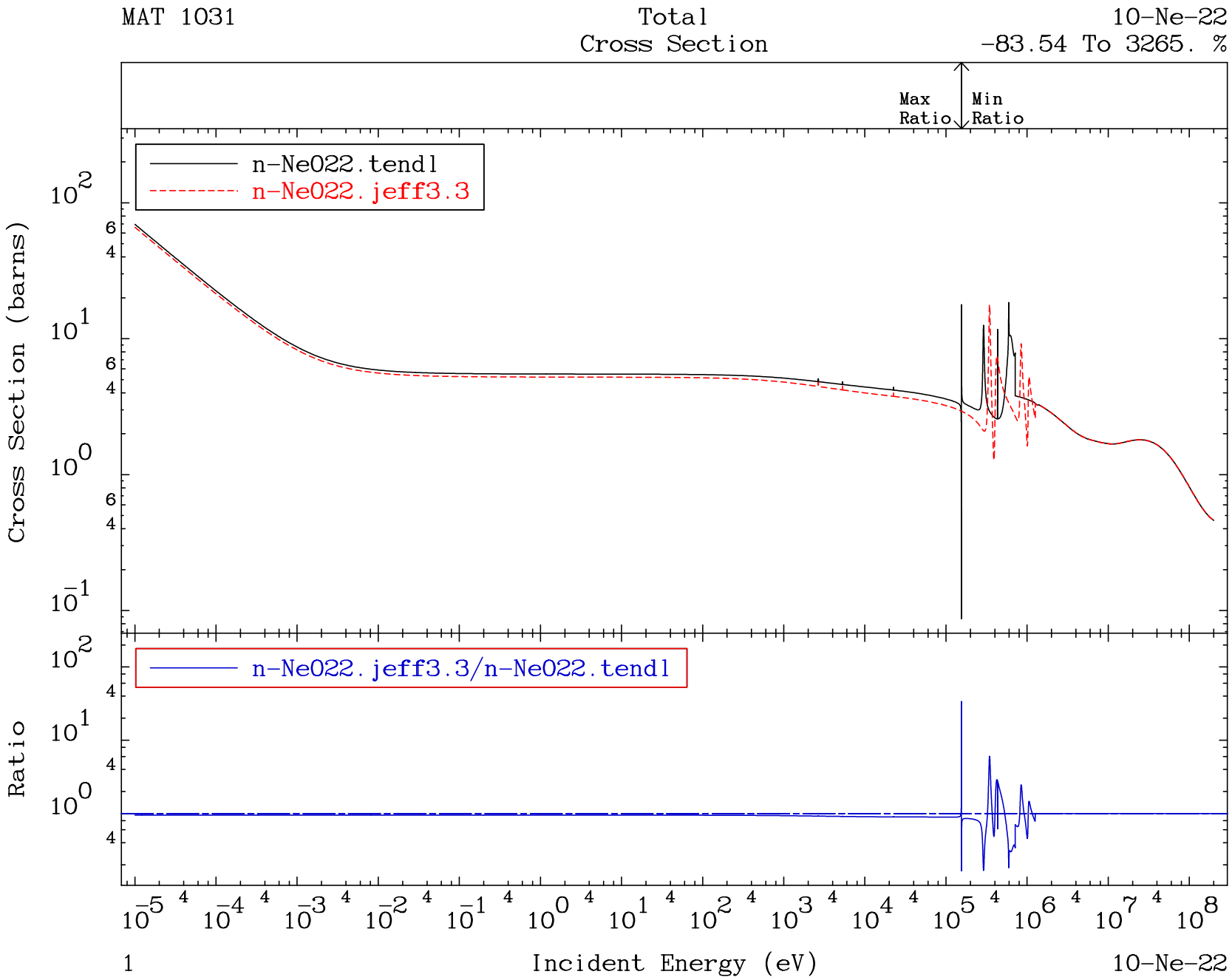
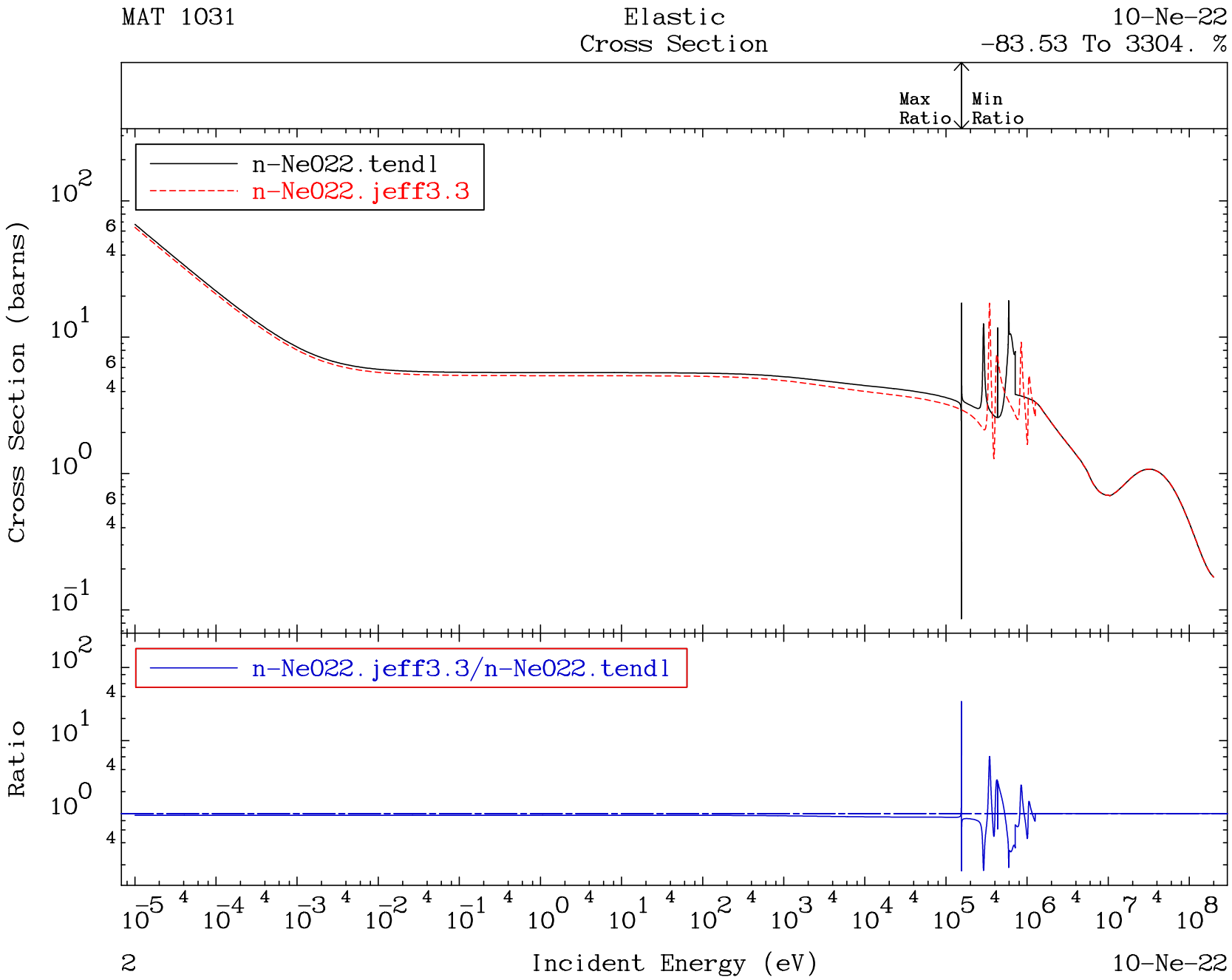
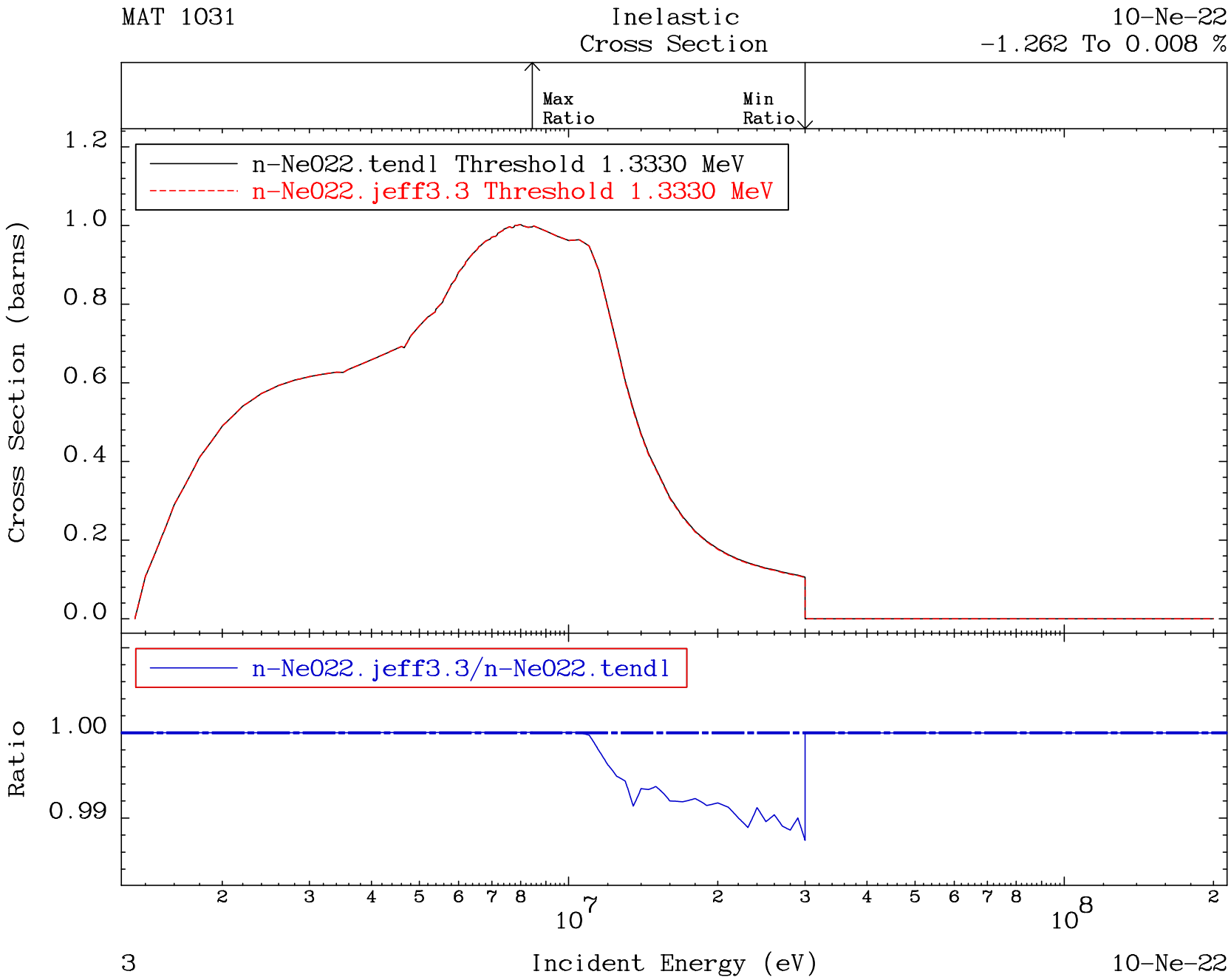
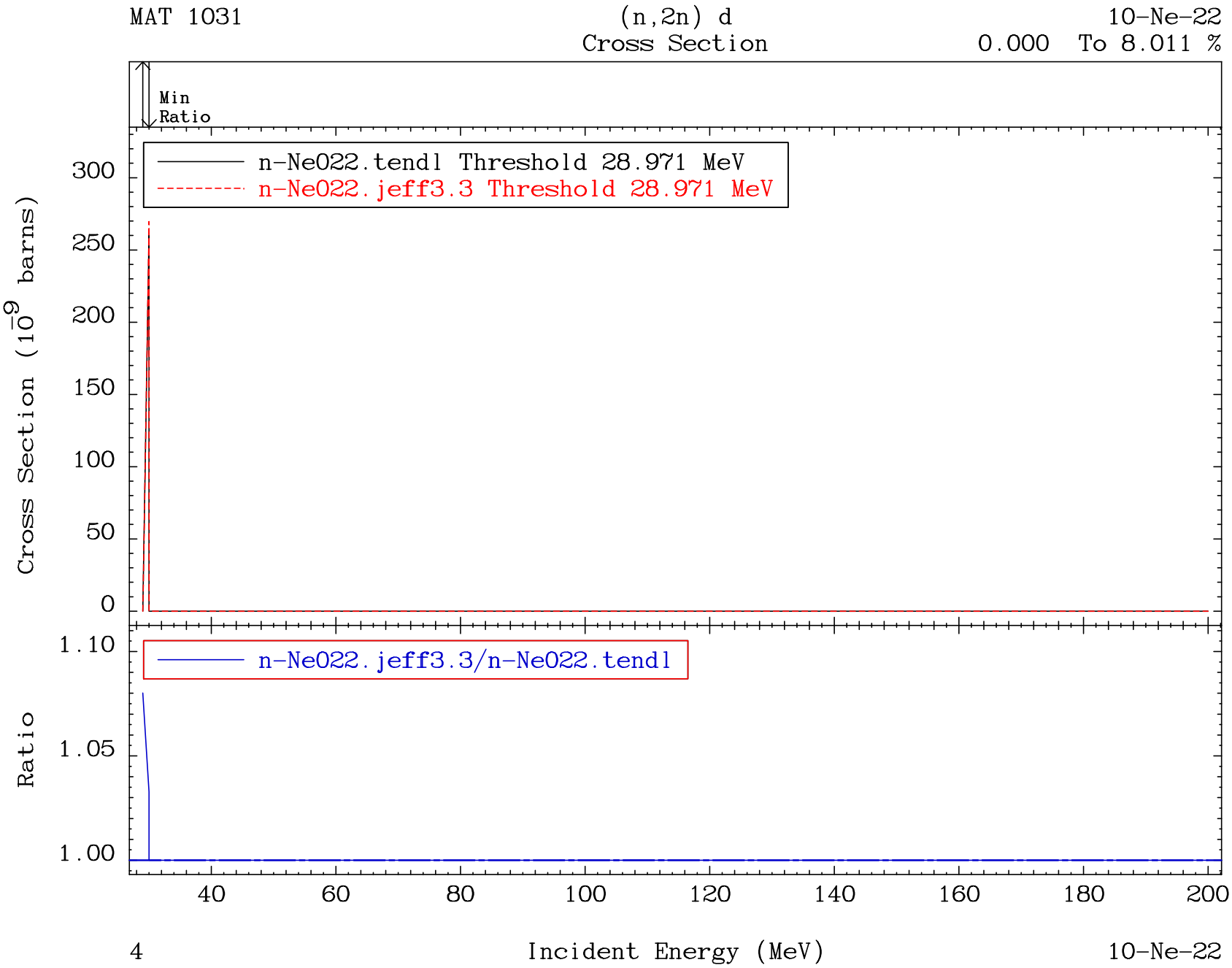
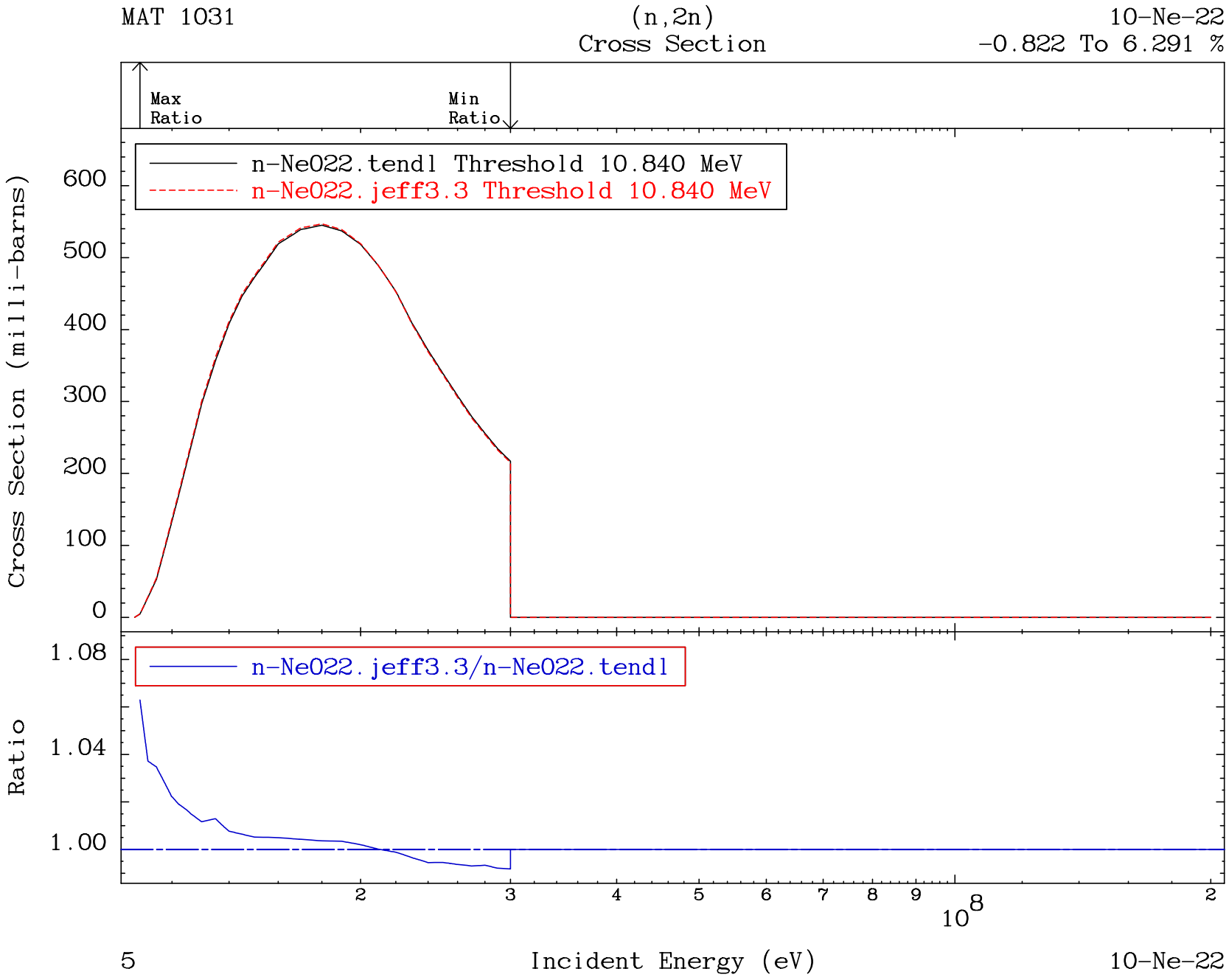
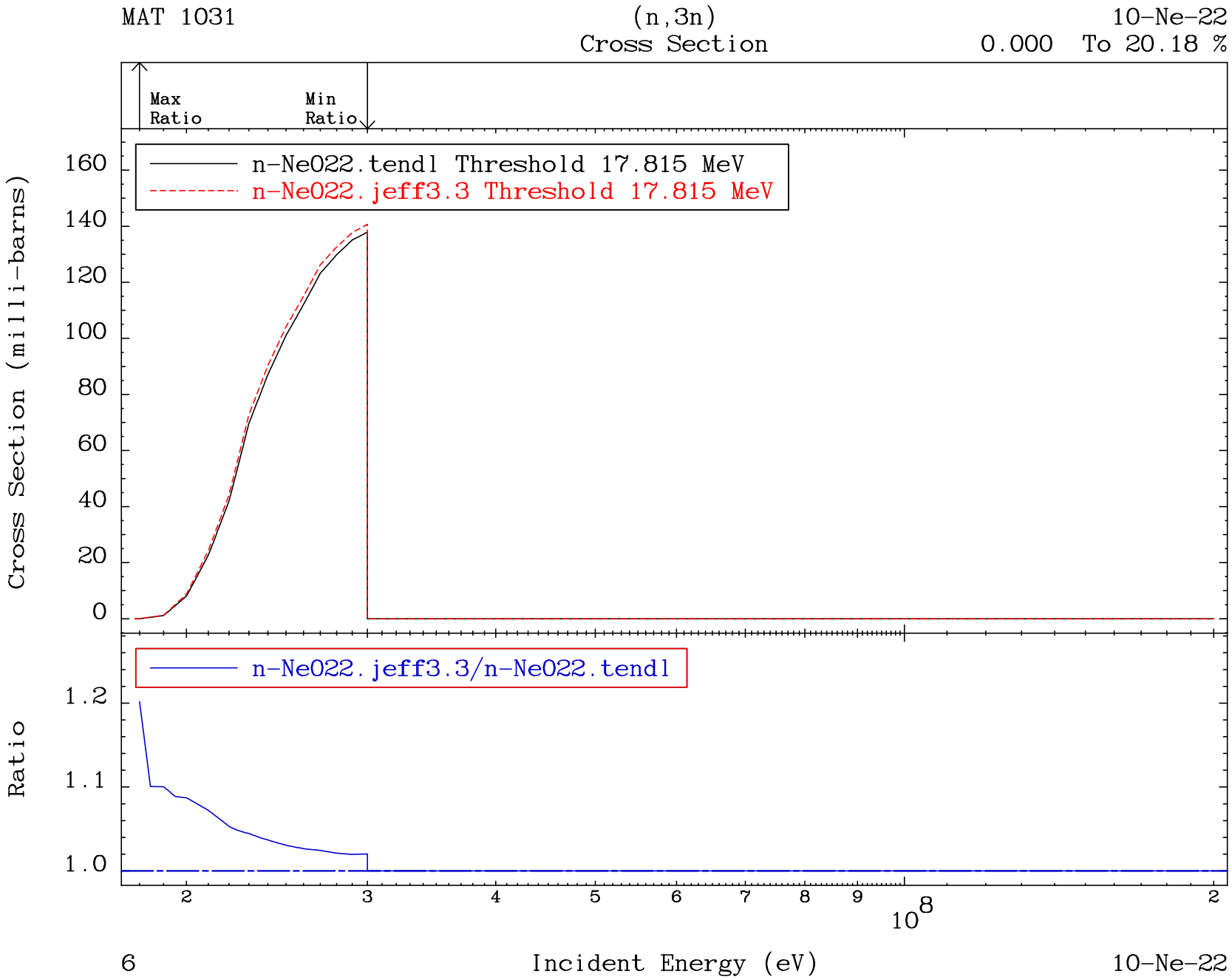

MAT 1031
Total
Cross Section
10-Ne-22
-83.54 To 3265. %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
1
10-Ne-22

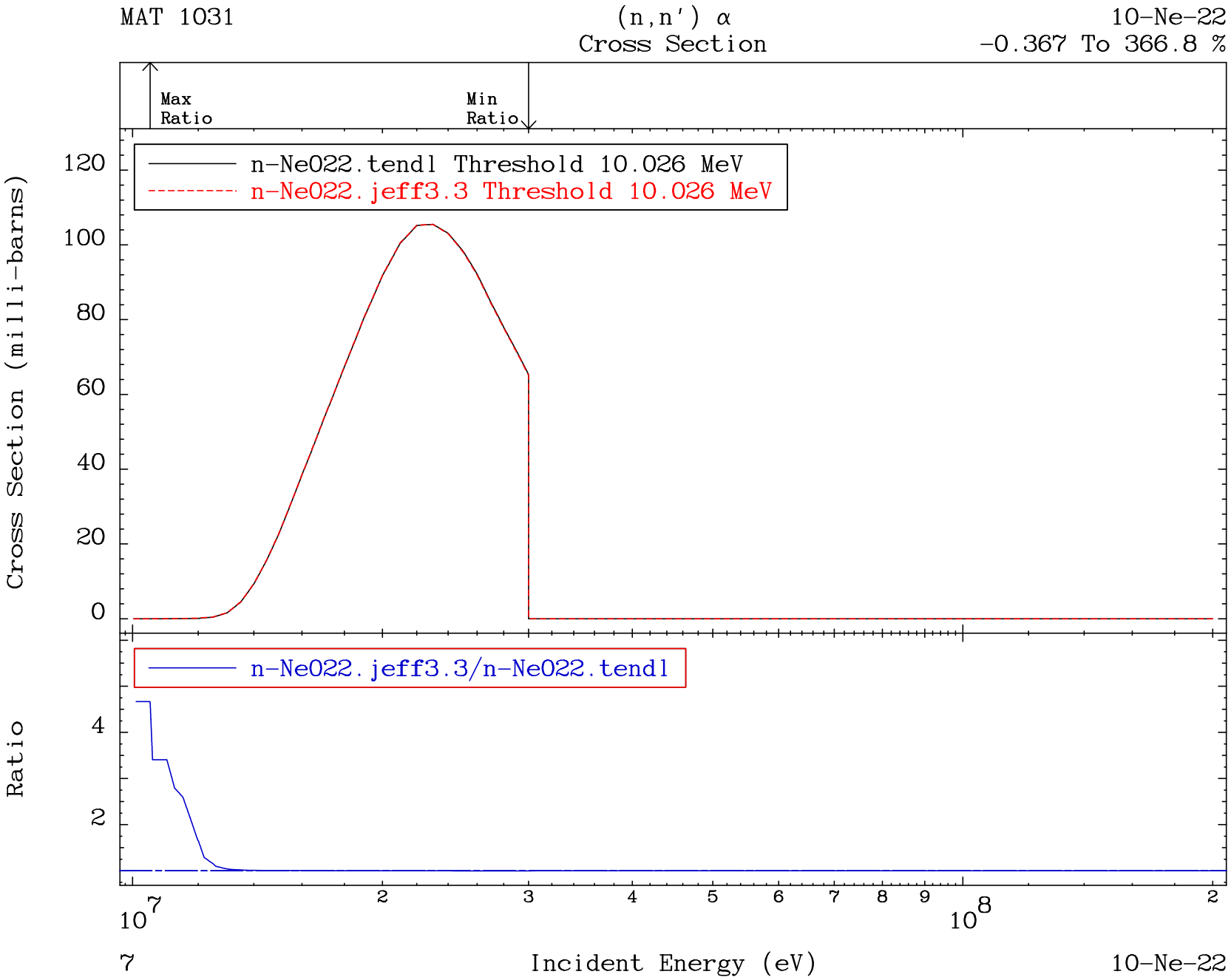

MAT 1031
Elastic
Cross Section
10-Ne-22
-83.53 To 3304. %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
2
10-Ne-22

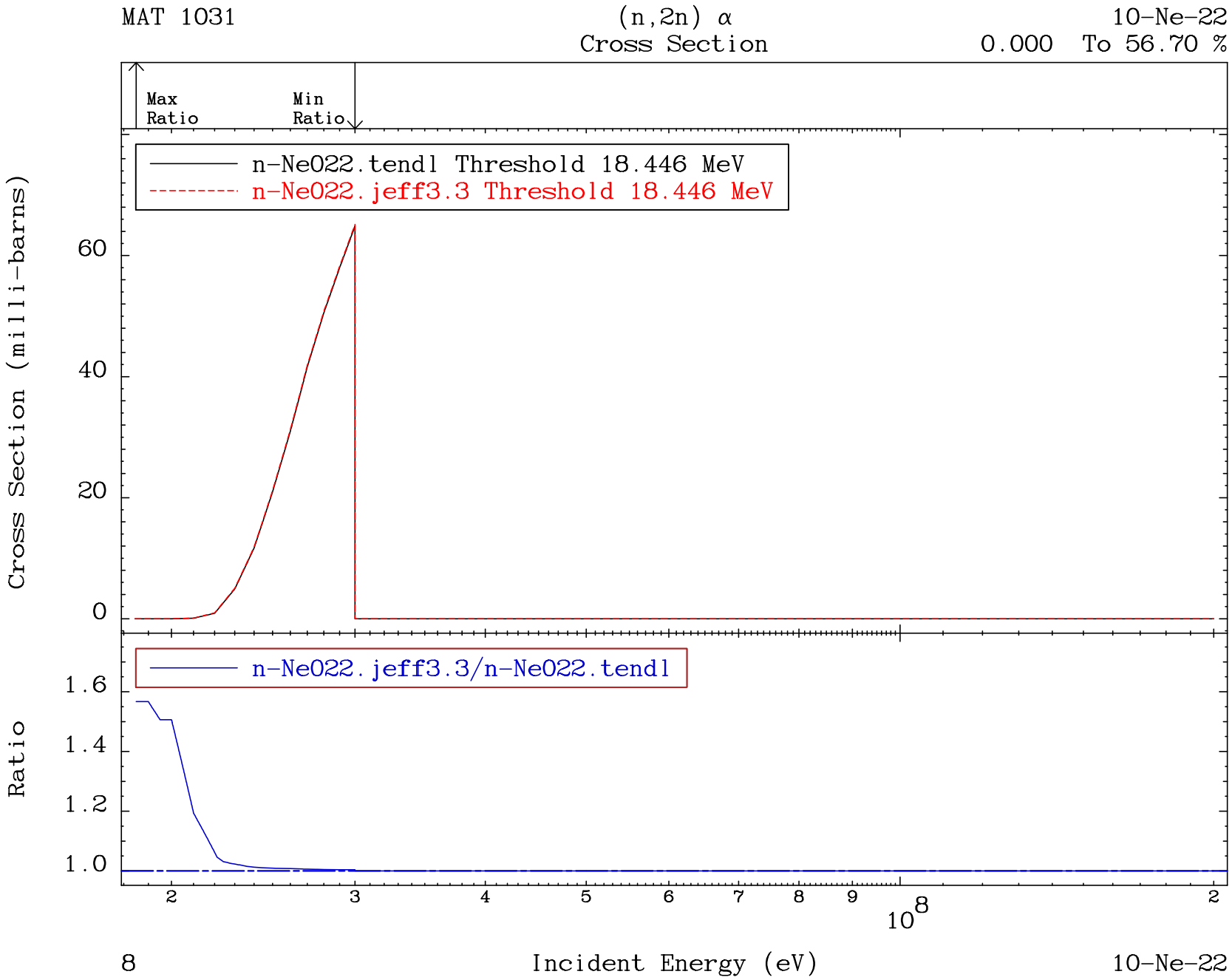

MAT 1031
Inelastic
Cross Section
10-Ne-22
-1.262 To 0.008 %
Max
Ratio
Min
Ratio
n-Ne022.tendl Threshold 1.3330 MeV
n-Ne022.jeff3.3 Threshold 1.3330 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
10-Ne-22

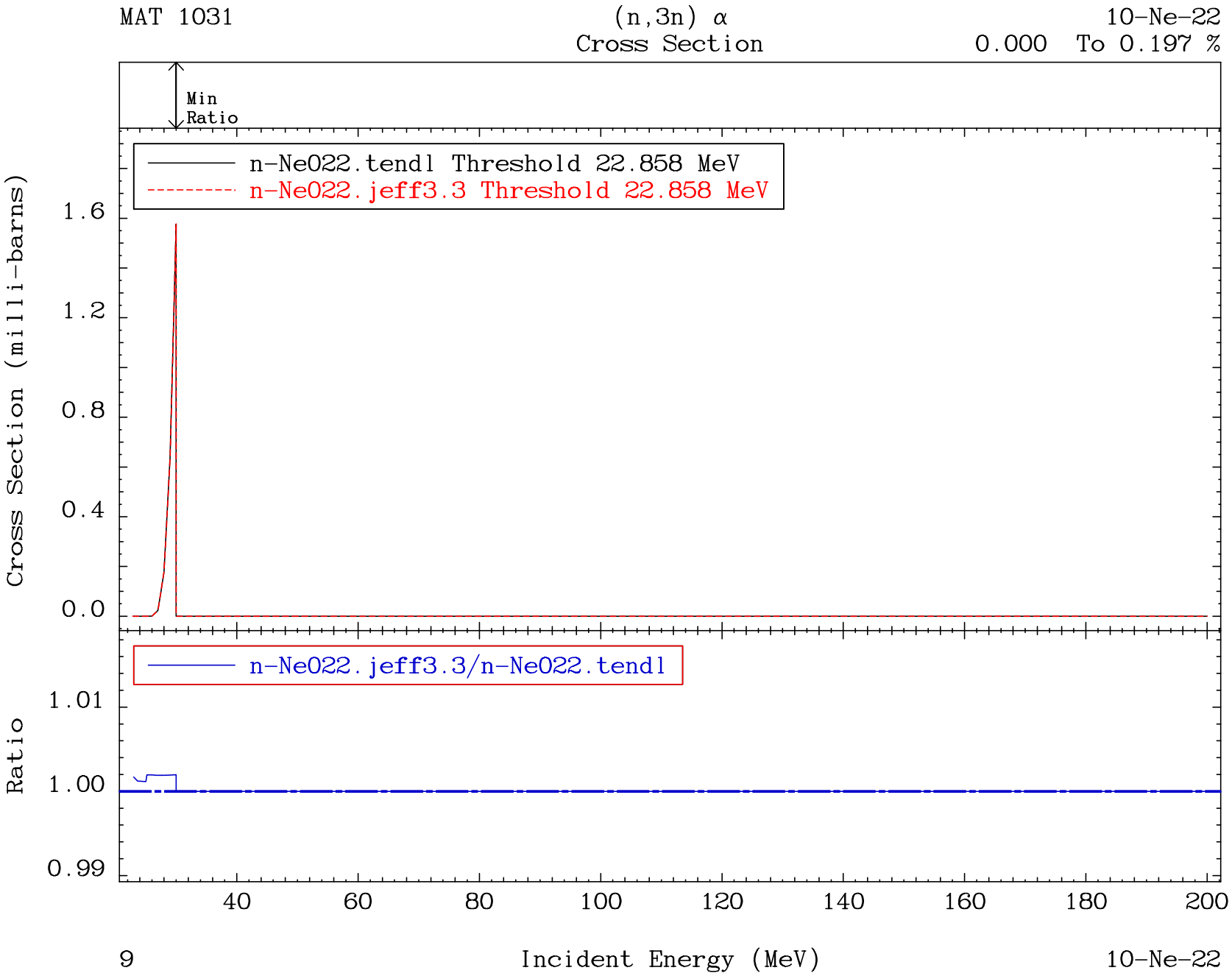

MAT 1031
(n,2n) d
Cross Section
10-Ne-22
0.000 To 8.011 %
Min
Ratio
n-Ne022.tendl Threshold 28.971 MeV
n-Ne022.jeff3.3 Threshold 28.971 MeV
Cross Section (10-9 barns)
300
250
200
150
100
50
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.10
1.05
1.00
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
10-Ne-22

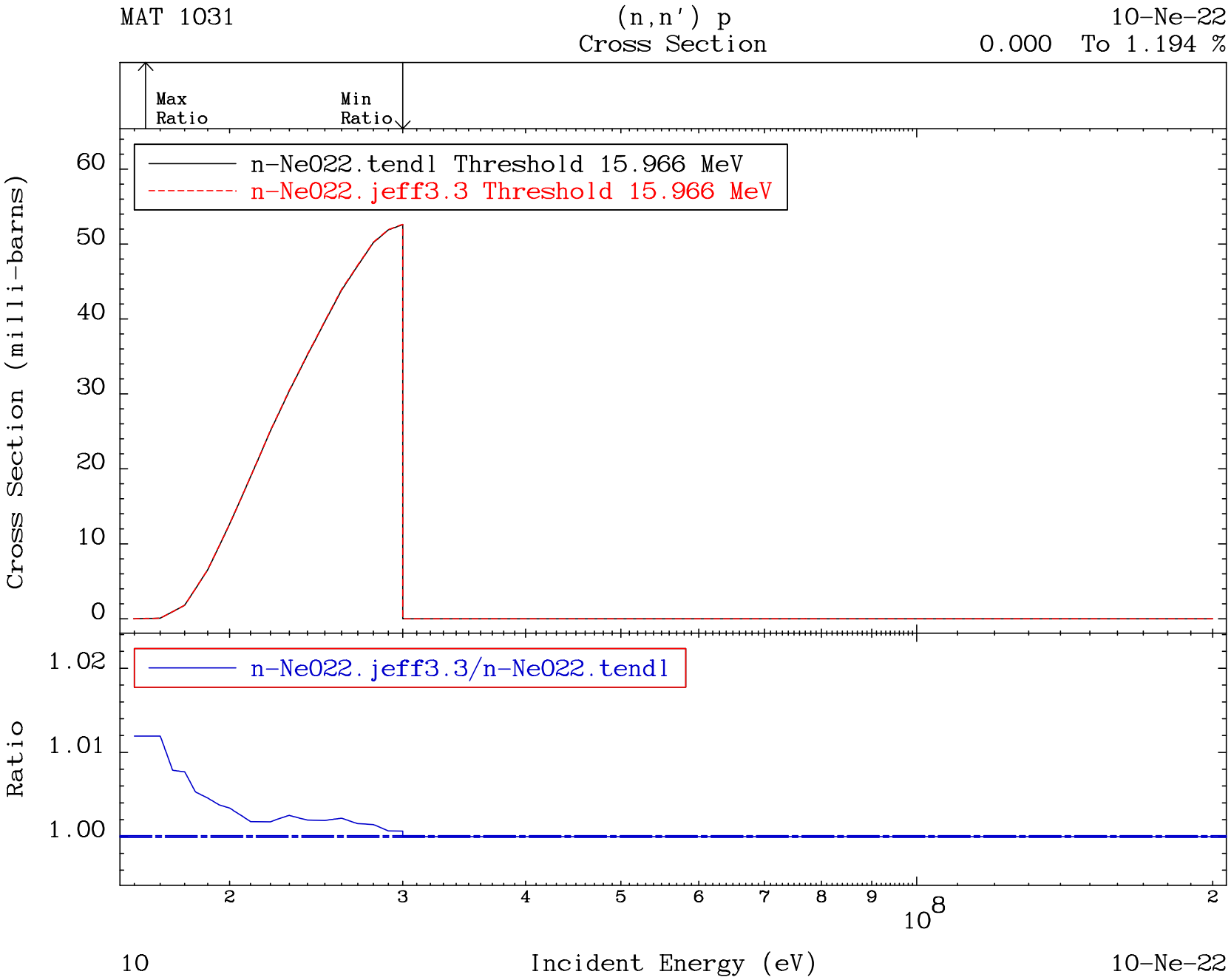

MAT 1031
(n,2n)
Cross Section
10-Ne-22
-0.822 To 6.291 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 10.840 MeV
n-Ne022.jeff3.3 Threshold 10.840 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.08
1.04
1.00
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
10-Ne-22

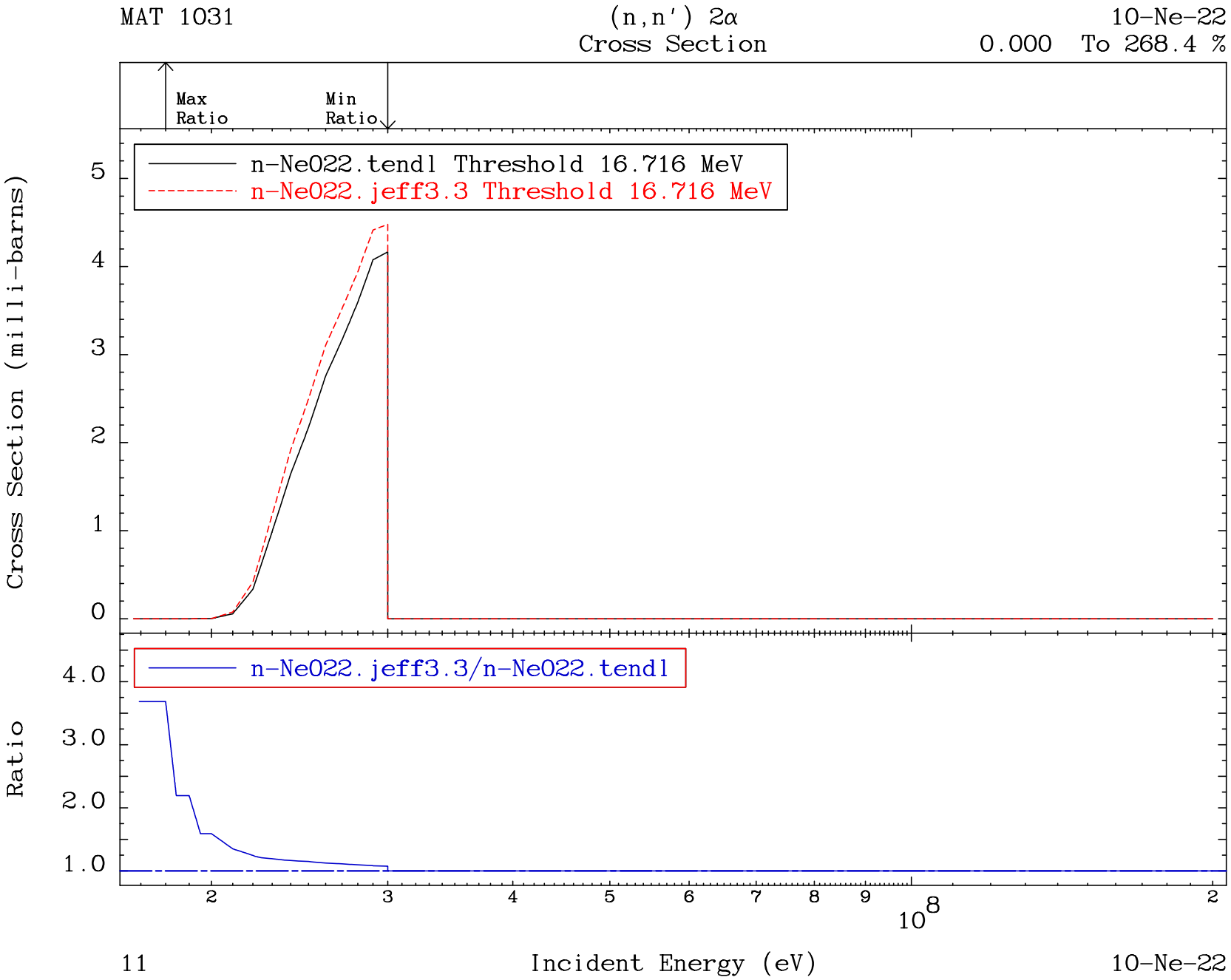

MAT 1031
(n,3n)
Cross Section
10-Ne-22
0.000 To 20.18 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 17.815 MeV
n-Ne022.jeff3.3 Threshold 17.815 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
10-Ne-22

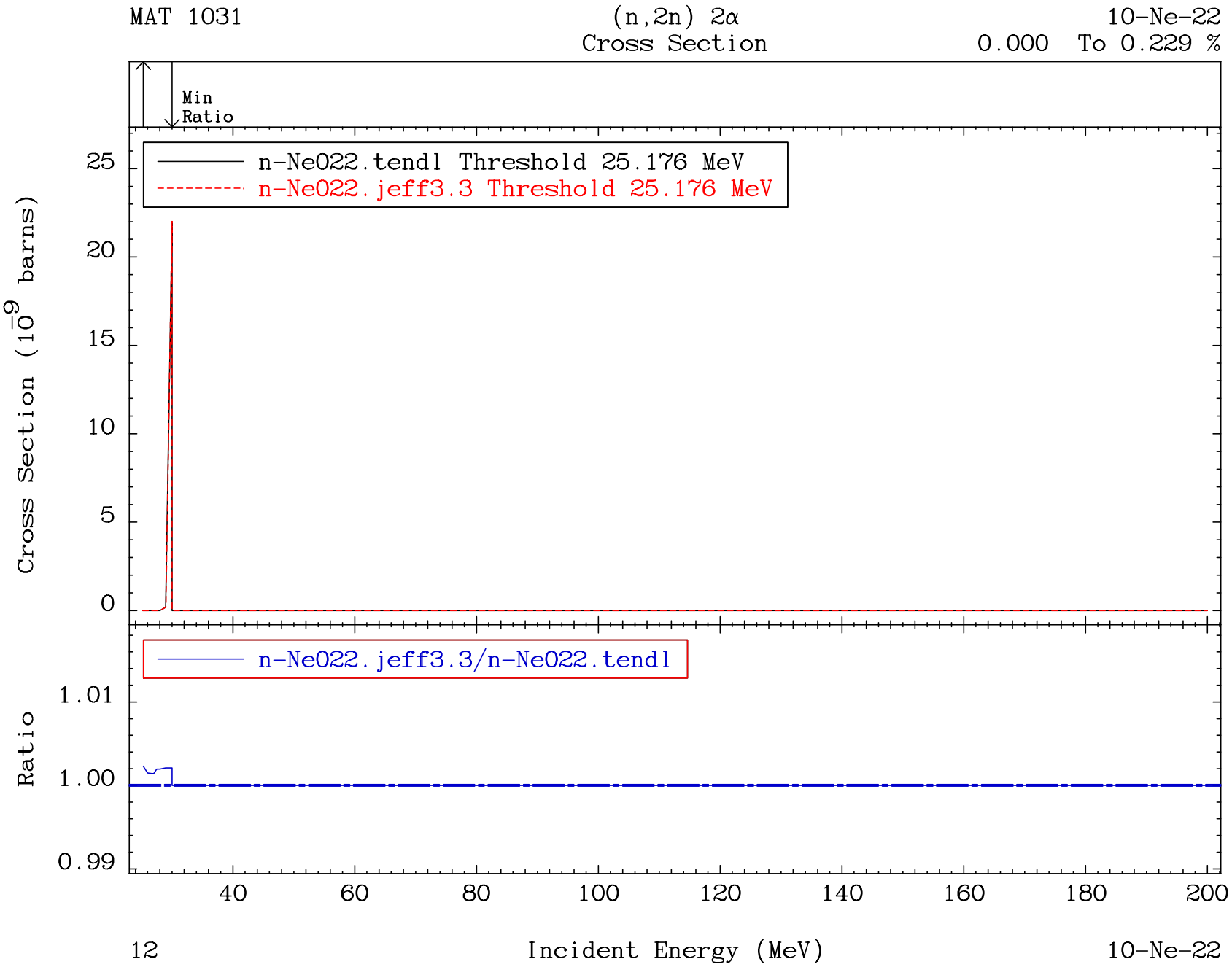

MAT 1031
(n,n') α
Cross Section
10-Ne-22
-0.367 To 366.8 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 10.026 MeV
n-Ne022.jeff3.3 Threshold 10.026 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
4
2
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
10-Ne-22

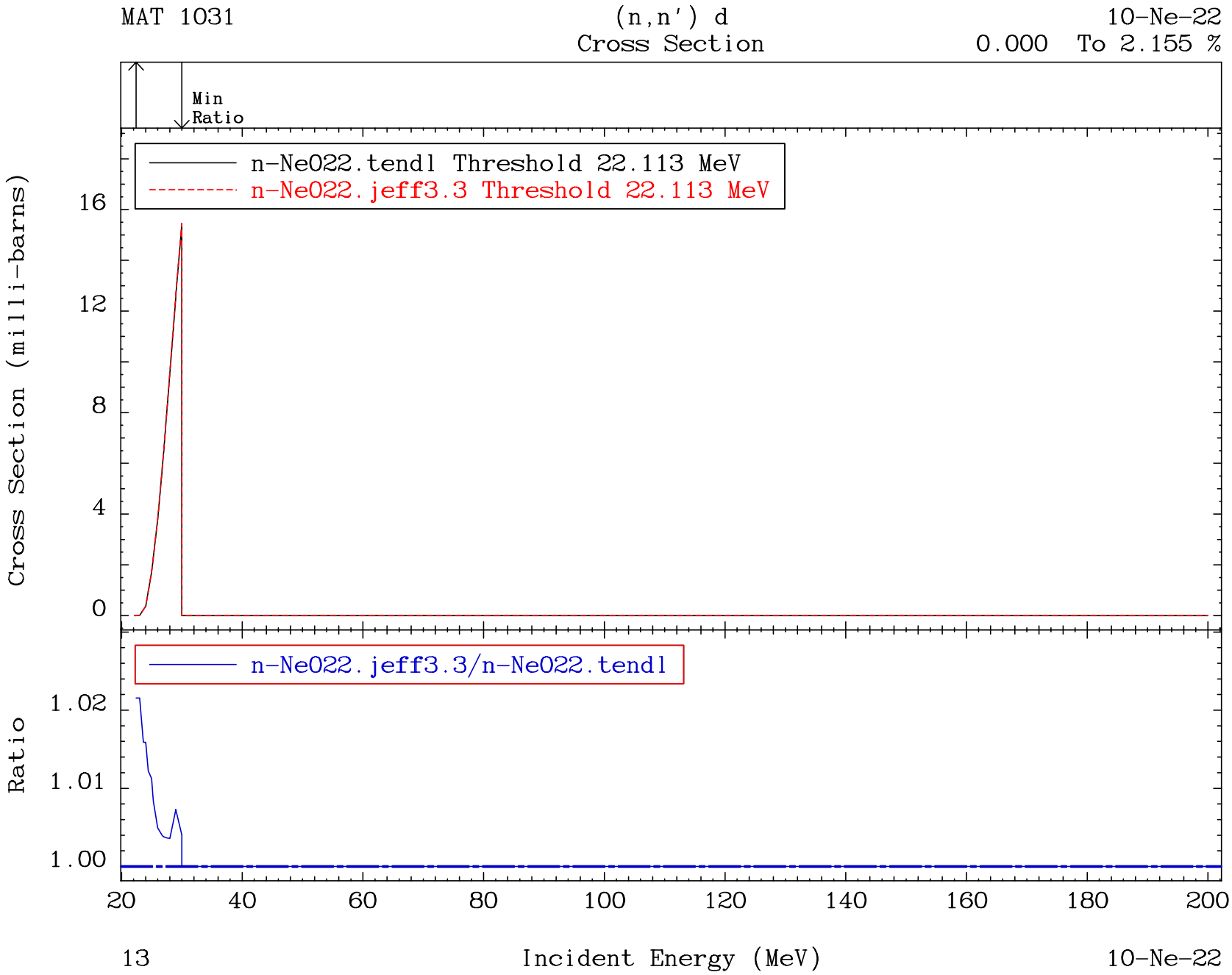

MAT 1031
(n,2n) α
Cross Section
10-Ne-22
0.000 To 56.70 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 18.446 MeV
n-Ne022.jeff3.3 Threshold 18.446 MeV
Cross Section (milli-barns)
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.6
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
10-Ne-22

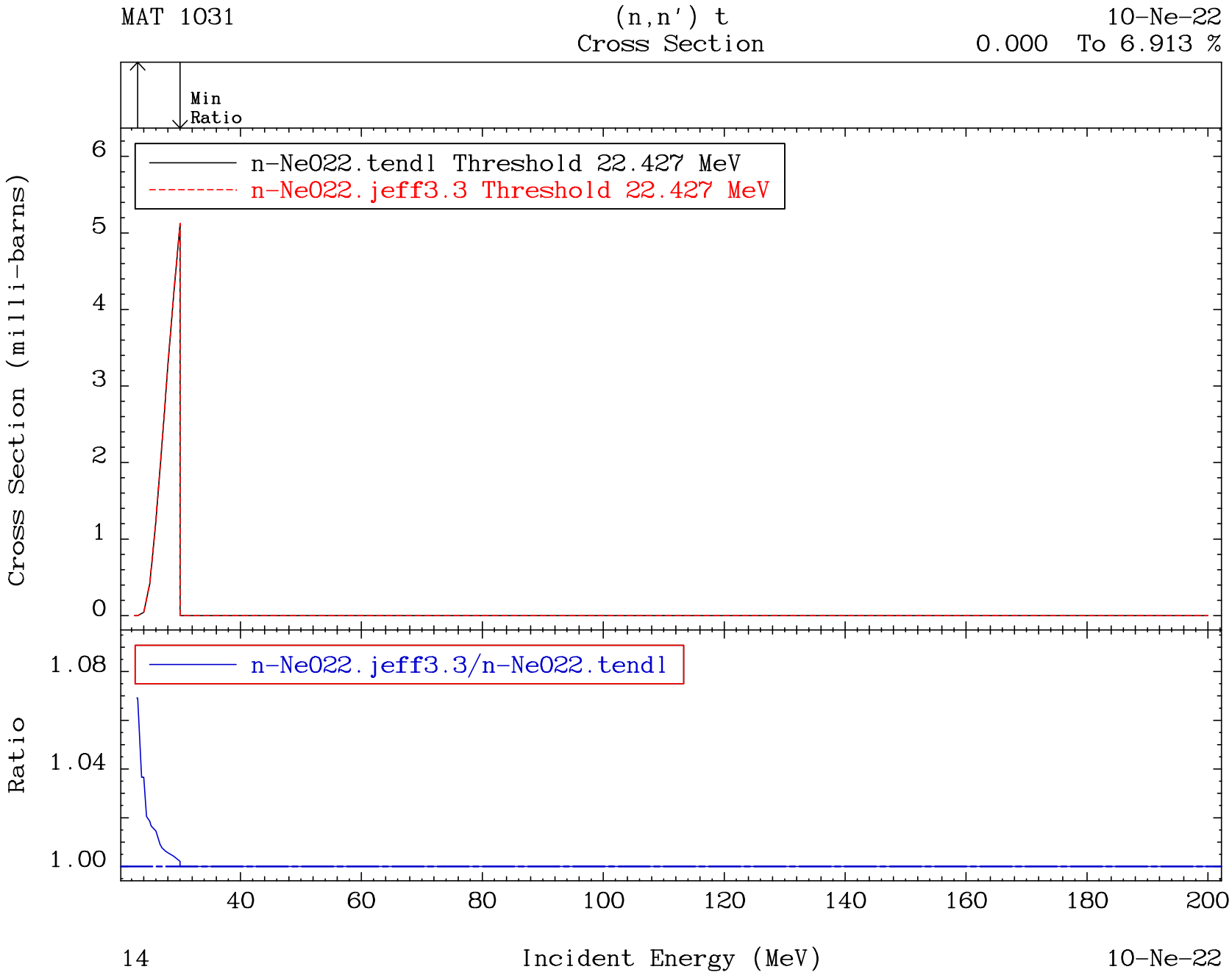

MAT 1031
(n,3n) α
Cross Section
10-Ne-22
0.000 To 0.197 %
Min
Ratio
n-Ne022.tendl Threshold 22.858 MeV
n-Ne022.jeff3.3 Threshold 22.858 MeV
Cross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
10-Ne-22

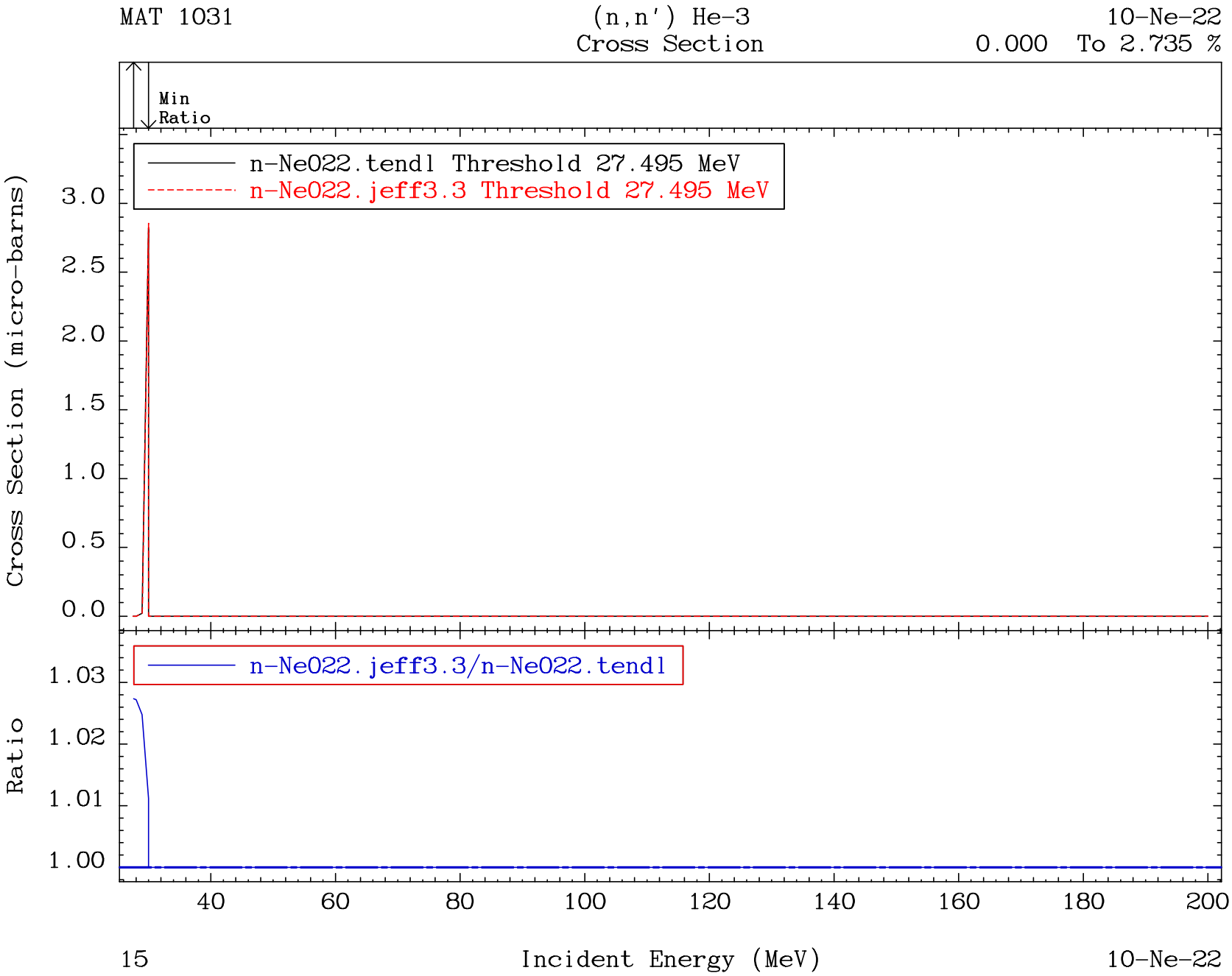

MAT 1031
(n,n') p
Cross Section
10-Ne-22
0.000 To 1.194 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 15.966 MeV
n-Ne022.jeff3.3 Threshold 15.966 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
10-Ne-22

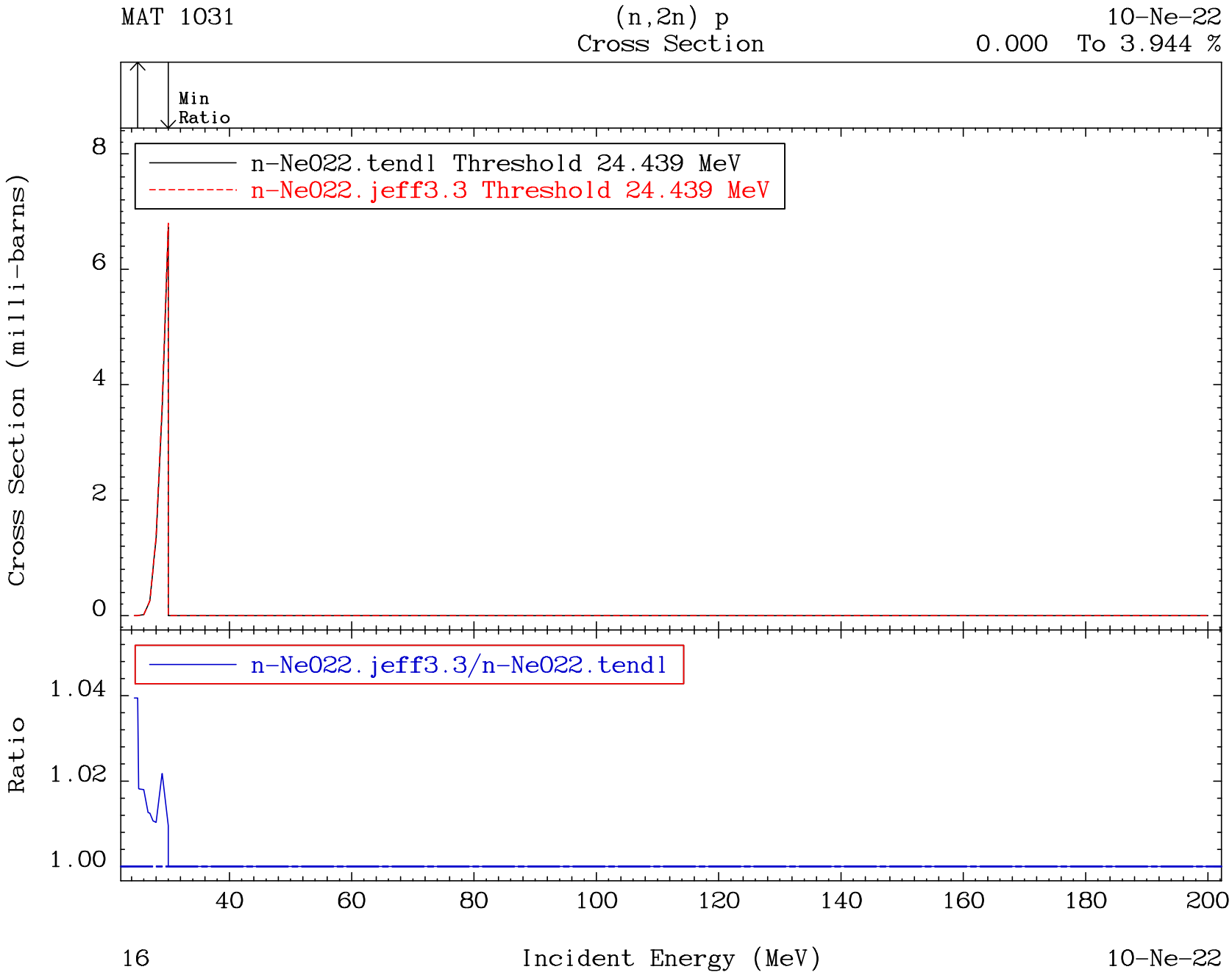

MAT 1031
(n,n') 2α
Cross Section
10-Ne-22
0.000 To 268.4 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 16.716 MeV
n-Ne022.jeff3.3 Threshold 16.716 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.0
2.0
3.0
4.0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
10-Ne-22

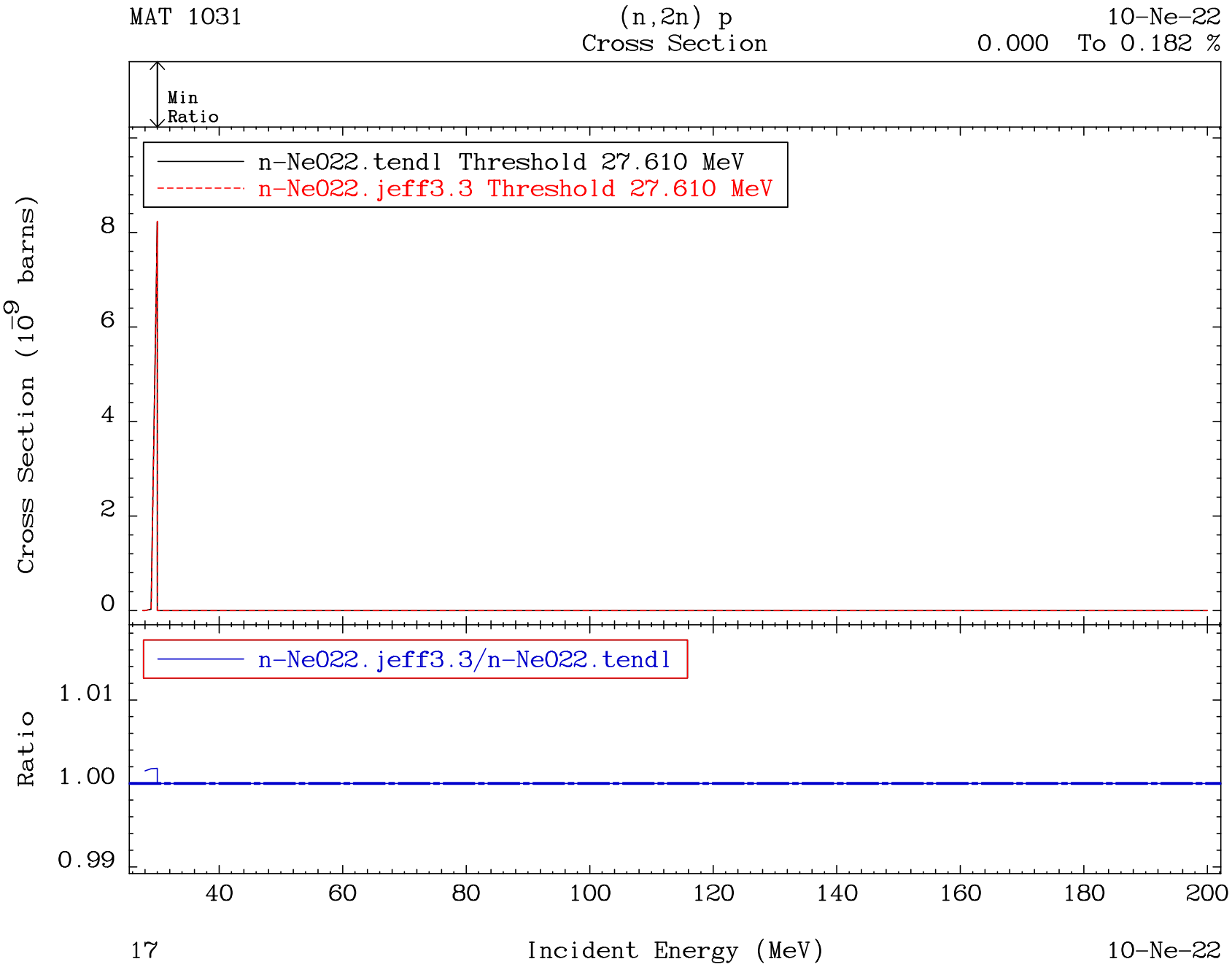

MAT 1031
(n,2n) 2α
Cross Section
10-Ne-22
0.000 To 0.229 %
Min
Ratio
n-Ne022.tendl Threshold 25.176 MeV
n-Ne022.jeff3.3 Threshold 25.176 MeV
Cross Section (10^-9 barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
10-Ne-22

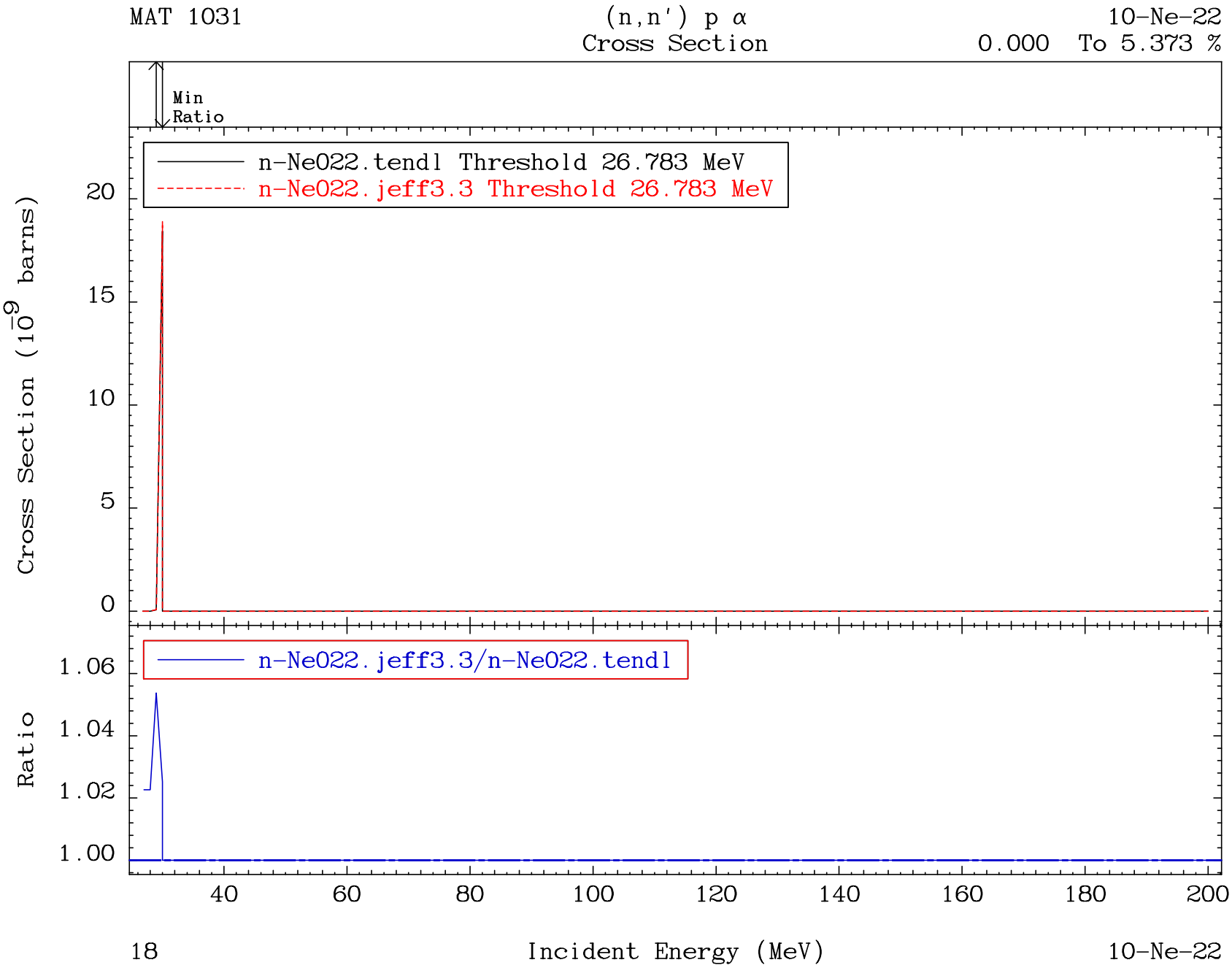

MAT 1031
(n,n') d
Cross Section
10-Ne-22
0.000 To 2.155 %
Min
Ratio
n-Ne022.tendl Threshold 22.113 MeV
n-Ne022.jeff3.3 Threshold 22.113 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.02
1.01
1.00
20
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
10-Ne-22

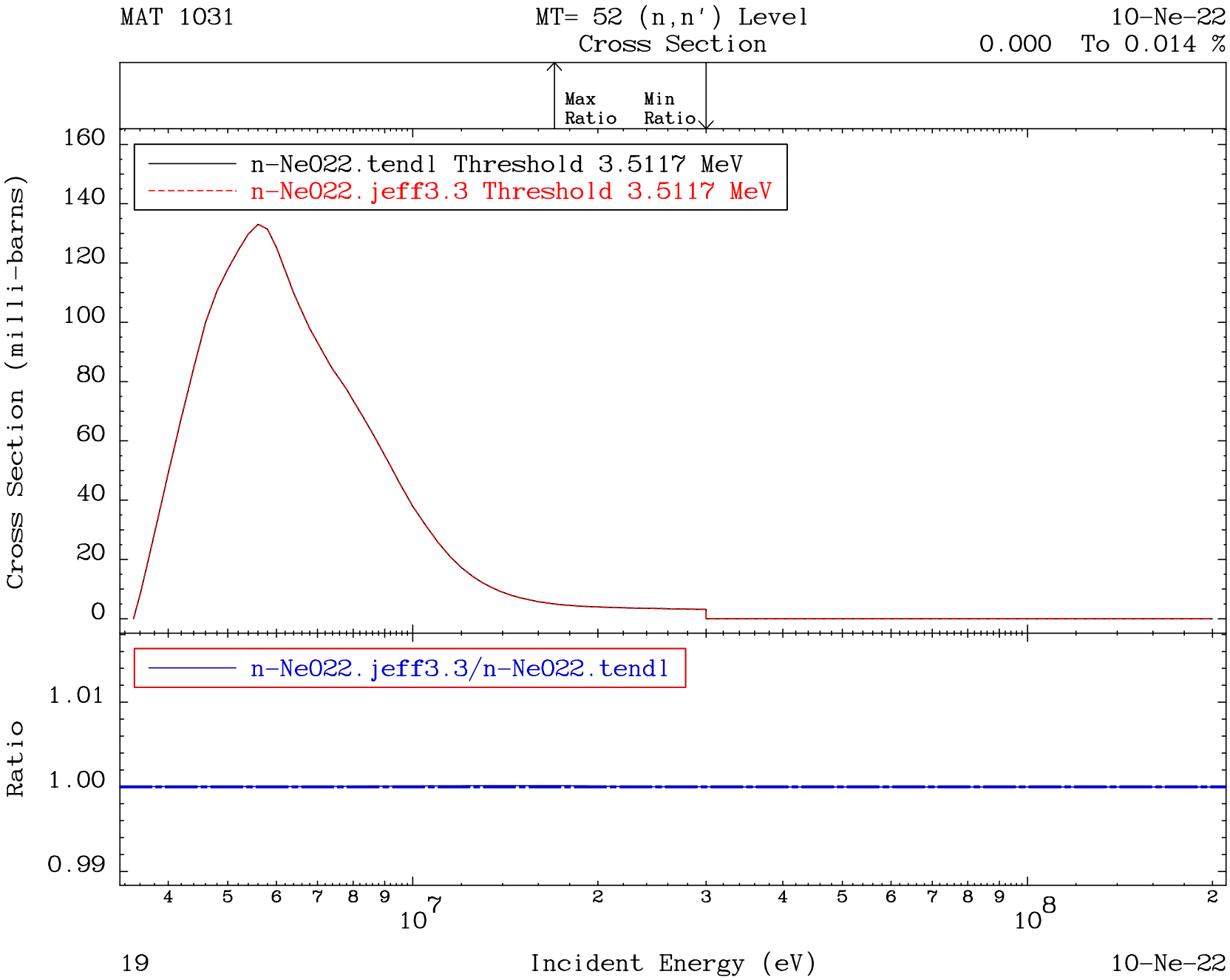

MAT 1031
(n,n') t
Cross Section
10-Ne-22
0.000 To 6.913 %
Min
Ratio
n-Ne022.tendl Threshold 22.427 MeV
n-Ne022.jeff3.3 Threshold 22.427 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
1.04
1.08
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
10-Ne-22

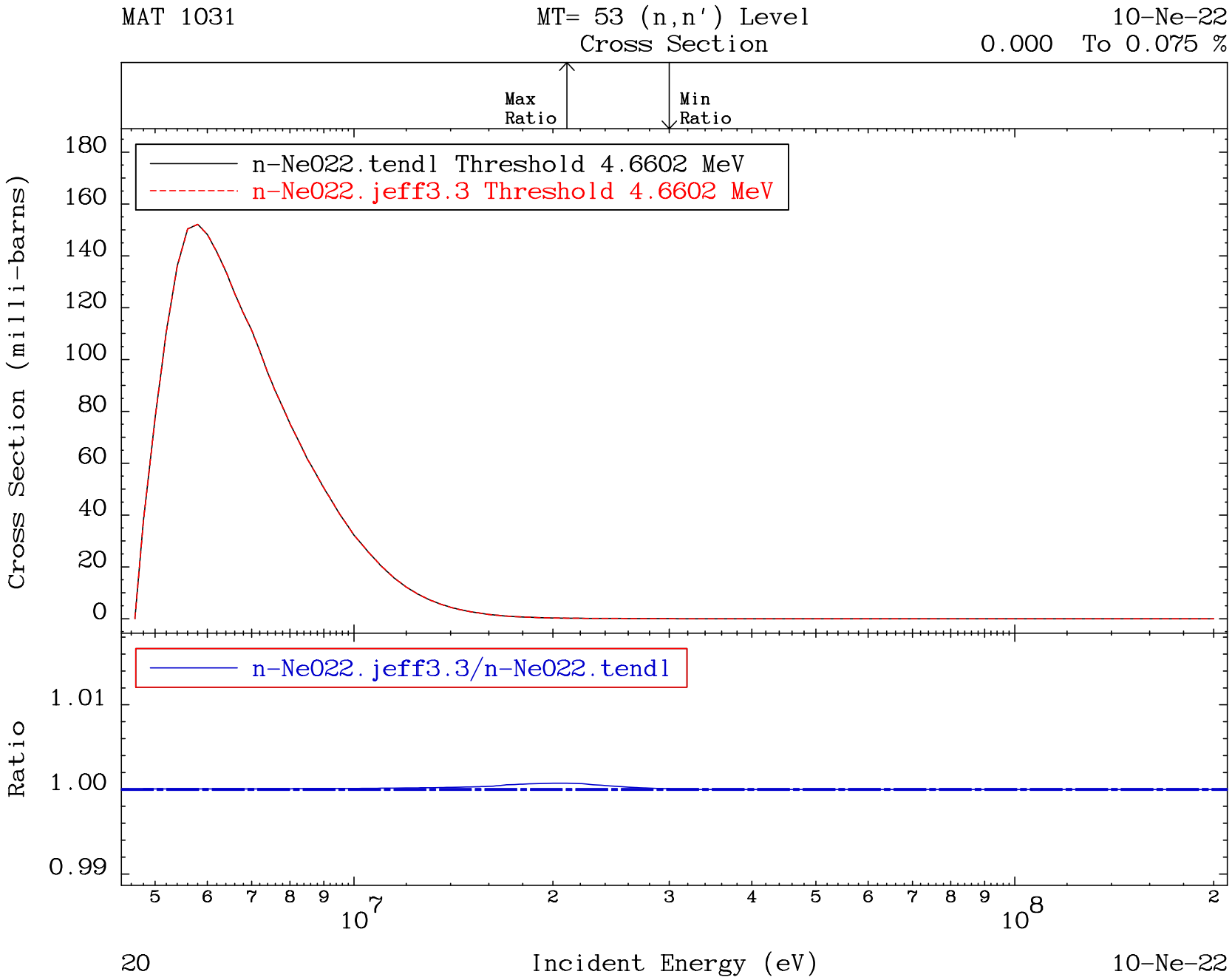

MAT 1031
(n,n') He-3
Cross Section
10-Ne-22
0.000 To 2.735 %
Min
Ratio
n-Ne022.tendl Threshold 27.495 MeV
n-Ne022.jeff3.3 Threshold 27.495 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.03
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
10-Ne-22

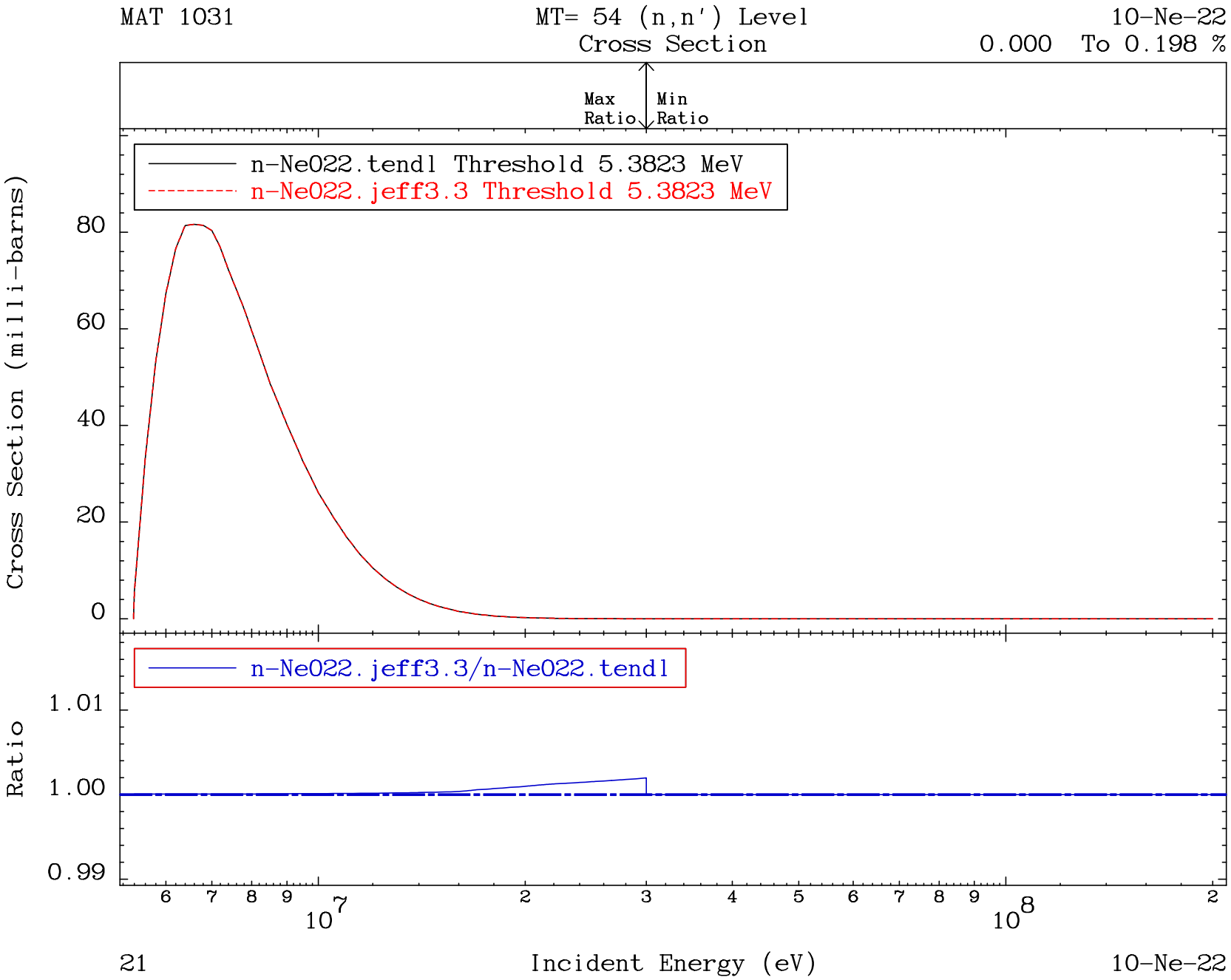

MAT 1031
(n,2n) p
Cross Section
10-Ne-22
0.000 To 3.944 %
Min
Ratio
n-Ne022.tendl Threshold 24.439 MeV
n-Ne022.jeff3.3 Threshold 24.439 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
1.02
1.04
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
10-Ne-22

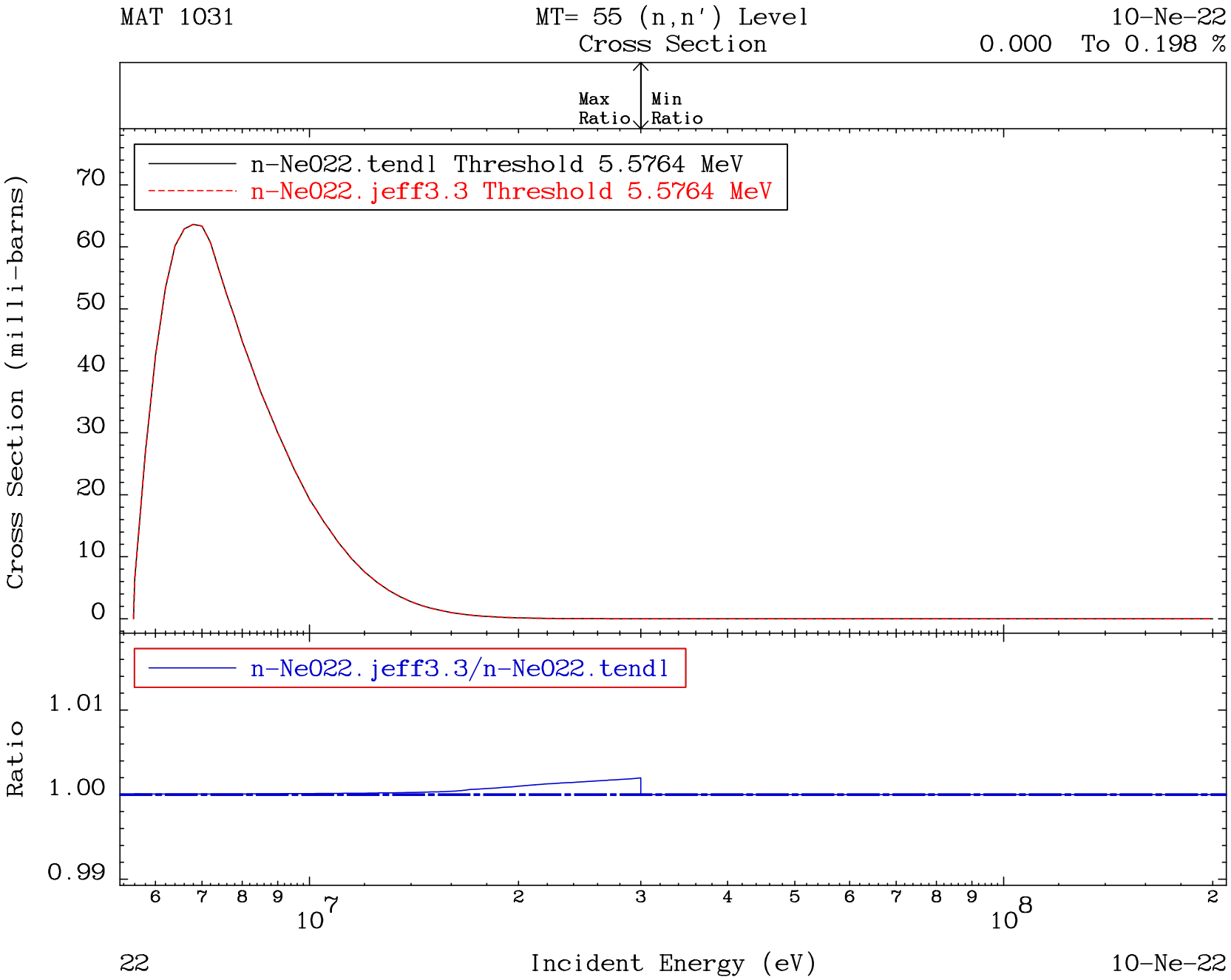

MAT 1031
(n,2n) p
Cross Section
10-Ne-22
0.000 To 0.182 %
Min
Ratio
n-Ne022.tendl Threshold 27.610 MeV
n-Ne022.jeff3.3 Threshold 27.610 MeV
Cross Section (10^-9 barns)
0
2
4
6
8
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
0.99
1.00
1.01
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
10-Ne-22

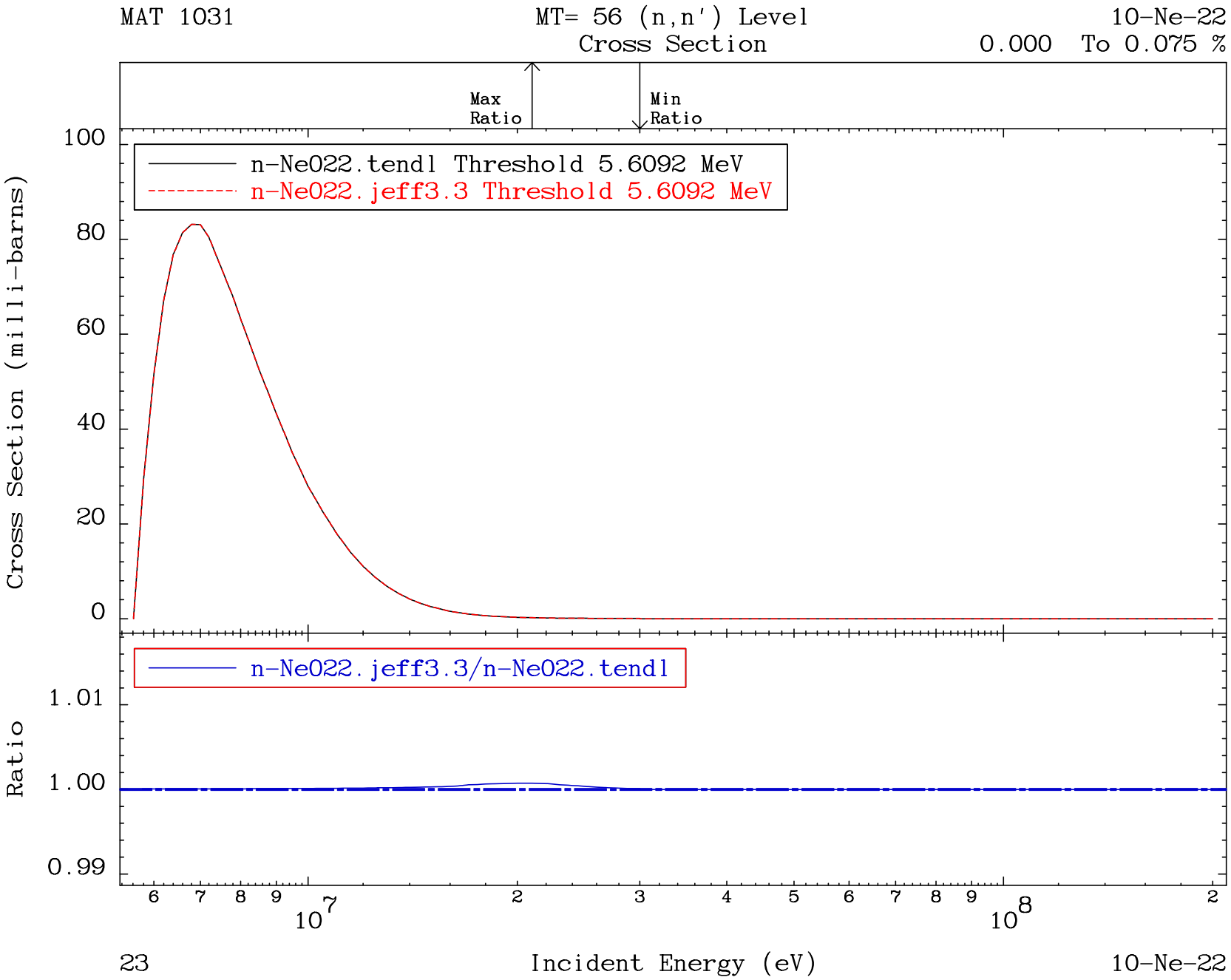

MAT 1031
(n,n') p α
Cross Section
10-Ne-22
0.000 To 5.373 %
Min
Ratio
n-Ne022.tendl Threshold 26.783 MeV
n-Ne022.jeff3.3 Threshold 26.783 MeV
Cross Section (10^-9 barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.06
1.04
1.02
1.00
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
10-Ne-22

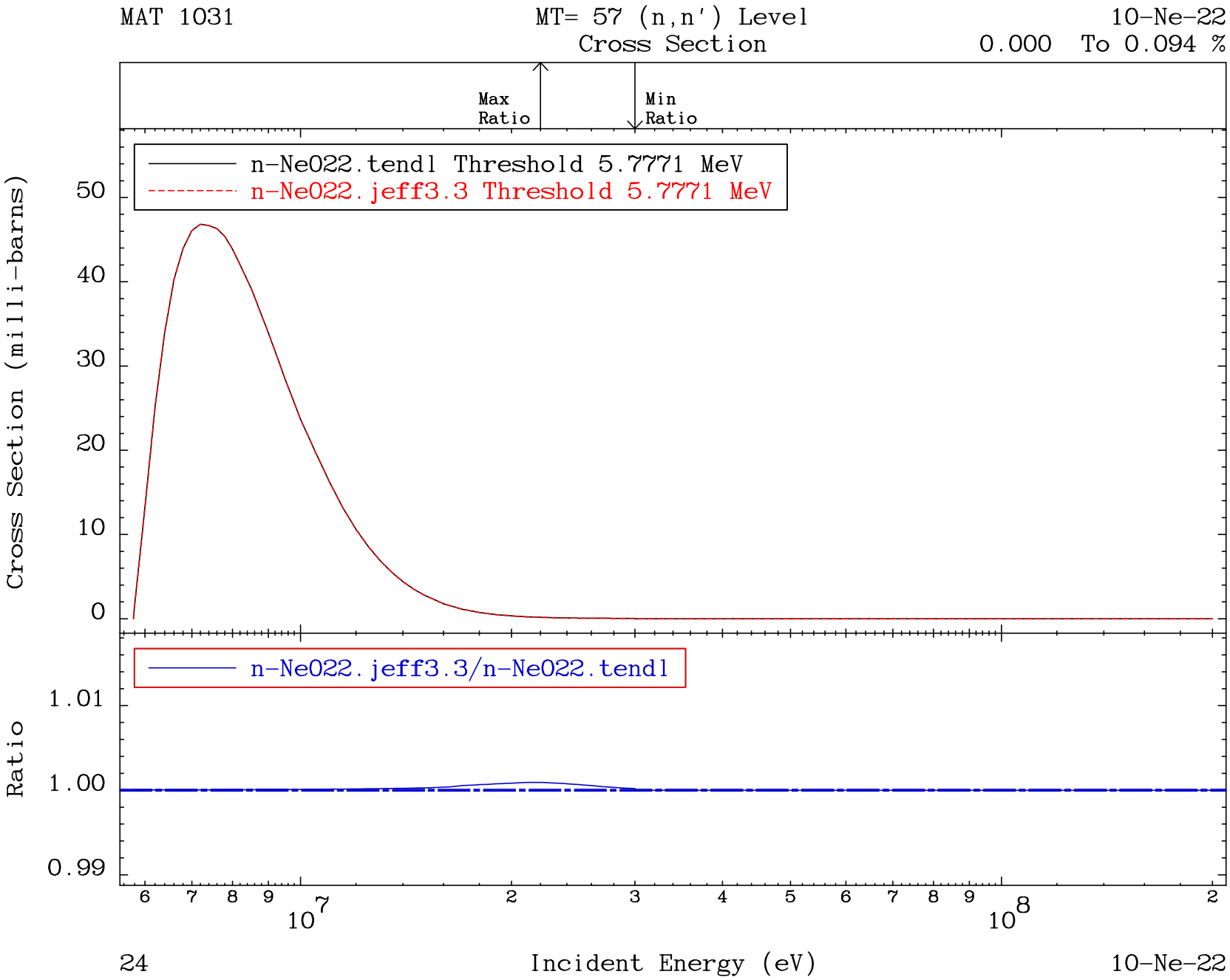

MAT 1031
MT= 52 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.014 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 3.5117 MeV
n-Ne022.jeff3.3 Threshold 3.5117 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
10-Ne-22

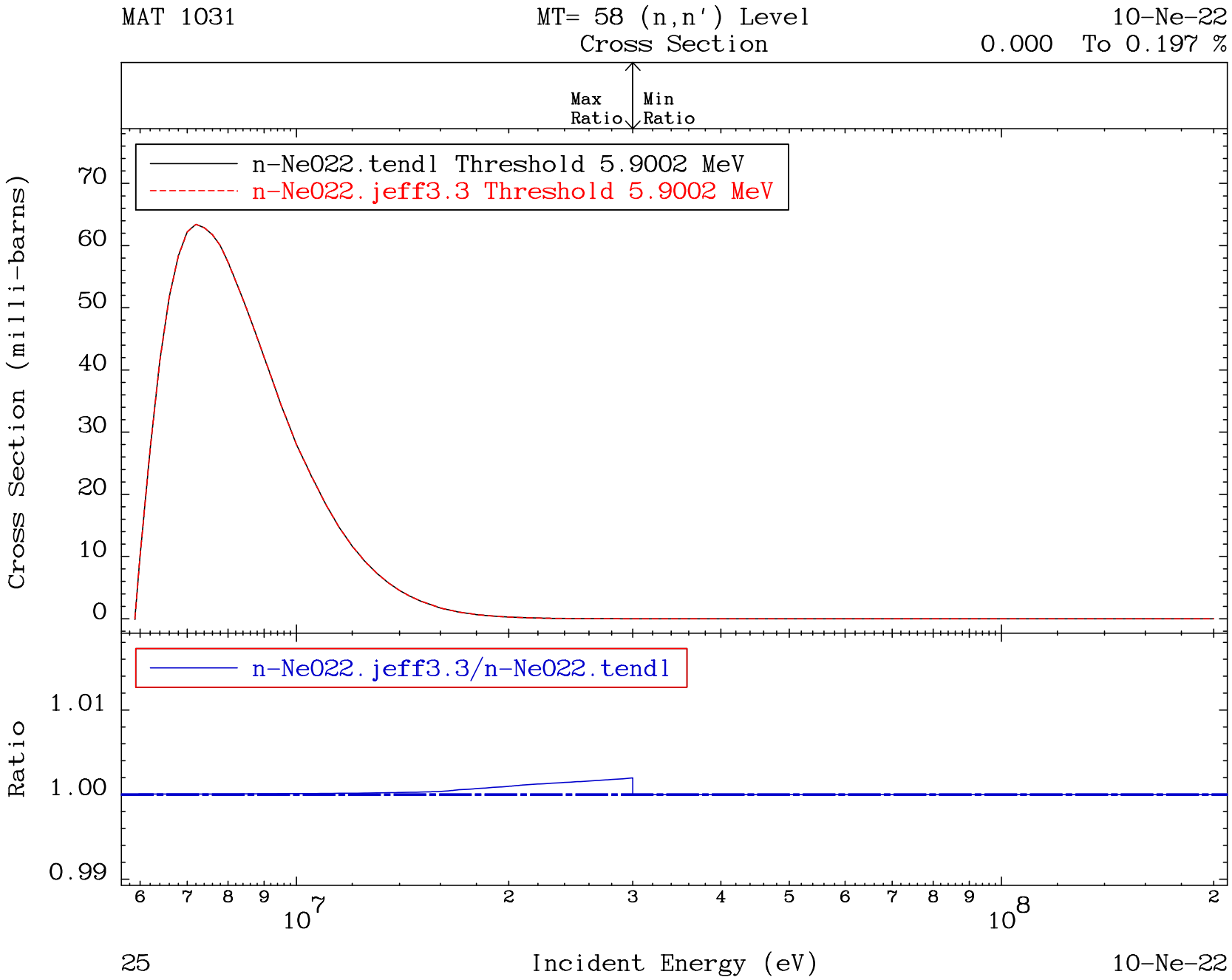

MAT 1031
MT= 53 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.075 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 4.6602 MeV
n-Ne022.jeff3.3 Threshold 4.6602 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
10-Ne-22

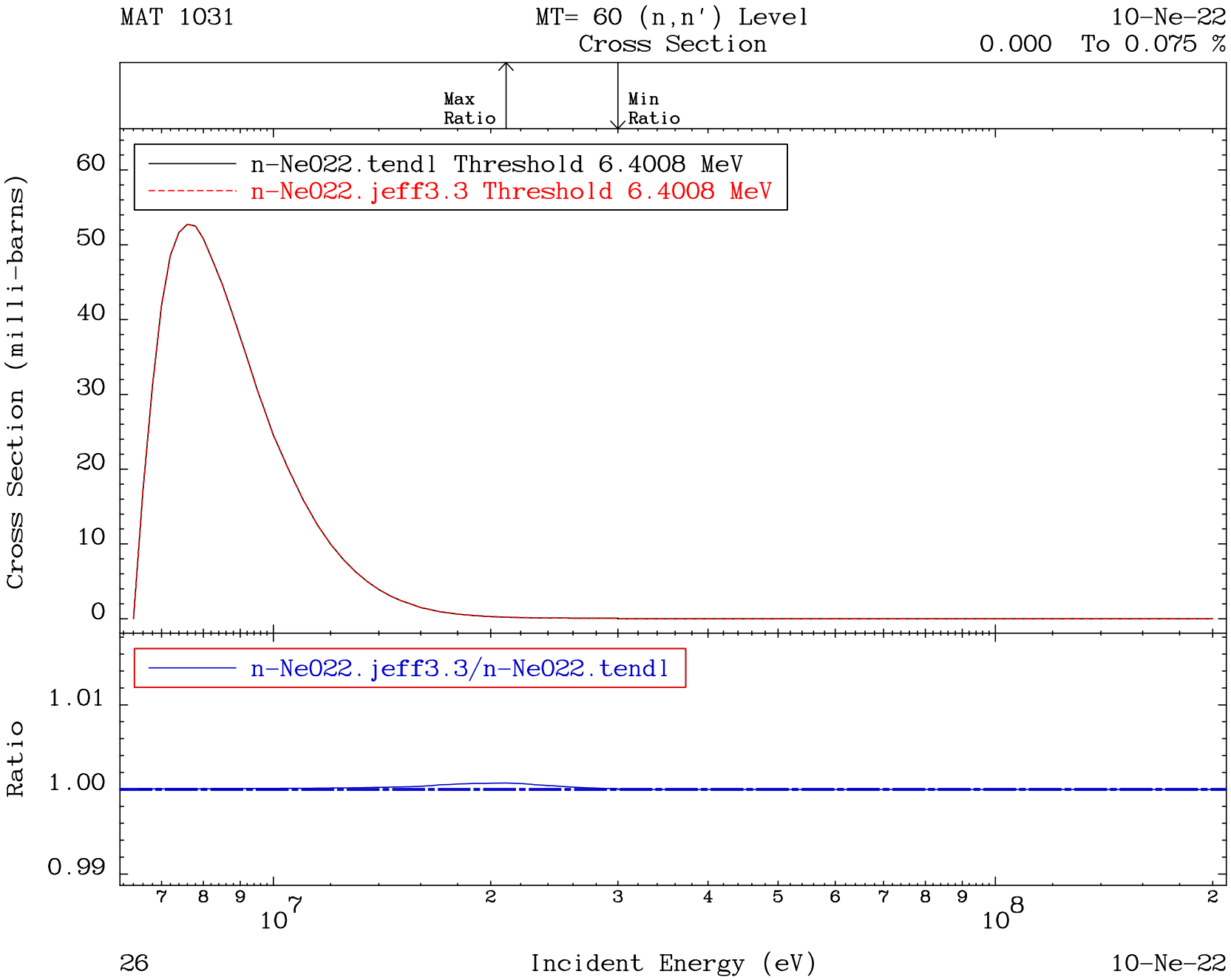

MAT 1031
MT= 54 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.3823 MeV
n-Ne022.jeff3.3 Threshold 5.3823 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
10-Ne-22

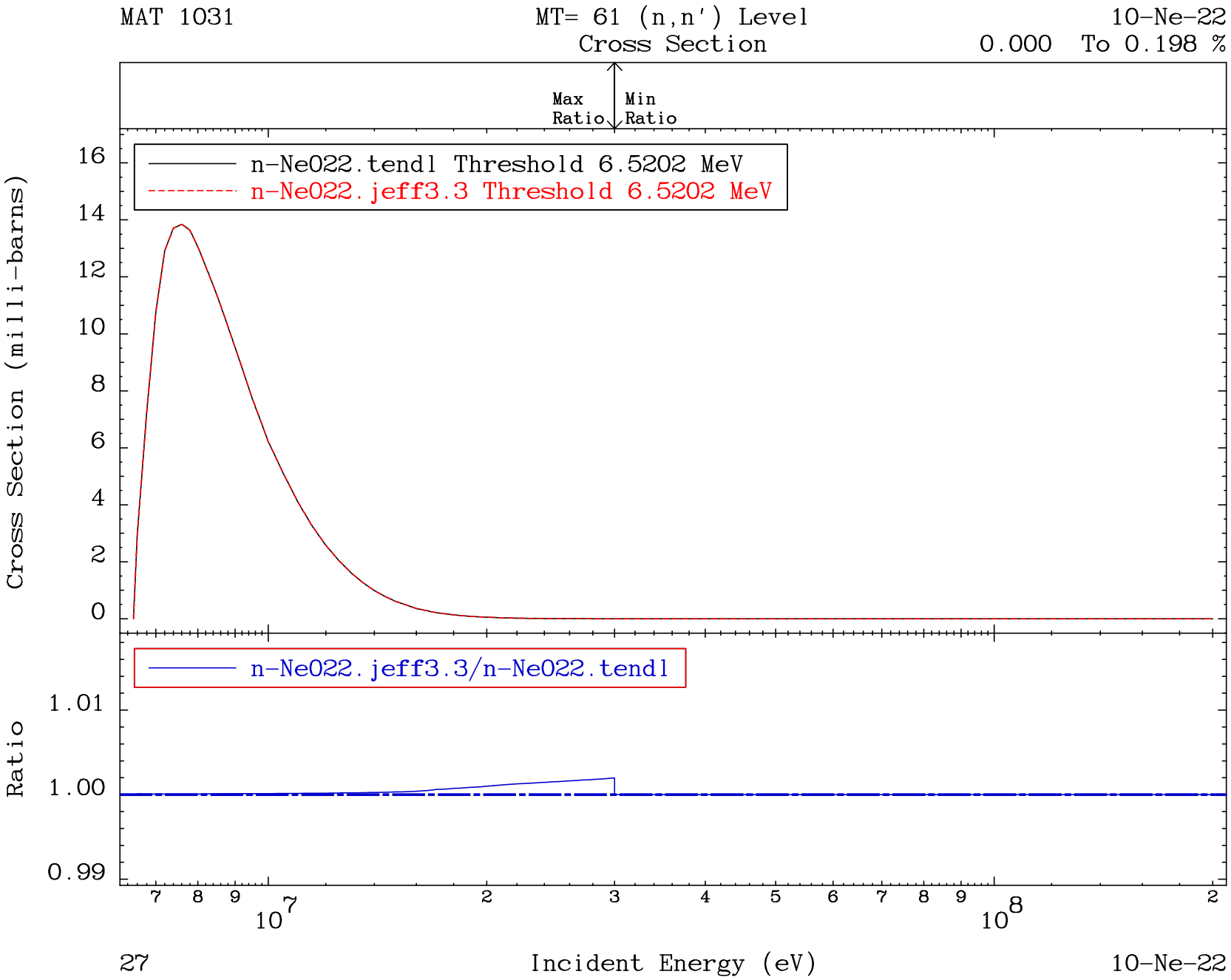

MAT 1031
MT= 55 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.5764 MeV
n-Ne022.jeff3.3 Threshold 5.5764 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
10-Ne-22

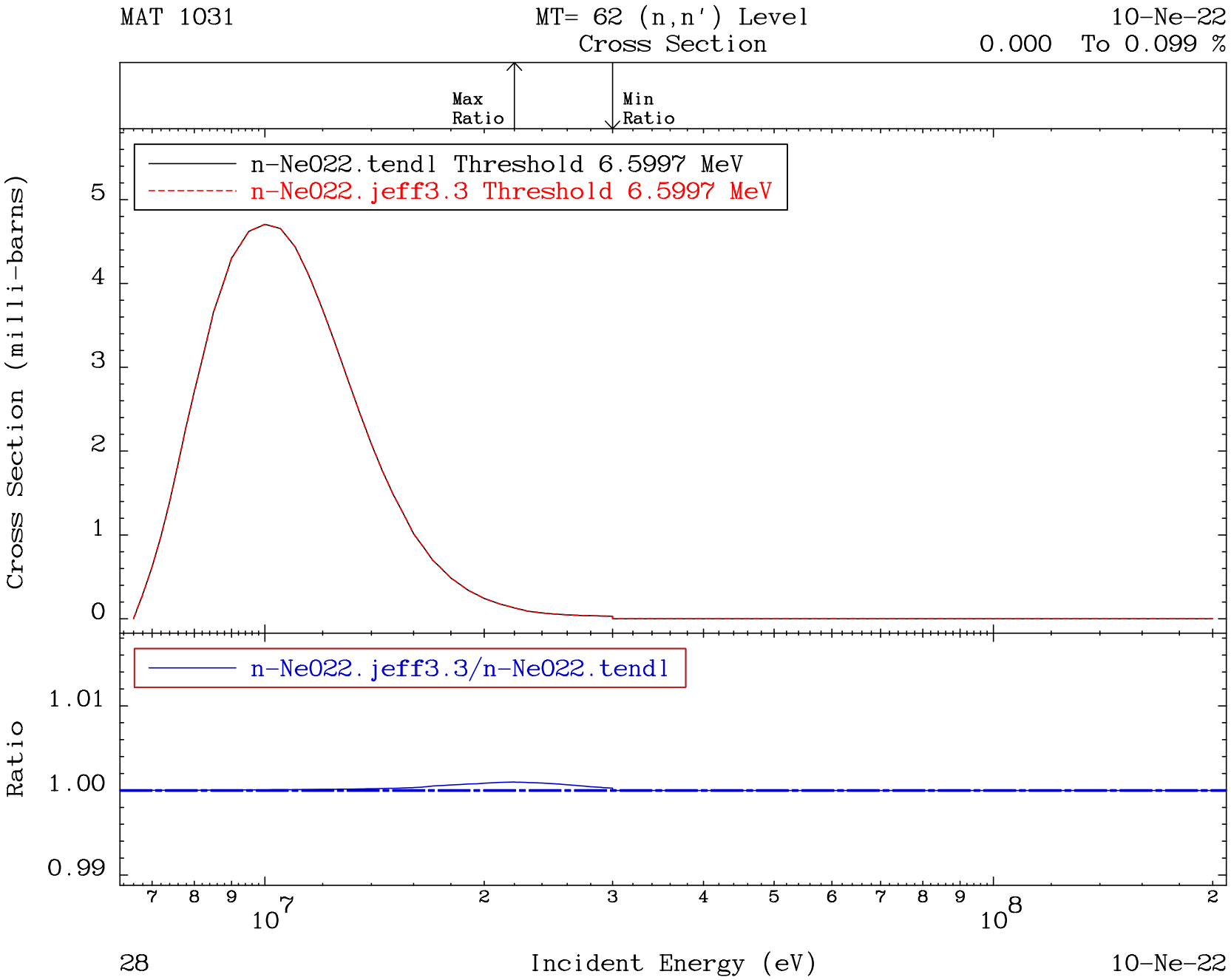

MAT 1031
MT= 56 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.075 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.6092 MeV
n-Ne022.jeff3.3 Threshold 5.6092 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
10-Ne-22

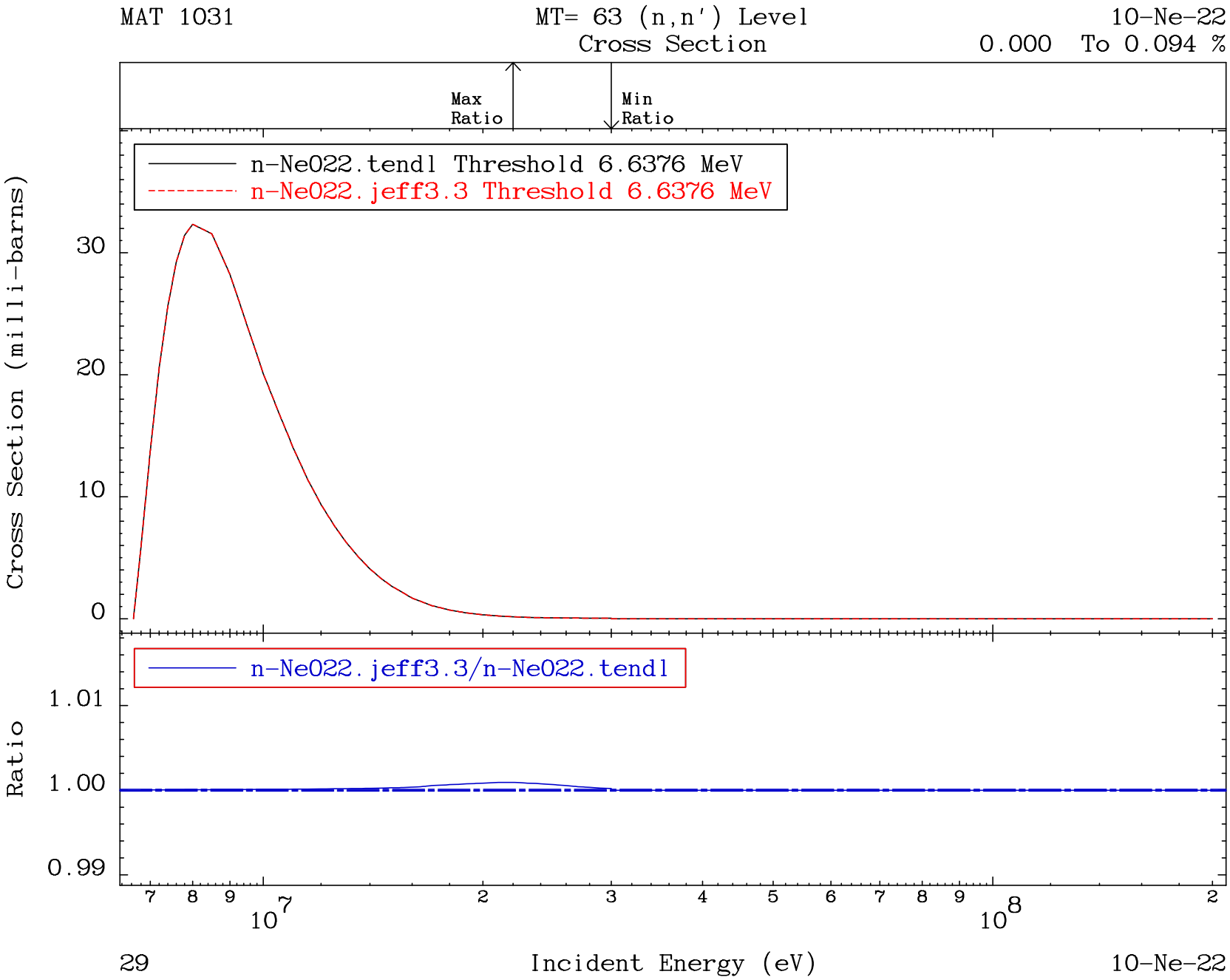

MAT 1031
MT= 57 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.094 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.7771 MeV
n-Ne022.jeff3.3 Threshold 5.7771 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
10-Ne-22

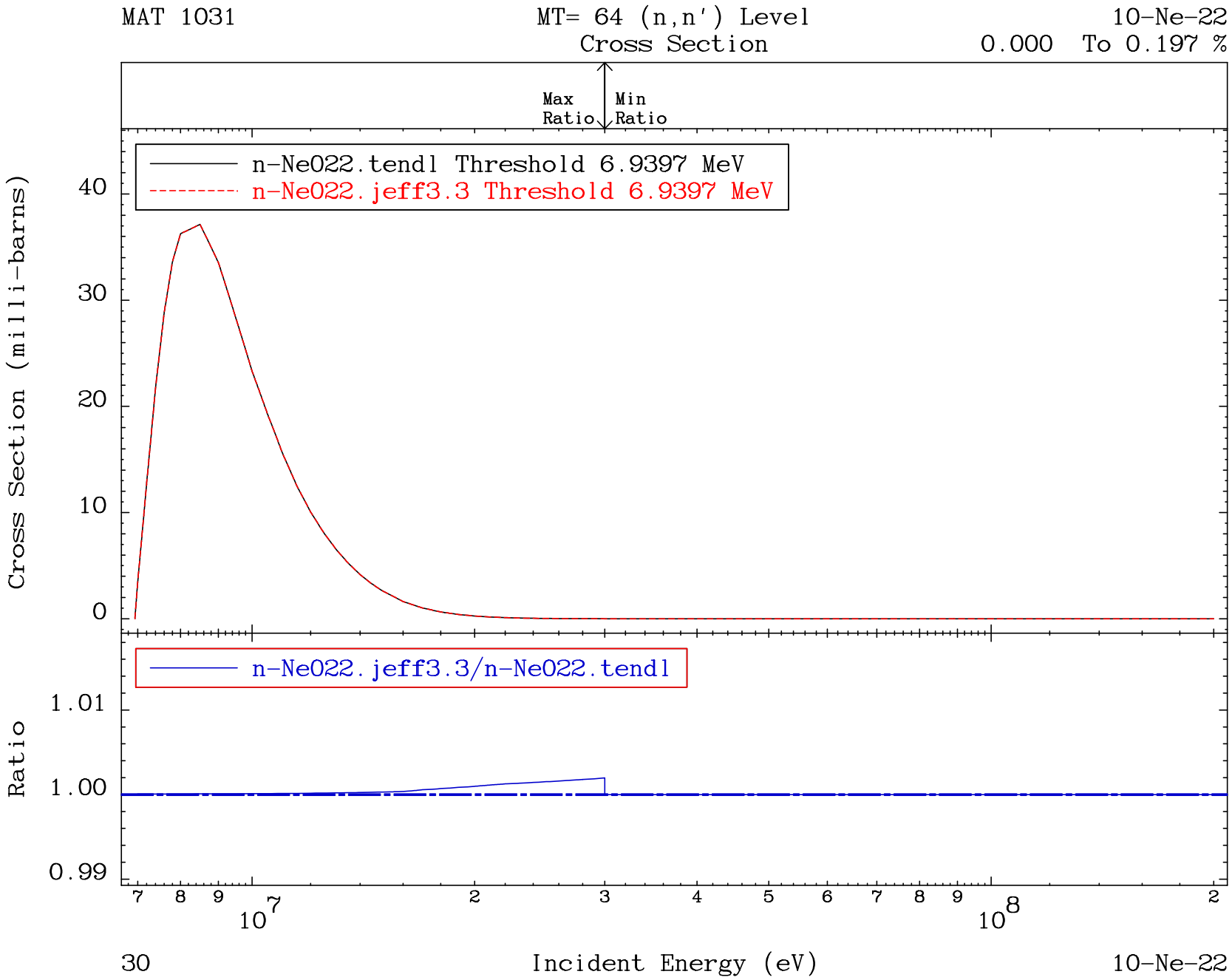

MAT 1031
MT= 58 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.197 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.9002 MeV
n-Ne022.jeff3.3 Threshold 5.9002 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
10-Ne-22

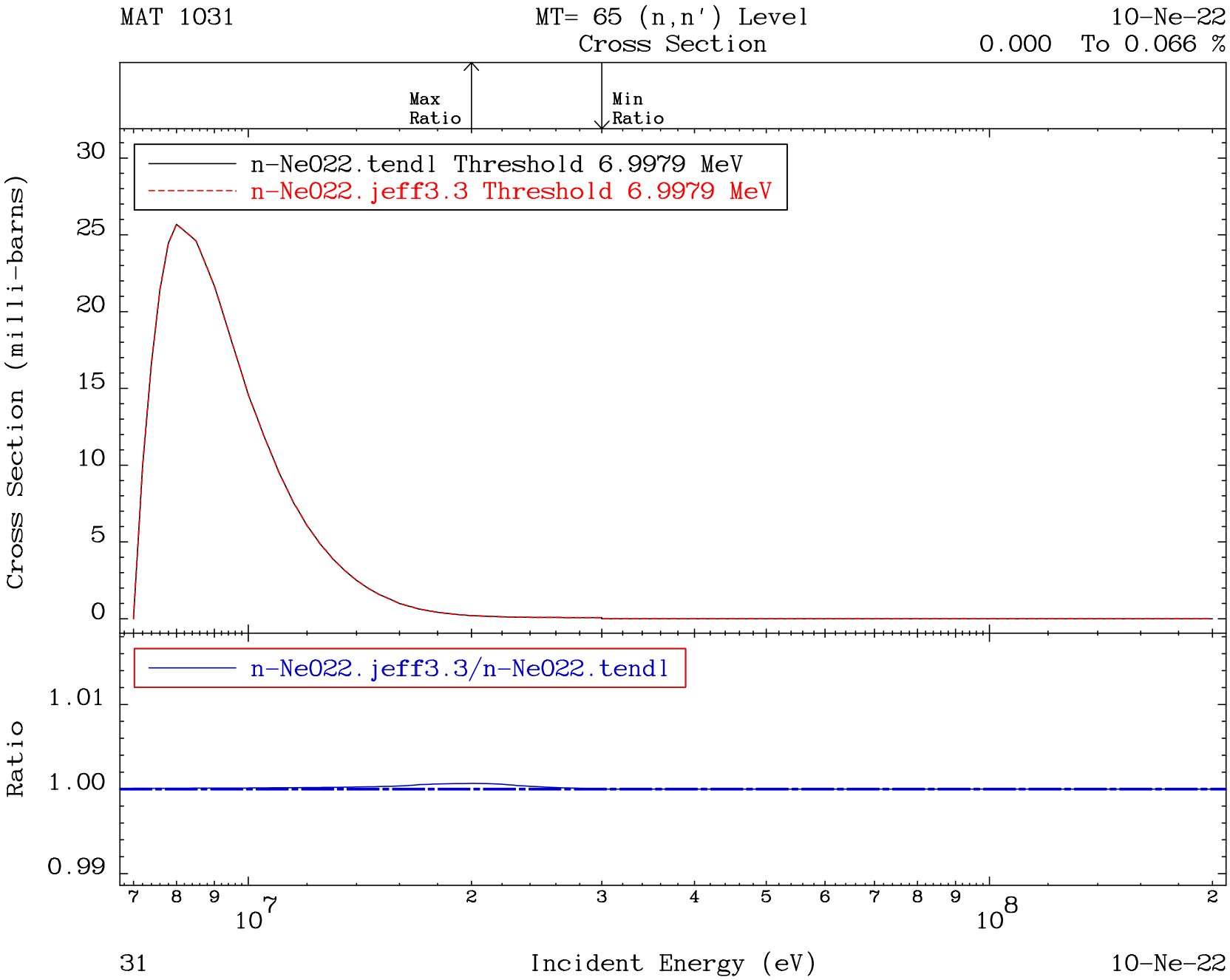

MAT 1031
MT= 60 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.075 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.4008 MeV
n-Ne022.jeff3.3 Threshold 6.4008 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
10-Ne-22

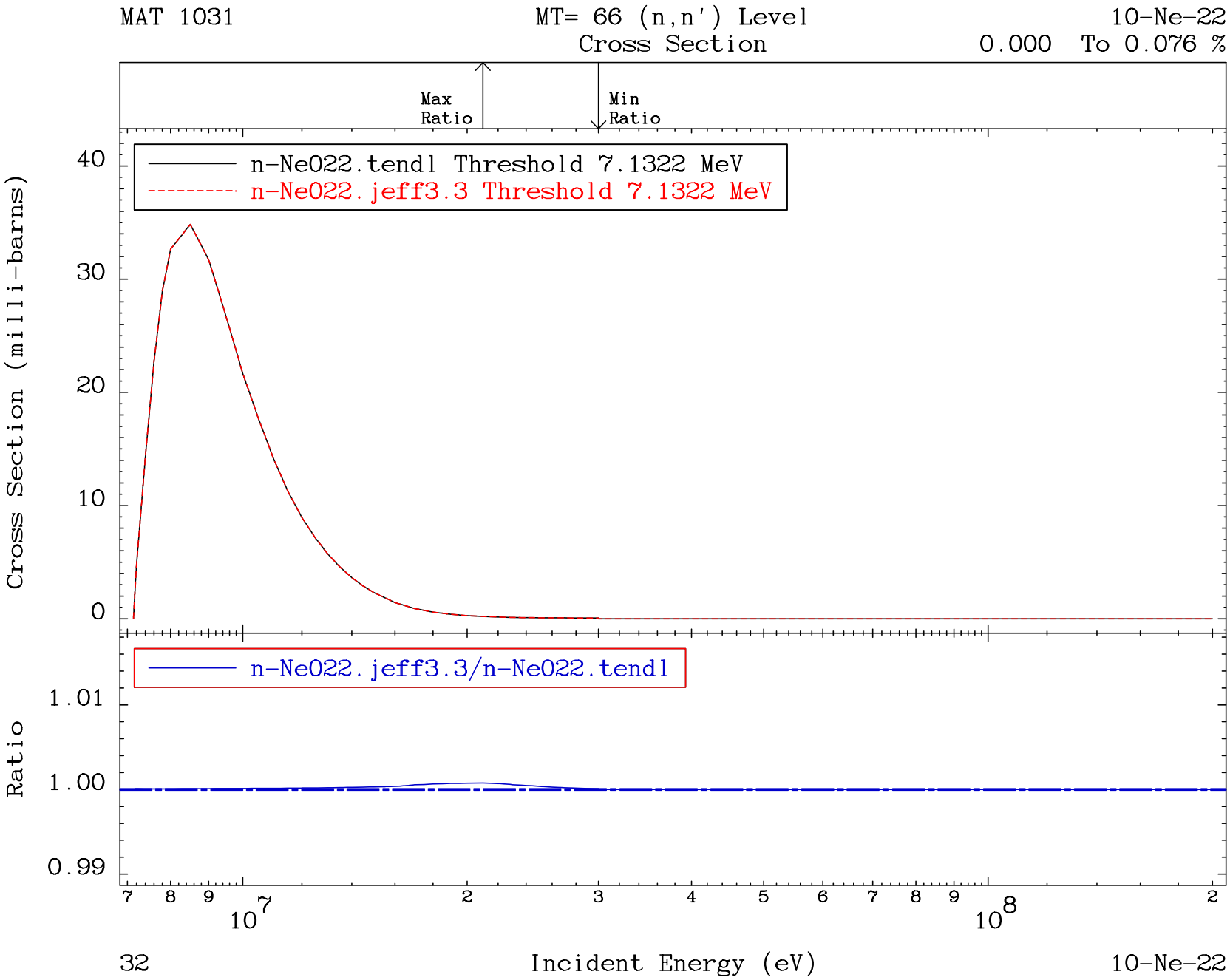

MAT 1031
MT= 61 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.5202 MeV
n-Ne022.jeff3.3 Threshold 6.5202 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
10-Ne-22

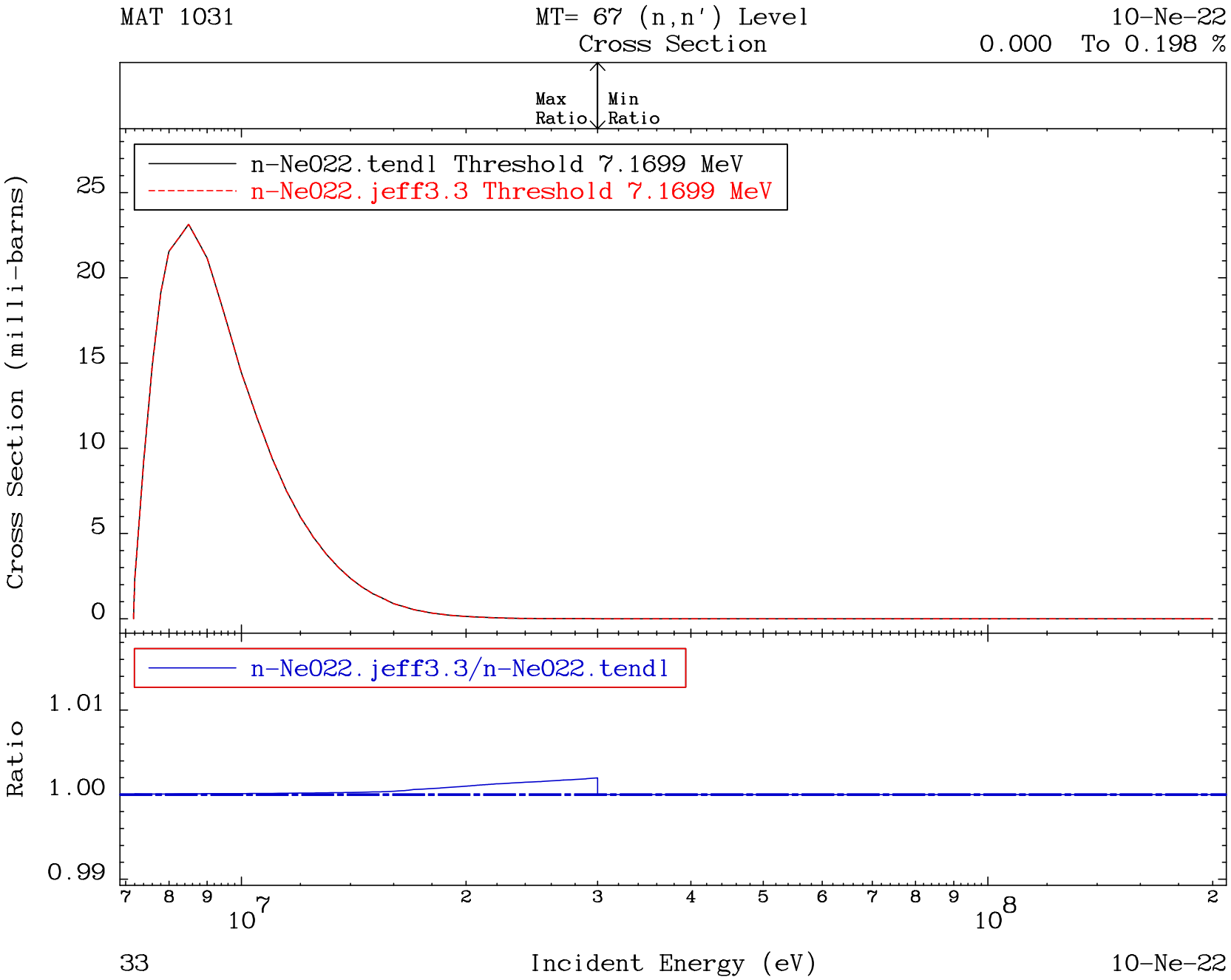

MAT 1031
MT= 62 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.099 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.5997 MeV
n-Ne022.jeff3.3 Threshold 6.5997 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
0.99
1.00
1.01
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
28
10-Ne-22

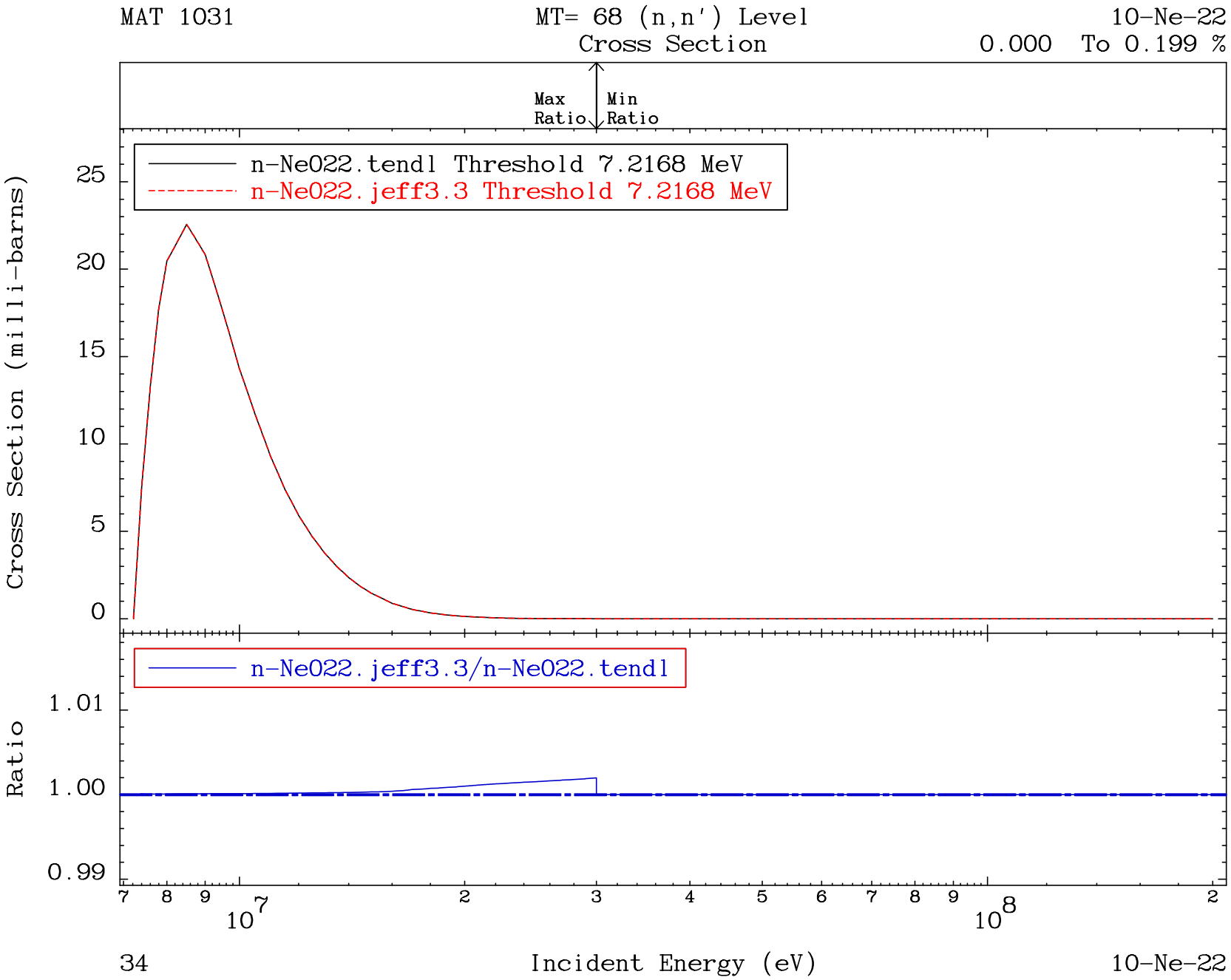

MAT 1031
MT= 63 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.094 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.6376 MeV
n-Ne022.jeff3.3 Threshold 6.6376 MeV
Cross Section (milli-barns)
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
10-Ne-22

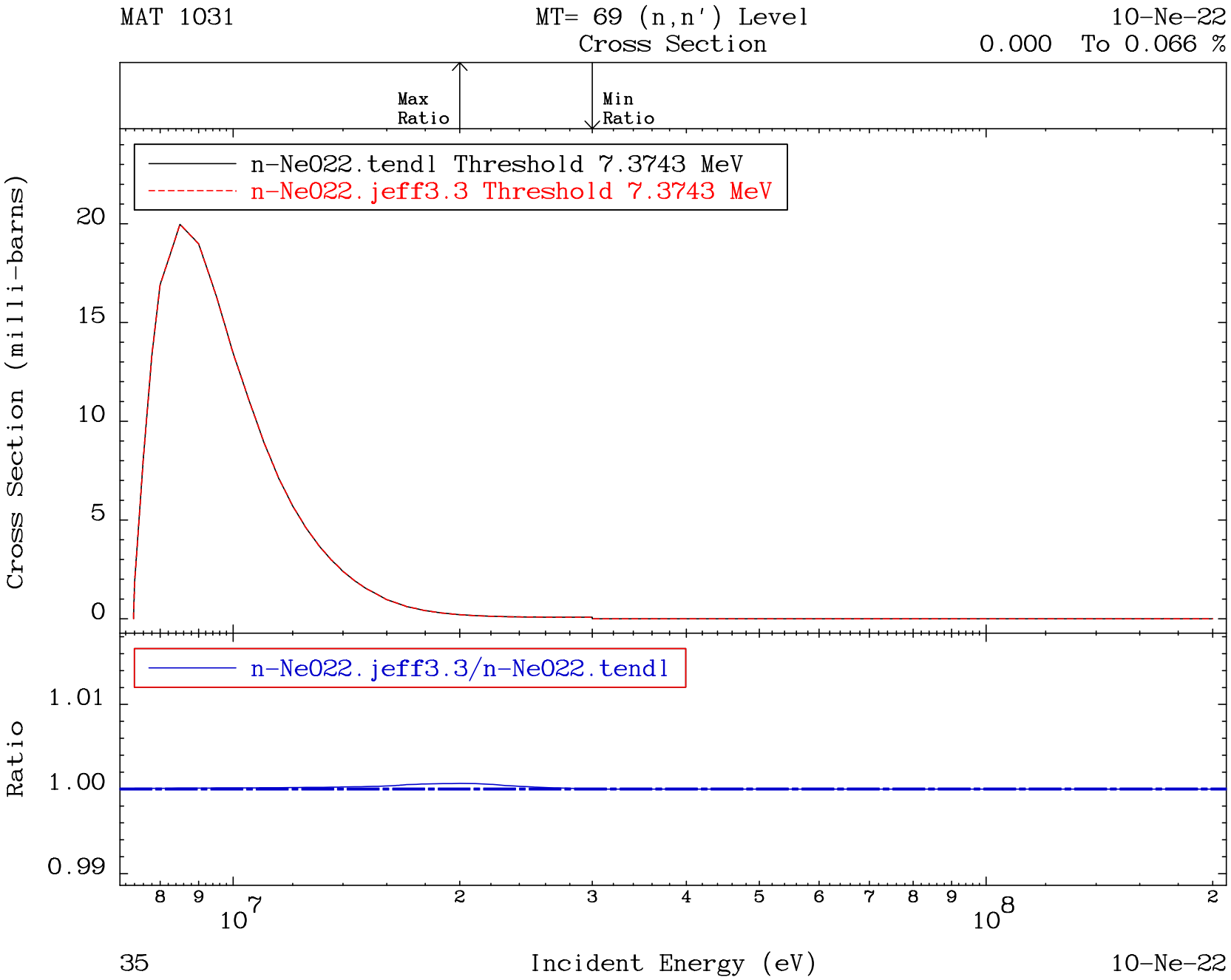

MAT 1031
MT= 64 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.197 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.9397 MeV
n-Ne022.jeff3.3 Threshold 6.9397 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
10-Ne-22

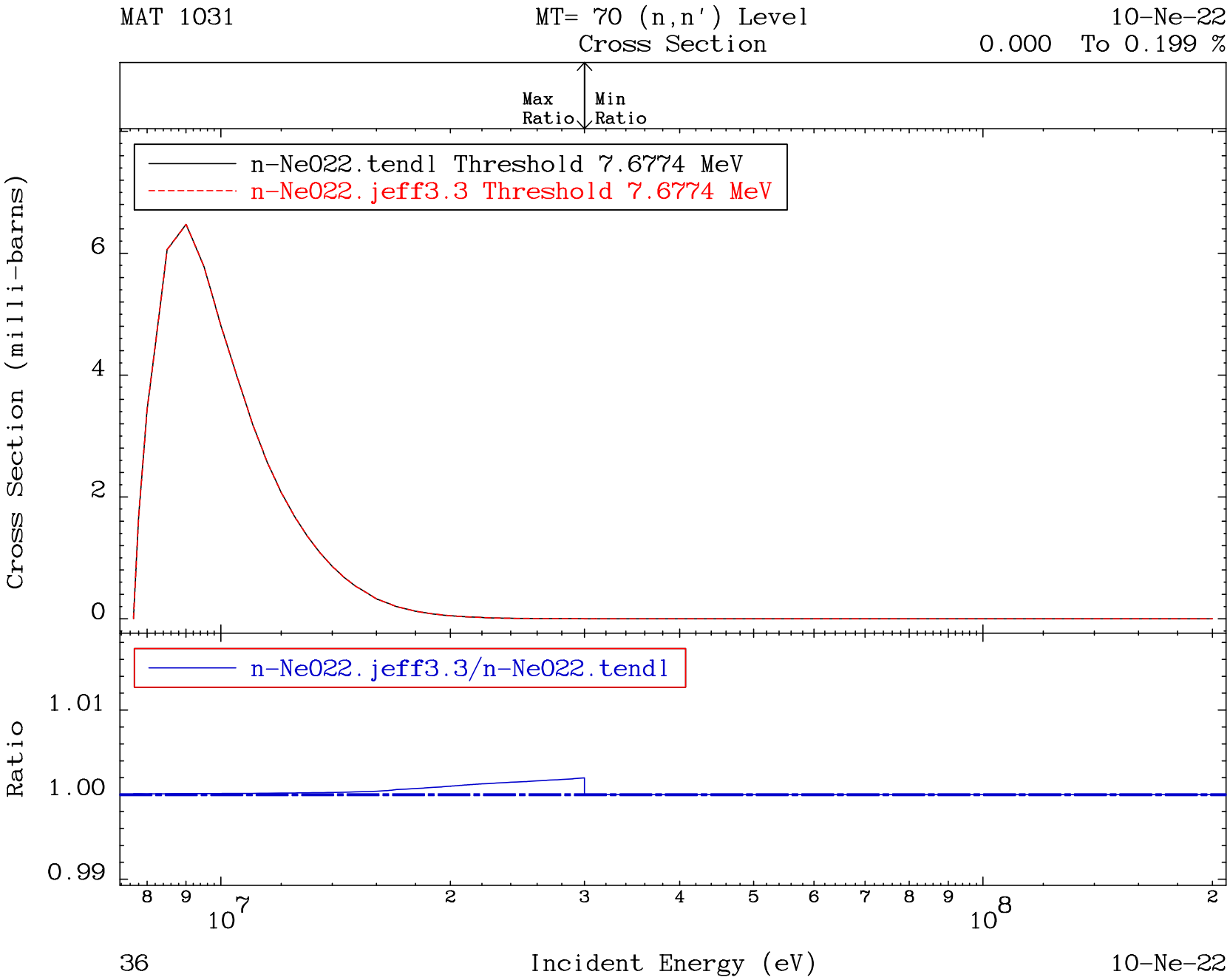

MAT 1031
MT= 65 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.066 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 6.9979 MeV
n-Ne022.jeff3.3 Threshold 6.9979 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
10-Ne-22

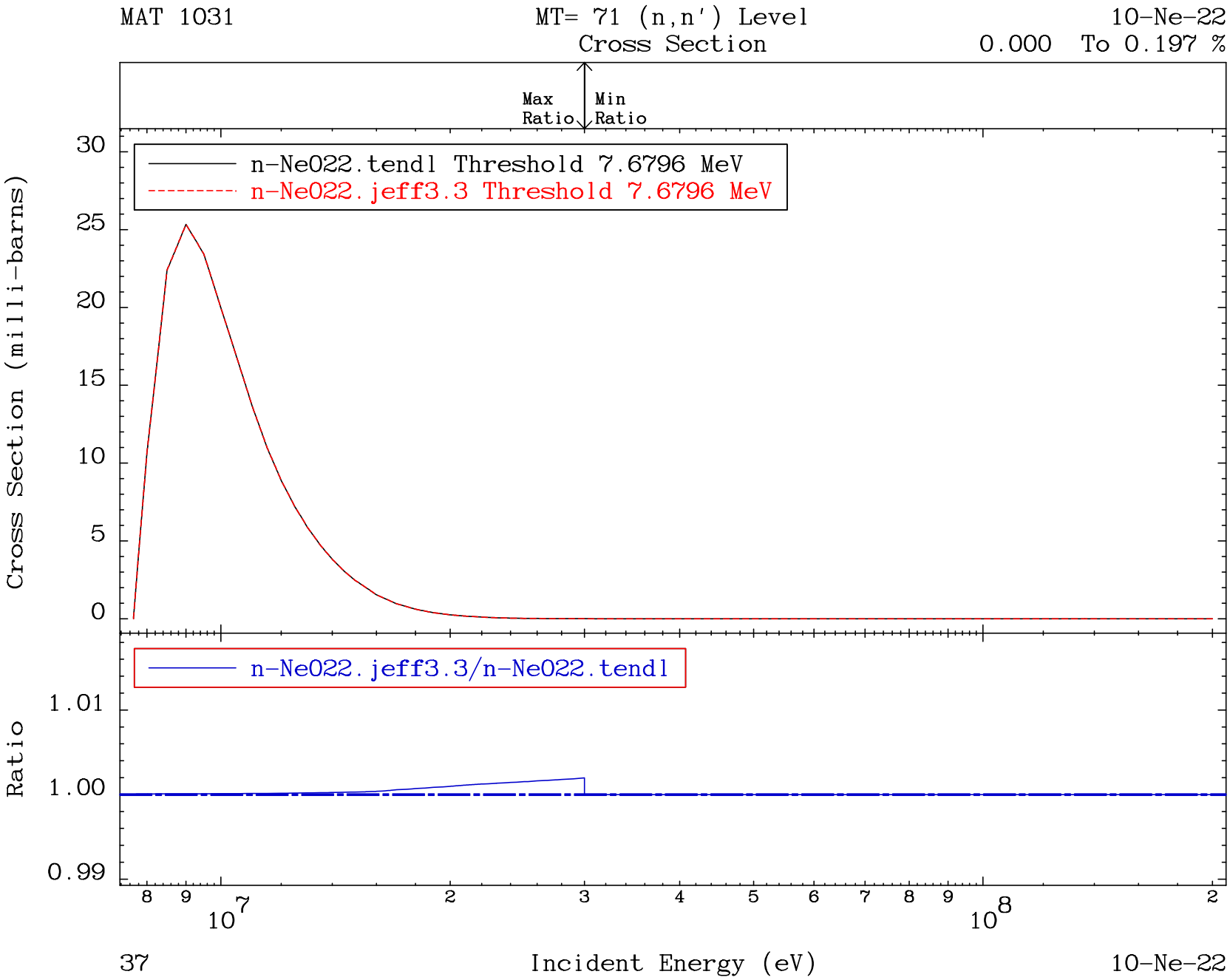

MAT 1031
MT= 66 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.076 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.1322 MeV
n-Ne022.jeff3.3 Threshold 7.1322 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
10-Ne-22

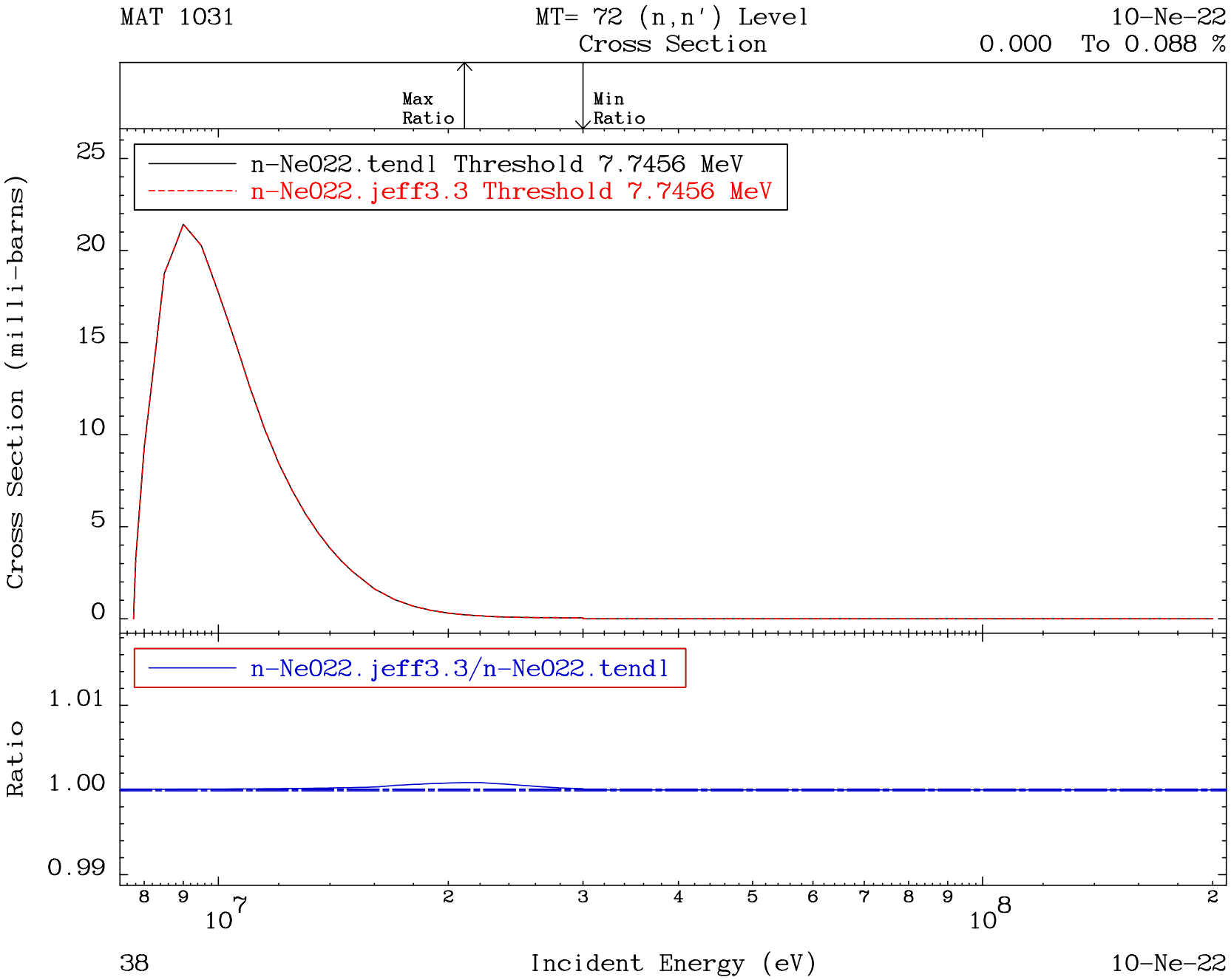

MAT 1031
MT= 67 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.1699 MeV
n-Ne022.jeff3.3 Threshold 7.1699 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
10-Ne-22

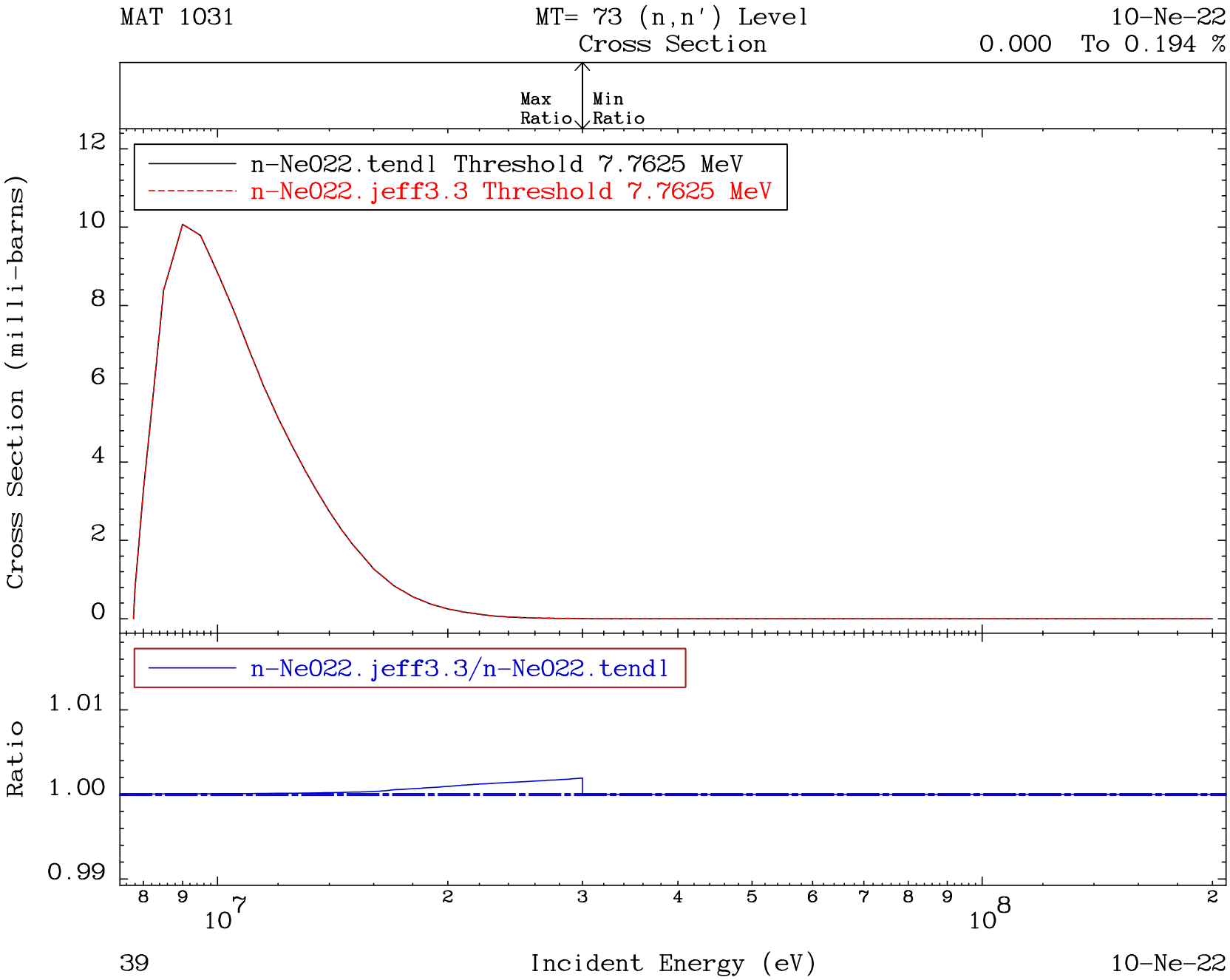

MAT 1031
MT= 68 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.199 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.2168 MeV
n-Ne022.jeff3.3 Threshold 7.2168 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
10-Ne-22

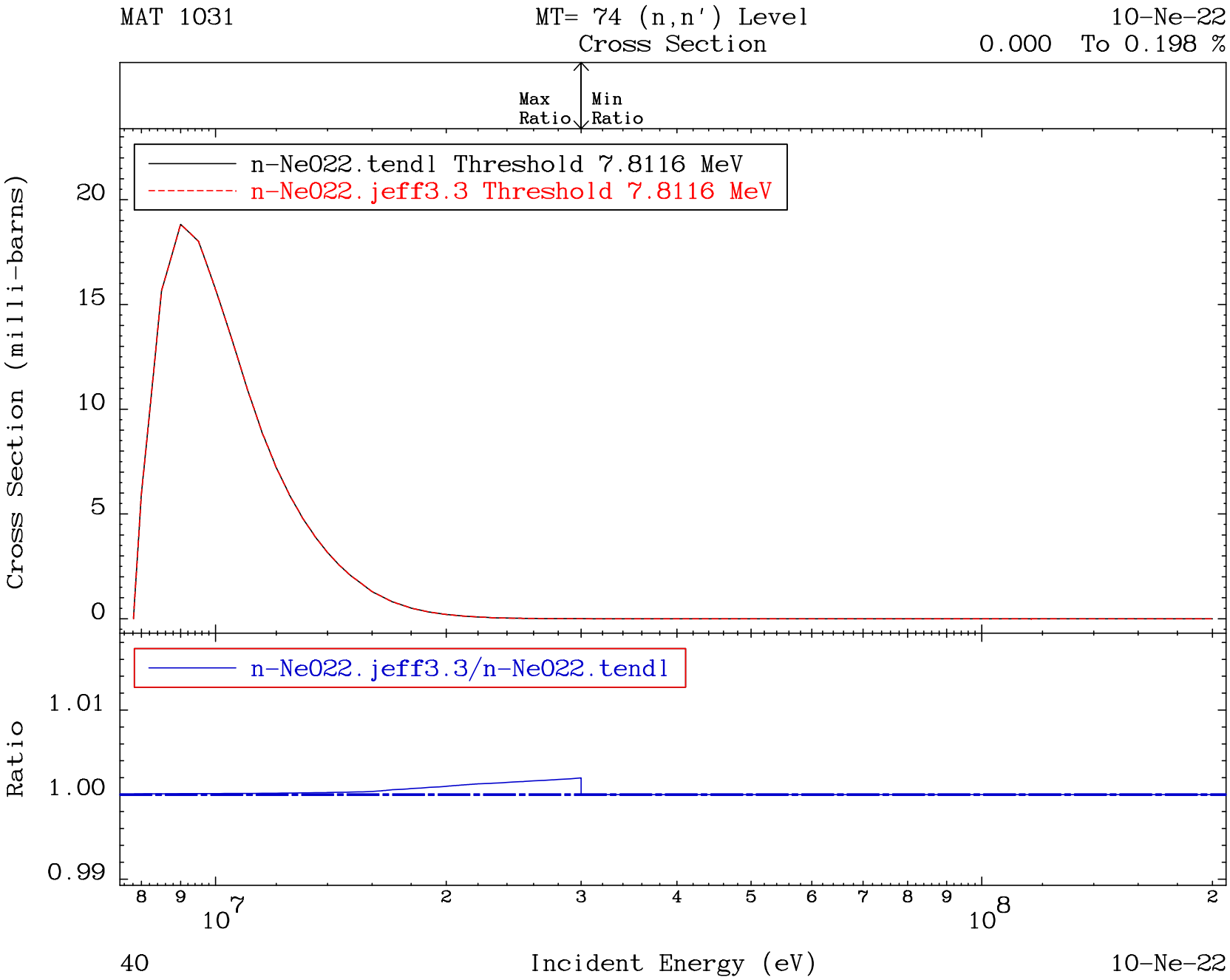

MAT 1031
MT= 69 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.066 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.3743 MeV
n-Ne022.jeff3.3 Threshold 7.3743 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
10-Ne-22

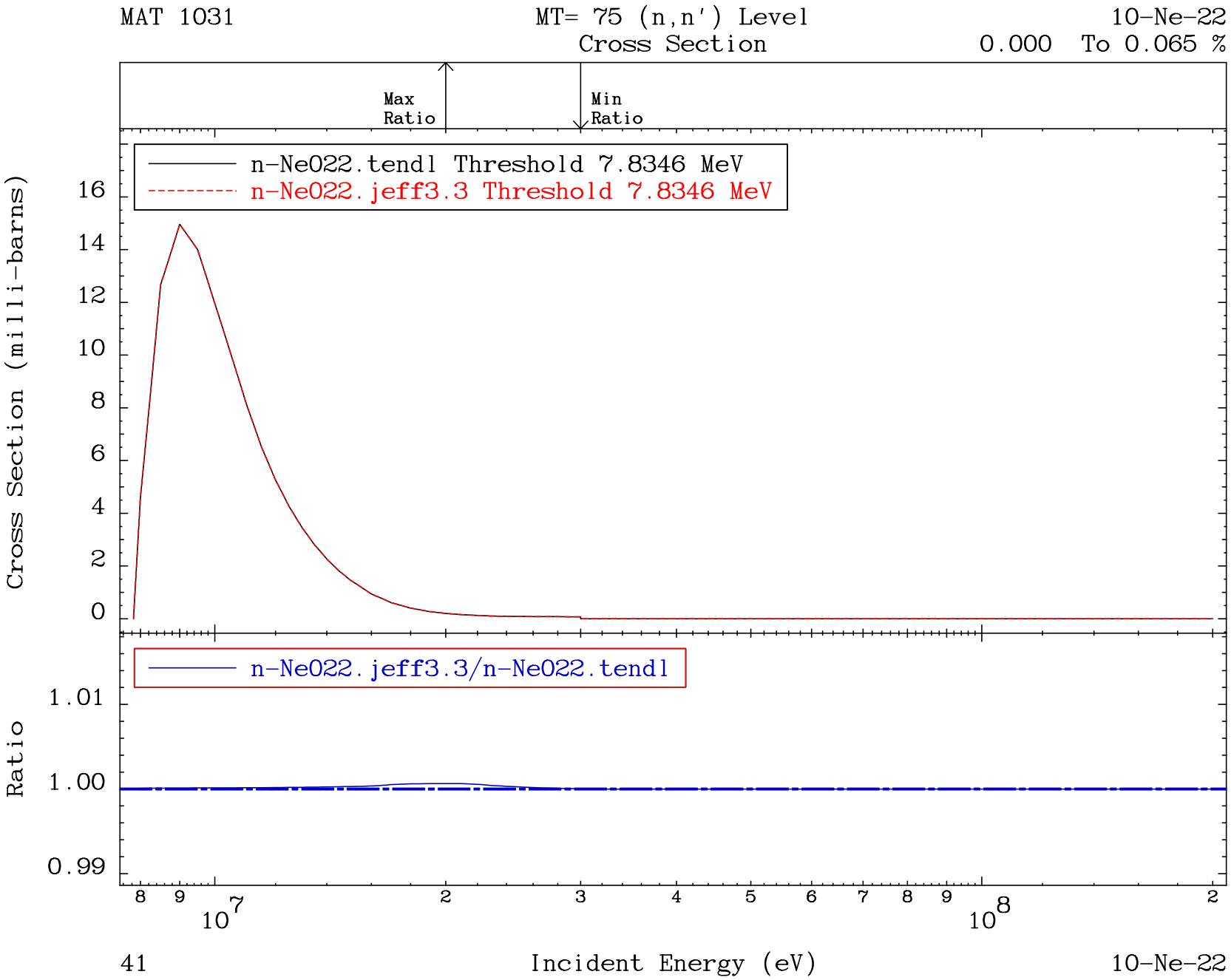

MAT 1031
MT= 70 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.199 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.6774 MeV
n-Ne022.jeff3.3 Threshold 7.6774 MeV
Cross Section (milli-barns)
0
2
4
6
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
0.99
1.00
1.01
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
10-Ne-22

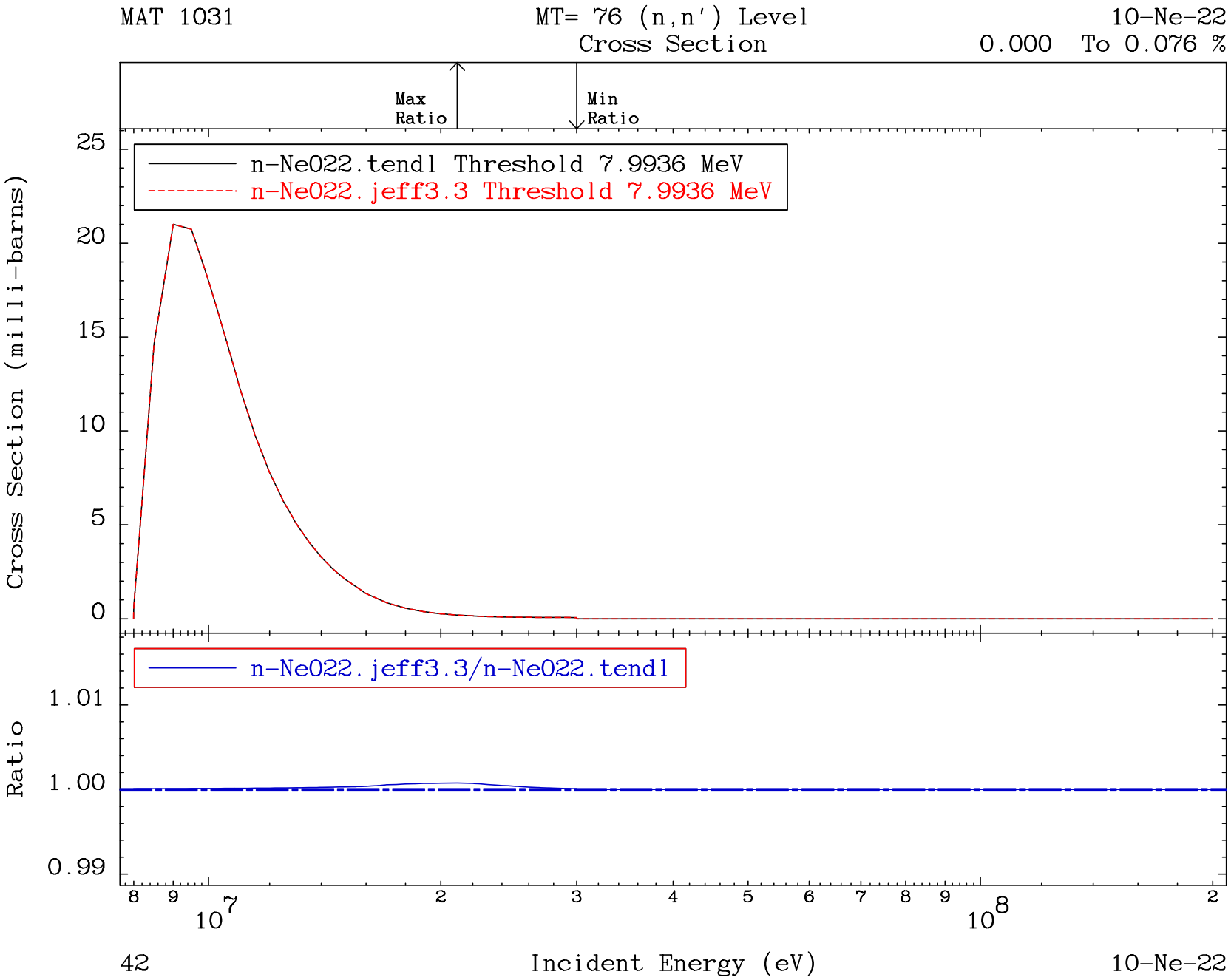

MAT 1031
MT= 71 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.197 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.6796 MeV
n-Ne022.jeff3.3 Threshold 7.6796 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
10-Ne-22

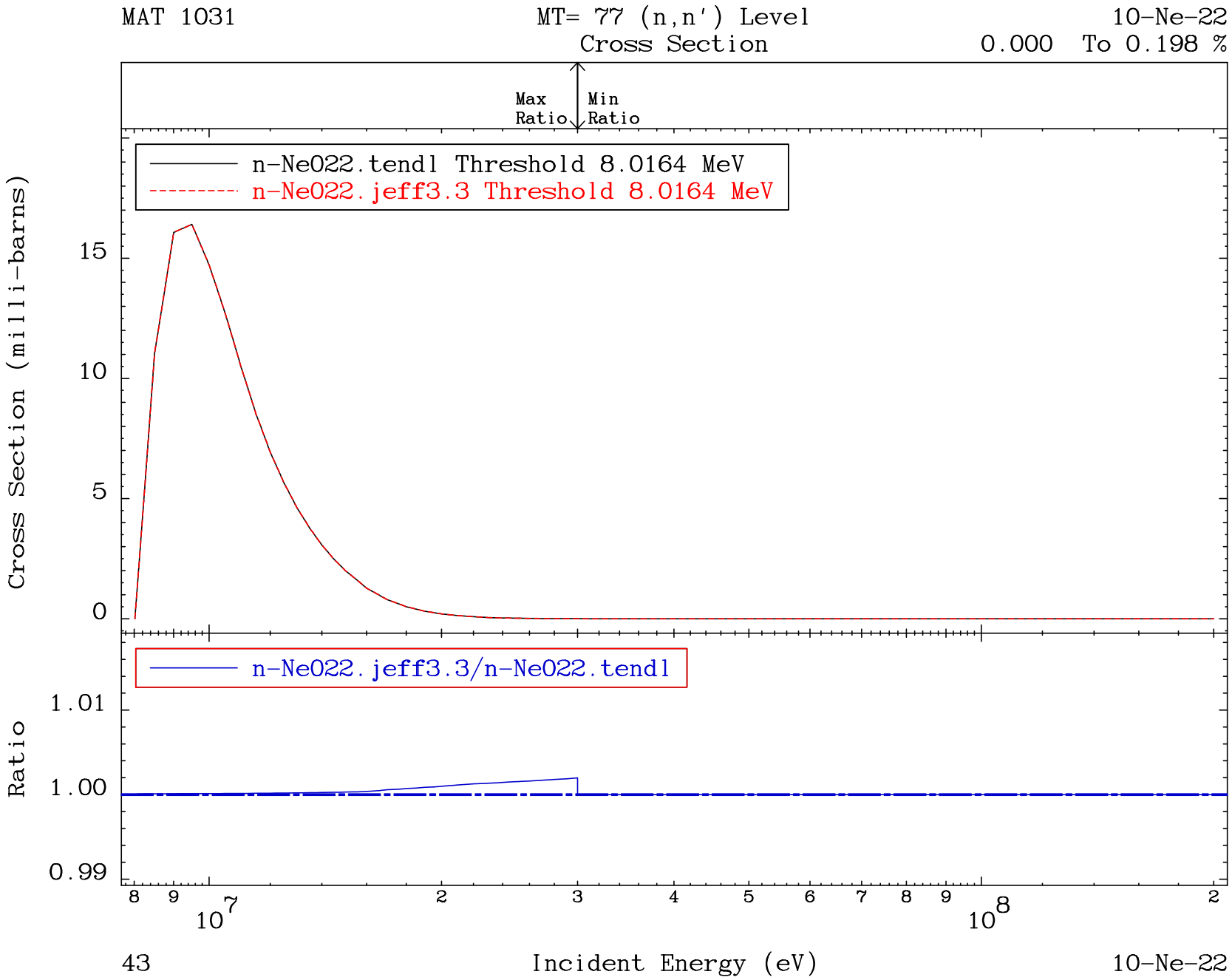

MAT 1031
MT= 72 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.088 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.7456 MeV
n-Ne022.jeff3.3 Threshold 7.7456 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
10-Ne-22

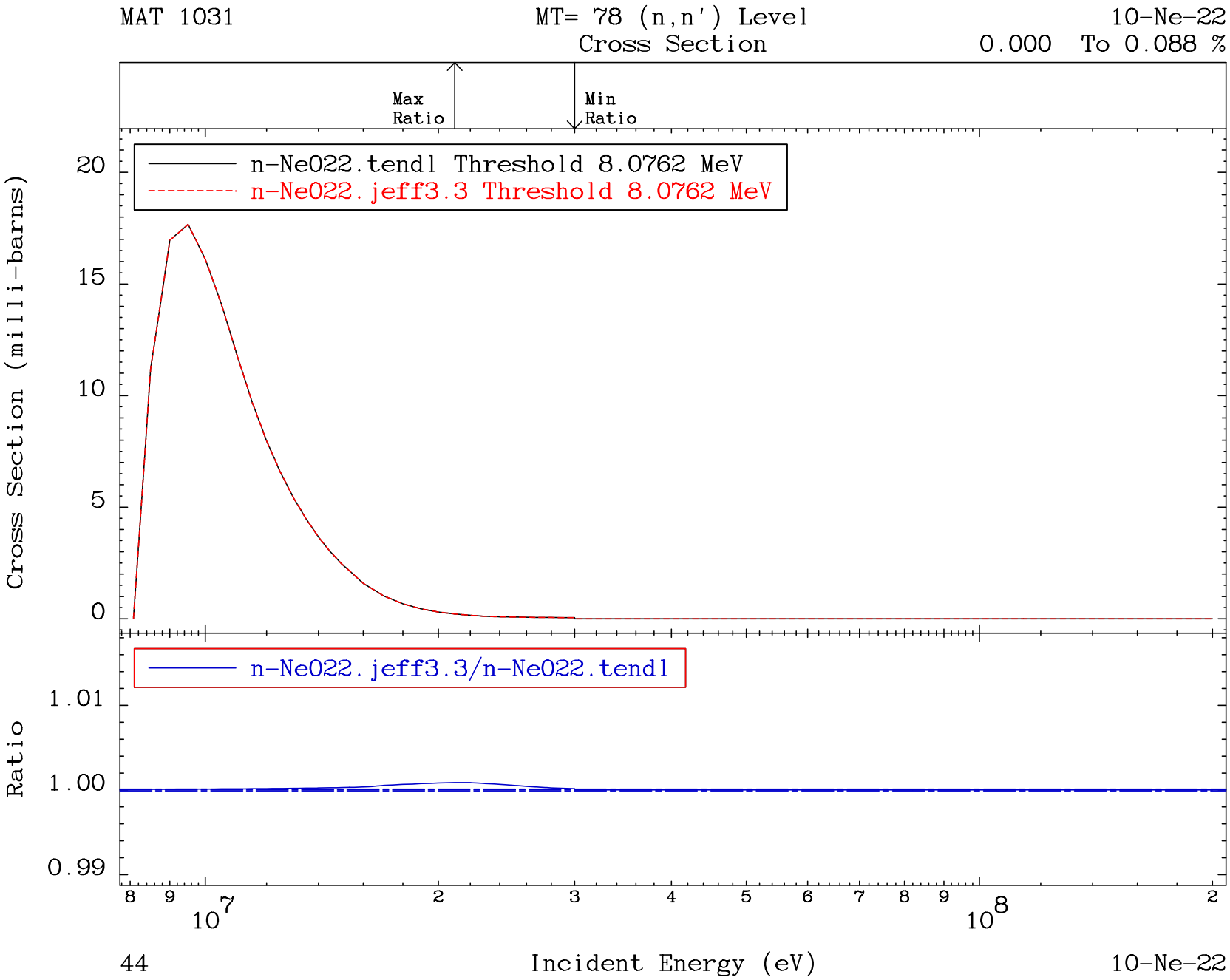

MAT 1031
MT= 73 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.194 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.7625 MeV
n-Ne022.jeff3.3 Threshold 7.7625 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
10-Ne-22

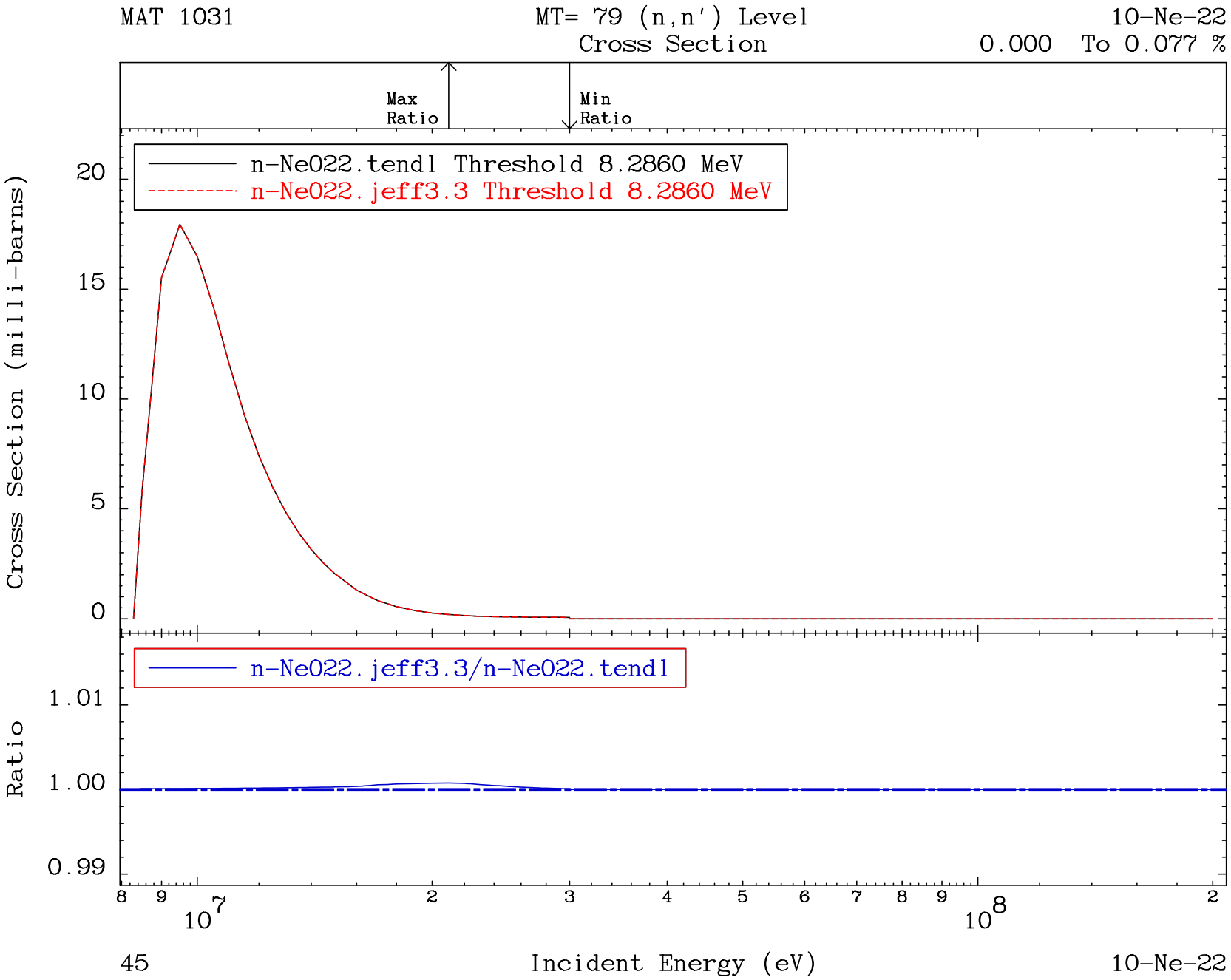

MAT 1031
MT= 74 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.8116 MeV
n-Ne022.jeff3.3 Threshold 7.8116 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
10-Ne-22

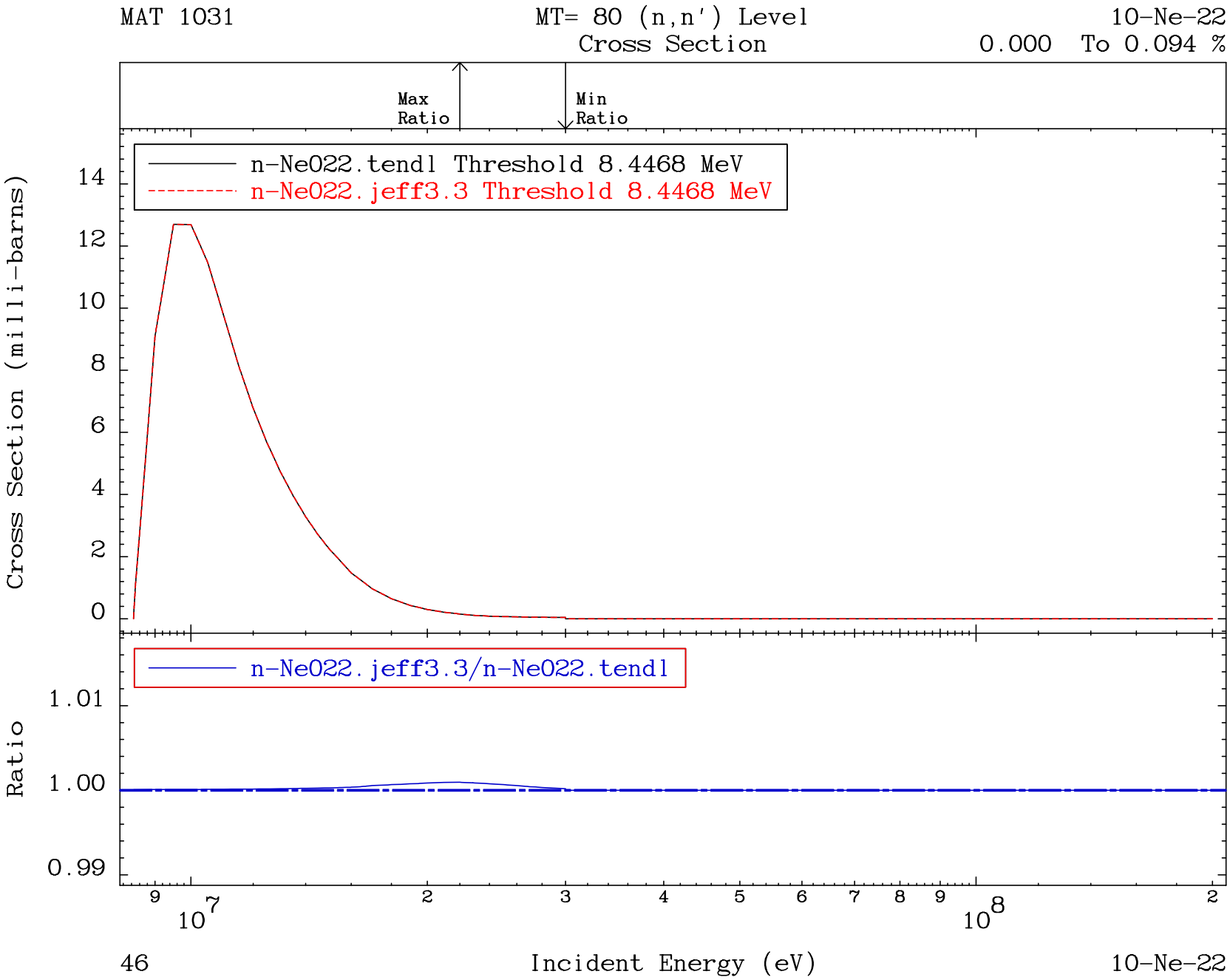

MAT 1031
MT= 75 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.065 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.8346 MeV
n-Ne022.jeff3.3 Threshold 7.8346 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
10-Ne-22

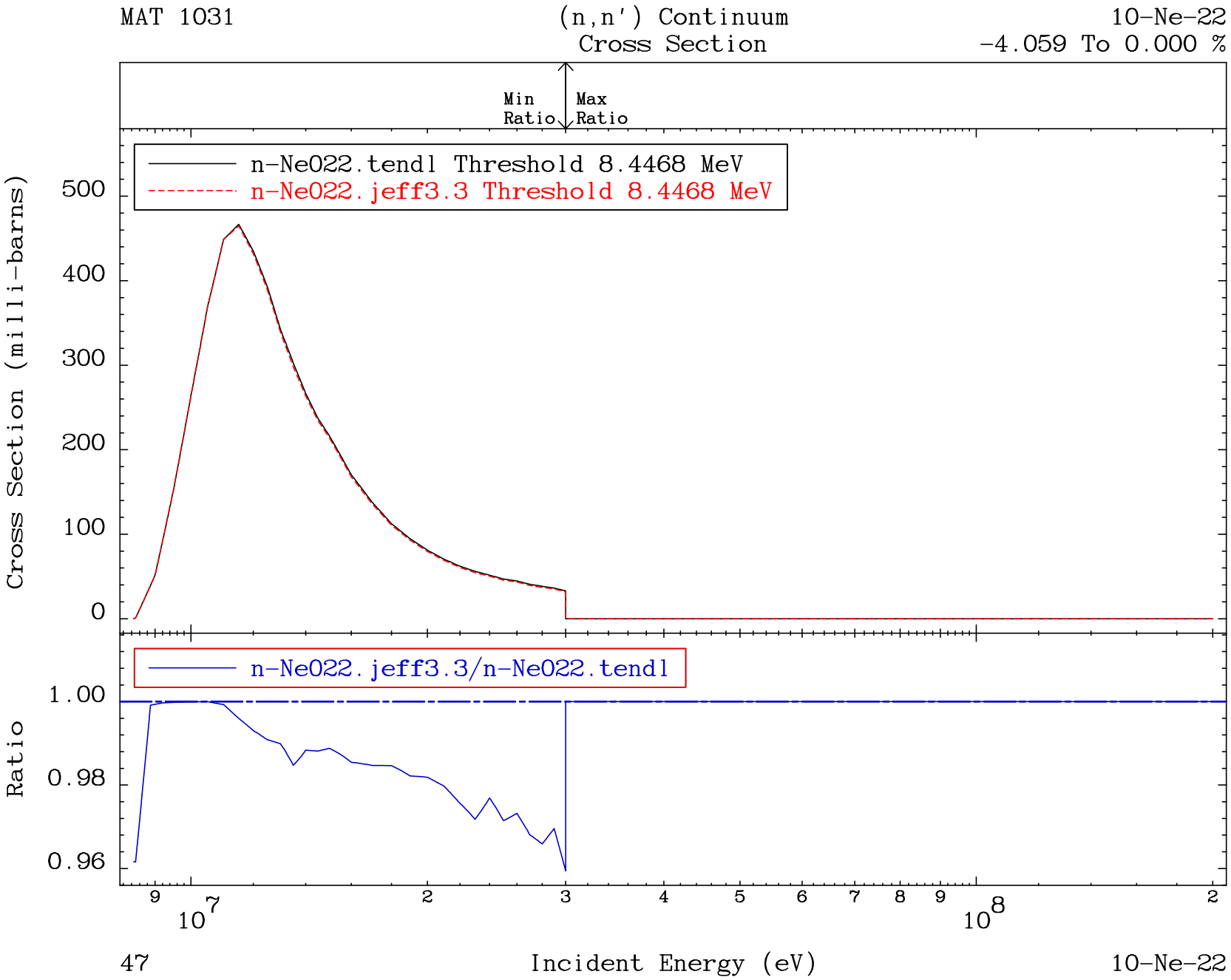

MAT 1031
MT= 76 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.076 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 7.9936 MeV
n-Ne022.jeff3.3 Threshold 7.9936 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
10-Ne-22

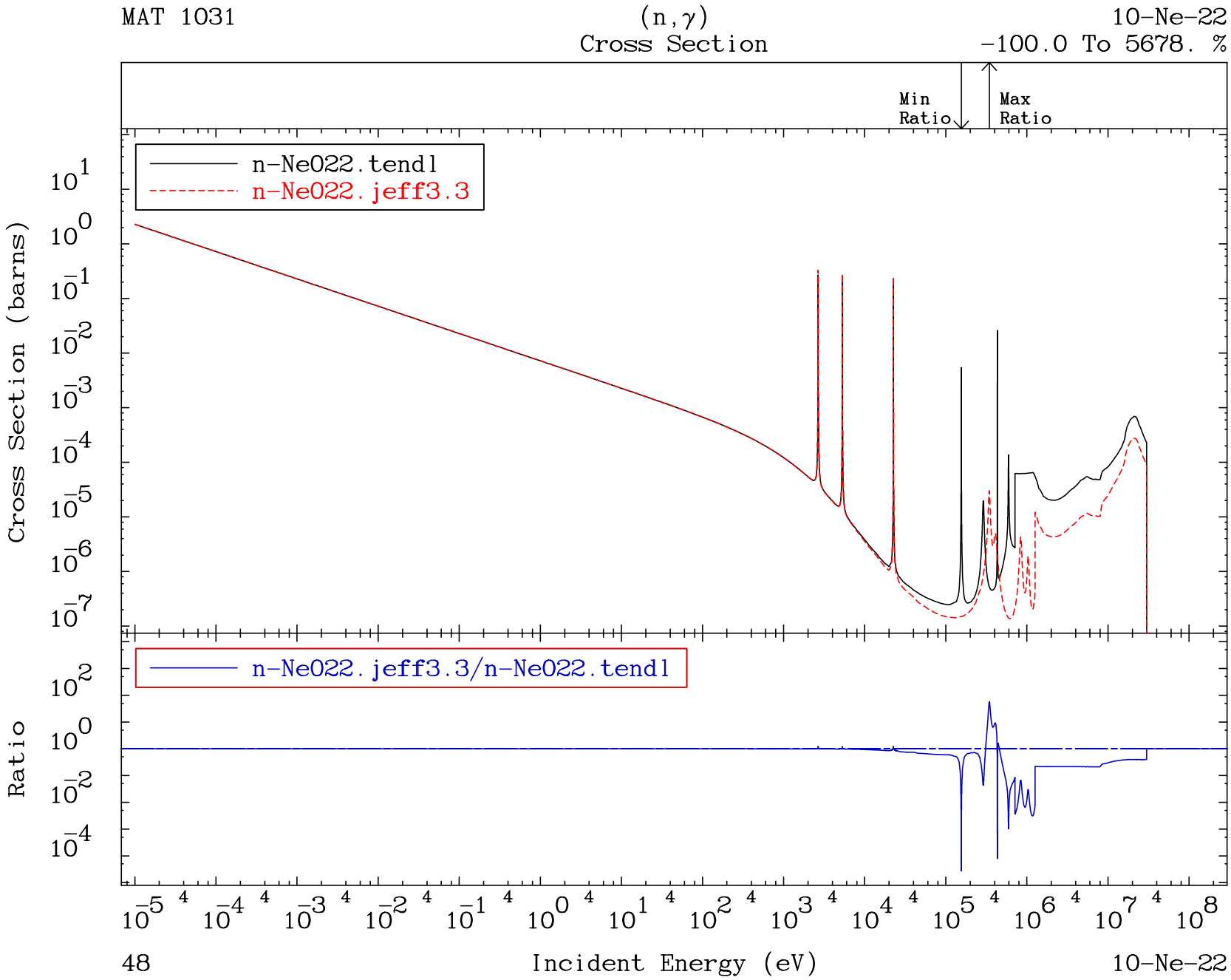

MAT 1031
MT= 77 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.198 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 8.0164 MeV
n-Ne022.jeff3.3 Threshold 8.0164 MeV
Cross Section (milli-barns)
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
10-Ne-22

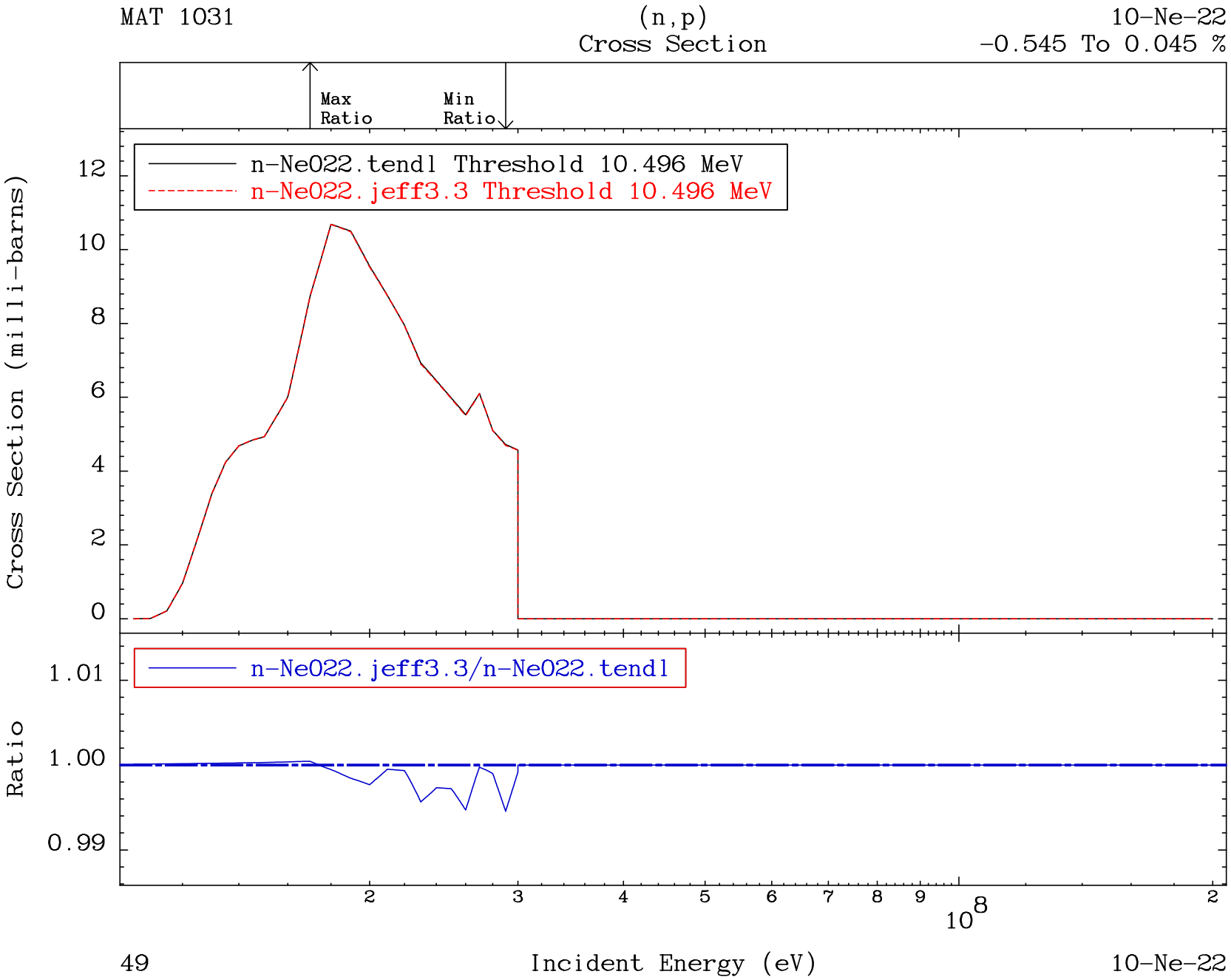

MAT 1031
MT= 78 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.088 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 8.0762 MeV
n-Ne022.jeff3.3 Threshold 8.0762 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
10-Ne-22

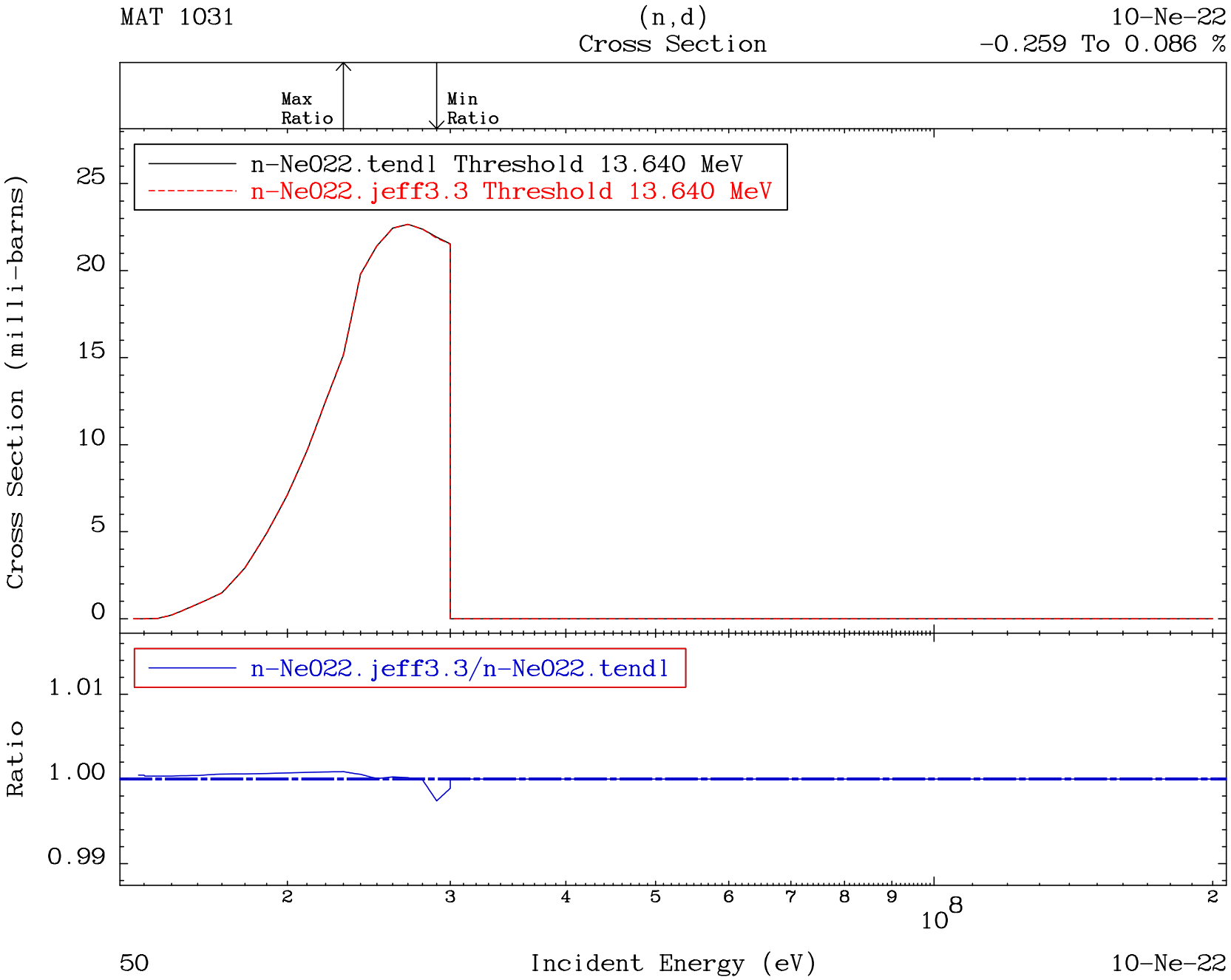

MAT 1031
MT= 79 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.077 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 8.2860 MeV
n-Ne022.jeff3.3 Threshold 8.2860 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
10-Ne-22

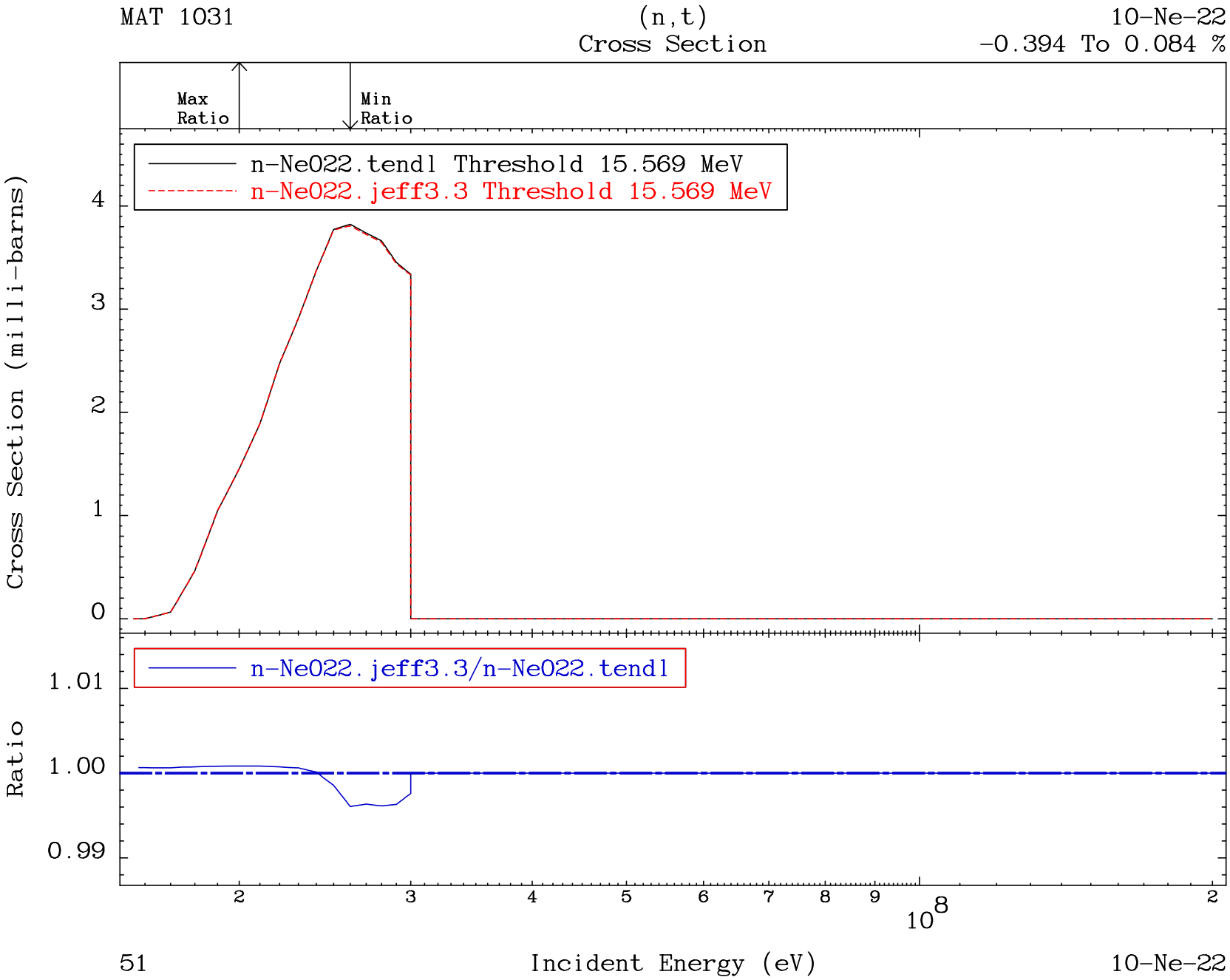

MAT 1031
MT= 80 (n,n') Level
Cross Section
10-Ne-22
0.000 To 0.094 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 8.4468 MeV
n-Ne022.jeff3.3 Threshold 8.4468 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
10-Ne-22

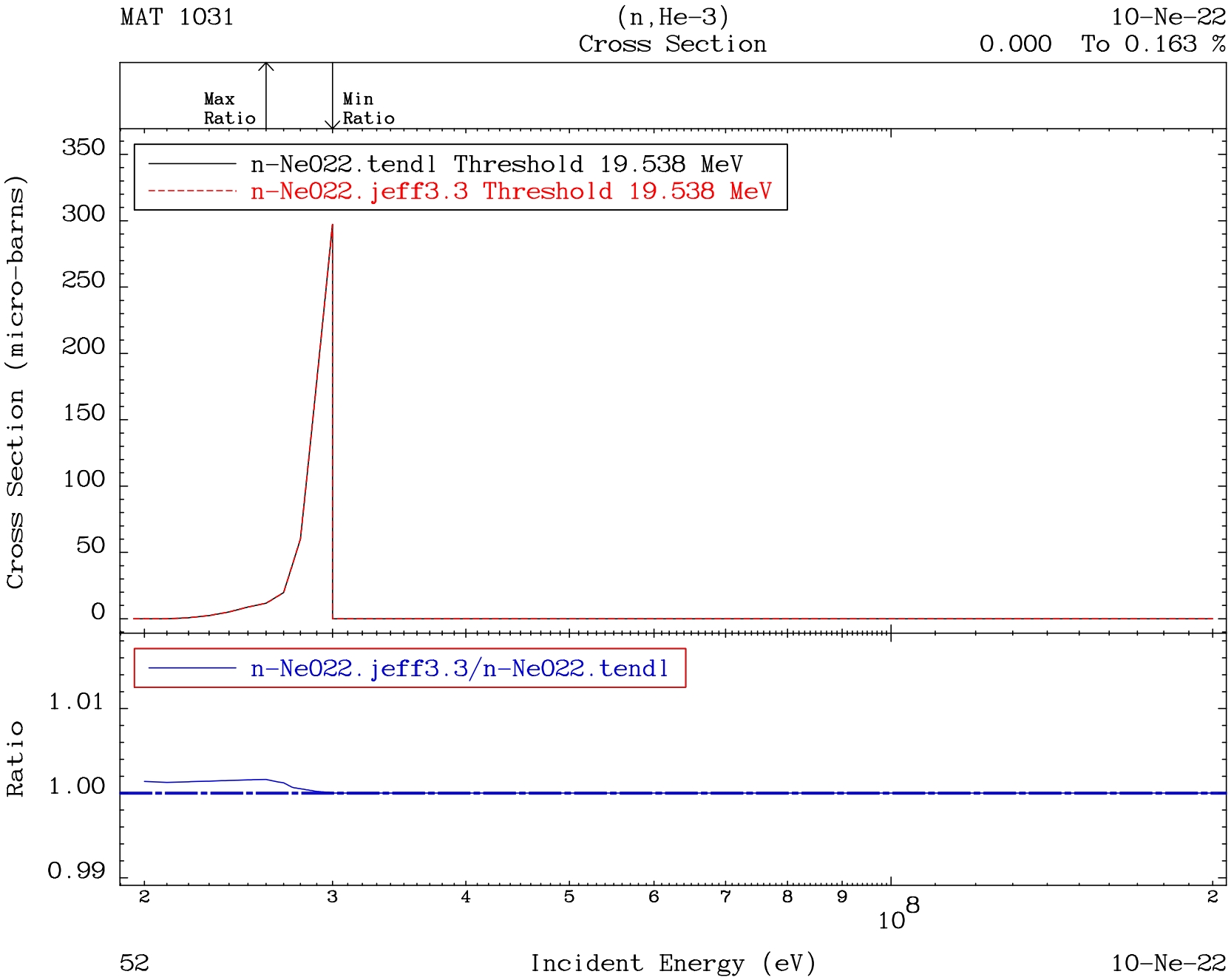

MAT 1031
(n,n') Continuum
Cross Section
10-Ne-22
-4.059 To 0.000 %
Min Ratio
Max Ratio
n-Ne022.tendl Threshold 8.4468 MeV
n-Ne022.jeff3.3 Threshold 8.4468 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
0.98
0.96
9
10^7
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
10-Ne-22

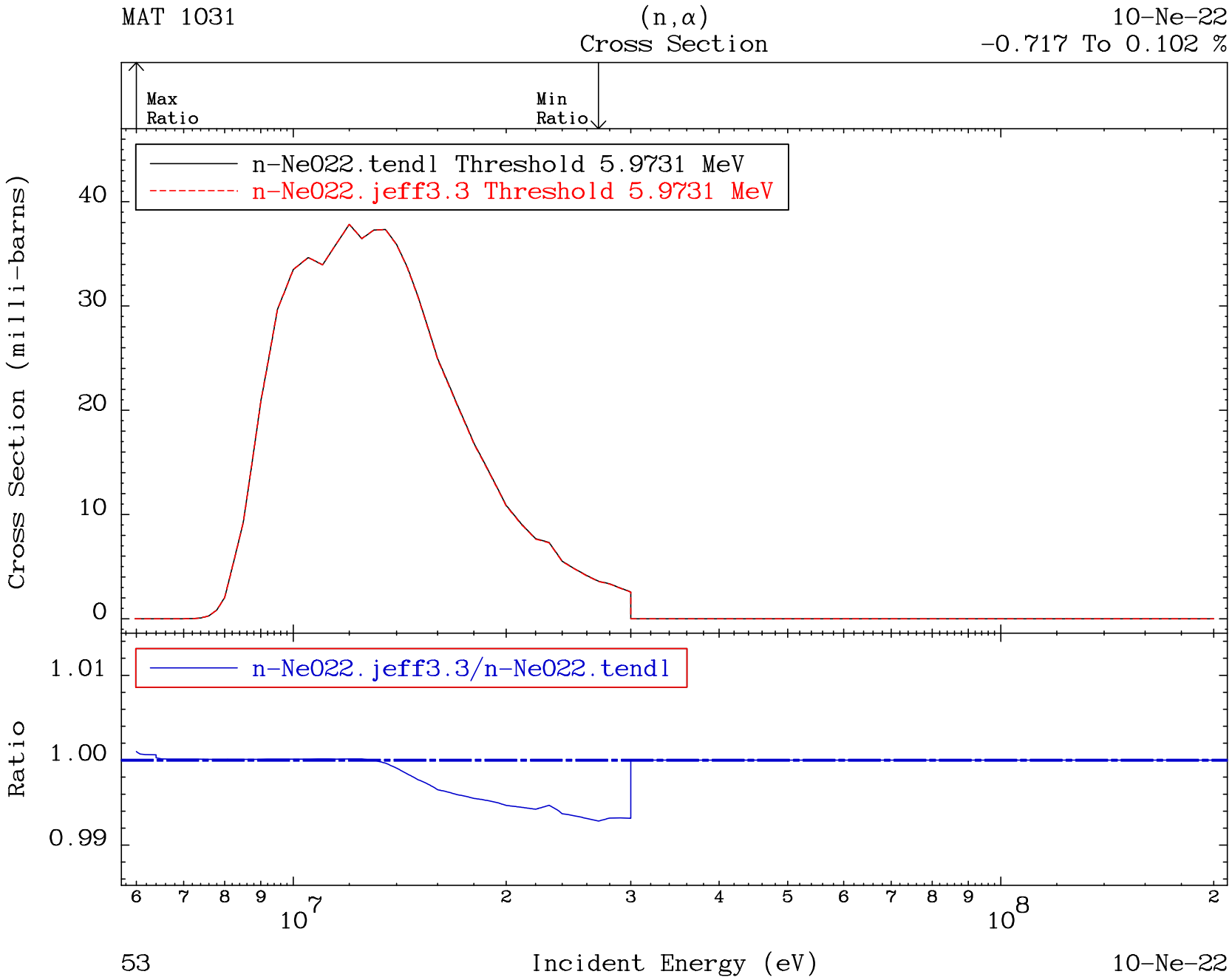

MAT 1031
(n,γ)
Cross Section
10-Ne-22
-100.0 To 5678. %
Min Ratio
Max Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
48
10-Ne-22

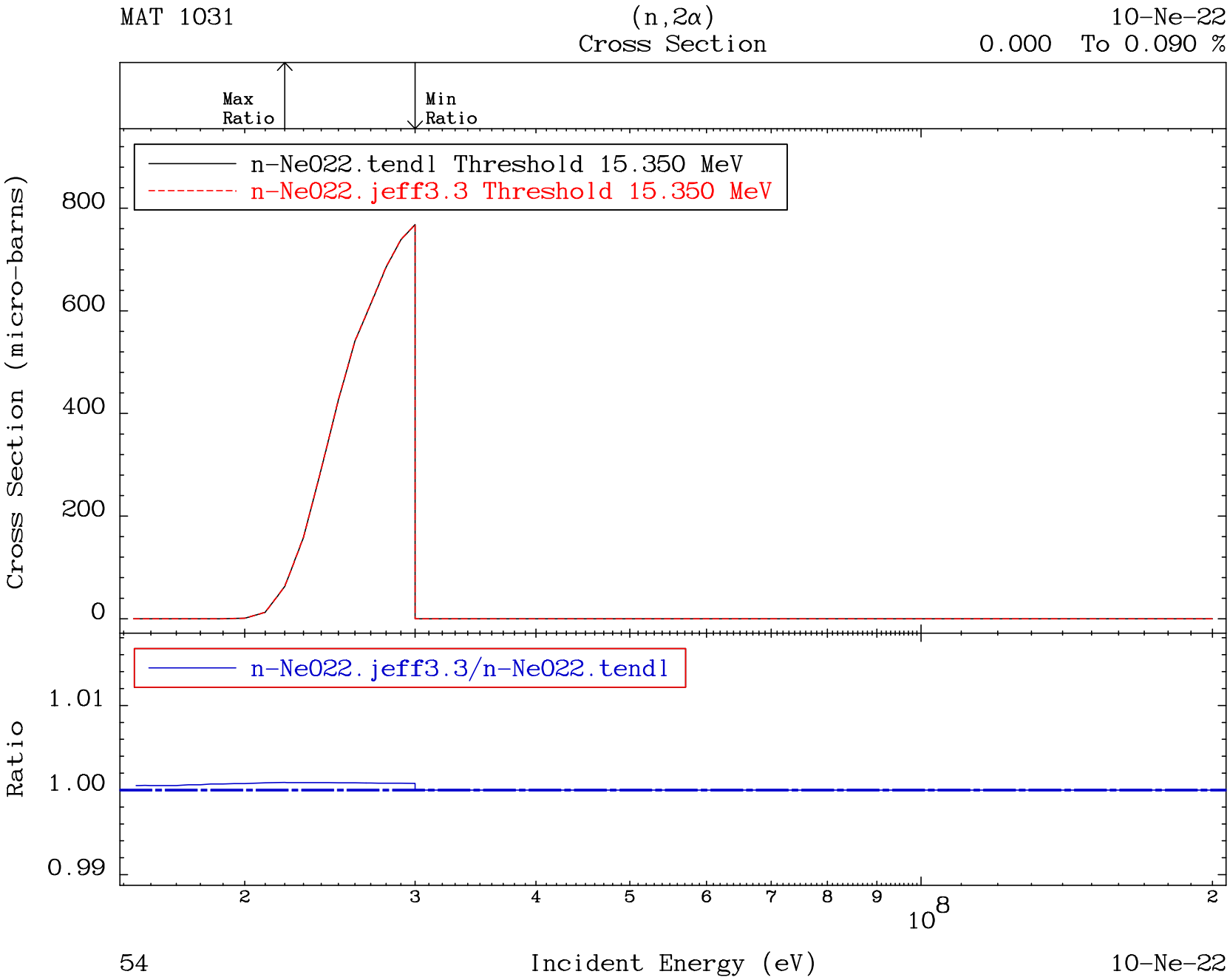

MAT 1031
(n,p)
Cross Section
10-Ne-22
-0.545 To 0.045 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 10.496 MeV
n-Ne022.jeff3.3 Threshold 10.496 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
10-Ne-22

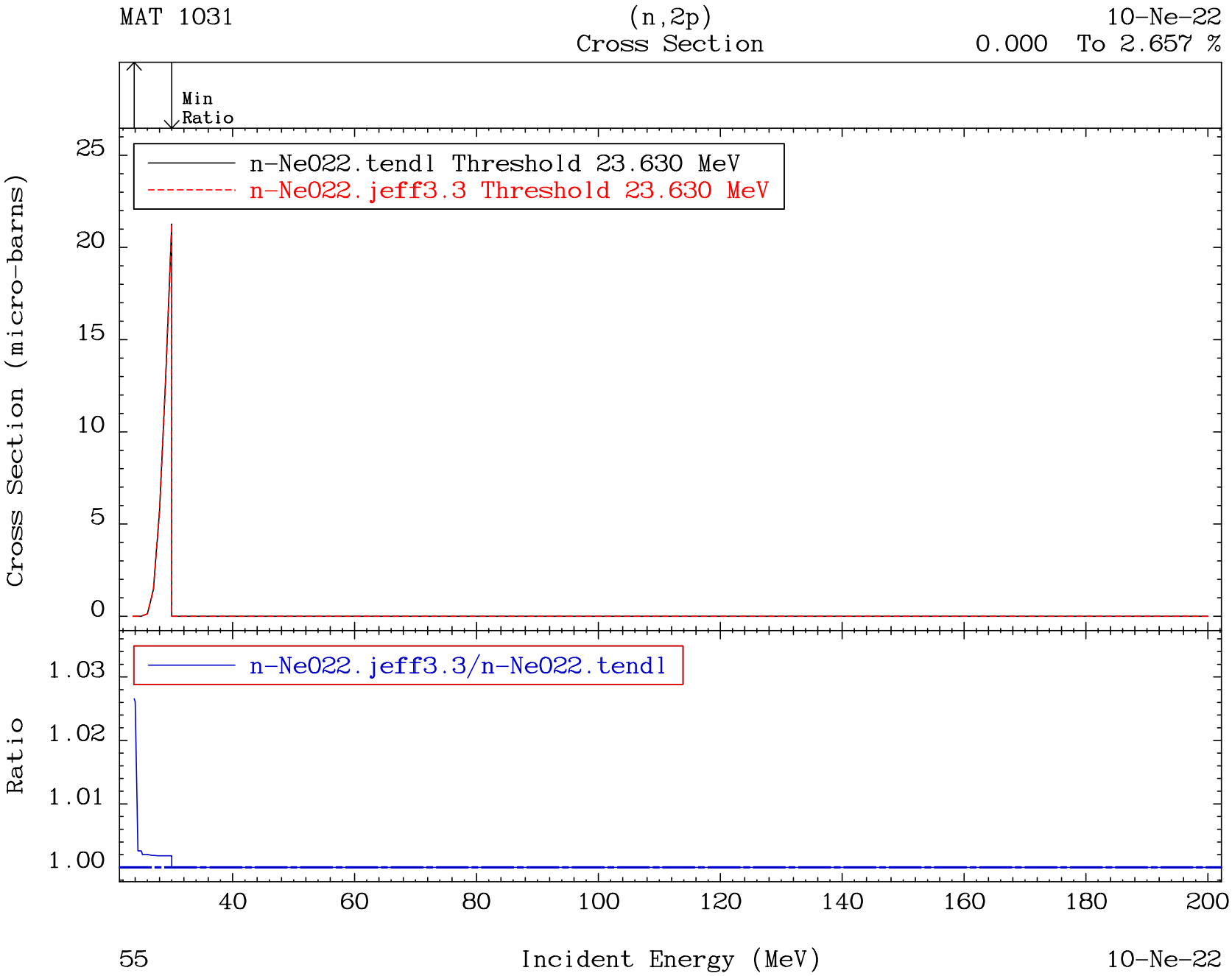

MAT 1031
(n,d)
Cross Section
10-Ne-22
-0.259 To 0.086 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 13.640 MeV
n-Ne022.jeff3.3 Threshold 13.640 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
10-Ne-22

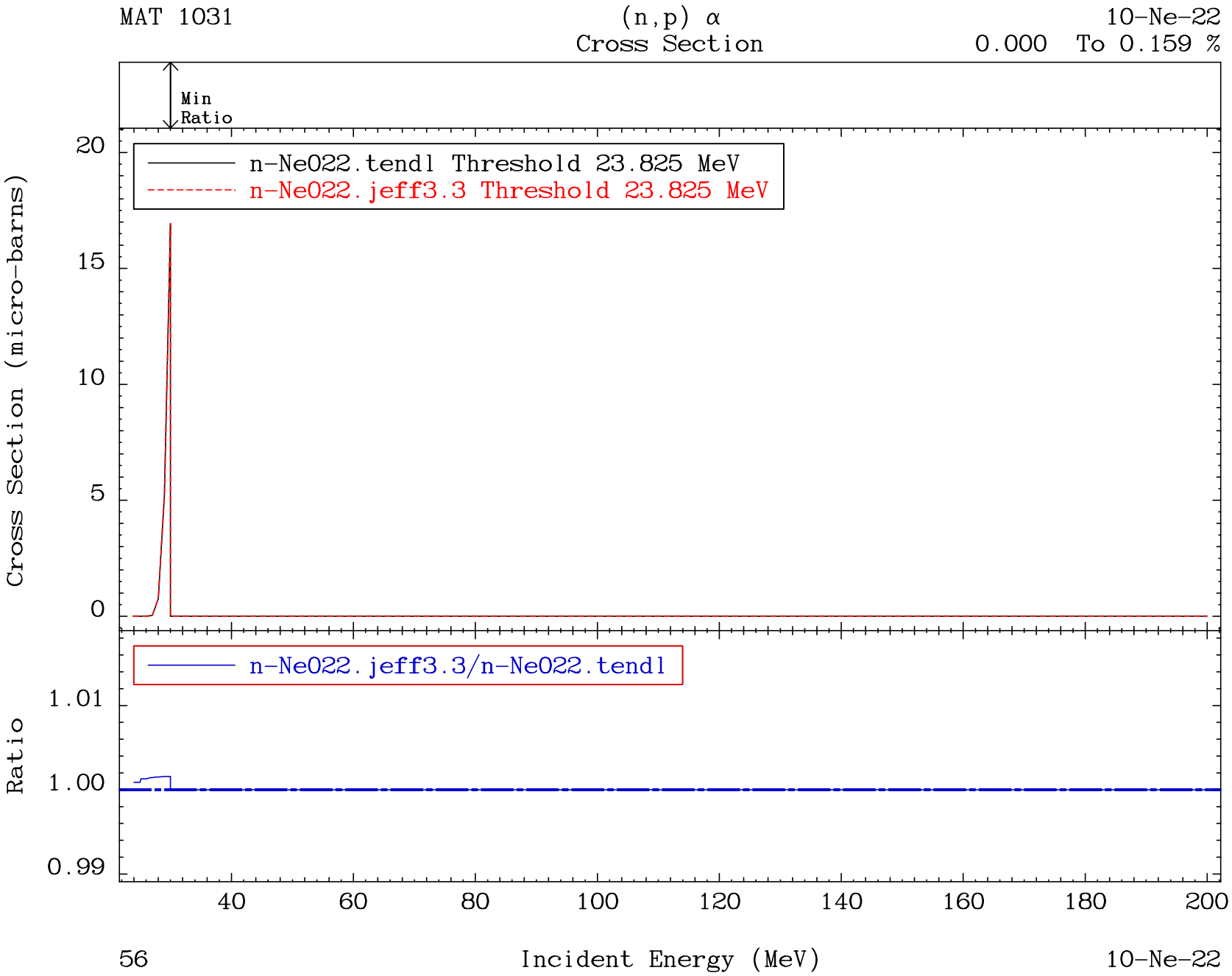

MAT 1031
(n,t)
Cross Section
10-Ne-22
-0.394 To 0.084 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 15.569 MeV
n-Ne022.jeff3.3 Threshold 15.569 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
10-Ne-22

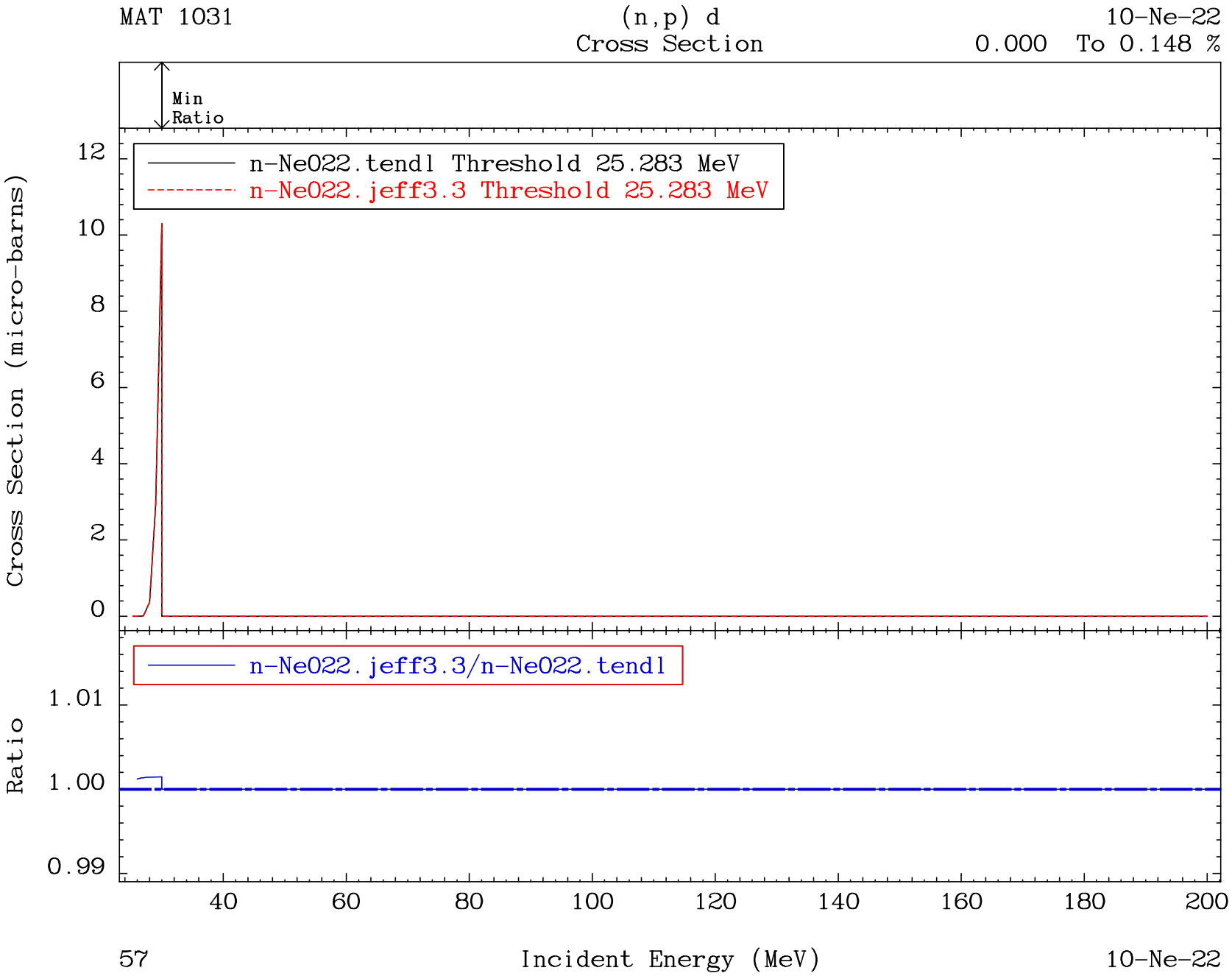

MAT 1031
(n,He-3)
Cross Section
10-Ne-22
0.000 To 0.163 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 19.538 MeV
n-Ne022.jeff3.3 Threshold 19.538 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
10-Ne-22

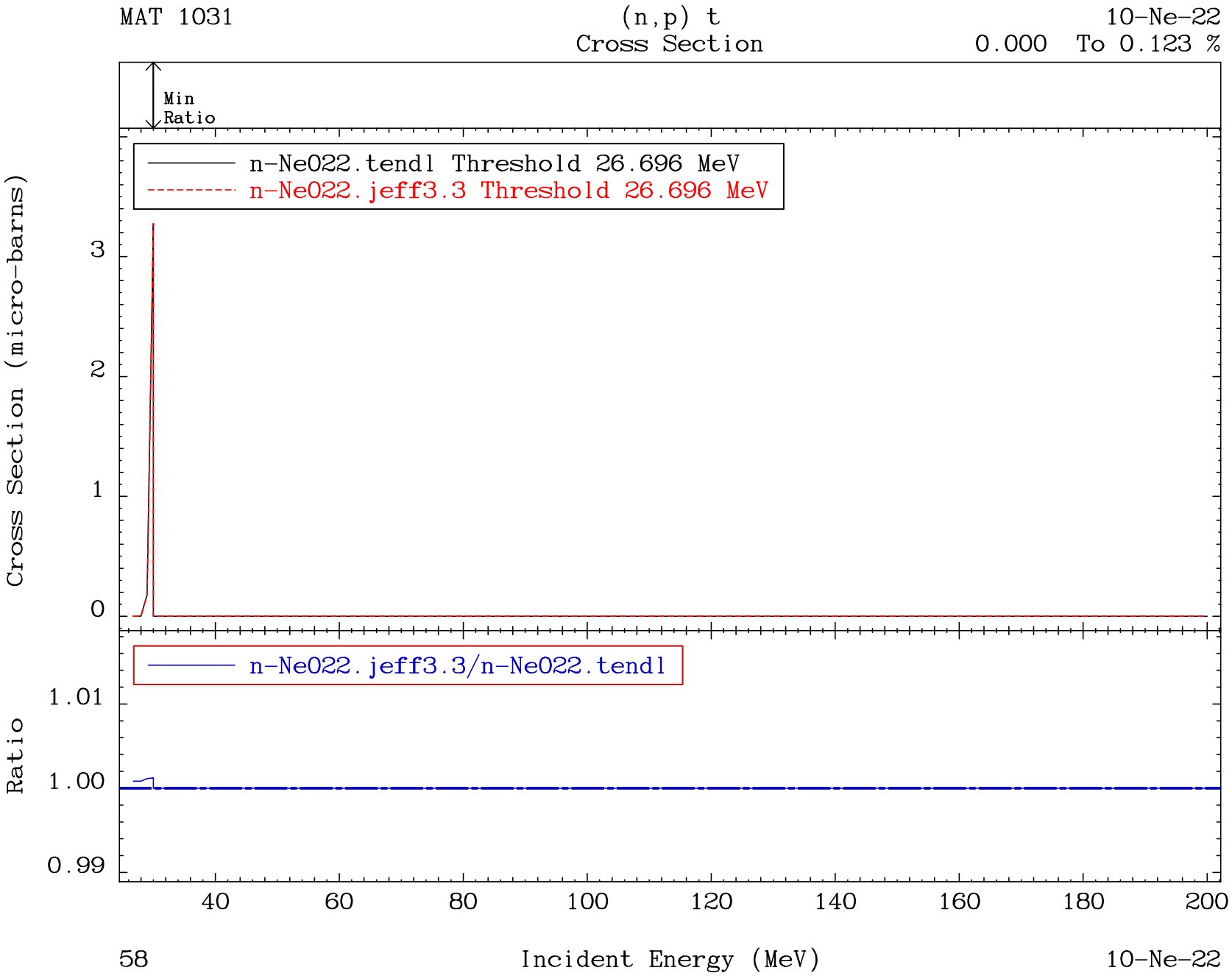

MAT 1031
(n,α)
Cross Section
10-Ne-22
-0.717 To 0.102 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 5.9731 MeV
n-Ne022.jeff3.3 Threshold 5.9731 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
10-Ne-22

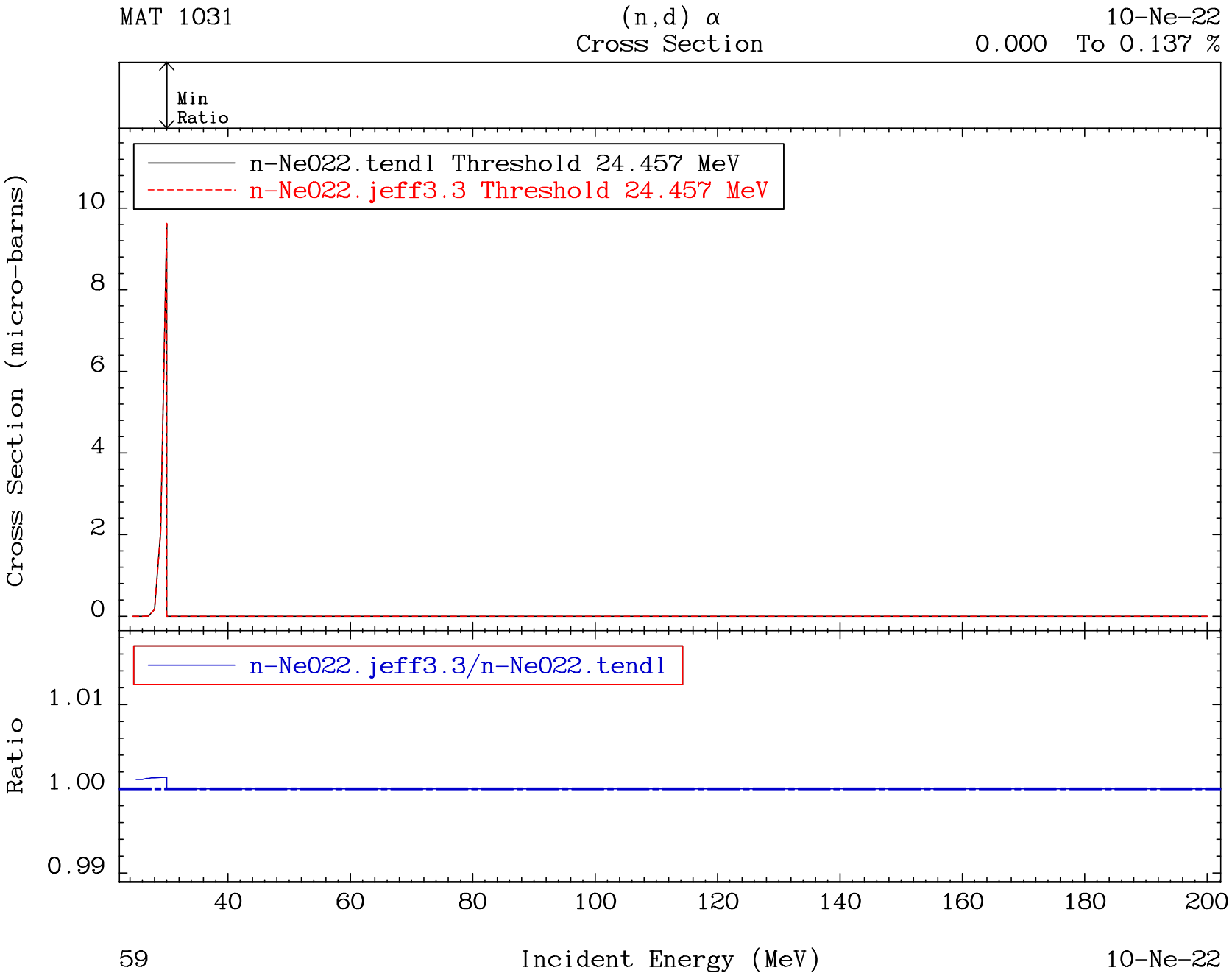

MAT 1031
(n,2α)
Cross Section
10-Ne-22
0.000 To 0.090 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 15.350 MeV
n-Ne022.jeff3.3 Threshold 15.350 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
10-Ne-22

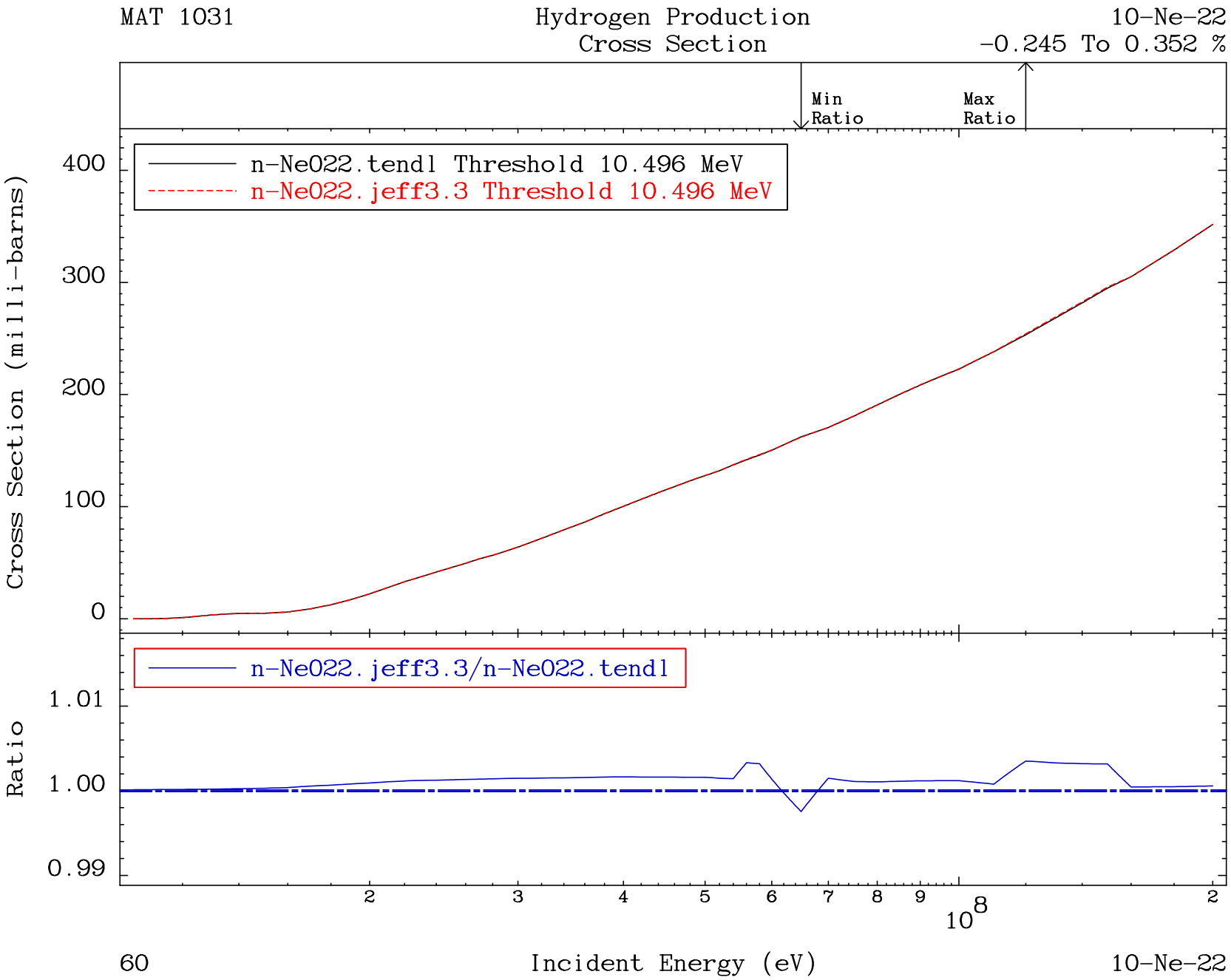

MAT 1031
(n,2p)
Cross Section
10-Ne-22
0.000 To 2.657 %
Min
Ratio
n-Ne022.tendl Threshold 23.630 MeV
n-Ne022.jeff3.3 Threshold 23.630 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.03
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
55
Incident Energy (MeV)
10-Ne-22

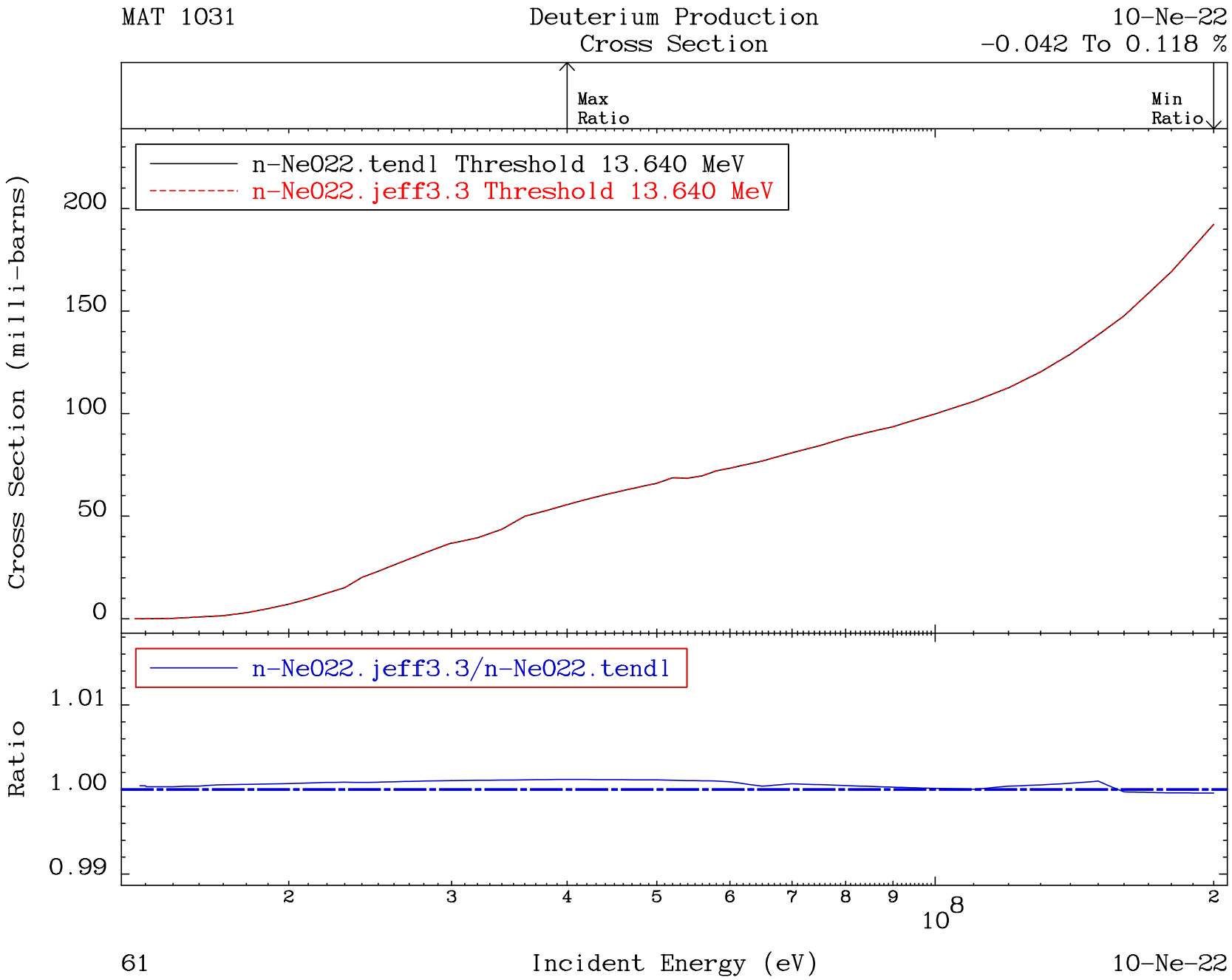

MAT 1031
(n,p) α
Cross Section
10-Ne-22
0.000 To 0.159 %
Min
Ratio
n-Ne022.tendl Threshold 23.825 MeV
n-Ne022.jeff3.3 Threshold 23.825 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
56
Incident Energy (MeV)
10-Ne-22

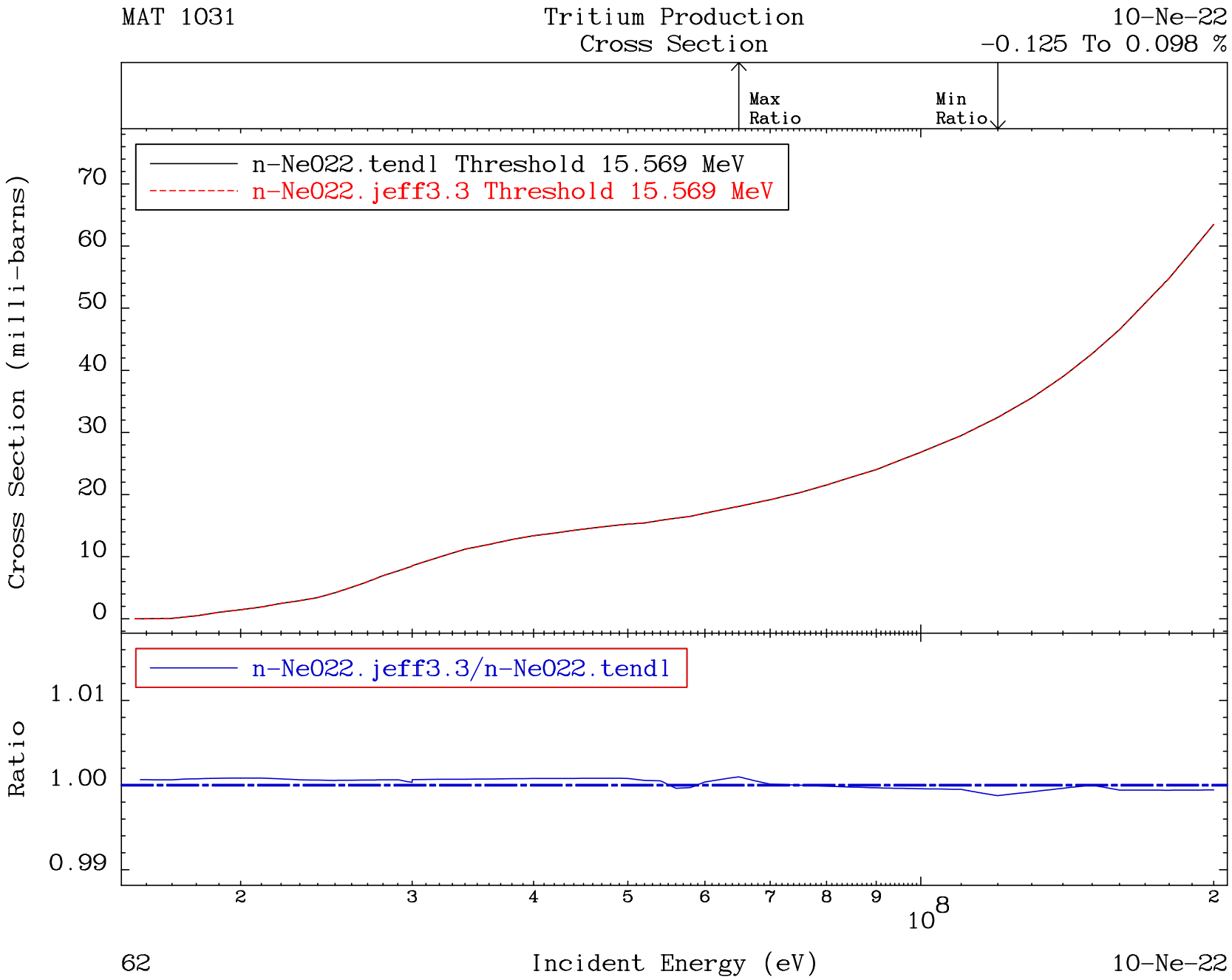

MAT 1031
(n,p) d
Cross Section
10-Ne-22
0.000 To 0.148 %
Min
Ratio
n-Ne022.tendl Threshold 25.283 MeV
n-Ne022.jeff3.3 Threshold 25.283 MeV
Cross Section (micro-barns)
12
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
57
Incident Energy (MeV)
10-Ne-22

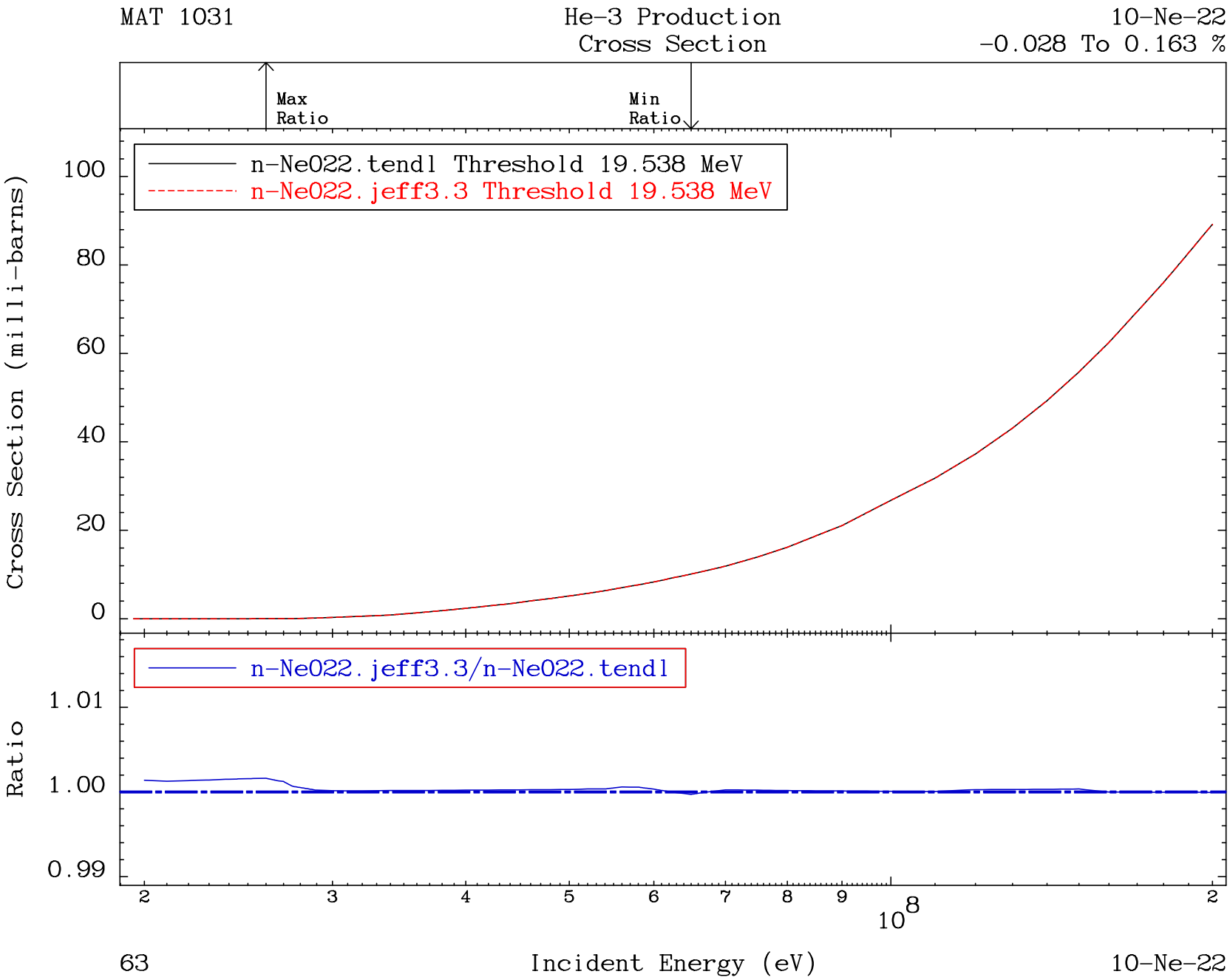

MAT 1031
(n,p) t
Cross Section
10-Ne-22
0.000 To 0.123 %
Min
Ratio
n-Ne022.tendl Threshold 26.696 MeV
n-Ne022.jeff3.3 Threshold 26.696 MeV
Cross Section (micro-barns)
0
1
2
3
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
58
Incident Energy (MeV)
10-Ne-22

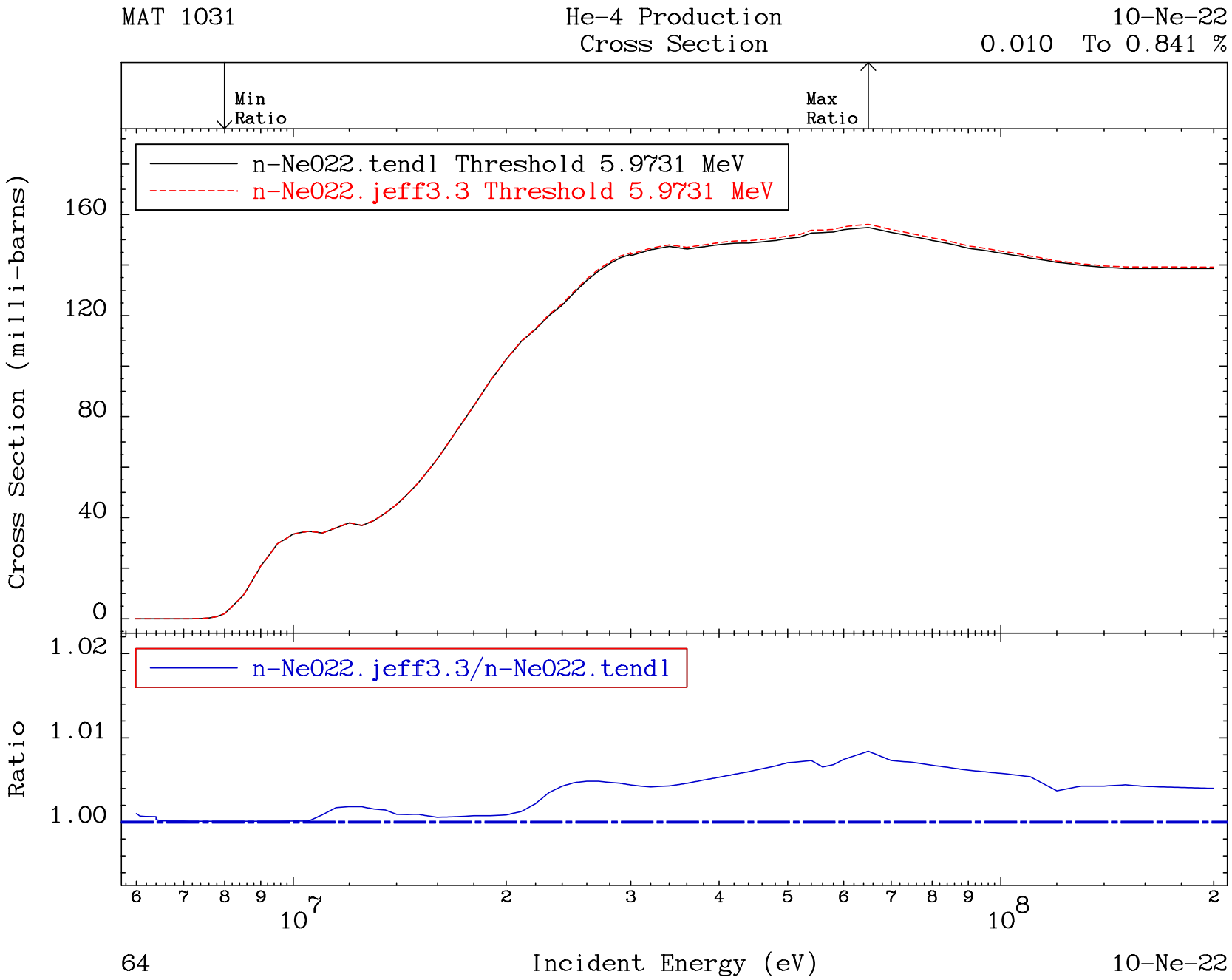

MAT 1031
(n,d) α
Cross Section
10-Ne-22
0.000 To 0.137 %
Min
Ratio
n-Ne022.tendl Threshold 24.457 MeV
n-Ne022.jeff3.3 Threshold 24.457 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
59
Incident Energy (MeV)
10-Ne-22

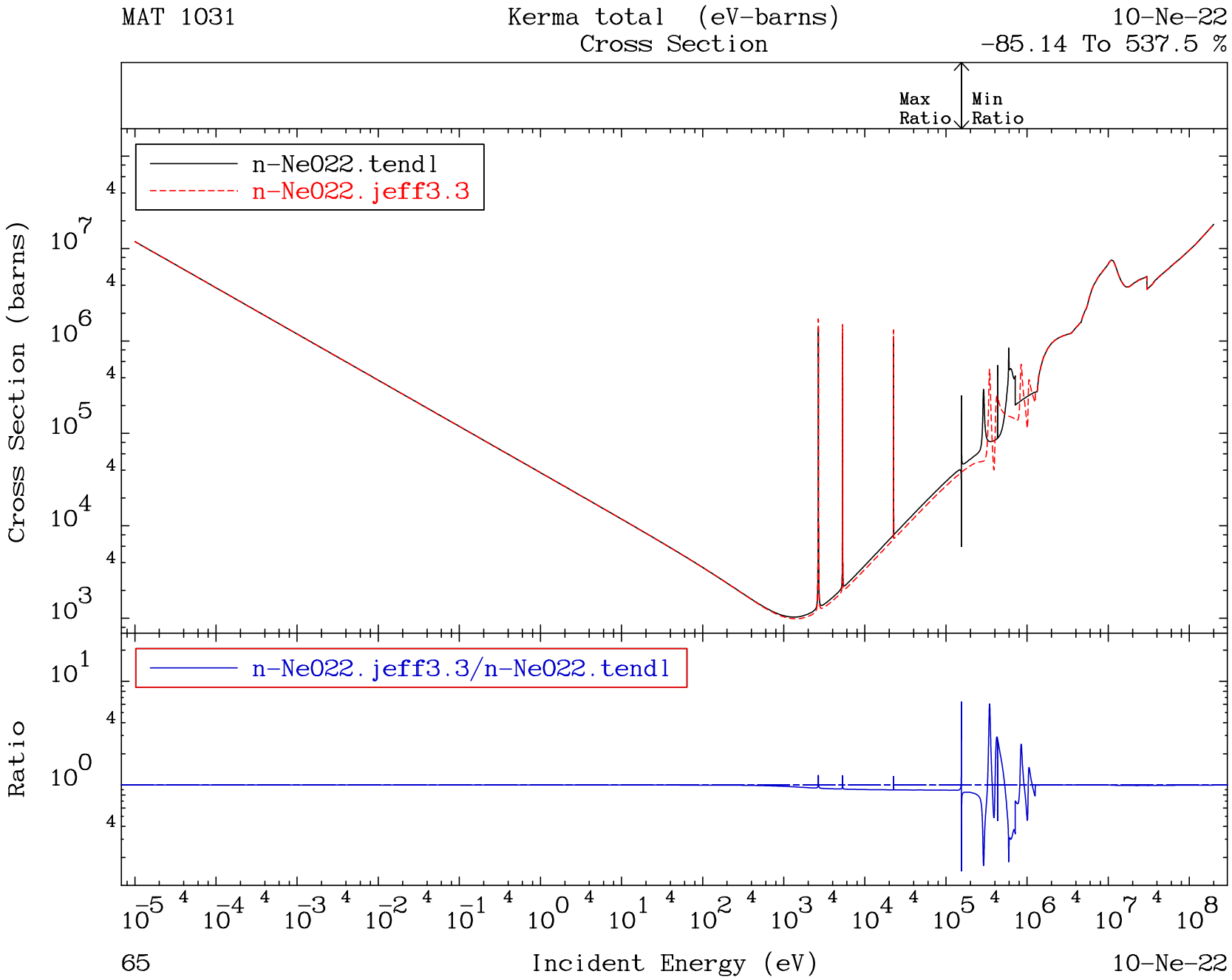

MAT 1031
Hydrogen Production
Cross Section
10-Ne-22
-0.245 To 0.352 %
Min Ratio
Max Ratio
n-Ne022.tendl Threshold 10.496 MeV
n-Ne022.jeff3.3 Threshold 10.496 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
10-Ne-22

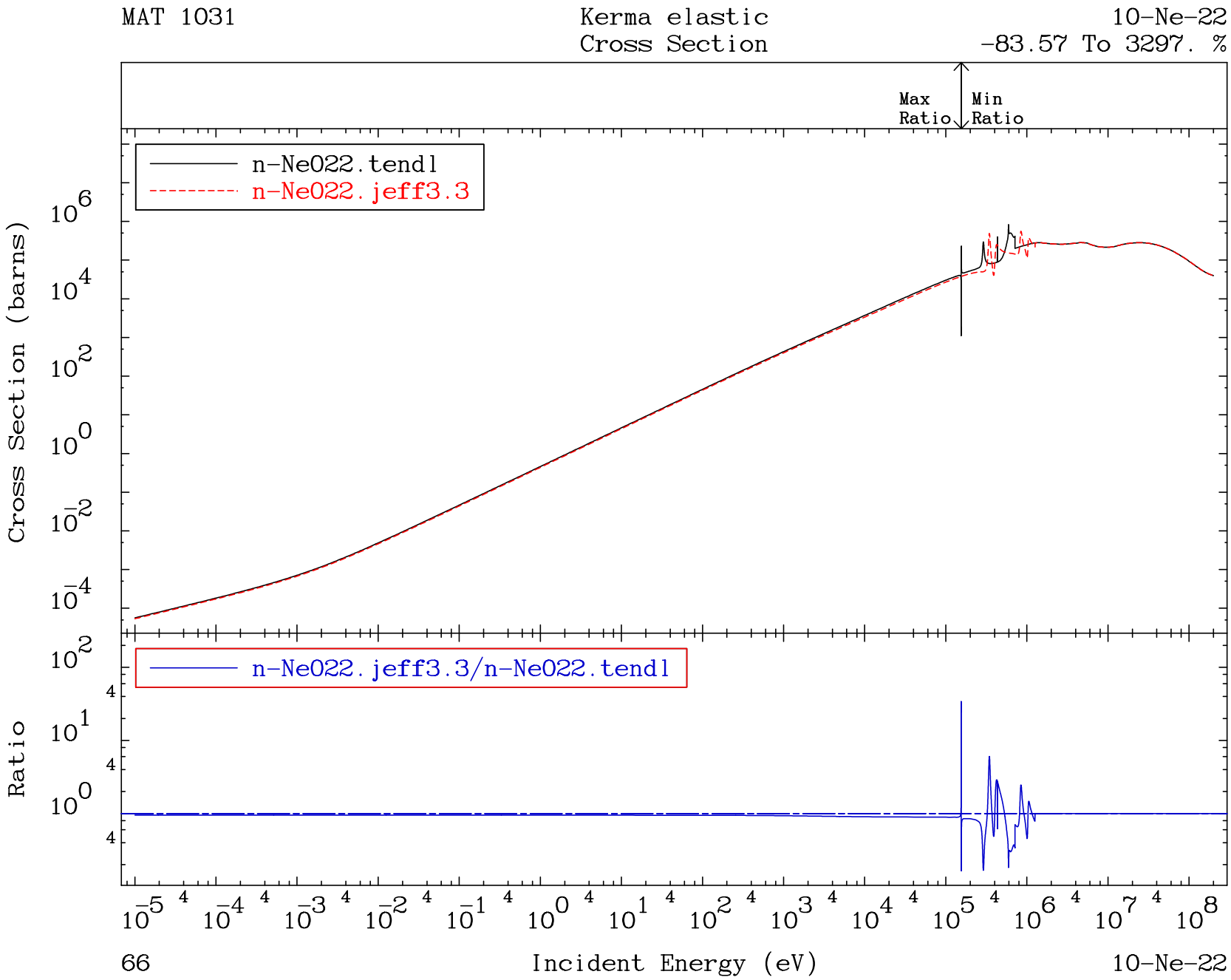

MAT 1031
Deuterium Production
Cross Section
10-Ne-22
-0.042 To 0.118 %
Max
Ratio
Min
Ratio
n-Ne022.tendl Threshold 13.640 MeV
n-Ne022.jeff3.3 Threshold 13.640 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
10-Ne-22

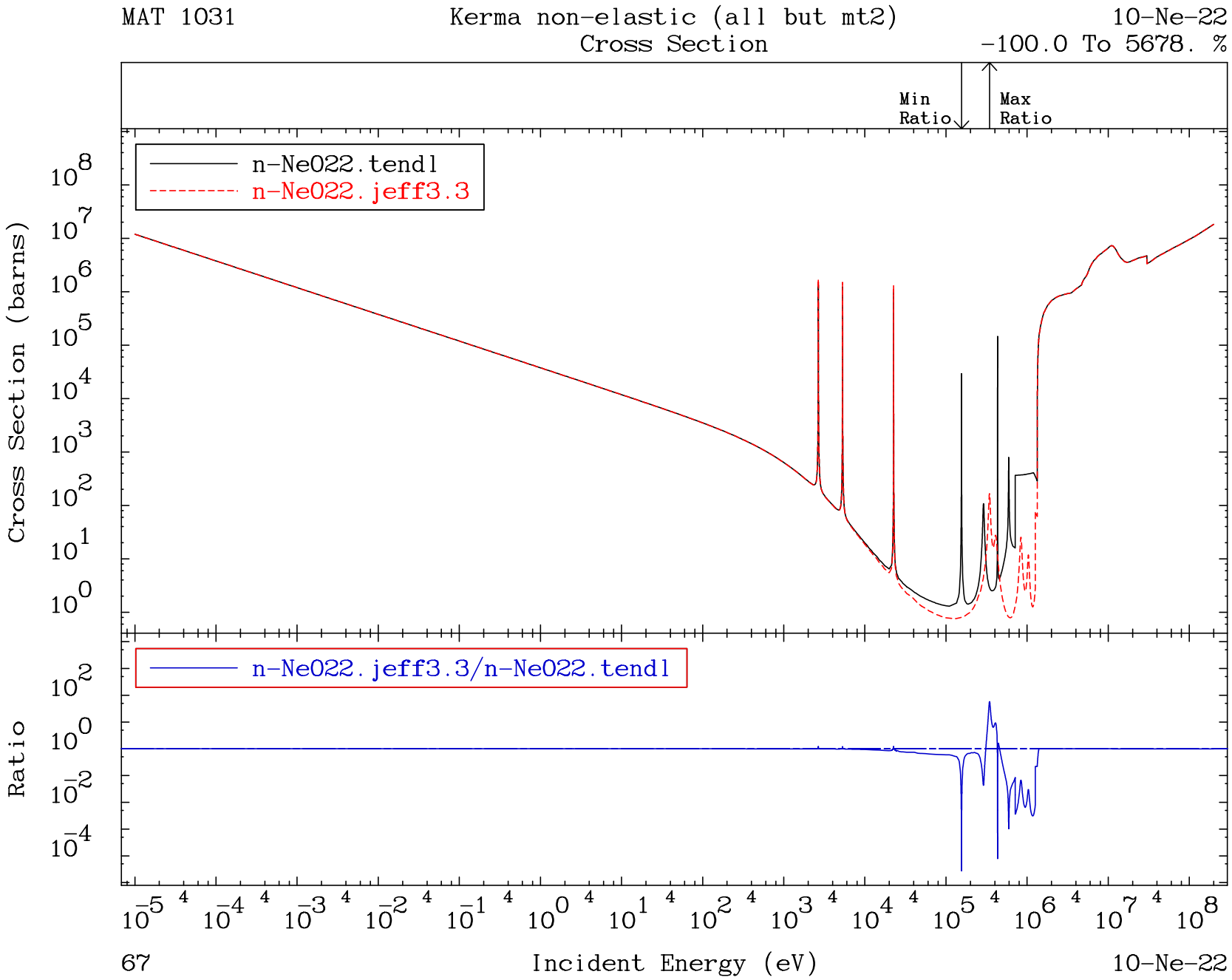

MAT 1031
Tritium Production
Cross Section
10-Ne-22
-0.125 To 0.098 %
Max
Ratio
Min
Ratio
n-Ne022.tendl Threshold 15.569 MeV
n-Ne022.jeff3.3 Threshold 15.569 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
10-Ne-22

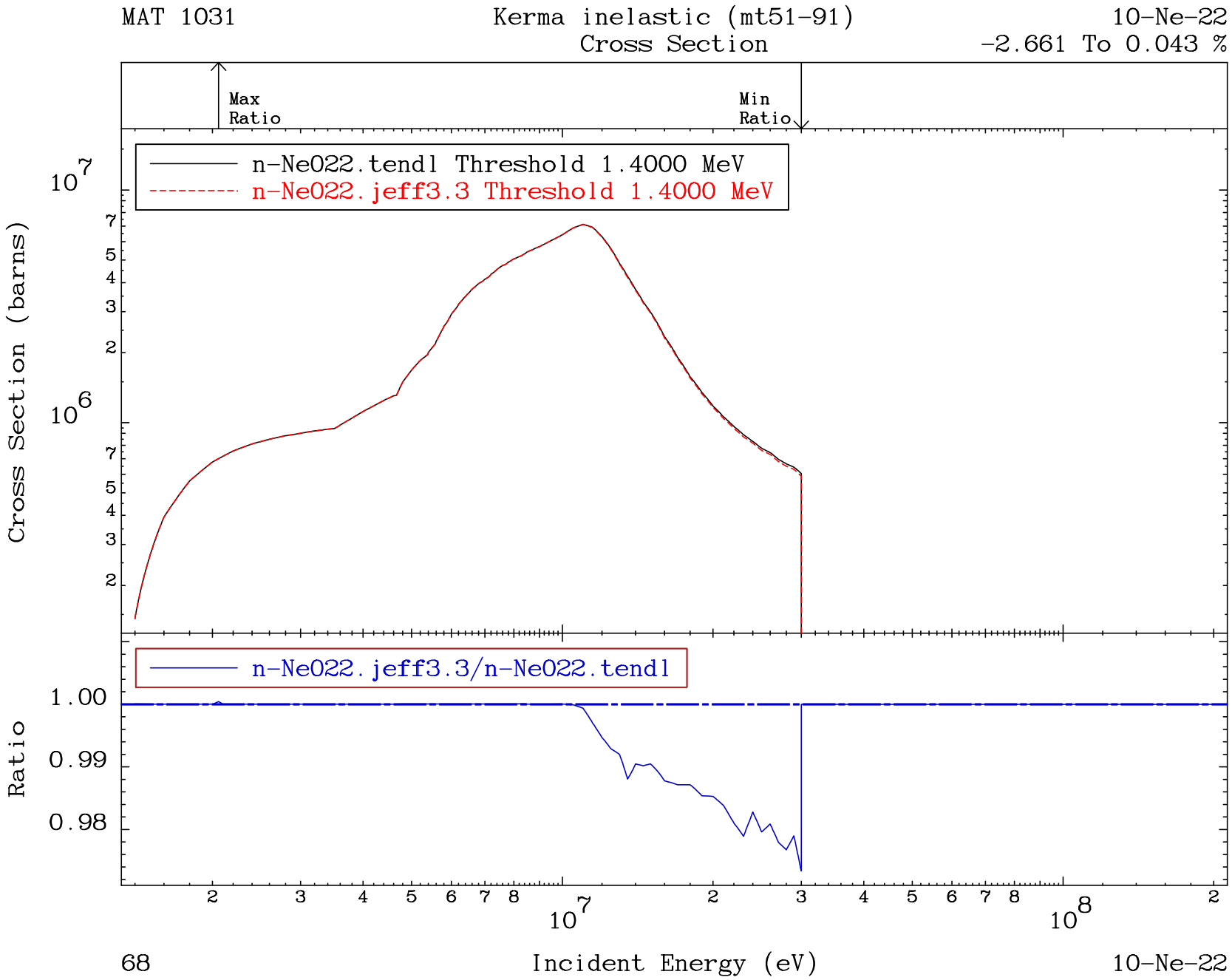

MAT 1031
He-3 Production
Cross Section
10-Ne-22
-0.028 To 0.163 %
Max
Ratio
Min
Ratio
n-Ne022.tendl Threshold 19.538 MeV
n-Ne022.jeff3.3 Threshold 19.538 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
10-Ne-22

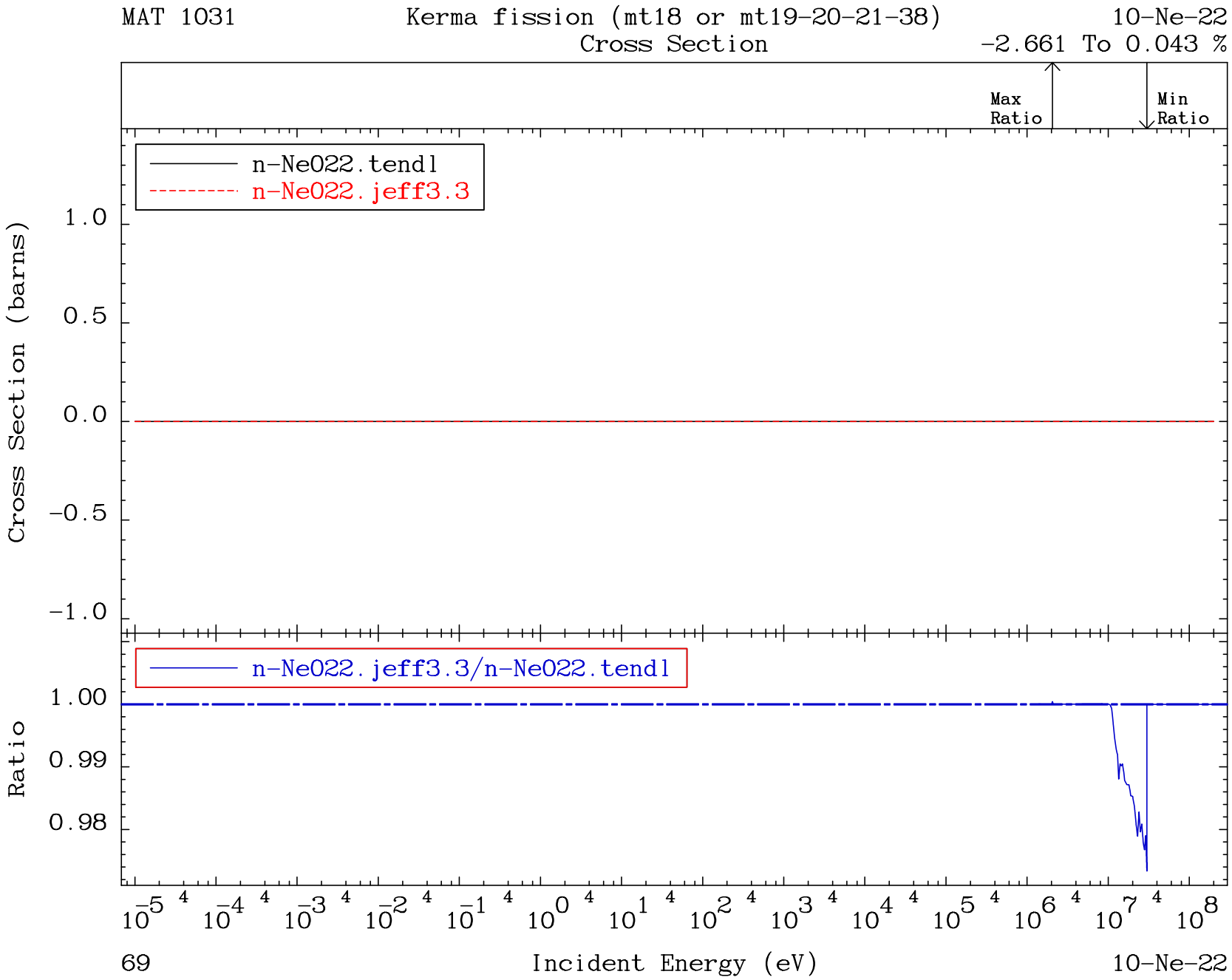

MAT 1031
He-4 Production
Cross Section
10-Ne-22
0.010 To 0.841 %
Min Ratio
Max Ratio
n-Ne022.tendl Threshold 5.9731 MeV
n-Ne022.jeff3.3 Threshold 5.9731 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.02
1.01
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
10-Ne-22

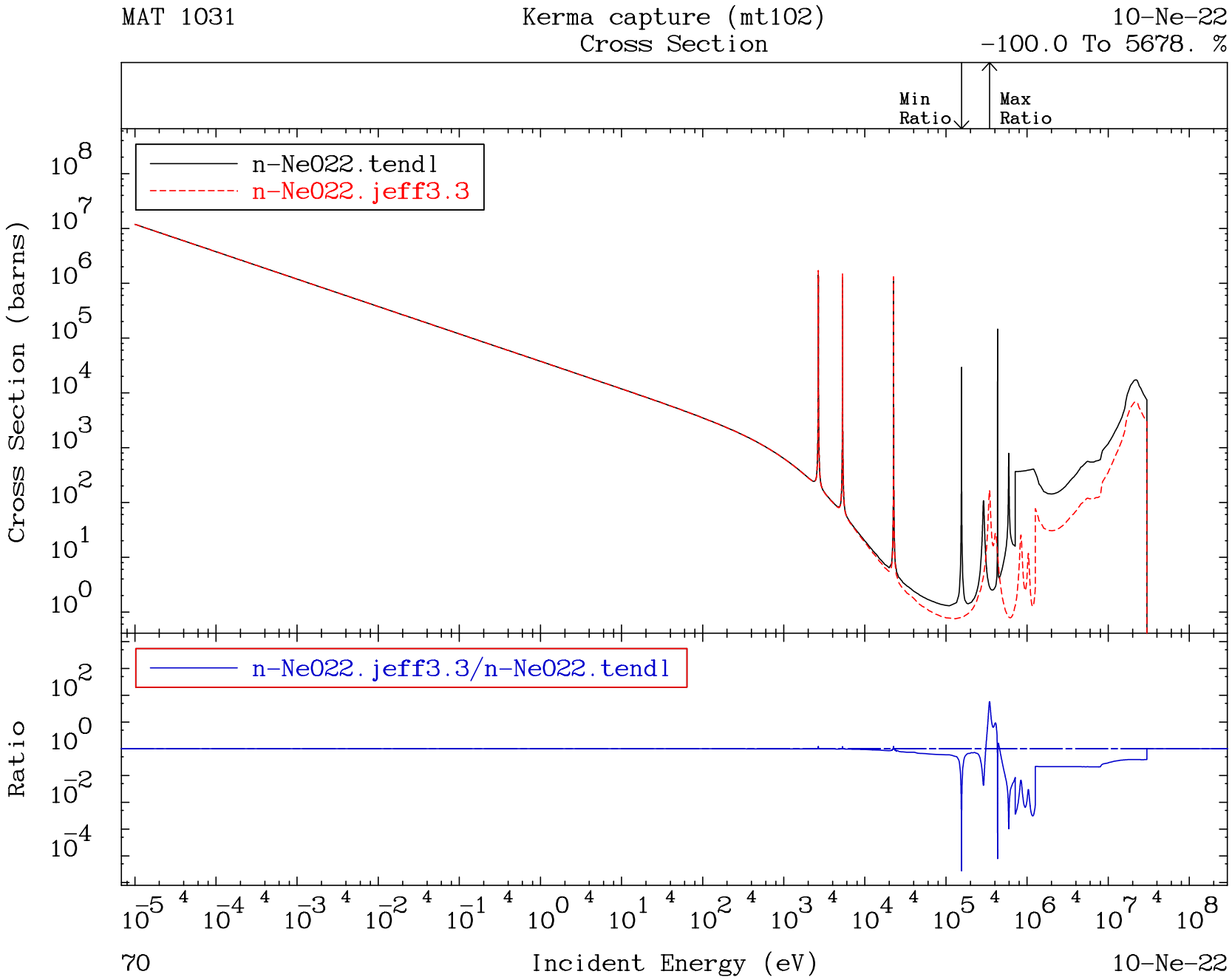

MAT 1031
Kerma total (eV-barns)
Cross Section
10-Ne-22
-85.14 To 537.5 %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
65
10-Ne-22

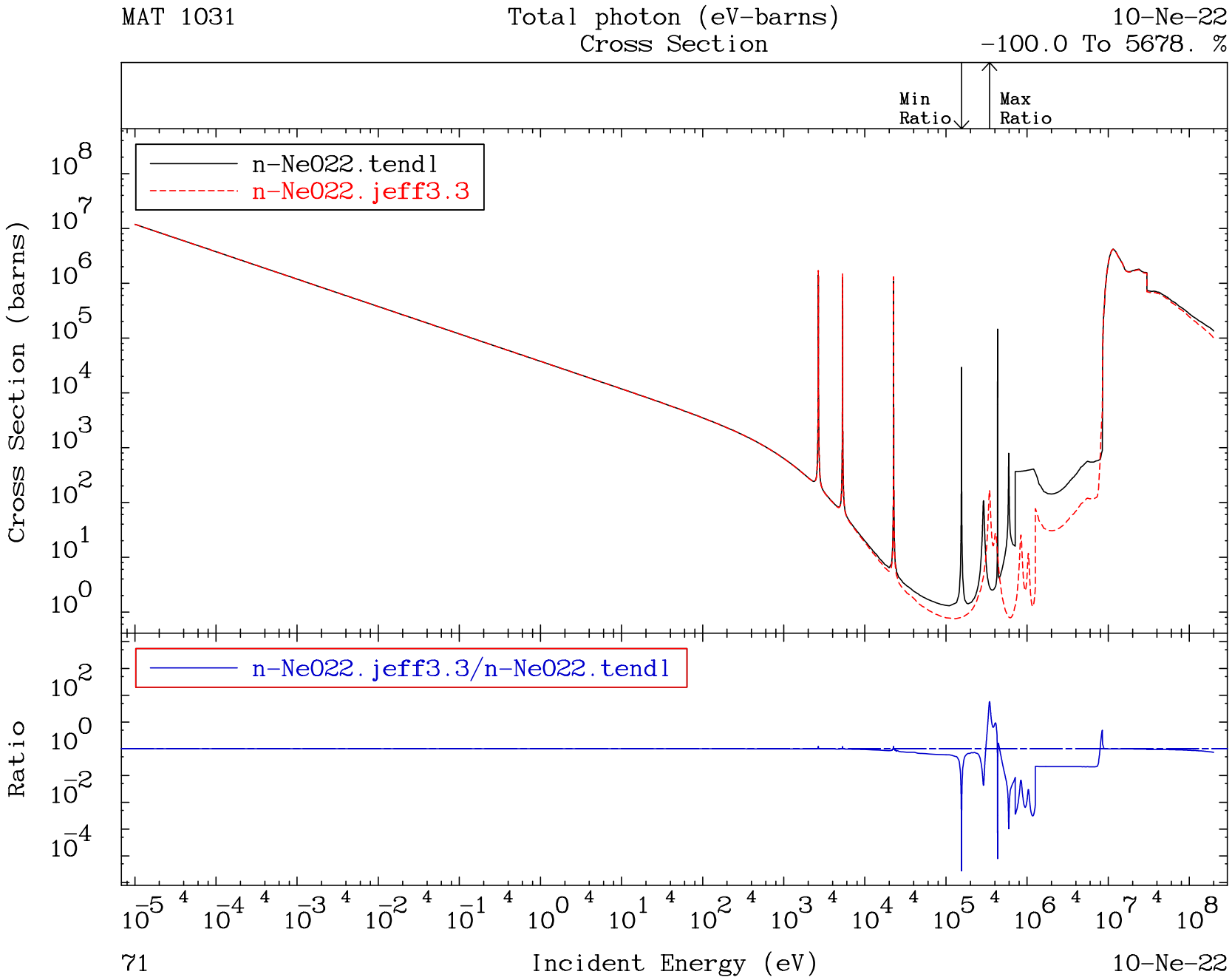

MAT 1031
Kerma elastic
Cross Section
10-Ne-22
-83.57 To 3297. %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
66
10-Ne-22

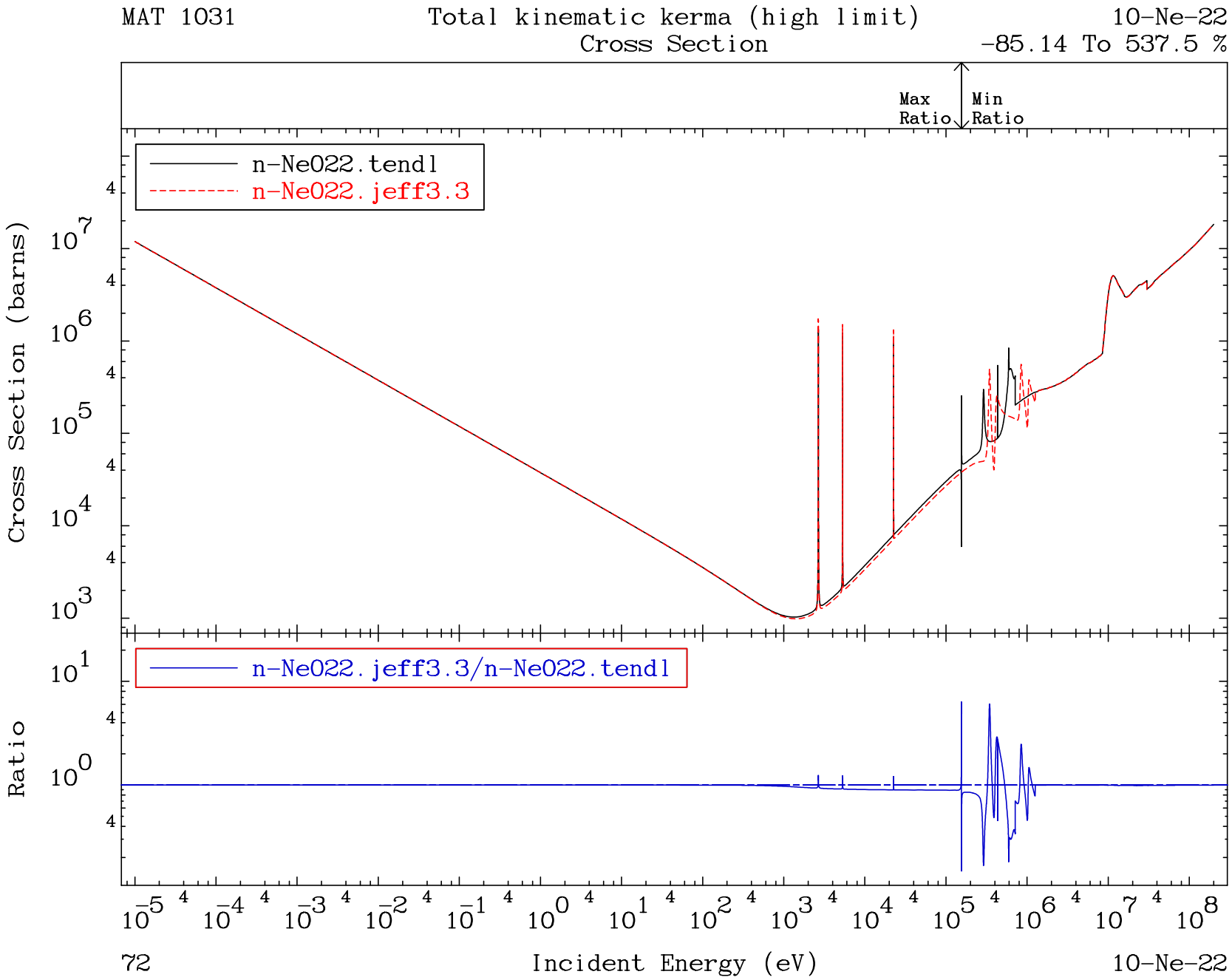

MAT 1031
Kerma non-elastic (all but mt2)
Cross Section
10-Ne-22
-100.0 To 5678. %
Min Ratio
Max Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
67
10-Ne-22

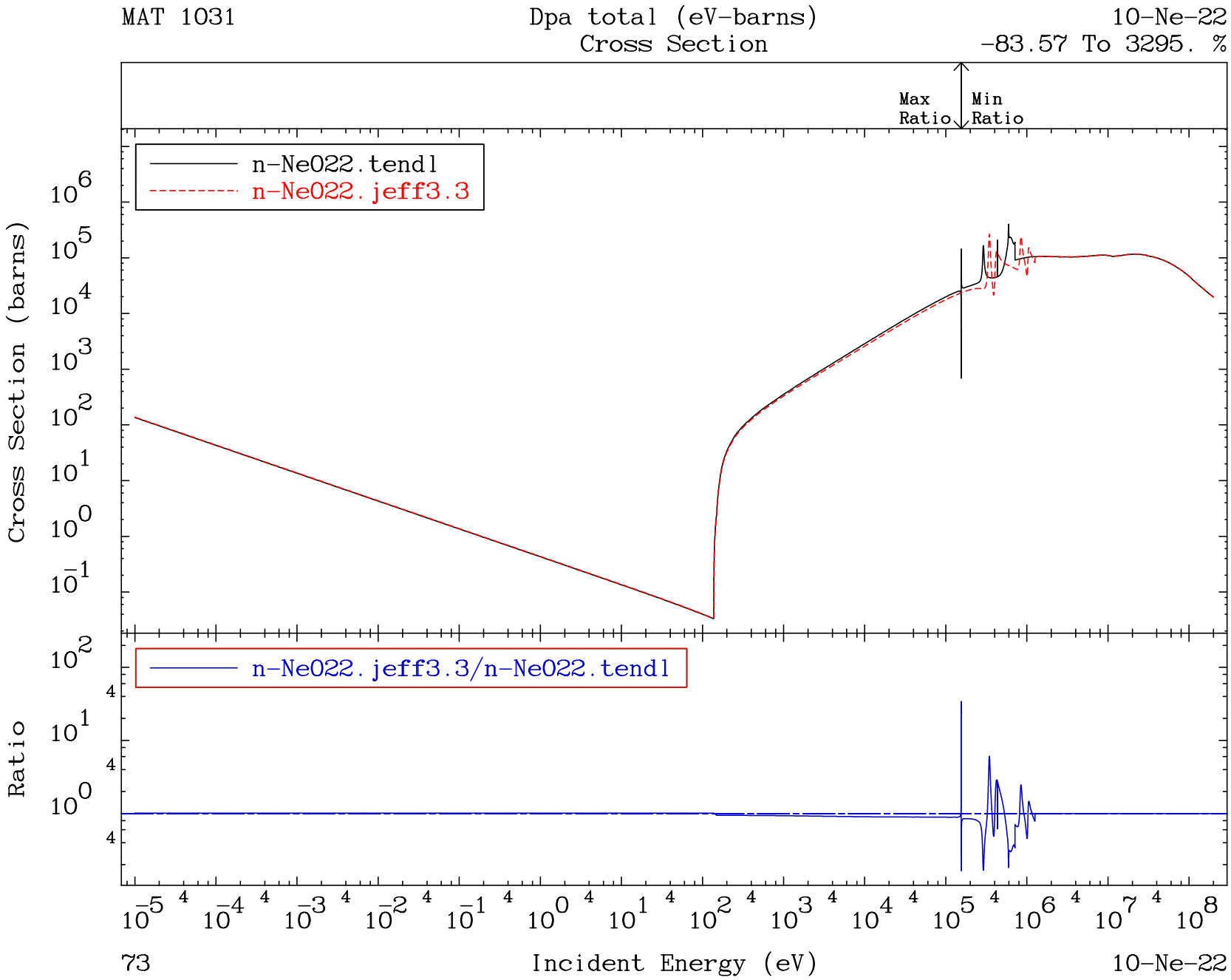

MAT 1031
Kerma inelastic (mt51-91)
Cross Section
10-Ne-22
-2.661 To 0.043 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 1.4000 MeV
n-Ne022.jeff3.3 Threshold 1.4000 MeV
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
0.99
0.98
Incident Energy (eV)
68
10-Ne-22

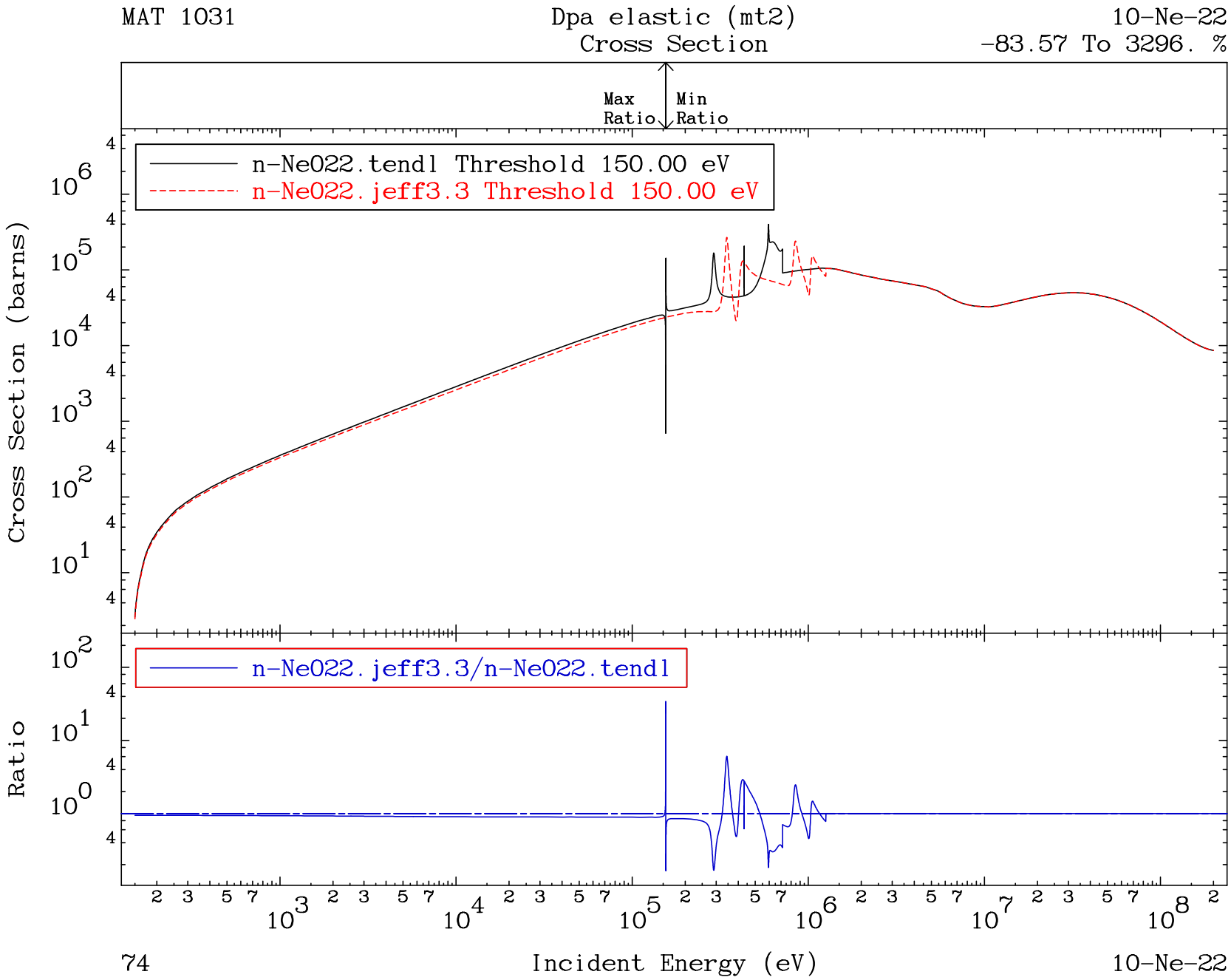

MAT 1031
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
10-Ne-22
-2.661 To 0.043 %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
1.00
0.99
0.98
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
69
Incident Energy (eV)
10-Ne-22

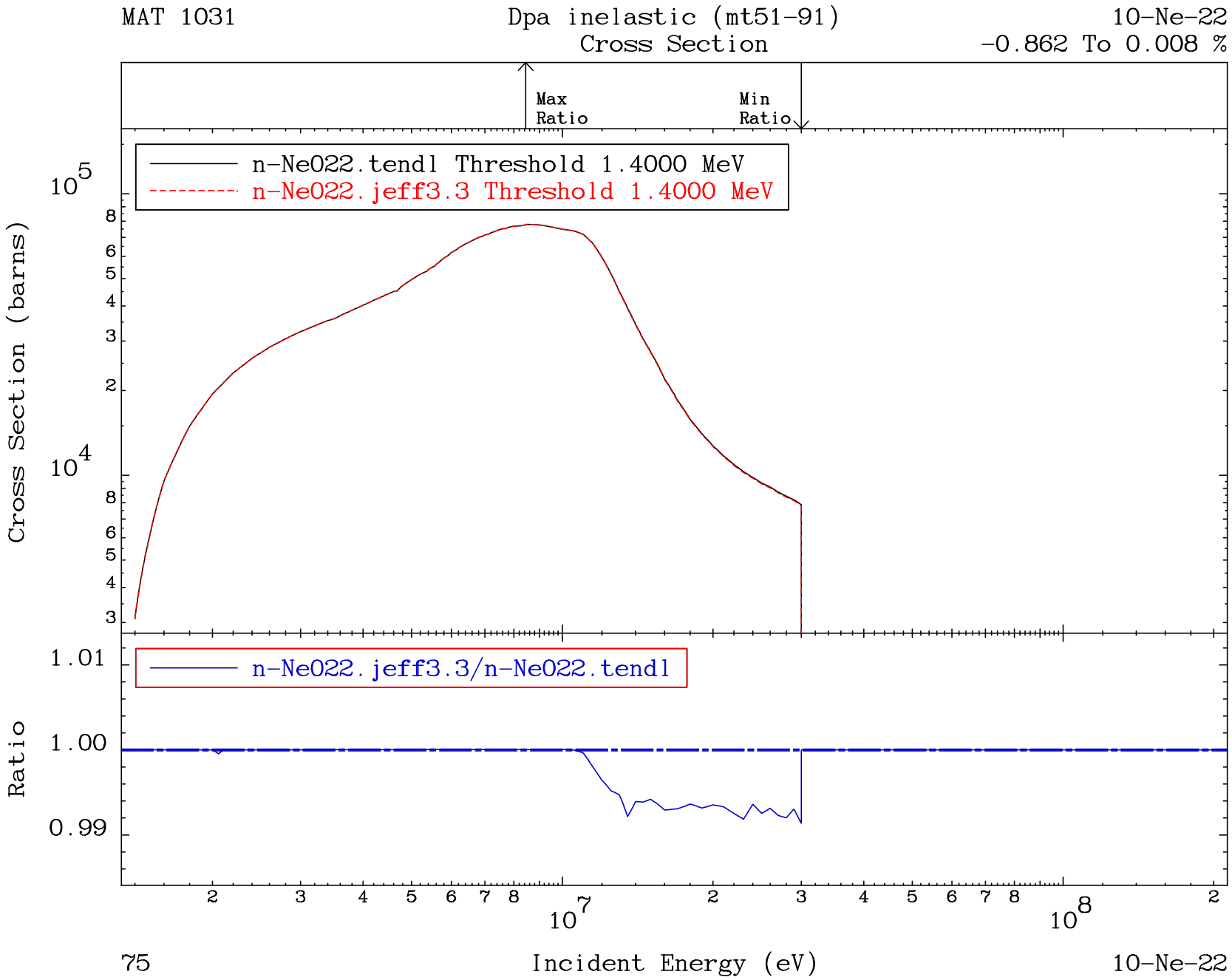

MAT 1031
Kerma capture (mt102)
Cross Section
10-Ne-22
-100.0 To 5678. %
Min Ratio
Max Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
70
10-Ne-22

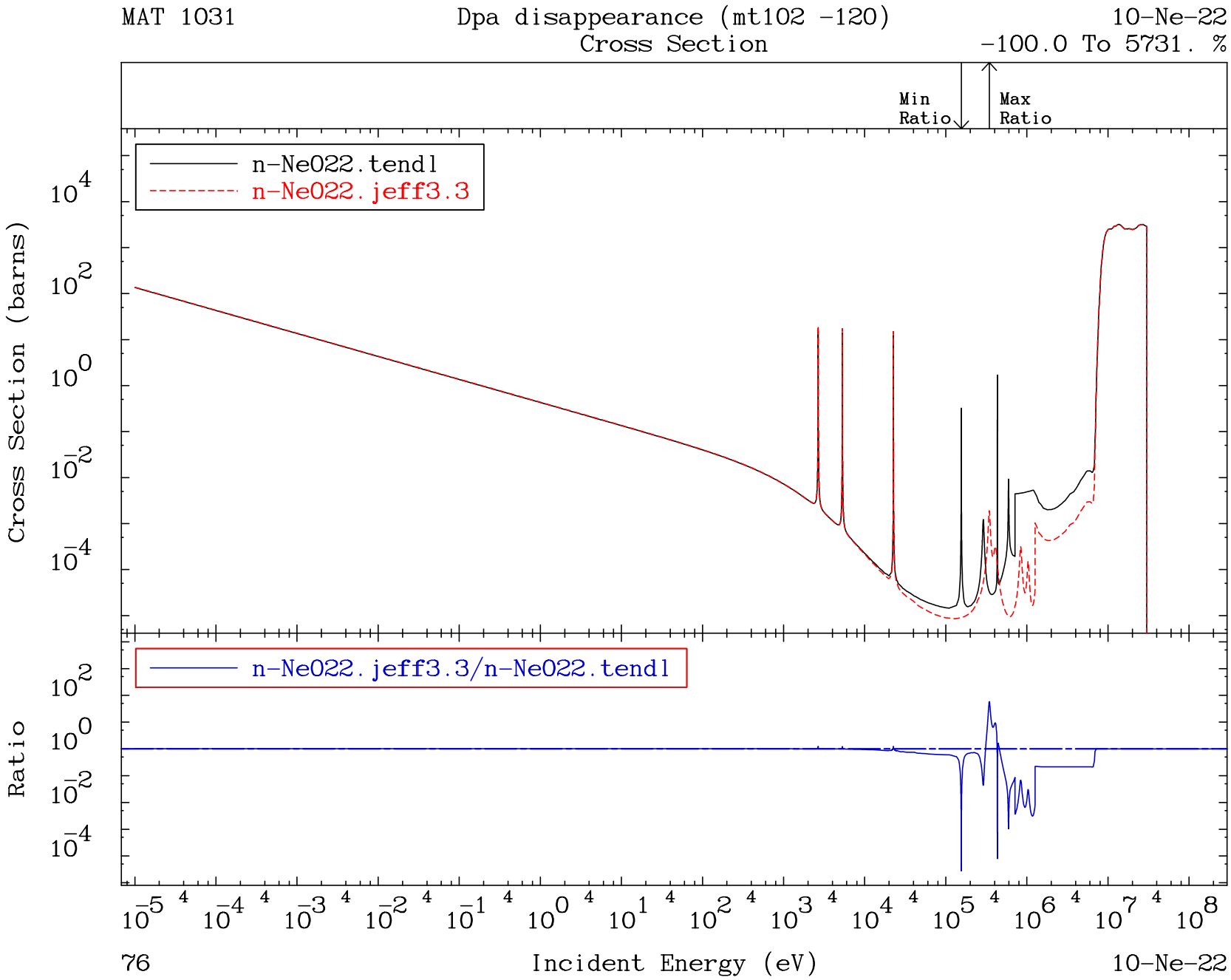

MAT 1031
Total photon (eV-barns)
Cross Section
10-Ne-22
-100.0 To 5678. %
Min Ratio
Max Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
71
10-Ne-22


MAT 1031
Total kinematic kerma (high limit)
Cross Section
10-Ne-22
-85.14 To 537.5 %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
72
10-Ne-22


MAT 1031
Dpa total (eV-barns)
Cross Section
10-Ne-22
-83.57 To 3295. %
Max Ratio
Min Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
73
10-Ne-22


MAT 1031
Dpa elastic (mt2)
Cross Section
10-Ne-22
-83.57 To 3296. %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 150.00 eV
n-Ne022.jeff3.3 Threshold 150.00 eV
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
74
10-Ne-22


MAT 1031
Dpa inelastic (mt51-91)
Cross Section
10-Ne-22
-0.862 To 0.008 %
Max Ratio
Min Ratio
n-Ne022.tendl Threshold 1.4000 MeV
n-Ne022.jeff3.3 Threshold 1.4000 MeV
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
75
10-Ne-22


MAT 1031
Dpa disappearance (mt102 -120)
Cross Section
10-Ne-22
-100.0 To 5731. %
Min Ratio
Max Ratio
n-Ne022.tendl
n-Ne022.jeff3.3
Cross Section (barns)
n-Ne022.jeff3.3/n-Ne022.tendl
Ratio
Incident Energy (eV)
76
10-Ne-22