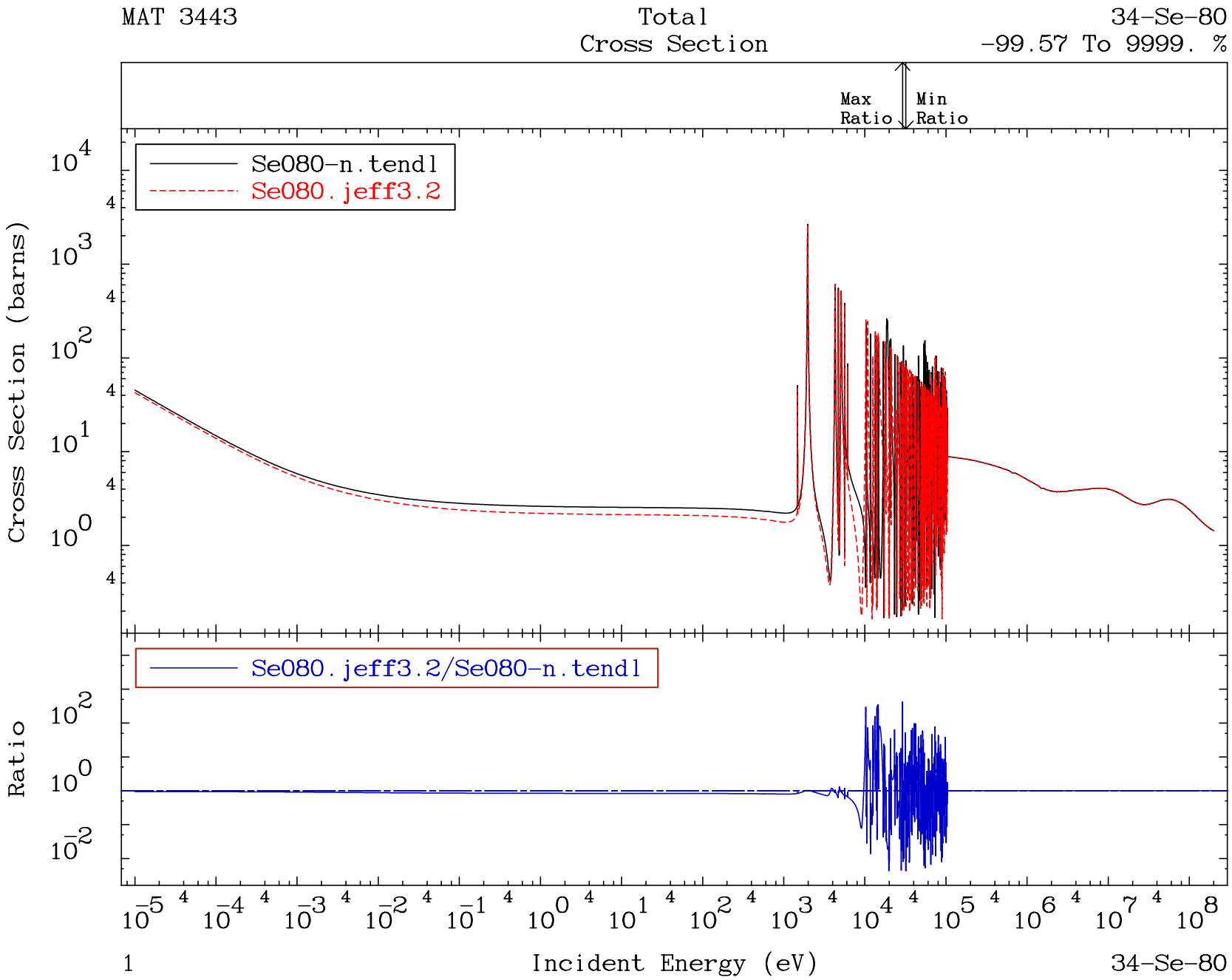
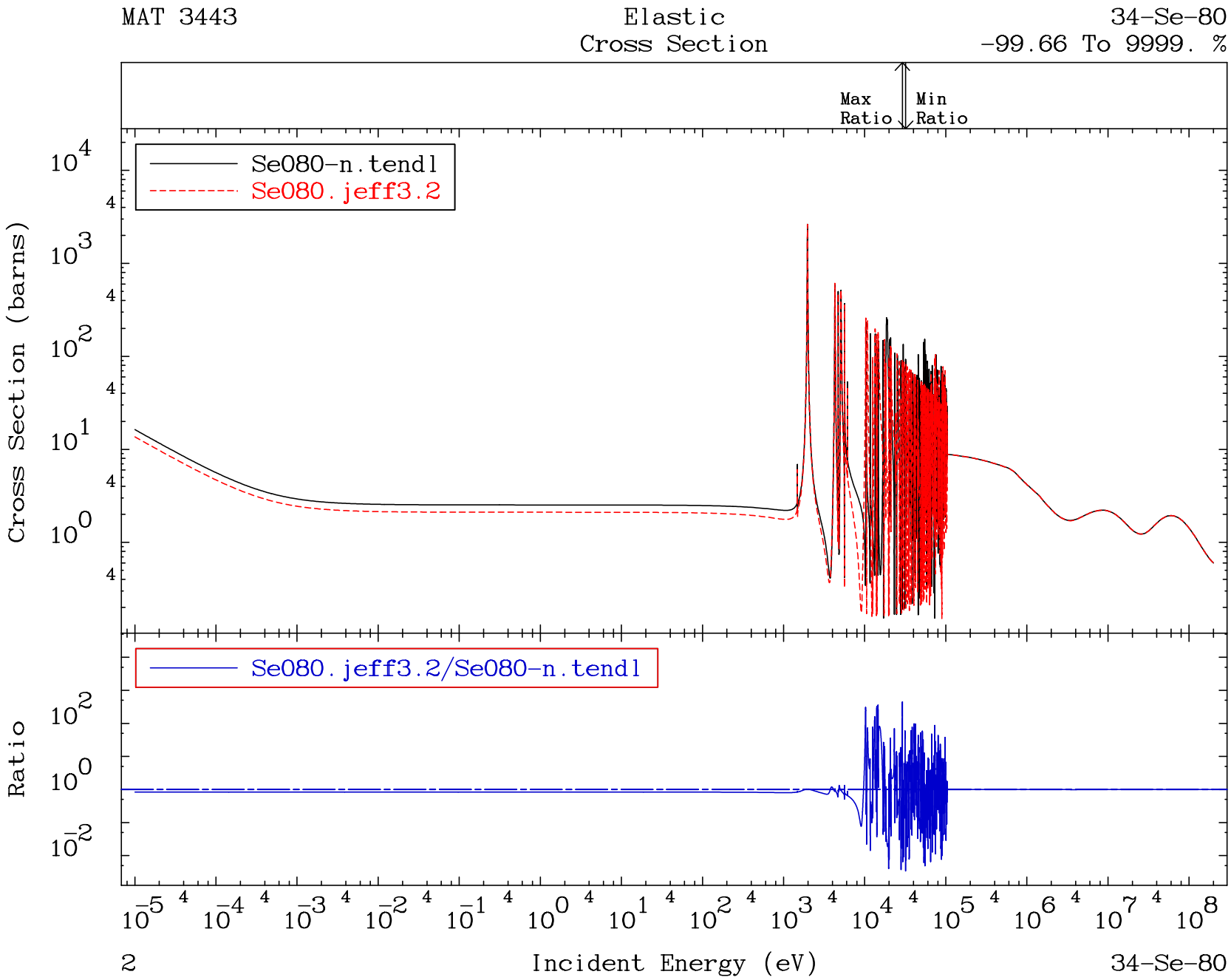
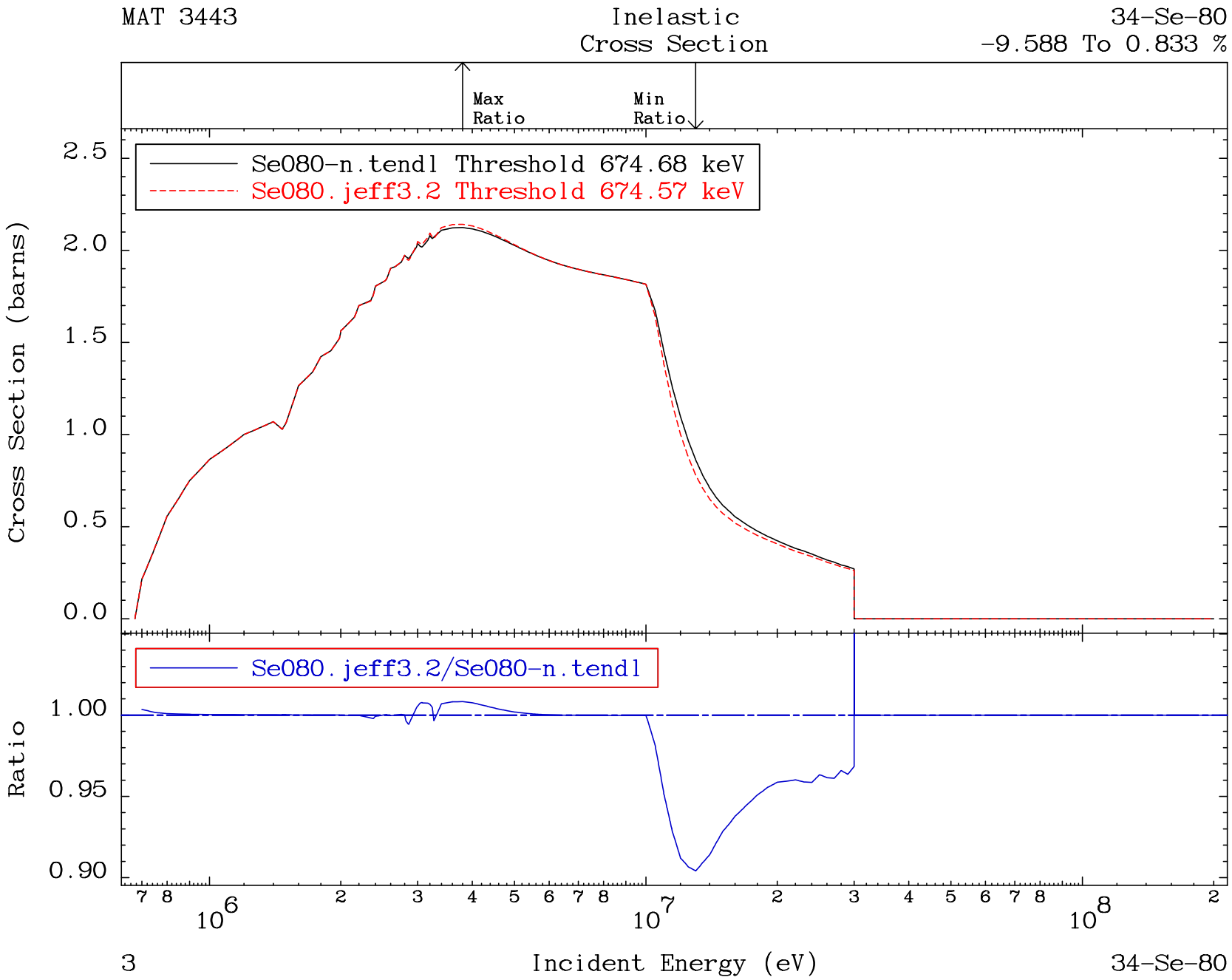
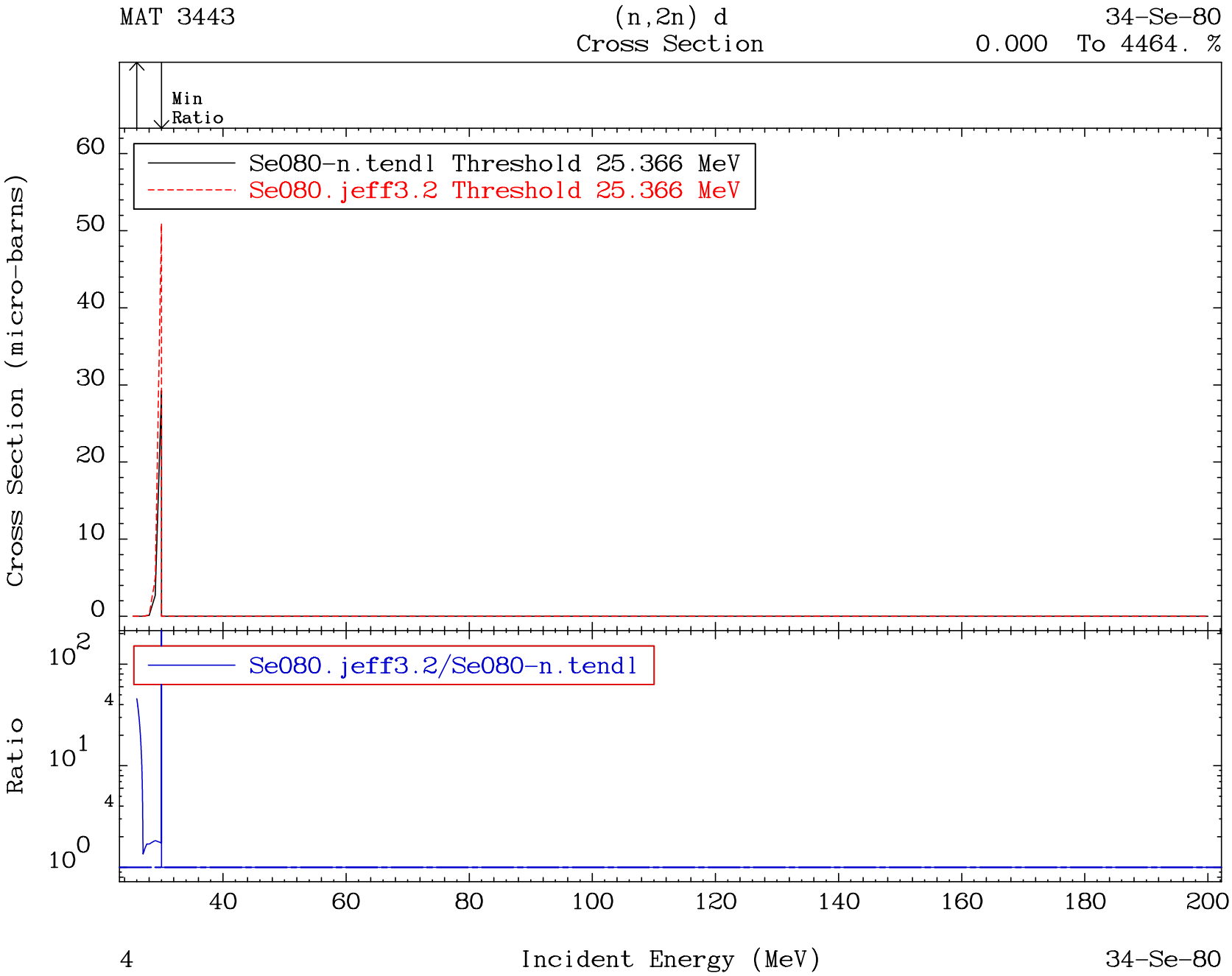
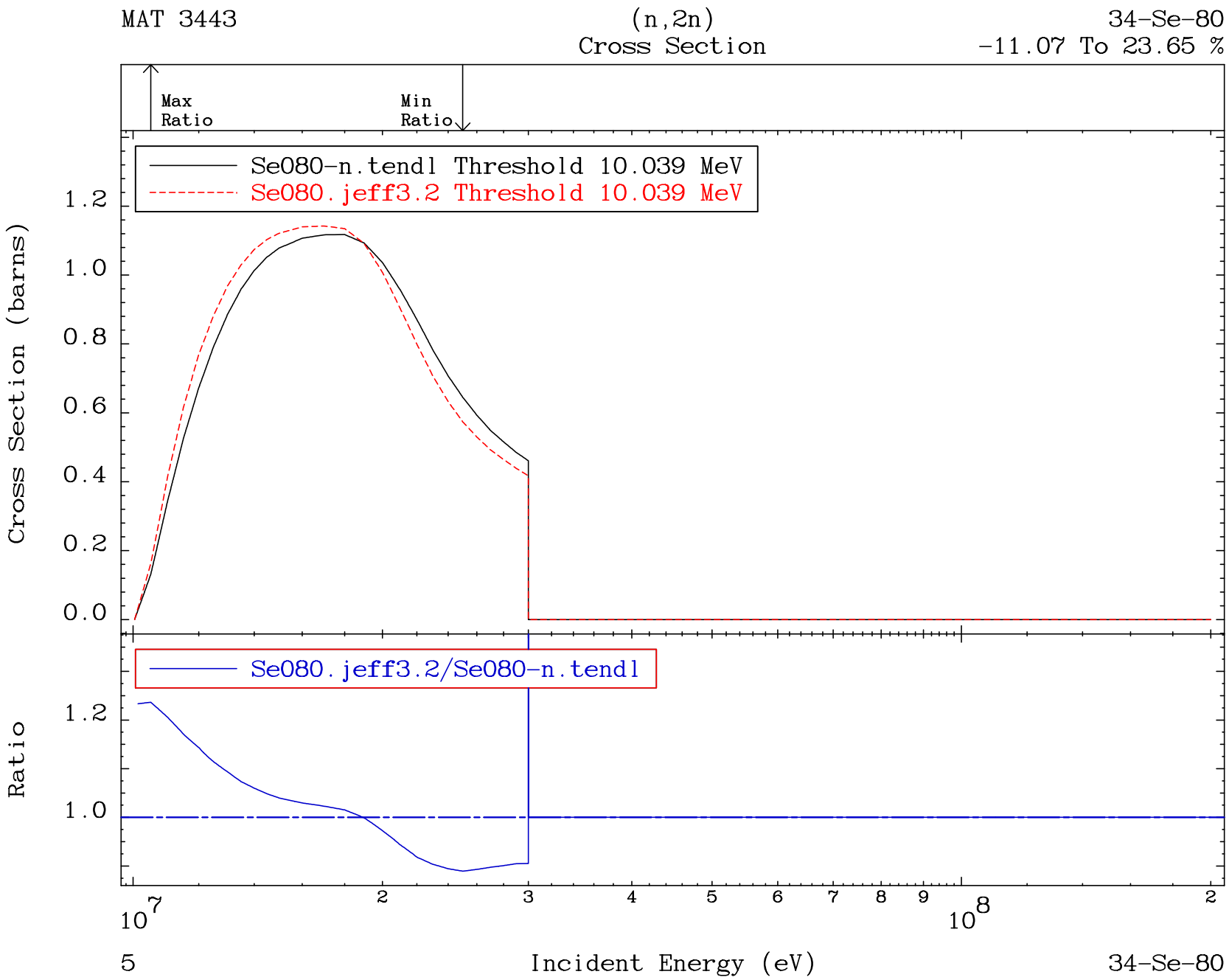
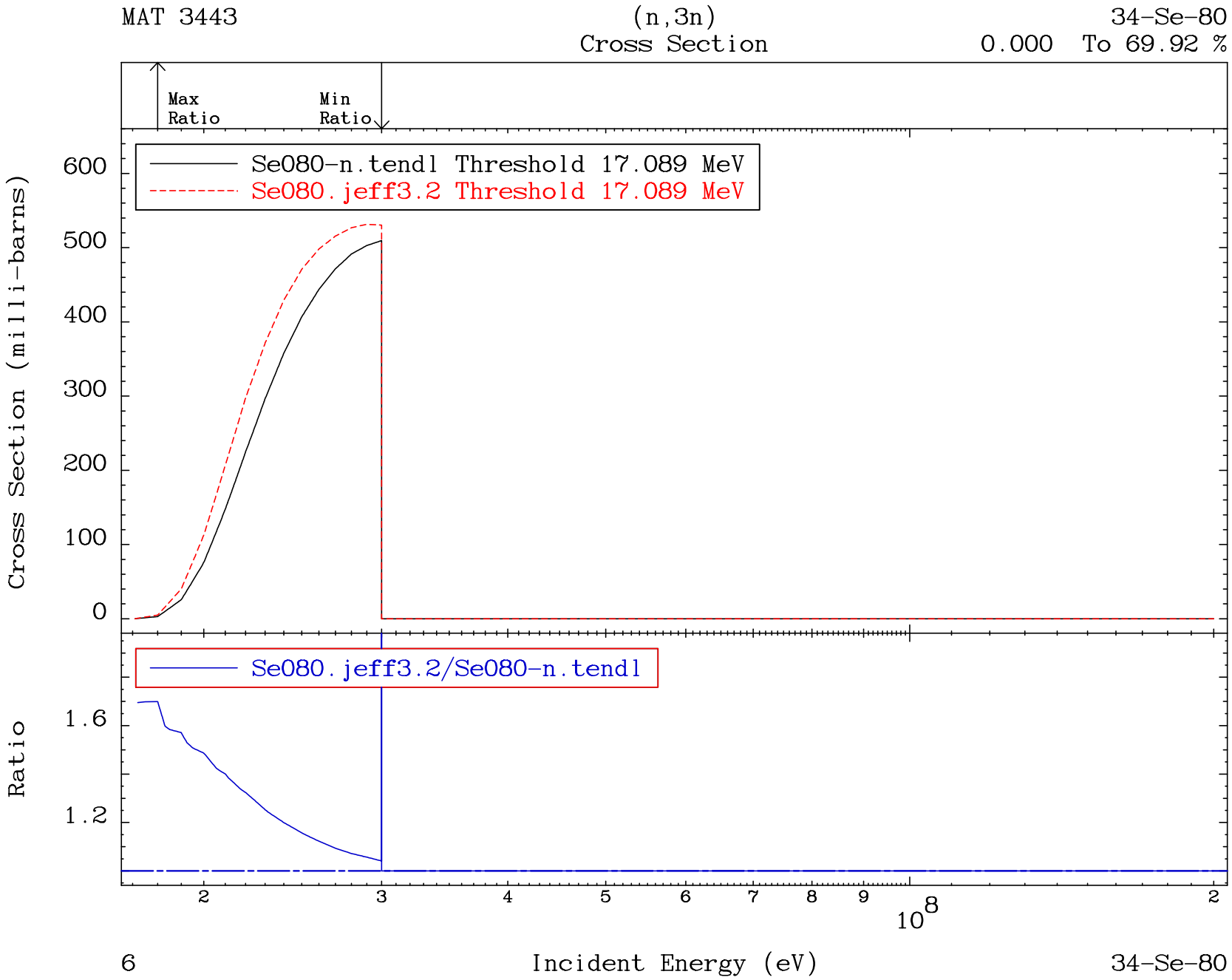

MAT 3443
Total
Cross Section
34-Se-80
-99.57 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
1
34-Se-80

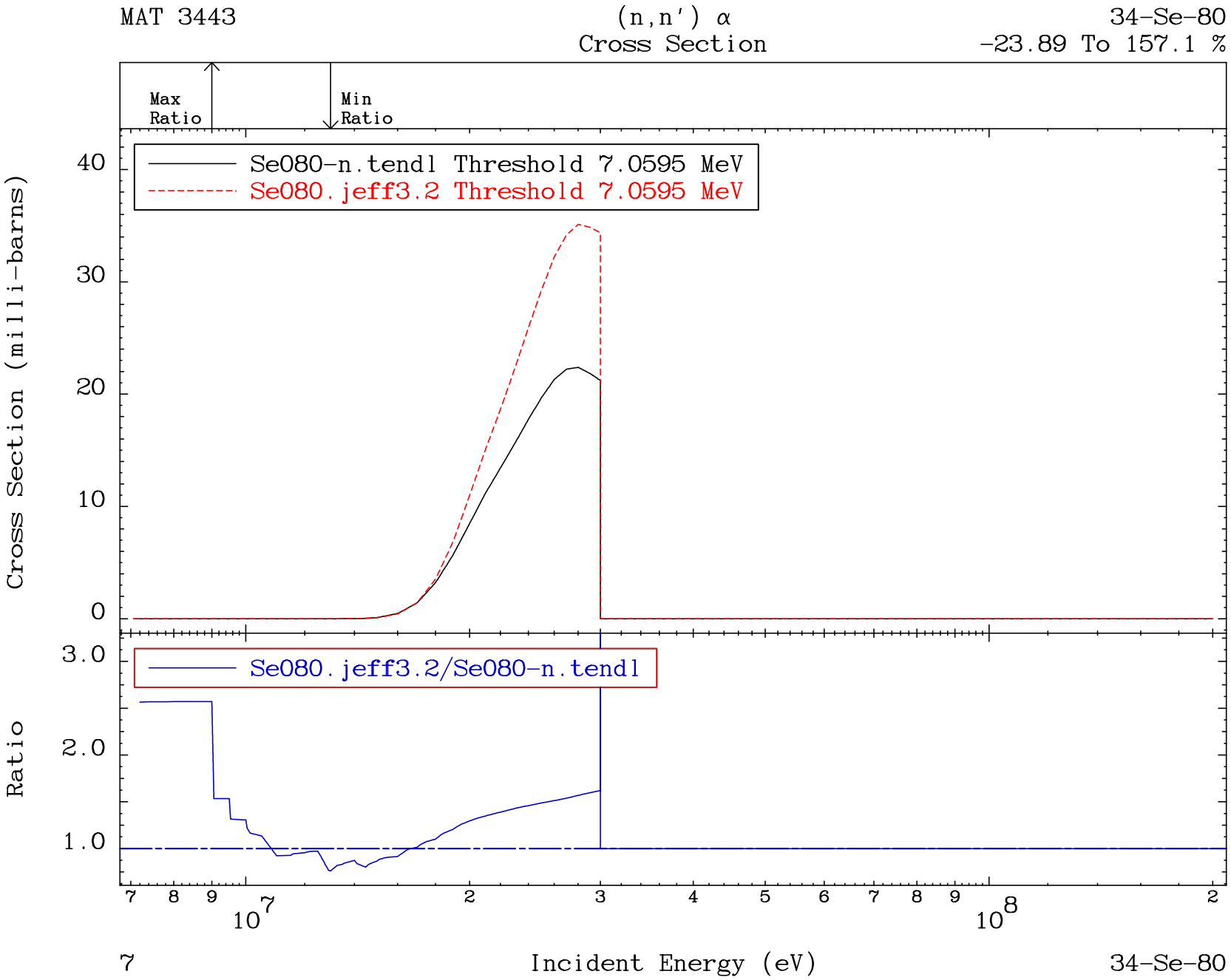

MAT 3443
Elastic
Cross Section
34-Se-80
-99.66 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
2
34-Se-80

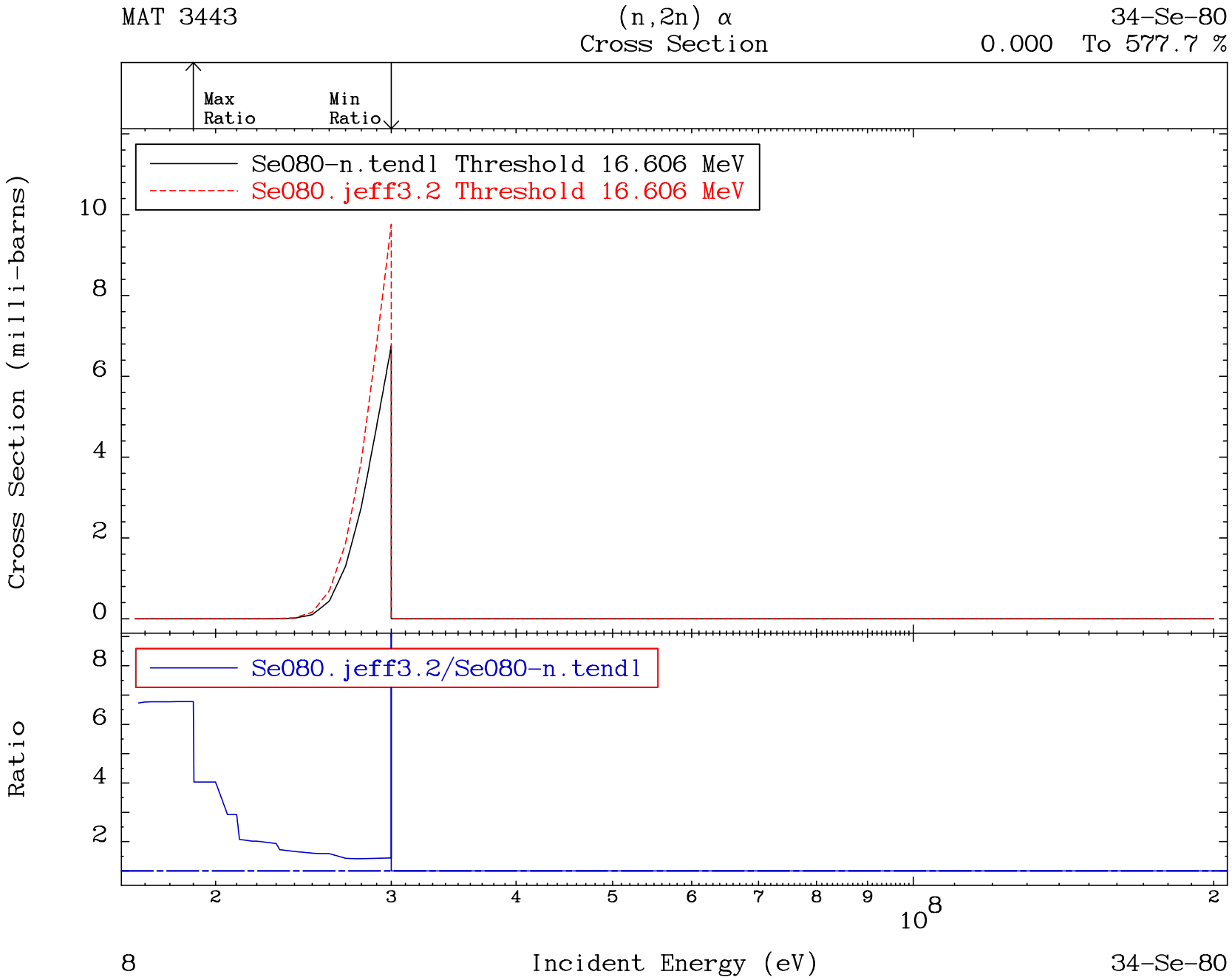

MAT 3443
Inelastic
Cross Section
34-Se-80
-9.588 To 0.833 %
Max
Ratio
Min
Ratio
Se080-n.tendl Threshold 674.68 keV
Se080.jeff3.2 Threshold 674.57 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.00
0.95
0.90
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
34-Se-80

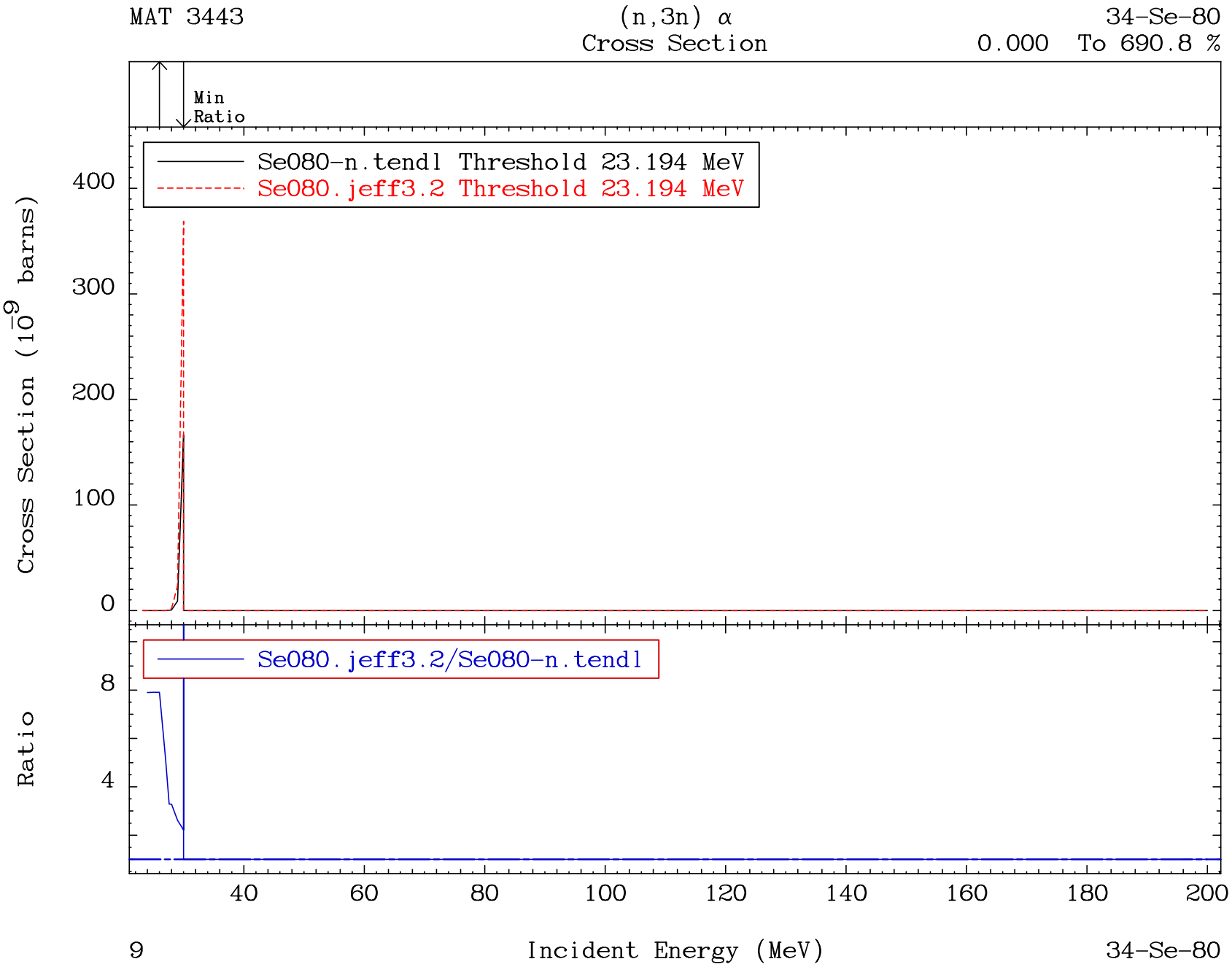

MAT 3443
(n,2n) d
Cross Section
34-Se-80
0.000 To 4464. %
Min
Ratio
Se080-n.tendl Threshold 25.366 MeV
Se080.jeff3.2 Threshold 25.366 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^2
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
34-Se-80

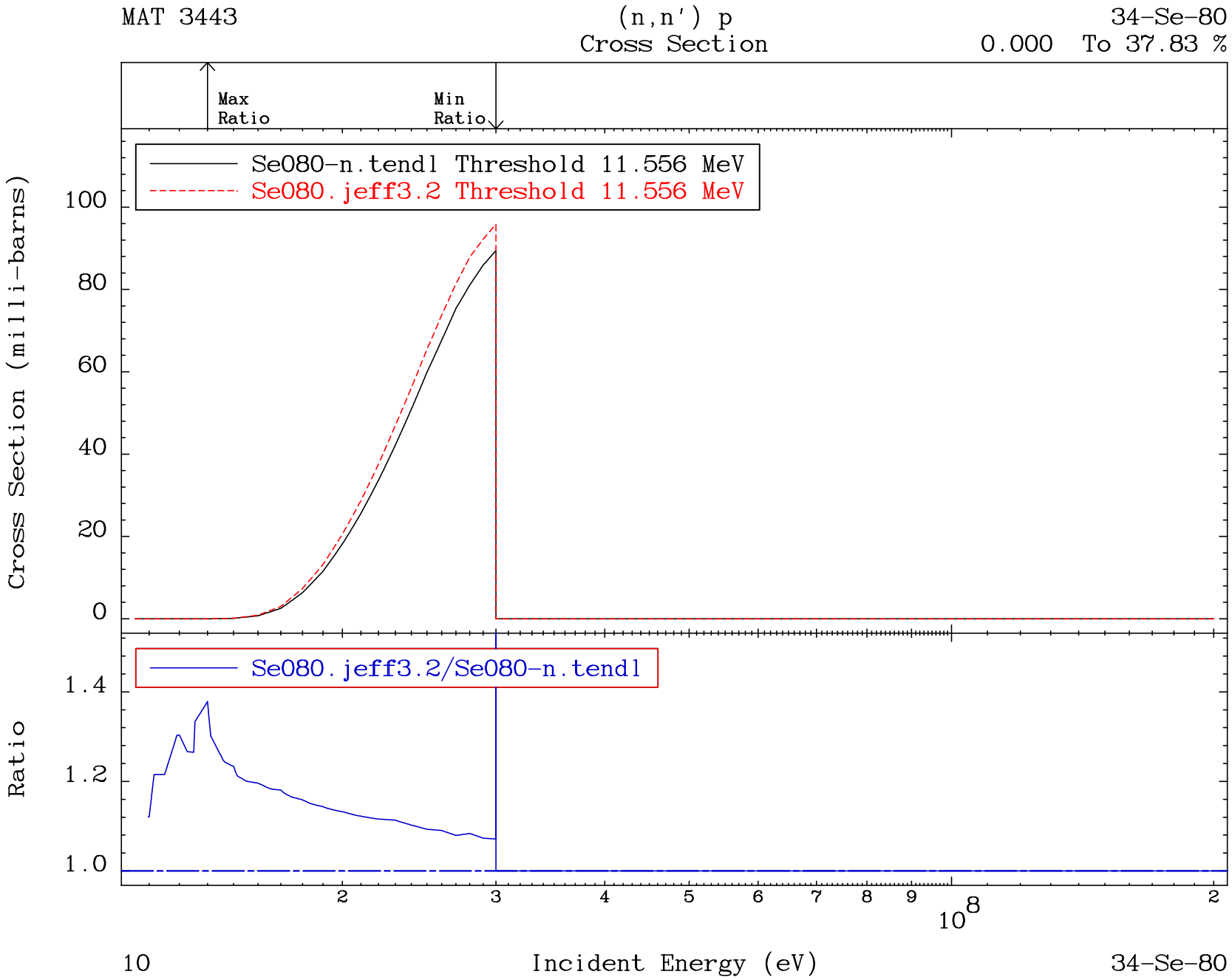

MAT 3443
(n,2n)
Cross Section
34-Se-80
-11.07 To 23.65 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 10.039 MeV
Se080.jeff3.2 Threshold 10.039 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
34-Se-80

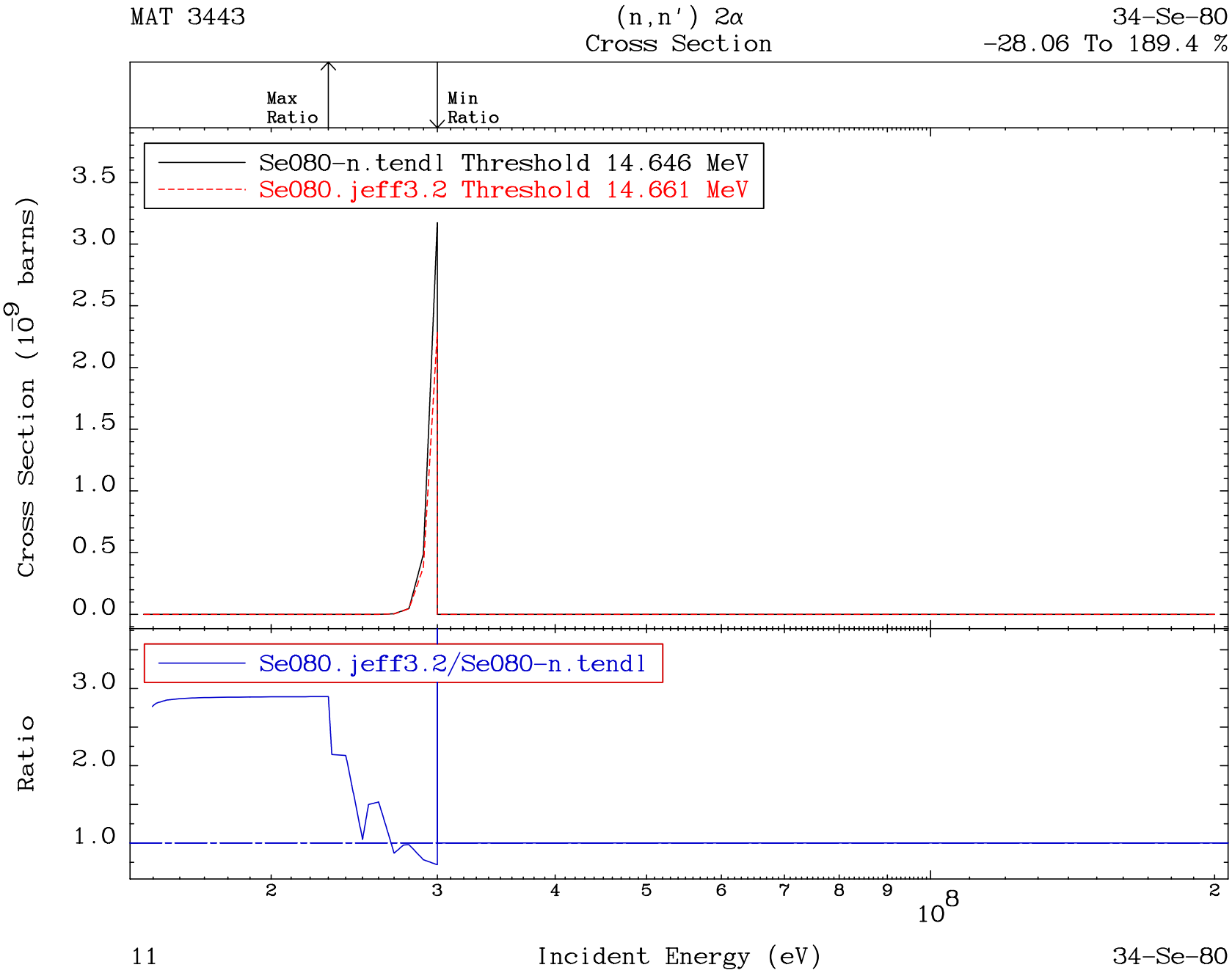

MAT 3443
(n,3n)
Cross Section
34-Se-80
0.000 To 69.92 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 17.089 MeV
Se080.jeff3.2 Threshold 17.089 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
34-Se-80

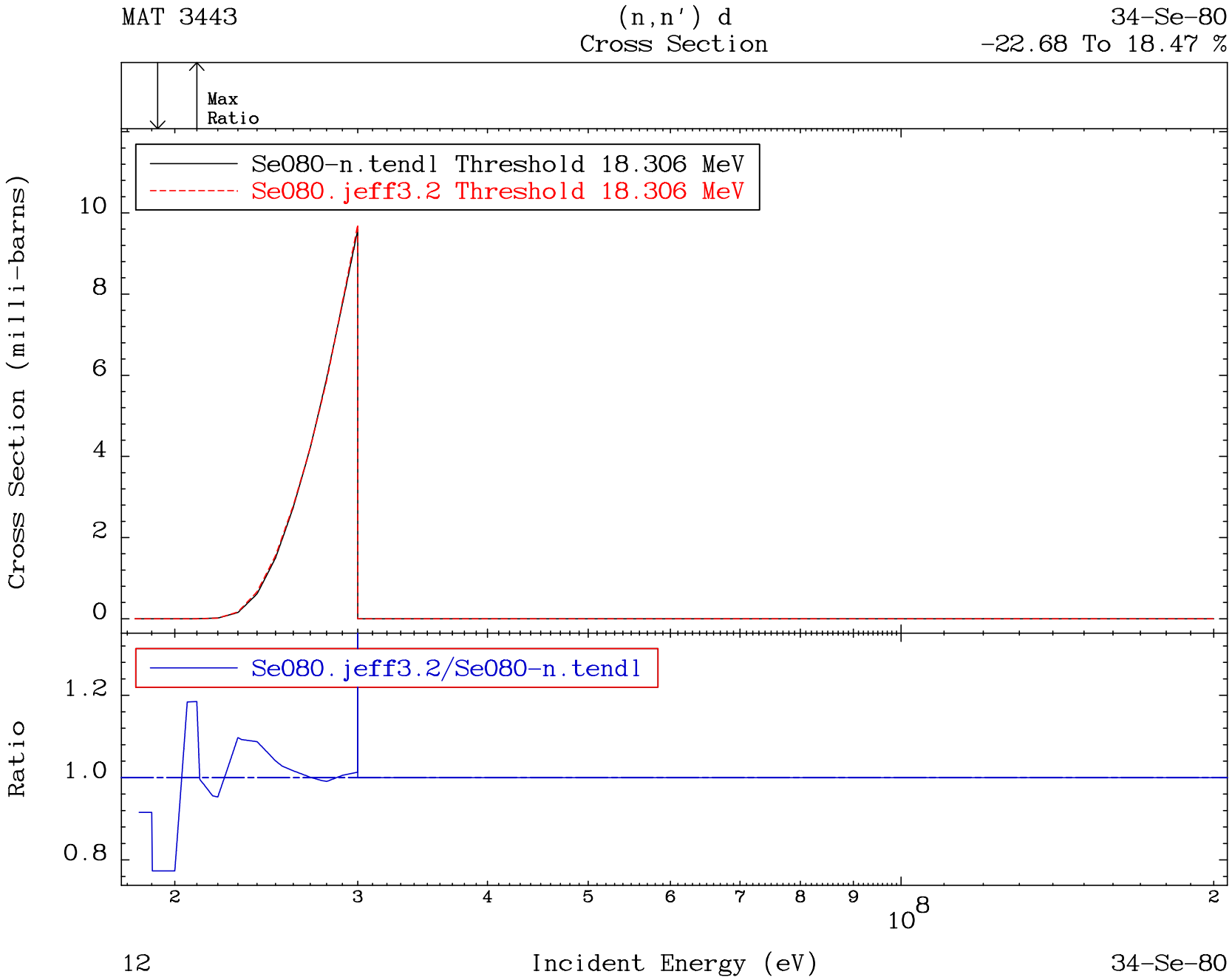

MAT 3443
(n,n') α
Cross Section
34-Se-80
-23.89 To 157.1 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 7.0595 MeV
Se080.jeff3.2 Threshold 7.0595 MeV
Cross Section (milli-barns)
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
34-Se-80

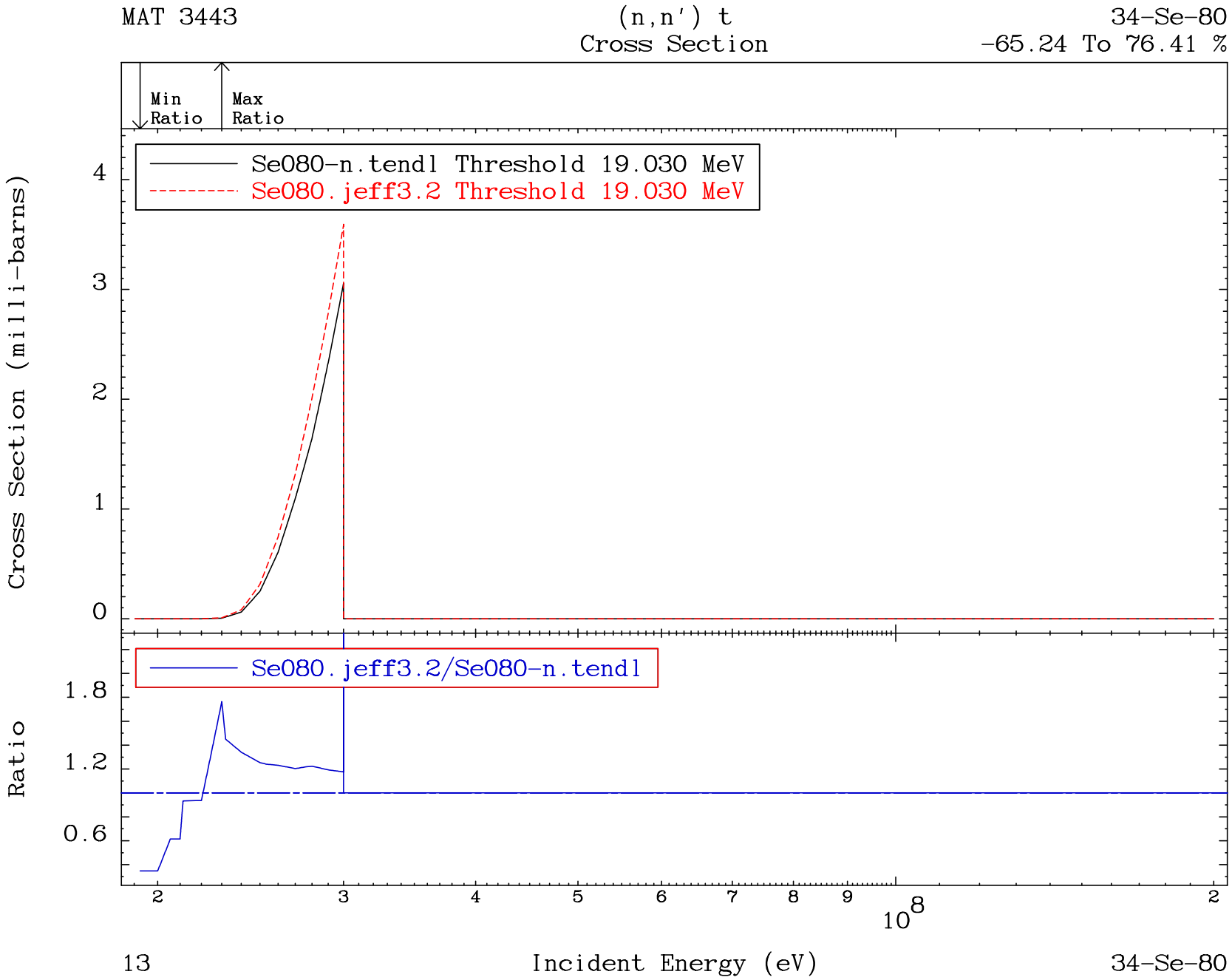

MAT 3443
(n,2n) α
Cross Section
34-Se-80
0.000 To 577.7 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 16.606 MeV
Se080.jeff3.2 Threshold 16.606 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
8
34-Se-80

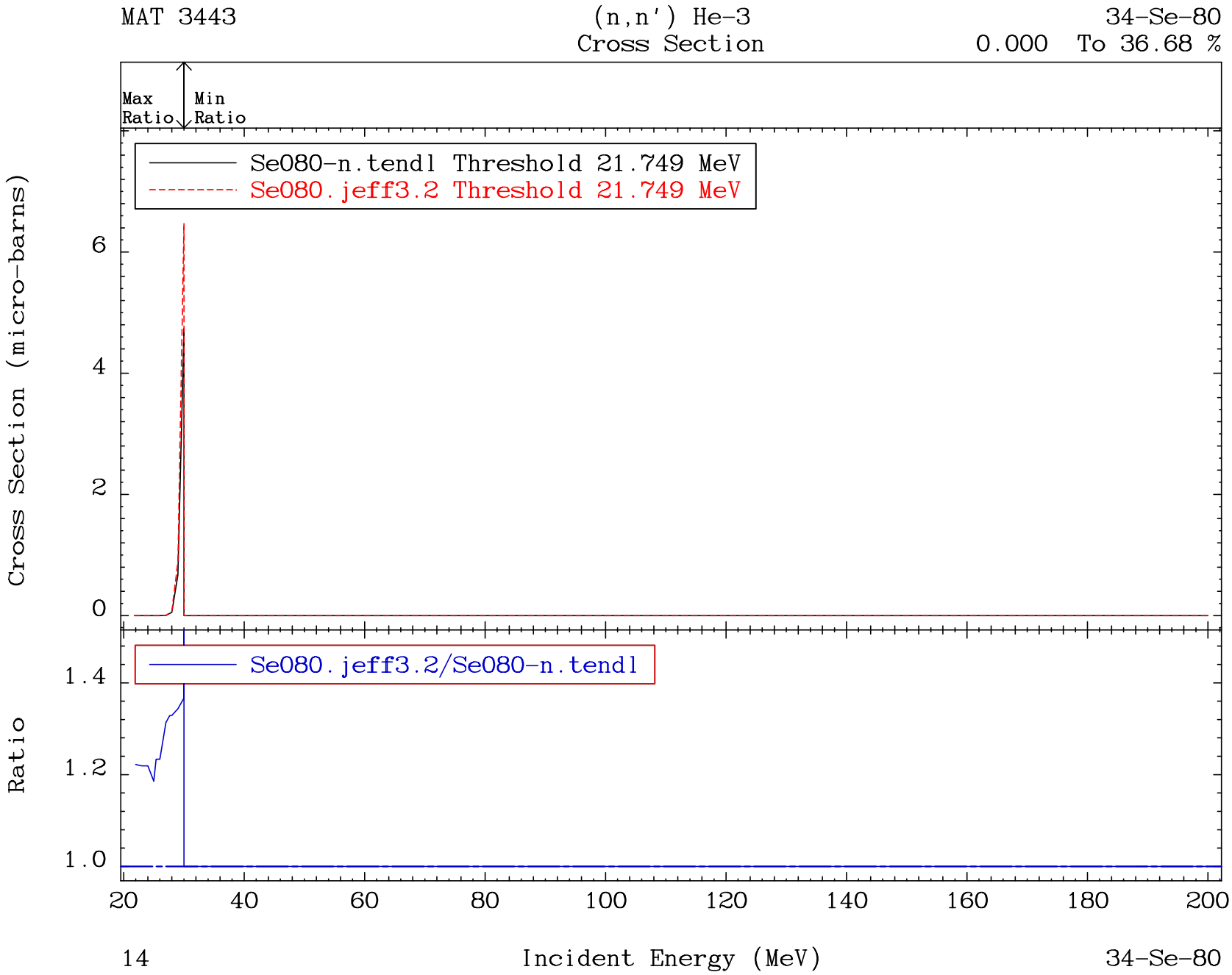

MAT 3443
(n,3n) α
Cross Section
34-Se-80
0.000 To 690.8 %
Min
Ratio
Se080-n.tendl Threshold 23.194 MeV
Se080.jeff3.2 Threshold 23.194 MeV
Cross Section (10^-9 barns)
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
8
4
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
34-Se-80

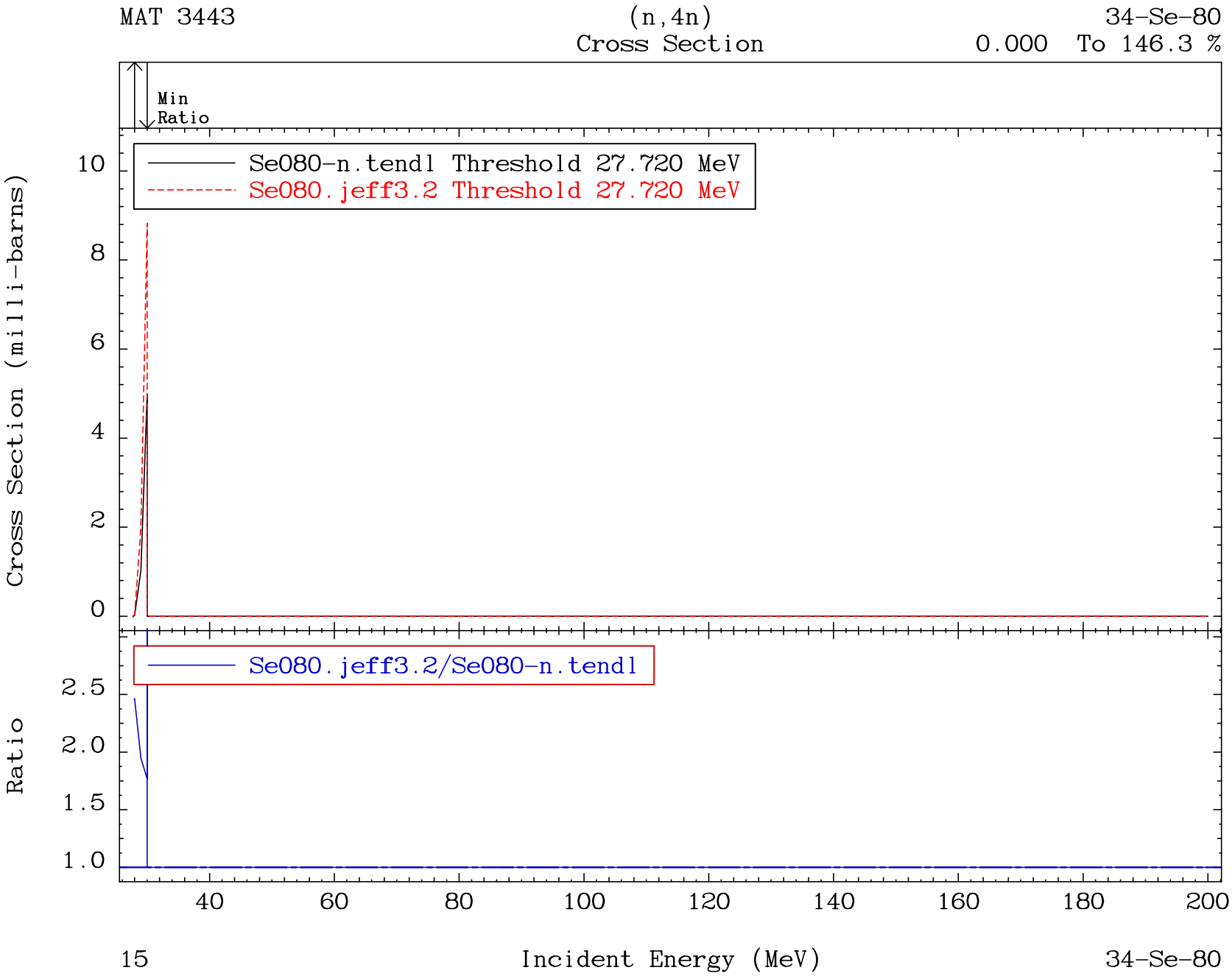

MAT 3443
(n,n') p
Cross Section
34-Se-80
0.000 To 37.83 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 11.556 MeV
Se080.jeff3.2 Threshold 11.556 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
34-Se-80

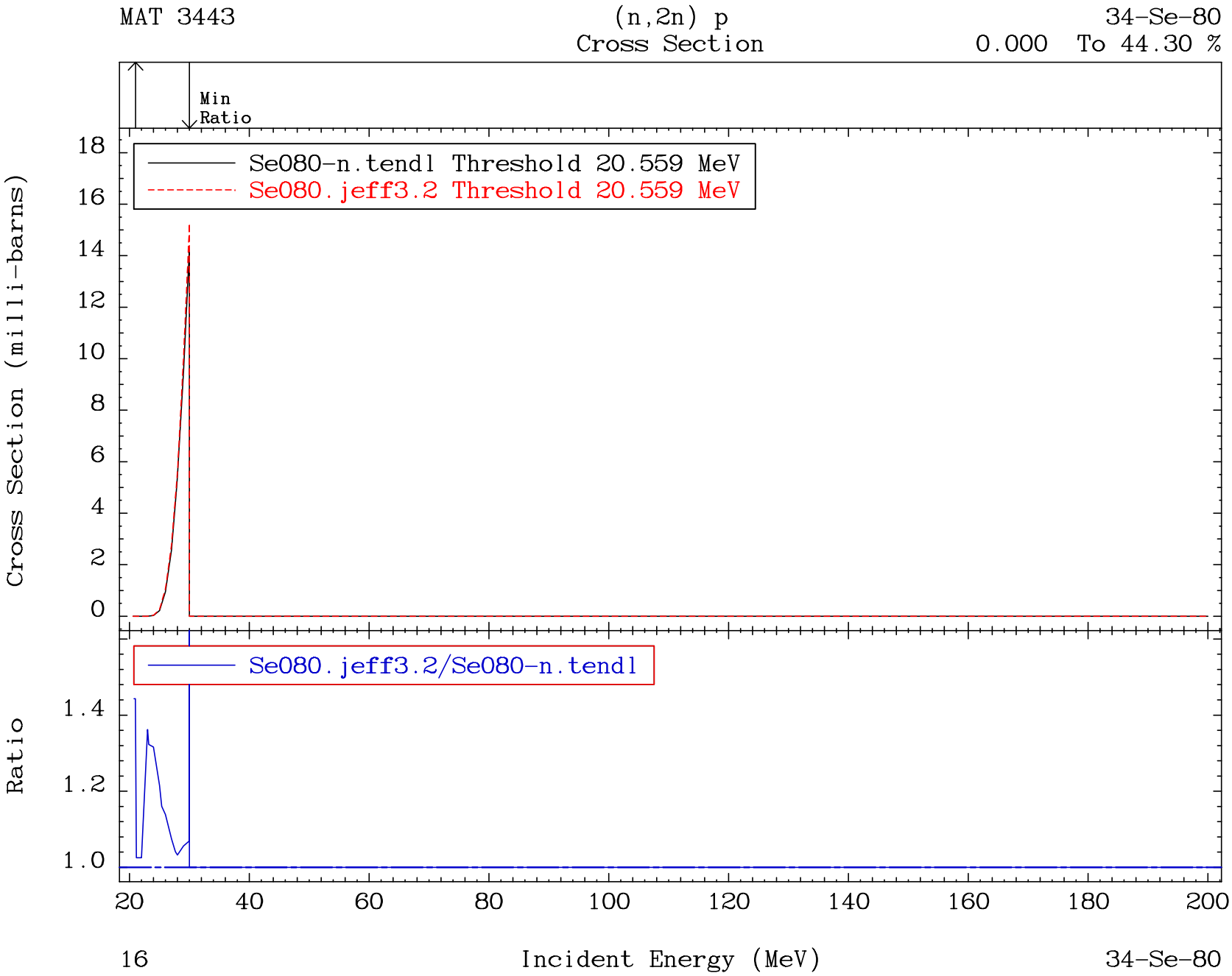

MAT 3443
(n,n') 2α
Cross Section
34-Se-80
-28.06 To 189.4 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 14.646 MeV
Se080.jeff3.2 Threshold 14.661 MeV
Cross Section (10^-9 barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
34-Se-80

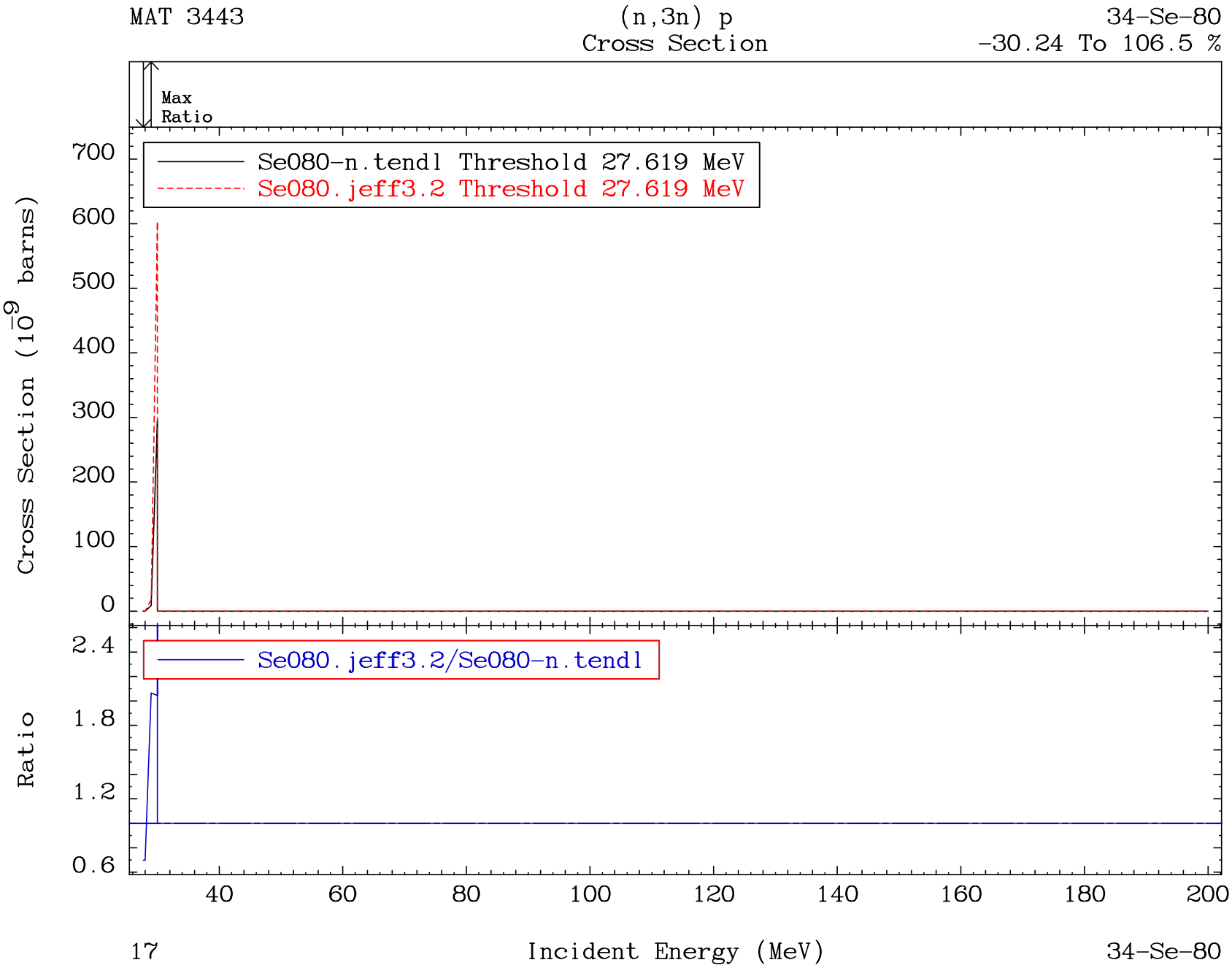

MAT 3443
(n,n') d
Cross Section
34-Se-80
-22.68 To 18.47 %
Max
Ratio
Se080-n.tendl Threshold 18.306 MeV
Se080.jeff3.2 Threshold 18.306 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
34-Se-80

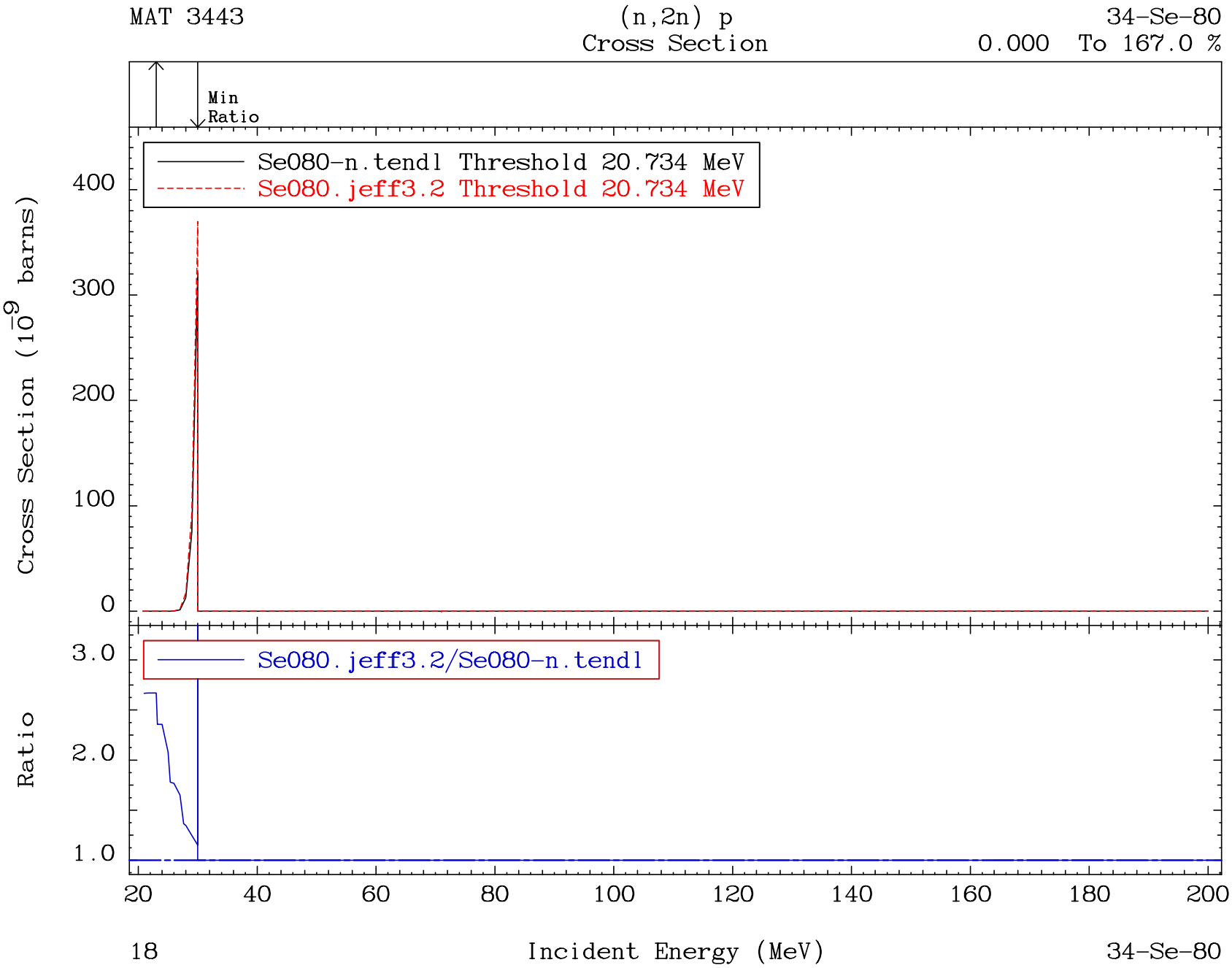

MAT 3443
(n,n') t
Cross Section
34-Se-80
-65.24 To 76.41 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 19.030 MeV
Se080.jeff3.2 Threshold 19.030 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
13
34-Se-80

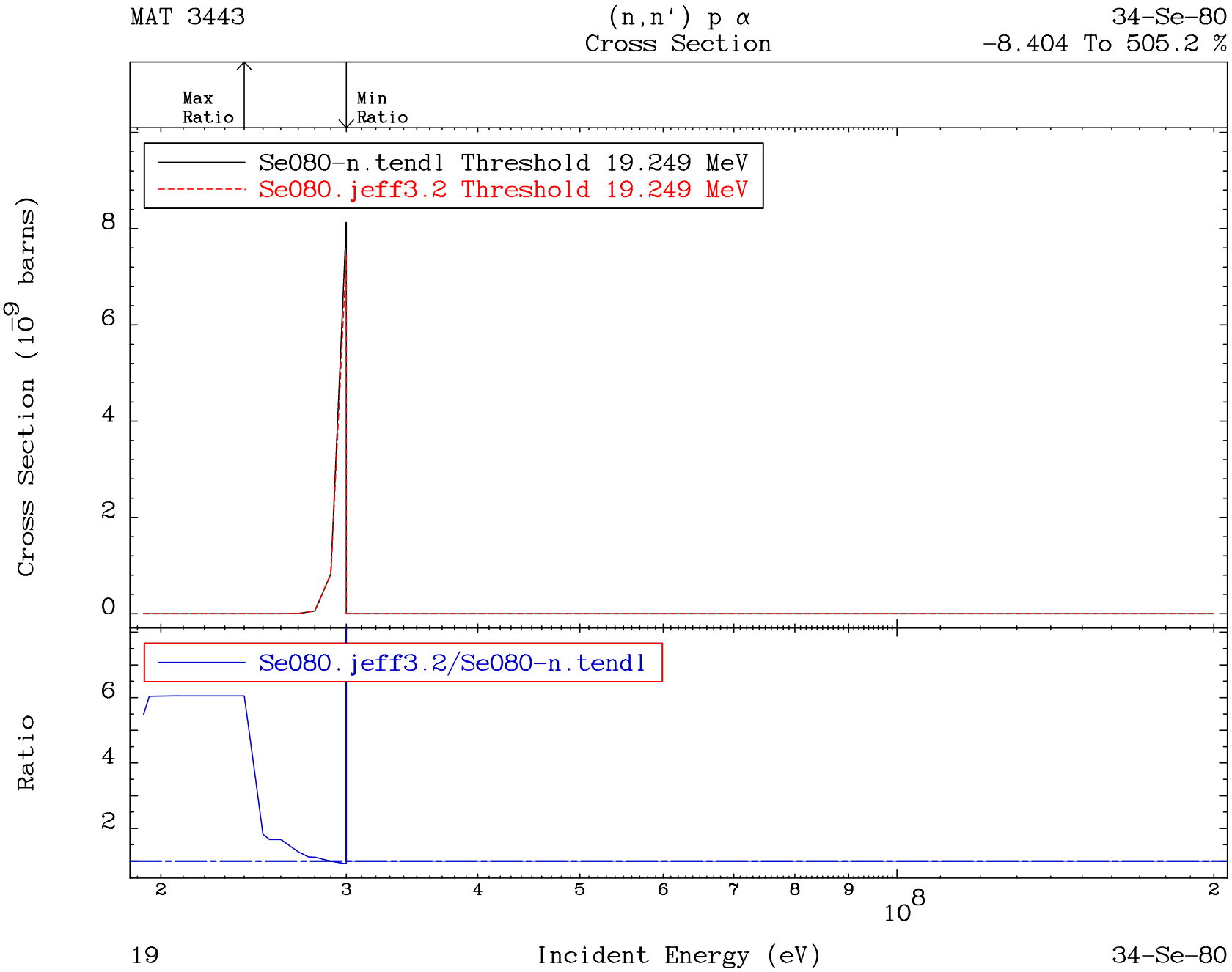

MAT 3443
(n,n') He-3
Cross Section
34-Se-80
0.000 To 36.68 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 21.749 MeV
Se080.jeff3.2 Threshold 21.749 MeV
Cross Section (micro-barns)
0
2
4
6
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
1.2
1.4
20
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
34-Se-80

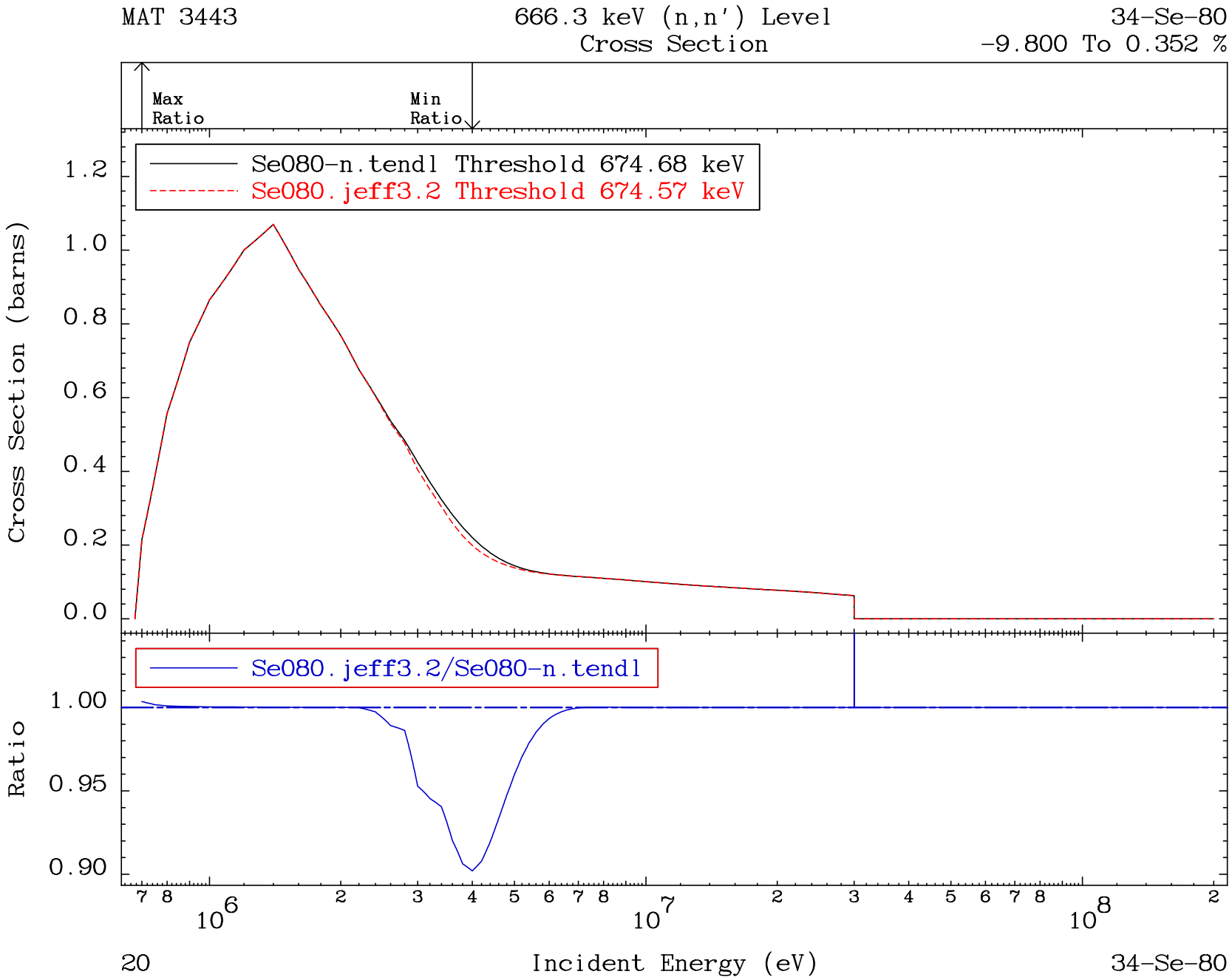

MAT 3443
(n,4n)
Cross Section
34-Se-80
0.000 To 146.3 %
Min
Ratio
Se080-n.tendl Threshold 27.720 MeV
Se080.jeff3.2 Threshold 27.720 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.5
2.0
1.5
1.0
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
34-Se-80

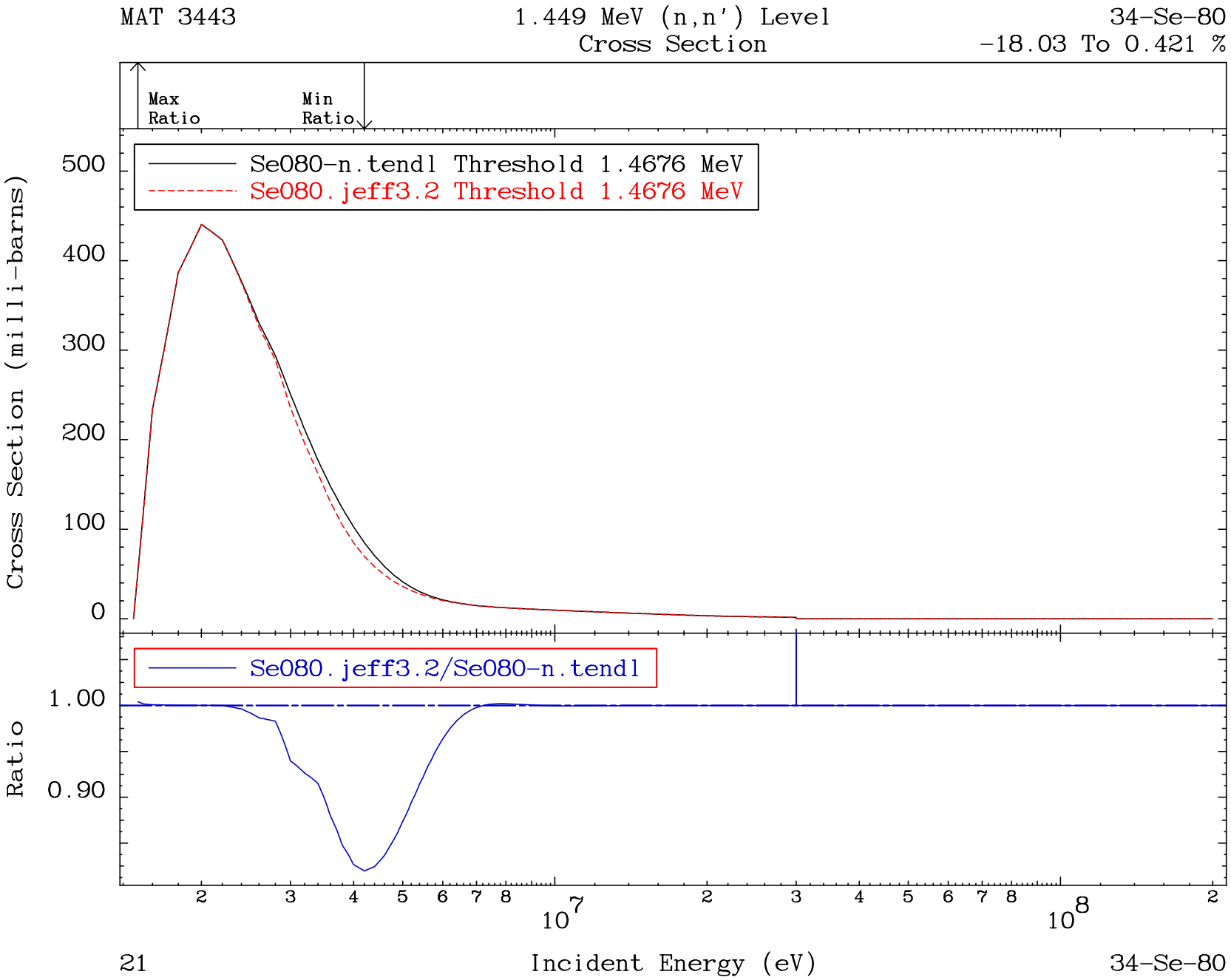

MAT 3443
(n,2n) p
Cross Section
34-Se-80
0.000 To 44.30 %
Min
Ratio
Se080-n.tendl Threshold 20.559 MeV
Se080.jeff3.2 Threshold 20.559 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
18
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
1.2
1.4
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
34-Se-80

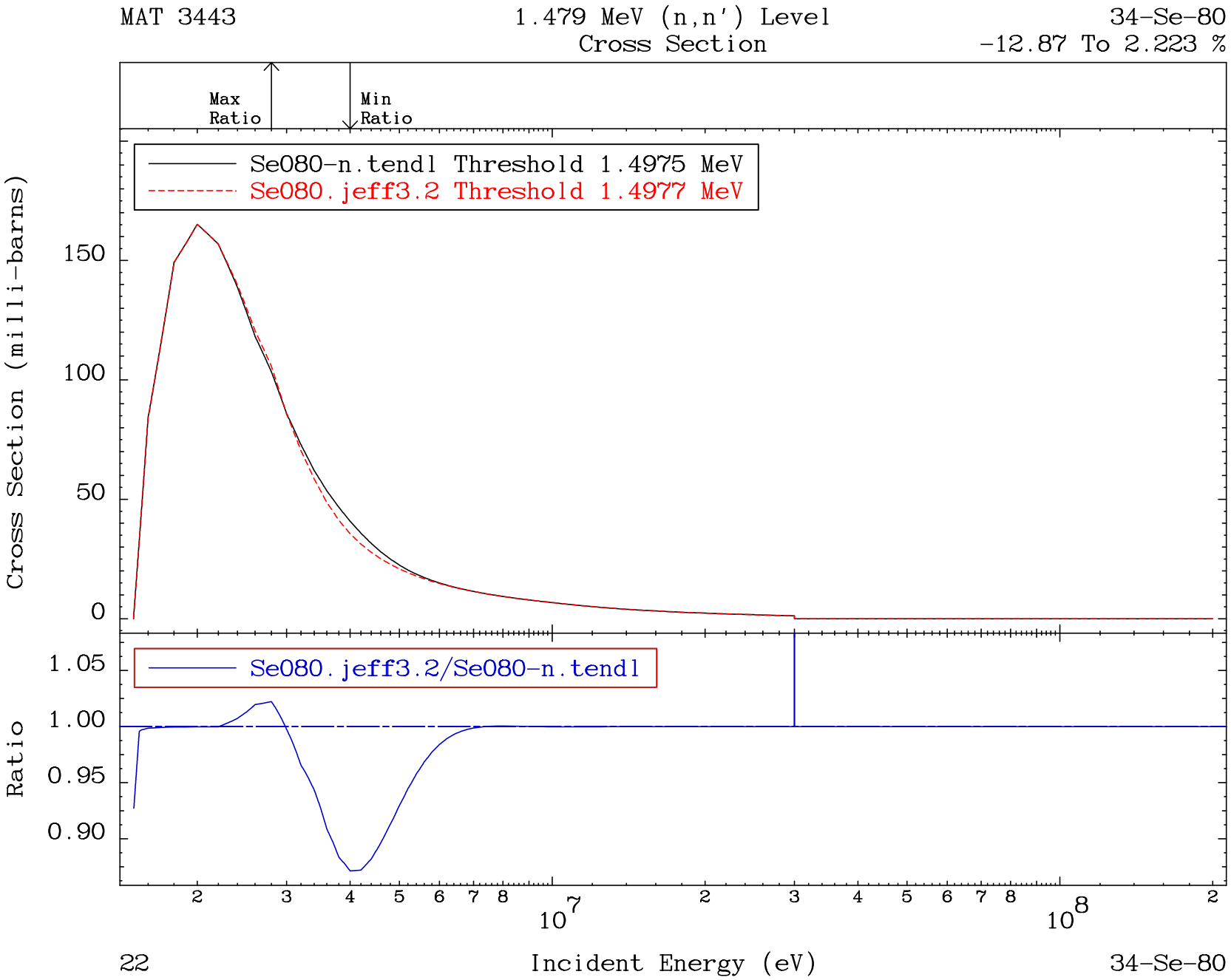

MAT 3443
(n,3n) p
Cross Section
34-Se-80
-30.24 To 106.5 %
Max
Ratio
Se080-n.tendl Threshold 27.619 MeV
Se080.jeff3.2 Threshold 27.619 MeV
Cross Section (10^-9 barns)
700
600
500
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.4
1.8
1.2
0.6
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
34-Se-80

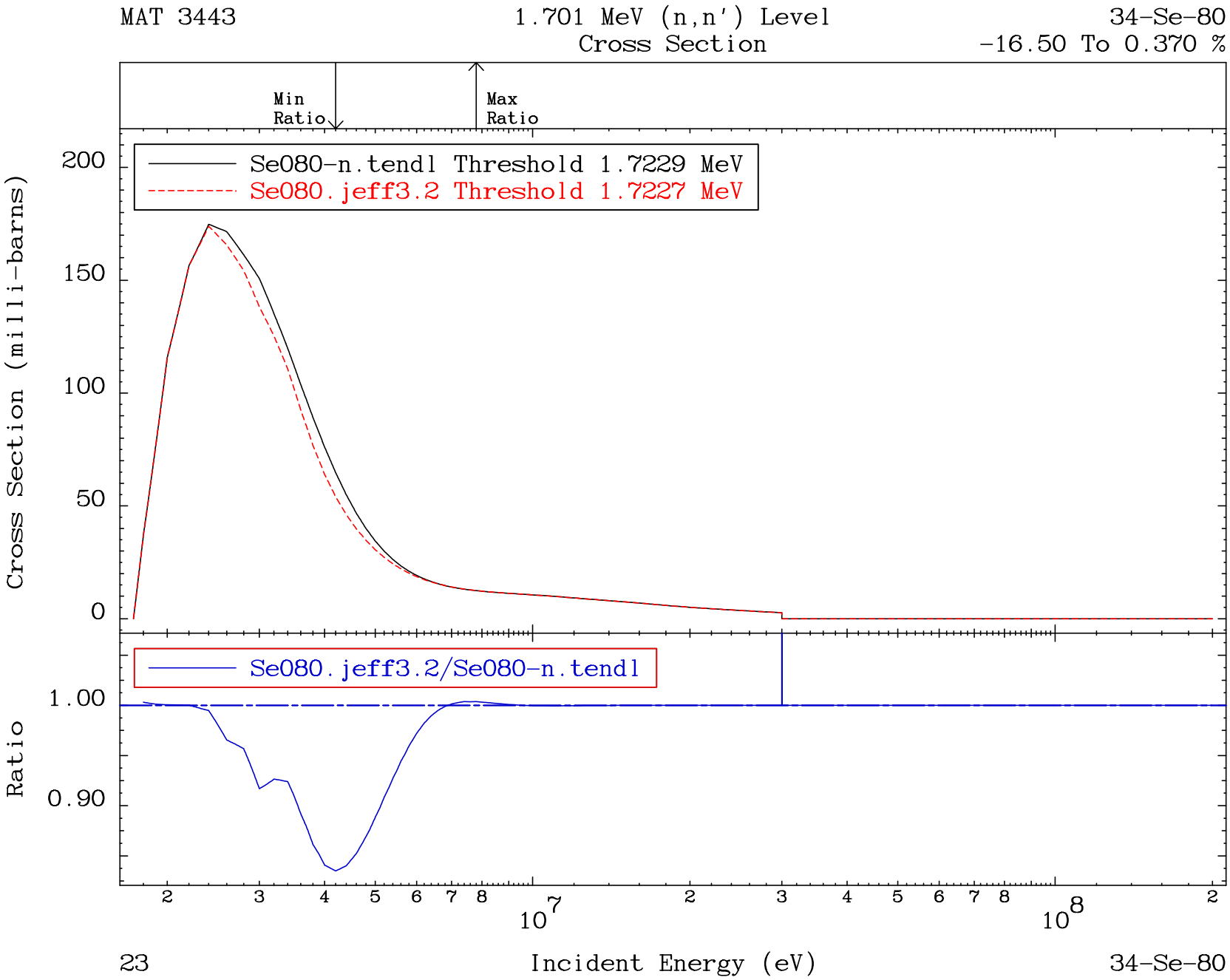

MAT 3443
(n,2n) p
Cross Section
34-Se-80
0.000 To 167.0 %
Min
Ratio
Se080-n.tendl Threshold 20.734 MeV
Se080.jeff3.2 Threshold 20.734 MeV
Cross Section (10^-9 barns)
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
20
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
34-Se-80

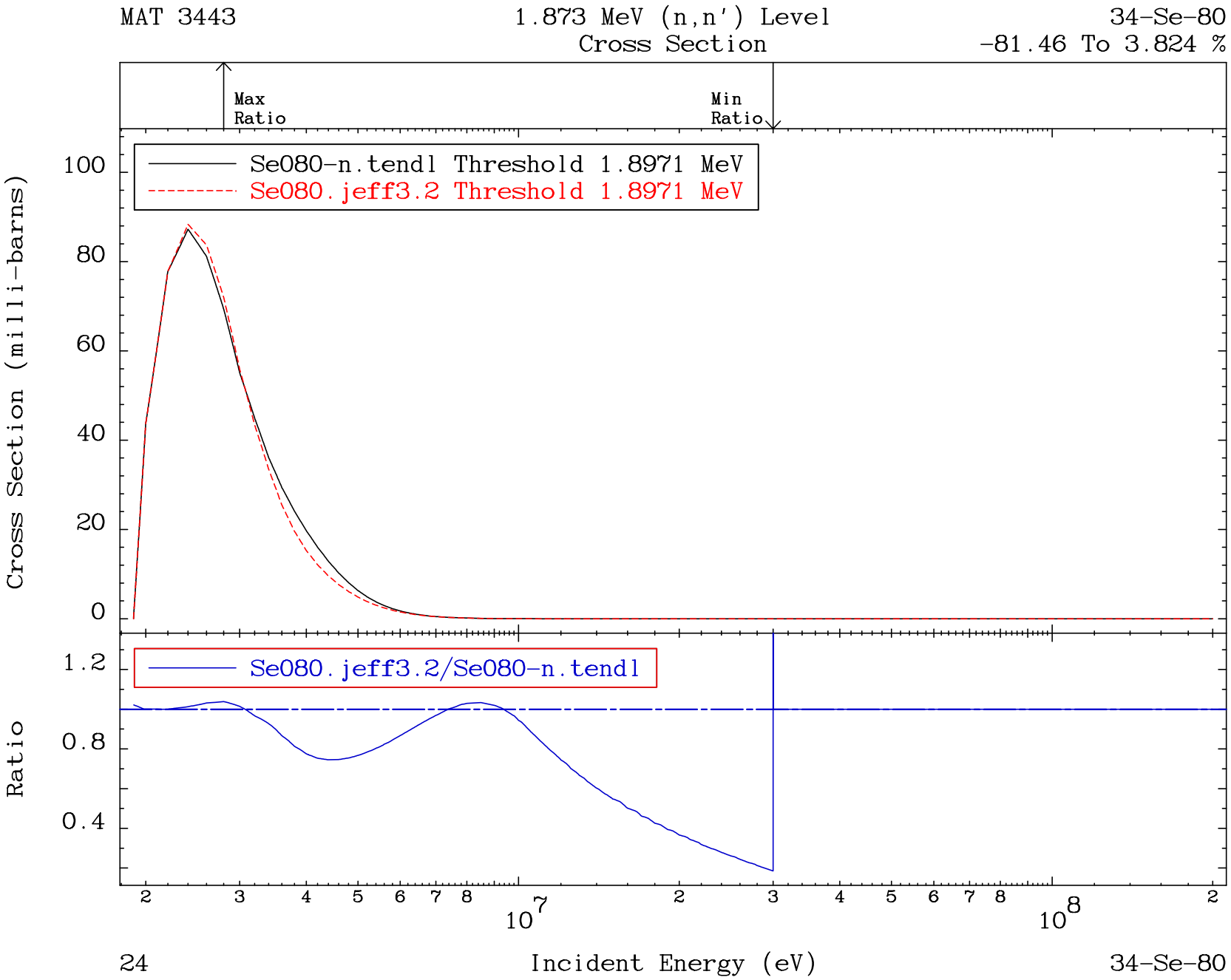

MAT 3443
(n,n') p α
Cross Section
34-Se-80
-8.404 To 505.2 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 19.249 MeV
Se080.jeff3.2 Threshold 19.249 MeV
Cross Section (10^-9 barns)
0
2
4
6
8
Se080.jeff3.2/Se080-n.tendl
Ratio
2
4
6
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
34-Se-80

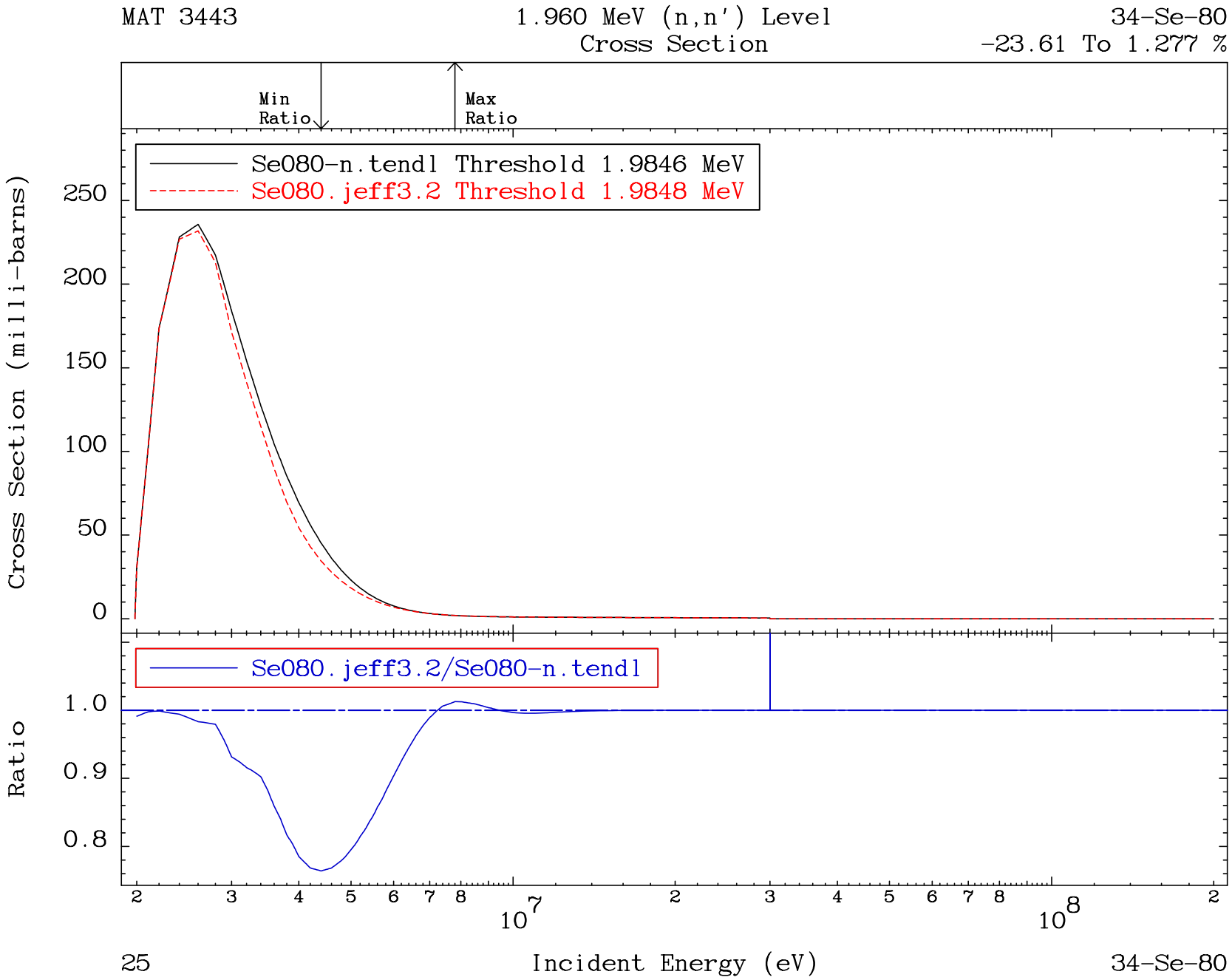

MAT 3443
666.3 keV (n,n') Level
Cross Section
34-Se-80
-9.800 To 0.352 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 674.68 keV
Se080.jeff3.2 Threshold 674.57 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.00
0.95
0.90
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
34-Se-80

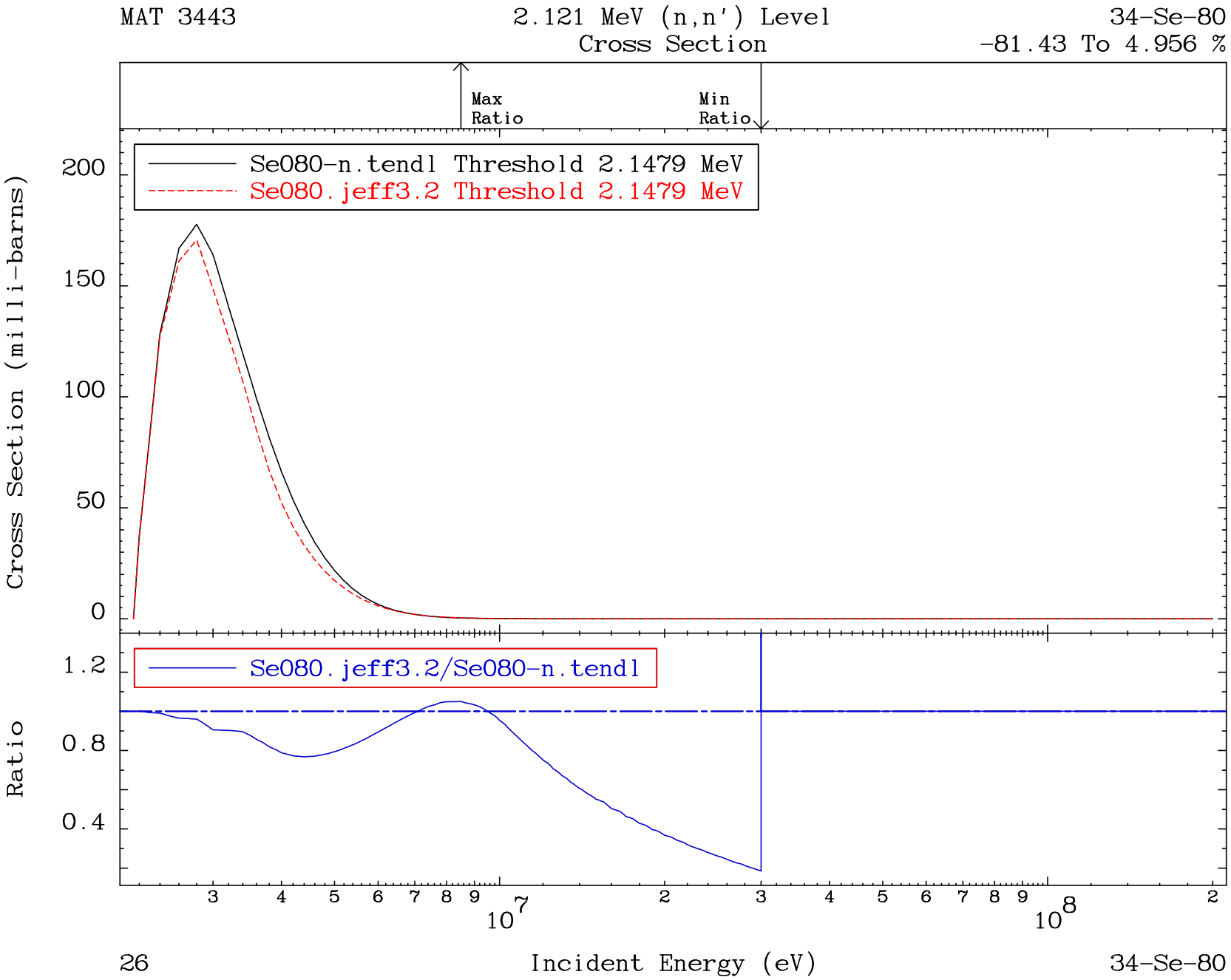

MAT 3443
1.449 MeV (n,n') Level
Cross Section
34-Se-80
-18.03 To 0.421 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 1.4676 MeV
Se080.jeff3.2 Threshold 1.4676 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.00
0.90
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
34-Se-80

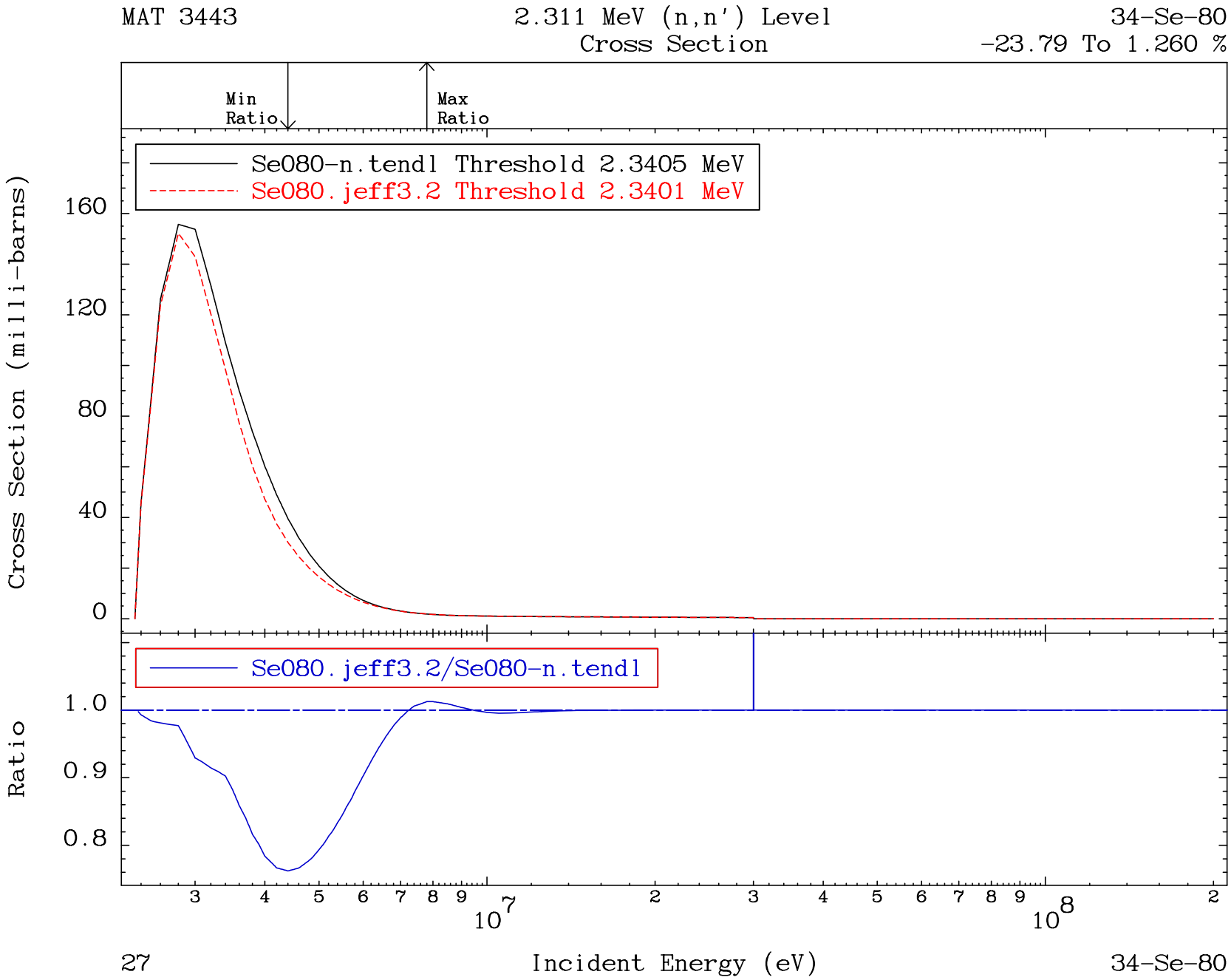

MAT 3443
1.479 MeV (n,n') Level
Cross Section
34-Se-80
-12.87 To 2.223 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 1.4975 MeV
Se080.jeff3.2 Threshold 1.4977 MeV
Cross Section (milli-barns)
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.05
1.00
0.95
0.90
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
34-Se-80

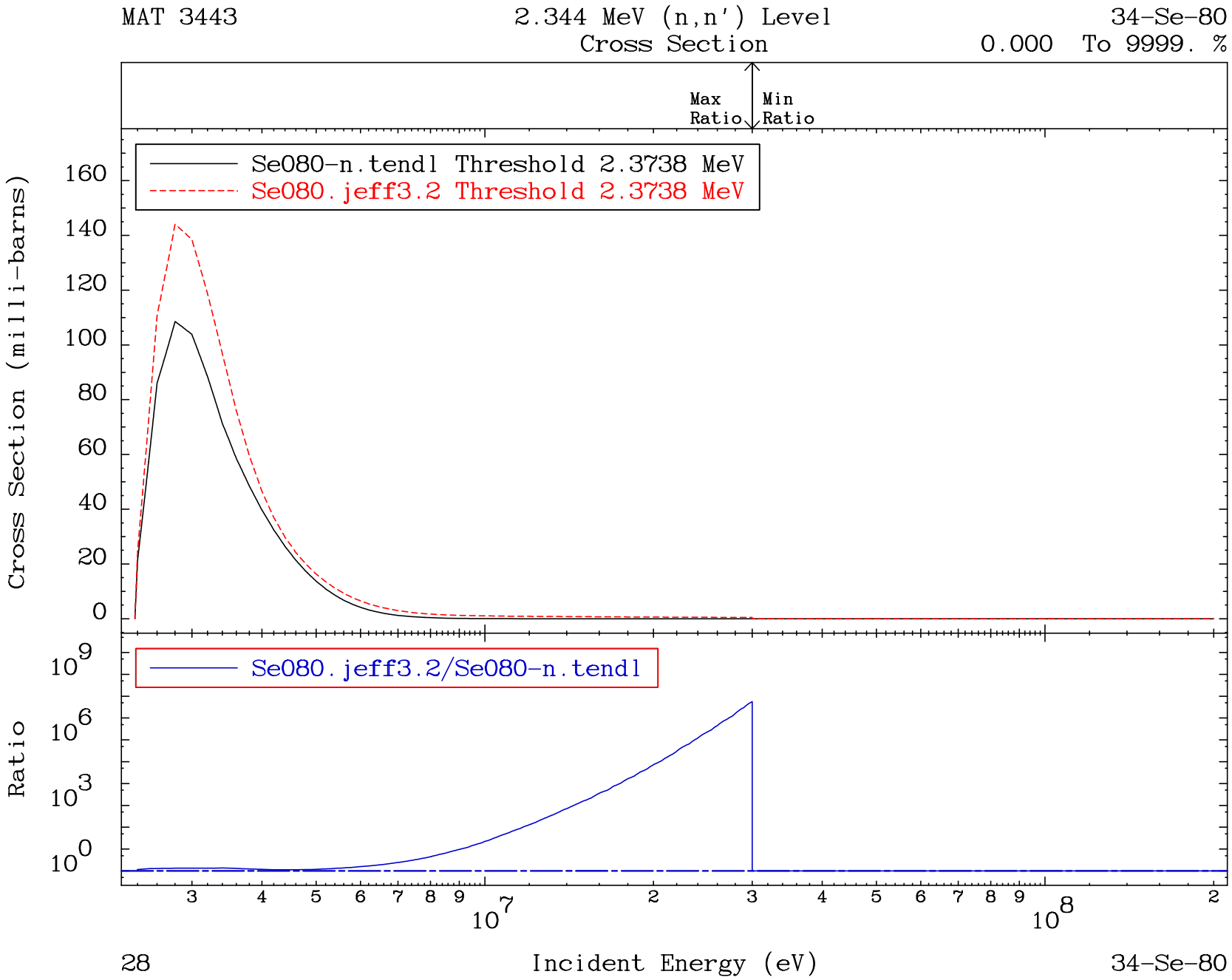

MAT 3443
1.701 MeV (n,n') Level
Cross Section
34-Se-80
-16.50 To 0.370 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 1.7229 MeV
Se080.jeff3.2 Threshold 1.7227 MeV
Cross Section (milli-barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.00
0.90
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
34-Se-80

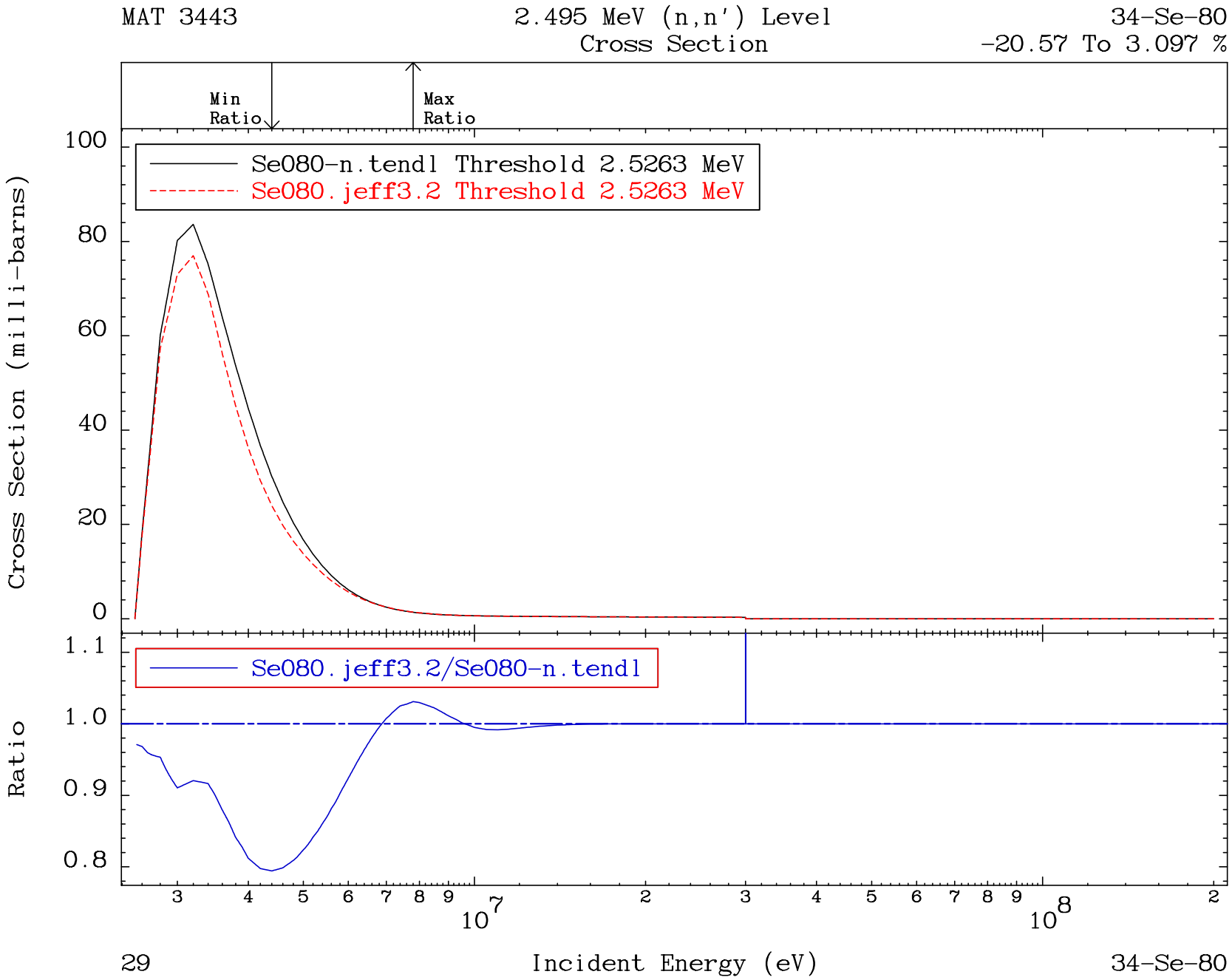

MAT 3443
1.873 MeV (n,n') Level
Cross Section
34-Se-80
-81.46 To 3.824 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 1.8971 MeV
Se080.jeff3.2 Threshold 1.8971 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
24
34-Se-80

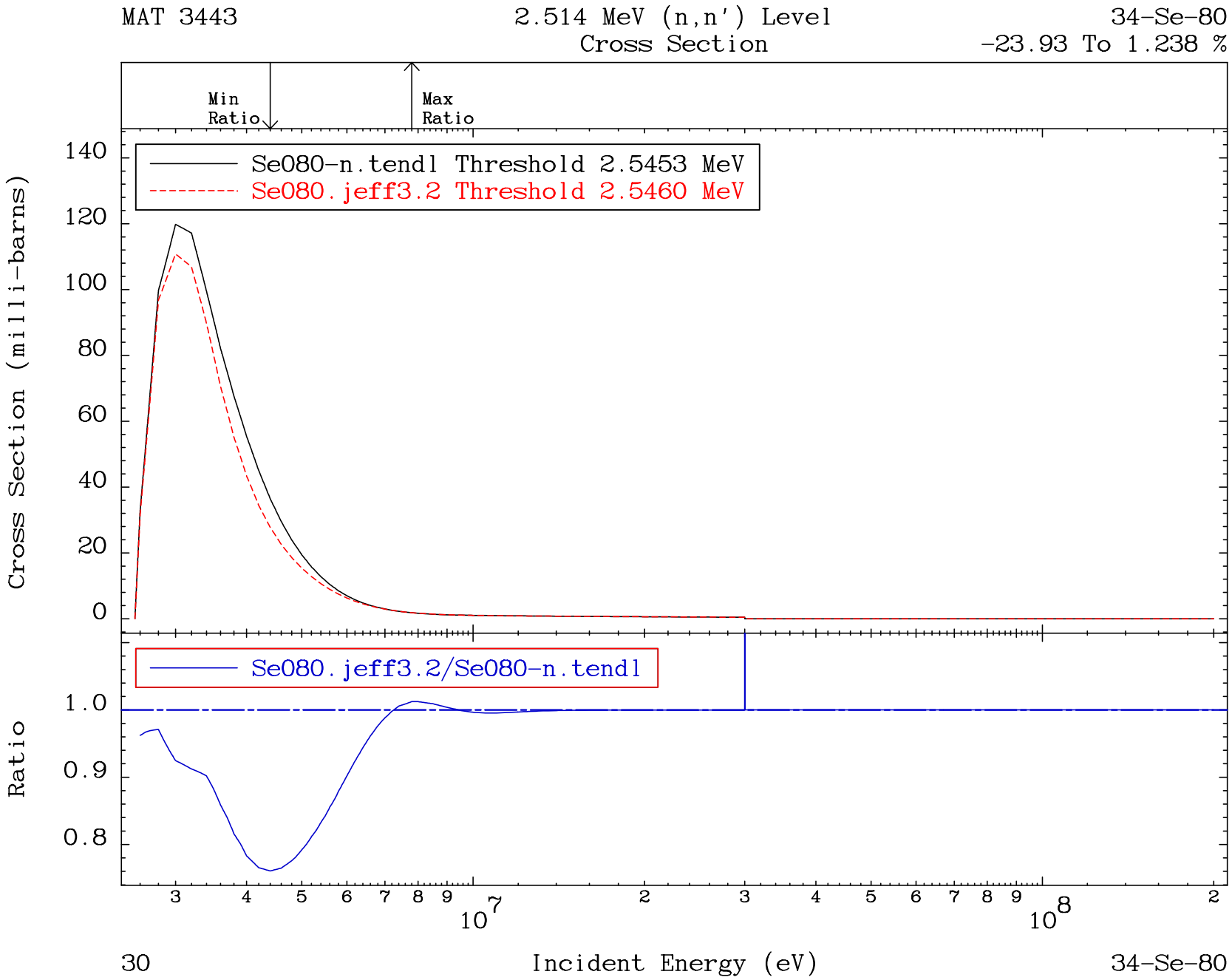

MAT 3443
1.960 MeV (n,n') Level
Cross Section
34-Se-80
-23.61 To 1.277 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 1.9846 MeV
Se080.jeff3.2 Threshold 1.9848 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
34-Se-80

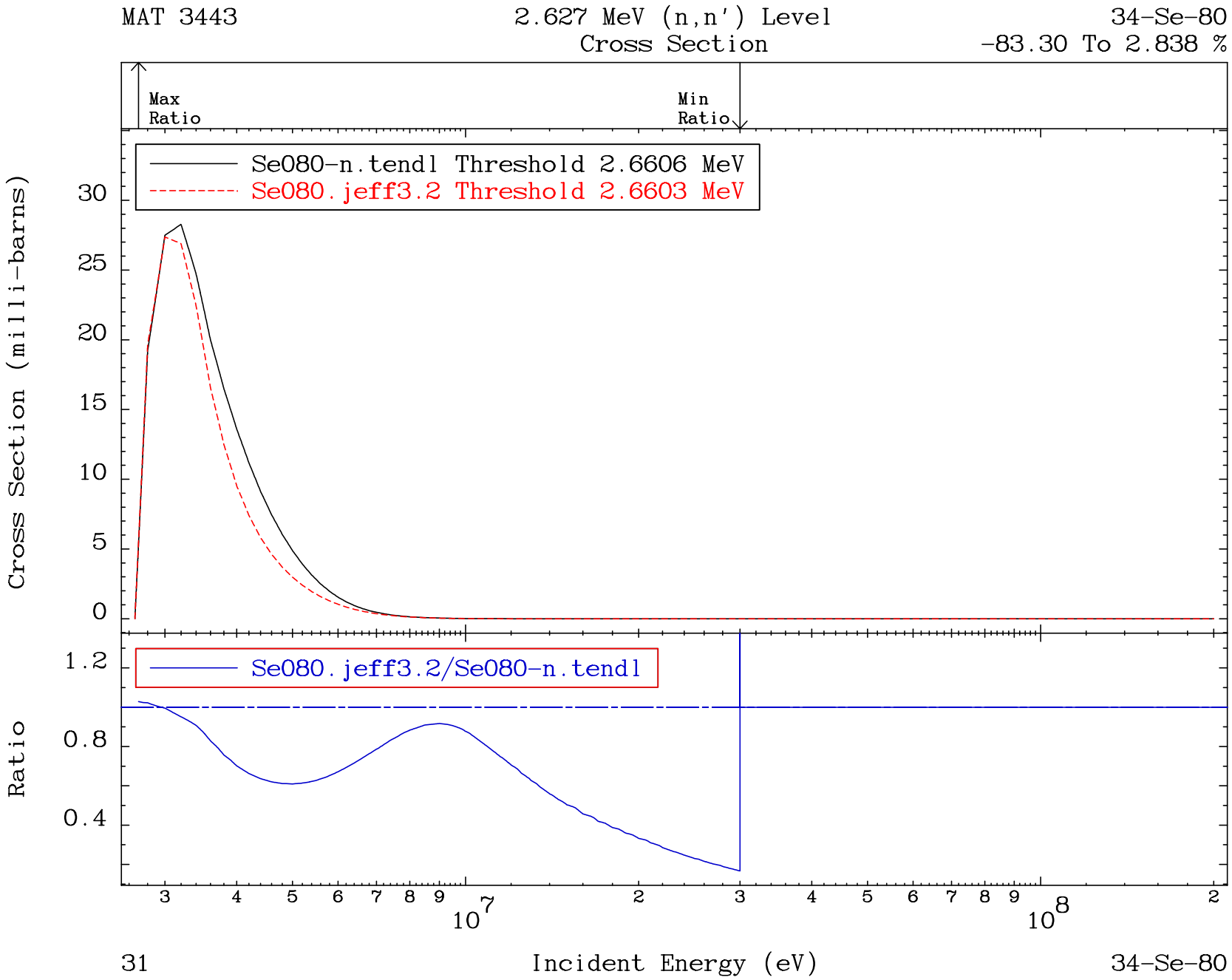

MAT 3443
2.121 MeV (n,n') Level
Cross Section
34-Se-80
-81.43 To 4.956 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.1479 MeV
Se080.jeff3.2 Threshold 2.1479 MeV
Cross Section (milli-barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
34-Se-80

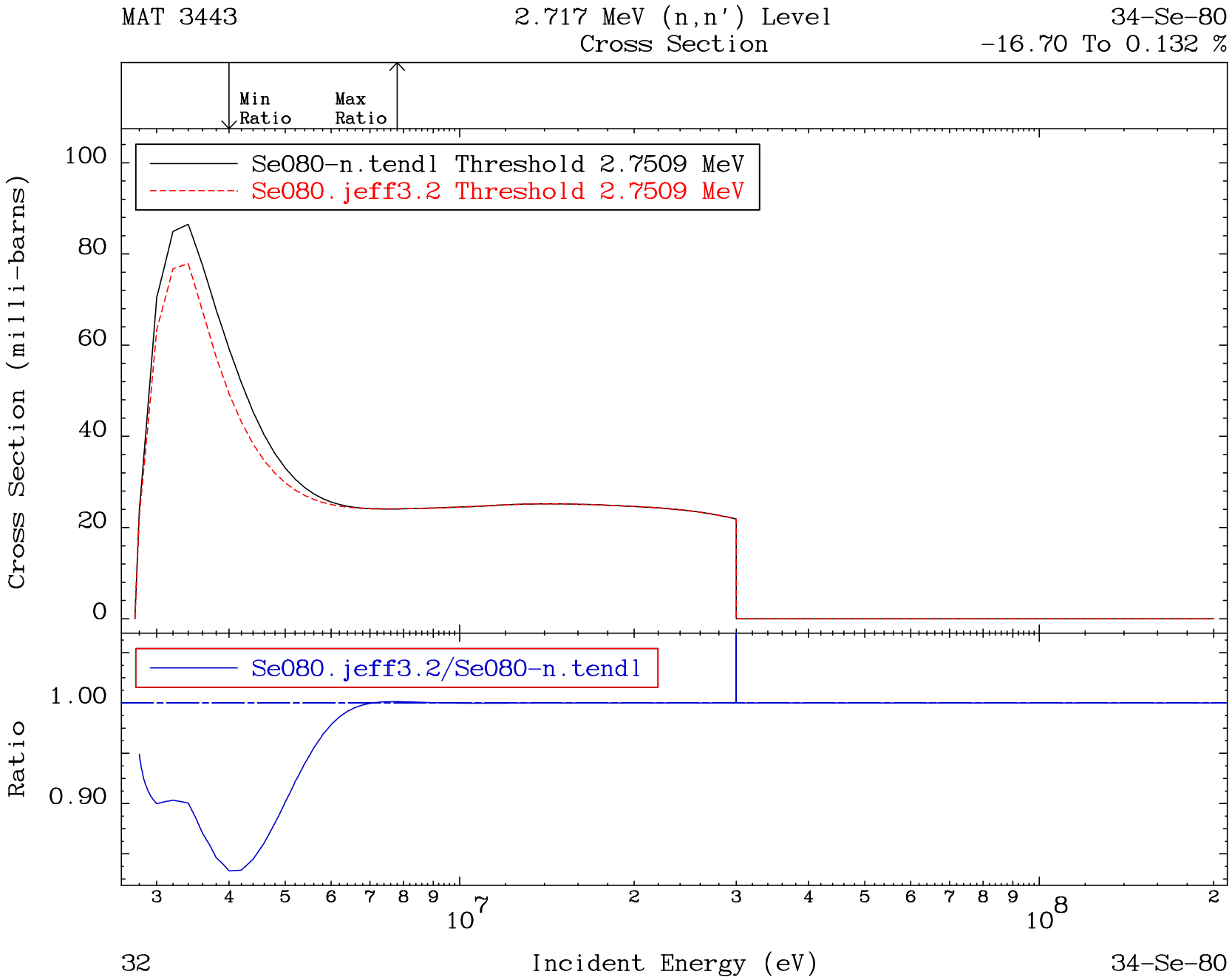

MAT 3443
2.311 MeV (n,n') Level
Cross Section
34-Se-80
-23.79 To 1.260 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.3405 MeV
Se080.jeff3.2 Threshold 2.3401 MeV
Cross Section (milli-barns)
160
120
80
40
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
34-Se-80

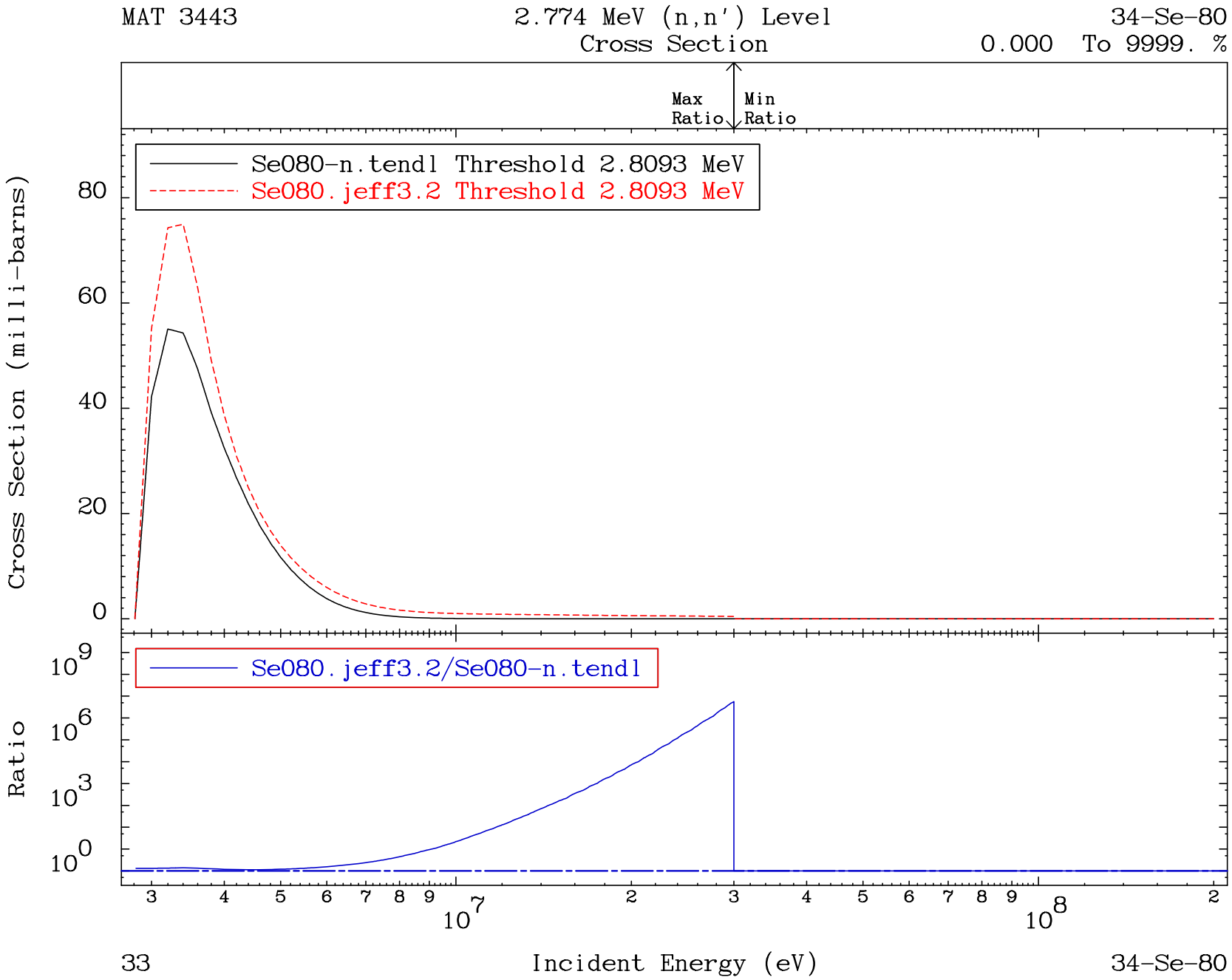

MAT 3443
2.344 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.3738 MeV
Se080.jeff3.2 Threshold 2.3738 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
34-Se-80

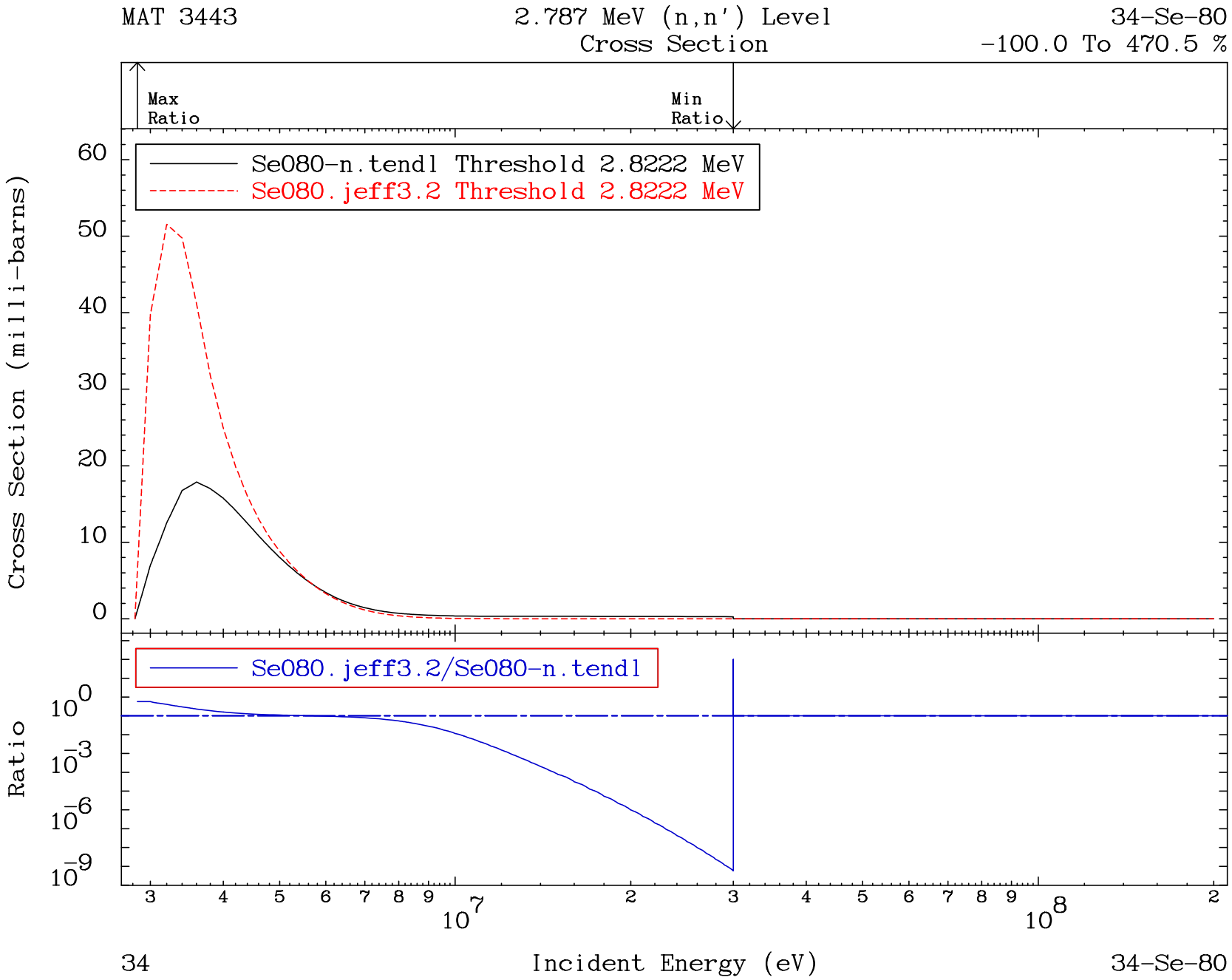

MAT 3443
2.495 MeV (n,n') Level
Cross Section
34-Se-80
-20.57 To 3.097 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.5263 MeV
Se080.jeff3.2 Threshold 2.5263 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.1
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
34-Se-80

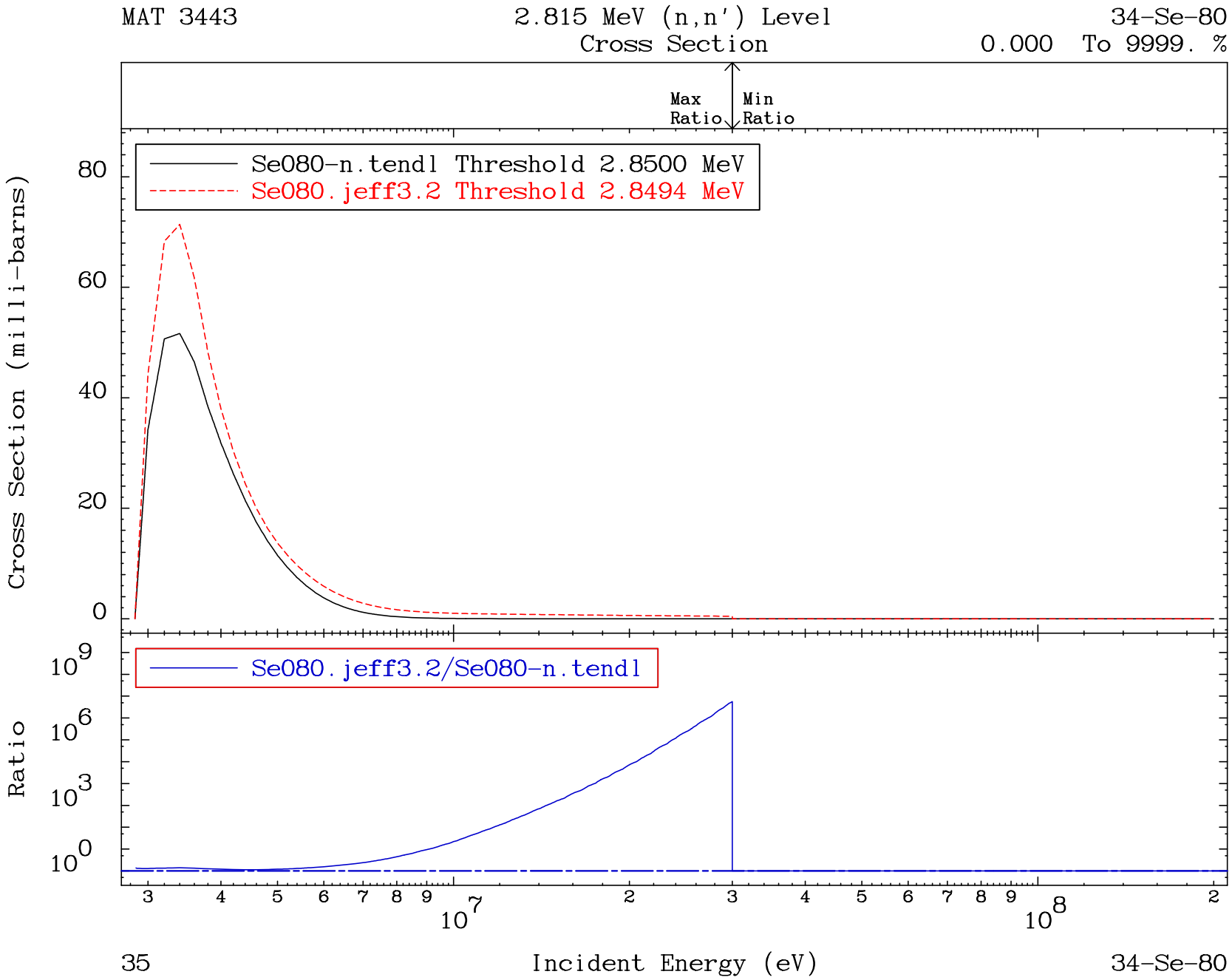

MAT 3443
2.514 MeV (n,n') Level
Cross Section
34-Se-80
-23.93 To 1.238 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.5453 MeV
Se080.jeff3.2 Threshold 2.5460 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
34-Se-80

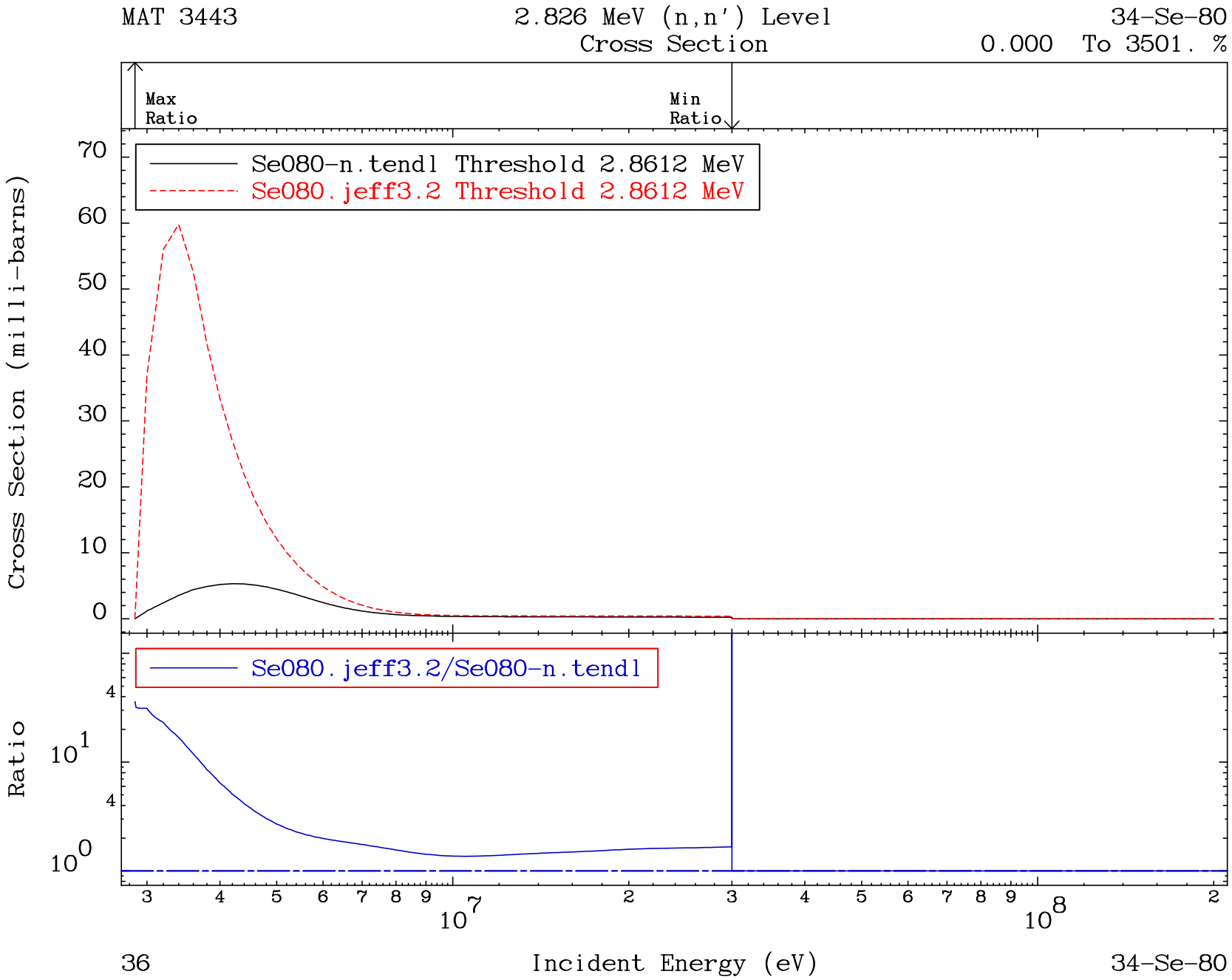

MAT 3443
2.627 MeV (n,n') Level
Cross Section
34-Se-80
-83.30 To 2.838 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.6606 MeV
Se080.jeff3.2 Threshold 2.6603 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
34-Se-80

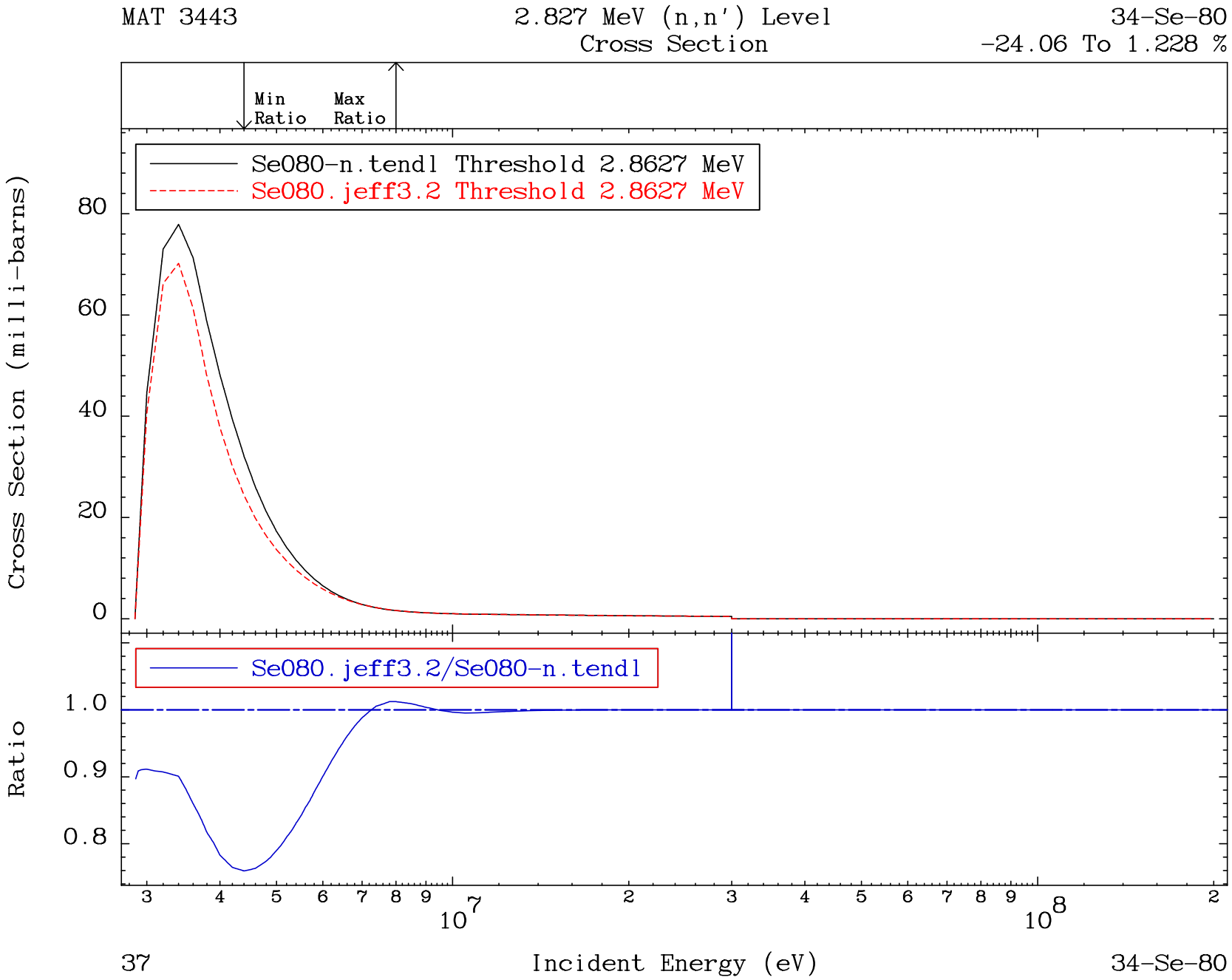

MAT 3443
2.717 MeV (n,n') Level
Cross Section
34-Se-80
-16.70 To 0.132 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.7509 MeV
Se080.jeff3.2 Threshold 2.7509 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.00
0.90
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
34-Se-80

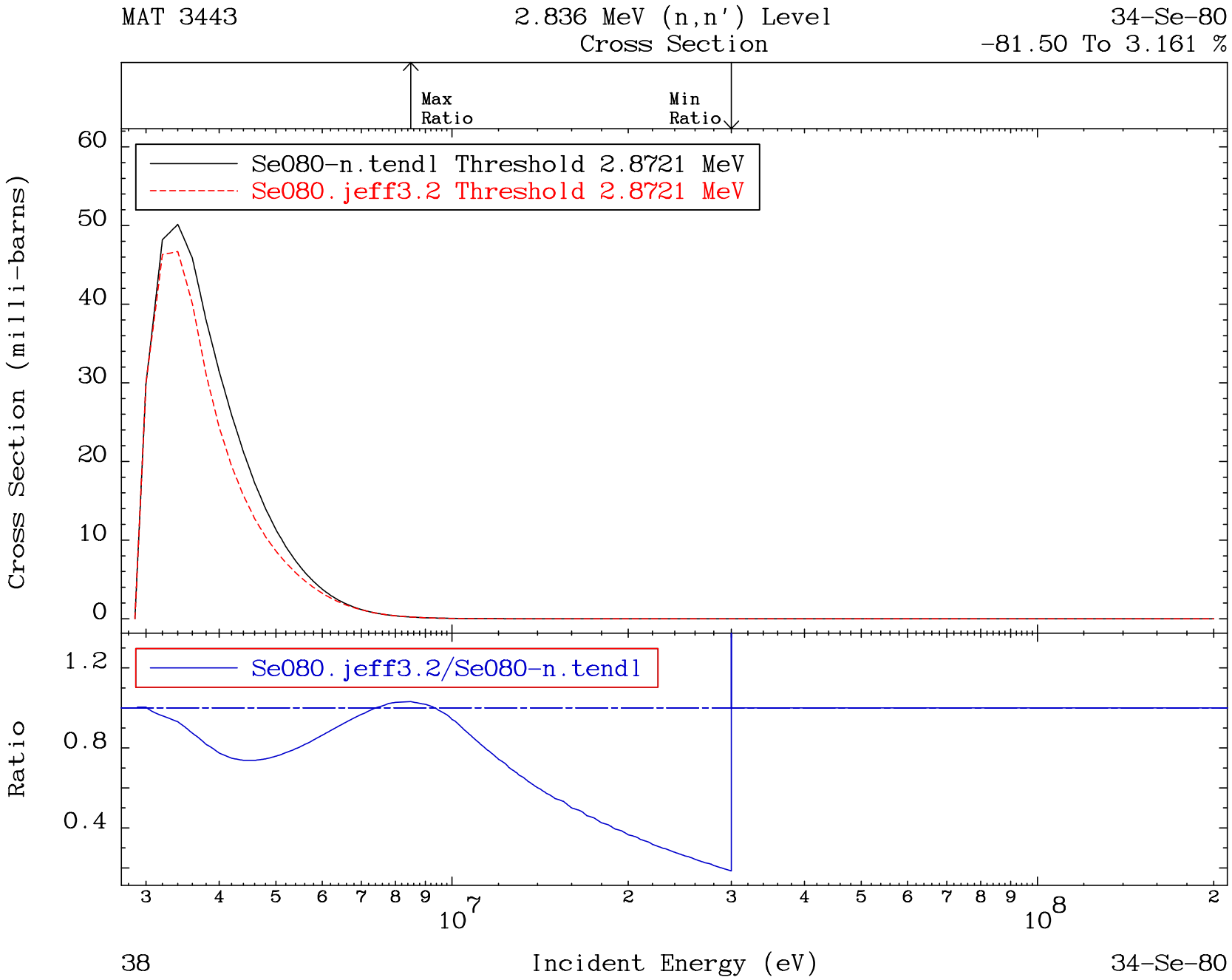

MAT 3443
2.774 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.8093 MeV
Se080.jeff3.2 Threshold 2.8093 MeV
Cross Section (milli-barns)
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
34-Se-80

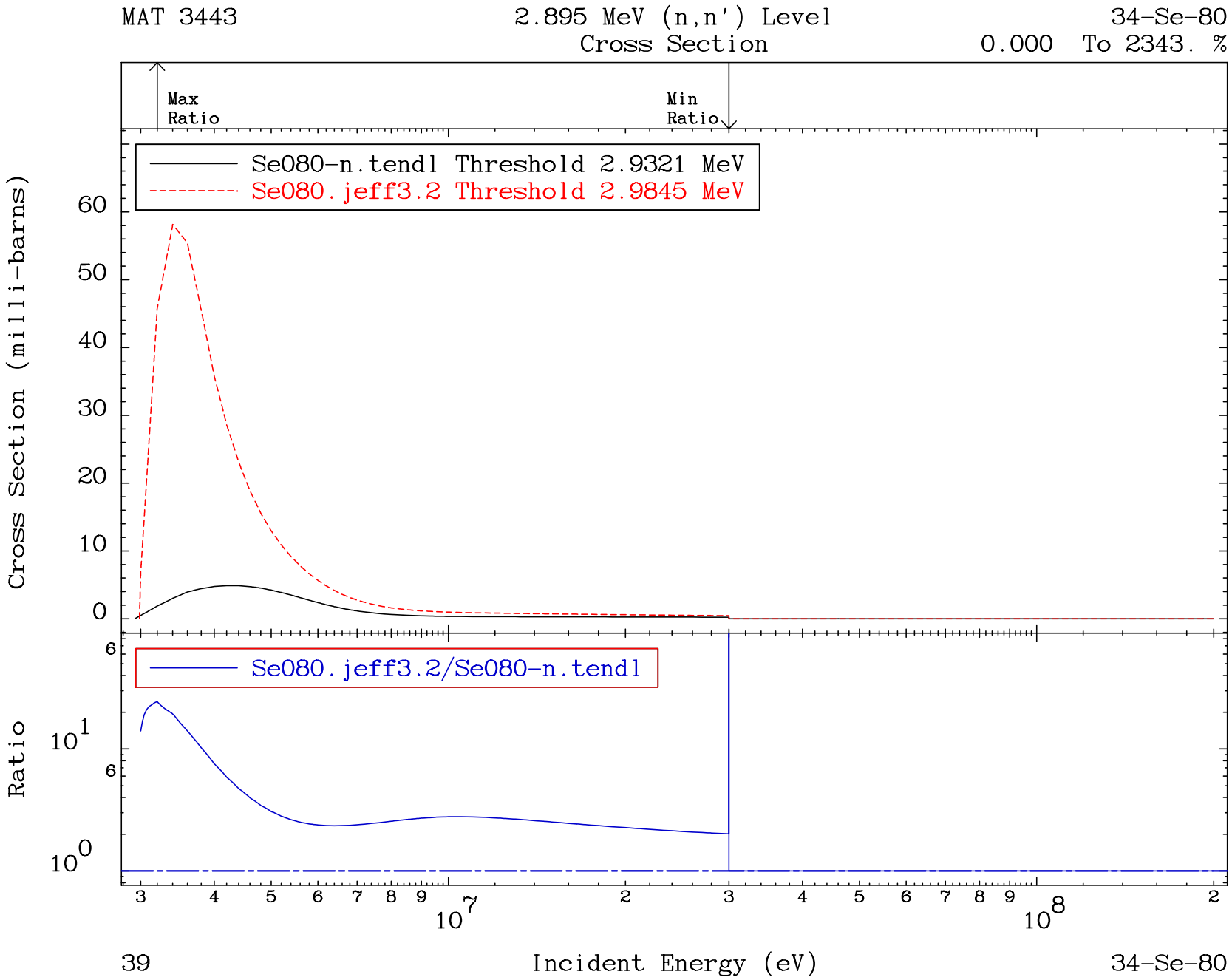

MAT 3443
2.787 MeV (n,n') Level
Cross Section
34-Se-80
-100.0 To 470.5 %
Max
Ratio
Min
Ratio
Se080-n.tendl Threshold 2.8222 MeV
Se080.jeff3.2 Threshold 2.8222 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^0
10^-3
10^-6
10^-9
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
34-Se-80

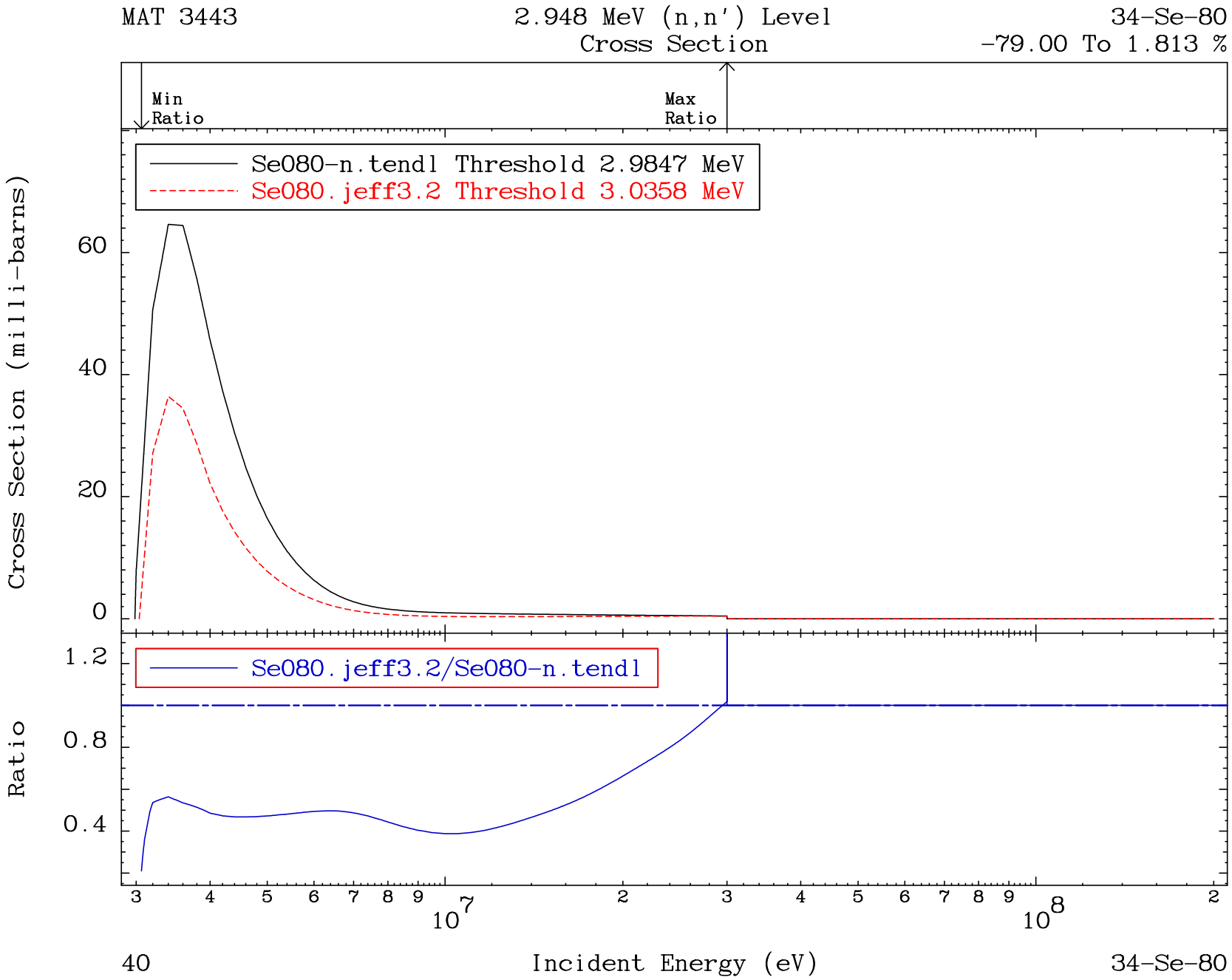

MAT 3443
2.815 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.8500 MeV
Se080.jeff3.2 Threshold 2.8494 MeV
Cross Section (milli-barns)
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
34-Se-80

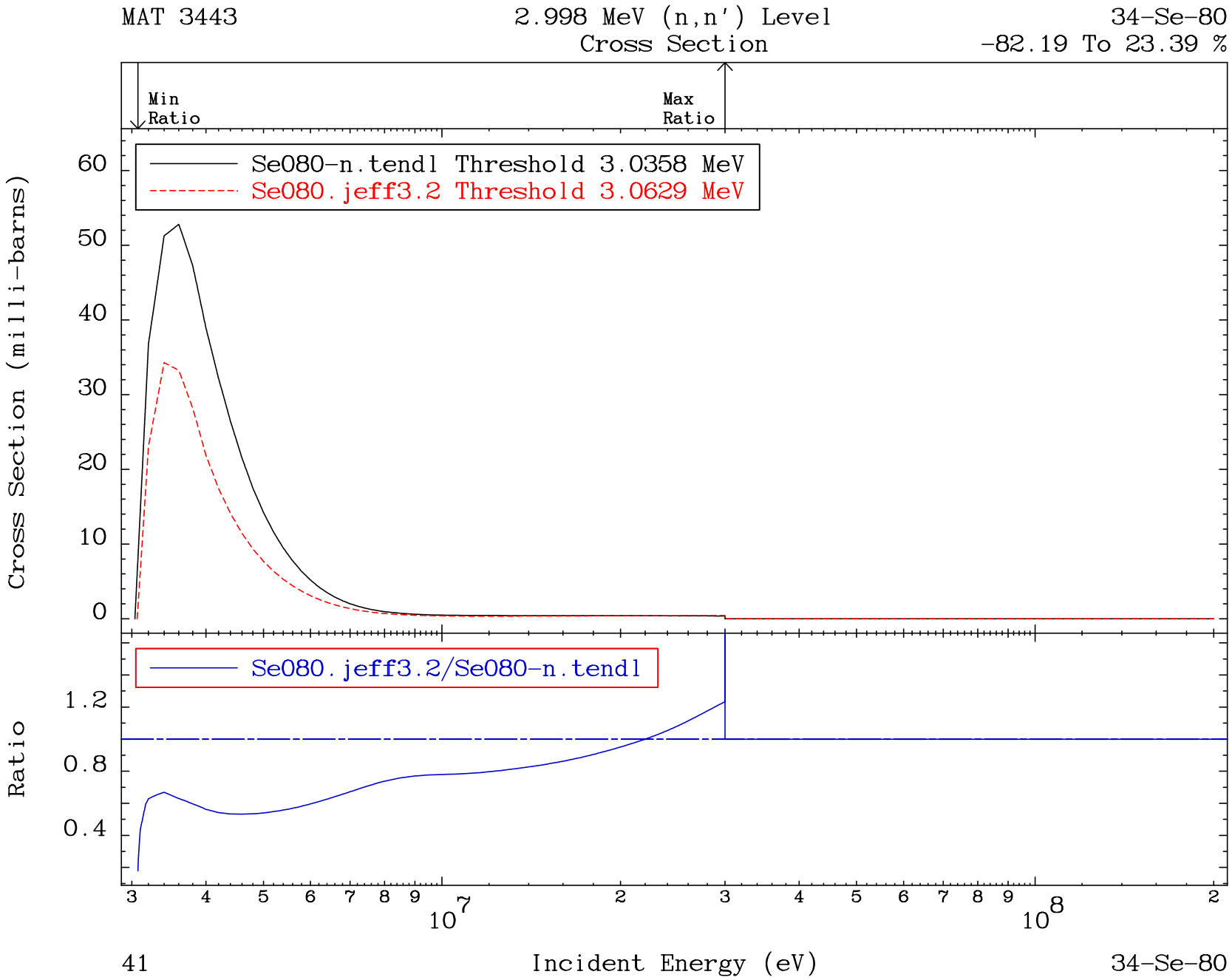

MAT 3443
2.826 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 3501. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.8612 MeV
Se080.jeff3.2 Threshold 2.8612 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
36
34-Se-80

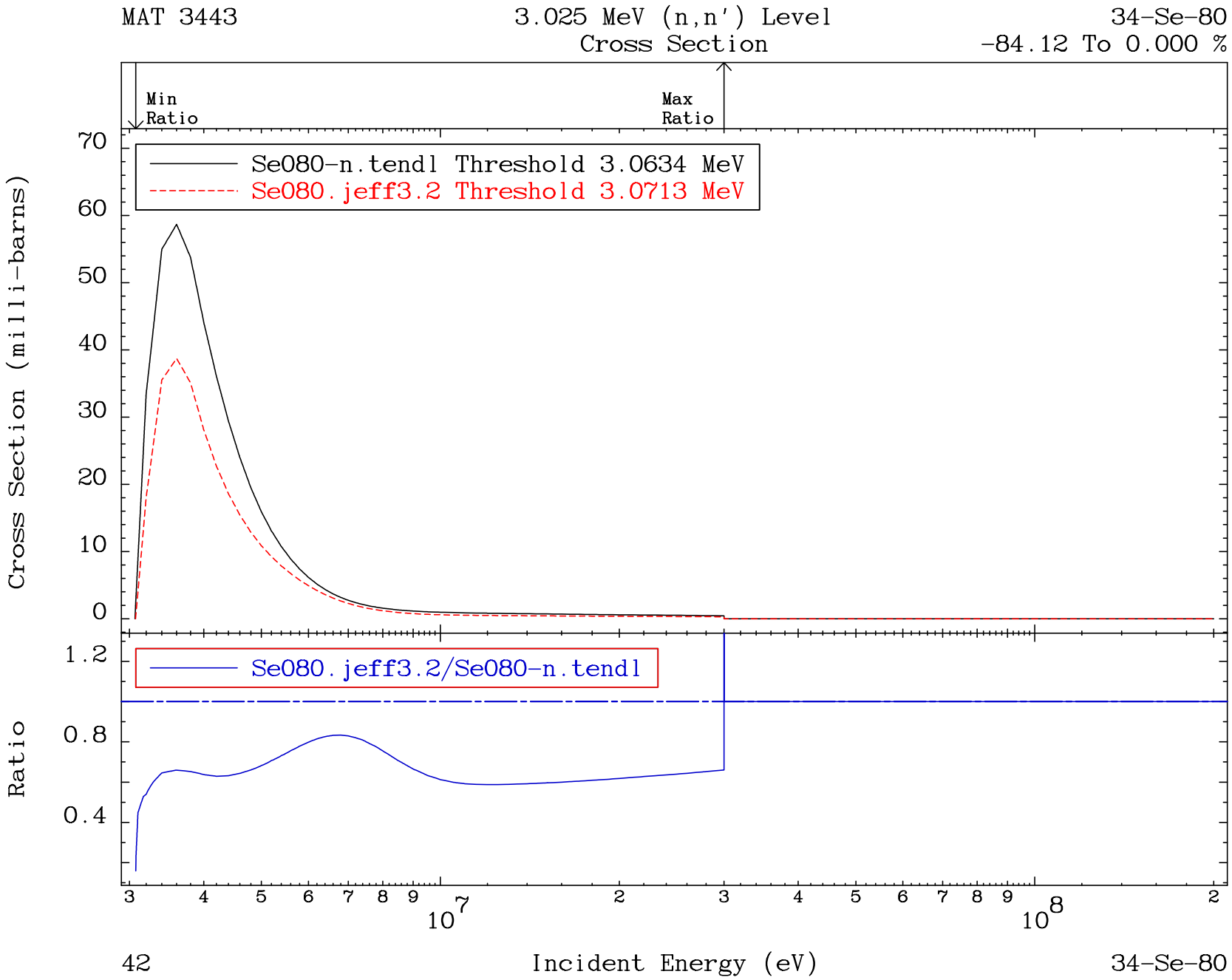

MAT 3443
2.827 MeV (n,n') Level
Cross Section
34-Se-80
-24.06 To 1.228 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.8627 MeV
Se080.jeff3.2 Threshold 2.8627 MeV
Cross Section (milli-barns)
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
34-Se-80

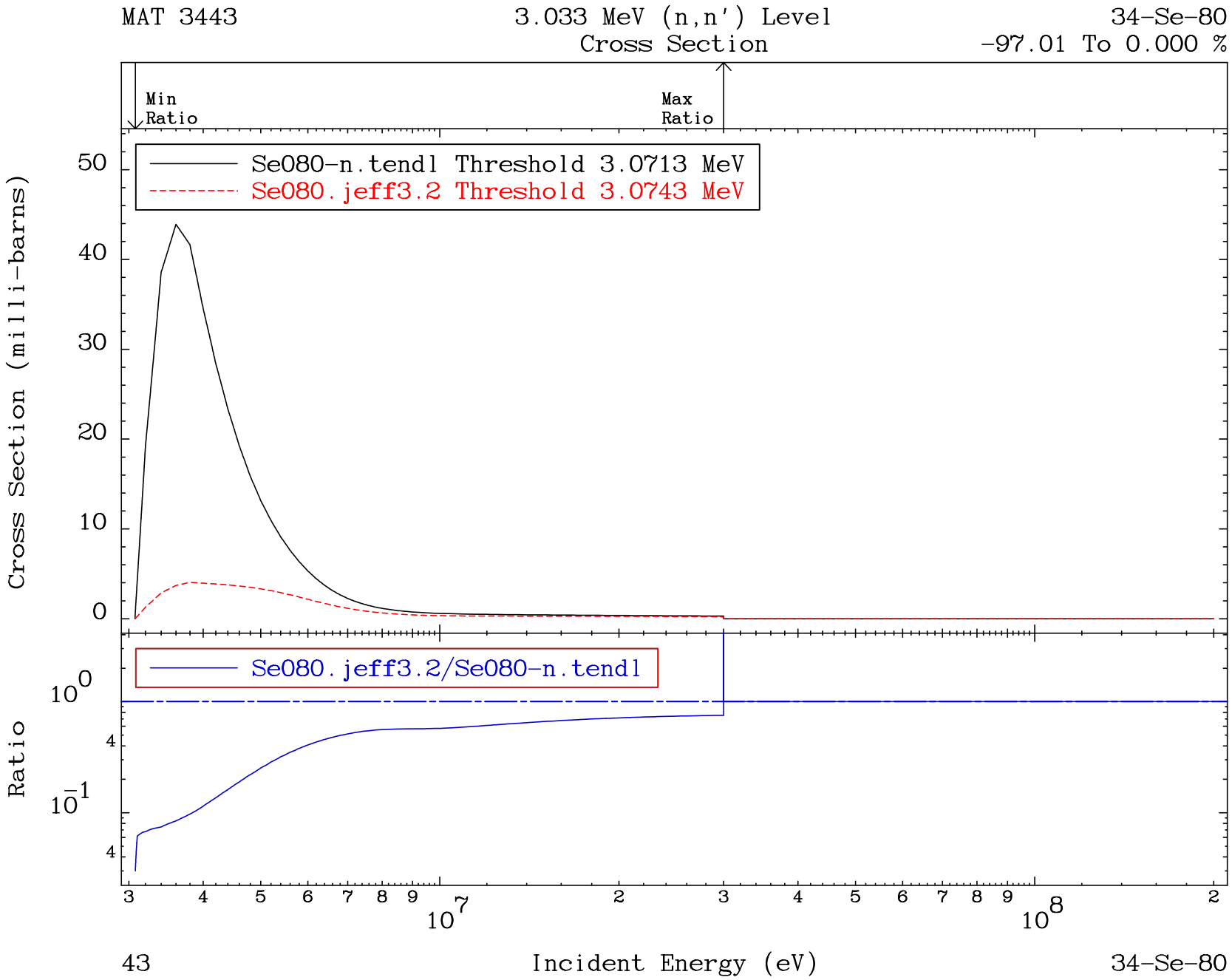

MAT 3443
2.836 MeV (n,n') Level
Cross Section
34-Se-80
-81.50 To 3.161 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.8721 MeV
Se080.jeff3.2 Threshold 2.8721 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
34-Se-80

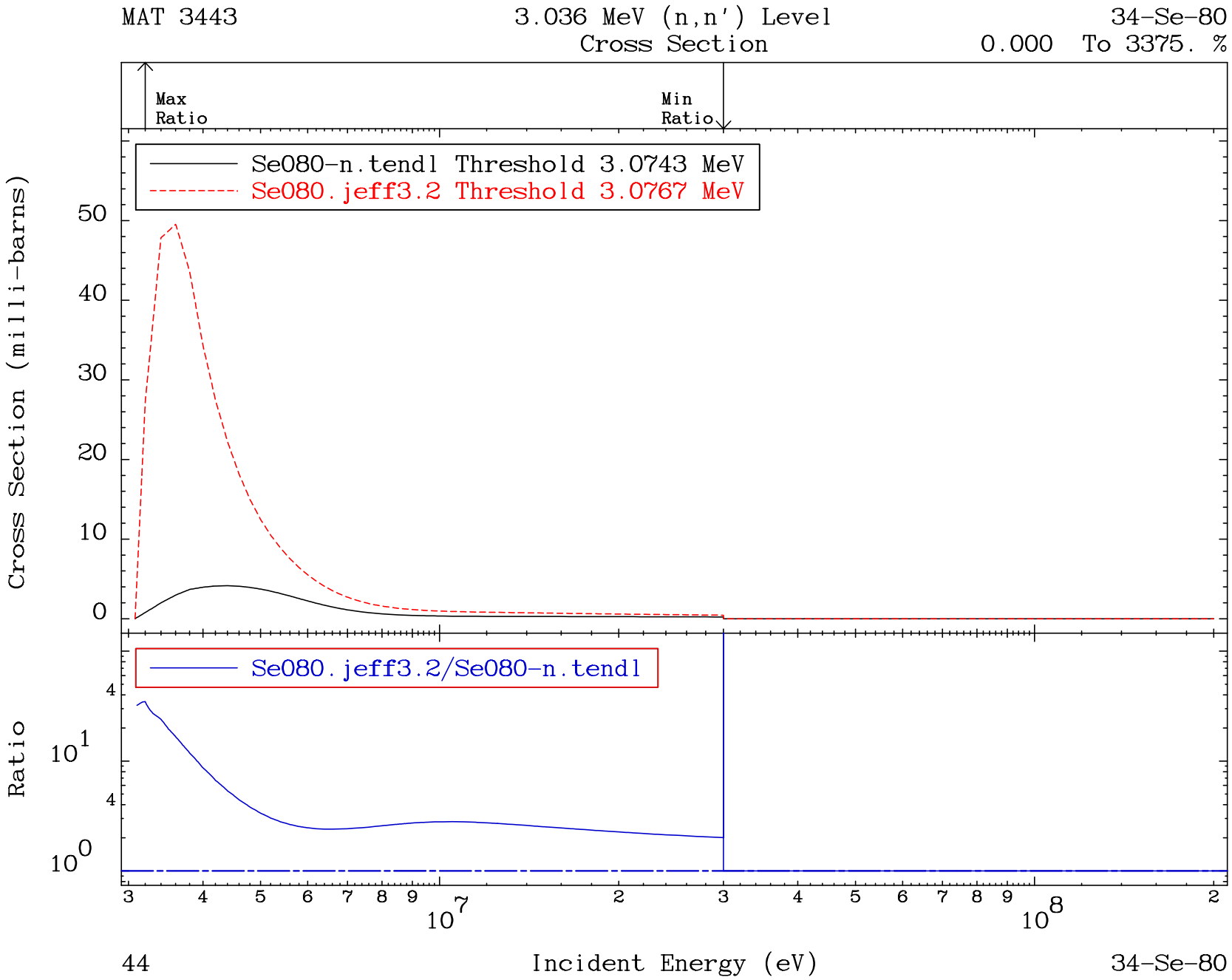

MAT 3443
2.895 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 2343. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 2.9321 MeV
Se080.jeff3.2 Threshold 2.9845 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
6
10^1
6
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
34-Se-80

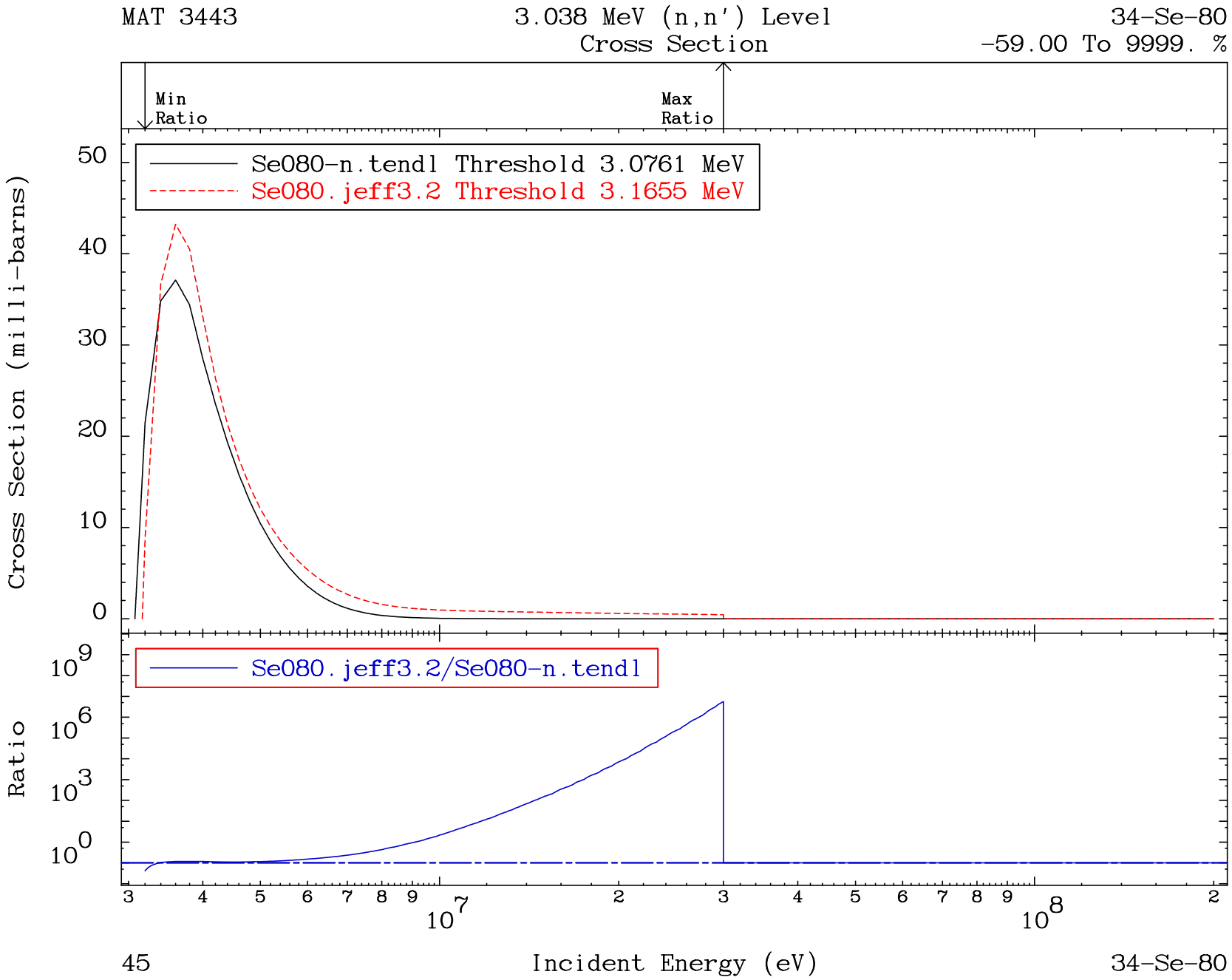

MAT 3443
2.948 MeV (n,n') Level
Cross Section
34-Se-80
-79.00 To 1.813 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.9847 MeV
Se080.jeff3.2 Threshold 3.0358 MeV
Cross Section (milli-barns)
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
1.2
0.8
0.4
Ratio
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
34-Se-80

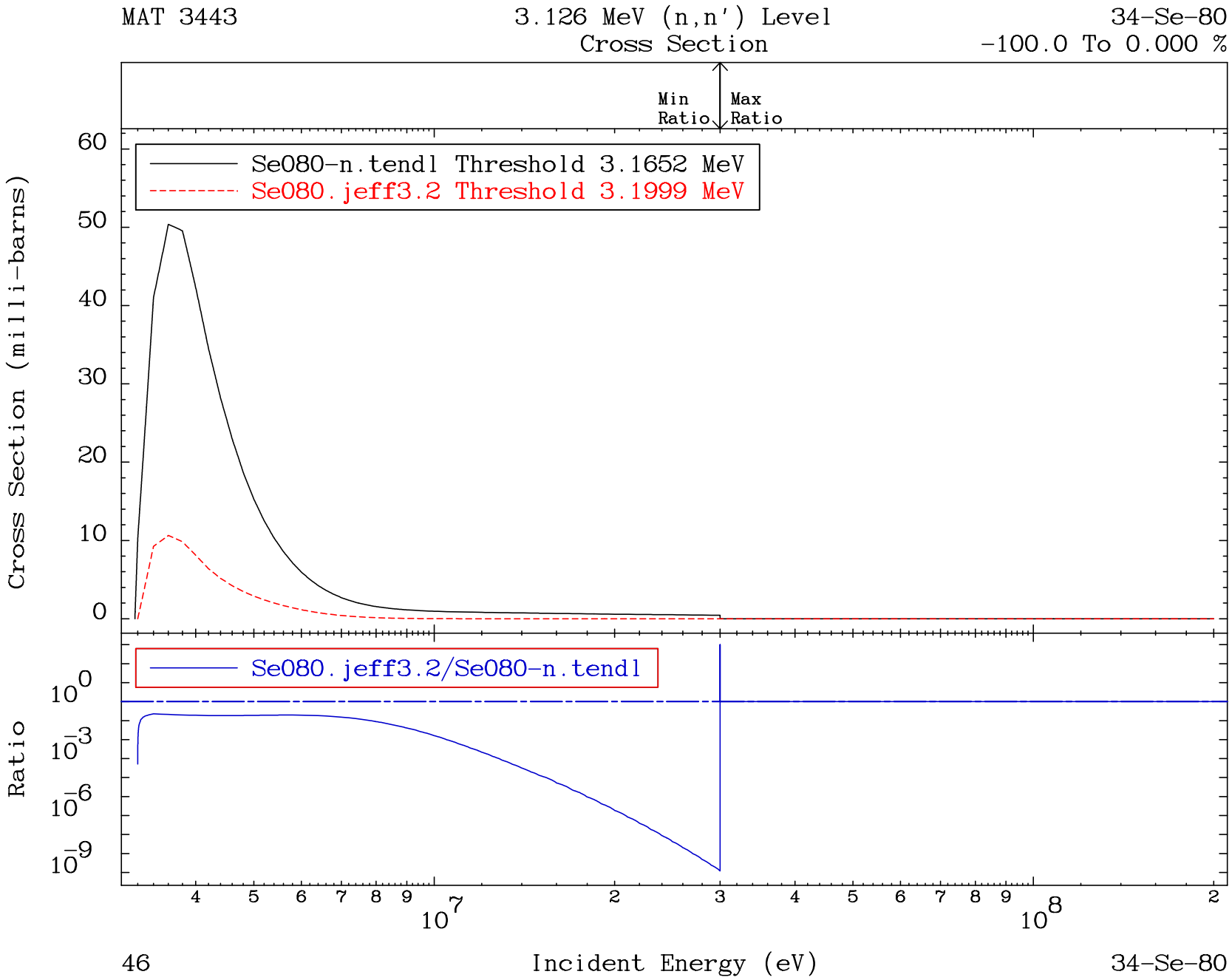

MAT 3443
2.998 MeV (n,n') Level
Cross Section
34-Se-80
-82.19 To 23.39 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 3.0358 MeV
Se080.jeff3.2 Threshold 3.0629 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
34-Se-80

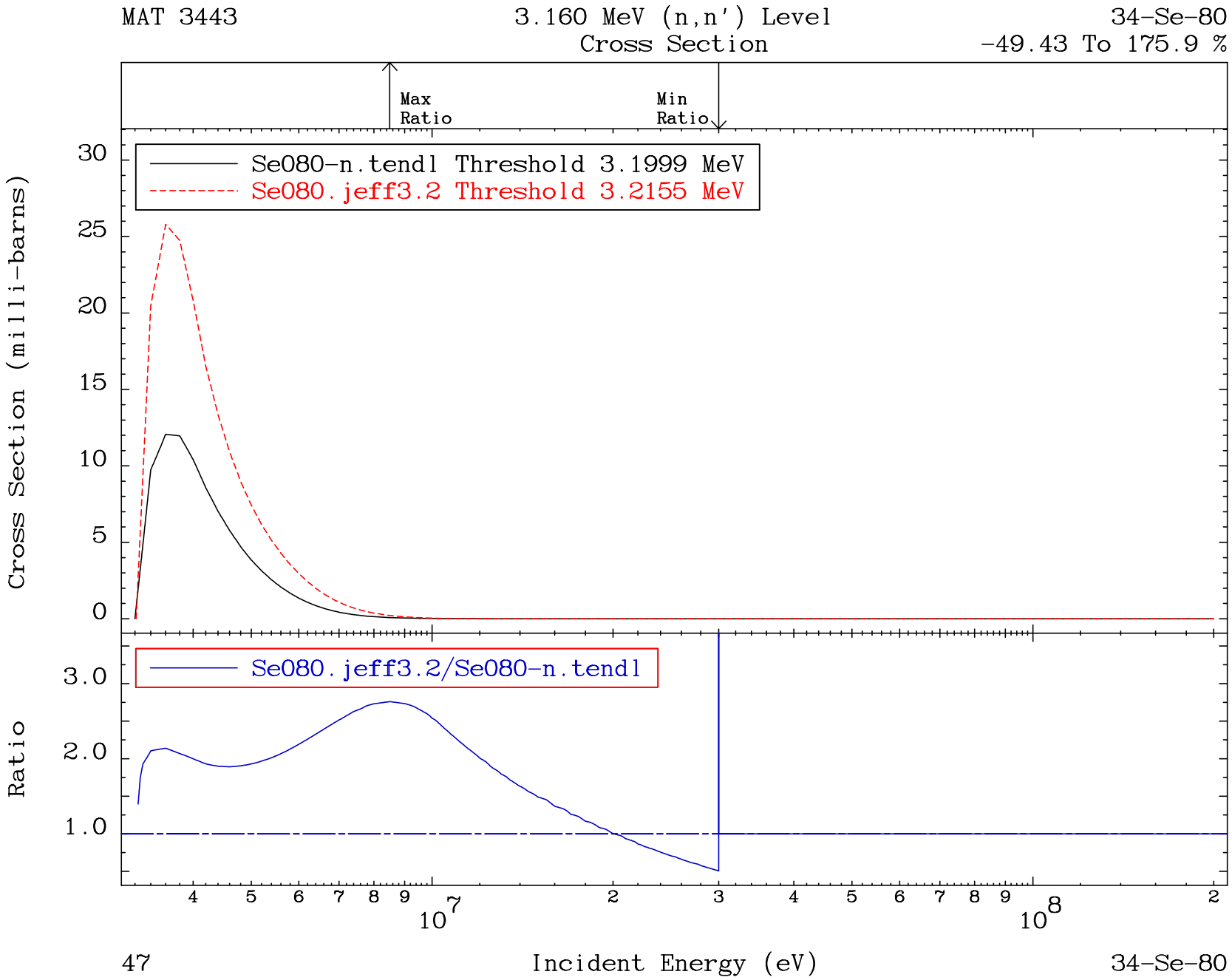

MAT 3443
3.025 MeV (n,n') Level
Cross Section
34-Se-80
-84.12 To 0.000 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 3.0634 MeV
Se080.jeff3.2 Threshold 3.0713 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
34-Se-80

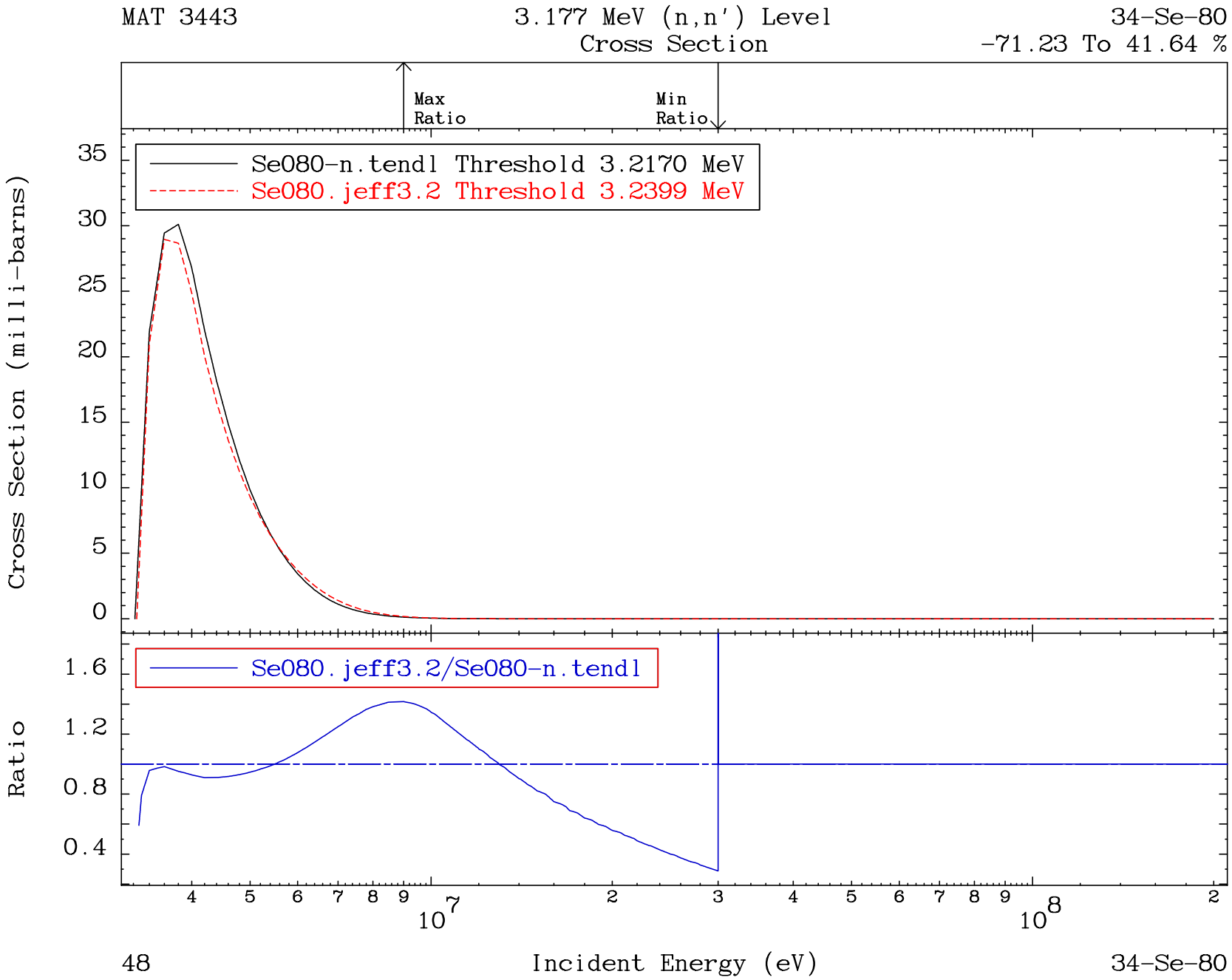

MAT 3443
3.033 MeV (n,n') Level
Cross Section
34-Se-80
-97.01 To 0.000 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 3.0713 MeV
Se080.jeff3.2 Threshold 3.0743 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^0
4
10^-1
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
34-Se-80

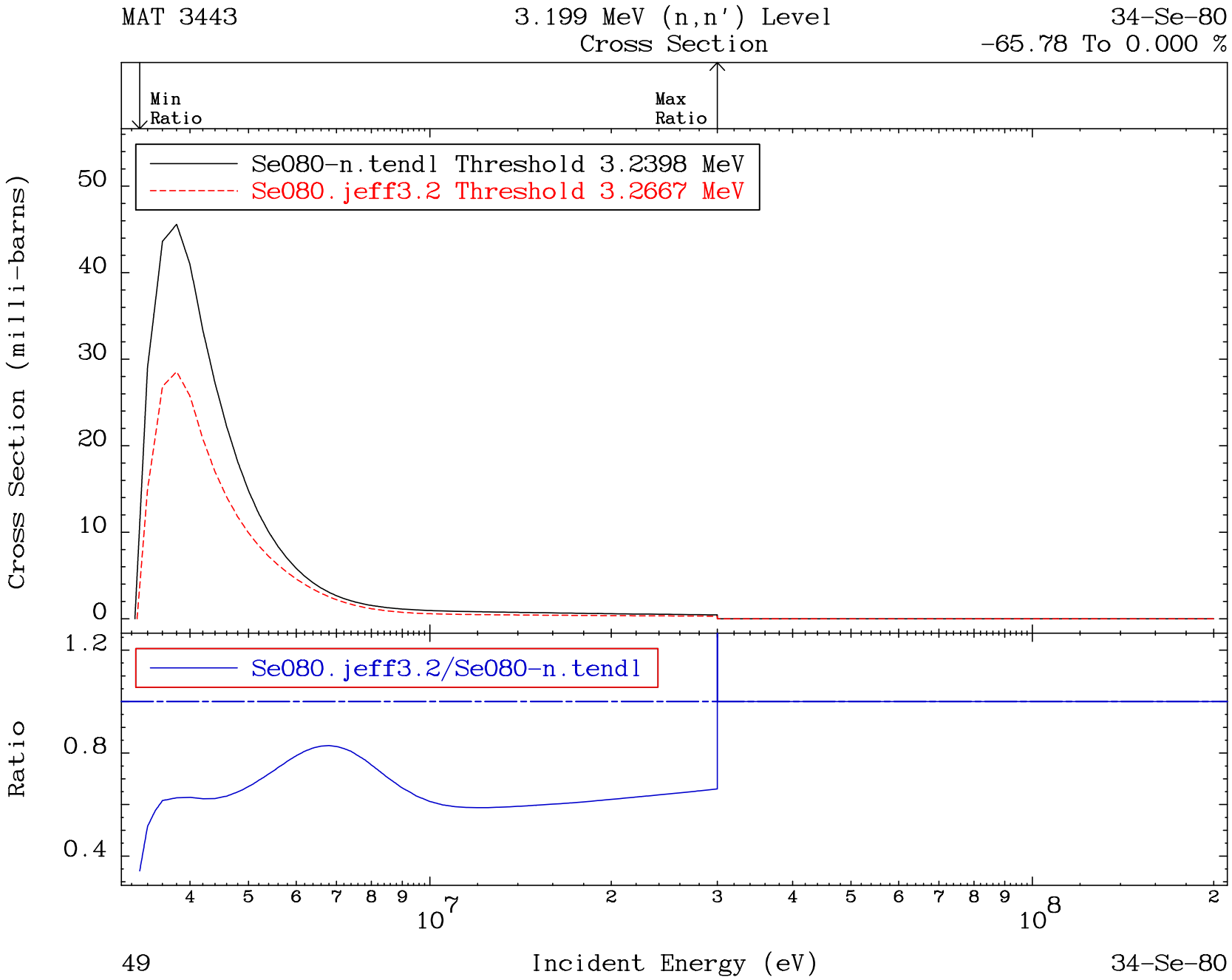

MAT 3443
3.036 MeV (n,n') Level
Cross Section
34-Se-80
0.000 To 3375. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 3.0743 MeV
Se080.jeff3.2 Threshold 3.0767 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^1
4
10^0
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
34-Se-80

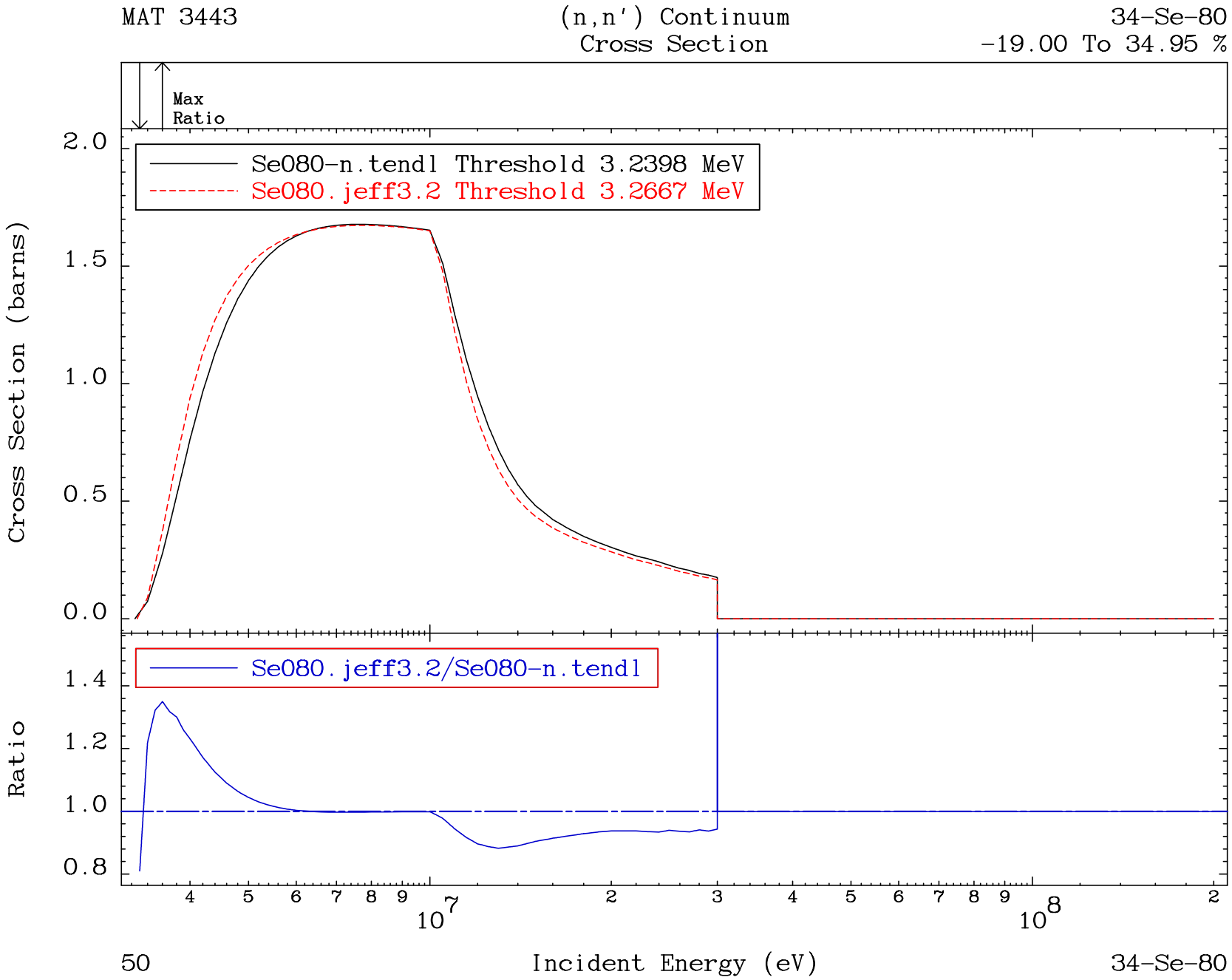

MAT 3443
3.038 MeV (n,n') Level
Cross Section
34-Se-80
-59.00 To 9999. %
Min
Ratio
Max
Ratio
Se080-n.tendl Threshold 3.0761 MeV
Se080.jeff3.2 Threshold 3.1655 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
45
Incident Energy (eV)
34-Se-80

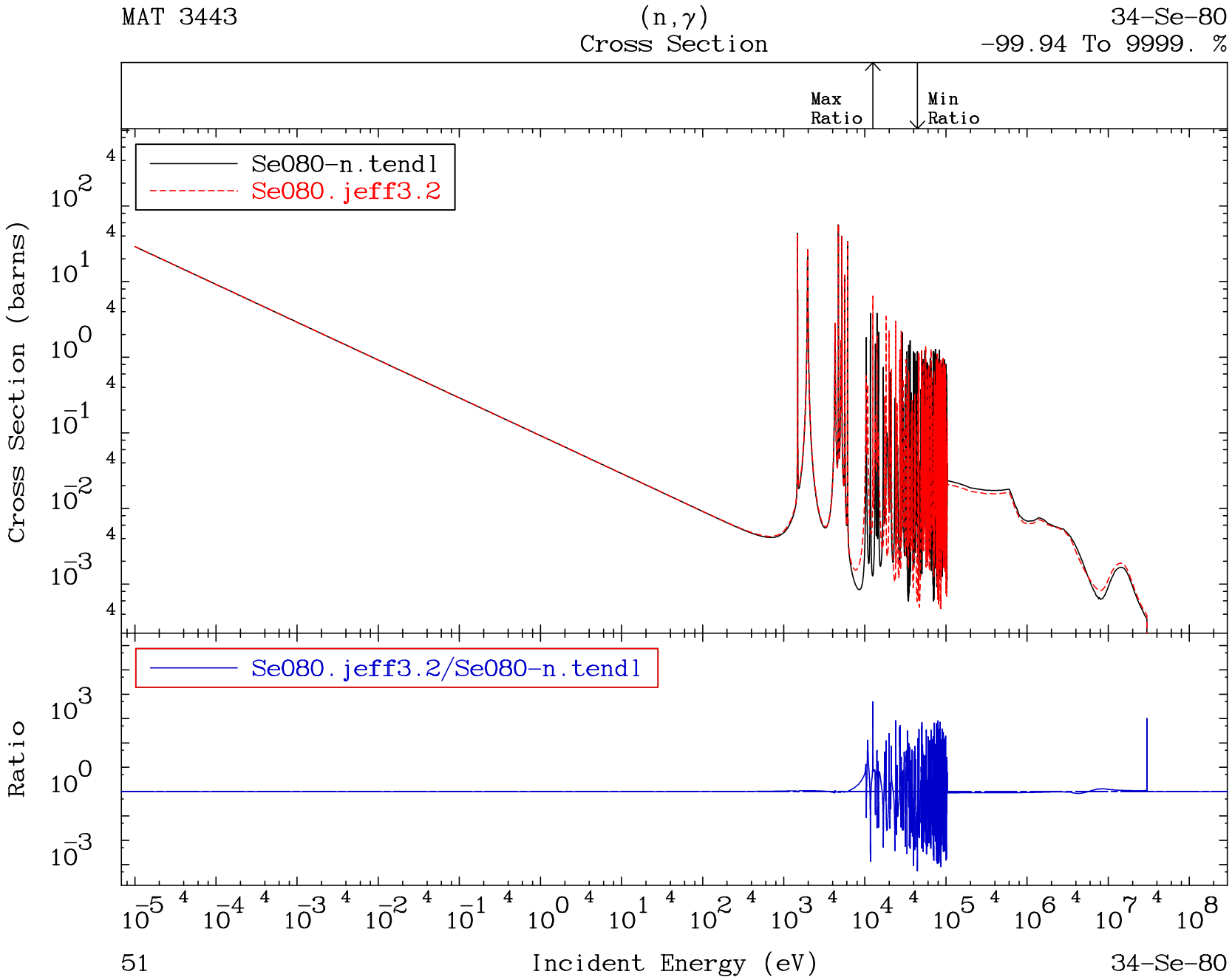

MAT 3443
3.126 MeV (n,n') Level
Cross Section
34-Se-80
-100.0 To 0.000 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 3.1652 MeV
Se080.jeff3.2 Threshold 3.1999 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
46
34-Se-80

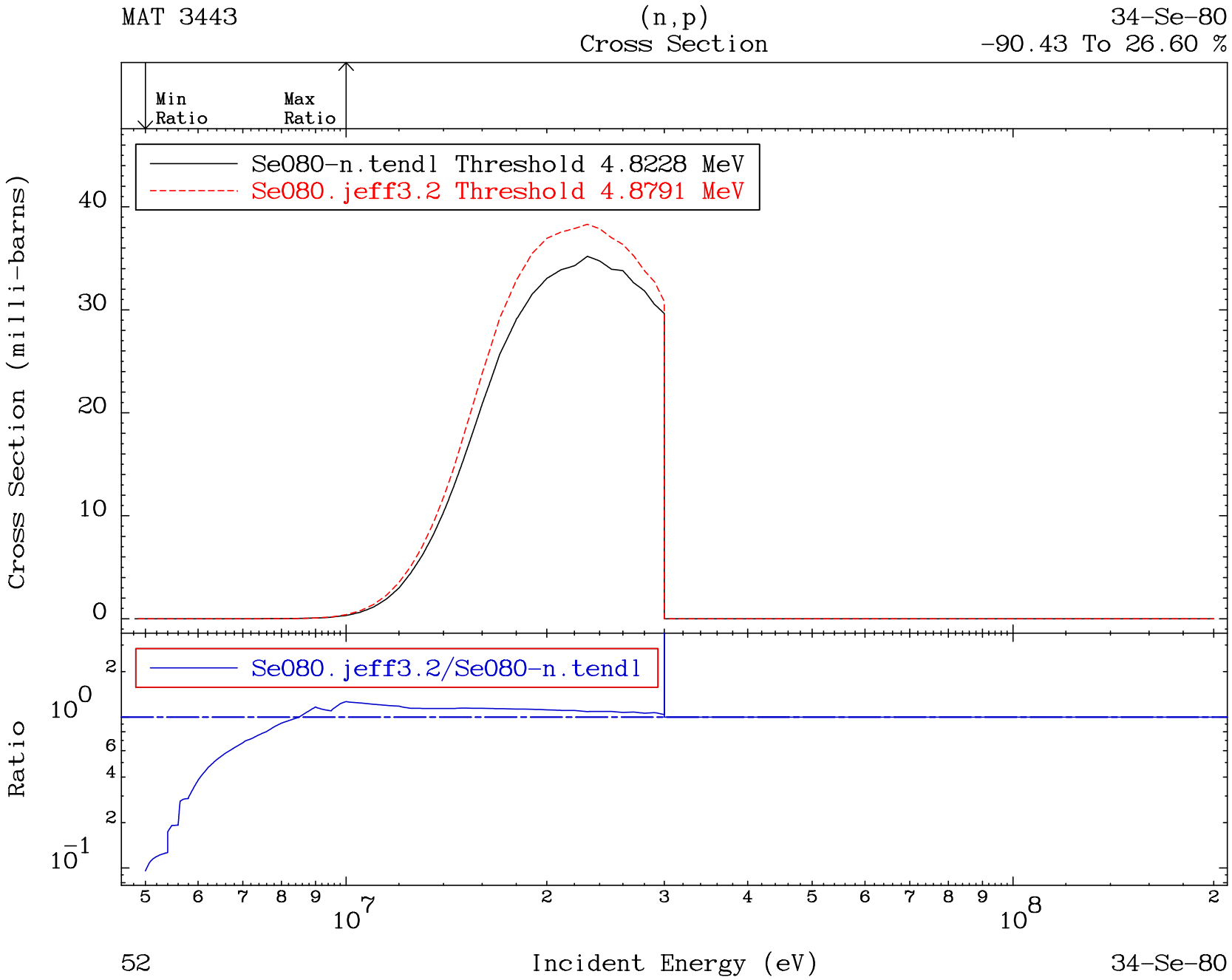

MAT 3443
3.160 MeV (n,n') Level
Cross Section
34-Se-80
-49.43 To 175.9 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 3.1999 MeV
Se080.jeff3.2 Threshold 3.2155 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
34-Se-80

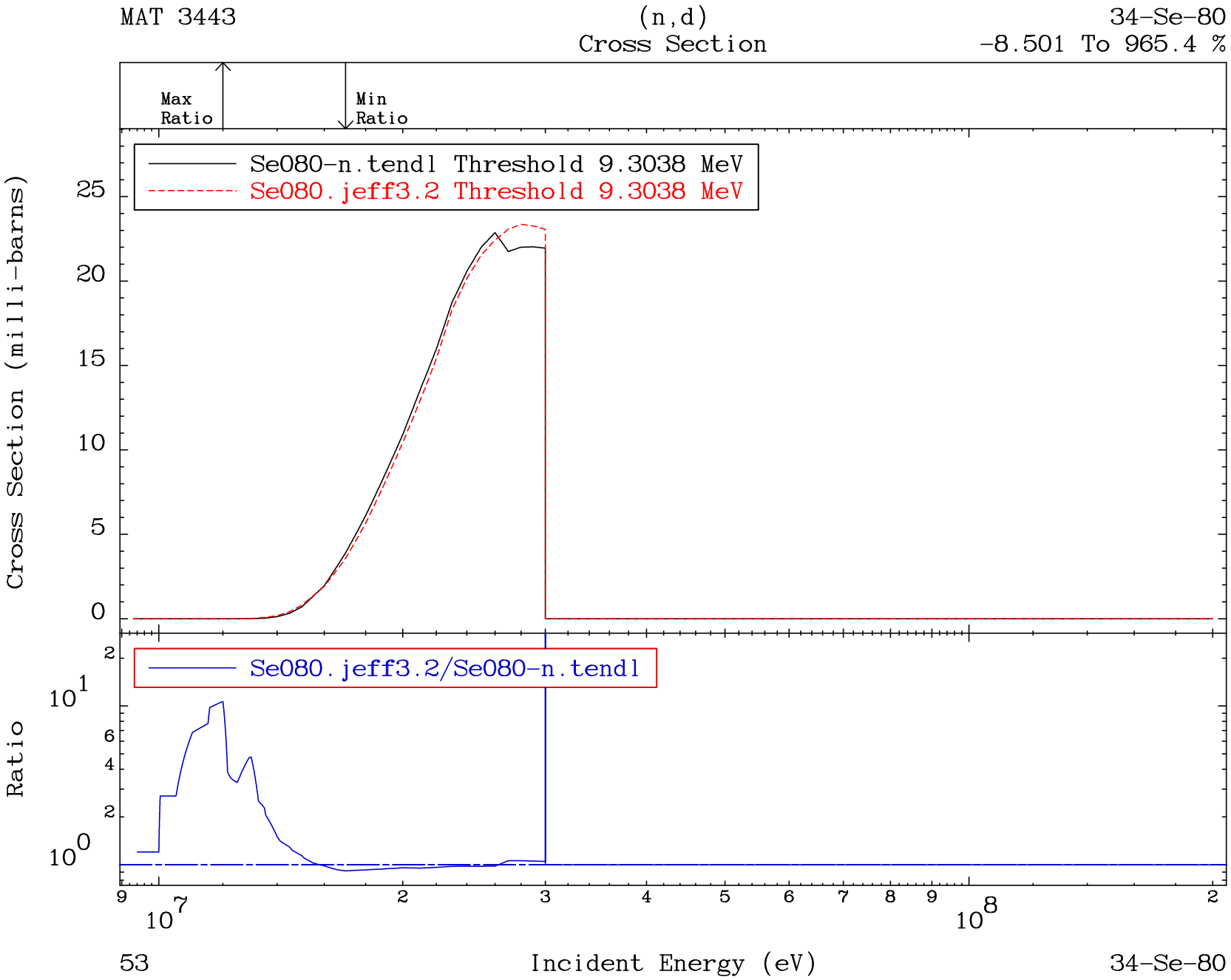

MAT 3443
3.177 MeV (n,n') Level
Cross Section
34-Se-80
-71.23 To 41.64 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 3.2170 MeV
Se080.jeff3.2 Threshold 3.2399 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.6
1.2
0.8
0.4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
34-Se-80

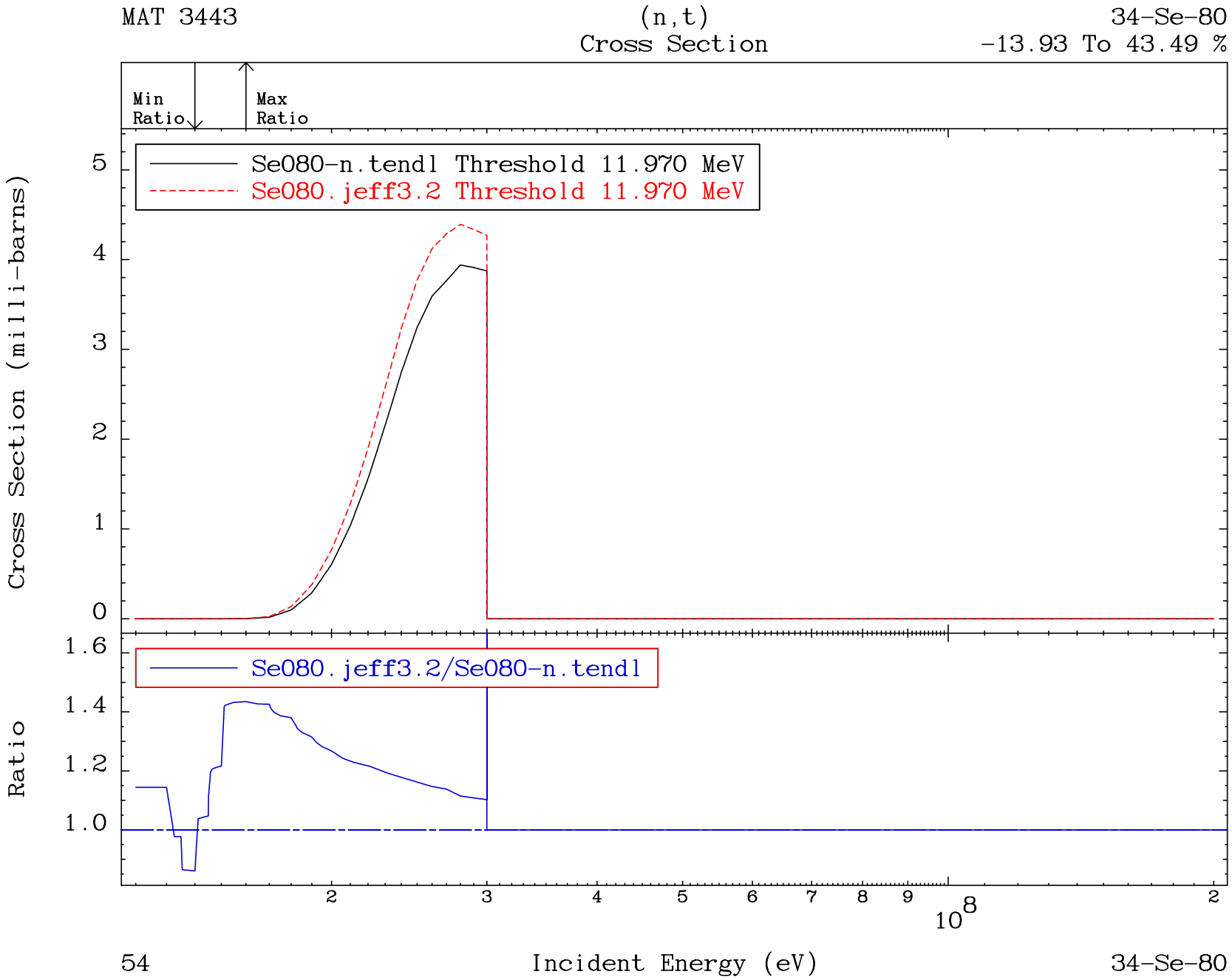

MAT 3443
3.199 MeV (n,n') Level
Cross Section
34-Se-80
-65.78 To 0.000 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 3.2398 MeV
Se080.jeff3.2 Threshold 3.2667 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
0.8
0.4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
34-Se-80

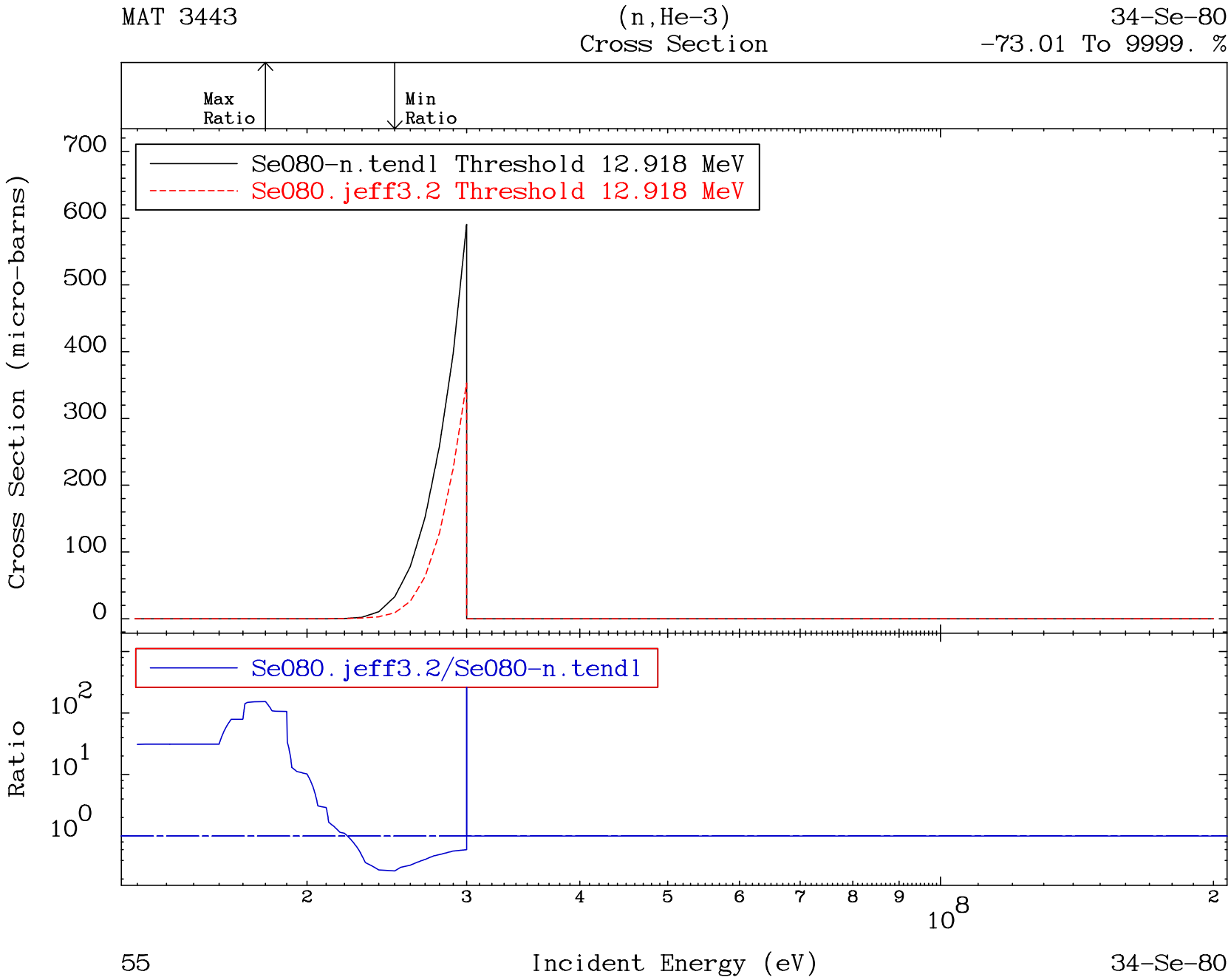

MAT 3443
(n,n') Continuum
Cross Section
34-Se-80
-19.00 To 34.95 %
Max
Ratio
Se080-n.tendl Threshold 3.2398 MeV
Se080.jeff3.2 Threshold 3.2667 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.4
1.2
1.0
0.8
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
34-Se-80

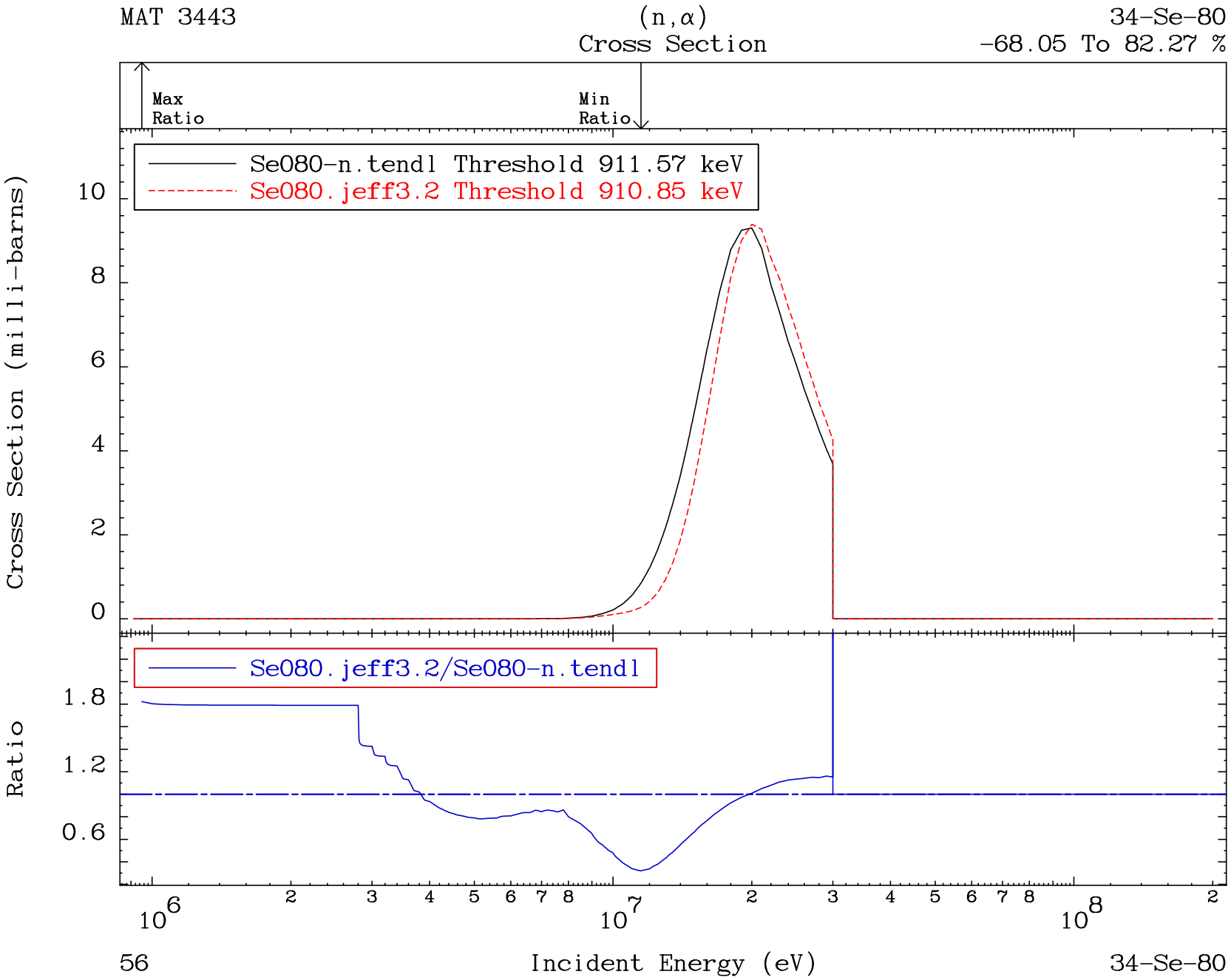

MAT 3443
(n,γ)
Cross Section
34-Se-80
-99.94 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
51
34-Se-80

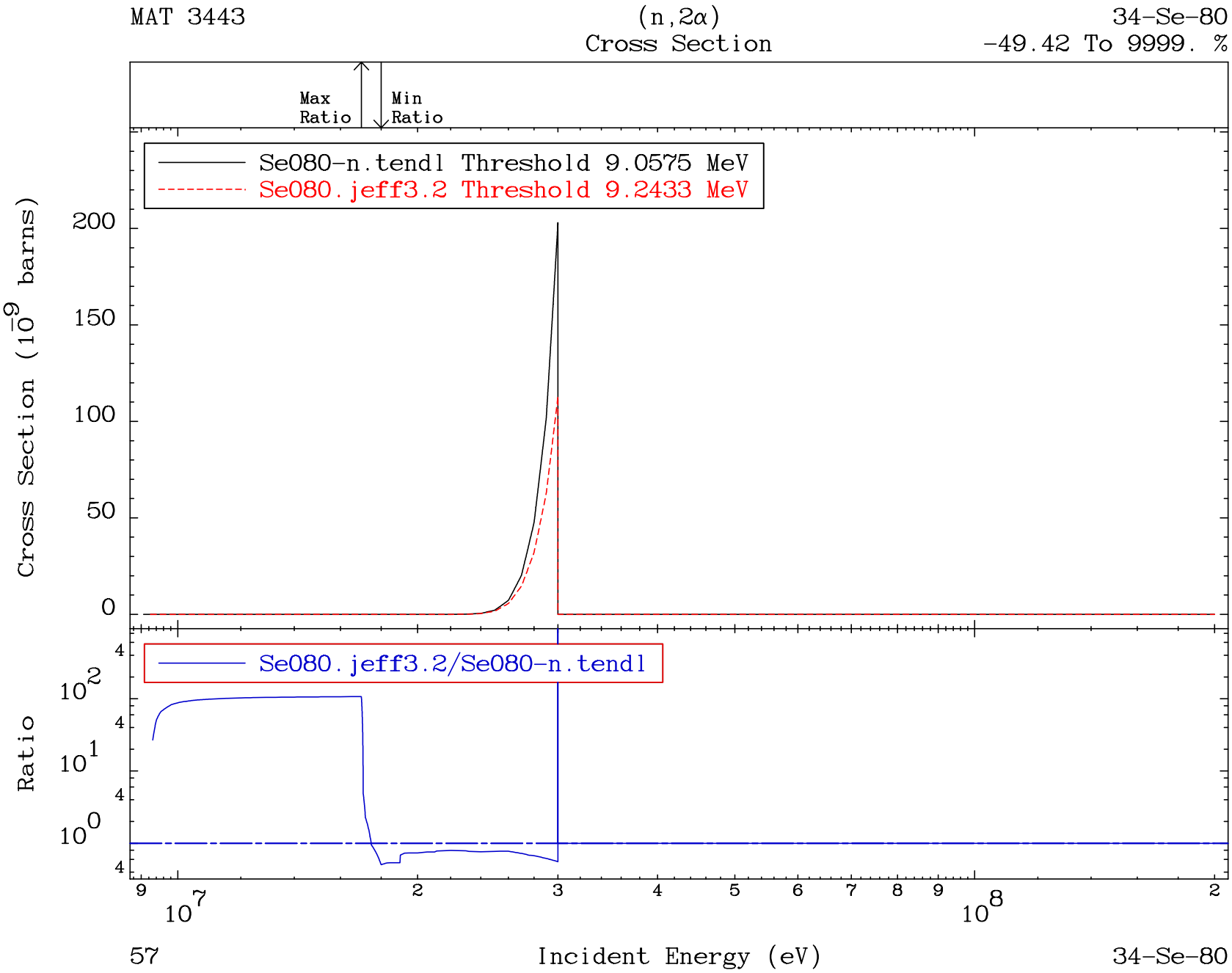

MAT 3443
(n,p)
Cross Section
34-Se-80
-90.43 To 26.60 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 4.8228 MeV
Se080.jeff3.2 Threshold 4.8791 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
52
34-Se-80

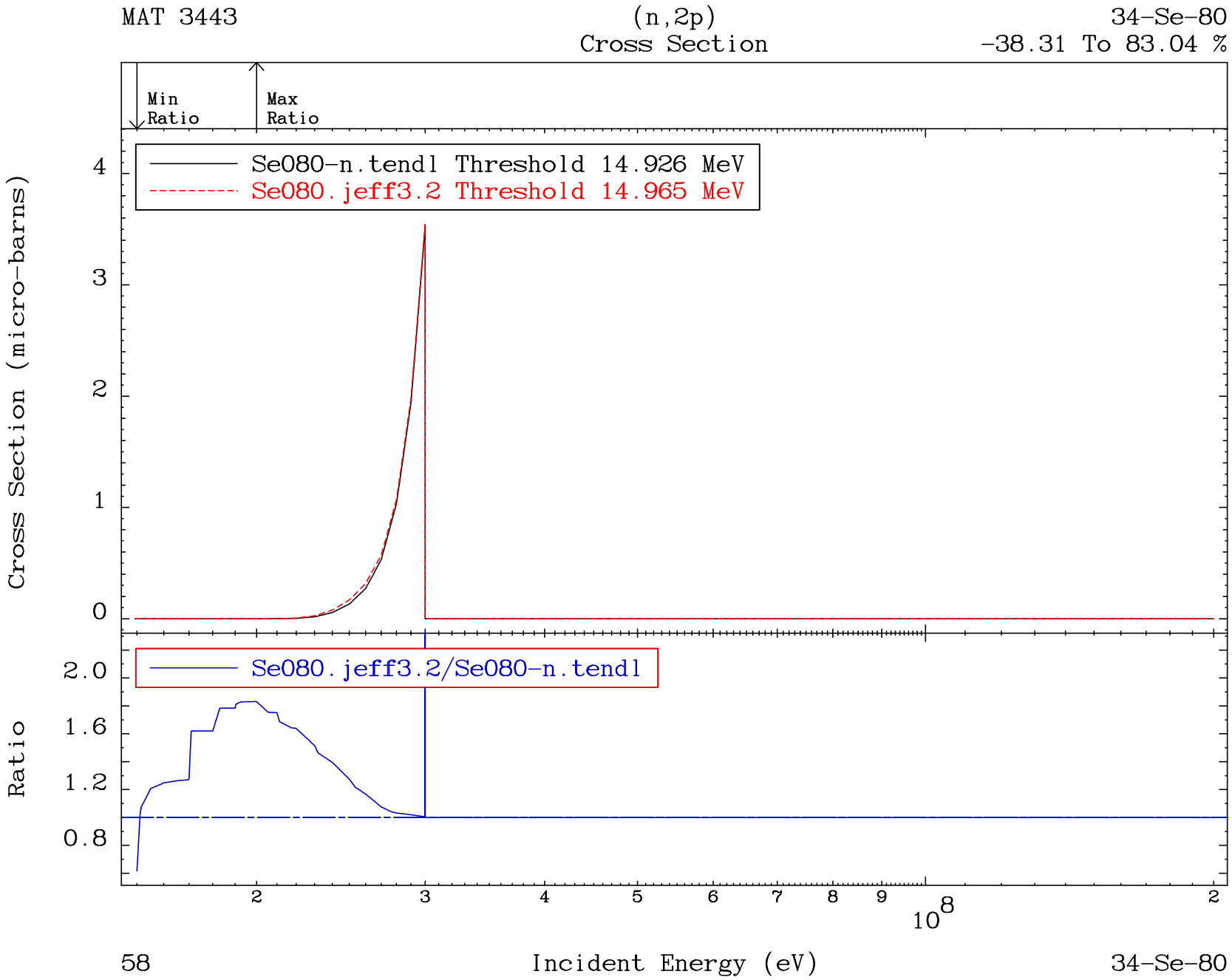

MAT 3443
(n,d)
Cross Section
34-Se-80
-8.501 To 965.4 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 9.3038 MeV
Se080.jeff3.2 Threshold 9.3038 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^1
6
4
2
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
34-Se-80

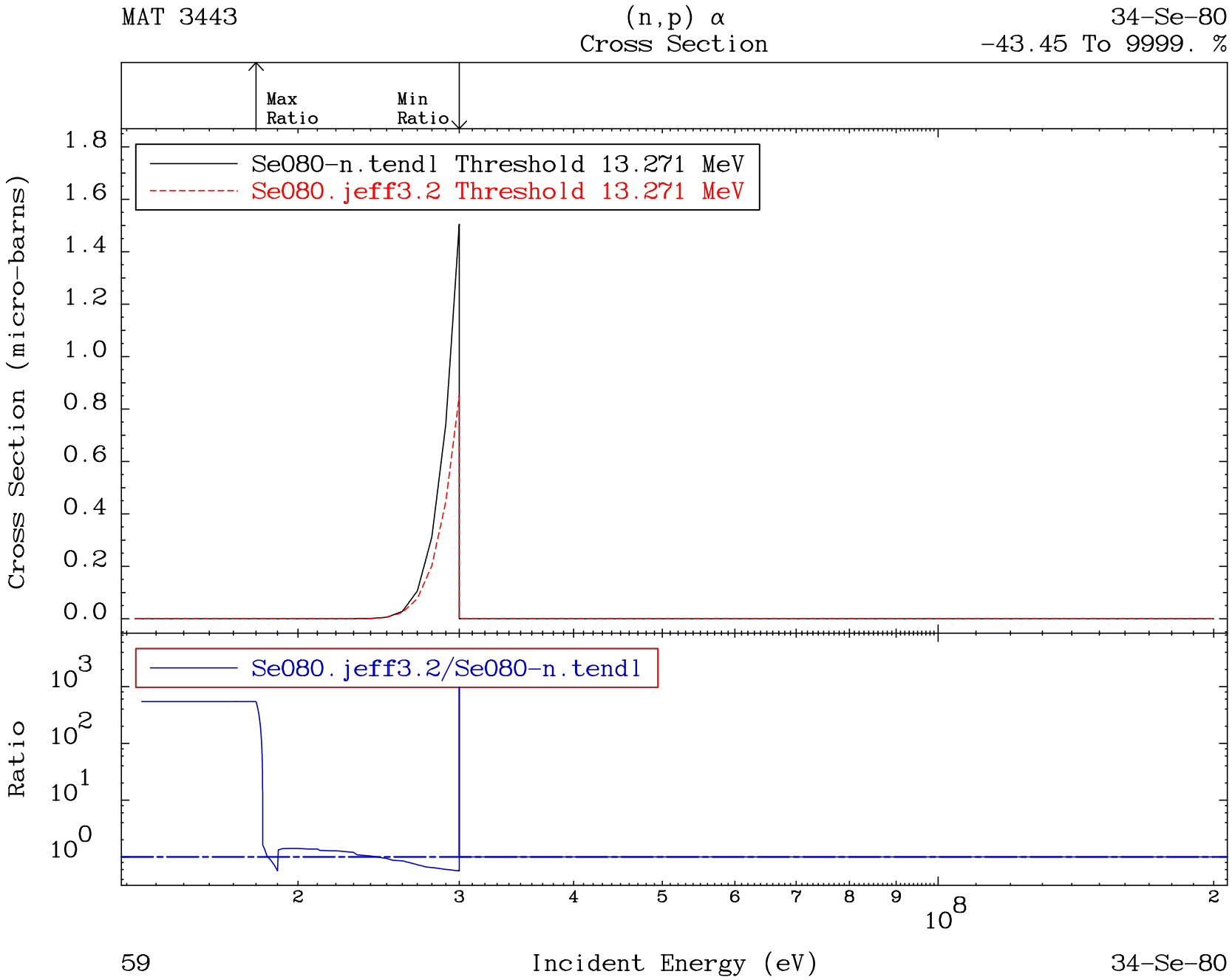

MAT 3443
(n,t)
Cross Section
34-Se-80
-13.93 To 43.49 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 11.970 MeV
Se080.jeff3.2 Threshold 11.970 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
1.2
1.4
1.6
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
34-Se-80

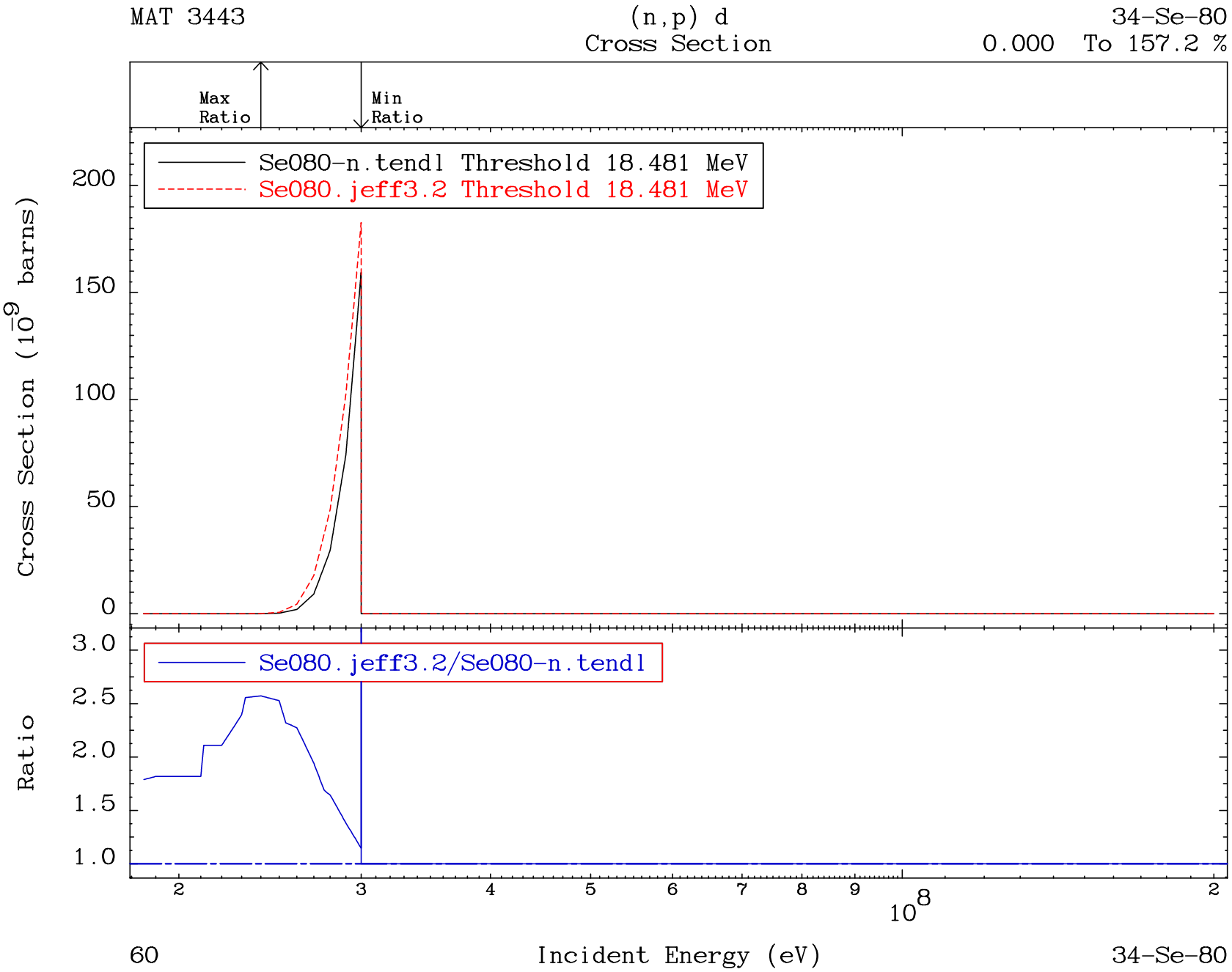

MAT 3443
(n,He-3)
Cross Section
34-Se-80
-73.01 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 12.918 MeV
Se080.jeff3.2 Threshold 12.918 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
34-Se-80

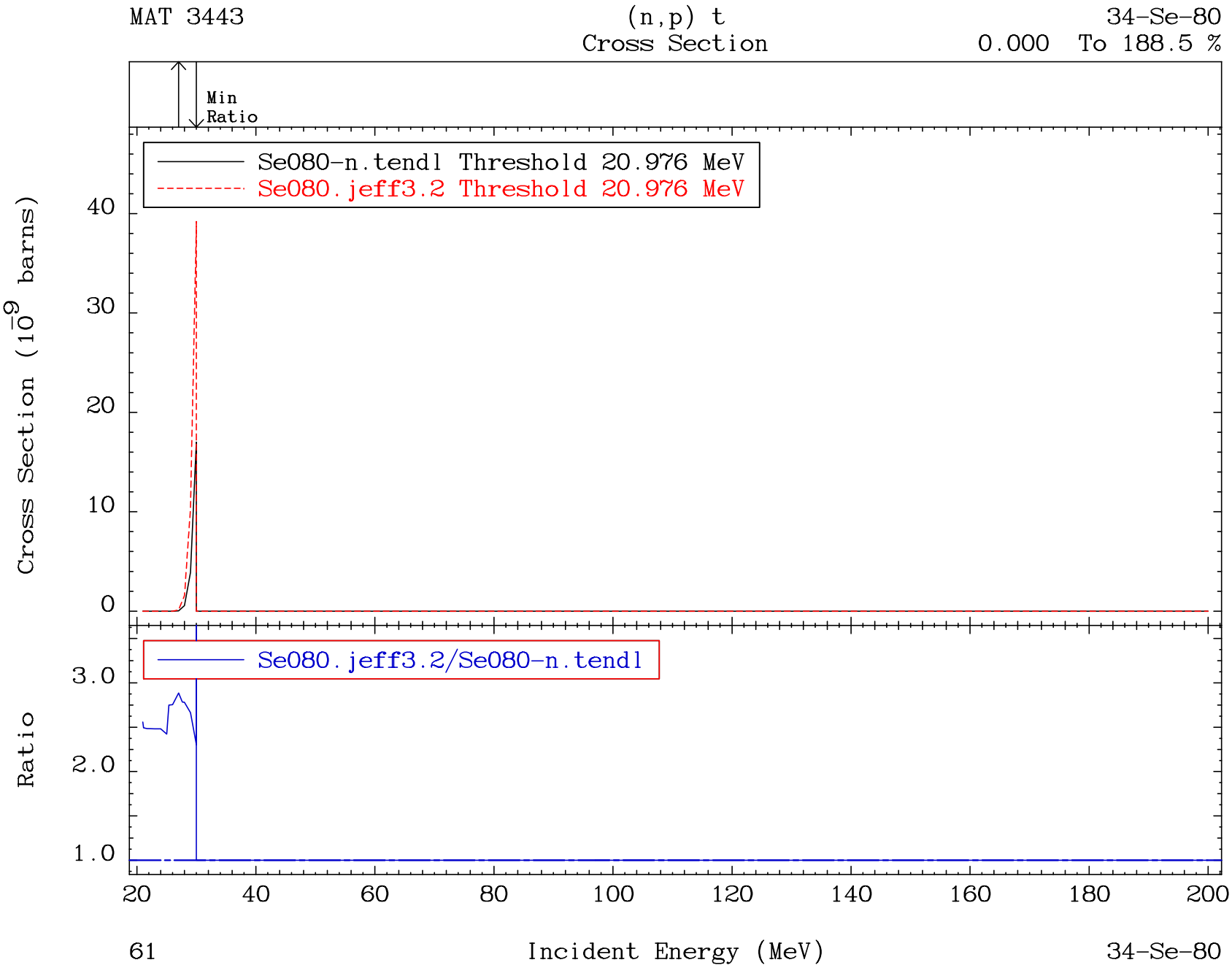

MAT 3443
(n,α)
Cross Section
34-Se-80
-68.05 To 82.27 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 911.57 keV
Se080.jeff3.2 Threshold 910.85 keV
Cross Section (milli-barns)
10
8
6
4
2
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.8
1.2
0.6
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
56
Incident Energy (eV)
34-Se-80

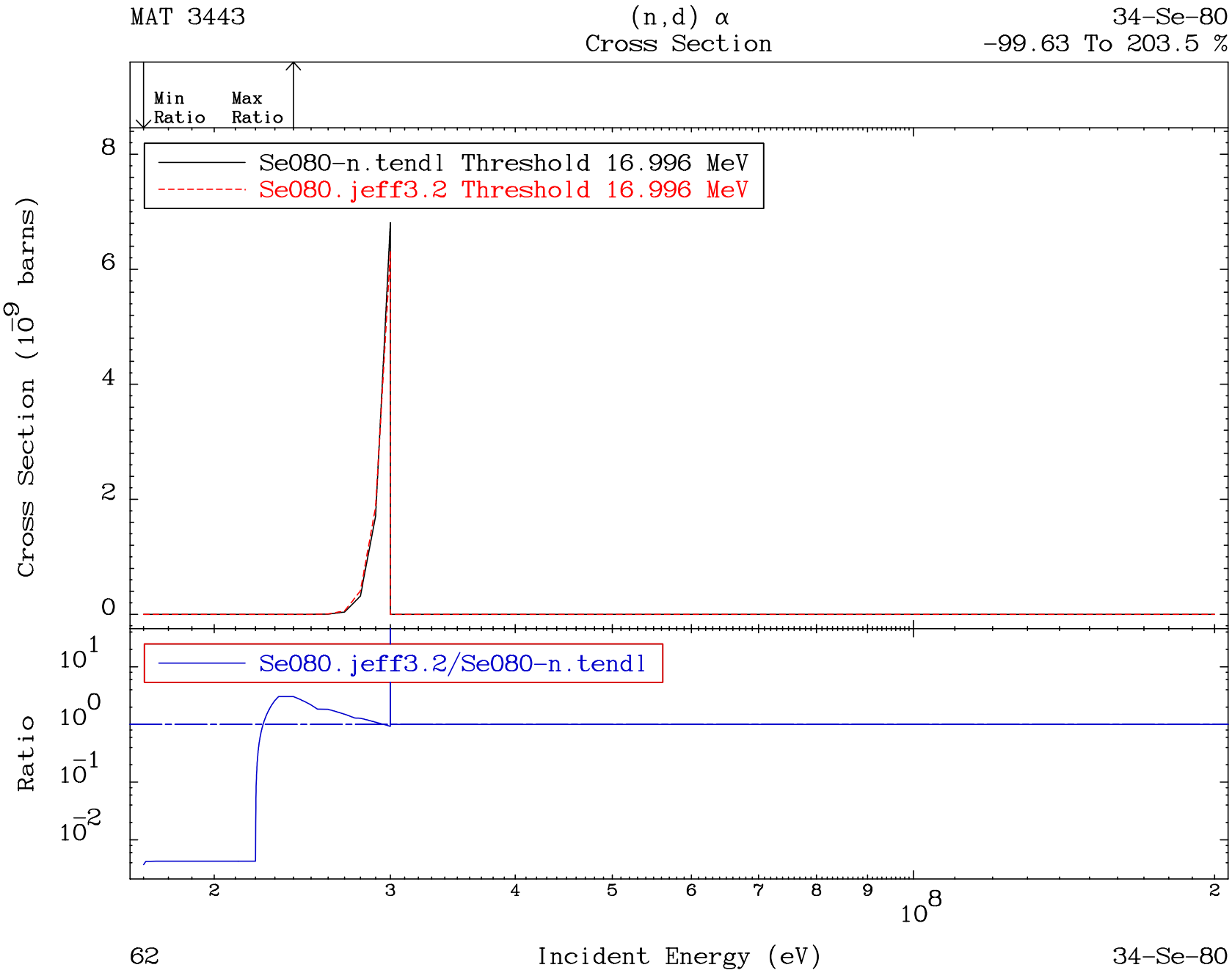

MAT 3443
(n,2α)
Cross Section
34-Se-80
-49.42 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 9.0575 MeV
Se080.jeff3.2 Threshold 9.2433 MeV
Cross Section (10^-9 barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
34-Se-80

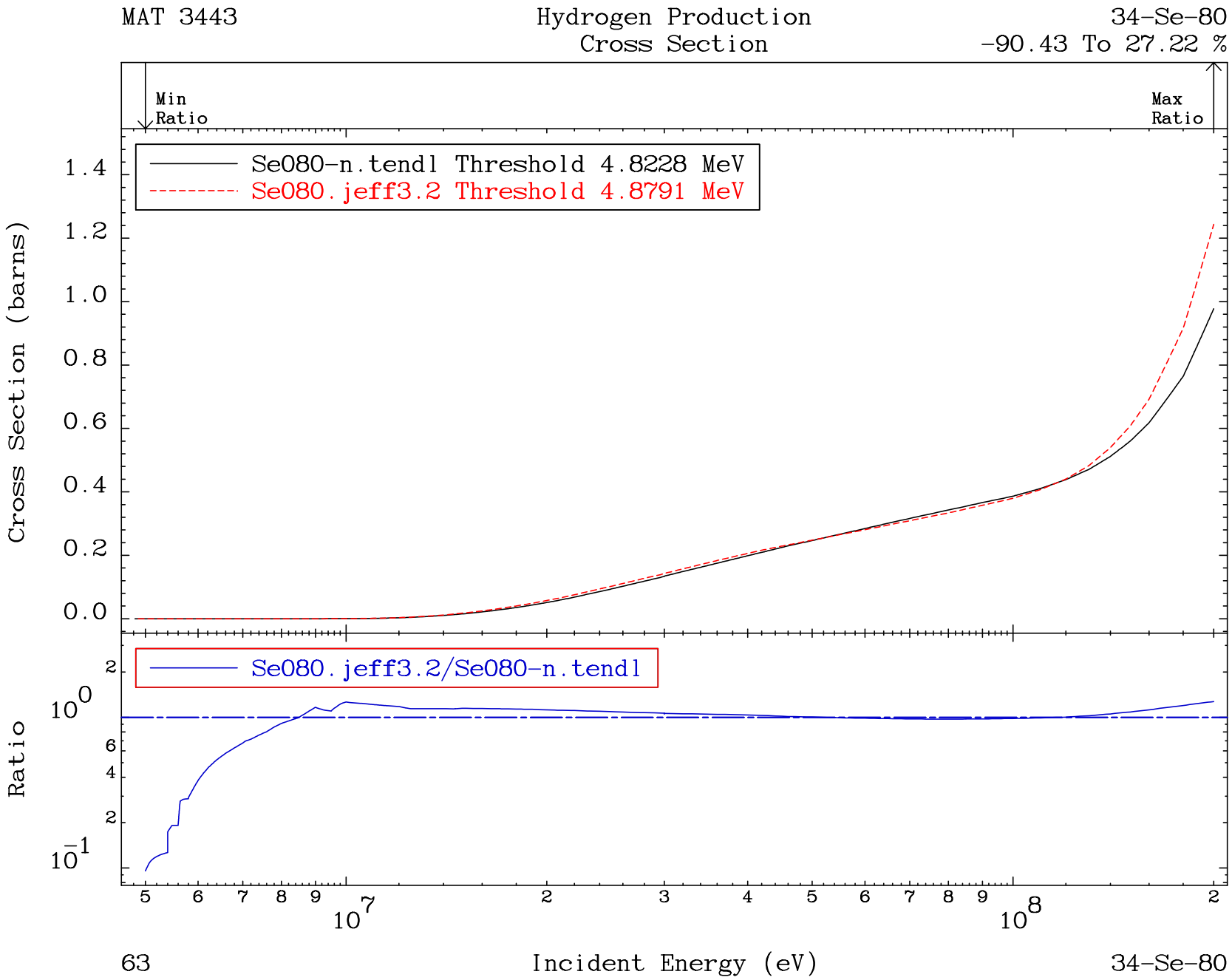

MAT 3443
(n,2p)
Cross Section
34-Se-80
-38.31 To 83.04 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 14.926 MeV
Se080.jeff3.2 Threshold 14.965 MeV
Cross Section (micro-barns)
0
1
2
3
4
Se080.jeff3.2/Se080-n.tendl
Ratio
0.8
1.2
1.6
2.0
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
34-Se-80

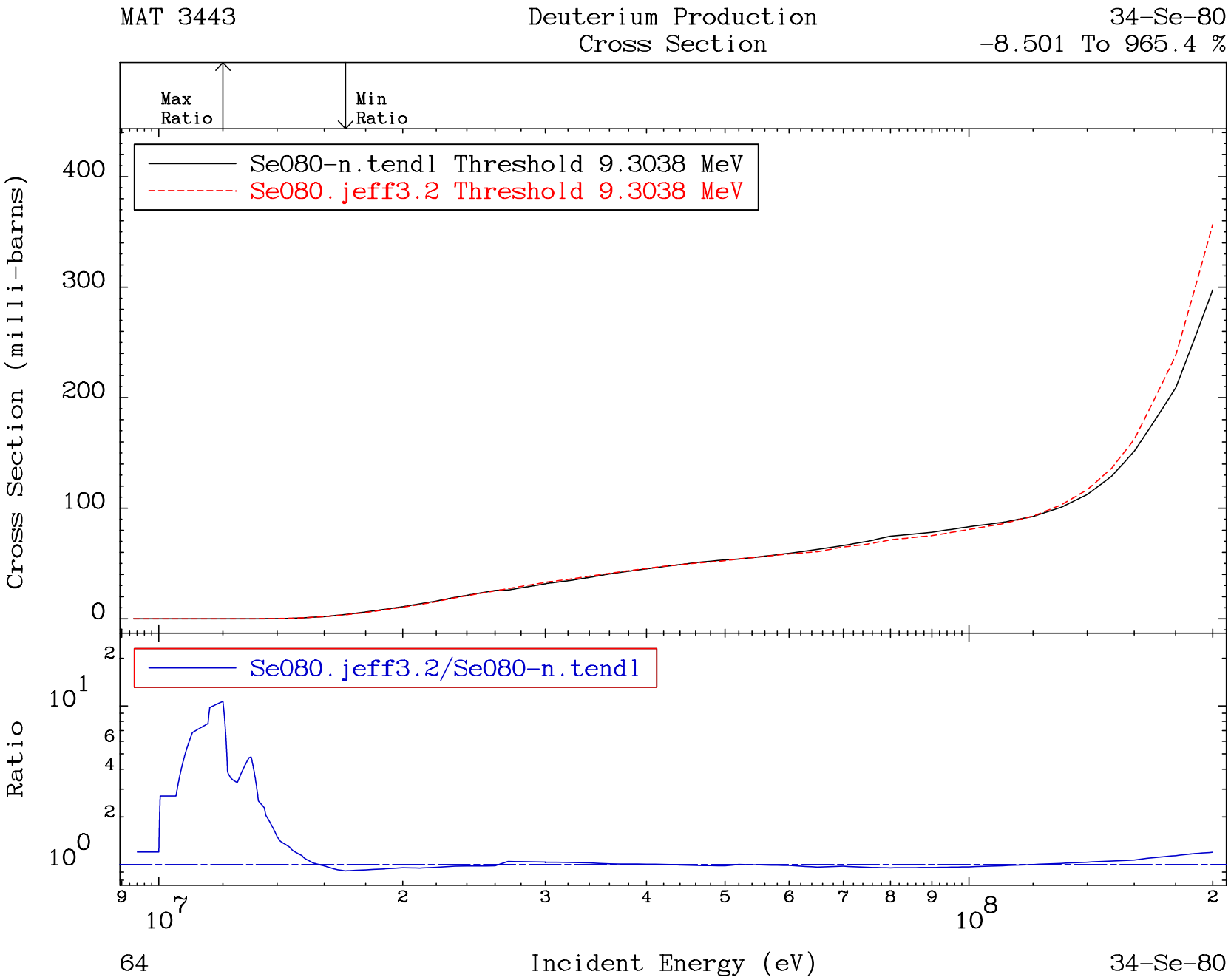

MAT 3443
(n,p) α
Cross Section
34-Se-80
-43.45 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 13.271 MeV
Se080.jeff3.2 Threshold 13.271 MeV
Cross Section (micro-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
34-Se-80

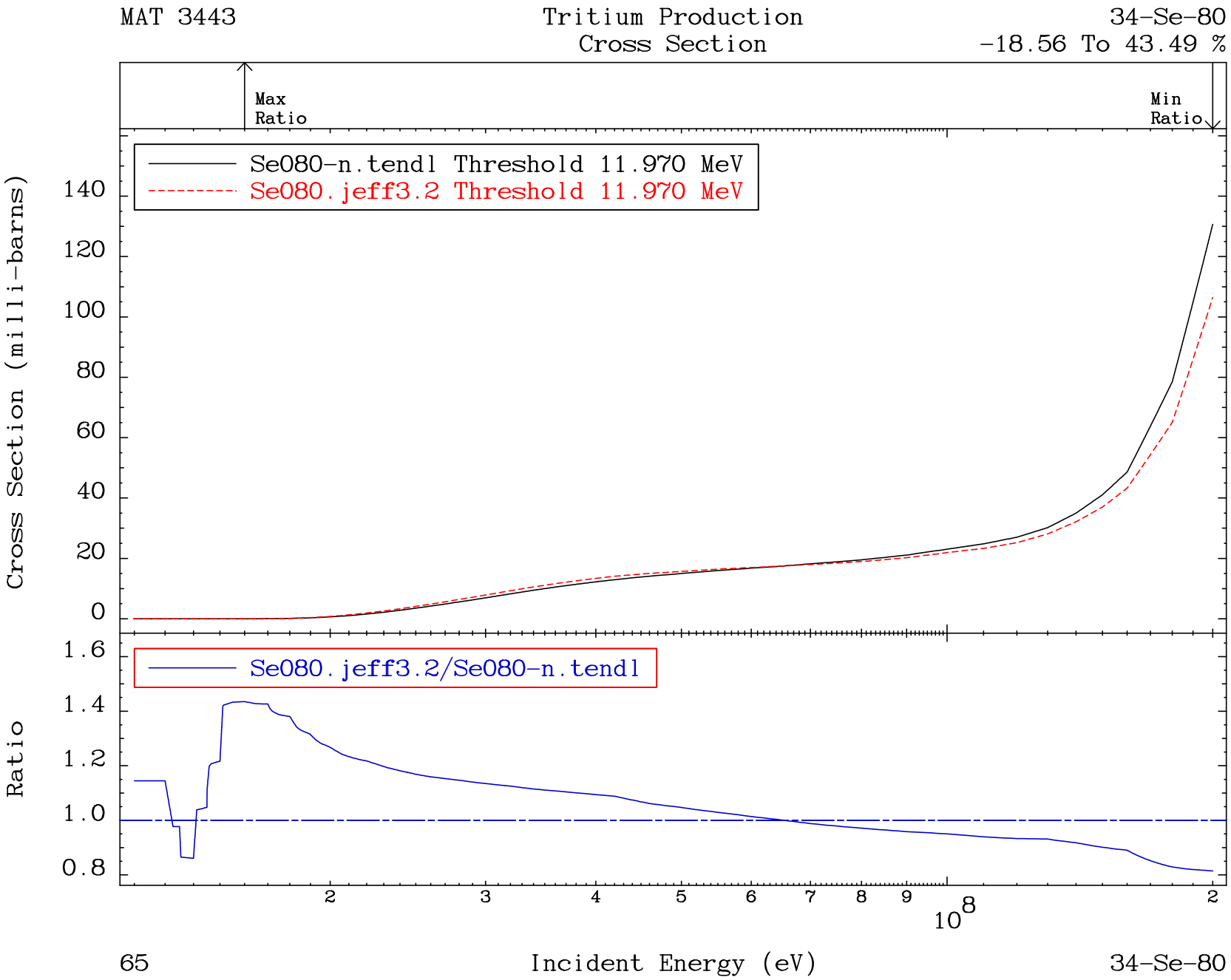

MAT 3443
(n,p) d
Cross Section
34-Se-80
0.000 To 157.2 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 18.481 MeV
Se080.jeff3.2 Threshold 18.481 MeV
Cross Section (10^-9 barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.5
2.0
1.5
1.0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
34-Se-80

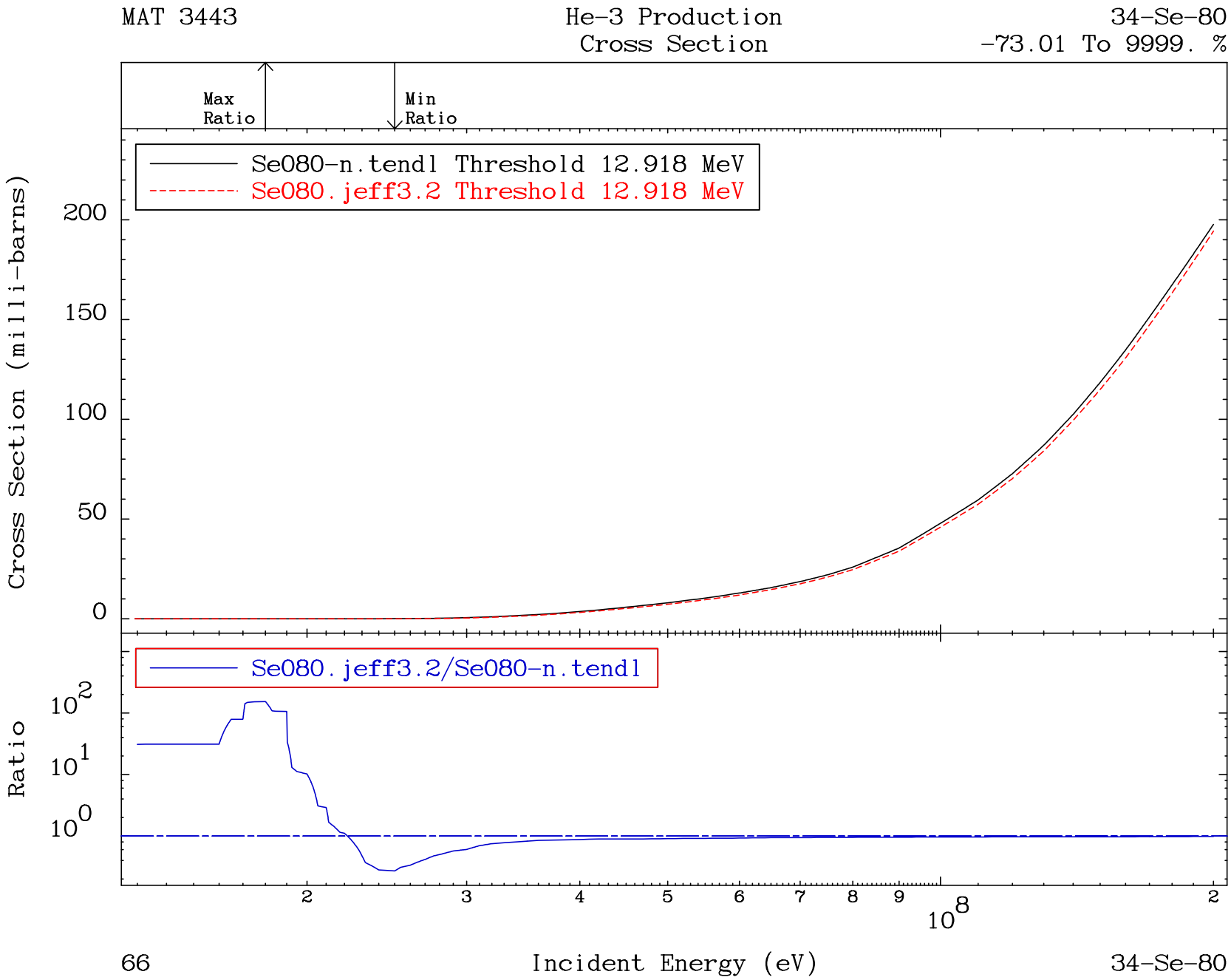

MAT 3443
(n,p) t
Cross Section
34-Se-80
0.000 To 188.5 %
Min
Ratio
Se080-n.tendl Threshold 20.976 MeV
Se080.jeff3.2 Threshold 20.976 MeV
Cross Section (10^-9 barns)
40
30
20
10
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
20
40
60
80
100
120
140
160
180
200
61
Incident Energy (MeV)
34-Se-80

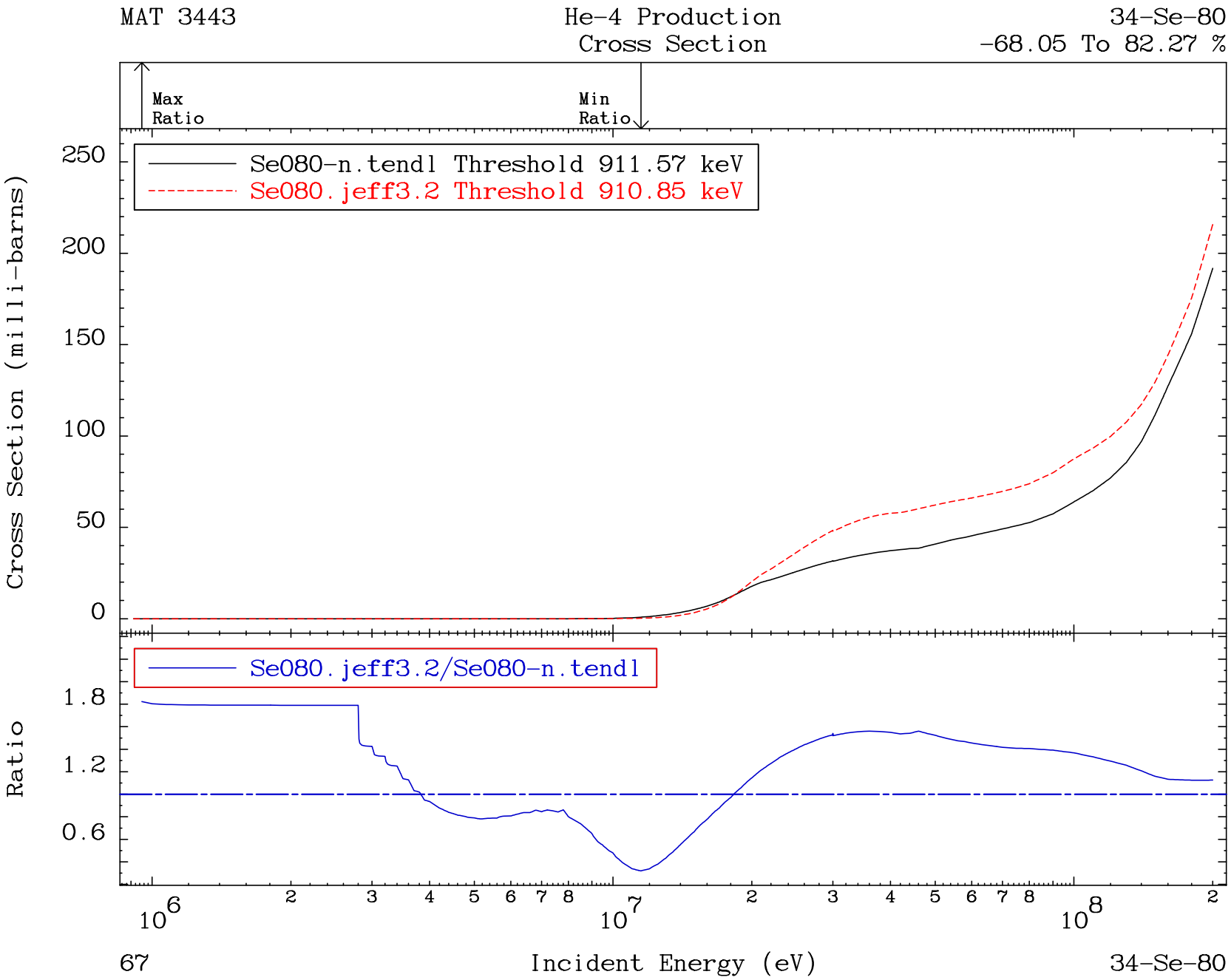

MAT 3443
(n,d) α
Cross Section
34-Se-80
-99.63 To 203.5 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 16.996 MeV
Se080.jeff3.2 Threshold 16.996 MeV
Cross Section (10^-9 barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
62
34-Se-80

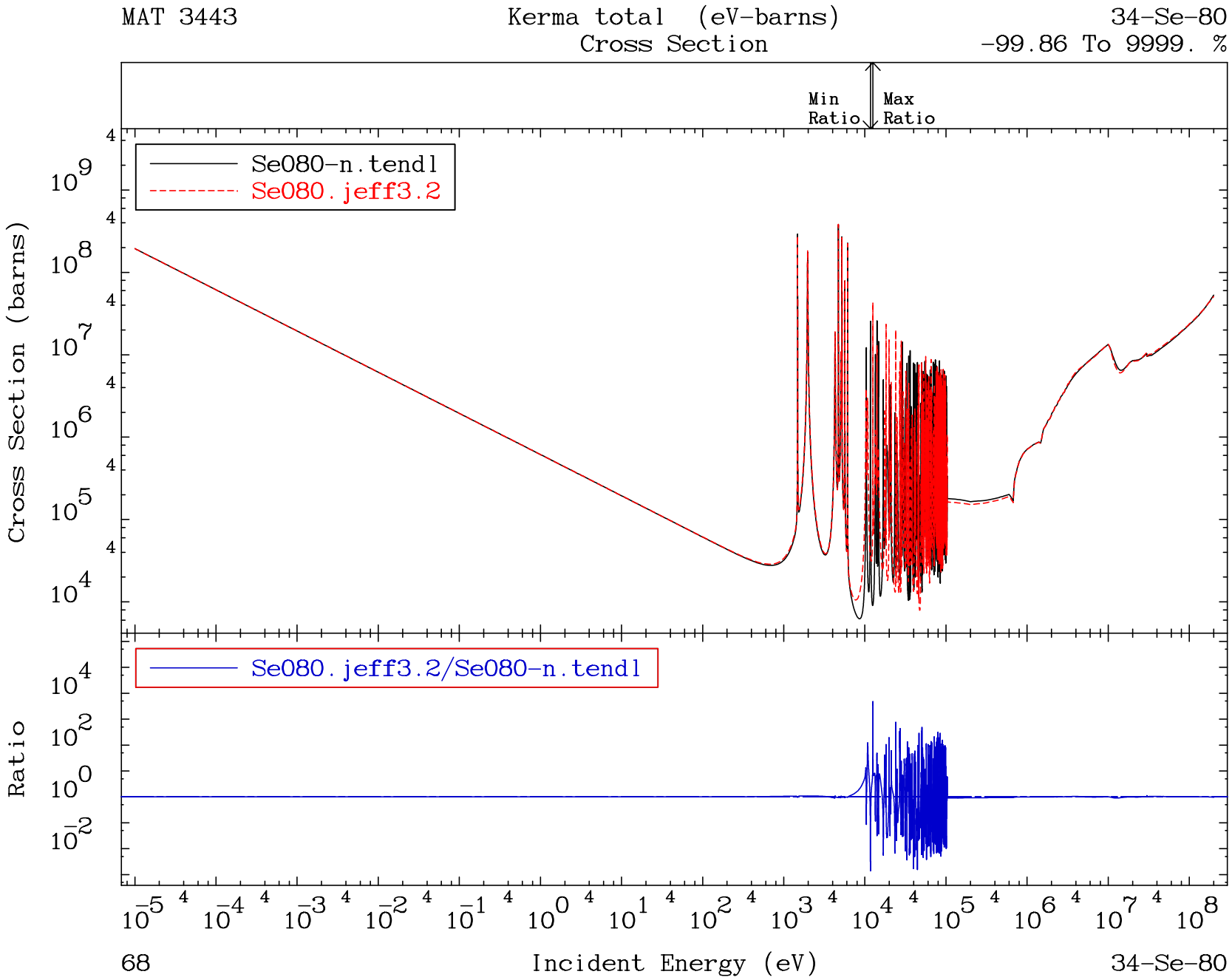

MAT 3443
Hydrogen Production
Cross Section
34-Se-80
-90.43 To 27.22 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 4.8228 MeV
Se080.jeff3.2 Threshold 4.8791 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^{0}
10^{-1}
2
6
4
2
5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
63
Incident Energy (eV)
34-Se-80

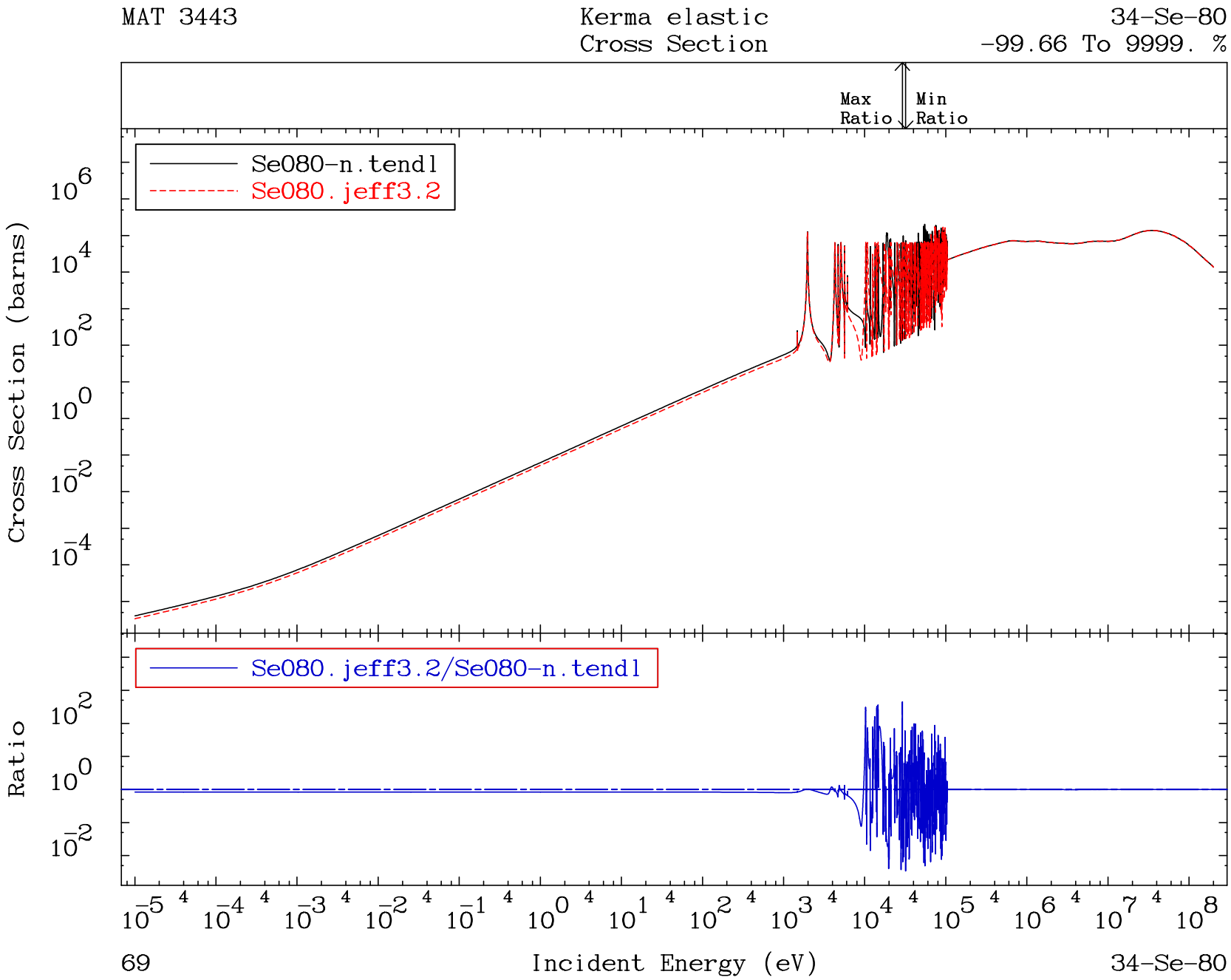

MAT 3443
Deuterium Production
Cross Section
34-Se-80
-8.501 To 965.4 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 9.3038 MeV
Se080.jeff3.2 Threshold 9.3038 MeV
Cross Section (milli-barns)
400
300
200
100
0
Se080.jeff3.2/Se080-n.tendl
Ratio
2
10^1
6
4
2
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
34-Se-80

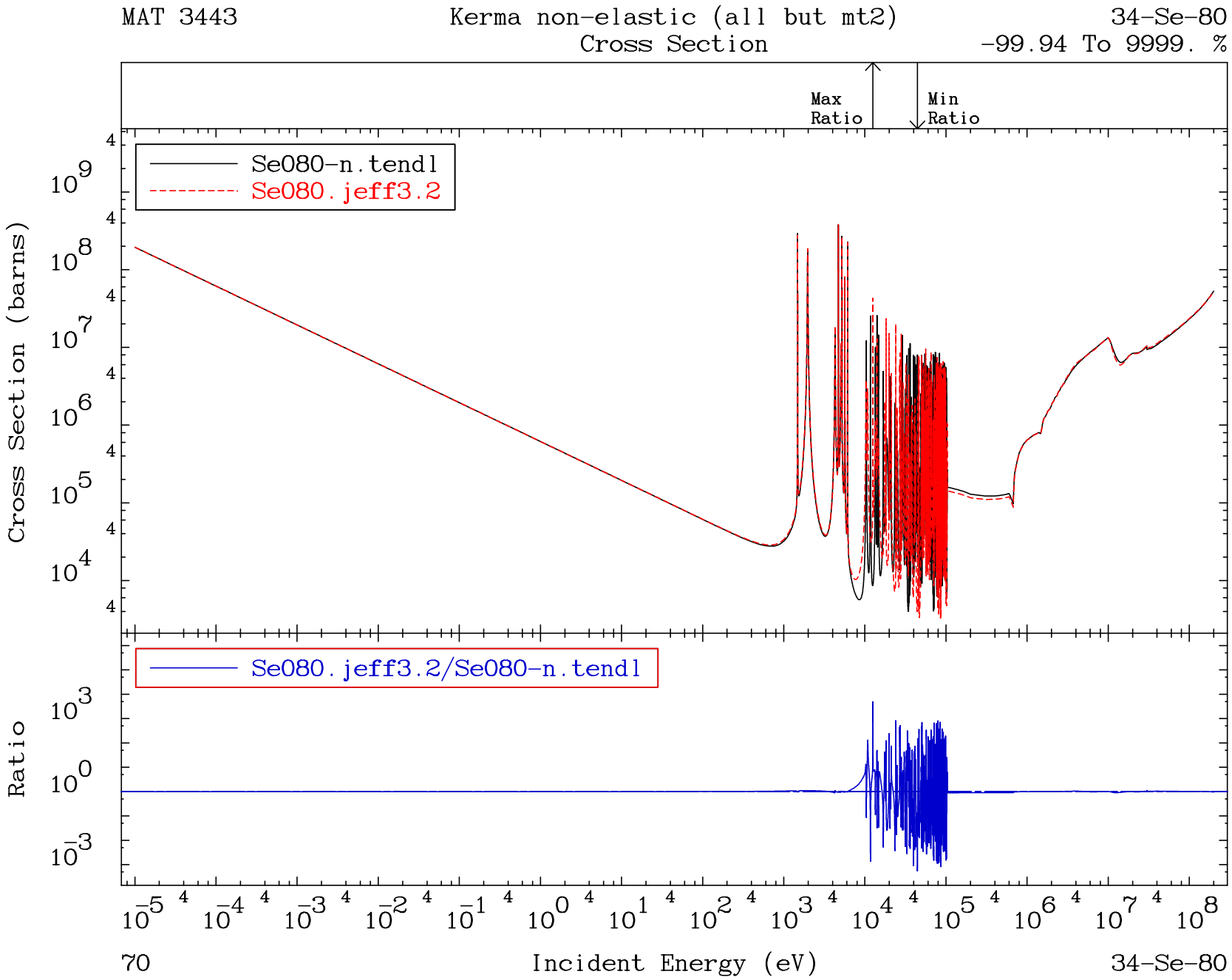

MAT 3443
Tritium Production
Cross Section
34-Se-80
-18.56 To 43.49 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 11.970 MeV
Se080.jeff3.2 Threshold 11.970 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.6
1.4
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
34-Se-80

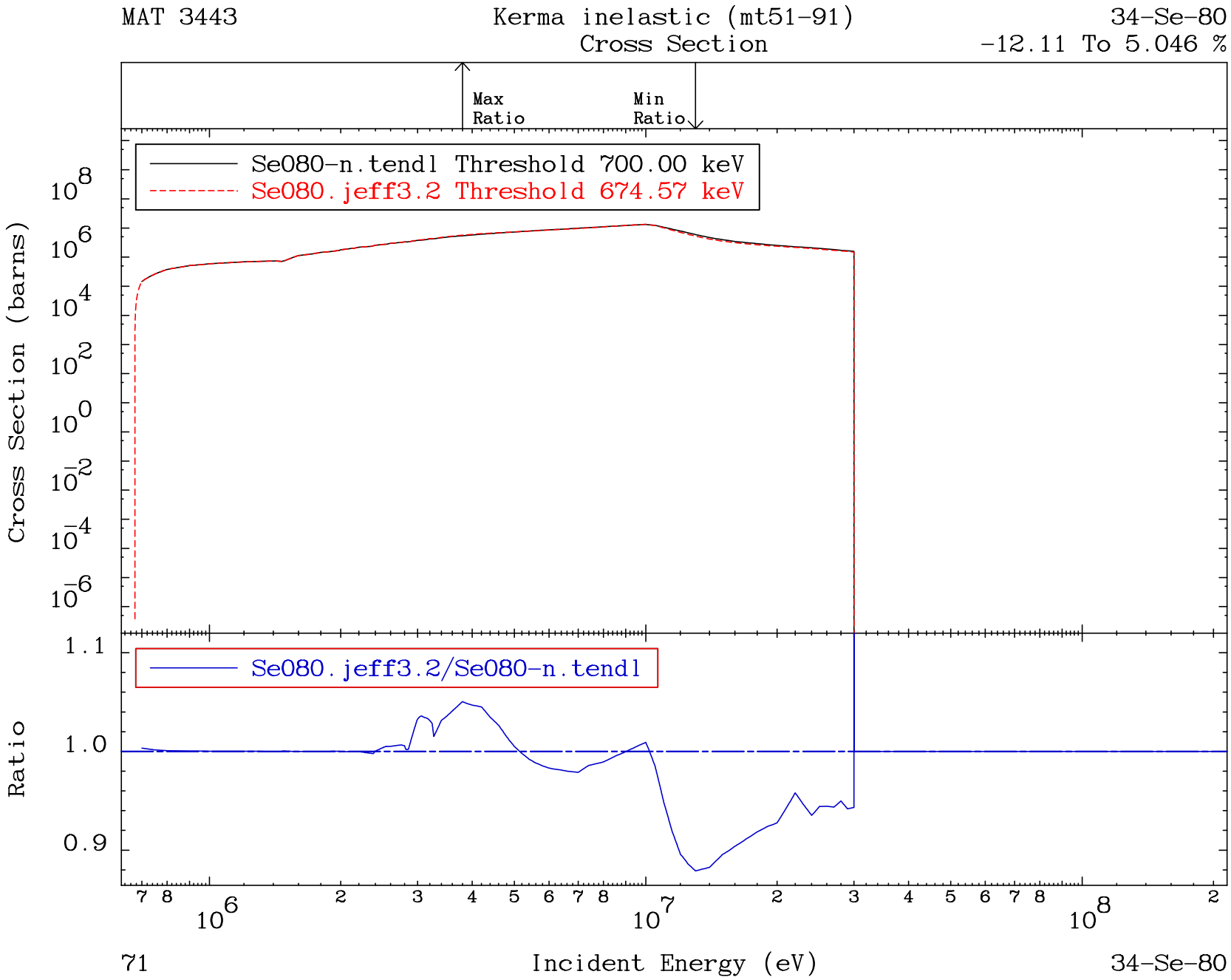

MAT 3443
He-3 Production
Cross Section
34-Se-80
-73.01 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 12.918 MeV
Se080.jeff3.2 Threshold 12.918 MeV
Cross Section (milli-barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
34-Se-80

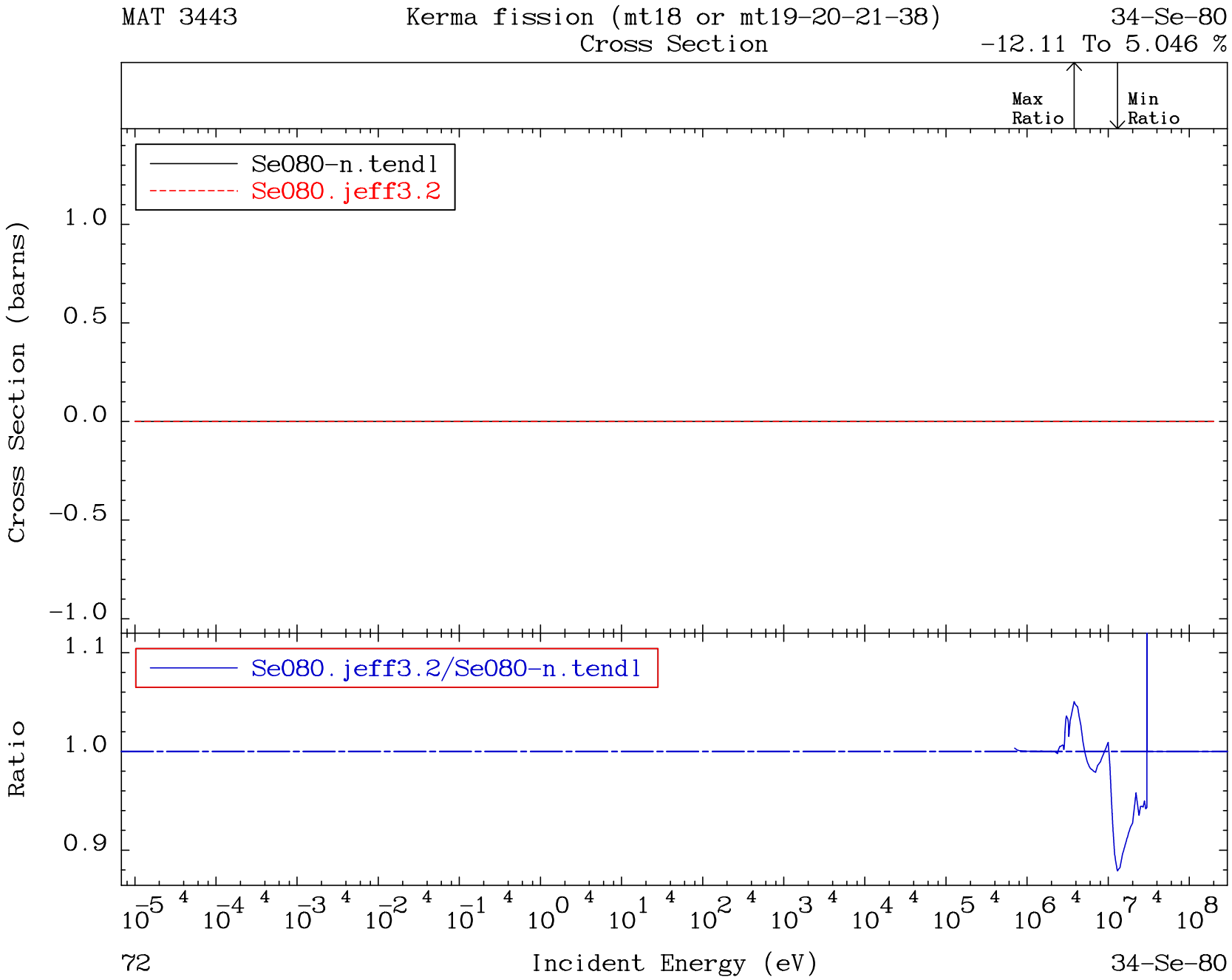

MAT 3443
He-4 Production
Cross Section
34-Se-80
-68.05 To 82.27 %
Max
Ratio
Min
Ratio
Se080-n.tendl Threshold 911.57 keV
Se080.jeff3.2 Threshold 910.85 keV
Cross Section (milli-barns)
250
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.8
1.2
0.6
10^6
10^7
10^8
67
Incident Energy (eV)
34-Se-80

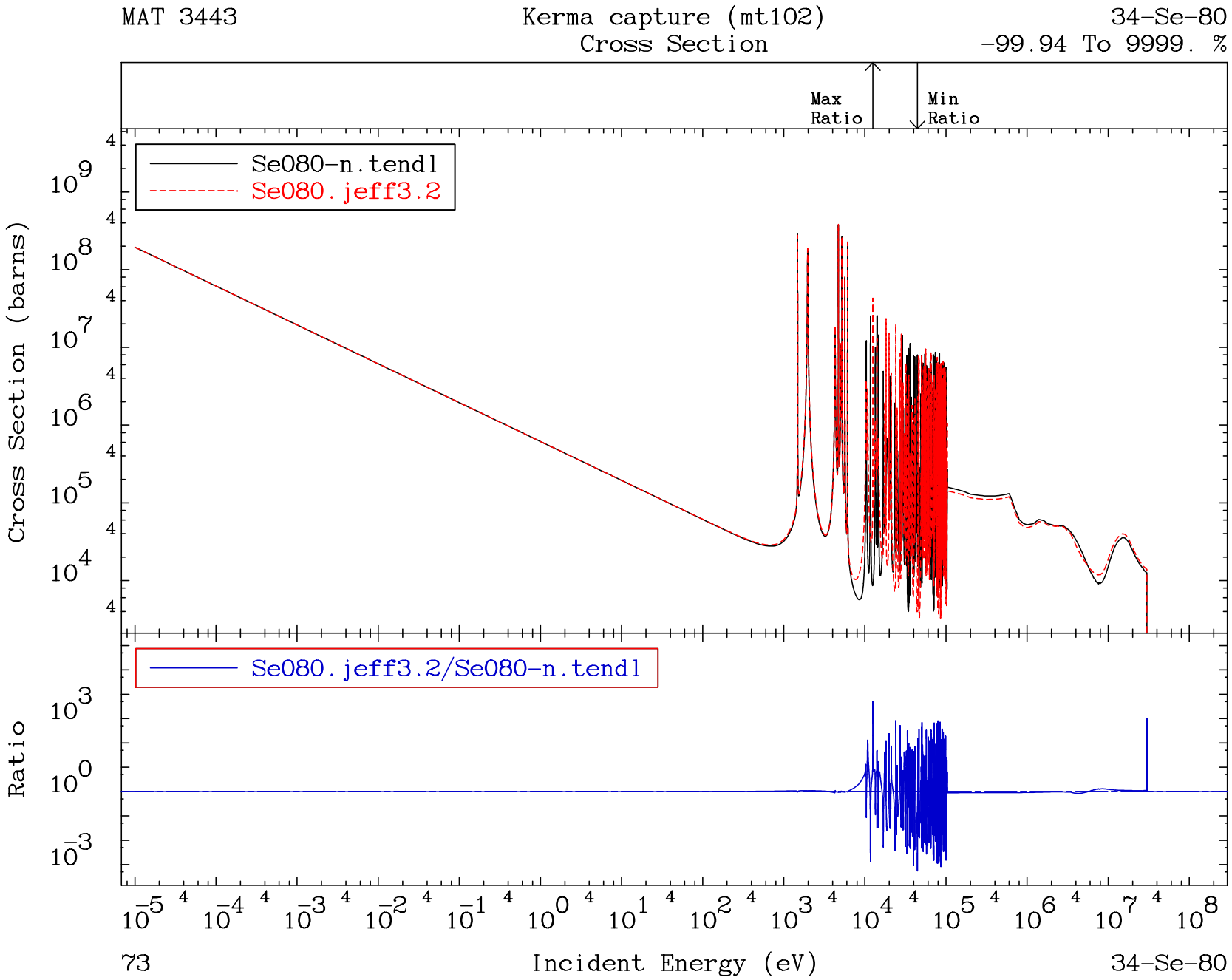

MAT 3443
Kerma total (eV-barns)
Cross Section
34-Se-80
-99.86 To 9999. %
Min Ratio
Max Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
68
34-Se-80

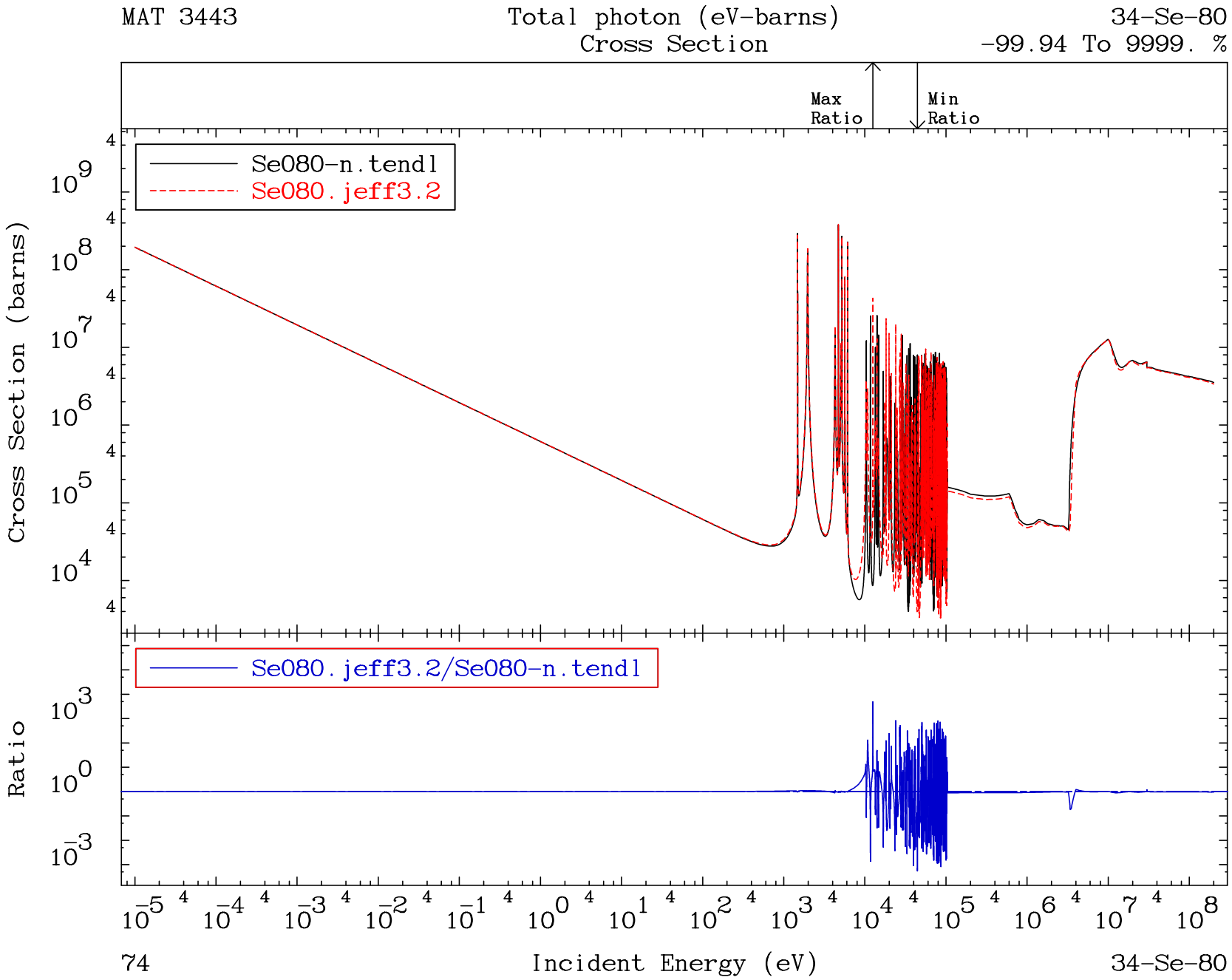

MAT 3443
Kerma elastic
Cross Section
34-Se-80
-99.66 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
69
34-Se-80

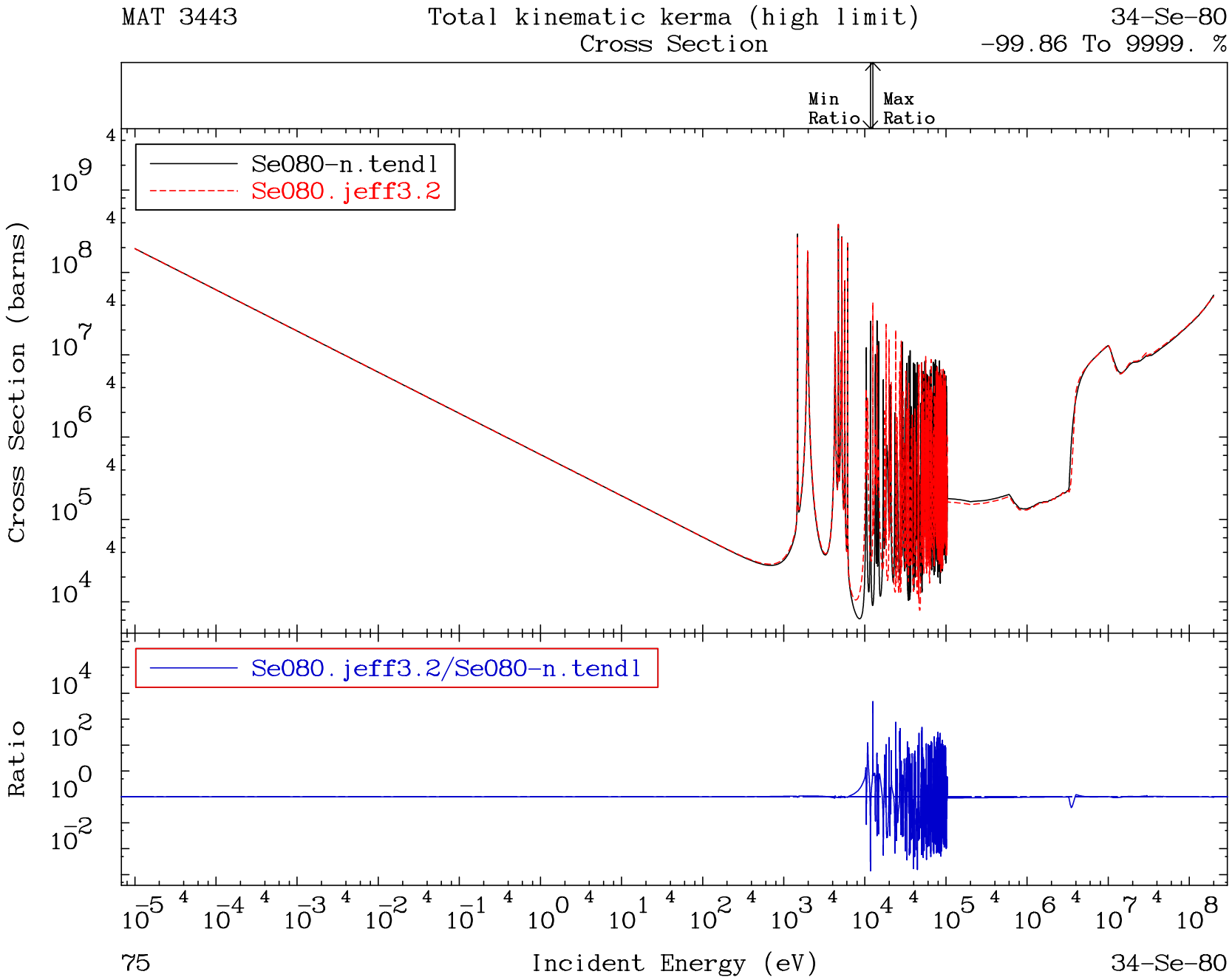

MAT 3443
Kerma non-elastic (all but mt2)
Cross Section
34-Se-80
-99.94 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
70
34-Se-80

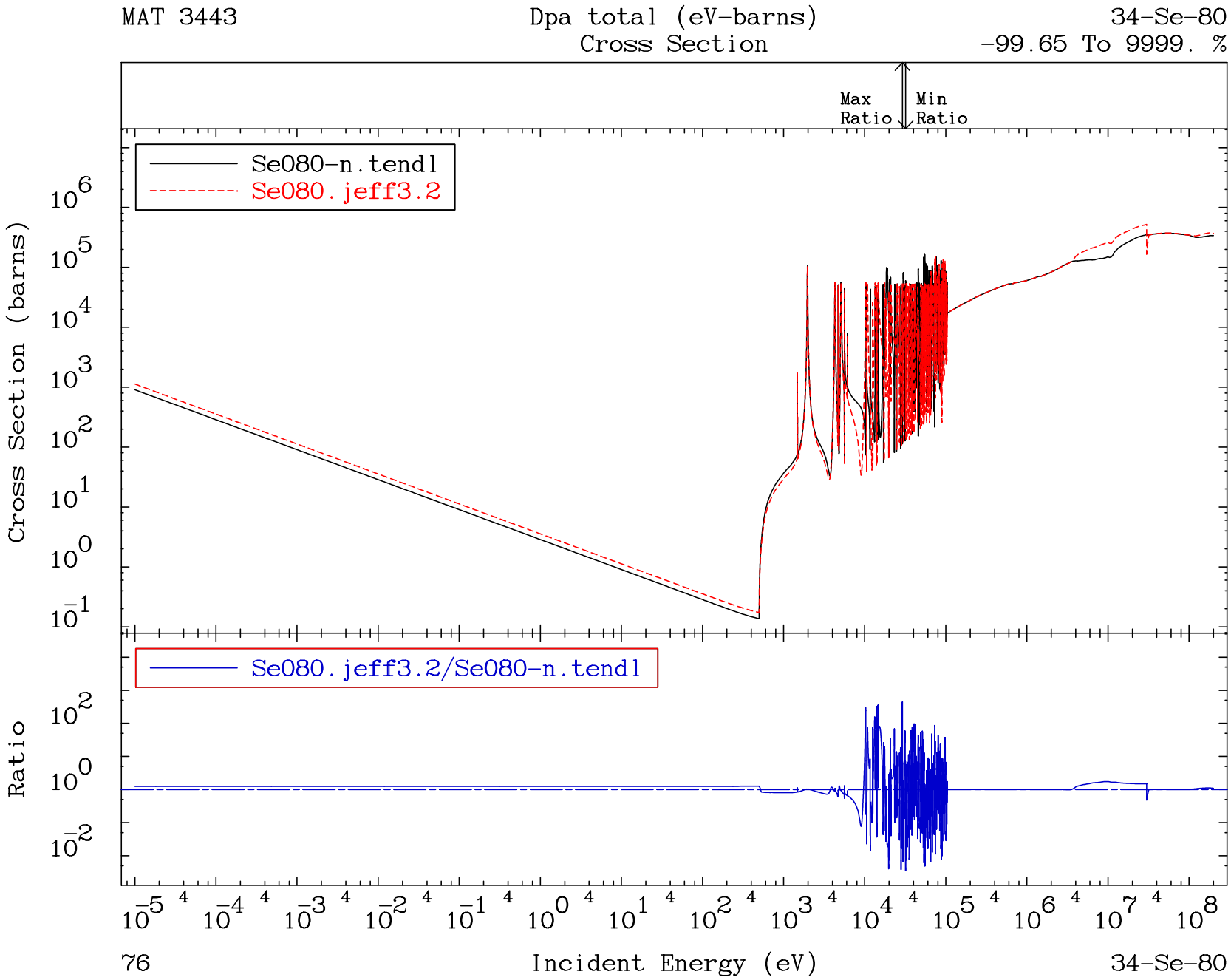

MAT 3443
Kerma inelastic (mt51-91)
Cross Section
34-Se-80
-12.11 To 5.046 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 700.00 keV
Se080.jeff3.2 Threshold 674.57 keV
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
71
34-Se-80

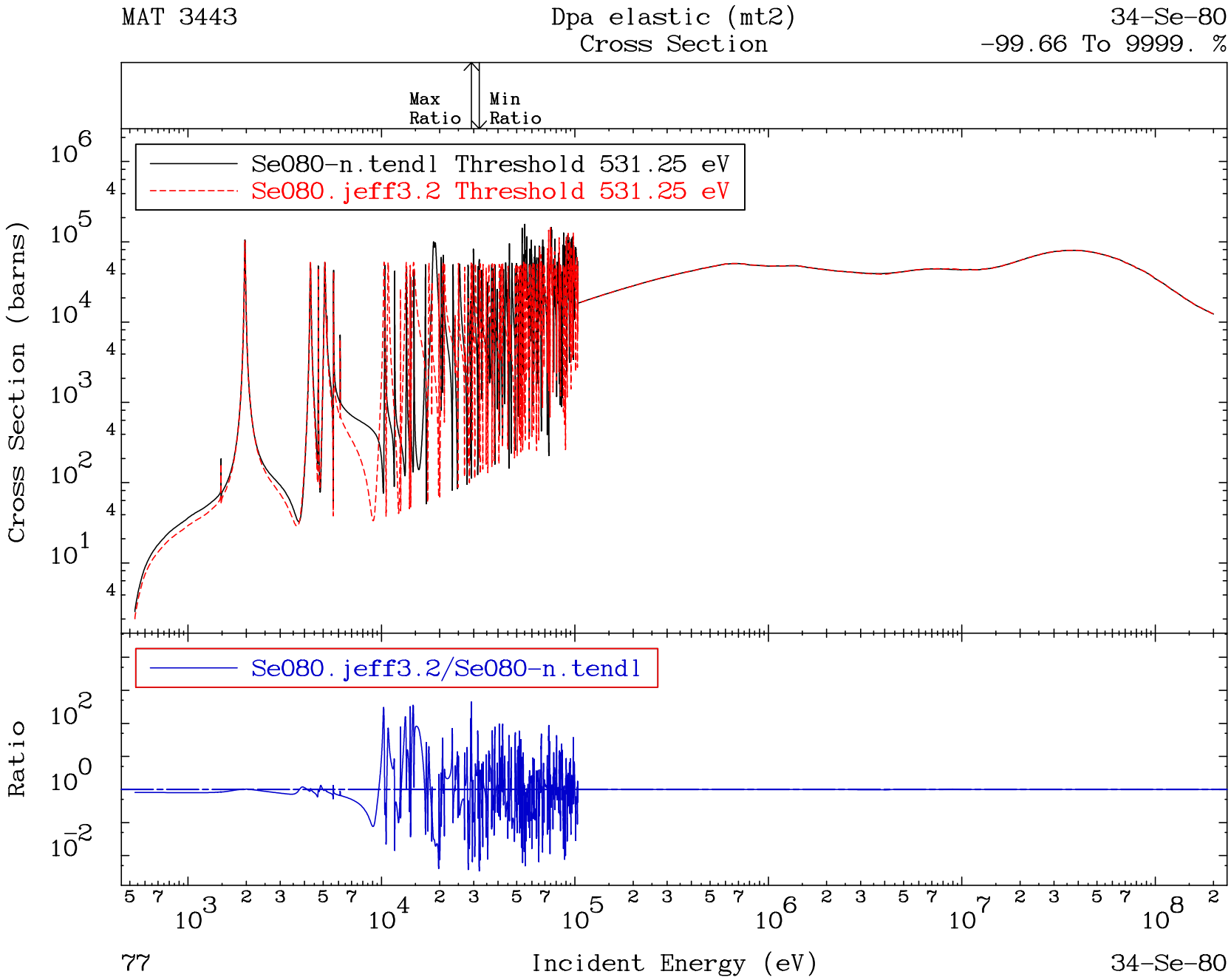

MAT 3443
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
34-Se-80
-12.11 To 5.046 %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.1
1.0
0.9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
72
Incident Energy (eV)
34-Se-80

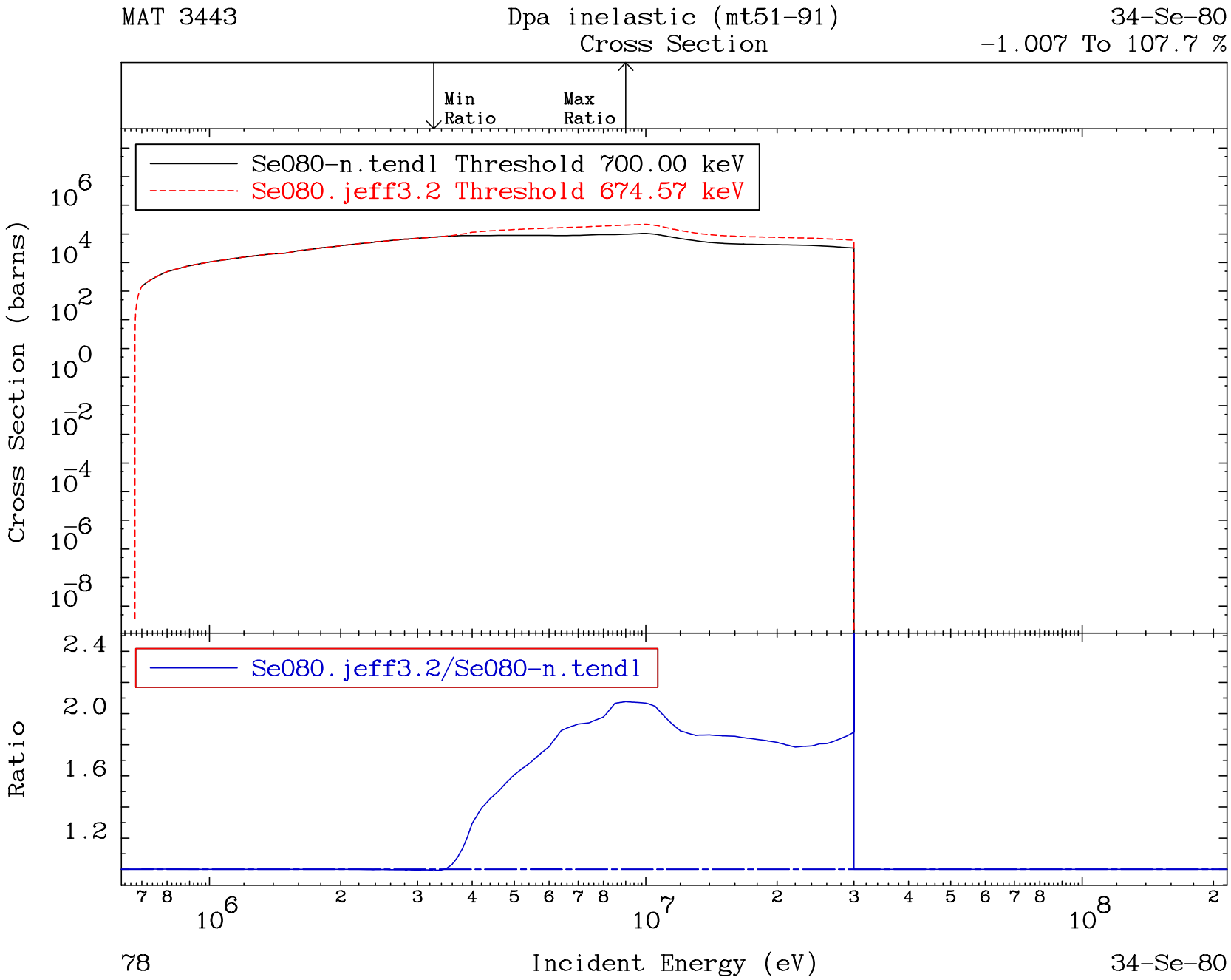

MAT 3443
Kerma capture (mt102)
Cross Section
34-Se-80
-99.94 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
73
34-Se-80

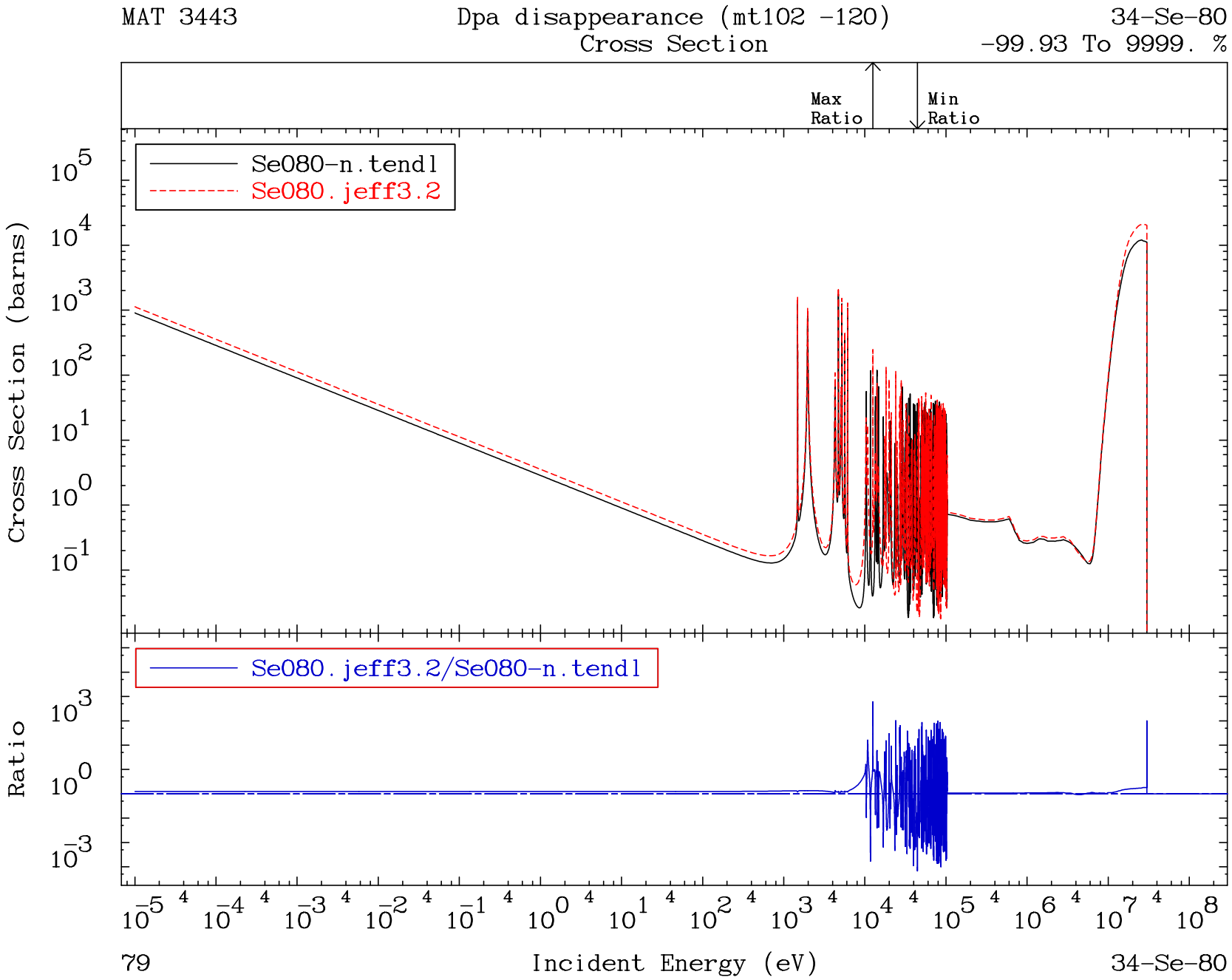

MAT 3443
Total photon (eV-barns)
Cross Section
34-Se-80
-99.94 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
74
34-Se-80

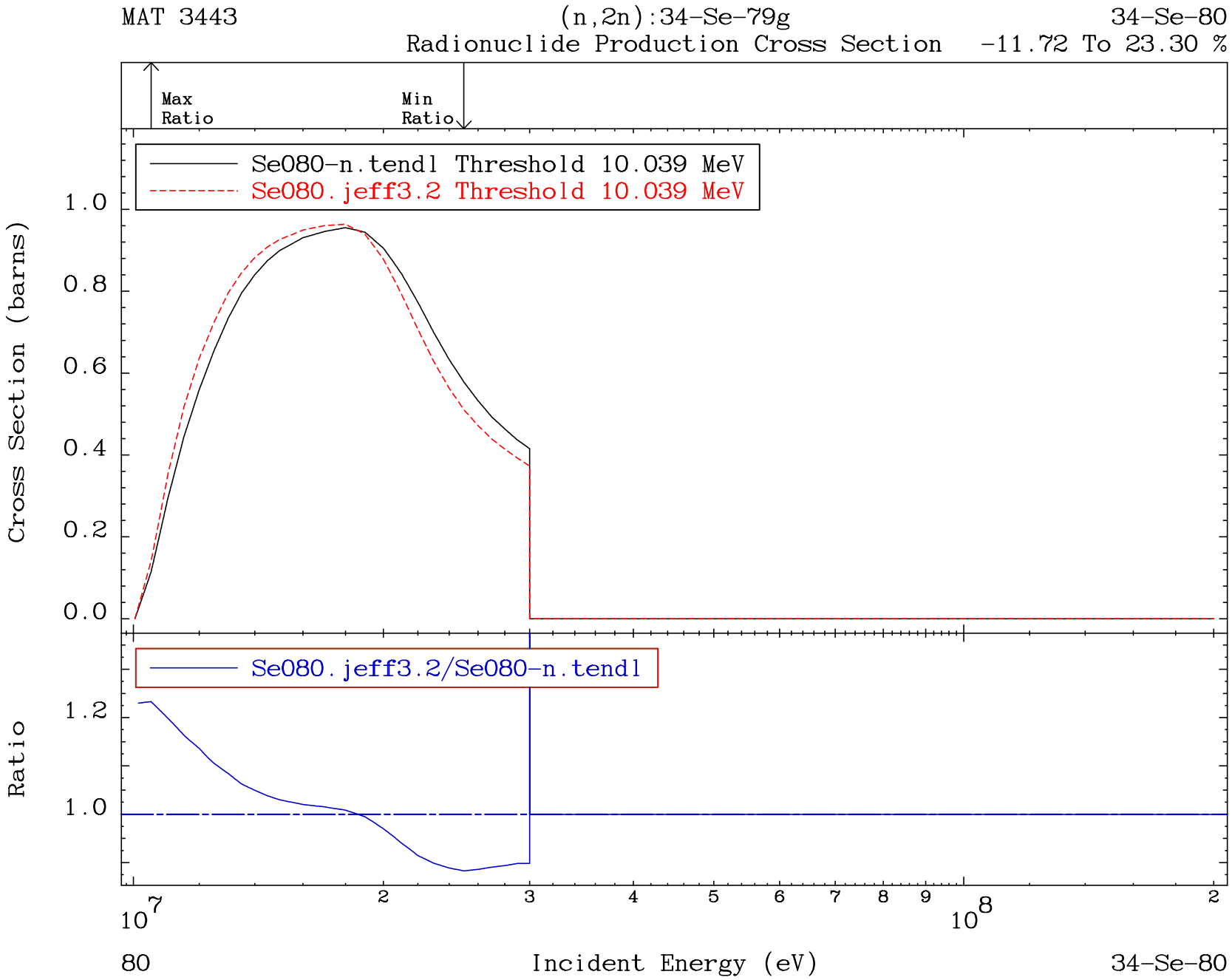

MAT 3443
Total kinematic kerma (high limit)
Cross Section
34-Se-80
-99.86 To 9999. %
Min Ratio
Max Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
75
34-Se-80

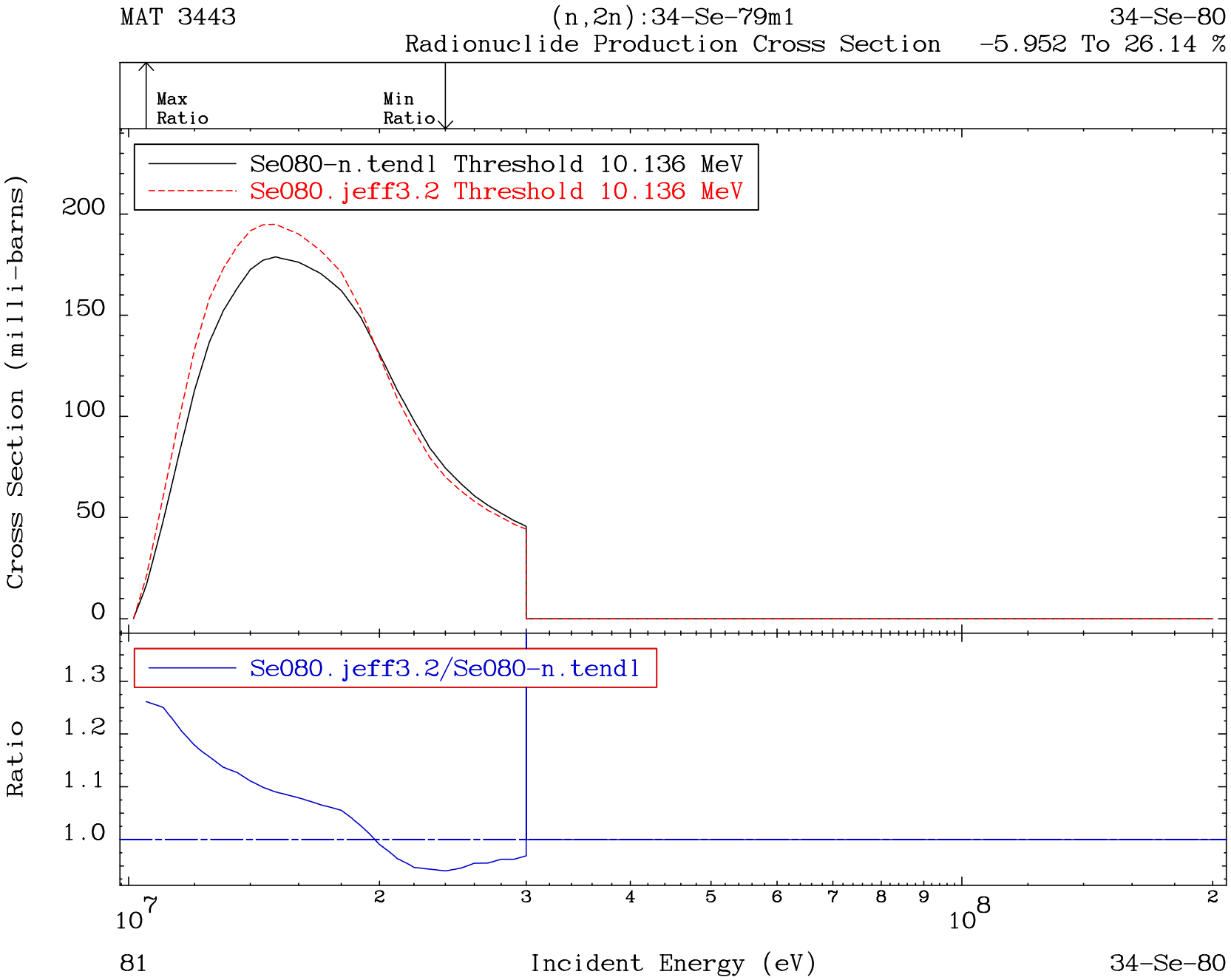

MAT 3443
Dpa total (eV-barns)
Cross Section
34-Se-80
-99.65 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
76
34-Se-80

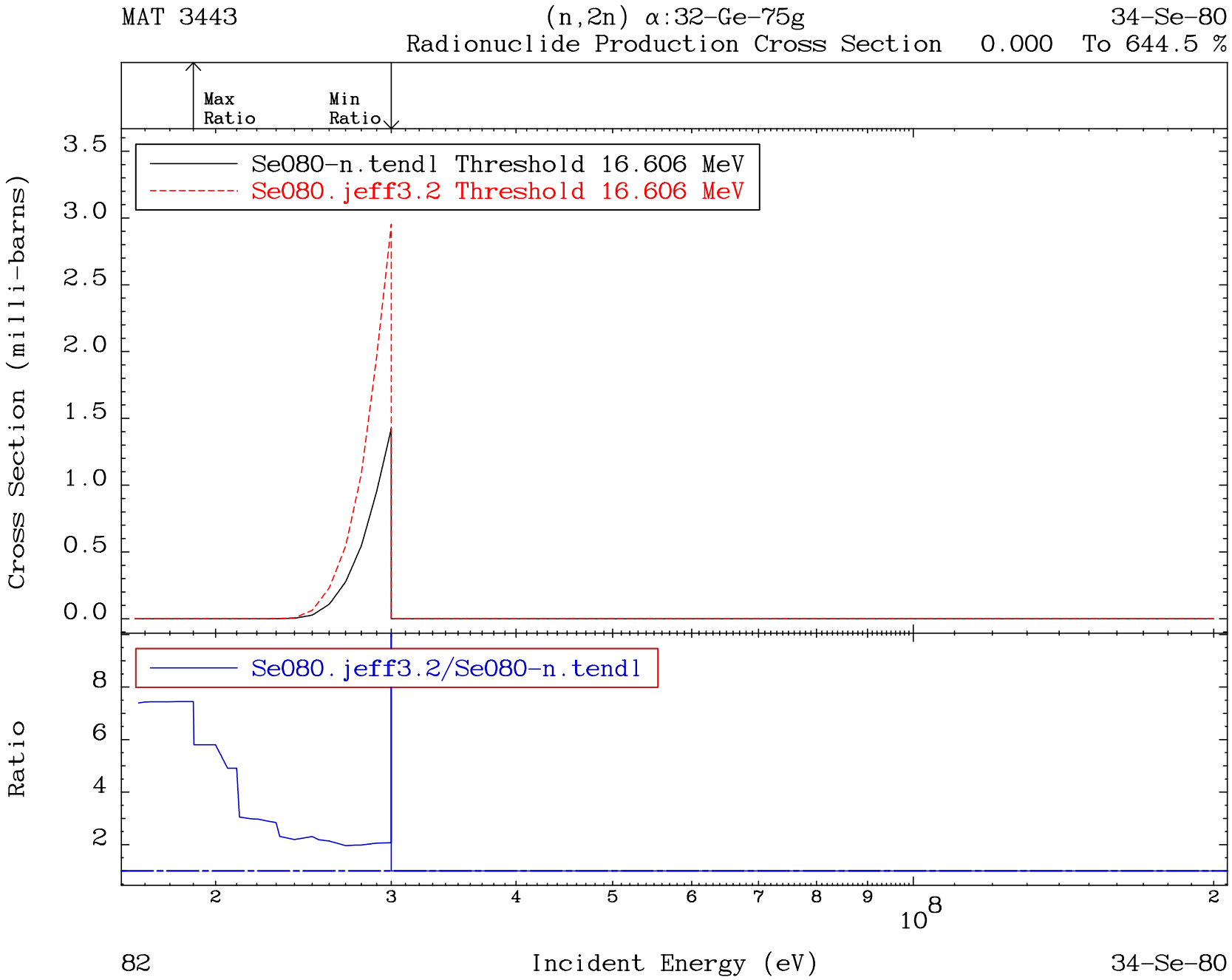

MAT 3443
Dpa elastic (mt2)
Cross Section
34-Se-80
-99.66 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 531.25 eV
Se080.jeff3.2 Threshold 531.25 eV
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
77
34-Se-80

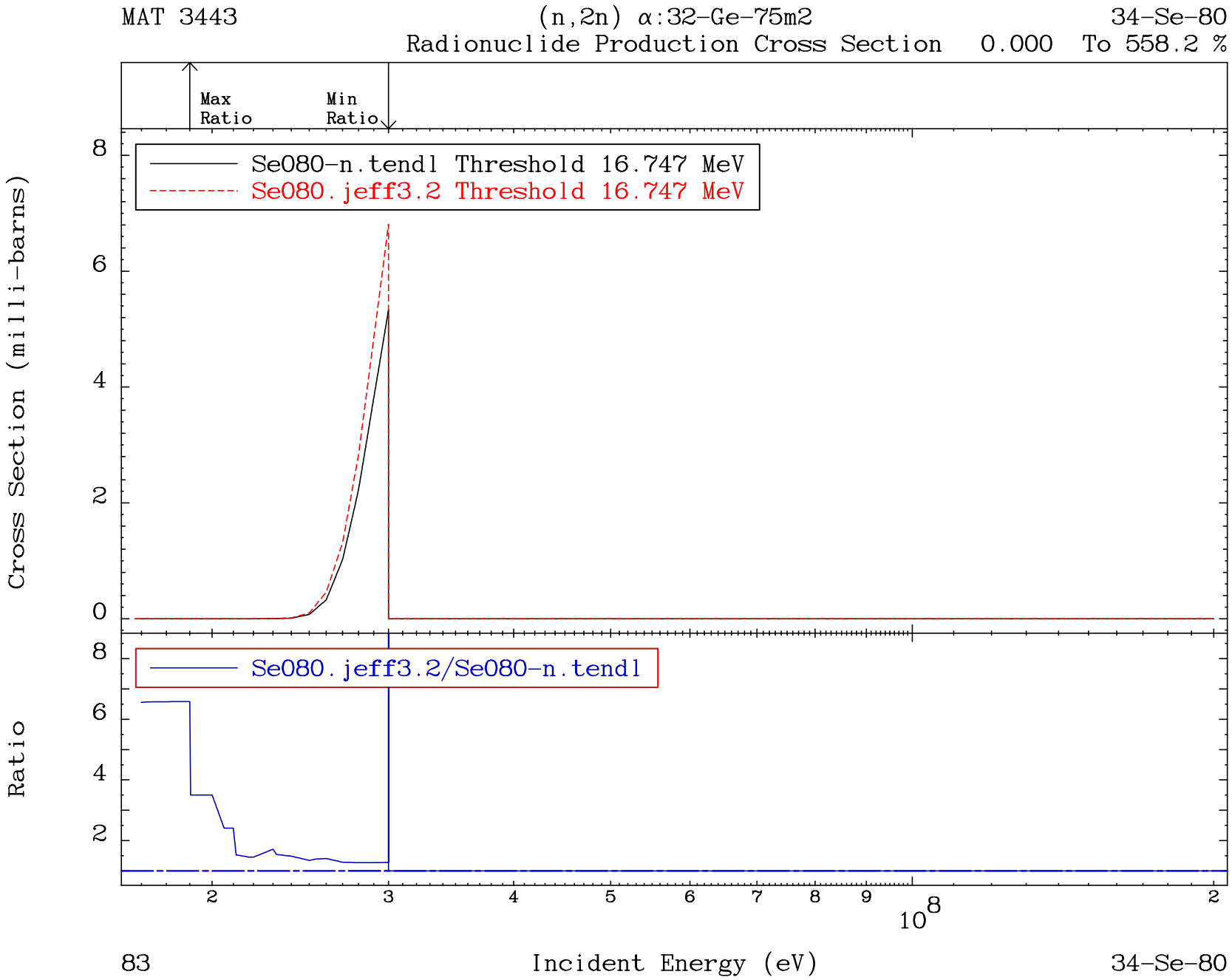

MAT 3443
Dpa inelastic (mt51-91)
Cross Section
34-Se-80
-1.007 To 107.7 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 700.00 keV
Se080.jeff3.2 Threshold 674.57 keV
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
78
34-Se-80

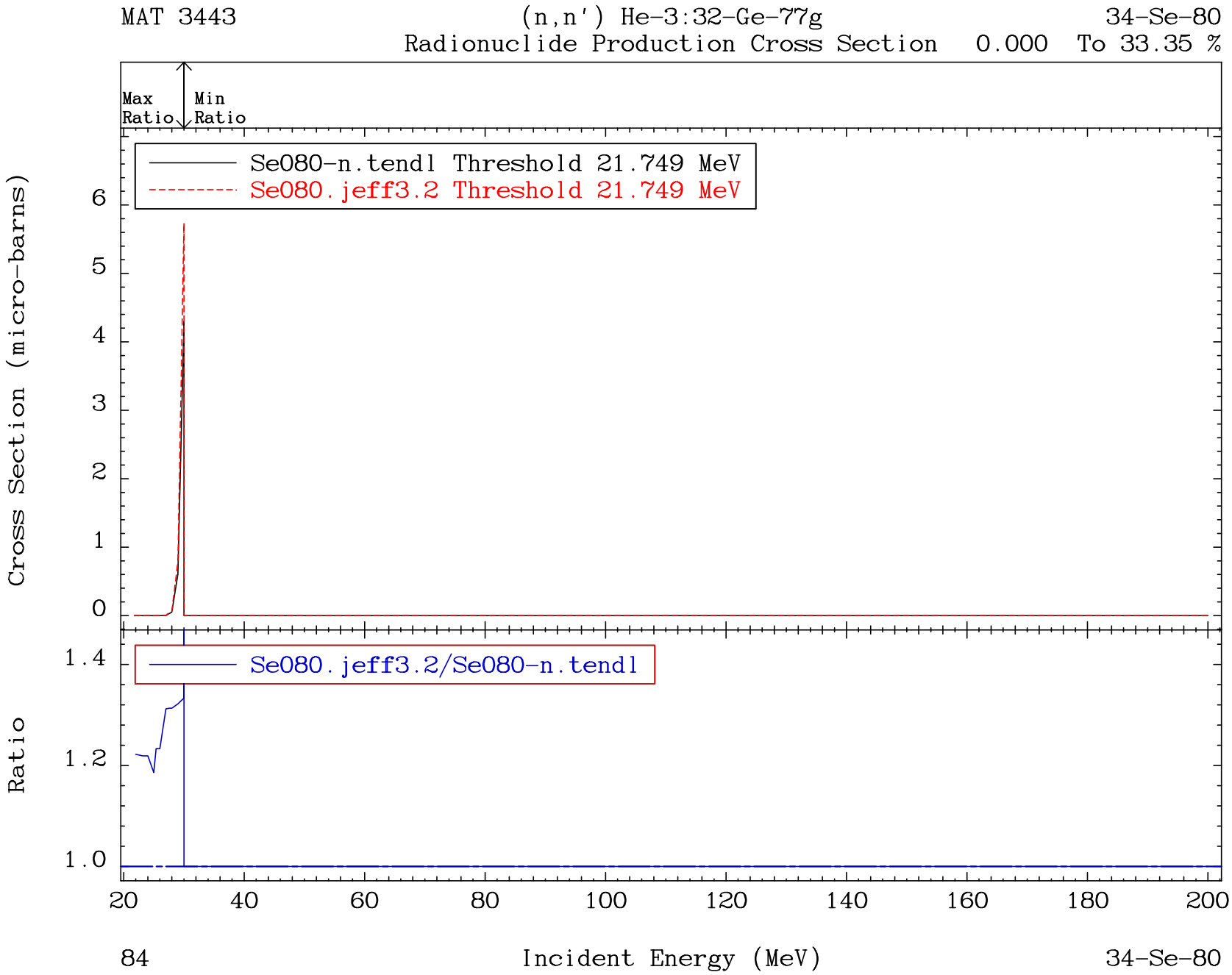

MAT 3443
Dpa disappearance (mt102 -120)
Cross Section
34-Se-80
-99.93 To 9999. %
Max Ratio
Min Ratio
Se080-n.tendl
Se080.jeff3.2
Cross Section (barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
79
34-Se-80

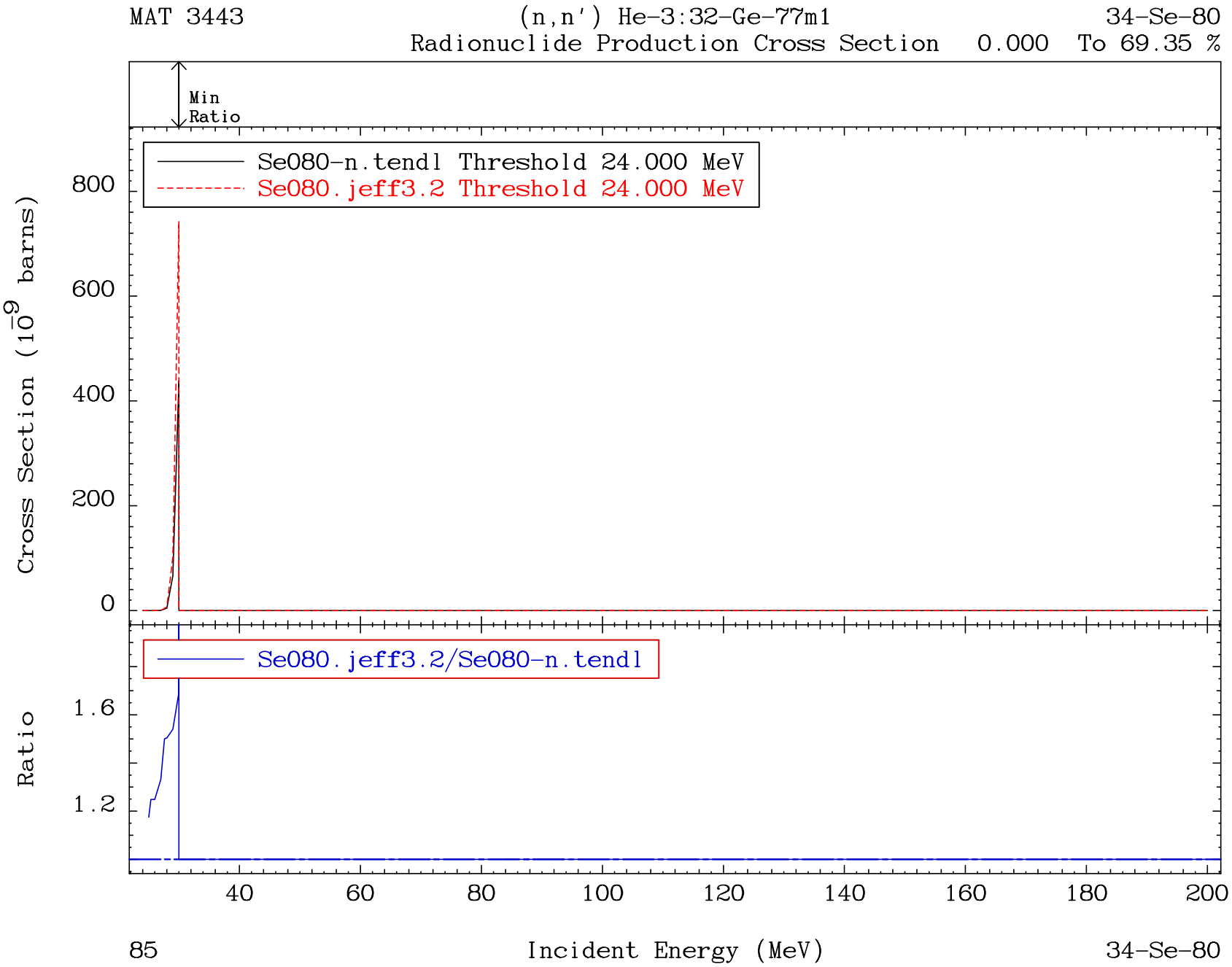

MAT 3443
(n,2n):34-Se-79g
34-Se-80
Radionuclide Production Cross Section -11.72 To 23.30 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 10.039 MeV
Se080.jeff3.2 Threshold 10.039 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
34-Se-80

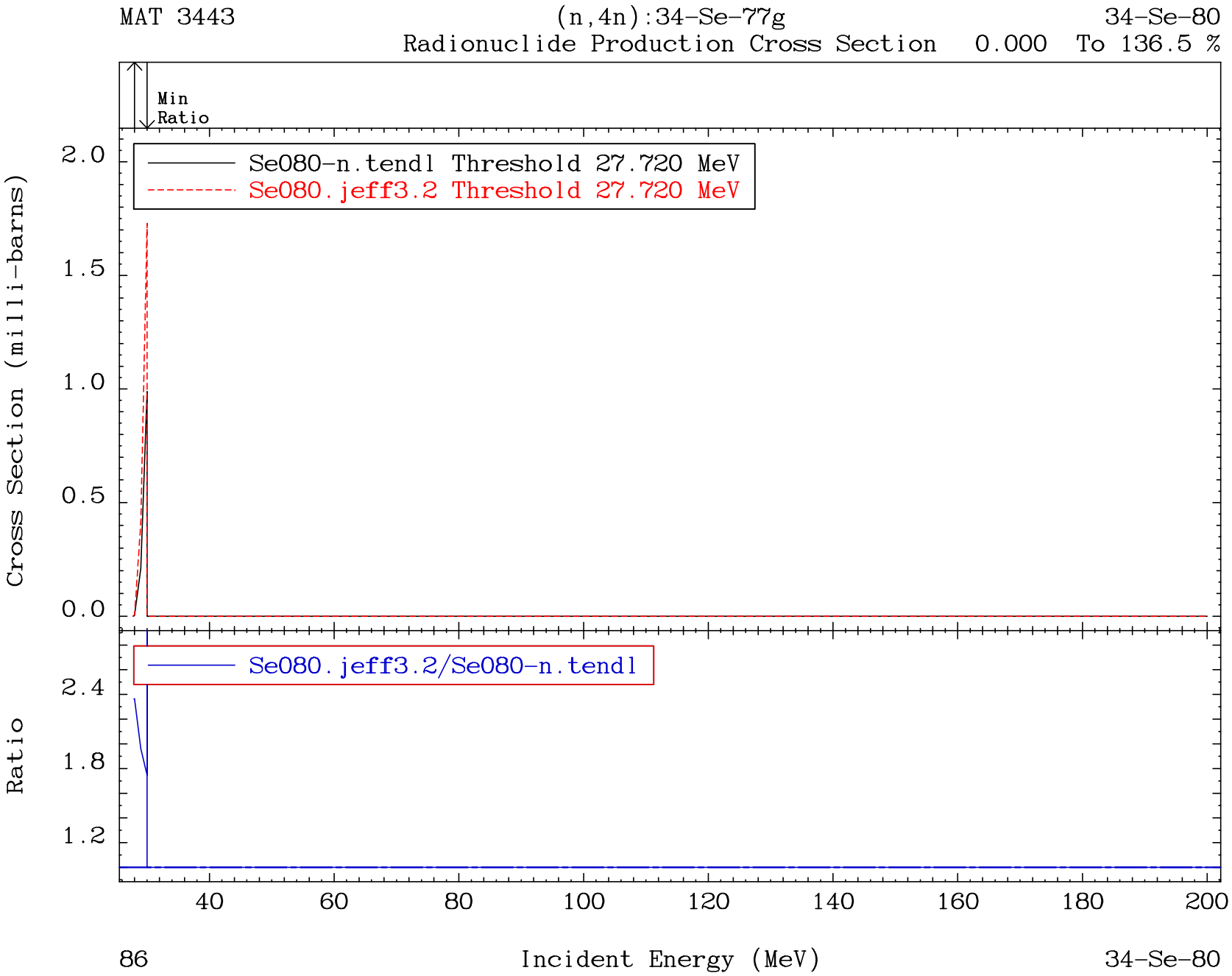

MAT 3443
(n,2n):34-Se-79m1
34-Se-80
Radionuclide Production Cross Section -5.952 To 26.14 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 10.136 MeV
Se080.jeff3.2 Threshold 10.136 MeV
Cross Section (milli-barns)
200
150
100
50
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.3
1.2
1.1
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
34-Se-80

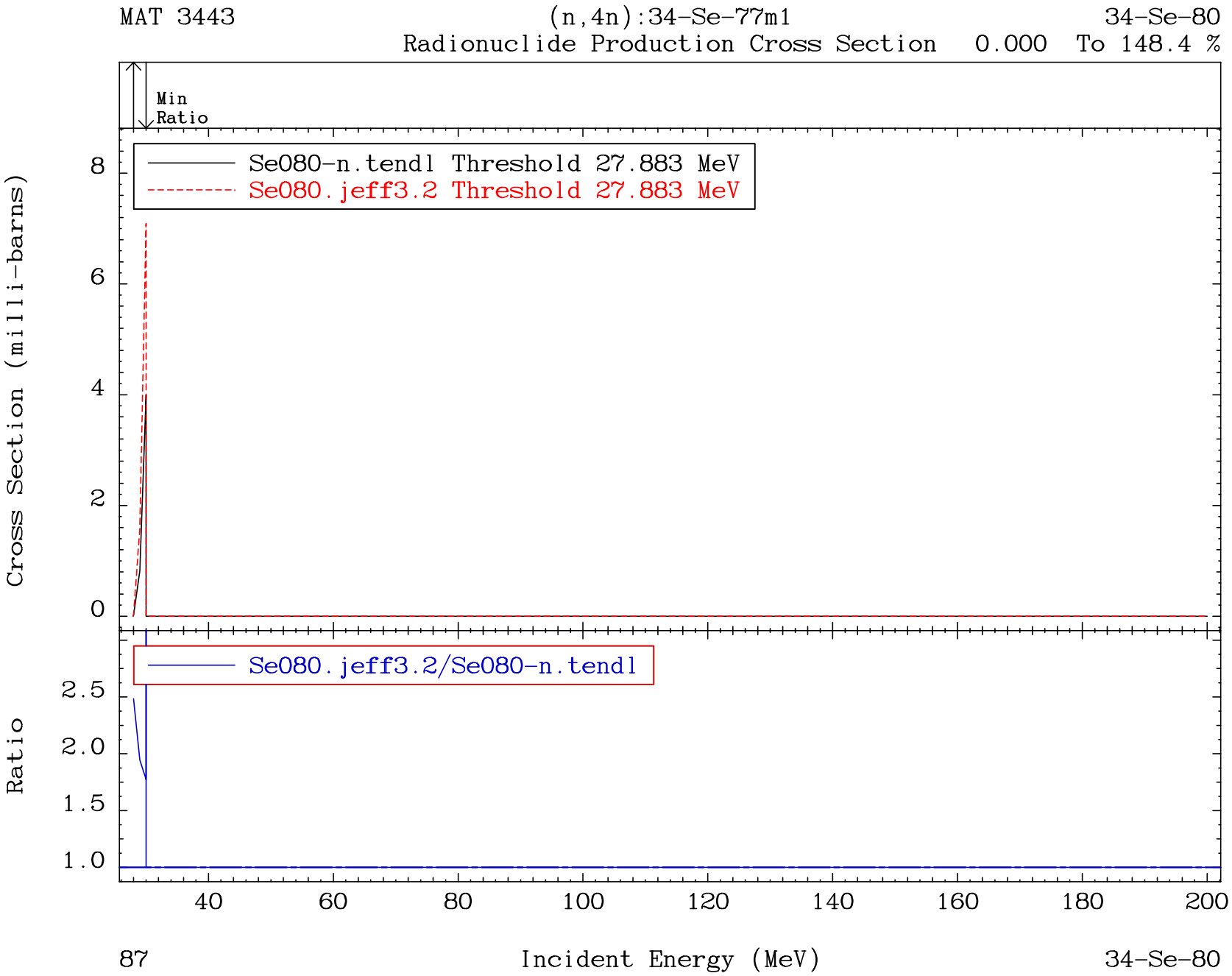

MAT 3443
(n,2n) α:32-Ge-75g
34-Se-80
Radionuclide Production Cross Section 0.000 To 644.5 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 16.606 MeV
Se080.jeff3.2 Threshold 16.606 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
34-Se-80

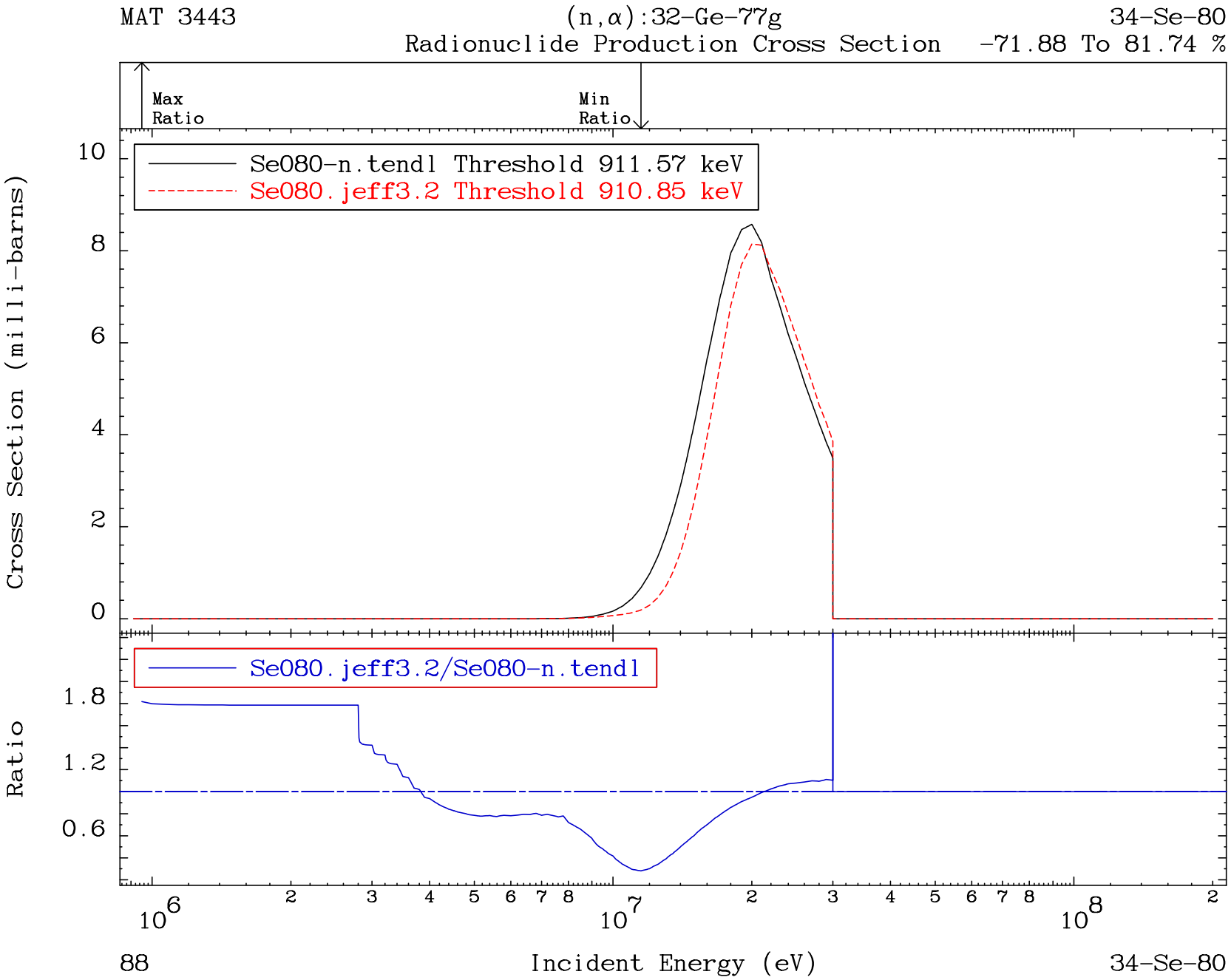

MAT 3443
(n,2n) α:32-Ge-75m2
34-Se-80
Radionuclide Production Cross Section 0.000 To 558.2 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 16.747 MeV
Se080.jeff3.2 Threshold 16.747 MeV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
83
34-Se-80

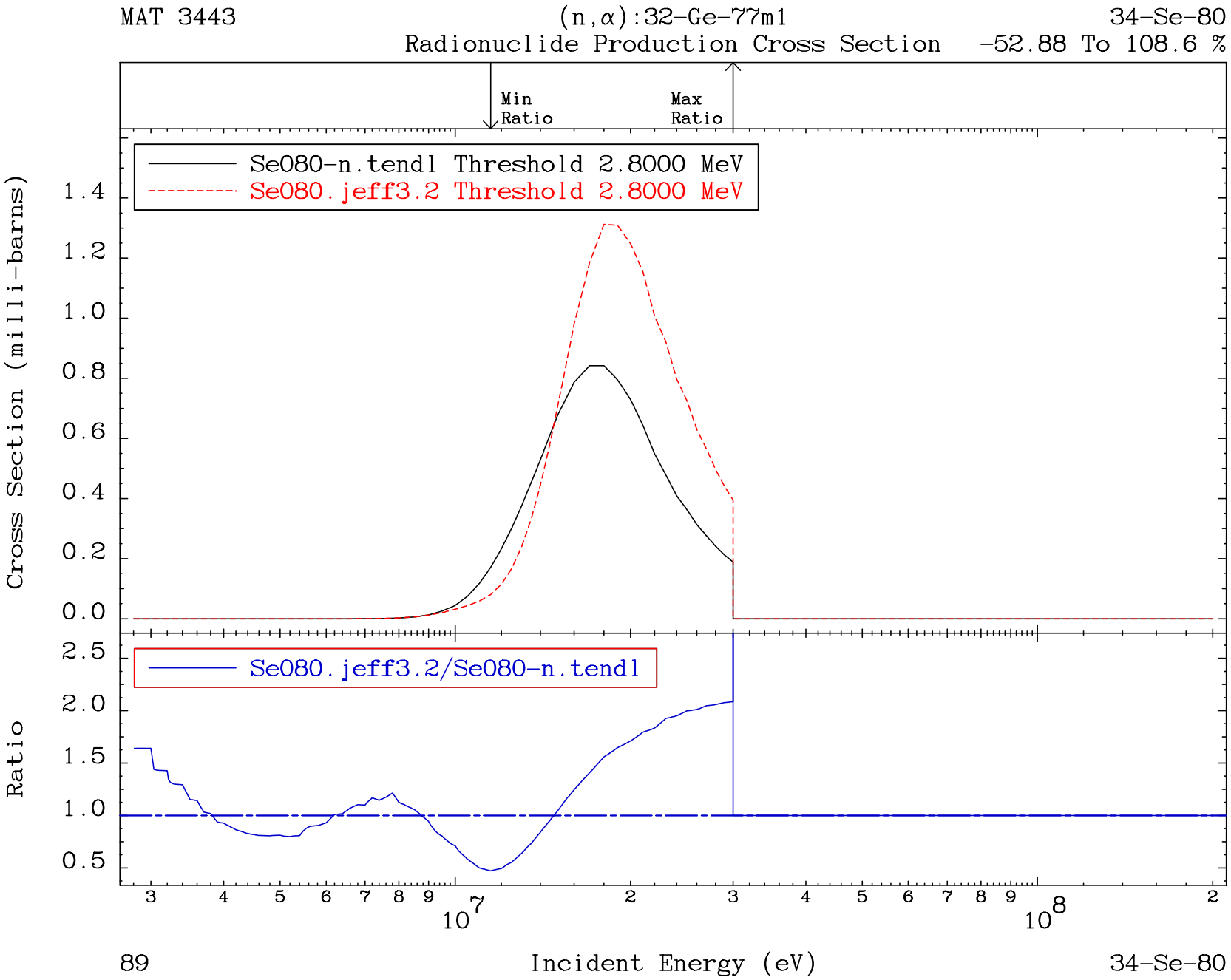

MAT 3443
(n,n') He-3:32-Ge-77g
34-Se-80
Radionuclide Production Cross Section 0.000 To 33.35 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 21.749 MeV
Se080.jeff3.2 Threshold 21.749 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
1.2
1.4
20
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
34-Se-80

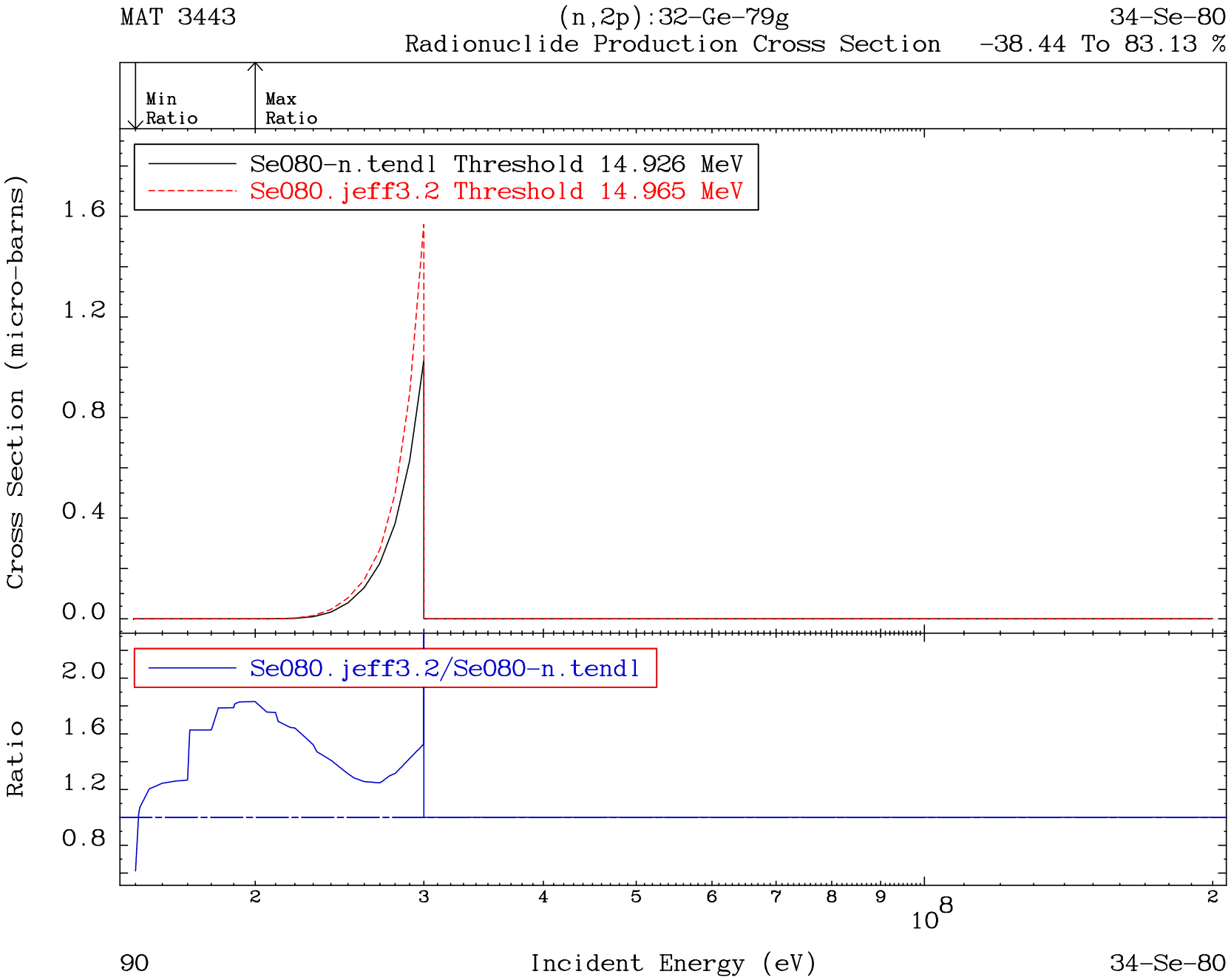

MAT 3443
(n,n') He-3:32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section 0.000 To 69.35 %
Min Ratio
Se080-n.tendl Threshold 24.000 MeV
Se080.jeff3.2 Threshold 24.000 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
Se080.jeff3.2/Se080-n.tendl
Ratio
1.6
1.2
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
34-Se-80

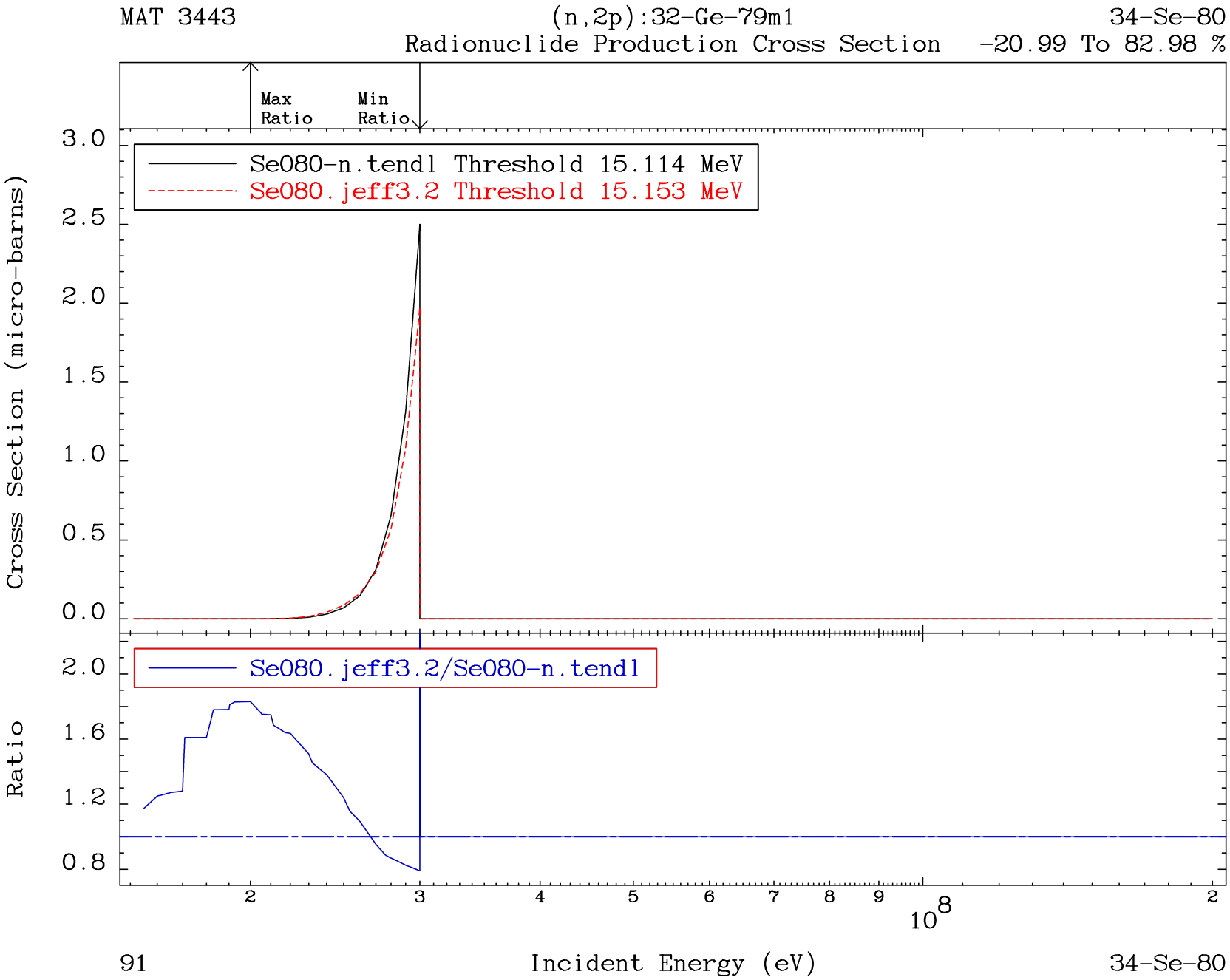

MAT 3443
(n,4n):34-Se-77g
34-Se-80
Radionuclide Production Cross Section 0.000 To 136.5 %
Min Ratio
Se080-n.tendl Threshold 27.720 MeV
Se080.jeff3.2 Threshold 27.720 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.4
1.8
1.2
40
60
80
100
120
140
160
180
200
86
Incident Energy (MeV)
34-Se-80

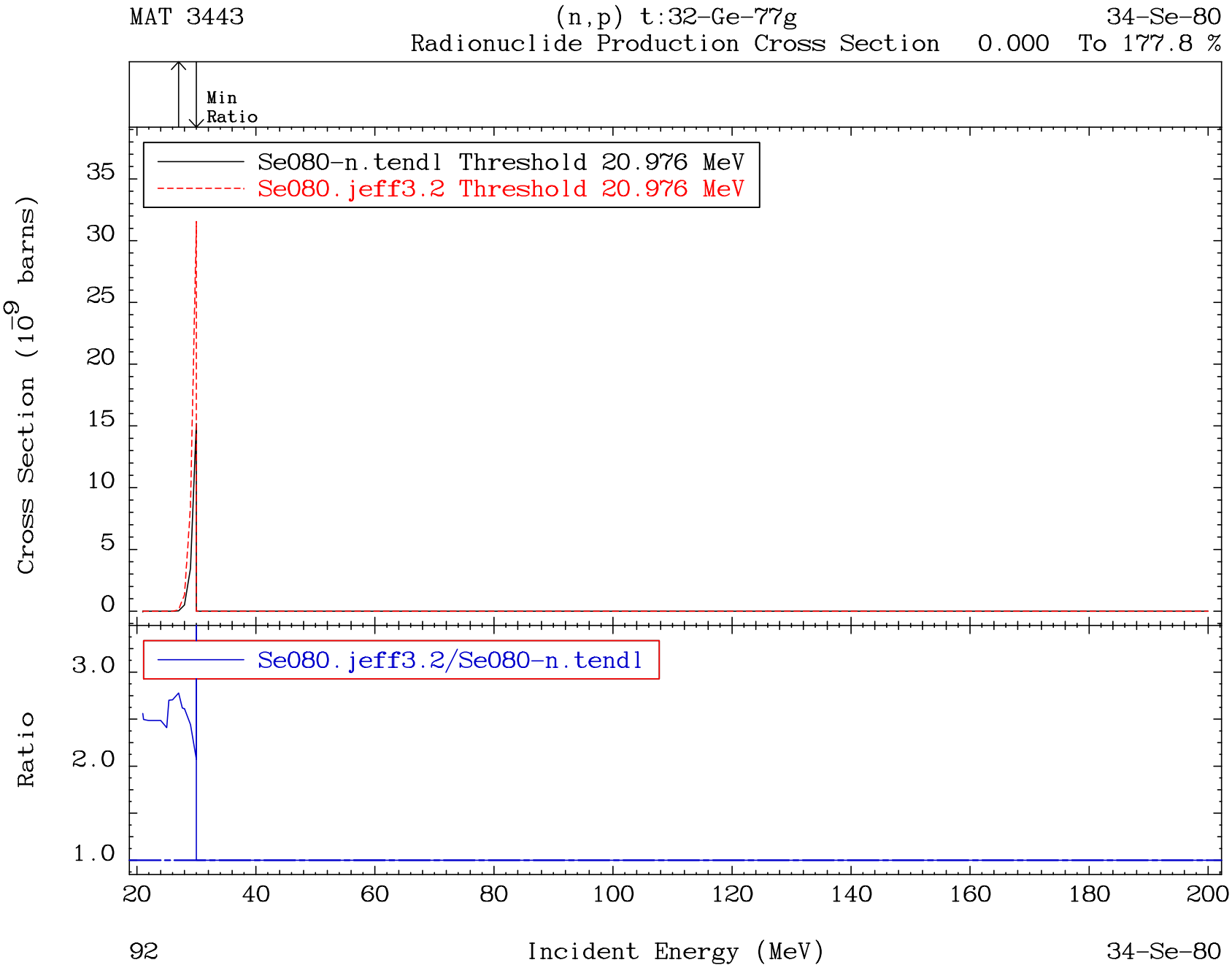

MAT 3443
(n,4n):34-Se-77m1
34-Se-80
Radionuclide Production Cross Section 0.000 To 148.4 %
Min Ratio
Se080-n.tendl Threshold 27.883 MeV
Se080.jeff3.2 Threshold 27.883 MeV
Cross Section (milli-barns)
0
2
4
6
8
Se080.jeff3.2/Se080-n.tendl
Ratio
1.0
1.5
2.0
2.5
40
60
80
100
120
140
160
180
200
87
Incident Energy (MeV)
34-Se-80

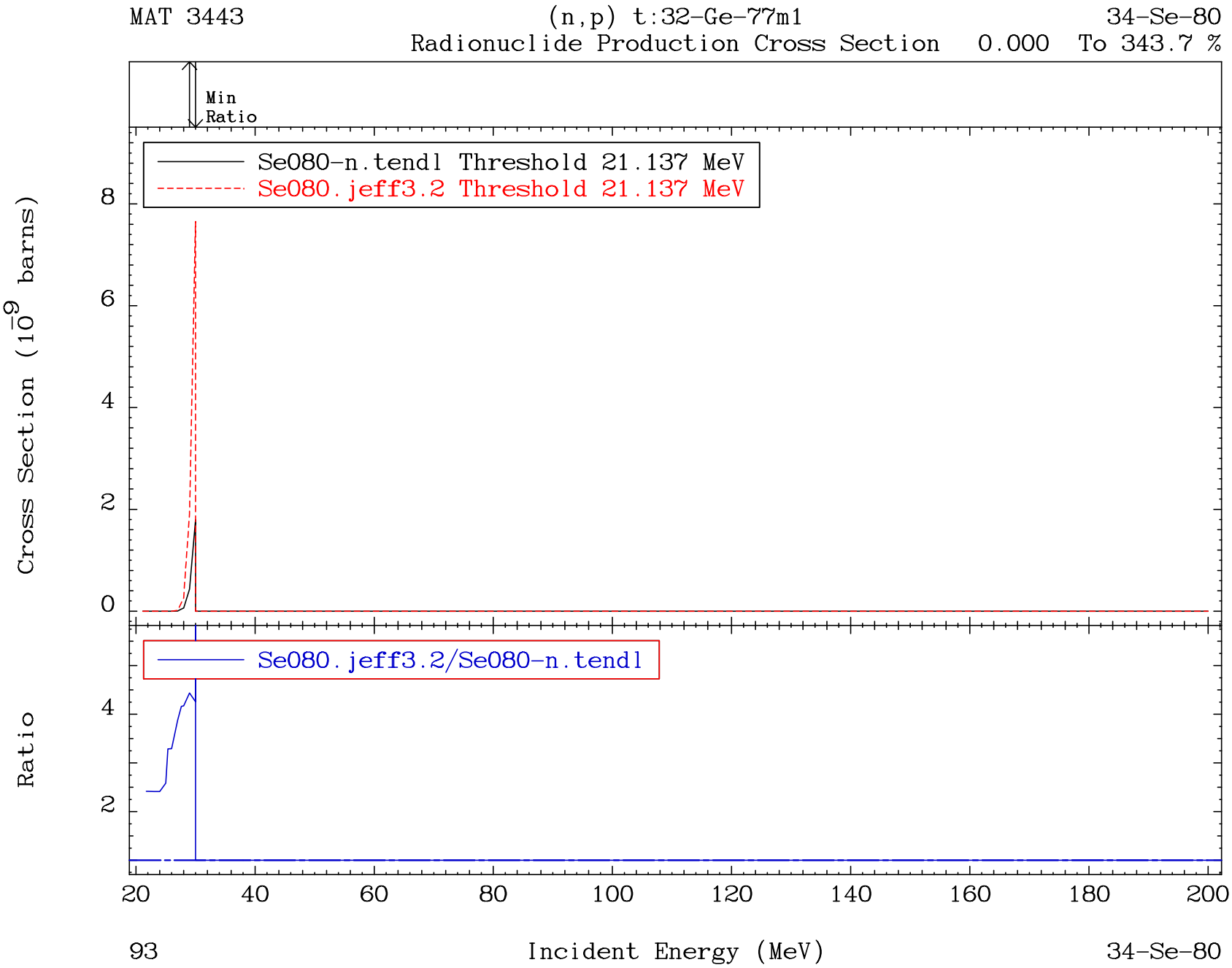

MAT 3443
(n,α):32-Ge-77g
34-Se-80
Radionuclide Production Cross Section -71.88 To 81.74 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 911.57 keV
Se080.jeff3.2 Threshold 910.85 keV
Cross Section (milli-barns)
Se080.jeff3.2/Se080-n.tendl
Ratio
Incident Energy (eV)
88
34-Se-80


MAT 3443
(n,α):32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section -52.88 To 108.6 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 2.8000 MeV
Se080.jeff3.2 Threshold 2.8000 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.5
2.0
1.5
1.0
0.5
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
34-Se-80


MAT 3443
(n,2p):32-Ge-79g
34-Se-80
Radionuclide Production Cross Section -38.44 To 83.13 %
Min Ratio
Max Ratio
Se080-n.tendl Threshold 14.926 MeV
Se080.jeff3.2 Threshold 14.965 MeV
Cross Section (micro-barns)
1.6
1.2
0.8
0.4
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
34-Se-80


MAT 3443
(n,2p):32-Ge-79m1
34-Se-80
Radionuclide Production Cross Section -20.99 To 82.98 %
Max Ratio
Min Ratio
Se080-n.tendl Threshold 15.114 MeV
Se080.jeff3.2 Threshold 15.153 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Se080.jeff3.2/Se080-n.tendl
Ratio
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
34-Se-80


MAT 3443
(n,p) t:32-Ge-77g
34-Se-80
Radionuclide Production Cross Section 0.000 To 177.8 %
Min
Ratio
Se080-n.tendl Threshold 20.976 MeV
Se080.jeff3.2 Threshold 20.976 MeV
Cross Section (10^{-9} barns)
35
30
25
20
15
10
5
0
Se080.jeff3.2/Se080-n.tendl
Ratio
3.0
2.0
1.0
20
40
60
80
100
120
140
160
180
200
92
Incident Energy (MeV)
34-Se-80


MAT 3443
(n,p) t:32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section 0.000 To 343.7 %
Min Ratio
Se080-n.tendl Threshold 21.137 MeV
Se080.jeff3.2 Threshold 21.137 MeV
Cross Section (10^{-9} barns)
0
2
4
6
8
Se080.jeff3.2/Se080-n.tendl
Ratio
2
4
20
40
60
80
100
120
140
160
180
200
93
Incident Energy (MeV)
34-Se-80