Program Complot
(Version 2018-1)
by
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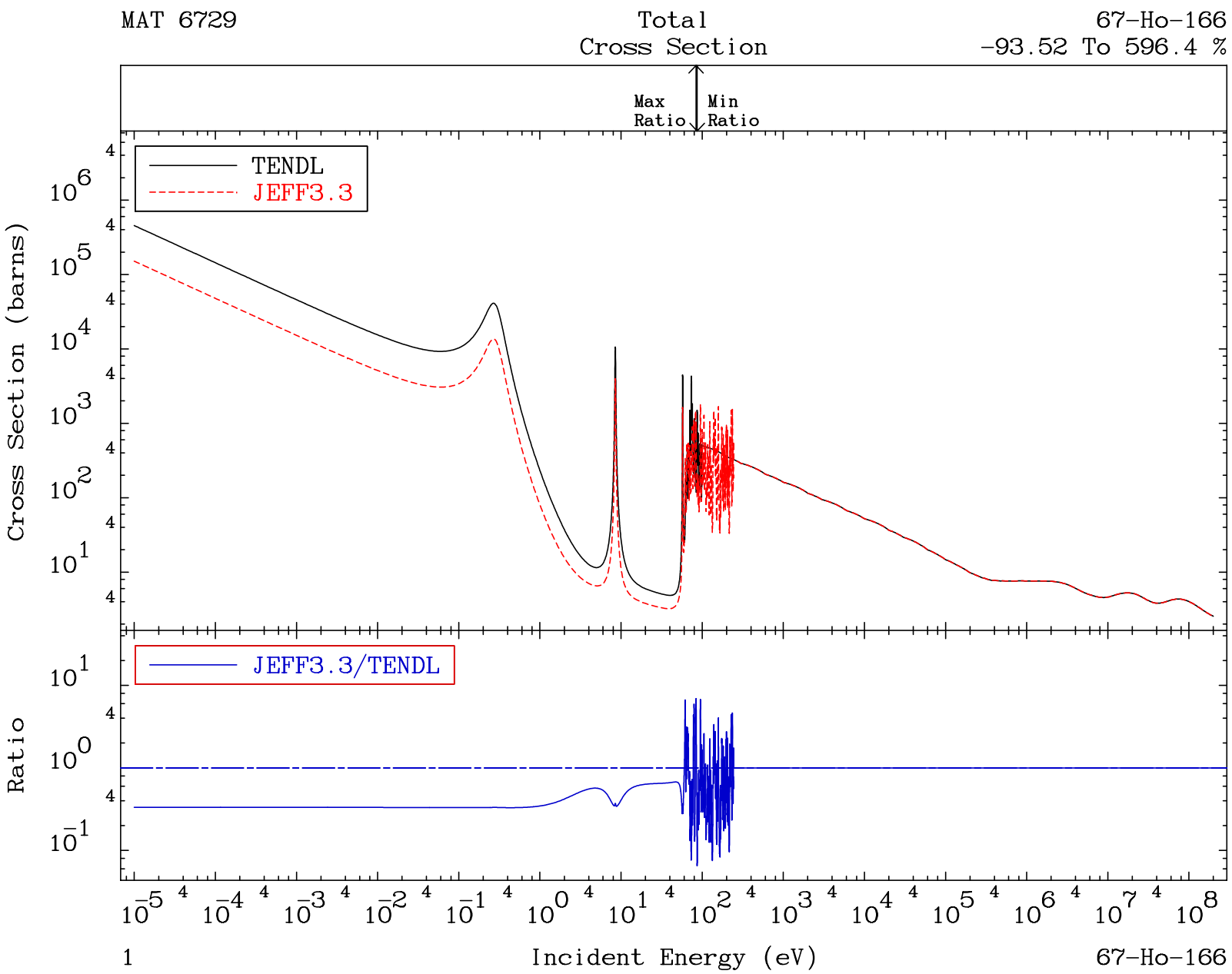
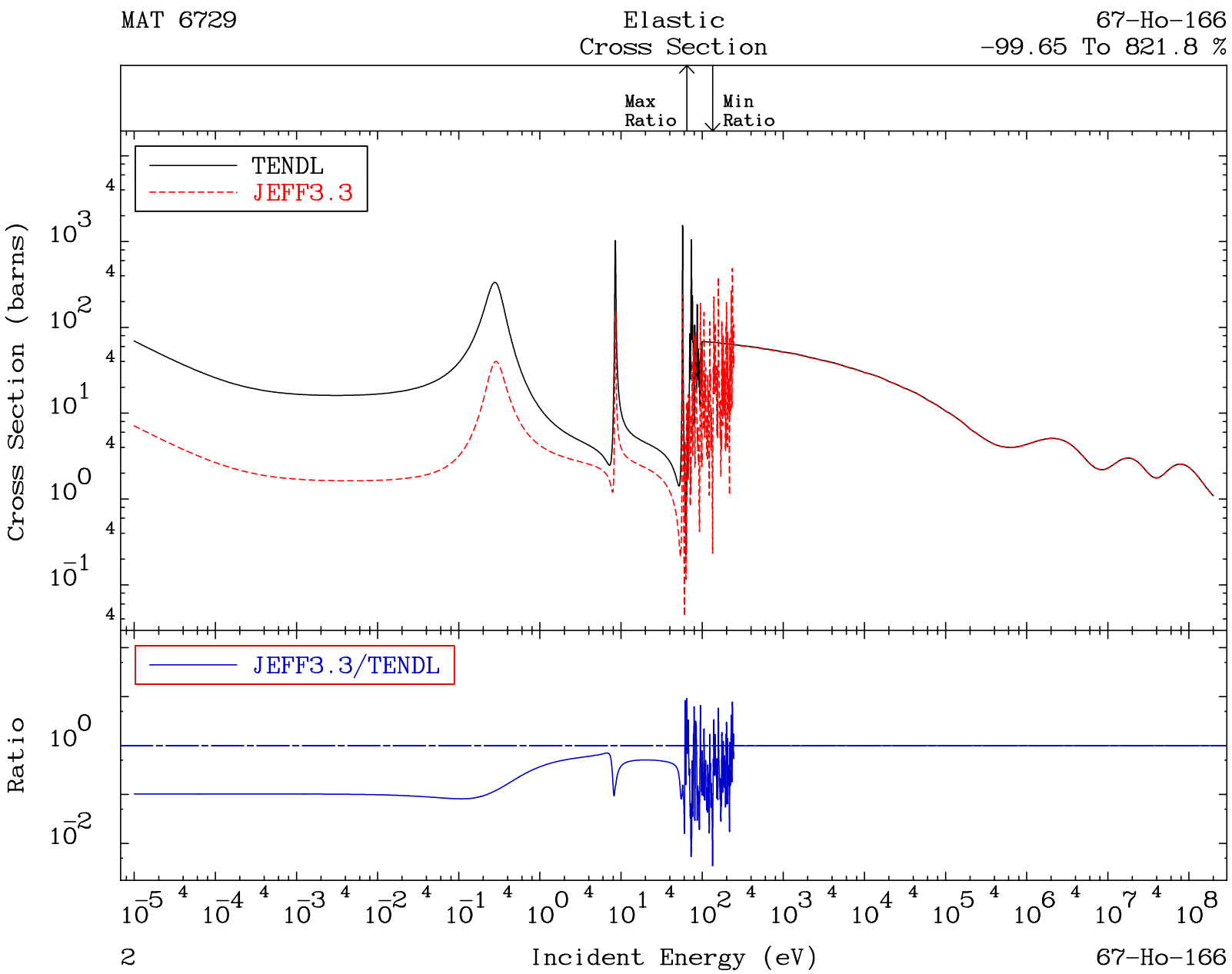
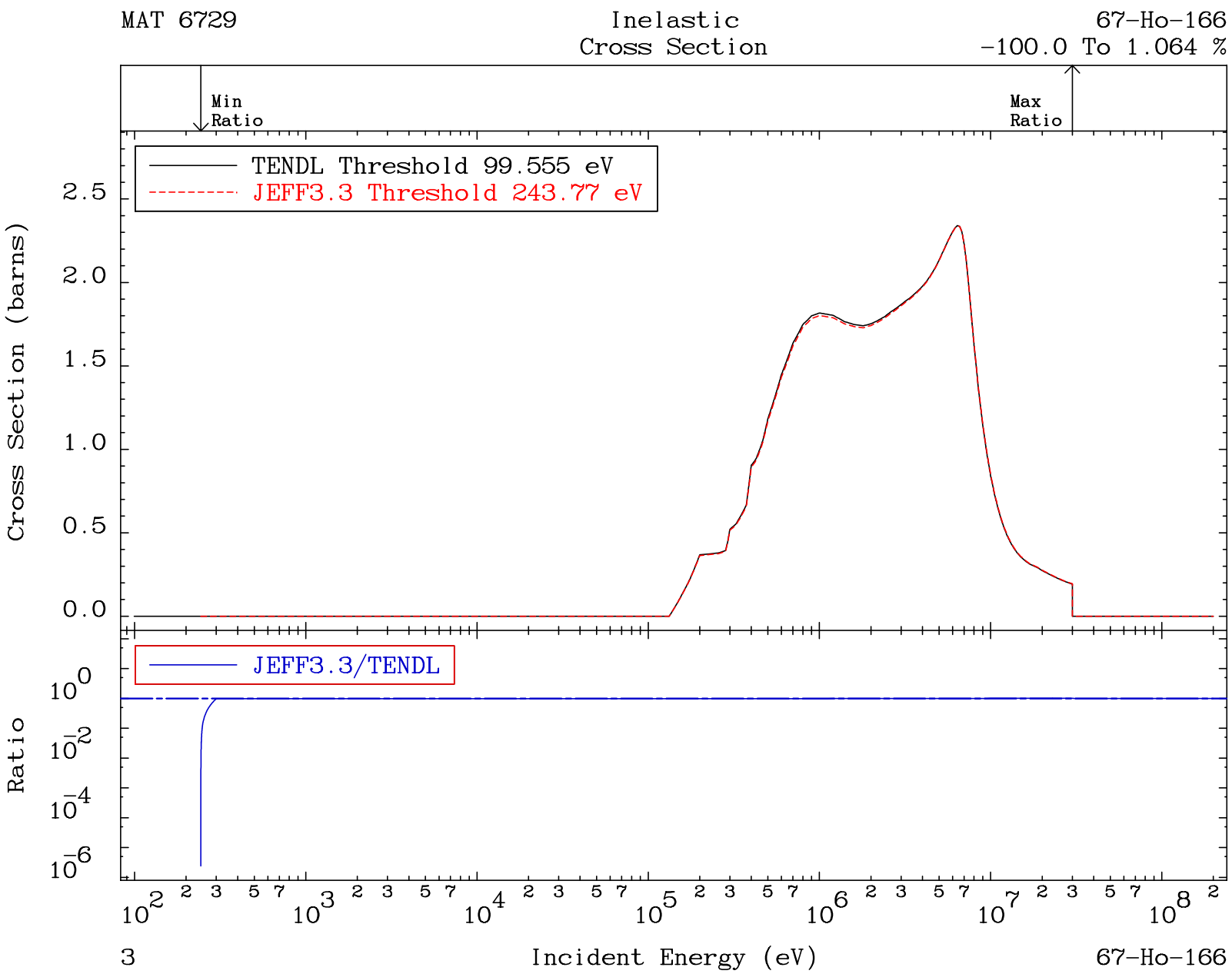
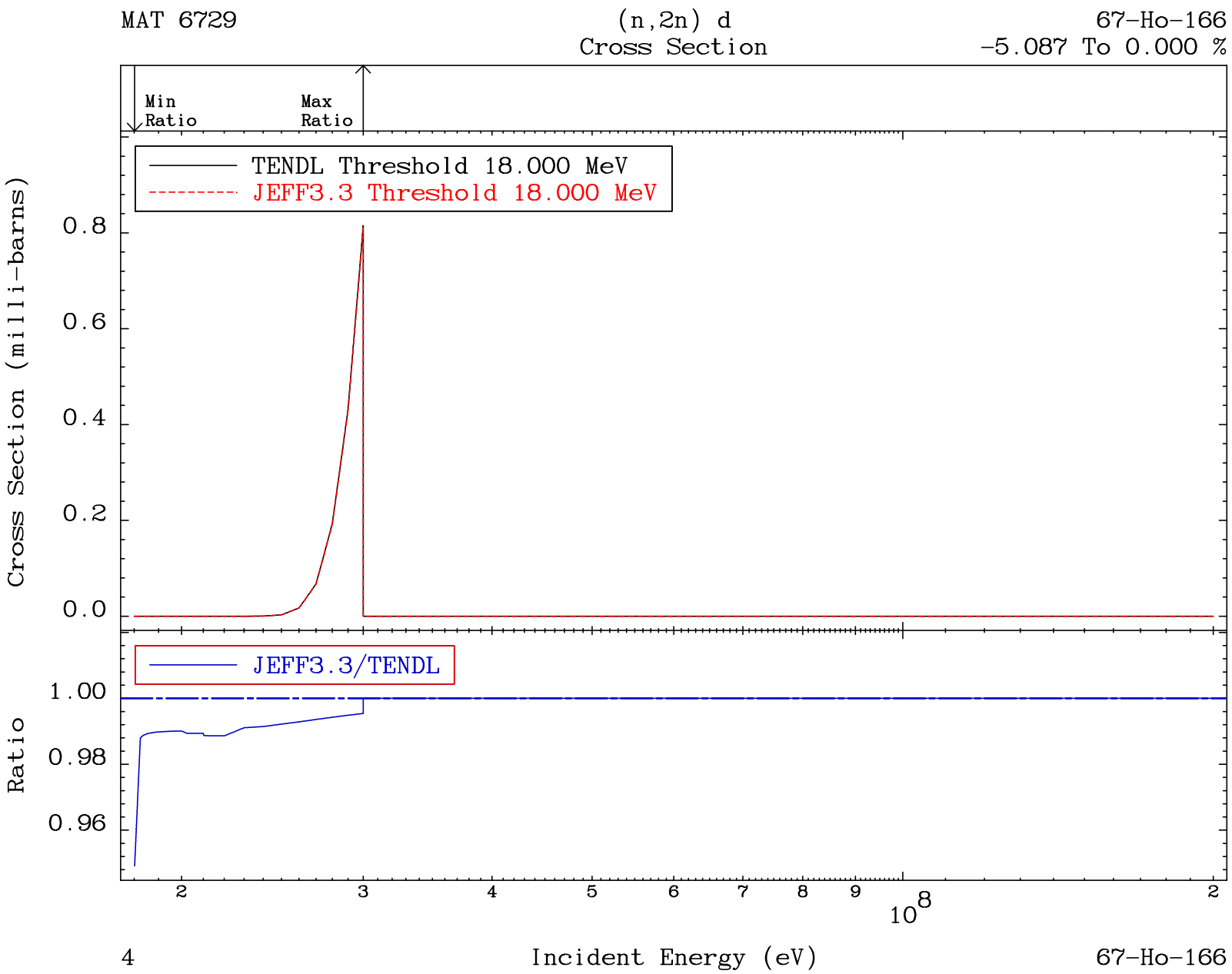
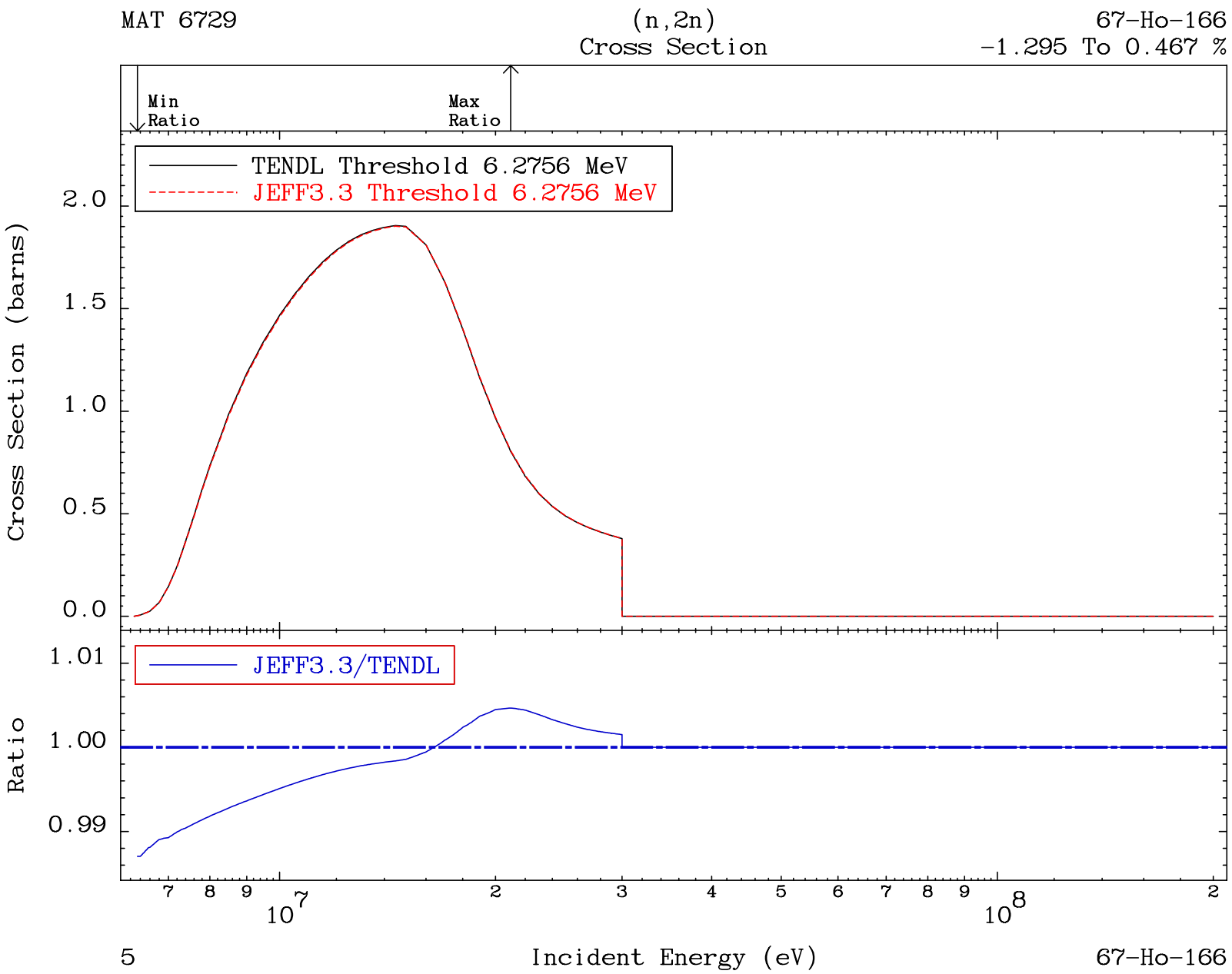
Press Mouse Button to Start

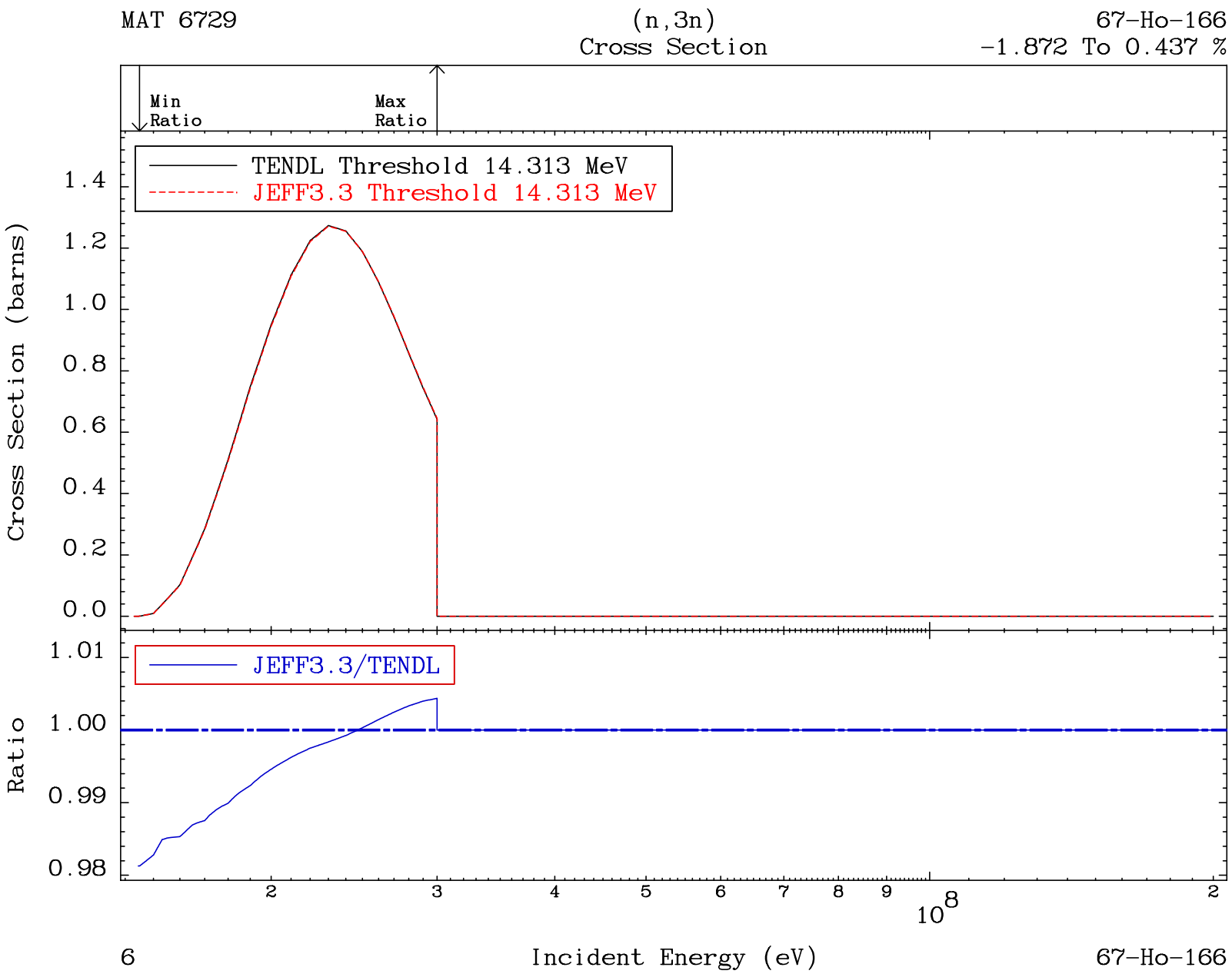

MAT 6729
Total
Cross Section
67-Ho-166
-93.52 To 596.4 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
67-Ho-166

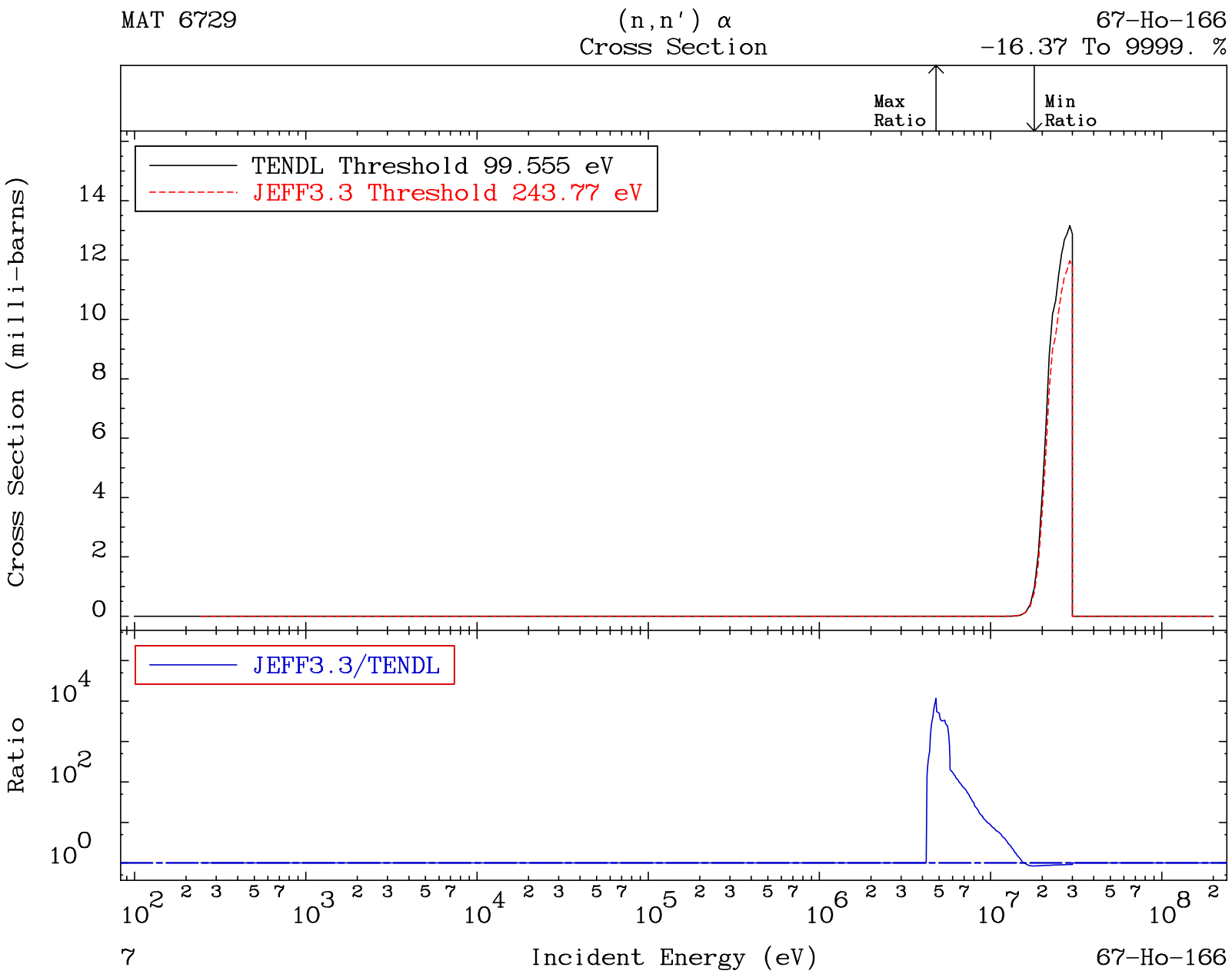

MAT 6729
Elastic
Cross Section
67-Ho-166
-99.65 To 821.8 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67-Ho-166
2

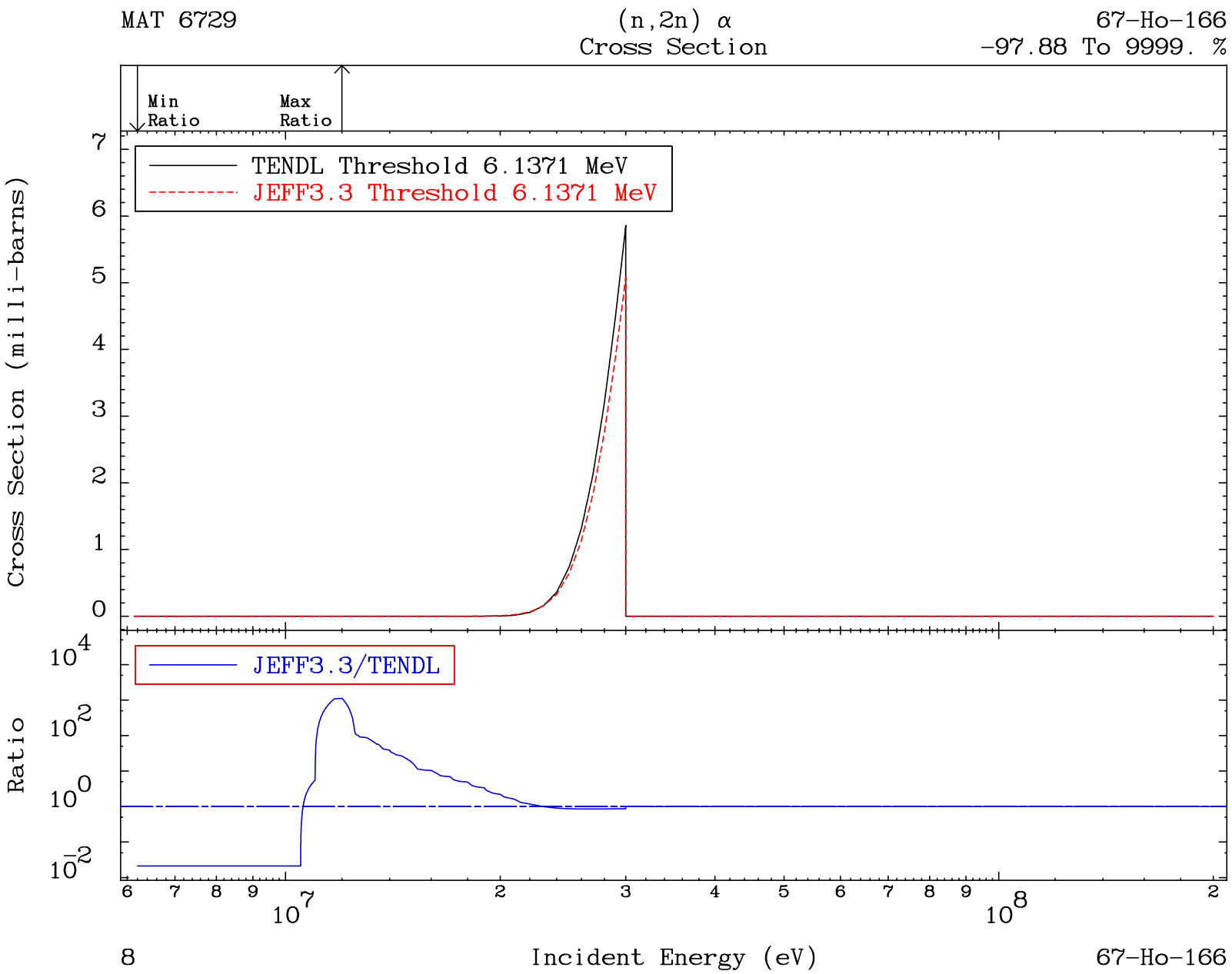

MAT 6729
Inelastic
Cross Section
67-Ho-166
-100.0 To 1.064 %
Min
Ratio
Max
Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.77 eV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
10^2
10^3
10^4
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
67-Ho-166

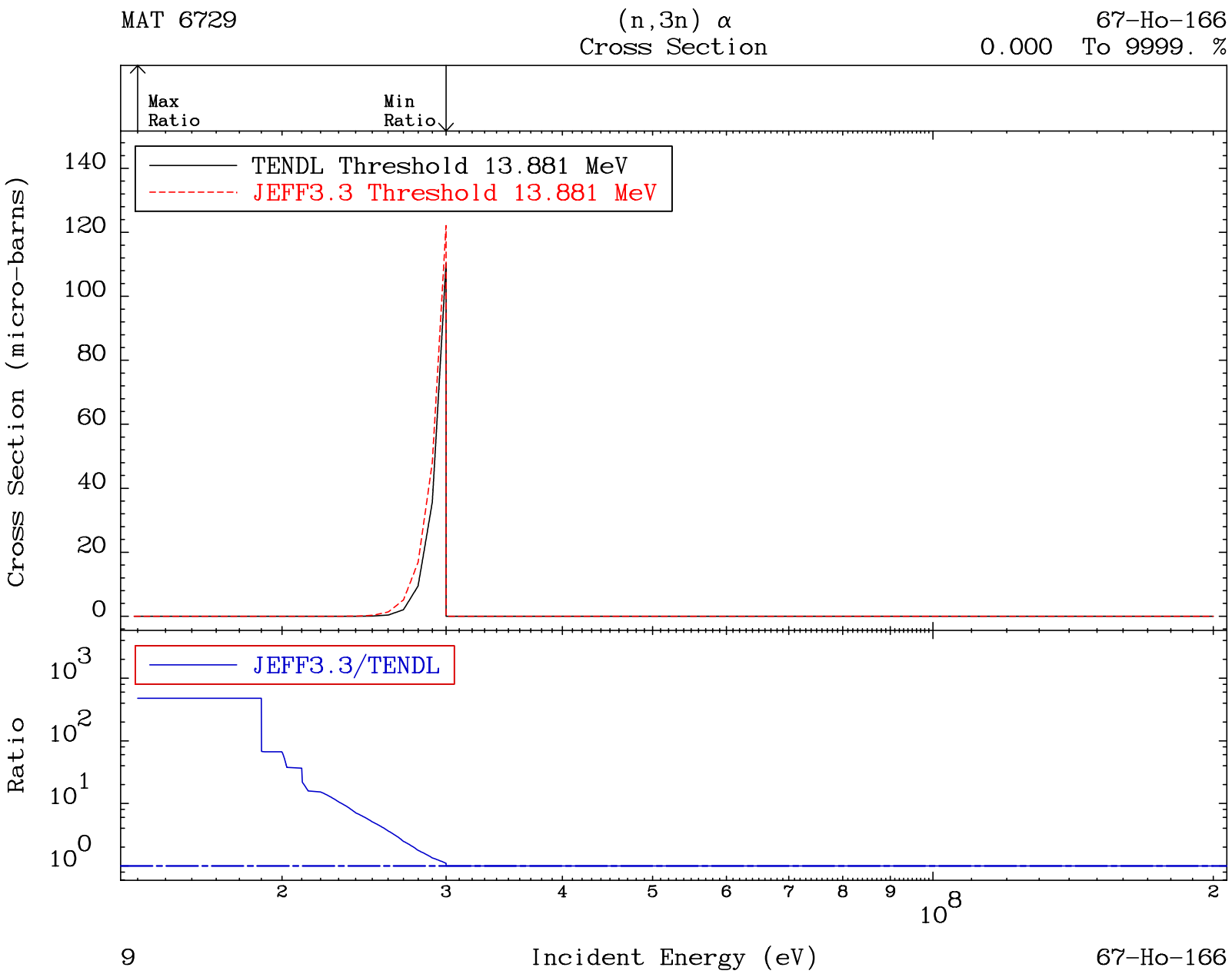

MAT 6729
(n,2n) d
Cross Section
67-Ho-166
-5.087 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 18.000 MeV
Cross Section (milli-barns)
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
67-Ho-166

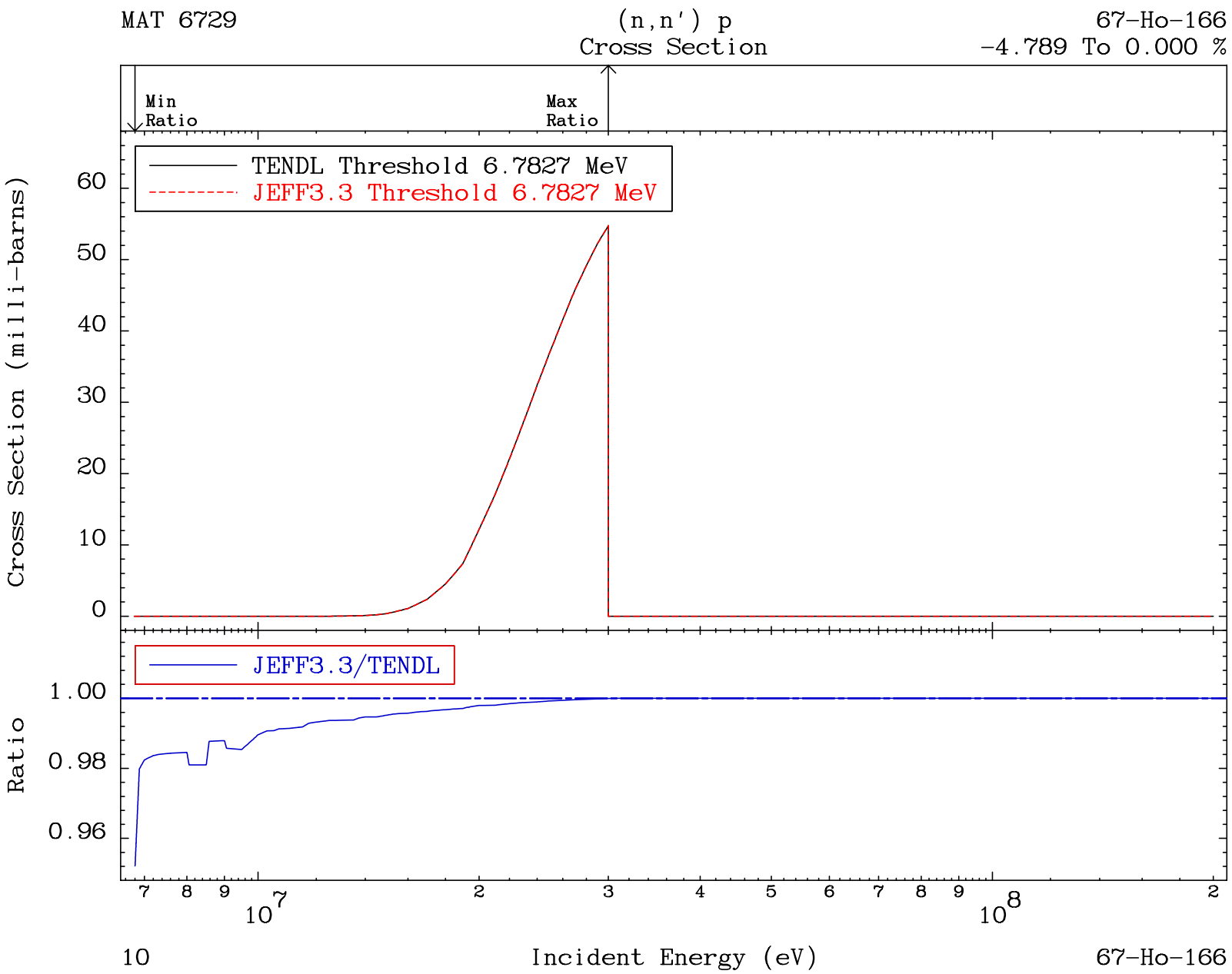

MAT 6729
(n,2n)
Cross Section
67-Ho-166
-1.295 To 0.467 %
Min
Ratio
Max
Ratio
TENDL Threshold 6.2756 MeV
JEFF3.3 Threshold 6.2756 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
5
Incident Energy (eV)
67-Ho-166

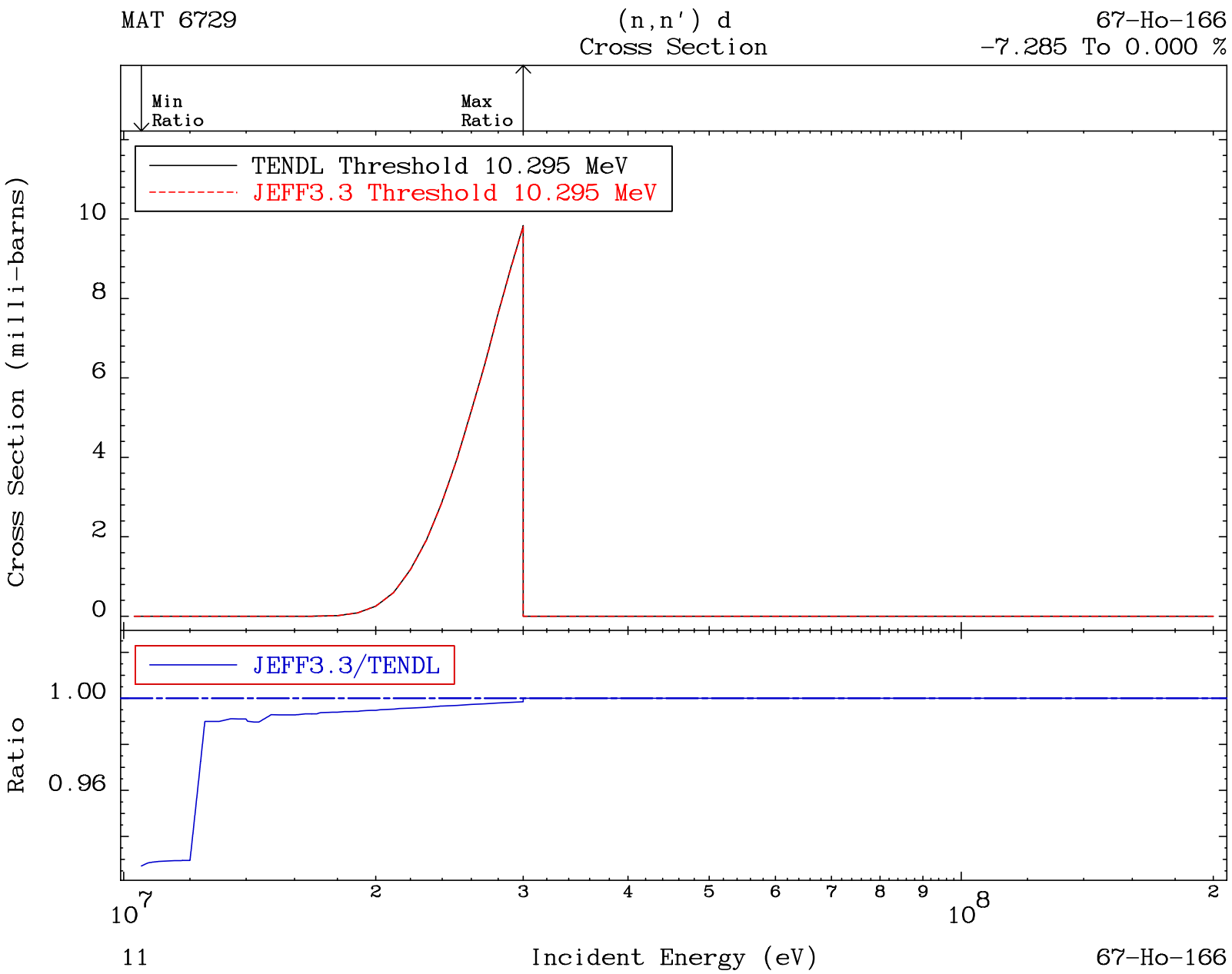

MAT 6729
(n,3n)
Cross Section
67-Ho-166
-1.872 To 0.437 %
Min Ratio
Max Ratio
TENDL Threshold 14.313 MeV
JEFF3.3 Threshold 14.313 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
67-Ho-166

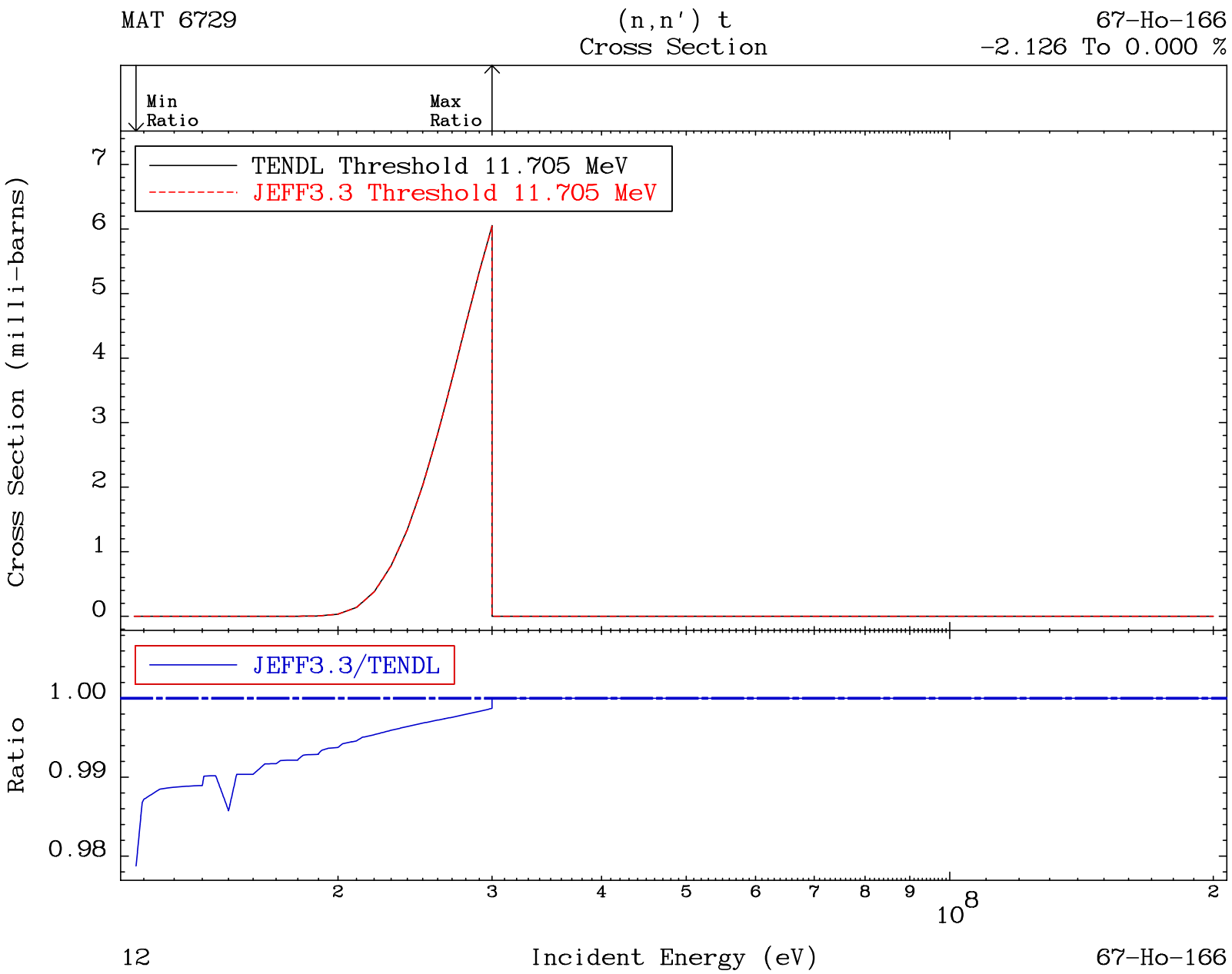

MAT 6729
(n,n') α
Cross Section
67-Ho-166
-16.37 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.77 eV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67-Ho-166
7

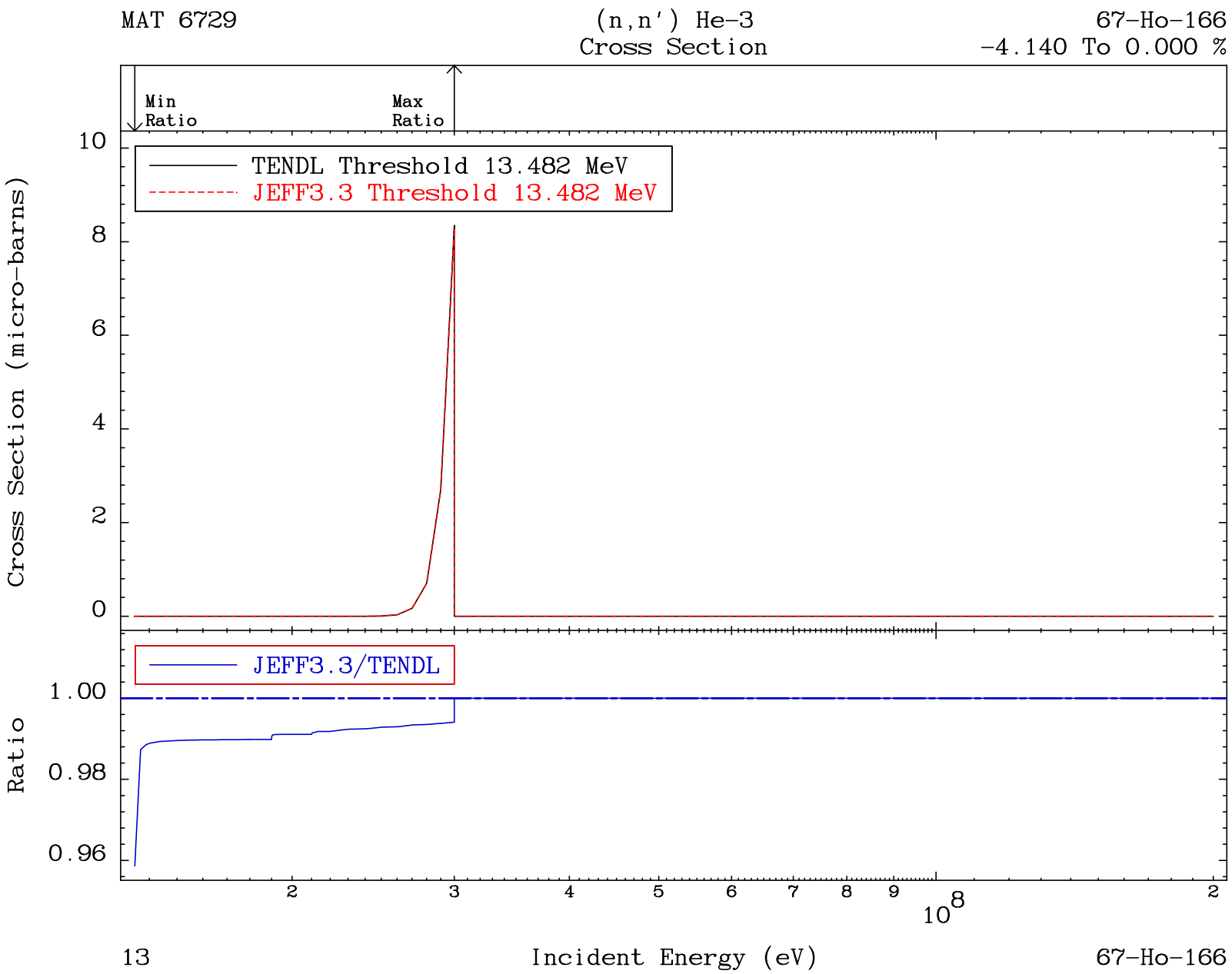

MAT 6729
(n,2n) α
Cross Section
67-Ho-166
-97.88 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.1371 MeV
JEFF3.3 Threshold 6.1371 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
8
67-Ho-166

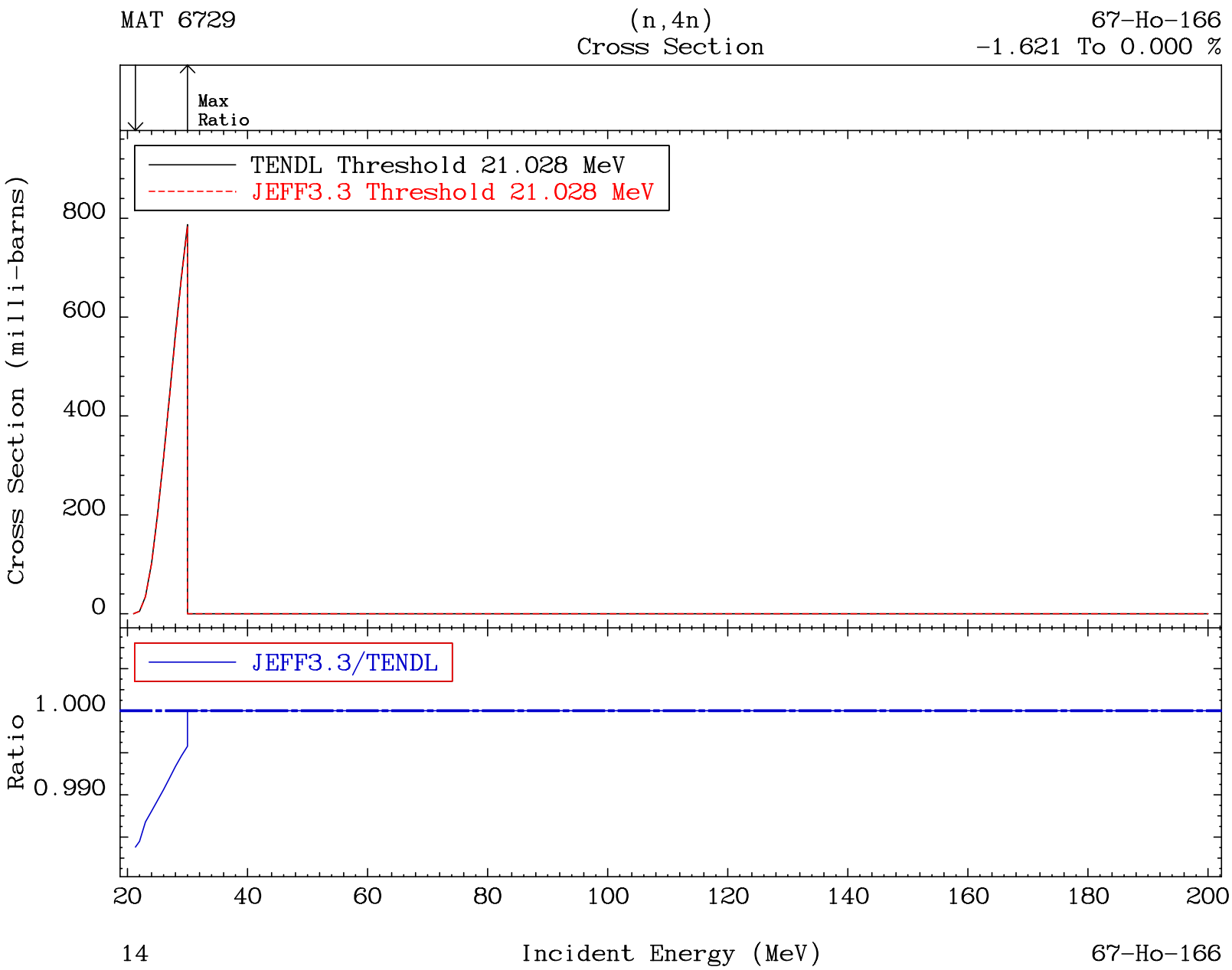

MAT 6729
(n,3n) α
Cross Section
67-Ho-166
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.881 MeV
JEFF3.3 Threshold 13.881 MeV
Cross Section (micro-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
67-Ho-166

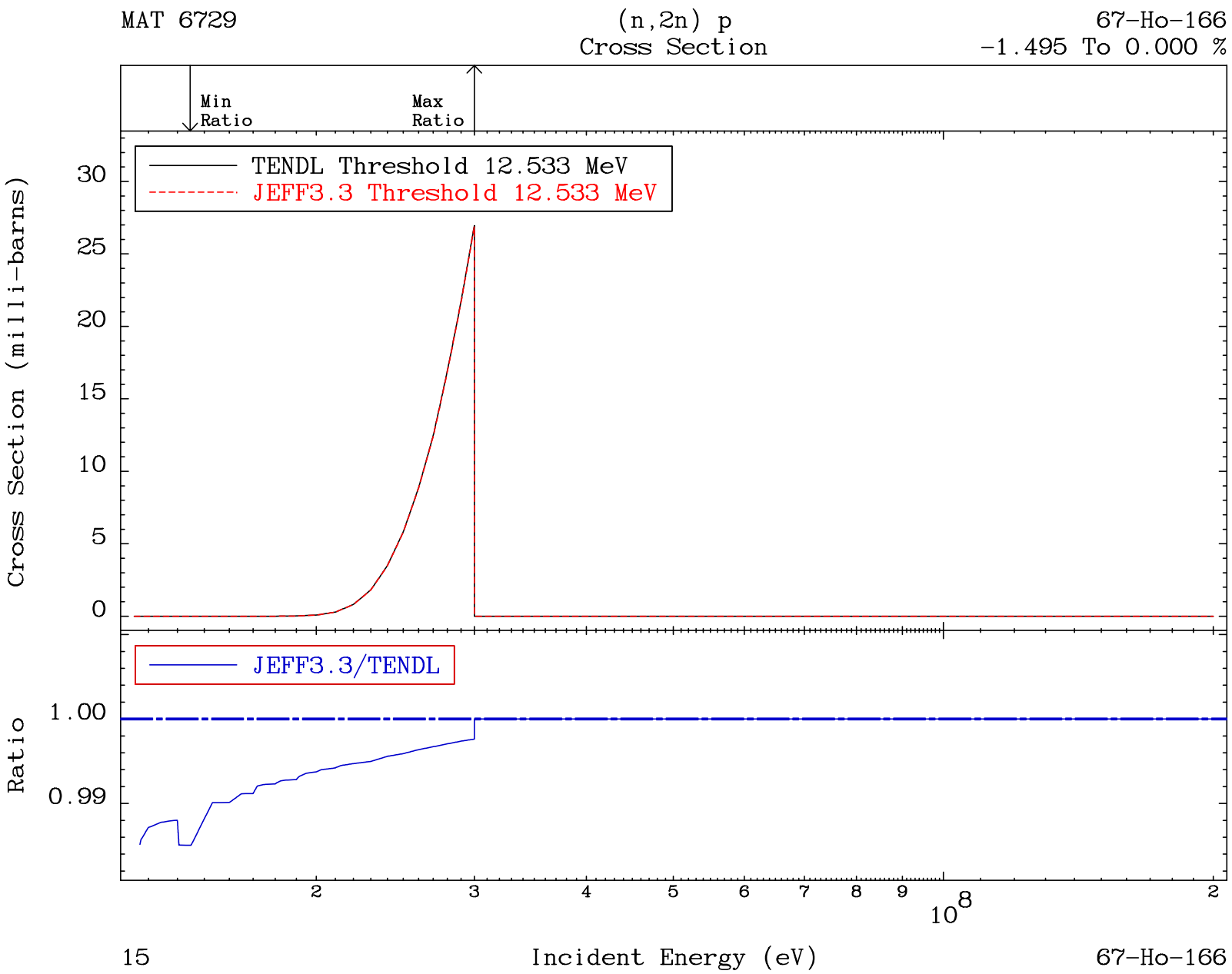

MAT 6729
(n,n') p
Cross Section
67-Ho-166
-4.789 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.7827 MeV
JEFF3.3 Threshold 6.7827 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
67-Ho-166

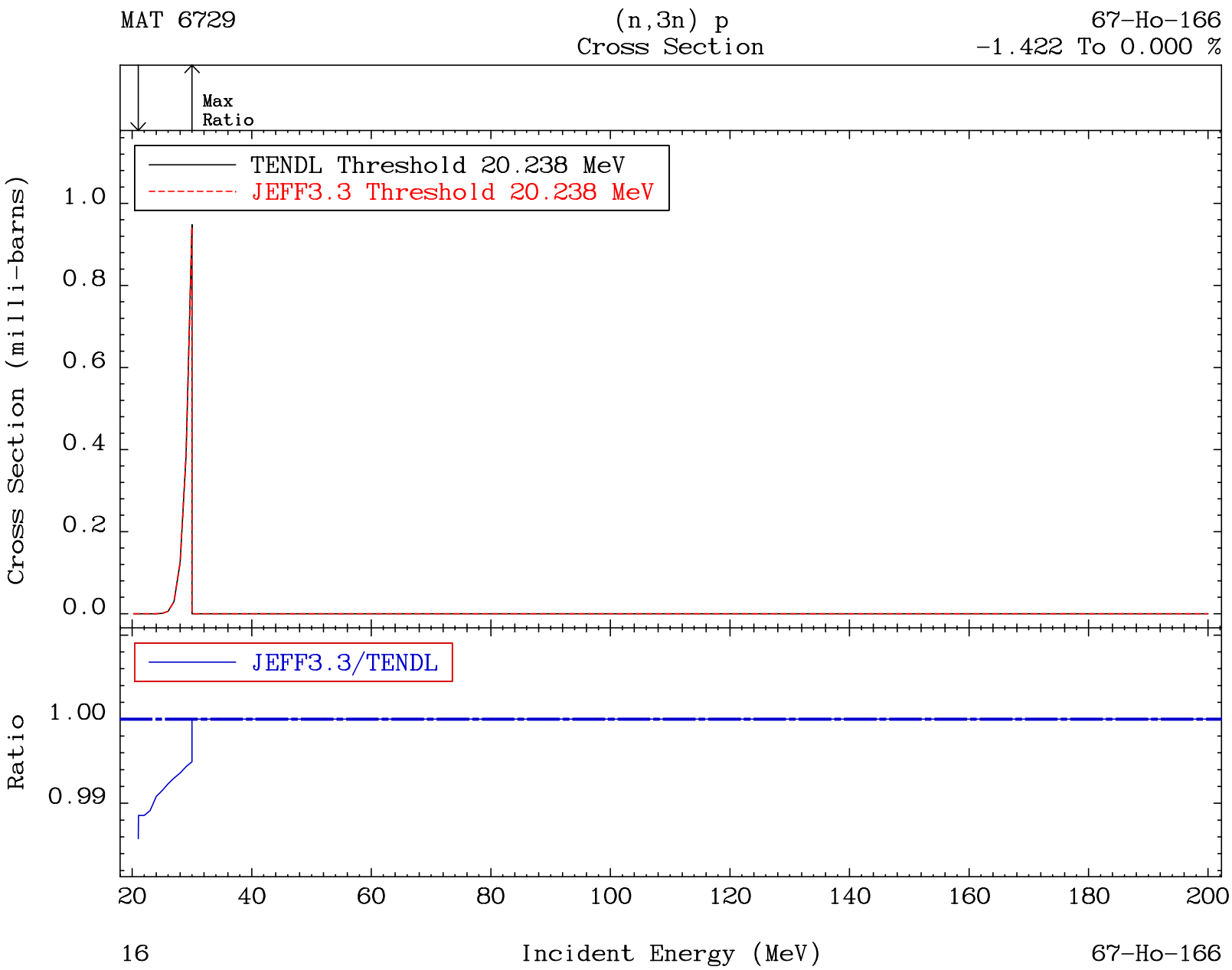

MAT 6729
(n,n') d
Cross Section
67-Ho-166
-7.285 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 10.295 MeV
JEFF3.3 Threshold 10.295 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.00
0.96
10^7
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
67-Ho-166

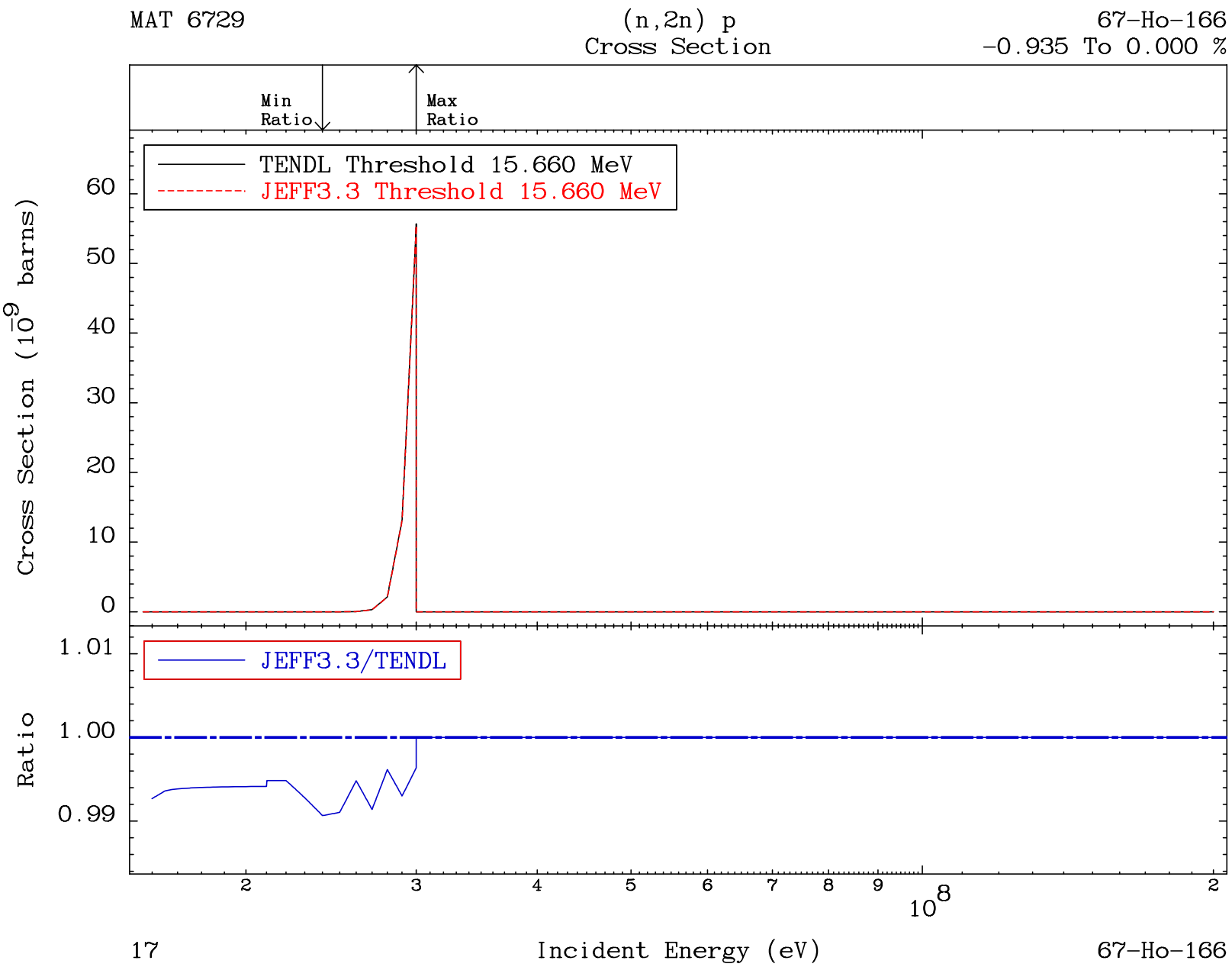

MAT 6729
(n,n') t
Cross Section
67-Ho-166
-2.126 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 11.705 MeV
JEFF3.3 Threshold 11.705 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
67-Ho-166

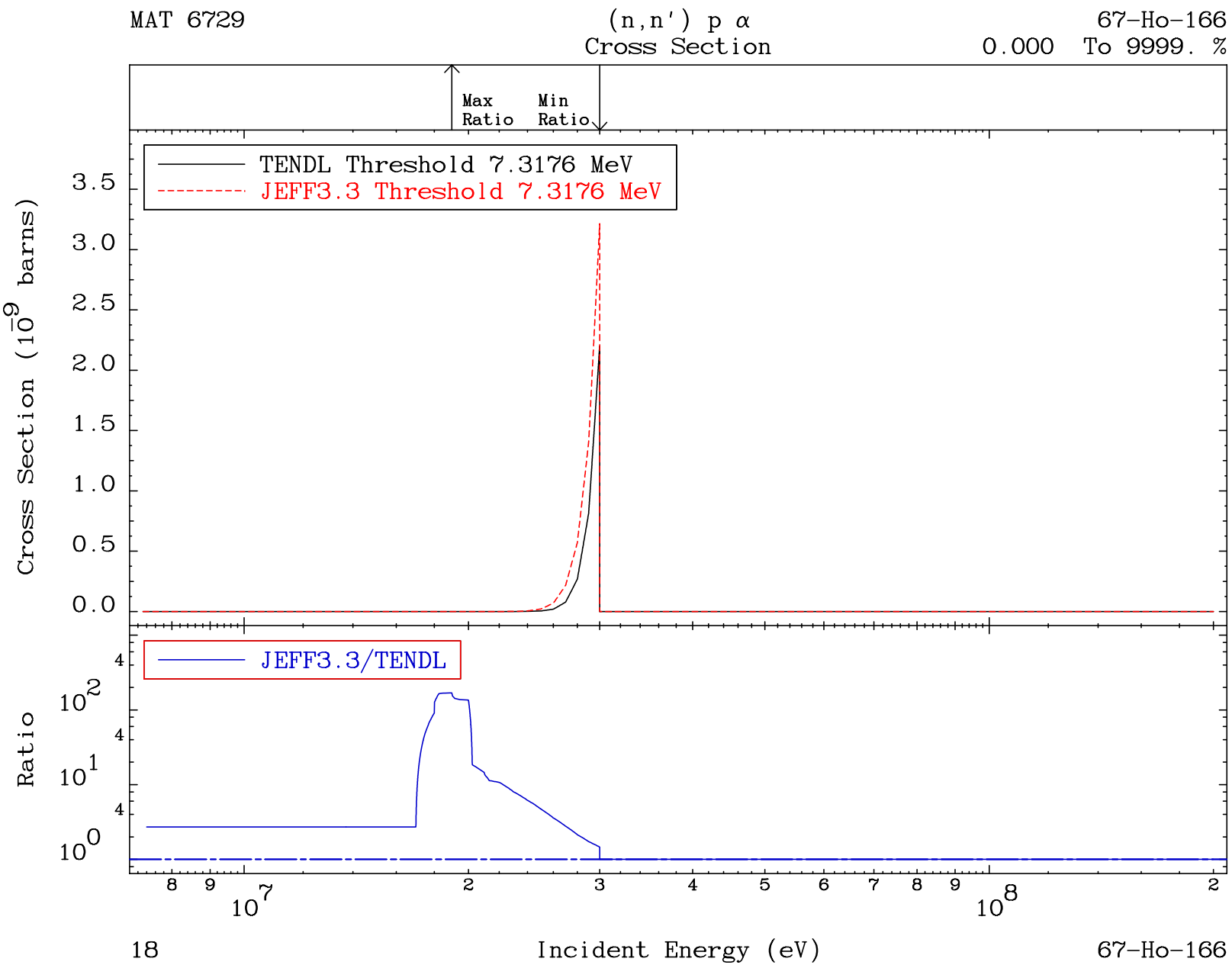

MAT 6729
(n,n') He-3
Cross Section
67-Ho-166
-4.140 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.482 MeV
JEFF3.3 Threshold 13.482 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
67-Ho-166

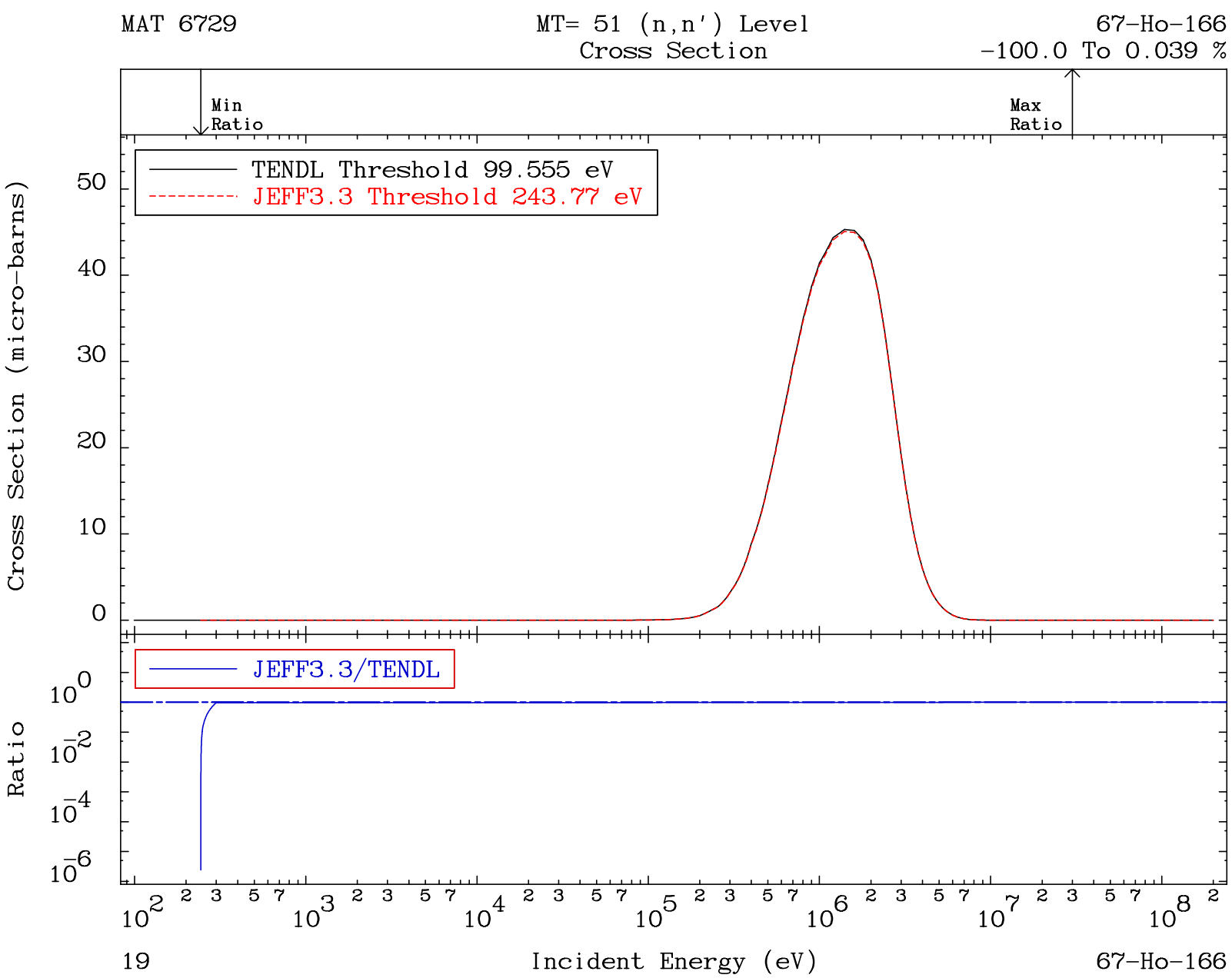

MAT 6729
(n,4n)
Cross Section
67-Ho-166
-1.621 To 0.000 %
Max
Ratio
TENDL Threshold 21.028 MeV
JEFF3.3 Threshold 21.028 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.000
0.990
20
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
67-Ho-166

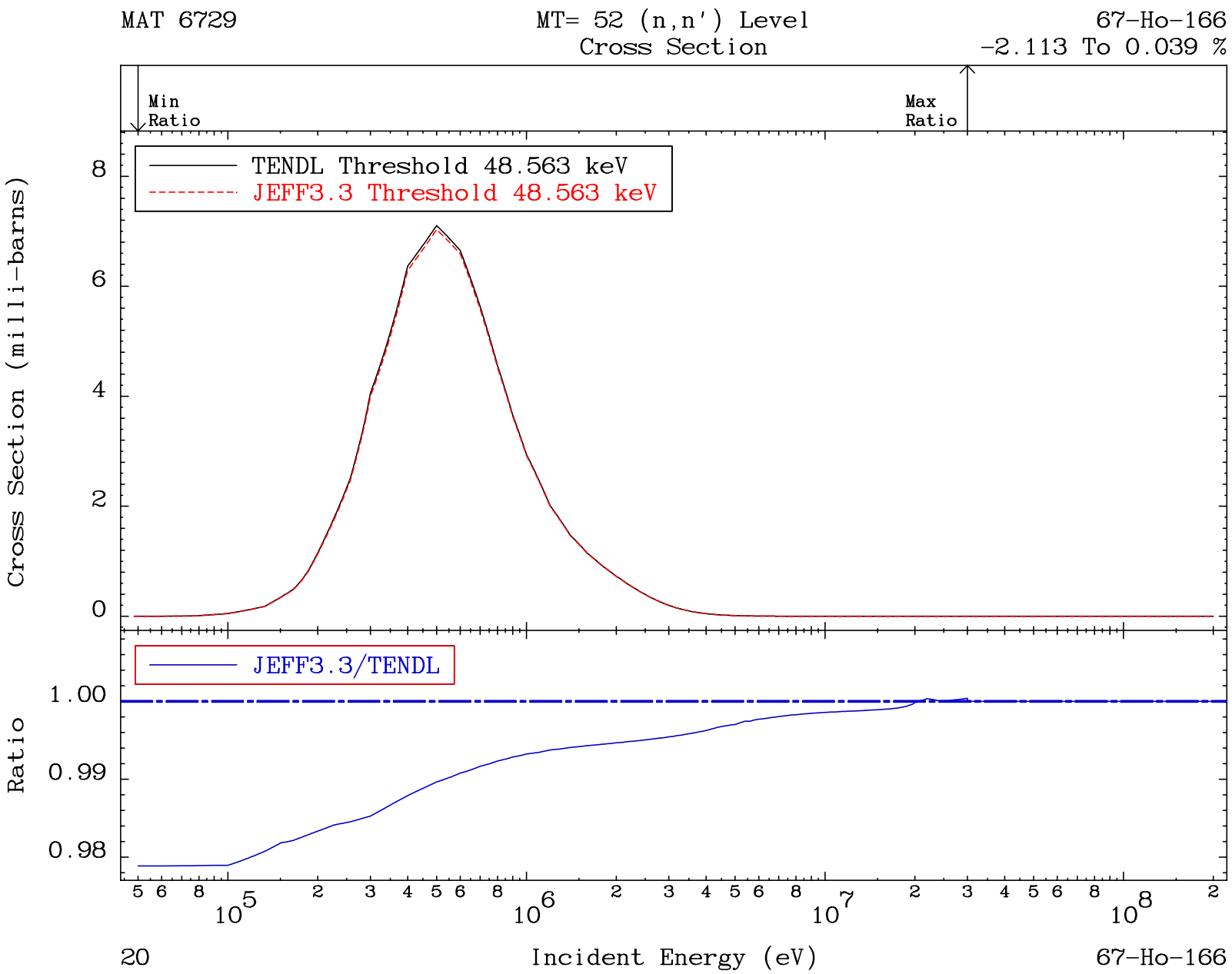

MAT 6729
(n,2n) p
Cross Section
67-Ho-166
-1.495 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 12.533 MeV
JEFF3.3 Threshold 12.533 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
67-Ho-166

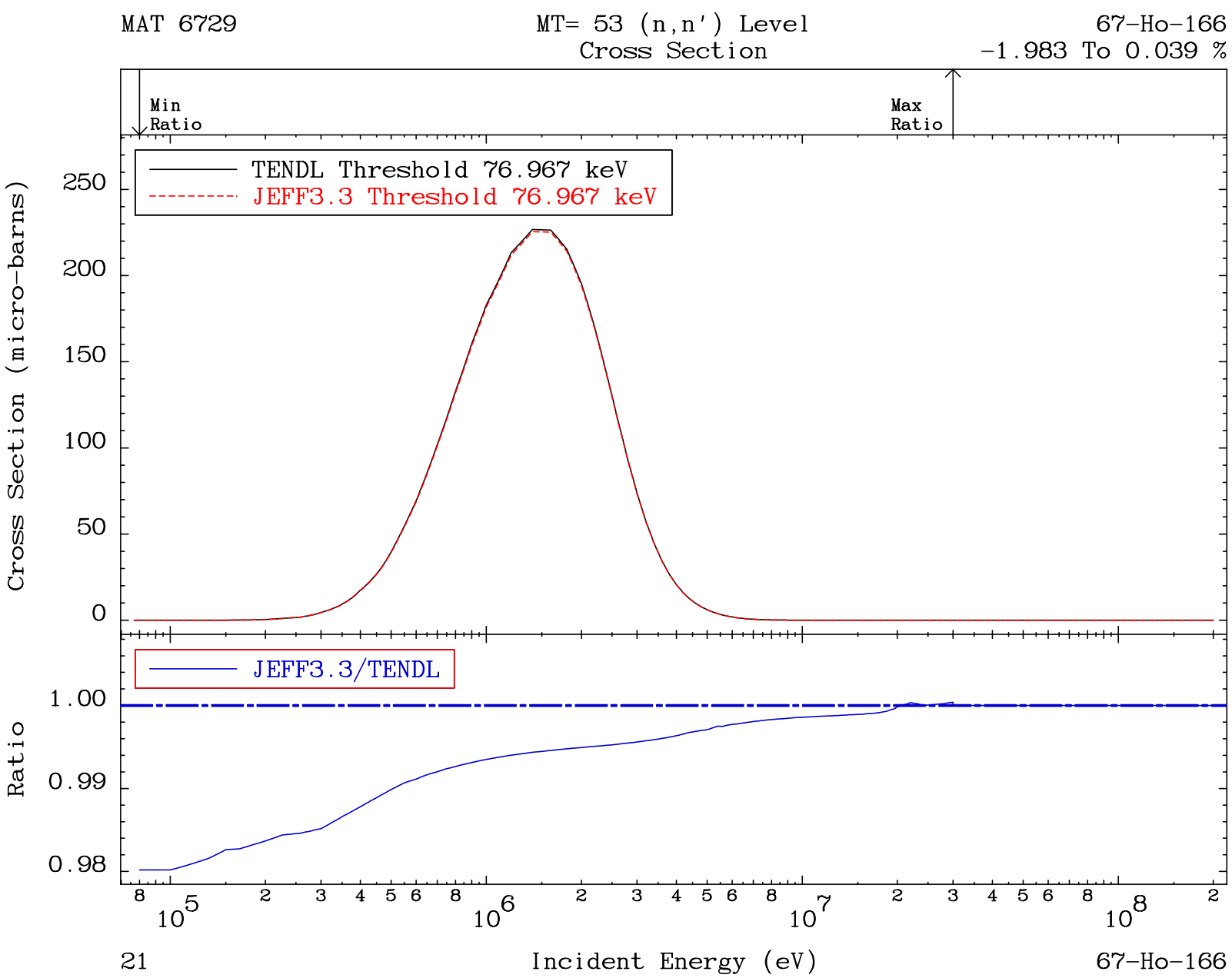

MAT 6729
(n,3n) p
Cross Section
67-Ho-166
-1.422 To 0.000 %
Max
Ratio
TENDL Threshold 20.238 MeV
JEFF3.3 Threshold 20.238 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.99
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
67-Ho-166

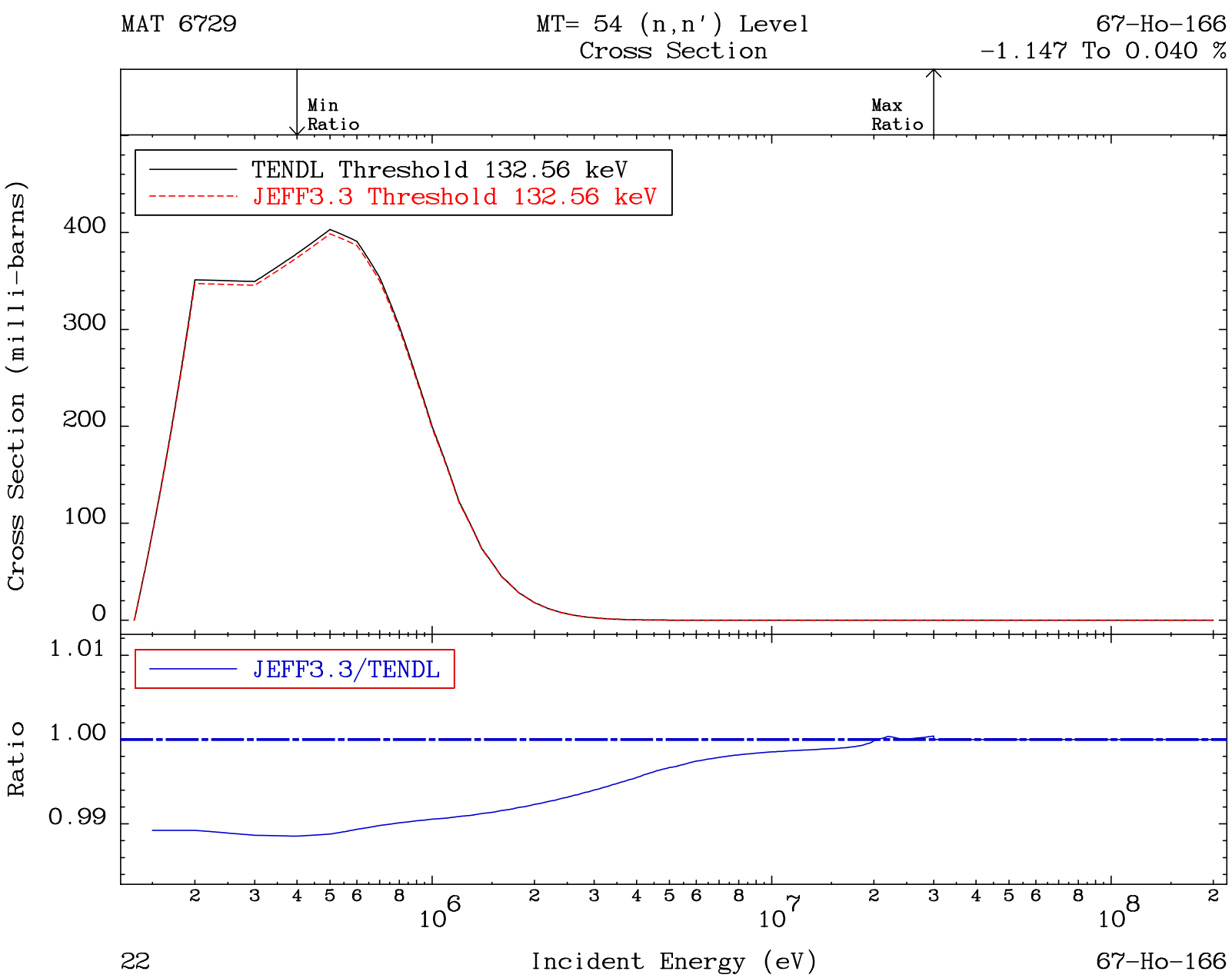

MAT 6729
(n,2n) p
Cross Section
67-Ho-166
-0.935 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.660 MeV
JEFF3.3 Threshold 15.660 MeV
Cross Section (10^-9 barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
67-Ho-166

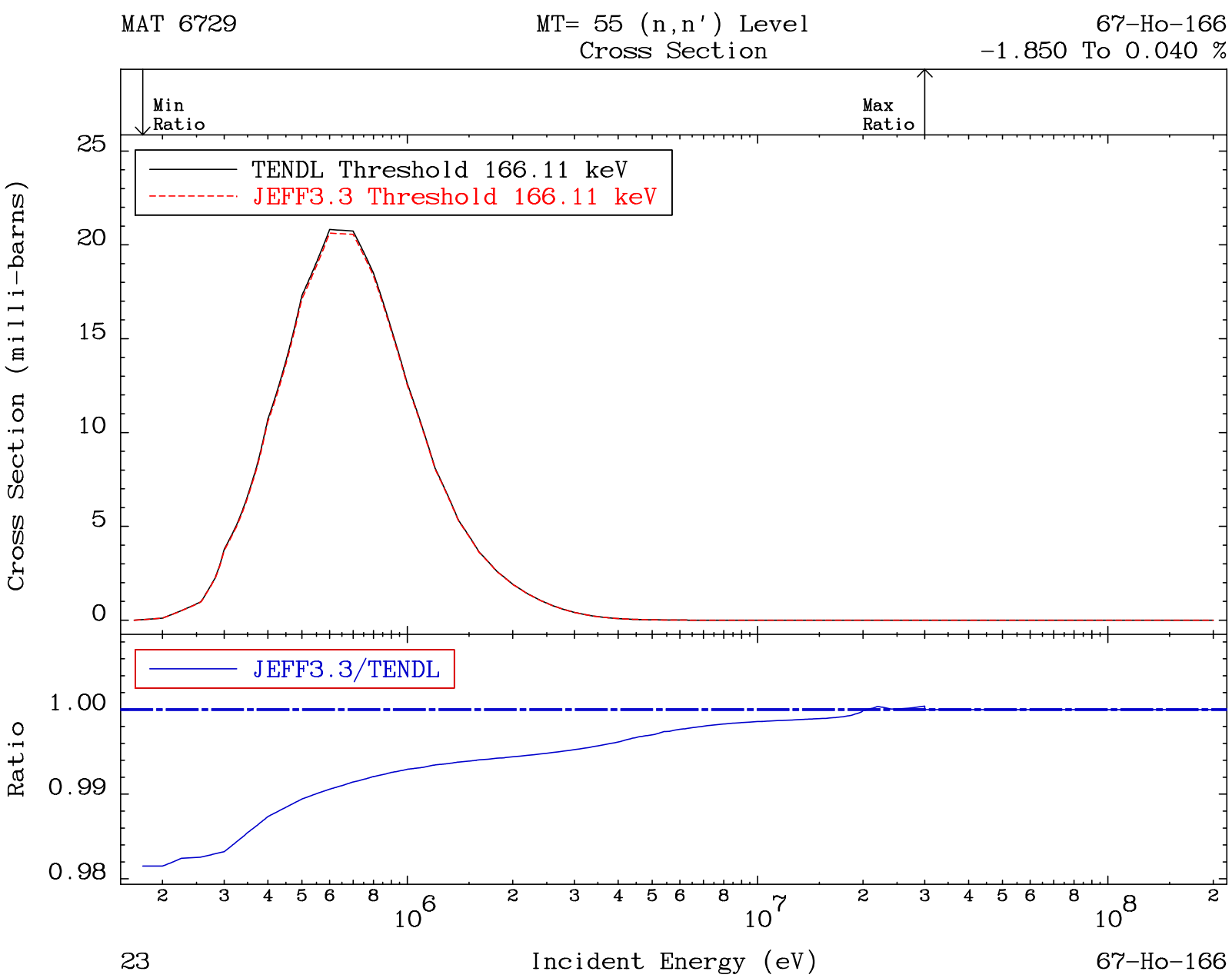

MAT 6729
(n,n') p α
Cross Section
67-Ho-166
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.3176 MeV
JEFF3.3 Threshold 7.3176 MeV
Cross Section (10^-9 barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
67-Ho-166

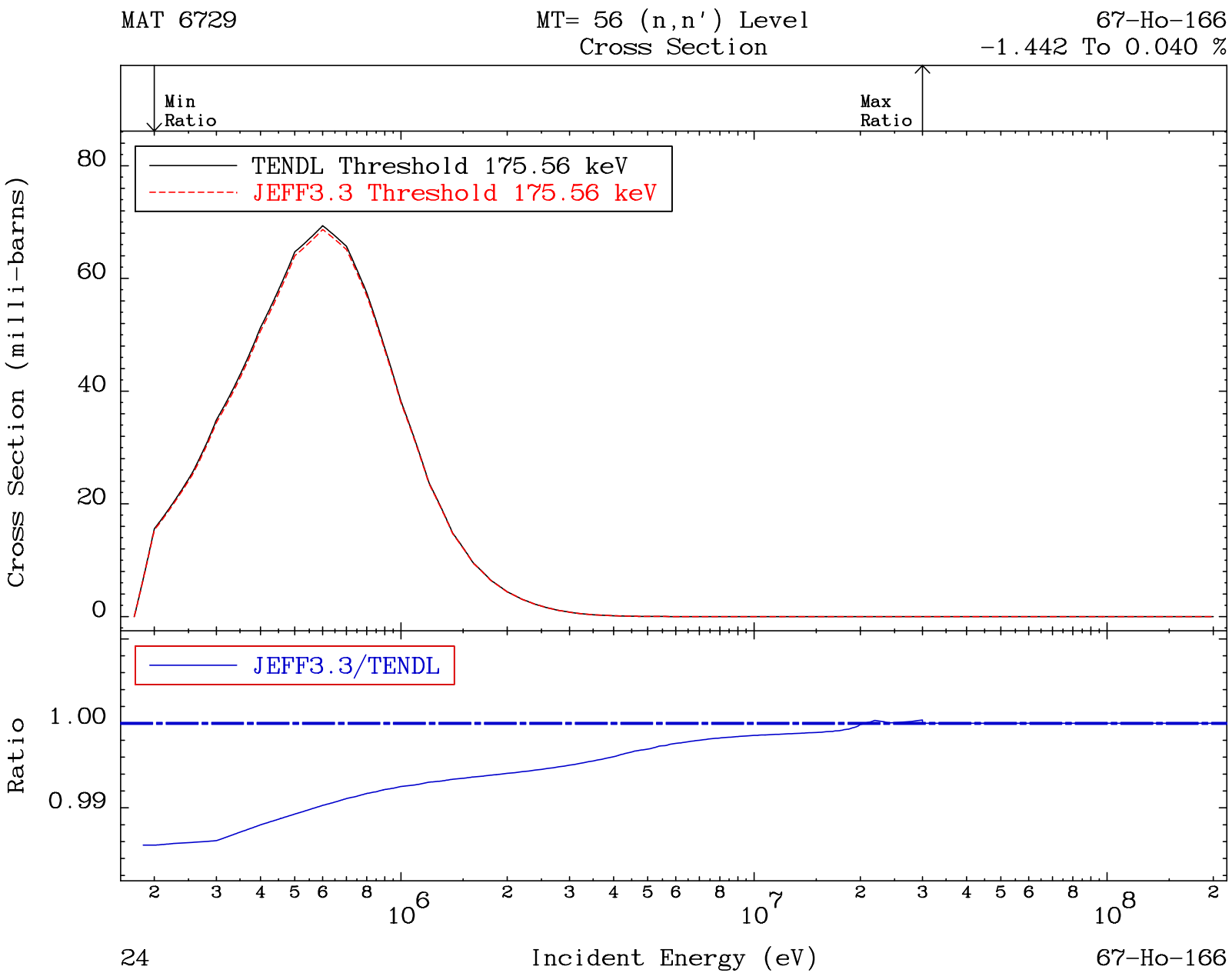

MAT 6729
MT= 51 (n,n') Level
Cross Section
67-Ho-166
-100.0 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.77 eV
Cross Section (micro-barns)
0
10
20
30
40
50
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
10^2
10^3
10^4
10^5
10^6
10^7
10^8
19
Incident Energy (eV)
67-Ho-166

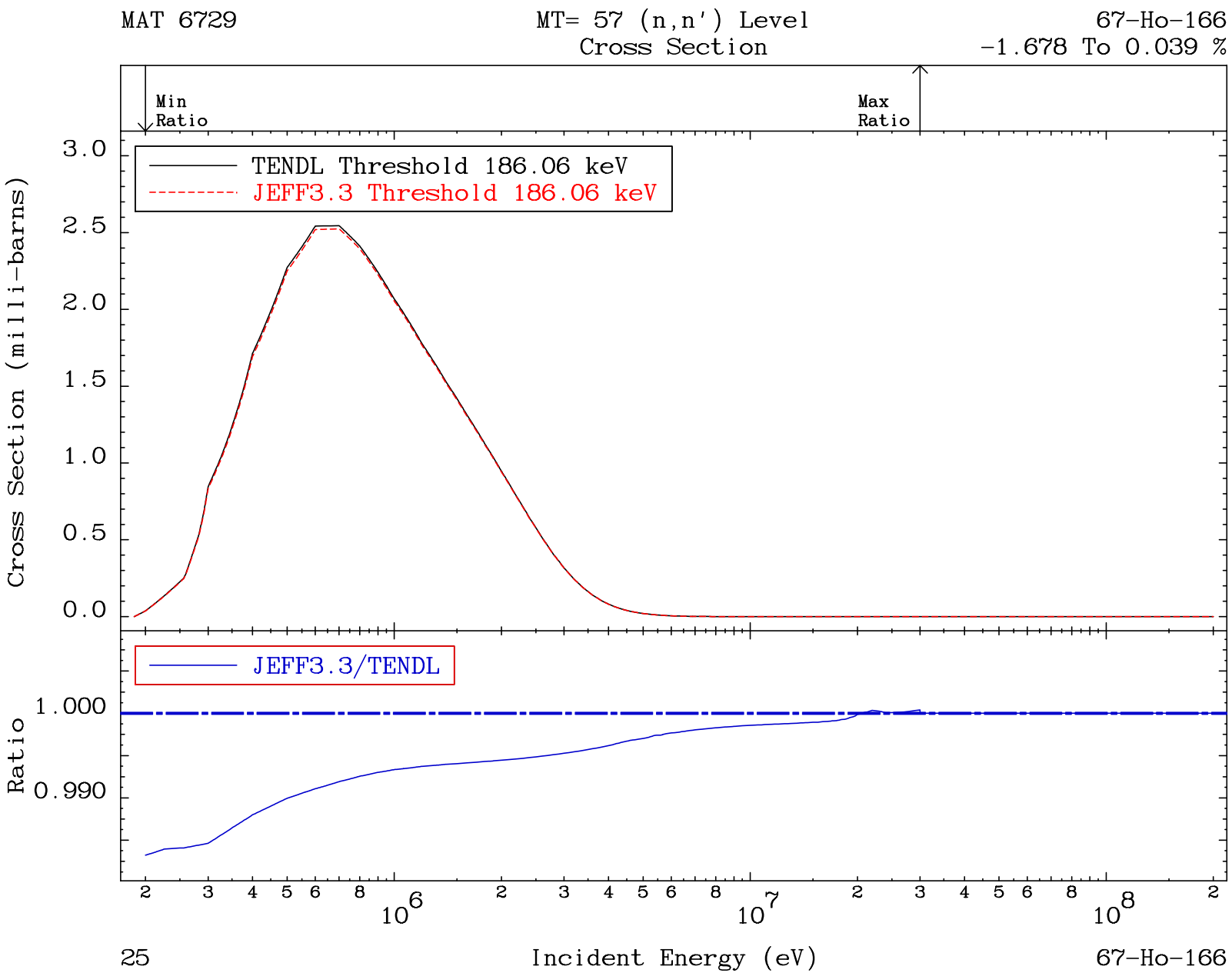

MAT 6729
MT= 52 (n,n') Level
Cross Section
67-Ho-166
-2.113 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 48.563 keV
JEFF3.3 Threshold 48.563 keV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.98
0.99
1.00
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
20
67-Ho-166

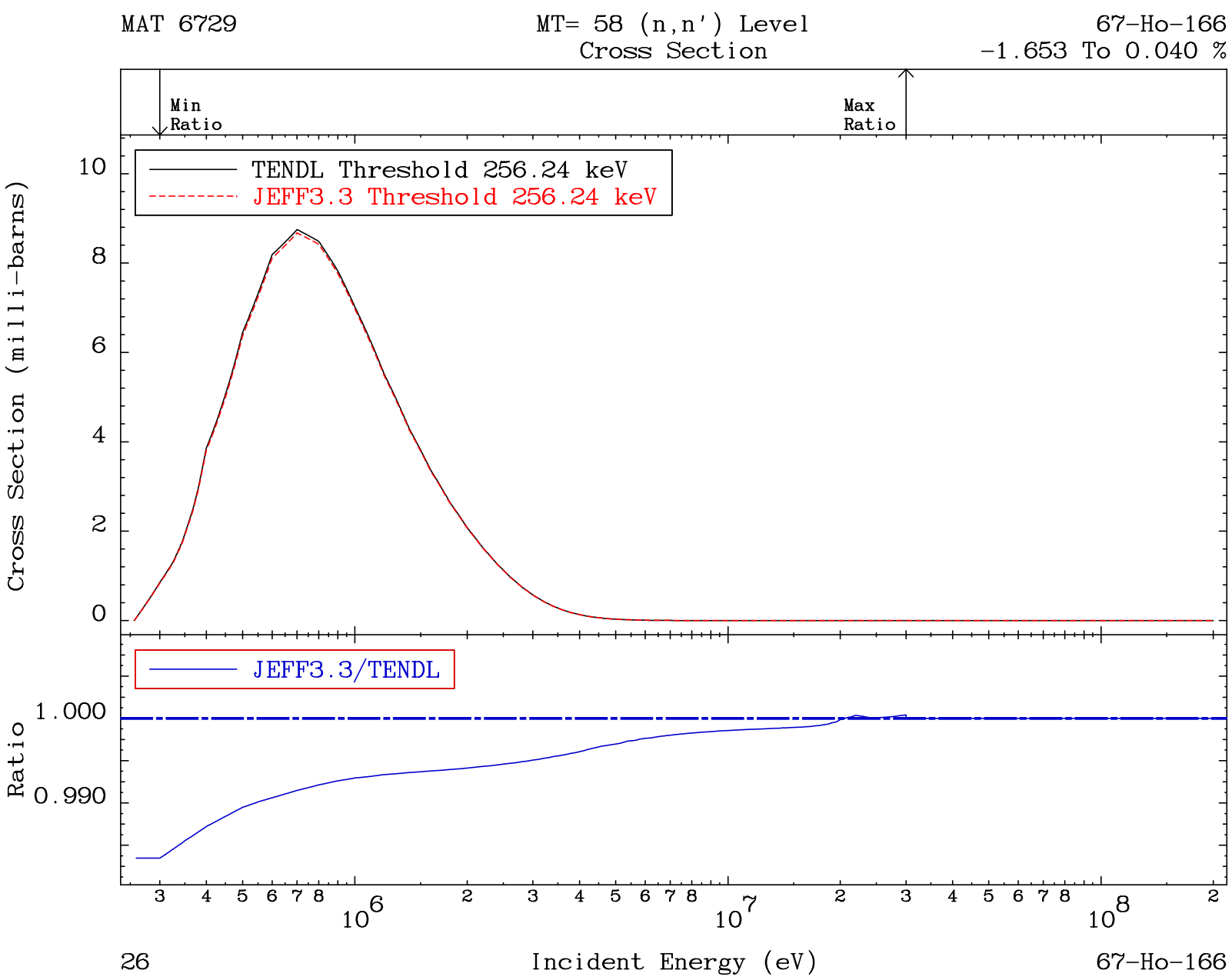

MAT 6729
MT= 53 (n,n') Level
Cross Section
67-Ho-166
-1.983 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 76.967 keV
JEFF3.3 Threshold 76.967 keV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
21
Incident Energy (eV)
67-Ho-166

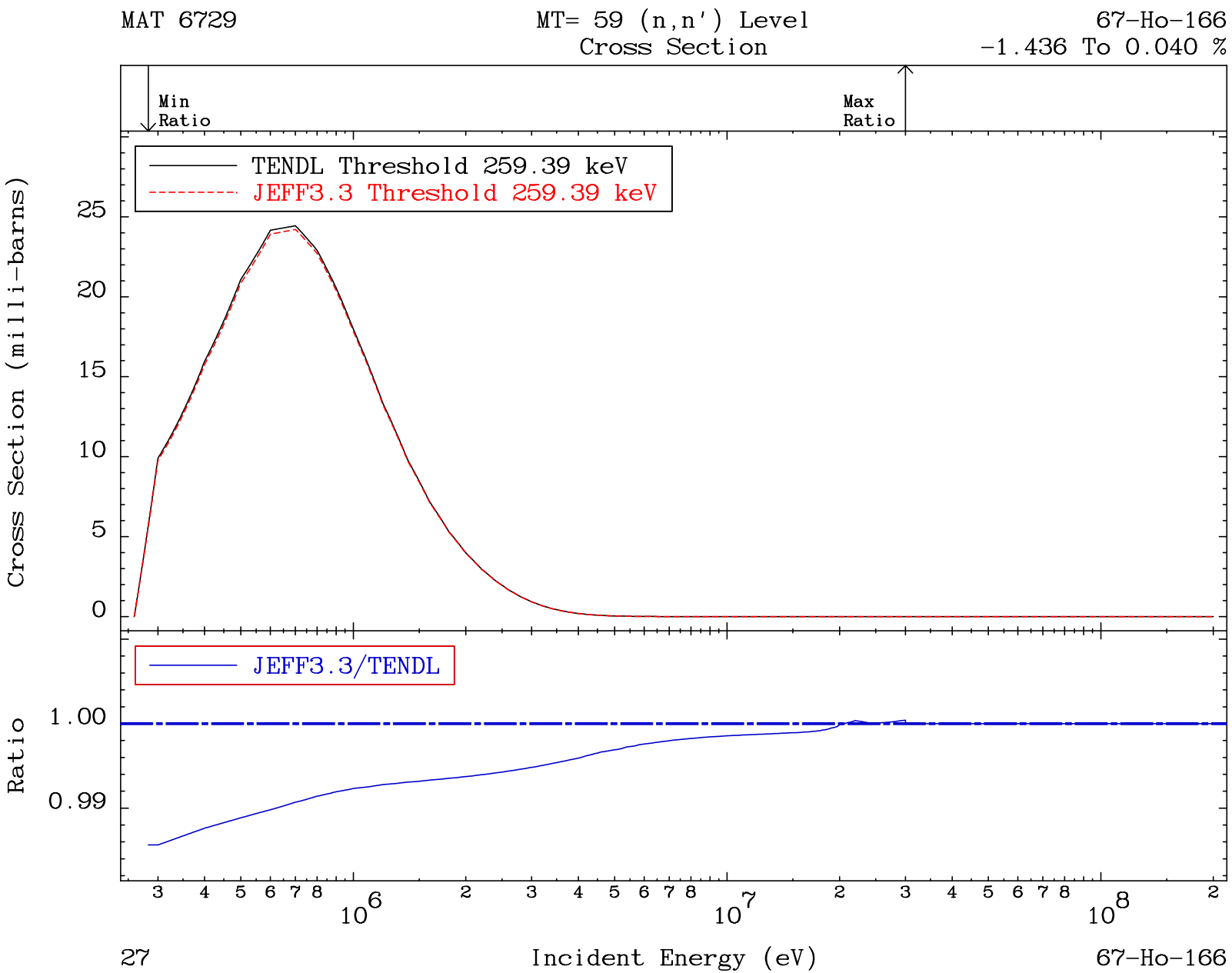

MAT 6729
MT= 54 (n,n') Level
Cross Section
67-Ho-166
-1.147 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 132.56 keV
JEFF3.3 Threshold 132.56 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
8
10^6
10^7
10^8
22
Incident Energy (eV)
67-Ho-166

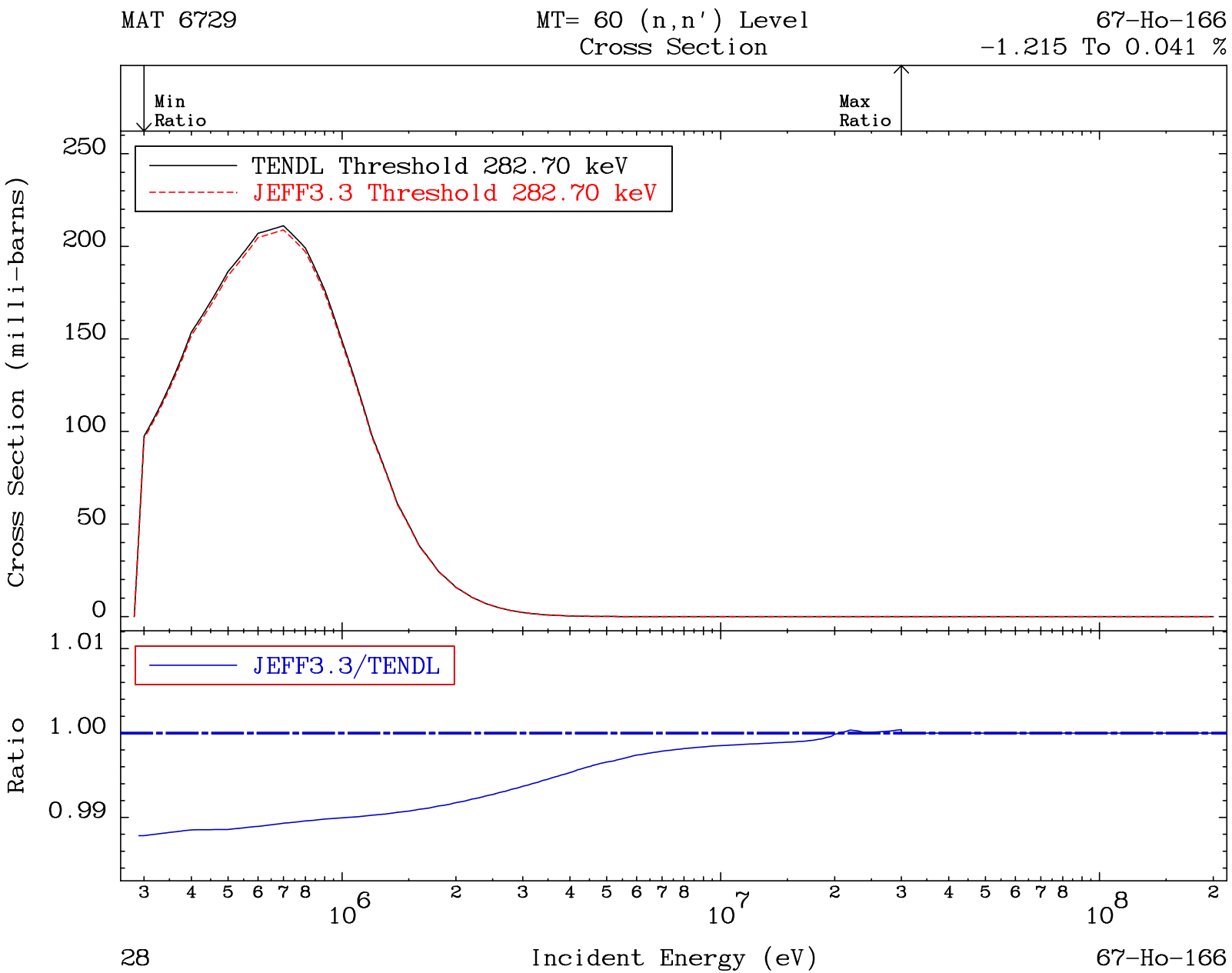

MAT 6729
MT= 55 (n,n') Level
Cross Section
67-Ho-166
-1.850 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 166.11 keV
JEFF3.3 Threshold 166.11 keV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
2
3
4
5
6
8
10^6
10^7
10^8
23
Incident Energy (eV)
67-Ho-166

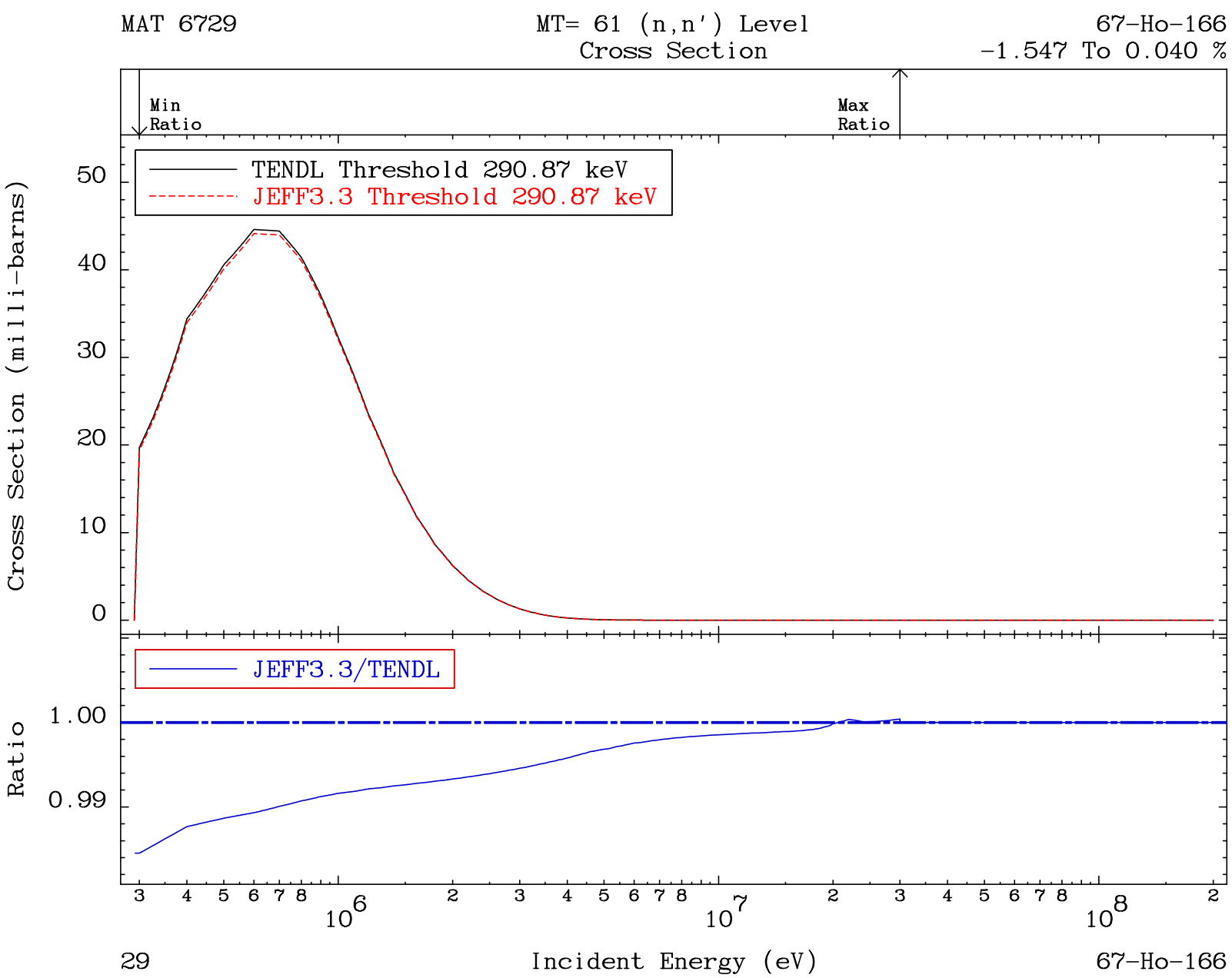

MAT 6729
MT= 56 (n,n') Level
Cross Section
67-Ho-166
-1.442 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 175.56 keV
JEFF3.3 Threshold 175.56 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
67-Ho-166

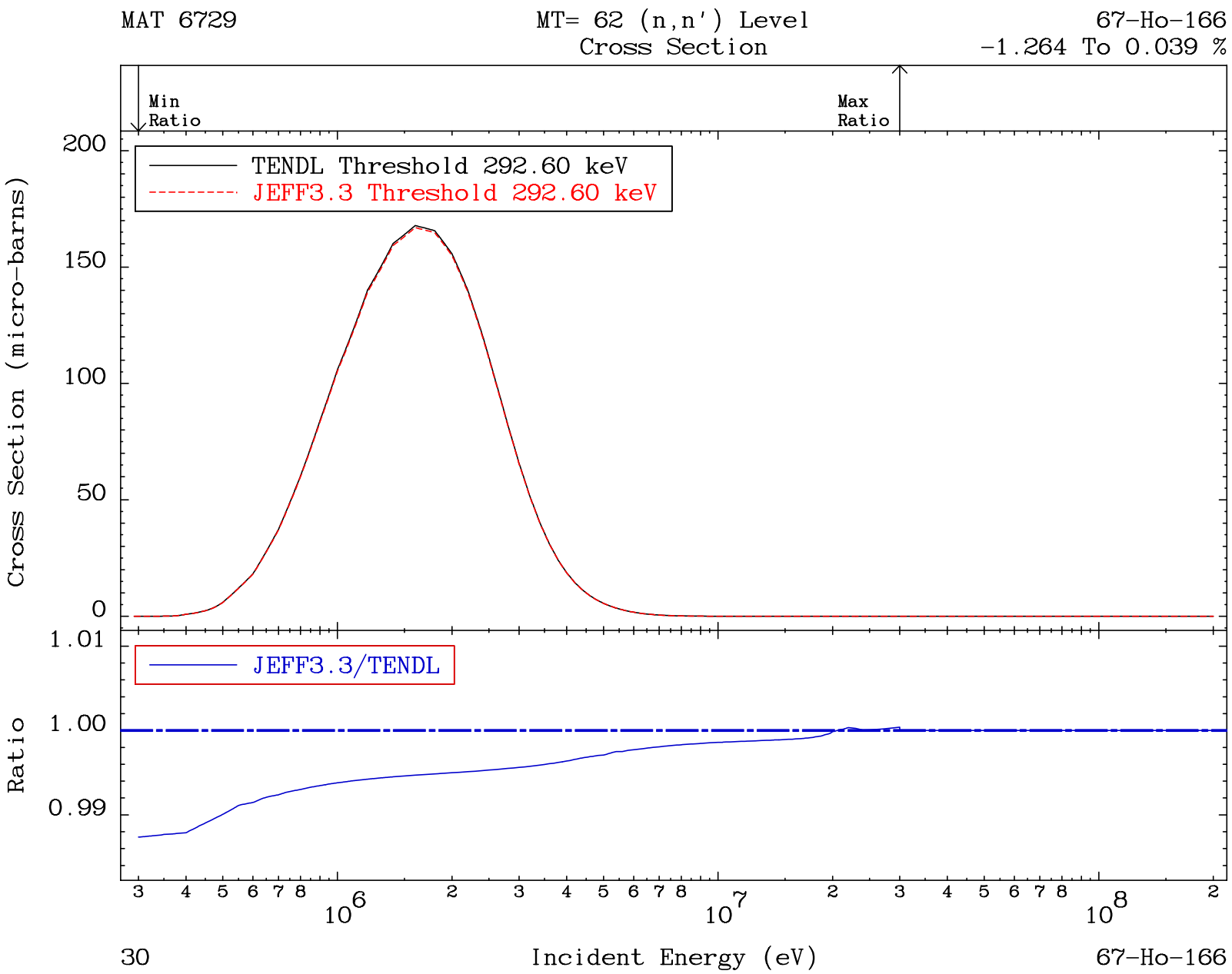

MAT 6729
MT= 57 (n,n') Level
Cross Section
67-Ho-166
-1.678 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 186.06 keV
JEFF3.3 Threshold 186.06 keV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.000
0.990
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
67-Ho-166

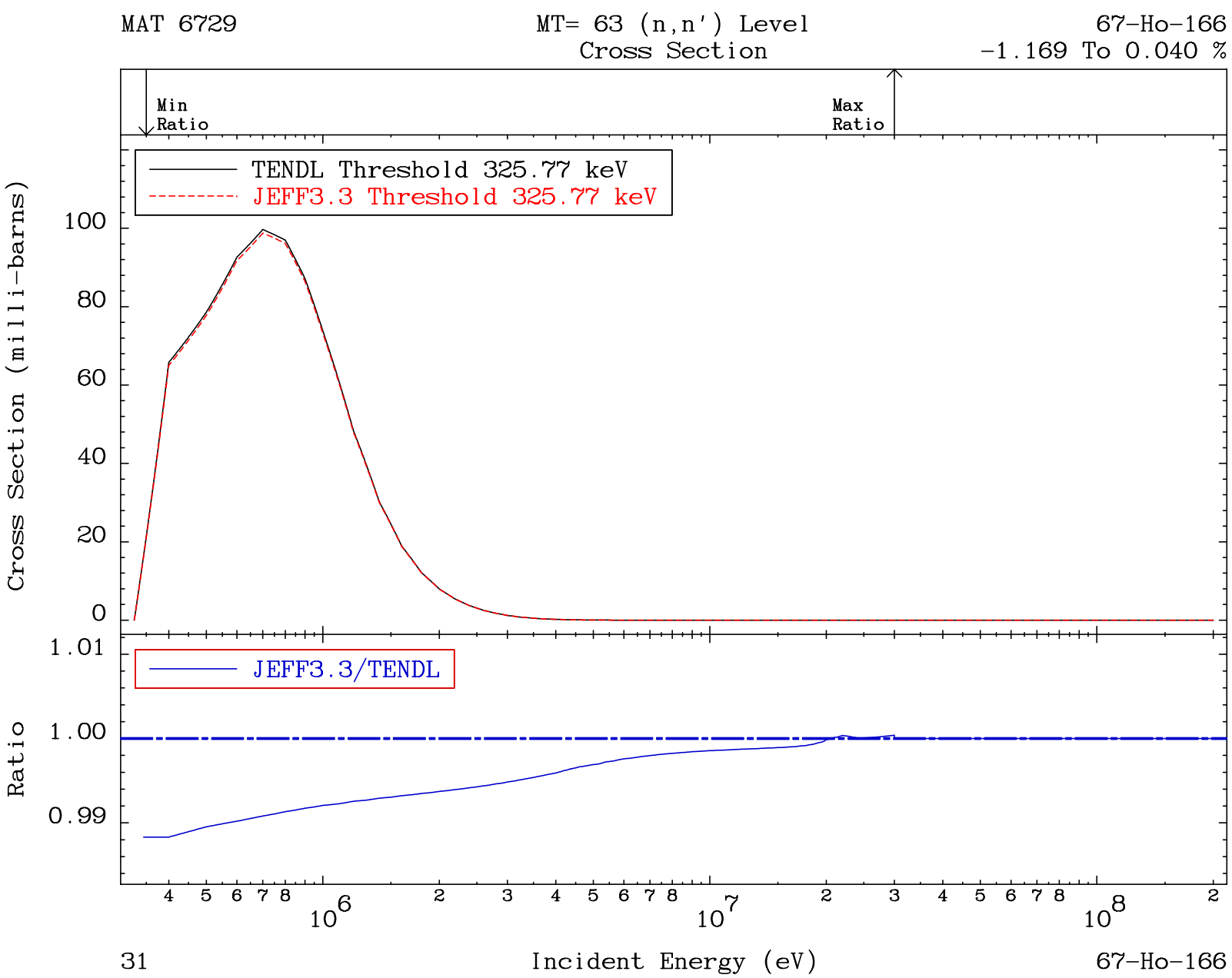

MAT 6729
MT= 58 (n,n') Level
Cross Section
67-Ho-166
-1.653 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 256.24 keV
JEFF3.3 Threshold 256.24 keV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.000
0.990
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
67-Ho-166

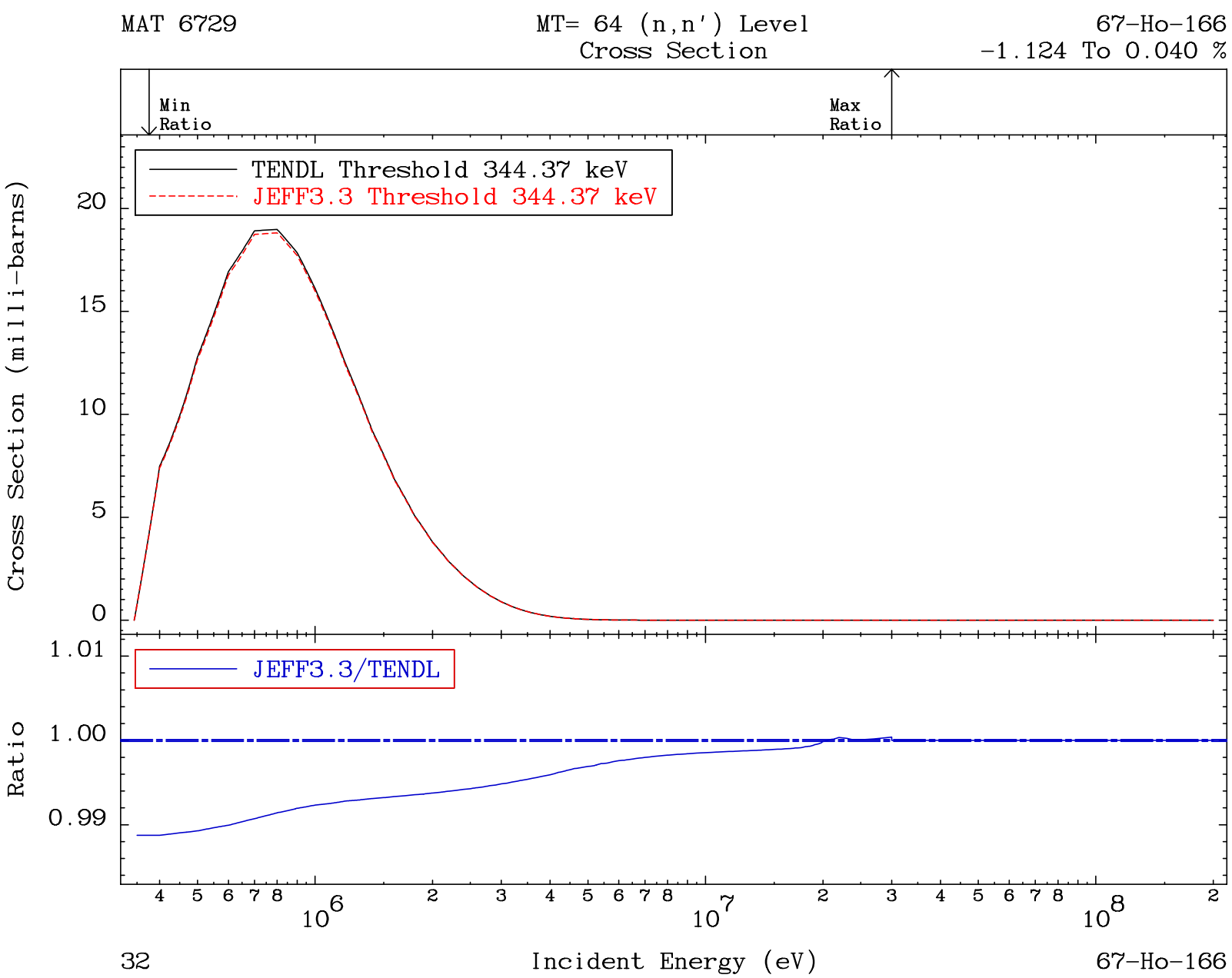

MAT 6729
MT= 59 (n,n') Level
Cross Section
67-Ho-166
-1.436 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 259.39 keV
JEFF3.3 Threshold 259.39 keV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
67-Ho-166

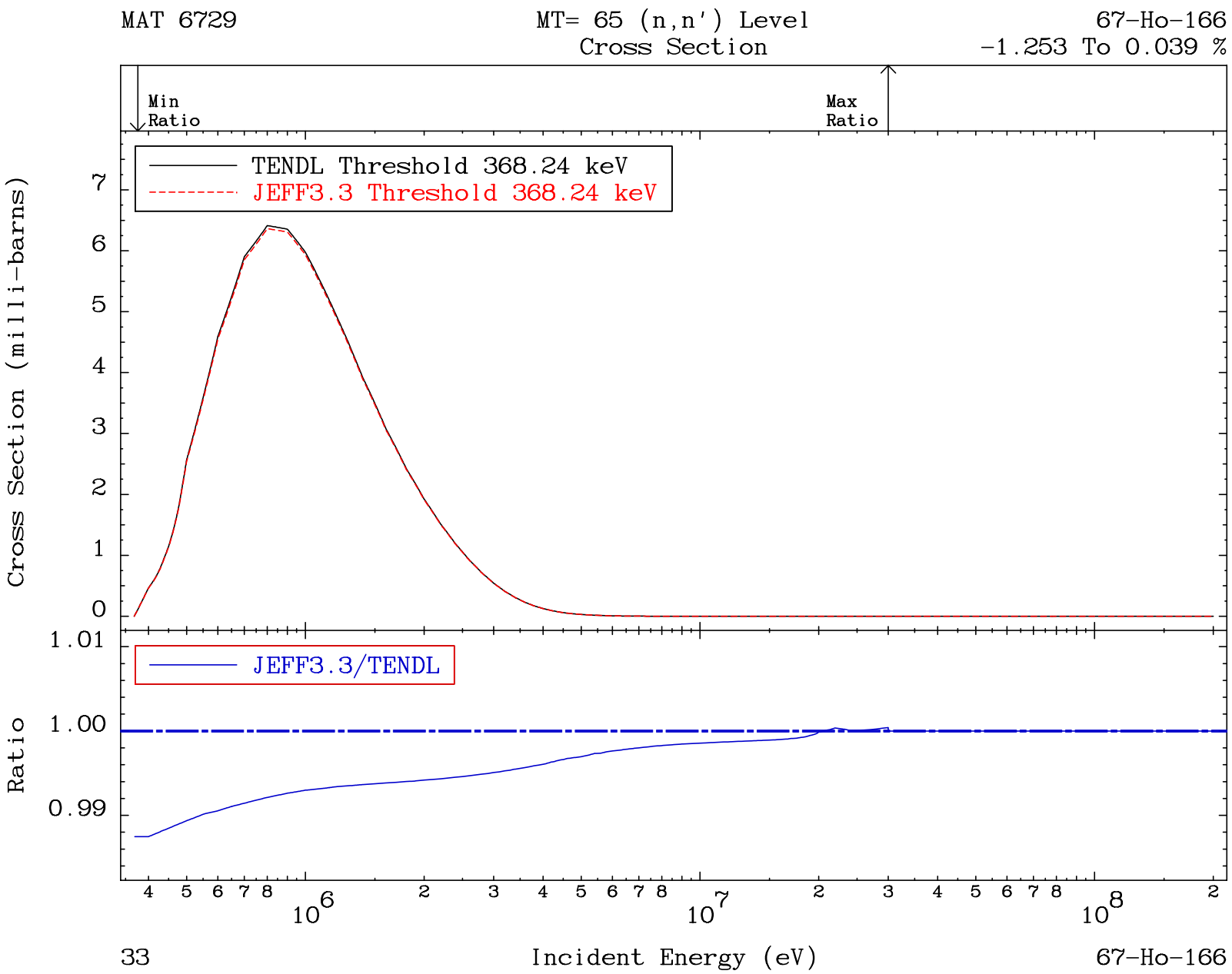

MAT 6729
MT= 60 (n,n') Level
Cross Section
67-Ho-166
-1.215 To 0.041 %
Min
Ratio
Max
Ratio
TENDL Threshold 282.70 keV
JEFF3.3 Threshold 282.70 keV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
67-Ho-166

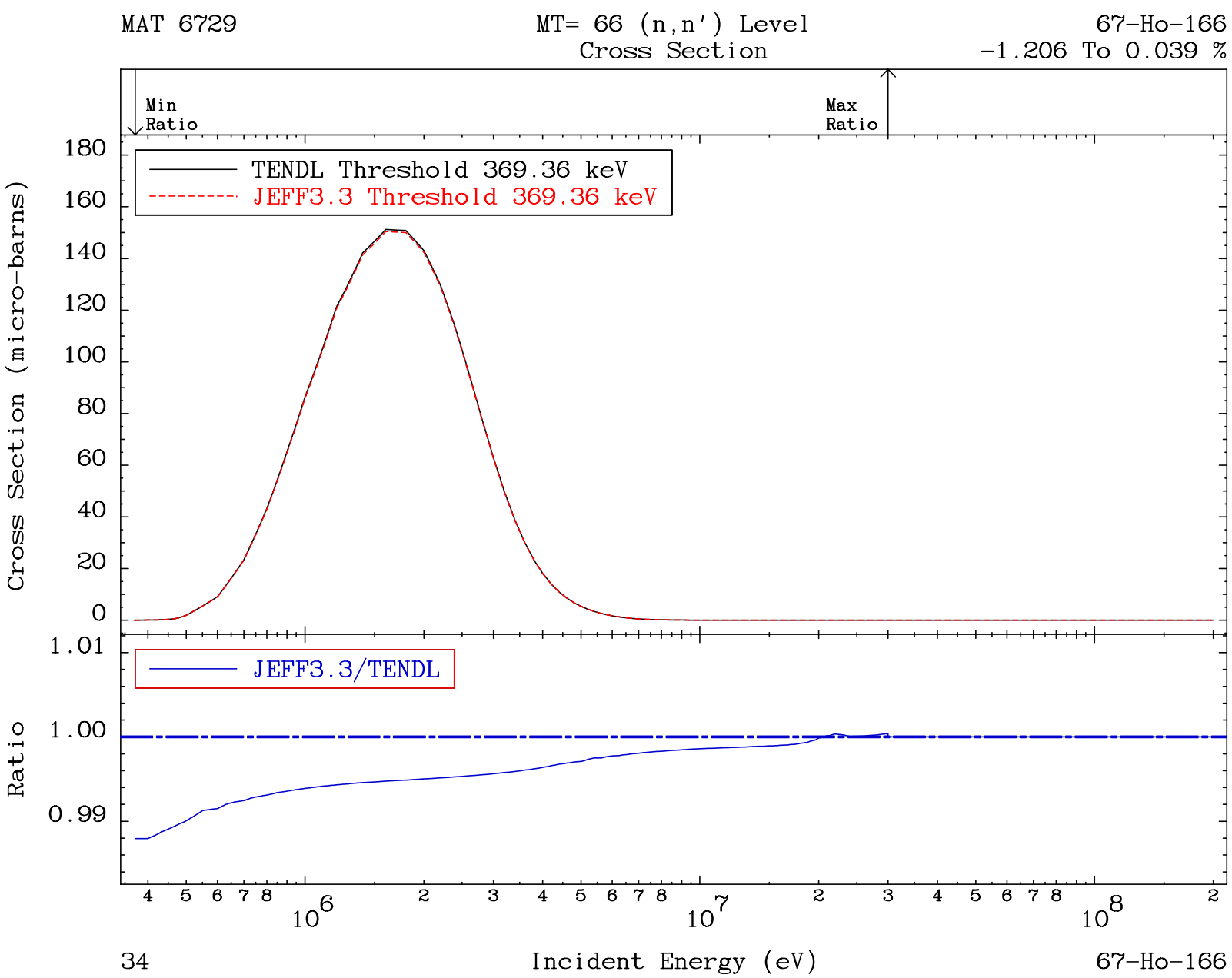

MAT 6729
MT= 61 (n,n') Level
Cross Section
67-Ho-166
-1.547 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 290.87 keV
JEFF3.3 Threshold 290.87 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.99
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
67-Ho-166

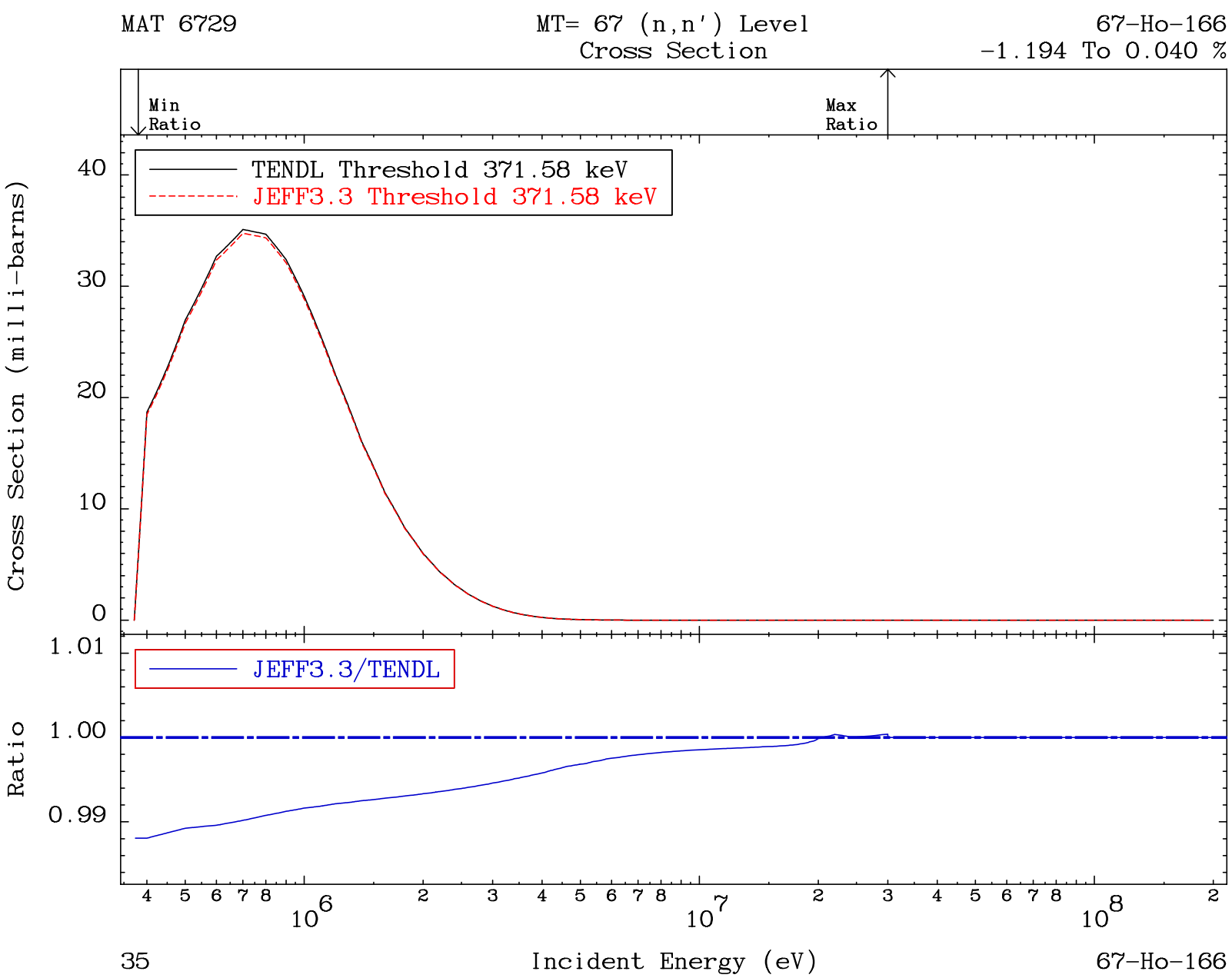

MAT 6729
MT= 62 (n,n') Level
Cross Section
67-Ho-166
-1.264 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 292.60 keV
JEFF3.3 Threshold 292.60 keV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
67-Ho-166

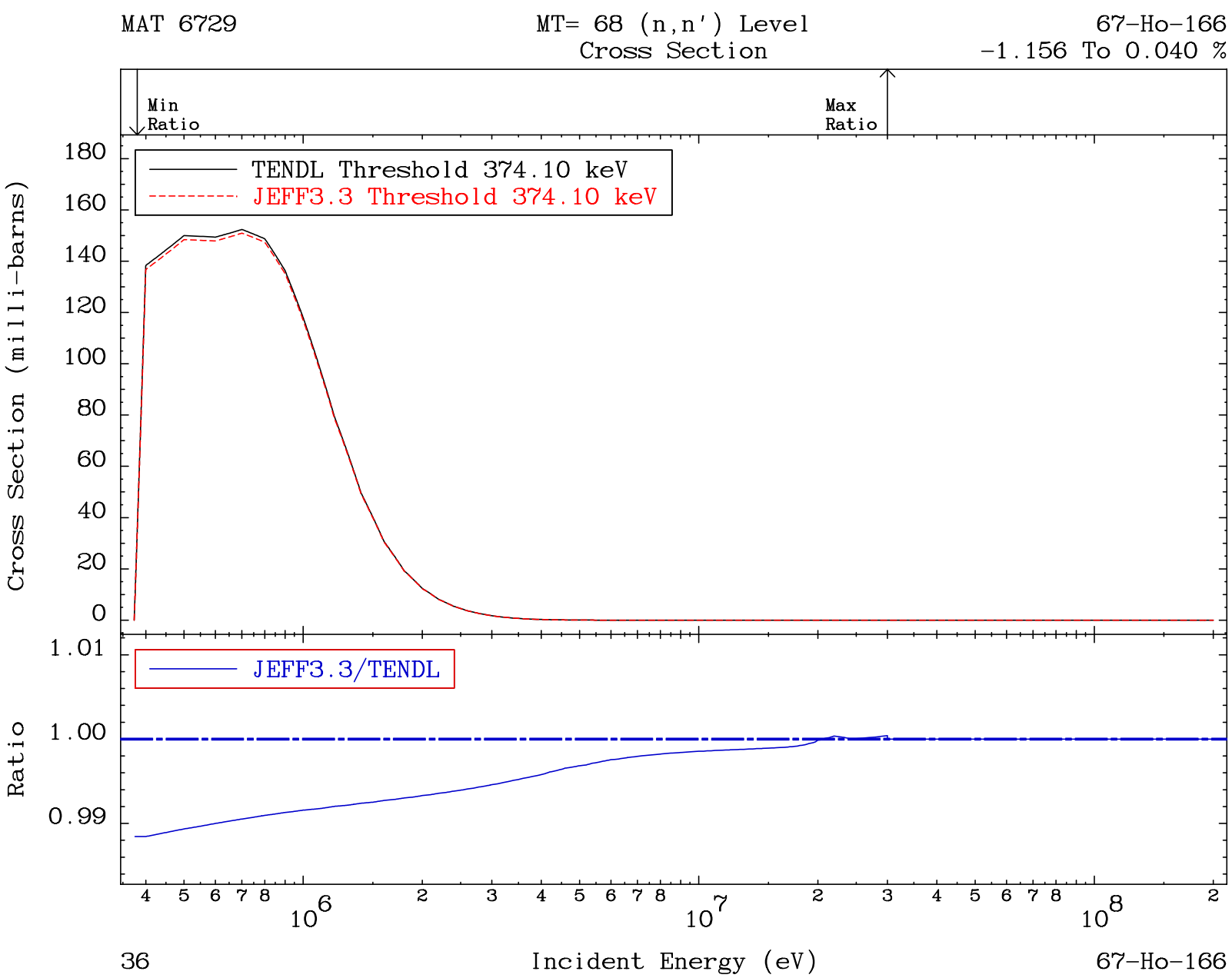

MAT 6729
MT= 63 (n,n') Level
Cross Section
67-Ho-166
-1.169 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 325.77 keV
JEFF3.3 Threshold 325.77 keV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
67-Ho-166

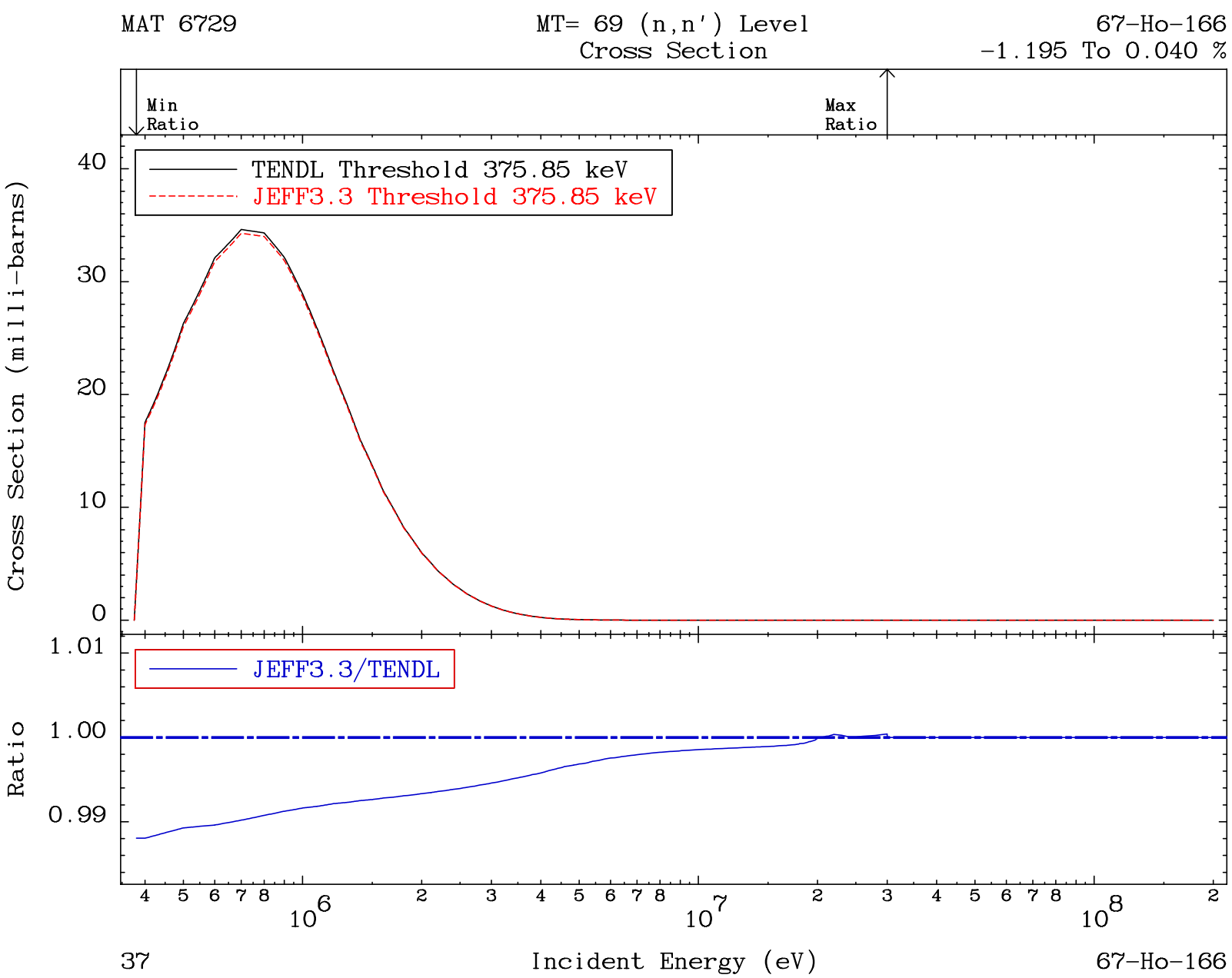

MAT 6729
MT= 64 (n,n') Level
Cross Section
67-Ho-166
-1.124 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 344.37 keV
JEFF3.3 Threshold 344.37 keV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
67-Ho-166

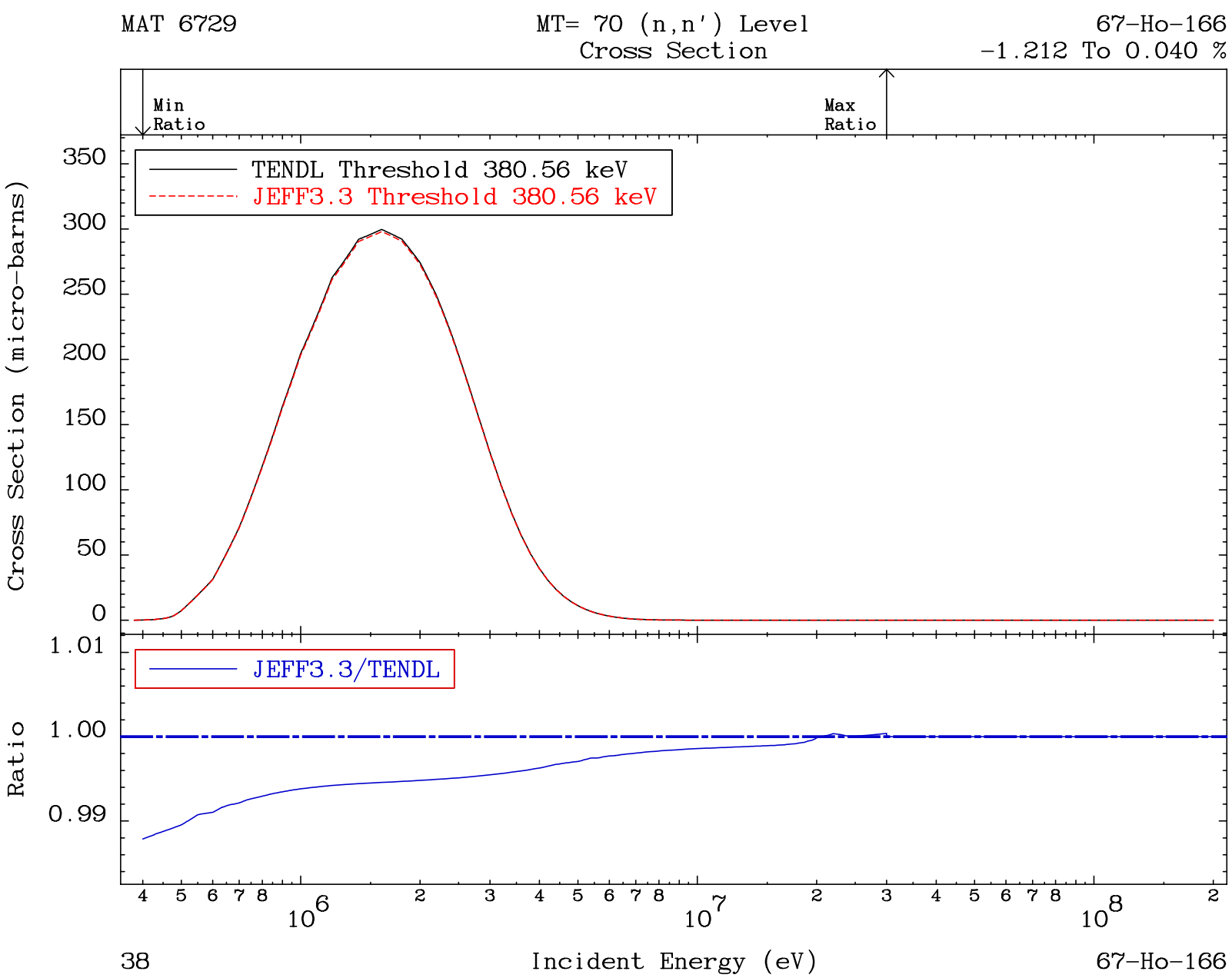

MAT 6729
MT= 65 (n,n') Level
Cross Section
67-Ho-166
-1.253 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 368.24 keV
JEFF3.3 Threshold 368.24 keV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
67-Ho-166

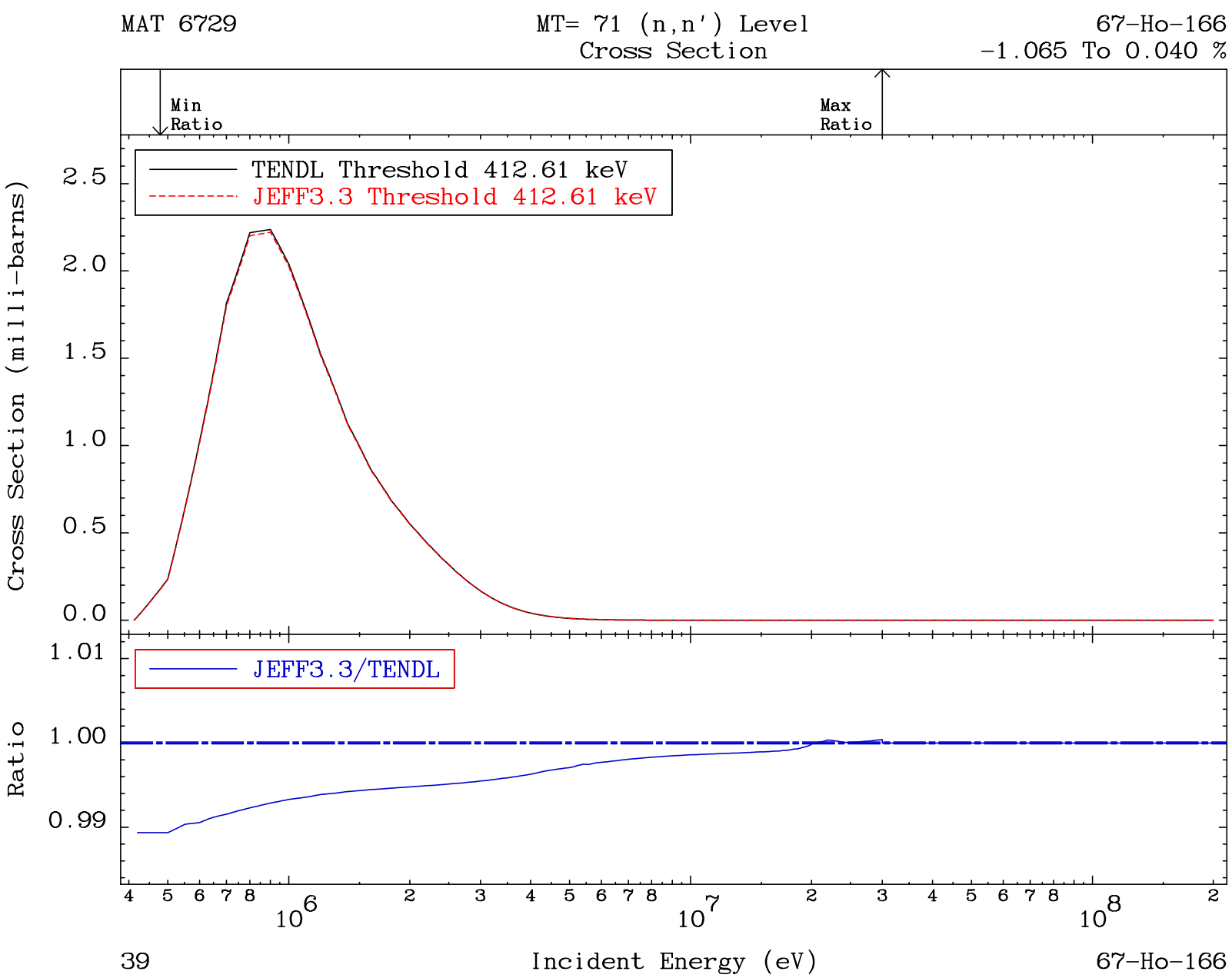

MAT 6729
MT= 66 (n,n') Level
Cross Section
67-Ho-166
-1.206 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 369.36 keV
JEFF3.3 Threshold 369.36 keV
Cross Section (micro-barns)
180
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
67-Ho-166

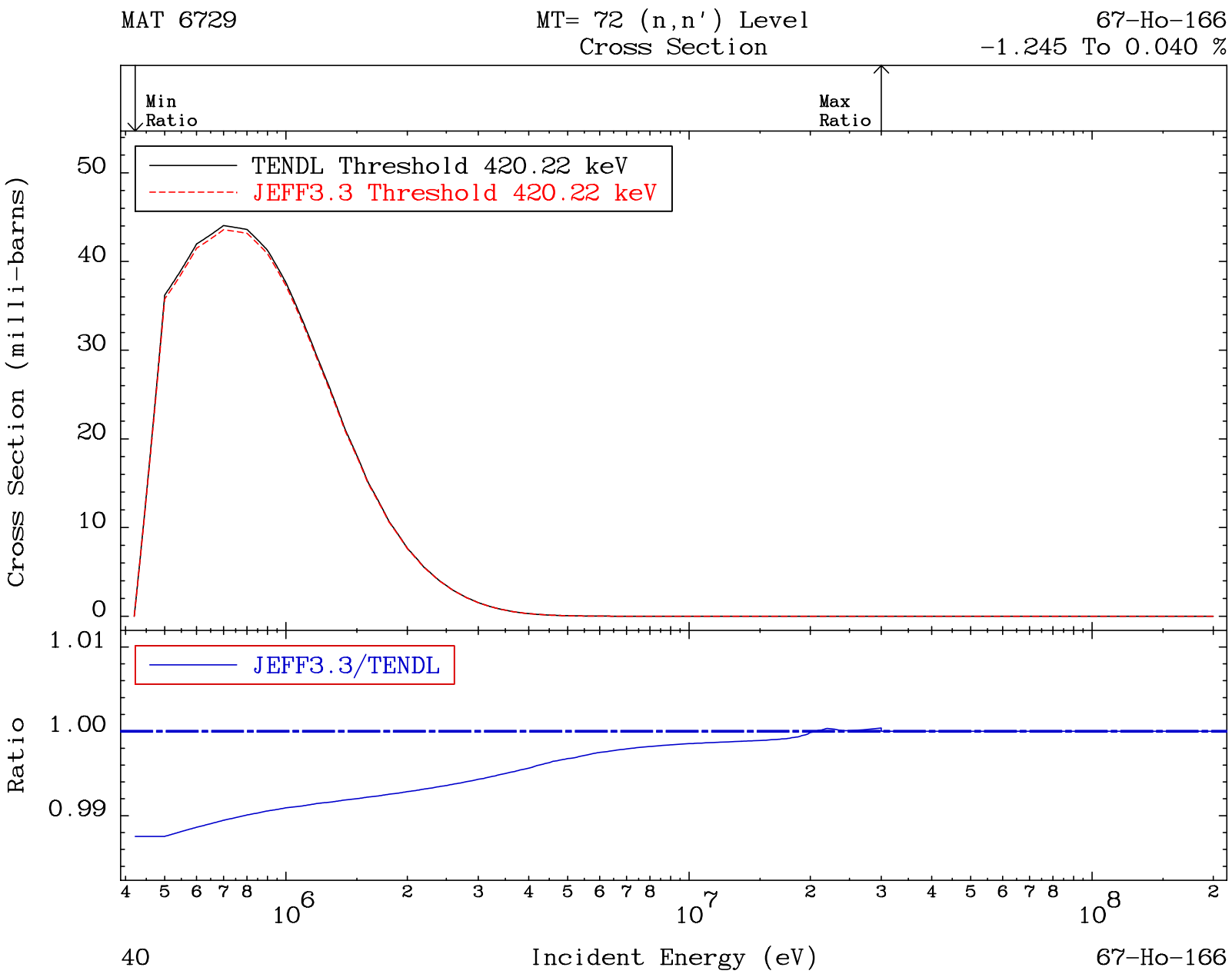

MAT 6729
MT= 67 (n,n') Level
Cross Section
67-Ho-166
-1.194 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 371.58 keV
JEFF3.3 Threshold 371.58 keV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
67-Ho-166

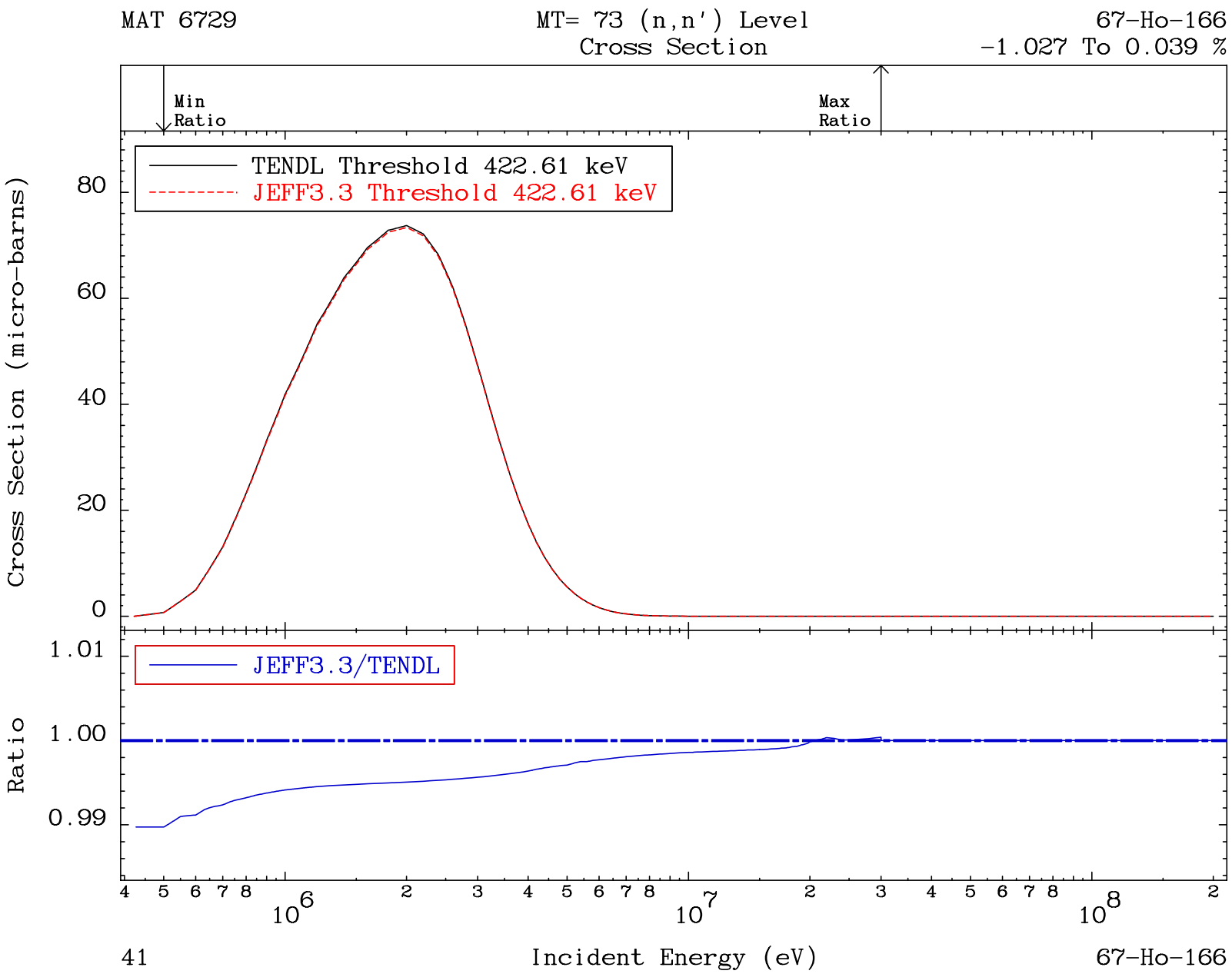

MAT 6729
MT= 68 (n,n') Level
Cross Section
67-Ho-166
-1.156 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 374.10 keV
JEFF3.3 Threshold 374.10 keV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
67-Ho-166

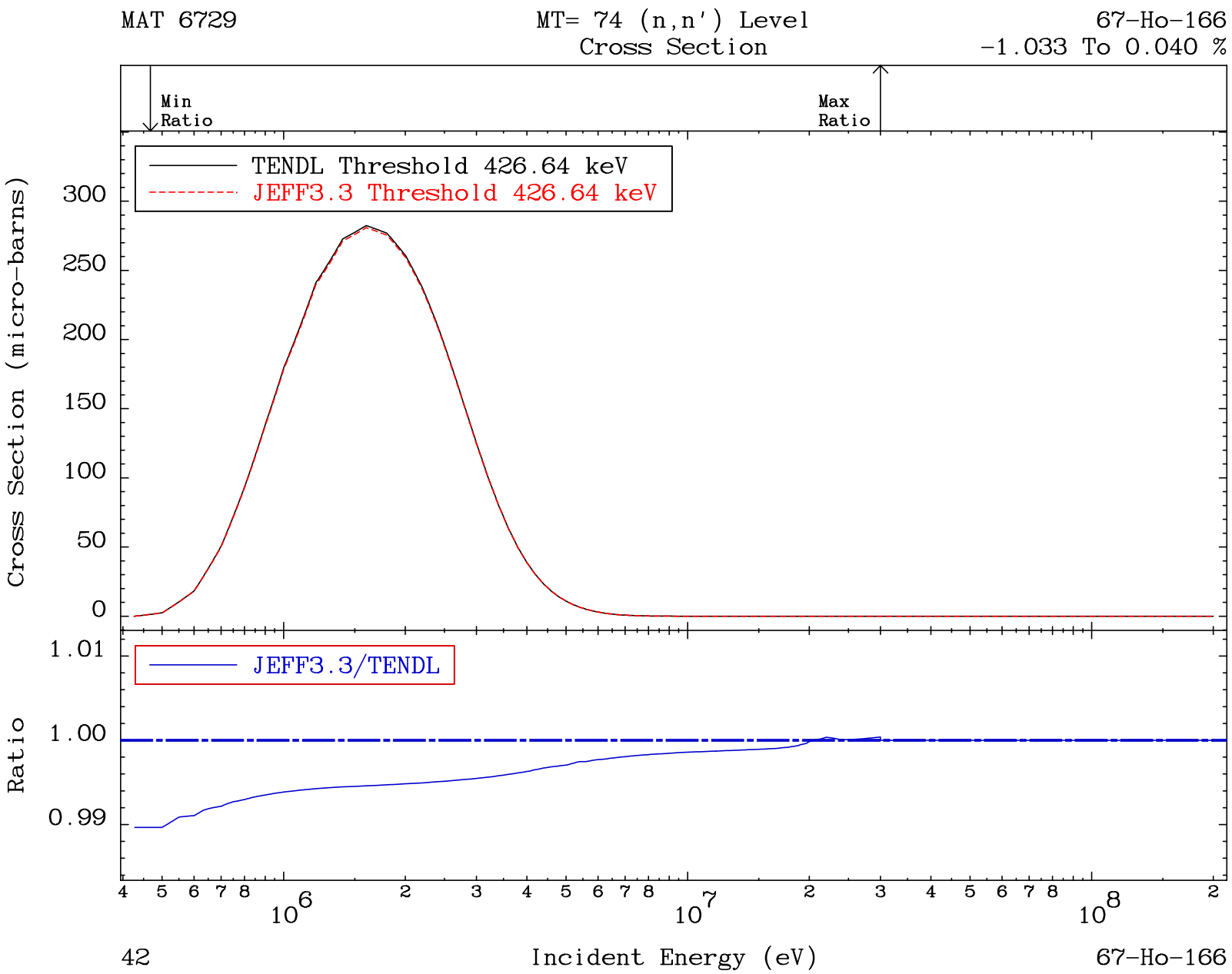

MAT 6729
MT= 69 (n,n') Level
Cross Section
67-Ho-166
-1.195 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 375.85 keV
JEFF3.3 Threshold 375.85 keV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
67-Ho-166

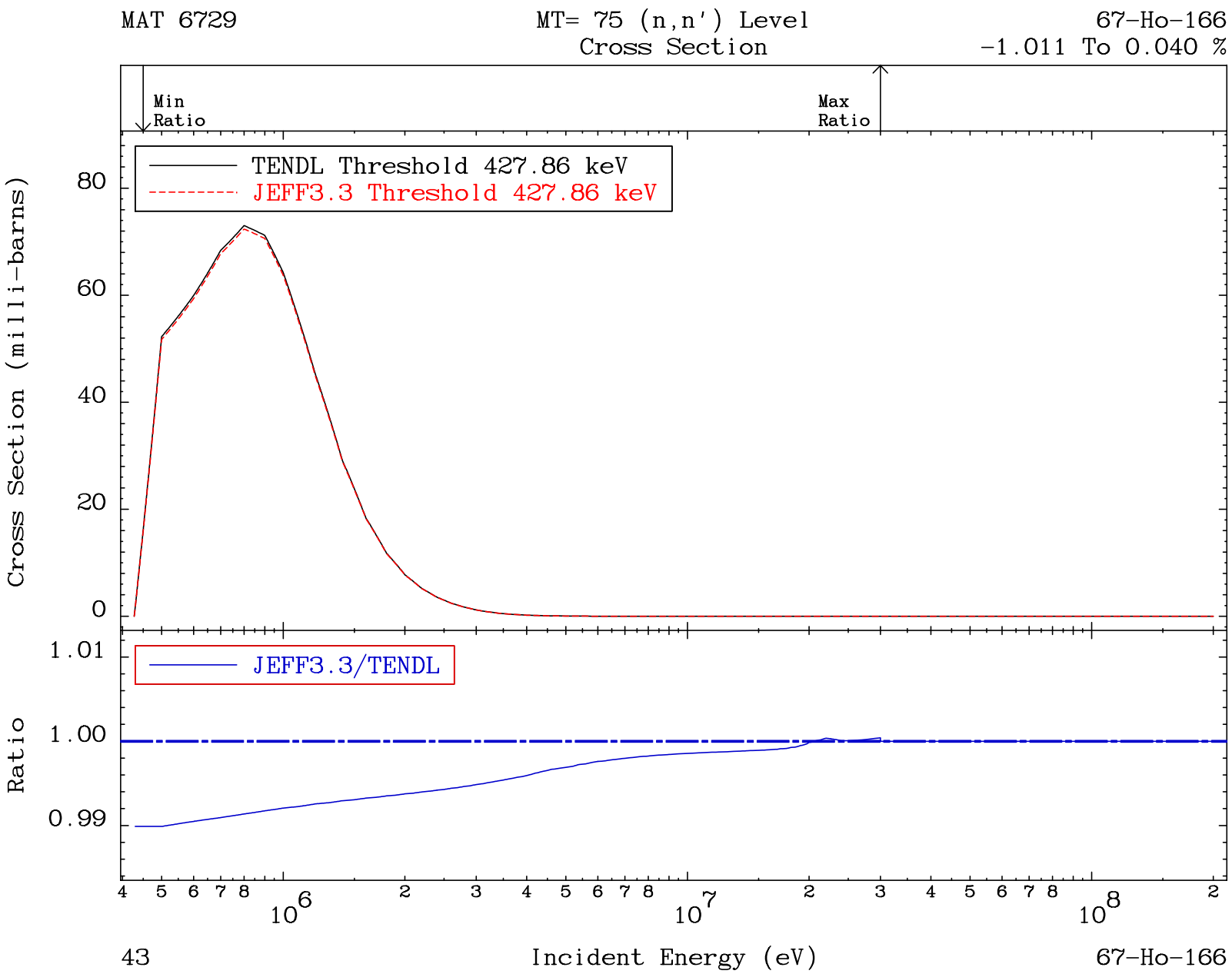

MAT 6729
MT= 70 (n,n') Level
Cross Section
67-Ho-166
-1.212 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 380.56 keV
JEFF3.3 Threshold 380.56 keV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
67-Ho-166

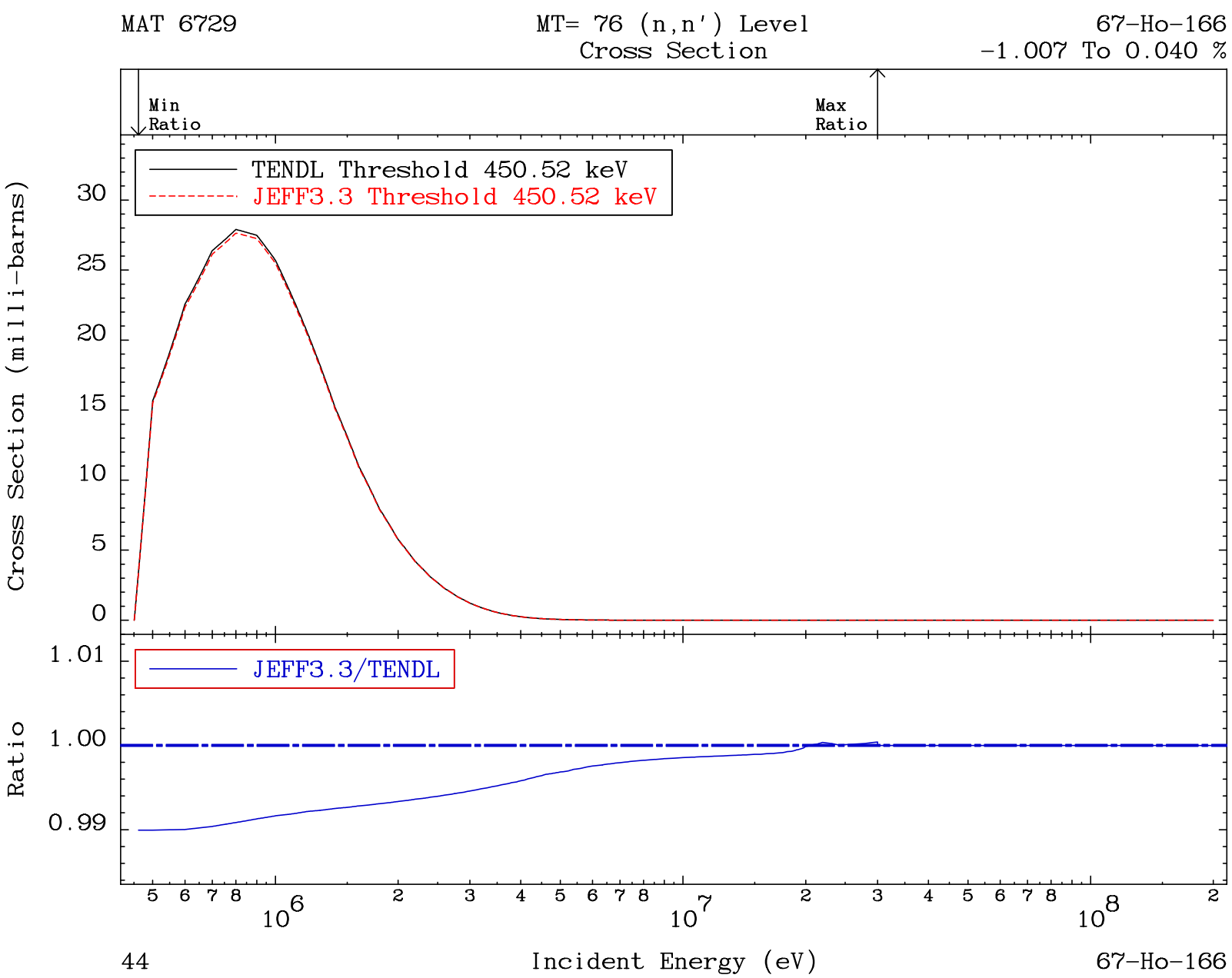

MAT 6729
MT= 71 (n,n') Level
Cross Section
67-Ho-166
-1.065 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 412.61 keV
JEFF3.3 Threshold 412.61 keV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
67-Ho-166

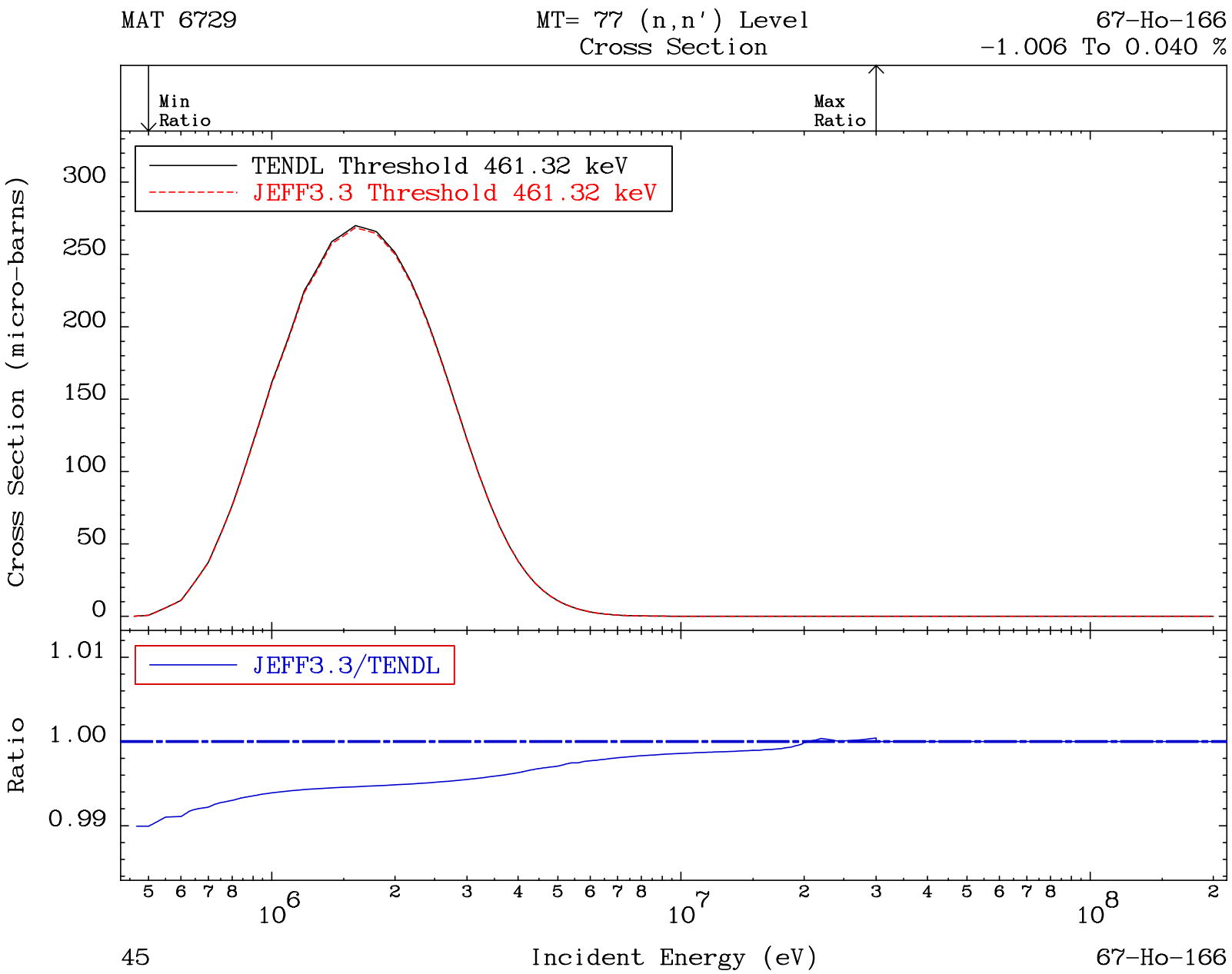

MAT 6729
MT= 72 (n,n') Level
Cross Section
67-Ho-166
-1.245 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 420.22 keV
JEFF3.3 Threshold 420.22 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
67-Ho-166

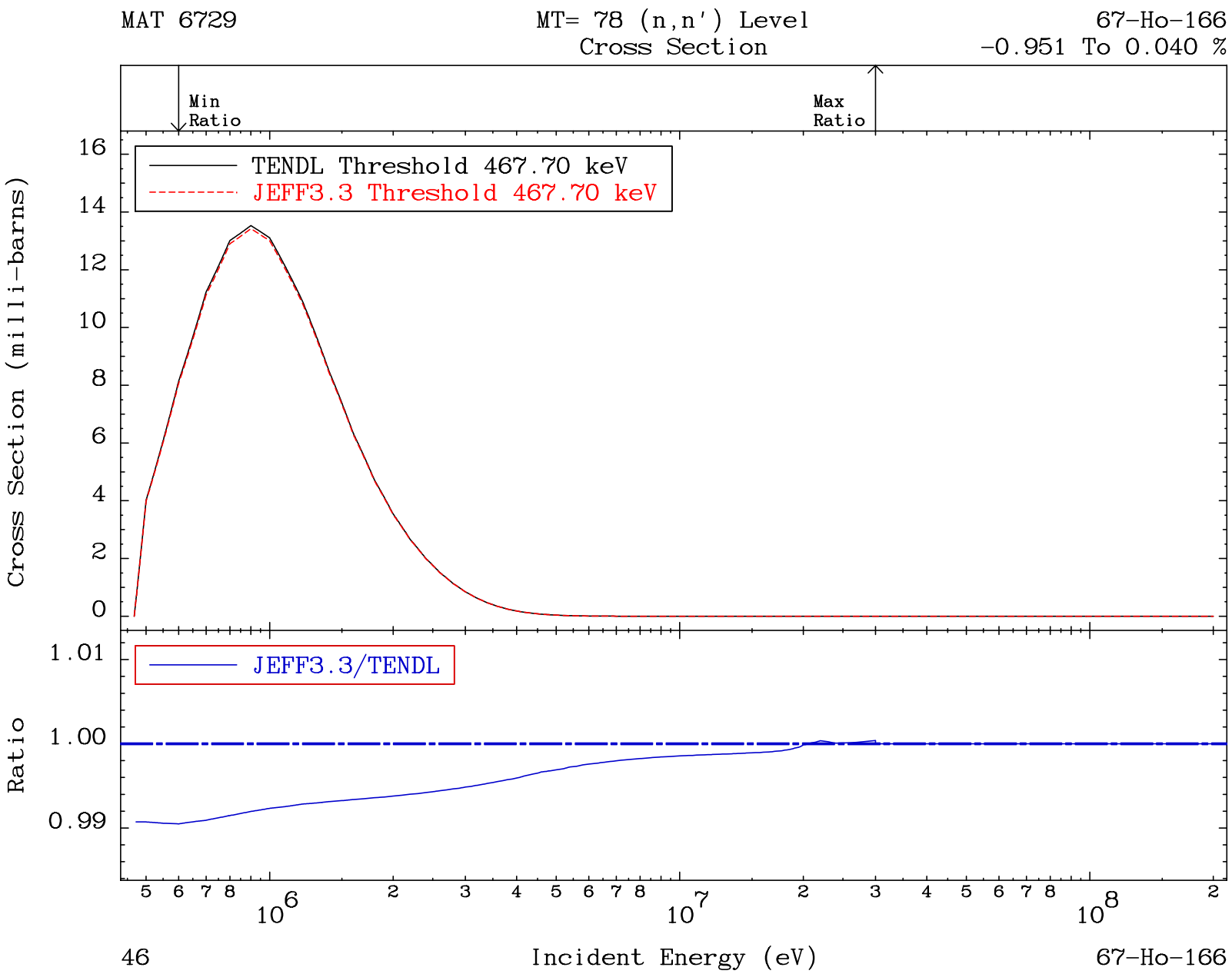

MAT 6729
MT= 73 (n,n') Level
Cross Section
67-Ho-166
-1.027 To 0.039 %
Min
Ratio
Max
Ratio
TENDL Threshold 422.61 keV
JEFF3.3 Threshold 422.61 keV
Cross Section (micro-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
41
Incident Energy (eV)
67-Ho-166

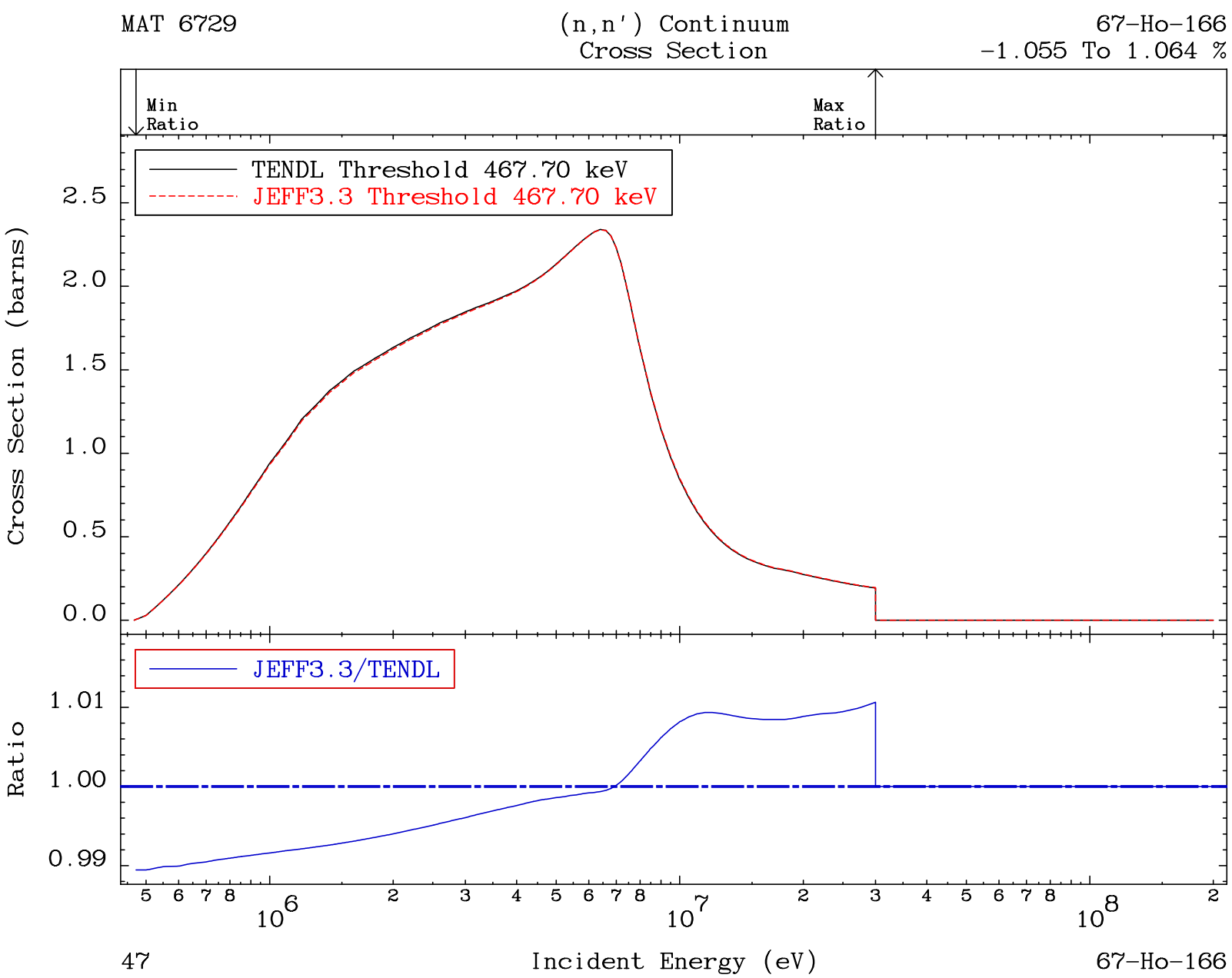

MAT 6729
MT= 74 (n,n') Level
Cross Section
67-Ho-166
-1.033 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 426.64 keV
JEFF3.3 Threshold 426.64 keV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
67-Ho-166

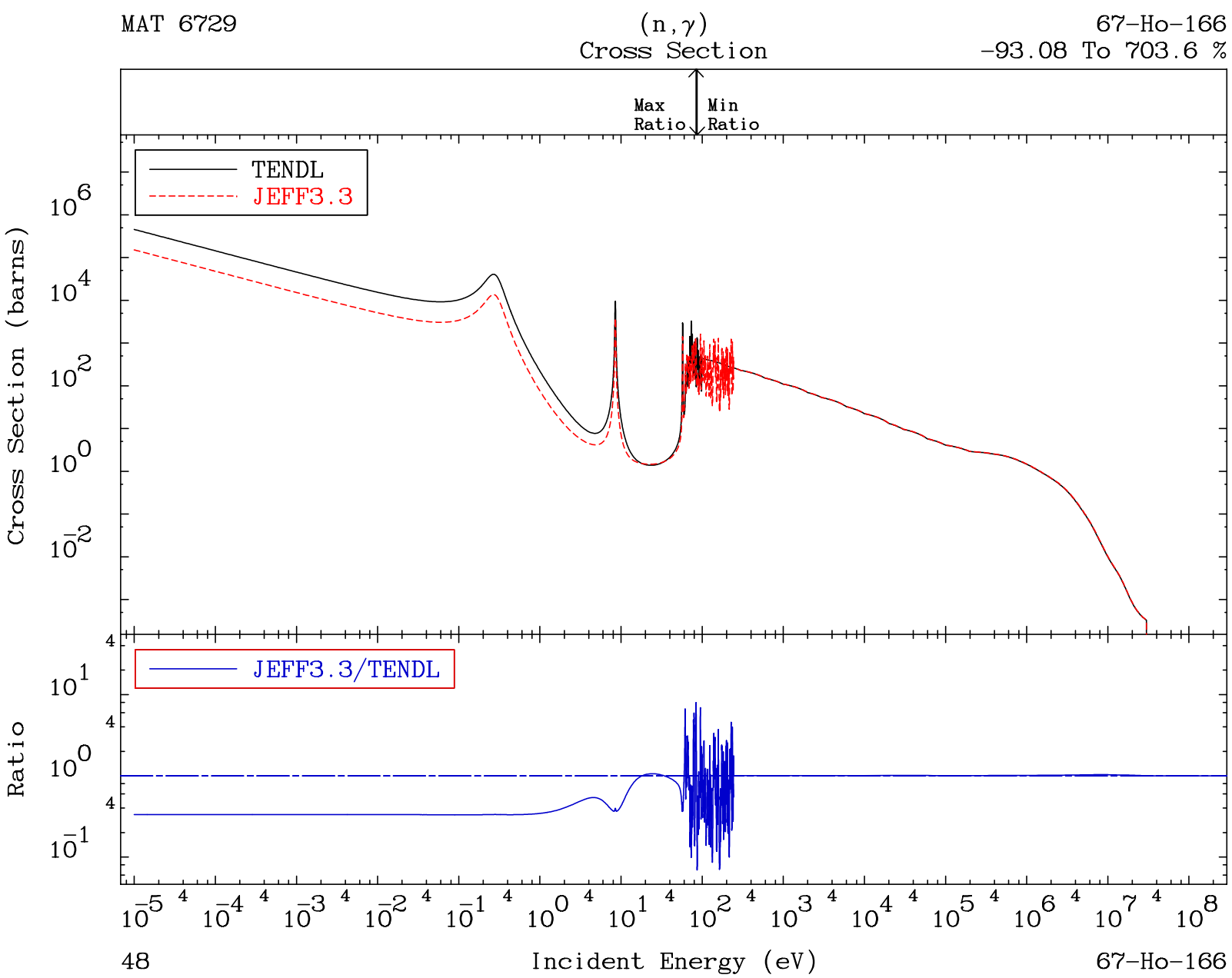

MAT 6729
MT= 75 (n,n') Level
Cross Section
67-Ho-166
-1.011 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 427.86 keV
JEFF3.3 Threshold 427.86 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
67-Ho-166

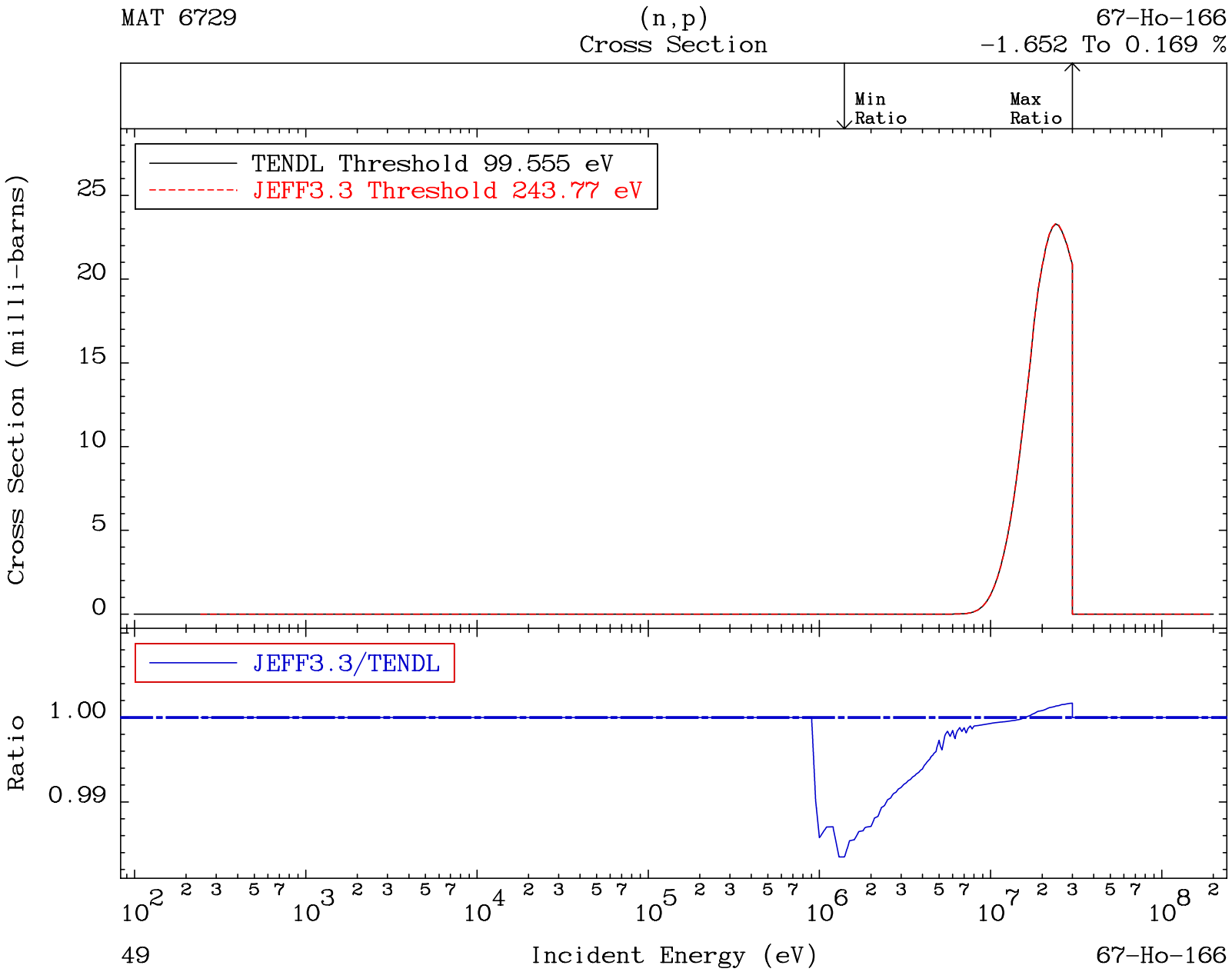

MAT 6729
MT= 76 (n,n') Level
Cross Section
67-Ho-166
-1.007 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 450.52 keV
JEFF3.3 Threshold 450.52 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
44
Incident Energy (eV)
67-Ho-166

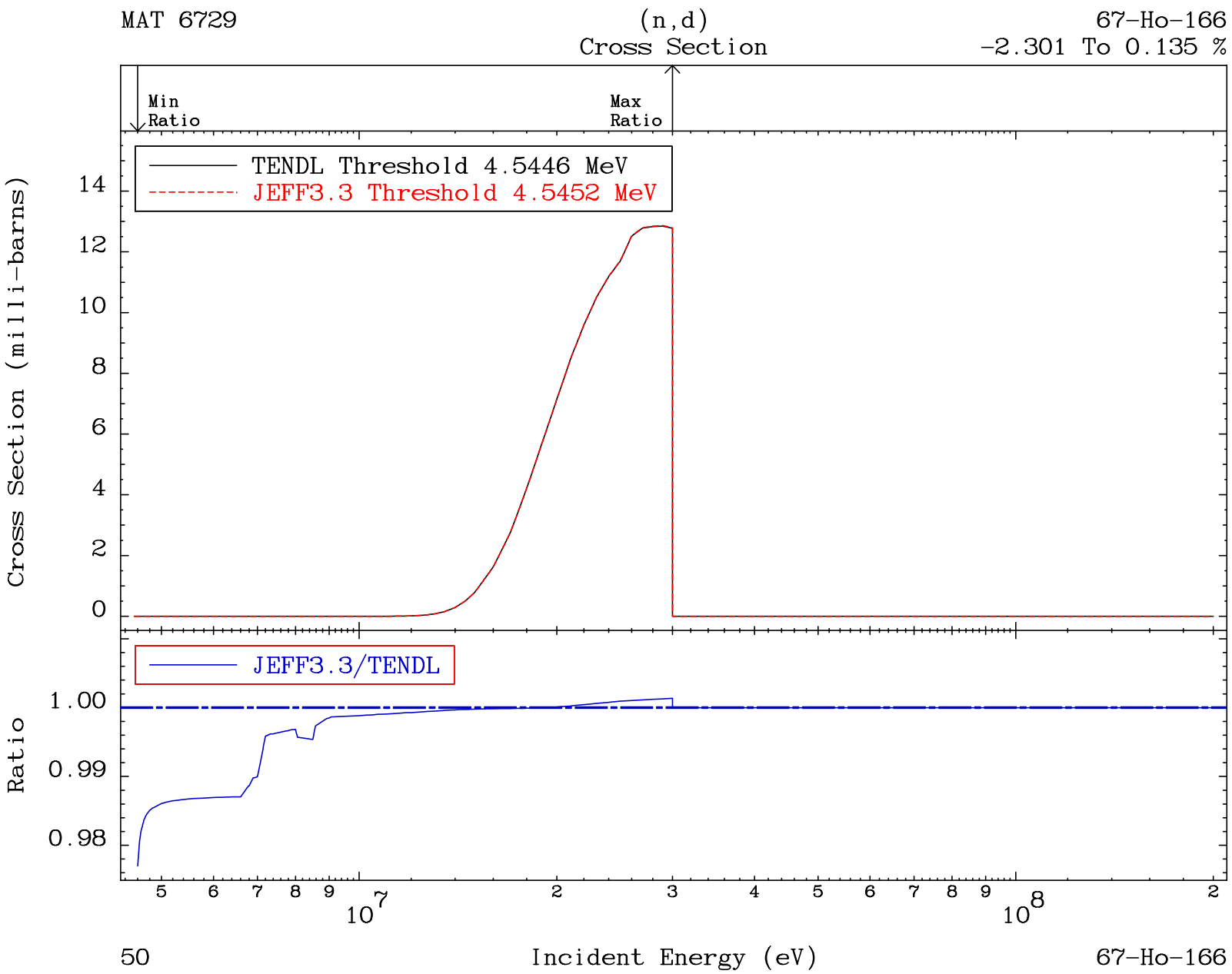

MAT 6729
MT= 77 (n,n') Level
Cross Section
67-Ho-166
-1.006 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 461.32 keV
JEFF3.3 Threshold 461.32 keV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
67-Ho-166

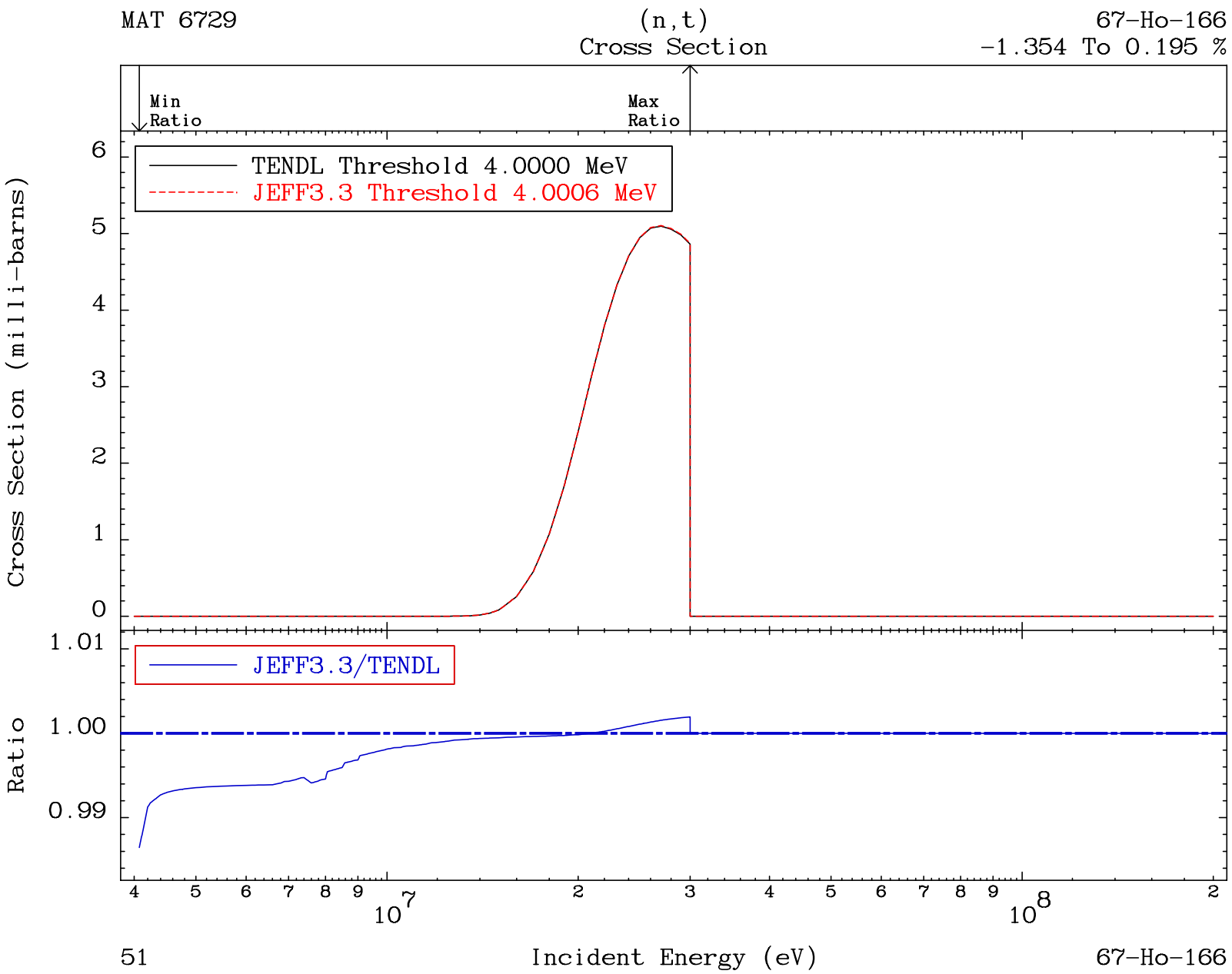

MAT 6729
MT= 78 (n,n') Level
Cross Section
67-Ho-166
-0.951 To 0.040 %
Min
Ratio
Max
Ratio
TENDL Threshold 467.70 keV
JEFF3.3 Threshold 467.70 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
67-Ho-166

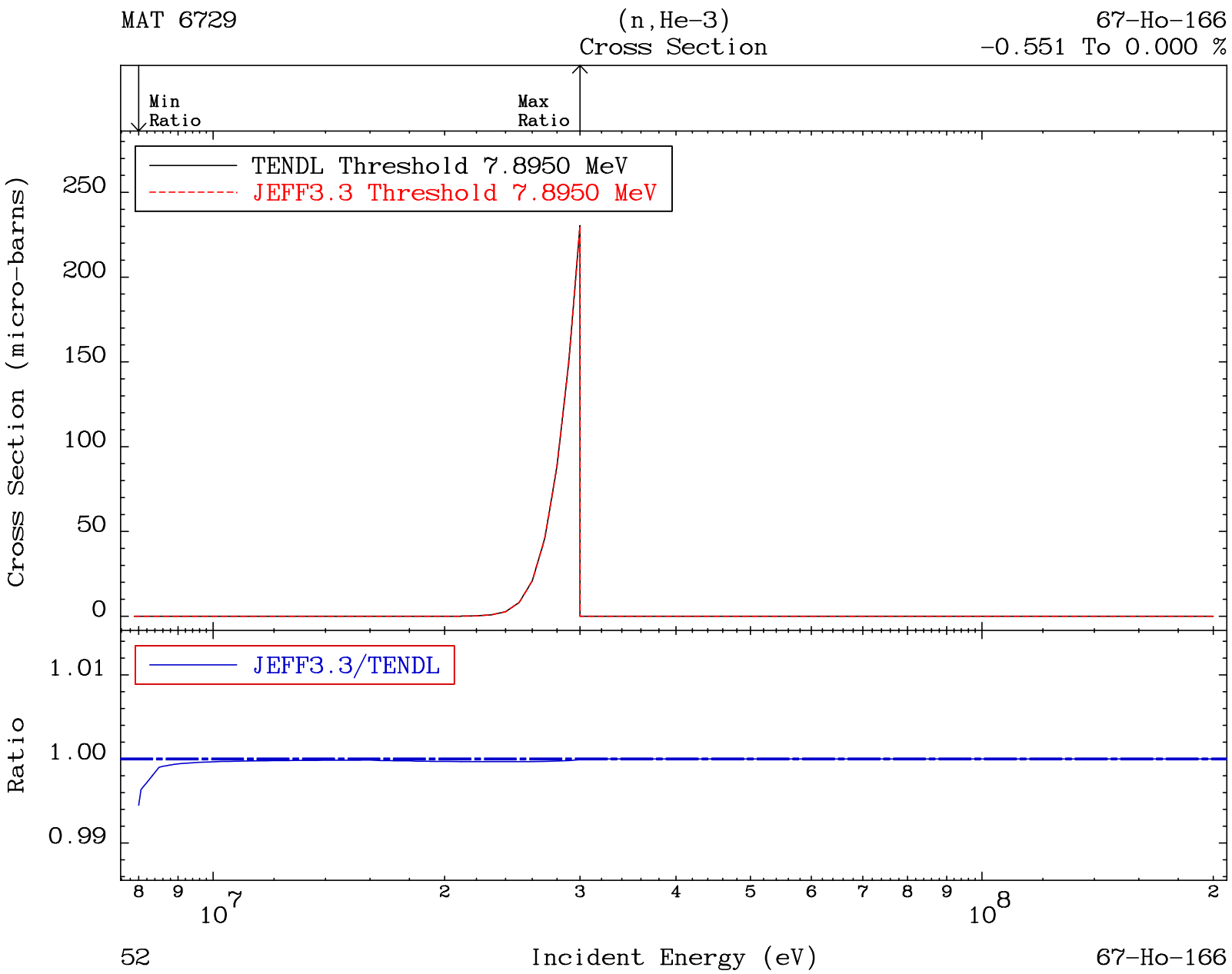

MAT 6729
(n,n') Continuum
Cross Section
67-Ho-166
-1.055 To 1.064 %
Min
Ratio
Max
Ratio
TENDL Threshold 467.70 keV
JEFF3.3 Threshold 467.70 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
47
Incident Energy (eV)
67-Ho-166

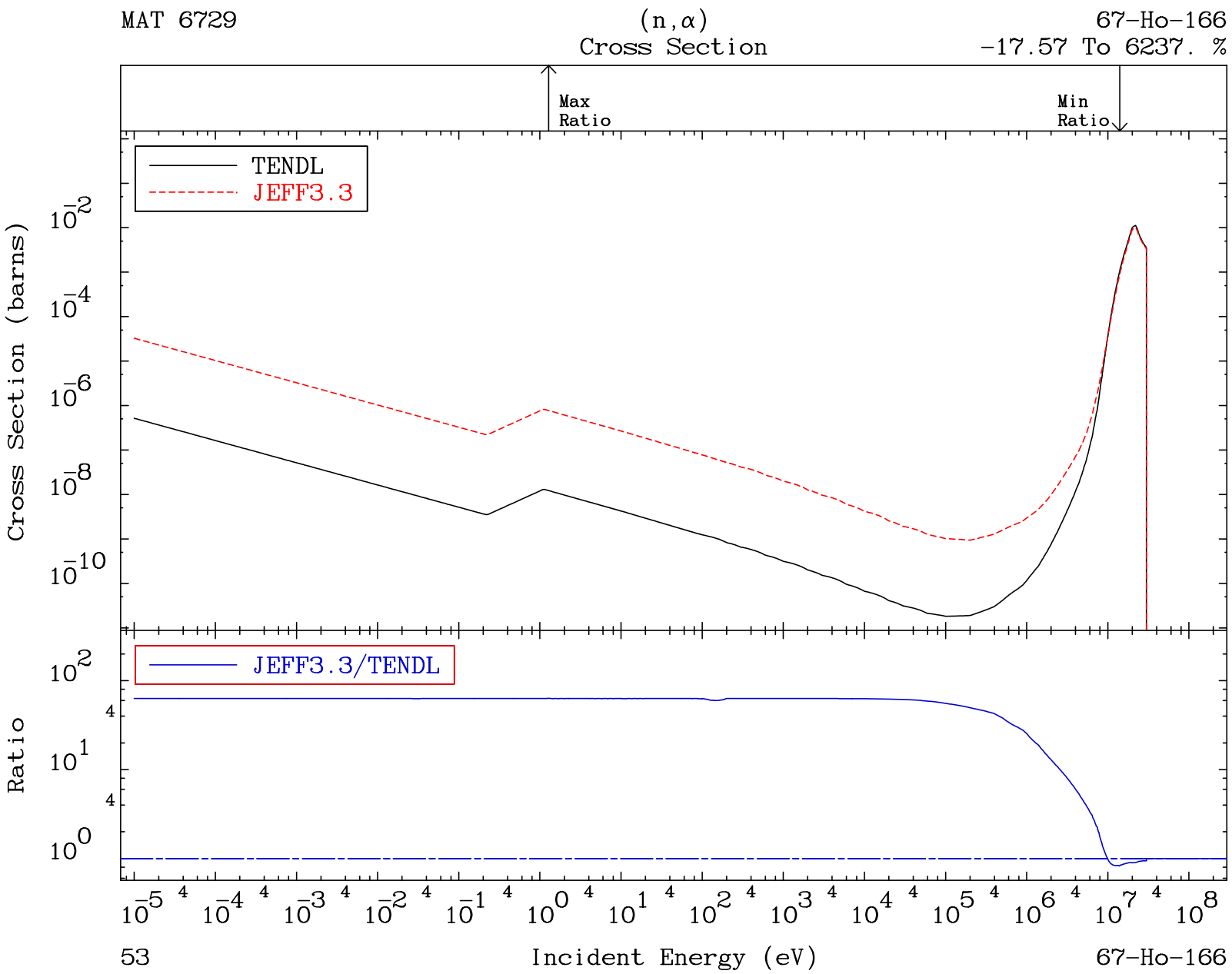

MAT 6729
(n,γ)
Cross Section
67-Ho-166
-93.08 To 703.6 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
48
67-Ho-166

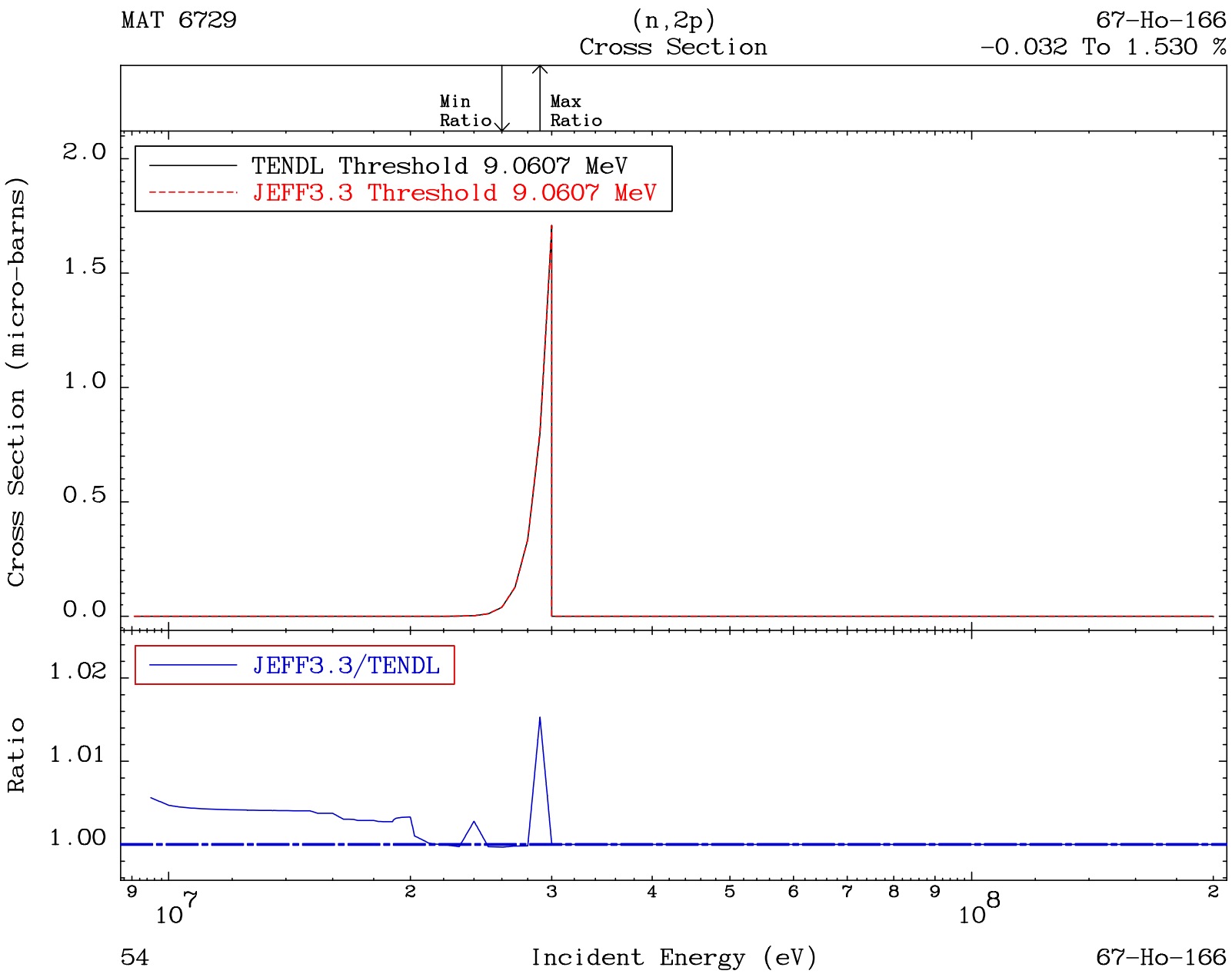

MAT 6729
(n,p)
Cross Section
67-Ho-166
-1.652 To 0.169 %
Min Ratio
Max Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.77 eV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.99
10^2 2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
49
Incident Energy (eV)
67-Ho-166

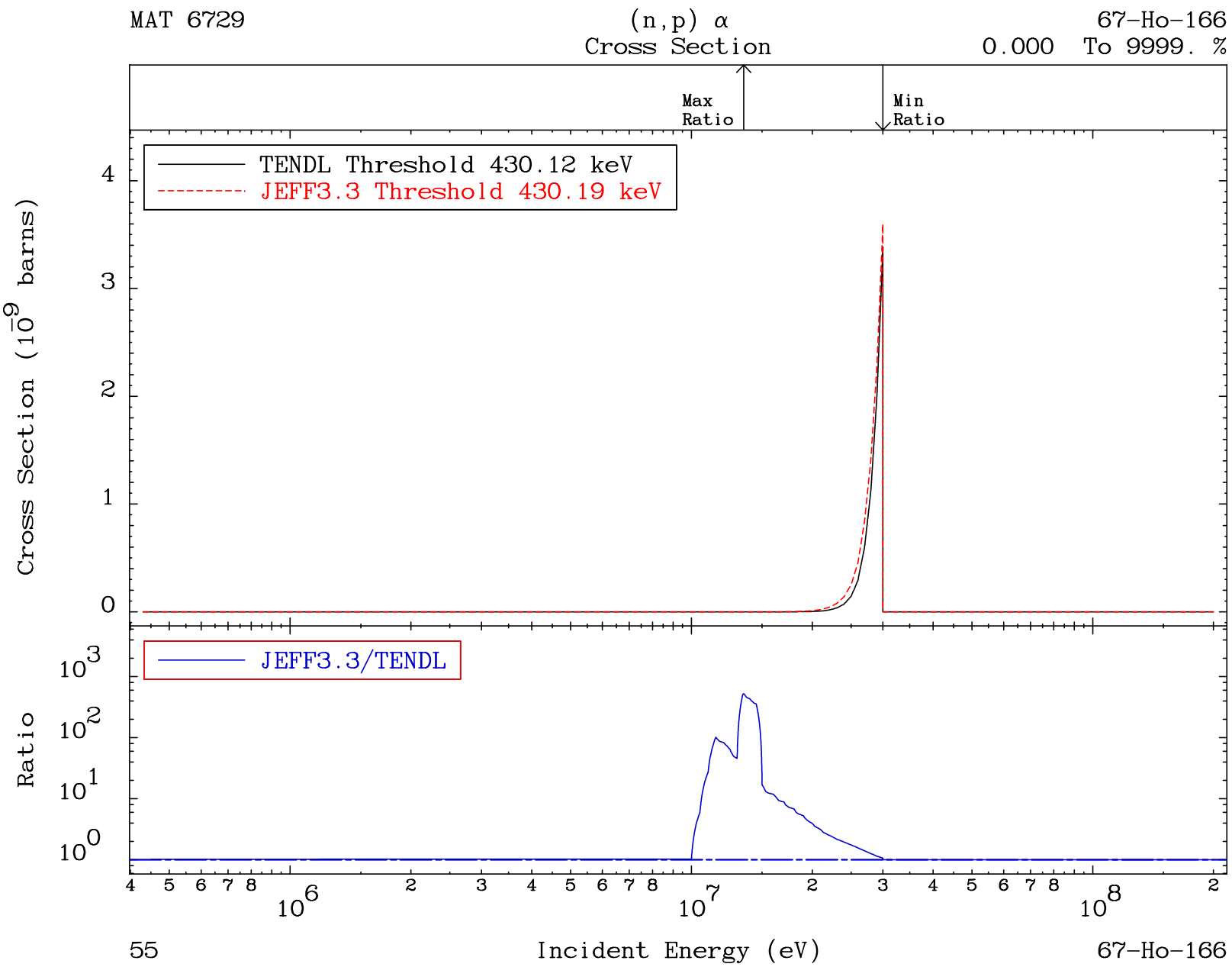

MAT 6729
(n,d)
Cross Section
67-Ho-166
-2.301 To 0.135 %
Min Ratio
Max Ratio
TENDL Threshold 4.5446 MeV
JEFF3.3 Threshold 4.5452 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
JEFF3.3/TENDL
Ratio
1.00
0.99
0.98
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
50
Incident Energy (eV)
67-Ho-166

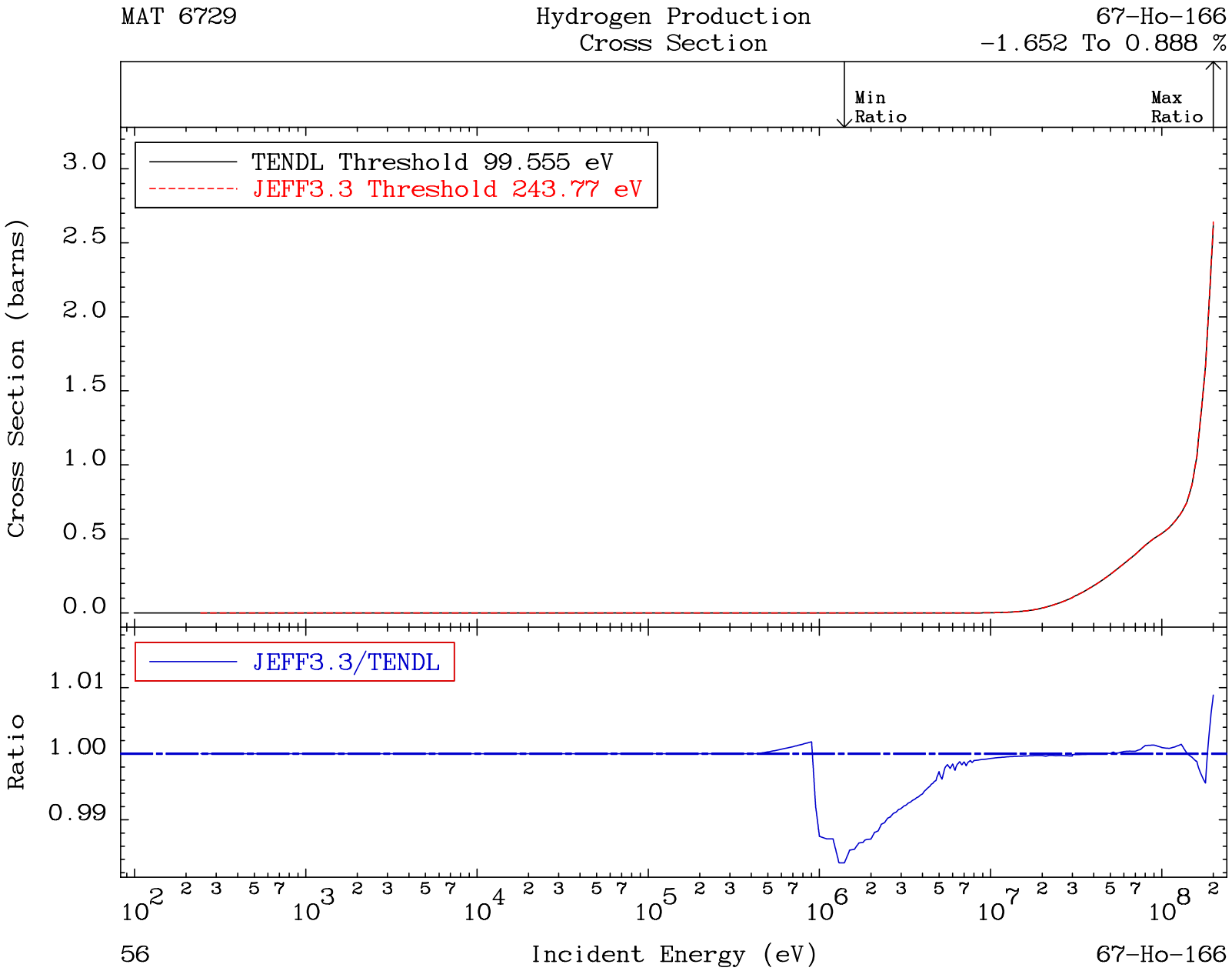

MAT 6729
(n,t)
Cross Section
67-Ho-166
-1.354 To 0.195 %
Min Ratio
Max Ratio
TENDL Threshold 4.0000 MeV
JEFF3.3 Threshold 4.0006 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
51
67-Ho-166

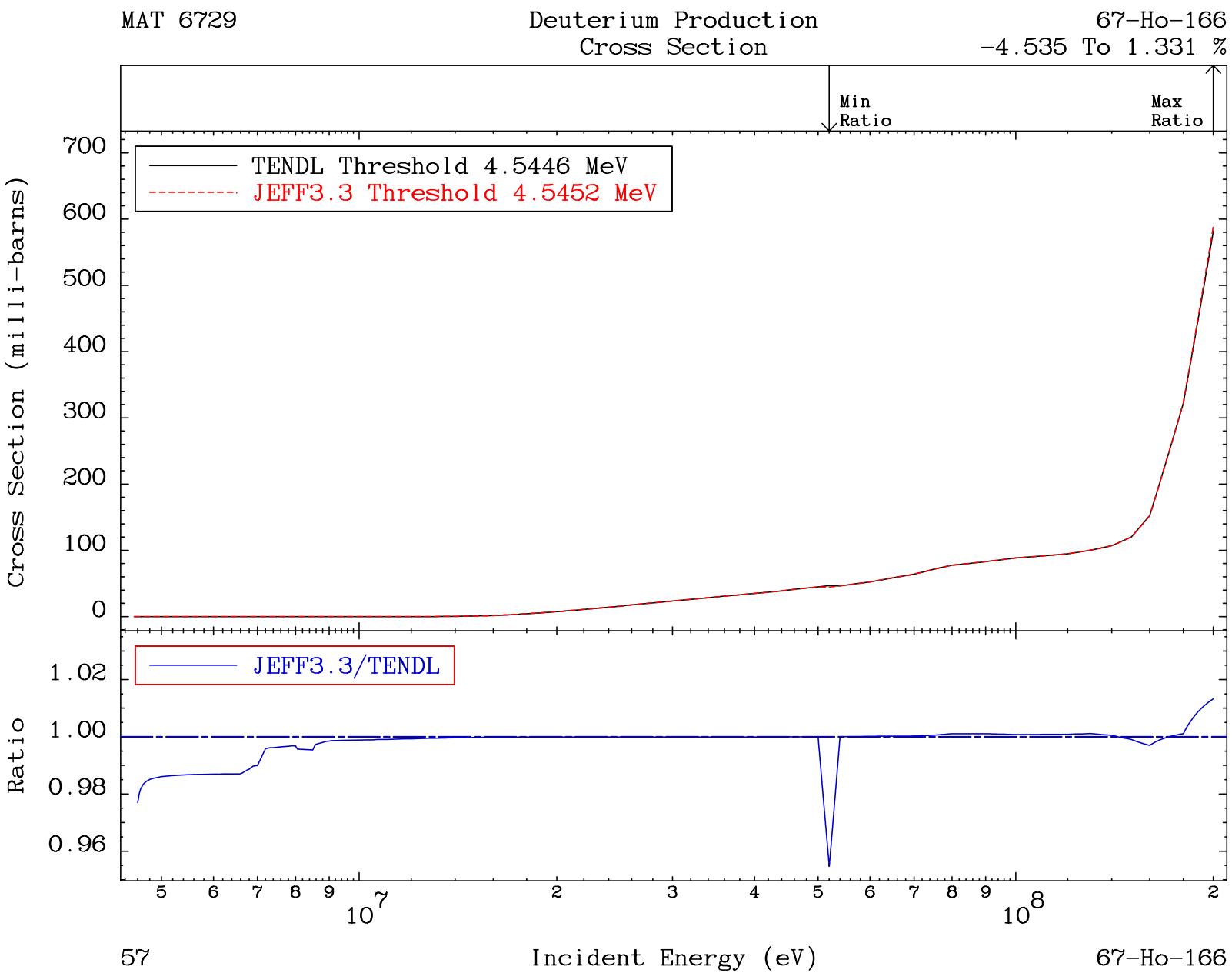

MAT 6729
(n,He-3)
Cross Section
67-Ho-166
-0.551 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 7.8950 MeV
JEFF3.3 Threshold 7.8950 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
67-Ho-166

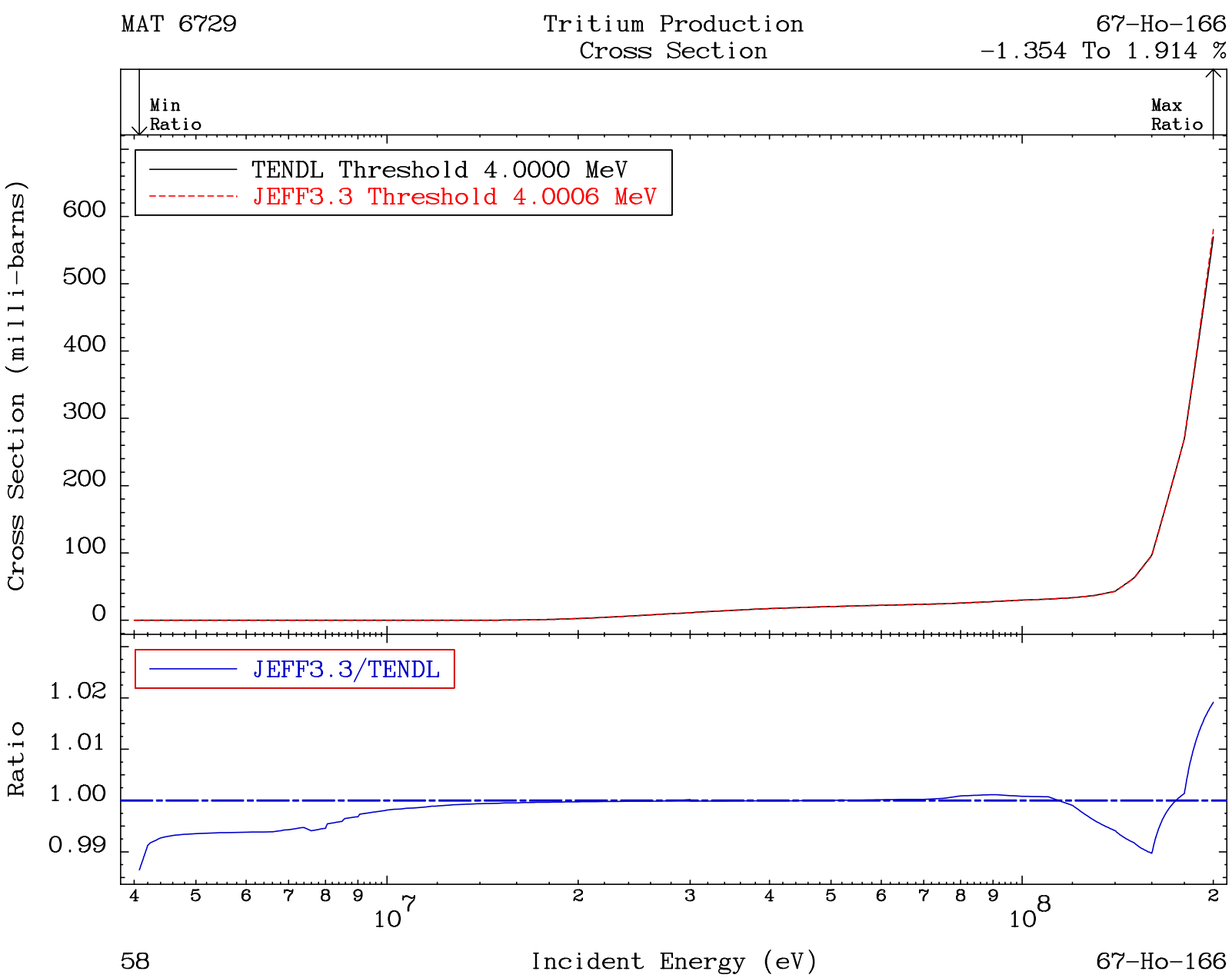

MAT 6729
(n,α)
Cross Section
67-Ho-166
-17.57 To 6237. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
53
67-Ho-166

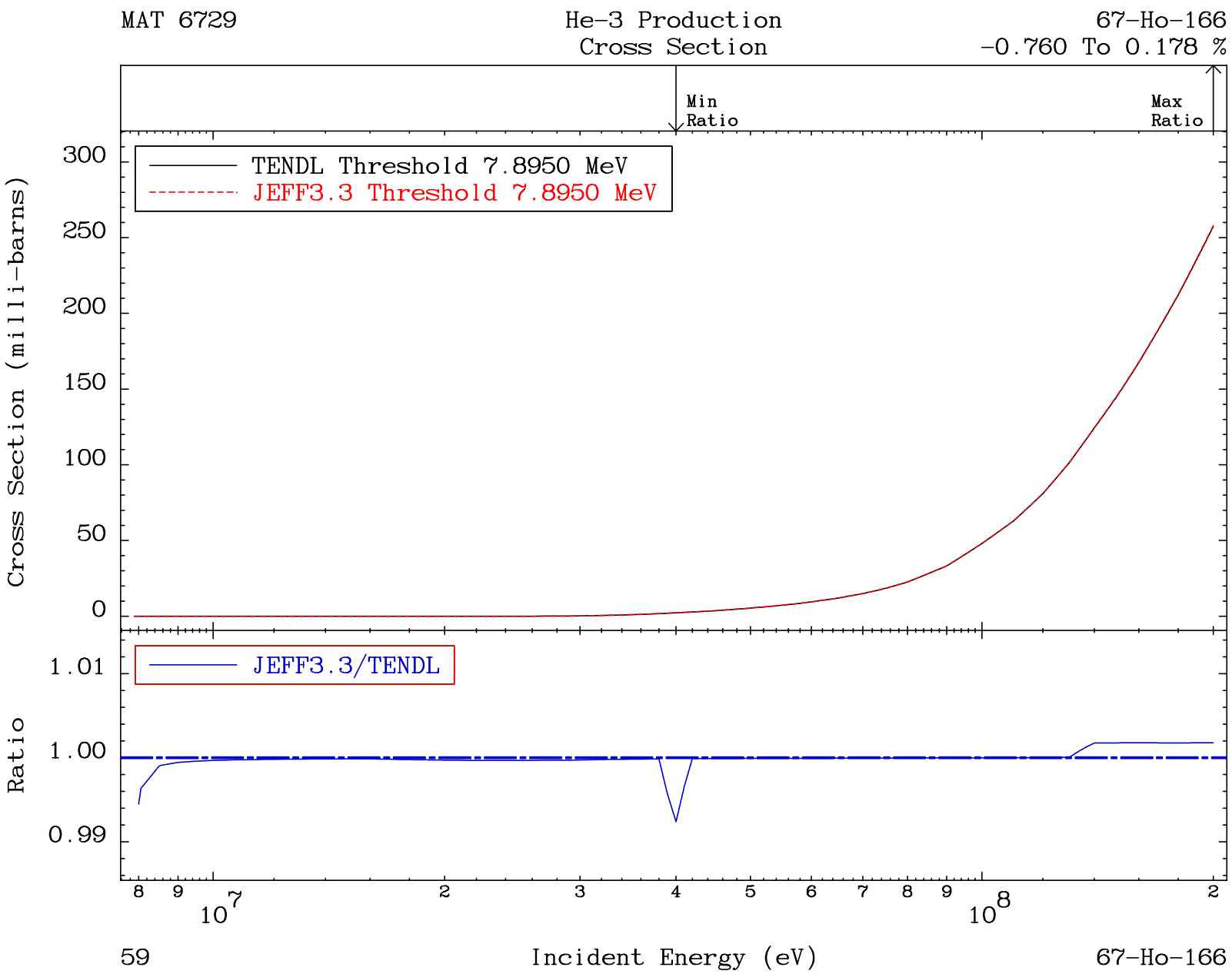

MAT 6729
(n,2p)
Cross Section
67-Ho-166
-0.032 To 1.530 %
Min Ratio
Max Ratio
TENDL Threshold 9.0607 MeV
JEFF3.3 Threshold 9.0607 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
9
10^7
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
67-Ho-166

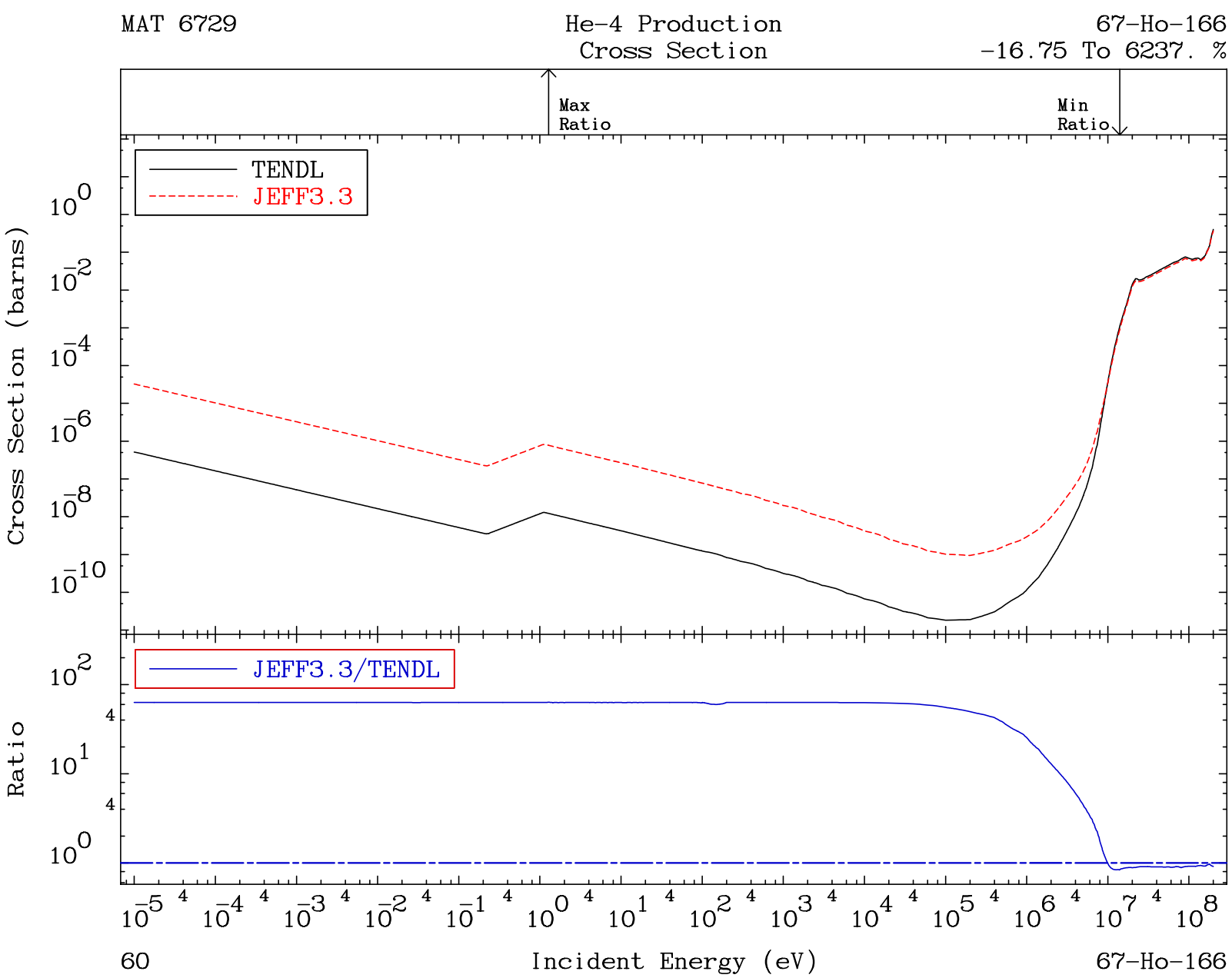

MAT 6729
(n,p) α
Cross Section
67-Ho-166
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 430.12 keV
JEFF3.3 Threshold 430.19 keV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
67-Ho-166

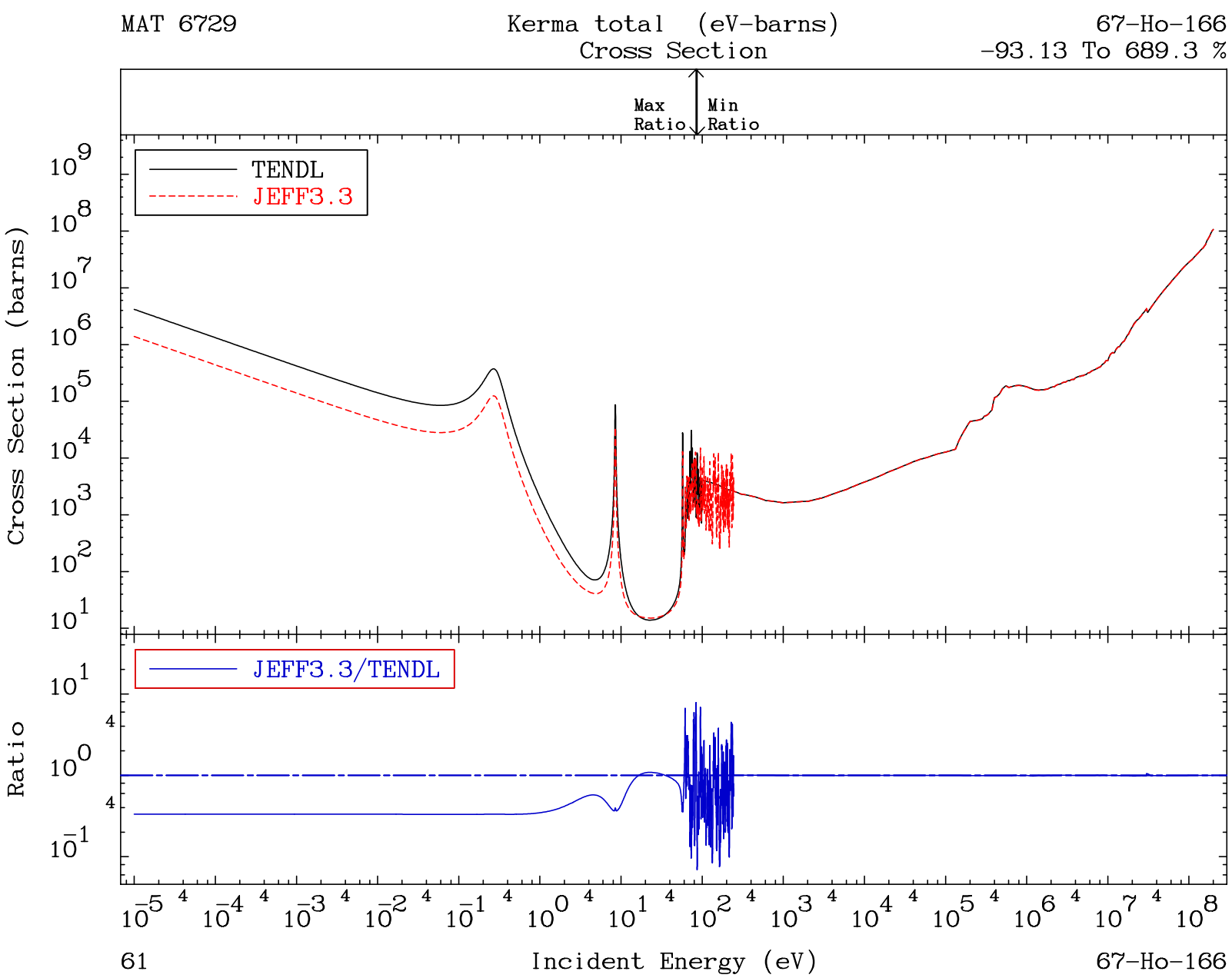

MAT 6729
Hydrogen Production
Cross Section
67-Ho-166
-1.652 To 0.888 %
Min
Ratio
Max
Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.77 eV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^2 2 3 5 7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
56
Incident Energy (eV)
67-Ho-166

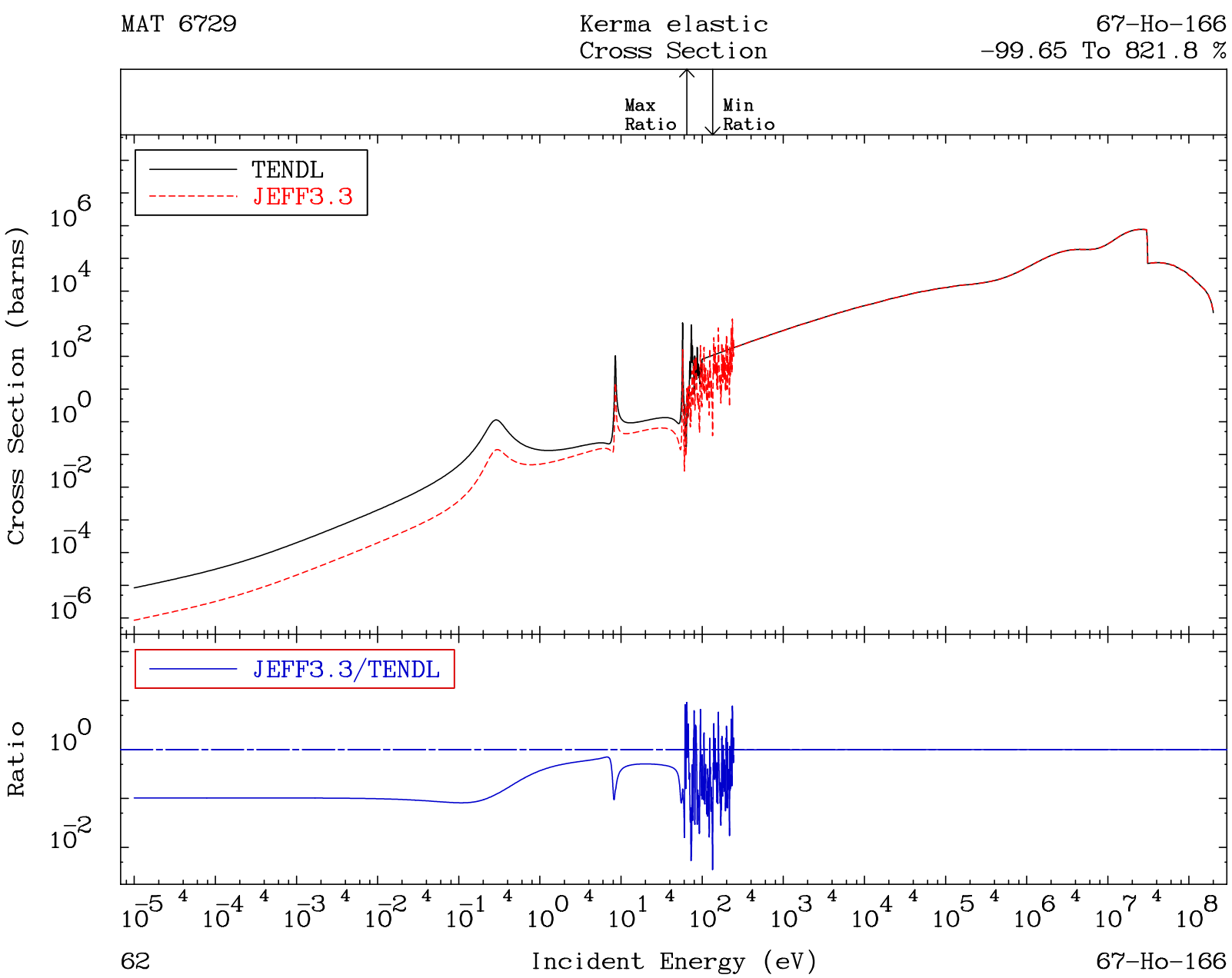

MAT 6729
Deuterium Production
Cross Section
67-Ho-166
-4.535 To 1.331 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.5446 MeV
JEFF3.3 Threshold 4.5452 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.00
0.98
0.96
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
57
Incident Energy (eV)
67-Ho-166

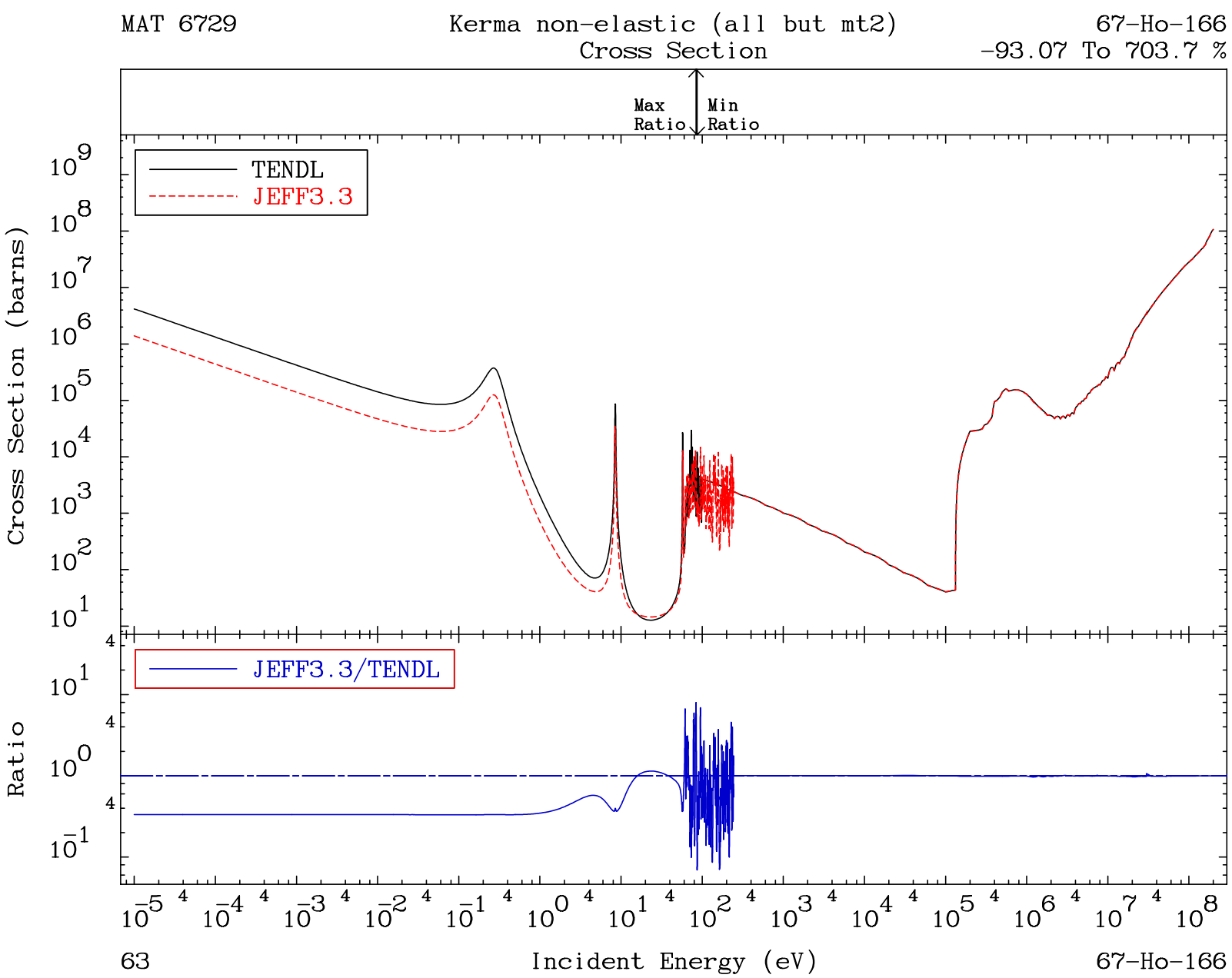

MAT 6729
Tritium Production
Cross Section
67-Ho-166
-1.354 To 1.914 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.0000 MeV
JEFF3.3 Threshold 4.0006 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
67-Ho-166

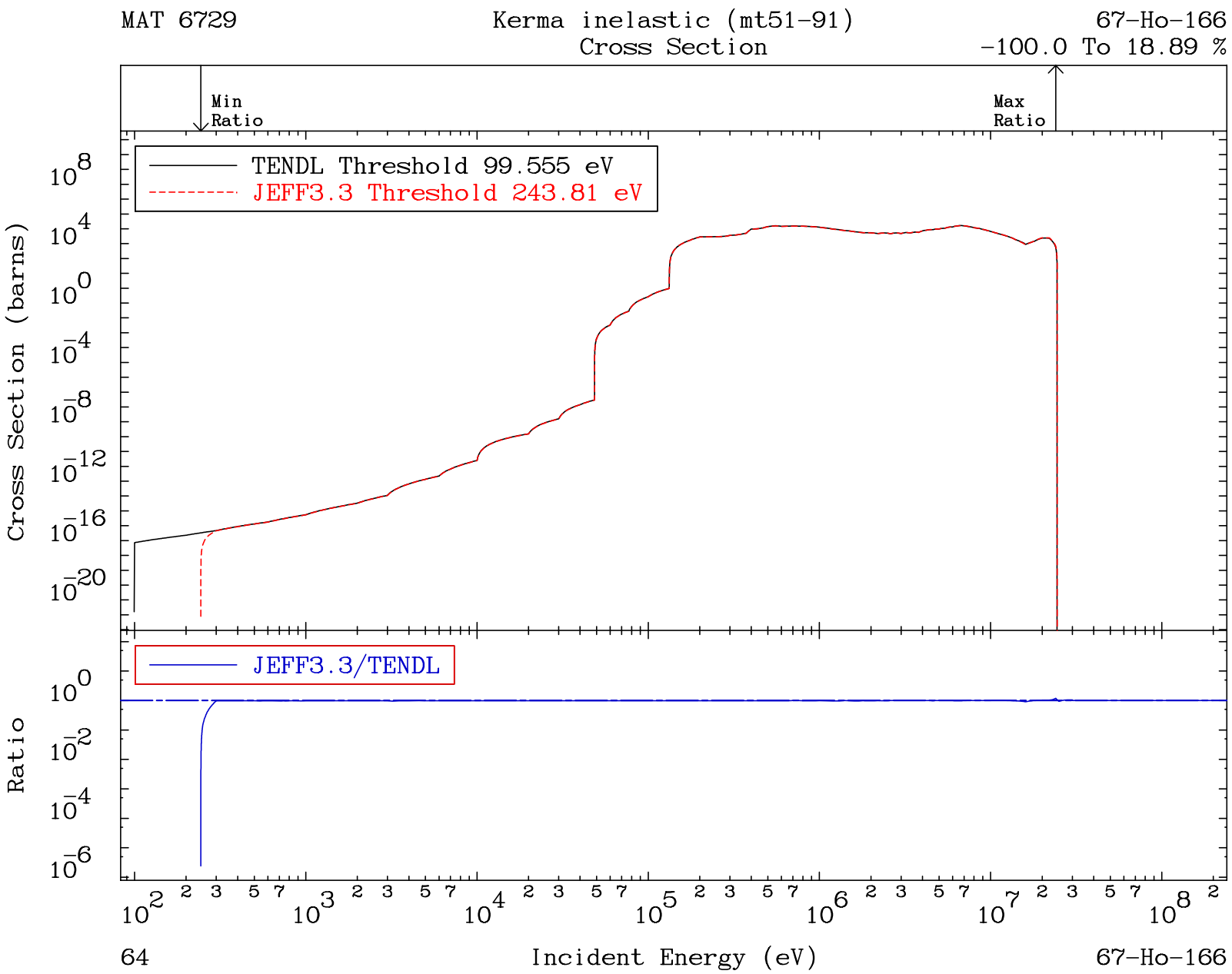

MAT 6729
He-3 Production
Cross Section
67-Ho-166
-0.760 To 0.178 %
Min
Ratio
Max
Ratio
TENDL Threshold 7.8950 MeV
JEFF3.3 Threshold 7.8950 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
59
Incident Energy (eV)
67-Ho-166

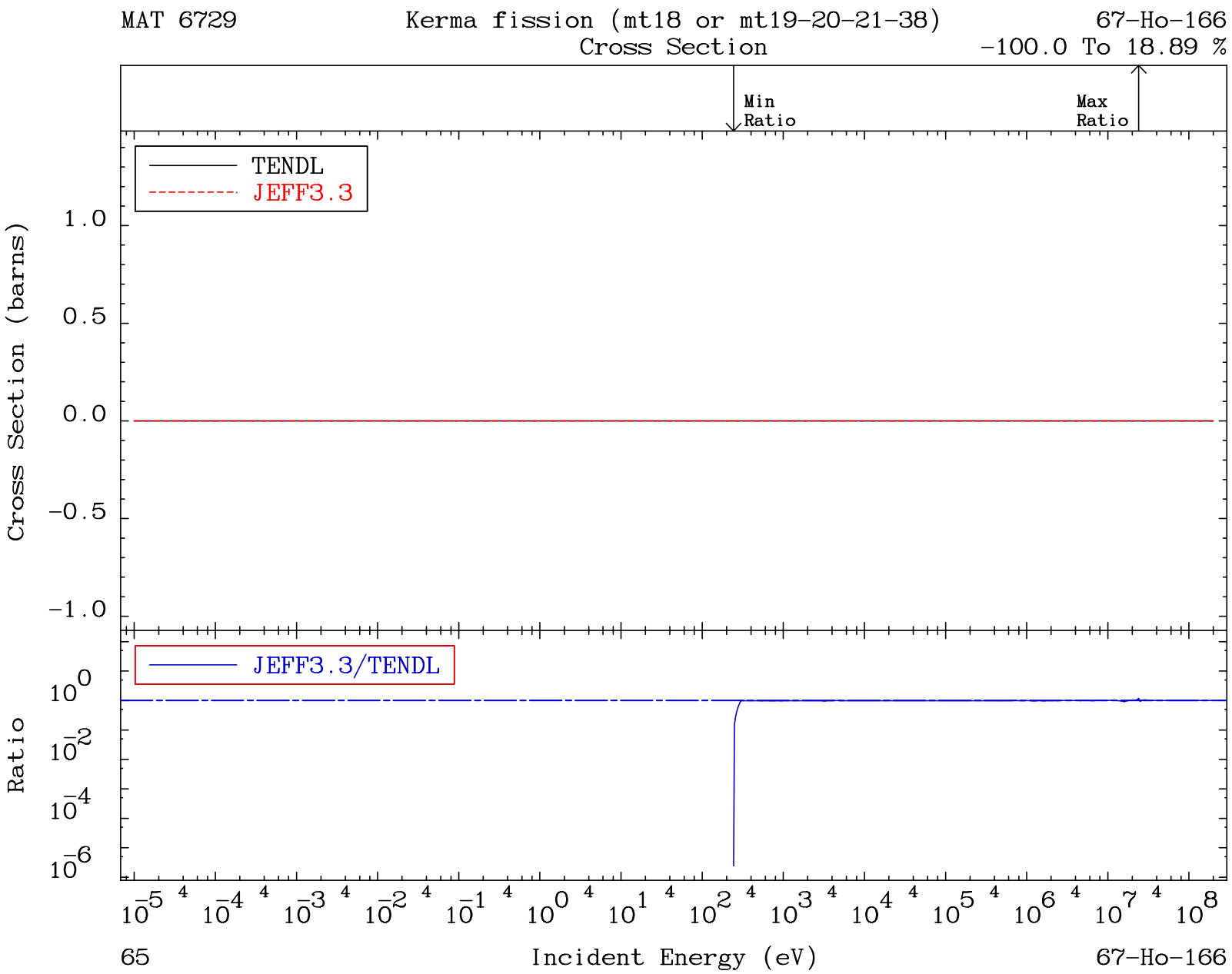

MAT 6729
He-4 Production
Cross Section
67-Ho-166
-16.75 To 6237. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
60
67-Ho-166

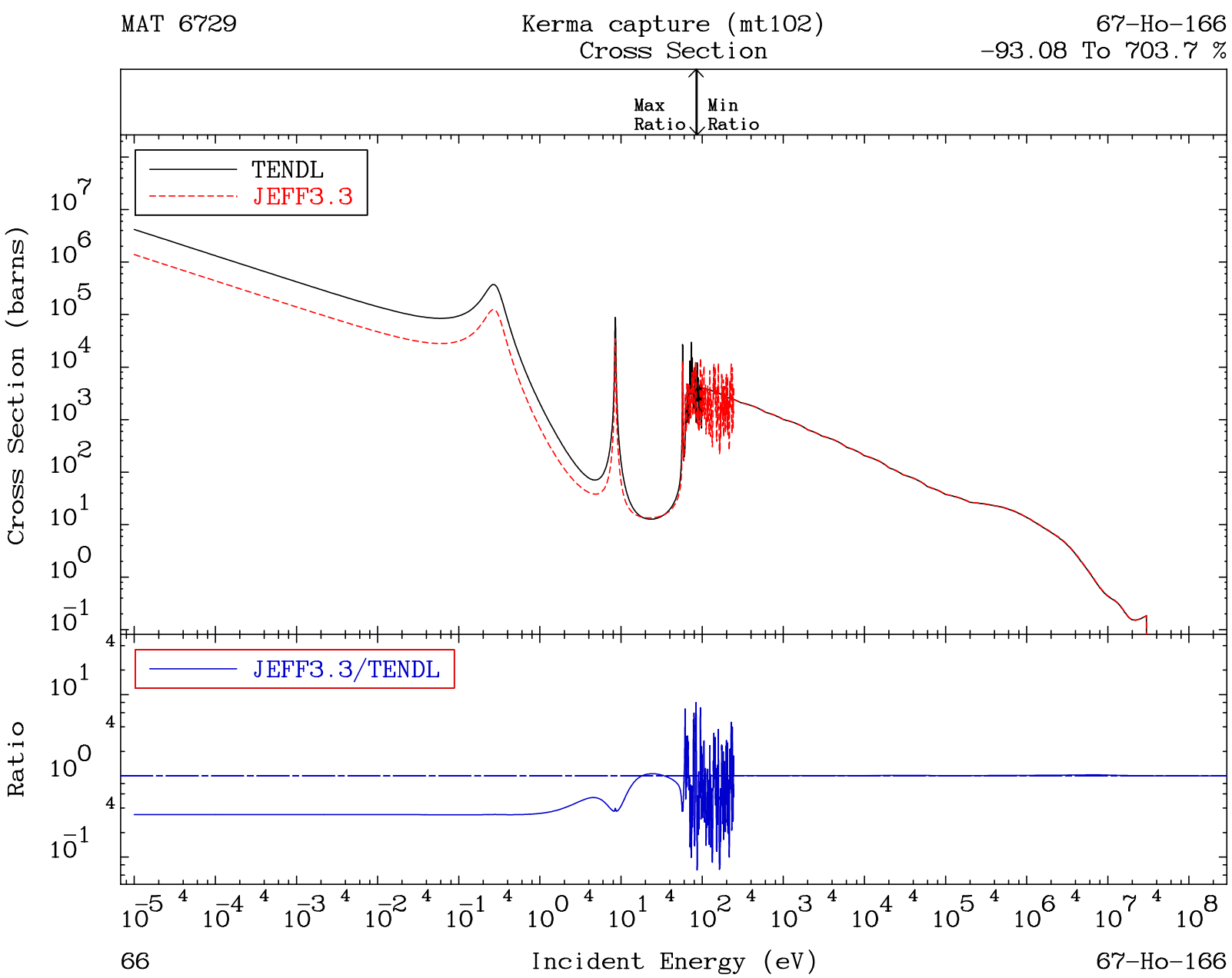

MAT 6729
Kerma total (eV-barns)
Cross Section
67-Ho-166
-93.13 To 689.3 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
61
67-Ho-166

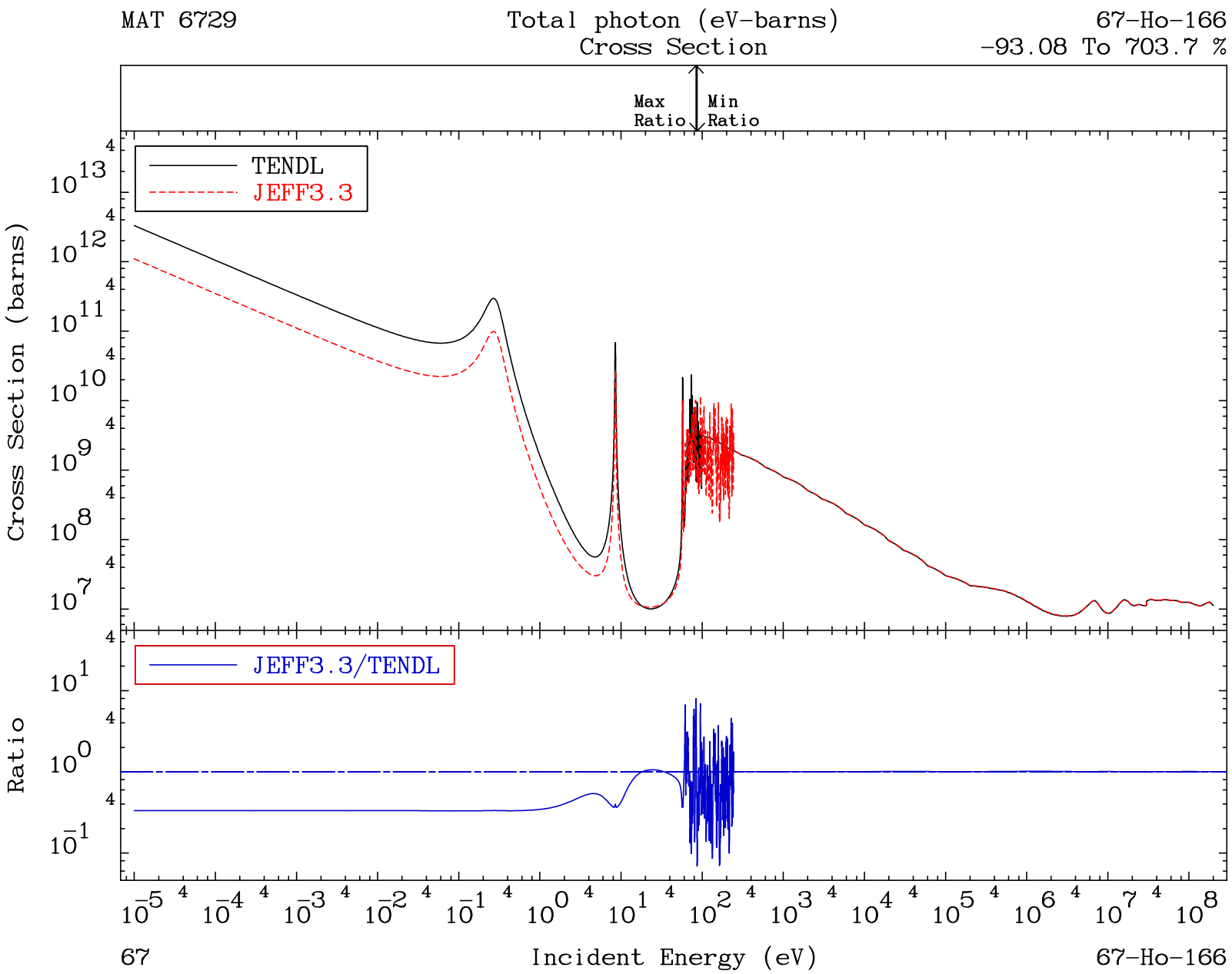

MAT 6729
Kerma elastic
Cross Section
67-Ho-166
-99.65 To 821.8 %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
67-Ho-166

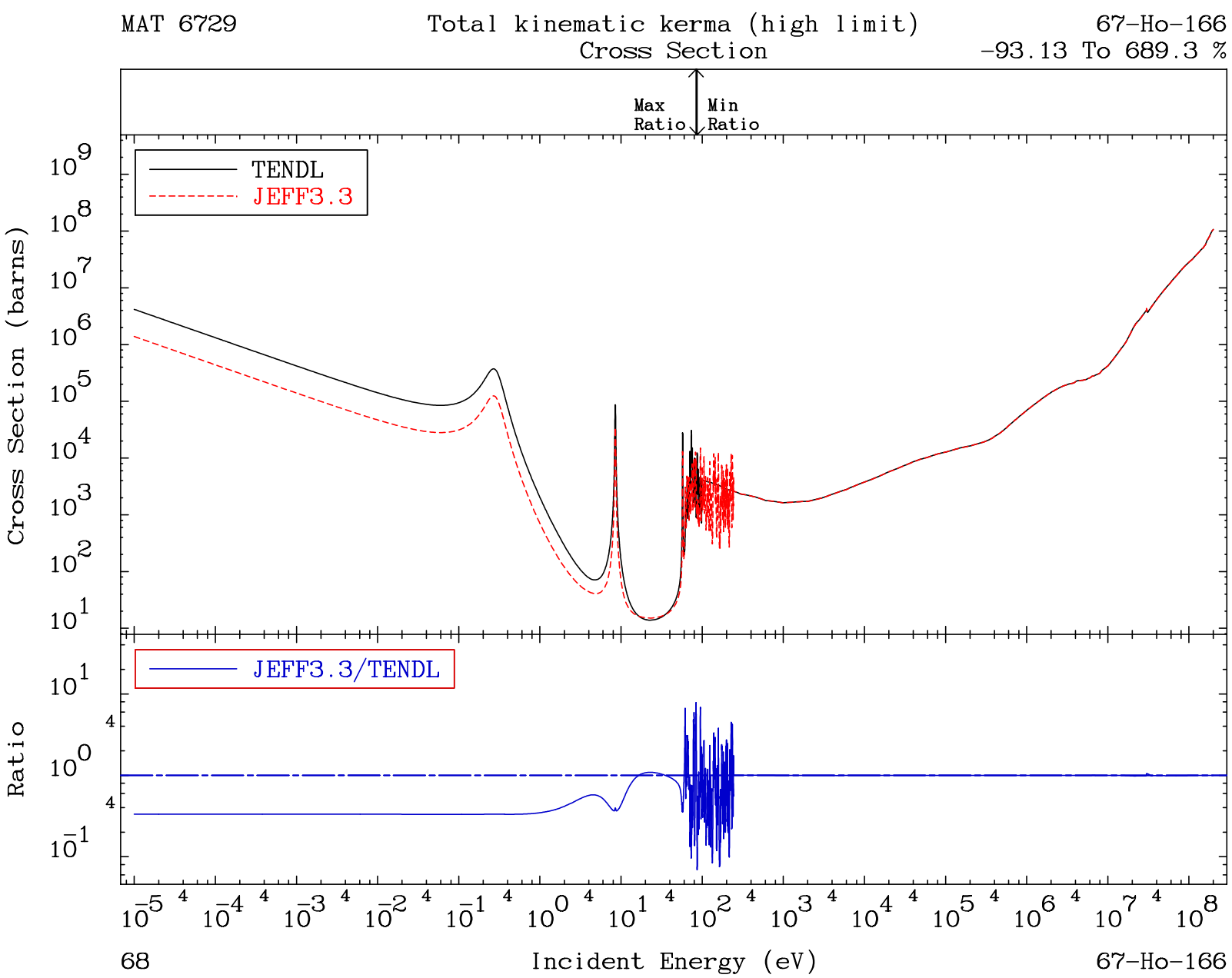

MAT 6729
Kerma non-elastic (all but mt2)
Cross Section
67-Ho-166
-93.07 To 703.7 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
63
67-Ho-166

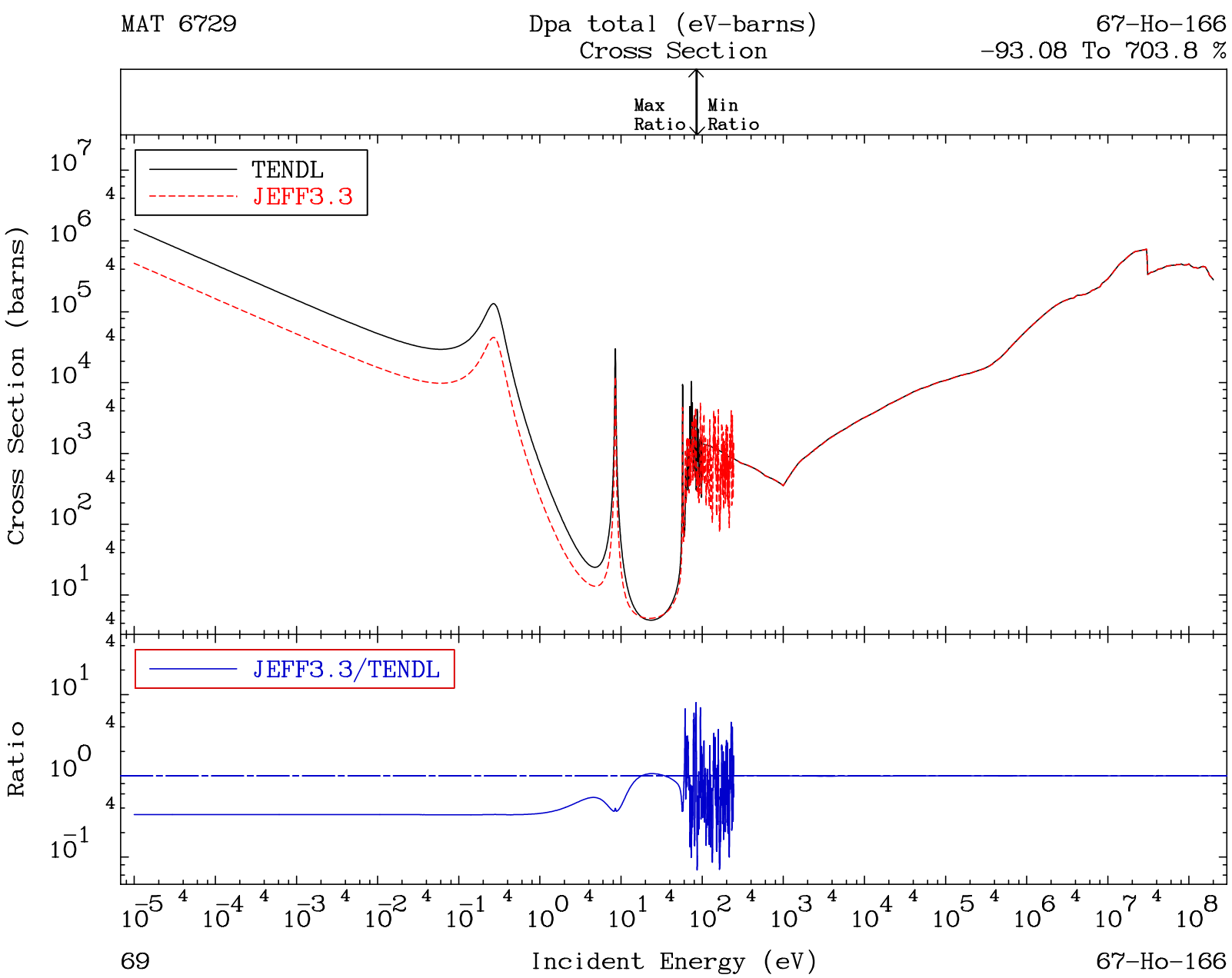

MAT 6729
Kerma inelastic (mt51-91)
Cross Section
67-Ho-166
-100.0 To 18.89 %
Min Ratio
Max Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.81 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
67-Ho-166

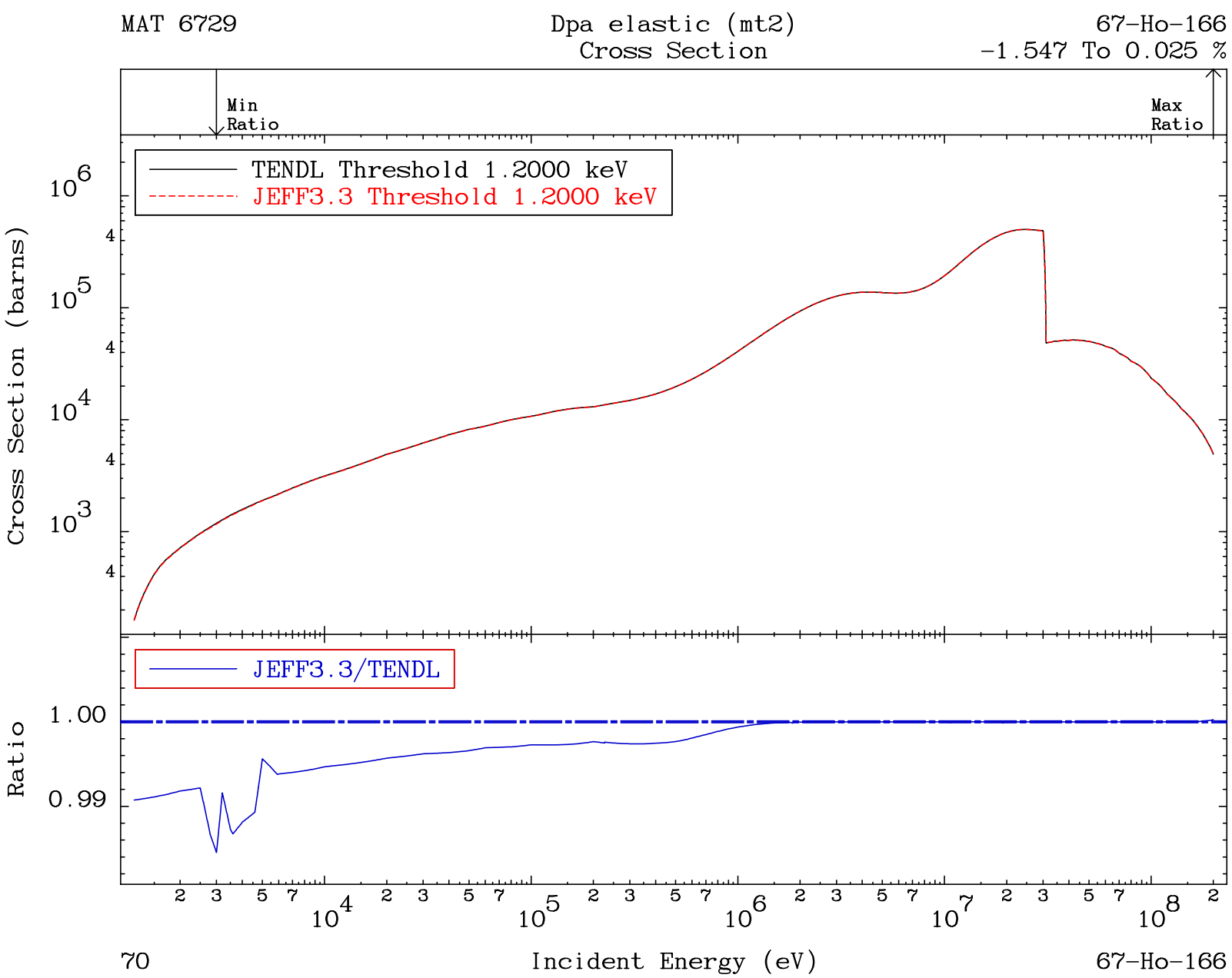

MAT 6729
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
67-Ho-166
-100.0 To 18.89 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
65
Incident Energy (eV)
67-Ho-166

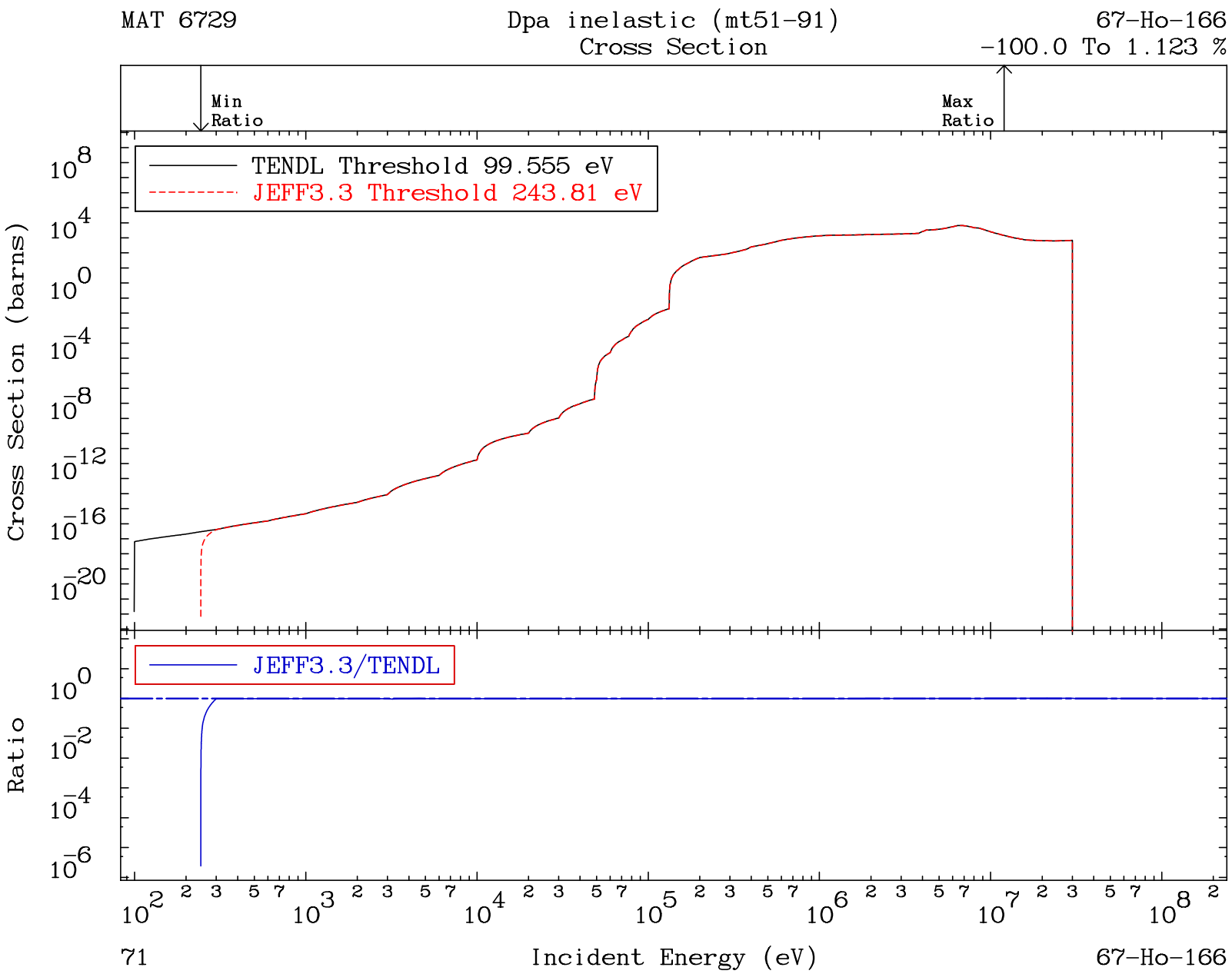

MAT 6729
Kerma capture (mt102)
Cross Section
67-Ho-166
-93.08 To 703.7 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
67-Ho-166

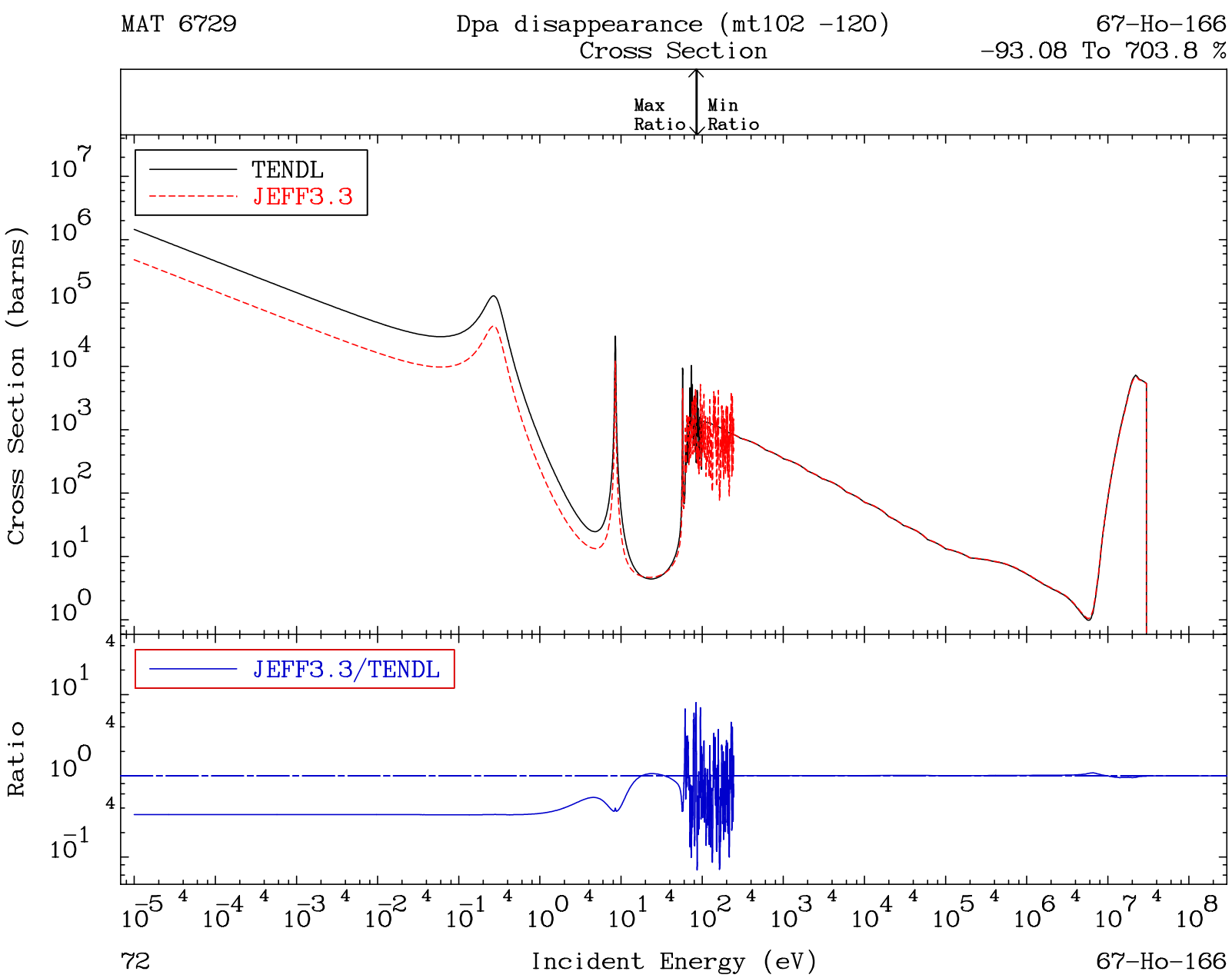

MAT 6729
Total photon (eV-barns)
Cross Section
67-Ho-166
-93.08 To 703.7 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
67-Ho-166

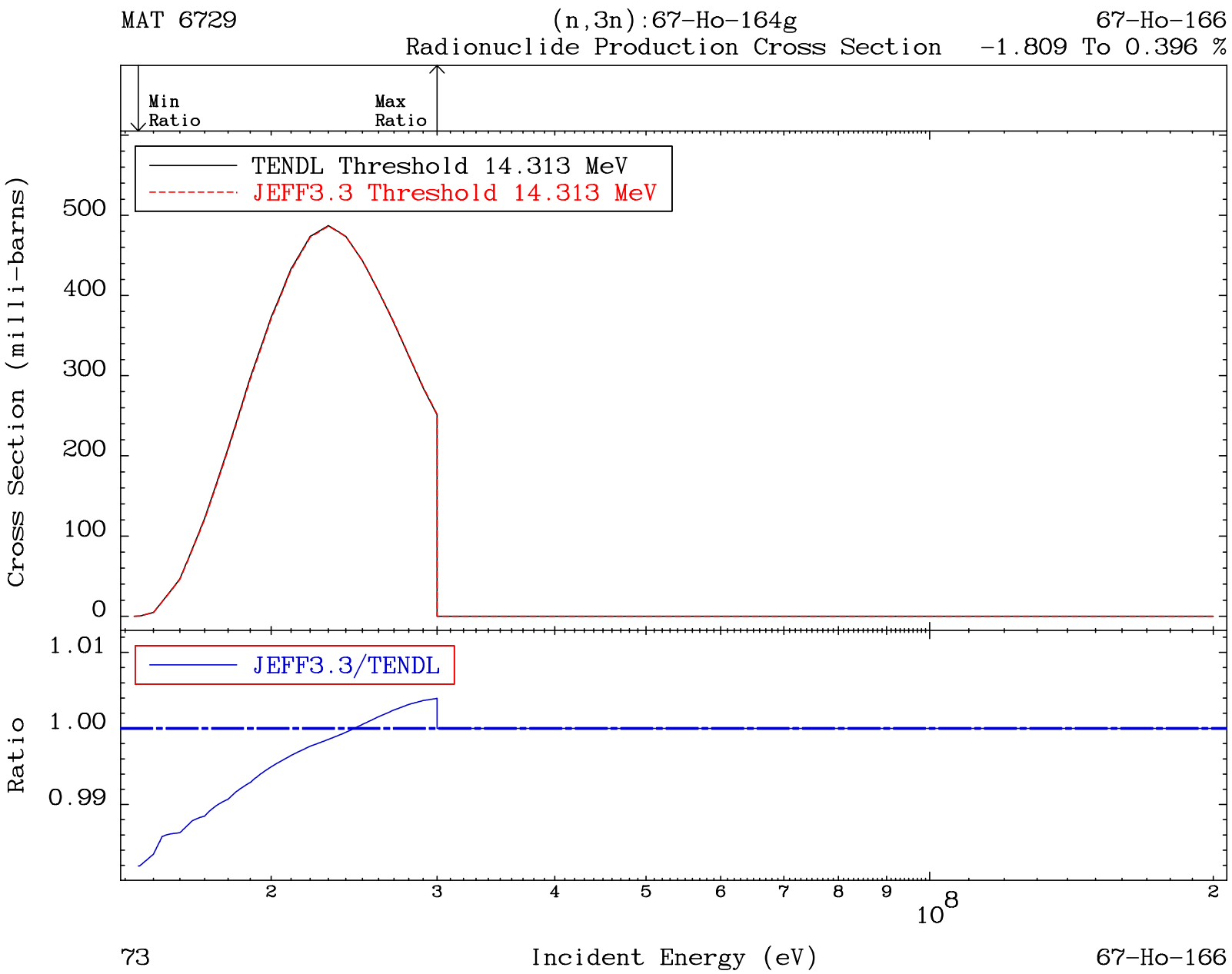

MAT 6729
Total kinematic kerma (high limit)
Cross Section
67-Ho-166
-93.13 To 689.3 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
67-Ho-166

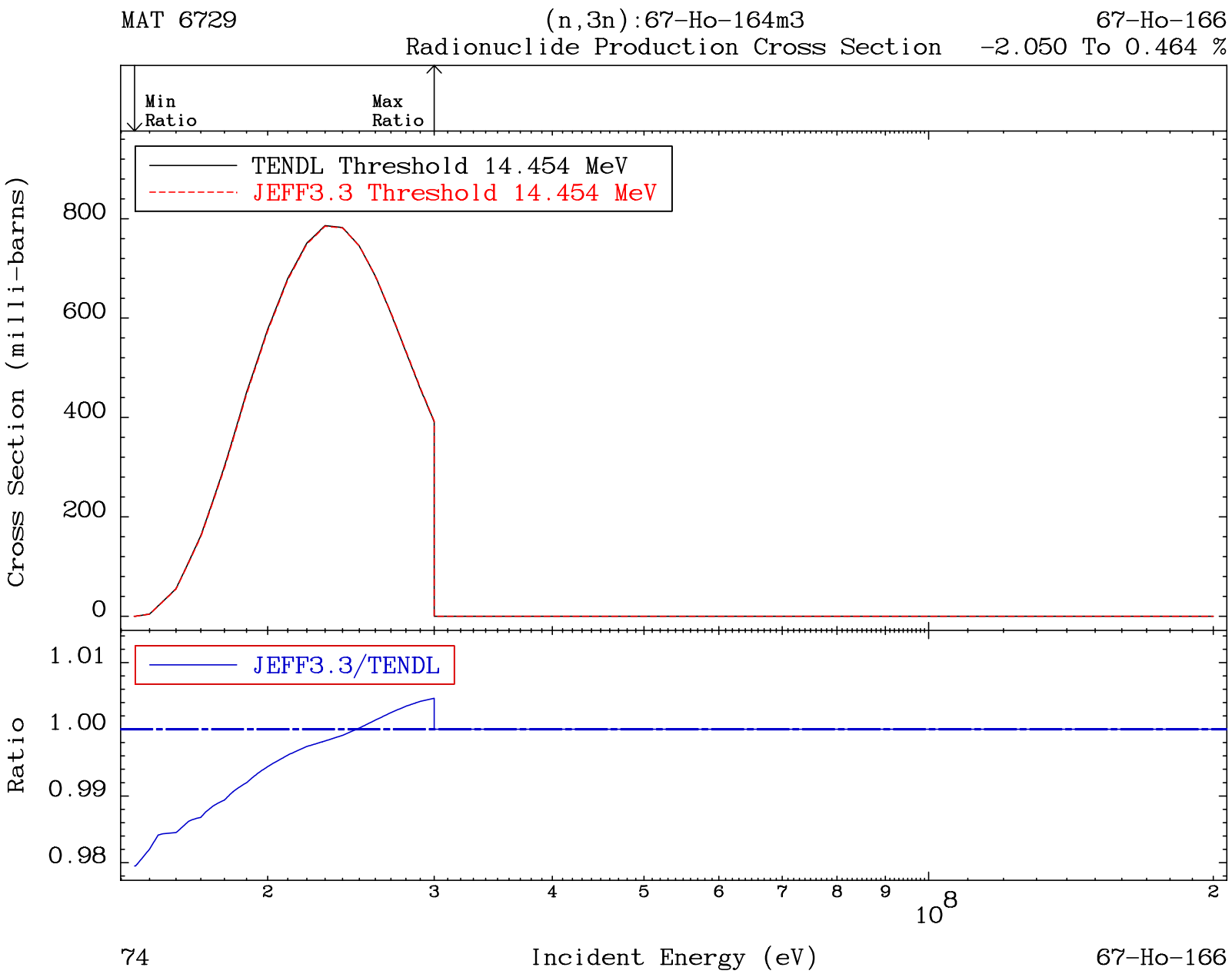

MAT 6729
Dpa total (eV-barns)
Cross Section
67-Ho-166
-93.08 To 703.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
67-Ho-166

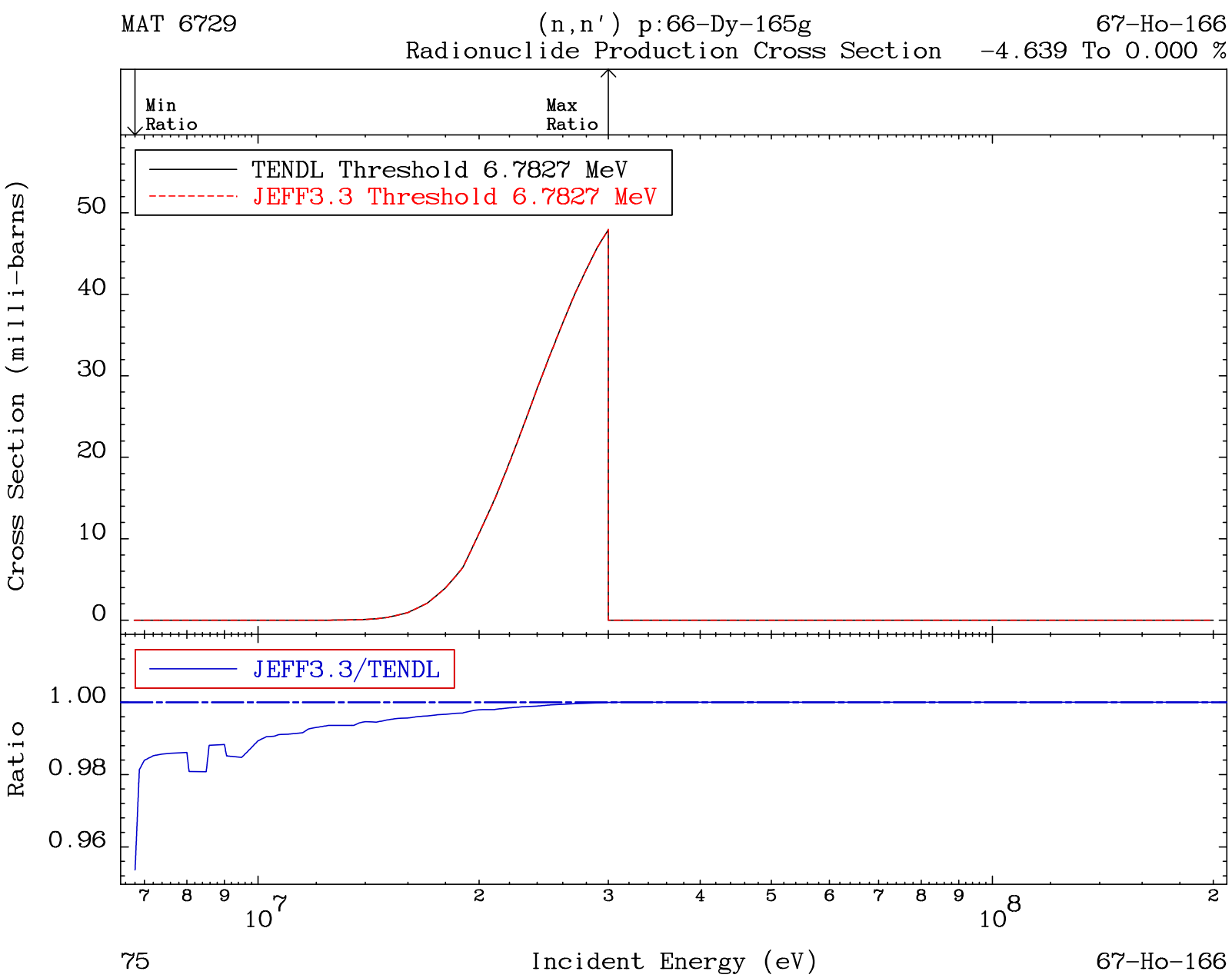

MAT 6729
Dpa elastic (mt2)
Cross Section
67-Ho-166
-1.547 To 0.025 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2000 keV
JEFF3.3 Threshold 1.2000 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
1.00
0.99
Incident Energy (eV)
70
67-Ho-166

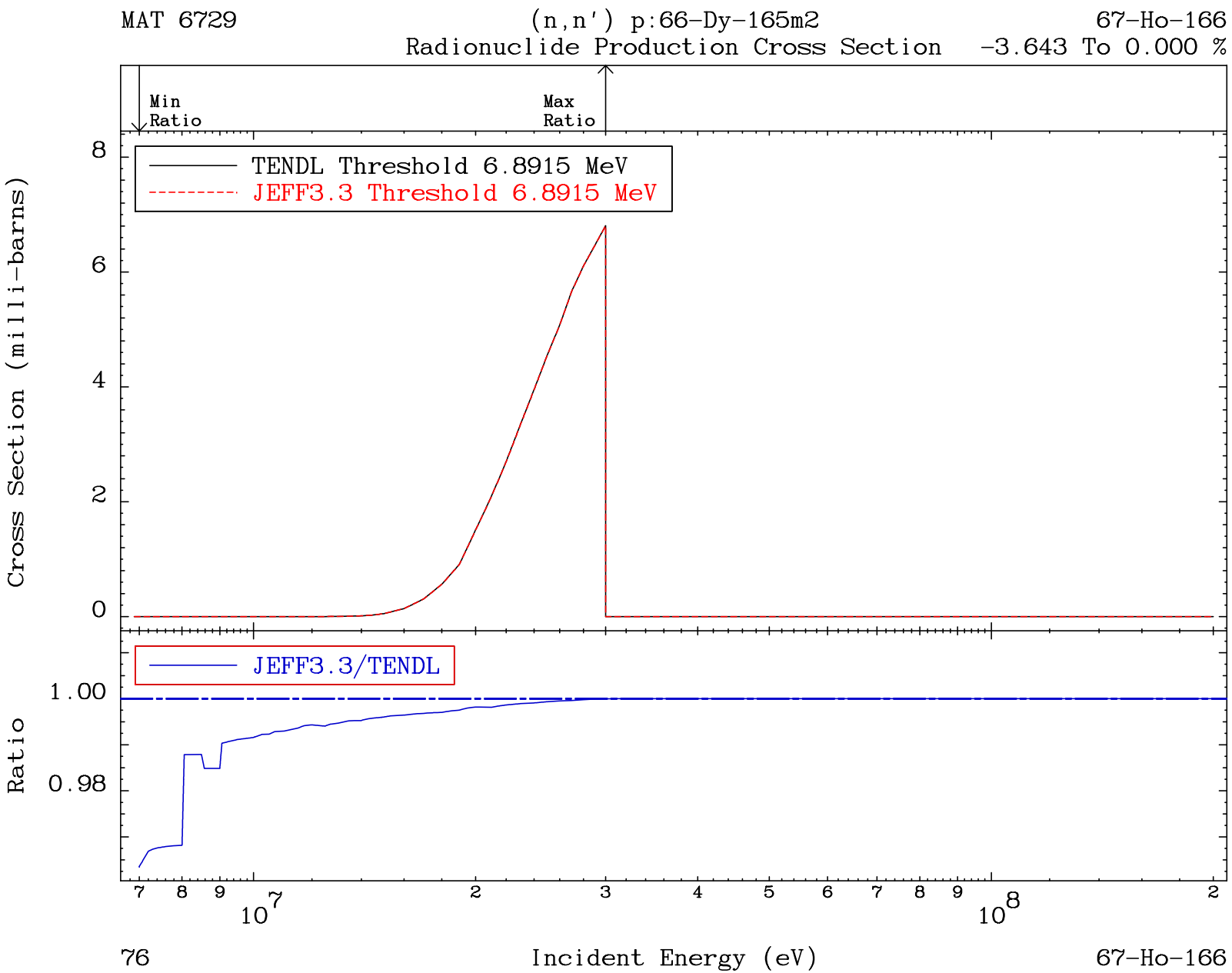

MAT 6729
Dpa inelastic (mt51-91)
Cross Section
67-Ho-166
-100.0 To 1.123 %
Min Ratio
Max Ratio
TENDL Threshold 99.555 eV
JEFF3.3 Threshold 243.81 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
67-Ho-166

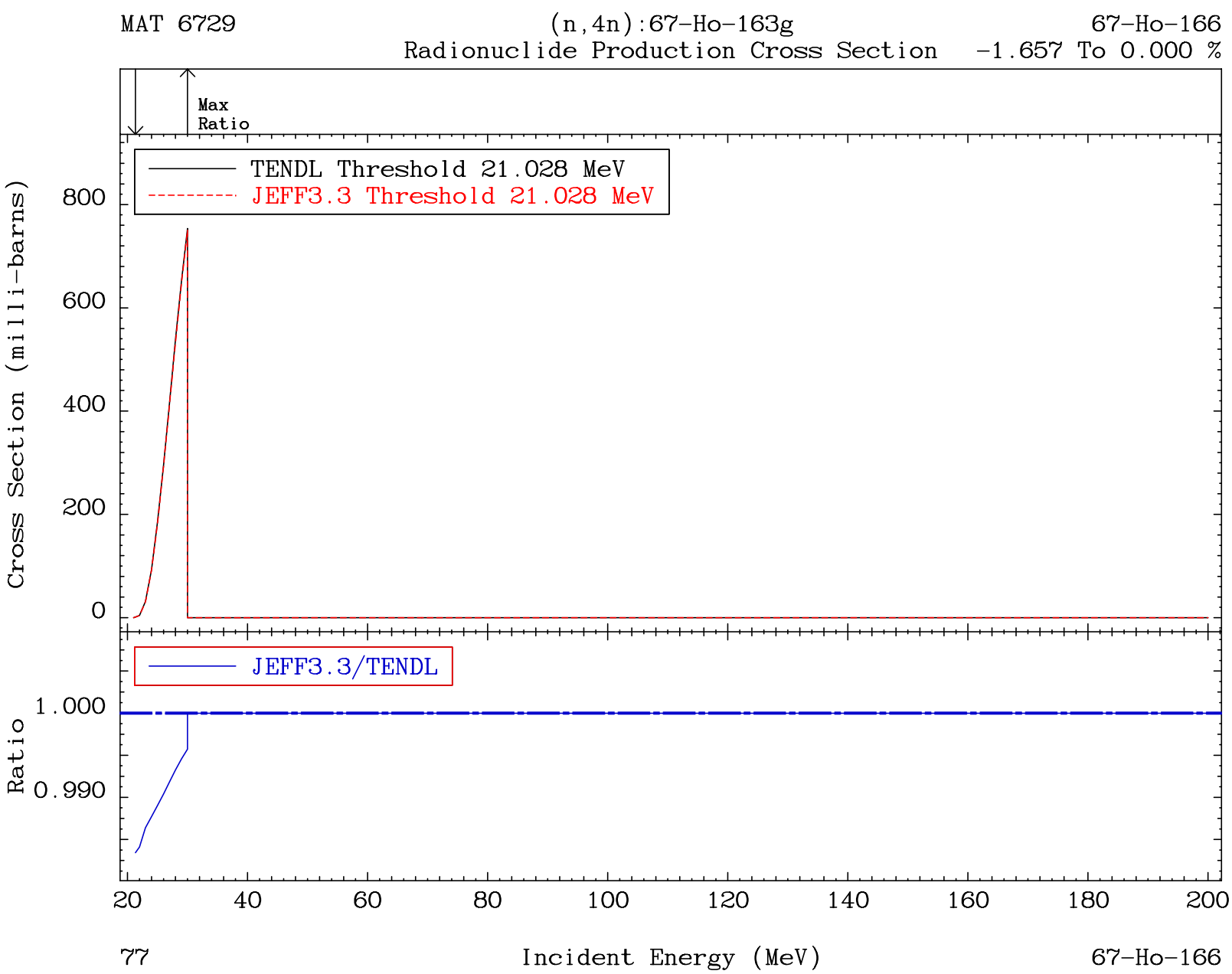

MAT 6729
Dpa disappearance (mt102 -120)
Cross Section
67-Ho-166
-93.08 To 703.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
67-Ho-166

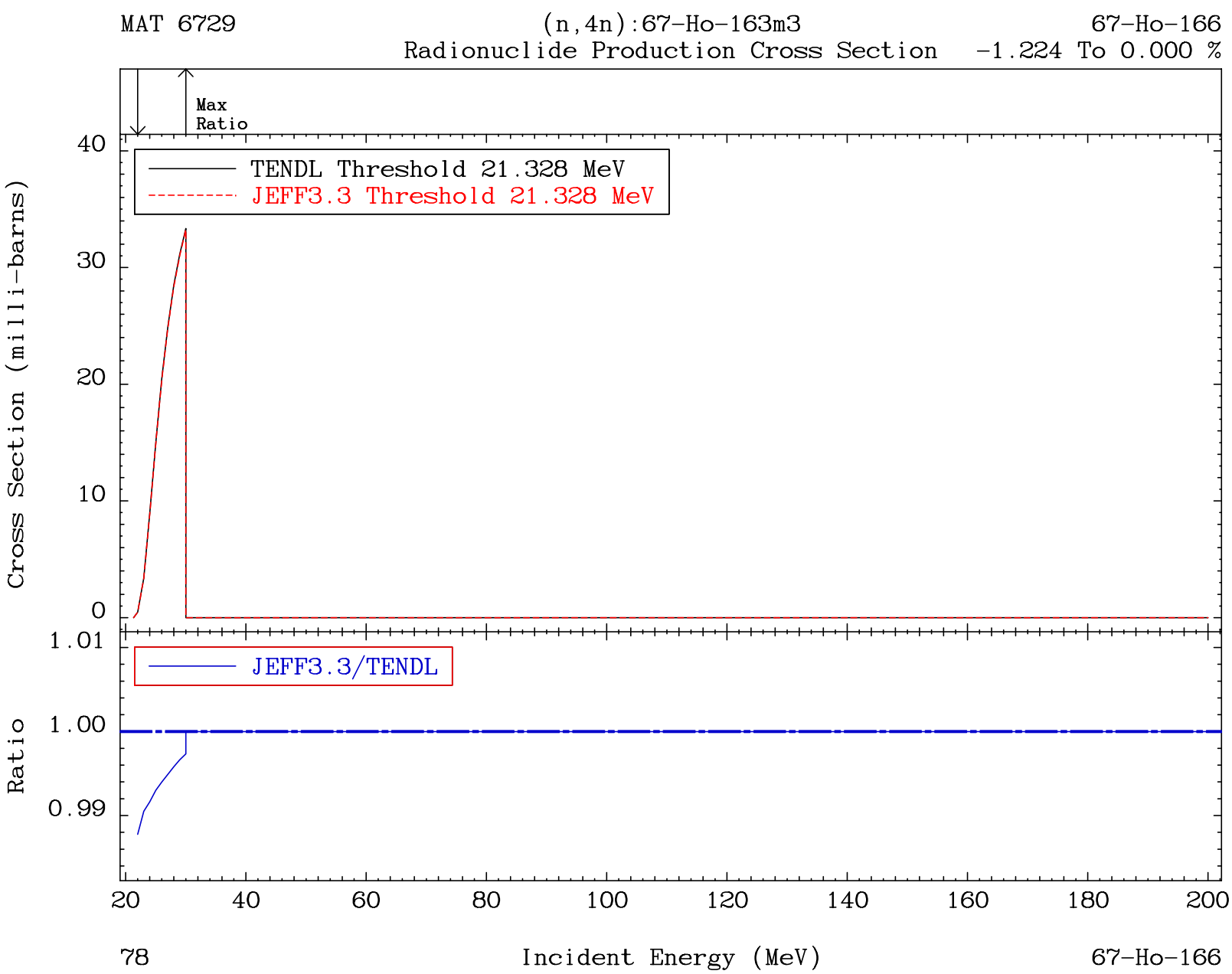

MAT 6729
(n,3n):67-Ho-164g
67-Ho-166
Radionuclide Production Cross Section
-1.809 To 0.396 %
Min Ratio
Max Ratio
TENDL Threshold 14.313 MeV
JEFF3.3 Threshold 14.313 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
67-Ho-166

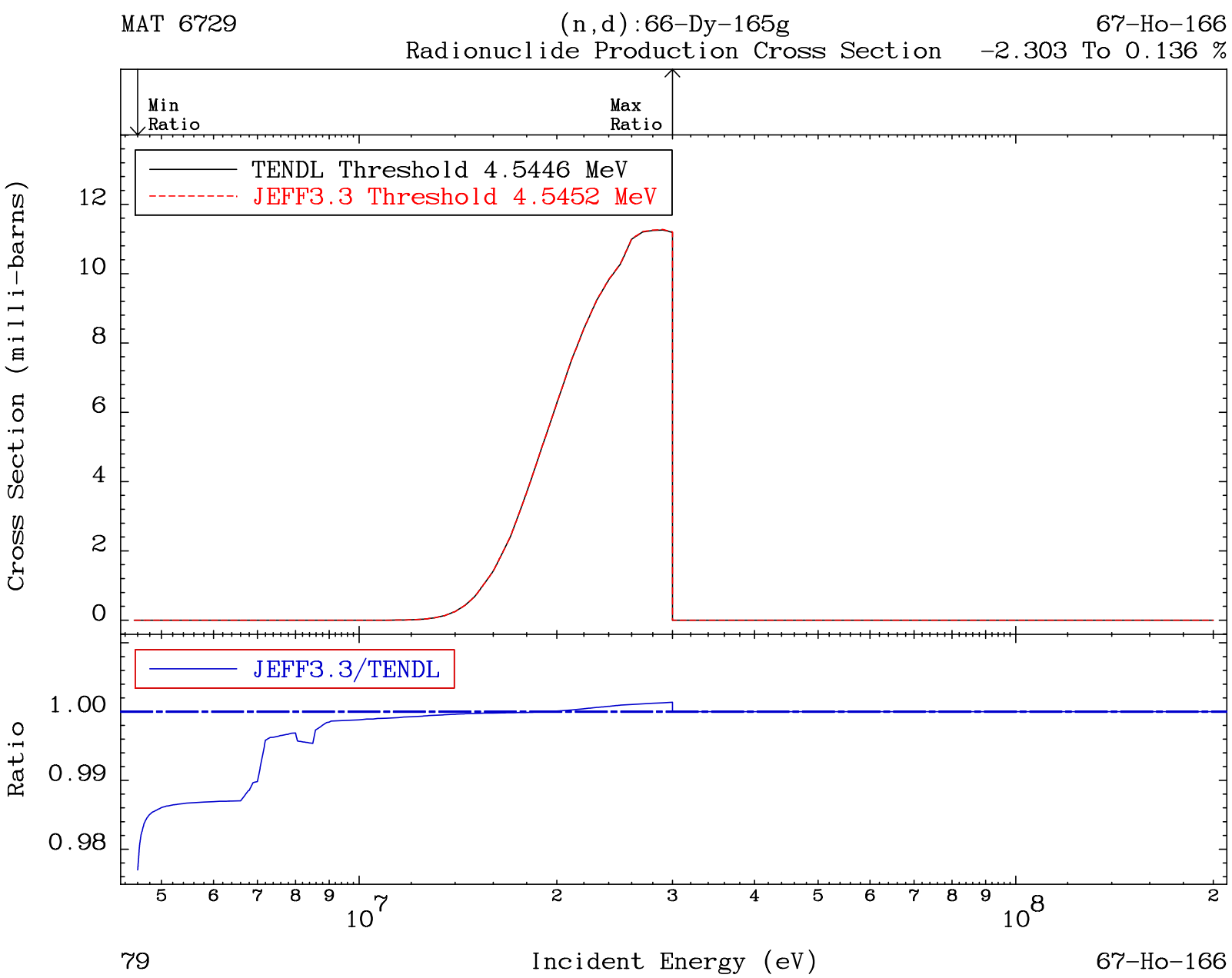

MAT 6729
(n,3n):67-Ho-164m3
67-Ho-166
Radionuclide Production Cross Section
-2.050 To 0.464 %
Min Ratio
Max Ratio
TENDL Threshold 14.454 MeV
JEFF3.3 Threshold 14.454 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
67-Ho-166

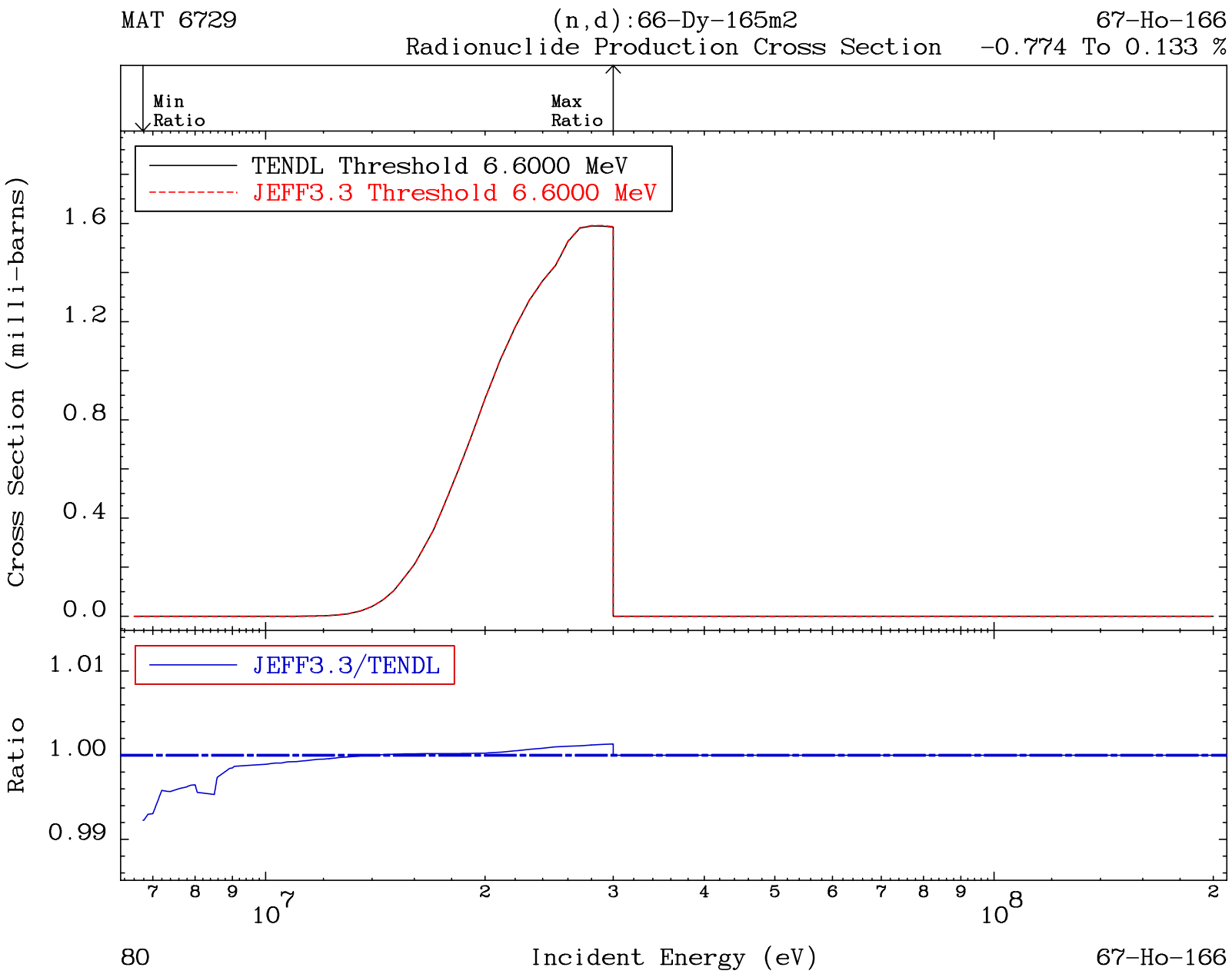

MAT 6729
(n,n') p:66-Dy-165g
67-Ho-166
Radionuclide Production Cross Section
-4.639 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.7827 MeV
JEFF3.3 Threshold 6.7827 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.98
0.96
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
75
Incident Energy (eV)
67-Ho-166


MAT 6729
(n,n') p:66-Dy-165m2
67-Ho-166
Radionuclide Production Cross Section
-3.643 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.8915 MeV
JEFF3.3 Threshold 6.8915 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
1.00
0.98
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
76
Incident Energy (eV)
67-Ho-166


MAT 6729
(n,4n):67-Ho-163g
67-Ho-166
Radionuclide Production Cross Section
-1.657 To 0.000 %
Max
Ratio
TENDL Threshold 21.028 MeV
JEFF3.3 Threshold 21.028 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.000
0.990
20
40
60
80
100
120
140
160
180
200
77
Incident Energy (MeV)
67-Ho-166


MAT 6729
(n,4n):67-Ho-163m3
67-Ho-166
Radionuclide Production Cross Section
-1.224 To 0.000 %
Max
Ratio
TENDL Threshold 21.328 MeV
JEFF3.3 Threshold 21.328 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
78
Incident Energy (MeV)
67-Ho-166


MAT 6729
(n,d):66-Dy-165g
67-Ho-166
Radionuclide Production Cross Section
-2.303 To 0.136 %
Min Ratio
Max Ratio
TENDL Threshold 4.5446 MeV
JEFF3.3 Threshold 4.5452 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JEFF3.3/TENDL
Ratio
0.98
0.99
1.00
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
79
Incident Energy (eV)
67-Ho-166


MAT 6729
(n,d):66-Dy-165m2
67-Ho-166
Radionuclide Production Cross Section -0.774 To 0.133 %
Min Ratio
Max Ratio
TENDL Threshold 6.6000 MeV
JEFF3.3 Threshold 6.6000 MeV
Cross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
80
Incident Energy (eV)
67-Ho-166