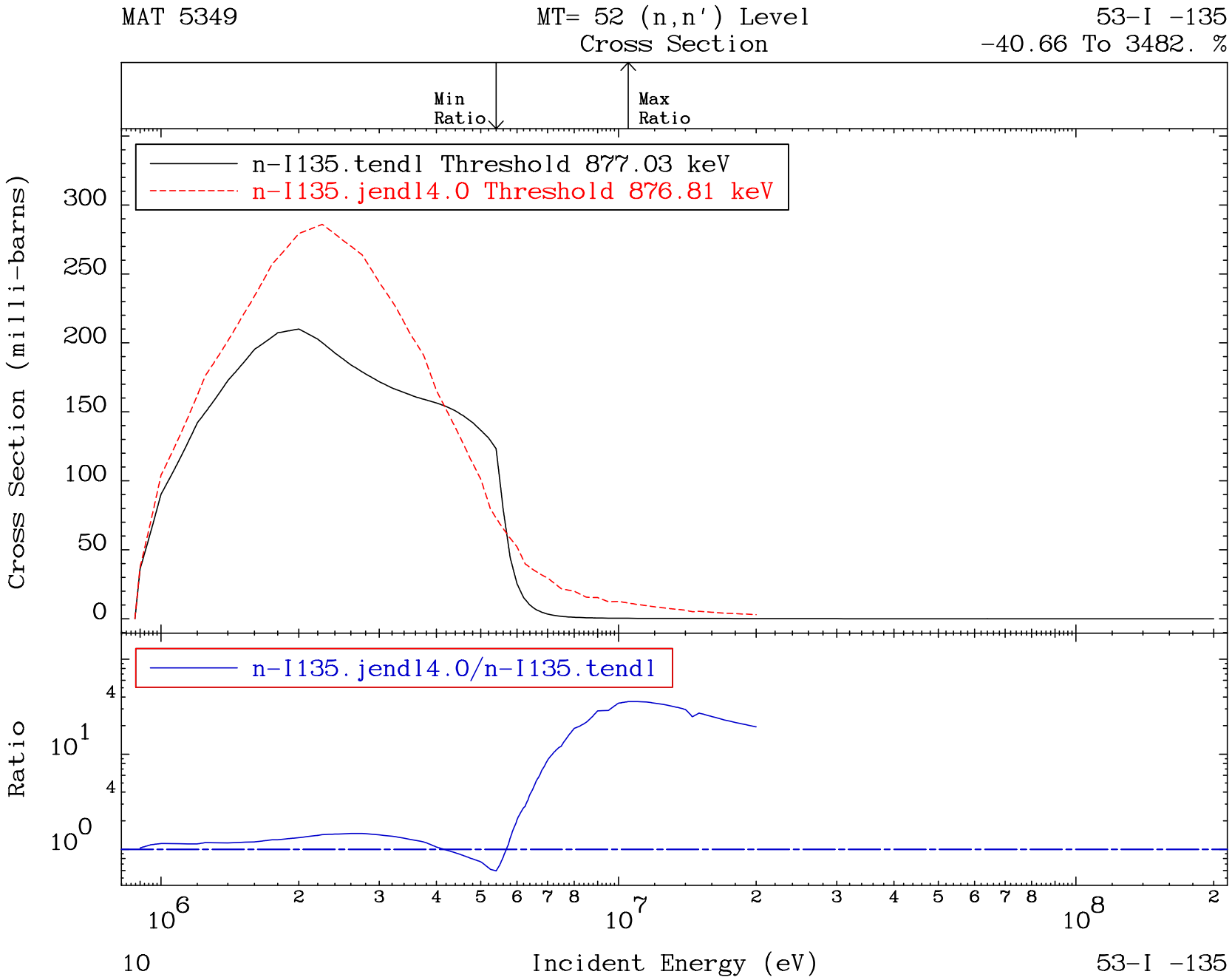

MAT 5349
(n,3n)
Cross Section
53-I -135
-41.98 To -27.01%
Min Ratio
Max Ratio
n-I135.tendl Threshold 14.169 MeV
n-I135.jendl4.0 Threshold 14.500 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
0.75
0.70
0.65
0.60
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
53-I -135

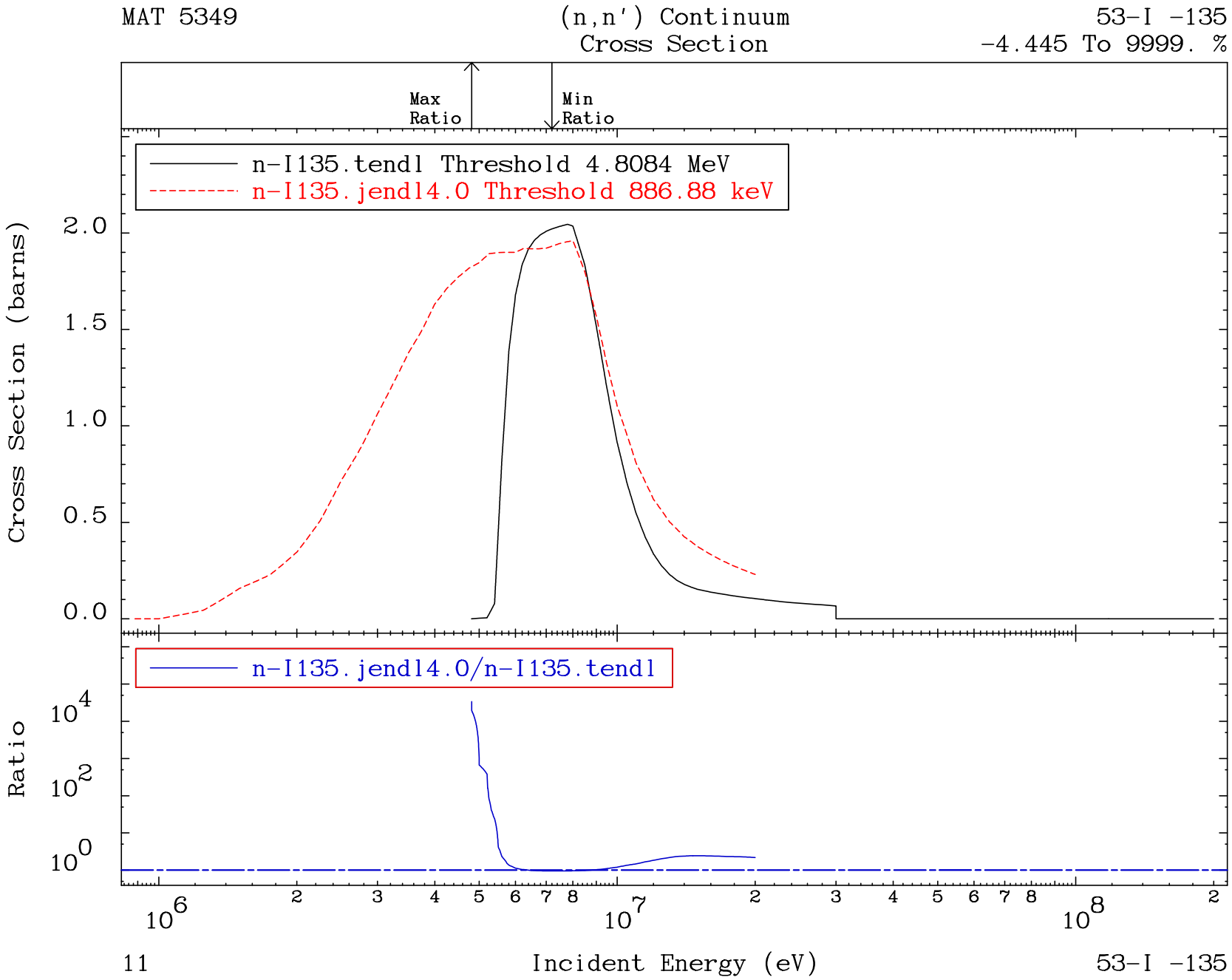

MAT 5349
(n,n') α
Cross Section
53-I -135
-83.19 To 90.18 %
Max Ratio
Min Ratio
n-I135.tendl Threshold 4.2542 MeV
n-I135.jendl4.0 Threshold 13.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-I135.jendl4.0/n-I135.tendl
Ratio
10^0
2
4
6
2
5 6 7 8 9
10^7
2
3
4
5 6 7 8 9
10^8
2
6
Incident Energy (eV)
53-I -135

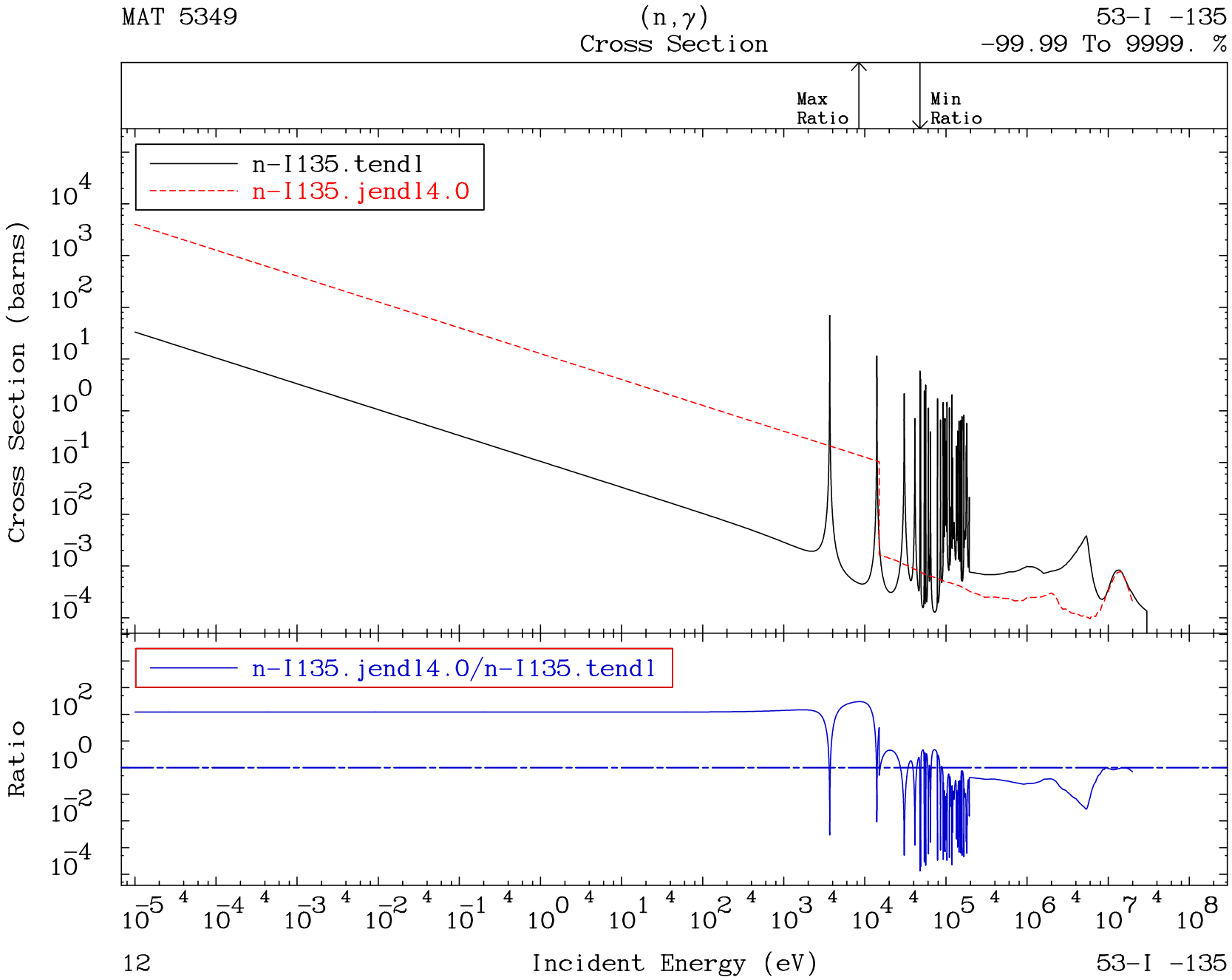

MAT 5349
(n,n') p
Cross Section
53-I -135
-5.495 To 192.8 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 8.5982 MeV
n-I135.jendl4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-I135.jendl4.0/n-I135.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
53-I -135

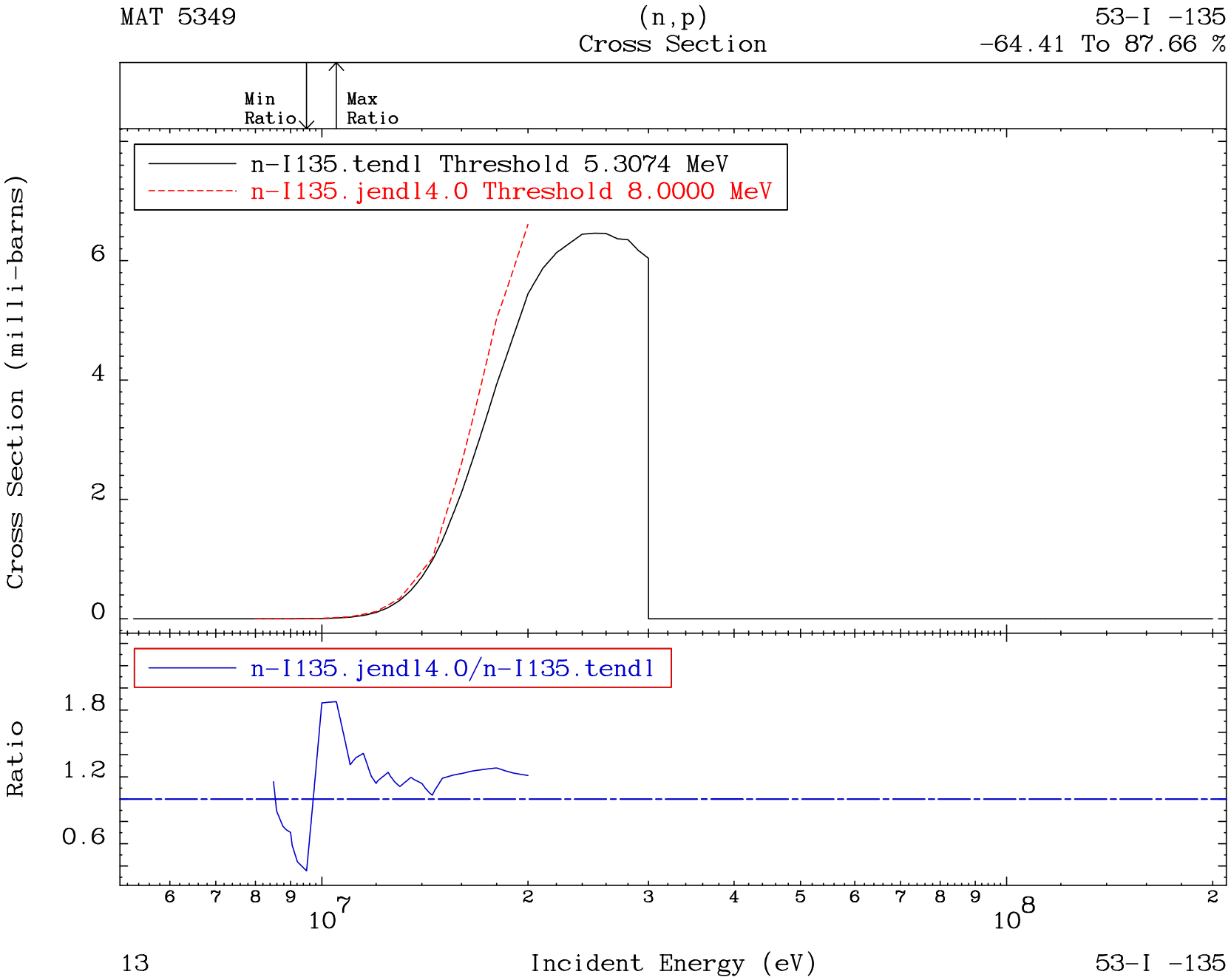

MAT 5349
(n,n') d
Cross Section
53-I -135
207.0 To 598.6 %
Max Ratio
Min Ratio
n-I135.tendl Threshold 14.082 MeV
n-I135.jendl4.0 Threshold 17.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-I135.jendl4.0/n-I135.tendl
Ratio
4
6
8
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
8
53-I -135

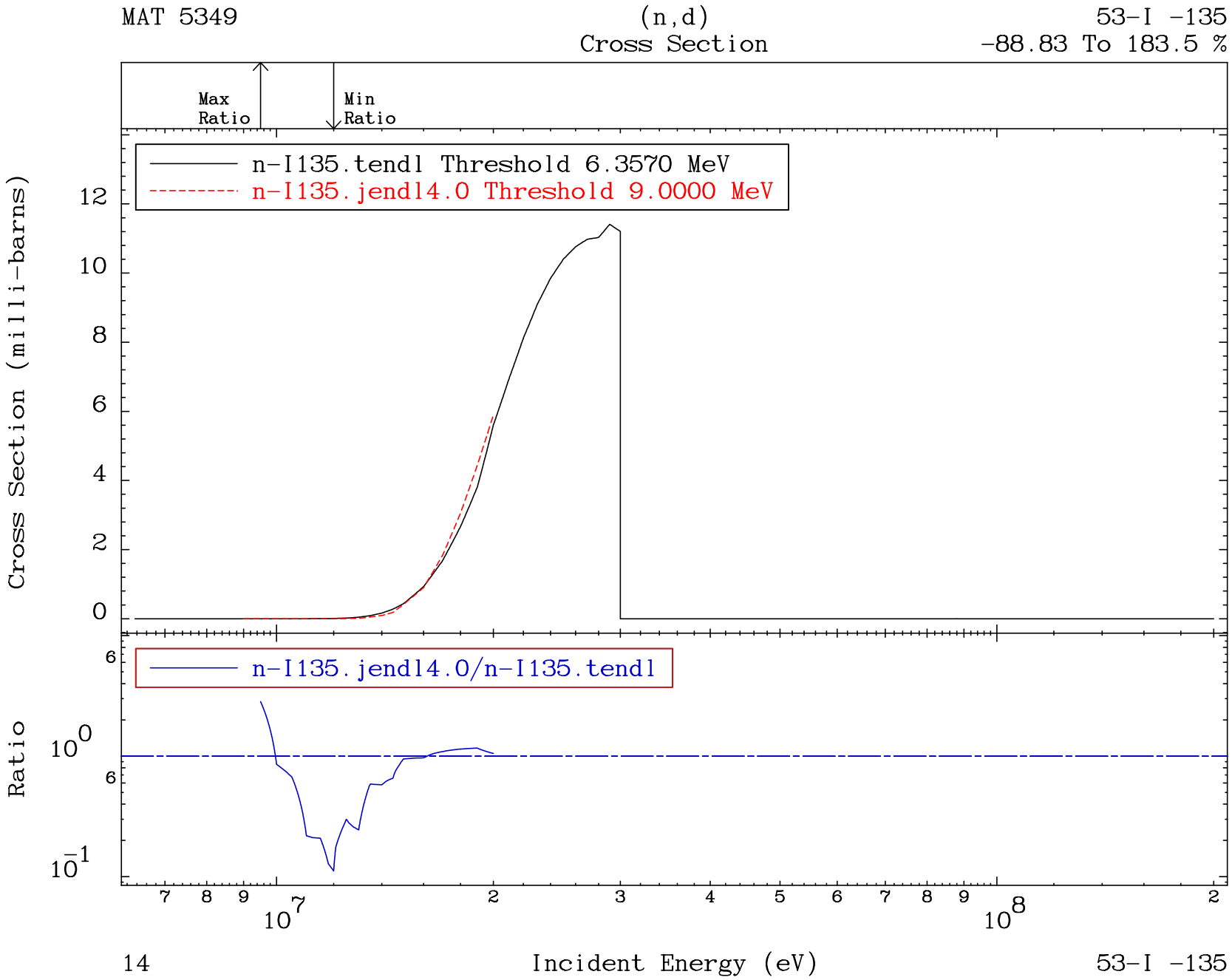

MAT 5349
MT= 51 (n,n') Level
Cross Section
53-I -135
-40.57 To 9568. %
Min Ratio
Max Ratio
n-I135.tendl Threshold 608.19 keV
n-I135.jendl4.0 Threshold 608.01 keV
Cross Section (milli-barns)
400
300
200
100
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^2
10^1
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
53-I -135

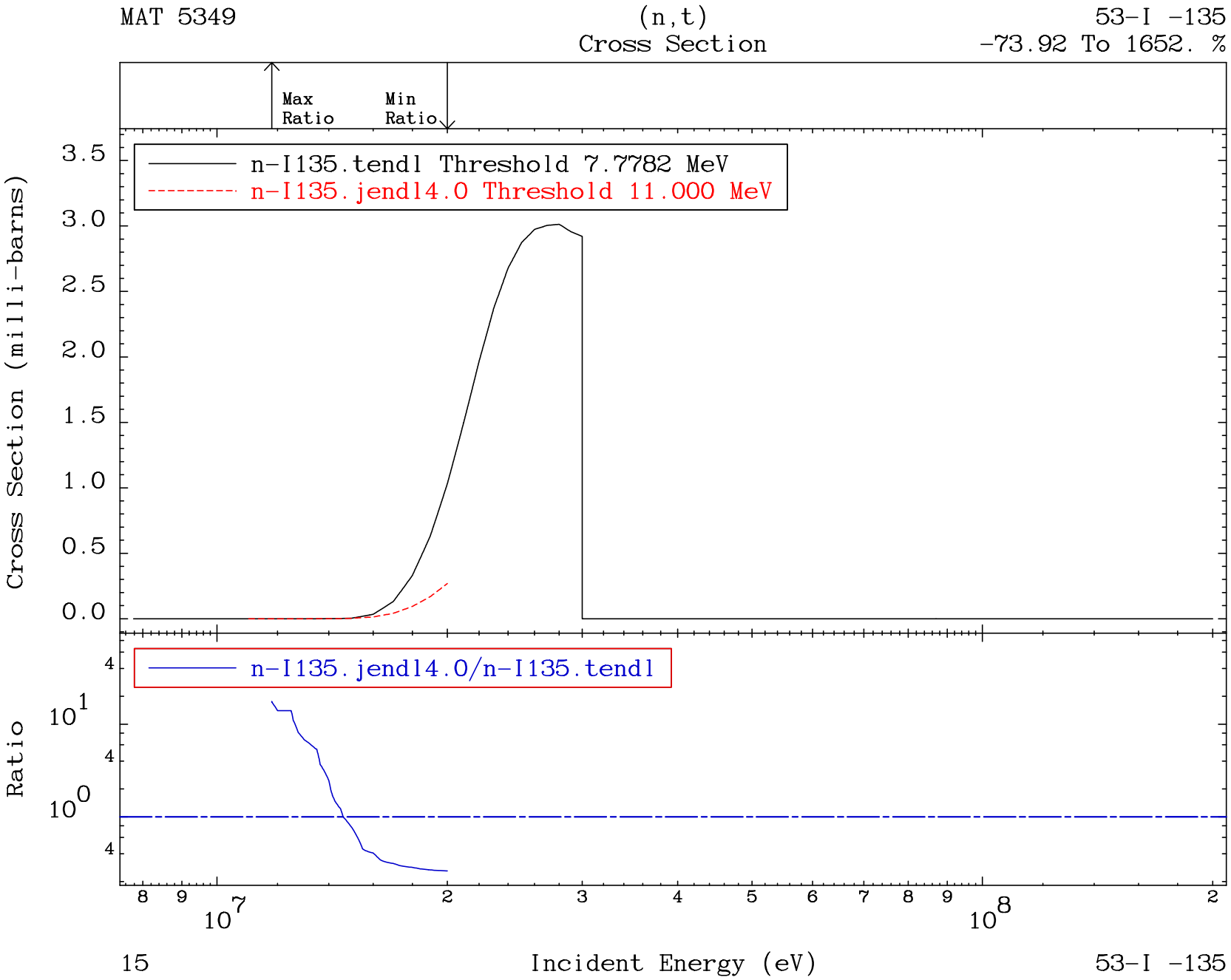

MAT 5349
MT= 52 (n,n') Level
Cross Section
53-I -135
-40.66 To 3482. %
Min Ratio
Max Ratio
n-I135.tendl Threshold 877.03 keV
n-I135.jendl4.0 Threshold 876.81 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^1
10^0
10^6
10^7
10^8
Incident Energy (eV)
10
53-I -135

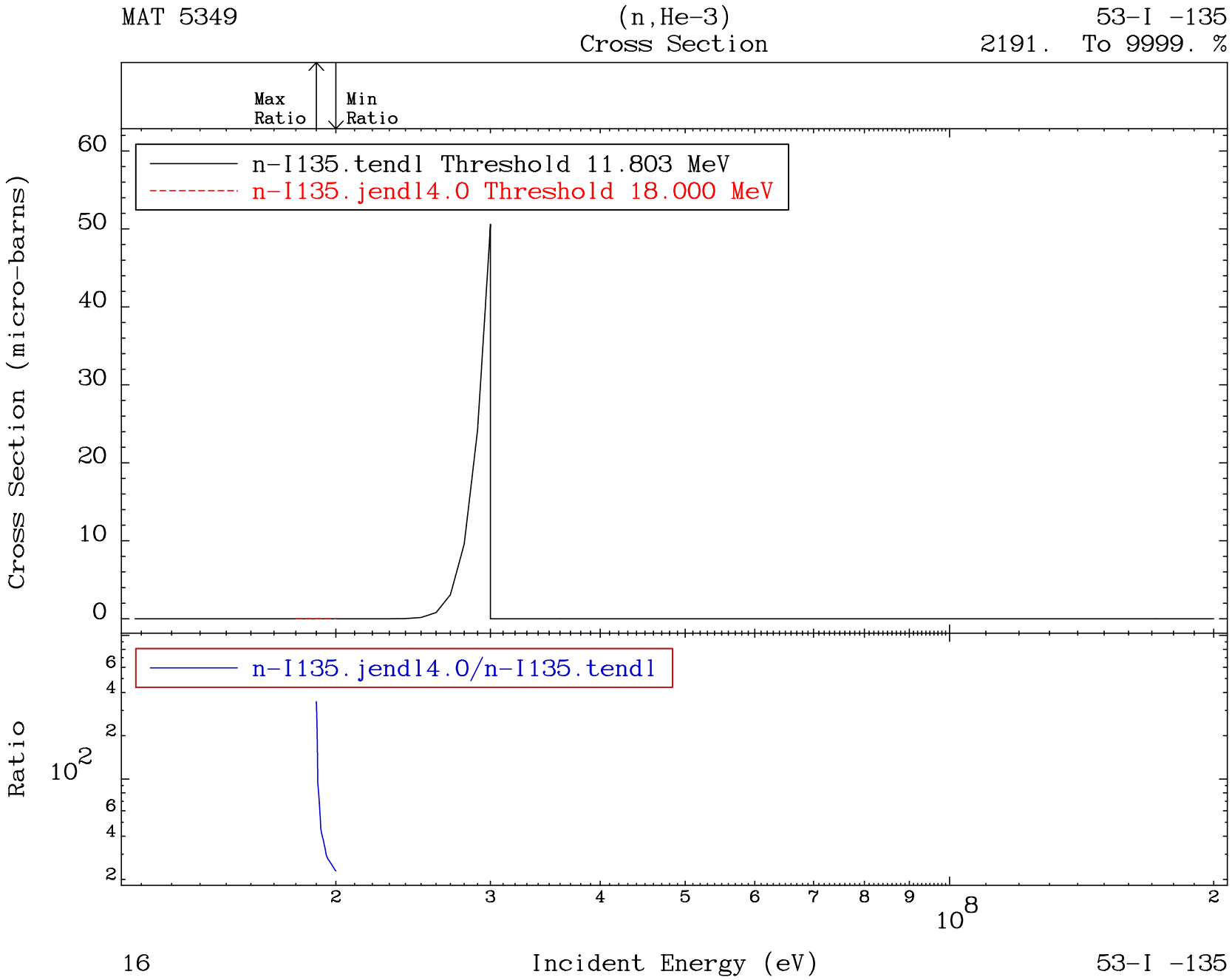

MAT 5349
(n,n') Continuum
Cross Section
53-I -135
-4.445 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl Threshold 4.8084 MeV
n-I135.jendl4.0 Threshold 886.88 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^4
10^2
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
53-I -135

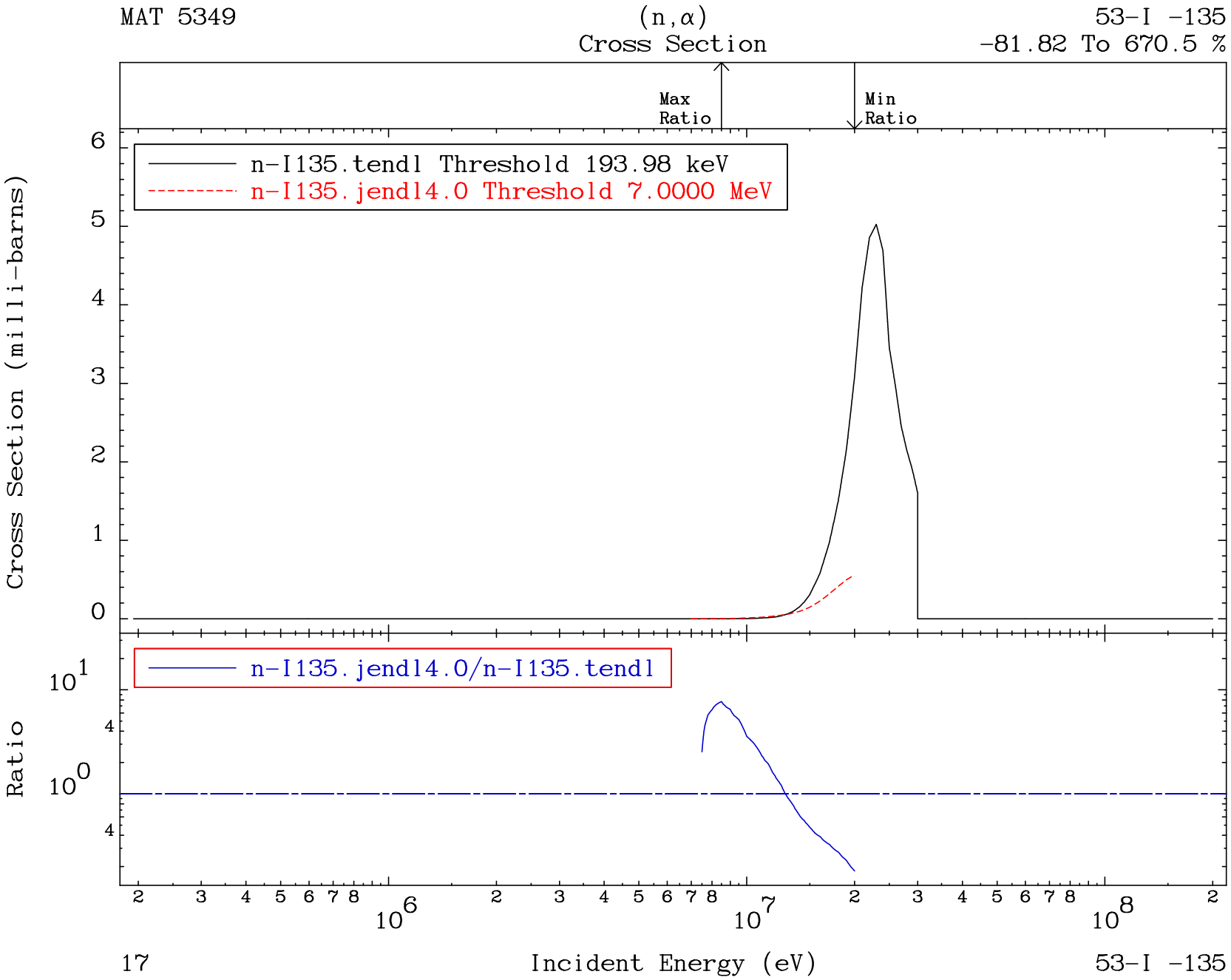

MAT 5349
(n,γ)
Cross Section
53-I -135
-99.99 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
12
53-I -135

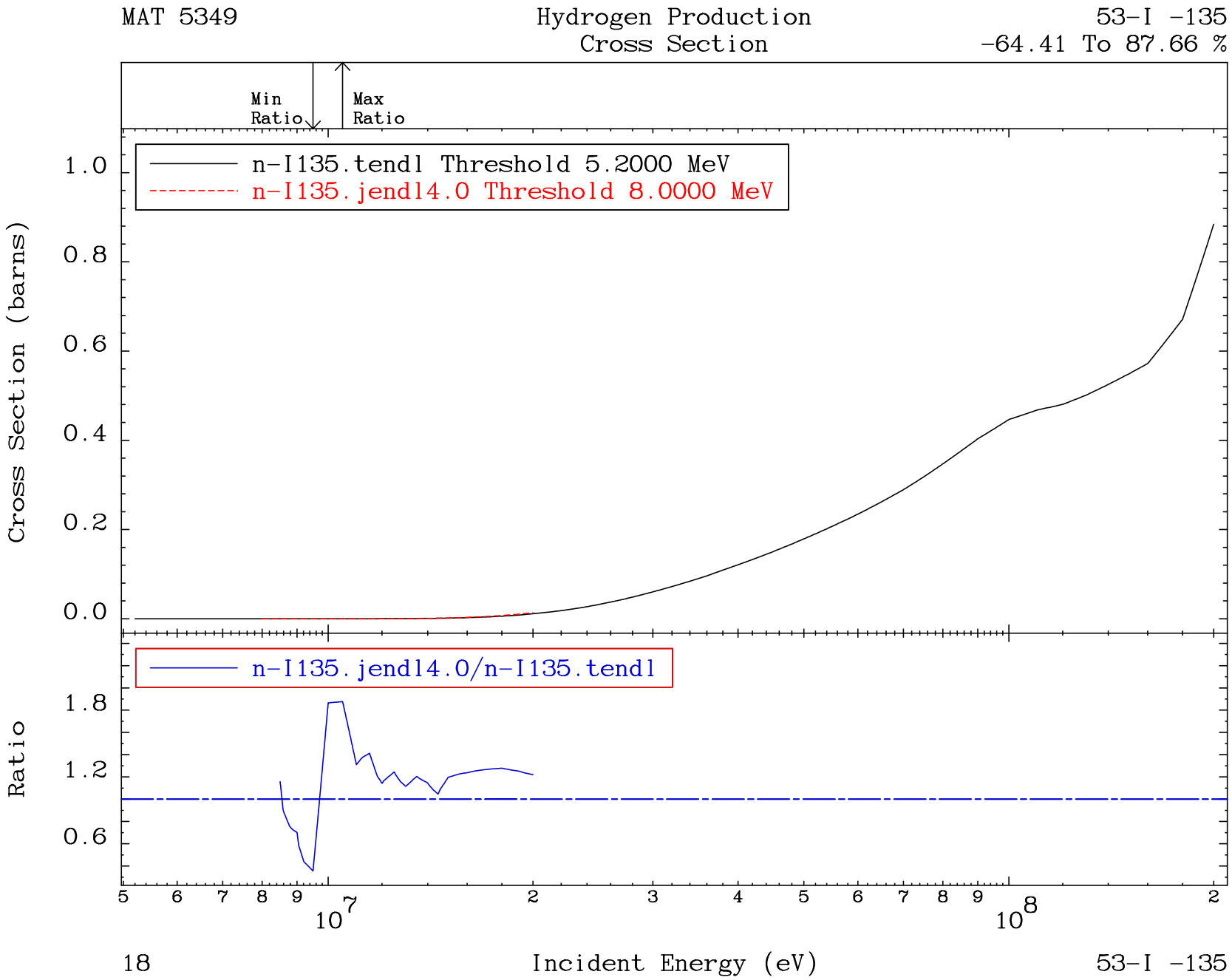

MAT 5349
(n,p)
Cross Section
53-I -135
-64.41 To 87.66 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 5.3074 MeV
n-I135.jendl4.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
0
2
4
6
n-I135.jendl4.0/n-I135.tendl
Ratio
0.6
1.2
1.8
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
53-I -135

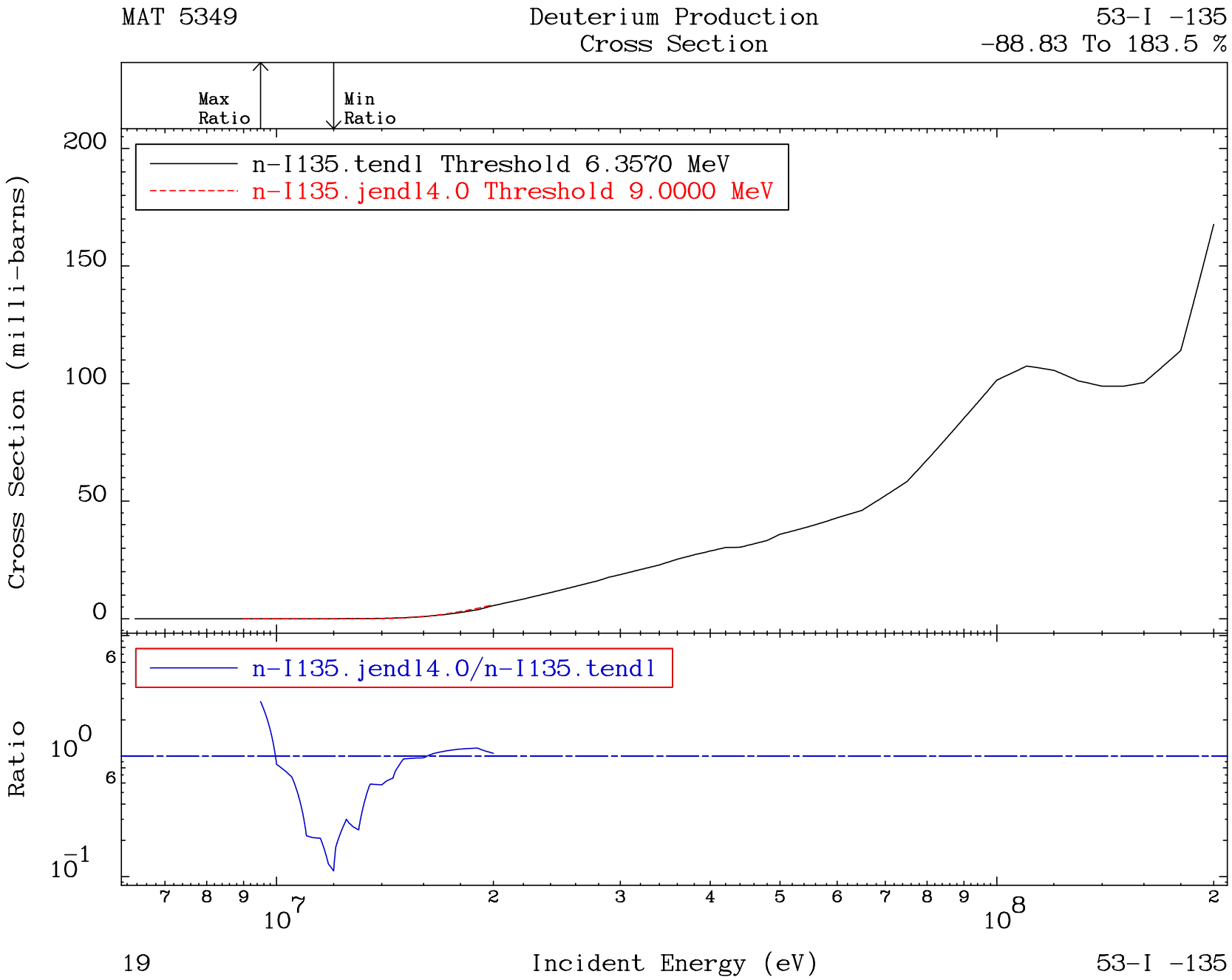

MAT 5349
(n,d)
Cross Section
53-I -135
-88.83 To 183.5 %
Max Ratio
Min Ratio
n-I135.tendl Threshold 6.3570 MeV
n-I135.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-I135.jendl4.0/n-I135.tendl
Ratio
10^{-1}
10^{0}
6
10^{7}
10^{8}
7 8 9 2 3 4 5 6 7 8 9 2
14
Incident Energy (eV)
53-I -135

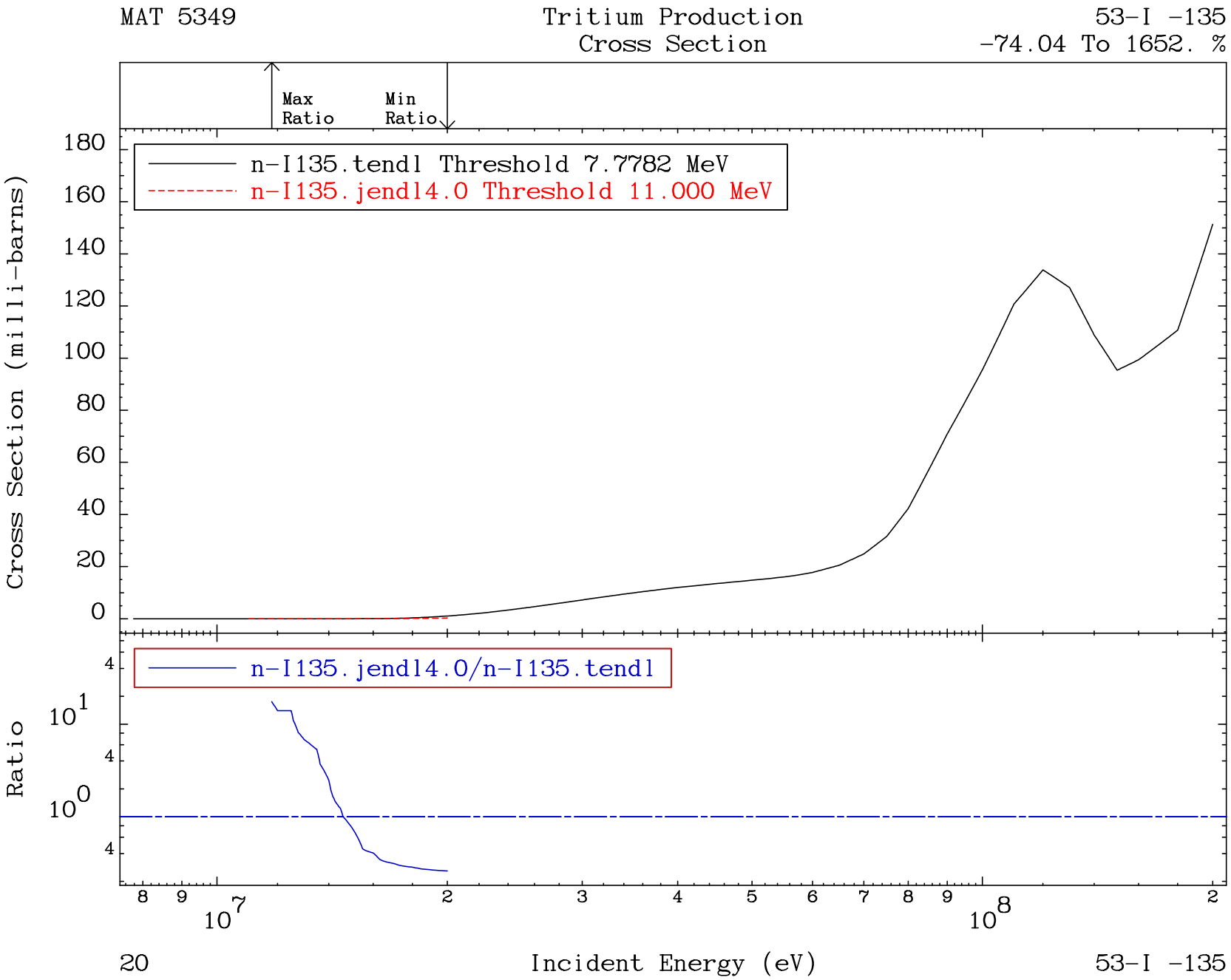

MAT 5349
(n,t)
Cross Section
53-I -135
-73.92 To 1652. %
Max Ratio
Min Ratio
n-I135.tendl Threshold 7.7782 MeV
n-I135.jendl4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^1
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
53-I -135

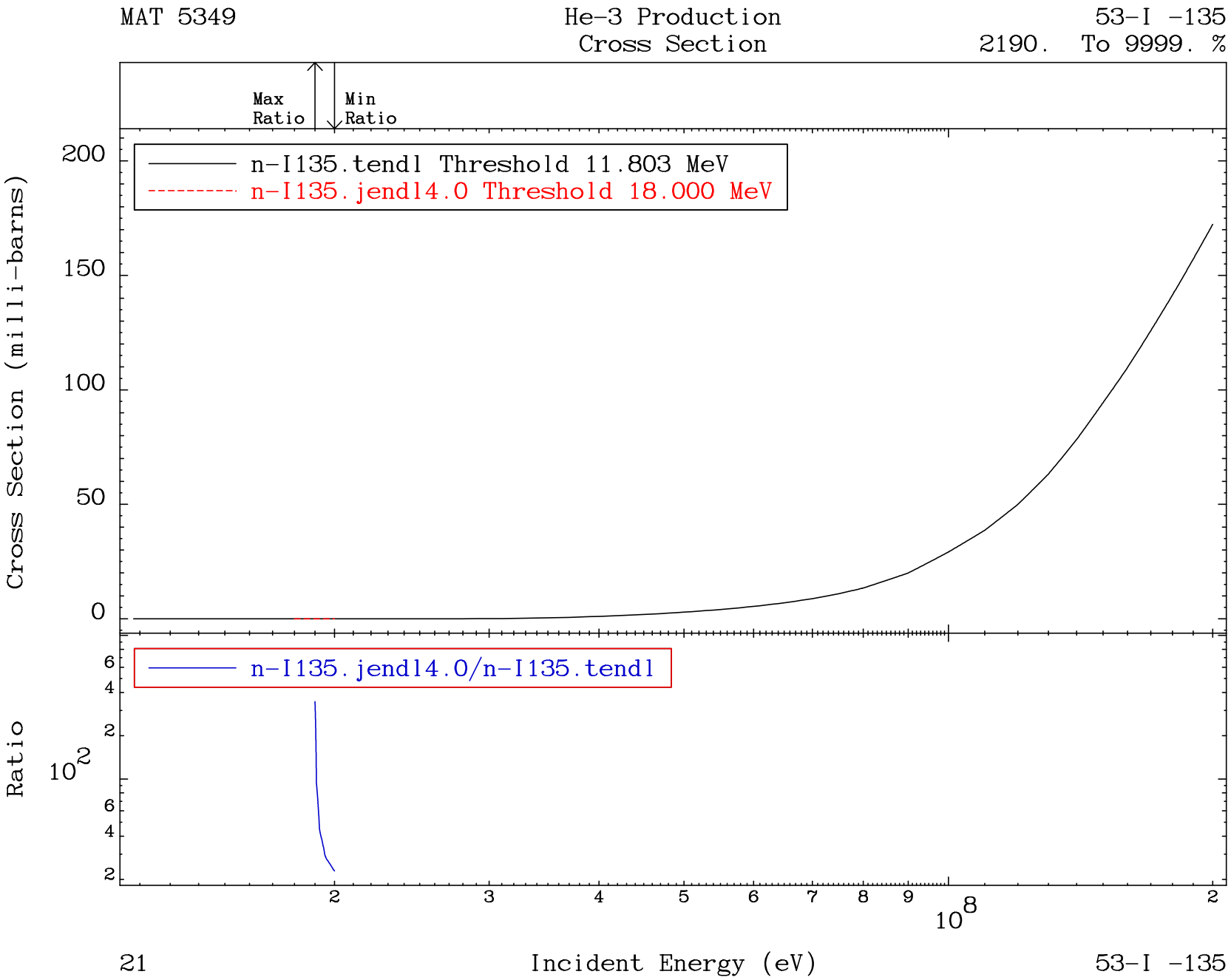

MAT 5349
(n,He-3)
Cross Section
53-I -135
2191. To 9999. %
Max Ratio
Min Ratio
n-I135.tendl Threshold 11.803 MeV
n-I135.jendl4.0 Threshold 18.000 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^2
6
4
2
6
4
2
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
53-I -135

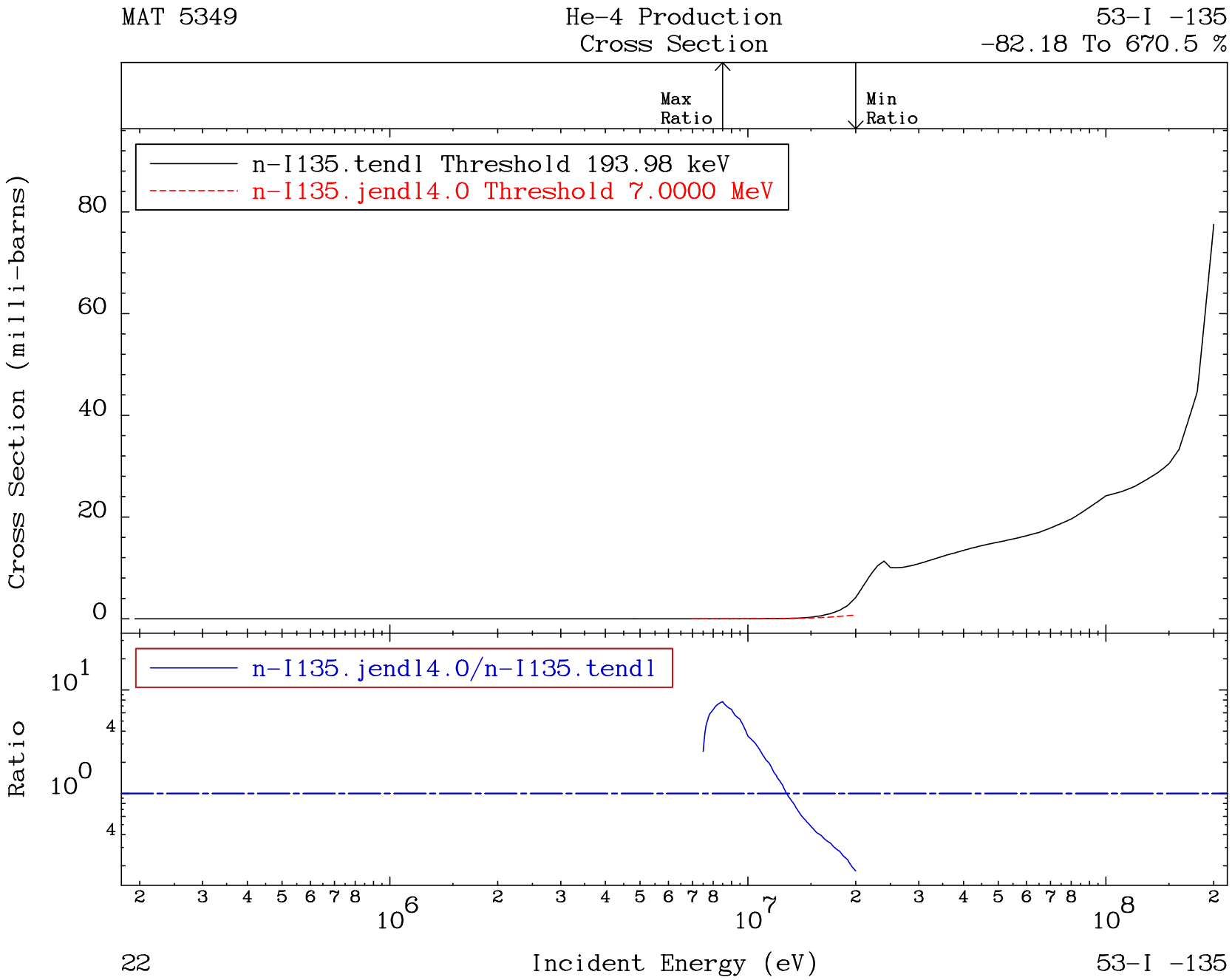

MAT 5349
(n,α)
Cross Section
53-I -135
-81.82 To 670.5 %
Max Ratio
Min Ratio
n-I135.tendl Threshold 193.98 keV
n-I135.jendl4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
17
53-I -135

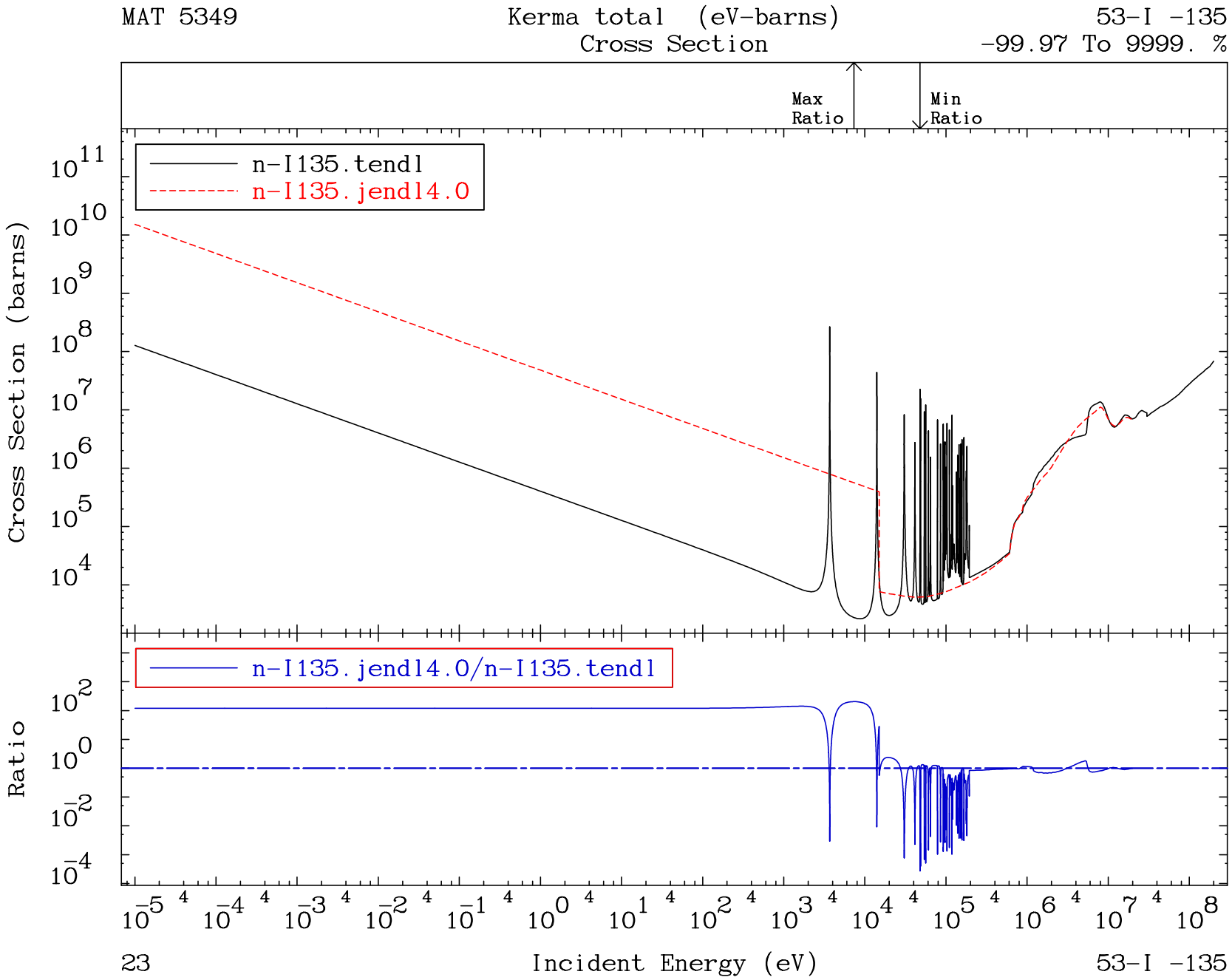

MAT 5349
Hydrogen Production
Cross Section
53-I -135
-64.41 To 87.66 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 5.2000 MeV
n-I135.jendl4.0 Threshold 8.0000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-I135.jendl4.0/n-I135.tendl
Ratio
1.8
1.2
0.6
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
53-I -135

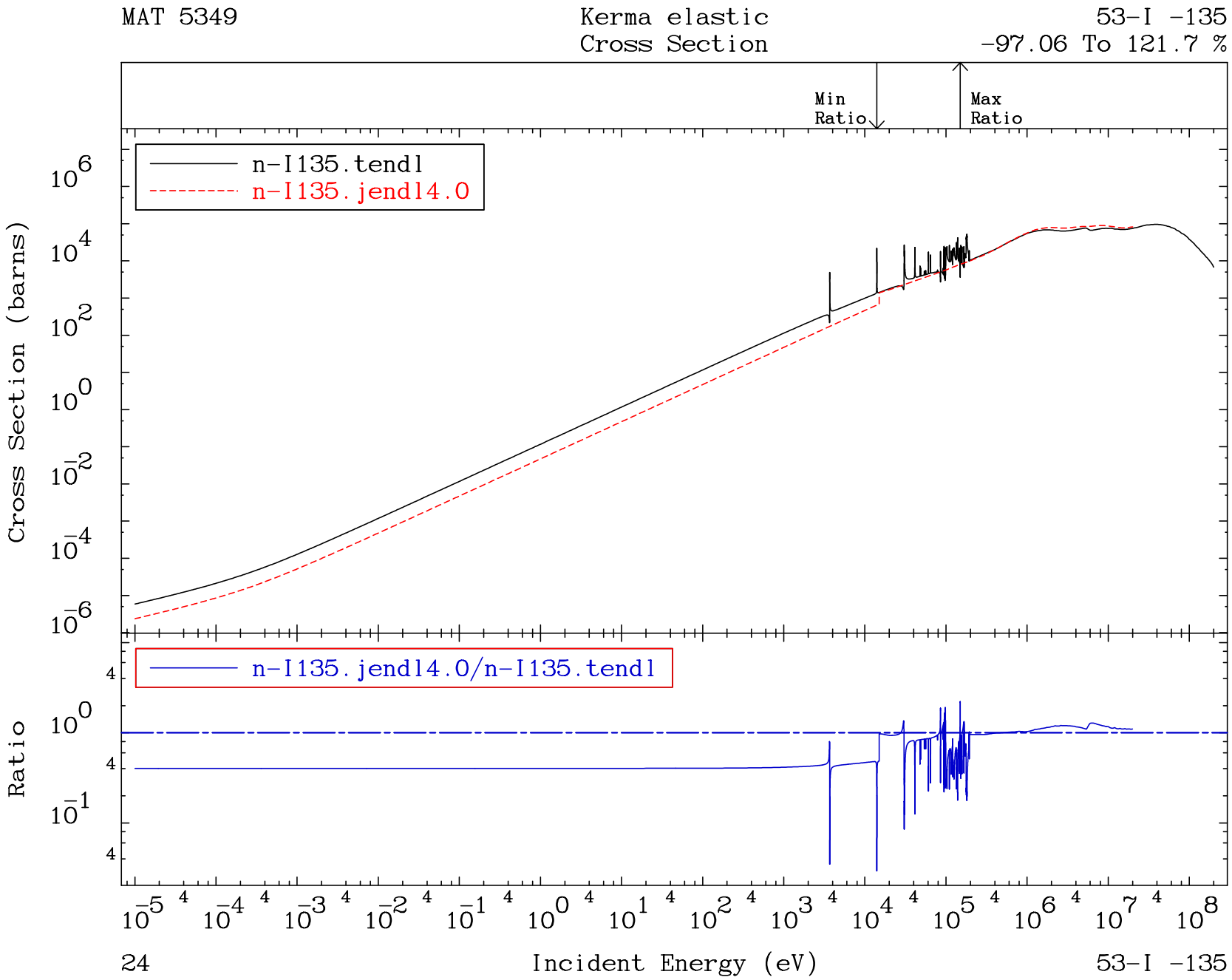

MAT 5349
Deuterium Production
Cross Section
53-I -135
-88.83 To 183.5 %
Max Ratio
Min Ratio
n-I135.tendl Threshold 6.3570 MeV
n-I135.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-I135.jendl4.0/n-I135.tendl
Ratio
6
10^0
6
10^{-1}
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
53-I -135

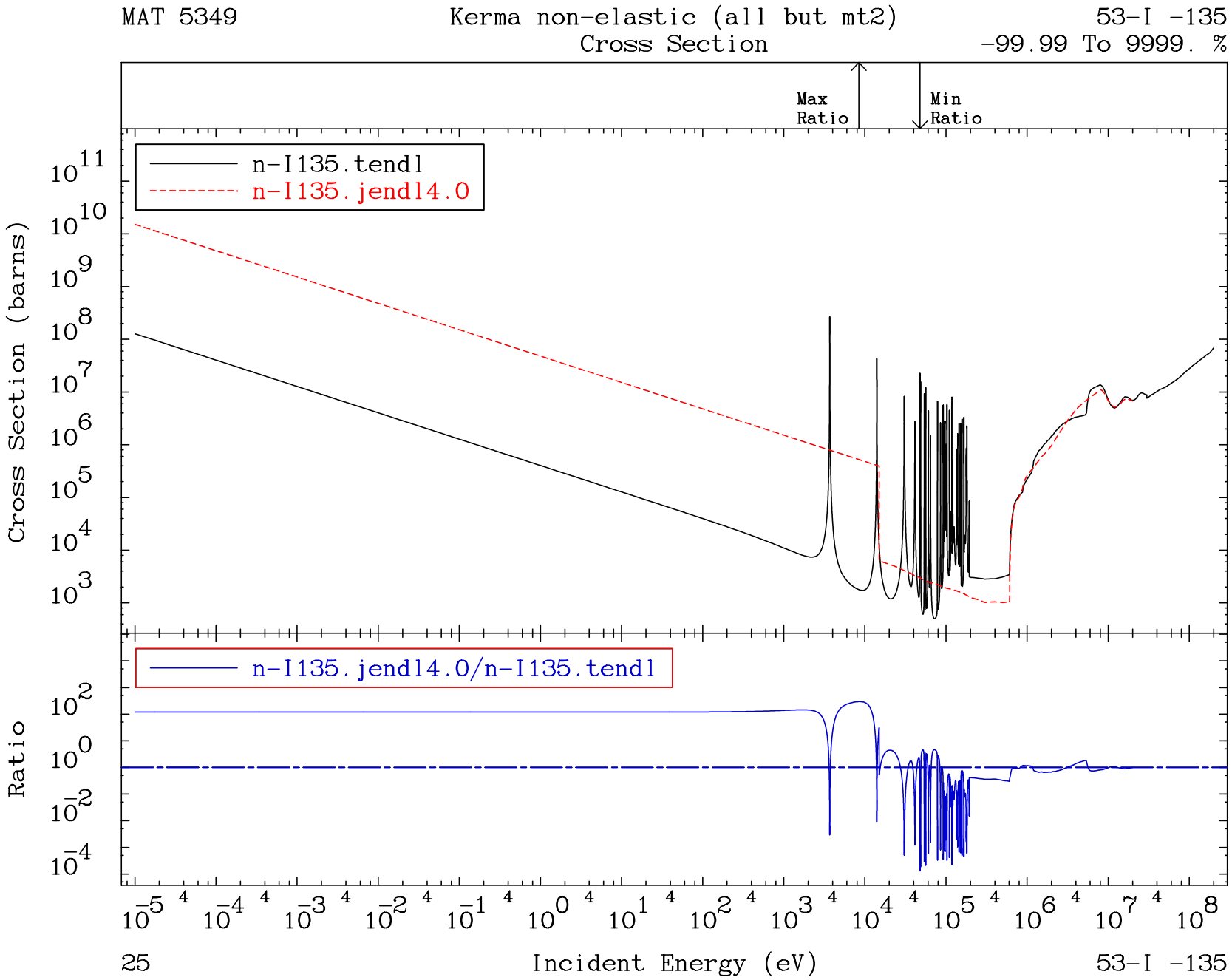

MAT 5349
Tritium Production
Cross Section
53-I -135
-74.04 To 1652. %
Max Ratio
Min Ratio
n-I135.tendl Threshold 7.7782 MeV
n-I135.jendl4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^1
10^0
4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
53-I -135

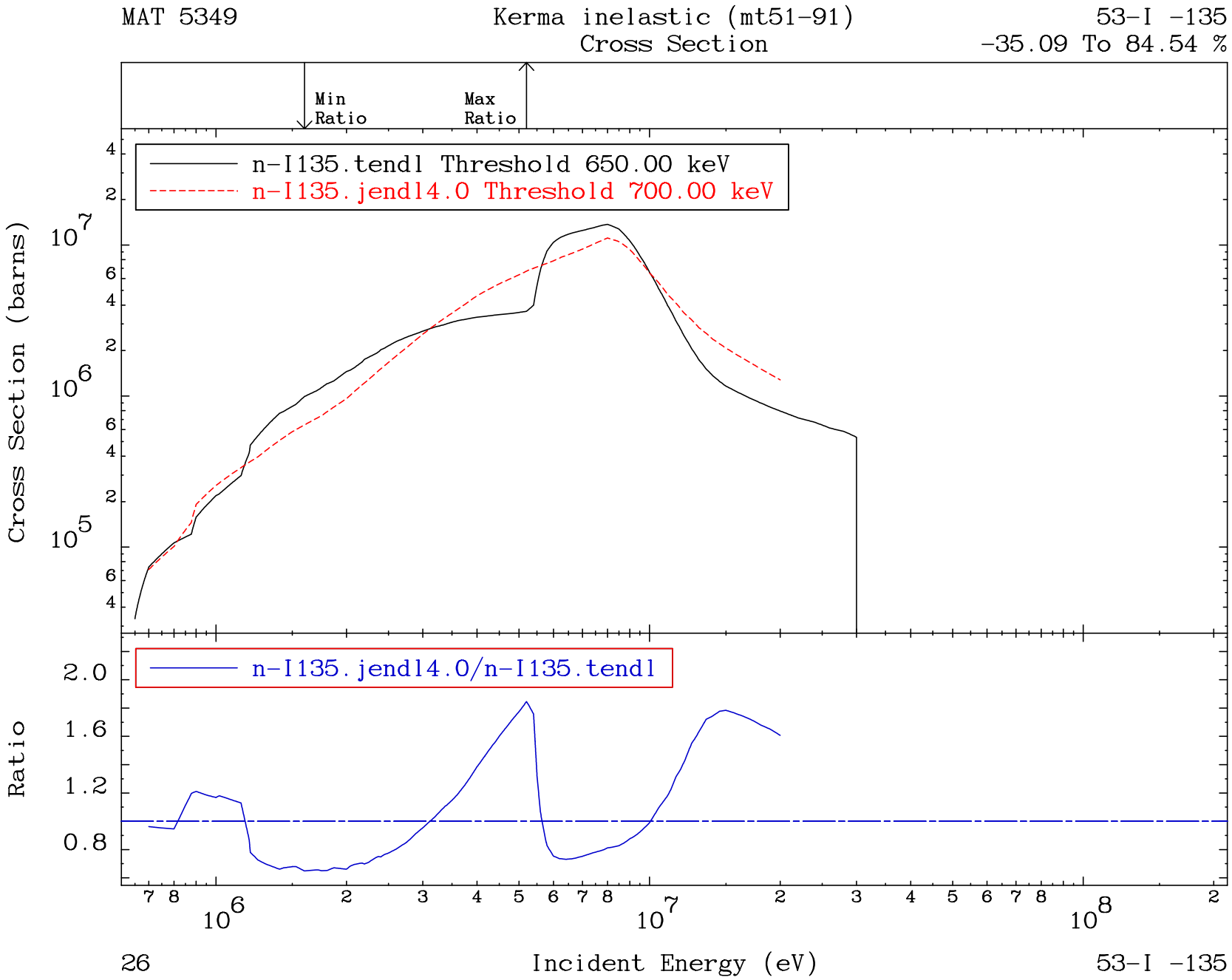

MAT 5349
He-3 Production
Cross Section
53-I -135
2190. To 9999. %
Max Ratio
Min Ratio
n-I135.tendl Threshold 11.803 MeV
n-I135.jendl4.0 Threshold 18.000 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^2
6
4
2
6
4
2
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
53-I -135

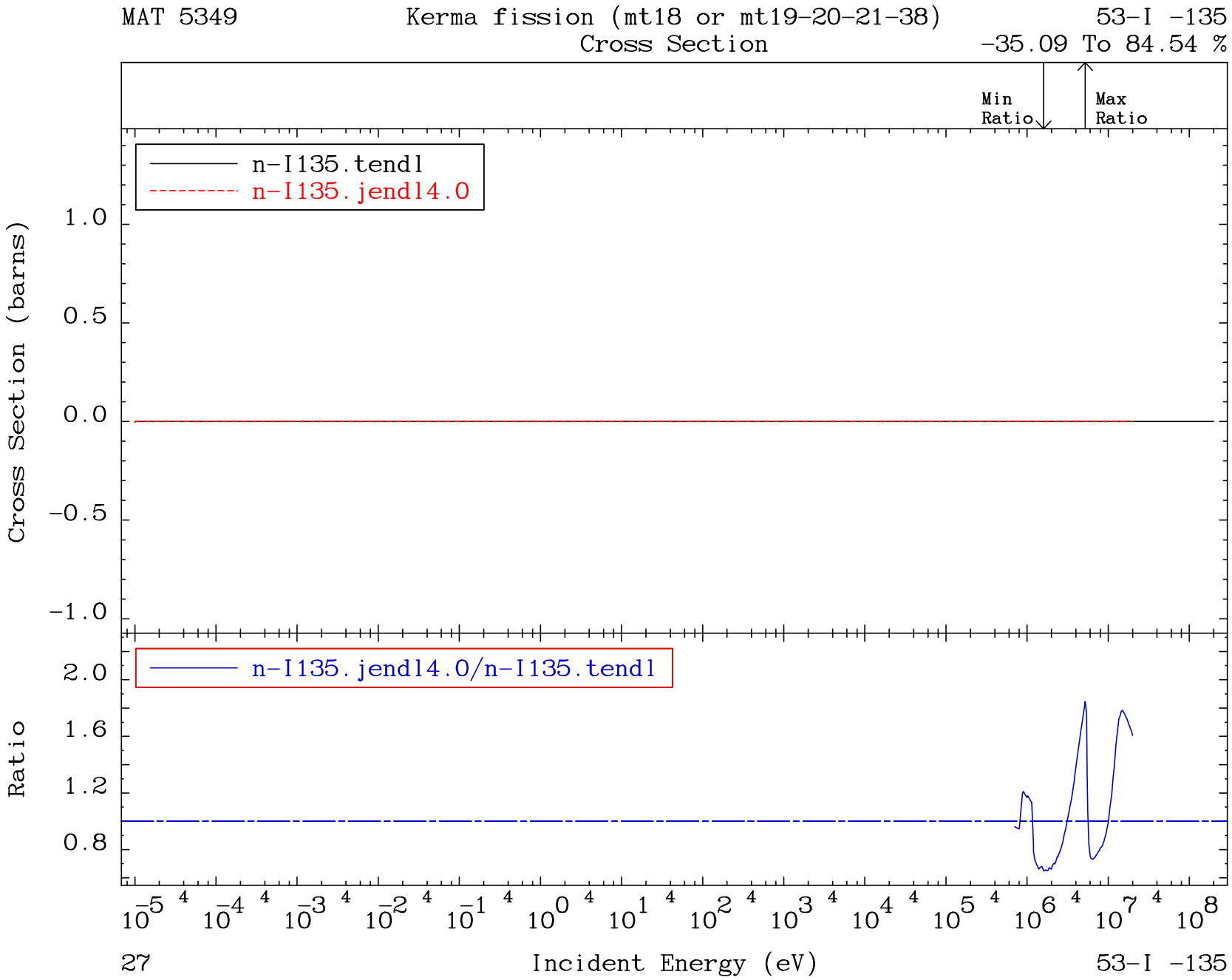

MAT 5349
He-4 Production
Cross Section
53-I -135
-82.18 To 670.5 %
Max
Ratio
Min
Ratio
n-I135.tendl Threshold 193.98 keV
n-I135.jendl4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
0
20
40
60
80
n-I135.jendl4.0/n-I135.tendl
Ratio
10^1
10^0
4
4
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
53-I -135

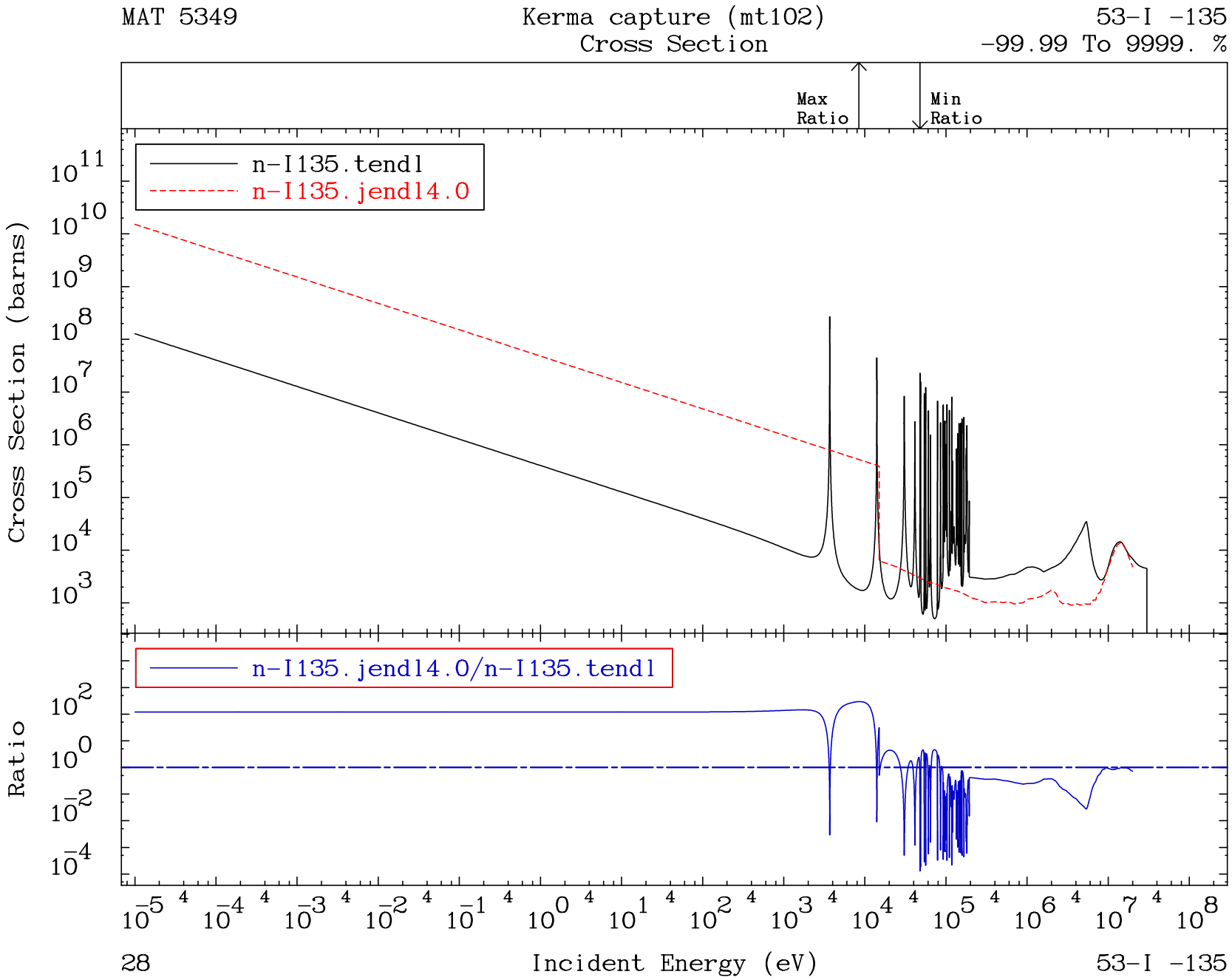

MAT 5349
Kerma total (eV-barns)
Cross Section
53-I -135
-99.97 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
23
53-I -135

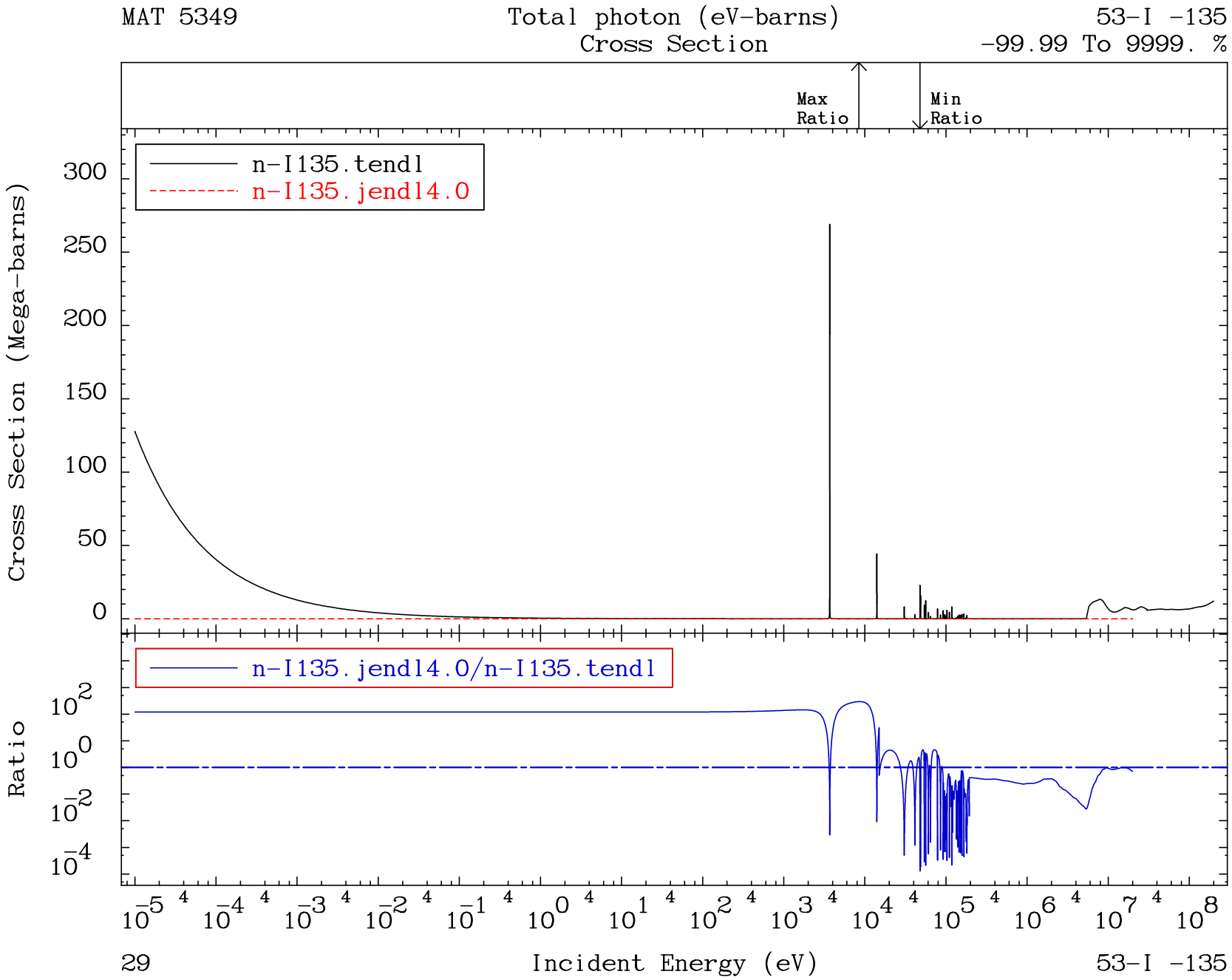

MAT 5349
Kerma elastic
Cross Section
53-I -135
-97.06 To 121.7 %
Min
Ratio
Max
Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
Ratio
n-I135.jendl4.0/n-I135.tendl
Incident Energy (eV)
24
53-I -135

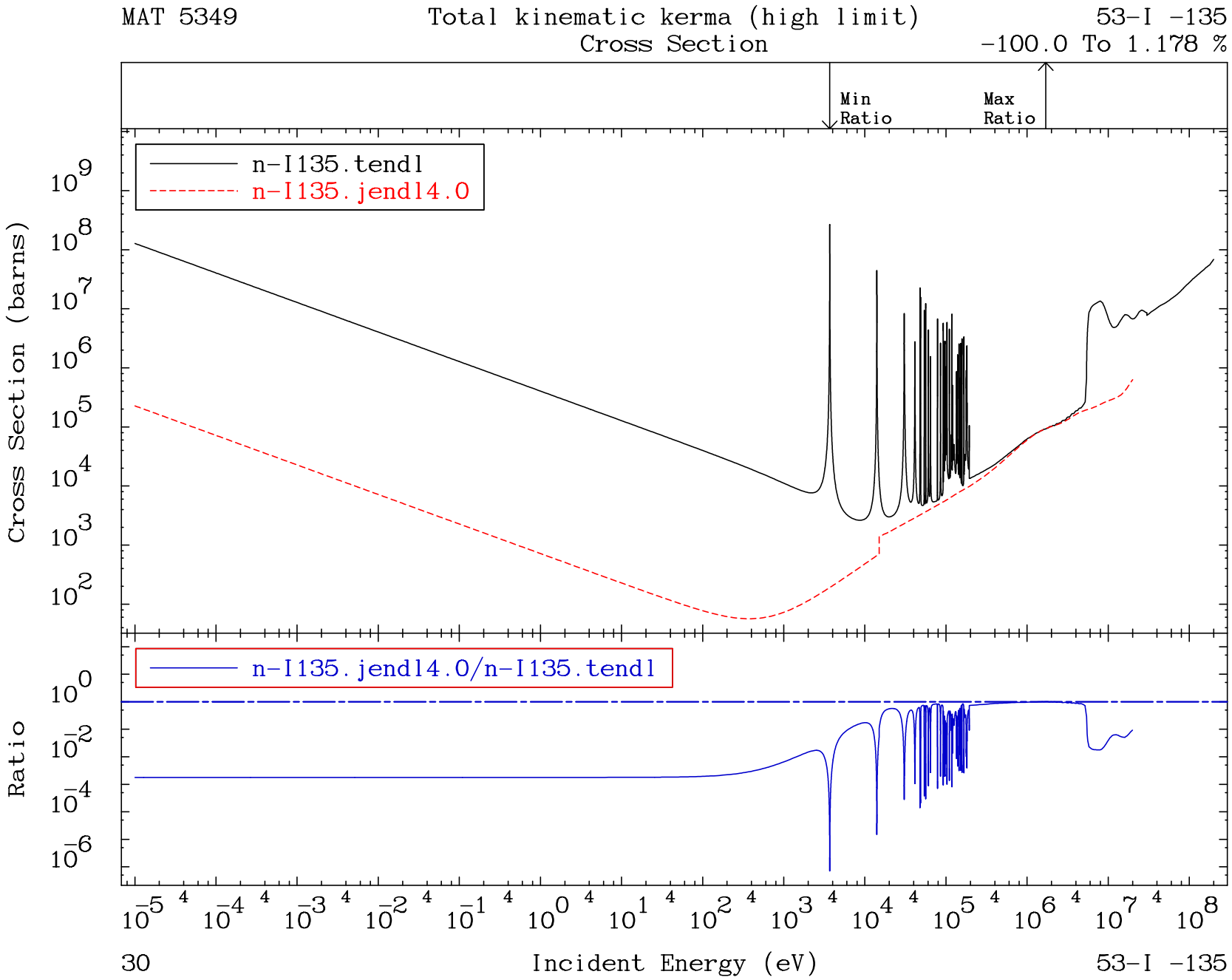

MAT 5349
Kerma non-elastic (all but mt2)
Cross Section
53-I -135
-99.99 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
25
53-I -135

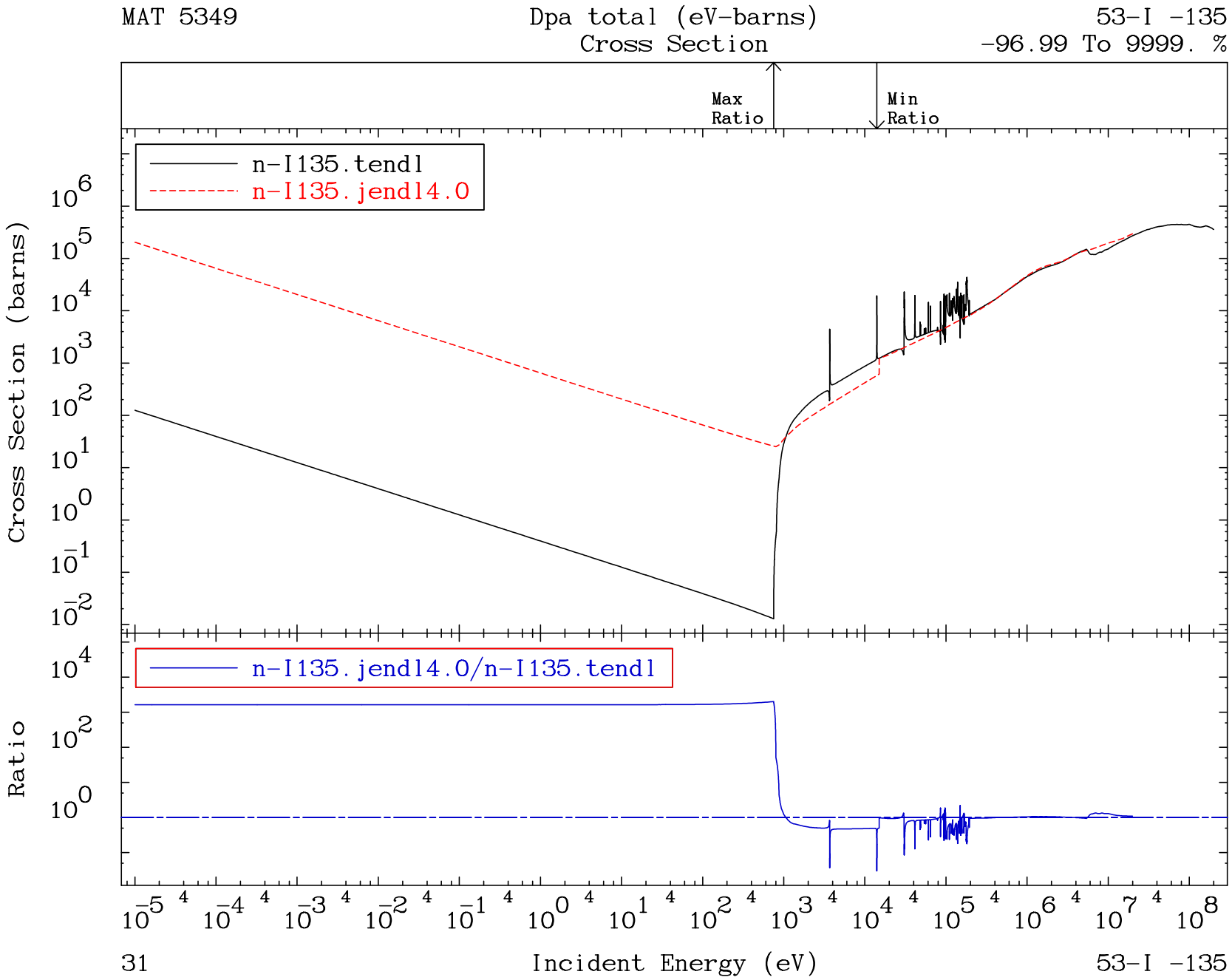

MAT 5349
Kerma inelastic (mt51-91)
Cross Section
53-I -135
-35.09 To 84.54 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 650.00 keV
n-I135.jendl4.0 Threshold 700.00 keV
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
26
53-I -135

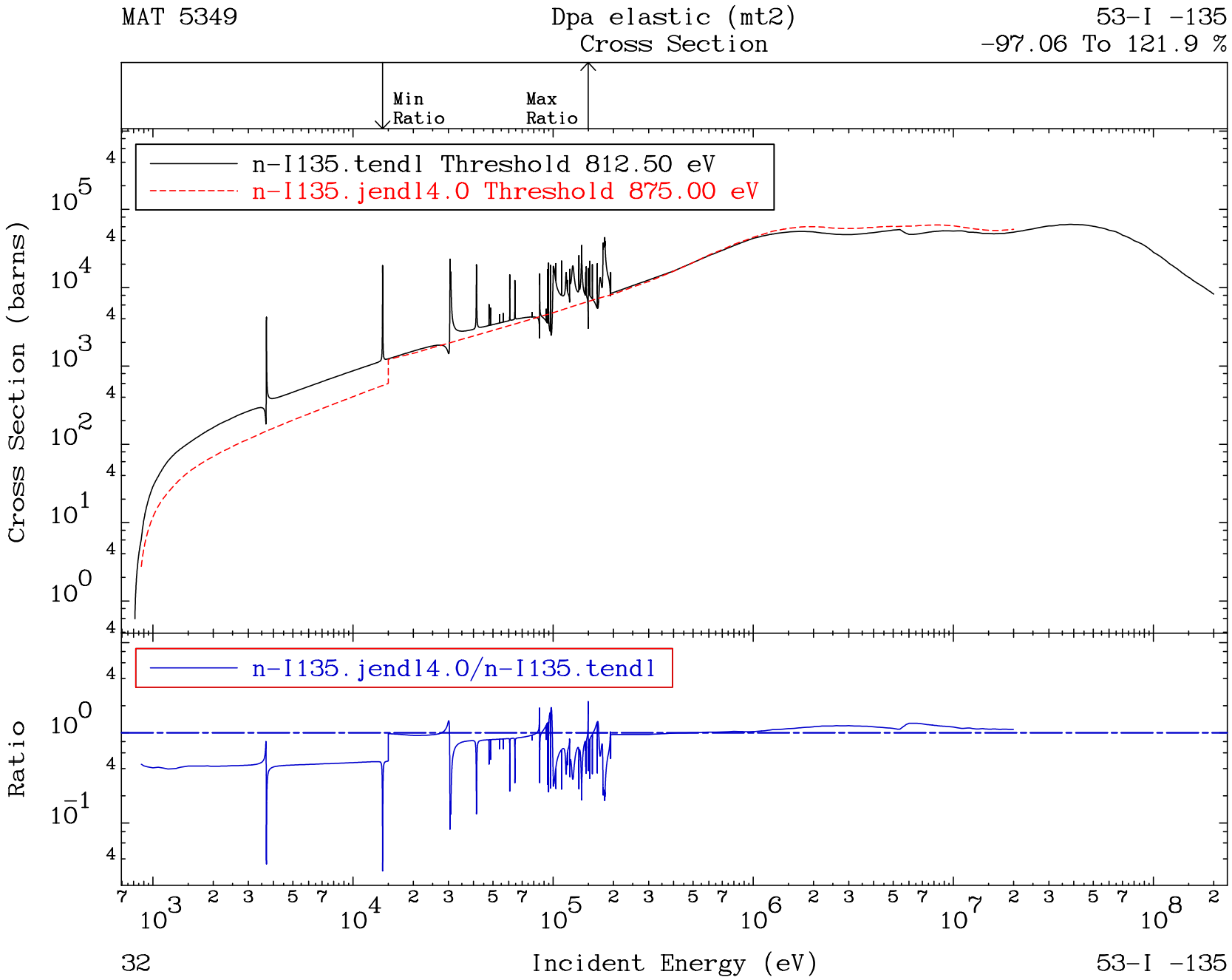

MAT 5349
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
53-I -135
-35.09 To 84.54 %
Min Ratio
Max Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-I135.jendl4.0/n-I135.tendl
Ratio
2.0
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
53-I -135

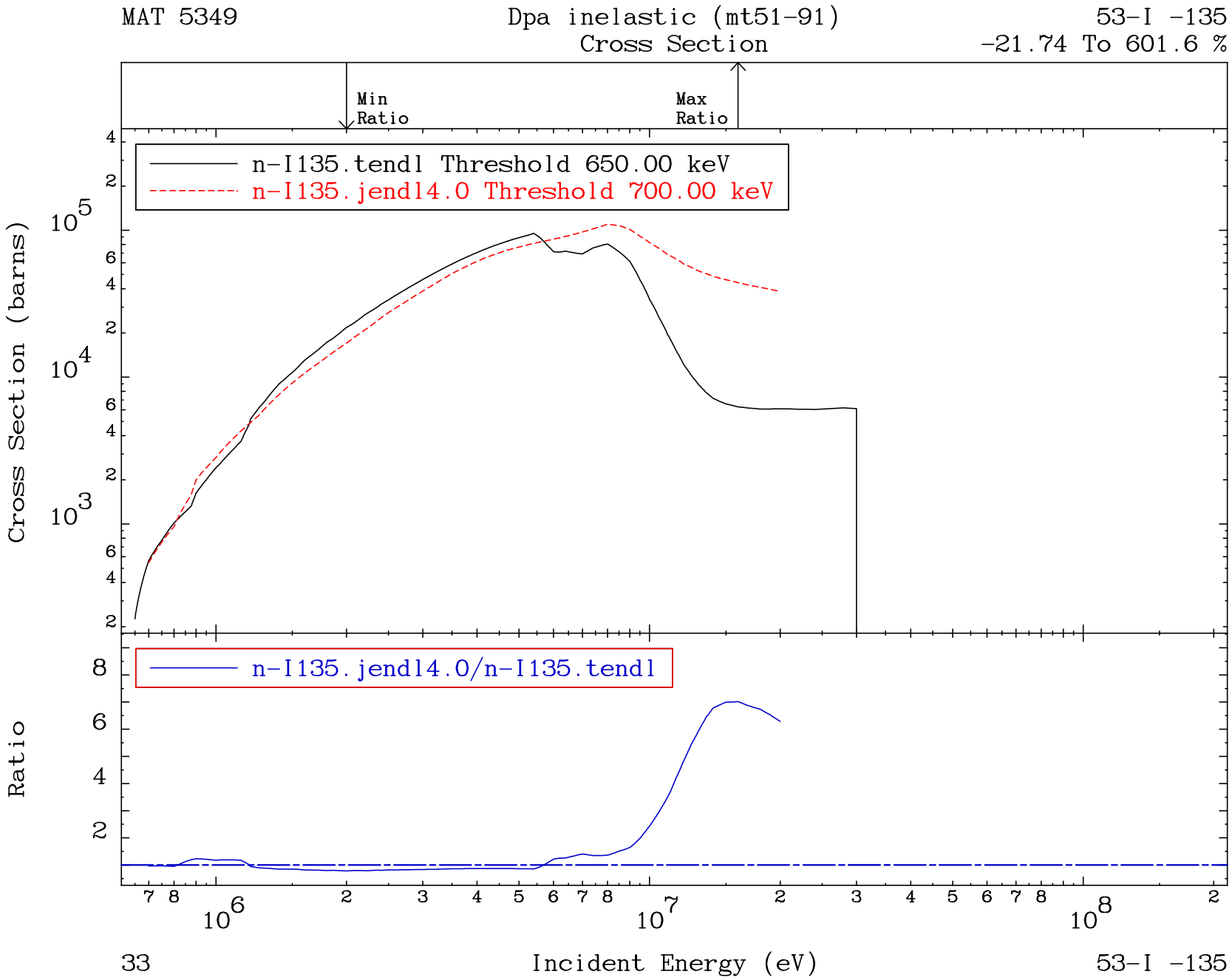

MAT 5349
Kerma capture (mt102)
Cross Section
53-I -135
-99.99 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
28
53-I -135

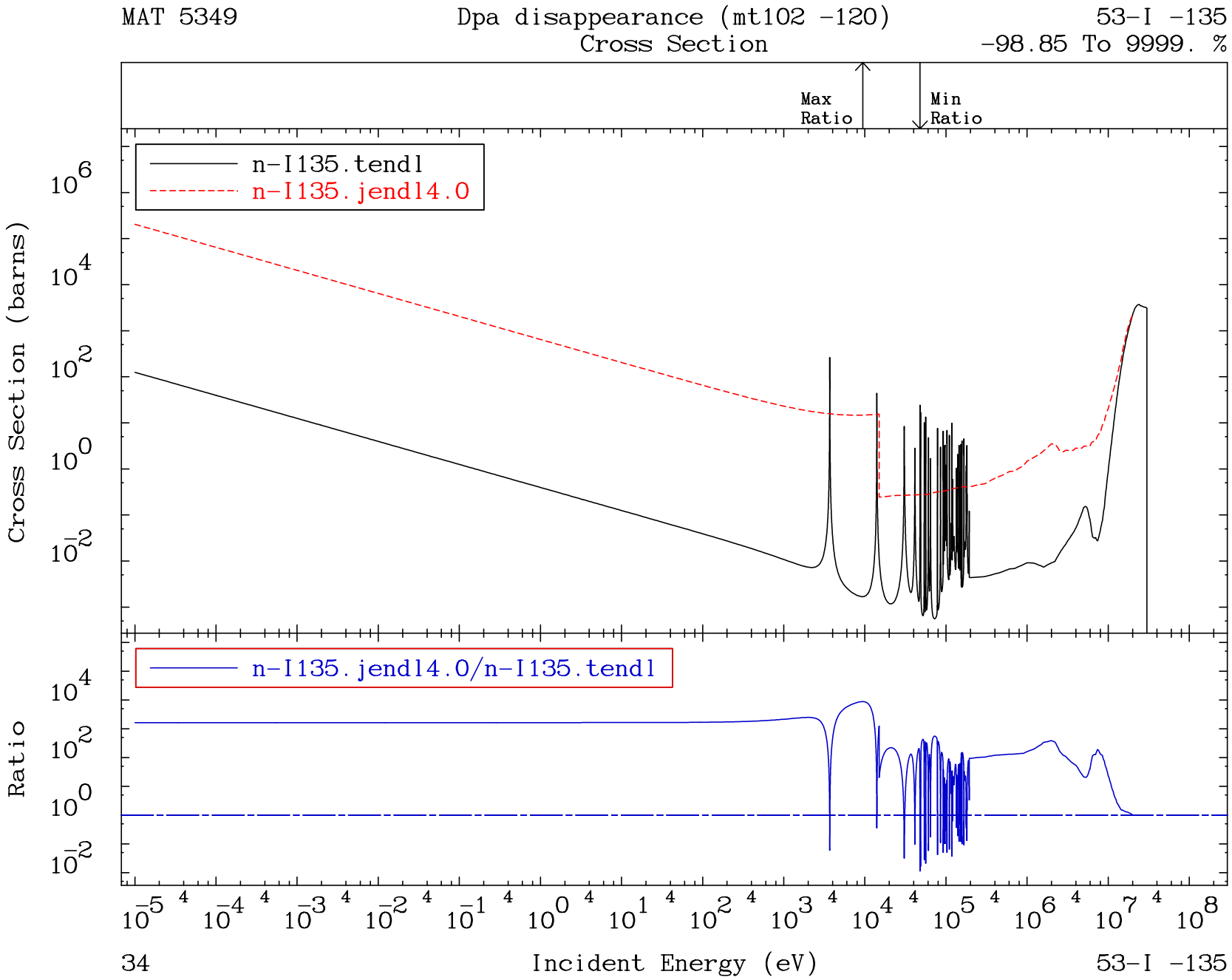

MAT 5349
Total photon (eV-barns)
Cross Section
53-I -135
-99.99 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (Mega-barns)
300
250
200
150
100
50
0
n-I135.jendl4.0/n-I135.tendl
Ratio
10^2
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
53-I -135


MAT 5349
Total kinematic kerma (high limit)
Cross Section
53-I -135
-100.0 To 1.178 %
Min Ratio
Max Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
30
53-I -135


MAT 5349
Dpa total (eV-barns)
Cross Section
53-I -135
-96.99 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
31
Incident Energy (eV)
53-I -135


MAT 5349
Dpa elastic (mt2)
Cross Section
53-I -135
-97.06 To 121.9 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 812.50 eV
n-I135.jendl4.0 Threshold 875.00 eV
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
32
53-I -135


MAT 5349
Dpa inelastic (mt51-91)
Cross Section
53-I -135
-21.74 To 601.6 %
Min Ratio
Max Ratio
n-I135.tendl Threshold 650.00 keV
n-I135.jendl4.0 Threshold 700.00 keV
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
Incident Energy (eV)
33
53-I -135


MAT 5349
Dpa disappearance (mt102 -120)
Cross Section
53-I -135
-98.85 To 9999. %
Max Ratio
Min Ratio
n-I135.tendl
n-I135.jendl4.0
Cross Section (barns)
n-I135.jendl4.0/n-I135.tendl
Ratio
34
Incident Energy (eV)
53-I -135