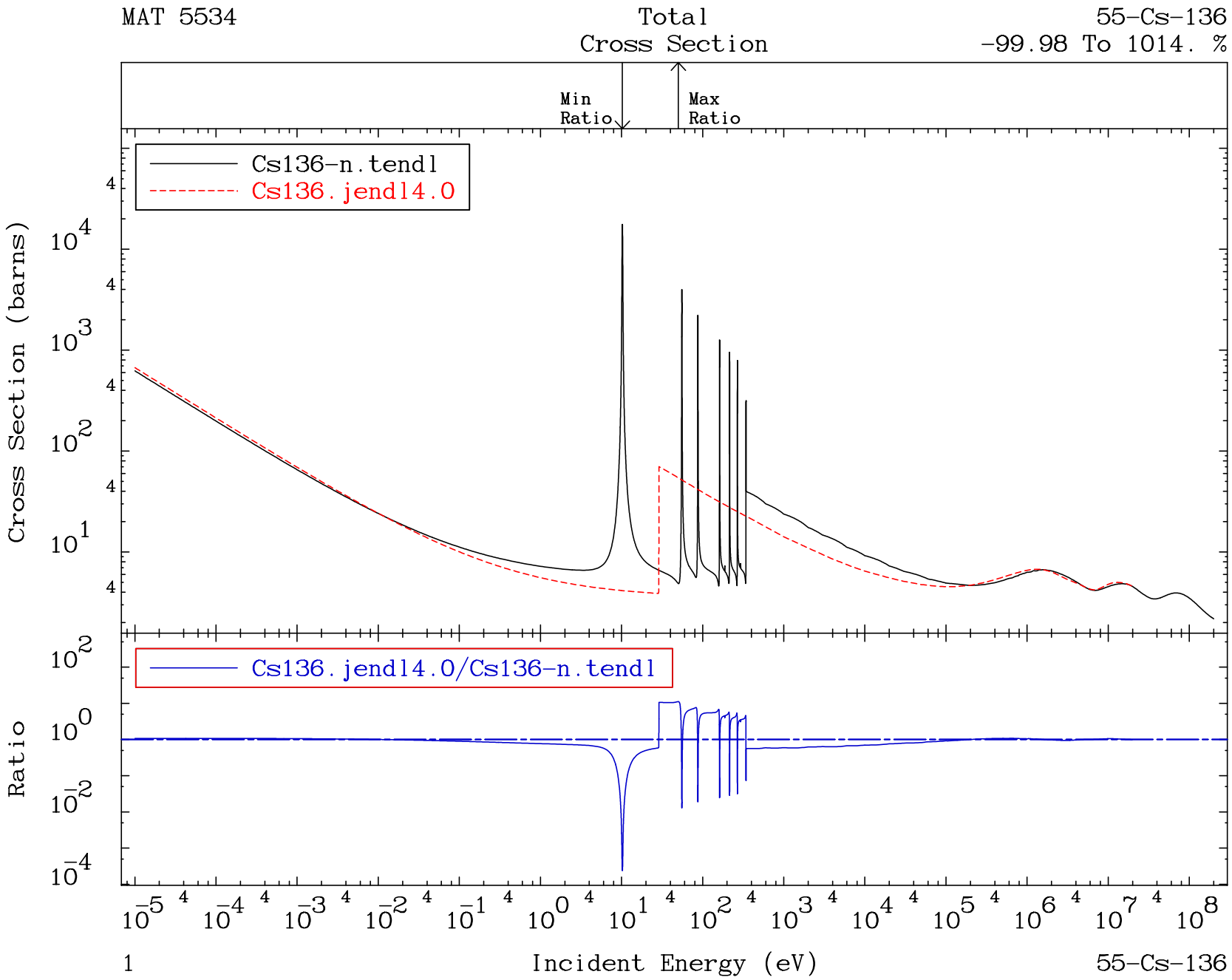
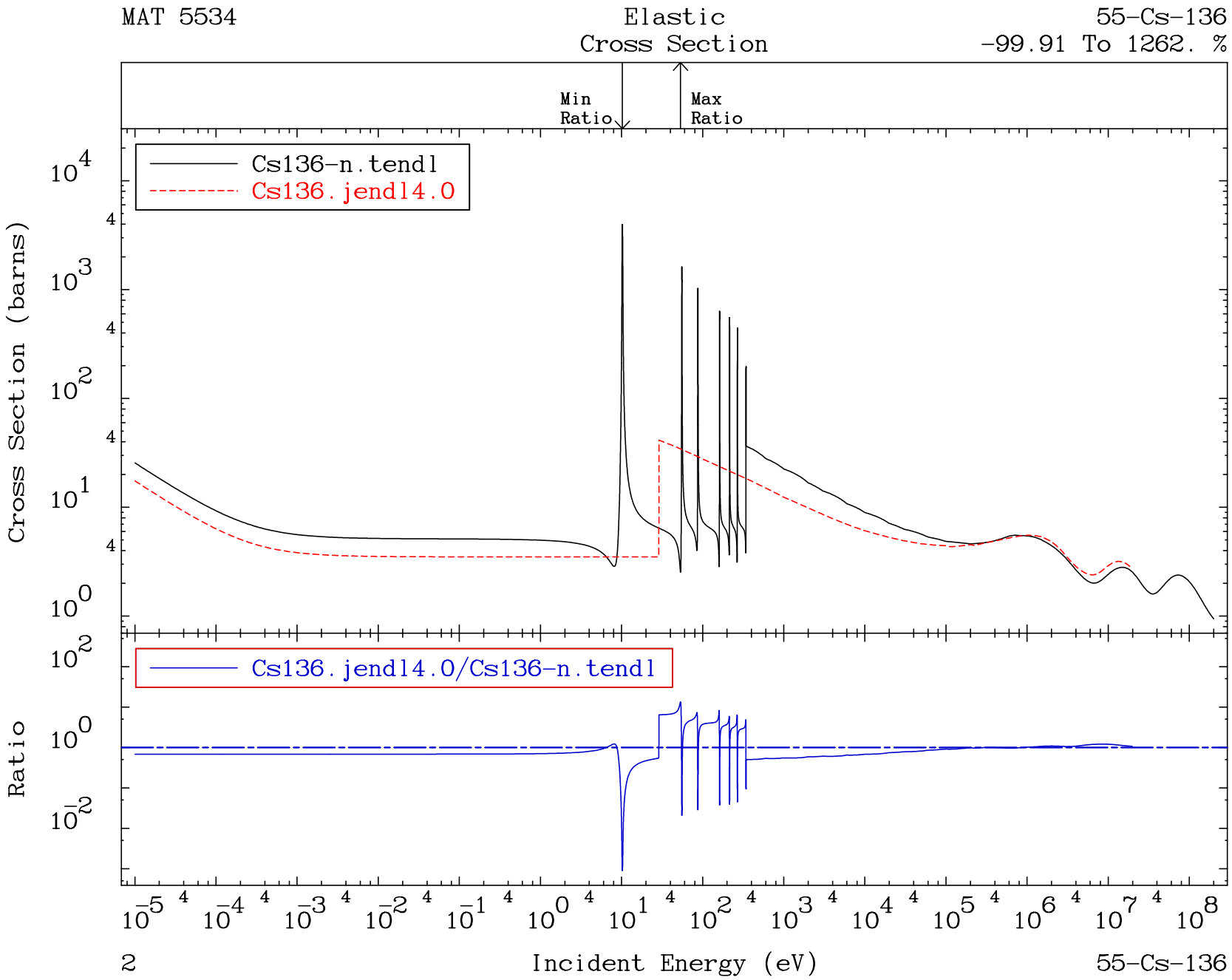
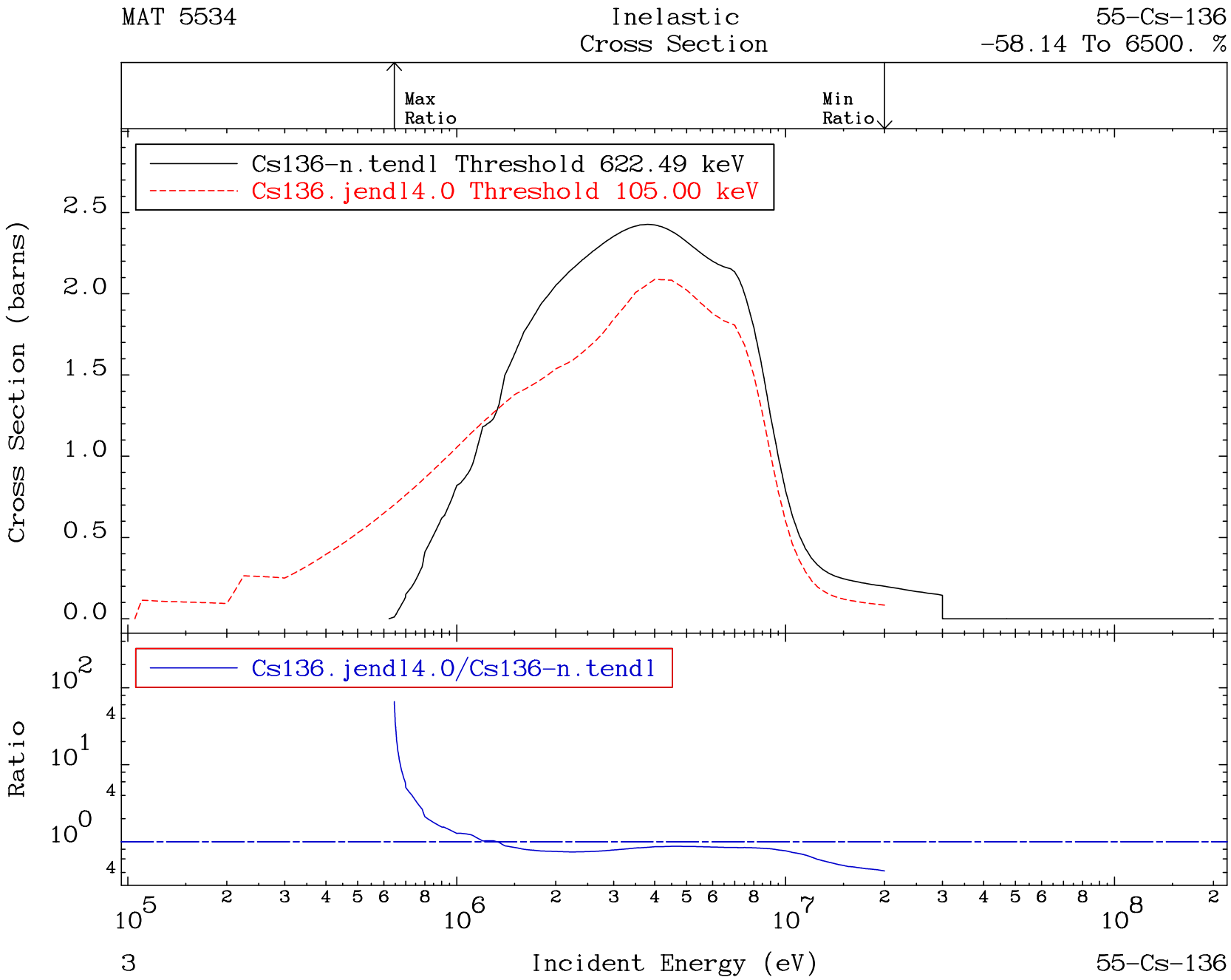
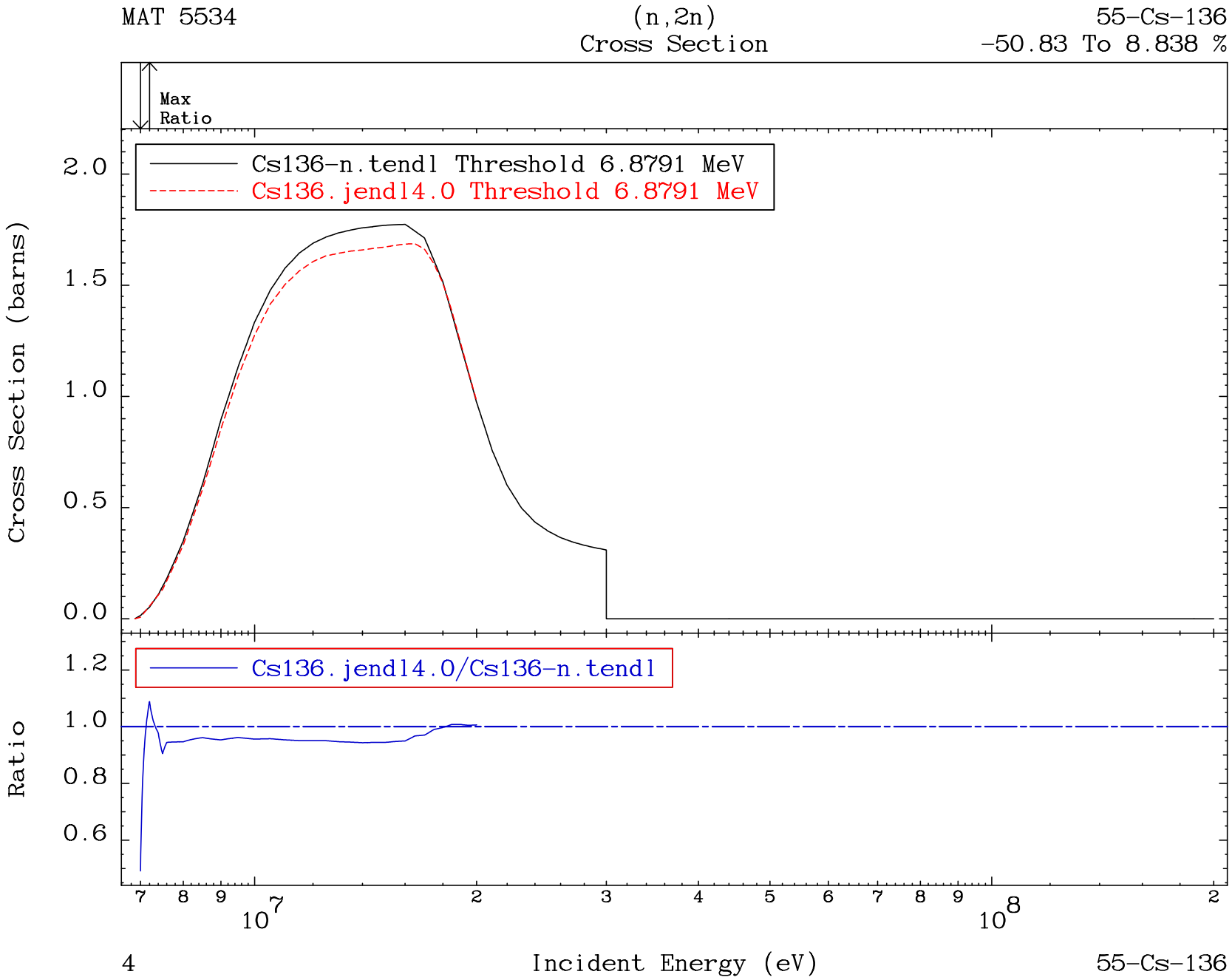
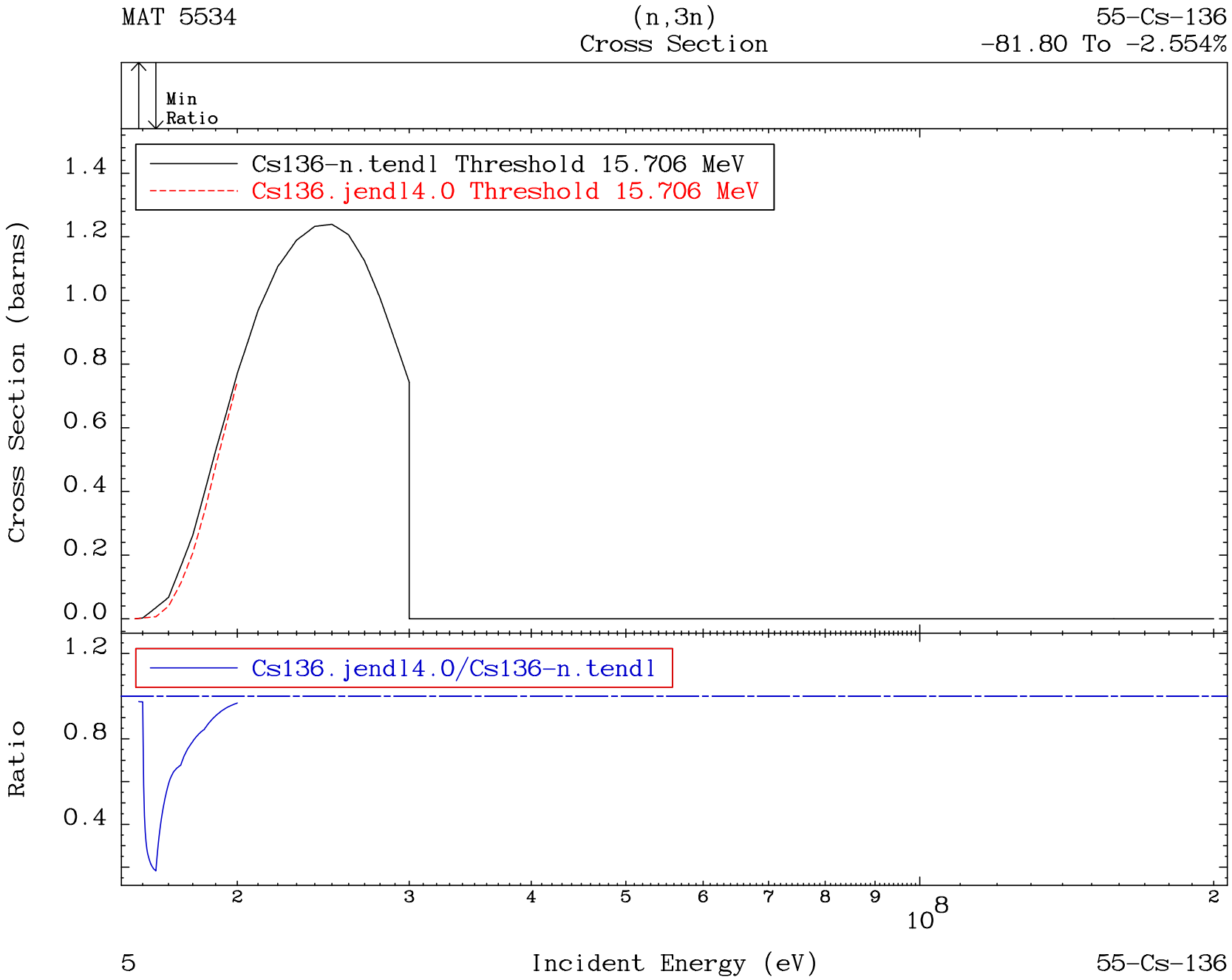
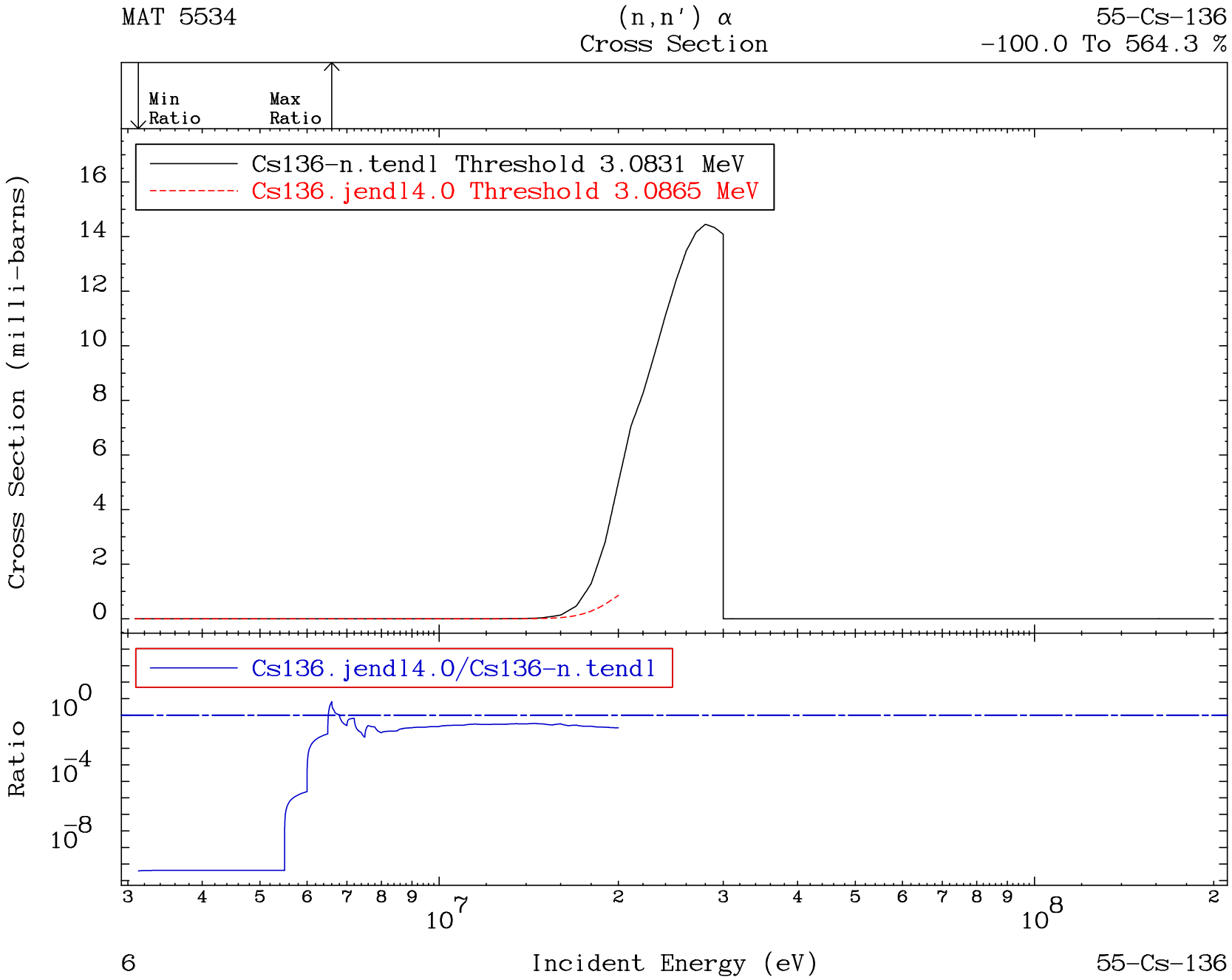

MAT 5534
Total
Cross Section
55-Cs-136
-99.98 To 1014. %
Min
Ratio
Max
Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
1
55-Cs-136

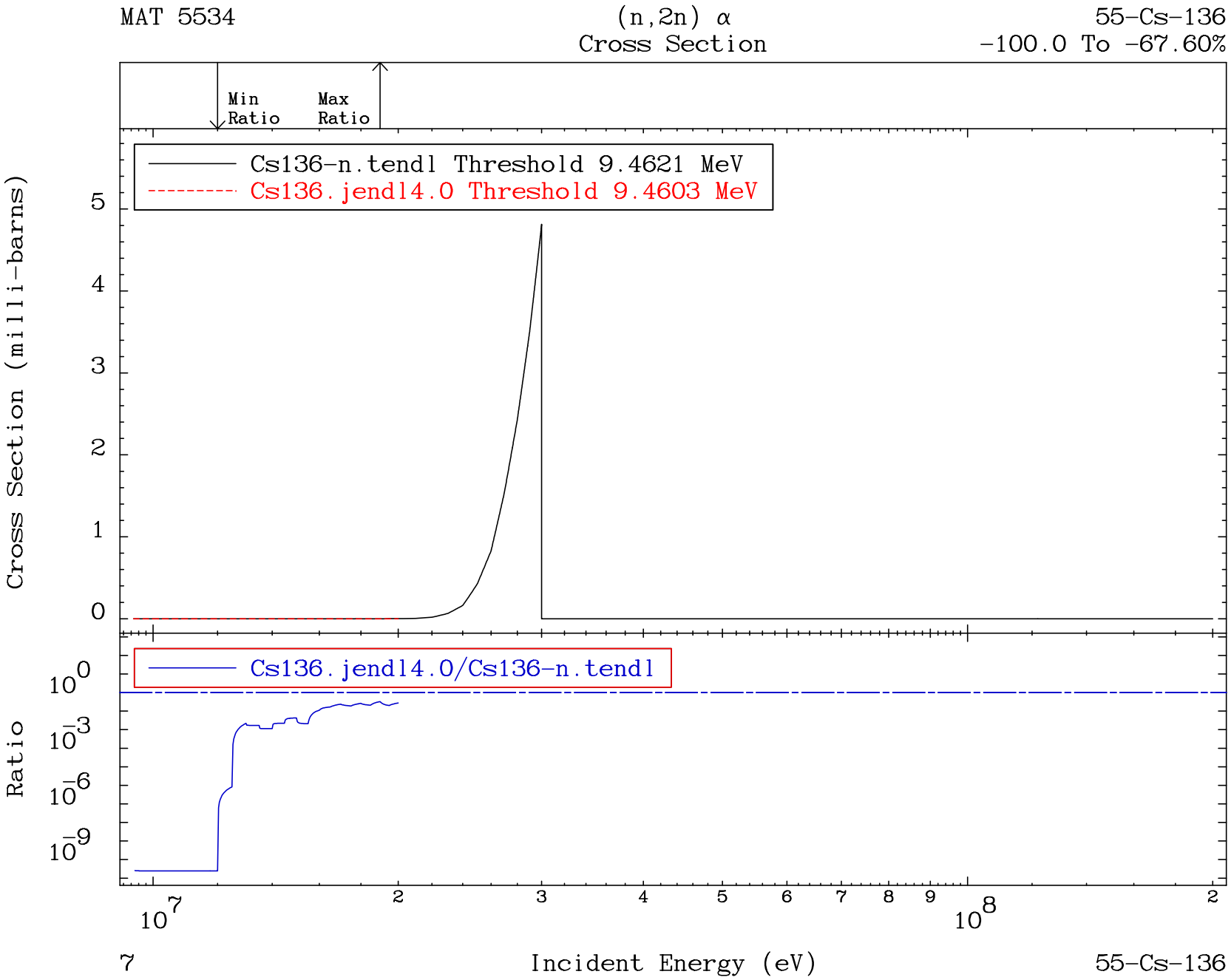

MAT 5534
Elastic
Cross Section
55-Cs-136
-99.91 To 1262. %
Min
Ratio
Max
Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
2
55-Cs-136

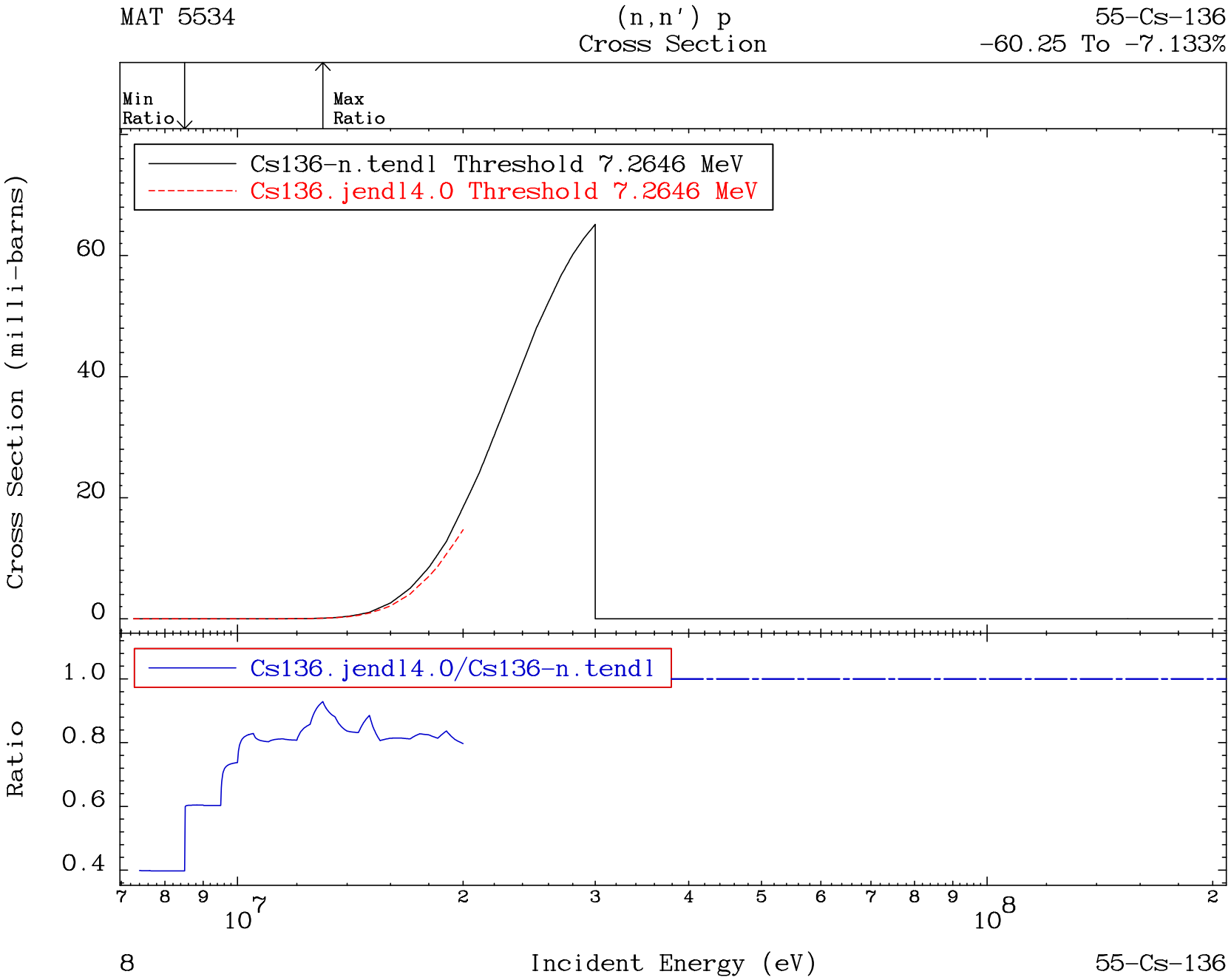

MAT 5534
Inelastic
Cross Section
55-Cs-136
-58.14 To 6500. %
Max
Ratio
Min
Ratio
Cs136-n.tendl Threshold 622.49 keV
Cs136.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^2
10^1
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
55-Cs-136

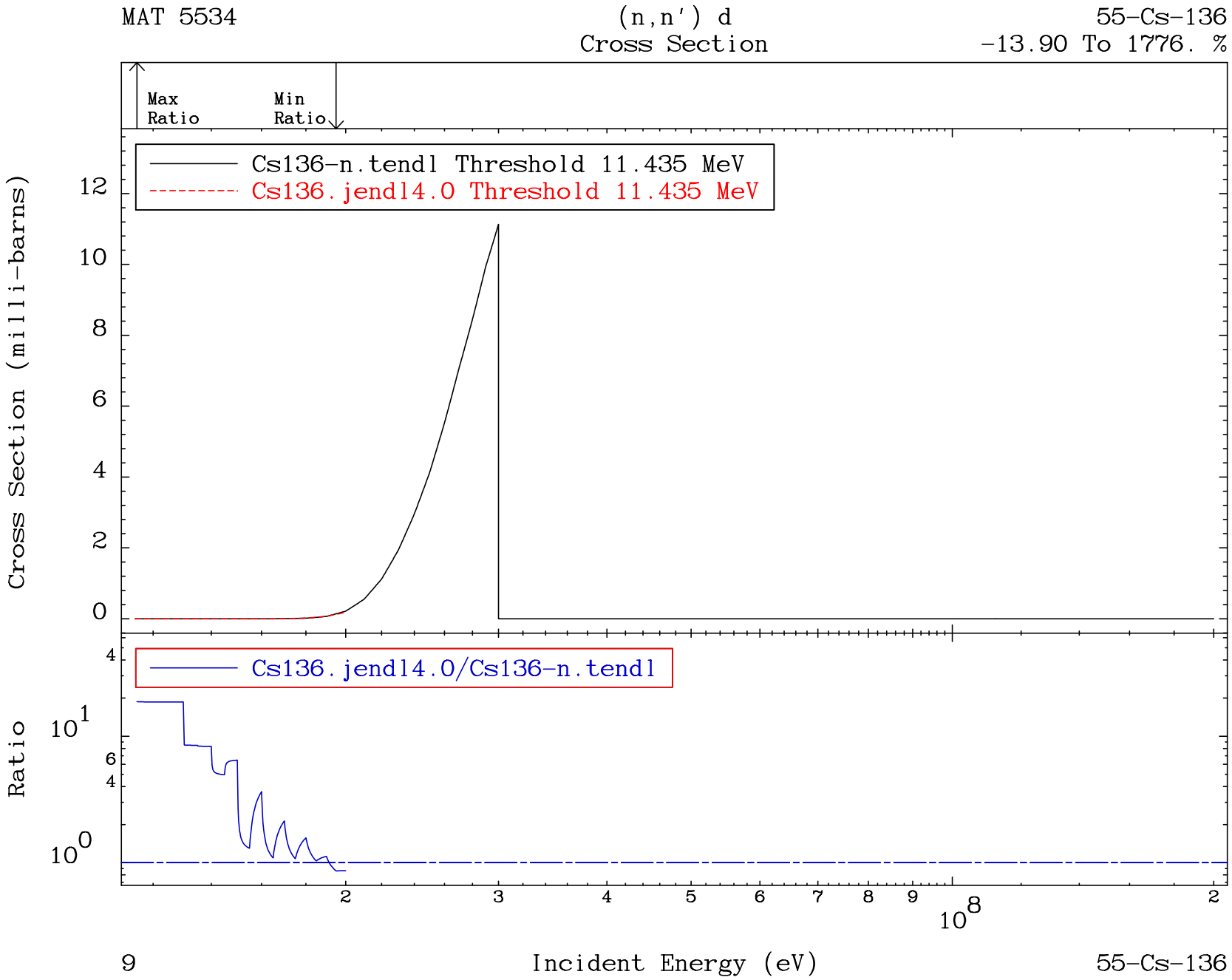

MAT 5534
(n,2n)
Cross Section
55-Cs-136
-50.83 To 8.838 %
Max
Ratio
Cs136-n.tendl Threshold 6.8791 MeV
Cs136.jendl4.0 Threshold 6.8791 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
1.2
1.0
0.8
0.6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
55-Cs-136

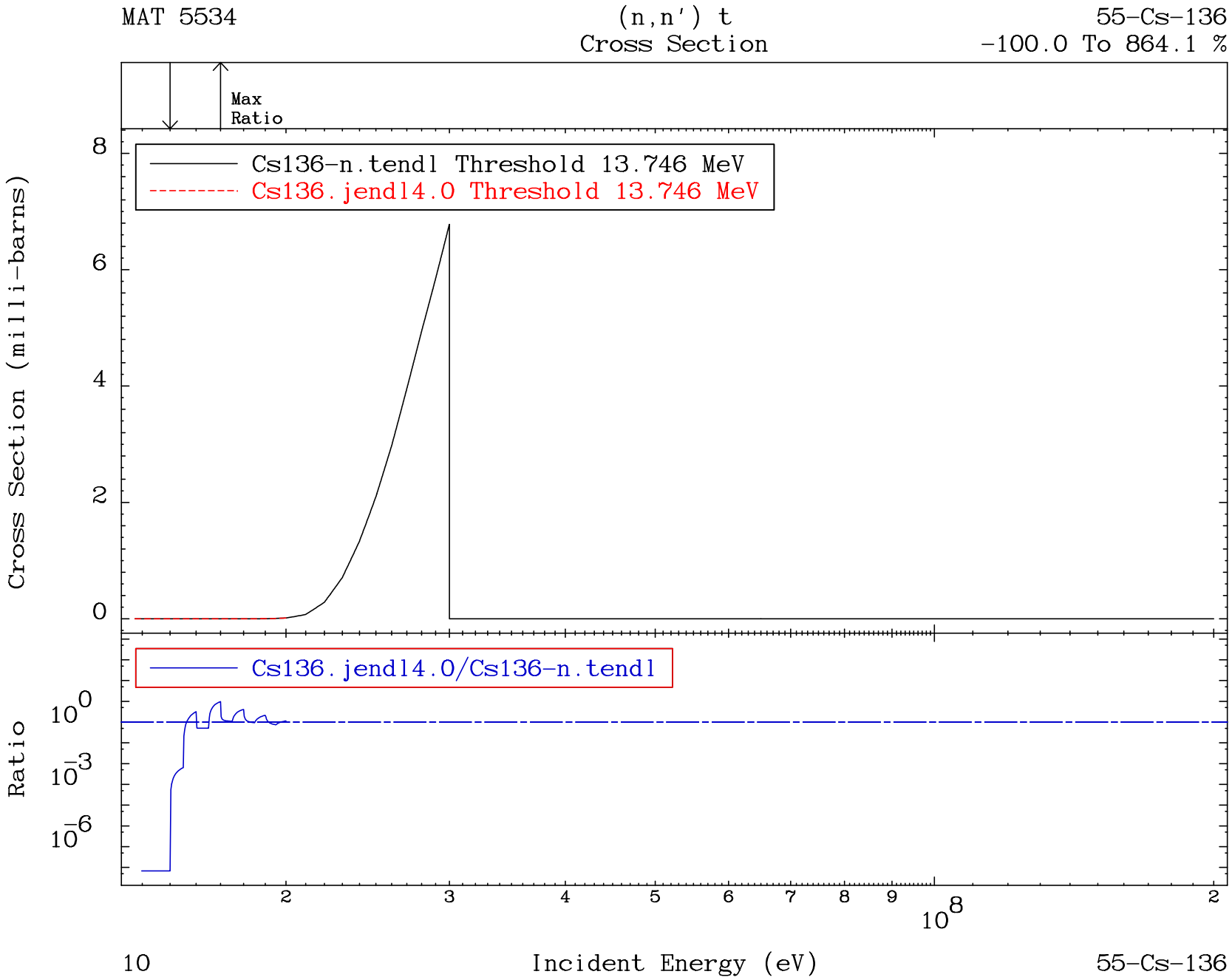

MAT 5534
(n,3n)
Cross Section
55-Cs-136
-81.80 To -2.554%
Min
Ratio
Cs136-n.tendl Threshold 15.706 MeV
Cs136.jendl4.0 Threshold 15.706 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
55-Cs-136

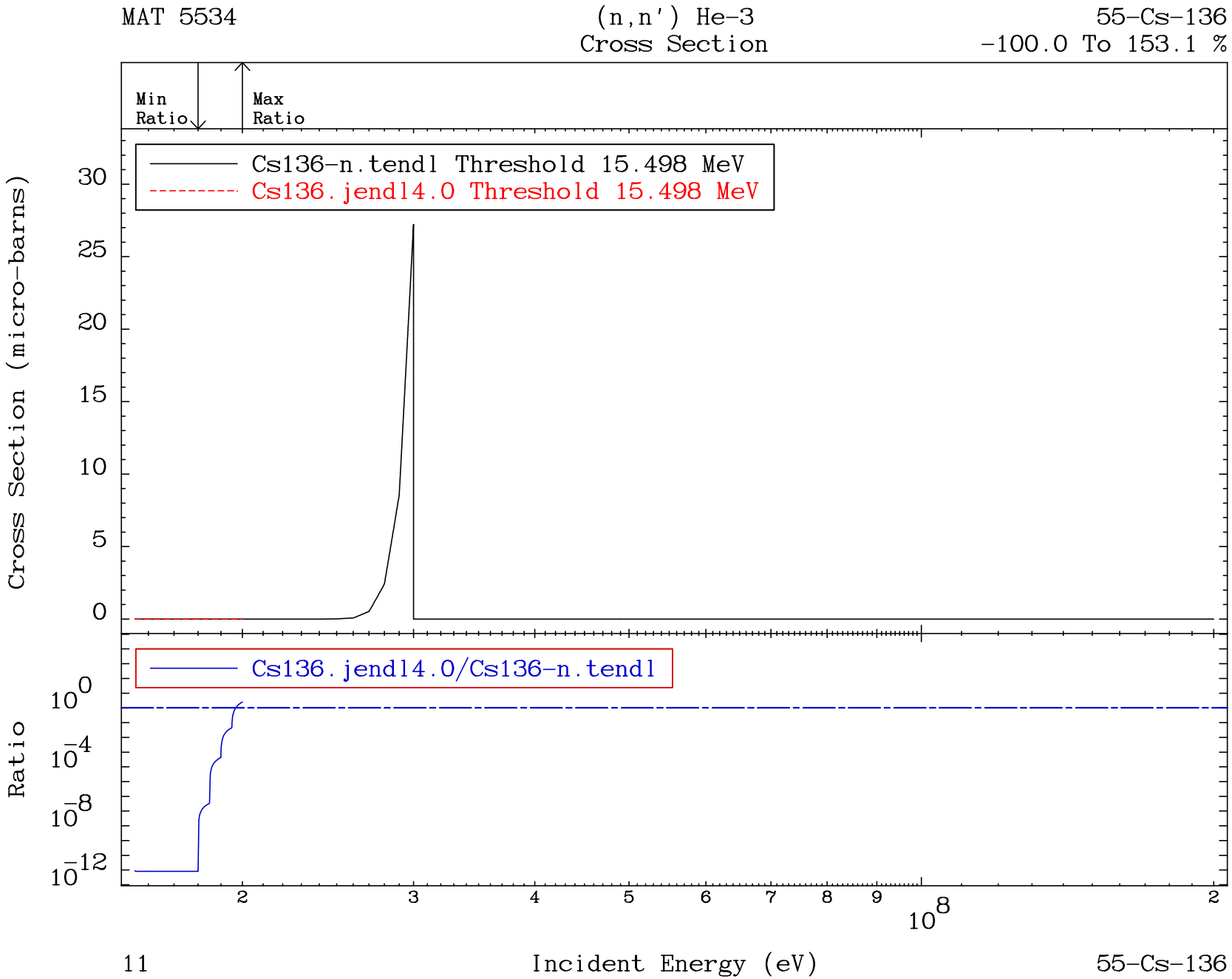

MAT 5534
(n,n') α
Cross Section
55-Cs-136
-100.0 To 564.3 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 3.0831 MeV
Cs136.jendl4.0 Threshold 3.0865 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-4
10^-8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
55-Cs-136

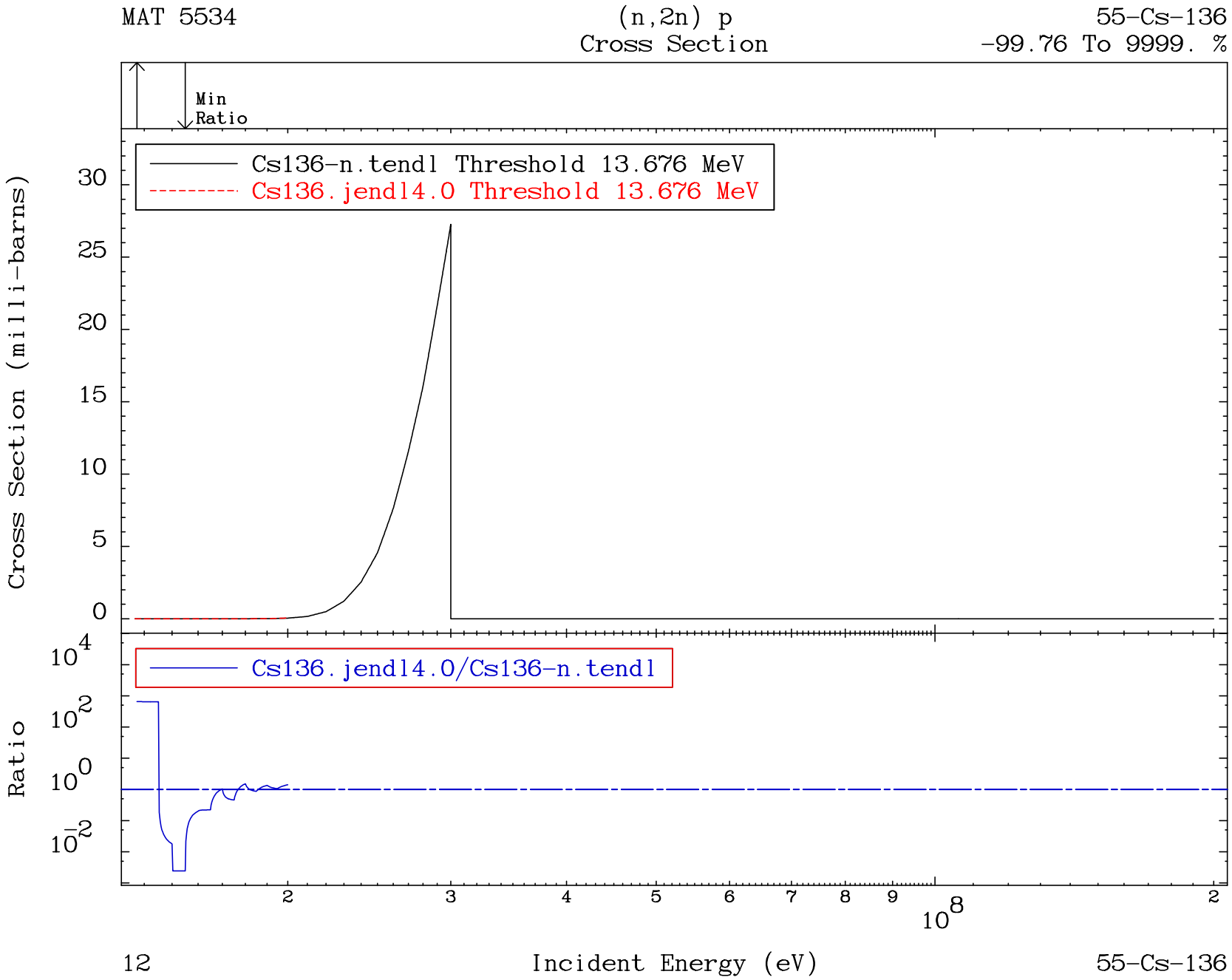

MAT 5534
(n,2n) α
Cross Section
55-Cs-136
-100.0 To -67.60%
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 9.4621 MeV
Cs136.jendl4.0 Threshold 9.4603 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
55-Cs-136

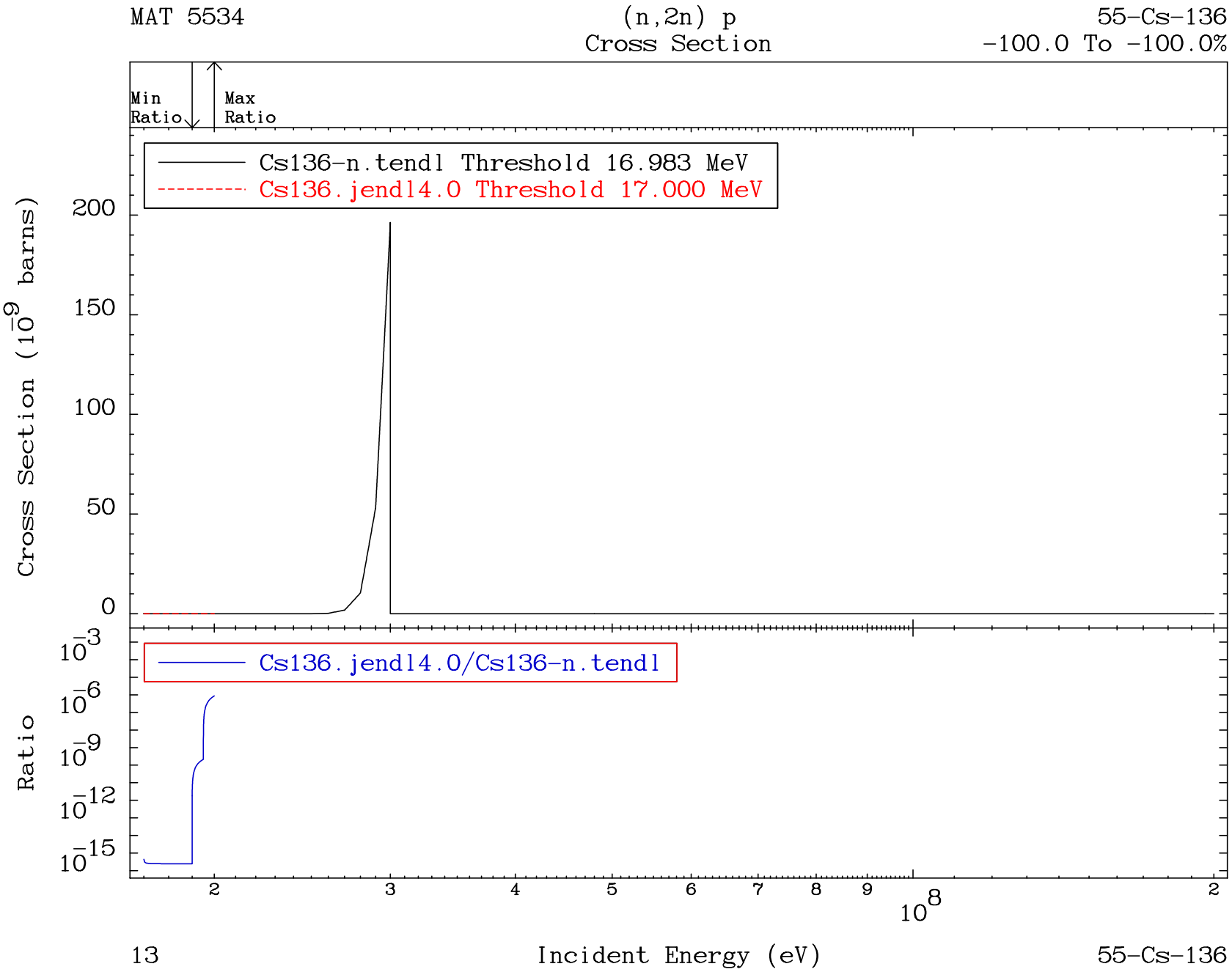

MAT 5534
(n,n') p
Cross Section
55-Cs-136
-60.25 To -7.133%
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 7.2646 MeV
Cs136.jendl4.0 Threshold 7.2646 MeV
Cross Section (milli-barns)
60
40
20
0
Cs136.jendl4.0/Cs136-n.tendl
1.0
0.8
0.6
0.4
Ratio
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
55-Cs-136

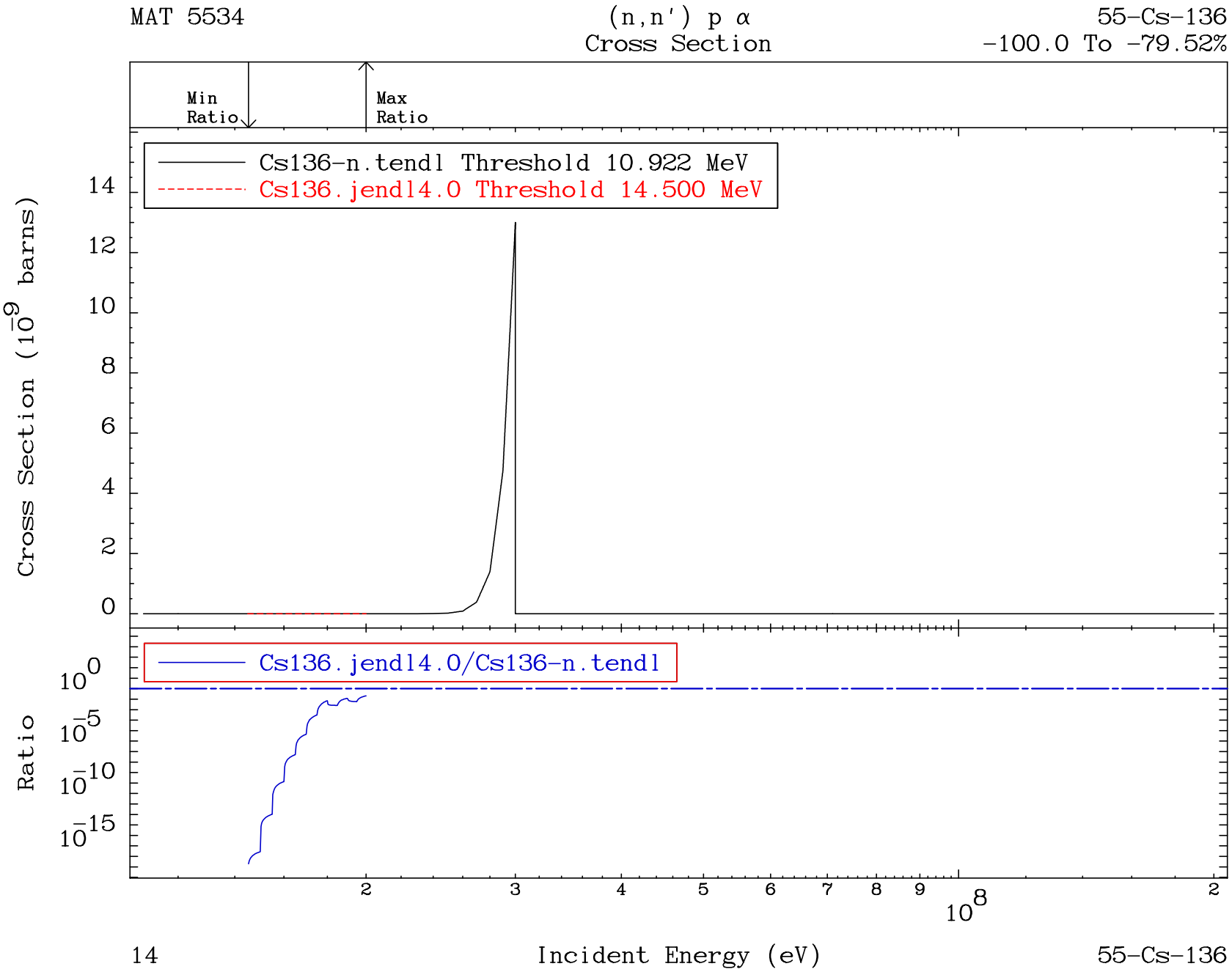

MAT 5534
(n,n') d
Cross Section
55-Cs-136
-13.90 To 1776. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 11.435 MeV
Cs136.jendl4.0 Threshold 11.435 MeV
Cross Section (milli-barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
9
55-Cs-136

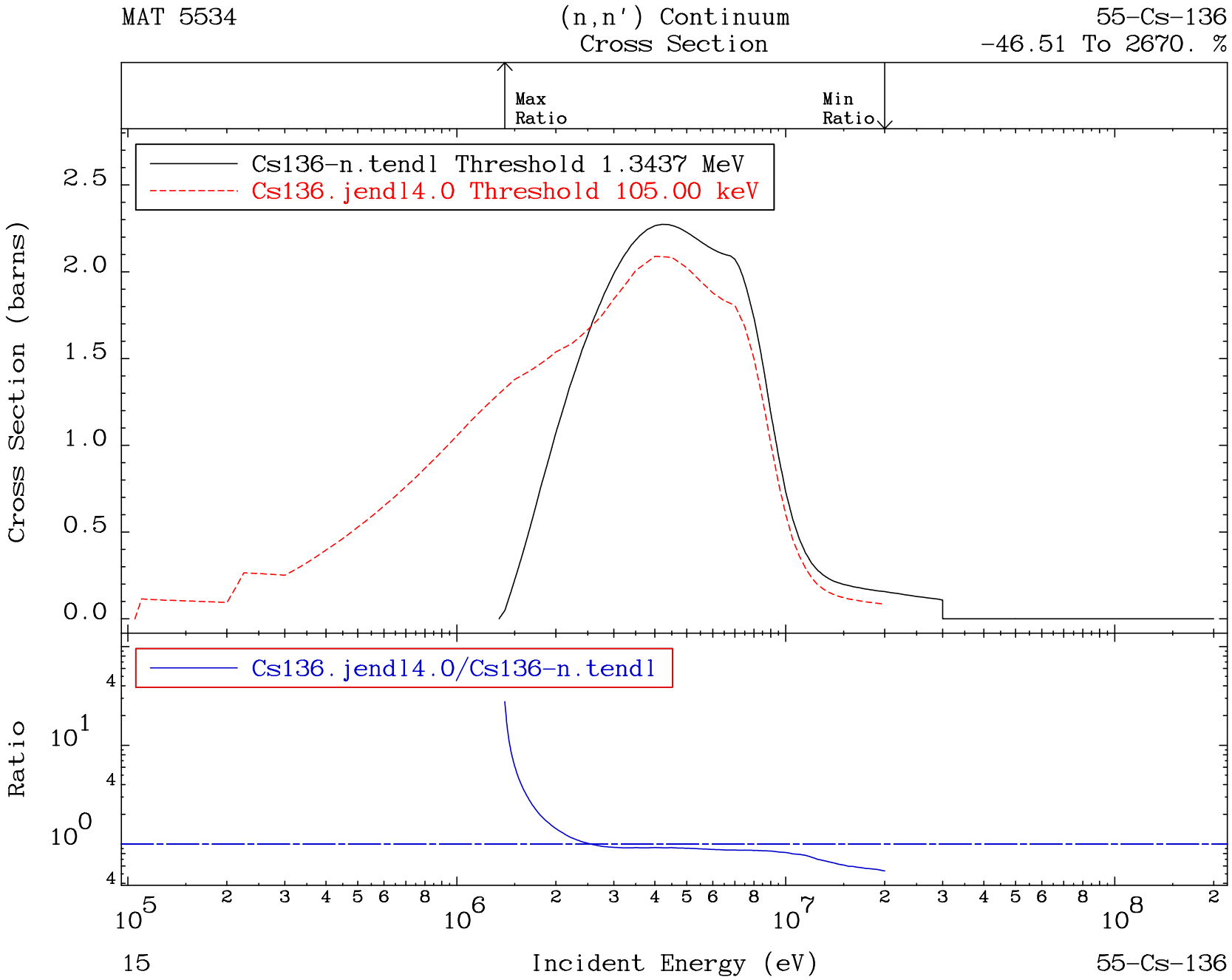

MAT 5534
(n,n') t
Cross Section
55-Cs-136
-100.0 To 864.1 %
Max
Ratio
Cs136-n.tendl Threshold 13.746 MeV
Cs136.jendl4.0 Threshold 13.746 MeV
Cross Section (milli-barns)
0
2
4
6
8
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
55-Cs-136

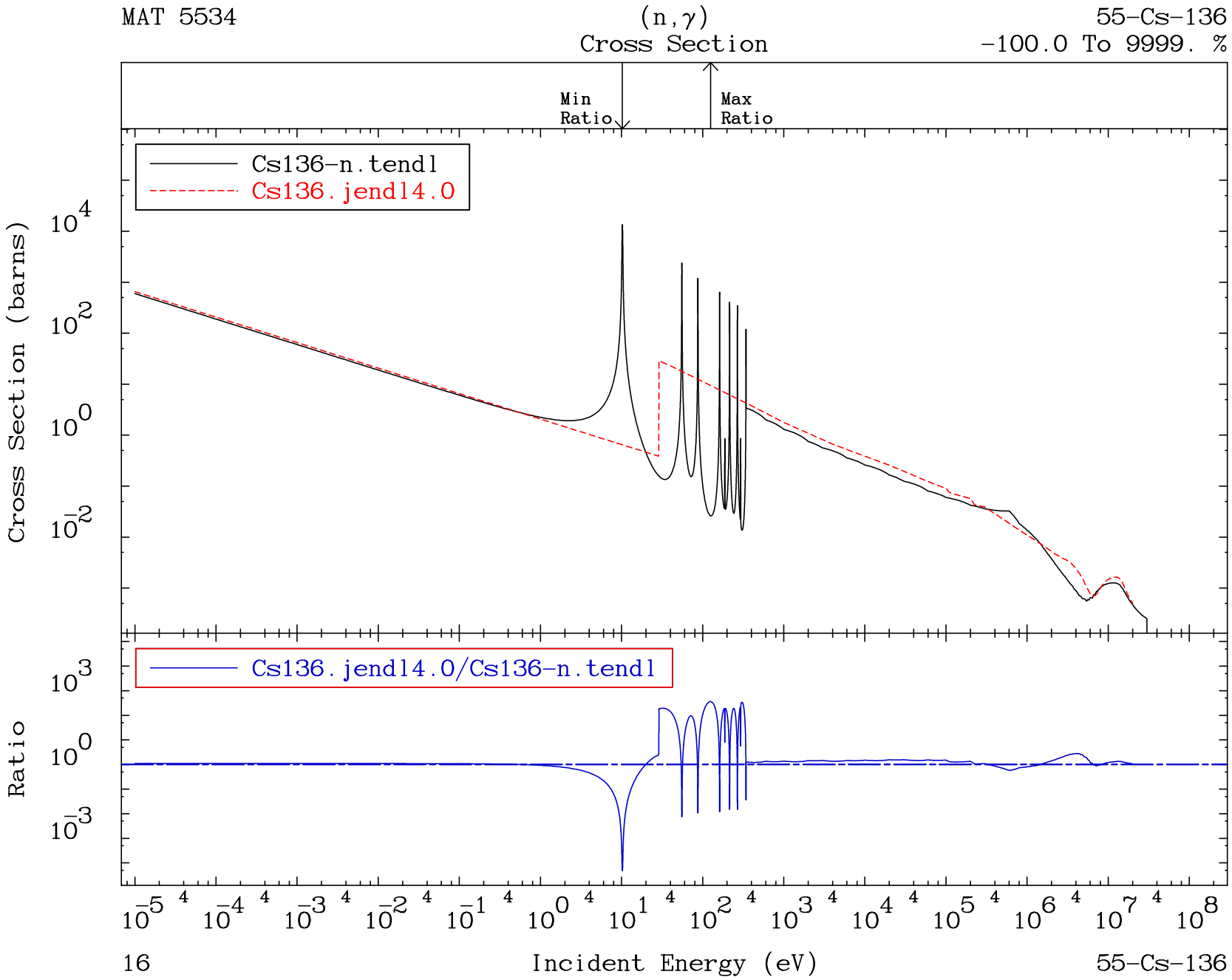

MAT 5534
(n,n') He-3
Cross Section
55-Cs-136
-100.0 To 153.1 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 15.498 MeV
Cs136.jendl4.0 Threshold 15.498 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-4
10^-8
10^-12
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
55-Cs-136

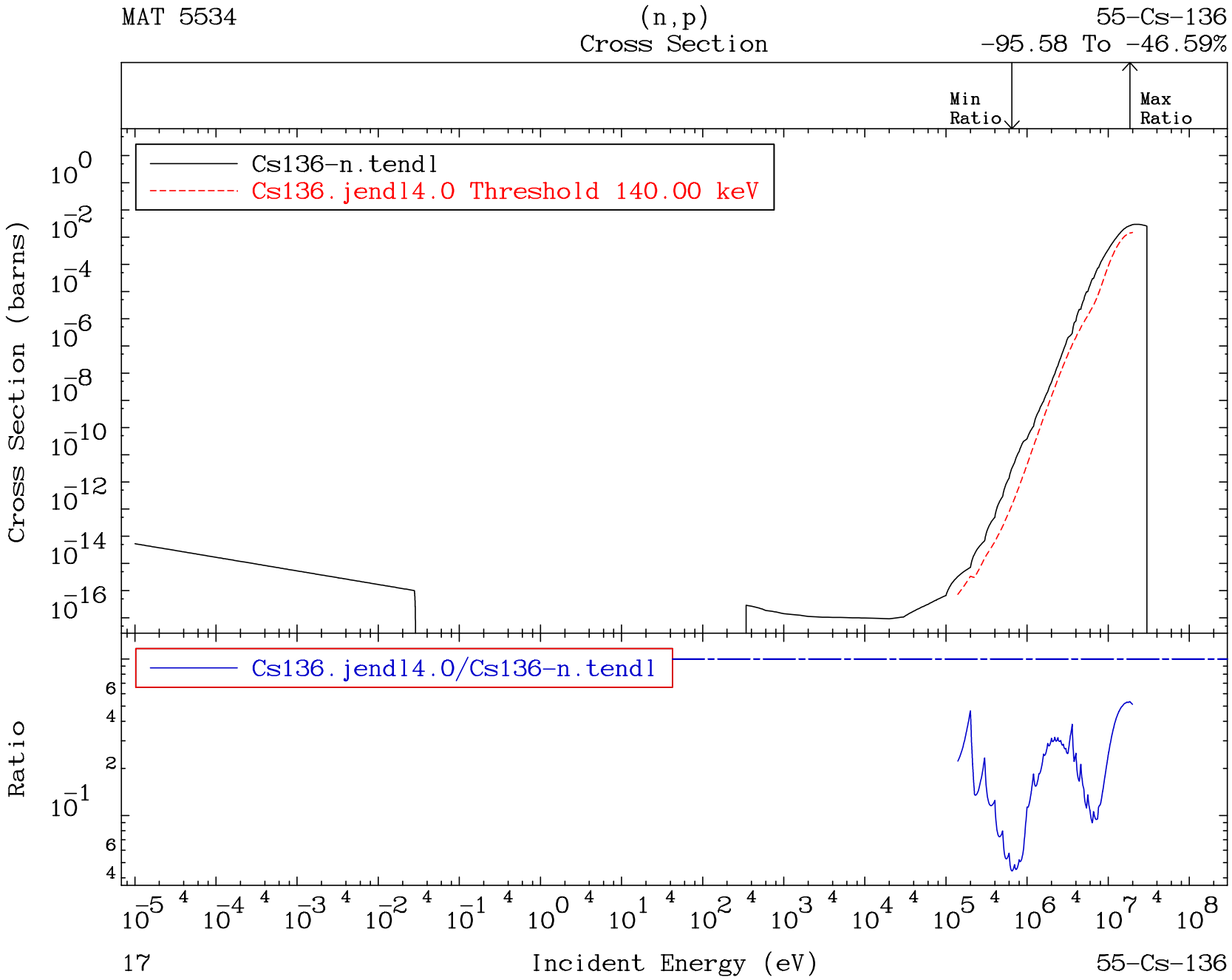

MAT 5534
(n,2n) p
Cross Section
55-Cs-136
-99.76 To 9999. %
Min
Ratio
Cs136-n.tendl Threshold 13.676 MeV
Cs136.jendl4.0 Threshold 13.676 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^4
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
55-Cs-136

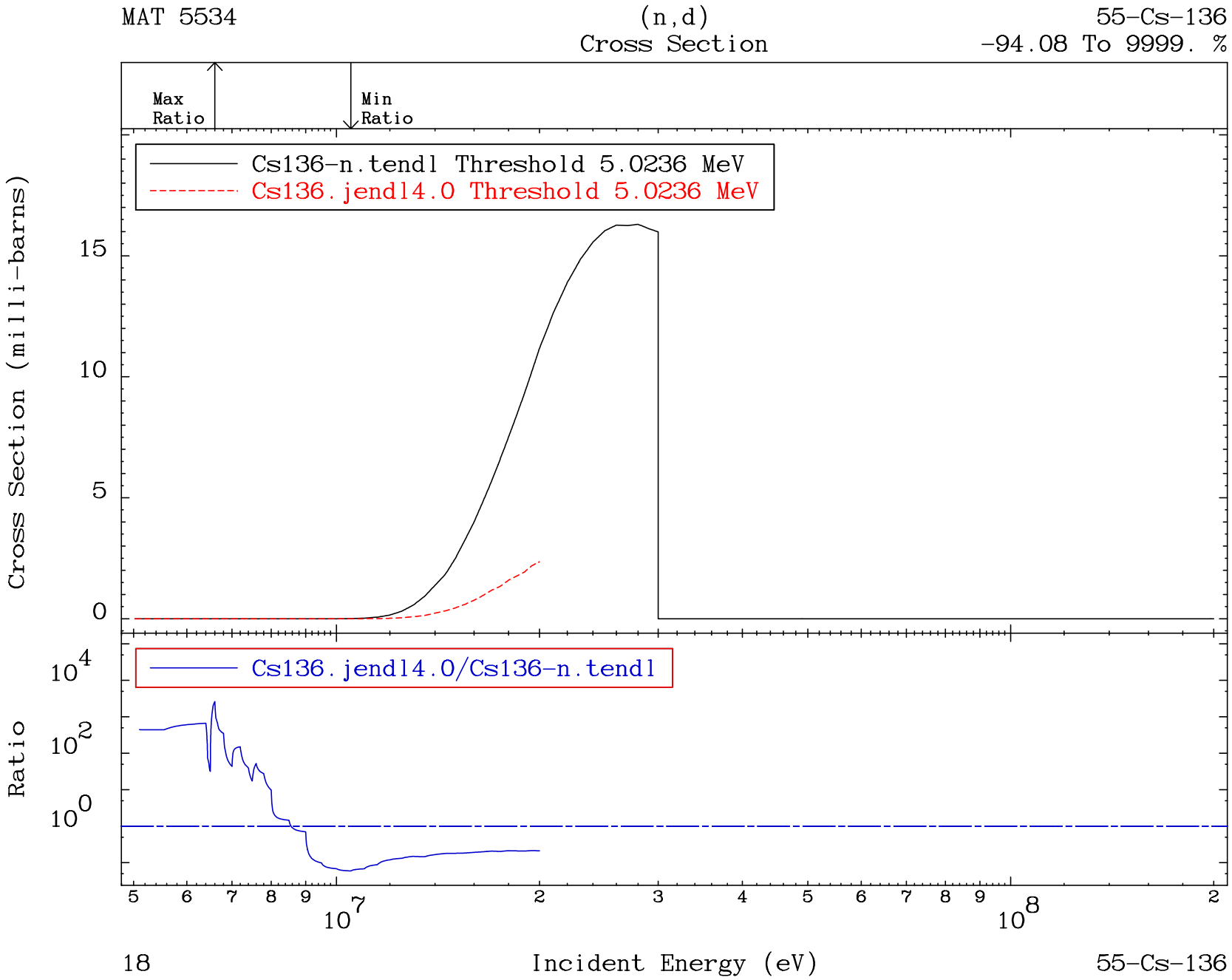

MAT 5534
(n,2n) p
Cross Section
55-Cs-136
-100.0 To -100.0%
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 16.983 MeV
Cs136.jendl4.0 Threshold 17.000 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^{-3}
10^{-6}
10^{-9}
10^{-12}
10^{-15}
2
3
4
5
6
7
8
9
10^{8}
2
13
Incident Energy (eV)
55-Cs-136

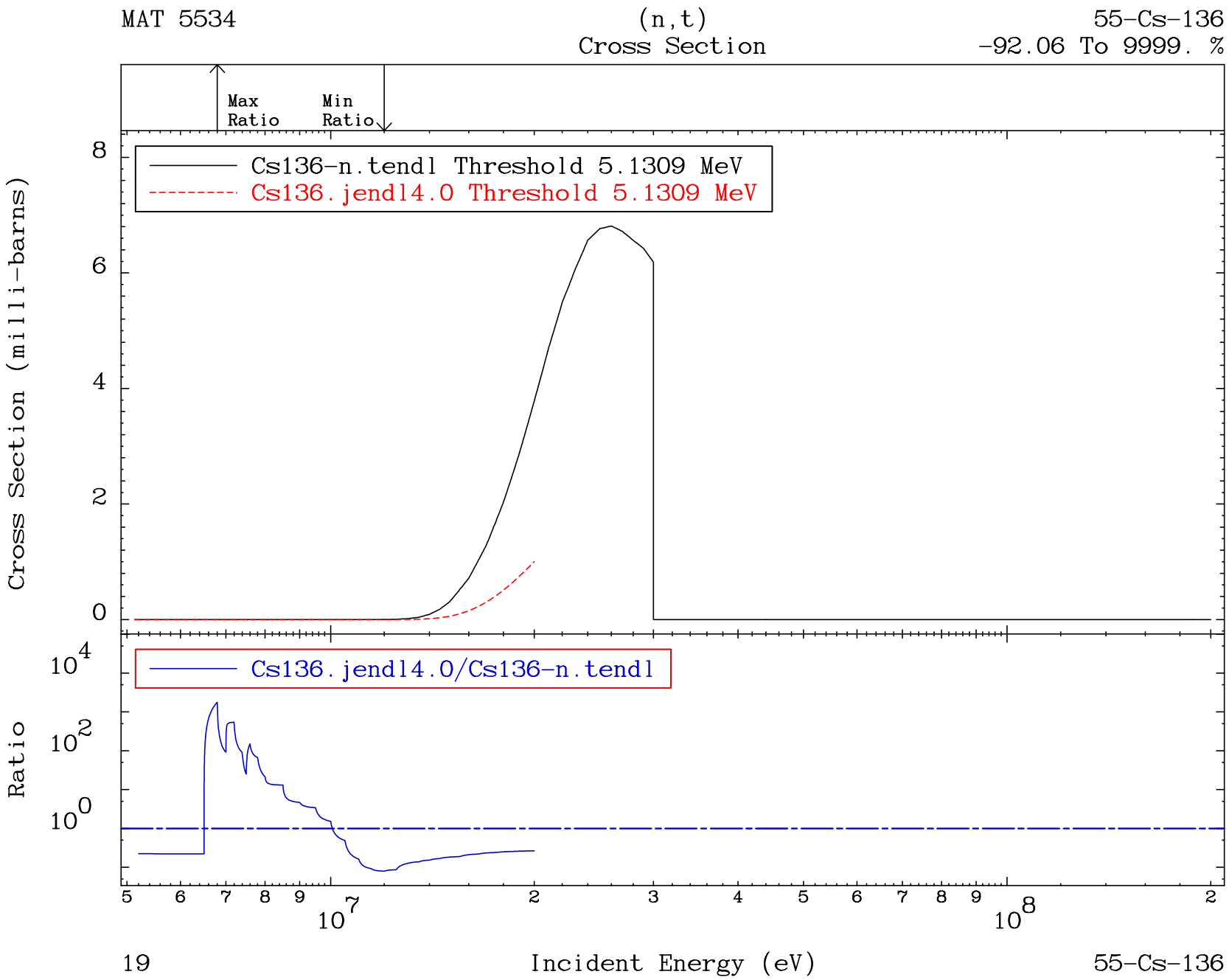

MAT 5534
(n,n') p α
Cross Section
55-Cs-136
-100.0 To -79.52%
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 10.922 MeV
Cs136.jendl4.0 Threshold 14.500 MeV
Cross Section (10^-9 barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
14
55-Cs-136

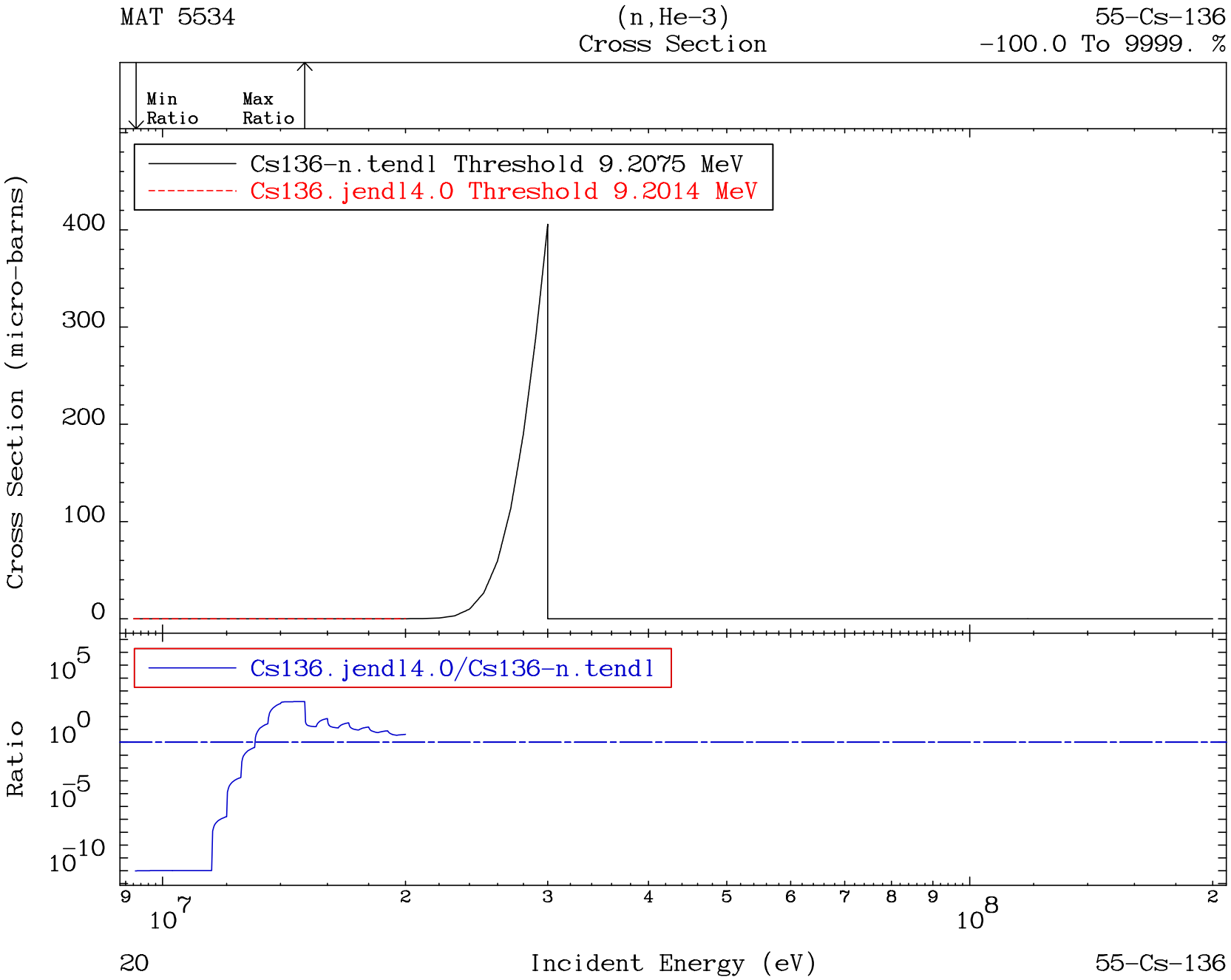

MAT 5534
(n,n') Continuum
Cross Section
55-Cs-136
-46.51 To 2670. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 1.3437 MeV
Cs136.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^1
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
15
55-Cs-136

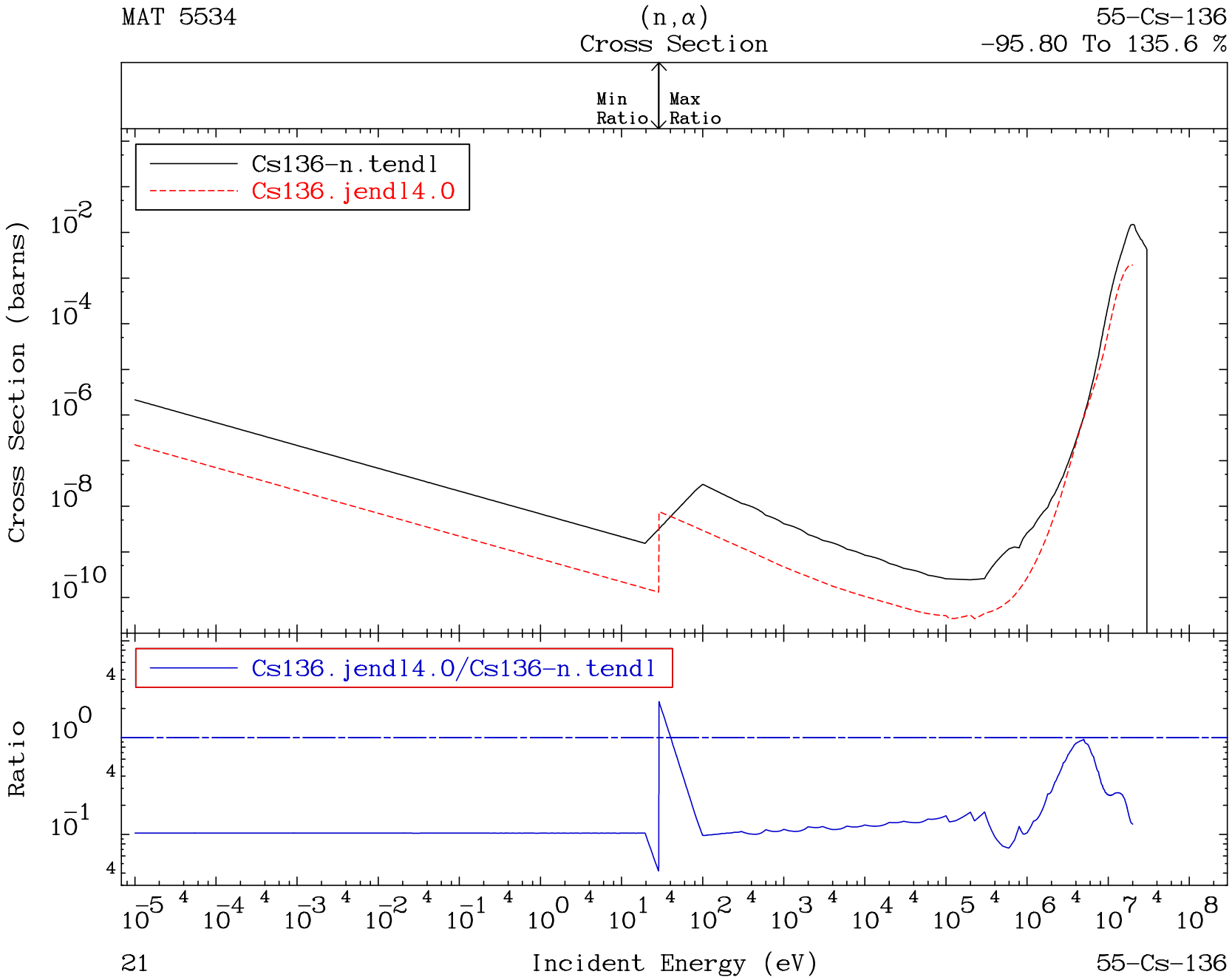

MAT 5534
(n,γ)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
16
55-Cs-136

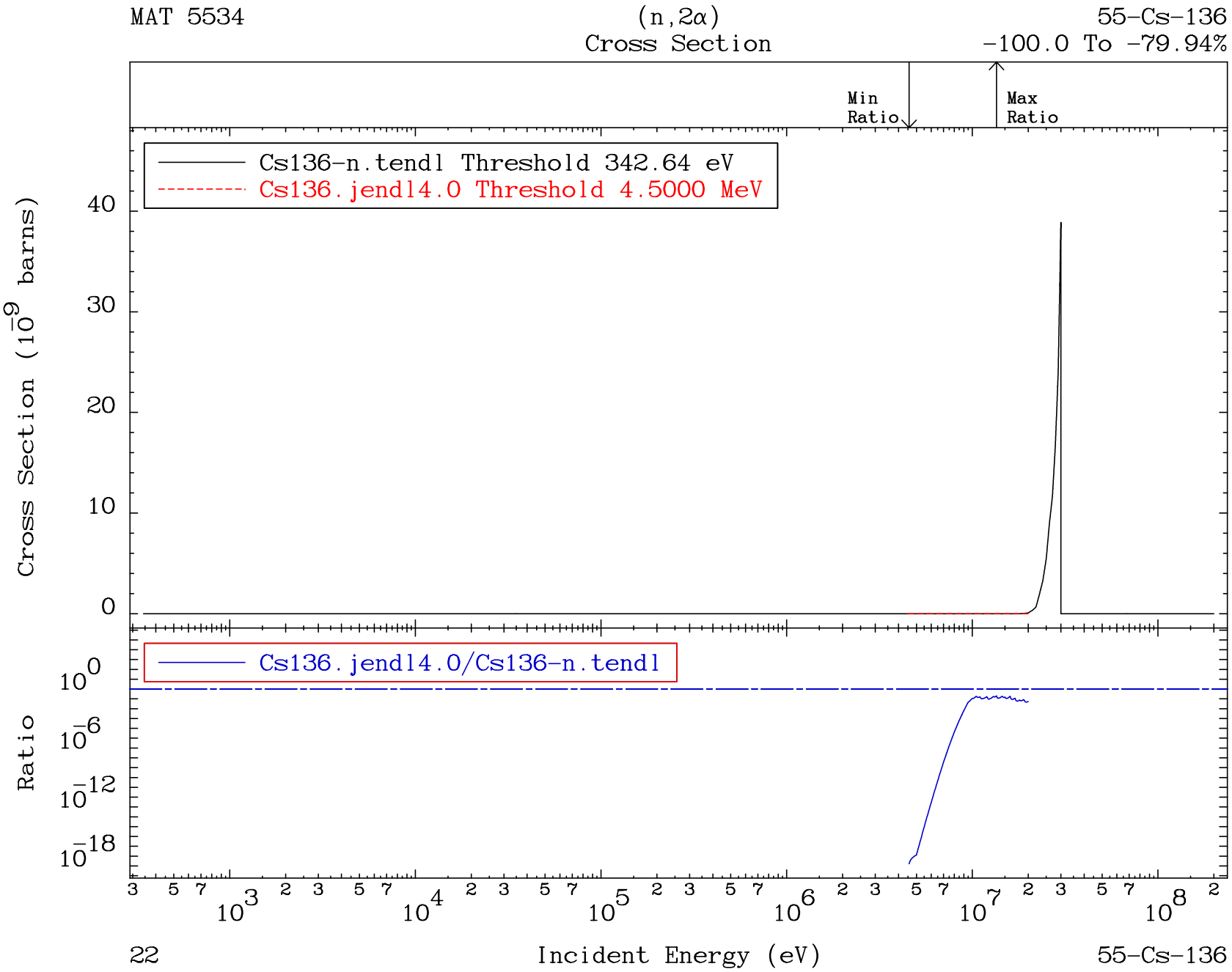

MAT 5534
(n,p)
Cross Section
55-Cs-136
-95.58 To -46.59%
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0 Threshold 140.00 keV
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
17
55-Cs-136

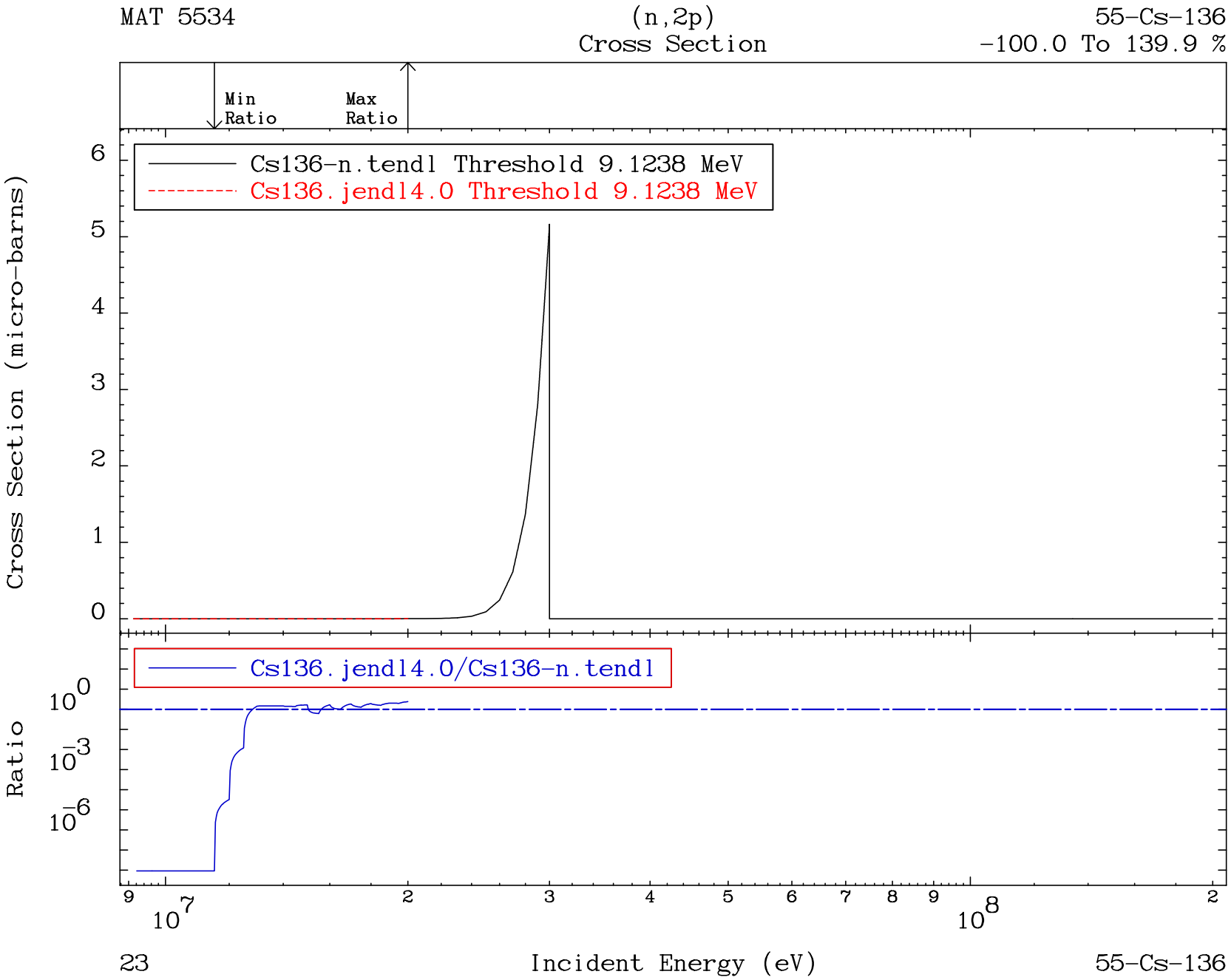

MAT 5534
(n,d)
Cross Section
55-Cs-136
-94.08 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 5.0236 MeV
Cs136.jendl4.0 Threshold 5.0236 MeV
Cross Section (milli-barns)
15
10
5
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
55-Cs-136

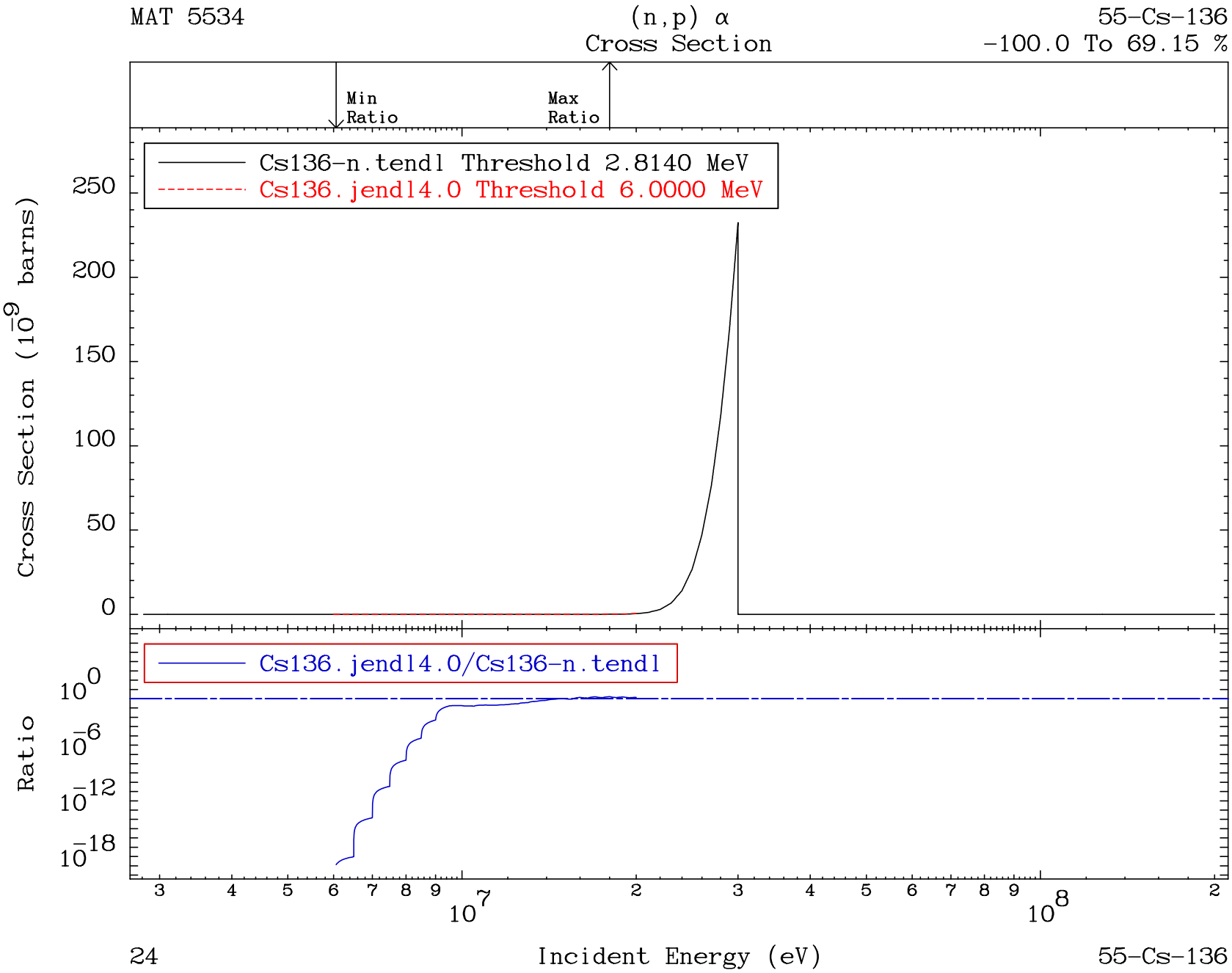

MAT 5534
(n,t)
Cross Section
55-Cs-136
-92.06 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 5.1309 MeV
Cs136.jendl4.0 Threshold 5.1309 MeV
Cross Section (milli-barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
19
55-Cs-136

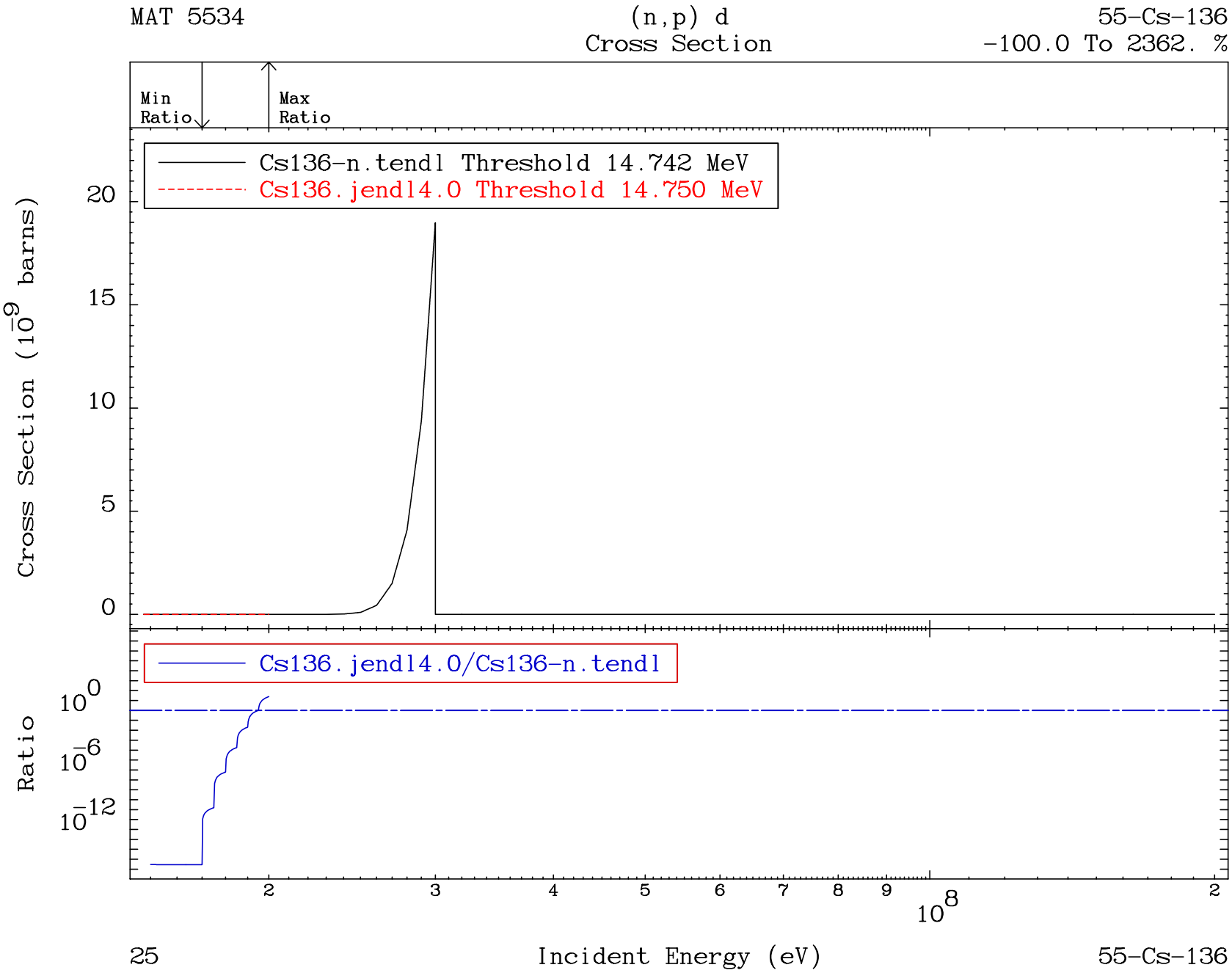

MAT 5534
(n,He-3)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 9.2075 MeV
Cs136.jendl4.0 Threshold 9.2014 MeV
Cross Section (micro-barns)
400
300
200
100
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^5
10^0
10^-5
10^-10
9
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
55-Cs-136

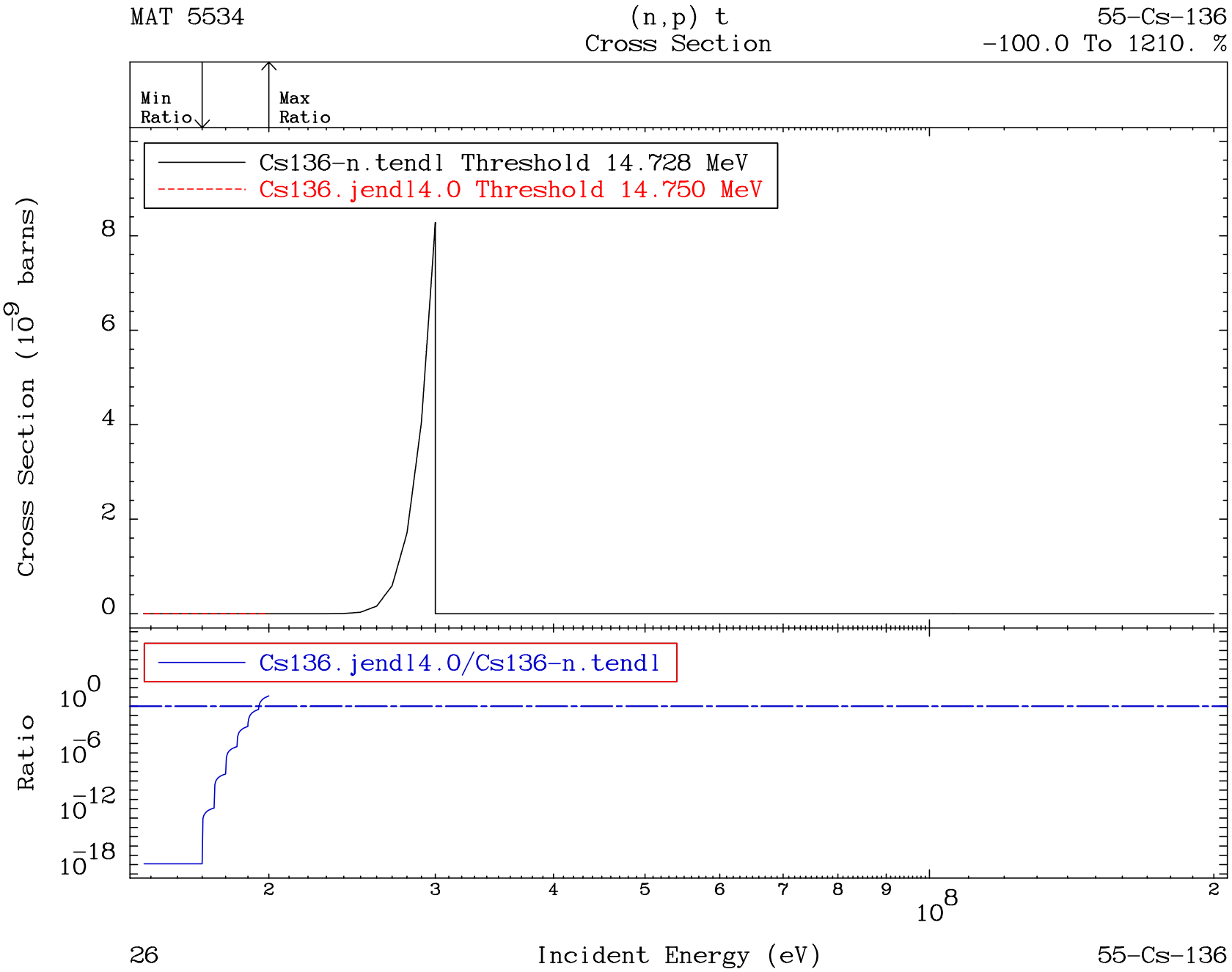

MAT 5534
(n,α)
Cross Section
55-Cs-136
-95.80 To 135.6 %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
21
55-Cs-136

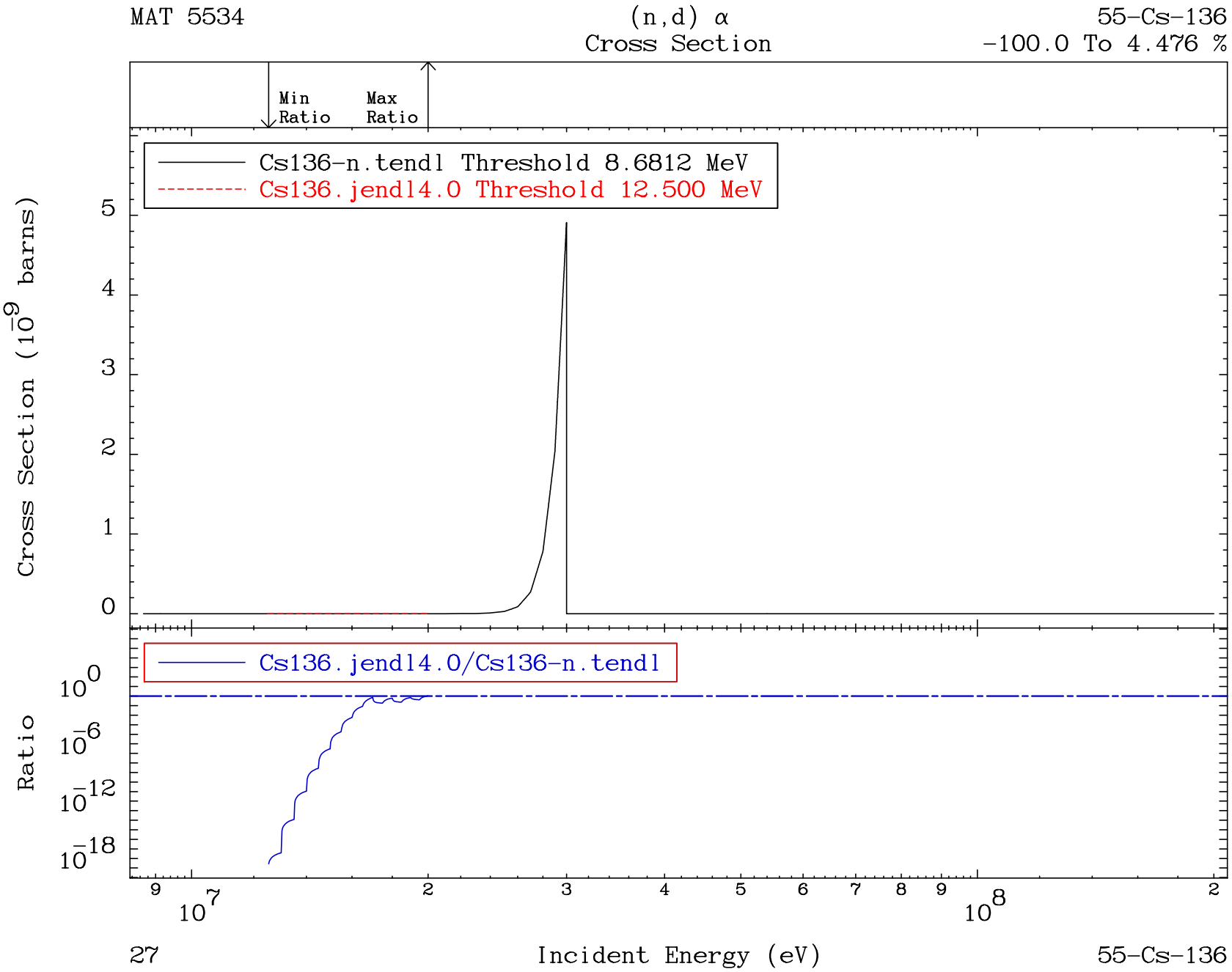

MAT 5534
(n,2α)
Cross Section
55-Cs-136
-100.0 To -79.94%
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 342.64 eV
Cs136.jendl4.0 Threshold 4.5000 MeV
Cross Section (10^{-9} barns)
40
30
20
10
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^{0}
10^{-6}
10^{-12}
10^{-18}
3 5 7 10^{3} 2 3 5 7 10^{4} 2 3 5 7 10^{5} 2 3 5 7 10^{6} 2 3 5 7 10^{7} 2 3 5 7 10^{8} 2
22
Incident Energy (eV)
55-Cs-136

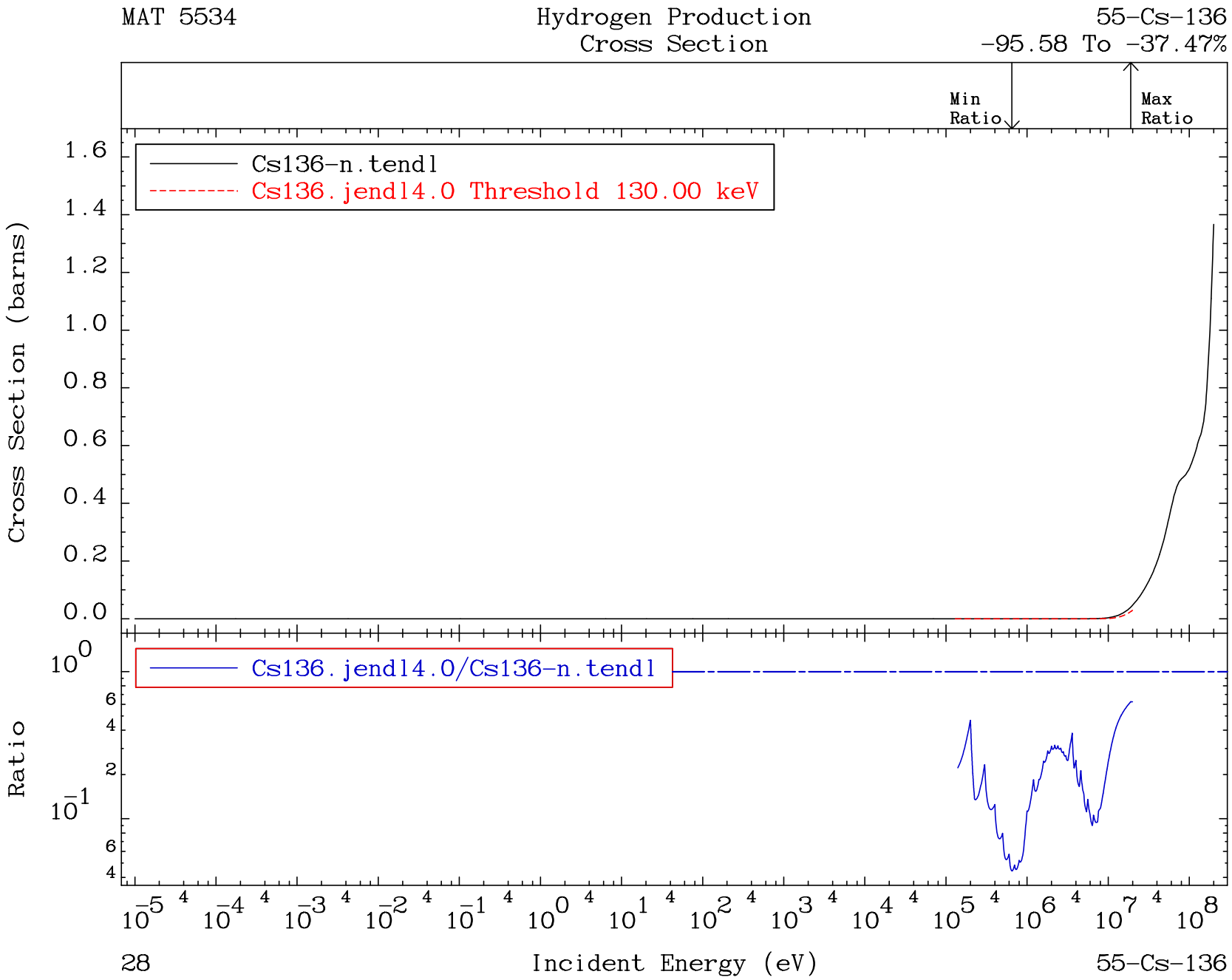

MAT 5534
(n,2p)
Cross Section
55-Cs-136
-100.0 To 139.9 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 9.1238 MeV
Cs136.jendl4.0 Threshold 9.1238 MeV
Cross Section (micro-barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
23
55-Cs-136

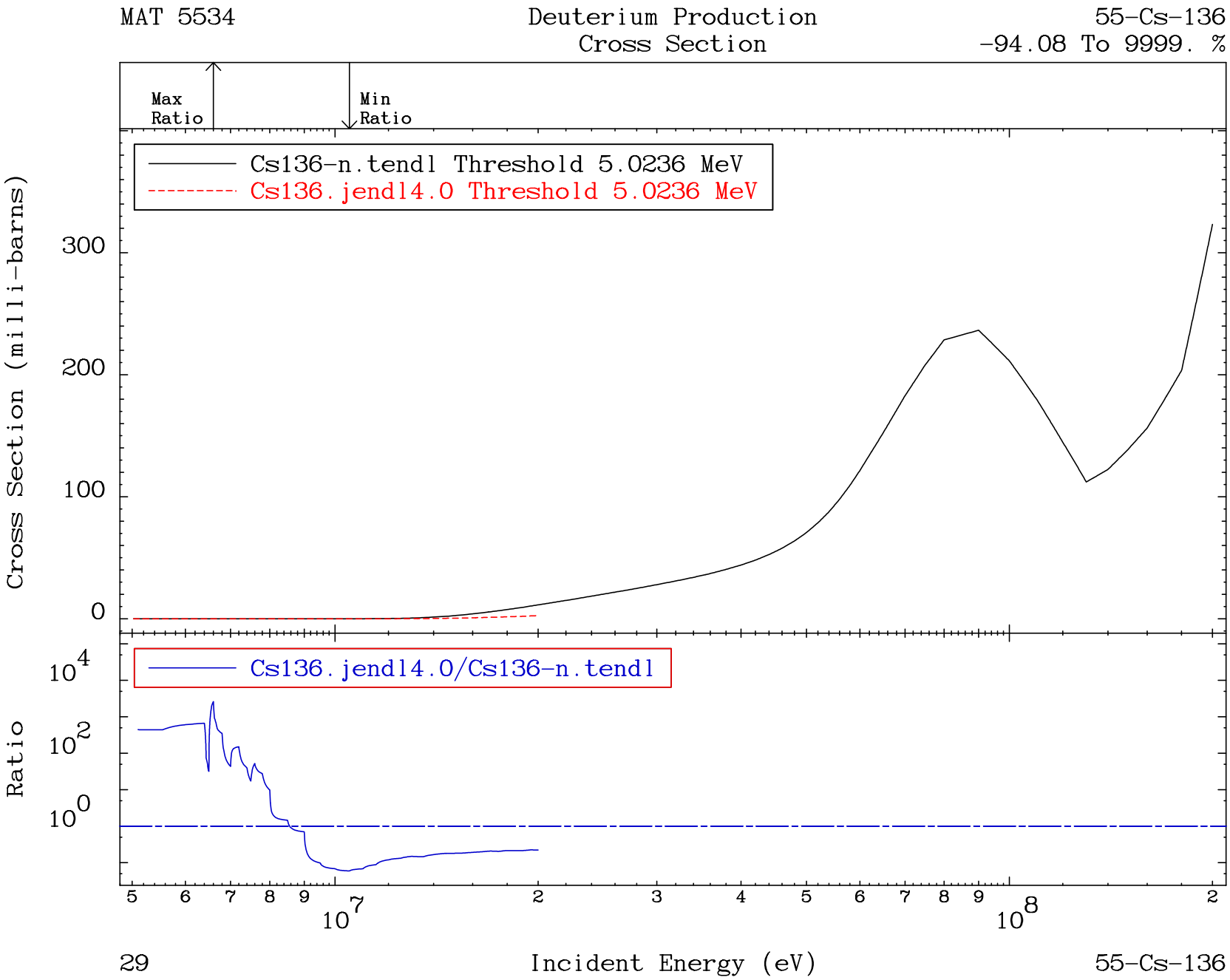

MAT 5534
(n,p) α
Cross Section
55-Cs-136
-100.0 To 69.15 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 2.8140 MeV
Cs136.jendl4.0 Threshold 6.0000 MeV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^{0}
10^{-6}
10^{-12}
10^{-18}
3 4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
24
Incident Energy (eV)
55-Cs-136

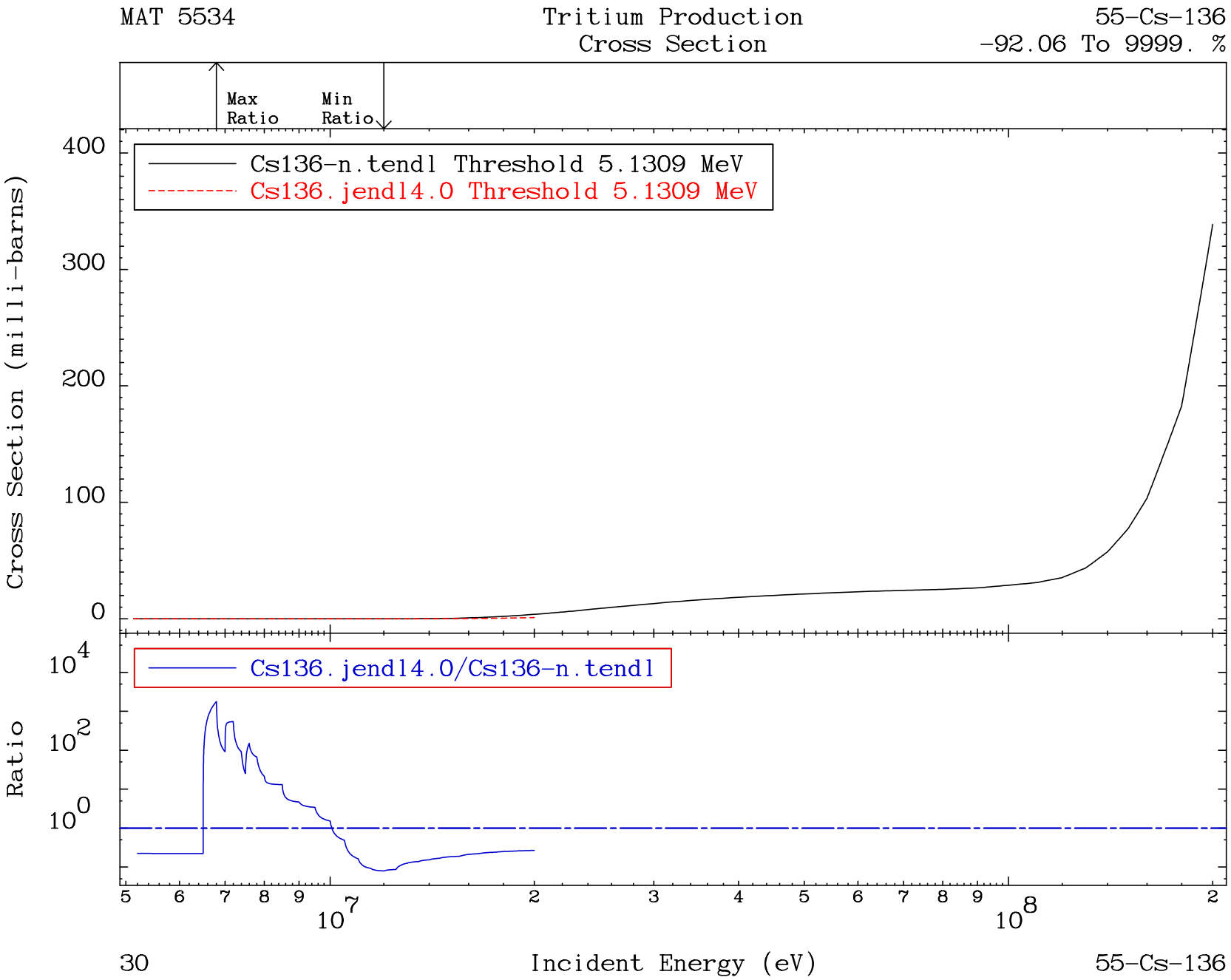

MAT 5534
(n,p) d
Cross Section
55-Cs-136
-100.0 To 2362. %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 14.742 MeV
Cs136.jendl4.0 Threshold 14.750 MeV
Cross Section (10^-9 barns)
20
15
10
5
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-6
10^-12
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
55-Cs-136

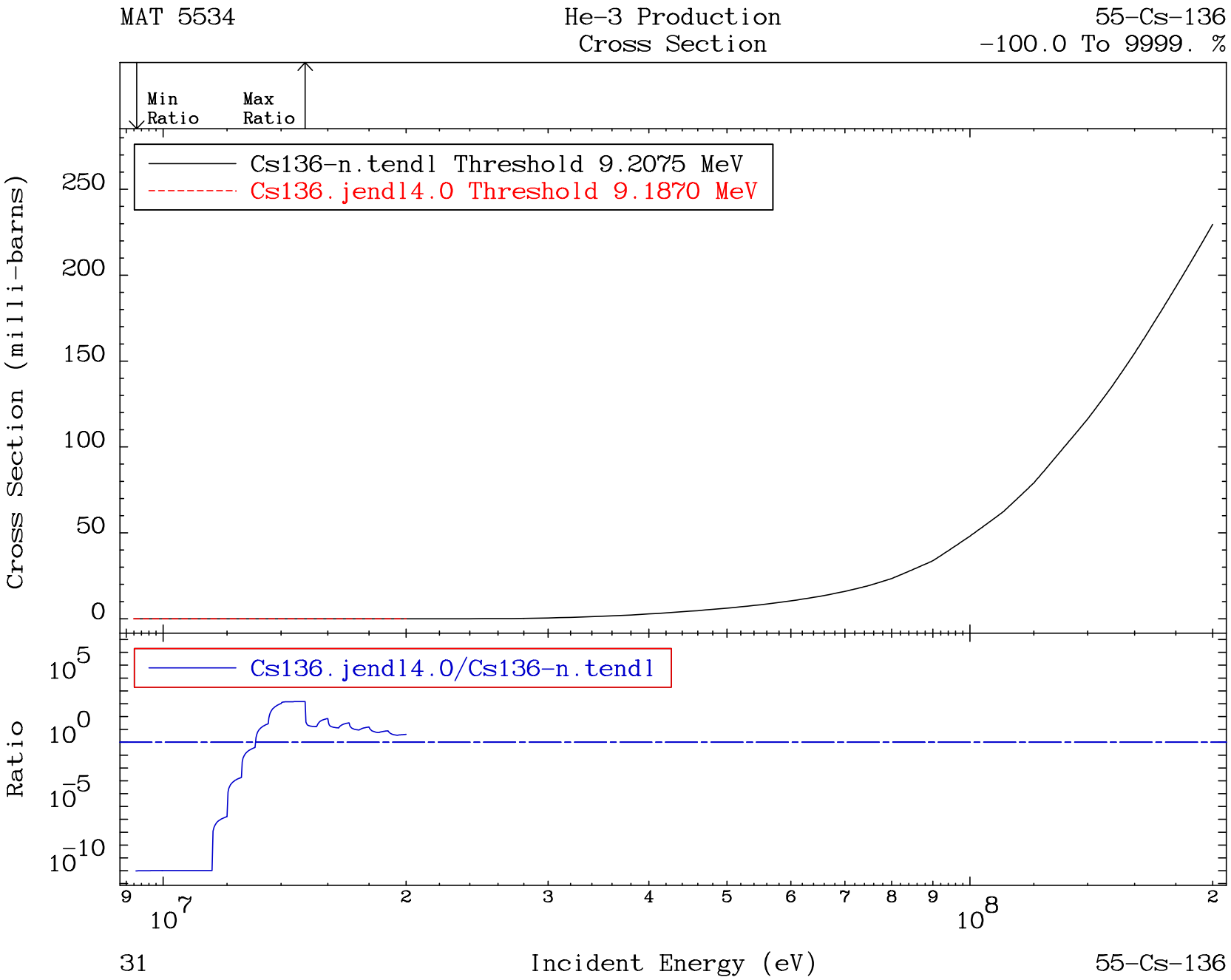

MAT 5534
(n,p) t
Cross Section
55-Cs-136
-100.0 To 1210. %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 14.728 MeV
Cs136.jendl4.0 Threshold 14.750 MeV
Cross Section (10^{-9} barns)
0
2
4
6
8
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^{0}
10^{-6}
10^{-12}
10^{-18}
2
3
4
5
6
7
8
9
10^{8}
2
26
Incident Energy (eV)
55-Cs-136

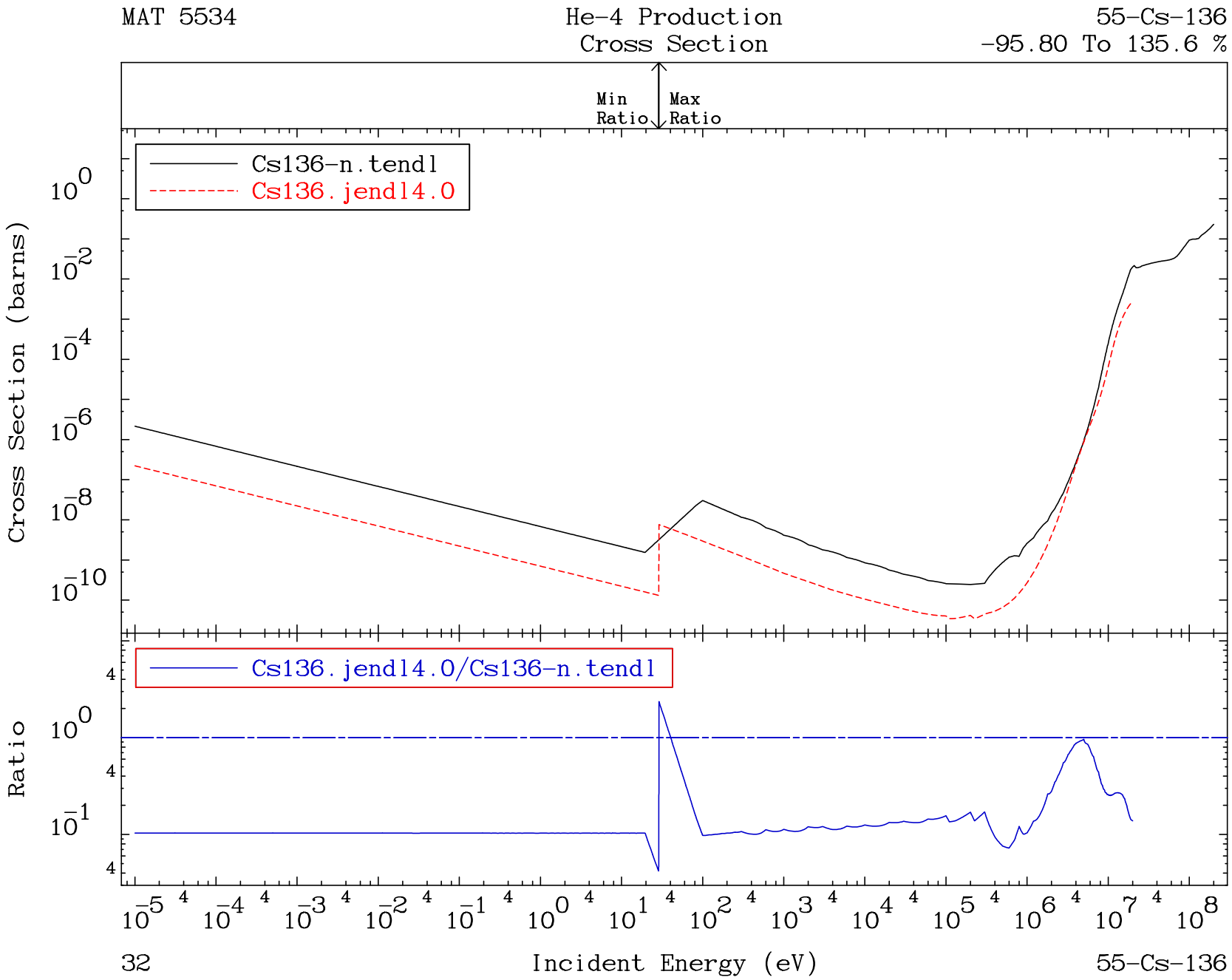

MAT 5534
(n,d) α
Cross Section
55-Cs-136
-100.0 To 4.476 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 8.6812 MeV
Cs136.jendl4.0 Threshold 12.500 MeV
Cross Section (10^-9 barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
27
55-Cs-136

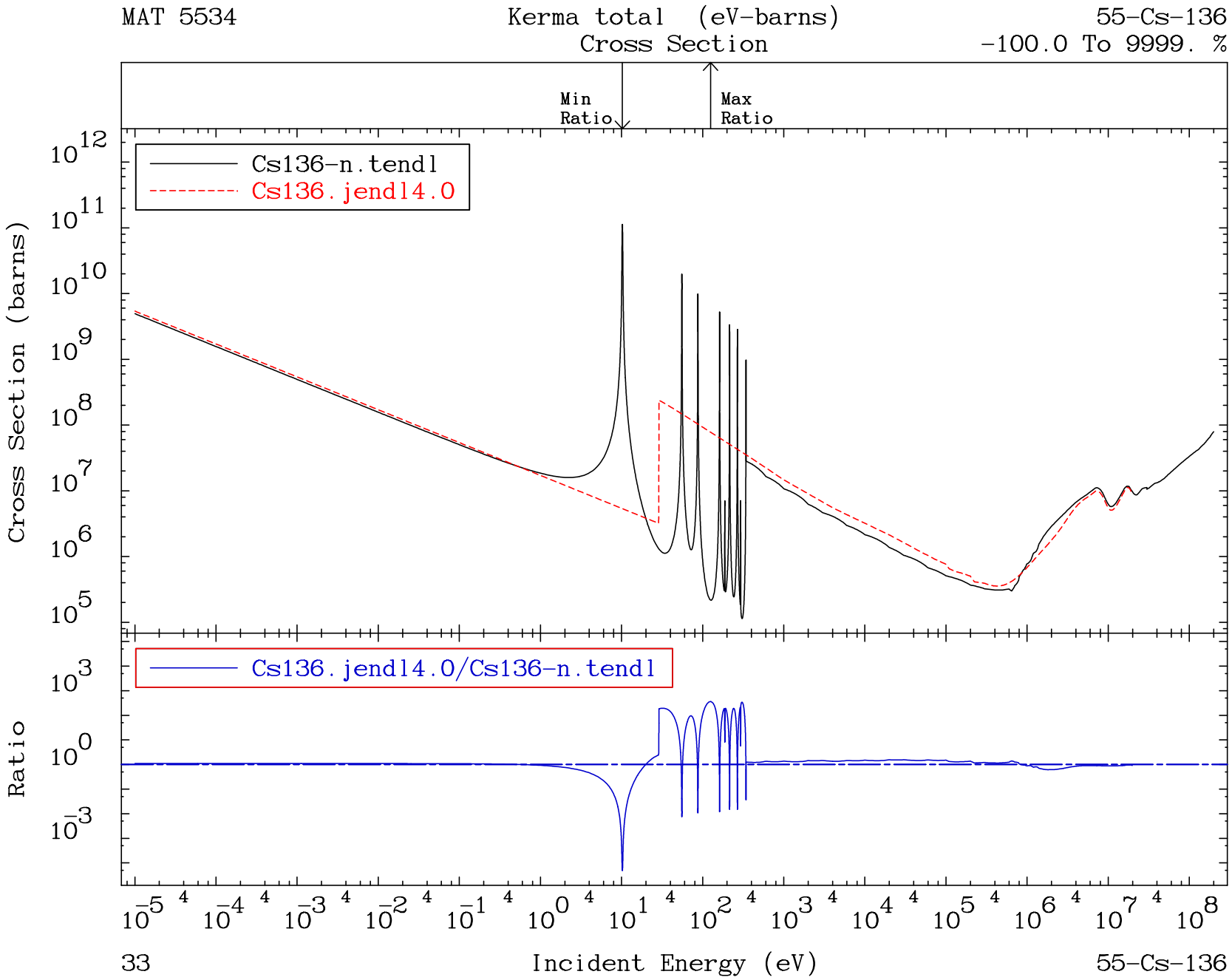

MAT 5534
Hydrogen Production
Cross Section
55-Cs-136
-95.58 To -37.47%
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0 Threshold 130.00 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^0
10^-1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
55-Cs-136

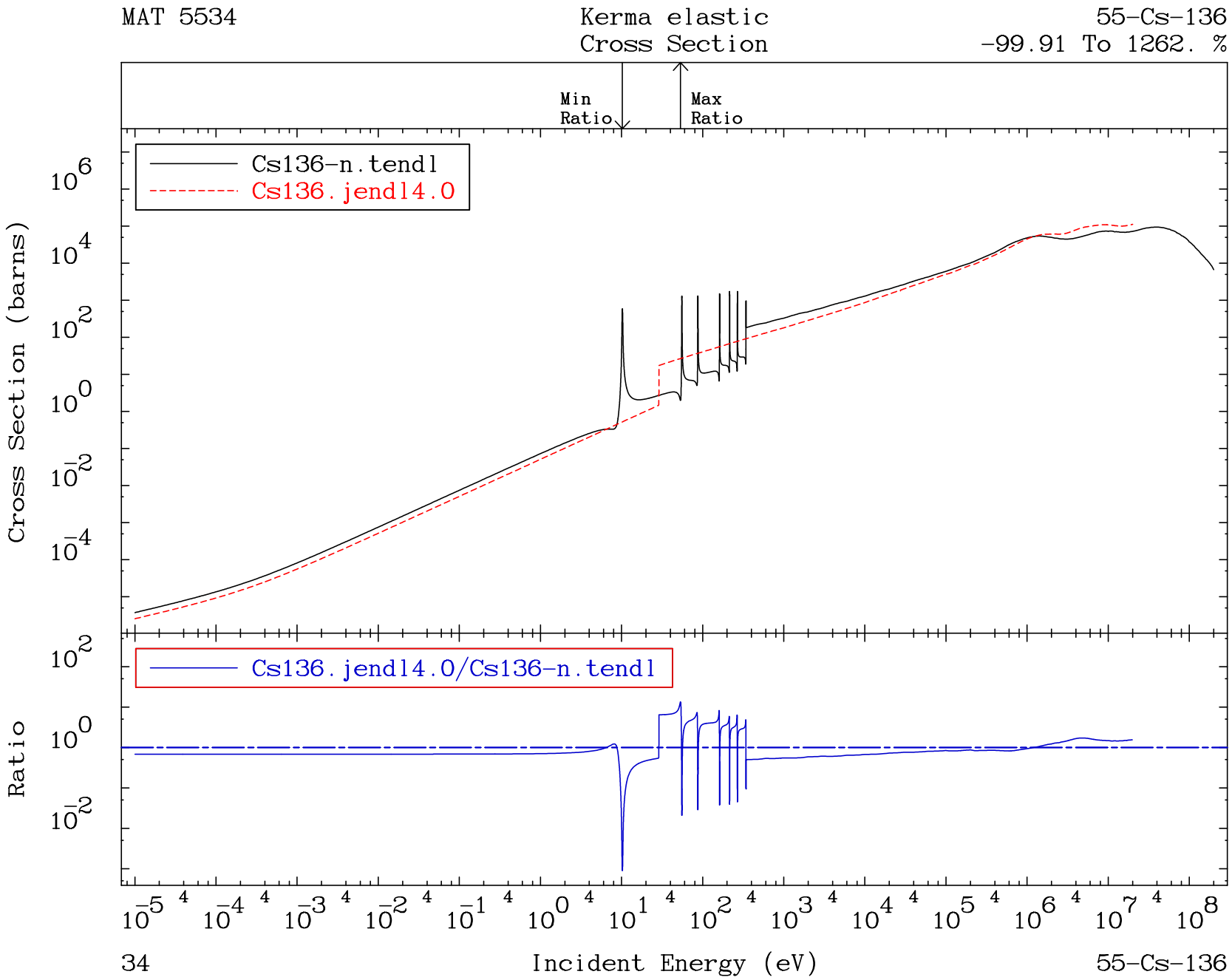

MAT 5534
Deuterium Production
Cross Section
55-Cs-136
-94.08 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 5.0236 MeV
Cs136.jendl4.0 Threshold 5.0236 MeV
Cross Section (milli-barns)
300
200
100
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
55-Cs-136

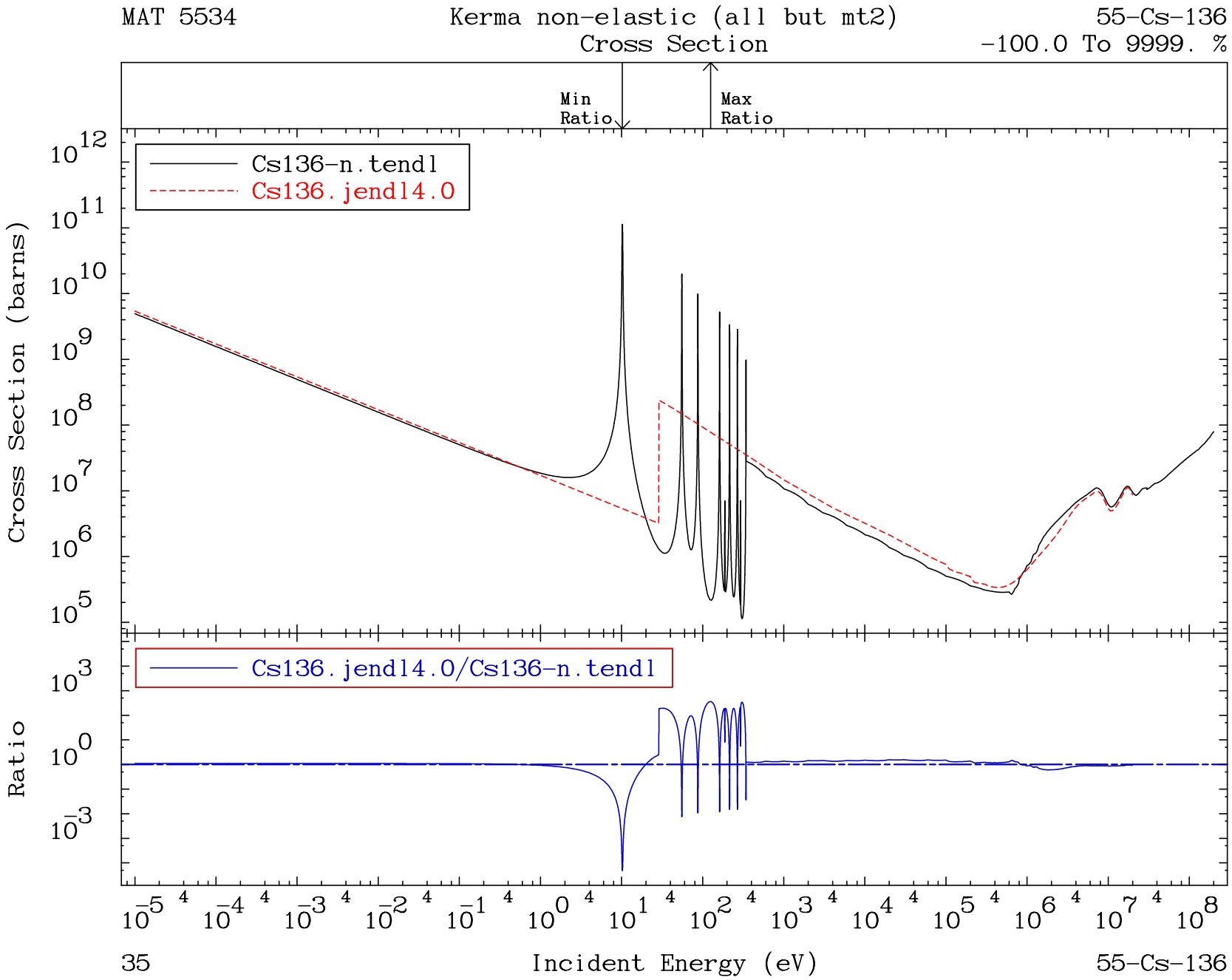

MAT 5534
Tritium Production
Cross Section
55-Cs-136
-92.06 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 5.1309 MeV
Cs136.jendl4.0 Threshold 5.1309 MeV
Cross Section (milli-barns)
400
300
200
100
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
55-Cs-136

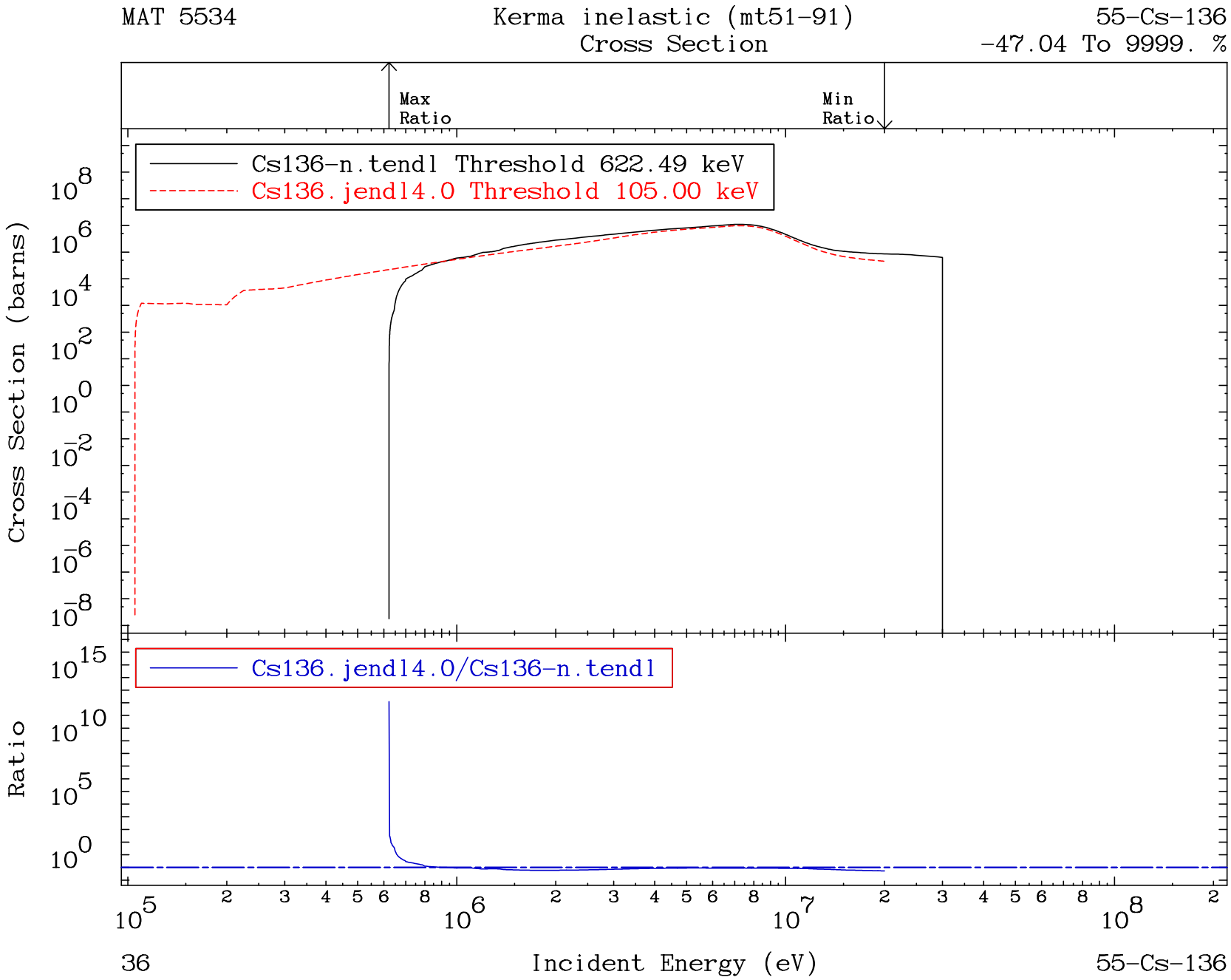

MAT 5534
He-3 Production
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 9.2075 MeV
Cs136.jendl4.0 Threshold 9.1870 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^5
10^0
10^-5
10^-10
9
10^7
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
55-Cs-136

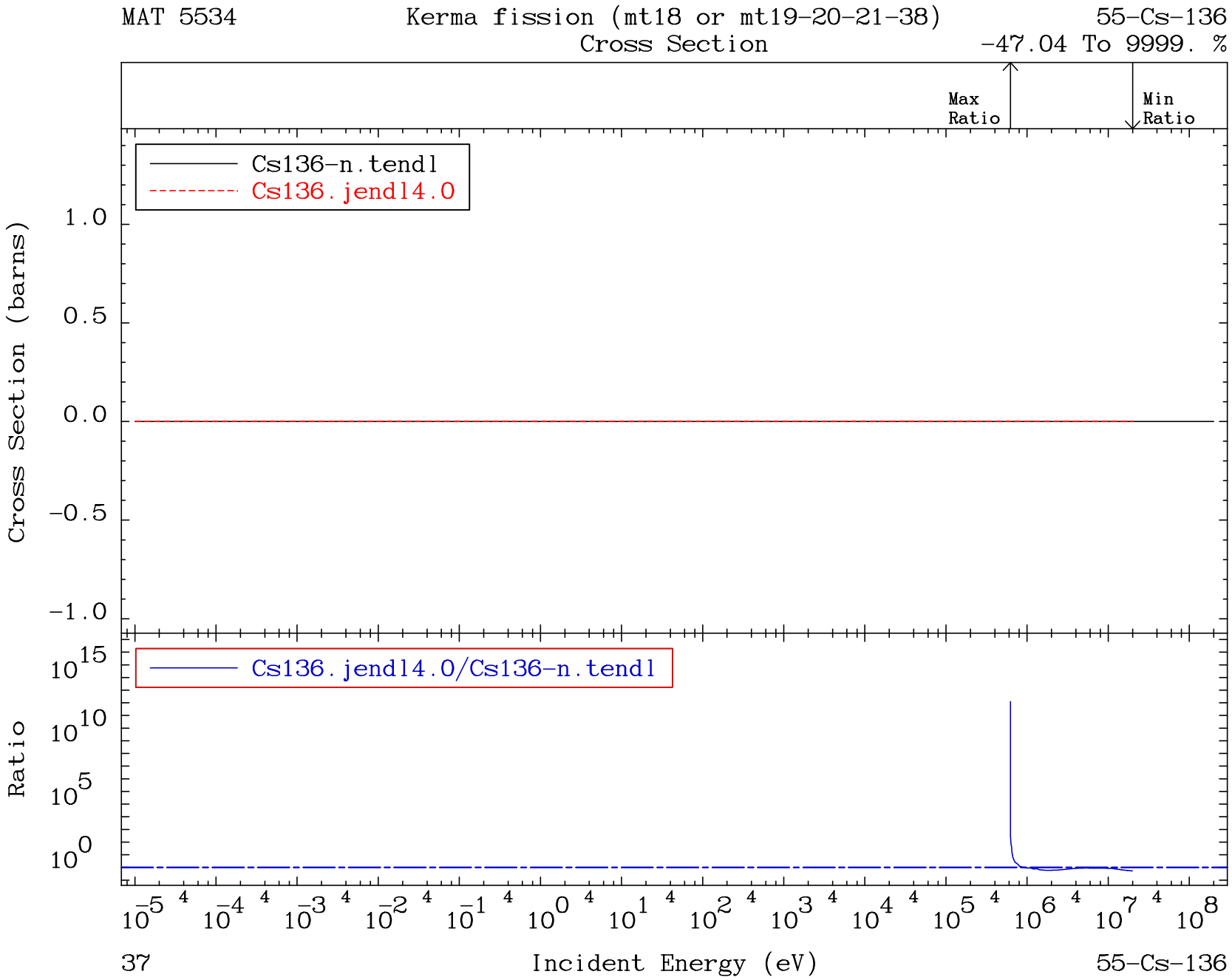

MAT 5534
He-4 Production
Cross Section
55-Cs-136
-95.80 To 135.6 %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
32
55-Cs-136

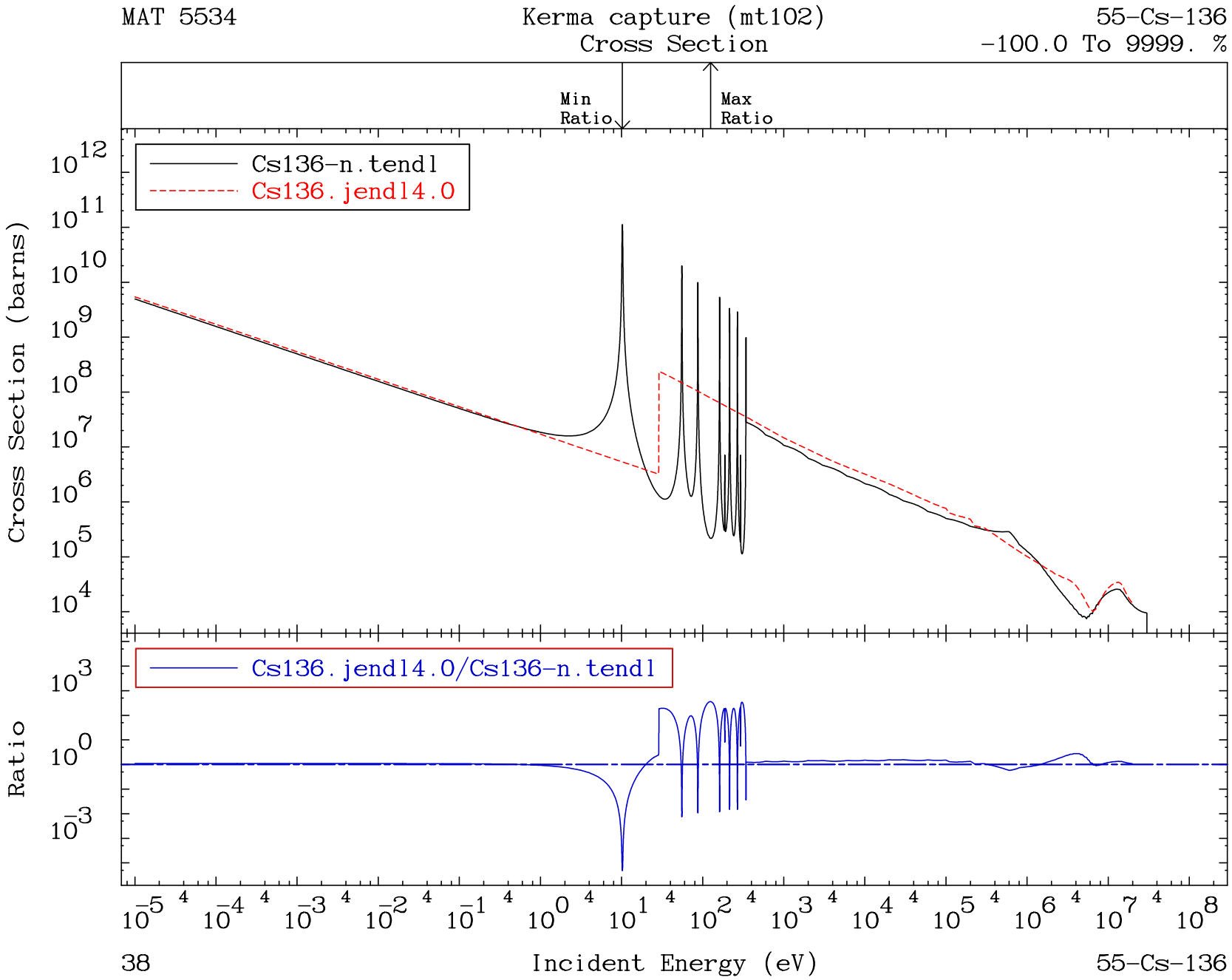

MAT 5534
Kerma total (eV-barns)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
33
Incident Energy (eV)
55-Cs-136

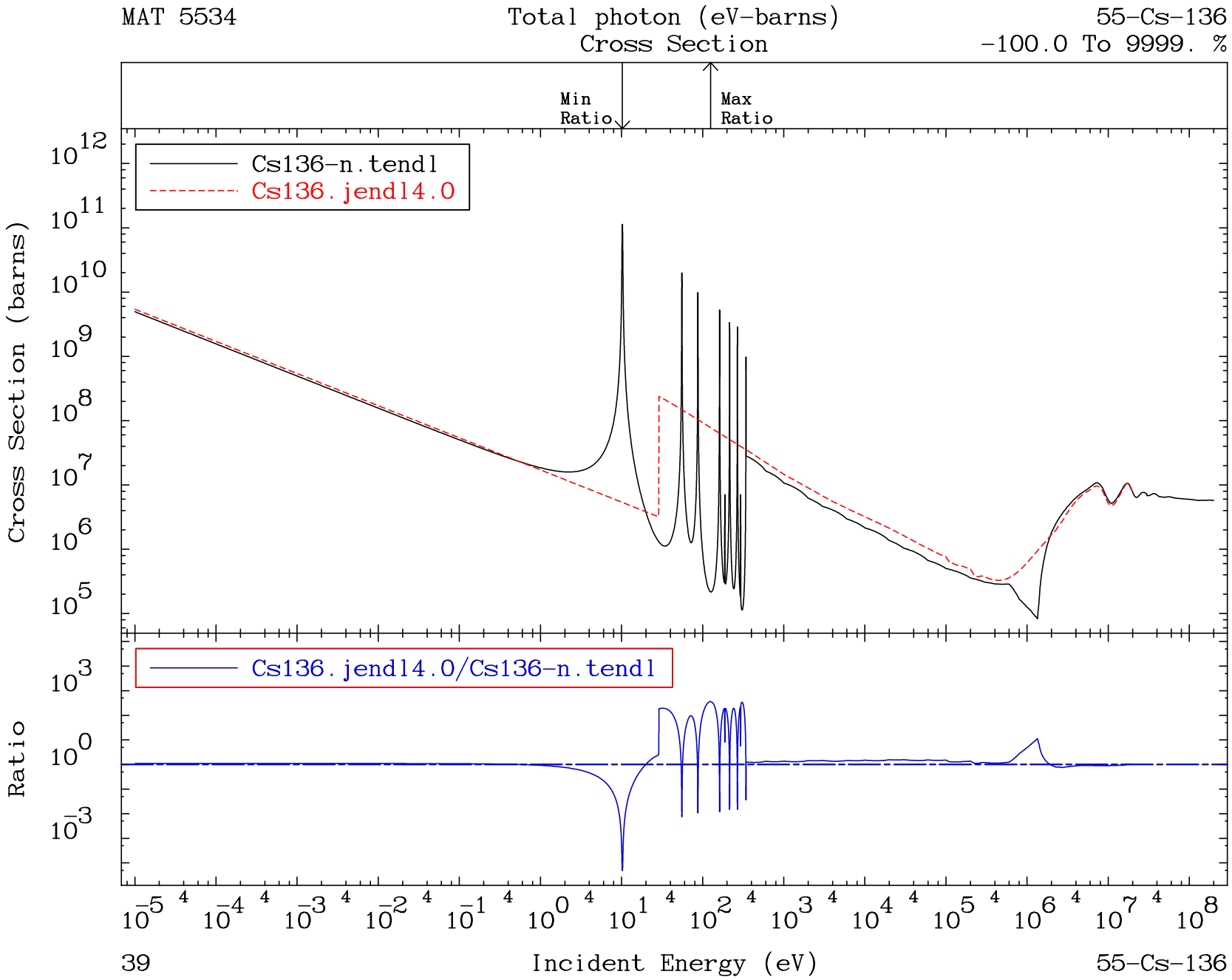

MAT 5534
Kerma elastic
Cross Section
55-Cs-136
-99.91 To 1262. %
Min
Ratio
Max
Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
34
55-Cs-136

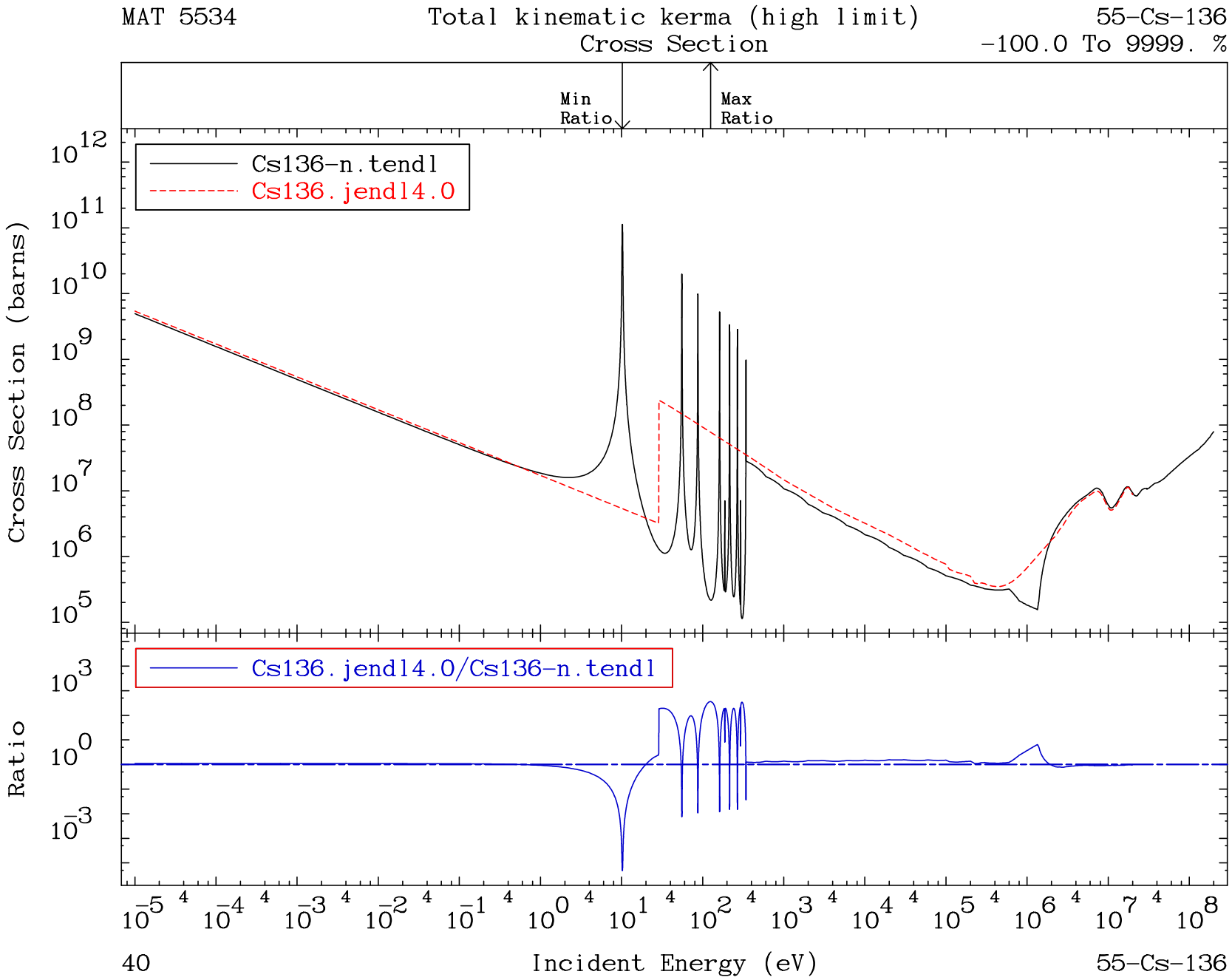

MAT 5534
Kerma non-elastic (all but mt2)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
35
55-Cs-136

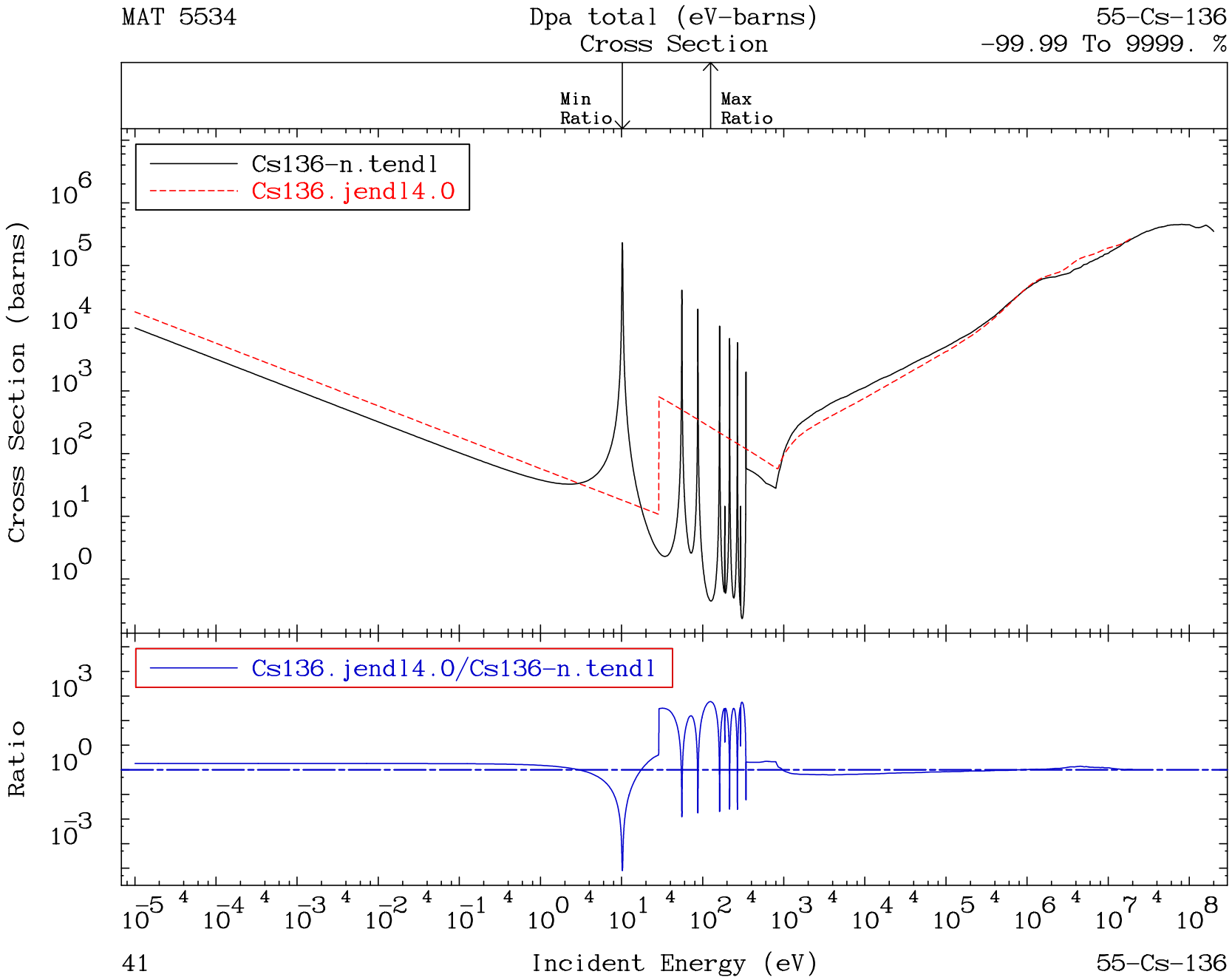

MAT 5534
Kerma inelastic (mt51-91)
Cross Section
55-Cs-136
-47.04 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 622.49 keV
Cs136.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
36
55-Cs-136

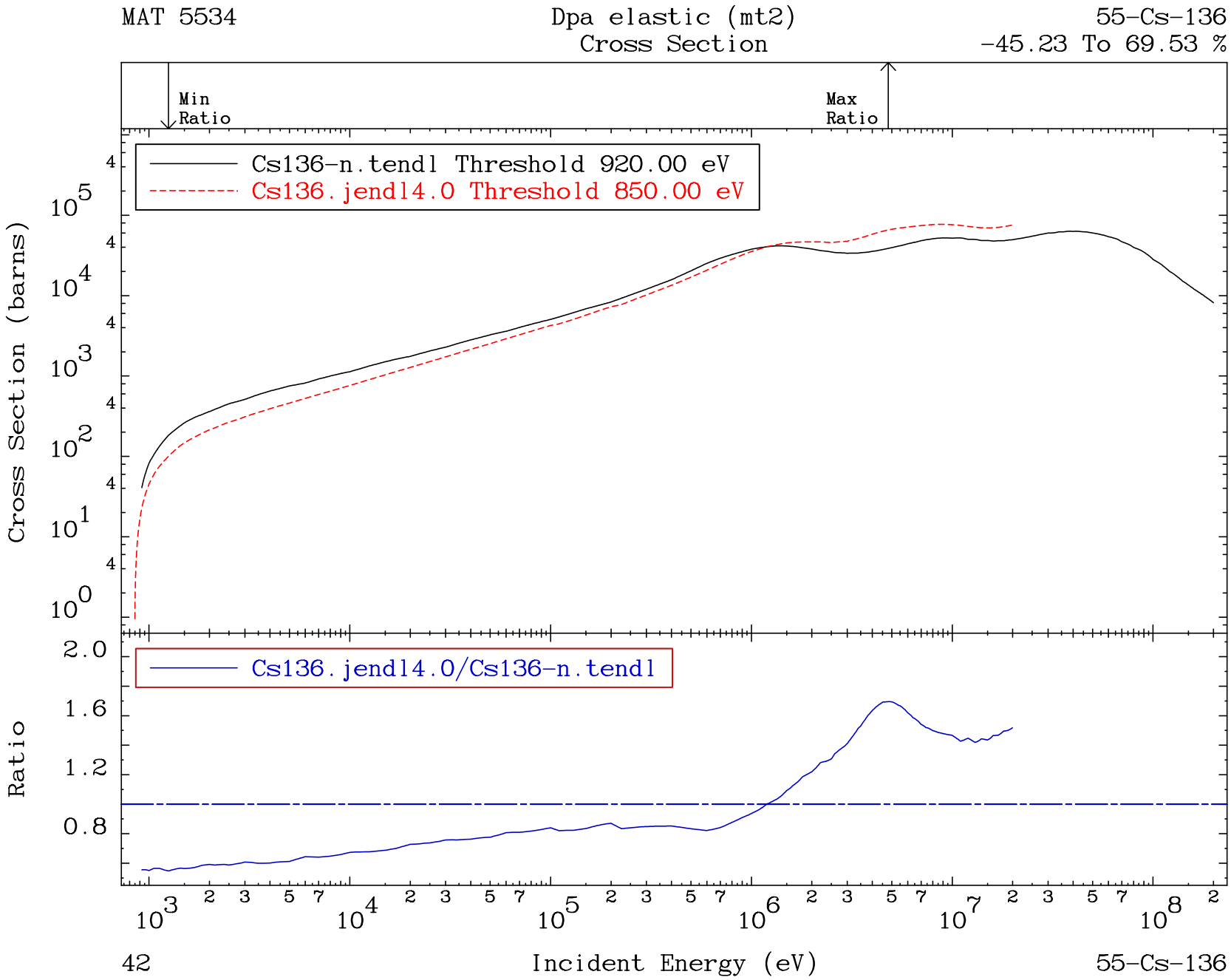

MAT 5534
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
55-Cs-136
-47.04 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Cs136.jendl4.0/Cs136-n.tendl
Ratio
10^15
10^10
10^5
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
55-Cs-136

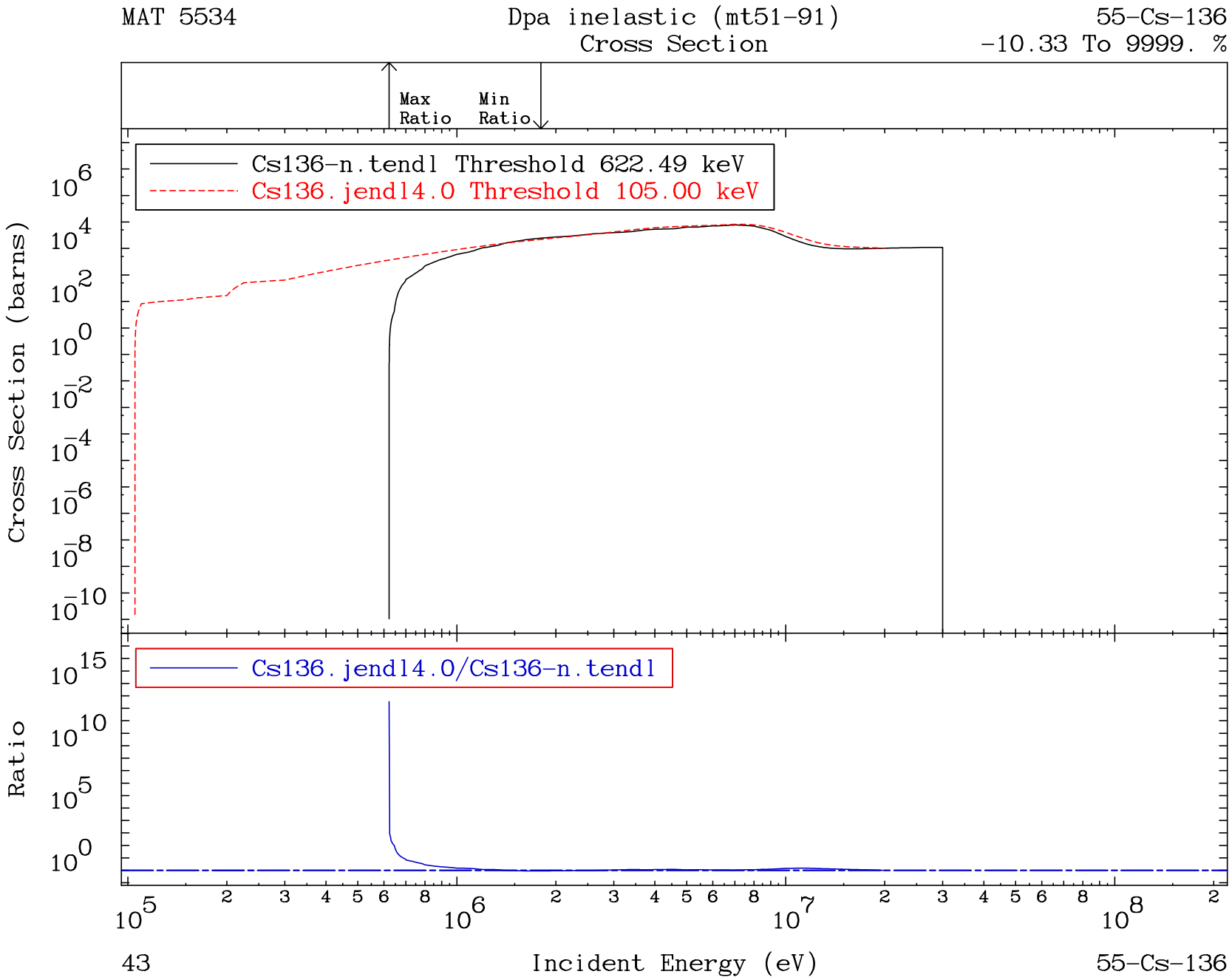

MAT 5534
Kerma capture (mt102)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
38
55-Cs-136

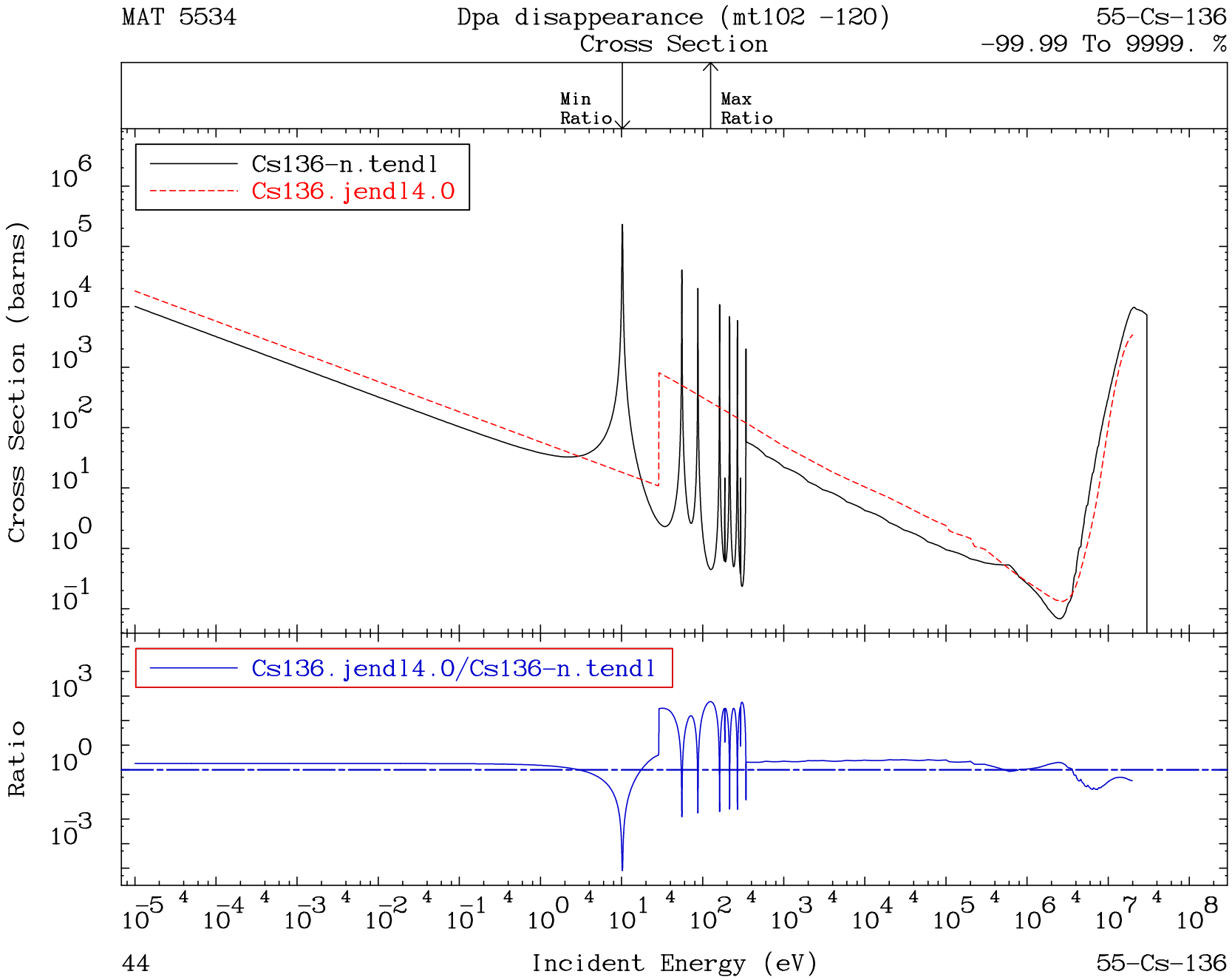

MAT 5534
Total photon (eV-barns)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
39
Incident Energy (eV)
55-Cs-136


MAT 5534
Total kinematic kerma (high limit)
Cross Section
55-Cs-136
-100.0 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
40
55-Cs-136


MAT 5534
Dpa total (eV-barns)
Cross Section
55-Cs-136
-99.99 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
41
55-Cs-136


MAT 5534
Dpa elastic (mt2)
Cross Section
55-Cs-136
-45.23 To 69.53 %
Min Ratio
Max Ratio
Cs136-n.tendl Threshold 920.00 eV
Cs136.jendl4.0 Threshold 850.00 eV
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
42
55-Cs-136


MAT 5534
Dpa inelastic (mt51-91)
Cross Section
55-Cs-136
-10.33 To 9999. %
Max Ratio
Min Ratio
Cs136-n.tendl Threshold 622.49 keV
Cs136.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
43
55-Cs-136


MAT 5534
Dpa disappearance (mt102 -120)
Cross Section
55-Cs-136
-99.99 To 9999. %
Min Ratio
Max Ratio
Cs136-n.tendl
Cs136.jendl4.0
Cross Section (barns)
Cs136.jendl4.0/Cs136-n.tendl
Ratio
Incident Energy (eV)
44
55-Cs-136