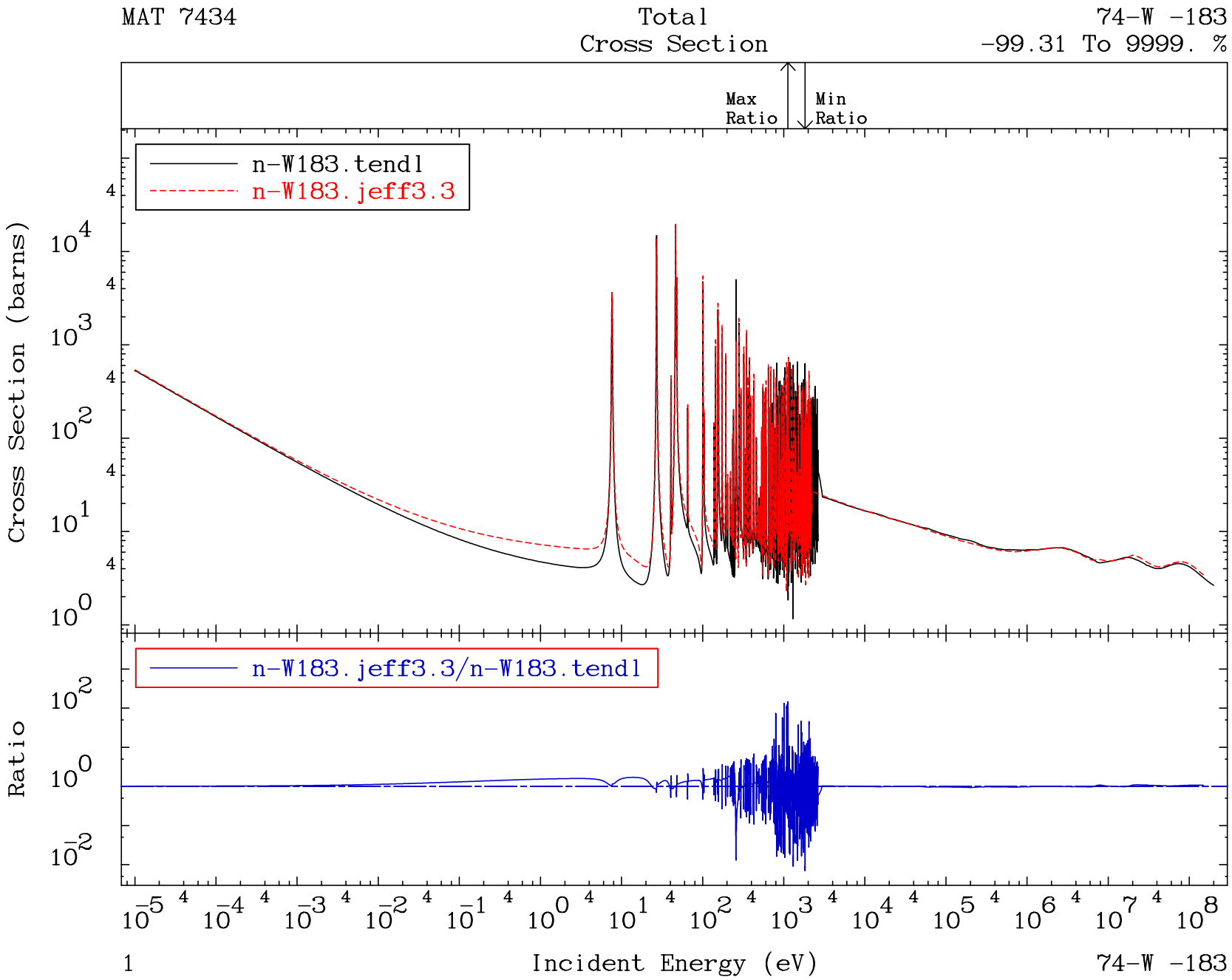
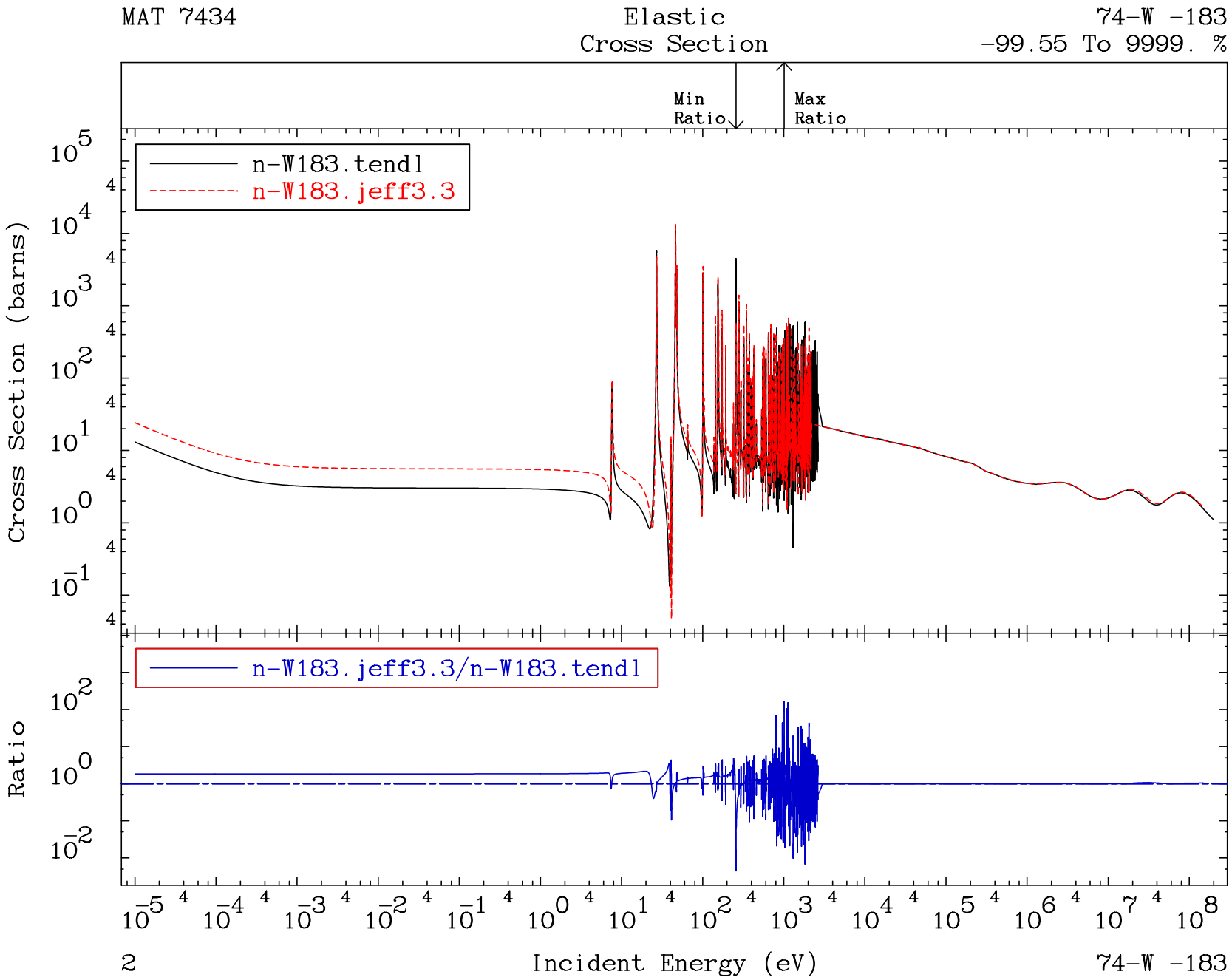
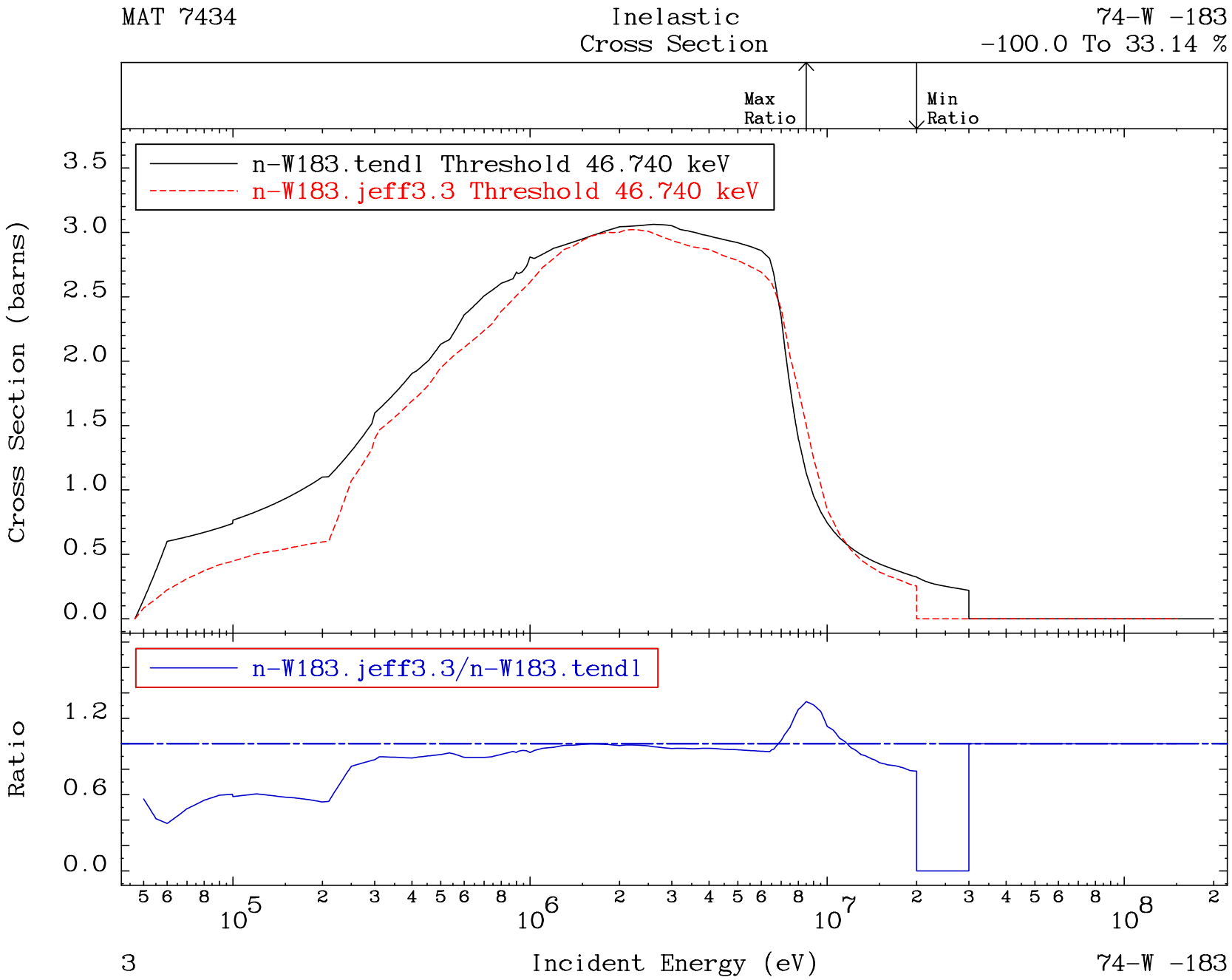
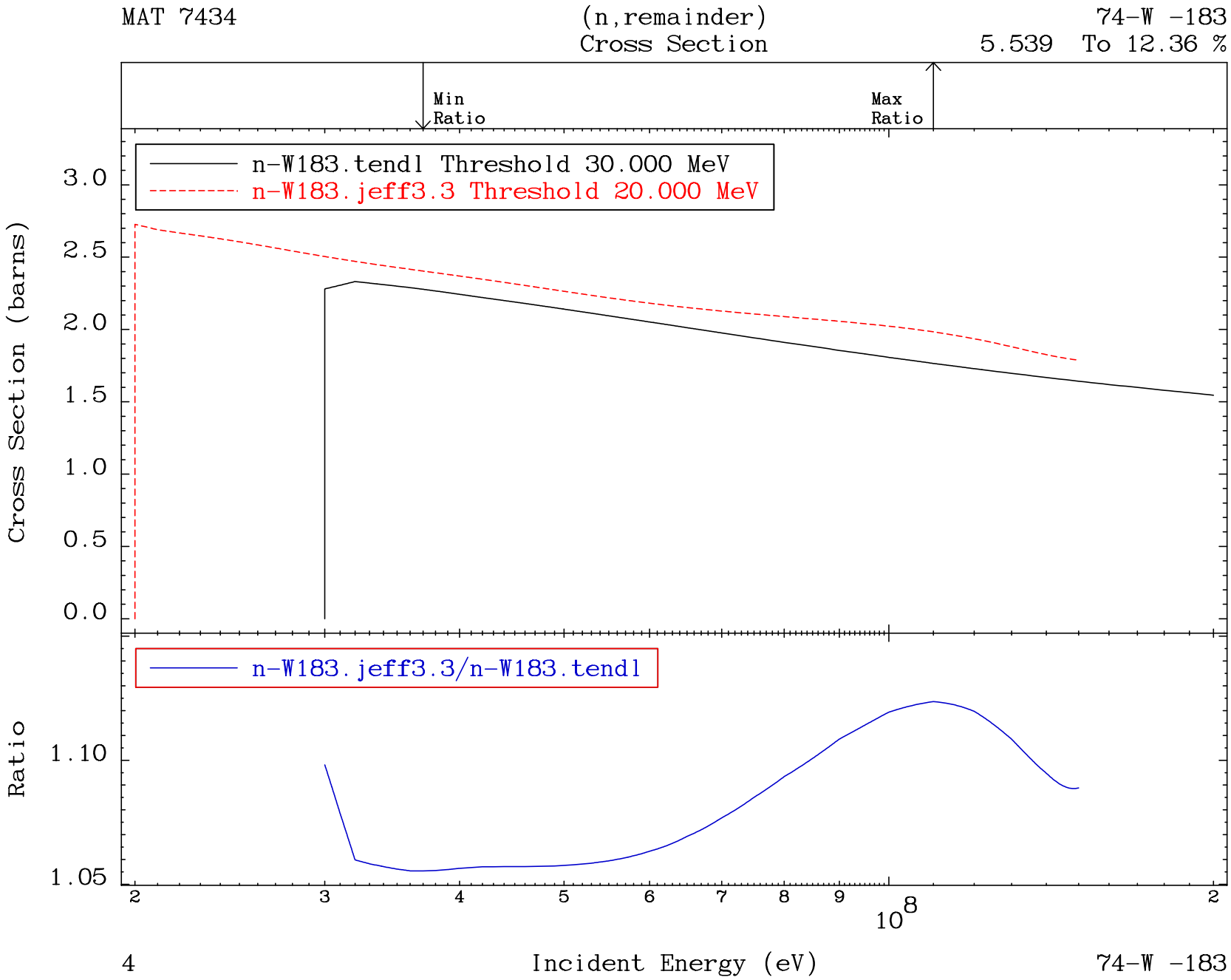
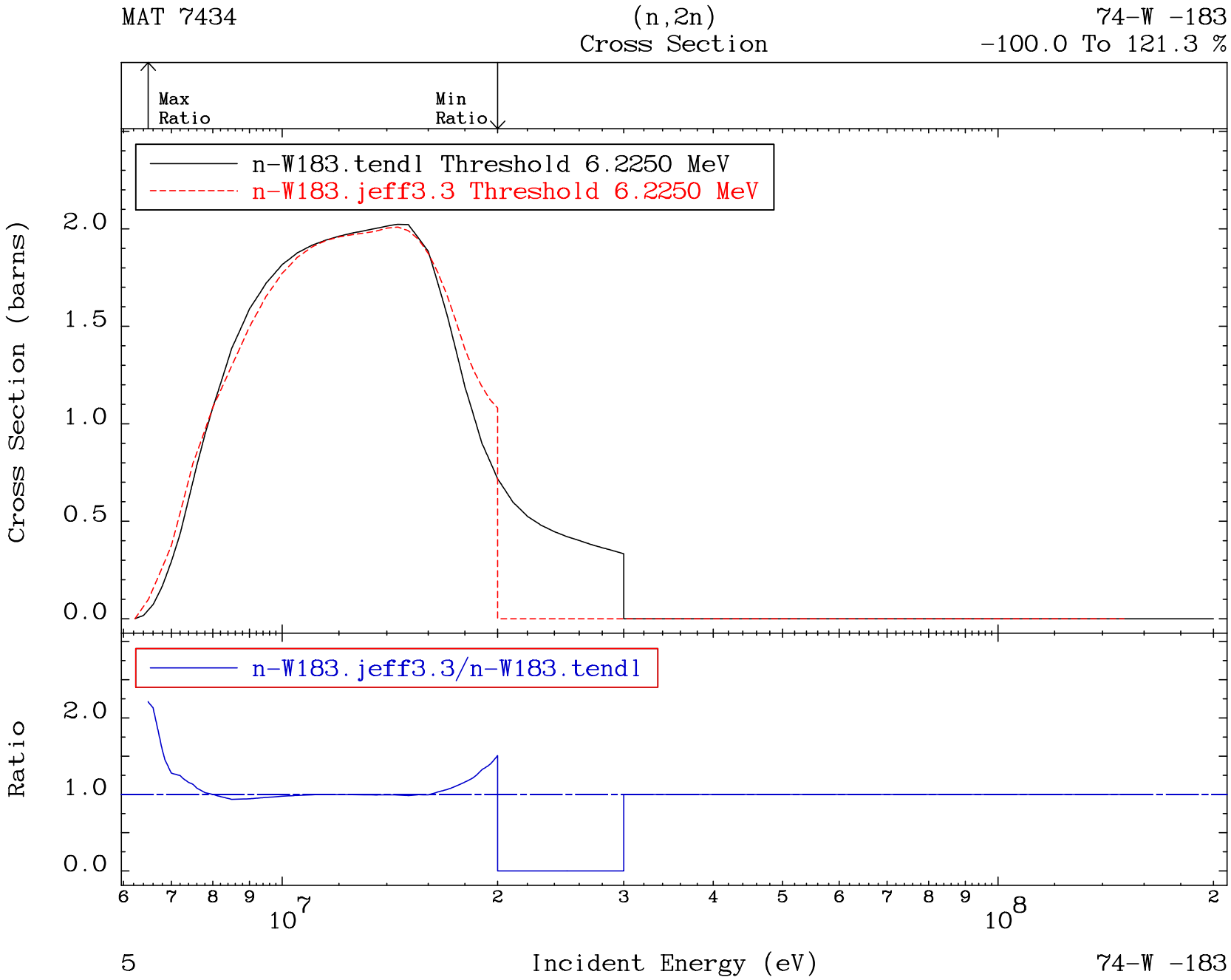
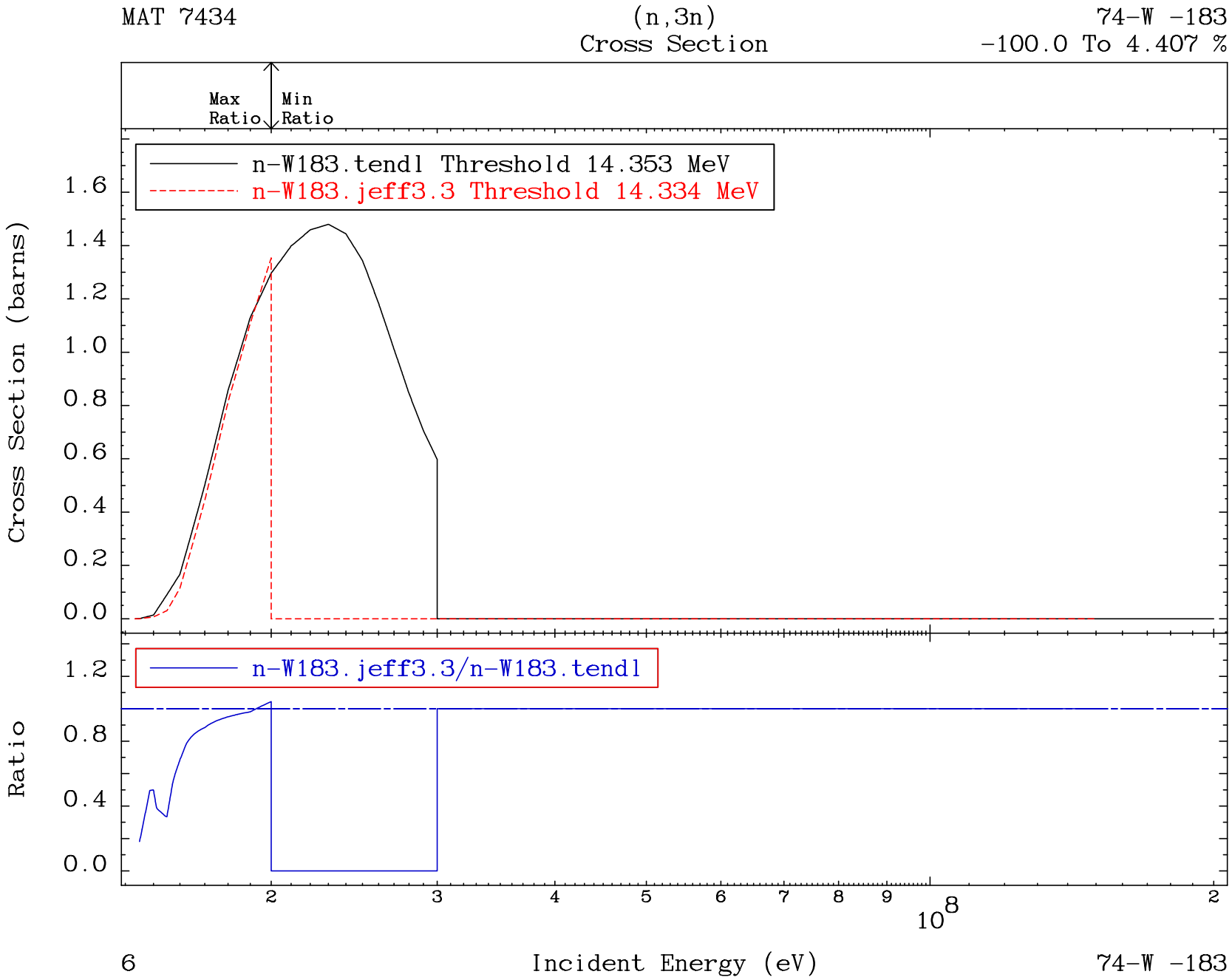

MAT 7434
Total
Cross Section
74-W -183
-99.31 To 9999. %
Max
Ratio
Min
Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
1
74-W -183

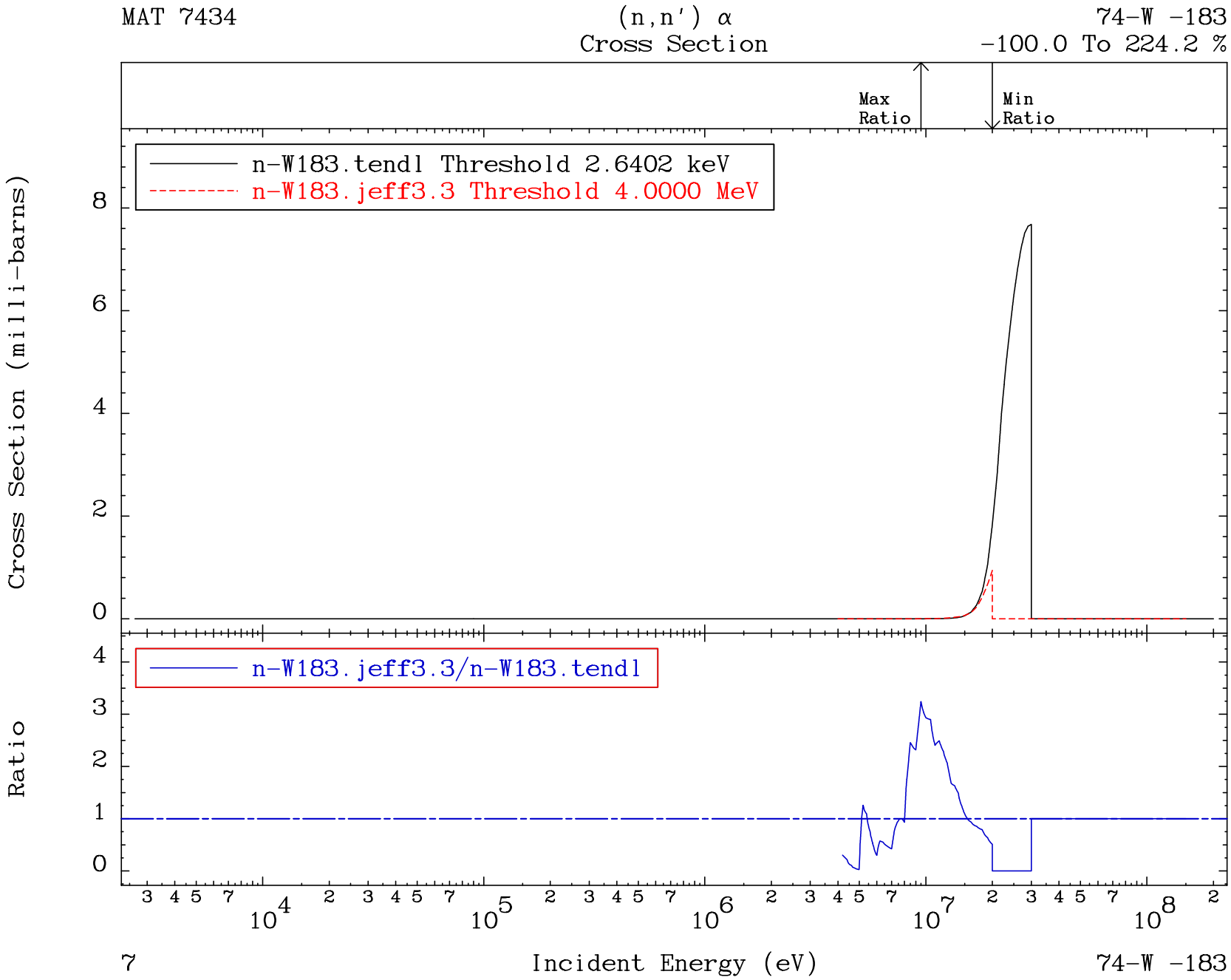

MAT 7434
Elastic
Cross Section
74-W -183
-99.55 To 9999. %
Min
Ratio
Max
Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
2
74-W -183

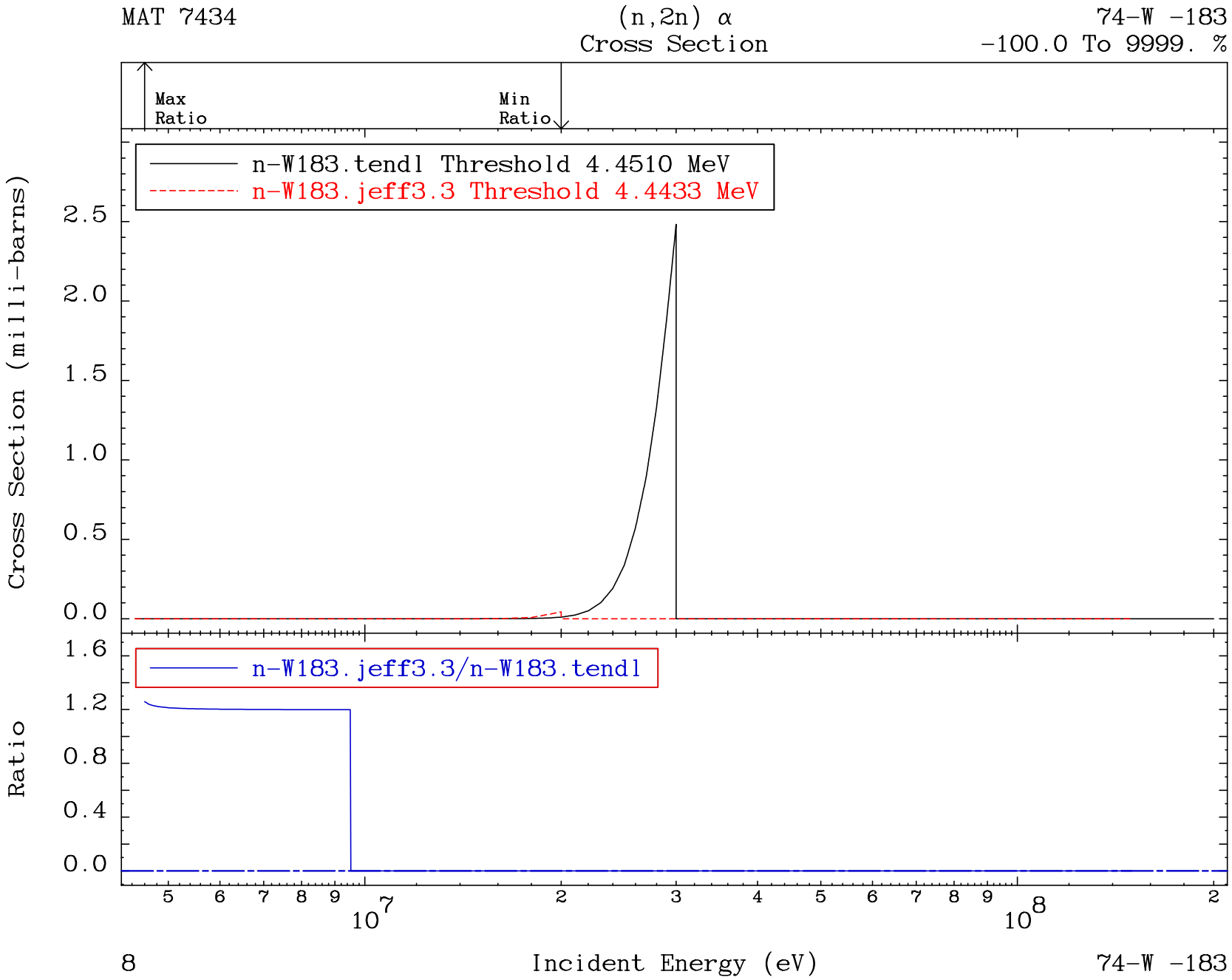

MAT 7434
Inelastic
Cross Section
74-W -183
-100.0 To 33.14 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 46.740 keV
n-W183.jeff3.3 Threshold 46.740 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.6
0.0
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
74-W -183

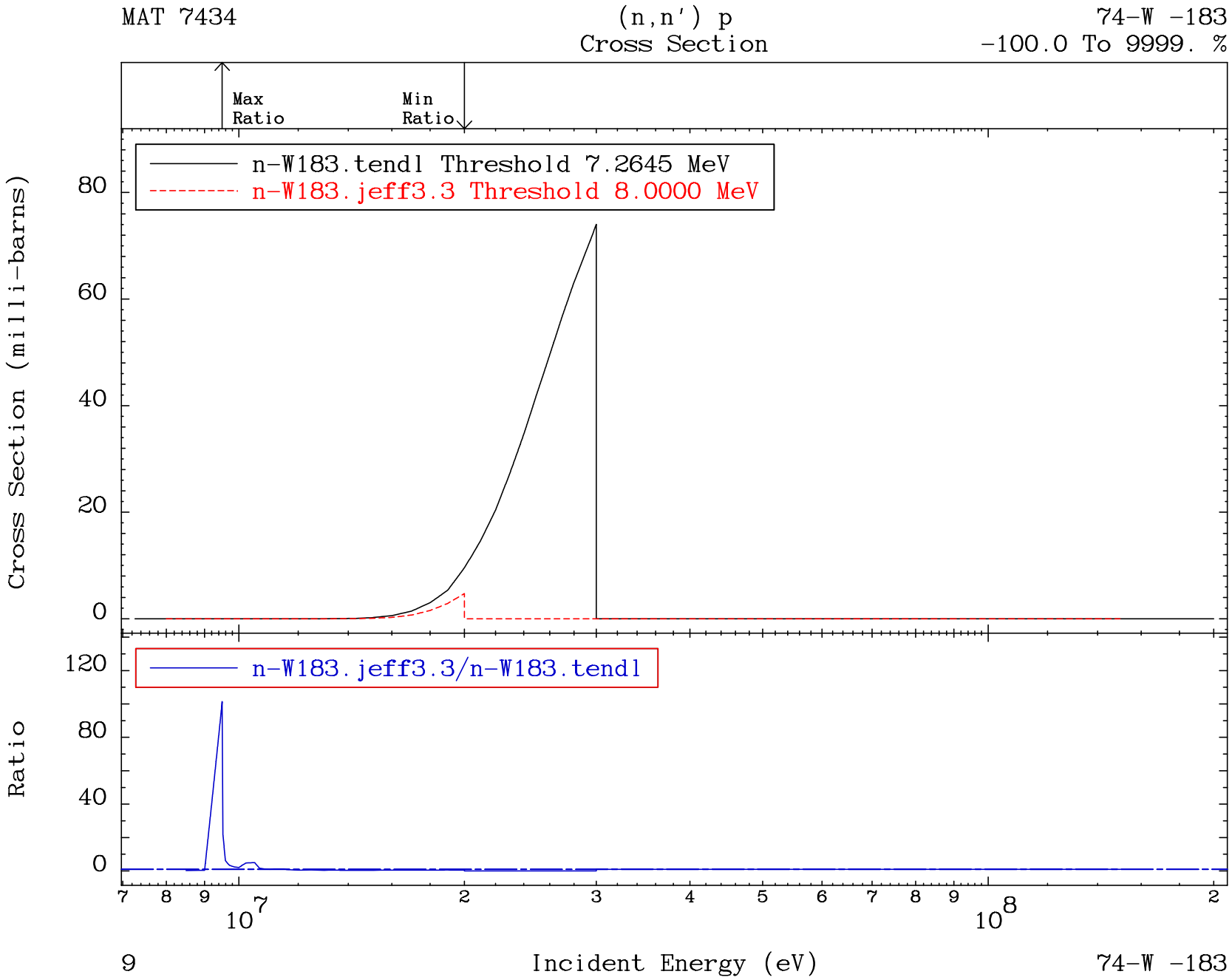

MAT 7434
(n,remainder)
Cross Section
74-W -183
5.539 To 12.36 %
Min
Ratio
Max
Ratio
n-W183.tendl Threshold 30.000 MeV
n-W183.jeff3.3 Threshold 20.000 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.10
1.05
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
74-W -183

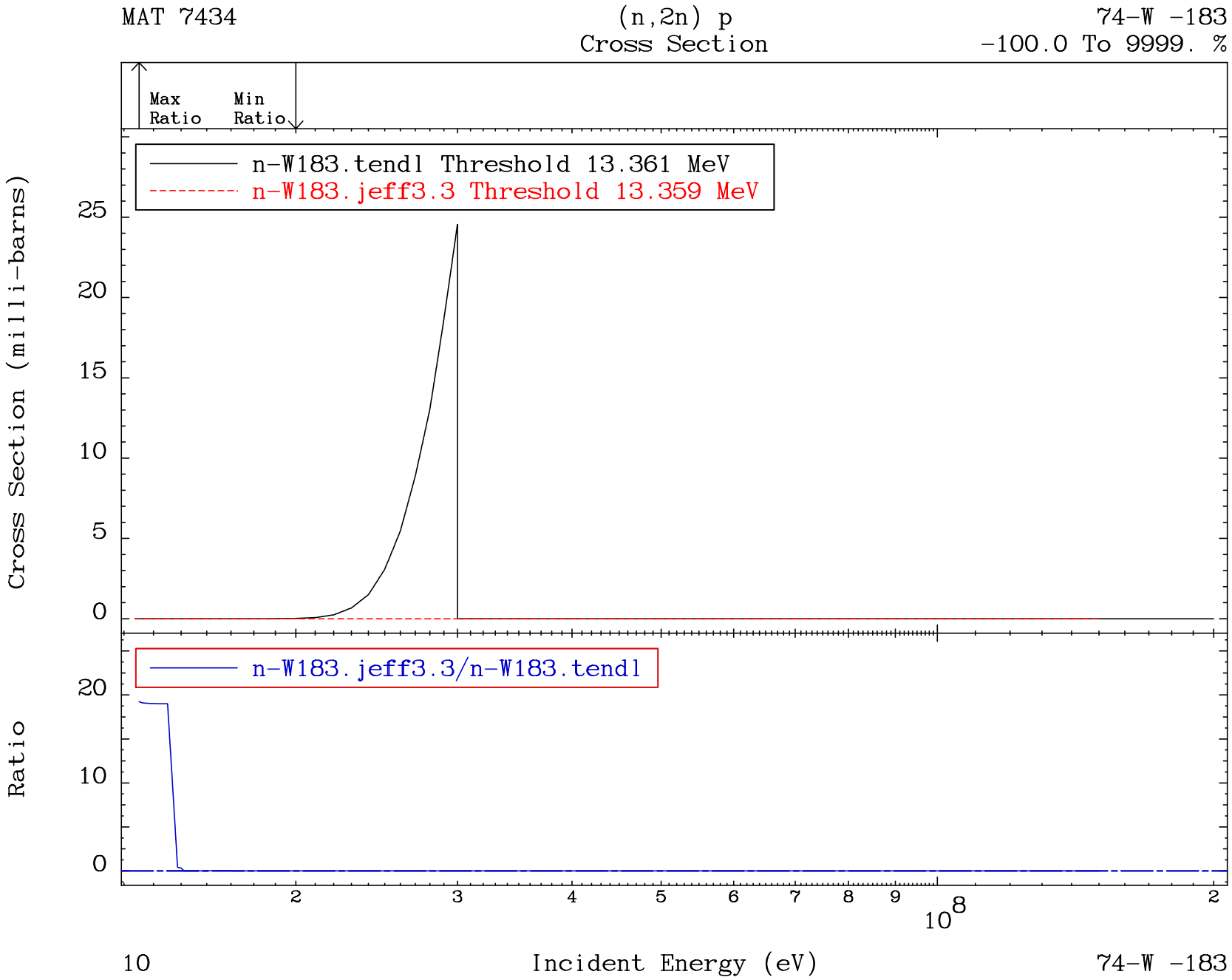

MAT 7434
(n,2n)
Cross Section
74-W -183
-100.0 To 121.3 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 6.2250 MeV
n-W183.jeff3.3 Threshold 6.2250 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
2.0
1.0
0.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
74-W -183

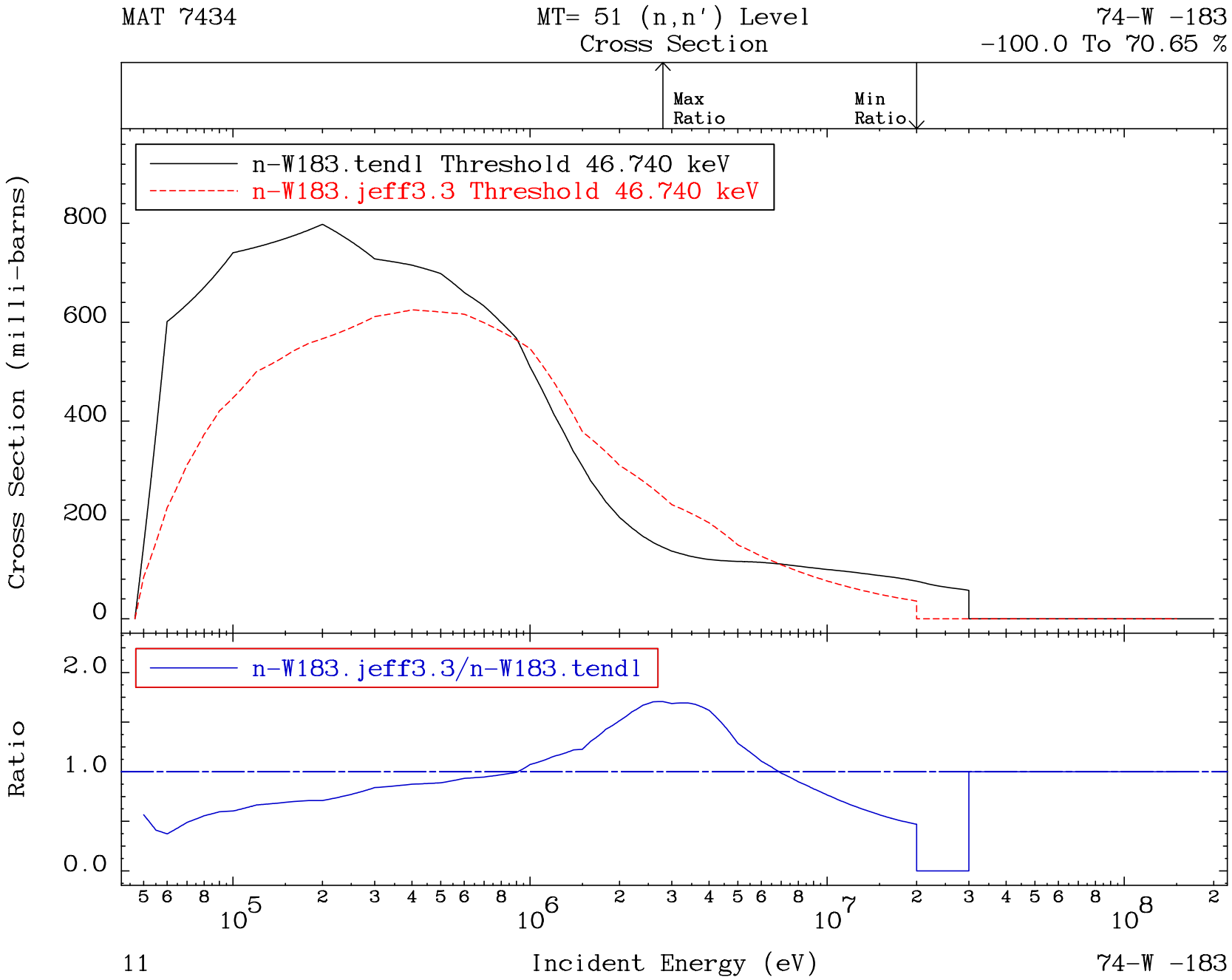

MAT 7434
(n,3n)
Cross Section
74-W -183
-100.0 To 4.407 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 14.353 MeV
n-W183.jeff3.3 Threshold 14.334 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
74-W -183

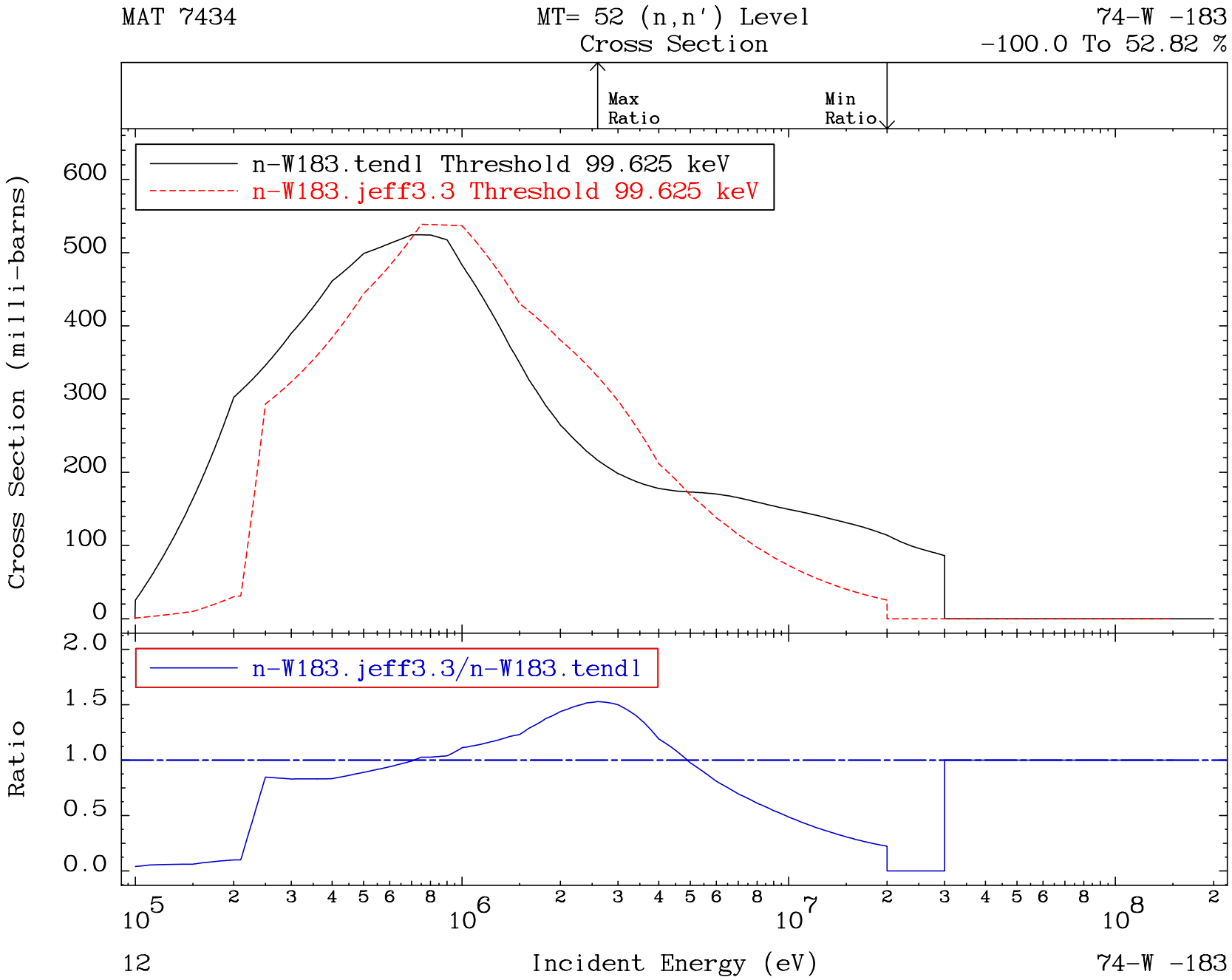

MAT 7434
(n,n') α
Cross Section
74-W -183
-100.0 To 224.2 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 2.6402 keV
n-W183.jeff3.3 Threshold 4.0000 MeV
Cross Section (milli-barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
7
74-W -183

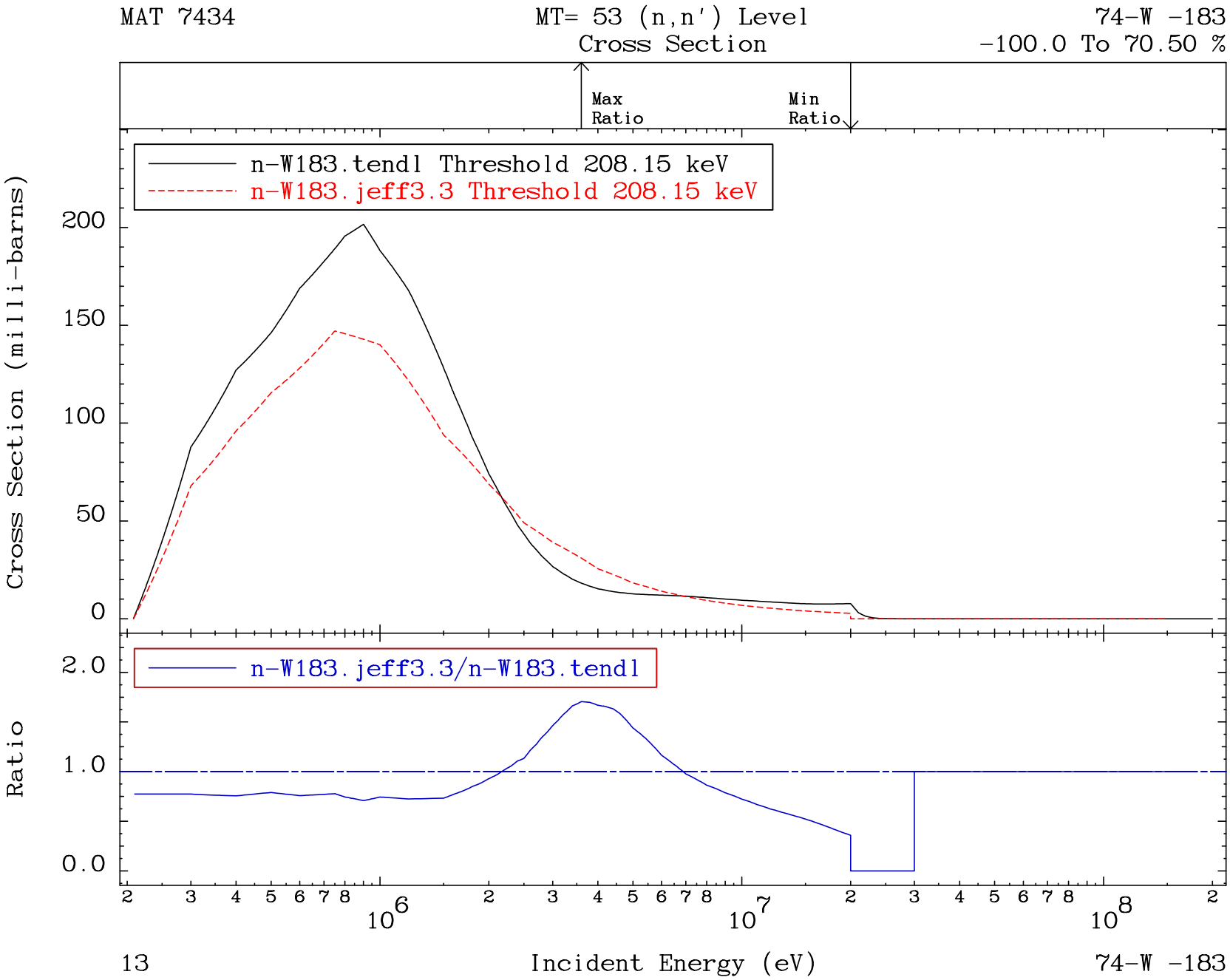

MAT 7434
(n,2n) α
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 4.4510 MeV
n-W183.jeff3.3 Threshold 4.4433 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
74-W -183

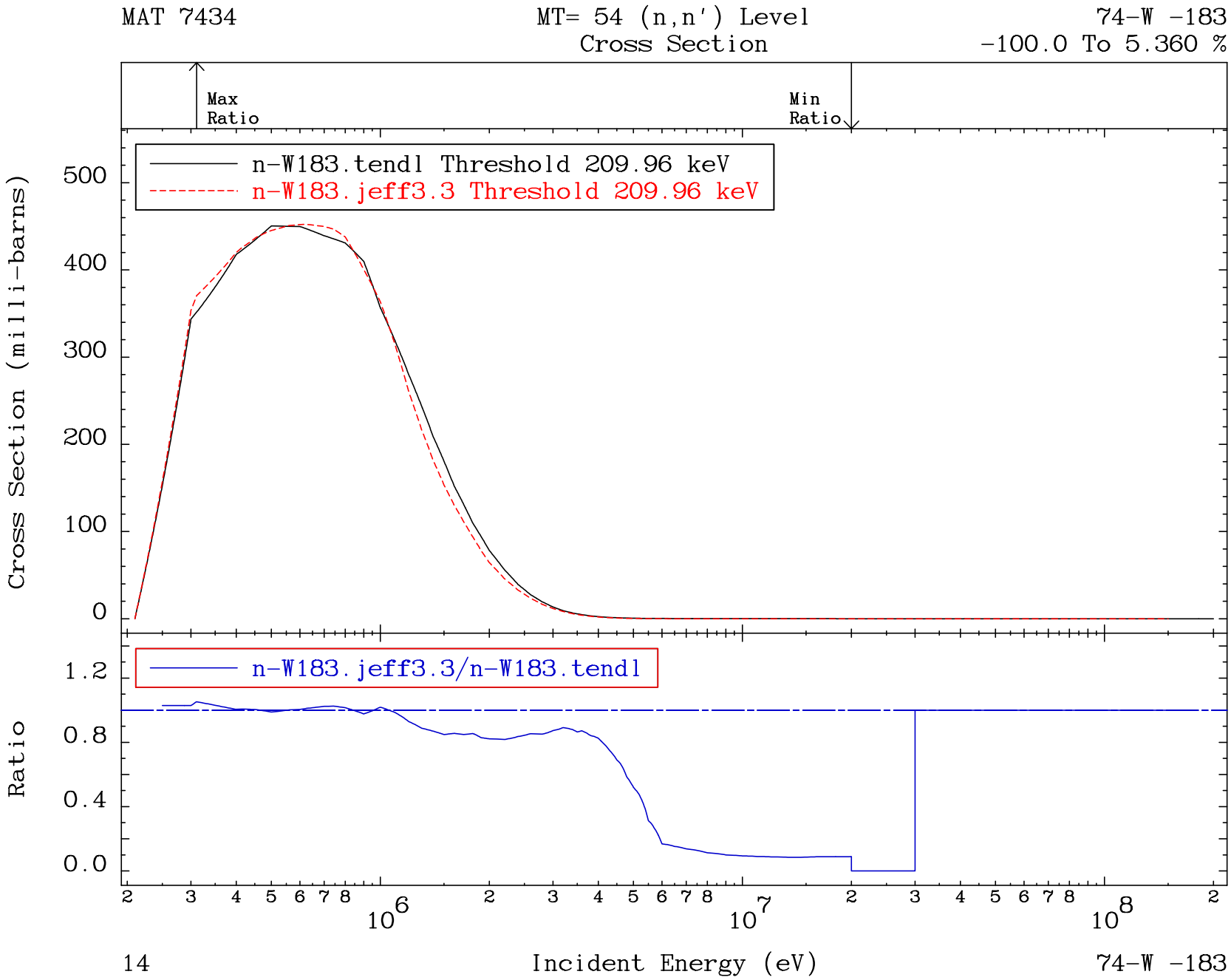

MAT 7434
(n,n') p
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 7.2645 MeV
n-W183.jeff3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
0
20
40
60
80
n-W183.jeff3.3/n-W183.tendl
Ratio
0
40
80
120
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
9
74-W -183

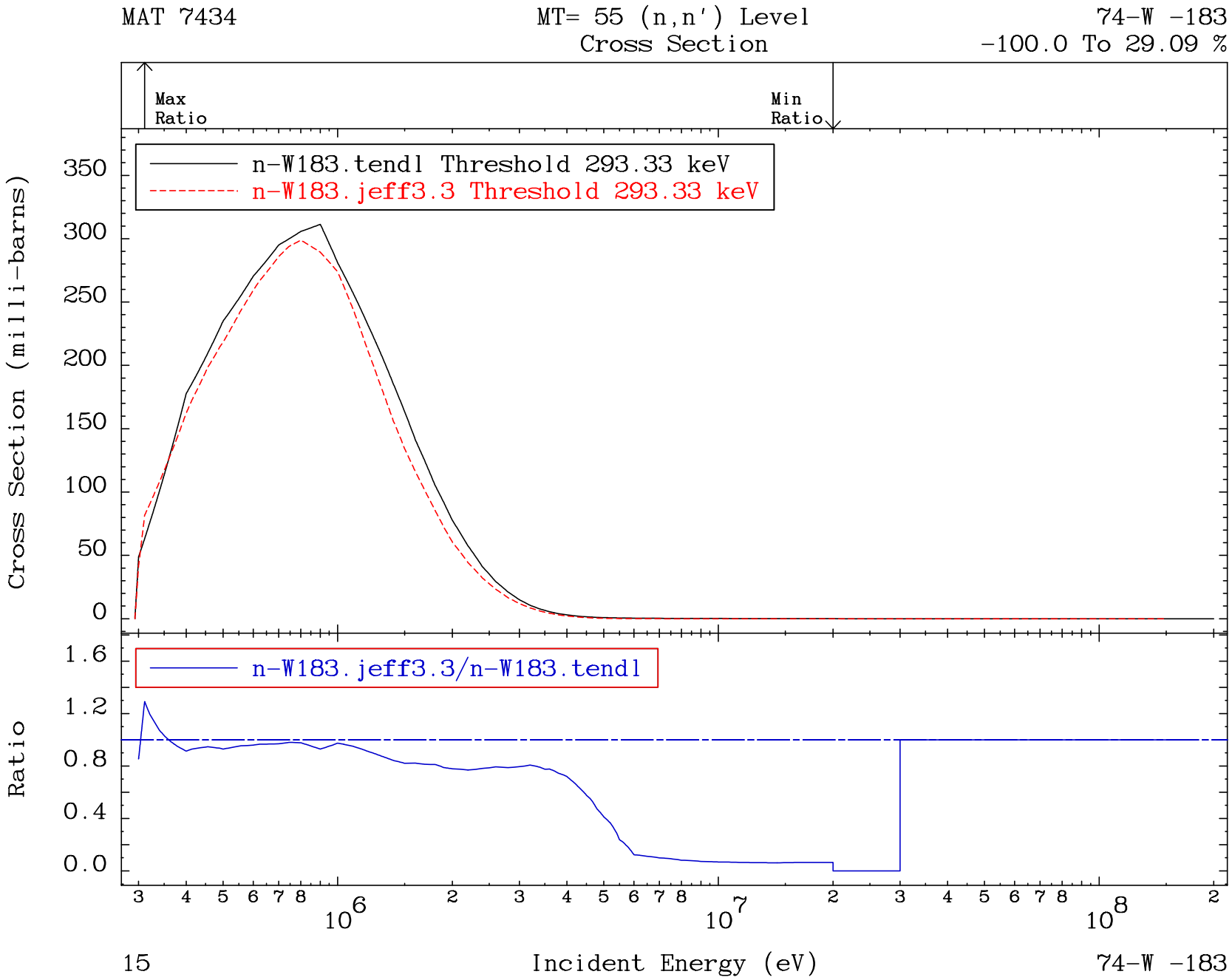

MAT 7434
(n,2n) p
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 13.361 MeV
n-W183.jeff3.3 Threshold 13.359 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-W183.jeff3.3/n-W183.tendl
Ratio
20
10
0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
74-W -183

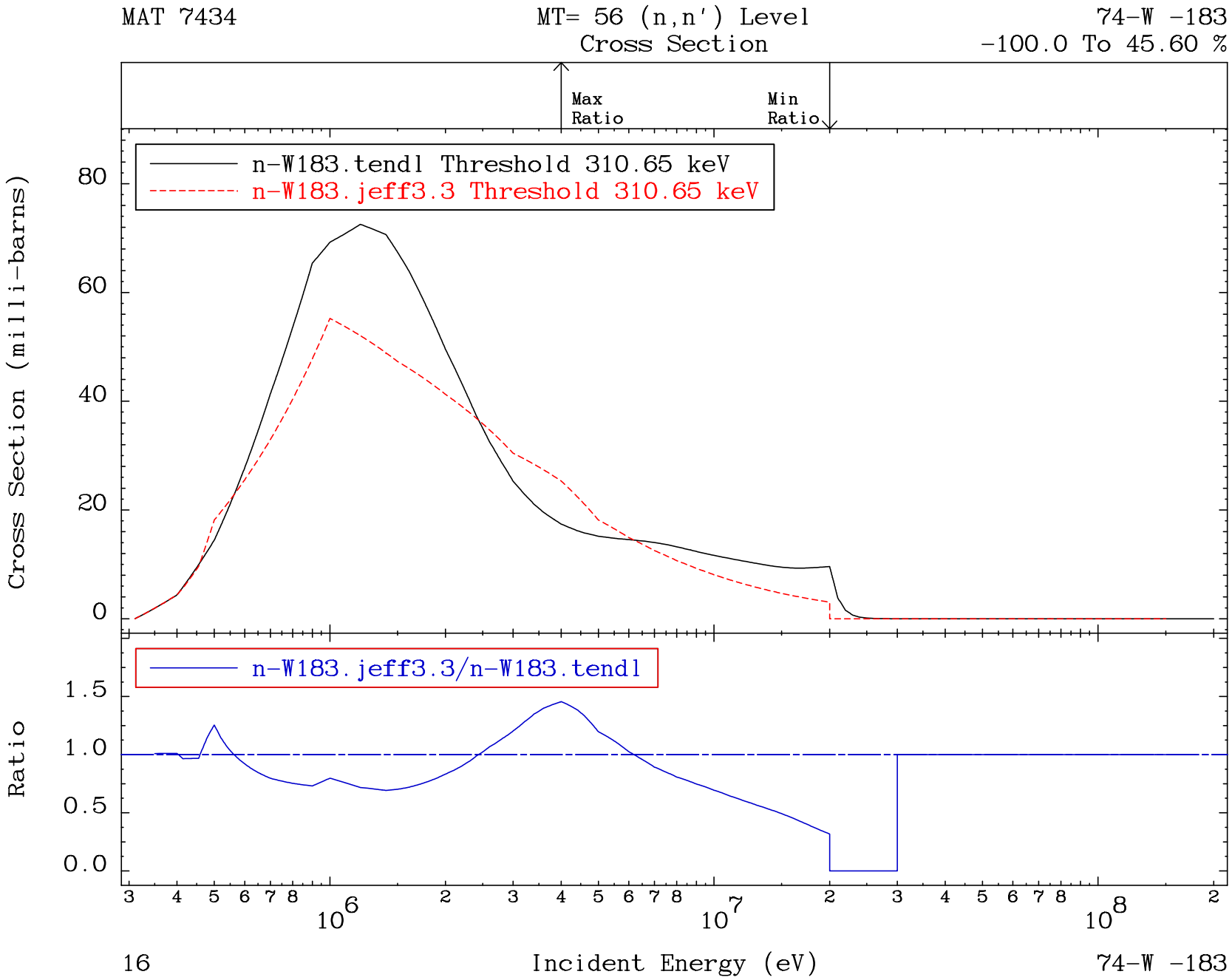

MAT 7434
MT= 51 (n,n') Level
Cross Section
74-W -183
-100.0 To 70.65 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 46.740 keV
n-W183.jeff3.3 Threshold 46.740 keV
Cross Section (milli-barns)
800
600
400
200
0
n-W183.jeff3.3/n-W183.tendl
Ratio
2.0
1.0
0.0
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
74-W -183

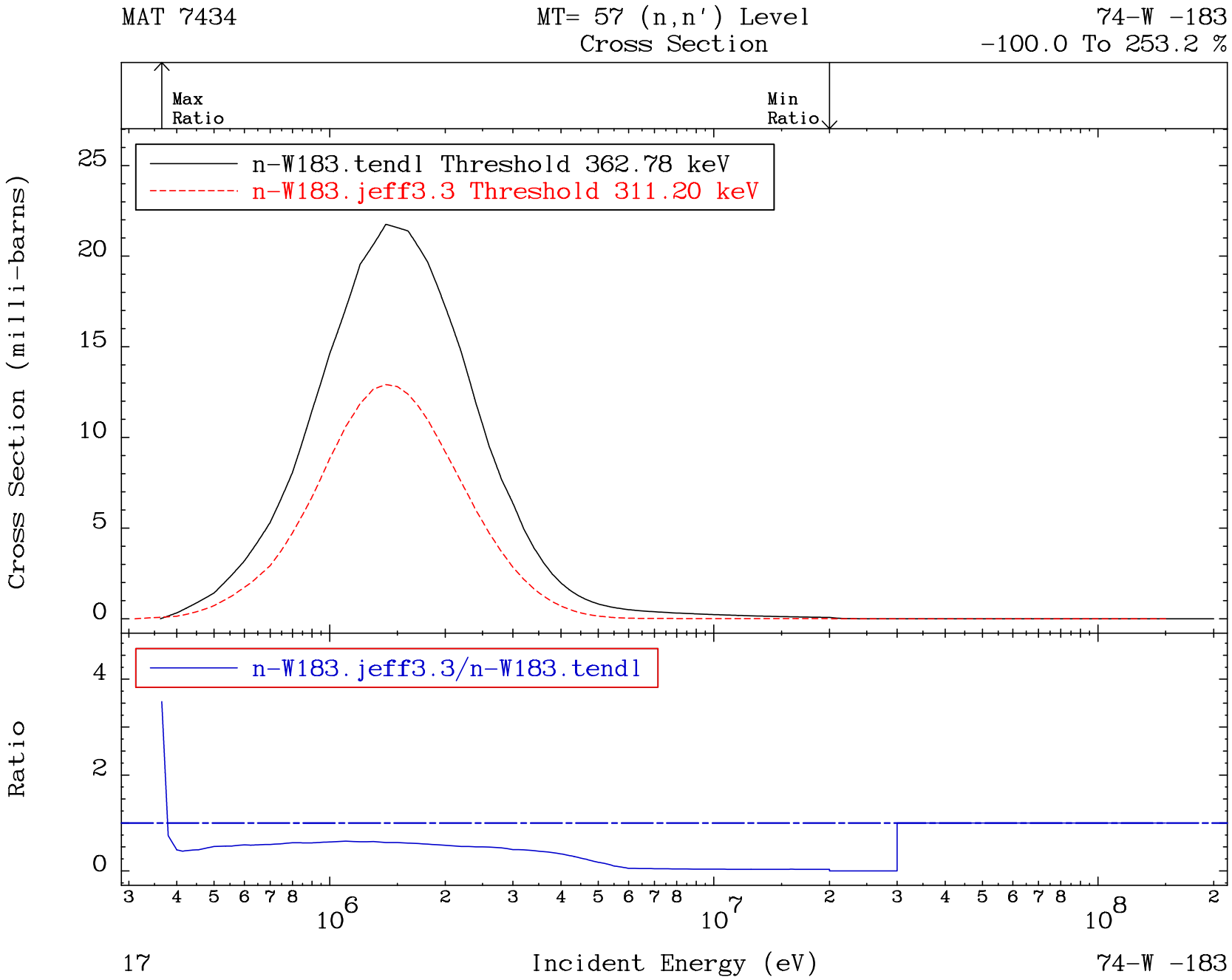

MAT 7434
MT= 52 (n,n') Level
Cross Section
74-W -183
-100.0 To 52.82 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 99.625 keV
n-W183.jeff3.3 Threshold 99.625 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-W183.jeff3.3/n-W183.tendl
Ratio
2.0
1.5
1.0
0.5
0.0
10^5
10^6
10^7
10^8
12
Incident Energy (eV)
74-W -183

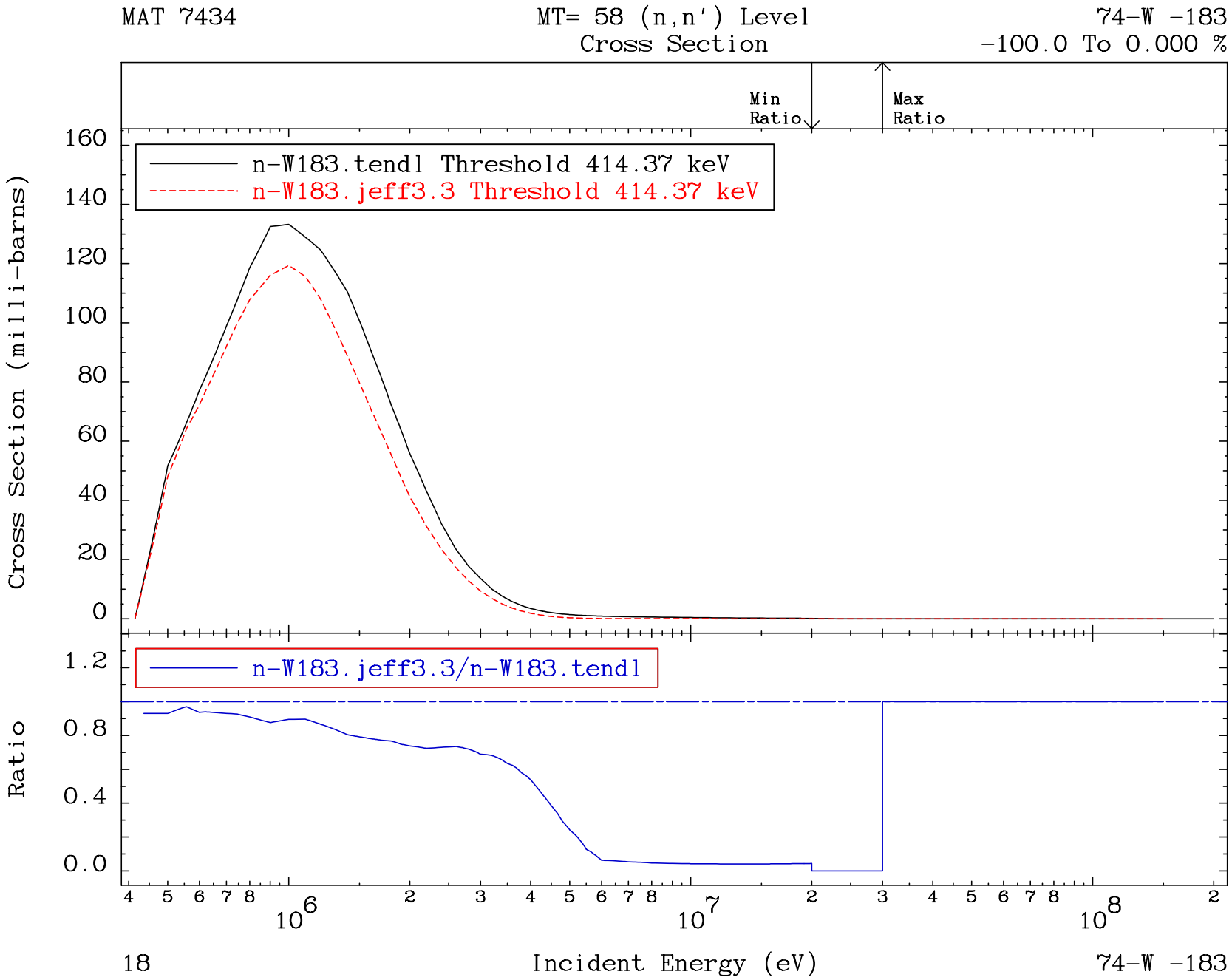

MAT 7434
MT= 53 (n,n') Level
Cross Section
74-W -183
-100.0 To 70.50 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 208.15 keV
n-W183.jeff3.3 Threshold 208.15 keV
Cross Section (milli-barns)
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
2.0
1.0
0.0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
74-W -183

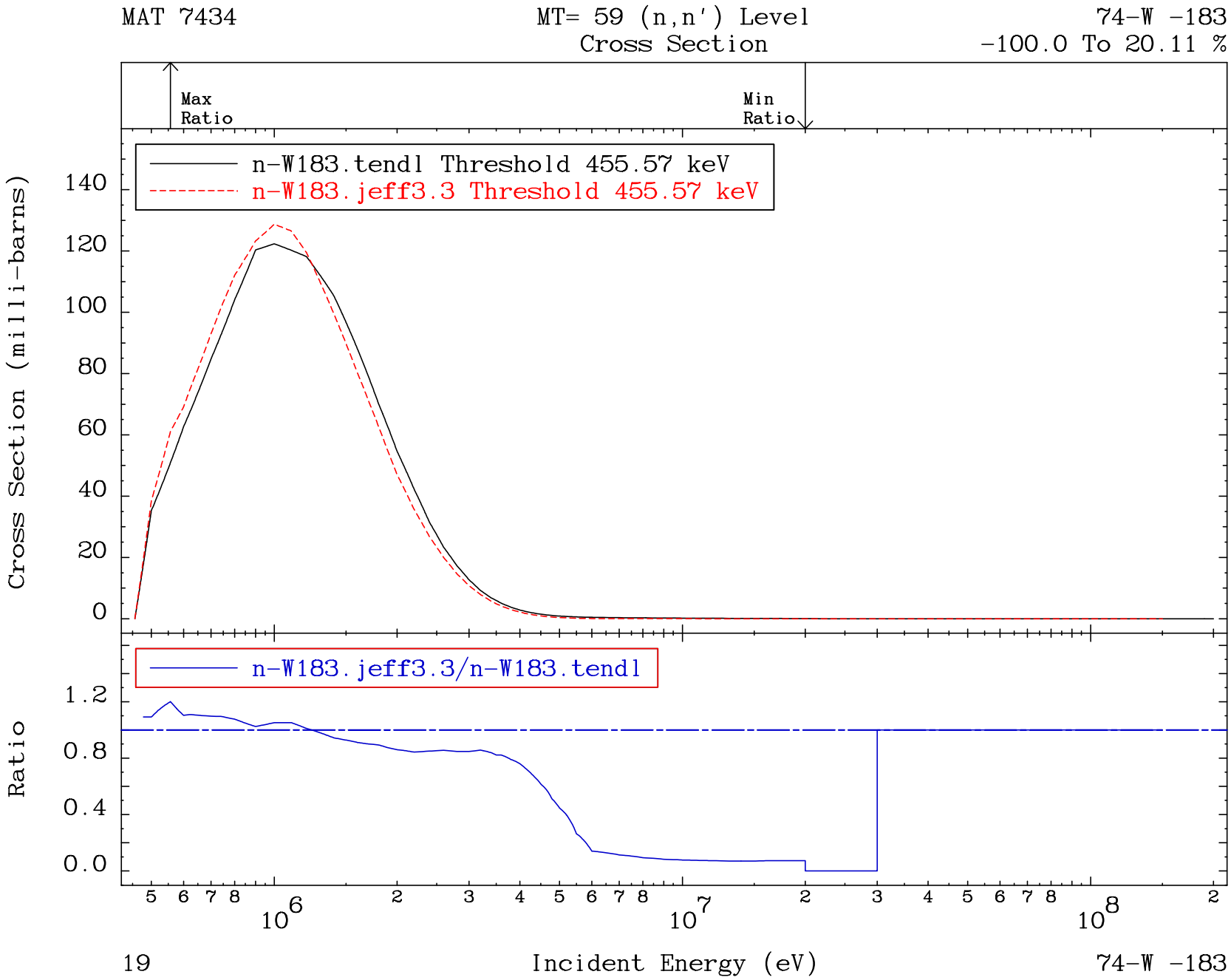

MAT 7434
MT= 54 (n,n') Level
Cross Section
74-W -183
-100.0 To 5.360 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 209.96 keV
n-W183.jeff3.3 Threshold 209.96 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
74-W -183

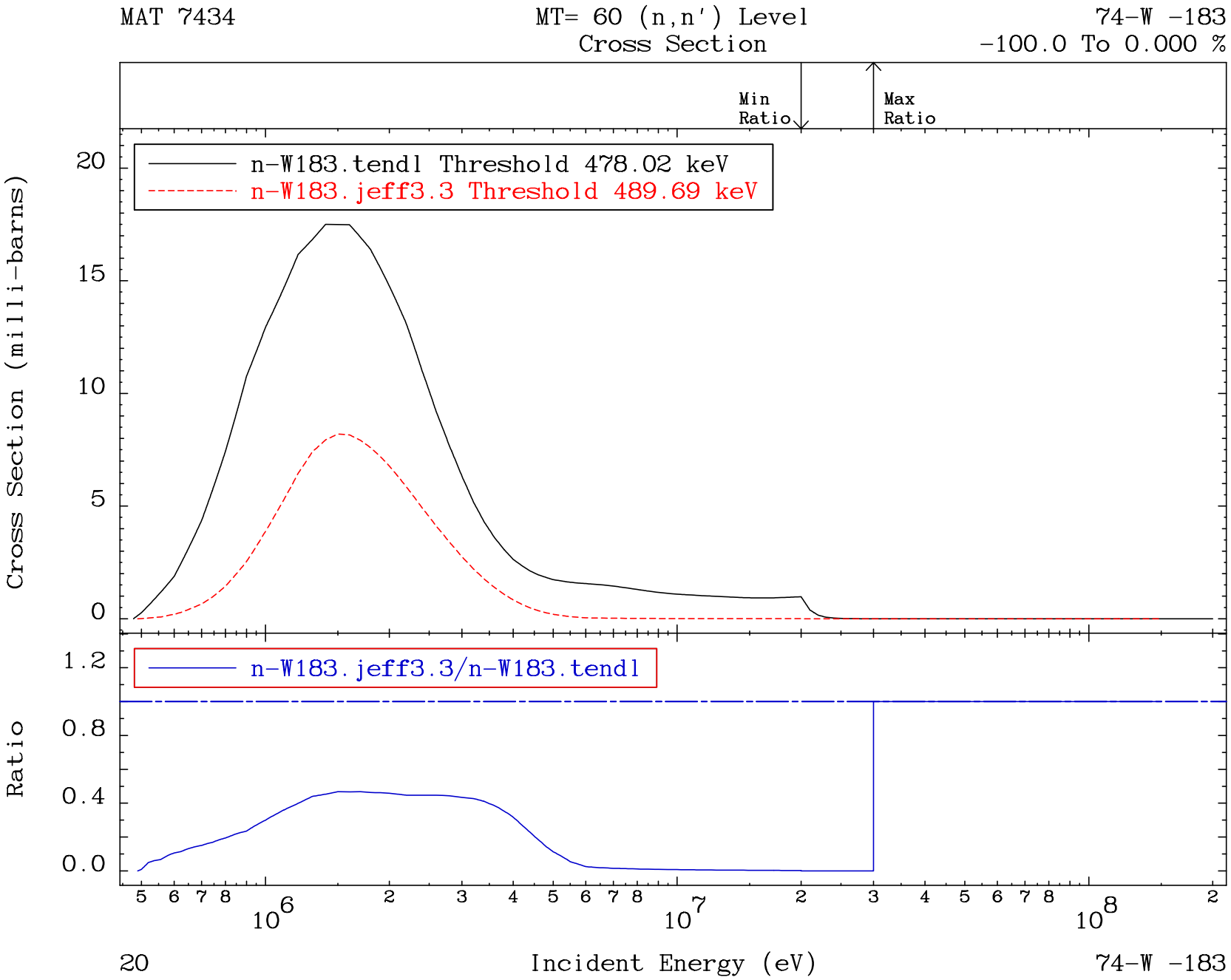

MAT 7434
MT= 55 (n,n') Level
Cross Section
74-W -183
-100.0 To 29.09 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 293.33 keV
n-W183.jeff3.3 Threshold 293.33 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
74-W -183

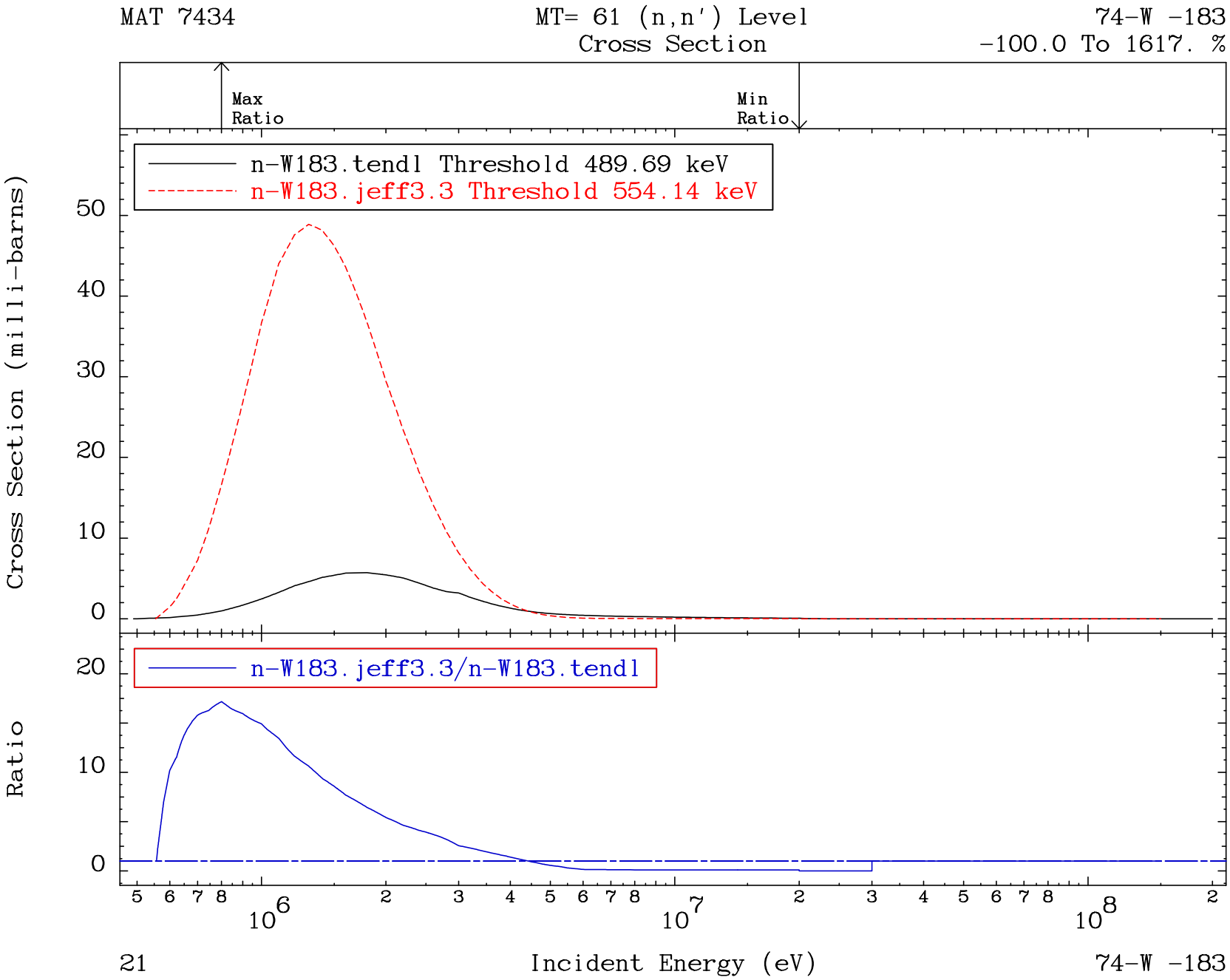

MAT 7434
MT= 56 (n,n') Level
Cross Section
74-W -183
-100.0 To 45.60 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 310.65 keV
n-W183.jeff3.3 Threshold 310.65 keV
Cross Section (milli-barns)
80
60
40
20
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.5
1.0
0.5
0.0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
74-W -183

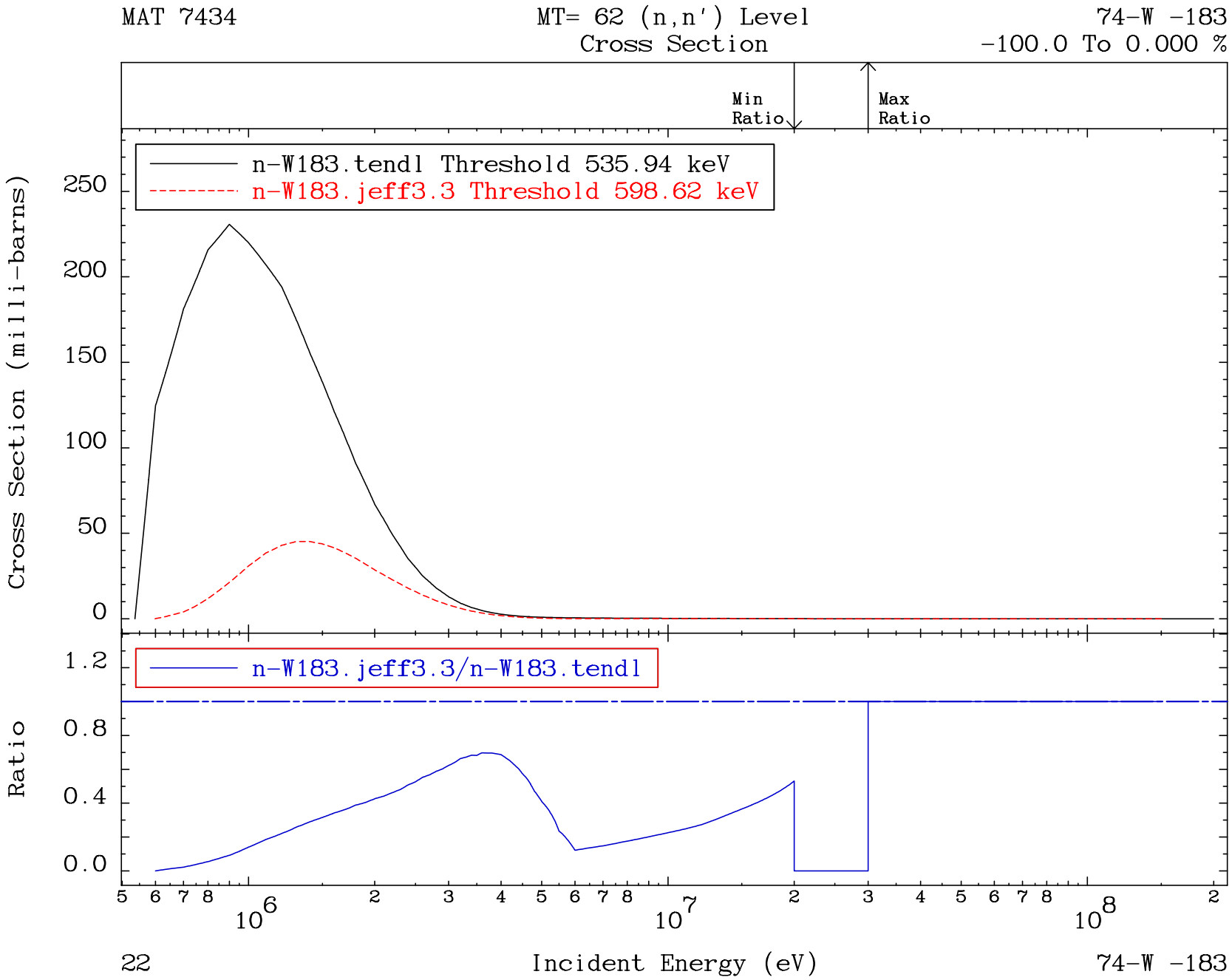

MAT 7434
MT= 57 (n,n') Level
Cross Section
74-W -183
-100.0 To 253.2 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 362.78 keV
n-W183.jeff3.3 Threshold 311.20 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-W183.jeff3.3/n-W183.tendl
Ratio
4
2
0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
74-W -183

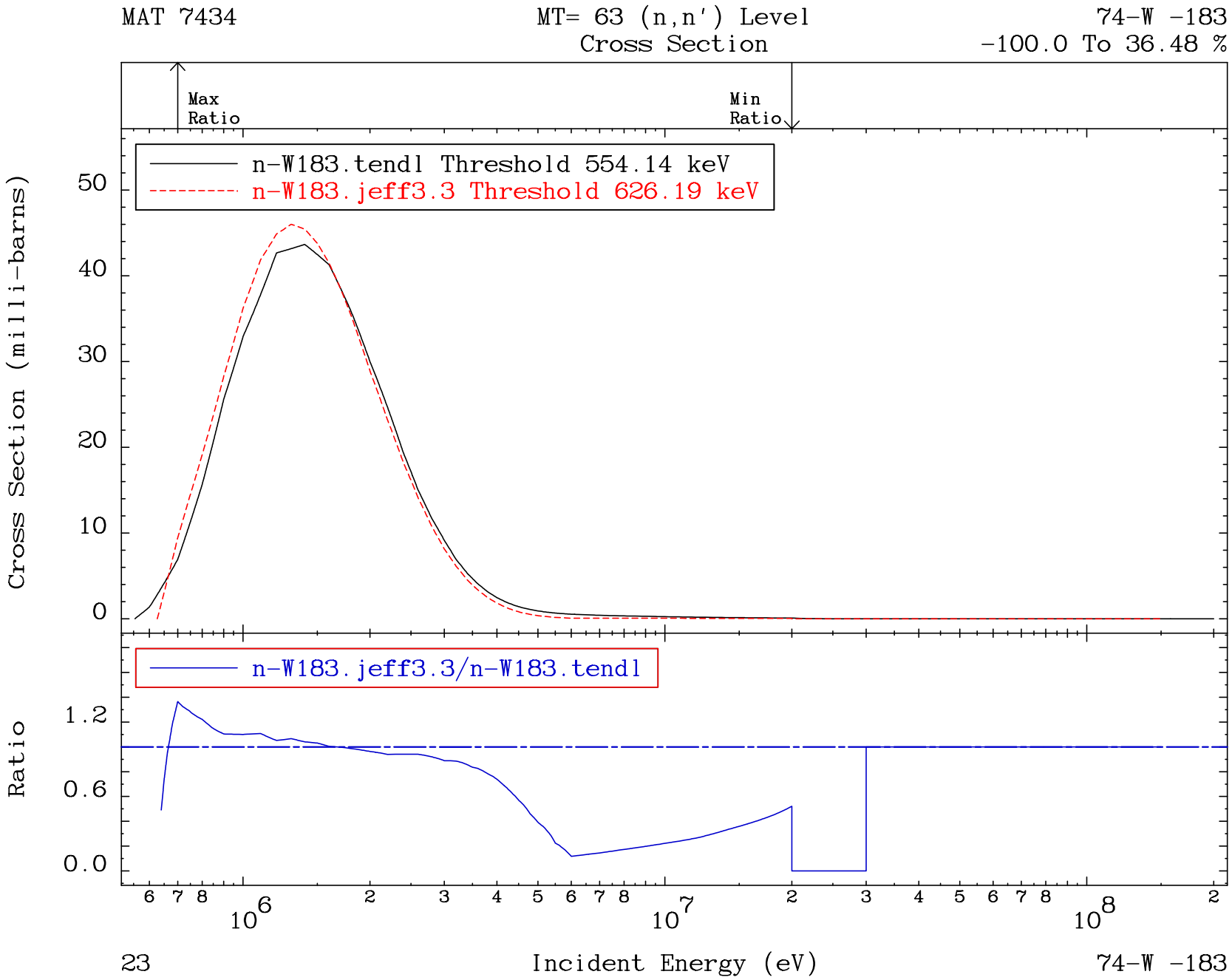

MAT 7434
MT= 58 (n,n') Level
Cross Section
74-W -183
-100.0 To 0.000 %
Min
Ratio
Max
Ratio
n-W183.tendl Threshold 414.37 keV
n-W183.jeff3.3 Threshold 414.37 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
74-W -183

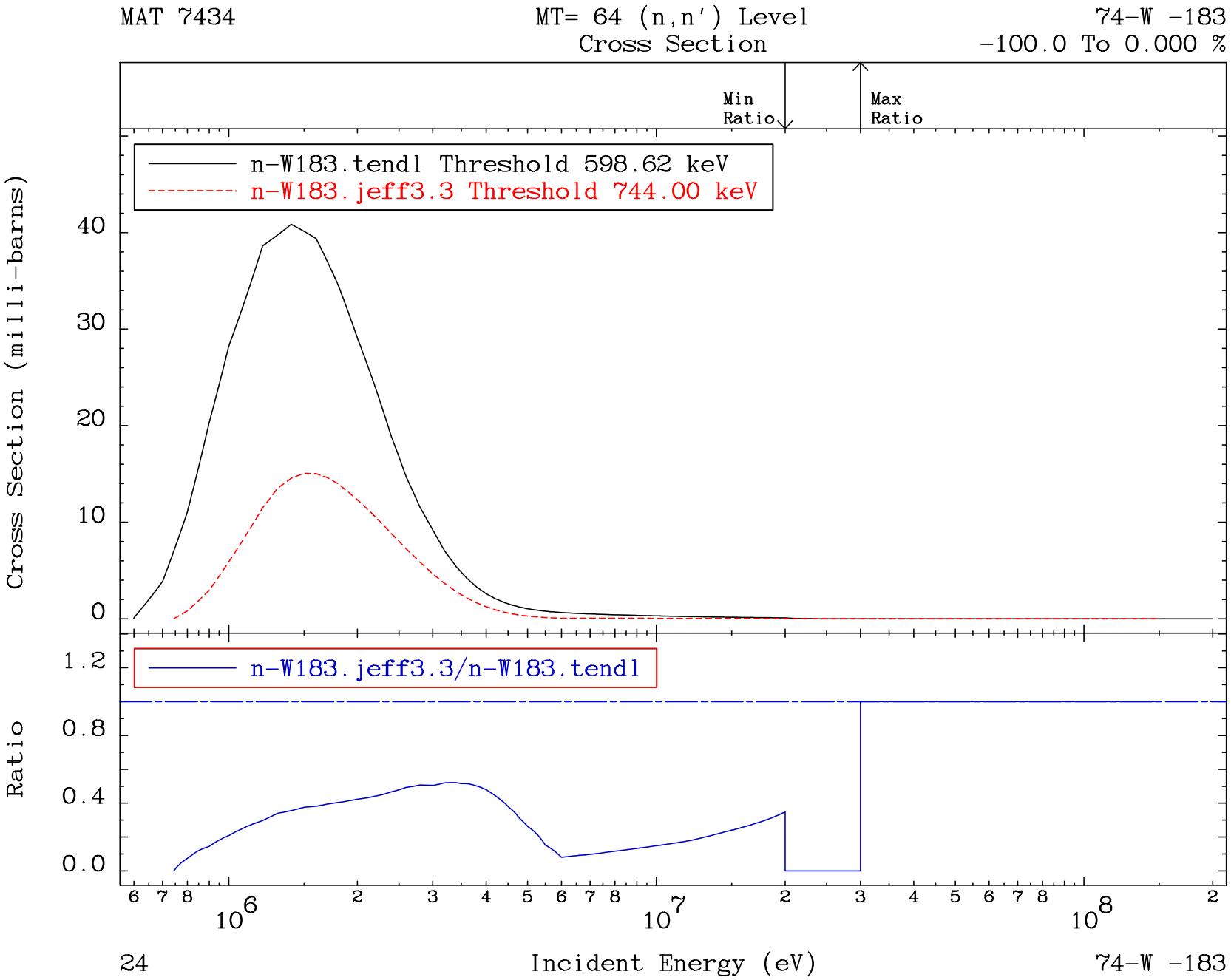

MAT 7434
MT= 59 (n,n') Level
Cross Section
74-W -183
-100.0 To 20.11 %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 455.57 keV
n-W183.jeff3.3 Threshold 455.57 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
74-W -183

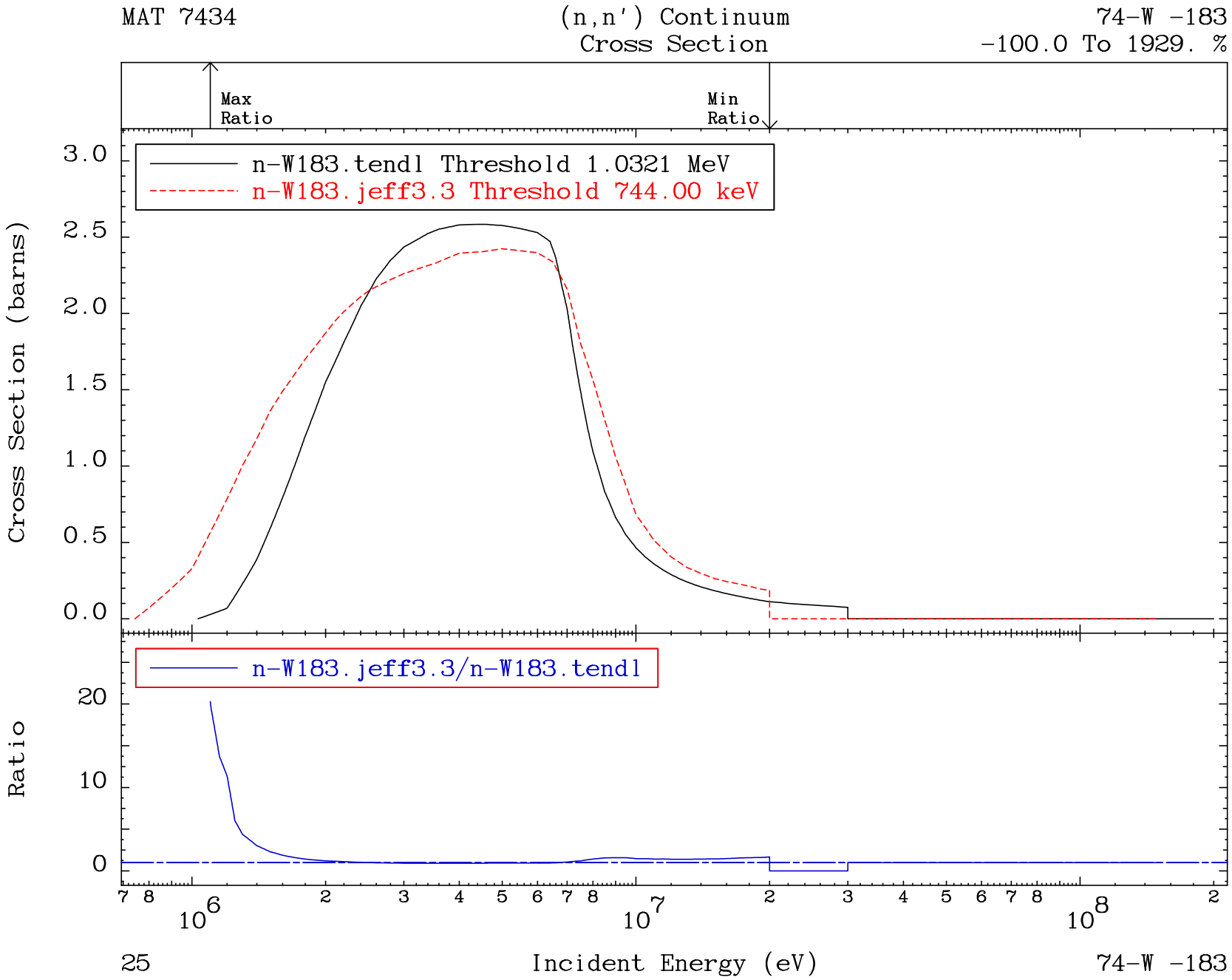

MAT 7434
MT= 60 (n,n') Level
Cross Section
74-W -183
-100.0 To 0.000 %
Min Ratio
Max Ratio
n-W183.tendl Threshold 478.02 keV
n-W183.jeff3.3 Threshold 489.69 keV
Cross Section (milli-barns)
20
15
10
5
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
74-W -183

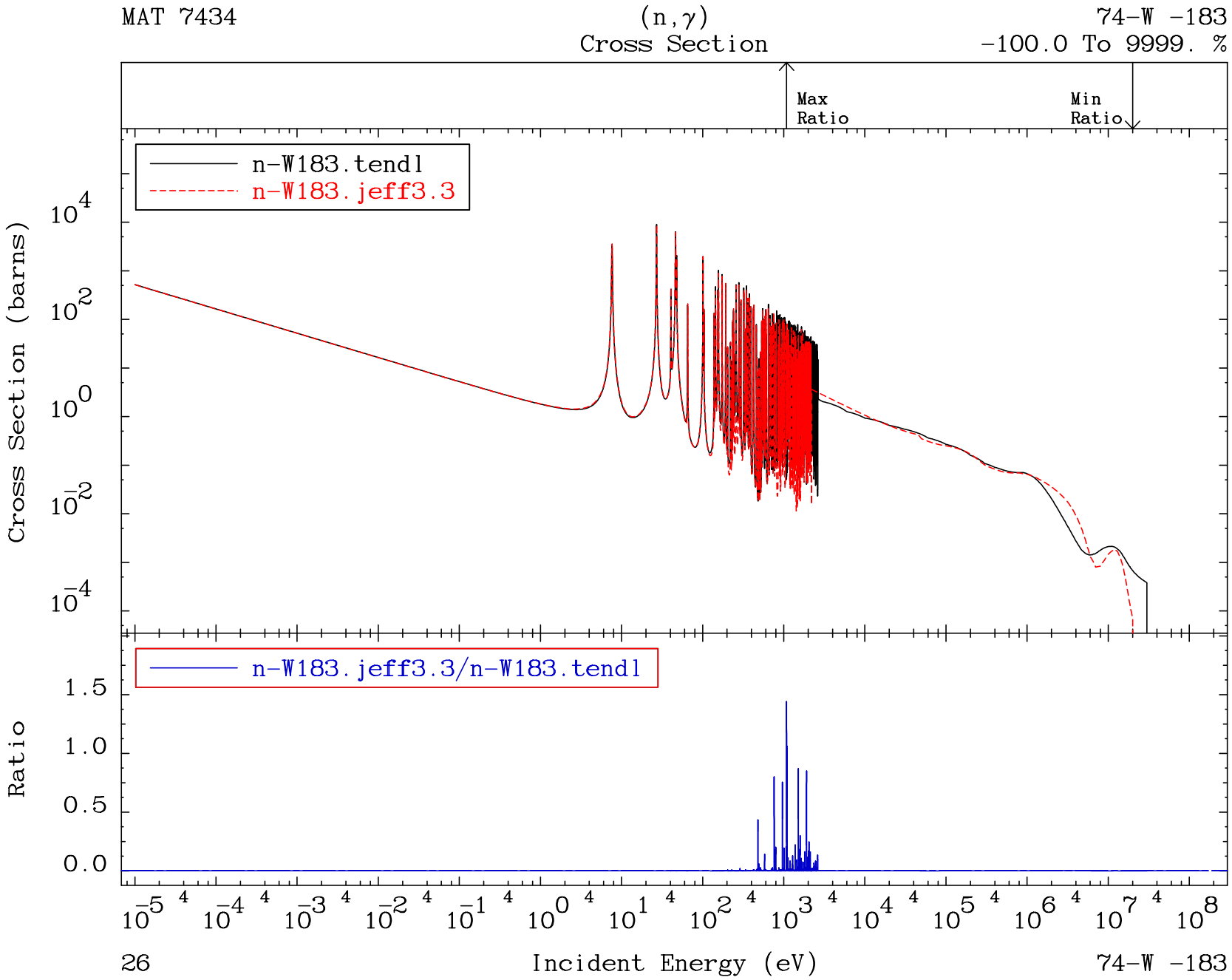

MAT 7434
MT= 61 (n,n') Level
Cross Section
74-W -183
-100.0 To 1617. %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 489.69 keV
n-W183.jeff3.3 Threshold 554.14 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-W183.jeff3.3/n-W183.tendl
Ratio
20
10
0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
74-W -183

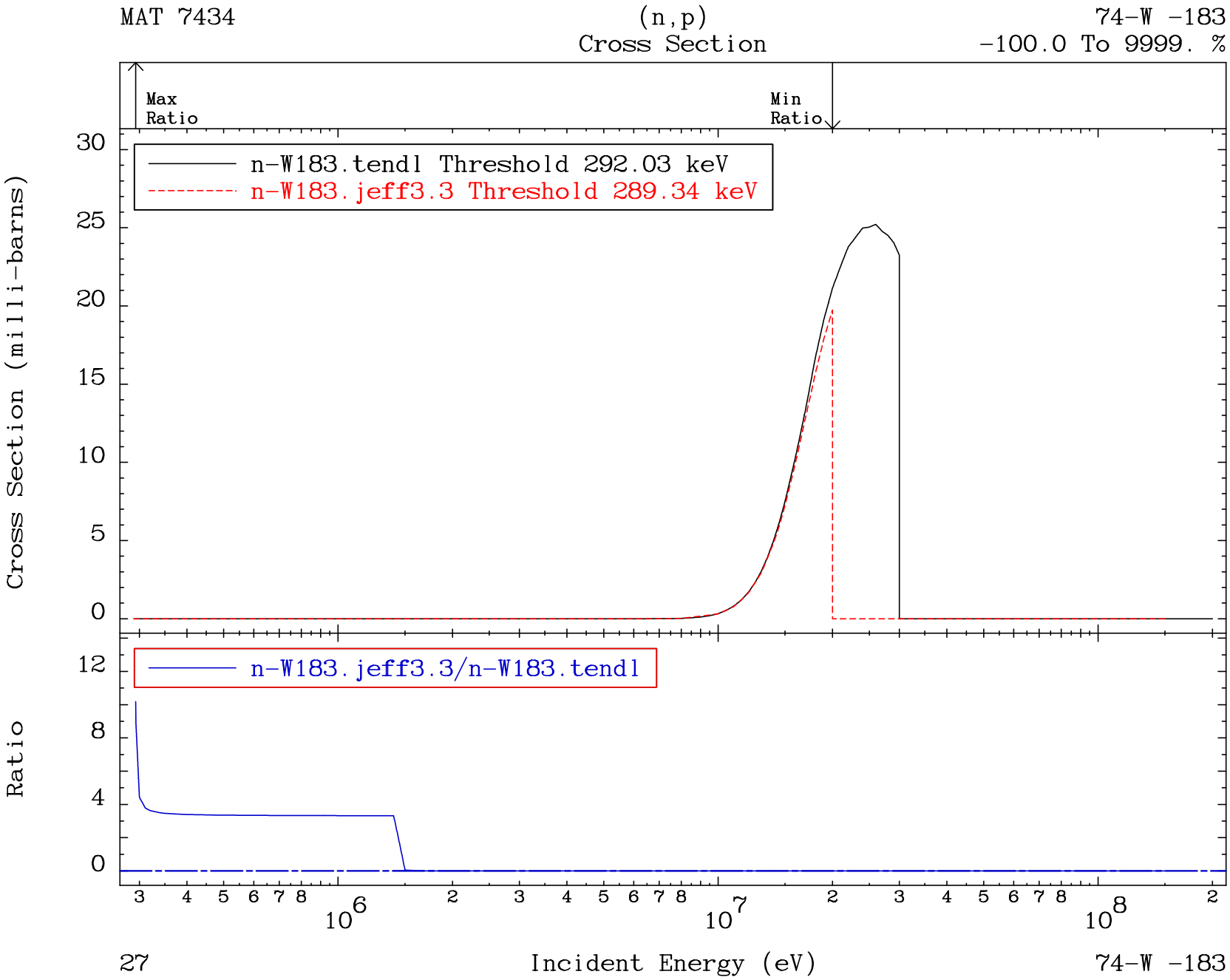

MAT 7434
MT= 62 (n,n') Level
Cross Section
74-W -183
-100.0 To 0.000 %
Min Ratio
Max Ratio
n-W183.tendl Threshold 535.94 keV
n-W183.jeff3.3 Threshold 598.62 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
74-W -183

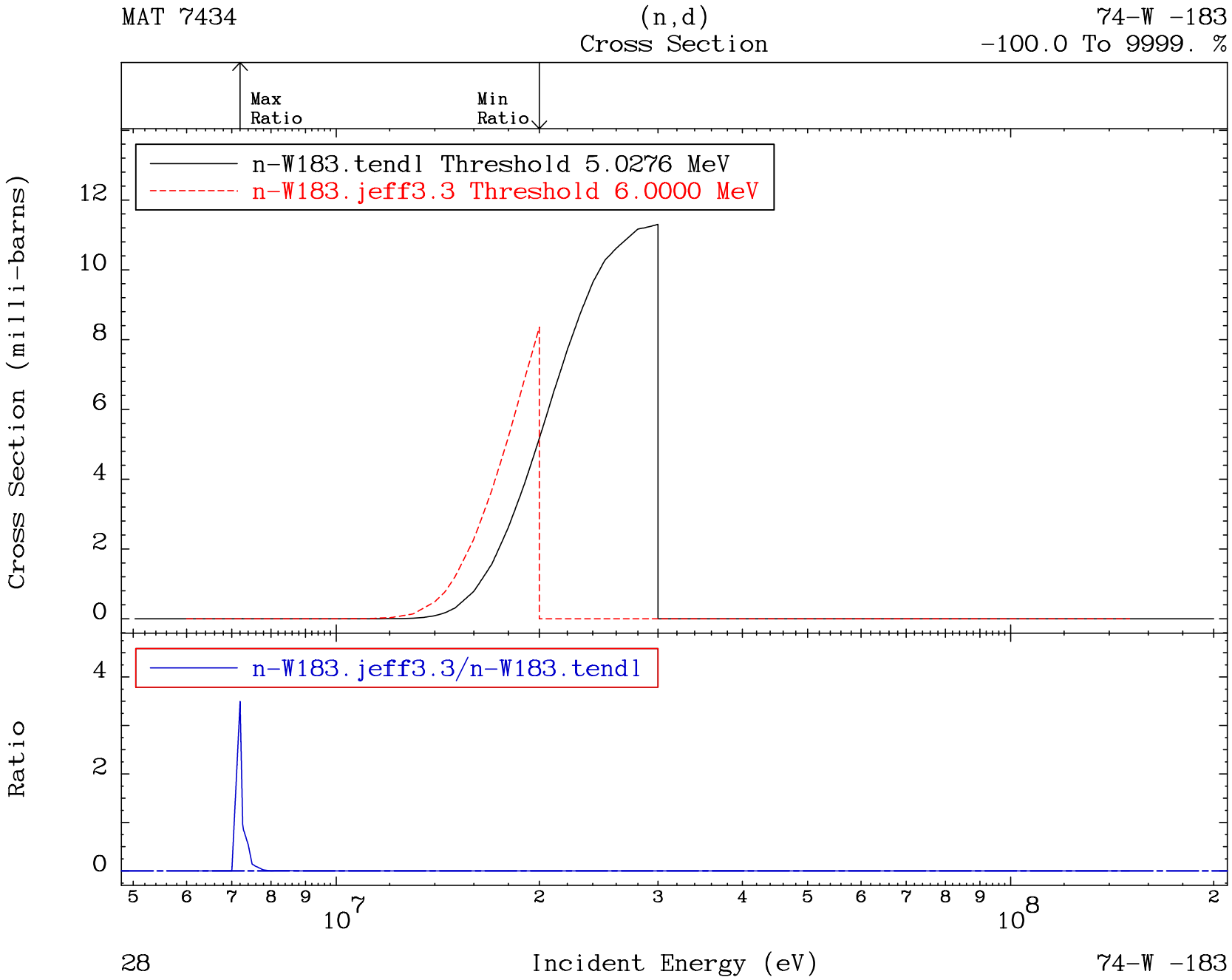

MAT 7434
MT= 63 (n,n') Level
Cross Section
74-W -183
-100.0 To 36.48 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 554.14 keV
n-W183.jeff3.3 Threshold 626.19 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.6
0.0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
74-W -183

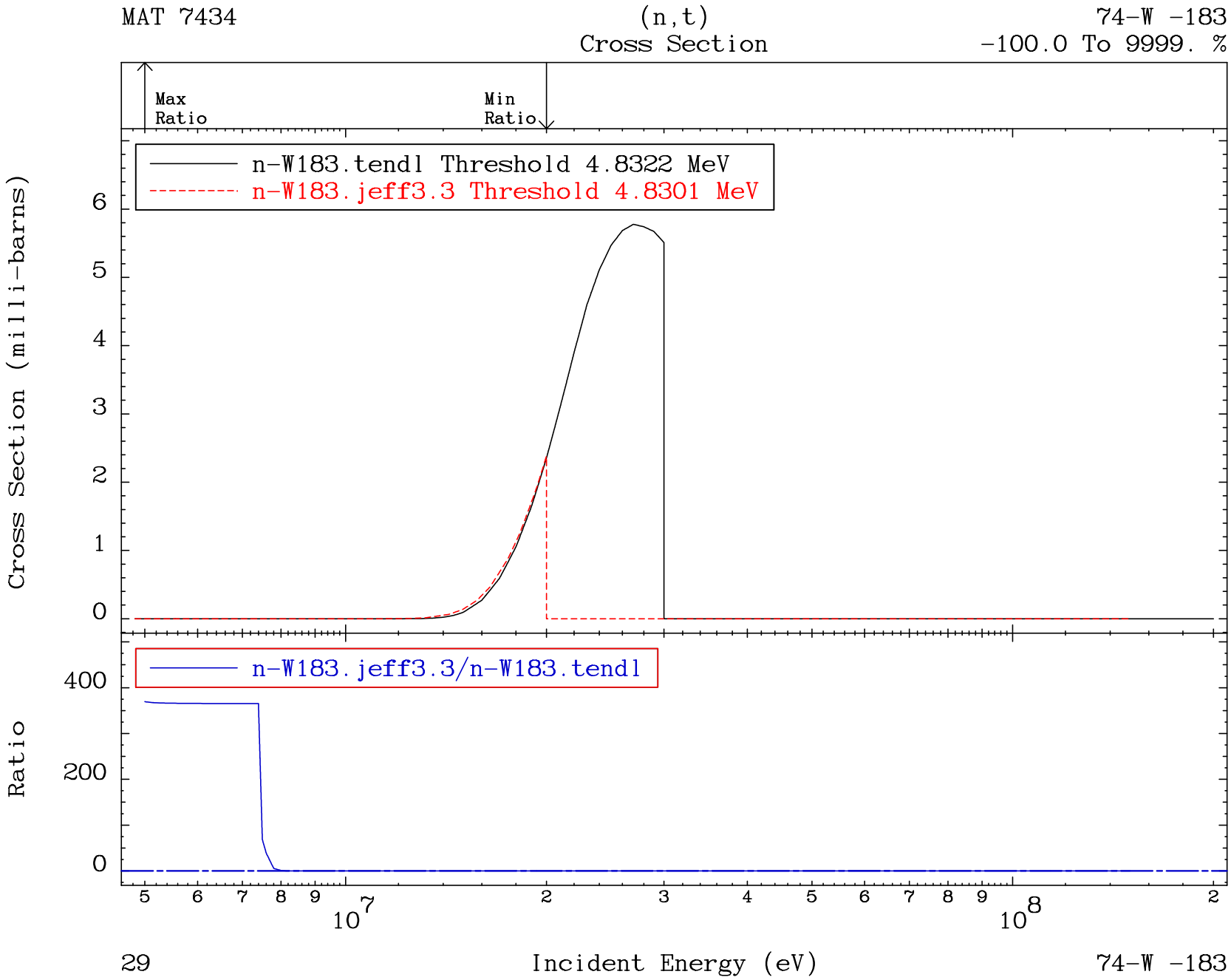

MAT 7434
MT= 64 (n,n') Level
Cross Section
74-W -183
-100.0 To 0.000 %
Min Ratio
Max Ratio
n-W183.tendl Threshold 598.62 keV
n-W183.jeff3.3 Threshold 744.00 keV
Cross Section (milli-barns)
40
30
20
10
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
74-W -183

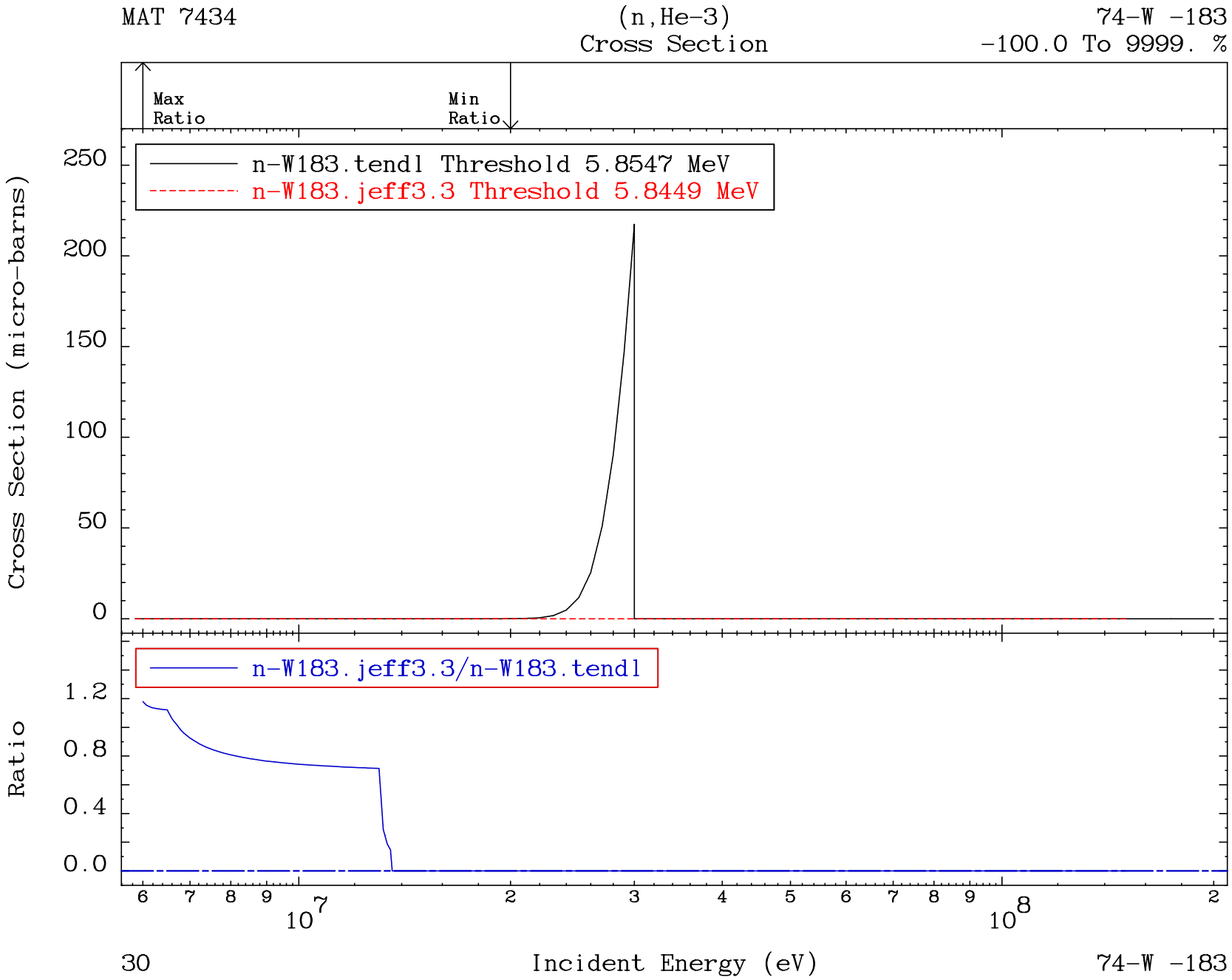

MAT 7434
(n,n') Continuum
Cross Section
74-W -183
-100.0 To 1929. %
Max
Ratio
Min
Ratio
n-W183.tendl Threshold 1.0321 MeV
n-W183.jeff3.3 Threshold 744.00 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
20
10
0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
74-W -183

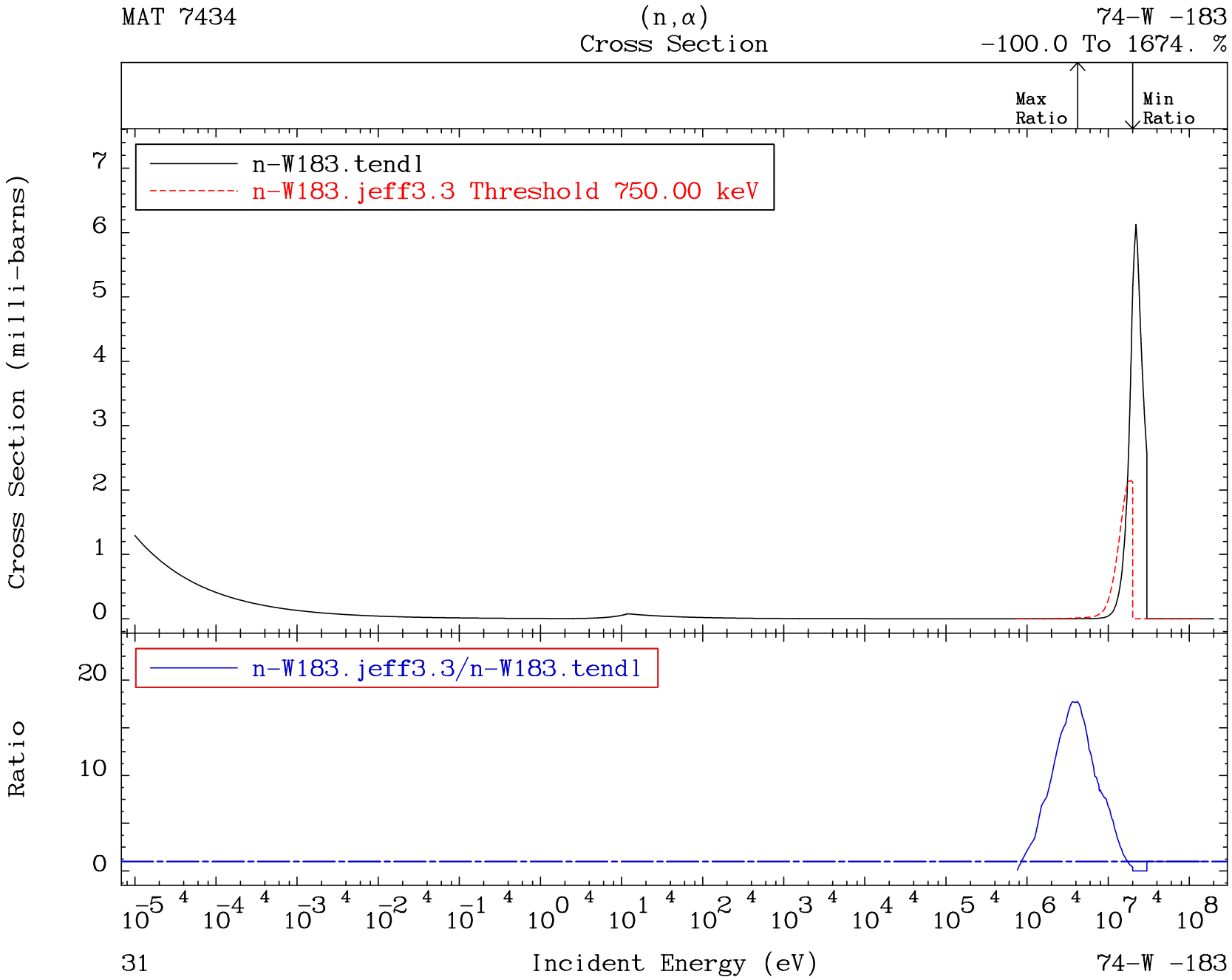

MAT 7434
(n,γ)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
26
74-W -183

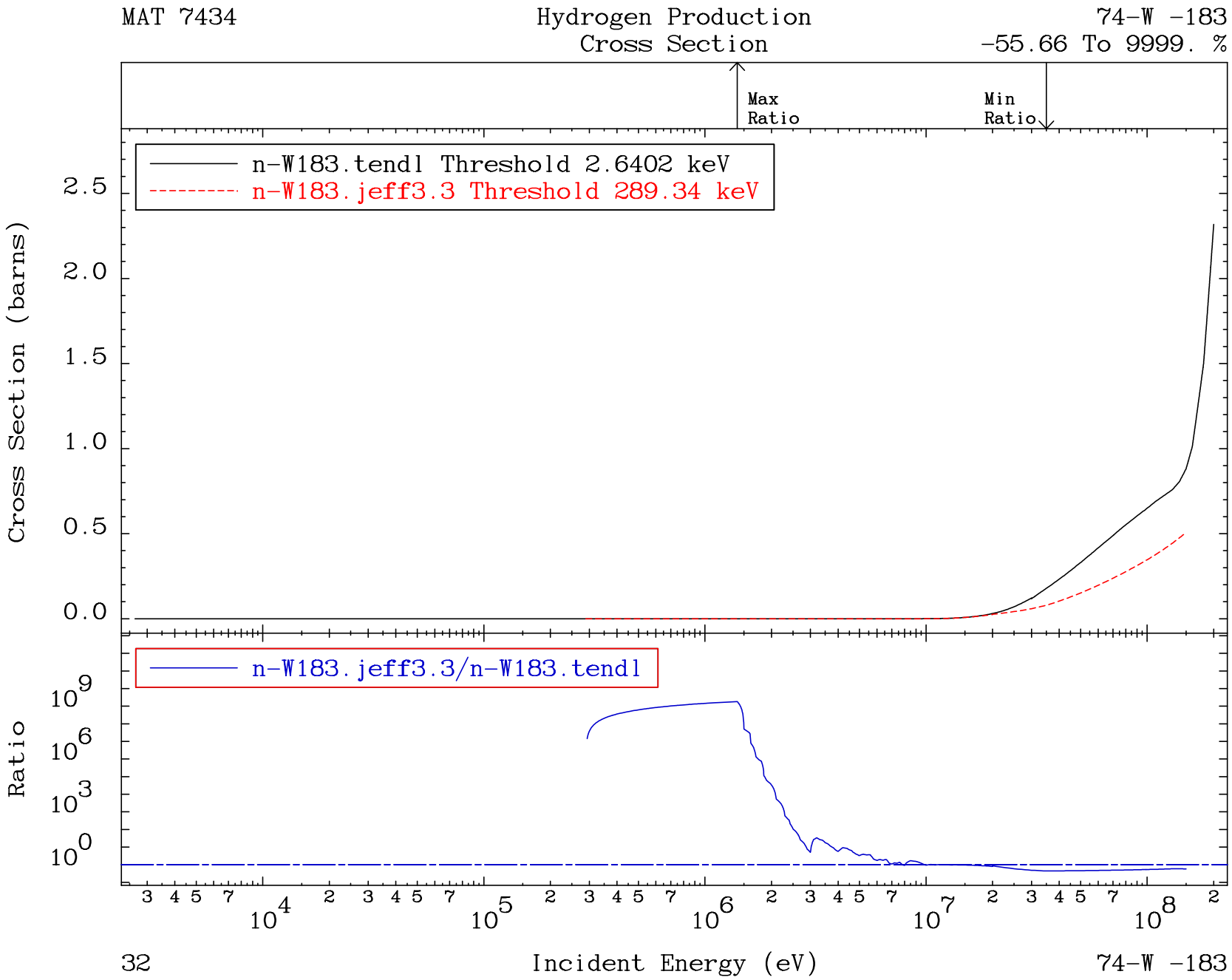

MAT 7434
(n,p)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 292.03 keV
n-W183.jeff3.3 Threshold 289.34 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-W183.jeff3.3/n-W183.tendl
Ratio
12
8
4
0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
74-W -183

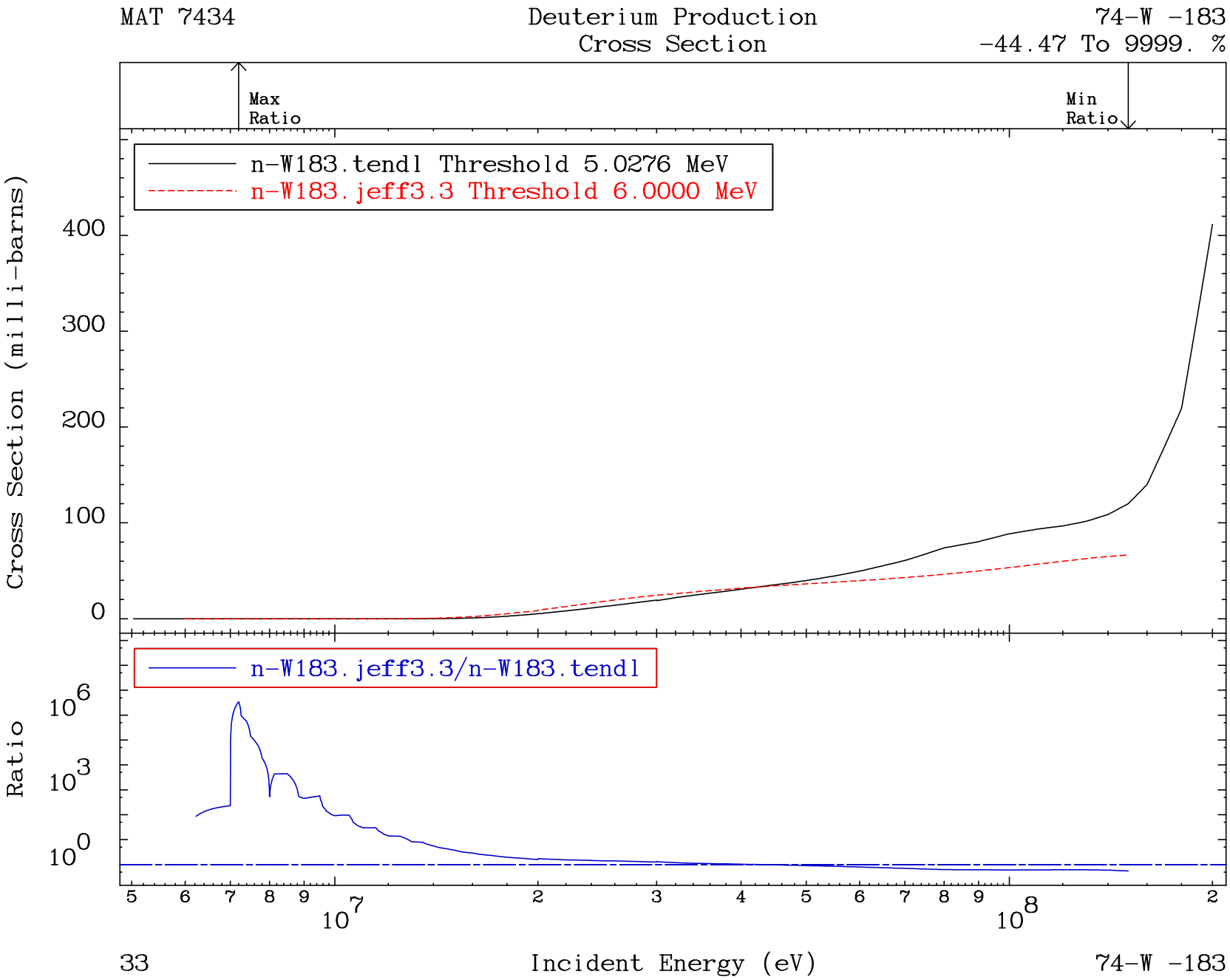

MAT 7434
(n,d)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 5.0276 MeV
n-W183.jeff3.3 Threshold 6.0000 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-W183.jeff3.3/n-W183.tendl
Ratio
4
2
0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
74-W -183

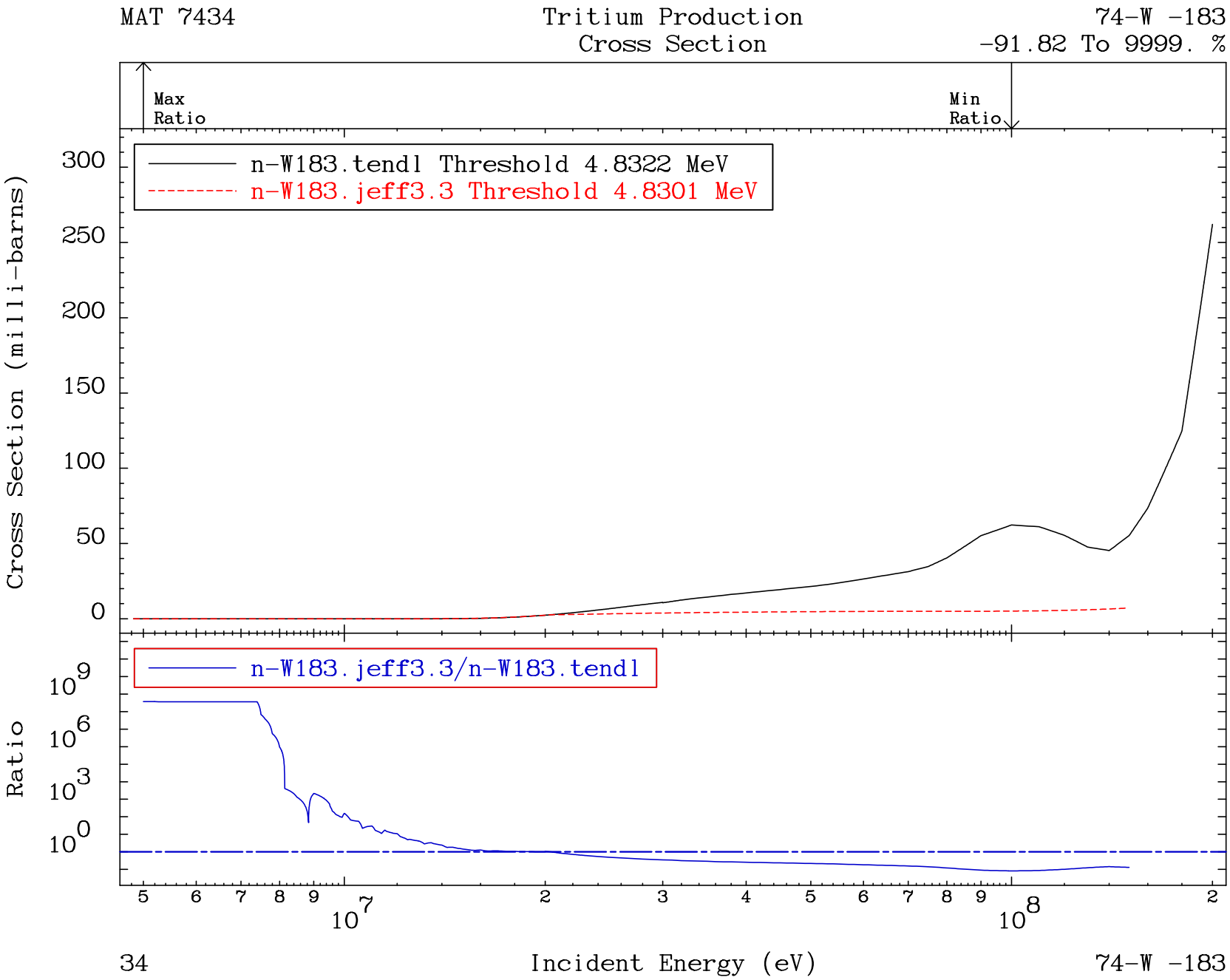

MAT 7434
(n,t)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 4.8322 MeV
n-W183.jeff3.3 Threshold 4.8301 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-W183.jeff3.3/n-W183.tendl
Ratio
0
200
400
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
74-W -183

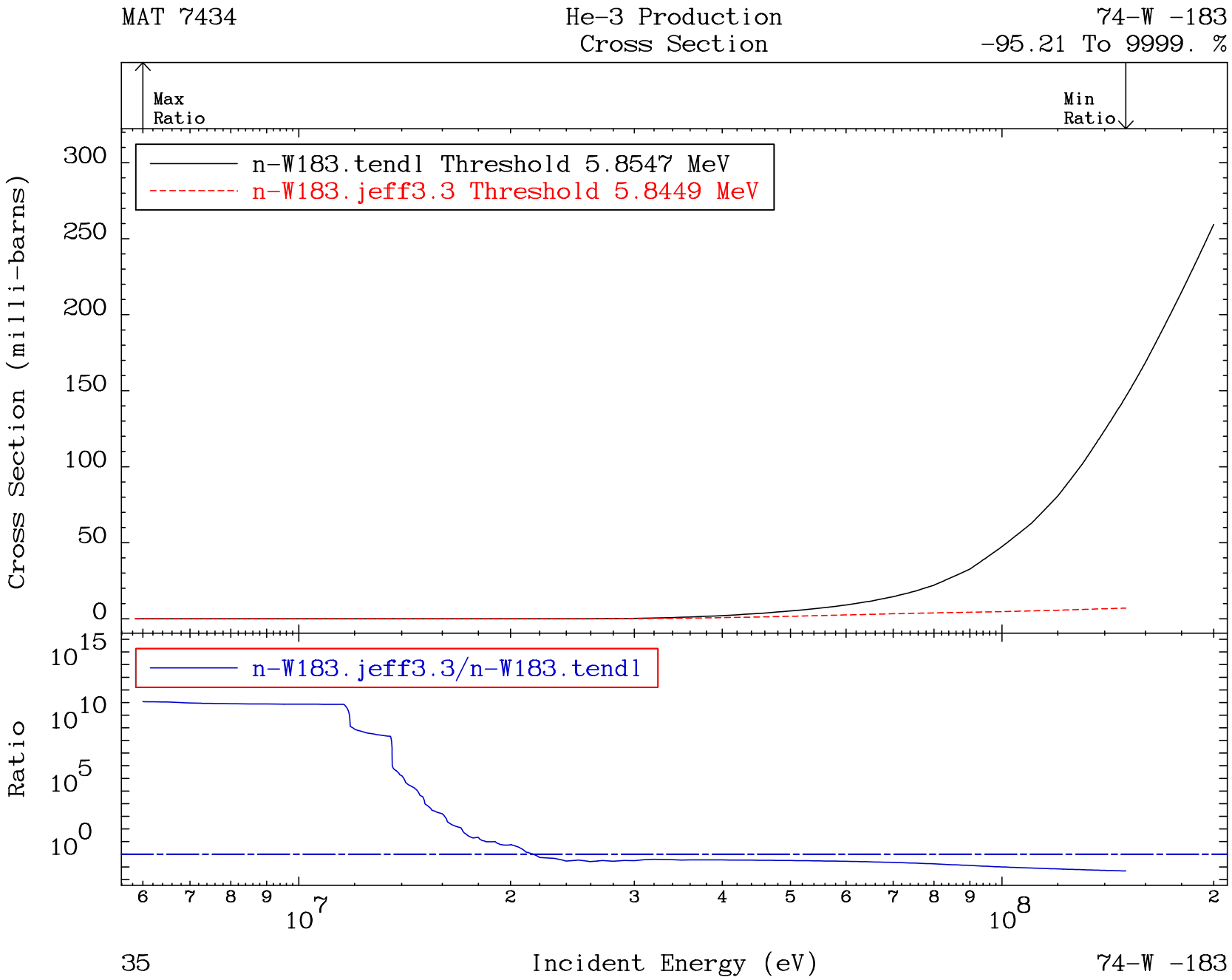

MAT 7434
(n,He-3)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 5.8547 MeV
n-W183.jeff3.3 Threshold 5.8449 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
1.2
0.8
0.4
0.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
74-W -183

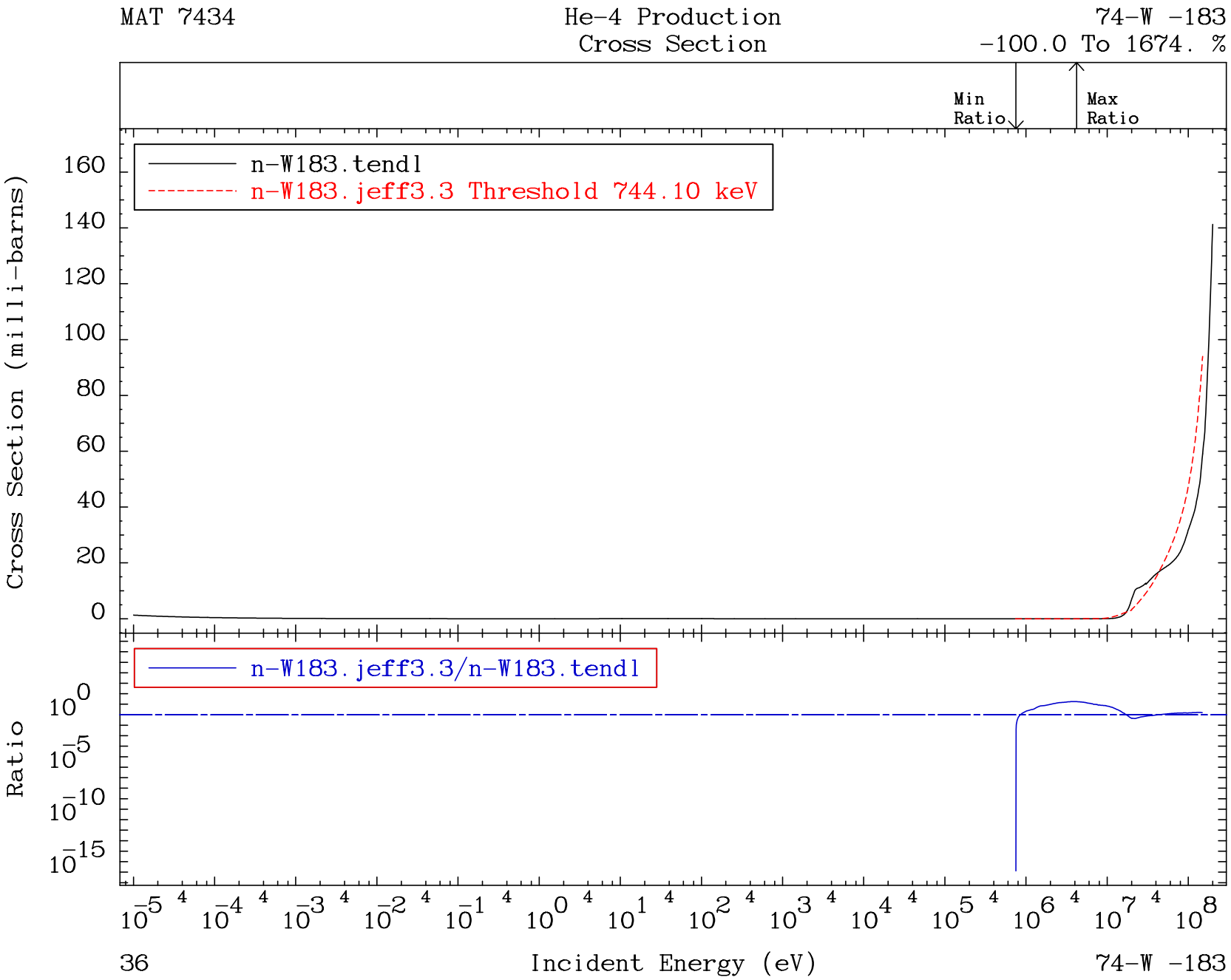

MAT 7434
(n,α)
Cross Section
74-W -183
-100.0 To 1674. %
Max Ratio
Min Ratio
n-W183.tendl
n-W183.jeff3.3 Threshold 750.00 keV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-W183.jeff3.3/n-W183.tendl
Ratio
0
10
20
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
74-W -183

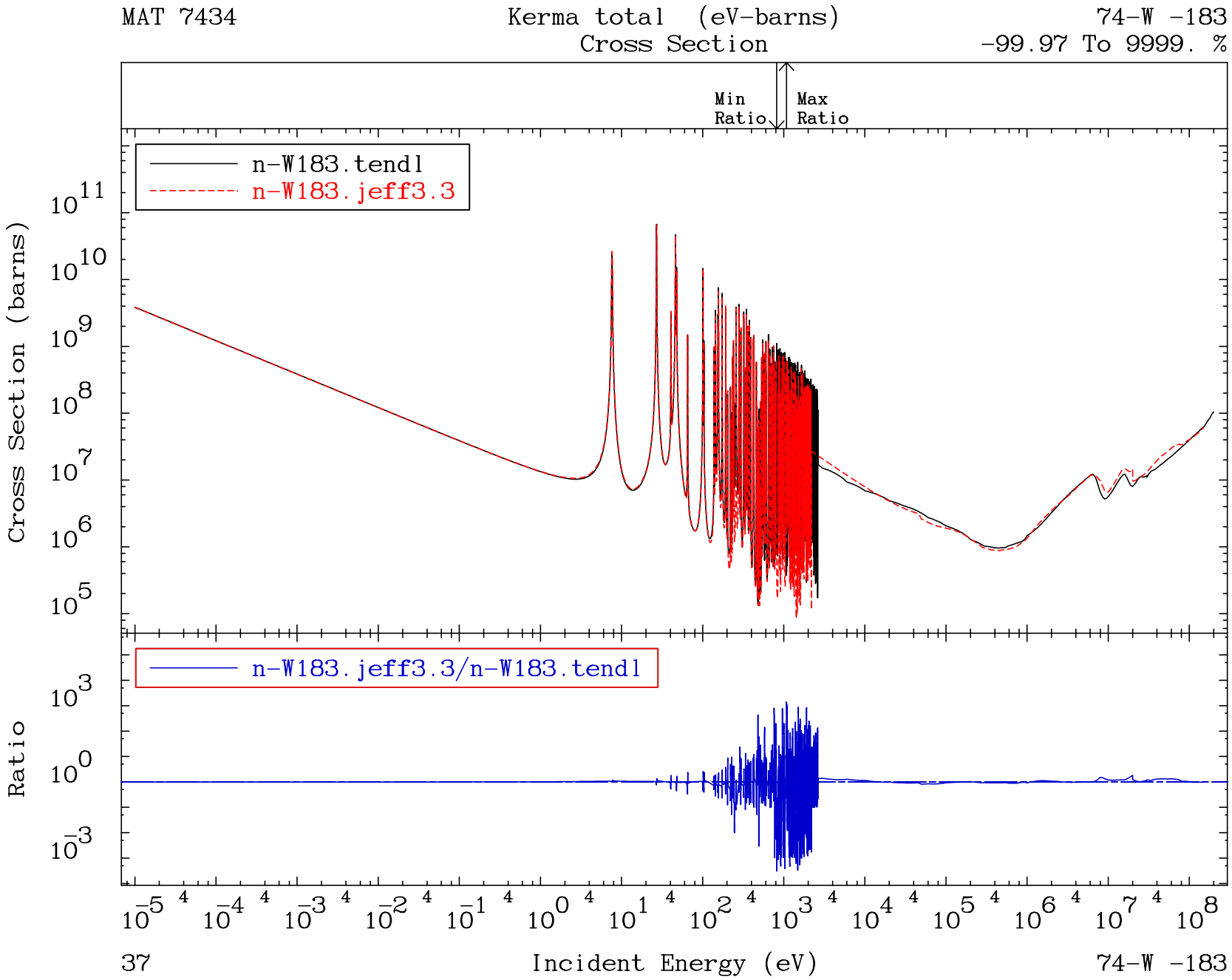

MAT 7434
Hydrogen Production
Cross Section
74-W -183
-55.66 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 2.6402 keV
n-W183.jeff3.3 Threshold 289.34 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-W183.jeff3.3/n-W183.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
32
Incident Energy (eV)
74-W -183

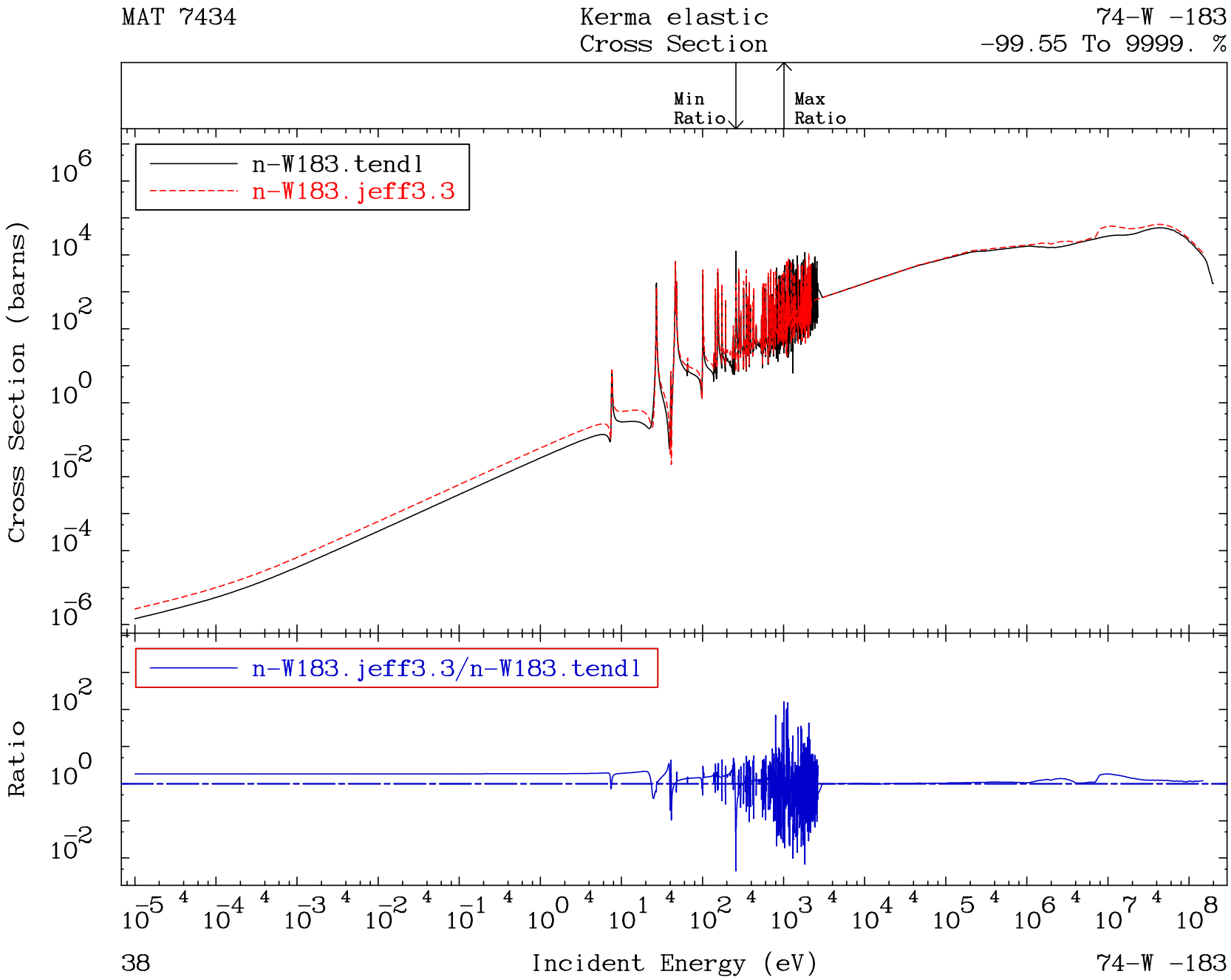

MAT 7434
Deuterium Production
Cross Section
74-W -183
-44.47 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 5.0276 MeV
n-W183.jeff3.3 Threshold 6.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-W183.jeff3.3/n-W183.tendl
Ratio
10^6
10^3
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
74-W -183

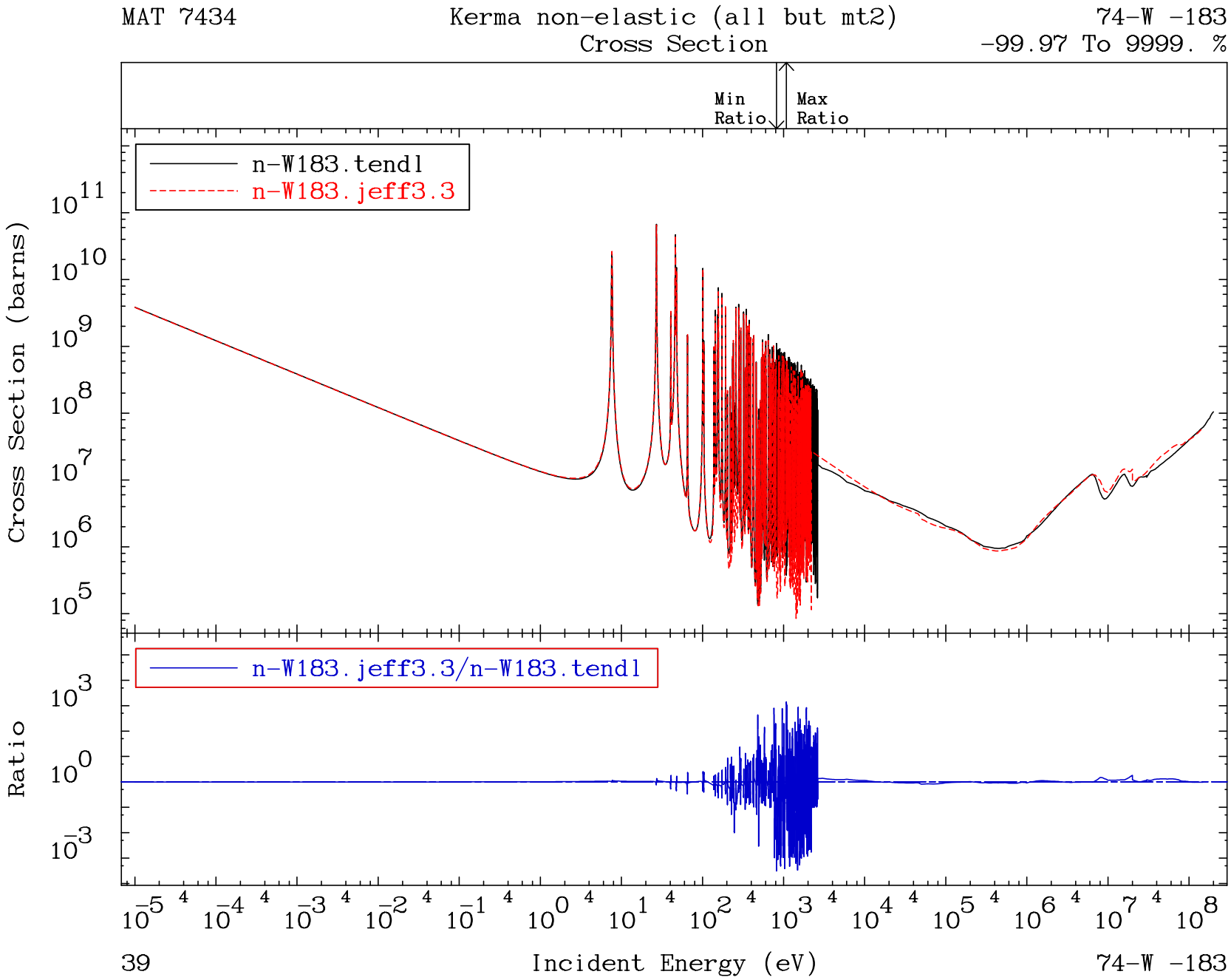

MAT 7434
Tritium Production
Cross Section
74-W -183
-91.82 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 4.8322 MeV
n-W183.jeff3.3 Threshold 4.8301 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
10^9
10^6
10^3
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
74-W -183

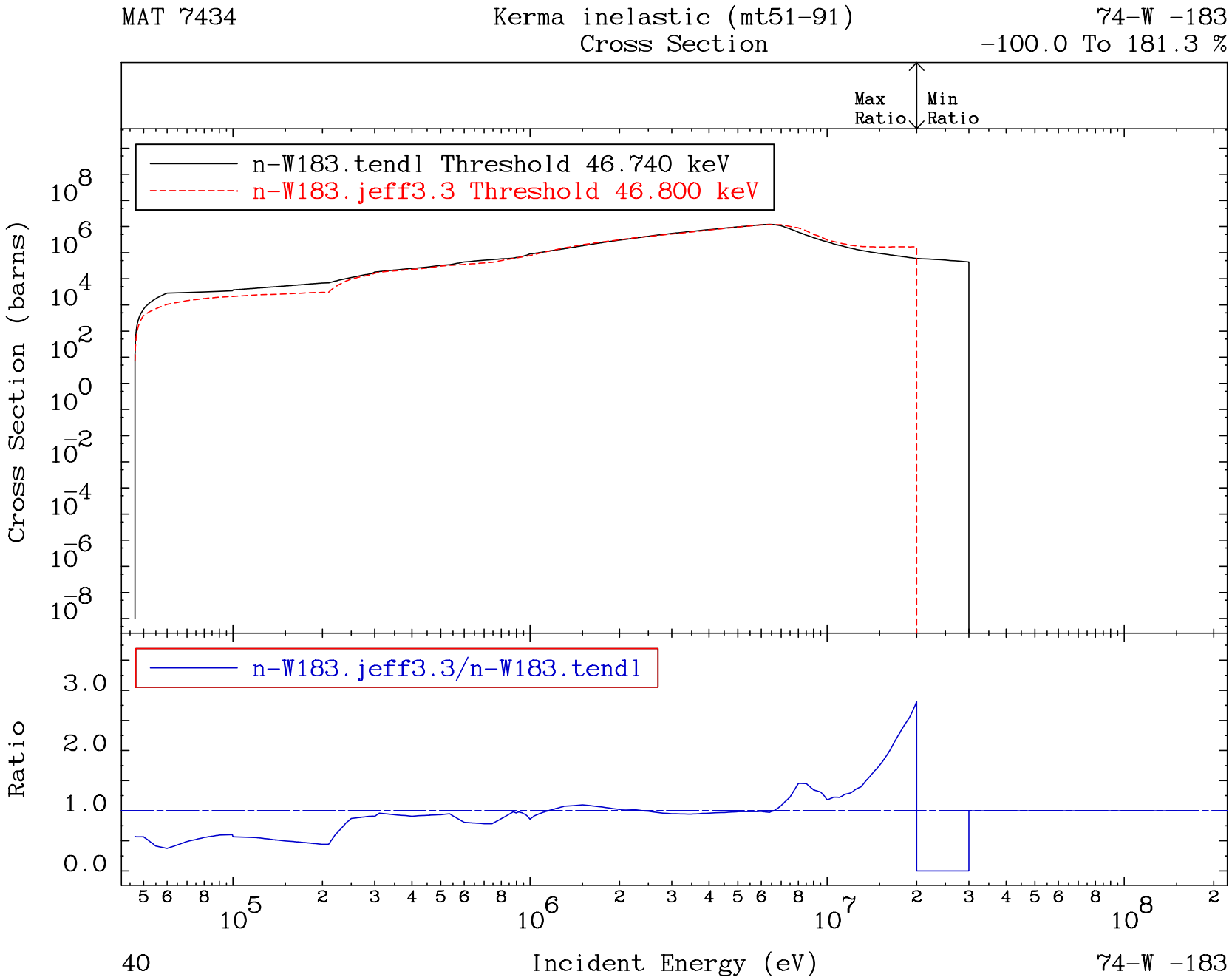

MAT 7434
He-3 Production
Cross Section
74-W -183
-95.21 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl Threshold 5.8547 MeV
n-W183.jeff3.3 Threshold 5.8449 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-W183.jeff3.3/n-W183.tendl
Ratio
10^15
10^10
10^5
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
74-W -183

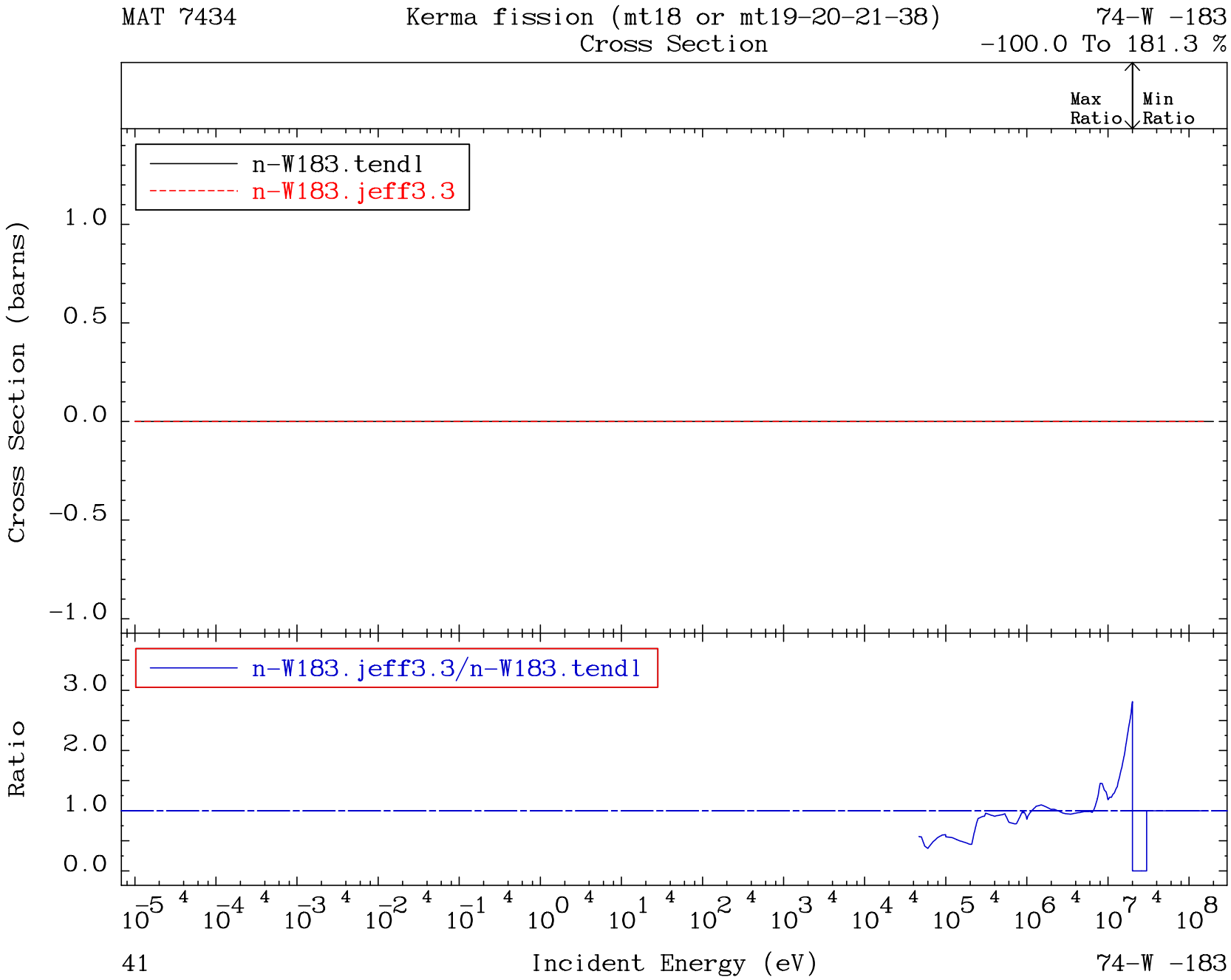

MAT 7434
He-4 Production
Cross Section
74-W -183
-100.0 To 1674. %
Min Ratio
Max Ratio
n-W183.tendl
n-W183.jeff3.3 Threshold 744.10 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-W183.jeff3.3/n-W183.tendl
Ratio
10^0
10^-5
10^-10
10^-15
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
74-W -183

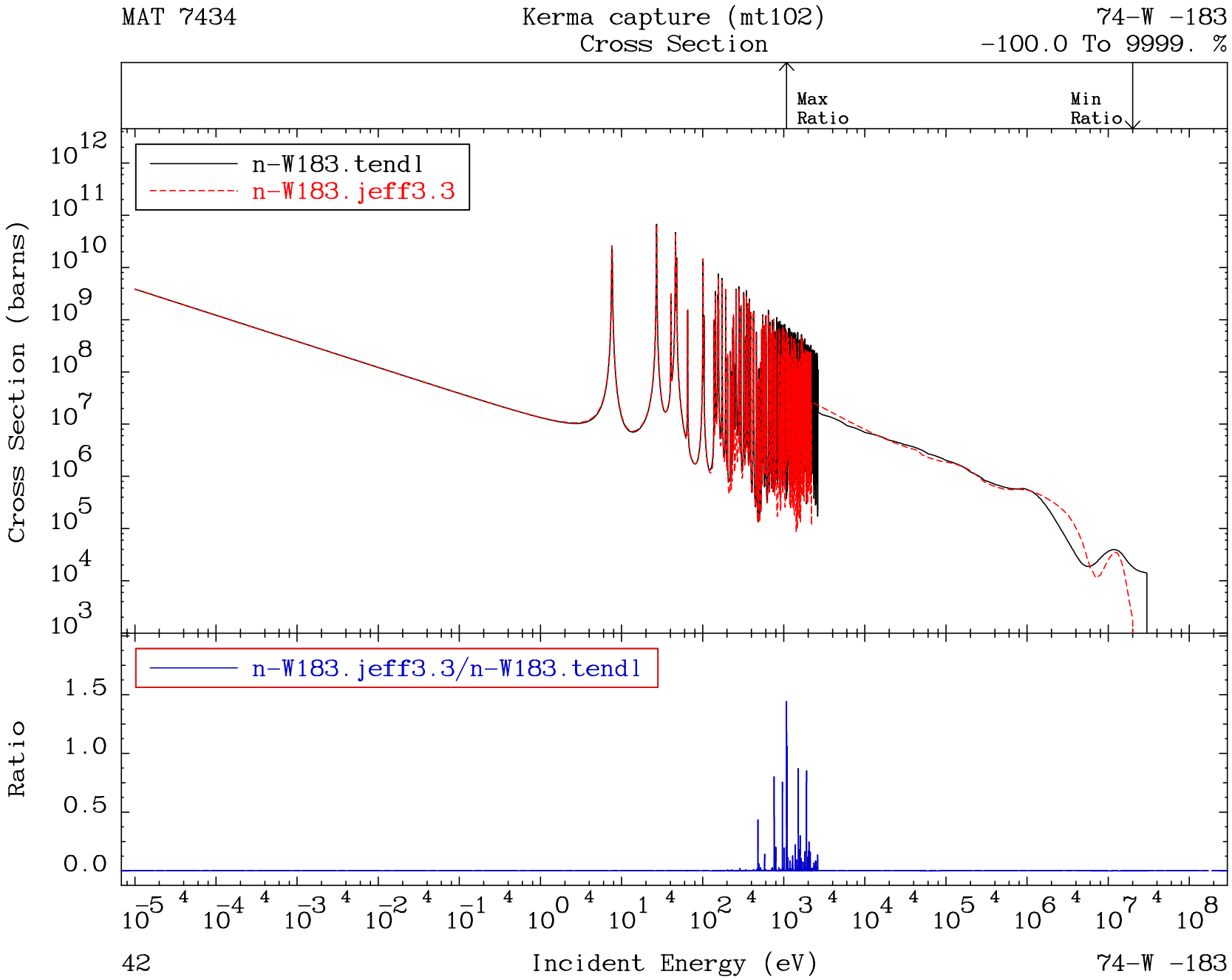

MAT 7434
Kerma total (eV-barns)
Cross Section
74-W -183
-99.97 To 9999. %
Min Ratio
Max Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
Ratio
n-W183.jeff3.3/n-W183.tendl
Incident Energy (eV)
37
74-W -183

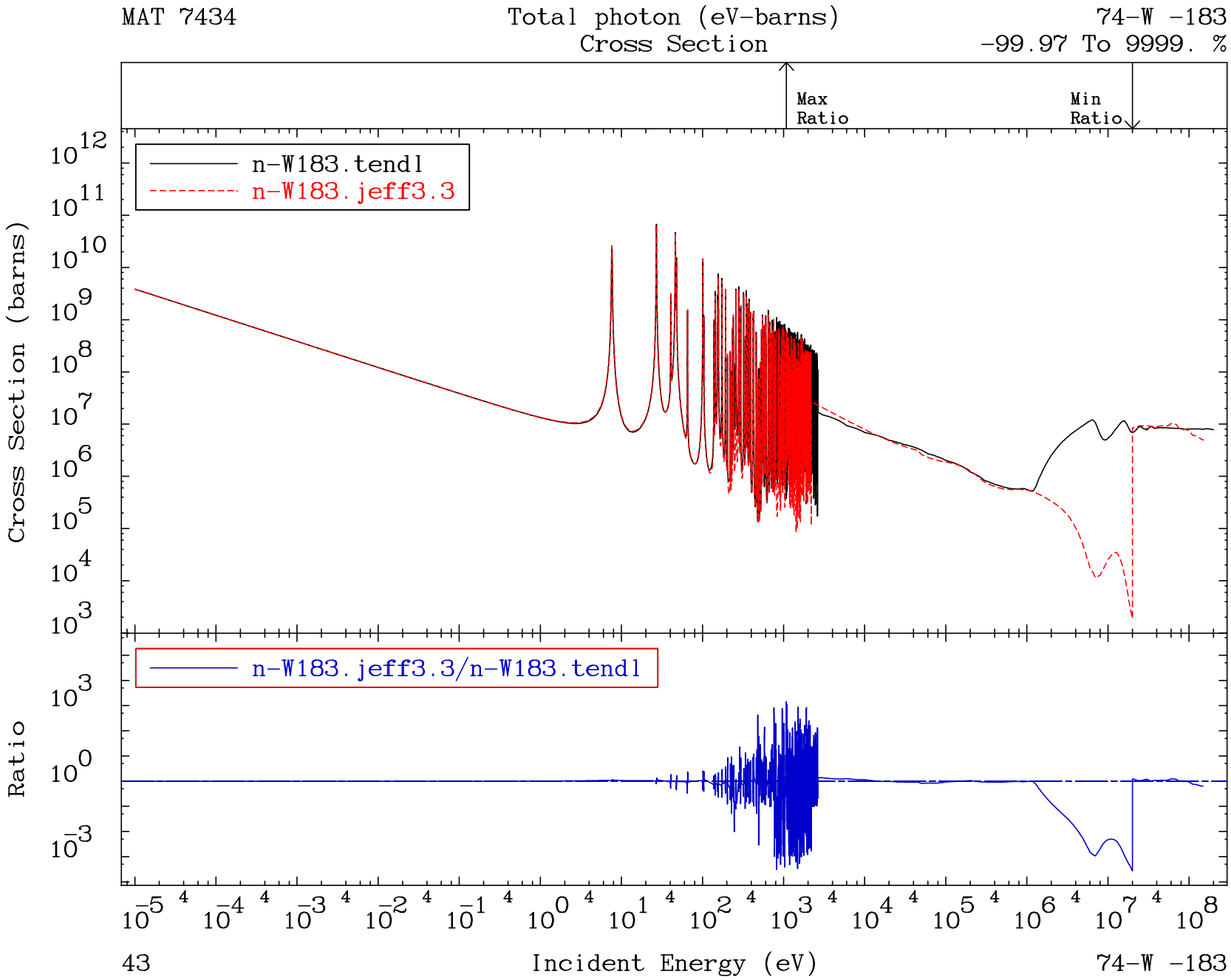

MAT 7434
Kerma elastic
Cross Section
74-W -183
-99.55 To 9999. %
Min
Ratio
Max
Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
38
74-W -183

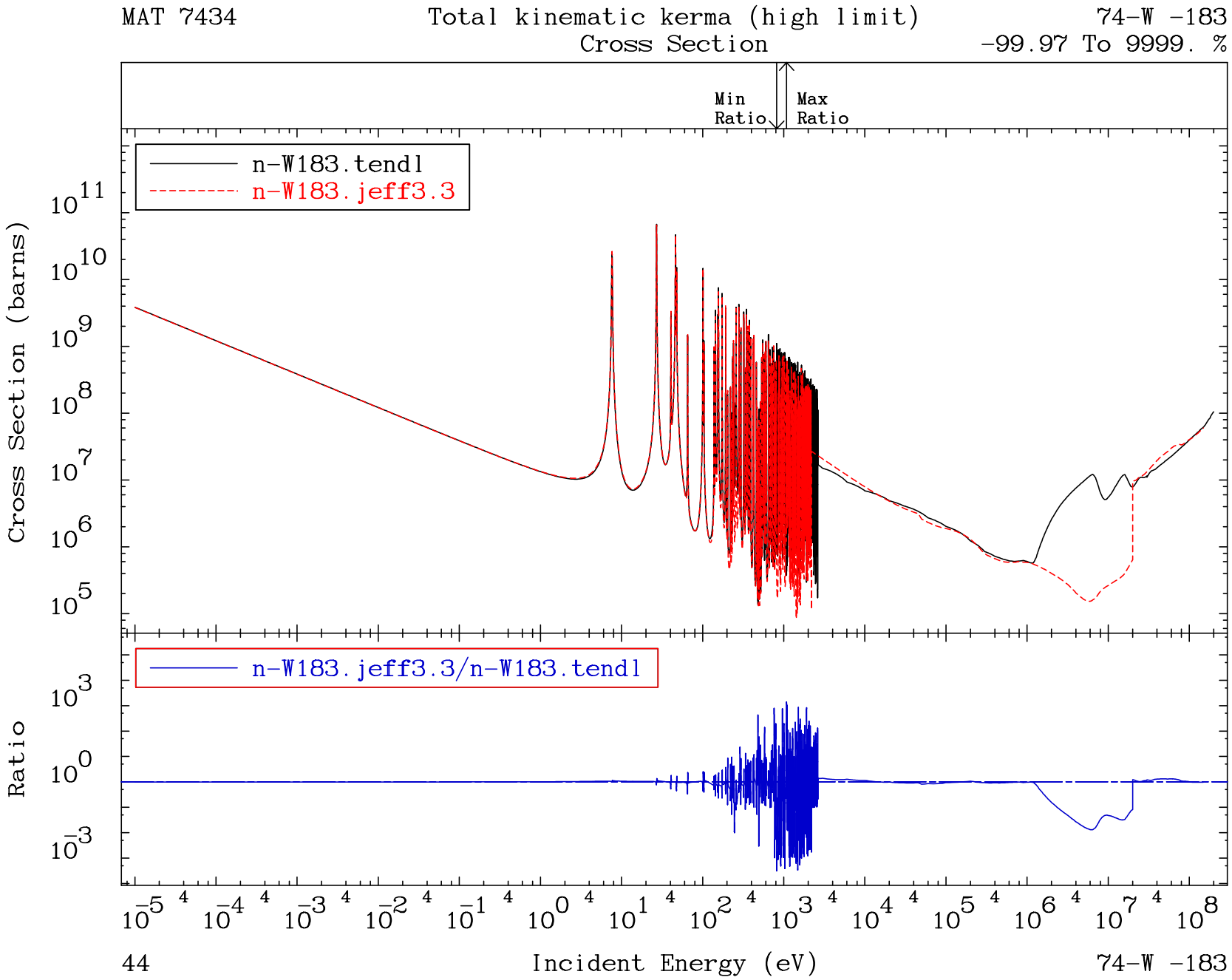

MAT 7434
Kerma non-elastic (all but mt2)
Cross Section
74-W -183
-99.97 To 9999. %
Min Ratio
Max Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
39
74-W -183

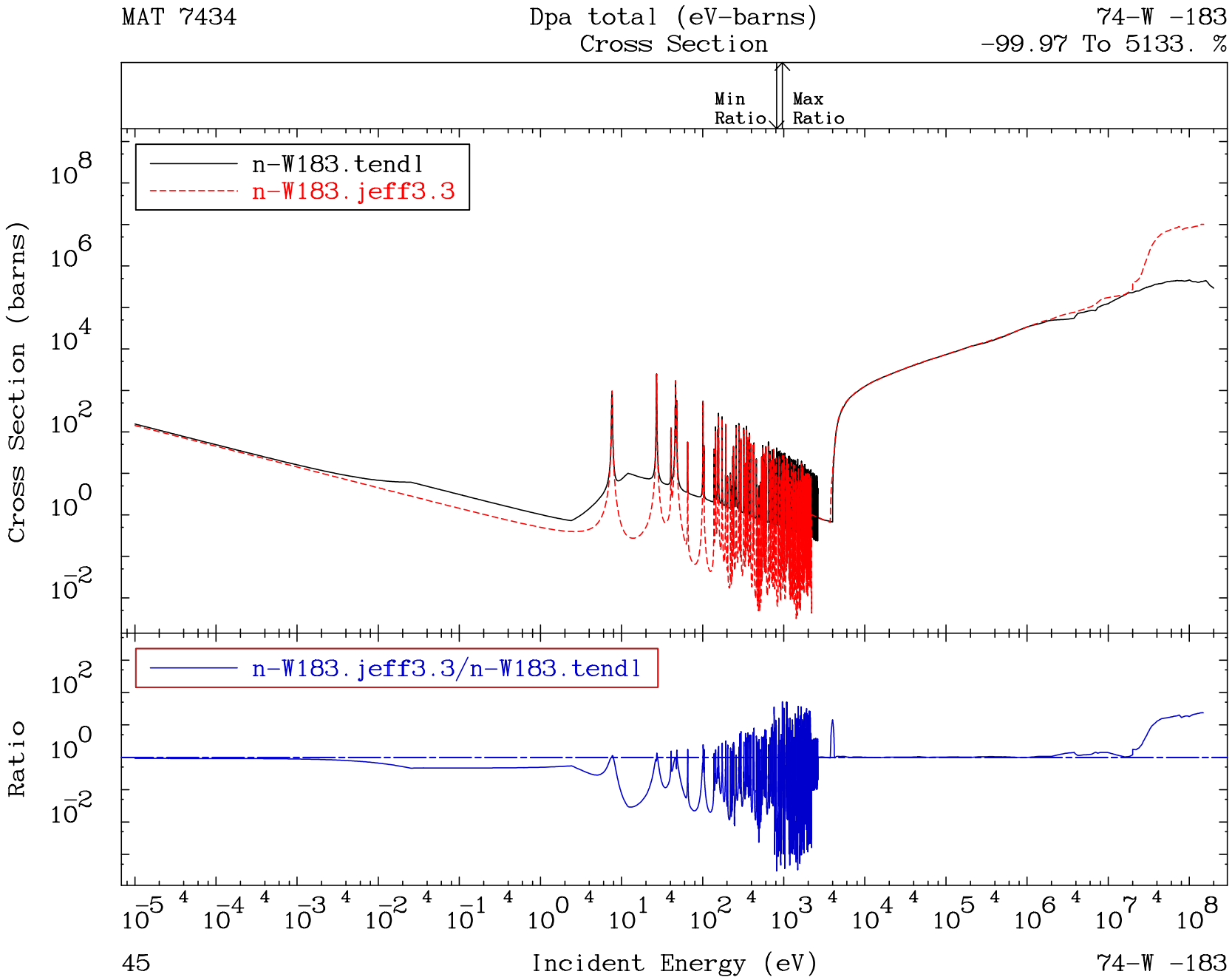

MAT 7434
Kerma inelastic (mt51-91)
Cross Section
74-W -183
-100.0 To 181.3 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 46.740 keV
n-W183.jeff3.3 Threshold 46.800 keV
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
40
74-W -183

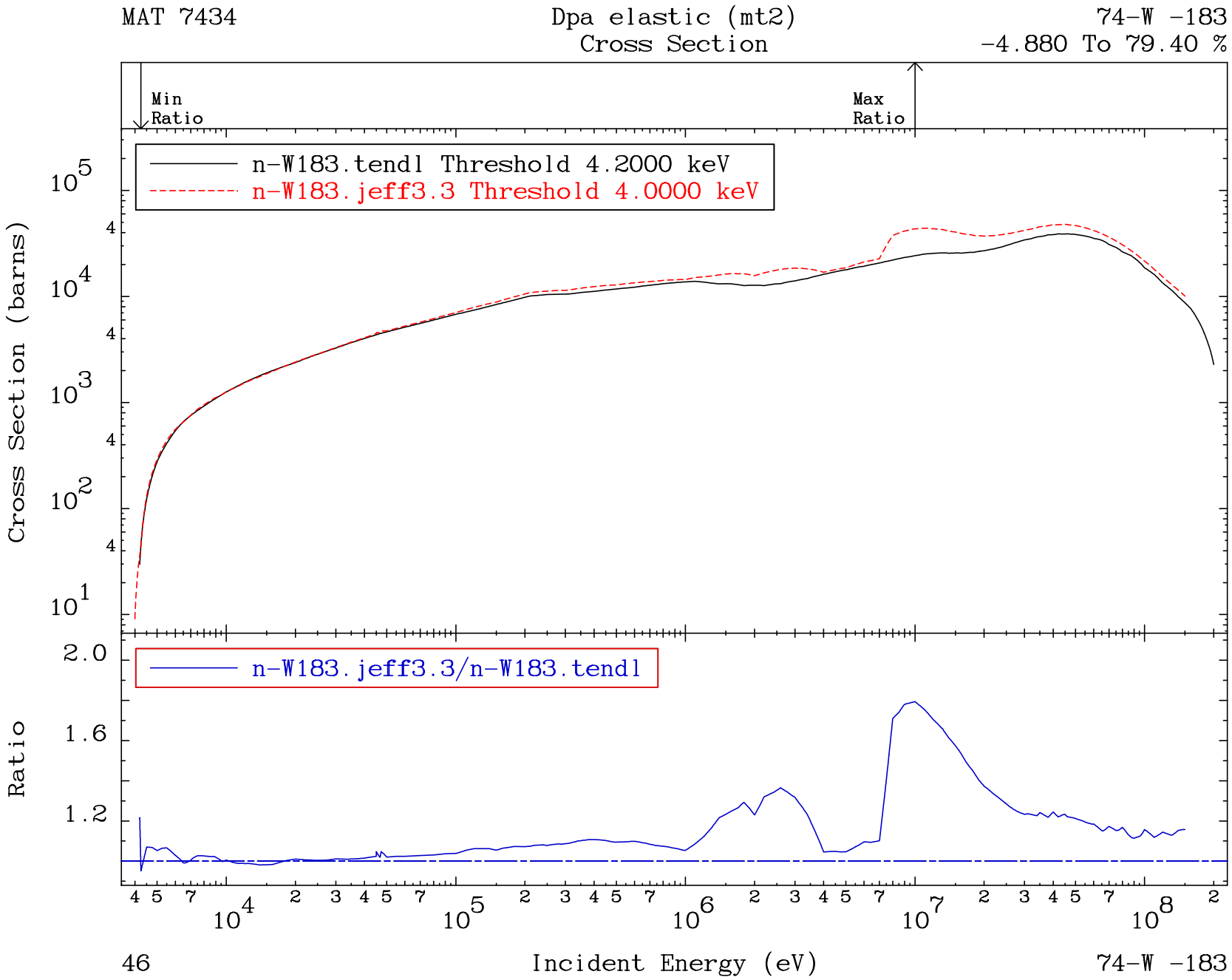

MAT 7434
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
74-W -183
-100.0 To 181.3 %
Max Ratio
Min Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-W183.jeff3.3/n-W183.tendl
Ratio
3.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
74-W -183

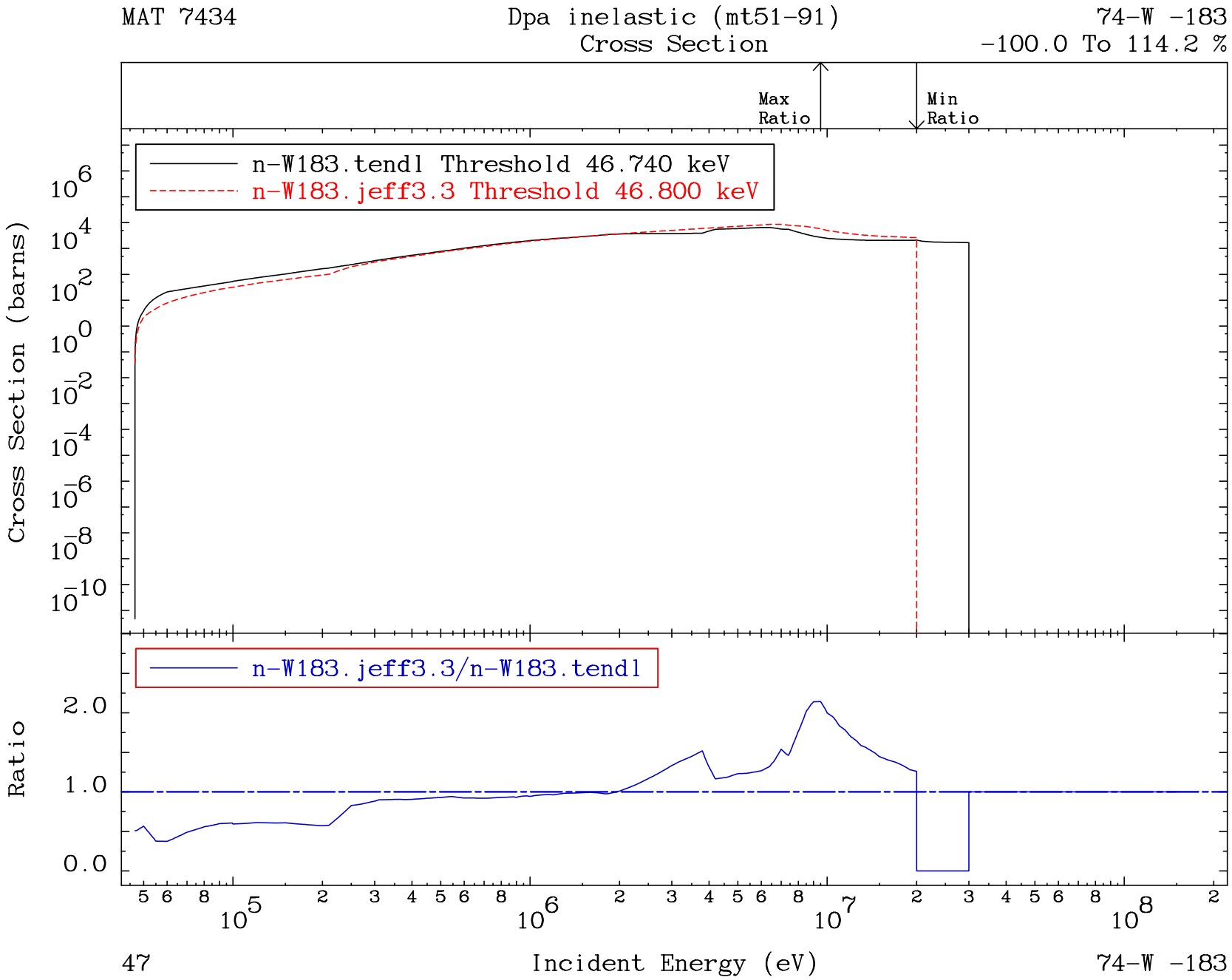

MAT 7434
Kerma capture (mt102)
Cross Section
74-W -183
-100.0 To 9999. %
Max Ratio
Min Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
42
74-W -183

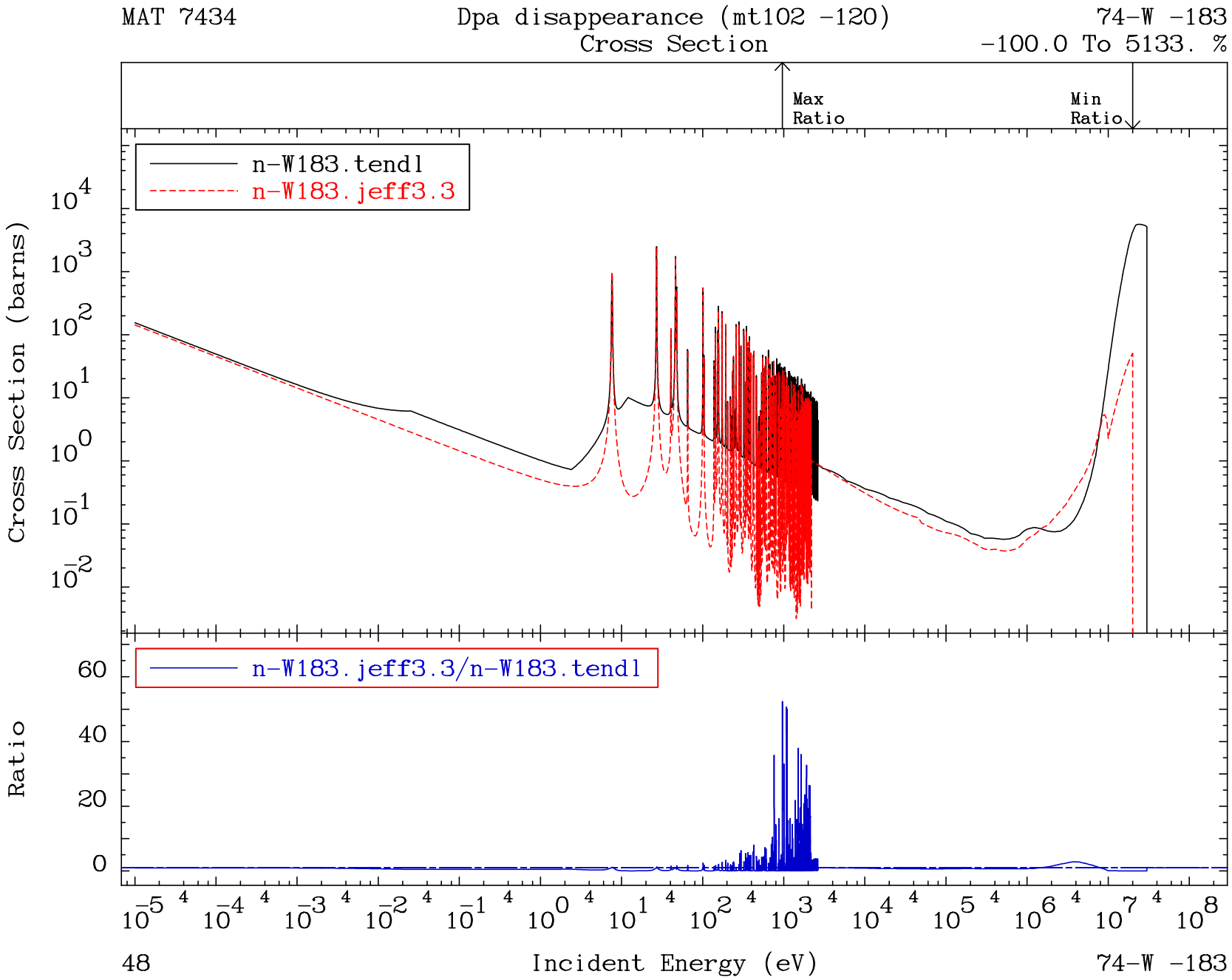

MAT 7434
Total photon (eV-barns)
Cross Section
74-W -183
-99.97 To 9999. %
Max
Ratio
Min
Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
43
74-W -183


MAT 7434
Total kinematic kerma (high limit)
Cross Section
74-W -183
-99.97 To 9999. %
Min Ratio
Max Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
44
74-W -183


MAT 7434
Dpa total (eV-barns)
Cross Section
74-W -183
-99.97 To 5133. %
Min Ratio
Max Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
45
74-W -183


MAT 7434
Dpa elastic (mt2)
Cross Section
74-W -183
-4.880 To 79.40 %
Min Ratio
Max Ratio
n-W183.tendl Threshold 4.2000 keV
n-W183.jeff3.3 Threshold 4.0000 keV
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
46
74-W -183


MAT 7434
Dpa inelastic (mt51-91)
Cross Section
74-W -183
-100.0 To 114.2 %
Max Ratio
Min Ratio
n-W183.tendl Threshold 46.740 keV
n-W183.jeff3.3 Threshold 46.800 keV
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
47
74-W -183


MAT 7434
Dpa disappearance (mt102 -120)
Cross Section
74-W -183
-100.0 To 5133. %
Max Ratio
Min Ratio
n-W183.tendl
n-W183.jeff3.3
Cross Section (barns)
n-W183.jeff3.3/n-W183.tendl
Ratio
Incident Energy (eV)
48
74-W -183