Program Complot
(Version 2021-1)
by
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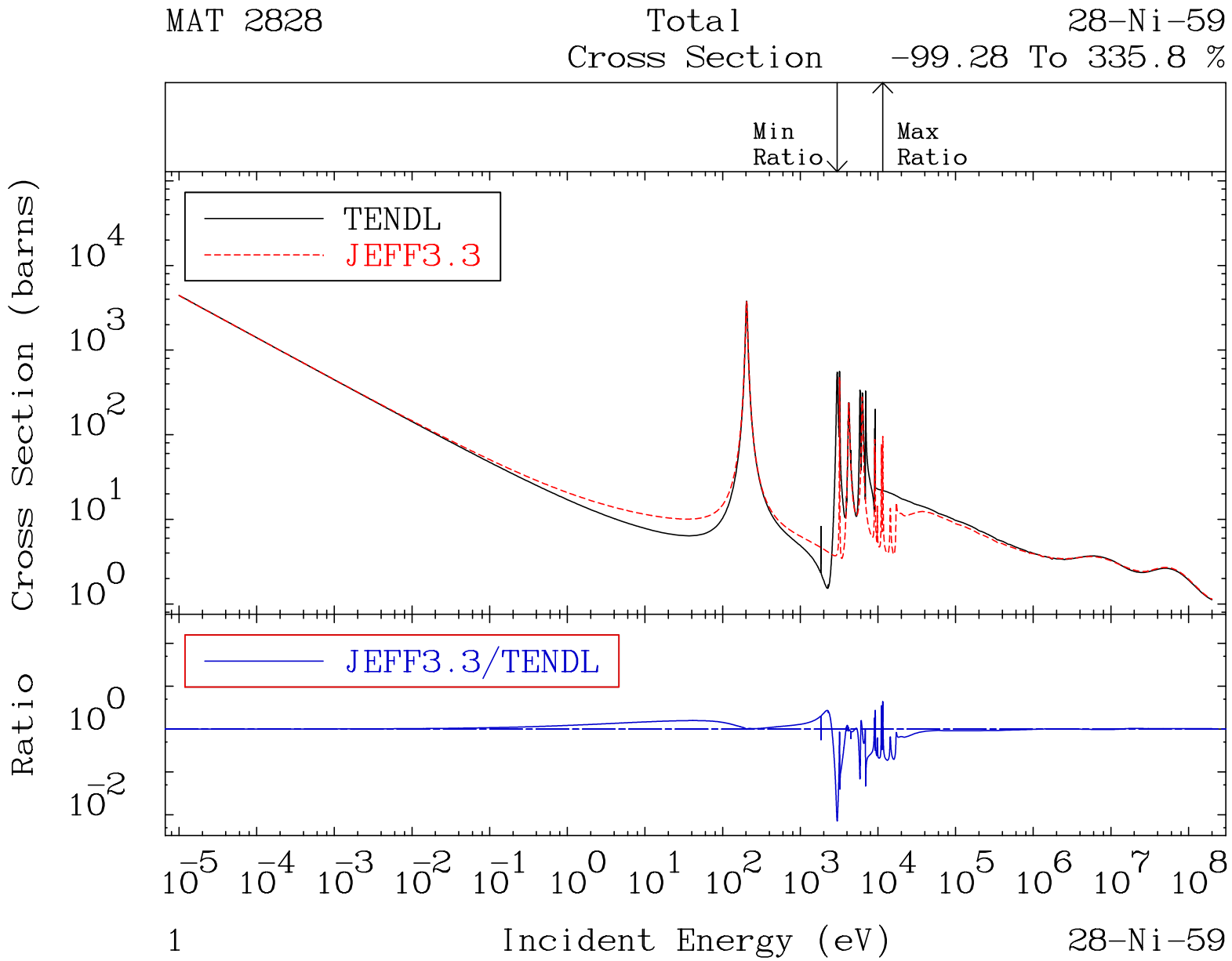
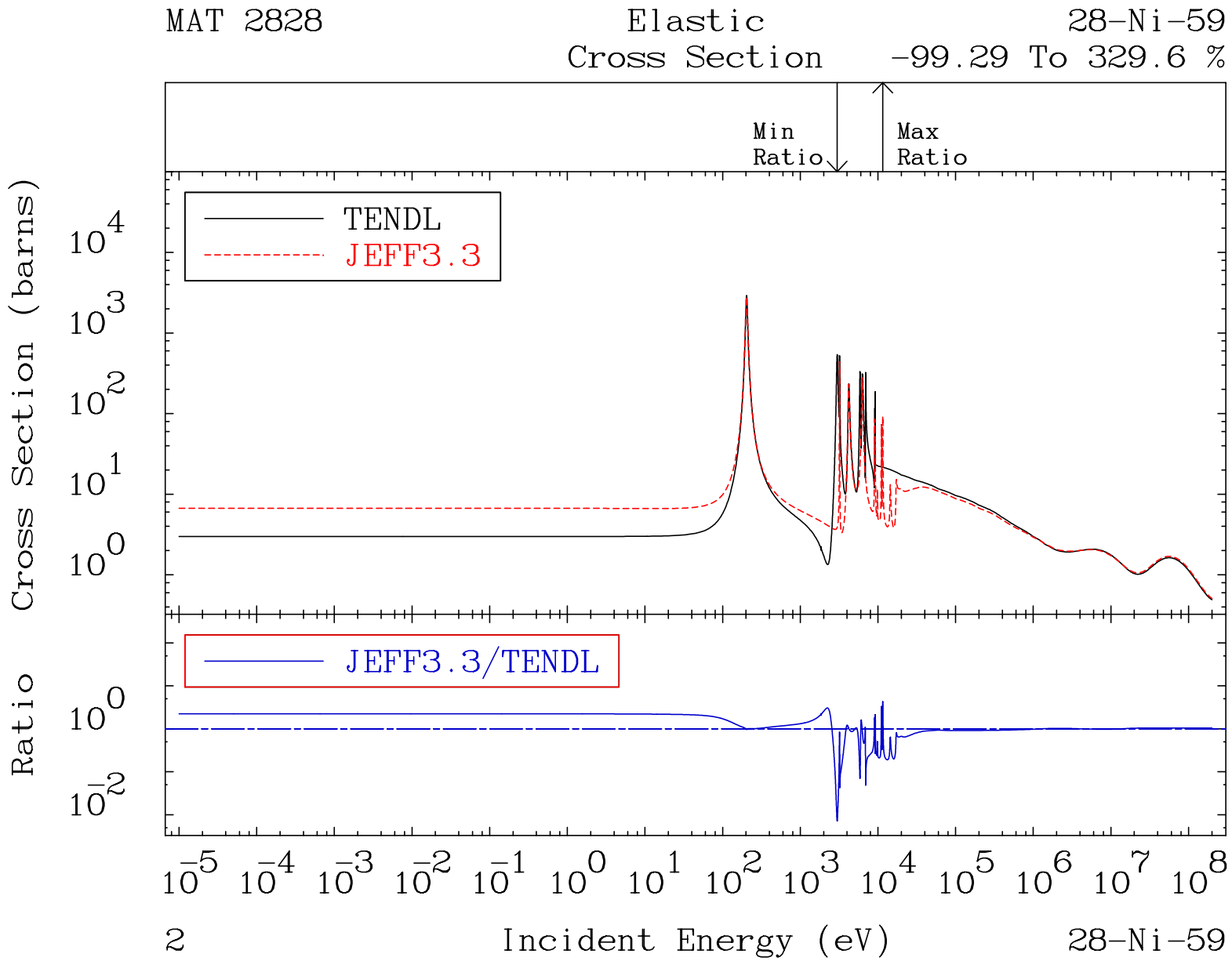
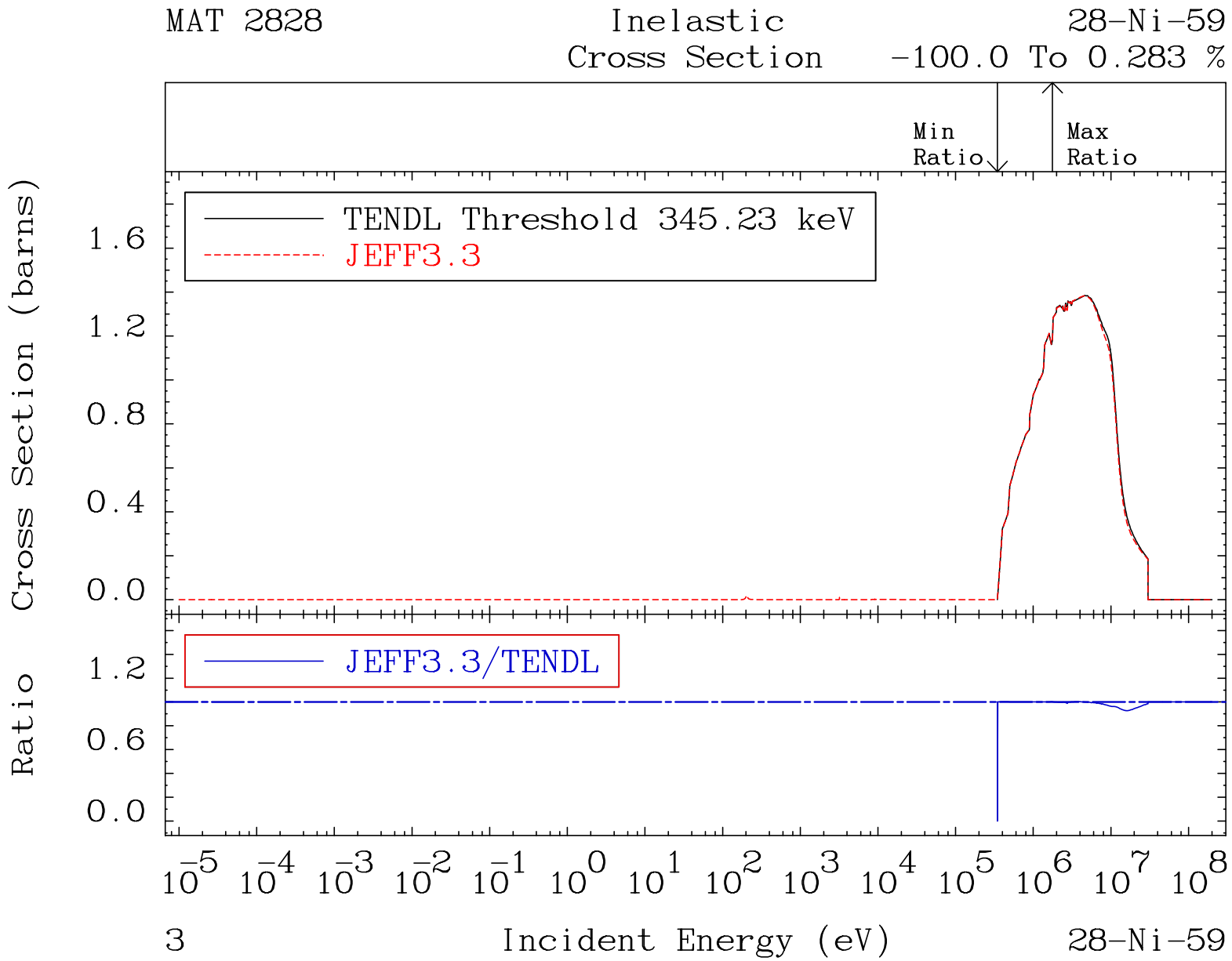
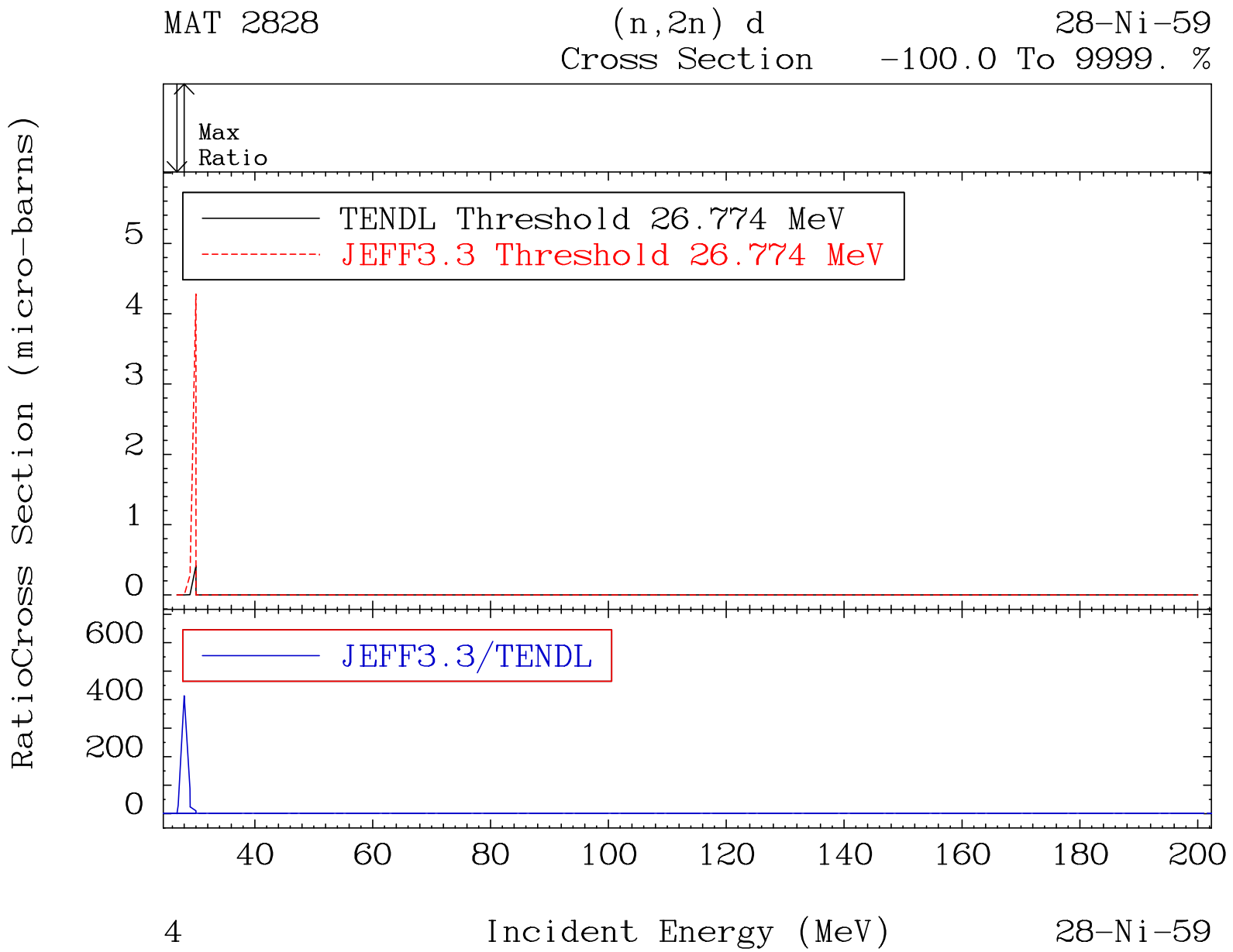
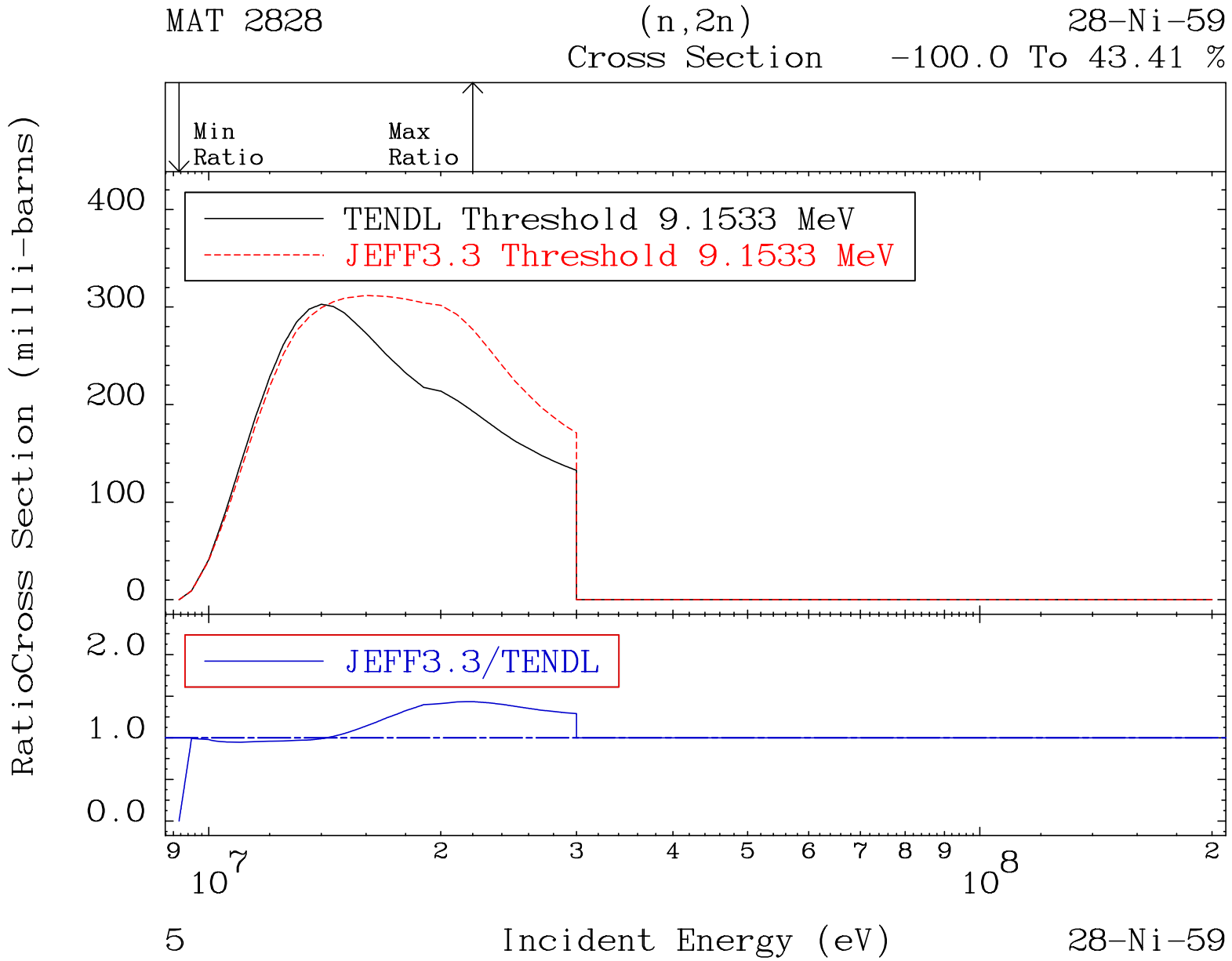
Press Mouse Button to Start

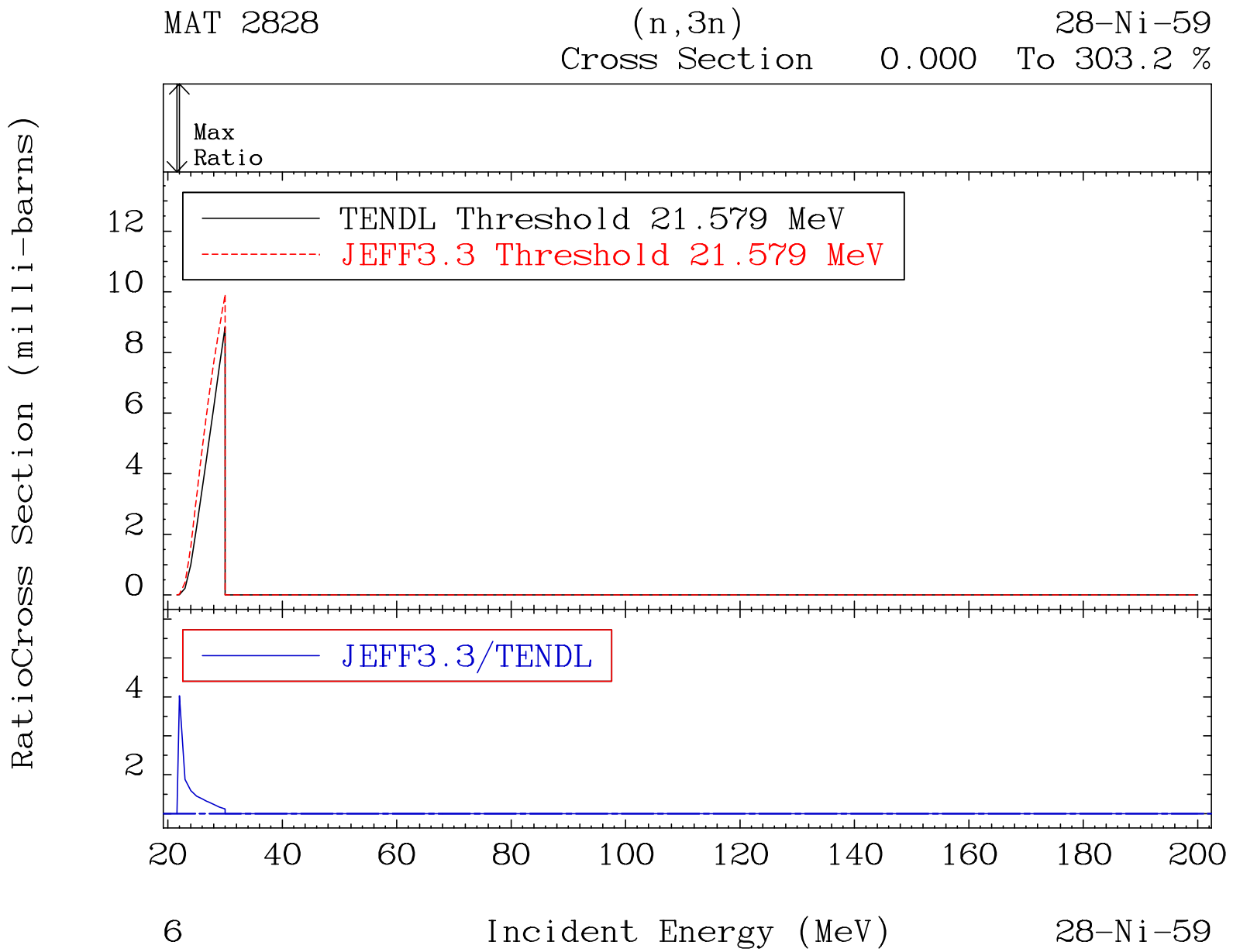

MAT 2828
Total
Cross Section
28-Ni-59
-99.28 To 335.8 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
28-Ni-59

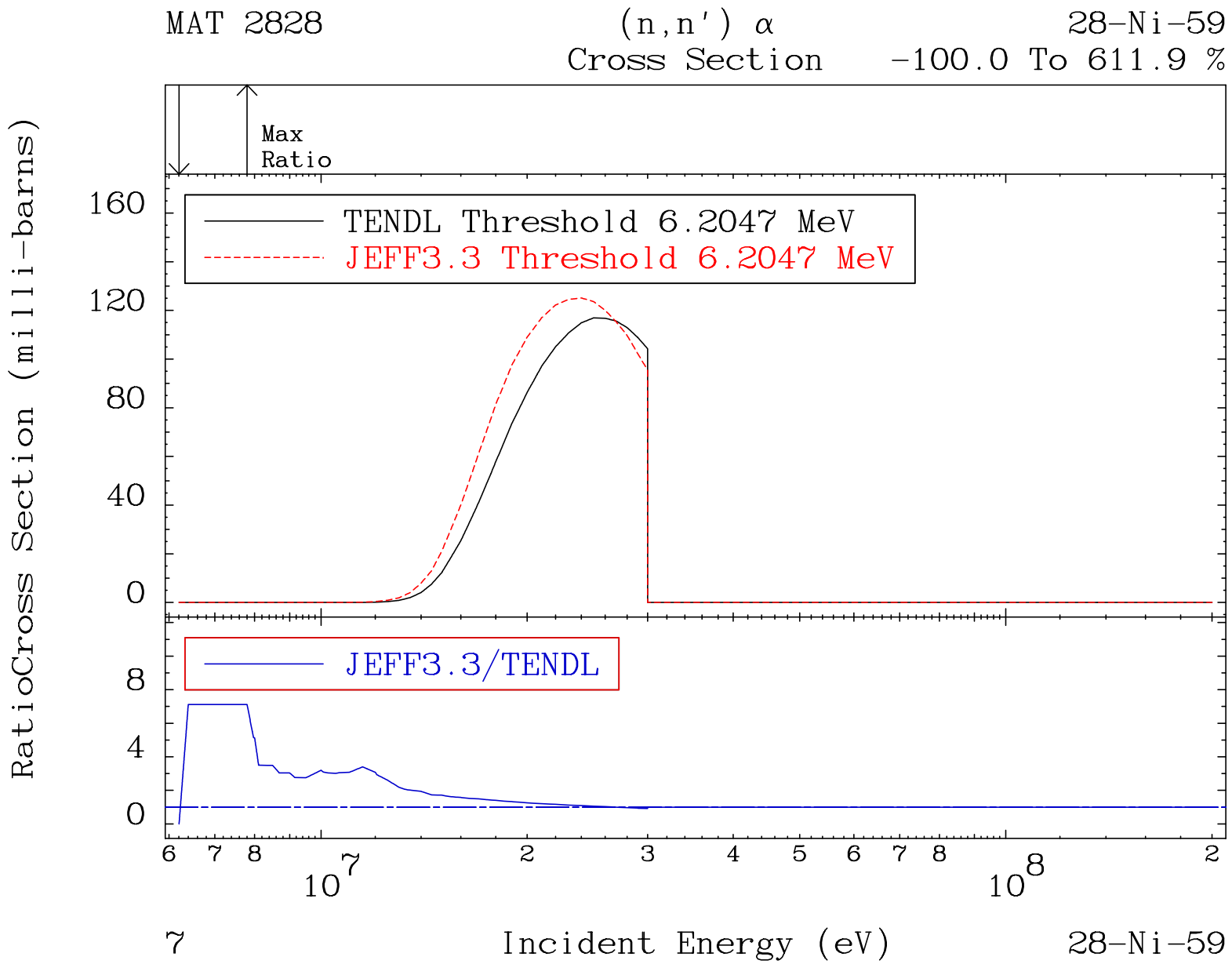

MAT 2828
Elastic
Cross Section
28-Ni-59
-99.29 To 329.6 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
28-Ni-59

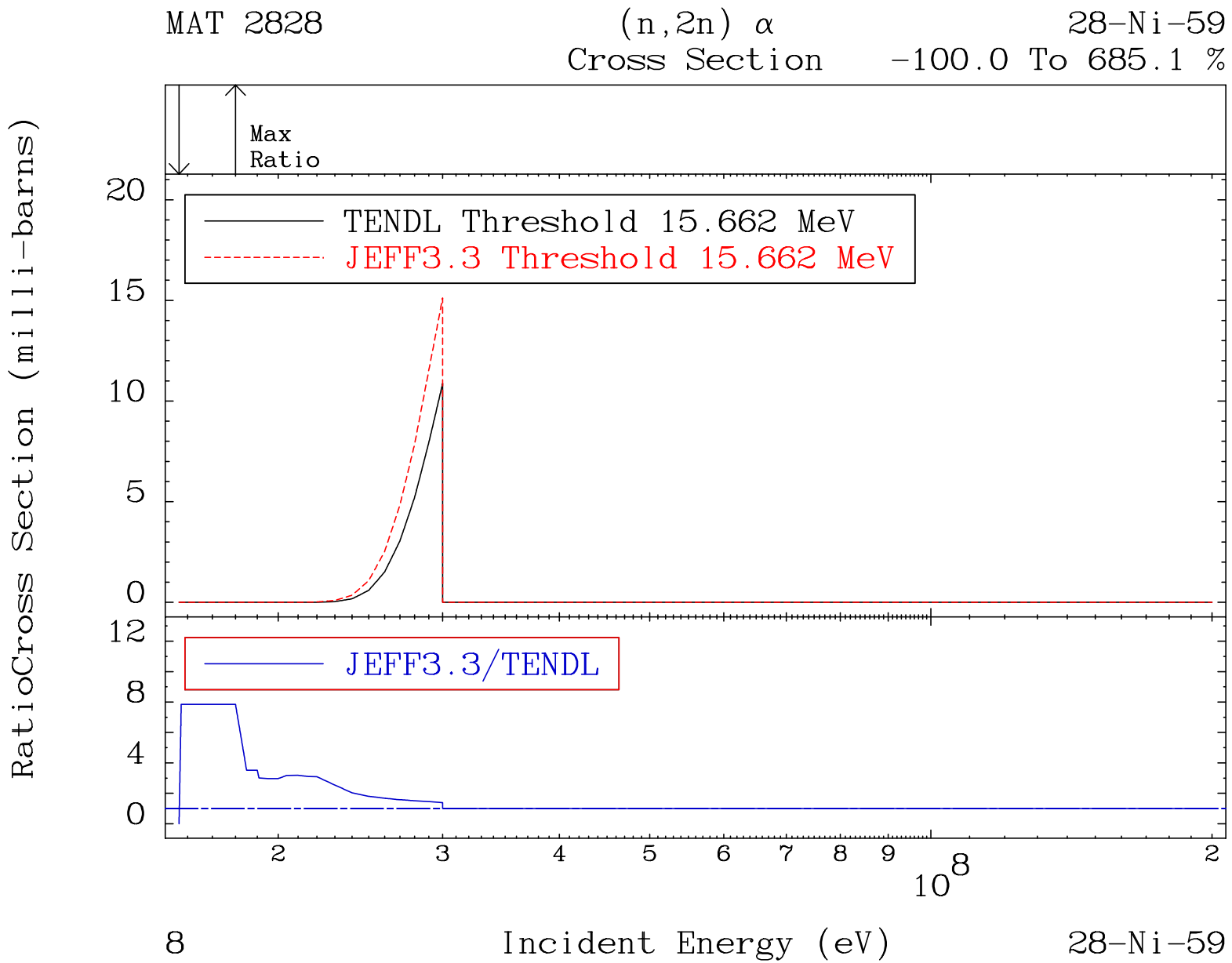

MAT 2828
Inelastic
Cross Section
28-Ni-59
-100.0 To 0.283 %
Min Ratio
Max Ratio
TENDL Threshold 345.23 keV
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
3
28-Ni-59

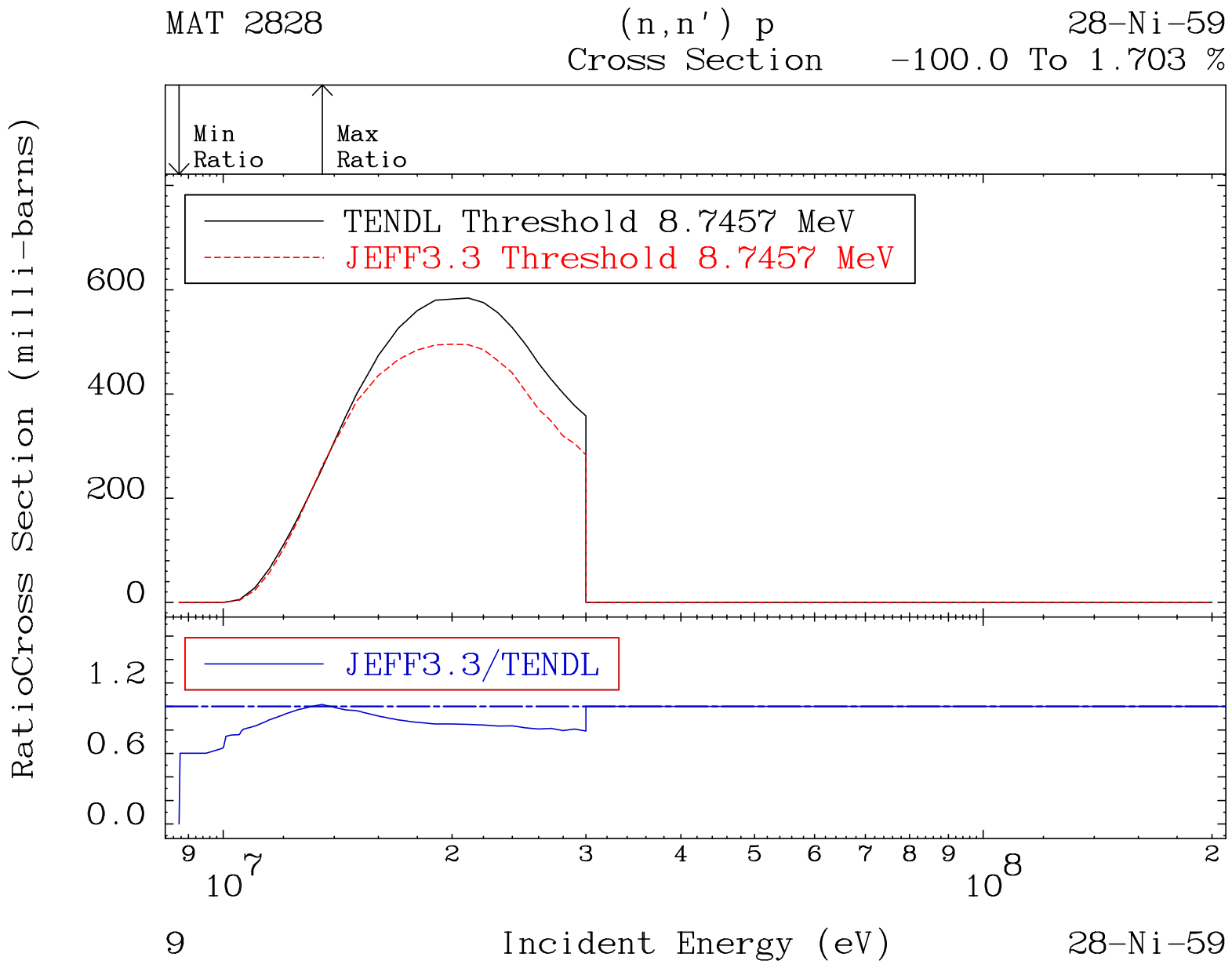

MAT 2828
(n,2n) d
Cross Section
28-Ni-59
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 26.774 MeV
JEFF3.3 Threshold 26.774 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
0
1
2
3
4
5
0
200
400
600
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
4
28-Ni-59

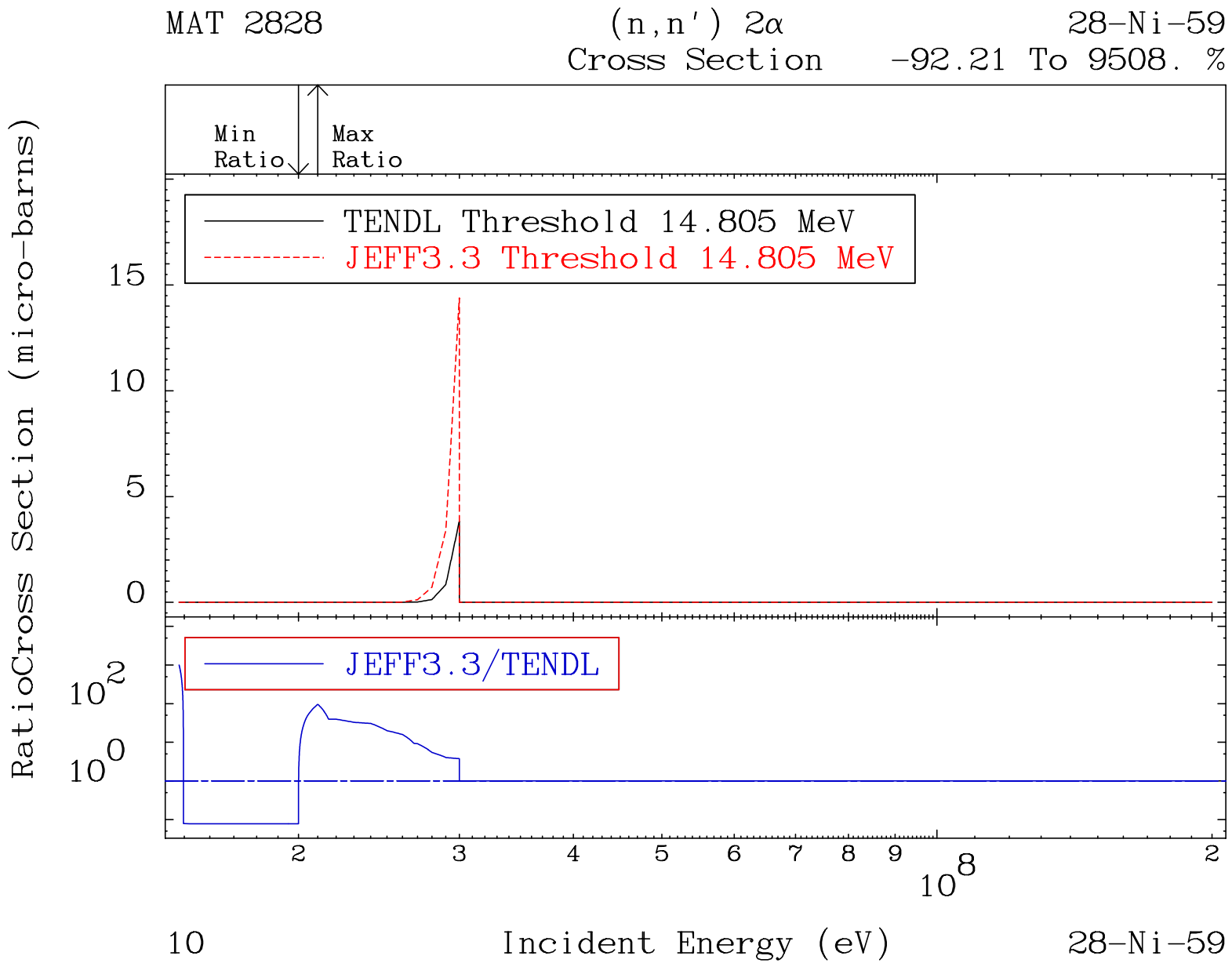

MAT 2828
(n,2n)
Cross Section
28-Ni-59
-100.0 To 43.41 %
Min Ratio
Max Ratio
TENDL Threshold 9.1533 MeV
JEFF3.3 Threshold 9.1533 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
28-Ni-59

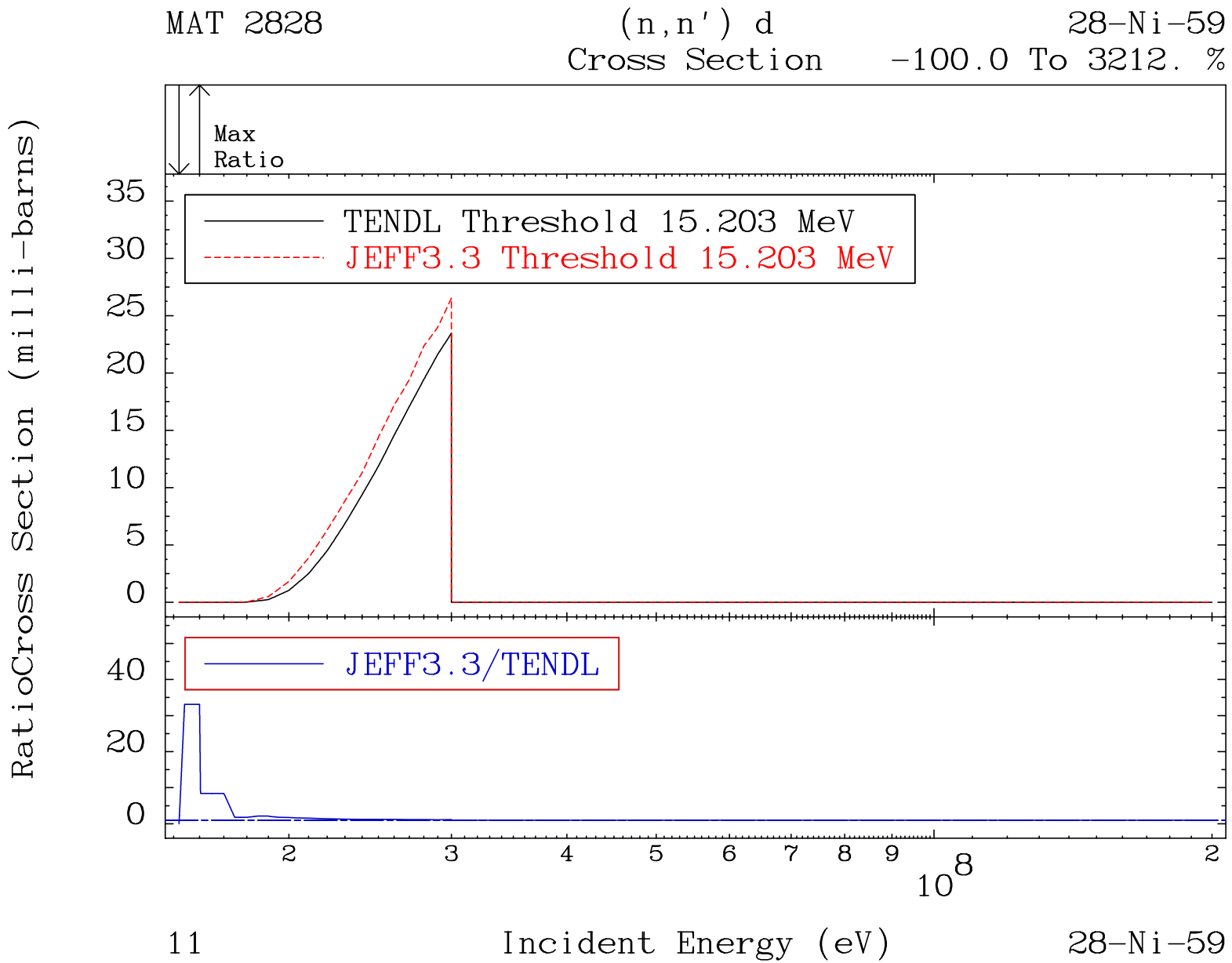

MAT 2828
(n,3n)
Cross Section
28-Ni-59
0.000 To 303.2 %
Max
Ratio
TENDL Threshold 21.579 MeV
JEFF3.3 Threshold 21.579 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
0
2
4
6
8
10
12
20
40
60
80
100
120
140
160
180
200

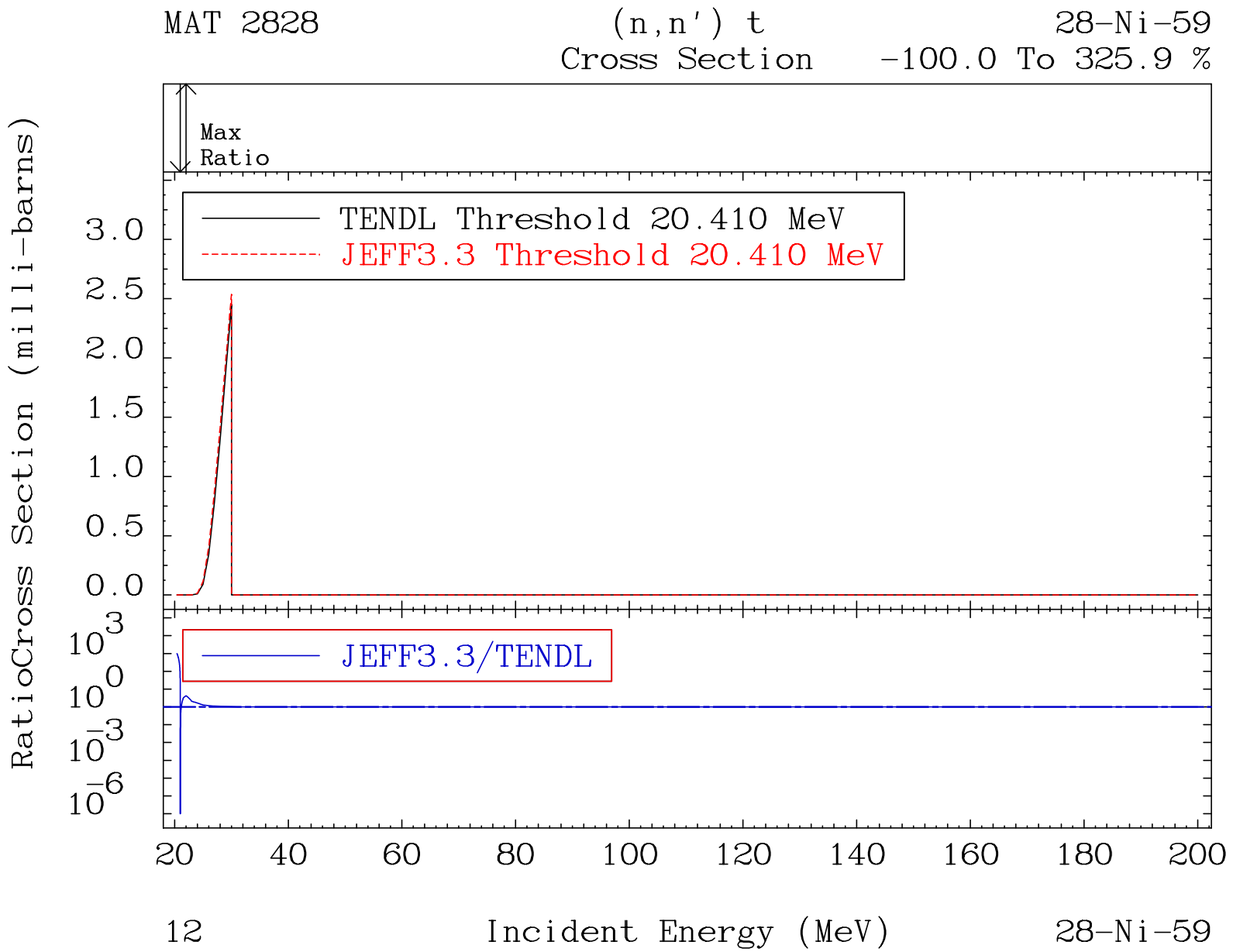

MAT 2828
(n,n') α
Cross Section
28-Ni-59
-100.0 To 611.9 %
Max
Ratio
TENDL Threshold 6.2047 MeV
JEFF3.3 Threshold 6.2047 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
8
4
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
7
Incident Energy (eV)
28-Ni-59

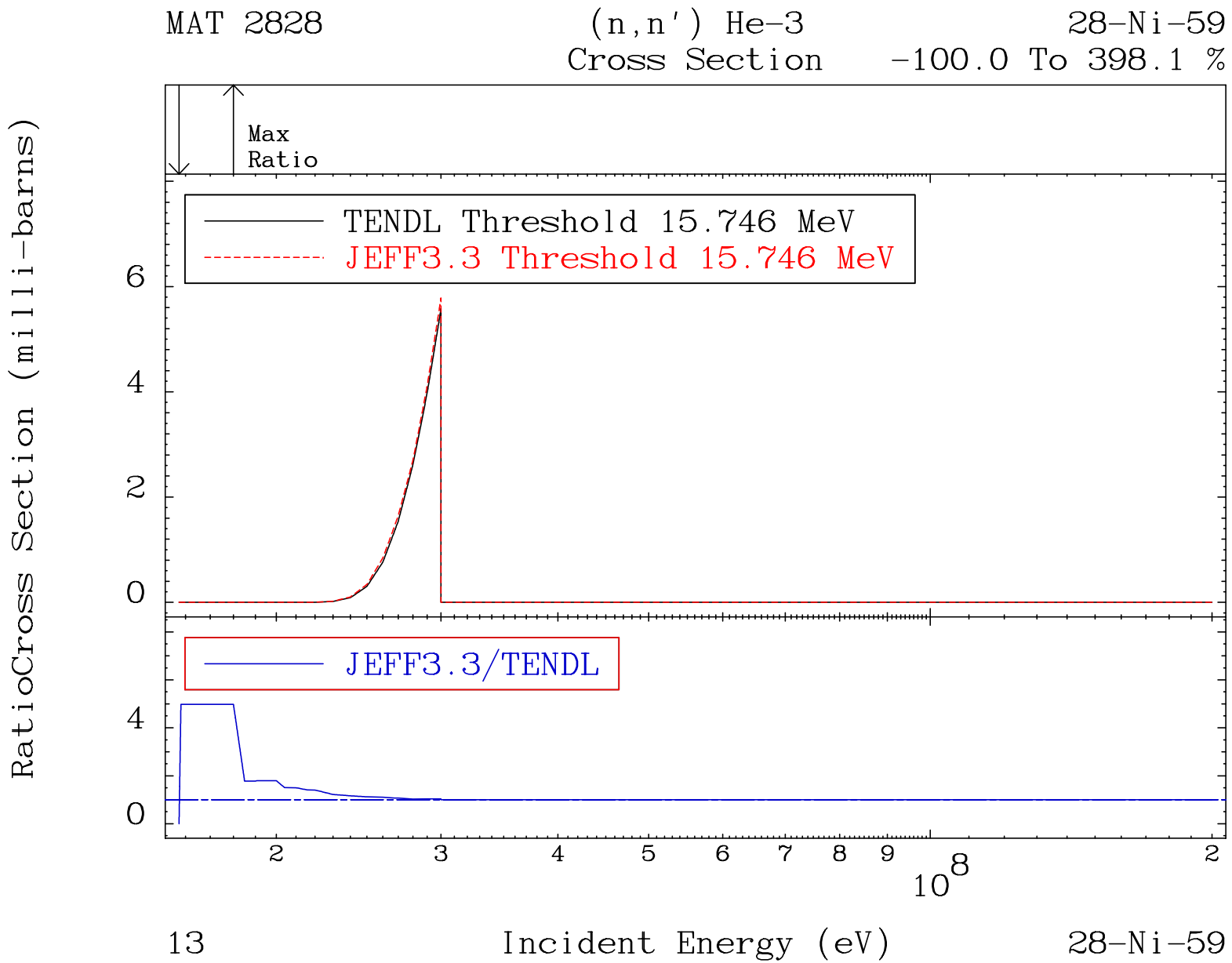

MAT 2828
(n,2n) α
28-Ni-59
Cross Section
-100.0 To 685.1 %
Max
Ratio
TENDL Threshold 15.662 MeV
JEFF3.3 Threshold 15.662 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
12
8
4
0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
28-Ni-59

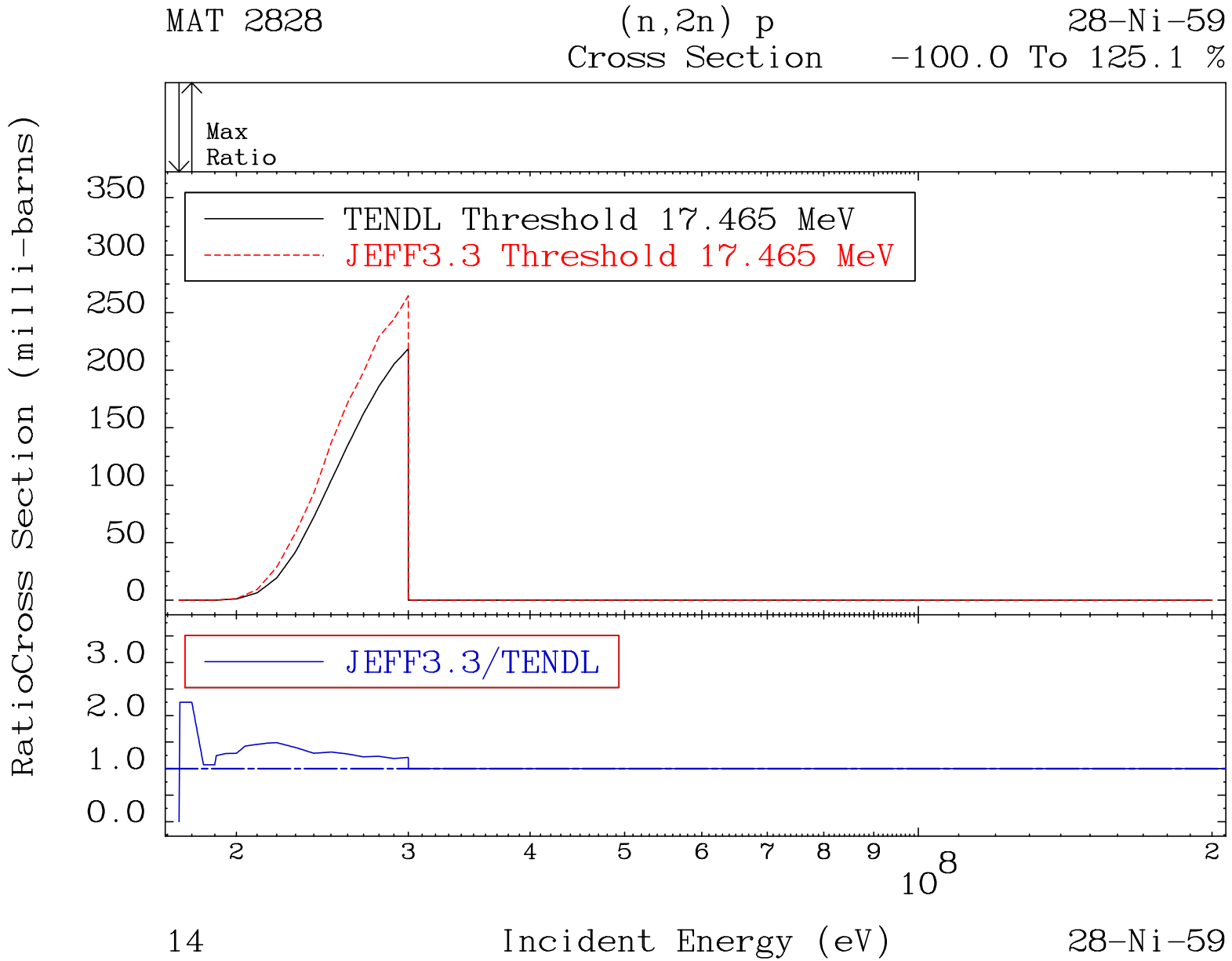

MAT 2828
(n,n') p
Cross Section
28-Ni-59
-100.0 To 1.703 %
Min Ratio
Max Ratio
TENDL Threshold 8.7457 MeV
JEFF3.3 Threshold 8.7457 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
28-Ni-59

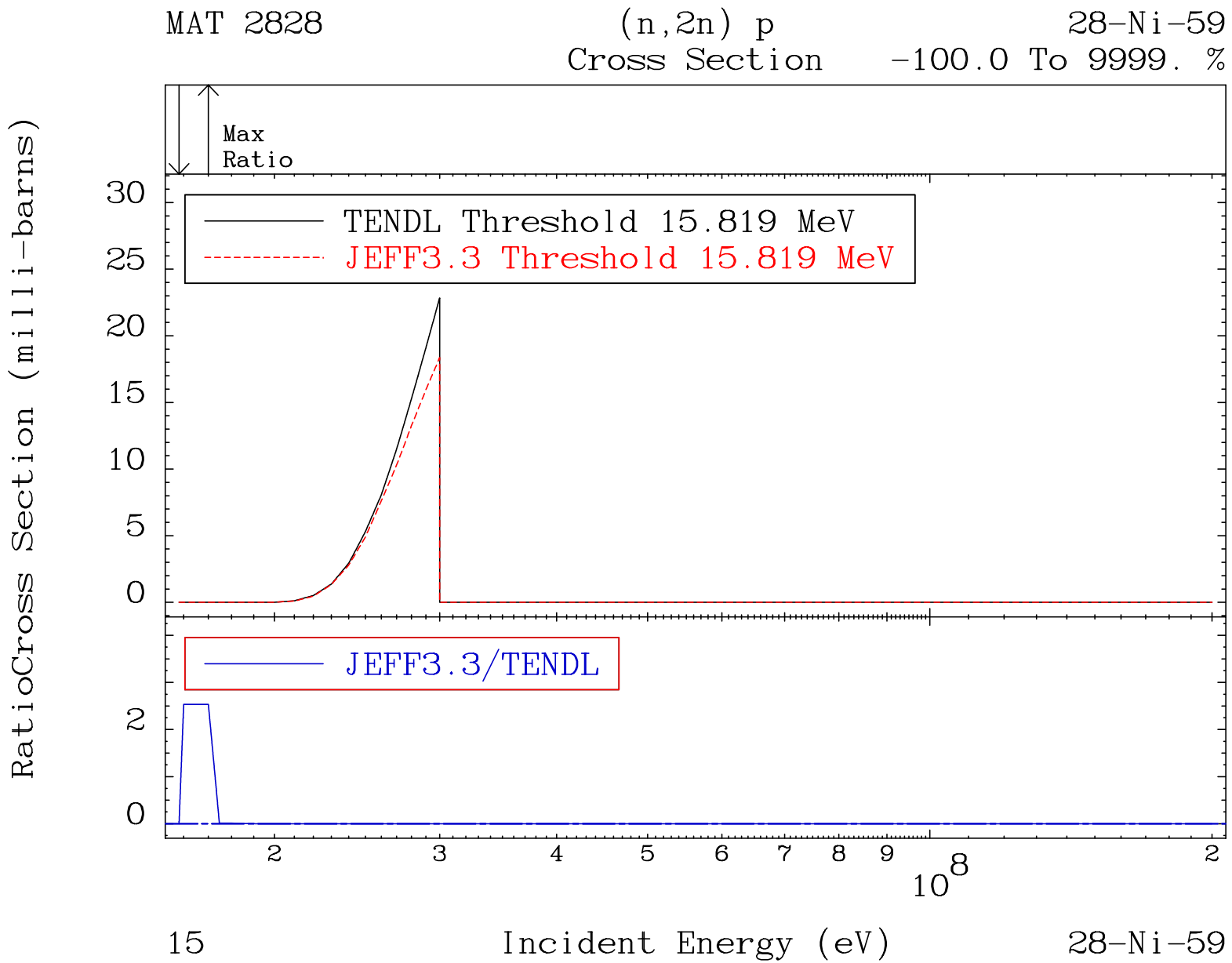

MAT 2828
(n,n') 2α
Cross Section
28-Ni-59
-92.21 To 9508. %
Min Ratio
Max Ratio
TENDL Threshold 14.805 MeV
JEFF3.3 Threshold 14.805 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
15
10
5
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
28-Ni-59

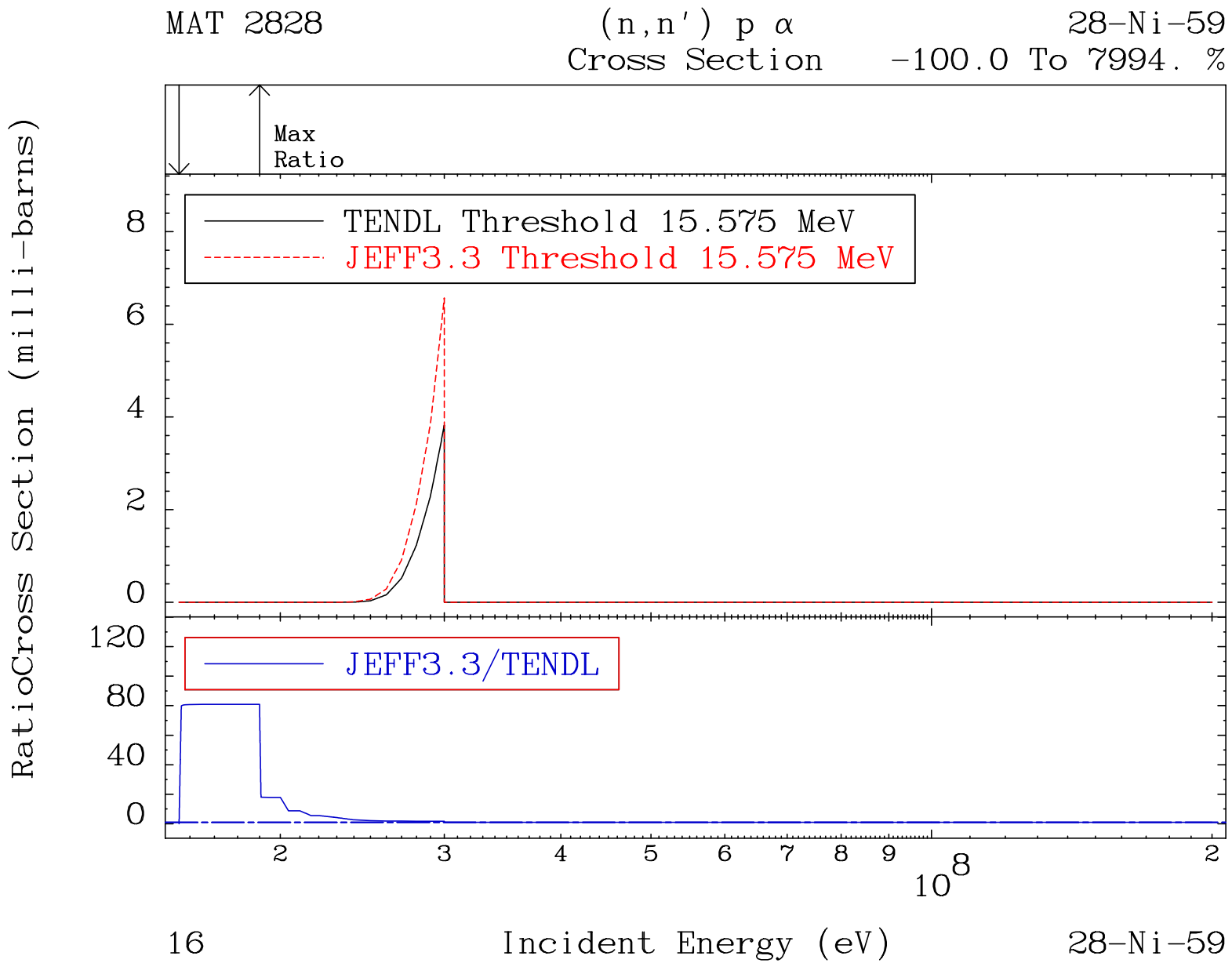

MAT 2828
(n,n') d
Cross Section
28-Ni-59
-100.0 To 3212. %
Max
Ratio
TENDL Threshold 15.203 MeV
JEFF3.3 Threshold 15.203 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
28-Ni-59

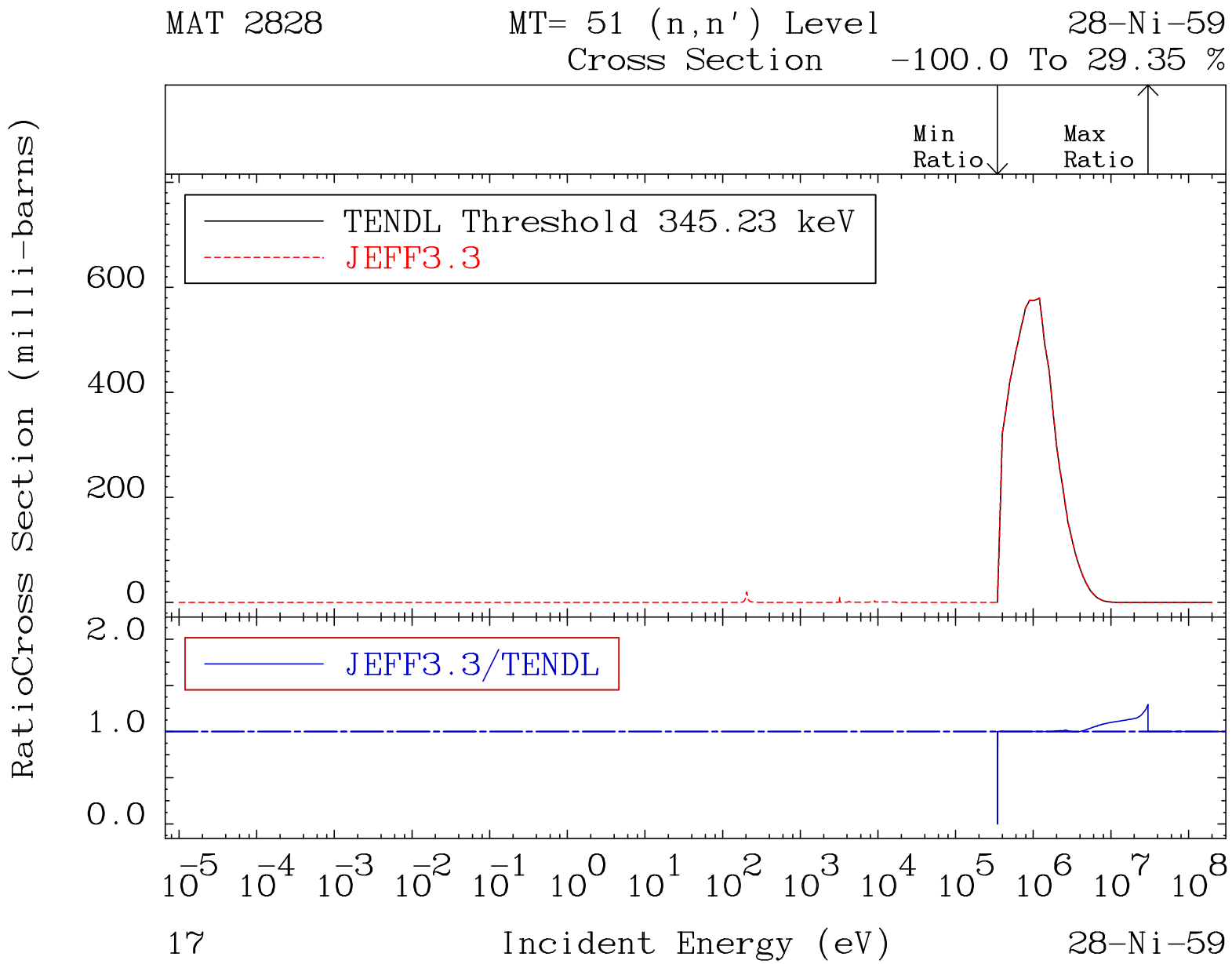

MAT 2828
(n,n') t
Cross Section
28-Ni-59
-100.0 To 325.9 %
Max
Ratio
TENDL Threshold 20.410 MeV
JEFF3.3 Threshold 20.410 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^3
10^0
10^-3
10^-6
20
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
28-Ni-59

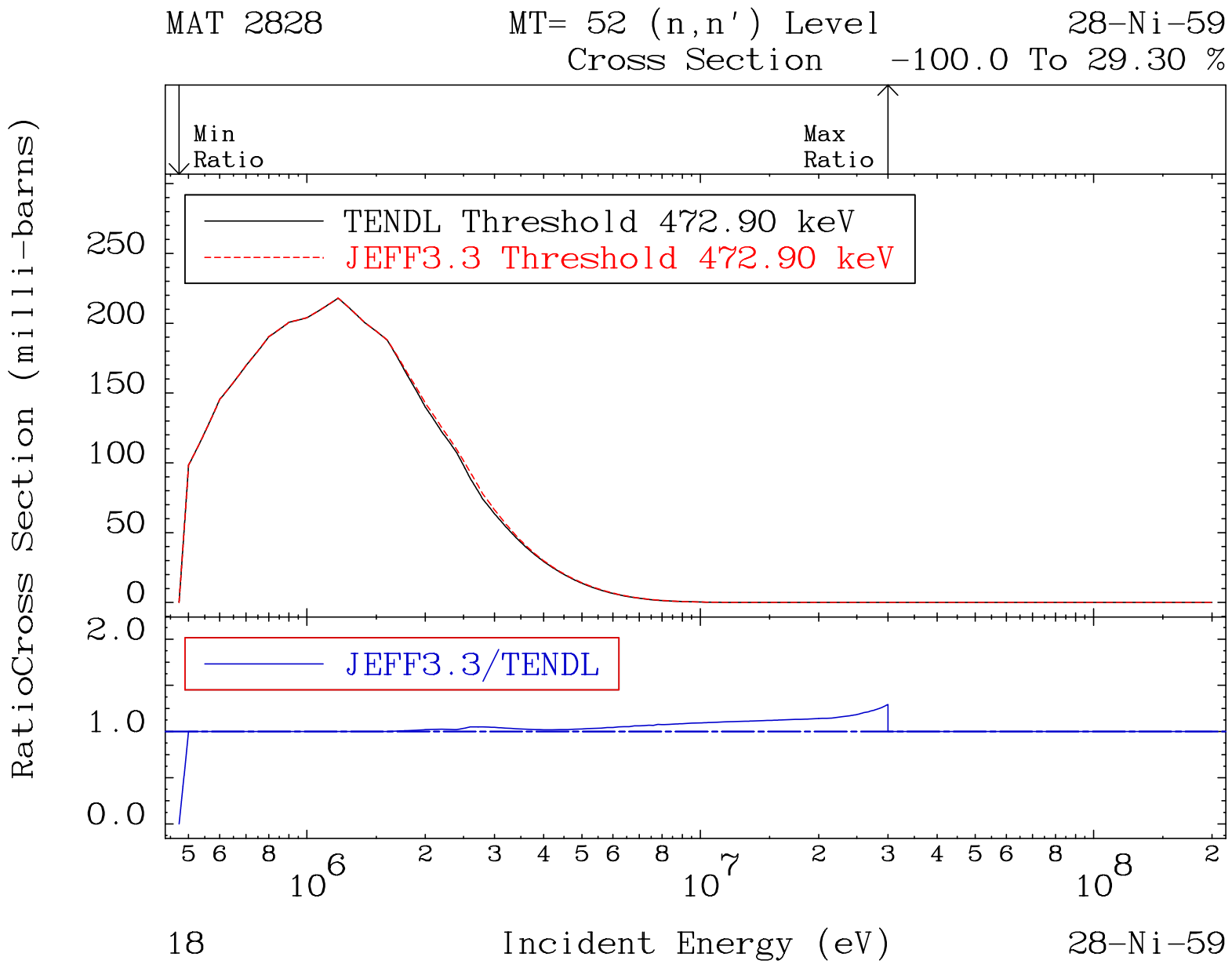

MAT 2828
(n,n') He-3
Cross Section
28-Ni-59
-100.0 To 398.1 %
Max
Ratio
TENDL Threshold 15.746 MeV
JEFF3.3 Threshold 15.746 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
6
4
2
0
4
0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
28-Ni-59

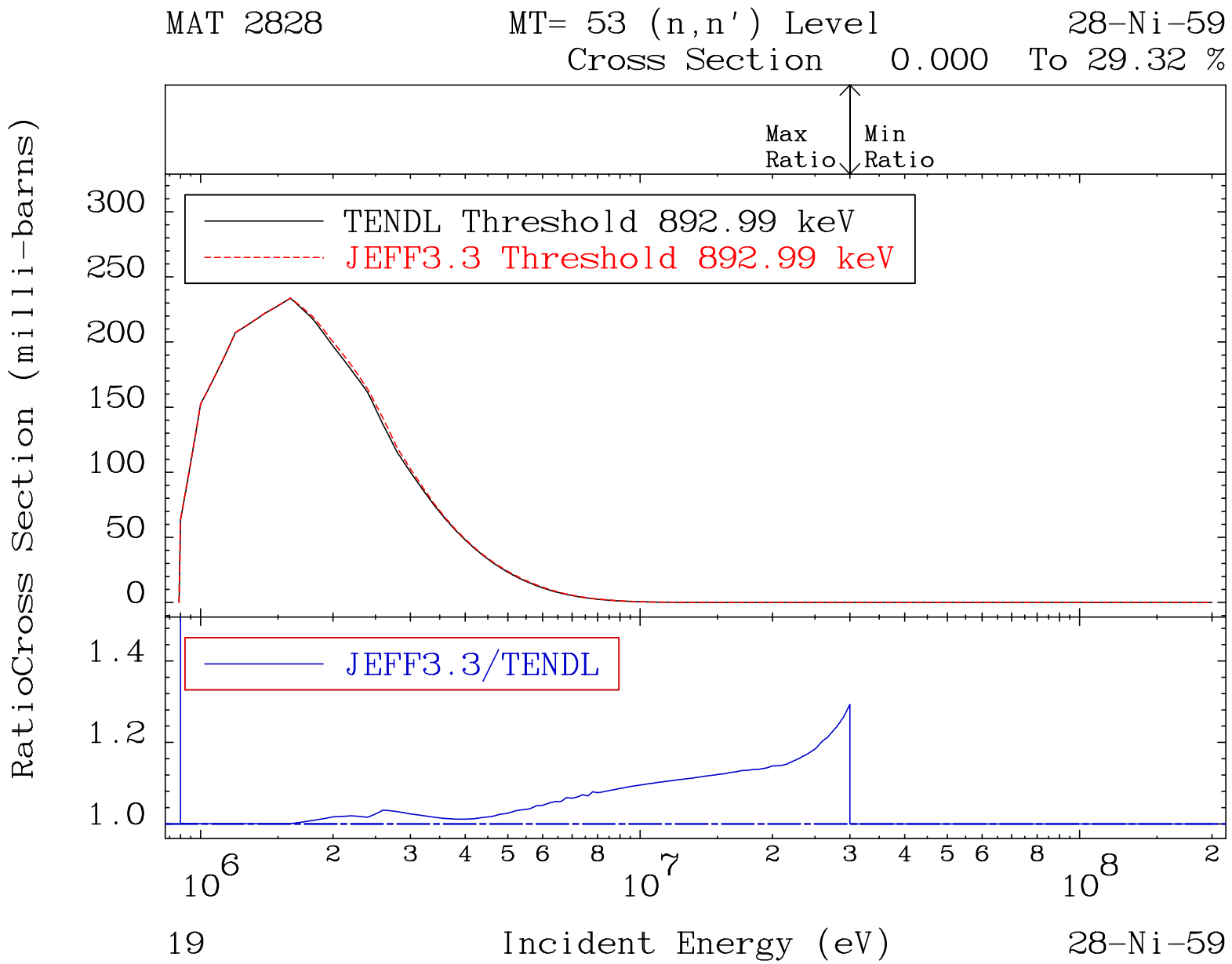

MAT 2828
(n,2n) p
Cross Section
28-Ni-59
-100.0 To 125.1 %
Max
Ratio
TENDL Threshold 17.465 MeV
JEFF3.3 Threshold 17.465 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
28-Ni-59

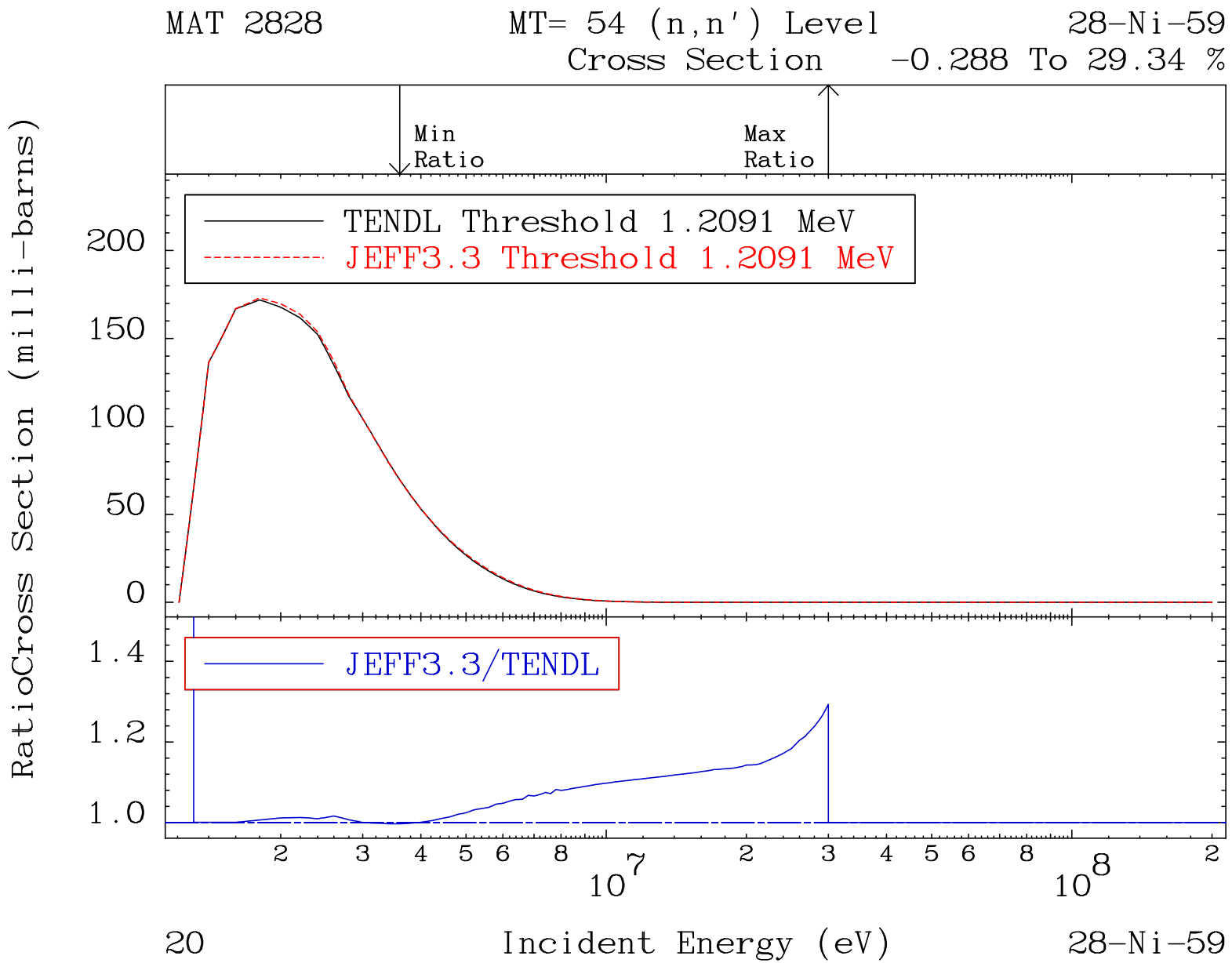

MAT 2828
(n,2n) p
Cross Section
28-Ni-59
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 15.819 MeV
JEFF3.3 Threshold 15.819 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2
0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
28-Ni-59

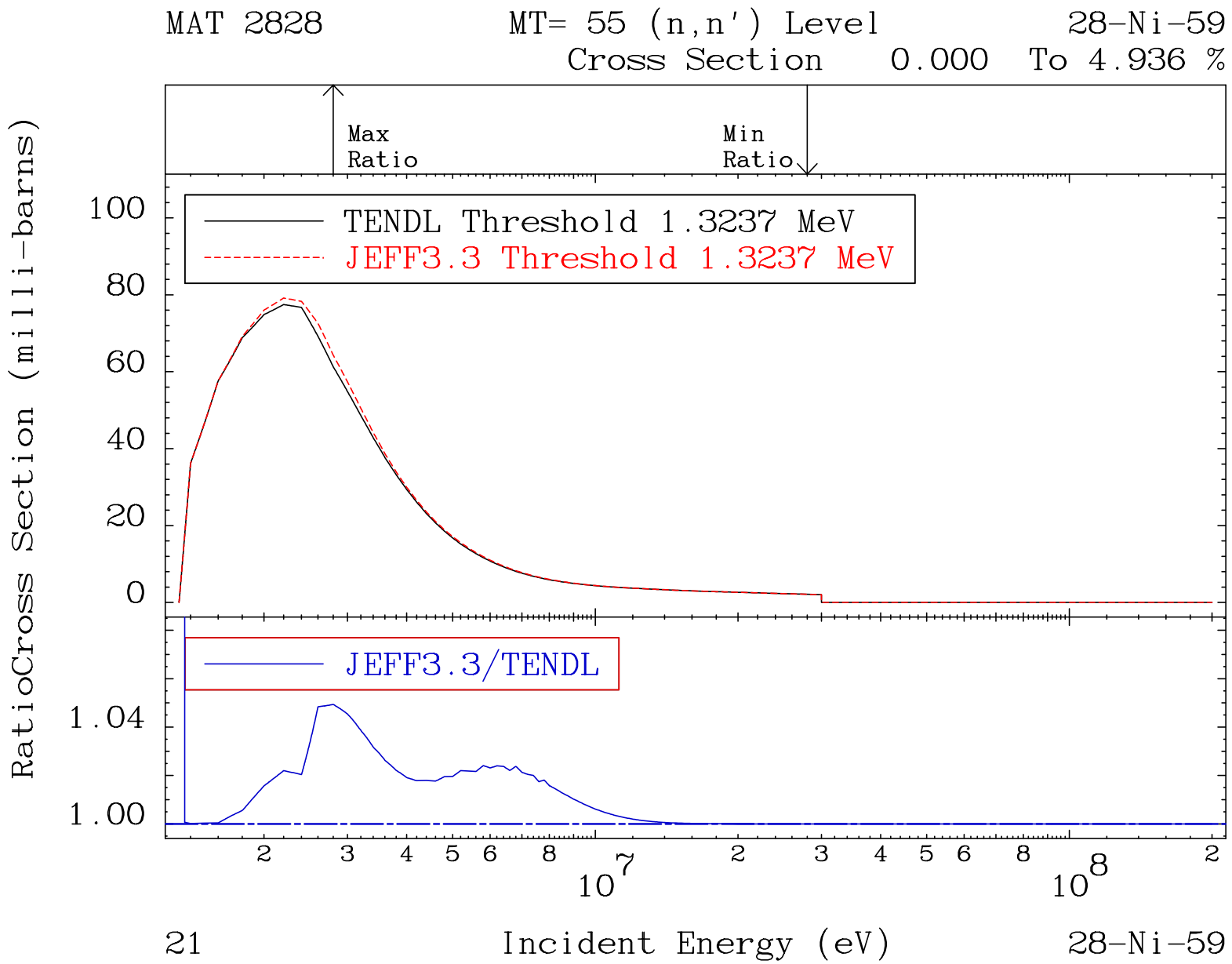

MAT 2828
(n,n') p α
28-Ni-59
Cross Section
-100.0 To 7994. %
Max
Ratio
TENDL Threshold 15.575 MeV
JEFF3.3 Threshold 15.575 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
120
80
40
0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
28-Ni-59

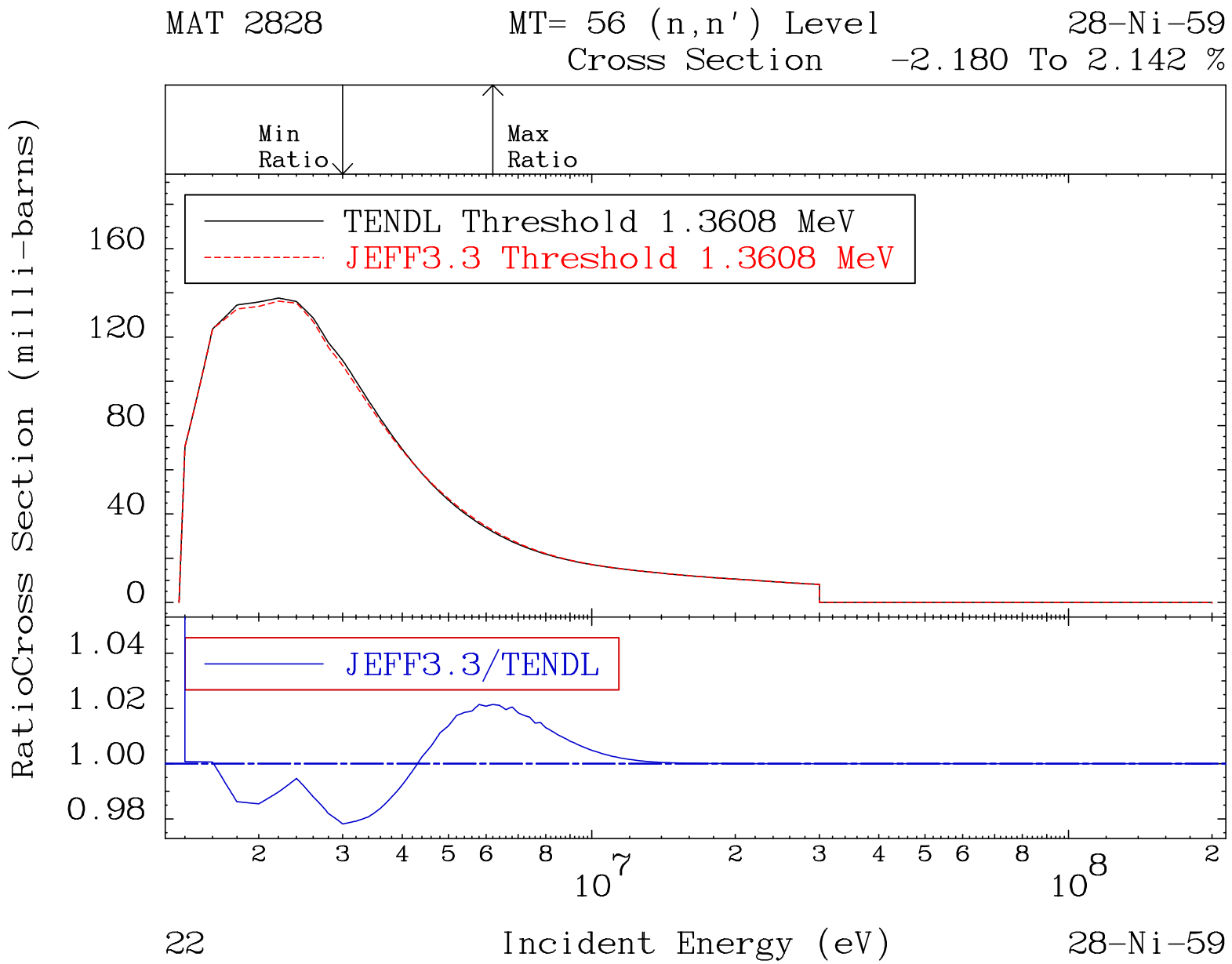

MAT 2828
MT= 51 (n,n') Level
Cross Section
28-Ni-59
-100.0 To 29.35 %
Min Ratio
Max Ratio
TENDL Threshold 345.23 keV
JEFF3.3
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
400
200
0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
17
Incident Energy (eV)
28-Ni-59

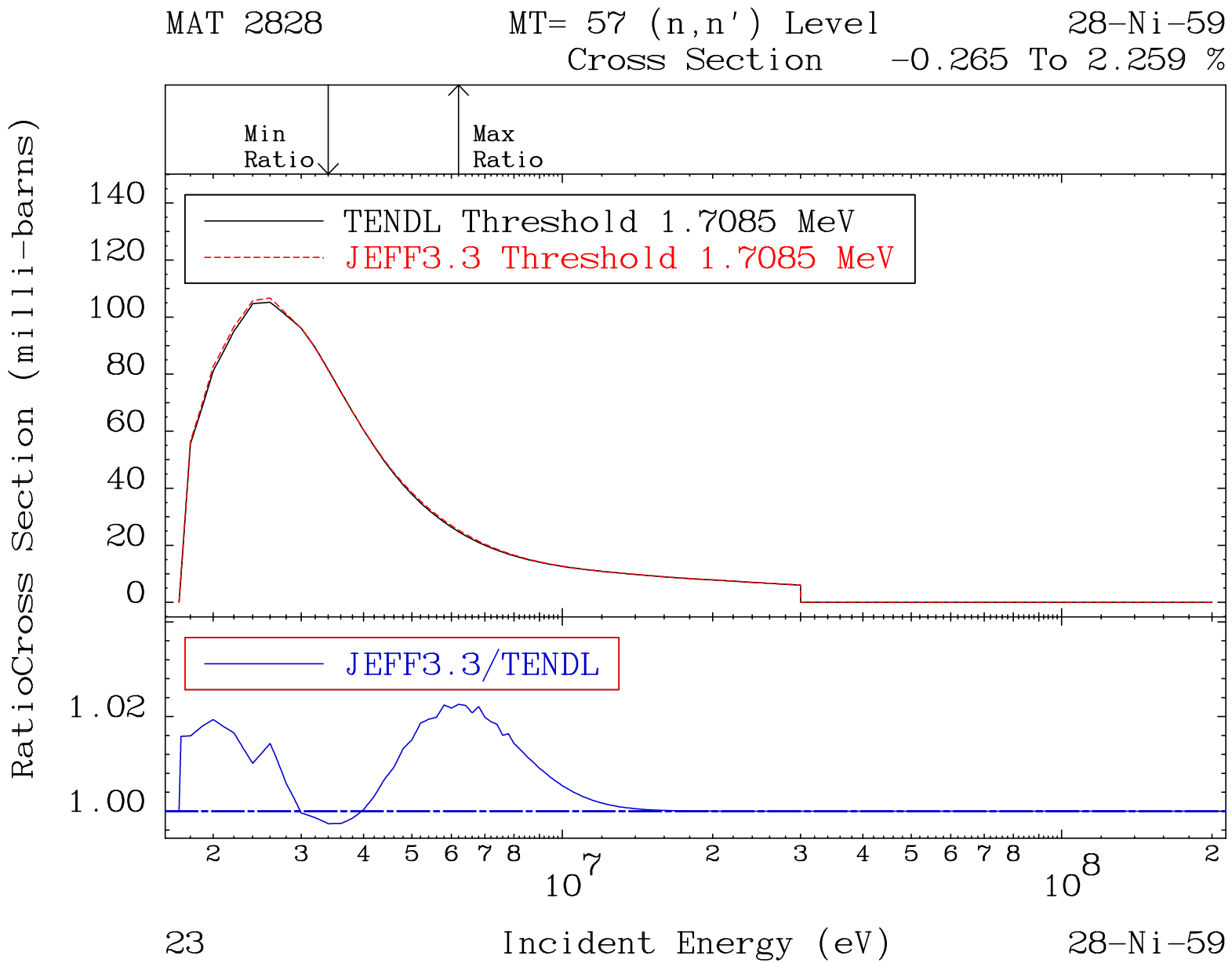

MAT 2828
MT= 52 (n,n') Level
28-Ni-59
Cross Section -100.0 To 29.30 %
Min Ratio
Max Ratio
TENDL Threshold 472.90 keV
JEFF3.3 Threshold 472.90 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
28-Ni-59

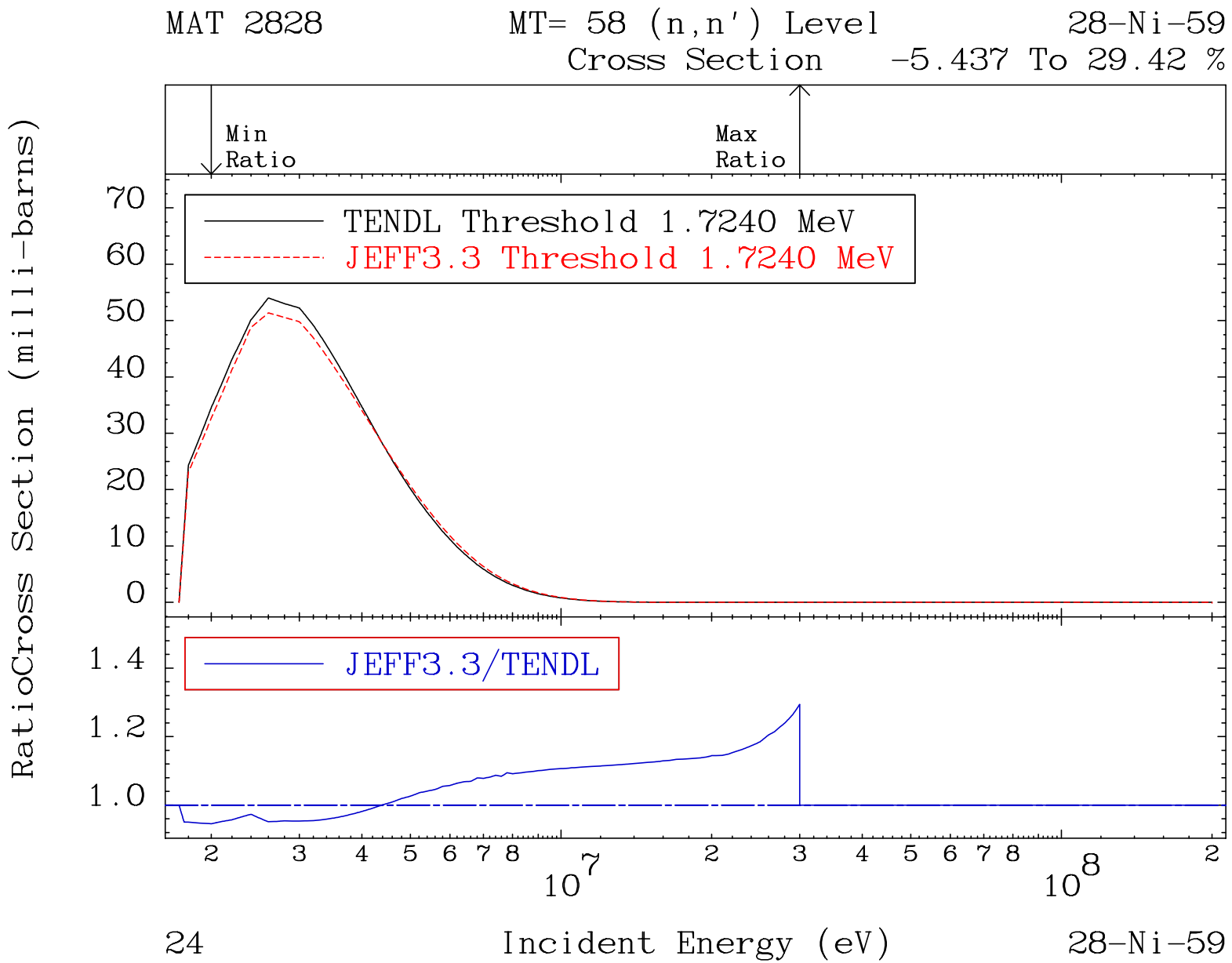

MAT 2828
MT= 53 (n,n') Level
28-Ni-59
Cross Section 0.000 To 29.32 %
Max Ratio
Min Ratio
TENDL Threshold 892.99 keV
JEFF3.3 Threshold 892.99 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.4
1.2
1.0
10^6
10^7
10^8
19
Incident Energy (eV)
28-Ni-59

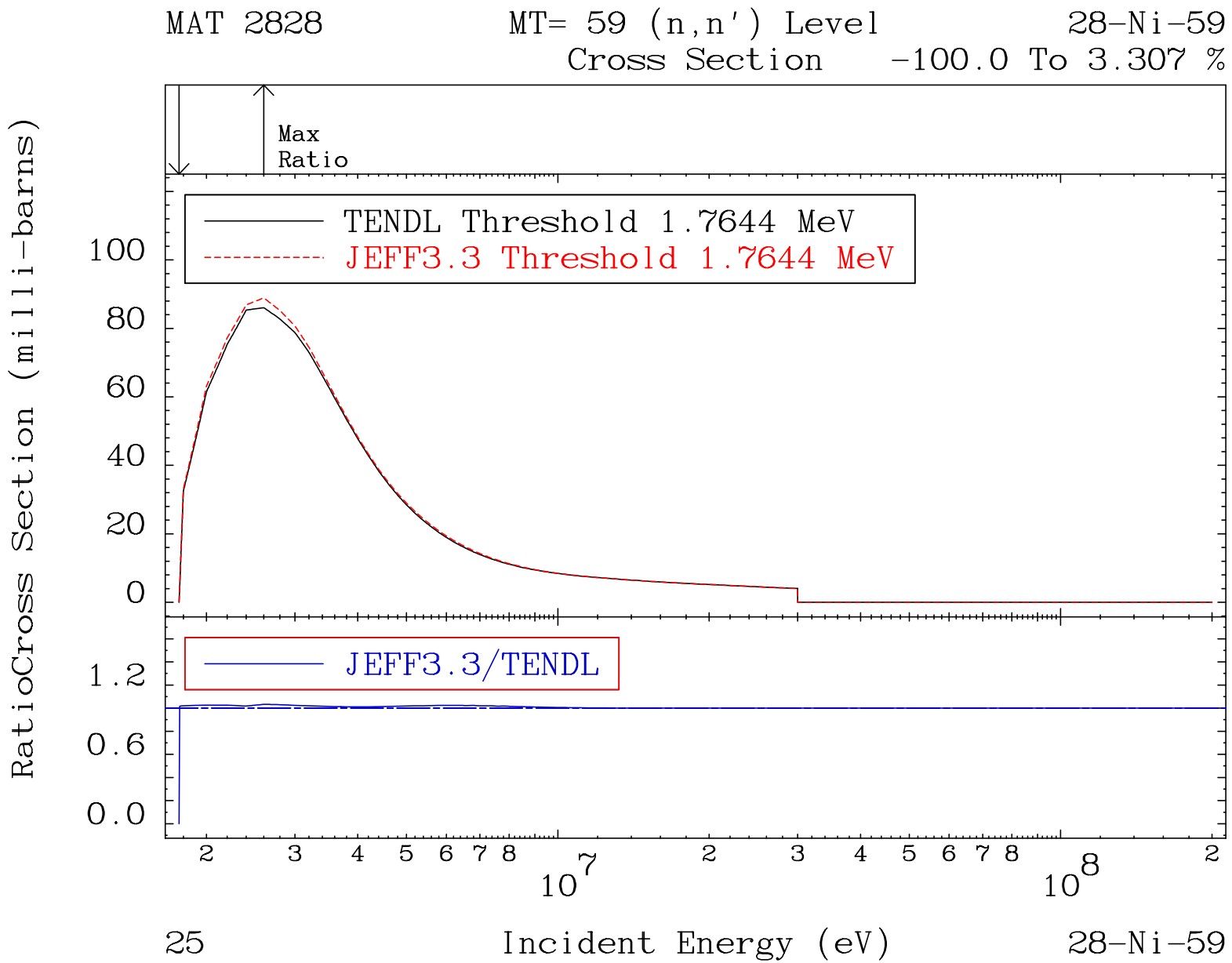

MAT 2828
MT= 54 (n,n') Level
28-Ni-59
Cross Section -0.288 To 29.34 %
Min Ratio
Max Ratio
TENDL Threshold 1.2091 MeV
JEFF3.3 Threshold 1.2091 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.4
1.2
1.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
28-Ni-59

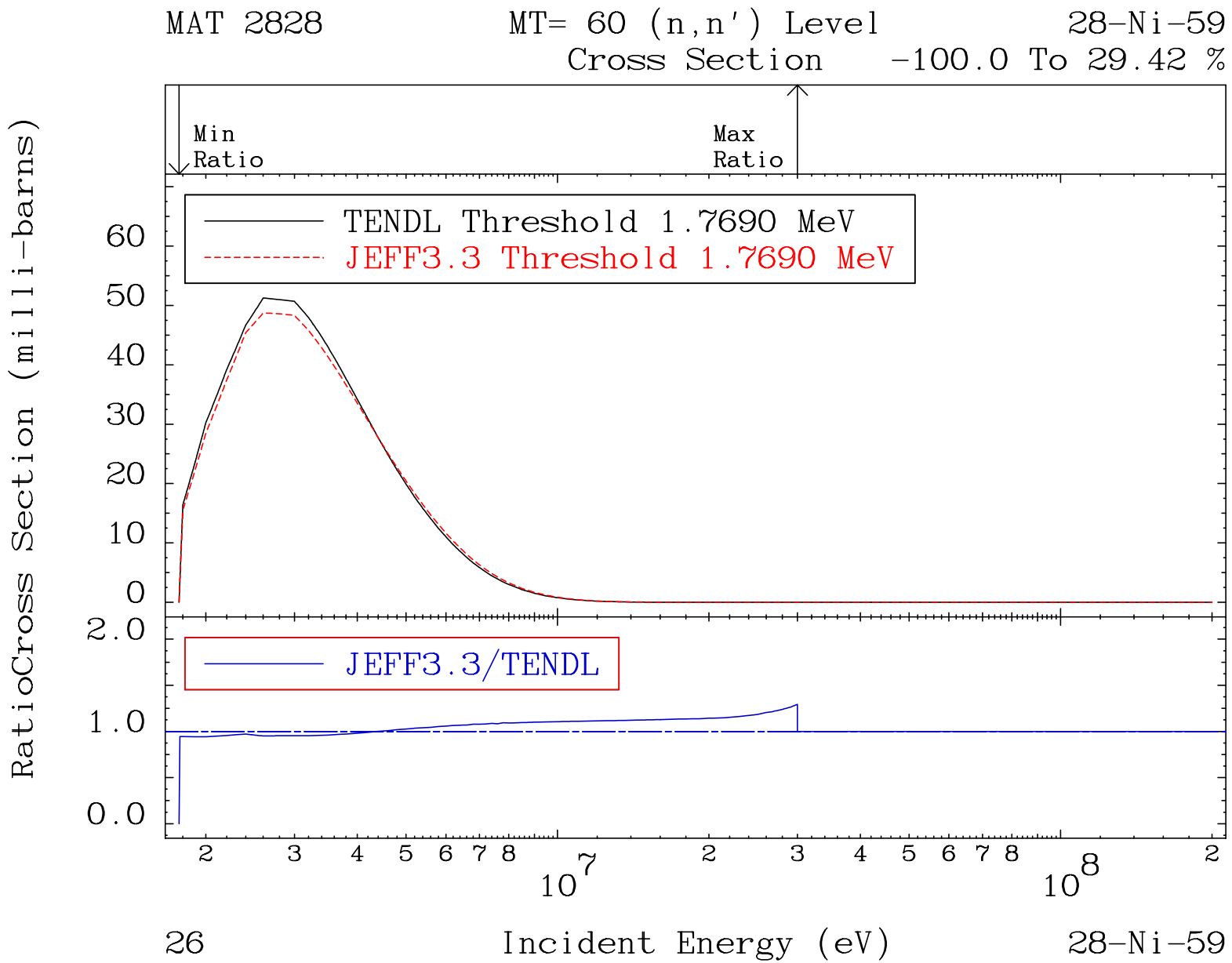

MAT 2828
MT= 55 (n,n') Level
28-Ni-59
Cross Section 0.000 To 4.936 %
Max Ratio
Min Ratio
TENDL Threshold 1.3237 MeV
JEFF3.3 Threshold 1.3237 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.04
1.00
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
28-Ni-59

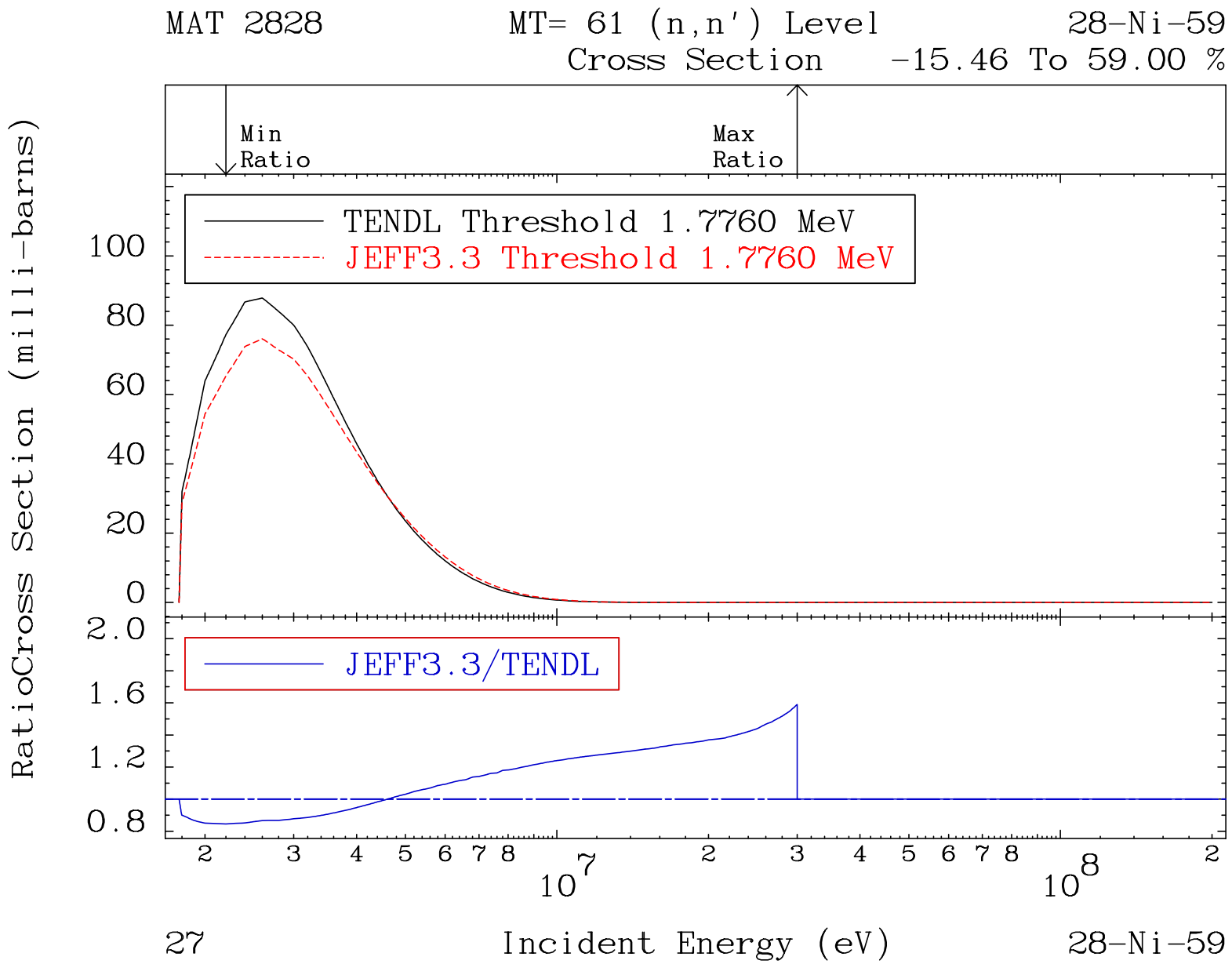

MAT 2828
MT= 56 (n,n') Level
28-Ni-59
Cross Section
-2.180 To 2.142 %
Min Ratio
Max Ratio
TENDL Threshold 1.3608 MeV
JEFF3.3 Threshold 1.3608 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.04
1.02
1.00
0.98
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
28-Ni-59

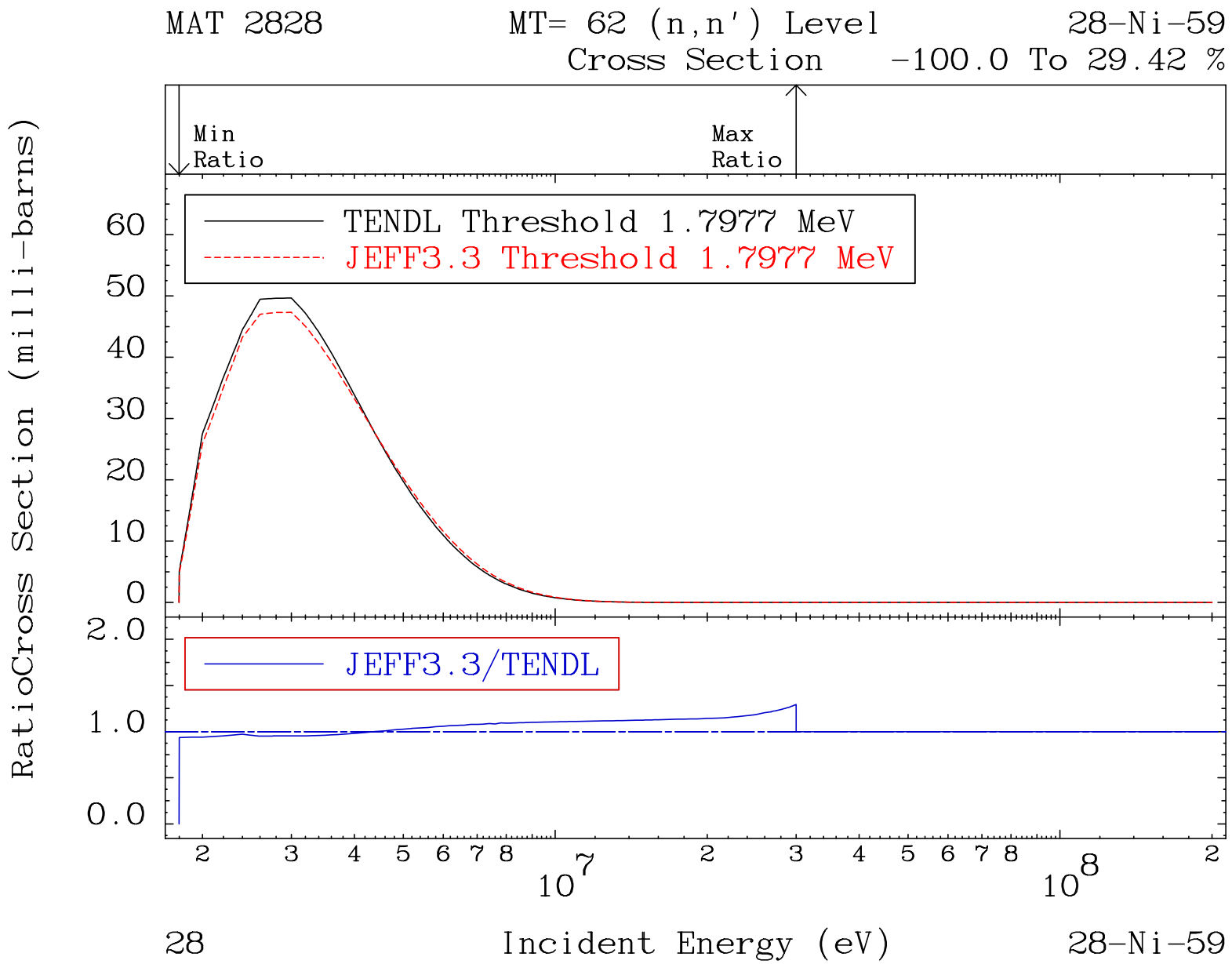

MAT 2828
MT= 57 (n,n') Level
28-Ni-59
Cross Section -0.265 To 2.259 %
Min Ratio
Max Ratio
TENDL Threshold 1.7085 MeV
JEFF3.3 Threshold 1.7085 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.02
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
28-Ni-59

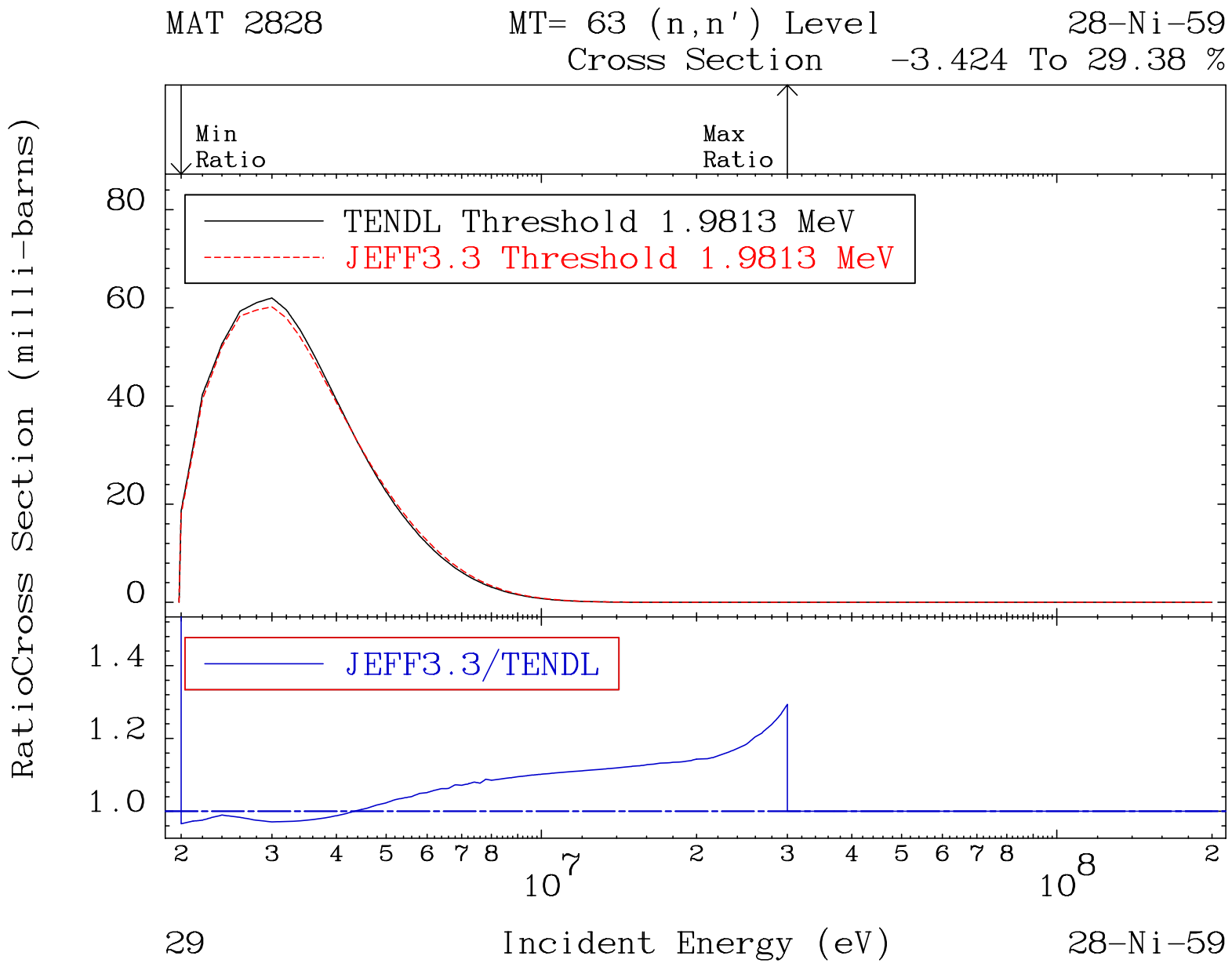

MAT 2828
MT= 58 (n,n') Level
28-Ni-59
Cross Section -5.437 To 29.42 %
Min Ratio
Max Ratio
TENDL Threshold 1.7240 MeV
JEFF3.3 Threshold 1.7240 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.4
1.2
1.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
28-Ni-59

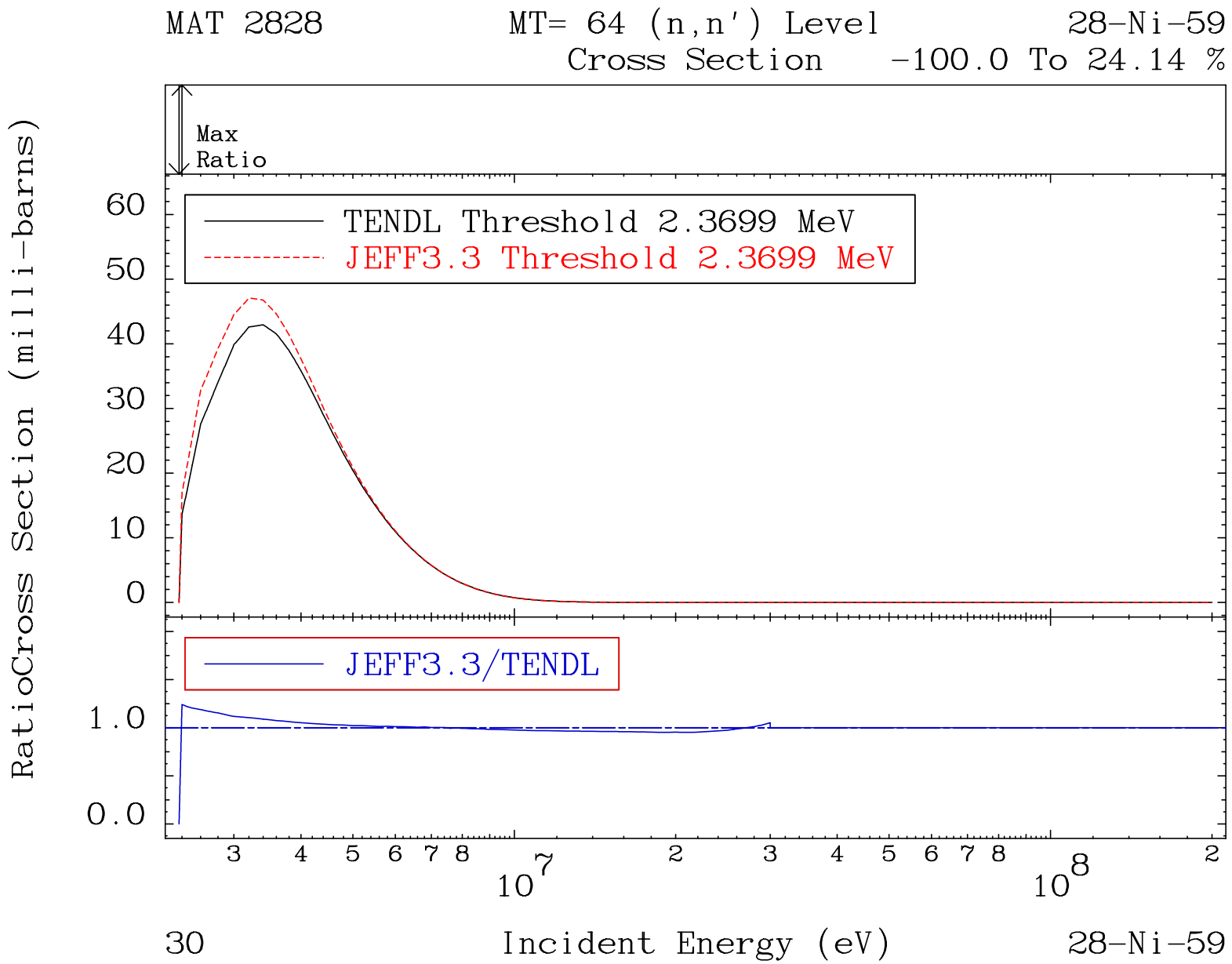

MAT 2828
MT= 59 (n,n') Level
Cross Section
28-Ni-59
-100.0 To 3.307 %
Max
Ratio
TENDL Threshold 1.7644 MeV
JEFF3.3 Threshold 1.7644 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
28-Ni-59

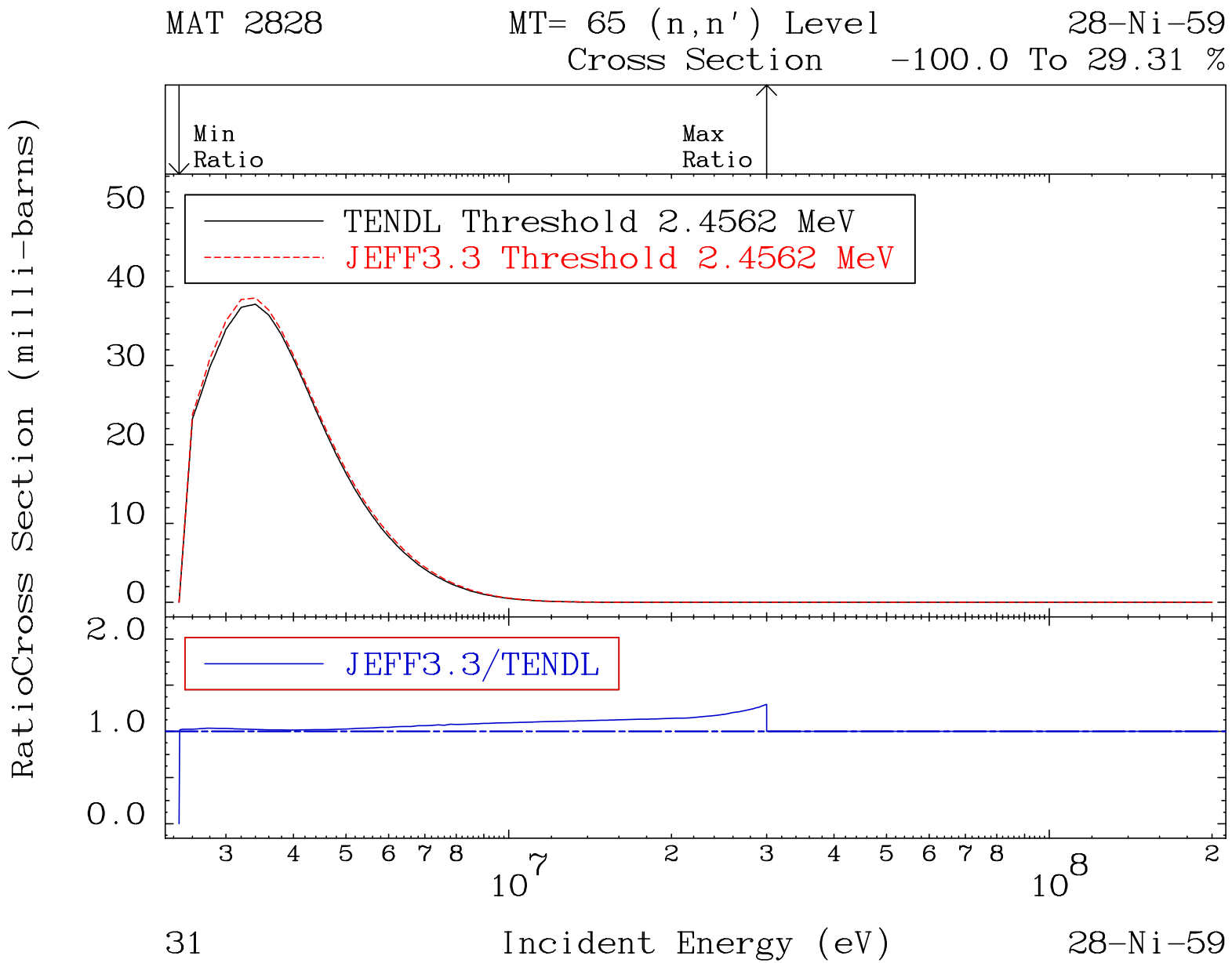

MAT 2828
MT= 60 (n,n') Level
28-Ni-59
Cross Section -100.0 To 29.42 %
Min Ratio
Max Ratio
TENDL Threshold 1.7690 MeV
JEFF3.3 Threshold 1.7690 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
28-Ni-59

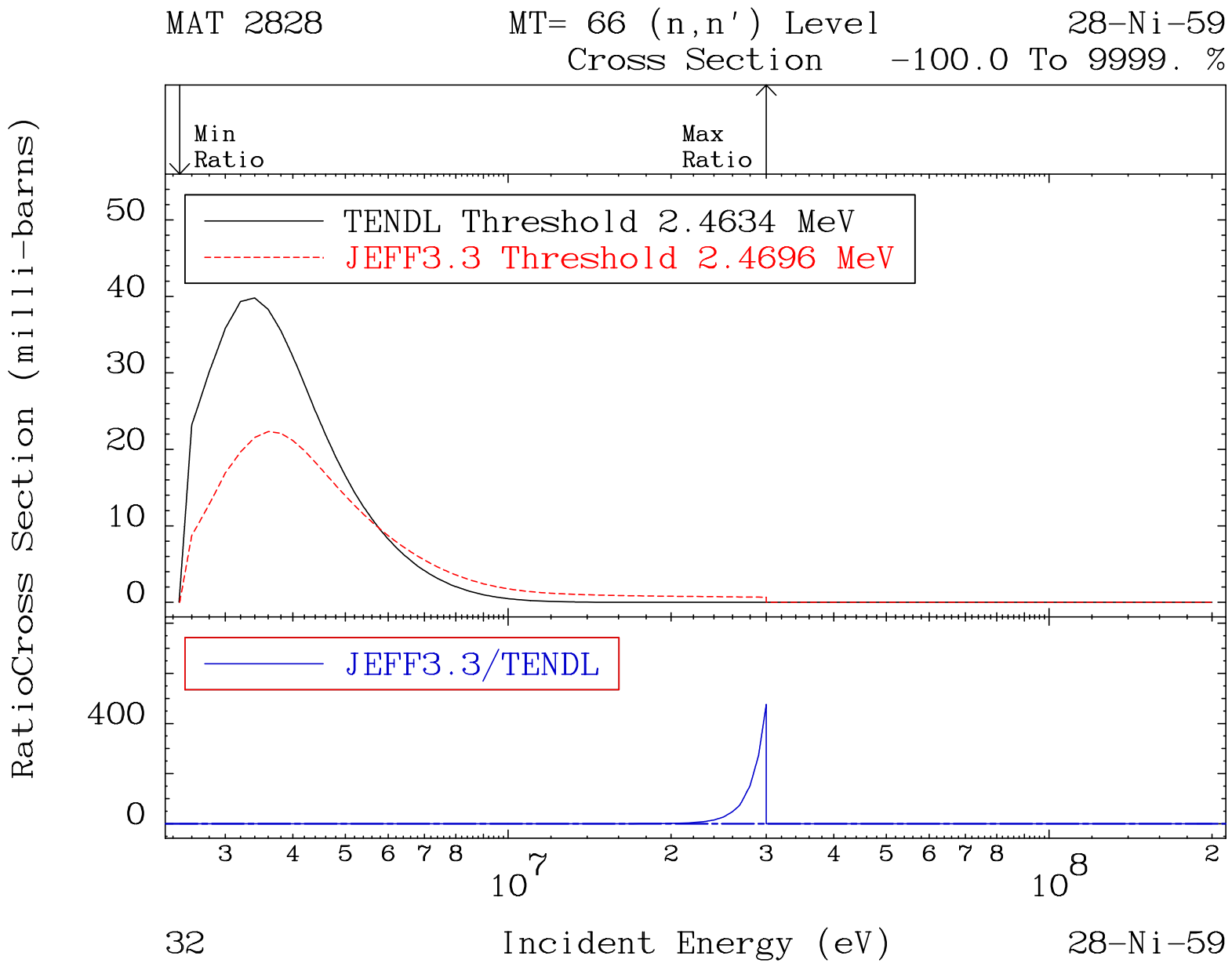

MAT 2828
MT= 61 (n,n') Level
28-Ni-59
Cross Section -15.46 To 59.00 %
Min Ratio
Max Ratio
TENDL Threshold 1.7760 MeV
JEFF3.3 Threshold 1.7760 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.6
1.2
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
28-Ni-59

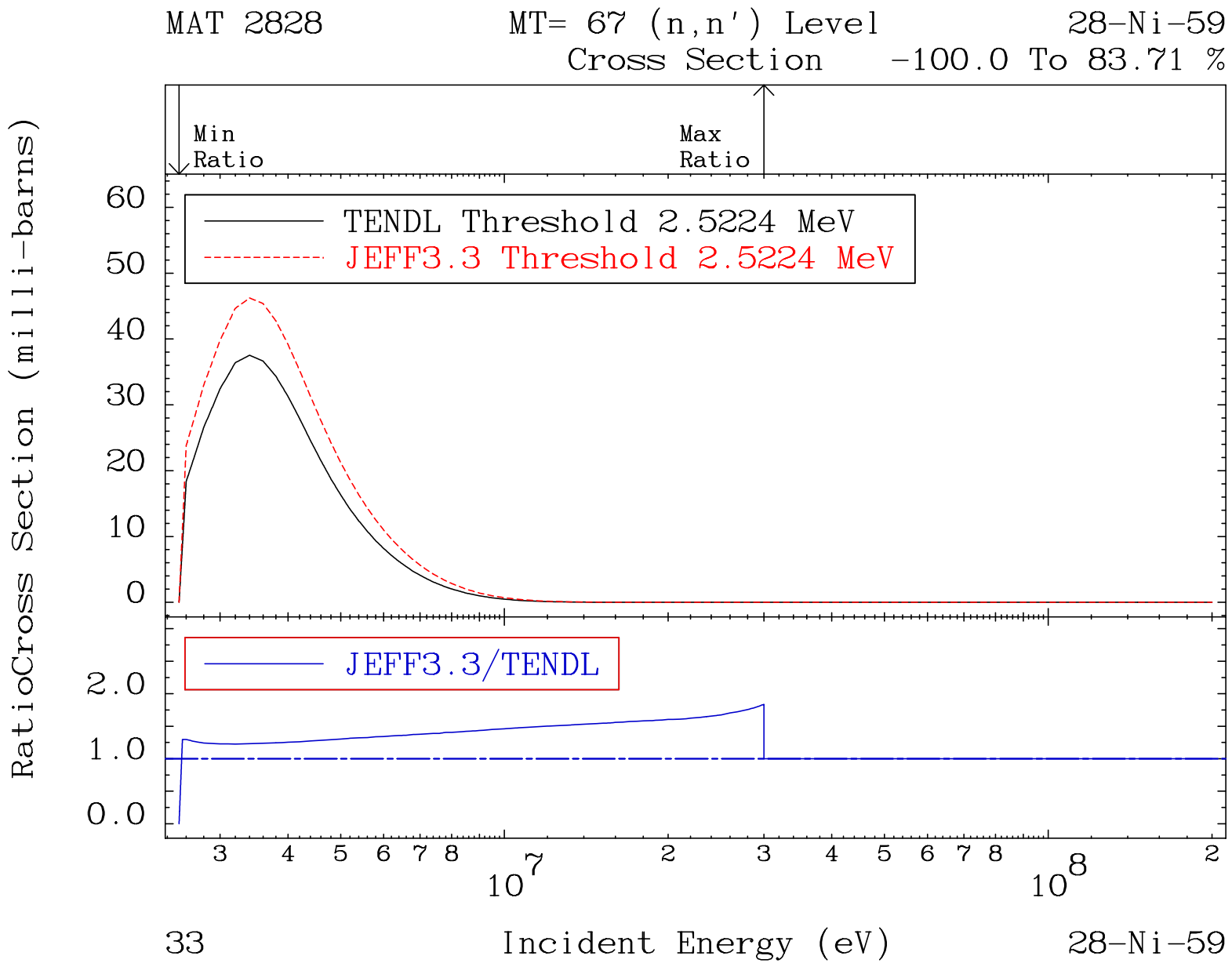

MAT 2828
MT= 62 (n,n') Level
28-Ni-59
Cross Section -100.0 To 29.42 %
Min Ratio
Max Ratio
TENDL Threshold 1.7977 MeV
JEFF3.3 Threshold 1.7977 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
28-Ni-59

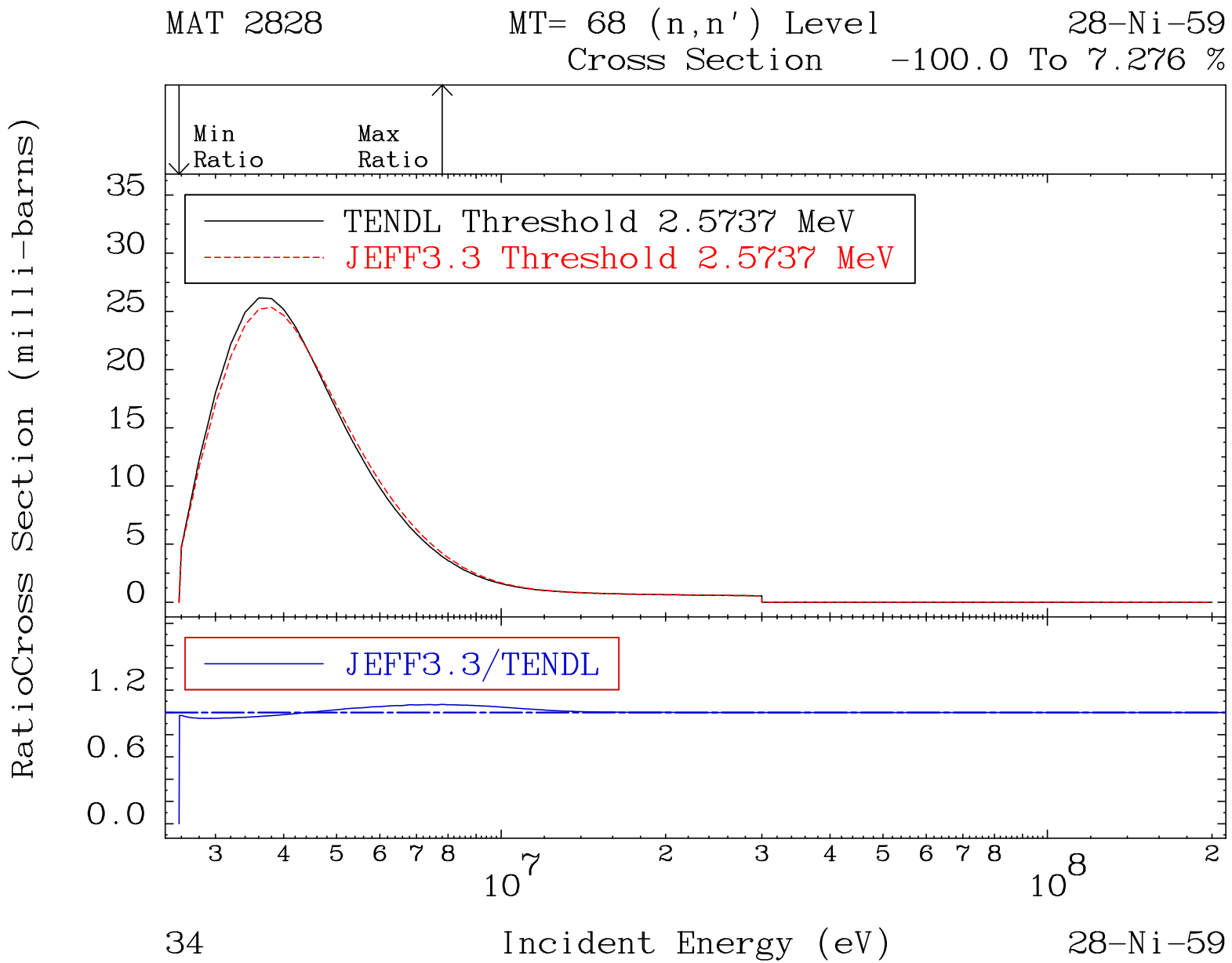

MAT 2828
MT= 63 (n,n') Level
28-Ni-59
Cross Section -3.424 To 29.38 %
Min Ratio
Max Ratio
TENDL Threshold 1.9813 MeV
JEFF3.3 Threshold 1.9813 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.4
1.2
1.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
28-Ni-59

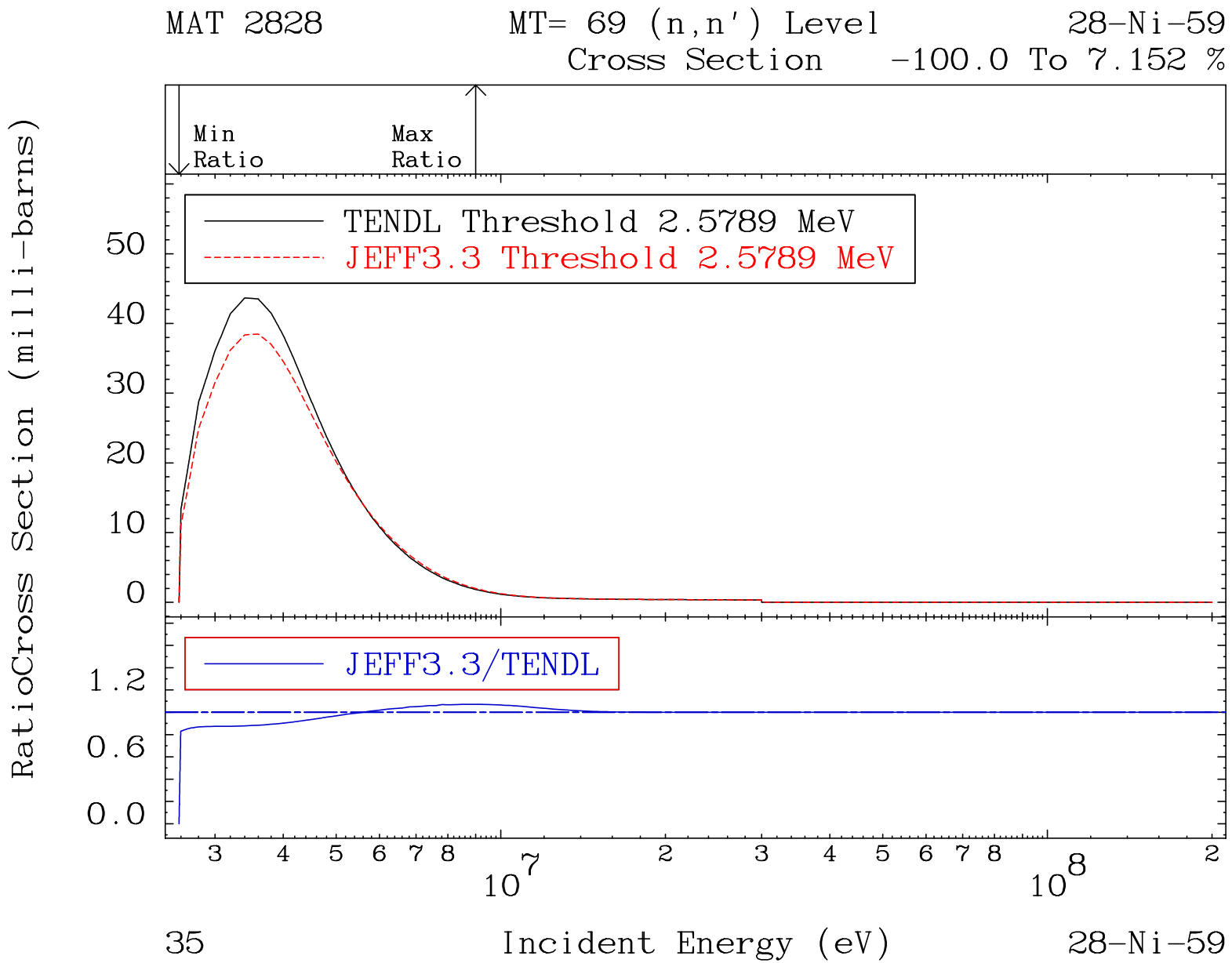

MAT 2828
MT= 64 (n,n') Level
28-Ni-59
Cross Section -100.0 To 24.14 %
Max
Ratio
TENDL Threshold 2.3699 MeV
JEFF3.3 Threshold 2.3699 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
28-Ni-59

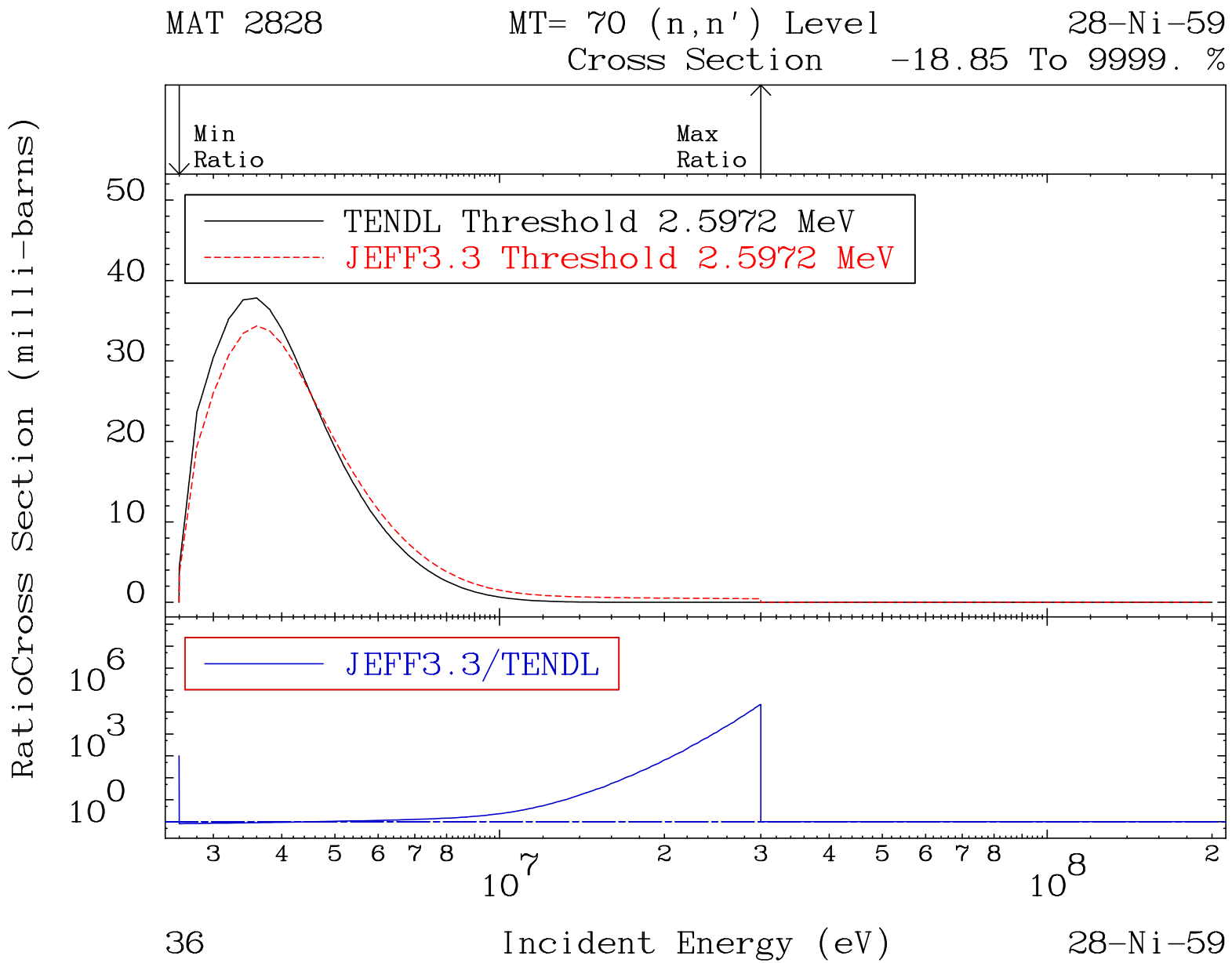

MAT 2828
MT= 65 (n,n') Level
28-Ni-59
Cross Section -100.0 To 29.31 %
Min Ratio
Max Ratio
TENDL Threshold 2.4562 MeV
JEFF3.3 Threshold 2.4562 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
28-Ni-59

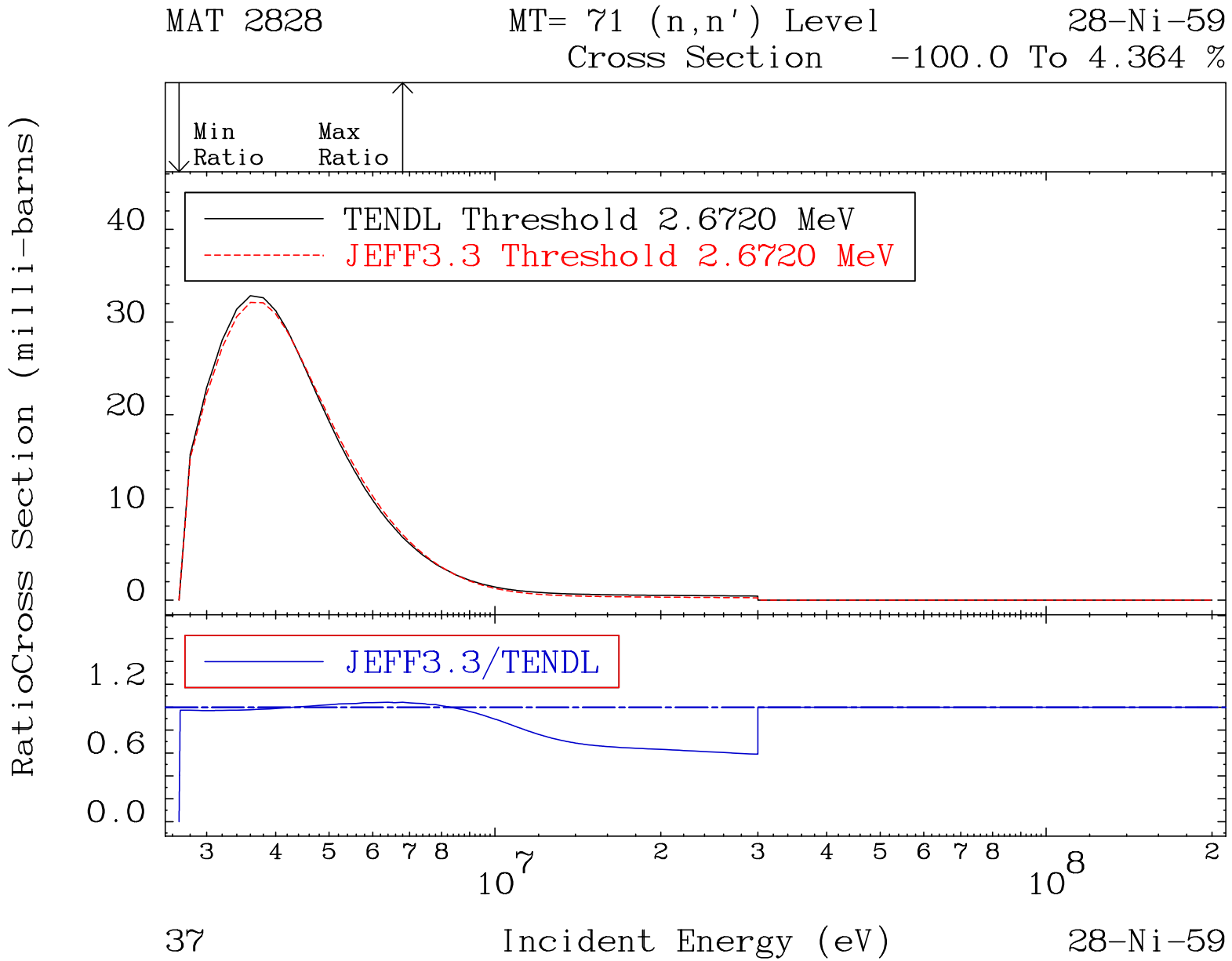

MAT 2828
MT= 66 (n,n') Level
28-Ni-59
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4634 MeV
JEFF3.3 Threshold 2.4696 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
400
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
28-Ni-59

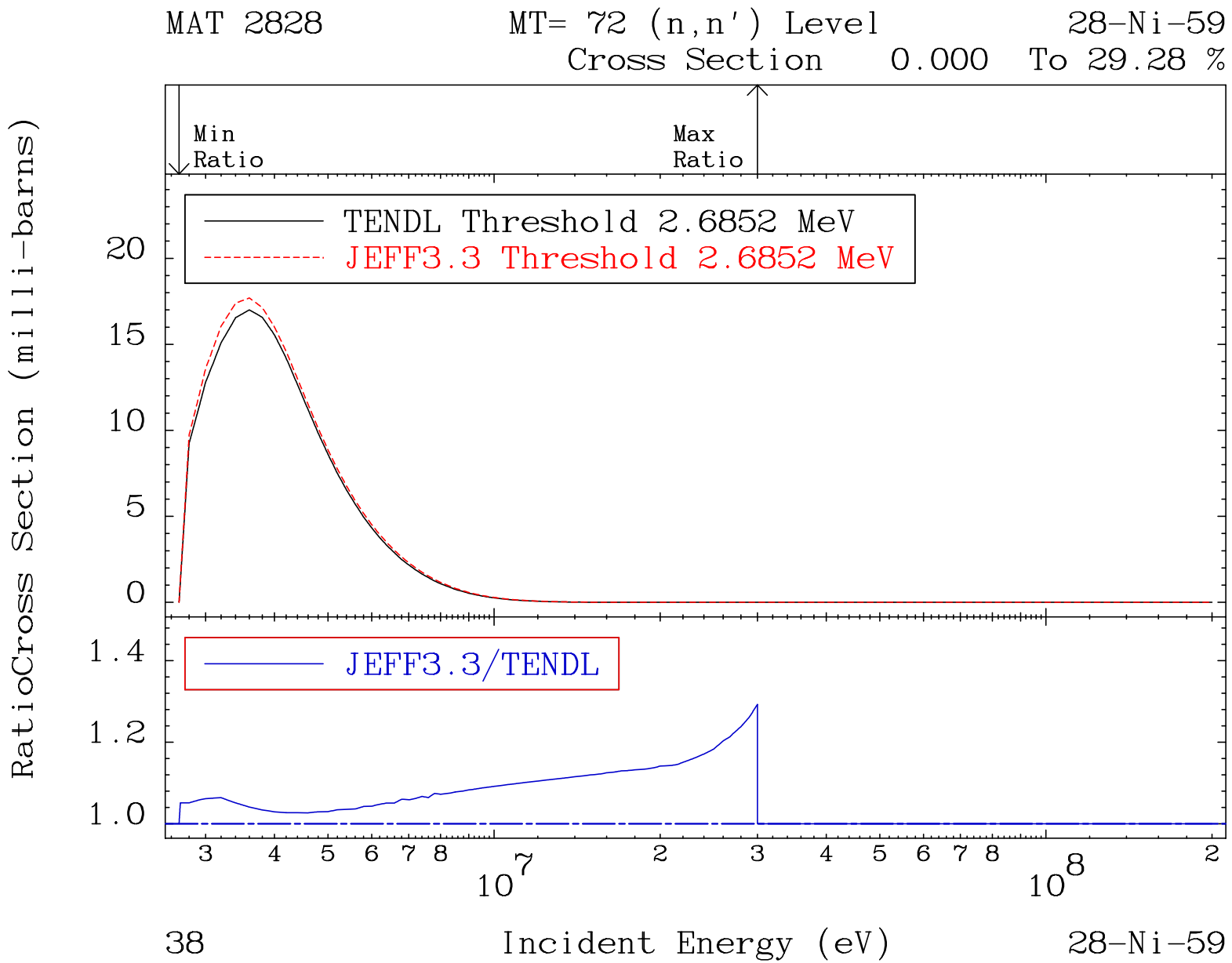

MAT 2828
MT= 67 (n,n') Level
28-Ni-59
Cross Section -100.0 To 83.71 %
Min Ratio
Max Ratio
TENDL Threshold 2.5224 MeV
JEFF3.3 Threshold 2.5224 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
28-Ni-59

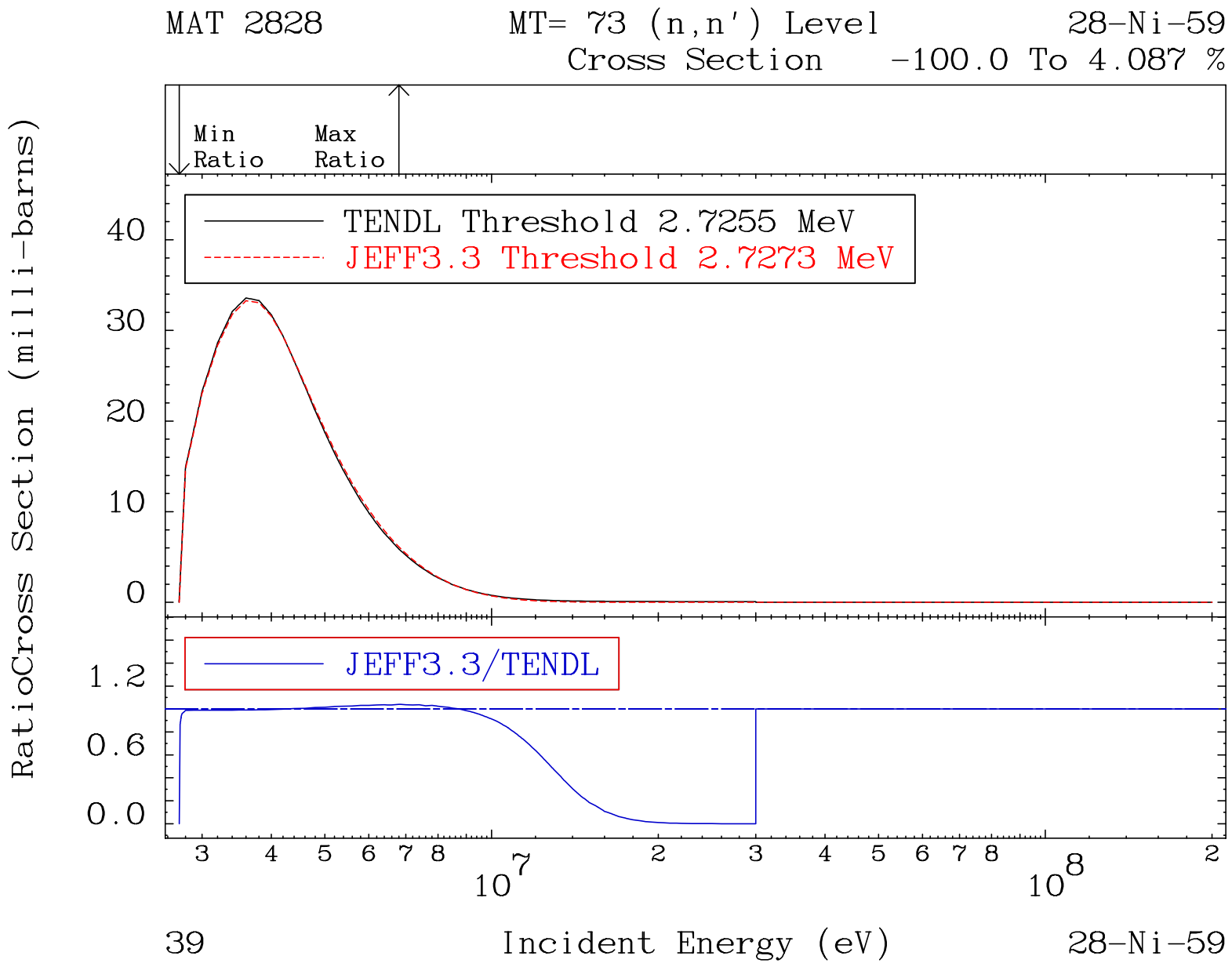

MAT 2828
MT= 68 (n,n') Level
28-Ni-59
Cross Section -100.0 To 7.276 %
Min Ratio
Max Ratio
TENDL Threshold 2.5737 MeV
JEFF3.3 Threshold 2.5737 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
28-Ni-59

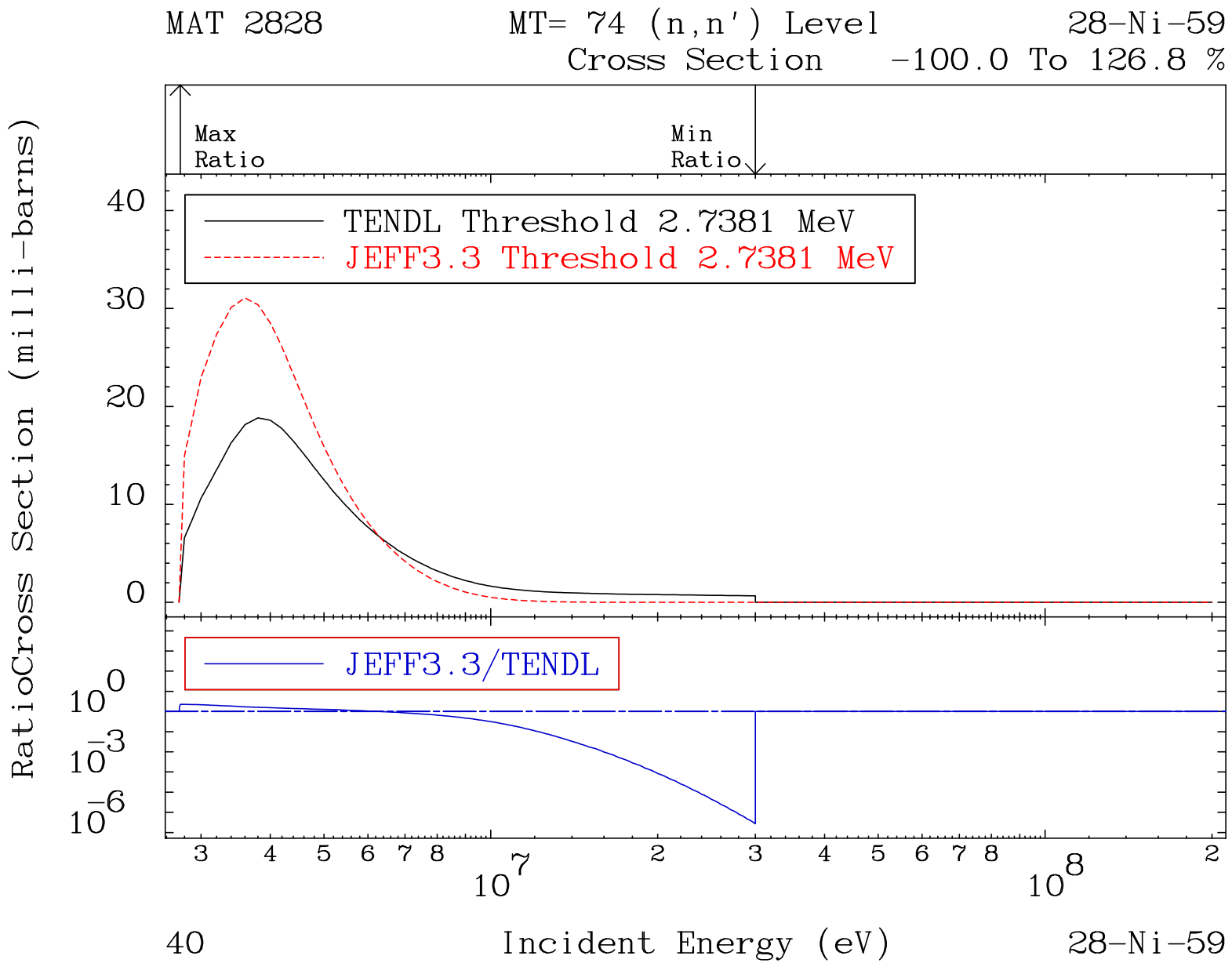

MAT 2828
MT= 69 (n,n') Level
28-Ni-59
Cross Section -100.0 To 7.152 %
Min Ratio
Max Ratio
TENDL Threshold 2.5789 MeV
JEFF3.3 Threshold 2.5789 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
28-Ni-59

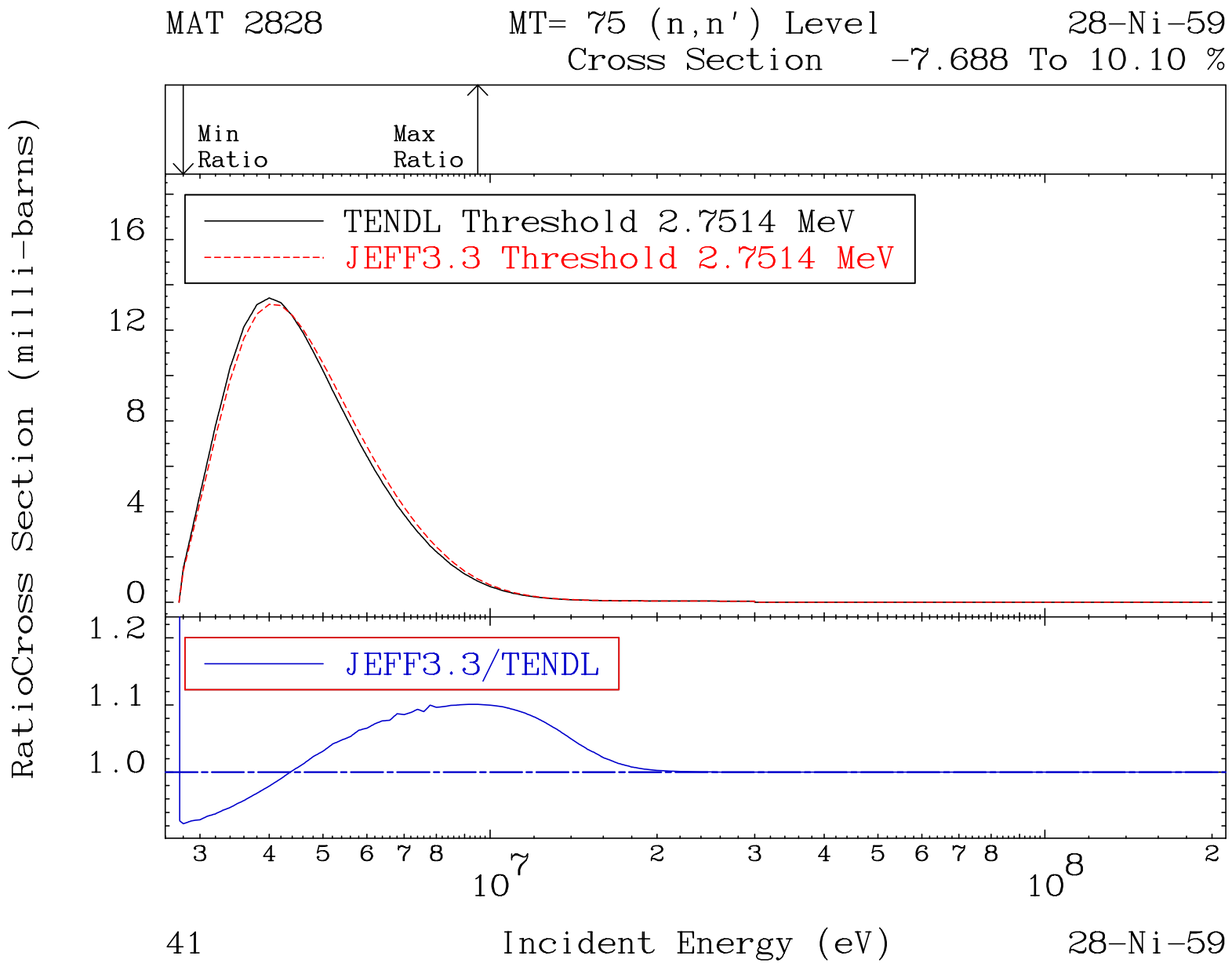

MAT 2828
MT= 70 (n,n') Level
28-Ni-59
Cross Section -18.85 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5972 MeV
JEFF3.3 Threshold 2.5972 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
36
28-Ni-59

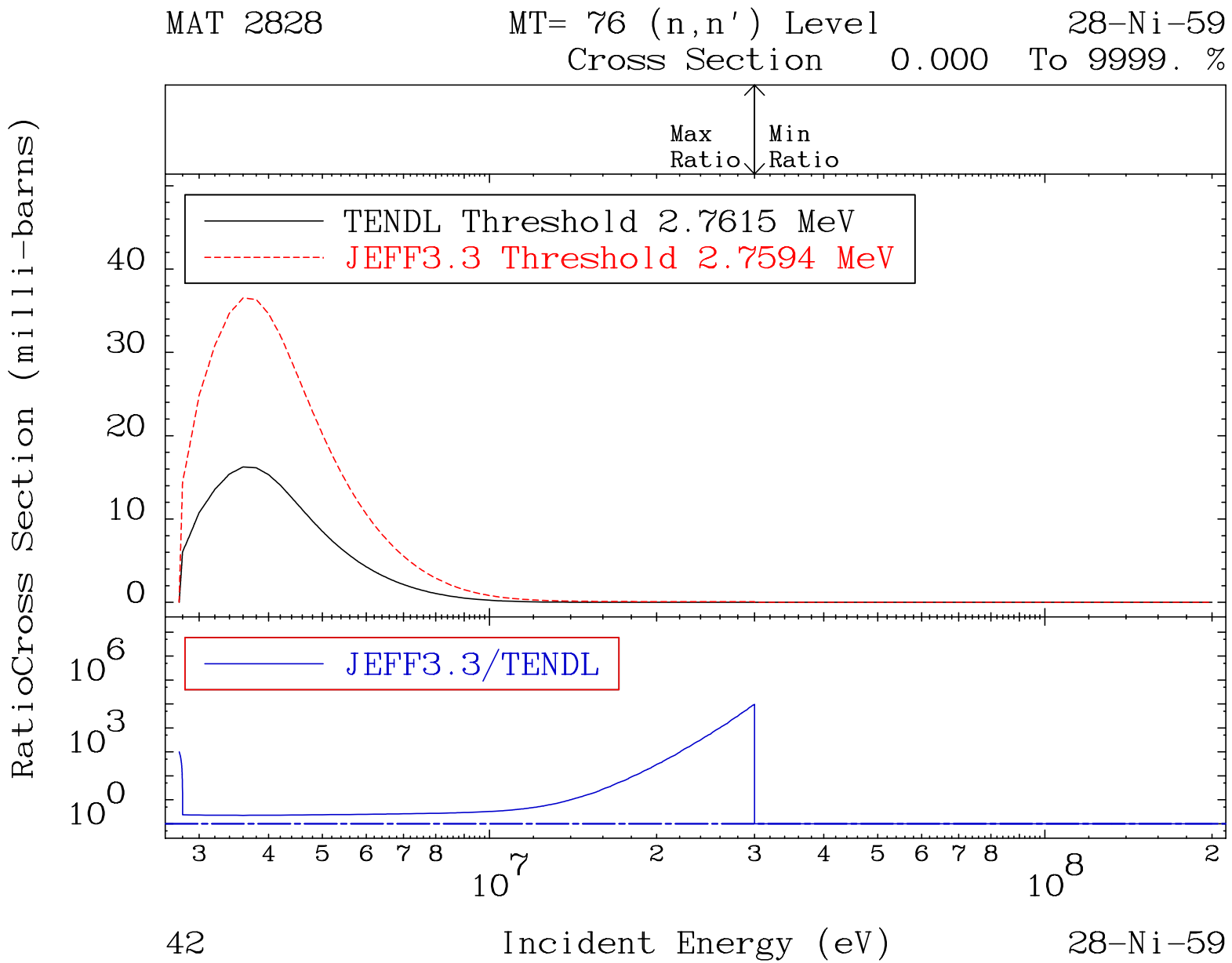

MAT 2828
MT= 71 (n,n') Level
28-Ni-59
Cross Section -100.0 To 4.364 %
Min Ratio
Max Ratio
TENDL Threshold 2.6720 MeV
JEFF3.3 Threshold 2.6720 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
28-Ni-59

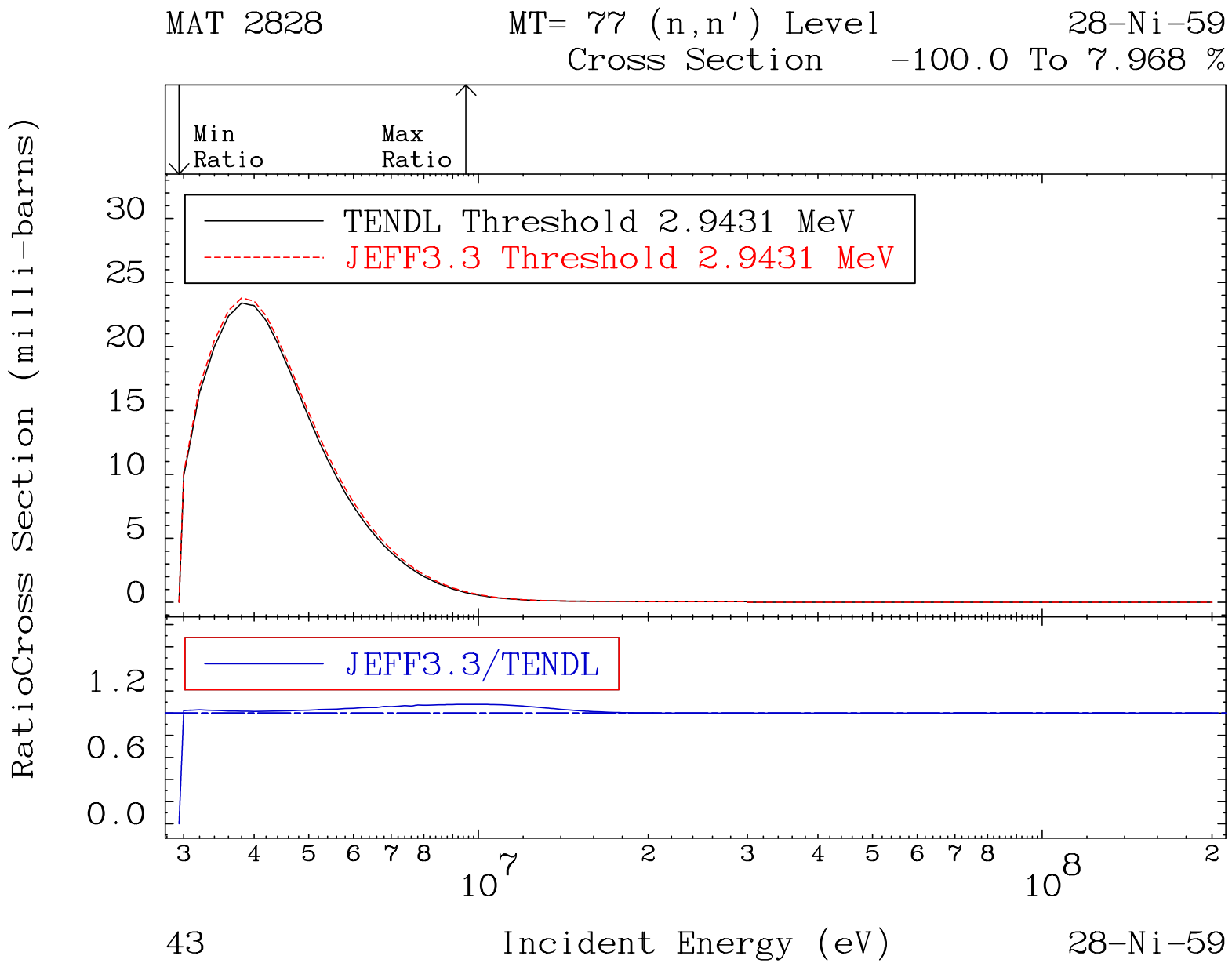

MAT 2828
MT= 72 (n,n') Level
28-Ni-59
Cross Section 0.000 To 29.28 %
Min Ratio
Max Ratio
TENDL Threshold 2.6852 MeV
JEFF3.3 Threshold 2.6852 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.4
1.2
1.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
28-Ni-59

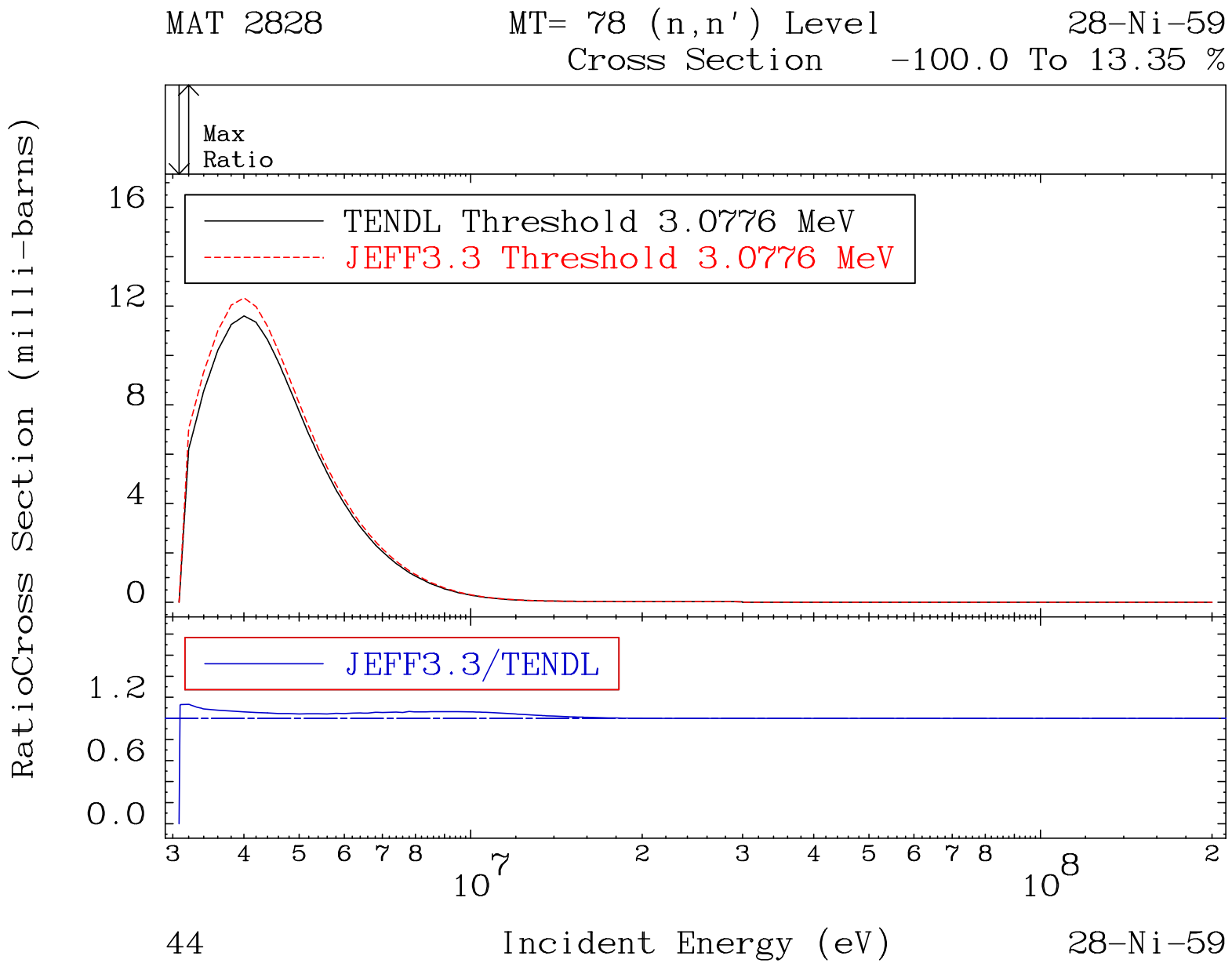

MAT 2828
MT= 73 (n,n') Level
28-Ni-59
Cross Section -100.0 To 4.087 %
Min Ratio
Max Ratio
TENDL Threshold 2.7255 MeV
JEFF3.3 Threshold 2.7273 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
28-Ni-59

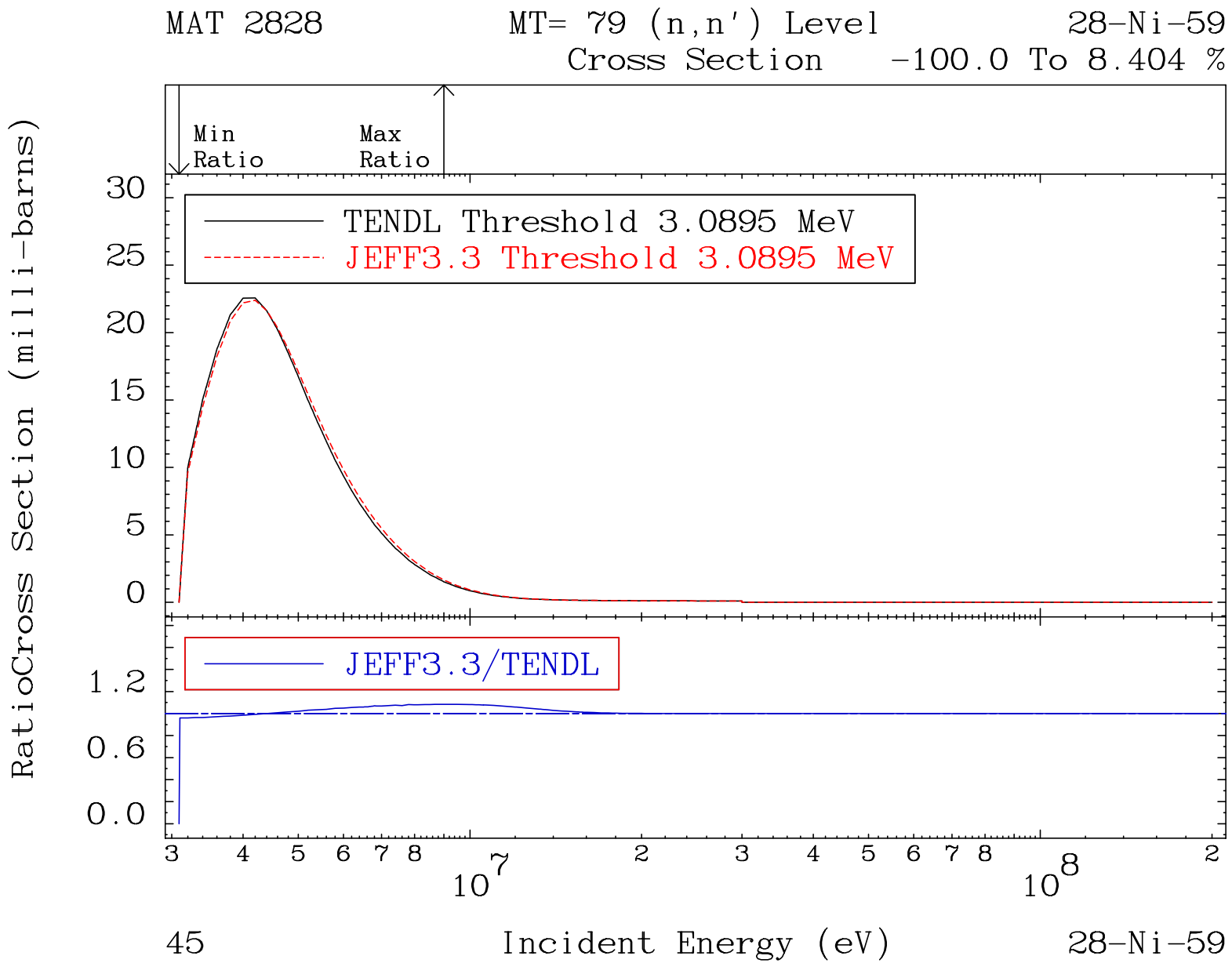

MAT 2828
MT= 74 (n,n') Level
28-Ni-59
Cross Section -100.0 To 126.8 %
Max Ratio
Min Ratio
TENDL Threshold 2.7381 MeV
JEFF3.3 Threshold 2.7381 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^0
10^-3
10^-6
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
28-Ni-59

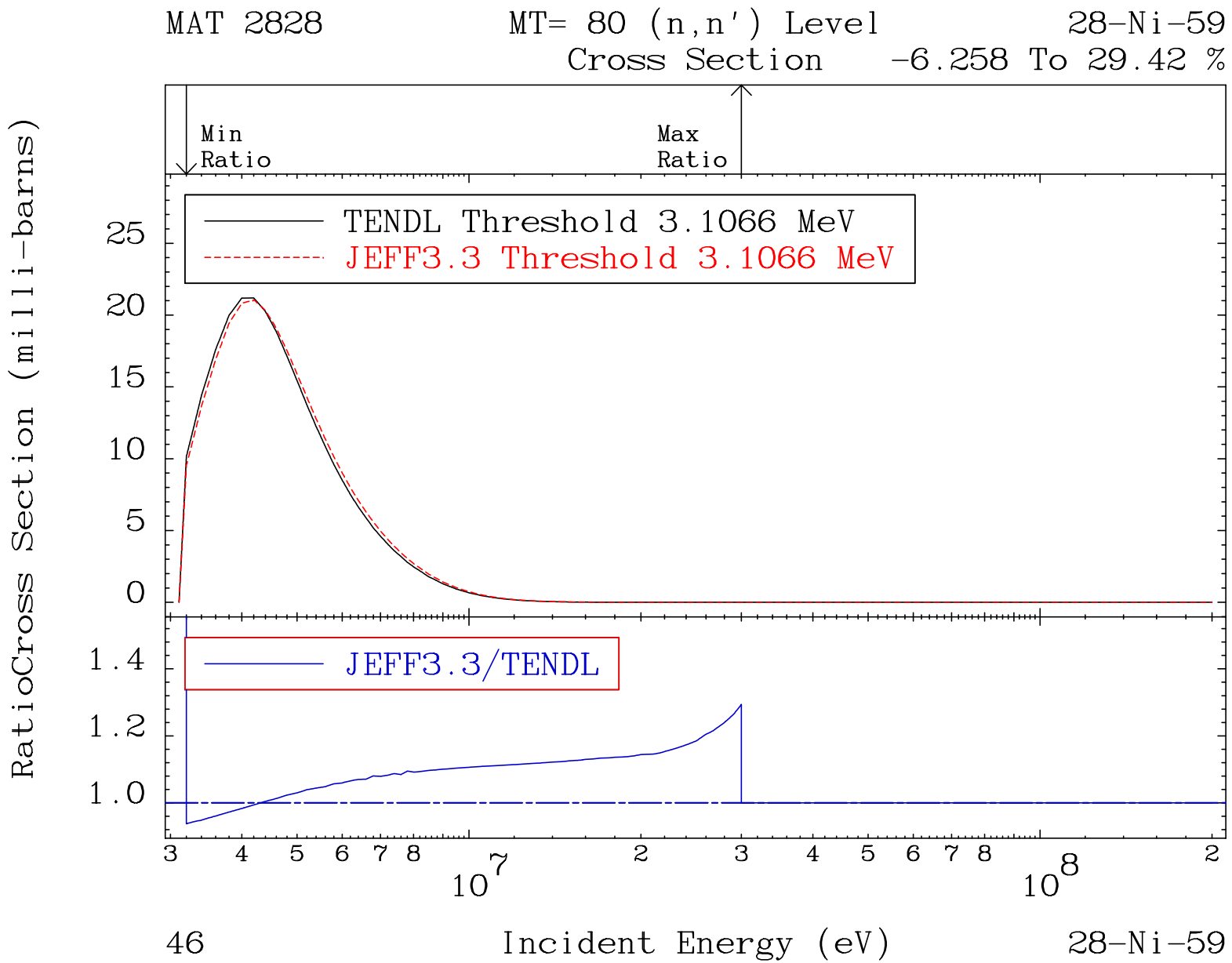

MAT 2828
MT= 75 (n,n') Level
28-Ni-59
Cross Section -7.688 To 10.10 %
Min Ratio
Max Ratio
TENDL Threshold 2.7514 MeV
JEFF3.3 Threshold 2.7514 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
1.1
1.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
28-Ni-59

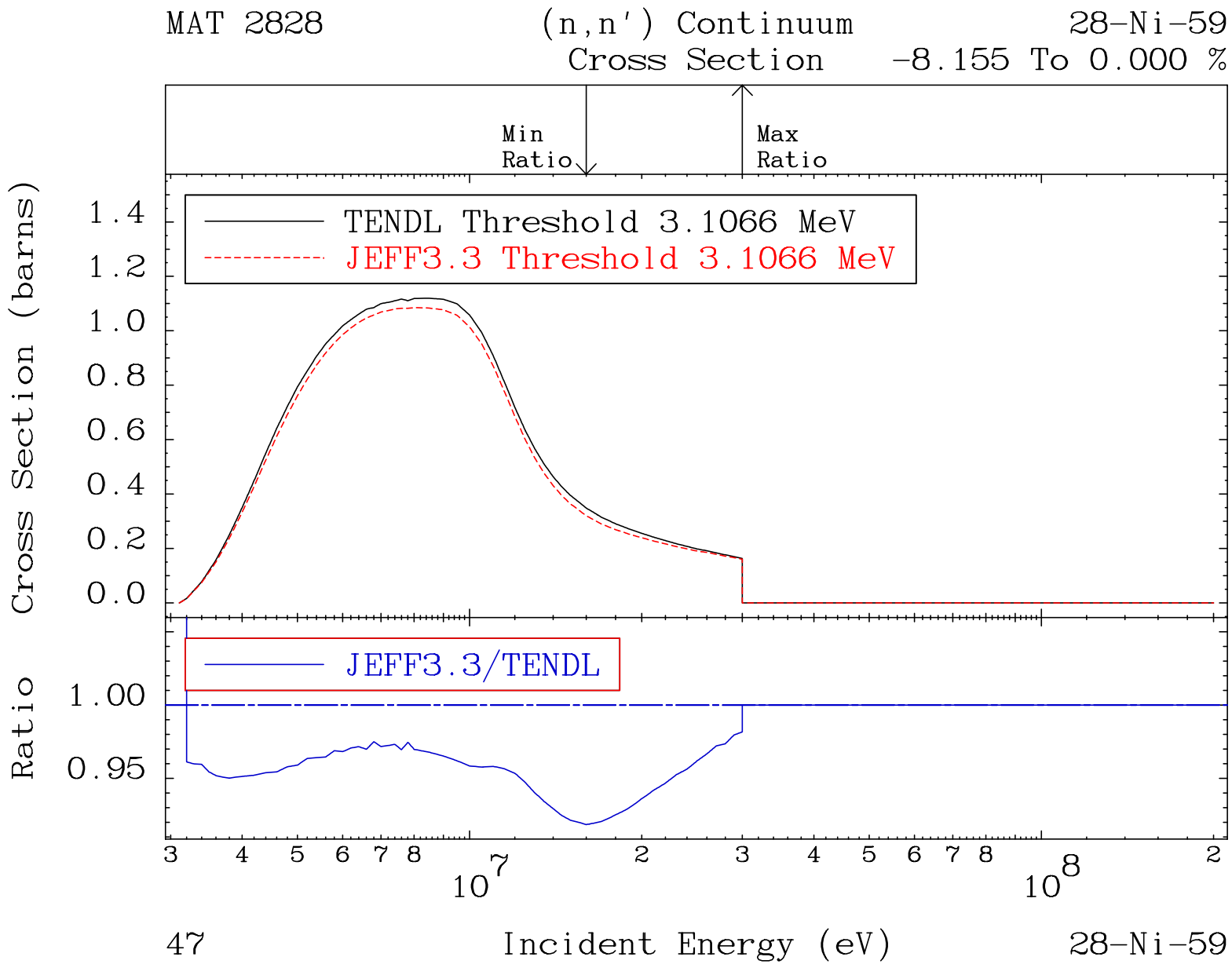

MAT 2828
MT= 76 (n,n') Level
28-Ni-59
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7615 MeV
JEFF3.3 Threshold 2.7594 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^6
10^3
10^0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
28-Ni-59

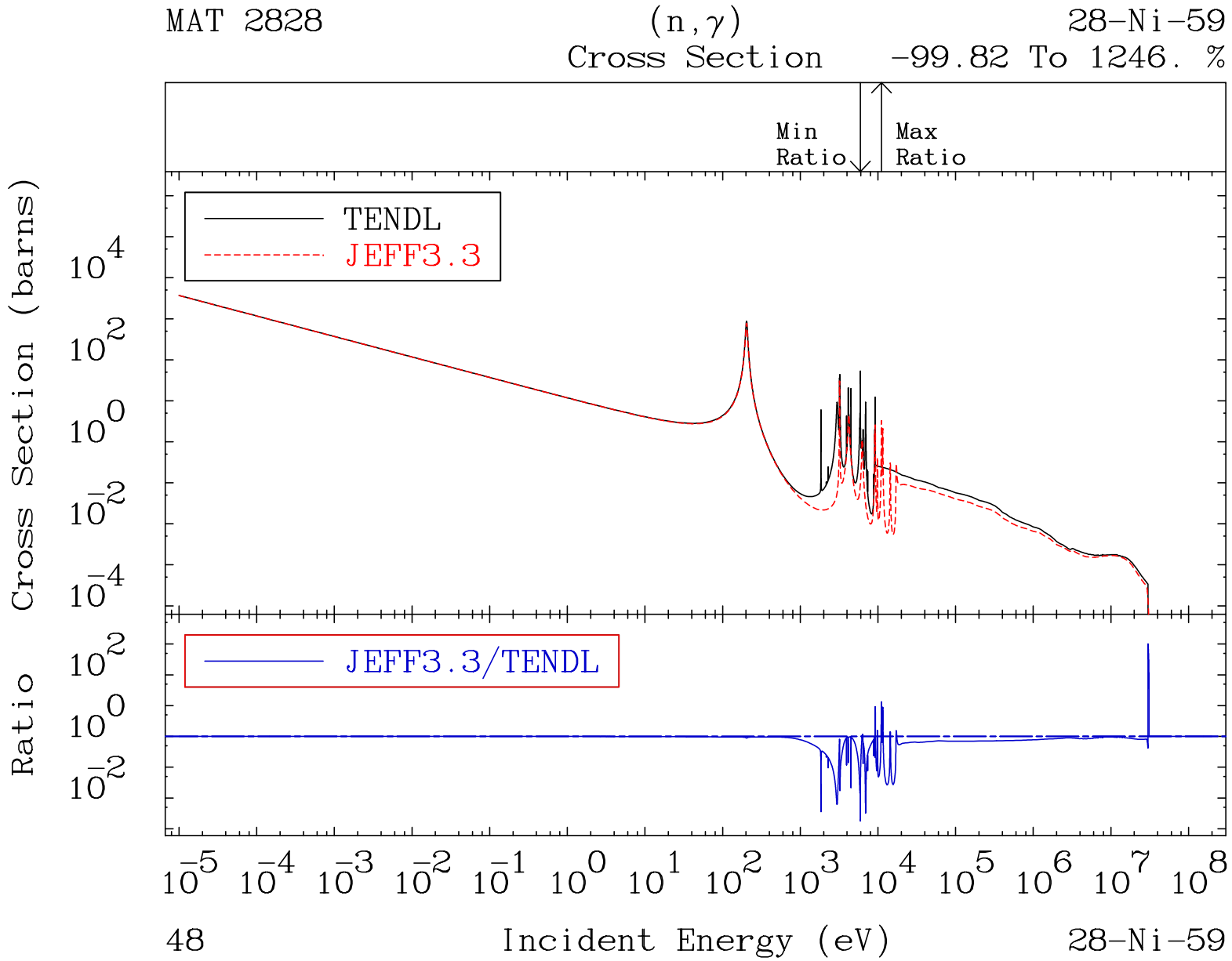

MAT 2828
MT= 77 (n,n') Level
28-Ni-59
Cross Section -100.0 To 7.968 %
Min Ratio
Max Ratio
TENDL Threshold 2.9431 MeV
JEFF3.3 Threshold 2.9431 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
28-Ni-59

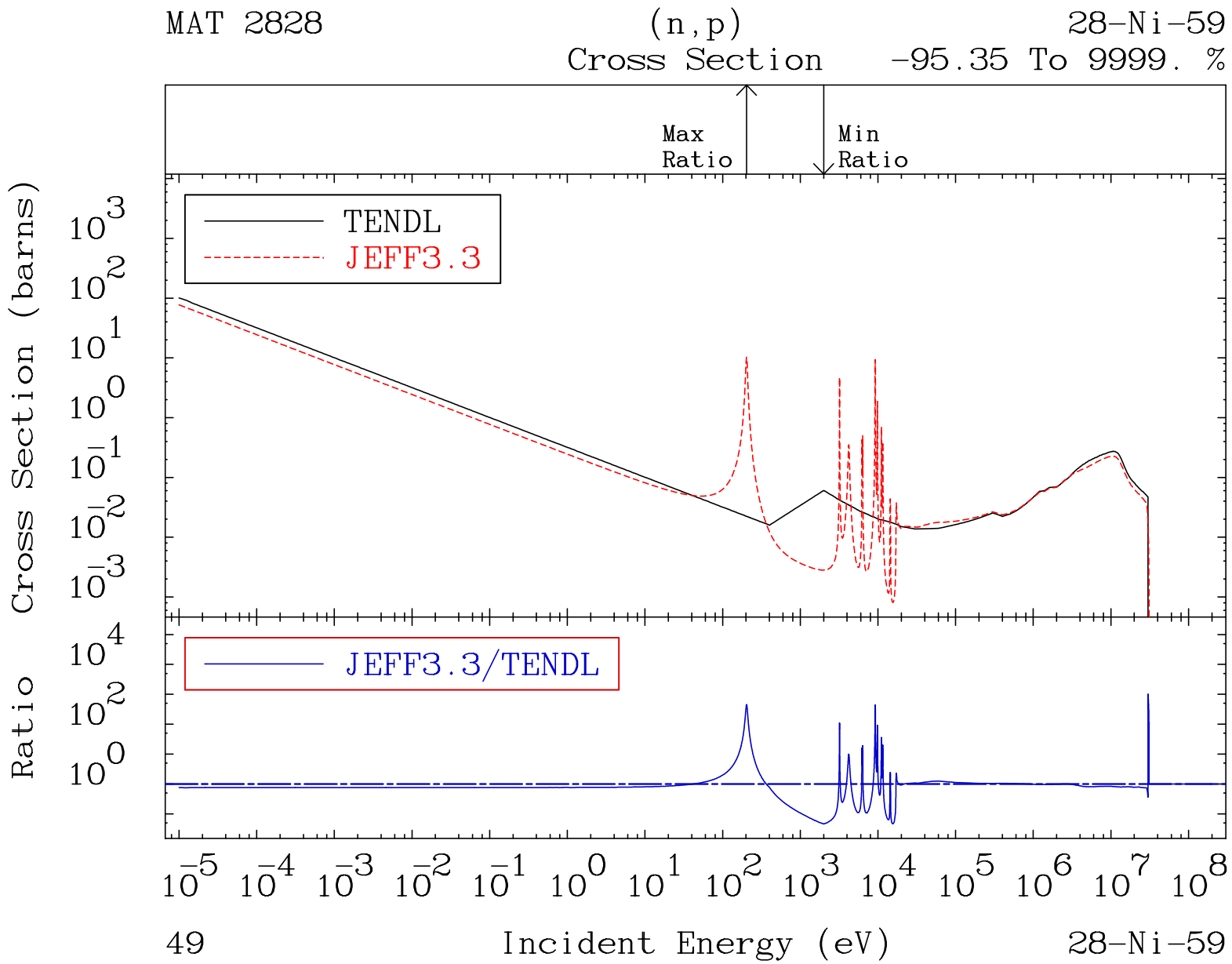

MAT 2828
MT= 78 (n,n') Level
28-Ni-59
Cross Section -100.0 To 13.35 %
Max
Ratio
TENDL Threshold 3.0776 MeV
JEFF3.3 Threshold 3.0776 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
44
Incident Energy (eV)
28-Ni-59

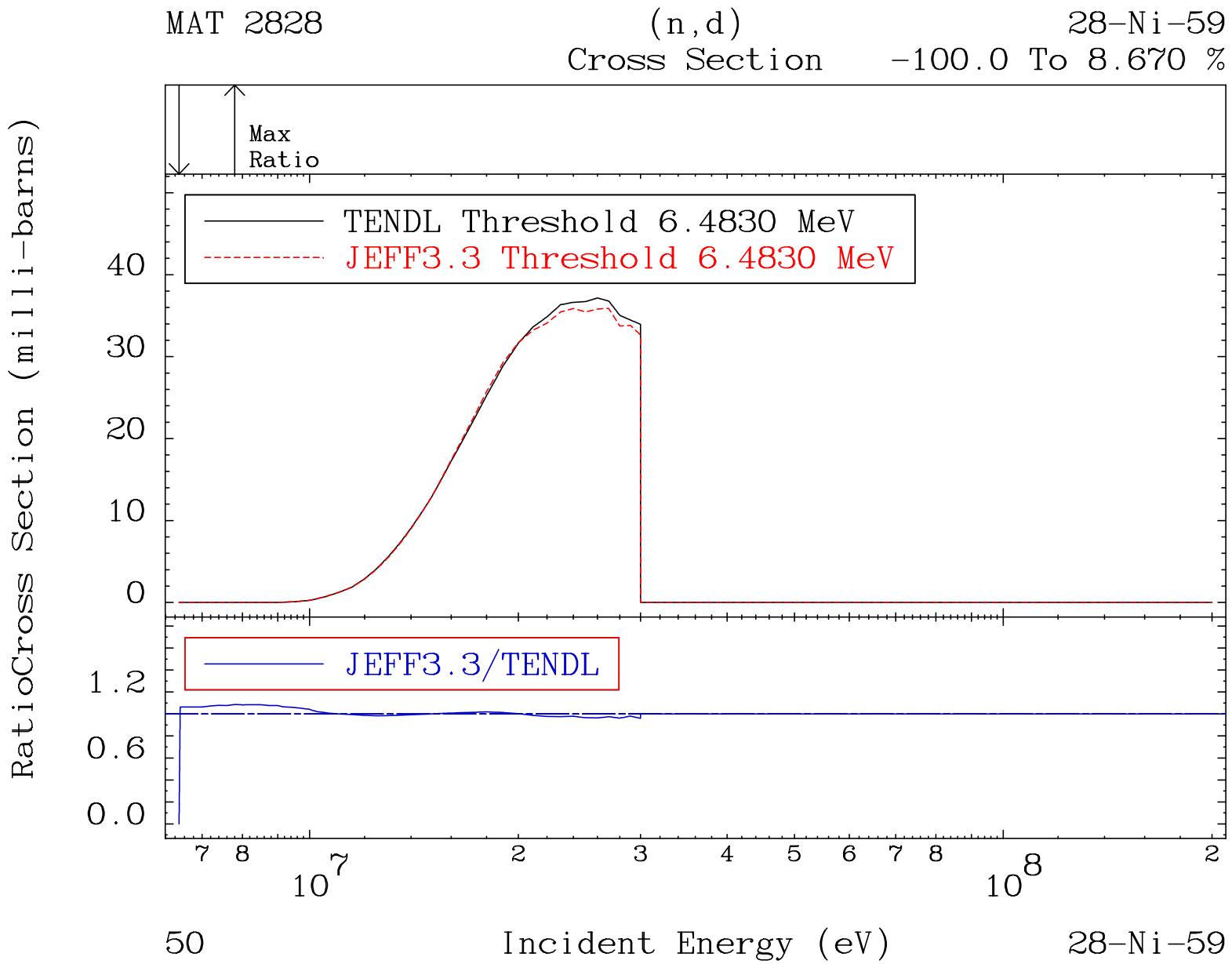

MAT 2828
MT= 79 (n,n') Level
28-Ni-59
Cross Section -100.0 To 8.404 %
Min Ratio
Max Ratio
TENDL Threshold 3.0895 MeV
JEFF3.3 Threshold 3.0895 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
28-Ni-59

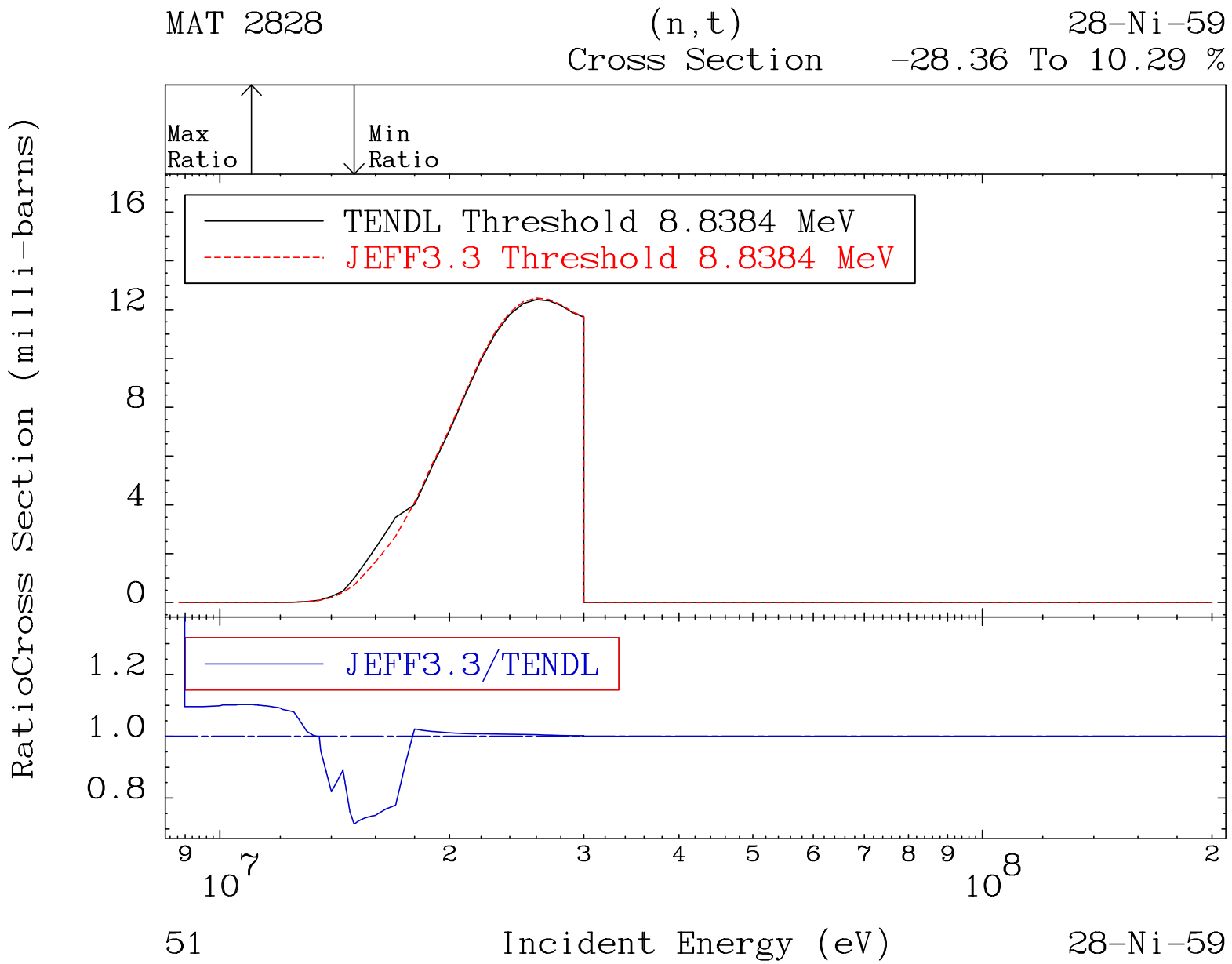

MAT 2828
MT= 80 (n,n') Level
28-Ni-59
Cross Section -6.258 To 29.42 %
Min Ratio
Max Ratio
TENDL Threshold 3.1066 MeV
JEFF3.3 Threshold 3.1066 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.4
1.2
1.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
28-Ni-59

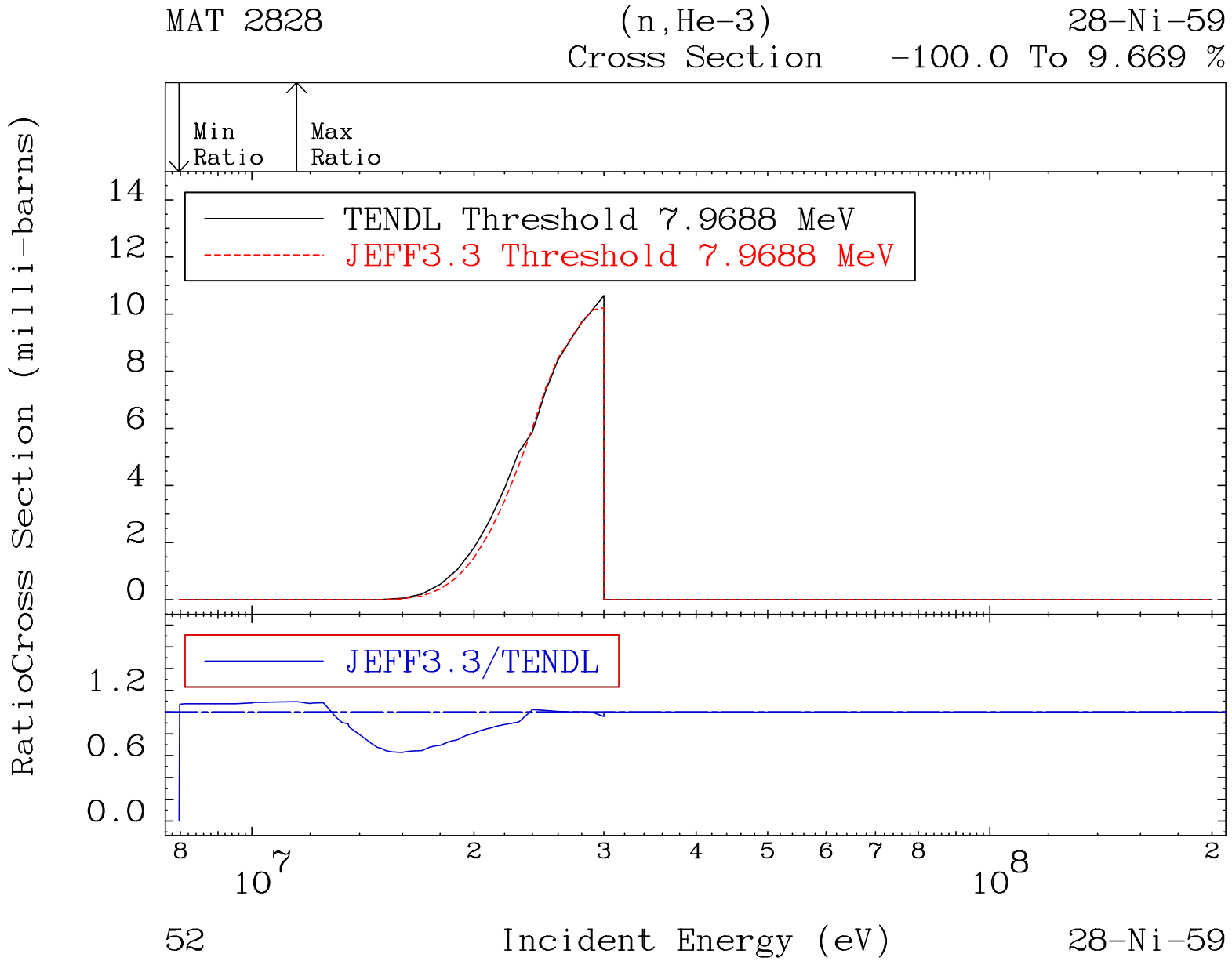

MAT 2828
(n,n') Continuum
Cross Section
28-Ni-59
-8.155 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 3.1066 MeV
JEFF3.3 Threshold 3.1066 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
47
Incident Energy (eV)
28-Ni-59

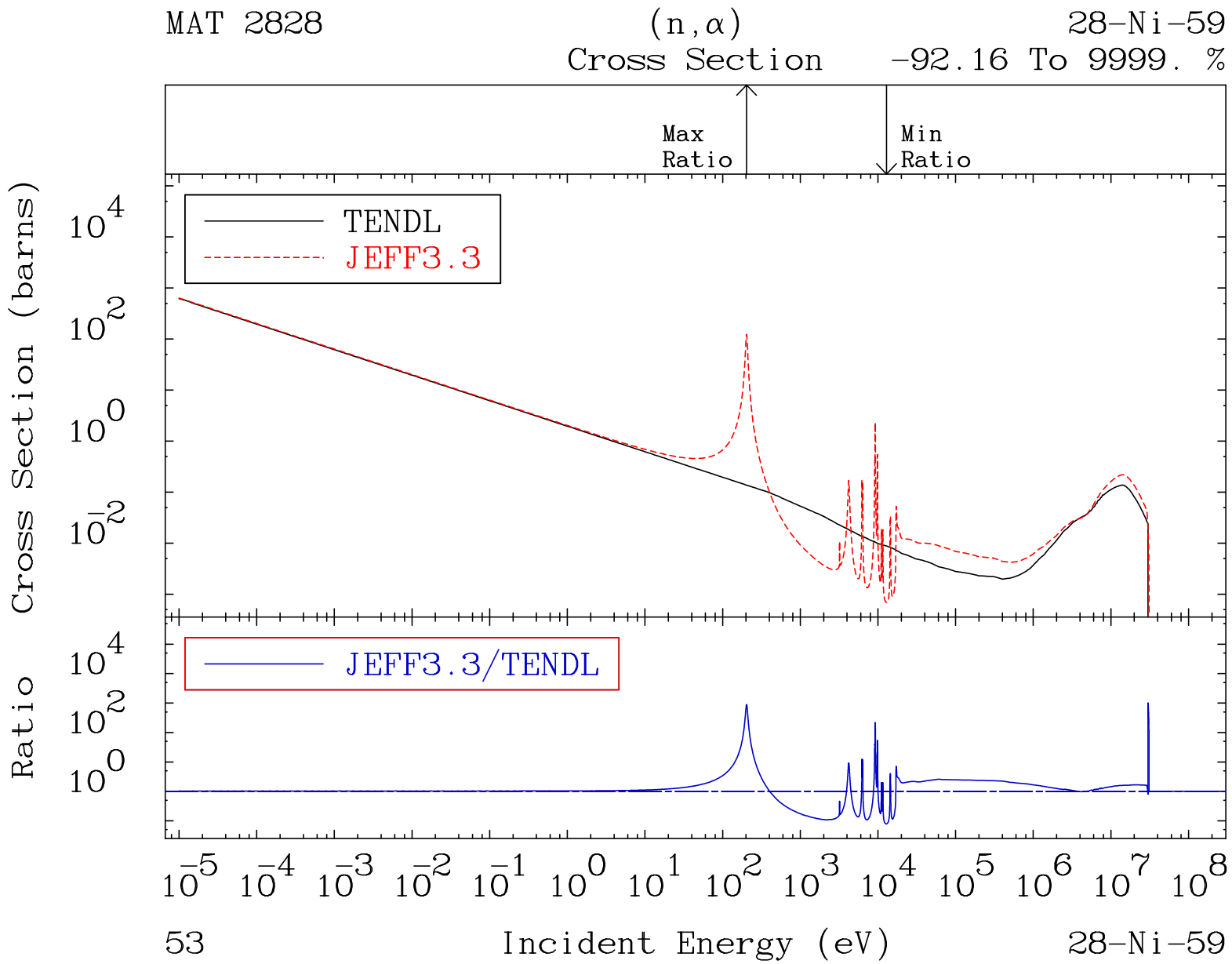

MAT 2828
(n,γ)
Cross Section
28-Ni-59
-99.82 To 1246. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
28-Ni-59

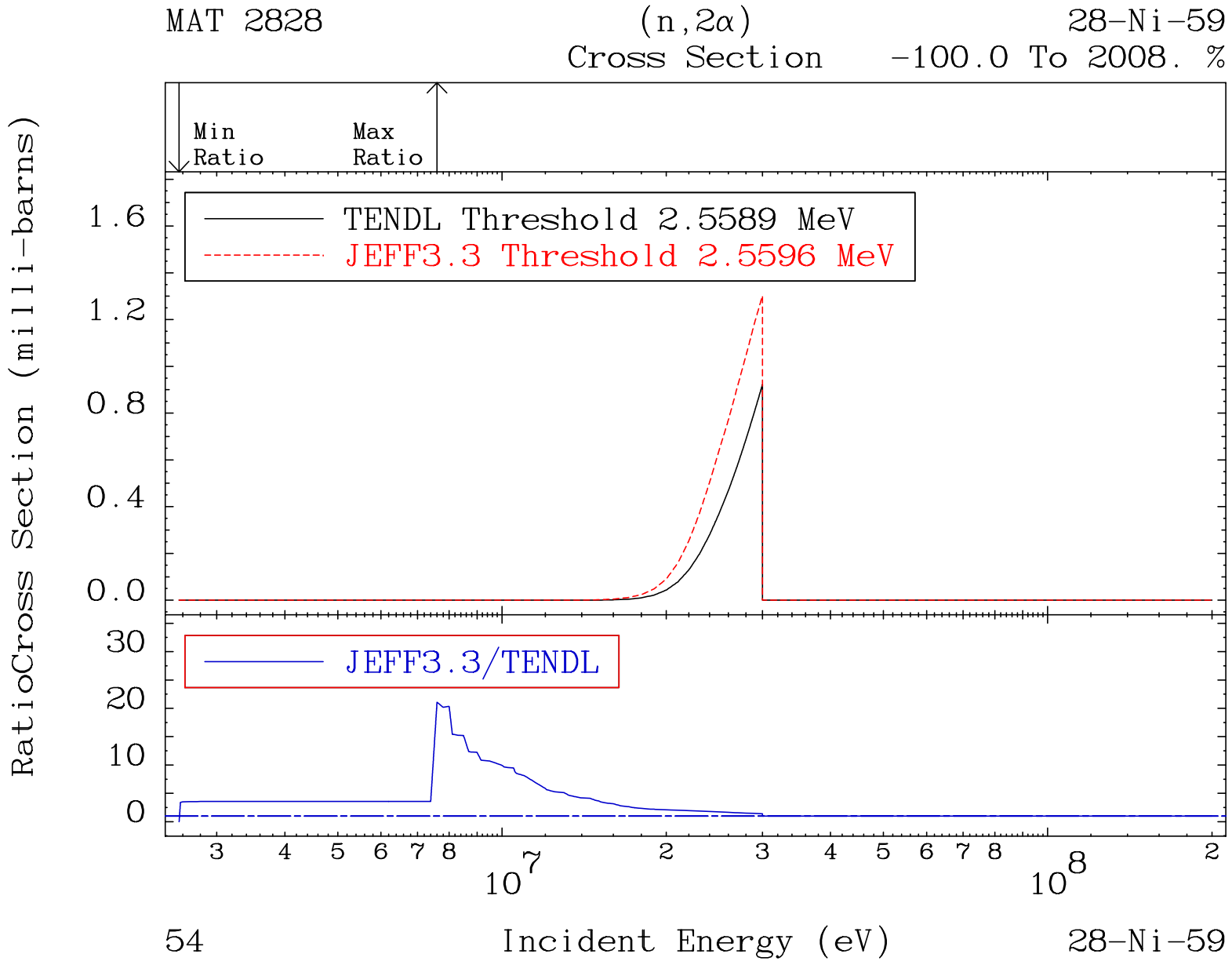

MAT 2828
(n,p)
Cross Section
28-Ni-59
-95.35 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
28-Ni-59

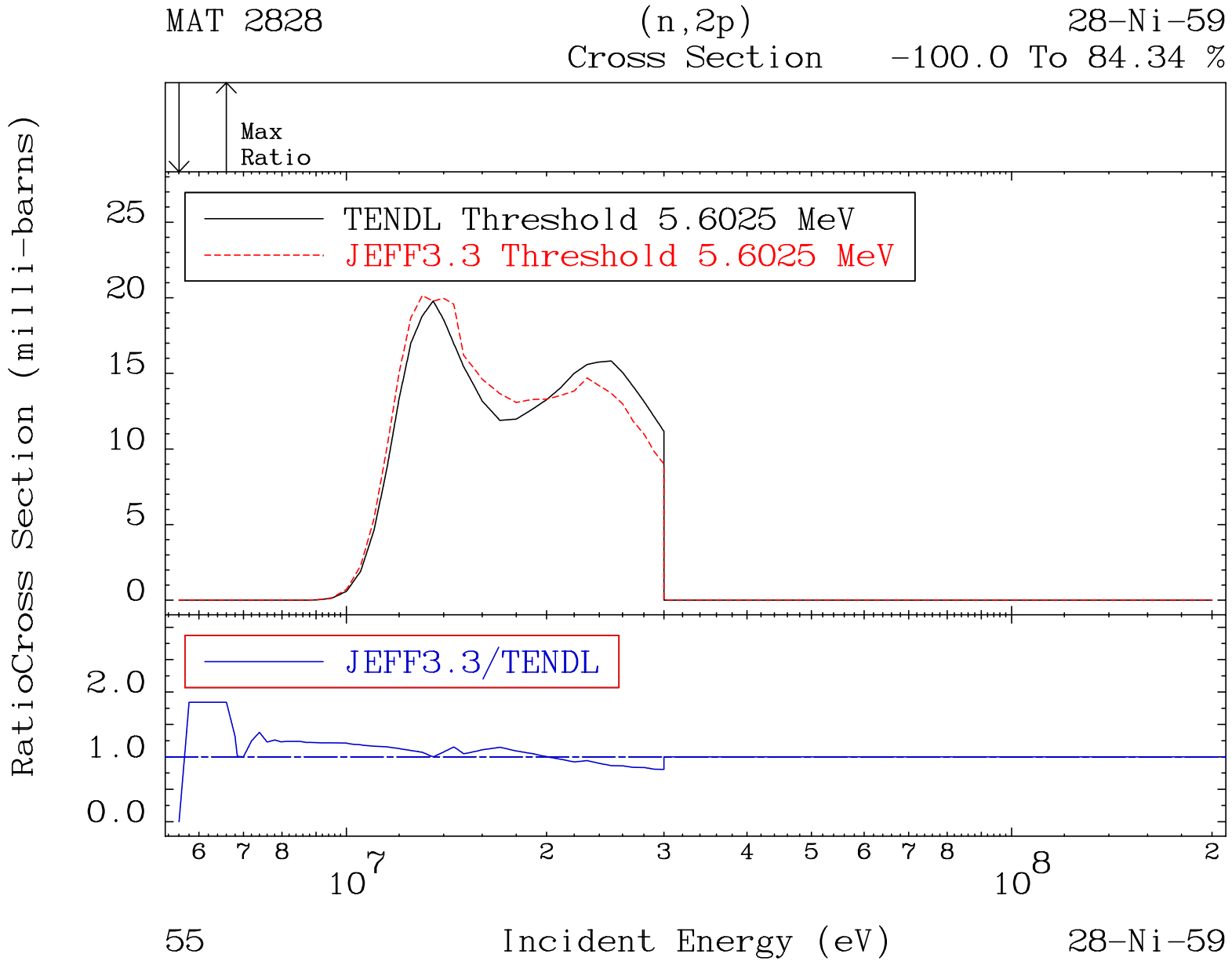

MAT 2828
(n,d)
28-Ni-59
Cross Section
-100.0 To 8.670 %
Max
Ratio
TENDL Threshold 6.4830 MeV
JEFF3.3 Threshold 6.4830 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
50
Incident Energy (eV)
28-Ni-59

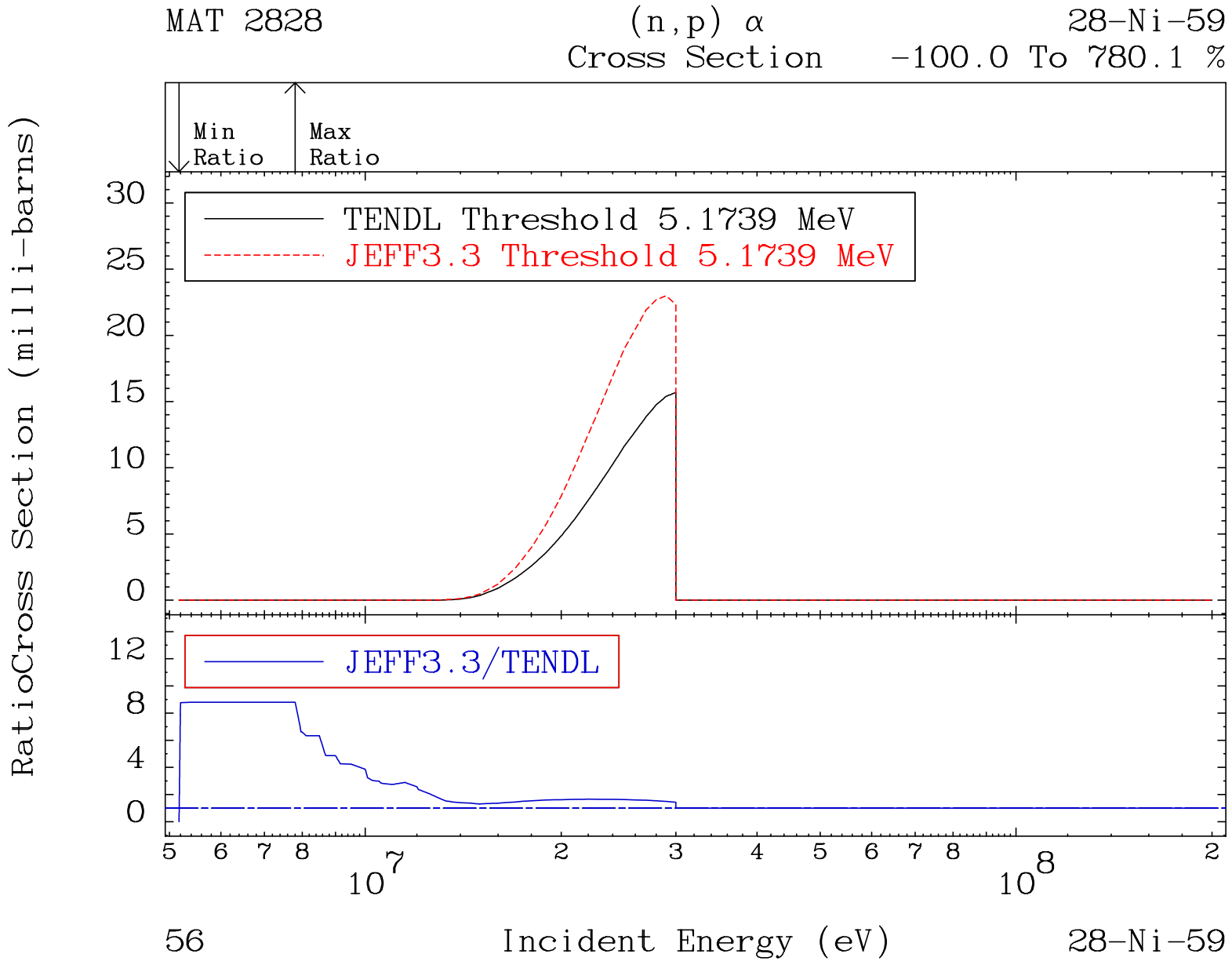

MAT 2828
(n,t)
Cross Section
28-Ni-59
-28.36 To 10.29 %
Max Ratio
Min Ratio
TENDL Threshold 8.8384 MeV
JEFF3.3 Threshold 8.8384 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
28-Ni-59

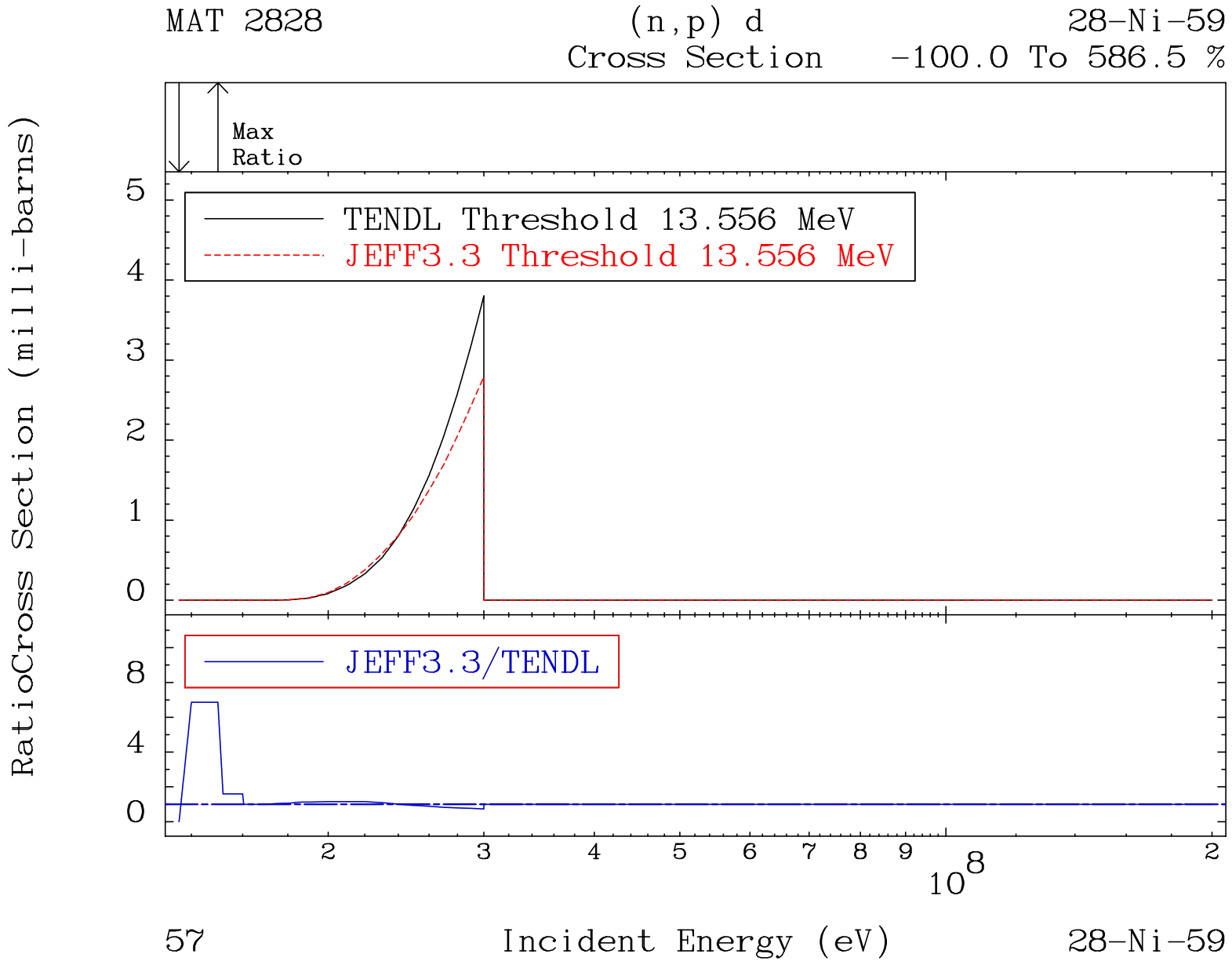

MAT 2828
(n,He-3)
Cross Section
28-Ni-59
-100.0 To 9.669 %
Min Ratio
Max Ratio
TENDL Threshold 7.9688 MeV
JEFF3.3 Threshold 7.9688 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
1.2
0.6
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
52
Incident Energy (eV)
28-Ni-59

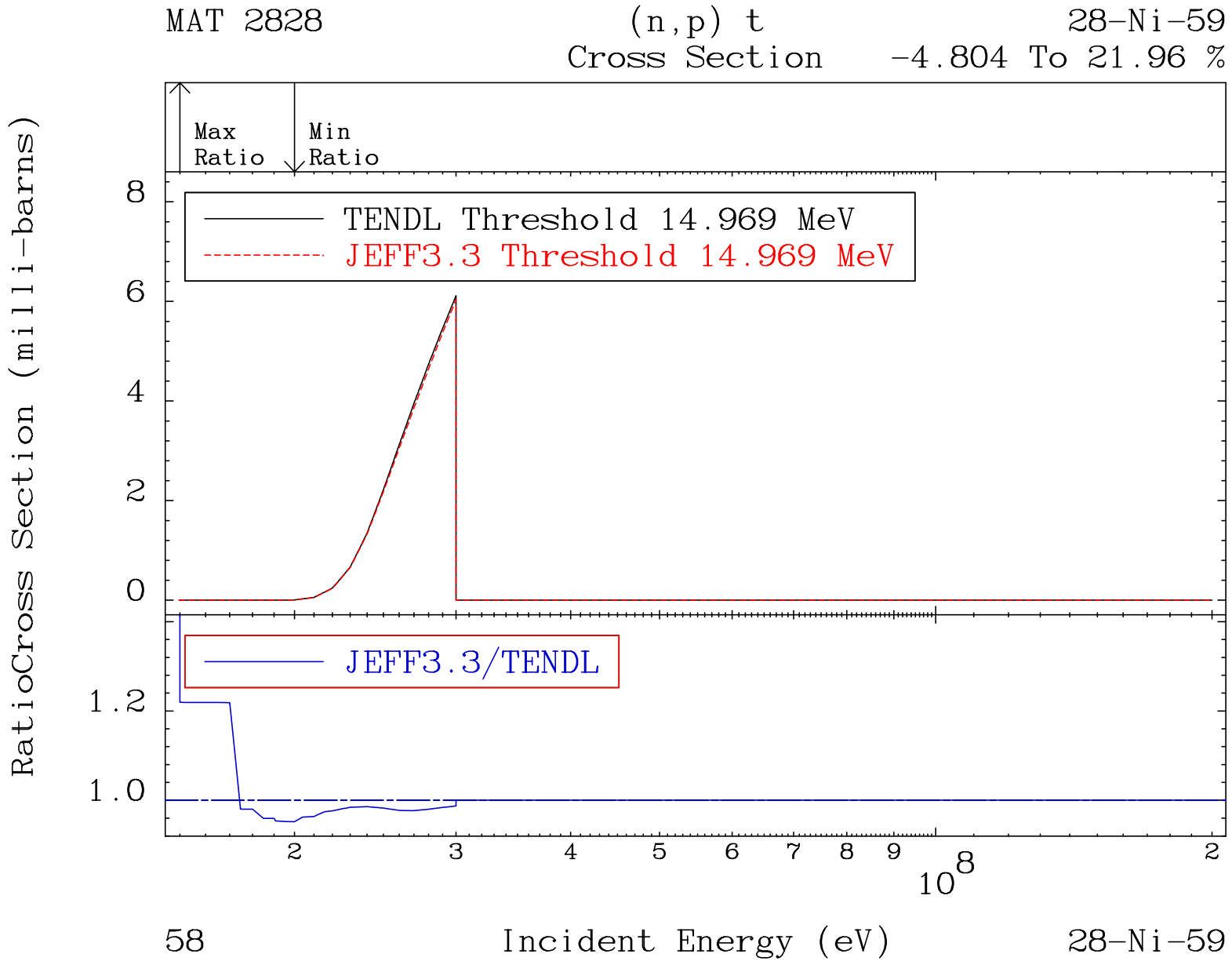

MAT 2828
(n,α)
Cross Section
28-Ni-59
-92.16 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
28-Ni-59

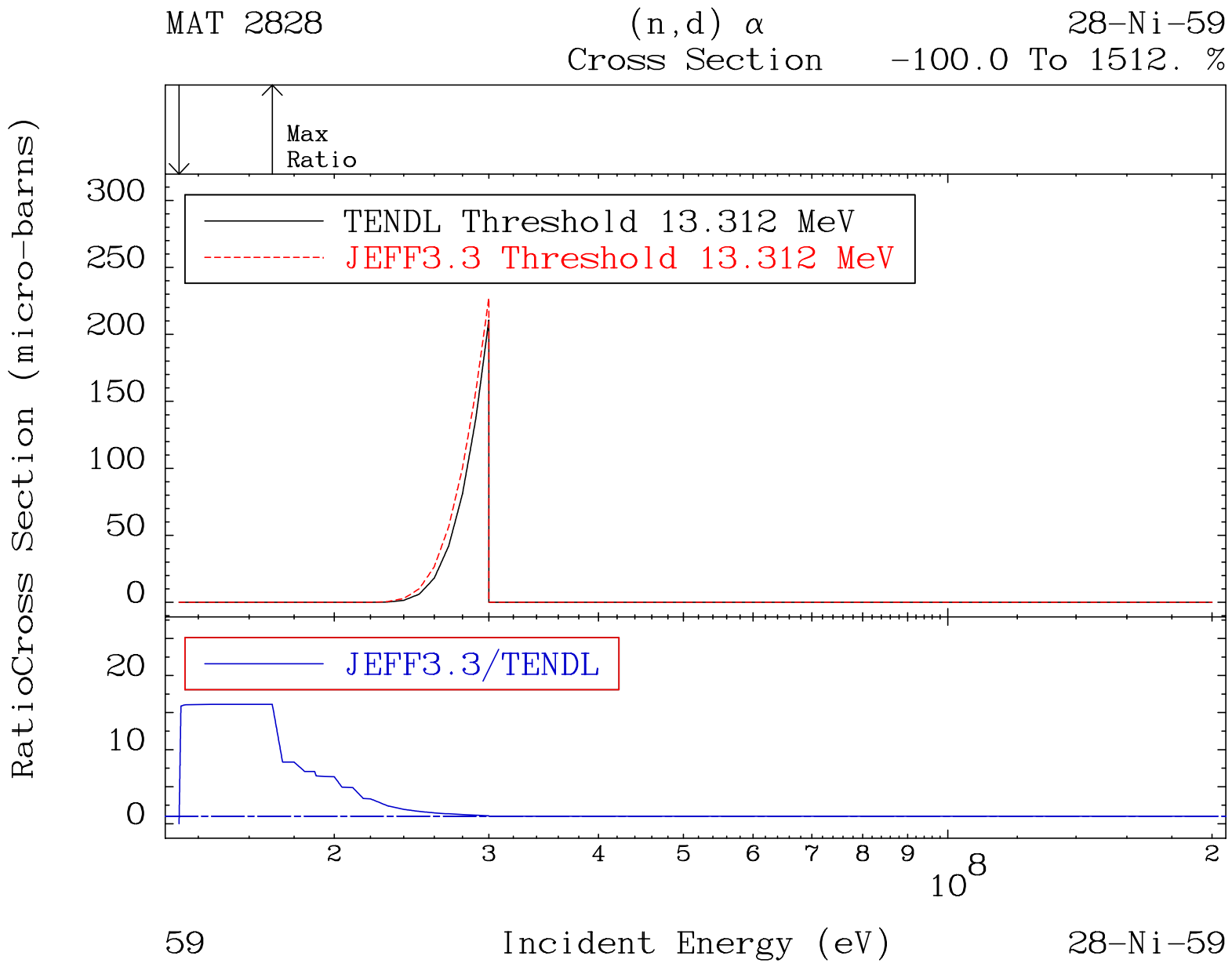

MAT 2828
(n,2α)
28-Ni-59
Cross Section
-100.0 To 2008. %
Min Ratio
Max Ratio
TENDL Threshold 2.5589 MeV
JEFF3.3 Threshold 2.5596 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
30
20
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
54
Incident Energy (eV)
28-Ni-59

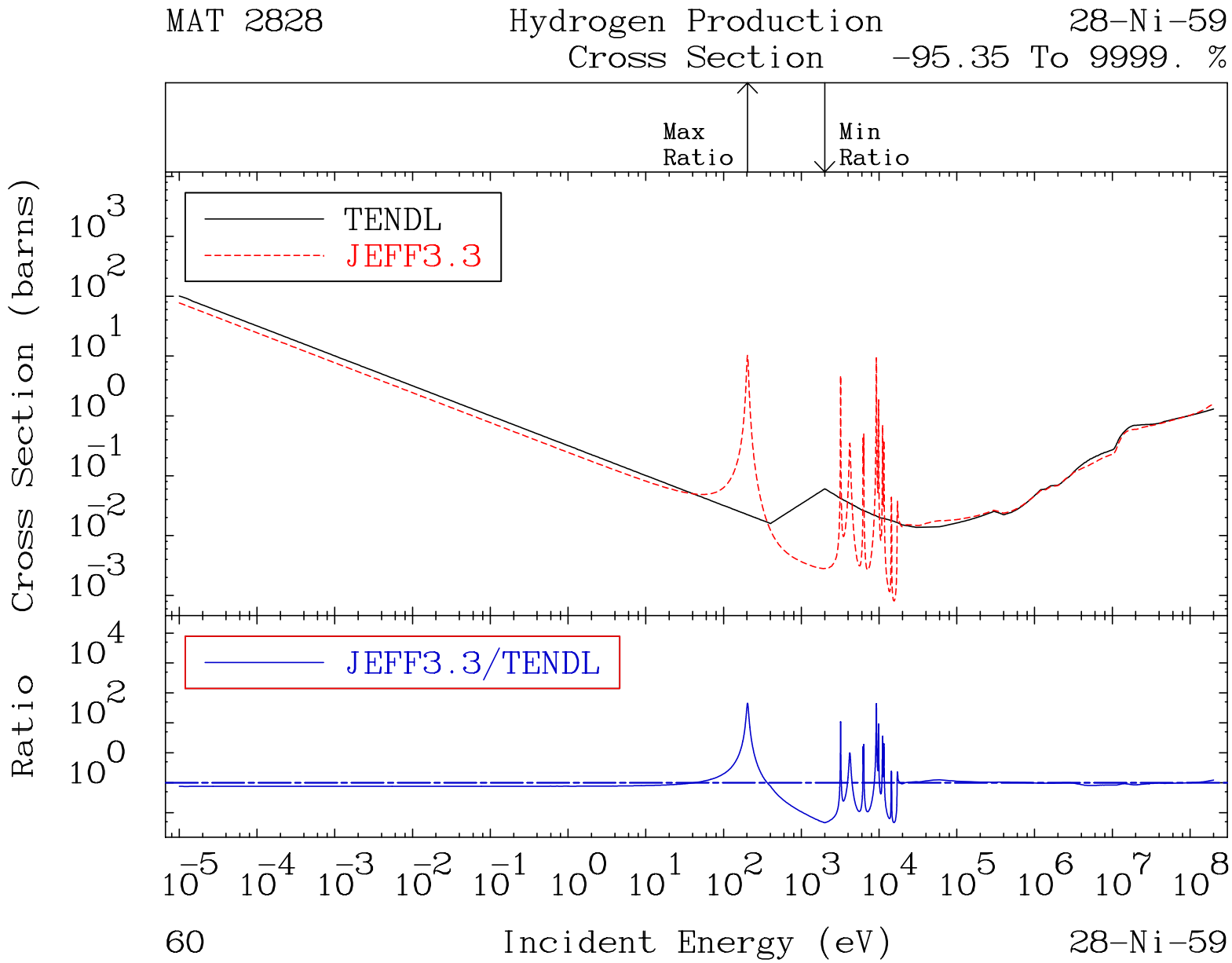

MAT 2828
(n,2p)
Cross Section
28-Ni-59
-100.0 To 84.34 %
Max
Ratio
TENDL Threshold 5.6025 MeV
JEFF3.3 Threshold 5.6025 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
55
Incident Energy (eV)
28-Ni-59

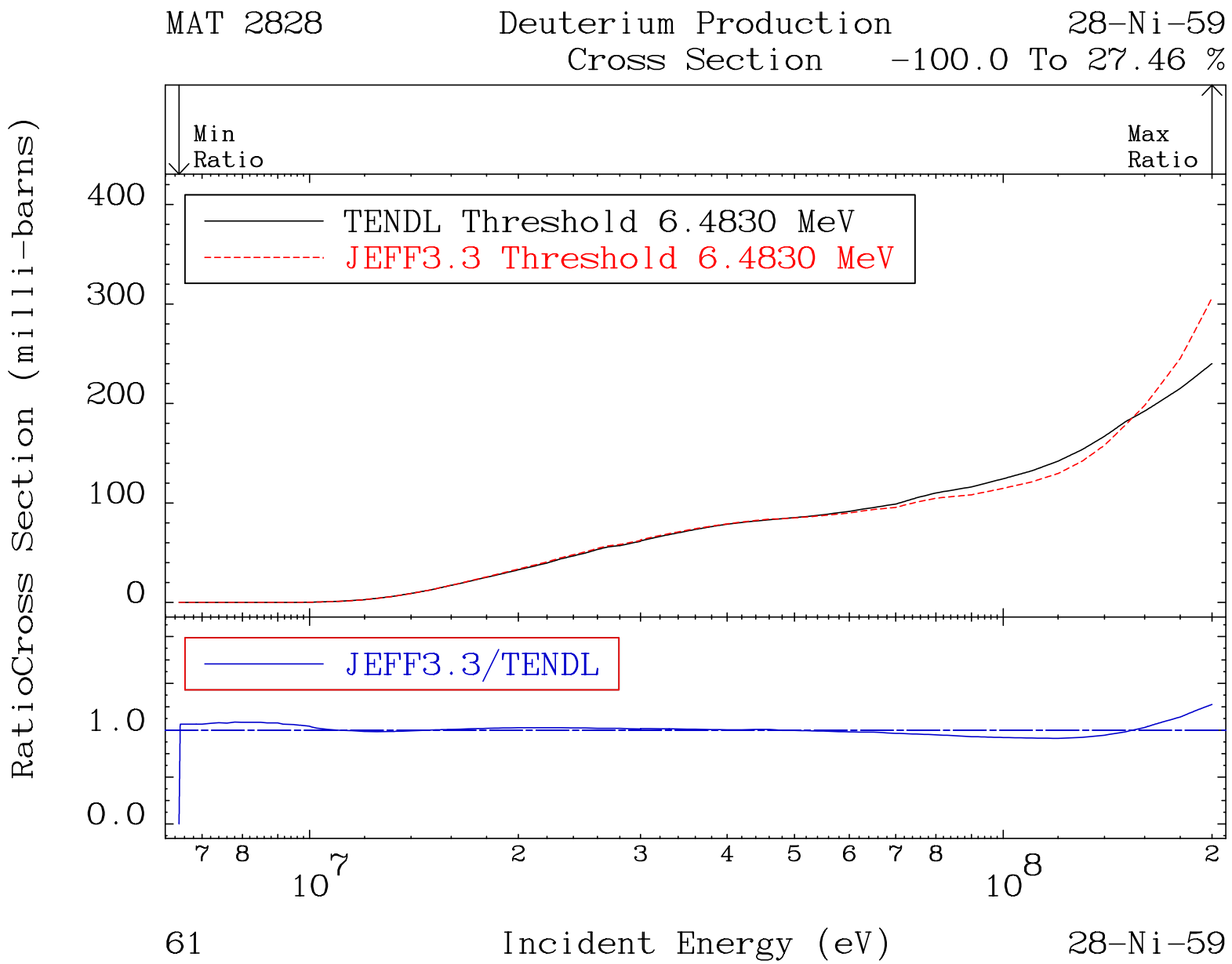

MAT 2828
(n,p) α
Cross Section
28-Ni-59
-100.0 To 780.1 %
Min Ratio
Max Ratio
TENDL Threshold 5.1739 MeV
JEFF3.3 Threshold 5.1739 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
12
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
56
Incident Energy (eV)
28-Ni-59

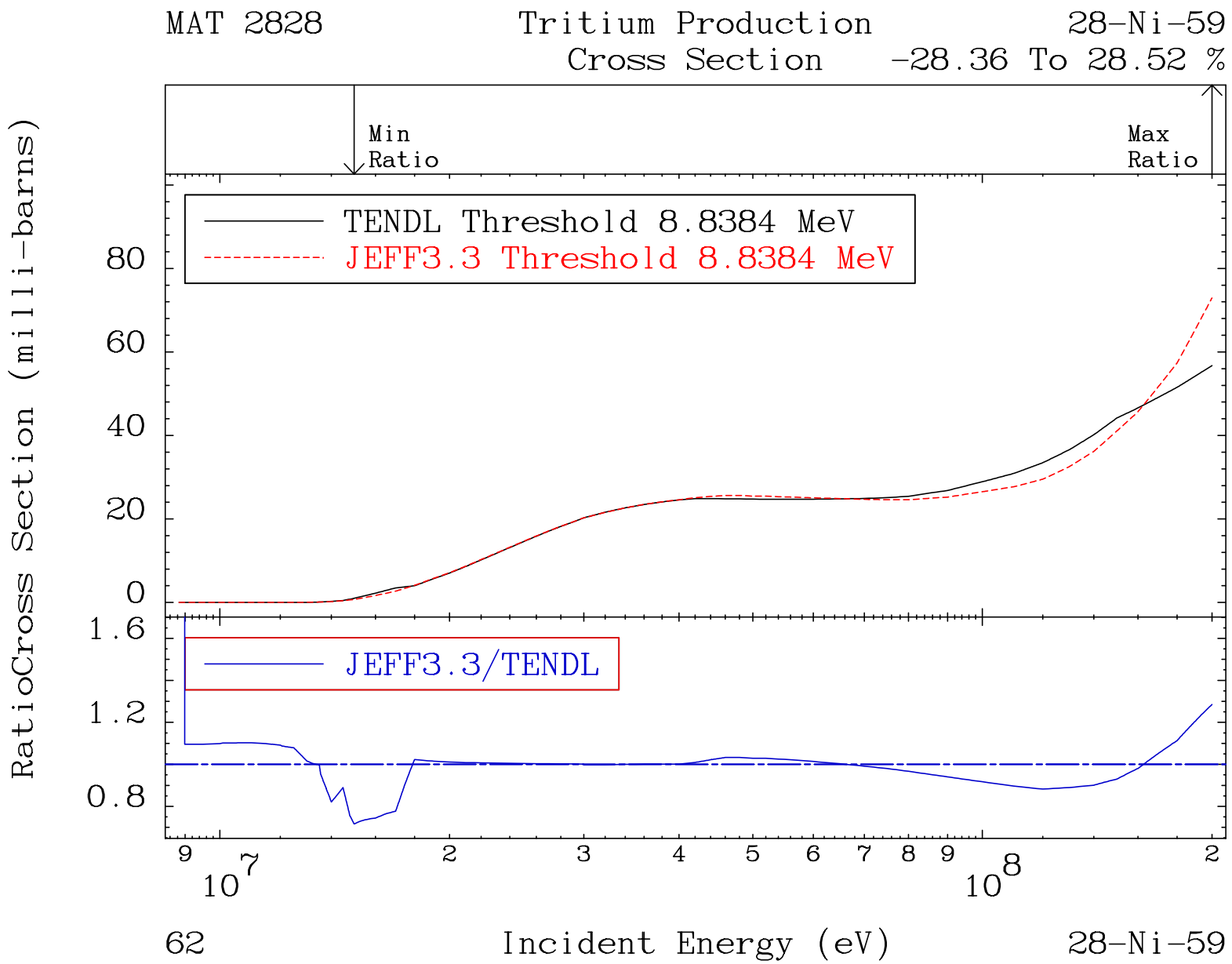

MAT 2828
(n,p) d
Cross Section
28-Ni-59
-100.0 To 586.5 %
Max
Ratio
TENDL Threshold 13.556 MeV
JEFF3.3 Threshold 13.556 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
57
28-Ni-59

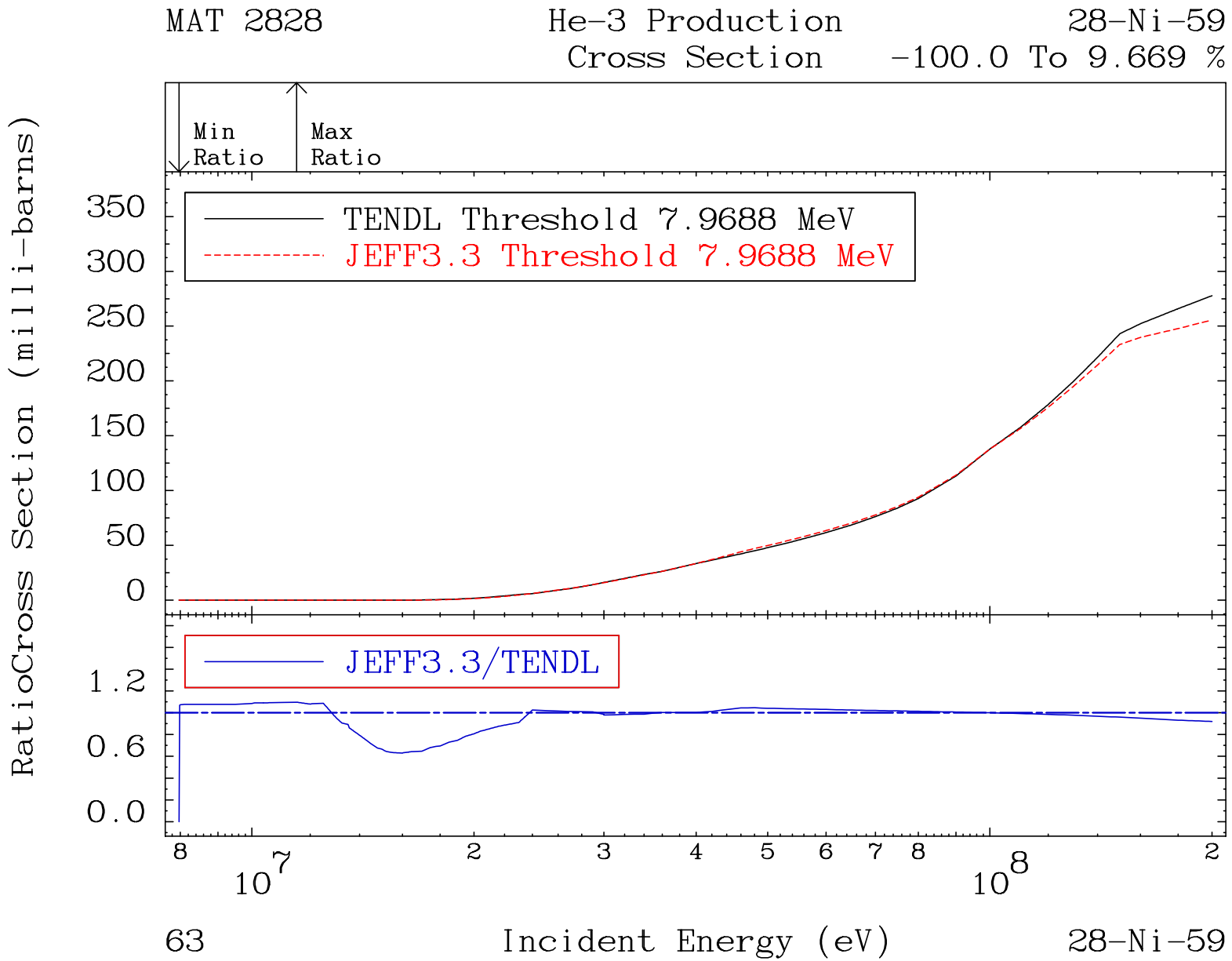

MAT 2828
(n,p) t
Cross Section
28-Ni-59
-4.804 To 21.96 %
Max Ratio
Min Ratio
TENDL Threshold 14.969 MeV
JEFF3.3 Threshold 14.969 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
28-Ni-59

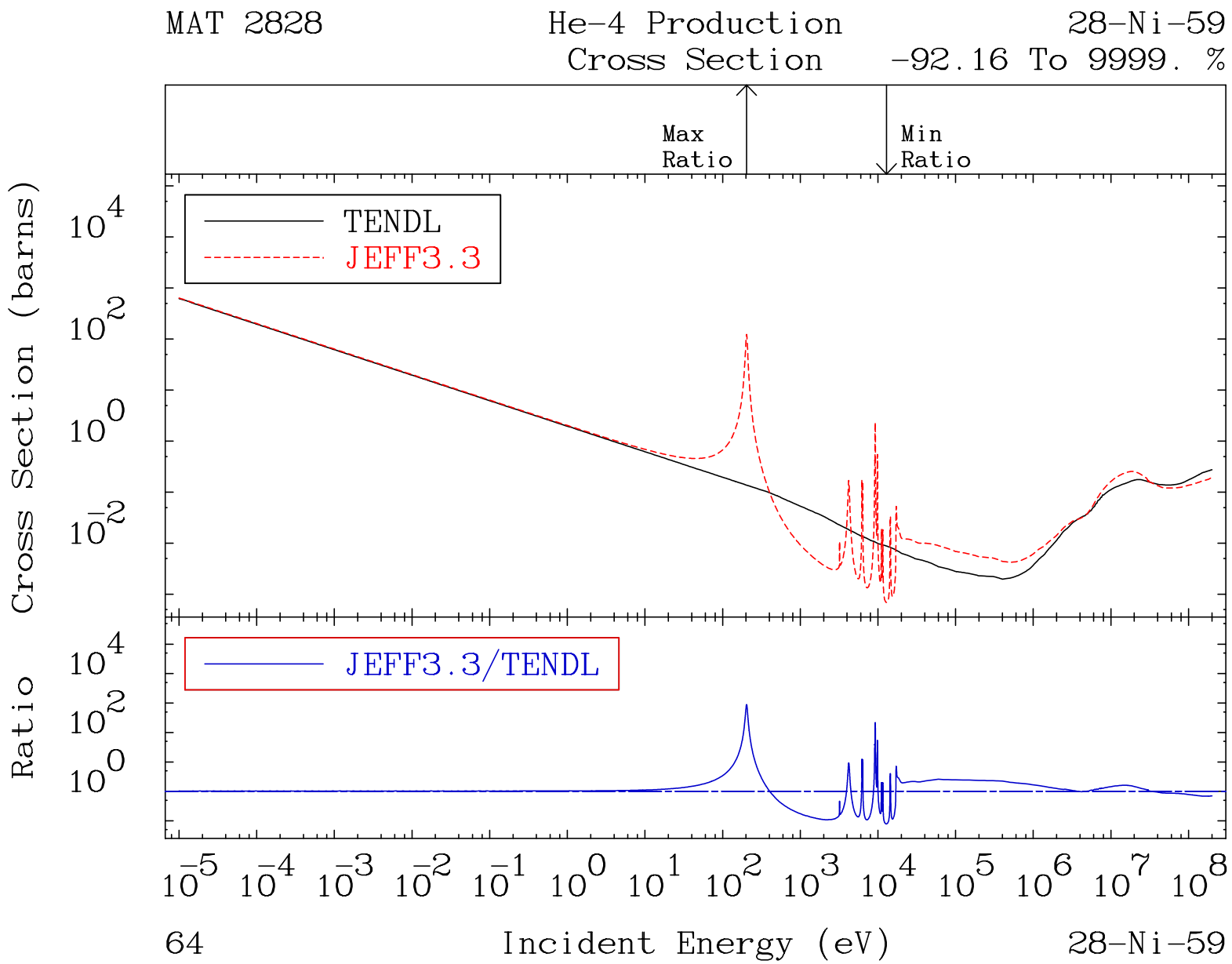

MAT 2828
(n,d) α
Cross Section
28-Ni-59
-100.0 To 1512. %
Max
Ratio
TENDL Threshold 13.312 MeV
JEFF3.3 Threshold 13.312 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
300
250
200
150
100
50
0
20
10
0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
28-Ni-59

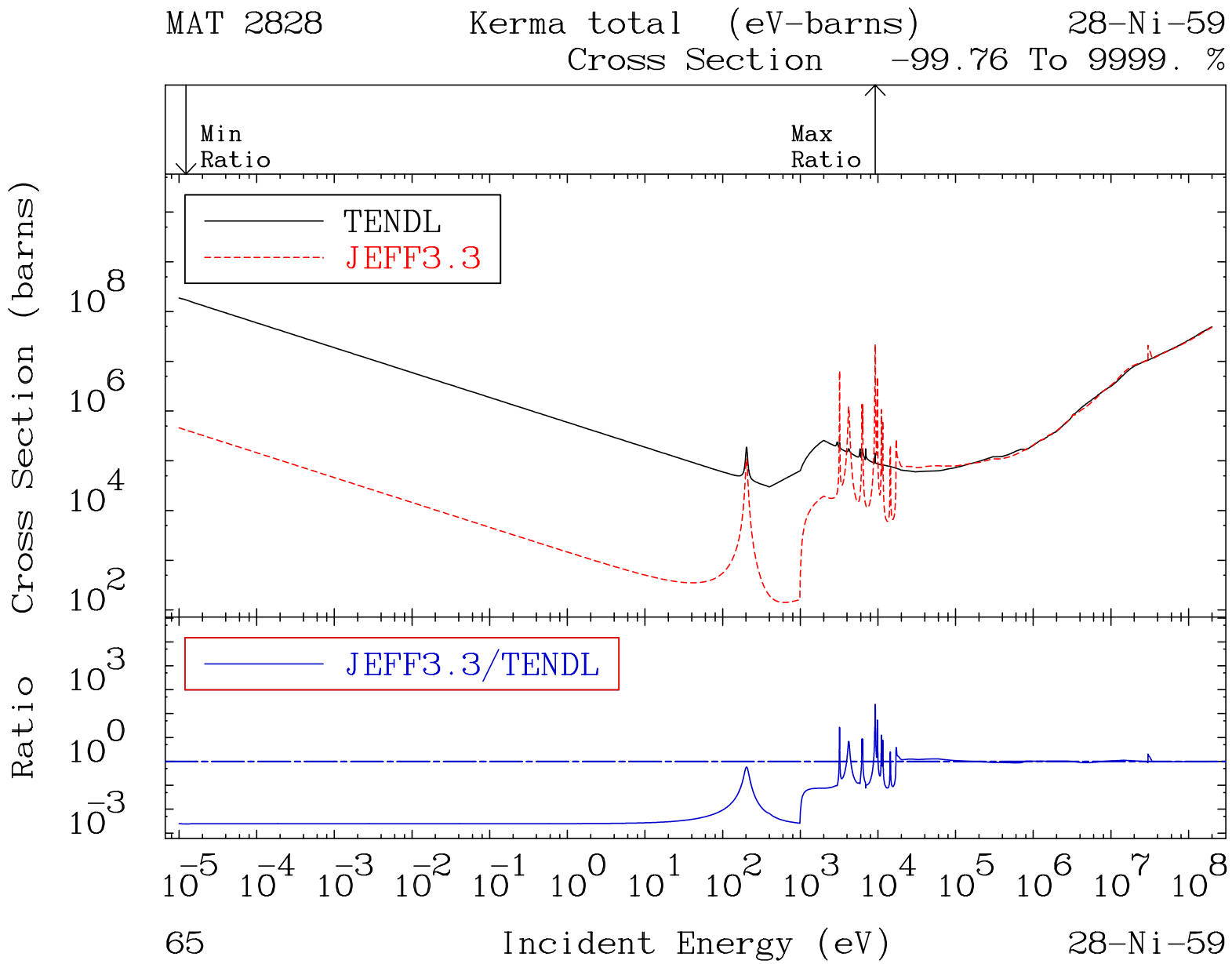

MAT 2828
Hydrogen Production
28-Ni-59
Cross Section -95.35 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
28-Ni-59

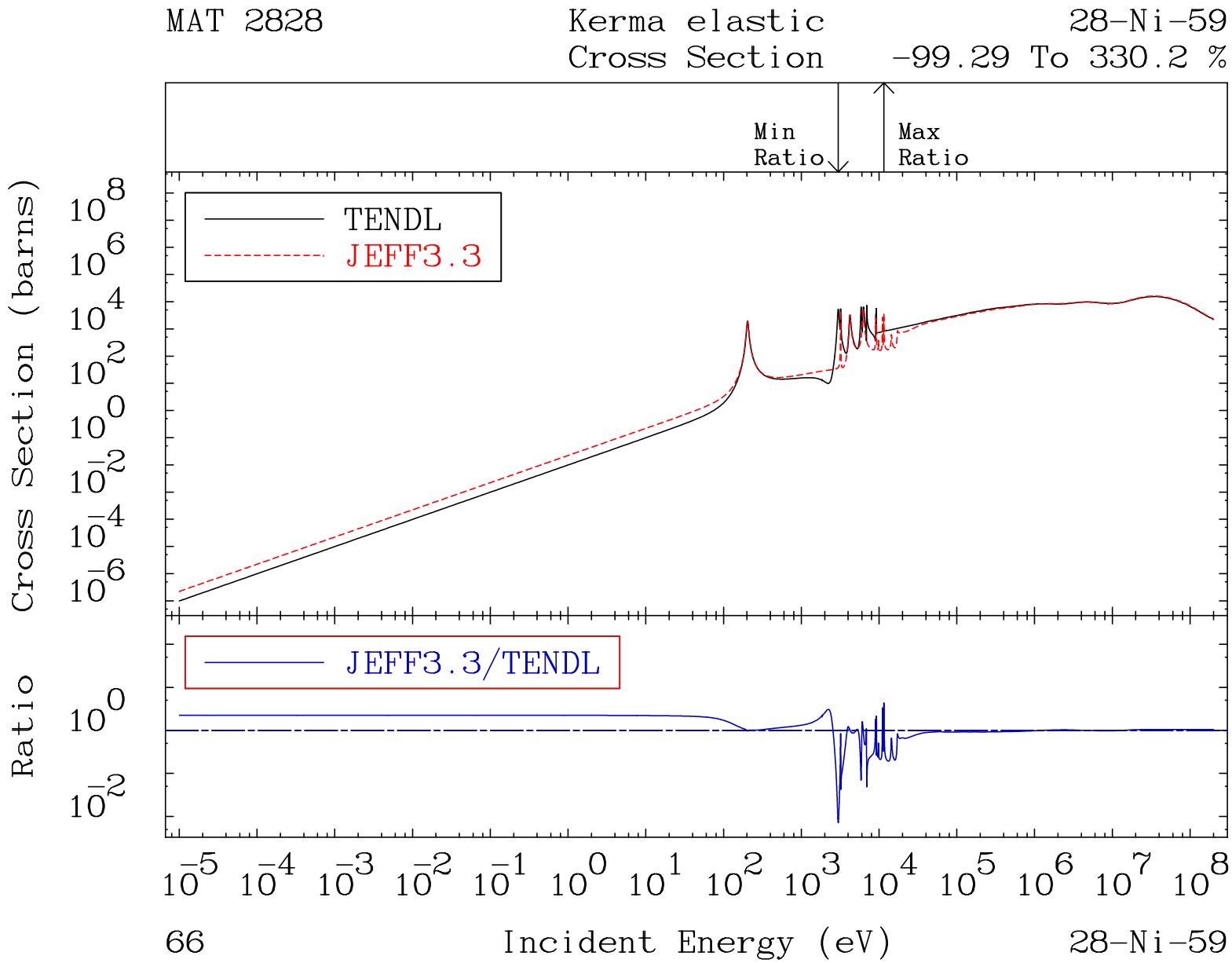

MAT 2828
Deuterium Production
28-Ni-59
Cross Section -100.0 To 27.46 %
Min Ratio
Max Ratio
TENDL Threshold 6.4830 MeV
JEFF3.3 Threshold 6.4830 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.0
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
61
Incident Energy (eV)
28-Ni-59

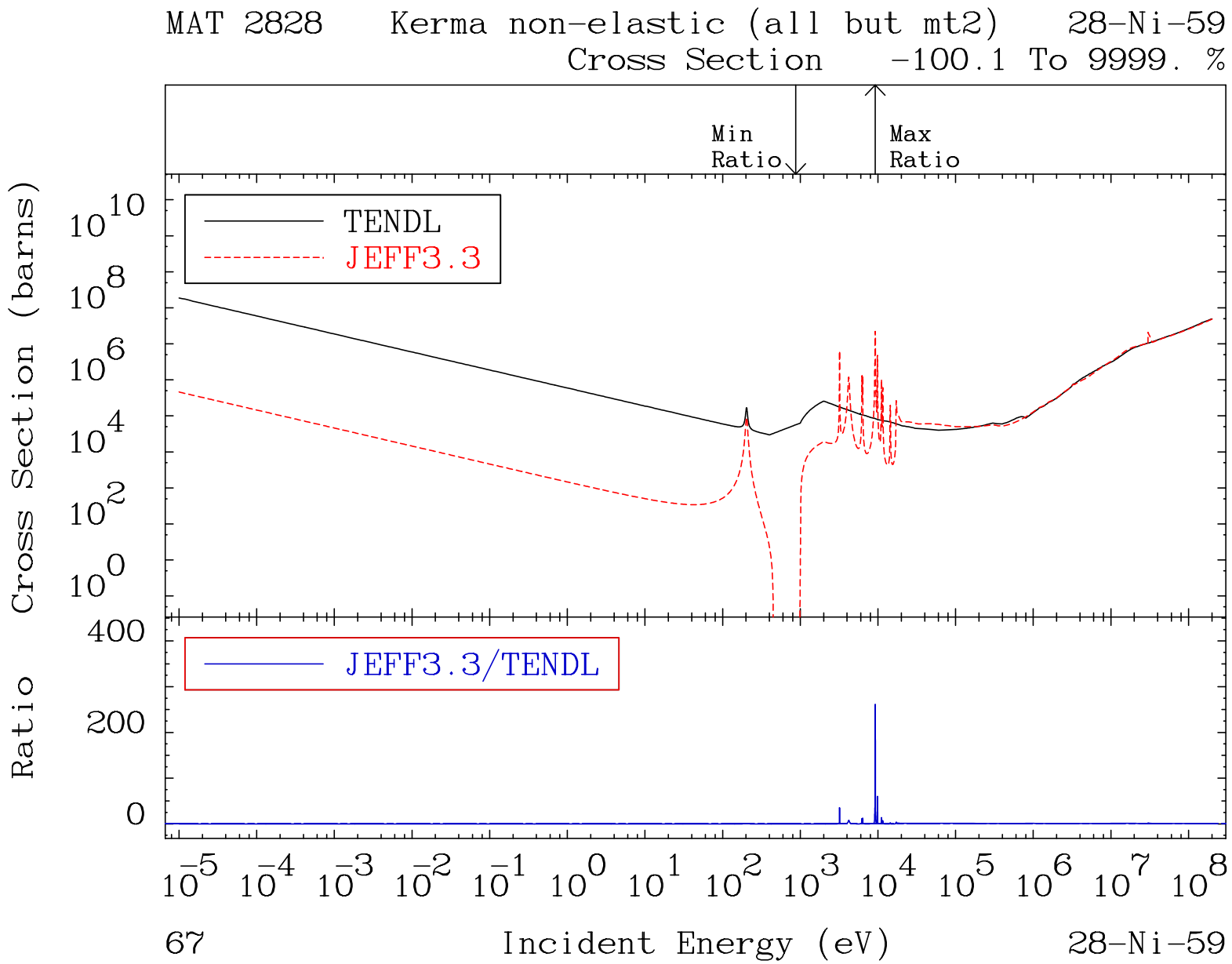

MAT 2828
Tritium Production
Cross Section
28-Ni-59
-28.36 To 28.52 %
Min Ratio
Max Ratio
TENDL Threshold 8.8384 MeV
JEFF3.3 Threshold 8.8384 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.6
1.2
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
28-Ni-59

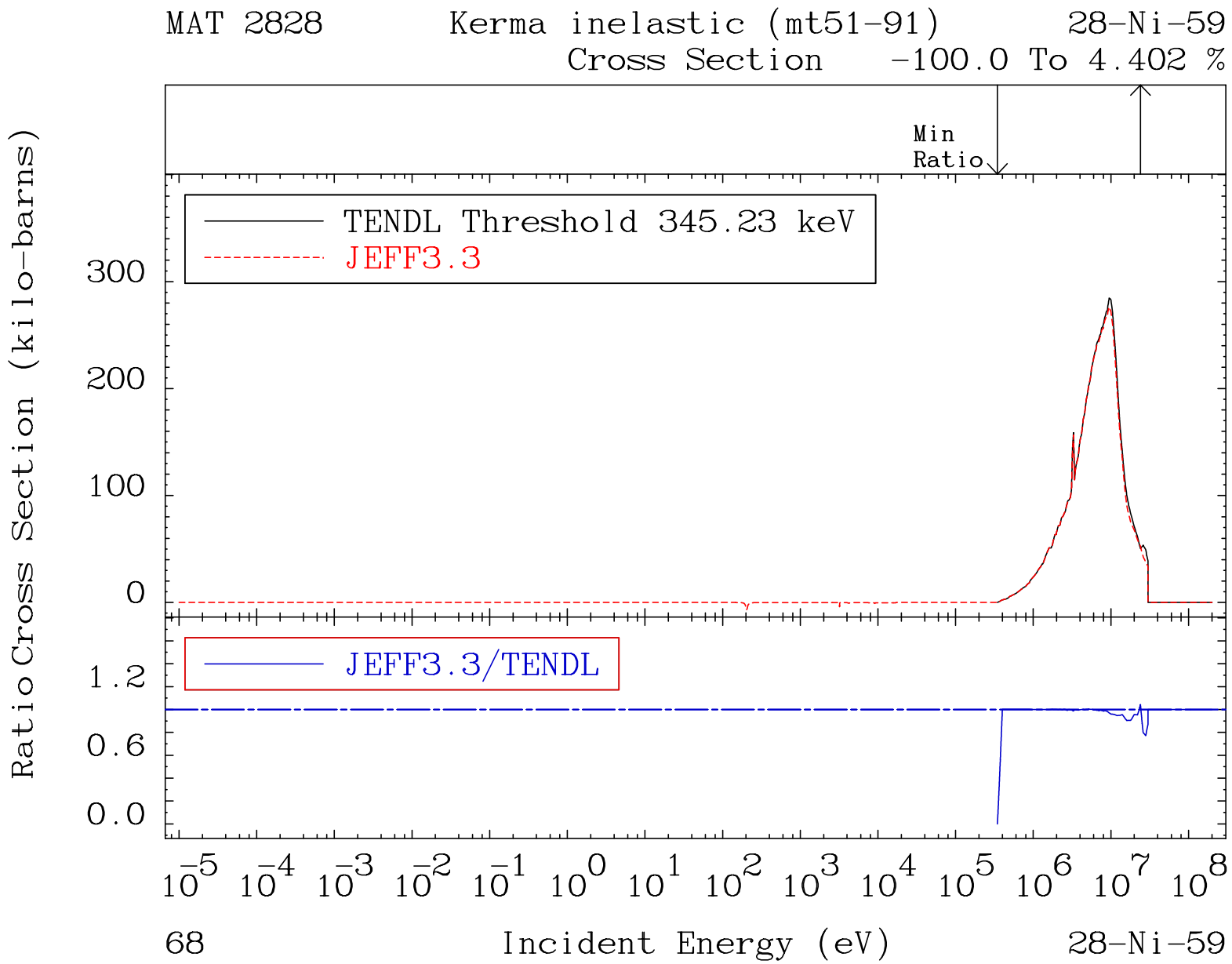

MAT 2828
He-3 Production
Cross Section
28-Ni-59
-100.0 To 9.669 %
Min Ratio
Max Ratio
TENDL Threshold 7.9688 MeV
JEFF3.3 Threshold 7.9688 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
63
Incident Energy (eV)
28-Ni-59

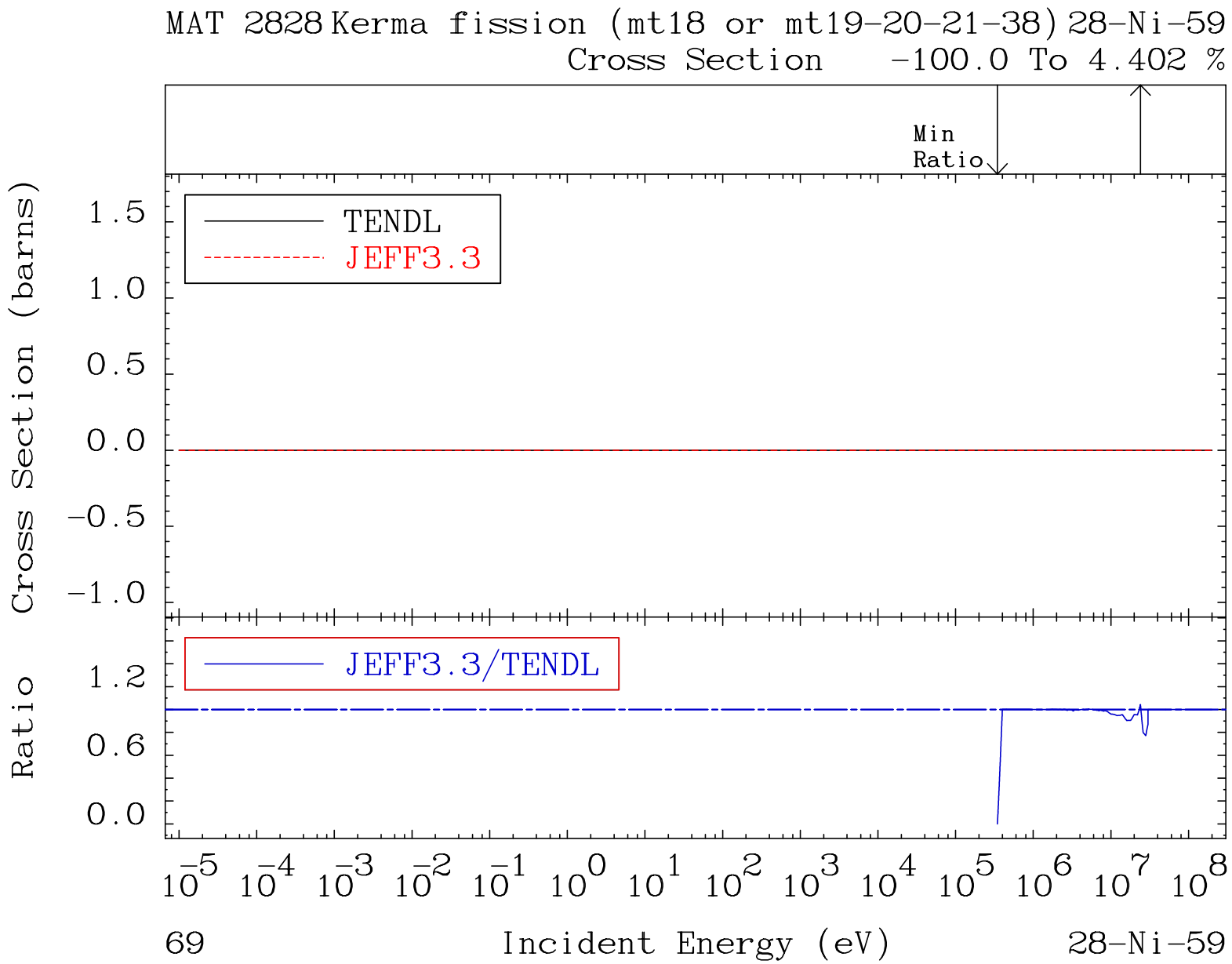

MAT 2828
He-4 Production
Cross Section
28-Ni-59
-92.16 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
28-Ni-59

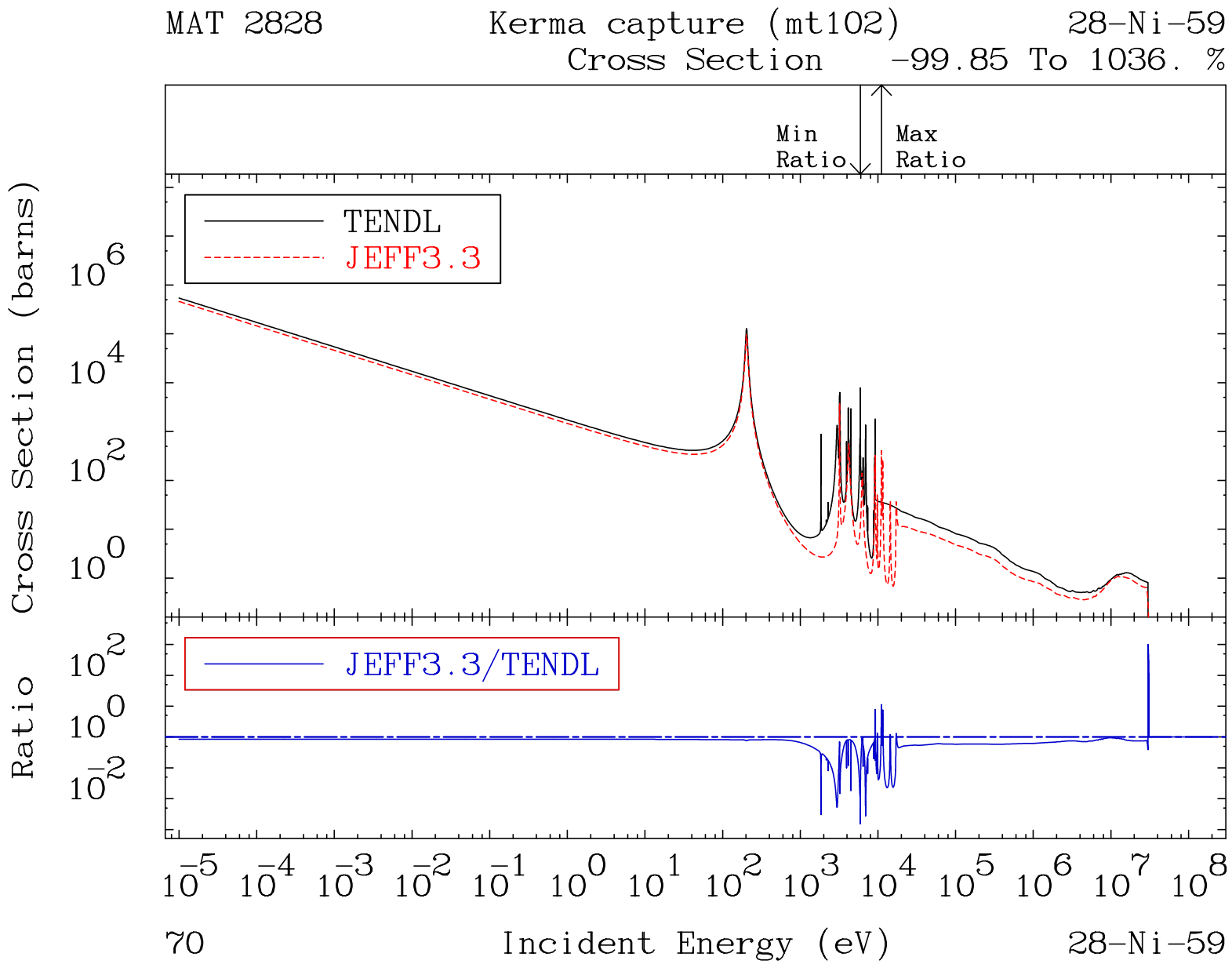

MAT 2828
Kerma total (eV-barns)
28-Ni-59
Cross Section -99.76 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
28-Ni-59

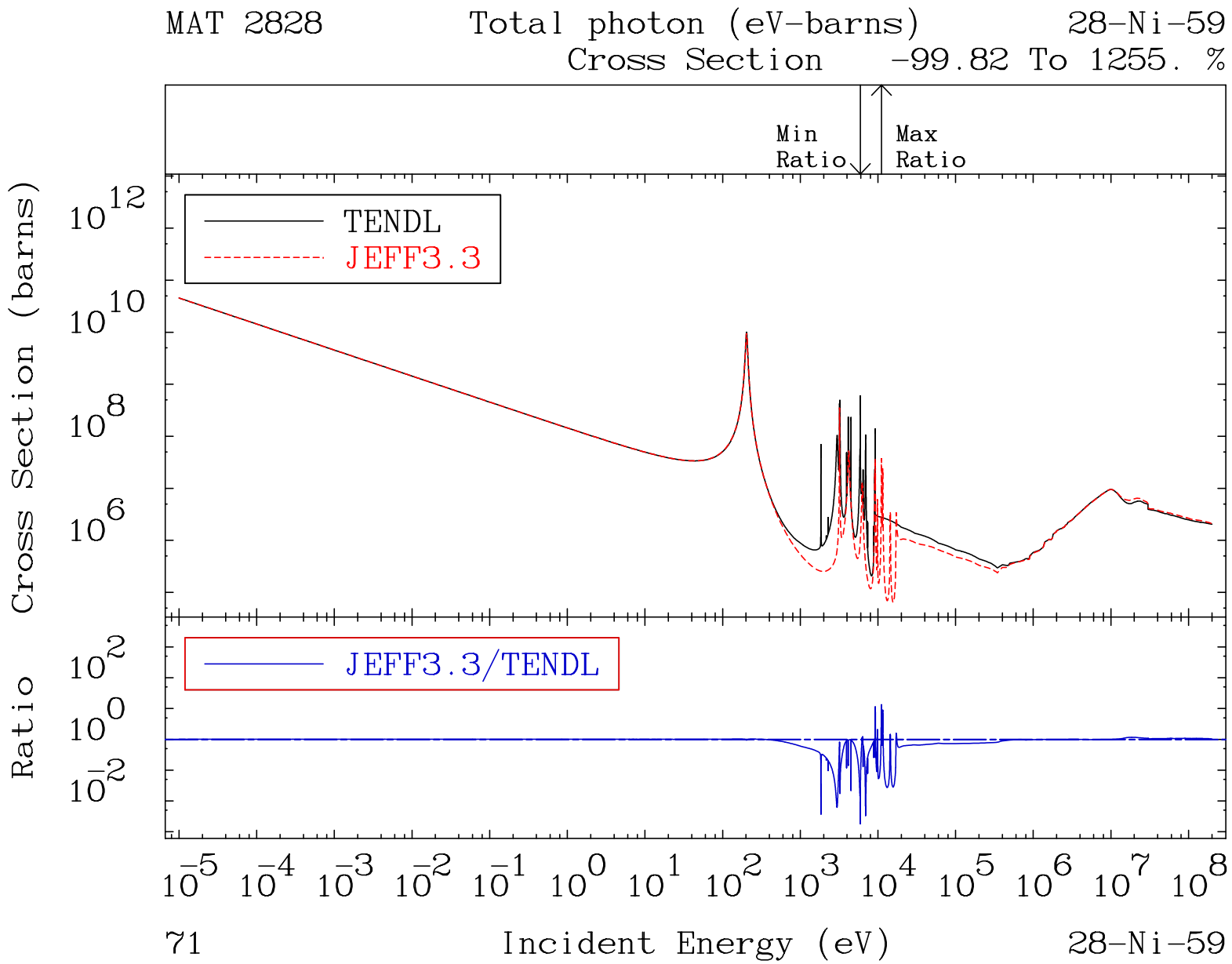

MAT 2828
Kerma elastic
Cross Section
28-Ni-59
-99.29 To 330.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
28-Ni-59

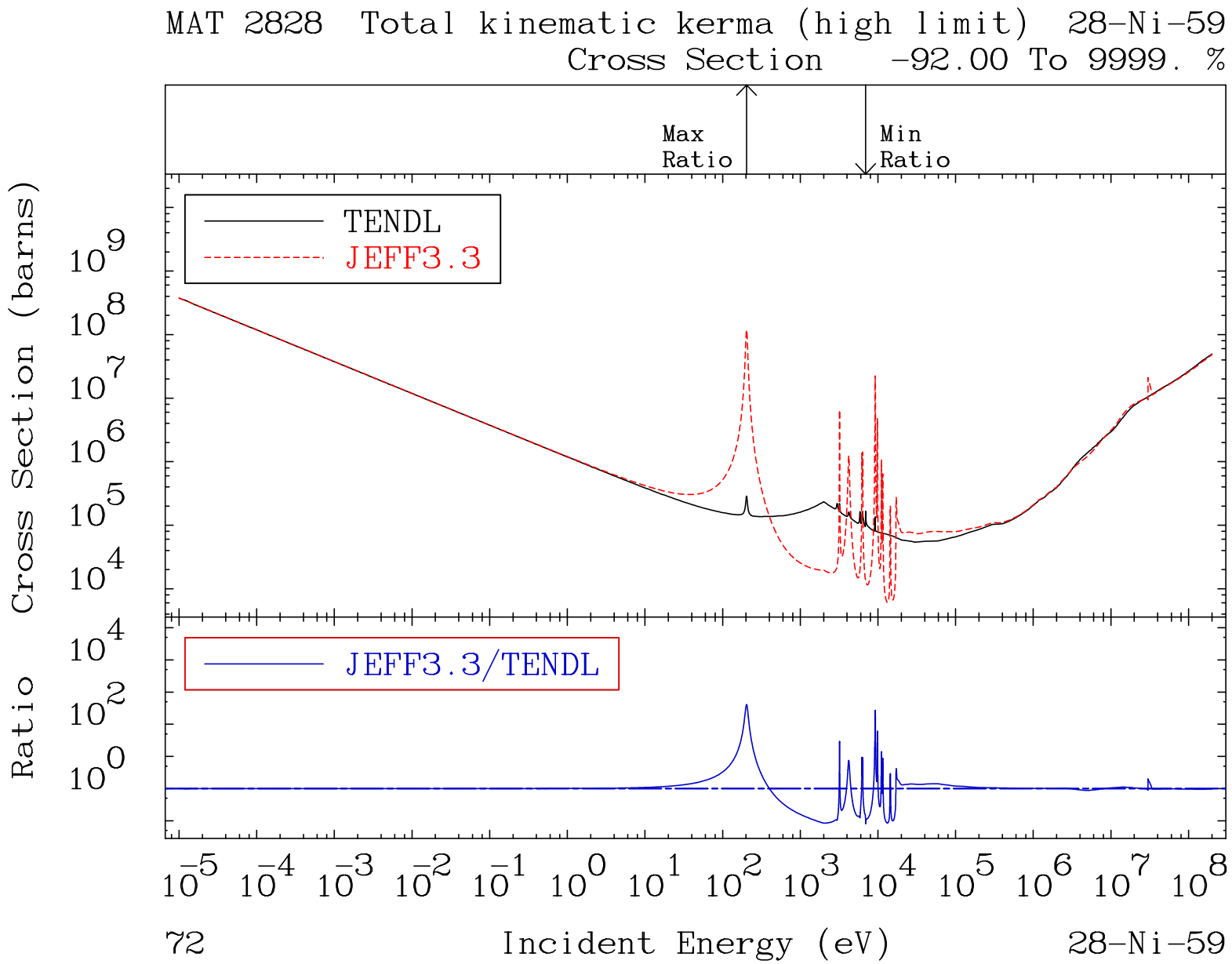

MAT 2828 Kerma non-elastic (all but mt2) 28-Ni-59
Cross Section -100.1 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
28-Ni-59

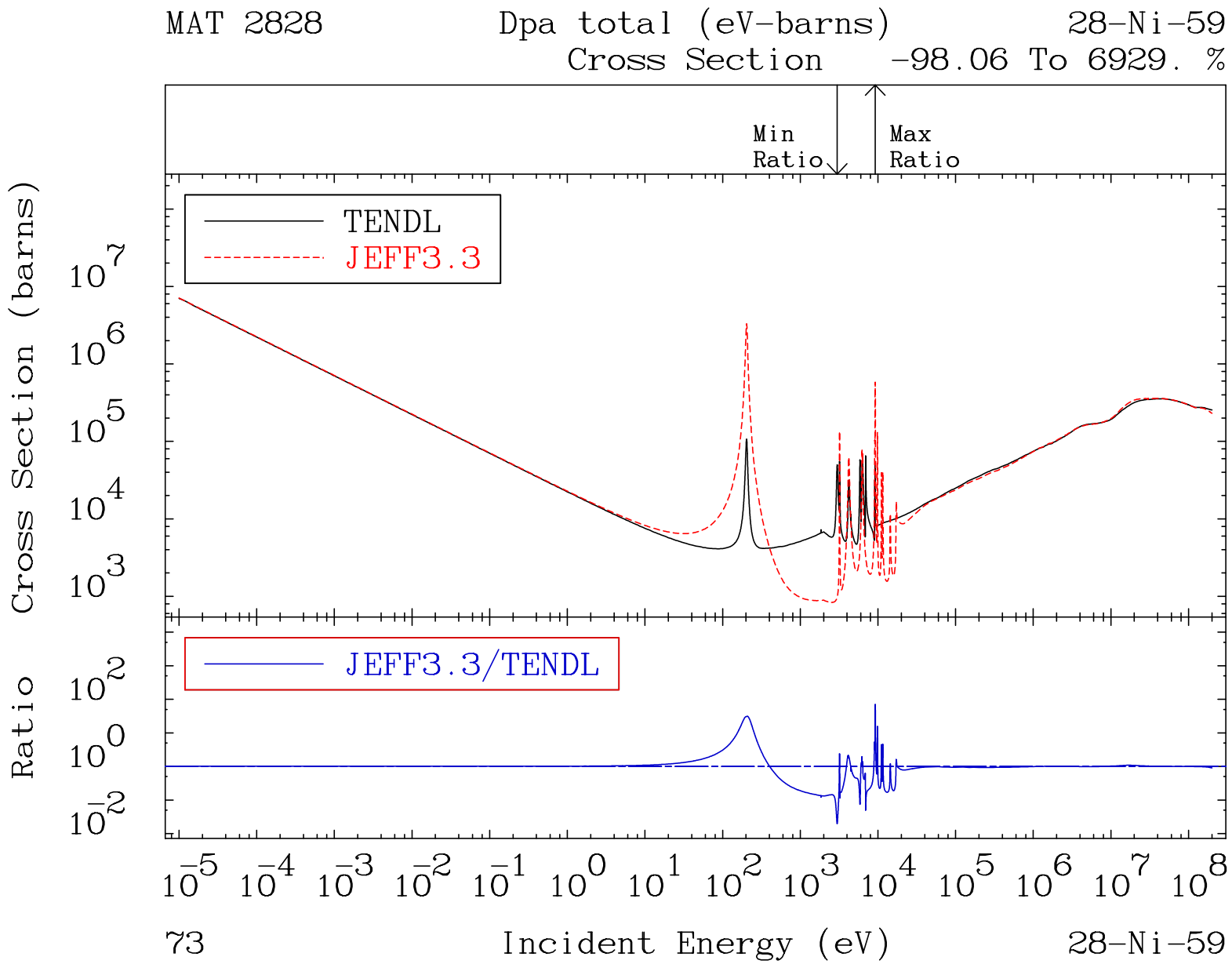

MAT 2828
Kerma inelastic (mt51-91)
28-Ni-59
Cross Section
-100.0 To 4.402 %
Min
Ratio
TENDL Threshold 345.23 keV
JEFF3.3
JEFF3.3/TENDL
Ratio Cross Section (kilo-barns)
300
200
100
0
1.2
0.6
0.0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
68
Incident Energy (eV)
28-Ni-59

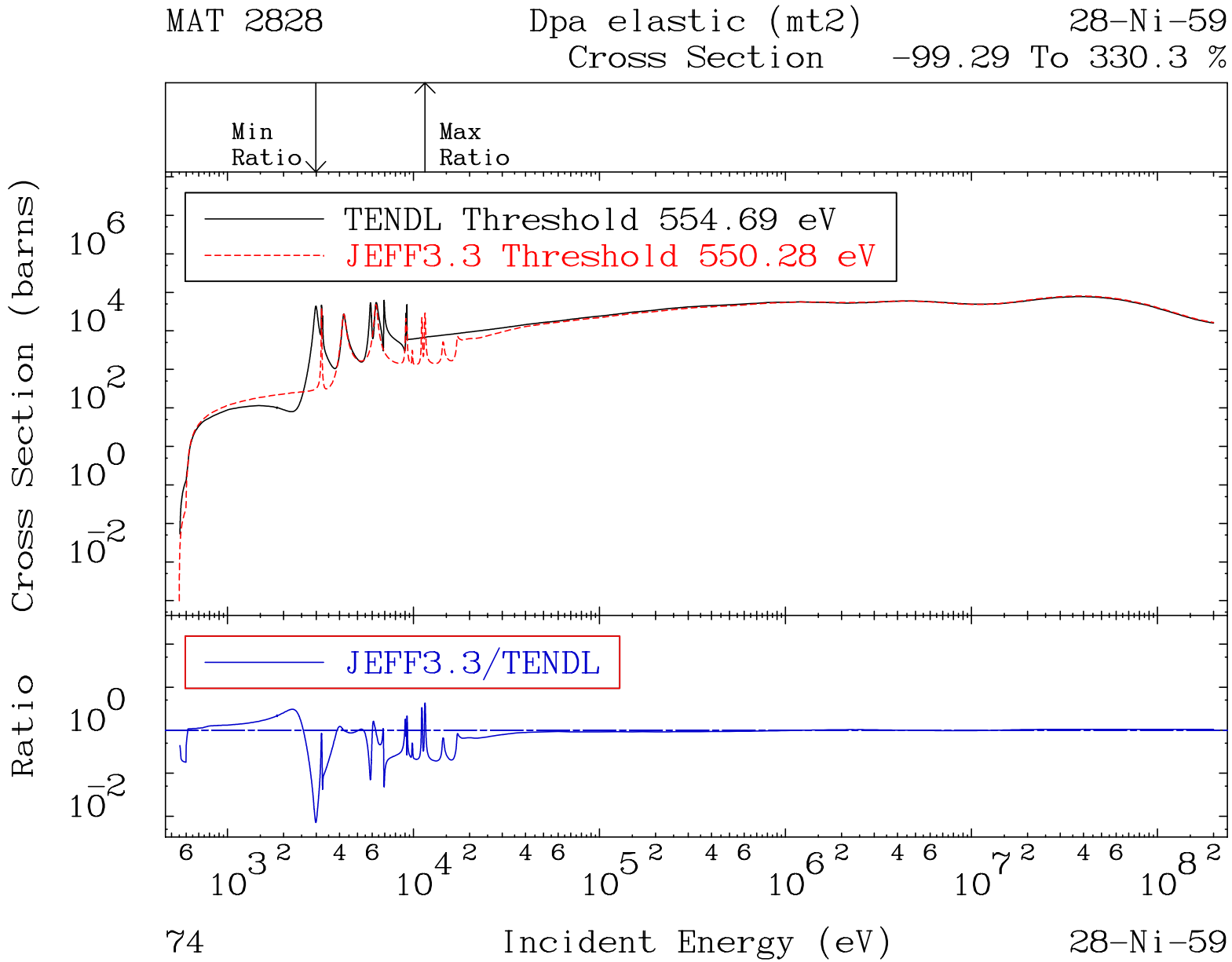

MAT 2828 Kerma fission (mt18 or mt19-20-21-38) 28-Ni-59
Cross Section -100.0 To 4.402 %
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
69
Incident Energy (eV)
28-Ni-59

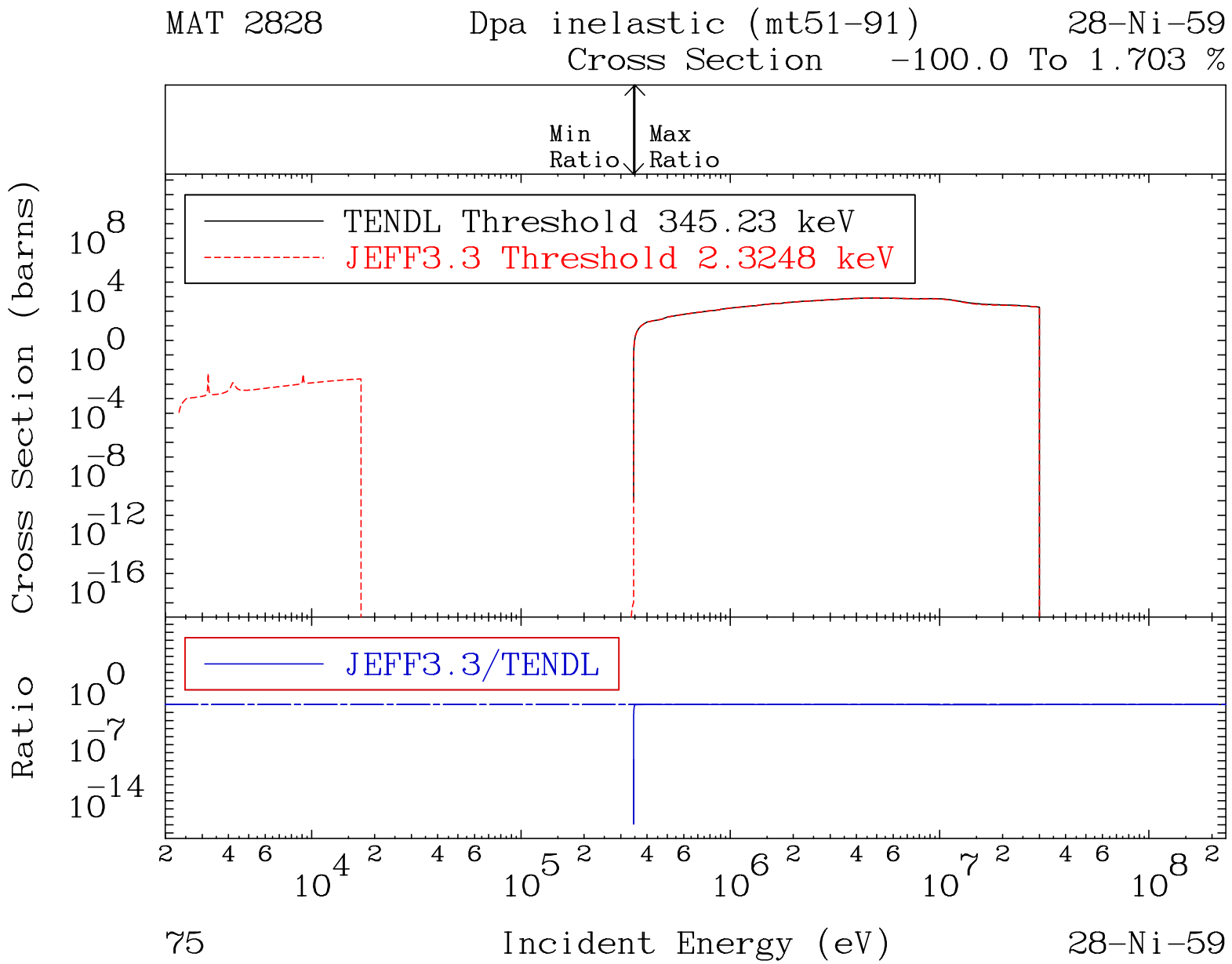

MAT 2828
Kerma capture (mt102)
28-Ni-59
Cross Section -99.85 To 1036. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
28-Ni-59

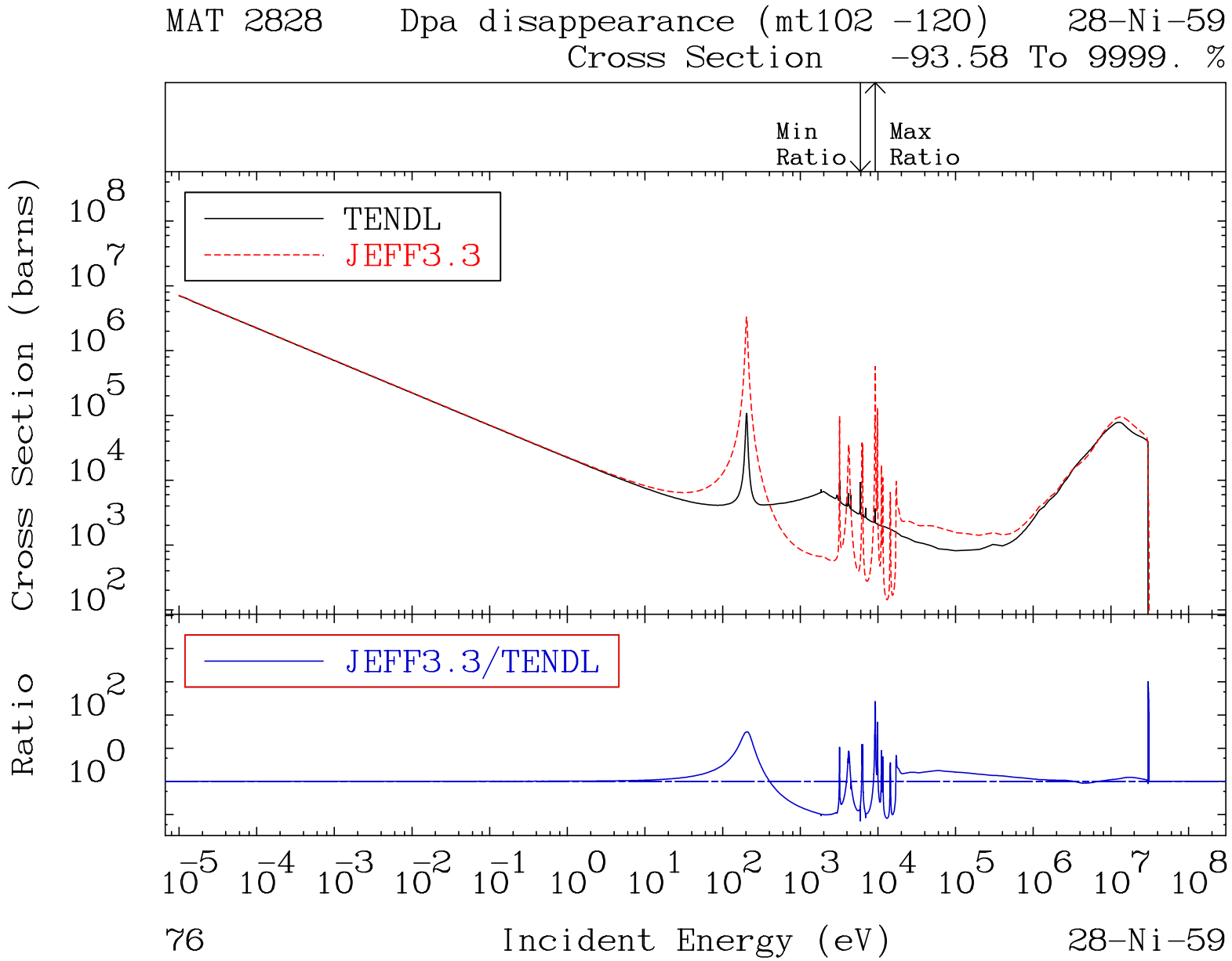

MAT 2828
Total photon (eV-barns)
28-Ni-59
Cross Section -99.82 To 1255. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
28-Ni-59

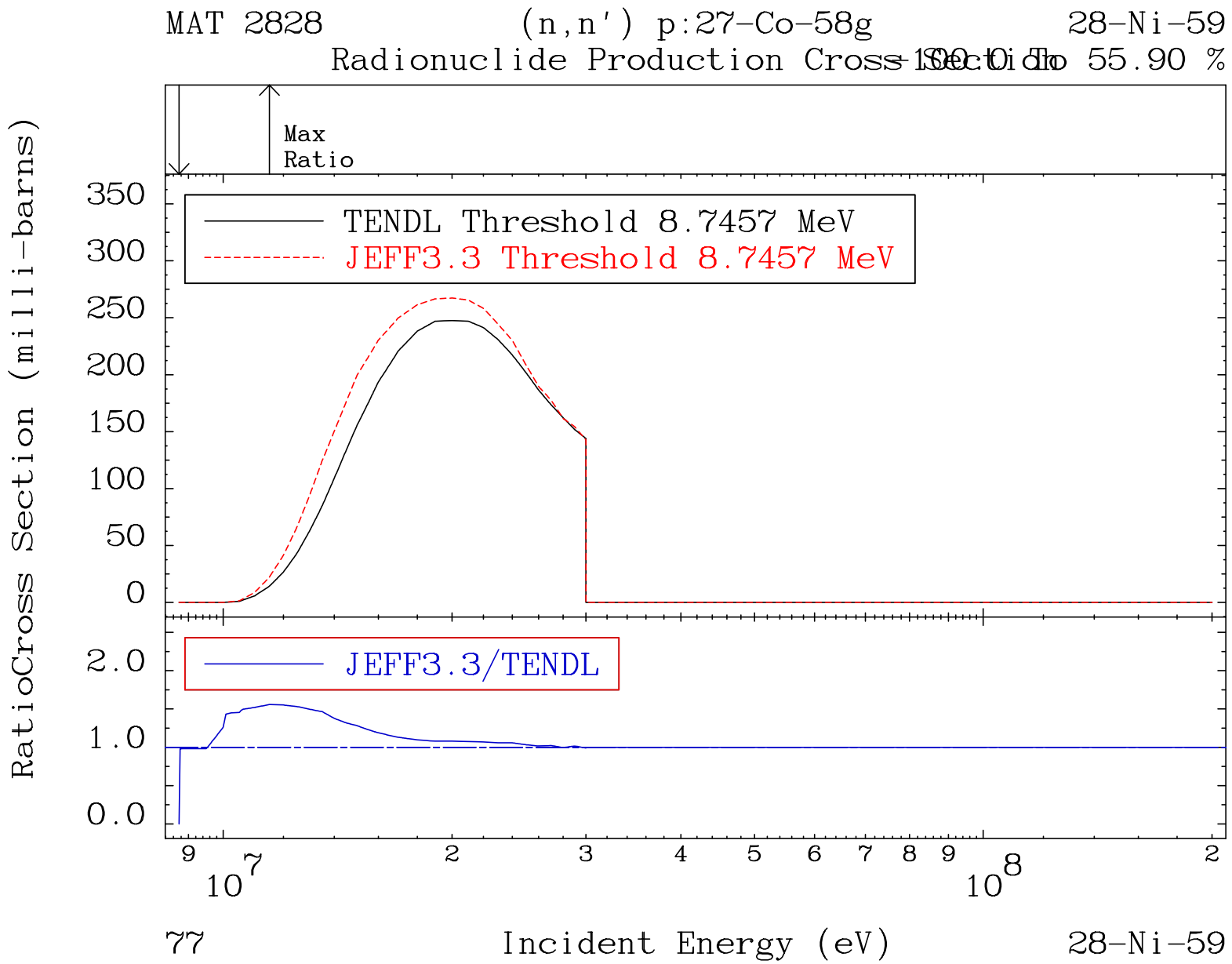

MAT 2828 Total kinematic kerma (high limit) 28-Ni-59
Cross Section -92.00 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
28-Ni-59

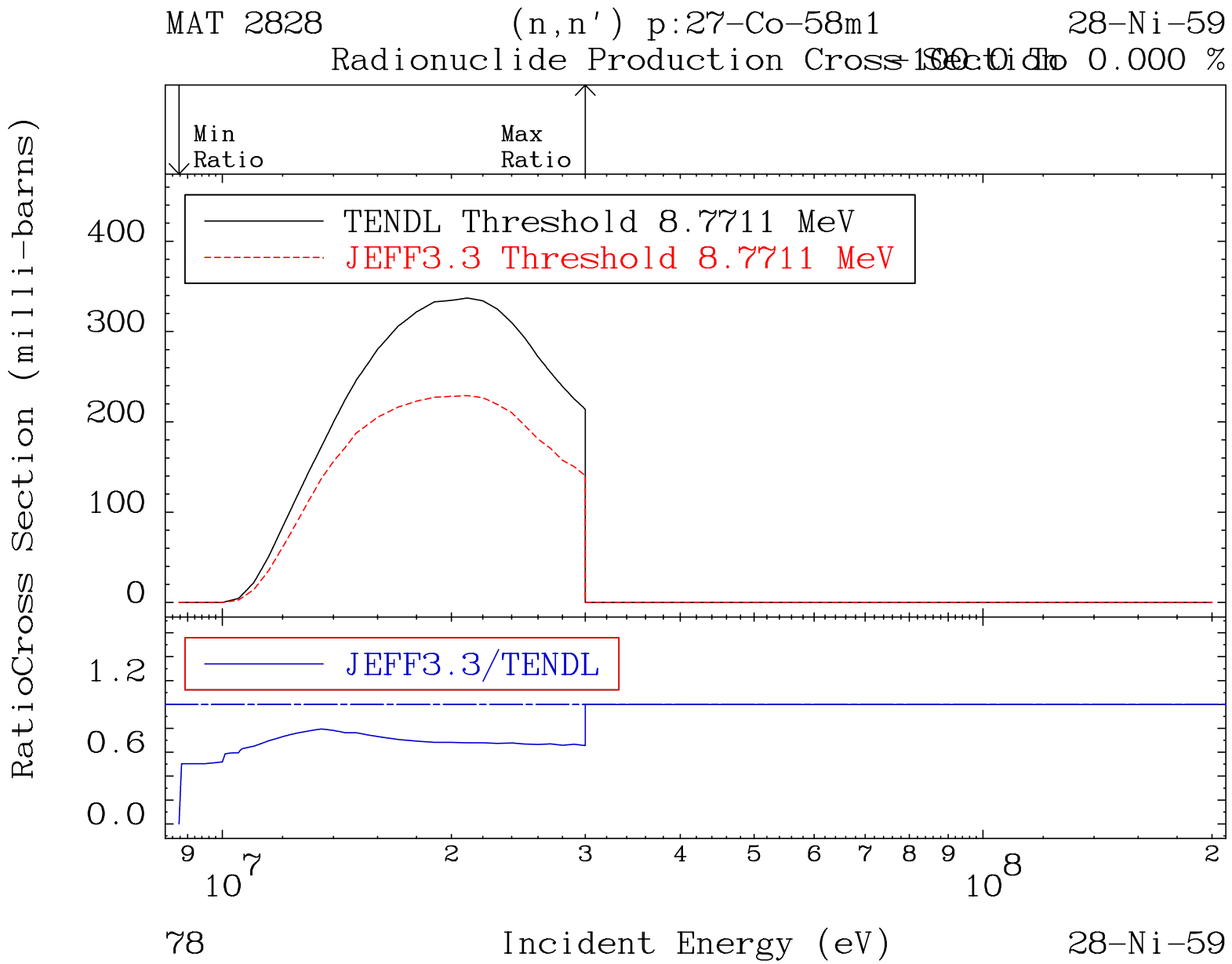

MAT 2828
Dpa total (eV-barns)
28-Ni-59
Cross Section
-98.06 To 6929. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
28-Ni-59

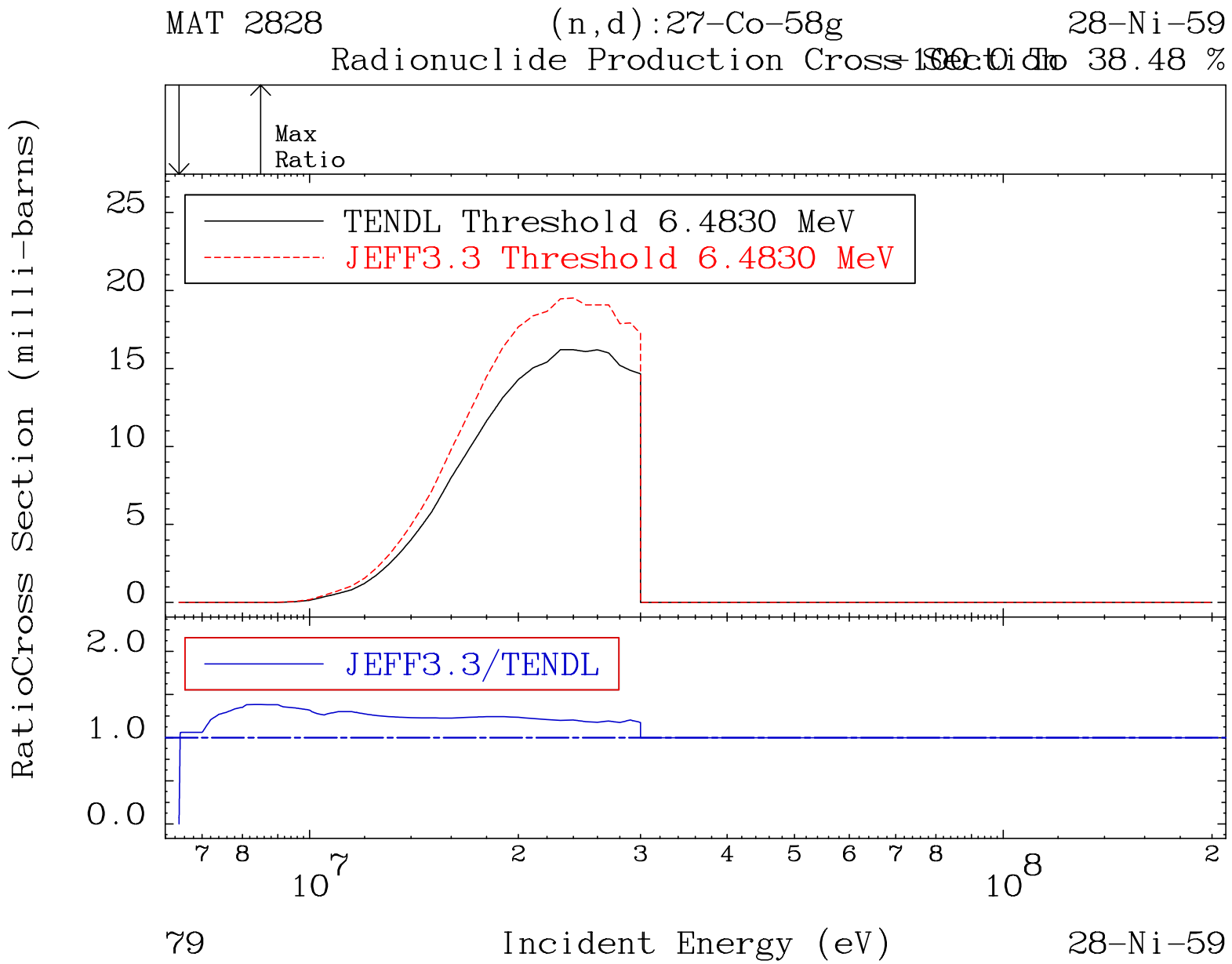

MAT 2828
Dpa elastic (mt2)
Cross Section
28-Ni-59
-99.29 To 330.3 %
Min Ratio
Max Ratio
TENDL Threshold 554.69 eV
JEFF3.3 Threshold 550.28 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
28-Ni-59

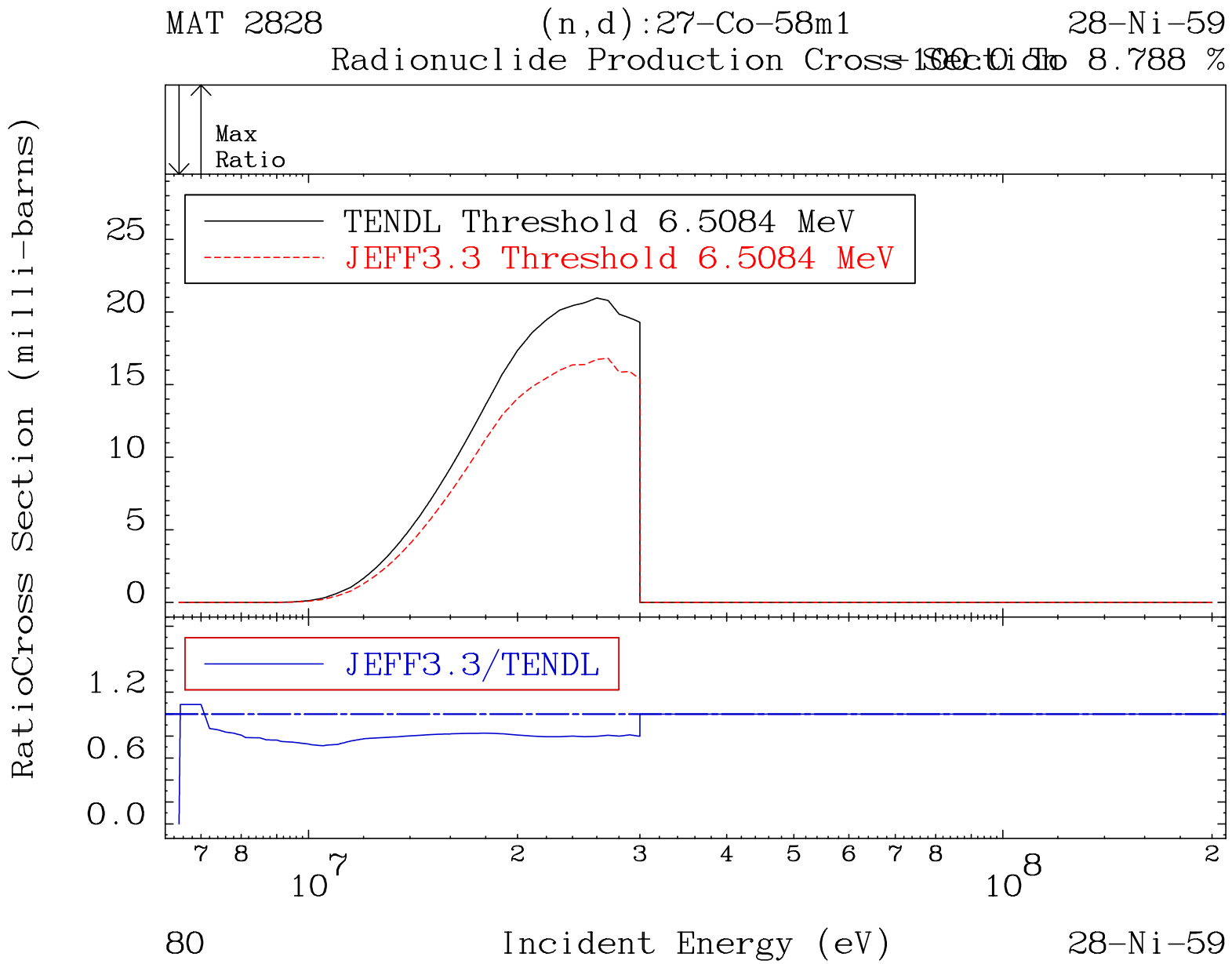

MAT 2828
Dpa inelastic (mt51-91)
28-Ni-59
Cross Section -100.0 To 1.703 %
Min Ratio
Max Ratio
TENDL Threshold 345.23 keV
JEFF3.3 Threshold 2.3248 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
28-Ni-59


MAT 2828 Dpa disappearance (mt102 -120) 28-Ni-59
Cross Section -93.58 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
28-Ni-59


MAT 2828
(n,n') p:27-Co-58g
28-Ni-59
Radionuclide Production Cross Section To 55.90 %
Max
Ratio
TENDL Threshold 8.7457 MeV
JEFF3.3 Threshold 8.7457 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
28-Ni-59


MAT 2828
(n,n') p:27-Co-58m1
28-Ni-59
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 8.7711 MeV
JEFF3.3 Threshold 8.7711 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
28-Ni-59


MAT 2828
(n,d):27-Co-58g
28-Ni-59
Radionuclide Production Cross Section To 38.48 %
Max
Ratio
TENDL Threshold 6.4830 MeV
JEFF3.3 Threshold 6.4830 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
79
Incident Energy (eV)
28-Ni-59


MAT 2828
(n,d):27-Co-58m1
28-Ni-59
Radionuclide Production Cross Section To 8.788 %
Max
Ratio
TENDL Threshold 6.5084 MeV
JEFF3.3 Threshold 6.5084 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.2
0.6
0.0
7 8
10^7
2
3
4
5
6
7
8
10^8
2
80
Incident Energy (eV)
28-Ni-59