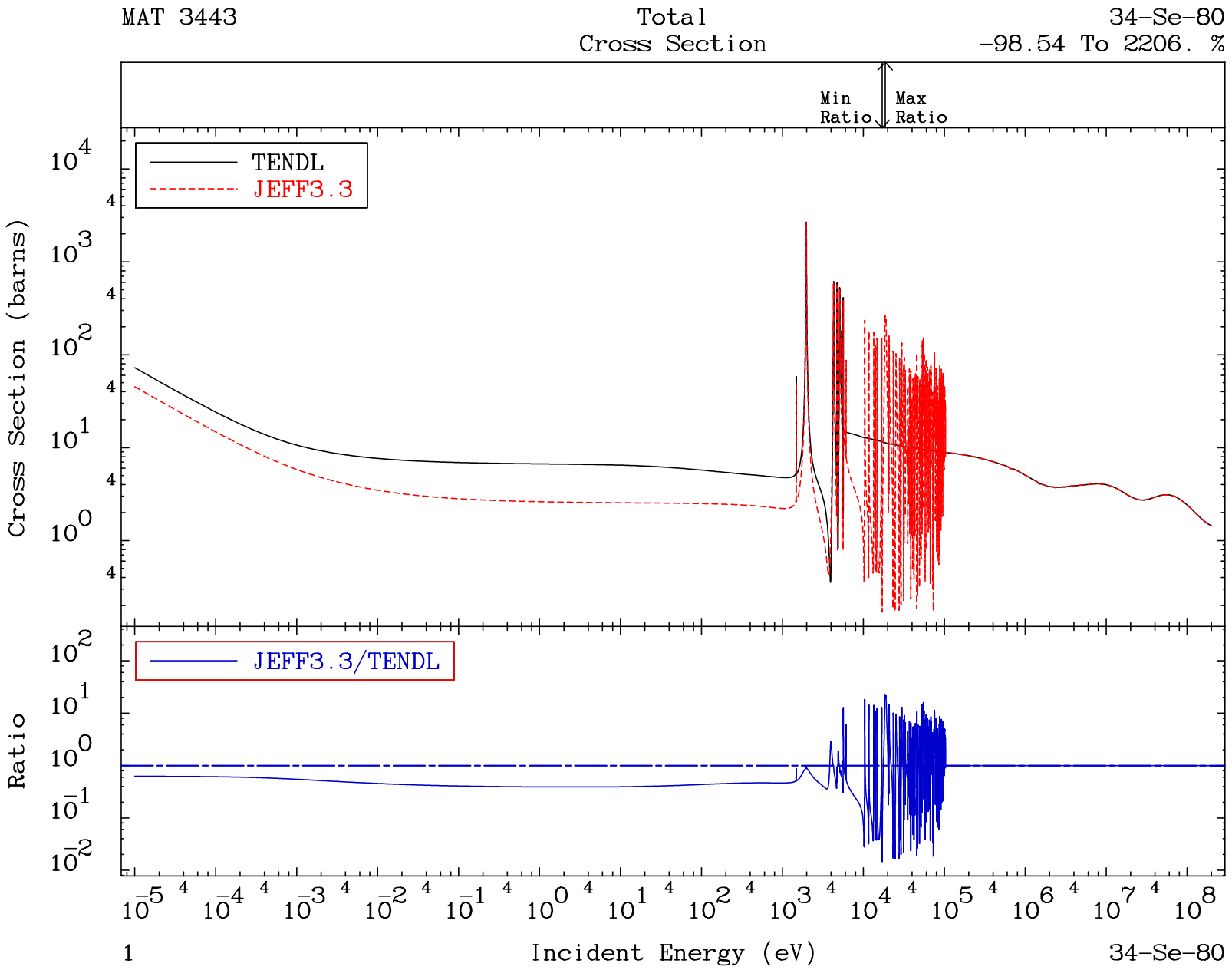
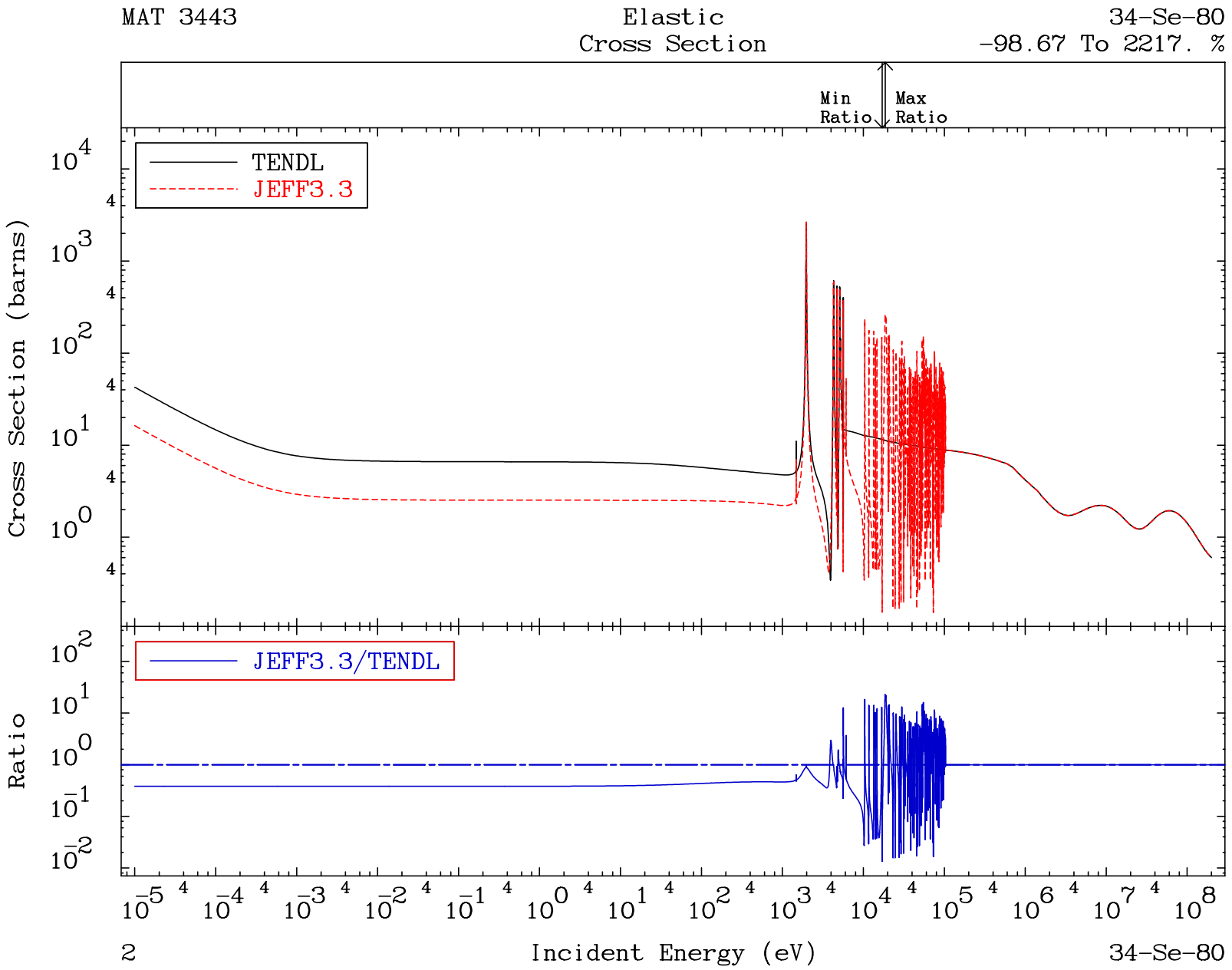
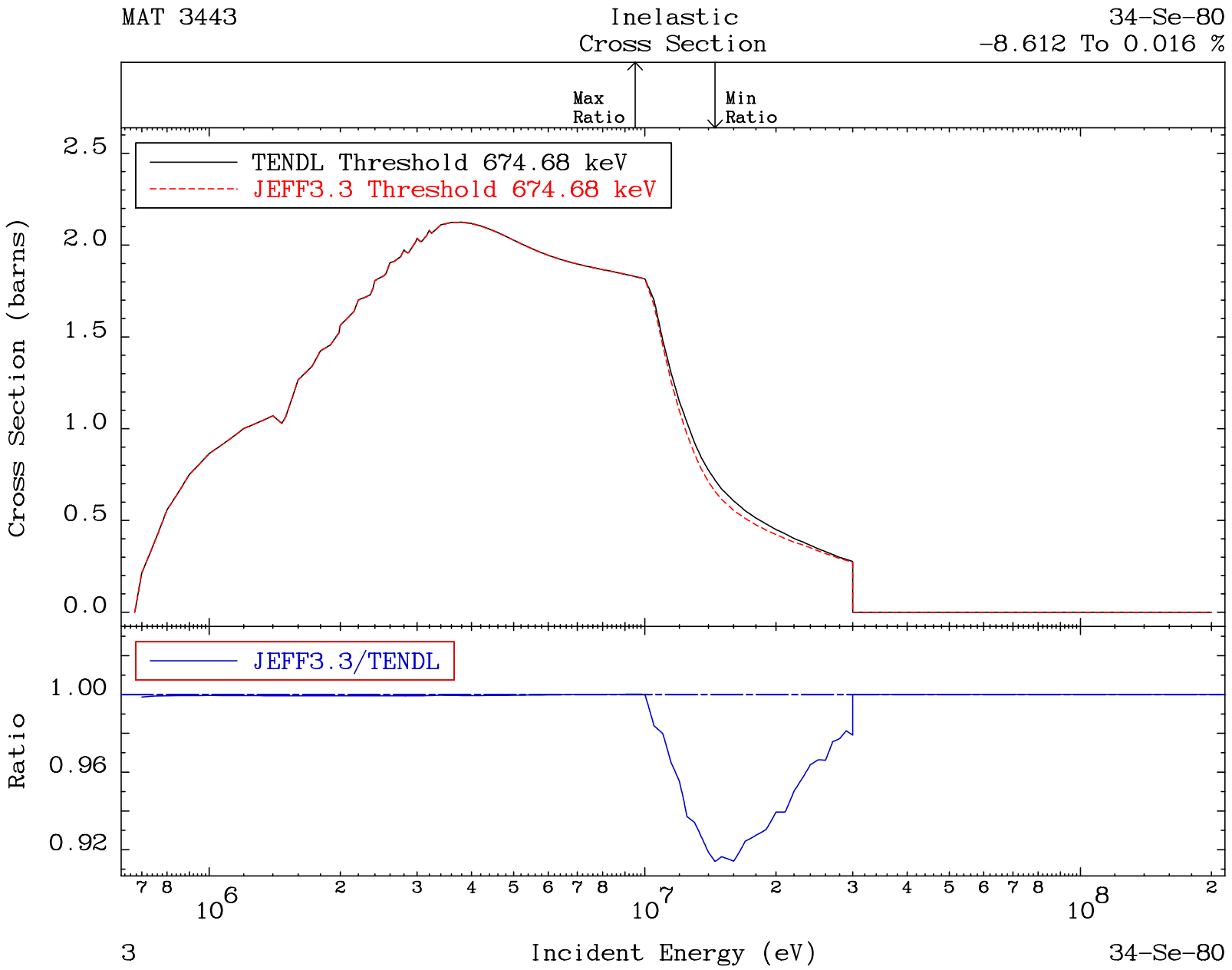
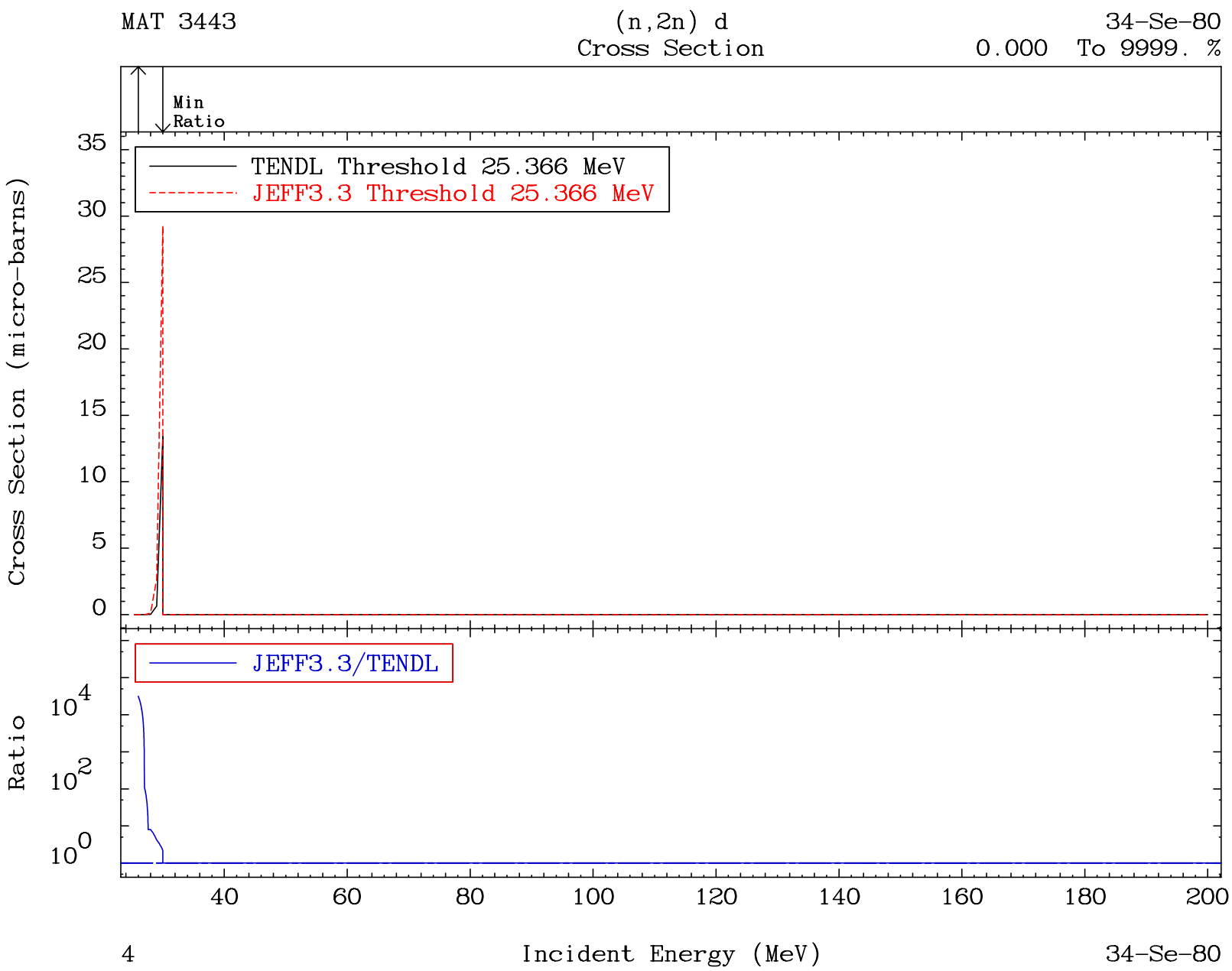
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

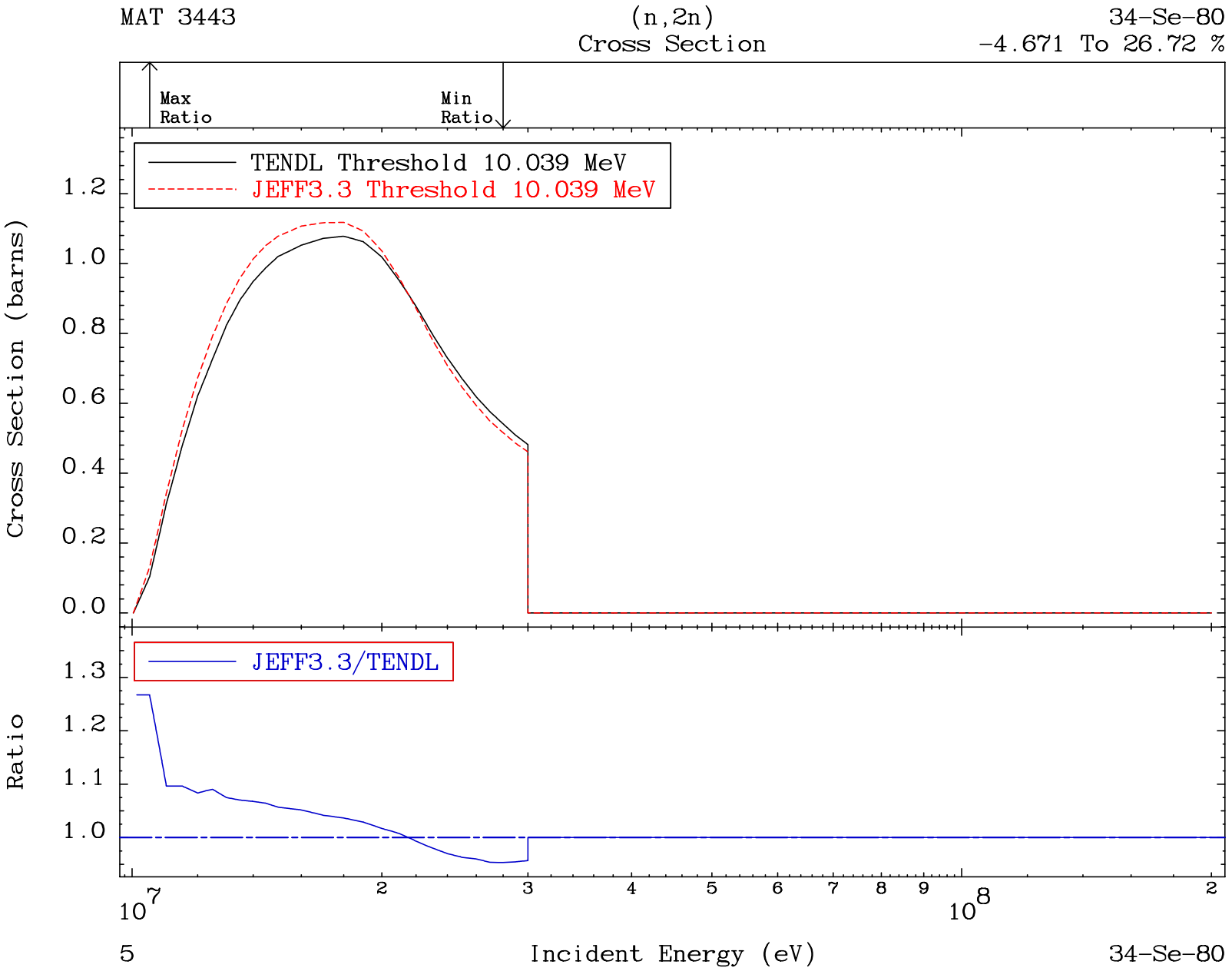
Press Mouse Button to Start

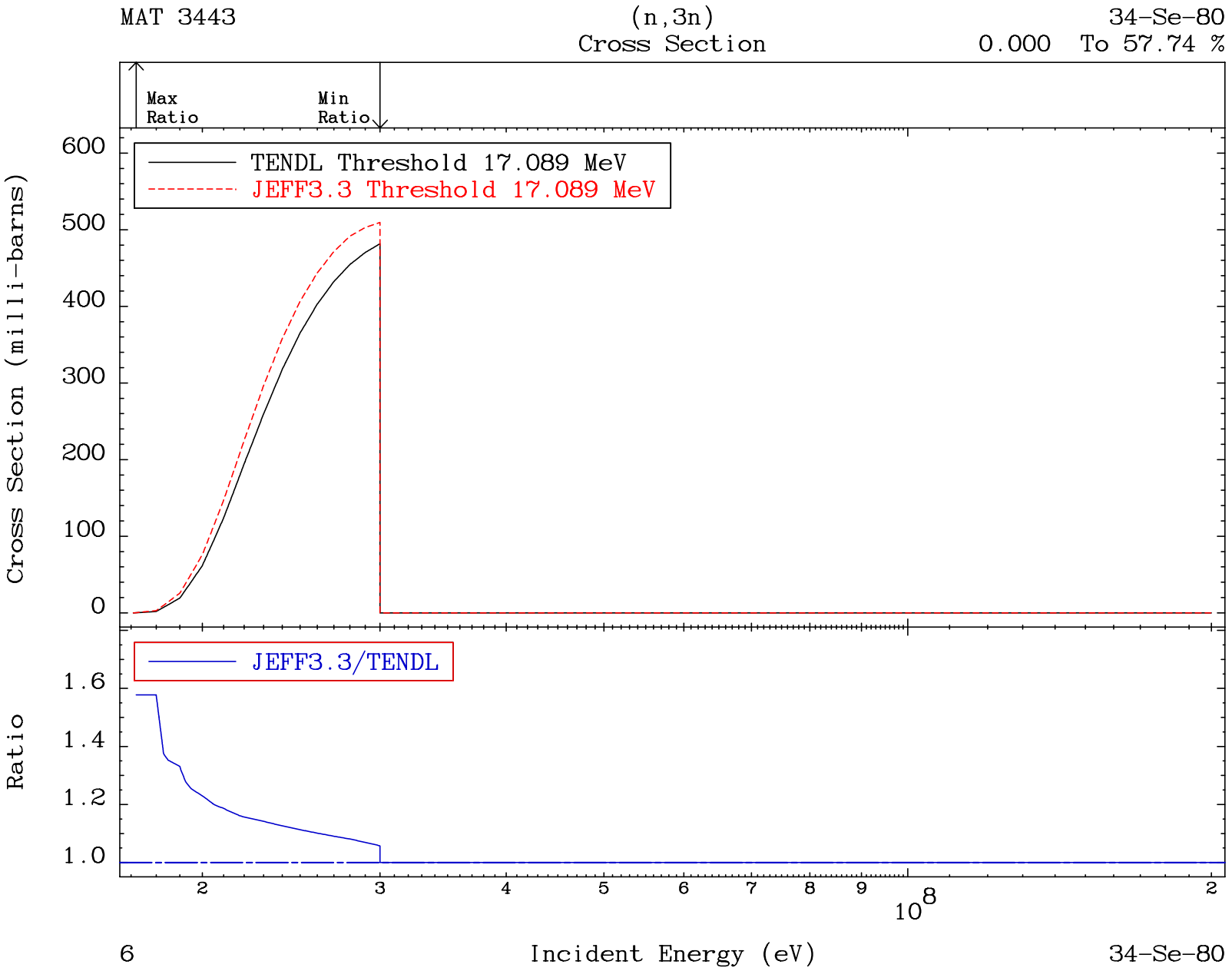

MAT 3443
Total
Cross Section
34-Se-80
-98.54 To 2206. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
34-Se-80

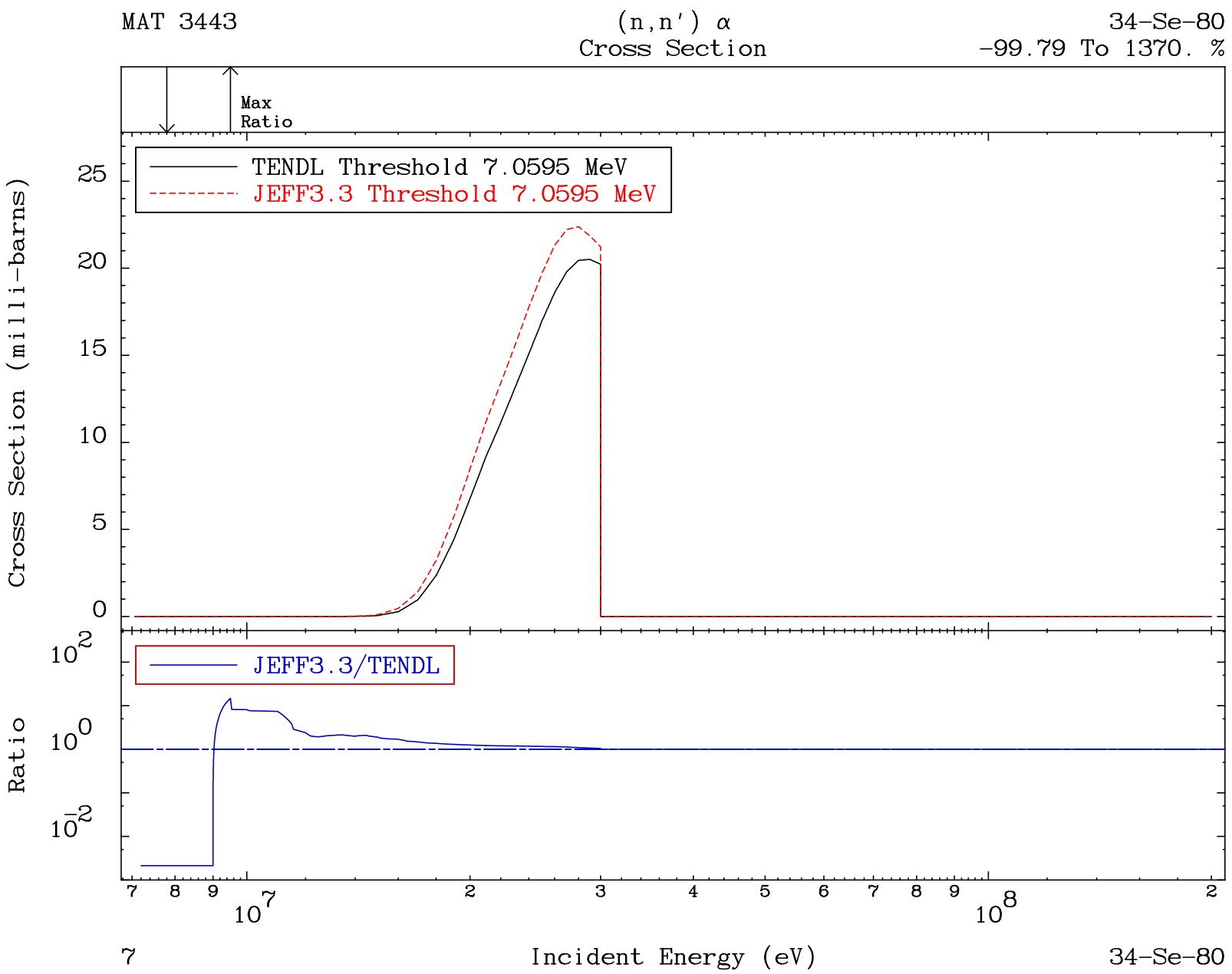

MAT 3443
Elastic
Cross Section
34-Se-80
-98.67 To 2217. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
34-Se-80

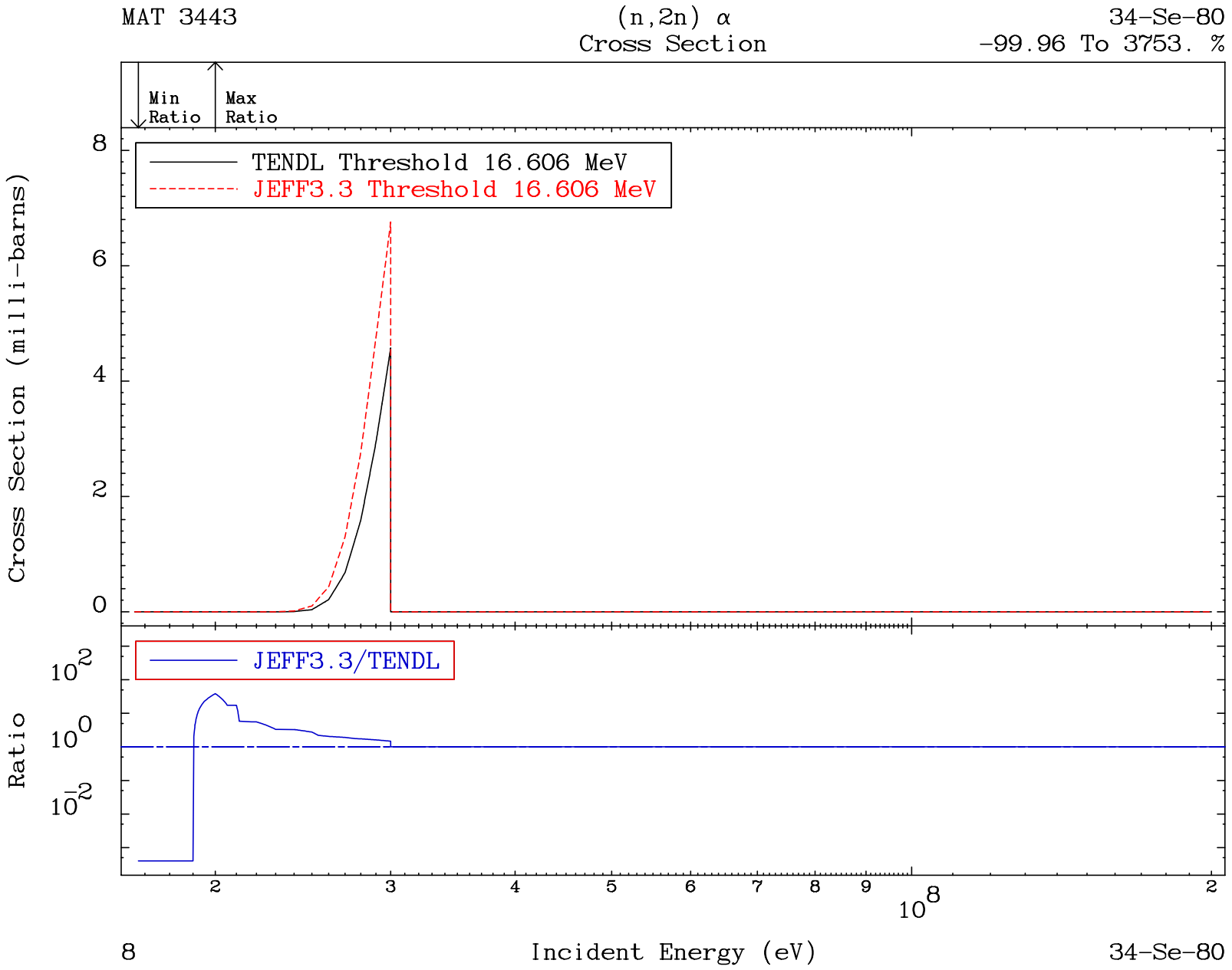

MAT 3443
Inelastic
Cross Section
34-Se-80
-8.612 To 0.016 %
Max
Ratio
Min
Ratio
TENDL Threshold 674.68 keV
JEFF3.3 Threshold 674.68 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.96
0.92
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
34-Se-80

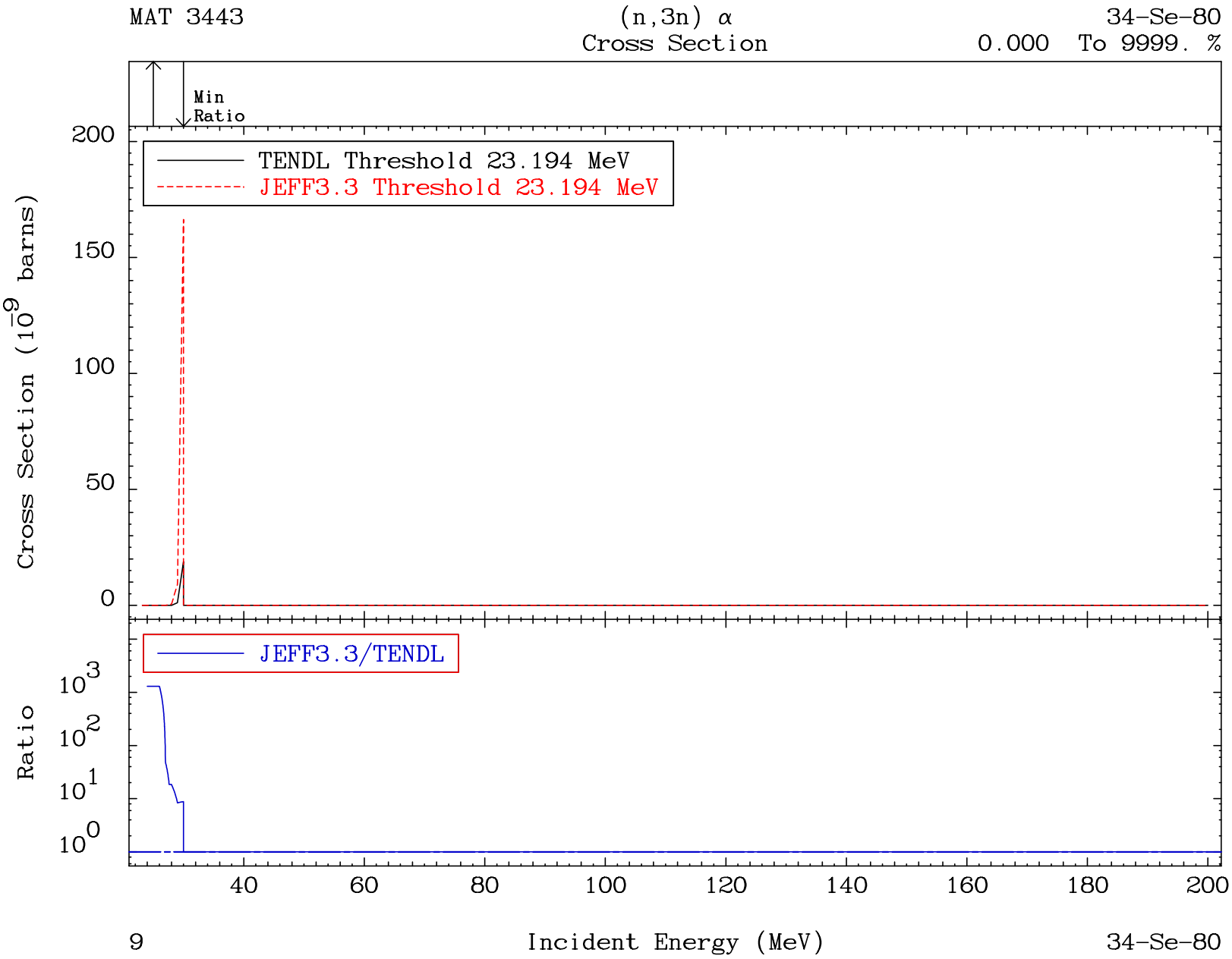

MAT 3443
(n,2n) d
Cross Section
34-Se-80
0.000 To 9999. %
Min
Ratio
TENDL Threshold 25.366 MeV
JEFF3.3 Threshold 25.366 MeV
Cross Section (micro-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
34-Se-80

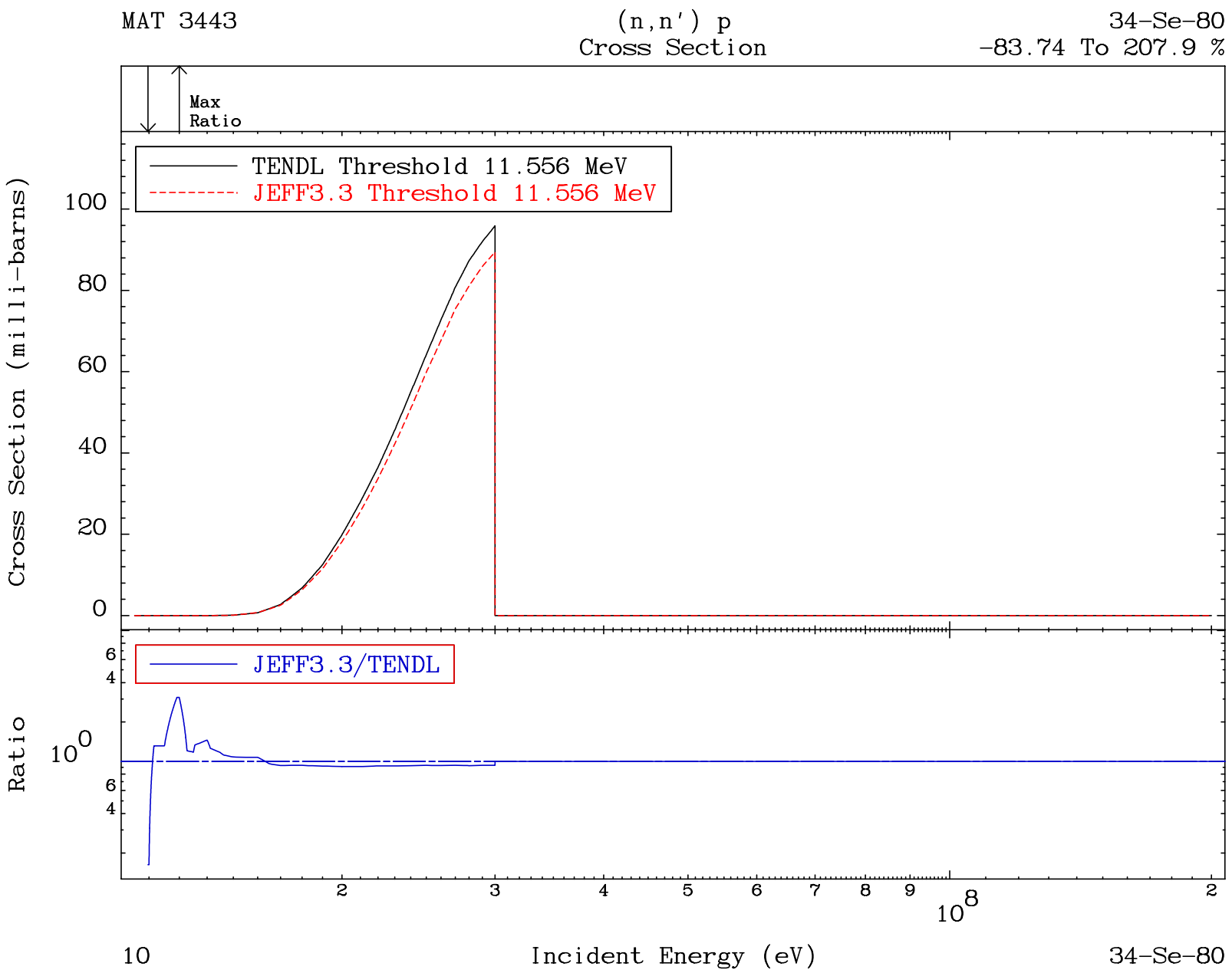

MAT 3443
(n,2n)
Cross Section
34-Se-80
-4.671 To 26.72 %
Max Ratio
Min Ratio
TENDL Threshold 10.039 MeV
JEFF3.3 Threshold 10.039 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
34-Se-80

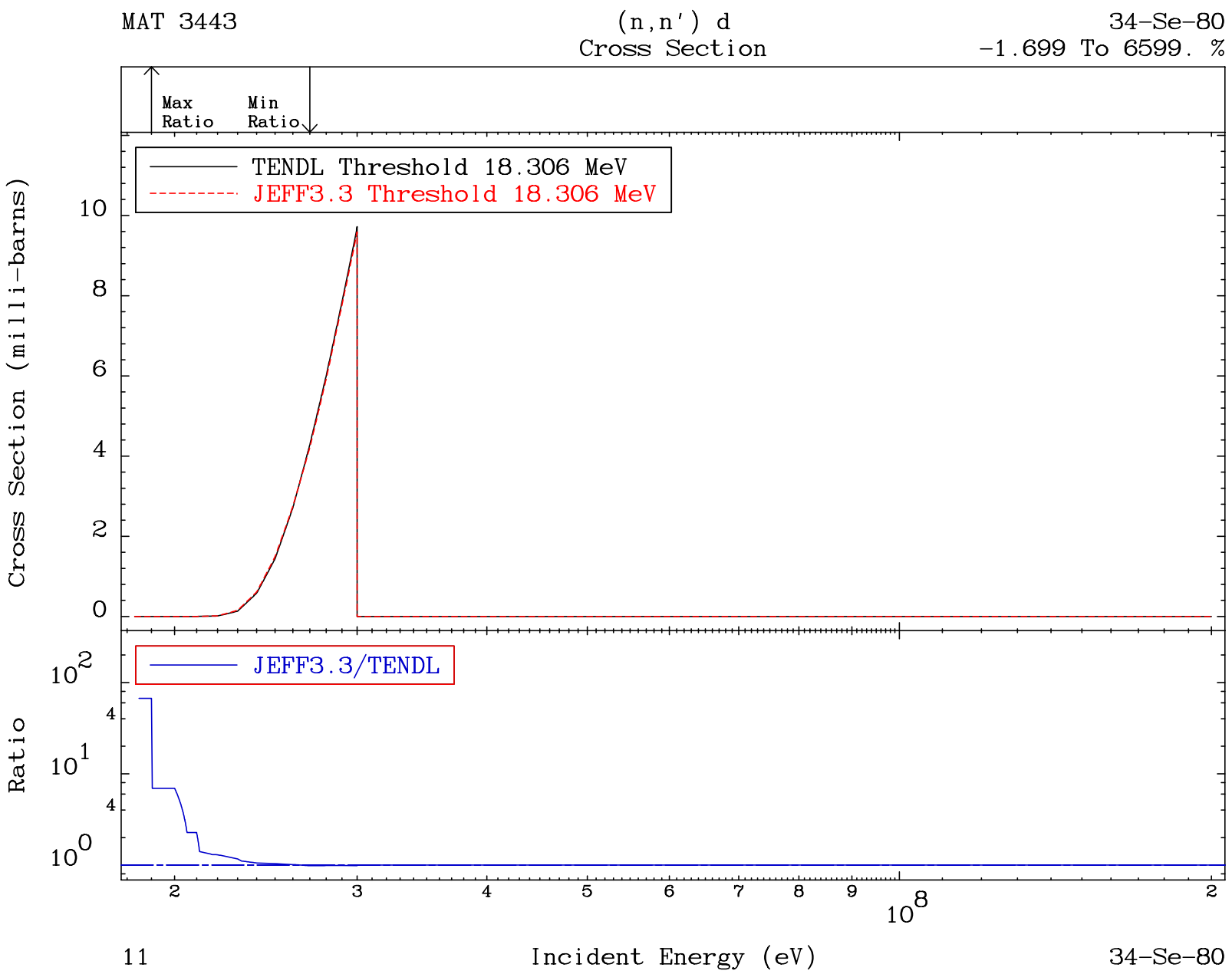

MAT 3443
(n,3n)
Cross Section
34-Se-80
0.000 To 57.74 %
Max Ratio
Min Ratio
TENDL Threshold 17.089 MeV
JEFF3.3 Threshold 17.089 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
34-Se-80

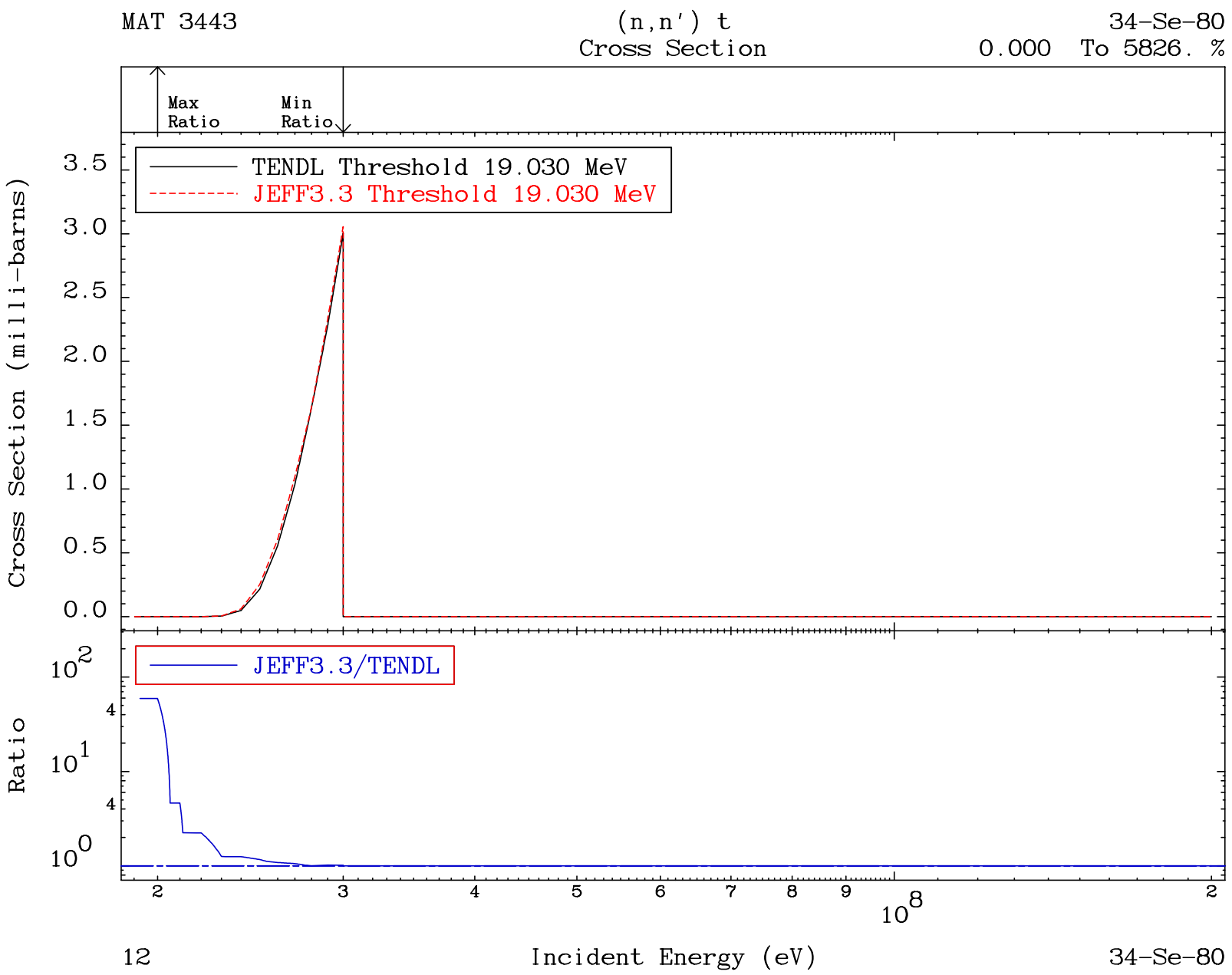

MAT 3443
(n,n') α
Cross Section
34-Se-80
-99.79 To 1370. %
Max
Ratio
TENDL Threshold 7.0595 MeV
JEFF3.3 Threshold 7.0595 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
34-Se-80

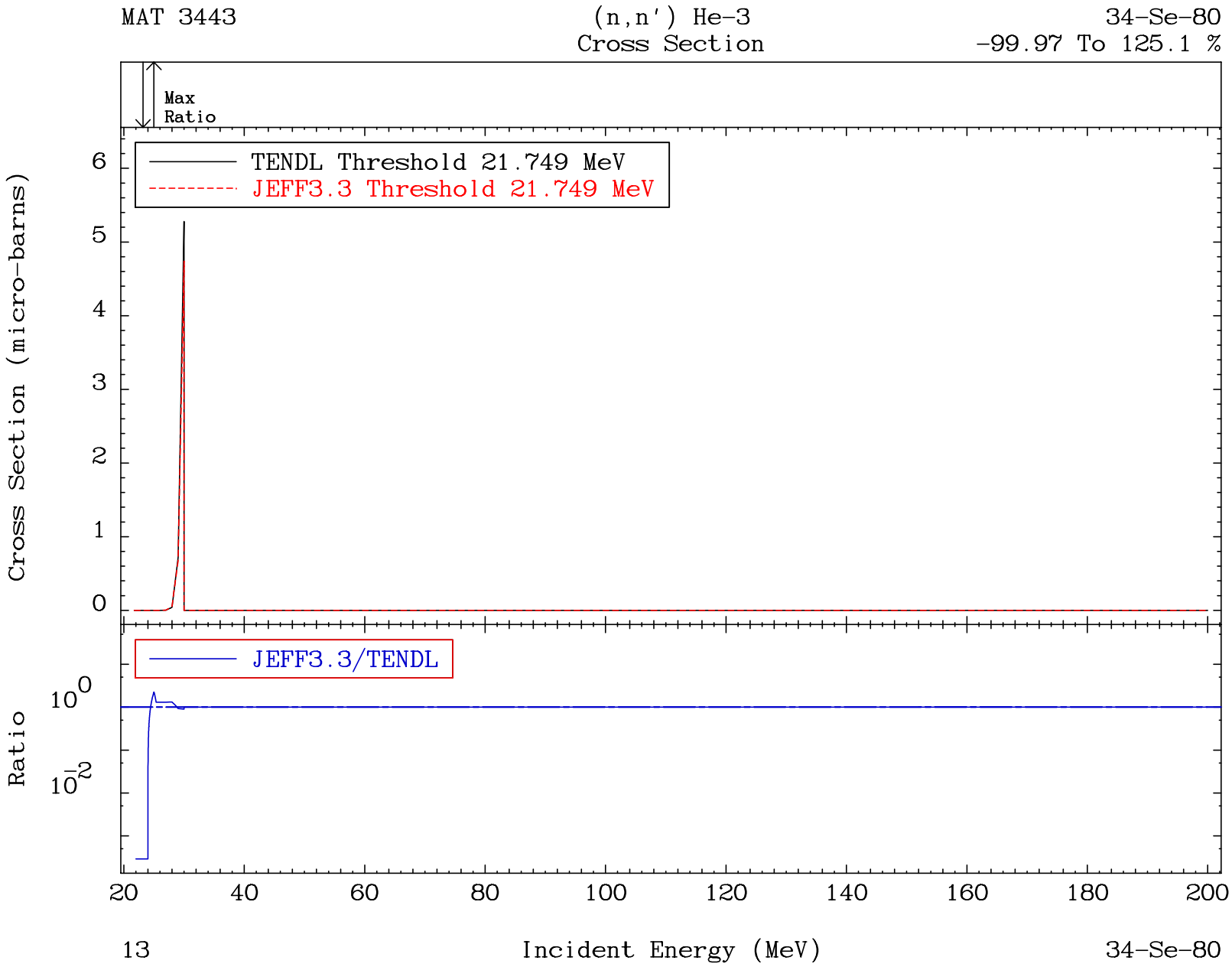

MAT 3443
(n,2n) α
Cross Section
34-Se-80
-99.96 To 3753. %
Min Ratio
Max Ratio
TENDL Threshold 16.606 MeV
JEFF3.3 Threshold 16.606 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
8
34-Se-80

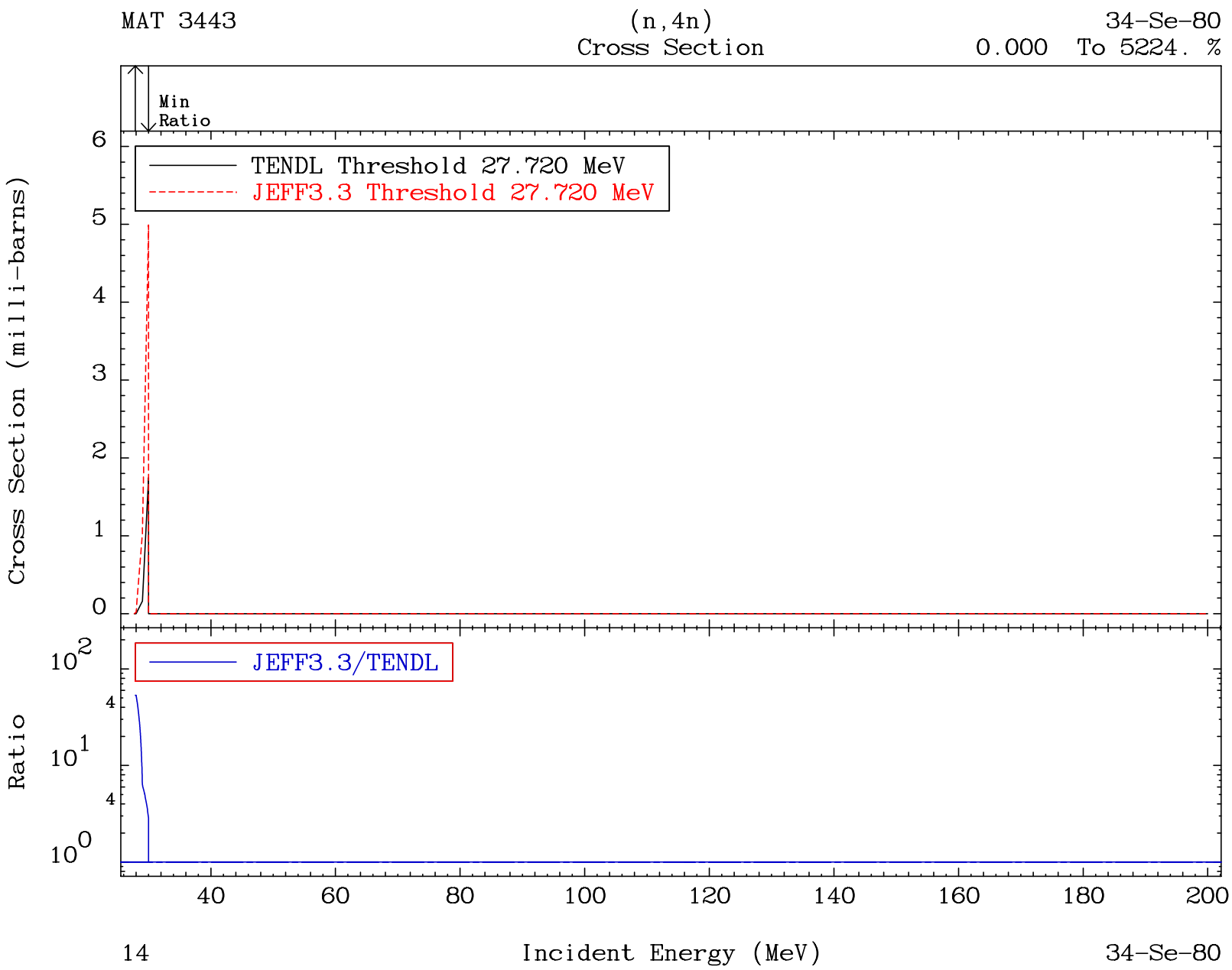

MAT 3443
(n,3n) α
Cross Section
34-Se-80
0.000 To 9999. %
Min
Ratio
TENDL Threshold 23.194 MeV
JEFF3.3 Threshold 23.194 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
34-Se-80

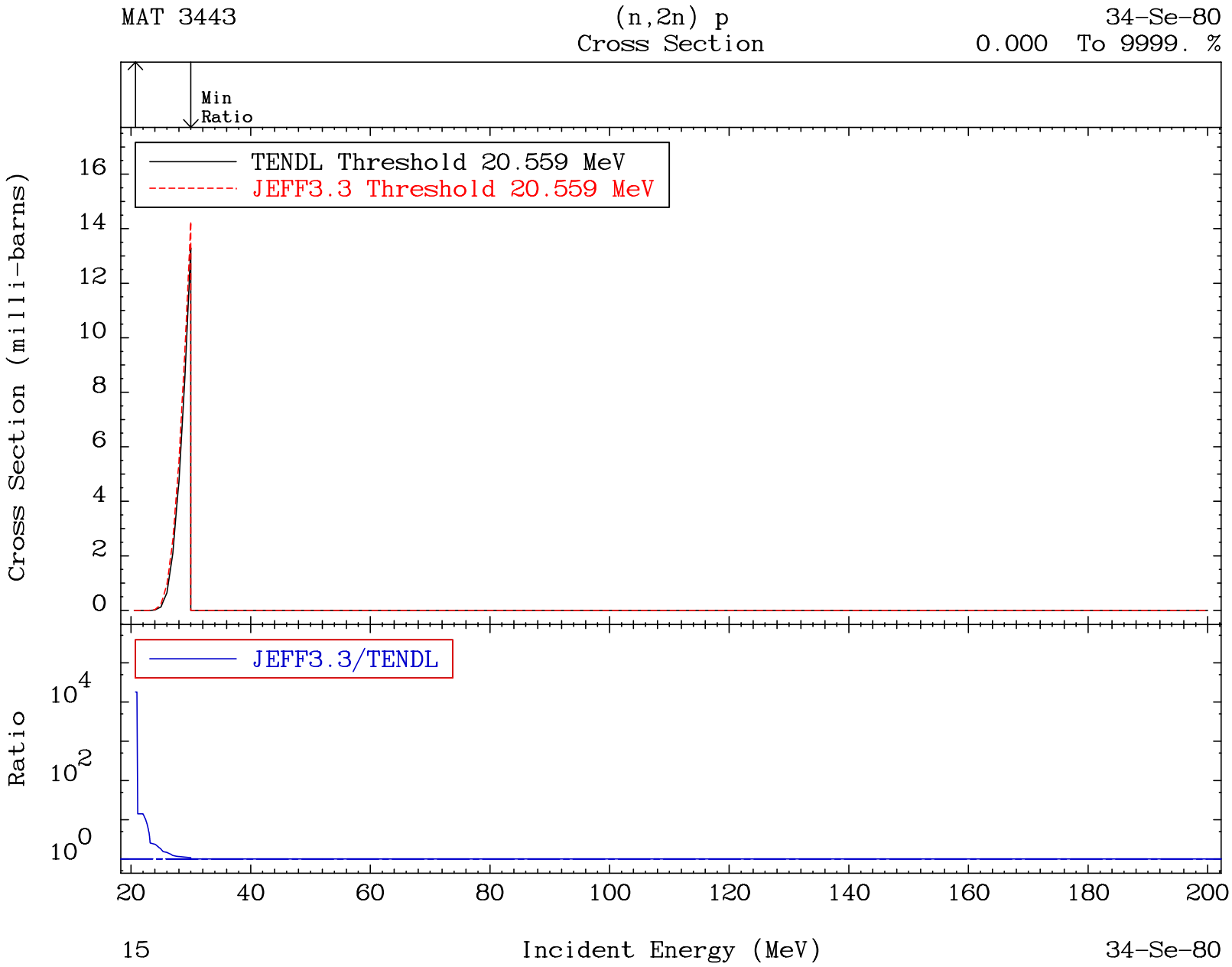

MAT 3443
(n,n') p
Cross Section
34-Se-80
-83.74 To 207.9 %
Max
Ratio
TENDL Threshold 11.556 MeV
JEFF3.3 Threshold 11.556 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
6
4
10^0
6
4
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
34-Se-80

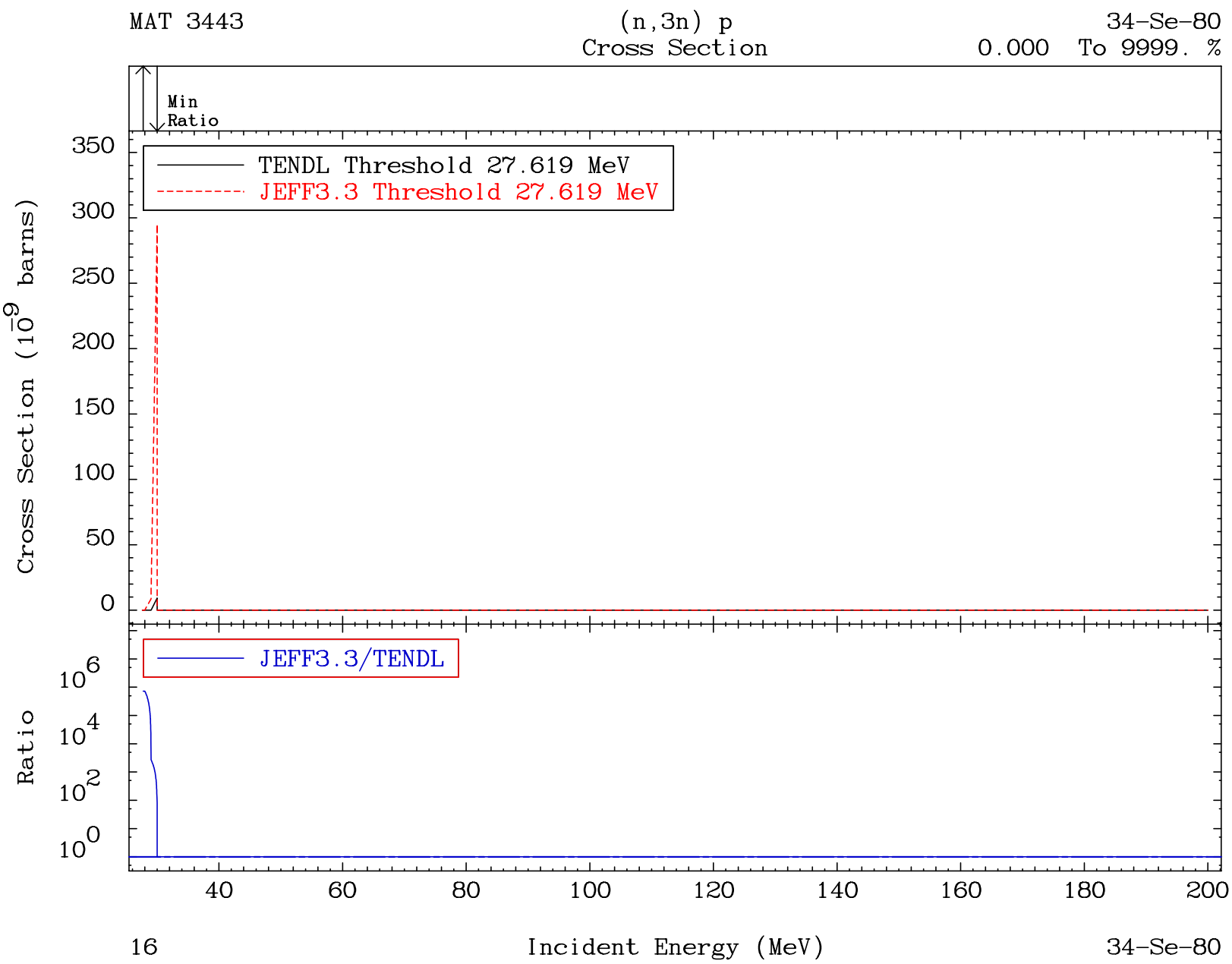

MAT 3443
(n,n') d
Cross Section
34-Se-80
-1.699 To 6599. %
Max Ratio
Min Ratio
TENDL Threshold 18.306 MeV
JEFF3.3 Threshold 18.306 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
11
34-Se-80

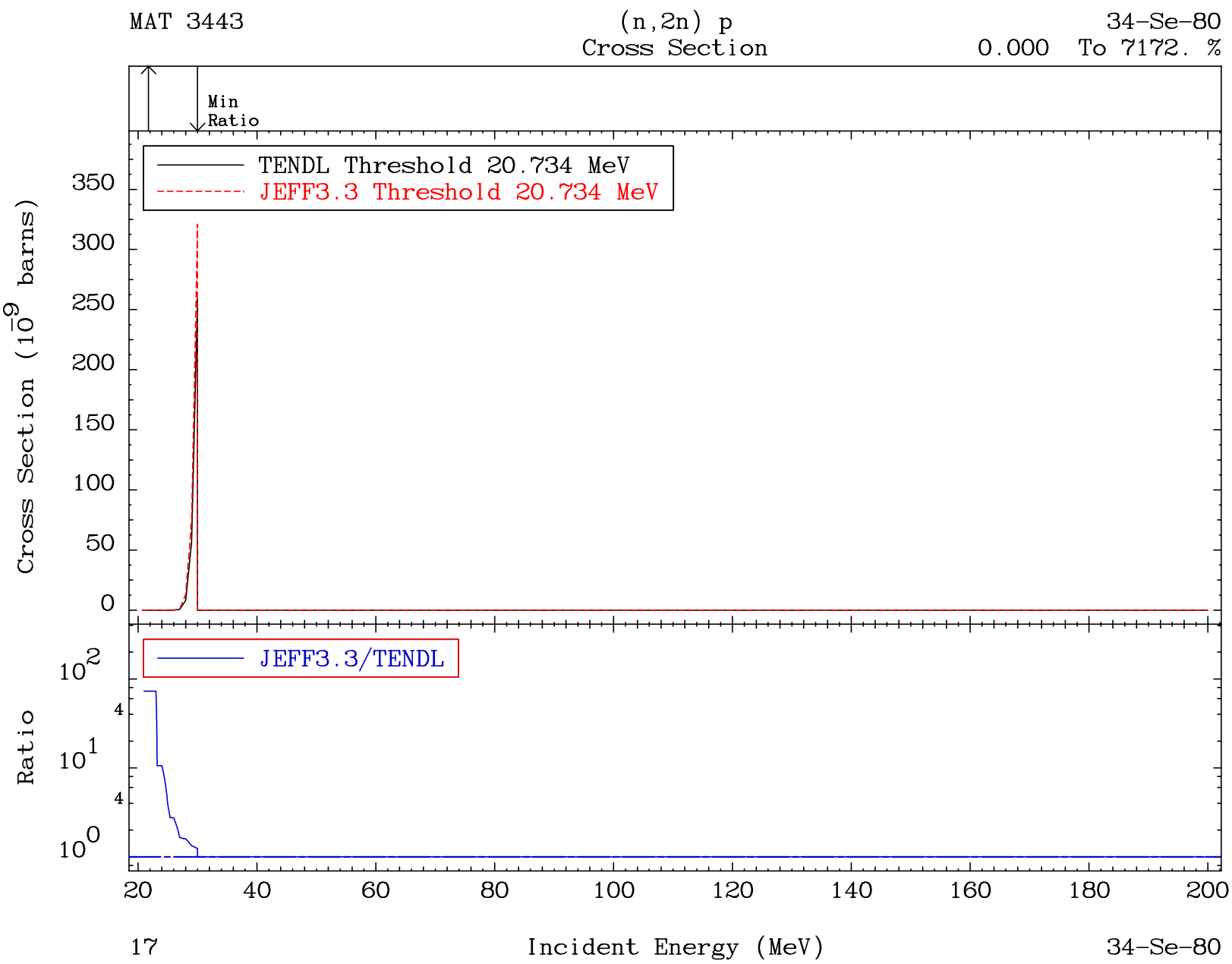

MAT 3443
(n,n') t
Cross Section
34-Se-80
0.000 To 5826. %
Max Ratio
Min Ratio
TENDL Threshold 19.030 MeV
JEFF3.3 Threshold 19.030 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
34-Se-80

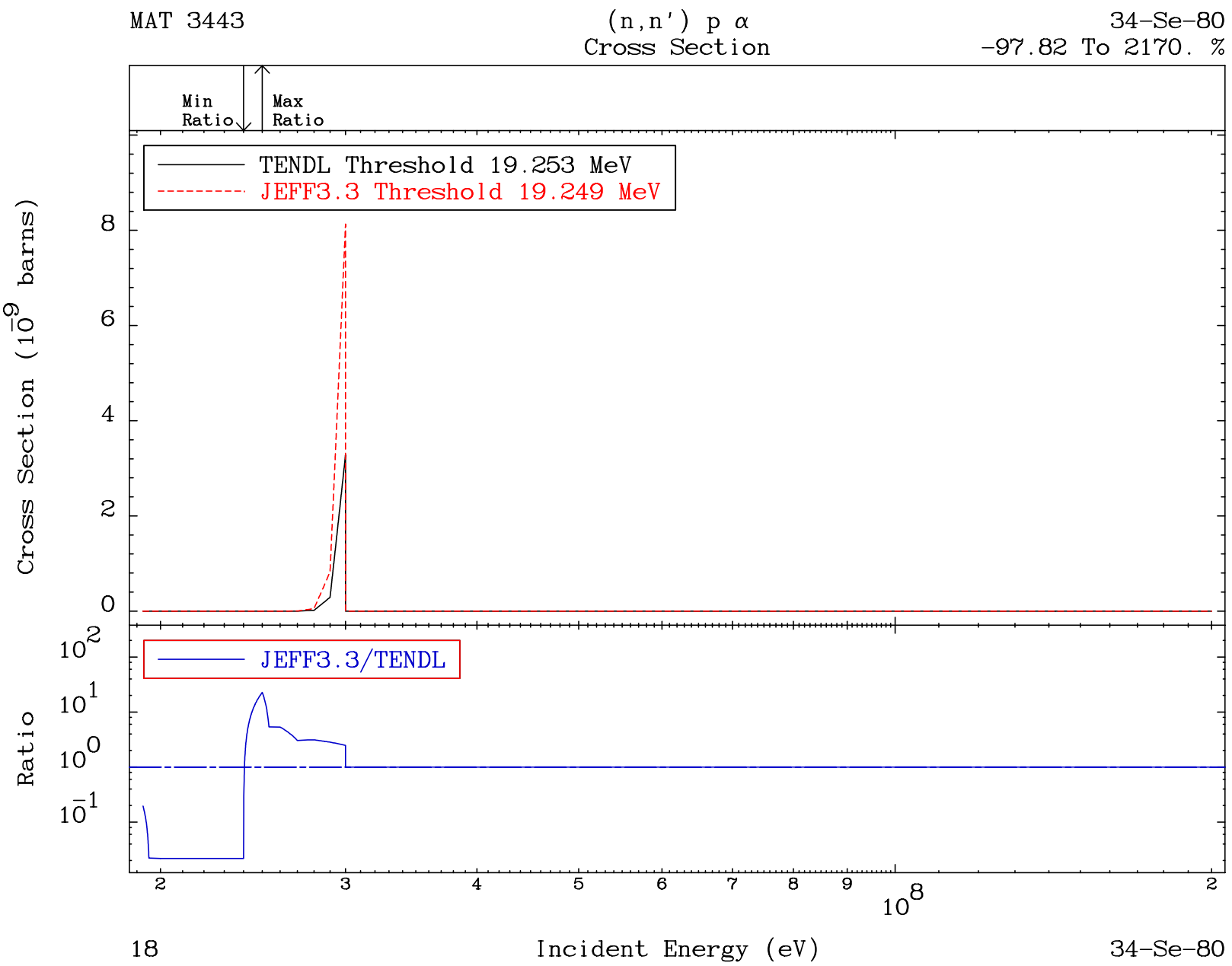

MAT 3443
(n,n') He-3
Cross Section
34-Se-80
-99.97 To 125.1 %
Max
Ratio
TENDL Threshold 21.749 MeV
JEFF3.3 Threshold 21.749 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
10^{0}
10^{-2}
20
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
34-Se-80

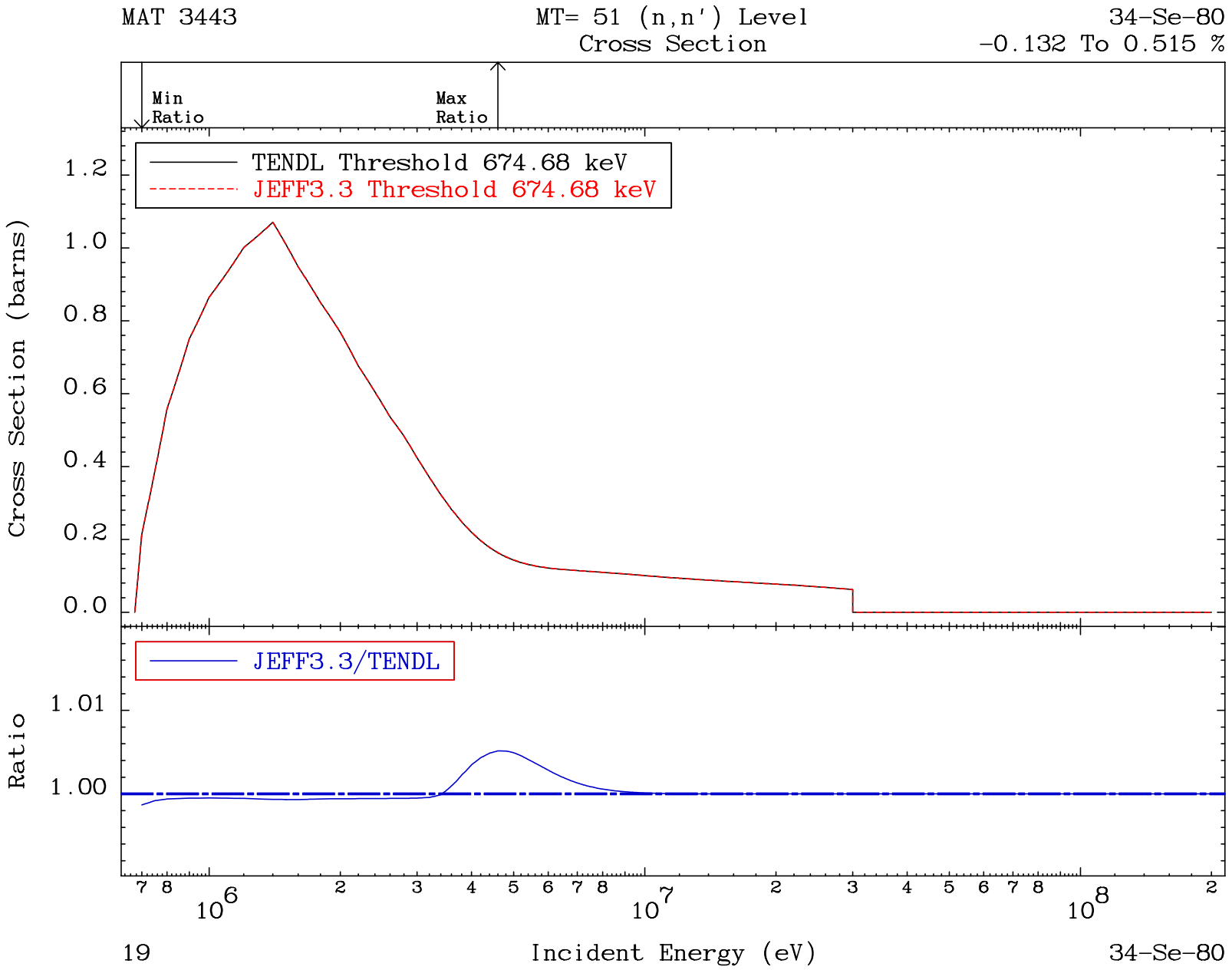

MAT 3443
(n,4n)
Cross Section
34-Se-80
0.000 To 5224. %
Min
Ratio
TENDL Threshold 27.720 MeV
JEFF3.3 Threshold 27.720 MeV
JEFF3.3/TENDL
Cross Section (milli-barns)
Ratio
Incident Energy (MeV)
14
34-Se-80

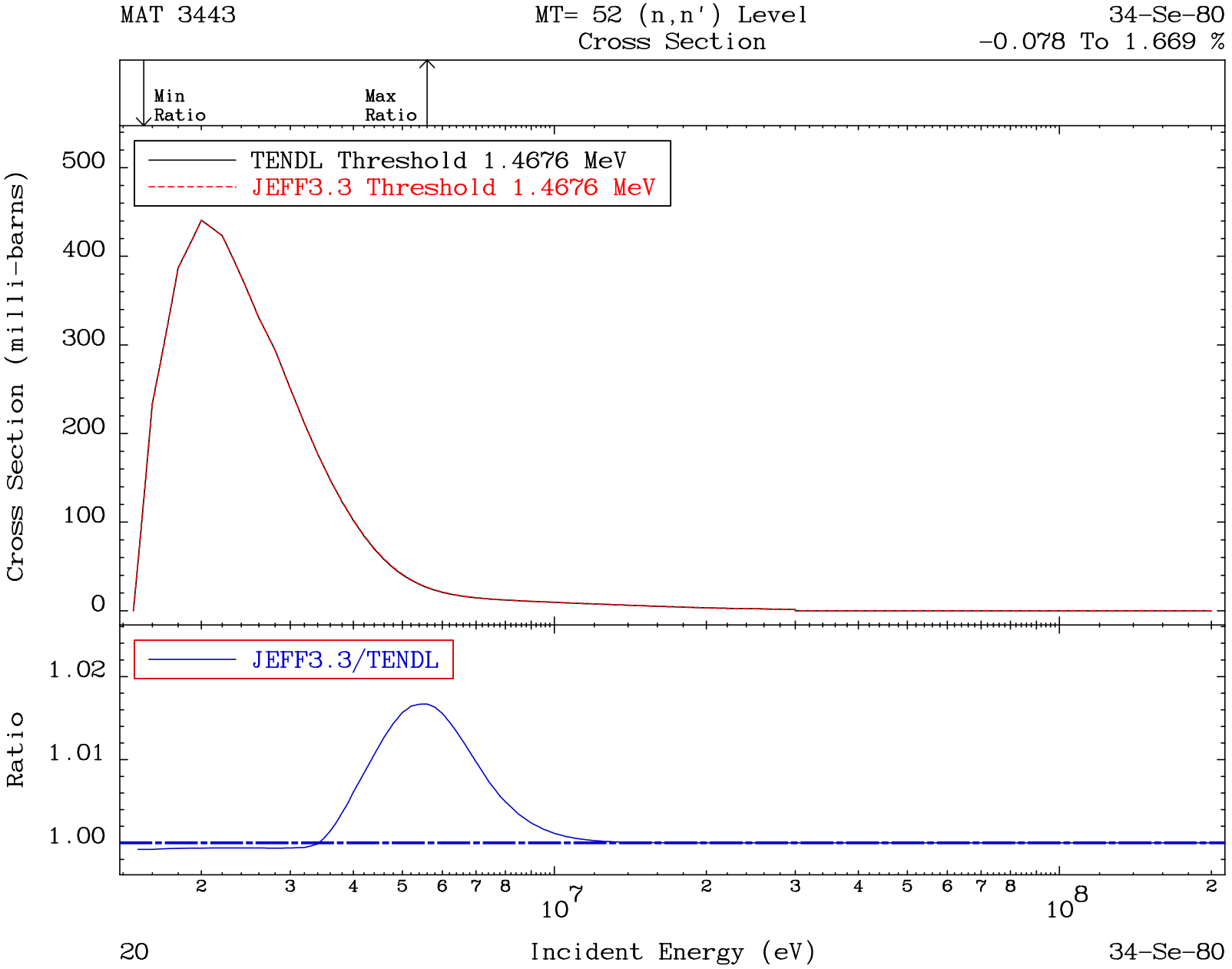

MAT 3443
(n,2n) p
Cross Section
34-Se-80
0.000 To 9999. %
Min
Ratio
TENDL Threshold 20.559 MeV
JEFF3.3 Threshold 20.559 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
JEFF3.3/TENDL
Ratio
10^0
10^2
10^4
20
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
34-Se-80

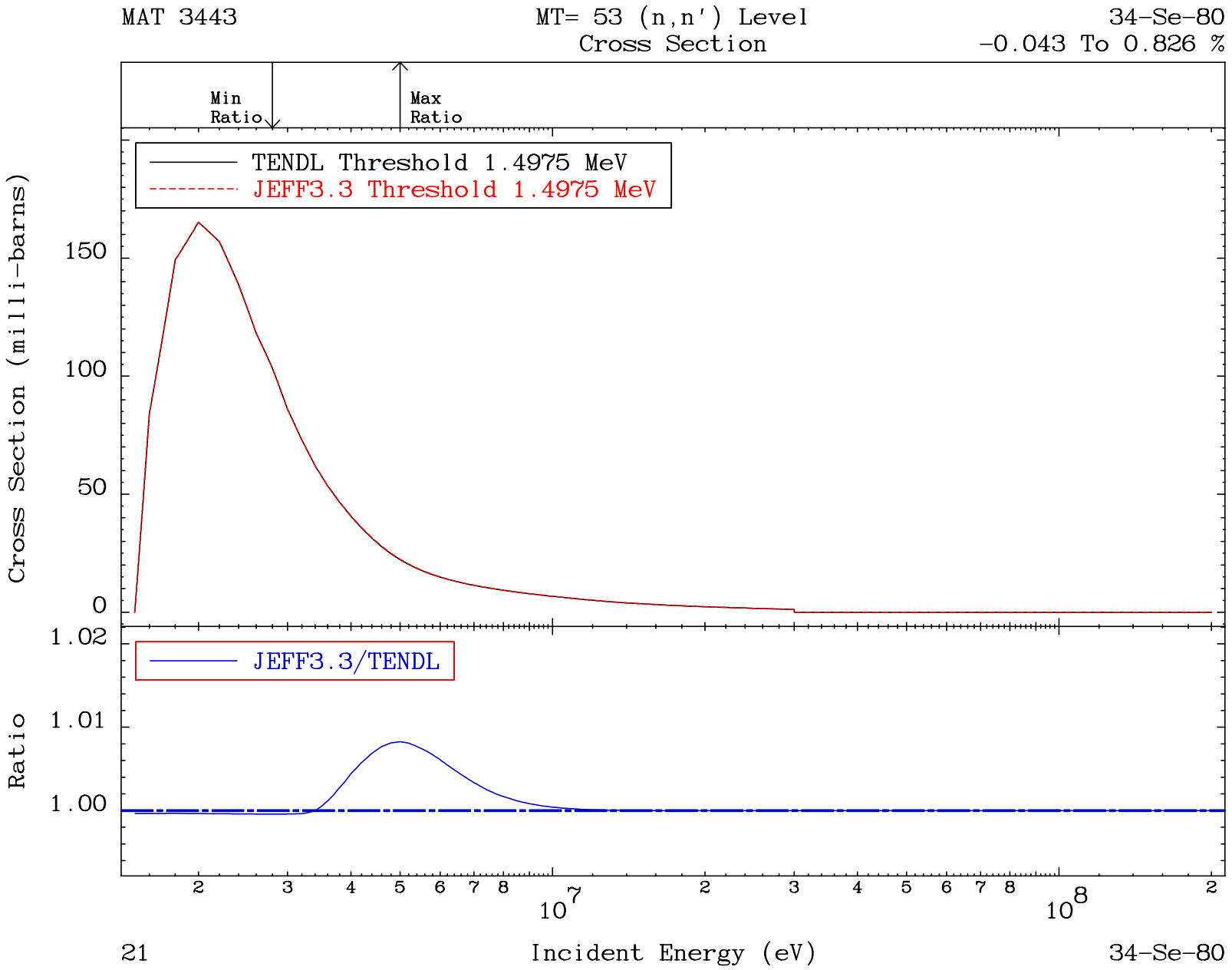

MAT 3443
(n,3n) p
Cross Section
34-Se-80
0.000 To 9999. %
Min
Ratio
TENDL Threshold 27.619 MeV
JEFF3.3 Threshold 27.619 MeV
Cross Section (10^{-9} barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^{6}
10^{4}
10^{2}
10^{0}
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
34-Se-80

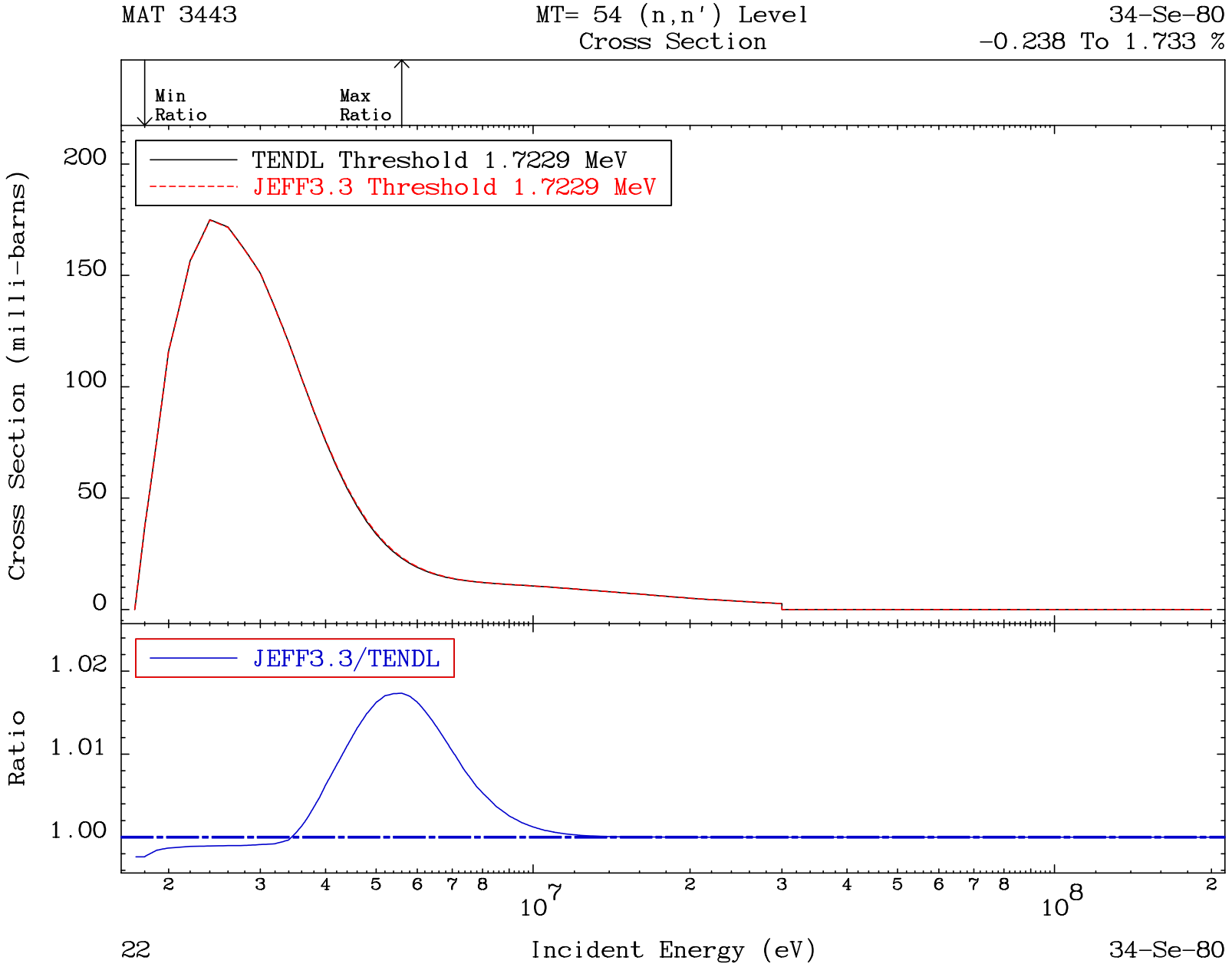

MAT 3443
(n,2n) p
Cross Section
34-Se-80
0.000 To 7172. %
Min
Ratio
TENDL Threshold 20.734 MeV
JEFF3.3 Threshold 20.734 MeV
Cross Section (10^{-9} barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
20
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
34-Se-80

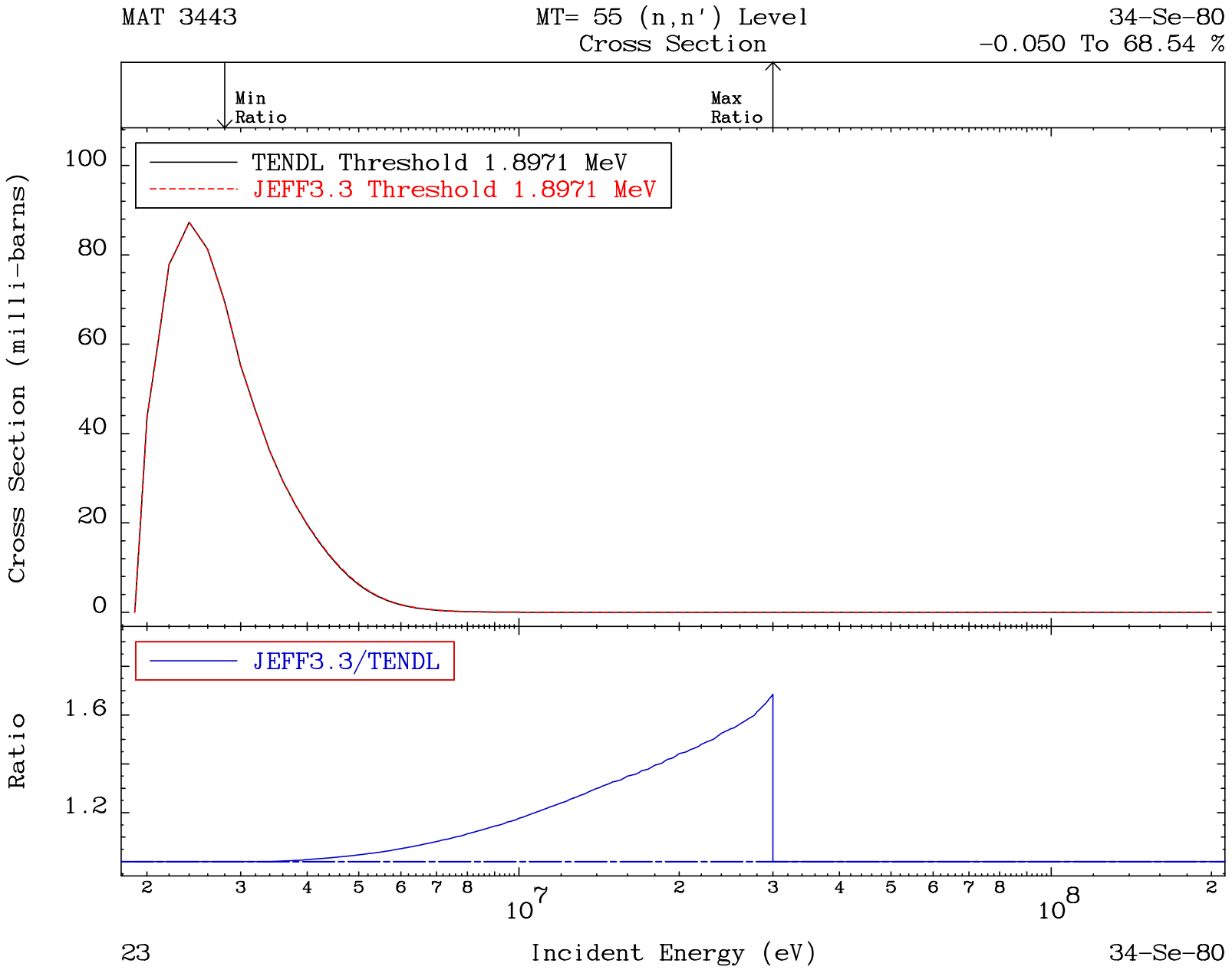

MAT 3443
(n,n') p α
Cross Section
34-Se-80
-97.82 To 2170. %
Min Ratio
Max Ratio
TENDL Threshold 19.253 MeV
JEFF3.3 Threshold 19.249 MeV
Cross Section (10^-9 barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
18
34-Se-80

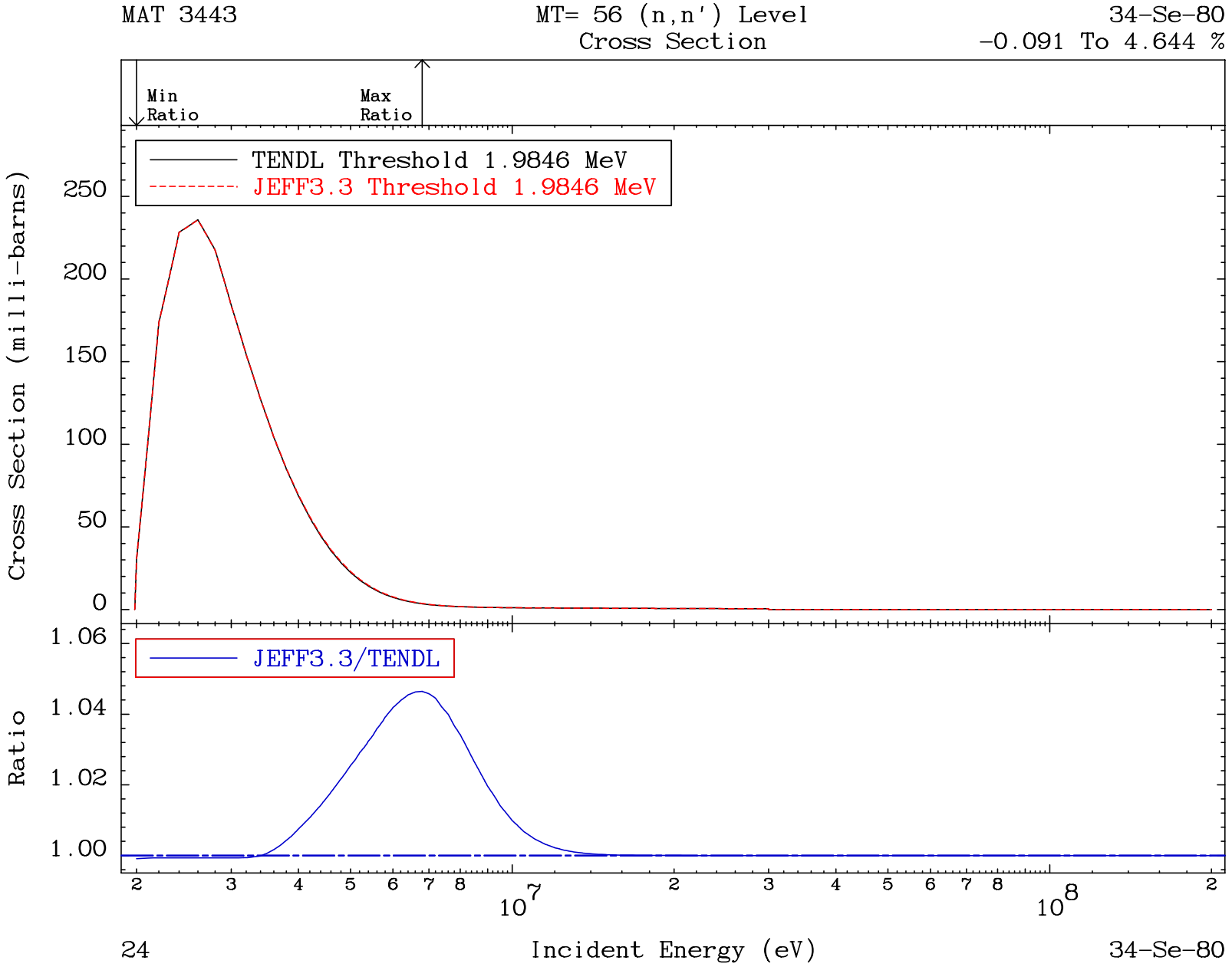

MAT 3443
MT= 51 (n,n') Level
Cross Section
34-Se-80
-0.132 To 0.515 %
Min
Ratio
Max
Ratio
TENDL Threshold 674.68 keV
JEFF3.3 Threshold 674.68 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
34-Se-80

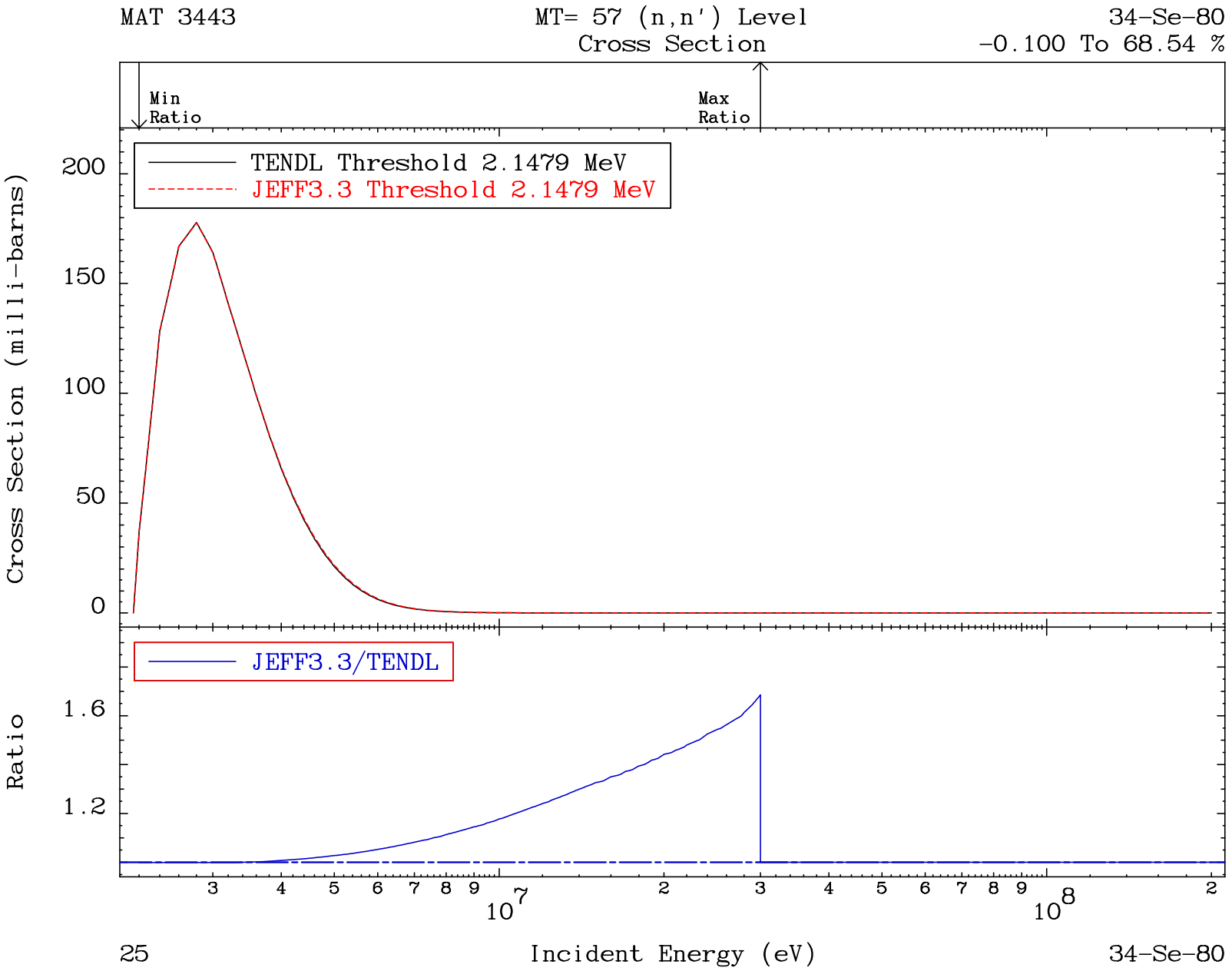

MAT 3443
MT= 52 (n,n') Level
Cross Section
34-Se-80
-0.078 To 1.669 %
Min Ratio
Max Ratio
TENDL Threshold 1.4676 MeV
JEFF3.3 Threshold 1.4676 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
34-Se-80

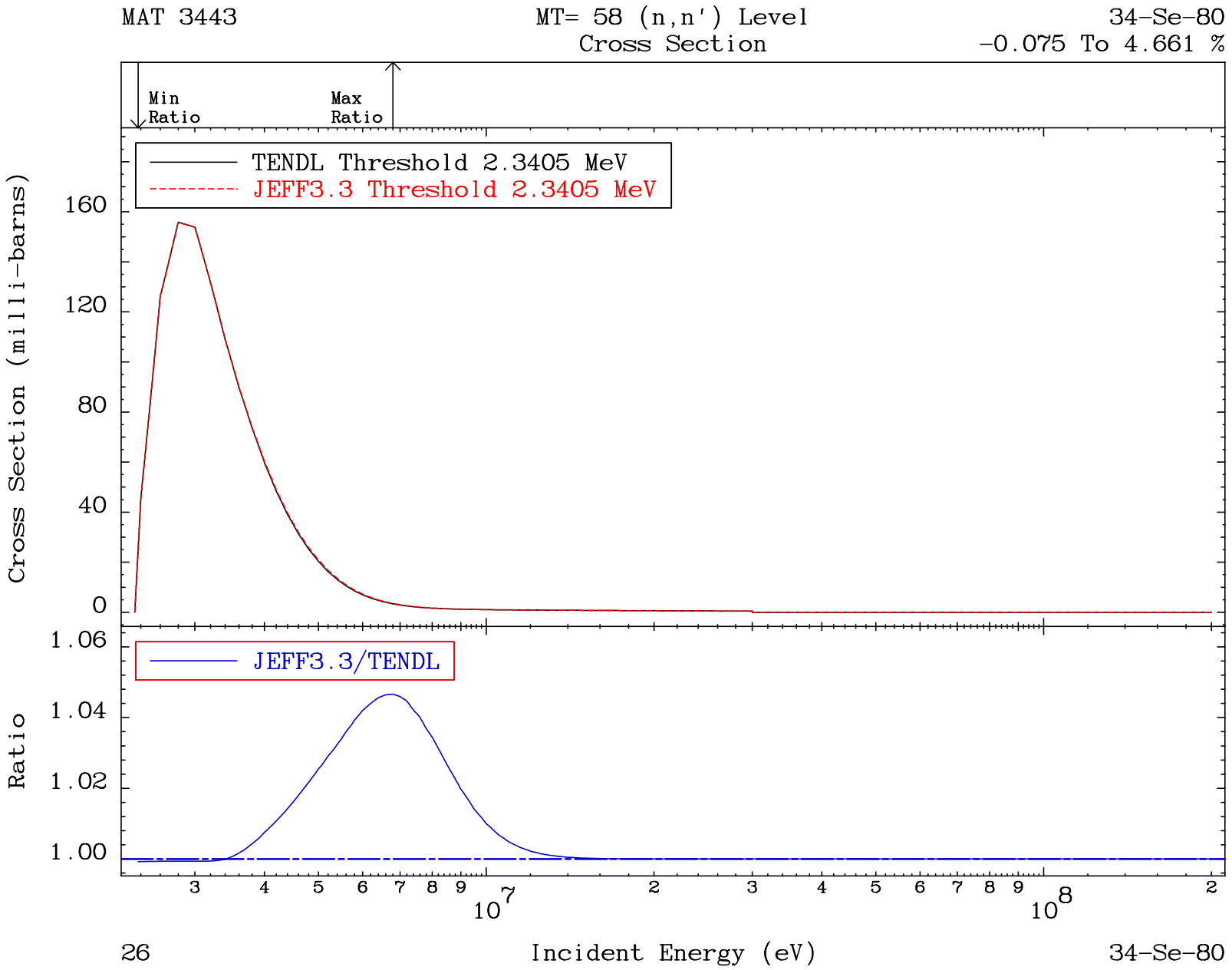

MAT 3443
MT= 53 (n,n') Level
Cross Section
34-Se-80
-0.043 To 0.826 %
Min Ratio
Max Ratio
TENDL Threshold 1.4975 MeV
JEFF3.3 Threshold 1.4975 MeV
Cross Section (milli-barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
34-Se-80

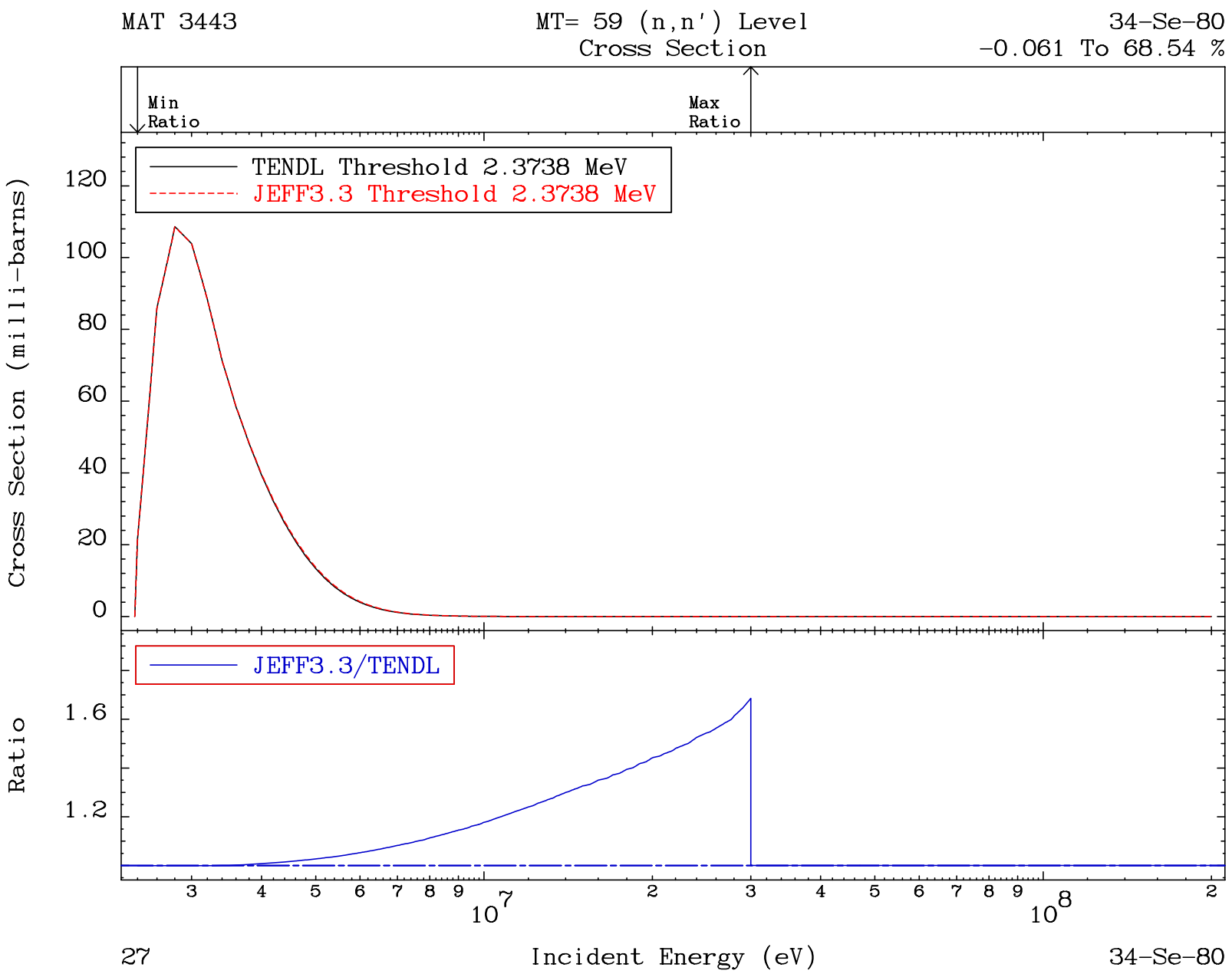

MAT 3443
MT= 54 (n,n') Level
Cross Section
34-Se-80
-0.238 To 1.733 %
Min Ratio
Max Ratio
TENDL Threshold 1.7229 MeV
JEFF3.3 Threshold 1.7229 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
34-Se-80

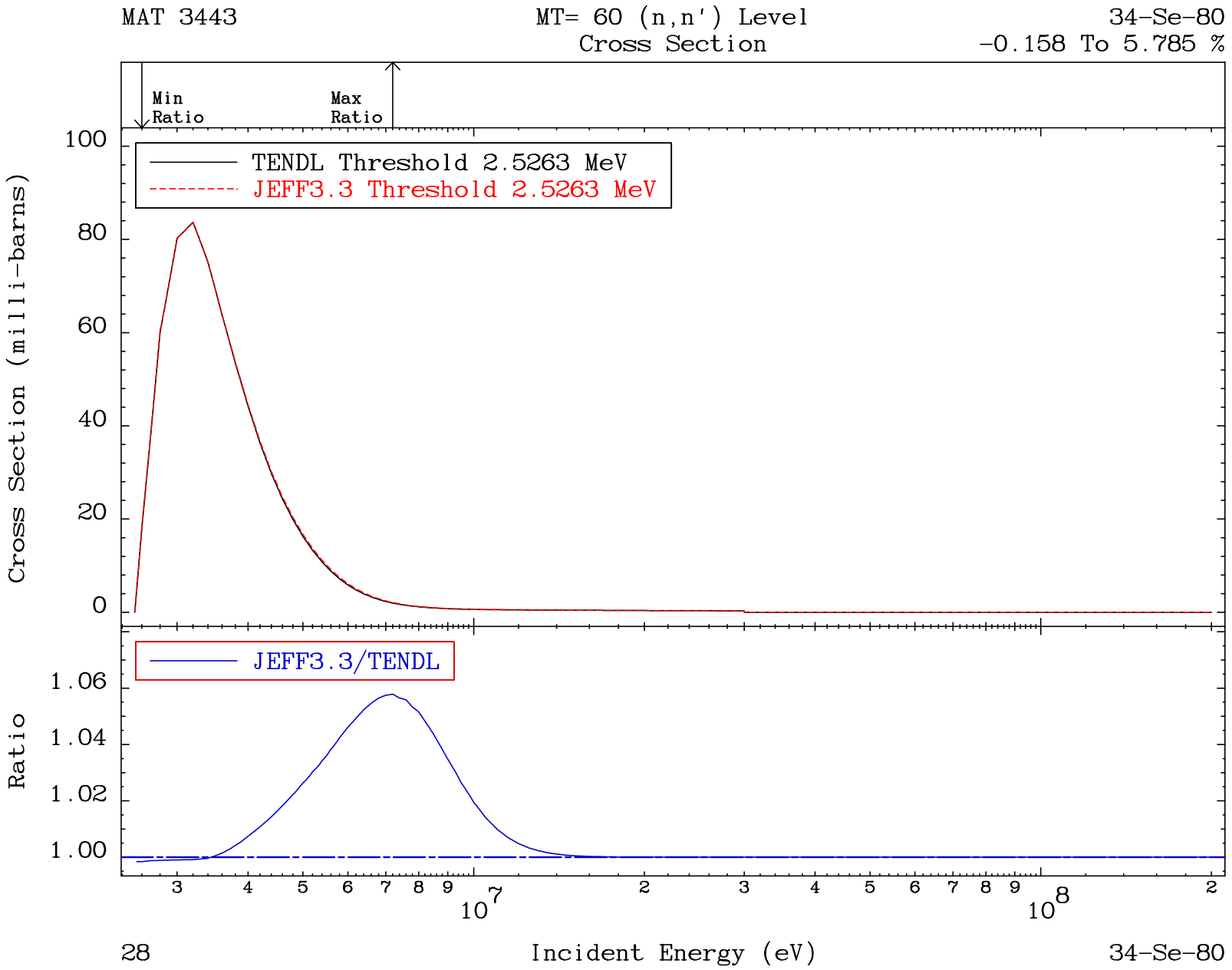

MAT 3443
MT= 55 (n,n') Level
Cross Section
34-Se-80
-0.050 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.8971 MeV
JEFF3.3 Threshold 1.8971 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.6
1.2
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
34-Se-80

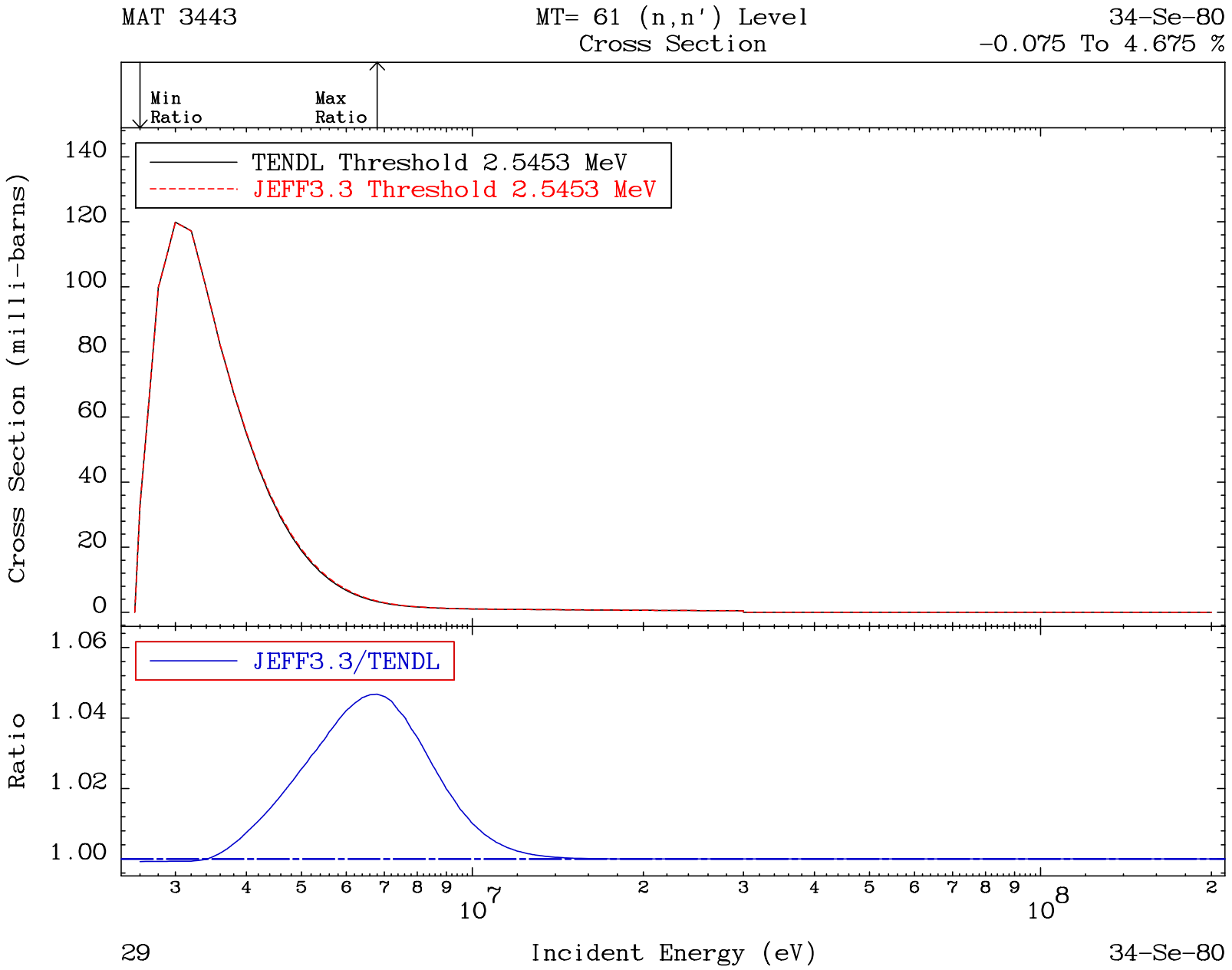

MAT 3443
MT= 56 (n,n') Level
Cross Section
34-Se-80
-0.091 To 4.644 %
Min Ratio
Max Ratio
TENDL Threshold 1.9846 MeV
JEFF3.3 Threshold 1.9846 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
34-Se-80

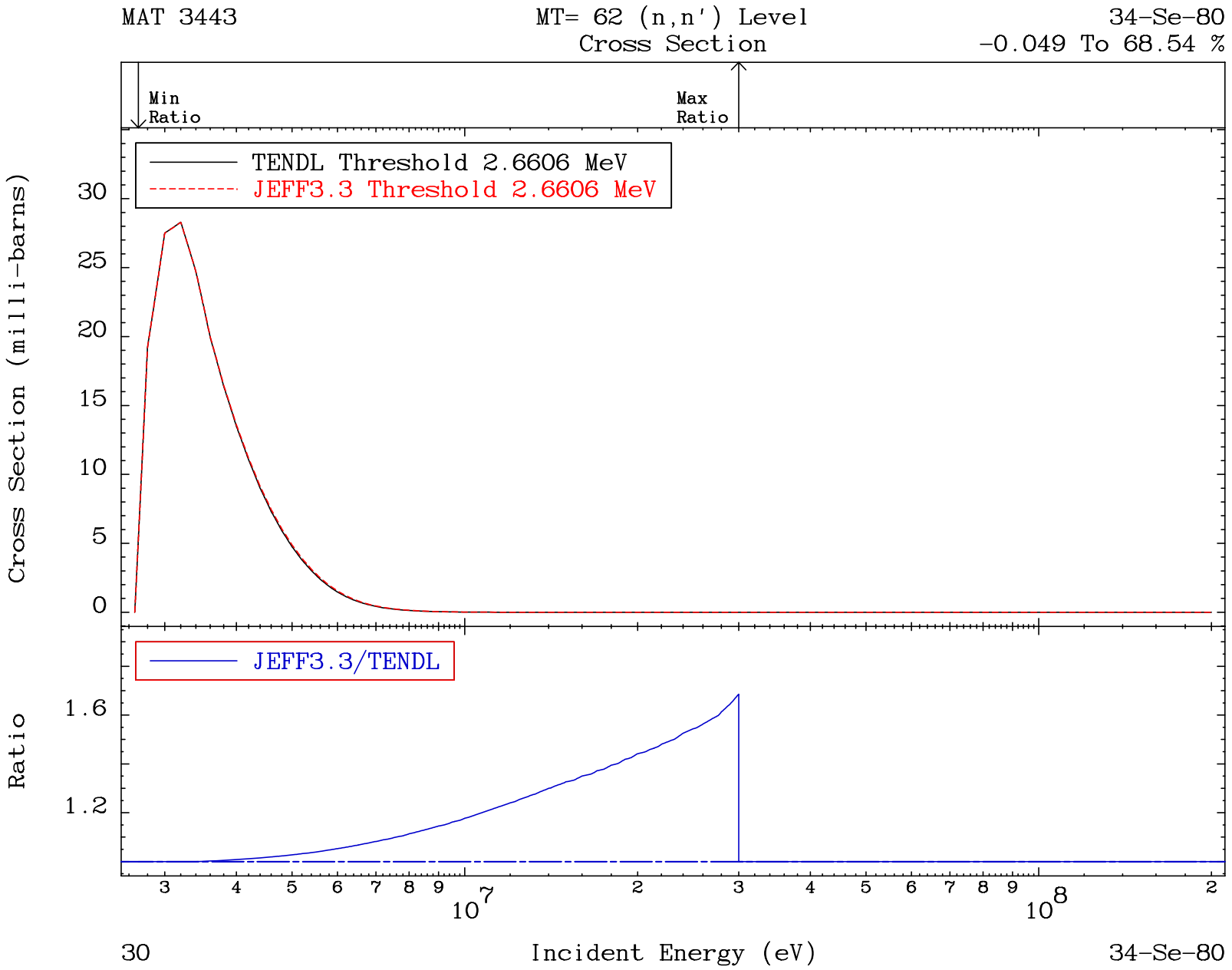

MAT 3443
MT= 57 (n,n') Level
Cross Section
34-Se-80
-0.100 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.1479 MeV
JEFF3.3 Threshold 2.1479 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
25
Incident Energy (eV)
34-Se-80

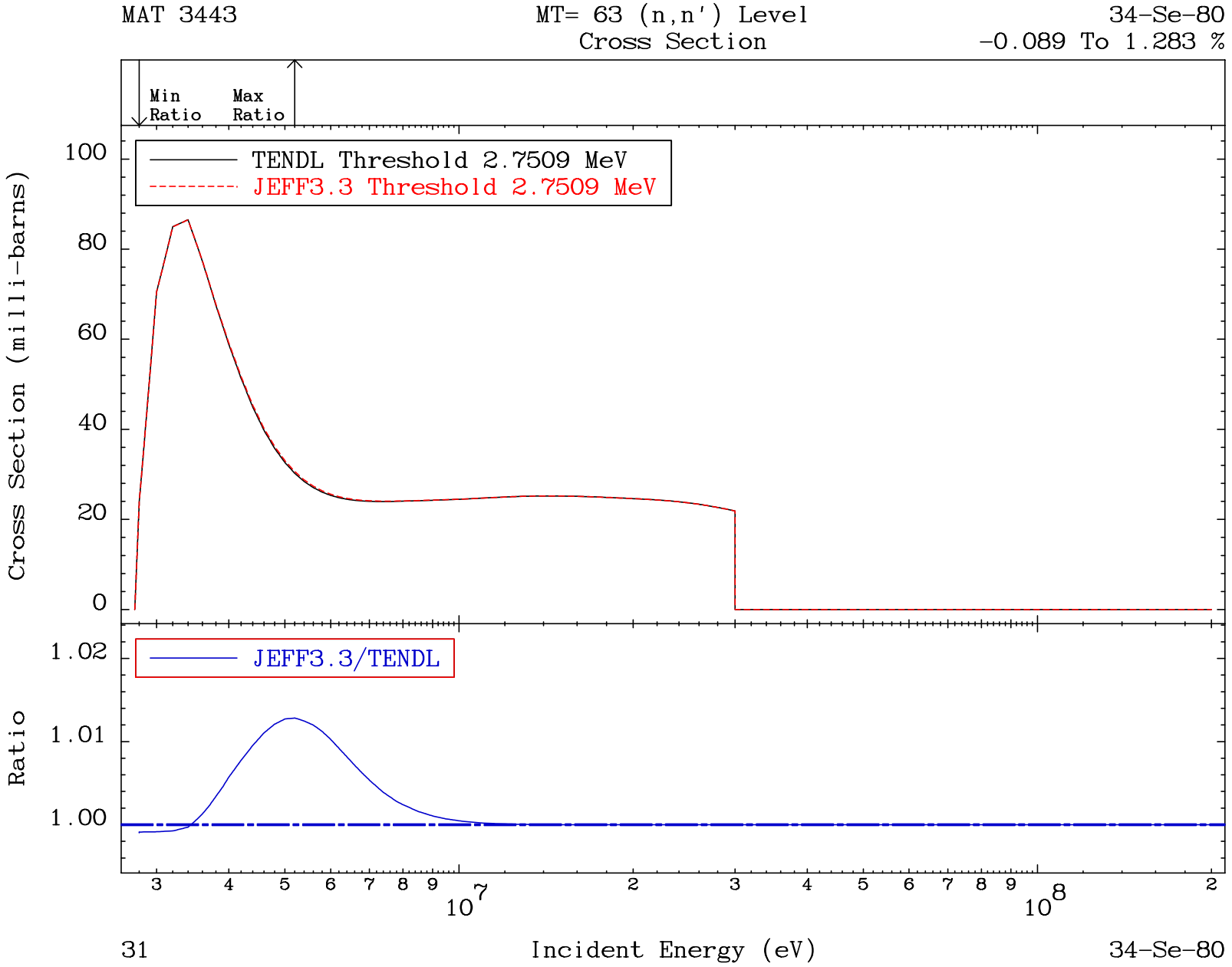

MAT 3443
MT= 58 (n,n') Level
Cross Section
34-Se-80
-0.075 To 4.661 %
Min Ratio
Max Ratio
TENDL Threshold 2.3405 MeV
JEFF3.3 Threshold 2.3405 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
34-Se-80

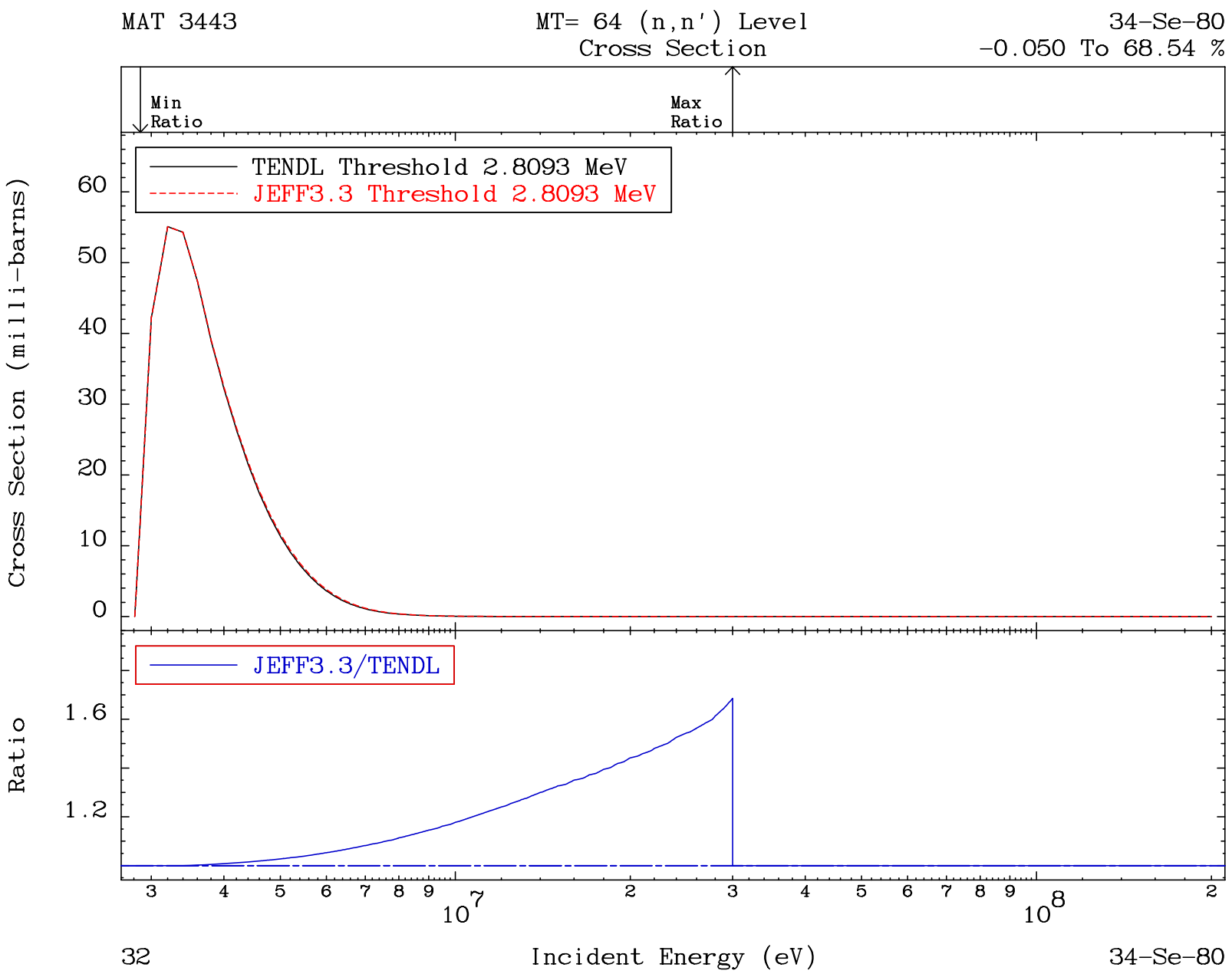

MAT 3443
MT= 59 (n,n') Level
Cross Section
34-Se-80
-0.061 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.3738 MeV
JEFF3.3 Threshold 2.3738 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
27
Incident Energy (eV)
34-Se-80

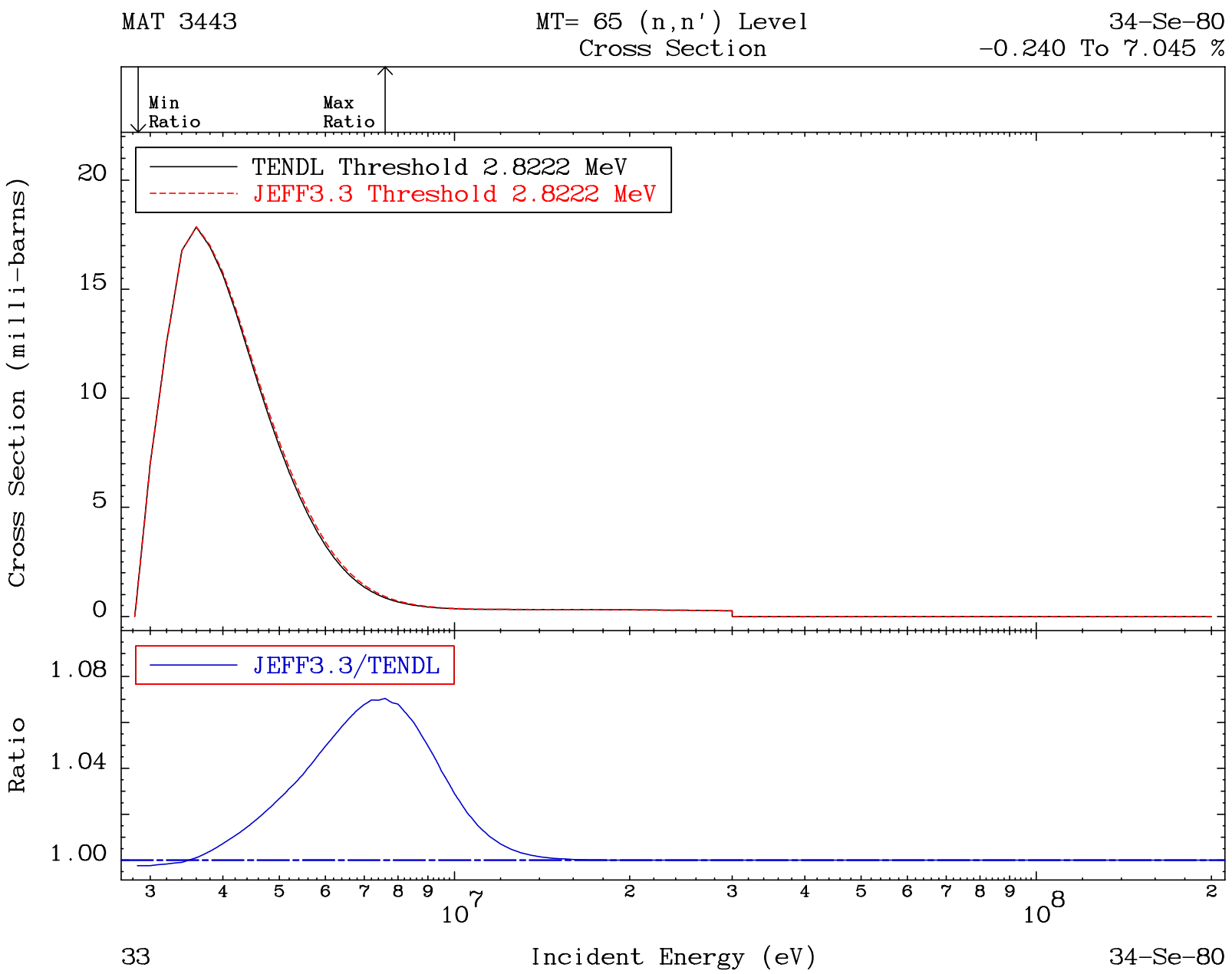

MAT 3443
MT= 60 (n,n') Level
Cross Section
34-Se-80
-0.158 To 5.785 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5263 MeV
JEFF3.3 Threshold 2.5263 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
28
Incident Energy (eV)
34-Se-80

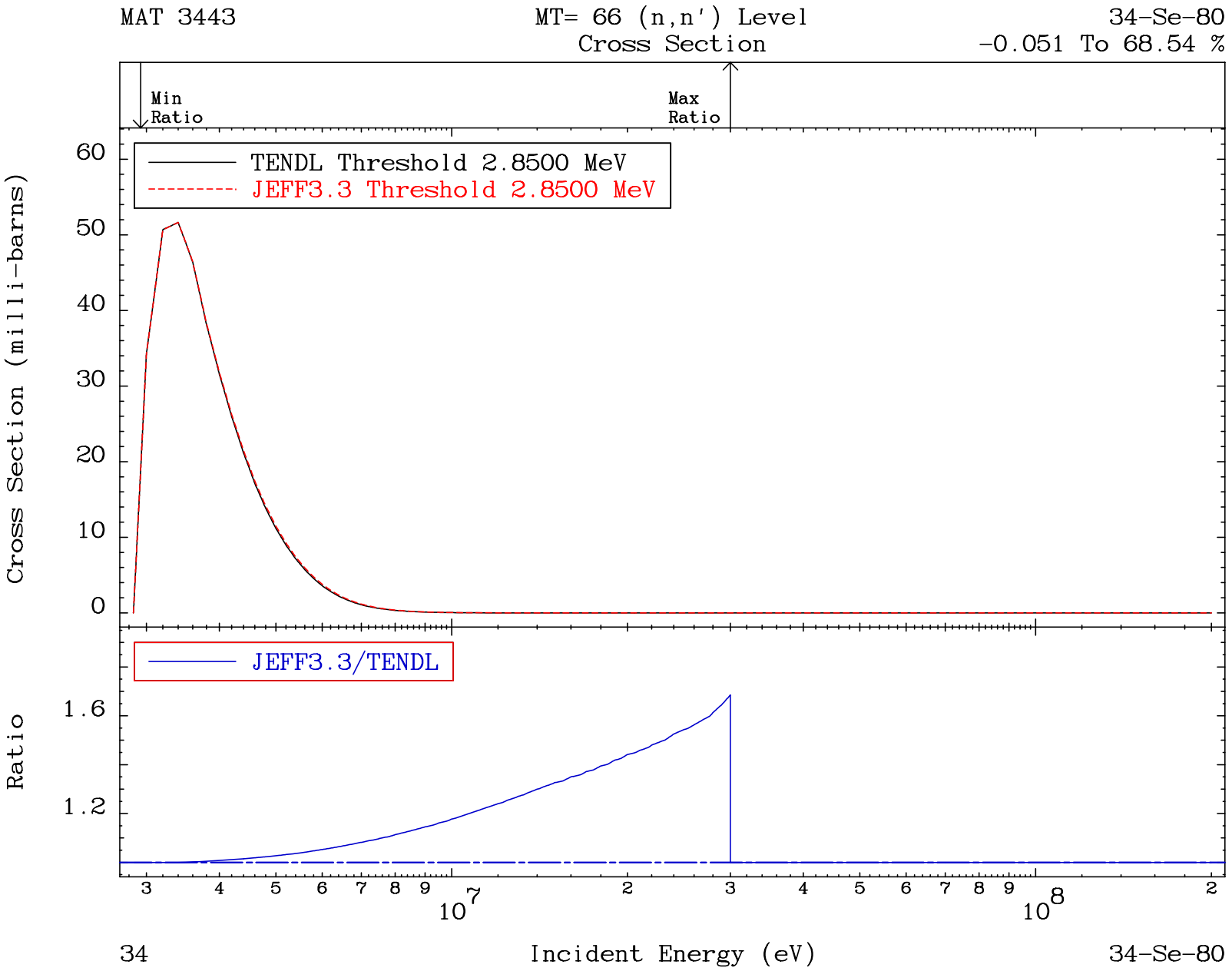

MAT 3443
MT= 61 (n,n') Level
Cross Section
34-Se-80
-0.075 To 4.675 %
Min Ratio
Max Ratio
TENDL Threshold 2.5453 MeV
JEFF3.3 Threshold 2.5453 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
29
Incident Energy (eV)
34-Se-80

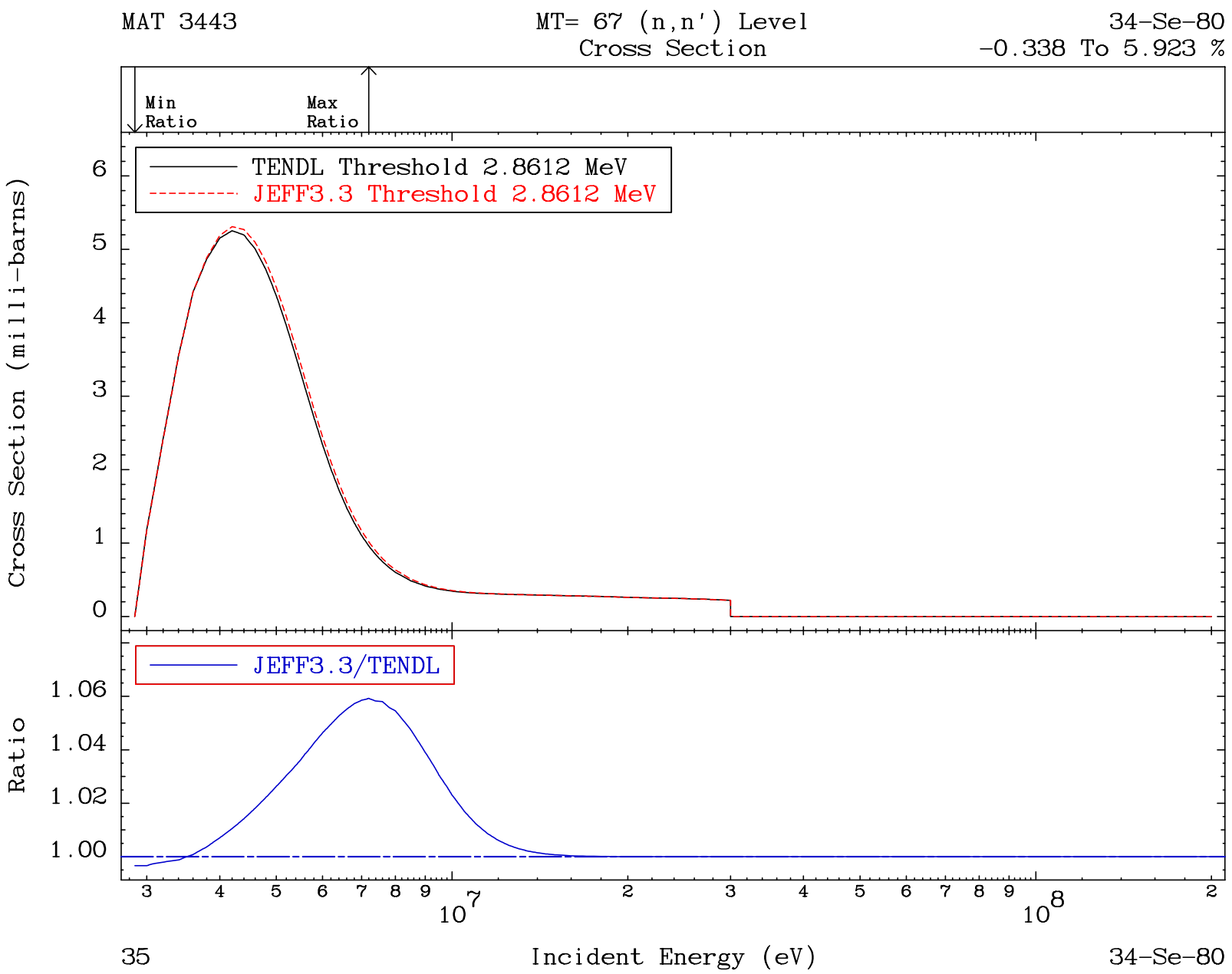

MAT 3443
MT= 62 (n,n') Level
Cross Section
34-Se-80
-0.049 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6606 MeV
JEFF3.3 Threshold 2.6606 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
34-Se-80

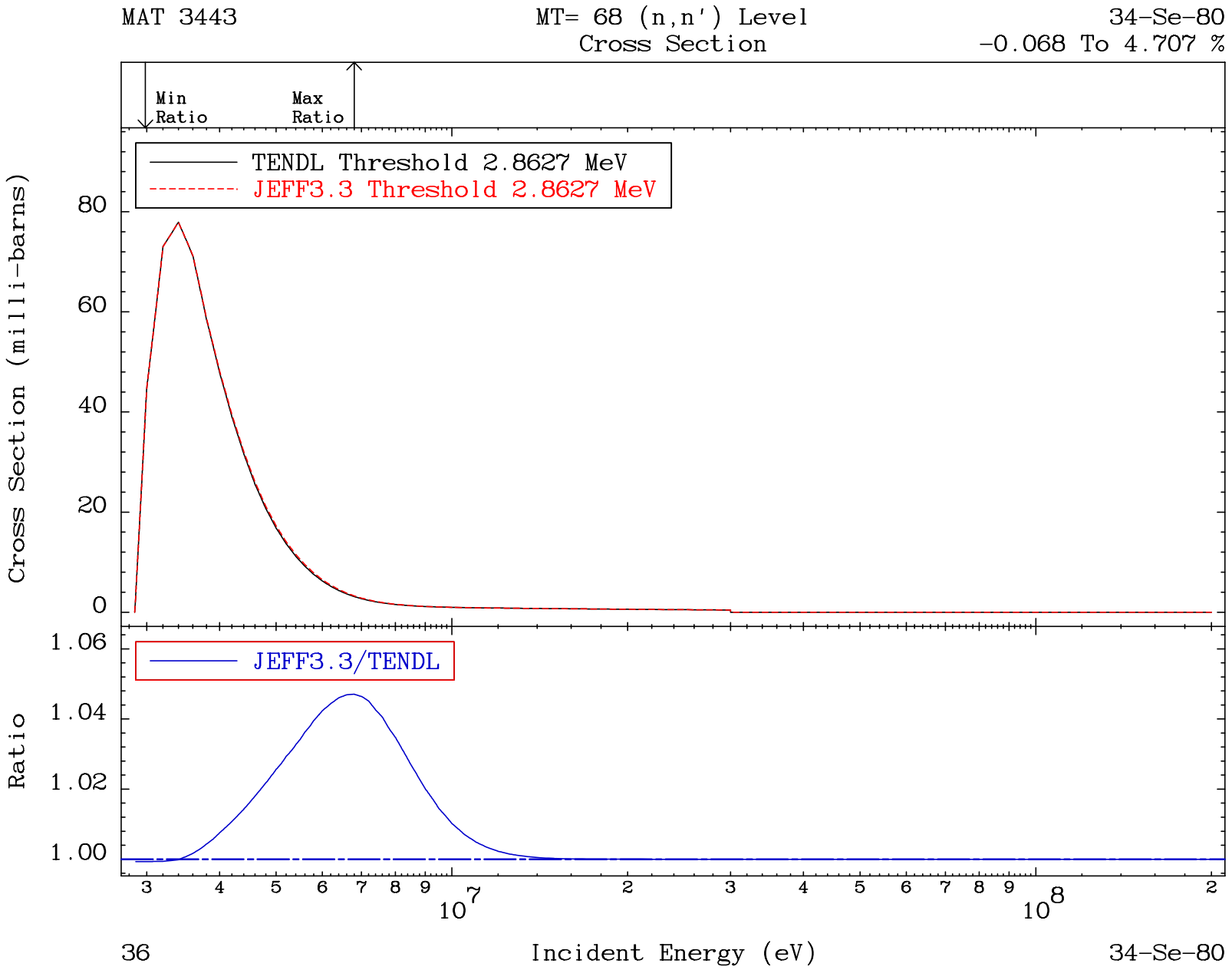

MAT 3443
MT= 63 (n,n') Level
Cross Section
34-Se-80
-0.089 To 1.283 %
Min Ratio
Max Ratio
TENDL Threshold 2.7509 MeV
JEFF3.3 Threshold 2.7509 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
31
Incident Energy (eV)
34-Se-80

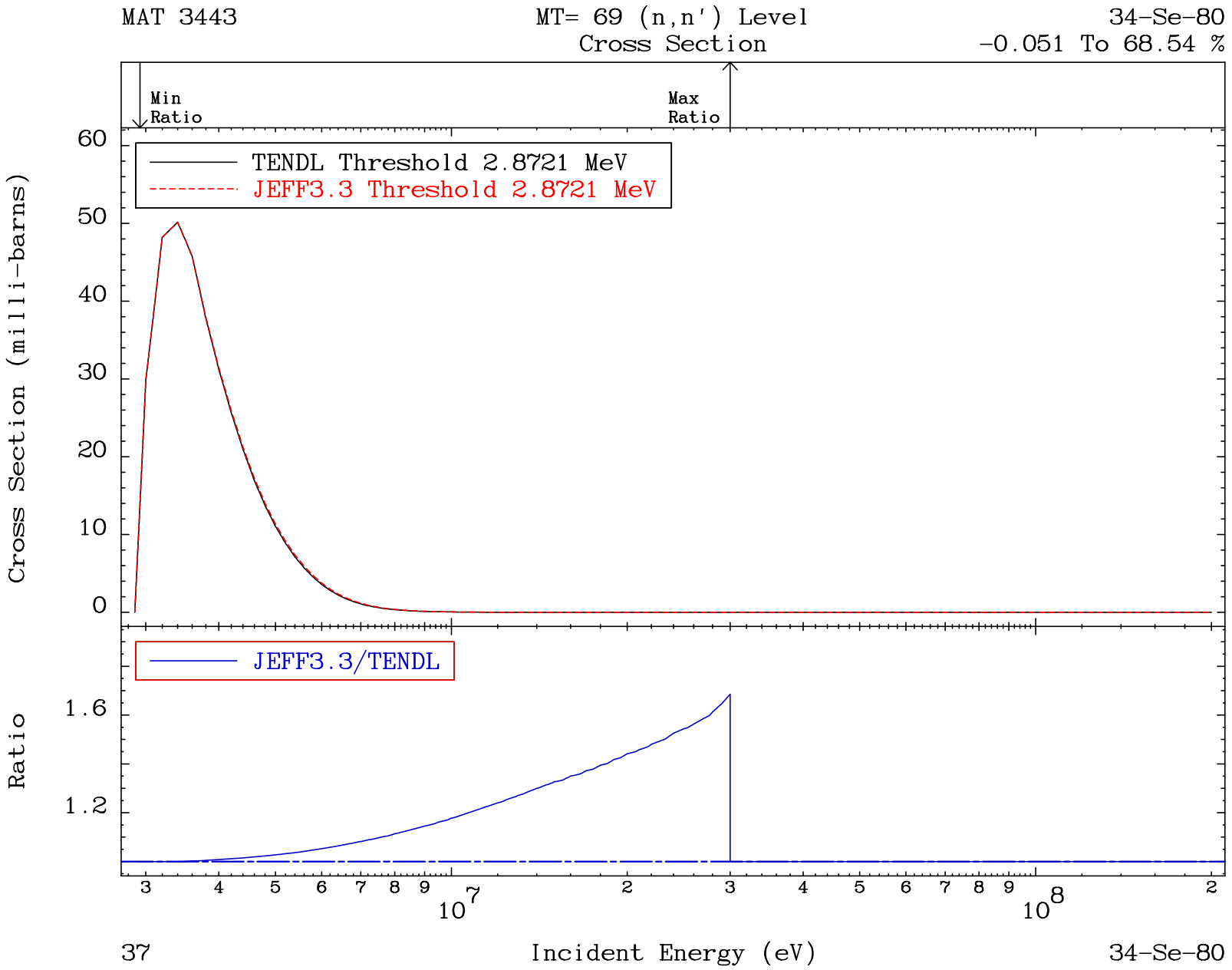

MAT 3443
MT= 64 (n,n') Level
Cross Section
34-Se-80
-0.050 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8093 MeV
JEFF3.3 Threshold 2.8093 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
34-Se-80

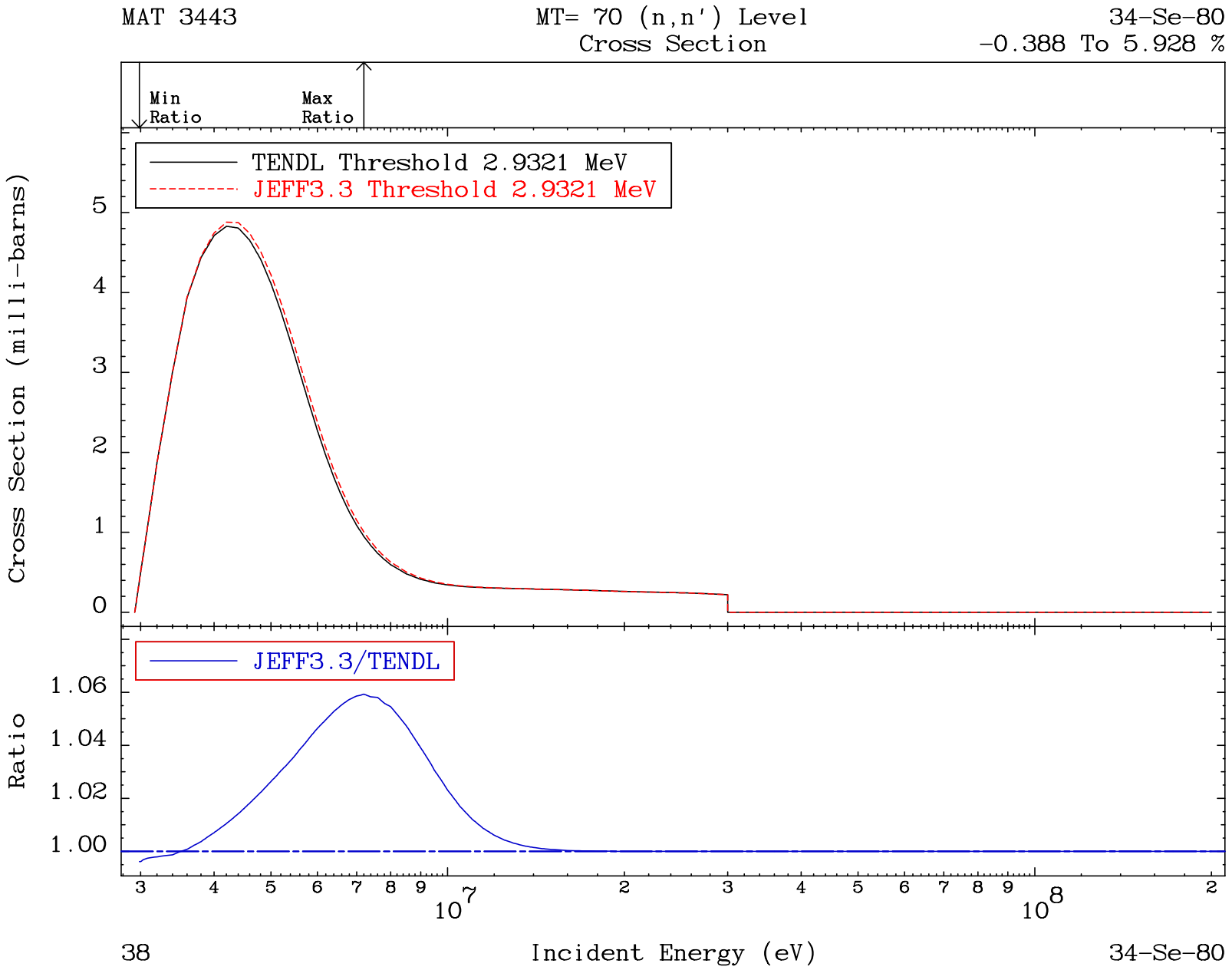

MAT 3443
MT= 65 (n,n') Level
Cross Section
34-Se-80
-0.240 To 7.045 %
Min Ratio
Max Ratio
TENDL Threshold 2.8222 MeV
JEFF3.3 Threshold 2.8222 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.08
1.04
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
34-Se-80

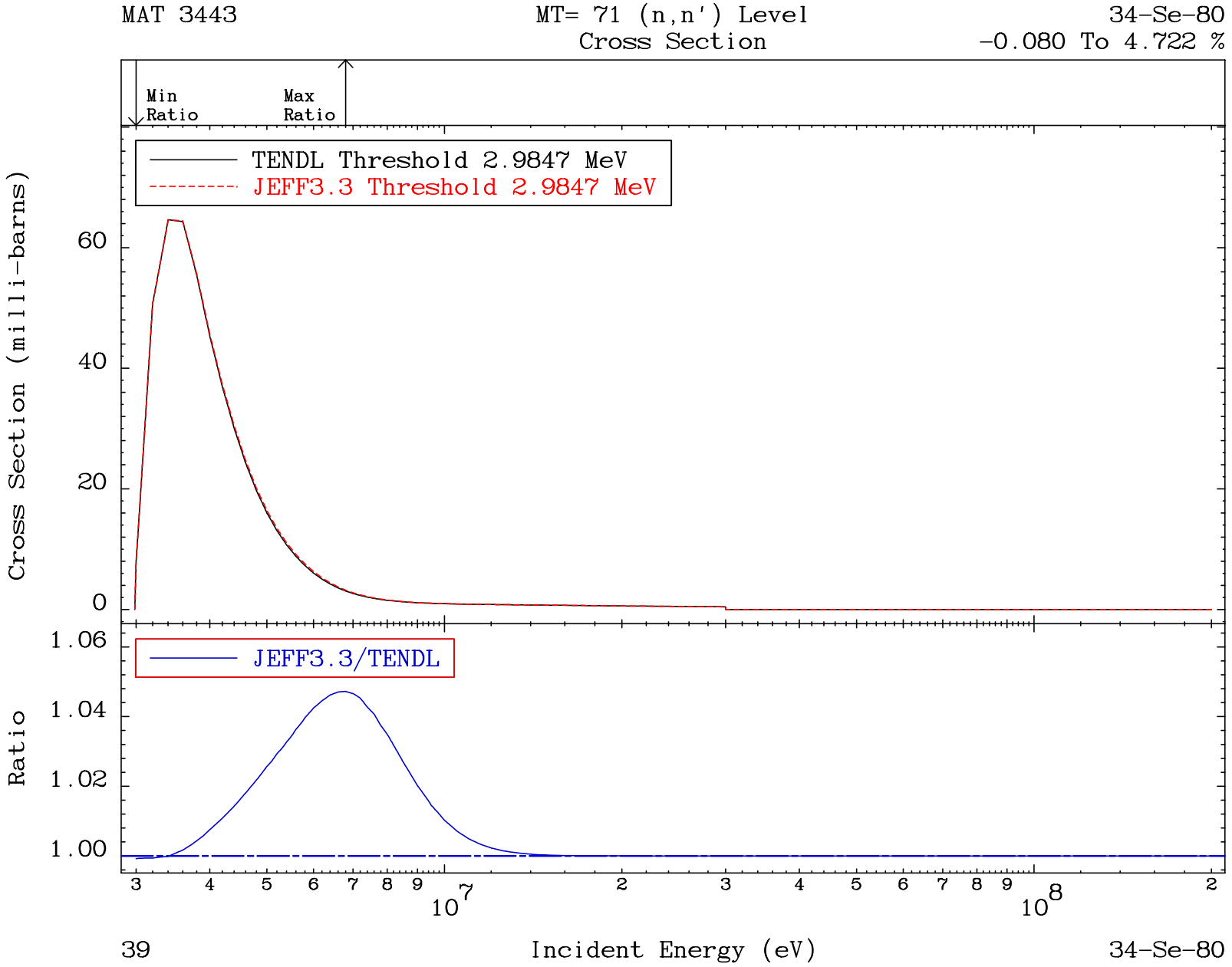

MAT 3443
MT= 66 (n,n') Level
Cross Section
34-Se-80
-0.051 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8500 MeV
JEFF3.3 Threshold 2.8500 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
34-Se-80

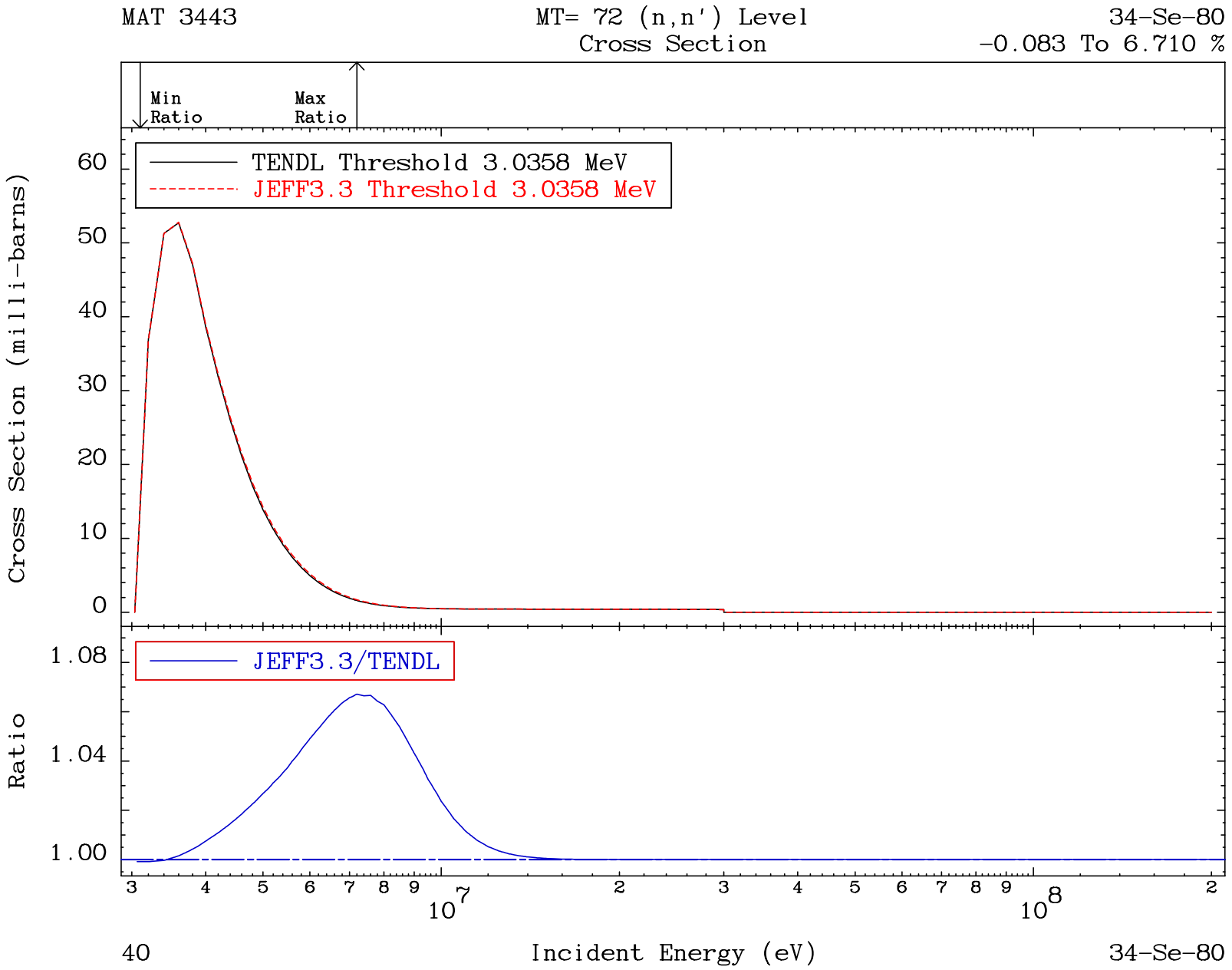

MAT 3443
MT= 67 (n,n') Level
Cross Section
34-Se-80
-0.338 To 5.923 %
Min Ratio
Max Ratio
TENDL Threshold 2.8612 MeV
JEFF3.3 Threshold 2.8612 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
1.06
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
35
34-Se-80

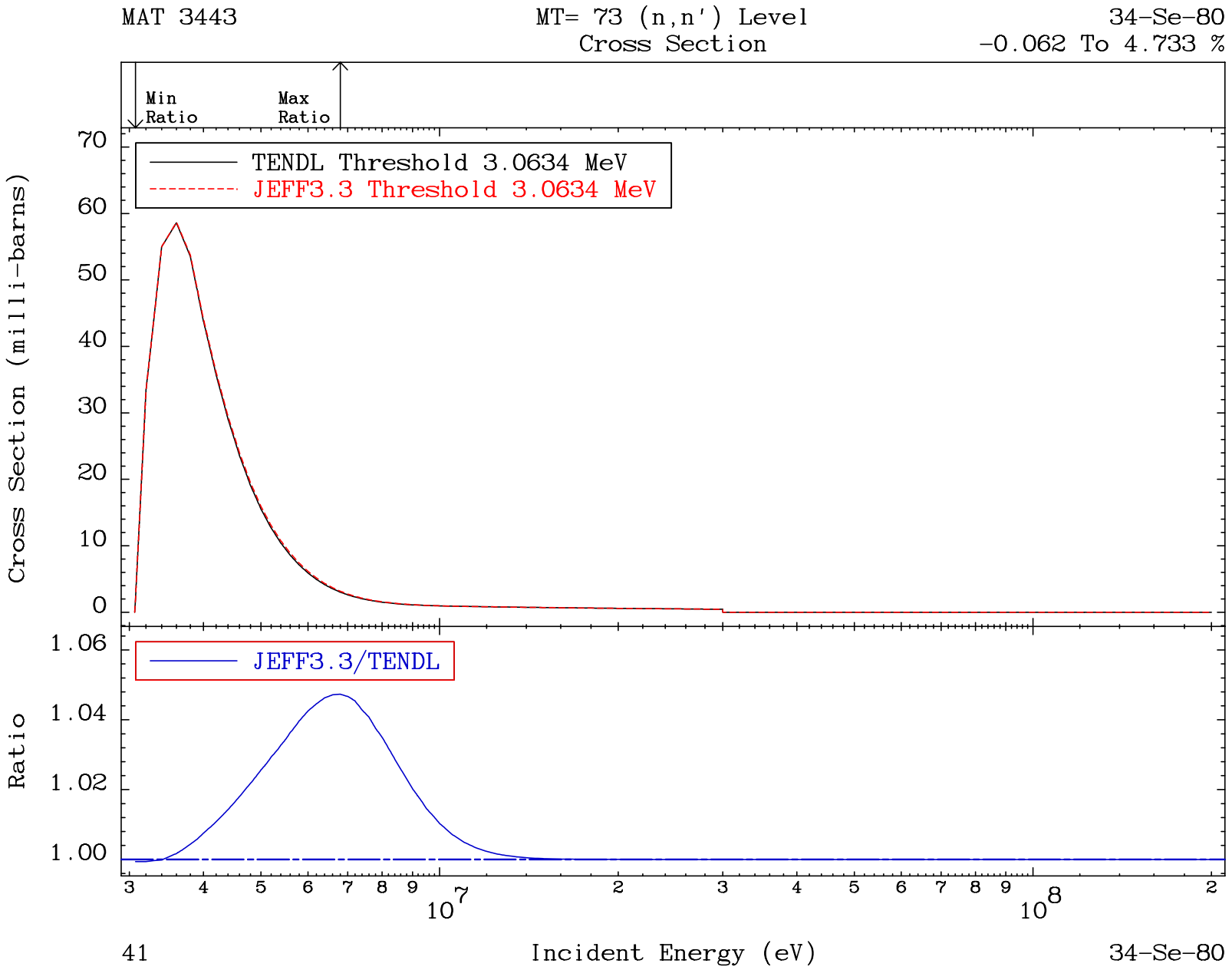

MAT 3443
MT= 68 (n,n') Level
Cross Section
34-Se-80
-0.068 To 4.707 %
Min Ratio
Max Ratio
TENDL Threshold 2.8627 MeV
JEFF3.3 Threshold 2.8627 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
36
Incident Energy (eV)
34-Se-80

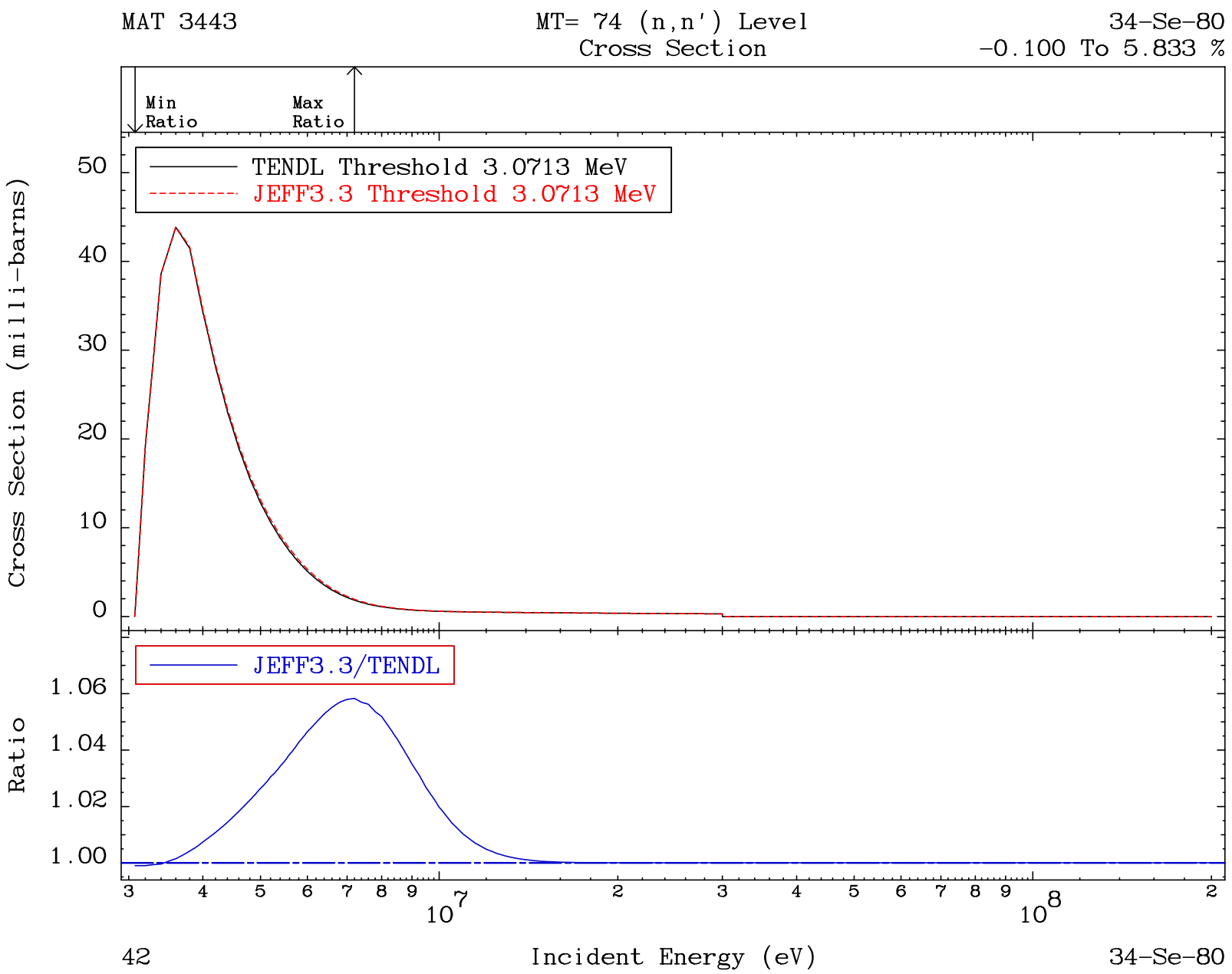

MAT 3443
MT= 69 (n,n') Level
Cross Section
34-Se-80
-0.051 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8721 MeV
JEFF3.3 Threshold 2.8721 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
34-Se-80

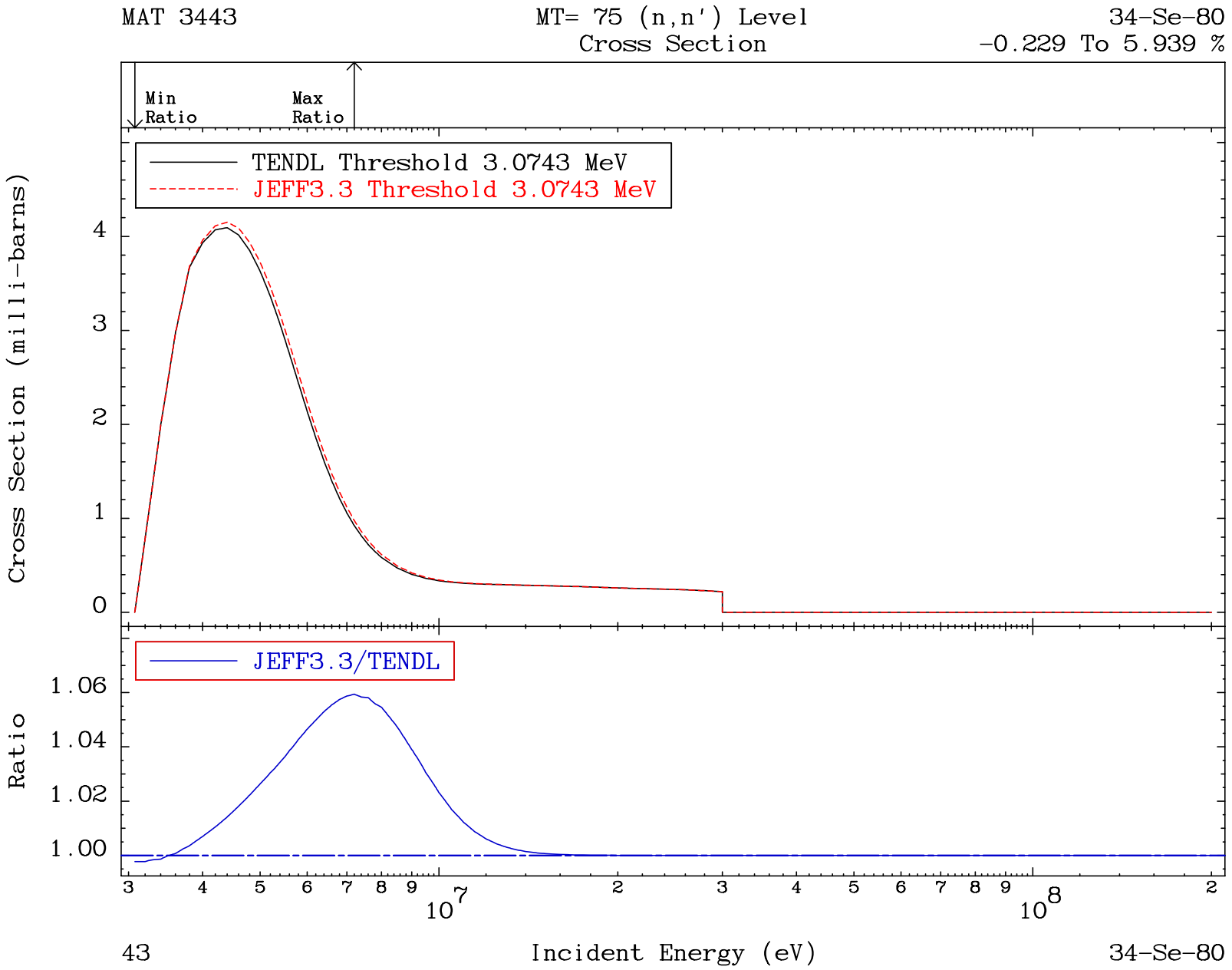

MAT 3443
MT= 70 (n,n') Level
Cross Section
34-Se-80
-0.388 To 5.928 %
Min Ratio
Max Ratio
TENDL Threshold 2.9321 MeV
JEFF3.3 Threshold 2.9321 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
1.06
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
34-Se-80

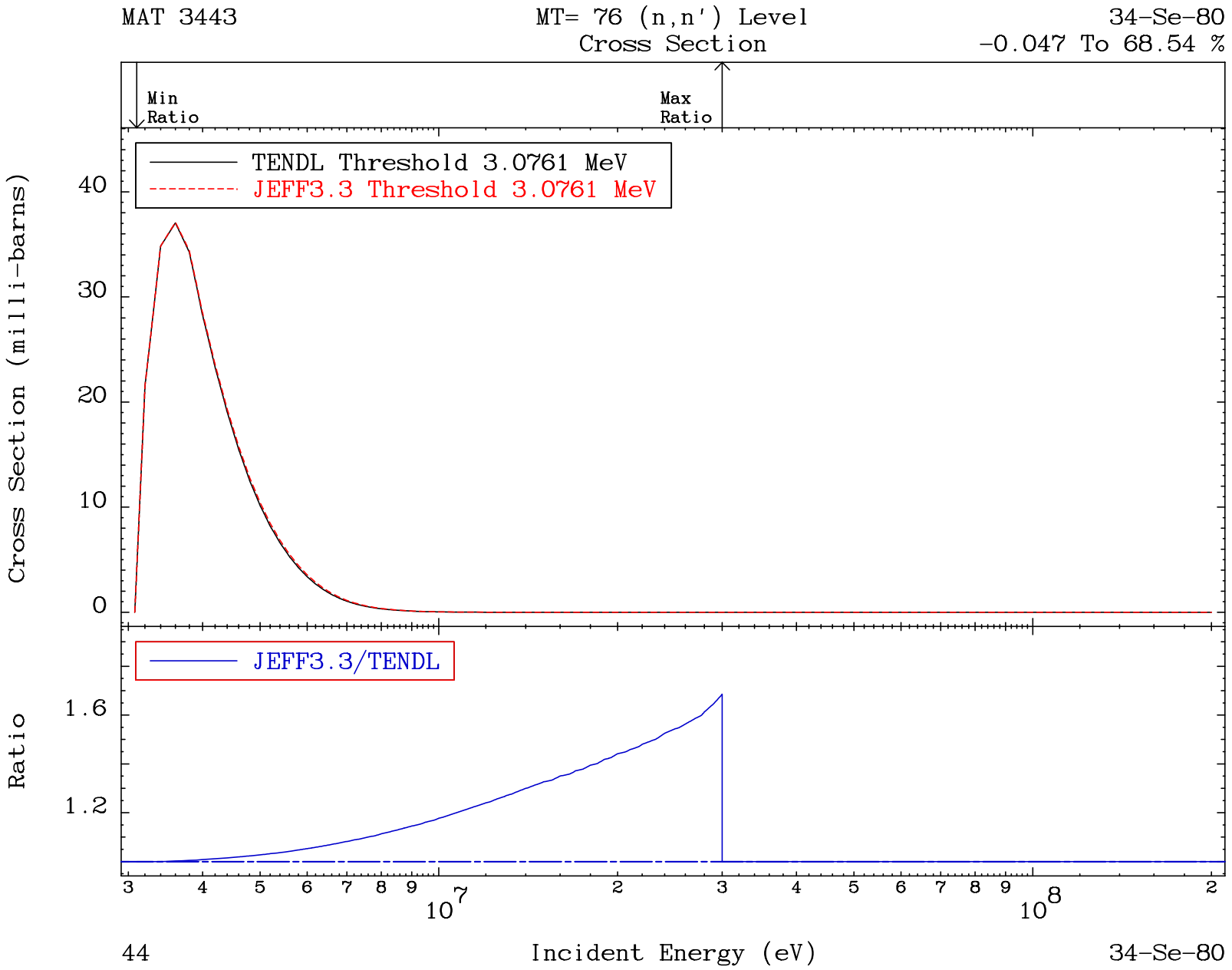

MAT 3443
MT= 71 (n,n') Level
Cross Section
34-Se-80
-0.080 To 4.722 %
Min Ratio
Max Ratio
TENDL Threshold 2.9847 MeV
JEFF3.3 Threshold 2.9847 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
39
Incident Energy (eV)
34-Se-80

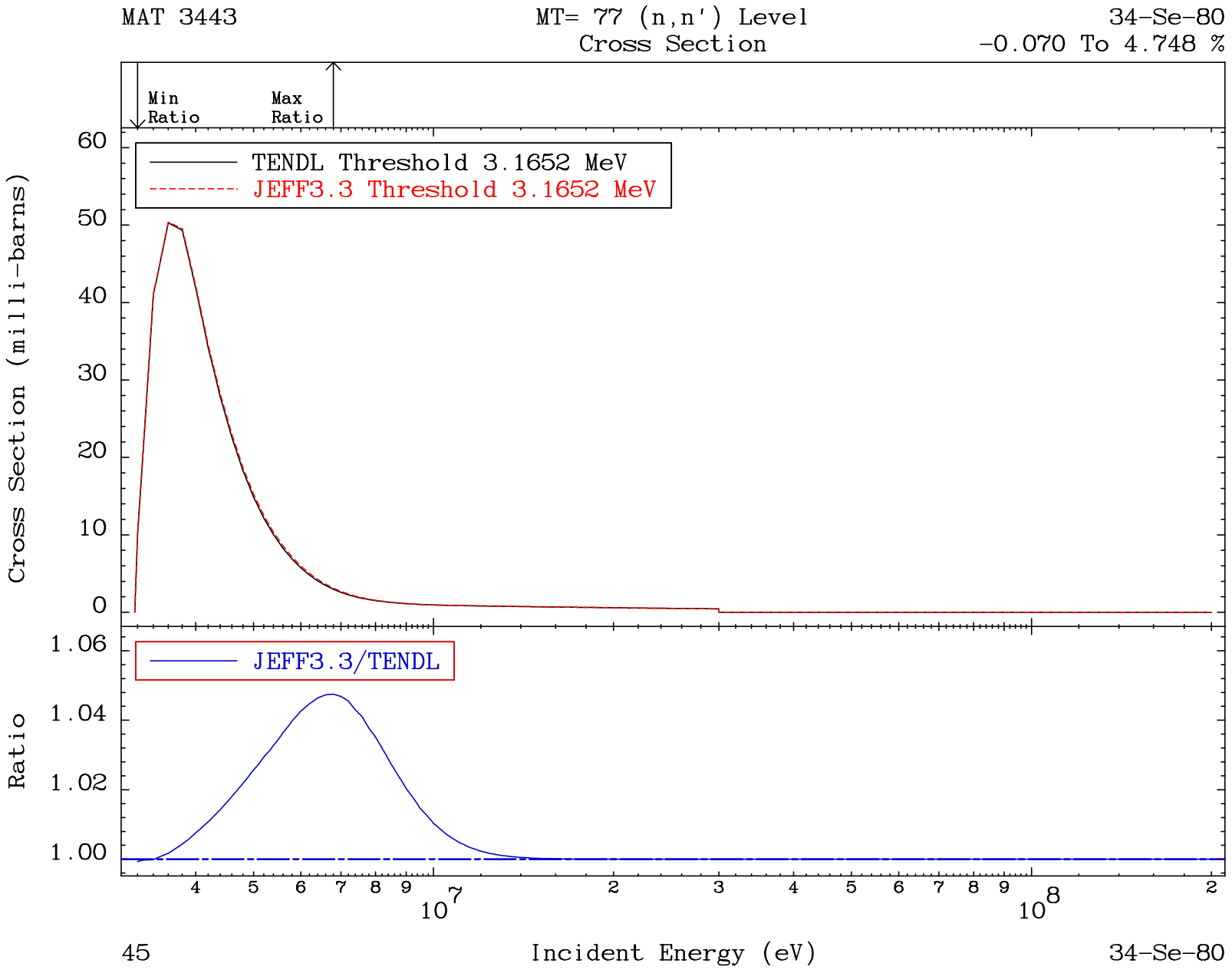

MAT 3443
MT= 72 (n,n') Level
Cross Section
34-Se-80
-0.083 To 6.710 %
Min Ratio
Max Ratio
TENDL Threshold 3.0358 MeV
JEFF3.3 Threshold 3.0358 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.08
1.04
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
40
Incident Energy (eV)
34-Se-80

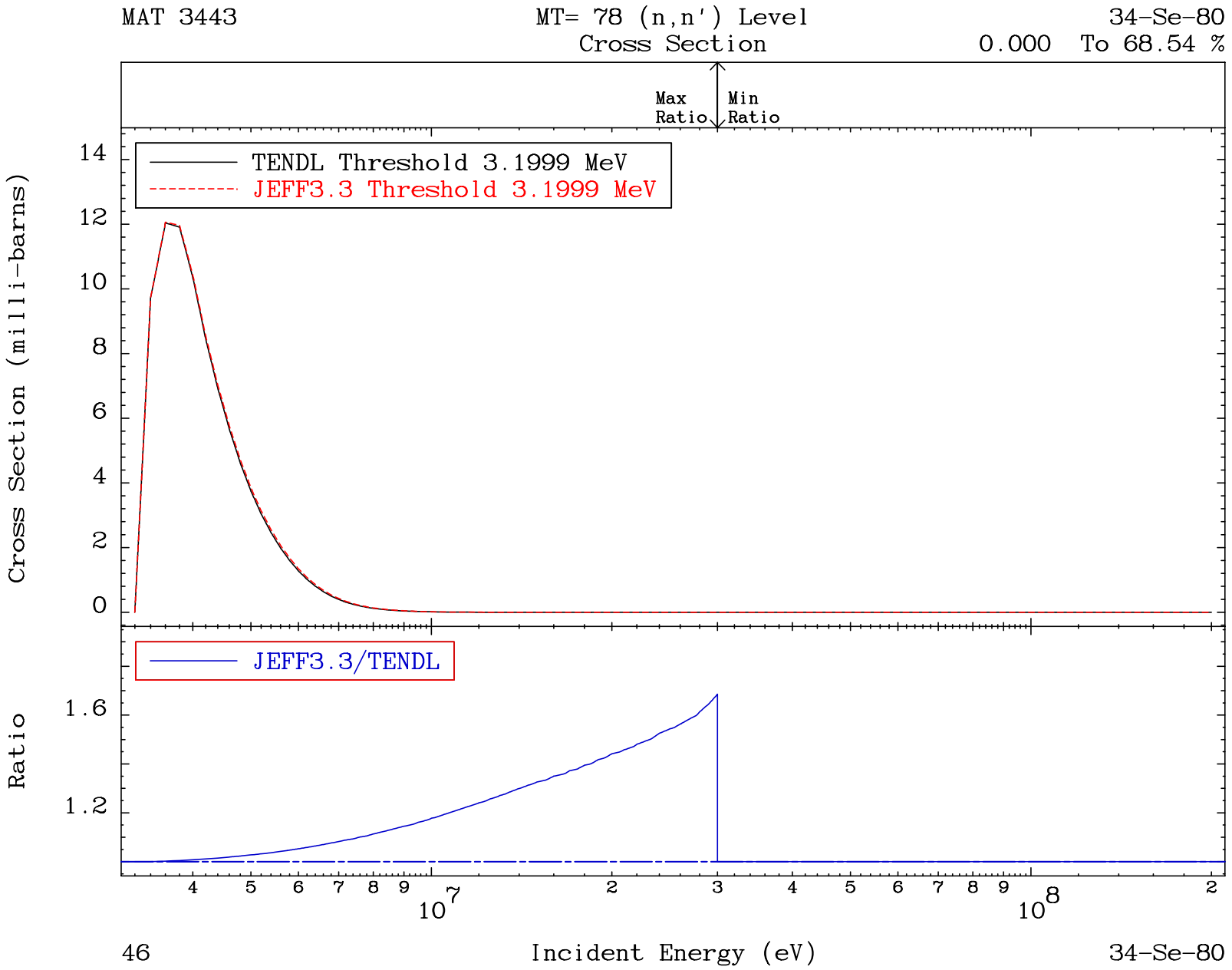

MAT 3443
MT= 73 (n,n') Level
Cross Section
34-Se-80
-0.062 To 4.733 %
Min Ratio
Max Ratio
TENDL Threshold 3.0634 MeV
JEFF3.3 Threshold 3.0634 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
34-Se-80

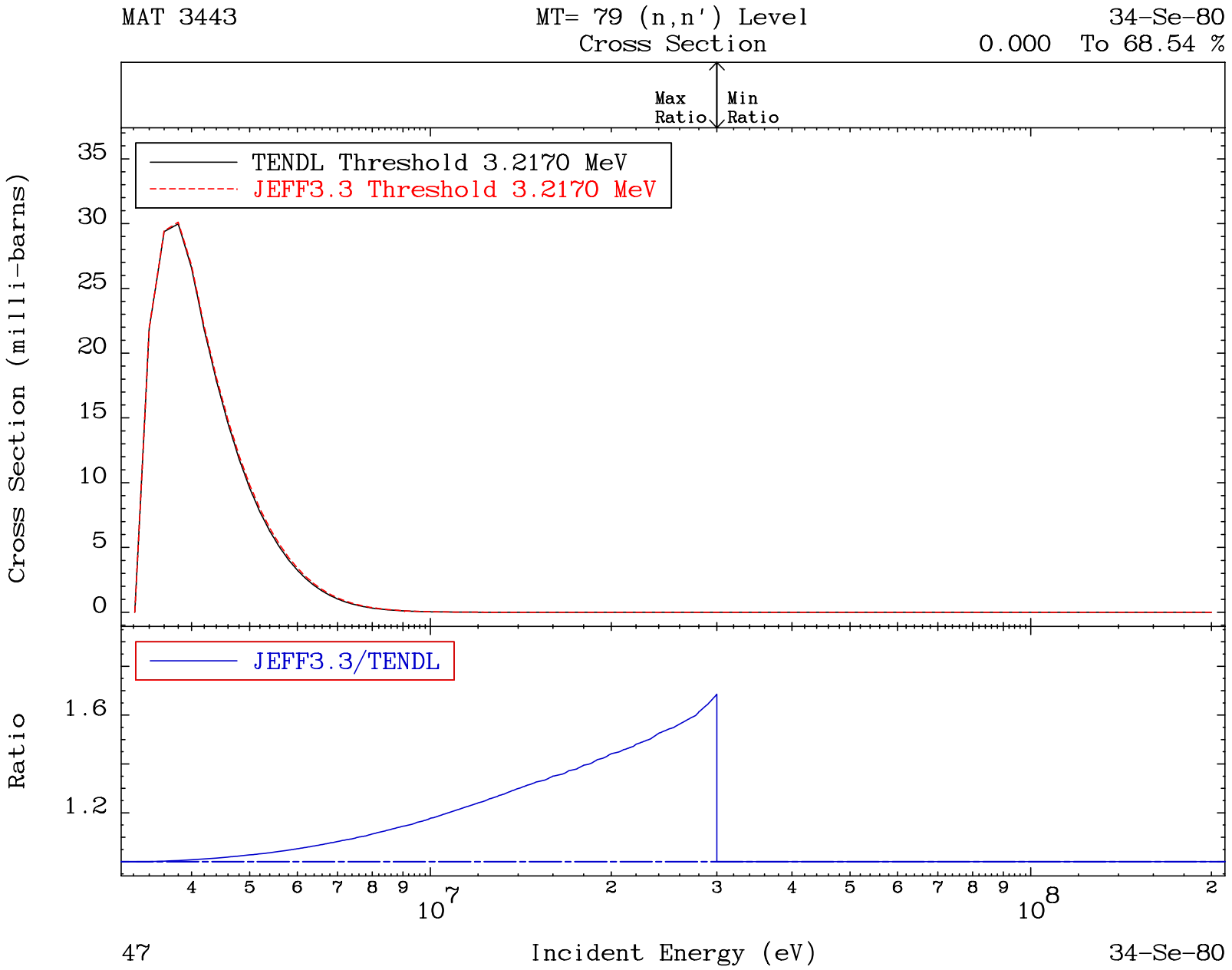

MAT 3443
MT= 74 (n,n') Level
Cross Section
34-Se-80
-0.100 To 5.833 %
Min Ratio
Max Ratio
TENDL Threshold 3.0713 MeV
JEFF3.3 Threshold 3.0713 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
42
Incident Energy (eV)
34-Se-80

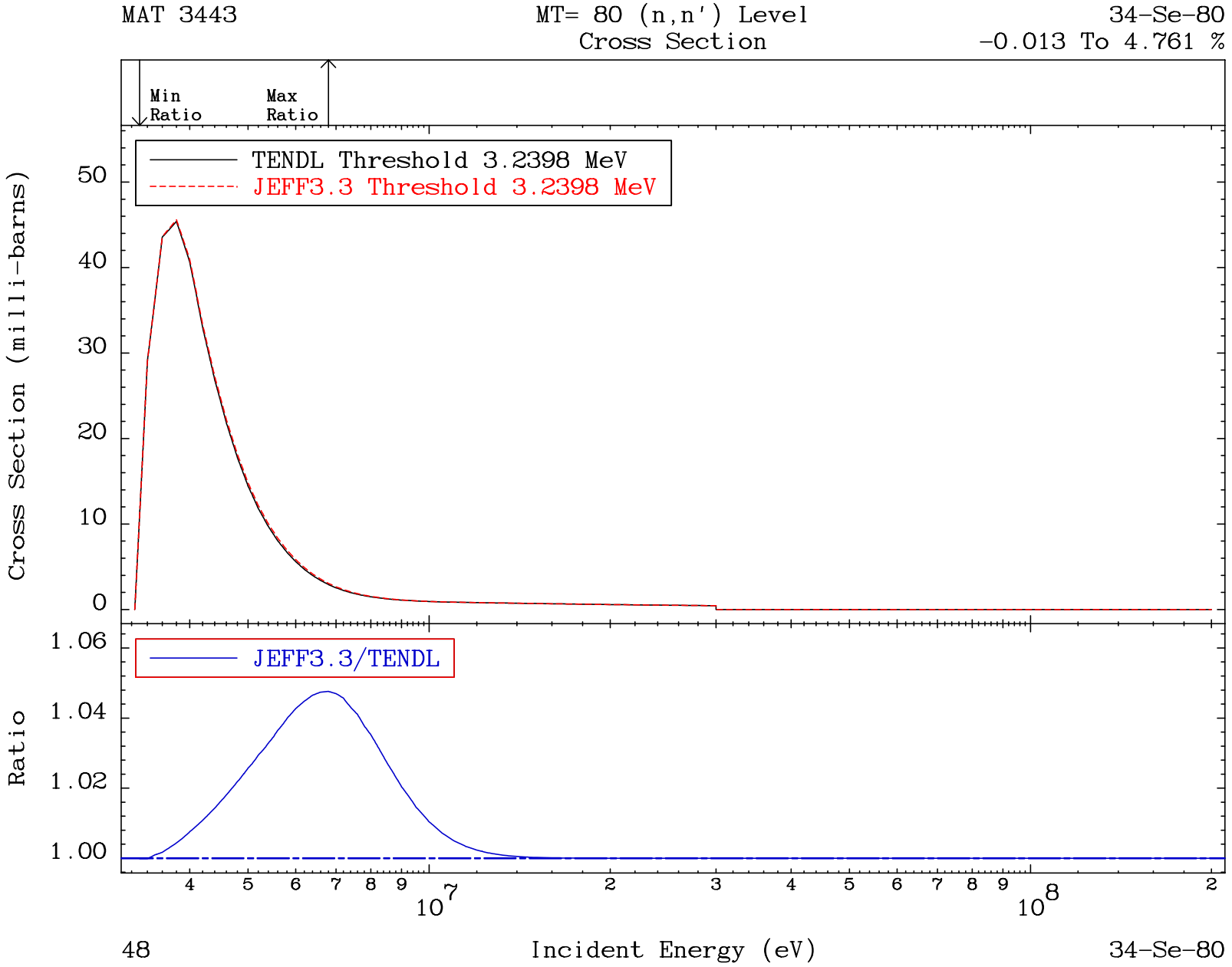

MAT 3443
MT= 75 (n,n') Level
Cross Section
34-Se-80
-0.229 To 5.939 %
Min Ratio
Max Ratio
TENDL Threshold 3.0743 MeV
JEFF3.3 Threshold 3.0743 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
1.06
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
43
34-Se-80

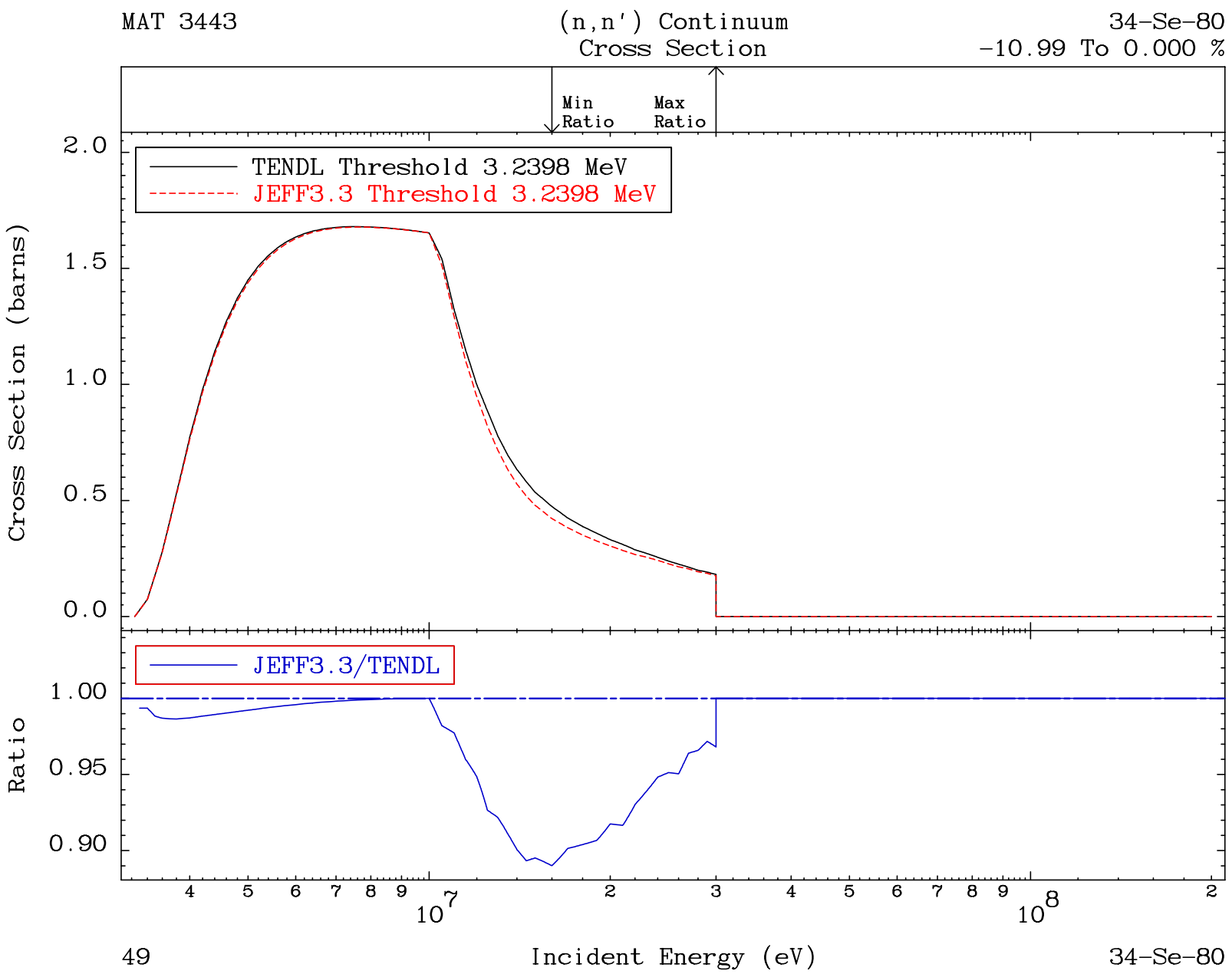

MAT 3443
MT= 76 (n,n') Level
Cross Section
34-Se-80
-0.047 To 68.54 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.0761 MeV
JEFF3.3 Threshold 3.0761 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.6
1.2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
44
Incident Energy (eV)
34-Se-80

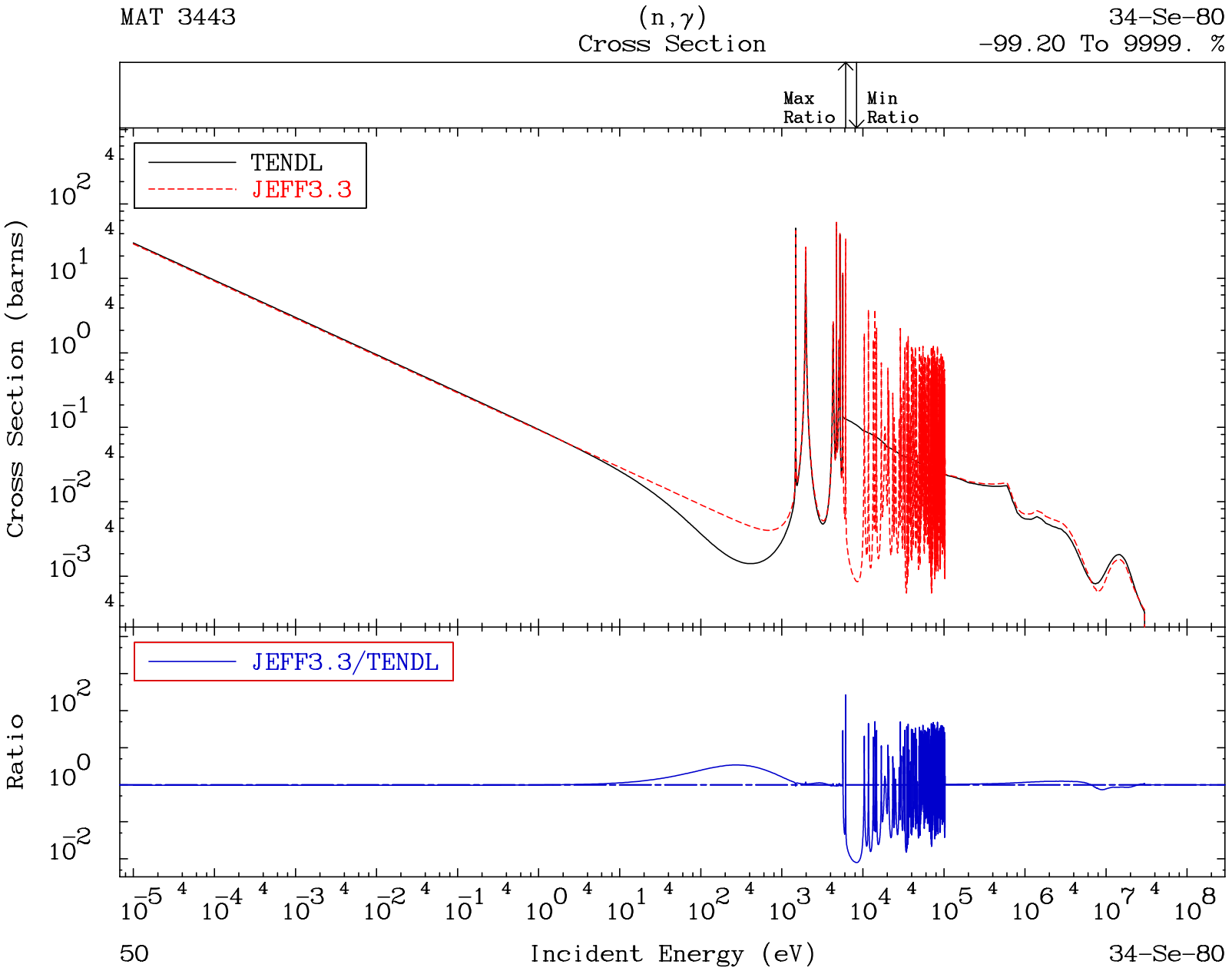

MAT 3443
MT= 77 (n,n') Level
Cross Section
34-Se-80
-0.070 To 4.748 %
Min Ratio
Max Ratio
TENDL Threshold 3.1652 MeV
JEFF3.3 Threshold 3.1652 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
45
Incident Energy (eV)
34-Se-80

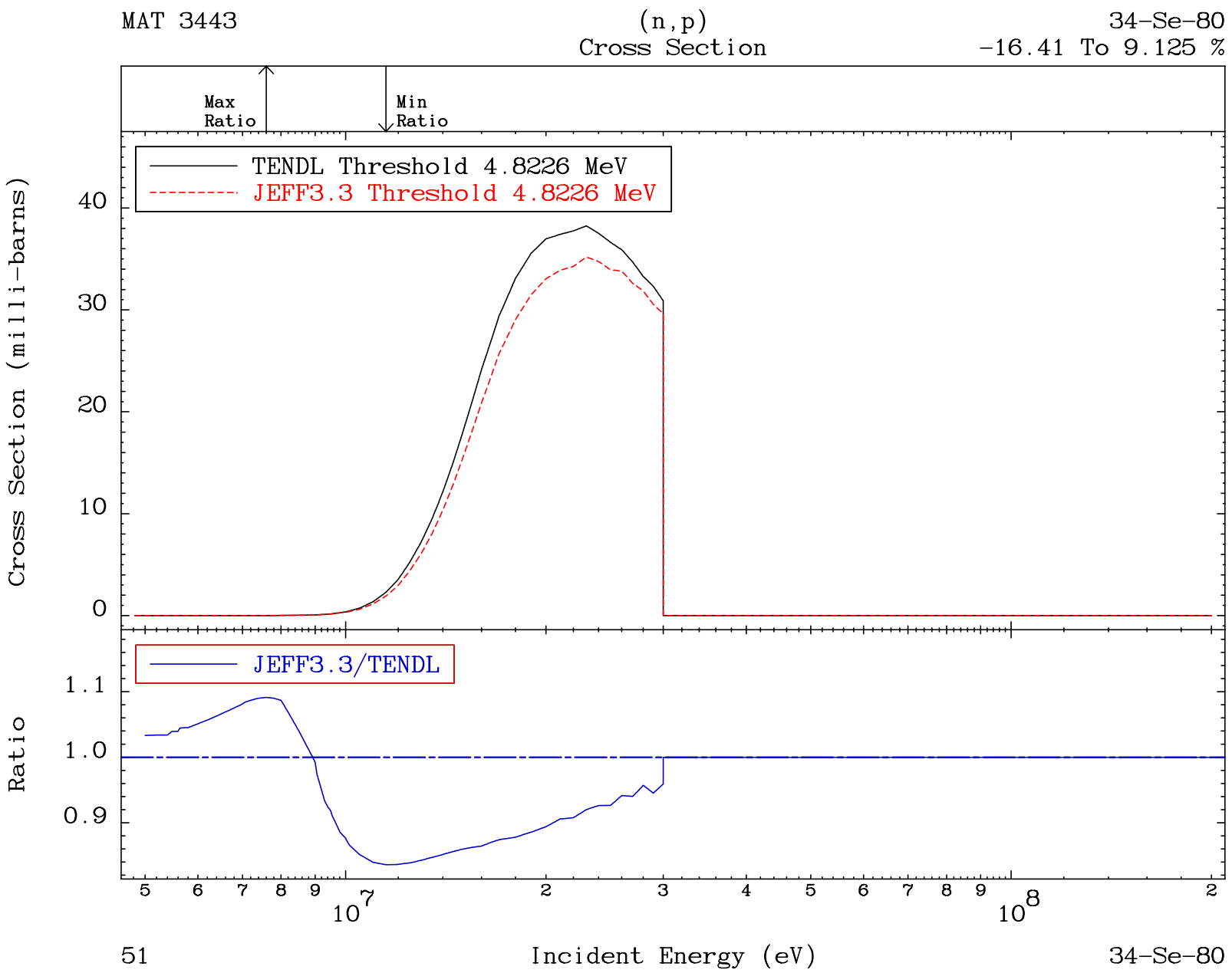

MAT 3443
MT= 78 (n,n') Level
Cross Section
34-Se-80
0.000 To 68.54 %
Max Ratio
Min Ratio
TENDL Threshold 3.1999 MeV
JEFF3.3 Threshold 3.1999 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
46
34-Se-80

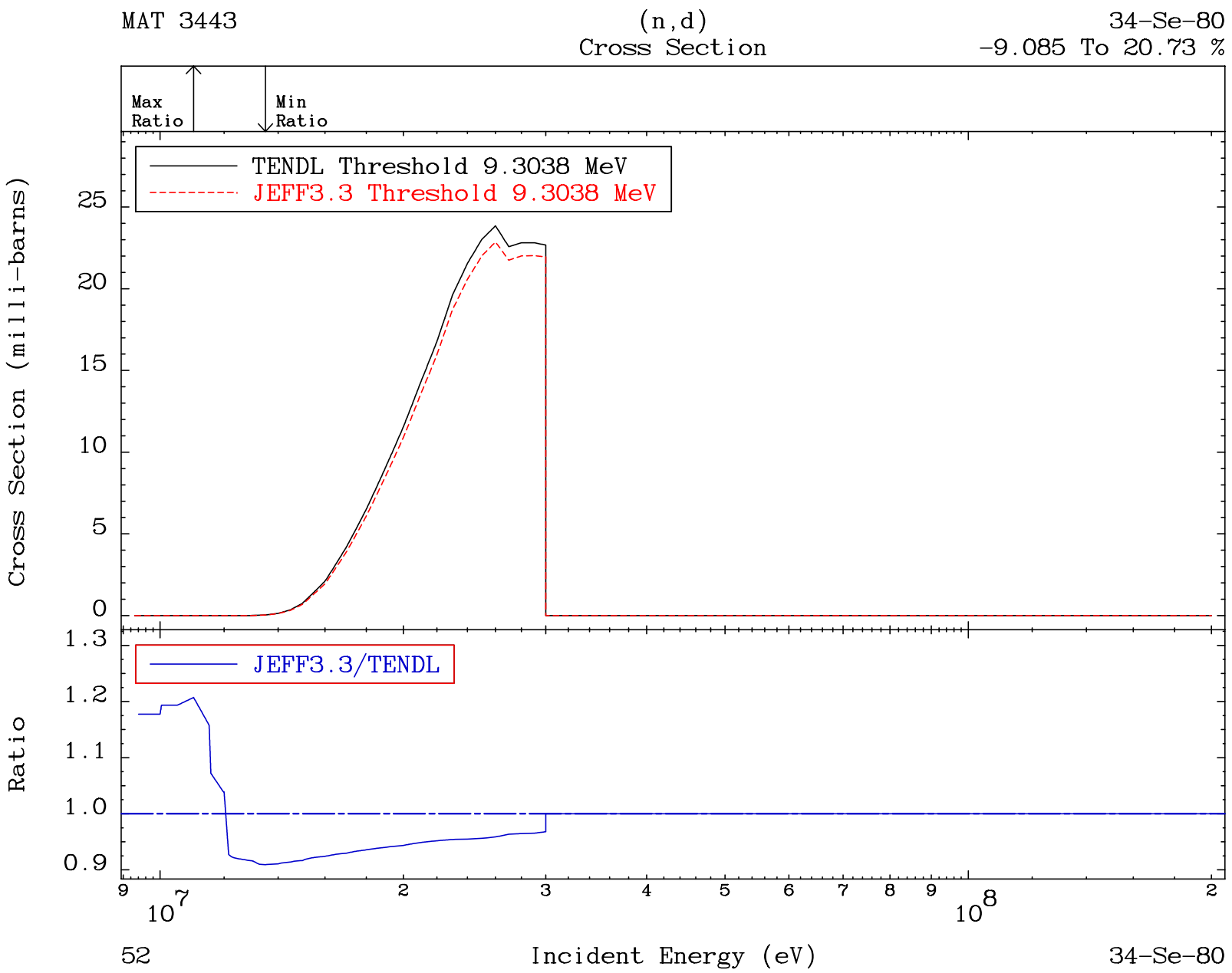

MAT 3443
MT= 79 (n,n') Level
Cross Section
34-Se-80
0.000 To 68.54 %
Max Ratio
Min Ratio
TENDL Threshold 3.2170 MeV
JEFF3.3 Threshold 3.2170 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.6
1.2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
34-Se-80

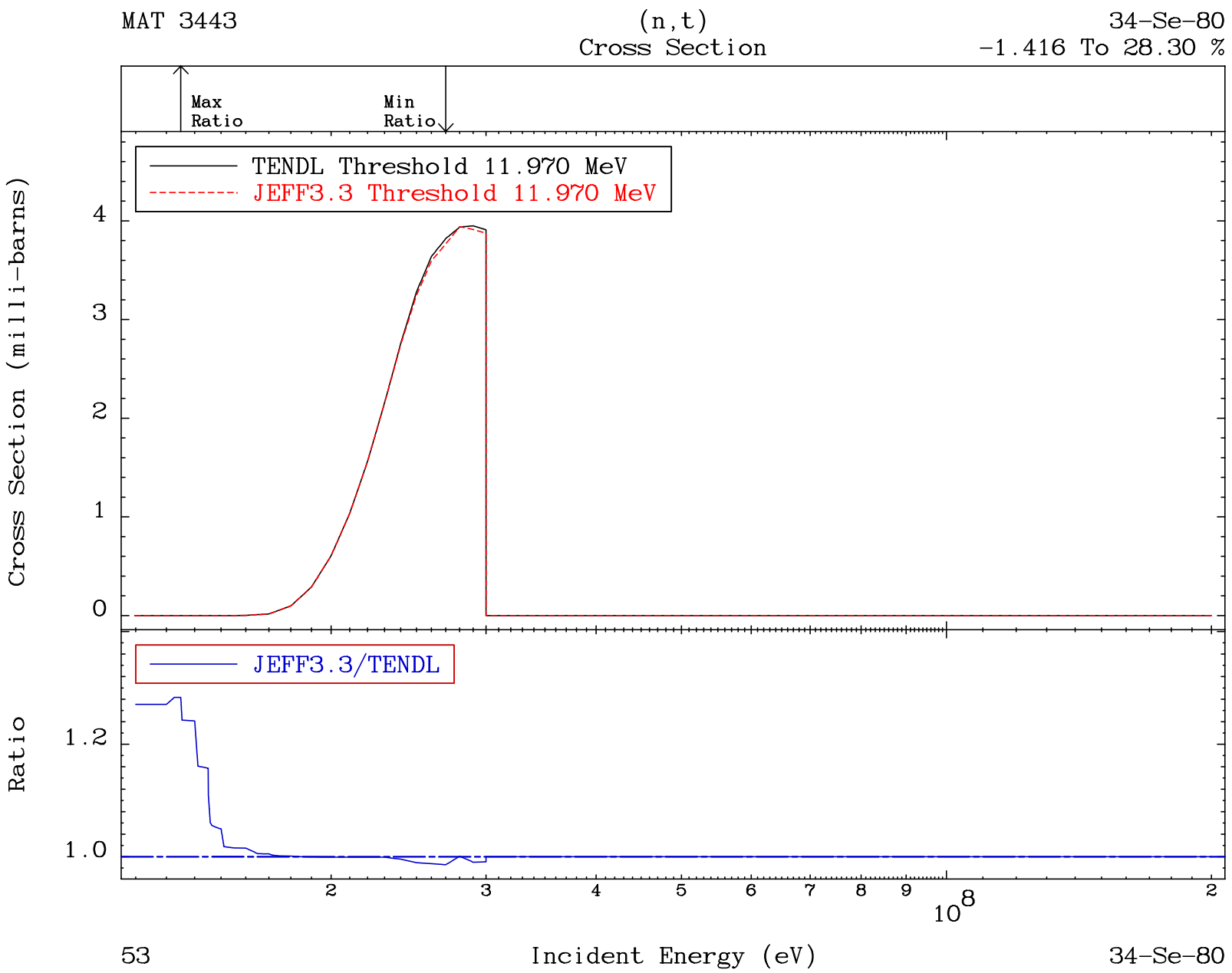

MAT 3443
MT= 80 (n,n') Level
Cross Section
34-Se-80
-0.013 To 4.761 %
Min Ratio
Max Ratio
TENDL Threshold 3.2398 MeV
JEFF3.3 Threshold 3.2398 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
34-Se-80

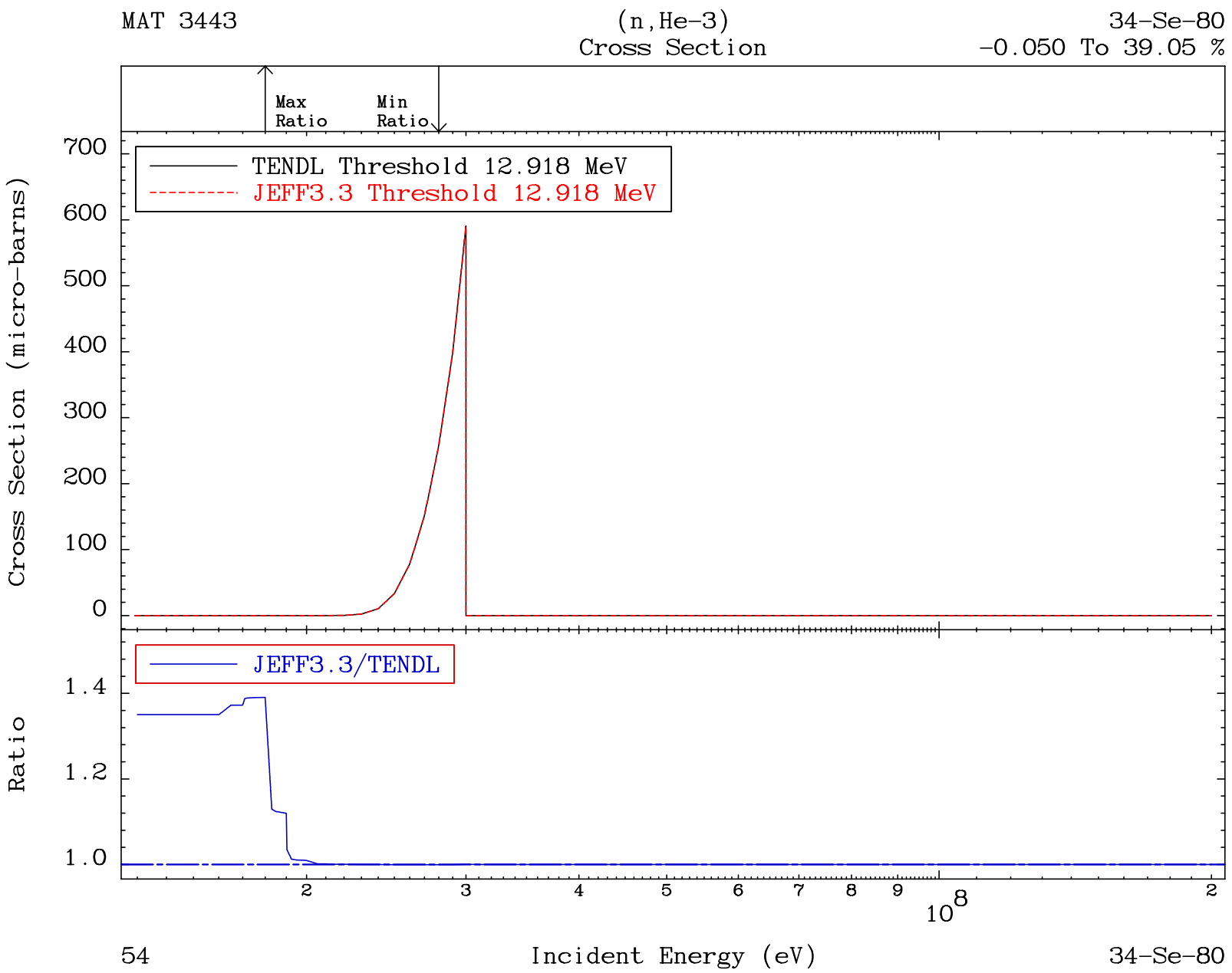

MAT 3443
(n,n') Continuum
Cross Section
34-Se-80
-10.99 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 3.2398 MeV
JEFF3.3 Threshold 3.2398 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
34-Se-80

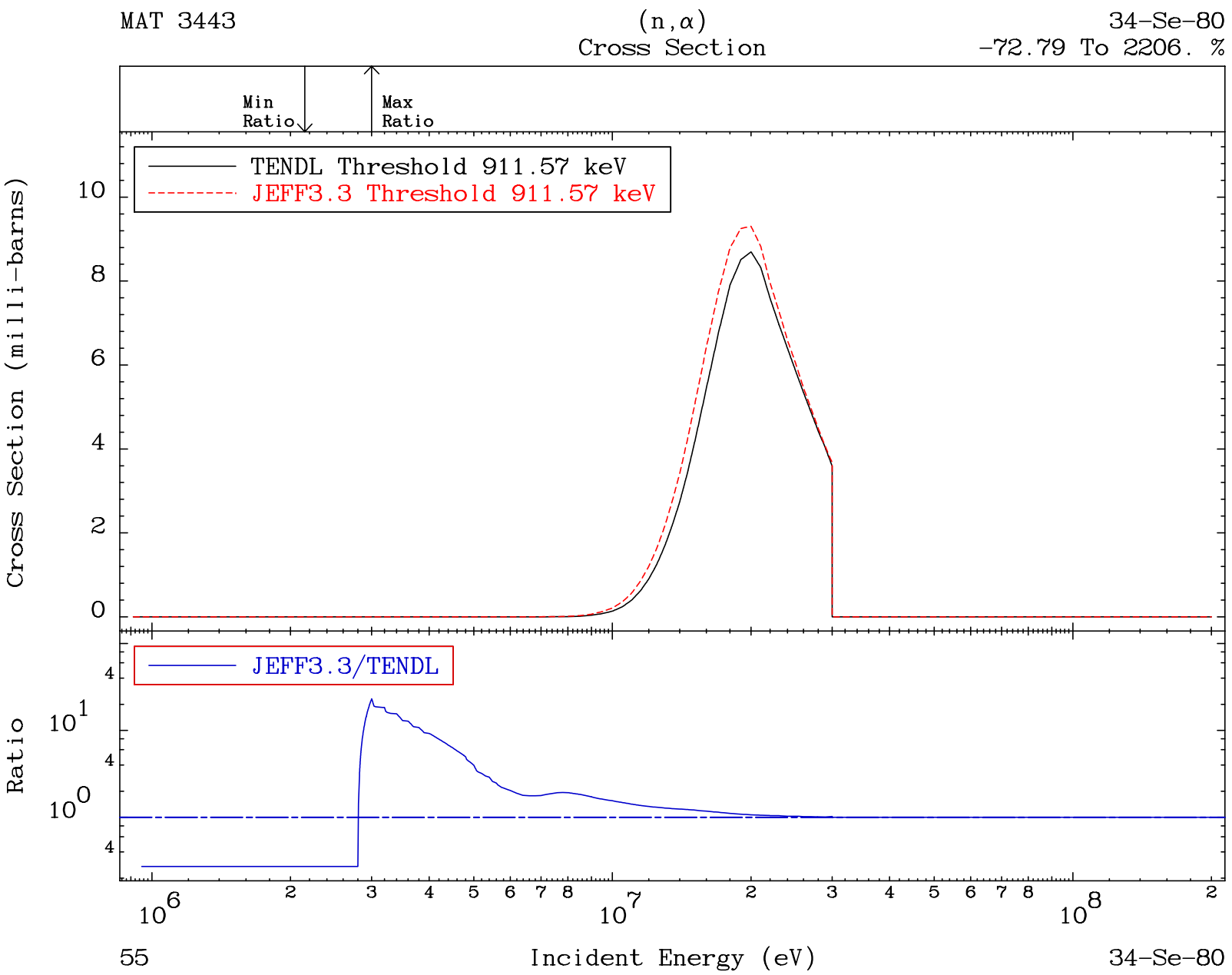

MAT 3443
(n,γ)
Cross Section
34-Se-80
-99.20 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
50
34-Se-80

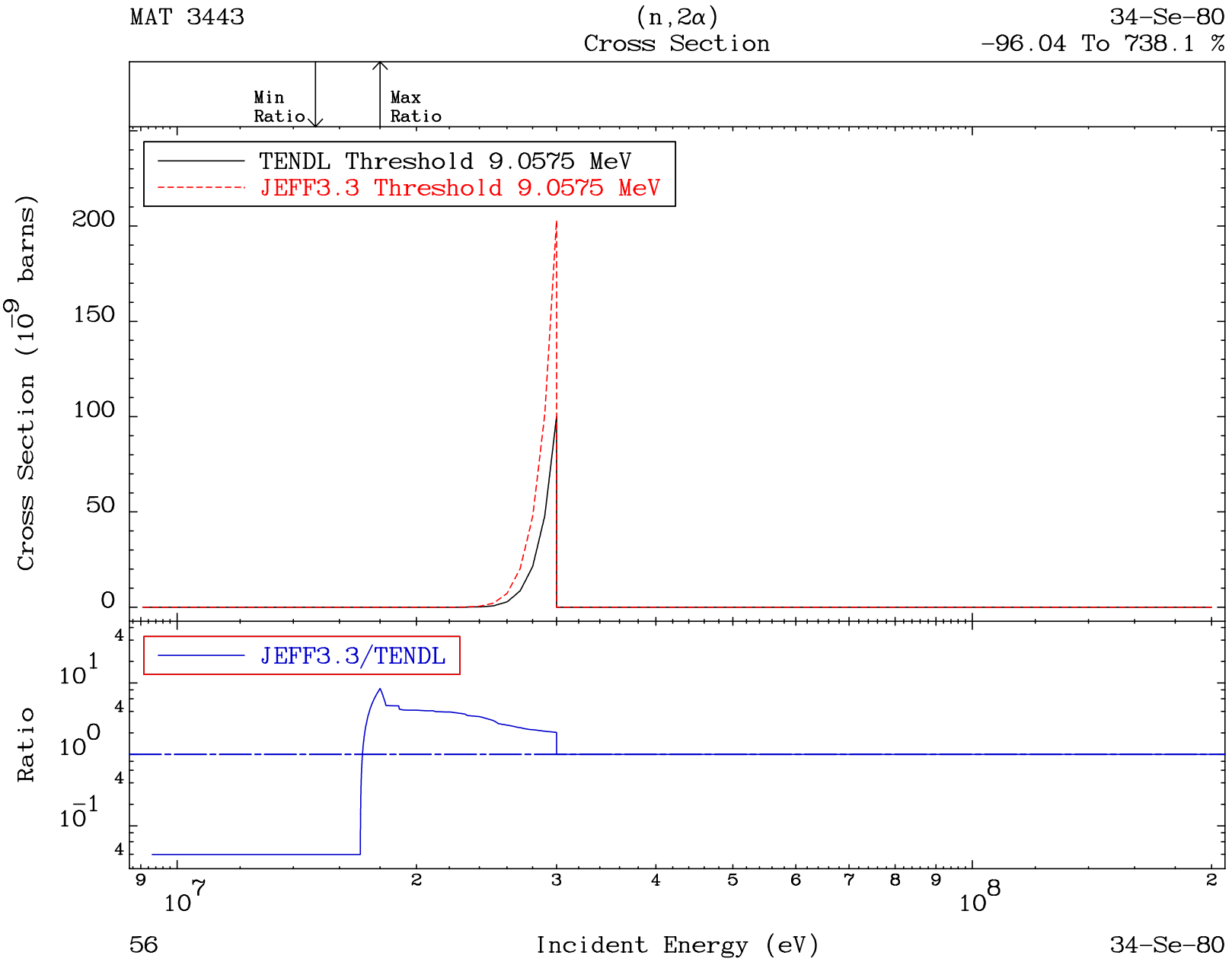

MAT 3443
(n,p)
Cross Section
34-Se-80
-16.41 To 9.125 %
Max Ratio
Min Ratio
TENDL Threshold 4.8226 MeV
JEFF3.3 Threshold 4.8226 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
34-Se-80

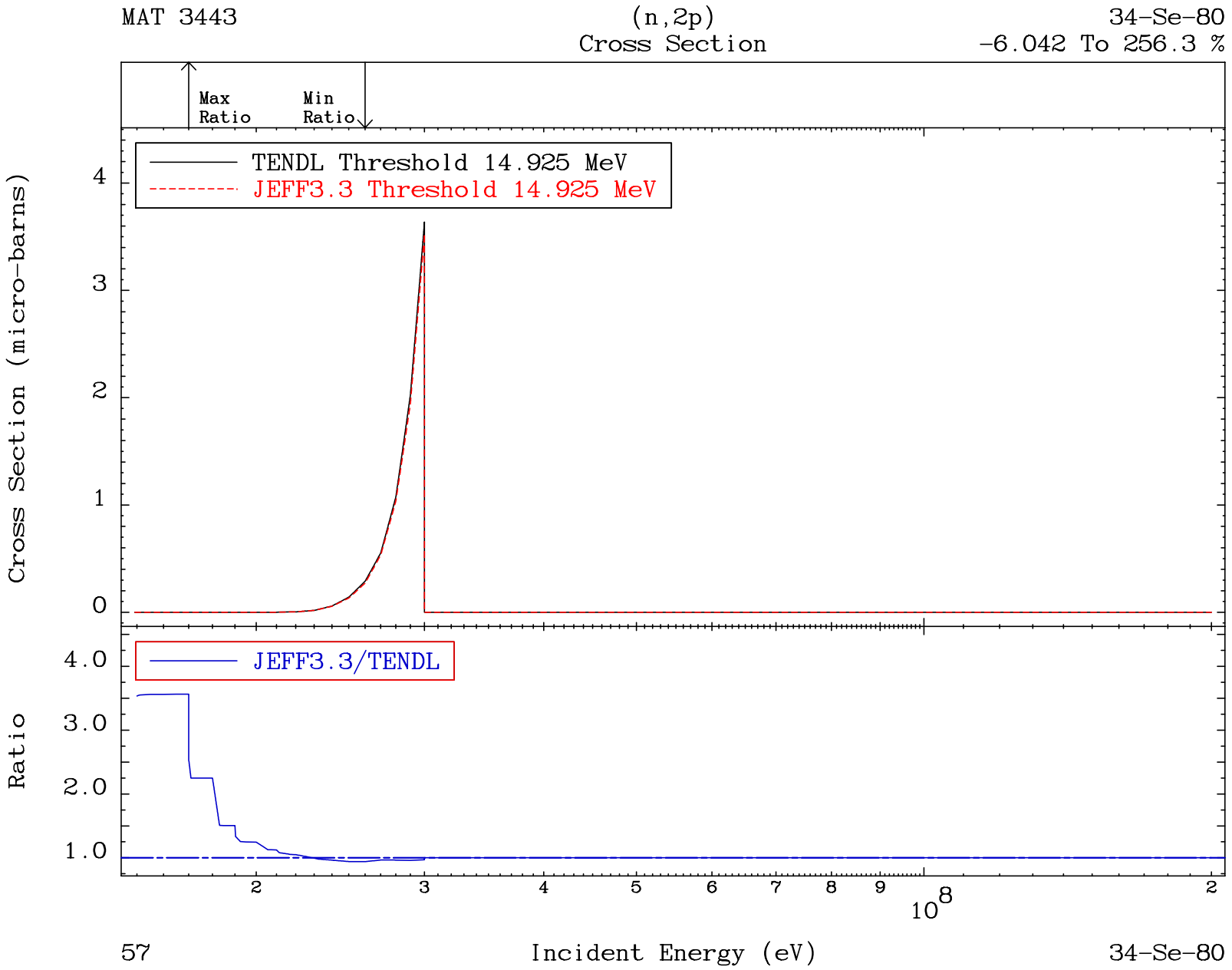

MAT 3443
(n,d)
Cross Section
34-Se-80
-9.085 To 20.73 %
Max Ratio
Min Ratio
TENDL Threshold 9.3038 MeV
JEFF3.3 Threshold 9.3038 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
0.9
9
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
34-Se-80

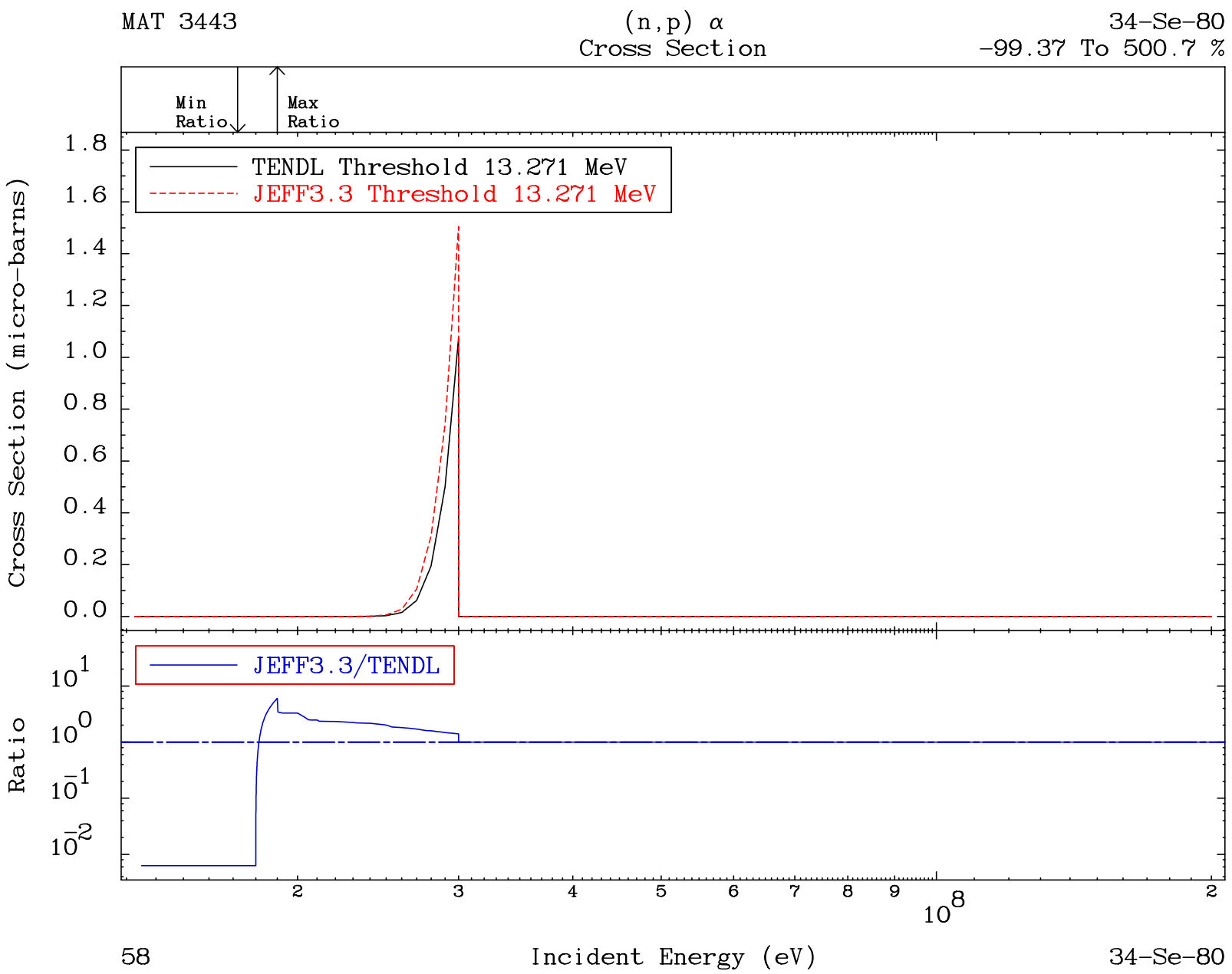

MAT 3443
(n,t)
Cross Section
34-Se-80
-1.416 To 28.30 %
Max Ratio
Min Ratio
TENDL Threshold 11.970 MeV
JEFF3.3 Threshold 11.970 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.0
1.2
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
34-Se-80

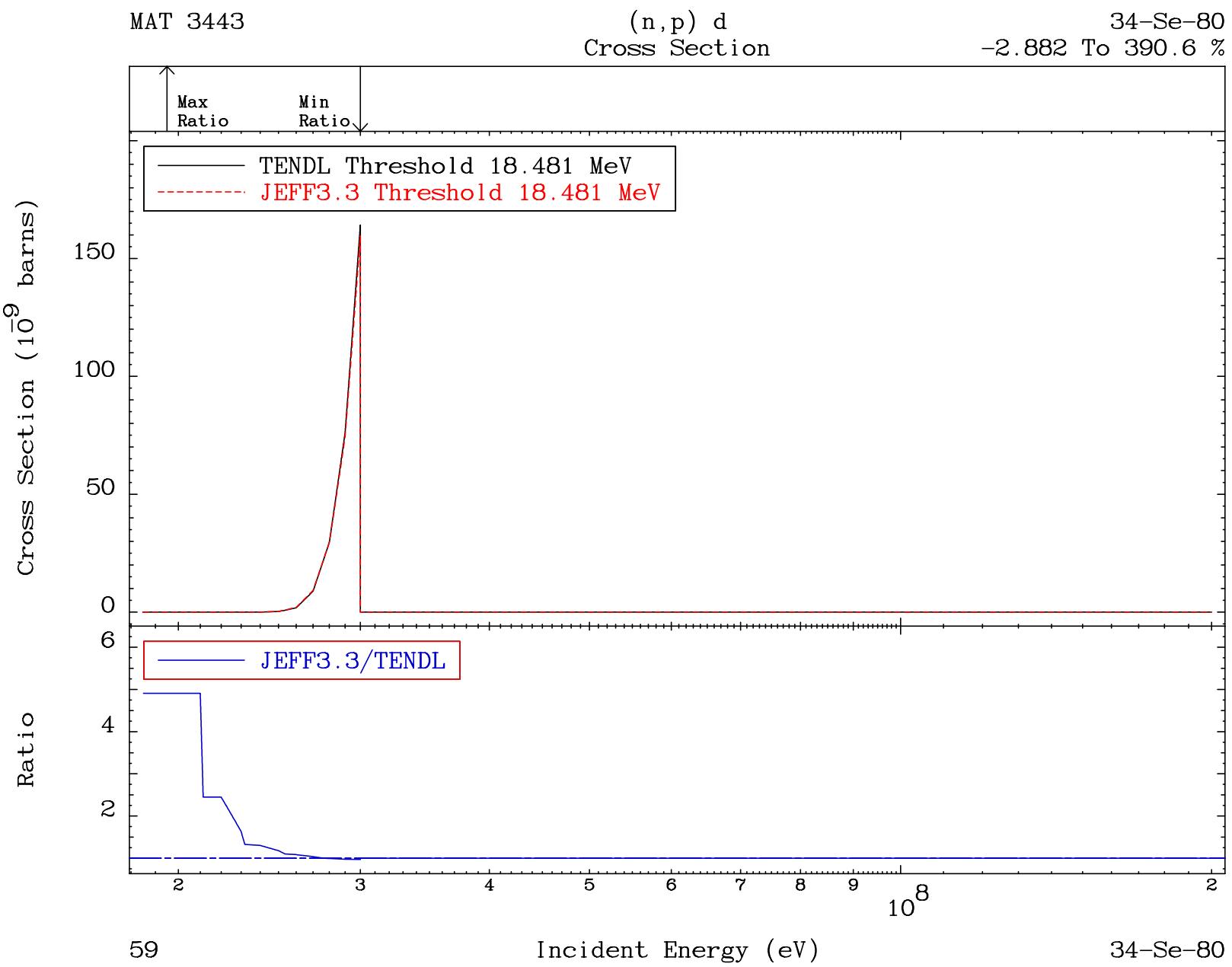

MAT 3443
(n,He-3)
Cross Section
34-Se-80
-0.050 To 39.05 %
Max Ratio
Min Ratio
TENDL Threshold 12.918 MeV
JEFF3.3 Threshold 12.918 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
34-Se-80

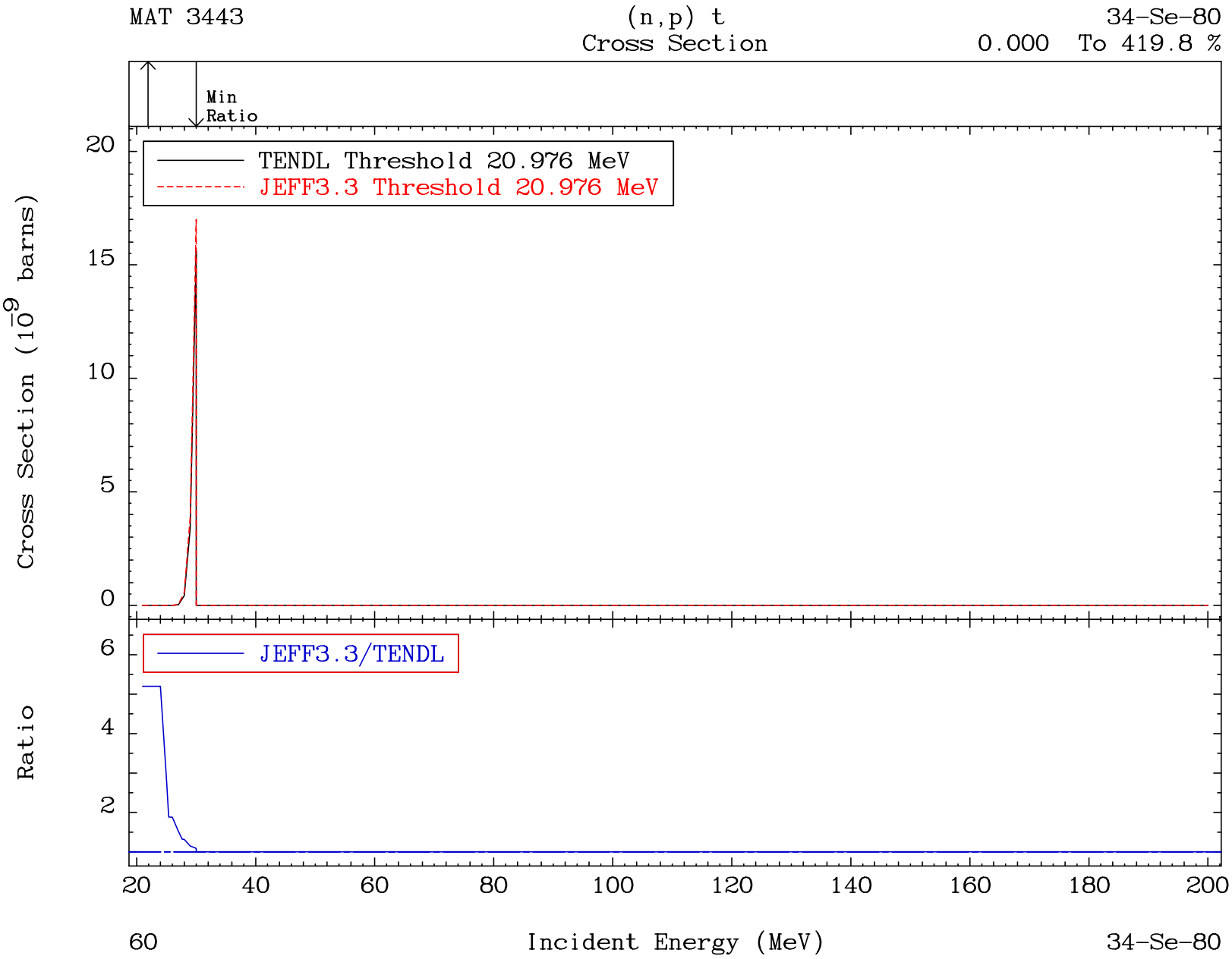

MAT 3443
(n,α)
Cross Section
34-Se-80
-72.79 To 2206. %
Min Ratio
Max Ratio
TENDL Threshold 911.57 keV
JEFF3.3 Threshold 911.57 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
34-Se-80

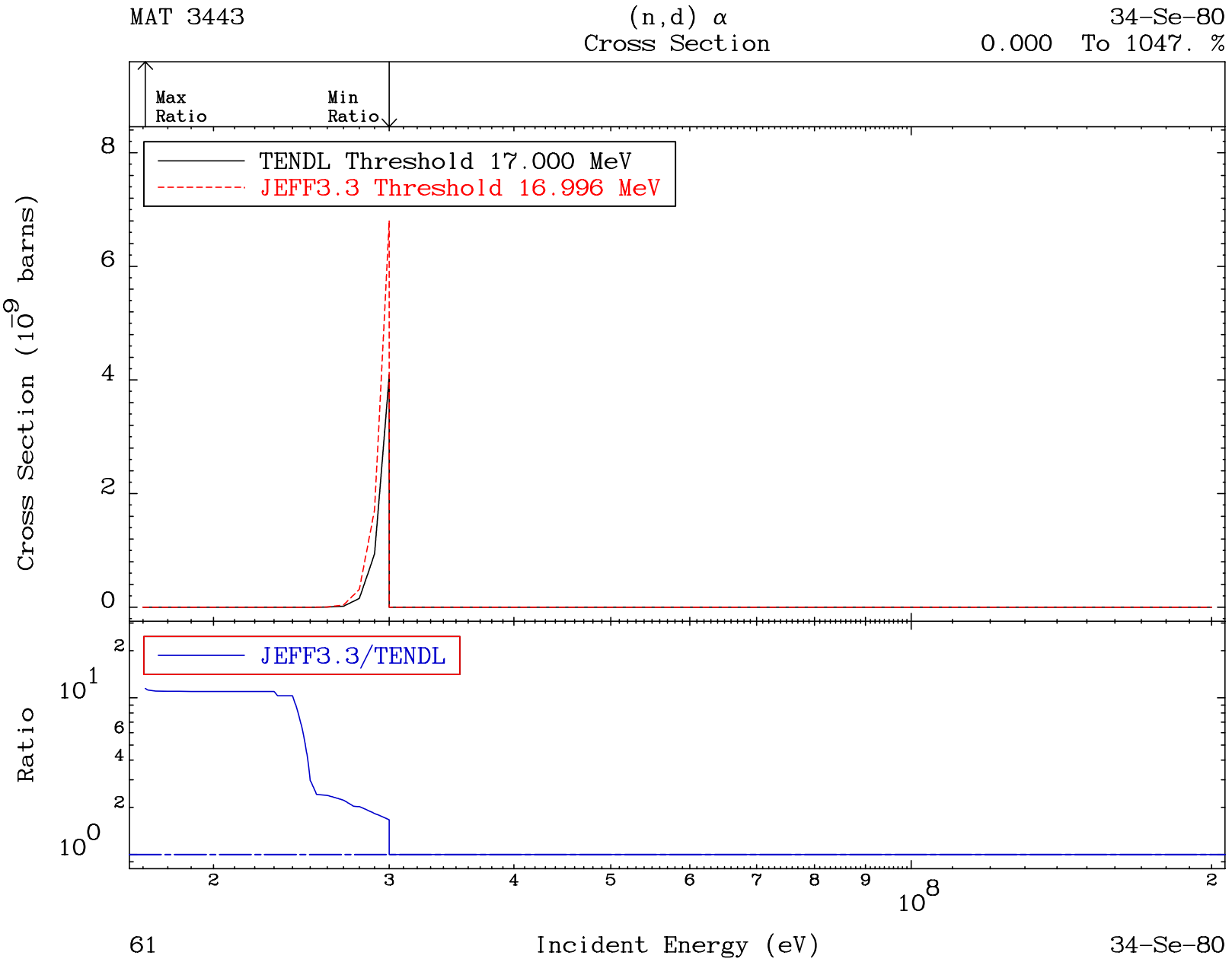

MAT 3443
(n,2α)
Cross Section
34-Se-80
-96.04 To 738.1 %
Min Ratio
Max Ratio
TENDL Threshold 9.0575 MeV
JEFF3.3 Threshold 9.0575 MeV
Cross Section (10^-9 barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
34-Se-80

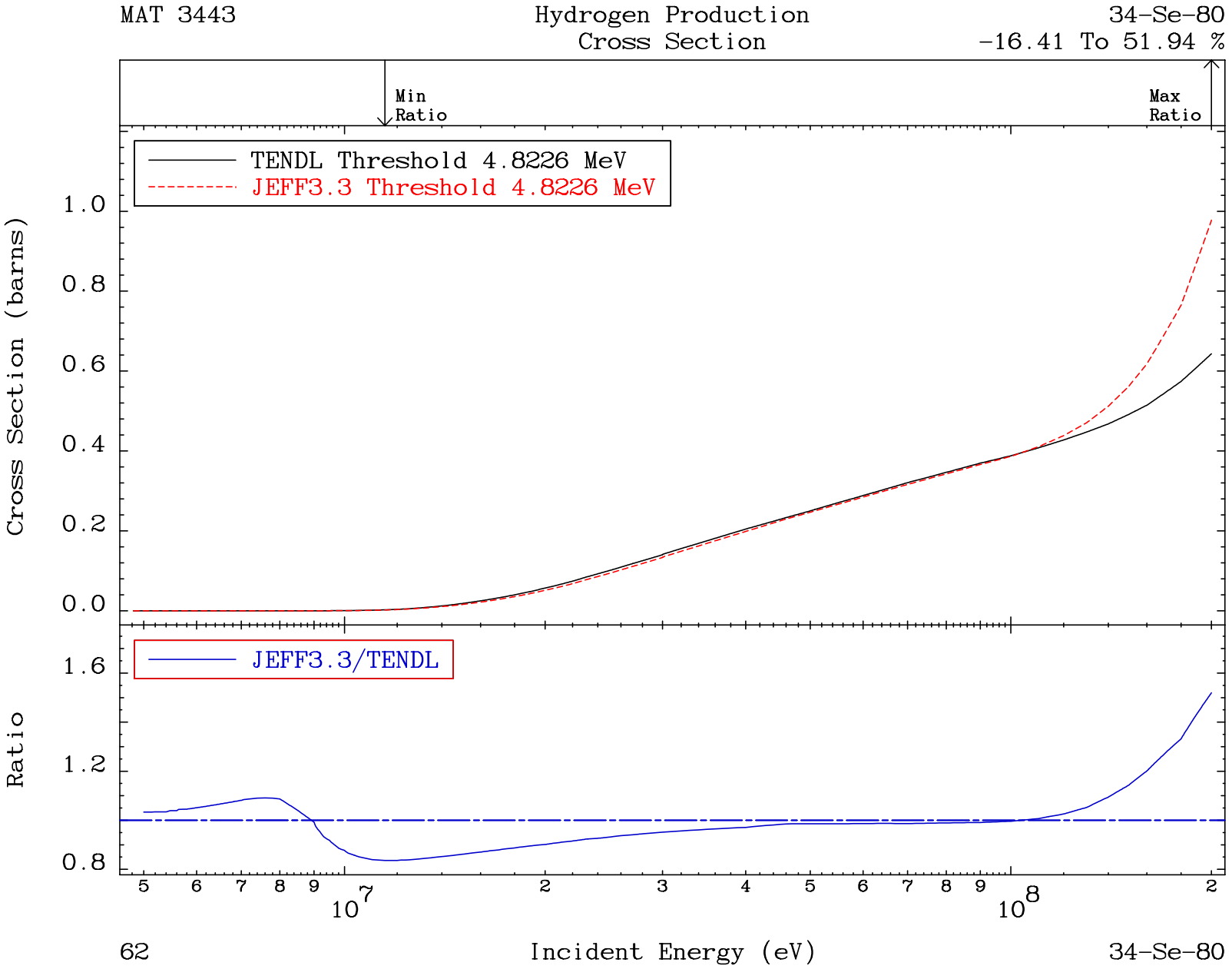

MAT 3443
(n,2p)
Cross Section
34-Se-80
-6.042 To 256.3 %
Max Ratio
Min Ratio
TENDL Threshold 14.925 MeV
JEFF3.3 Threshold 14.925 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
1.0
2.0
3.0
4.0
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
34-Se-80

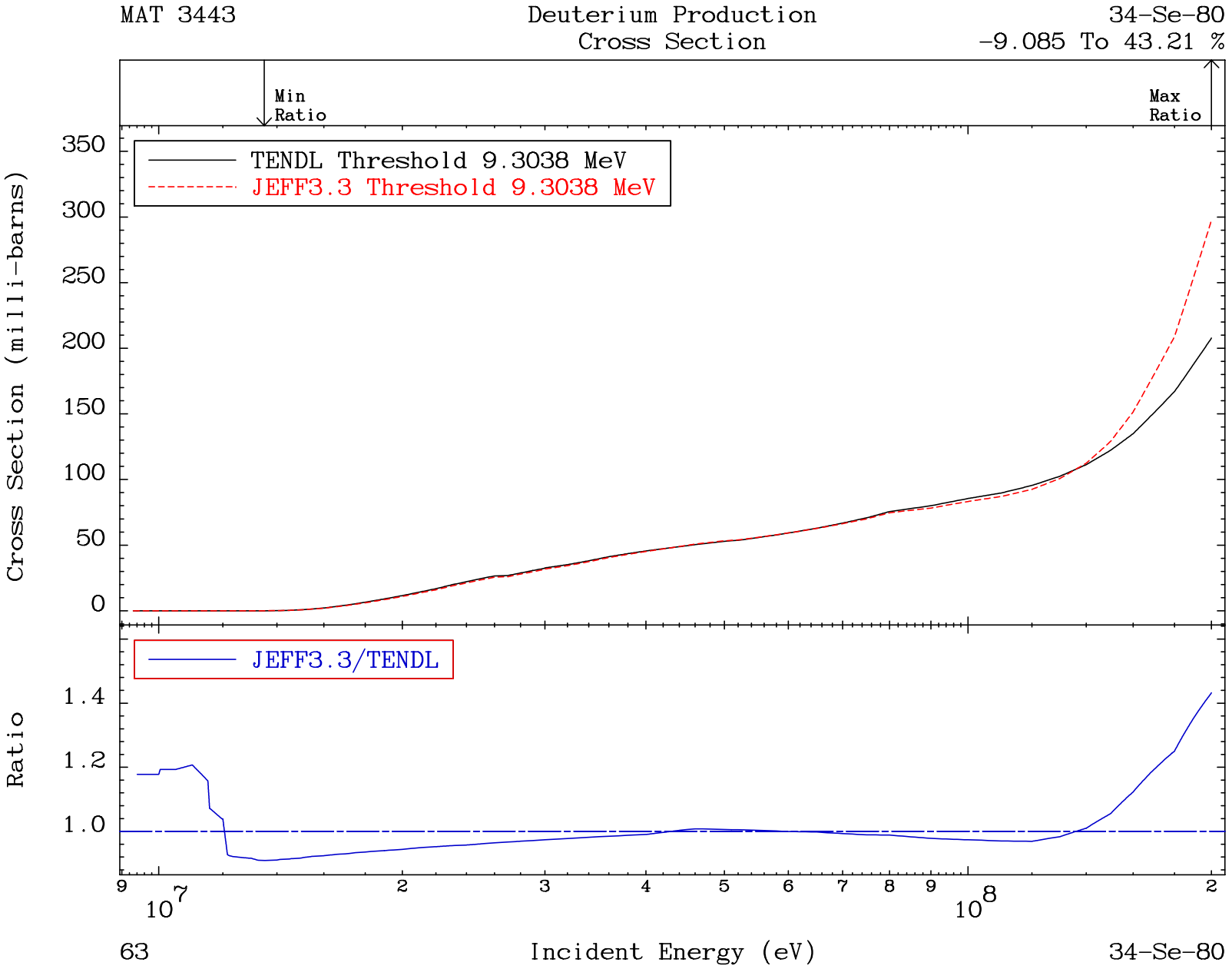

MAT 3443
(n,p) α
Cross Section
34-Se-80
-99.37 To 500.7 %
Min Ratio
Max Ratio
TENDL Threshold 13.271 MeV
JEFF3.3 Threshold 13.271 MeV
Cross Section (micro-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
34-Se-80

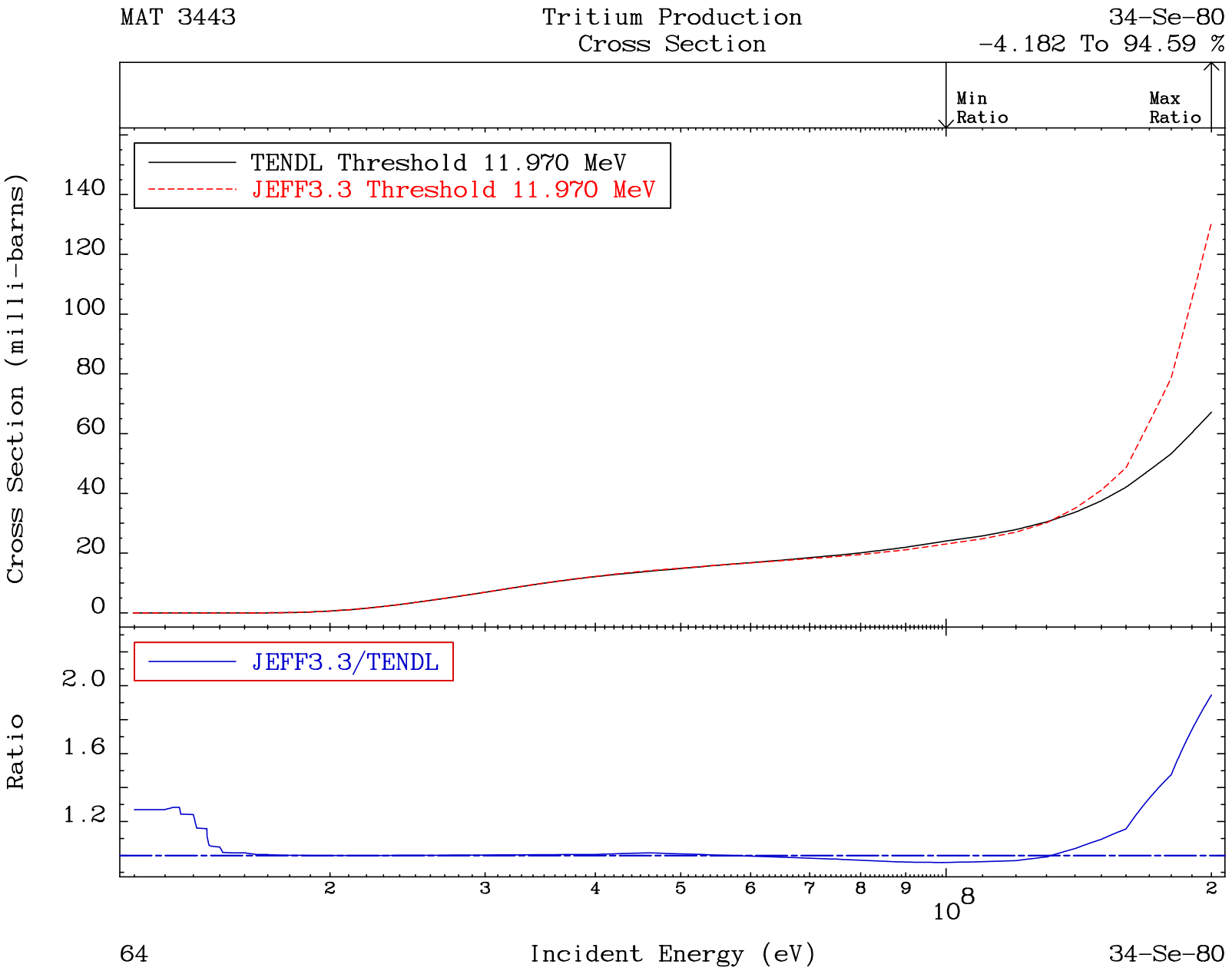

MAT 3443
(n,p) d
Cross Section
34-Se-80
-2.882 To 390.6 %
Max Ratio
Min Ratio
TENDL Threshold 18.481 MeV
JEFF3.3 Threshold 18.481 MeV
Cross Section (10^{-9} barns)
150
100
50
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
34-Se-80

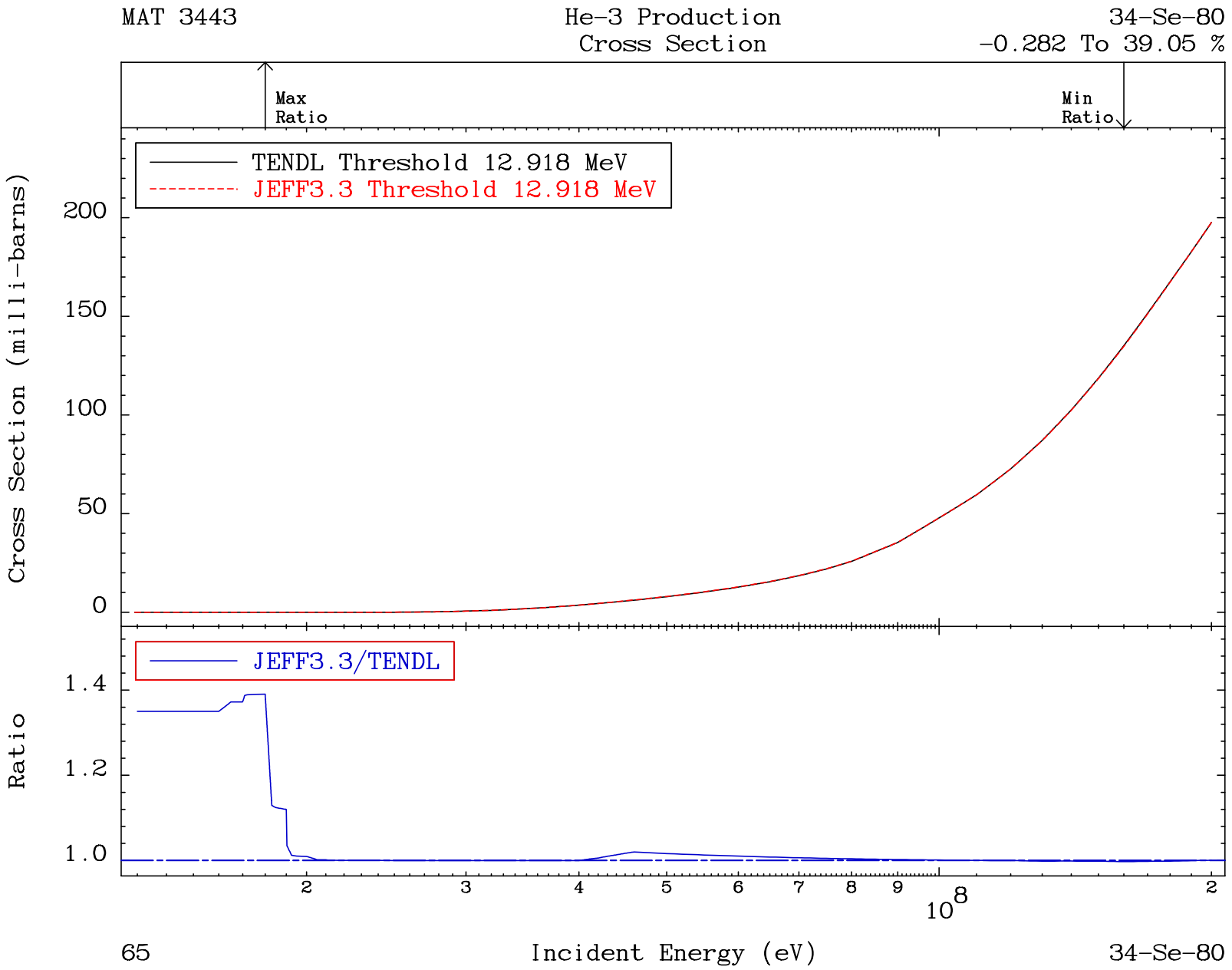

MAT 3443
(n,p) t
Cross Section
34-Se-80
0.000 To 419.8 %
Min
Ratio
TENDL Threshold 20.976 MeV
JEFF3.3 Threshold 20.976 MeV
Cross Section (10^-9 barns)
JEFF3.3/TENDL
Ratio
Incident Energy (MeV)
34-Se-80

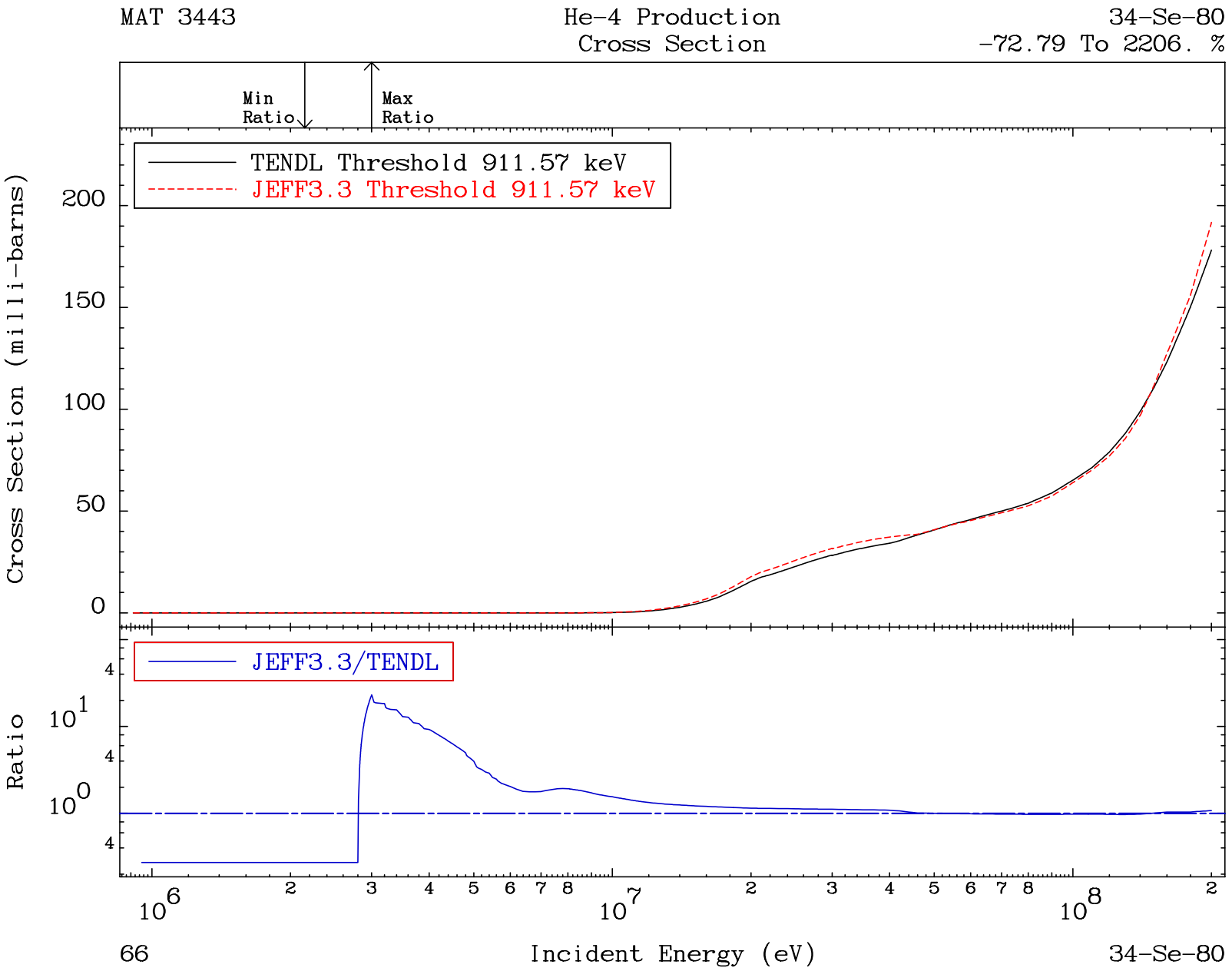

MAT 3443
(n,d) α
Cross Section
34-Se-80
0.000 To 1047. %
Max Ratio
Min Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 16.996 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
61
34-Se-80

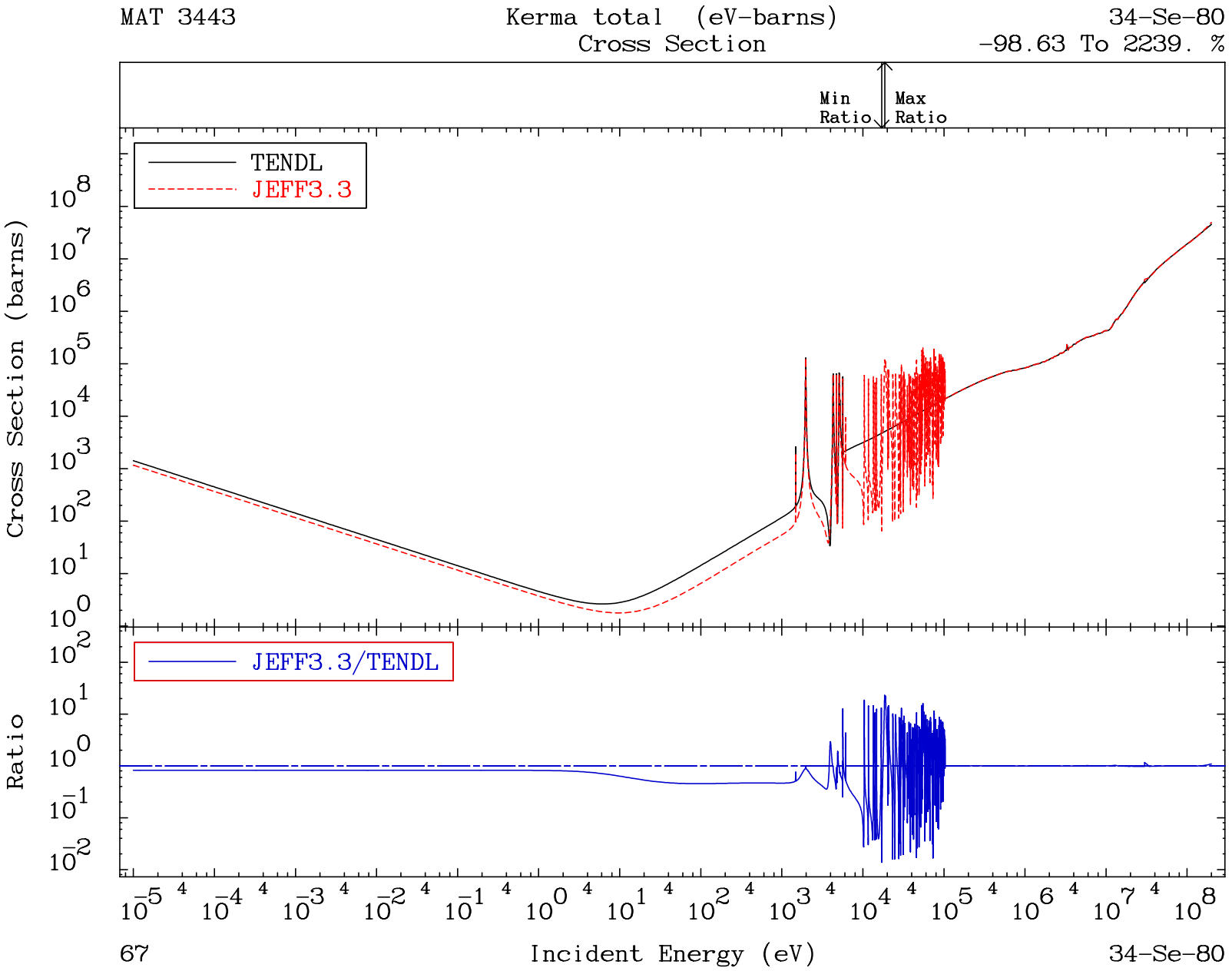

MAT 3443
Hydrogen Production
Cross Section
34-Se-80
-16.41 To 51.94 %
Min Ratio
Max Ratio
TENDL Threshold 4.8226 MeV
JEFF3.3 Threshold 4.8226 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
34-Se-80

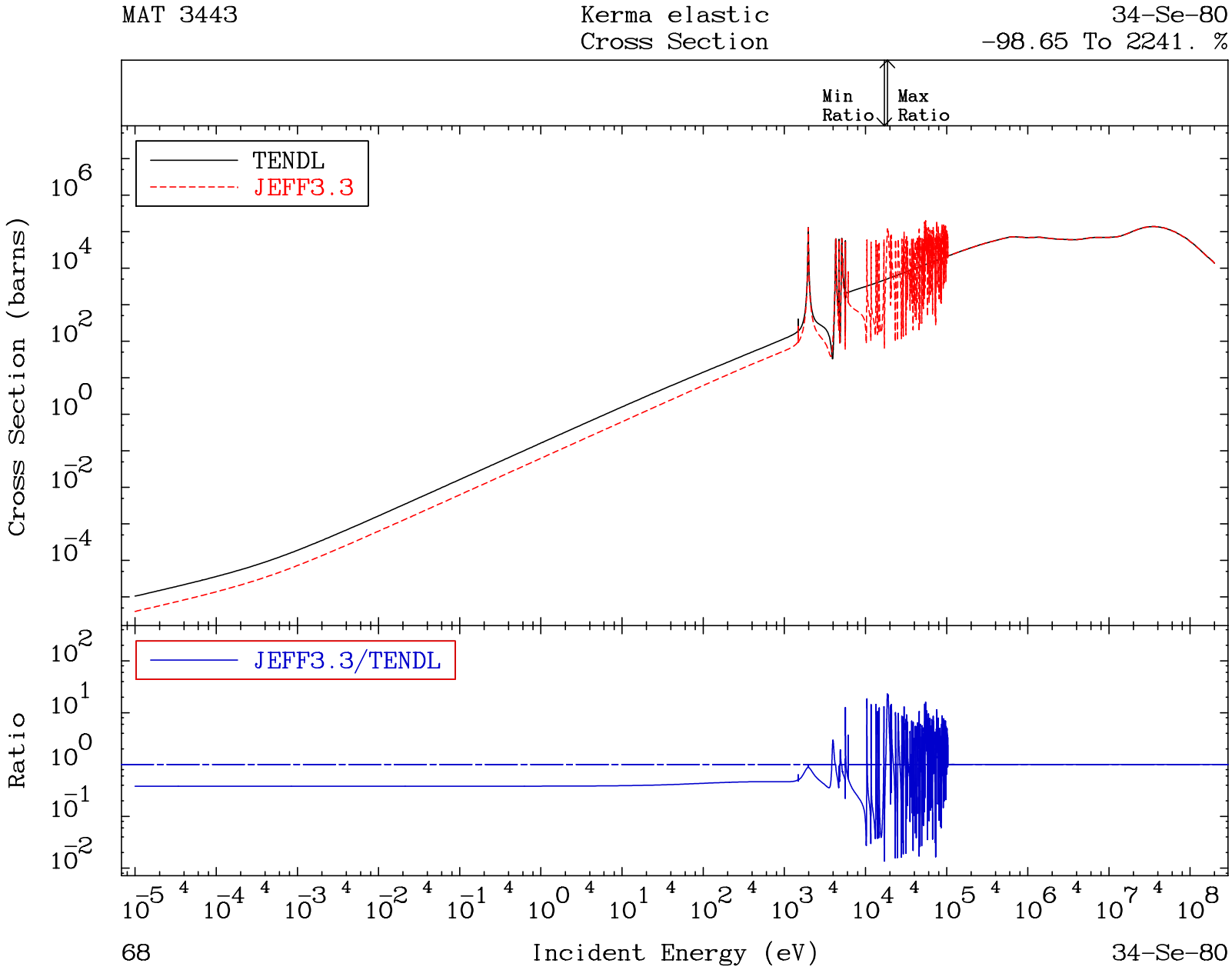

MAT 3443
Deuterium Production
Cross Section
34-Se-80
-9.085 To 43.21 %
Min
Ratio
Max
Ratio
TENDL Threshold 9.3038 MeV
JEFF3.3 Threshold 9.3038 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
34-Se-80

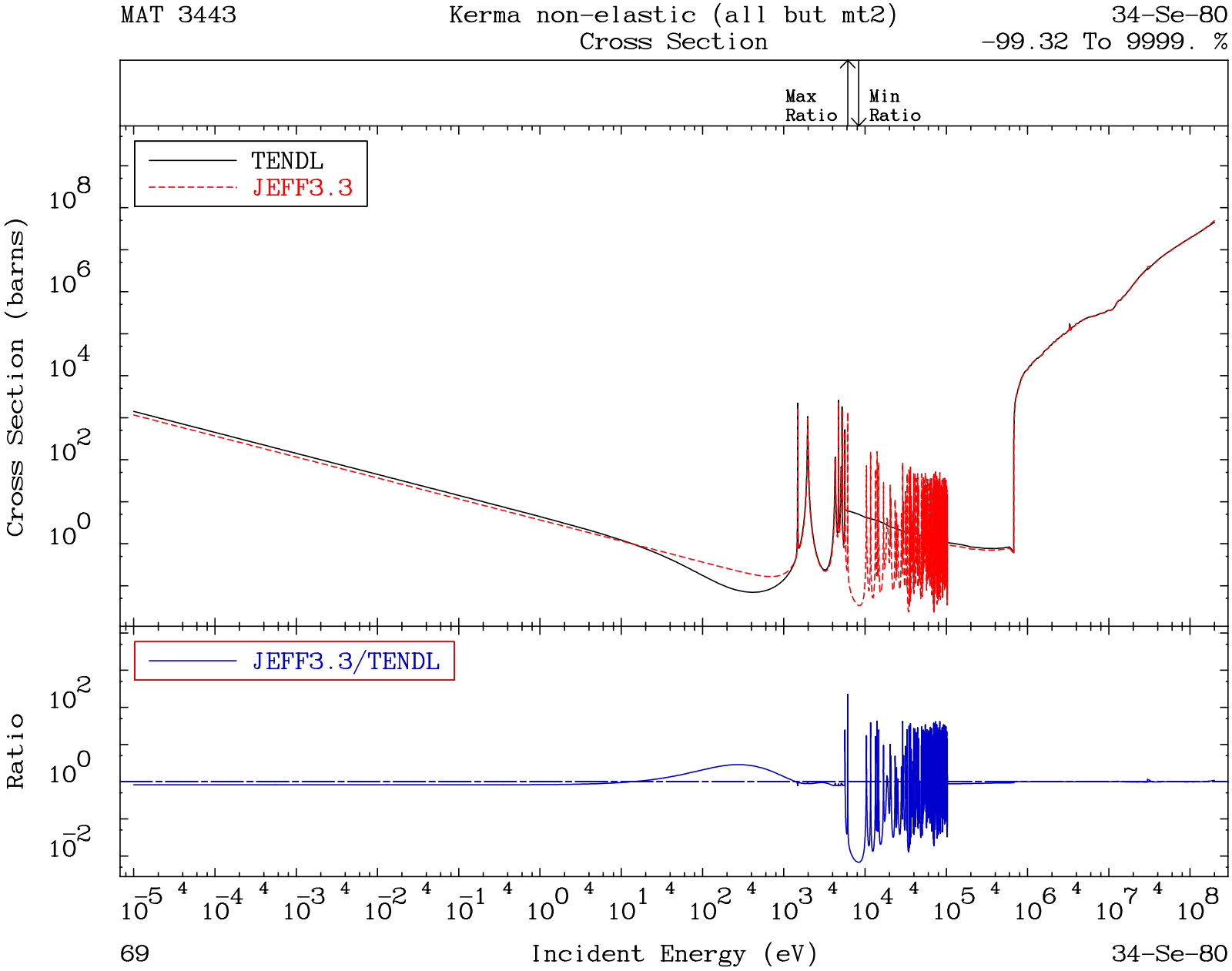

MAT 3443
Tritium Production
Cross Section
34-Se-80
-4.182 To 94.59 %
Min
Ratio
Max
Ratio
TENDL Threshold 11.970 MeV
JEFF3.3 Threshold 11.970 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
34-Se-80

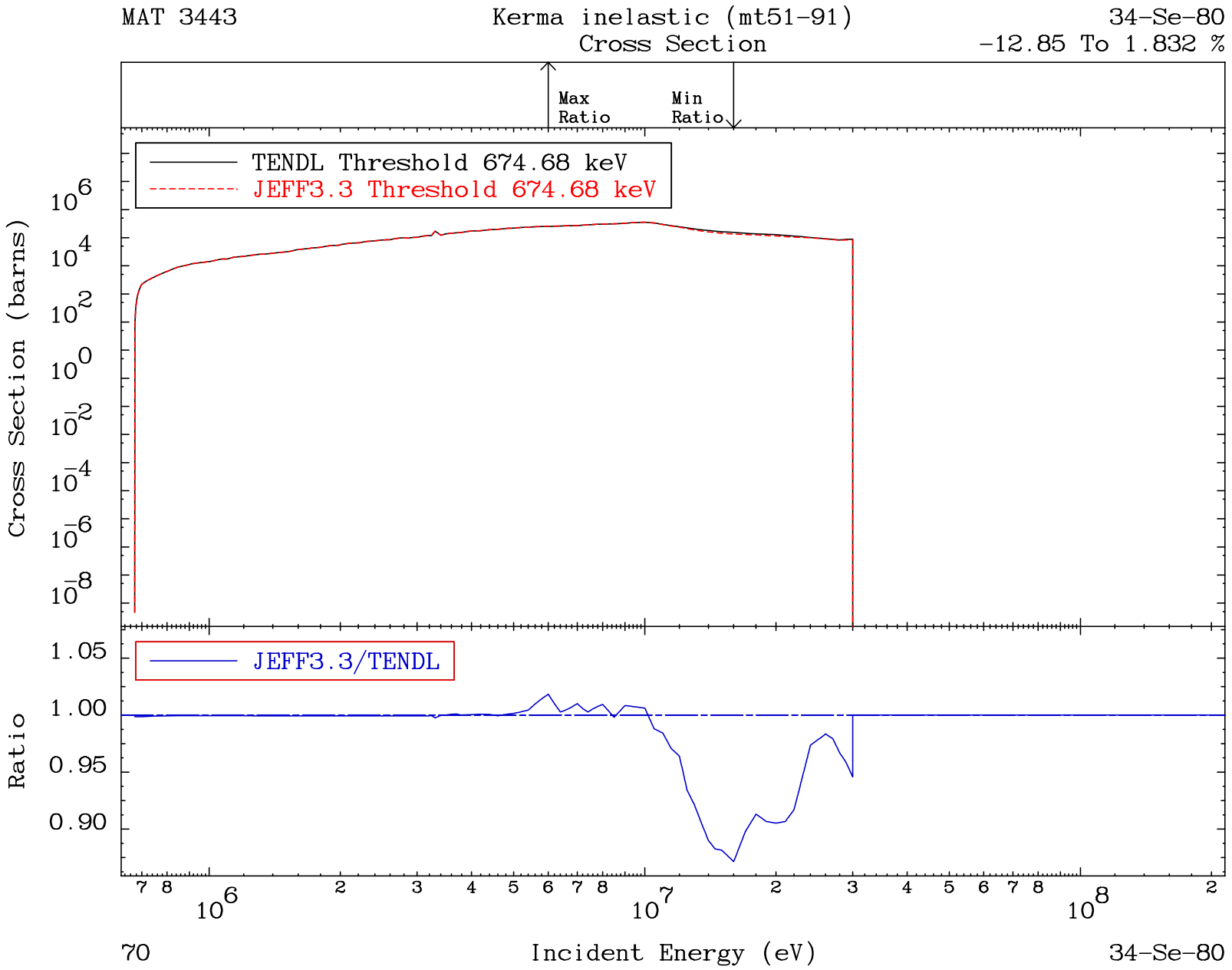

MAT 3443
He-3 Production
Cross Section
34-Se-80
-0.282 To 39.05 %
Max
Ratio
Min
Ratio
TENDL Threshold 12.918 MeV
JEFF3.3 Threshold 12.918 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
34-Se-80

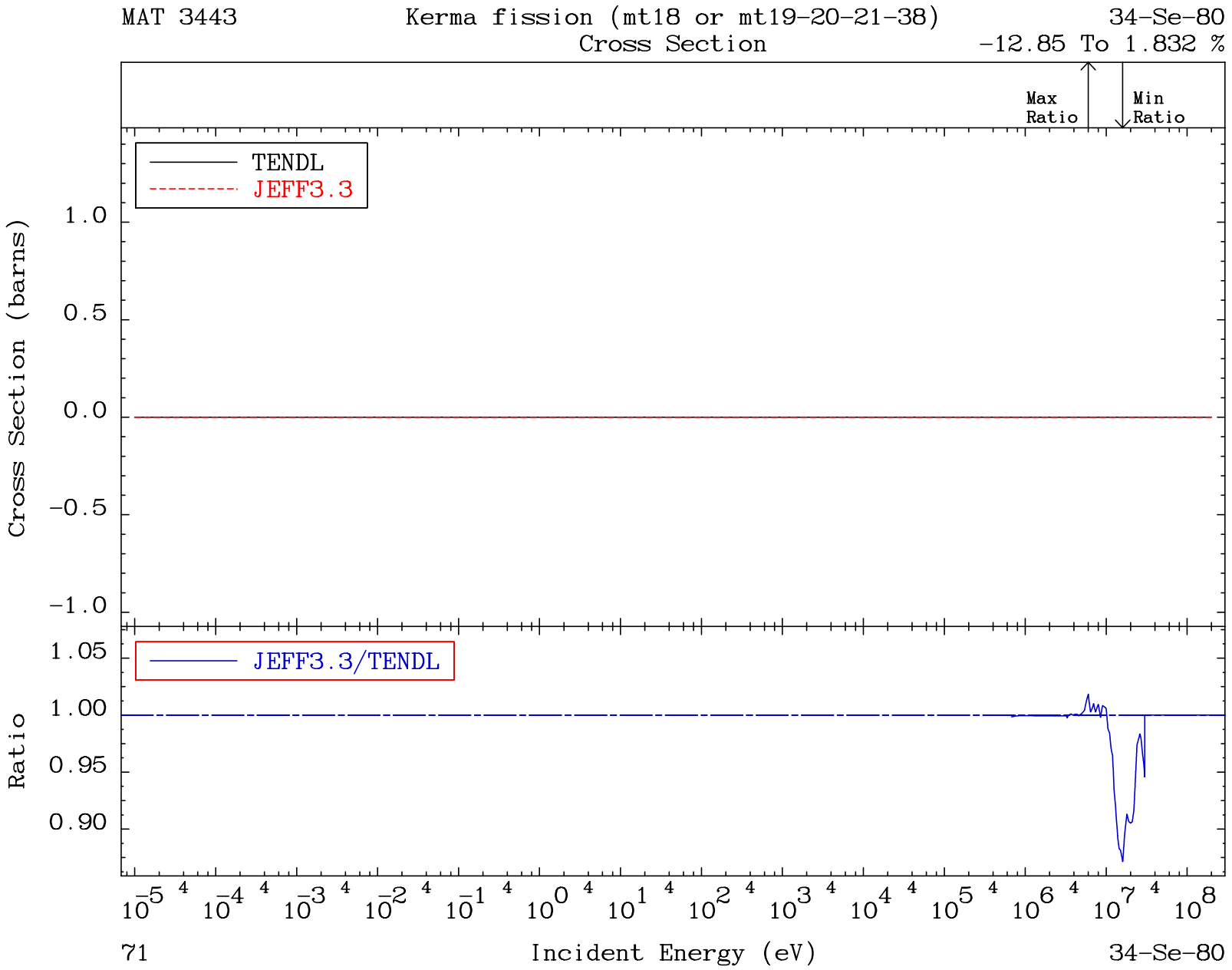

MAT 3443
He-4 Production
Cross Section
34-Se-80
-72.79 To 2206. %
Min Ratio
Max Ratio
TENDL Threshold 911.57 keV
JEFF3.3 Threshold 911.57 keV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^6
10^7
10^8
66
Incident Energy (eV)
34-Se-80

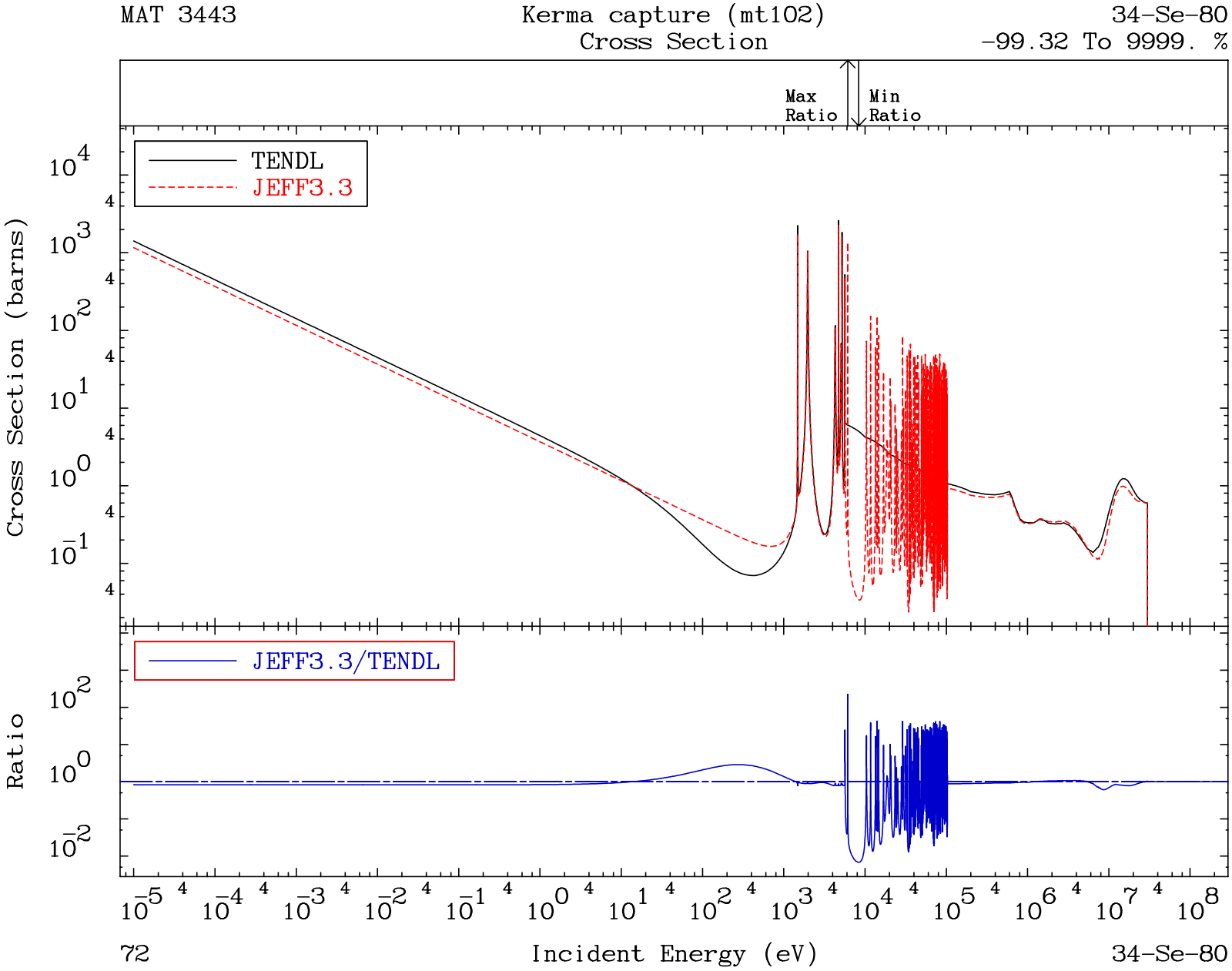

MAT 3443
Kerma total (eV-barns)
Cross Section
34-Se-80
-98.63 To 2239. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
34-Se-80

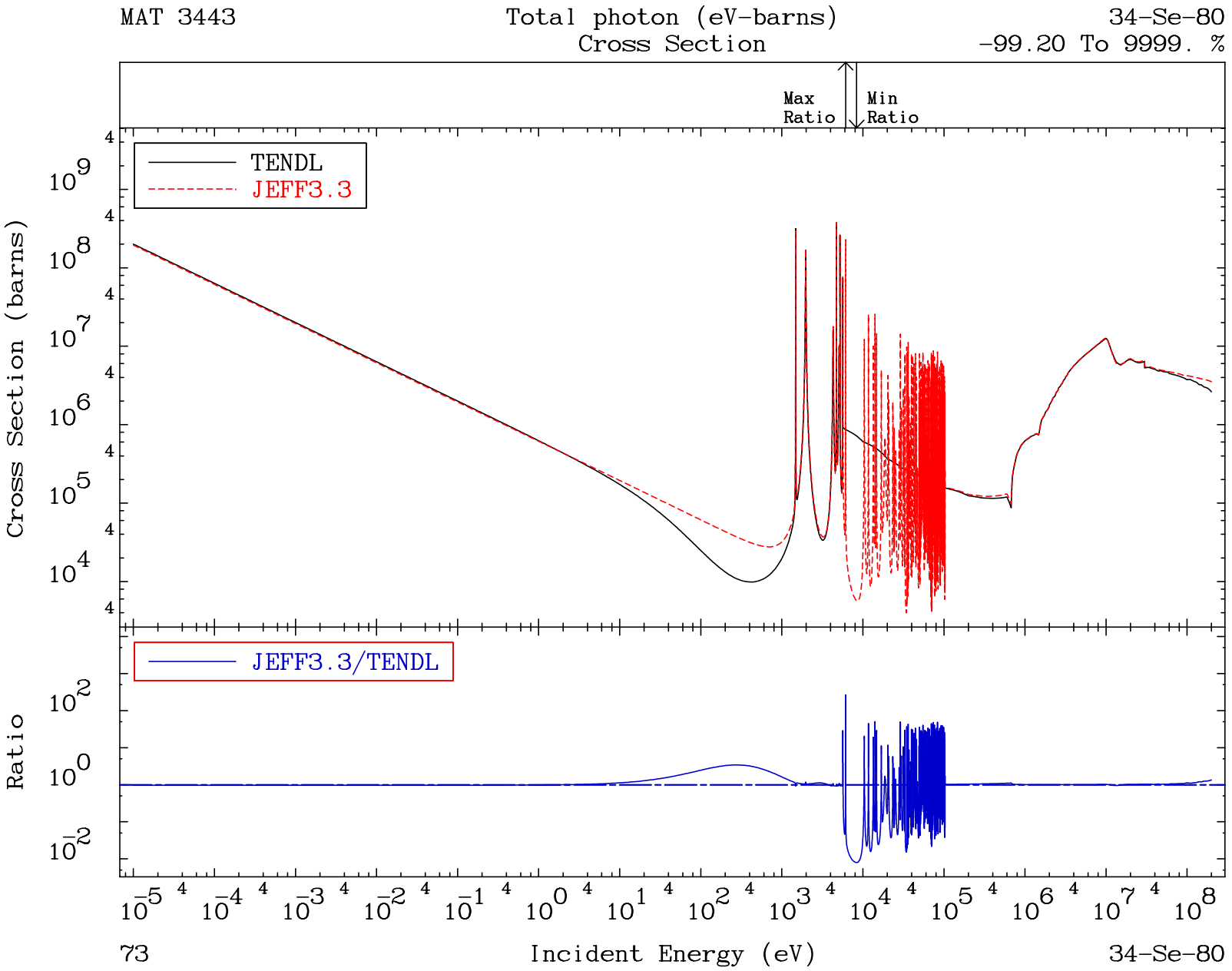

MAT 3443
Kerma elastic
Cross Section
34-Se-80
-98.65 To 2241. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
34-Se-80

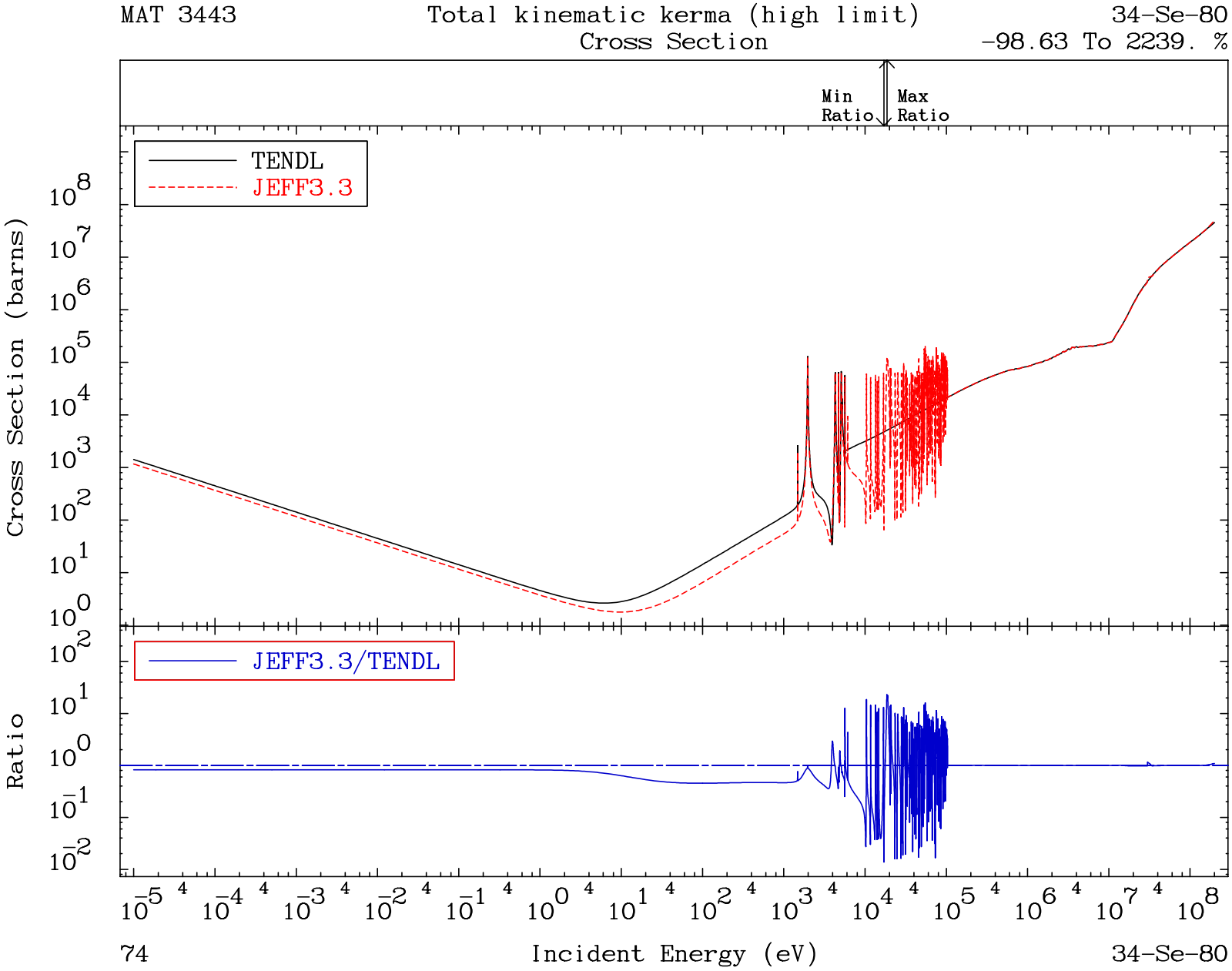

MAT 3443
Kerma non-elastic (all but mt2)
Cross Section
34-Se-80
-99.32 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
34-Se-80

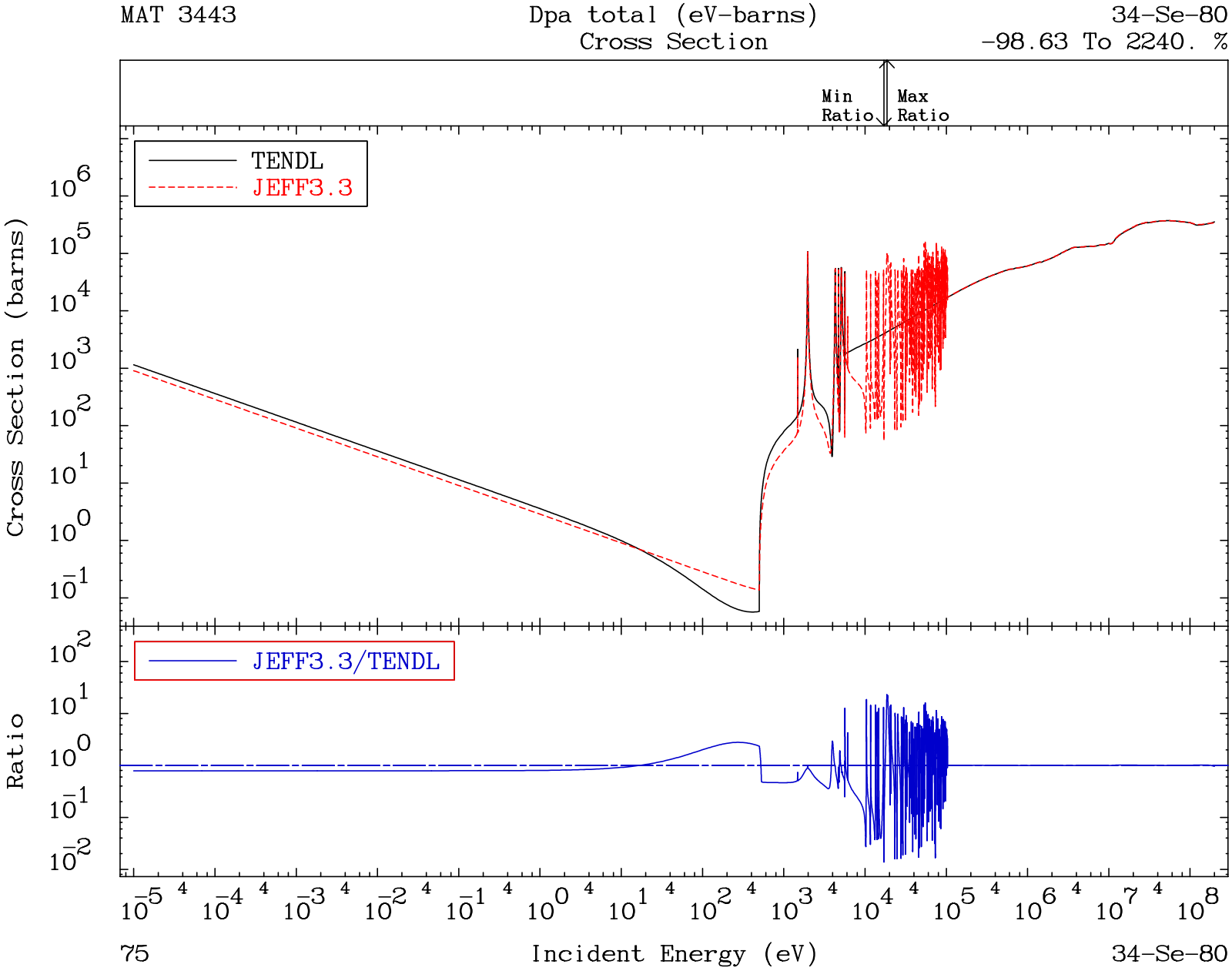

MAT 3443
Kerma inelastic (mt51-91)
Cross Section
34-Se-80
-12.85 To 1.832 %
Max Ratio
Min Ratio
TENDL Threshold 674.68 keV
JEFF3.3 Threshold 674.68 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
34-Se-80

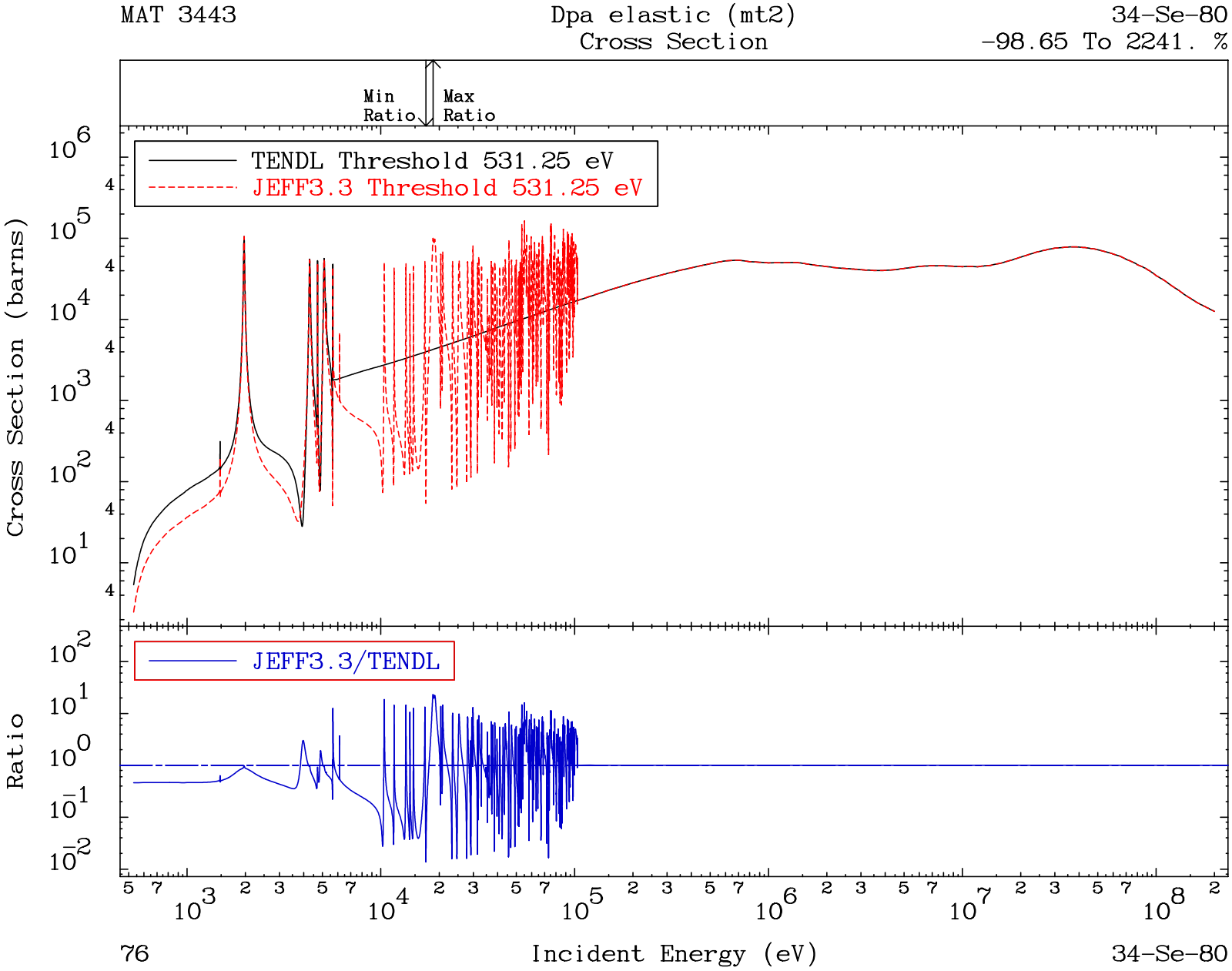

MAT 3443
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
34-Se-80
-12.85 To 1.832 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
71
Incident Energy (eV)
34-Se-80

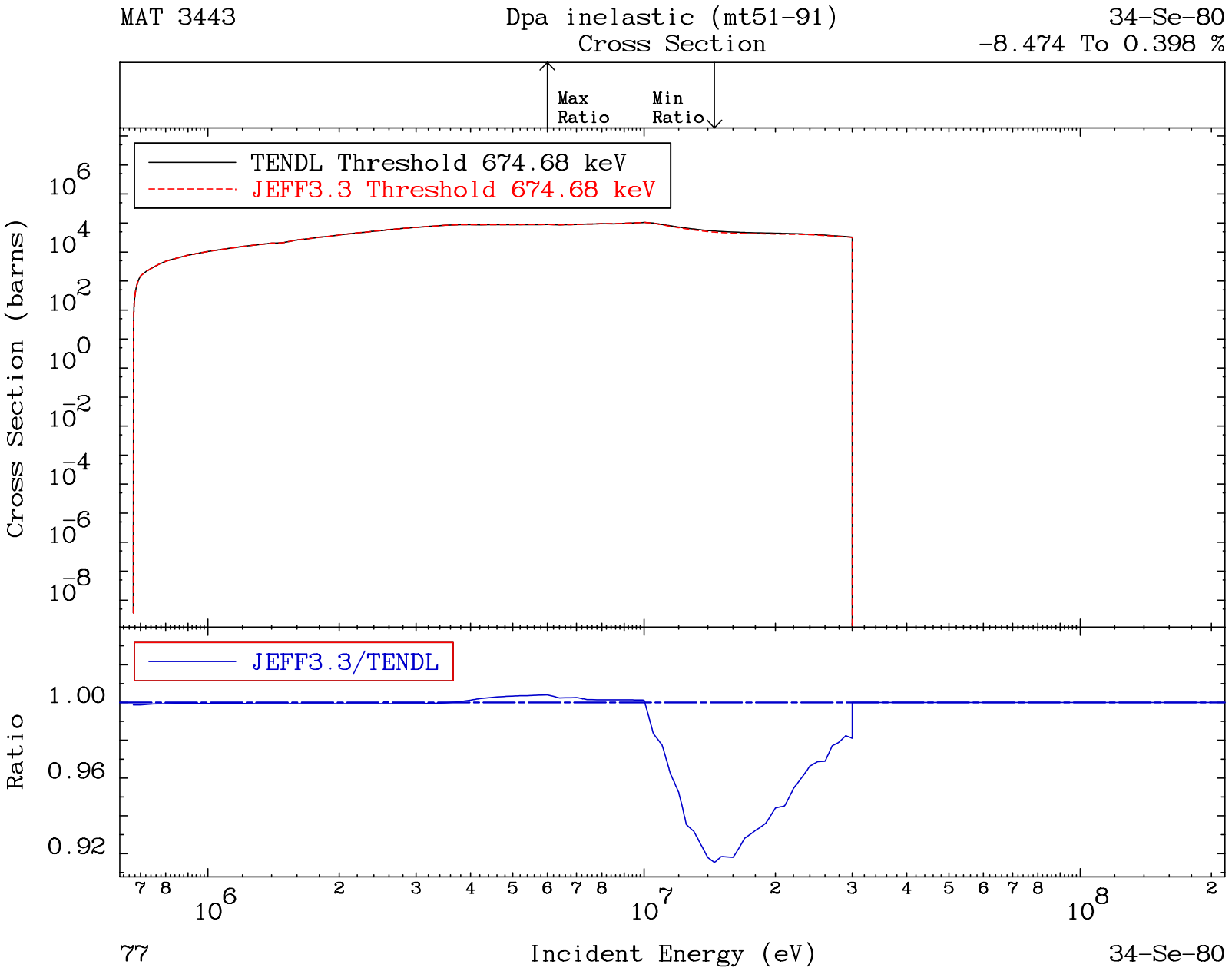

MAT 3443
Kerma capture (mt102)
Cross Section
34-Se-80
-99.32 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
34-Se-80

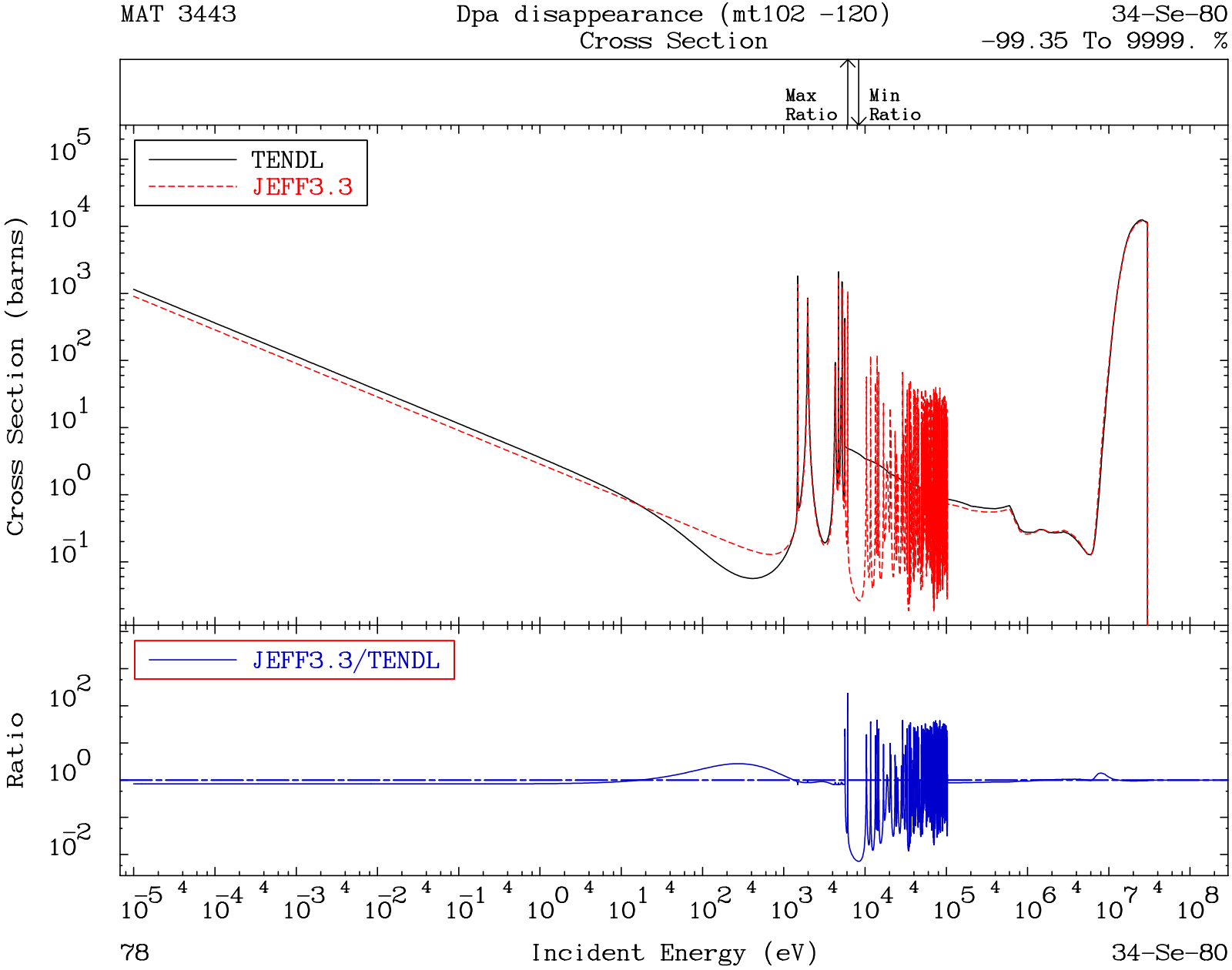

MAT 3443
Total photon (eV-barns)
Cross Section
34-Se-80
-99.20 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
34-Se-80

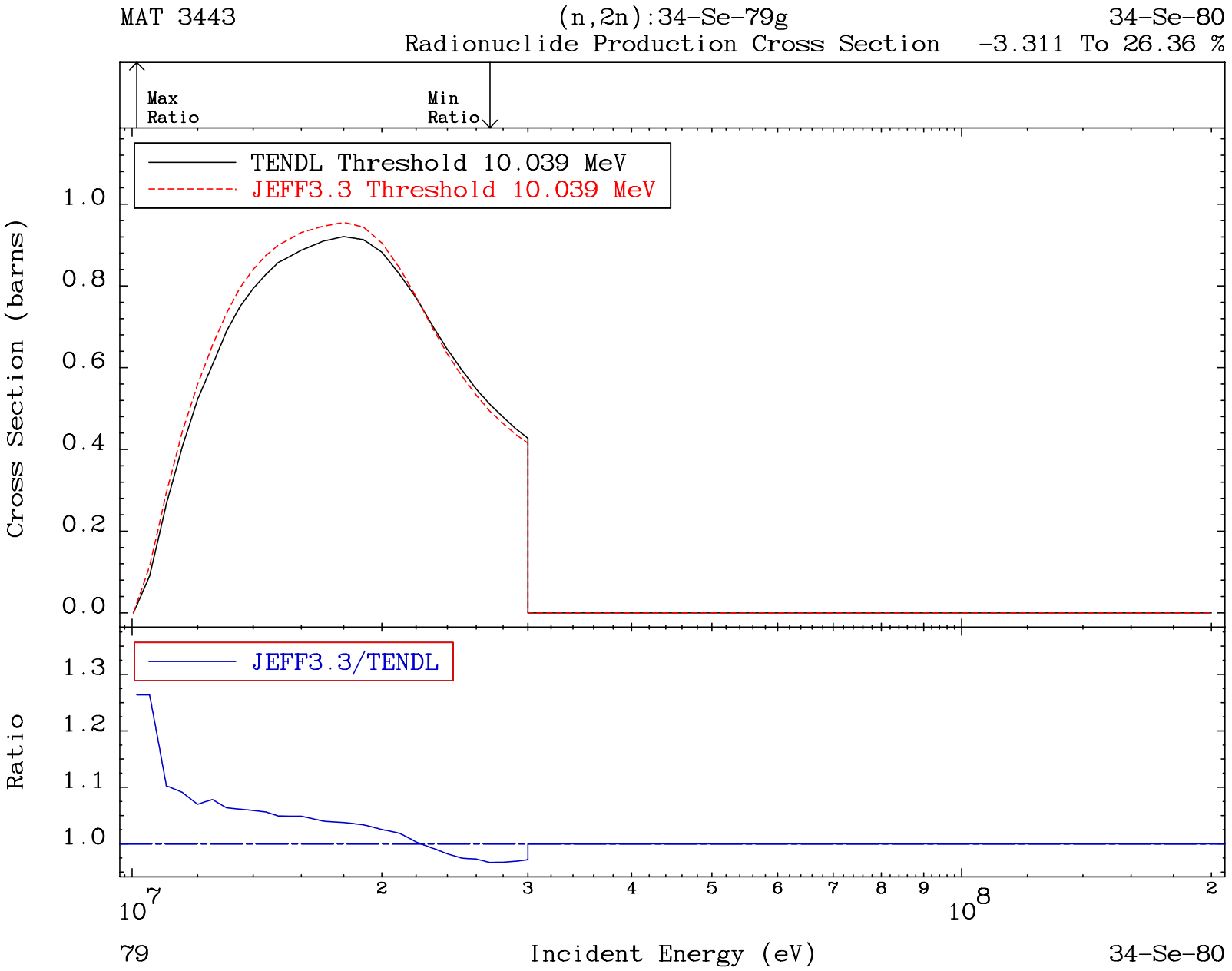

MAT 3443
Total kinematic kerma (high limit)
Cross Section
34-Se-80
-98.63 To 2239. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
34-Se-80

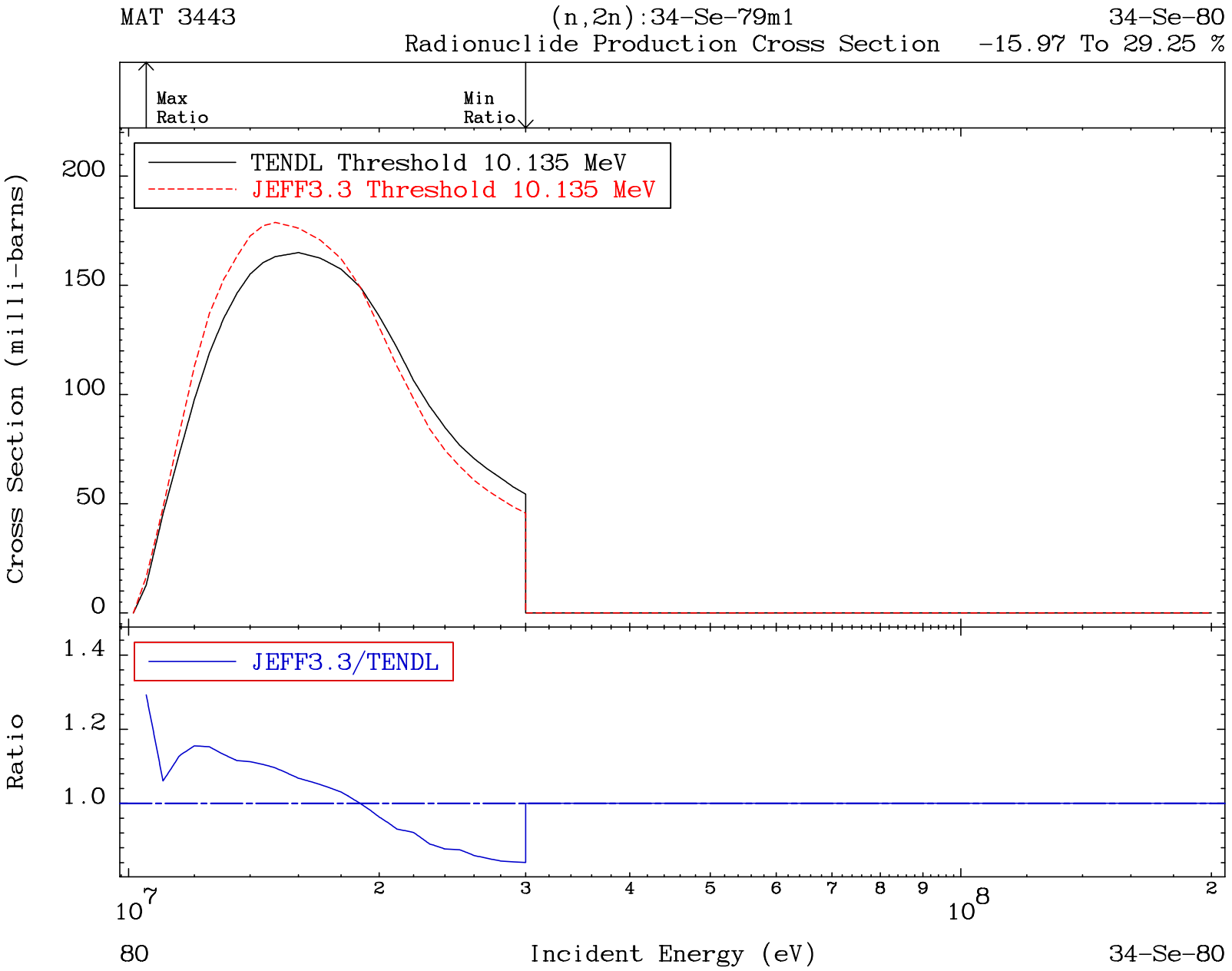

MAT 3443
Dpa total (eV-barns)
Cross Section
34-Se-80
-98.63 To 2240. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
34-Se-80

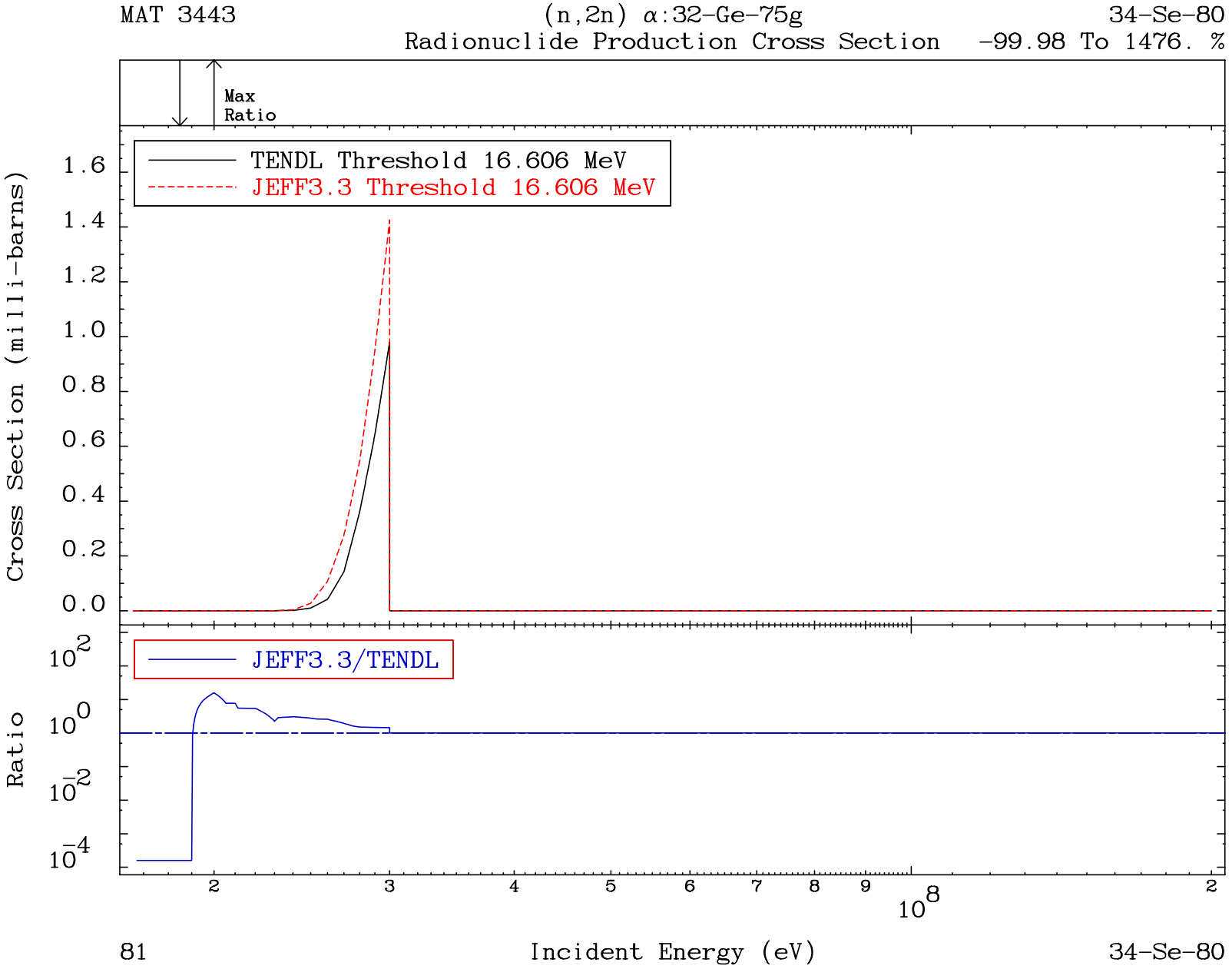

MAT 3443
Dpa elastic (mt2)
Cross Section
34-Se-80
-98.65 To 2241. %
Min Ratio
Max Ratio
TENDL Threshold 531.25 eV
JEFF3.3 Threshold 531.25 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
34-Se-80

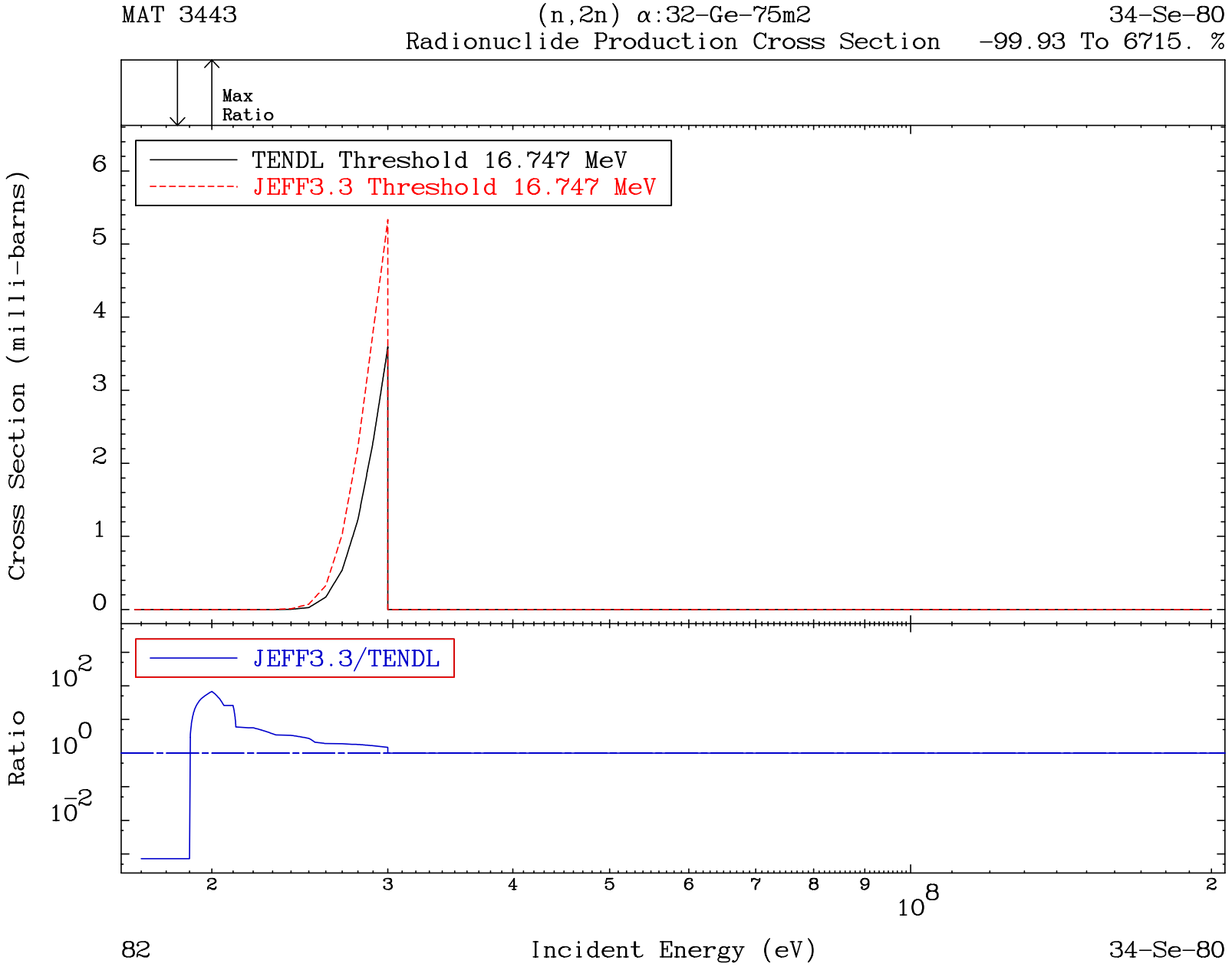

MAT 3443
Dpa inelastic (mt51-91)
Cross Section
34-Se-80
-8.474 To 0.398 %
Max Ratio
Min Ratio
TENDL Threshold 674.68 keV
JEFF3.3 Threshold 674.68 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
34-Se-80

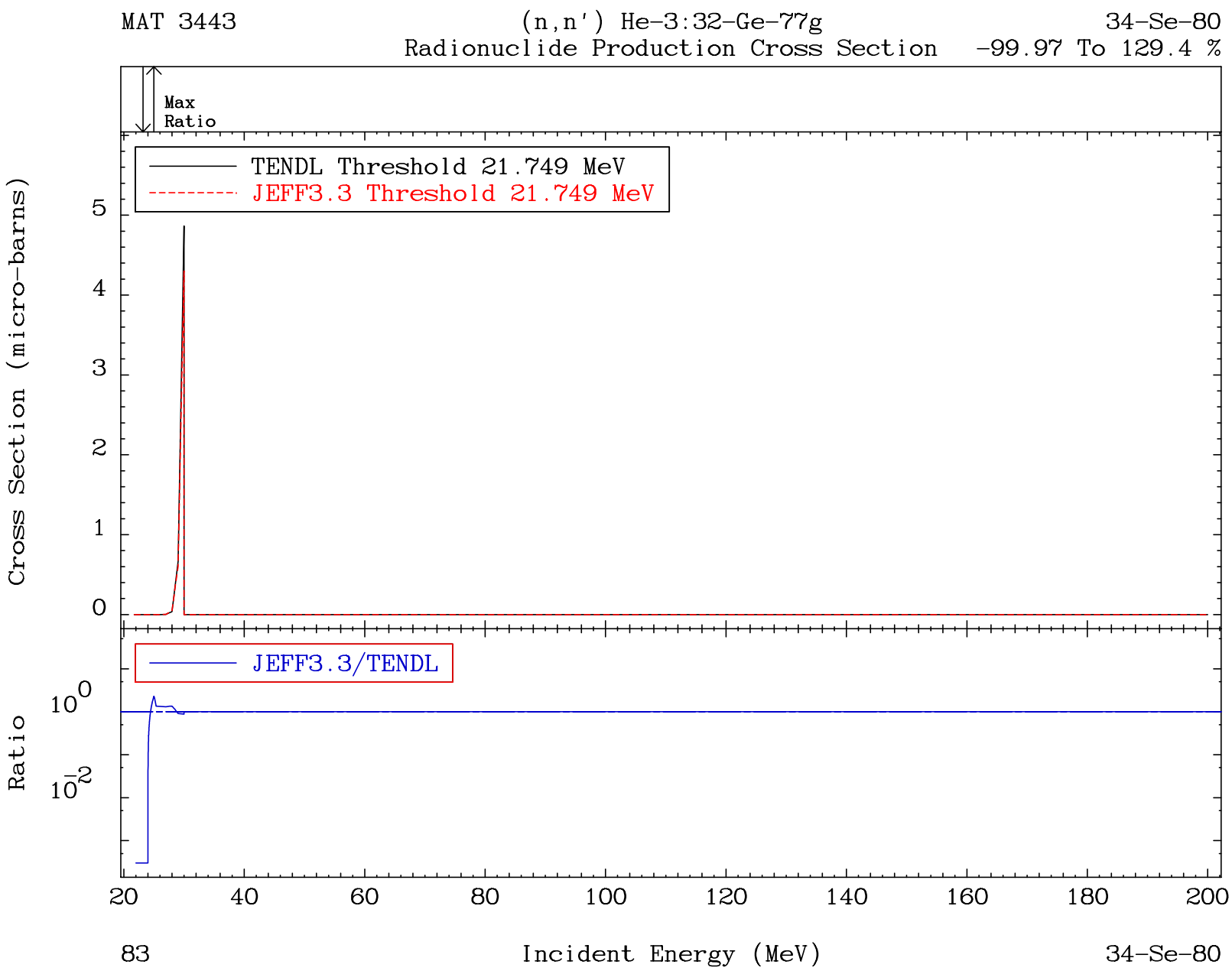

MAT 3443
Dpa disappearance (mt102 -120)
Cross Section
34-Se-80
-99.35 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
34-Se-80

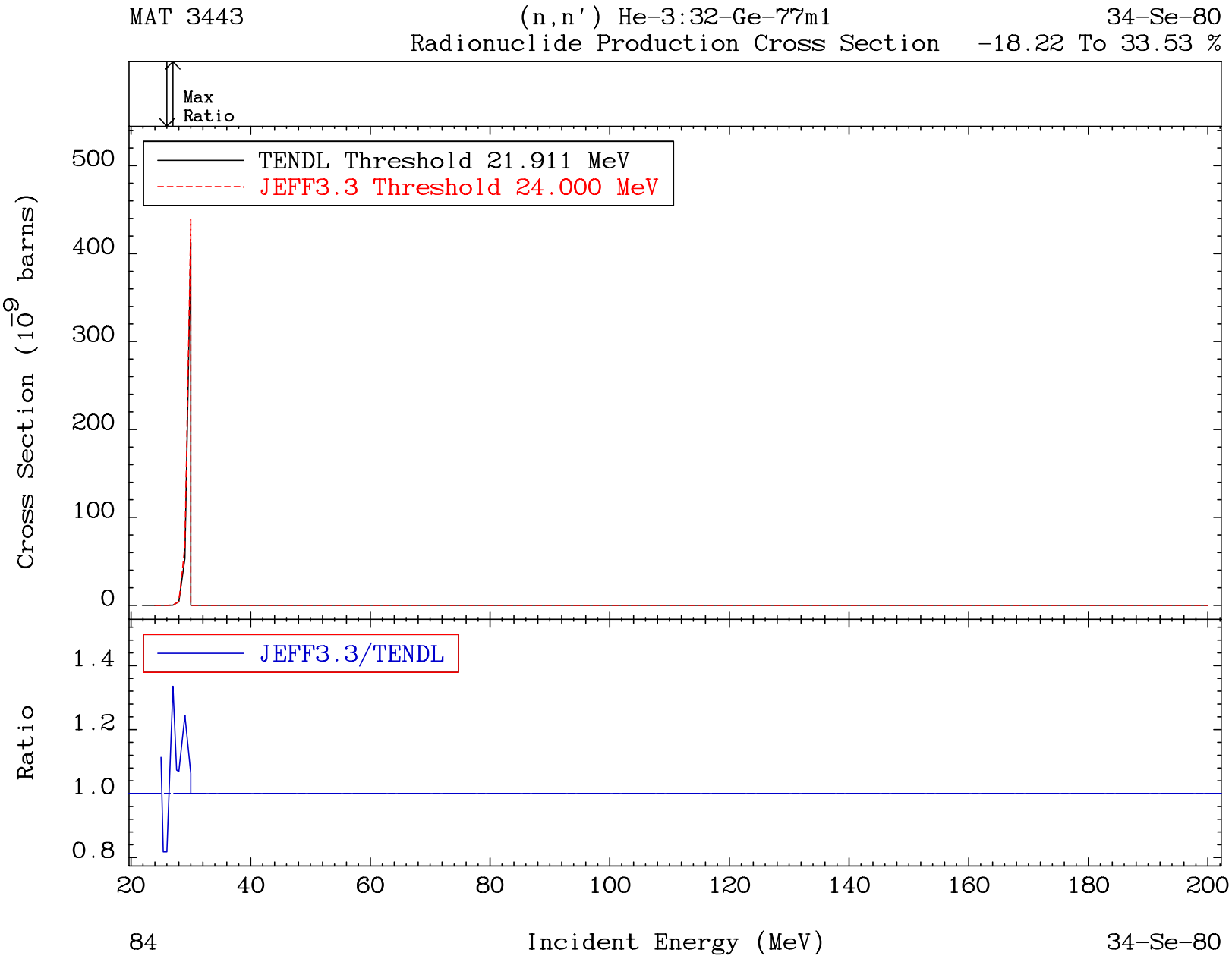

MAT 3443
(n,2n):34-Se-79g
34-Se-80
Radionuclide Production Cross Section
-3.311 To 26.36 %
Max Ratio
Min Ratio
TENDL Threshold 10.039 MeV
JEFF3.3 Threshold 10.039 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.3
1.2
1.1
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
34-Se-80

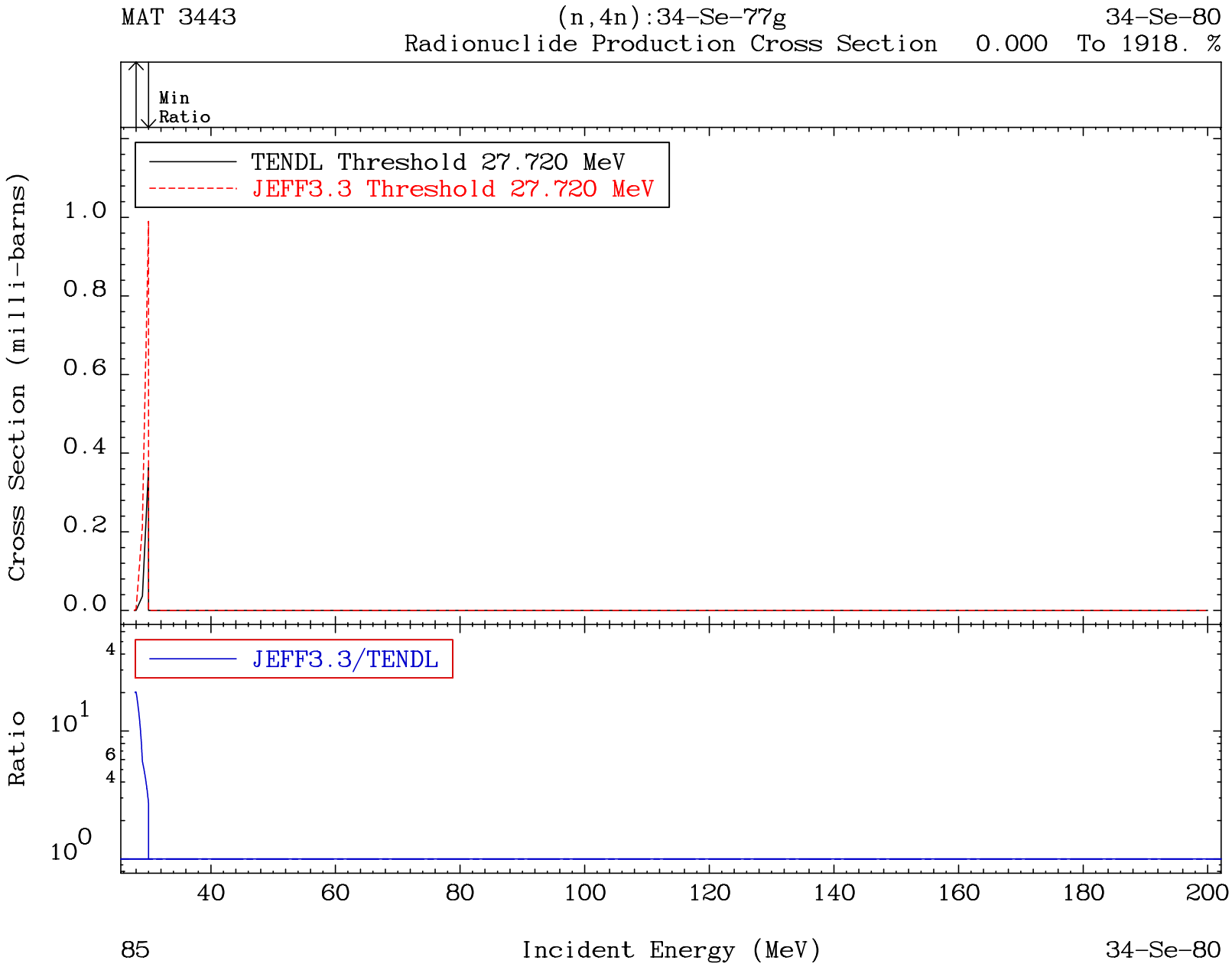

MAT 3443
(n,2n):34-Se-79m1
34-Se-80
Radionuclide Production Cross Section -15.97 To 29.25 %
Max Ratio
Min Ratio
TENDL Threshold 10.135 MeV
JEFF3.3 Threshold 10.135 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
34-Se-80

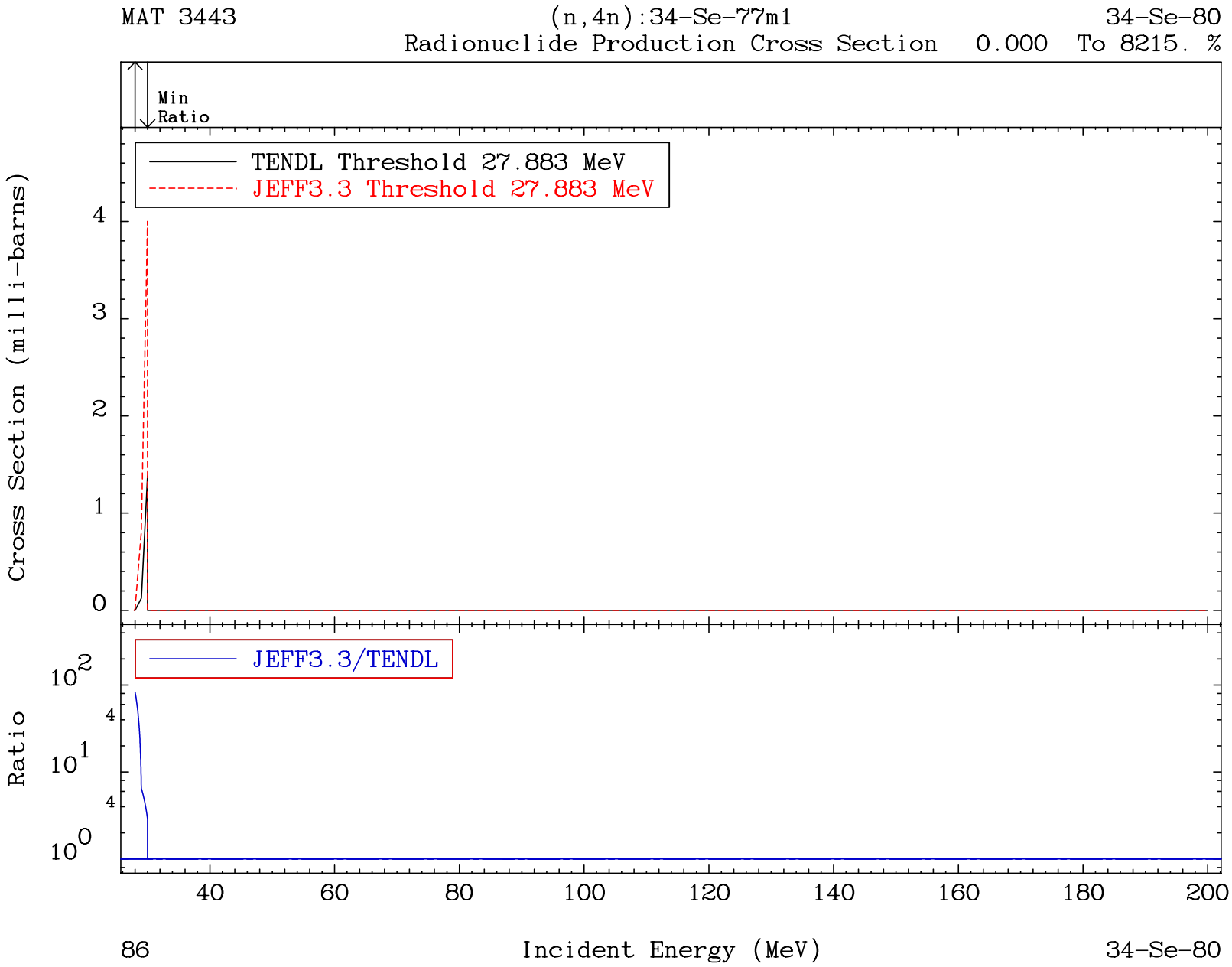

MAT 3443
(n,2n) α:32-Ge-75g
34-Se-80
Radionuclide Production Cross Section -99.98 To 1476. %
Max Ratio
TENDL Threshold 16.606 MeV
JEFF3.3 Threshold 16.606 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
10^-4
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
34-Se-80

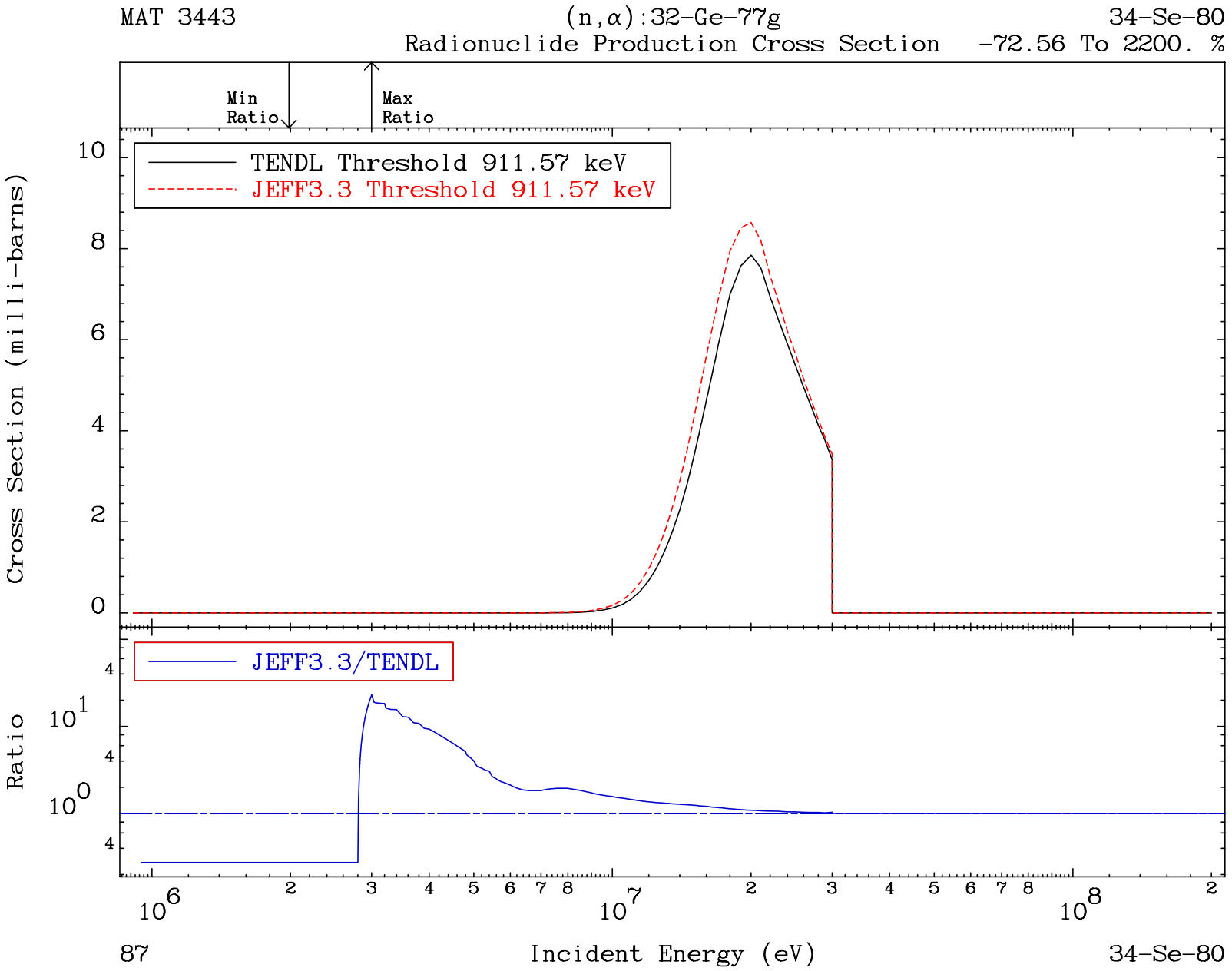

MAT 3443
(n,2n) α:32-Ge-75m2
34-Se-80
Radionuclide Production Cross Section -99.93 To 6715. %
Max
Ratio
TENDL Threshold 16.747 MeV
JEFF3.3 Threshold 16.747 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
34-Se-80

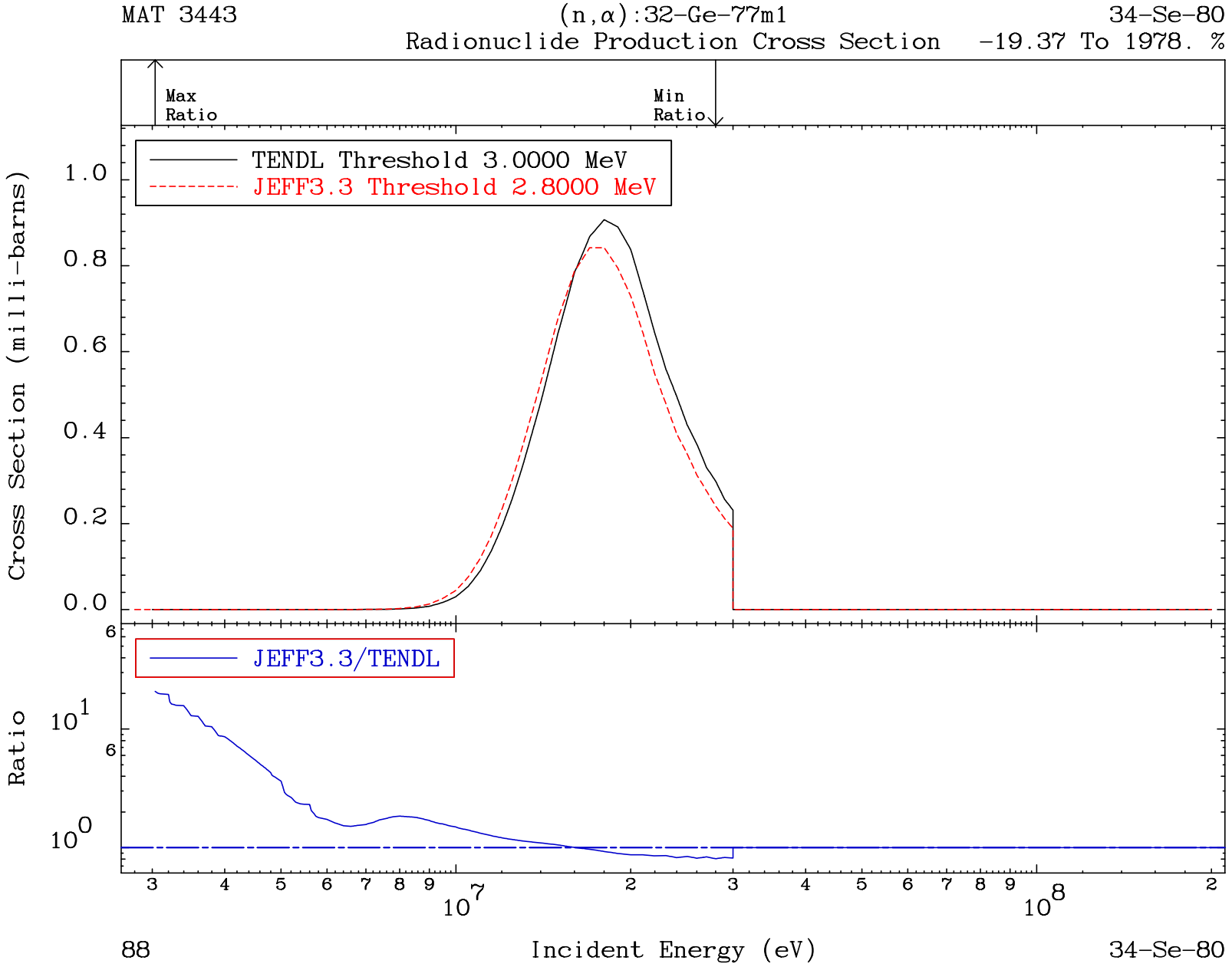

MAT 3443
(n,n') He-3:32-Ge-77g
34-Se-80
Radionuclide Production Cross Section -99.97 To 129.4 %
Max Ratio
TENDL Threshold 21.749 MeV
JEFF3.3 Threshold 21.749 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
10^0
10^-2
20
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
34-Se-80

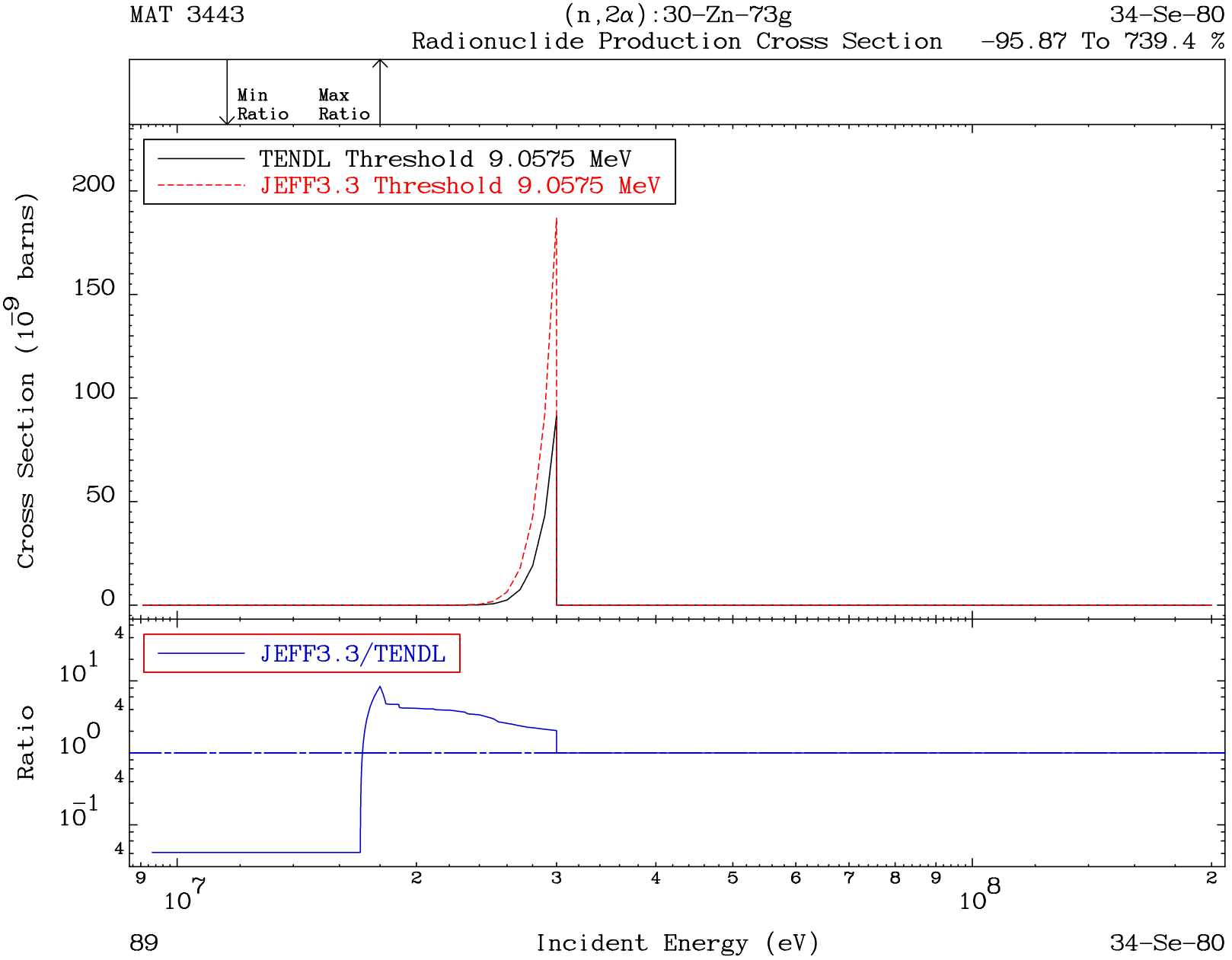

MAT 3443
(n,n') He-3:32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section
-18.22 To 33.53 %
Max
Ratio
TENDL Threshold 21.911 MeV
JEFF3.3 Threshold 24.000 MeV
Cross Section (10-9 barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
0.8
20
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
34-Se-80

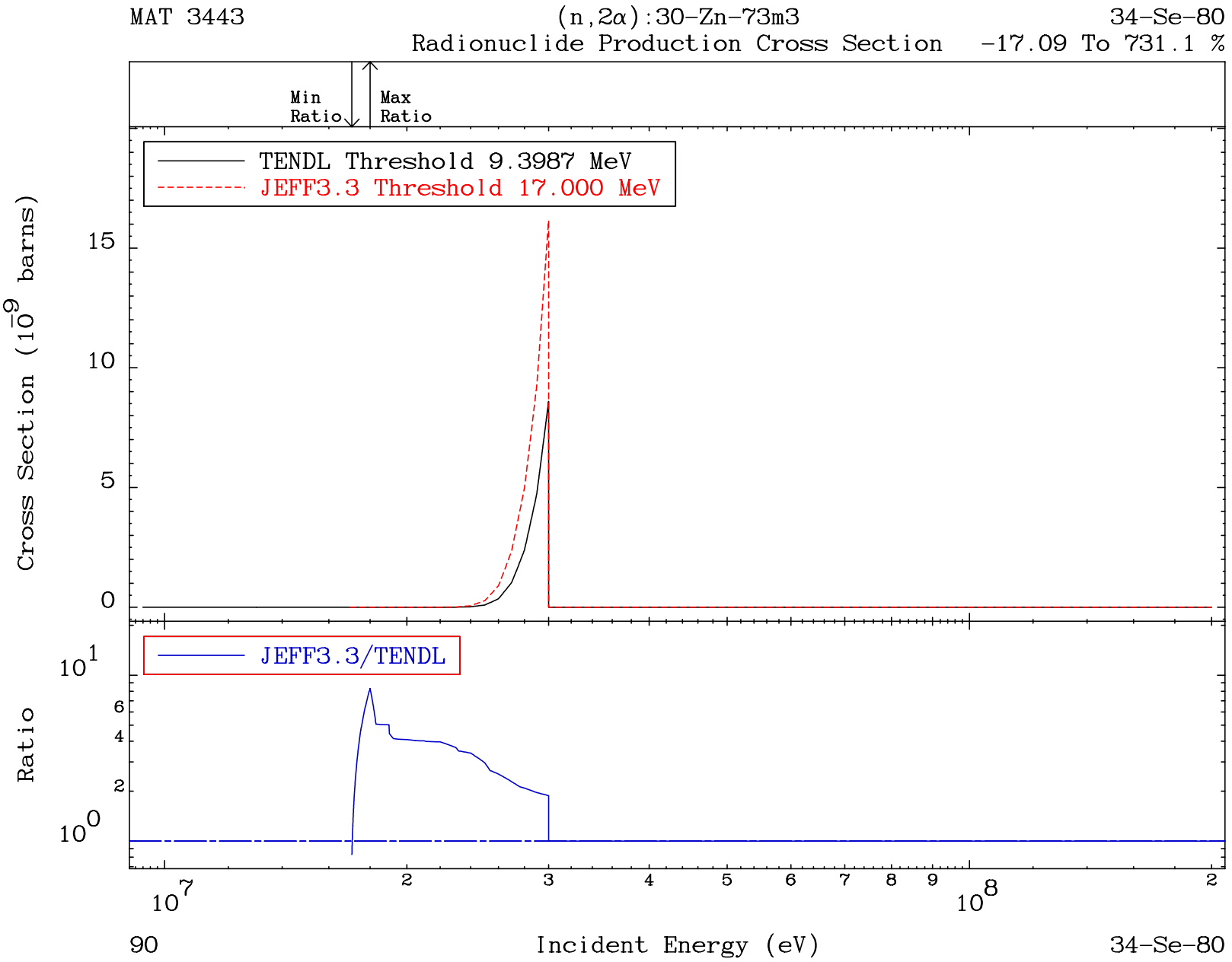

MAT 3443
(n,4n):34-Se-77g
34-Se-80
Radionuclide Production Cross Section 0.000 To 1918. %
Min Ratio
TENDL Threshold 27.720 MeV
JEFF3.3 Threshold 27.720 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
4
10^1
6
4
10^0
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
34-Se-80

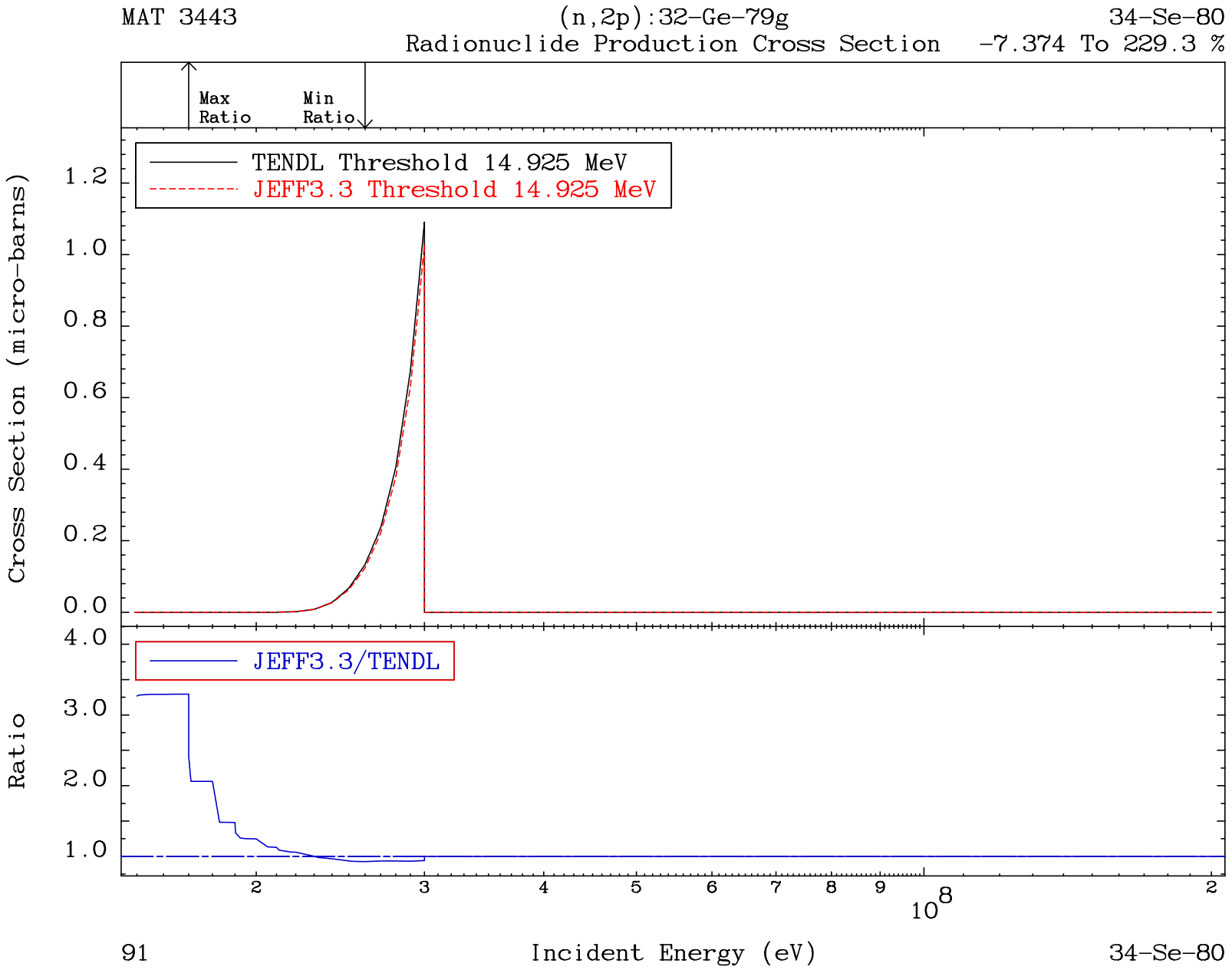

MAT 3443
(n,4n):34-Se-77m1
34-Se-80
Radionuclide Production Cross Section 0.000 To 8215. %
Min Ratio
TENDL Threshold 27.883 MeV
JEFF3.3 Threshold 27.883 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
86
Incident Energy (MeV)
34-Se-80

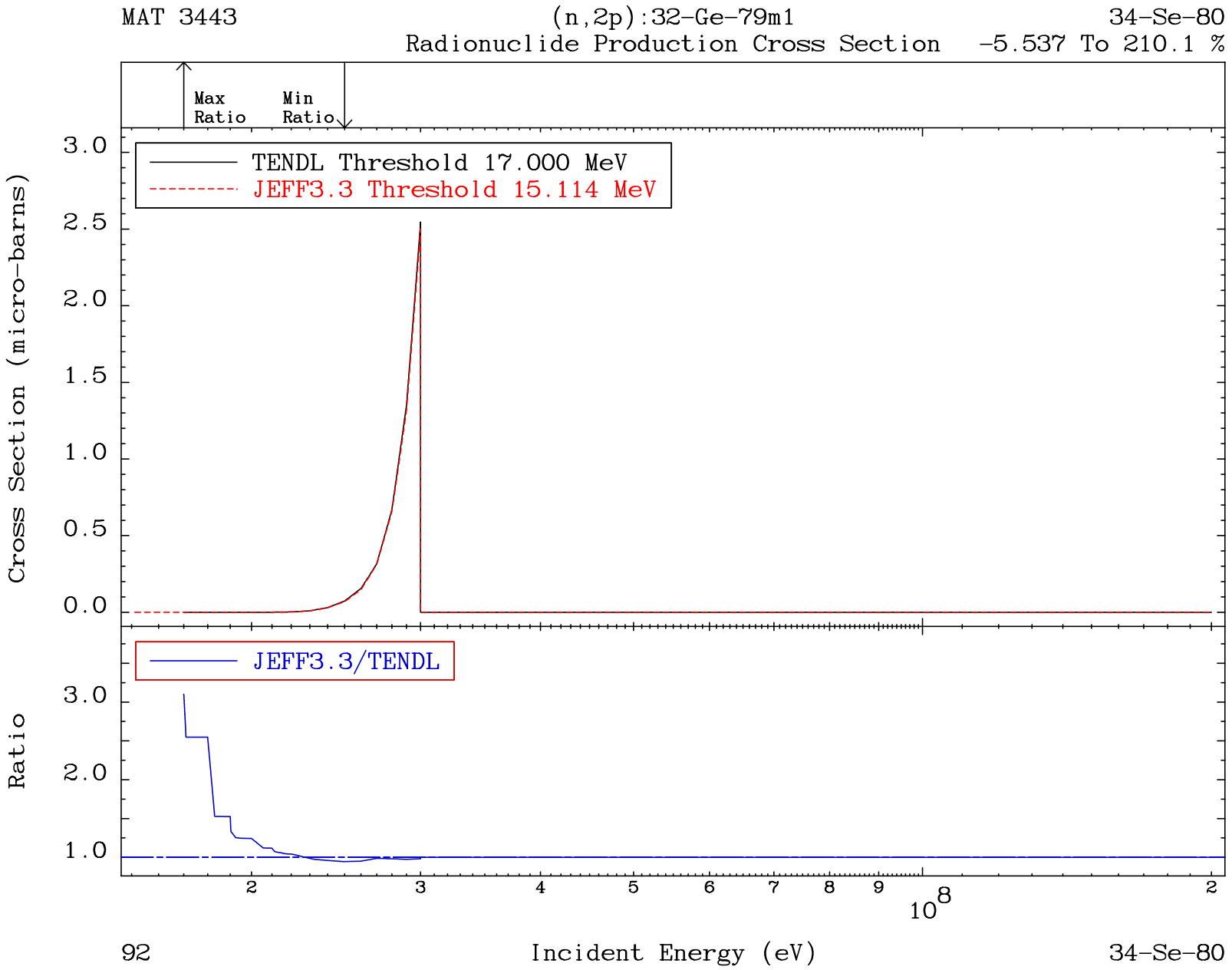

MAT 3443
(n,α):32-Ge-77g
34-Se-80
Radionuclide Production Cross Section -72.56 To 2200. %
Min Ratio
Max Ratio
TENDL Threshold 911.57 keV
JEFF3.3 Threshold 911.57 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
87
34-Se-80

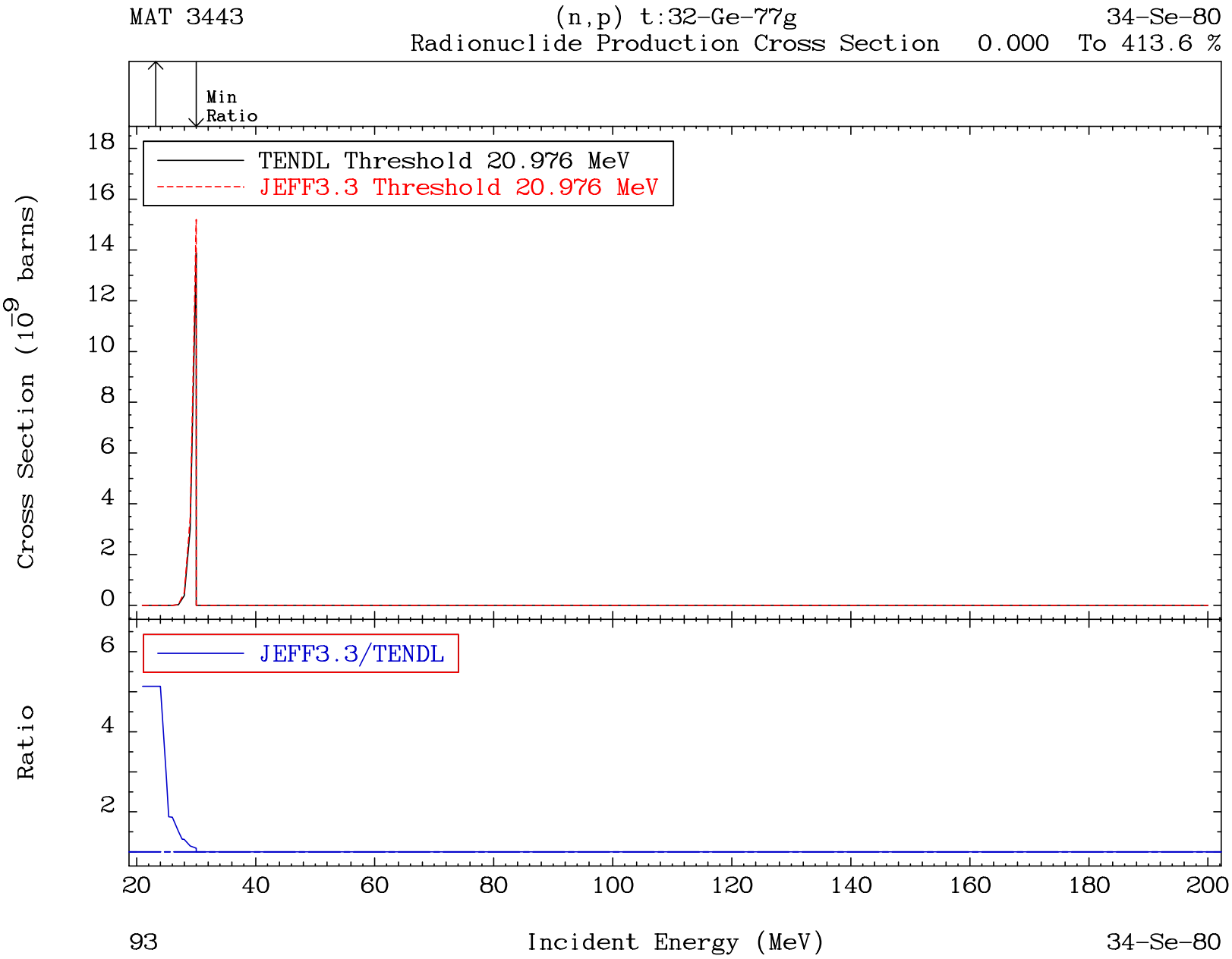

MAT 3443
(n,α):32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section -19.37 To 1978. %
Max Ratio
Min Ratio
TENDL Threshold 3.0000 MeV
JEFF3.3 Threshold 2.8000 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
88
Incident Energy (eV)
34-Se-80

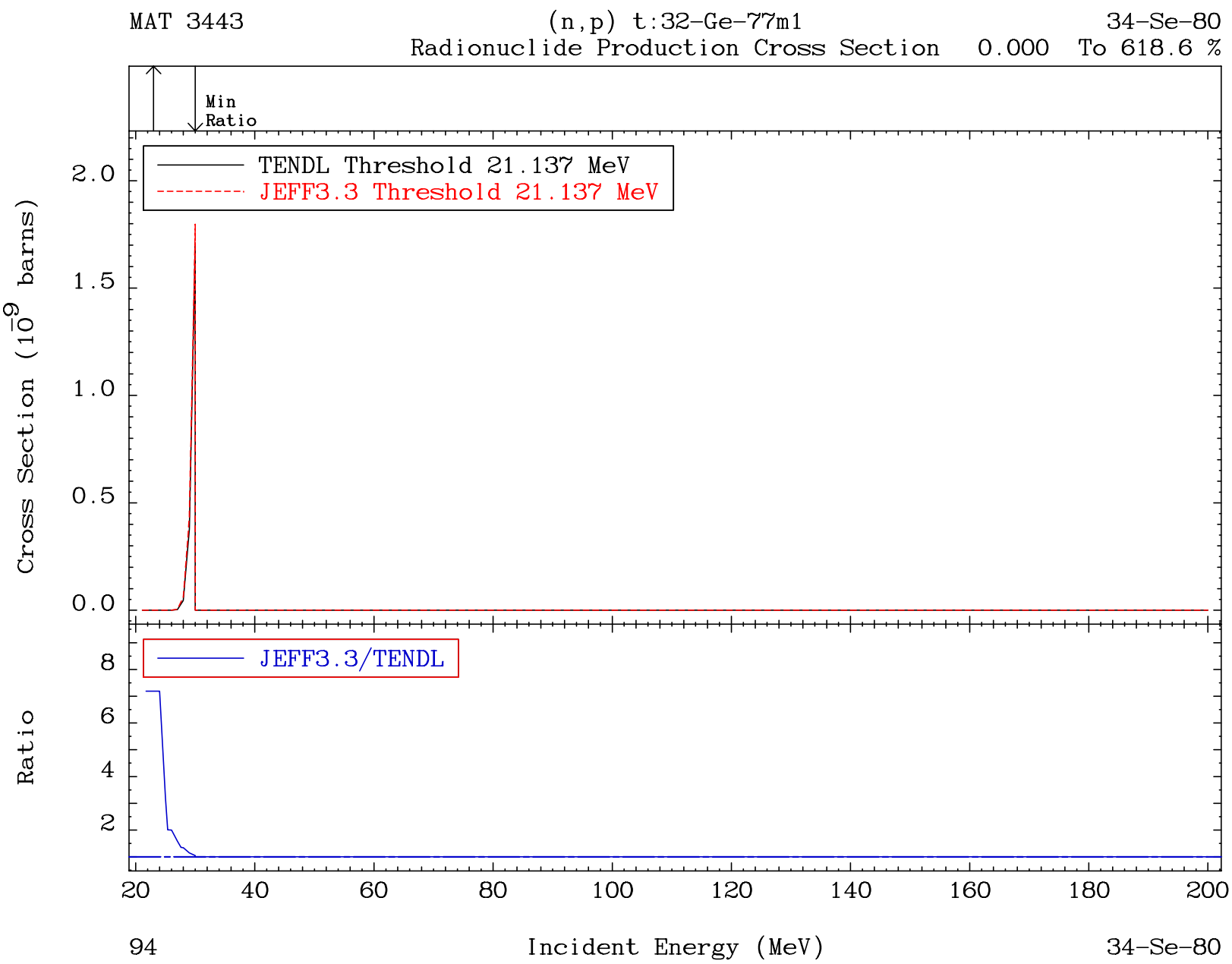

MAT 3443
(n,2α):30-Zn-73g
34-Se-80
Radionuclide Production Cross Section -95.87 To 739.4 %
Min Ratio
Max Ratio
TENDL Threshold 9.0575 MeV
JEFF3.3 Threshold 9.0575 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^{1}
10^{0}
10^{-1}
4
9
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
89
Incident Energy (eV)
34-Se-80


MAT 3443
(n,2α):30-Zn-73m3
34-Se-80
Radionuclide Production Cross Section -17.09 To 731.1 %
Min Ratio
Max Ratio
TENDL Threshold 9.3987 MeV
JEFF3.3 Threshold 17.000 MeV
Cross Section (10^{-9} barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
10^1
6
4
2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
34-Se-80


MAT 3443
(n,2p):32-Ge-79g
34-Se-80
Radionuclide Production Cross Section -7.374 To 229.3 %
Max Ratio
Min Ratio
TENDL Threshold 14.925 MeV
JEFF3.3 Threshold 14.925 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
34-Se-80


MAT 3443
(n,2p):32-Ge-79m1
34-Se-80
Radionuclide Production Cross Section -5.537 To 210.1 %
Max Ratio
Min Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 15.114 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
34-Se-80


MAT 3443
(n,p) t:32-Ge-77g
34-Se-80
Radionuclide Production Cross Section 0.000 To 413.6 %
Min Ratio
TENDL Threshold 20.976 MeV
JEFF3.3 Threshold 20.976 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (MeV)
93
34-Se-80


MAT 3443
(n,p) t:32-Ge-77m1
34-Se-80
Radionuclide Production Cross Section 0.000 To 618.6 %
Min Ratio
TENDL Threshold 21.137 MeV
JEFF3.3 Threshold 21.137 MeV
Cross Section (10^{-9} barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
8
6
4
2
20
40
60
80
100
120
140
160
180
200
94
Incident Energy (MeV)
34-Se-80