Program Complot
(Version 2018-1)
by
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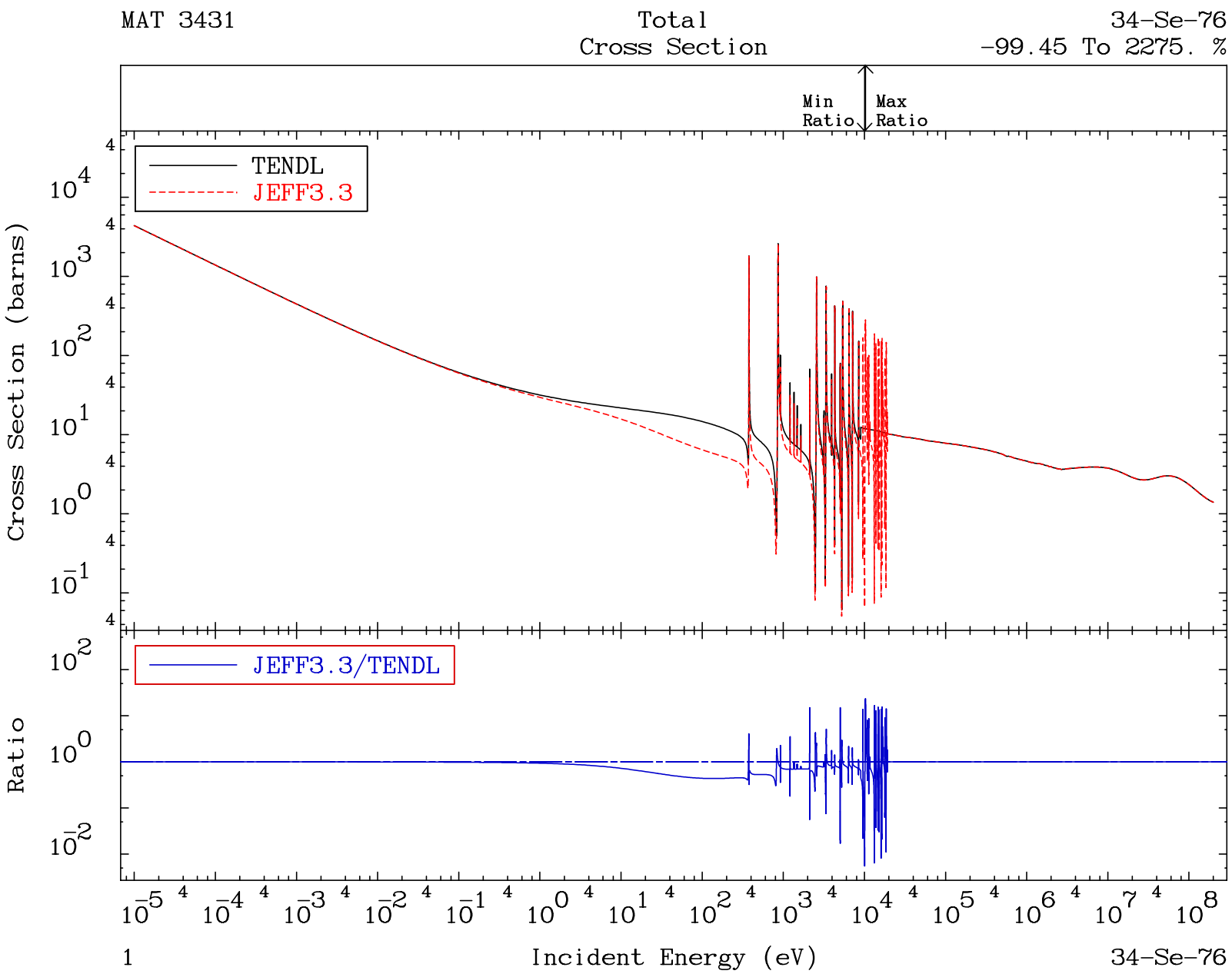
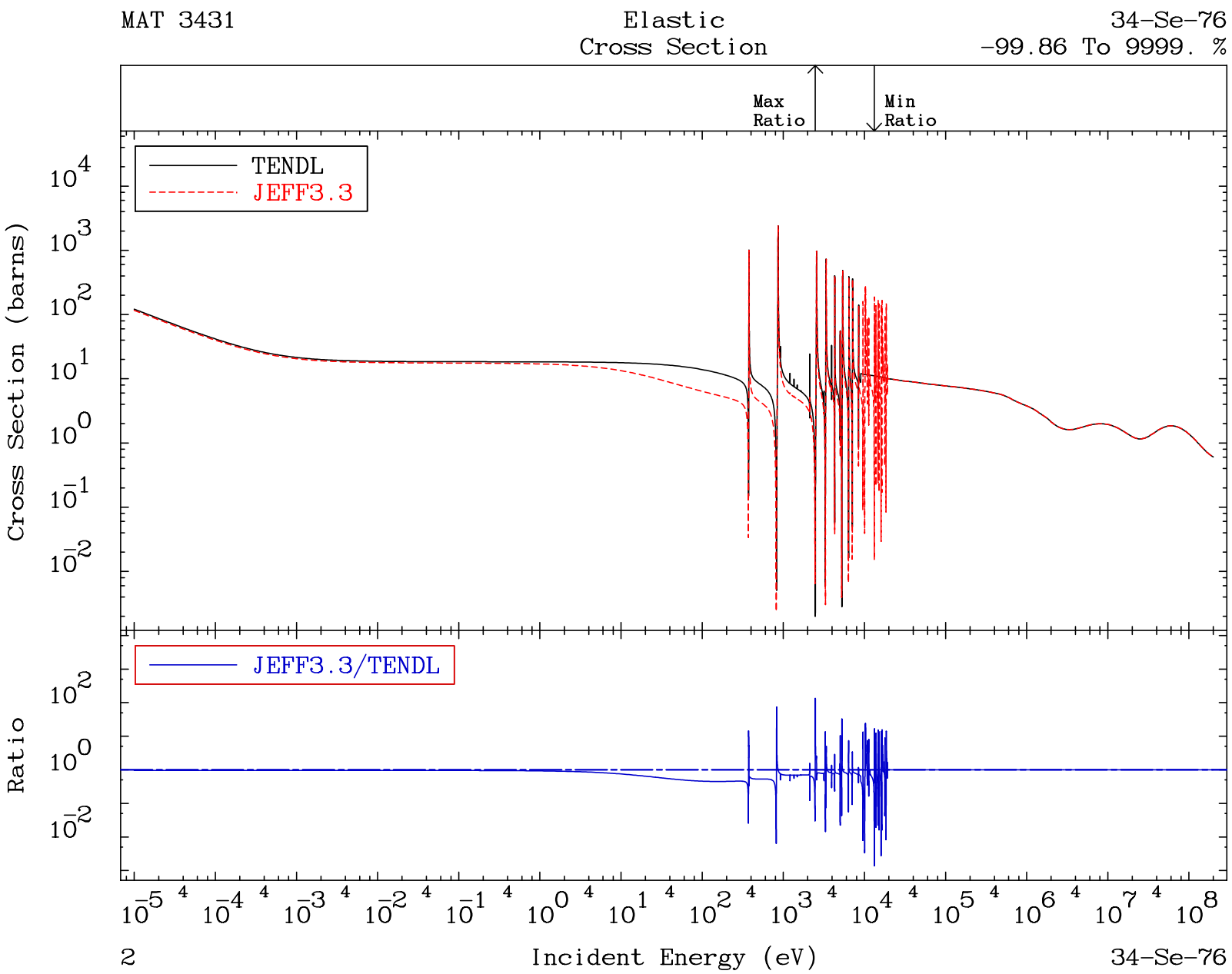
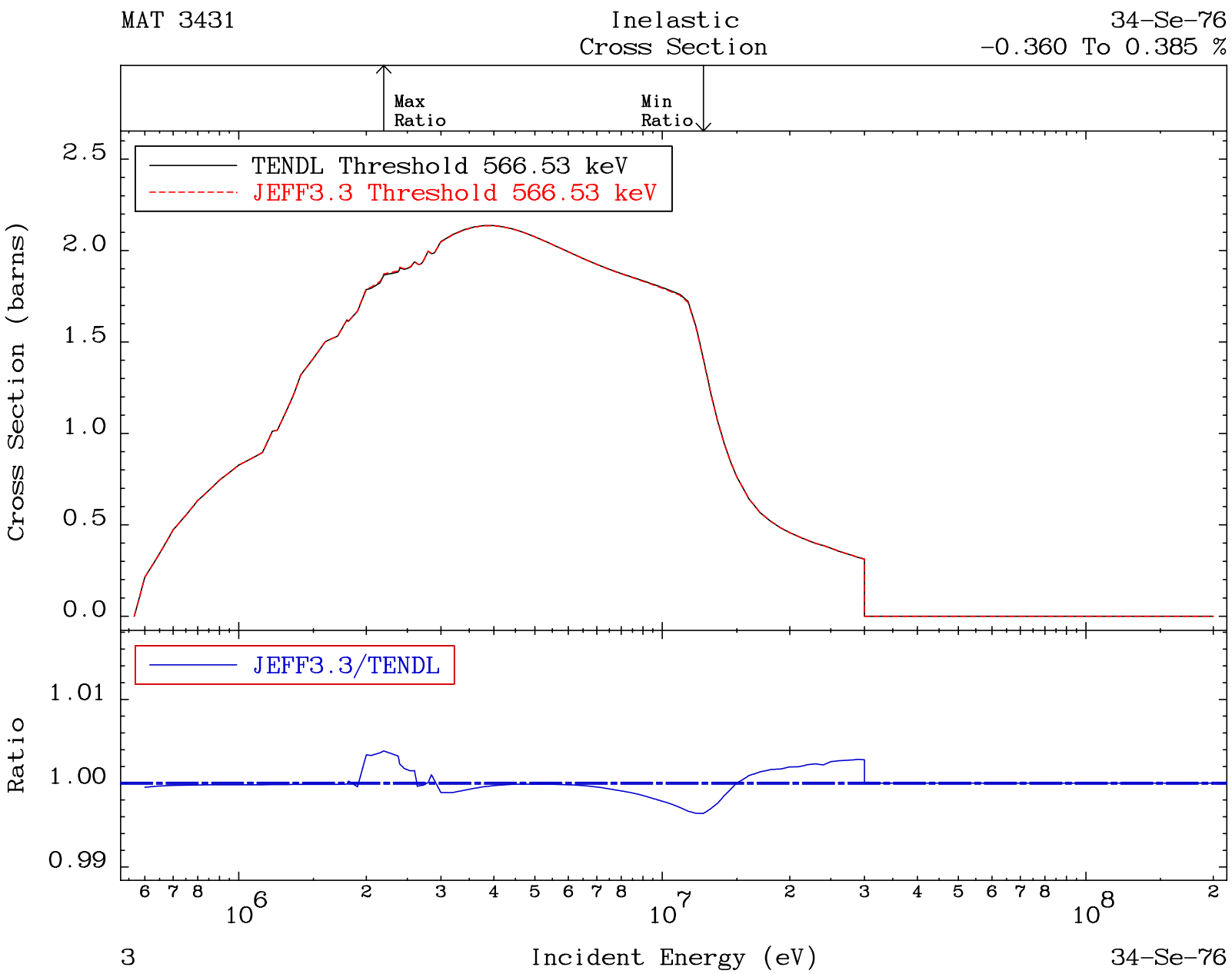
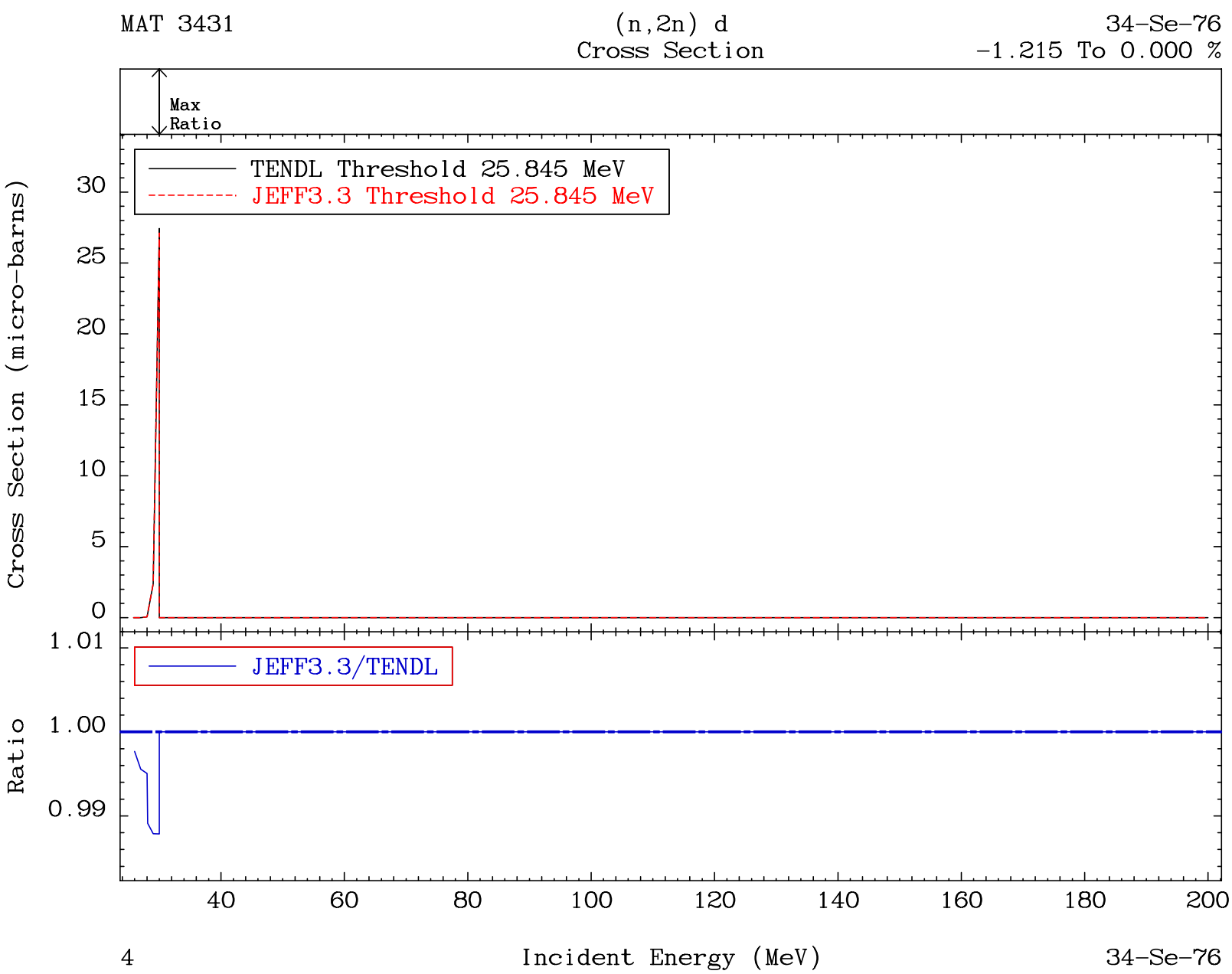
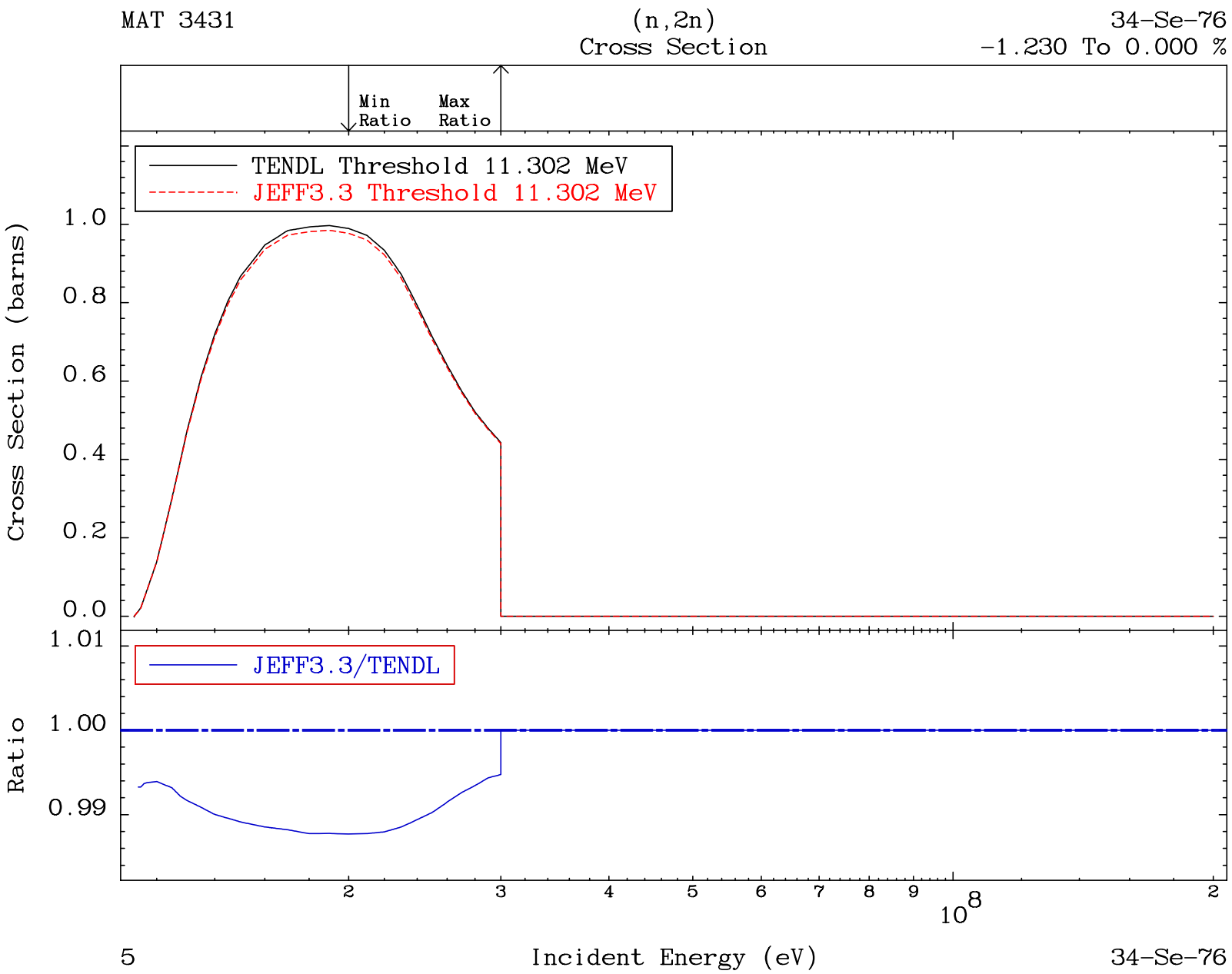
Press Mouse Button to Start

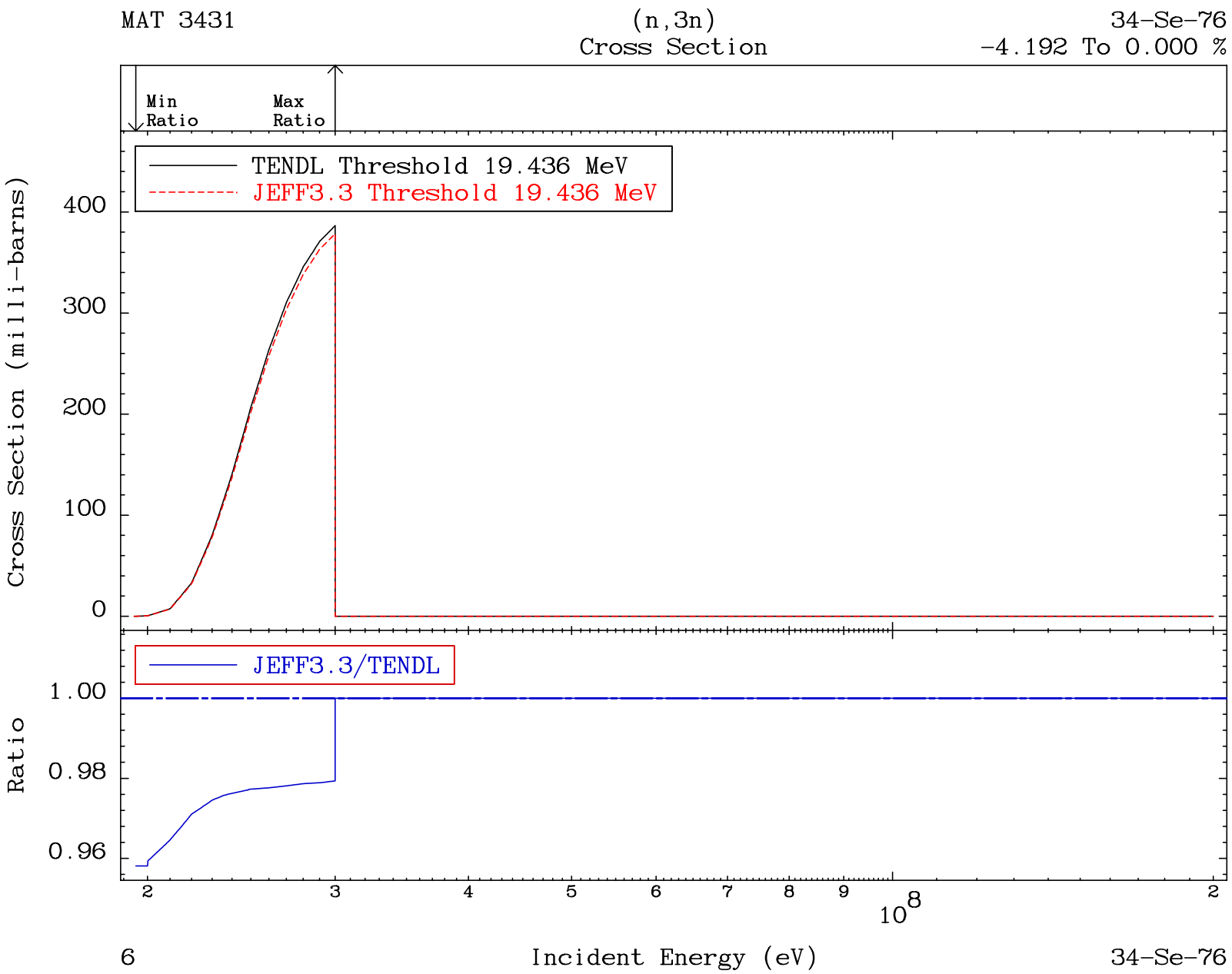

MAT 3431
Total
Cross Section
34-Se-76
-99.45 To 2275. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
34-Se-76

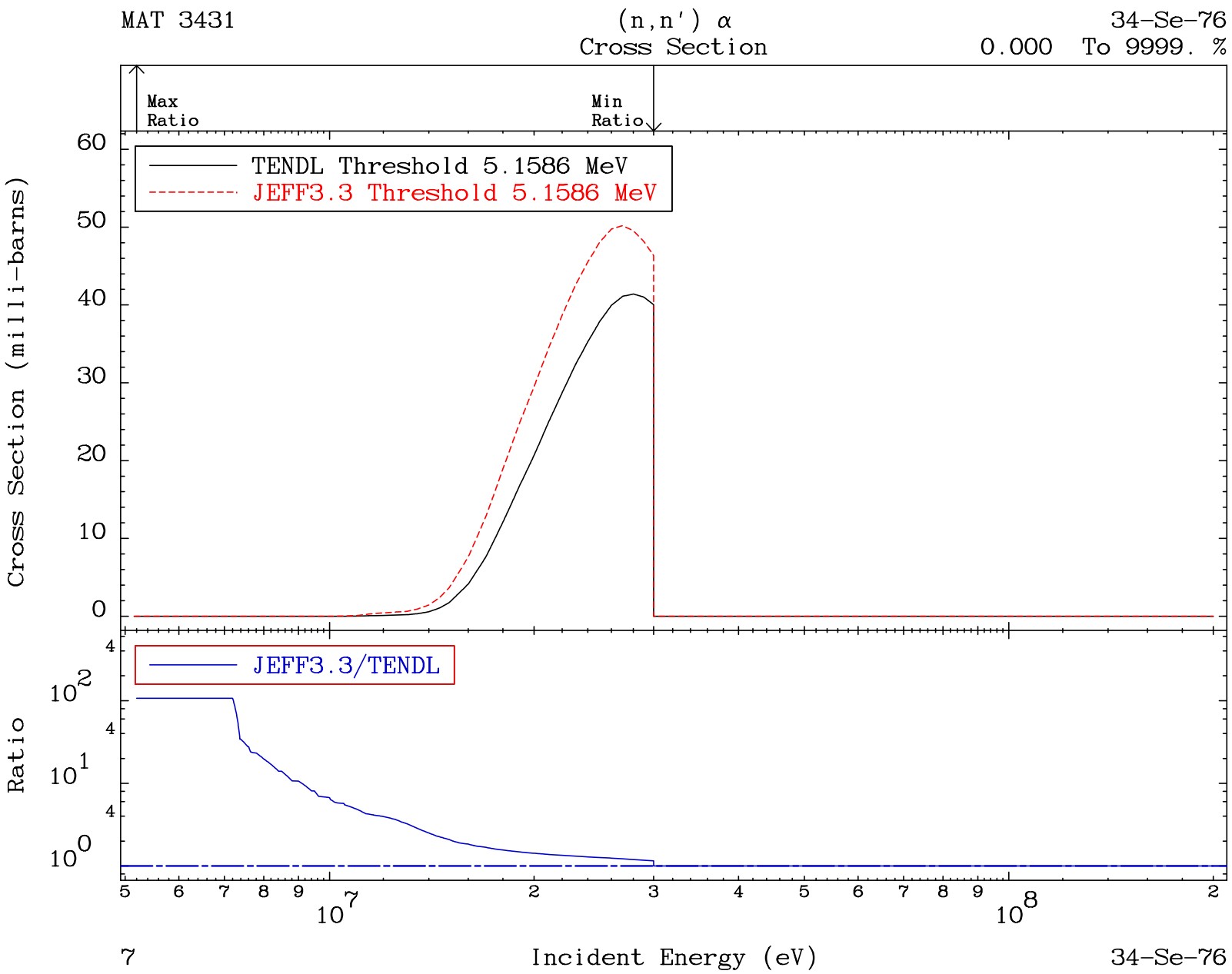

MAT 3431
Elastic
Cross Section
34-Se-76
-99.86 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
34-Se-76

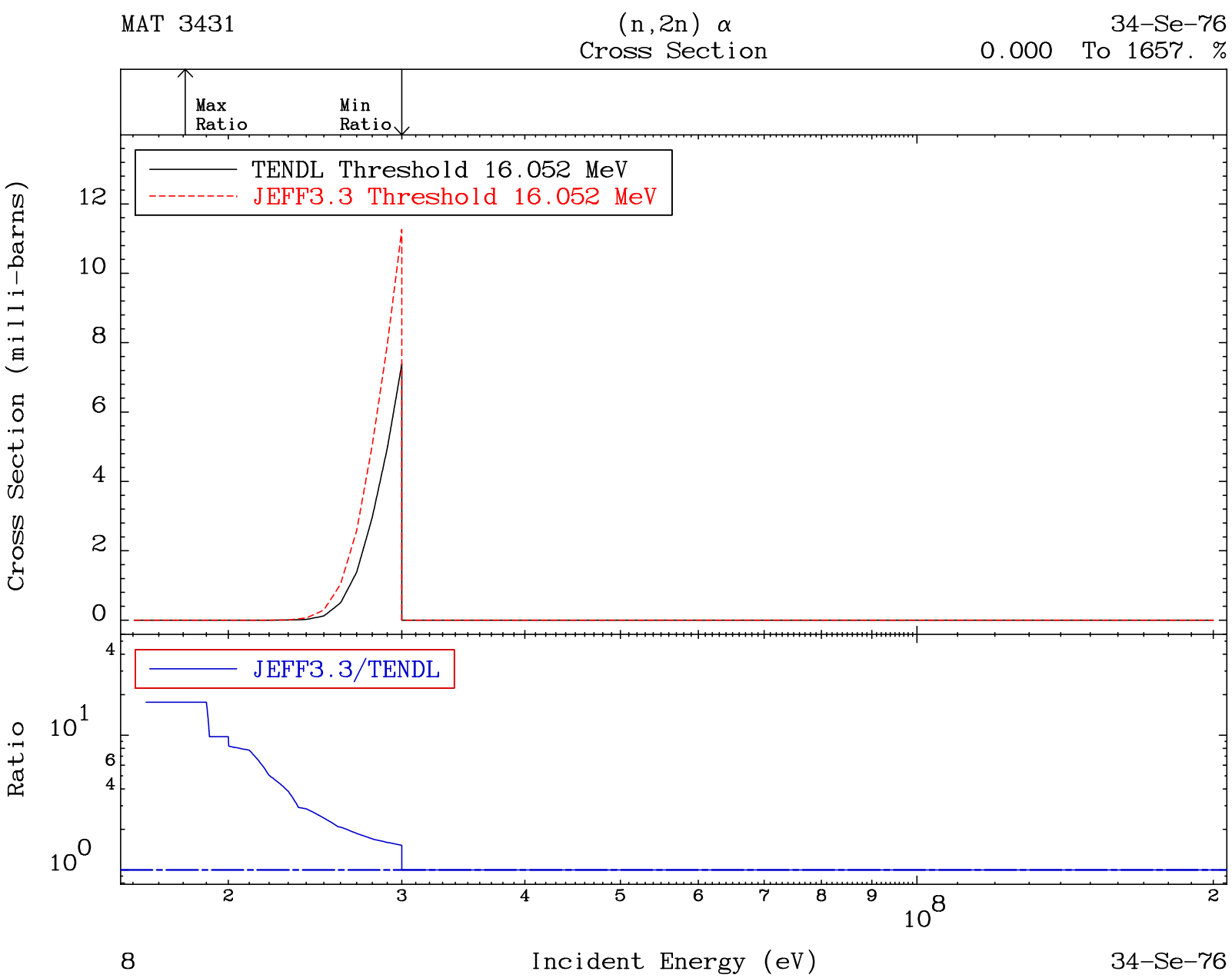

MAT 3431
Inelastic
Cross Section
34-Se-76
-0.360 To 0.385 %
Max
Ratio
Min
Ratio
TENDL Threshold 566.53 keV
JEFF3.3 Threshold 566.53 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
34-Se-76

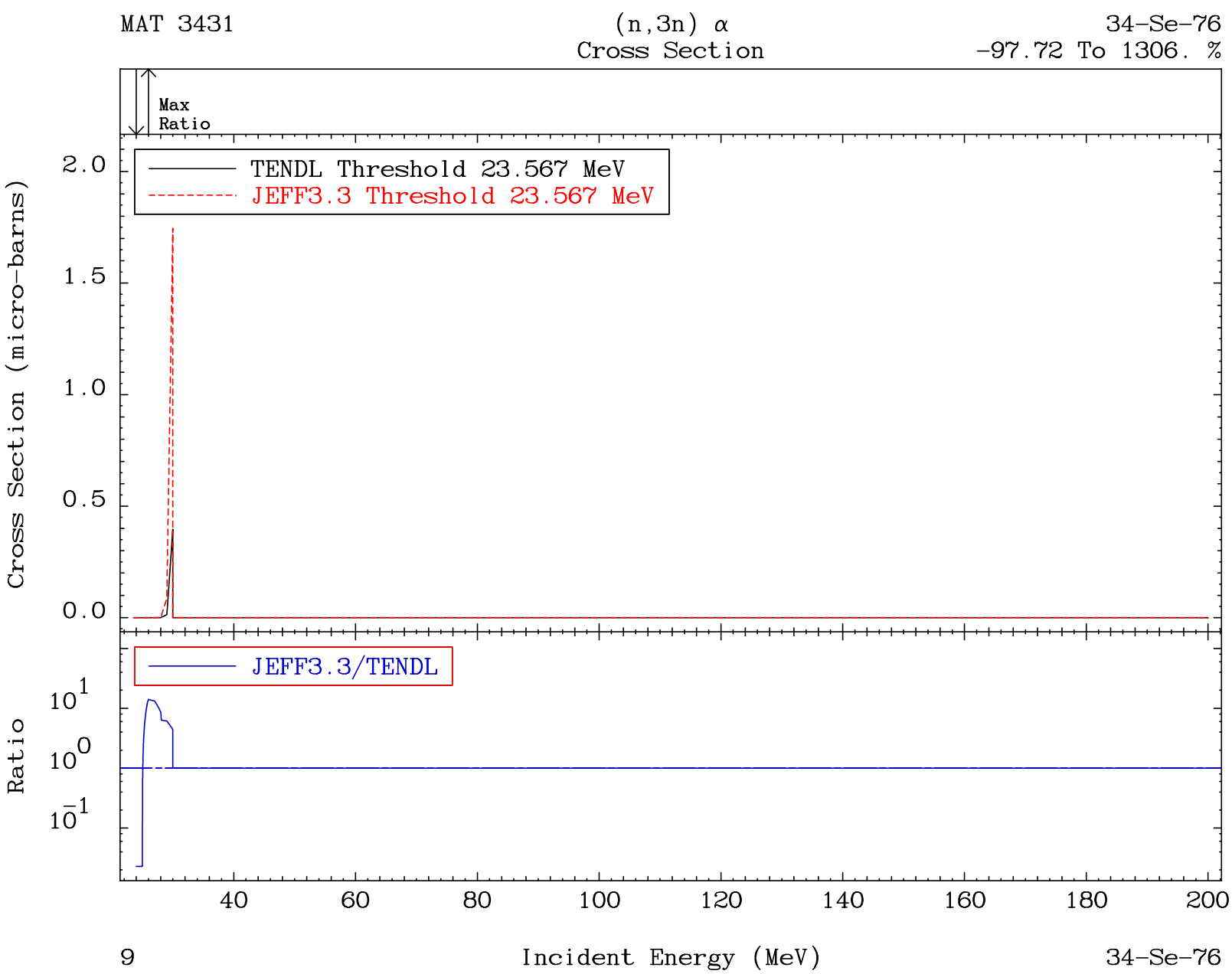

MAT 3431
(n,2n) d
Cross Section
34-Se-76
-1.215 To 0.000 %
Max
Ratio
TENDL Threshold 25.845 MeV
JEFF3.3 Threshold 25.845 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
34-Se-76

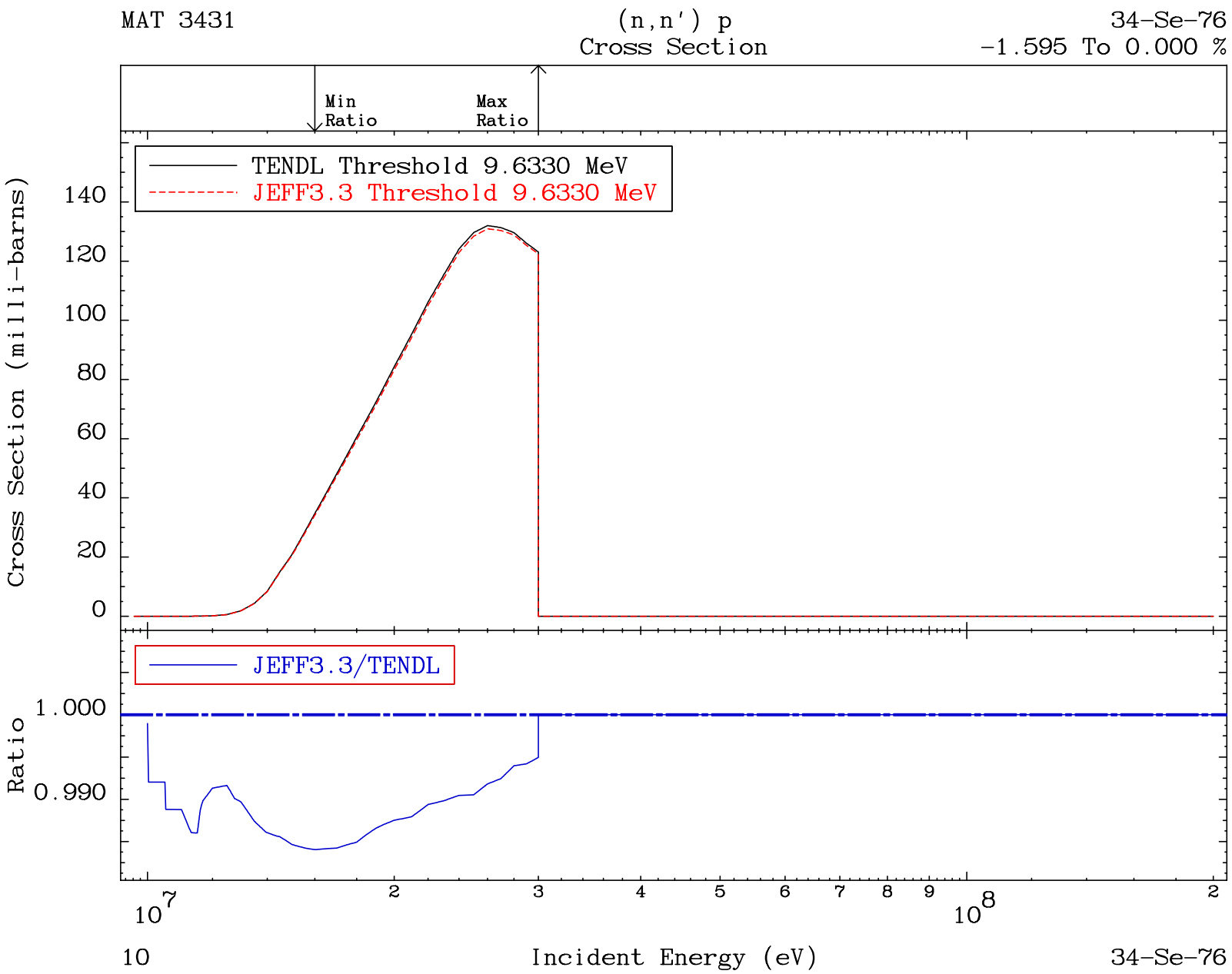

MAT 3431
(n,2n)
Cross Section
34-Se-76
-1.230 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.302 MeV
JEFF3.3 Threshold 11.302 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
1.01
1.00
0.99
Ratio
JEFF3.3/TENDL
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
34-Se-76

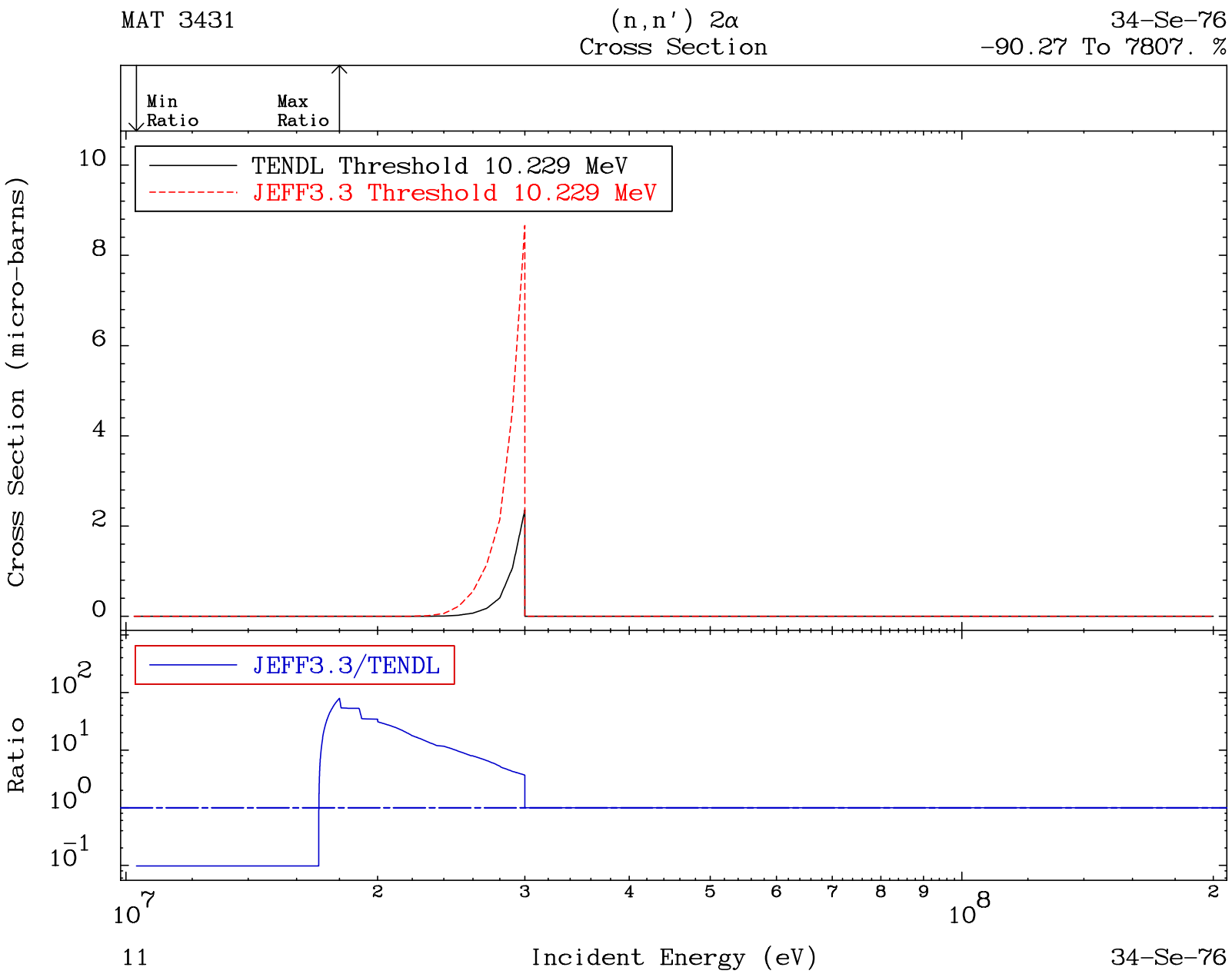

MAT 3431
(n,3n)
Cross Section
34-Se-76
-4.192 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 19.436 MeV
JEFF3.3 Threshold 19.436 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
34-Se-76

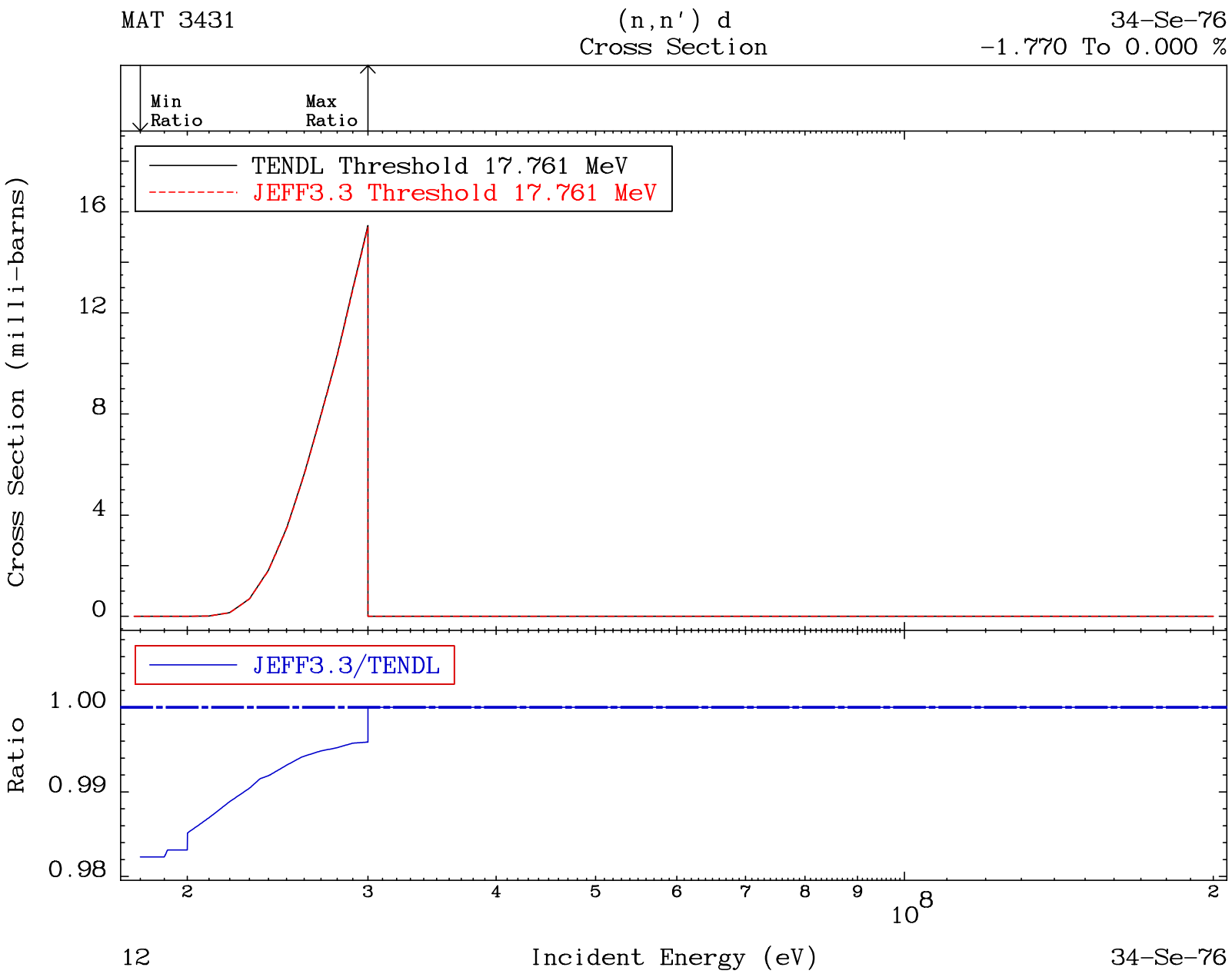

MAT 3431
(n,n') α
Cross Section
34-Se-76
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.1586 MeV
JEFF3.3 Threshold 5.1586 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
34-Se-76

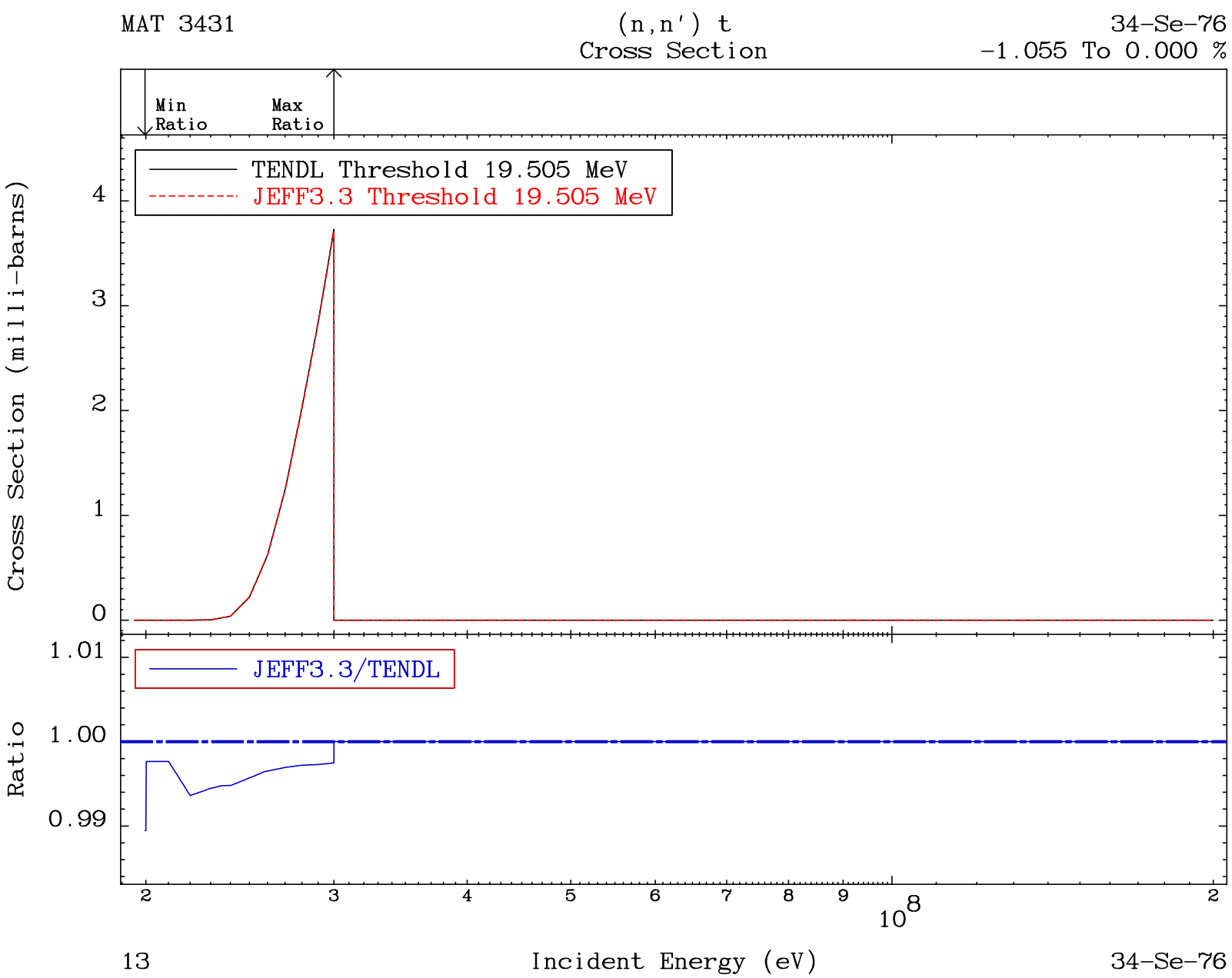

MAT 3431
(n,2n) α
Cross Section
34-Se-76
0.000 To 1657. %
Max Ratio
Min Ratio
TENDL Threshold 16.052 MeV
JEFF3.3 Threshold 16.052 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
4
10^1
6
4
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
34-Se-76

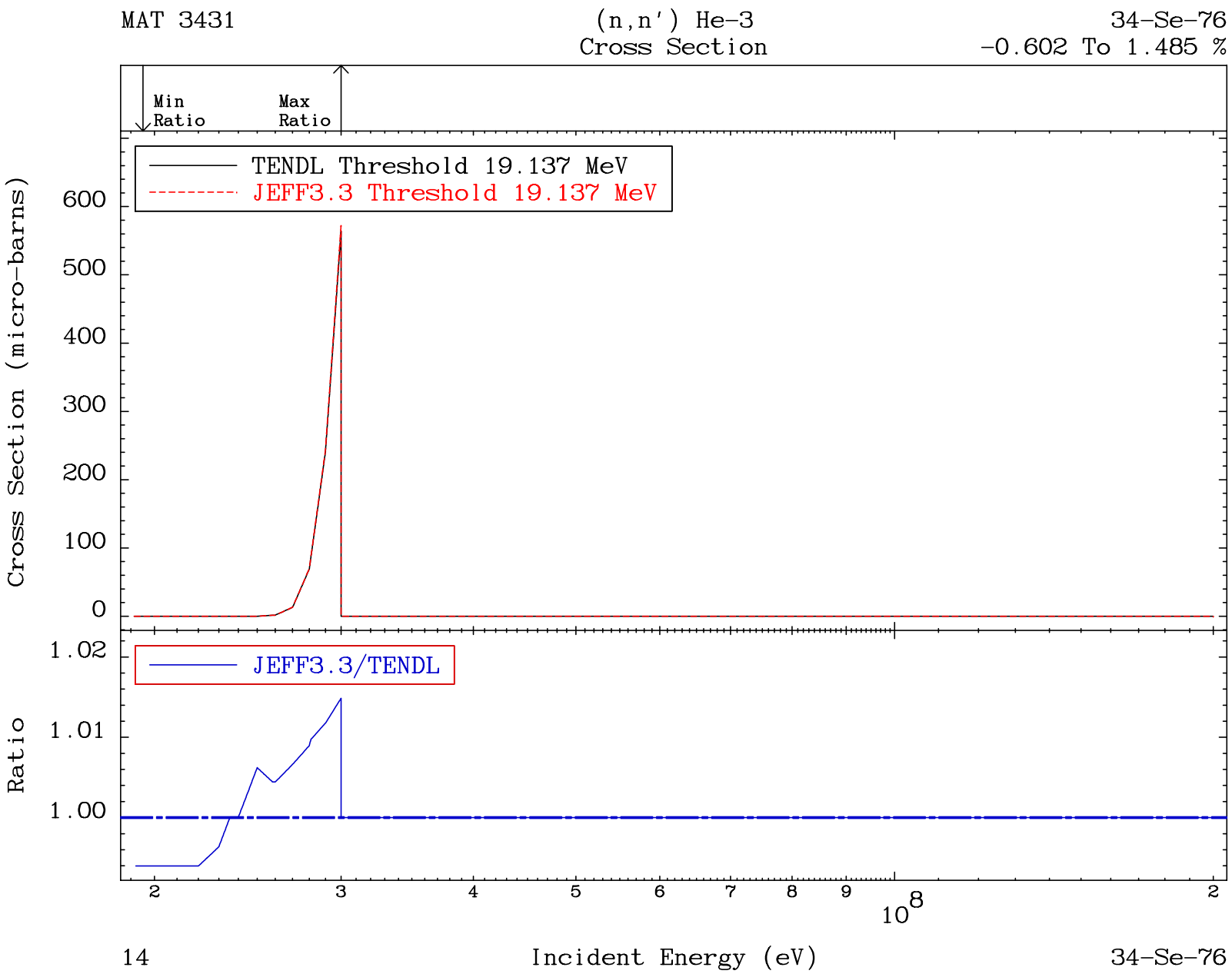

MAT 3431
(n,3n) α
Cross Section
34-Se-76
-97.72 To 1306. %
Max
Ratio
TENDL Threshold 23.567 MeV
JEFF3.3 Threshold 23.567 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
34-Se-76

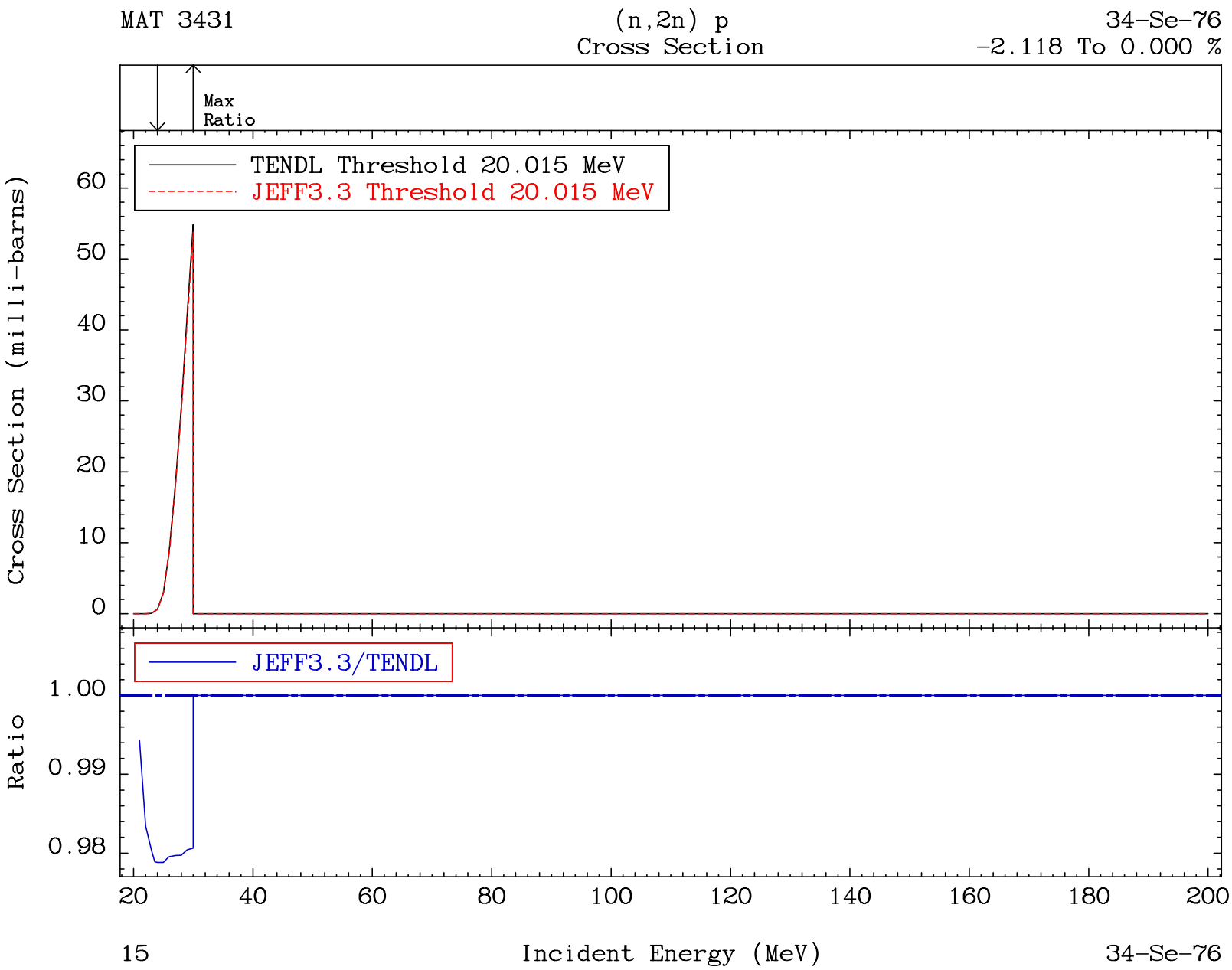

MAT 3431
(n,n') p
Cross Section
34-Se-76
-1.595 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.6330 MeV
JEFF3.3 Threshold 9.6330 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.000
0.990
10^7
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
34-Se-76

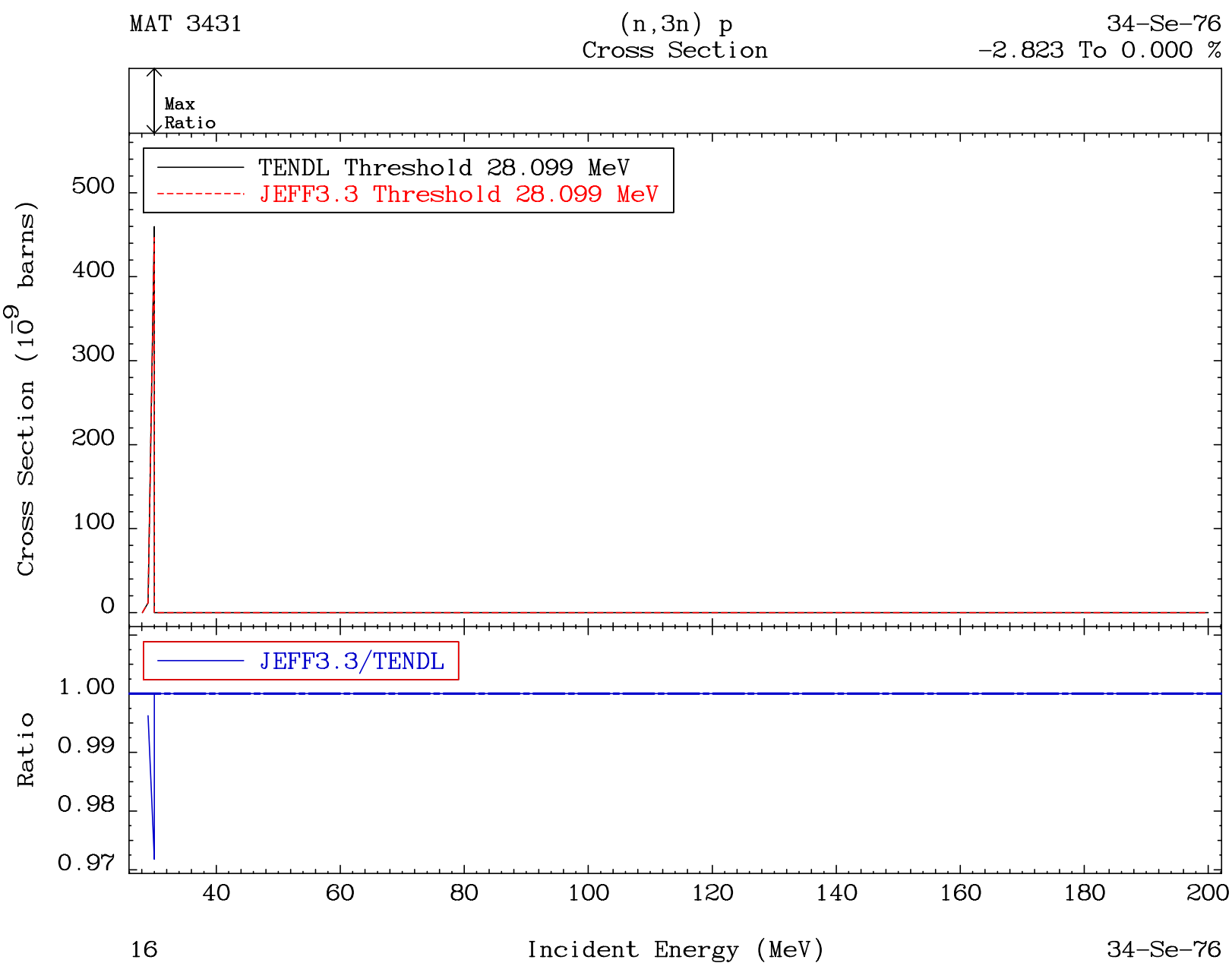

MAT 3431
(n,n') 2α
Cross Section
34-Se-76
-90.27 To 7807. %
Min Ratio
Max Ratio
TENDL Threshold 10.229 MeV
JEFF3.3 Threshold 10.229 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
11
34-Se-76

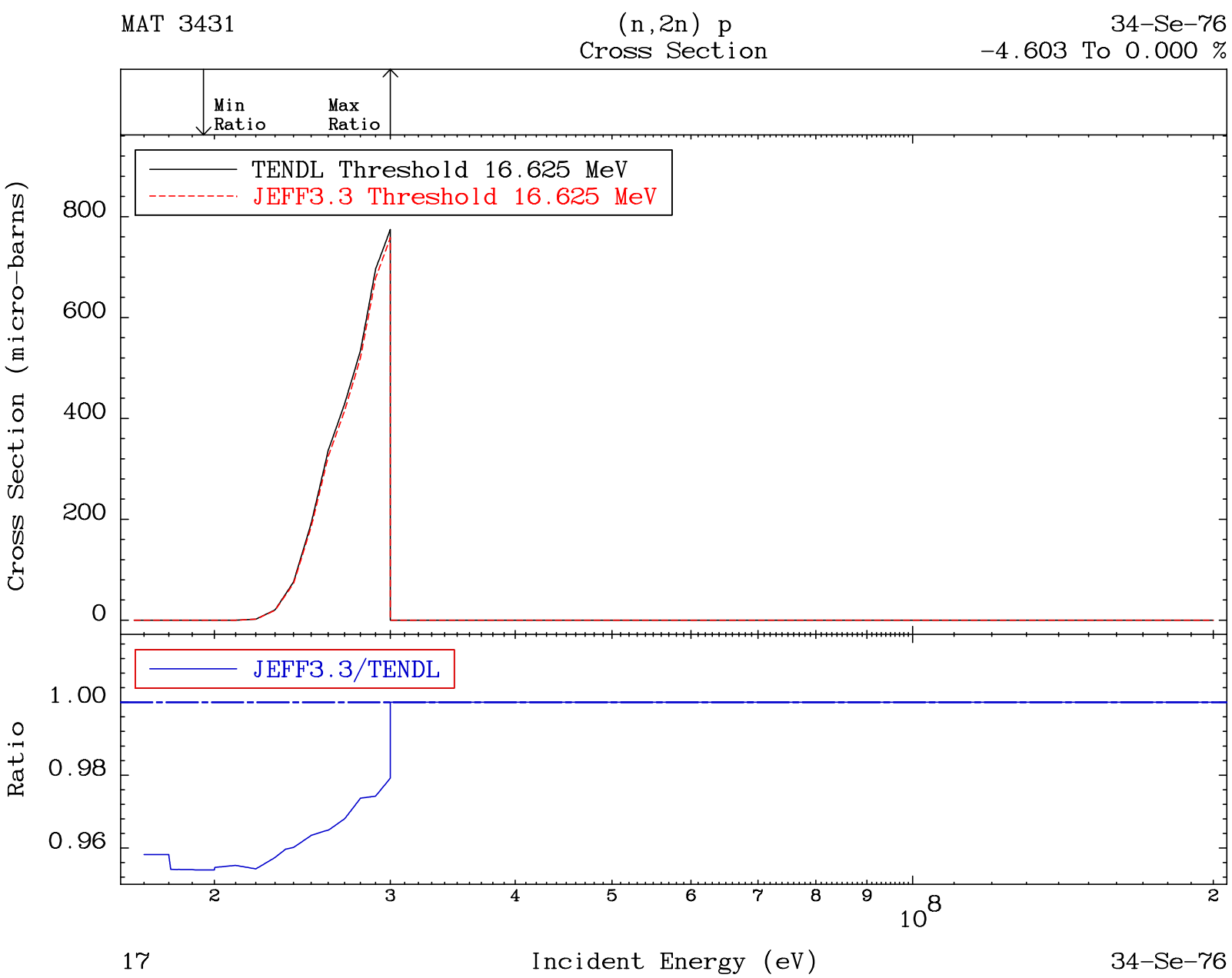

MAT 3431
(n,n') d
Cross Section
34-Se-76
-1.770 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 17.761 MeV
JEFF3.3 Threshold 17.761 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
34-Se-76

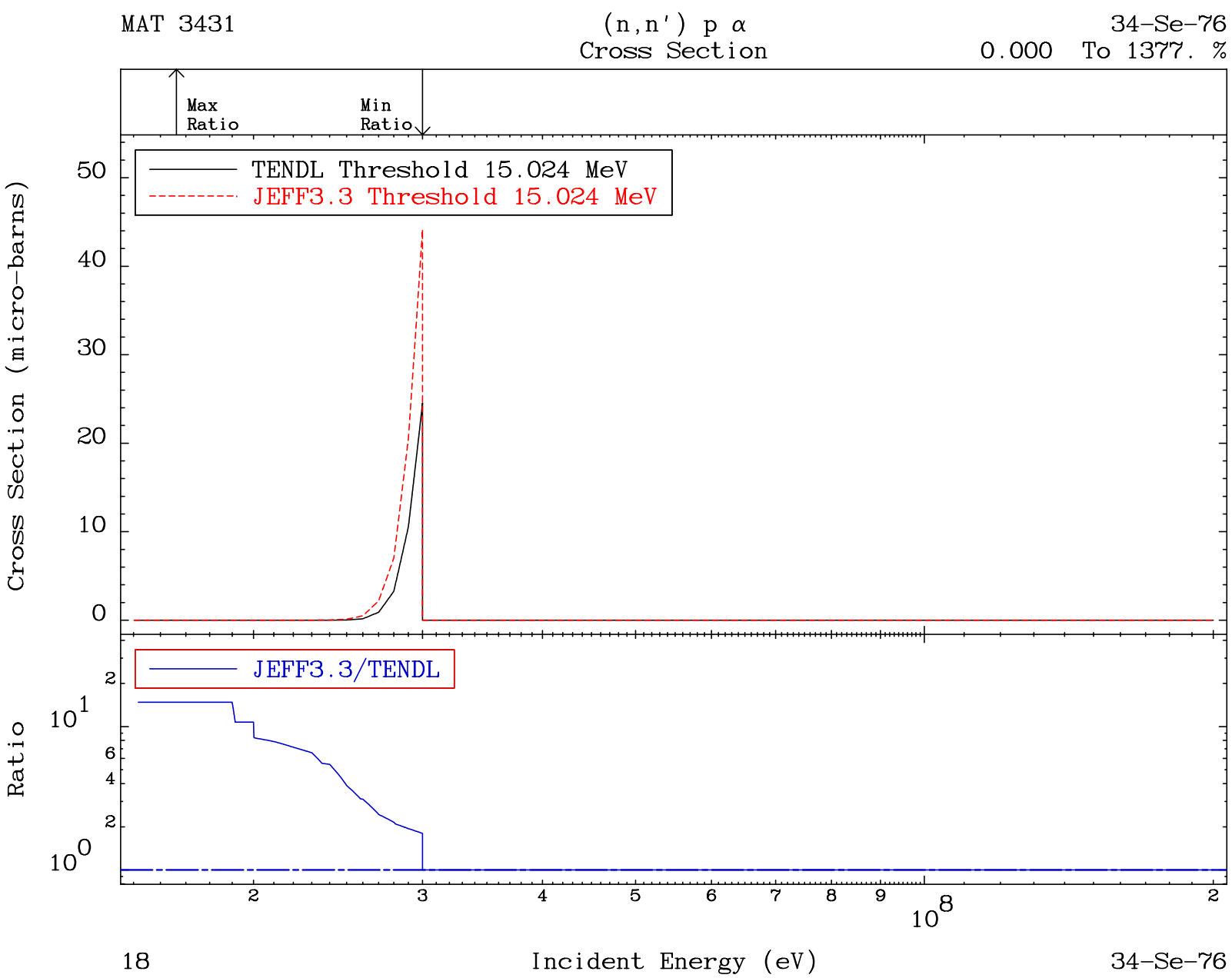

MAT 3431
(n,n') t
Cross Section
34-Se-76
-1.055 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 19.505 MeV
JEFF3.3 Threshold 19.505 MeV
Cross Section (milli-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
34-Se-76

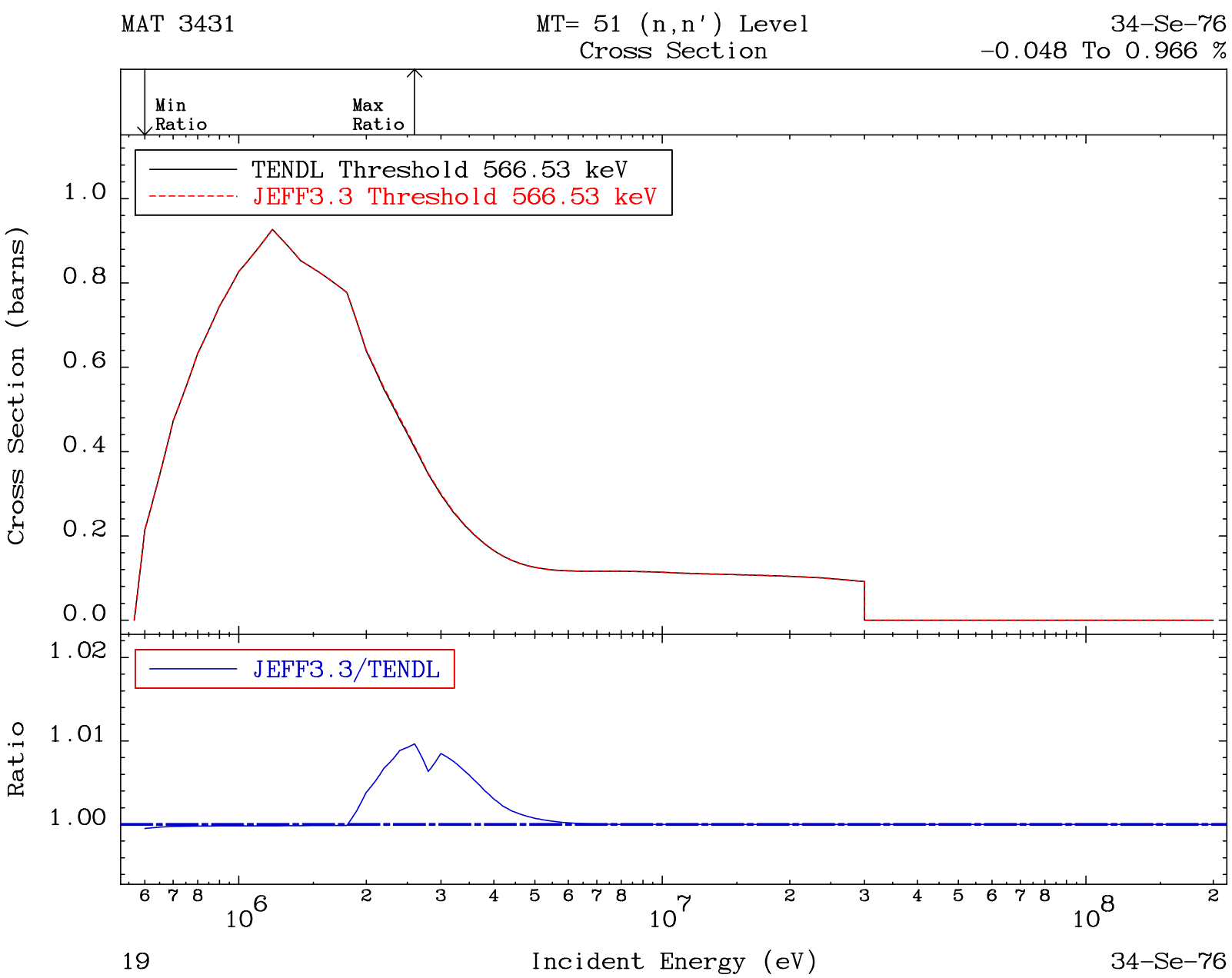

MAT 3431
(n,n') He-3
Cross Section
34-Se-76
-0.602 To 1.485 %
Min Ratio
Max Ratio
TENDL Threshold 19.137 MeV
JEFF3.3 Threshold 19.137 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
34-Se-76

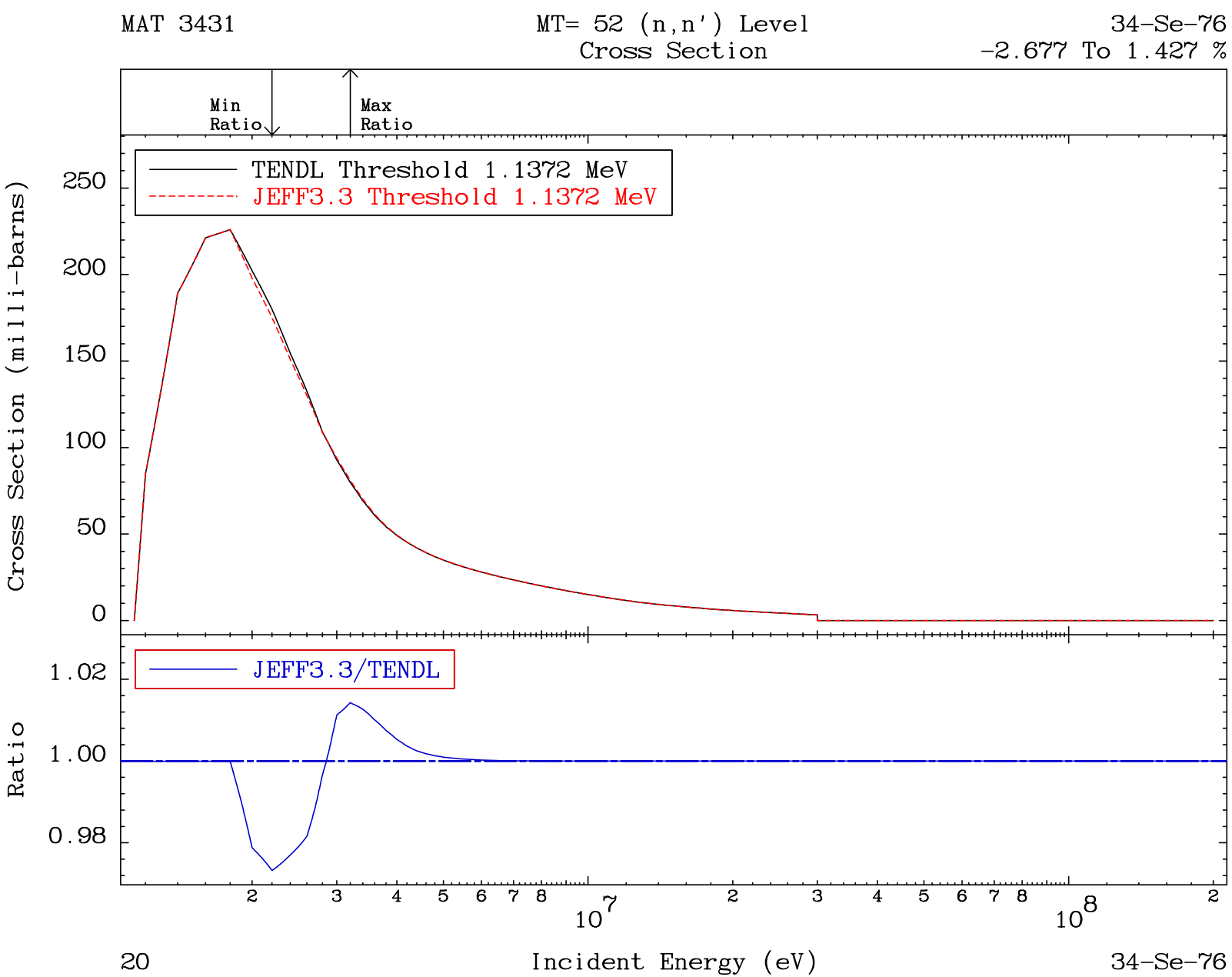

MAT 3431
(n,2n) p
Cross Section
34-Se-76
-2.118 To 0.000 %
Max
Ratio
TENDL Threshold 20.015 MeV
JEFF3.3 Threshold 20.015 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
20
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
34-Se-76

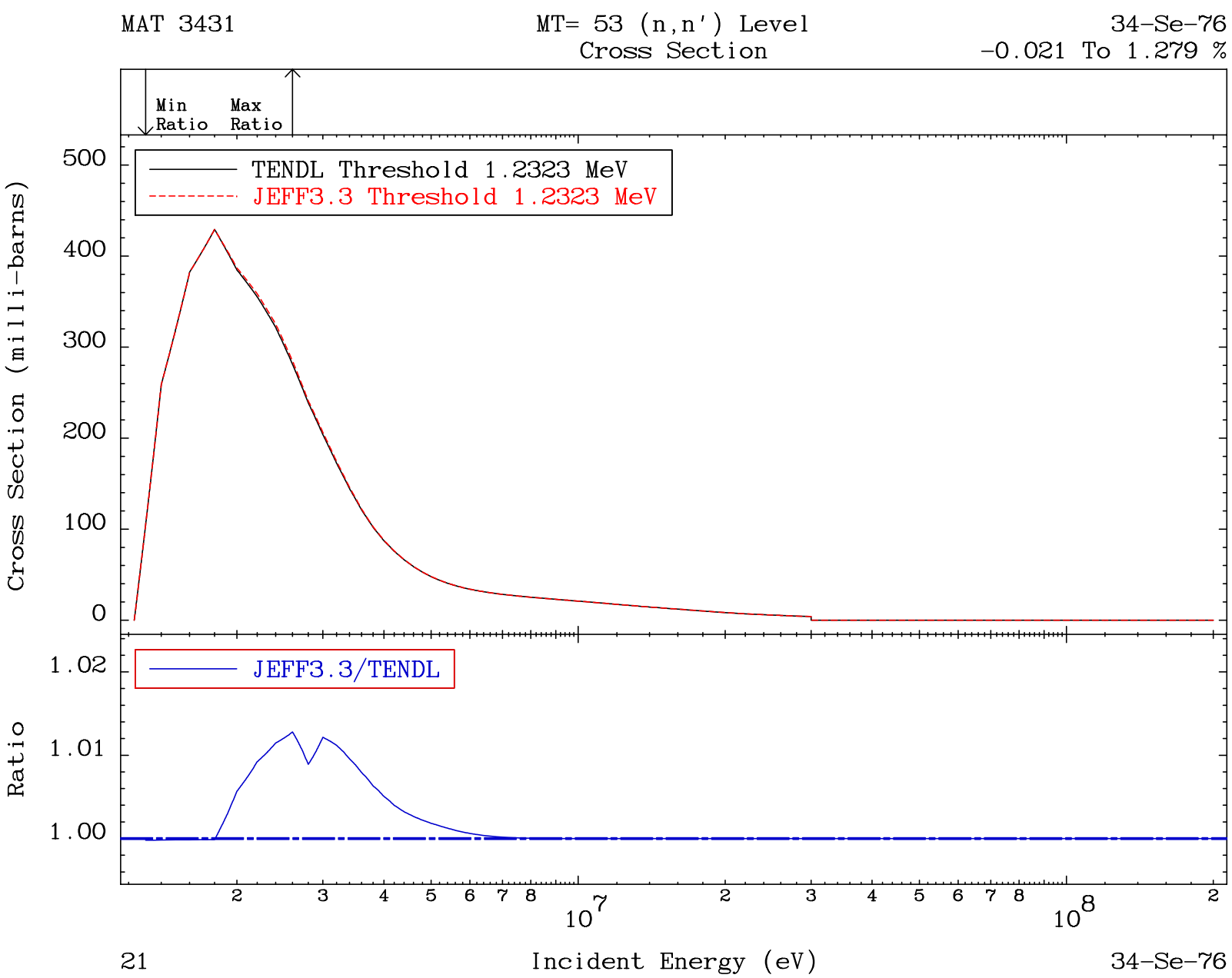

MAT 3431
(n,3n) p
Cross Section
34-Se-76
-2.823 To 0.000 %
Max
Ratio
TENDL Threshold 28.099 MeV
JEFF3.3 Threshold 28.099 MeV
Cross Section (10-9 barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
0.97
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
34-Se-76

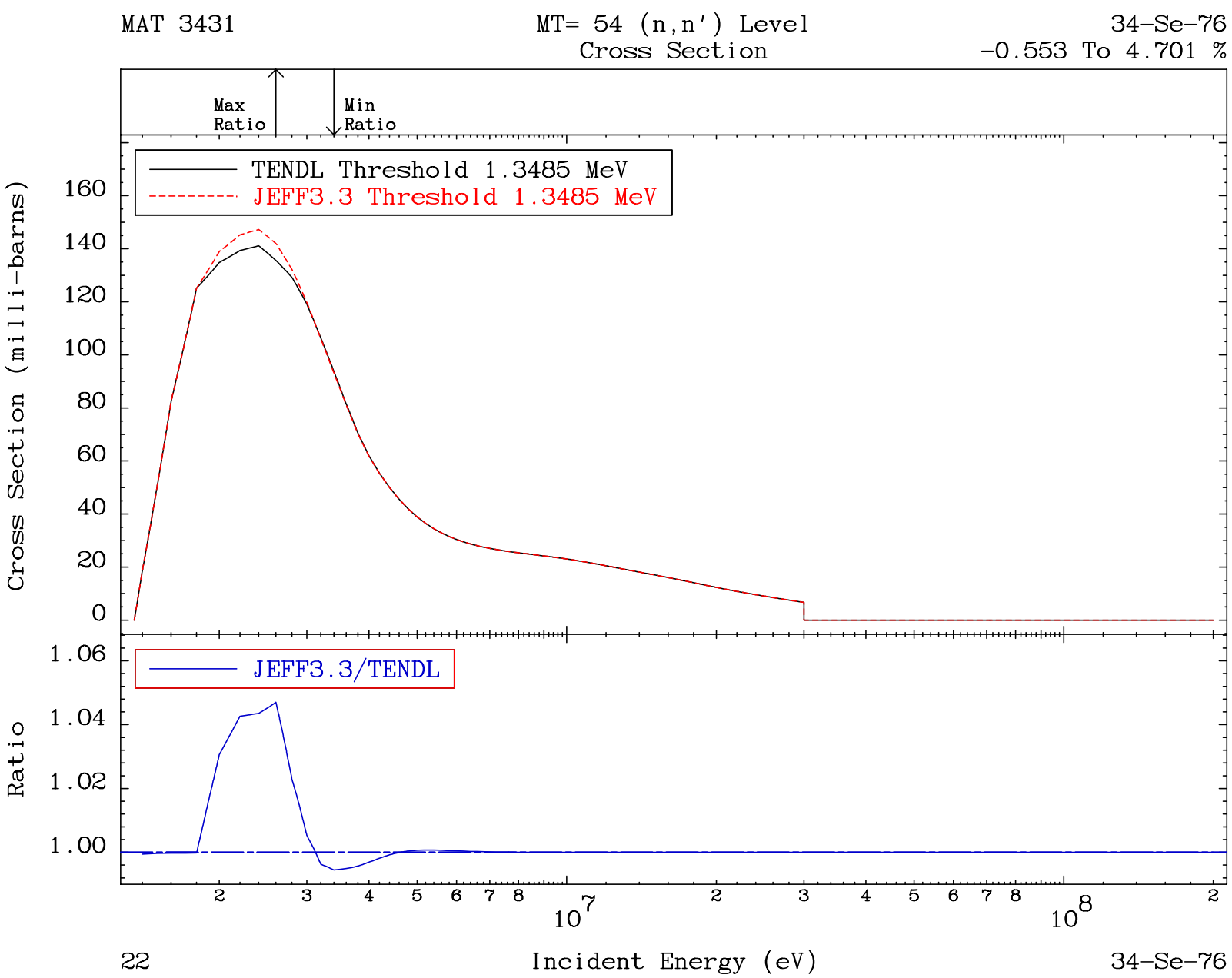

MAT 3431
(n,2n) p
Cross Section
34-Se-76
-4.603 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.625 MeV
JEFF3.3 Threshold 16.625 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
34-Se-76

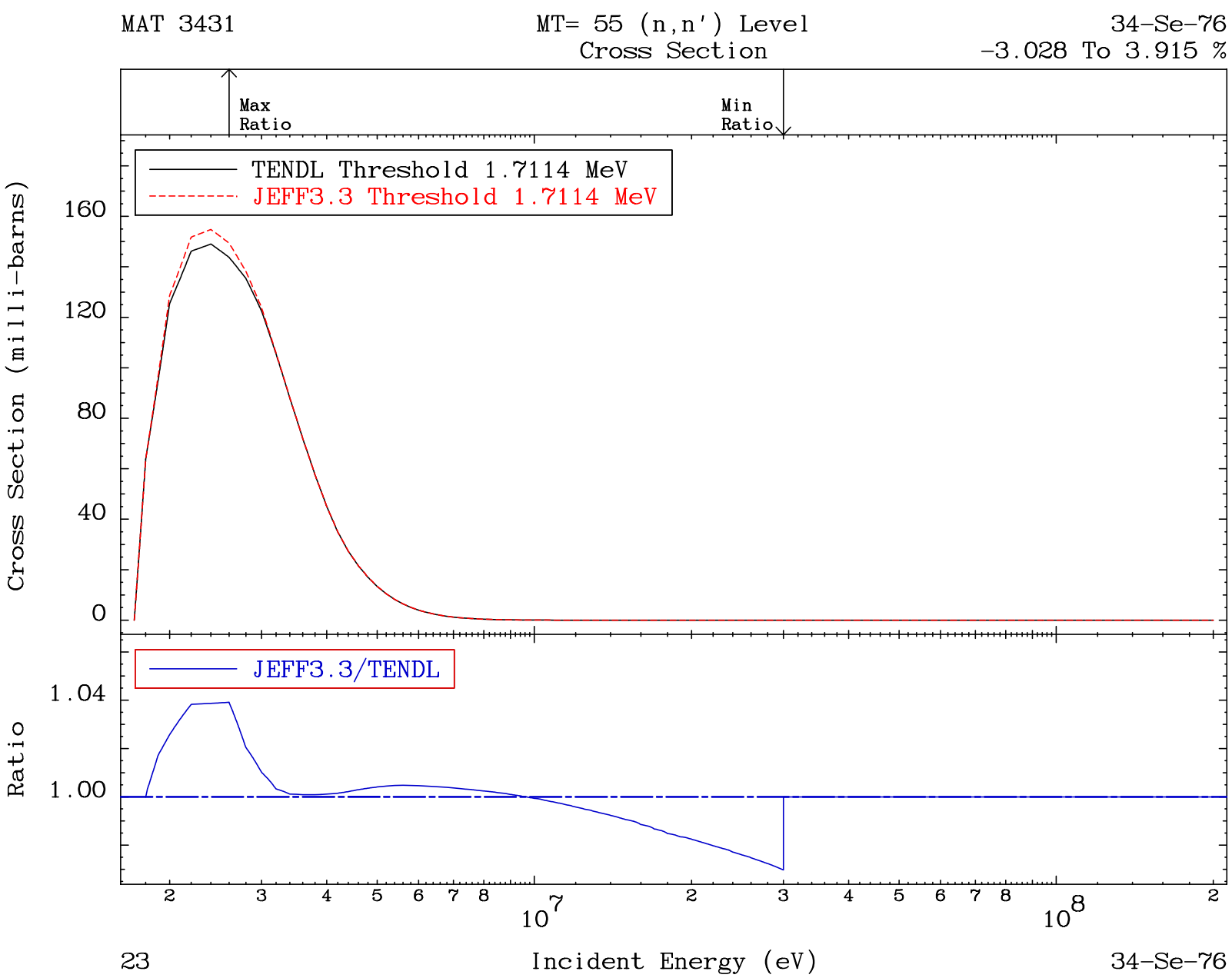

MAT 3431
(n,n') p α
Cross Section
34-Se-76
0.000 To 1377. %
Max Ratio
Min Ratio
TENDL Threshold 15.024 MeV
JEFF3.3 Threshold 15.024 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
34-Se-76

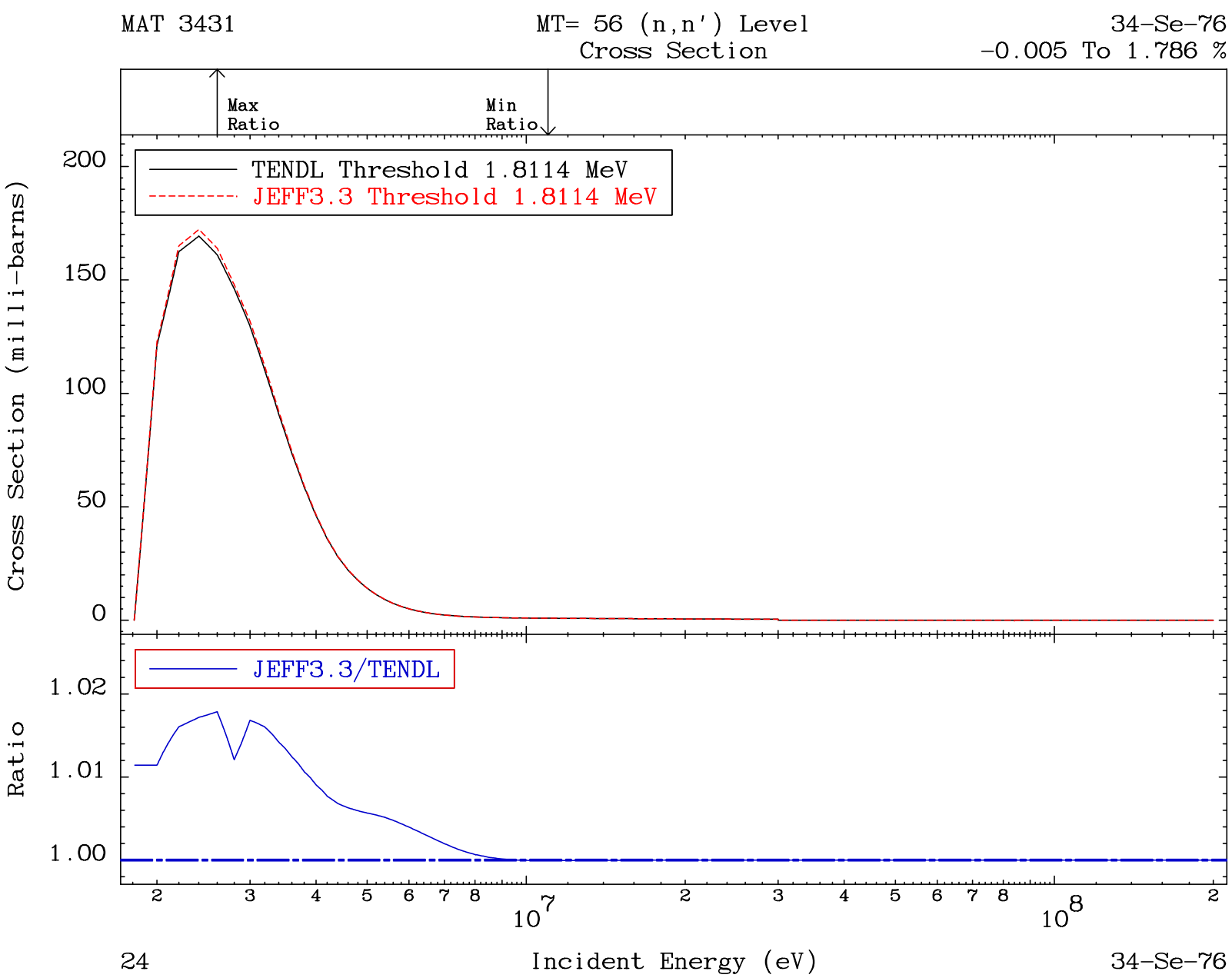

MAT 3431
MT= 51 (n,n') Level
Cross Section
34-Se-76
-0.048 To 0.966 %
Min Ratio
Max Ratio
TENDL Threshold 566.53 keV
JEFF3.3 Threshold 566.53 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
34-Se-76

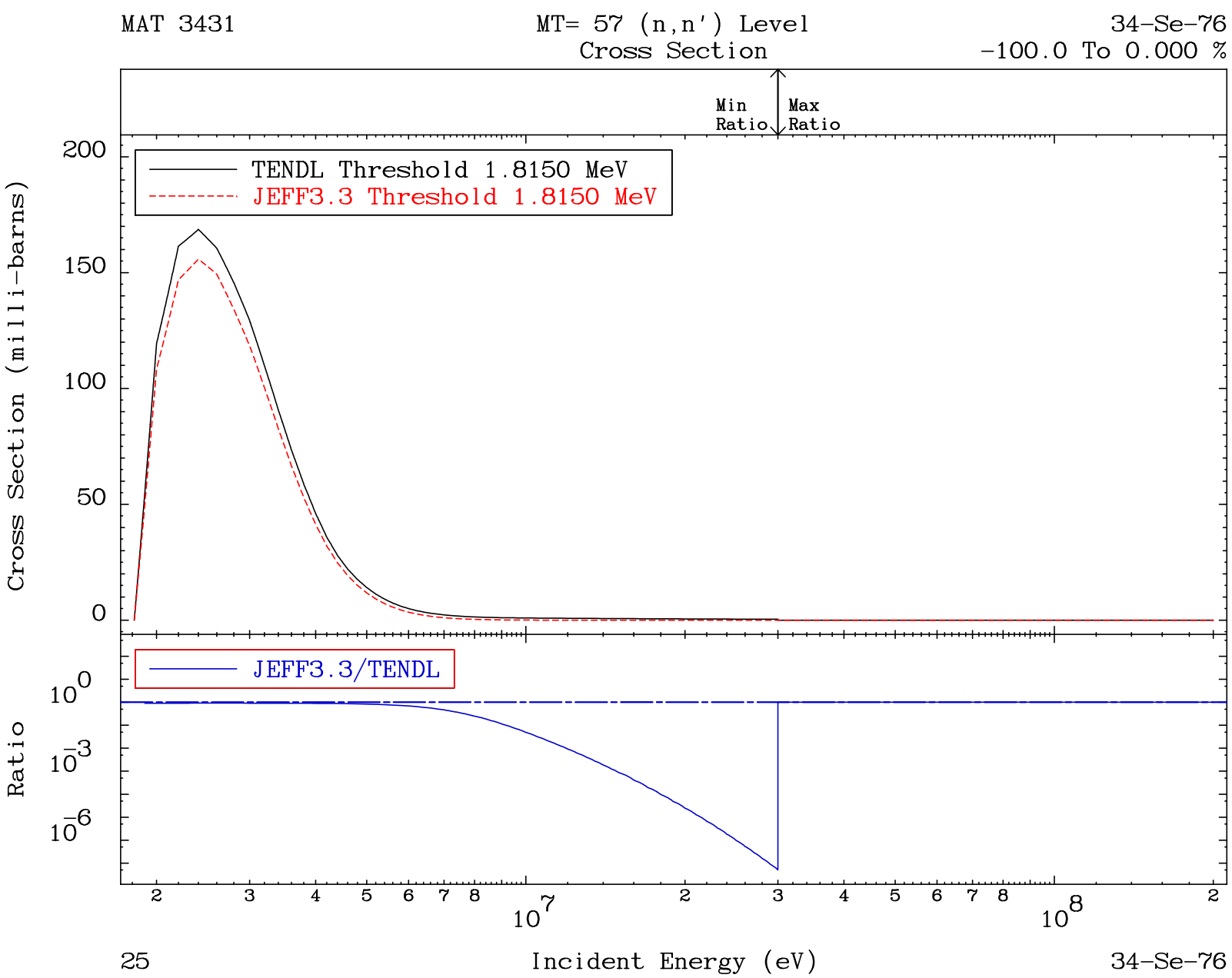

MAT 3431
MT= 52 (n,n') Level
Cross Section
34-Se-76
-2.677 To 1.427 %
Min Ratio
Max Ratio
TENDL Threshold 1.1372 MeV
JEFF3.3 Threshold 1.1372 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
34-Se-76

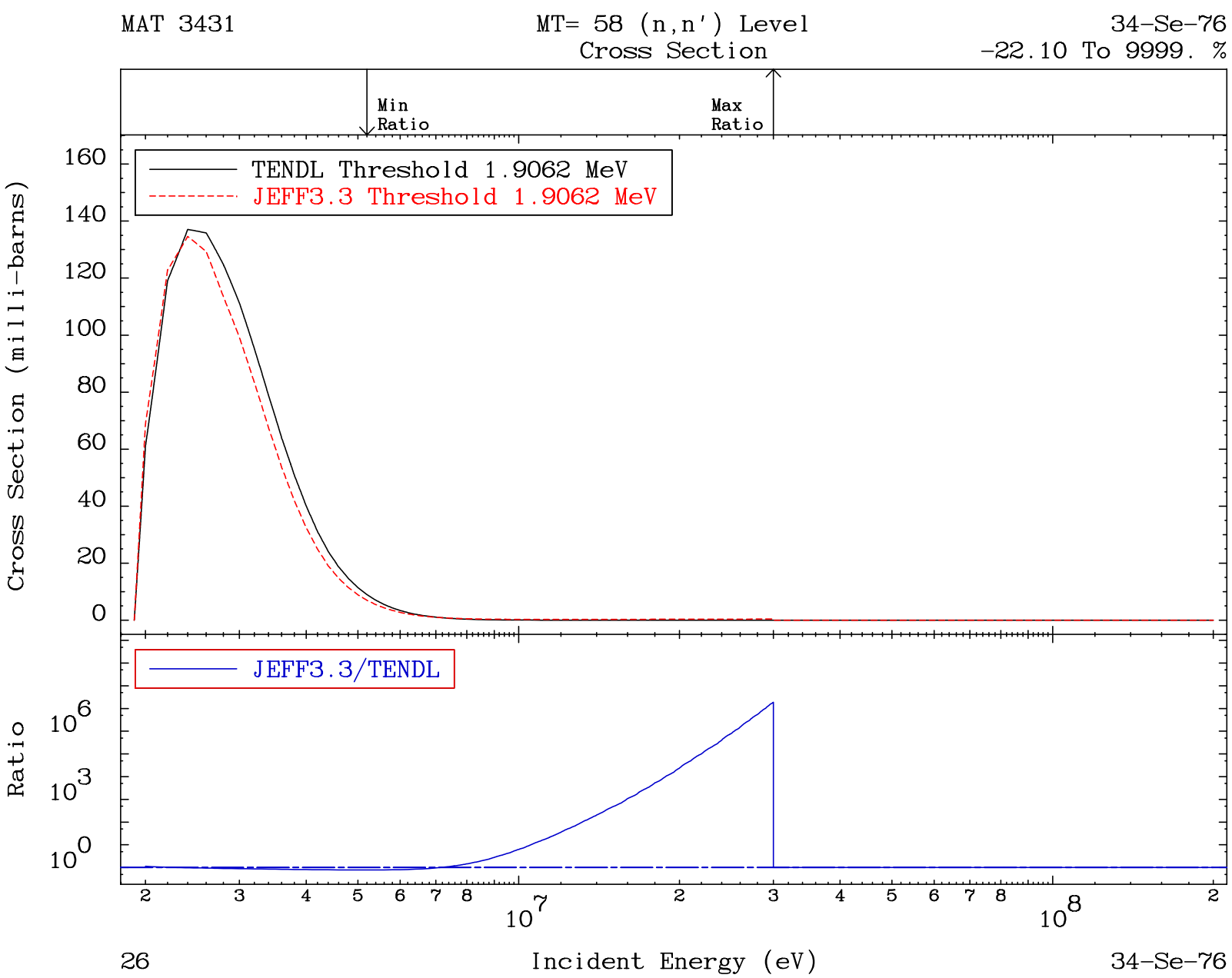

MAT 3431
MT= 53 (n,n') Level
Cross Section
34-Se-76
-0.021 To 1.279 %
Min Ratio
Max Ratio
TENDL Threshold 1.2323 MeV
JEFF3.3 Threshold 1.2323 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
34-Se-76

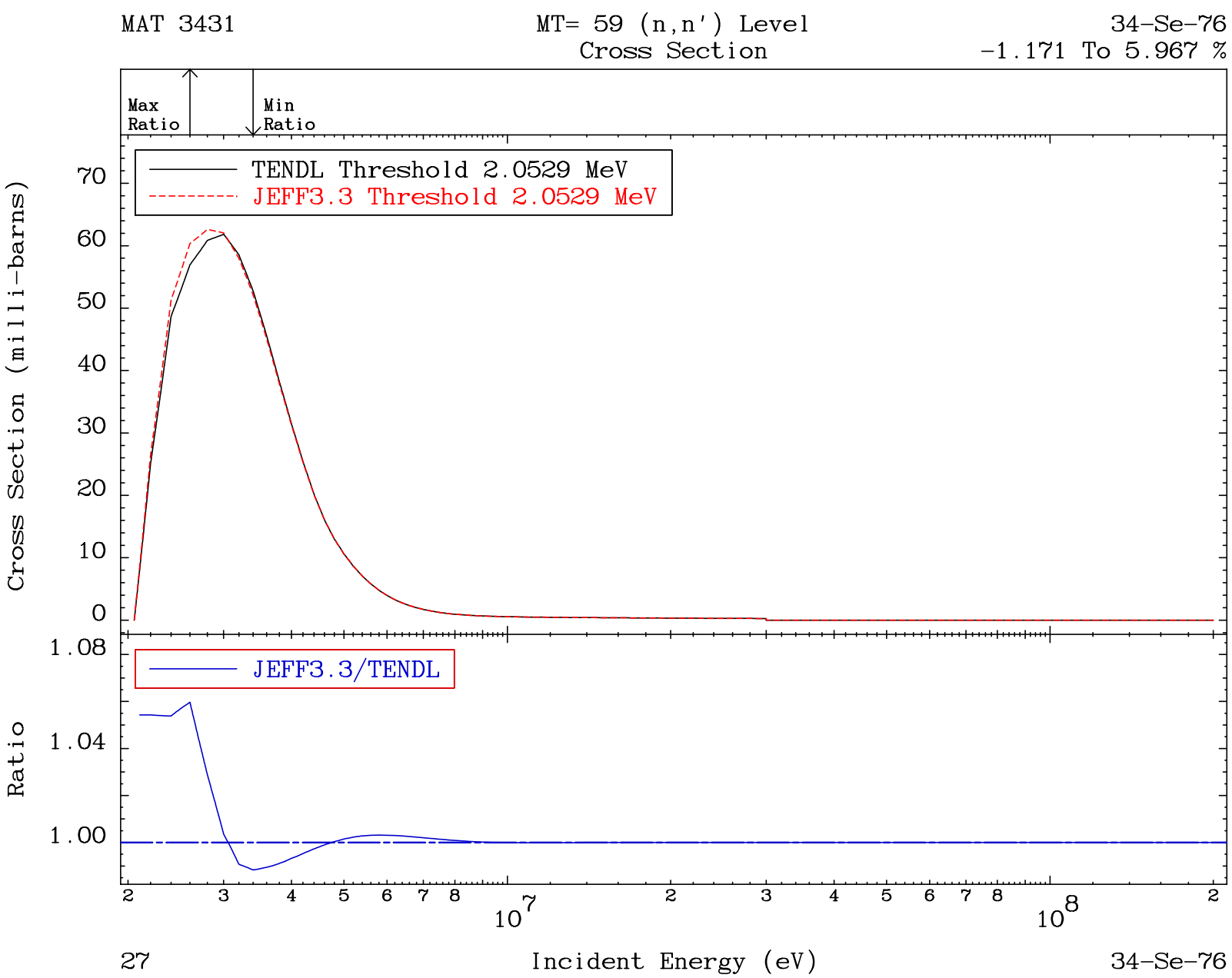

MAT 3431
MT= 54 (n,n') Level
Cross Section
34-Se-76
-0.553 To 4.701 %
Max Ratio
Min Ratio
TENDL Threshold 1.3485 MeV
JEFF3.3 Threshold 1.3485 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
34-Se-76

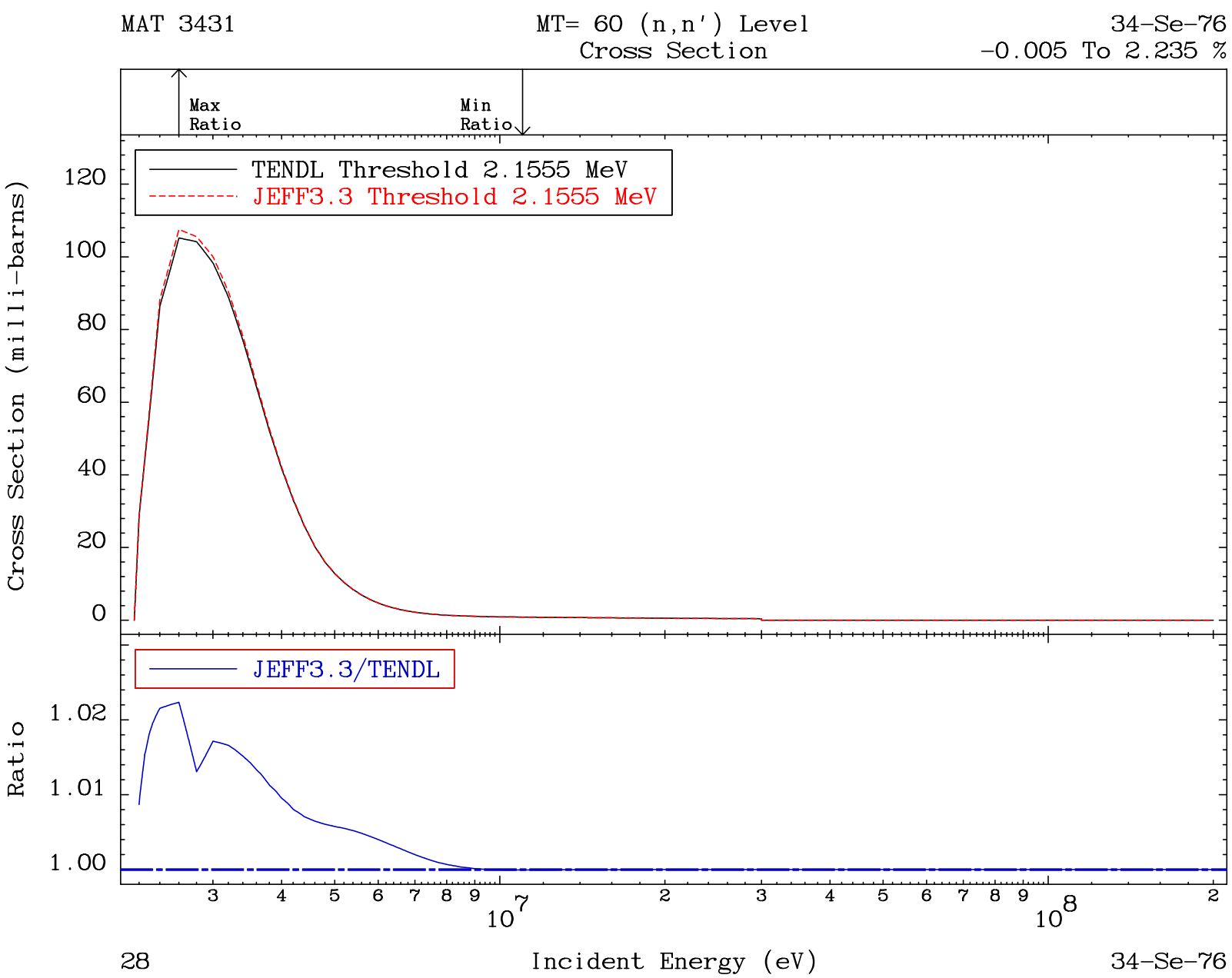

MAT 3431
MT= 55 (n,n') Level
Cross Section
34-Se-76
-3.028 To 3.915 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.7114 MeV
JEFF3.3 Threshold 1.7114 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.04
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
34-Se-76

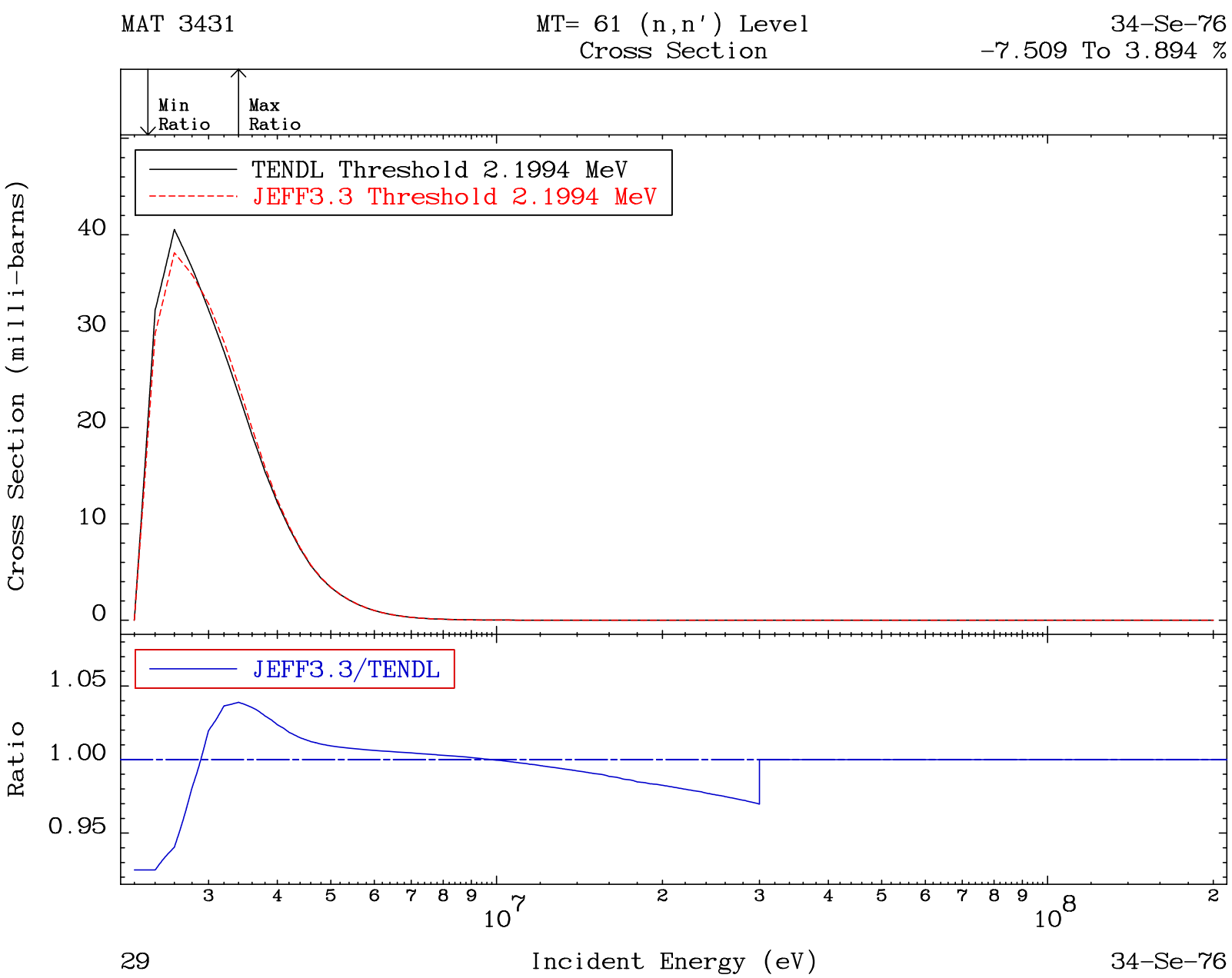

MAT 3431
MT= 56 (n,n') Level
Cross Section
34-Se-76
-0.005 To 1.786 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8114 MeV
JEFF3.3 Threshold 1.8114 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
34-Se-76

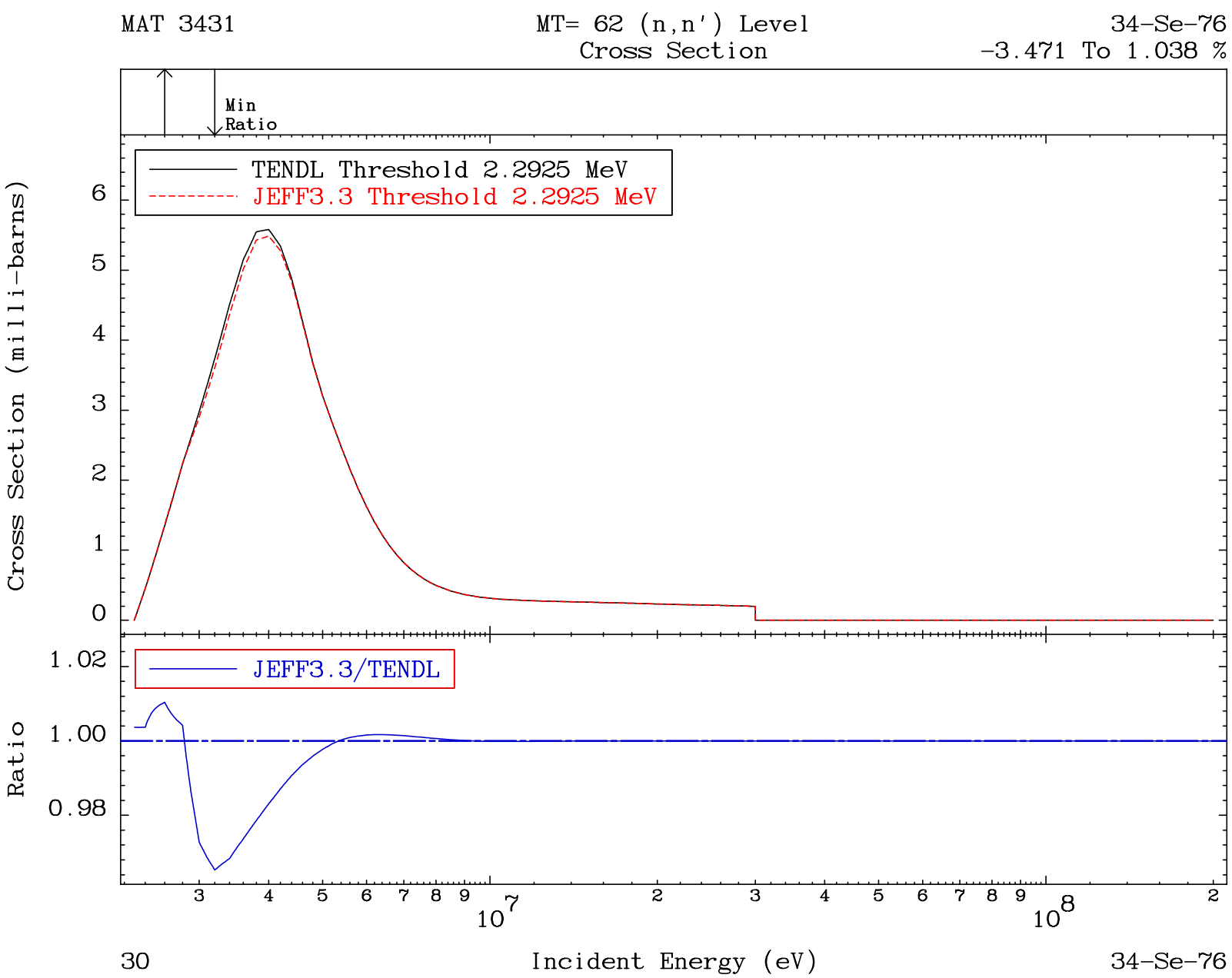

MAT 3431
MT= 57 (n,n') Level
Cross Section
34-Se-76
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.8150 MeV
JEFF3.3 Threshold 1.8150 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
34-Se-76

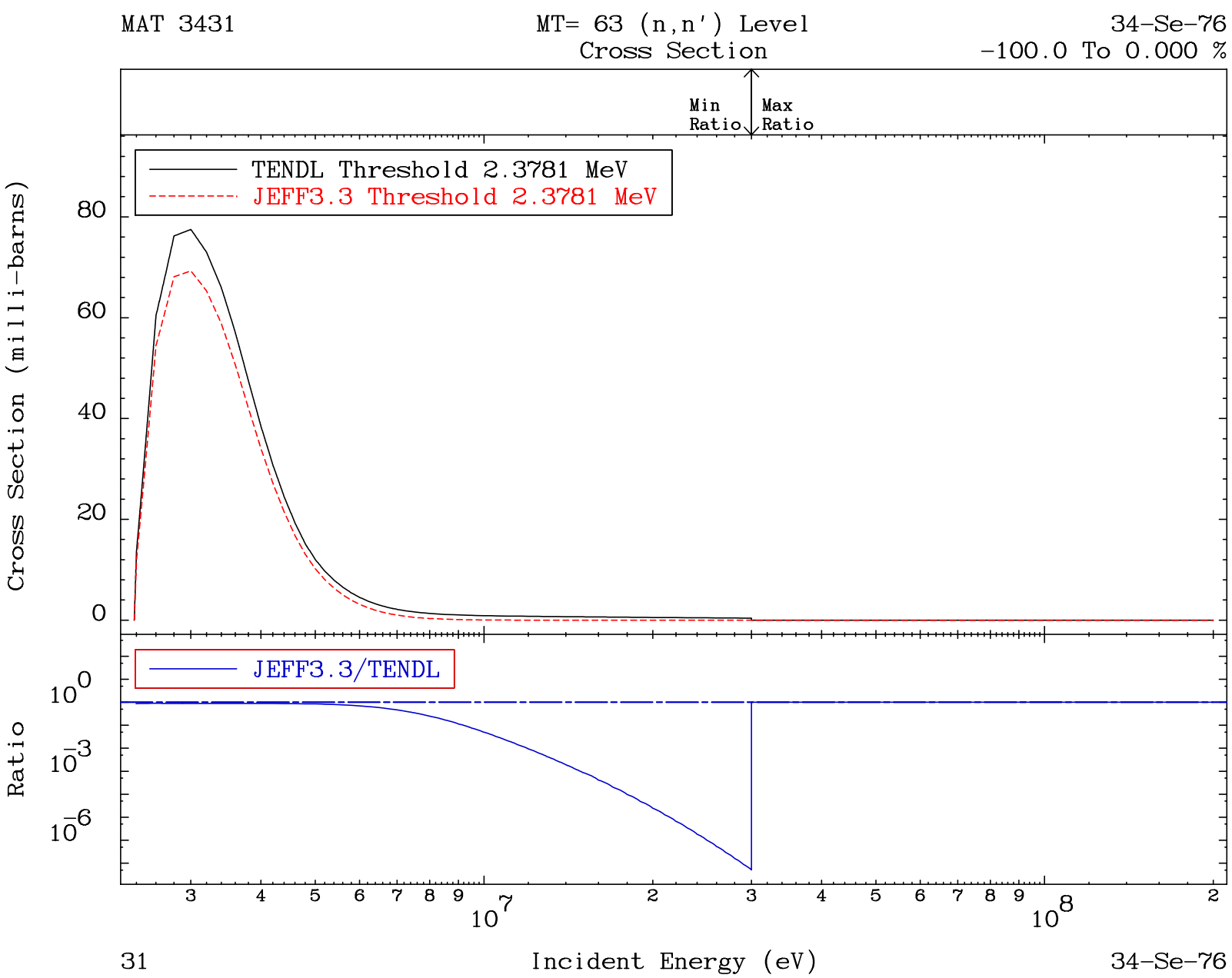

MAT 3431
MT= 58 (n,n') Level
Cross Section
34-Se-76
-22.10 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.9062 MeV
JEFF3.3 Threshold 1.9062 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
34-Se-76

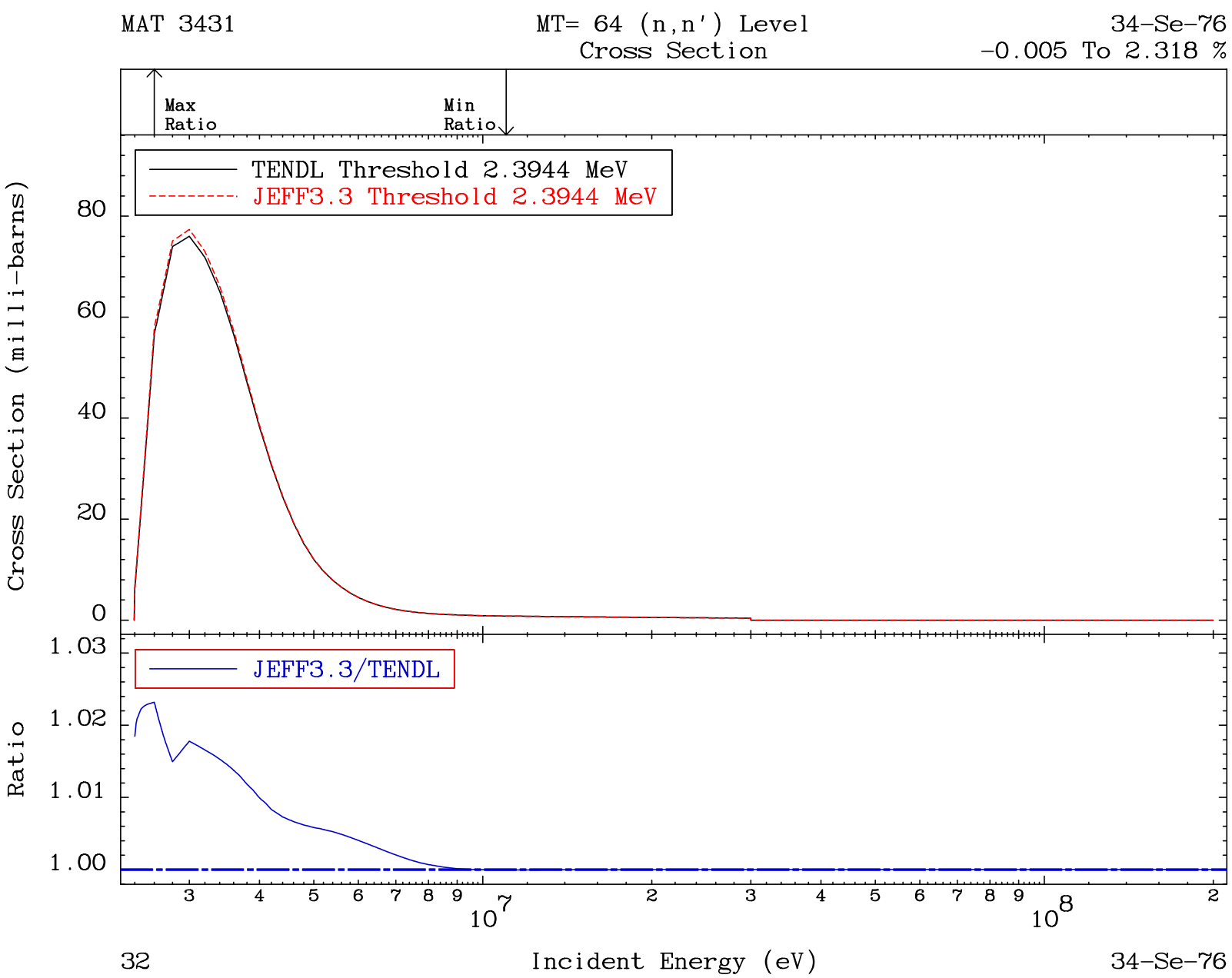

MAT 3431
MT= 59 (n,n') Level
Cross Section
34-Se-76
-1.171 To 5.967 %
Max Ratio
Min Ratio
TENDL Threshold 2.0529 MeV
JEFF3.3 Threshold 2.0529 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.08
1.04
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
34-Se-76

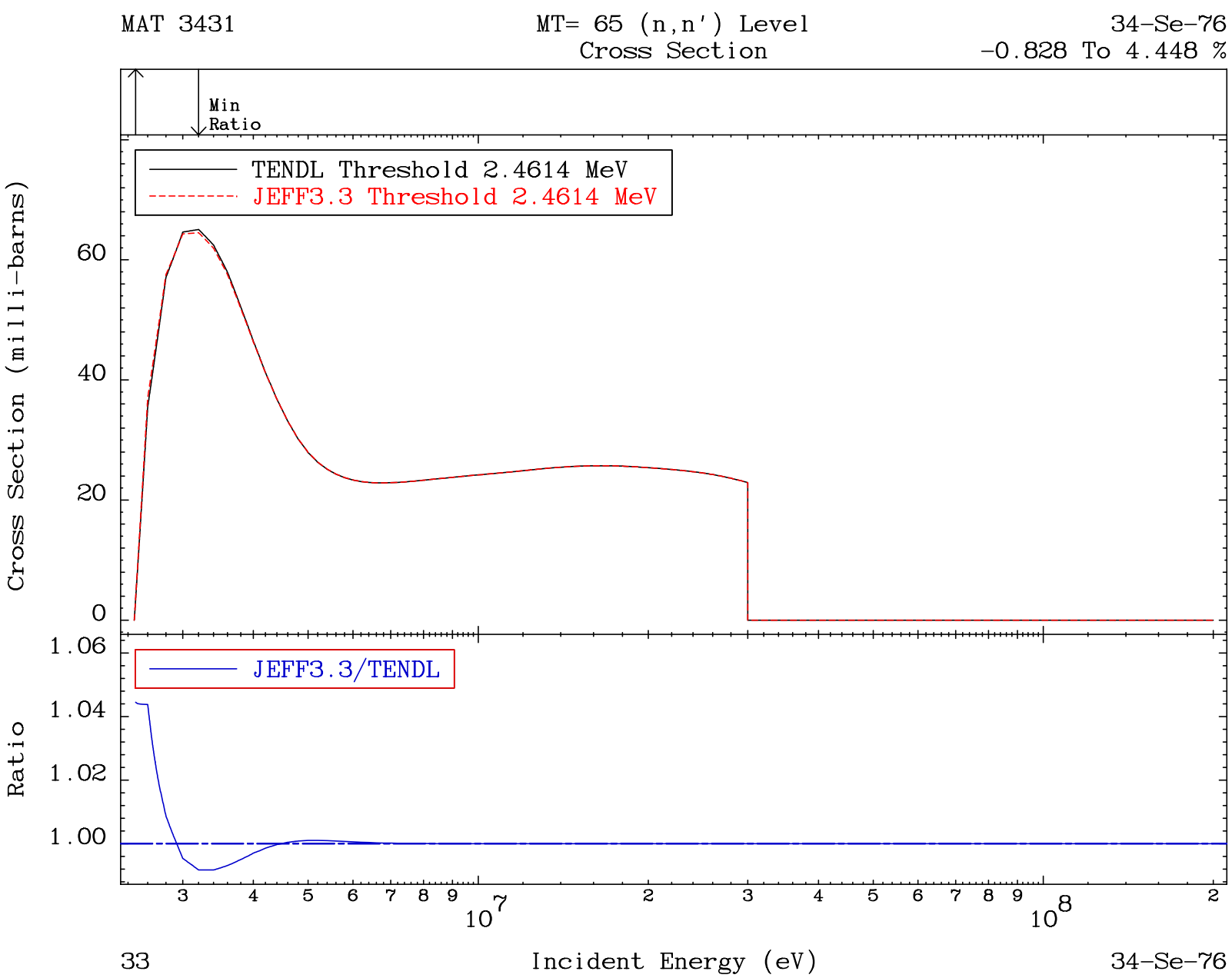

MAT 3431
MT= 60 (n,n') Level
Cross Section
34-Se-76
-0.005 To 2.235 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.1555 MeV
JEFF3.3 Threshold 2.1555 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
28
Incident Energy (eV)
34-Se-76

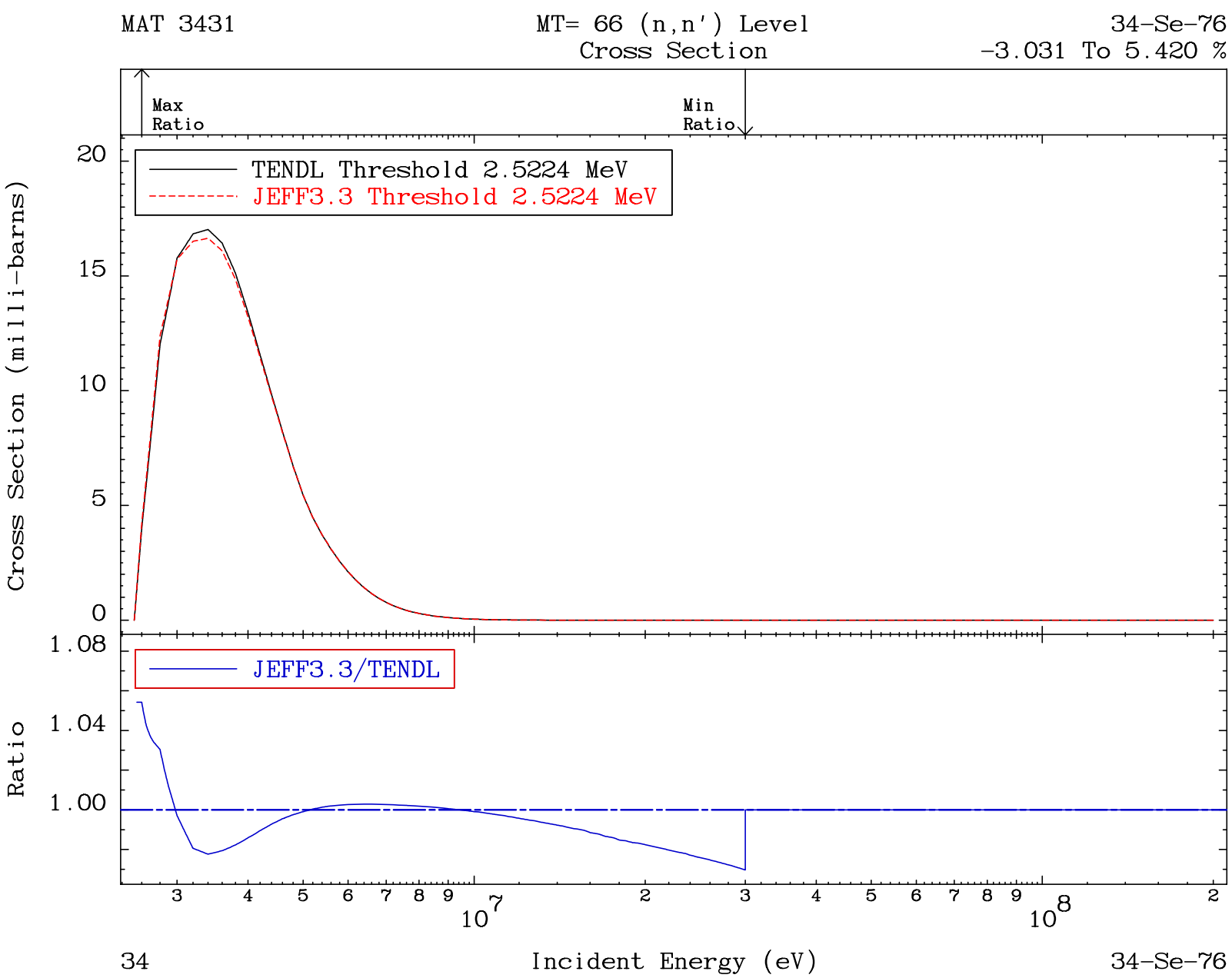

MAT 3431
MT= 61 (n,n') Level
Cross Section
34-Se-76
-7.509 To 3.894 %
Min Ratio
Max Ratio
TENDL Threshold 2.1994 MeV
JEFF3.3 Threshold 2.1994 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
34-Se-76

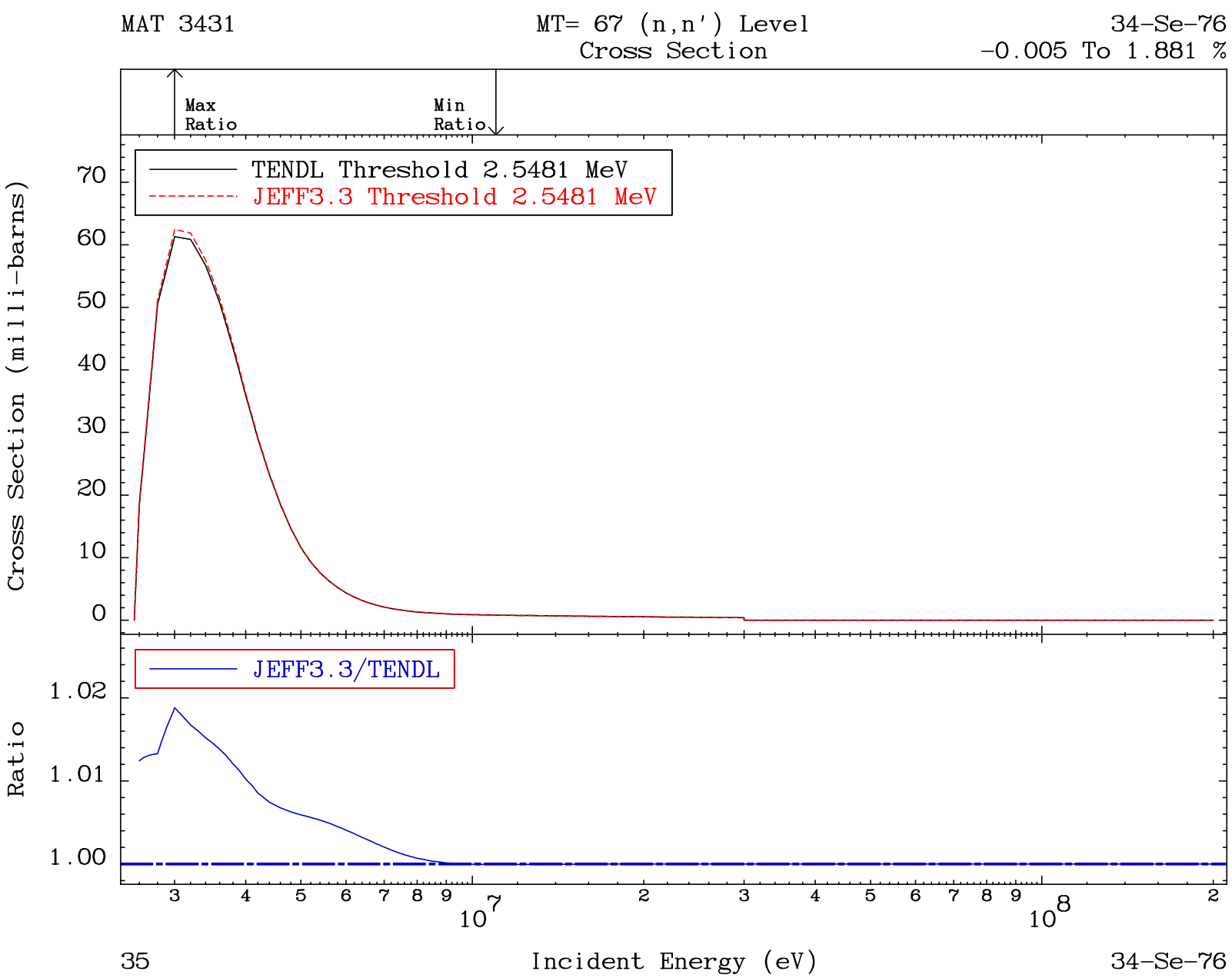

MAT 3431
MT= 62 (n,n') Level
Cross Section
34-Se-76
-3.471 To 1.038 %
Min
Ratio
TENDL Threshold 2.2925 MeV
JEFF3.3 Threshold 2.2925 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
0.98
1.00
1.02
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
34-Se-76

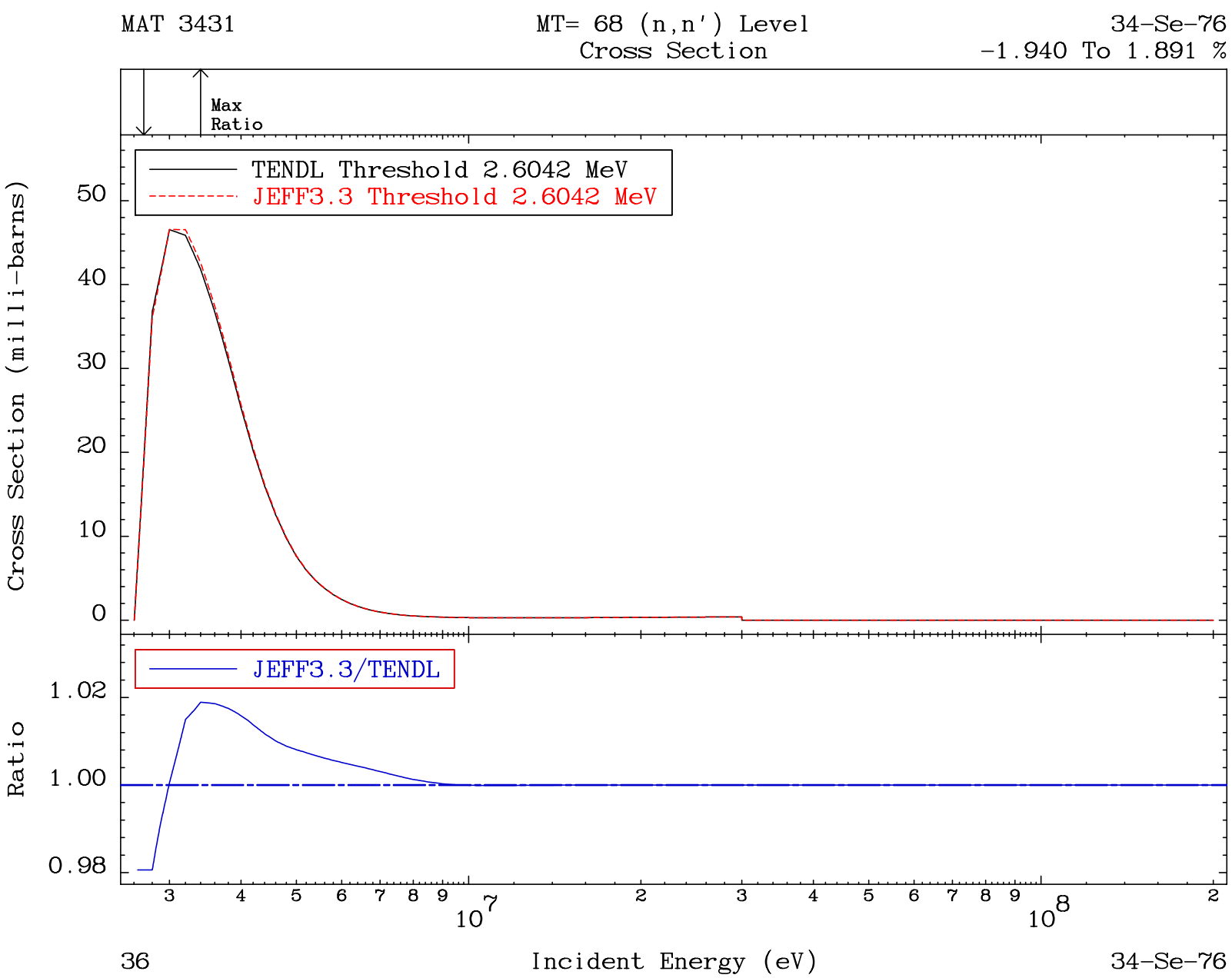

MAT 3431
MT= 63 (n,n') Level
Cross Section
34-Se-76
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.3781 MeV
JEFF3.3 Threshold 2.3781 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
34-Se-76

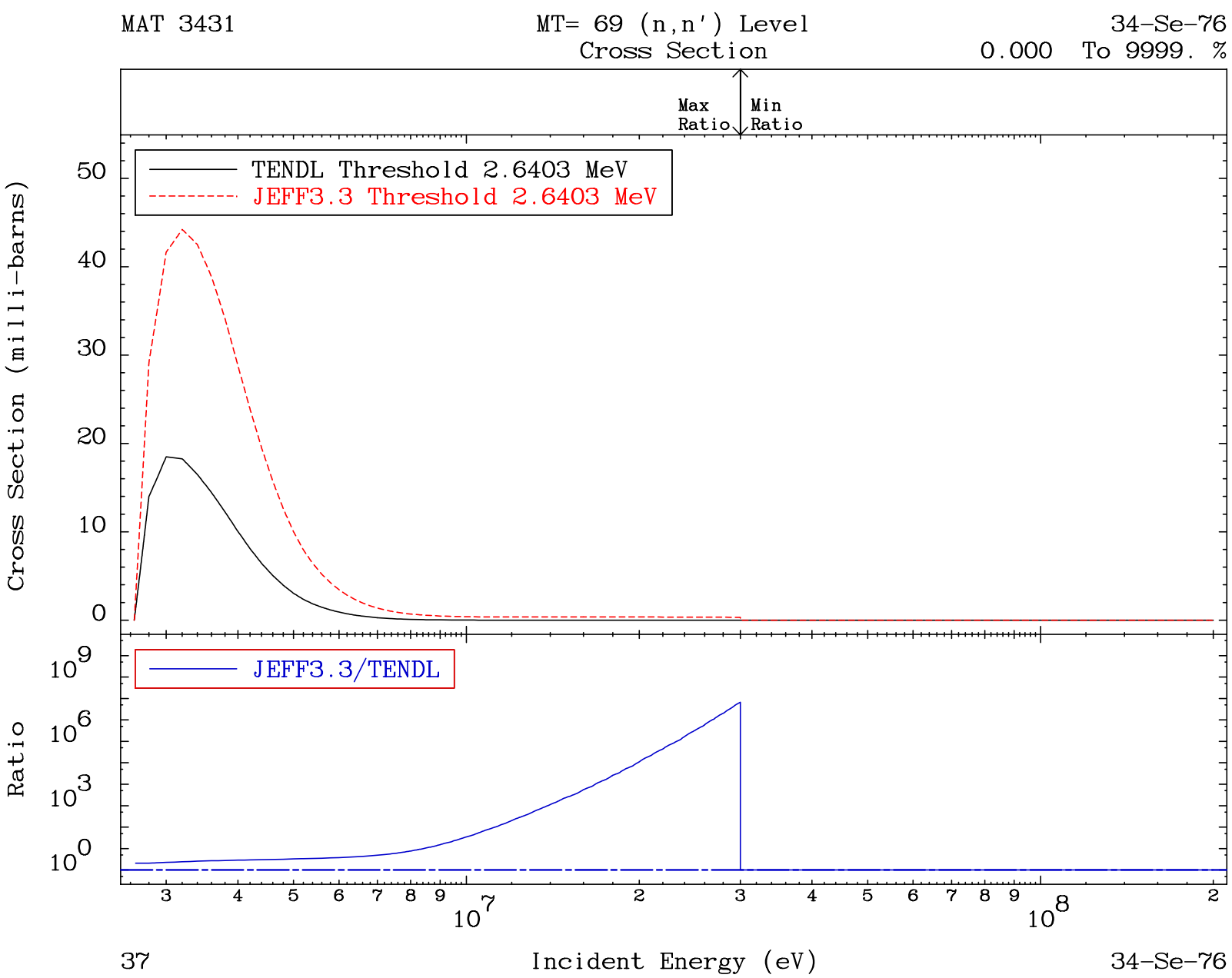

MAT 3431
MT= 64 (n,n') Level
Cross Section
34-Se-76
-0.005 To 2.318 %
Max Ratio
Min Ratio
TENDL Threshold 2.3944 MeV
JEFF3.3 Threshold 2.3944 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.03
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
32
Incident Energy (eV)
34-Se-76

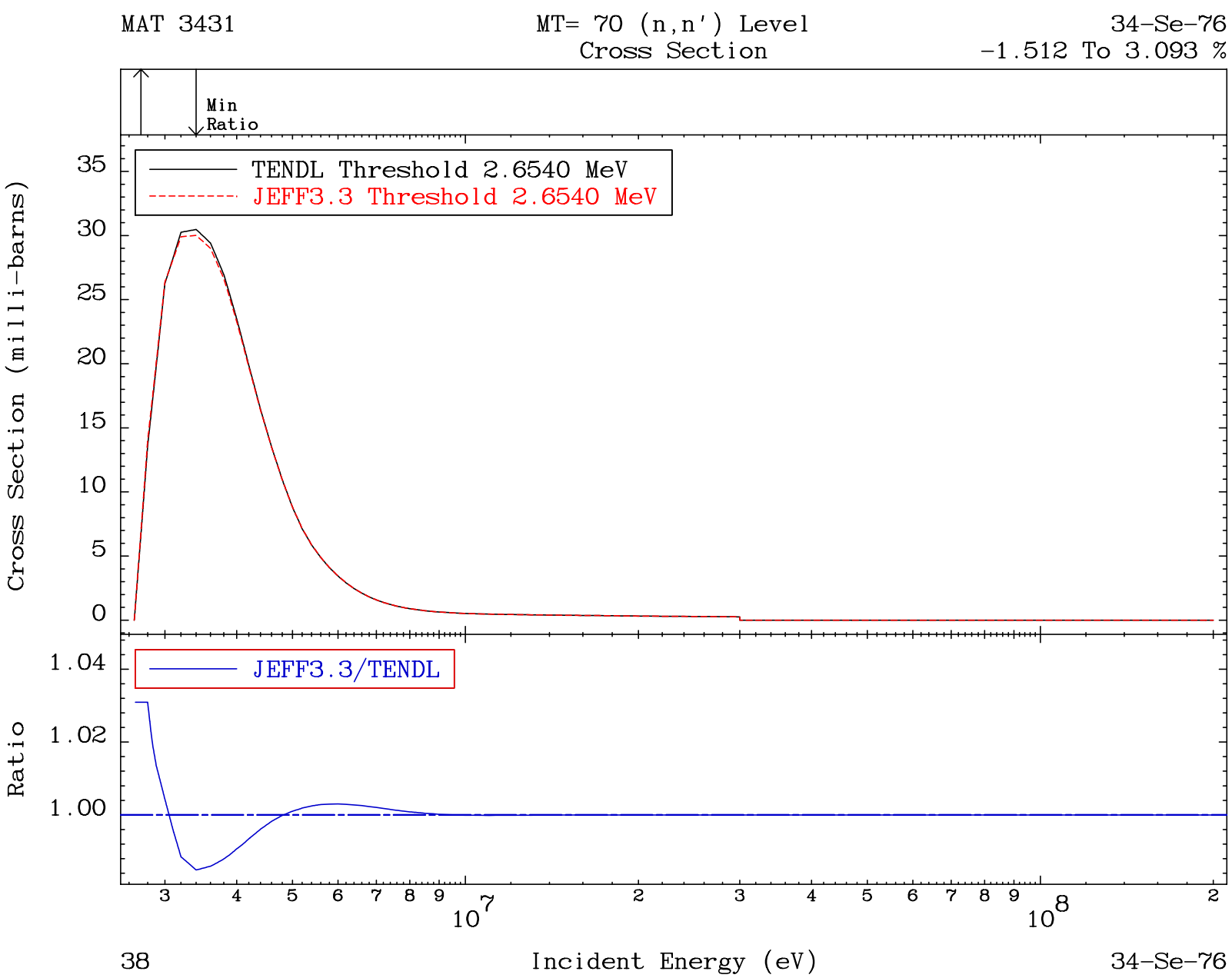

MAT 3431
MT= 65 (n,n') Level
Cross Section
34-Se-76
-0.828 To 4.448 %
Min
Ratio
TENDL Threshold 2.4614 MeV
JEFF3.3 Threshold 2.4614 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
33
Incident Energy (eV)
34-Se-76

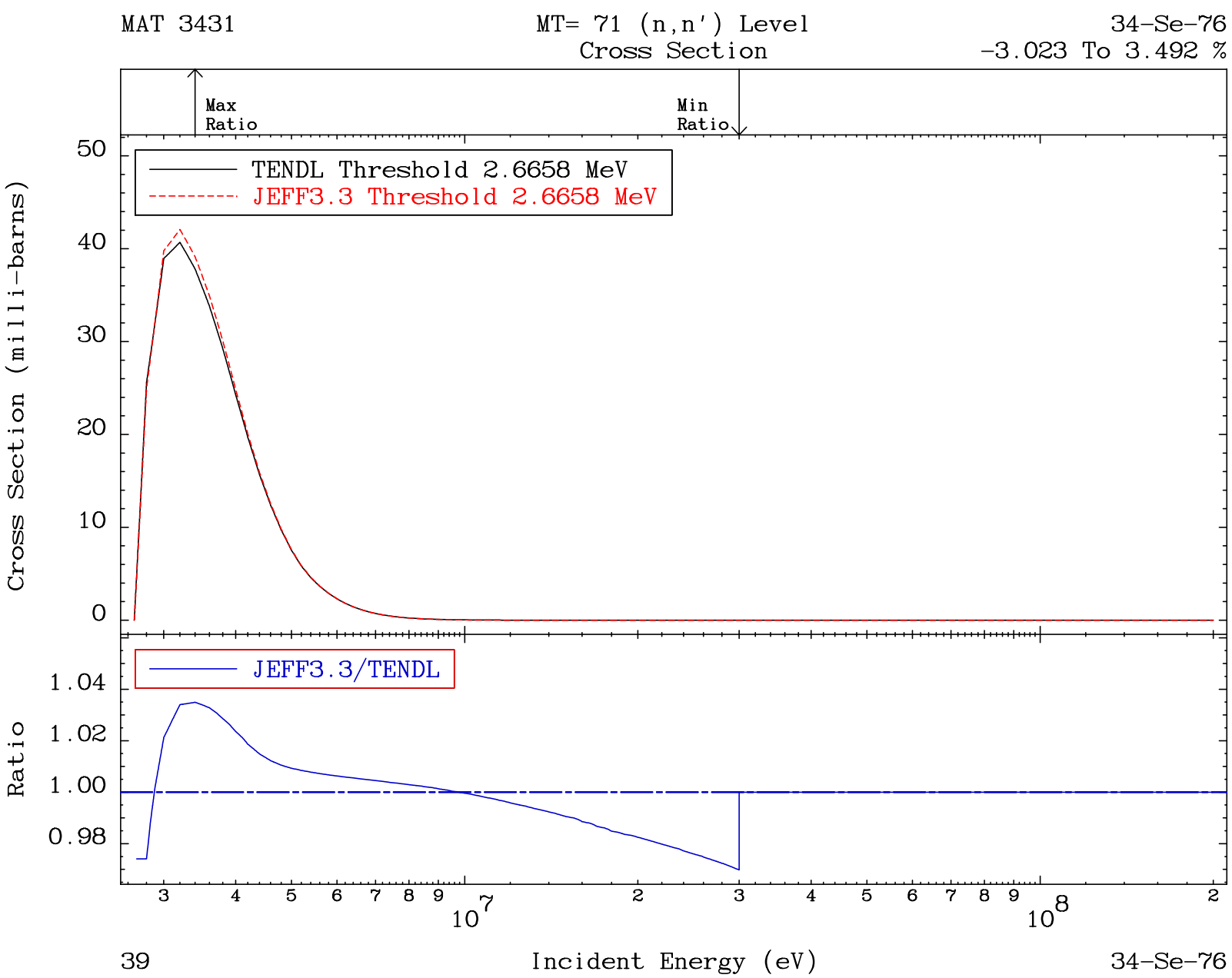

MAT 3431
MT= 66 (n,n') Level
Cross Section
34-Se-76
-3.031 To 5.420 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.5224 MeV
JEFF3.3 Threshold 2.5224 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.08
1.04
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
34-Se-76

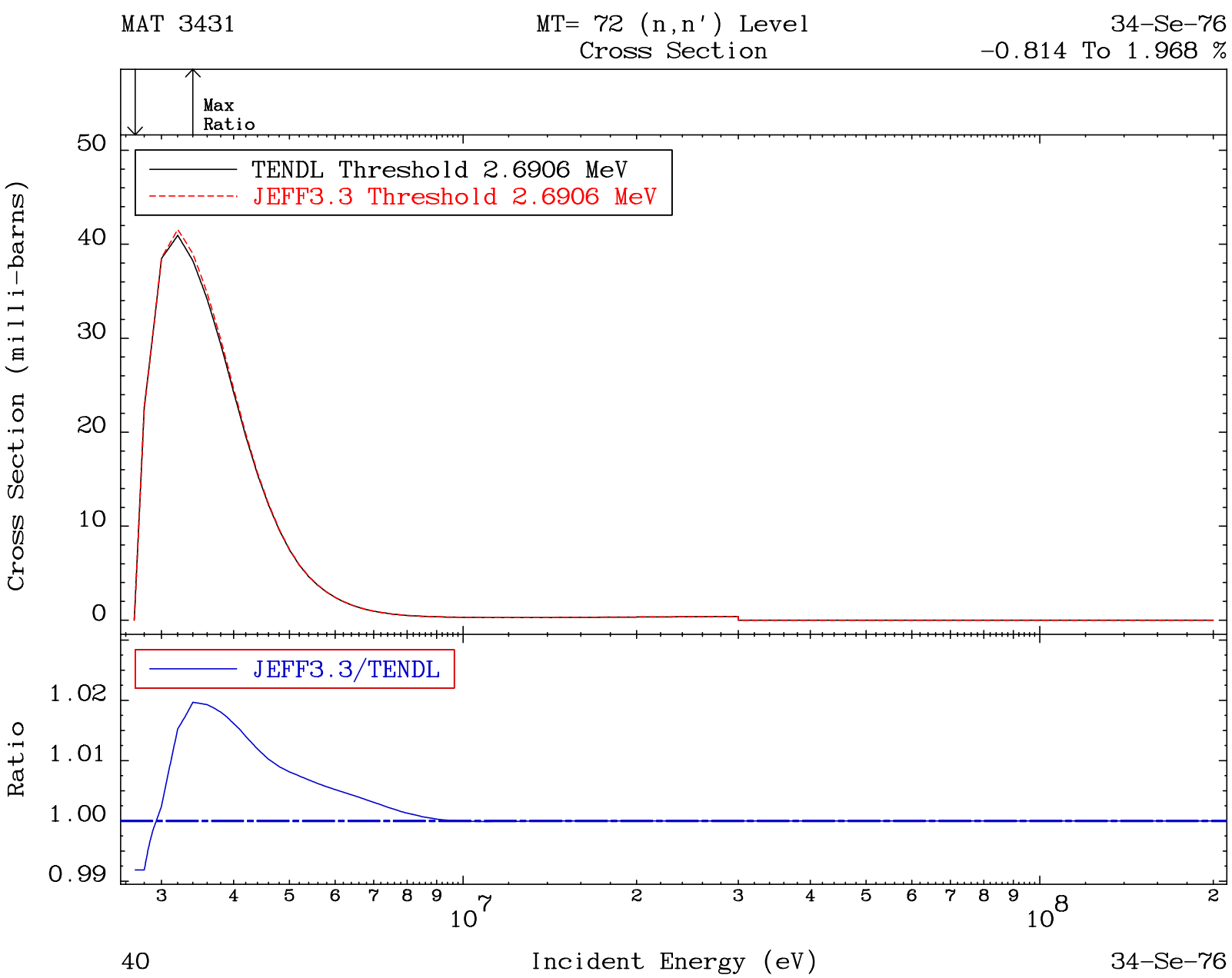

MAT 3431
MT= 67 (n,n') Level
Cross Section
34-Se-76
-0.005 To 1.881 %
Max Ratio
Min Ratio
TENDL Threshold 2.5481 MeV
JEFF3.3 Threshold 2.5481 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
35
Incident Energy (eV)
34-Se-76

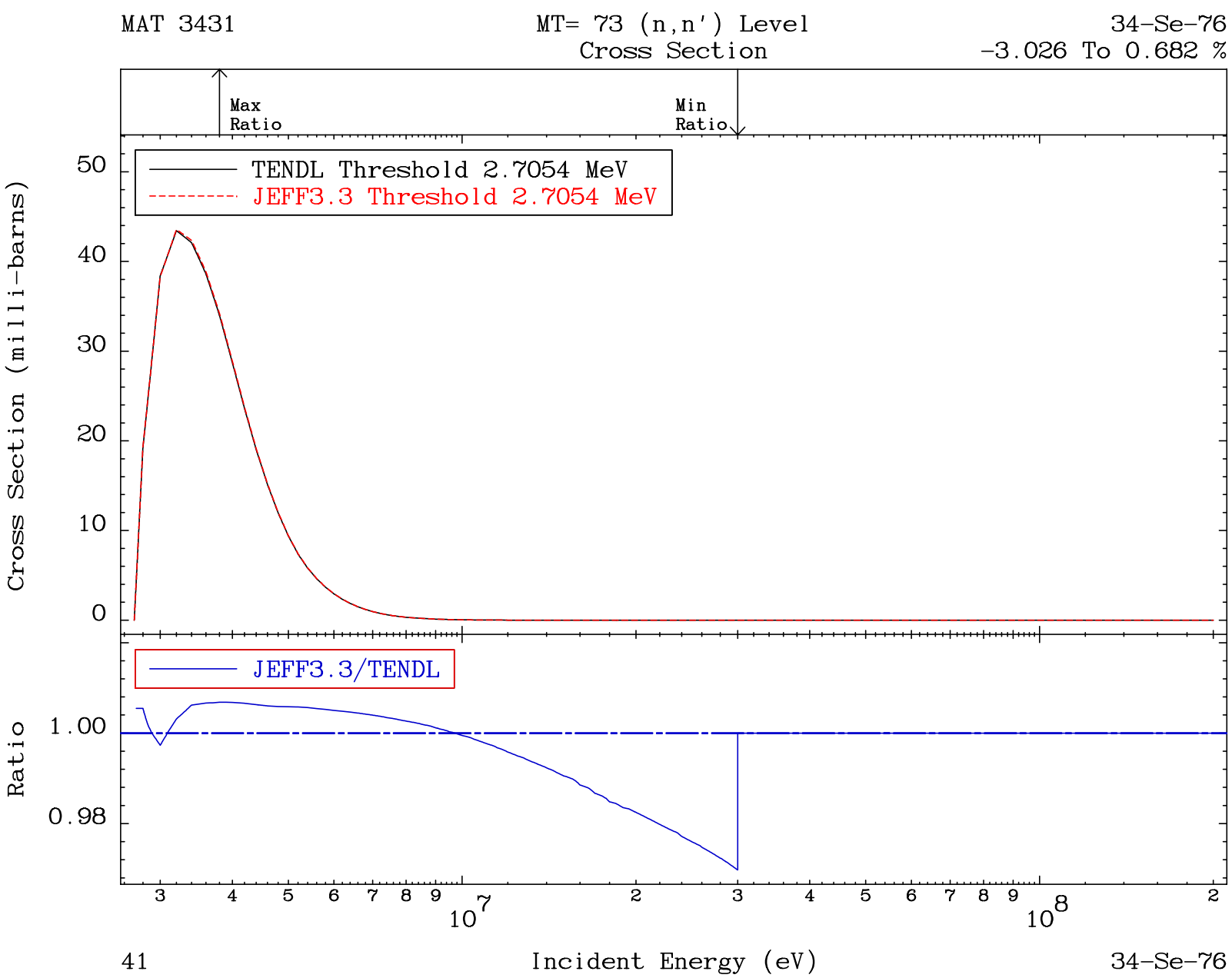

MAT 3431
MT= 68 (n,n') Level
Cross Section
34-Se-76
-1.940 To 1.891 %
Max
Ratio
TENDL Threshold 2.6042 MeV
JEFF3.3 Threshold 2.6042 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
34-Se-76

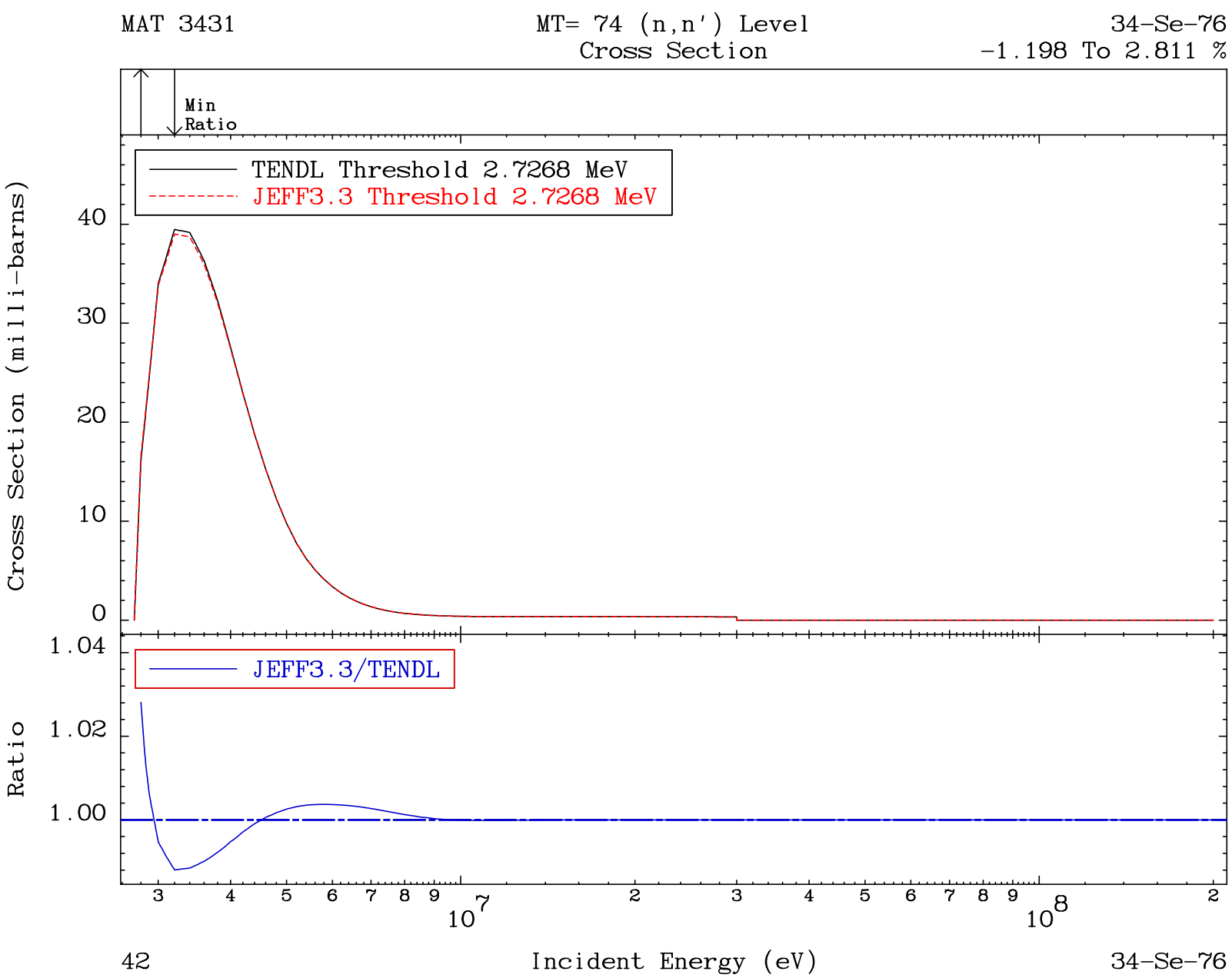

MAT 3431
MT= 69 (n,n') Level
Cross Section
34-Se-76
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.6403 MeV
JEFF3.3 Threshold 2.6403 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
37
Incident Energy (eV)
34-Se-76

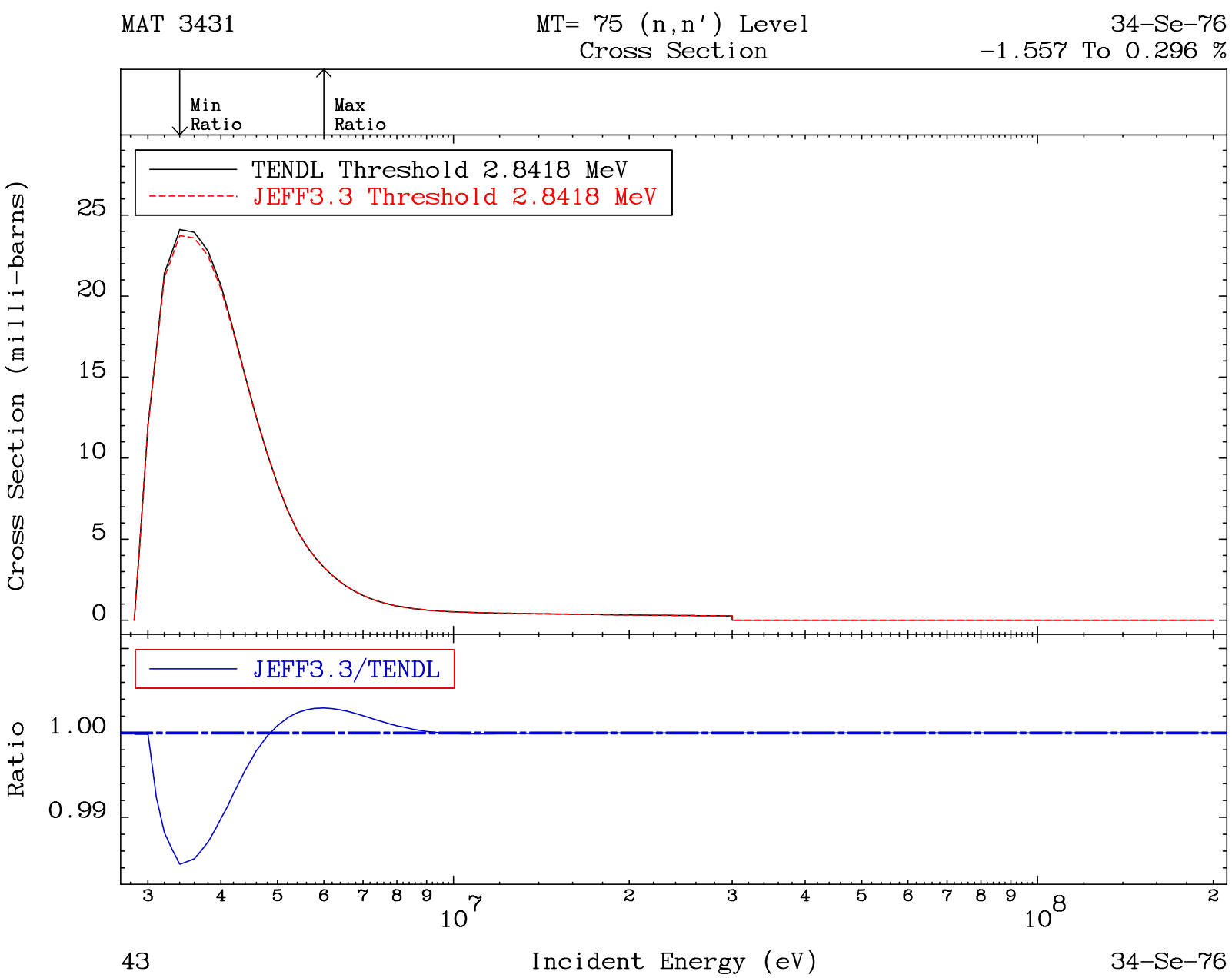

MAT 3431
MT= 70 (n,n') Level
Cross Section
34-Se-76
-1.512 To 3.093 %
Min
Ratio
TENDL Threshold 2.6540 MeV
JEFF3.3 Threshold 2.6540 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
34-Se-76

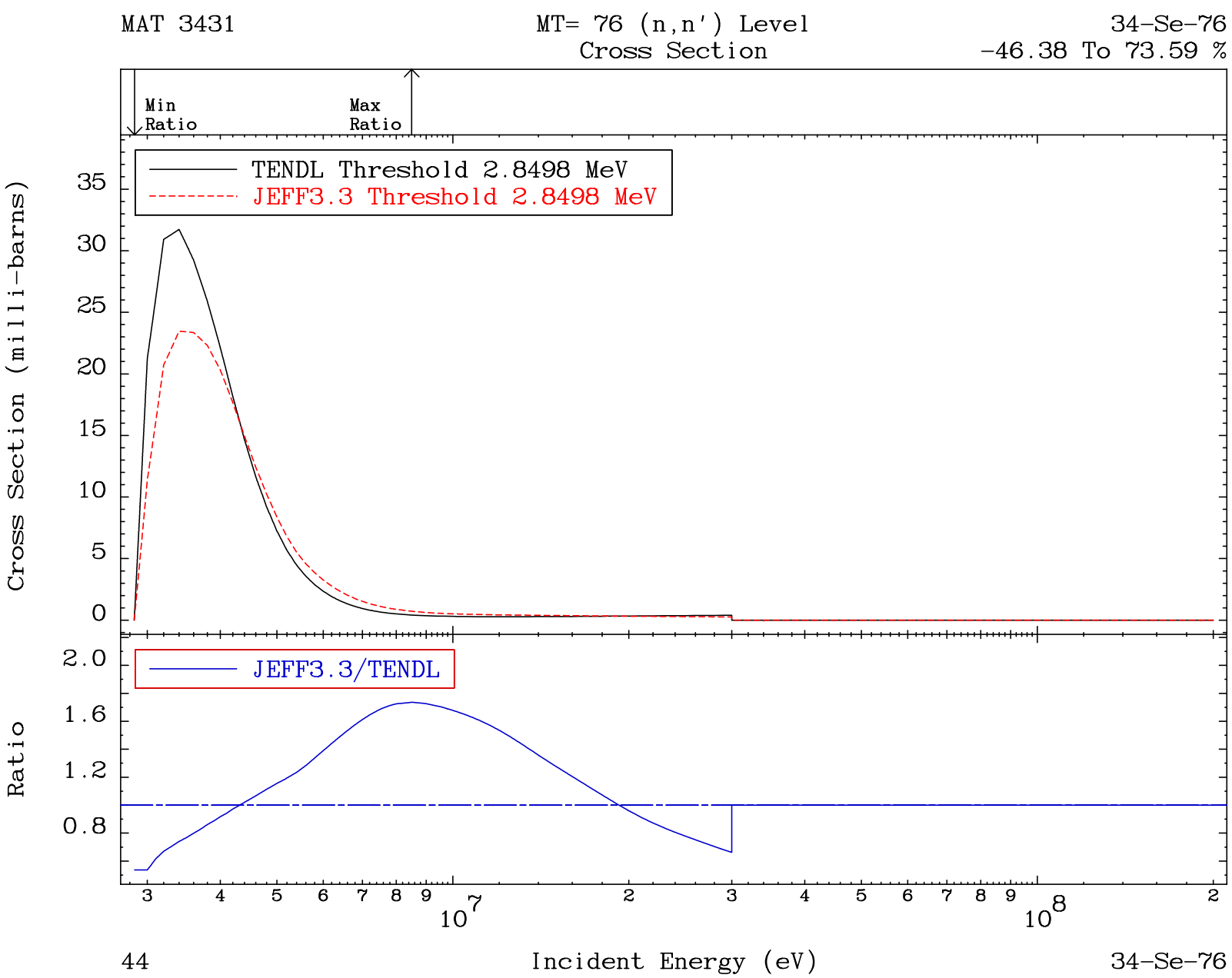

MAT 3431
MT= 71 (n,n') Level
Cross Section
34-Se-76
-3.023 To 3.492 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.6658 MeV
JEFF3.3 Threshold 2.6658 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
39
Incident Energy (eV)
34-Se-76

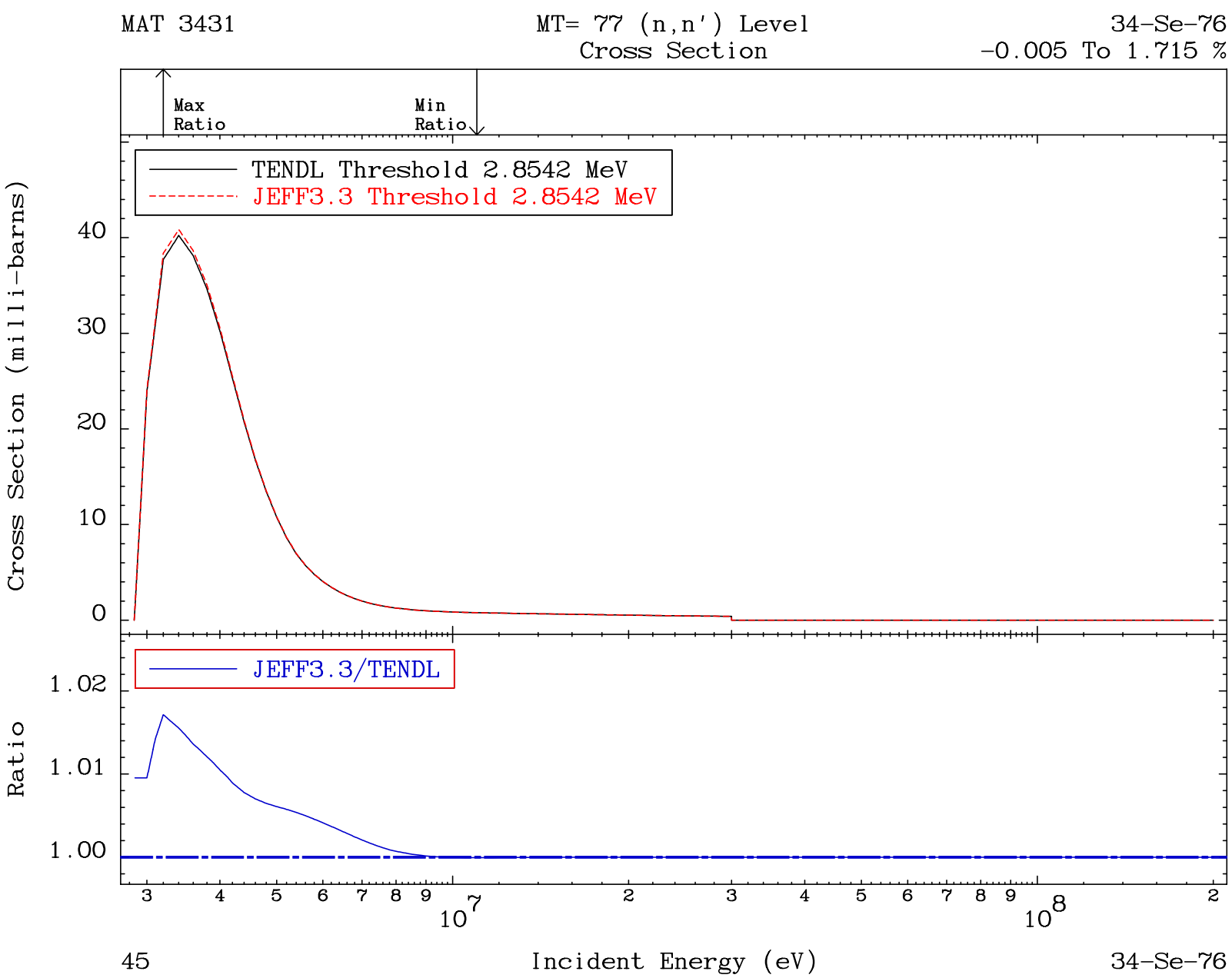

MAT 3431
MT= 72 (n,n') Level
Cross Section
34-Se-76
-0.814 To 1.968 %
Max
Ratio
TENDL Threshold 2.6906 MeV
JEFF3.3 Threshold 2.6906 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
40
Incident Energy (eV)
34-Se-76

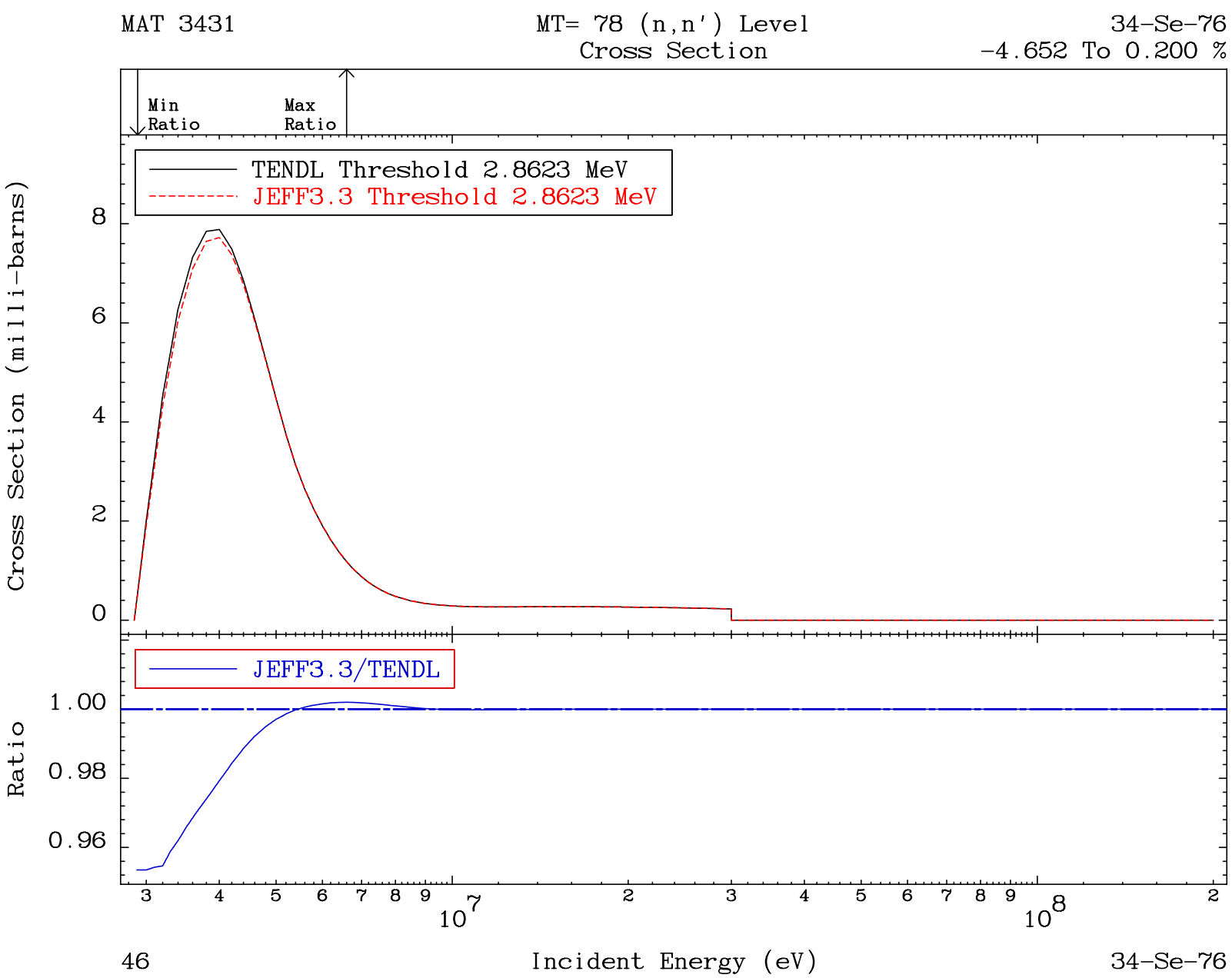

MAT 3431
MT= 73 (n,n') Level
Cross Section
34-Se-76
-3.026 To 0.682 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.7054 MeV
JEFF3.3 Threshold 2.7054 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.98
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
34-Se-76

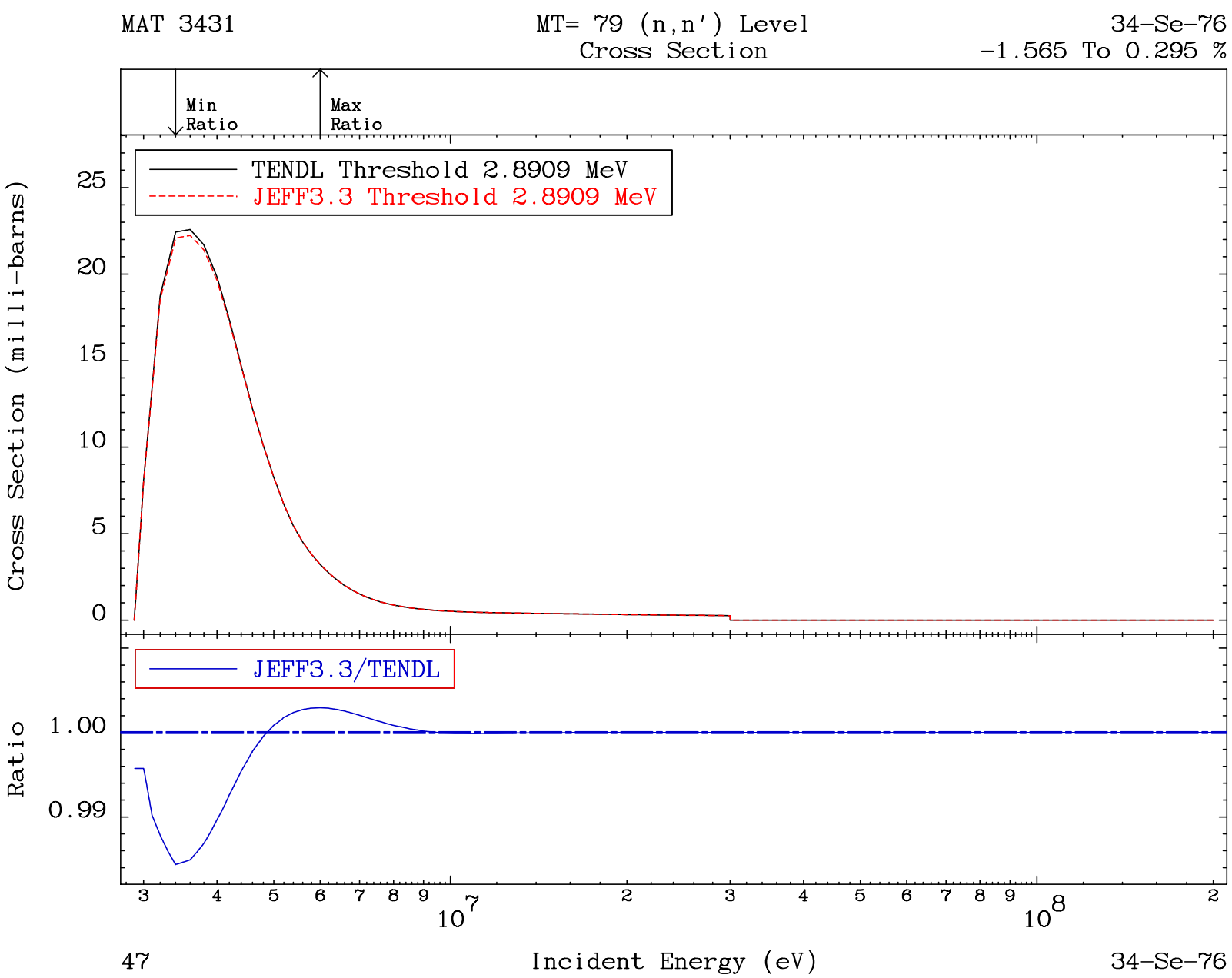

MAT 3431
MT= 74 (n,n') Level
Cross Section
34-Se-76
-1.198 To 2.811 %
Min
Ratio
TENDL Threshold 2.7268 MeV
JEFF3.3 Threshold 2.7268 MeV
Cross Section (milli-barns)
40
30
20
10
0
1.04
1.02
1.00
Ratio
JEFF3.3/TENDL
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
42
Incident Energy (eV)
34-Se-76

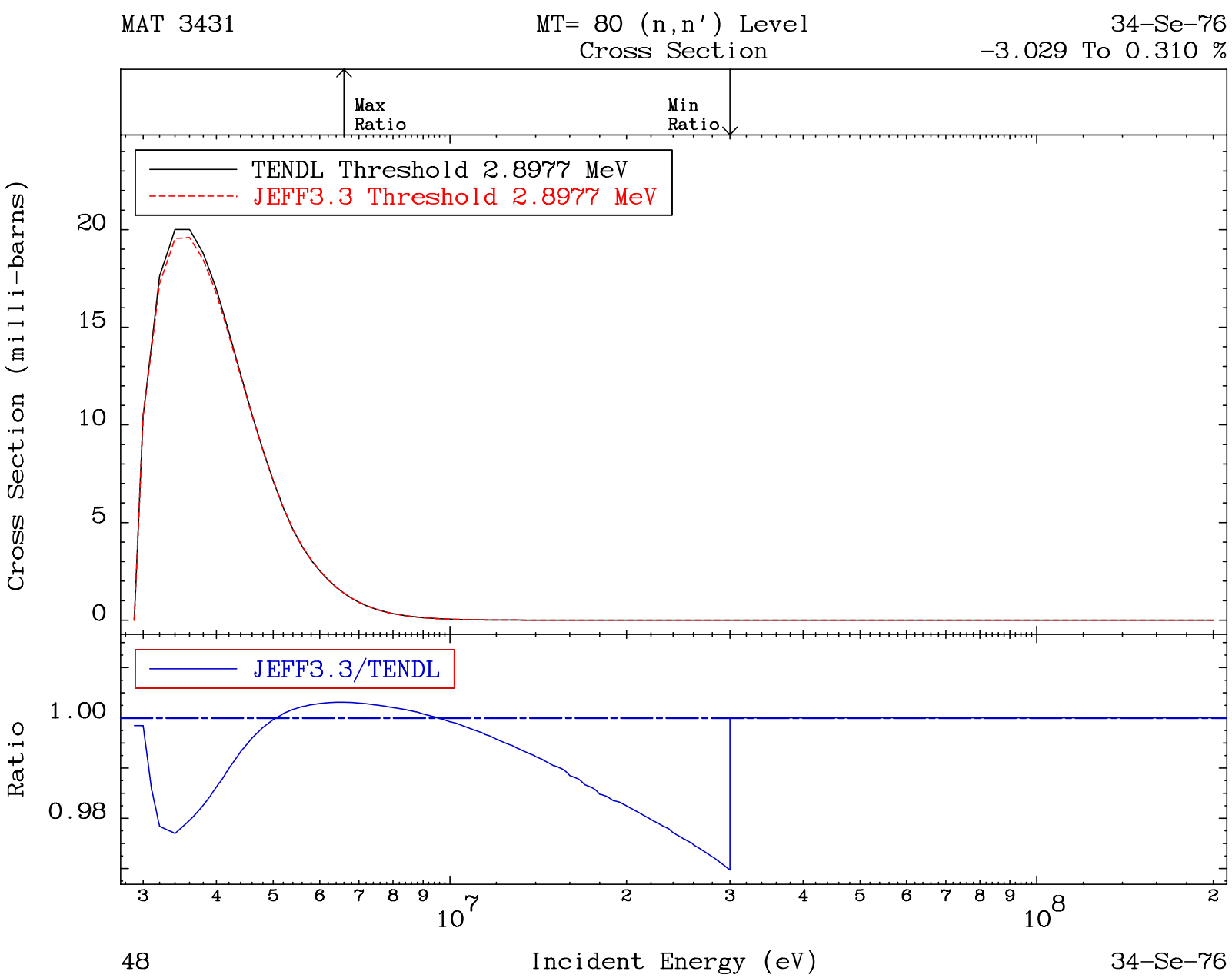

MAT 3431
MT= 75 (n,n') Level
Cross Section
34-Se-76
-1.557 To 0.296 %
Min Ratio
Max Ratio
TENDL Threshold 2.8418 MeV
JEFF3.3 Threshold 2.8418 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
34-Se-76

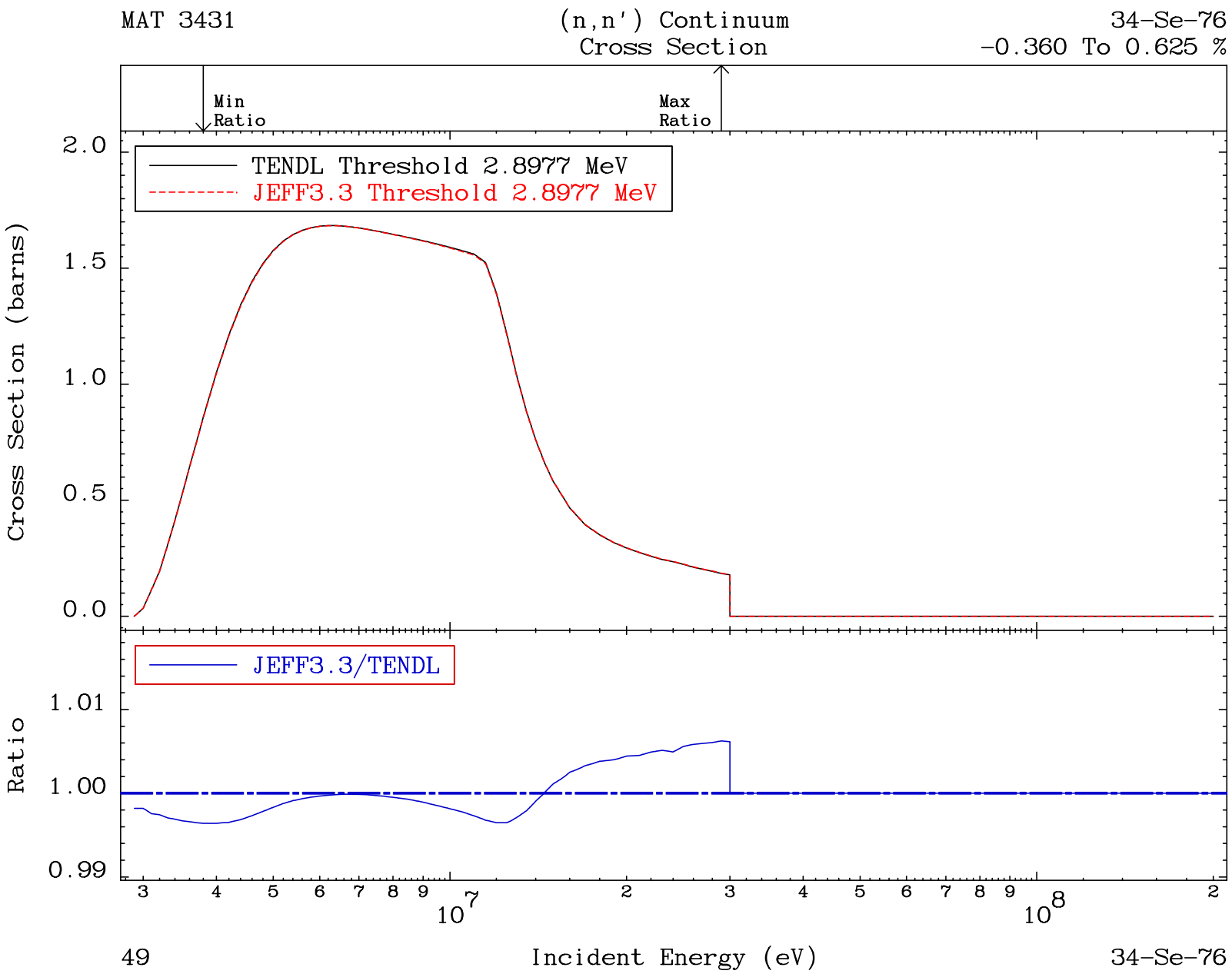

MAT 3431
MT= 76 (n,n') Level
Cross Section
34-Se-76
-46.38 To 73.59 %
Min Ratio
Max Ratio
TENDL Threshold 2.8498 MeV
JEFF3.3 Threshold 2.8498 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
0.8
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
44
Incident Energy (eV)
34-Se-76

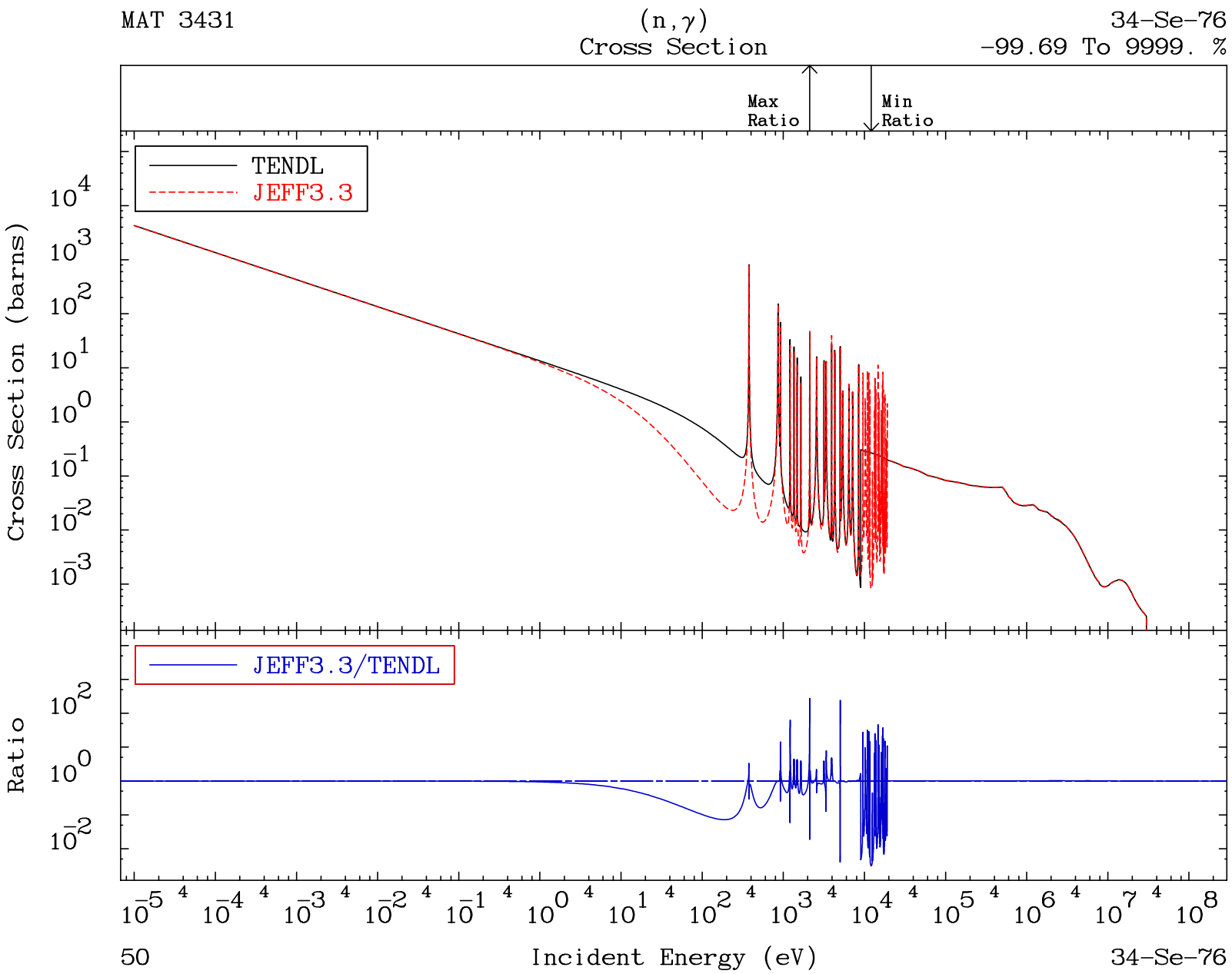

MAT 3431
MT= 77 (n,n') Level
Cross Section
34-Se-76
-0.005 To 1.715 %
Max Ratio
Min Ratio
TENDL Threshold 2.8542 MeV
JEFF3.3 Threshold 2.8542 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
45
Incident Energy (eV)
34-Se-76

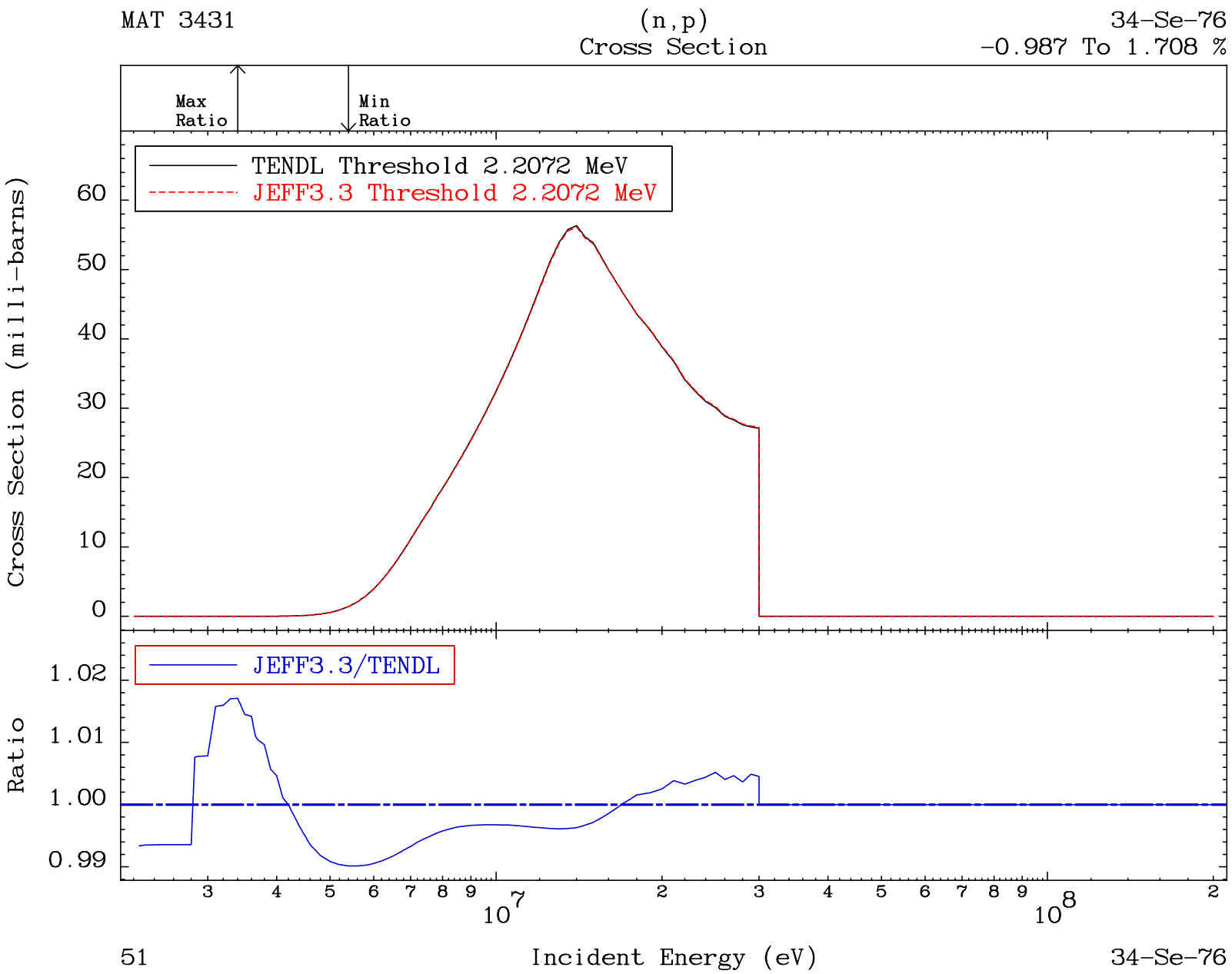

MAT 3431
MT= 78 (n,n') Level
Cross Section
34-Se-76
-4.652 To 0.200 %
Min Ratio
Max Ratio
TENDL Threshold 2.8623 MeV
JEFF3.3 Threshold 2.8623 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.96
0.98
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
46
34-Se-76

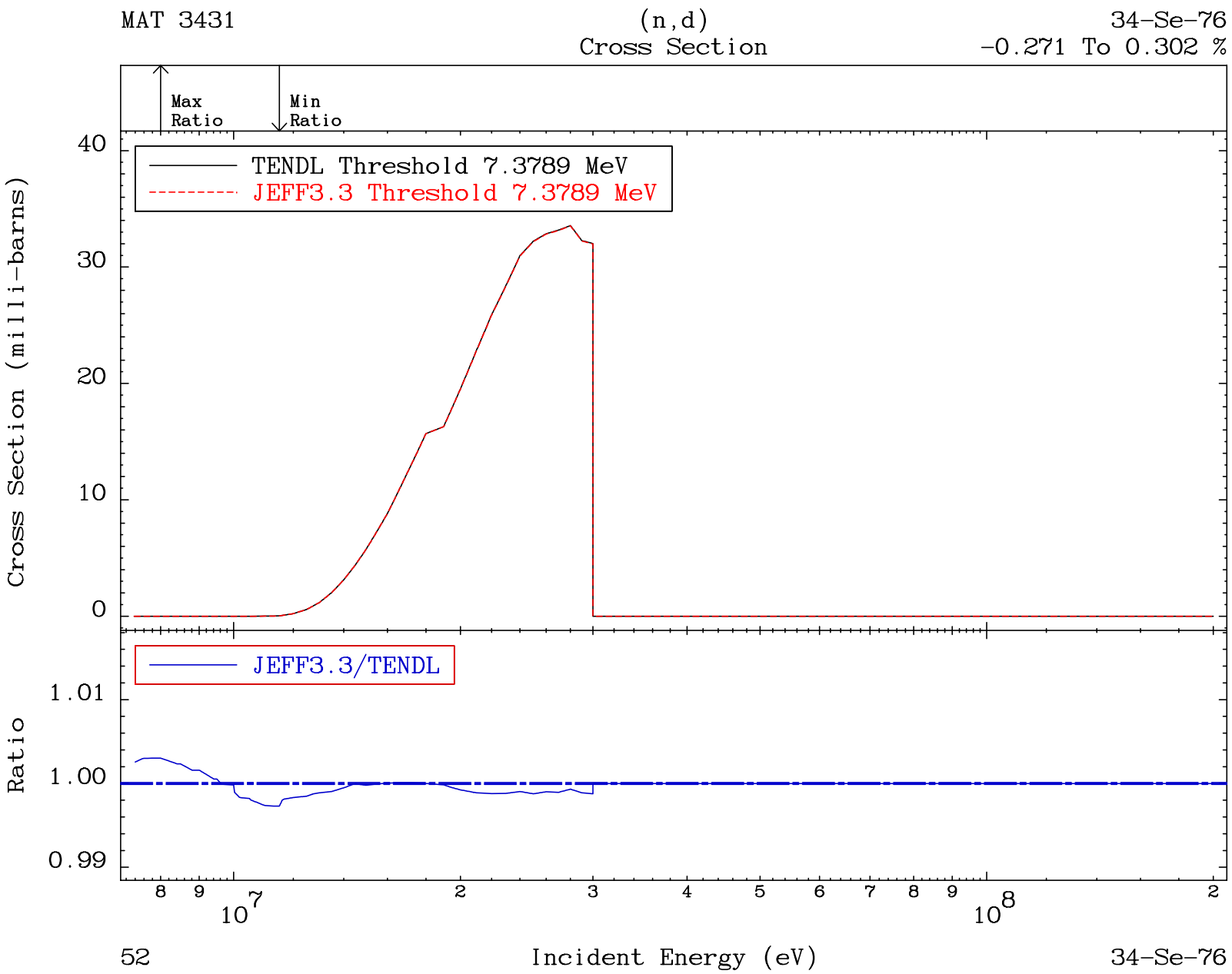

MAT 3431
MT= 79 (n,n') Level
Cross Section
34-Se-76
-1.565 To 0.295 %
Min Ratio
Max Ratio
TENDL Threshold 2.8909 MeV
JEFF3.3 Threshold 2.8909 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
34-Se-76

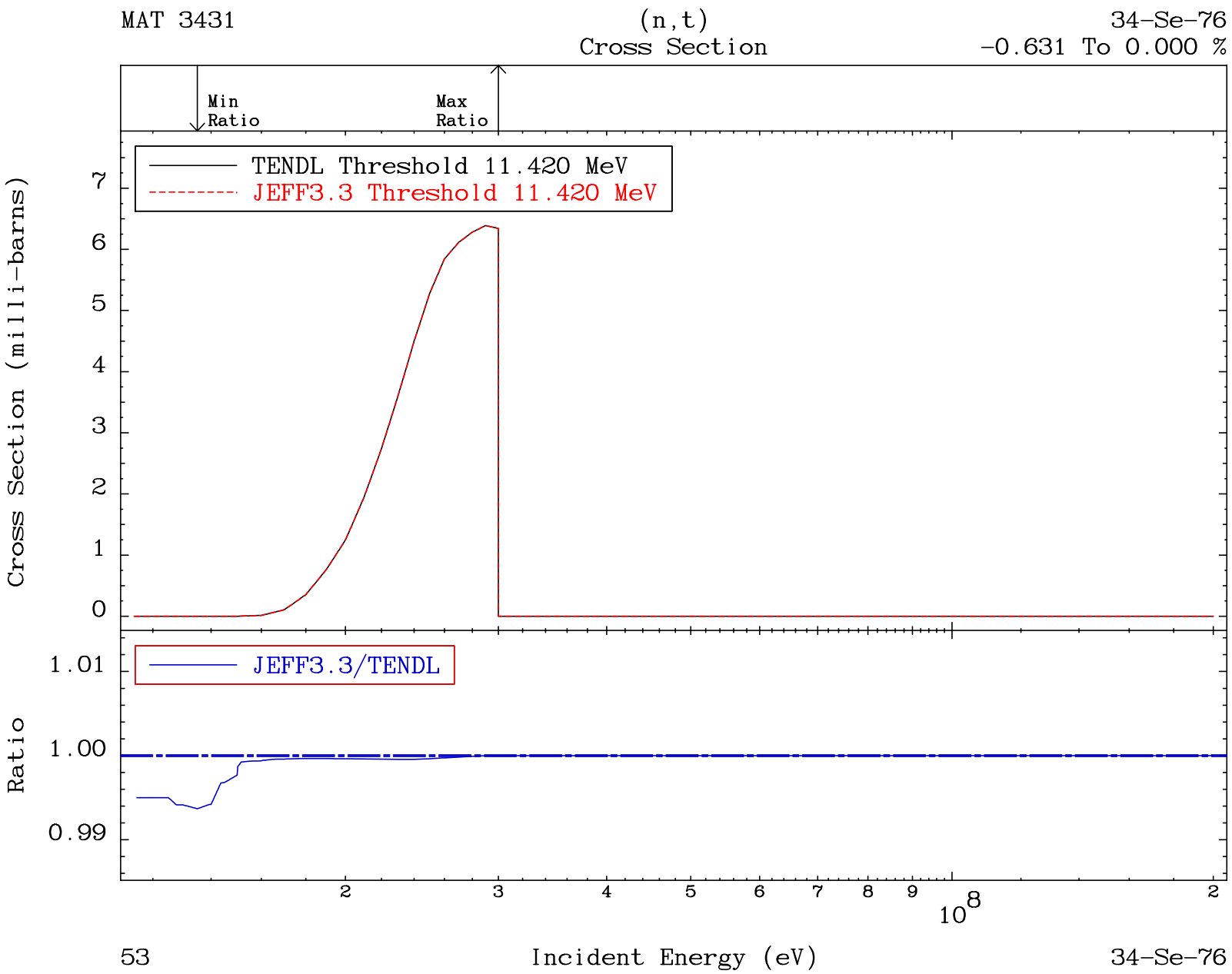

MAT 3431
MT= 80 (n,n') Level
Cross Section
34-Se-76
-3.029 To 0.310 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.8977 MeV
JEFF3.3 Threshold 2.8977 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.98
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
34-Se-76

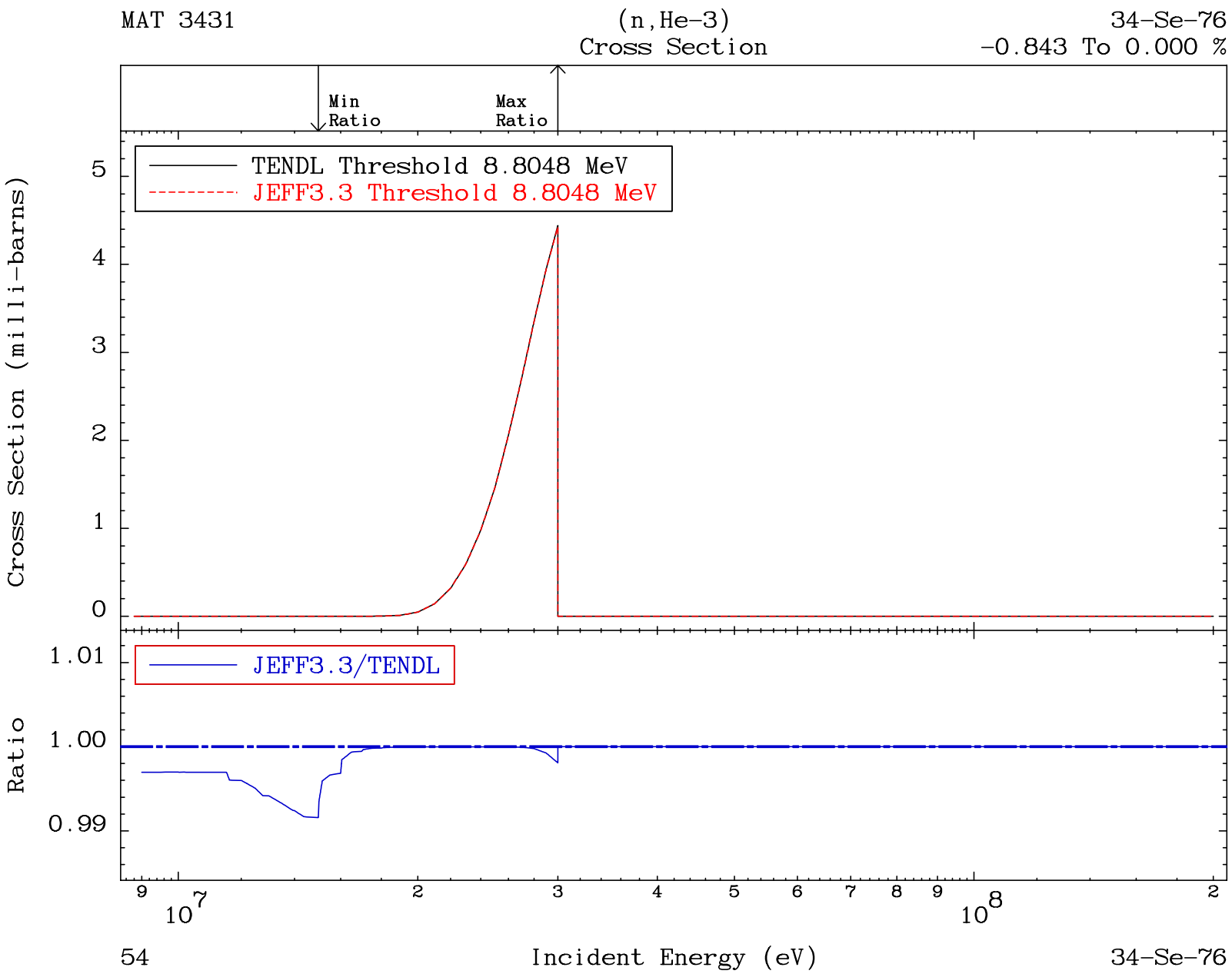

MAT 3431
(n,n') Continuum
Cross Section
34-Se-76
-0.360 To 0.625 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.8977 MeV
JEFF3.3 Threshold 2.8977 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
49
Incident Energy (eV)
34-Se-76

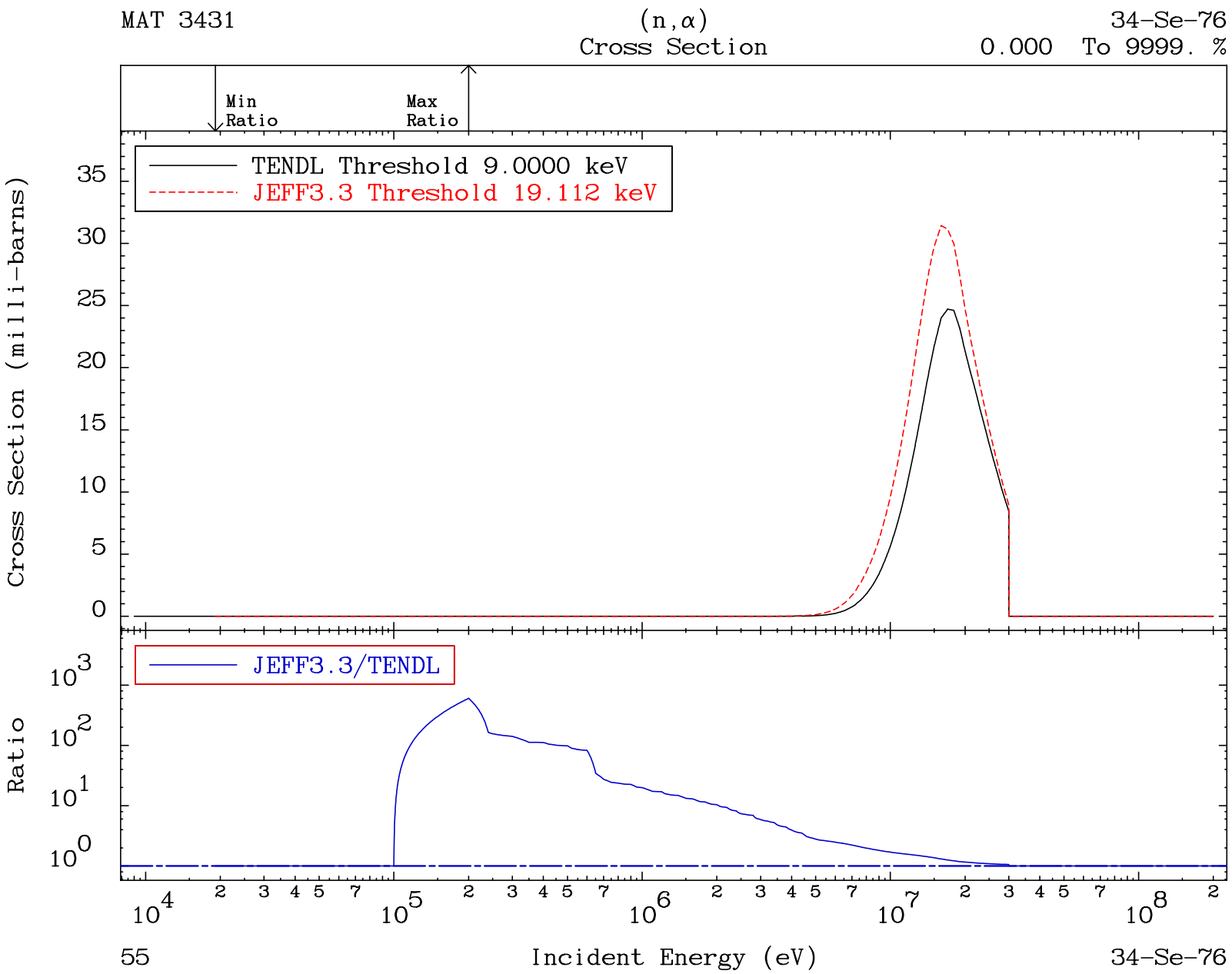

MAT 3431
(n,γ)
Cross Section
34-Se-76
-99.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
50
34-Se-76

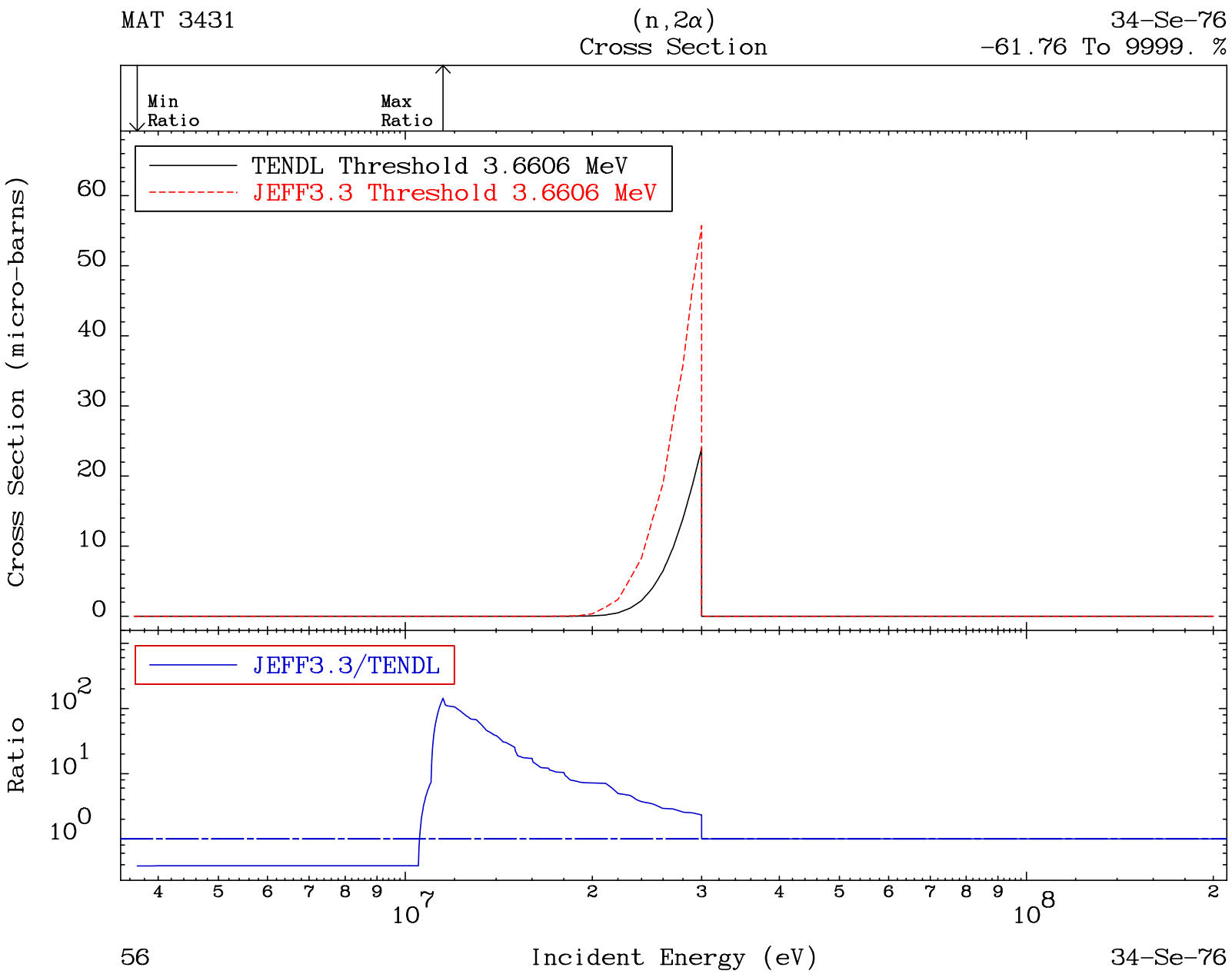

MAT 3431
(n,p)
Cross Section
34-Se-76
-0.987 To 1.708 %
Max Ratio
Min Ratio
TENDL Threshold 2.2072 MeV
JEFF3.3 Threshold 2.2072 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
34-Se-76

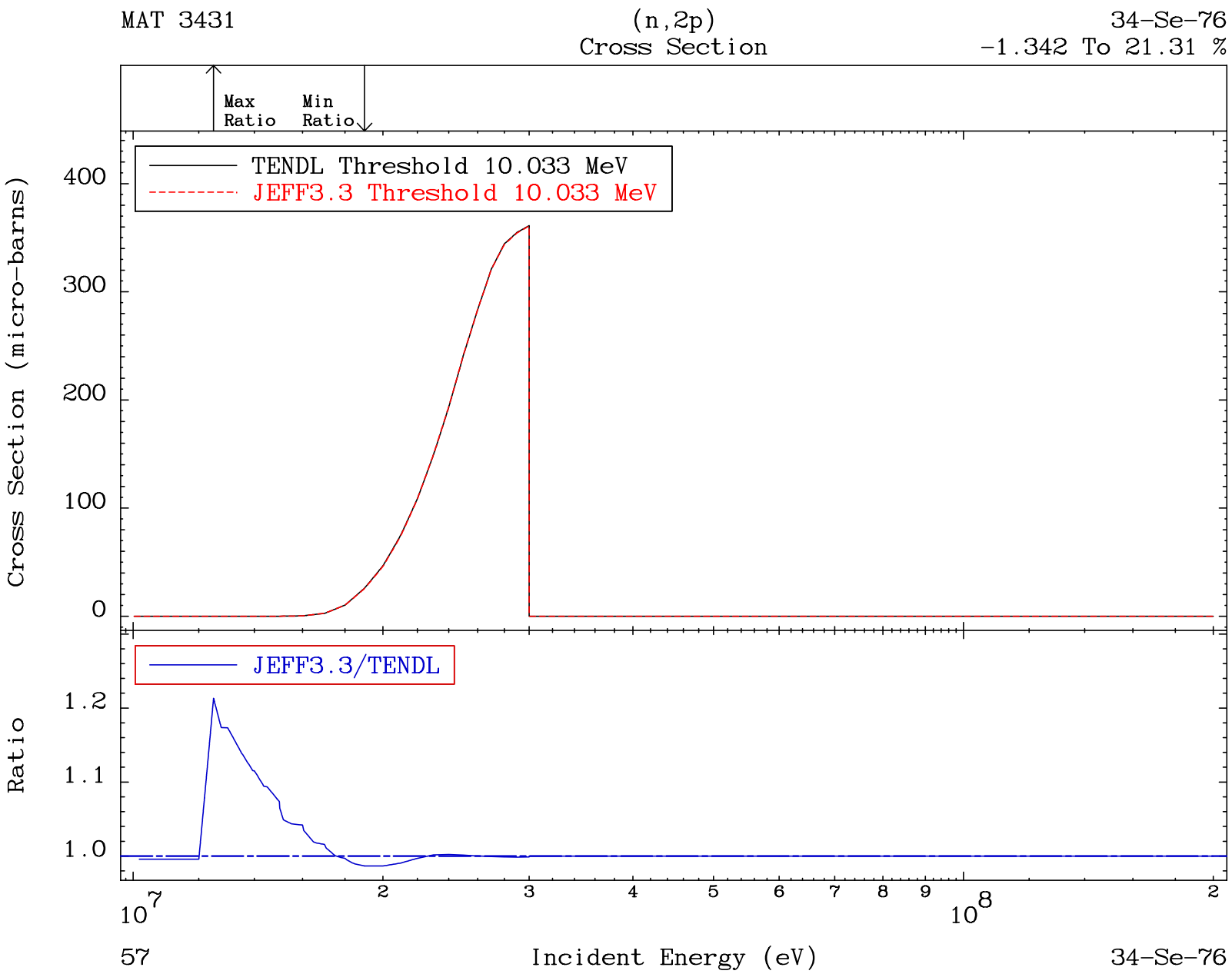

MAT 3431
(n,d)
Cross Section
34-Se-76
-0.271 To 0.302 %
Max Ratio
Min Ratio
TENDL Threshold 7.3789 MeV
JEFF3.3 Threshold 7.3789 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
34-Se-76

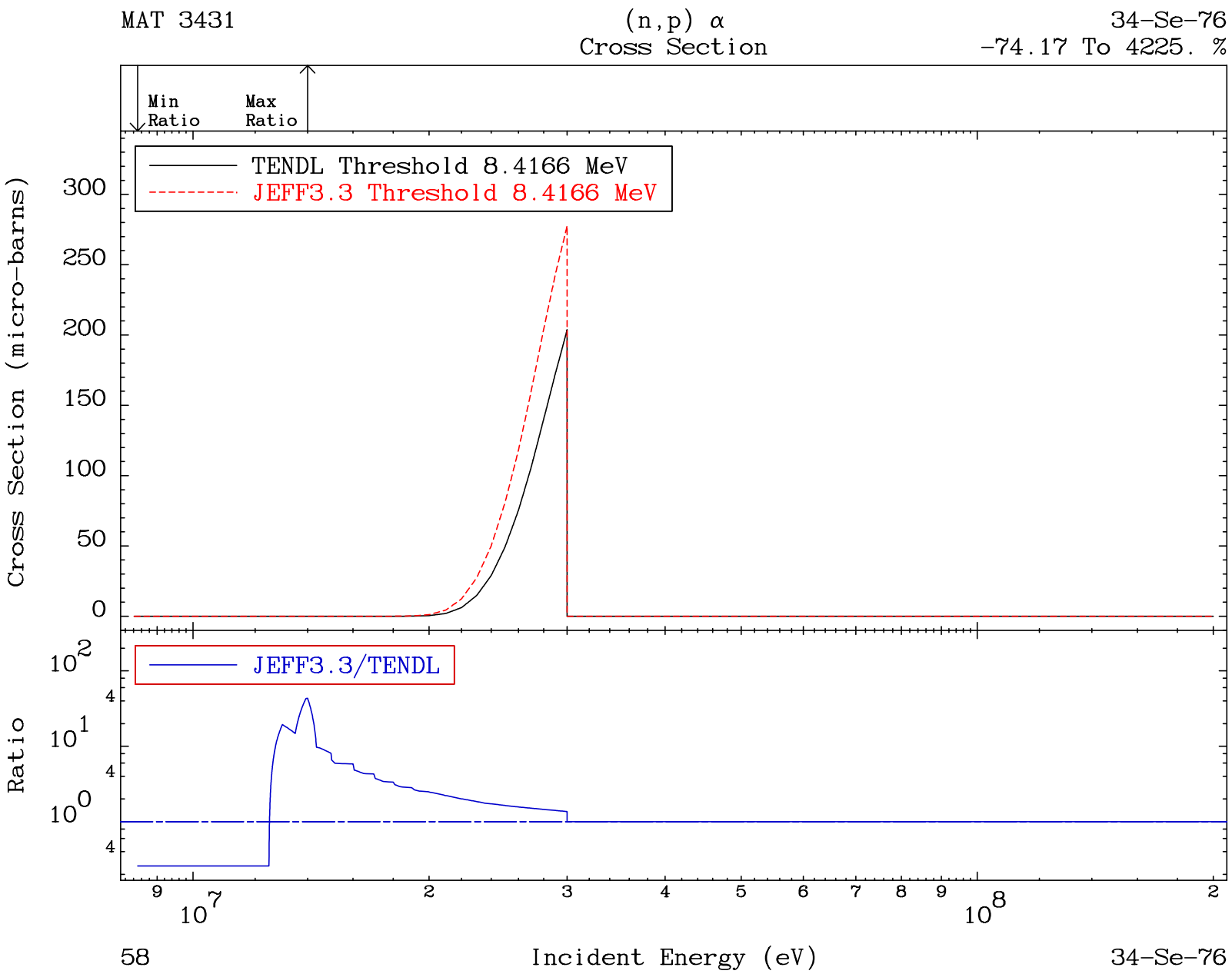

MAT 3431
(n,t)
Cross Section
34-Se-76
-0.631 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.420 MeV
JEFF3.3 Threshold 11.420 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
34-Se-76

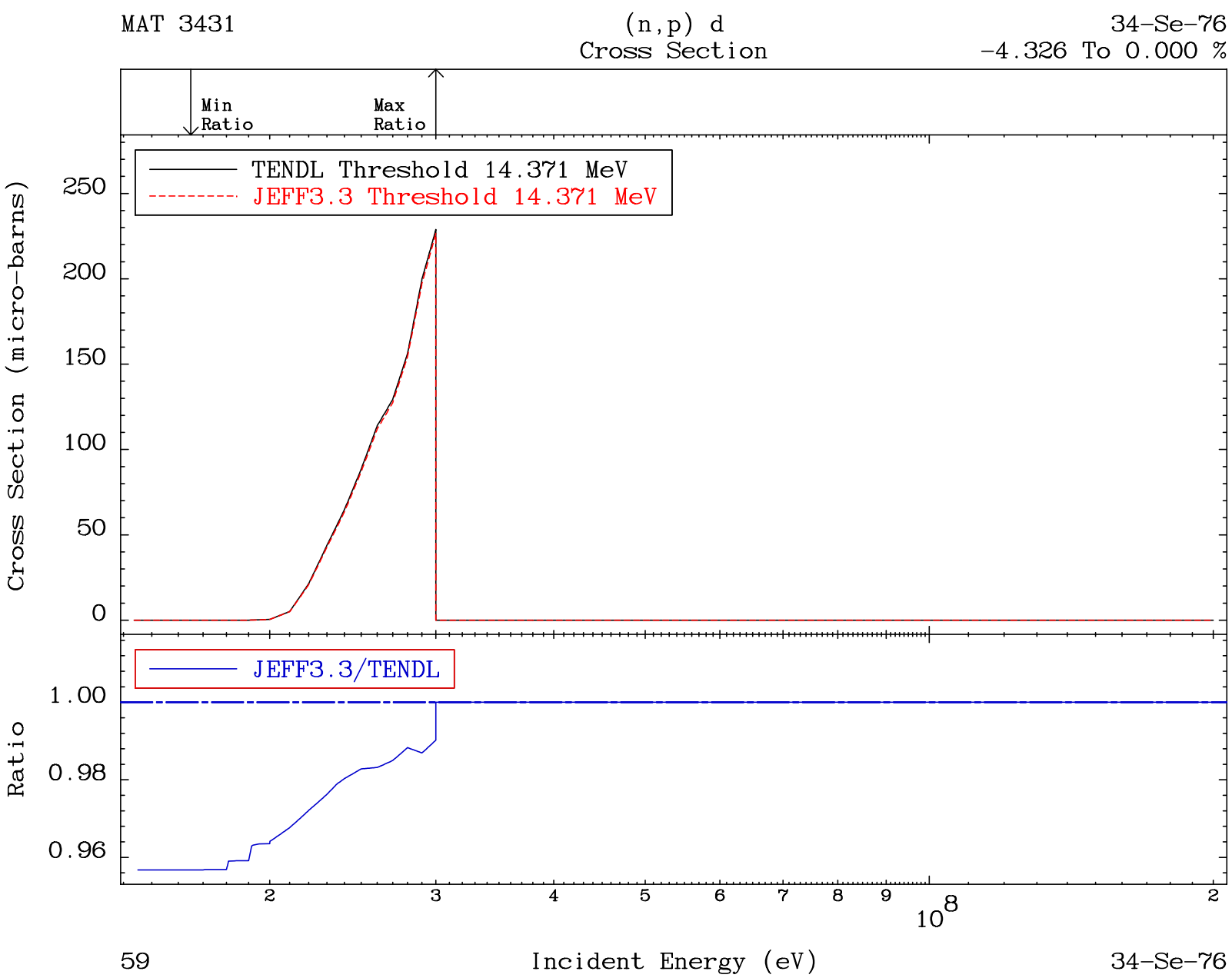

MAT 3431
(n,He-3)
Cross Section
34-Se-76
-0.843 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 8.8048 MeV
JEFF3.3 Threshold 8.8048 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
34-Se-76

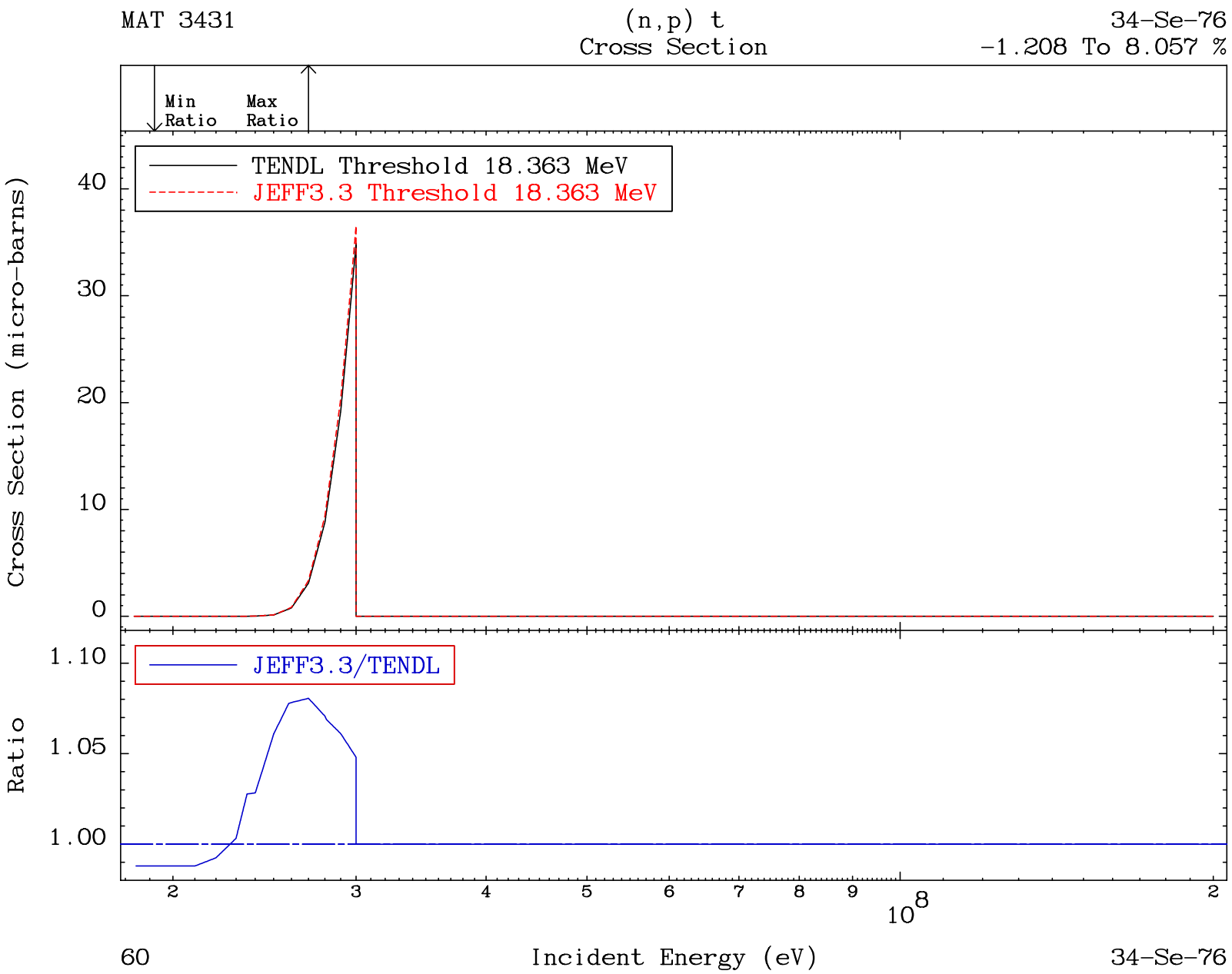

MAT 3431
(n,α)
Cross Section
34-Se-76
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.0000 keV
JEFF3.3 Threshold 19.112 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
34-Se-76

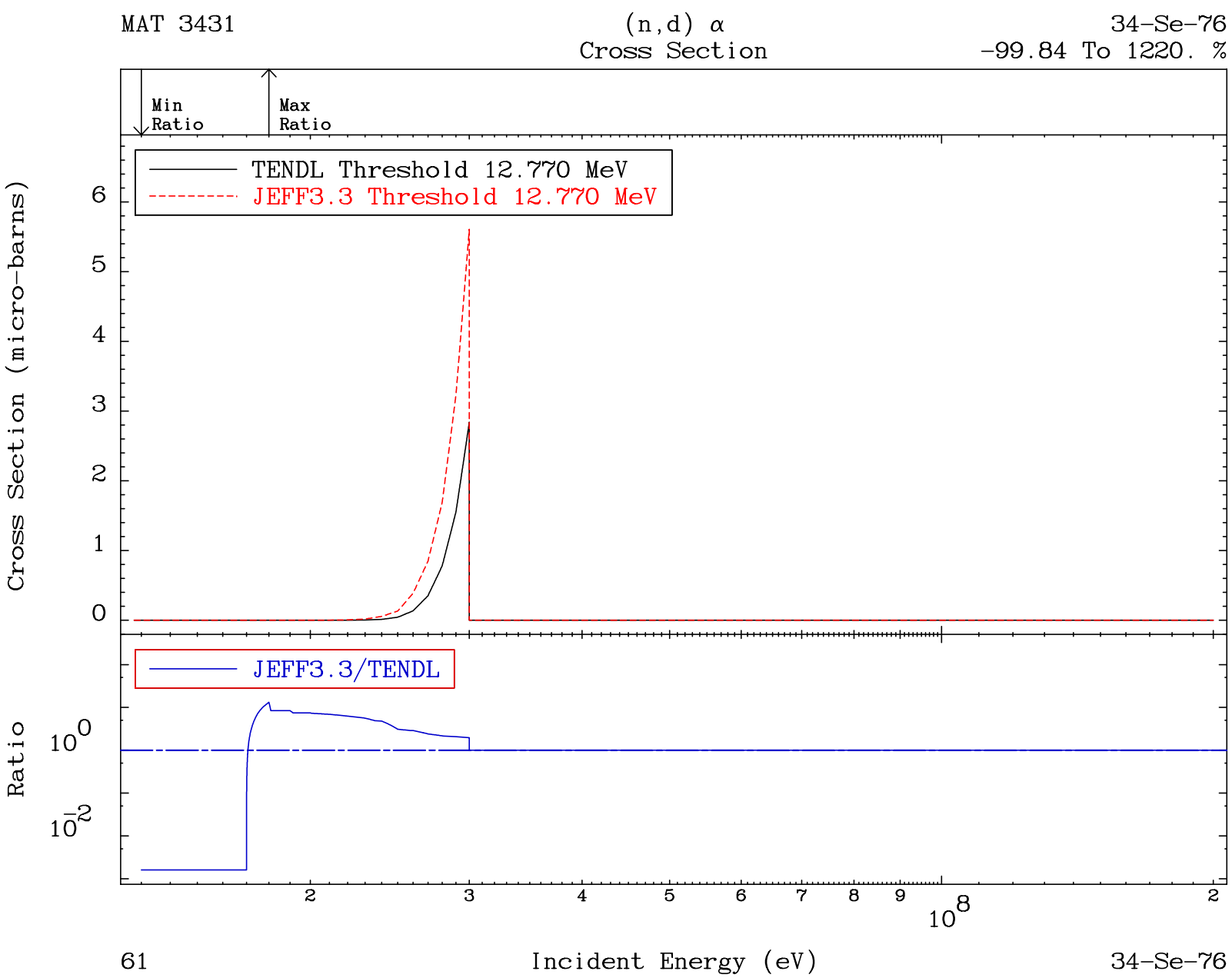

MAT 3431
(n,2α)
Cross Section
34-Se-76
-61.76 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.6606 MeV
JEFF3.3 Threshold 3.6606 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
34-Se-76

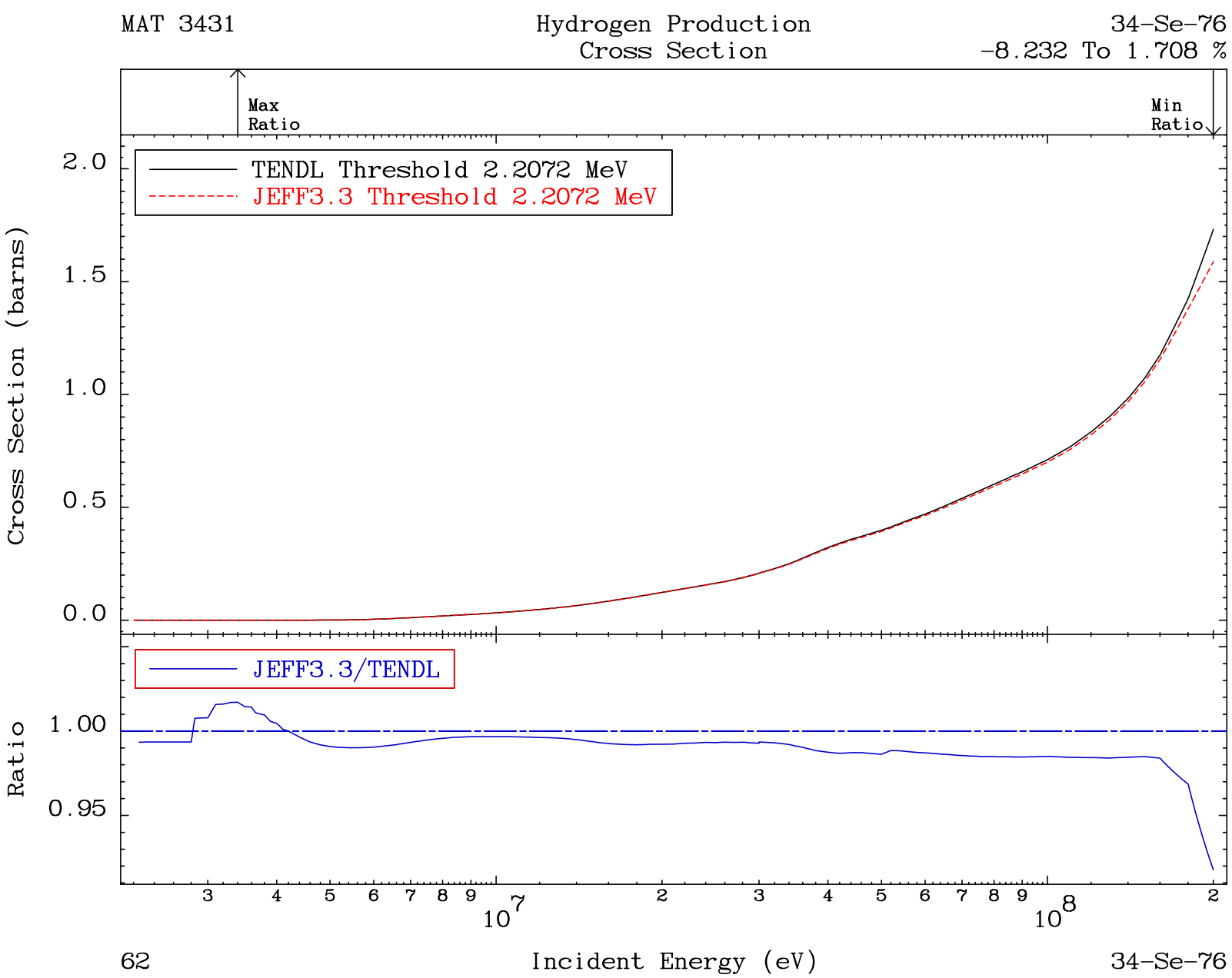

MAT 3431
(n,2p)
Cross Section
34-Se-76
-1.342 To 21.31 %
Max Ratio
Min Ratio
TENDL Threshold 10.033 MeV
JEFF3.3 Threshold 10.033 MeV
Cross Section (micro-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
34-Se-76

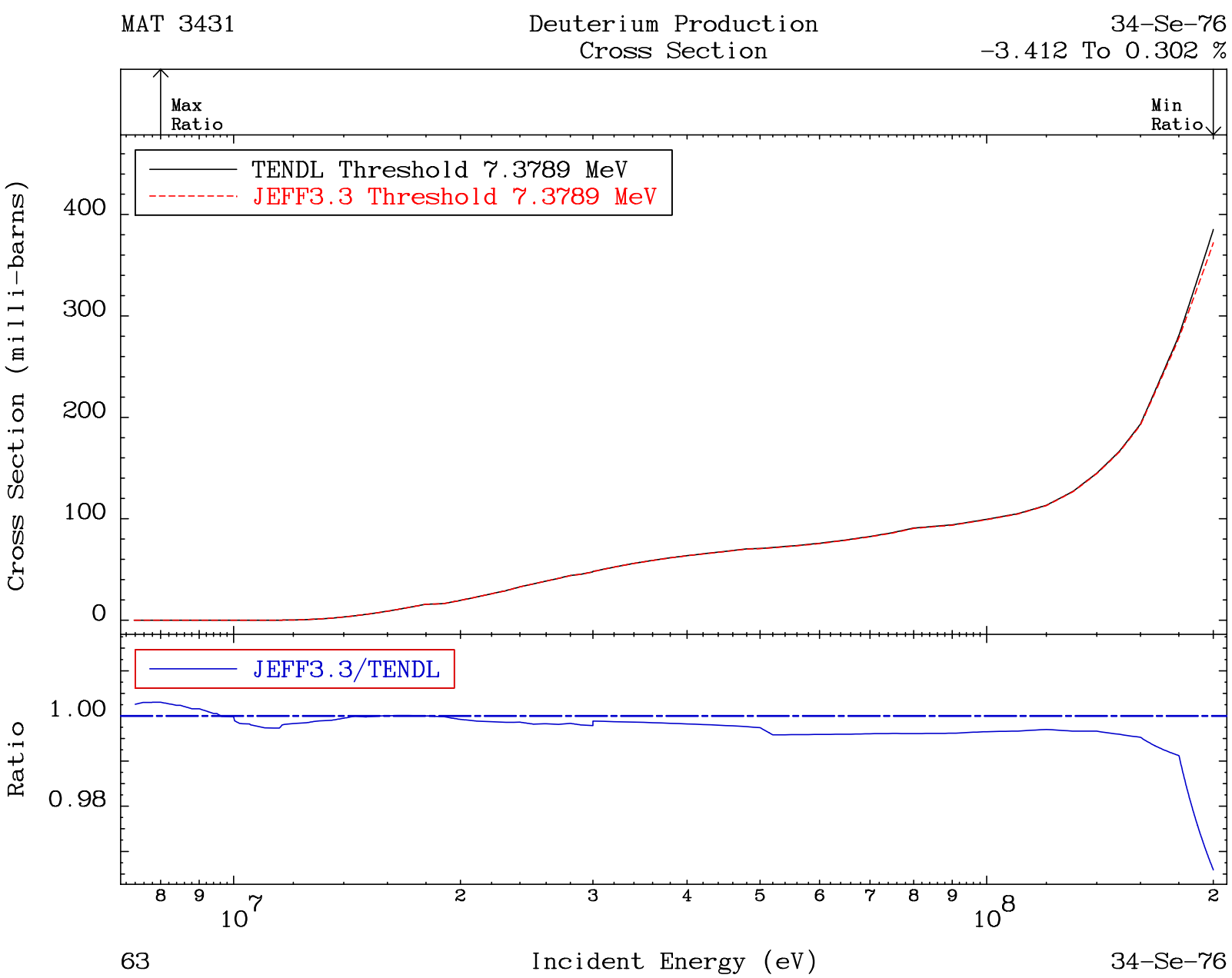

MAT 3431
(n,p) α
Cross Section
34-Se-76
-74.17 To 4225. %
Min Ratio
Max Ratio
TENDL Threshold 8.4166 MeV
JEFF3.3 Threshold 8.4166 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
34-Se-76

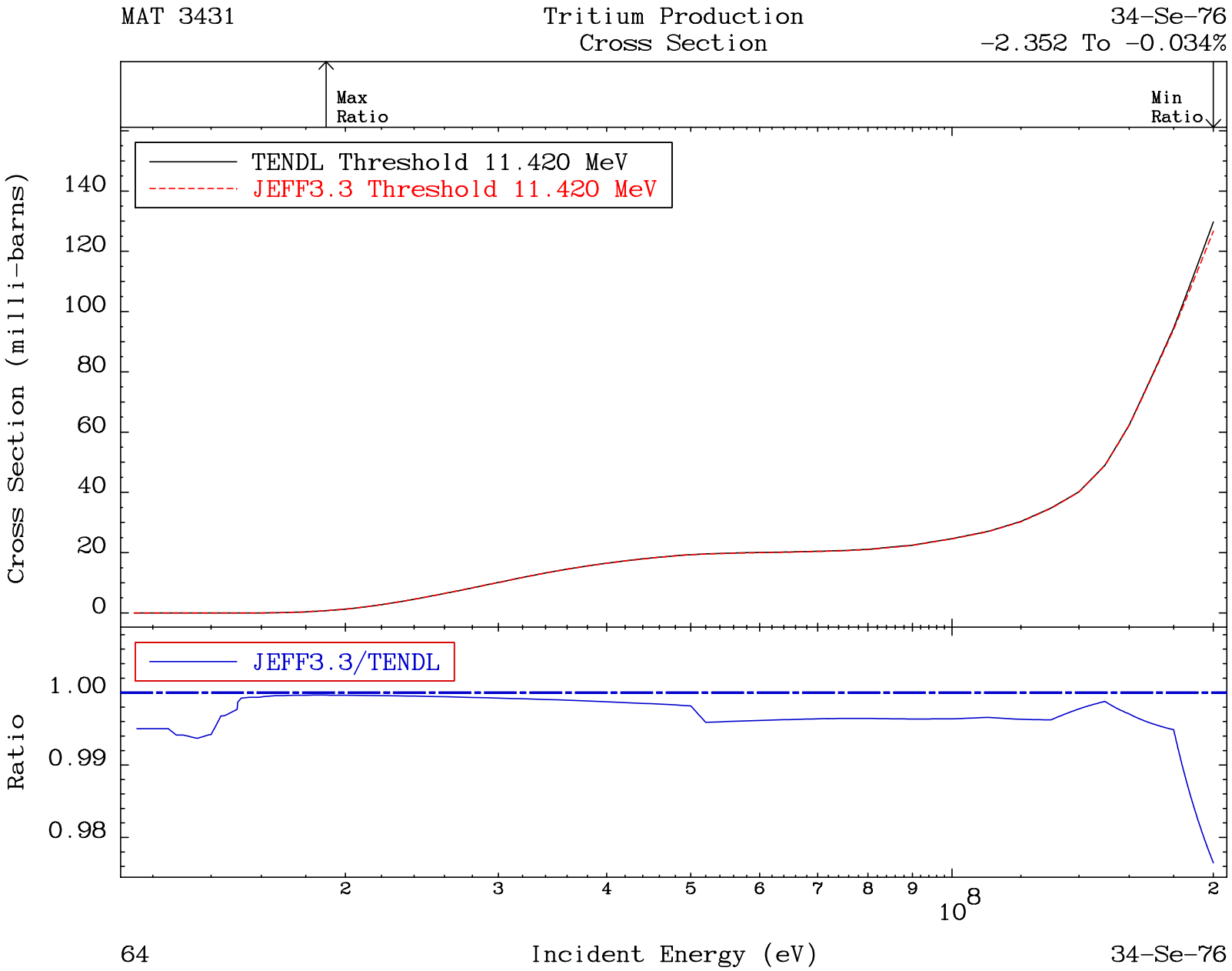

MAT 3431
(n,p) d
Cross Section
34-Se-76
-4.326 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 14.371 MeV
JEFF3.3 Threshold 14.371 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
34-Se-76

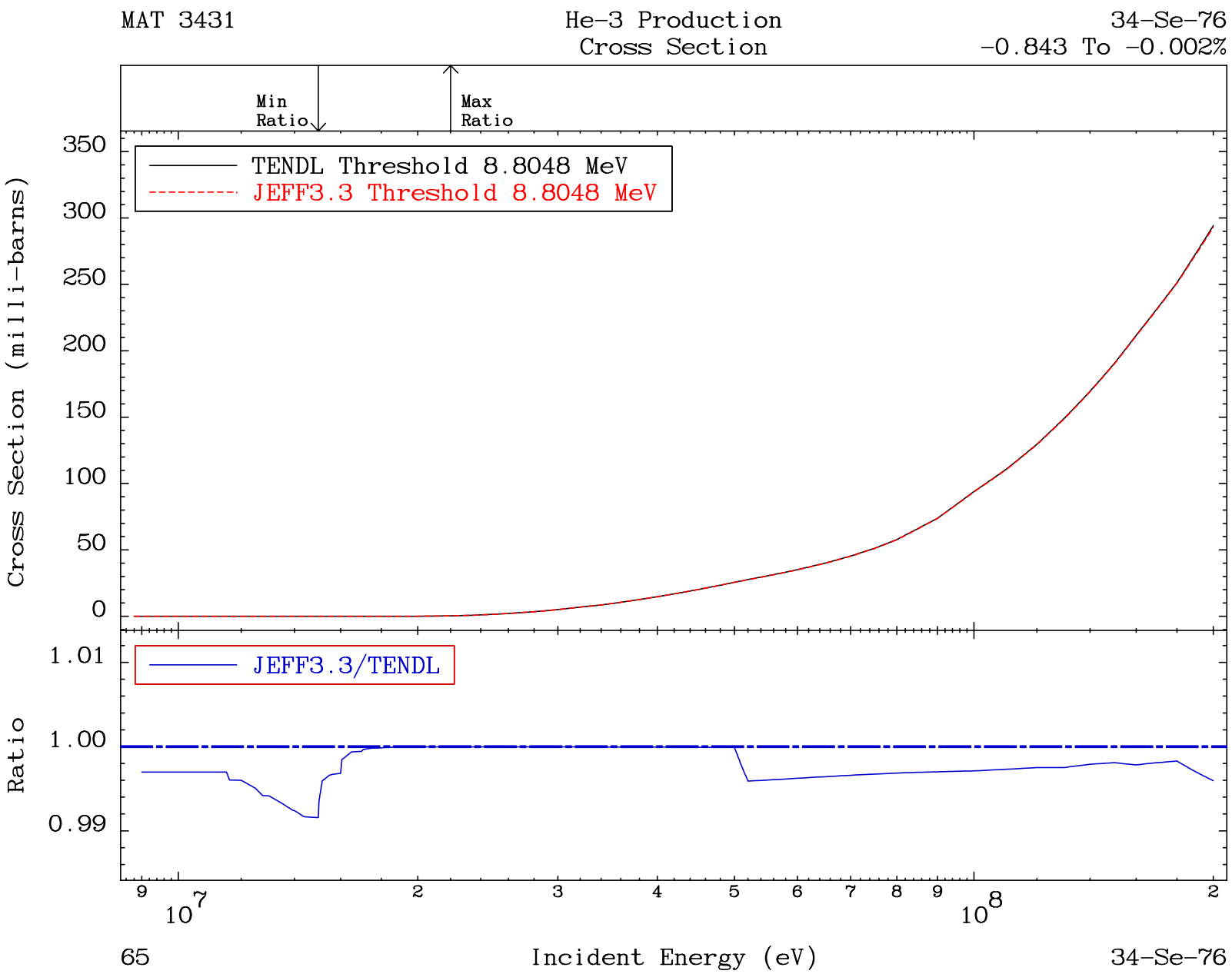

MAT 3431
(n,p) t
Cross Section
34-Se-76
-1.208 To 8.057 %
Min Ratio
Max Ratio
TENDL Threshold 18.363 MeV
JEFF3.3 Threshold 18.363 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
34-Se-76

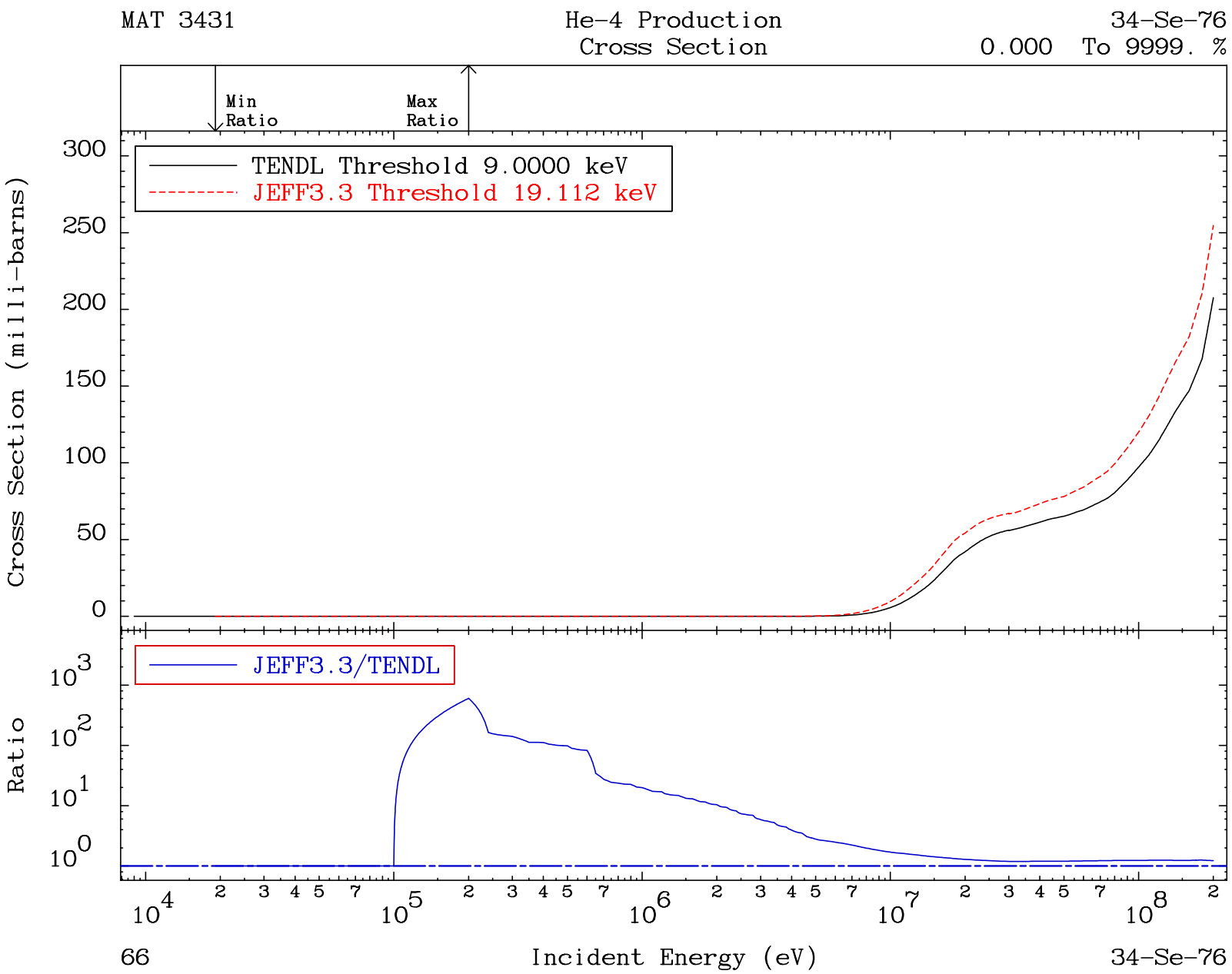

MAT 3431
(n,d) α
Cross Section
34-Se-76
-99.84 To 1220. %
Min Ratio
Max Ratio
TENDL Threshold 12.770 MeV
JEFF3.3 Threshold 12.770 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
34-Se-76

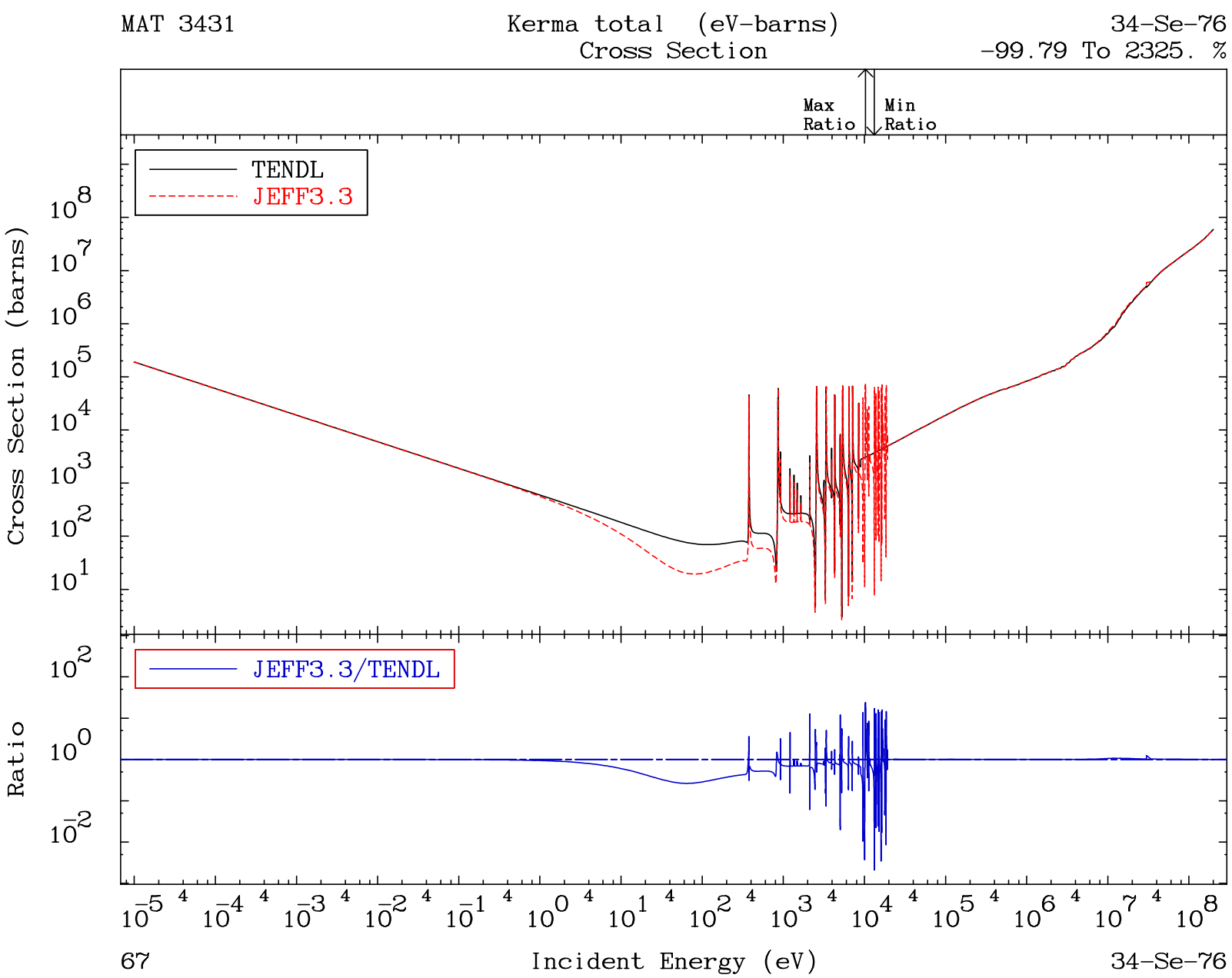

MAT 3431
Hydrogen Production
Cross Section
34-Se-76
-8.232 To 1.708 %
Max Ratio
Min Ratio
TENDL Threshold 2.2072 MeV
JEFF3.3 Threshold 2.2072 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
34-Se-76

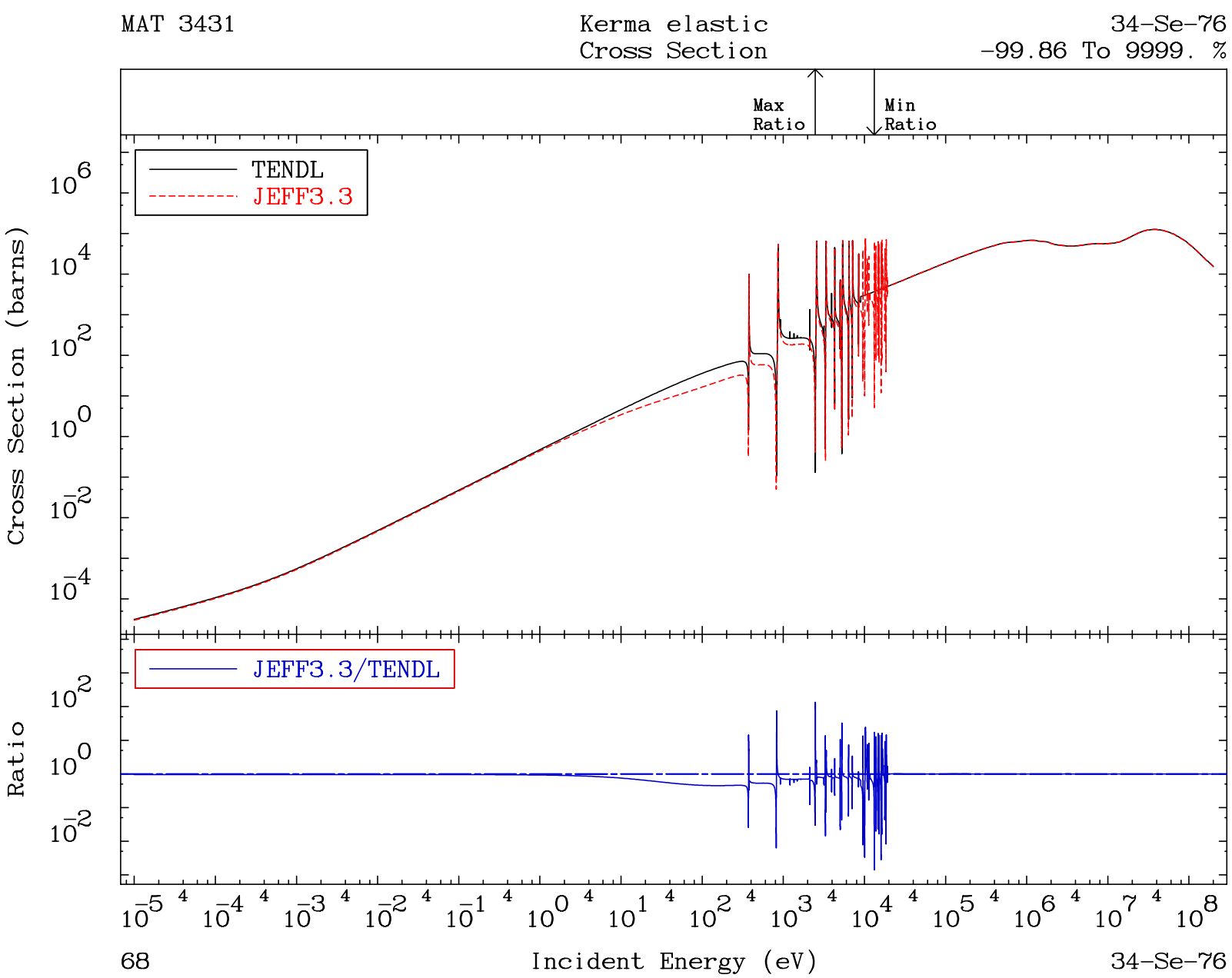

MAT 3431
Deuterium Production
Cross Section
34-Se-76
-3.412 To 0.302 %
Max Ratio
Min Ratio
TENDL Threshold 7.3789 MeV
JEFF3.3 Threshold 7.3789 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.00
0.98
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
63
Incident Energy (eV)
34-Se-76

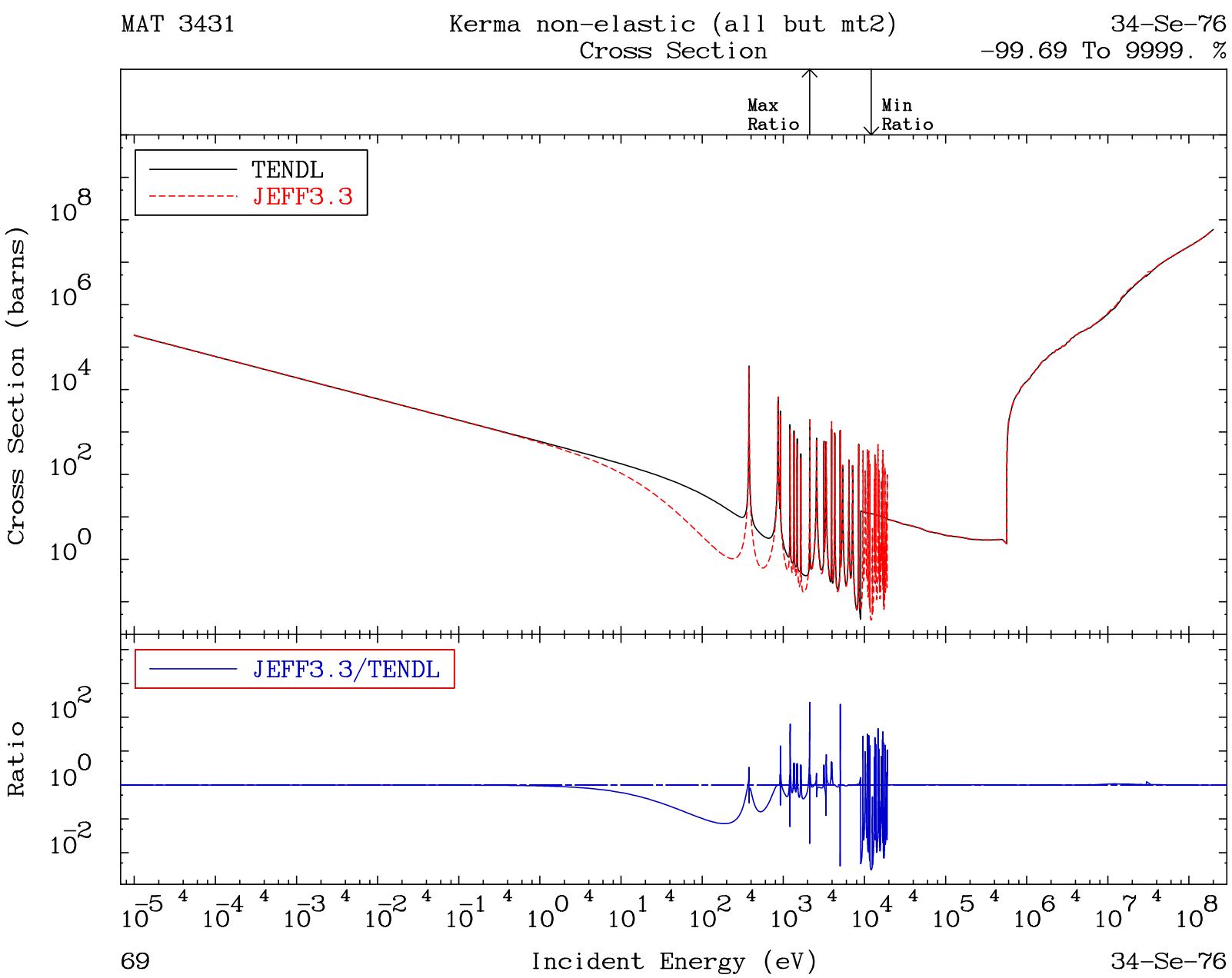

MAT 3431
Tritium Production
Cross Section
34-Se-76
-2.352 To -0.034%
Max
Ratio
Min
Ratio
TENDL Threshold 11.420 MeV
JEFF3.3 Threshold 11.420 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
34-Se-76

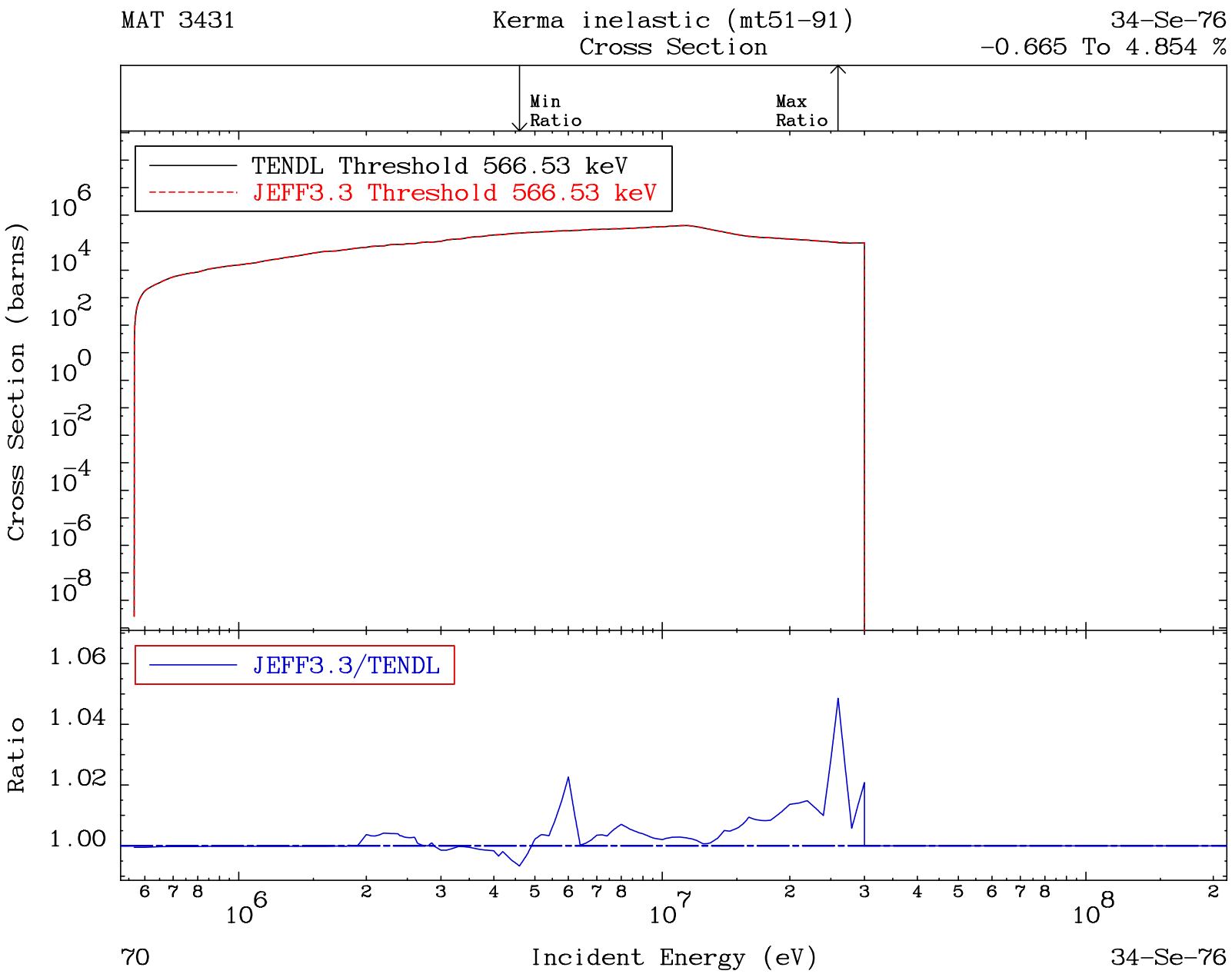

MAT 3431
He-3 Production
Cross Section
34-Se-76
-0.843 To -0.002%
Min Ratio
Max Ratio
TENDL Threshold 8.8048 MeV
JEFF3.3 Threshold 8.8048 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
34-Se-76

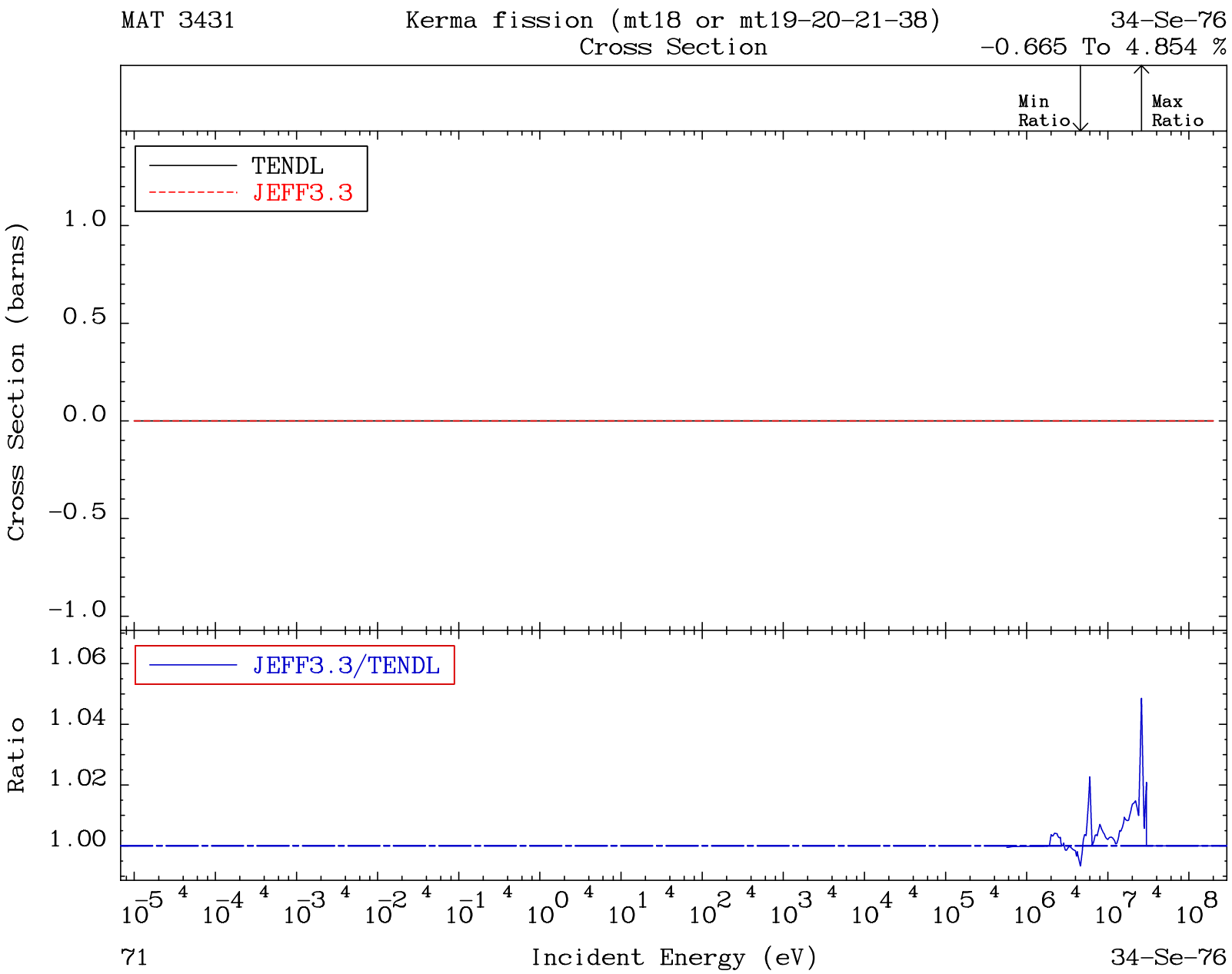

MAT 3431
He-4 Production
Cross Section
34-Se-76
0.000 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.0000 keV
JEFF3.3 Threshold 19.112 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
10^4
10^5
10^6
10^7
10^8
66
Incident Energy (eV)
34-Se-76

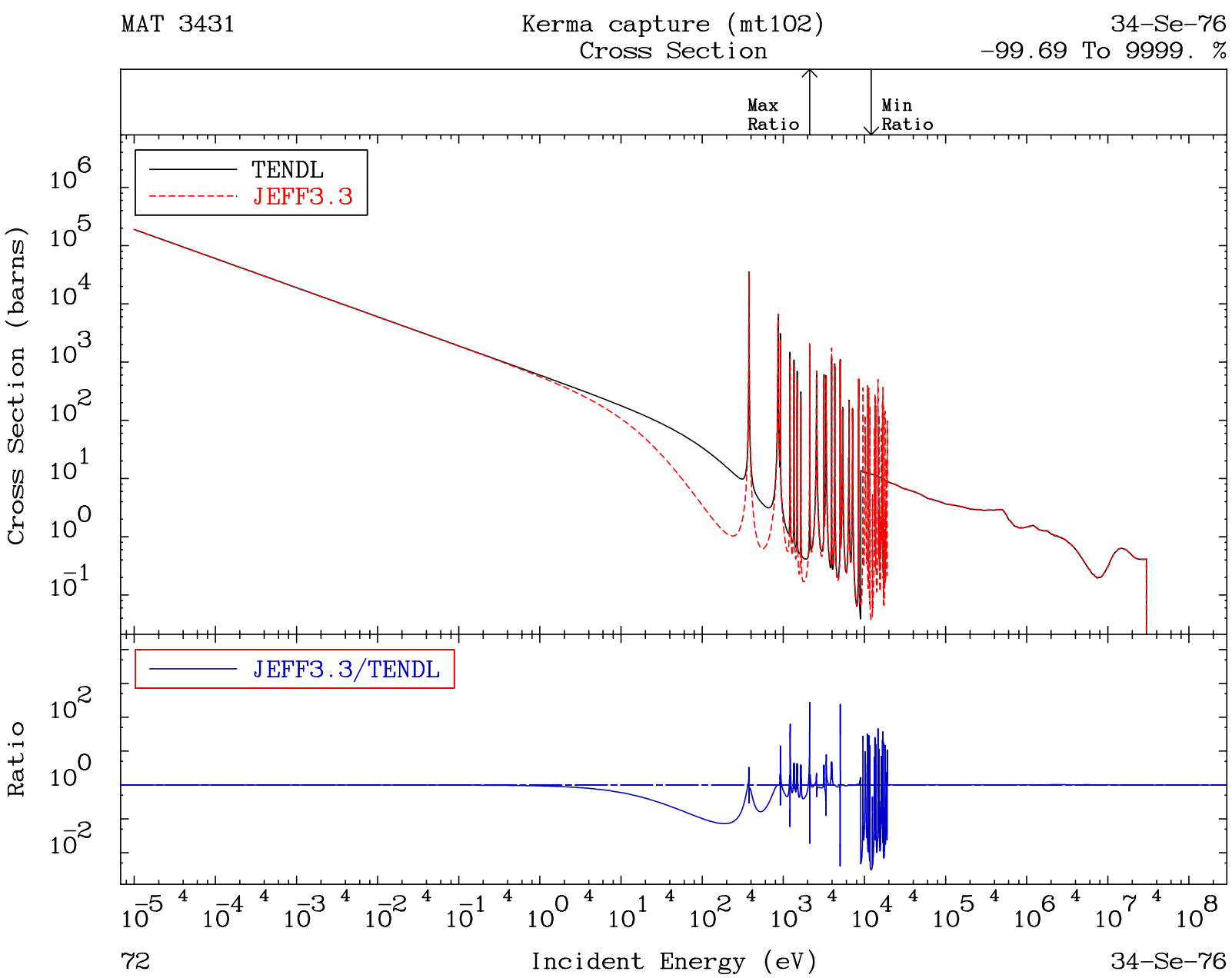

MAT 3431
Kerma total (eV-barns)
Cross Section
34-Se-76
-99.79 To 2325. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
34-Se-76

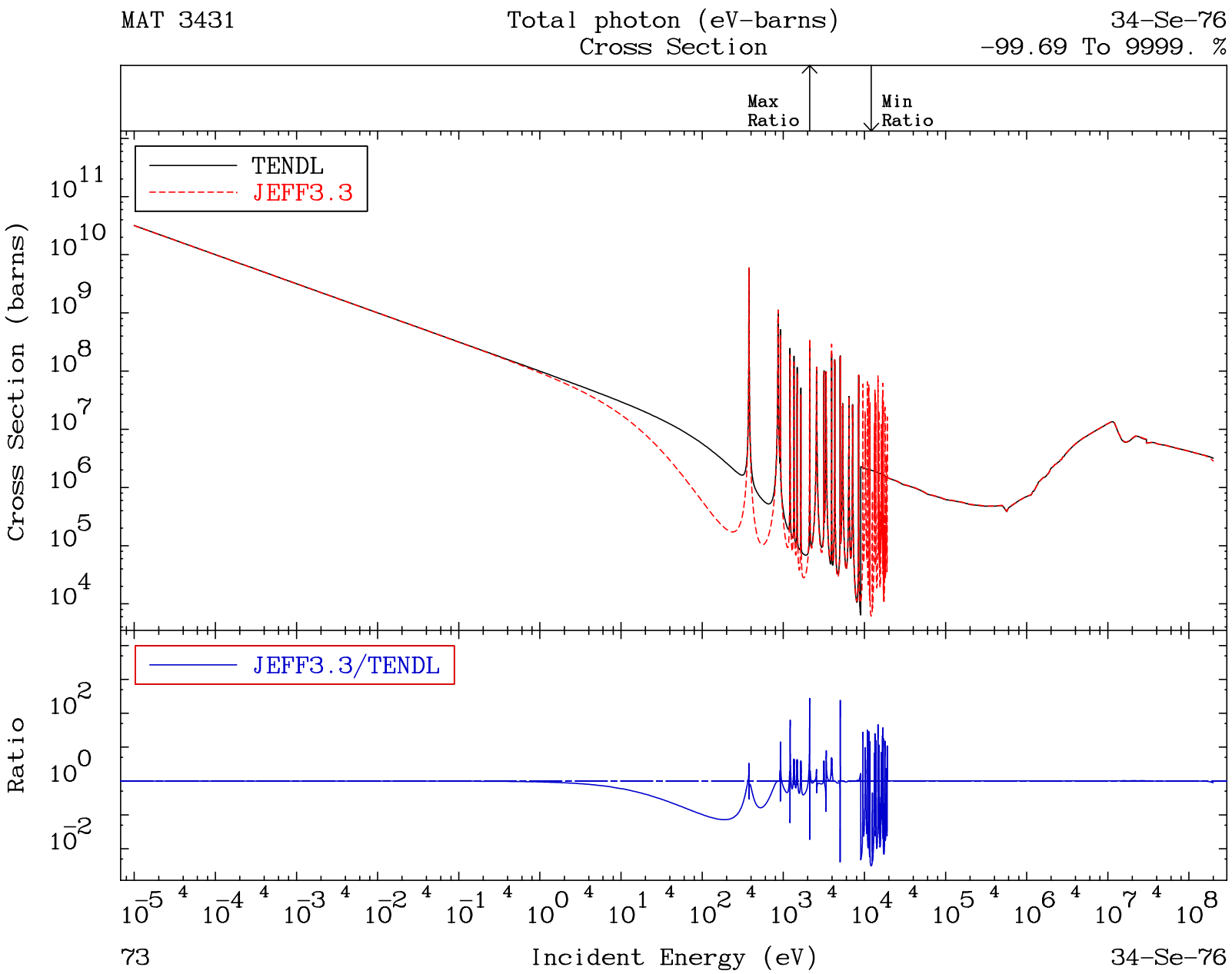

MAT 3431
Kerma elastic
Cross Section
34-Se-76
-99.86 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
34-Se-76

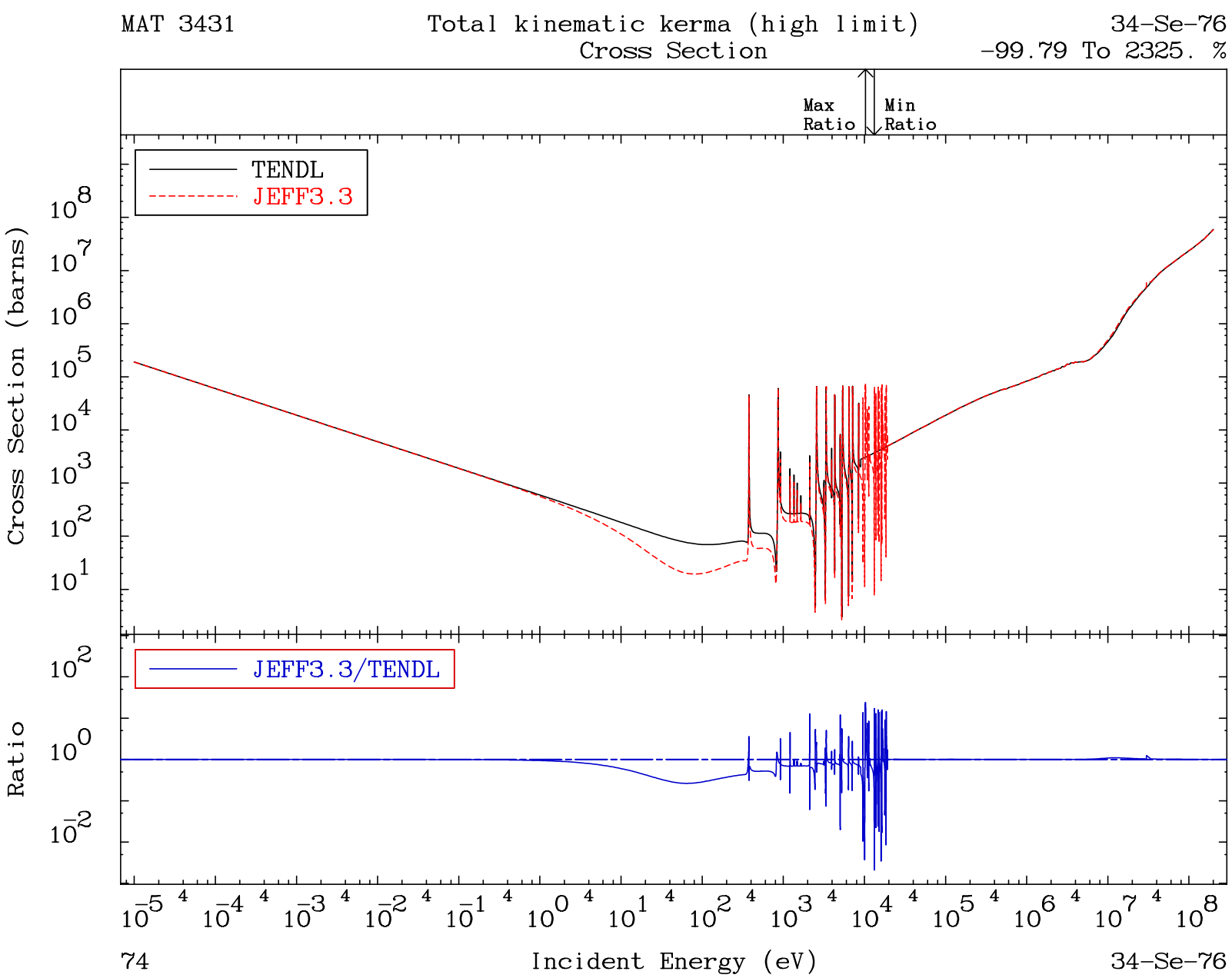

MAT 3431
Kerma non-elastic (all but mt2)
Cross Section
34-Se-76
-99.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
34-Se-76

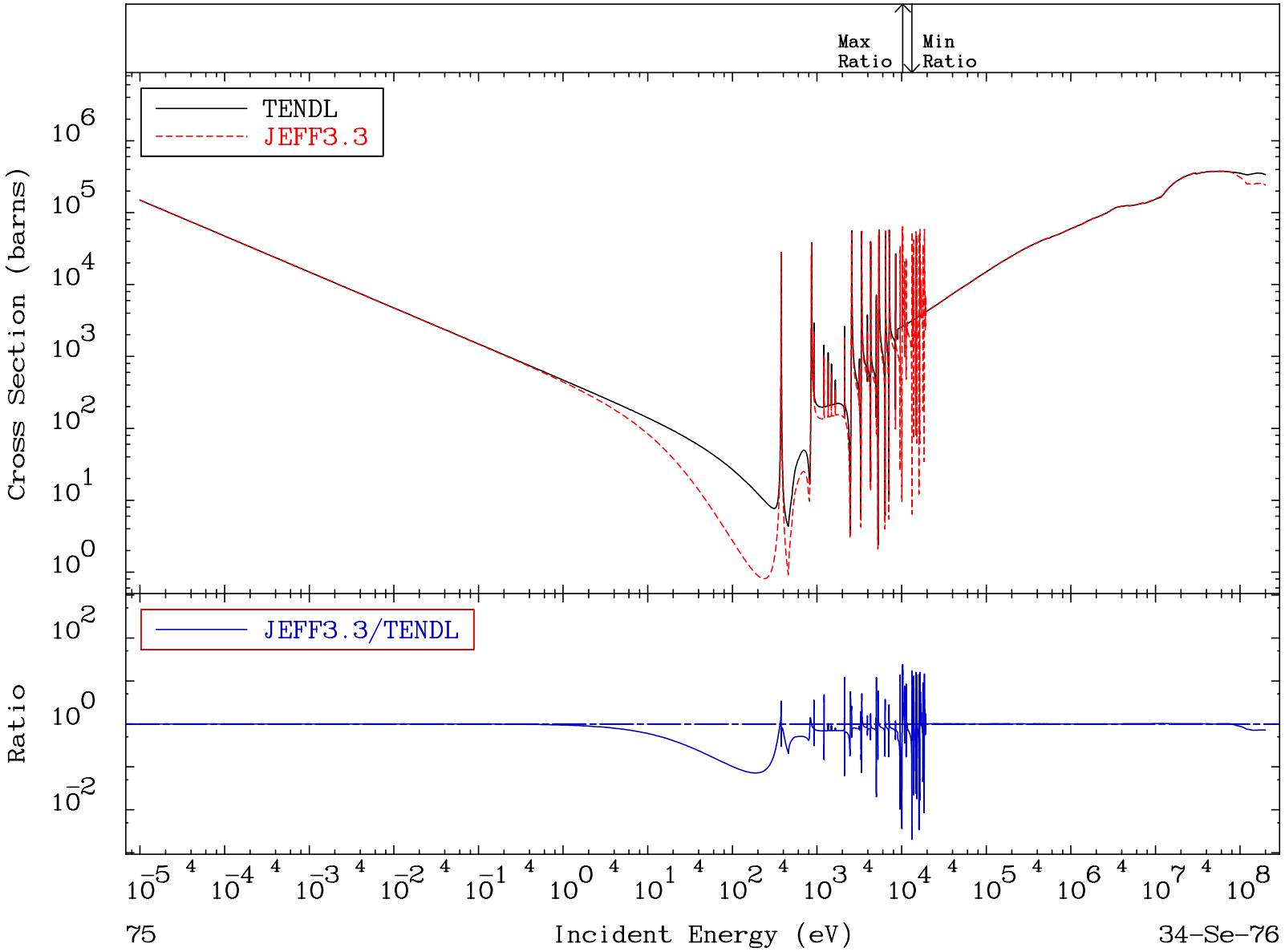

MAT 3431
Kerma inelastic (mt51-91)
Cross Section
34-Se-76
-0.665 To 4.854 %
Min Ratio
Max Ratio
TENDL Threshold 566.53 keV
JEFF3.3 Threshold 566.53 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
34-Se-76

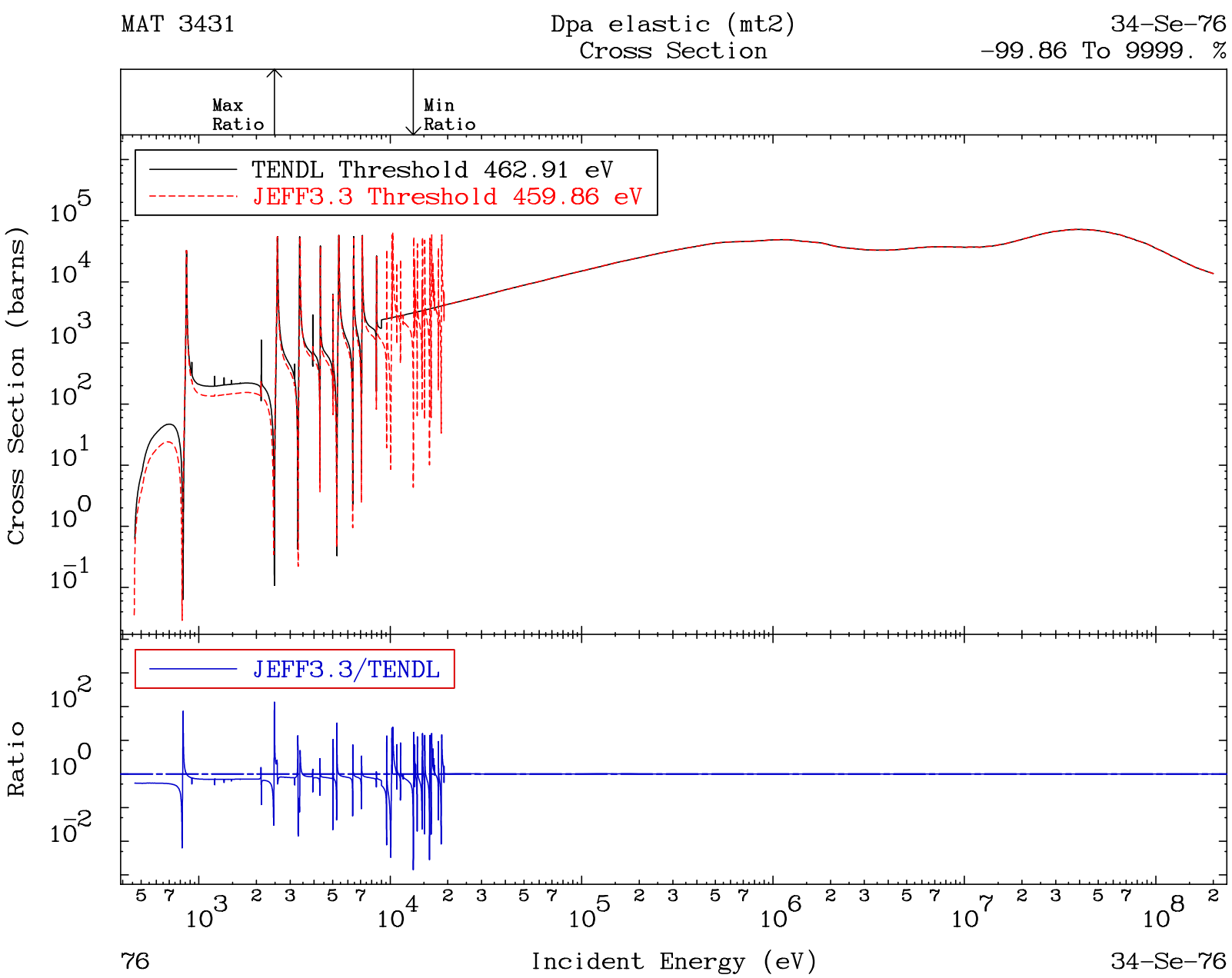

MAT 3431
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
34-Se-76
-0.665 To 4.854 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.06
1.04
1.02
1.00
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
71
Incident Energy (eV)
34-Se-76

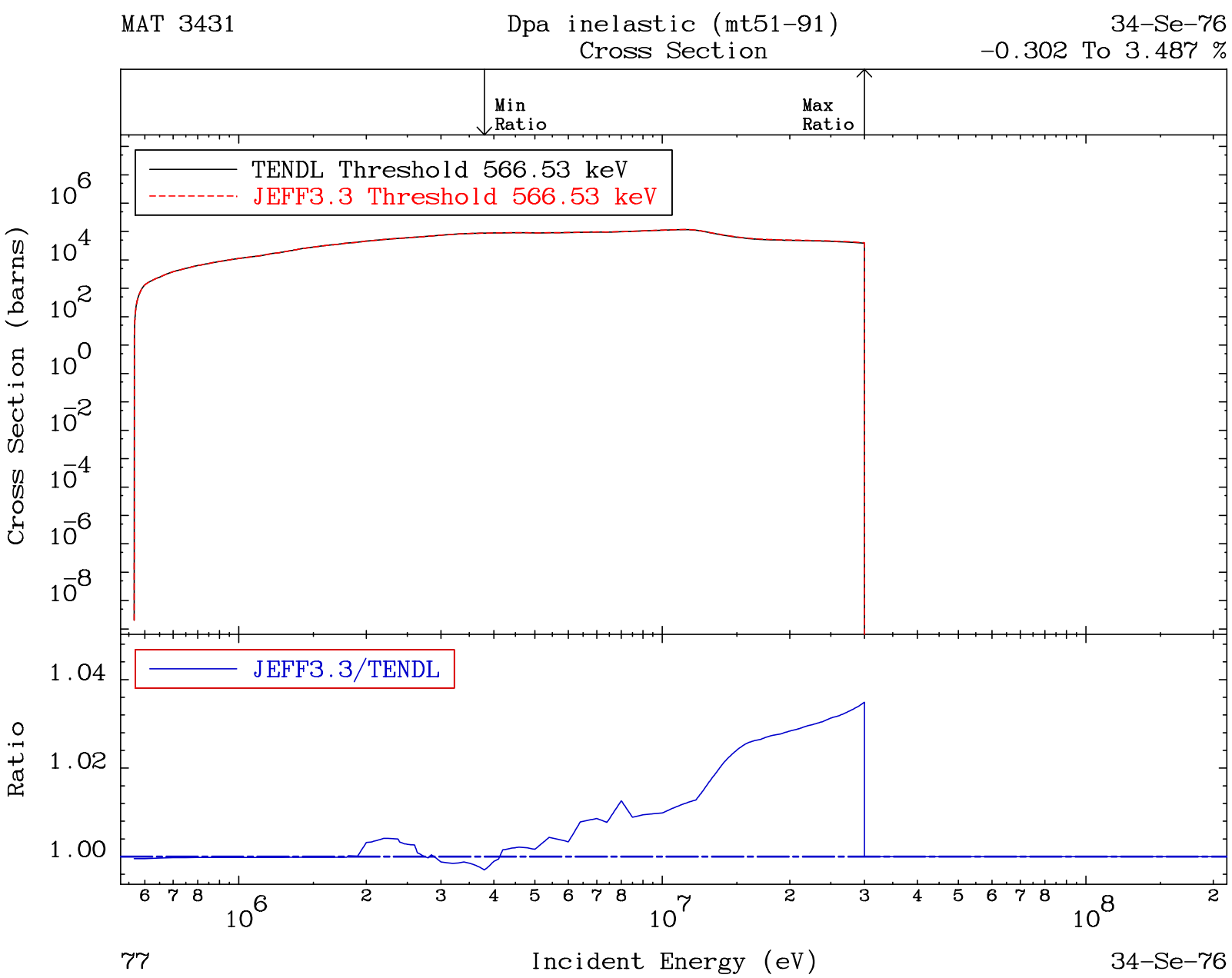

MAT 3431
Kerma capture (mt102)
Cross Section
34-Se-76
-99.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
34-Se-76

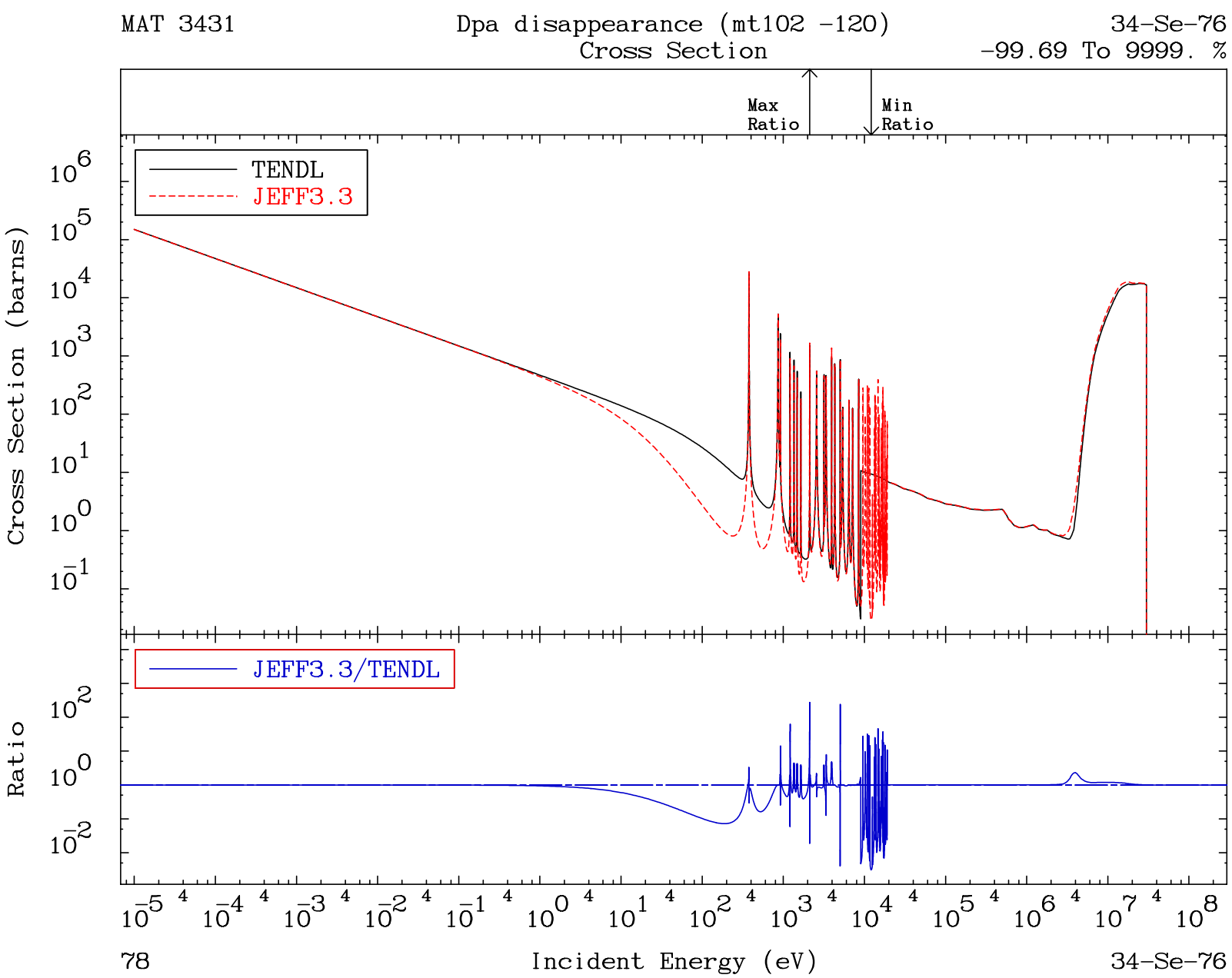

MAT 3431
Total photon (eV-barns)
Cross Section
34-Se-76
-99.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
73
Incident Energy (eV)
34-Se-76

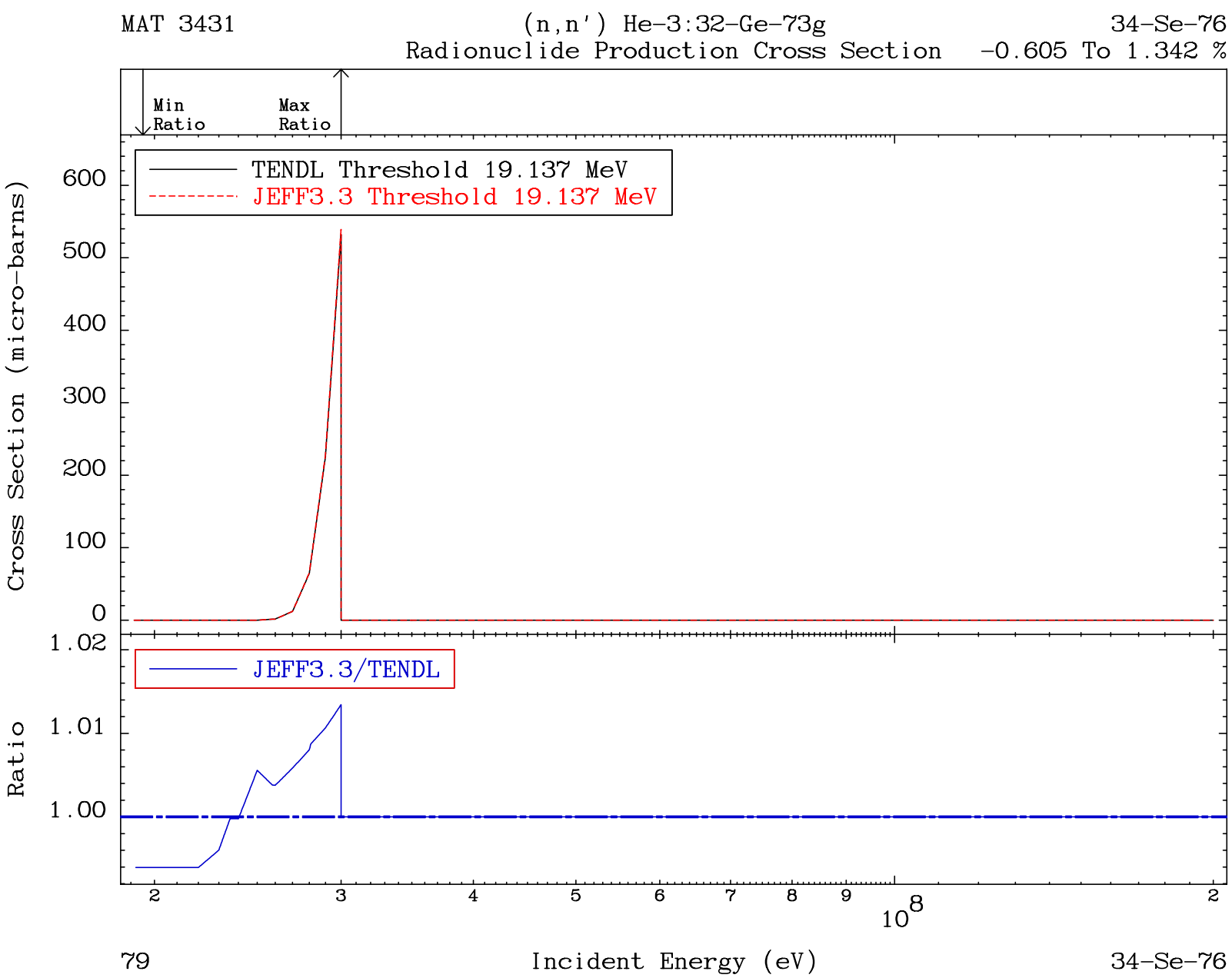

MAT 3431
Total kinematic kerma (high limit)
Cross Section
34-Se-76
-99.79 To 2325. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
34-Se-76

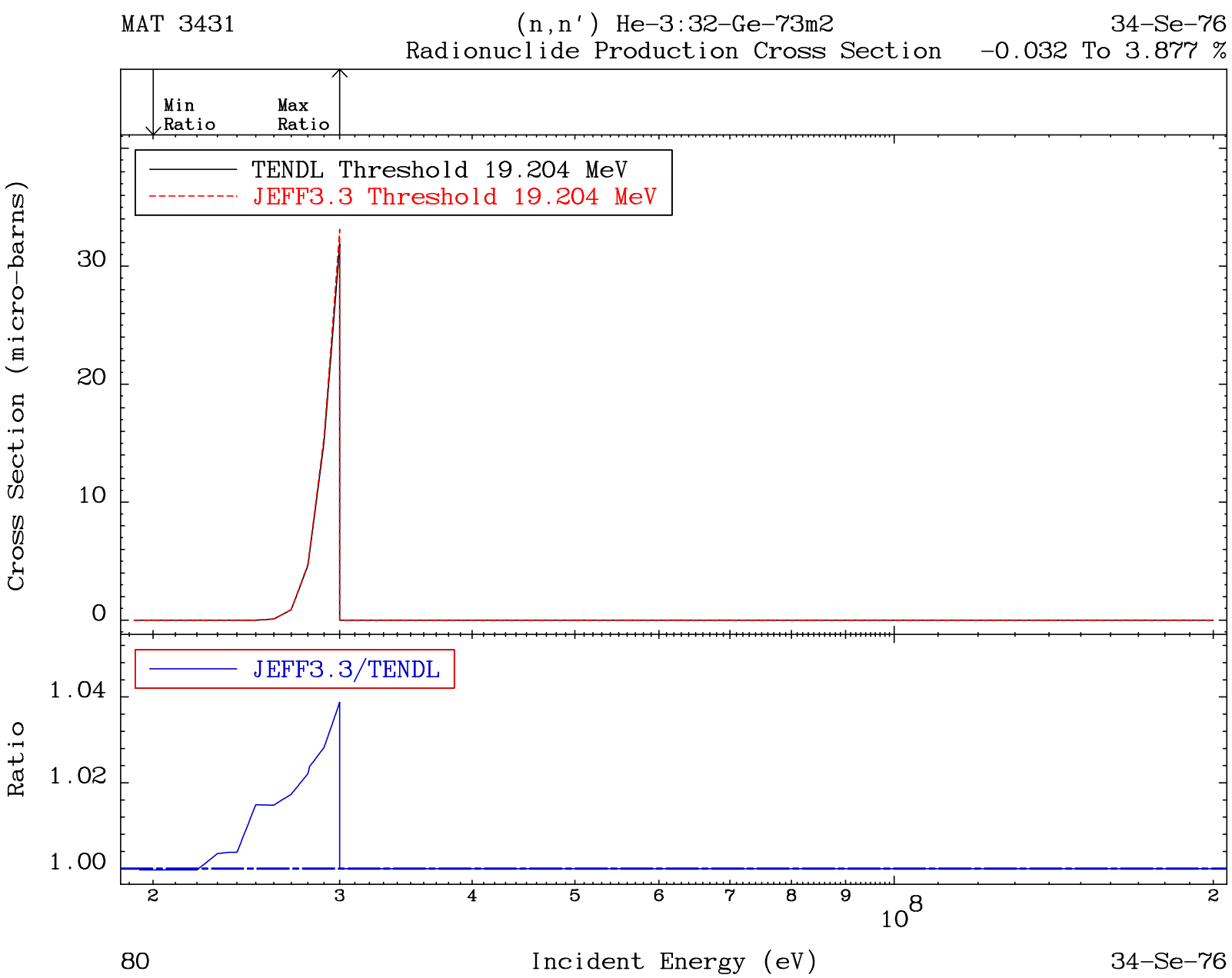

MAT 3431
Dpa total (eV-barns)
Cross Section
34-Se-76
-99.79 To 2327. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
34-Se-76

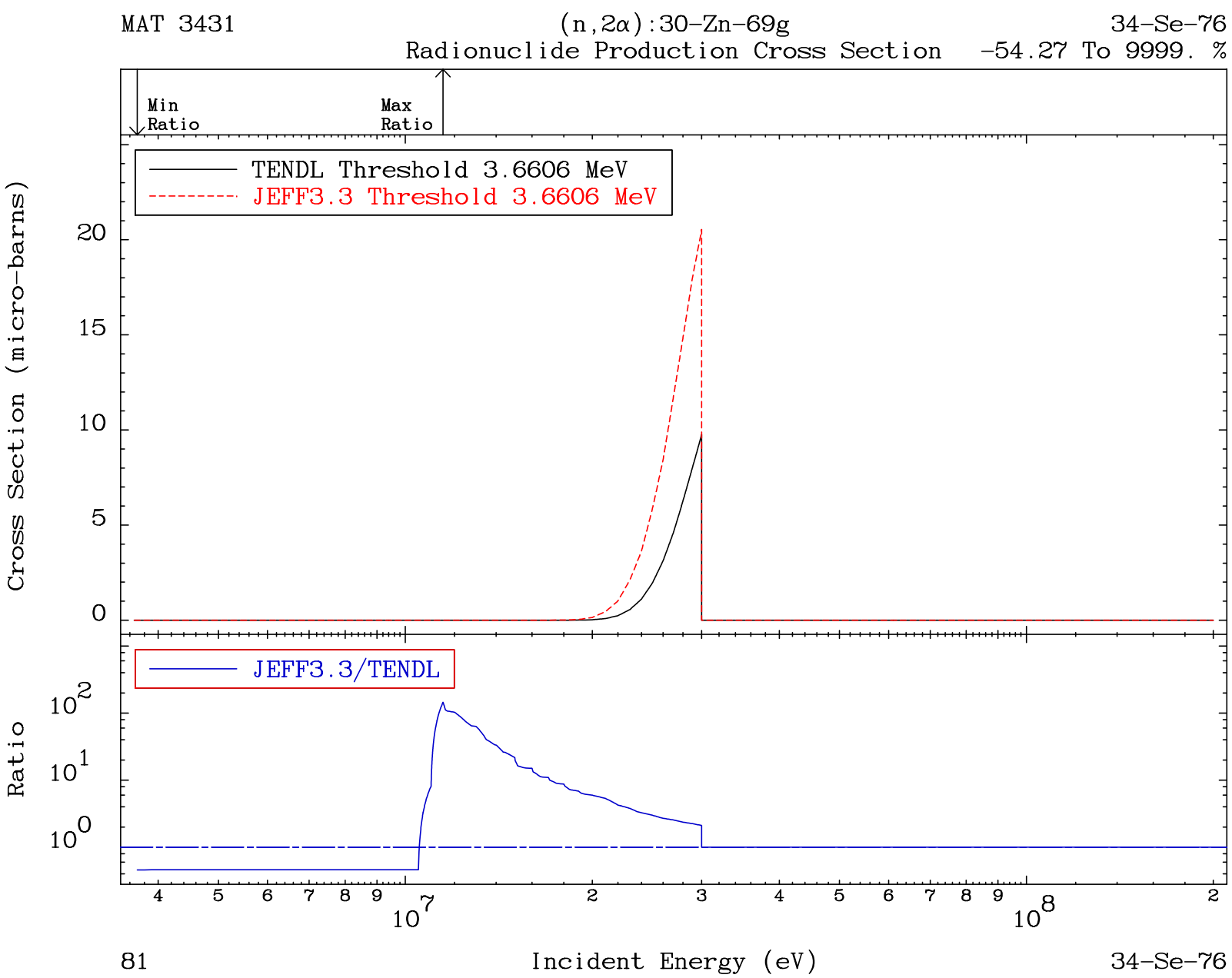

MAT 3431
Dpa elastic (mt2)
Cross Section
34-Se-76
-99.86 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 462.91 eV
JEFF3.3 Threshold 459.86 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
34-Se-76

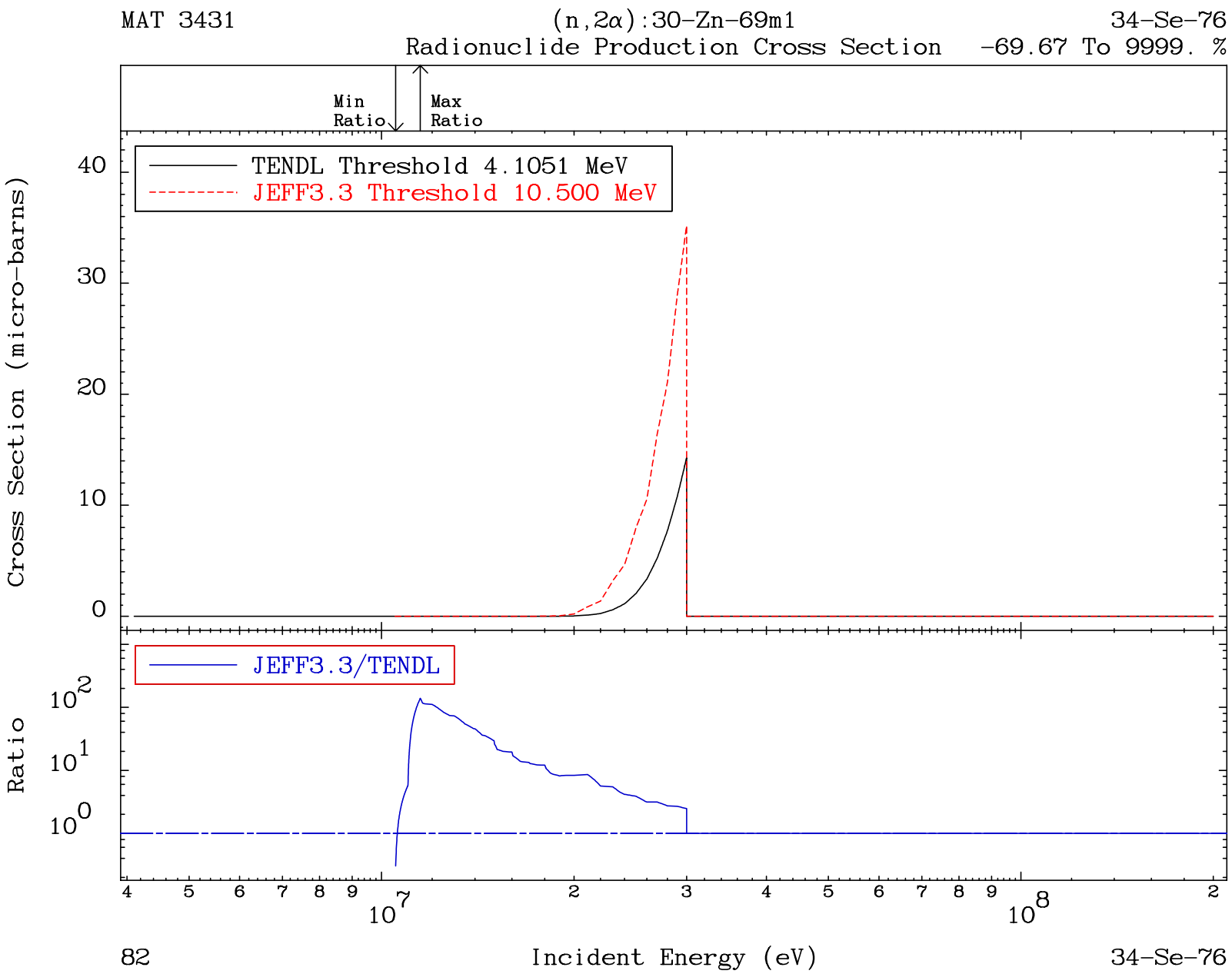

MAT 3431
Dpa inelastic (mt51-91)
Cross Section
34-Se-76
-0.302 To 3.487 %
Min Ratio
Max Ratio
TENDL Threshold 566.53 keV
JEFF3.3 Threshold 566.53 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
34-Se-76

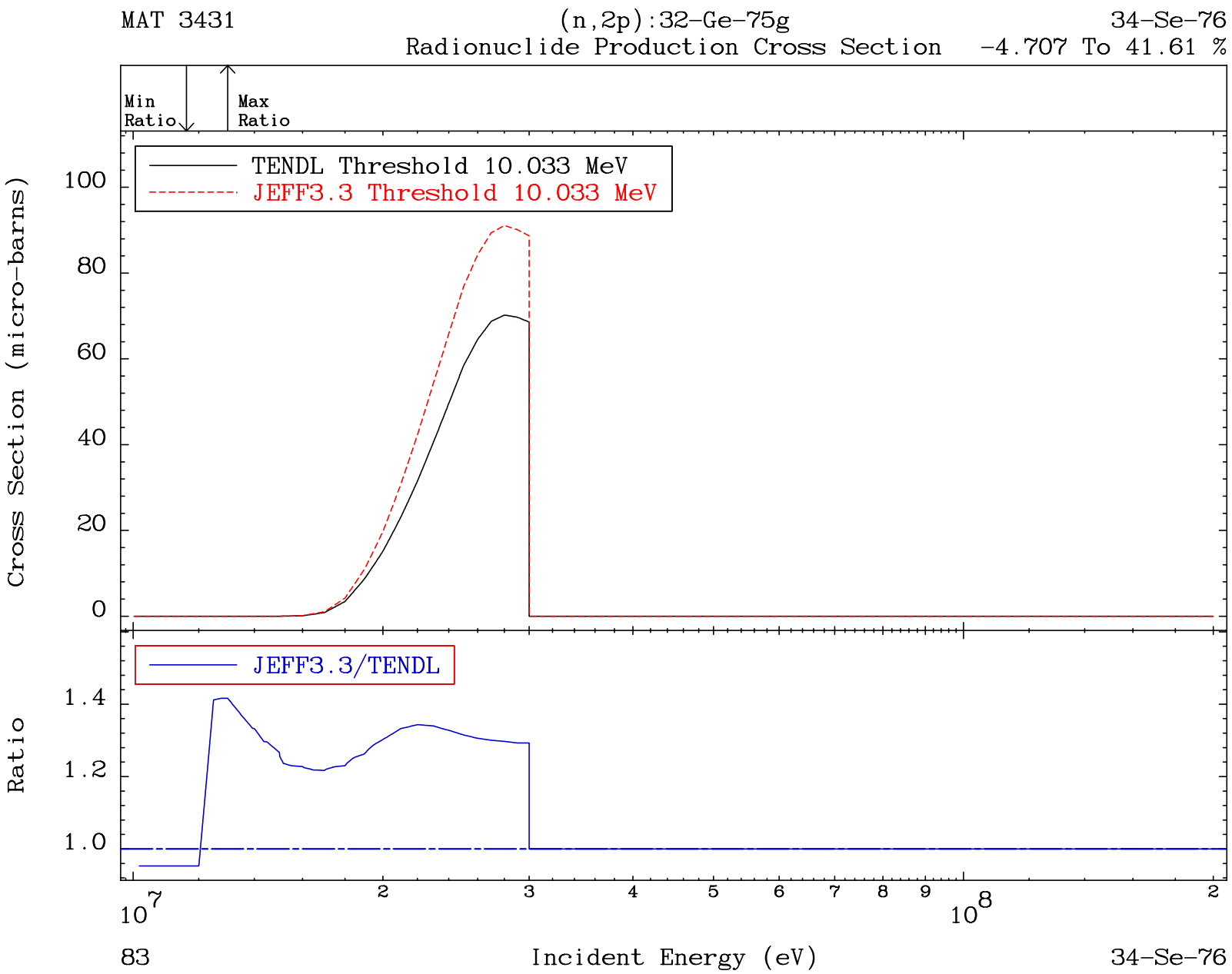

MAT 3431
Dpa disappearance (mt102 -120)
Cross Section
34-Se-76
-99.69 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
34-Se-76

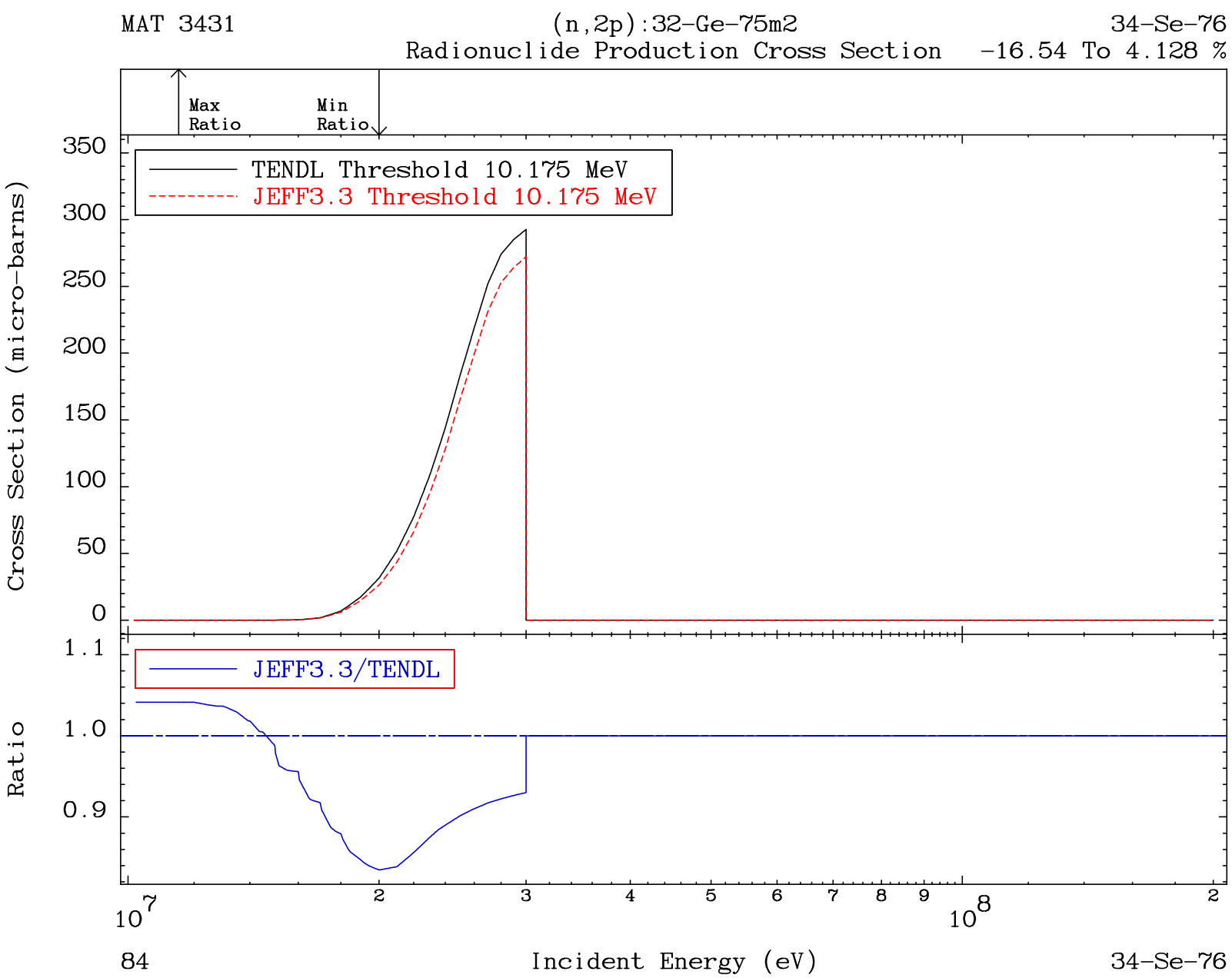

MAT 3431
(n,n') He-3:32-Ge-73g
34-Se-76
Radionuclide Production Cross Section
-0.605 To 1.342 %
Min Ratio
Max Ratio
TENDL Threshold 19.137 MeV
JEFF3.3 Threshold 19.137 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
34-Se-76

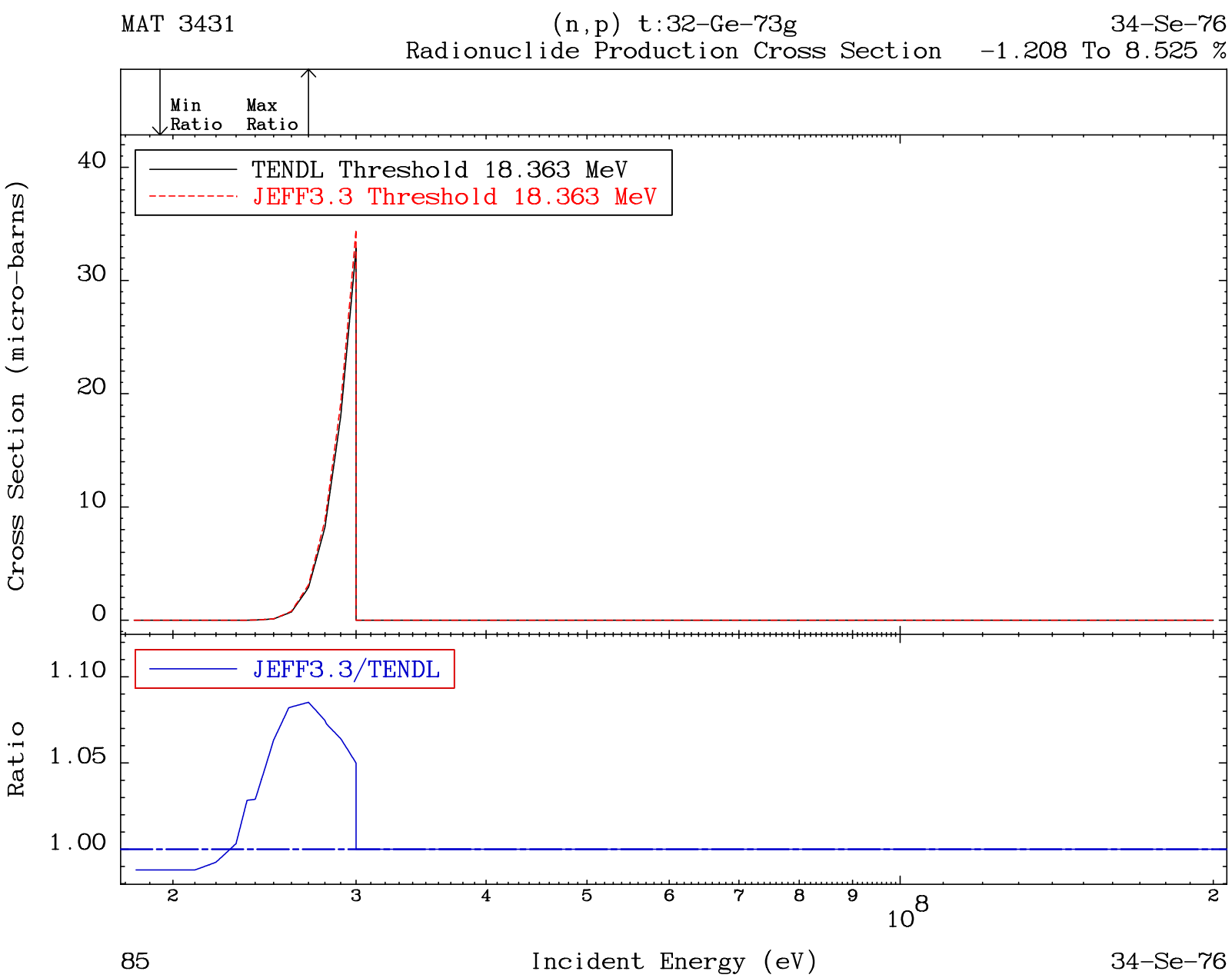

MAT 3431
(n,n') He-3:32-Ge-73m2
34-Se-76
Radionuclide Production Cross Section
-0.032 To 3.877 %
Min Ratio
Max Ratio
TENDL Threshold 19.204 MeV
JEFF3.3 Threshold 19.204 MeV
Cross Section (micro-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
34-Se-76

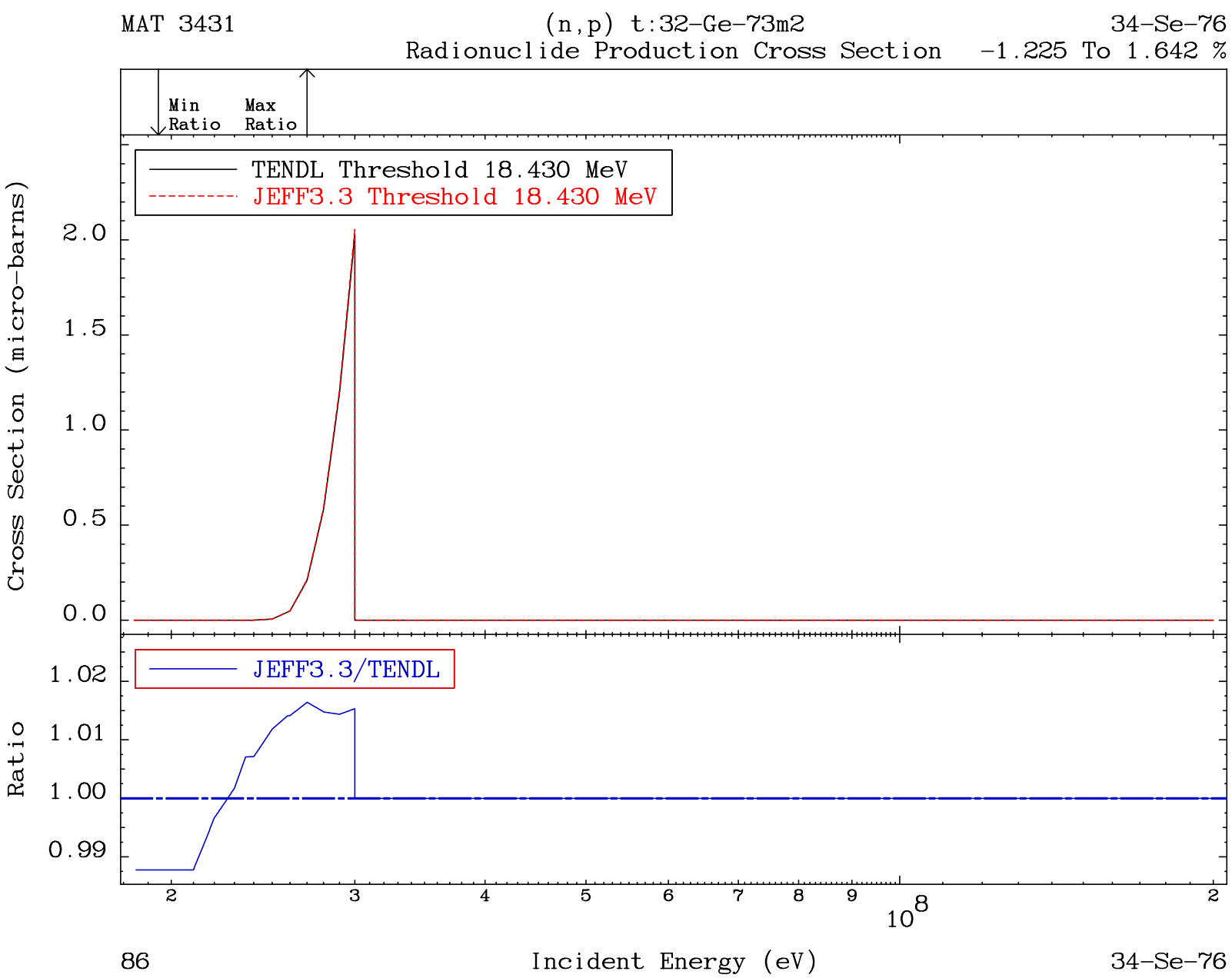

MAT 3431
(n,2α):30-Zn-69g
34-Se-76
Radionuclide Production Cross Section -54.27 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.6606 MeV
JEFF3.3 Threshold 3.6606 MeV
Cross Section (micro-barns)
0
5
10
15
20
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
81
Incident Energy (eV)
34-Se-76


MAT 3431
(n,2α):30-Zn-69m1
34-Se-76
Radionuclide Production Cross Section -69.67 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.1051 MeV
JEFF3.3 Threshold 10.500 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
82
Incident Energy (eV)
34-Se-76


MAT 3431
(n,2p):32-Ge-75g
34-Se-76
Radionuclide Production Cross Section -4.707 To 41.61 %
Min Ratio
Max Ratio
TENDL Threshold 10.033 MeV
JEFF3.3 Threshold 10.033 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
34-Se-76


MAT 3431
(n,2p):32-Ge-75m2
34-Se-76
Radionuclide Production Cross Section -16.54 To 4.128 %
Max Ratio
Min Ratio
TENDL Threshold 10.175 MeV
JEFF3.3 Threshold 10.175 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
10^7
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
34-Se-76


MAT 3431
(n,p) t:32-Ge-73g
34-Se-76
Radionuclide Production Cross Section
-1.208 To 8.525 %
Min Ratio
Max Ratio
TENDL Threshold 18.363 MeV
JEFF3.3 Threshold 18.363 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
2
10^8
85
Incident Energy (eV)
34-Se-76


MAT 3431
(n,p) t:32-Ge-73m2
34-Se-76
Radionuclide Production Cross Section
-1.225 To 1.642 %
Min Ratio
Max Ratio
TENDL Threshold 18.430 MeV
JEFF3.3 Threshold 18.430 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
34-Se-76