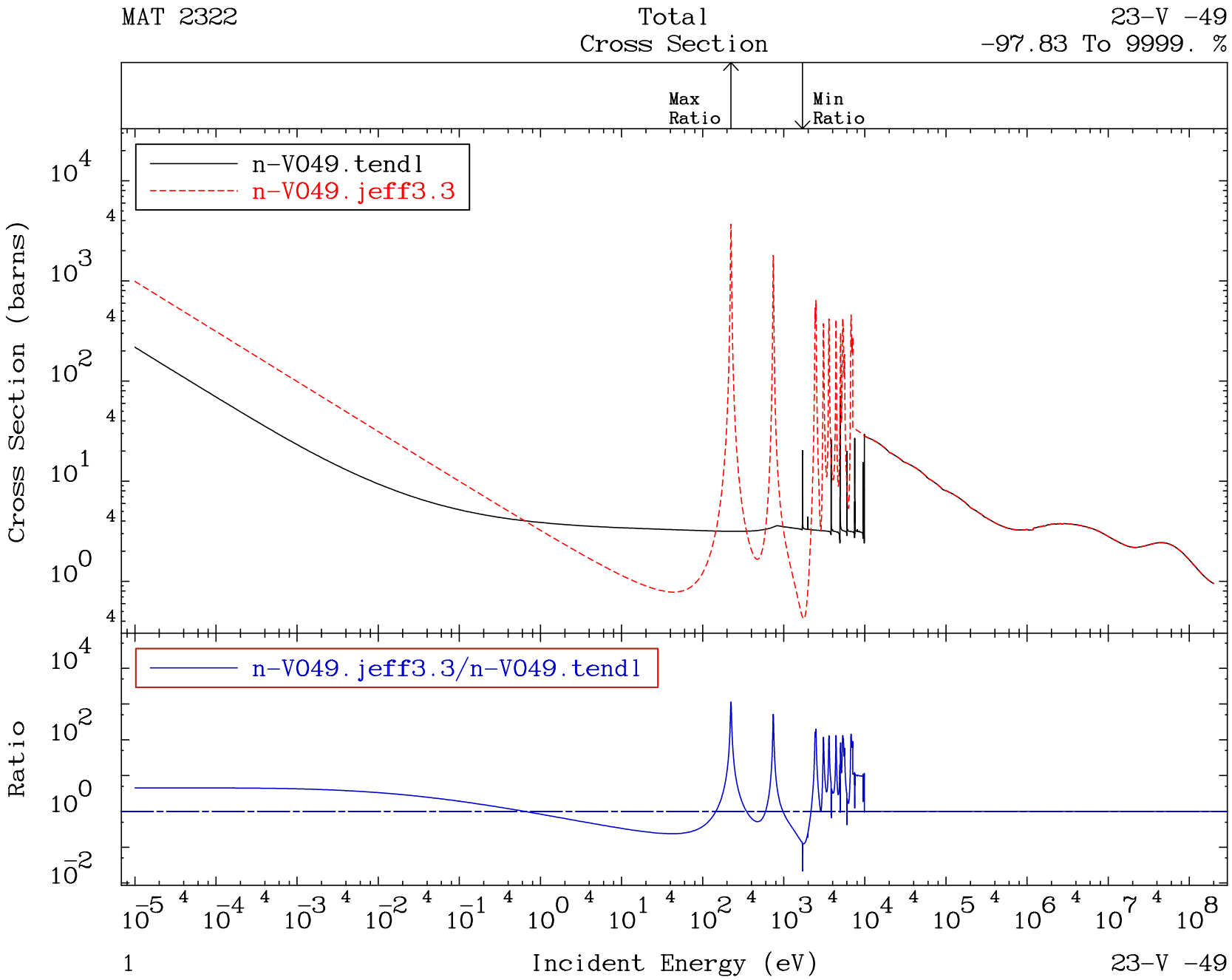
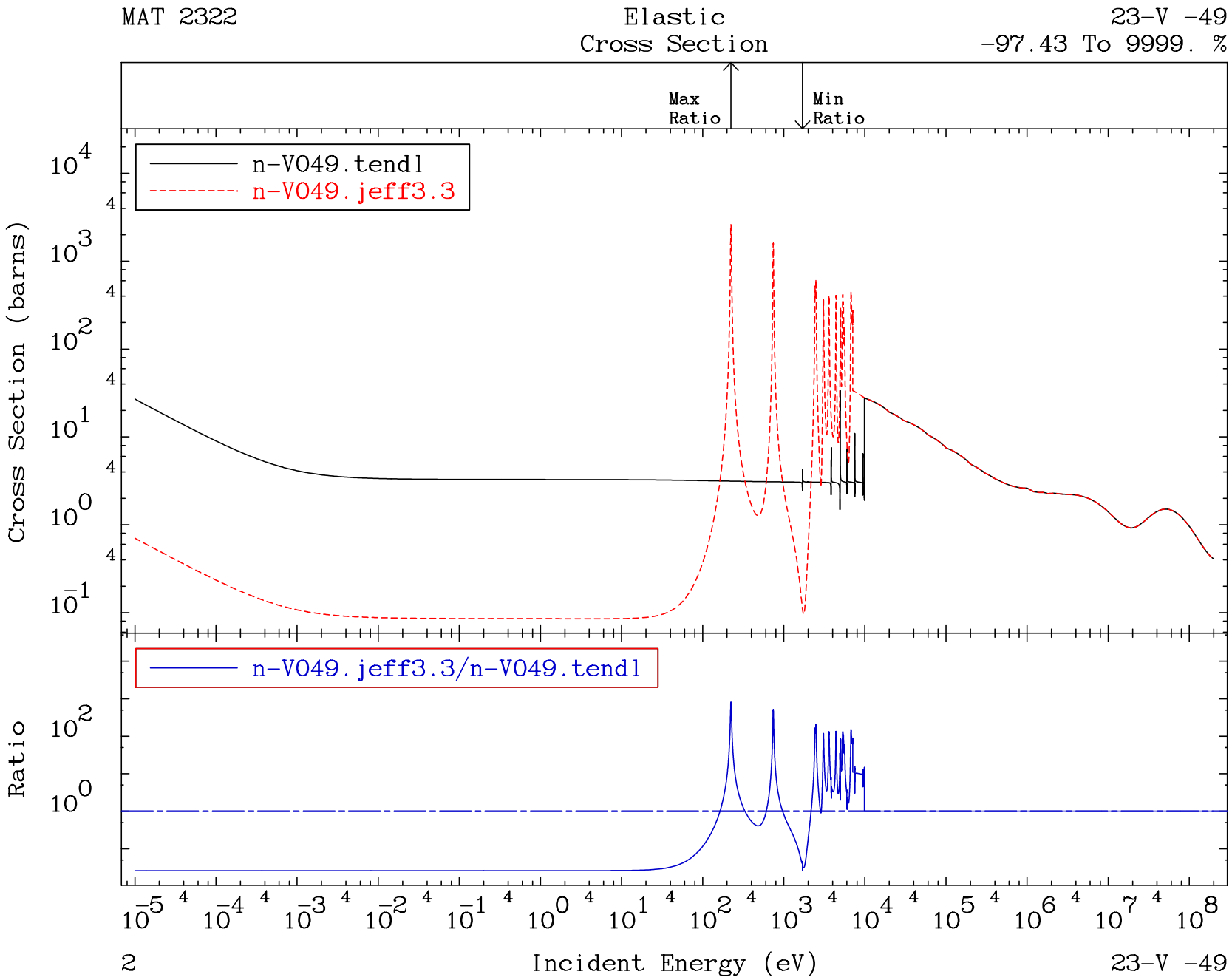
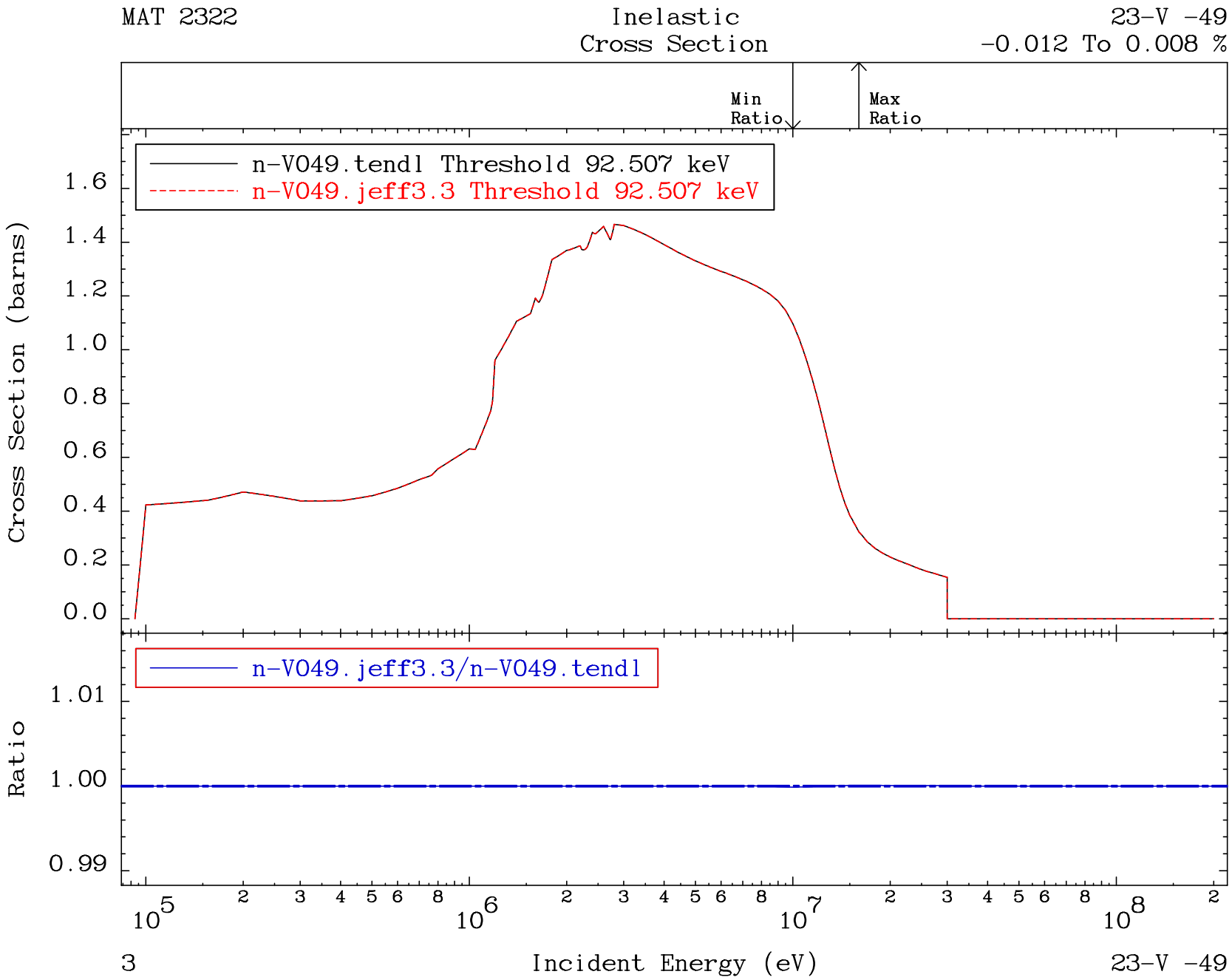
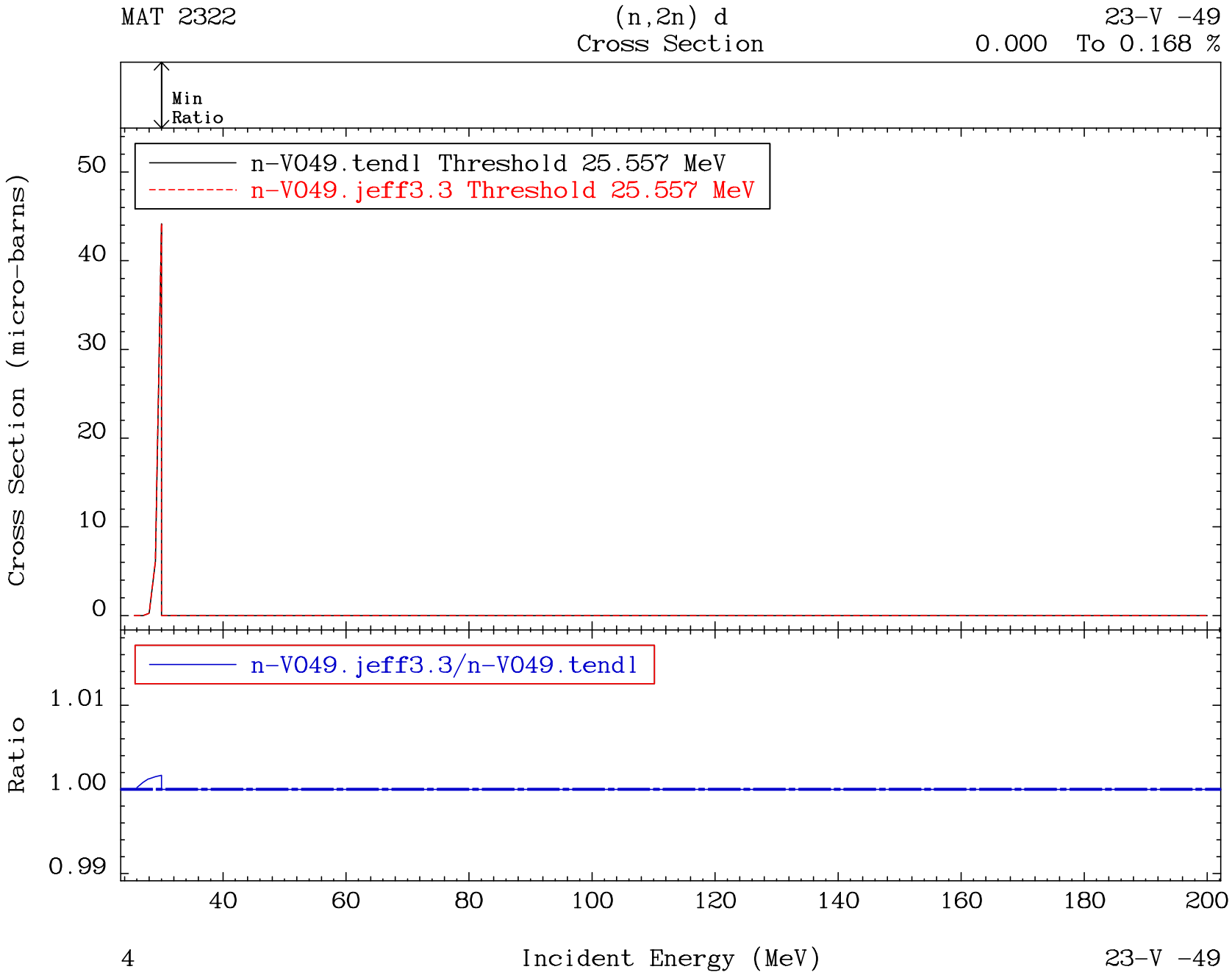
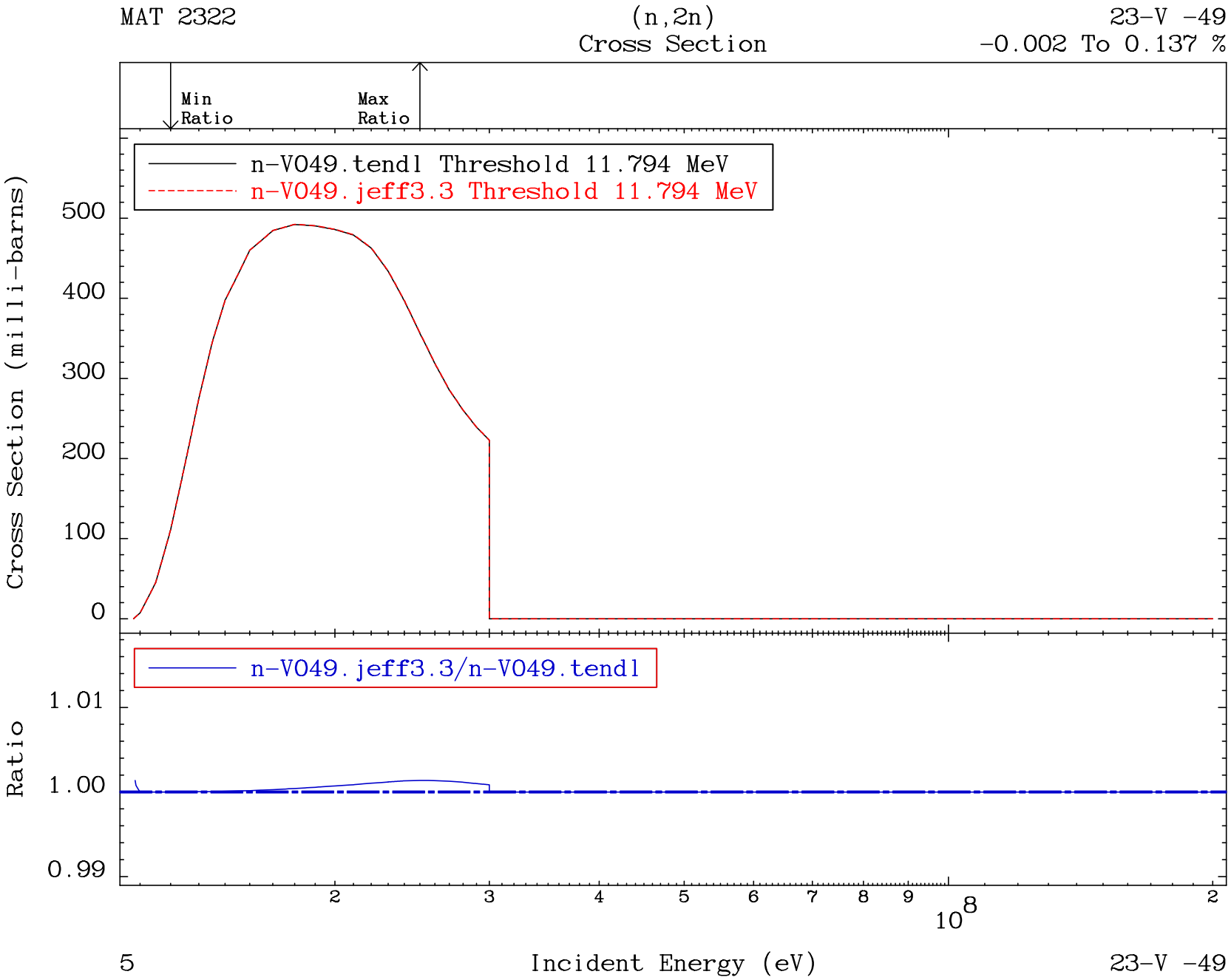
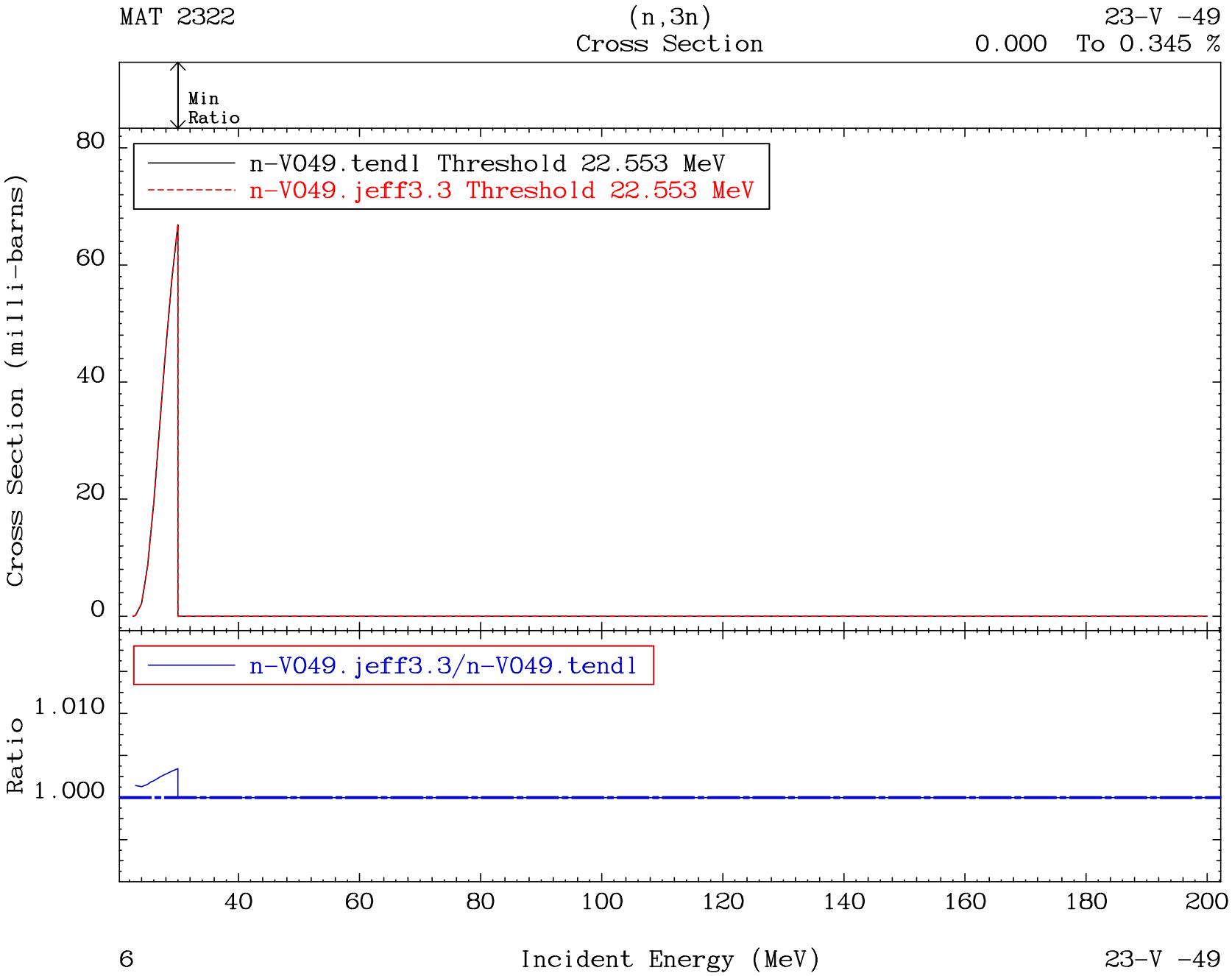

MAT 2322
Total
Cross Section
23-V -49
-97.83 To 9999. %
Max
Ratio
Min
Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
1
23-V -49

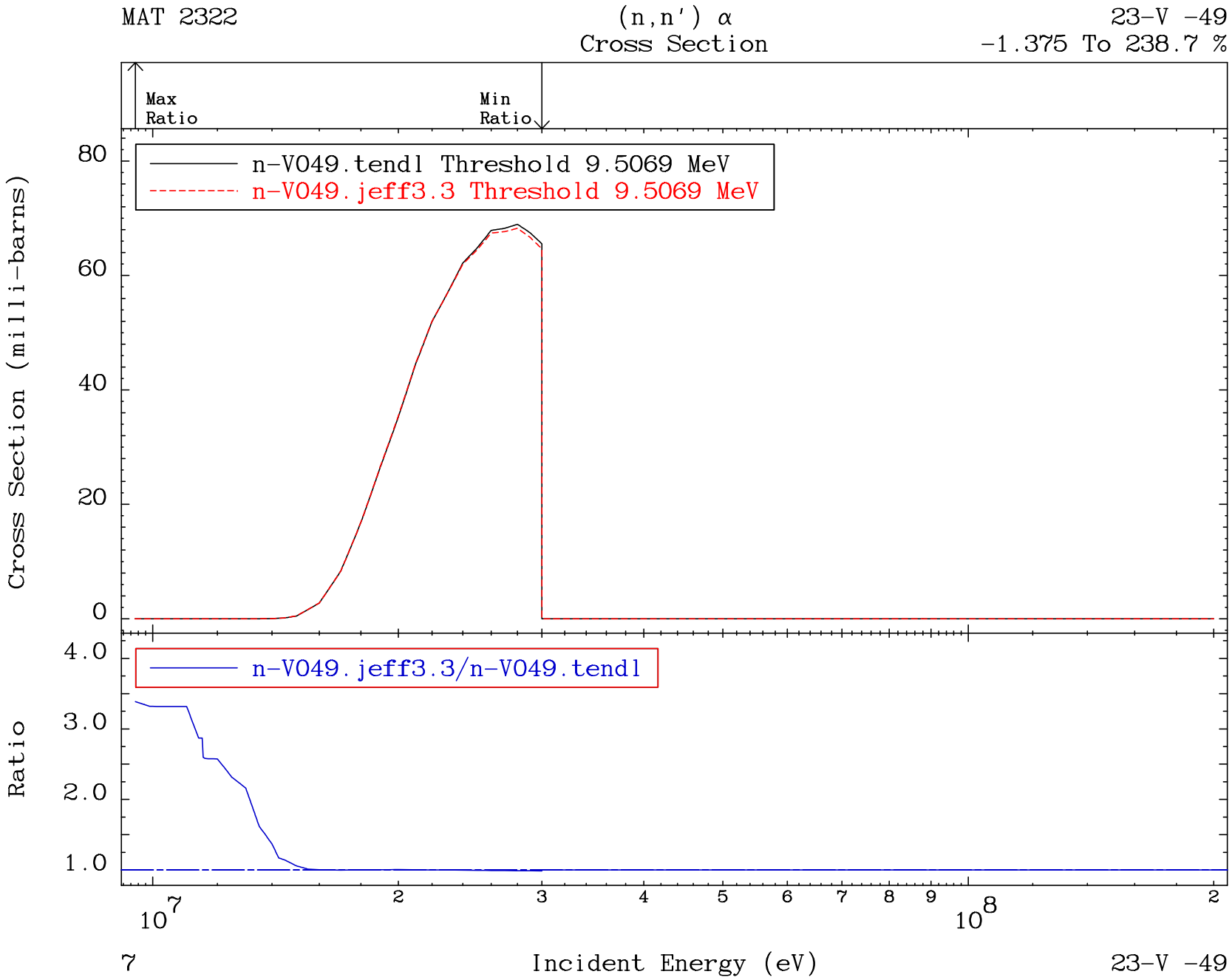

MAT 2322
Elastic
Cross Section
23-V -49
-97.43 To 9999. %
Max
Ratio
Min
Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
2
23-V -49

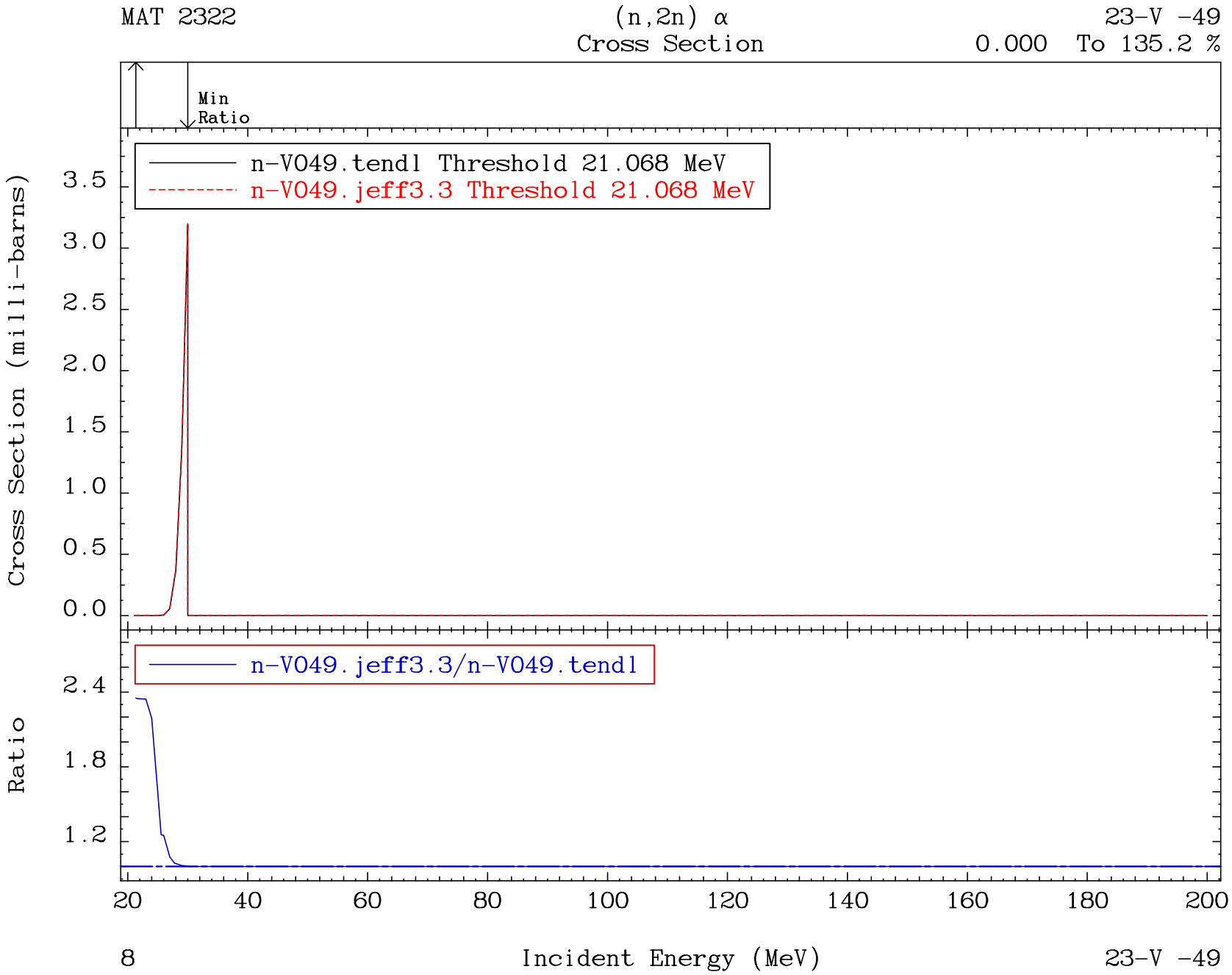

MAT 2322
Inelastic
Cross Section
23-V -49
-0.012 To 0.008 %
Min
Ratio
Max
Ratio
n-V049.tendl Threshold 92.507 keV
n-V049.jeff3.3 Threshold 92.507 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
23-V -49

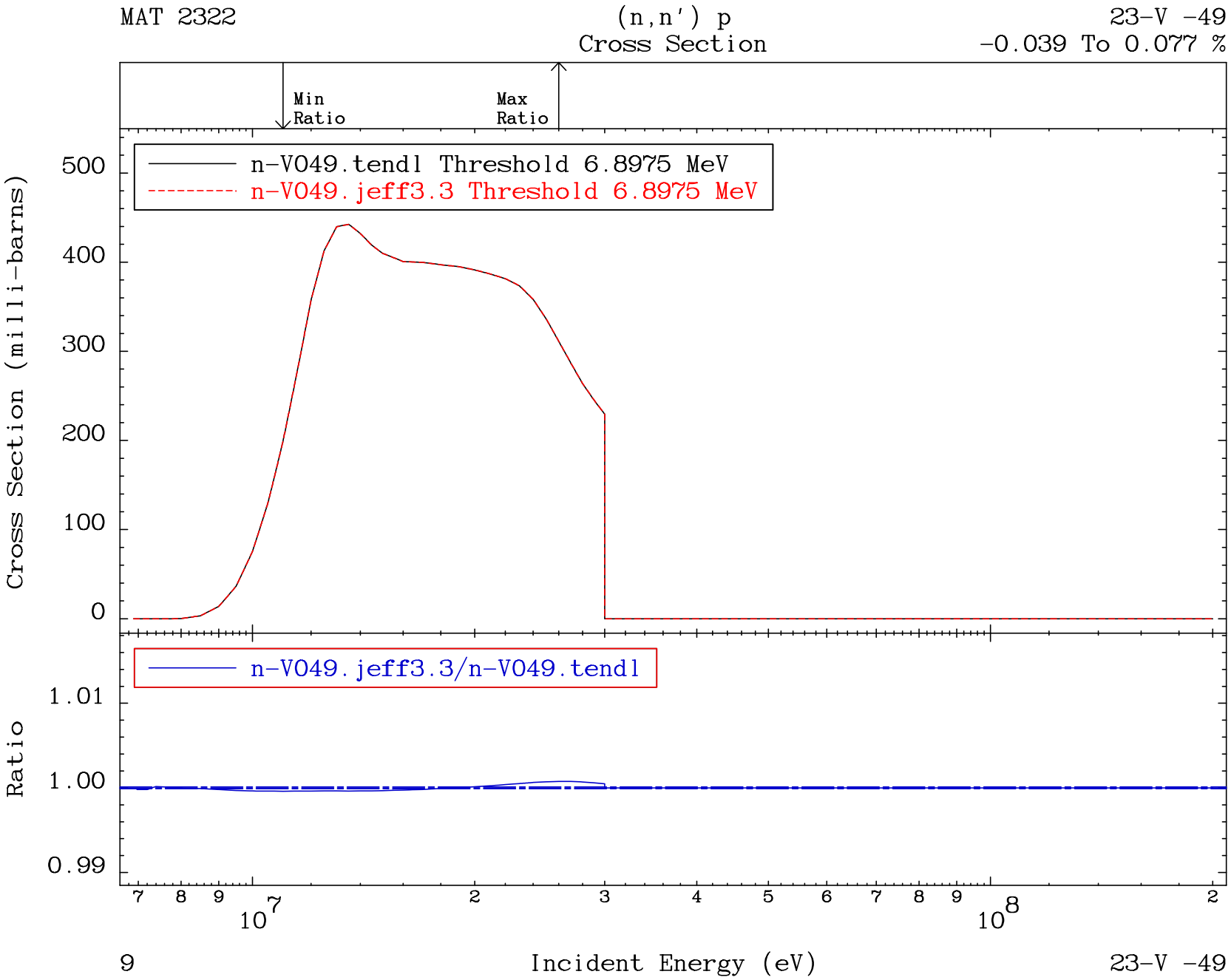

MAT 2322
(n,2n) d
Cross Section
23-V -49
0.000 To 0.168 %
Min
Ratio
n-V049.tendl Threshold 25.557 MeV
n-V049.jeff3.3 Threshold 25.557 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
4
23-V -49

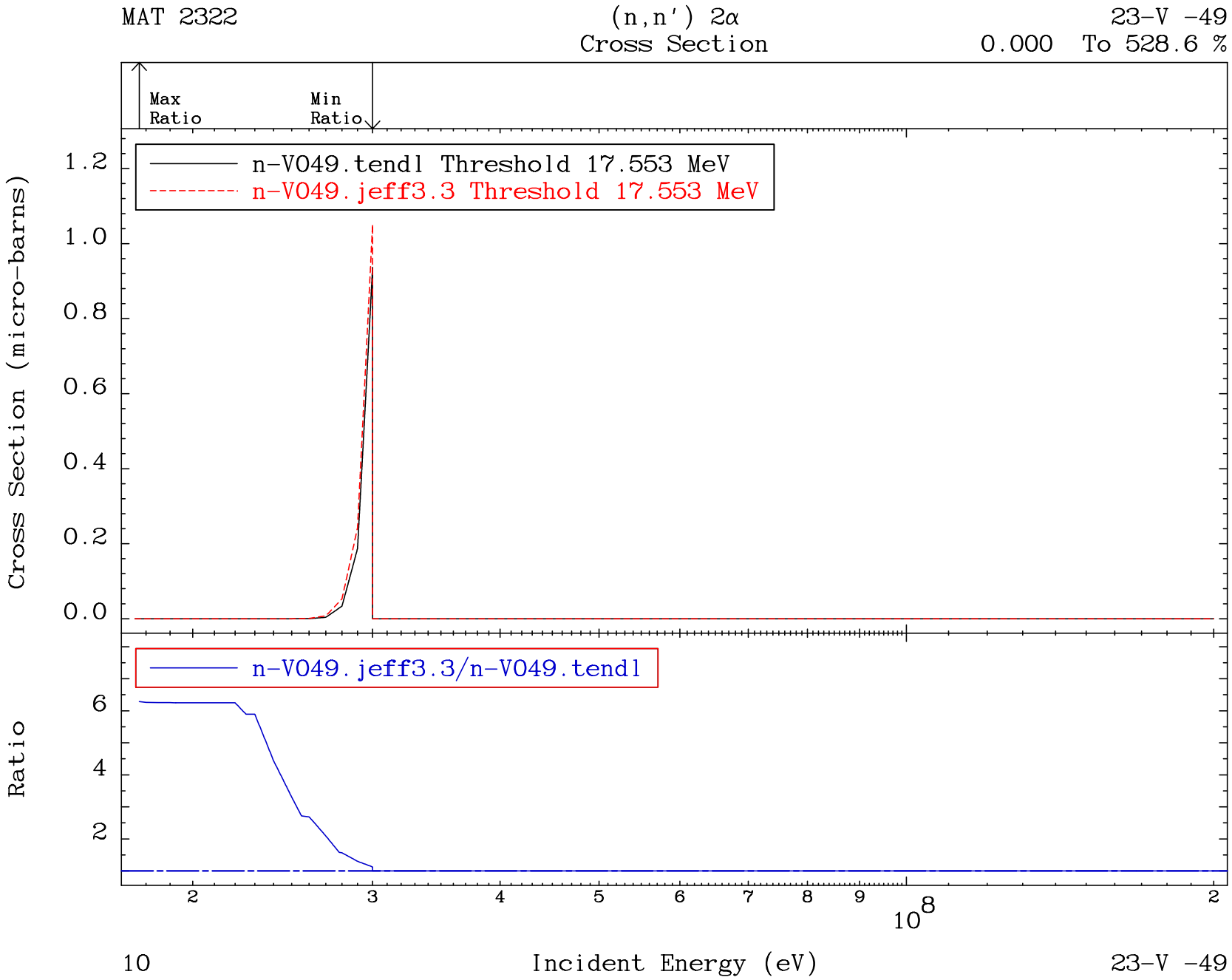

MAT 2322
(n,2n)
Cross Section
23-V -49
-0.002 To 0.137 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 11.794 MeV
n-V049.jeff3.3 Threshold 11.794 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
23-V -49

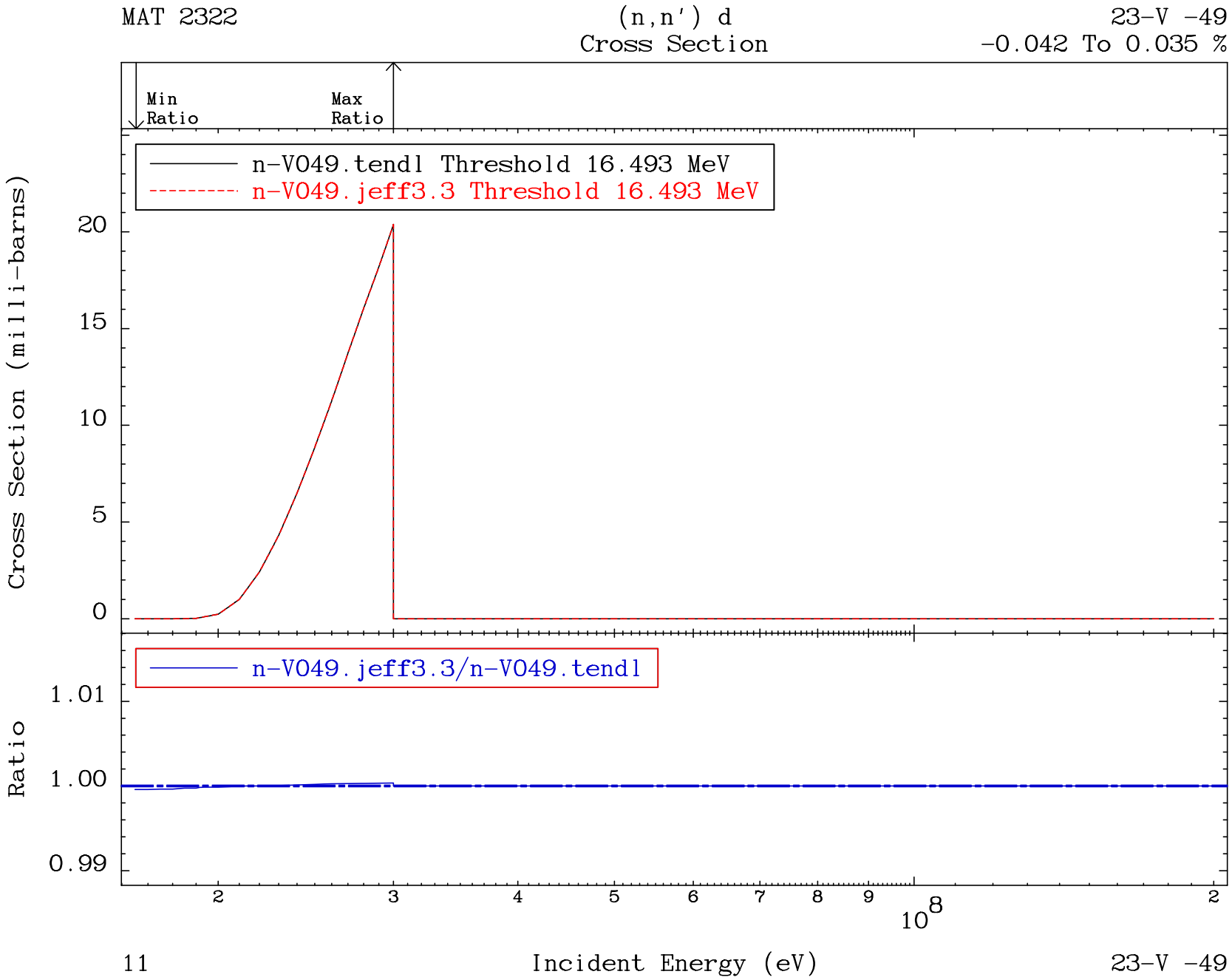

MAT 2322
(n,3n)
Cross Section
23-V -49
0.000 To 0.345 %
Min
Ratio
n-V049.tendl Threshold 22.553 MeV
n-V049.jeff3.3 Threshold 22.553 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.010
1.000
40
60
80
100
120
140
160
180
200
6
Incident Energy (MeV)
23-V -49

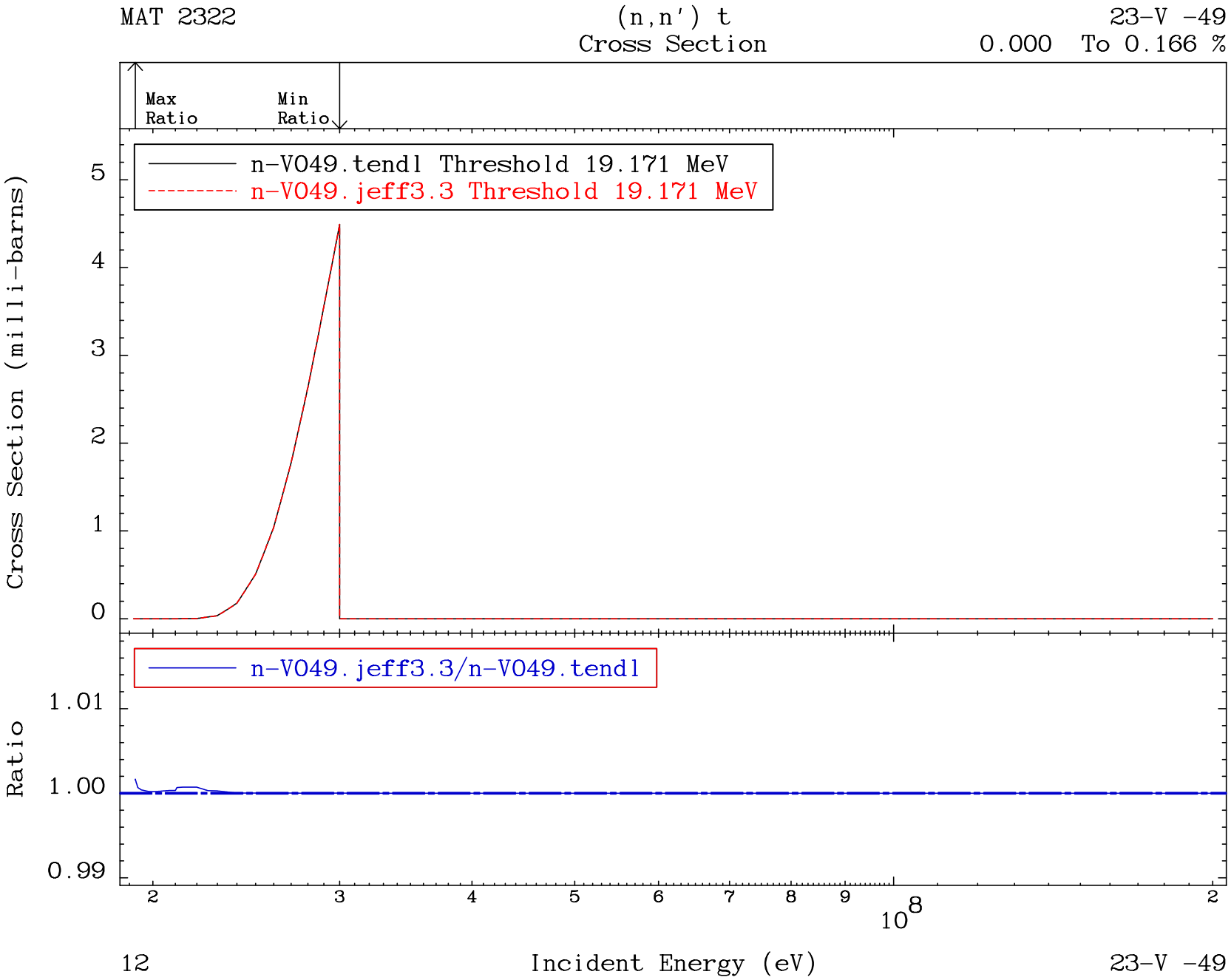

MAT 2322
(n,n') α
Cross Section
23-V -49
-1.375 To 238.7 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 9.5069 MeV
n-V049.jeff3.3 Threshold 9.5069 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
4.0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
23-V -49

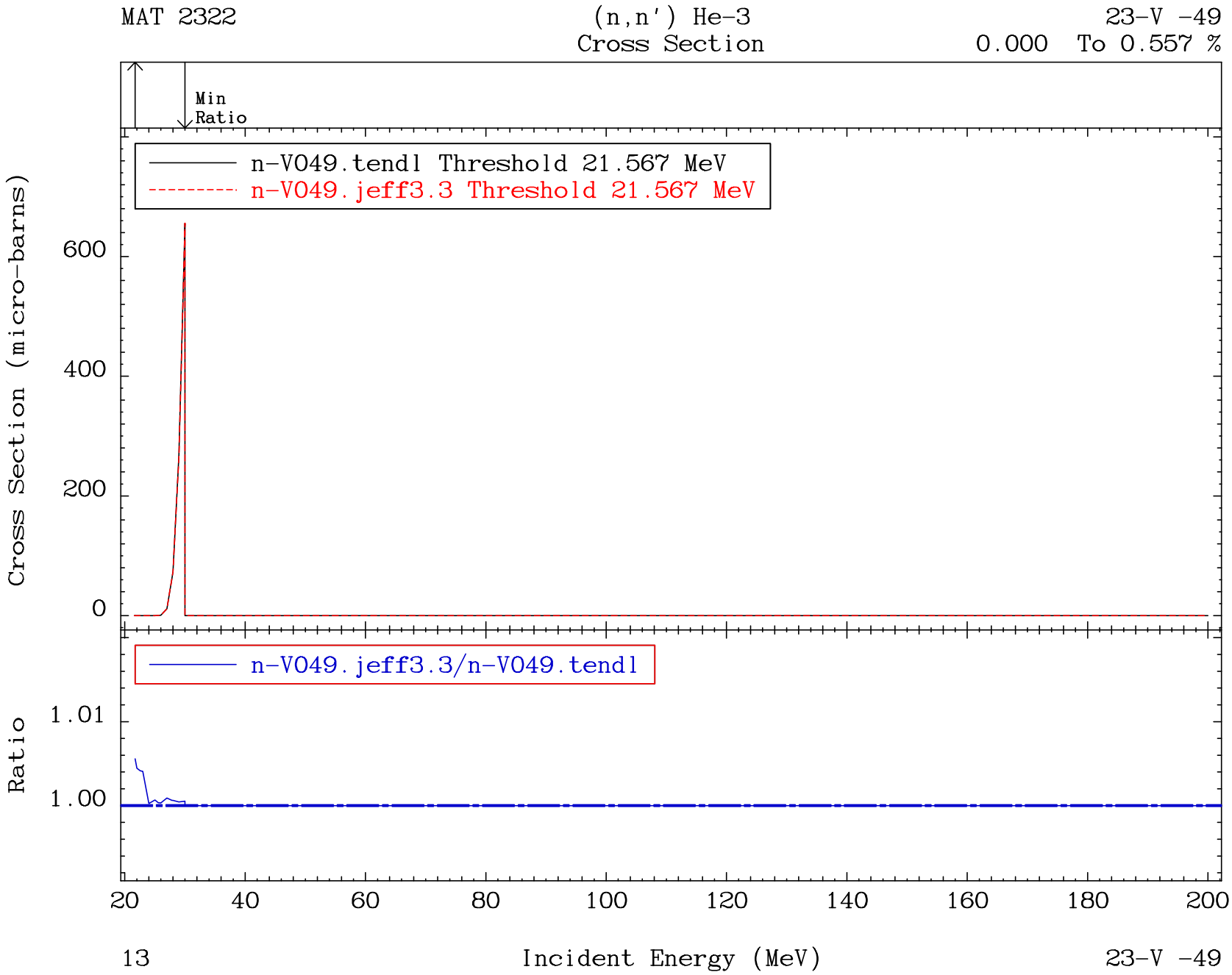

MAT 2322
(n,2n) α
Cross Section
23-V -49
0.000 To 135.2 %
Min
Ratio
n-V049.tendl Threshold 21.068 MeV
n-V049.jeff3.3 Threshold 21.068 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
2.4
1.8
1.2
20
40
60
80
100
120
140
160
180
200
8
Incident Energy (MeV)
23-V -49

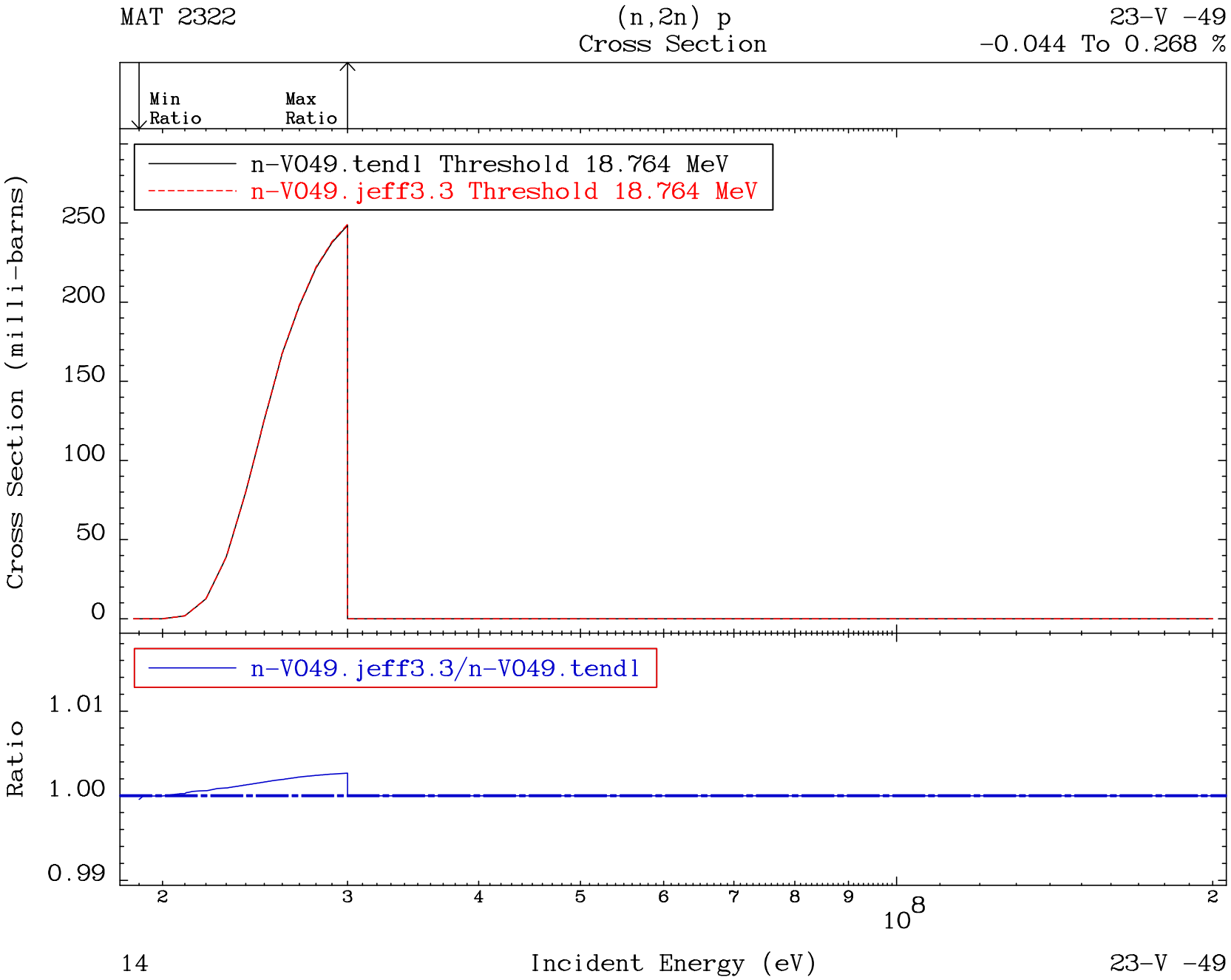

MAT 2322
(n,n') p
Cross Section
23-V -49
-0.039 To 0.077 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 6.8975 MeV
n-V049.jeff3.3 Threshold 6.8975 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
23-V -49

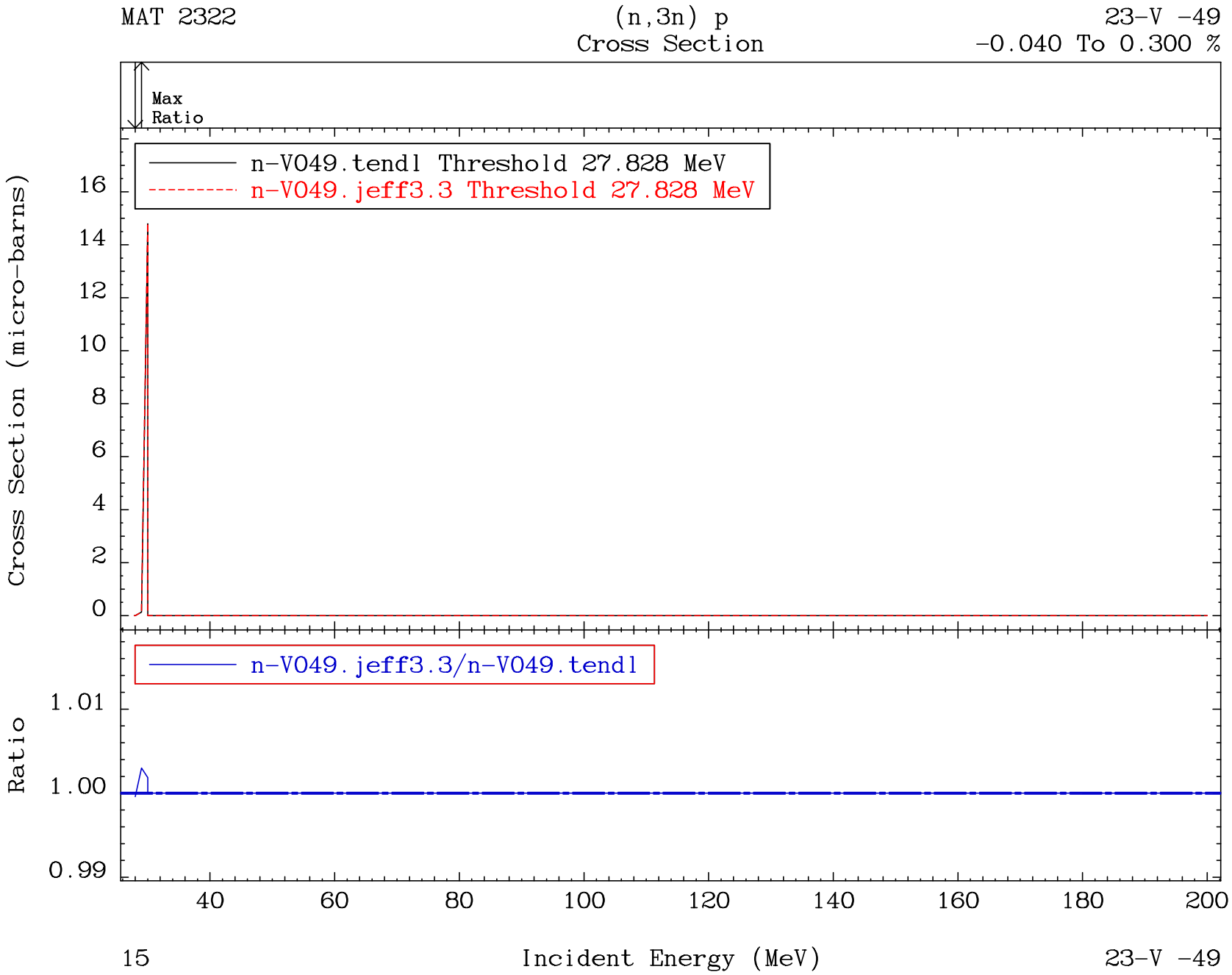

MAT 2322
(n,n') 2α
Cross Section
23-V -49
0.000 To 528.6 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 17.553 MeV
n-V049.jeff3.3 Threshold 17.553 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
23-V -49

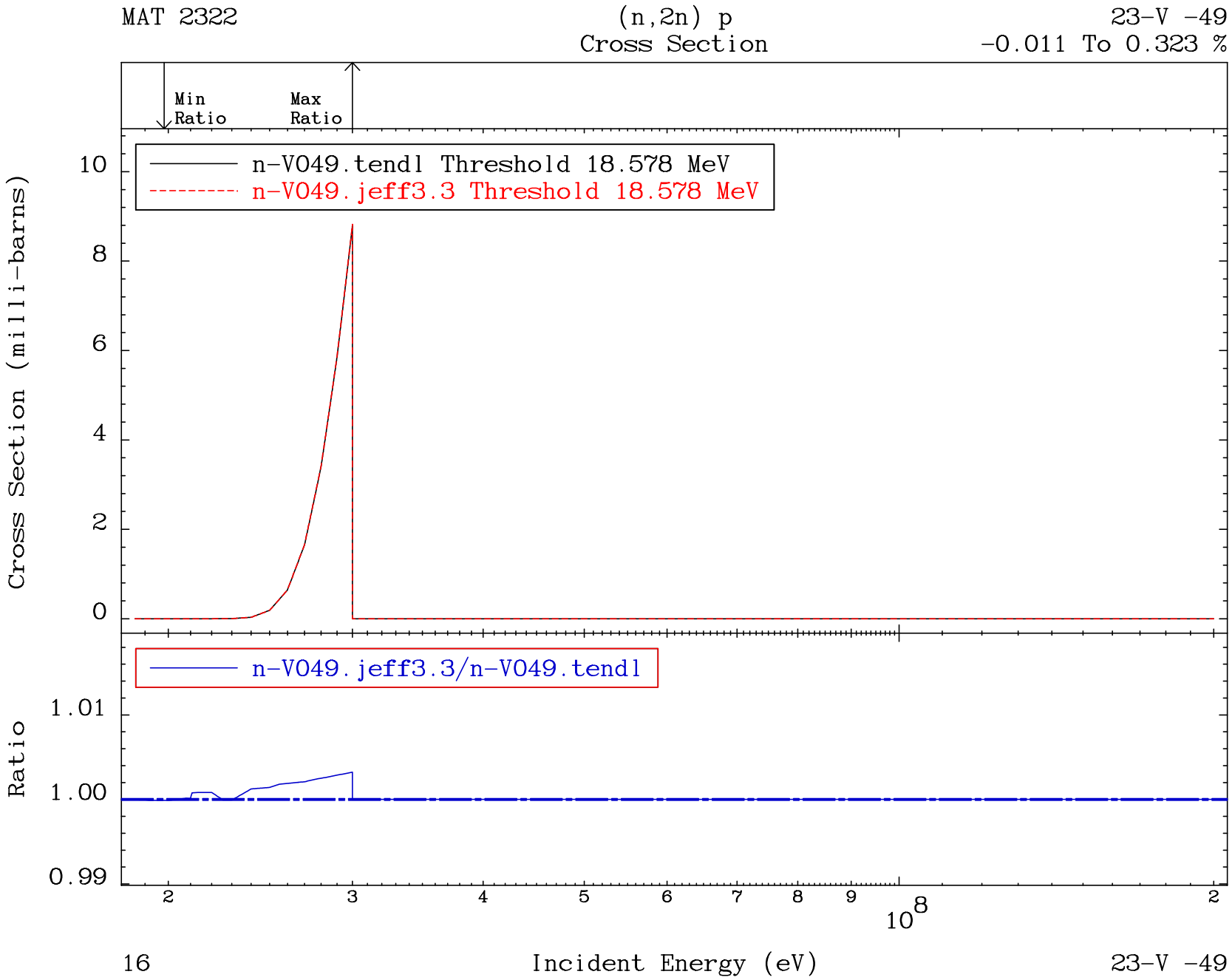

MAT 2322
(n,n') d
Cross Section
23-V -49
-0.042 To 0.035 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 16.493 MeV
n-V049.jeff3.3 Threshold 16.493 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
23-V -49

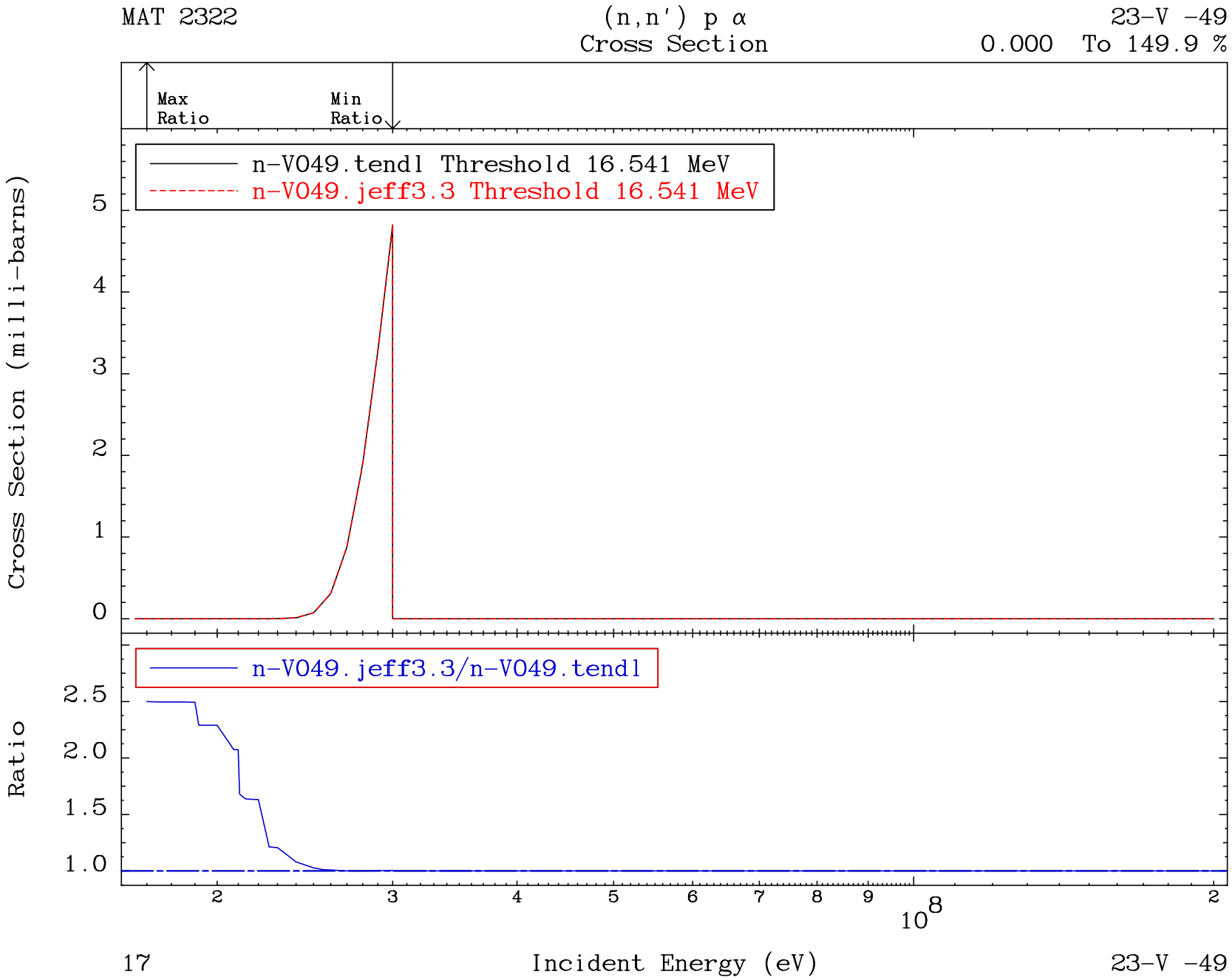

MAT 2322
(n,n') t
Cross Section
23-V -49
0.000 To 0.166 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 19.171 MeV
n-V049.jeff3.3 Threshold 19.171 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-V049.jeff3.3/n-V049.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
23-V -49

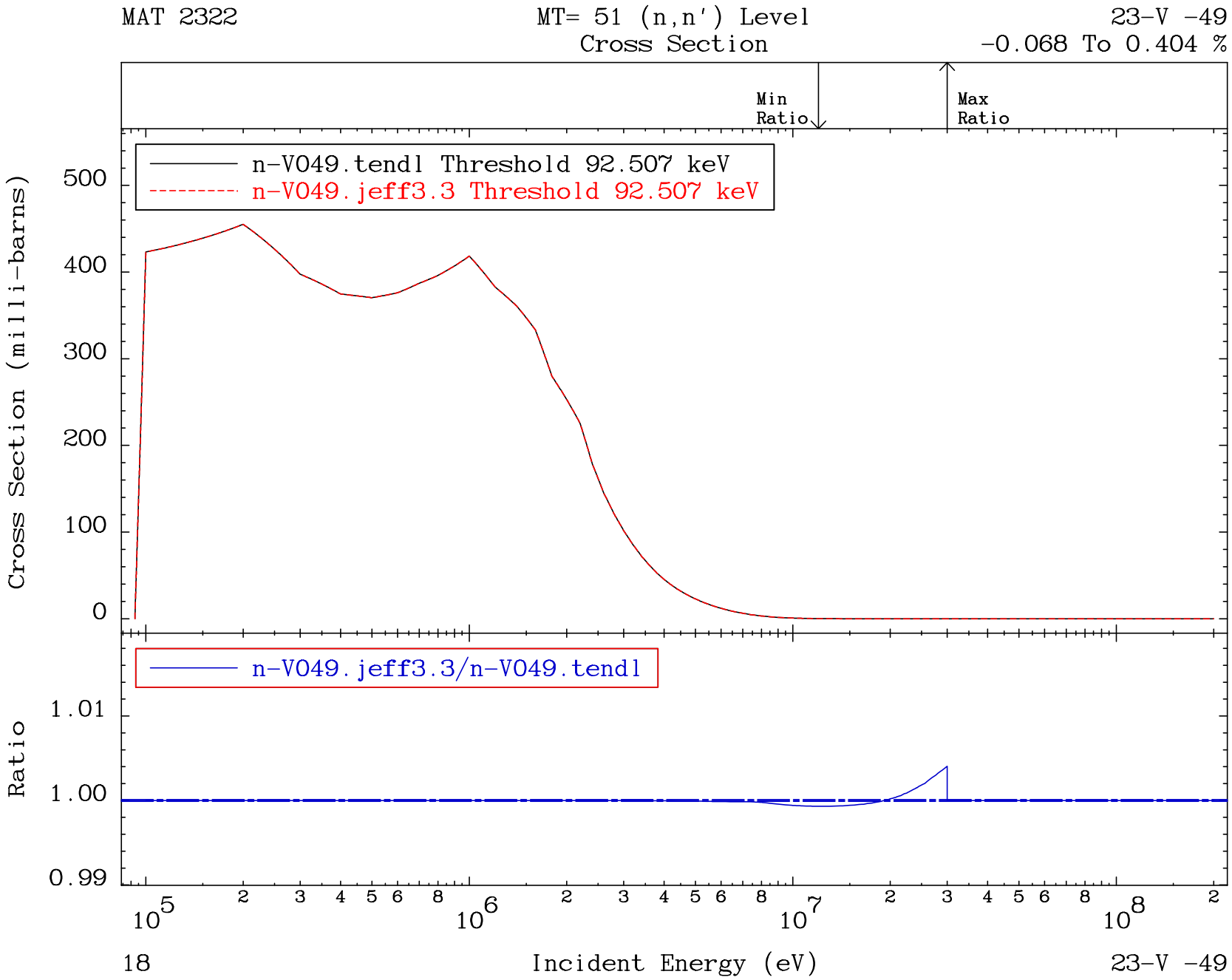

MAT 2322
(n,n') He-3
Cross Section
23-V -49
0.000 To 0.557 %
Min
Ratio
n-V049.tendl Threshold 21.567 MeV
n-V049.jeff3.3 Threshold 21.567 MeV
Cross Section (micro-barns)
600
400
200
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
23-V -49

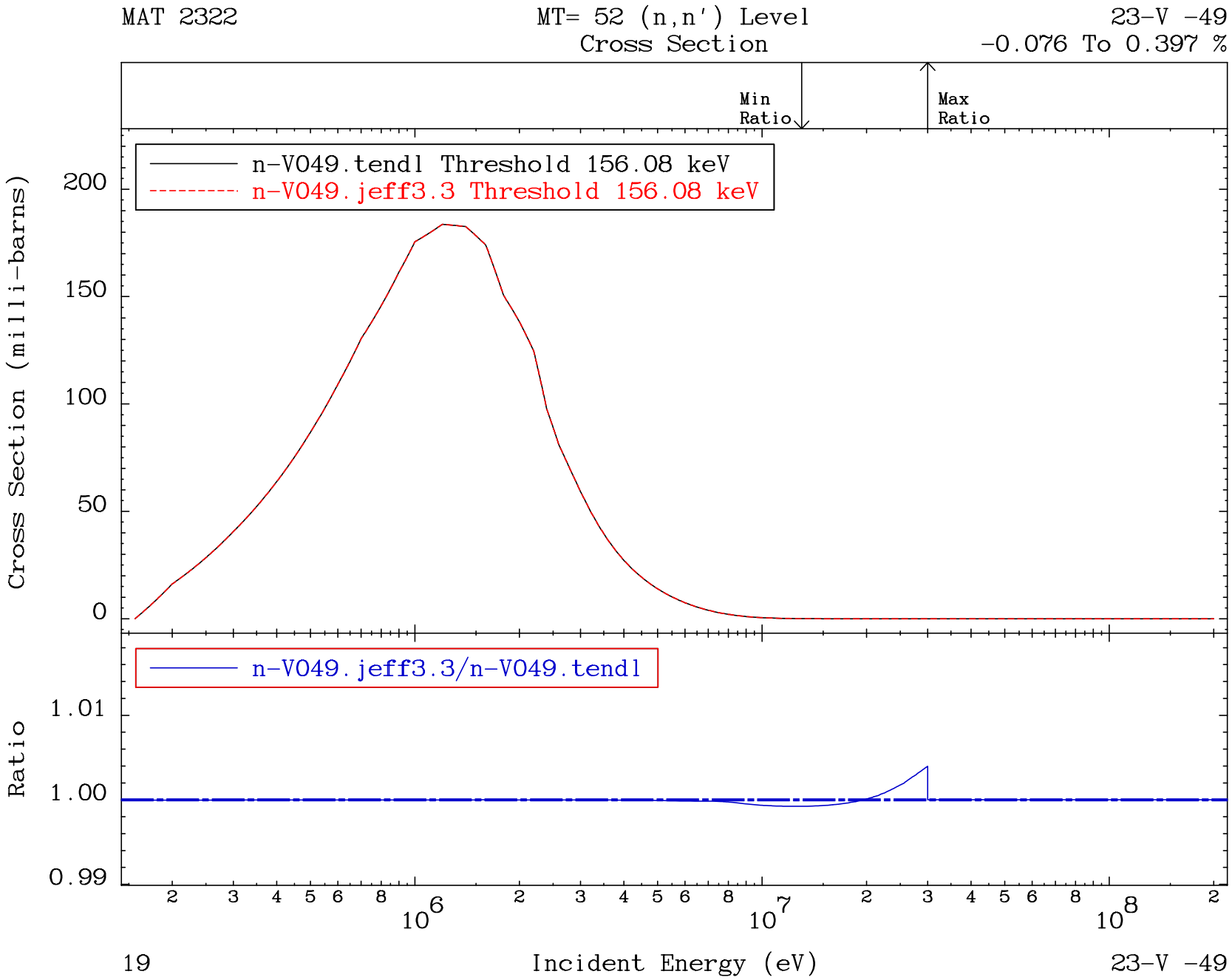

MAT 2322
(n,2n) p
Cross Section
23-V -49
-0.044 To 0.268 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 18.764 MeV
n-V049.jeff3.3 Threshold 18.764 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
23-V -49

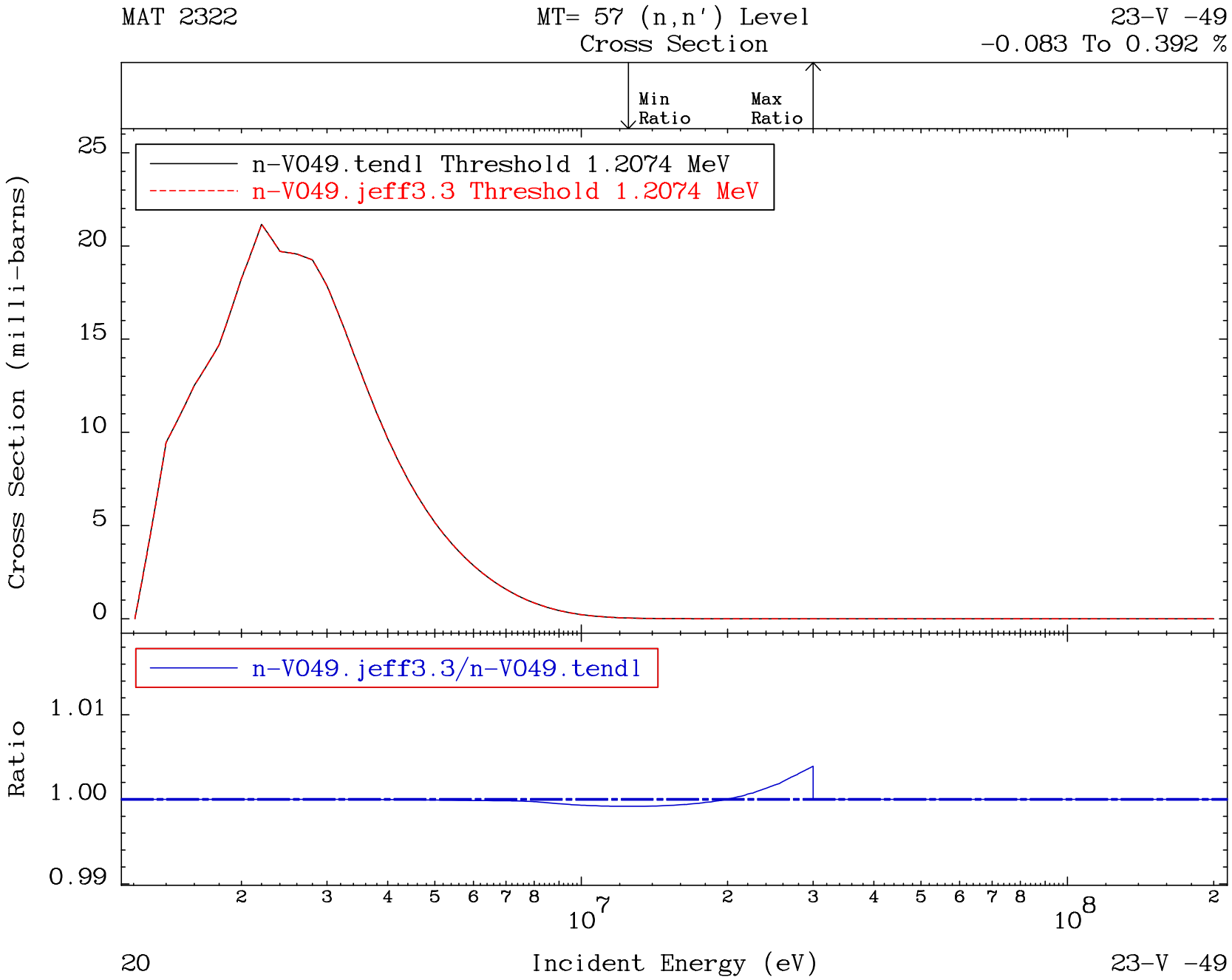

MAT 2322
(n,3n) p
Cross Section
23-V -49
-0.040 To 0.300 %
Max
Ratio
n-V049.tendl Threshold 27.828 MeV
n-V049.jeff3.3 Threshold 27.828 MeV
Cross Section (micro-barns)
16
14
12
10
8
6
4
2
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
23-V -49

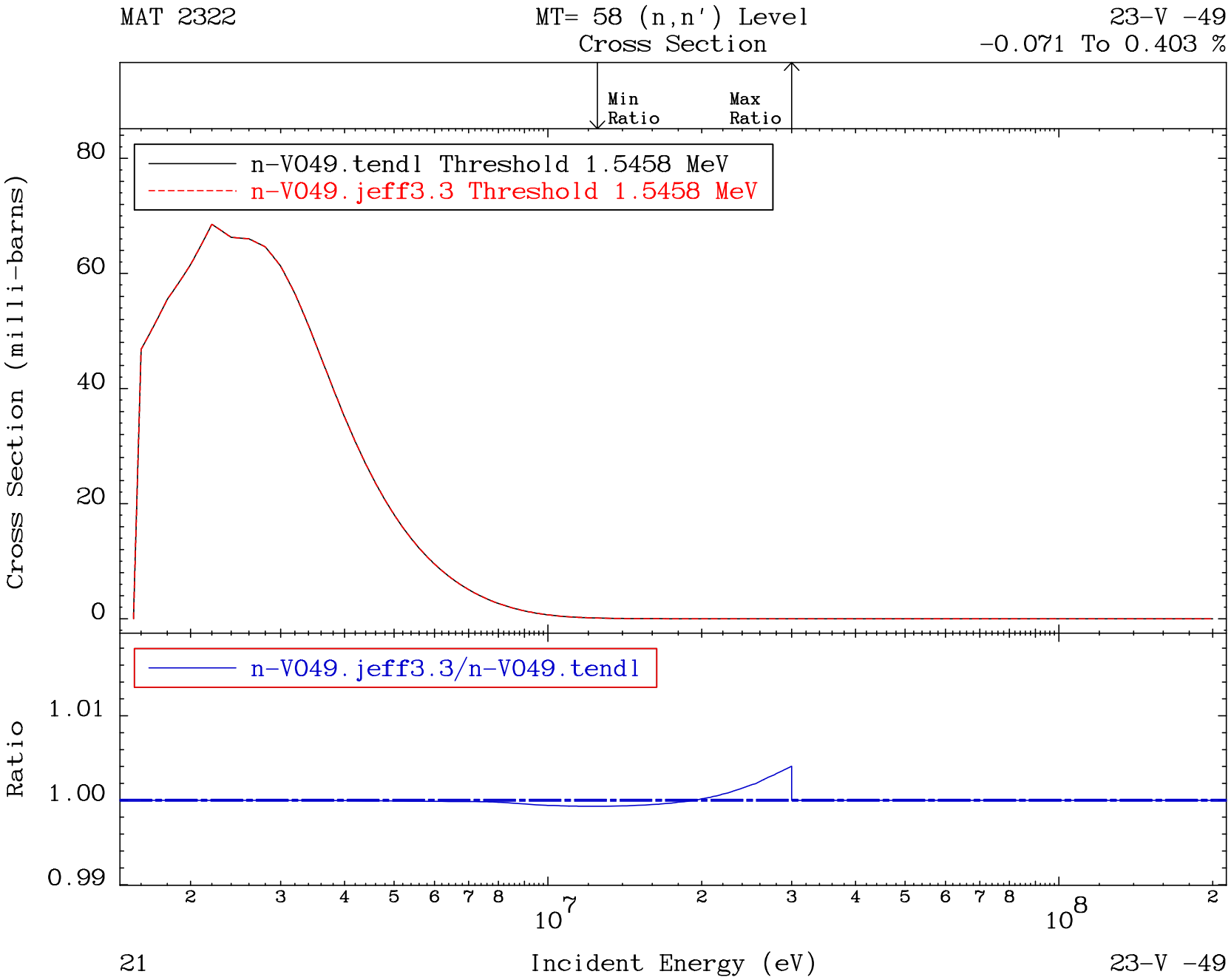

MAT 2322
(n,2n) p
Cross Section
23-V -49
-0.011 To 0.323 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 18.578 MeV
n-V049.jeff3.3 Threshold 18.578 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
23-V -49

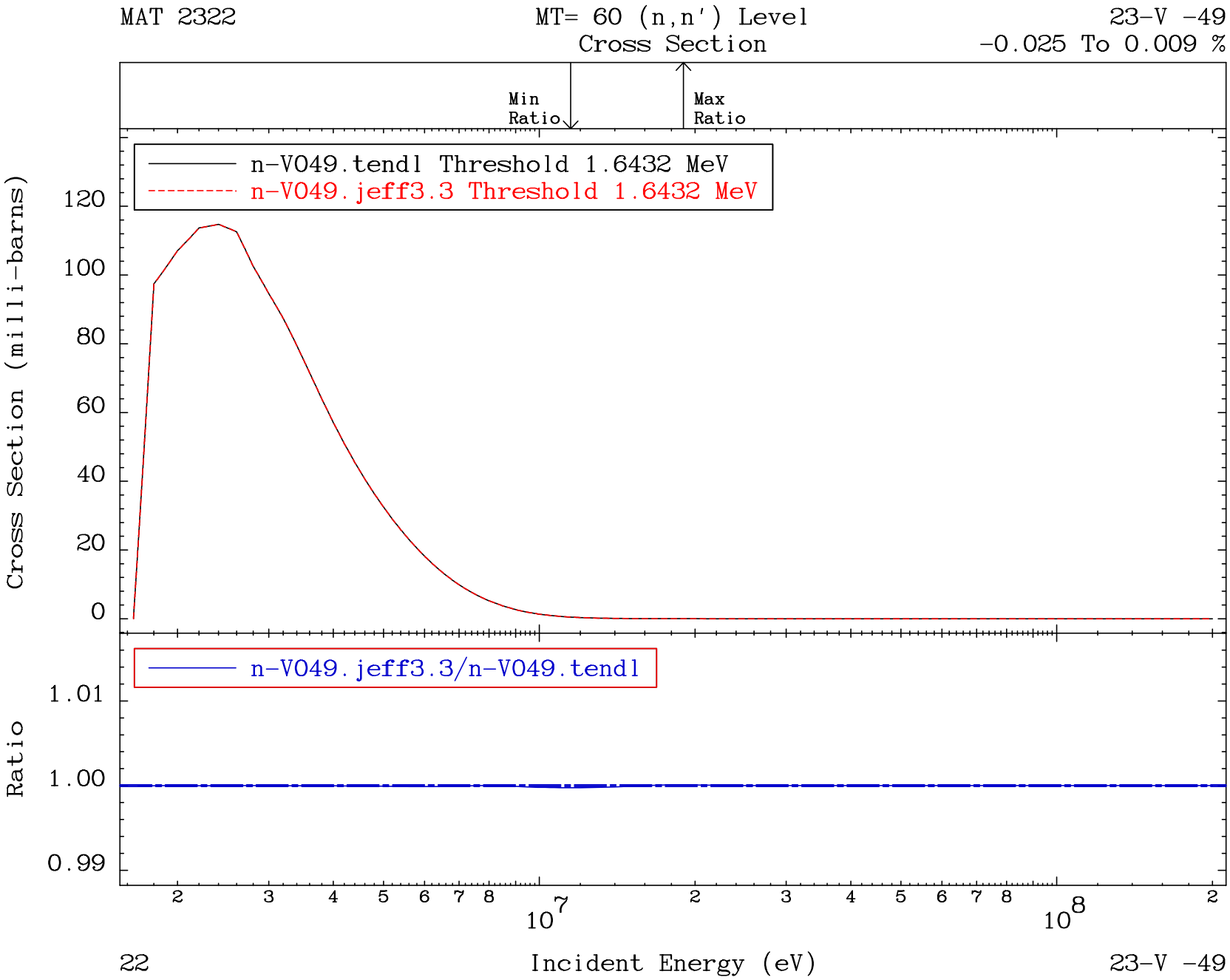

MAT 2322
(n,n') p α
Cross Section
23-V -49
0.000 To 149.9 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 16.541 MeV
n-V049.jeff3.3 Threshold 16.541 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-V049.jeff3.3/n-V049.tendl
Ratio
1.0
1.5
2.0
2.5
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
23-V -49

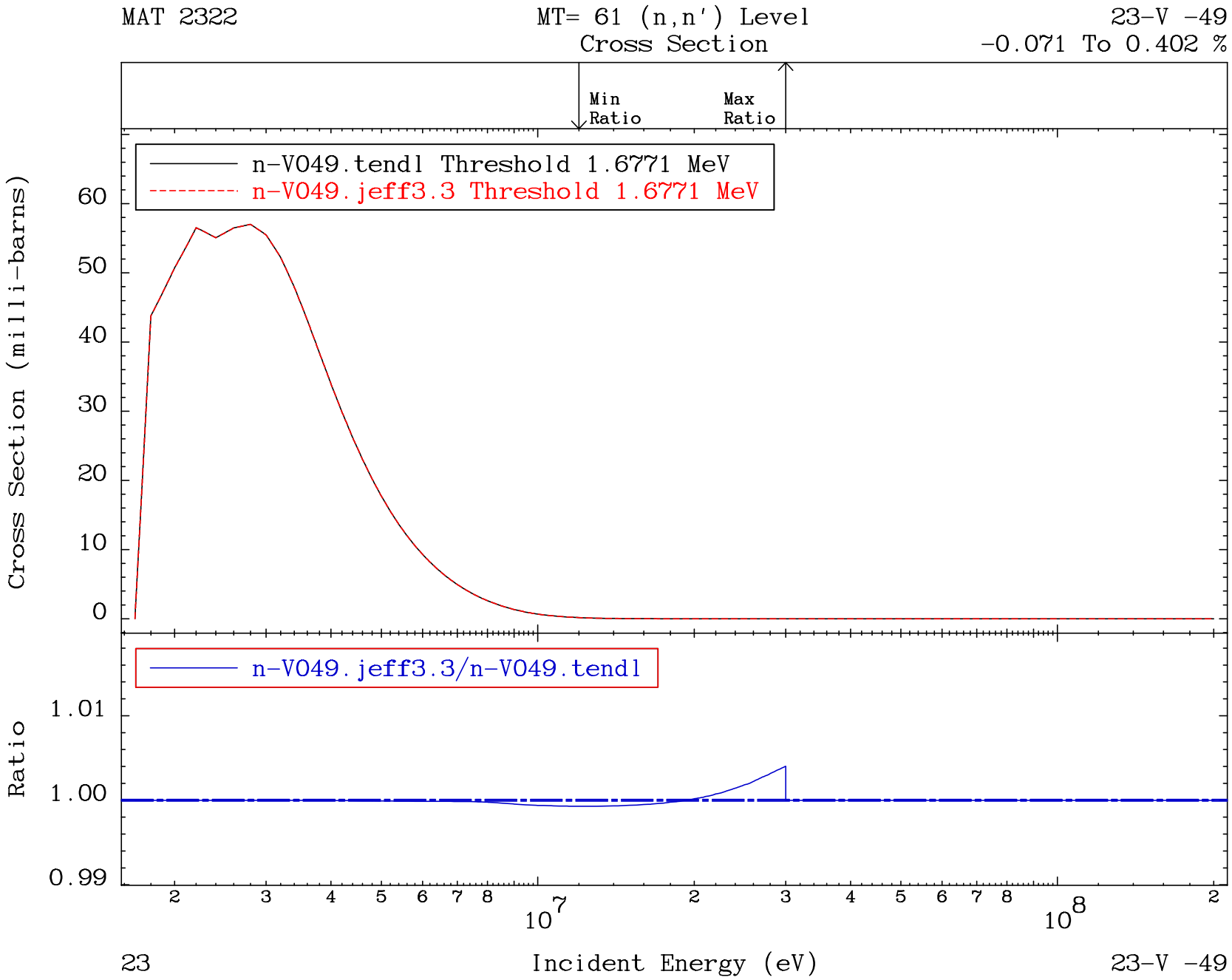

MAT 2322
MT= 51 (n,n') Level
Cross Section
23-V -49
-0.068 To 0.404 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 92.507 keV
n-V049.jeff3.3 Threshold 92.507 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
10^5
10^6
10^7
10^8
18
Incident Energy (eV)
23-V -49

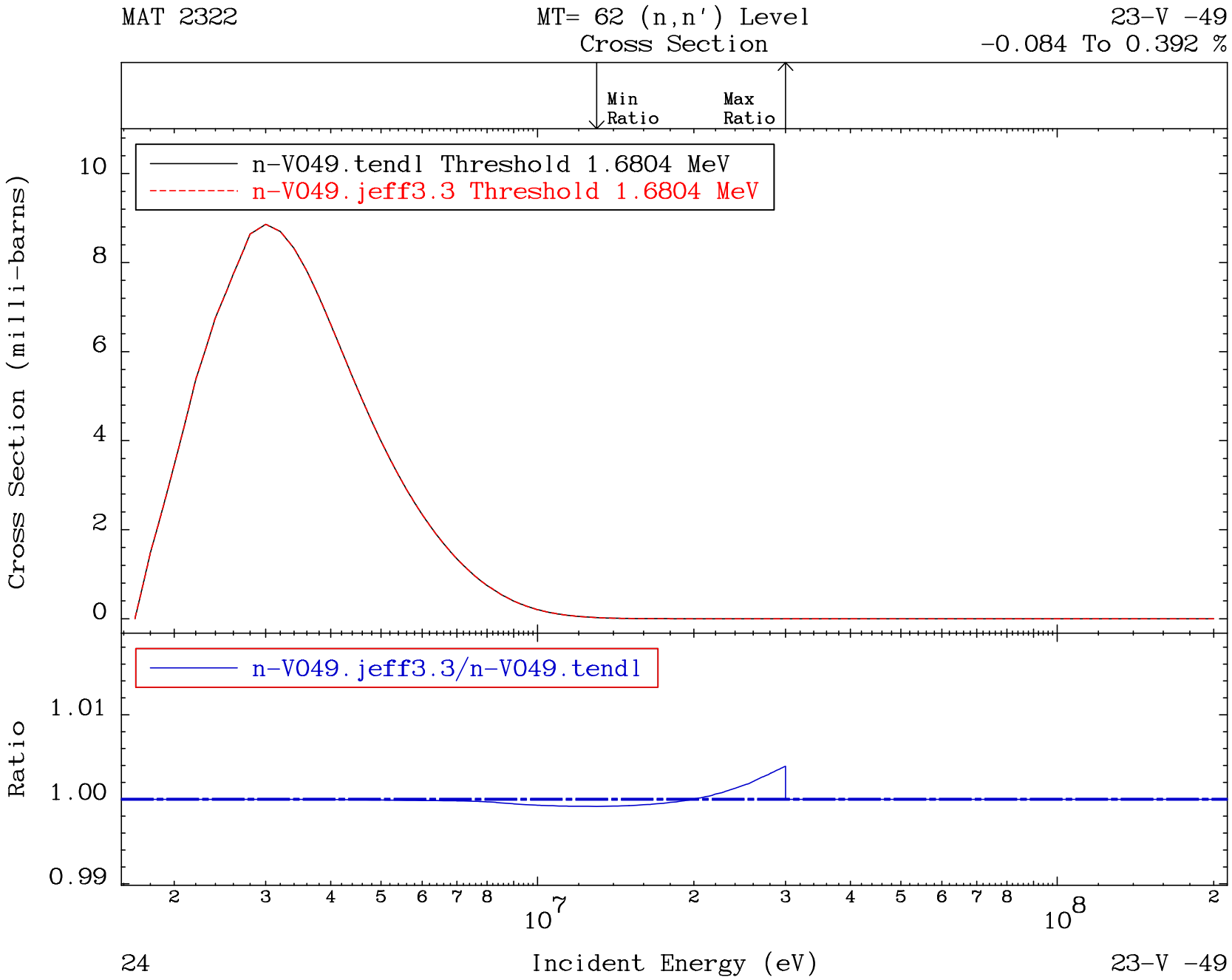

MAT 2322
MT= 52 (n,n') Level
Cross Section
23-V -49
-0.076 To 0.397 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 156.08 keV
n-V049.jeff3.3 Threshold 156.08 keV
Cross Section (milli-barns)
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
23-V -49

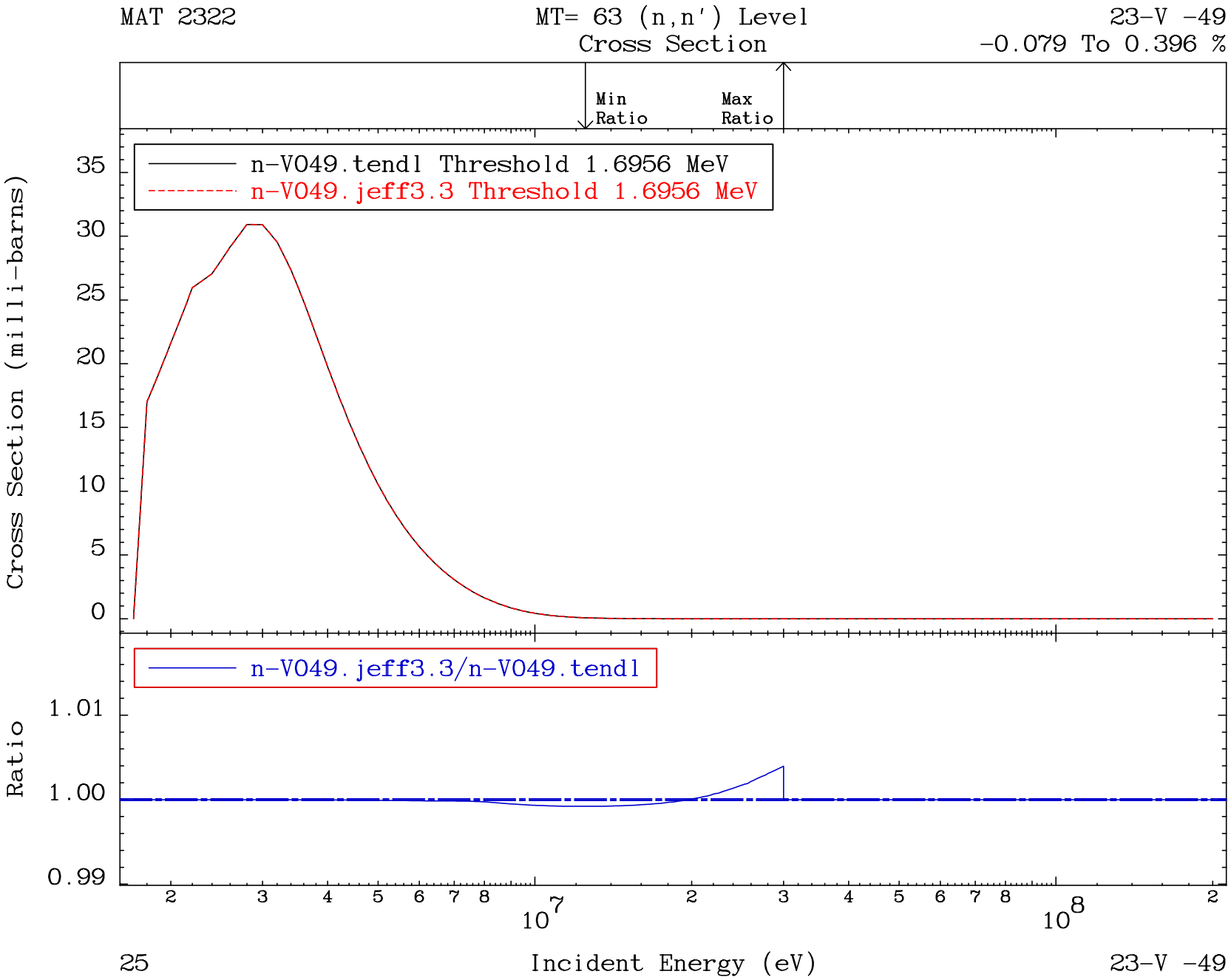

MAT 2322
MT= 57 (n,n') Level
Cross Section
23-V -49
-0.083 To 0.392 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.2074 MeV
n-V049.jeff3.3 Threshold 1.2074 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
23-V -49

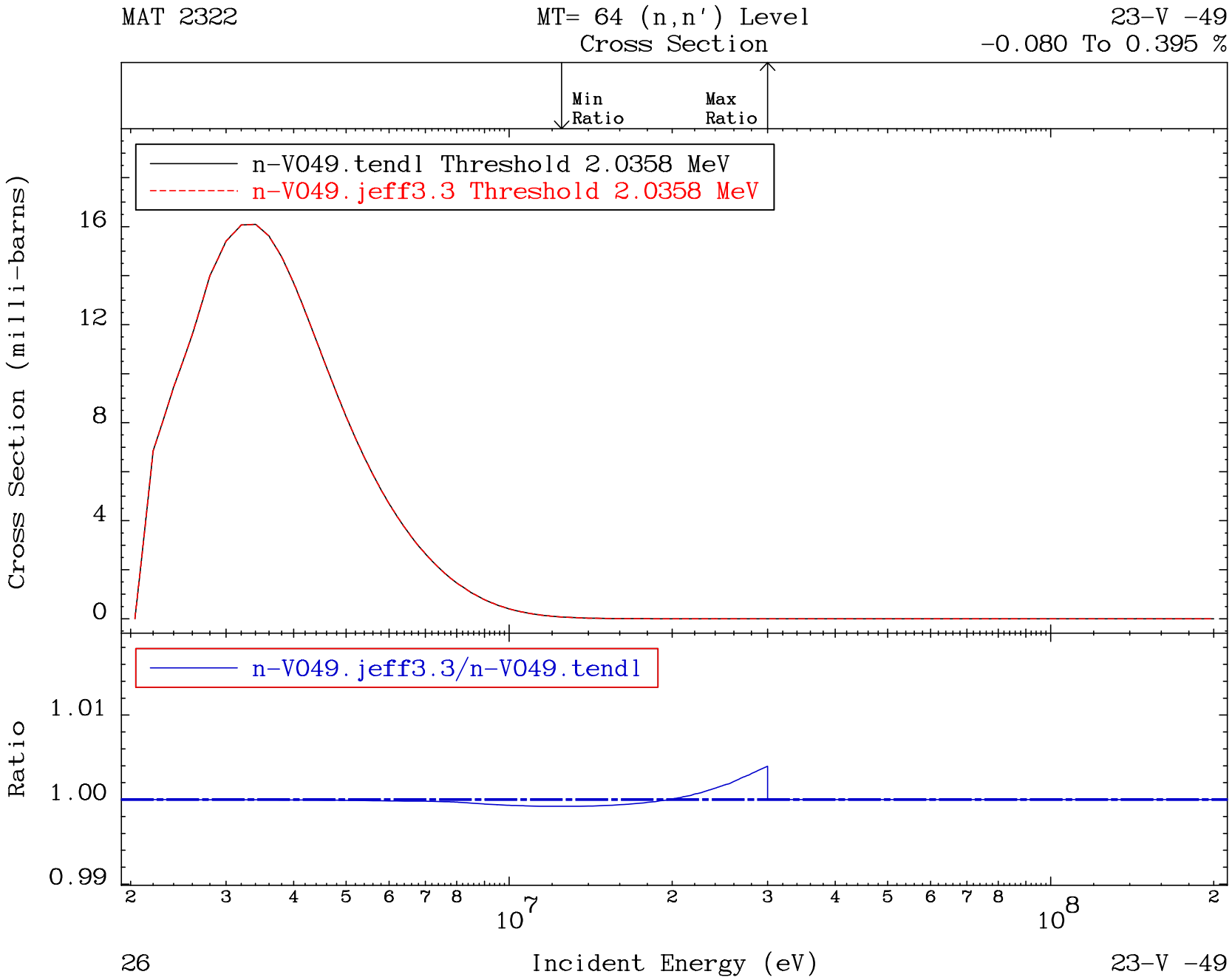

MAT 2322
MT= 58 (n,n') Level
Cross Section
23-V -49
-0.071 To 0.403 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.5458 MeV
n-V049.jeff3.3 Threshold 1.5458 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
23-V -49

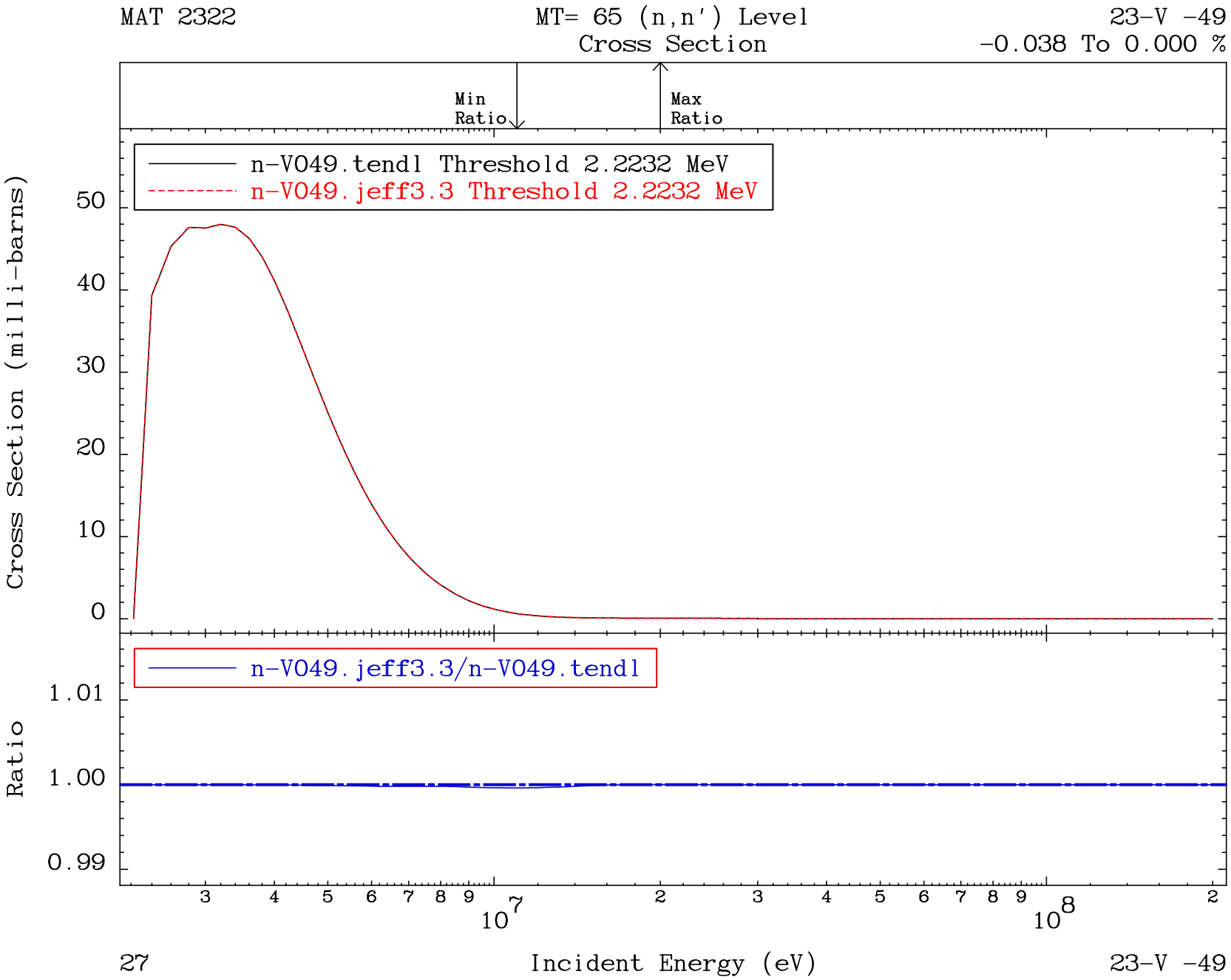

MAT 2322
MT= 60 (n,n') Level
Cross Section
23-V -49
-0.025 To 0.009 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.6432 MeV
n-V049.jeff3.3 Threshold 1.6432 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
23-V -49

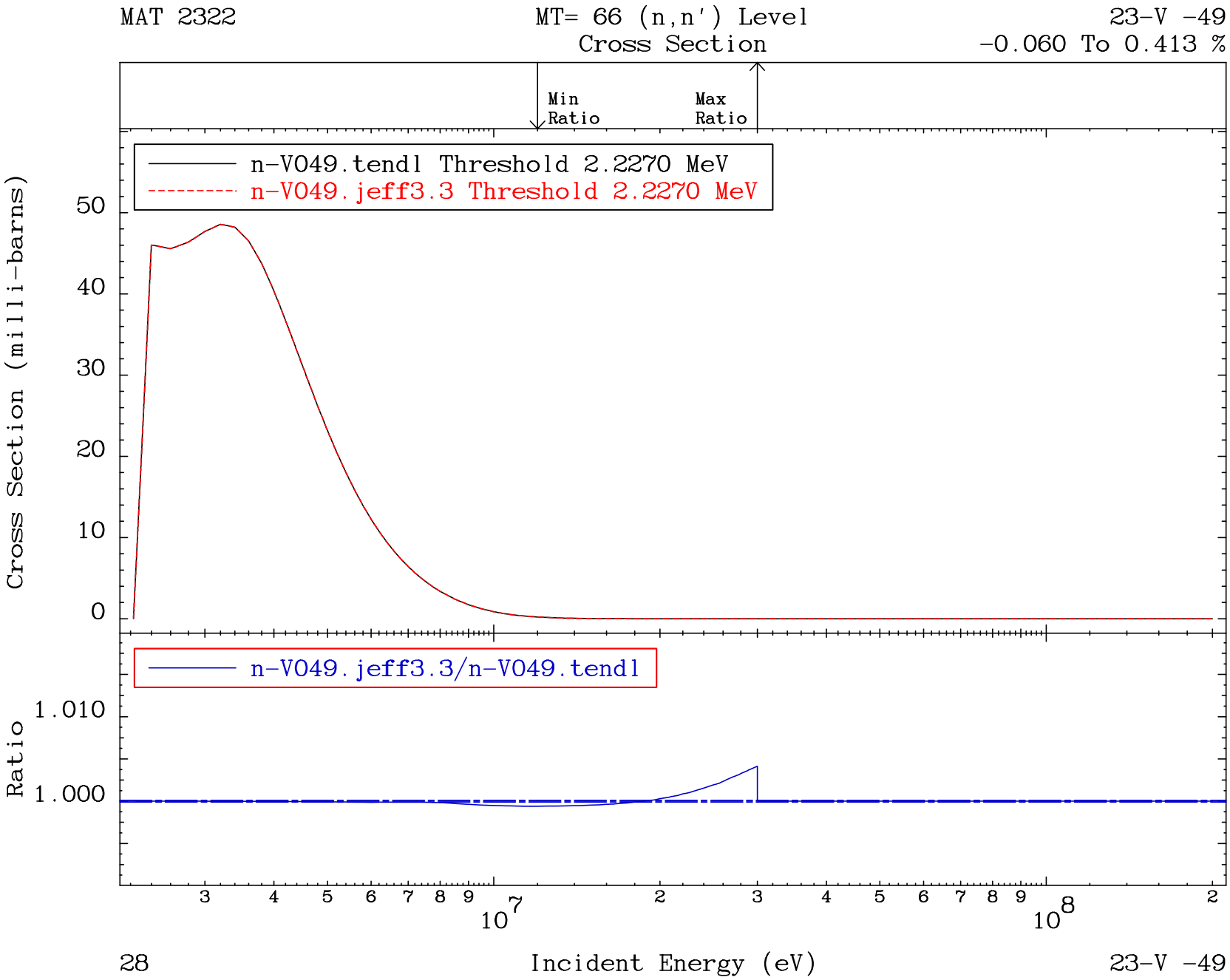

MAT 2322
MT= 61 (n,n') Level
Cross Section
23-V -49
-0.071 To 0.402 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.6771 MeV
n-V049.jeff3.3 Threshold 1.6771 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
23-V -49

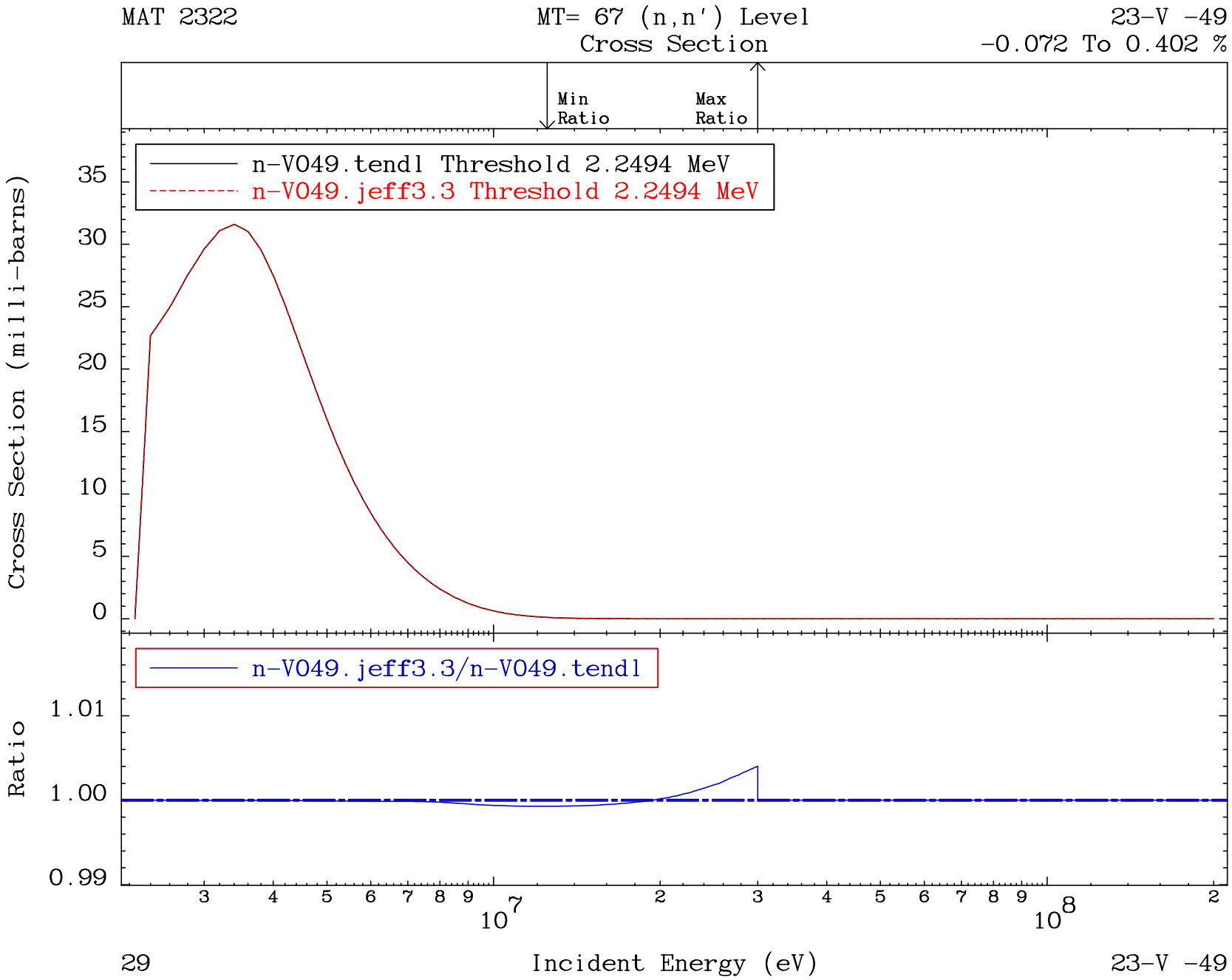

MAT 2322
MT= 62 (n,n') Level
Cross Section
23-V -49
-0.084 To 0.392 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.6804 MeV
n-V049.jeff3.3 Threshold 1.6804 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
23-V -49

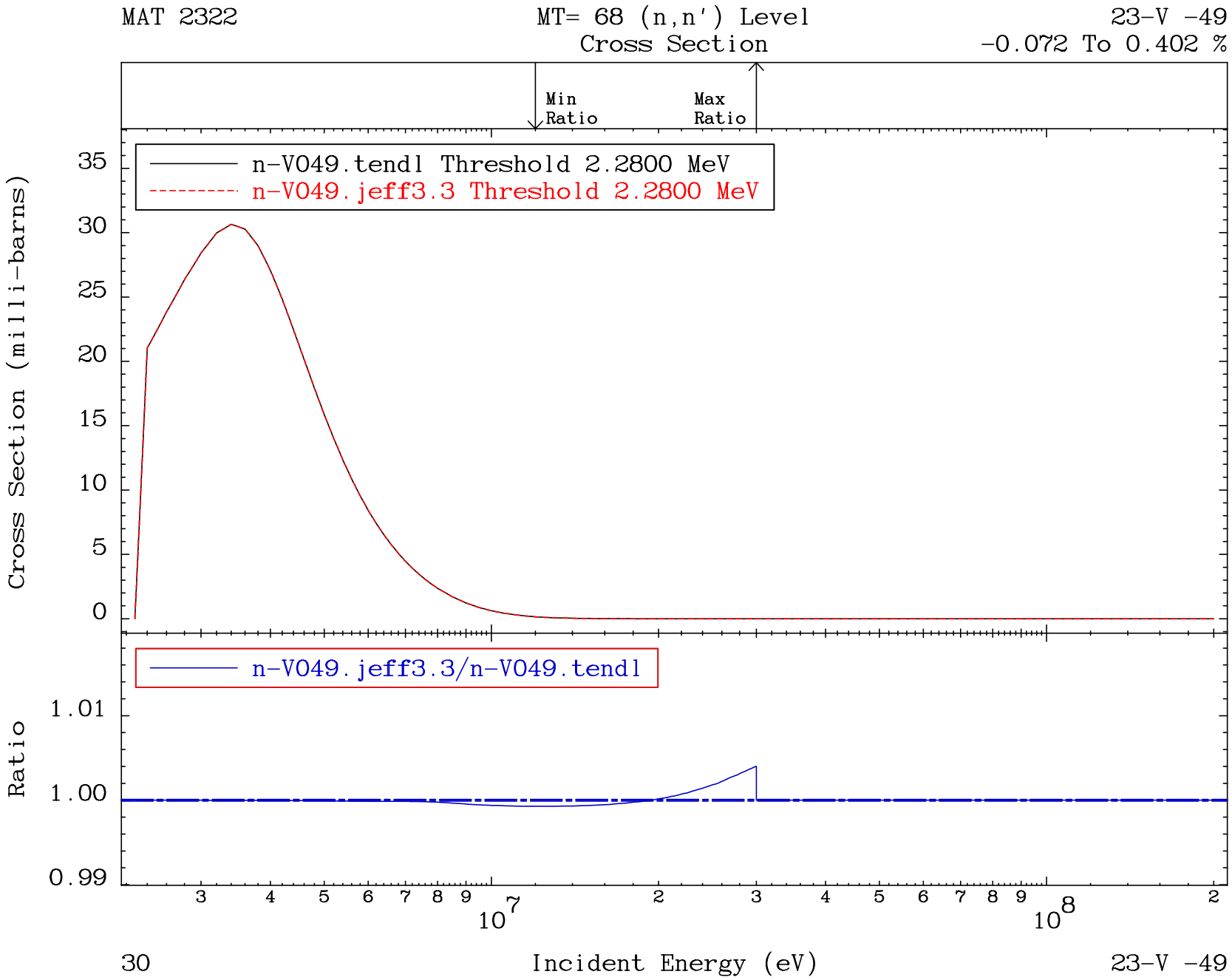

MAT 2322
MT= 63 (n,n') Level
Cross Section
23-V -49
-0.079 To 0.396 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 1.6956 MeV
n-V049.jeff3.3 Threshold 1.6956 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
23-V -49

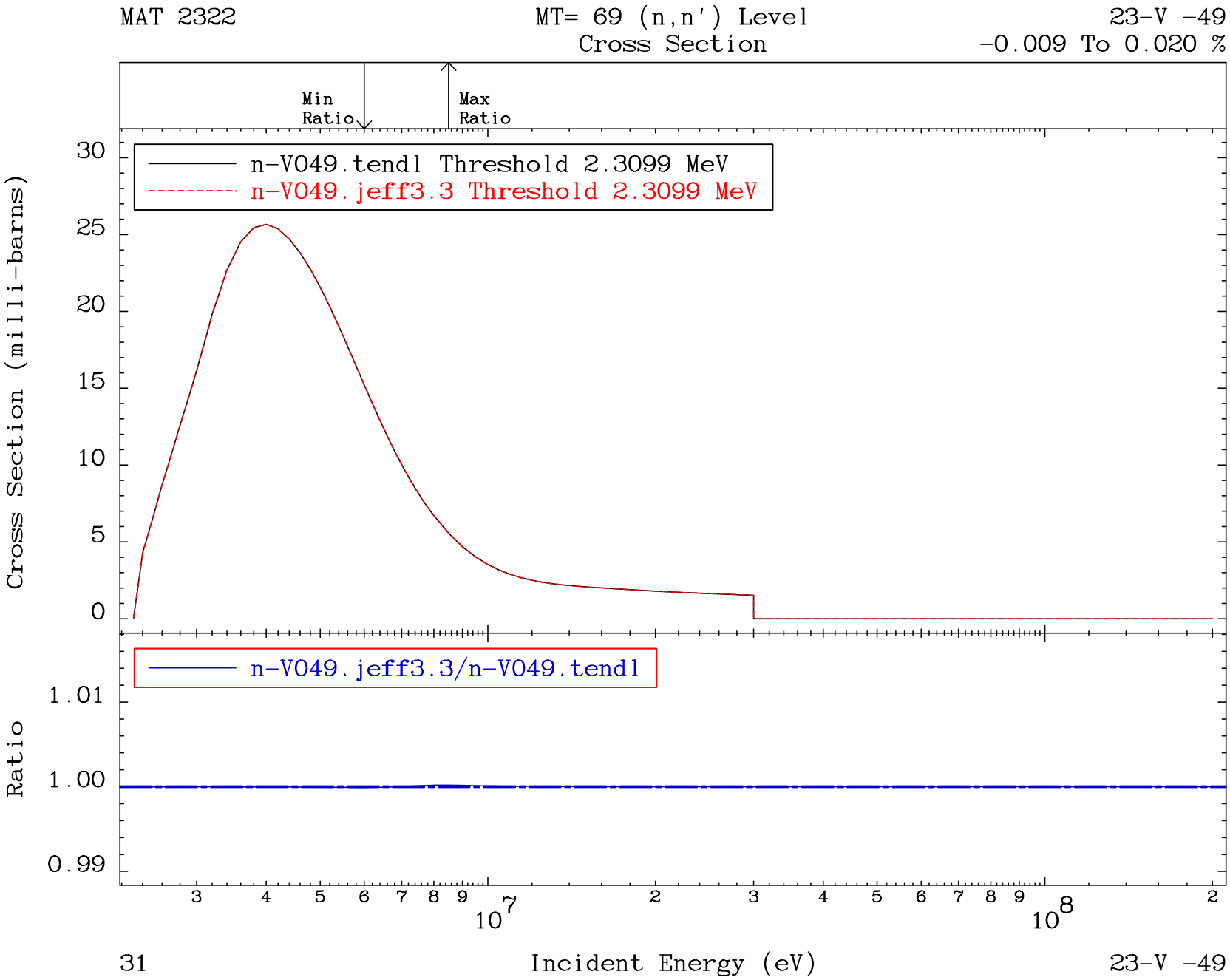

MAT 2322
MT= 64 (n,n') Level
Cross Section
23-V -49
-0.080 To 0.395 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.0358 MeV
n-V049.jeff3.3 Threshold 2.0358 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
23-V -49

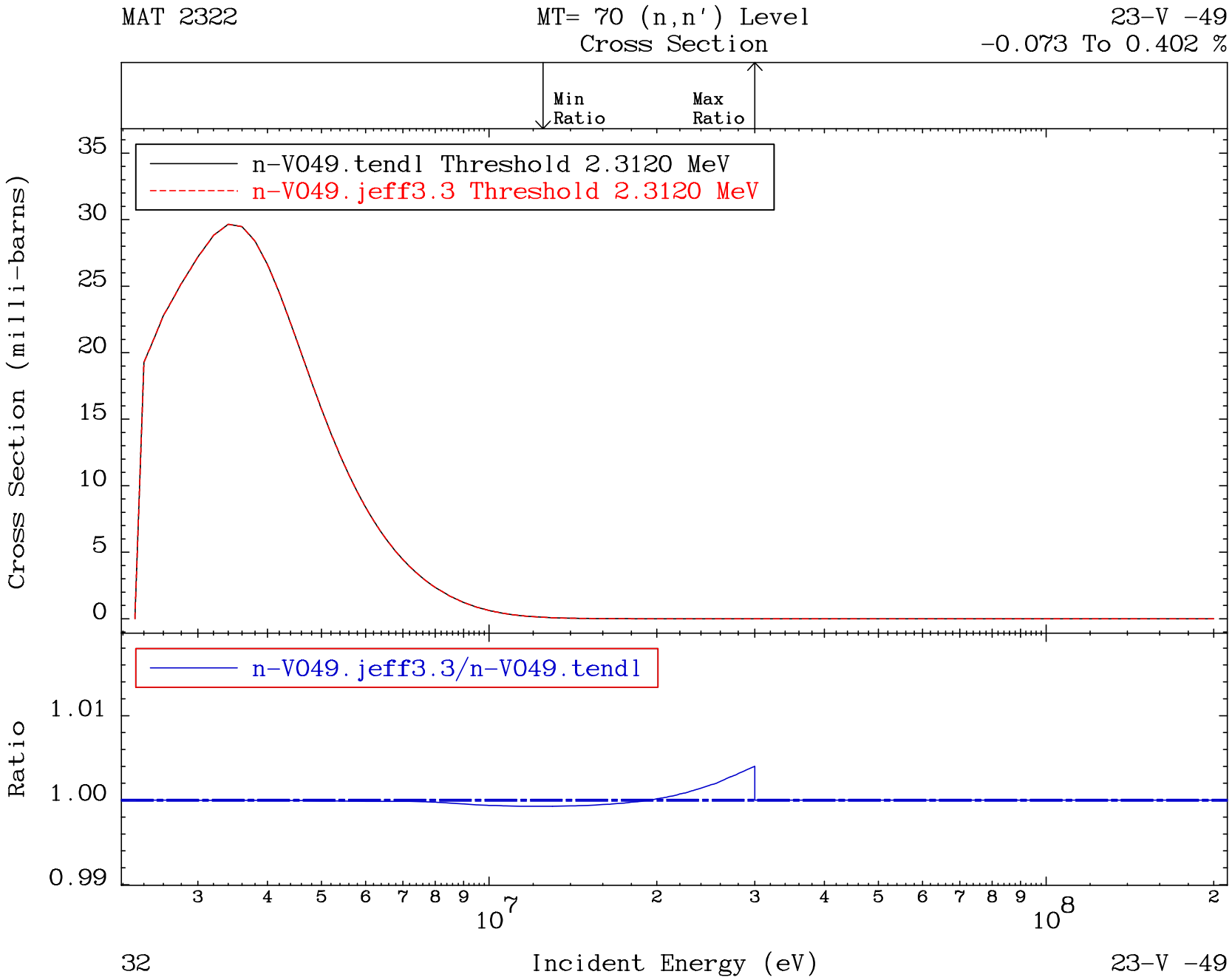

MAT 2322
MT= 65 (n,n') Level
Cross Section
23-V -49
-0.038 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.2232 MeV
n-V049.jeff3.3 Threshold 2.2232 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
23-V -49

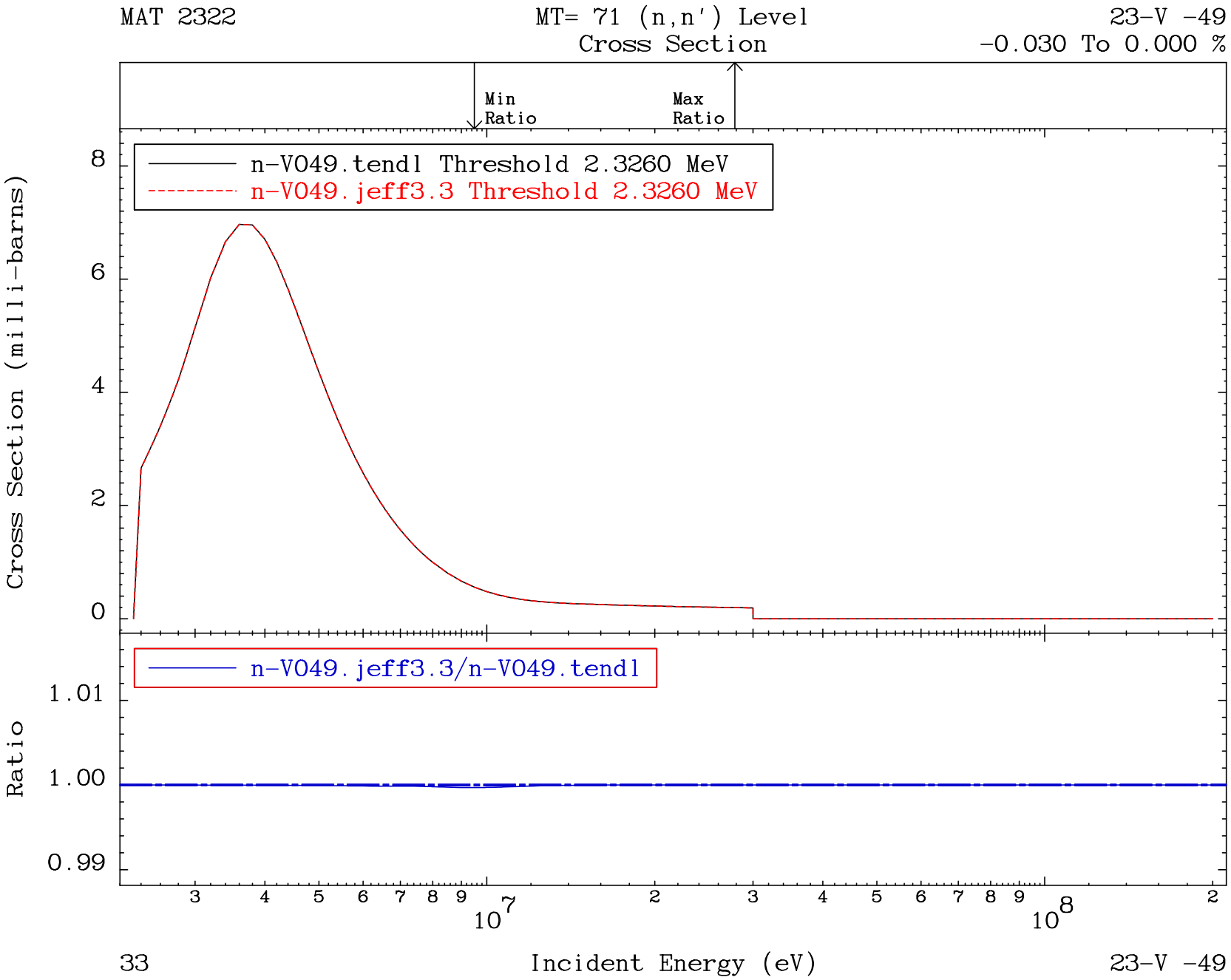

MAT 2322
MT= 66 (n,n') Level
Cross Section
23-V -49
-0.060 To 0.413 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.2270 MeV
n-V049.jeff3.3 Threshold 2.2270 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.010
1.000
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
23-V -49

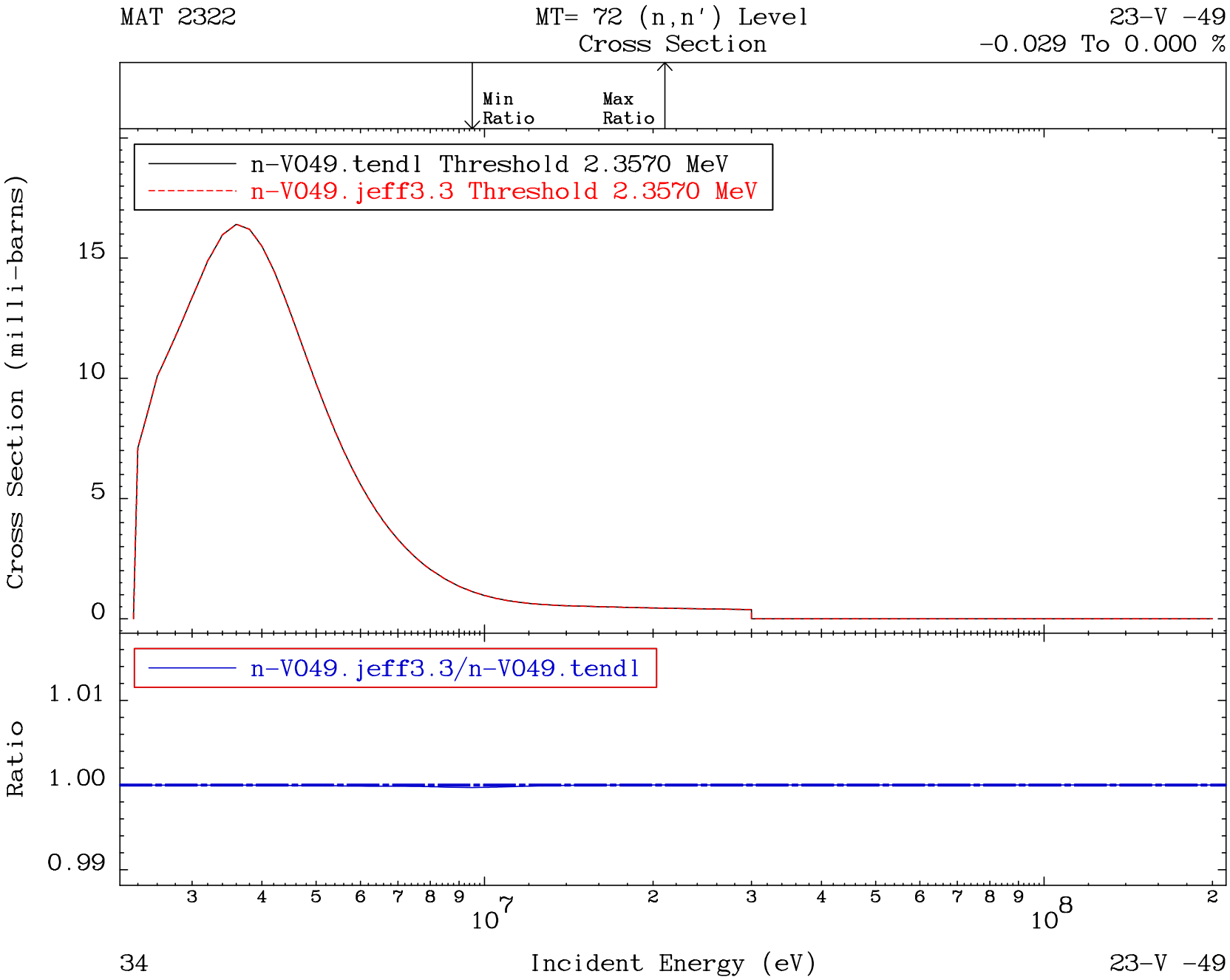

MAT 2322
MT= 67 (n,n') Level
Cross Section
23-V -49
-0.072 To 0.402 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.2494 MeV
n-V049.jeff3.3 Threshold 2.2494 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
29
Incident Energy (eV)
23-V -49

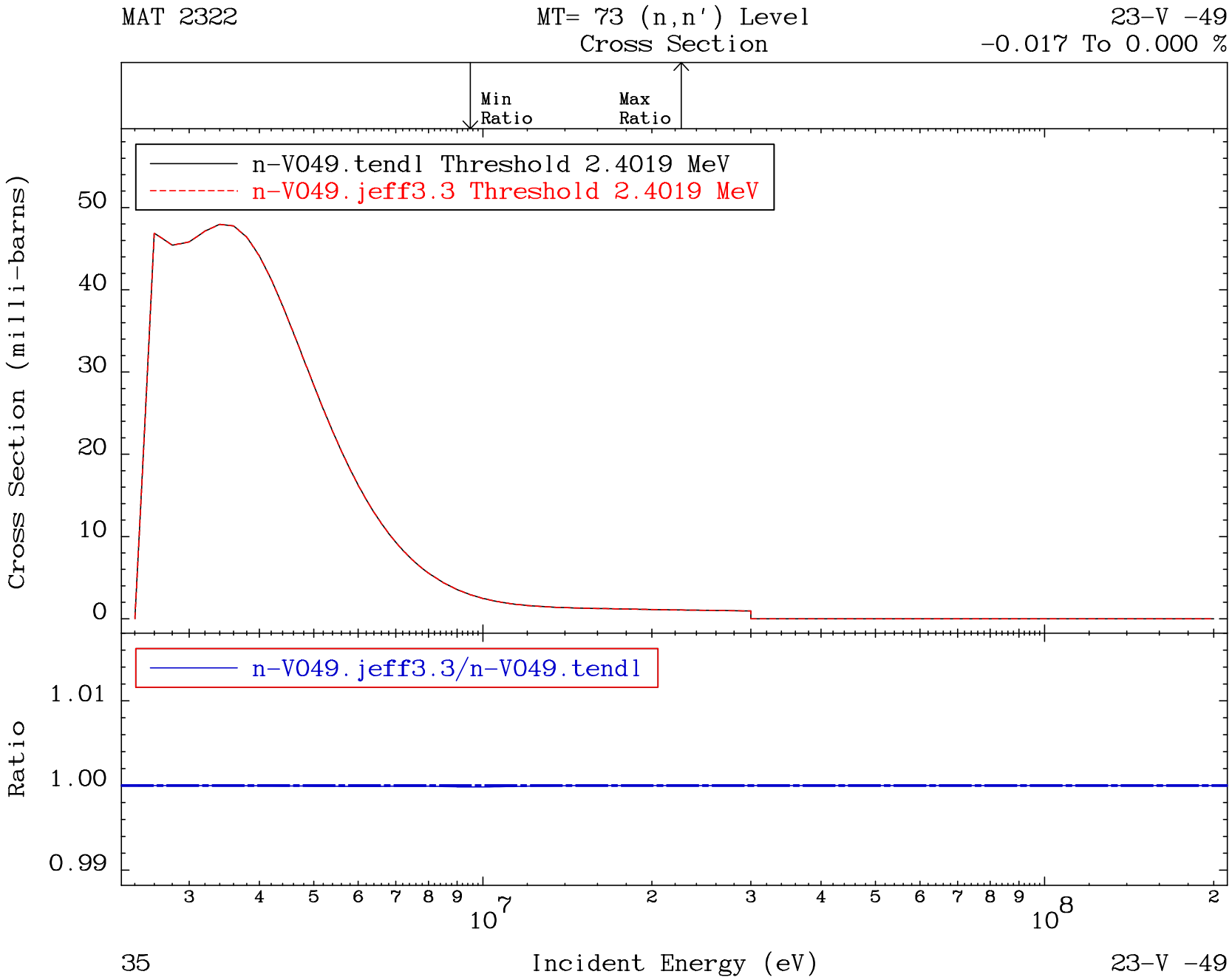

MAT 2322
MT= 68 (n,n') Level
Cross Section
23-V -49
-0.072 To 0.402 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.2800 MeV
n-V049.jeff3.3 Threshold 2.2800 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
30
Incident Energy (eV)
23-V -49

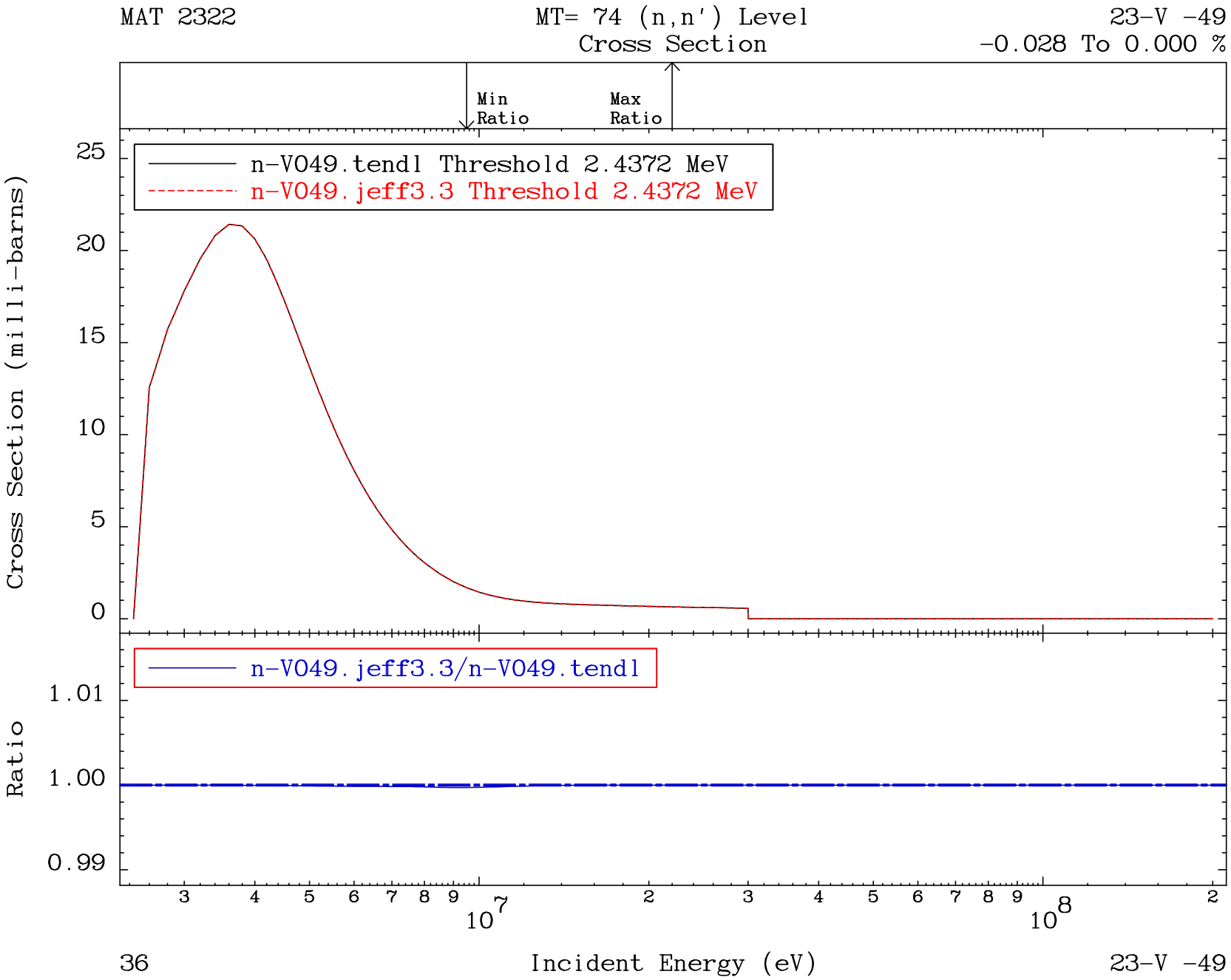

MAT 2322
MT= 69 (n,n') Level
Cross Section
23-V -49
-0.009 To 0.020 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.3099 MeV
n-V049.jeff3.3 Threshold 2.3099 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
23-V -49

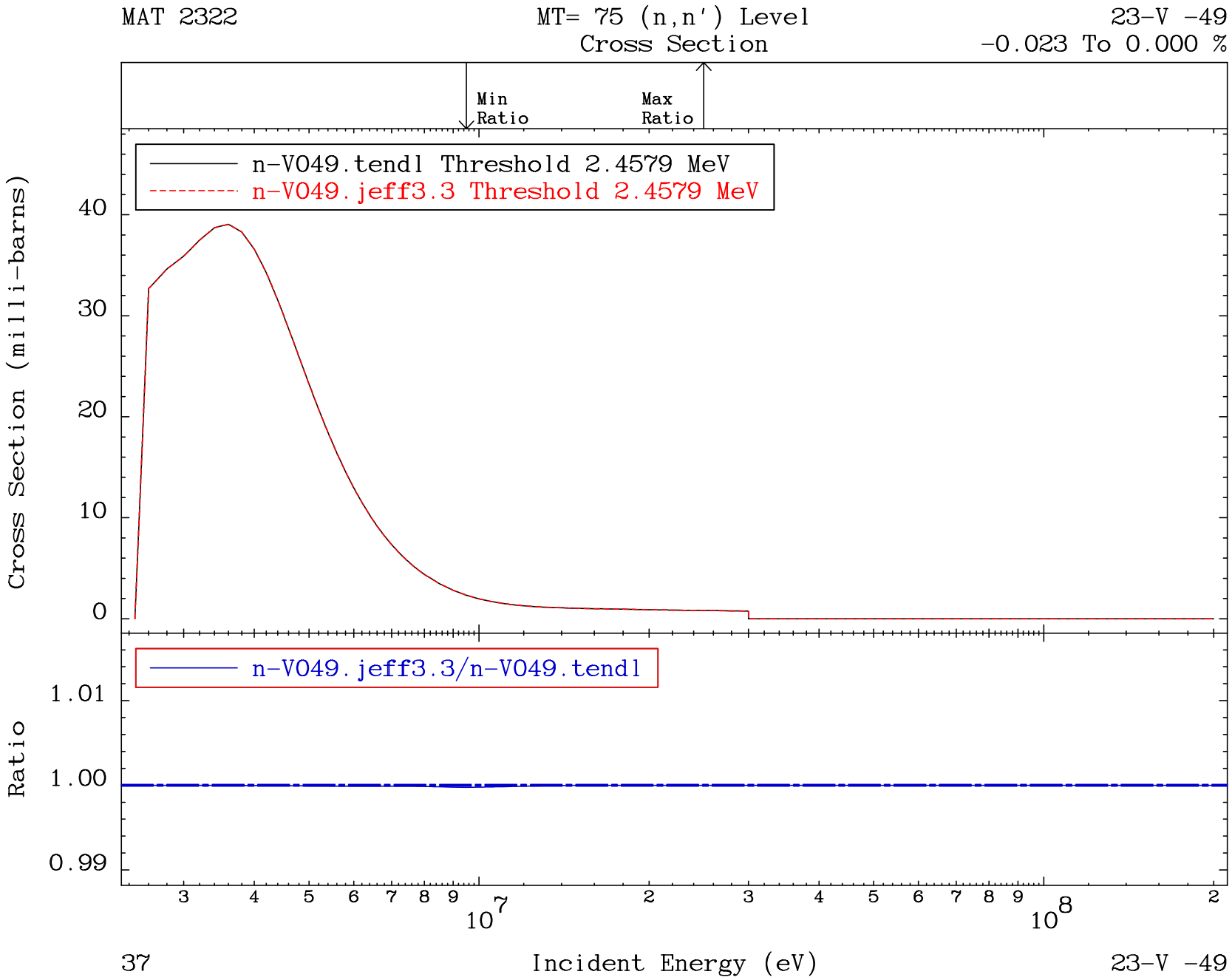

MAT 2322
MT= 70 (n,n') Level
Cross Section
23-V -49
-0.073 To 0.402 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.3120 MeV
n-V049.jeff3.3 Threshold 2.3120 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
32
Incident Energy (eV)
23-V -49

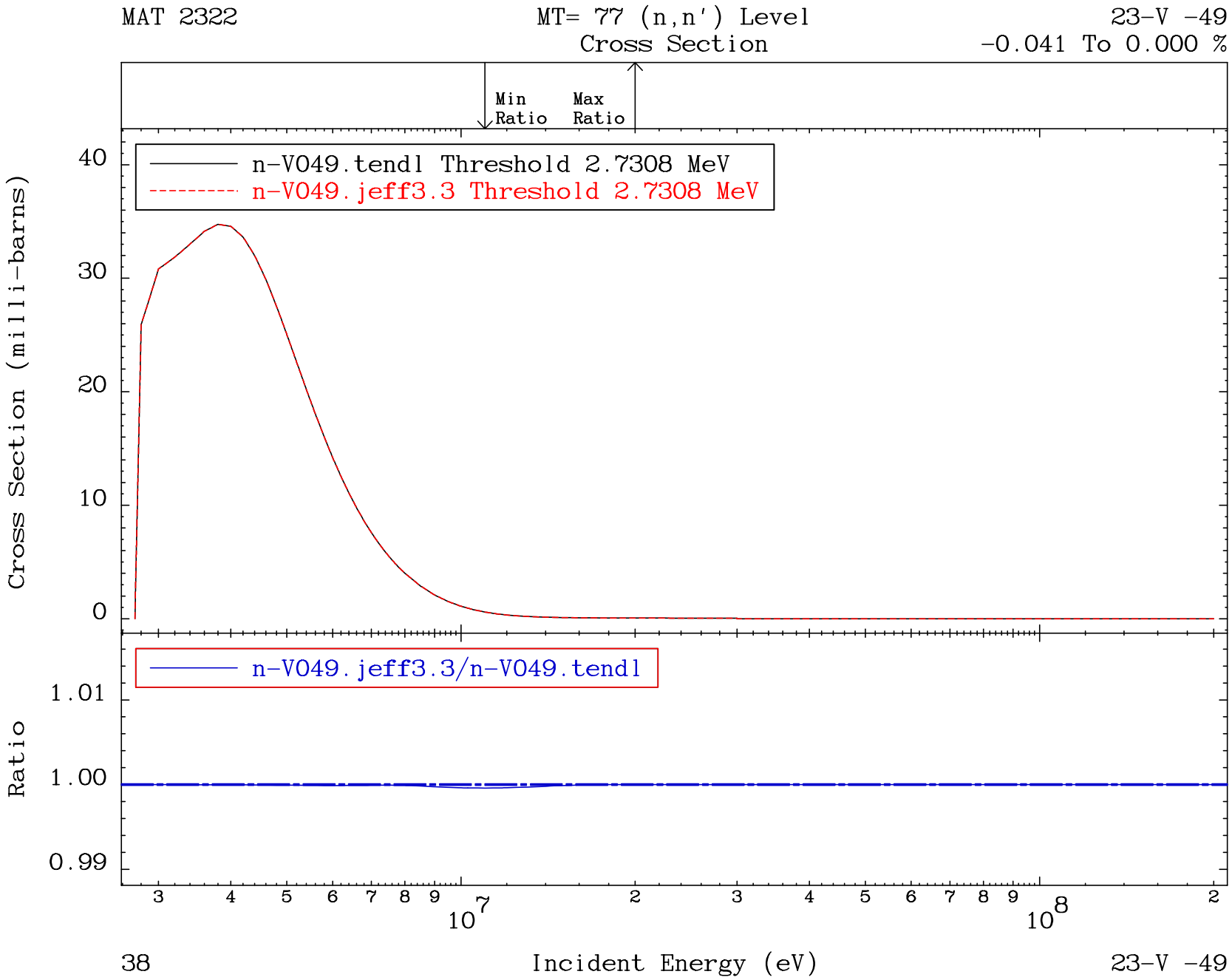

MAT 2322
MT= 71 (n,n') Level
Cross Section
23-V -49
-0.030 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.3260 MeV
n-V049.jeff3.3 Threshold 2.3260 MeV
Cross Section (milli-barns)
8
6
4
2
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
23-V -49

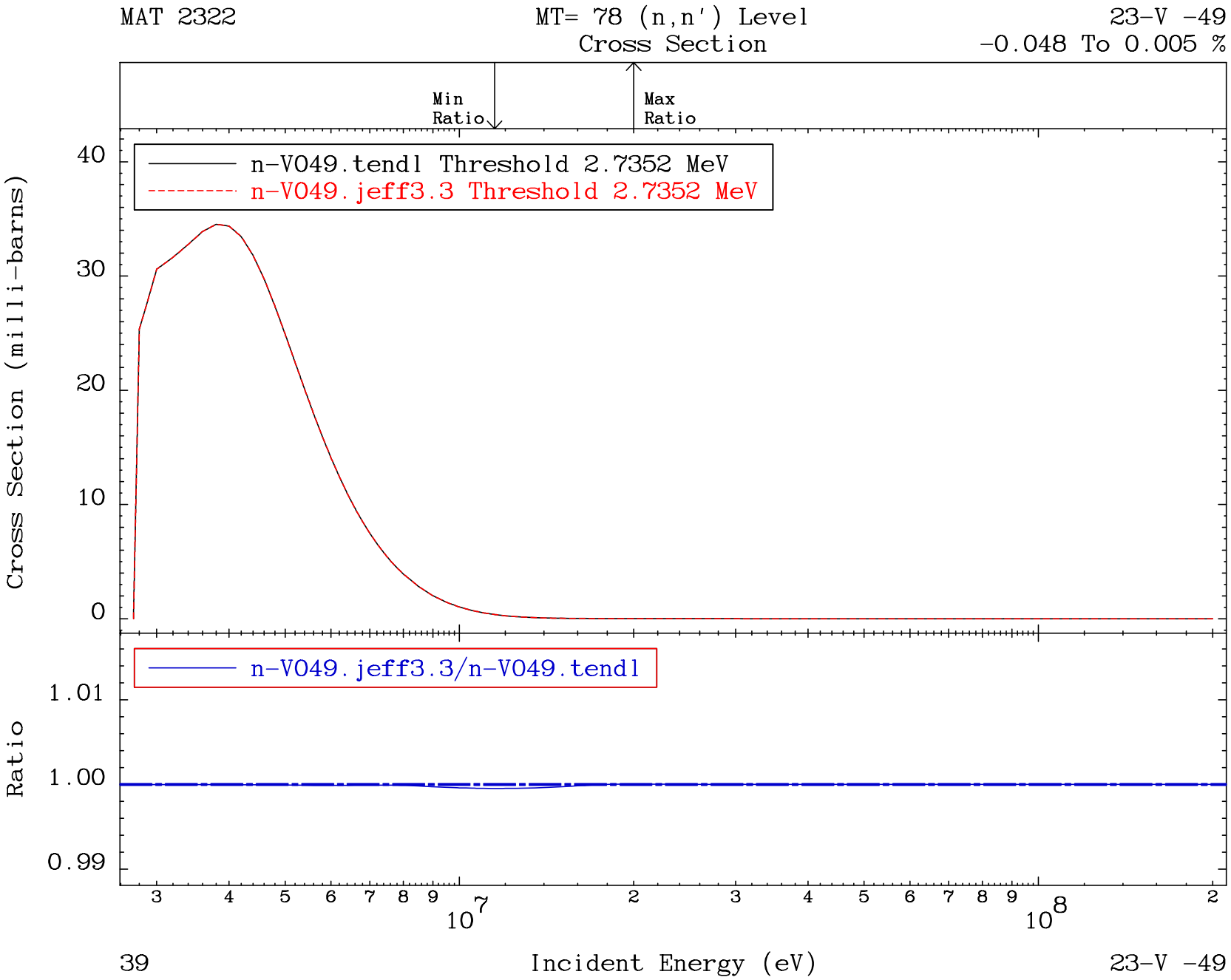

MAT 2322
MT= 72 (n,n') Level
Cross Section
23-V -49
-0.029 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.3570 MeV
n-V049.jeff3.3 Threshold 2.3570 MeV
Cross Section (milli-barns)
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
23-V -49

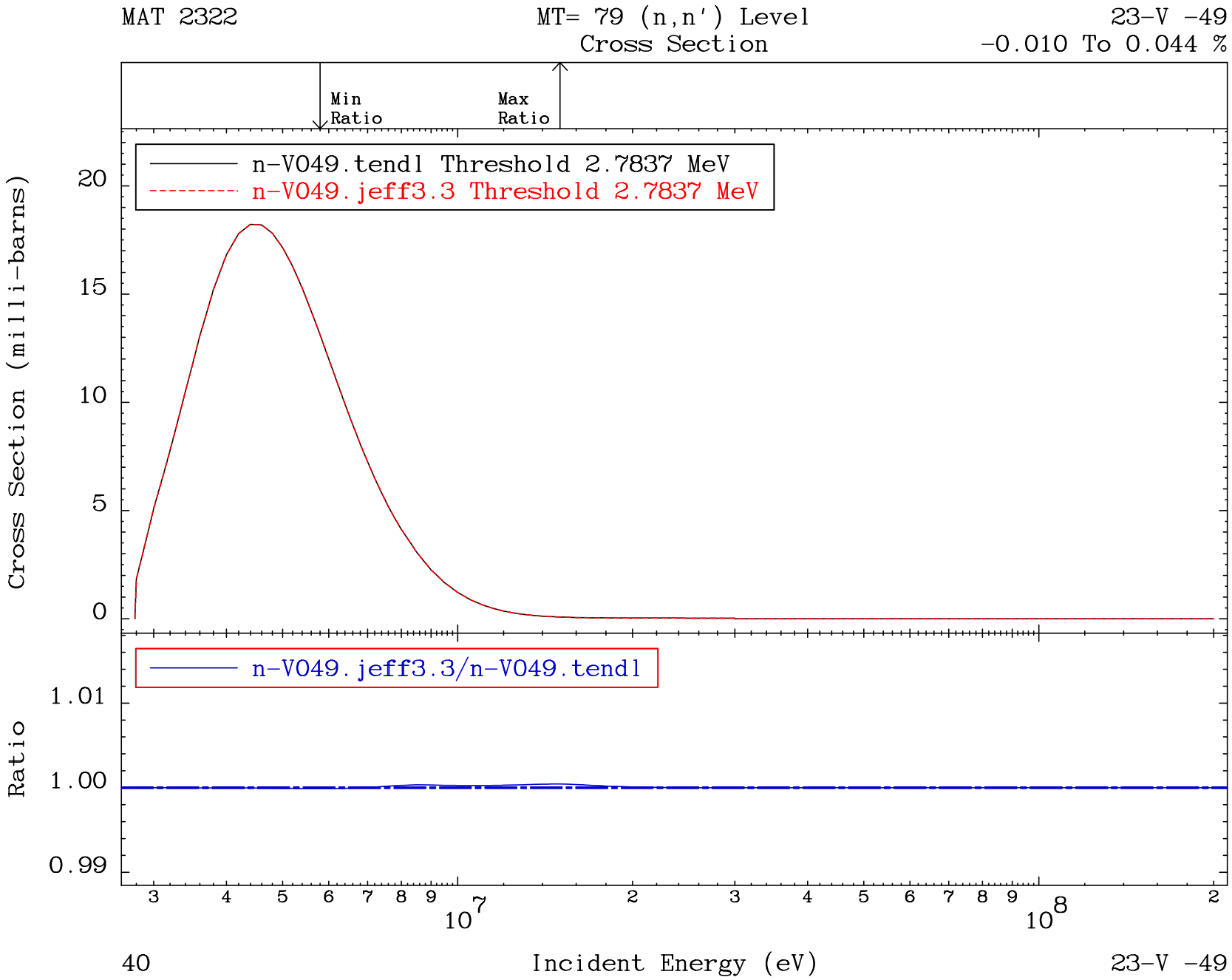

MAT 2322
MT= 73 (n,n') Level
Cross Section
23-V -49
-0.017 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.4019 MeV
n-V049.jeff3.3 Threshold 2.4019 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
23-V -49

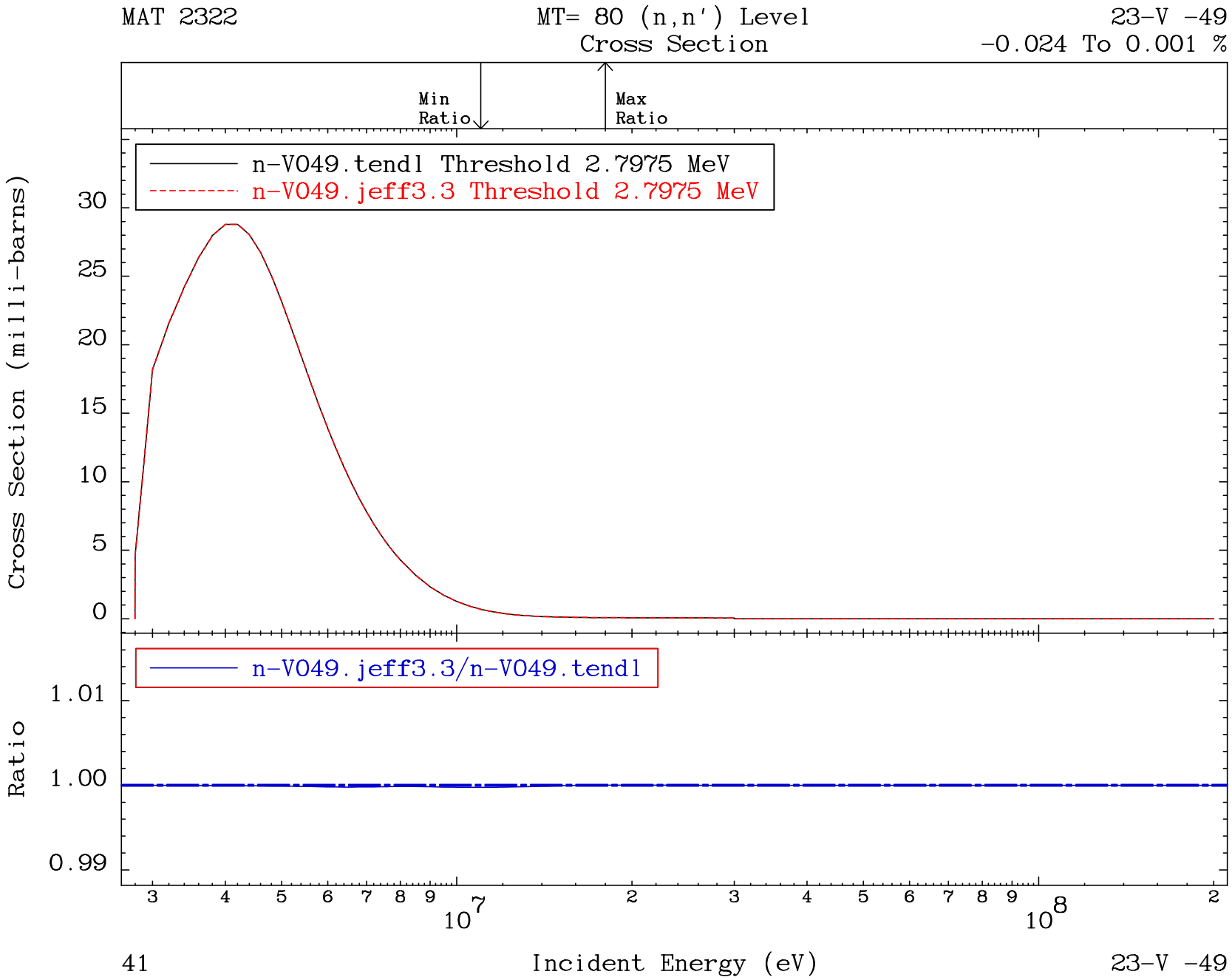

MAT 2322
MT= 74 (n,n') Level
Cross Section
23-V -49
-0.028 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.4372 MeV
n-V049.jeff3.3 Threshold 2.4372 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
23-V -49

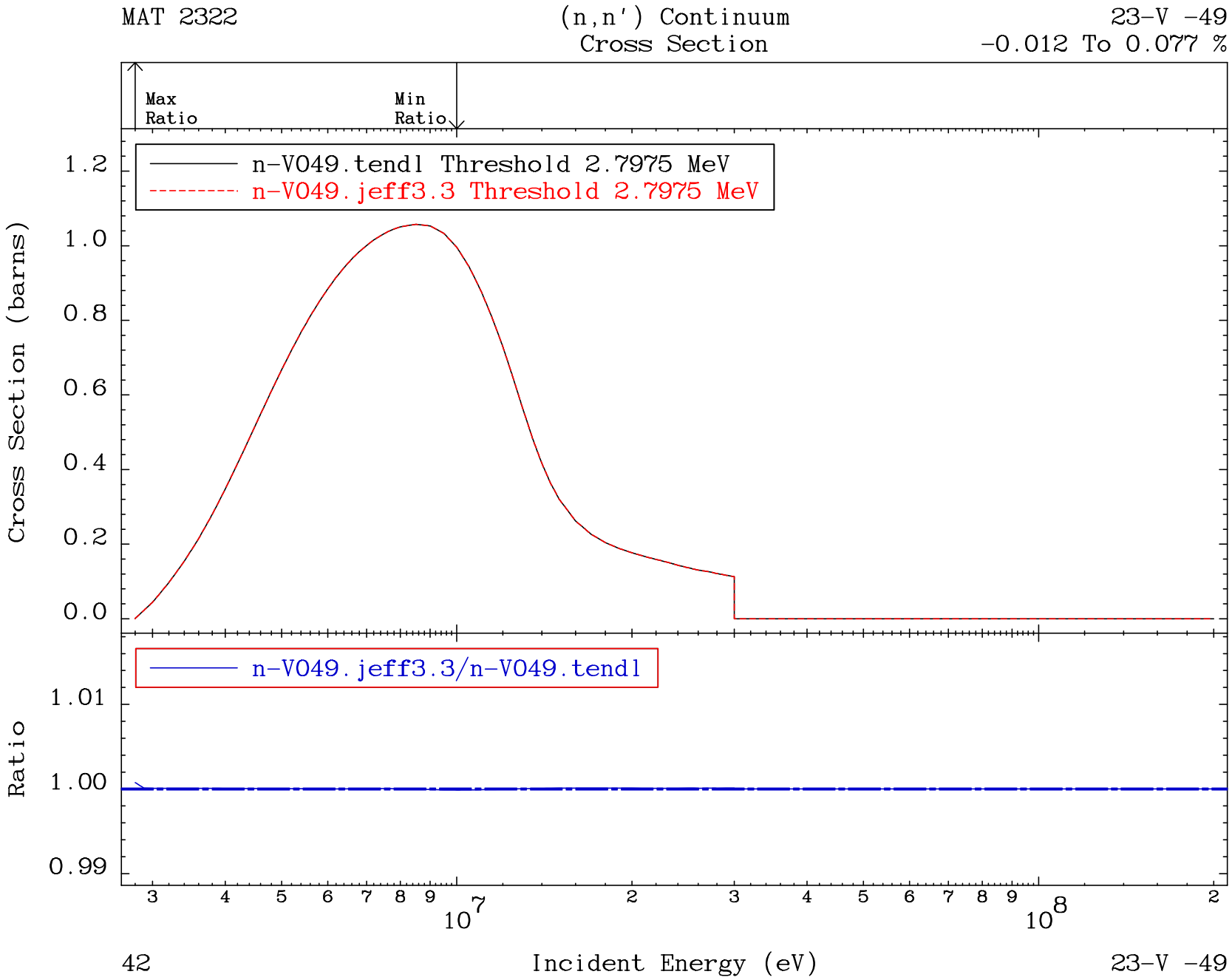

MAT 2322
MT= 75 (n,n') Level
Cross Section
23-V -49
-0.023 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.4579 MeV
n-V049.jeff3.3 Threshold 2.4579 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
23-V -49

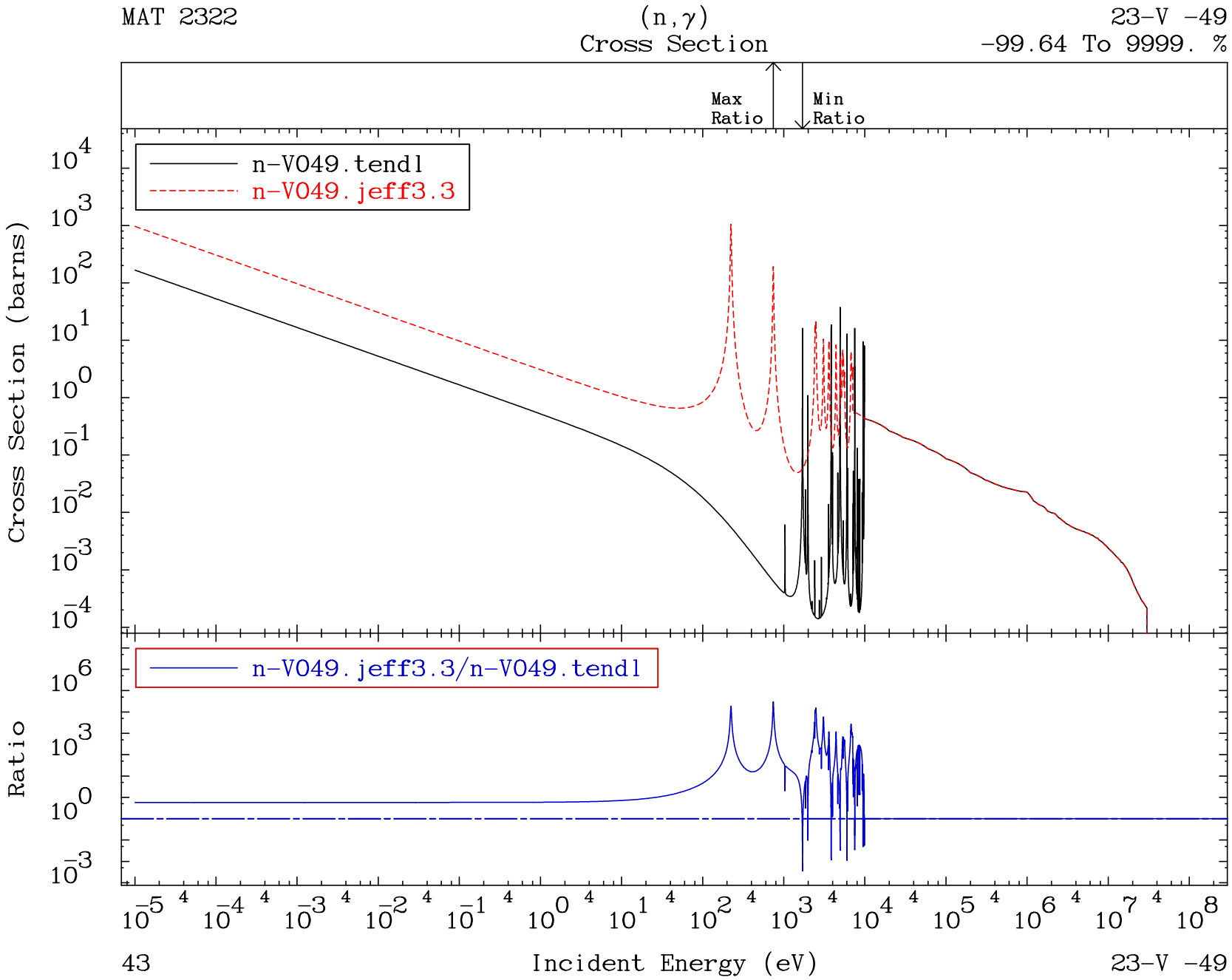

MAT 2322
MT= 77 (n,n') Level
Cross Section
23-V -49
-0.041 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.7308 MeV
n-V049.jeff3.3 Threshold 2.7308 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
23-V -49

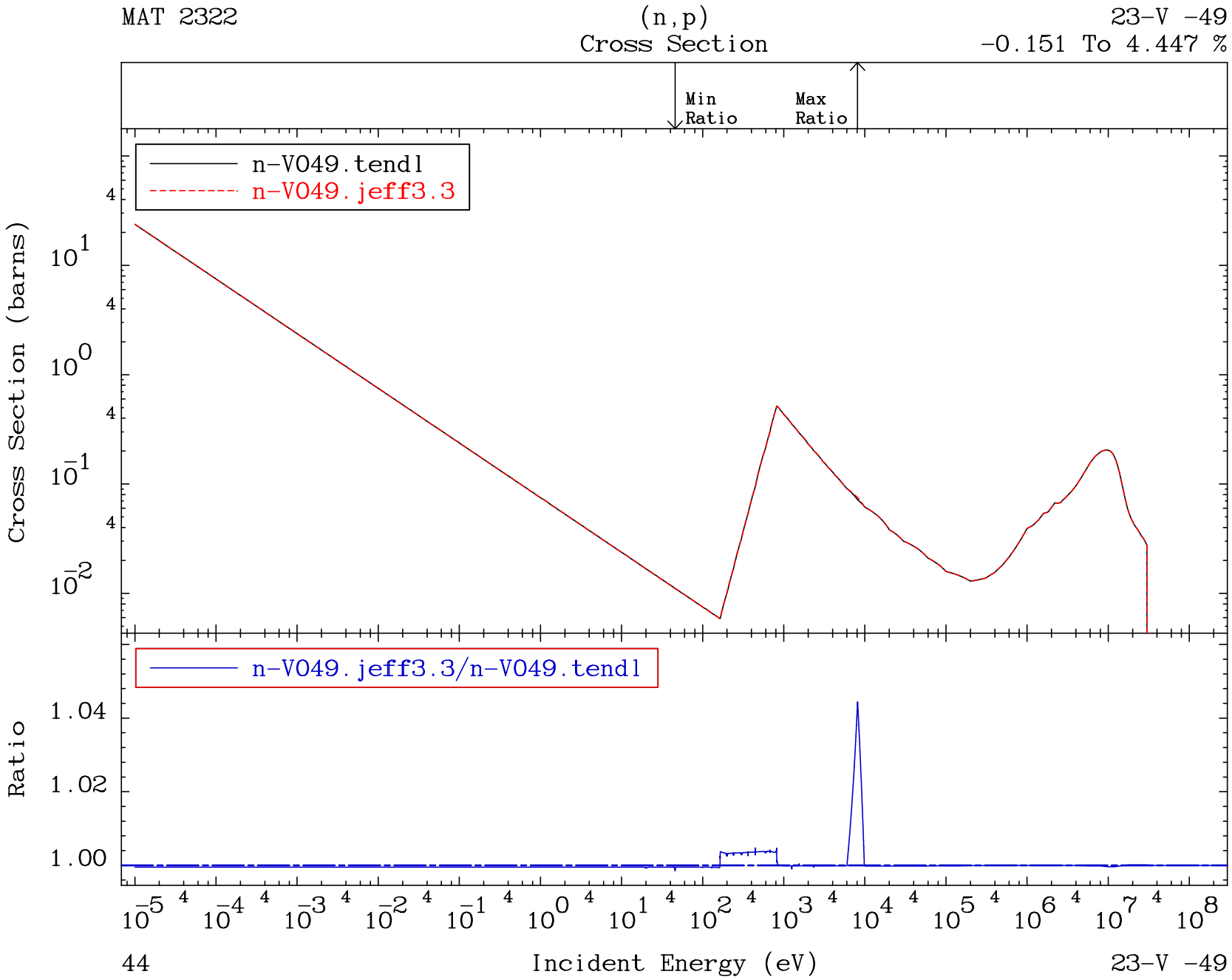

MAT 2322
MT= 78 (n,n') Level
Cross Section
23-V -49
-0.048 To 0.005 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.7352 MeV
n-V049.jeff3.3 Threshold 2.7352 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
23-V -49

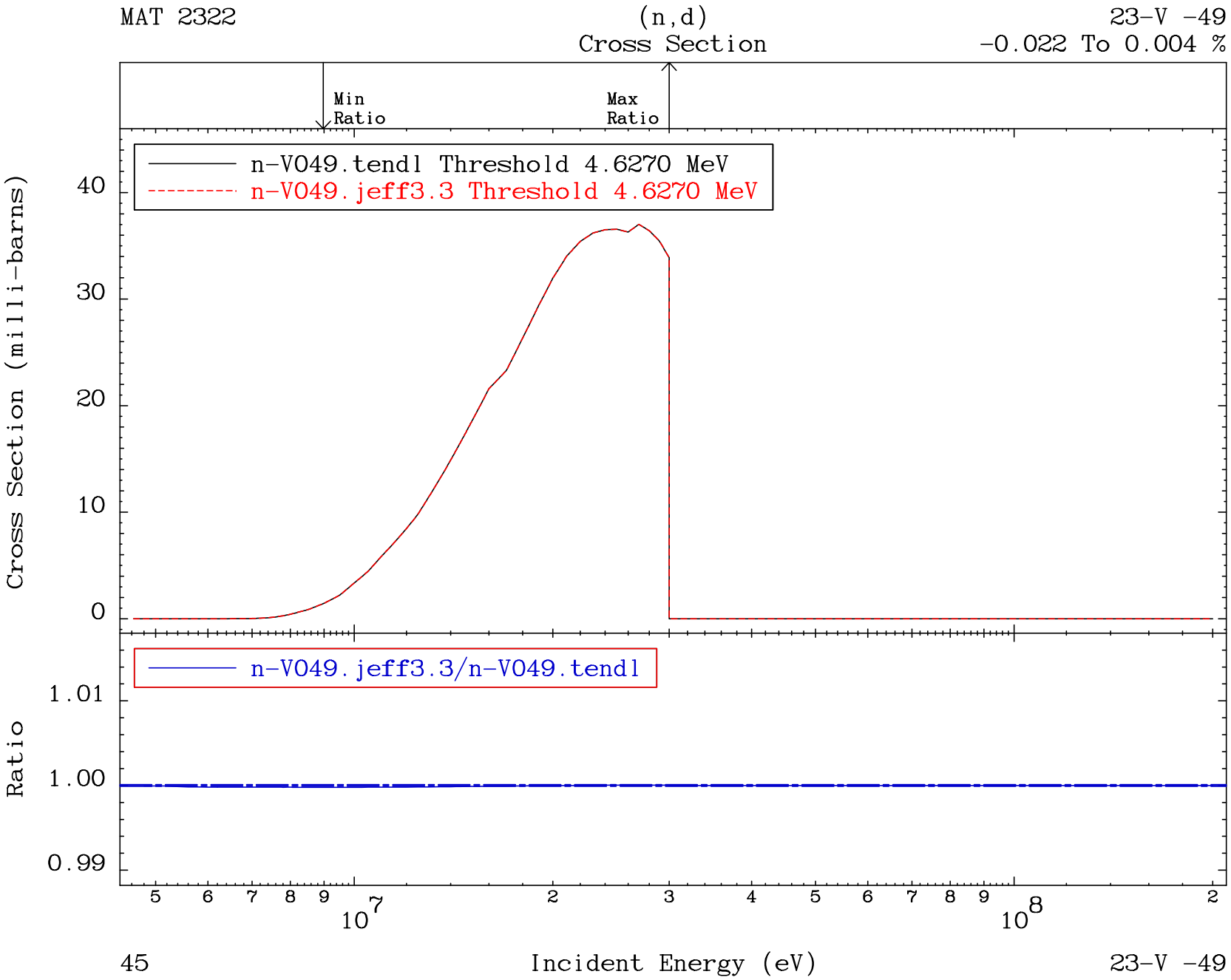

MAT 2322
MT= 79 (n,n') Level
Cross Section
23-V -49
-0.010 To 0.044 %
Min
Ratio
Max
Ratio
n-V049.tendl Threshold 2.7837 MeV
n-V049.jeff3.3 Threshold 2.7837 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
40
Incident Energy (eV)
23-V -49

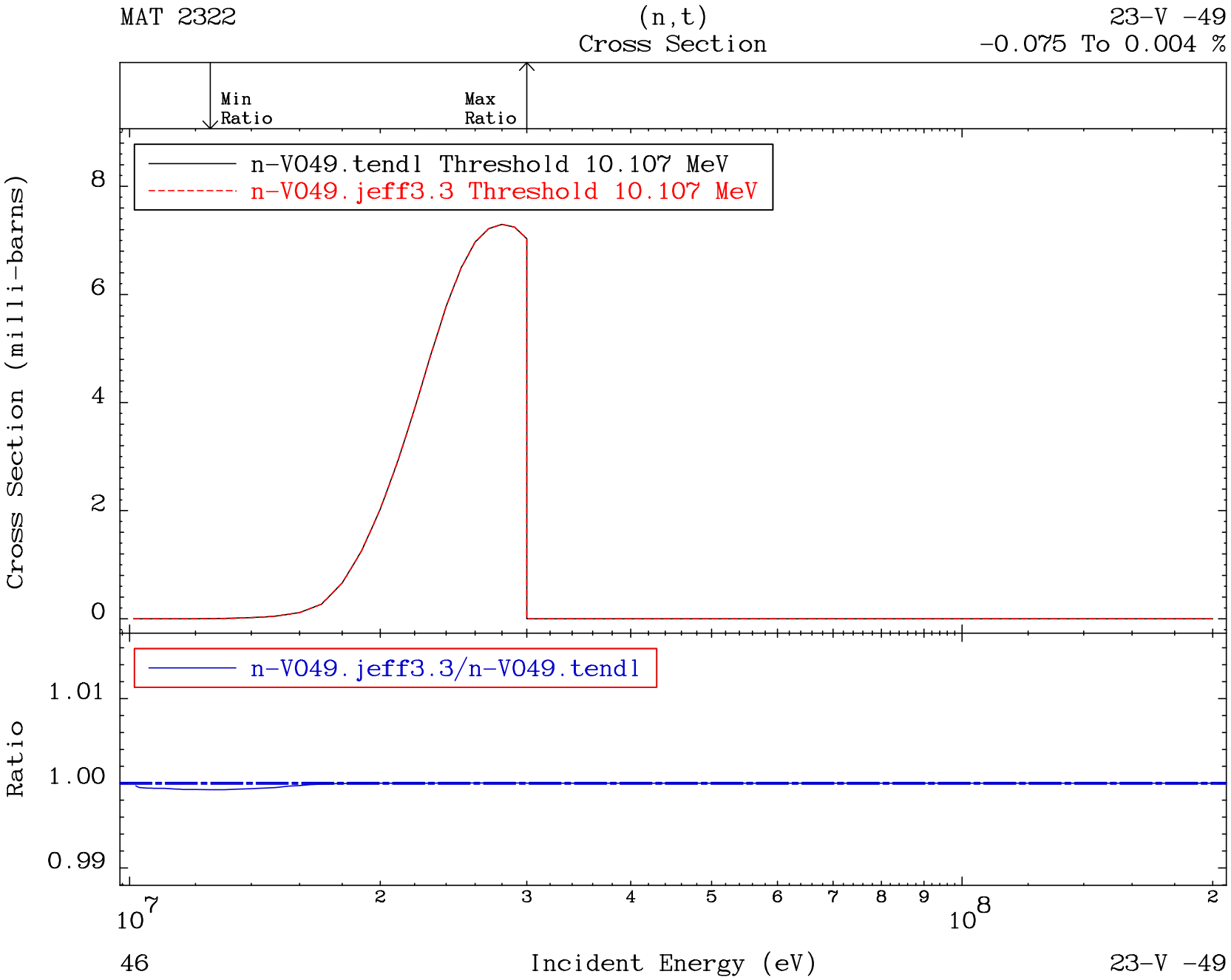

MAT 2322
MT= 80 (n,n') Level
Cross Section
23-V -49
-0.024 To 0.001 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 2.7975 MeV
n-V049.jeff3.3 Threshold 2.7975 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
23-V -49

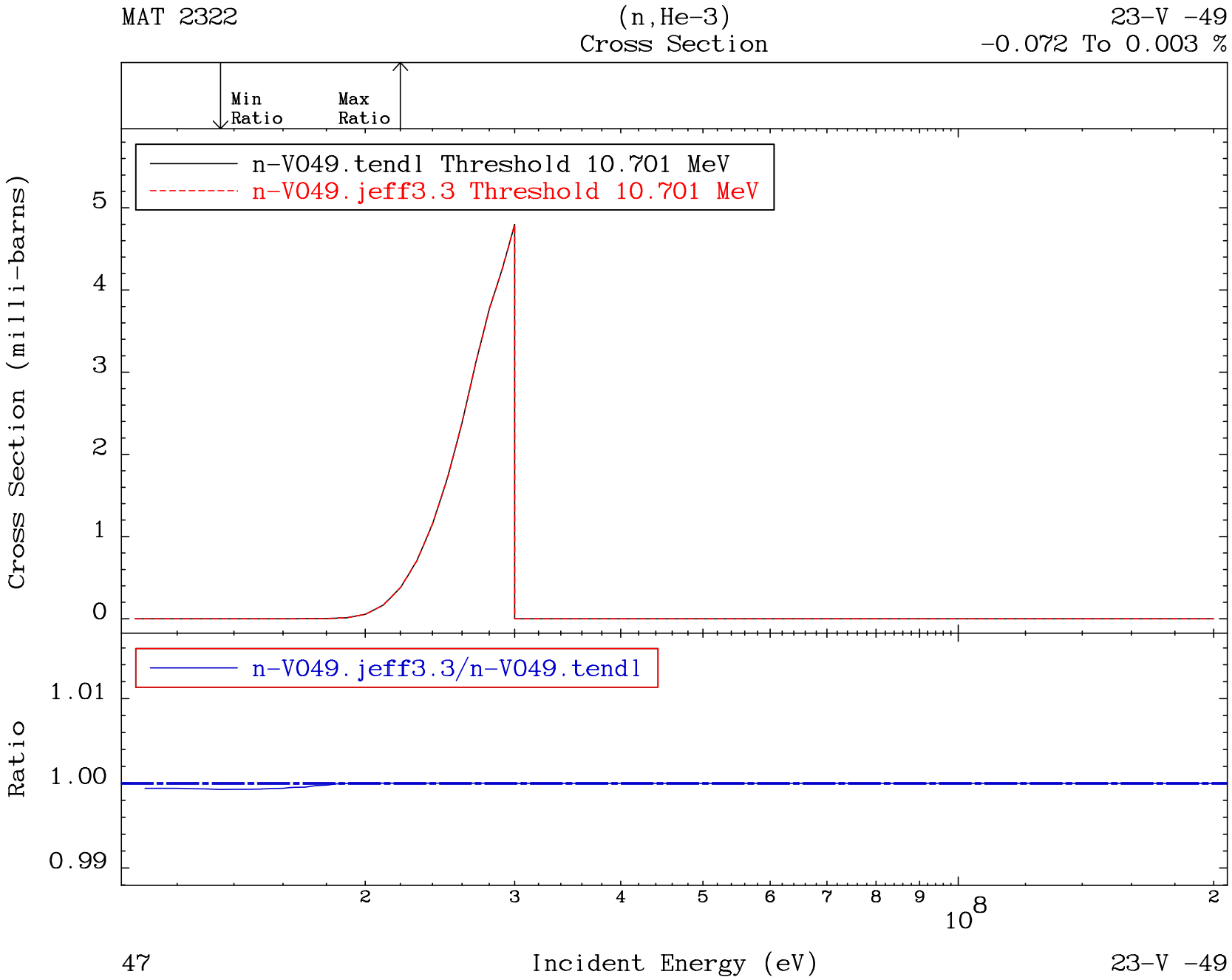

MAT 2322
(n,n') Continuum
Cross Section
23-V -49
-0.012 To 0.077 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 2.7975 MeV
n-V049.jeff3.3 Threshold 2.7975 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
23-V -49

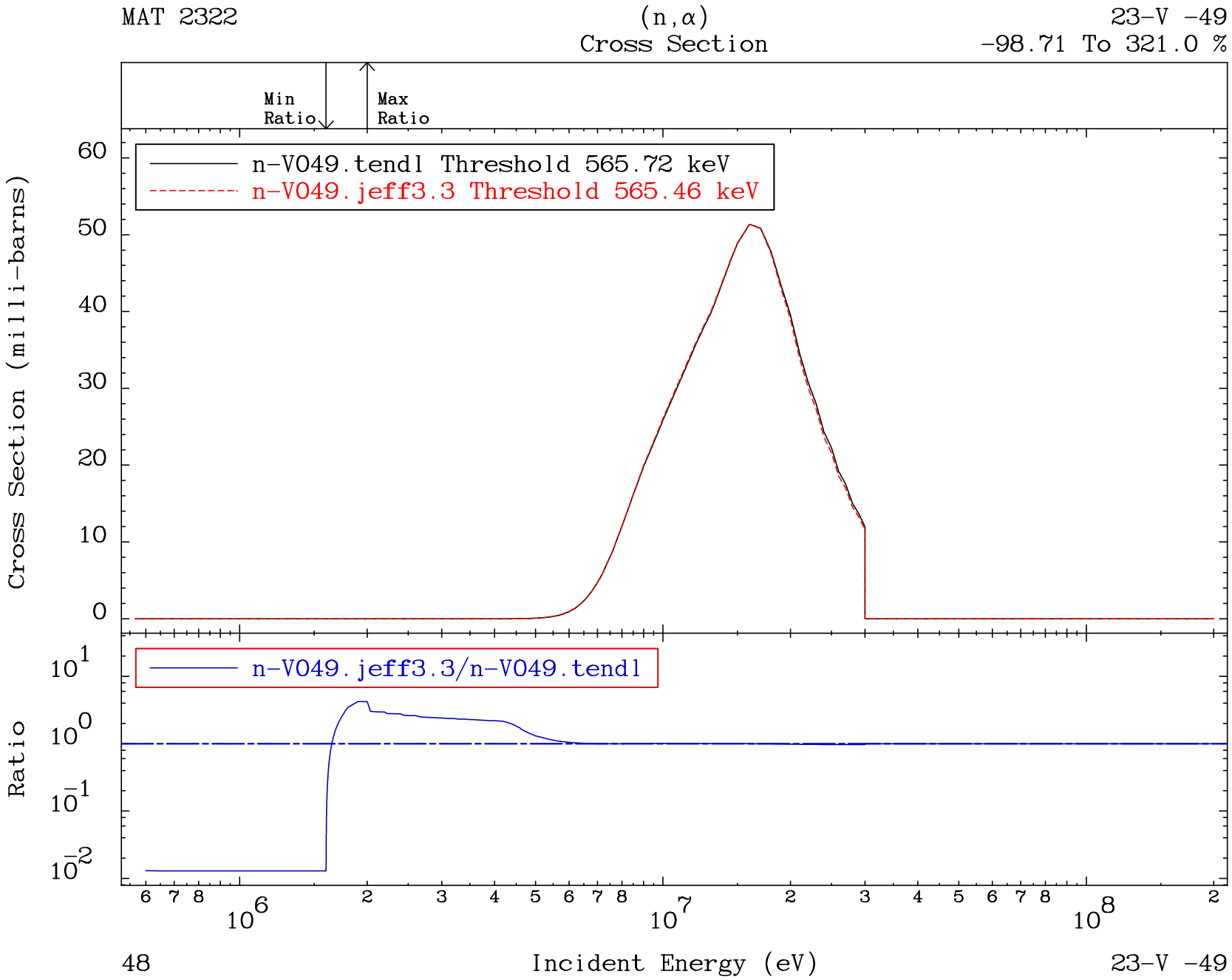

MAT 2322
(n,γ)
Cross Section
23-V -49
-99.64 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
43
23-V -49

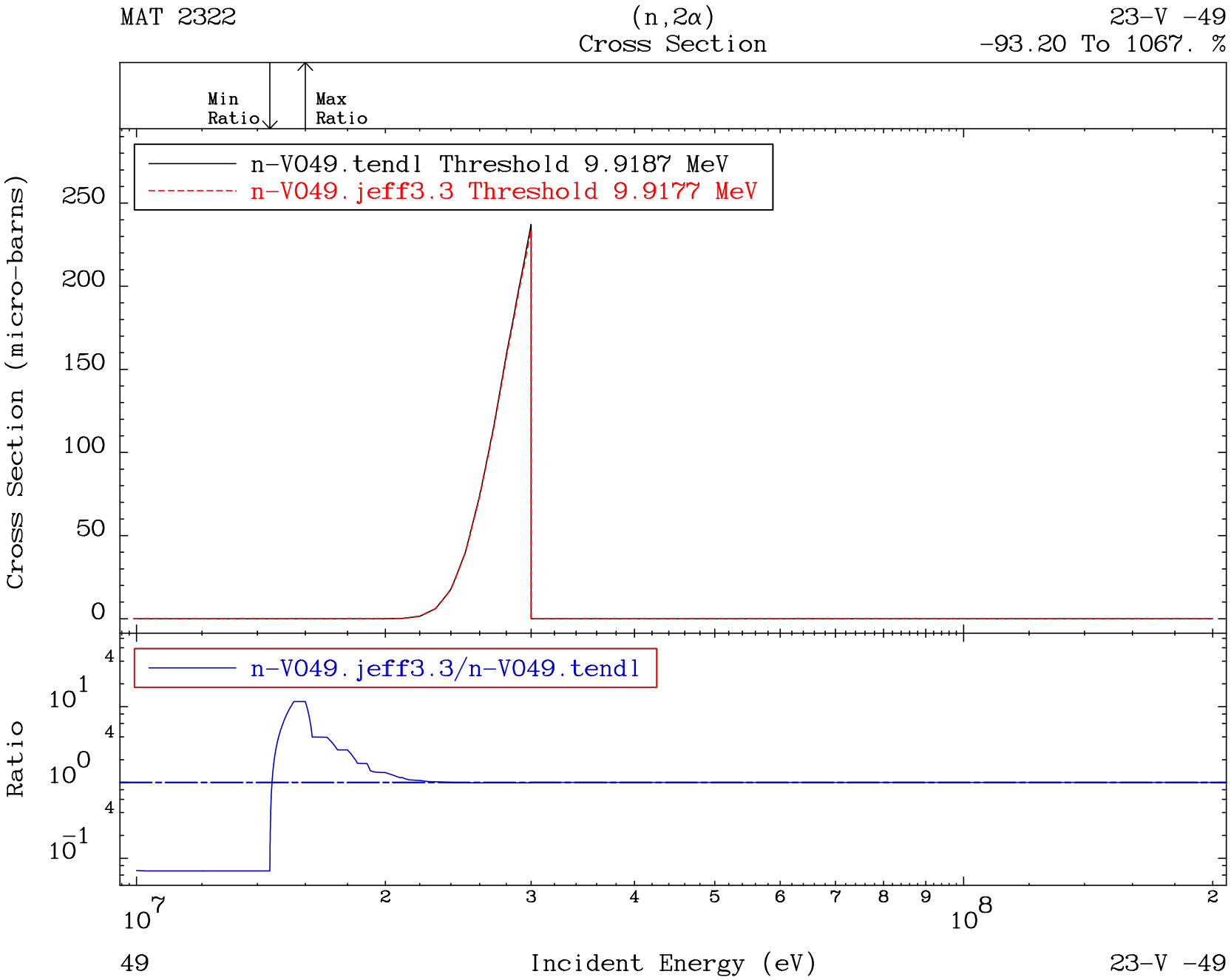

MAT 2322
(n,p)
Cross Section
23-V -49
-0.151 To 4.447 %
Min Ratio
Max Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
1.04
1.02
1.00
Incident Energy (eV)
44
23-V -49

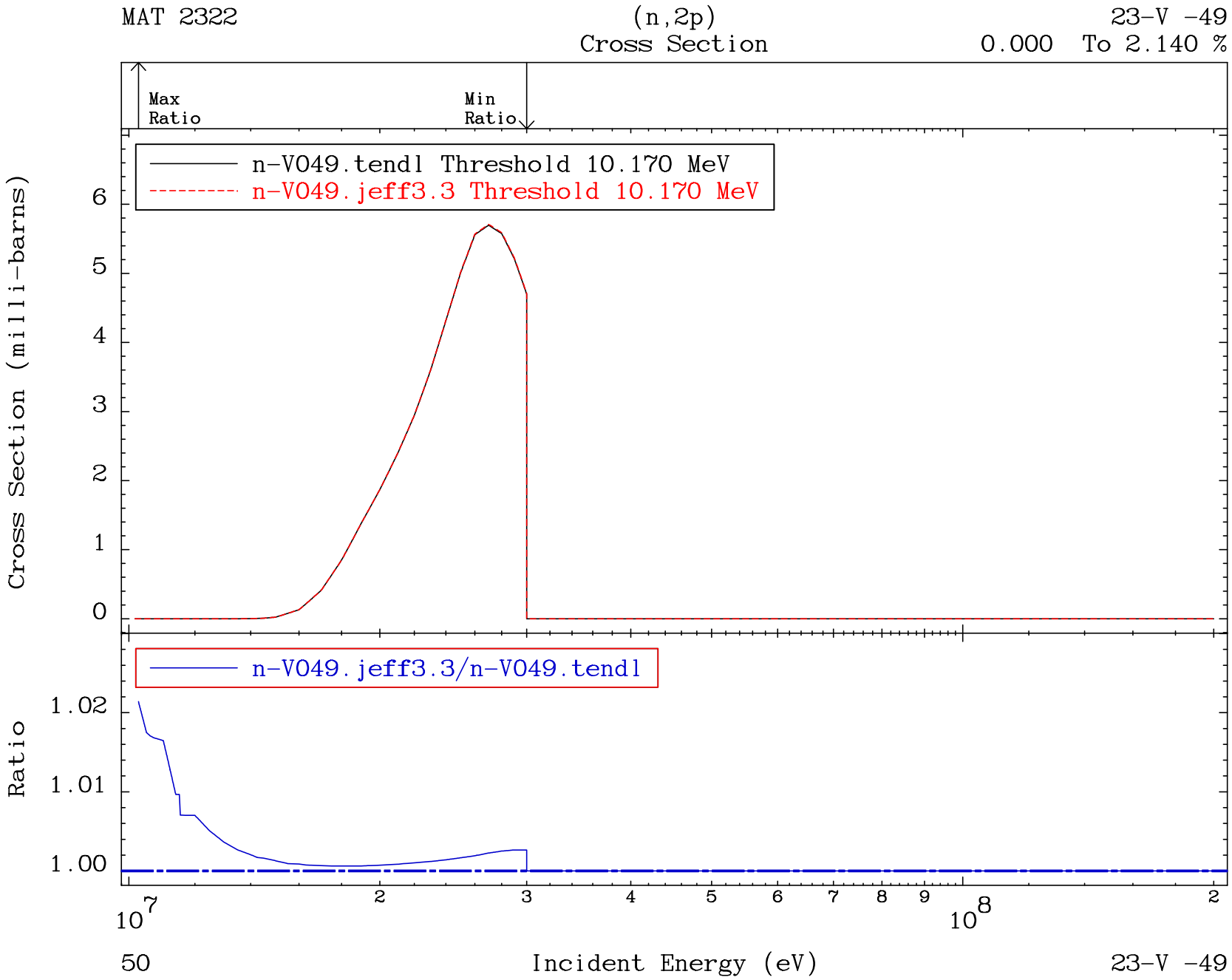

MAT 2322
(n,d)
Cross Section
23-V -49
-0.022 To 0.004 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 4.6270 MeV
n-V049.jeff3.3 Threshold 4.6270 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
23-V -49

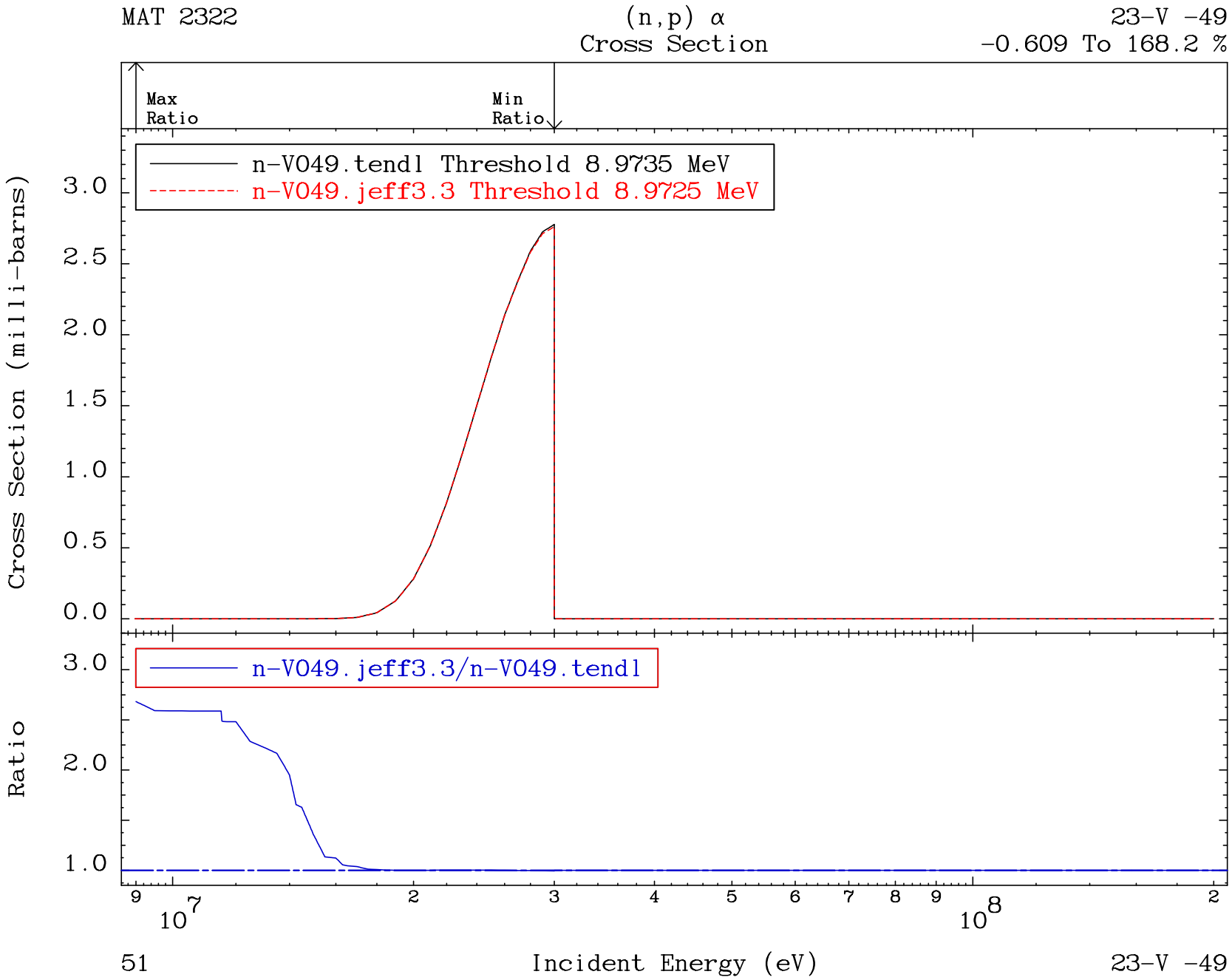

MAT 2322
(n,t)
Cross Section
23-V -49
-0.075 To 0.004 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 10.107 MeV
n-V049.jeff3.3 Threshold 10.107 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-V049.jeff3.3/n-V049.tendl
Ratio
0.99
1.00
1.01
10^7
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
23-V -49

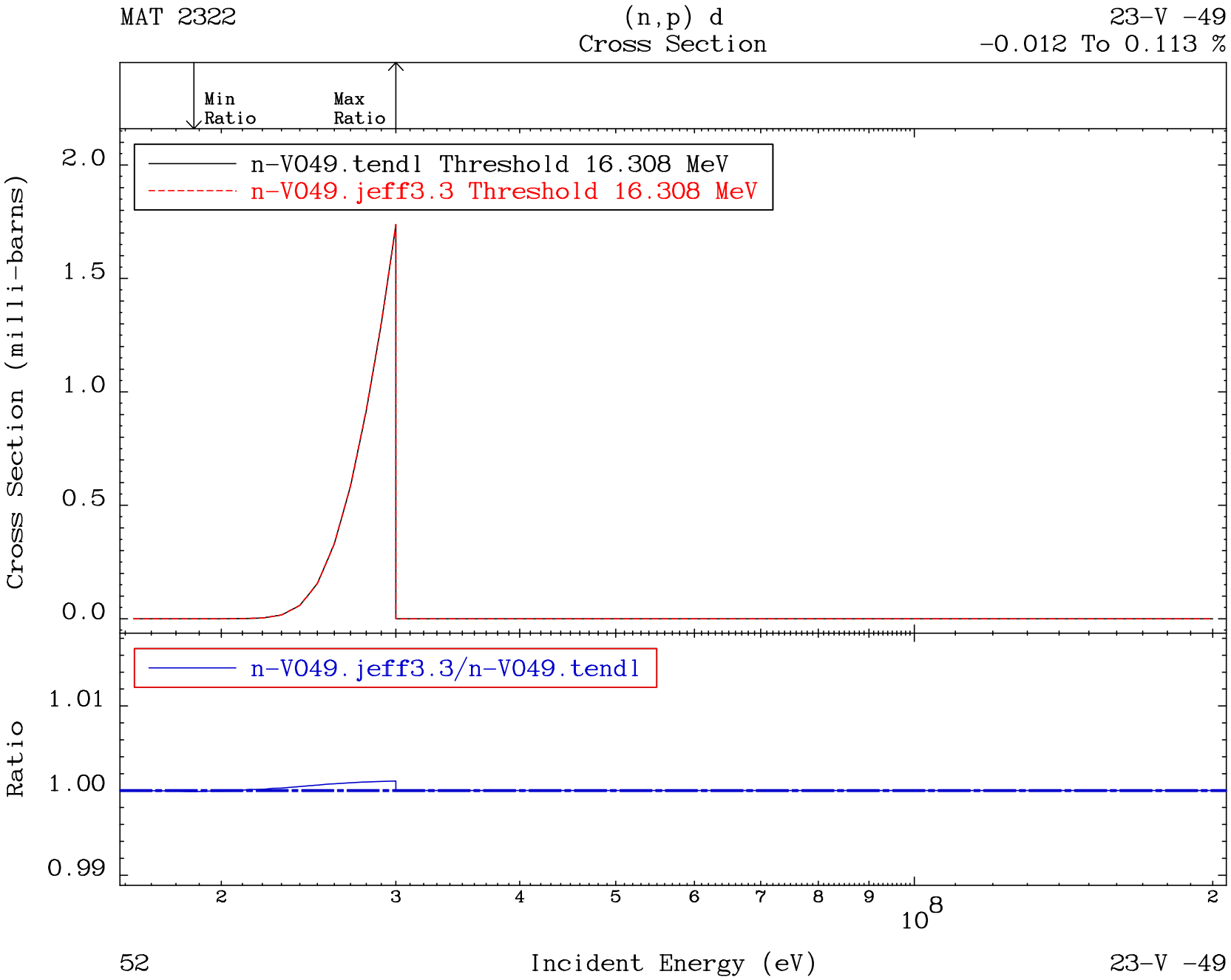

MAT 2322
(n,He-3)
Cross Section
23-V -49
-0.072 To 0.003 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 10.701 MeV
n-V049.jeff3.3 Threshold 10.701 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-V049.jeff3.3/n-V049.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
23-V -49

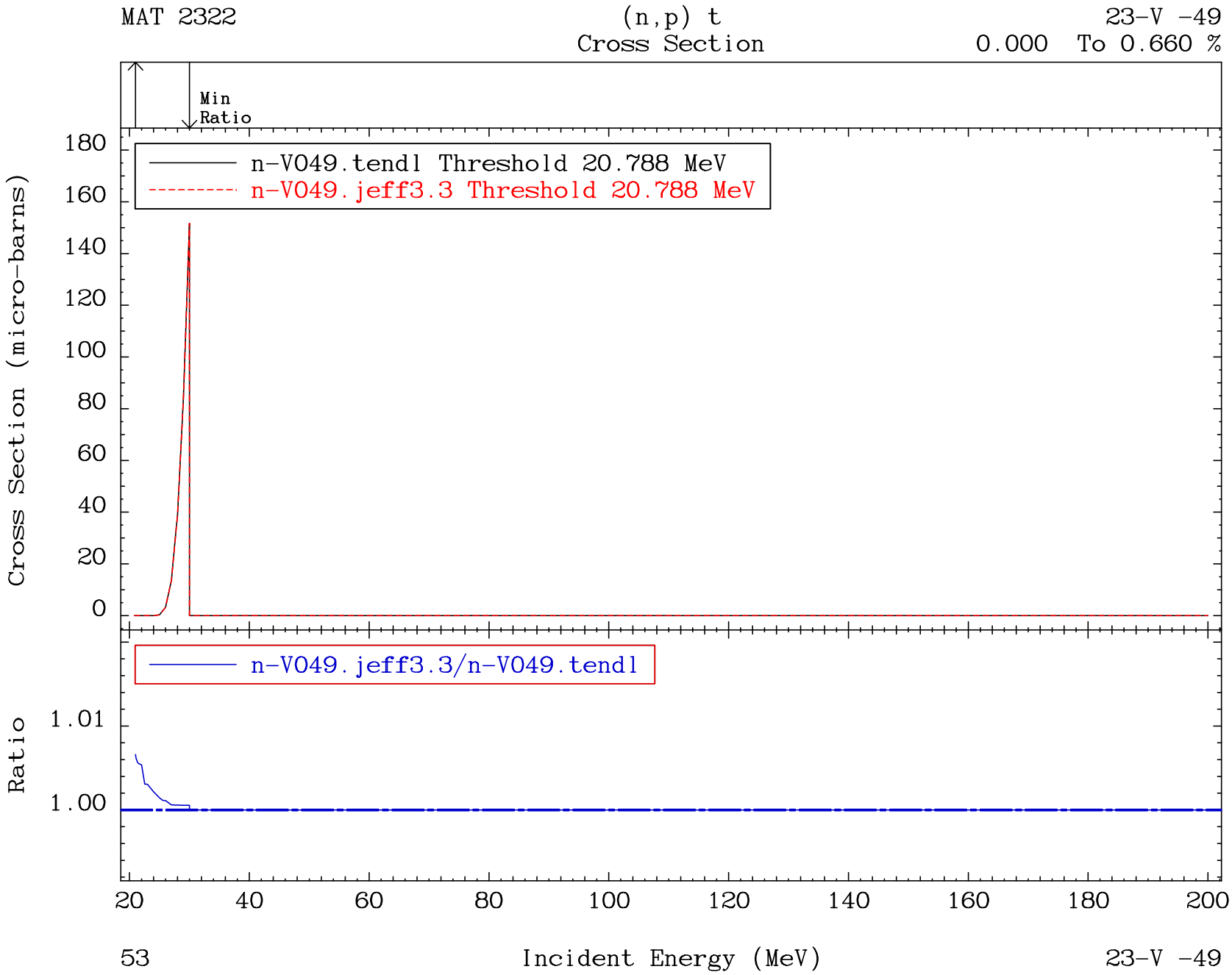

MAT 2322
(n,α)
Cross Section
23-V -49
-98.71 To 321.0 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 565.72 keV
n-V049.jeff3.3 Threshold 565.46 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
10^1
10^0
10^-1
10^-2
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
23-V -49

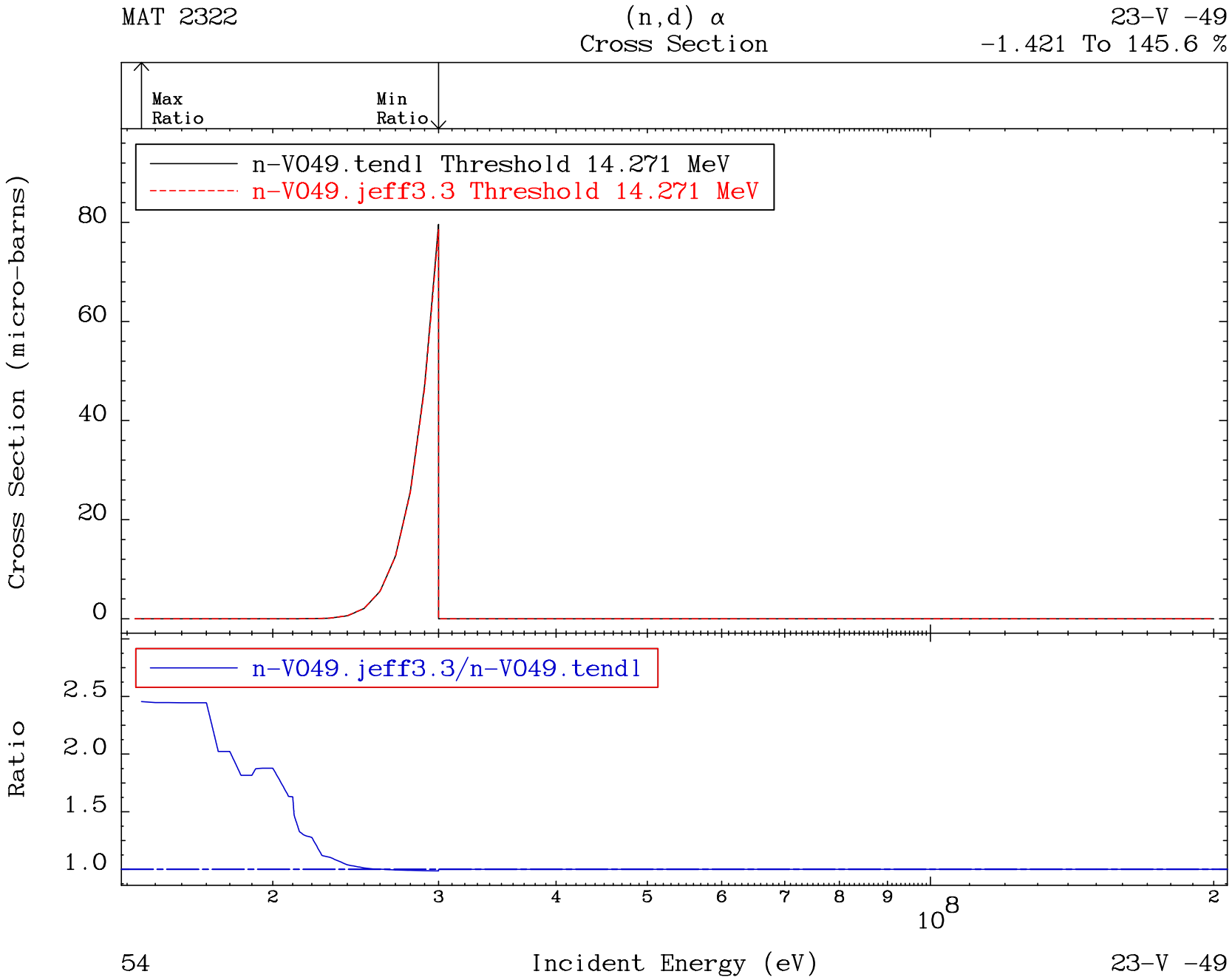

MAT 2322
(n,2α)
Cross Section
23-V -49
-93.20 To 1067. %
Min Ratio
Max Ratio
n-V049.tendl Threshold 9.9187 MeV
n-V049.jeff3.3 Threshold 9.9177 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
10^{1}
10^{0}
10^{-1}
10^{7}
10^{8}
Incident Energy (eV)
49
23-V -49

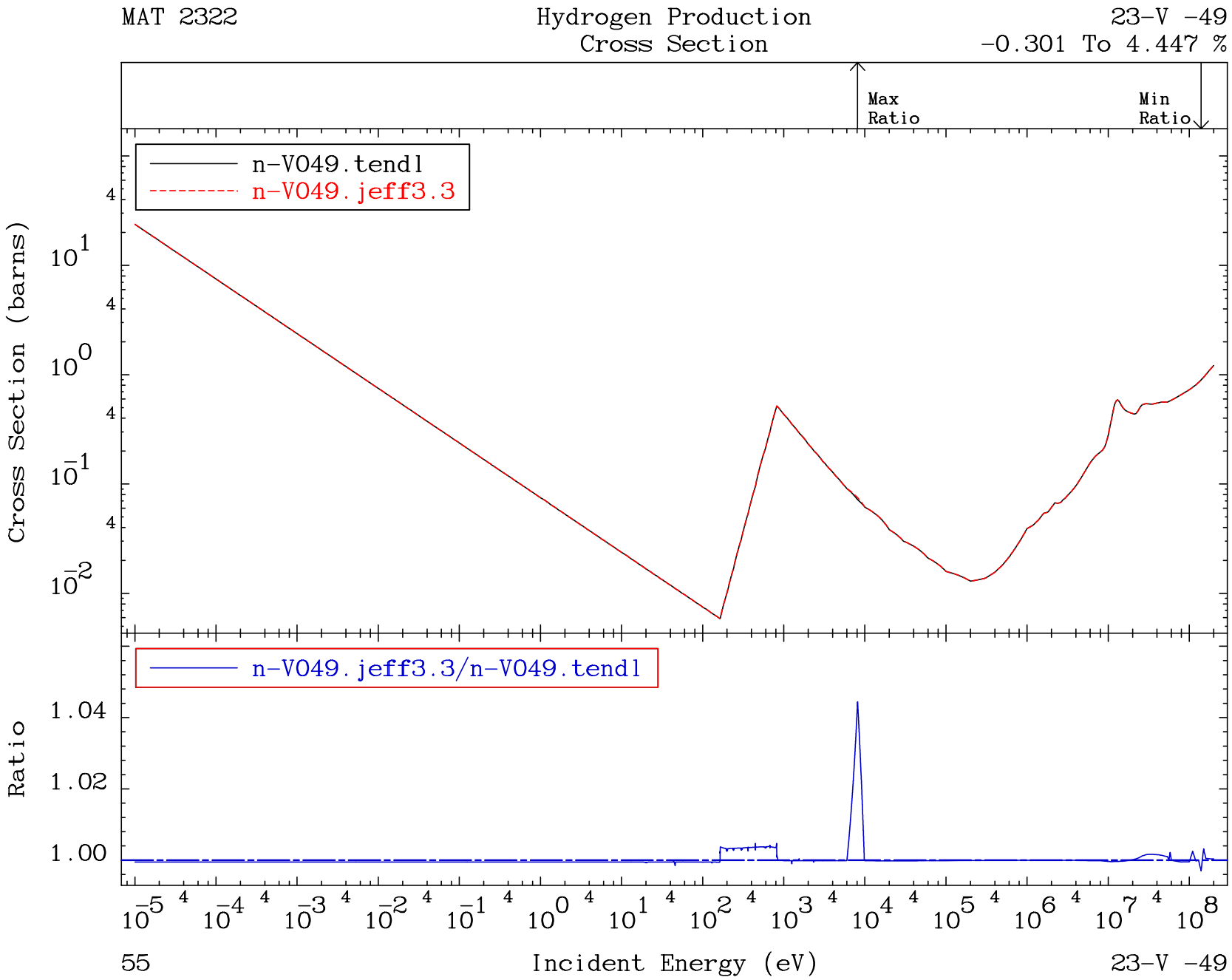

MAT 2322
(n,2p)
Cross Section
23-V -49
0.000 To 2.140 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 10.170 MeV
n-V049.jeff3.3 Threshold 10.170 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-V049.jeff3.3/n-V049.tendl
Ratio
1.00
1.01
1.02
10^7
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
23-V -49

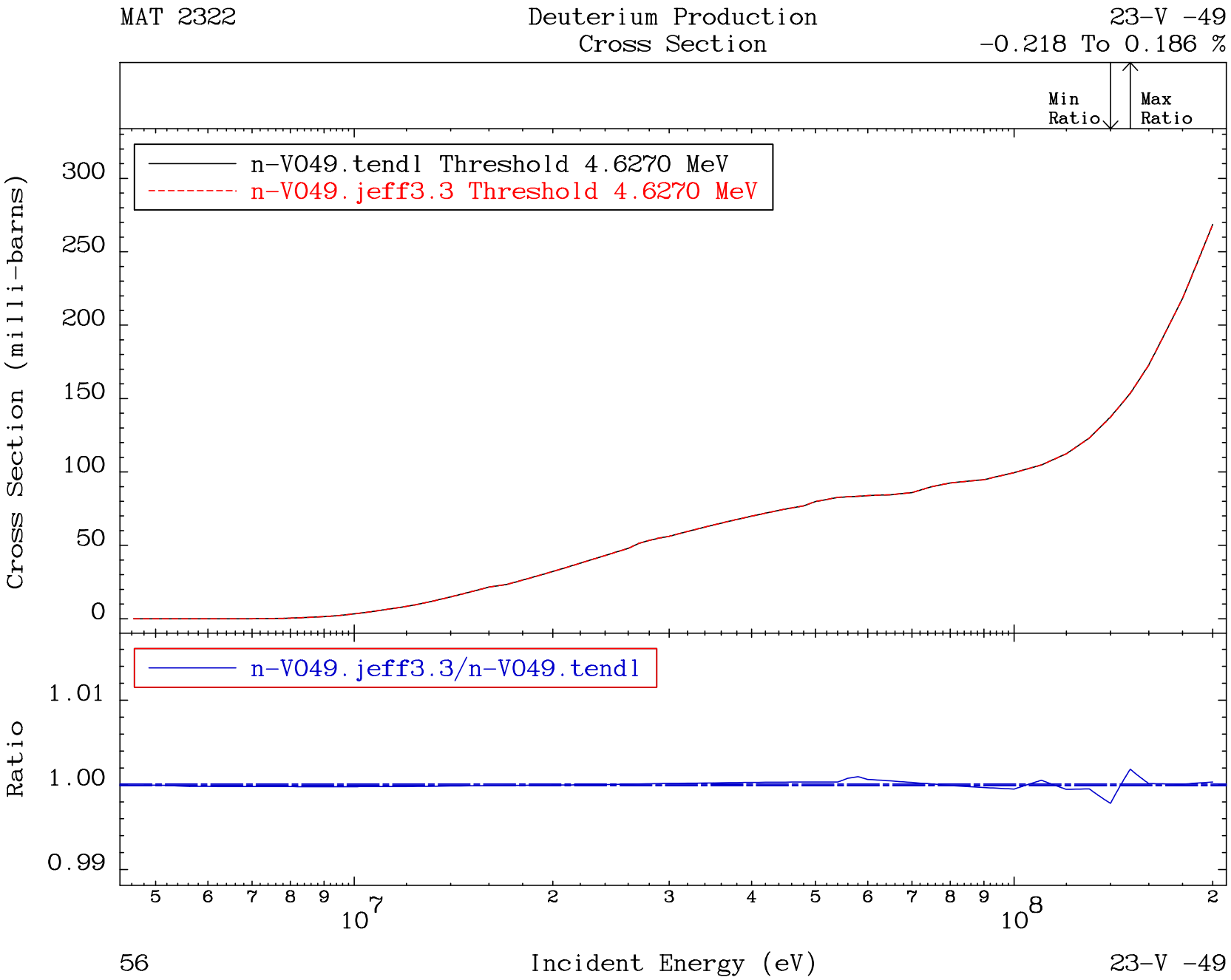

MAT 2322
(n,p) α
Cross Section
23-V -49
-0.609 To 168.2 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 8.9735 MeV
n-V049.jeff3.3 Threshold 8.9725 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
23-V -49

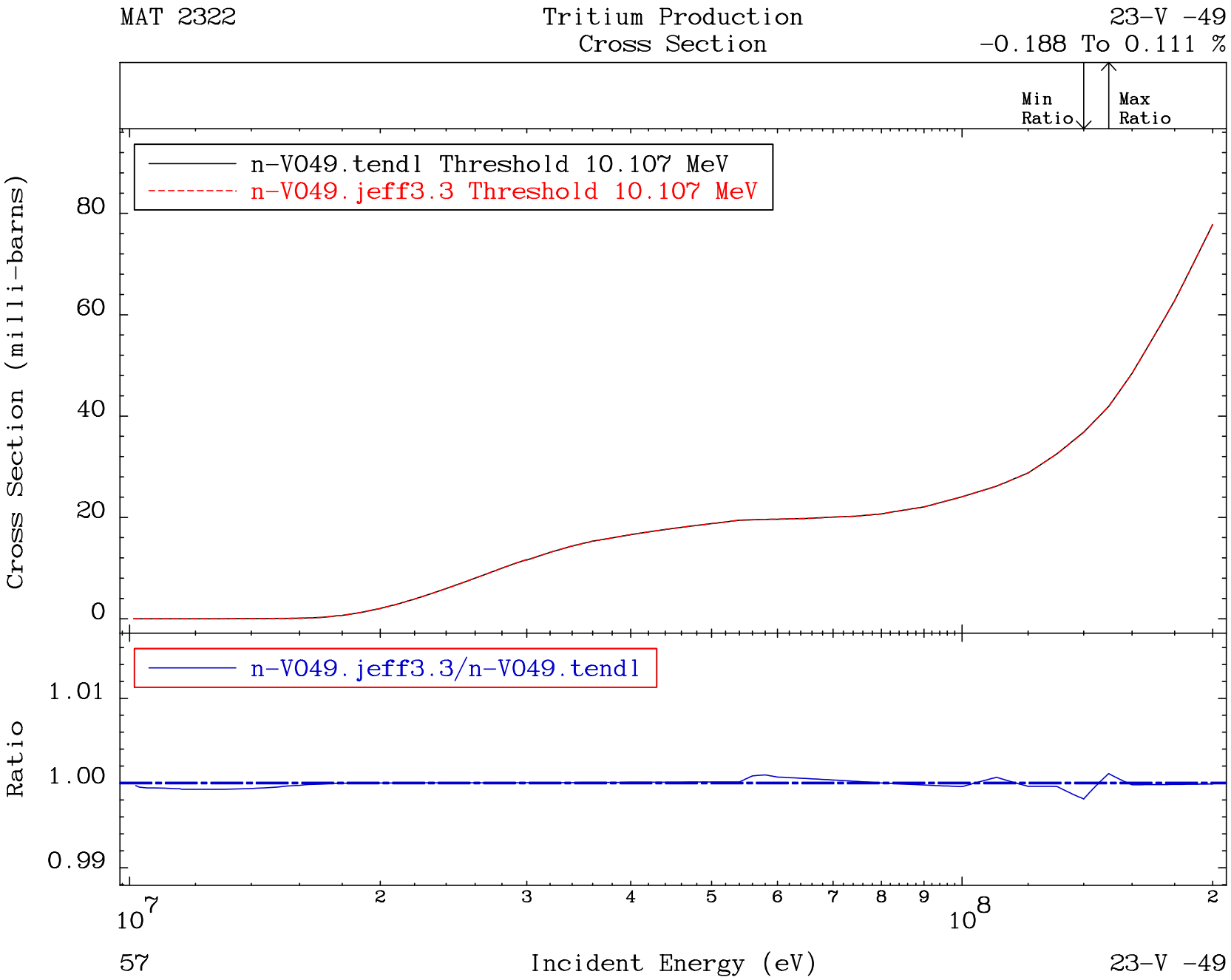

MAT 2322
(n,p) d
Cross Section
23-V -49
-0.012 To 0.113 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 16.308 MeV
n-V049.jeff3.3 Threshold 16.308 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
23-V -49

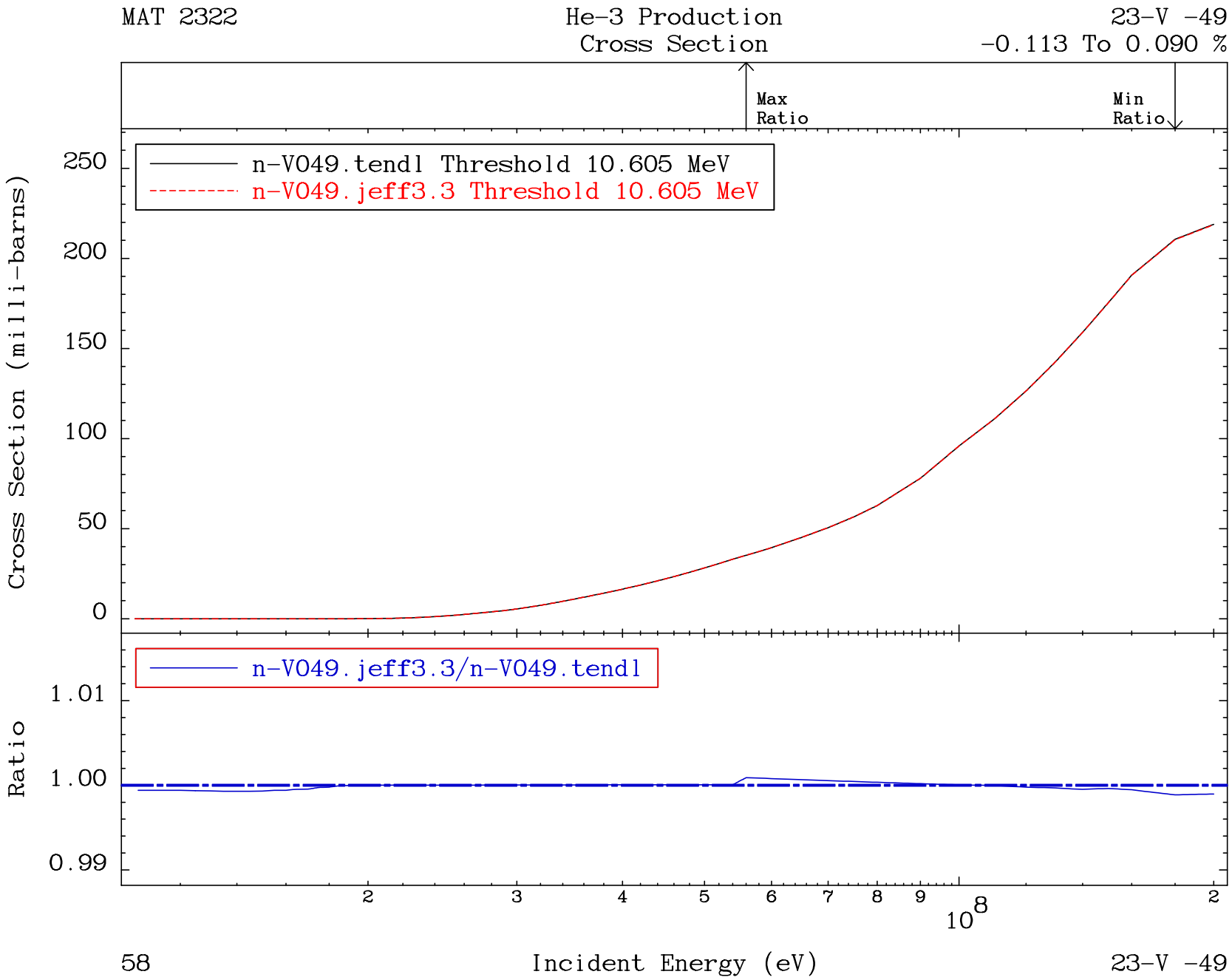

MAT 2322
(n,p) t
Cross Section
23-V -49
0.000 To 0.660 %
Min
Ratio
n-V049.tendl Threshold 20.788 MeV
n-V049.jeff3.3 Threshold 20.788 MeV
Cross Section (micro-barns)
180
160
140
120
100
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
53
Incident Energy (MeV)
23-V -49

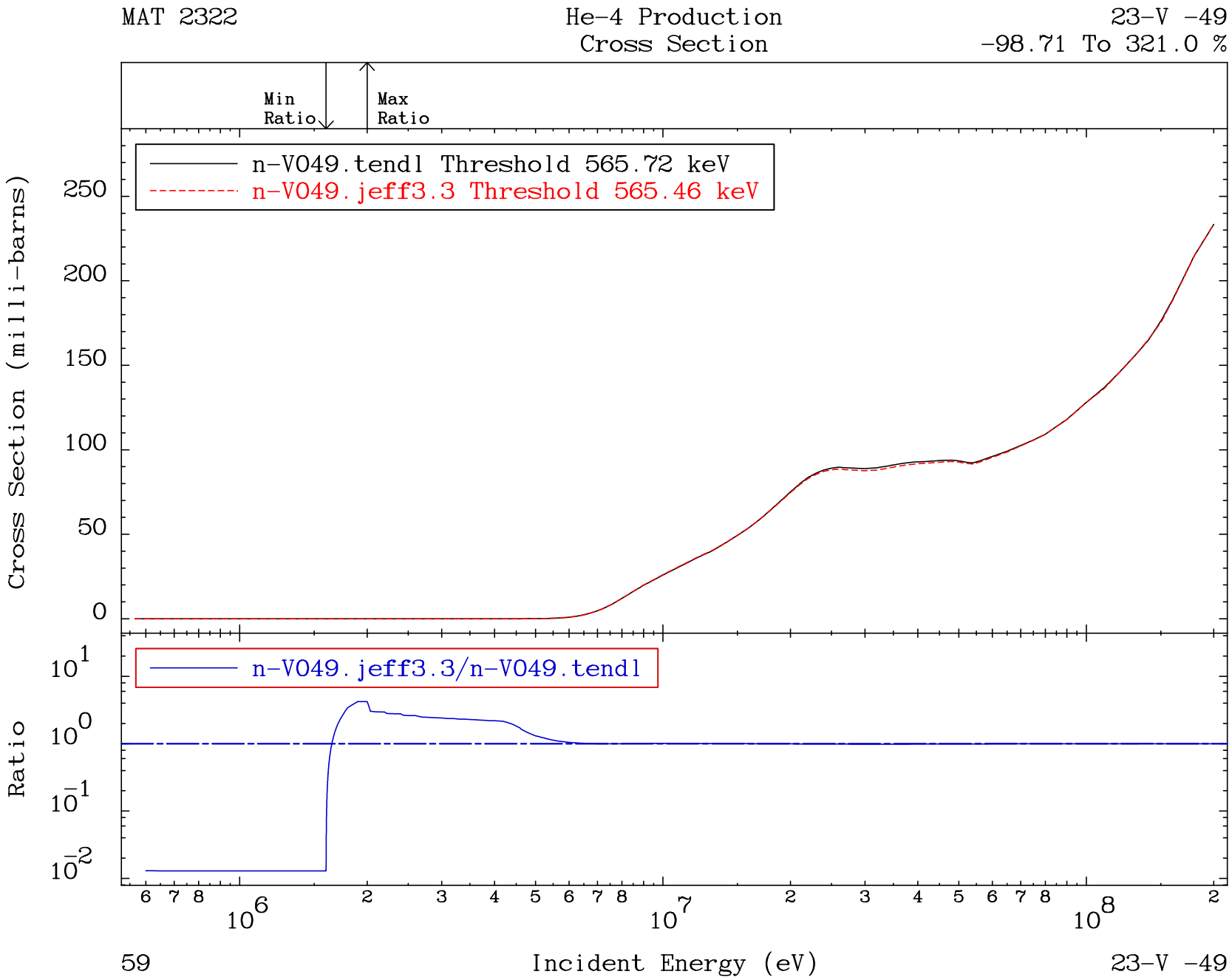

MAT 2322
(n,d) α
Cross Section
23-V -49
-1.421 To 145.6 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 14.271 MeV
n-V049.jeff3.3 Threshold 14.271 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
2.5
2.0
1.5
1.0
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
23-V -49

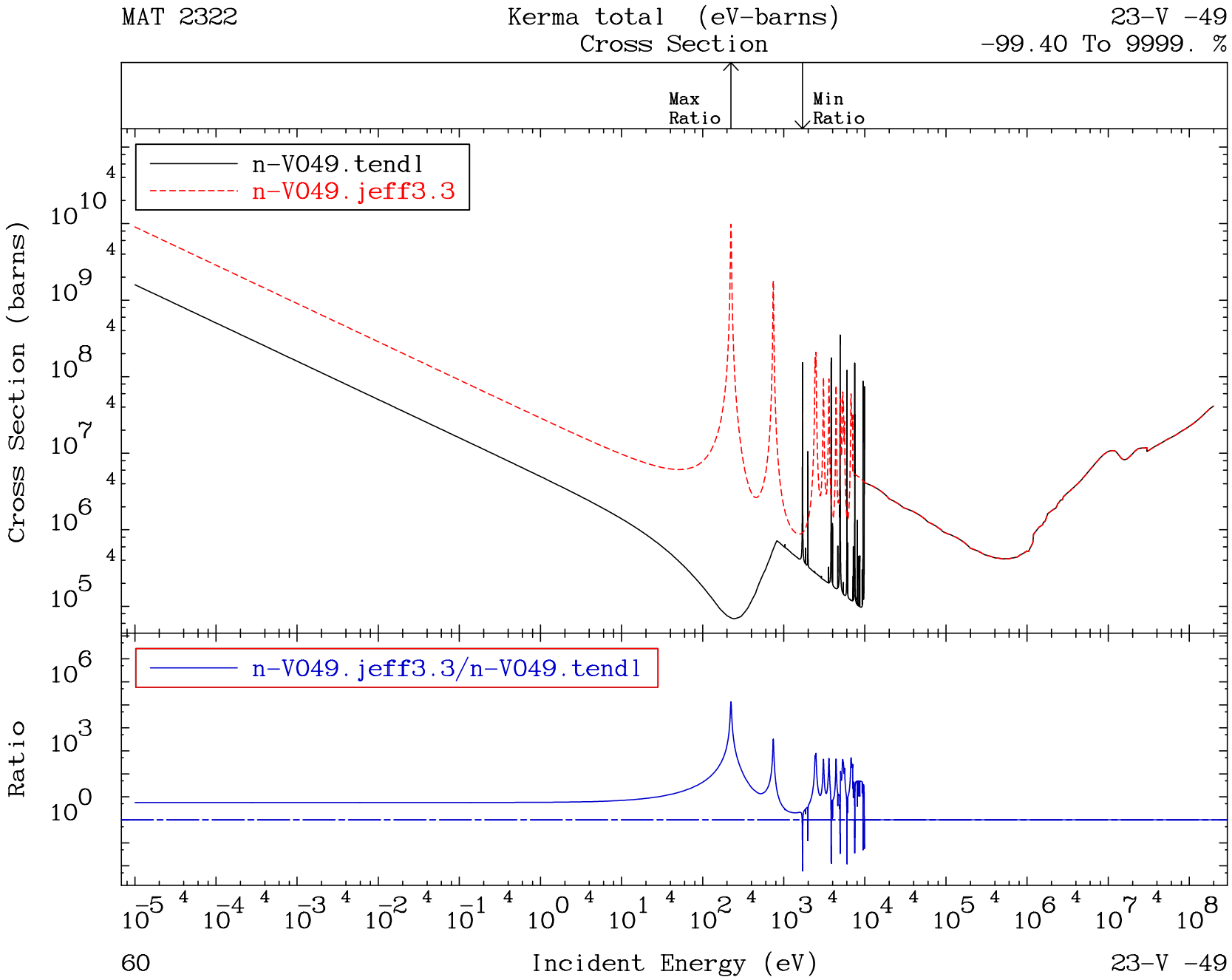

MAT 2322
Hydrogen Production
Cross Section
23-V -49
-0.301 To 4.447 %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
1.04
1.02
1.00
Incident Energy (eV)
55
23-V -49

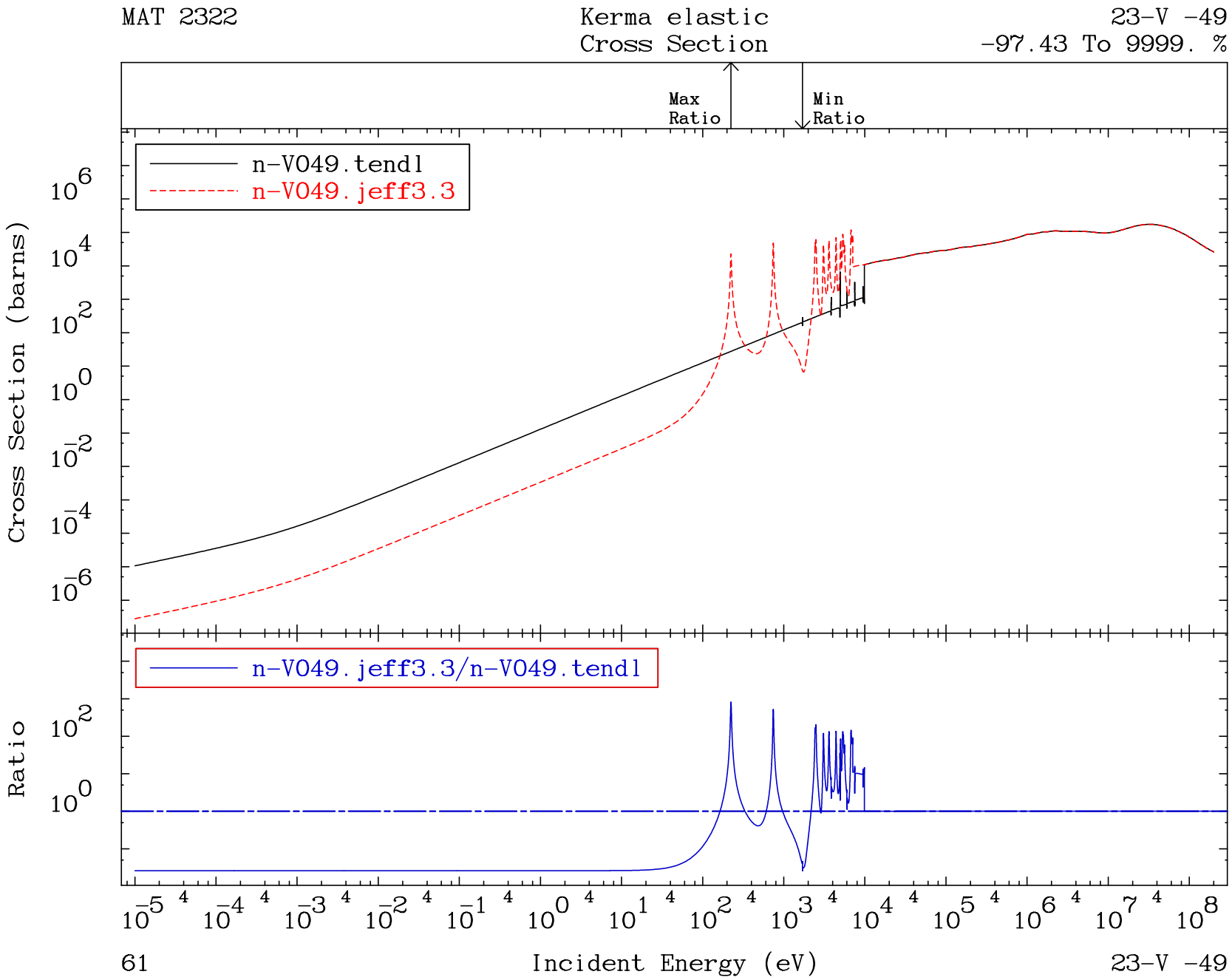

MAT 2322
Deuterium Production
Cross Section
23-V -49
-0.218 To 0.186 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 4.6270 MeV
n-V049.jeff3.3 Threshold 4.6270 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
23-V -49

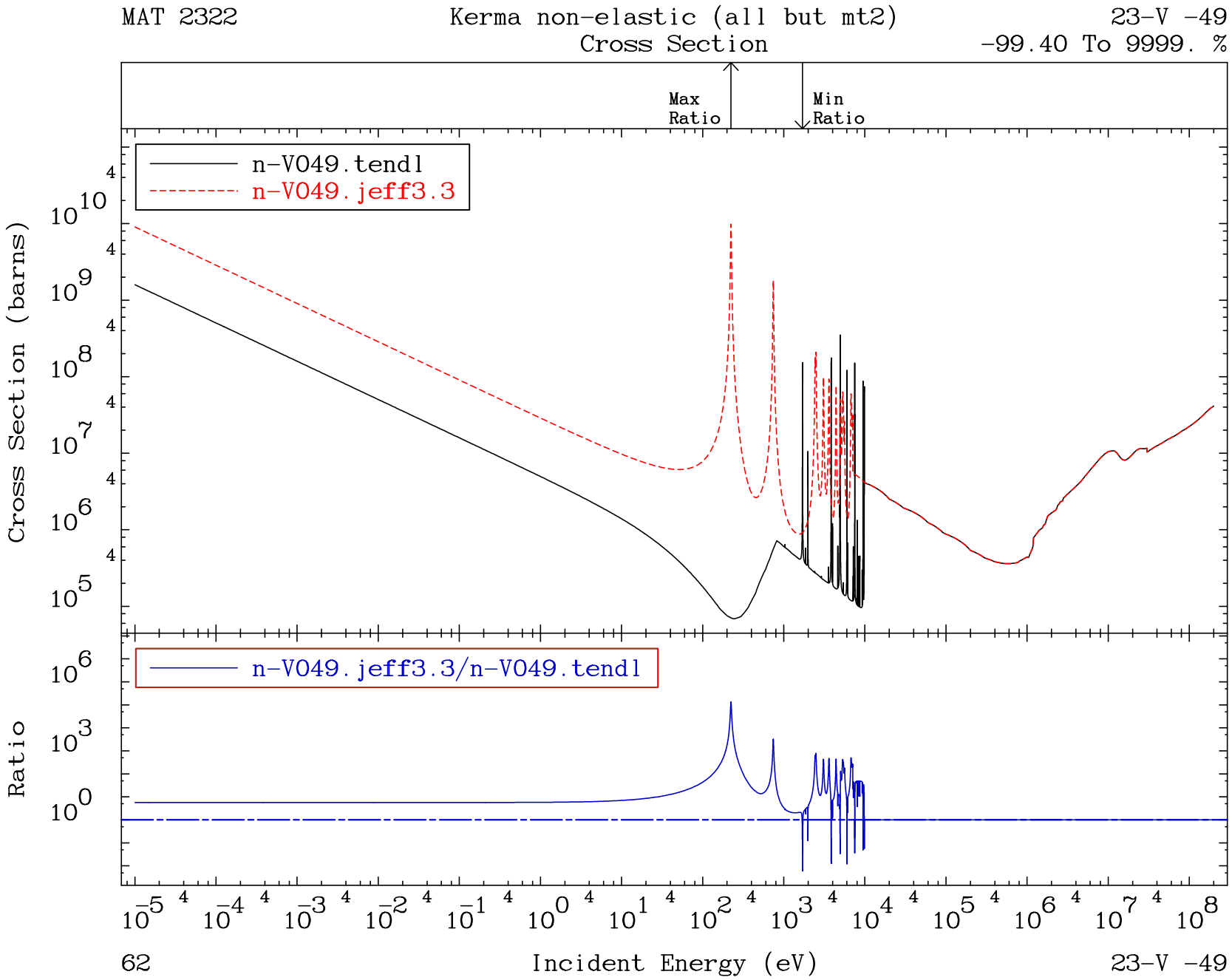

MAT 2322
Tritium Production
Cross Section
23-V -49
-0.188 To 0.111 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 10.107 MeV
n-V049.jeff3.3 Threshold 10.107 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
23-V -49

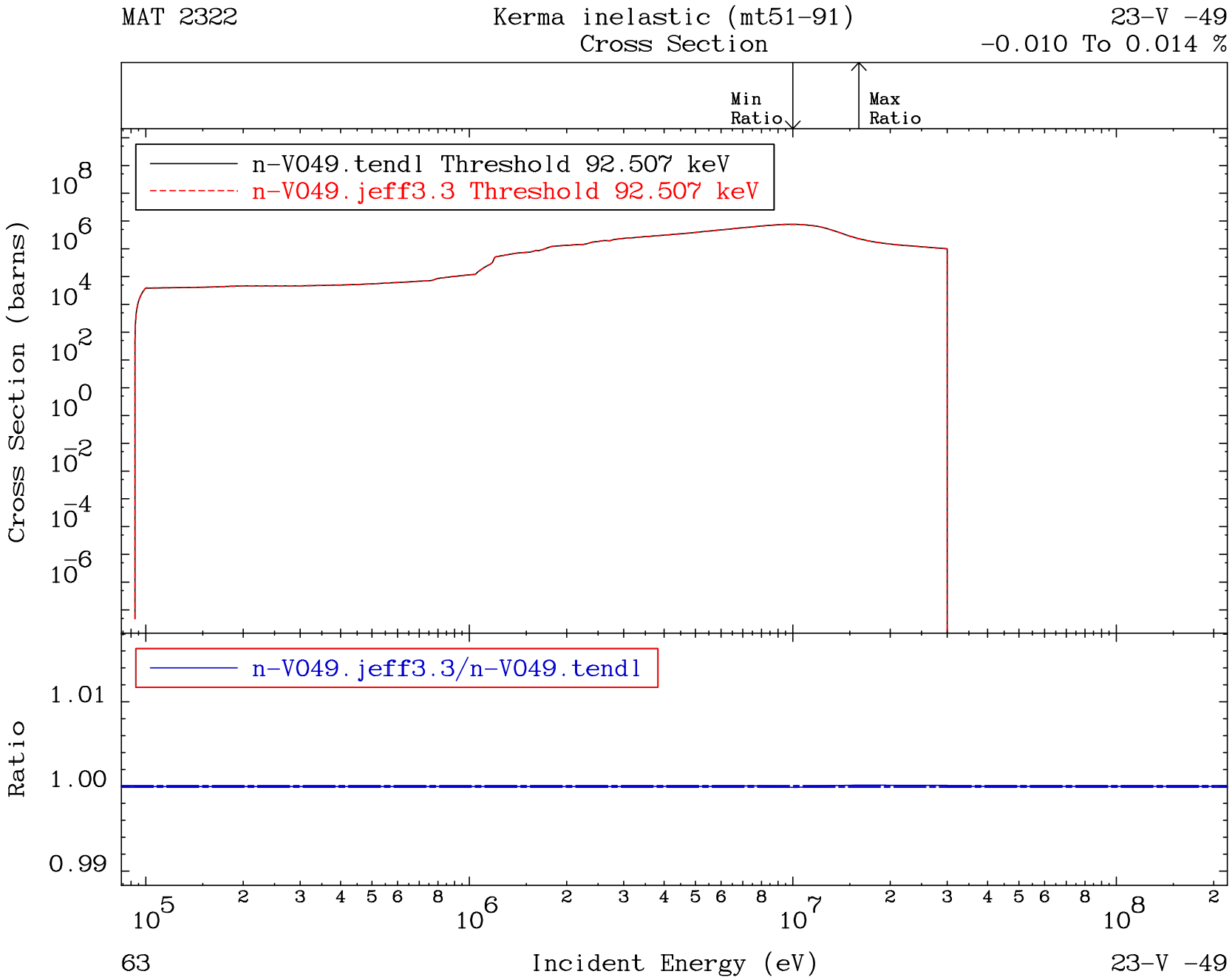

MAT 2322
He-3 Production
Cross Section
23-V -49
-0.113 To 0.090 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 10.605 MeV
n-V049.jeff3.3 Threshold 10.605 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
23-V -49

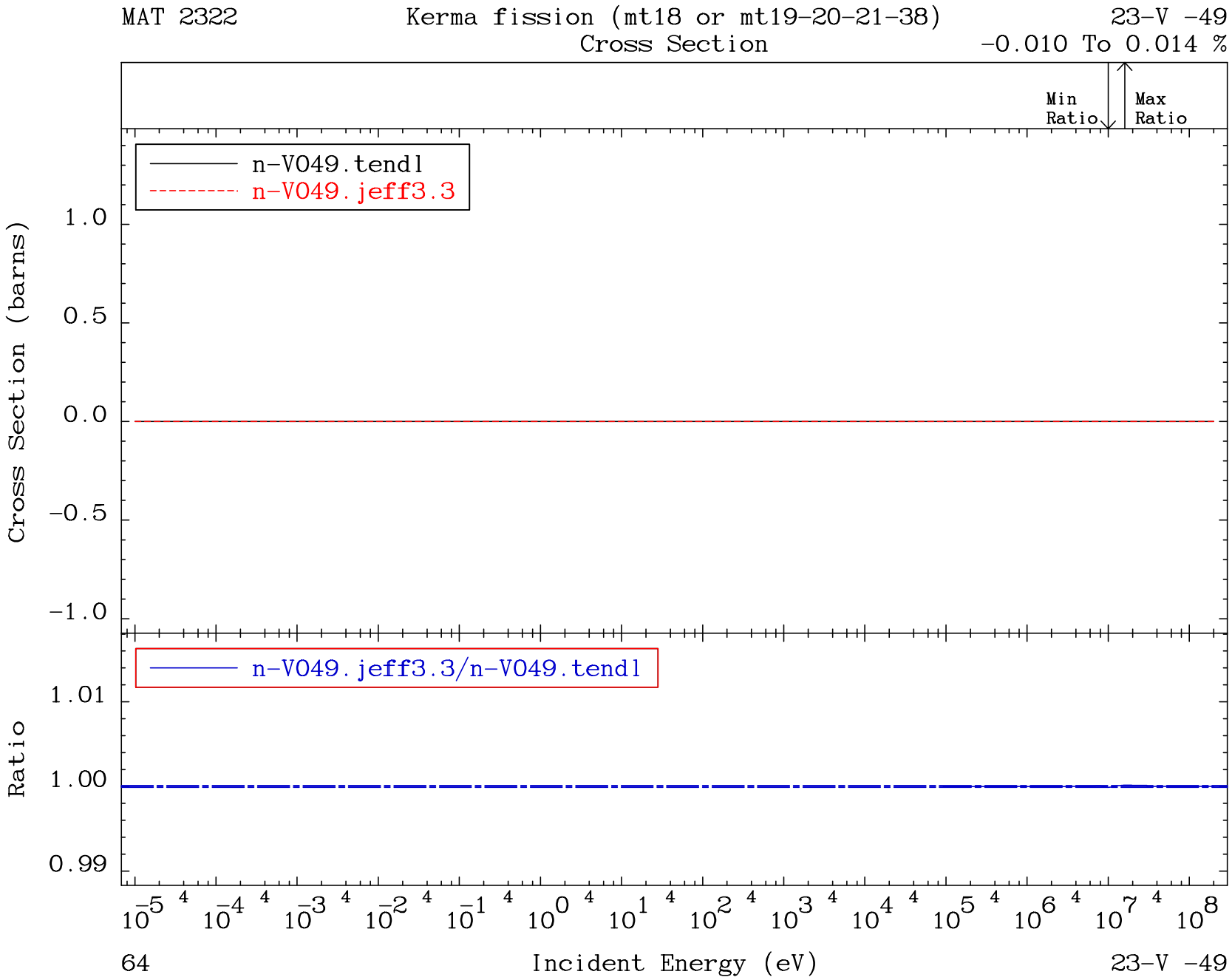

MAT 2322
He-4 Production
Cross Section
23-V -49
-98.71 To 321.0 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 565.72 keV
n-V049.jeff3.3 Threshold 565.46 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
10^1
10^0
10^-1
10^-2
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
59
Incident Energy (eV)
23-V -49

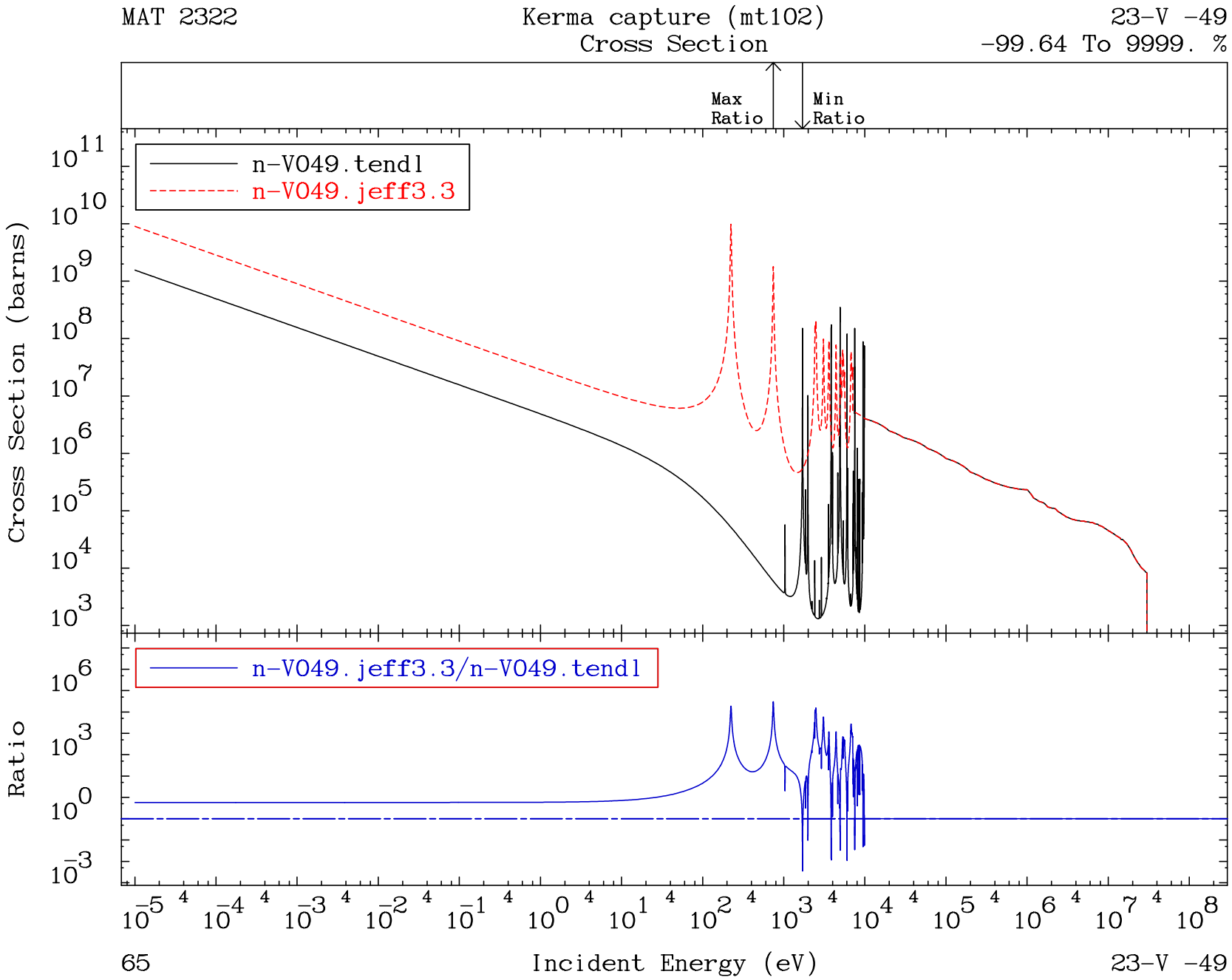

MAT 2322
Kerma total (eV-barns)
Cross Section
23-V -49
-99.40 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
60
Incident Energy (eV)
23-V -49

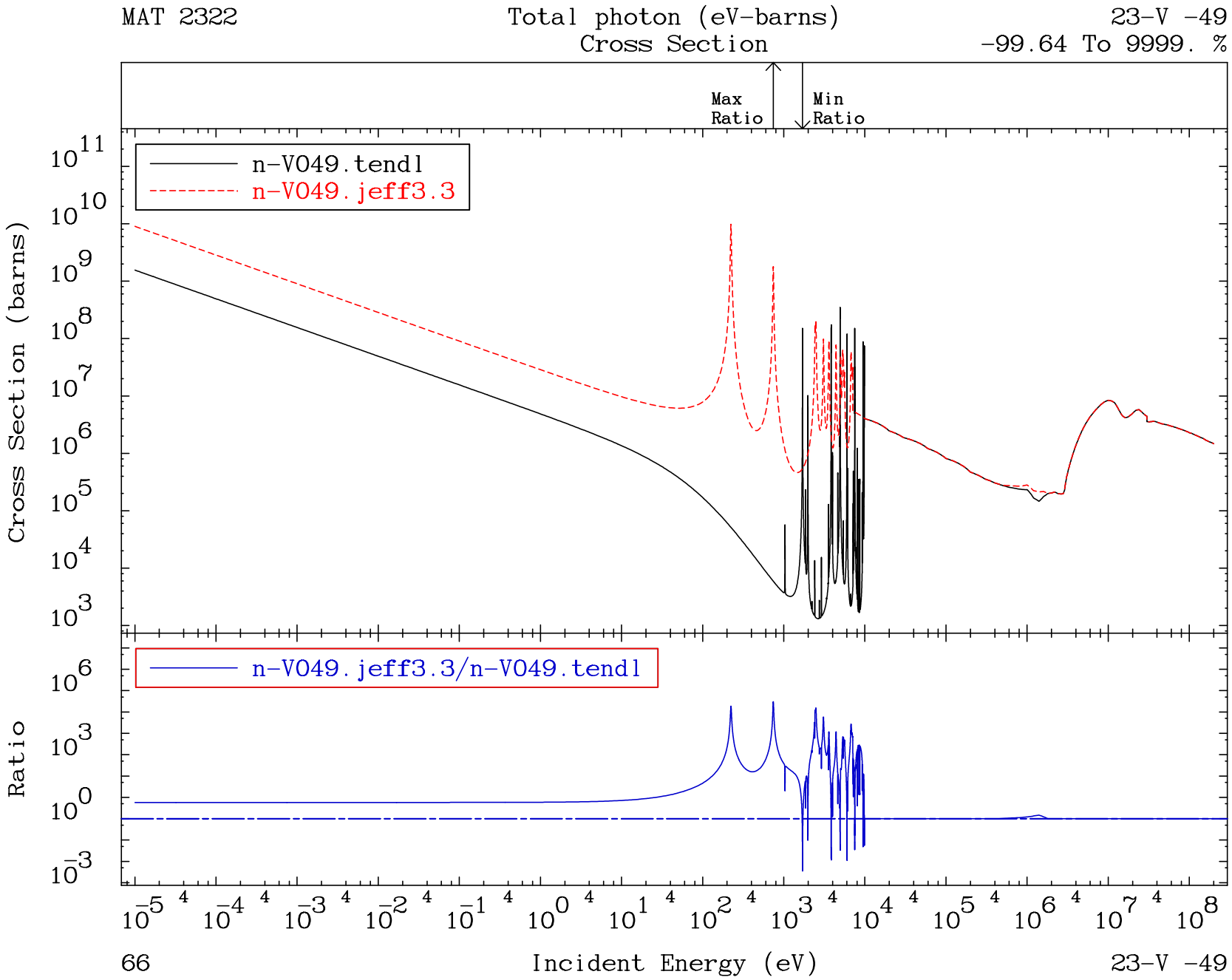

MAT 2322
Kerma elastic
Cross Section
23-V -49
-97.43 To 9999. %
Max
Ratio
Min
Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
61
Incident Energy (eV)
23-V -49

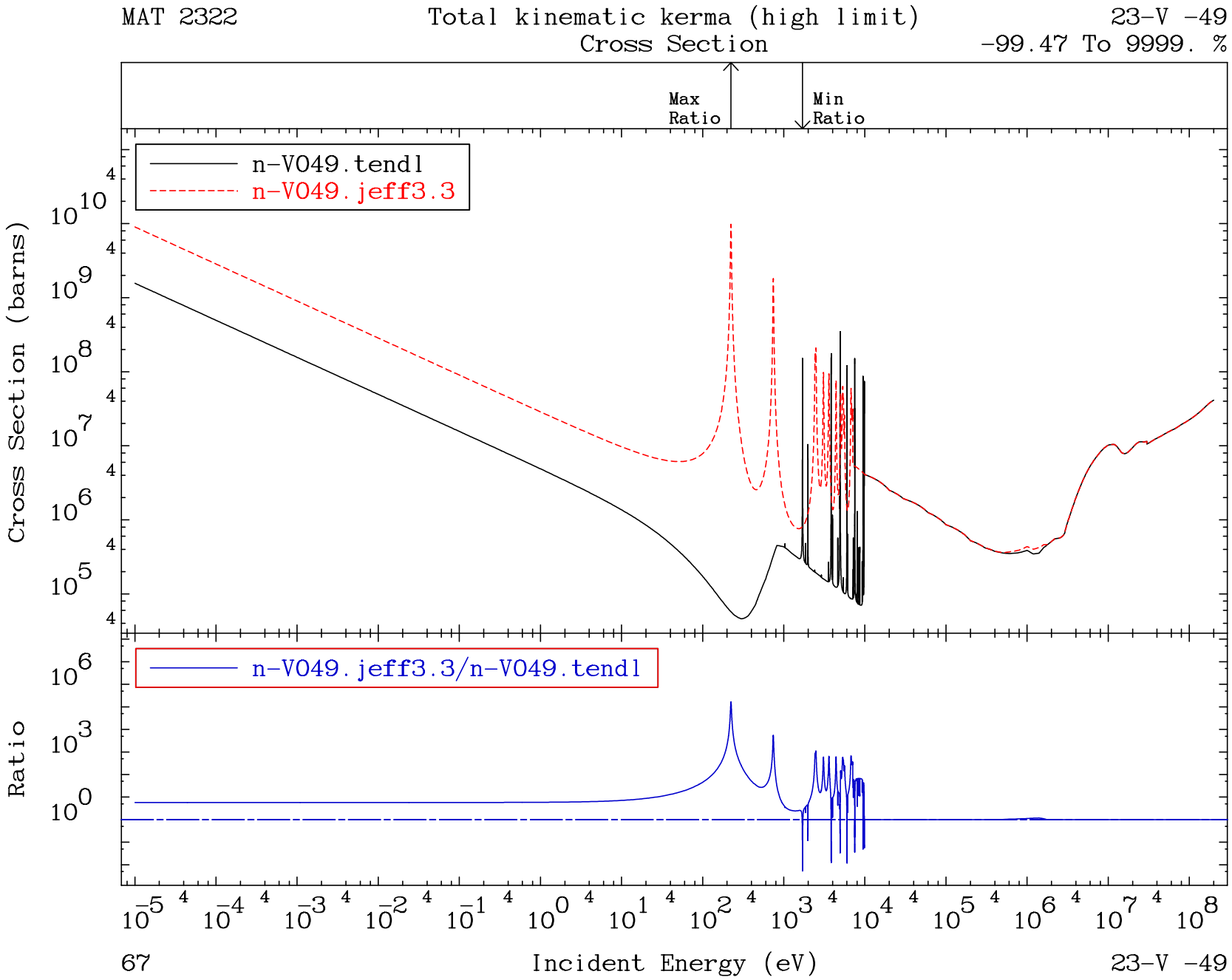

MAT 2322
Kerma non-elastic (all but mt2)
Cross Section
23-V -49
-99.40 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
62
Incident Energy (eV)
23-V -49

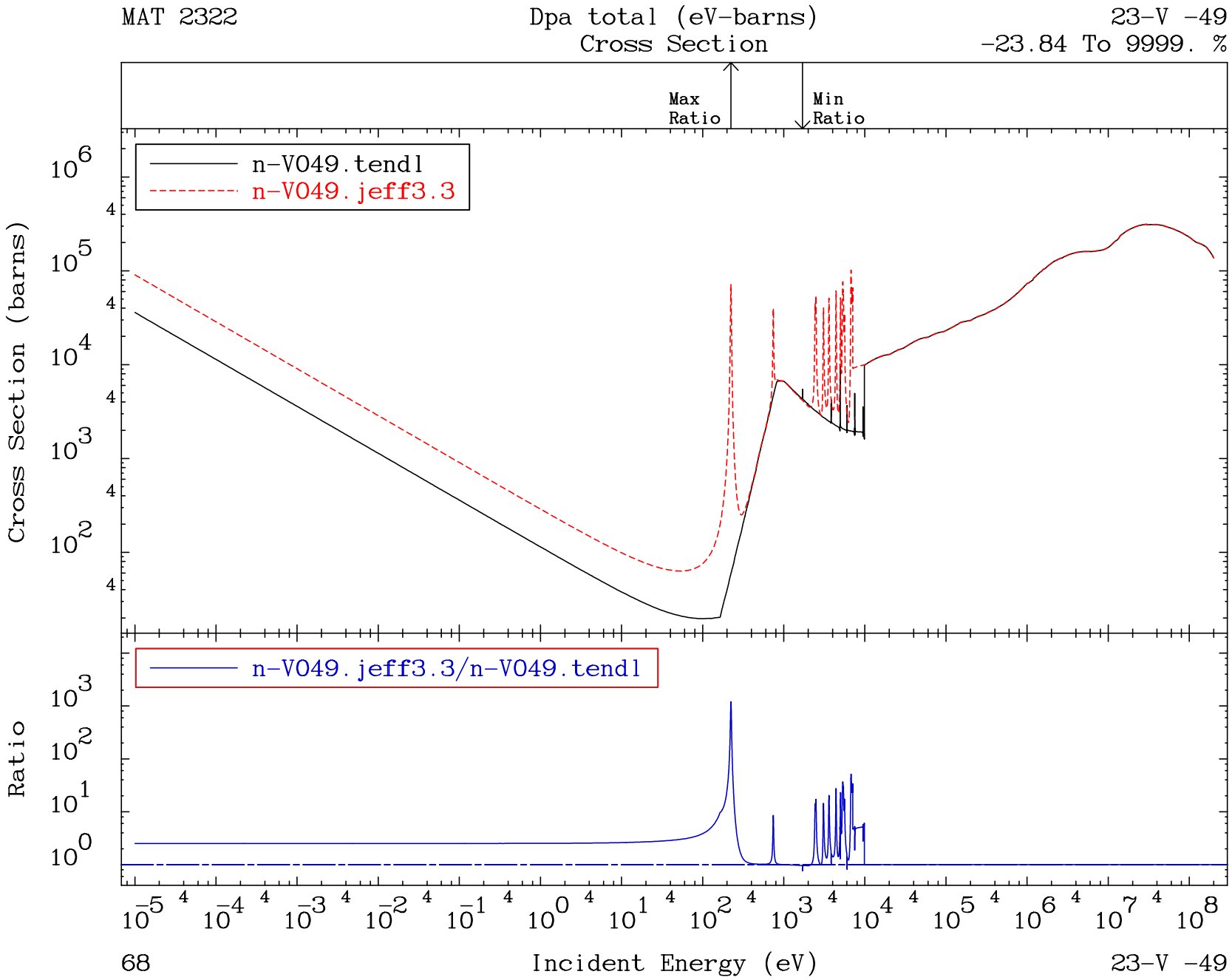

MAT 2322
Kerma inelastic (mt51-91)
Cross Section
23-V -49
-0.010 To 0.014 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 92.507 keV
n-V049.jeff3.3 Threshold 92.507 keV
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
63
23-V -49

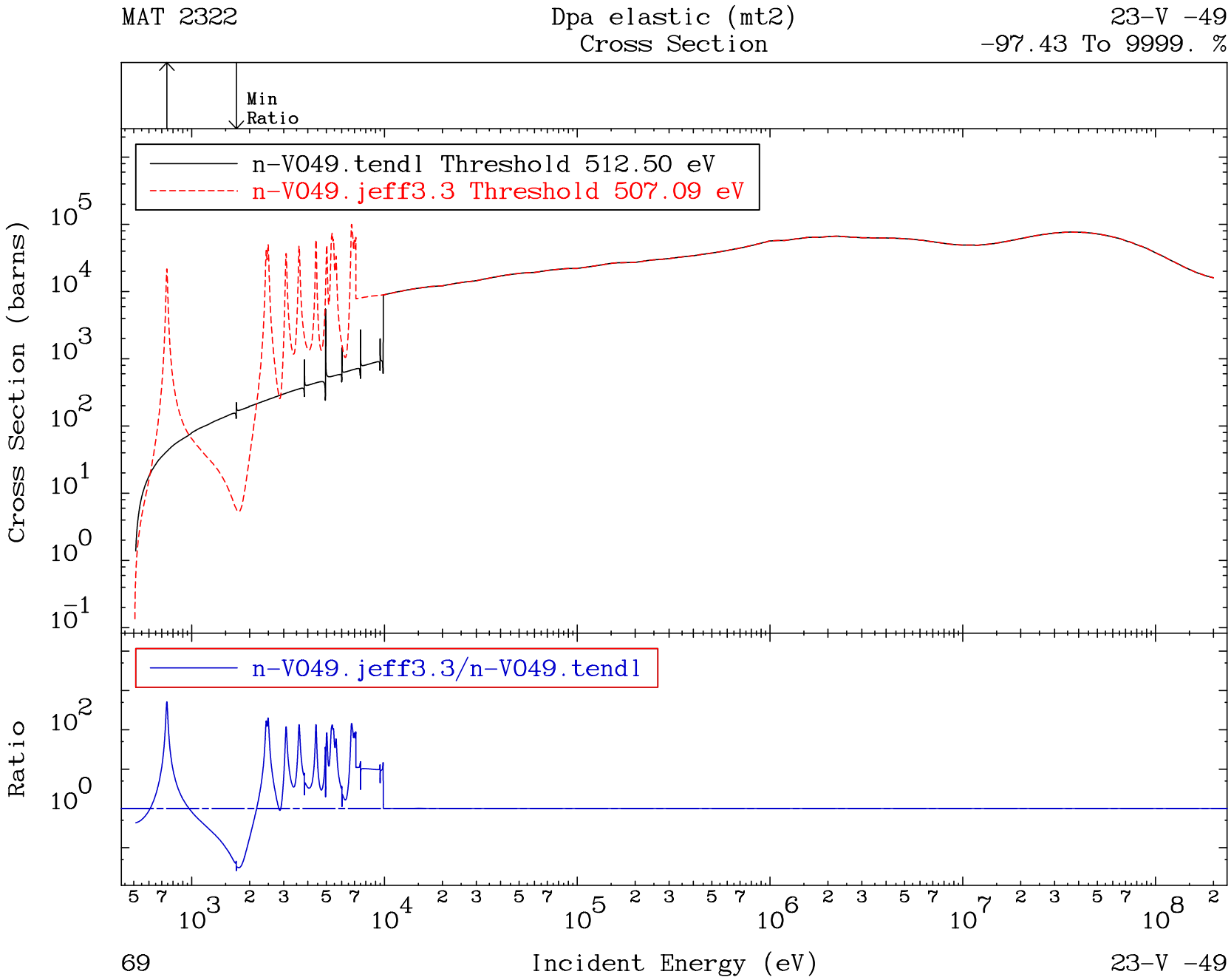

MAT 2322
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
23-V -49
-0.010 To 0.014 %
Min Ratio
Max Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
64
Incident Energy (eV)
23-V -49

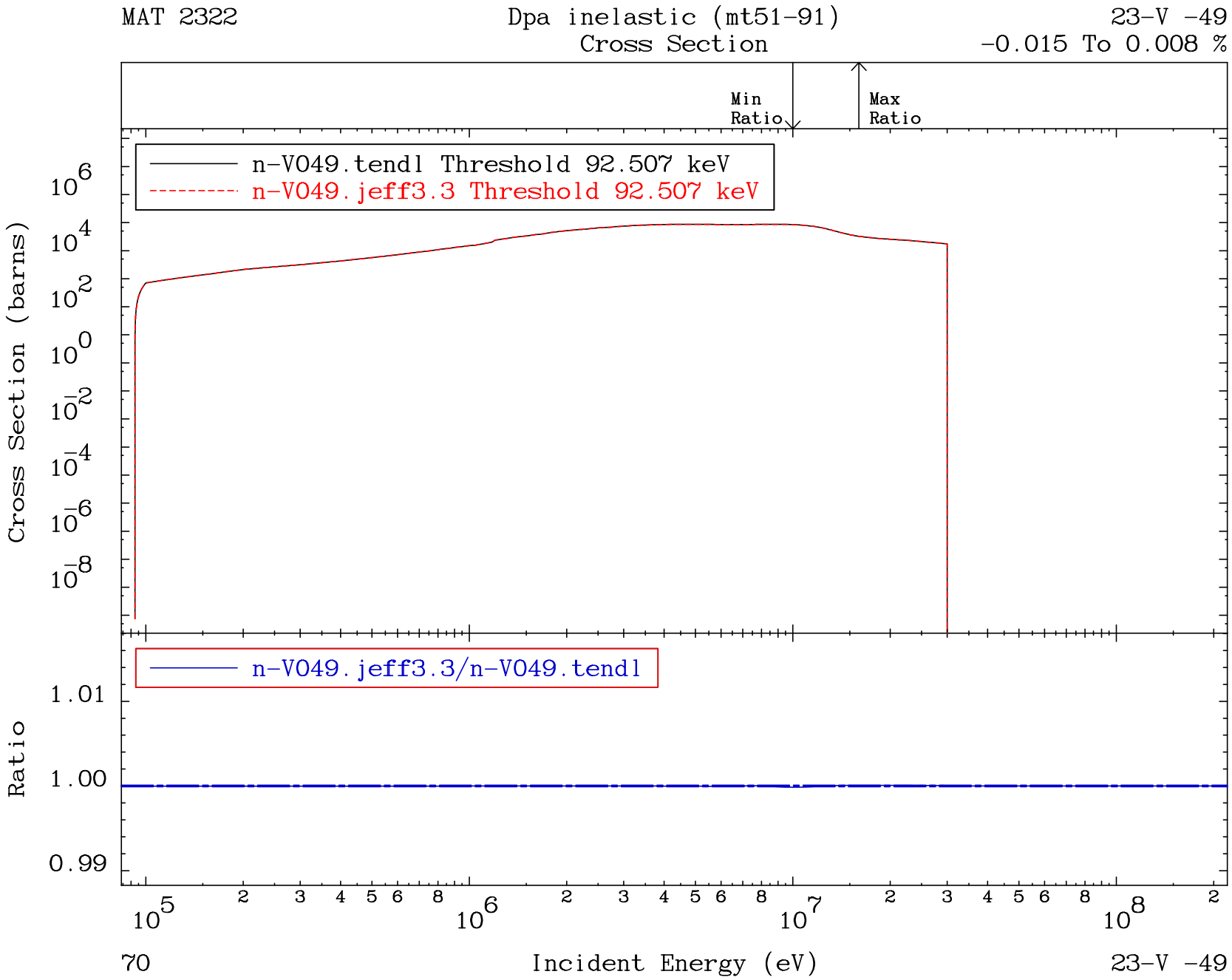

MAT 2322
Kerma capture (mt102)
Cross Section
23-V -49
-99.64 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
65
23-V -49

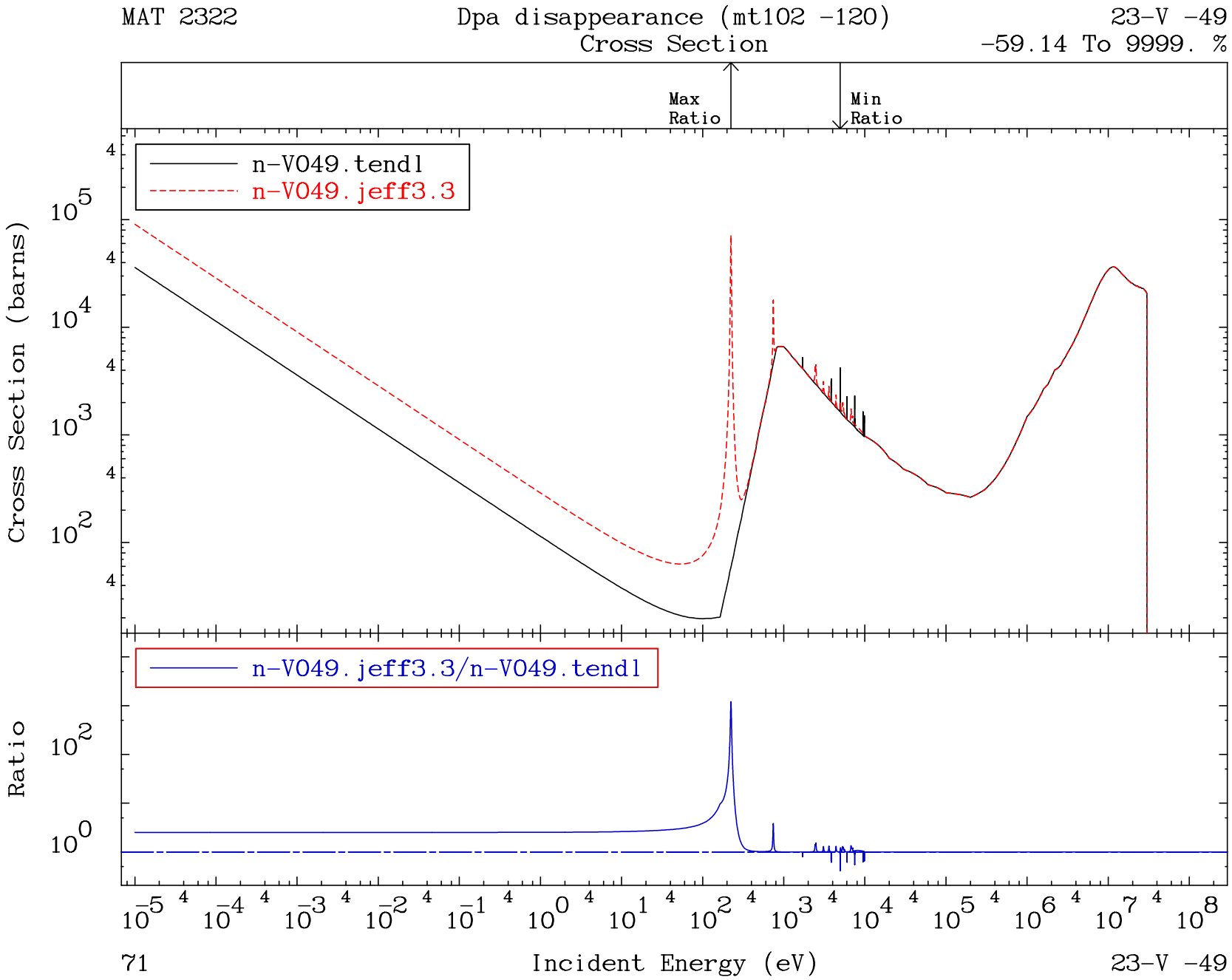

MAT 2322
Total photon (eV-barns)
Cross Section
23-V -49
-99.64 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
66
Incident Energy (eV)
23-V -49

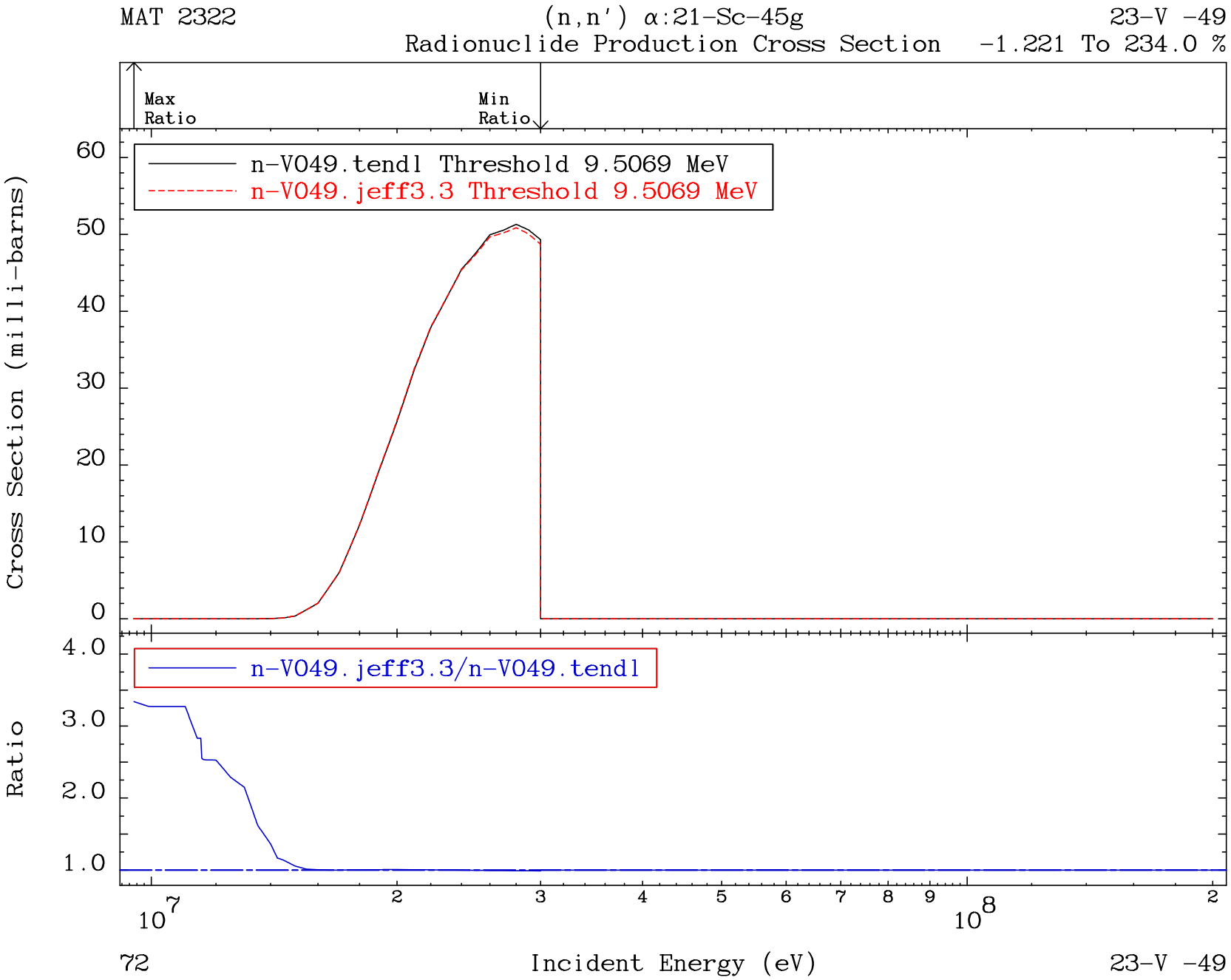

MAT 2322
Total kinematic kerma (high limit)
Cross Section
23-V -49
-99.47 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
67
23-V -49

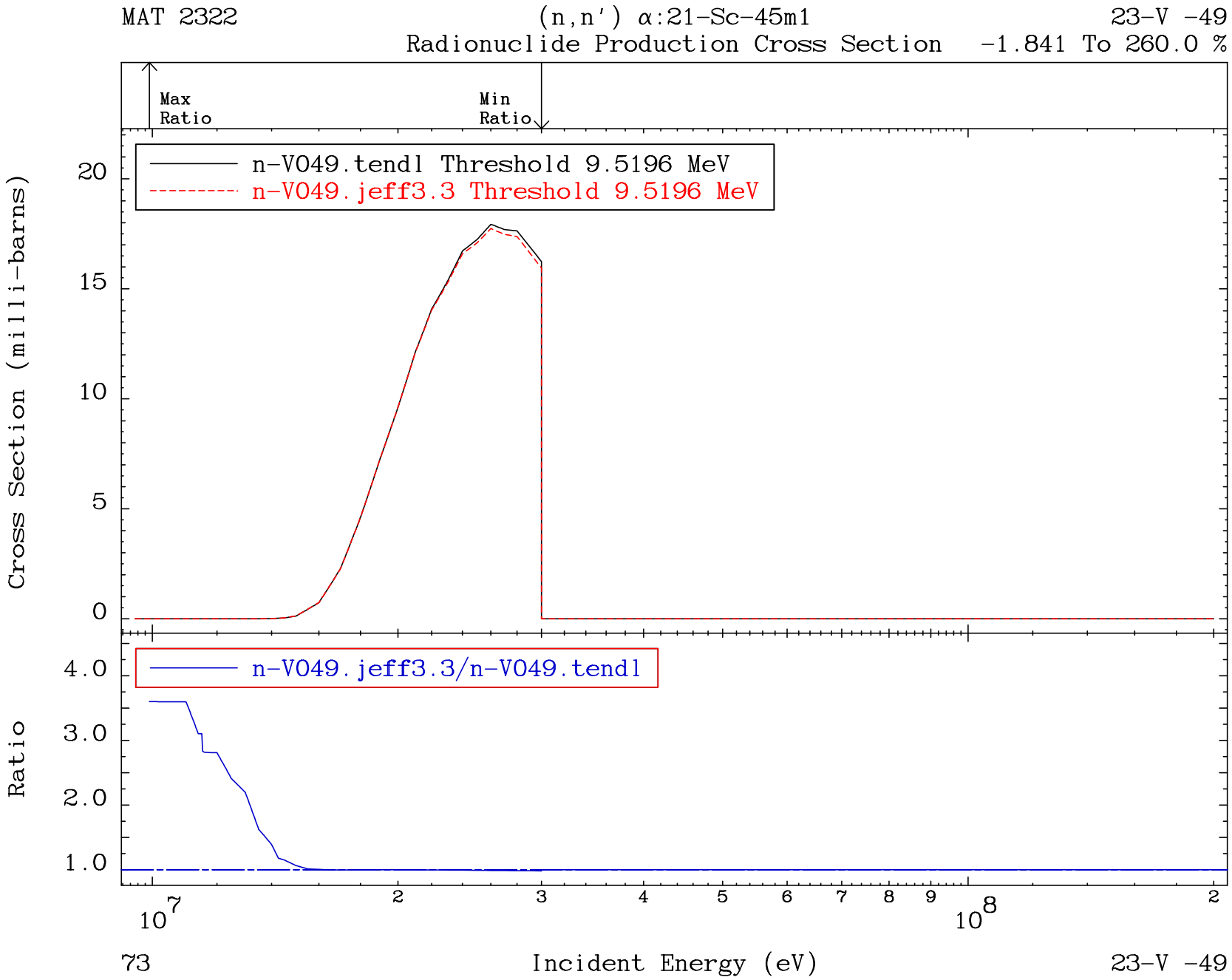

MAT 2322
Dpa total (eV-barns)
Cross Section
23-V -49
-23.84 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
68
Incident Energy (eV)
23-V -49

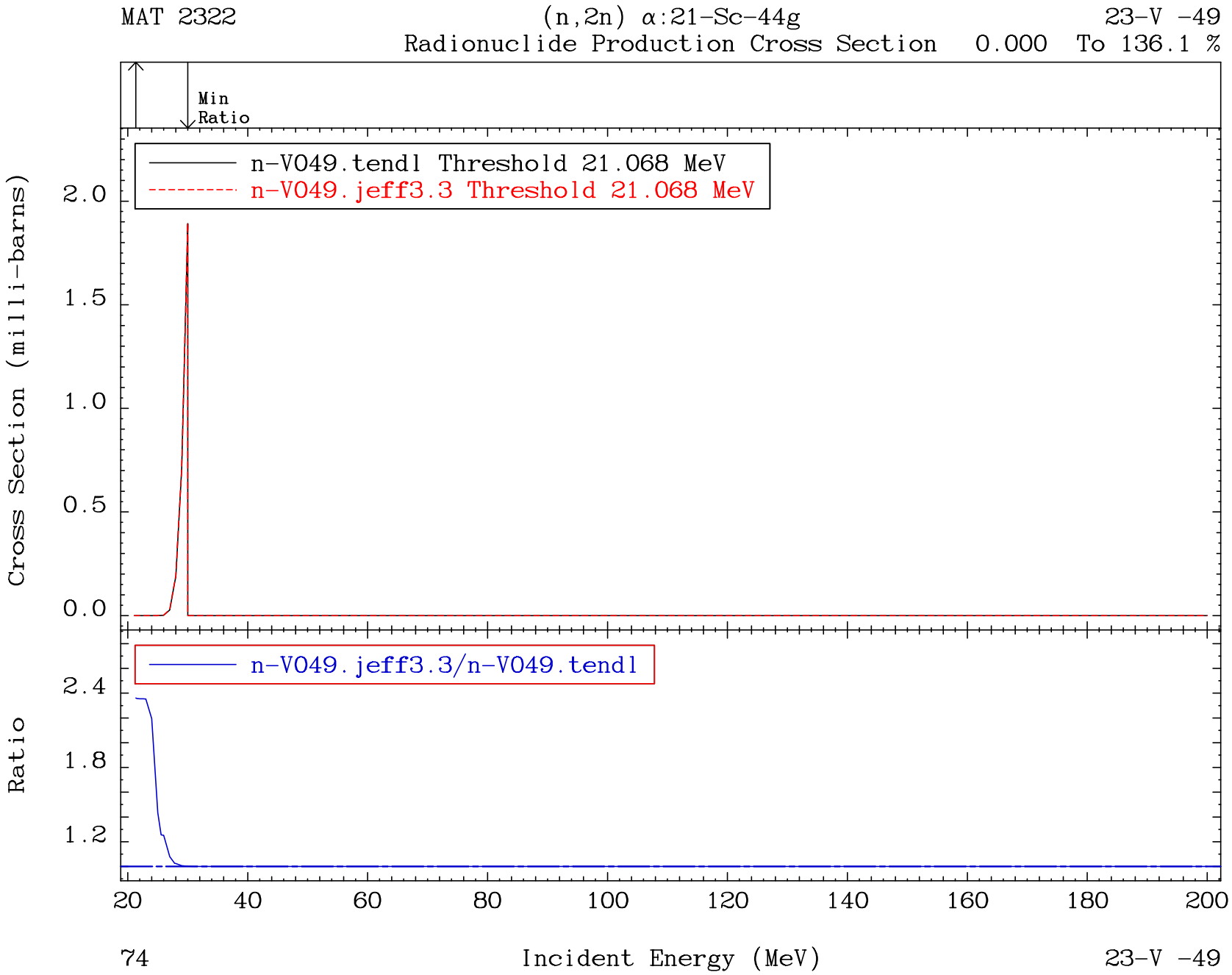

MAT 2322
Dpa elastic (mt2)
Cross Section
23-V -49
-97.43 To 9999. %
Min
Ratio
n-V049.tendl Threshold 512.50 eV
n-V049.jeff3.3 Threshold 507.09 eV
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
69
23-V -49

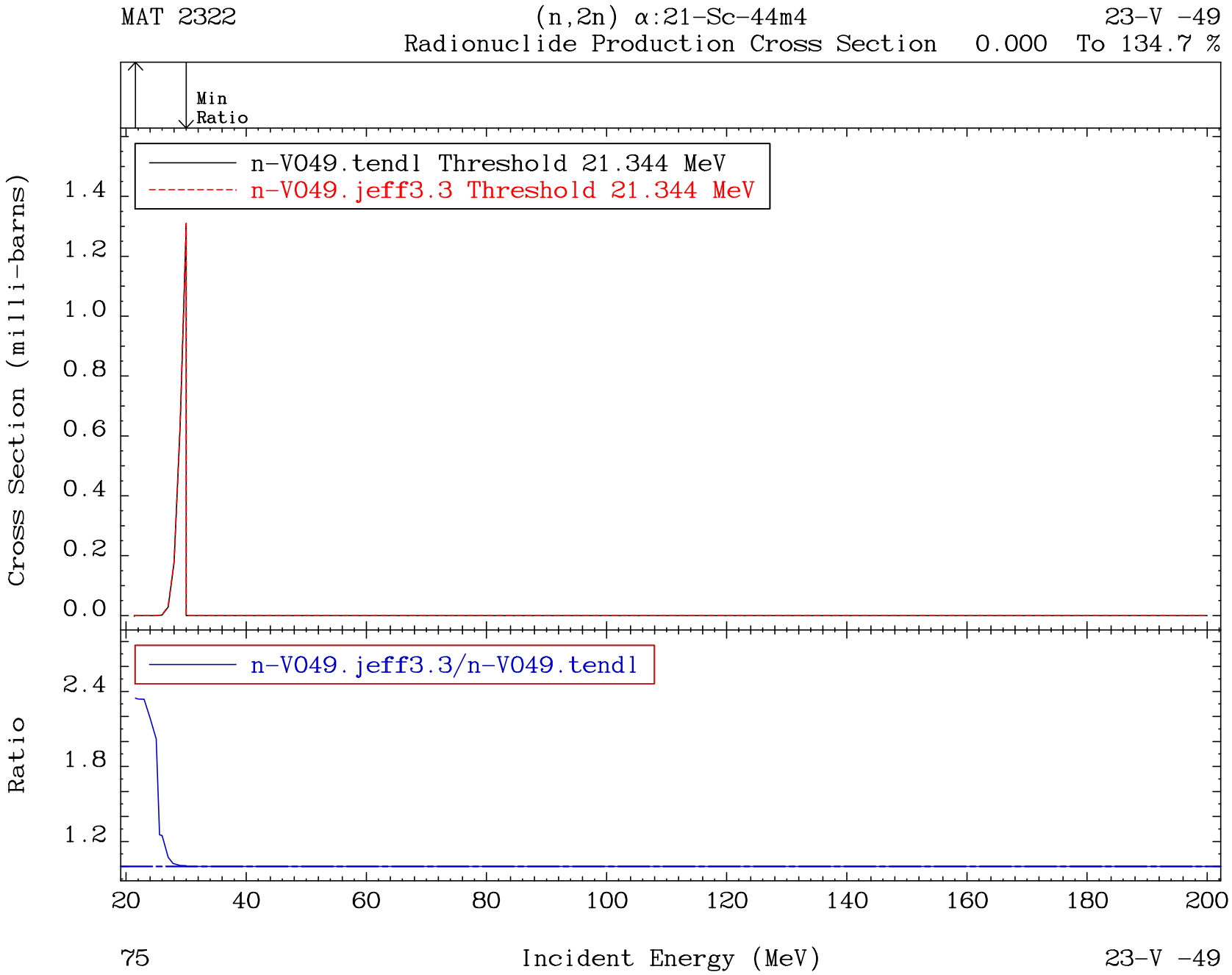

MAT 2322
Dpa inelastic (mt51-91)
Cross Section
23-V -49
-0.015 To 0.008 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 92.507 keV
n-V049.jeff3.3 Threshold 92.507 keV
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
70
23-V -49

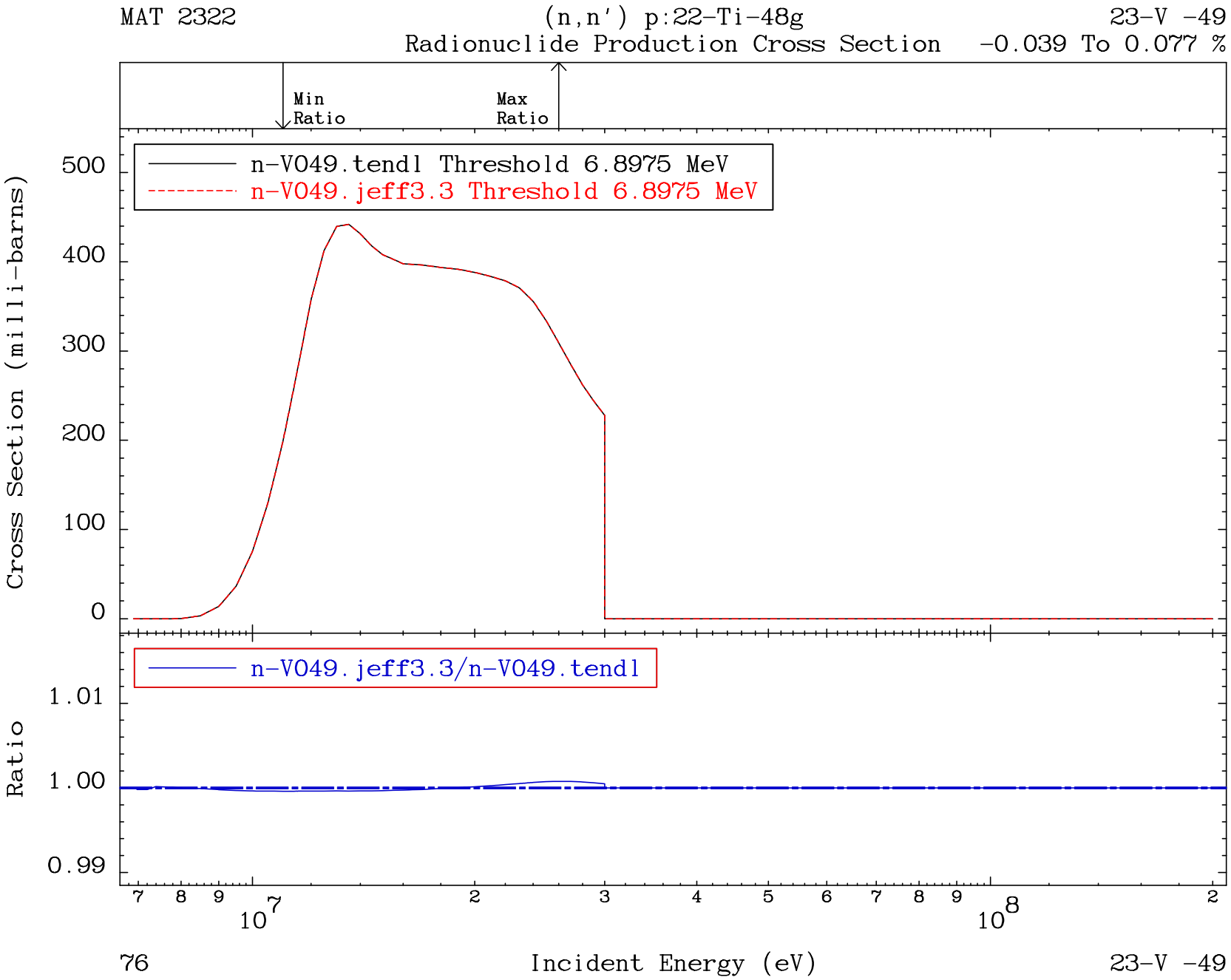

MAT 2322
Dpa disappearance (mt102 -120)
Cross Section
23-V -49
-59.14 To 9999. %
Max Ratio
Min Ratio
n-V049.tendl
n-V049.jeff3.3
Cross Section (barns)
n-V049.jeff3.3/n-V049.tendl
Ratio
Incident Energy (eV)
71
23-V -49

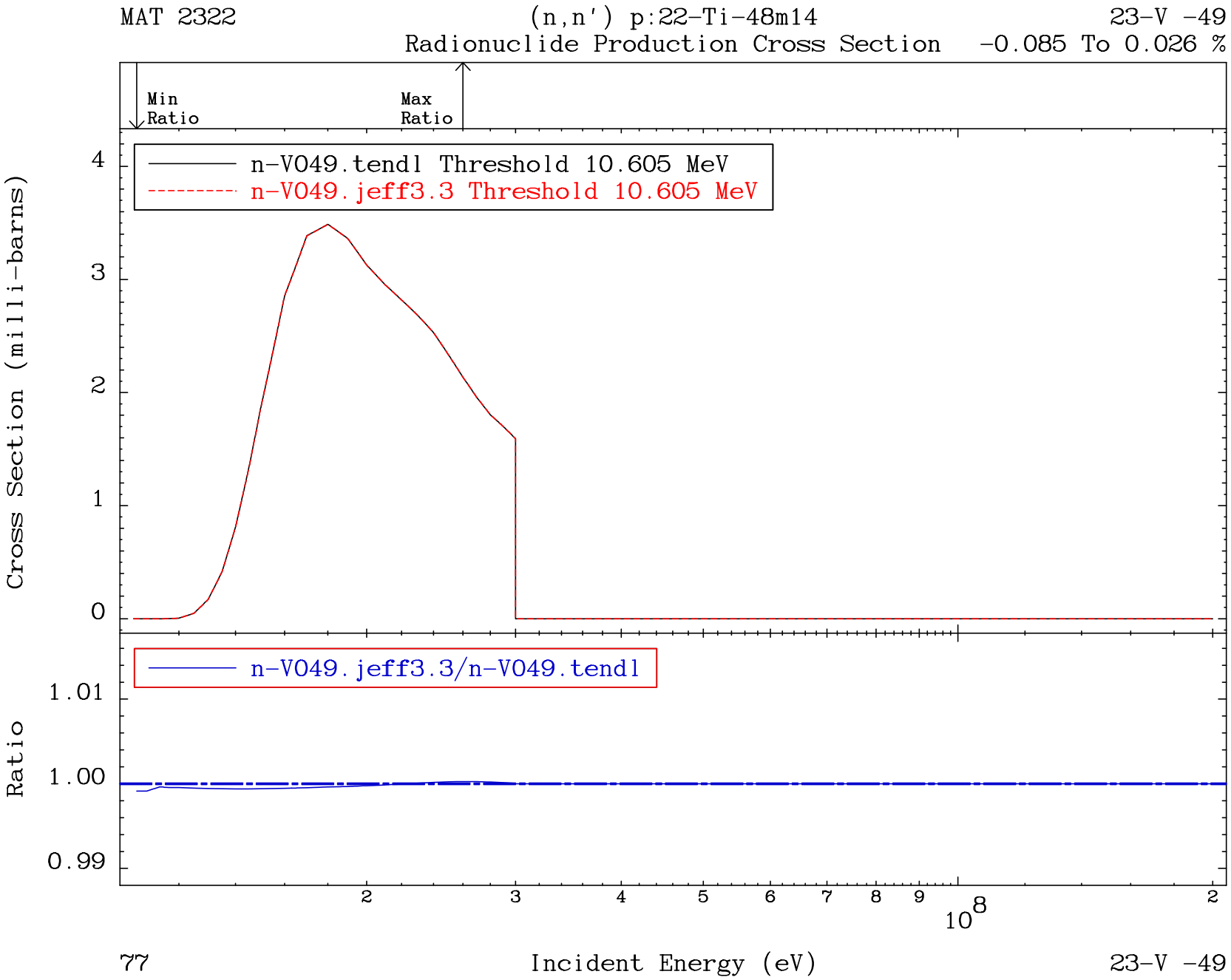

MAT 2322
(n,n') α:21-Sc-45g
23-V -49
Radionuclide Production Cross Section -1.221 To 234.0 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 9.5069 MeV
n-V049.jeff3.3 Threshold 9.5069 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
4.0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
72
Incident Energy (eV)
23-V -49

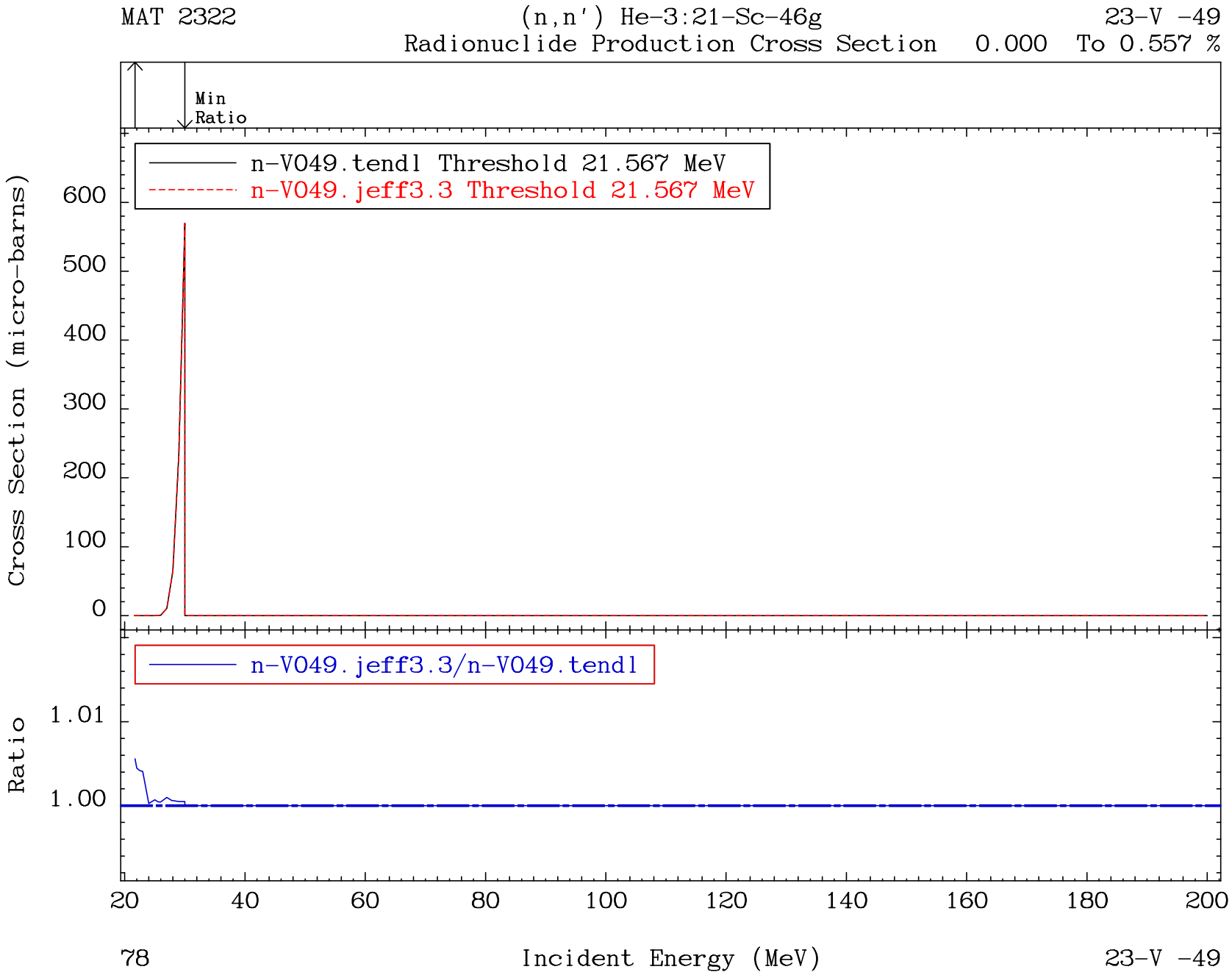

MAT 2322
(n,n') α:21-Sc-45m1
23-V -49
Radionuclide Production Cross Section -1.841 To 260.0 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 9.5196 MeV
n-V049.jeff3.3 Threshold 9.5196 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
4.0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
23-V -49

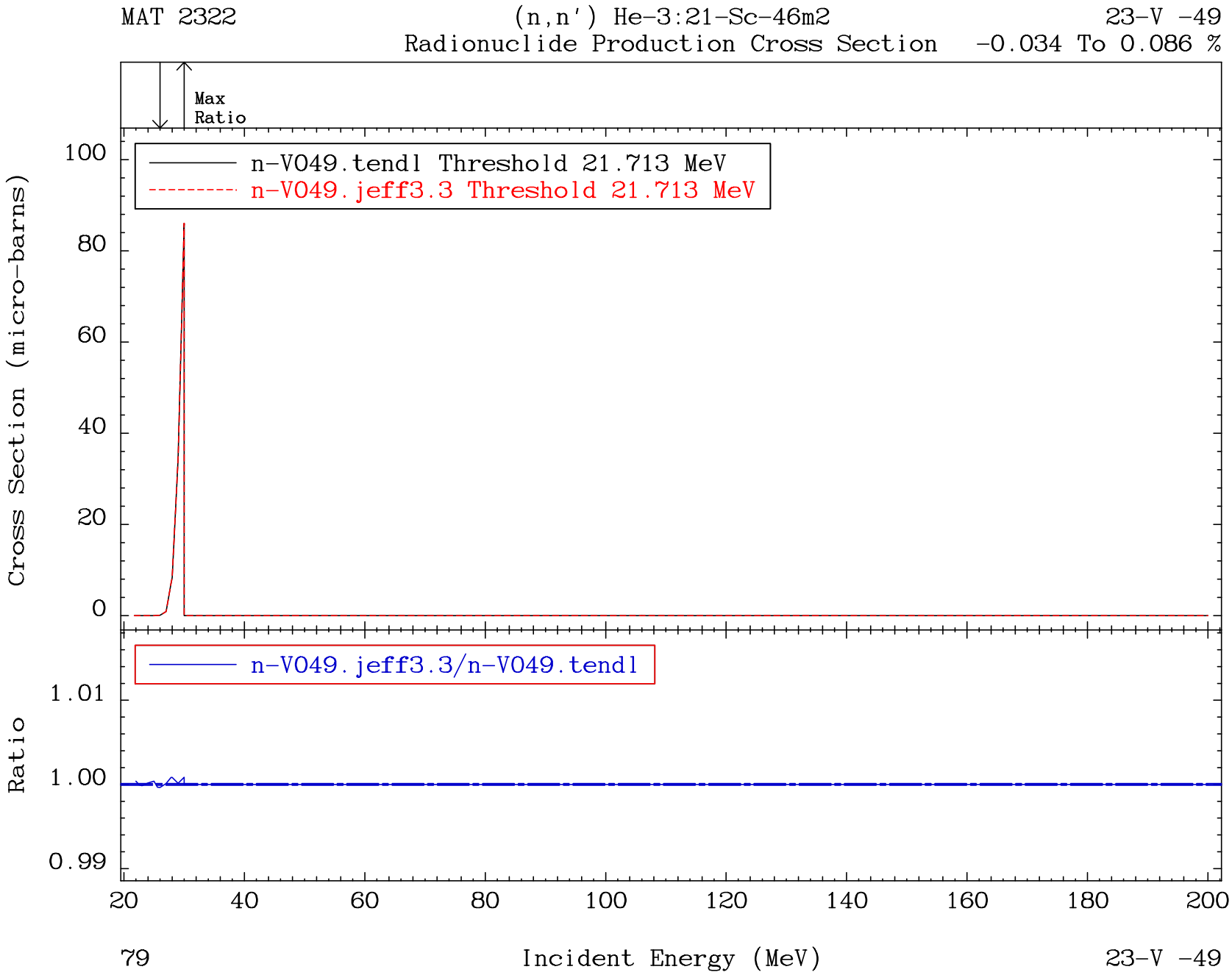

MAT 2322
(n,2n) α:21-Sc-44g
23-V -49
Radionuclide Production Cross Section 0.000 To 136.1 %
Min
Ratio
n-V049.tendl Threshold 21.068 MeV
n-V049.jeff3.3 Threshold 21.068 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
2.4
1.8
1.2
20
40
60
80
100
120
140
160
180
200
74
Incident Energy (MeV)
23-V -49

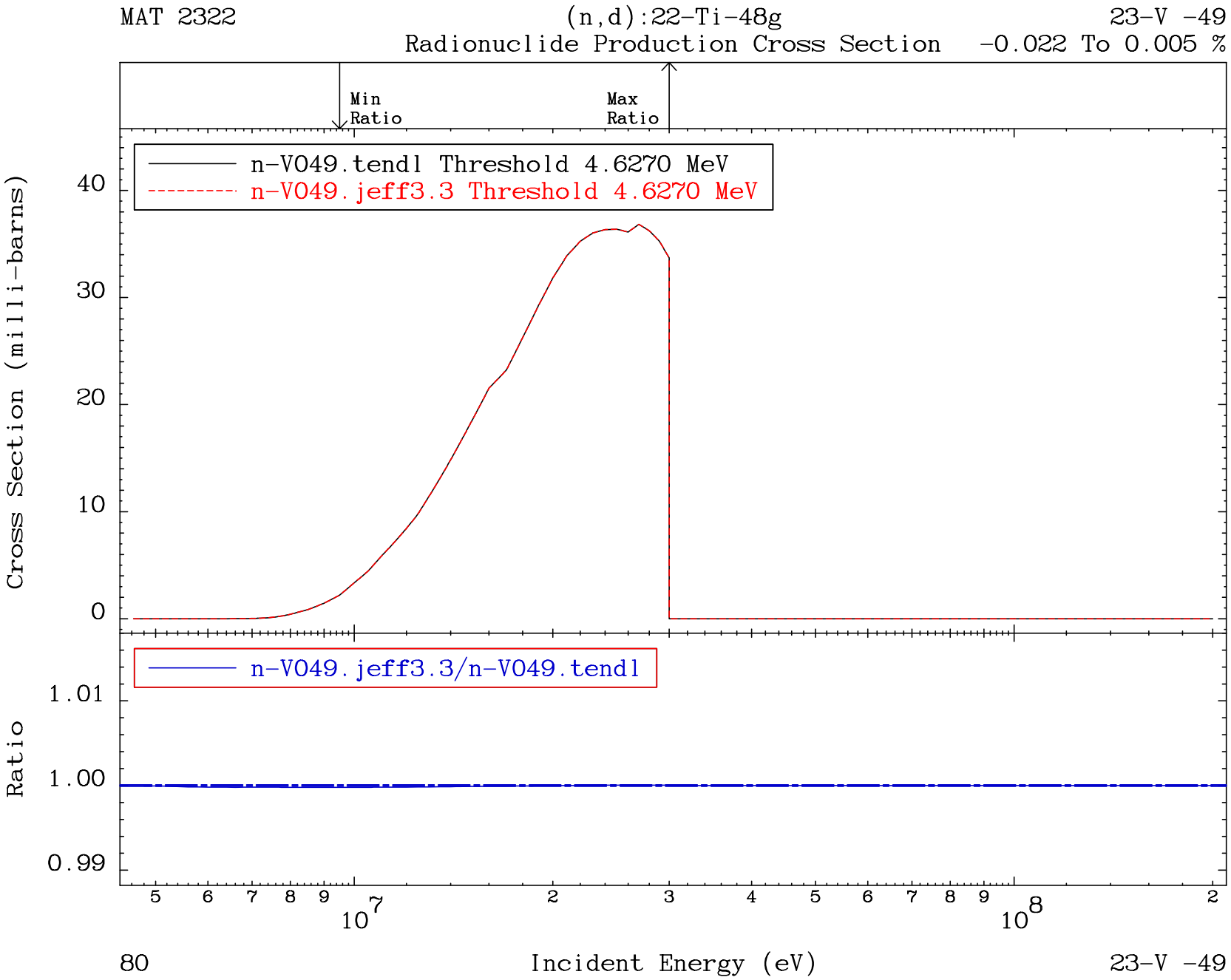

MAT 2322
(n,2n) α:21-Sc-44m4
23-V -49
Radionuclide Production Cross Section 0.000 To 134.7 %
Min Ratio
n-V049.tendl Threshold 21.344 MeV
n-V049.jeff3.3 Threshold 21.344 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-V049.jeff3.3/n-V049.tendl
Ratio
2.4
1.8
1.2
20
40
60
80
100
120
140
160
180
200
75
Incident Energy (MeV)
23-V -49

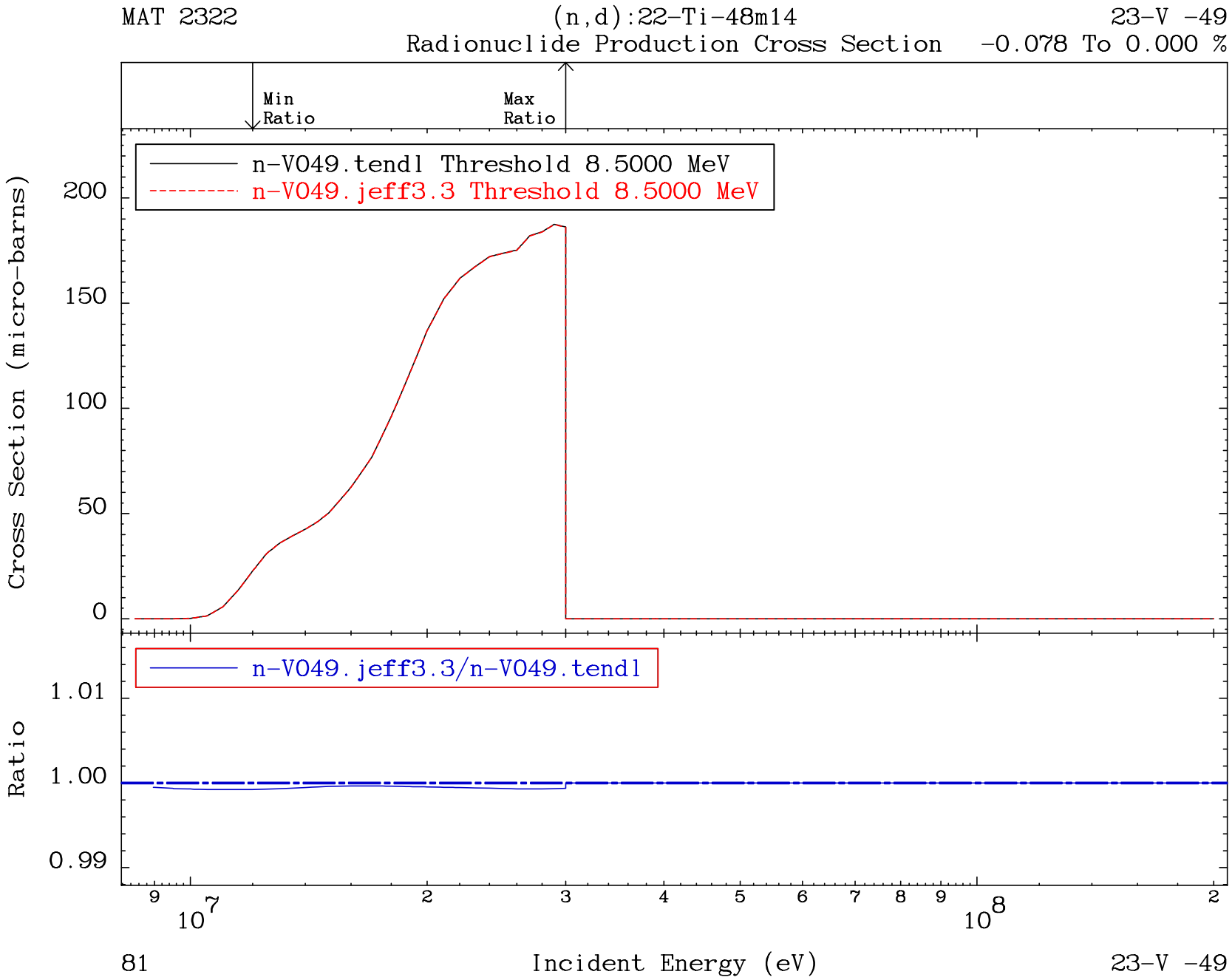

MAT 2322
(n,n') p:22-Ti-48g
23-V -49
Radionuclide Production Cross Section
-0.039 To 0.077 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 6.8975 MeV
n-V049.jeff3.3 Threshold 6.8975 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
76
Incident Energy (eV)
23-V -49

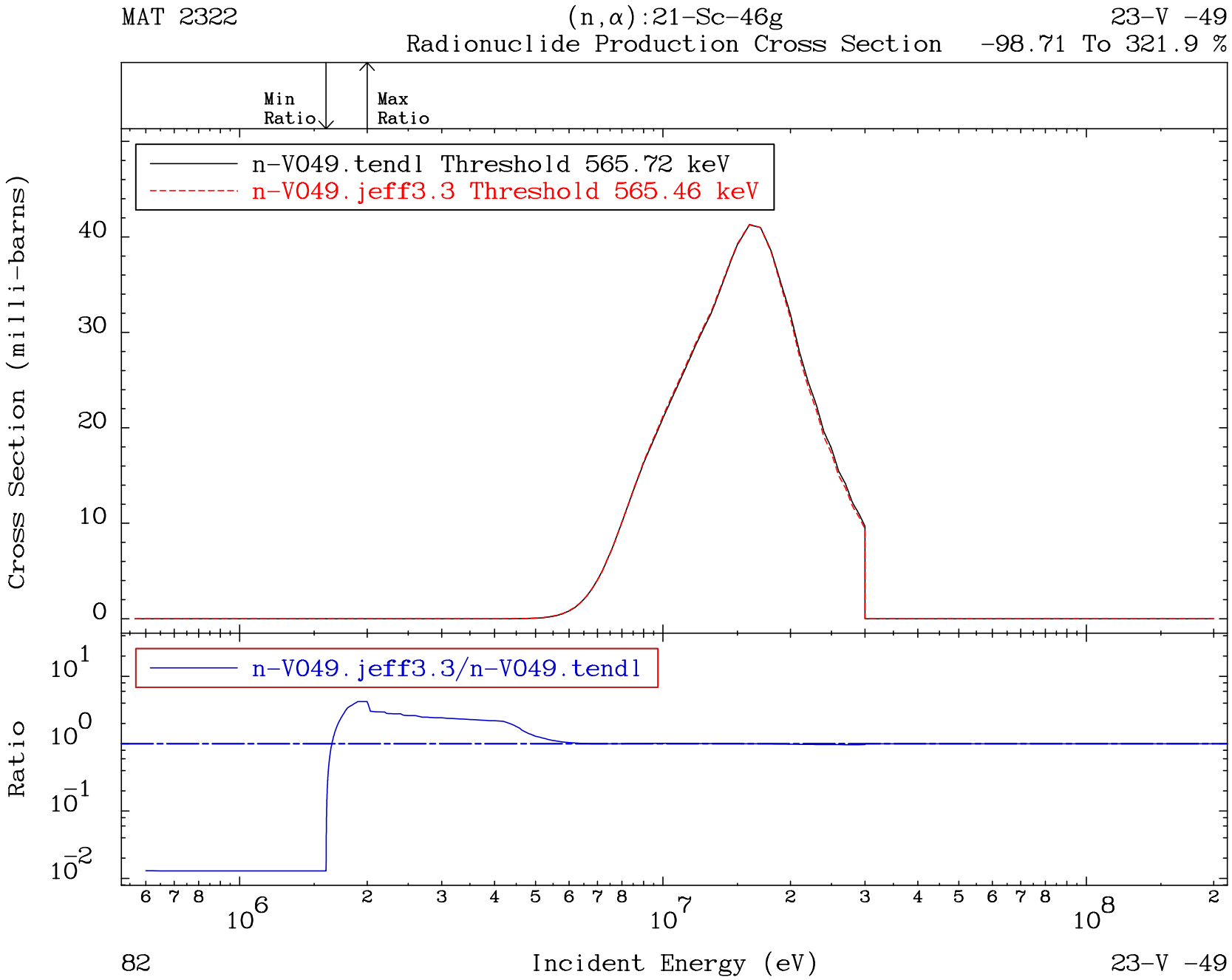

MAT 2322
(n,n') p:22-Ti-48m14
23-V -49
Radionuclide Production Cross Section -0.085 To 0.026 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 10.605 MeV
n-V049.jeff3.3 Threshold 10.605 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-V049.jeff3.3/n-V049.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
23-V -49

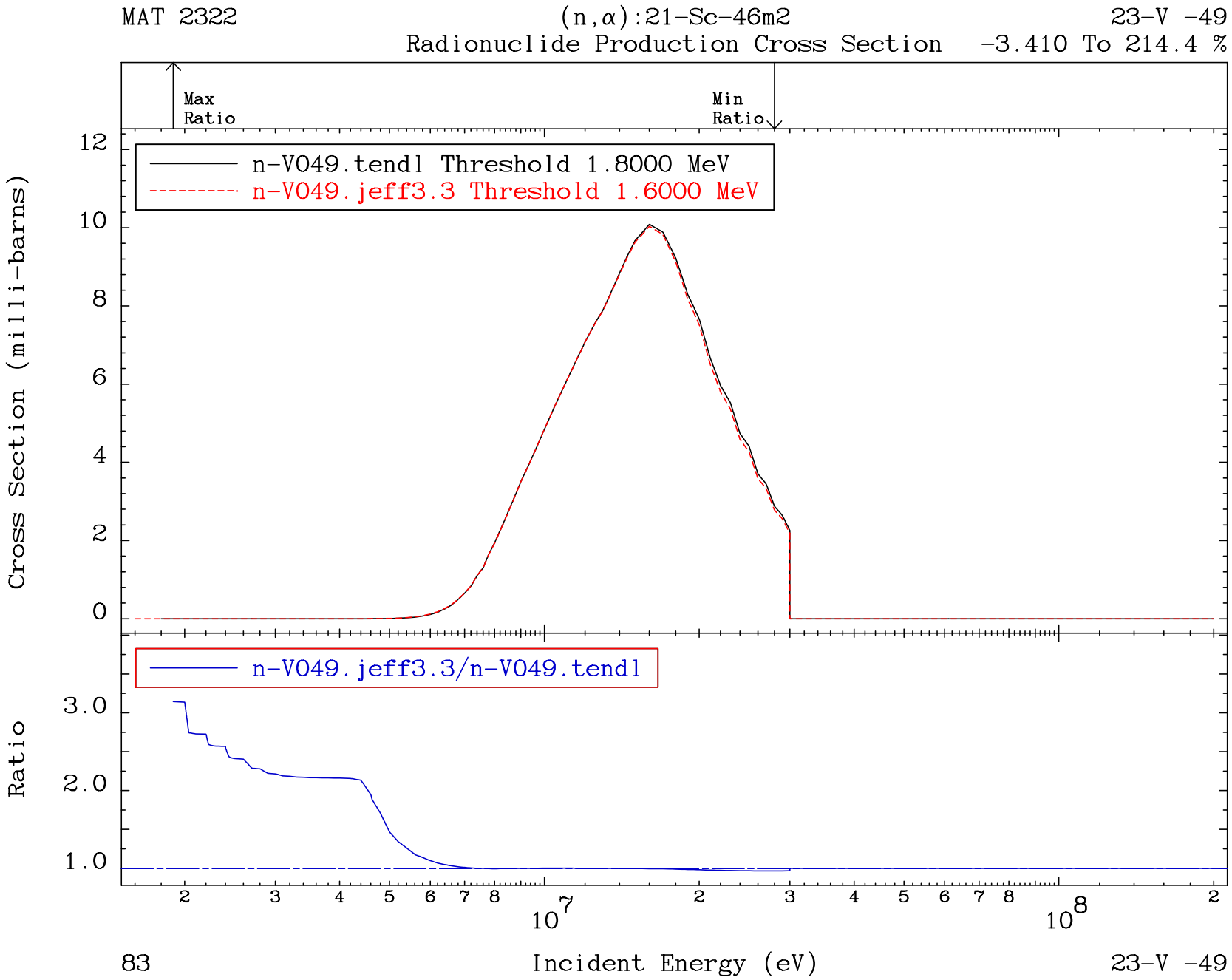

MAT 2322
(n,n') He-3:21-Sc-46g
23-V -49
Radionuclide Production Cross Section 0.000 To 0.557 %
Min
Ratio
n-V049.tendl Threshold 21.567 MeV
n-V049.jeff3.3 Threshold 21.567 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
23-V -49

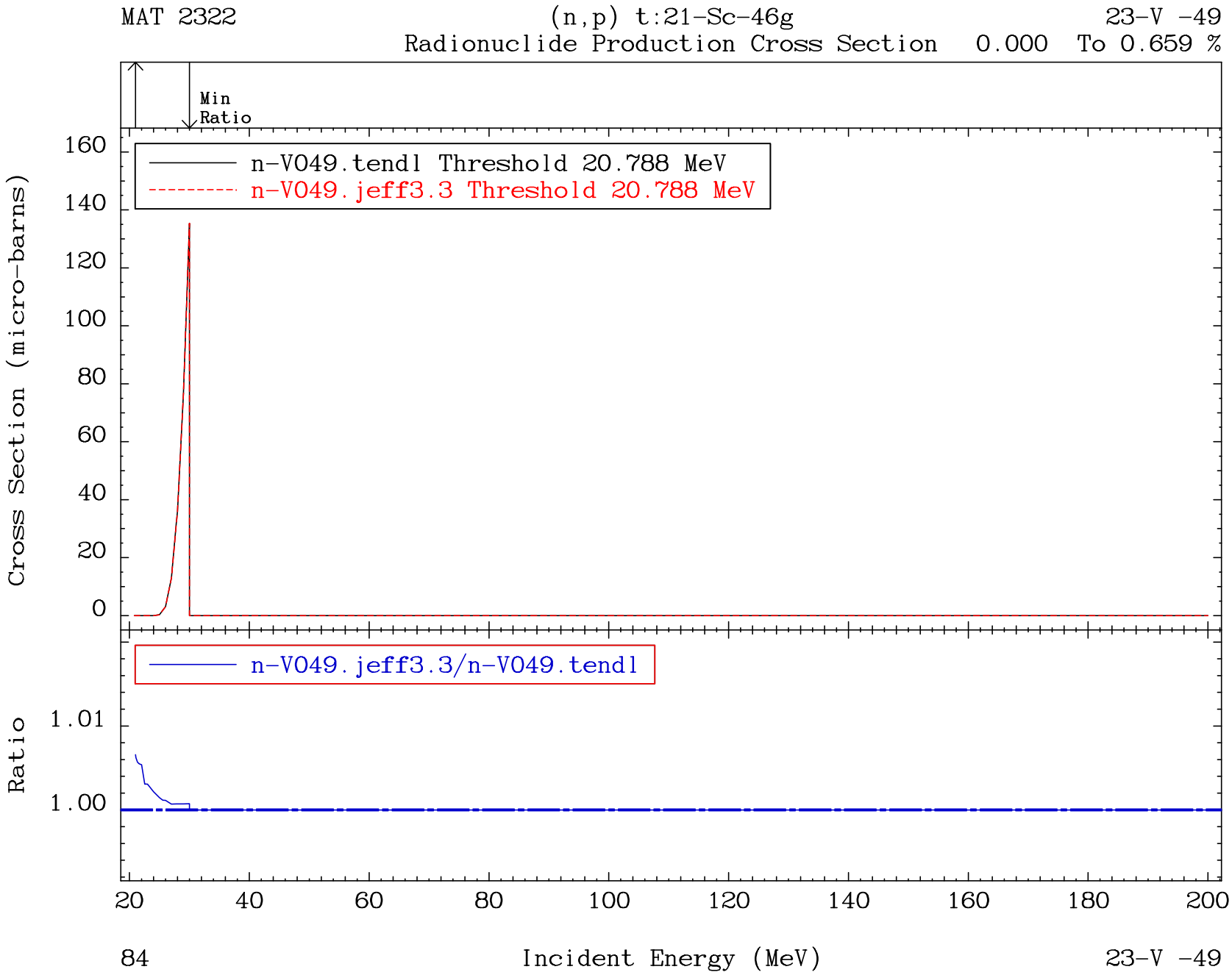

MAT 2322
(n,n') He-3:21-Sc-46m2
23-V -49
Radionuclide Production Cross Section
-0.034 To 0.086 %
Max
Ratio
n-V049.tendl Threshold 21.713 MeV
n-V049.jeff3.3 Threshold 21.713 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
79
Incident Energy (MeV)
23-V -49

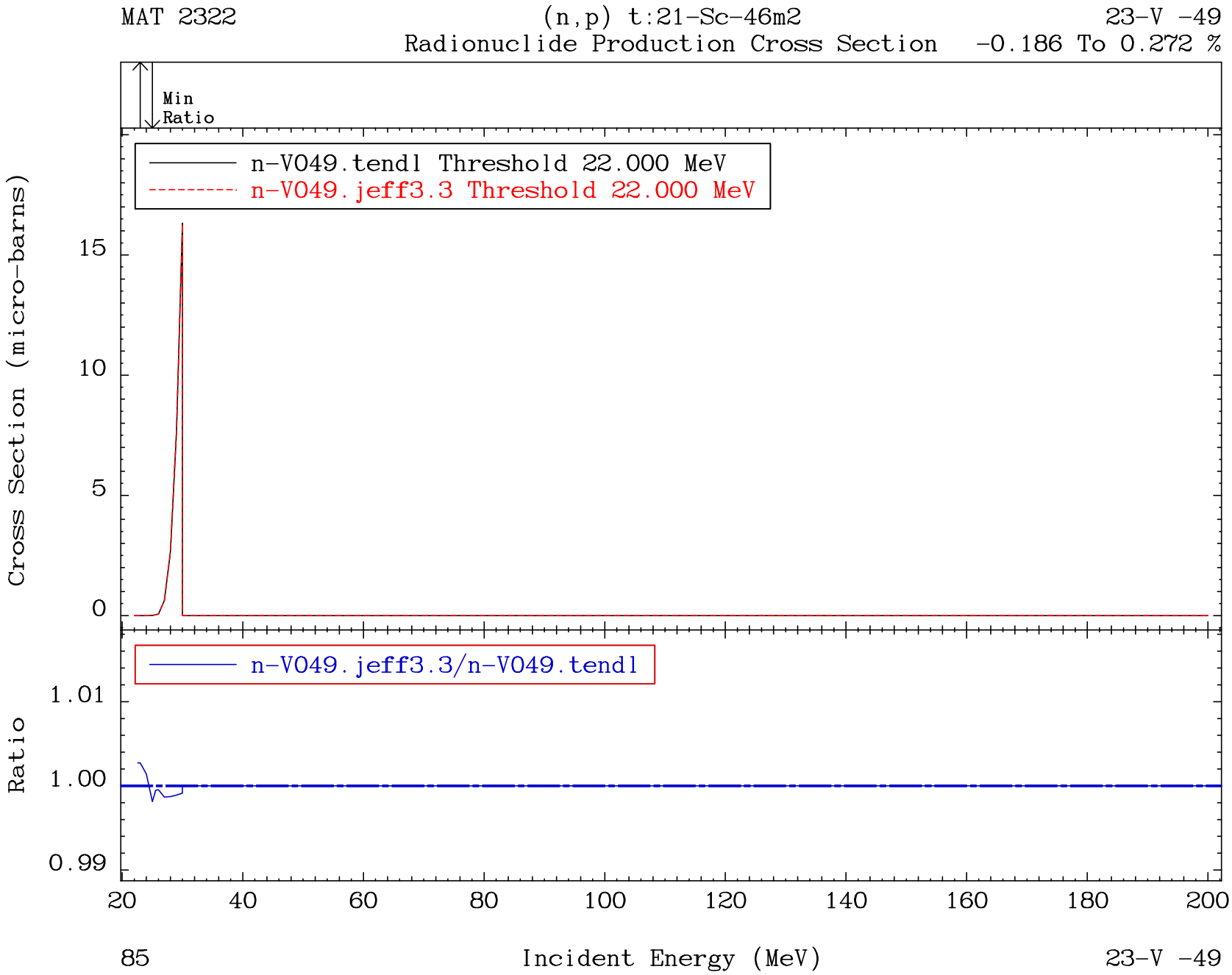

MAT 2322
(n,d):22-Ti-48g
23-V -49
Radionuclide Production Cross Section
-0.022 To 0.005 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 4.6270 MeV
n-V049.jeff3.3 Threshold 4.6270 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
80
Incident Energy (eV)
23-V -49


MAT 2322
(n,d):22-Ti-48m14
23-V -49
Radionuclide Production Cross Section
-0.078 To 0.000 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 8.5000 MeV
n-V049.jeff3.3 Threshold 8.5000 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
23-V -49


MAT 2322
(n,α):21-Sc-46g
23-V -49
Radionuclide Production Cross Section
-98.71 To 321.9 %
Min Ratio
Max Ratio
n-V049.tendl Threshold 565.72 keV
n-V049.jeff3.3 Threshold 565.46 keV
Cross Section (milli-barns)
40
30
20
10
0
n-V049.jeff3.3/n-V049.tendl
Ratio
10^1
10^0
10^-1
10^-2
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
82
Incident Energy (eV)
23-V -49


MAT 2322
(n,α):21-Sc-46m2
23-V -49
Radionuclide Production Cross Section -3.410 To 214.4 %
Max Ratio
Min Ratio
n-V049.tendl Threshold 1.8000 MeV
n-V049.jeff3.3 Threshold 1.6000 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-V049.jeff3.3/n-V049.tendl
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
83
Incident Energy (eV)
23-V -49


MAT 2322
(n,p) t:21-Sc-46g
23-V -49
Radionuclide Production Cross Section 0.000 To 0.659 %
Min Ratio
n-V049.tendl Threshold 20.788 MeV
n-V049.jeff3.3 Threshold 20.788 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
23-V -49


MAT 2322
(n,p) t:21-Sc-46m2
23-V -49
Radionuclide Production Cross Section
-0.186 To 0.272 %
Min
Ratio
n-V049.tendl Threshold 22.000 MeV
n-V049.jeff3.3 Threshold 22.000 MeV
Cross Section (micro-barns)
15
10
5
0
n-V049.jeff3.3/n-V049.tendl
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
23-V -49