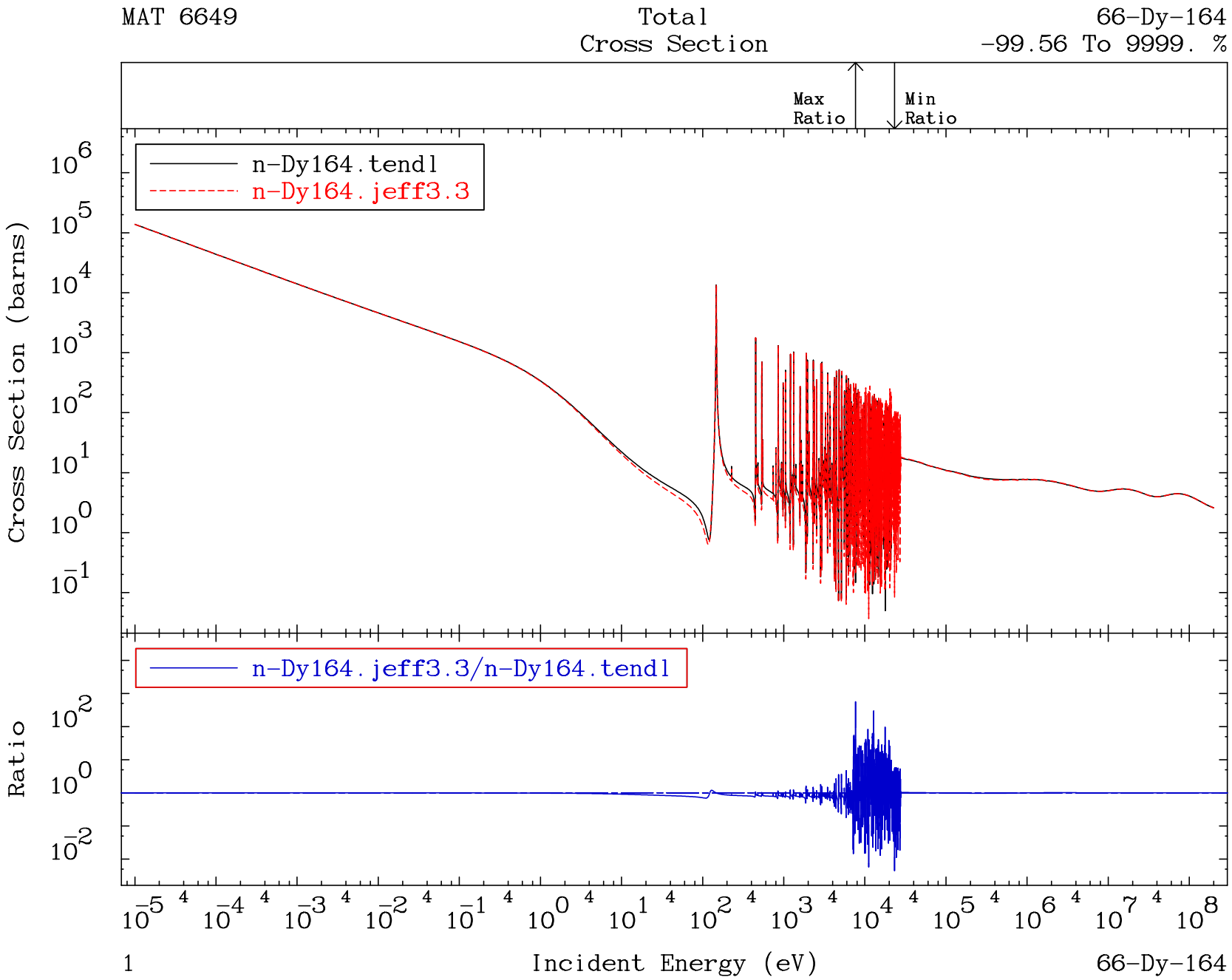
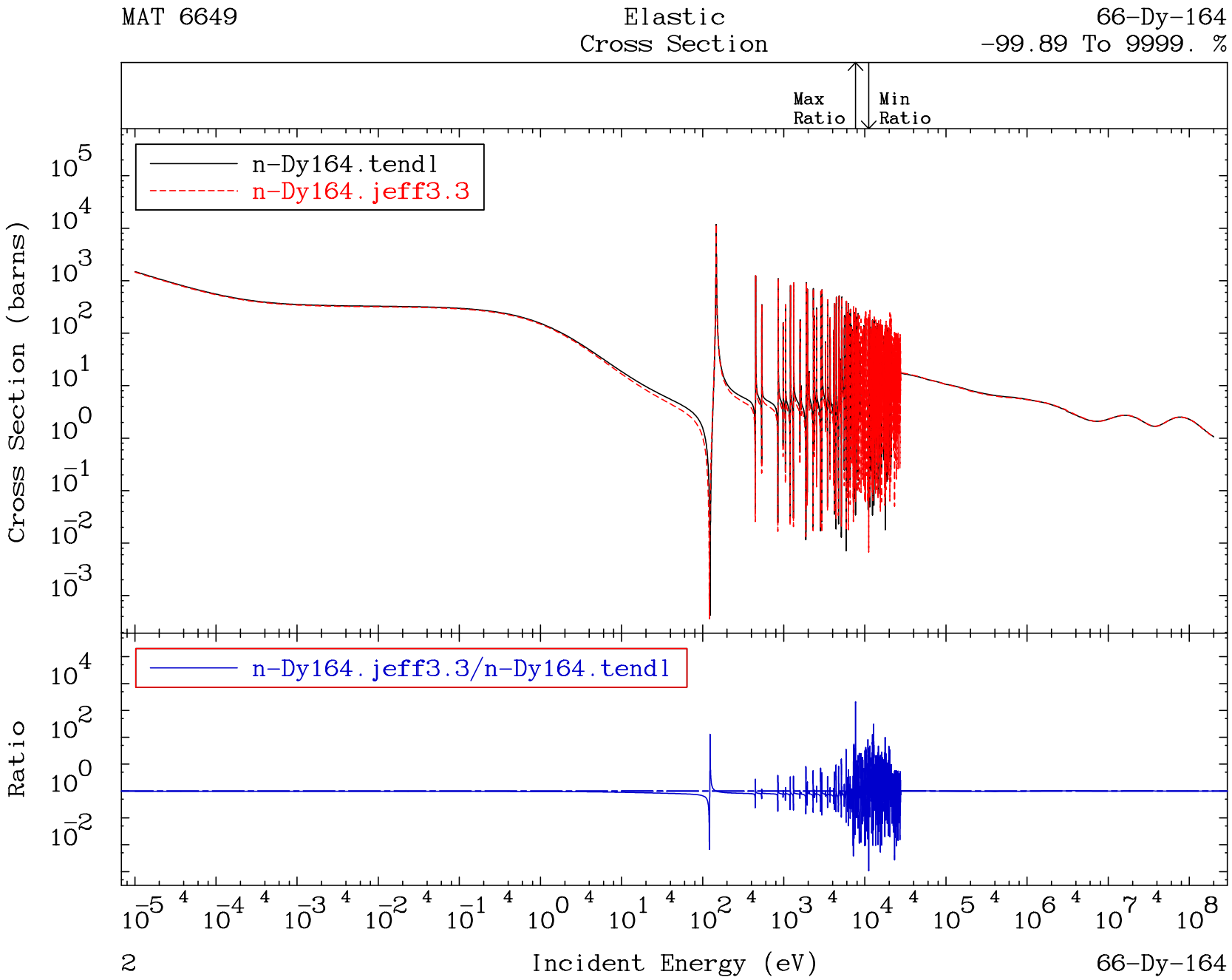
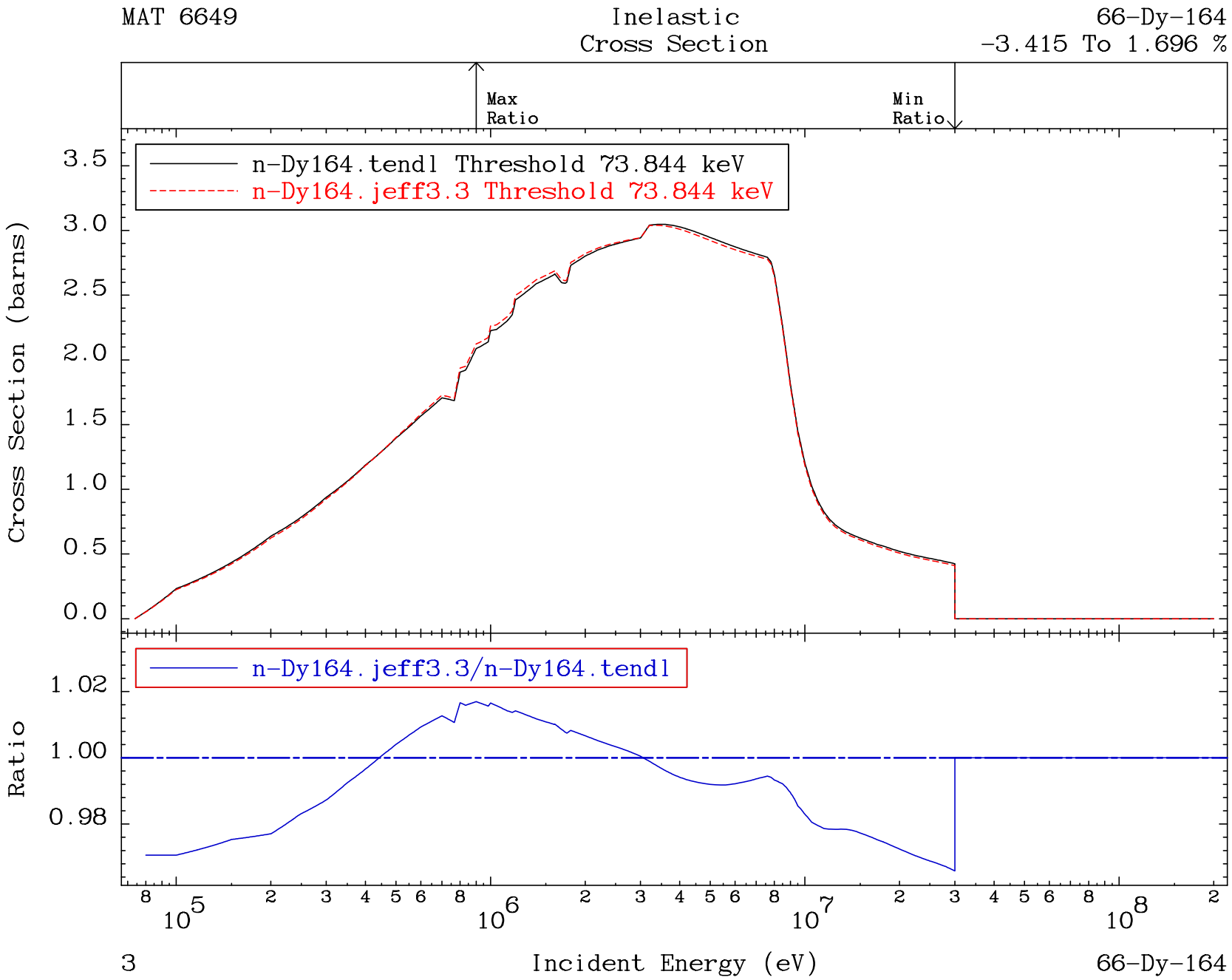
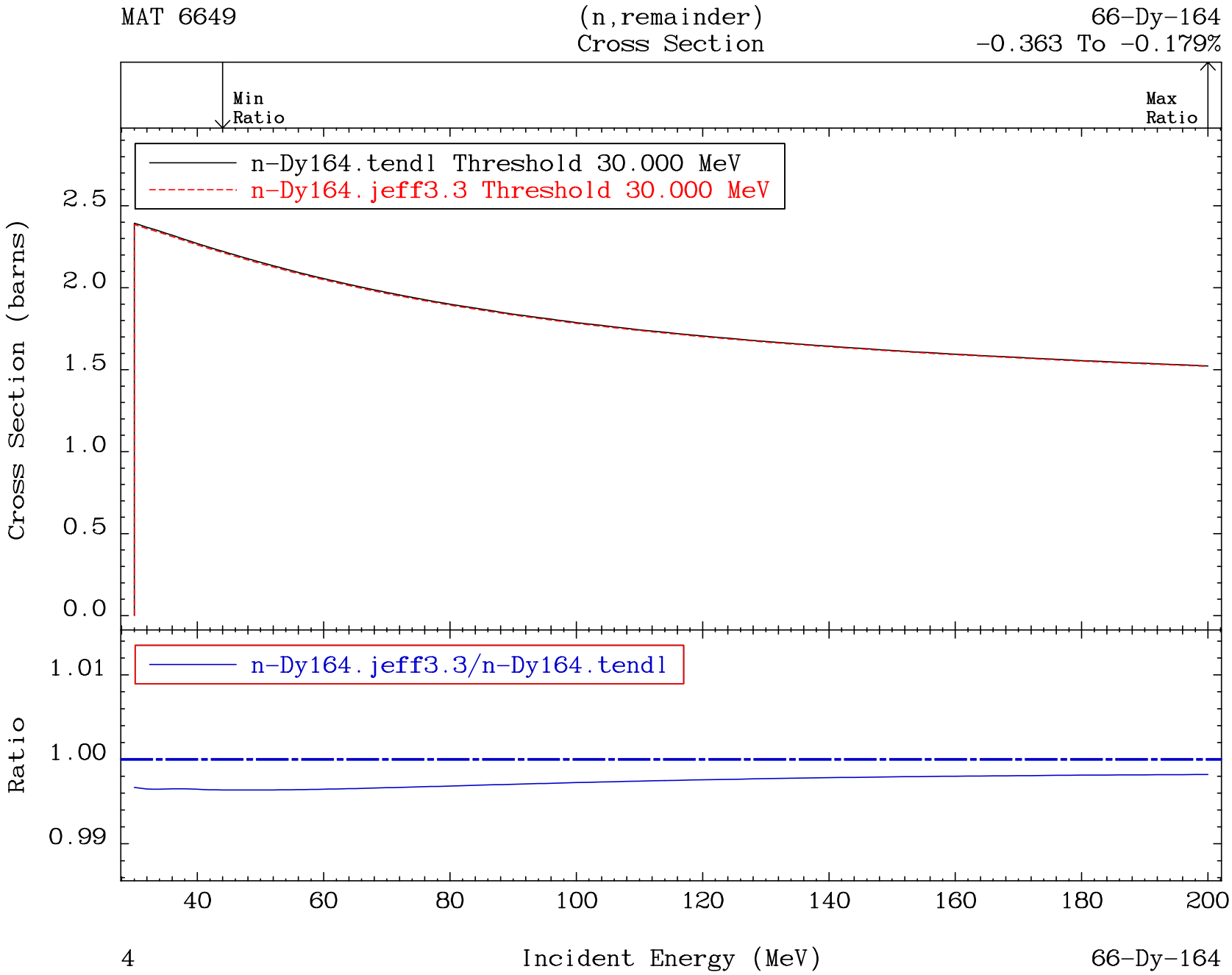
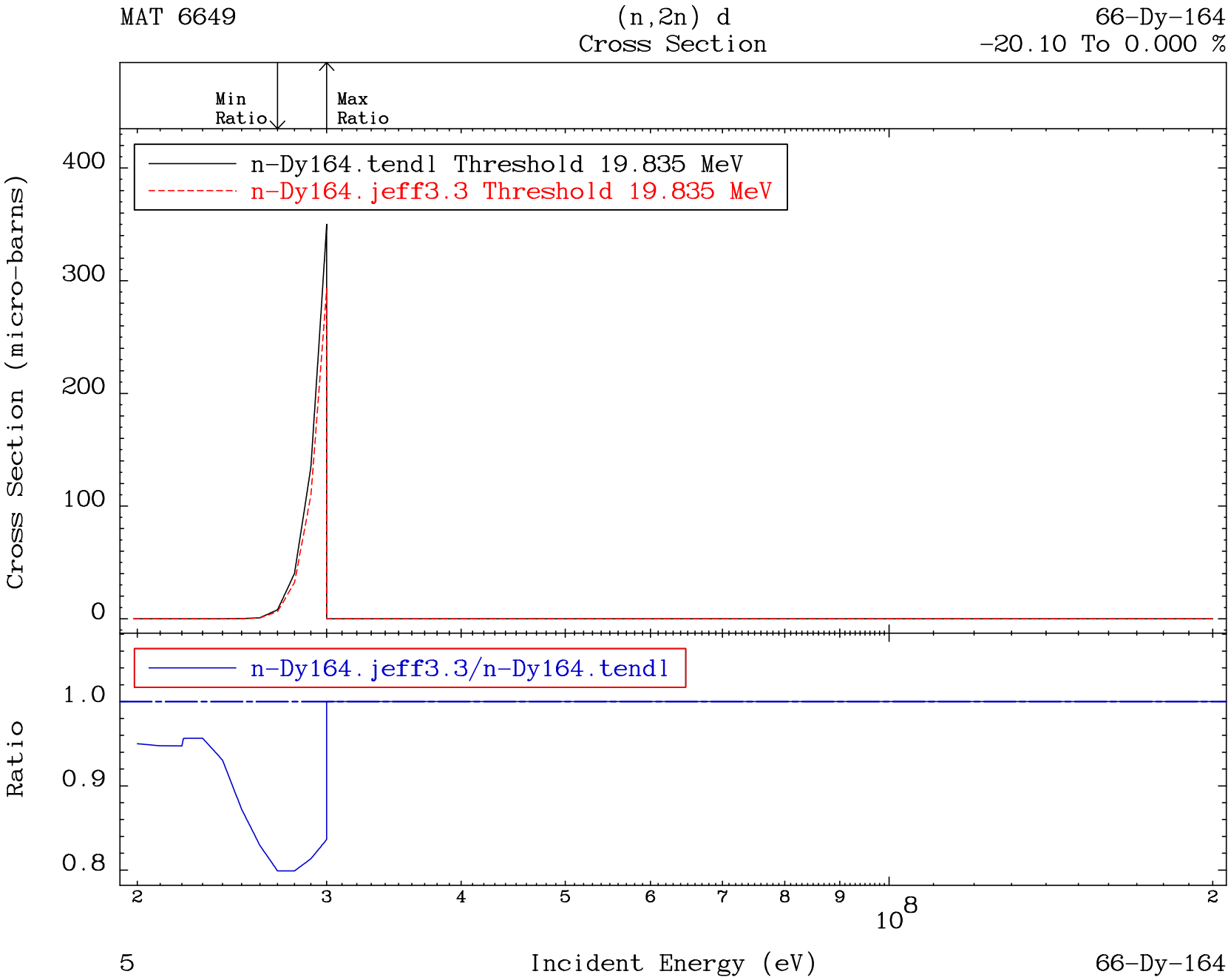
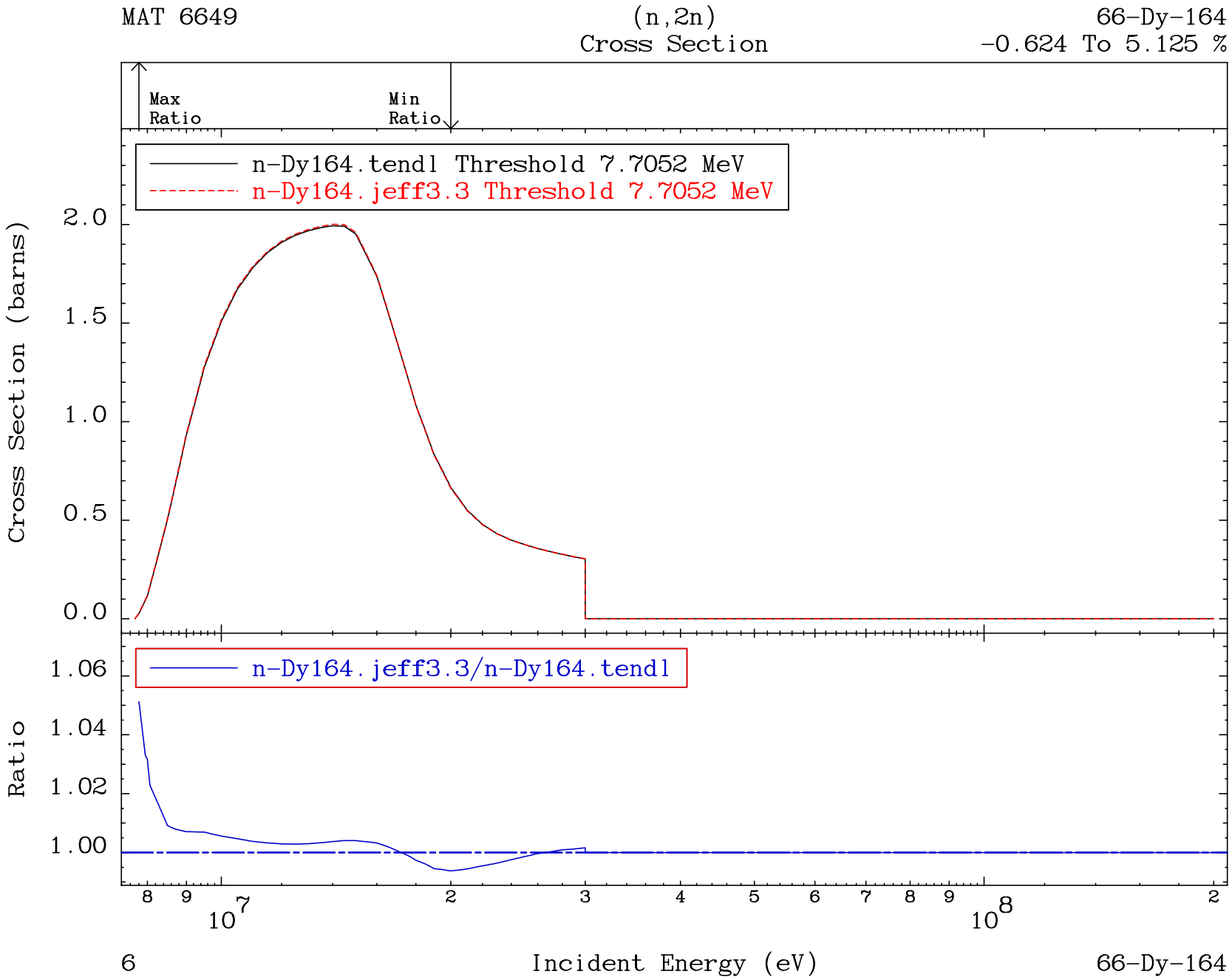

MAT 6649
Total
Cross Section
66-Dy-164
-99.56 To 9999. %
Max
Ratio
Min
Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
1
66-Dy-164

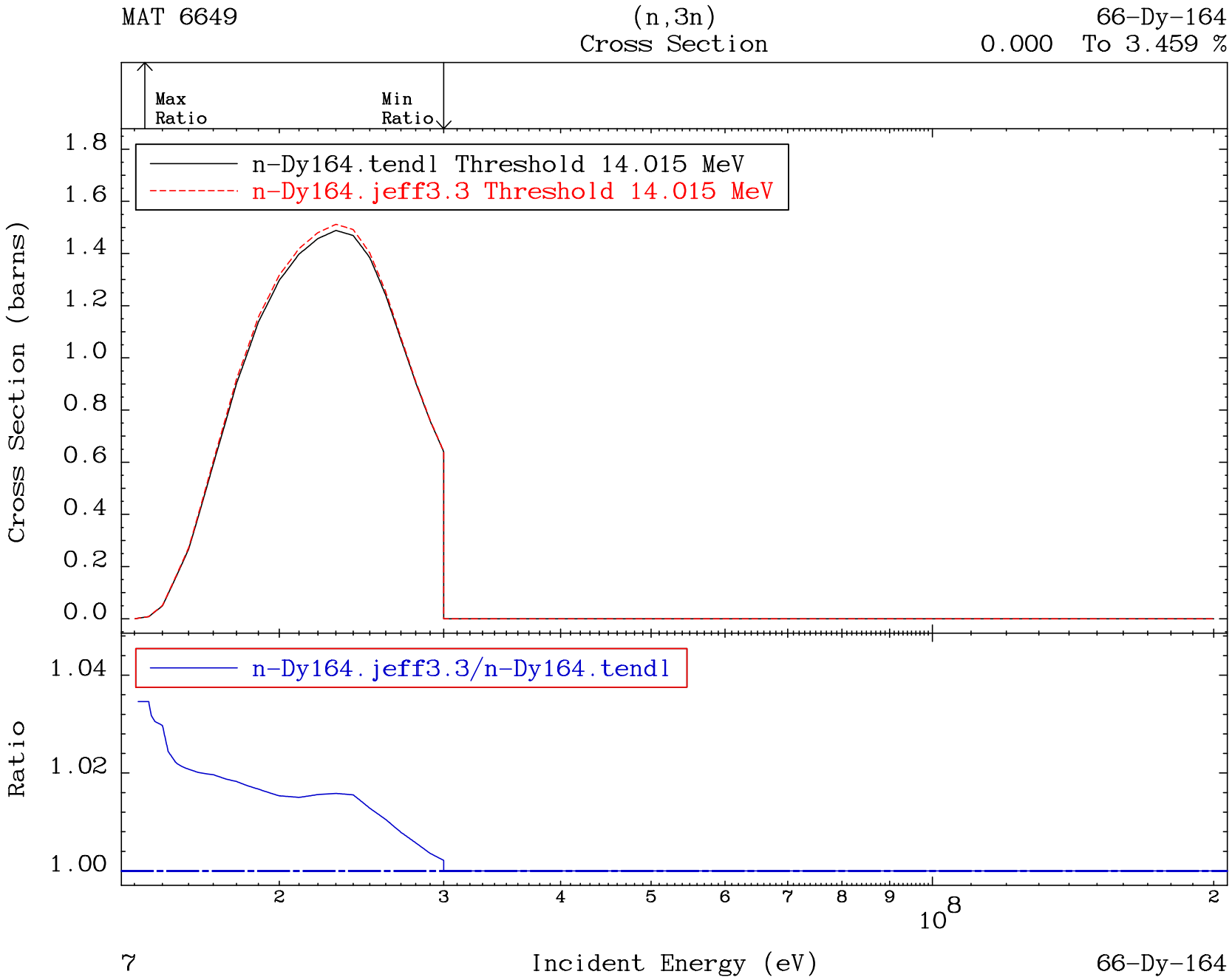

MAT 6649
Elastic
Cross Section
66-Dy-164
-99.89 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
2
66-Dy-164

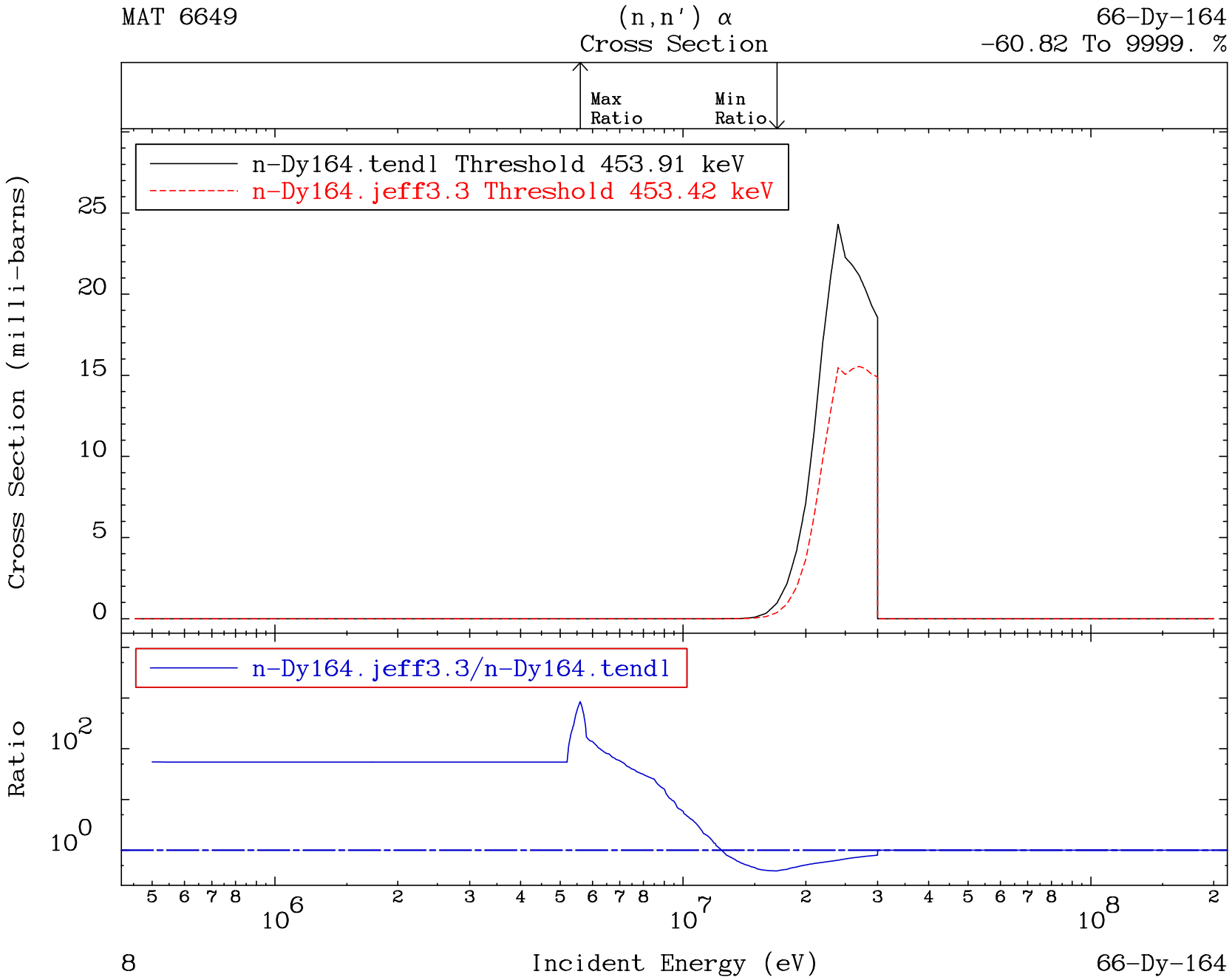

MAT 6649
Inelastic
Cross Section
66-Dy-164
-3.415 To 1.696 %
Max
Ratio
Min
Ratio
n-Dy164.tendl Threshold 73.844 keV
n-Dy164.jeff3.3 Threshold 73.844 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
8
2
3
4
5
6
8
10^5
10^6
10^7
10^8
3
Incident Energy (eV)
66-Dy-164

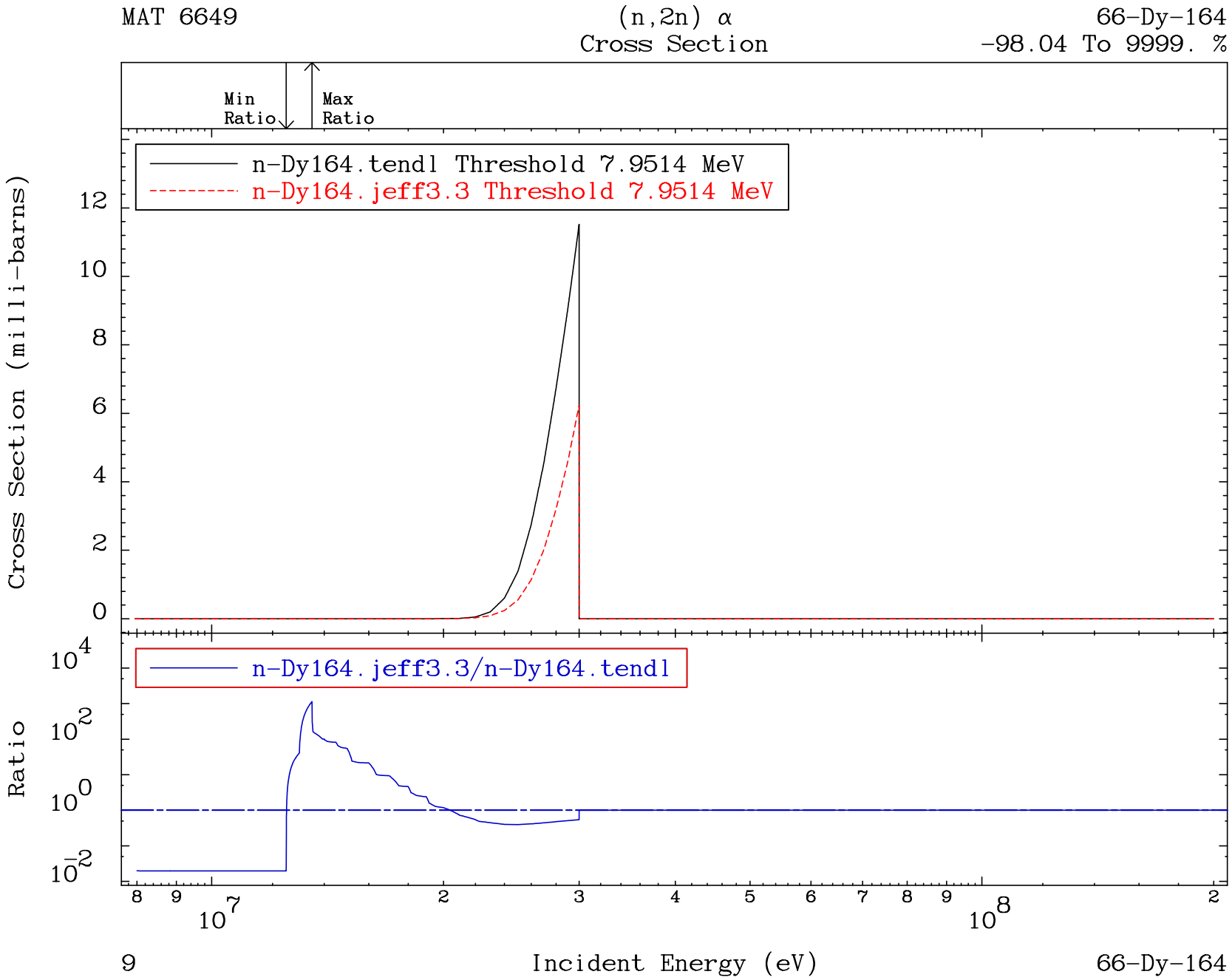

MAT 6649
(n,remainder)
Cross Section
66-Dy-164
-0.363 To -0.179%
Min
Ratio
Max
Ratio
n-Dy164.tendl Threshold 30.000 MeV
n-Dy164.jeff3.3 Threshold 30.000 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
66-Dy-164

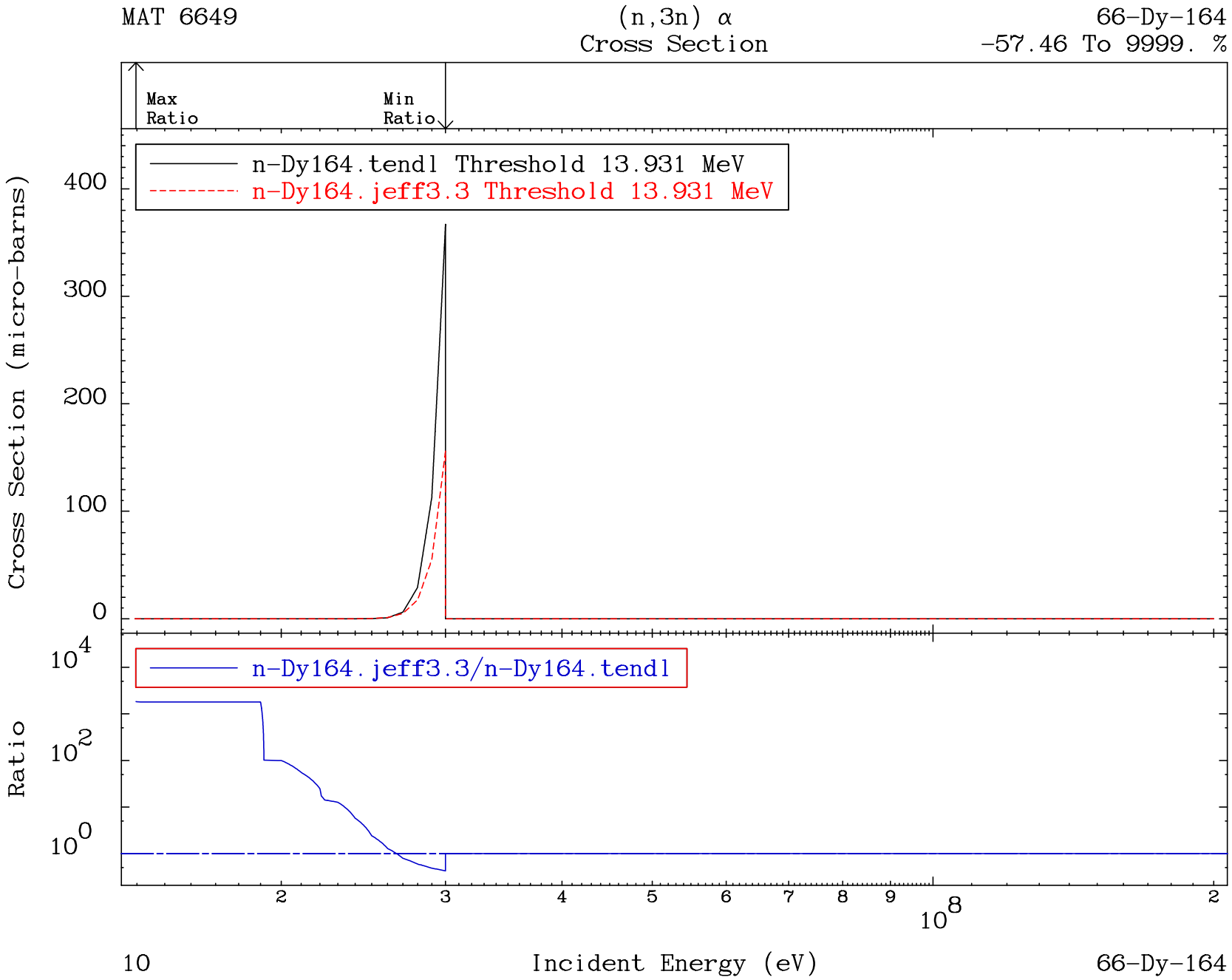

MAT 6649
(n,2n) d
Cross Section
66-Dy-164
-20.10 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 19.835 MeV
n-Dy164.jeff3.3 Threshold 19.835 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
66-Dy-164

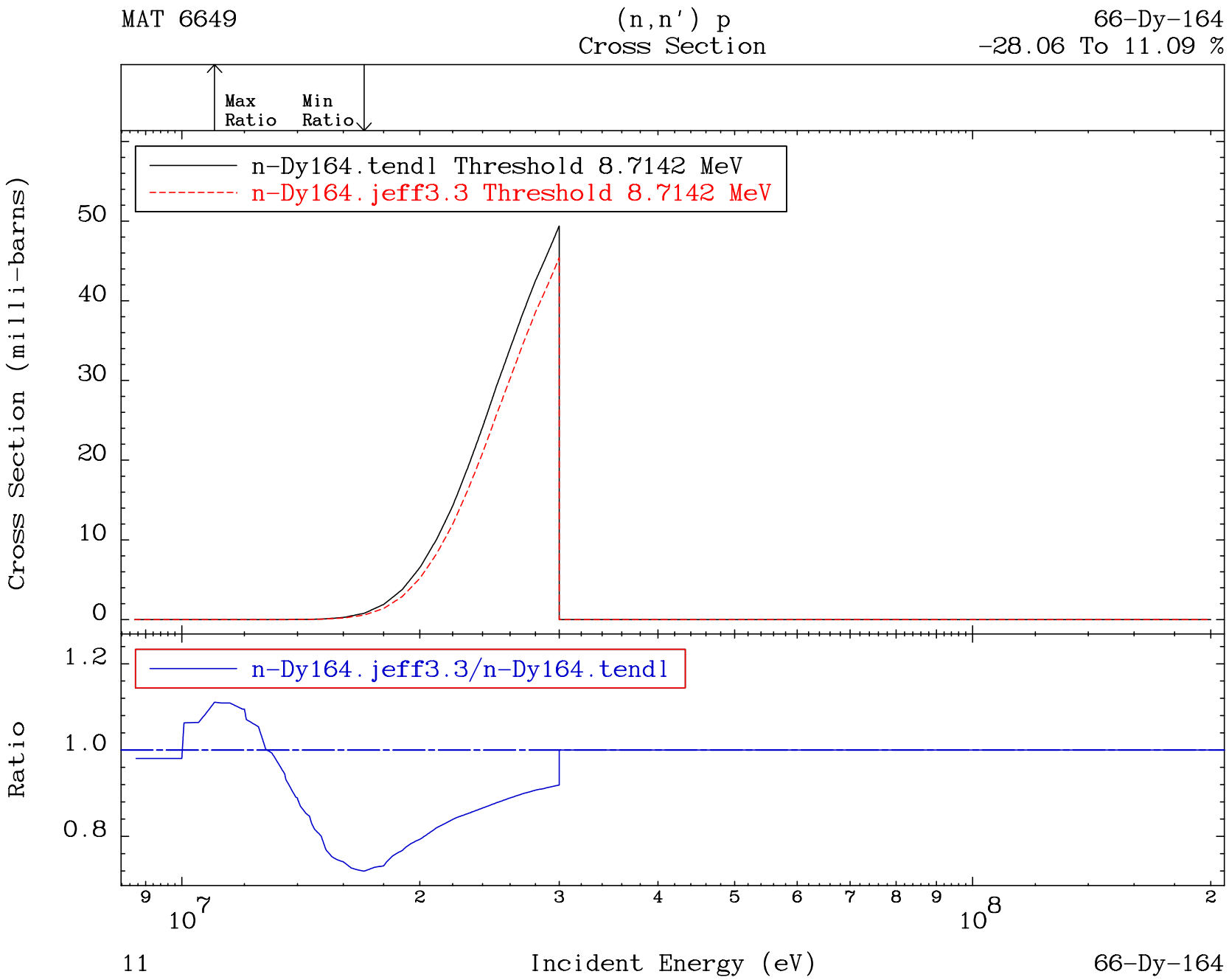

MAT 6649
(n,2n)
Cross Section
66-Dy-164
-0.624 To 5.125 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 7.7052 MeV
n-Dy164.jeff3.3 Threshold 7.7052 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.06
1.04
1.02
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
66-Dy-164

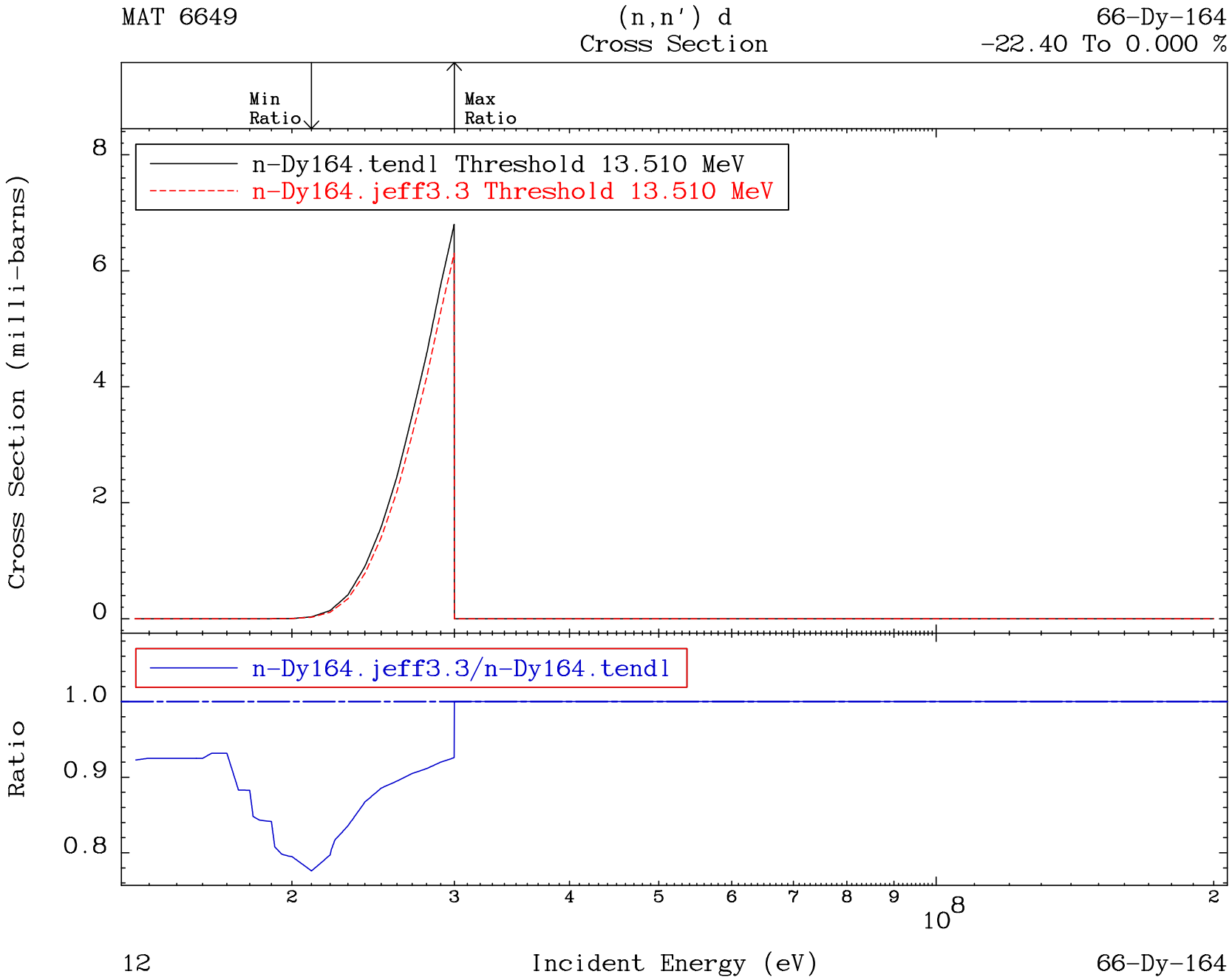

MAT 6649
(n,3n)
Cross Section
66-Dy-164
0.000 To 3.459 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 14.015 MeV
n-Dy164.jeff3.3 Threshold 14.015 MeV
Cross Section (barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
66-Dy-164

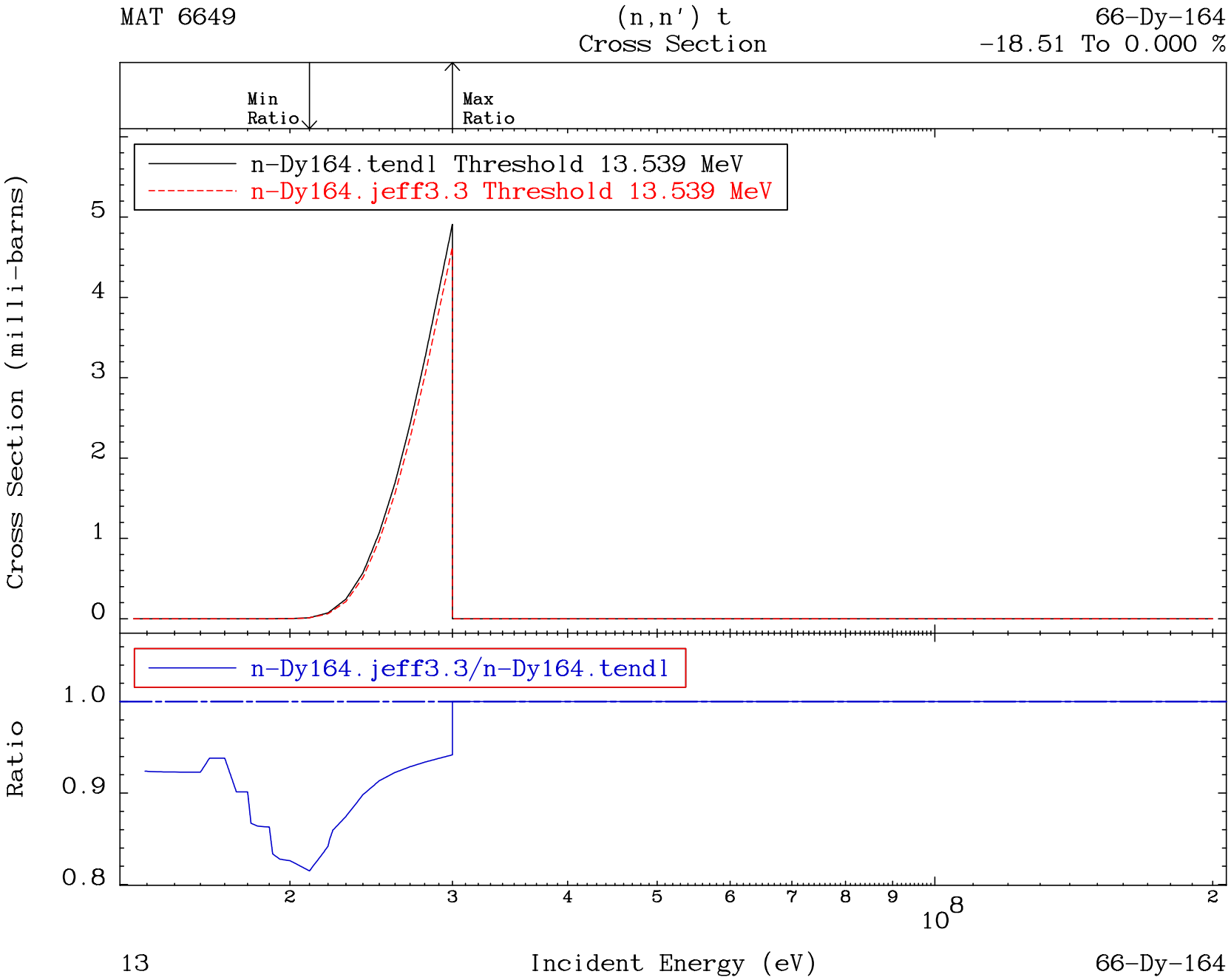

MAT 6649
(n,n') α
Cross Section
66-Dy-164
-60.82 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 453.91 keV
n-Dy164.jeff3.3 Threshold 453.42 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
10^2
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
66-Dy-164

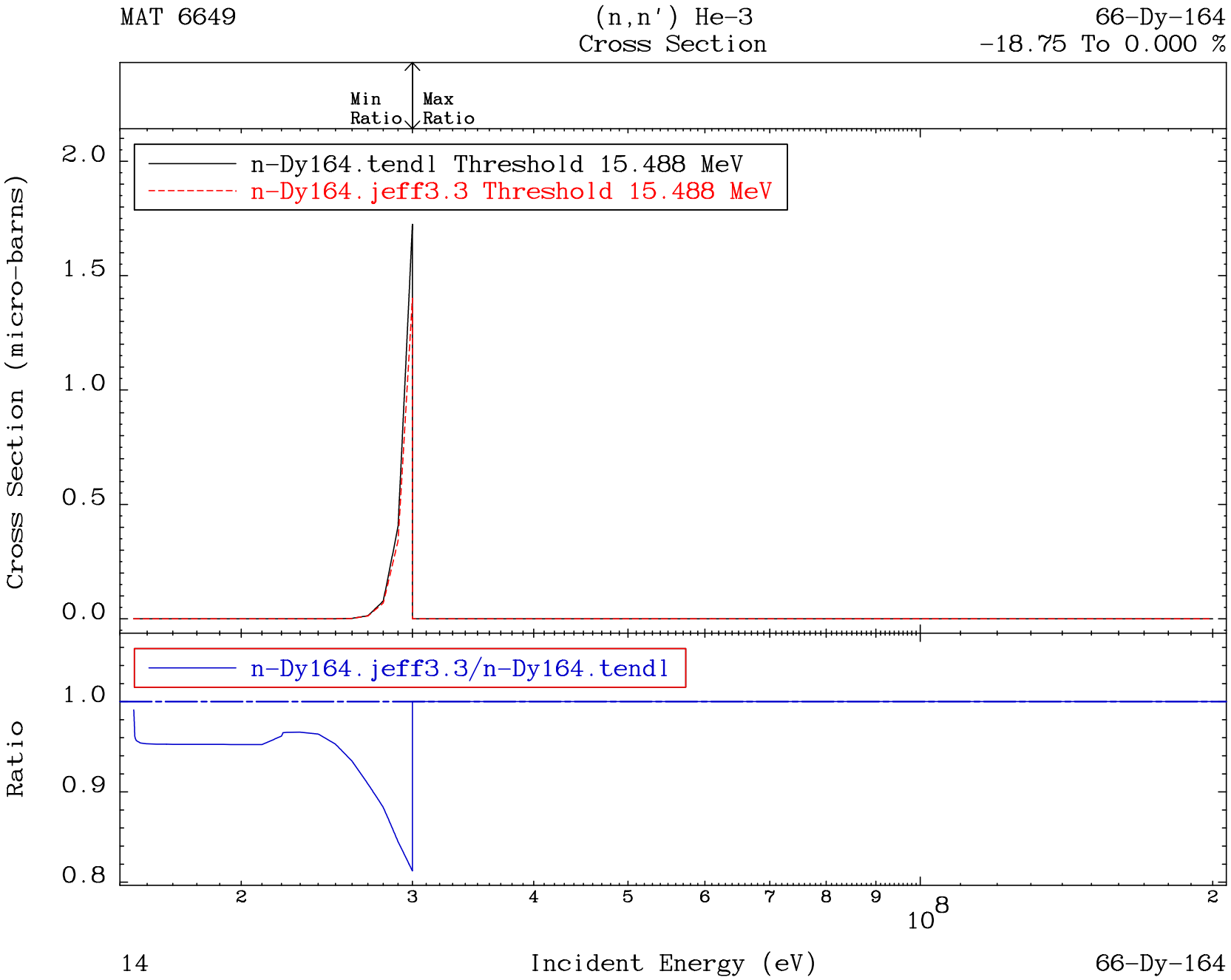

MAT 6649
(n,2n) α
Cross Section
66-Dy-164
-98.04 To 9999. %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 7.9514 MeV
n-Dy164.jeff3.3 Threshold 7.9514 MeV
Cross Section (milli-barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
9
66-Dy-164

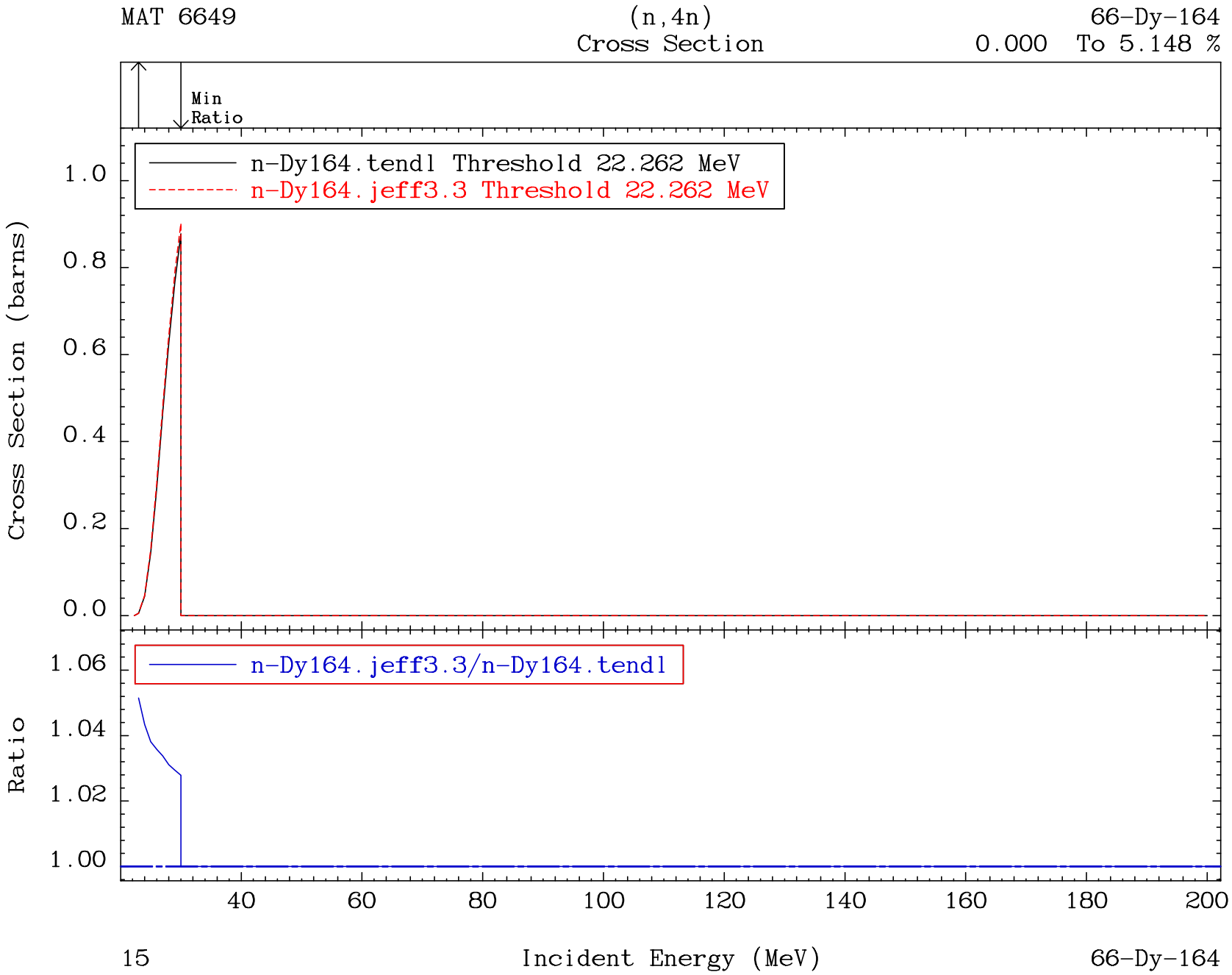

MAT 6649
(n,3n) α
Cross Section
66-Dy-164
-57.46 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 13.931 MeV
n-Dy164.jeff3.3 Threshold 13.931 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
66-Dy-164

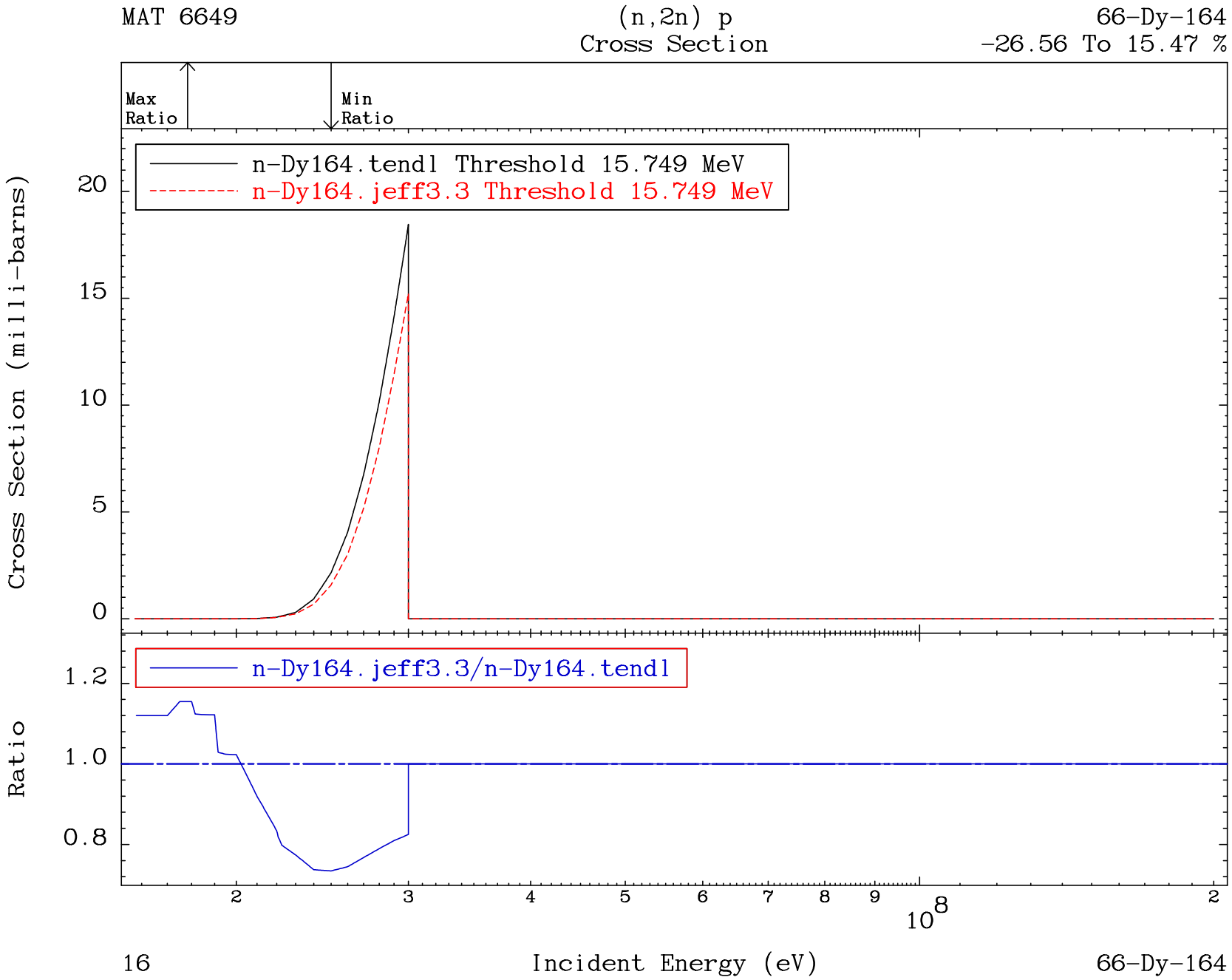

MAT 6649
(n,n') p
Cross Section
66-Dy-164
-28.06 To 11.09 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 8.7142 MeV
n-Dy164.jeff3.3 Threshold 8.7142 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
66-Dy-164

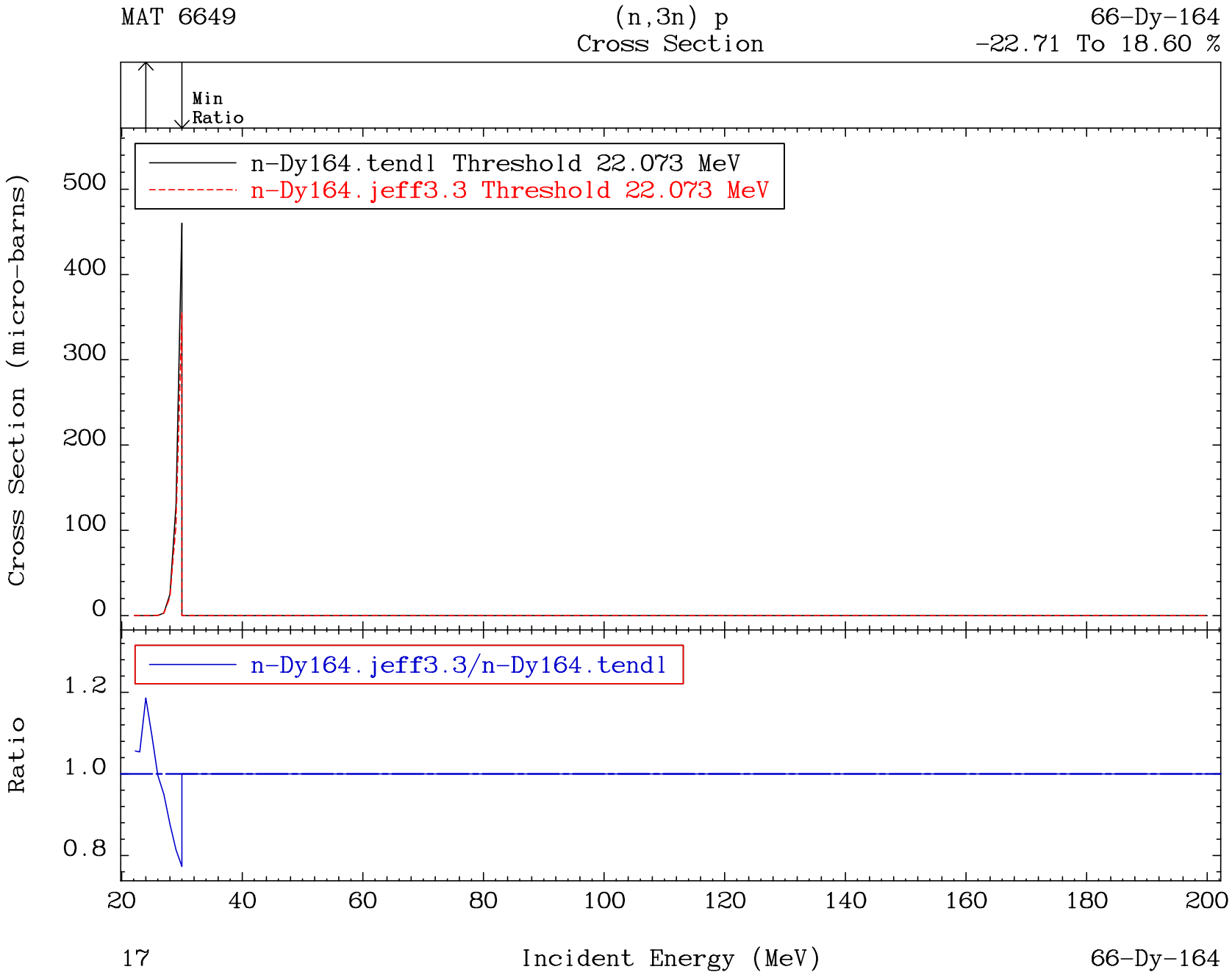

MAT 6649
(n,n') d
Cross Section
66-Dy-164
-22.40 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 13.510 MeV
n-Dy164.jeff3.3 Threshold 13.510 MeV
Cross Section (milli-barns)
8
6
4
2
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
66-Dy-164

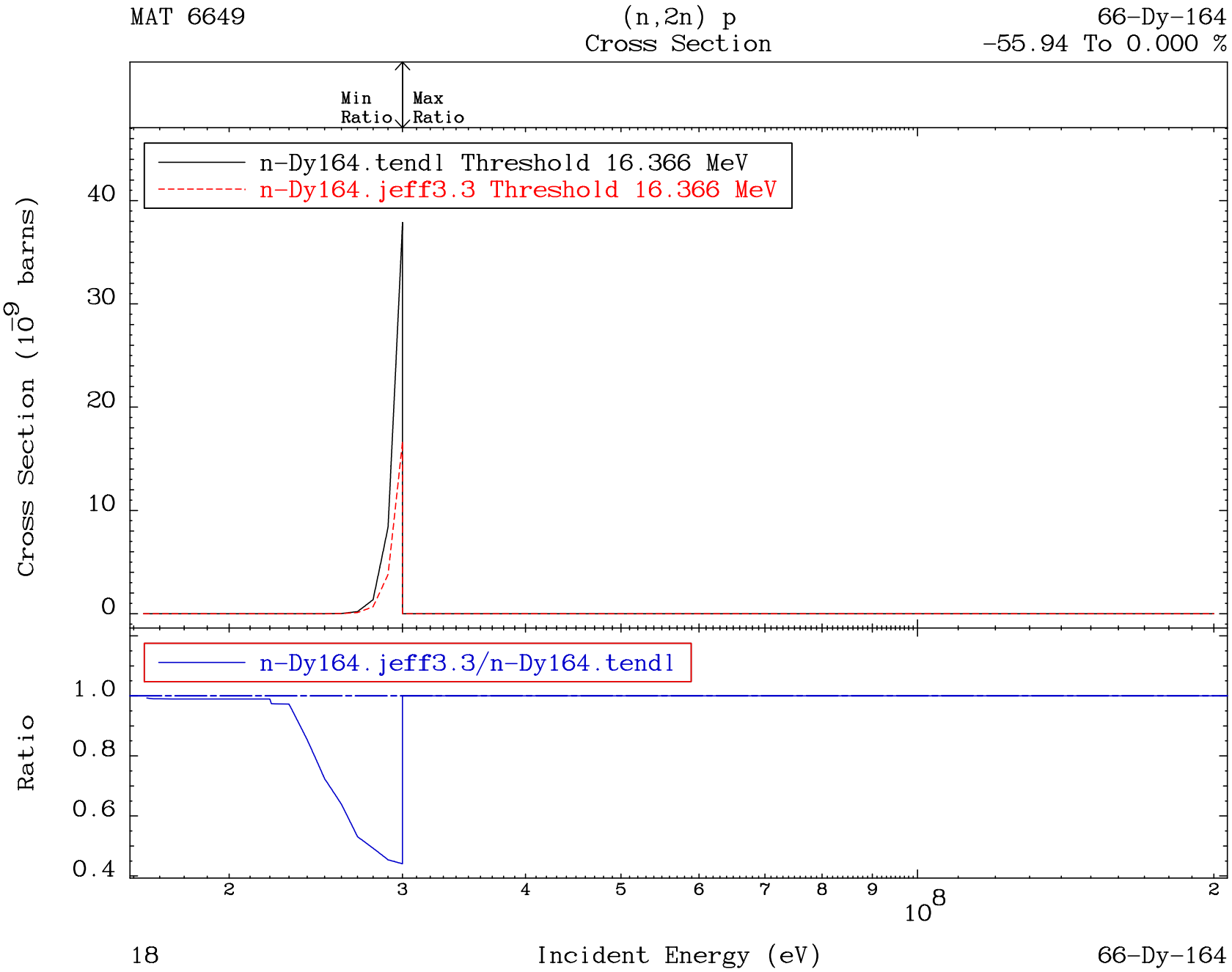

MAT 6649
(n,n') t
Cross Section
66-Dy-164
-18.51 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 13.539 MeV
n-Dy164.jeff3.3 Threshold 13.539 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
0.8
0.9
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
66-Dy-164

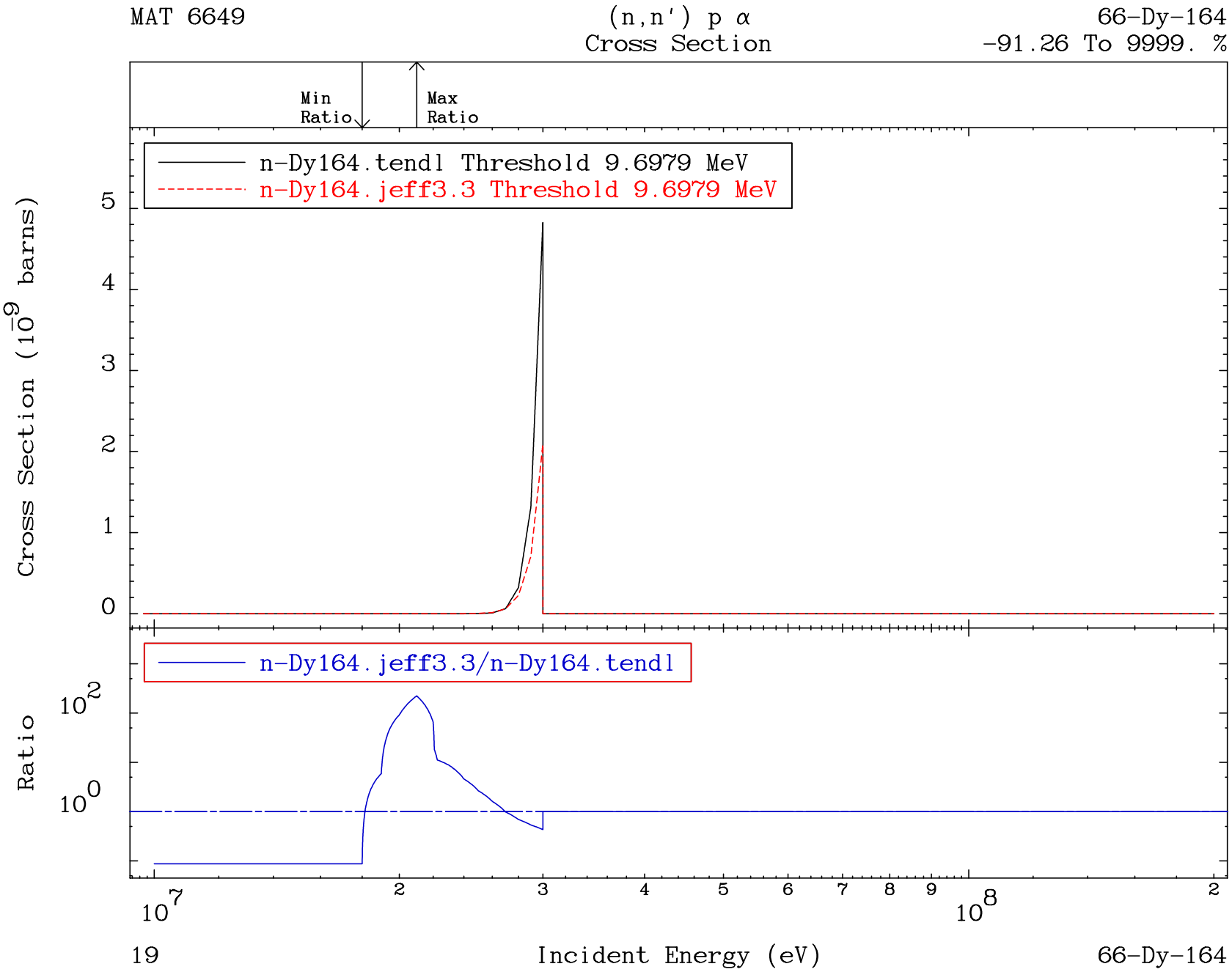

MAT 6649
(n,n') He-3
Cross Section
66-Dy-164
-18.75 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 15.488 MeV
n-Dy164.jeff3.3 Threshold 15.488 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
66-Dy-164

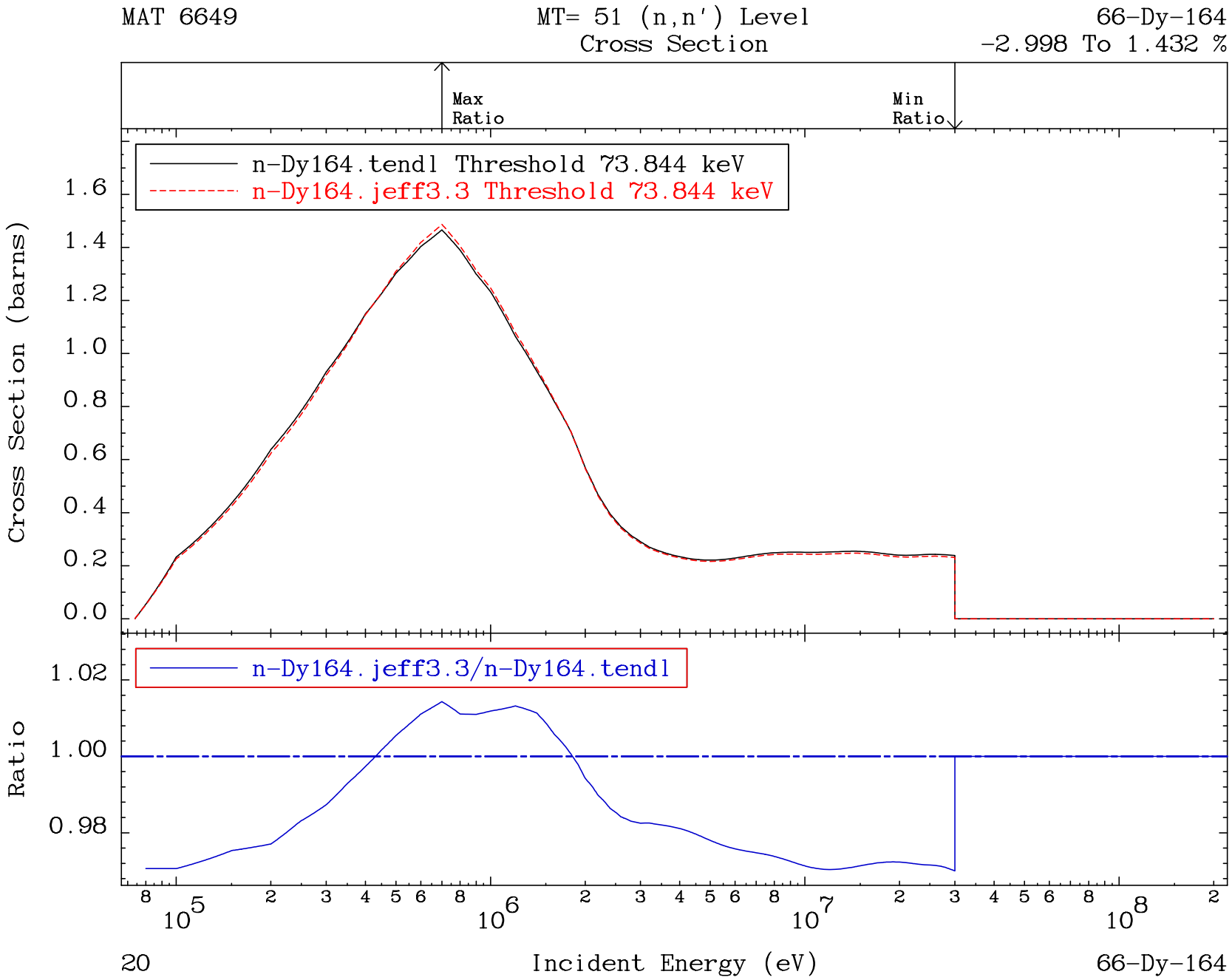

MAT 6649
(n,4n)
Cross Section
66-Dy-164
0.000 To 5.148 %
Min
Ratio
n-Dy164.tendl Threshold 22.262 MeV
n-Dy164.jeff3.3 Threshold 22.262 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.06
1.04
1.02
1.00
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
66-Dy-164

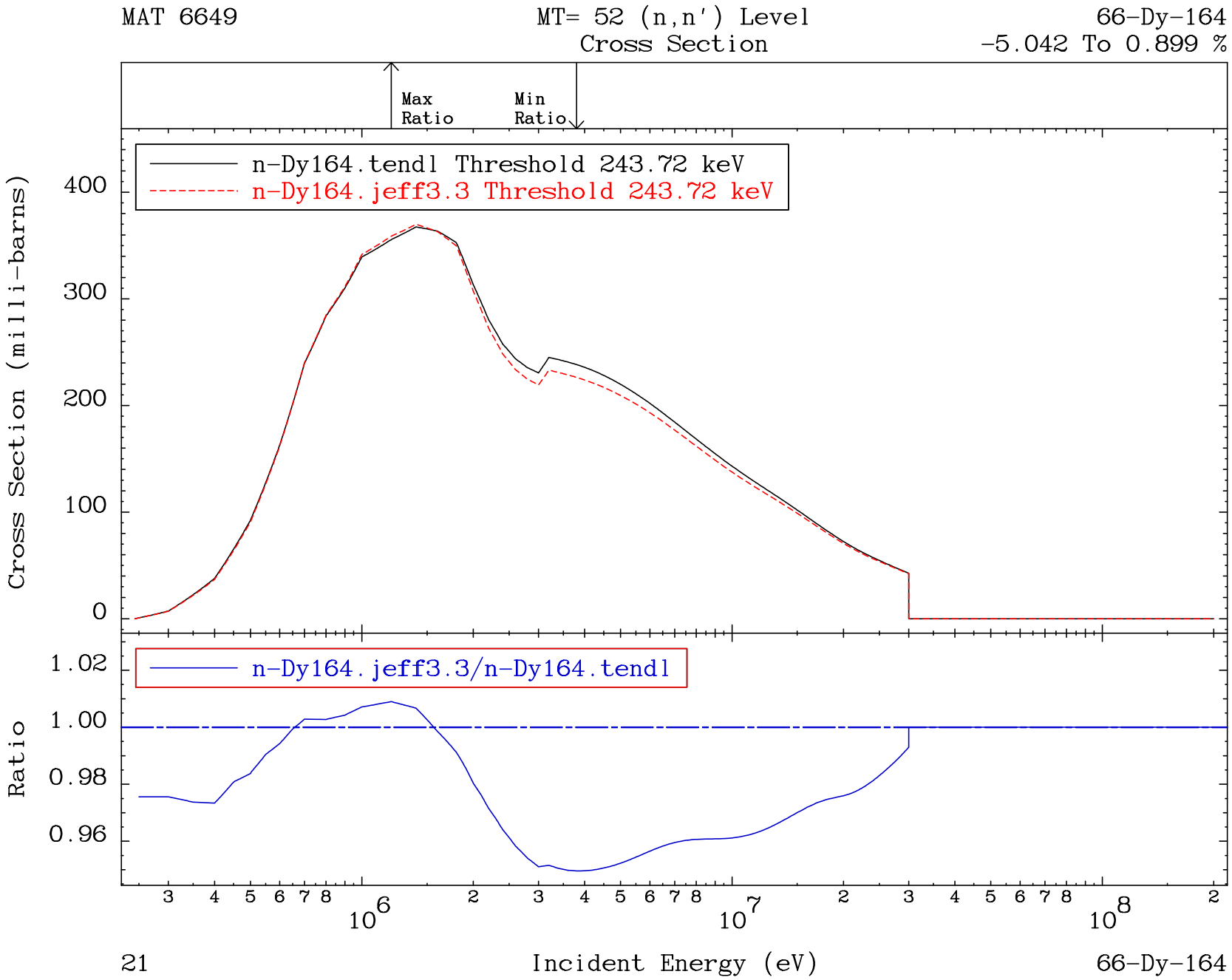

MAT 6649
(n,2n) p
Cross Section
66-Dy-164
-26.56 To 15.47 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 15.749 MeV
n-Dy164.jeff3.3 Threshold 15.749 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
66-Dy-164

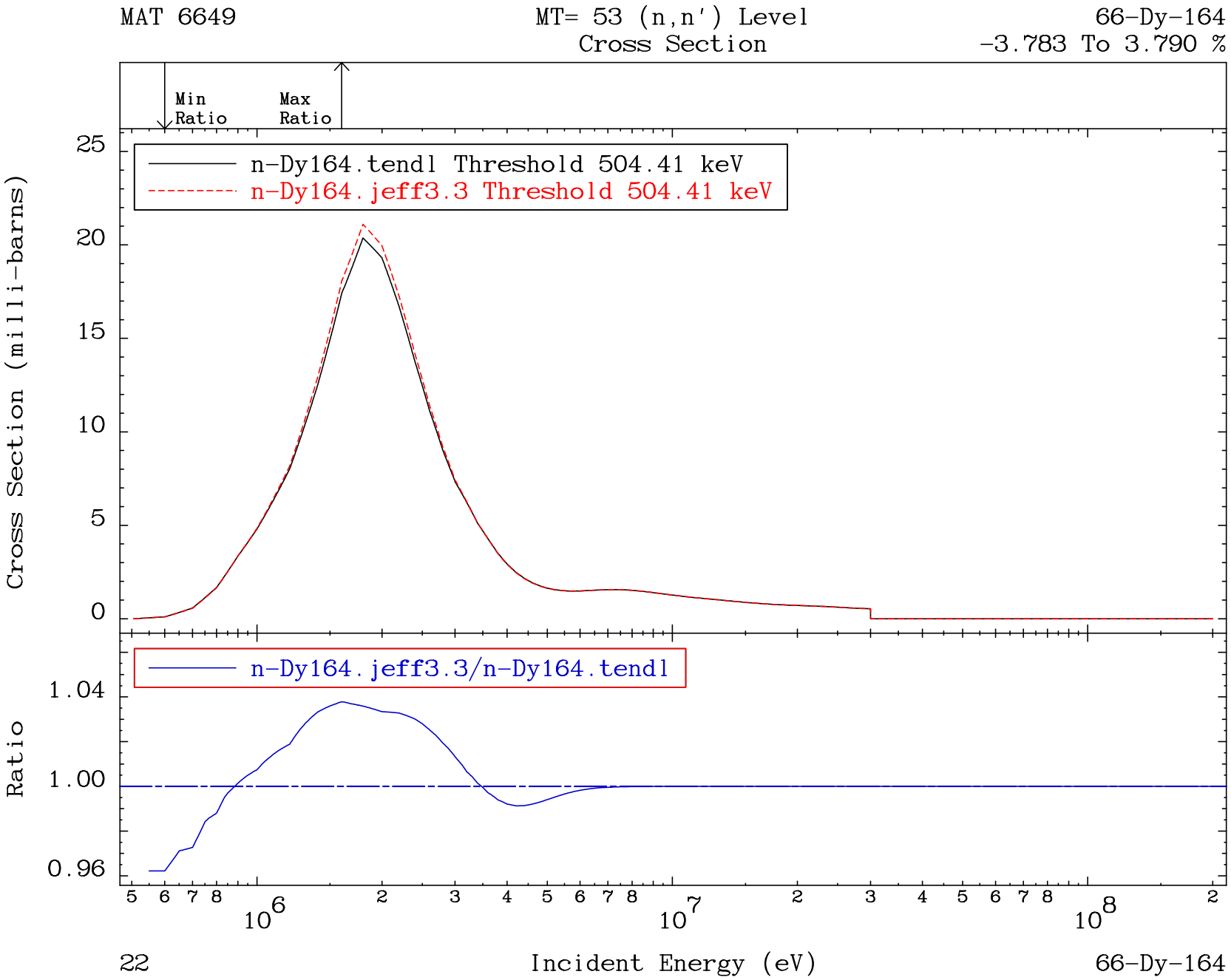

MAT 6649
(n,3n) p
Cross Section
66-Dy-164
-22.71 To 18.60 %
Min
Ratio
n-Dy164.tendl Threshold 22.073 MeV
n-Dy164.jeff3.3 Threshold 22.073 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.2
1.0
0.8
20
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
66-Dy-164

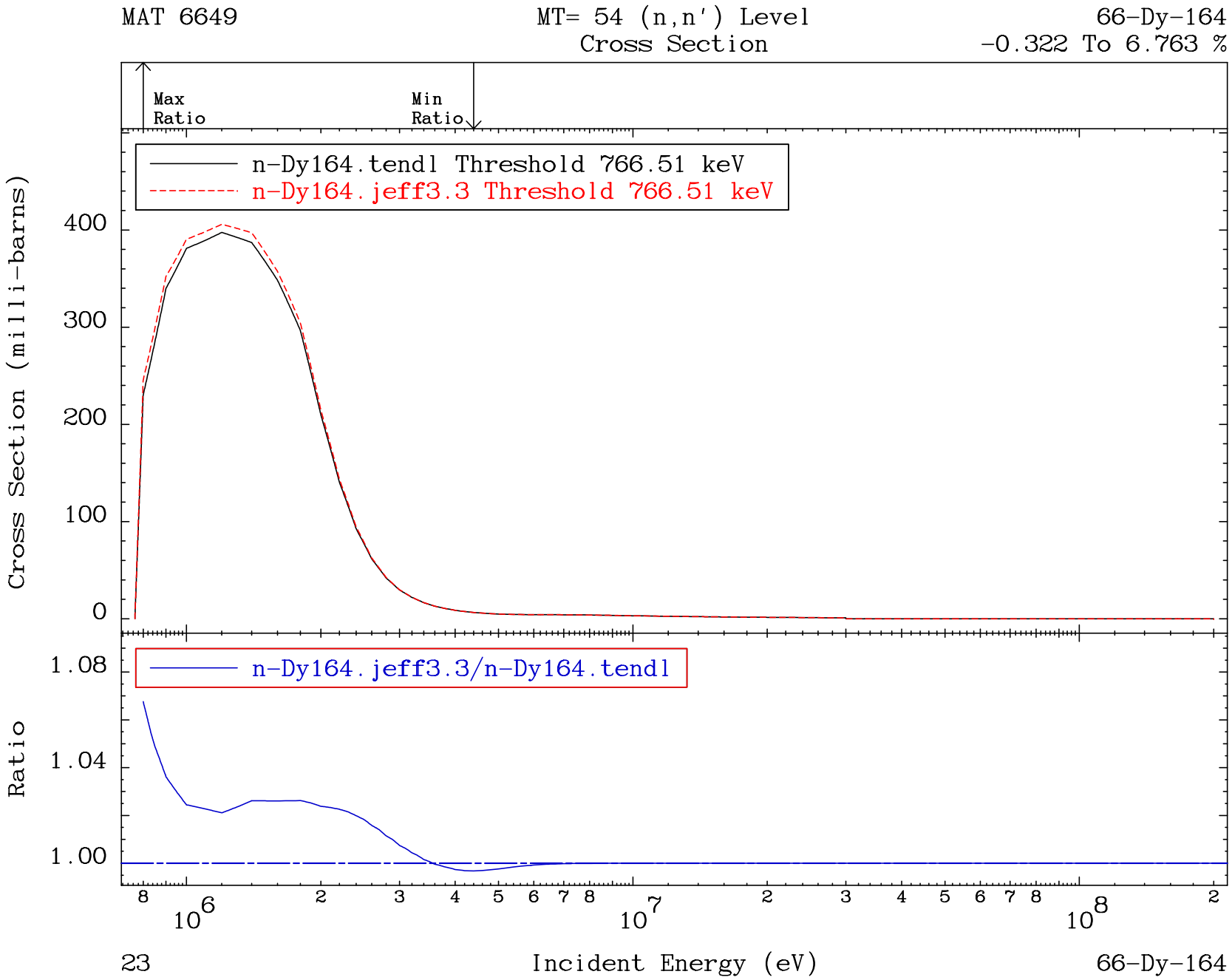

MAT 6649
(n,2n) p
Cross Section
66-Dy-164
-55.94 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 16.366 MeV
n-Dy164.jeff3.3 Threshold 16.366 MeV
Cross Section (10^{-9} barns)
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.8
0.6
0.4
2
3
4
5
6
7
8
9
10^{8}
2
18
Incident Energy (eV)
66-Dy-164

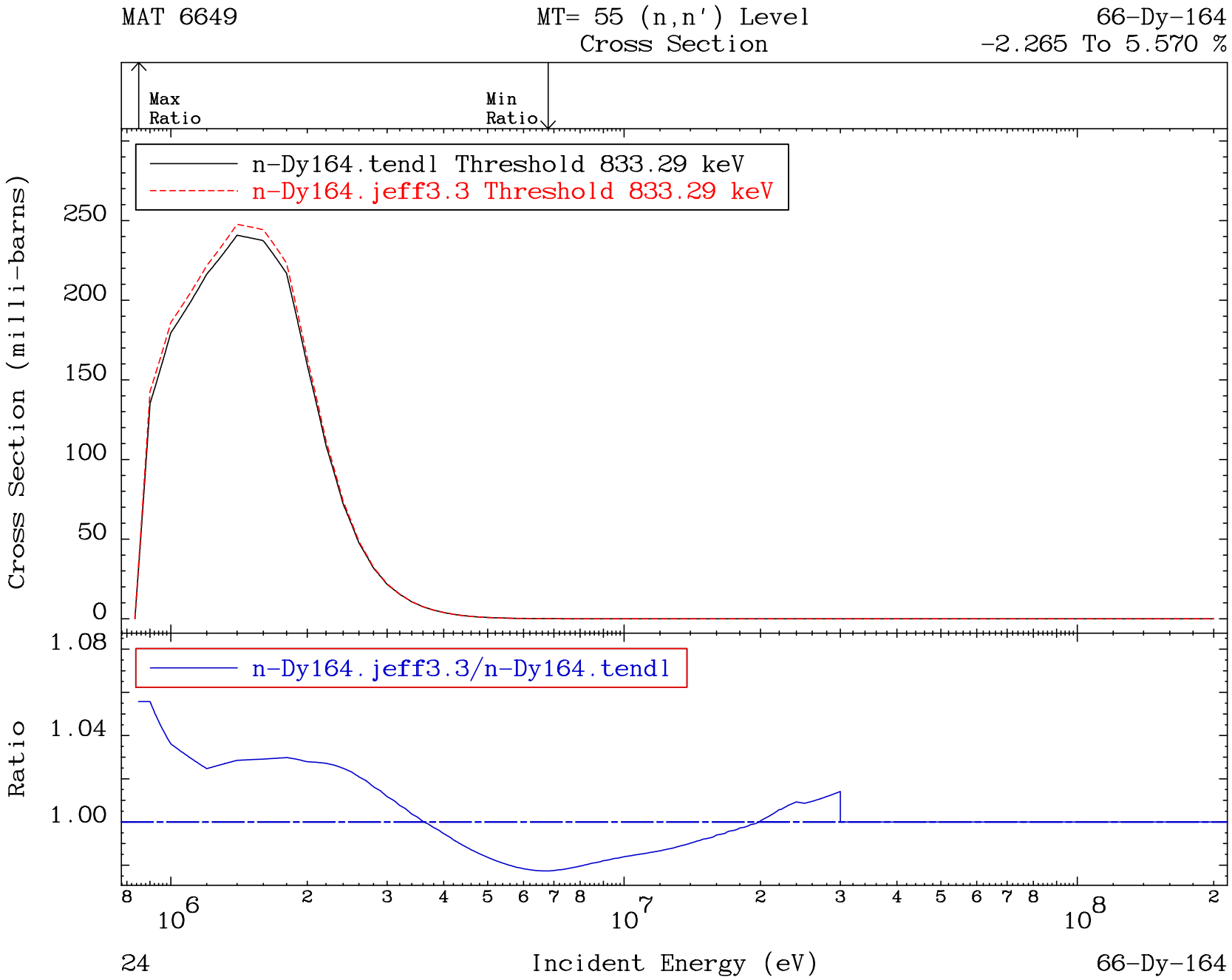

MAT 6649
(n,n') p α
Cross Section
66-Dy-164
-91.26 To 9999. %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 9.6979 MeV
n-Dy164.jeff3.3 Threshold 9.6979 MeV
Cross Section (10^-9 barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
19
66-Dy-164

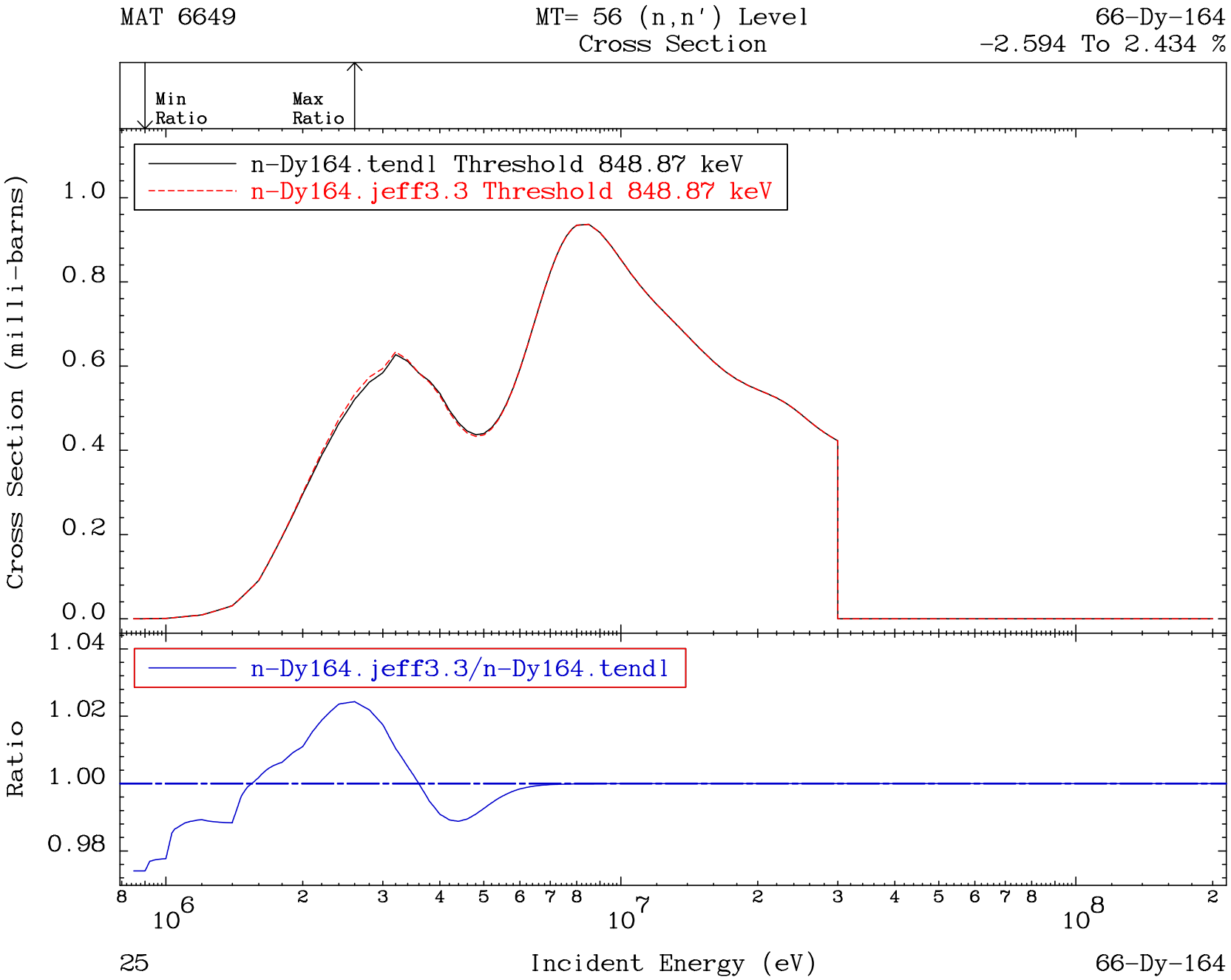

MAT 6649
MT= 51 (n,n') Level
Cross Section
66-Dy-164
-2.998 To 1.432 %
Max
Ratio
Min
Ratio
n-Dy164.tendl Threshold 73.844 keV
n-Dy164.jeff3.3 Threshold 73.844 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
8
2
3
4
5
6
8
10^5
10^6
10^7
10^8
20
Incident Energy (eV)
66-Dy-164

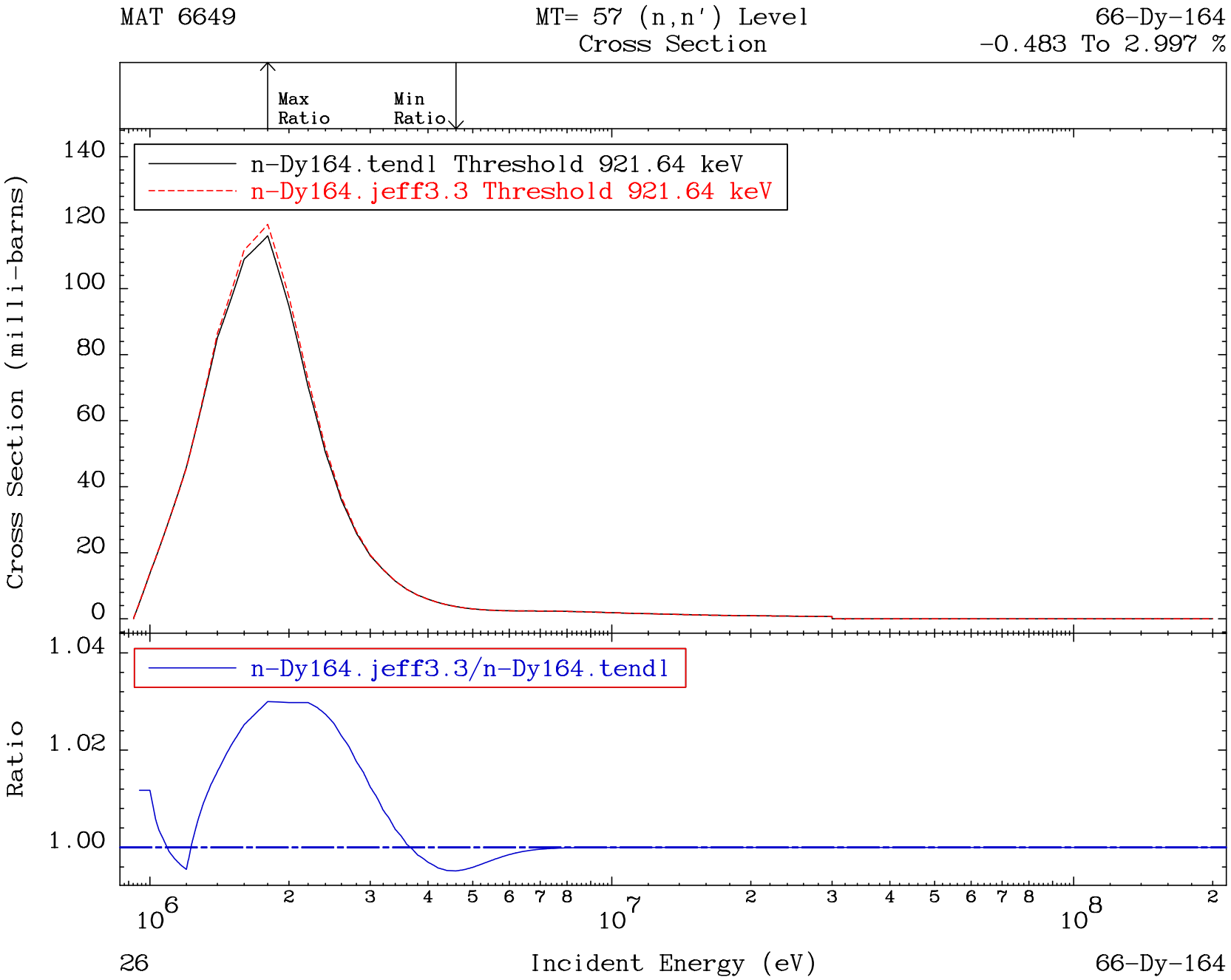

MAT 6649
MT= 52 (n,n') Level
Cross Section
66-Dy-164
-5.042 To 0.899 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 243.72 keV
n-Dy164.jeff3.3 Threshold 243.72 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
0.96
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
66-Dy-164

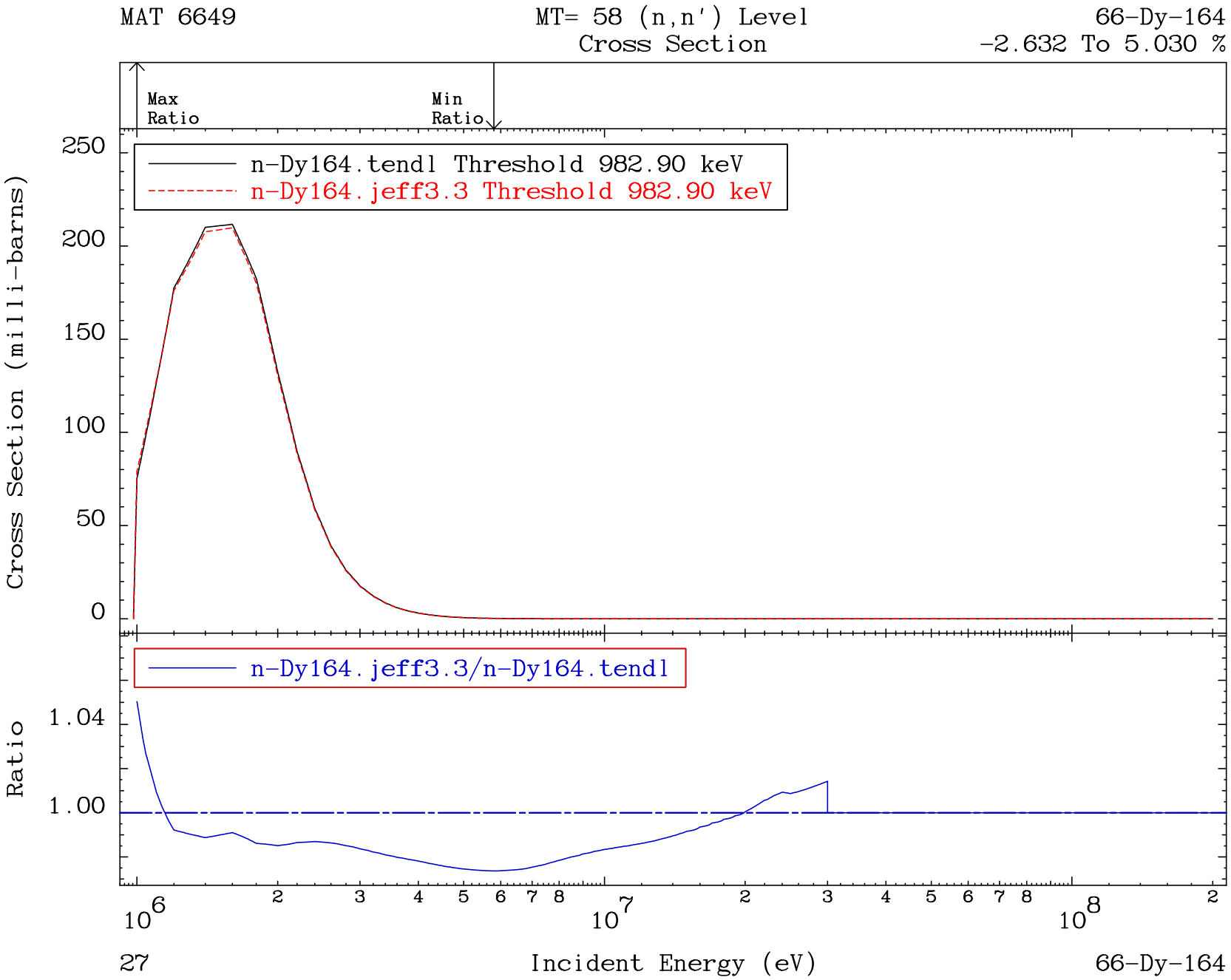

MAT 6649
MT= 53 (n,n') Level
Cross Section
66-Dy-164
-3.783 To 3.790 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 504.41 keV
n-Dy164.jeff3.3 Threshold 504.41 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.00
0.96
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
66-Dy-164

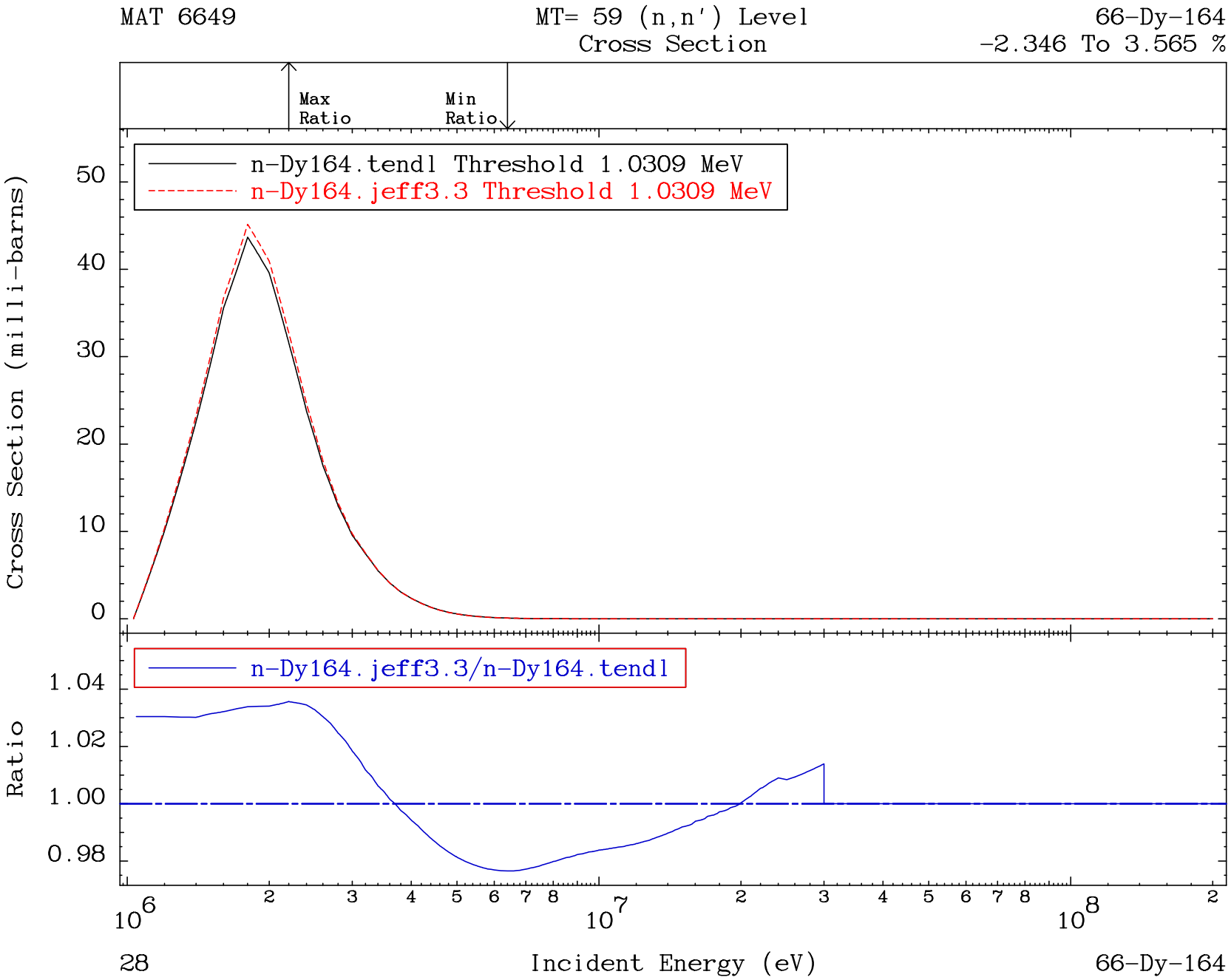

MAT 6649
MT= 54 (n,n') Level
Cross Section
66-Dy-164
-0.322 To 6.763 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 766.51 keV
n-Dy164.jeff3.3 Threshold 766.51 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.08
1.04
1.00
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
66-Dy-164

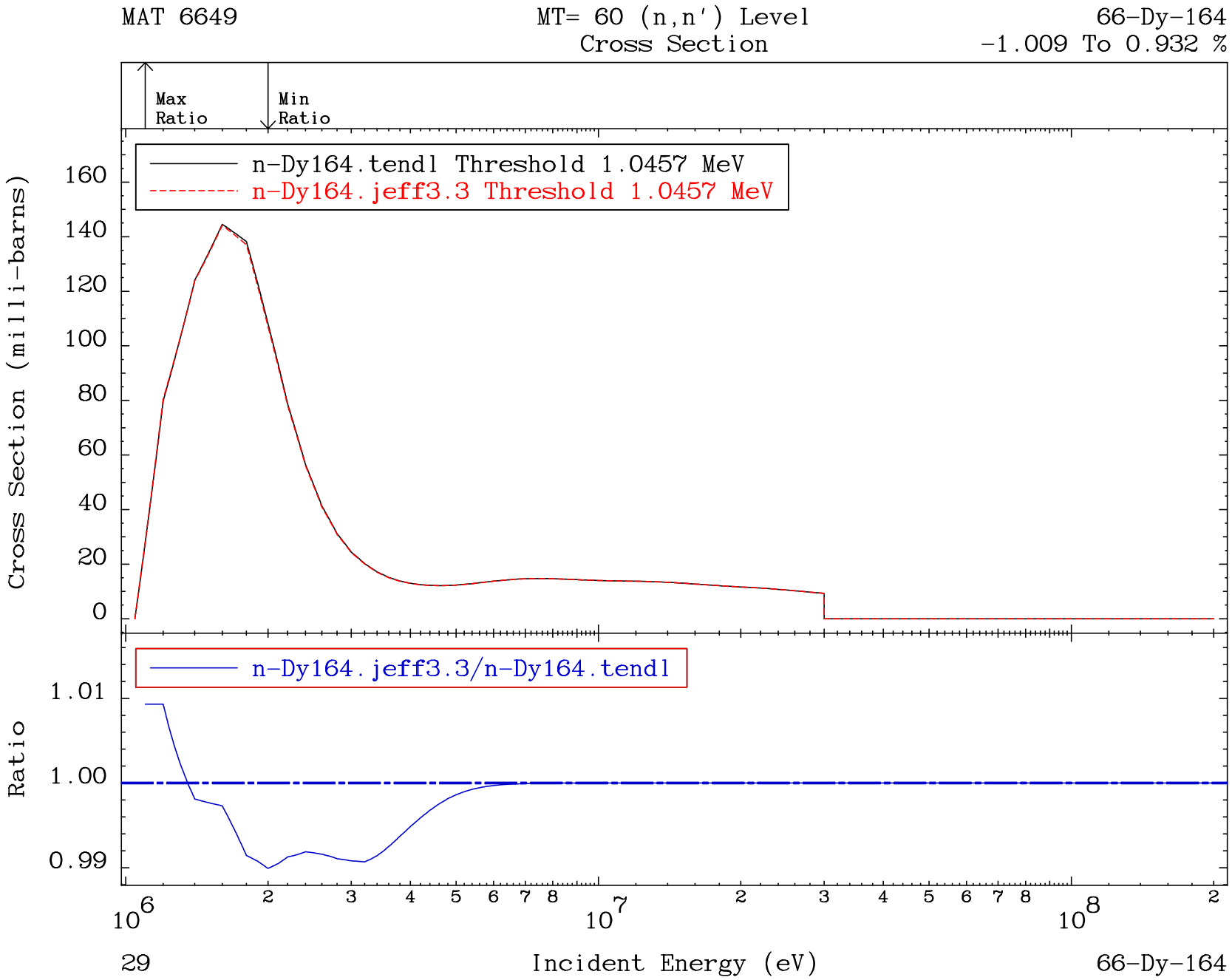

MAT 6649
MT= 55 (n,n') Level
Cross Section
66-Dy-164
-2.265 To 5.570 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 833.29 keV
n-Dy164.jeff3.3 Threshold 833.29 keV
Cross Section (milli-barns)
250
200
150
100
50
0
1.08
1.04
1.00
Ratio
n-Dy164.jeff3.3/n-Dy164.tendl
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
66-Dy-164

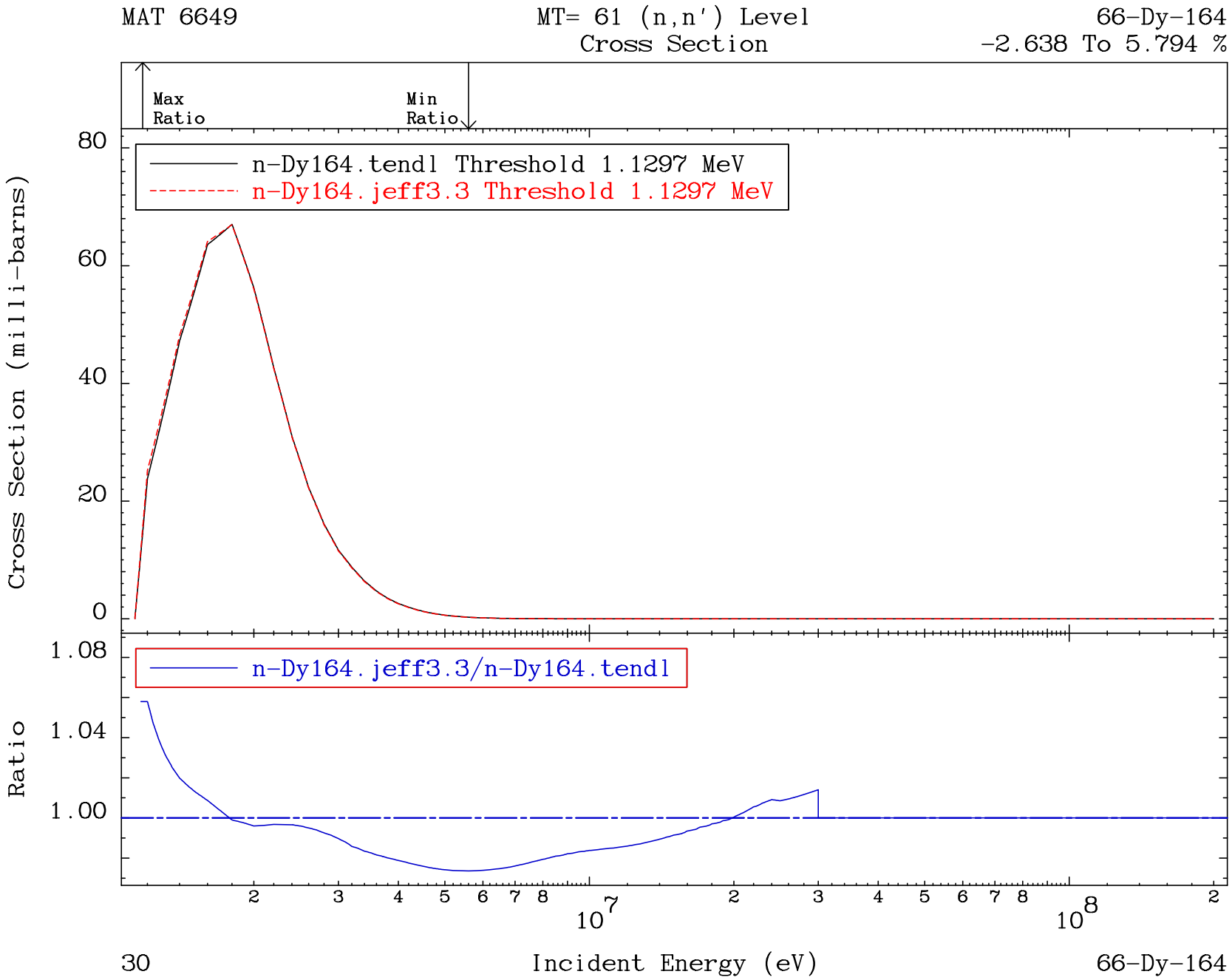

MAT 6649
MT= 56 (n,n') Level
Cross Section
66-Dy-164
-2.594 To 2.434 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 848.87 keV
n-Dy164.jeff3.3 Threshold 848.87 keV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
0.98
8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
66-Dy-164

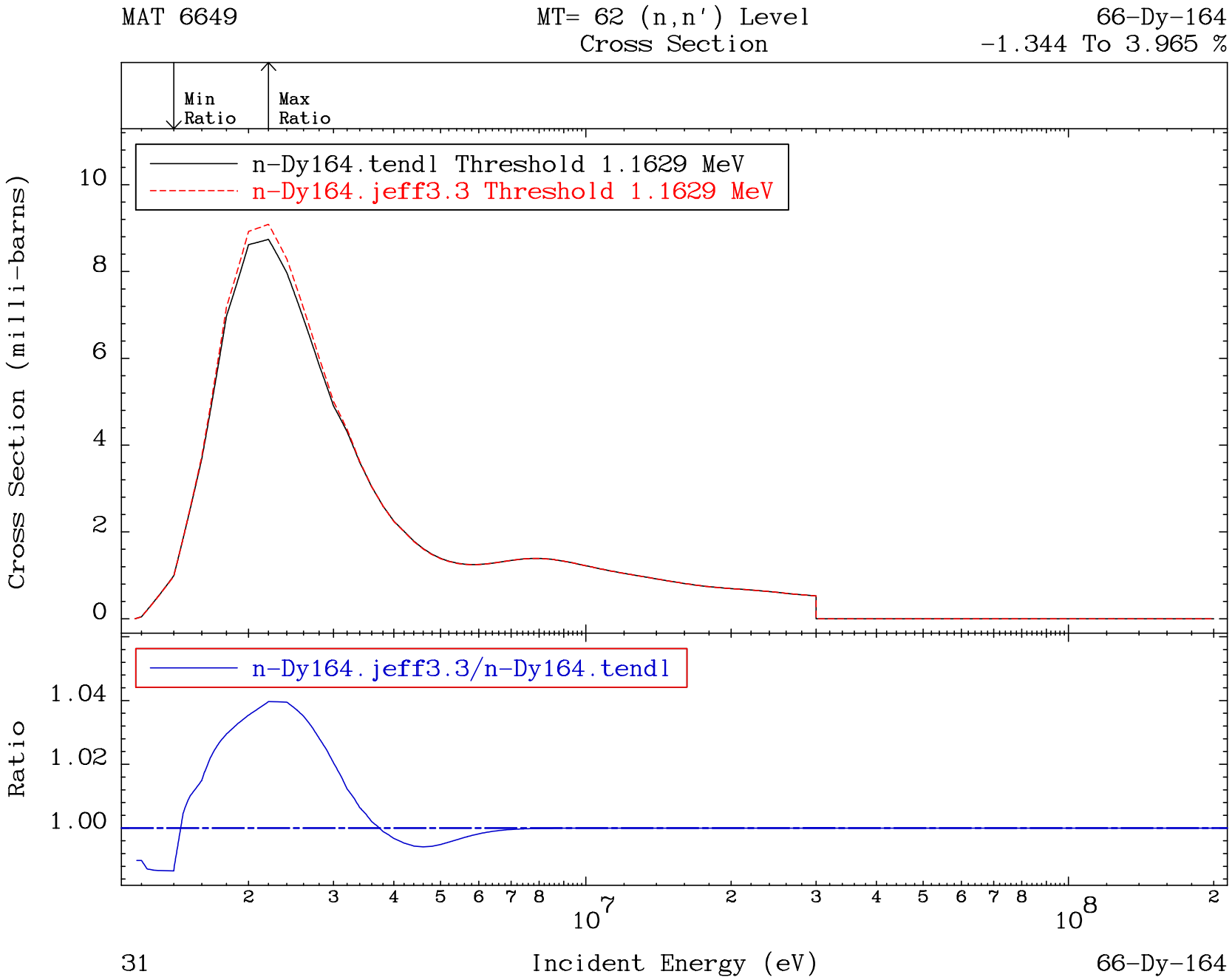

MAT 6649
MT= 57 (n,n') Level
Cross Section
66-Dy-164
-0.483 To 2.997 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 921.64 keV
n-Dy164.jeff3.3 Threshold 921.64 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
10^6
10^7
10^8
26
Incident Energy (eV)
66-Dy-164

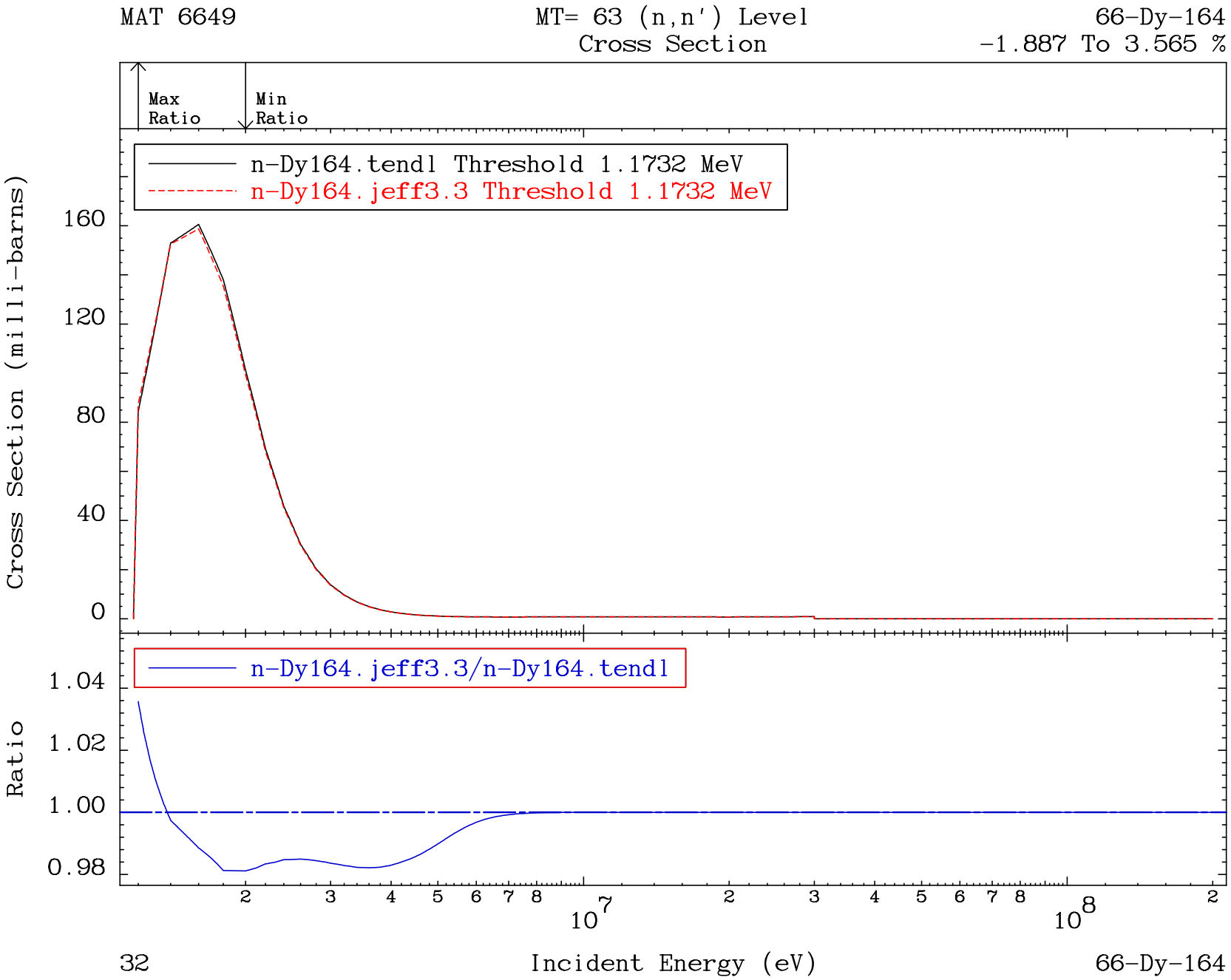

MAT 6649
MT= 58 (n,n') Level
Cross Section
66-Dy-164
-2.632 To 5.030 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 982.90 keV
n-Dy164.jeff3.3 Threshold 982.90 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.00
10^6
10^7
10^8
27
Incident Energy (eV)
66-Dy-164

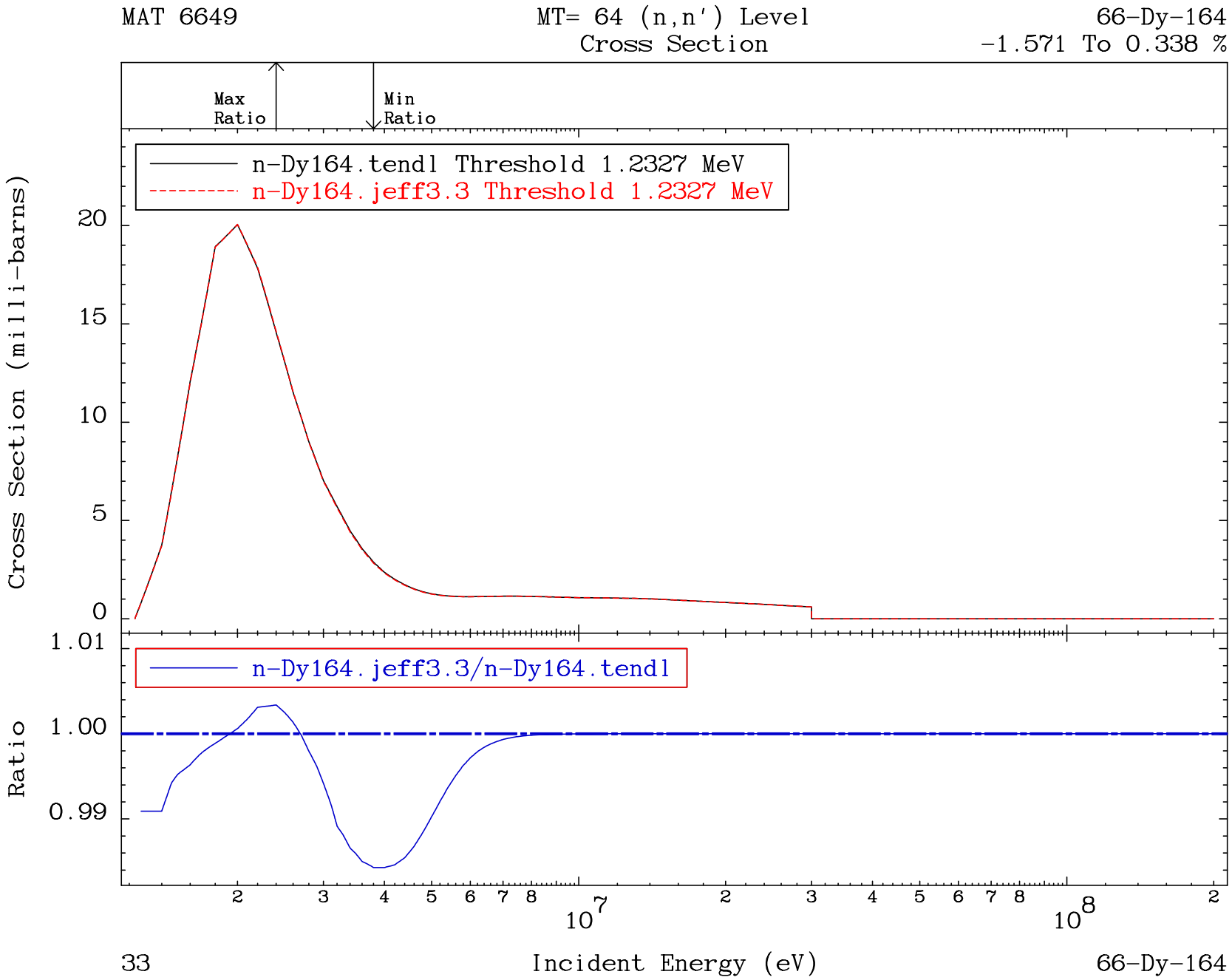

MAT 6649
MT= 59 (n,n') Level
Cross Section
66-Dy-164
-2.346 To 3.565 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.0309 MeV
n-Dy164.jeff3.3 Threshold 1.0309 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
0.98
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
66-Dy-164

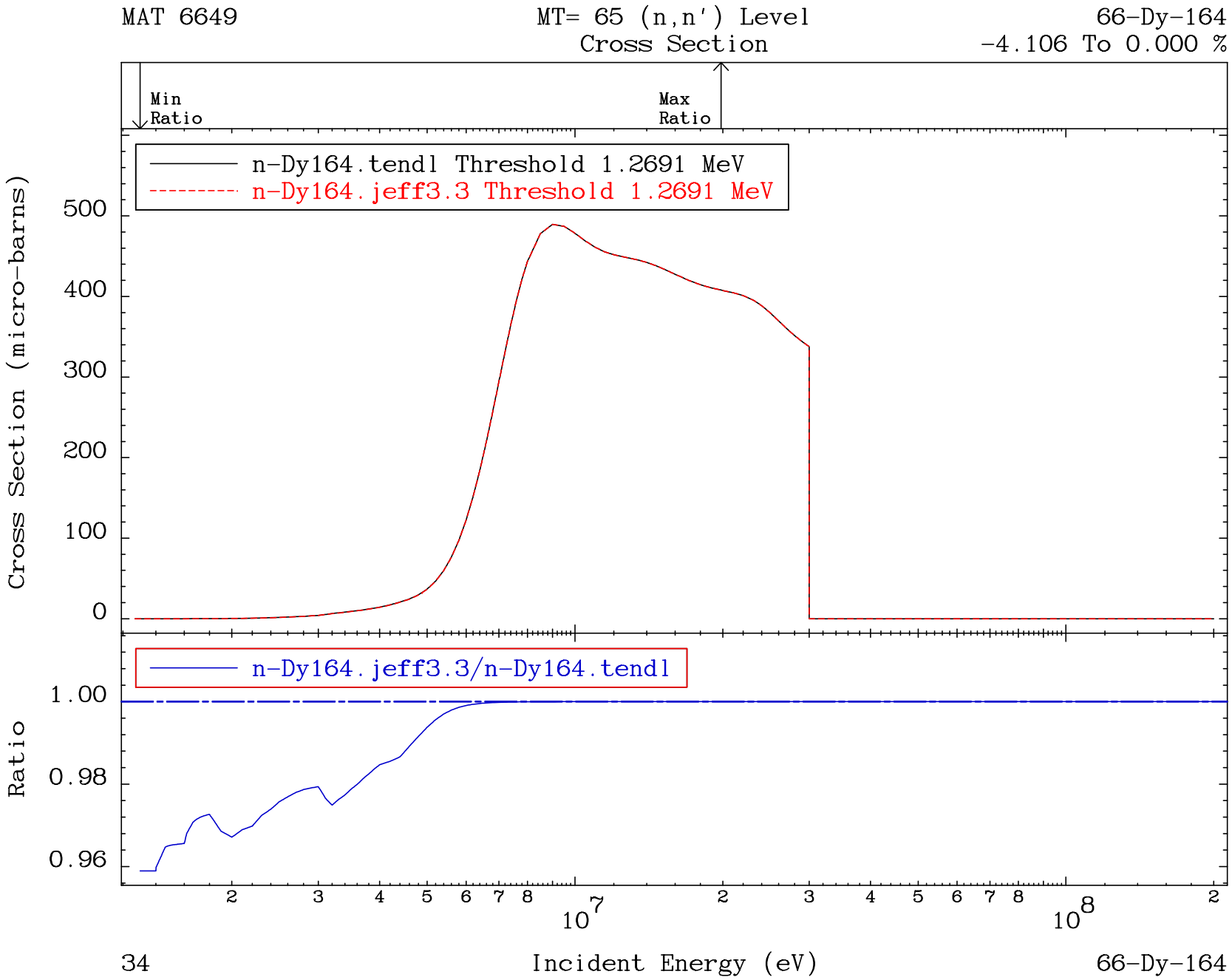

MAT 6649
MT= 60 (n,n') Level
Cross Section
66-Dy-164
-1.009 To 0.932 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.0457 MeV
n-Dy164.jeff3.3 Threshold 1.0457 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
2 3 4 5 6 7 8
29
Incident Energy (eV)
66-Dy-164

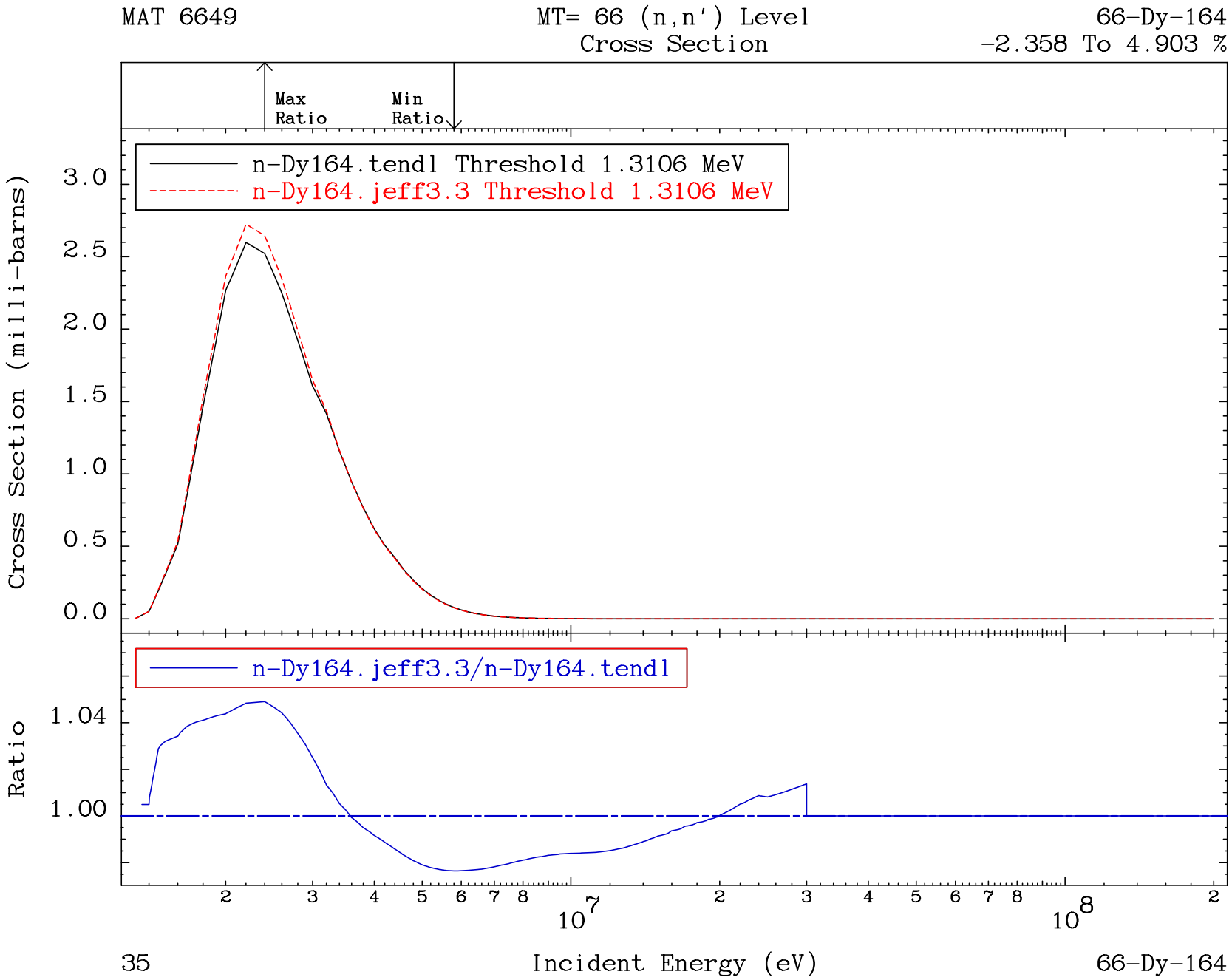

MAT 6649
MT= 61 (n,n') Level
Cross Section
66-Dy-164
-2.638 To 5.794 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.1297 MeV
n-Dy164.jeff3.3 Threshold 1.1297 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.08
1.04
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
66-Dy-164

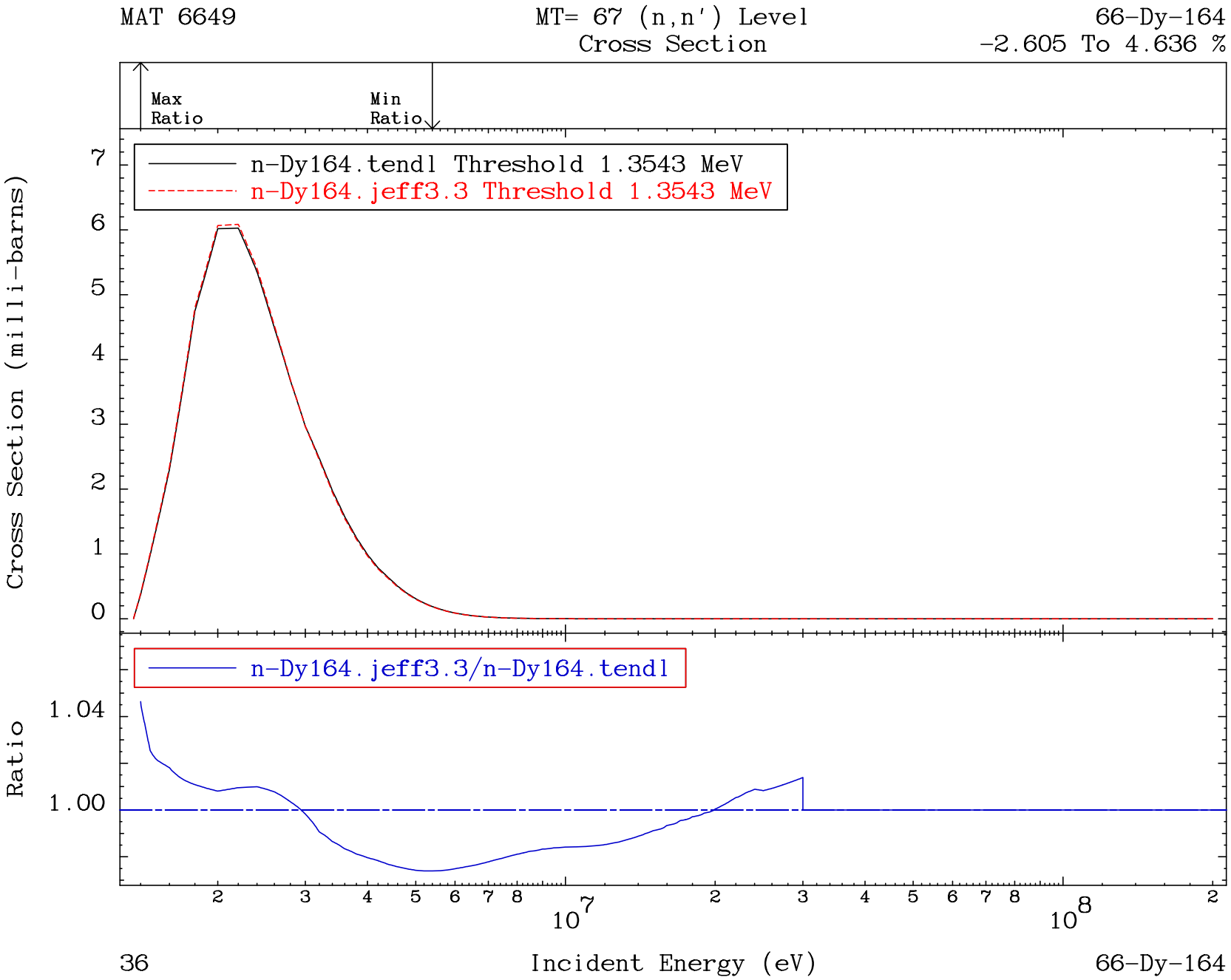

MAT 6649
MT= 62 (n,n') Level
Cross Section
66-Dy-164
-1.344 To 3.965 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 1.1629 MeV
n-Dy164.jeff3.3 Threshold 1.1629 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
66-Dy-164

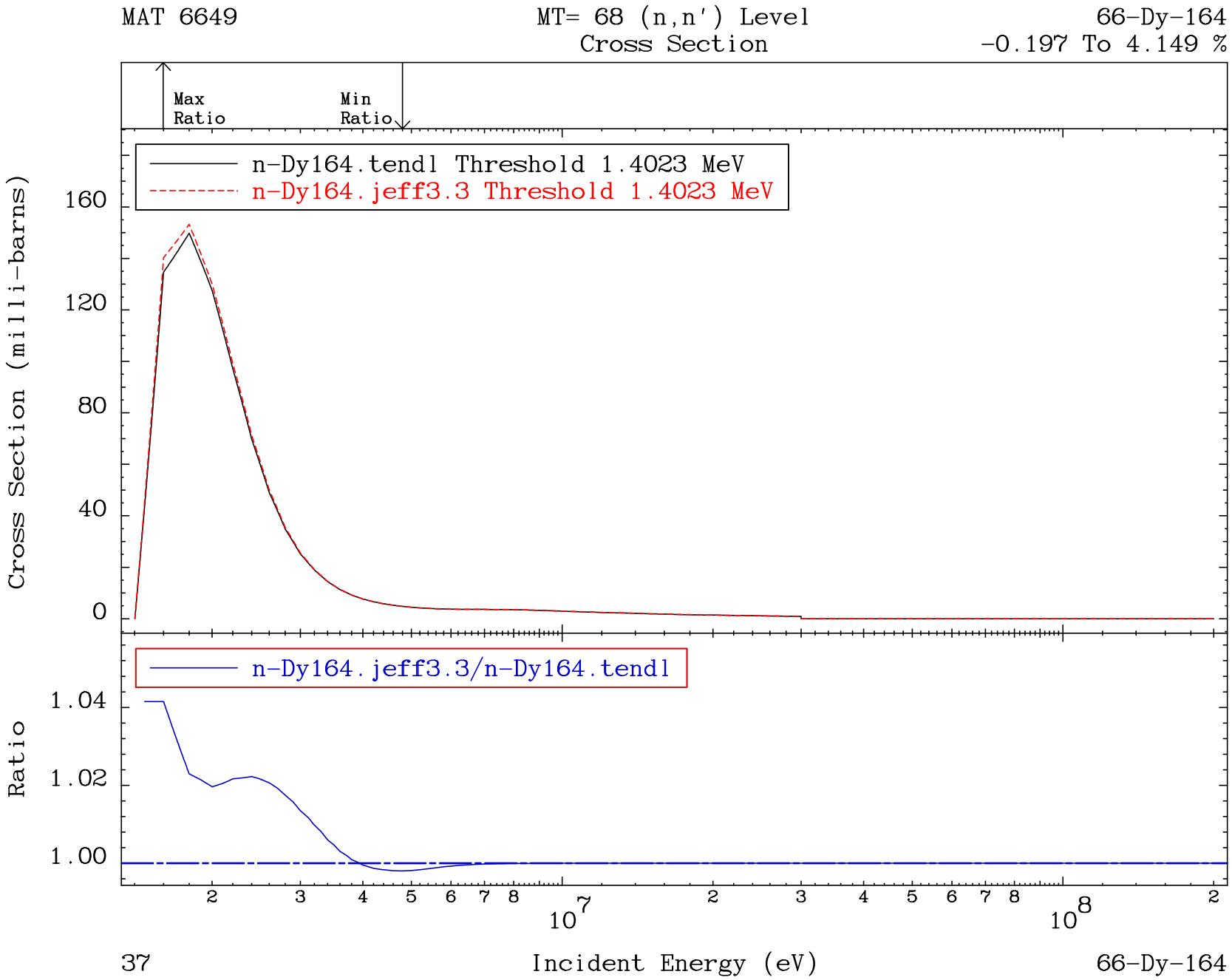

MAT 6649
MT= 63 (n,n') Level
Cross Section
66-Dy-164
-1.887 To 3.565 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.1732 MeV
n-Dy164.jeff3.3 Threshold 1.1732 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
66-Dy-164

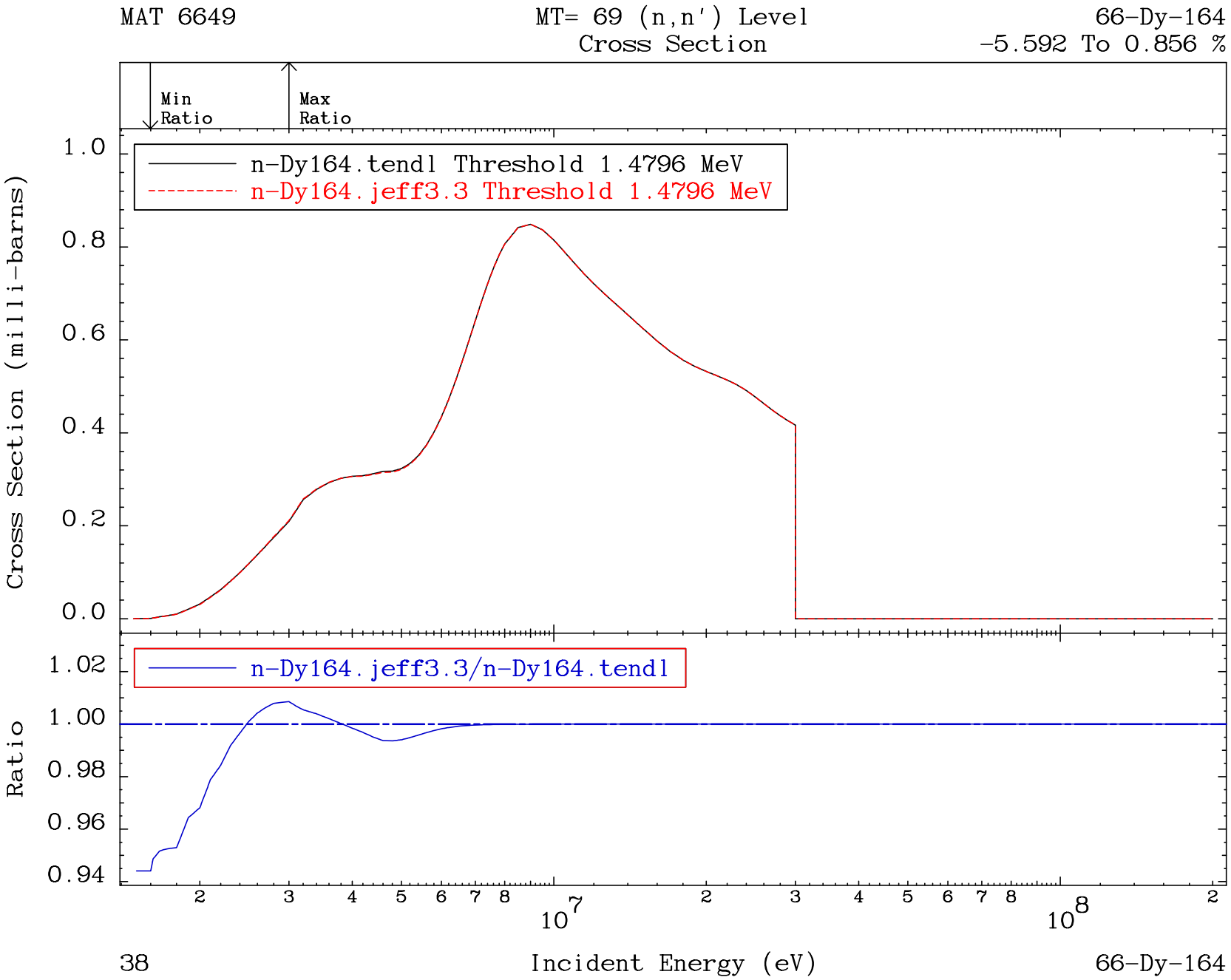

MAT 6649
MT= 64 (n,n') Level
Cross Section
66-Dy-164
-1.571 To 0.338 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.2327 MeV
n-Dy164.jeff3.3 Threshold 1.2327 MeV
Cross Section (milli-barns)
20
15
10
5
0
1.01
1.00
0.99
Ratio
n-Dy164.jeff3.3/n-Dy164.tendl
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
66-Dy-164

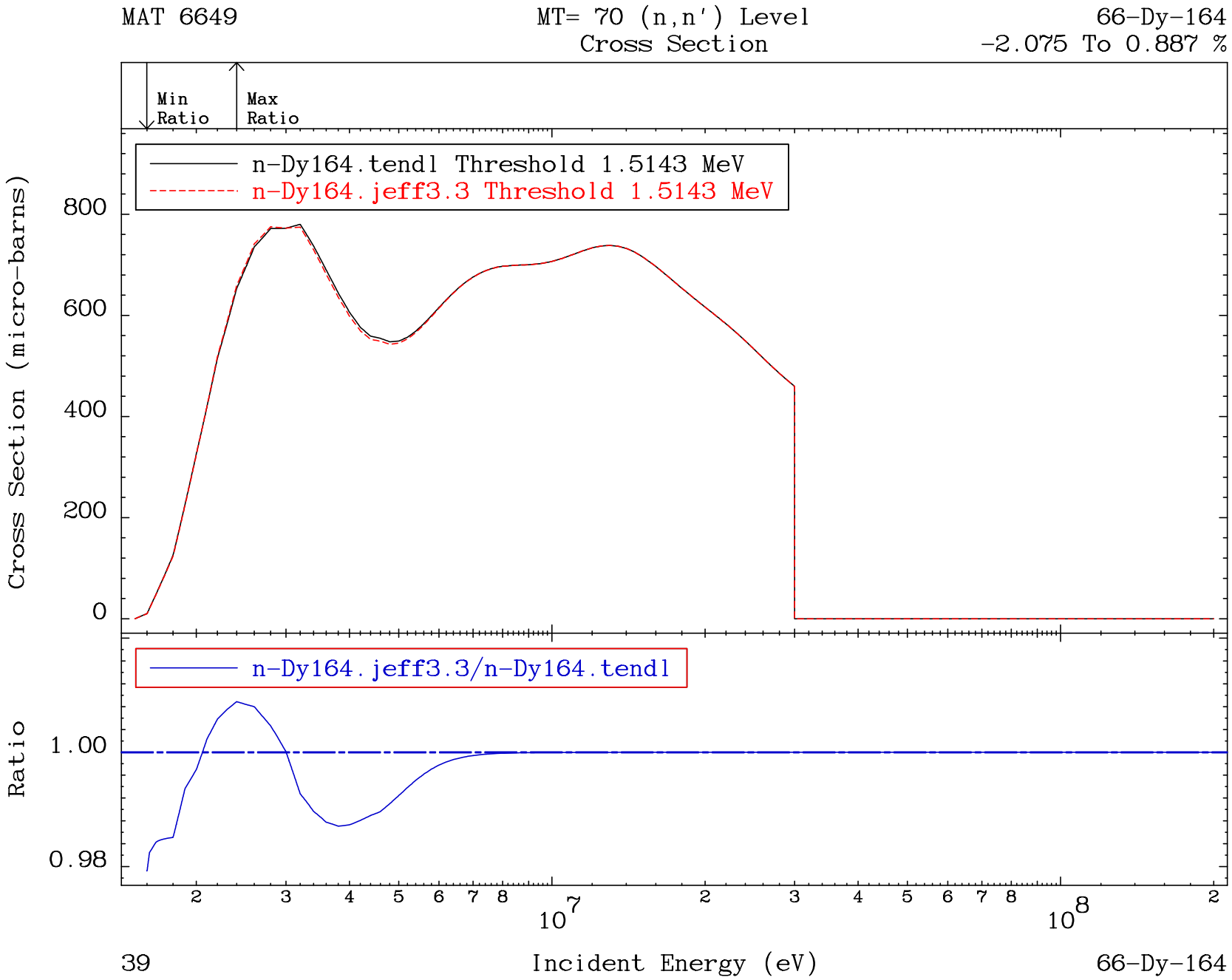

MAT 6649
MT= 65 (n,n') Level
Cross Section
66-Dy-164
-4.106 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 1.2691 MeV
n-Dy164.jeff3.3 Threshold 1.2691 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.00
0.98
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
66-Dy-164

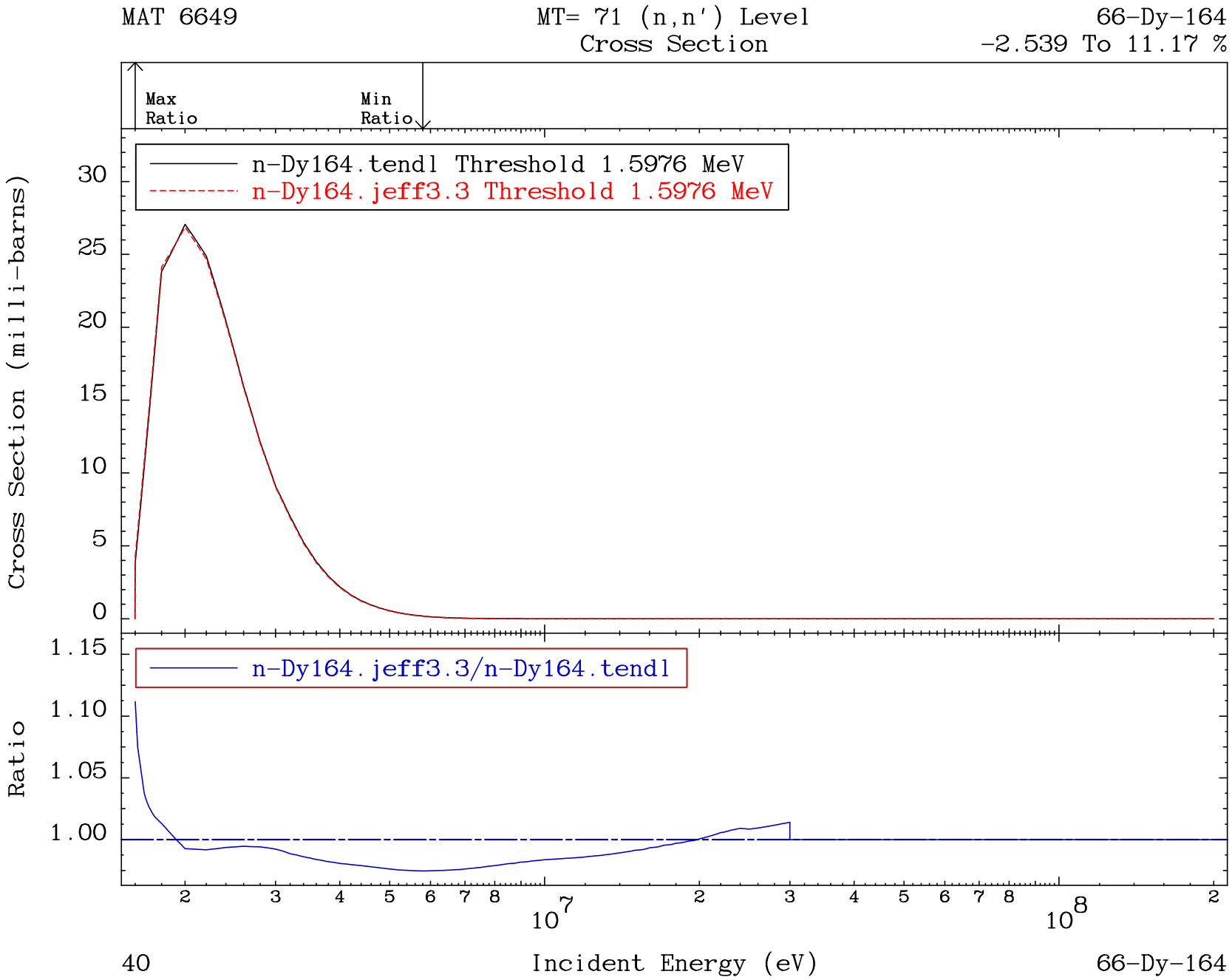

MAT 6649
MT= 66 (n,n') Level
Cross Section
66-Dy-164
-2.358 To 4.903 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.3106 MeV
n-Dy164.jeff3.3 Threshold 1.3106 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
66-Dy-164

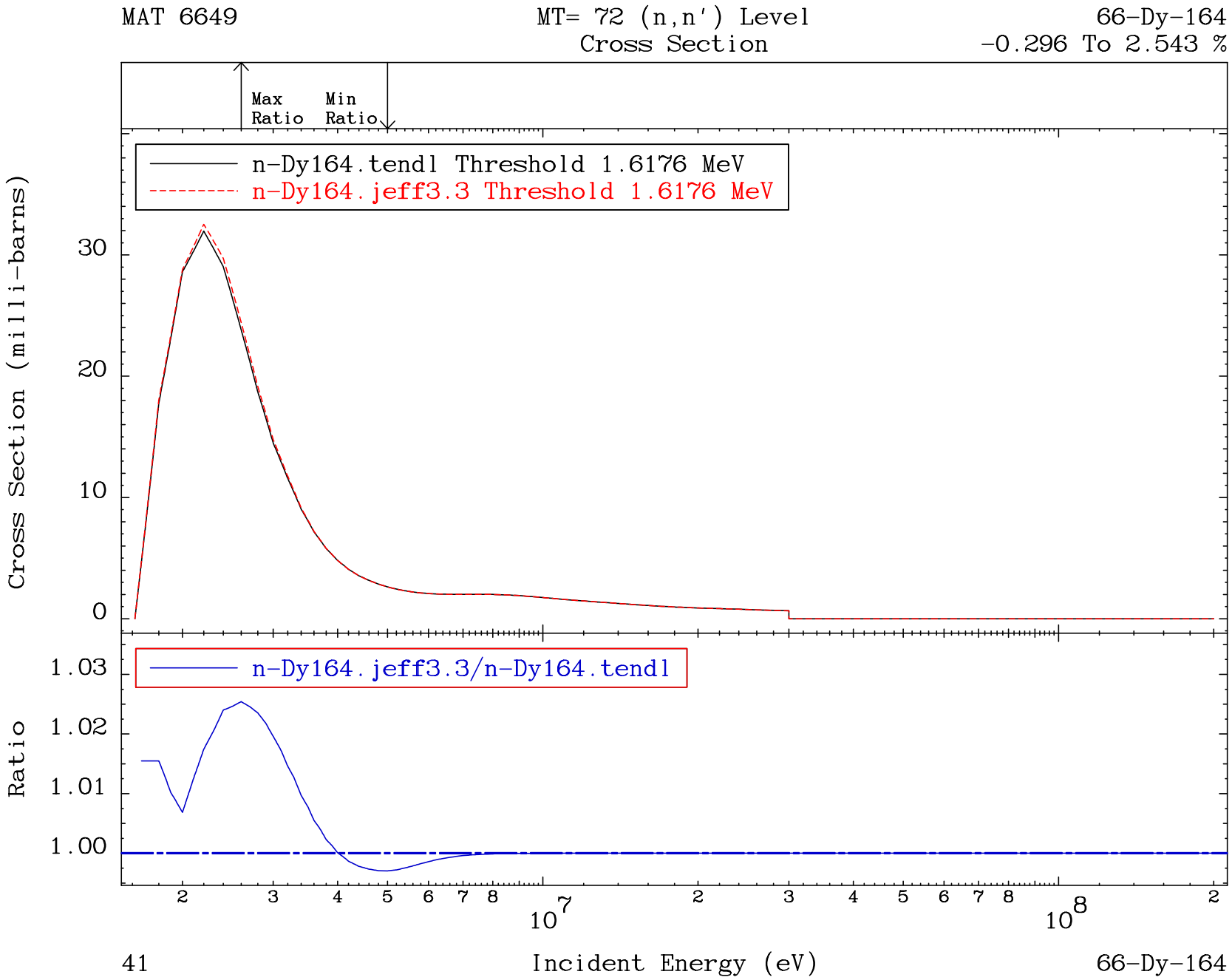

MAT 6649
MT= 67 (n,n') Level
Cross Section
66-Dy-164
-2.605 To 4.636 %
Max
Ratio
Min
Ratio
n-Dy164.tendl Threshold 1.3543 MeV
n-Dy164.jeff3.3 Threshold 1.3543 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
36
Incident Energy (eV)
66-Dy-164

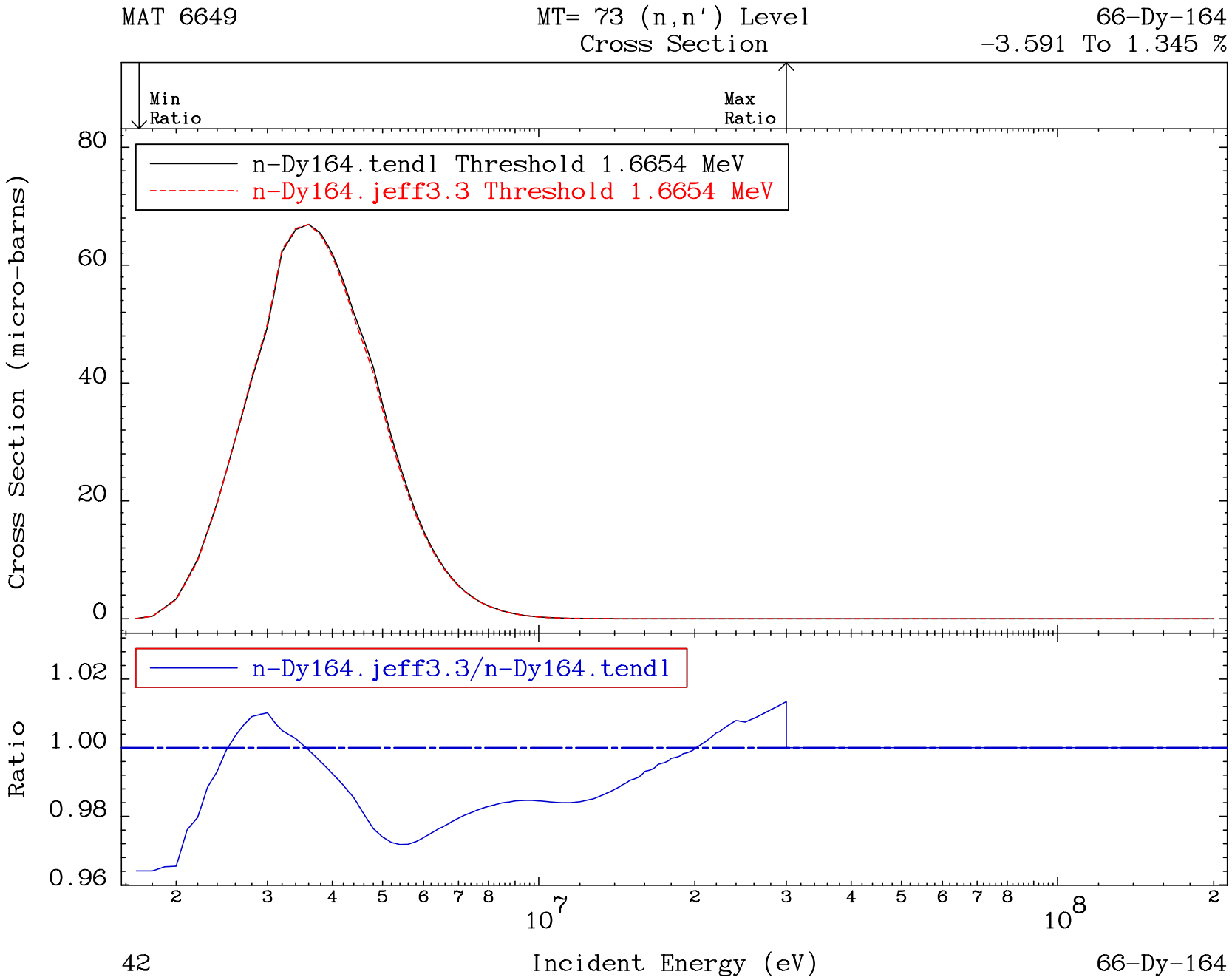

MAT 6649
MT= 68 (n,n') Level
Cross Section
66-Dy-164
-0.197 To 4.149 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.4023 MeV
n-Dy164.jeff3.3 Threshold 1.4023 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
66-Dy-164

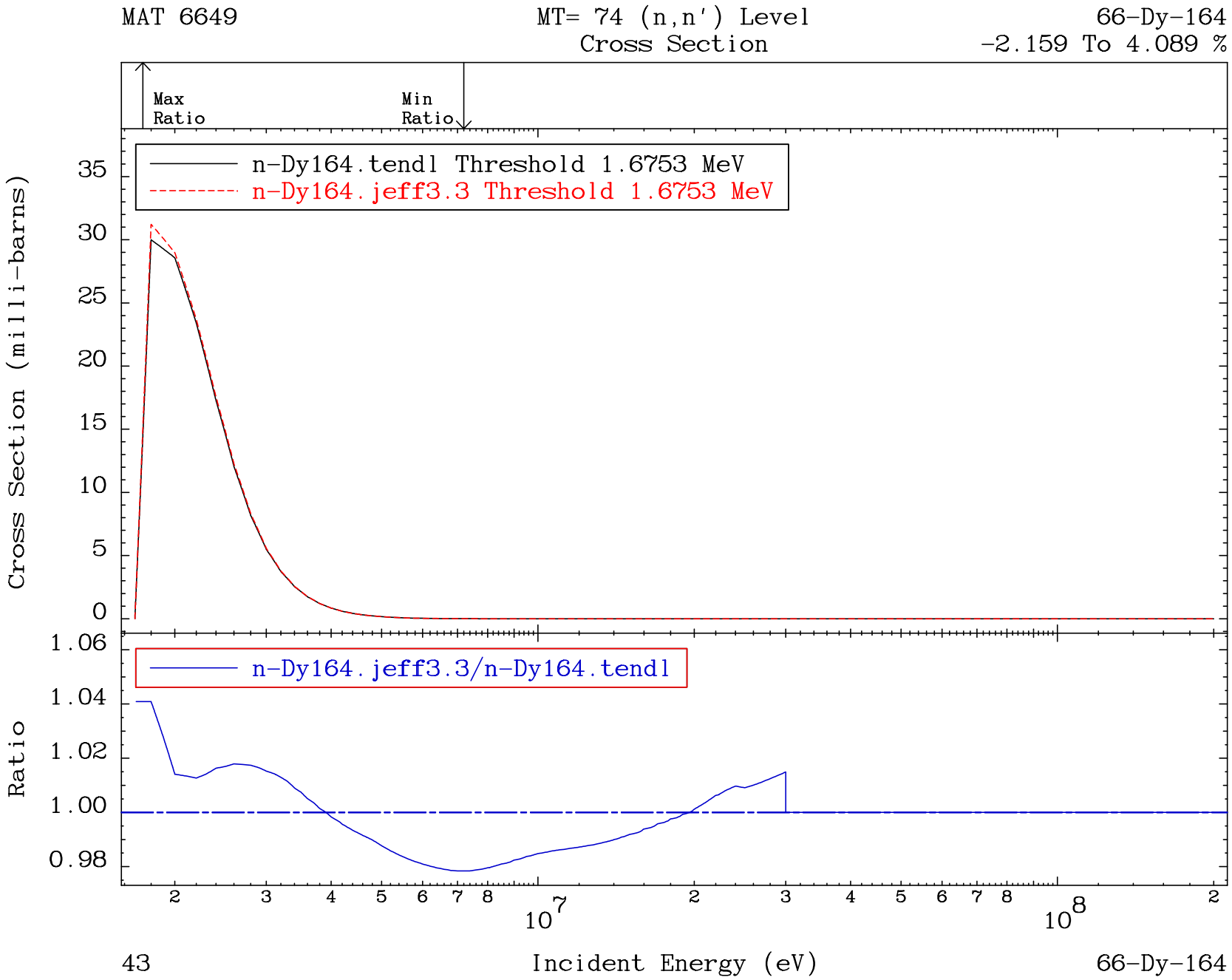

MAT 6649
MT= 69 (n,n') Level
Cross Section
66-Dy-164
-5.592 To 0.856 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 1.4796 MeV
n-Dy164.jeff3.3 Threshold 1.4796 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
0.96
0.94
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
66-Dy-164

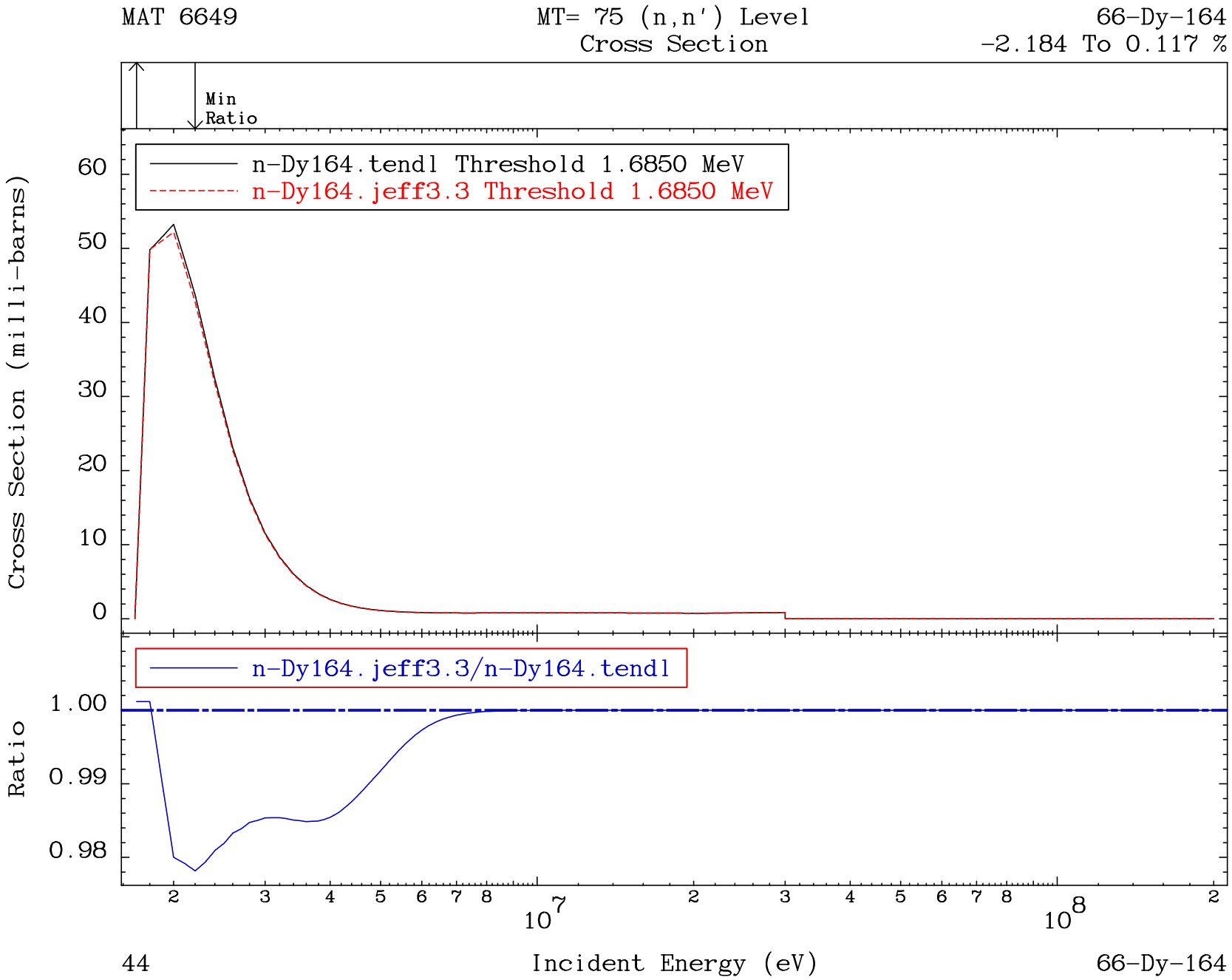

MAT 6649
MT= 70 (n,n') Level
Cross Section
66-Dy-164
-2.075 To 0.887 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 1.5143 MeV
n-Dy164.jeff3.3 Threshold 1.5143 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
66-Dy-164

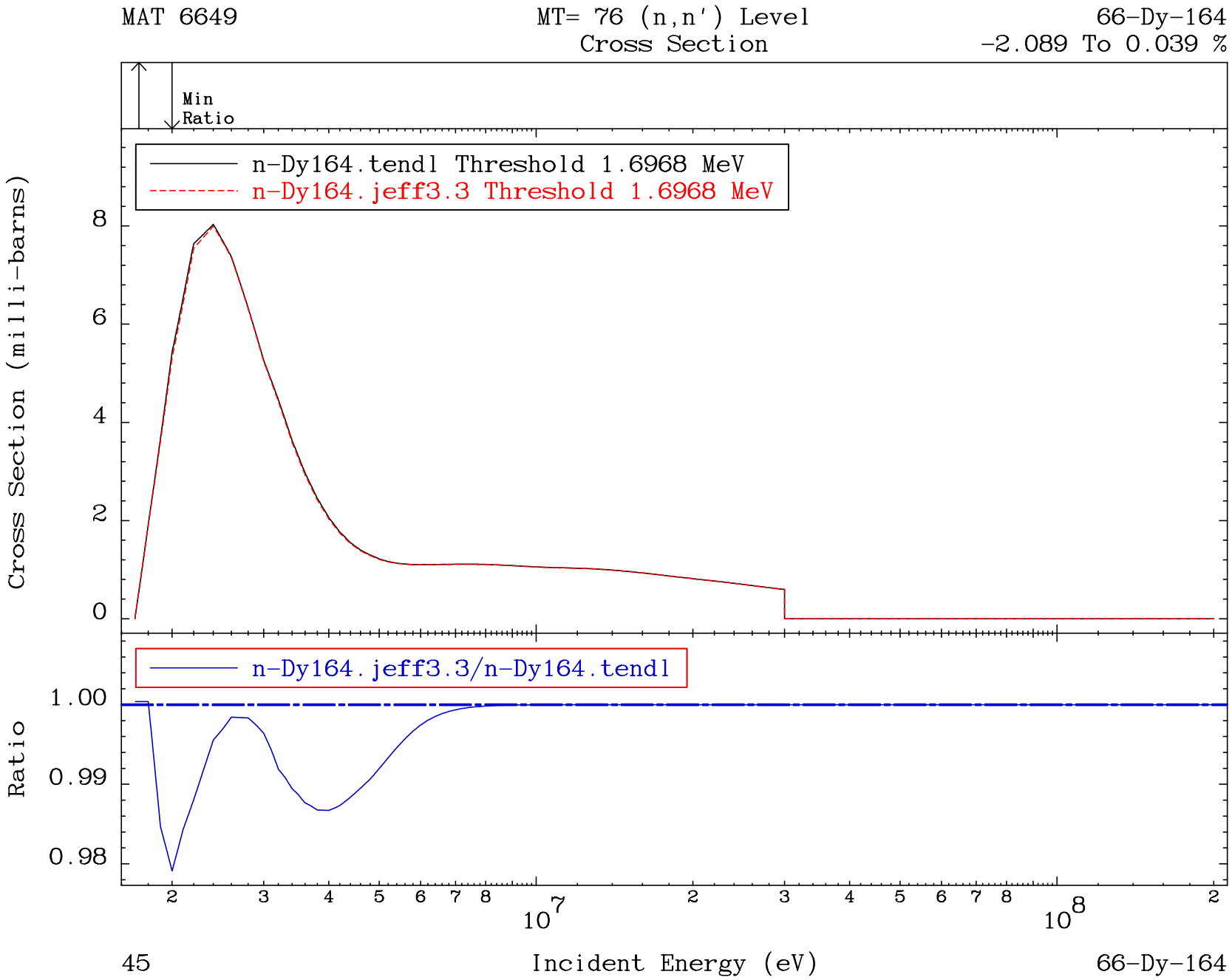

MAT 6649
MT= 71 (n,n') Level
Cross Section
66-Dy-164
-2.539 To 11.17 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.5976 MeV
n-Dy164.jeff3.3 Threshold 1.5976 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.15
1.10
1.05
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
66-Dy-164

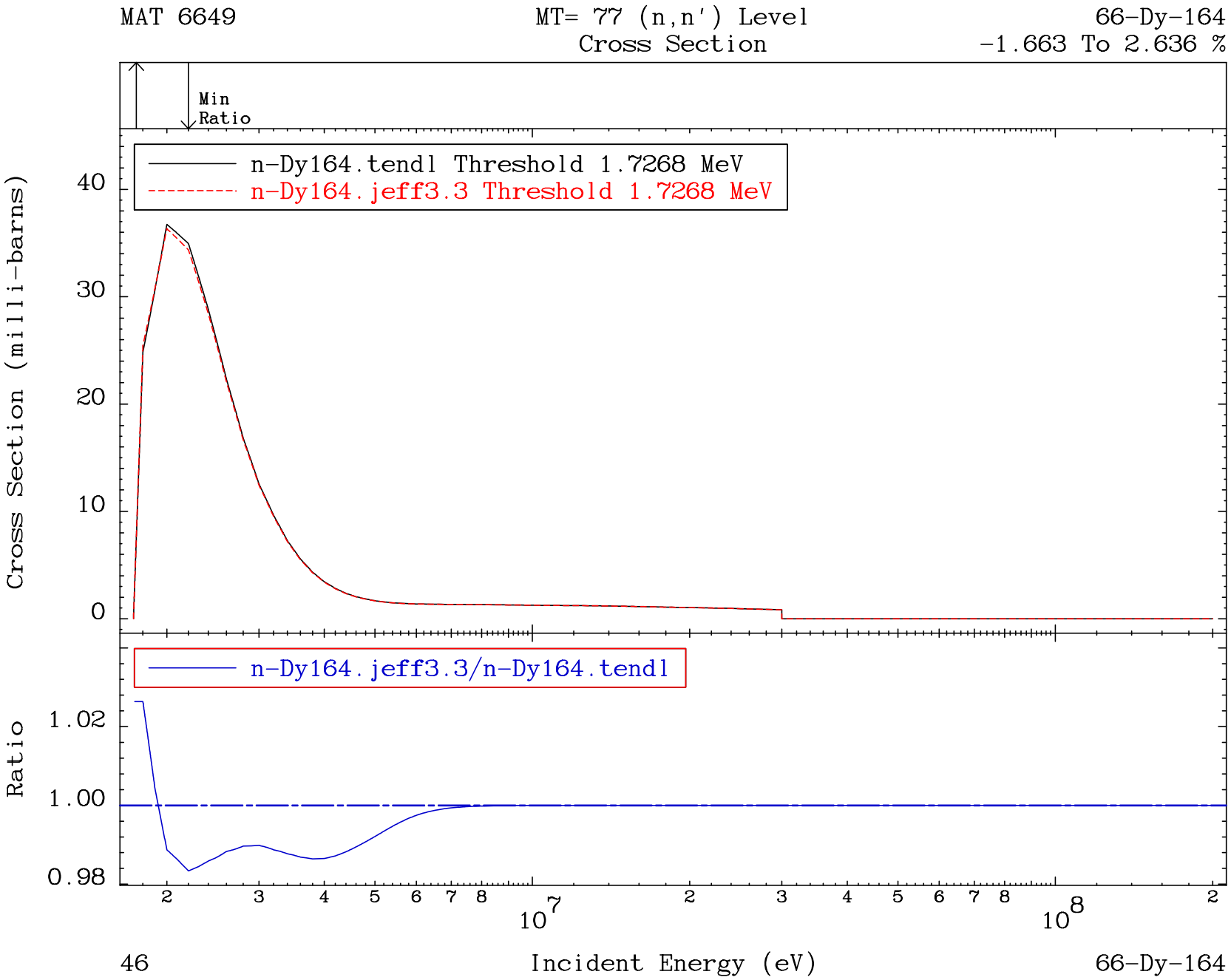

MAT 6649
MT= 72 (n,n') Level
Cross Section
66-Dy-164
-0.296 To 2.543 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.6176 MeV
n-Dy164.jeff3.3 Threshold 1.6176 MeV
Cross Section (milli-barns)
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.03
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
66-Dy-164

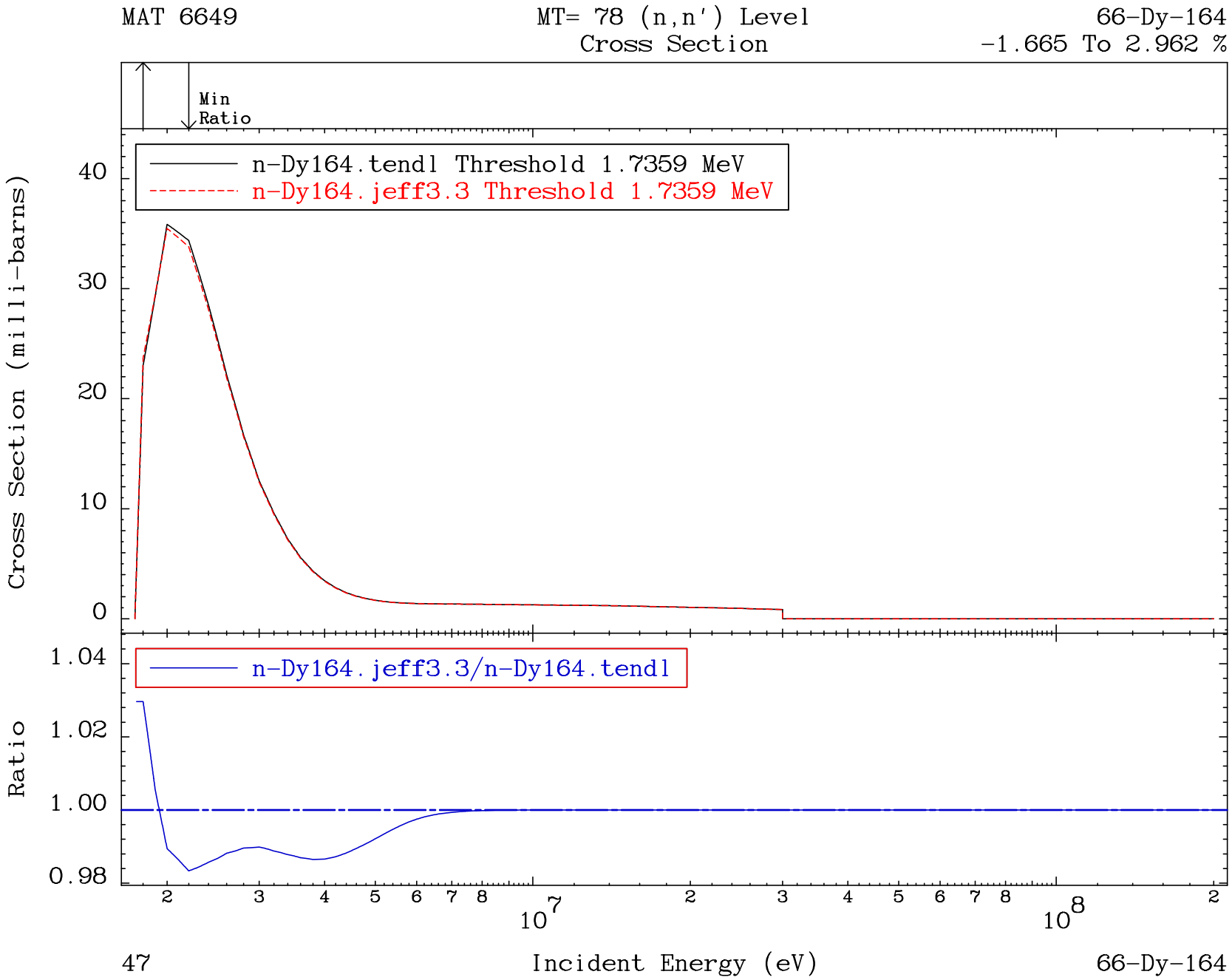

MAT 6649
MT= 73 (n,n') Level
Cross Section
66-Dy-164
-3.591 To 1.345 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 1.6654 MeV
n-Dy164.jeff3.3 Threshold 1.6654 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
0.96
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
66-Dy-164

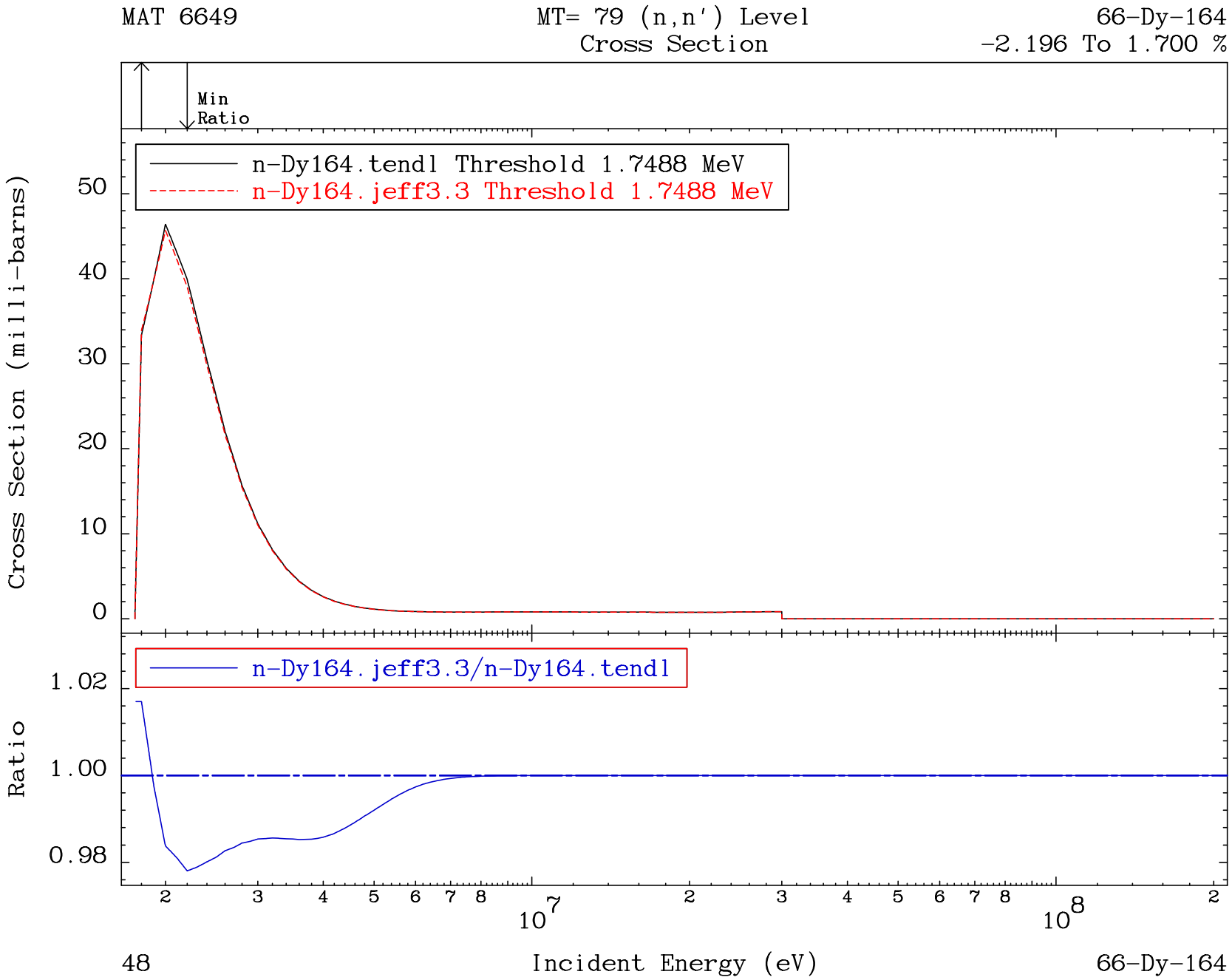

MAT 6649
MT= 74 (n,n') Level
Cross Section
66-Dy-164
-2.159 To 4.089 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.6753 MeV
n-Dy164.jeff3.3 Threshold 1.6753 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.06
1.04
1.02
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
66-Dy-164

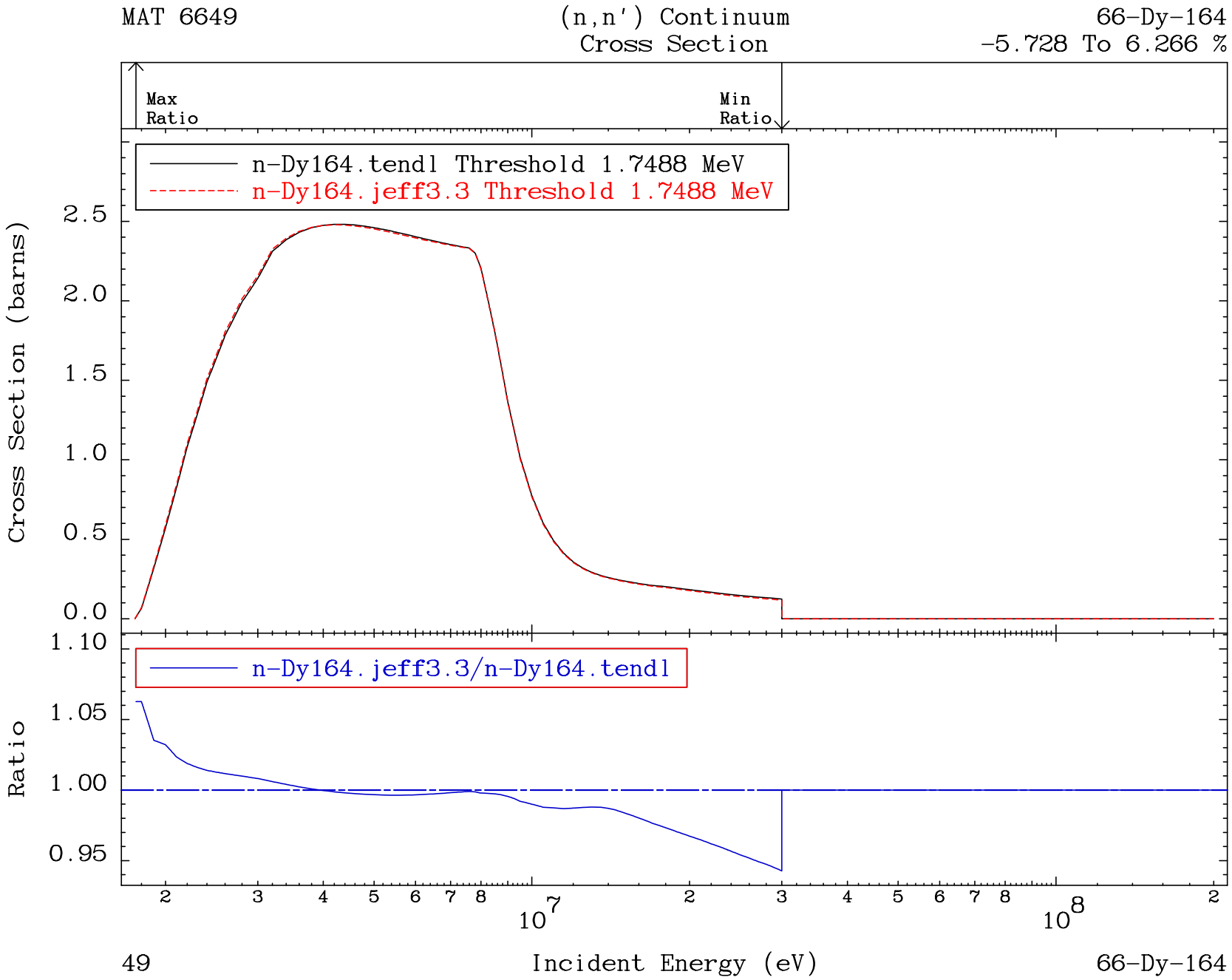

MAT 6649
MT= 75 (n,n') Level
Cross Section
66-Dy-164
-2.184 To 0.117 %
Min
Ratio
n-Dy164.tendl Threshold 1.6850 MeV
n-Dy164.jeff3.3 Threshold 1.6850 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.00
0.99
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
44
Incident Energy (eV)
66-Dy-164

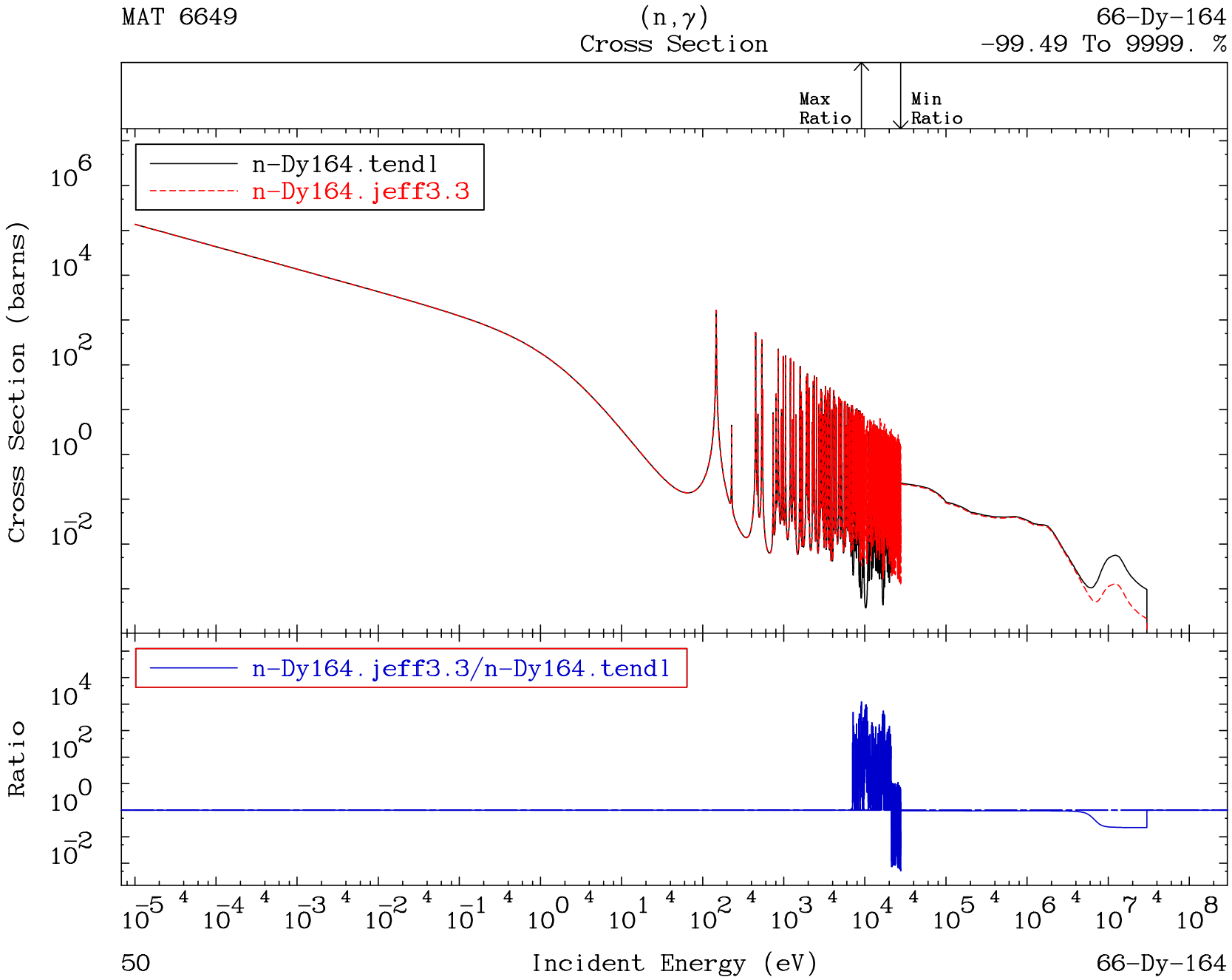

MAT 6649
MT= 76 (n,n') Level
Cross Section
66-Dy-164
-2.089 To 0.039 %
Min
Ratio
n-Dy164.tendl Threshold 1.6968 MeV
n-Dy164.jeff3.3 Threshold 1.6968 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
0.98
0.99
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
45
Incident Energy (eV)
66-Dy-164

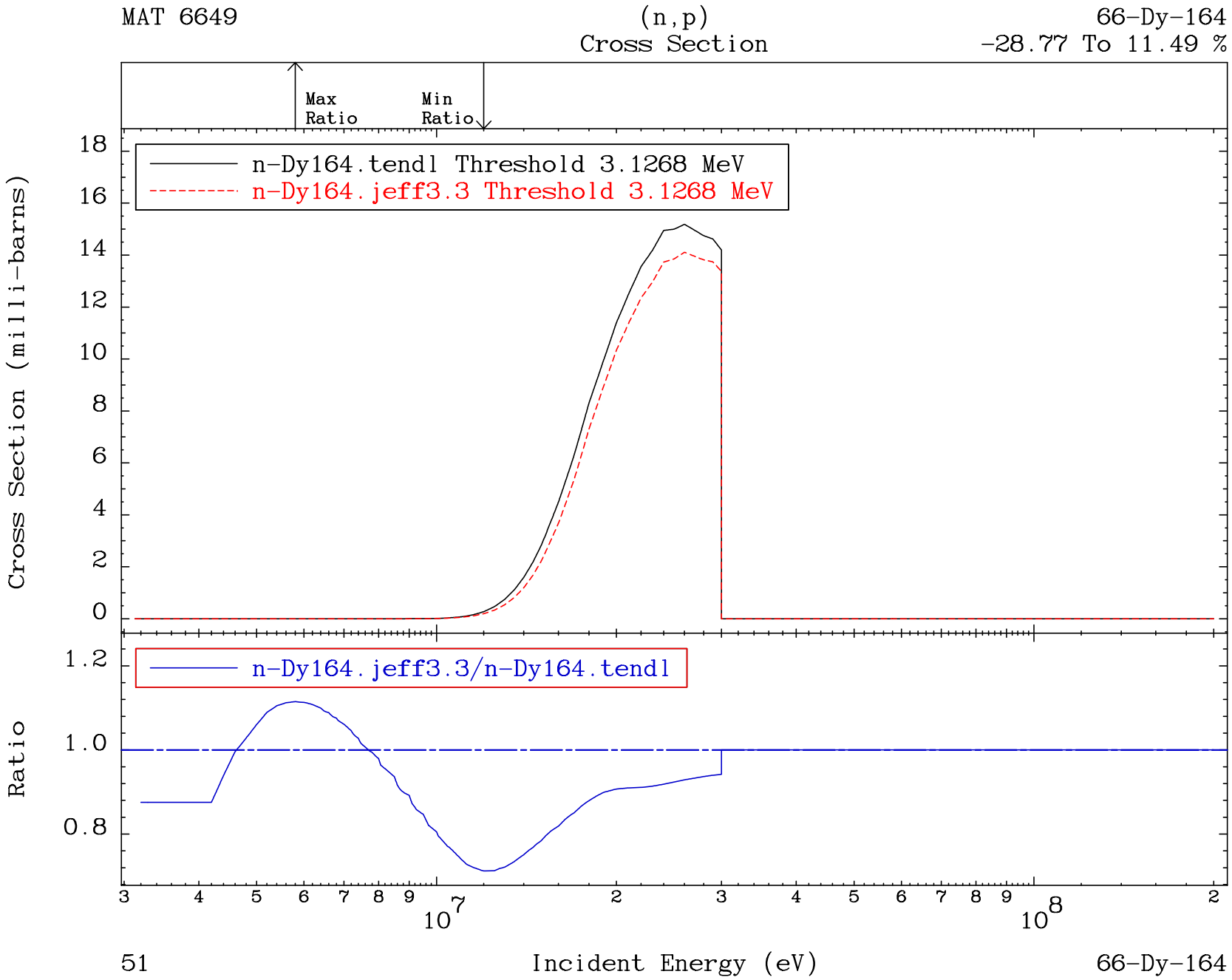

MAT 6649
MT= 77 (n,n') Level
Cross Section
66-Dy-164
-1.663 To 2.636 %
Min
Ratio
n-Dy164.tendl Threshold 1.7268 MeV
n-Dy164.jeff3.3 Threshold 1.7268 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
46
Incident Energy (eV)
66-Dy-164

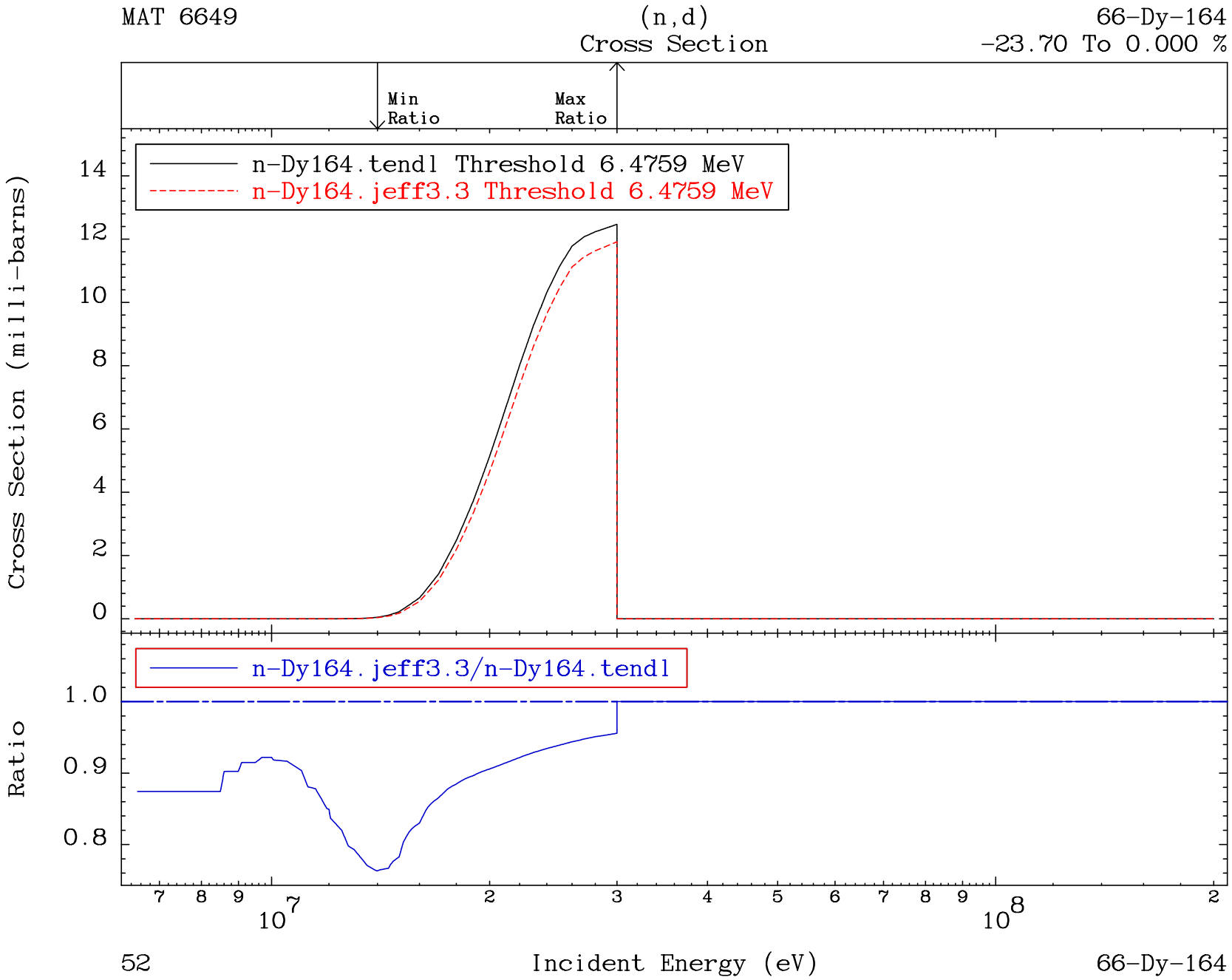

MAT 6649
MT= 78 (n,n') Level
Cross Section
66-Dy-164
-1.665 To 2.962 %
Min
Ratio
n-Dy164.tendl Threshold 1.7359 MeV
n-Dy164.jeff3.3 Threshold 1.7359 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.04
1.02
1.00
0.98
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
47
Incident Energy (eV)
66-Dy-164

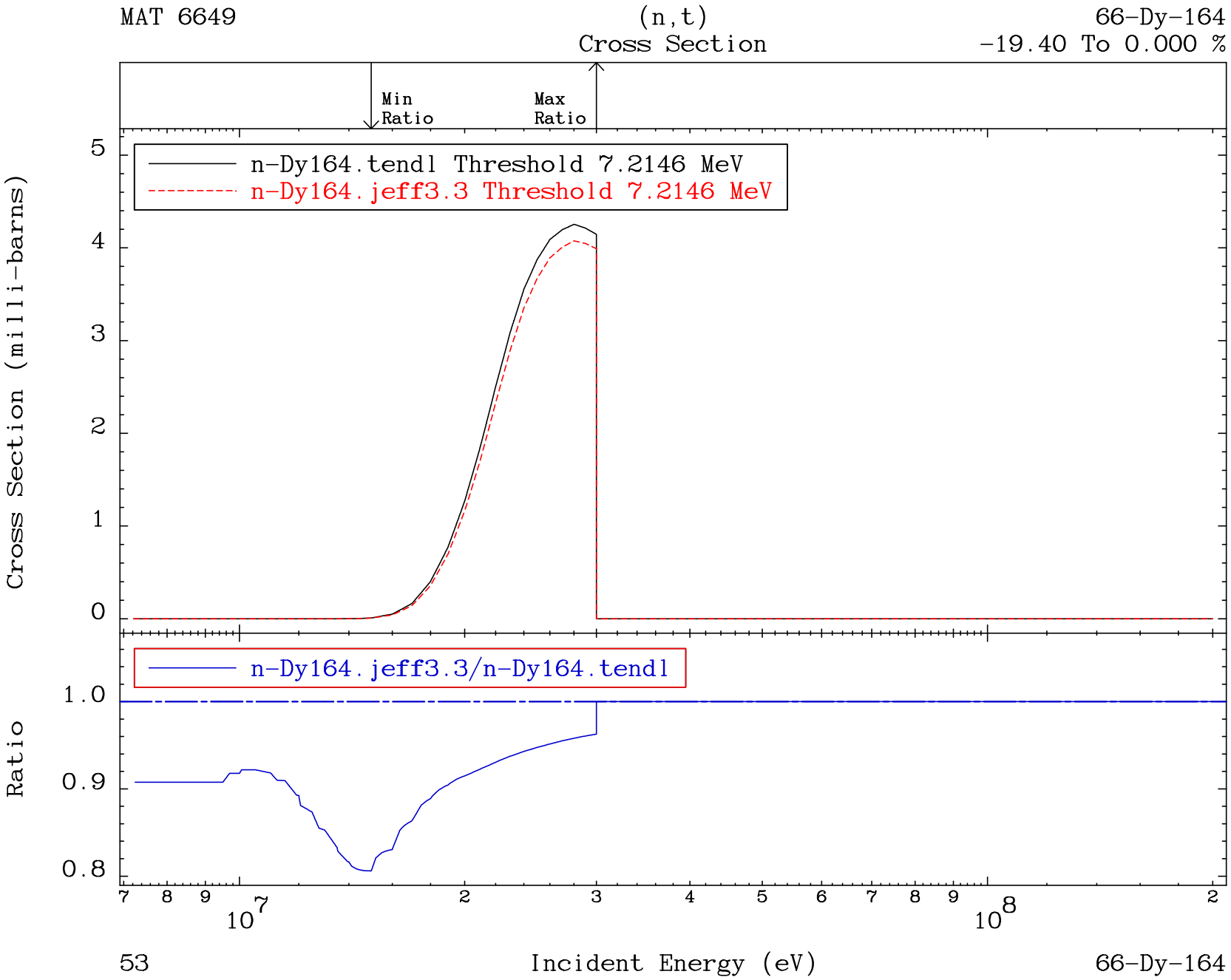

MAT 6649
MT= 79 (n,n') Level
Cross Section
66-Dy-164
-2.196 To 1.700 %
Min
Ratio
n-Dy164.tendl Threshold 1.7488 MeV
n-Dy164.jeff3.3 Threshold 1.7488 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.02
1.00
0.98
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
48
Incident Energy (eV)
66-Dy-164

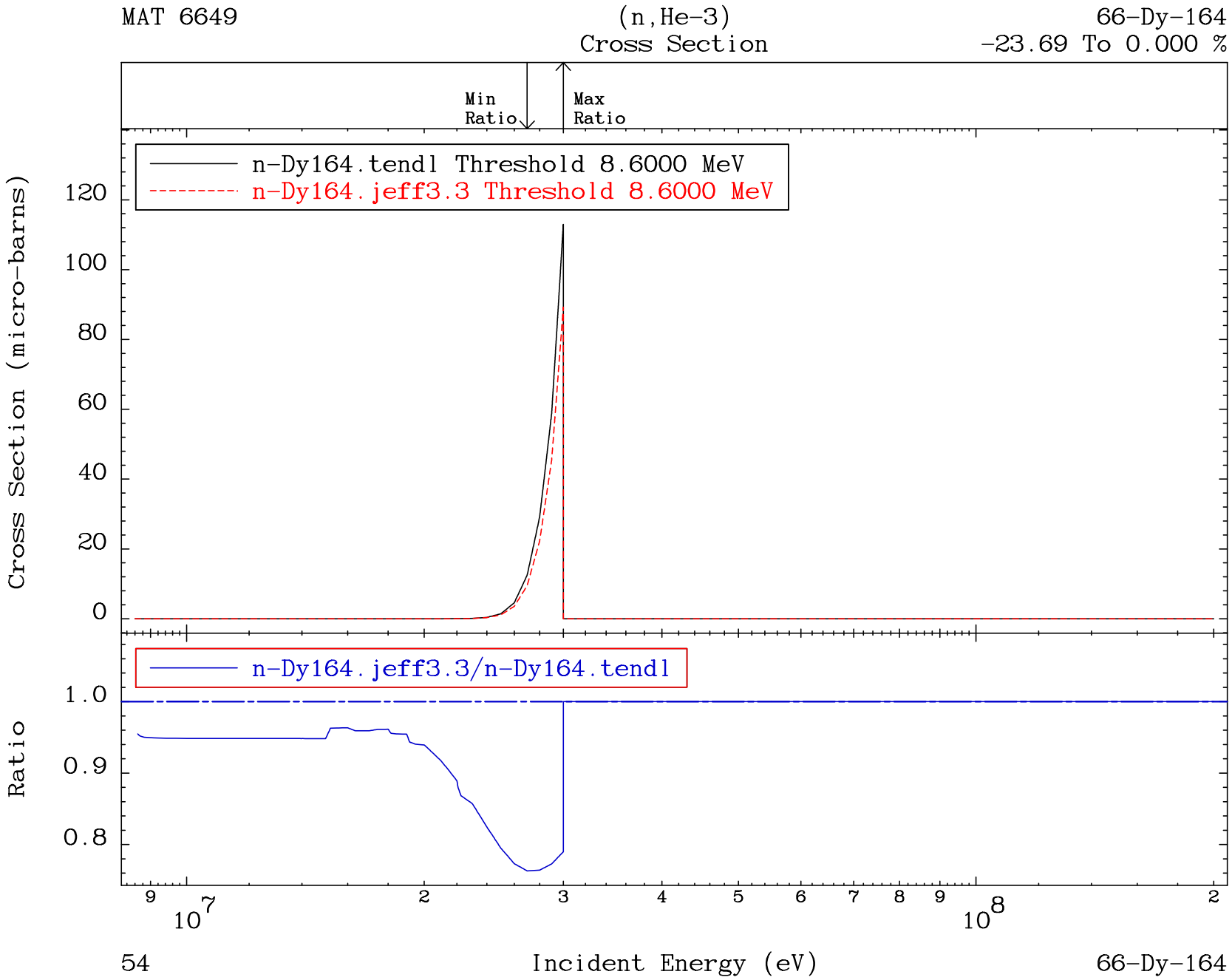

MAT 6649
(n,n') Continuum
Cross Section
66-Dy-164
-5.728 To 6.266 %
Max
Ratio
Min
Ratio
n-Dy164.tendl Threshold 1.7488 MeV
n-Dy164.jeff3.3 Threshold 1.7488 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
1.10
1.05
1.00
0.95
Ratio
n-Dy164.jeff3.3/n-Dy164.tendl
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
49
Incident Energy (eV)
66-Dy-164

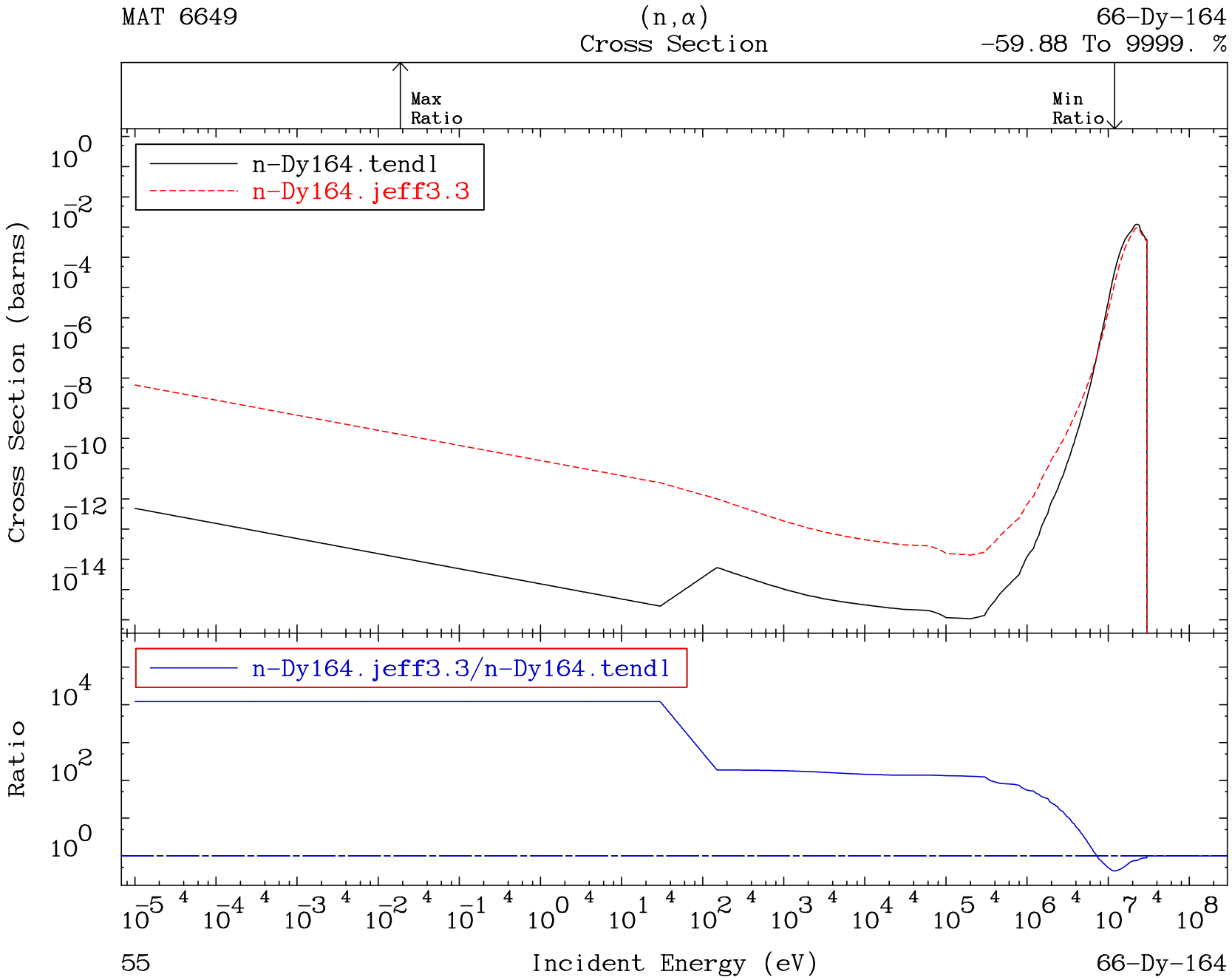

MAT 6649
(n,γ)
Cross Section
66-Dy-164
-99.49 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
50
66-Dy-164

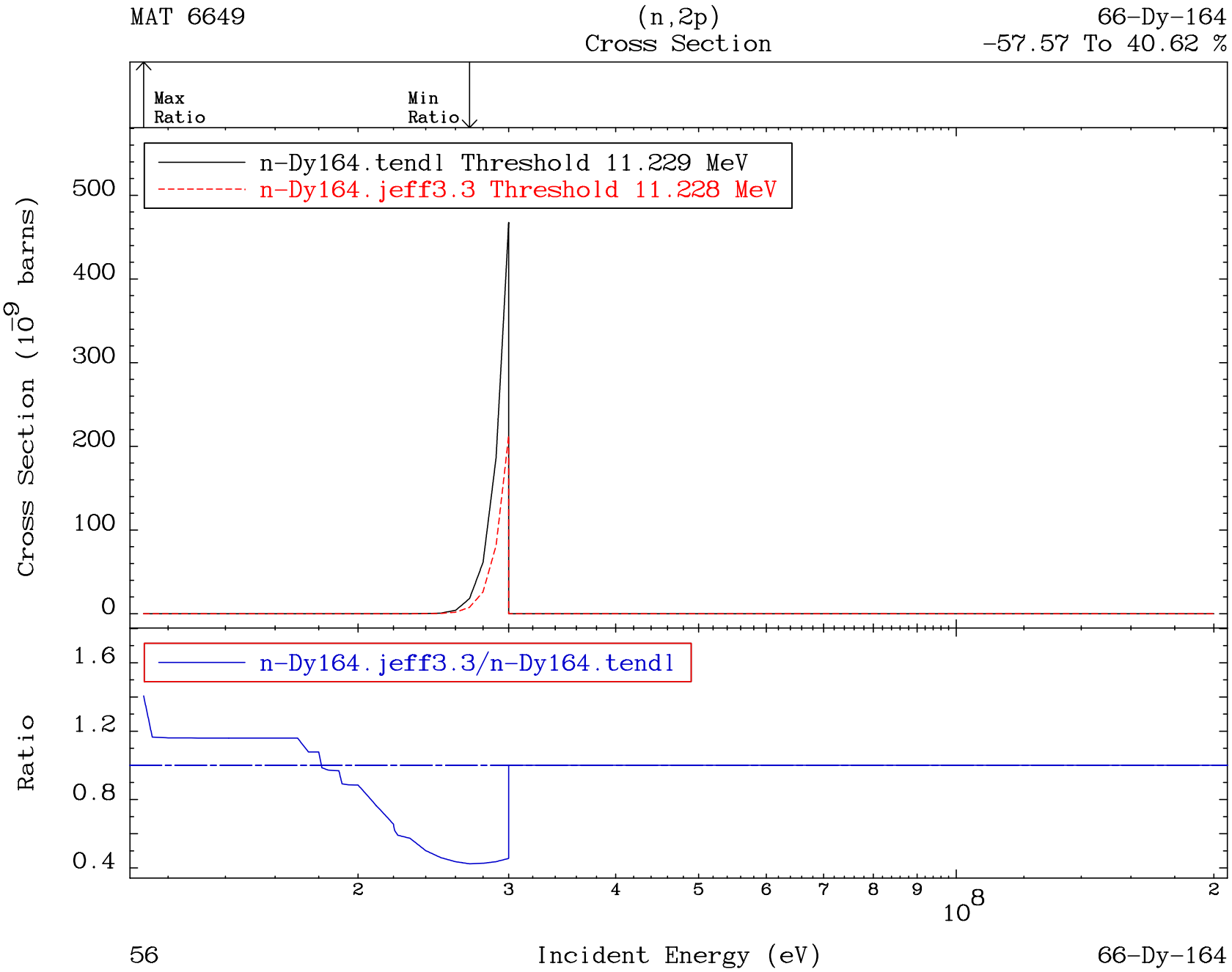

MAT 6649
(n,p)
Cross Section
66-Dy-164
-28.77 To 11.49 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 3.1268 MeV
n-Dy164.jeff3.3 Threshold 3.1268 MeV
Cross Section (milli-barns)
18
16
14
12
10
8
6
4
2
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.2
1.0
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
66-Dy-164

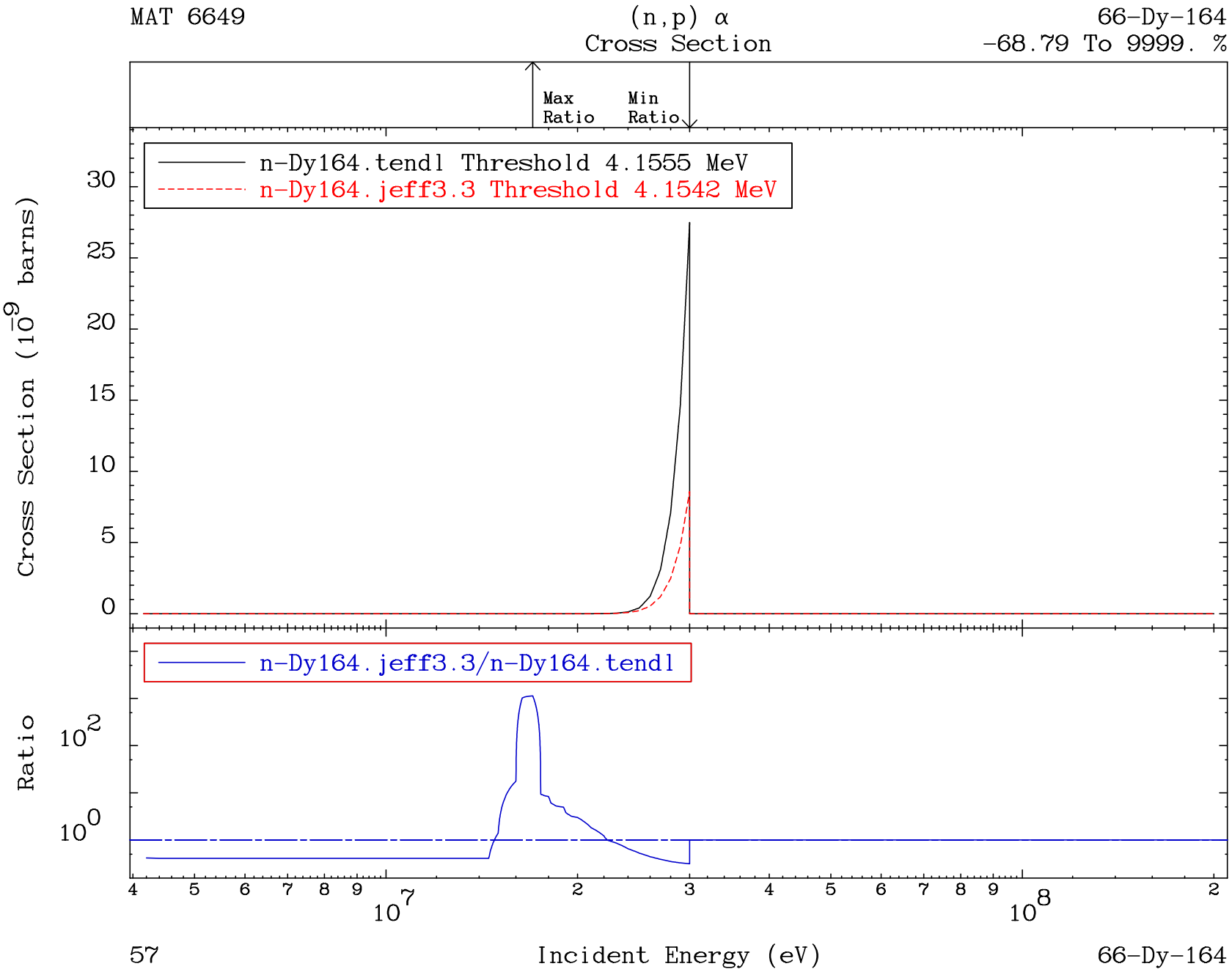

MAT 6649
(n,d)
Cross Section
66-Dy-164
-23.70 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 6.4759 MeV
n-Dy164.jeff3.3 Threshold 6.4759 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
66-Dy-164

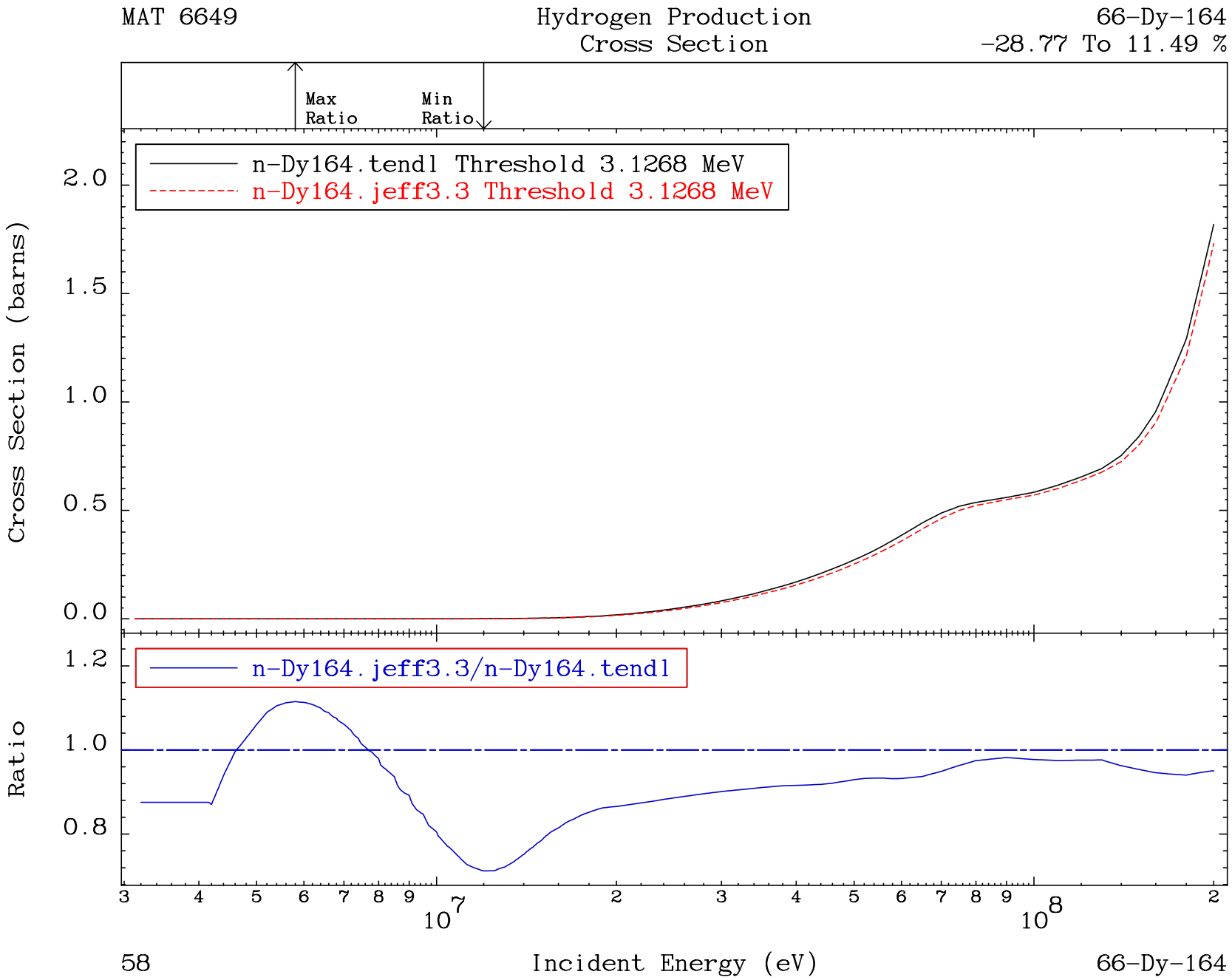

MAT 6649
(n,t)
Cross Section
66-Dy-164
-19.40 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 7.2146 MeV
n-Dy164.jeff3.3 Threshold 7.2146 MeV
Cross Section (milli-barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
53
66-Dy-164

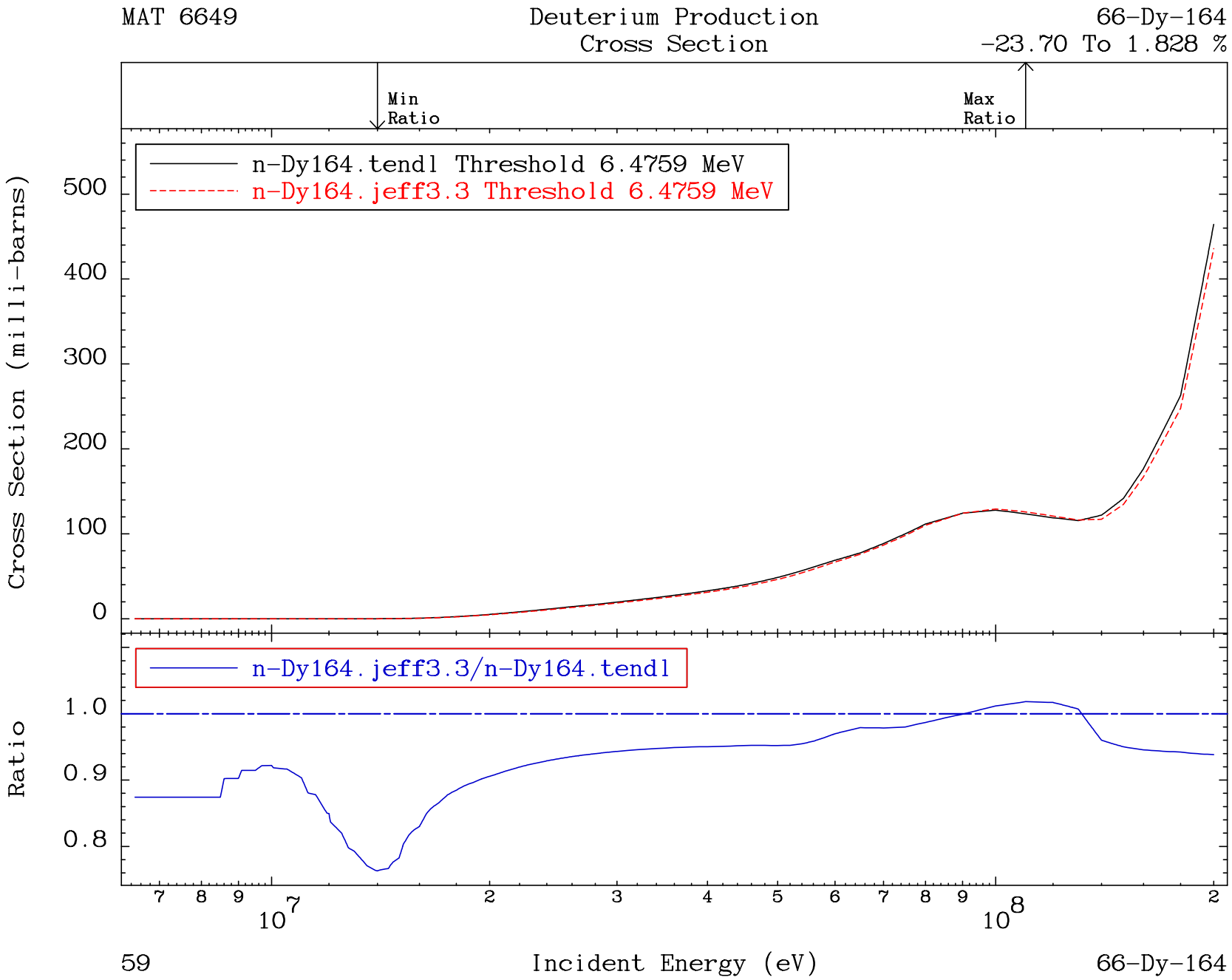

MAT 6649
(n,He-3)
Cross Section
66-Dy-164
-23.69 To 0.000 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 8.6000 MeV
n-Dy164.jeff3.3 Threshold 8.6000 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
66-Dy-164

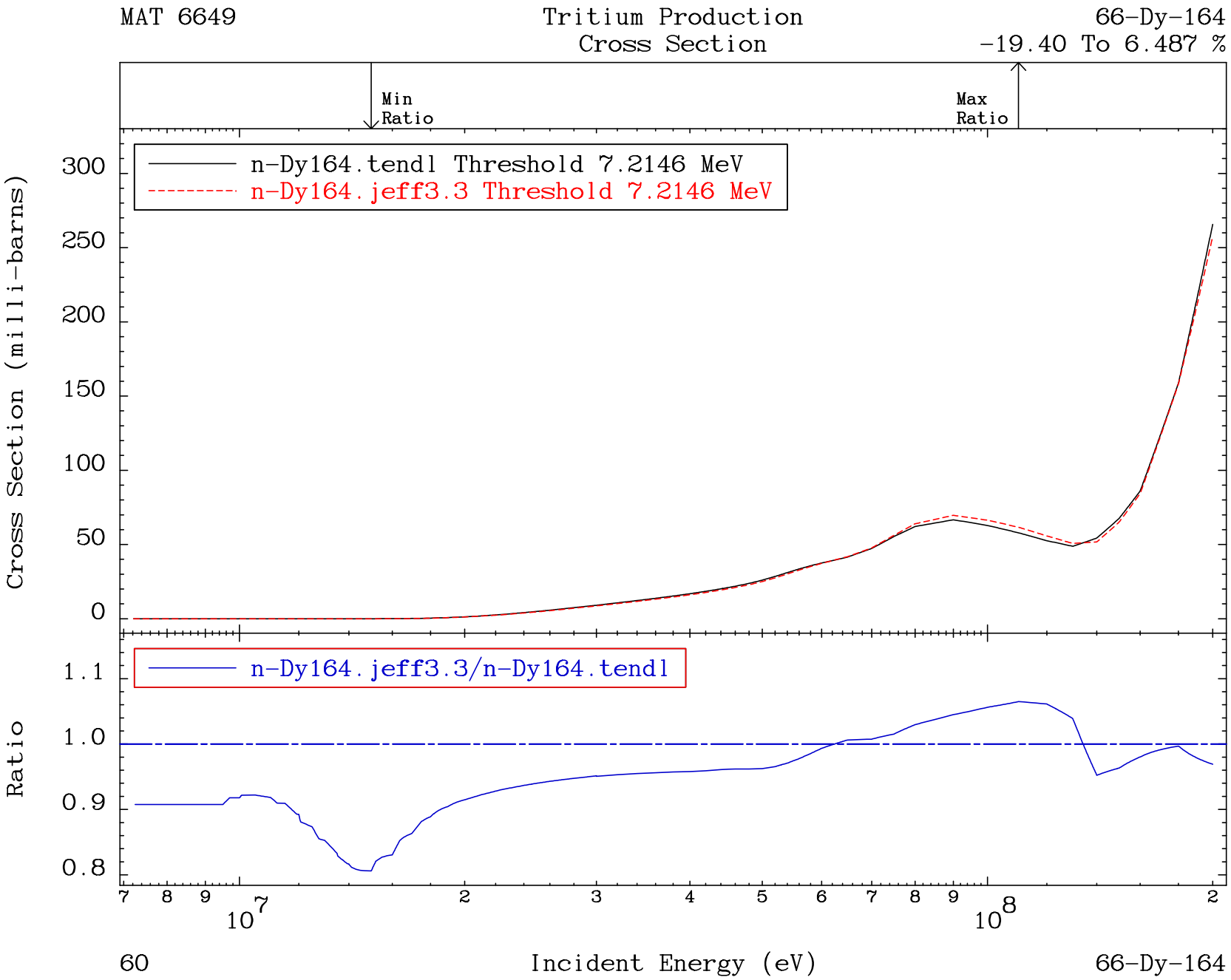

MAT 6649
(n,α)
Cross Section
66-Dy-164
-59.88 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
55
Incident Energy (eV)
66-Dy-164

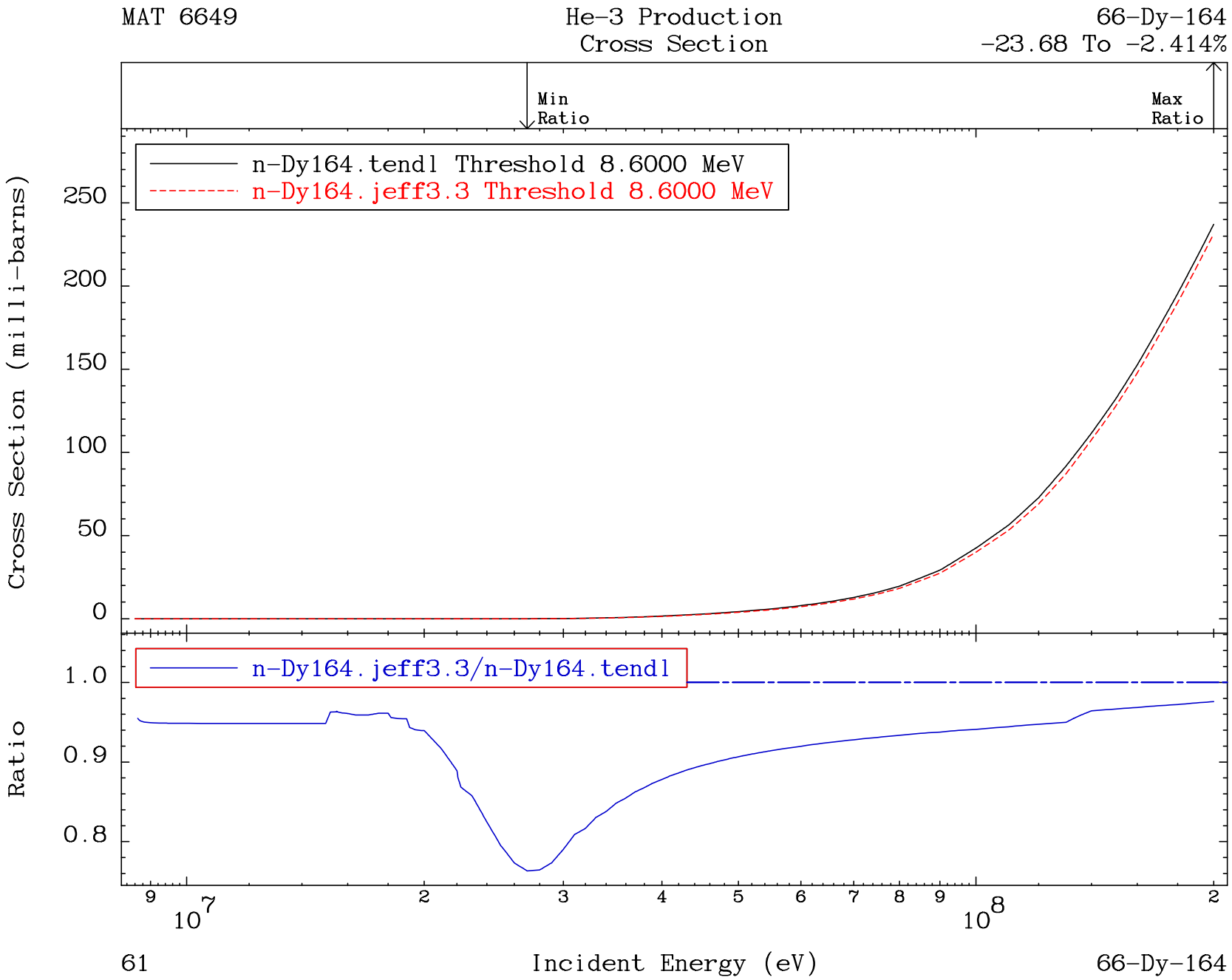

MAT 6649
(n,2p)
Cross Section
66-Dy-164
-57.57 To 40.62 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 11.229 MeV
n-Dy164.jeff3.3 Threshold 11.228 MeV
Cross Section (10^{-9} barns)
500
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
66-Dy-164

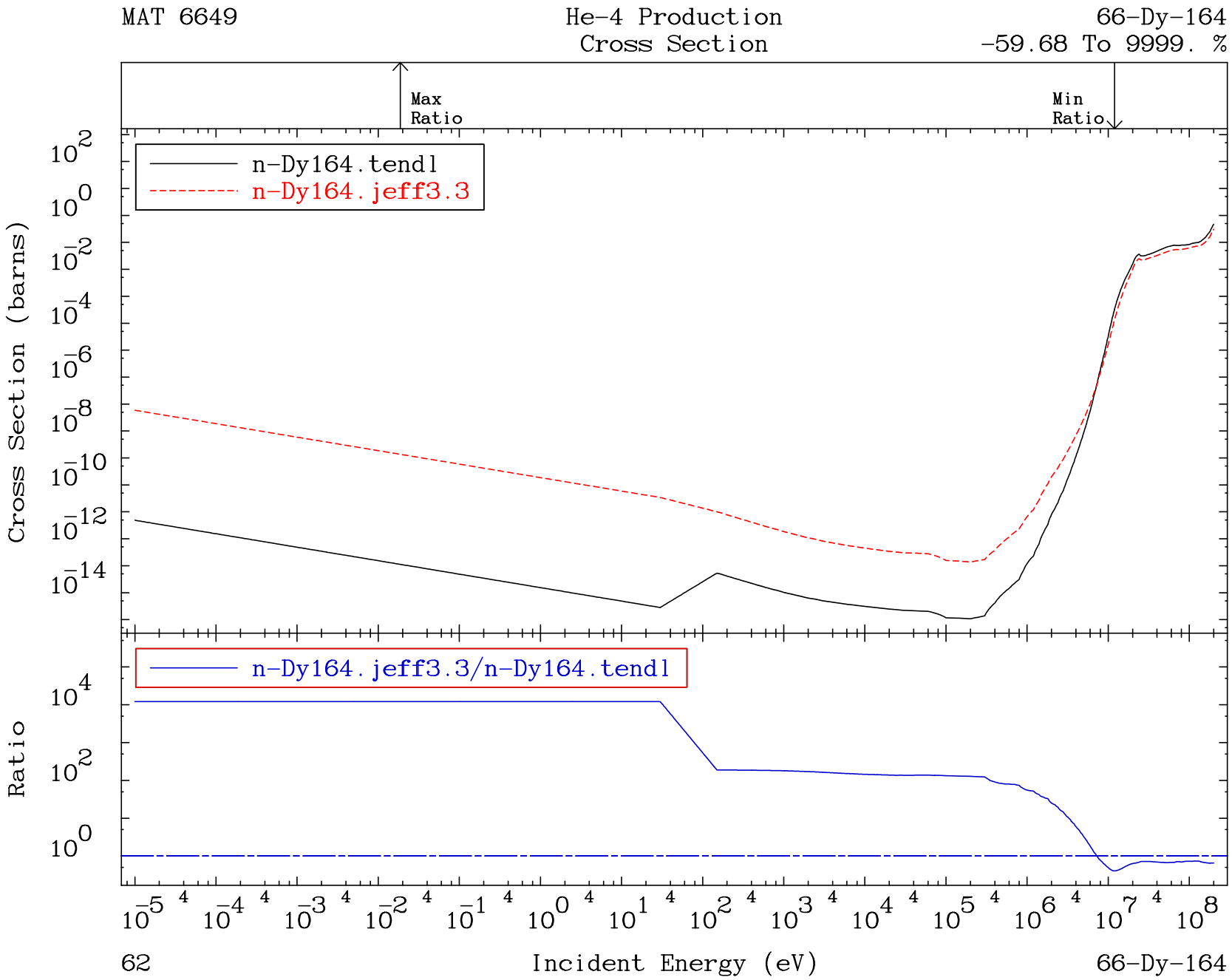

MAT 6649
(n,p) α
Cross Section
66-Dy-164
-68.79 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 4.1555 MeV
n-Dy164.jeff3.3 Threshold 4.1542 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
10^{2}
10^{0}
4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
57
Incident Energy (eV)
66-Dy-164

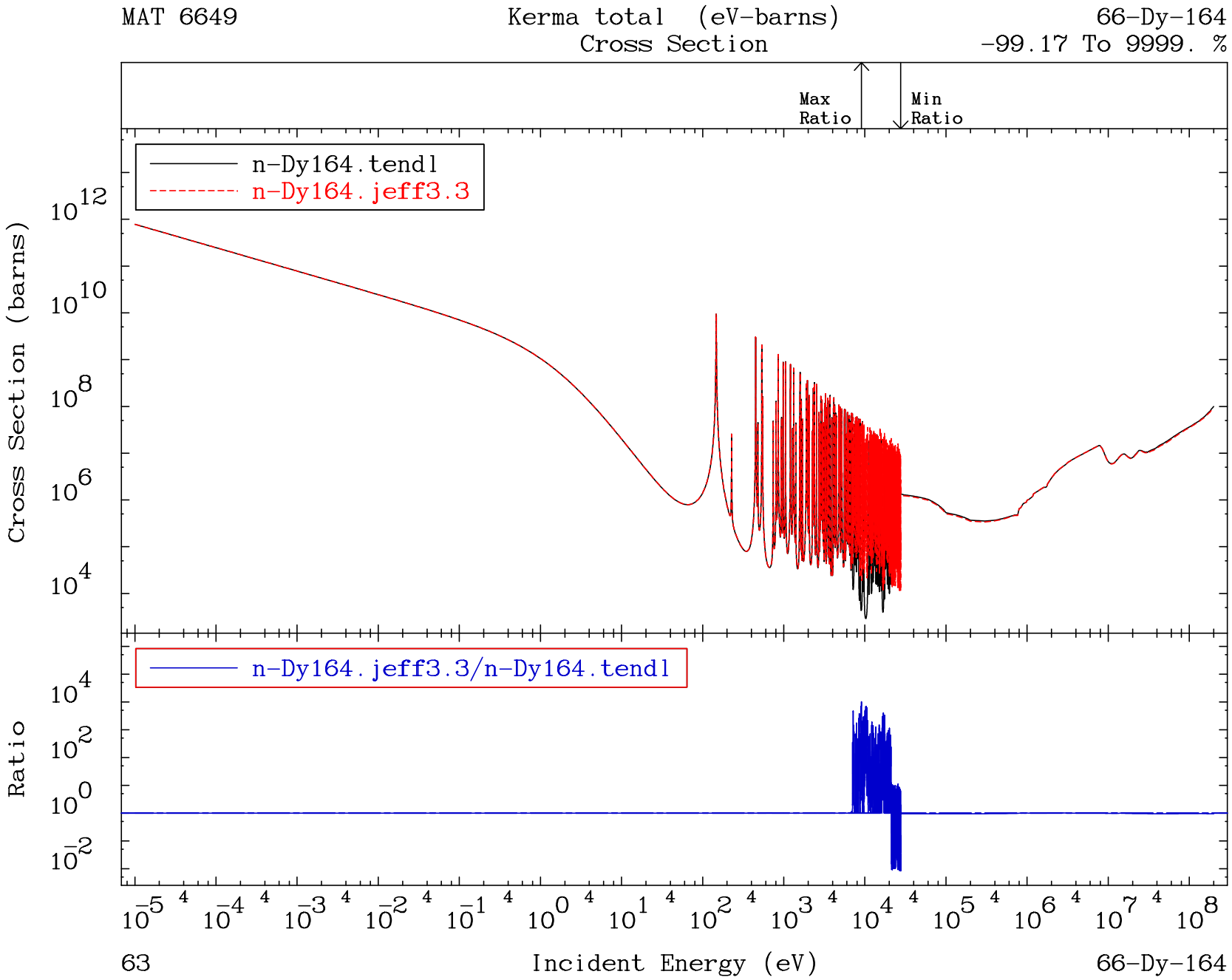

MAT 6649
Hydrogen Production
Cross Section
66-Dy-164
-28.77 To 11.49 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 3.1268 MeV
n-Dy164.jeff3.3 Threshold 3.1268 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.2
1.0
0.8
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
58
Incident Energy (eV)
66-Dy-164

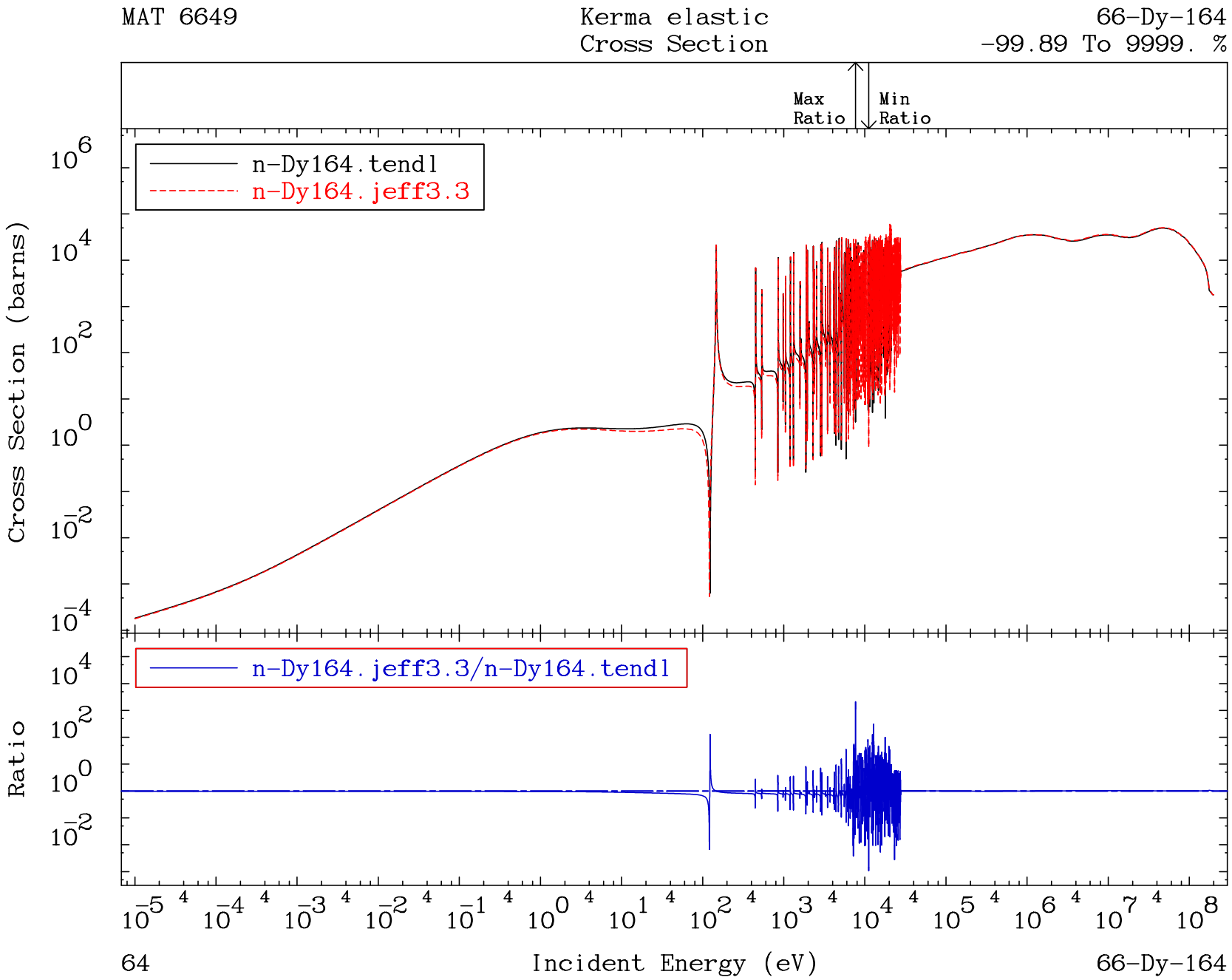

MAT 6649
Deuterium Production
Cross Section
66-Dy-164
-23.70 To 1.828 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 6.4759 MeV
n-Dy164.jeff3.3 Threshold 6.4759 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
59
Incident Energy (eV)
66-Dy-164

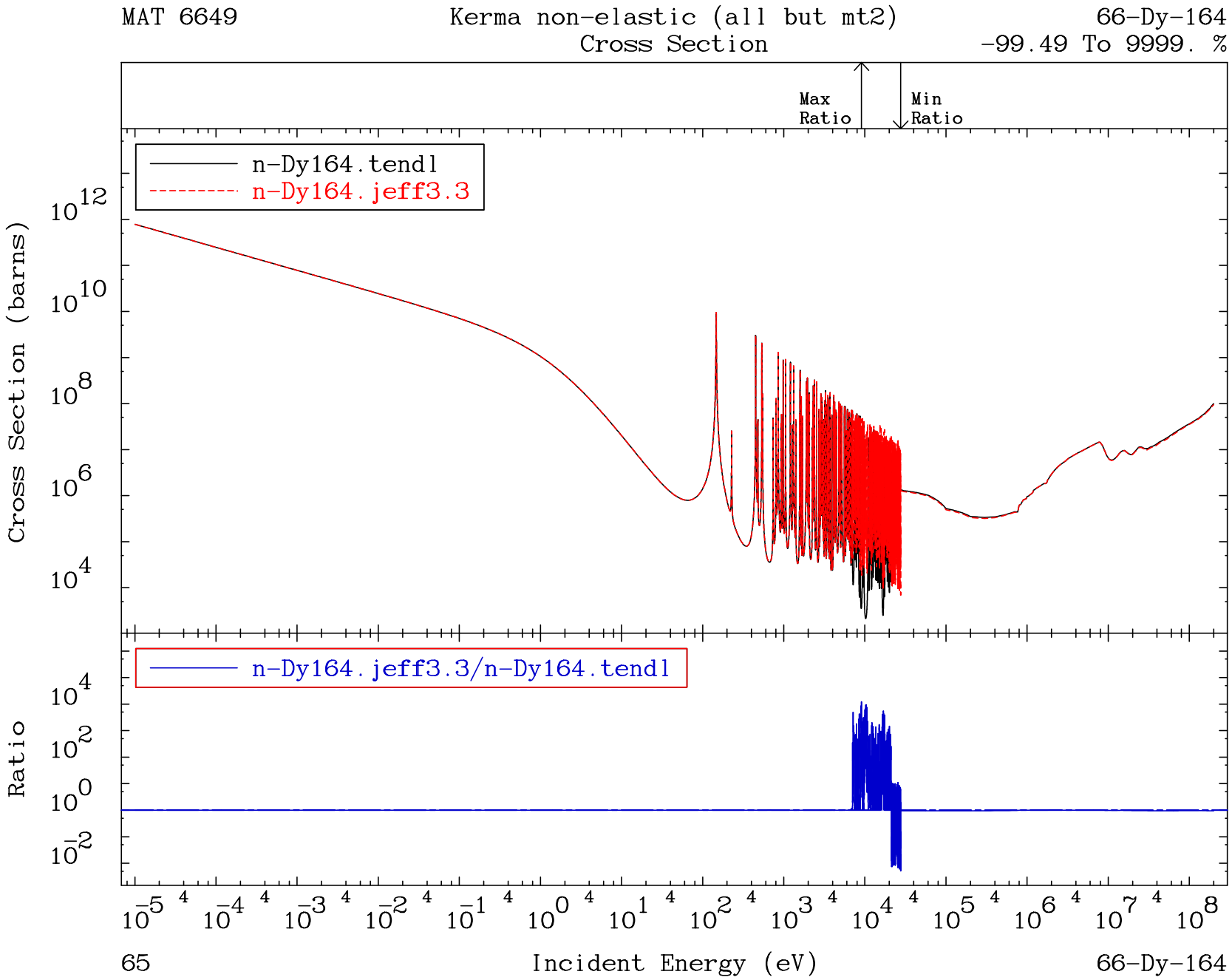

MAT 6649
Tritium Production
Cross Section
66-Dy-164
-19.40 To 6.487 %
Min
Ratio
Max
Ratio
n-Dy164.tendl Threshold 7.2146 MeV
n-Dy164.jeff3.3 Threshold 7.2146 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.1
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
60
Incident Energy (eV)
66-Dy-164

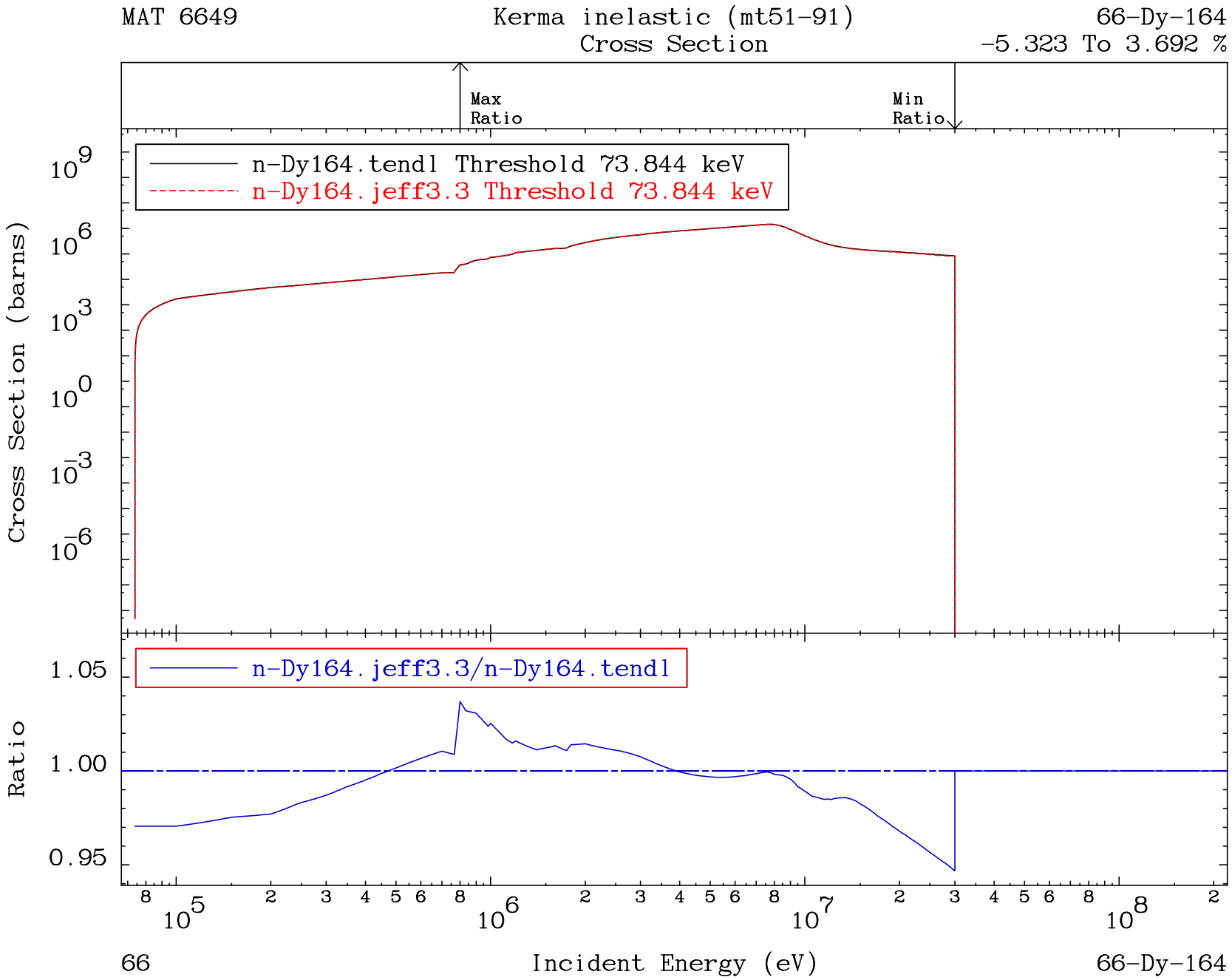

MAT 6649
He-3 Production
Cross Section
66-Dy-164
-23.68 To -2.414%
Min
Ratio
Max
Ratio
n-Dy164.tendl Threshold 8.6000 MeV
n-Dy164.jeff3.3 Threshold 8.6000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.0
0.9
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
66-Dy-164

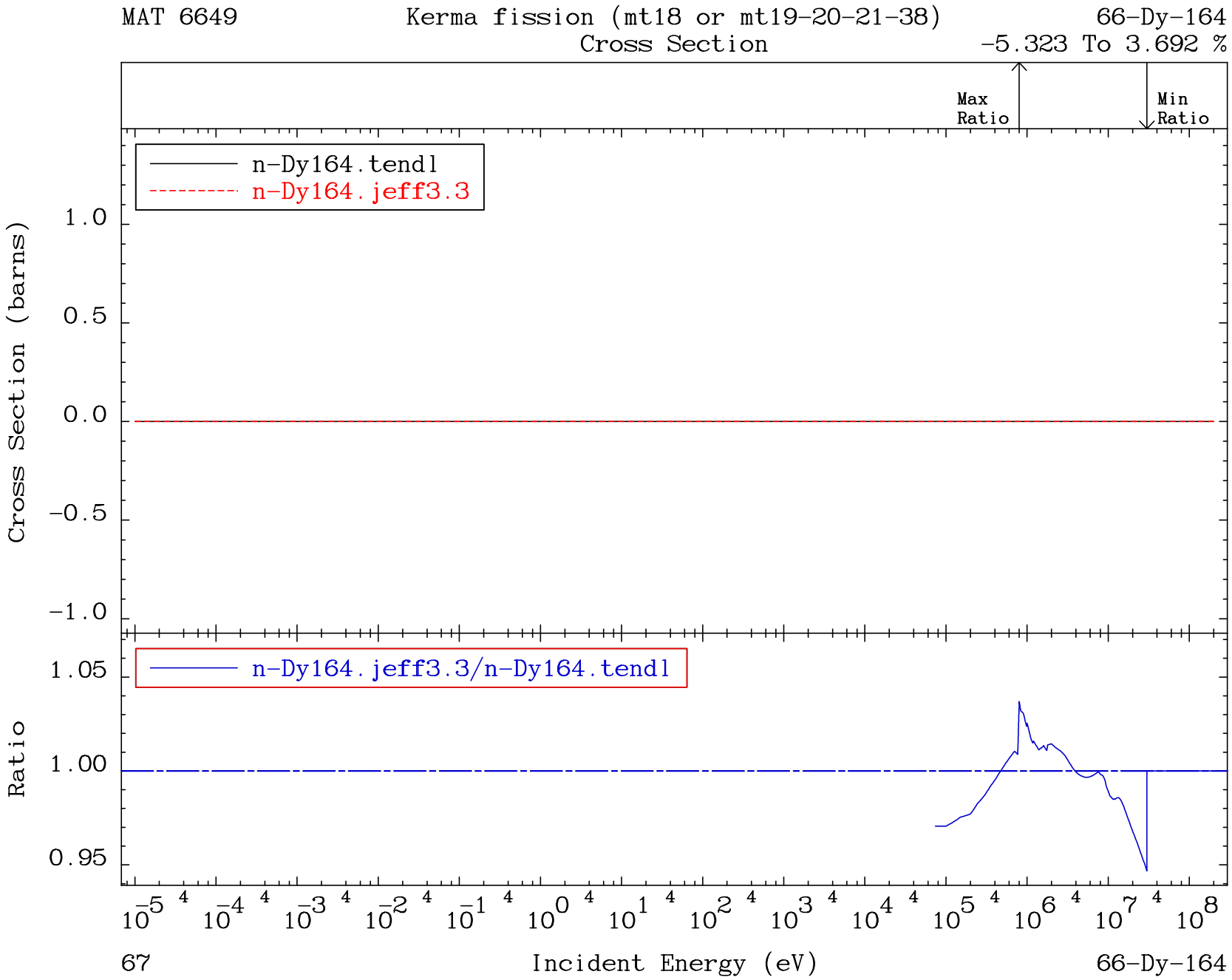

MAT 6649
He-4 Production
Cross Section
66-Dy-164
-59.68 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
62
66-Dy-164

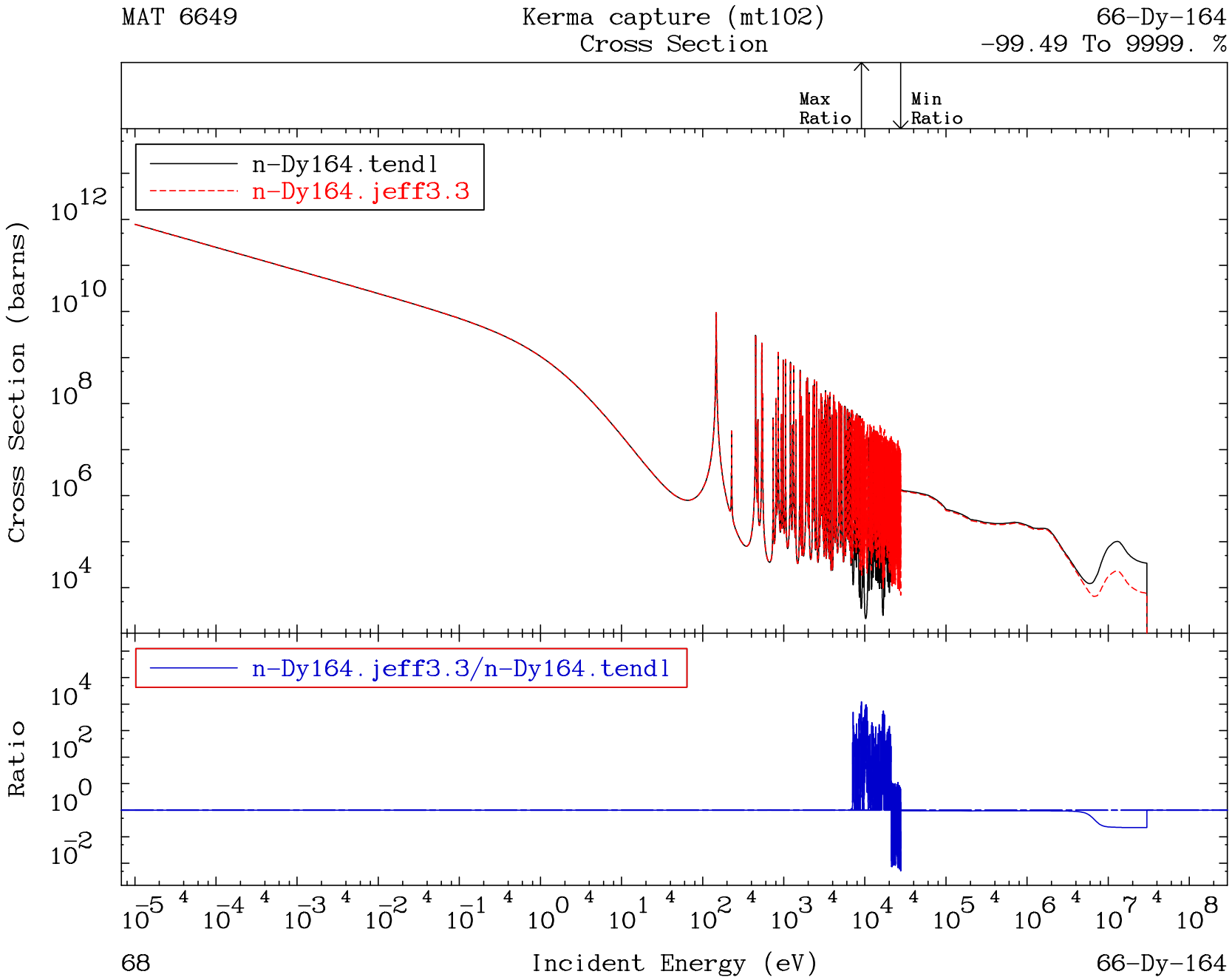

MAT 6649
Kerma total (eV-barns)
Cross Section
66-Dy-164
-99.17 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
63
66-Dy-164

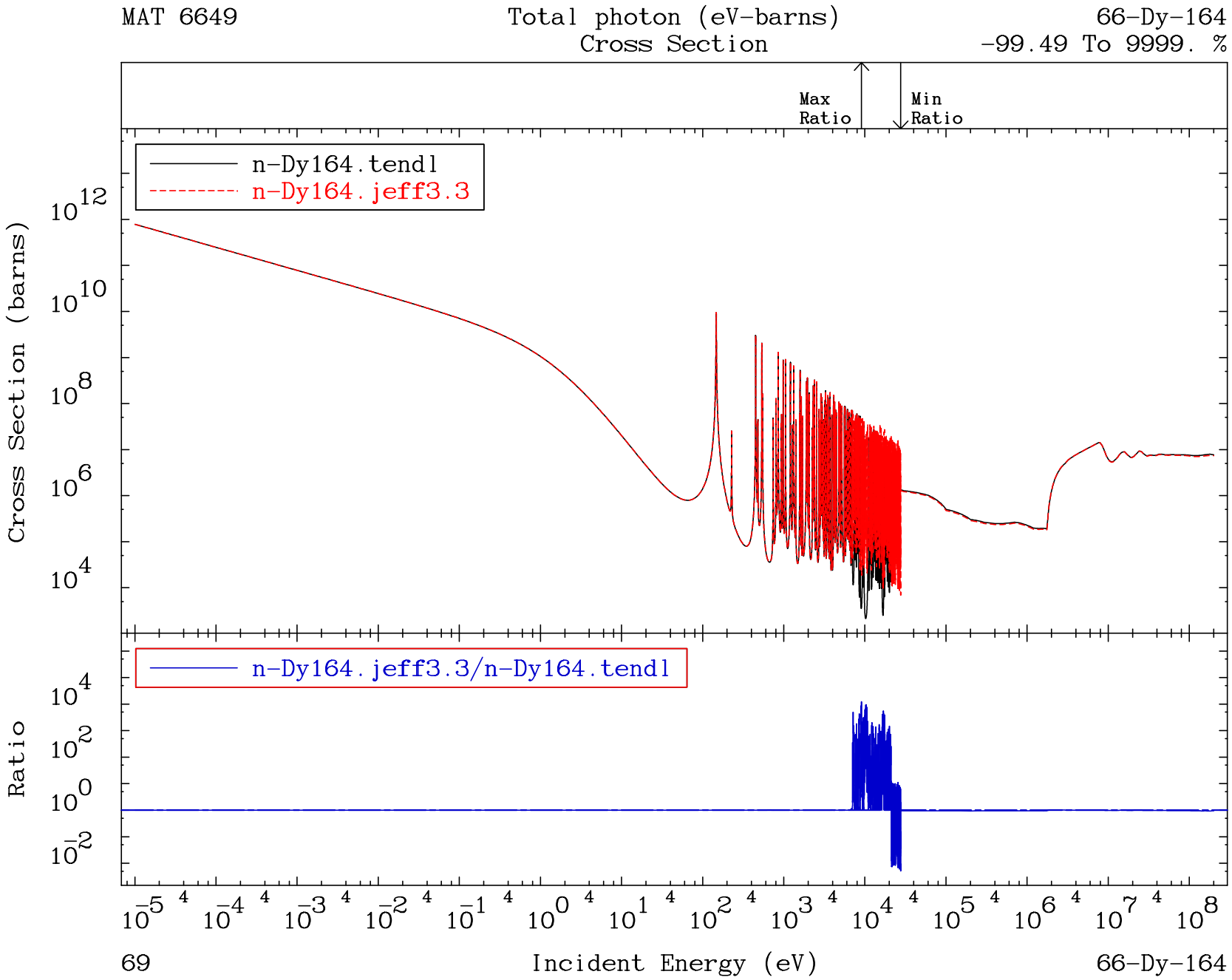

MAT 6649
Kerma elastic
Cross Section
66-Dy-164
-99.89 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
64
Incident Energy (eV)
66-Dy-164

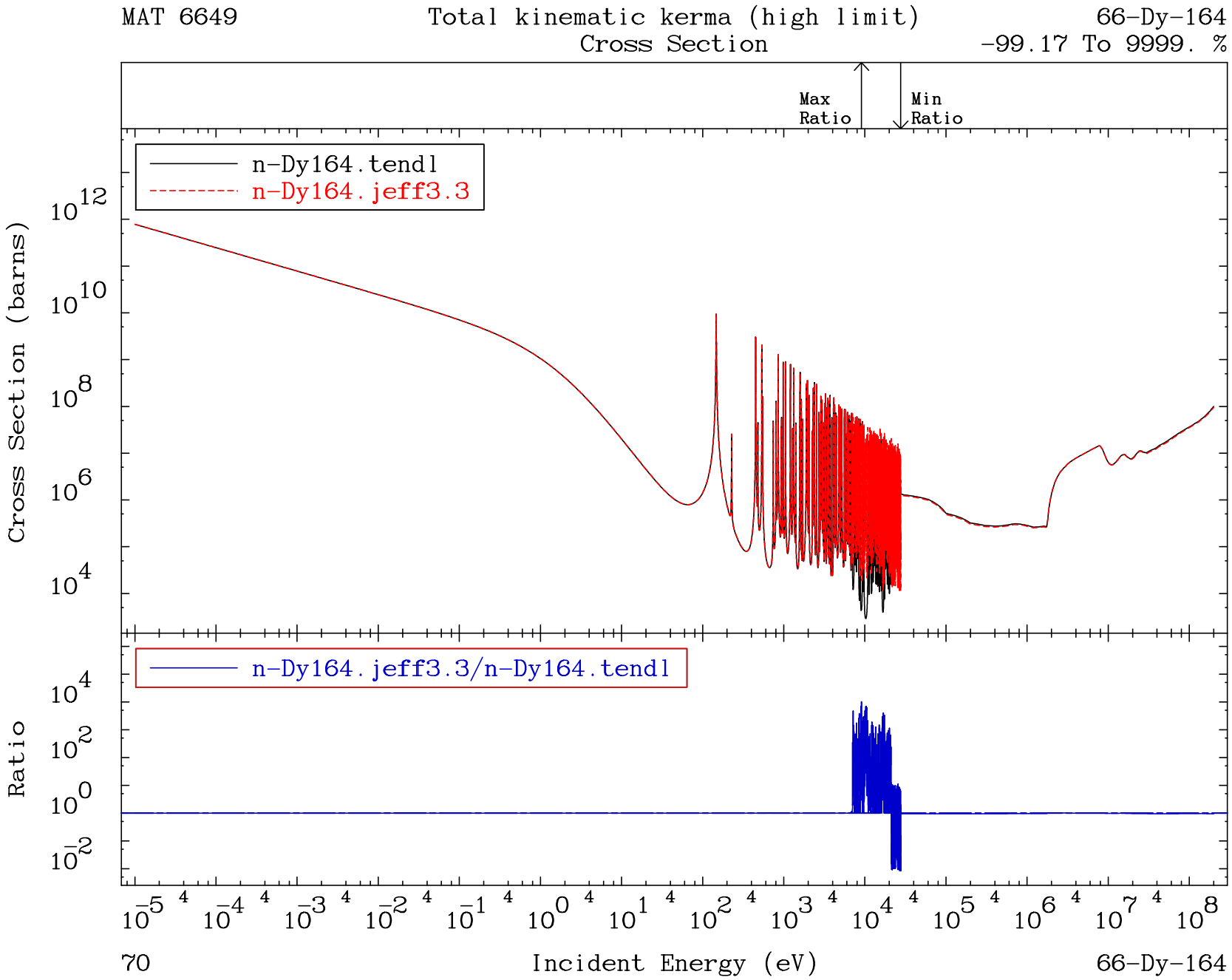

MAT 6649
Kerma non-elastic (all but mt2)
Cross Section
66-Dy-164
-99.49 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
65
66-Dy-164

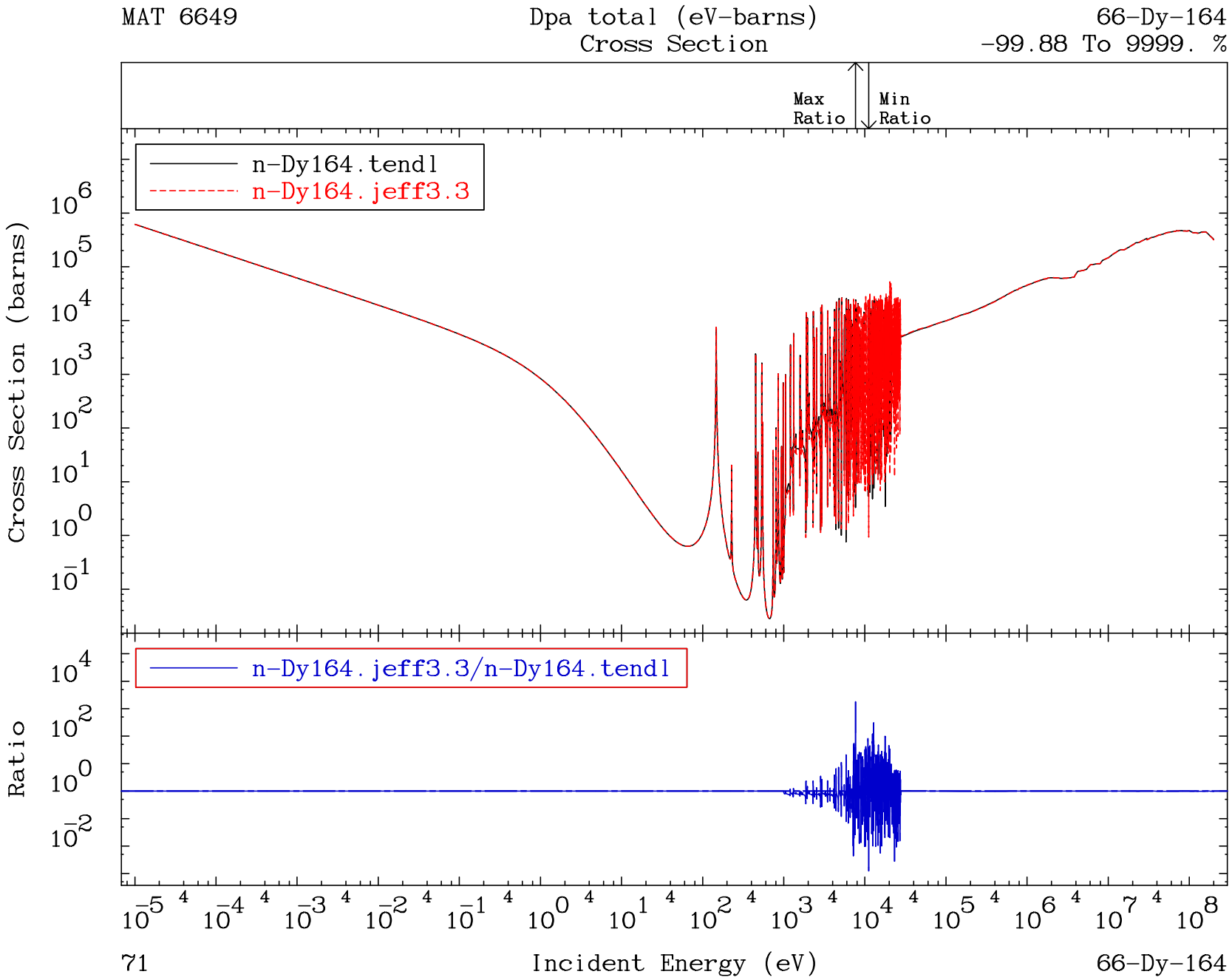

MAT 6649
Kerma inelastic (mt51-91)
Cross Section
66-Dy-164
-5.323 To 3.692 %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 73.844 keV
n-Dy164.jeff3.3 Threshold 73.844 keV
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
66
66-Dy-164

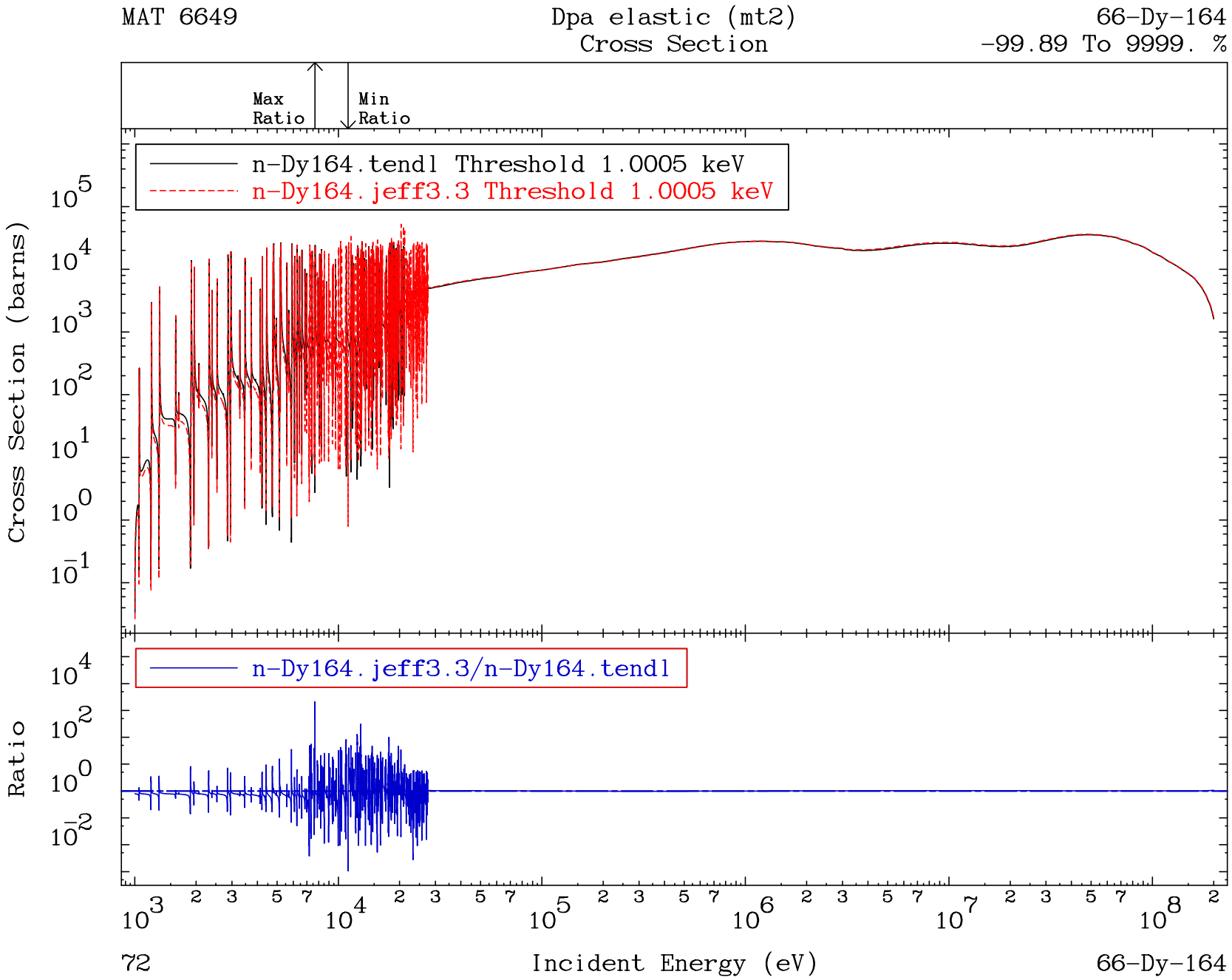

MAT 6649
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
66-Dy-164
-5.323 To 3.692 %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
1.05
1.00
0.95
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
67
Incident Energy (eV)
66-Dy-164

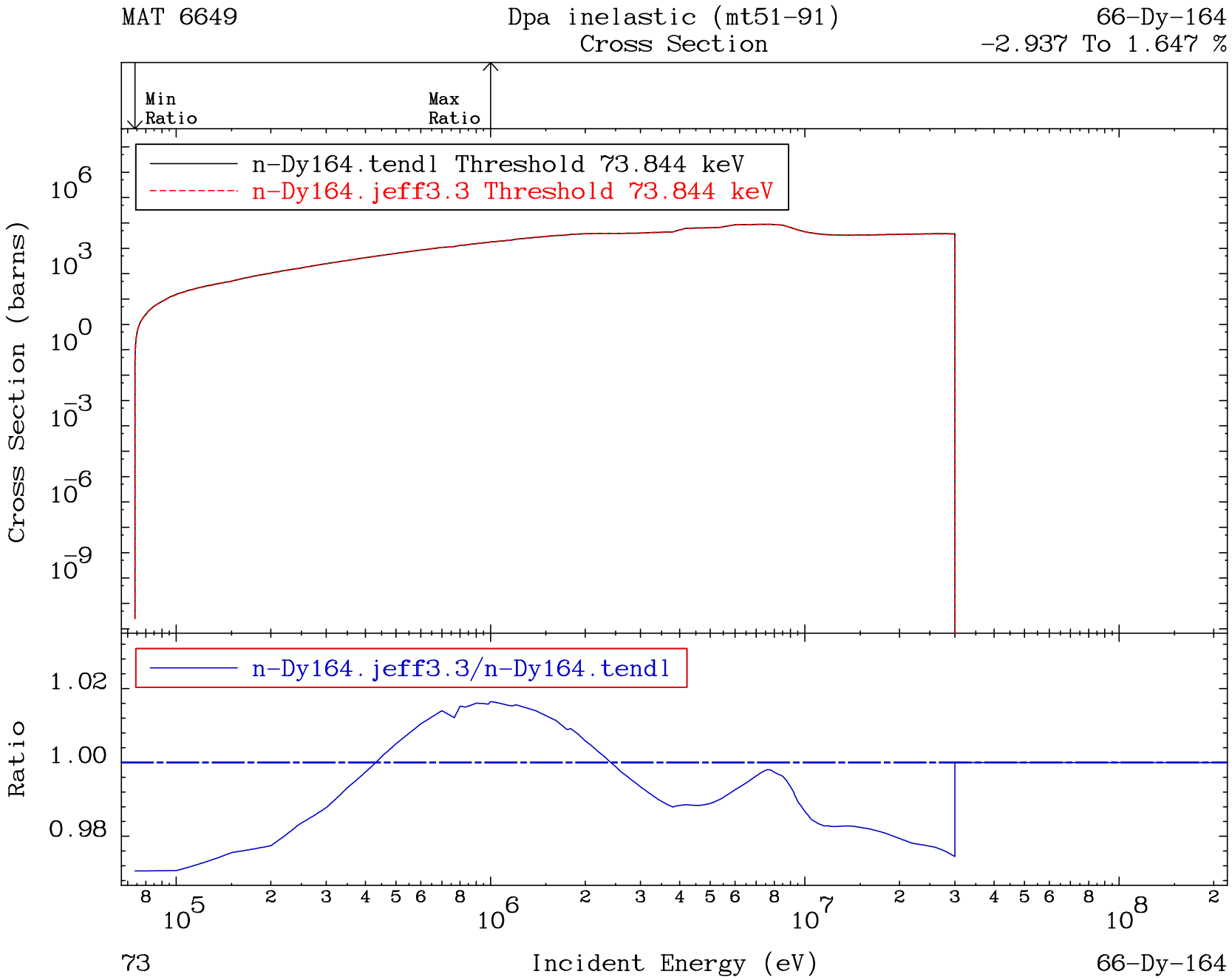

MAT 6649
Kerma capture (mt102)
Cross Section
66-Dy-164
-99.49 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
68
66-Dy-164

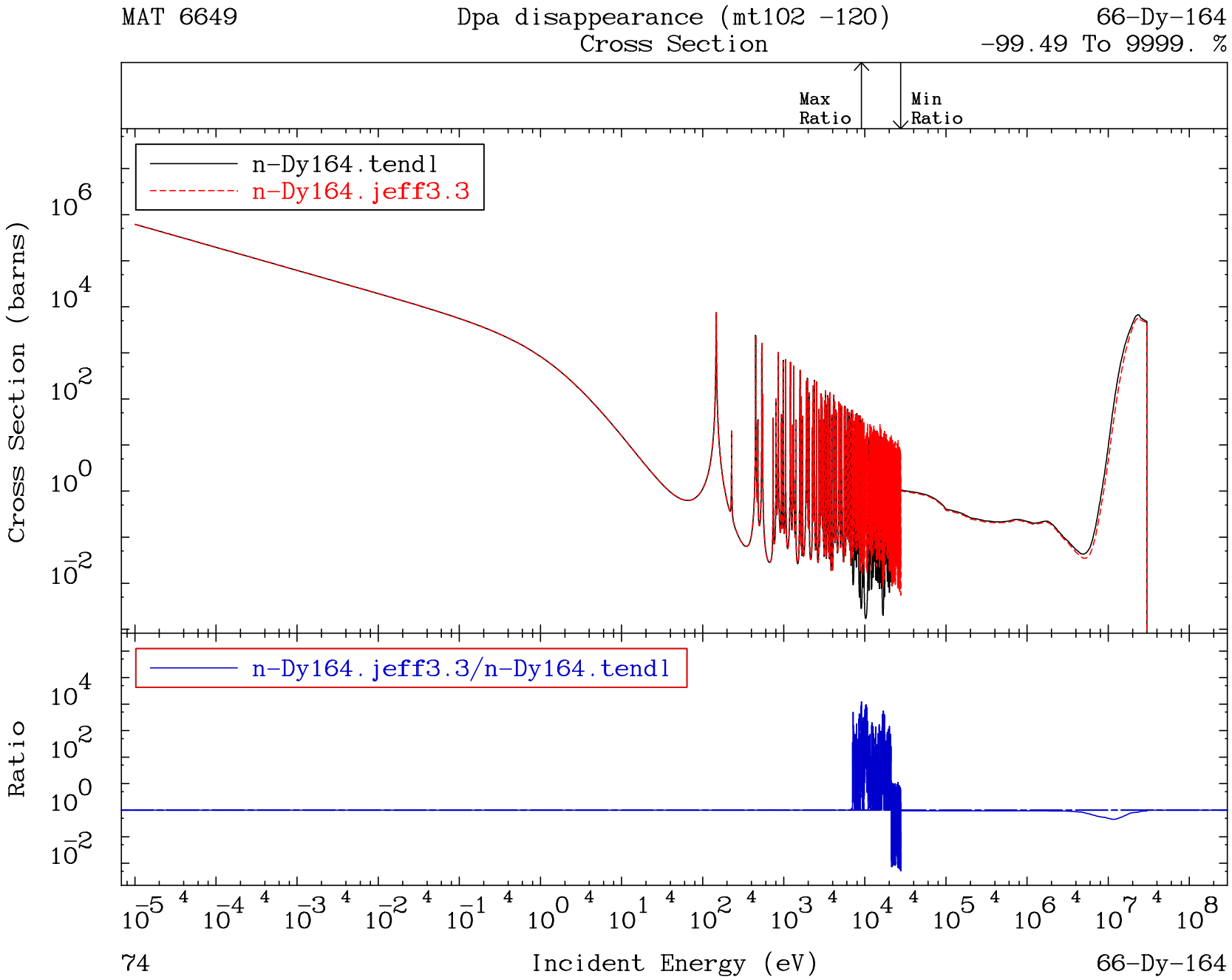

MAT 6649
Total photon (eV-barns)
Cross Section
66-Dy-164
-99.49 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
69
66-Dy-164


MAT 6649
Total kinematic kerma (high limit)
Cross Section
66-Dy-164
-99.17 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
70
66-Dy-164


MAT 6649
Dpa total (eV-barns)
Cross Section
66-Dy-164
-99.88 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
71
66-Dy-164


MAT 6649
Dpa elastic (mt2)
Cross Section
66-Dy-164
-99.89 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl Threshold 1.0005 keV
n-Dy164.jeff3.3 Threshold 1.0005 keV
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
72
66-Dy-164


MAT 6649
Dpa inelastic (mt51-91)
Cross Section
66-Dy-164
-2.937 To 1.647 %
Min Ratio
Max Ratio
n-Dy164.tendl Threshold 73.844 keV
n-Dy164.jeff3.3 Threshold 73.844 keV
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
73
66-Dy-164


MAT 6649
Dpa disappearance (mt102 -120)
Cross Section
66-Dy-164
-99.49 To 9999. %
Max Ratio
Min Ratio
n-Dy164.tendl
n-Dy164.jeff3.3
Cross Section (barns)
n-Dy164.jeff3.3/n-Dy164.tendl
Ratio
Incident Energy (eV)
74
66-Dy-164