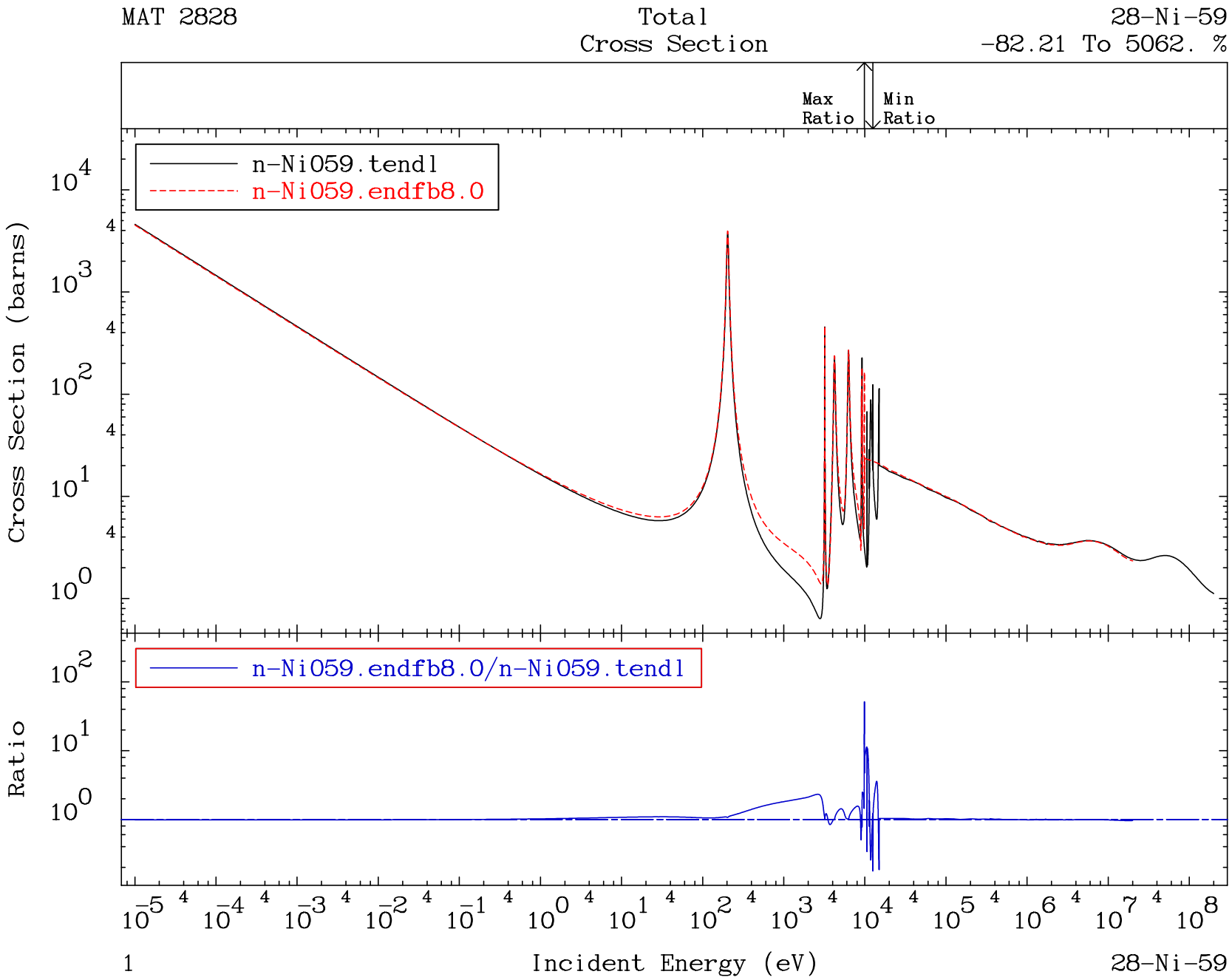
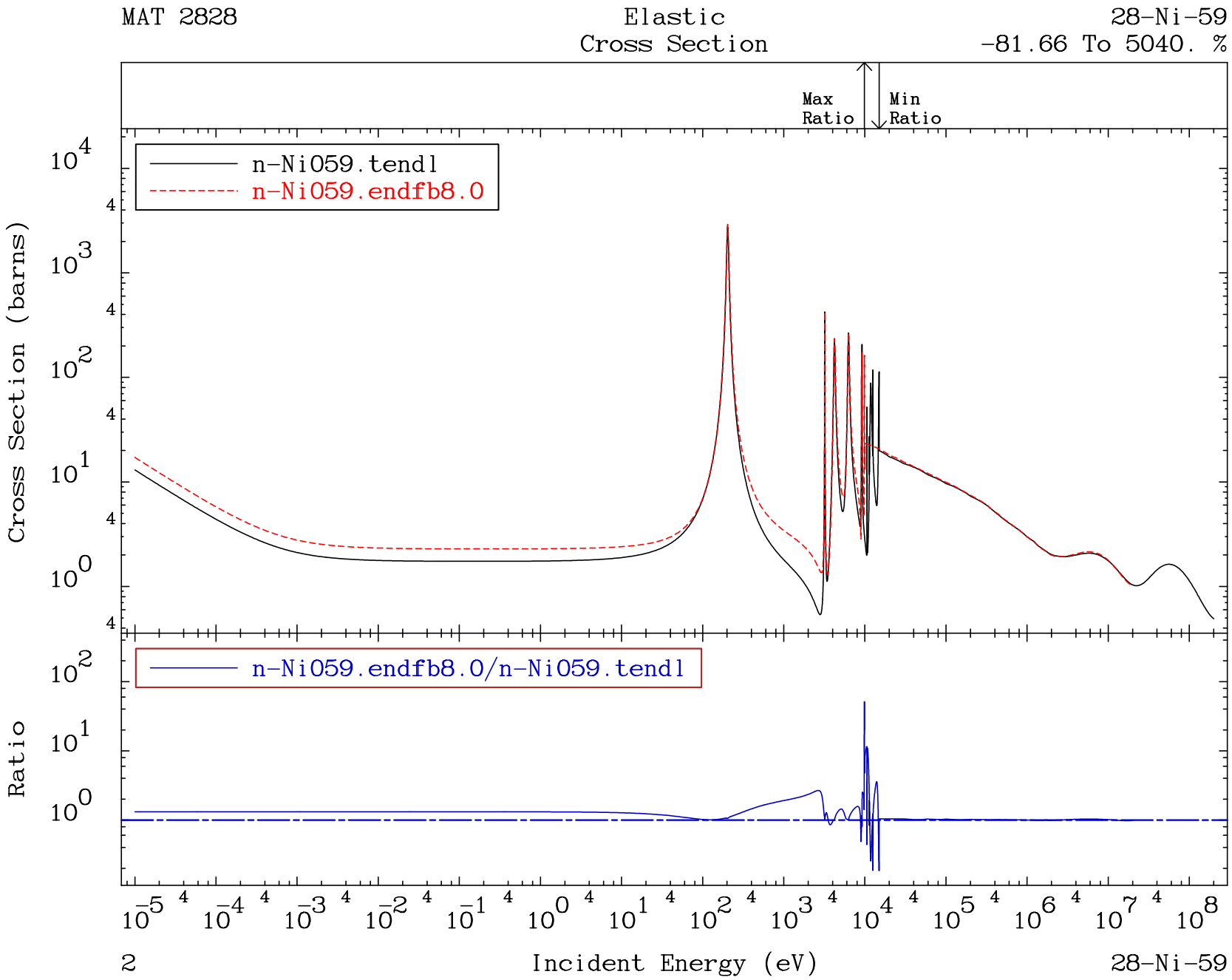
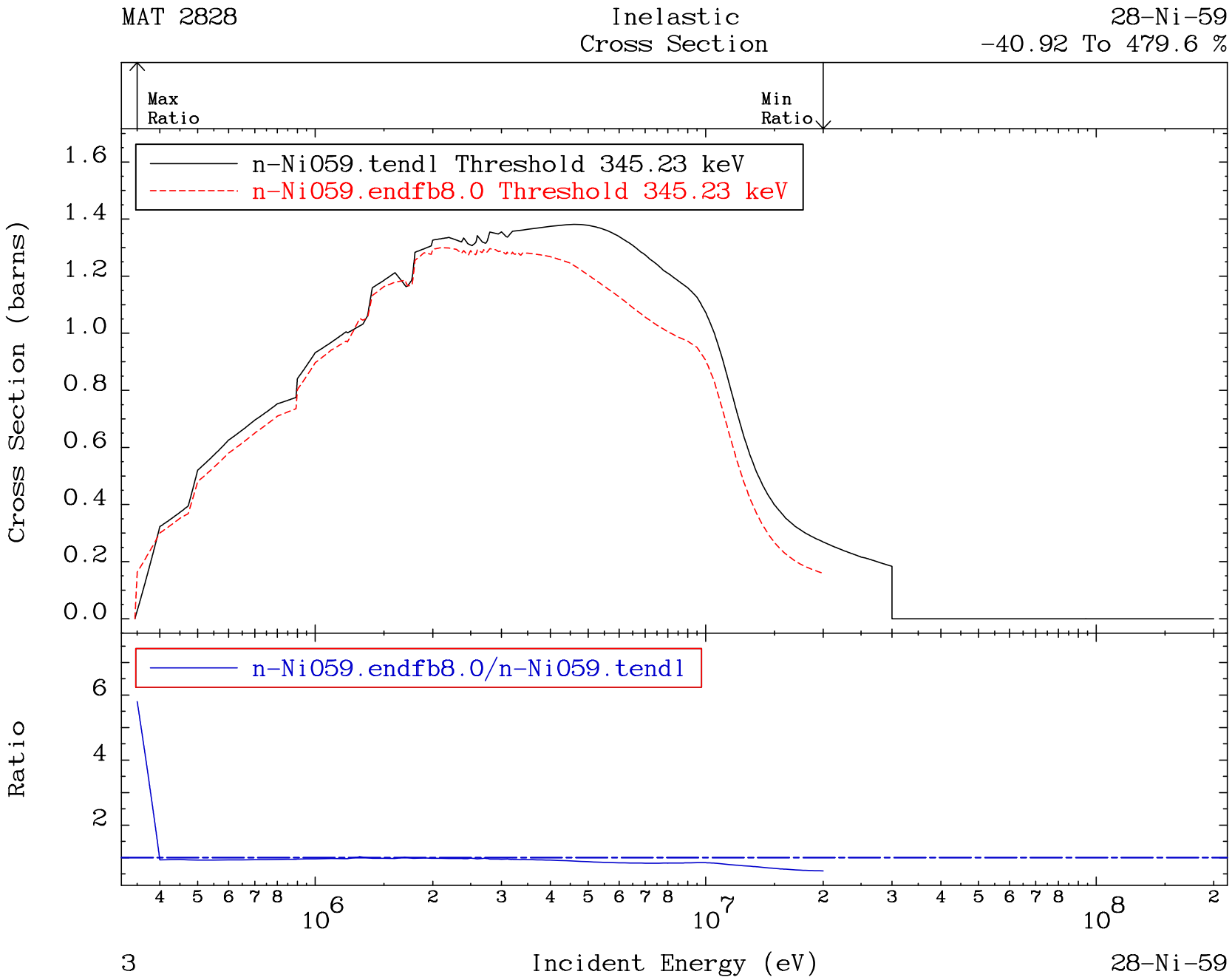
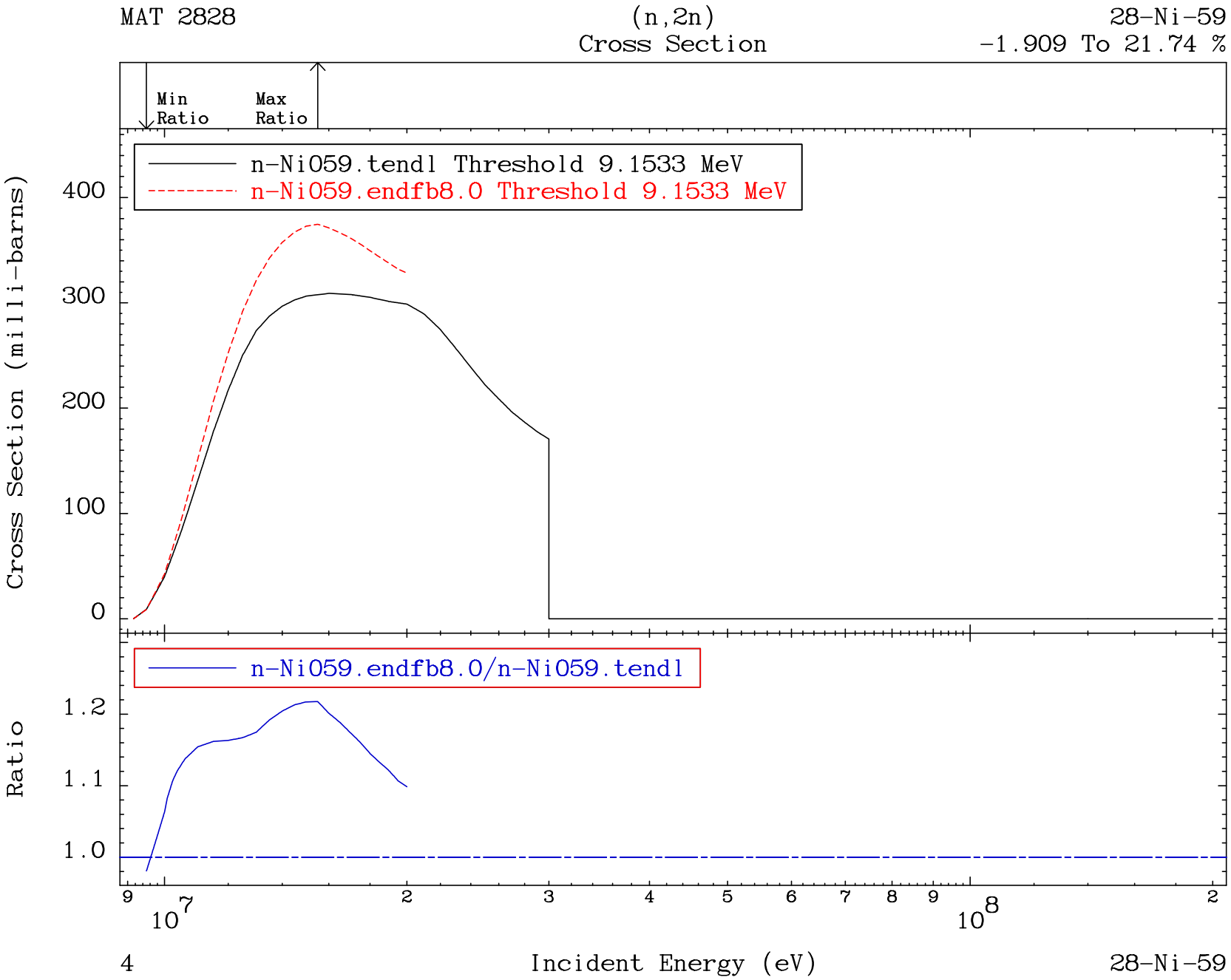
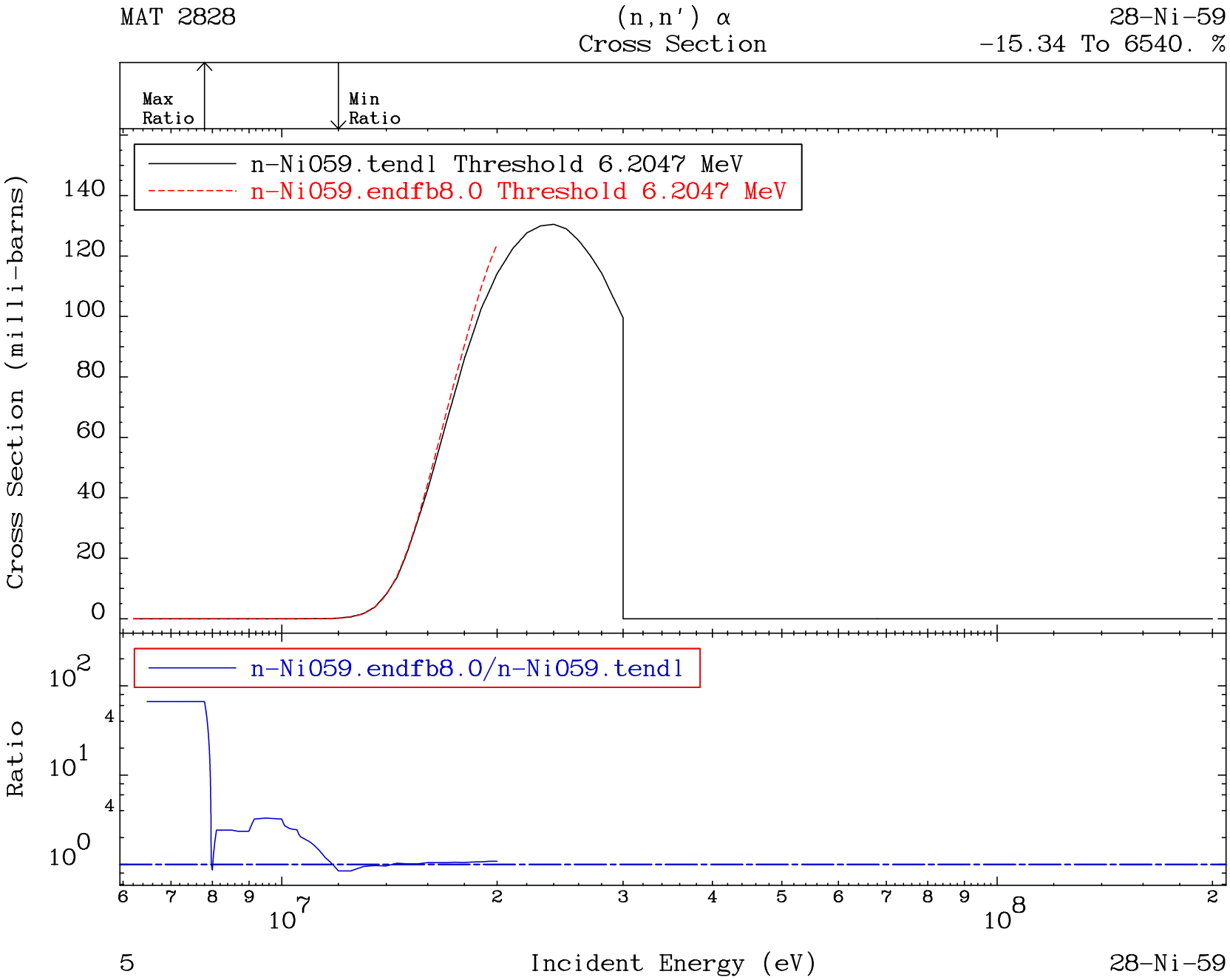
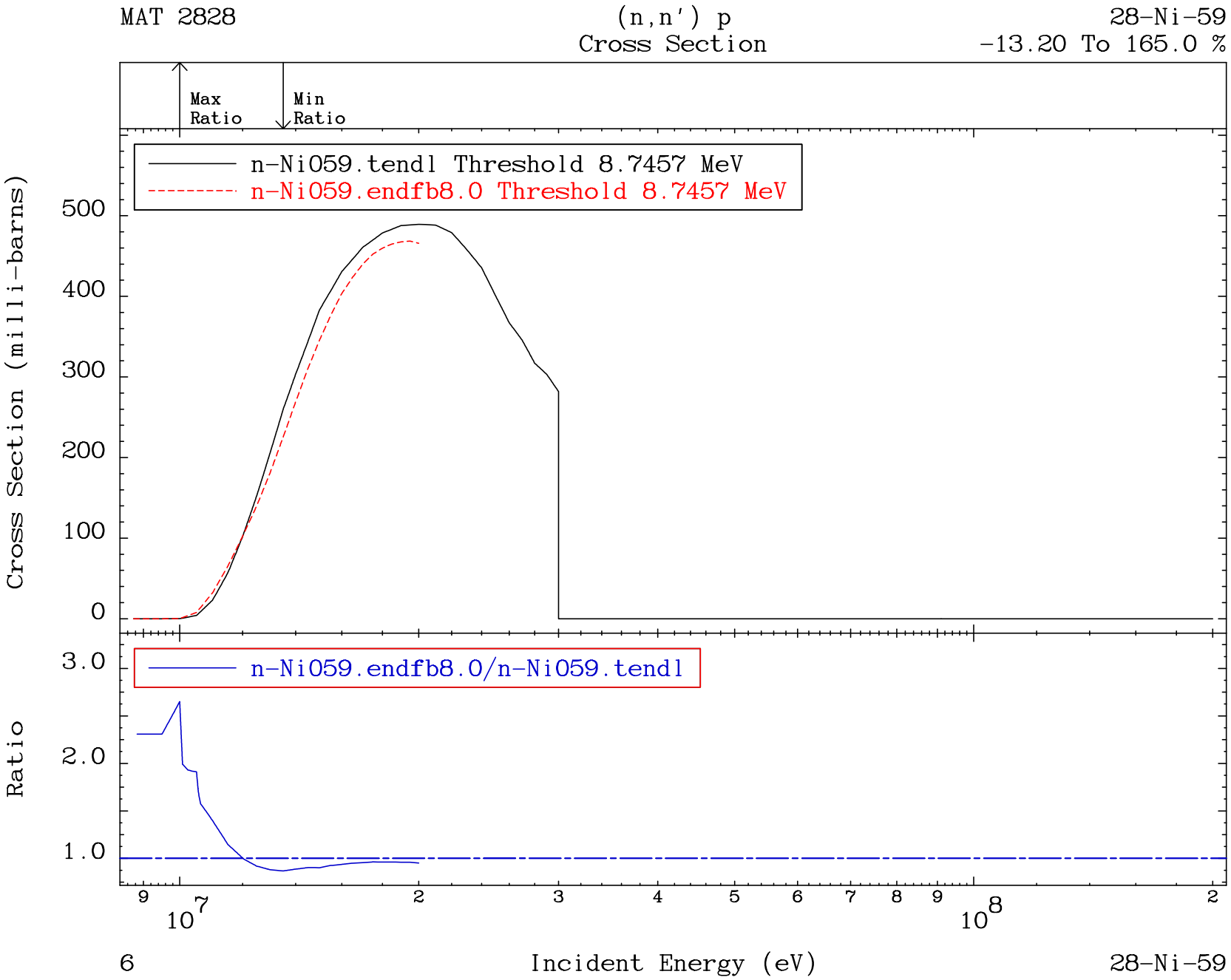

MAT 2828
Total
Cross Section
28-Ni-59
-82.21 To 5062. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
1
28-Ni-59

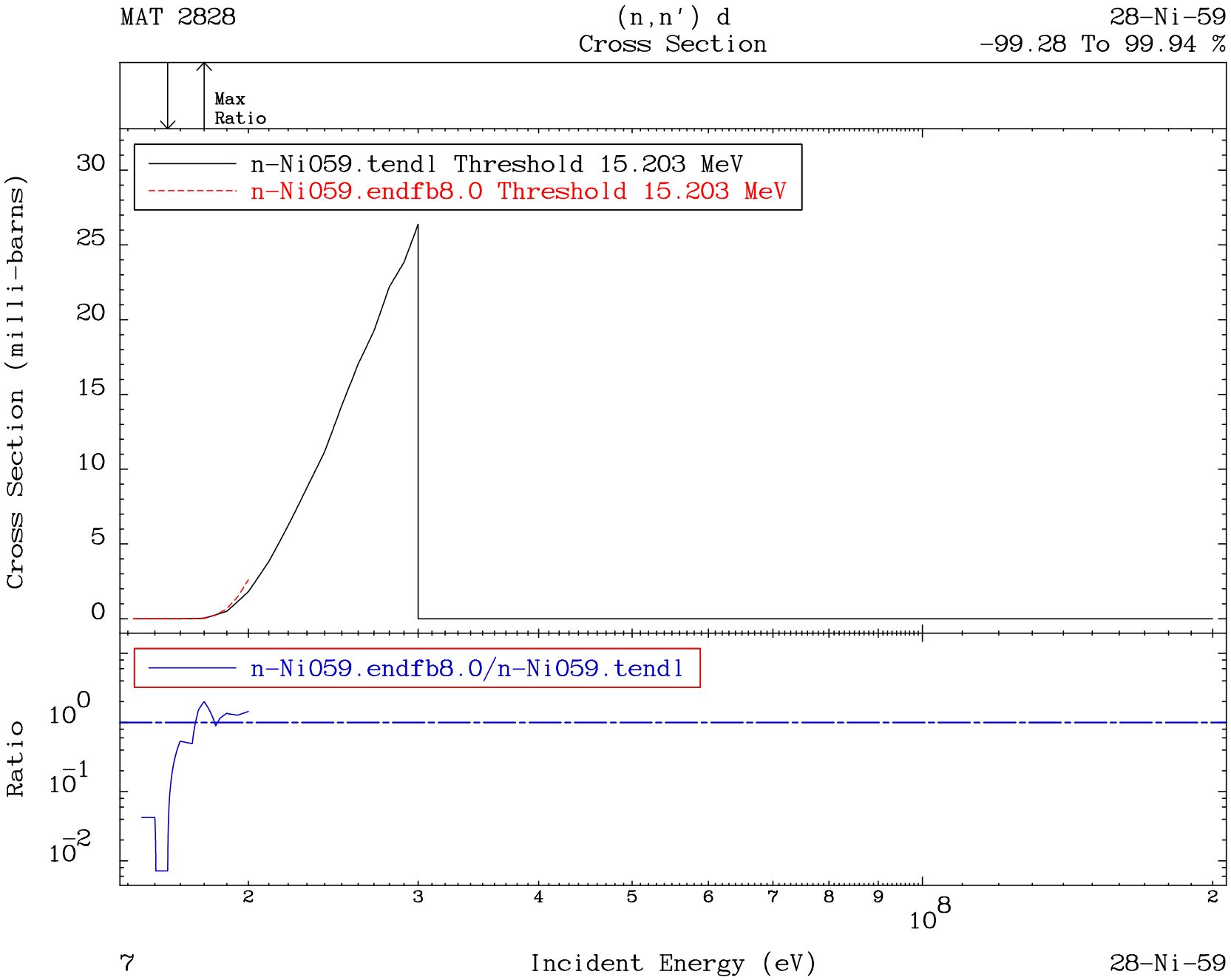

MAT 2828
Elastic
Cross Section
28-Ni-59
-81.66 To 5040. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
2
28-Ni-59

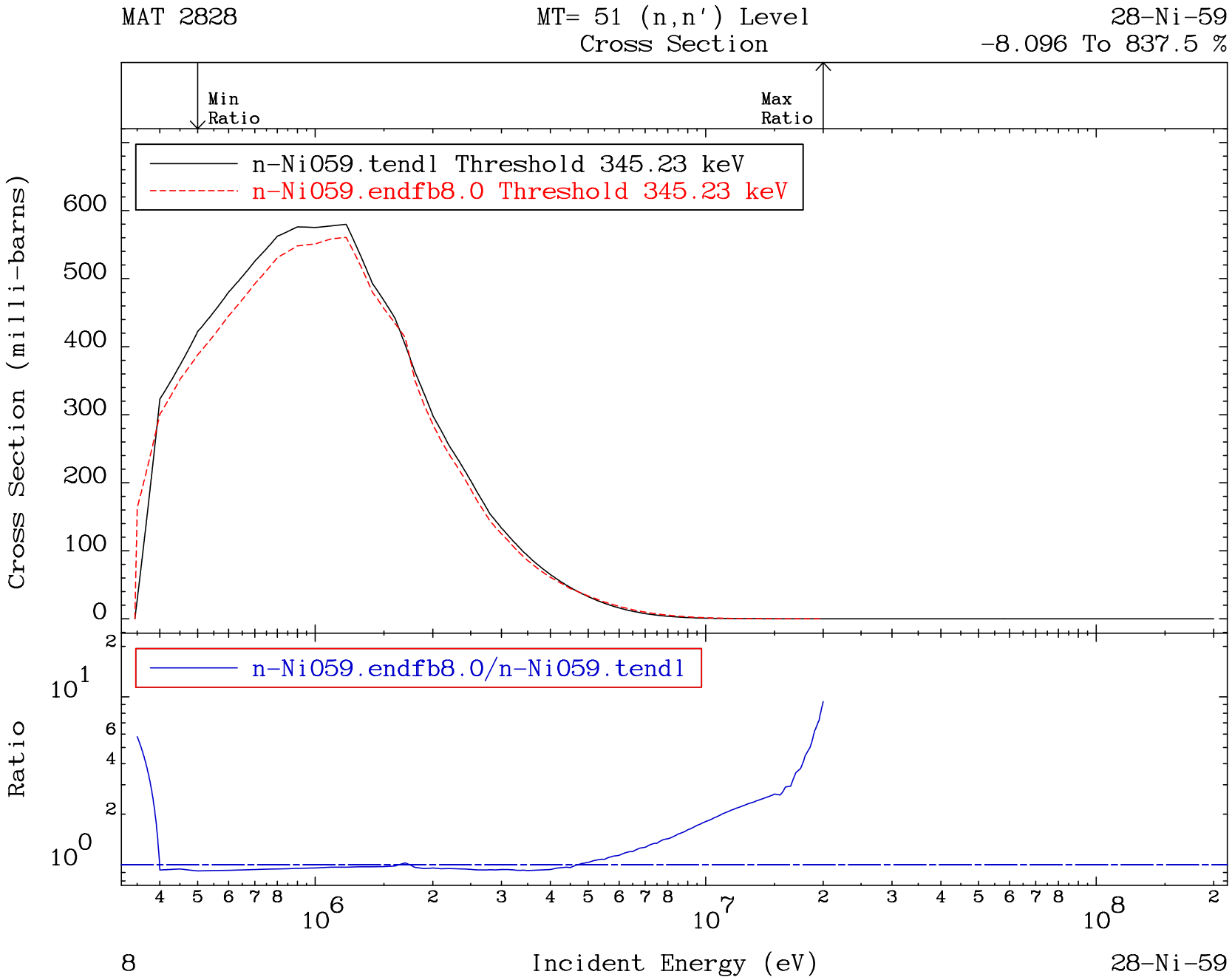

MAT 2828
Inelastic
Cross Section
28-Ni-59
-40.92 To 479.6 %
Max
Ratio
Min
Ratio
n-Ni059.tendl Threshold 345.23 keV
n-Ni059.endfb8.0 Threshold 345.23 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
6
4
2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
28-Ni-59

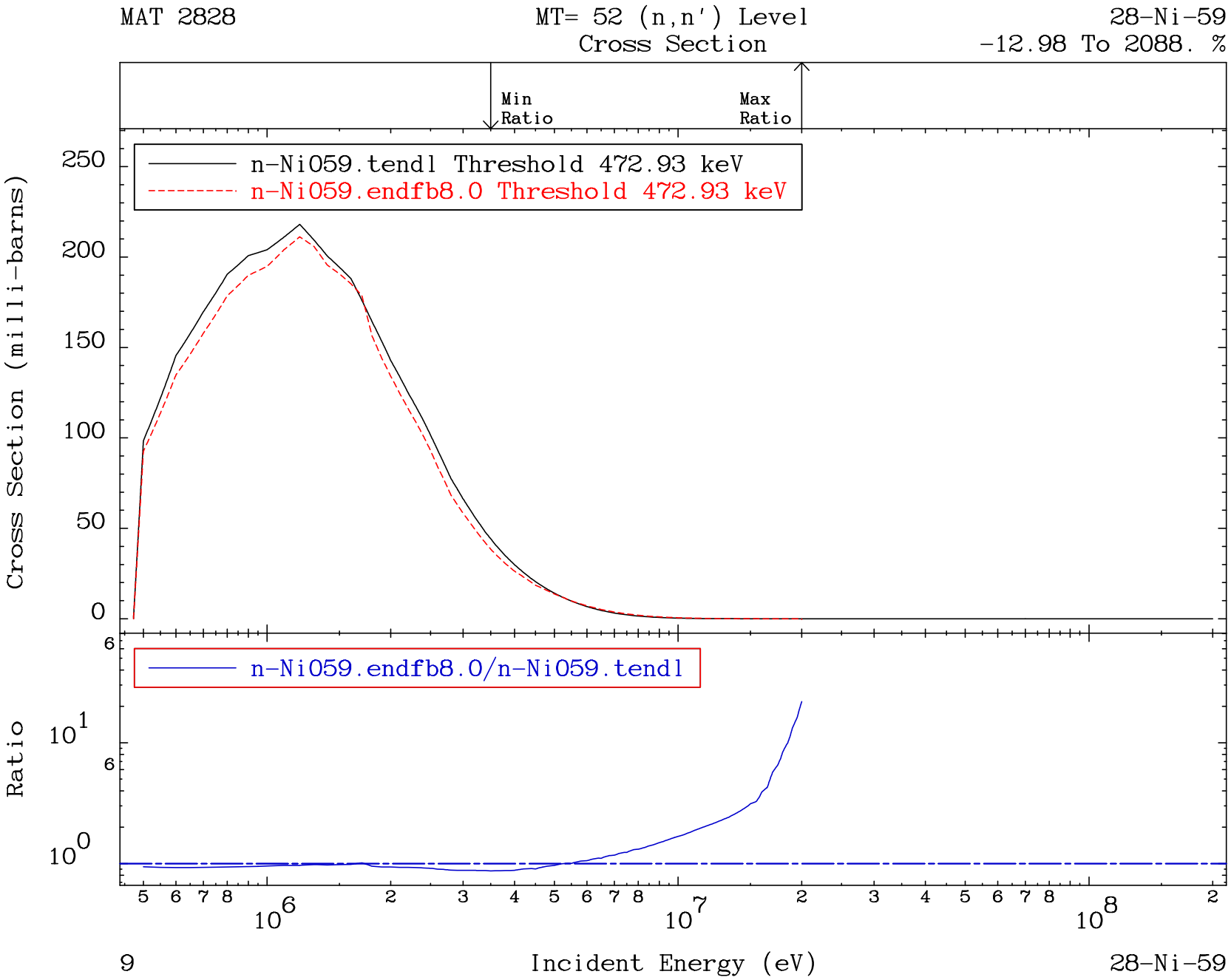

MAT 2828
(n,2n)
Cross Section
28-Ni-59
-1.909 To 21.74 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 9.1533 MeV
n-Ni059.endfb8.0 Threshold 9.1533 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
28-Ni-59

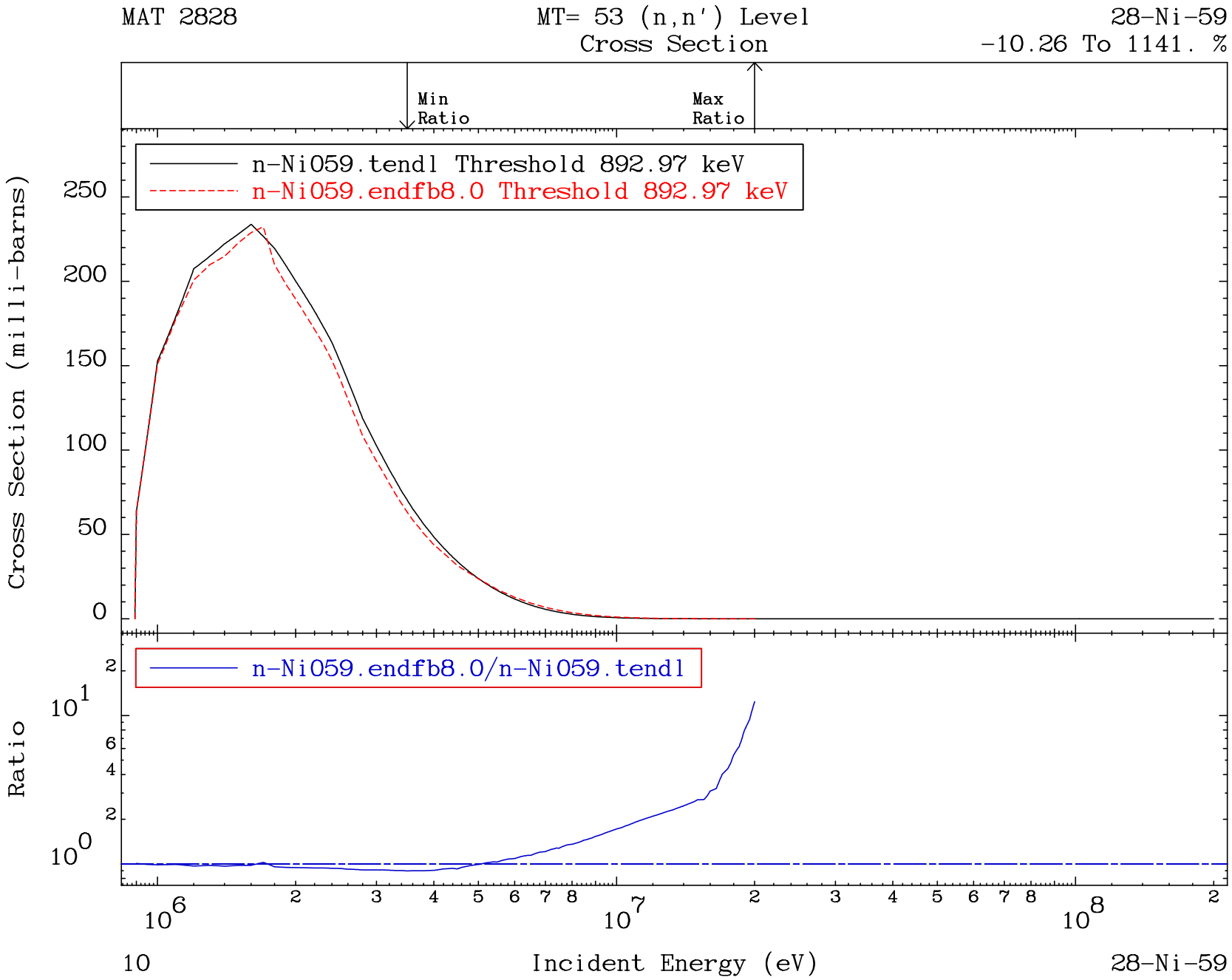

MAT 2828
(n,n') α
Cross Section
28-Ni-59
-15.34 To 6540. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 6.2047 MeV
n-Ni059.endfb8.0 Threshold 6.2047 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^2
10^1
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
28-Ni-59

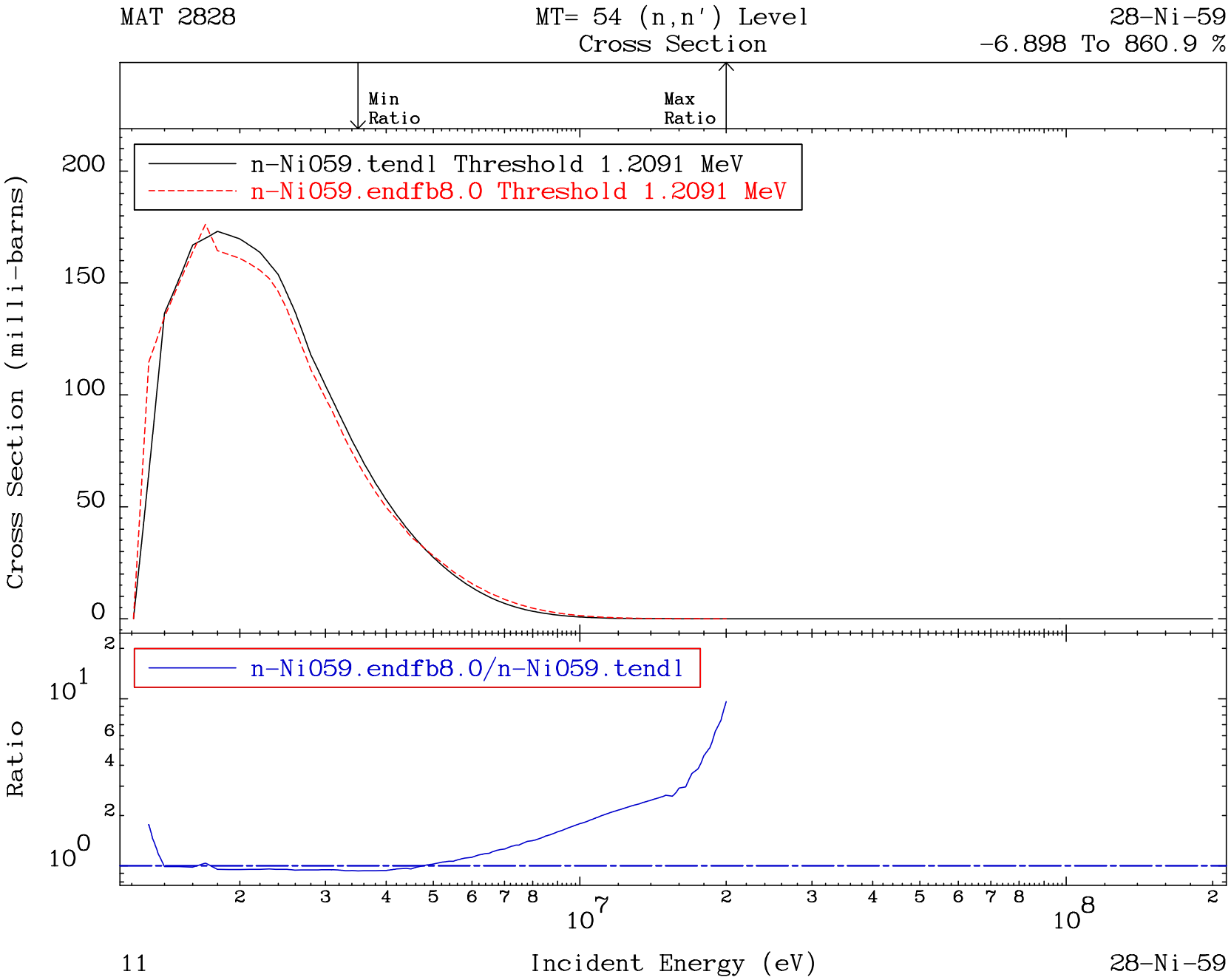

MAT 2828
(n,n') p
Cross Section
28-Ni-59
-13.20 To 165.0 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 8.7457 MeV
n-Ni059.endfb8.0 Threshold 8.7457 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
28-Ni-59

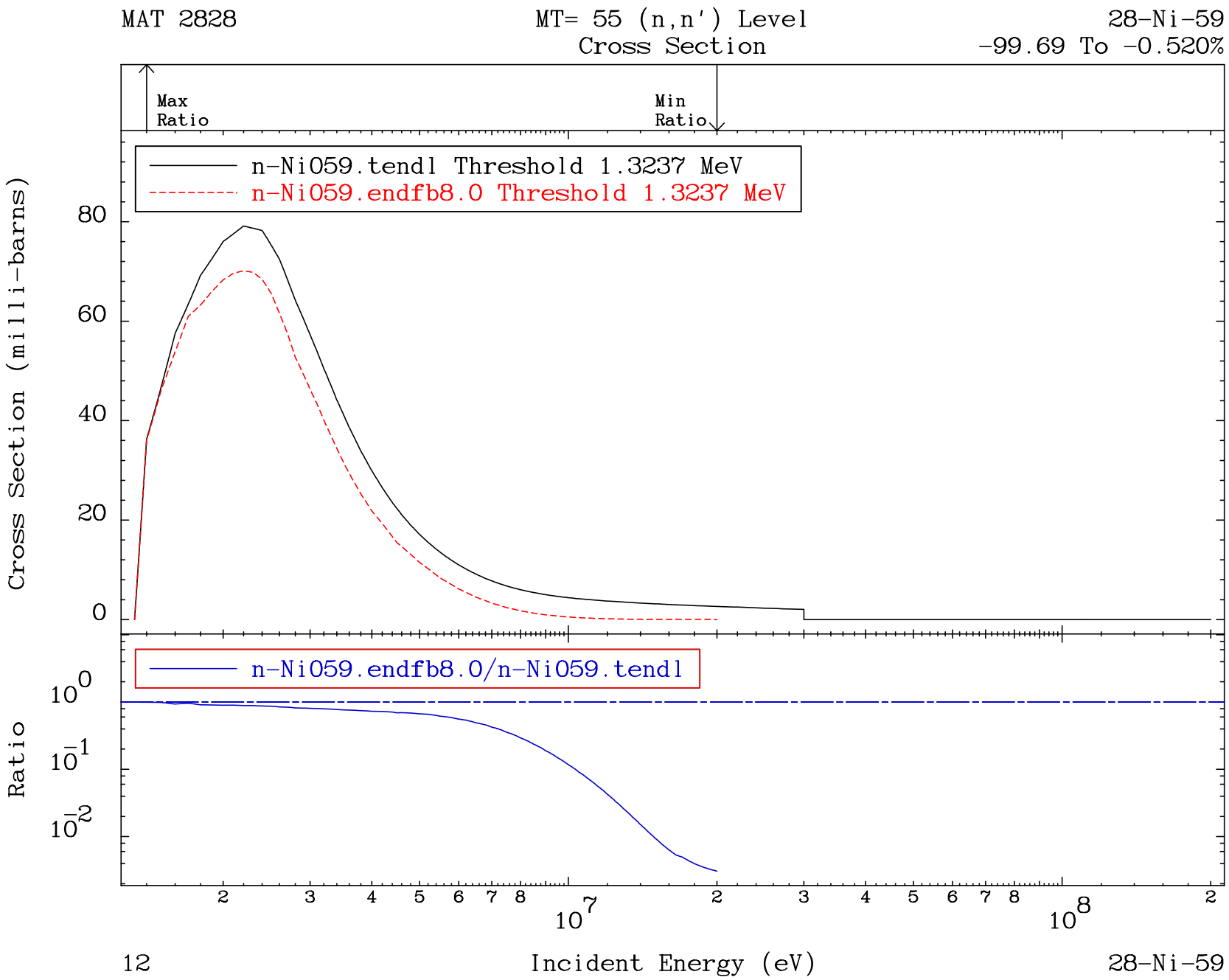

MAT 2828
(n,n') d
Cross Section
28-Ni-59
-99.28 To 99.94 %
Max
Ratio
n-Ni059.tendl Threshold 15.203 MeV
n-Ni059.endfb8.0 Threshold 15.203 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
28-Ni-59

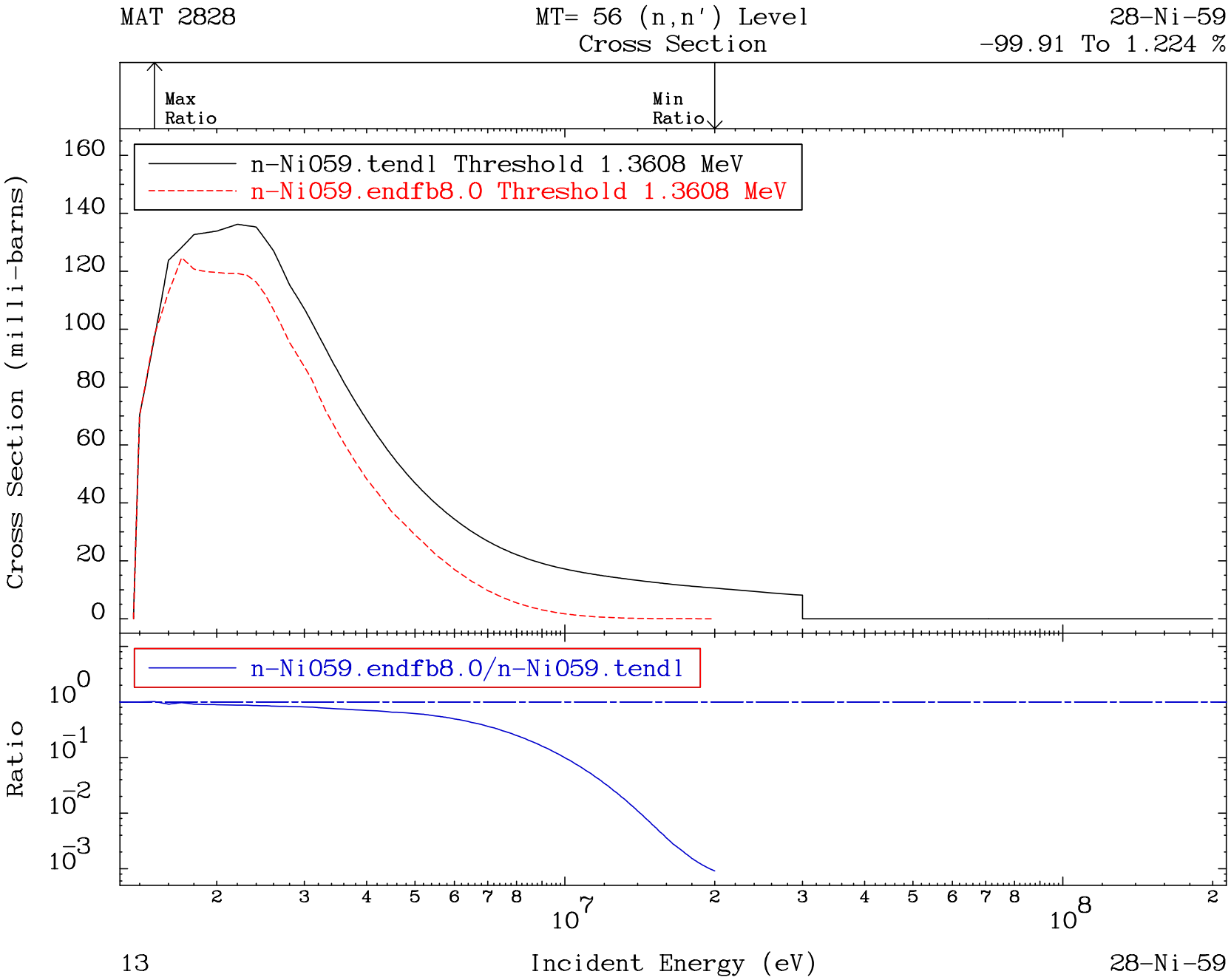

MAT 2828
MT= 51 (n,n') Level
Cross Section
28-Ni-59
-8.096 To 837.5 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 345.23 keV
n-Ni059.endfb8.0 Threshold 345.23 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
2
10^1
6
4
2
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
28-Ni-59

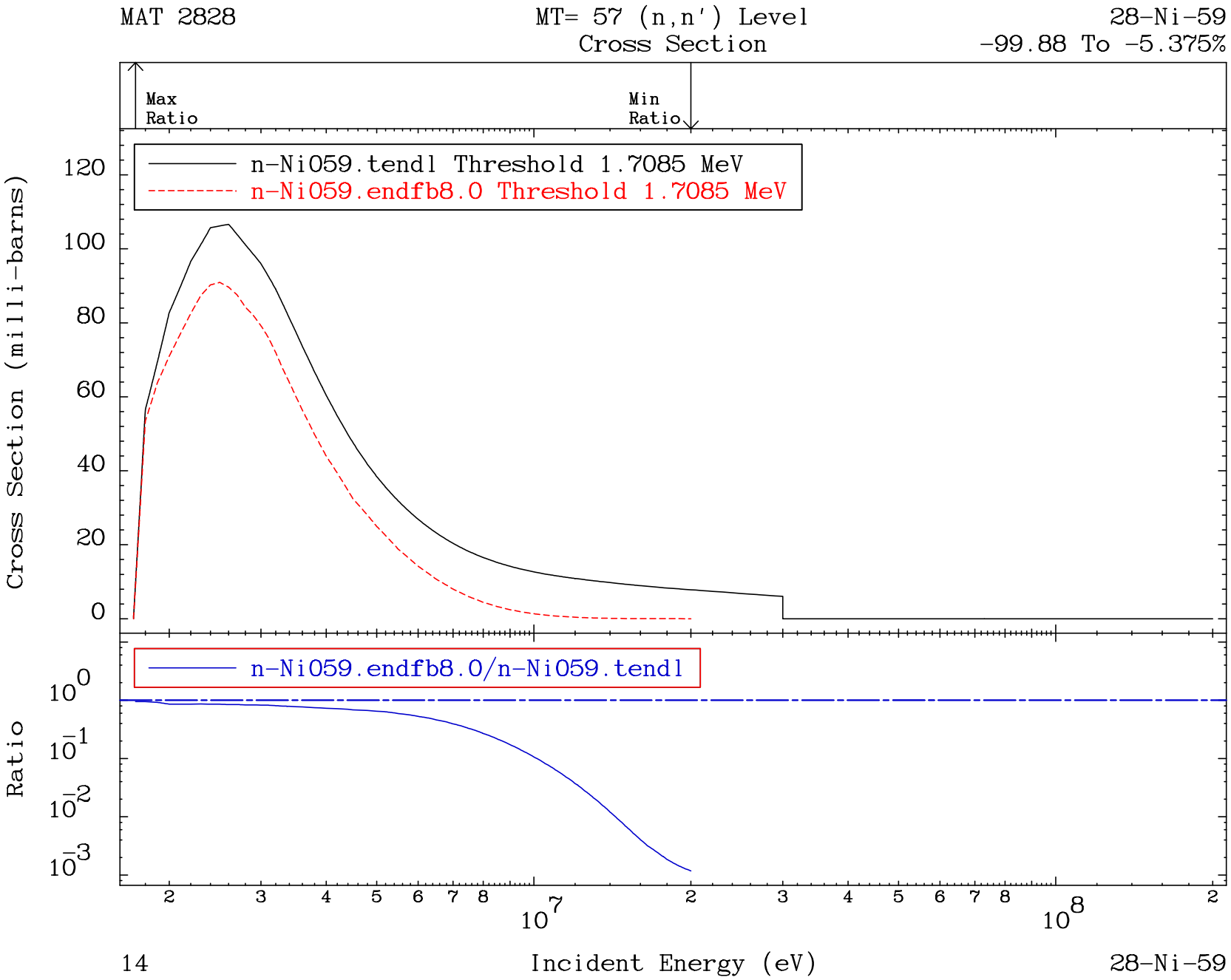

MAT 2828
MT= 52 (n,n') Level
Cross Section
28-Ni-59
-12.98 To 2088. %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 472.93 keV
n-Ni059.endfb8.0 Threshold 472.93 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
6
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
9
Incident Energy (eV)
28-Ni-59

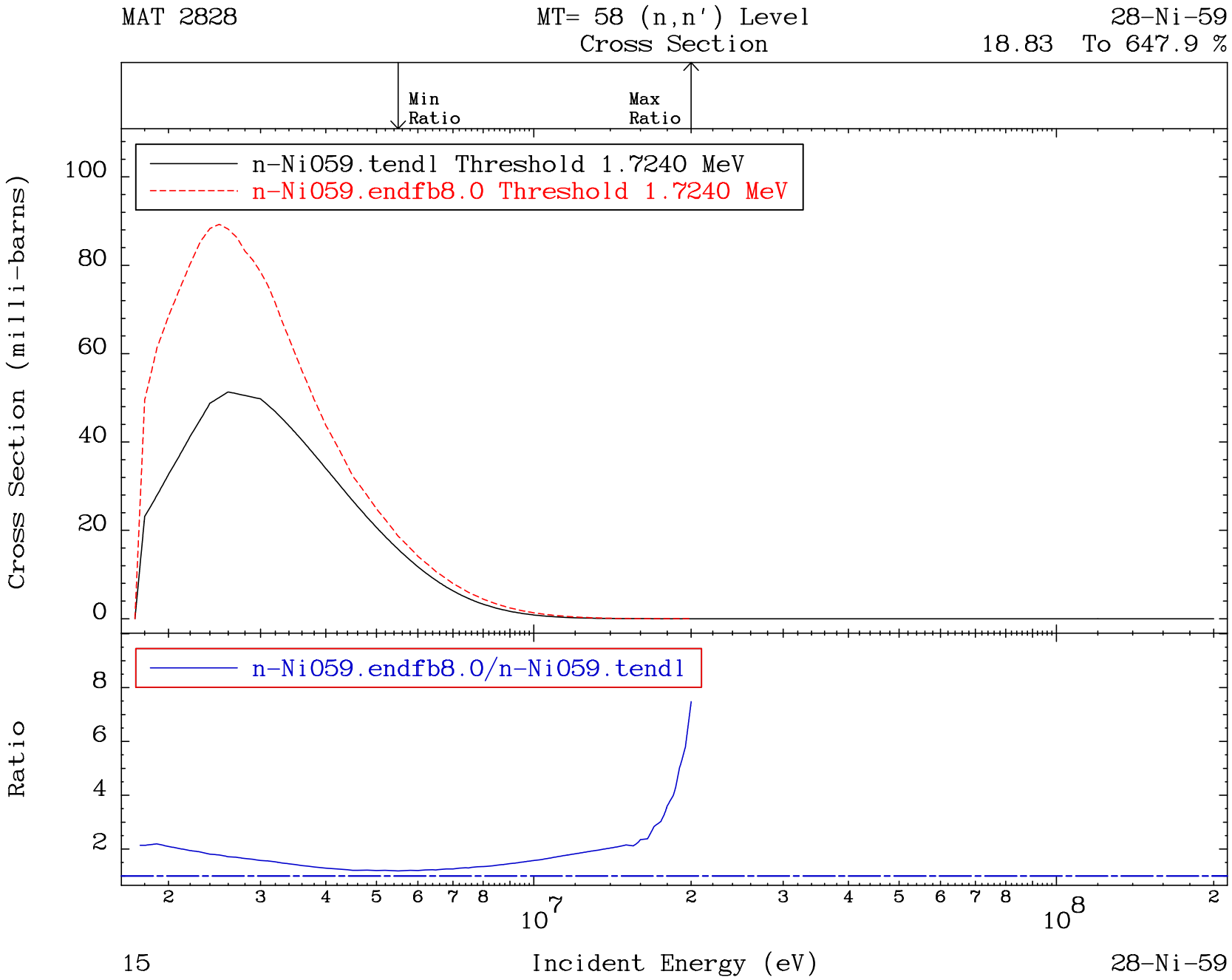

MAT 2828
MT= 53 (n,n') Level
Cross Section
28-Ni-59
-10.26 To 1141. %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 892.97 keV
n-Ni059.endfb8.0 Threshold 892.97 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
6
4
2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
28-Ni-59

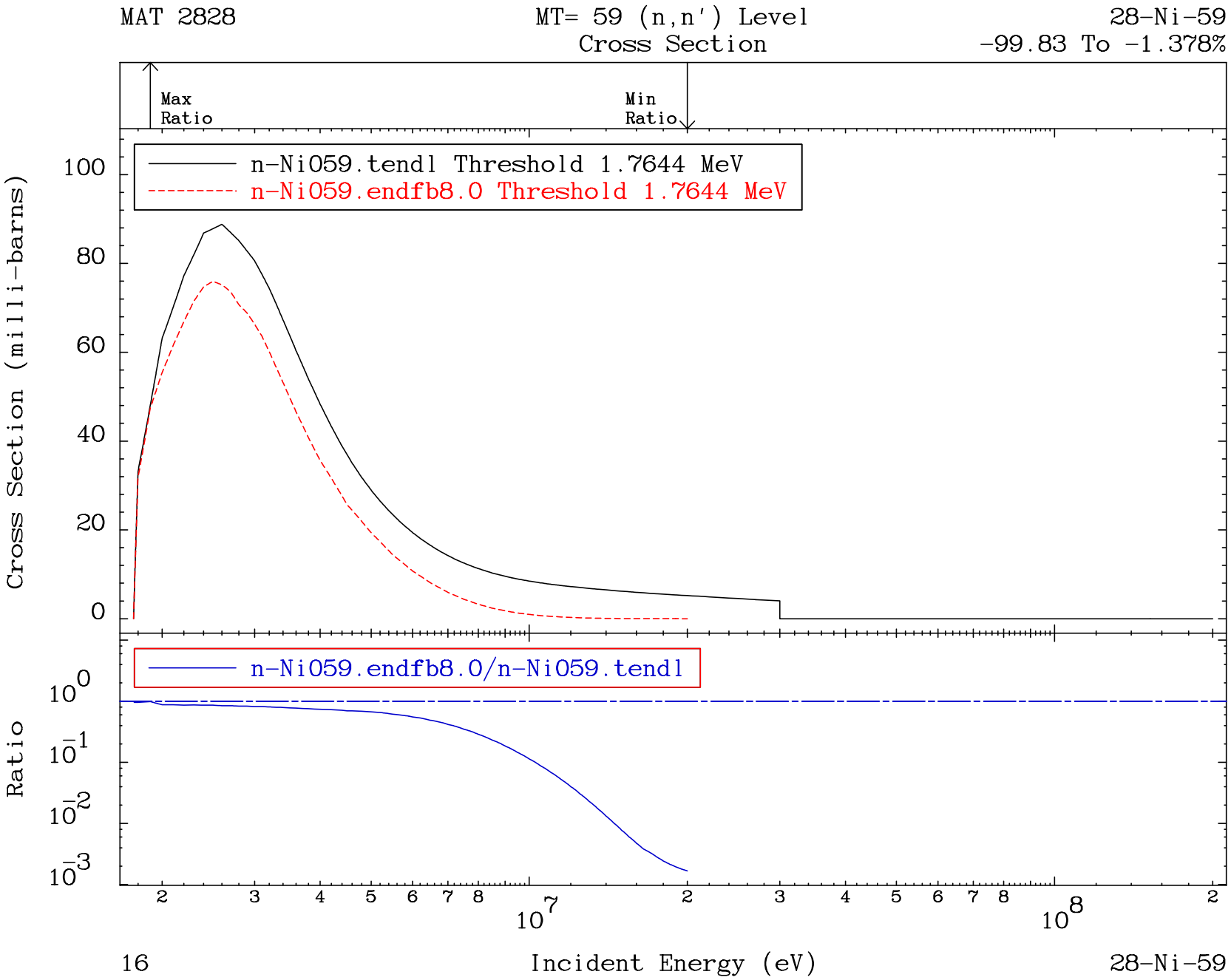

MAT 2828
MT= 54 (n,n') Level
Cross Section
28-Ni-59
-6.898 To 860.9 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 1.2091 MeV
n-Ni059.endfb8.0 Threshold 1.2091 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
2
10^1
6
4
2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
28-Ni-59

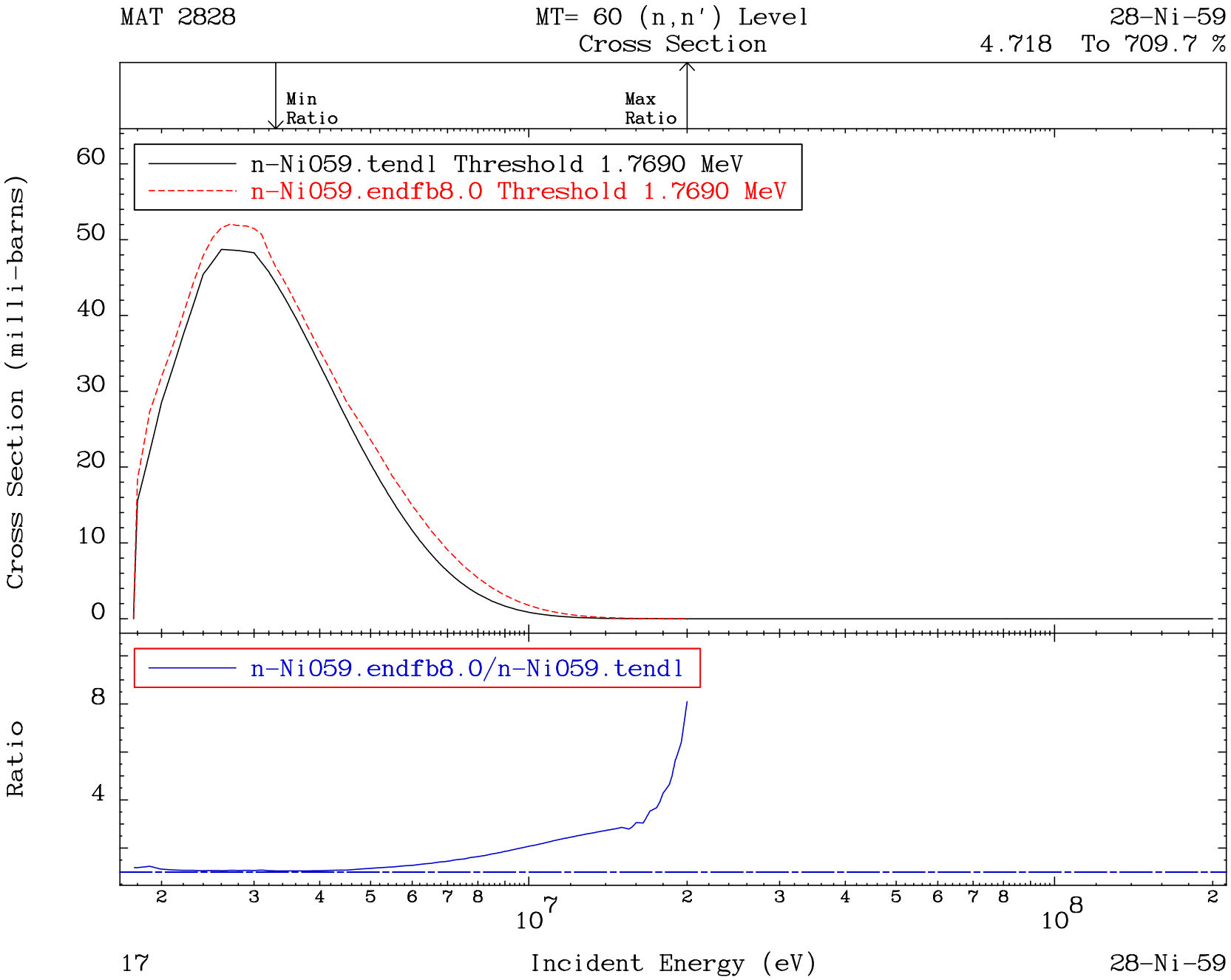

MAT 2828
MT= 55 (n,n') Level
Cross Section
28-Ni-59
-99.69 To -0.520%
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 1.3237 MeV
n-Ni059.endfb8.0 Threshold 1.3237 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
28-Ni-59

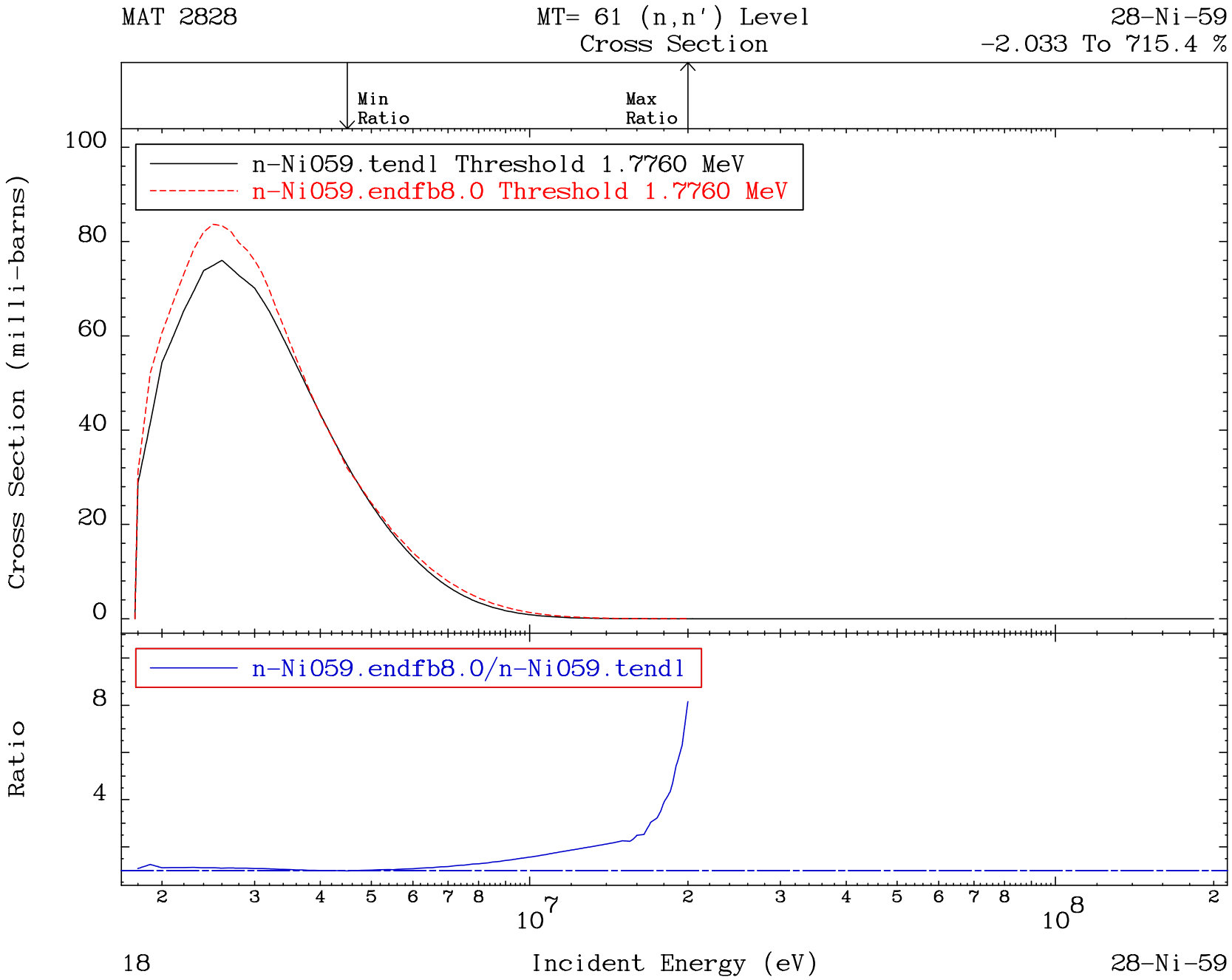

MAT 2828
MT= 56 (n,n') Level
Cross Section
28-Ni-59
-99.91 To 1.224 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 1.3608 MeV
n-Ni059.endfb8.0 Threshold 1.3608 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
10^-2
10^-3
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
28-Ni-59

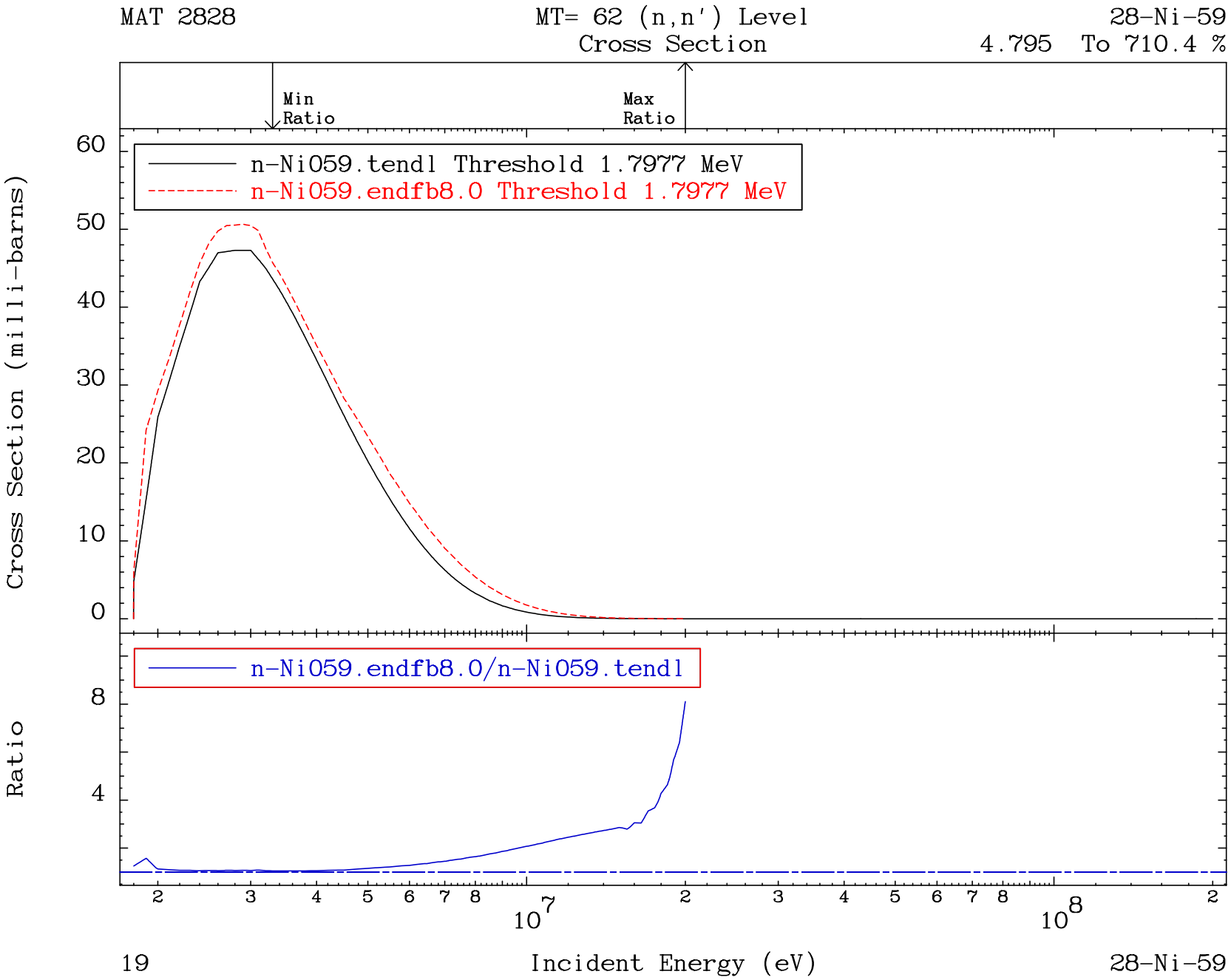

MAT 2828
MT= 57 (n,n') Level
Cross Section
28-Ni-59
-99.88 To -5.375%
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 1.7085 MeV
n-Ni059.endfb8.0 Threshold 1.7085 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
10^-2
10^-3
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
28-Ni-59

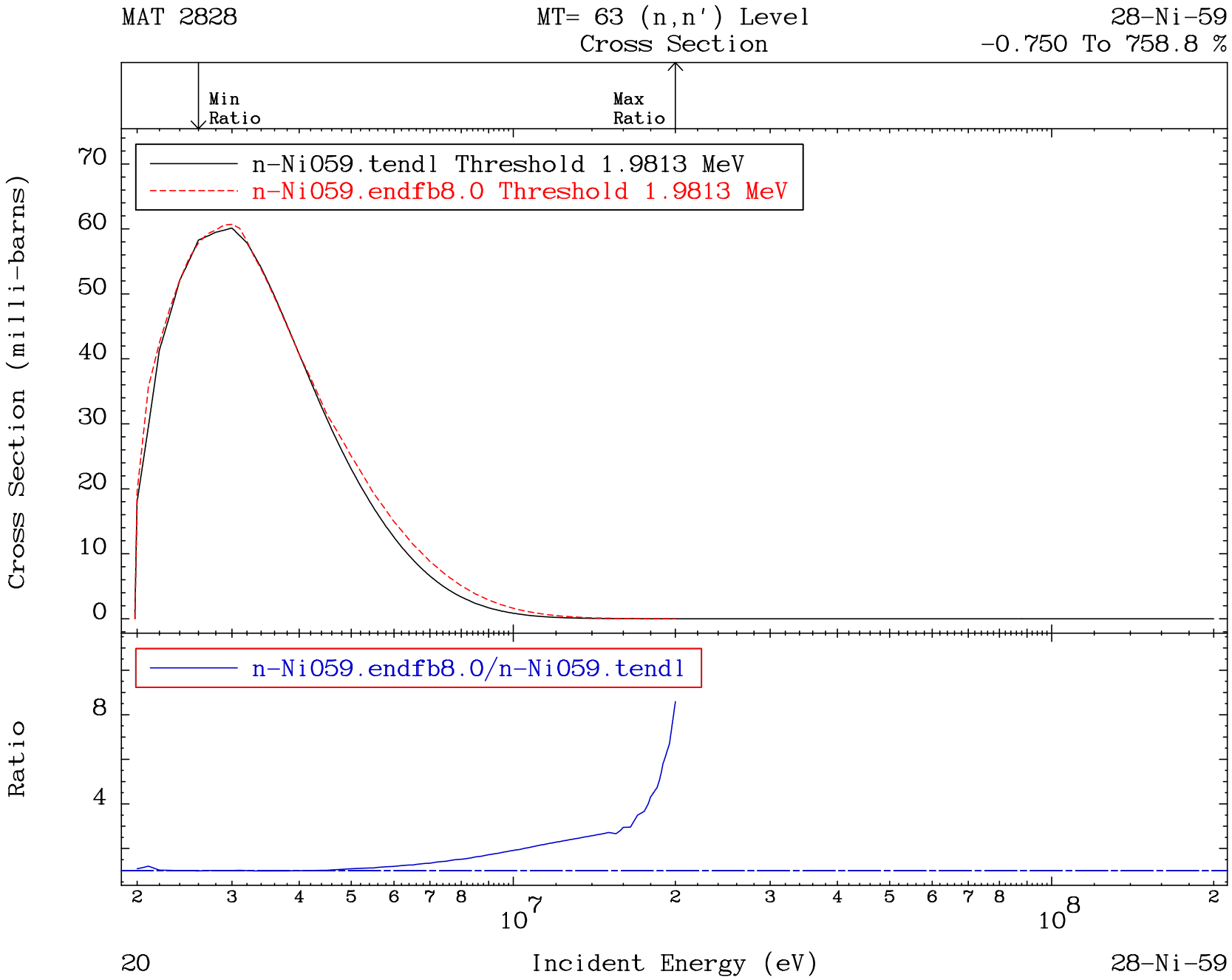

MAT 2828
MT= 58 (n,n') Level
Cross Section
28-Ni-59
18.83 To 647.9 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 1.7240 MeV
n-Ni059.endfb8.0 Threshold 1.7240 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
6
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
28-Ni-59

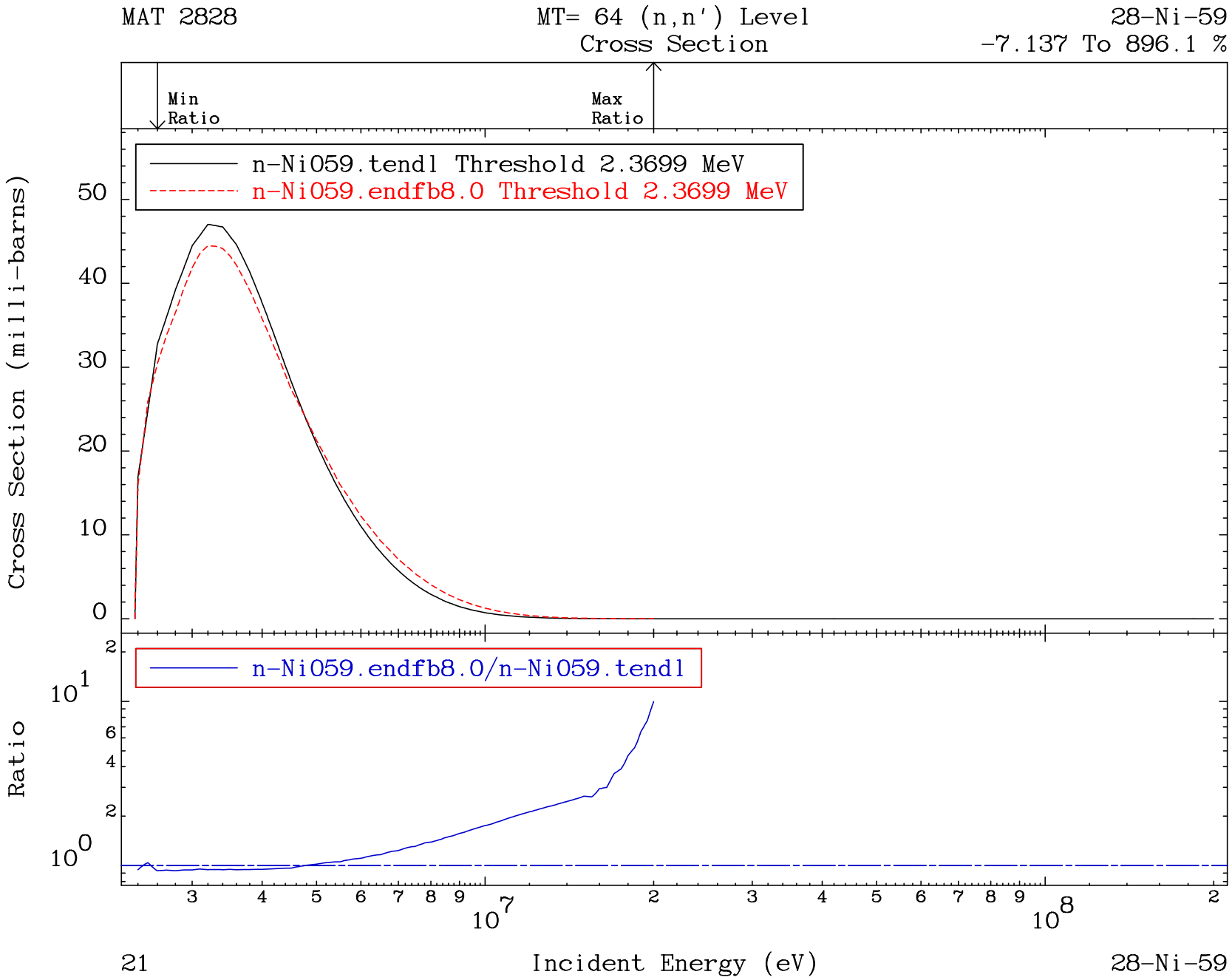

MAT 2828
MT= 59 (n,n') Level
Cross Section
28-Ni-59
-99.83 To -1.378%
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 1.7644 MeV
n-Ni059.endfb8.0 Threshold 1.7644 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
10^-2
10^-3
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
28-Ni-59

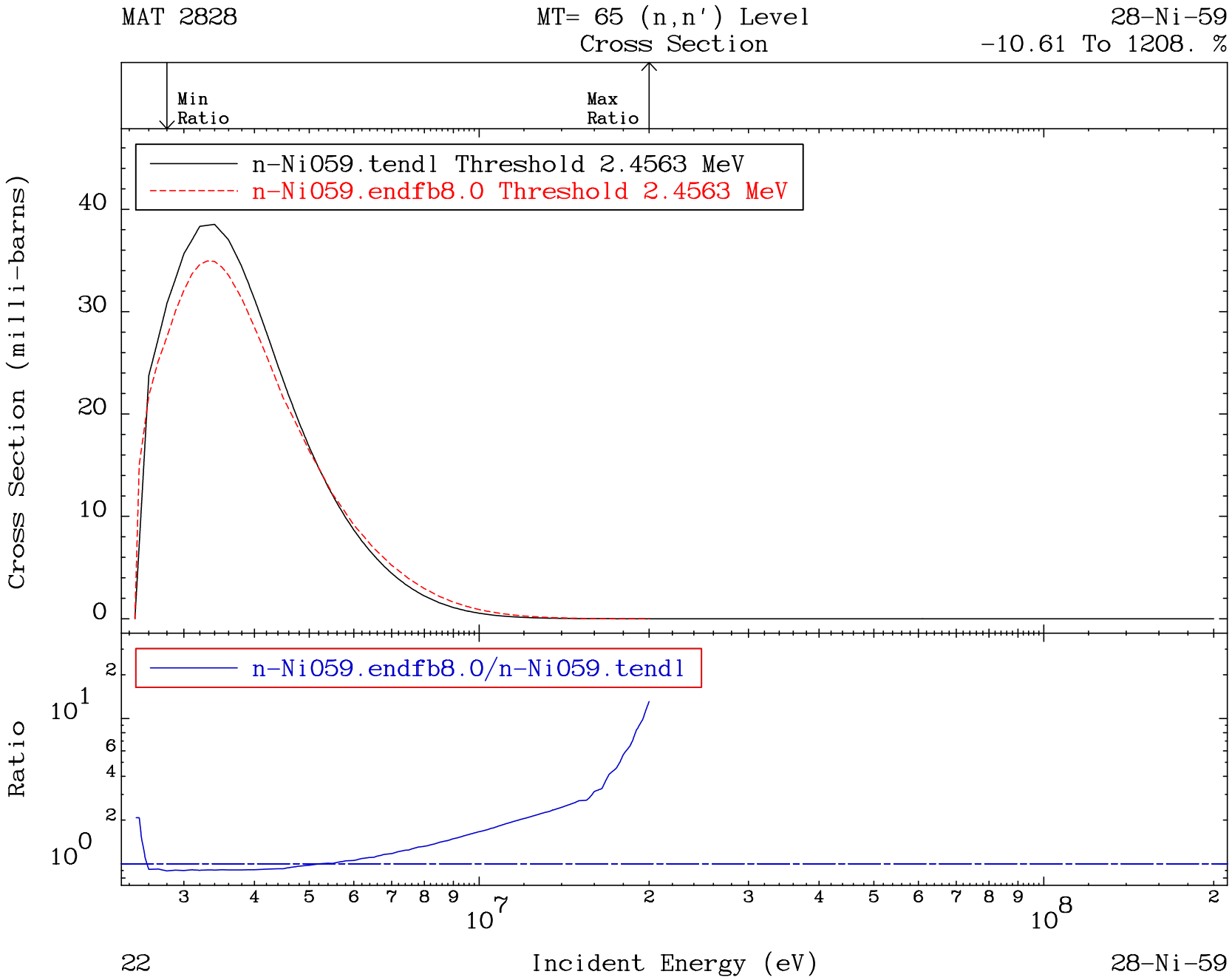

MAT 2828
MT= 60 (n,n') Level
Cross Section
28-Ni-59
4.718 To 709.7 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 1.7690 MeV
n-Ni059.endfb8.0 Threshold 1.7690 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
28-Ni-59

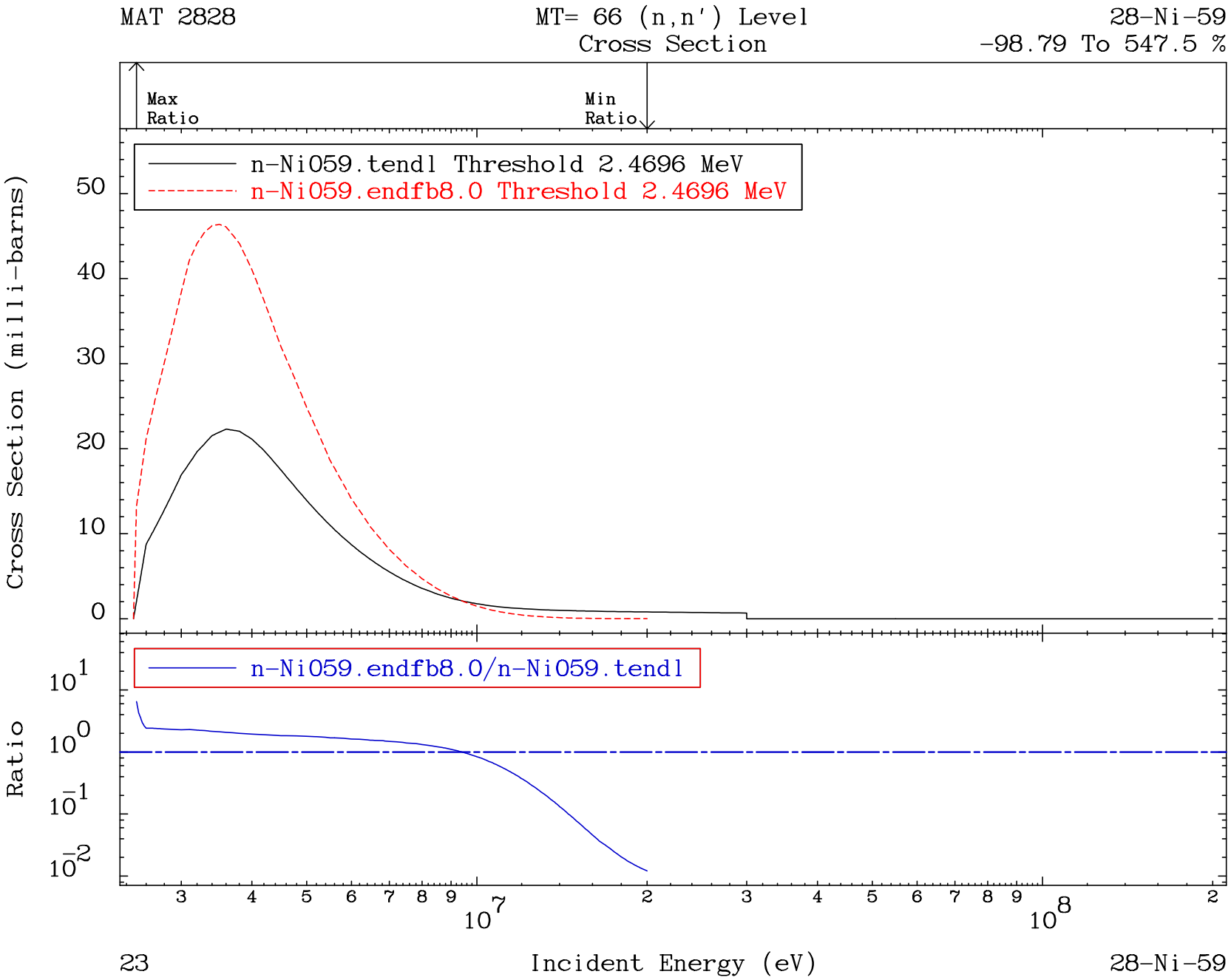

MAT 2828
MT= 61 (n,n') Level
Cross Section
28-Ni-59
-2.033 To 715.4 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 1.7760 MeV
n-Ni059.endfb8.0 Threshold 1.7760 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
28-Ni-59

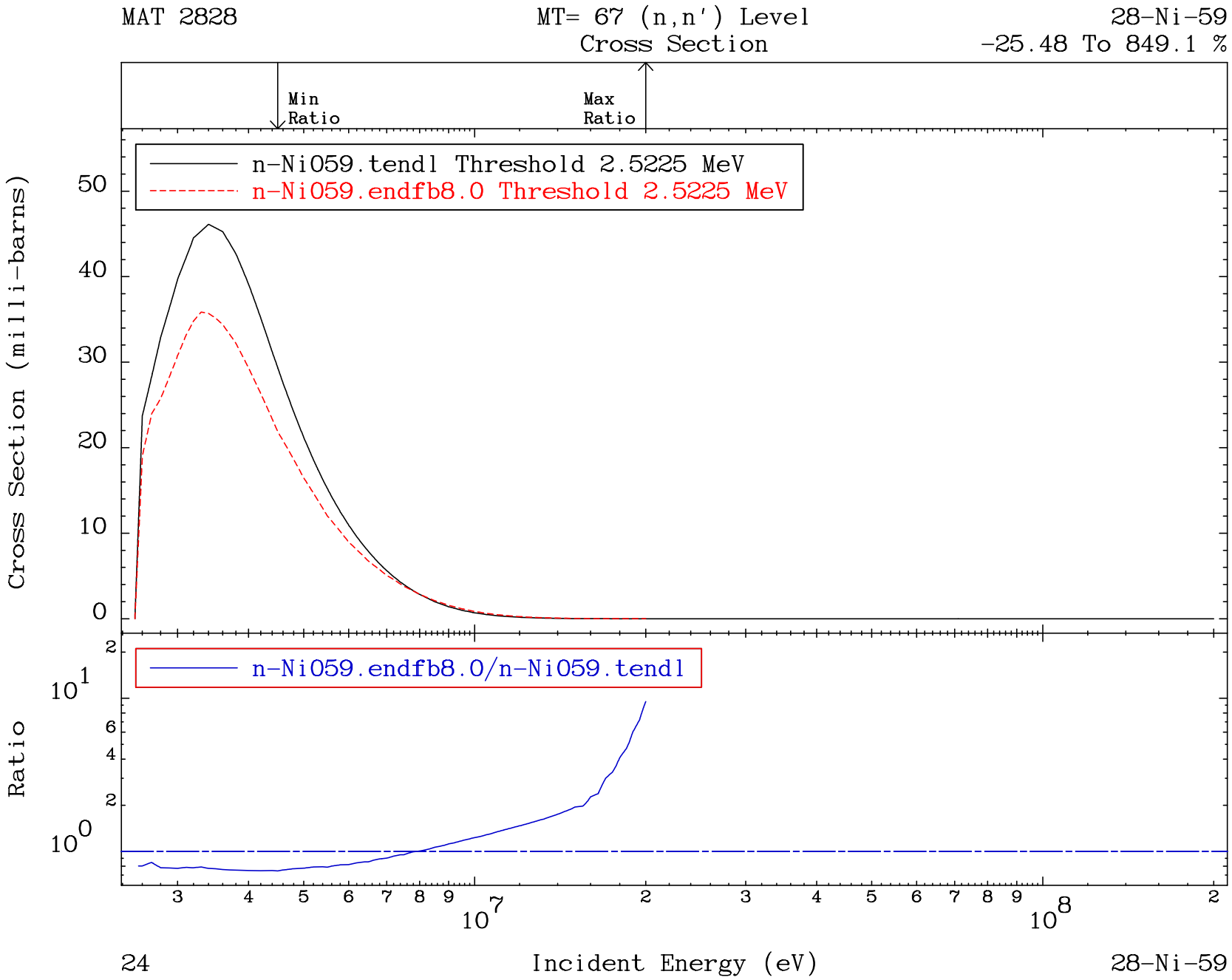

MAT 2828
MT= 62 (n,n') Level
Cross Section
28-Ni-59
4.795 To 710.4 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 1.7977 MeV
n-Ni059.endfb8.0 Threshold 1.7977 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
28-Ni-59

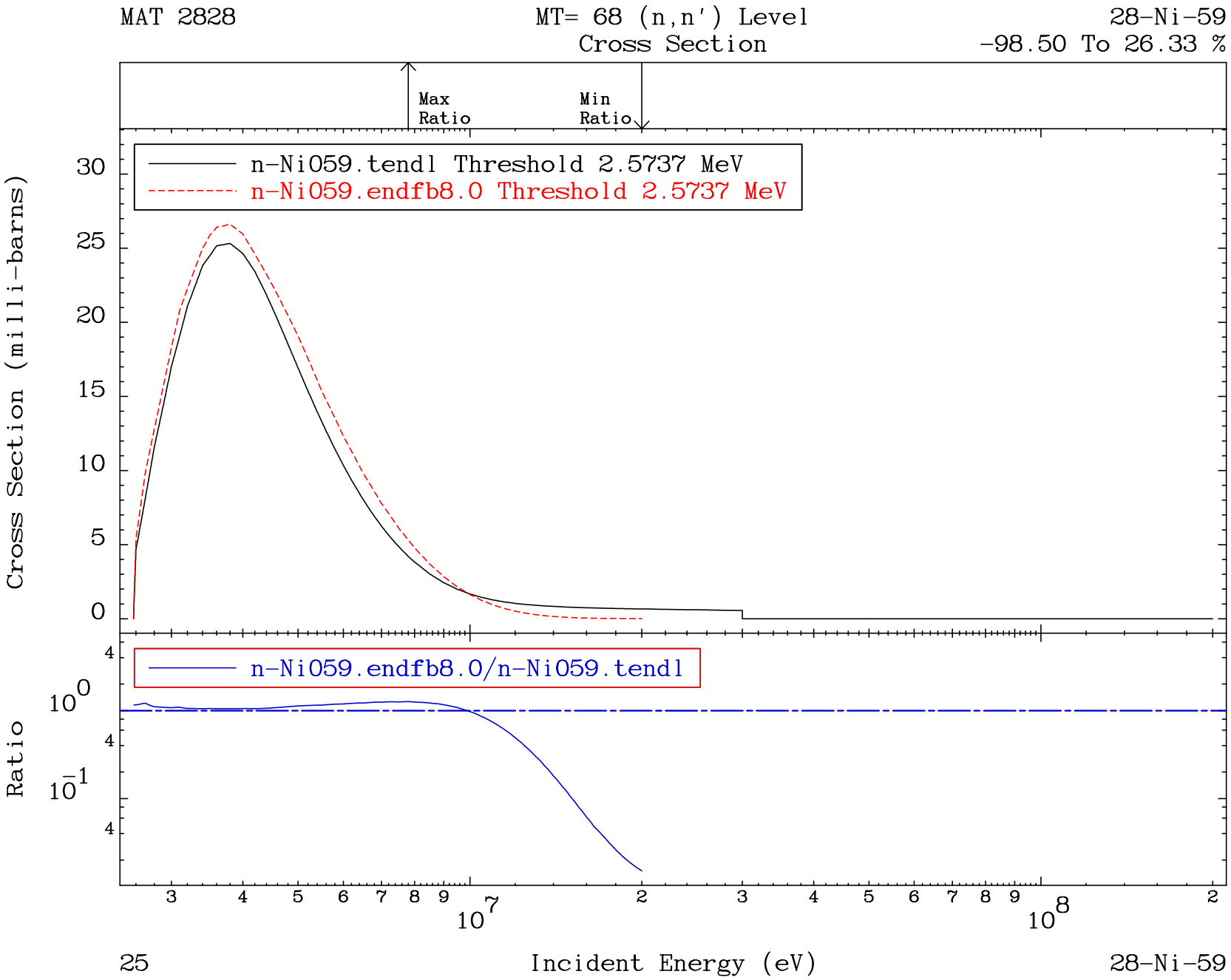

MAT 2828
MT= 63 (n,n') Level
Cross Section
28-Ni-59
-0.750 To 758.8 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 1.9813 MeV
n-Ni059.endfb8.0 Threshold 1.9813 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
28-Ni-59

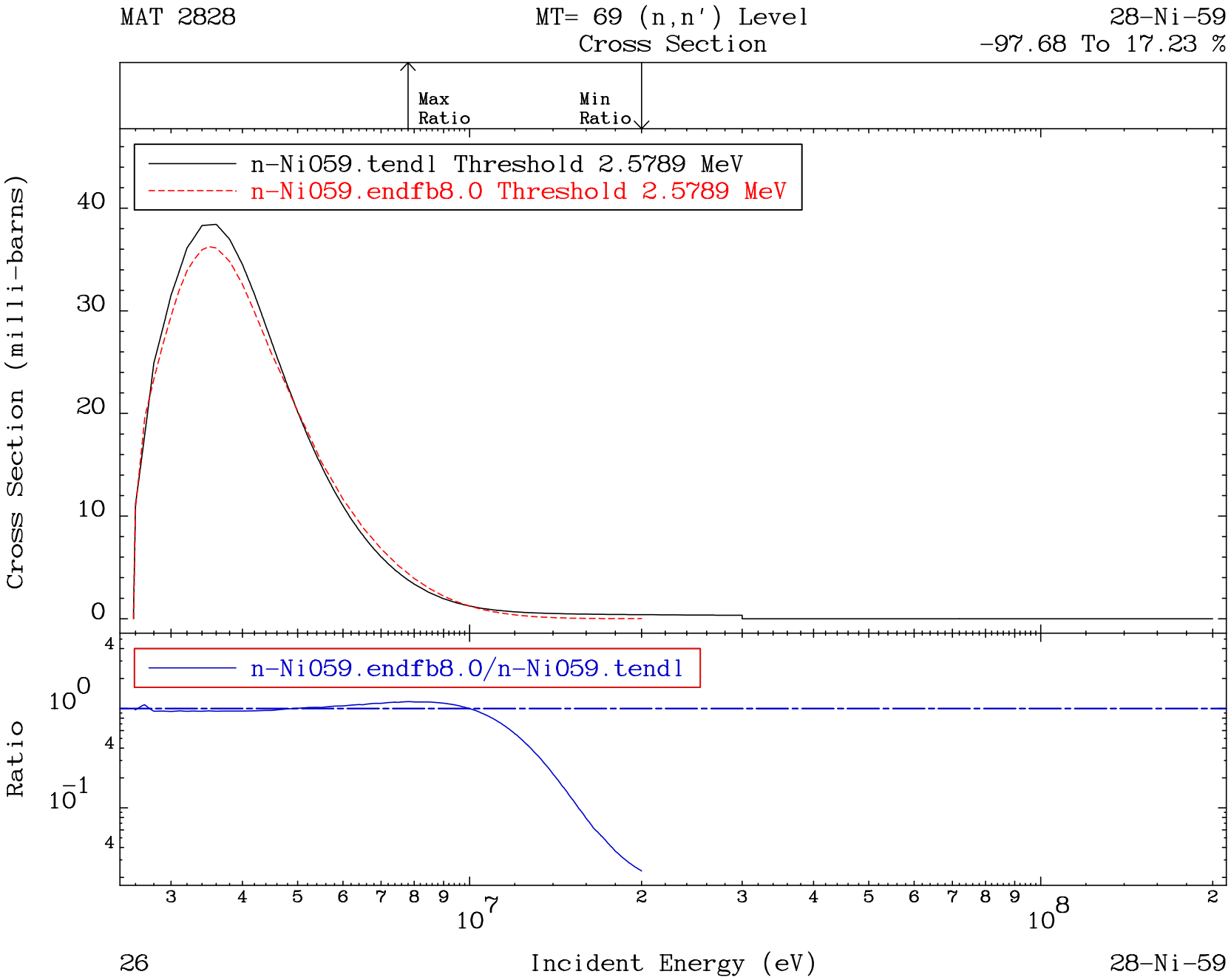

MAT 2828
MT= 64 (n,n') Level
Cross Section
28-Ni-59
-7.137 To 896.1 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 2.3699 MeV
n-Ni059.endfb8.0 Threshold 2.3699 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
10^0
2
6
4
2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
28-Ni-59

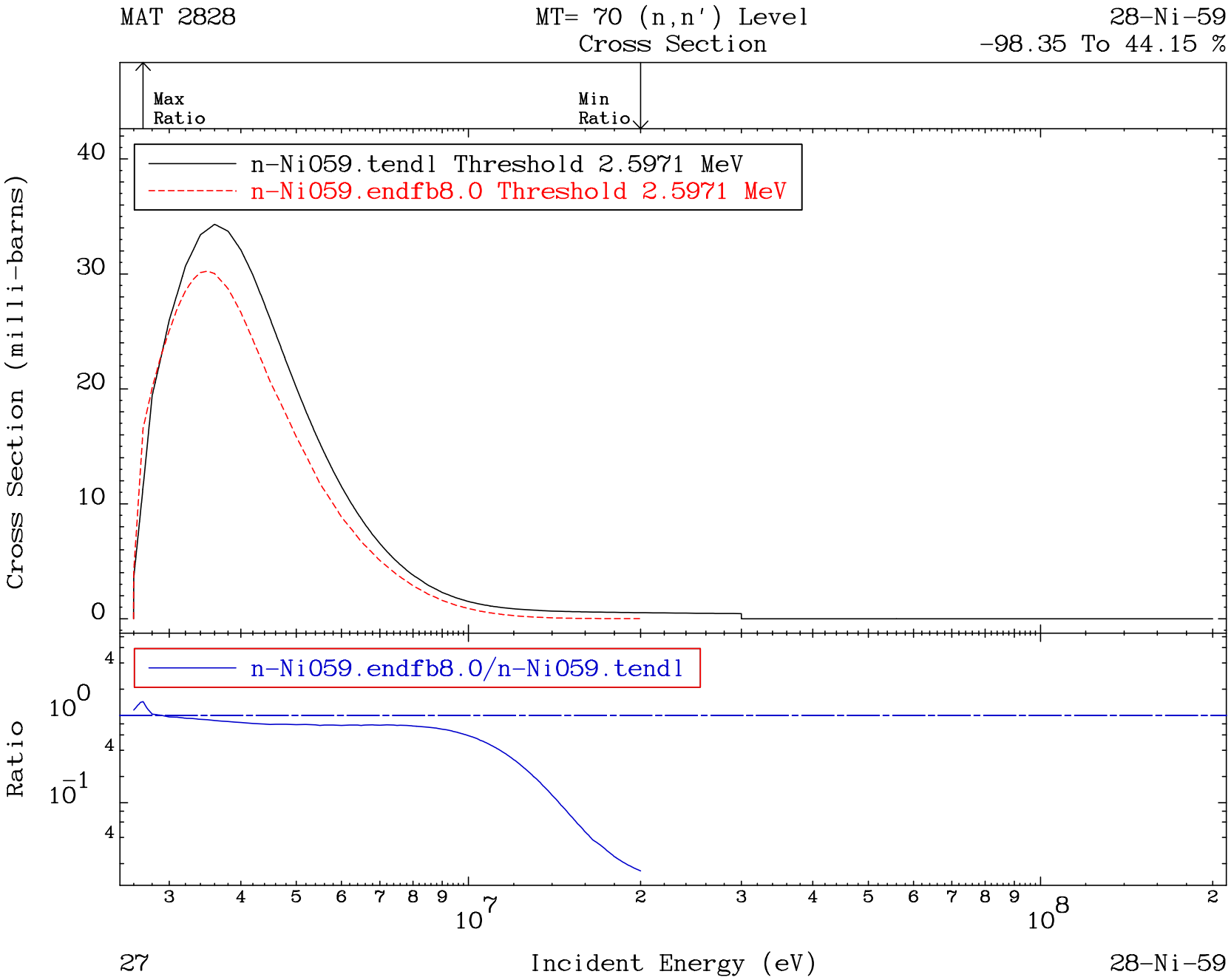

MAT 2828
MT= 65 (n,n') Level
Cross Section
28-Ni-59
-10.61 To 1208. %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 2.4563 MeV
n-Ni059.endfb8.0 Threshold 2.4563 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
22
28-Ni-59

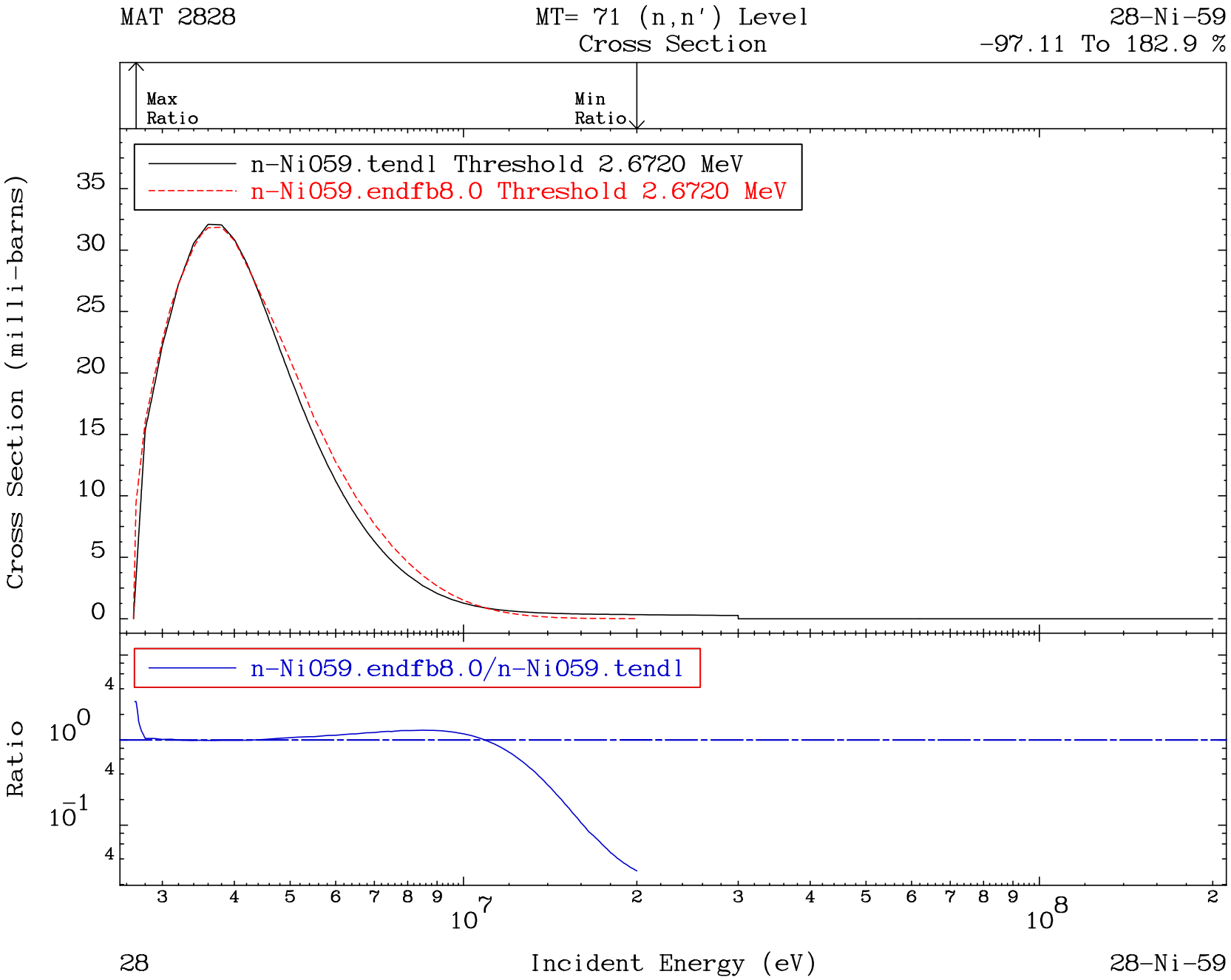

MAT 2828
MT= 66 (n,n') Level
Cross Section
28-Ni-59
-98.79 To 547.5 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.4696 MeV
n-Ni059.endfb8.0 Threshold 2.4696 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
10^0
10^-1
10^-2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
28-Ni-59

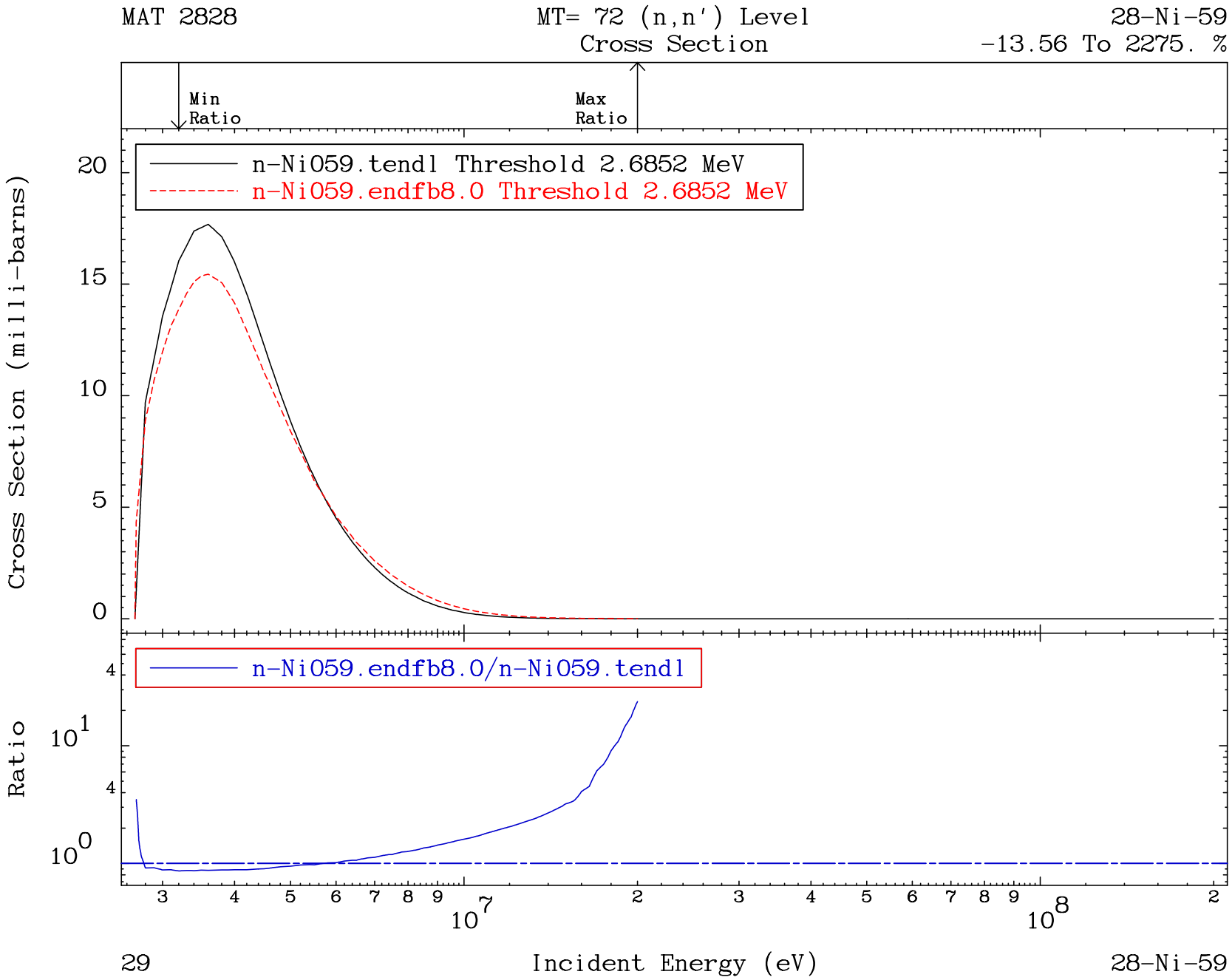

MAT 2828
MT= 67 (n,n') Level
Cross Section
28-Ni-59
-25.48 To 849.1 %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 2.5225 MeV
n-Ni059.endfb8.0 Threshold 2.5225 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
10^0
2
6
4
2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
24
Incident Energy (eV)
28-Ni-59

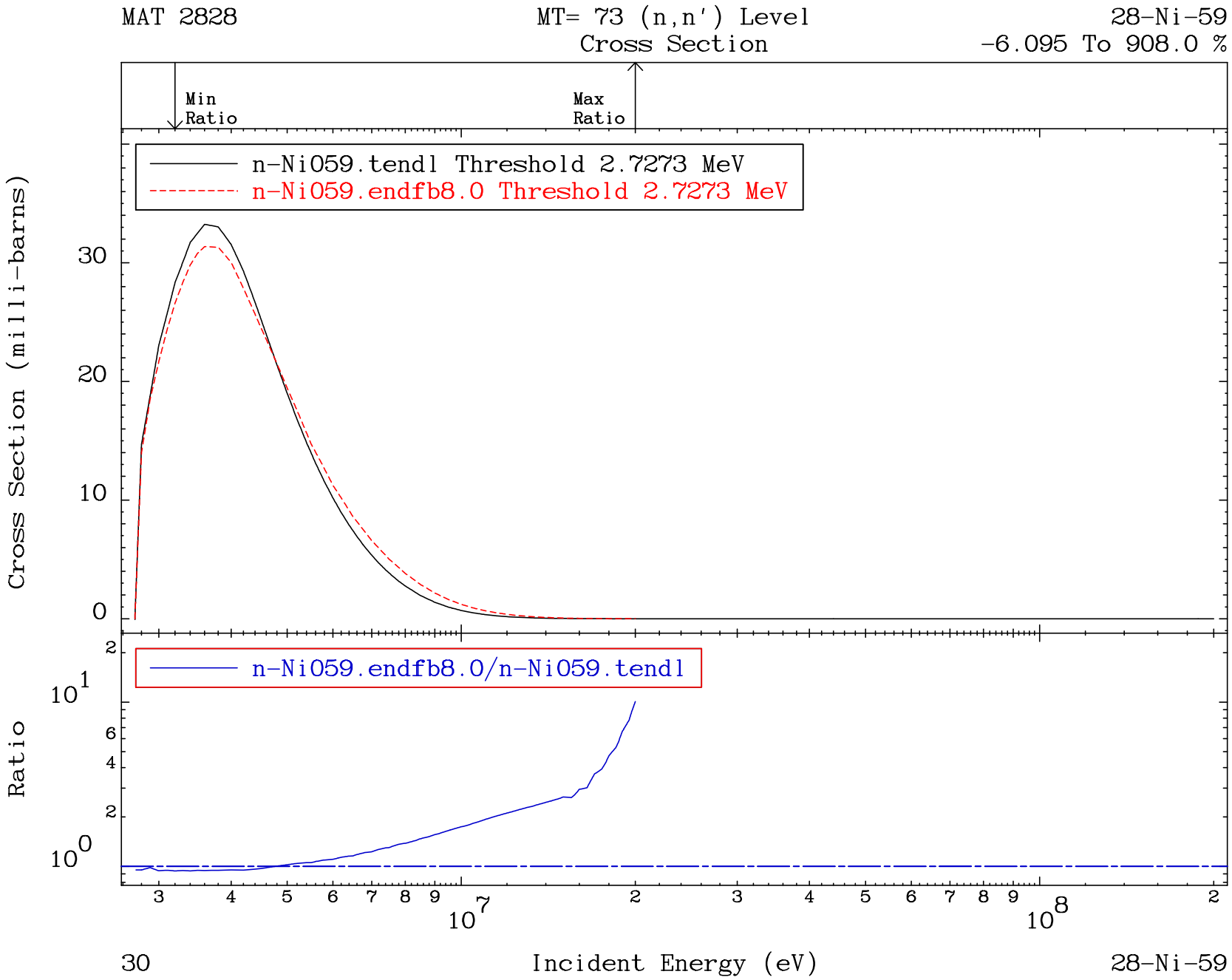

MAT 2828
MT= 68 (n,n') Level
Cross Section
28-Ni-59
-98.50 To 26.33 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.5737 MeV
n-Ni059.endfb8.0 Threshold 2.5737 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
25
28-Ni-59

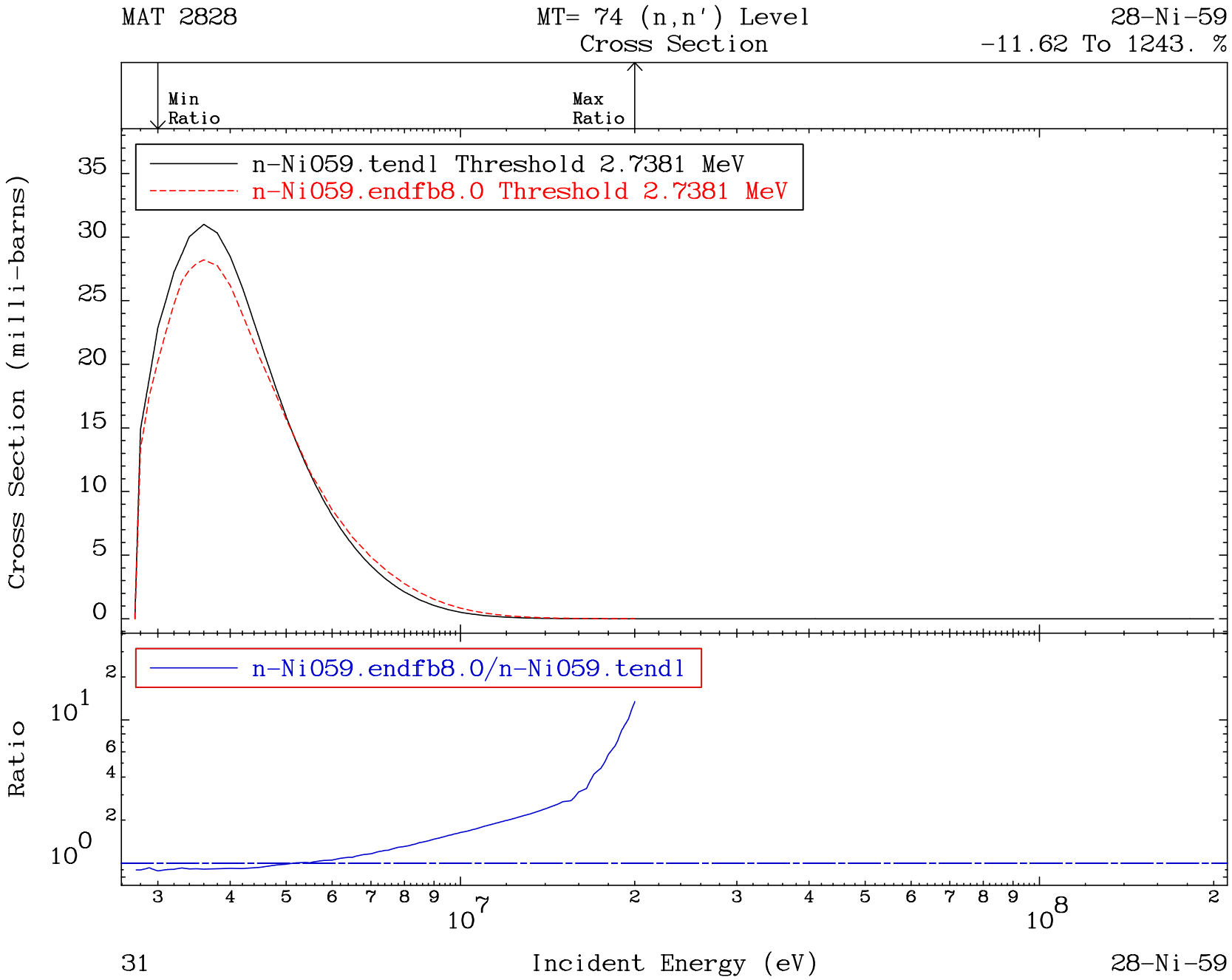

MAT 2828
MT= 69 (n,n') Level
Cross Section
28-Ni-59
-97.68 To 17.23 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.5789 MeV
n-Ni059.endfb8.0 Threshold 2.5789 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
26
28-Ni-59

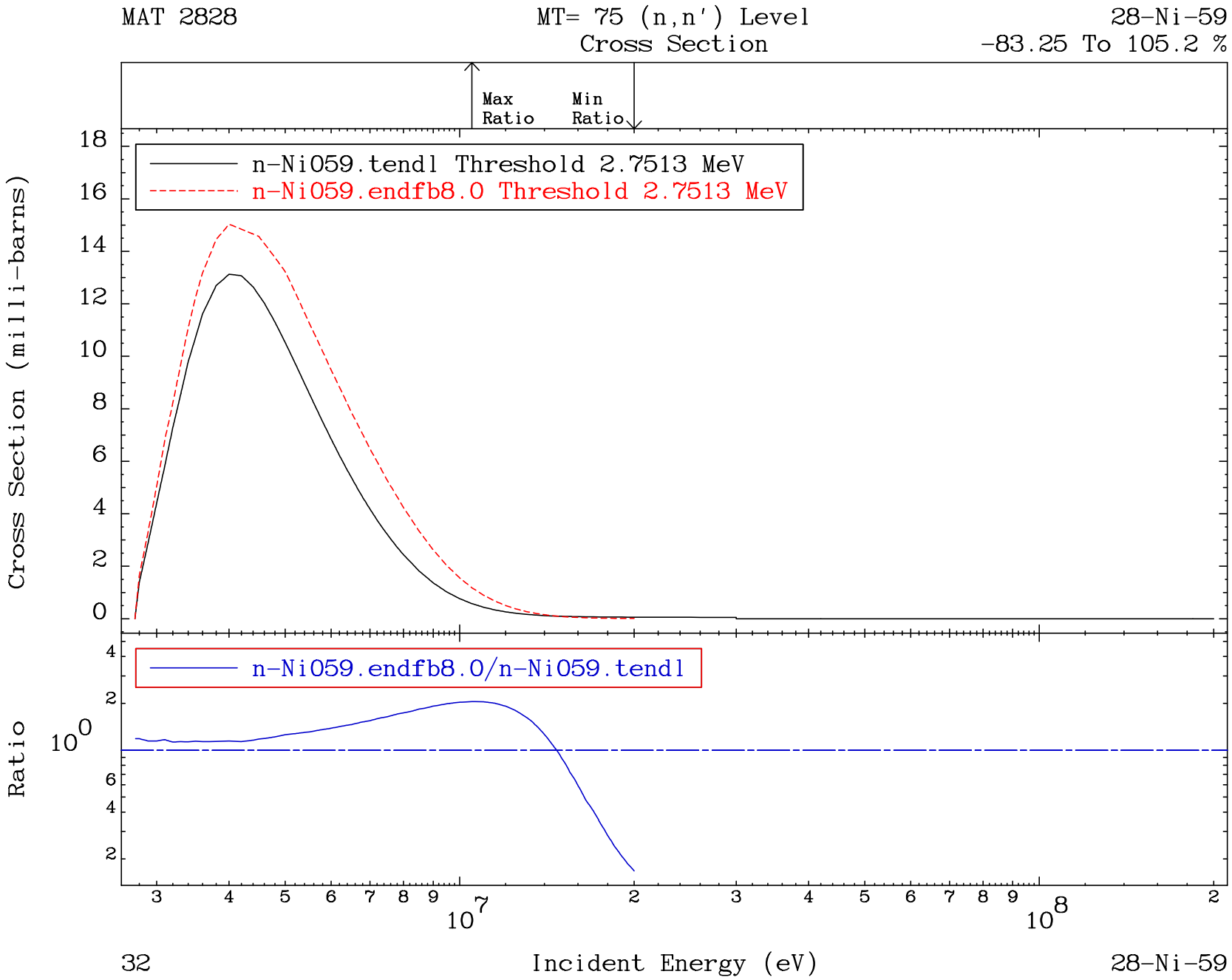

MAT 2828
MT= 70 (n,n') Level
Cross Section
28-Ni-59
-98.35 To 44.15 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.5971 MeV
n-Ni059.endfb8.0 Threshold 2.5971 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
28-Ni-59

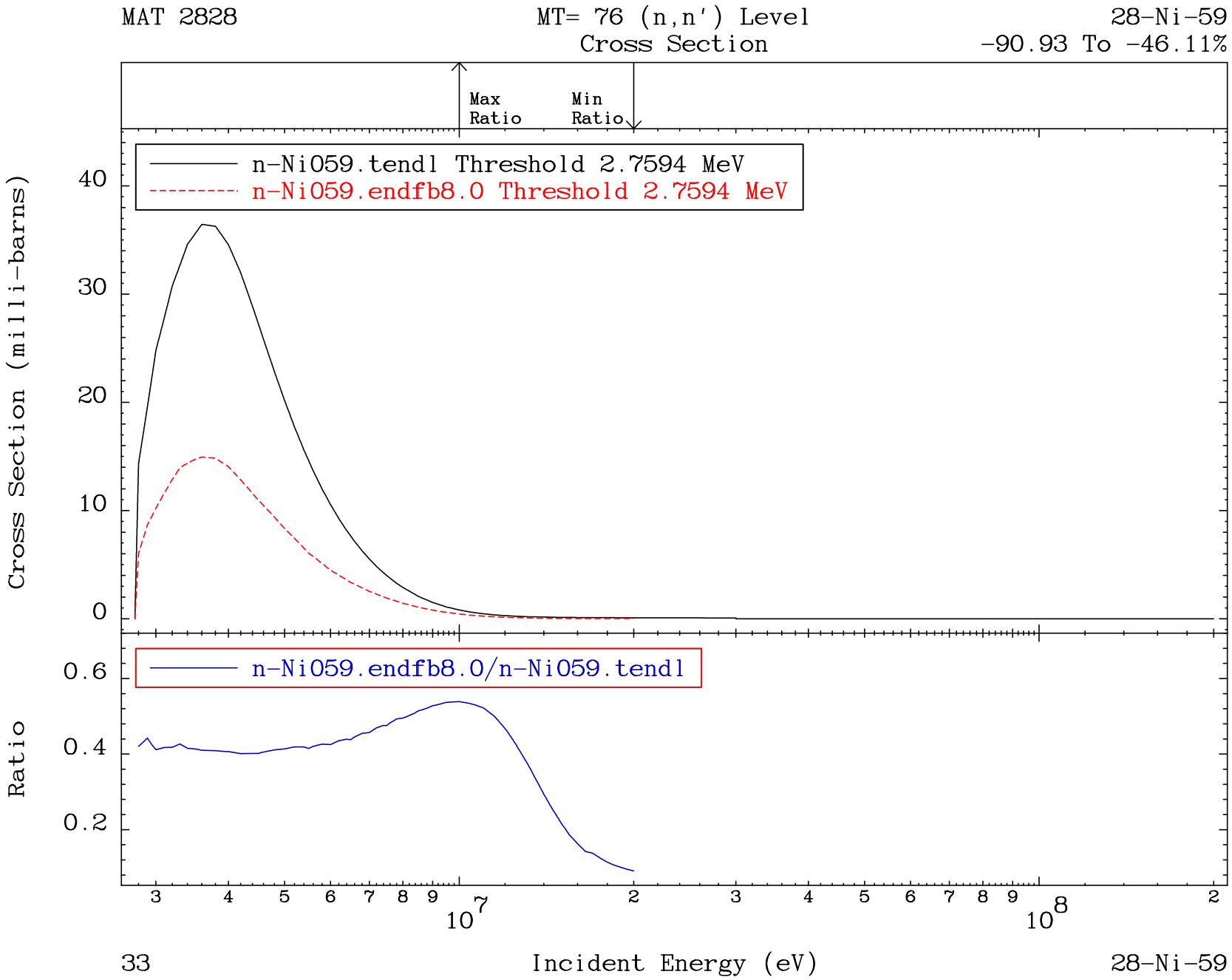

MAT 2828
MT= 71 (n,n') Level
Cross Section
28-Ni-59
-97.11 To 182.9 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.6720 MeV
n-Ni059.endfb8.0 Threshold 2.6720 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
28-Ni-59

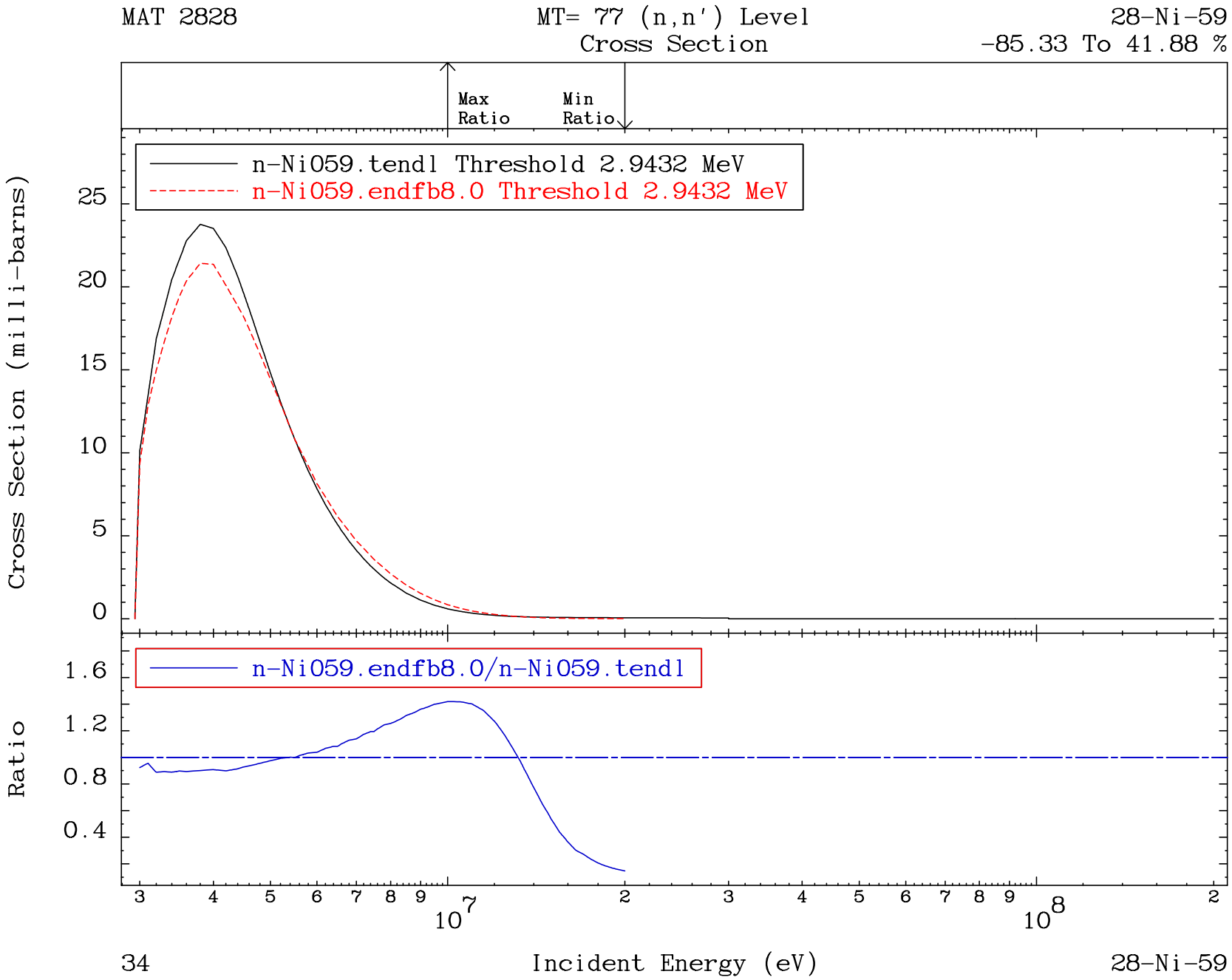

MAT 2828
MT= 72 (n,n') Level
Cross Section
28-Ni-59
-13.56 To 2275. %
Min
Ratio
Max
Ratio
n-Ni059.tendl Threshold 2.6852 MeV
n-Ni059.endfb8.0 Threshold 2.6852 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
4
10^1
4
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
28-Ni-59

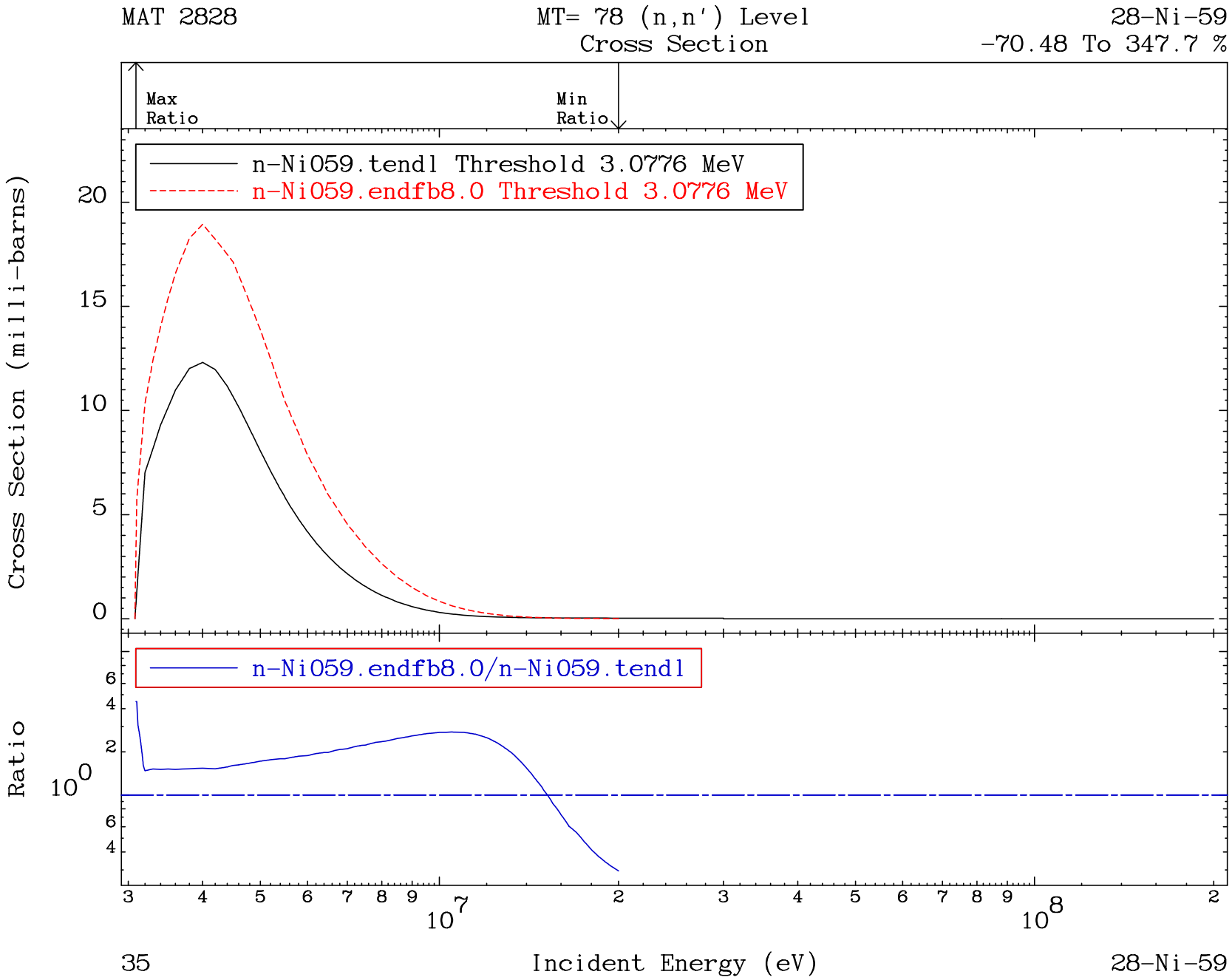

MAT 2828
MT= 73 (n,n') Level
Cross Section
28-Ni-59
-6.095 To 908.0 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 2.7273 MeV
n-Ni059.endfb8.0 Threshold 2.7273 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
30
28-Ni-59

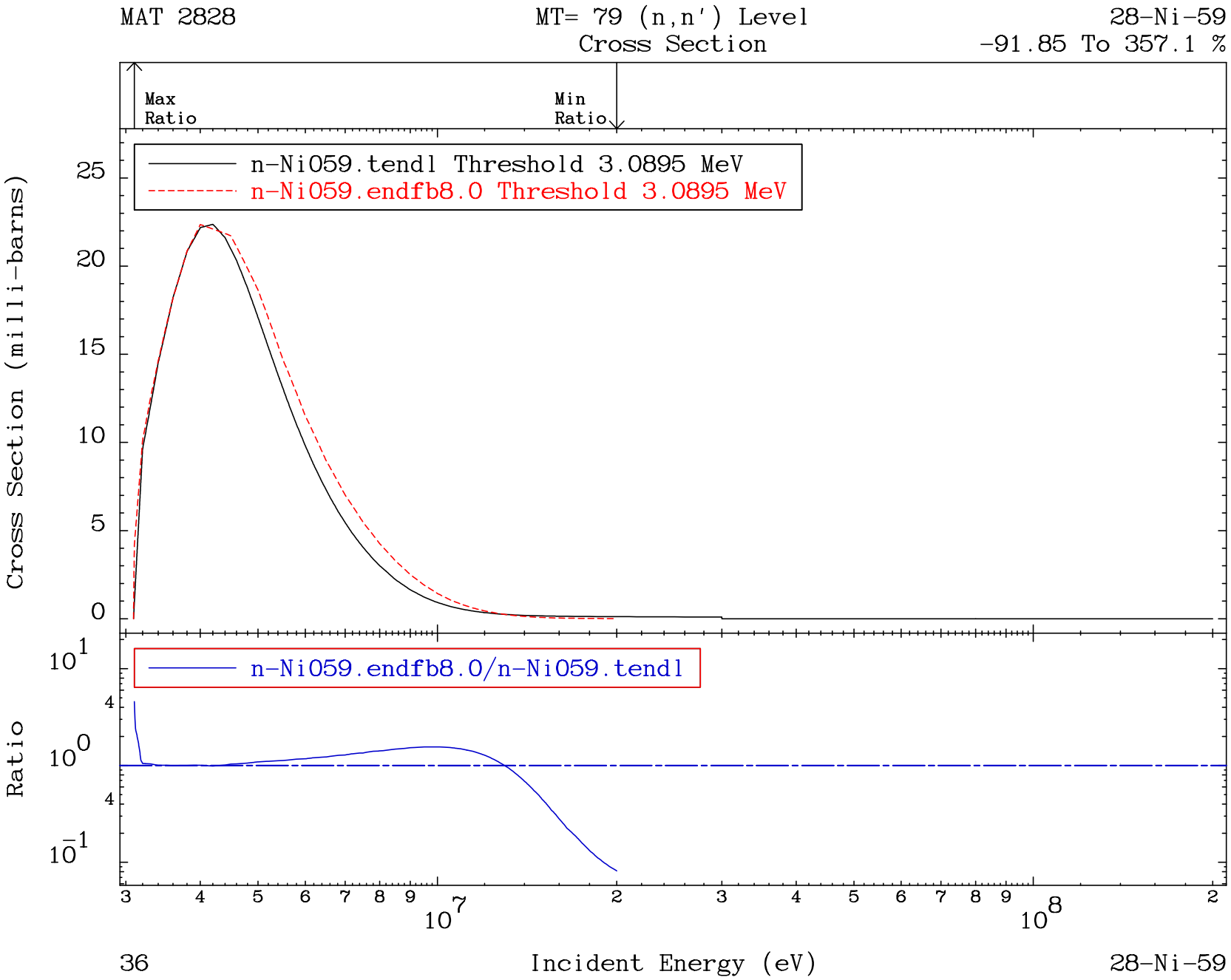

MAT 2828
MT= 74 (n,n') Level
Cross Section
28-Ni-59
-11.62 To 1243. %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 2.7381 MeV
n-Ni059.endfb8.0 Threshold 2.7381 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
31
28-Ni-59

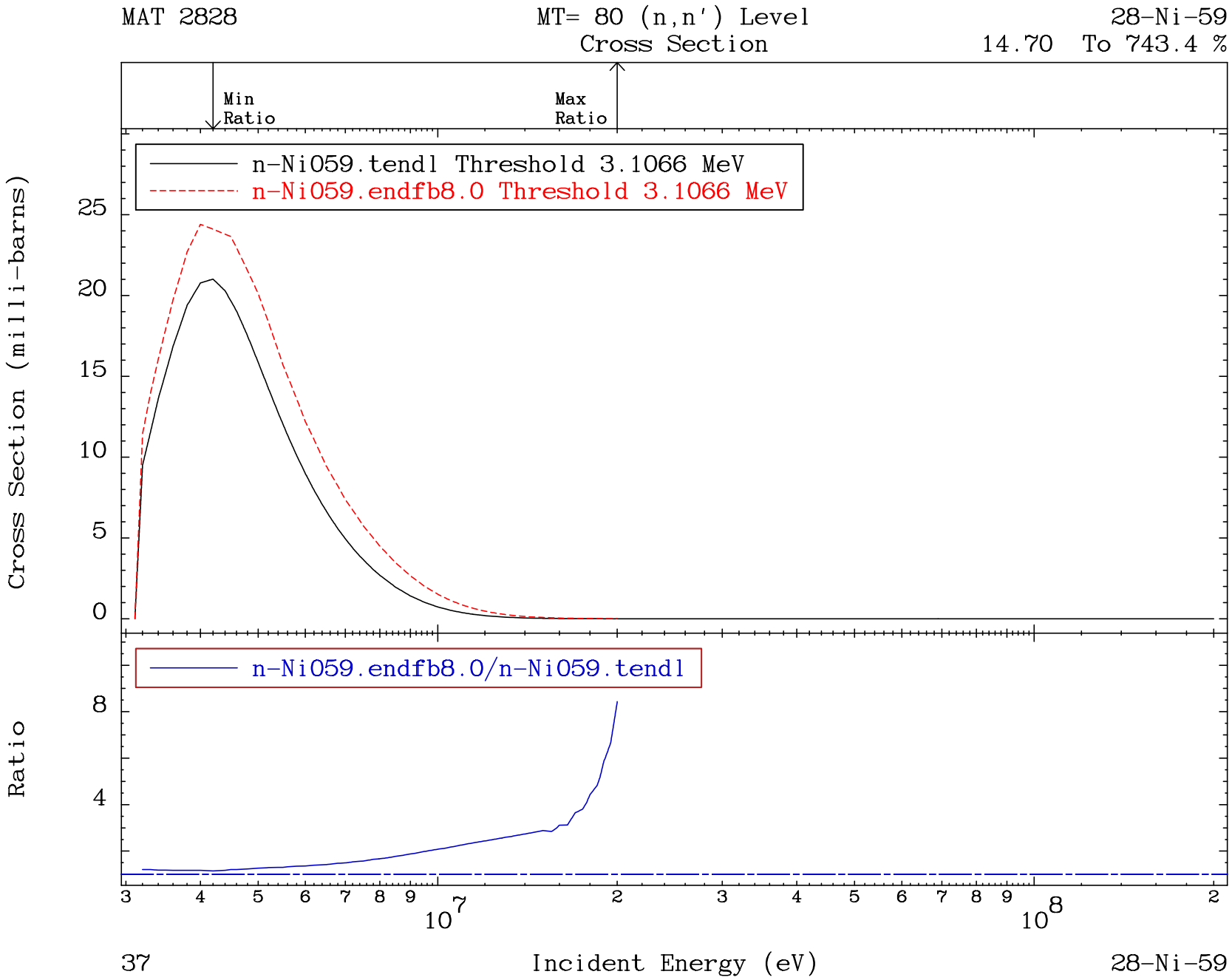

MAT 2828
MT= 75 (n,n') Level
Cross Section
28-Ni-59
-83.25 To 105.2 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.7513 MeV
n-Ni059.endfb8.0 Threshold 2.7513 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
32
28-Ni-59

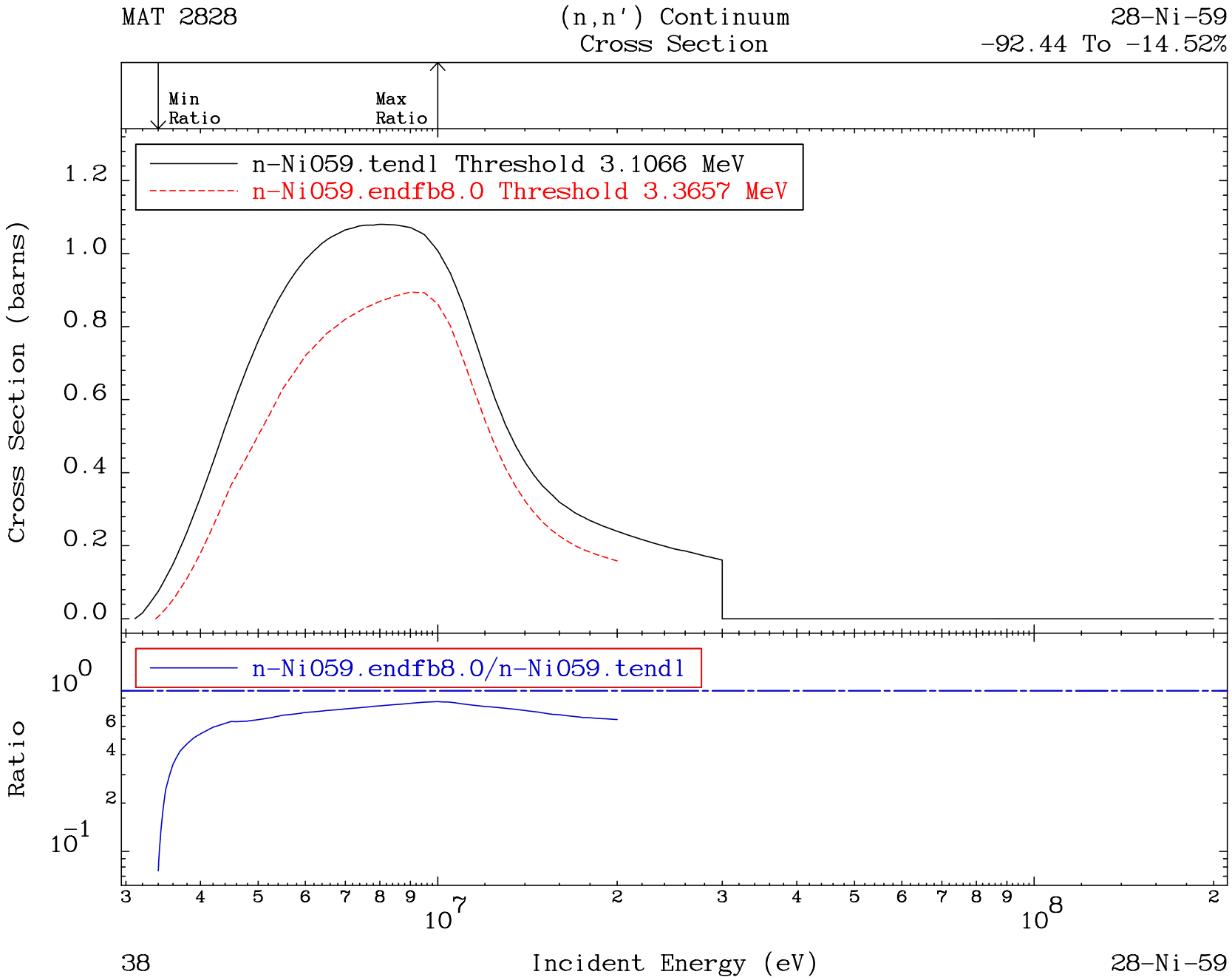

MAT 2828
MT= 76 (n,n') Level
Cross Section
28-Ni-59
-90.93 To -46.11%
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.7594 MeV
n-Ni059.endfb8.0 Threshold 2.7594 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
0.6
0.4
0.2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
28-Ni-59

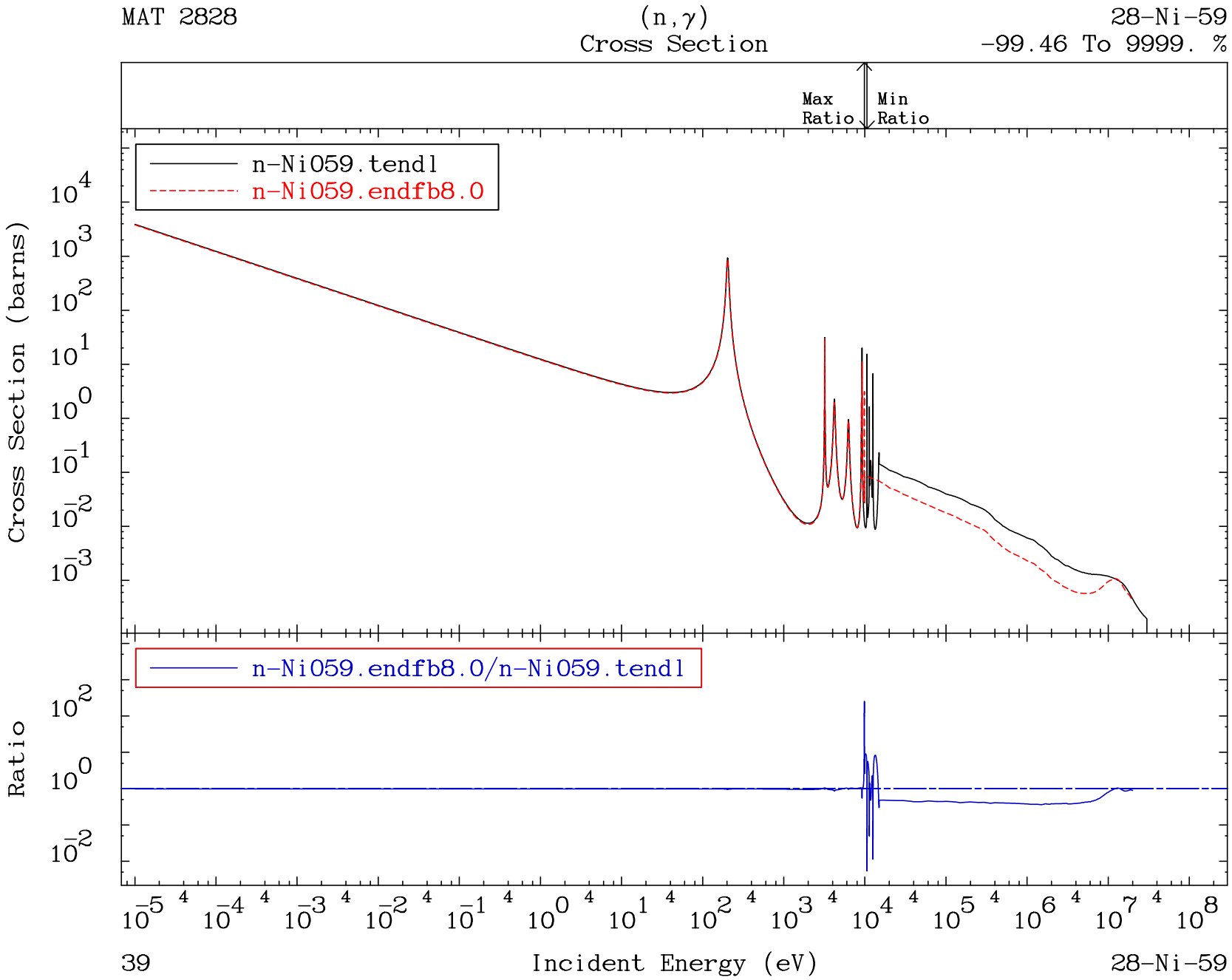

MAT 2828
MT= 77 (n,n') Level
Cross Section
28-Ni-59
-85.33 To 41.88 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.9432 MeV
n-Ni059.endfb8.0 Threshold 2.9432 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
28-Ni-59

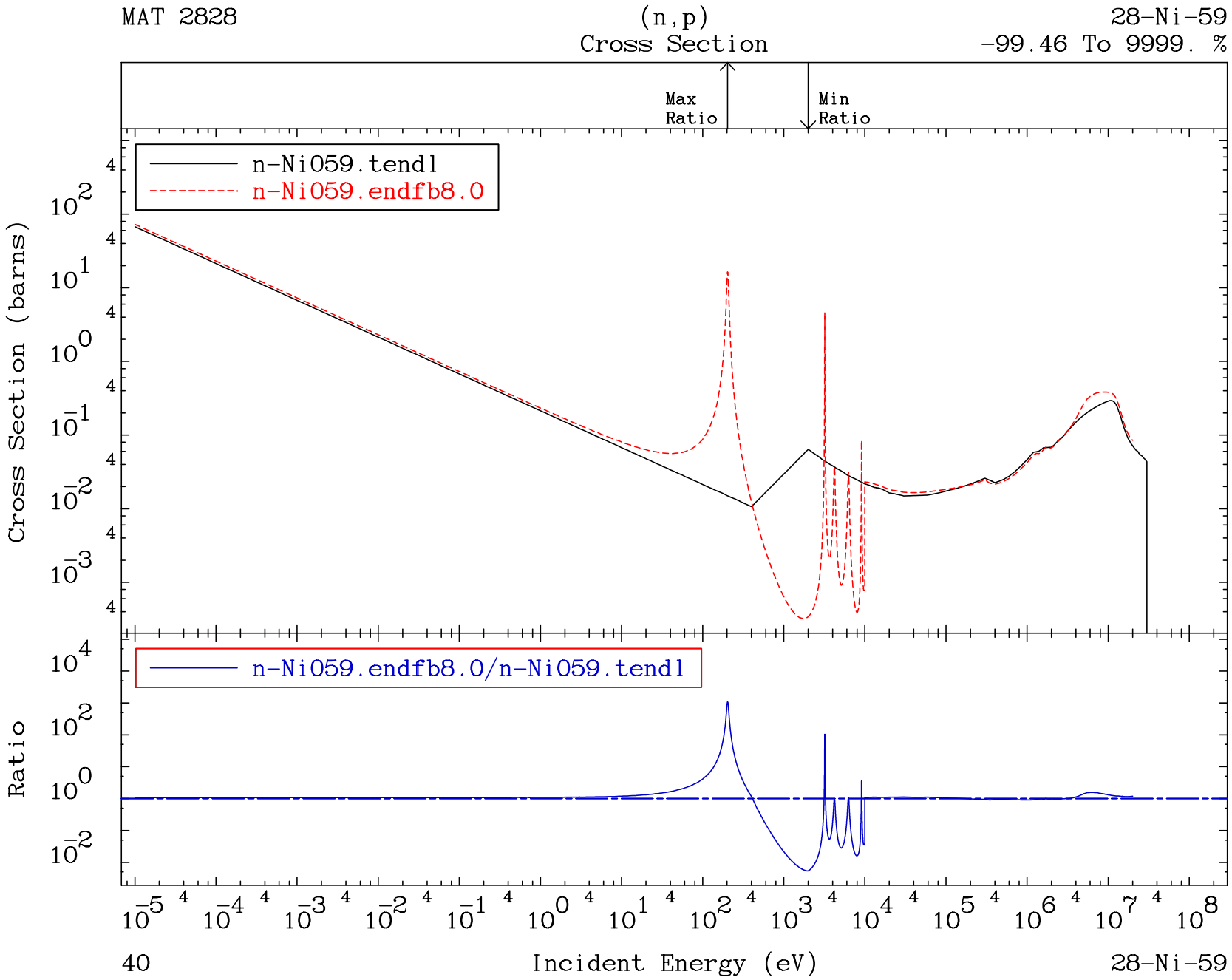

MAT 2828
MT= 78 (n,n') Level
Cross Section
28-Ni-59
-70.48 To 347.7 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 3.0776 MeV
n-Ni059.endfb8.0 Threshold 3.0776 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
6
4
2
10^0
6
4
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
35
Incident Energy (eV)
28-Ni-59

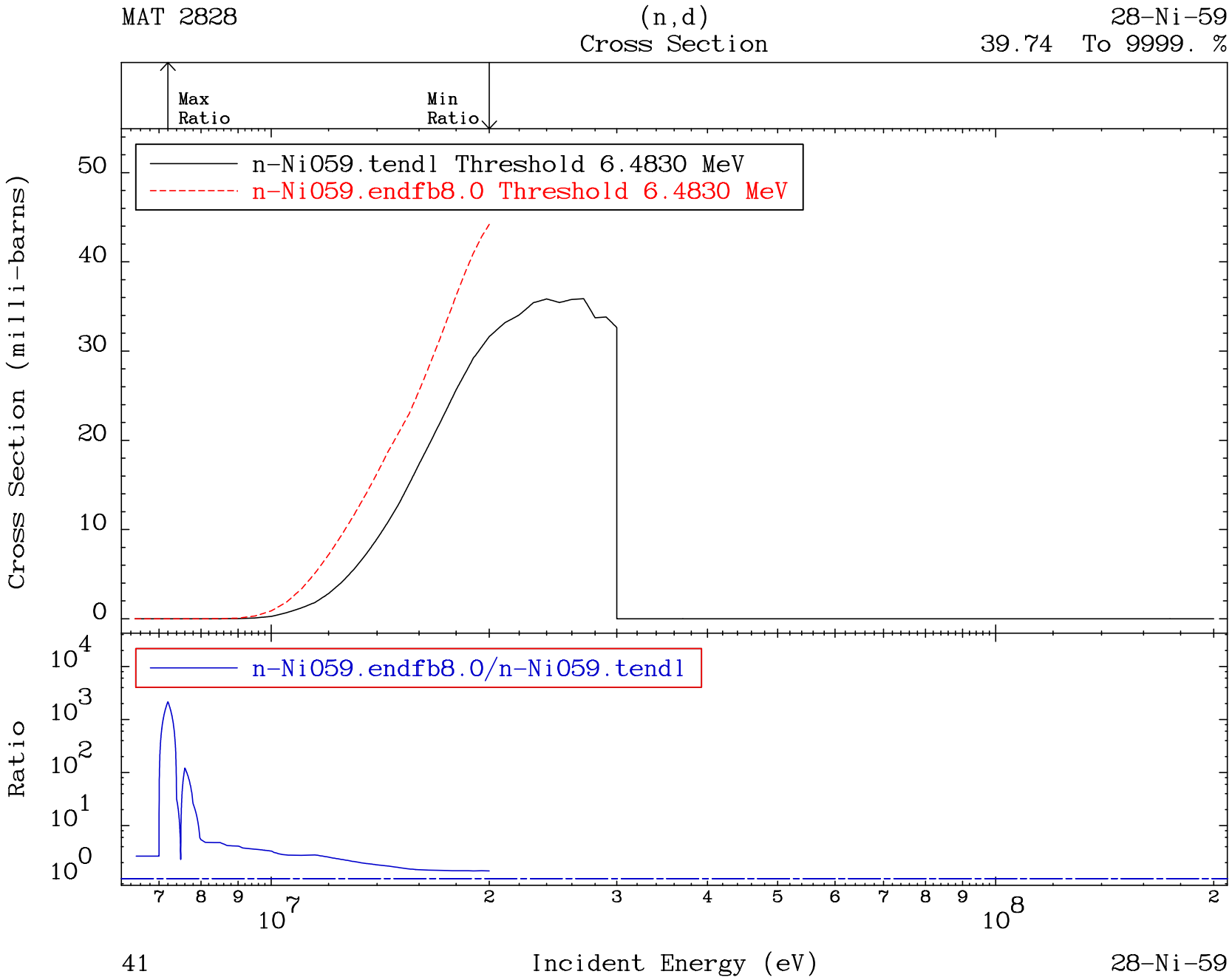

MAT 2828
MT= 79 (n,n') Level
Cross Section
28-Ni-59
-91.85 To 357.1 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 3.0895 MeV
n-Ni059.endfb8.0 Threshold 3.0895 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
36
28-Ni-59

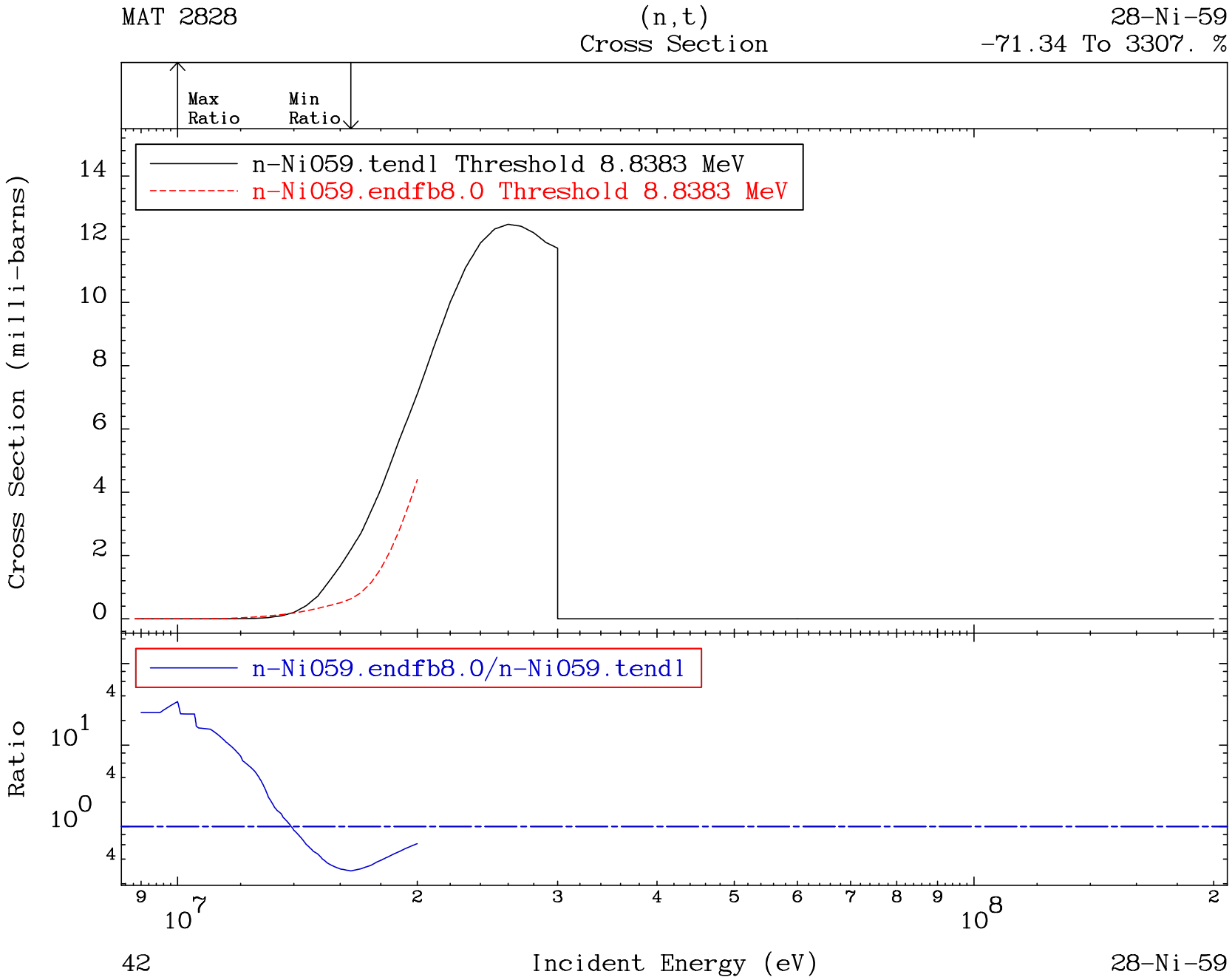

MAT 2828
MT= 80 (n,n') Level
Cross Section
28-Ni-59
14.70 To 743.4 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 3.1066 MeV
n-Ni059.endfb8.0 Threshold 3.1066 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
8
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
28-Ni-59

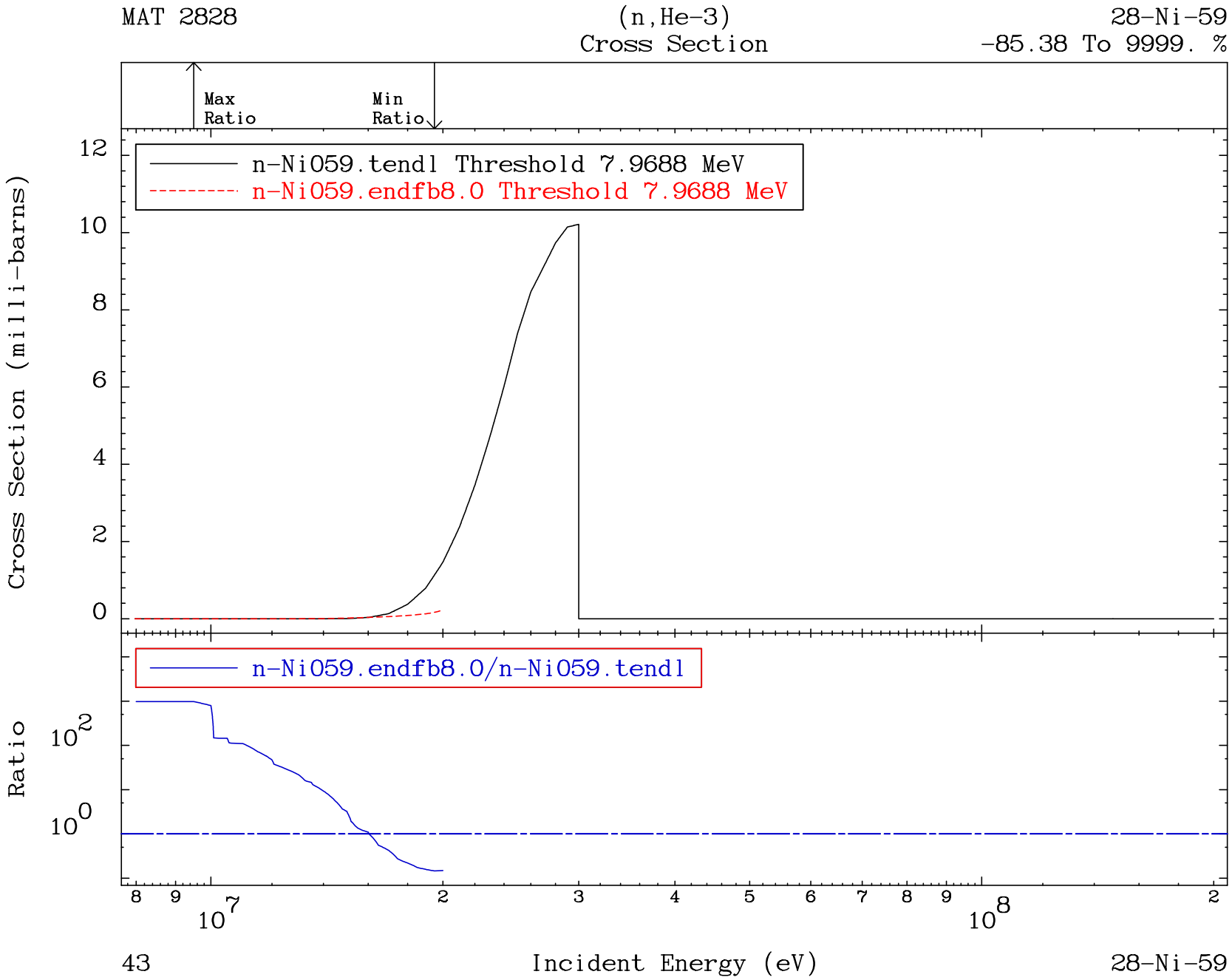

MAT 2828
(n,n') Continuum
Cross Section
28-Ni-59
-92.44 To -14.52%
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 3.1066 MeV
n-Ni059.endfb8.0 Threshold 3.3657 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^0
6
4
2
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
28-Ni-59

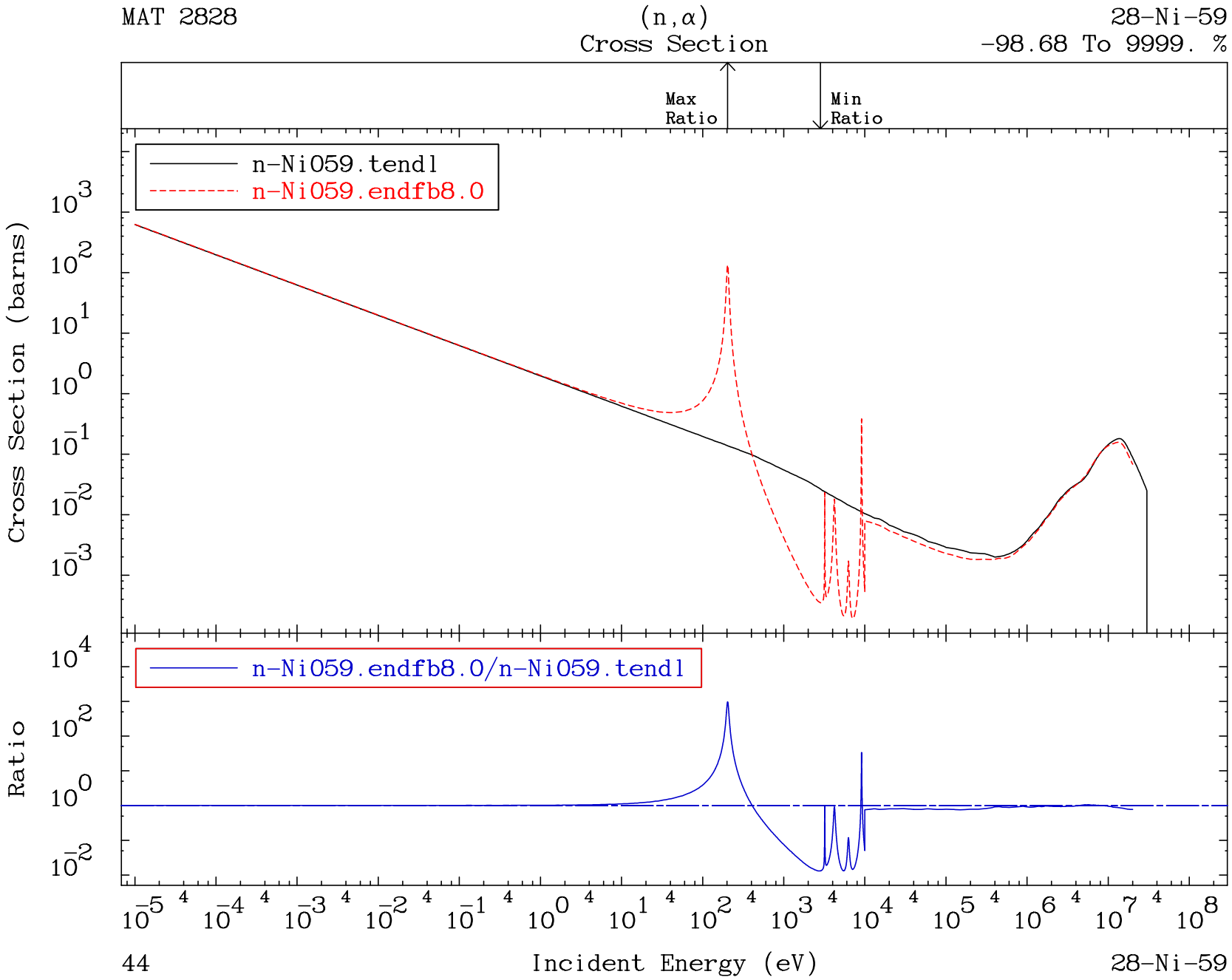

MAT 2828
(n,γ)
Cross Section
28-Ni-59
-99.46 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
39
28-Ni-59

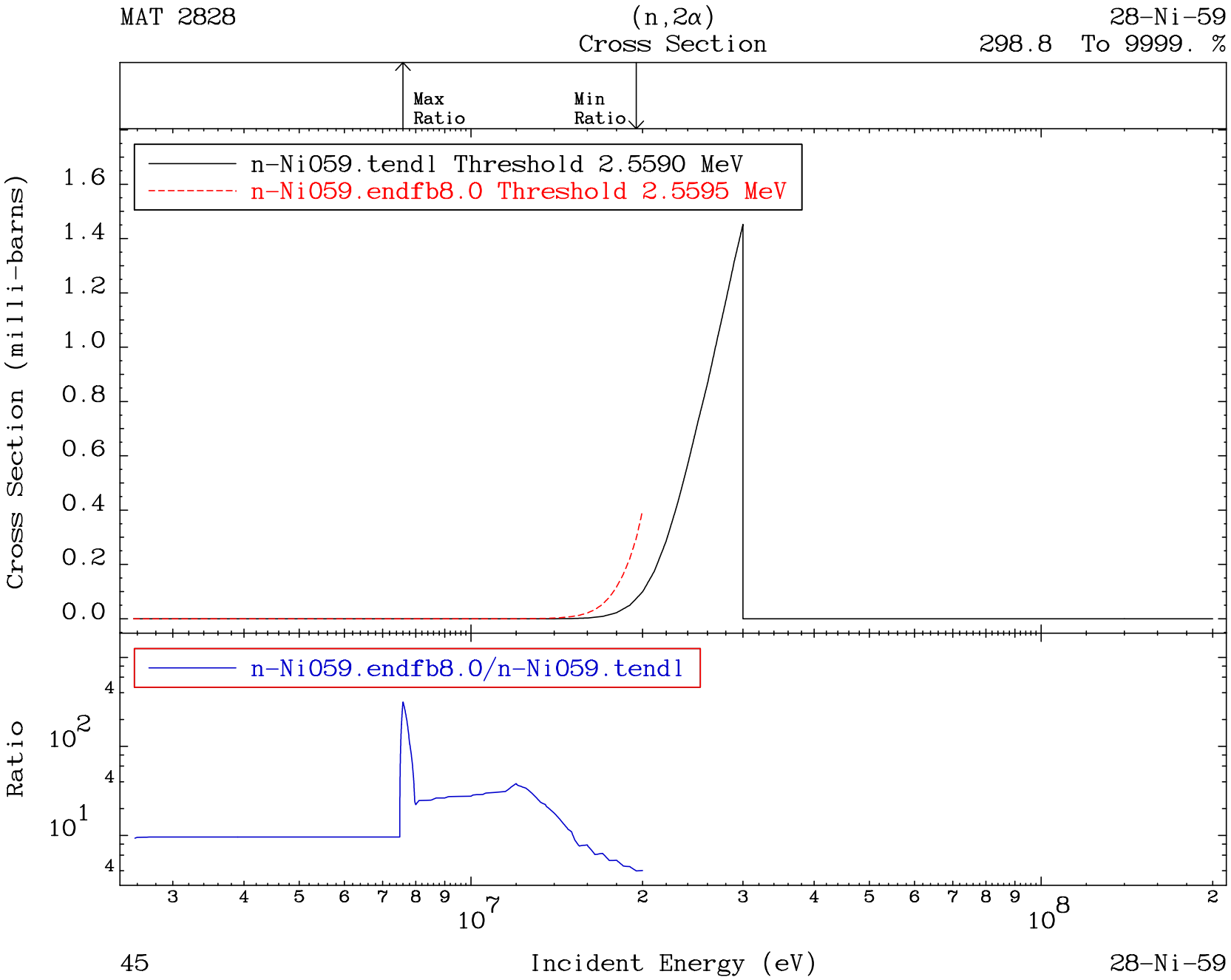

MAT 2828
(n,p)
Cross Section
28-Ni-59
-99.46 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
40
28-Ni-59

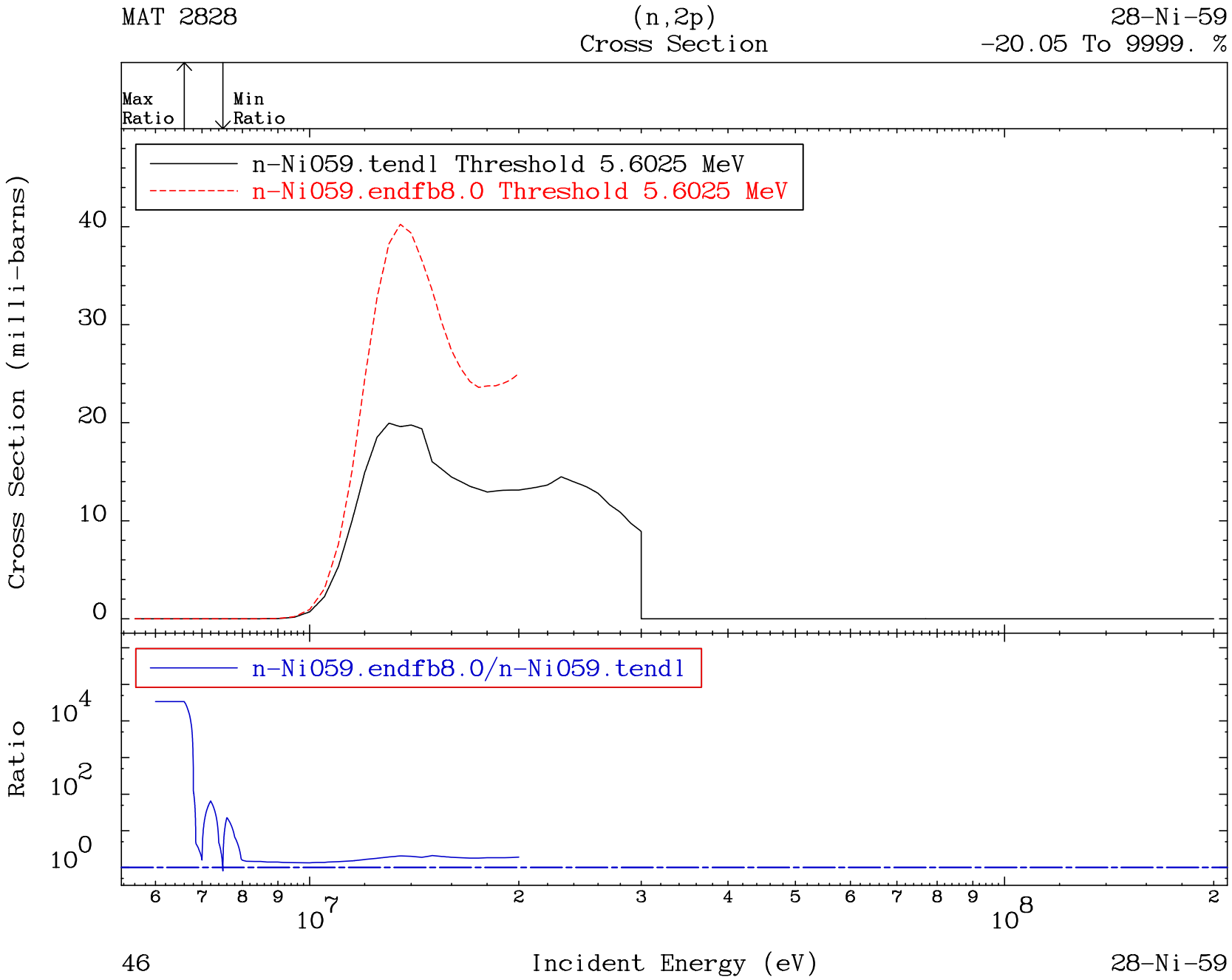

MAT 2828
(n,d)
Cross Section
28-Ni-59
39.74 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 6.4830 MeV
n-Ni059.endfb8.0 Threshold 6.4830 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^4
10^3
10^2
10^1
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
28-Ni-59

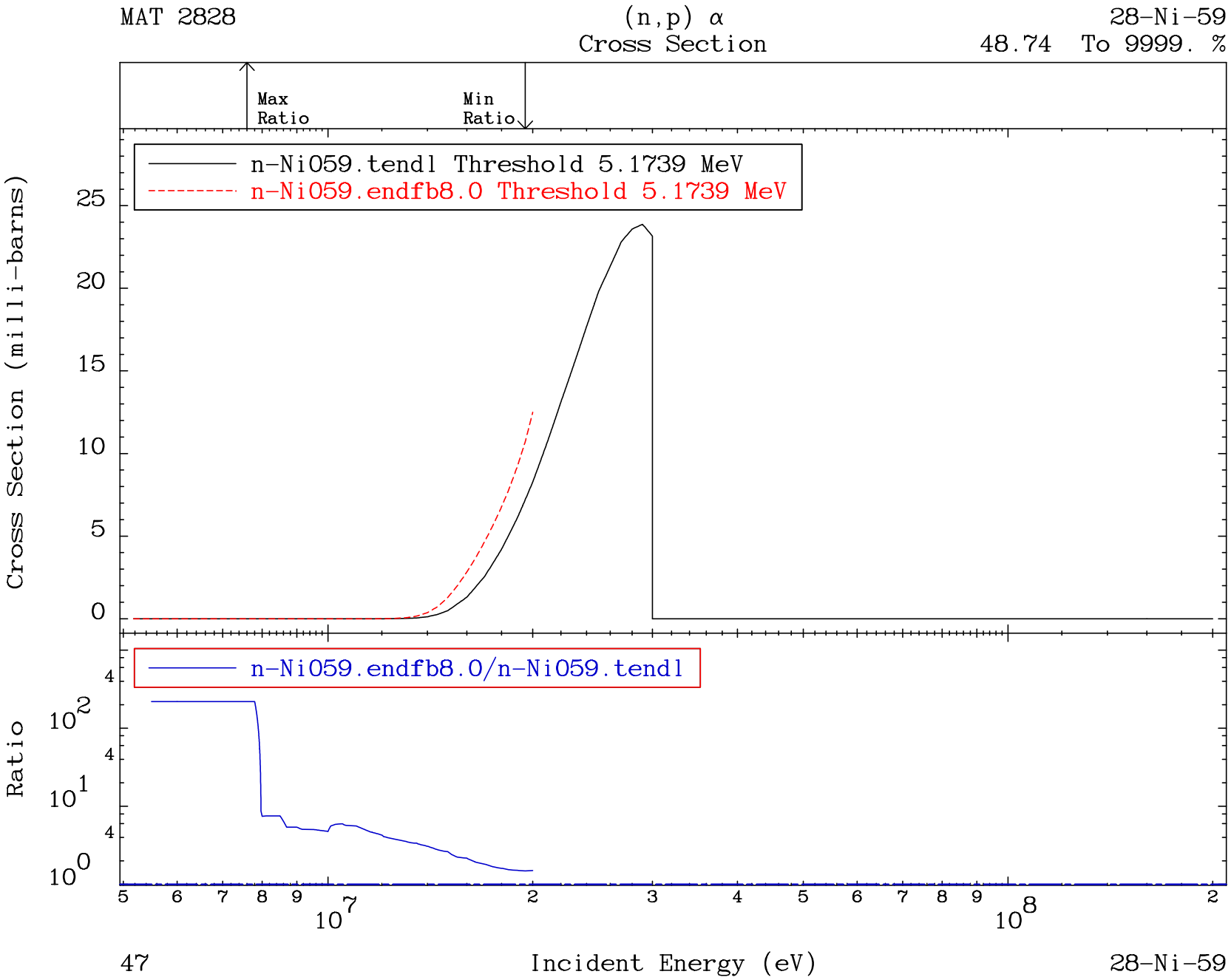

MAT 2828
(n,t)
Cross Section
28-Ni-59
-71.34 To 3307. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 8.8383 MeV
n-Ni059.endfb8.0 Threshold 8.8383 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
28-Ni-59

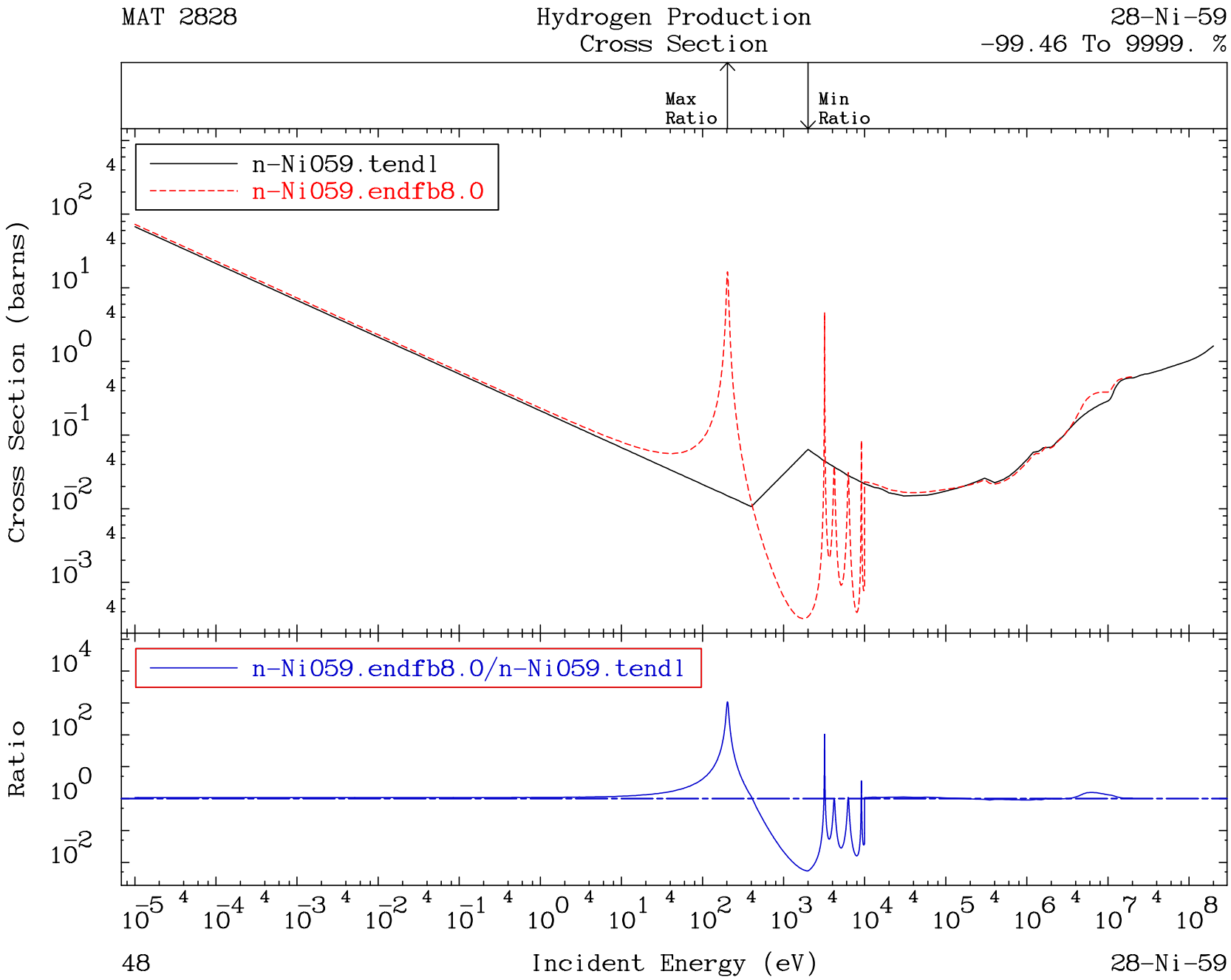

MAT 2828
(n,He-3)
Cross Section
28-Ni-59
-85.38 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 7.9688 MeV
n-Ni059.endfb8.0 Threshold 7.9688 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
43
28-Ni-59

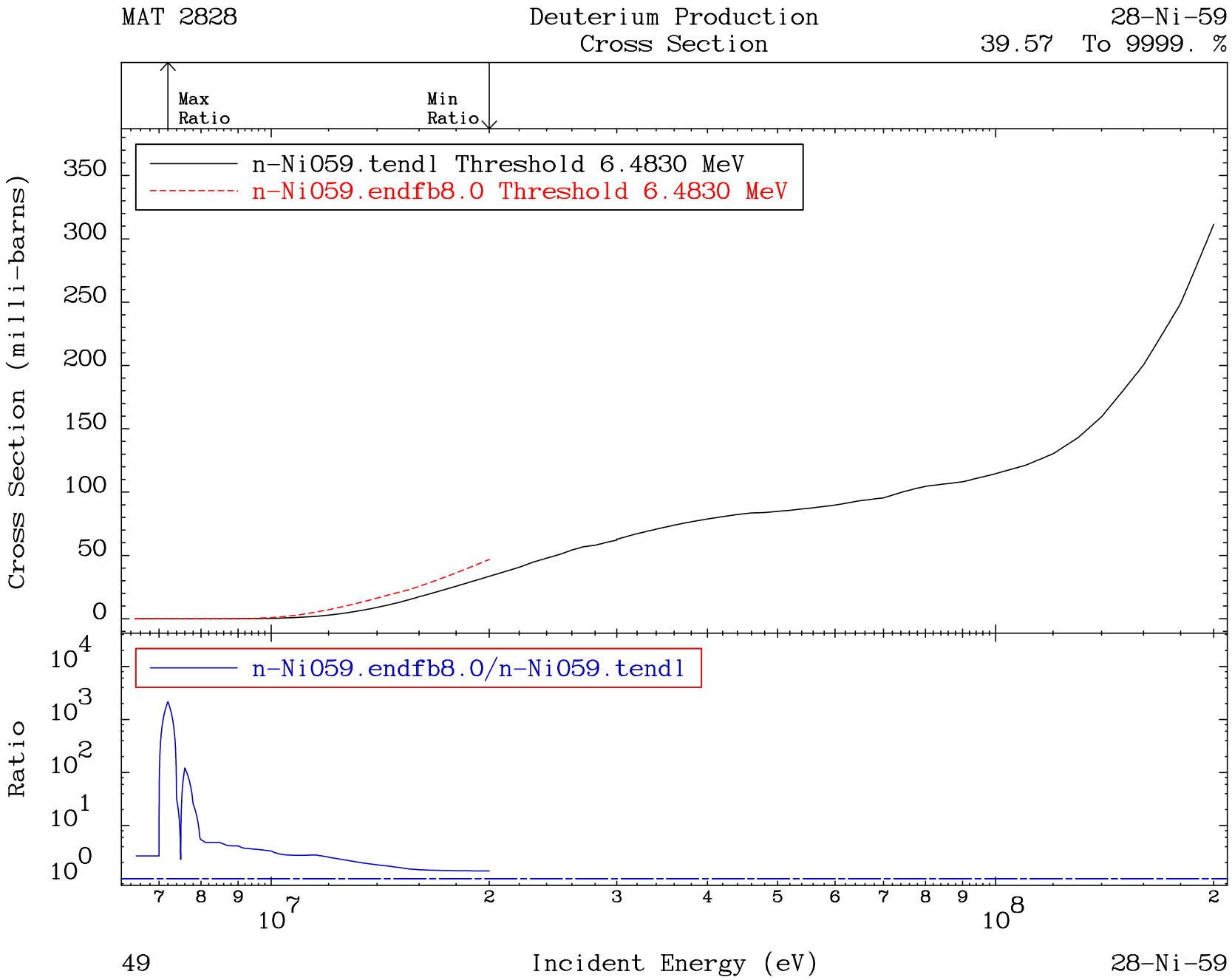

MAT 2828
(n,α)
Cross Section
28-Ni-59
-98.68 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
44
28-Ni-59

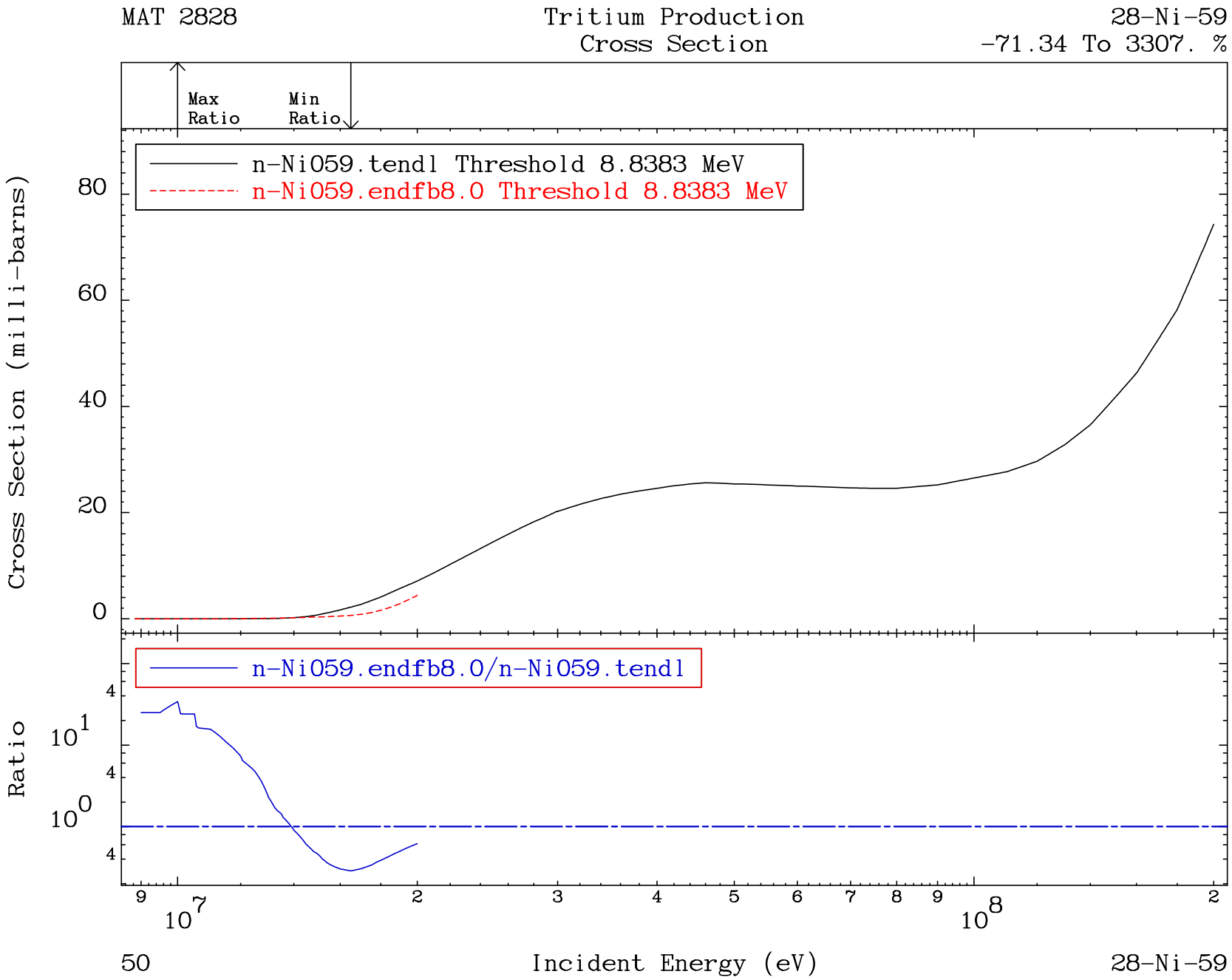

MAT 2828
(n,2α)
Cross Section
28-Ni-59
298.8 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 2.5590 MeV
n-Ni059.endfb8.0 Threshold 2.5595 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^2
10^1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
28-Ni-59

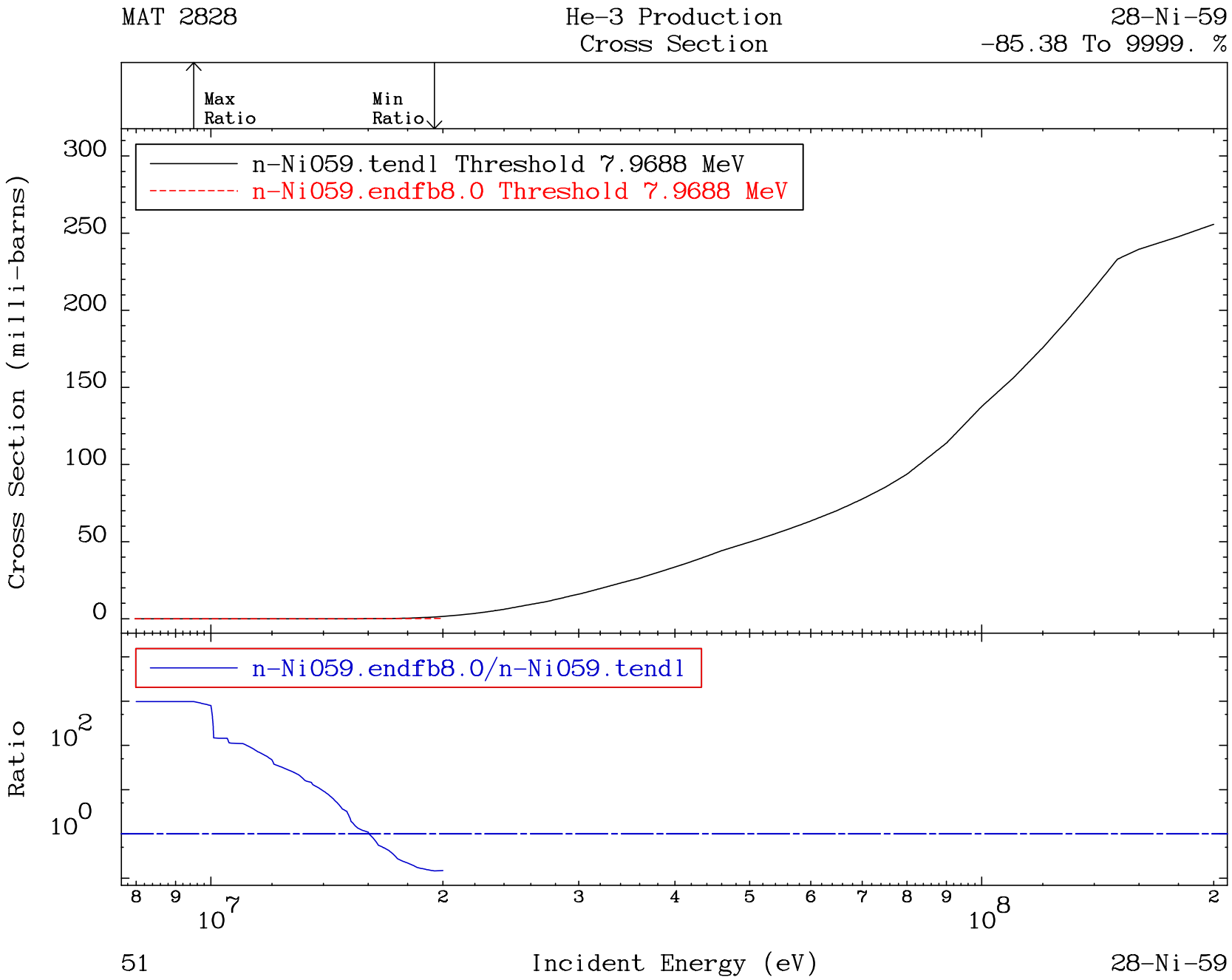

MAT 2828
(n,2p)
Cross Section
28-Ni-59
-20.05 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 5.6025 MeV
n-Ni059.endfb8.0 Threshold 5.6025 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
28-Ni-59

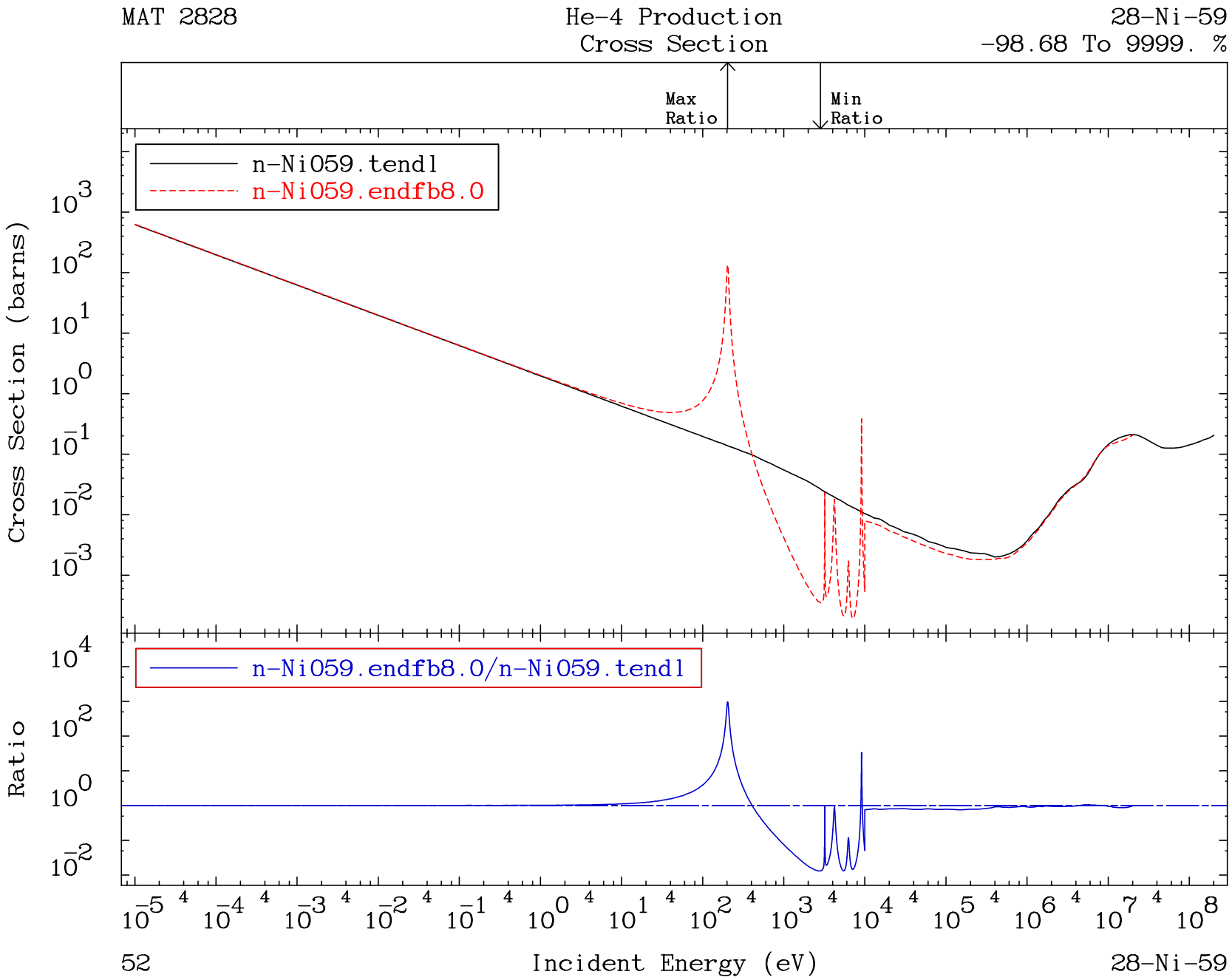

MAT 2828
(n,p) α
Cross Section
28-Ni-59
48.74 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 5.1739 MeV
n-Ni059.endfb8.0 Threshold 5.1739 MeV
Cross Section (milli-barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
47
28-Ni-59

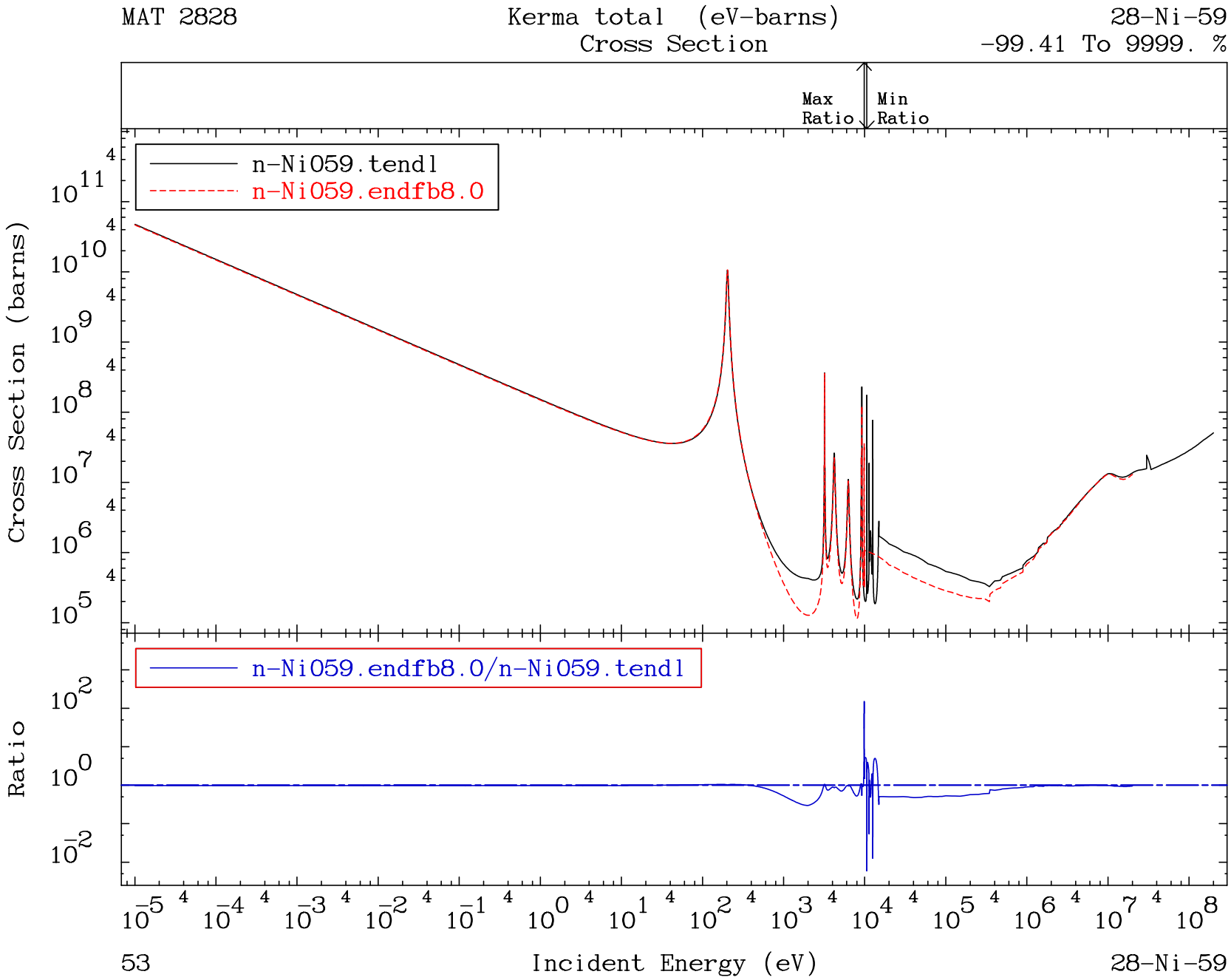

MAT 2828
Hydrogen Production
Cross Section
28-Ni-59
-99.46 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
48
28-Ni-59

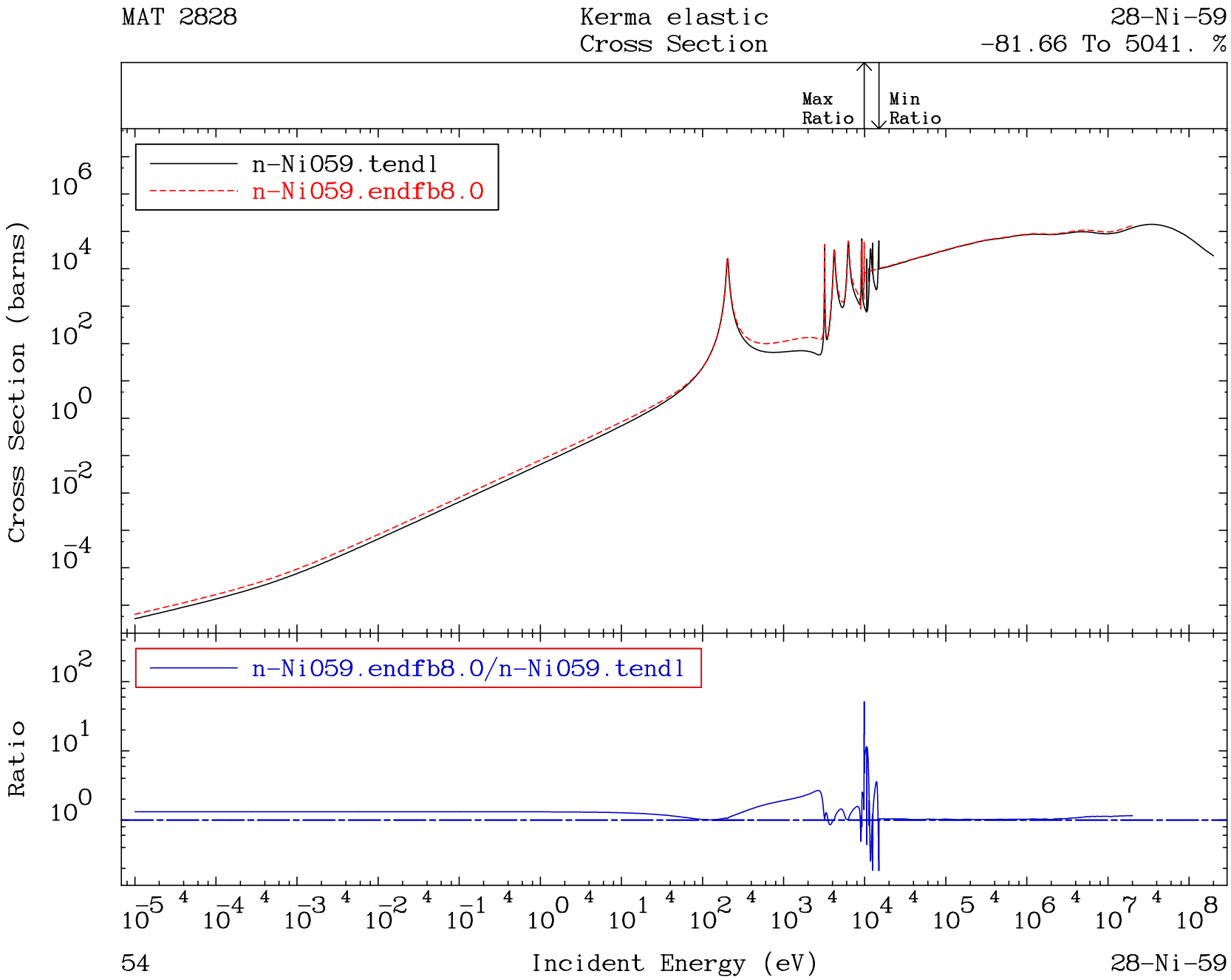

MAT 2828
Deuterium Production
Cross Section
28-Ni-59
39.57 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 6.4830 MeV
n-Ni059.endfb8.0 Threshold 6.4830 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^4
10^3
10^2
10^1
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
28-Ni-59

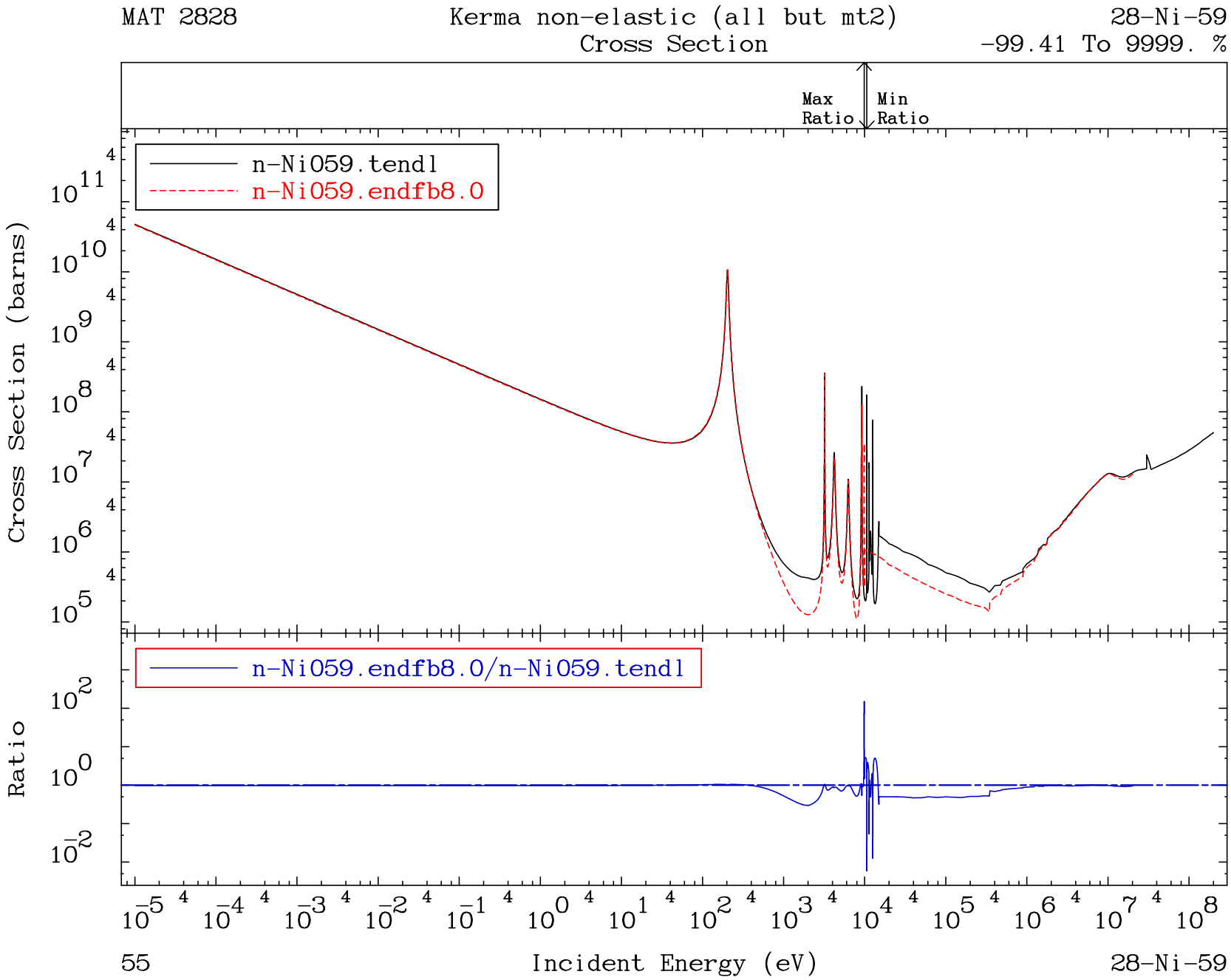

MAT 2828
Tritium Production
Cross Section
28-Ni-59
-71.34 To 3307. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 8.8383 MeV
n-Ni059.endfb8.0 Threshold 8.8383 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^1
10^0
4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
28-Ni-59

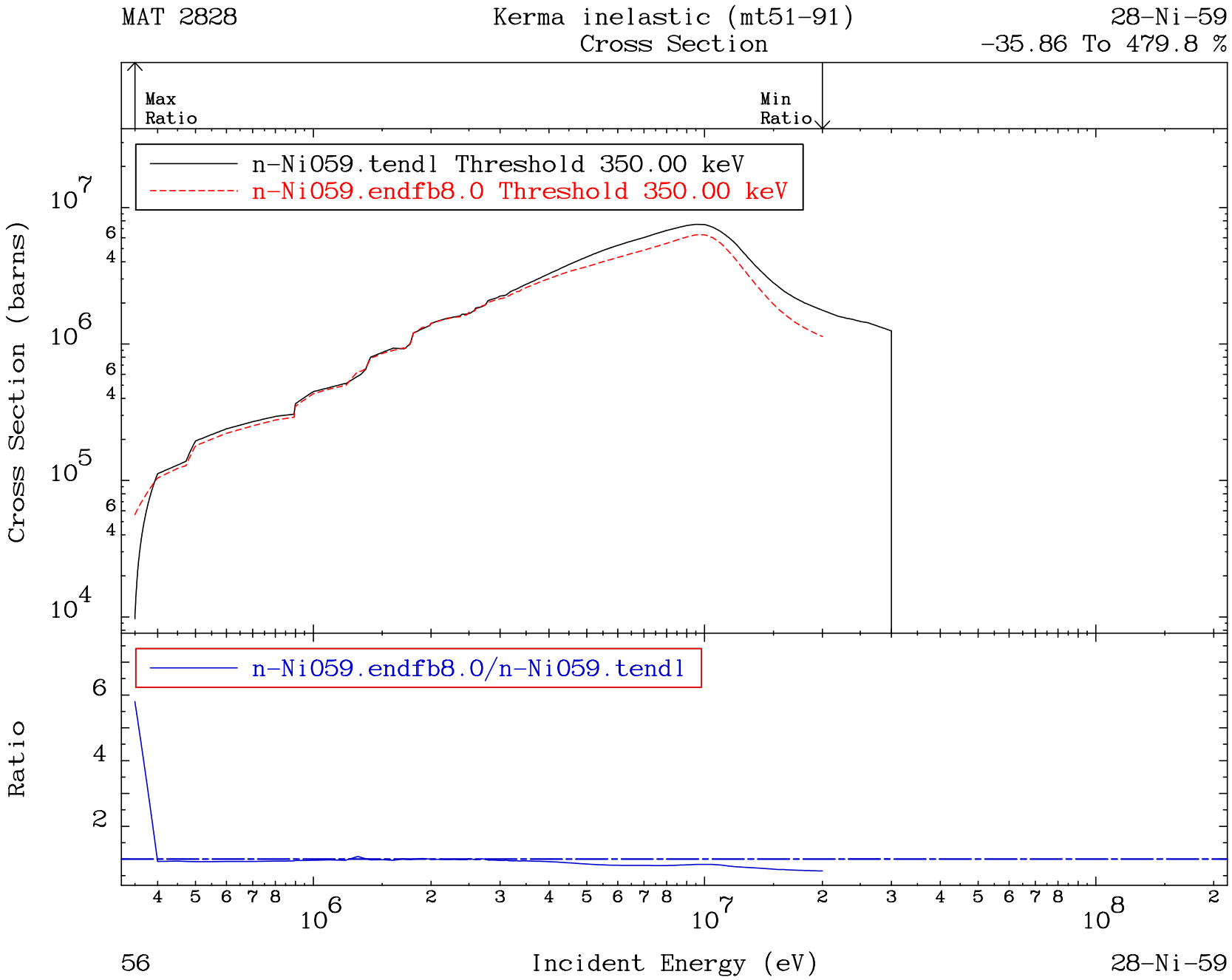

MAT 2828
He-3 Production
Cross Section
28-Ni-59
-85.38 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 7.9688 MeV
n-Ni059.endfb8.0 Threshold 7.9688 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
10^2
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
28-Ni-59

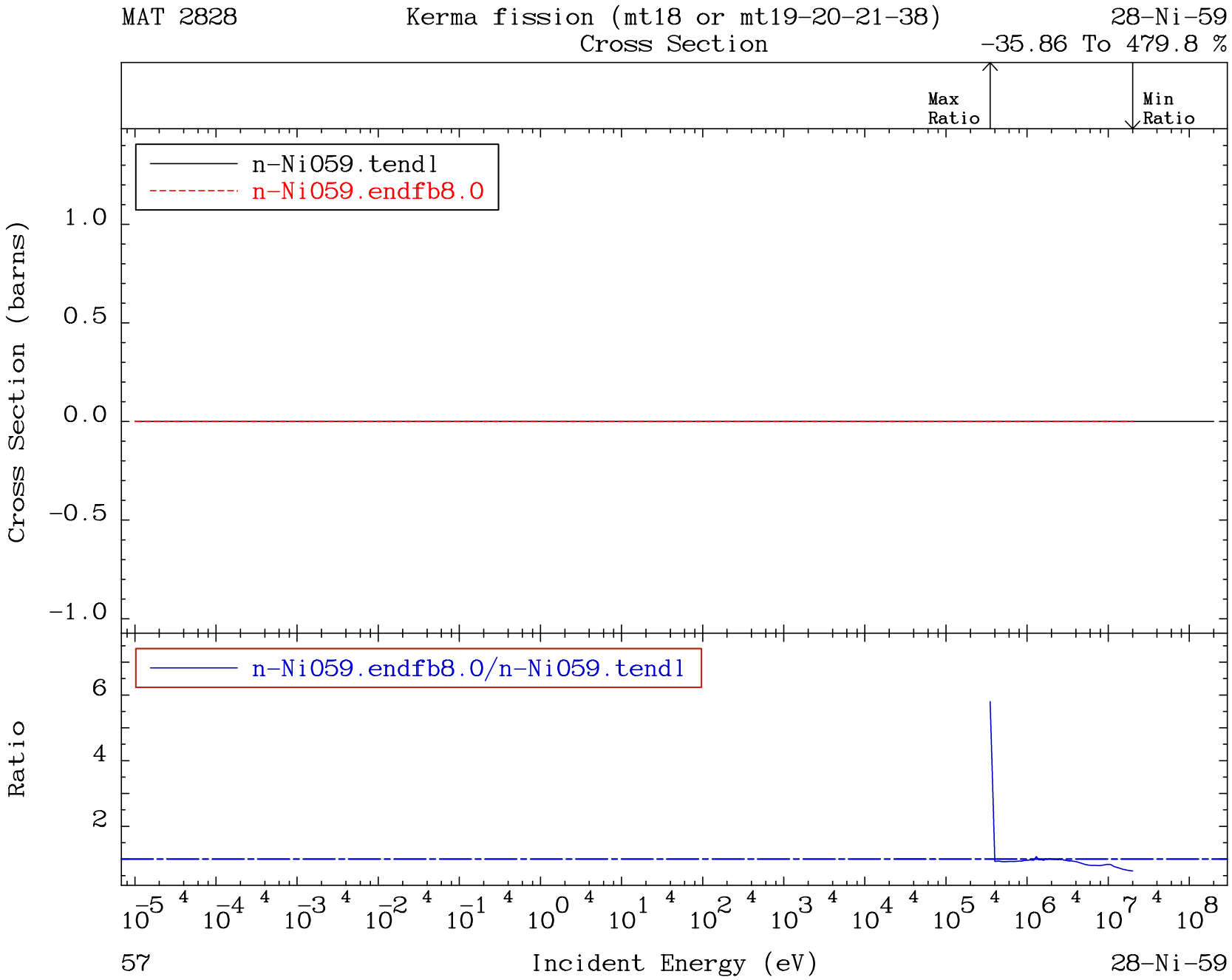

MAT 2828
He-4 Production
Cross Section
28-Ni-59
-98.68 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
52
28-Ni-59

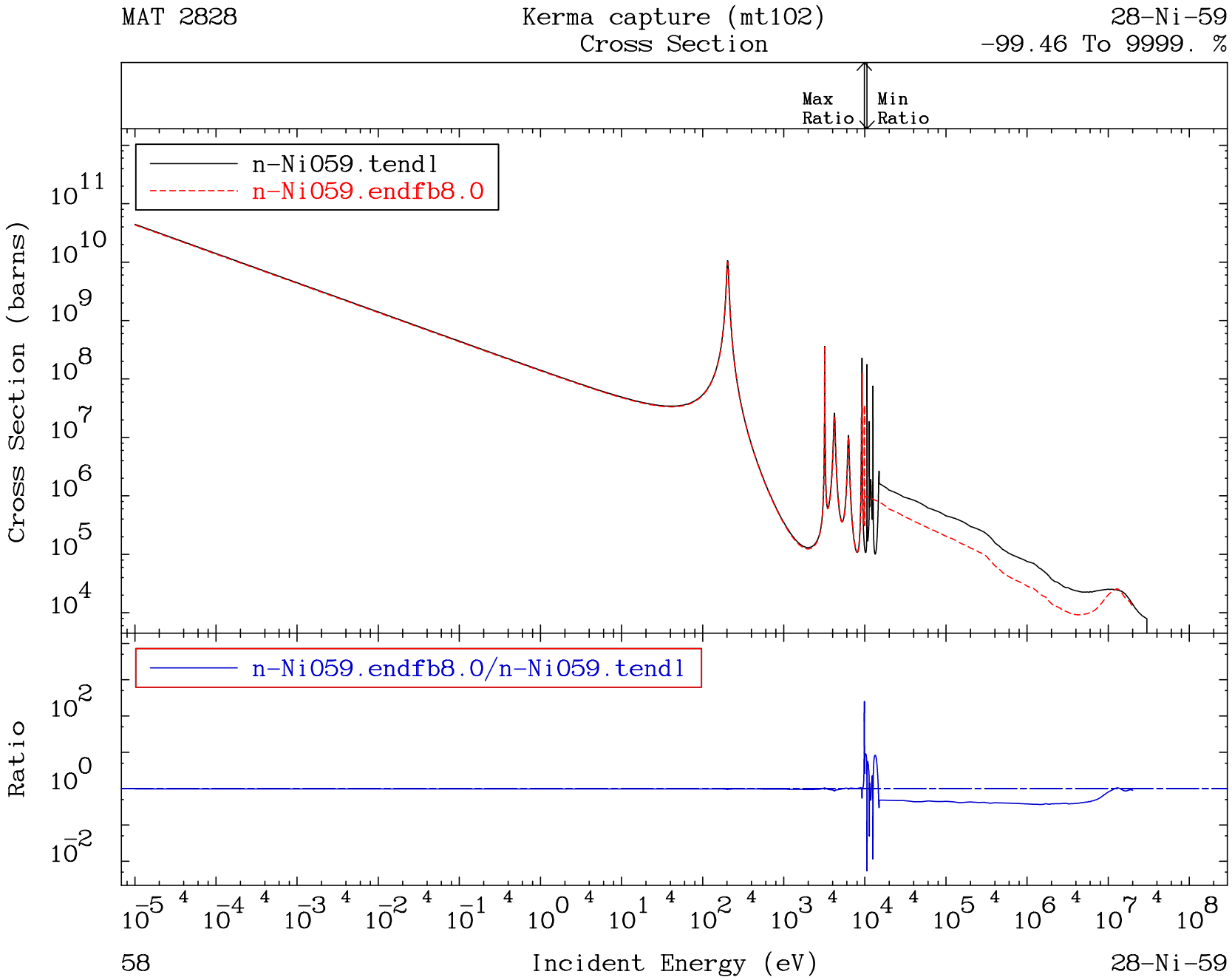

MAT 2828
Kerma total (eV-barns)
Cross Section
28-Ni-59
-99.41 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
53
Incident Energy (eV)
28-Ni-59

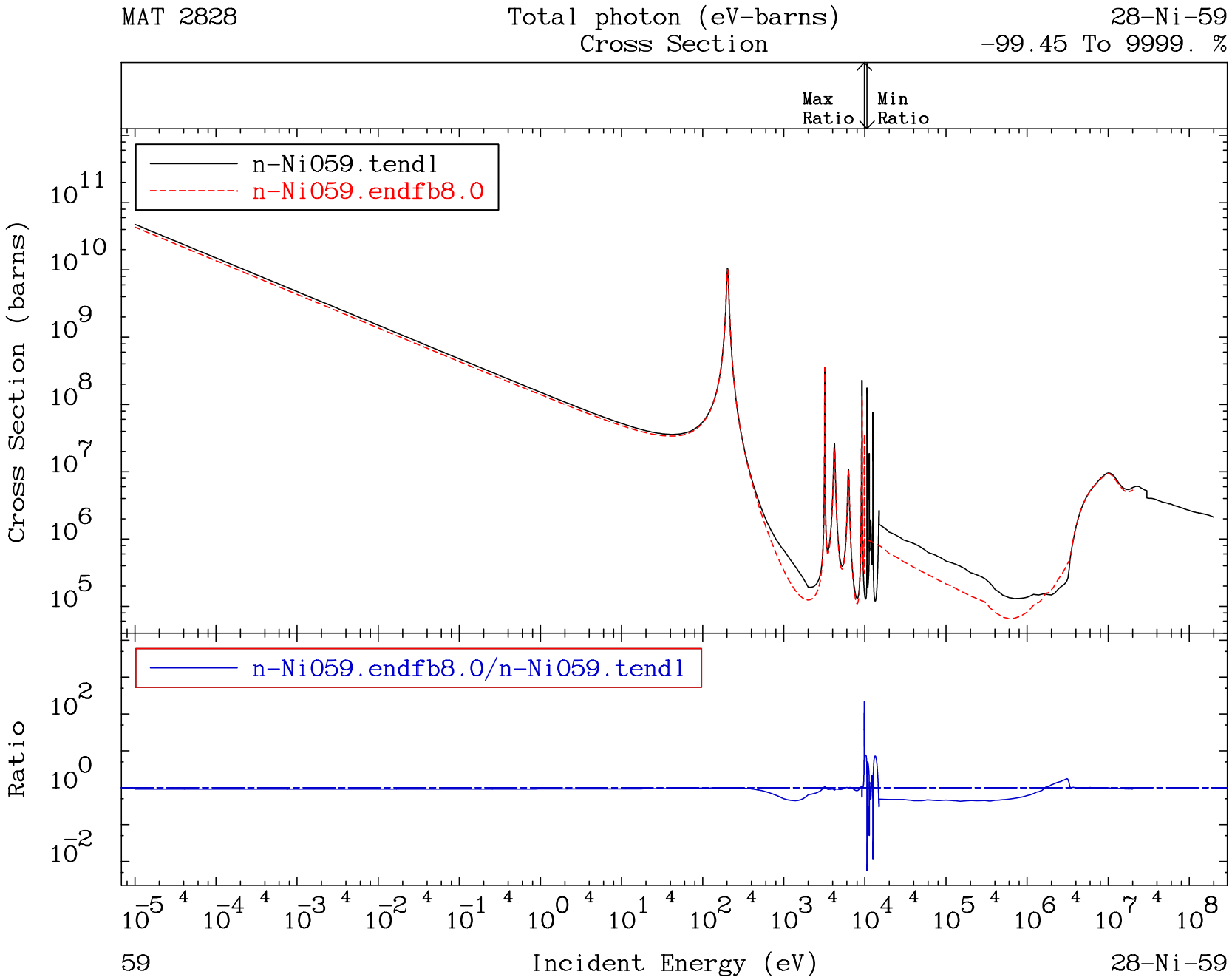

MAT 2828
Kerma elastic
Cross Section
28-Ni-59
-81.66 To 5041. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
54
28-Ni-59

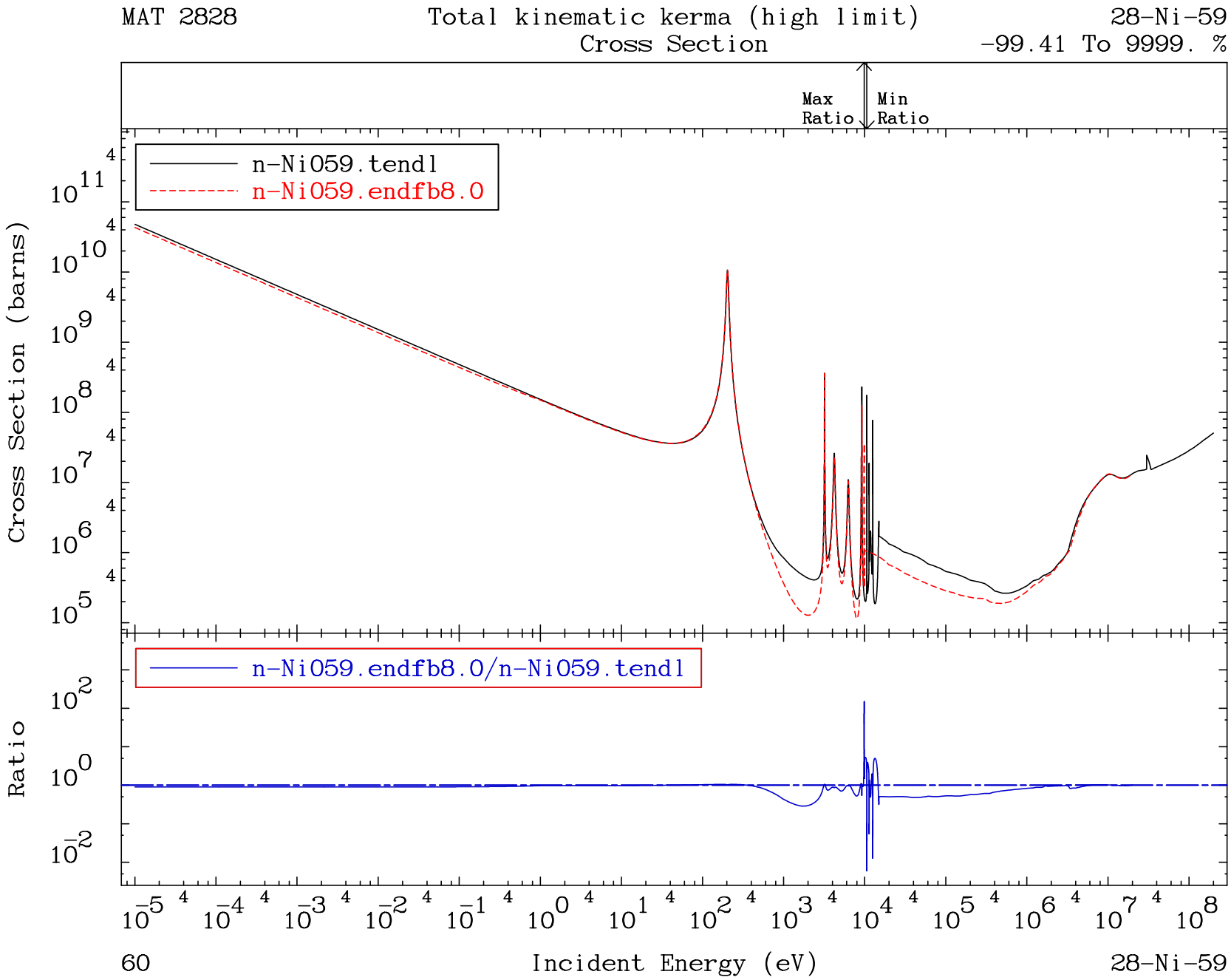

MAT 2828
Kerma non-elastic (all but mt2)
Cross Section
28-Ni-59
-99.41 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
55
28-Ni-59

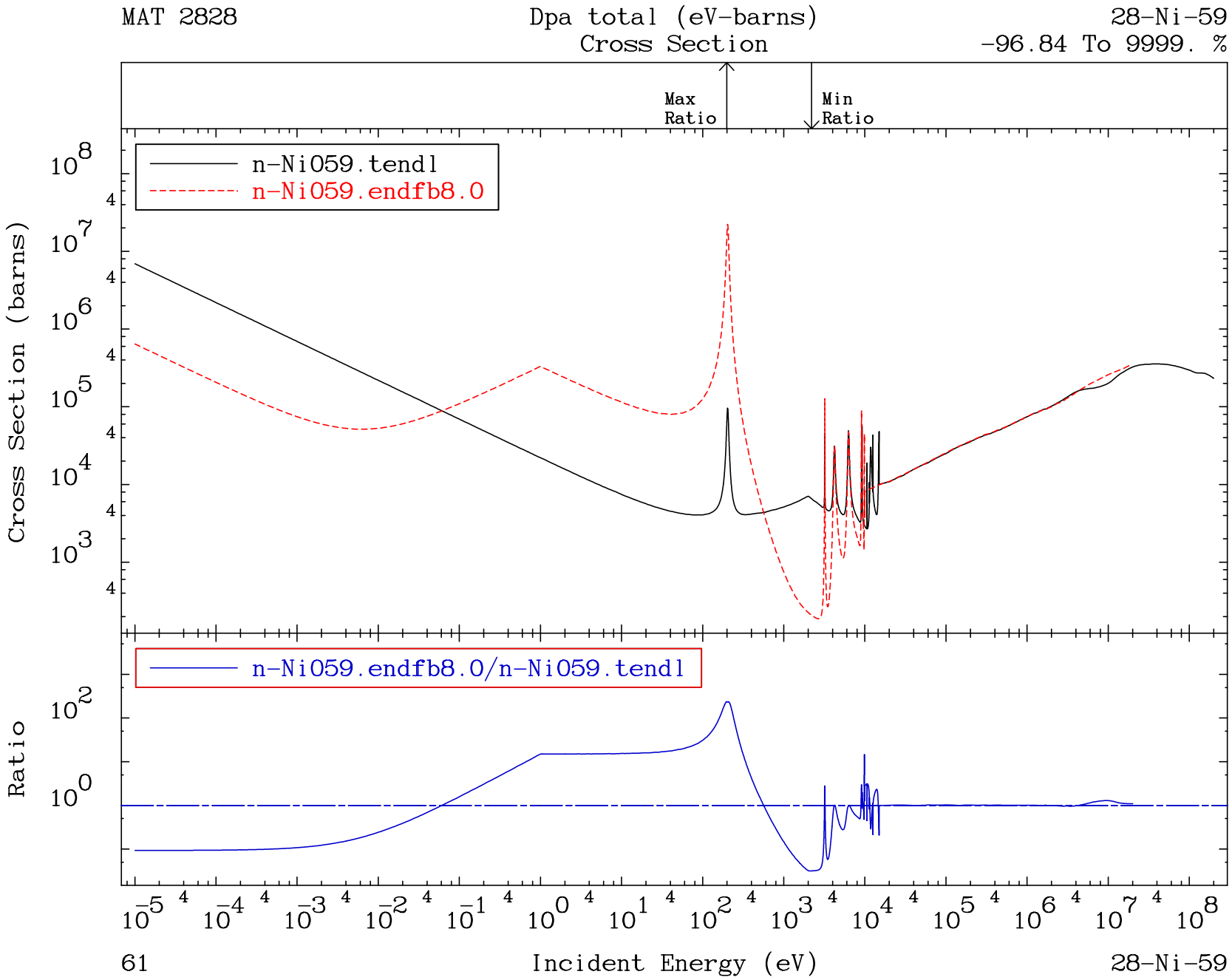

MAT 2828
Kerma inelastic (mt51-91)
Cross Section
28-Ni-59
-35.86 To 479.8 %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 350.00 keV
n-Ni059.endfb8.0 Threshold 350.00 keV
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
56
28-Ni-59

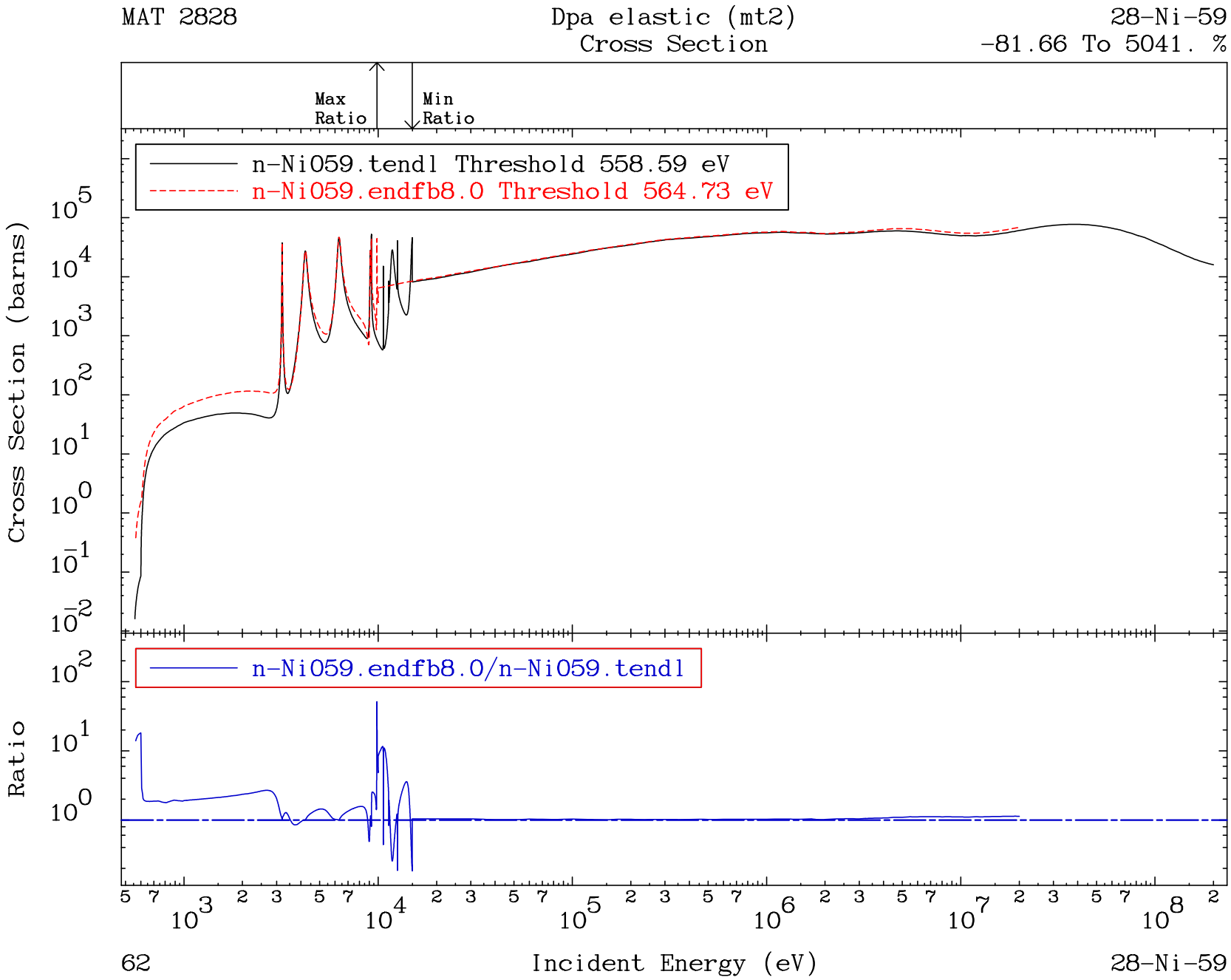

MAT 2828
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
28-Ni-59
-35.86 To 479.8 %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
6
4
2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
57
Incident Energy (eV)
28-Ni-59

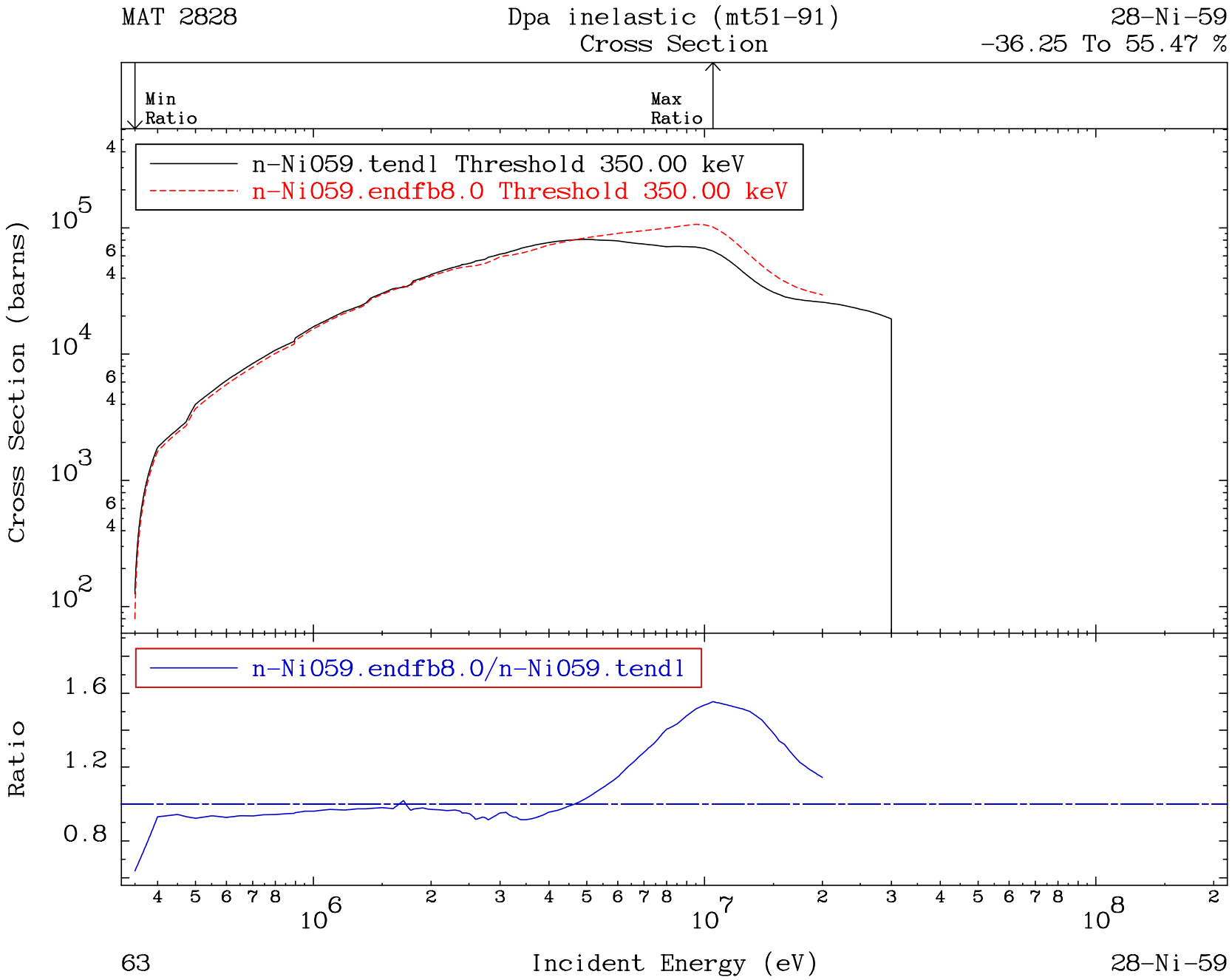

MAT 2828
Kerma capture (mt102)
Cross Section
28-Ni-59
-99.46 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
58
Incident Energy (eV)
28-Ni-59

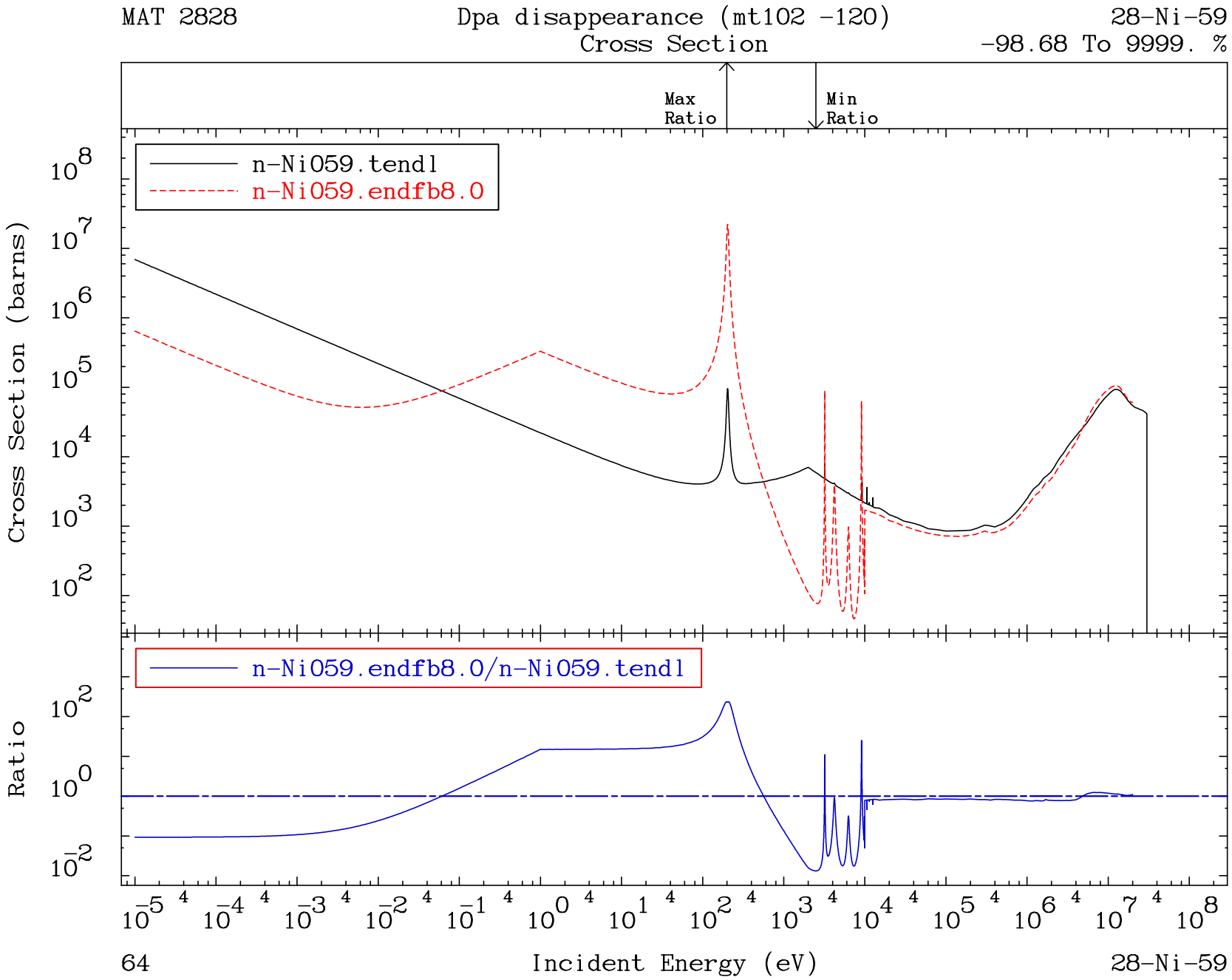

MAT 2828
Total photon (eV-barns)
Cross Section
28-Ni-59
-99.45 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
59
Incident Energy (eV)
28-Ni-59


MAT 2828
Total kinematic kerma (high limit)
Cross Section
28-Ni-59
-99.41 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
60
28-Ni-59


MAT 2828
Dpa total (eV-barns)
Cross Section
28-Ni-59
-96.84 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
61
Incident Energy (eV)
28-Ni-59


MAT 2828
Dpa elastic (mt2)
Cross Section
28-Ni-59
-81.66 To 5041. %
Max Ratio
Min Ratio
n-Ni059.tendl Threshold 558.59 eV
n-Ni059.endfb8.0 Threshold 564.73 eV
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
62
28-Ni-59


MAT 2828
Dpa inelastic (mt51-91)
Cross Section
28-Ni-59
-36.25 To 55.47 %
Min Ratio
Max Ratio
n-Ni059.tendl Threshold 350.00 keV
n-Ni059.endfb8.0 Threshold 350.00 keV
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
63
28-Ni-59


MAT 2828
Dpa disappearance (mt102 -120)
Cross Section
28-Ni-59
-98.68 To 9999. %
Max Ratio
Min Ratio
n-Ni059.tendl
n-Ni059.endfb8.0
Cross Section (barns)
n-Ni059.endfb8.0/n-Ni059.tendl
Ratio
Incident Energy (eV)
64
28-Ni-59