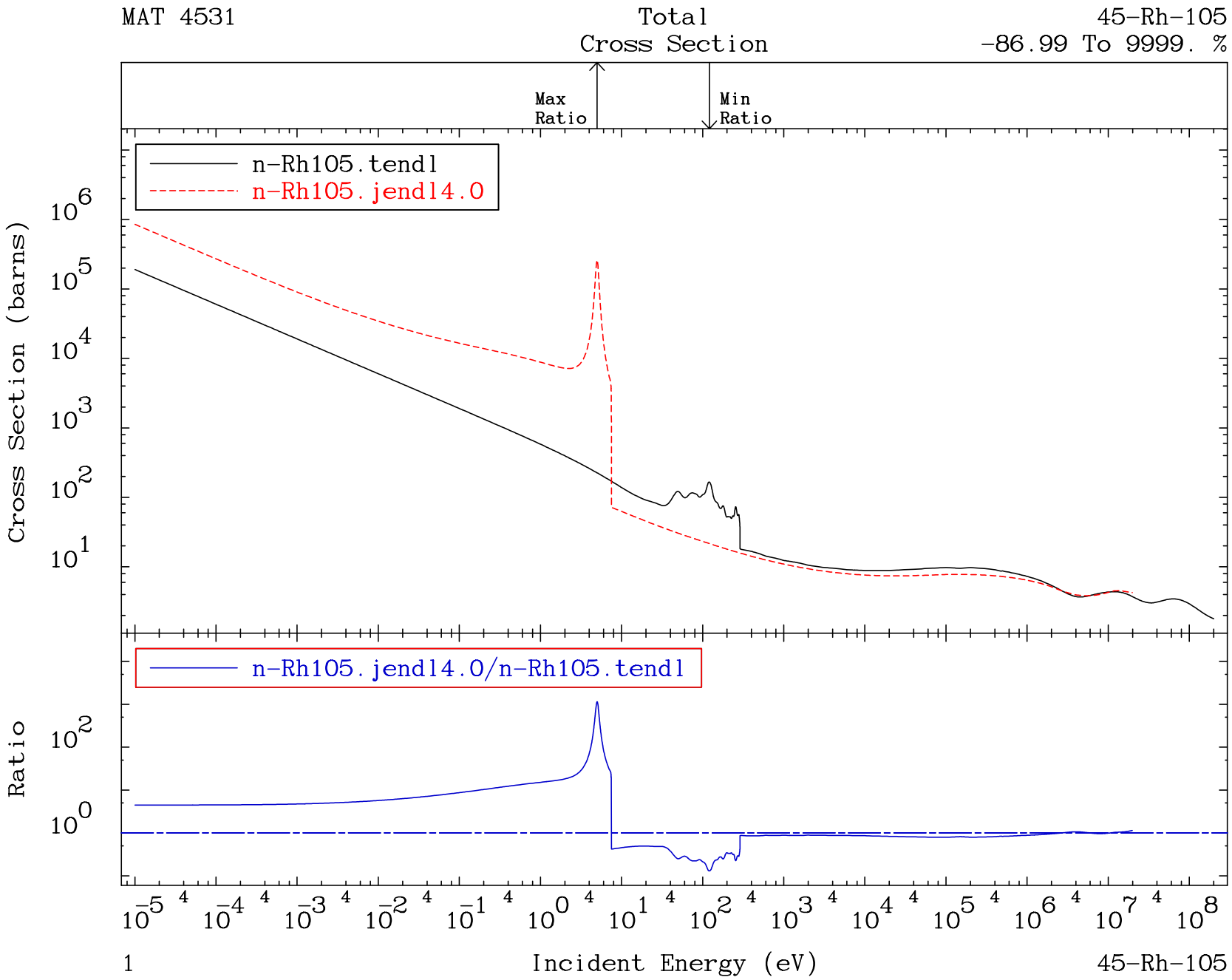
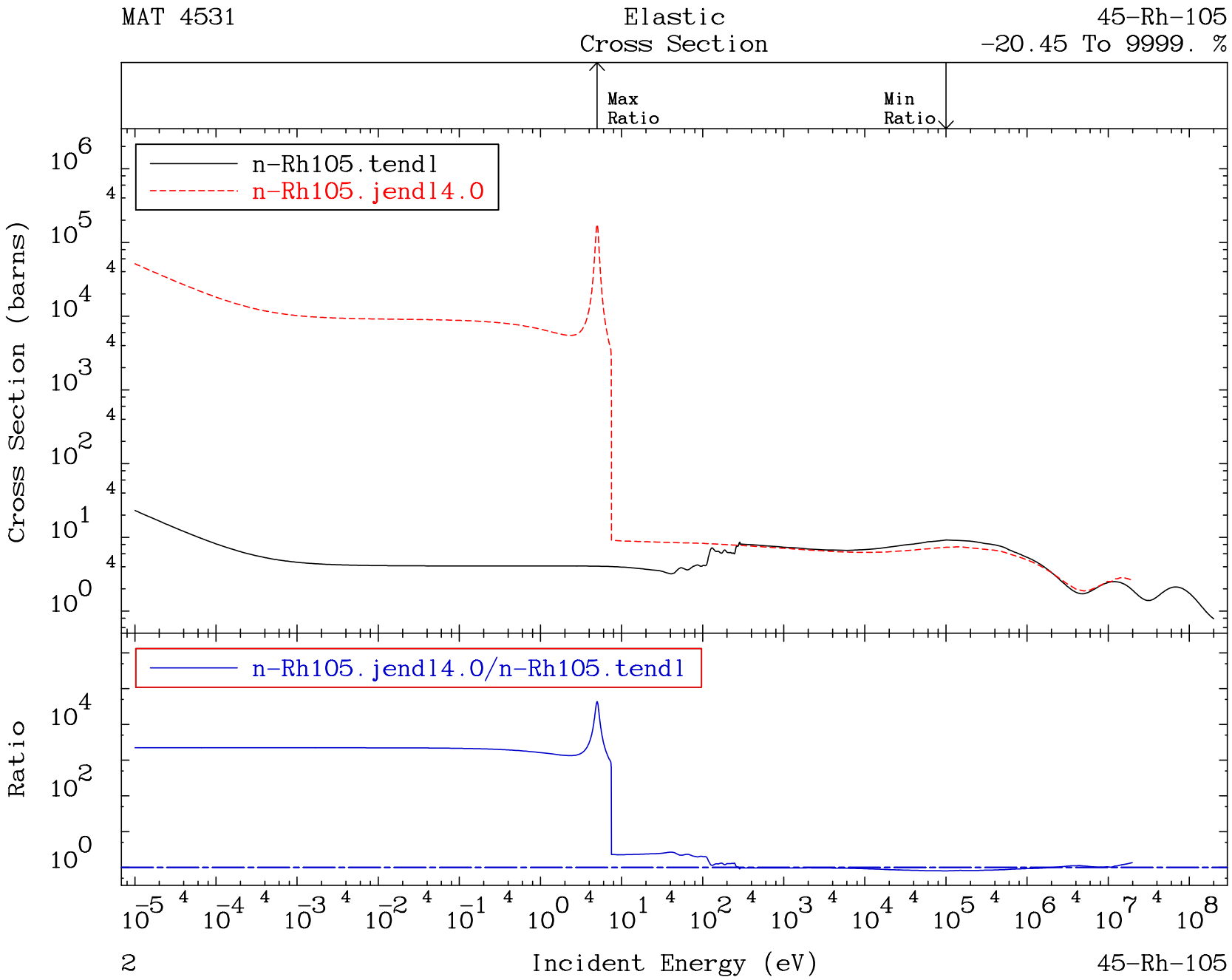
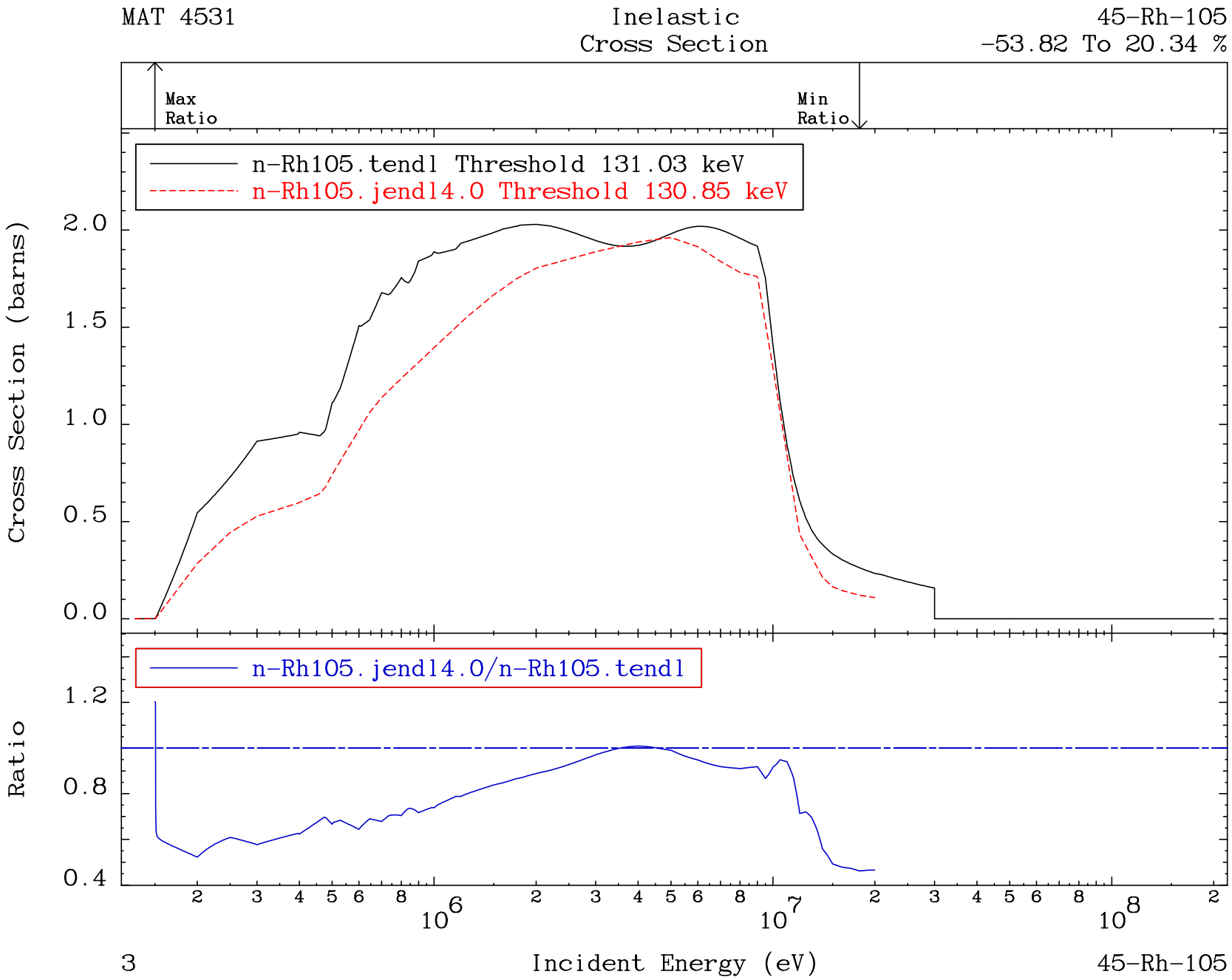
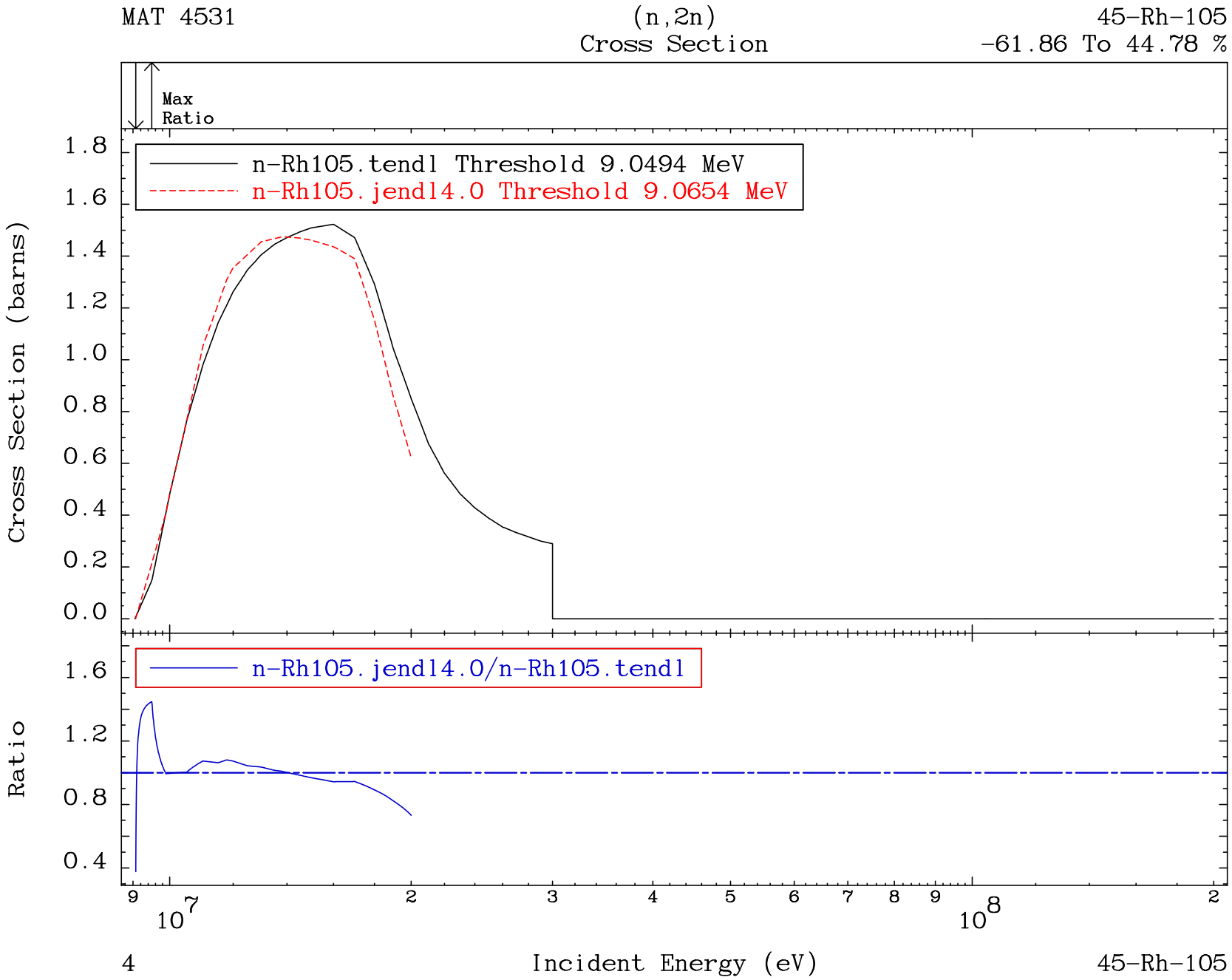
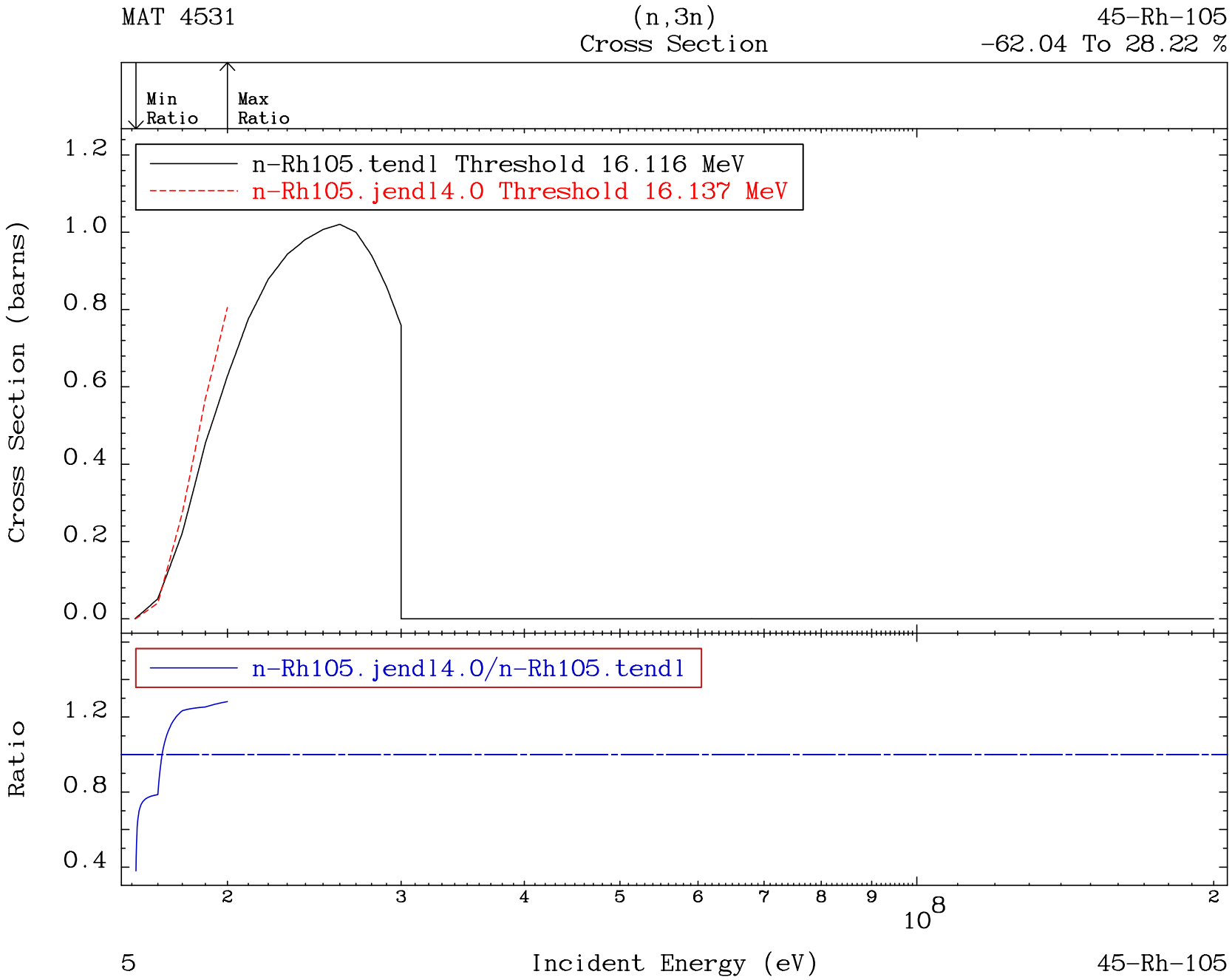
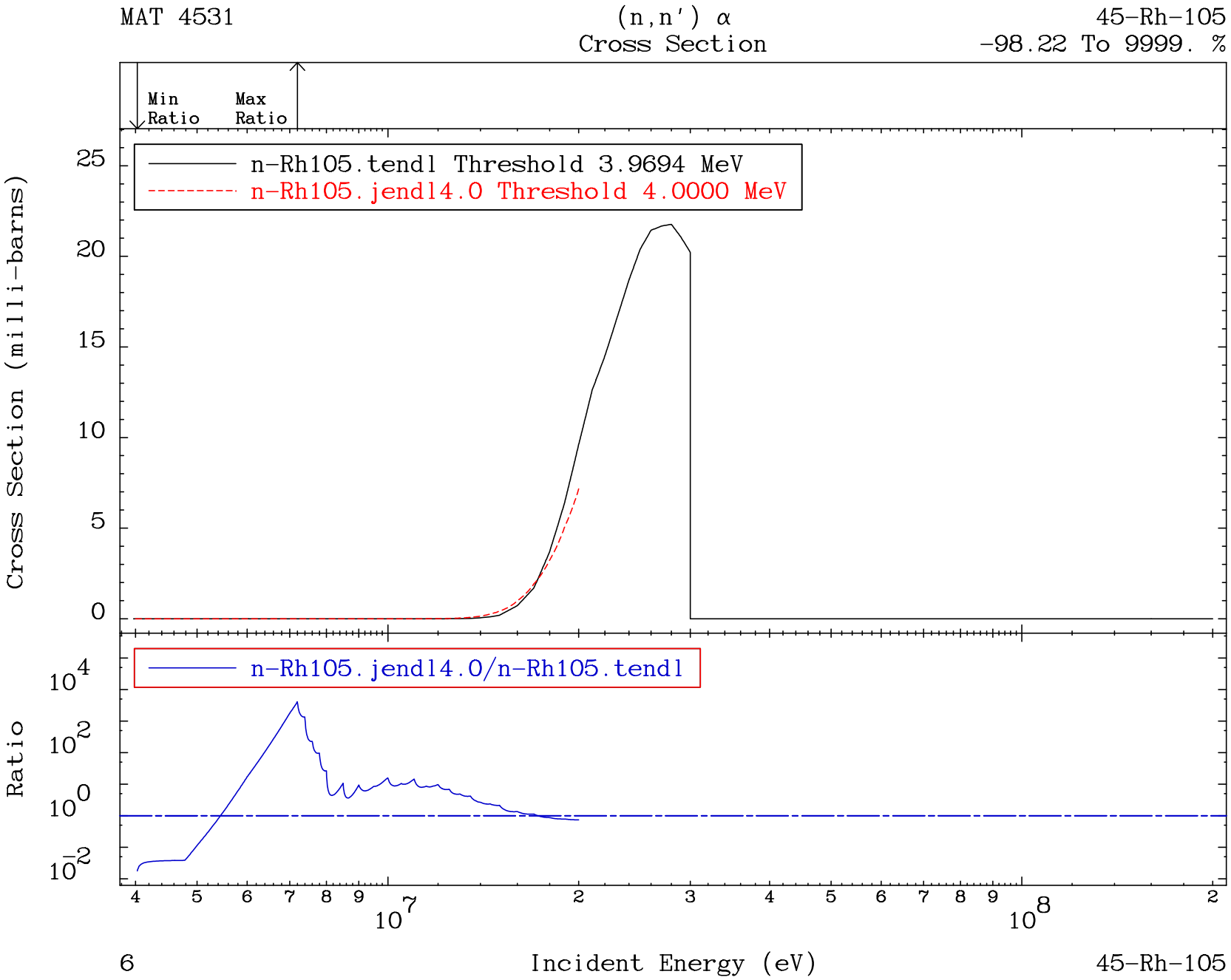

MAT 4531
Total
Cross Section
45-Rh-105
-86.99 To 9999. %
Max
Ratio
Min
Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
10^6
10^5
10^4
10^3
10^2
10^1
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
1
Incident Energy (eV)
45-Rh-105

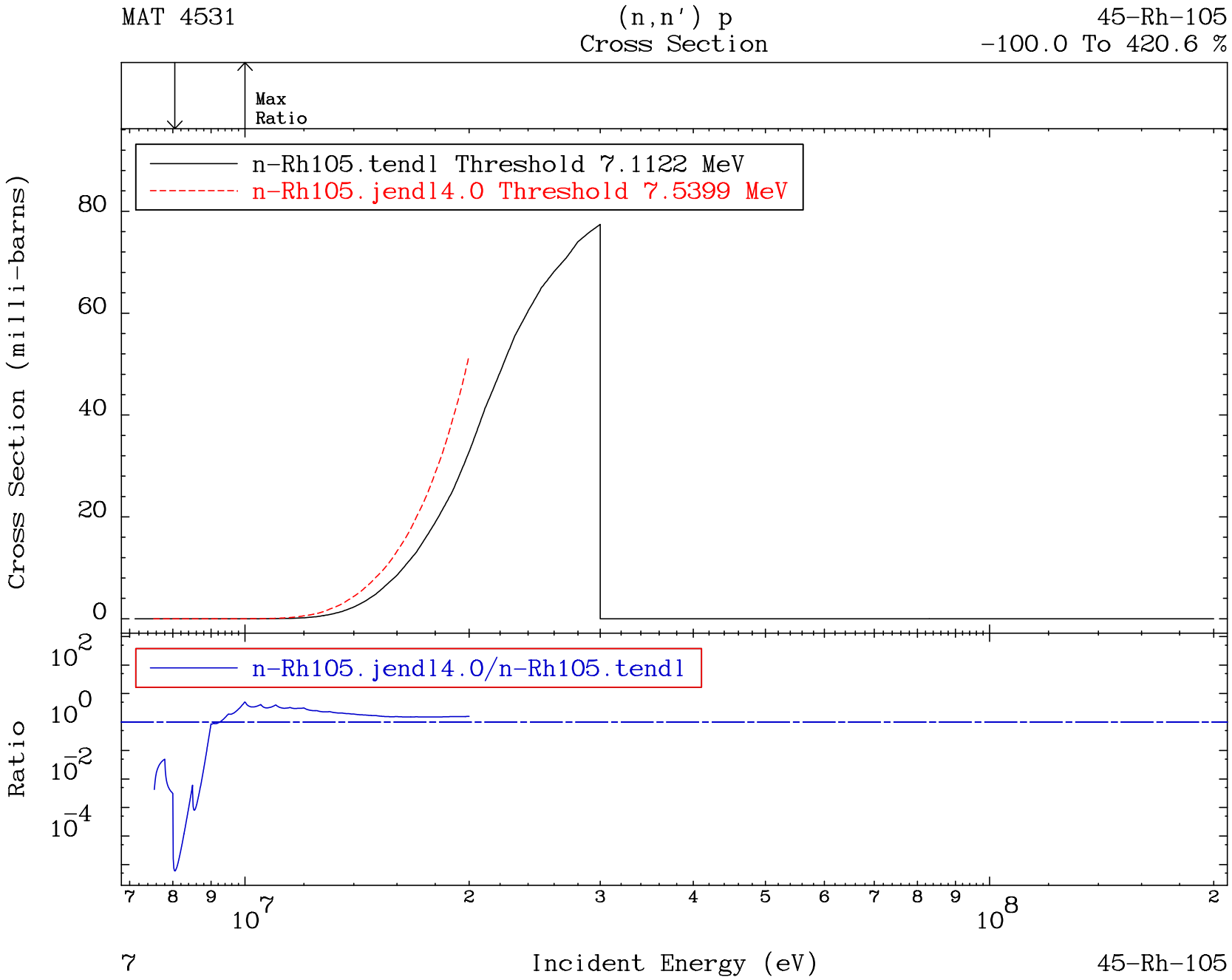

MAT 4531
Elastic
Cross Section
45-Rh-105
-20.45 To 9999. %
Max
Ratio
Min
Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
2
45-Rh-105

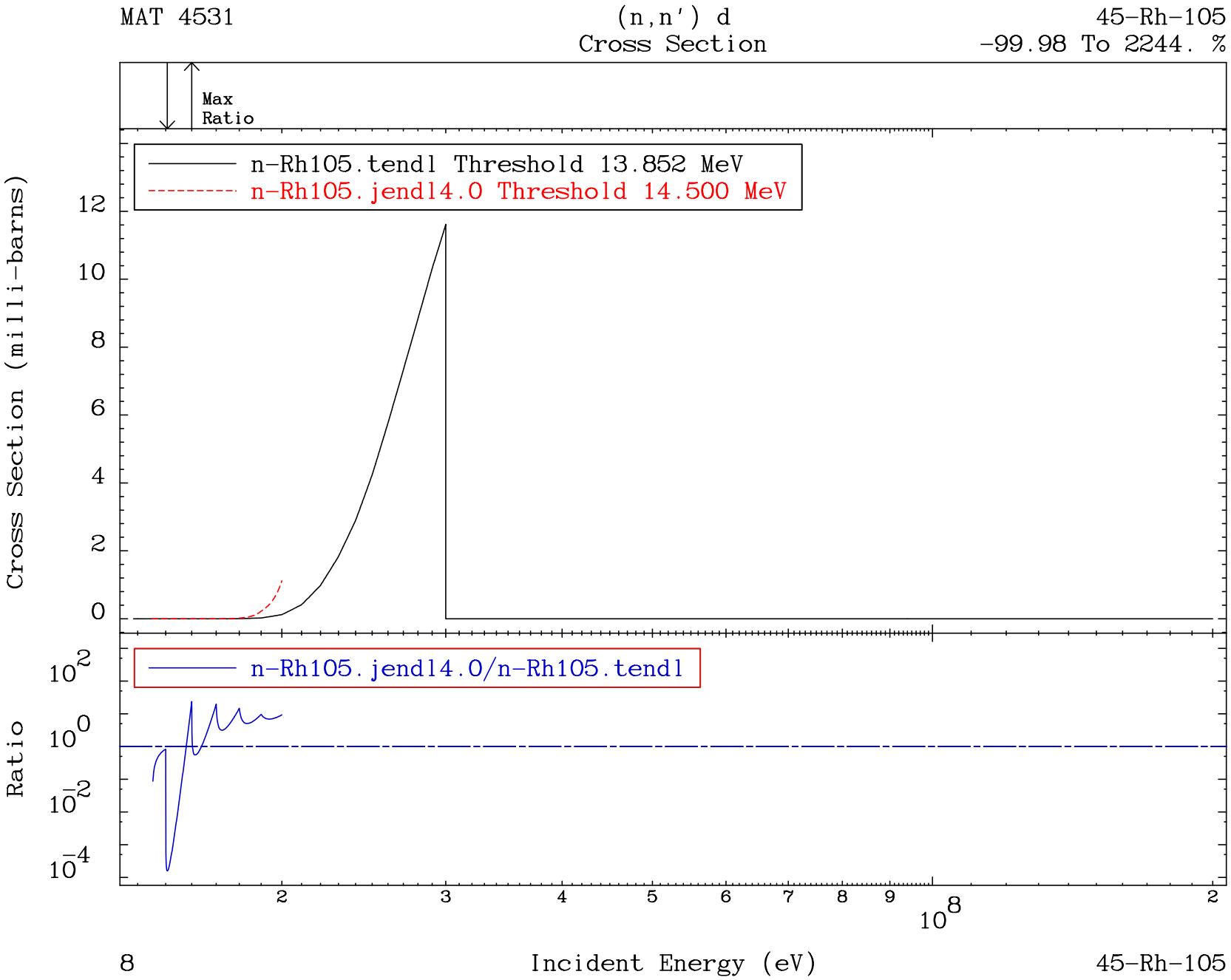

MAT 4531
Inelastic
Cross Section
45-Rh-105
-53.82 To 20.34 %
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 131.03 keV
n-Rh105.jendl4.0 Threshold 130.85 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
8
10^6
10^7
10^8
3
Incident Energy (eV)
45-Rh-105

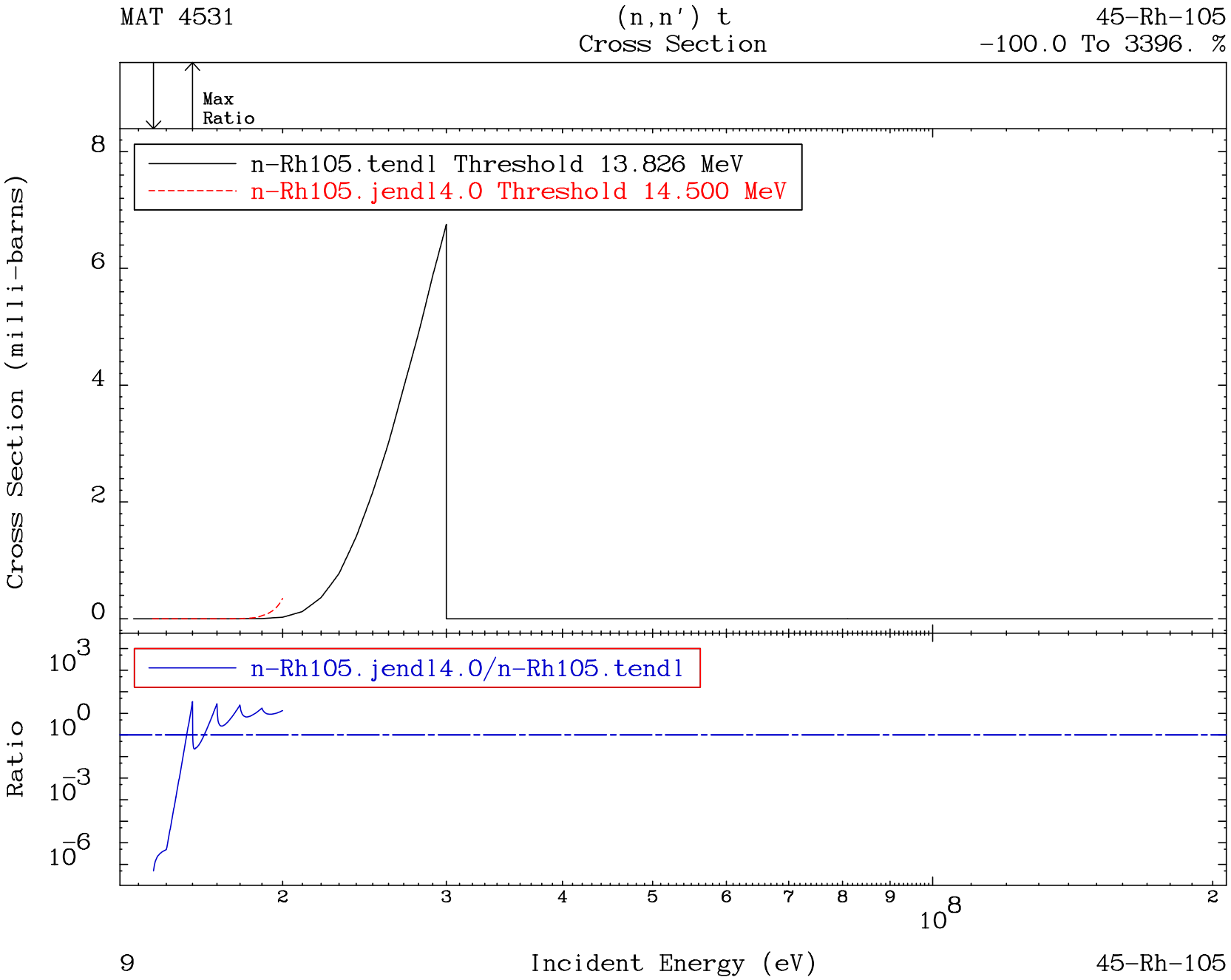

MAT 4531
(n,2n)
Cross Section
45-Rh-105
-61.86 To 44.78 %
Max
Ratio
n-Rh105.tendl Threshold 9.0494 MeV
n-Rh105.jendl4.0 Threshold 9.0654 MeV
Cross Section (barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
1.6
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
45-Rh-105

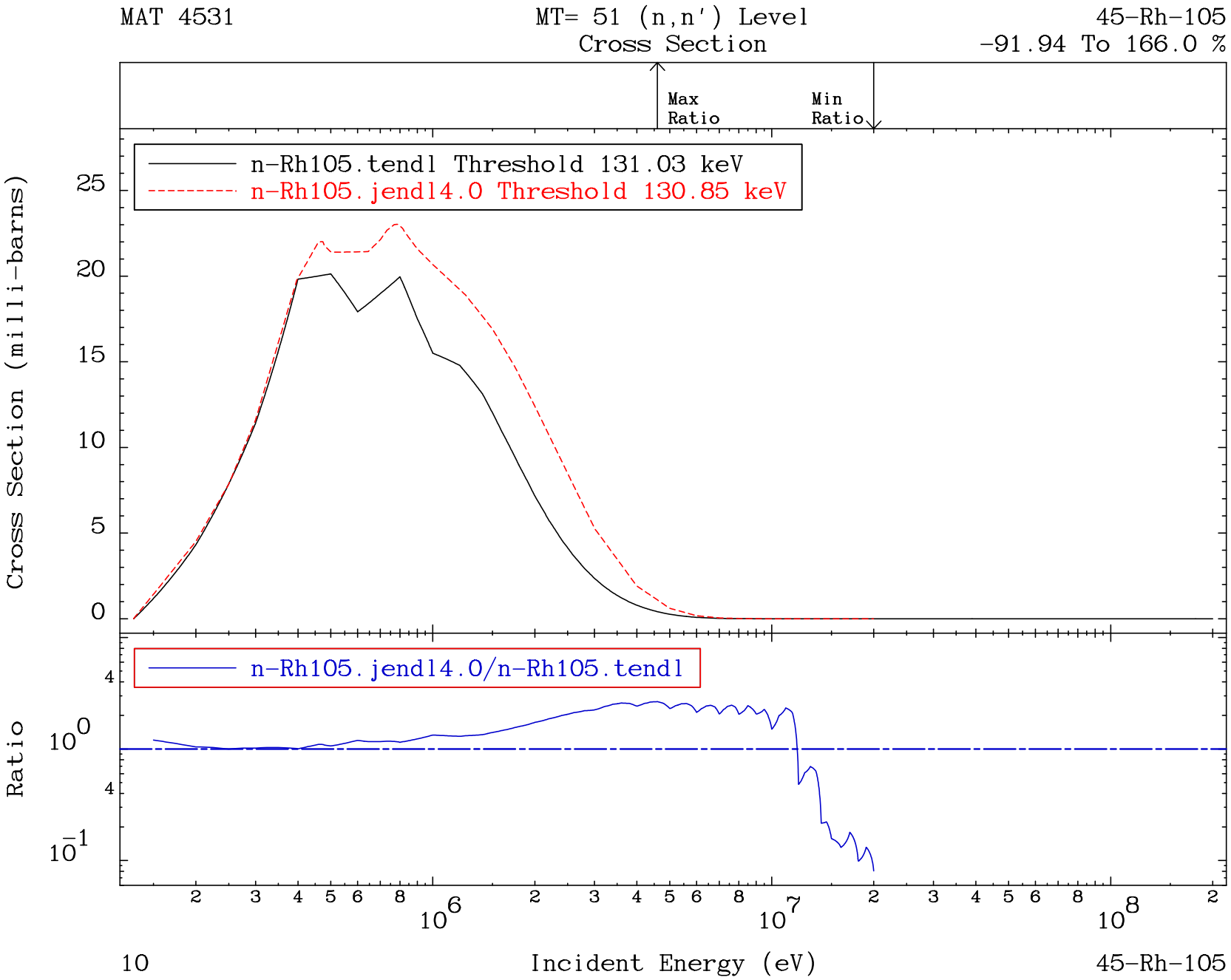

MAT 4531
(n,3n)
Cross Section
45-Rh-105
-62.04 To 28.22 %
Min Ratio
Max Ratio
n-Rh105.tendl Threshold 16.116 MeV
n-Rh105.jendl4.0 Threshold 16.137 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
45-Rh-105

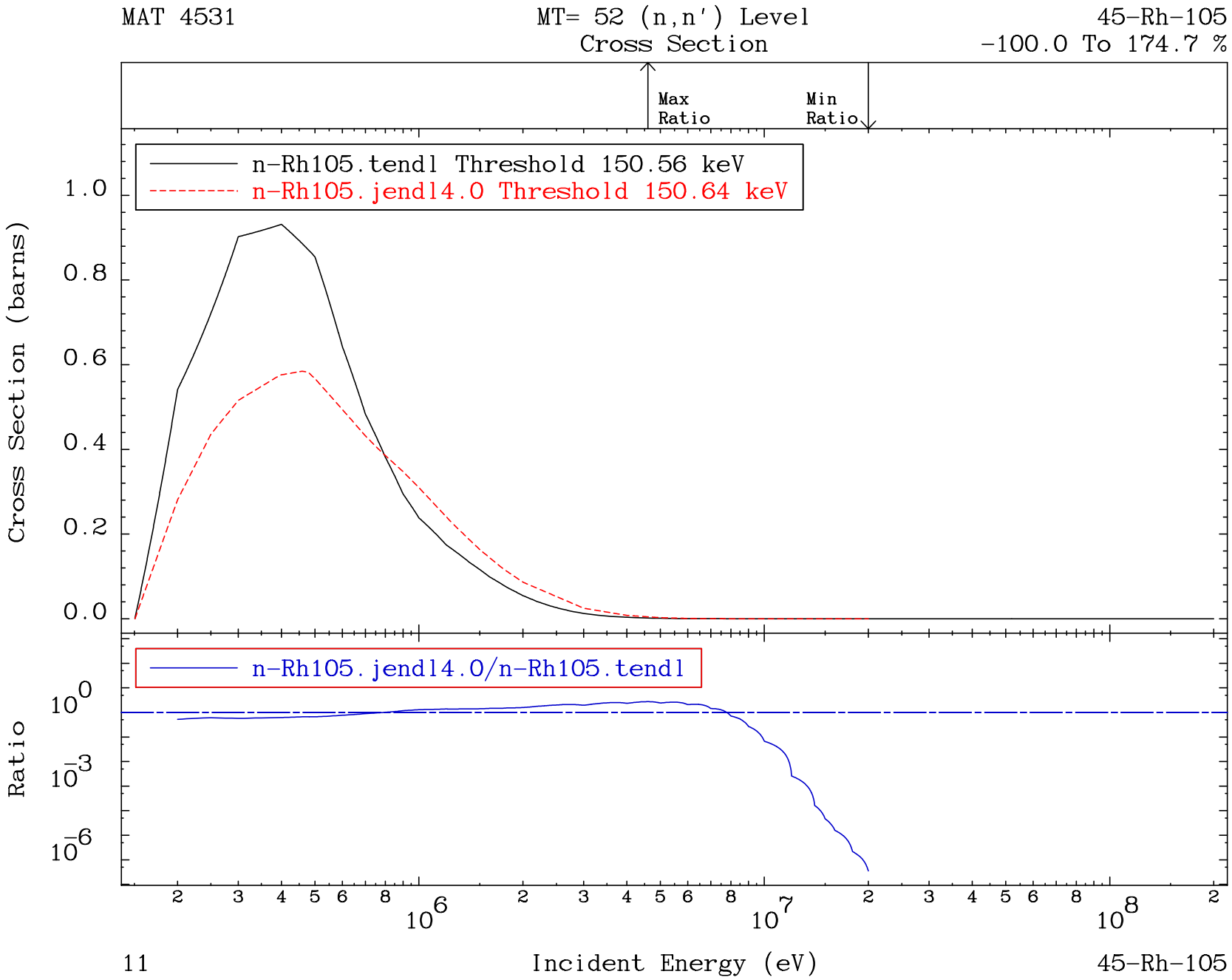

MAT 4531
(n,n') α
Cross Section
45-Rh-105
-98.22 To 9999. %
Min Ratio
Max Ratio
n-Rh105.tendl Threshold 3.9694 MeV
n-Rh105.jendl4.0 Threshold 4.0000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^4
10^2
10^0
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
45-Rh-105

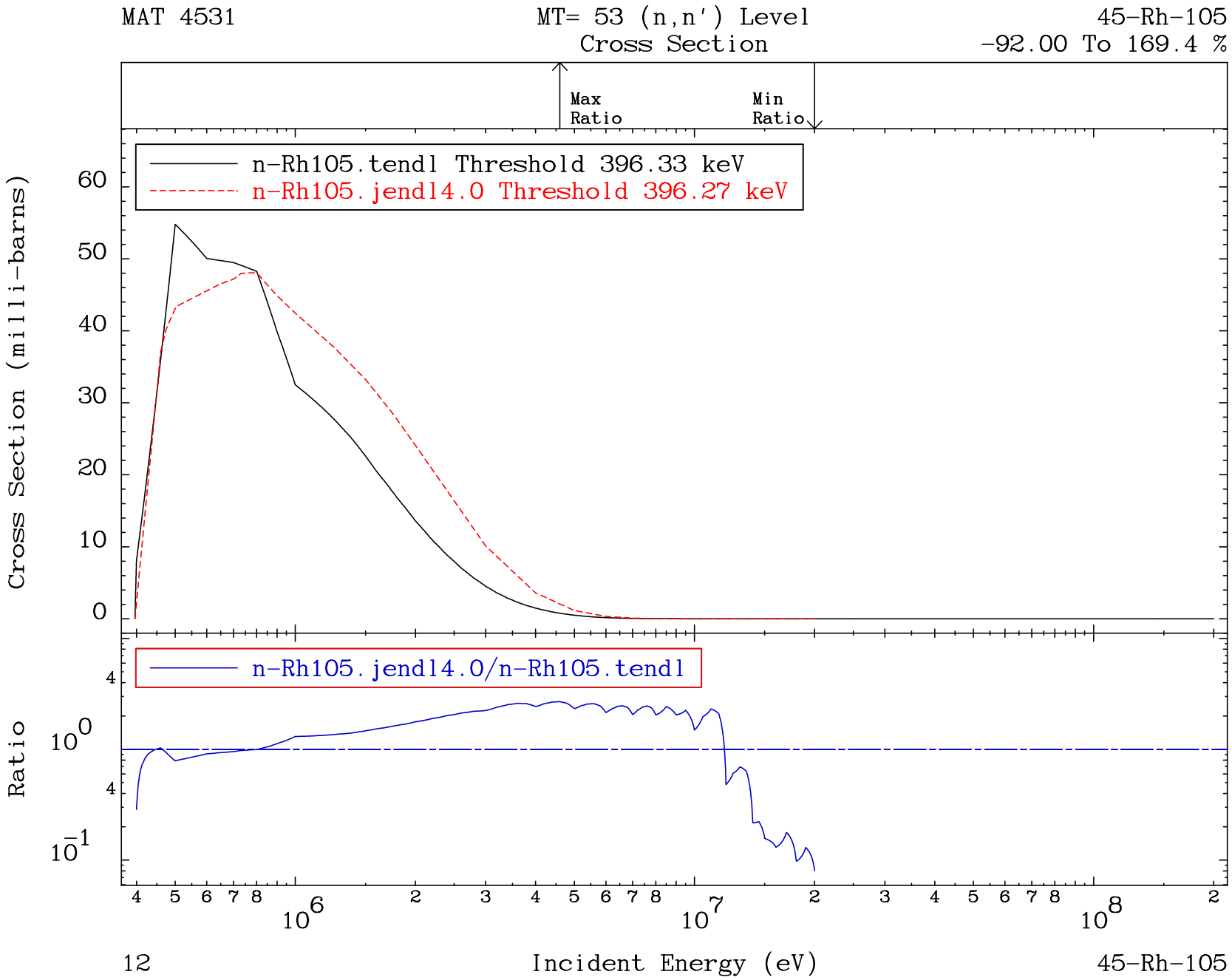

MAT 4531
(n,n') p
Cross Section
45-Rh-105
-100.0 To 420.6 %
Max
Ratio
n-Rh105.tendl Threshold 7.1122 MeV
n-Rh105.jendl4.0 Threshold 7.5399 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
45-Rh-105

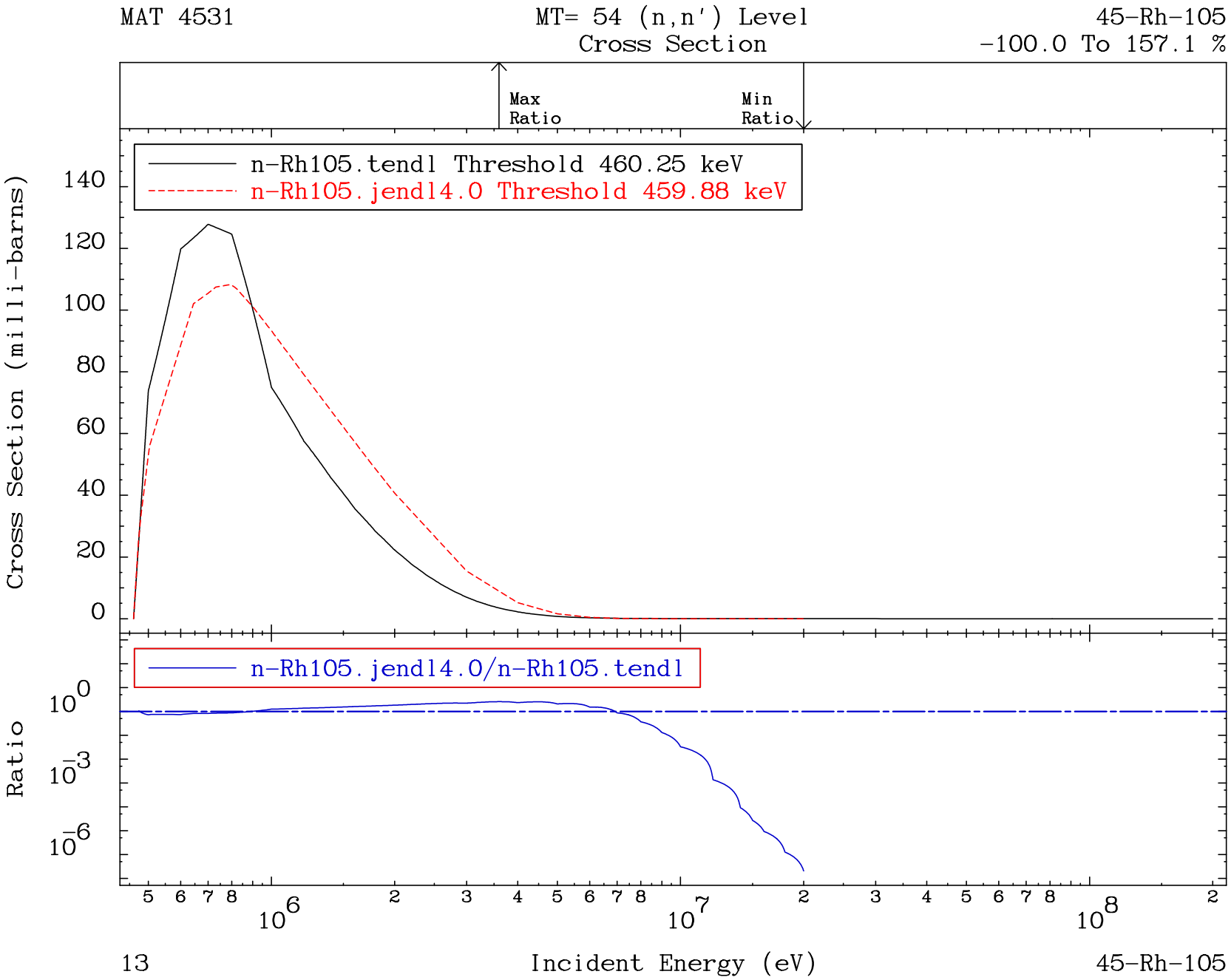

MAT 4531
(n,n') d
Cross Section
45-Rh-105
-99.98 To 2244. %
Max
Ratio
n-Rh105.tendl Threshold 13.852 MeV
n-Rh105.jendl4.0 Threshold 14.500 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^{2}
10^{0}
10^{-2}
10^{-4}
2
3
4
5
6
7
8
9
10^{8}
2
8
Incident Energy (eV)
45-Rh-105

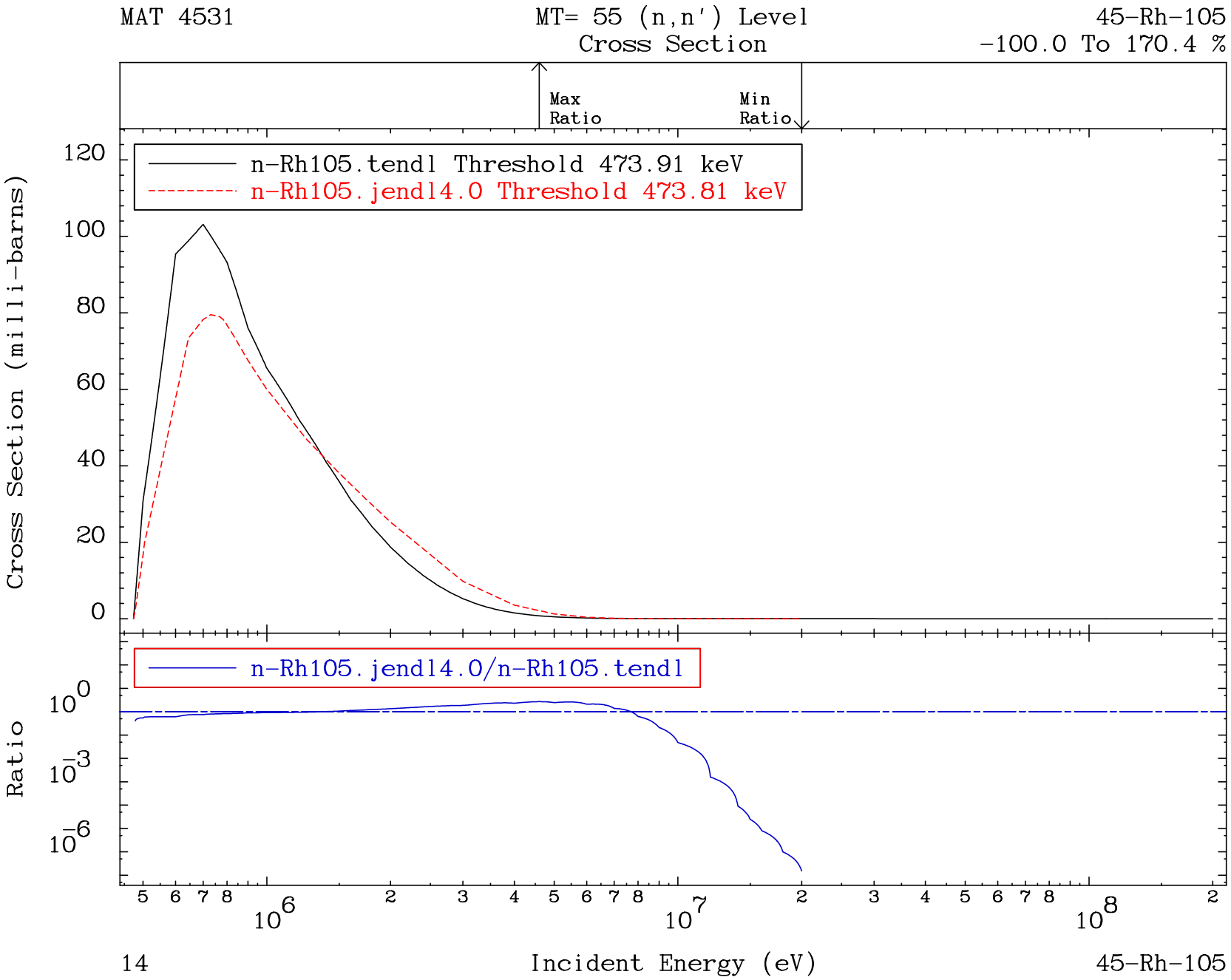

MAT 4531
(n,n') t
Cross Section
45-Rh-105
-100.0 To 3396. %
Max
Ratio
n-Rh105.tendl Threshold 13.826 MeV
n-Rh105.jendl4.0 Threshold 14.500 MeV
Cross Section (milli-barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
9
45-Rh-105

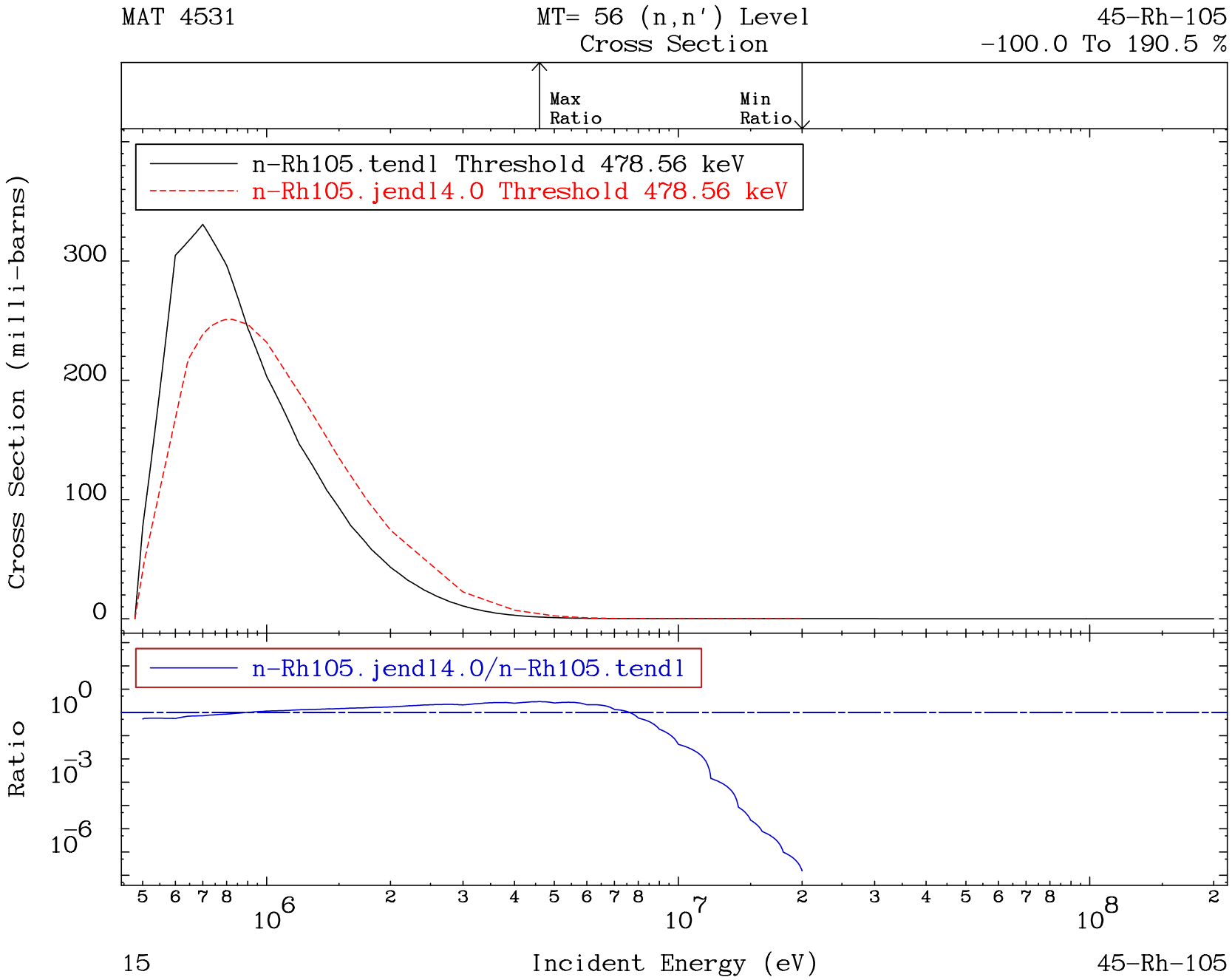

MAT 4531
MT= 51 (n,n') Level
Cross Section
45-Rh-105
-91.94 To 166.0 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 131.03 keV
n-Rh105.jendl4.0 Threshold 130.85 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
4
10^0
4
10^{-1}
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
45-Rh-105

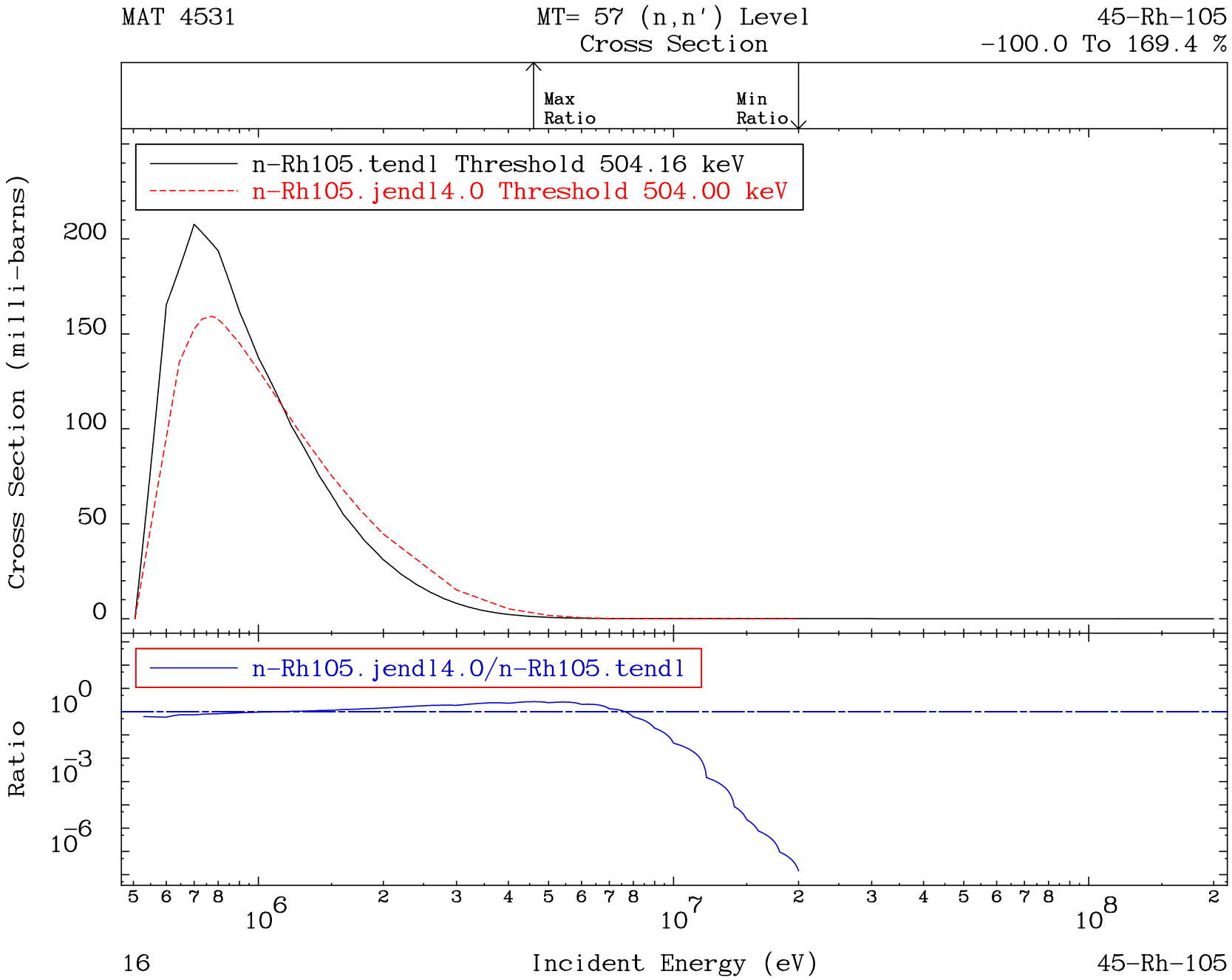

MAT 4531
MT= 52 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 174.7 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 150.56 keV
n-Rh105.jendl4.0 Threshold 150.64 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
45-Rh-105

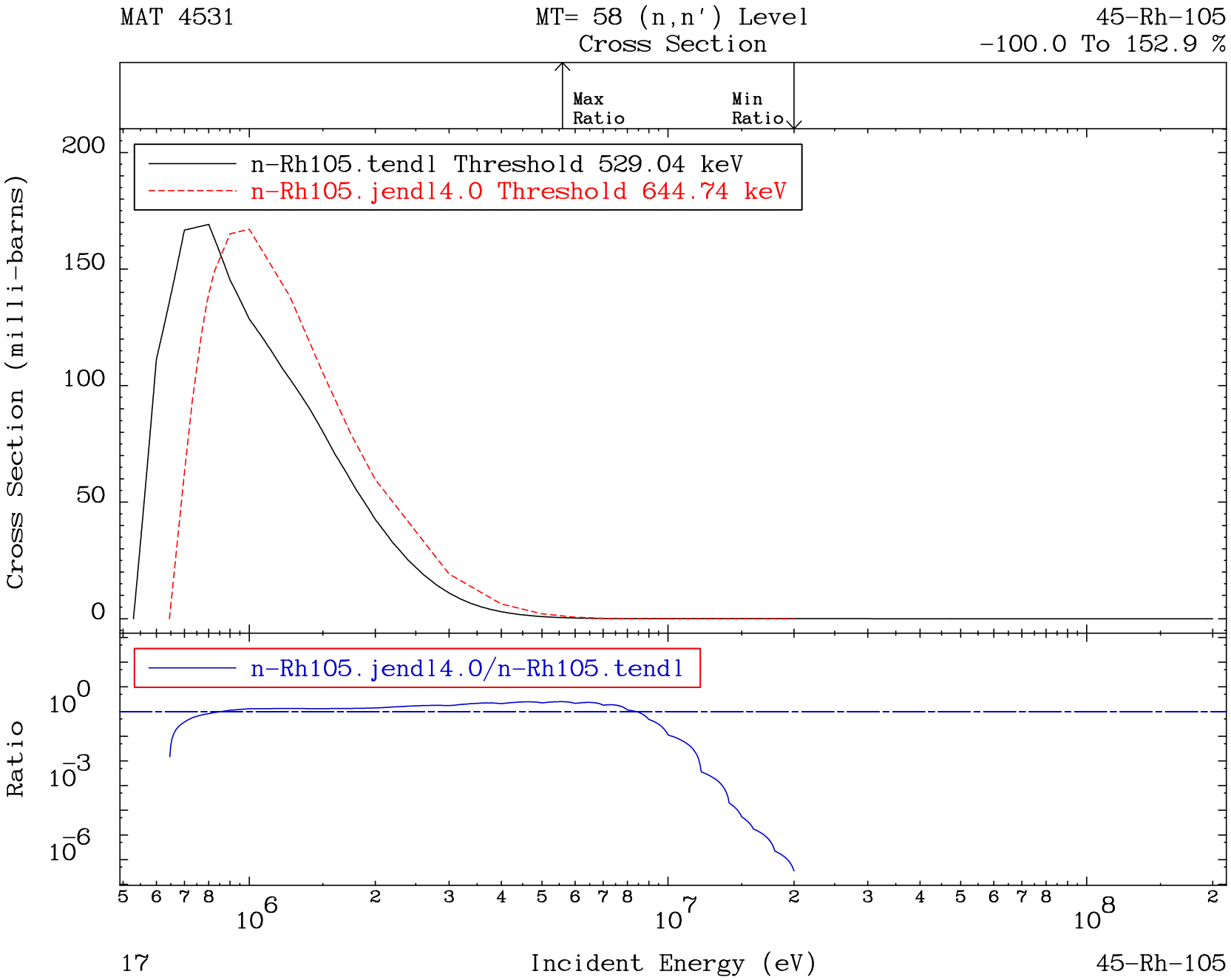

MAT 4531
MT= 53 (n,n') Level
Cross Section
45-Rh-105
-92.00 To 169.4 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 396.33 keV
n-Rh105.jendl4.0 Threshold 396.27 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
4
10^0
4
10^{-1}
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
45-Rh-105

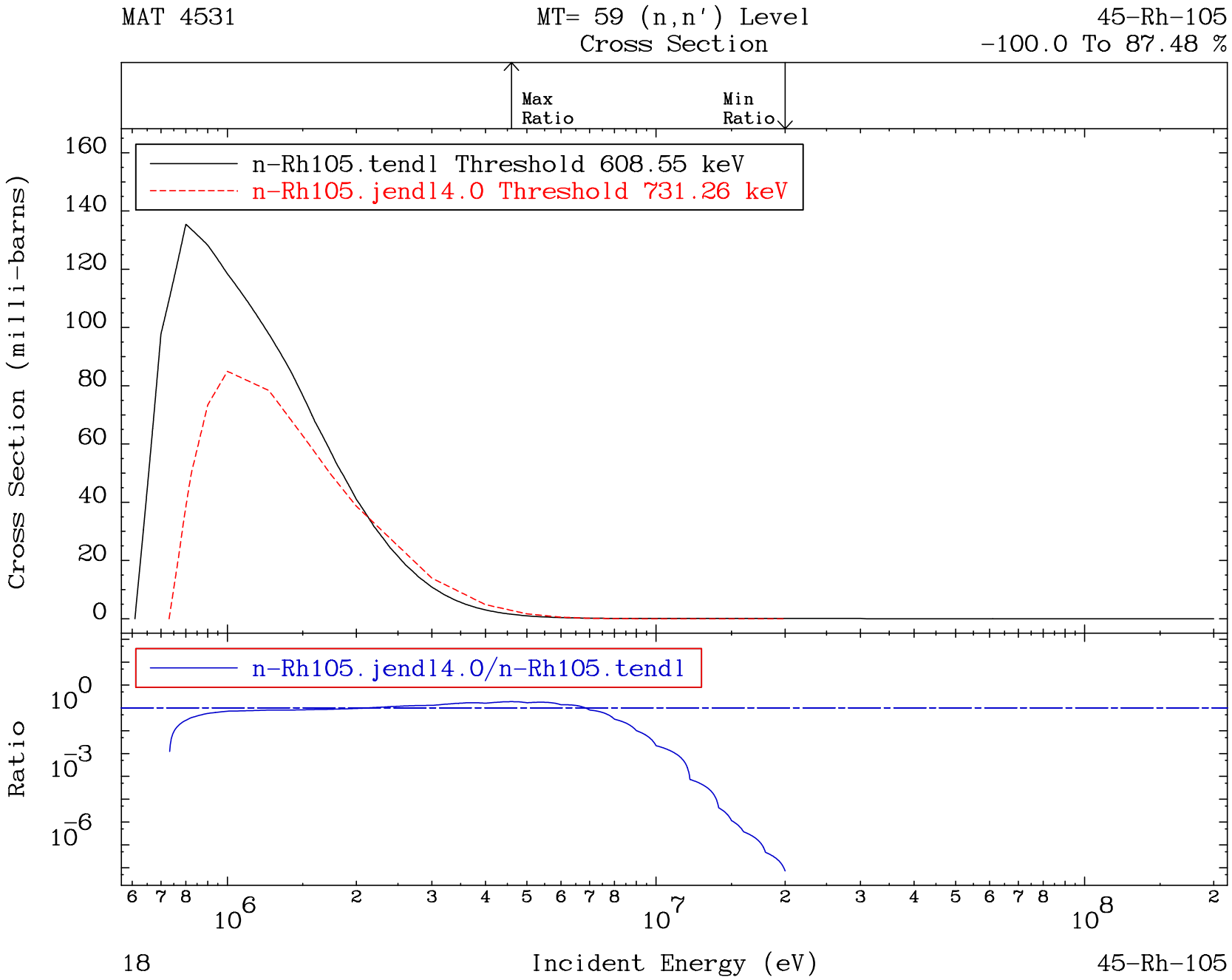

MAT 4531
MT= 54 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 157.1 %
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 460.25 keV
n-Rh105.jendl4.0 Threshold 459.88 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
45-Rh-105

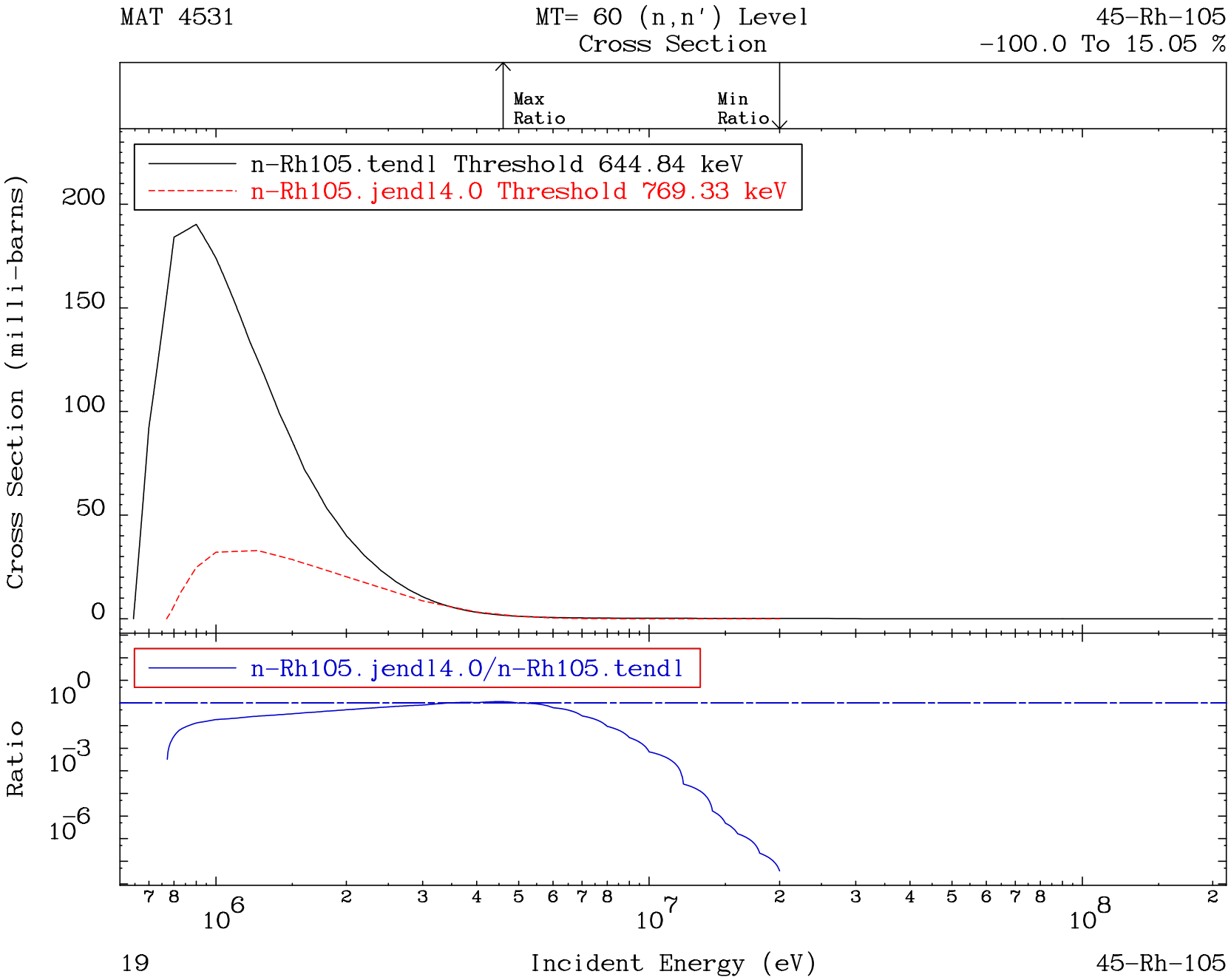

MAT 4531
MT= 55 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 170.4 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 473.91 keV
n-Rh105.jendl4.0 Threshold 473.81 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
45-Rh-105

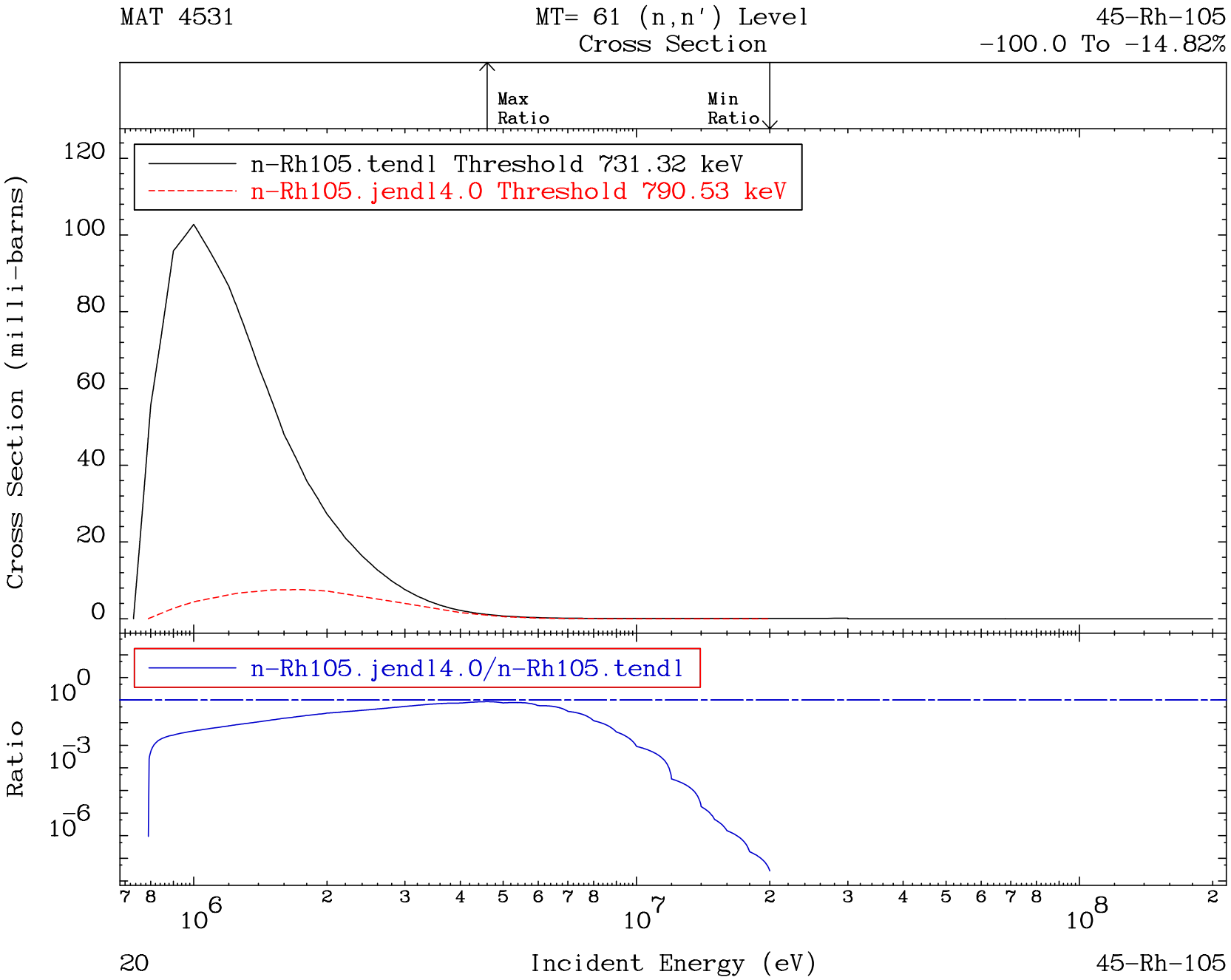

MAT 4531
MT= 56 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 190.5 %
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 478.56 keV
n-Rh105.jendl4.0 Threshold 478.56 keV
Cross Section (milli-barns)
300
200
100
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
45-Rh-105

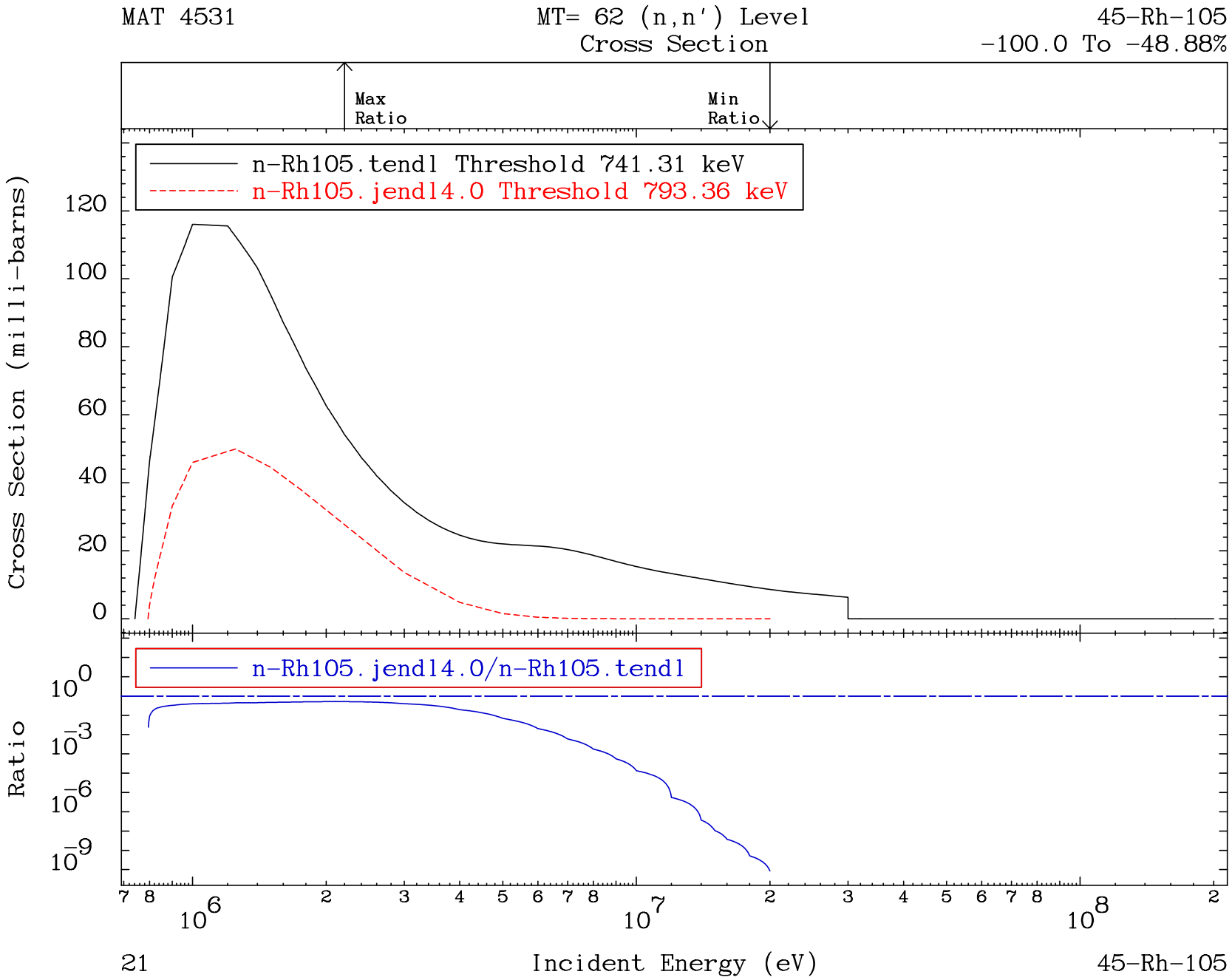

MAT 4531
MT= 57 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 169.4 %
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 504.16 keV
n-Rh105.jendl4.0 Threshold 504.00 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
45-Rh-105

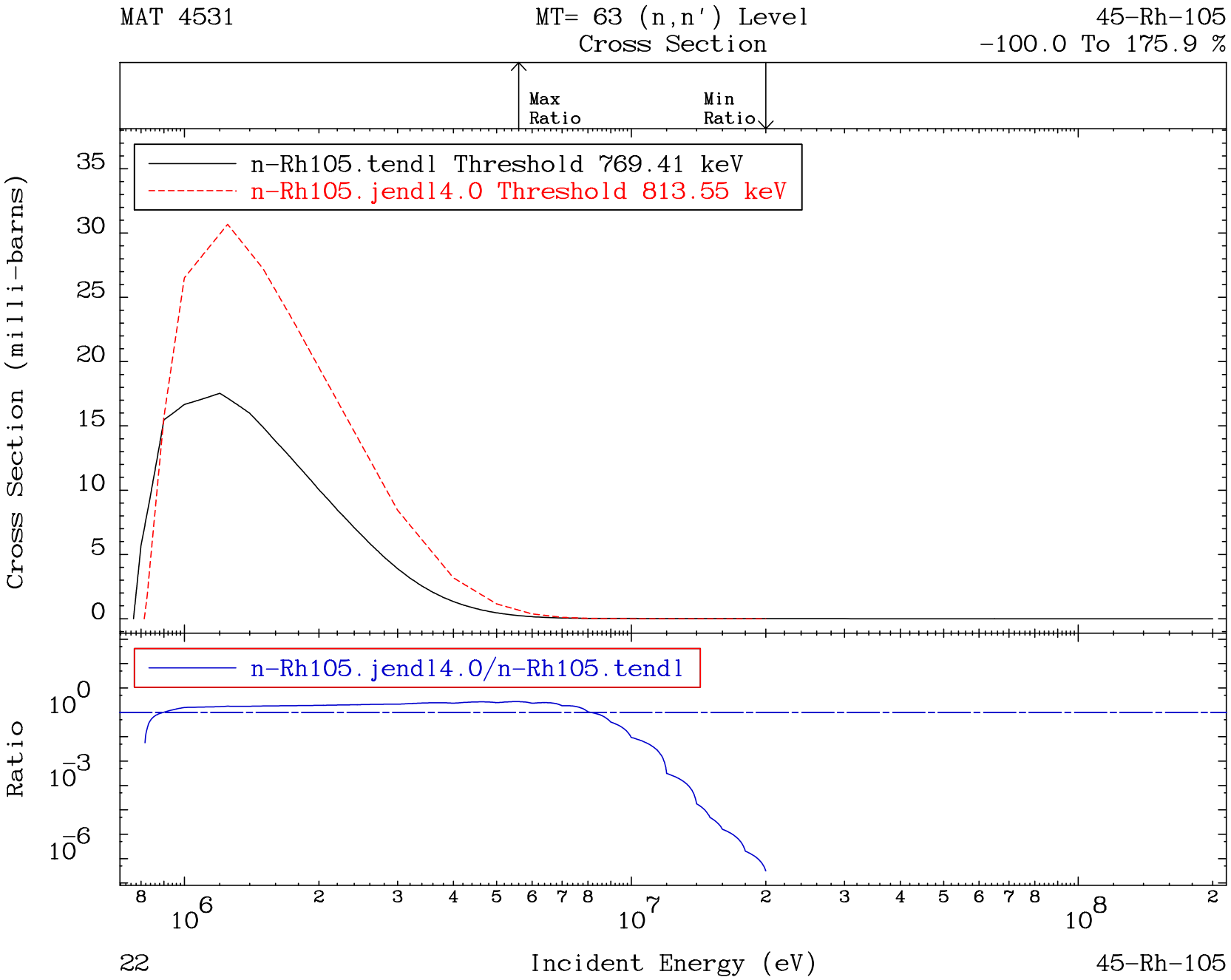

MAT 4531
MT= 58 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 152.9 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 529.04 keV
n-Rh105.jendl4.0 Threshold 644.74 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
45-Rh-105

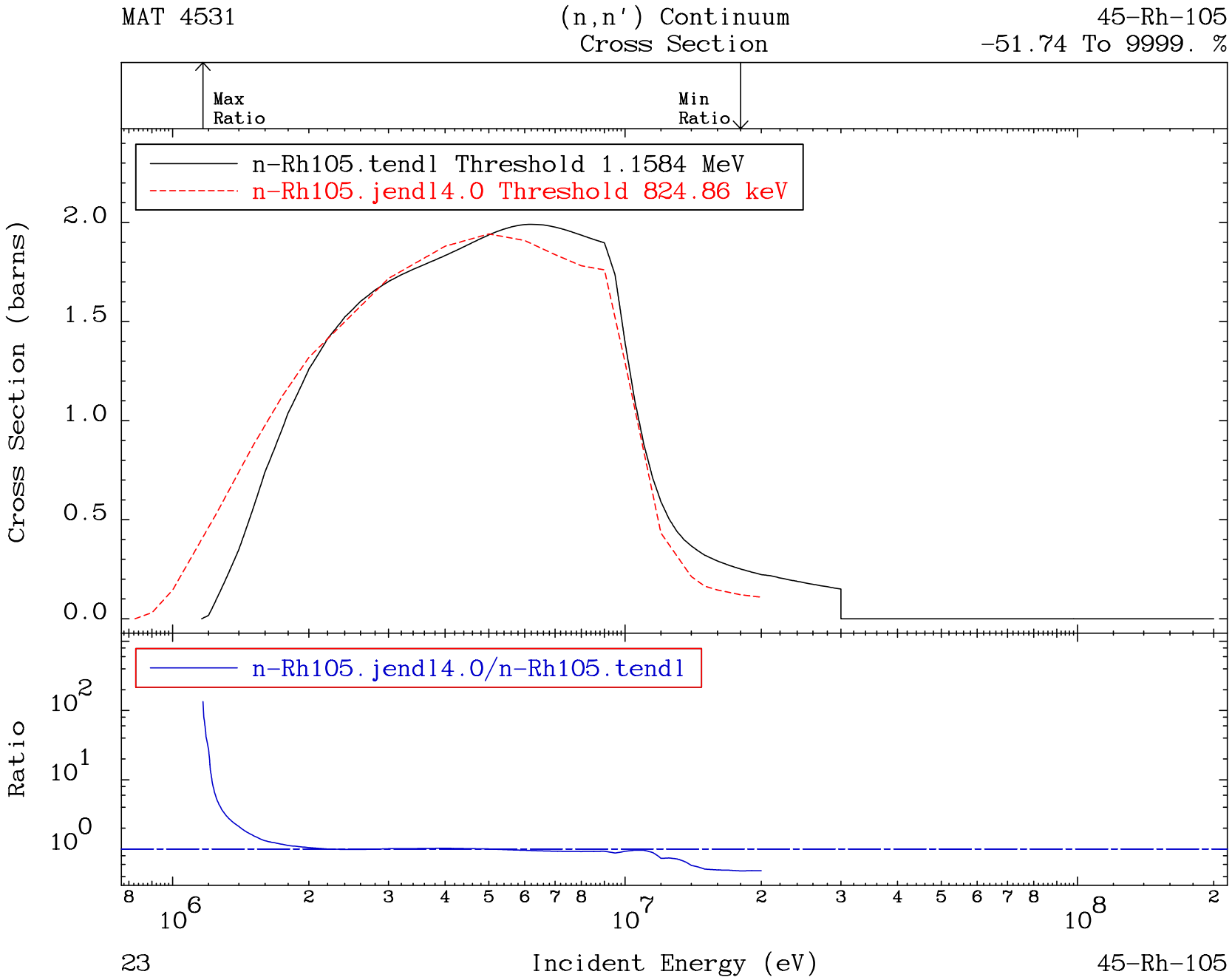

MAT 4531
MT= 59 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 87.48 %
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 608.55 keV
n-Rh105.jendl4.0 Threshold 731.26 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
45-Rh-105

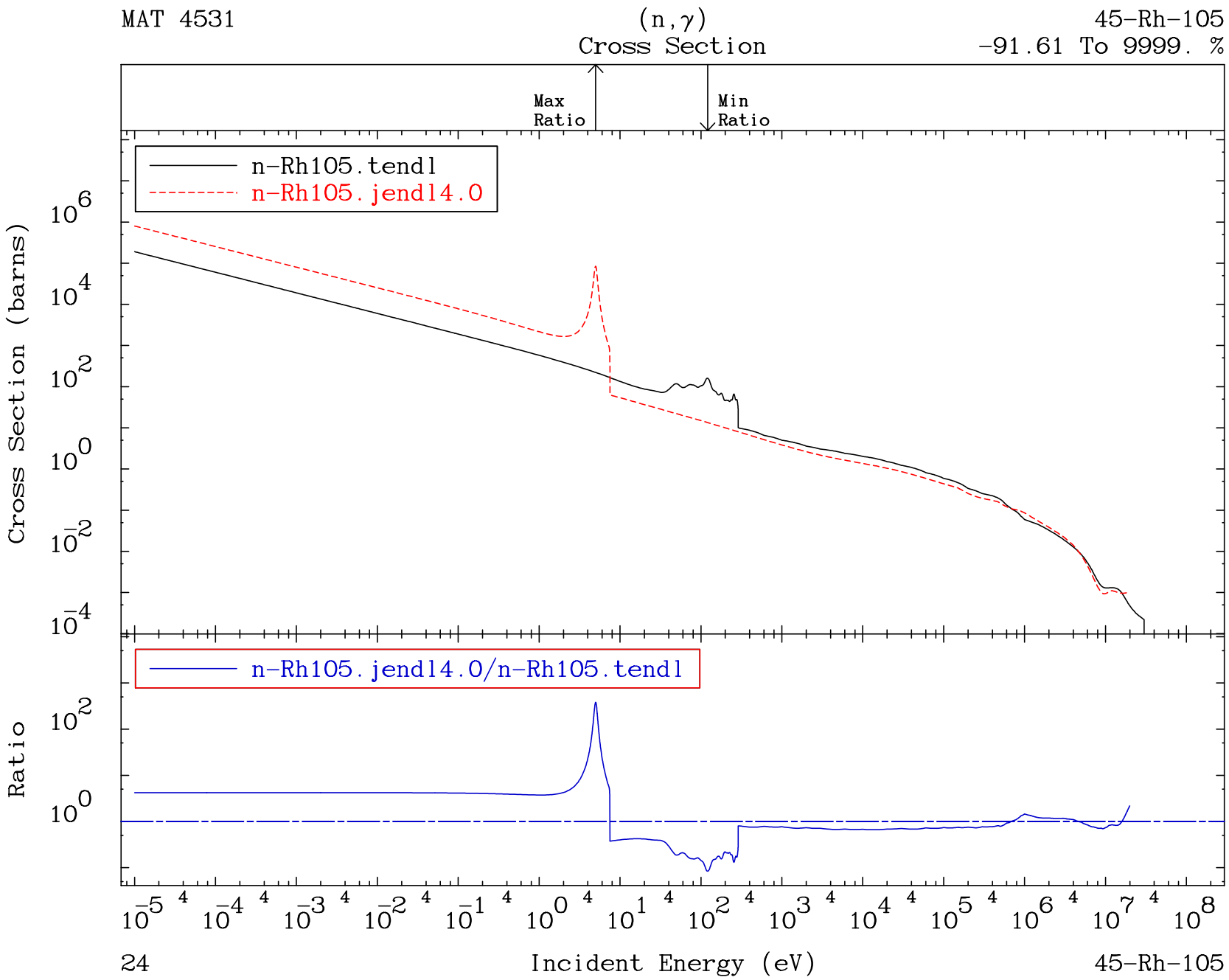

MAT 4531
MT= 60 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 15.05 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 644.84 keV
n-Rh105.jendl4.0 Threshold 769.33 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
45-Rh-105

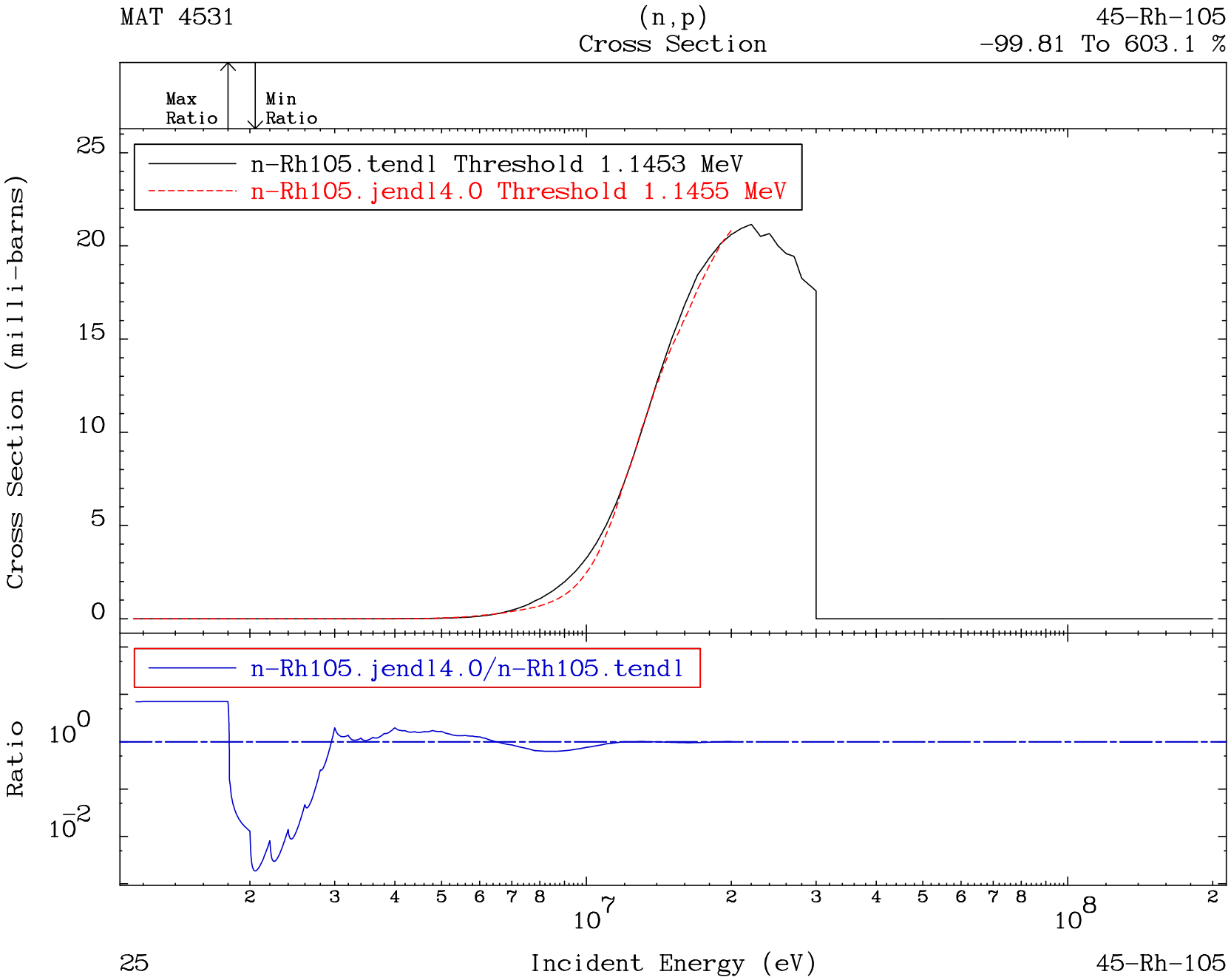

MAT 4531
MT= 61 (n,n') Level
Cross Section
45-Rh-105
-100.0 To -14.82%
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 731.32 keV
n-Rh105.jendl4.0 Threshold 790.53 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
7 8
10^6
2
3
4
5
6
7 8
10^7
2
3
4
5
6
7 8
10^8
2
20
Incident Energy (eV)
45-Rh-105

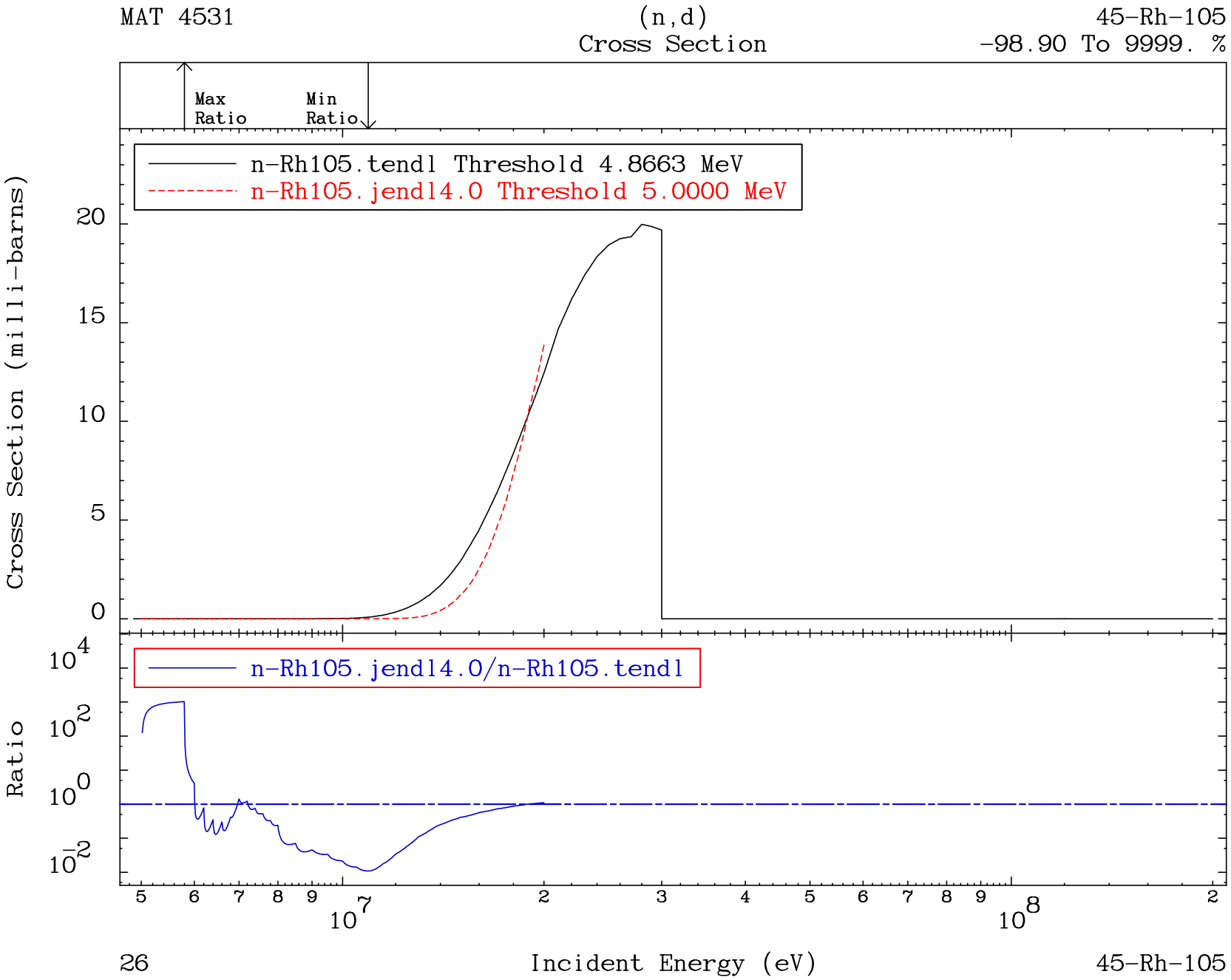

MAT 4531
MT= 62 (n,n') Level
Cross Section
45-Rh-105
-100.0 To -48.88%
Max
Ratio
Min
Ratio
n-Rh105.tendl Threshold 741.31 keV
n-Rh105.jendl4.0 Threshold 793.36 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
10^-9
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
45-Rh-105

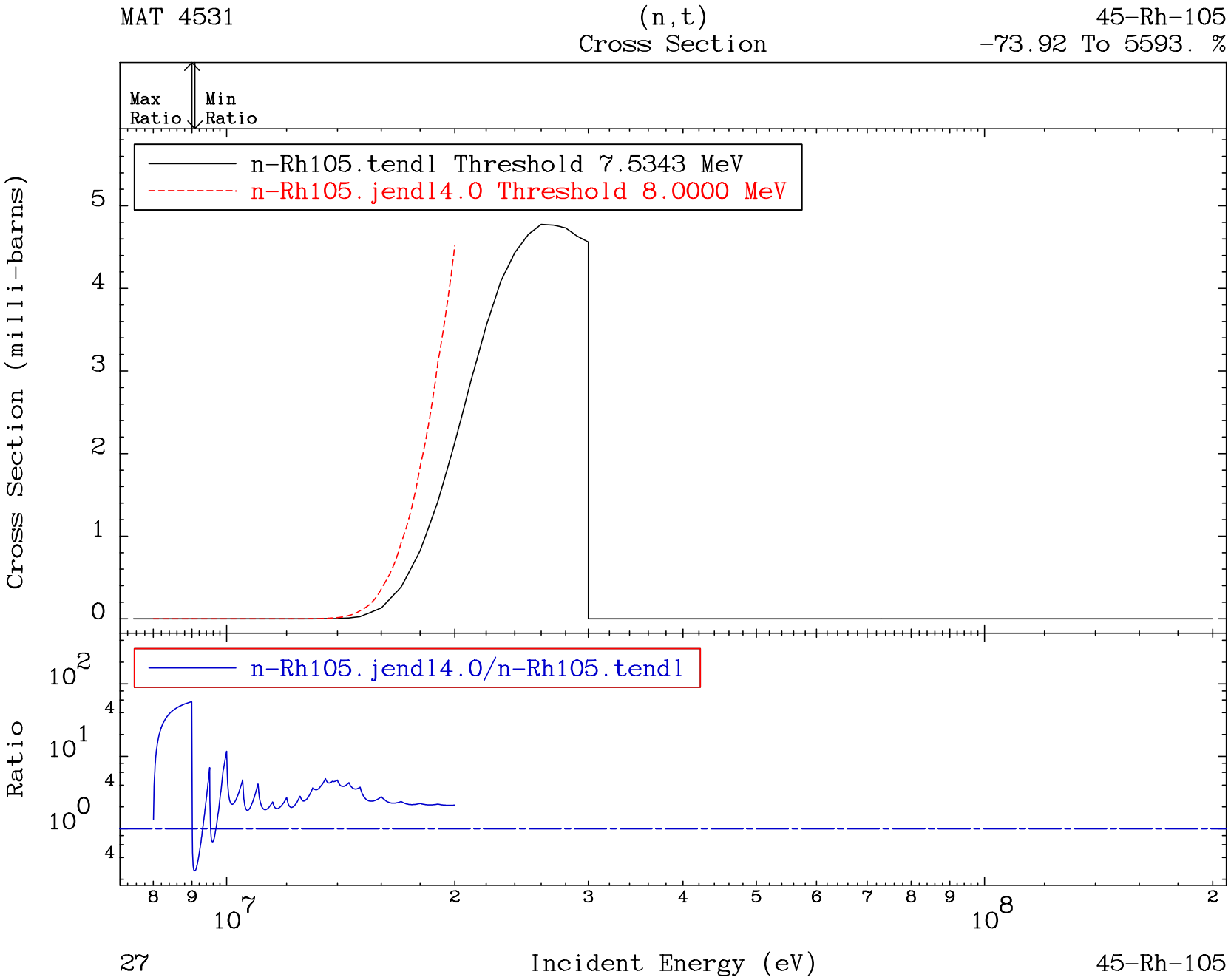

MAT 4531
MT= 63 (n,n') Level
Cross Section
45-Rh-105
-100.0 To 175.9 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 769.41 keV
n-Rh105.jendl4.0 Threshold 813.55 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-3
10^-6
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
45-Rh-105

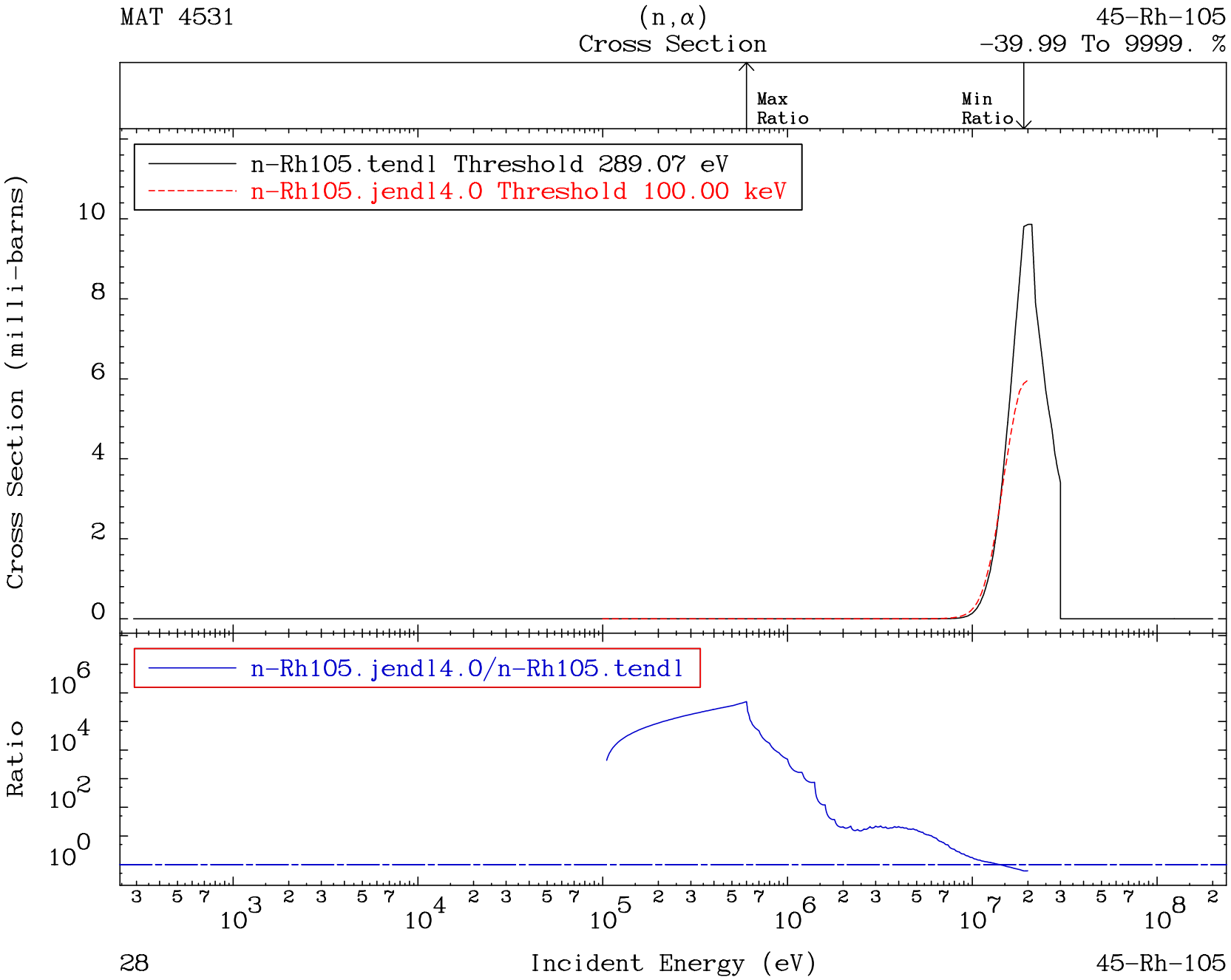

MAT 4531
(n,n') Continuum
Cross Section
45-Rh-105
-51.74 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 1.1584 MeV
n-Rh105.jendl4.0 Threshold 824.86 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^1
10^0
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
45-Rh-105

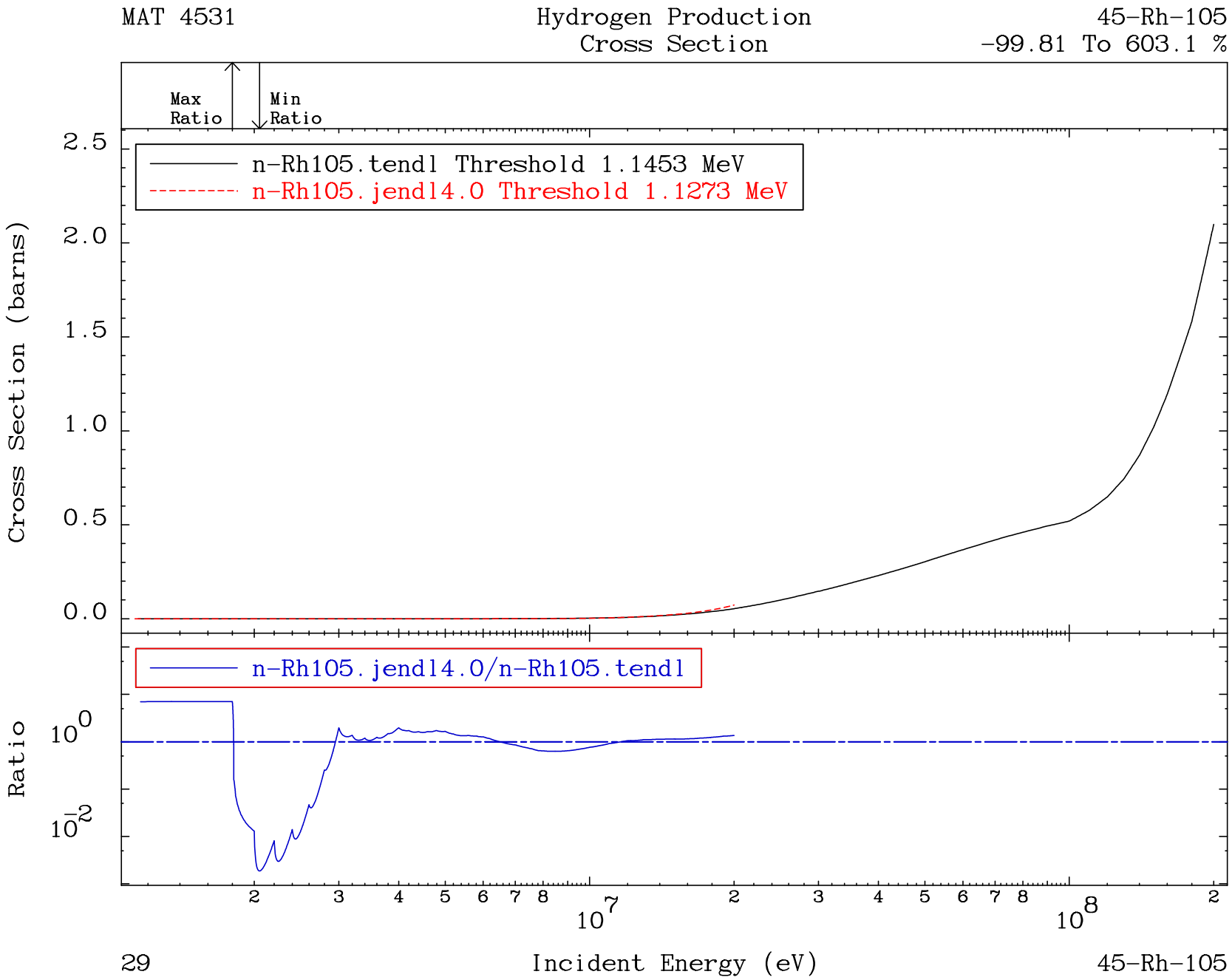

MAT 4531
(n,γ)
Cross Section
45-Rh-105
-91.61 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
10^6
10^4
10^2
10^0
10^-2
10^-4
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
24
Incident Energy (eV)
45-Rh-105

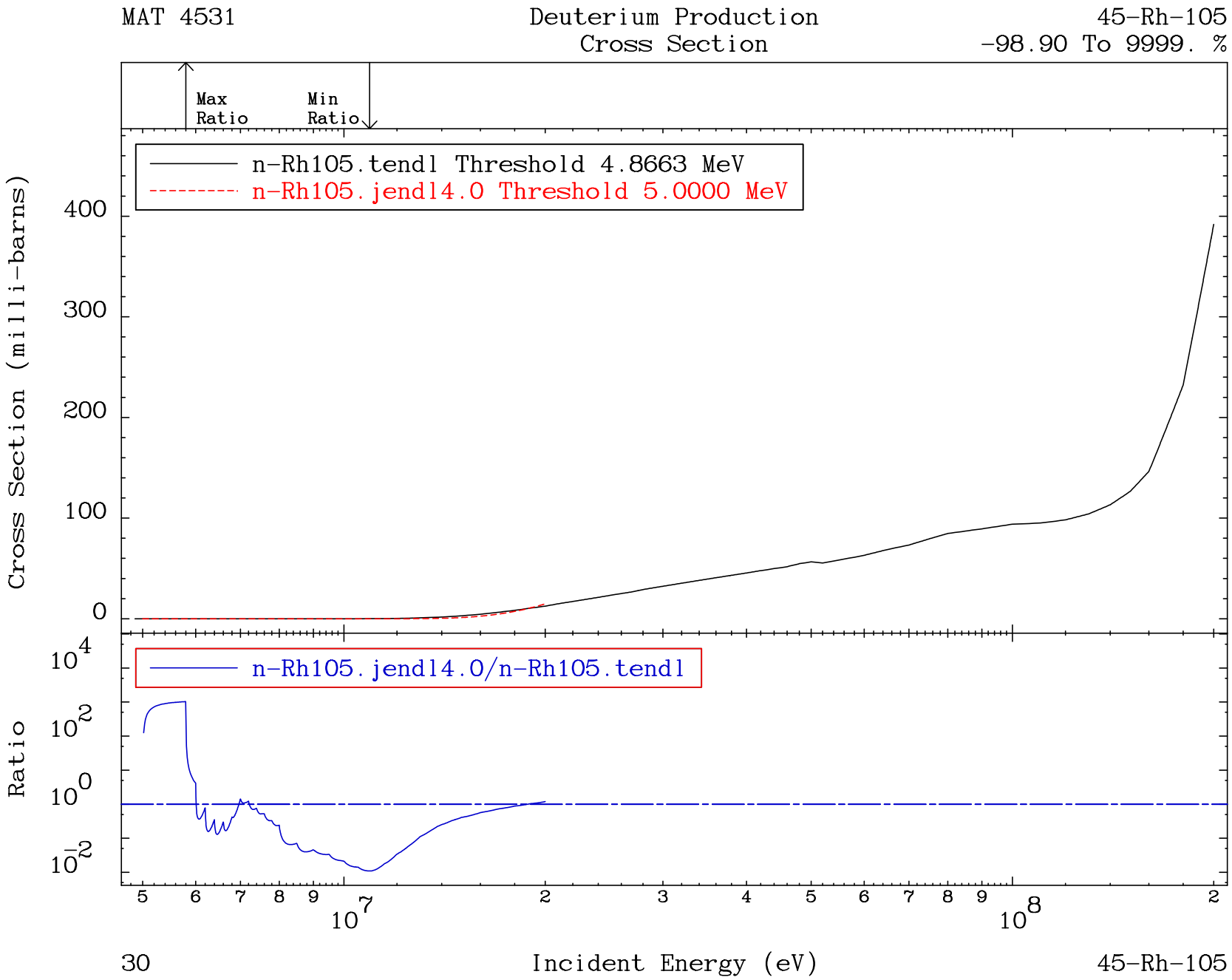

MAT 4531
(n,p)
Cross Section
45-Rh-105
-99.81 To 603.1 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 1.1453 MeV
n-Rh105.jendl4.0 Threshold 1.1455 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
45-Rh-105

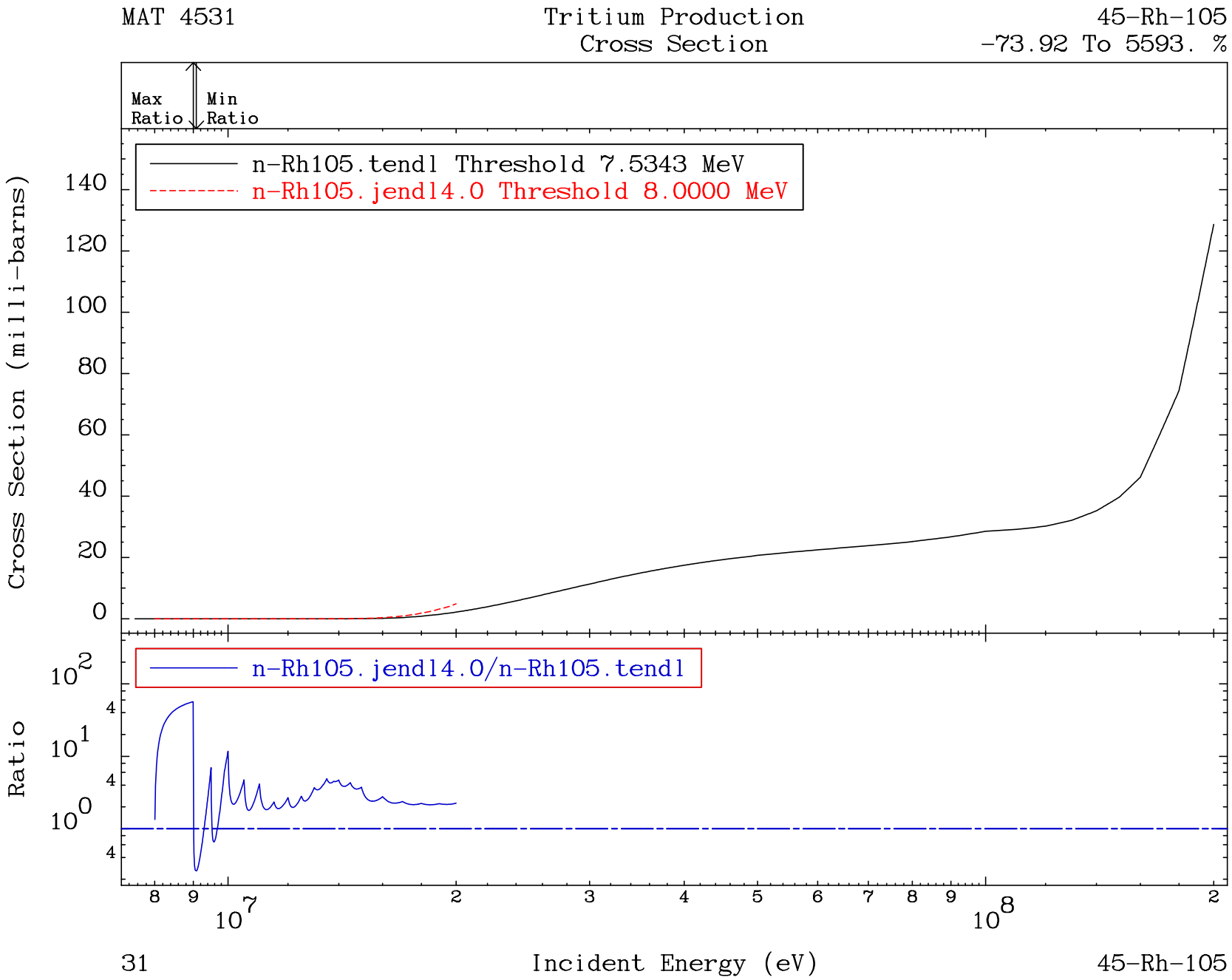

MAT 4531
(n,d)
Cross Section
45-Rh-105
-98.90 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 4.8663 MeV
n-Rh105.jendl4.0 Threshold 5.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^4
10^2
10^0
10^-2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
45-Rh-105

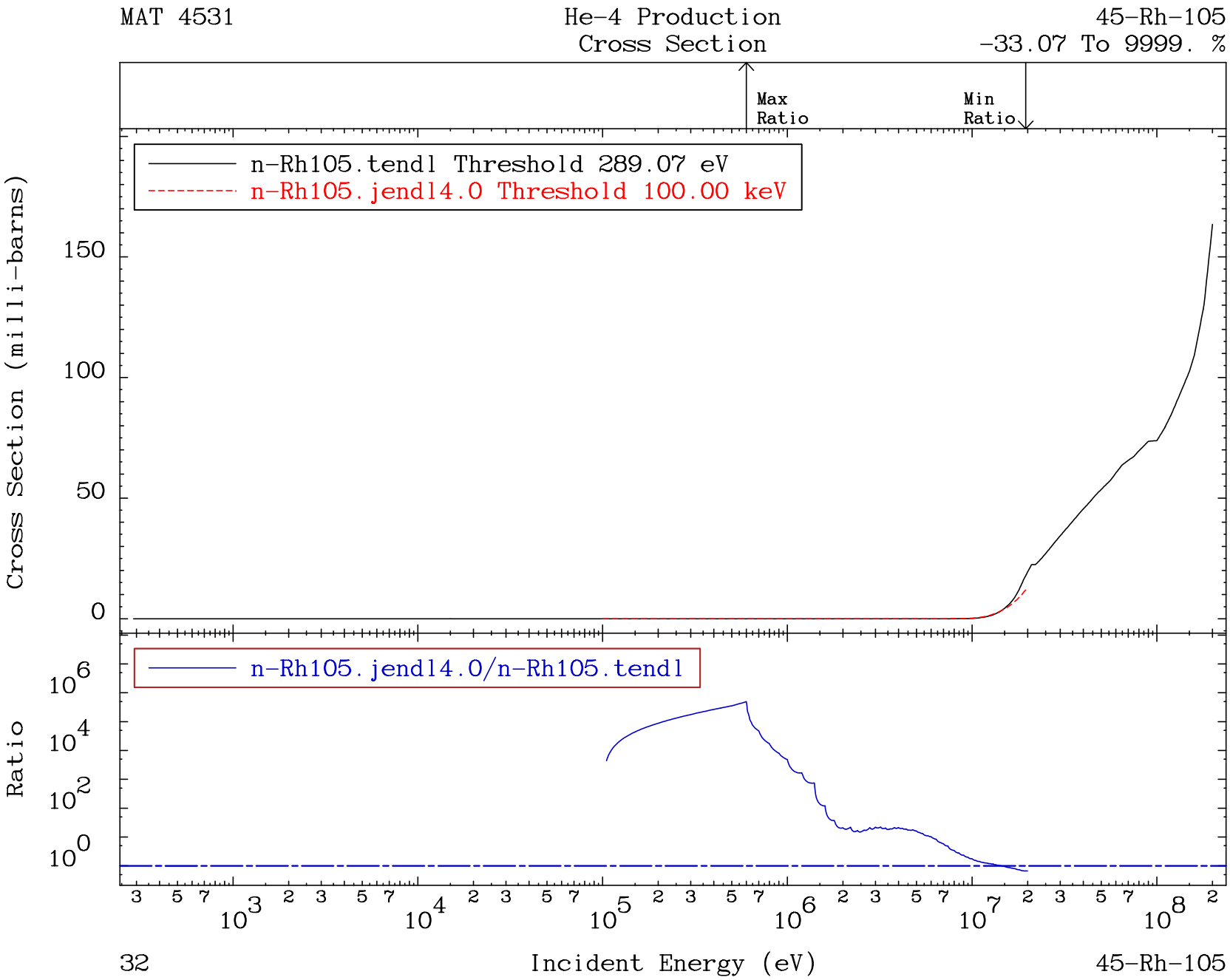

MAT 4531
(n,t)
Cross Section
45-Rh-105
-73.92 To 5593. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 7.5343 MeV
n-Rh105.jendl4.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
27
45-Rh-105

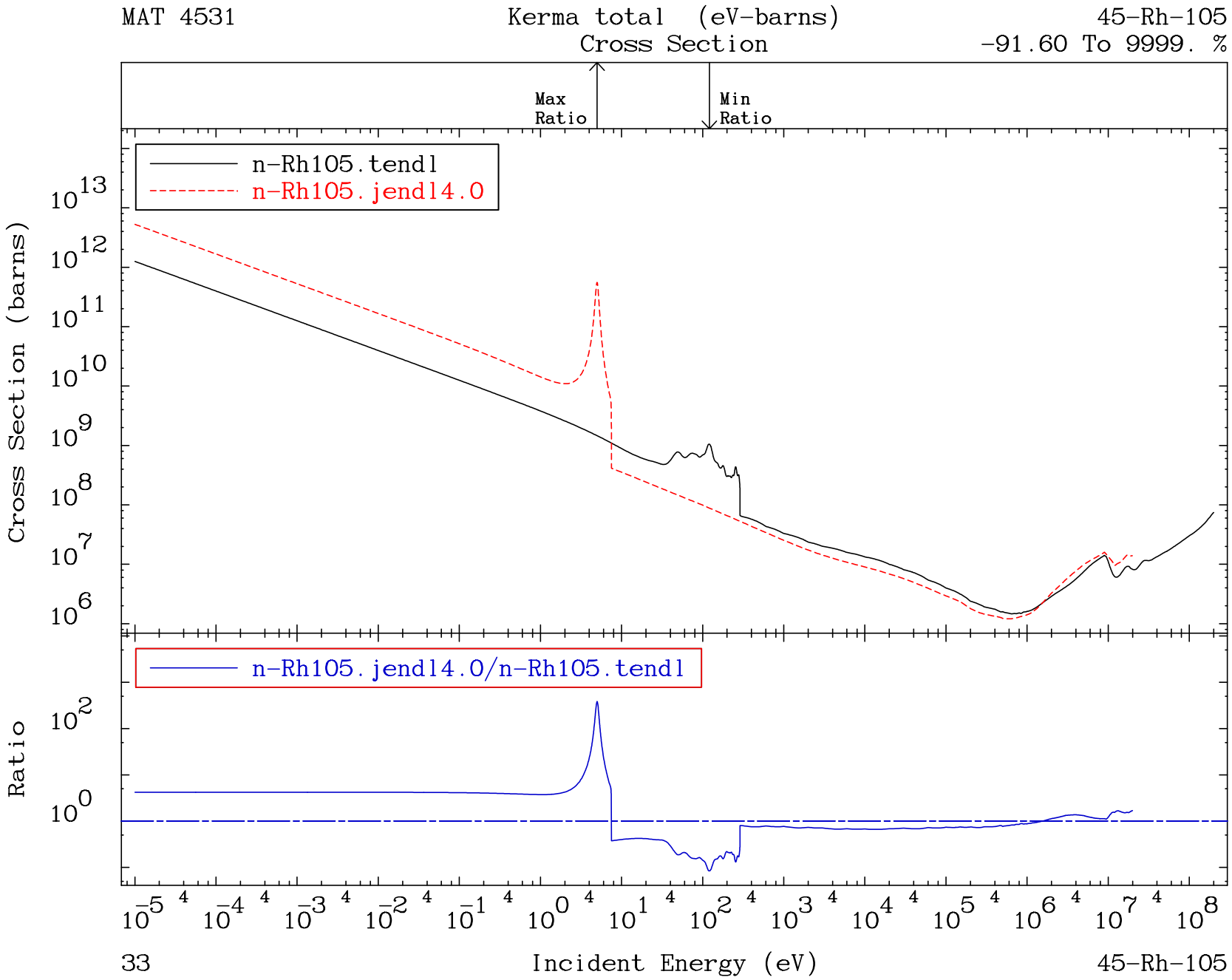

MAT 4531
(n,α)
Cross Section
45-Rh-105
-39.99 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 289.07 eV
n-Rh105.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
28
45-Rh-105

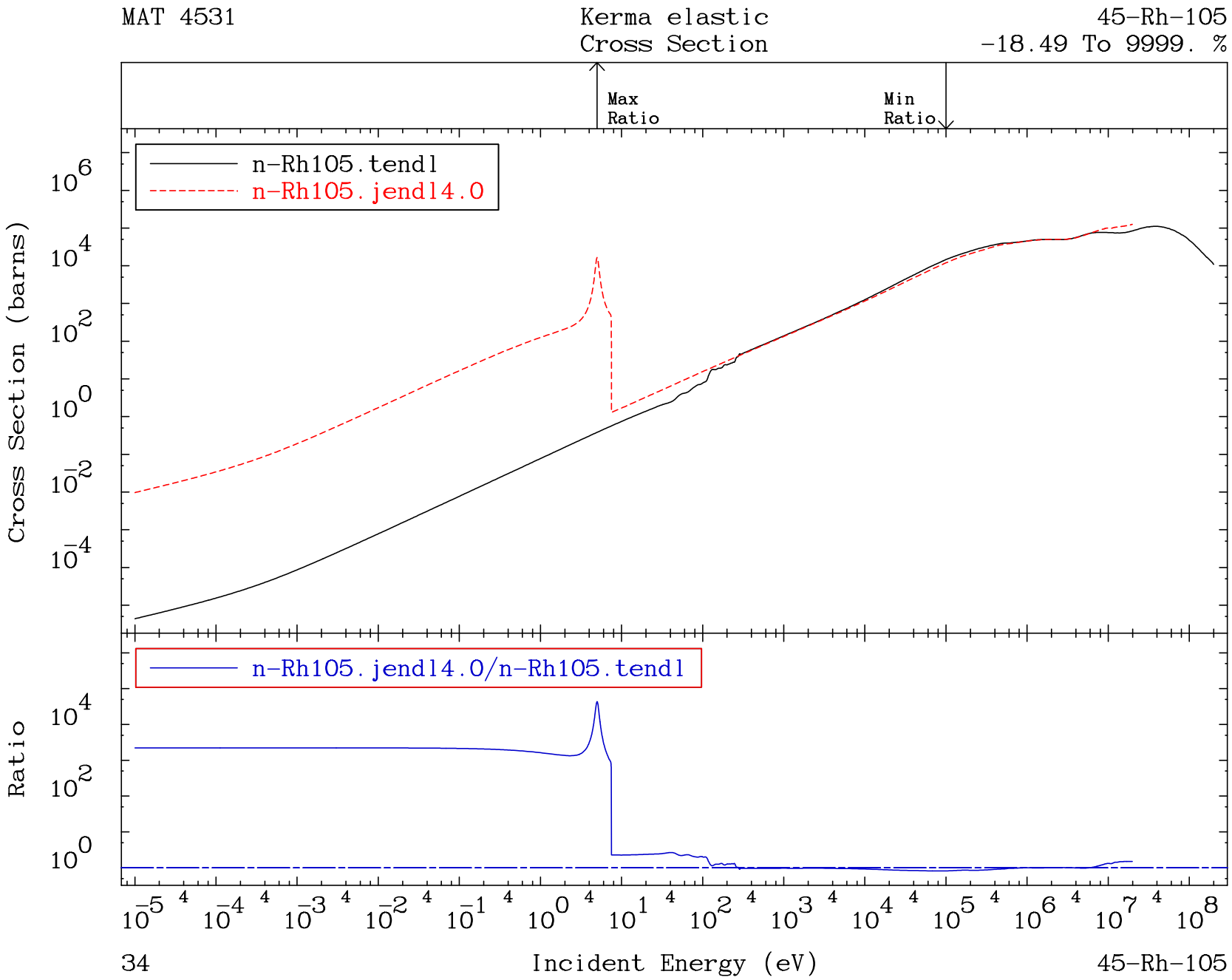

MAT 4531
Hydrogen Production
Cross Section
45-Rh-105
-99.81 To 603.1 %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 1.1453 MeV
n-Rh105.jendl4.0 Threshold 1.1273 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^0
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
45-Rh-105

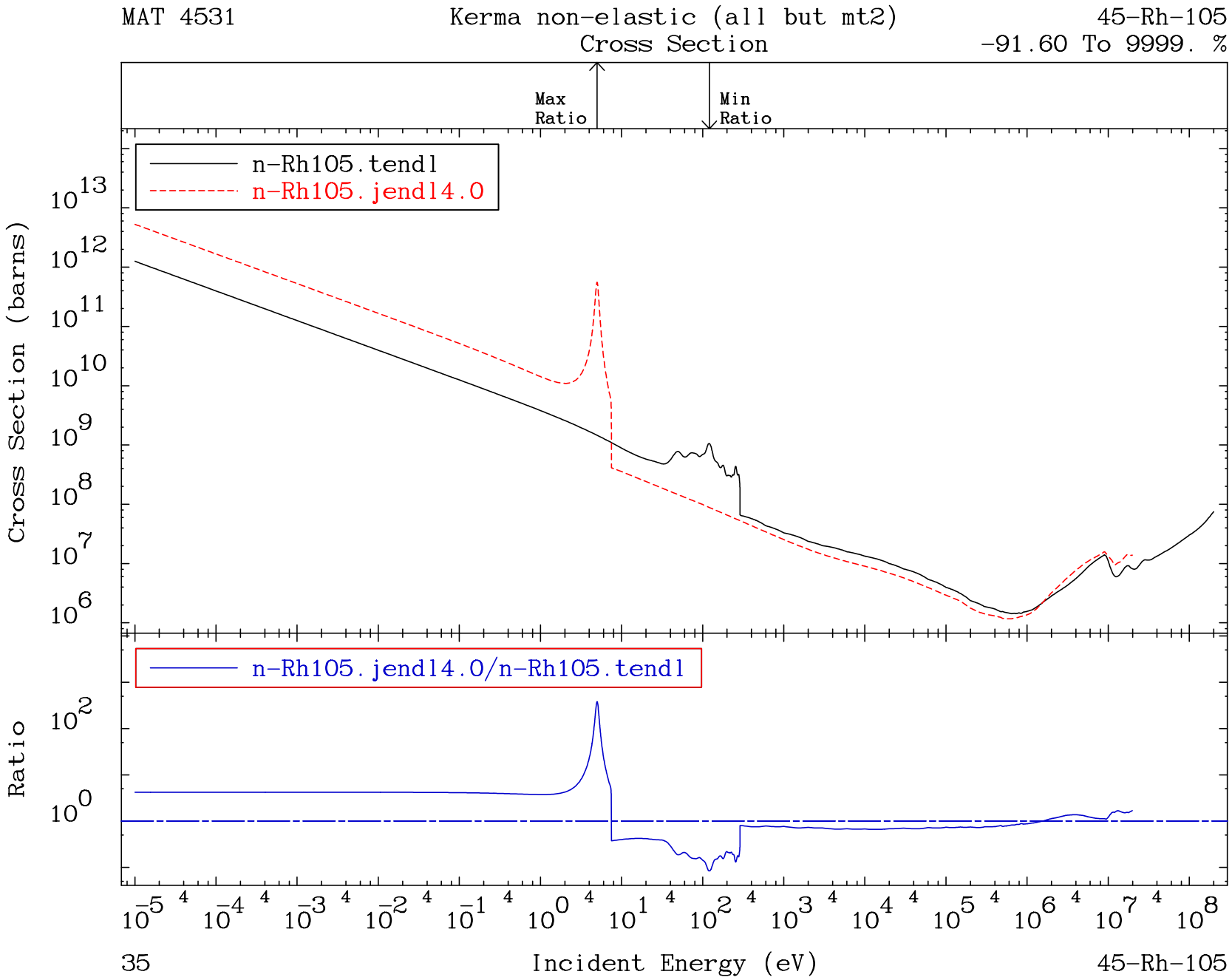

MAT 4531
Deuterium Production
Cross Section
45-Rh-105
-98.90 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 4.8663 MeV
n-Rh105.jendl4.0 Threshold 5.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^4
10^2
10^0
10^-2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
45-Rh-105

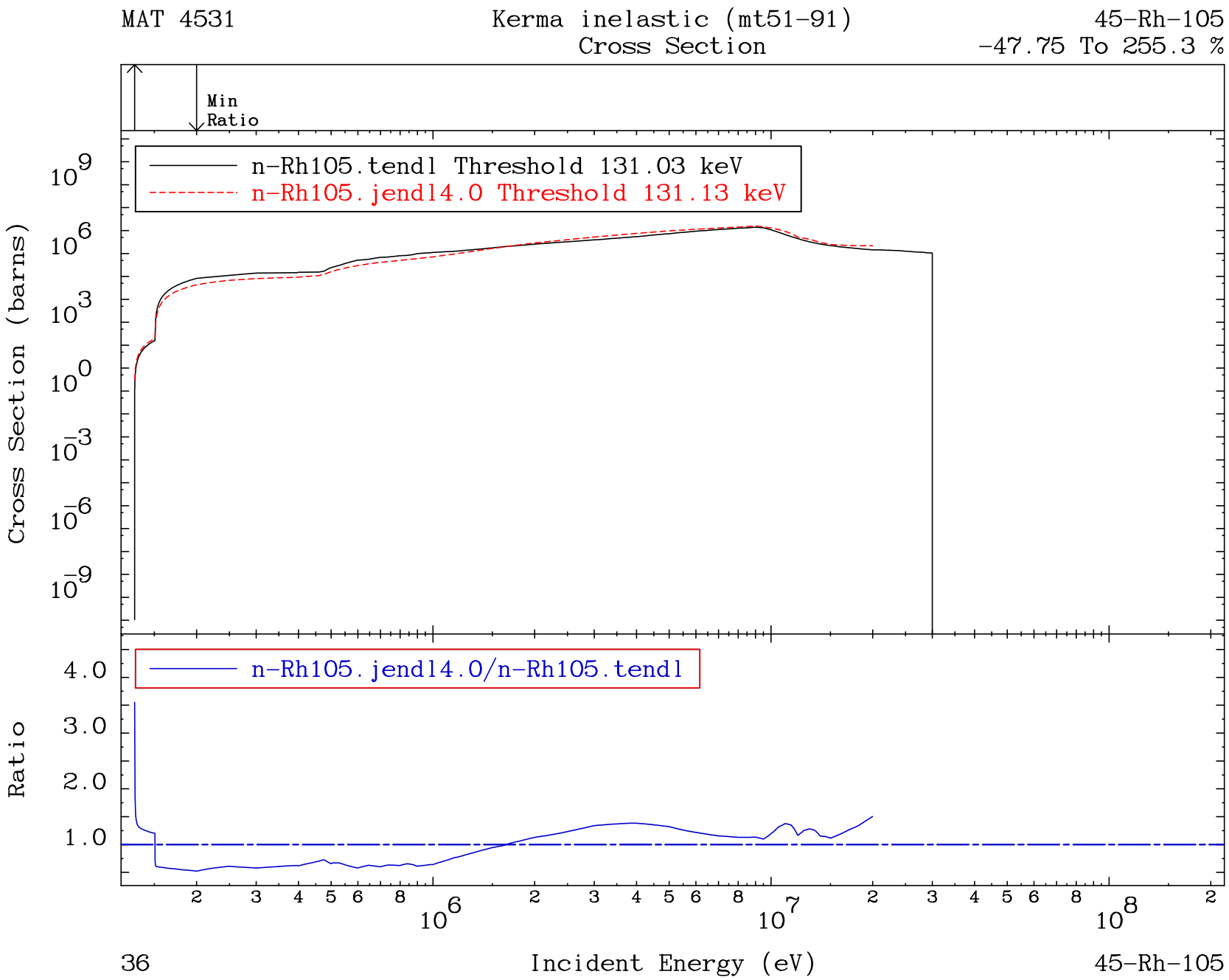

MAT 4531
Tritium Production
Cross Section
45-Rh-105
-73.92 To 5593. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 7.5343 MeV
n-Rh105.jendl4.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^1
10^0
4
4
4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
45-Rh-105

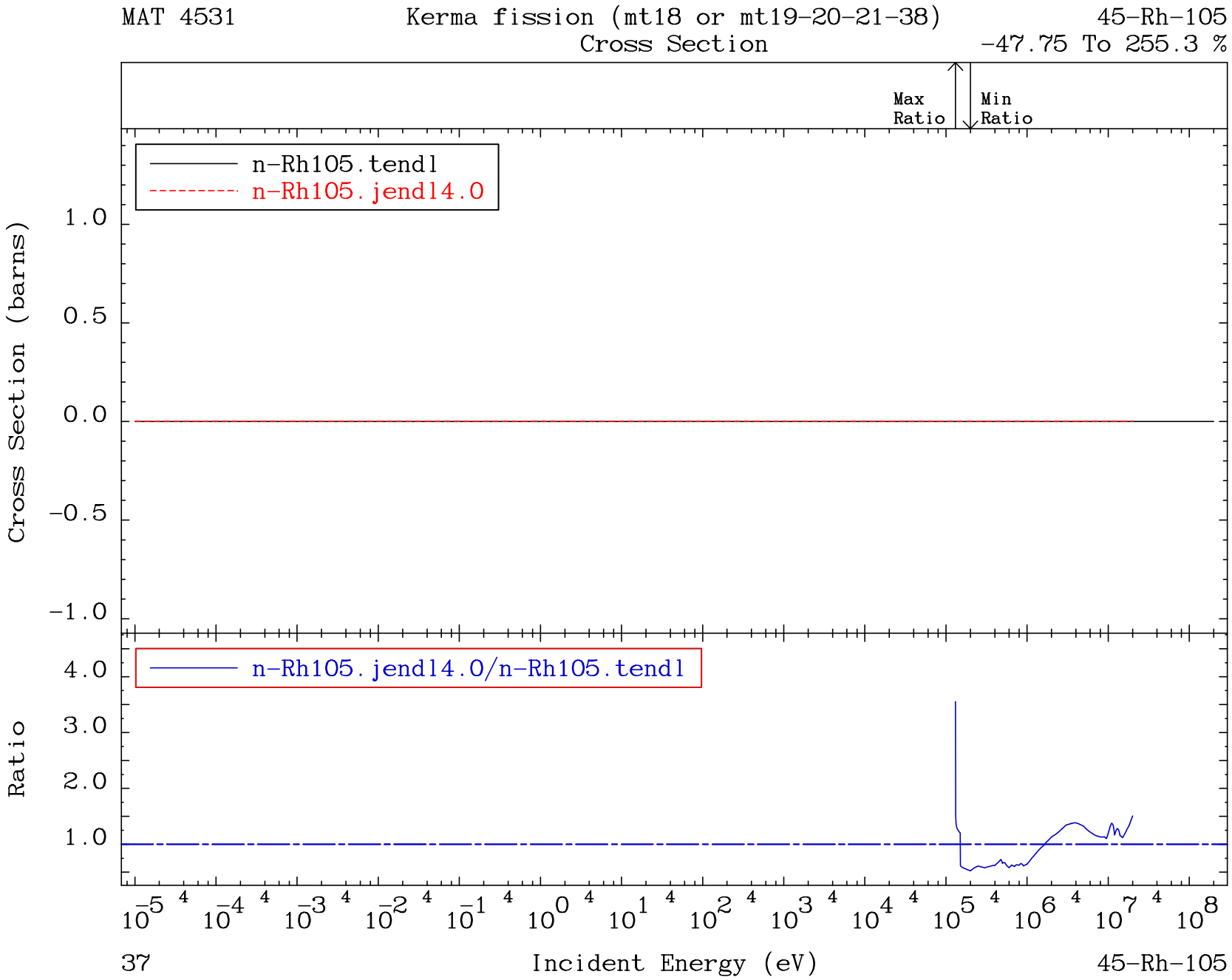

MAT 4531
He-4 Production
Cross Section
45-Rh-105
-33.07 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl Threshold 289.07 eV
n-Rh105.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
150
100
50
0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^6
10^4
10^2
10^0
3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
32
Incident Energy (eV)
45-Rh-105

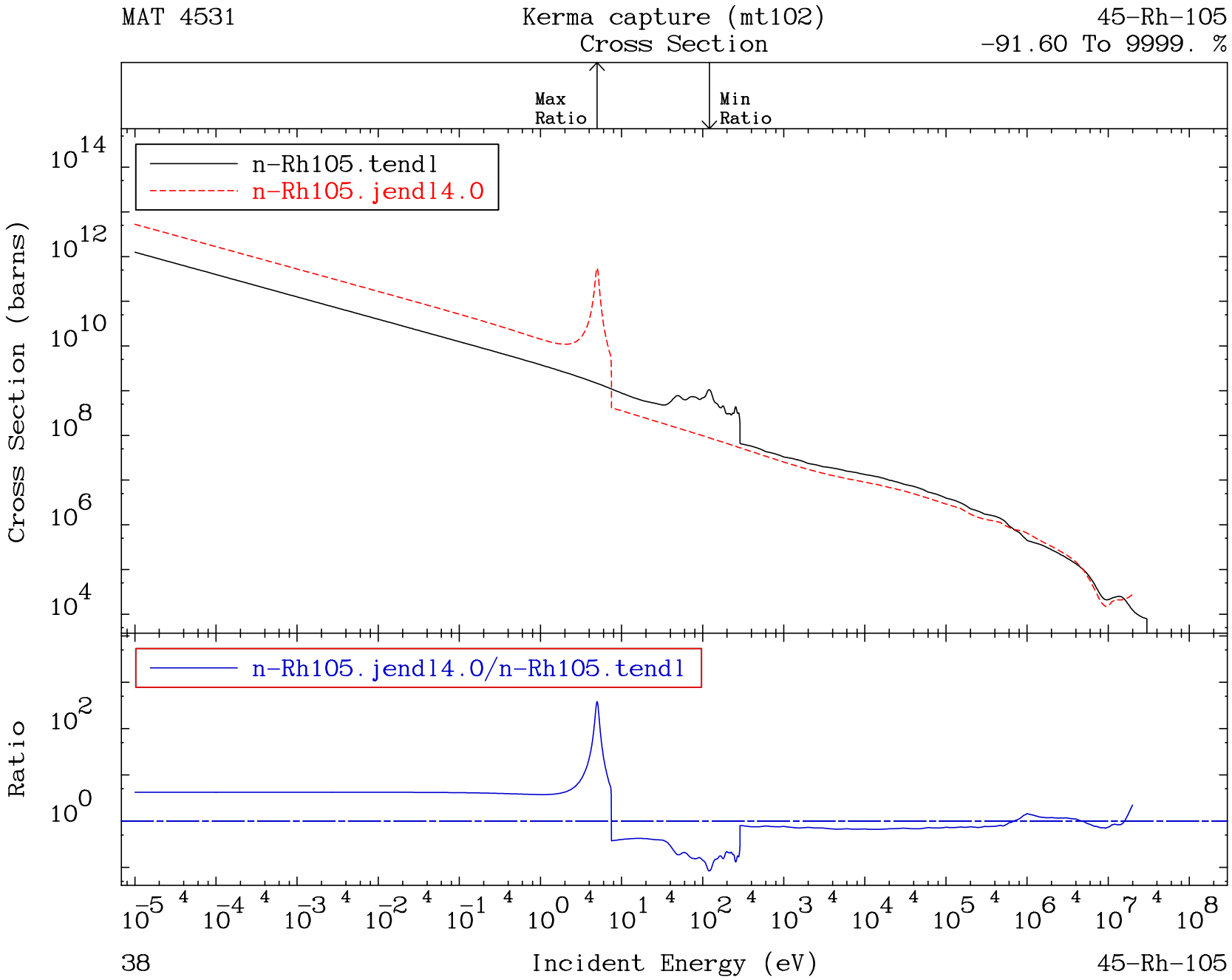

MAT 4531
Kerma total (eV-barns)
Cross Section
45-Rh-105
-91.60 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
33
45-Rh-105

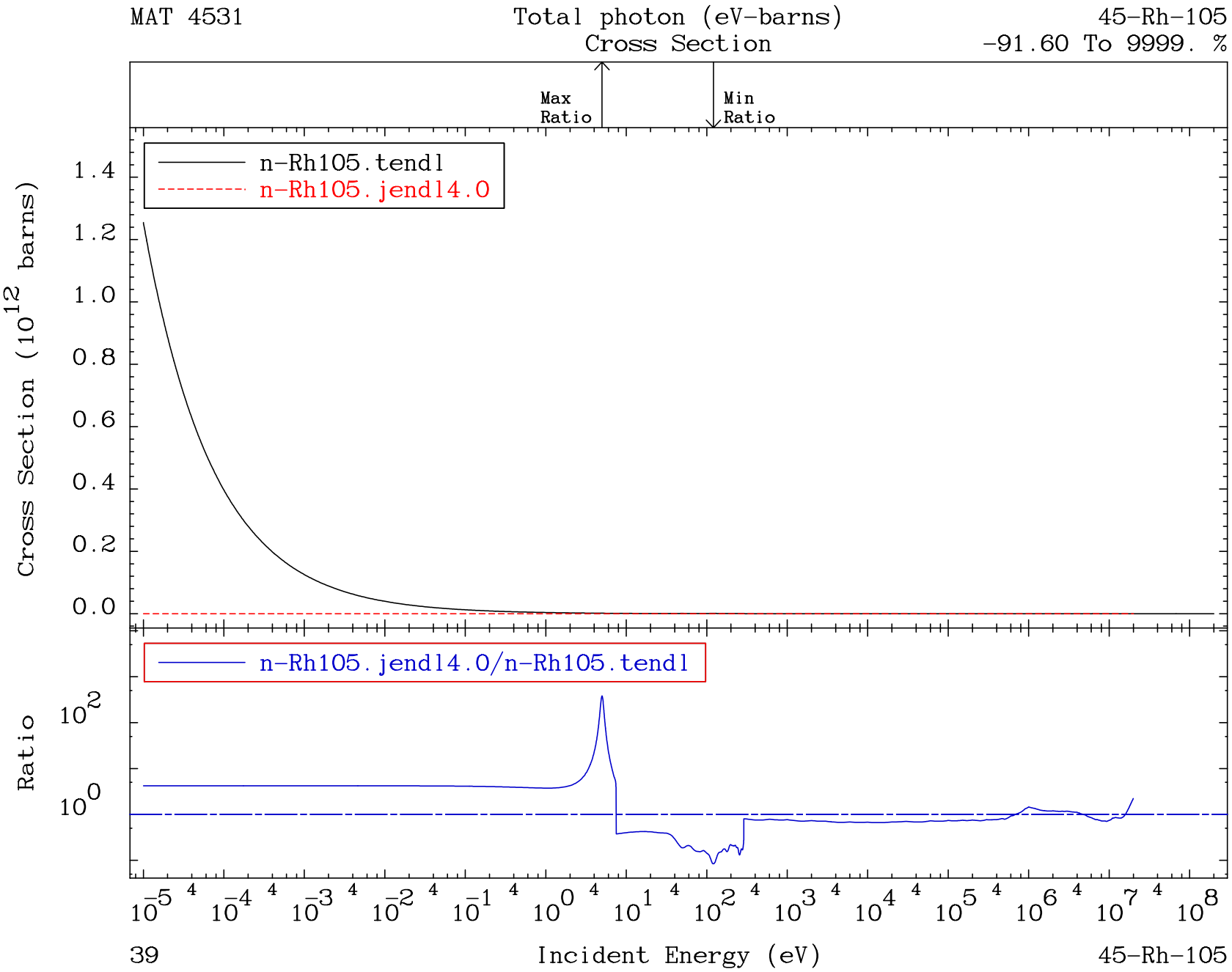

MAT 4531
Kerma elastic
Cross Section
45-Rh-105
-18.49 To 9999. %
Max
Ratio
Min
Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
34
Incident Energy (eV)
45-Rh-105

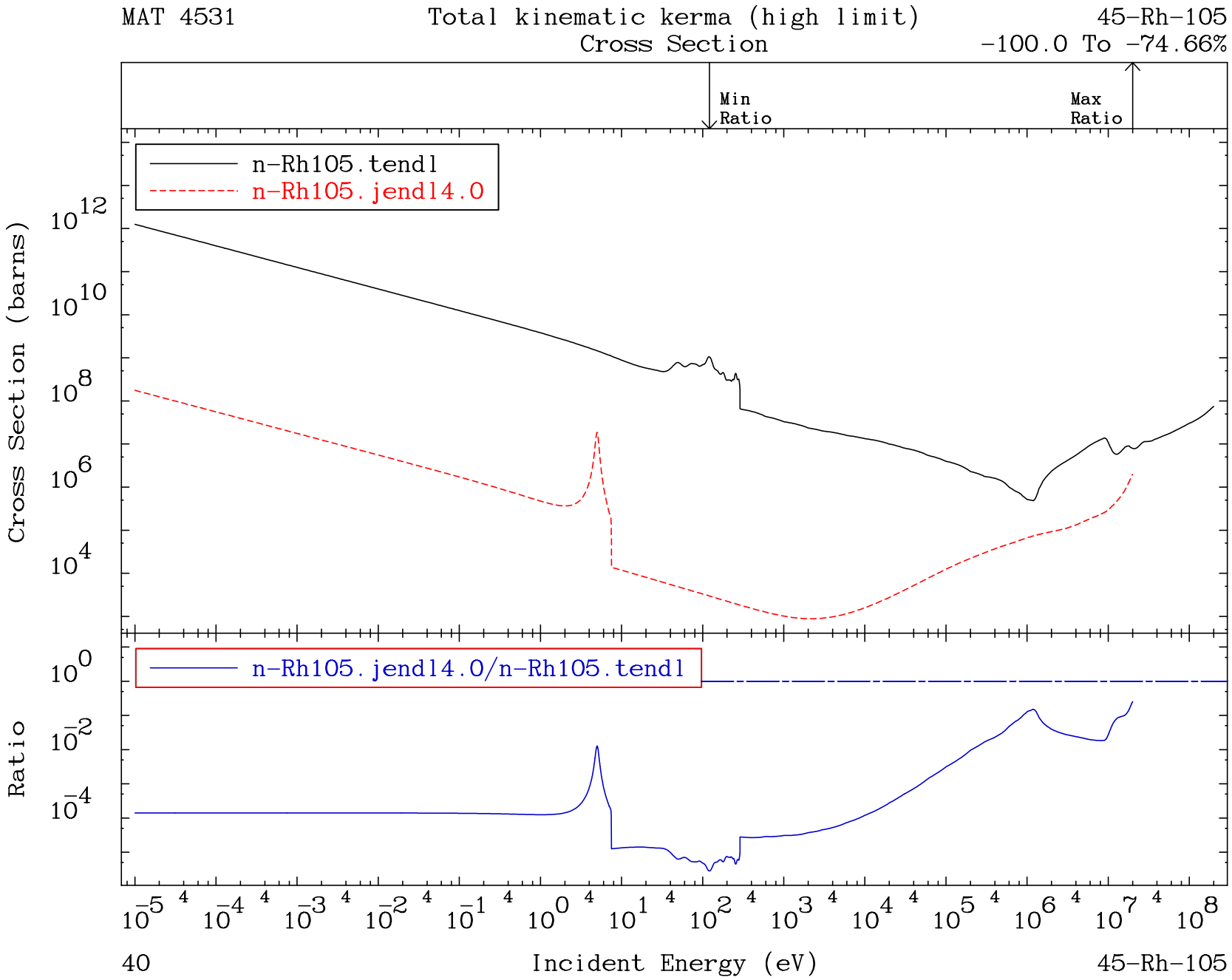

MAT 4531
Kerma non-elastic (all but mt2)
Cross Section
45-Rh-105
-91.60 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
35
45-Rh-105

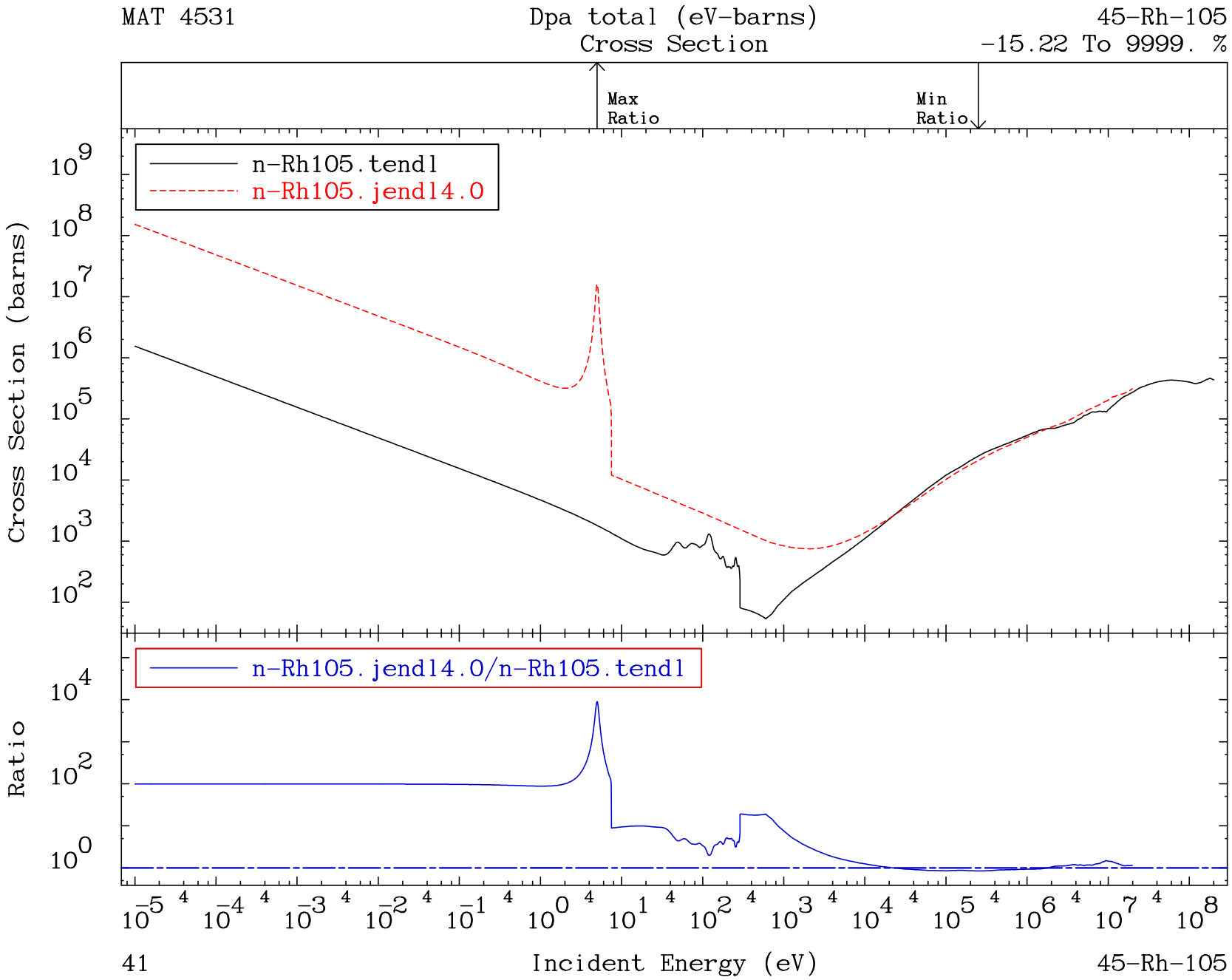

MAT 4531
Kerma inelastic (mt51-91)
Cross Section
45-Rh-105
-47.75 To 255.3 %
Min
Ratio
n-Rh105.tendl Threshold 131.03 keV
n-Rh105.jendl4.0 Threshold 131.13 keV
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
36
45-Rh-105

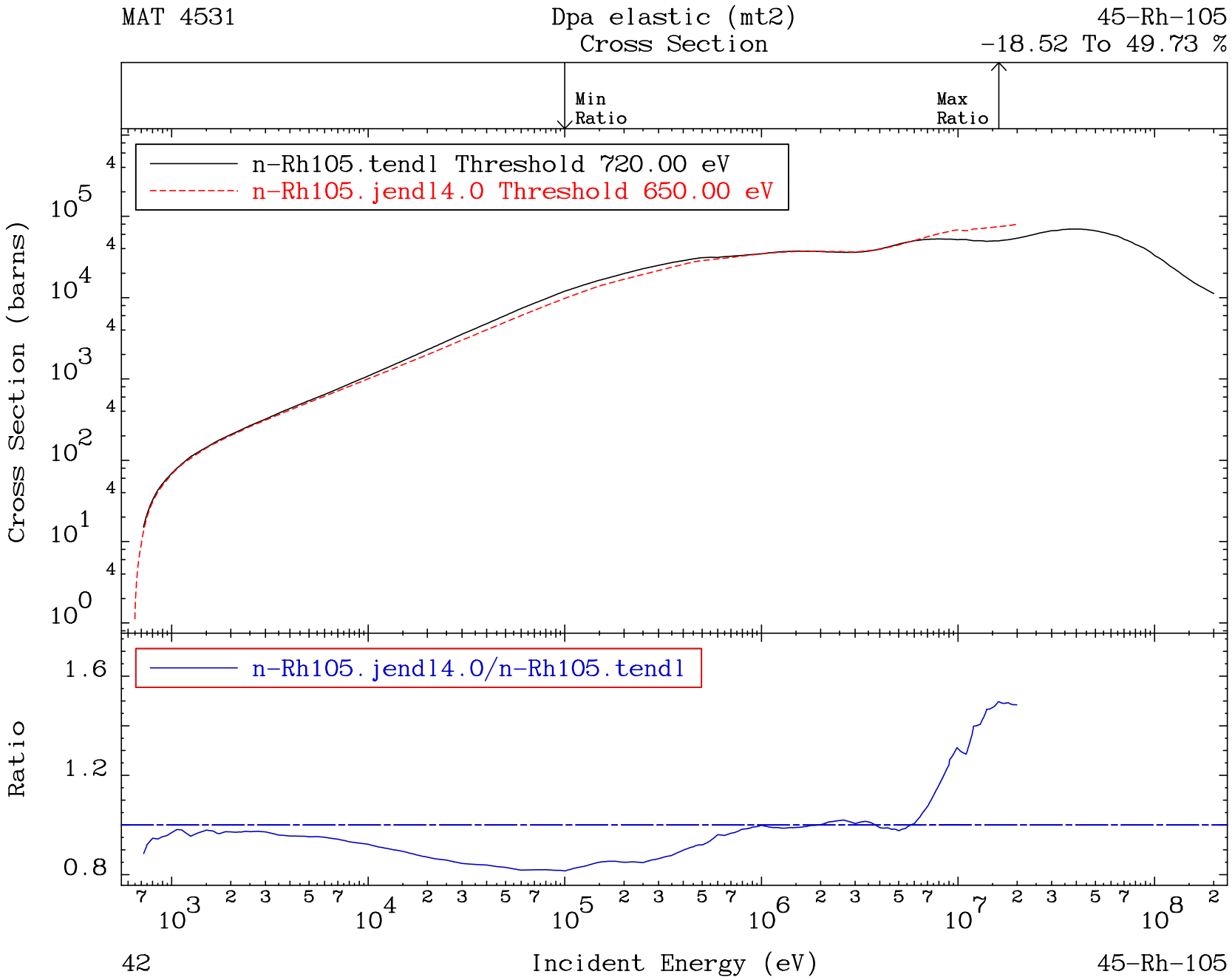

MAT 4531
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
45-Rh-105
-47.75 To 255.3 %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
4.0
3.0
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
45-Rh-105

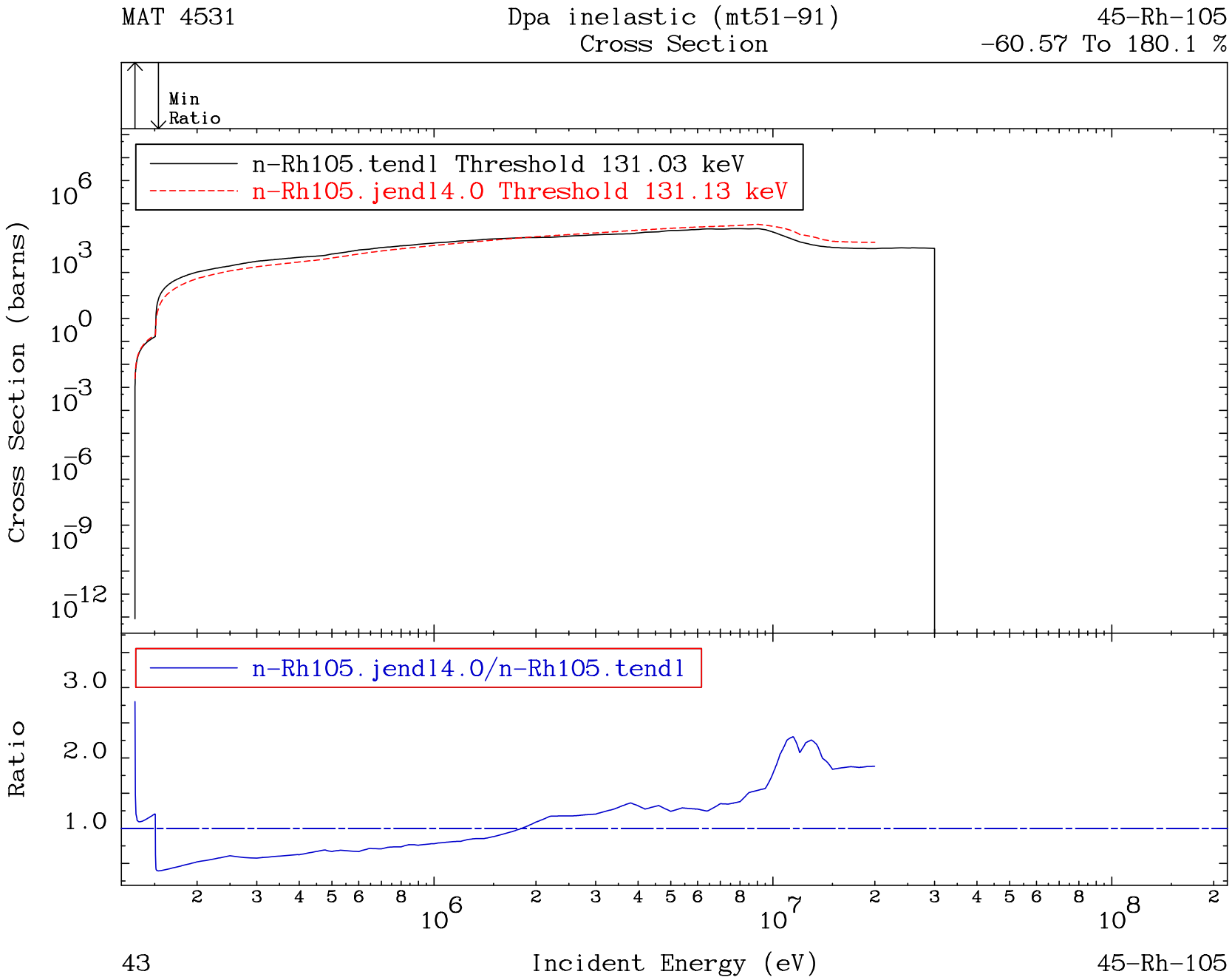

MAT 4531
Kerma capture (mt102)
Cross Section
45-Rh-105
-91.60 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
38
45-Rh-105

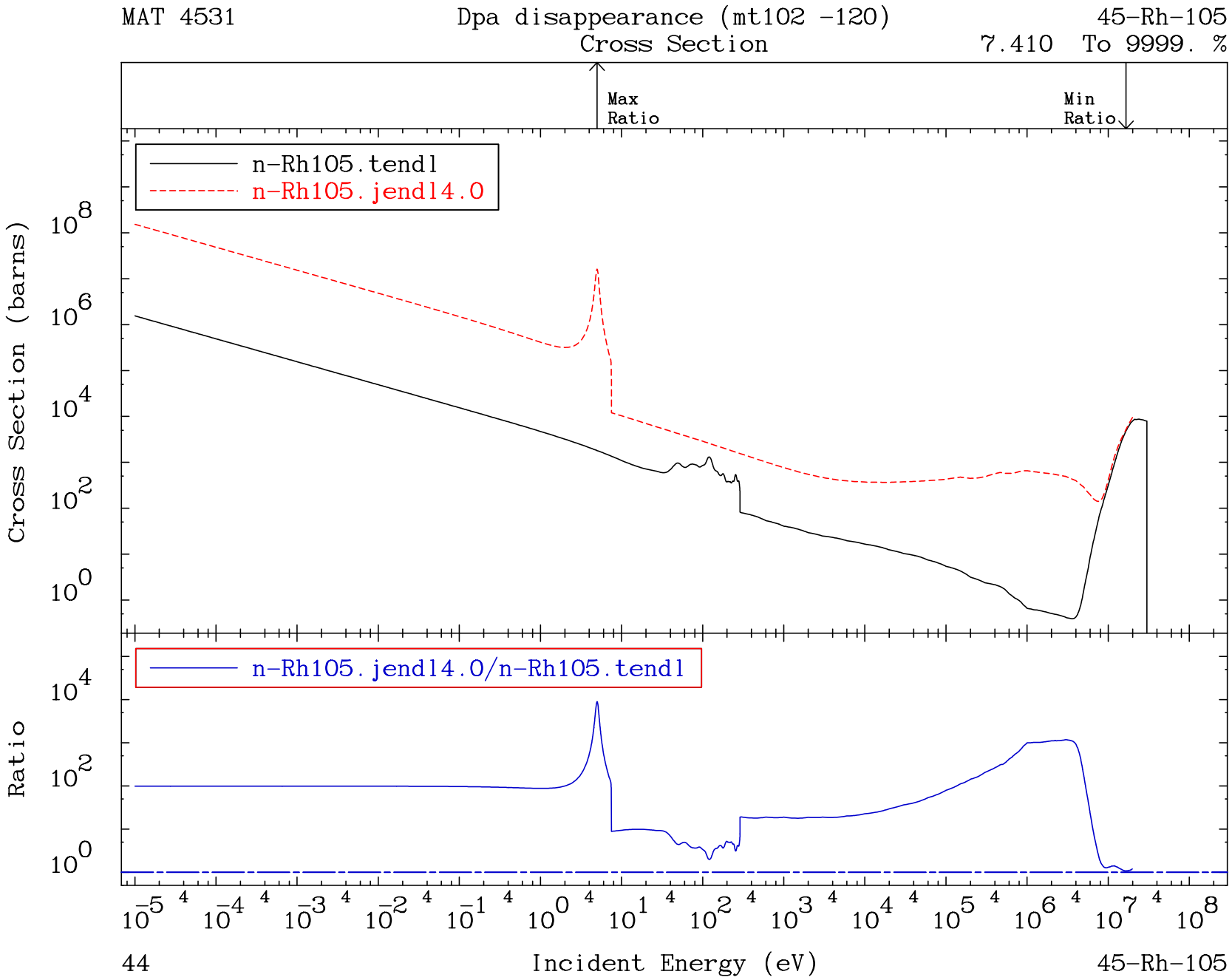

MAT 4531
Total photon (eV-barns)
Cross Section
45-Rh-105
-91.60 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (10^{12} barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
10^2
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
39
Incident Energy (eV)
45-Rh-105


MAT 4531
Total kinematic kerma (high limit)
Cross Section
45-Rh-105
-100.0 To -74.66%
Min Ratio
Max Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
Ratio
n-Rh105.jendl4.0/n-Rh105.tendl
Incident Energy (eV)
40
45-Rh-105


MAT 4531
Dpa total (eV-barns)
Cross Section
45-Rh-105
-15.22 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
41
45-Rh-105


MAT 4531
Dpa elastic (mt2)
Cross Section
45-Rh-105
-18.52 To 49.73 %
Min
Ratio
Max
Ratio
n-Rh105.tendl Threshold 720.00 eV
n-Rh105.jendl4.0 Threshold 650.00 eV
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
42
45-Rh-105


MAT 4531
Dpa inelastic (mt51-91)
Cross Section
45-Rh-105
-60.57 To 180.1 %
Min
Ratio
n-Rh105.tendl Threshold 131.03 keV
n-Rh105.jendl4.0 Threshold 131.13 keV
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
10^-12
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
3.0
2.0
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
43
Incident Energy (eV)
45-Rh-105


MAT 4531
Dpa disappearance (mt102 -120)
Cross Section
45-Rh-105
7.410 To 9999. %
Max Ratio
Min Ratio
n-Rh105.tendl
n-Rh105.jendl4.0
Cross Section (barns)
n-Rh105.jendl4.0/n-Rh105.tendl
Ratio
Incident Energy (eV)
44
45-Rh-105