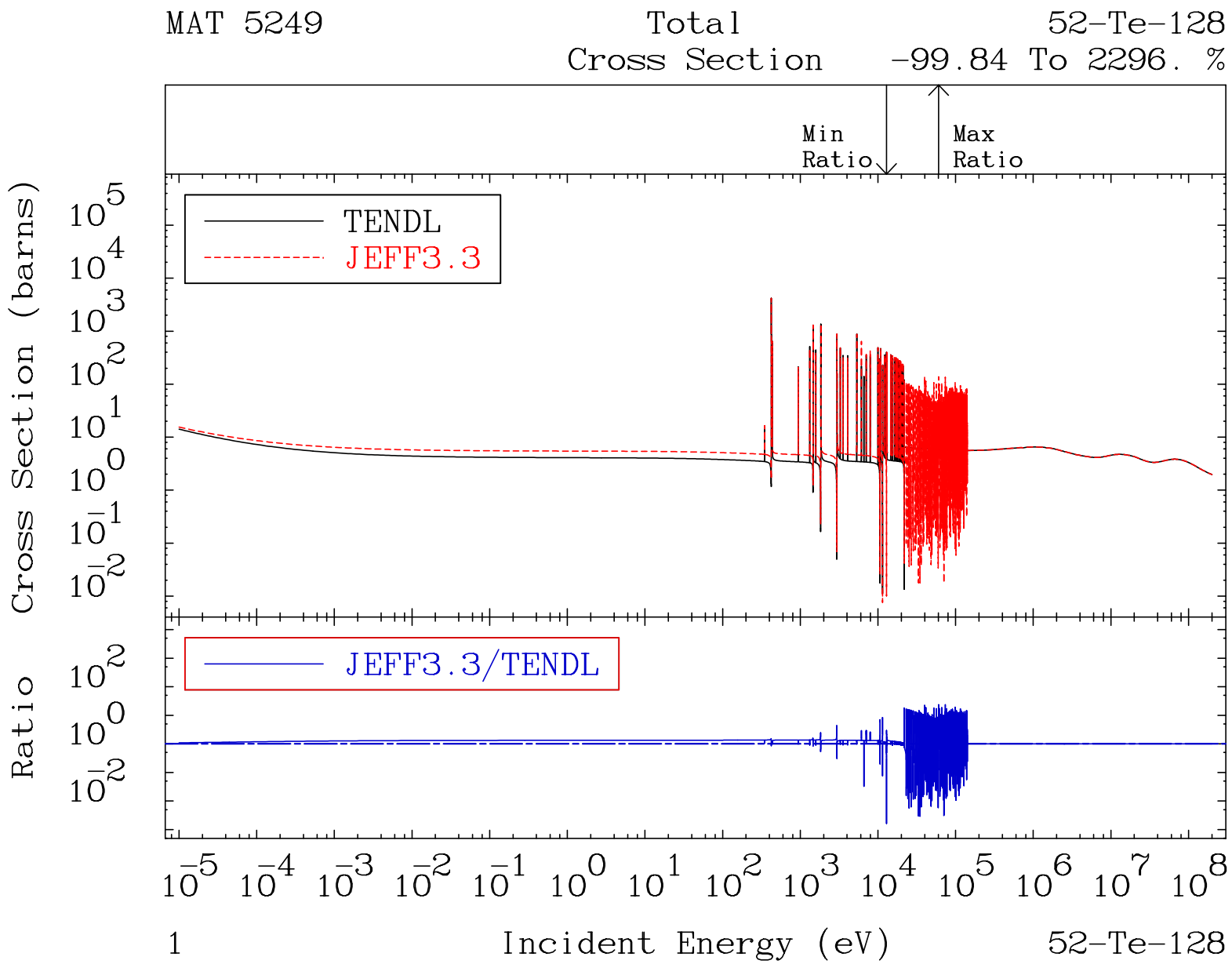
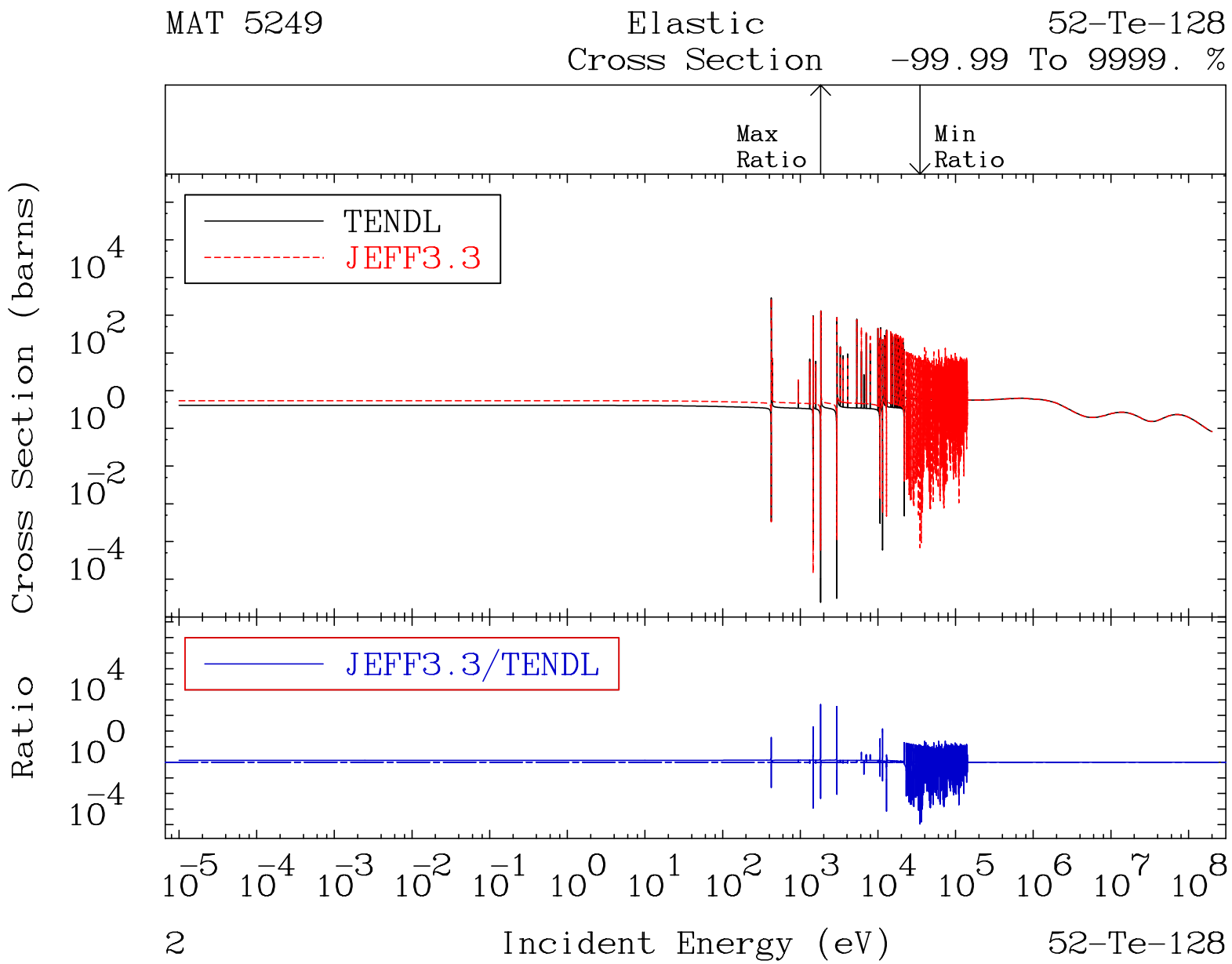
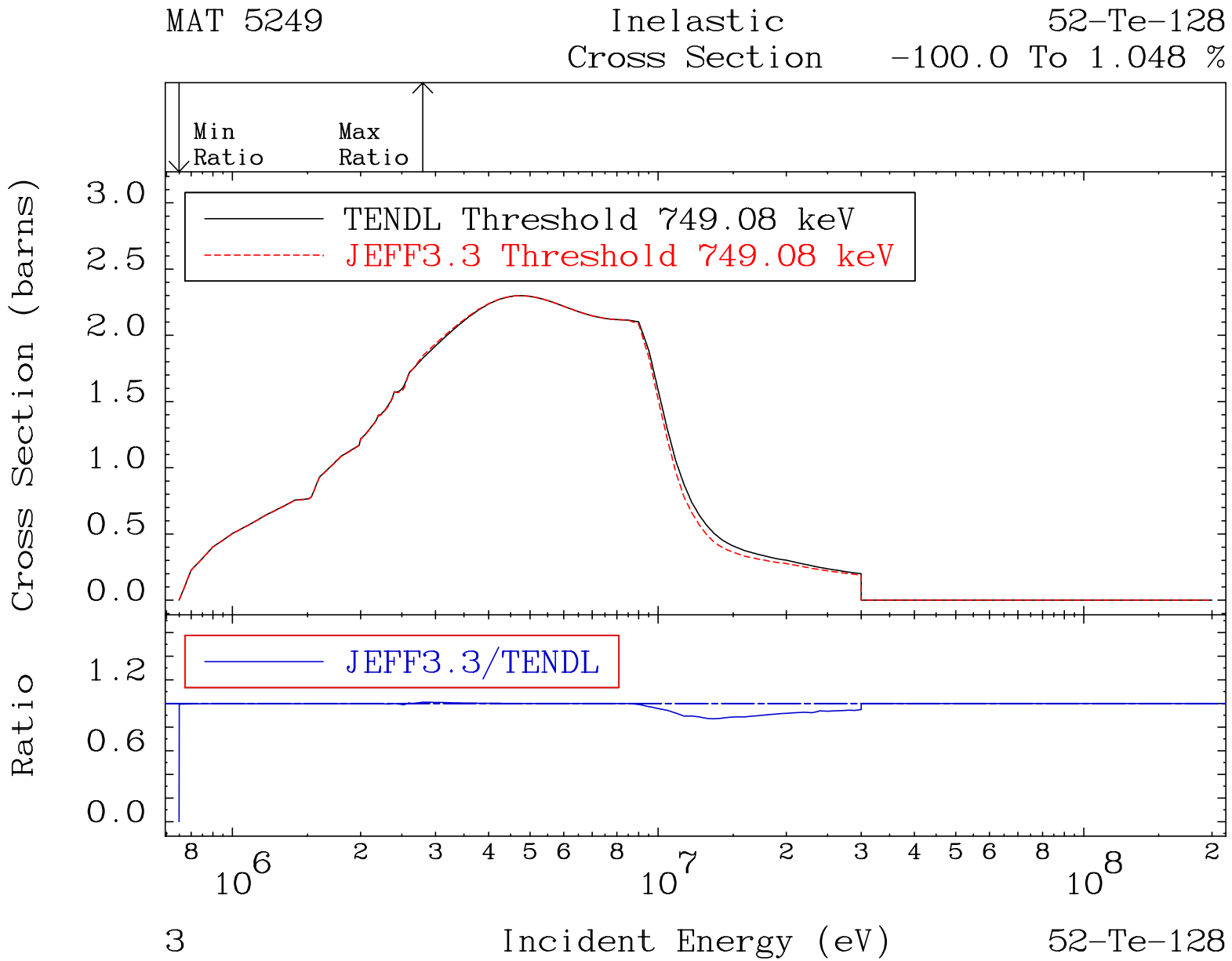
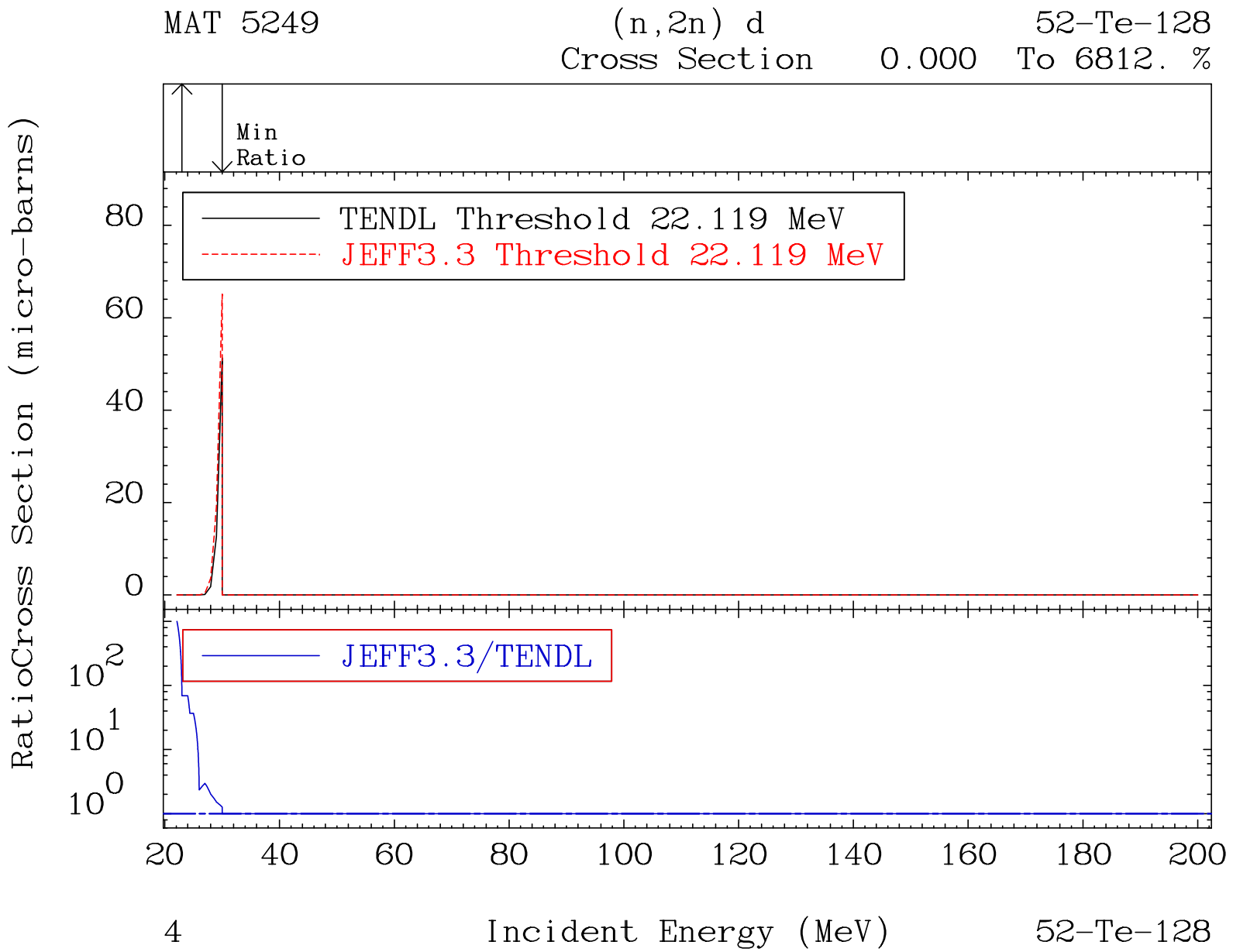
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

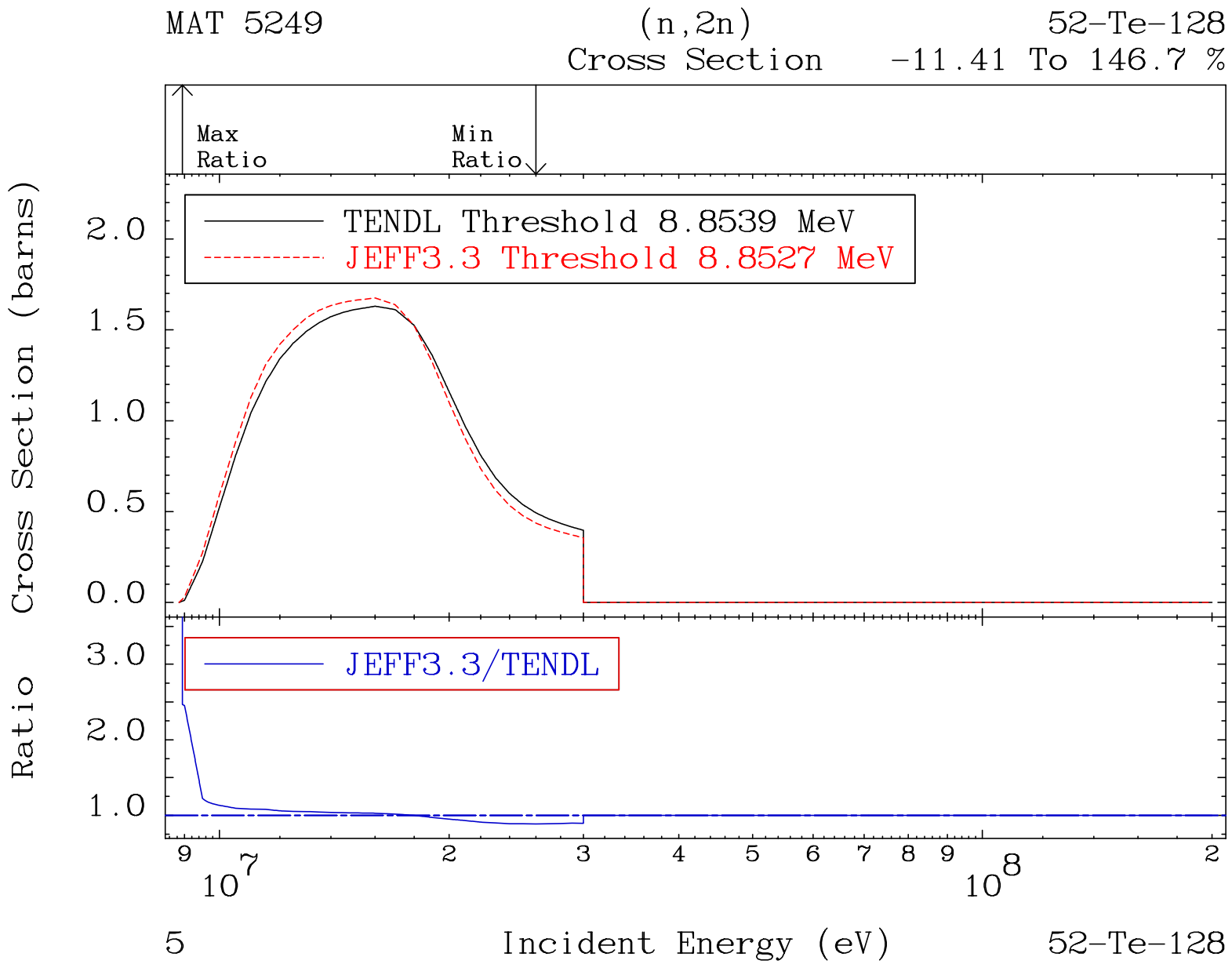
Press Mouse Button to Start

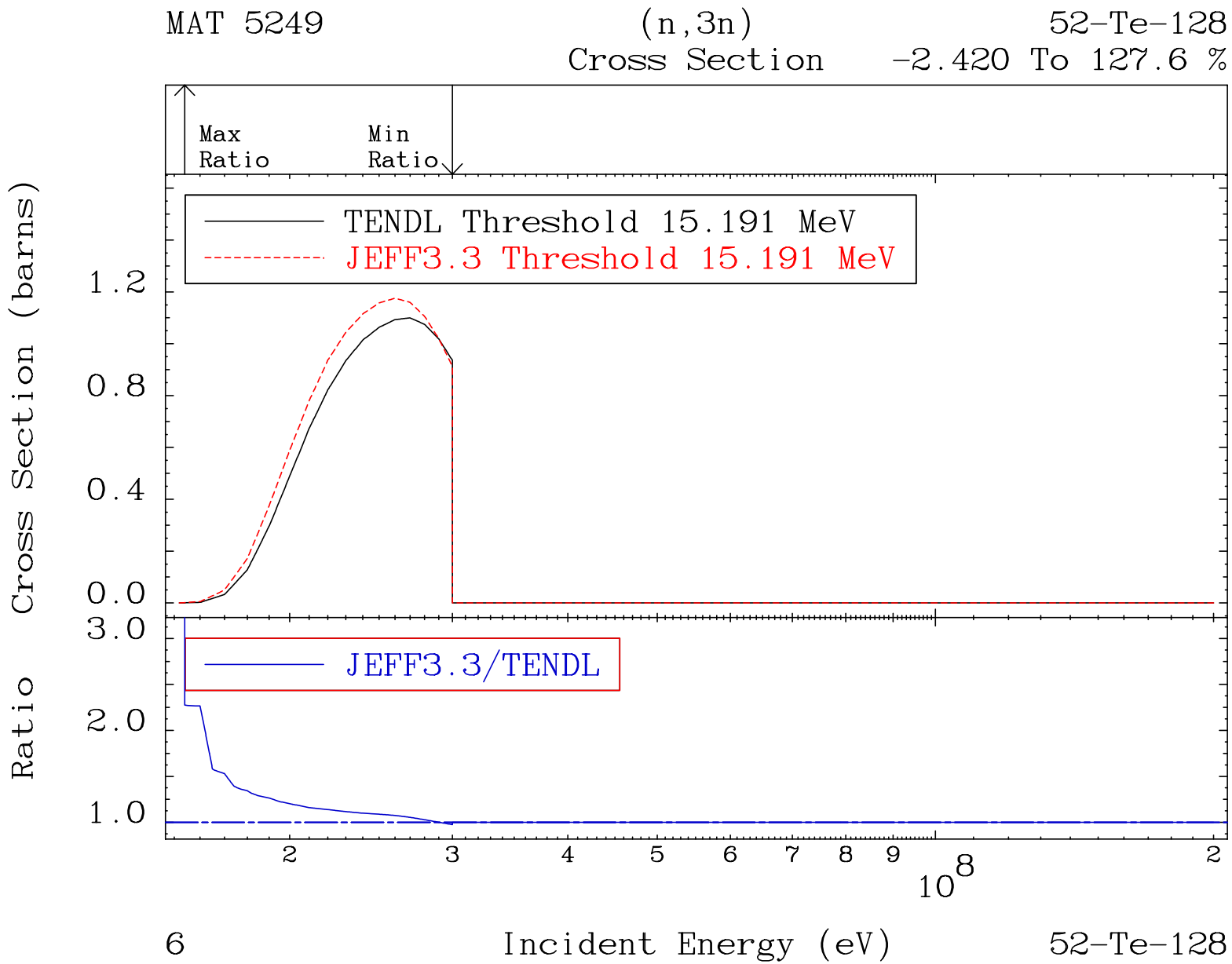

MAT 5249
Total
Cross Section
52-Te-128
-99.84 To 2296. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
52-Te-128

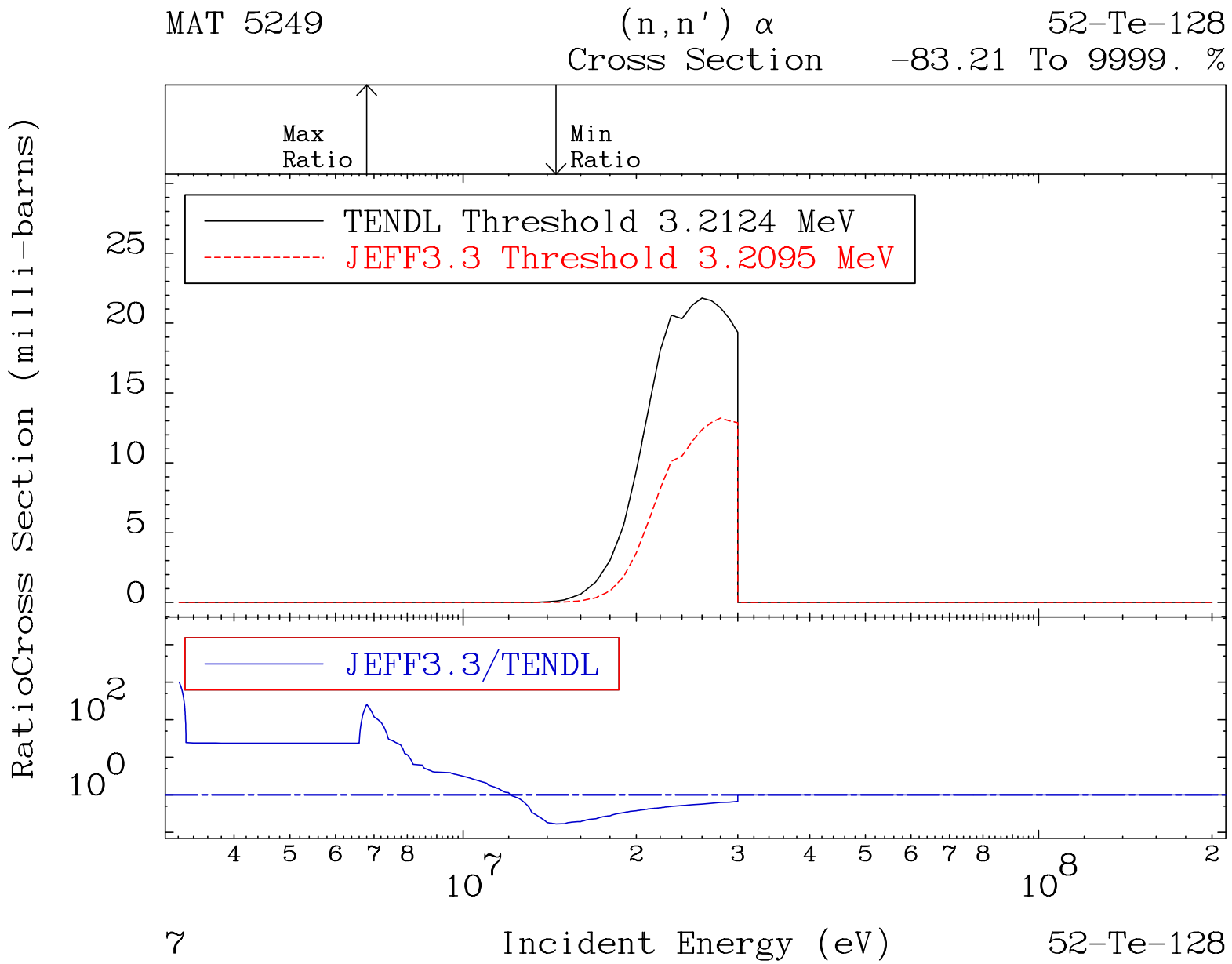

MAT 5249
Elastic
Cross Section
52-Te-128
-99.99 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
52-Te-128

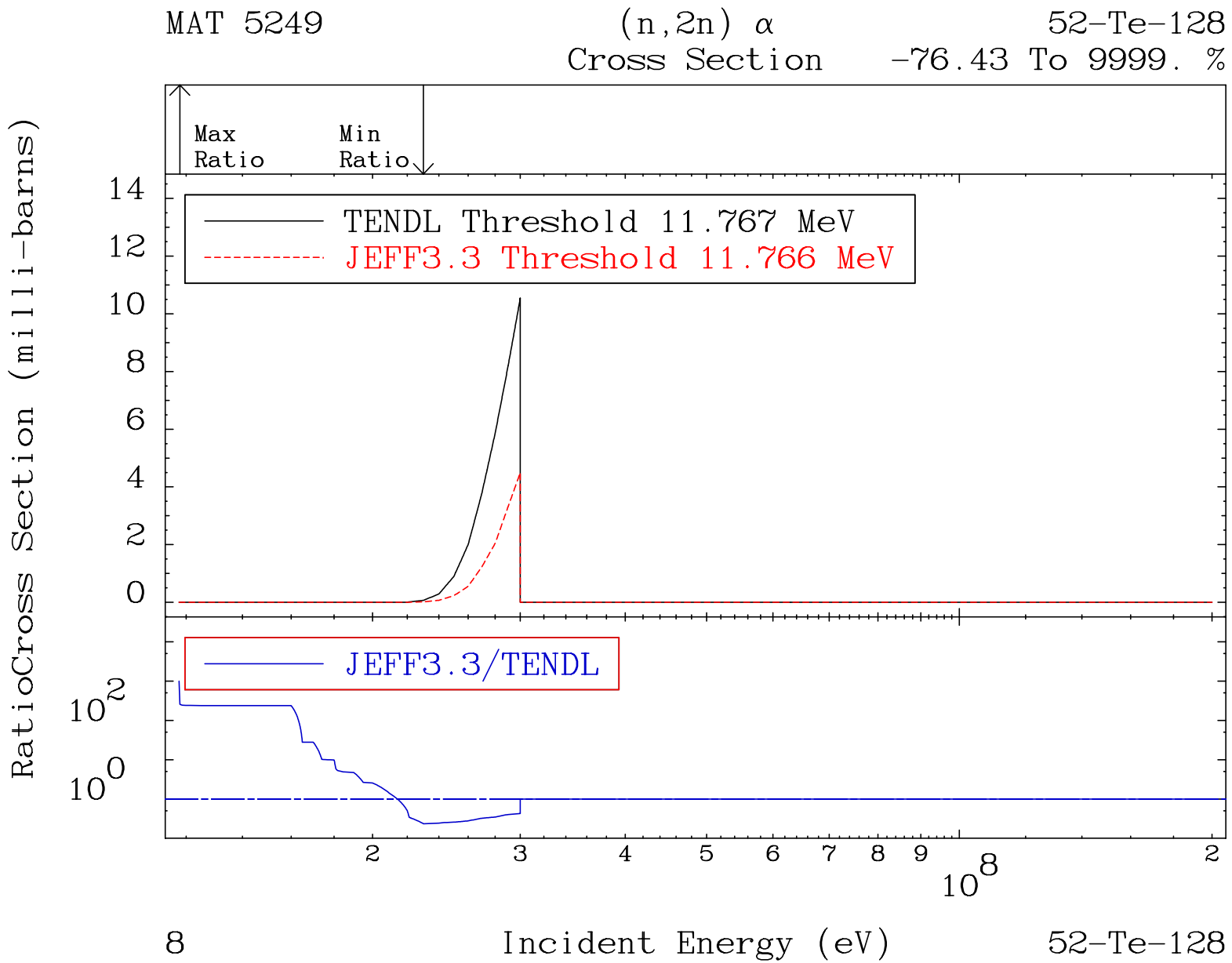

MAT 5249
Inelastic
Cross Section
52-Te-128
-100.0 To 1.048 %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JEFF3.3 Threshold 749.08 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
52-Te-128

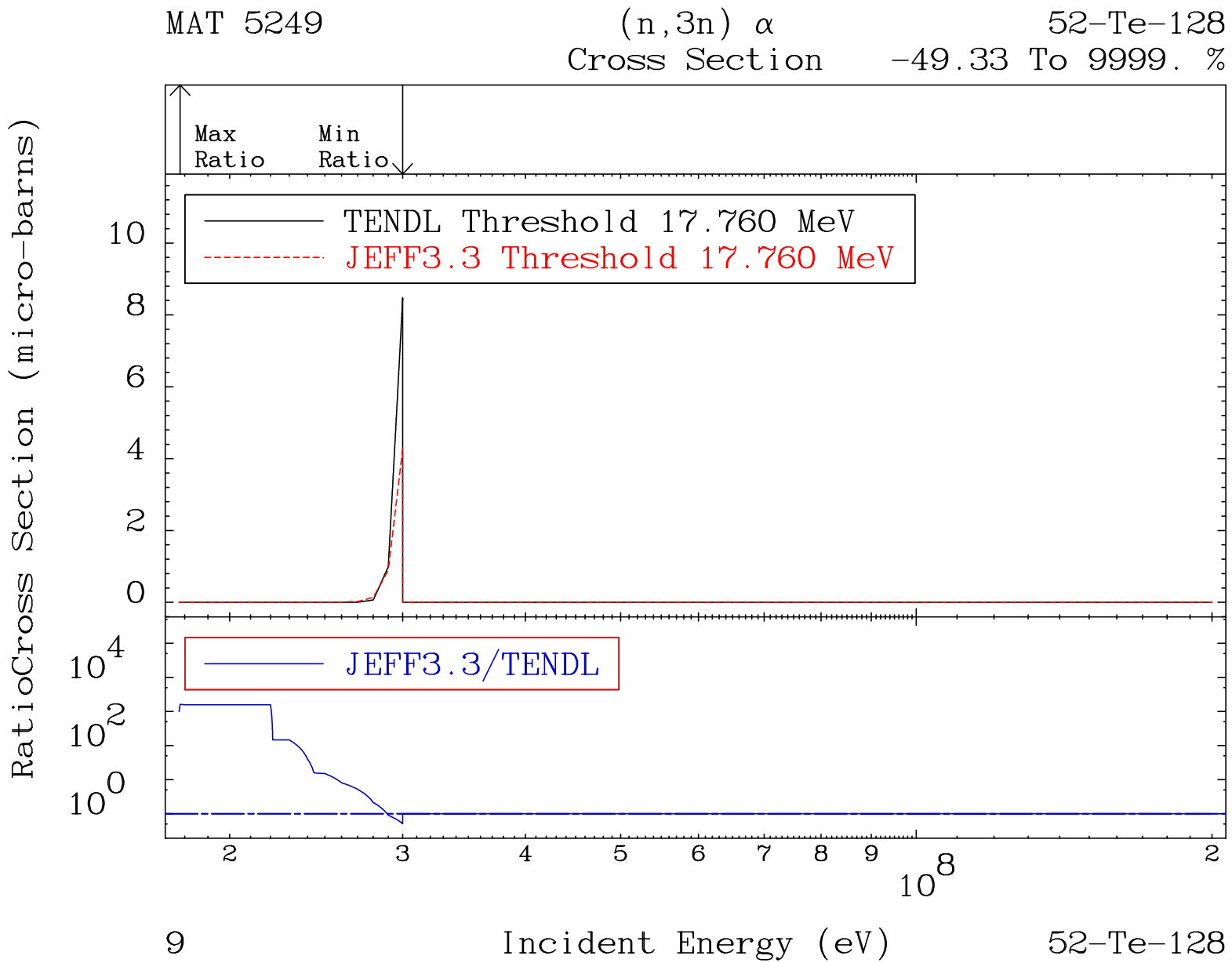

MAT 5249
(n,2n) d
52-Te-128
Cross Section 0.000 To 6812. %
Min
Ratio
TENDL Threshold 22.119 MeV
JEFF3.3 Threshold 22.119 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
80
60
40
20
0
10^2
10^1
10^0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
52-Te-128

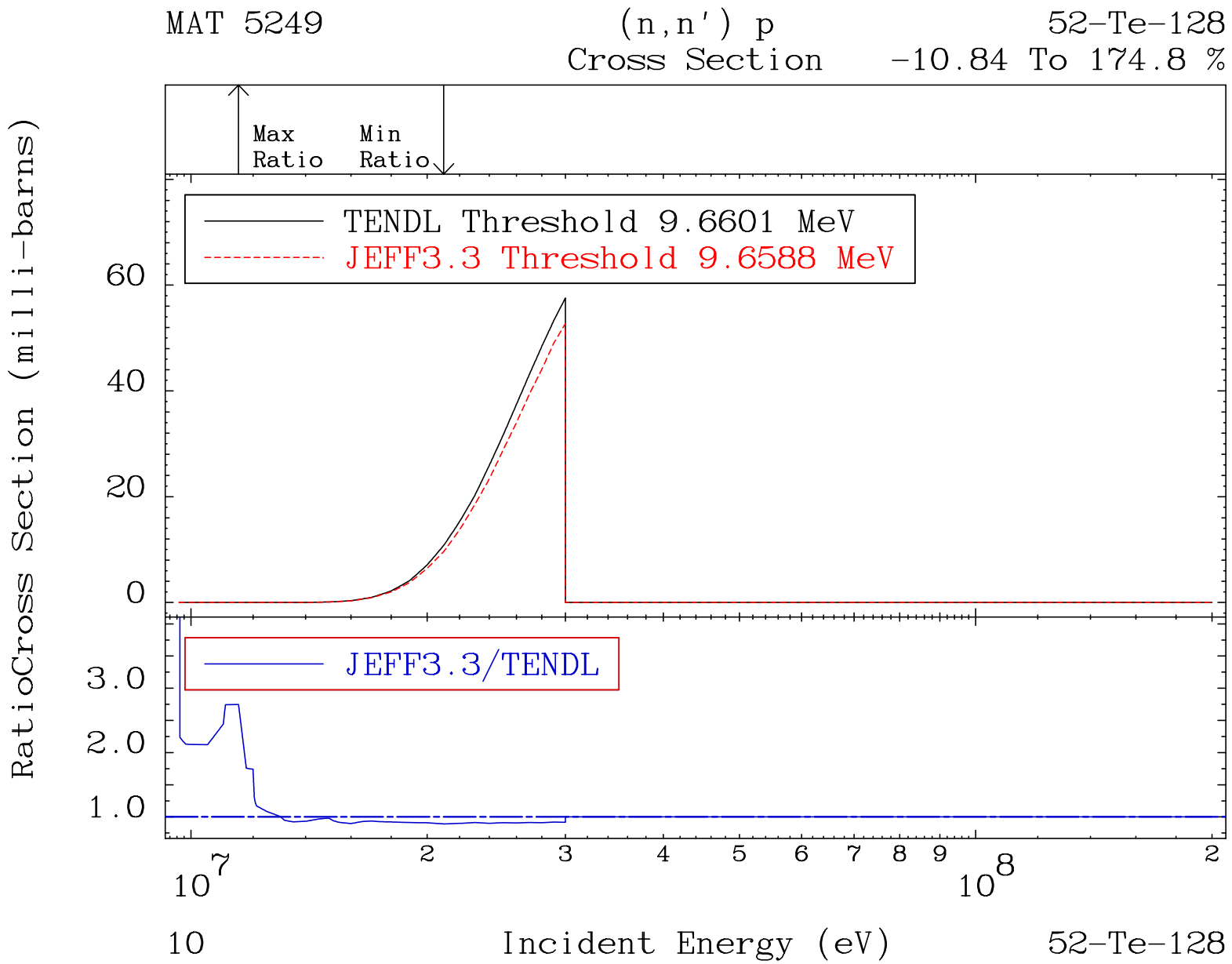

MAT 5249
(n,2n)
Cross Section
52-Te-128
-11.41 To 146.7 %
Max Ratio
Min Ratio
TENDL Threshold 8.8539 MeV
JEFF3.3 Threshold 8.8527 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
52-Te-128

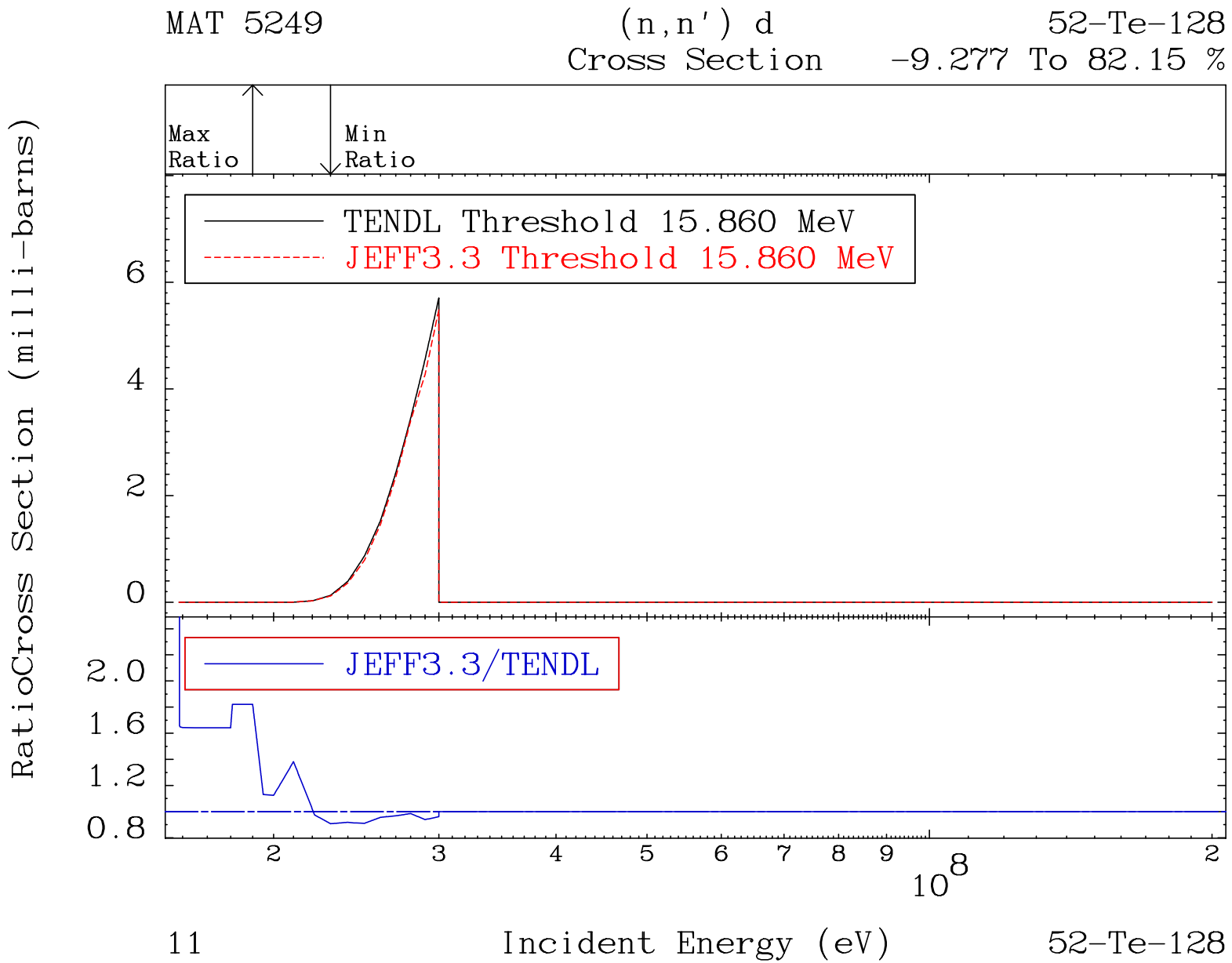

MAT 5249
(n,3n)
52-Te-128
Cross Section
-2.420 To 127.6 %
Max Ratio
Min Ratio
TENDL Threshold 15.191 MeV
JEFF3.3 Threshold 15.191 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.2
0.8
0.4
0.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
52-Te-128

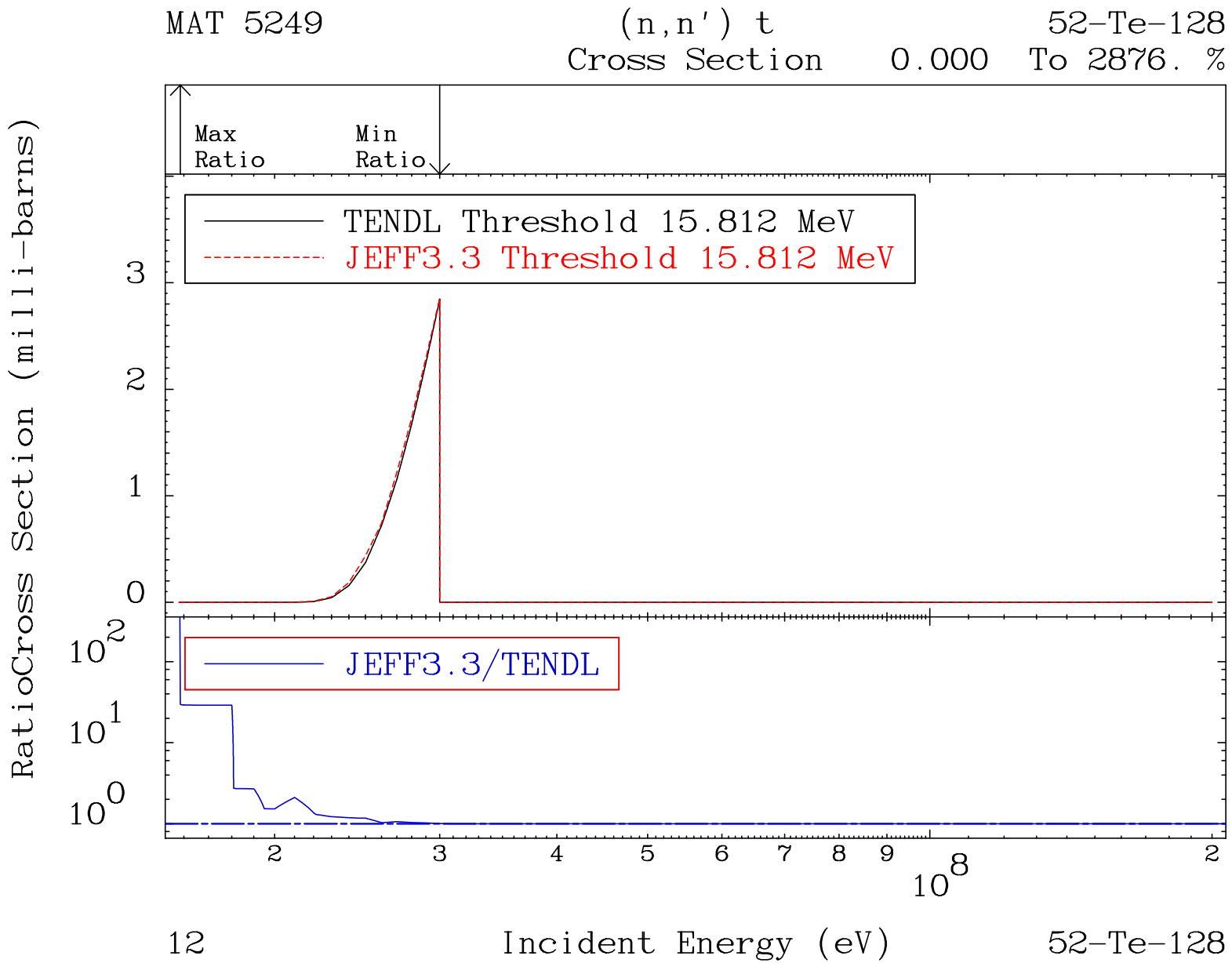

MAT 5249
(n,n') α
Cross Section
52-Te-128
-83.21 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.2124 MeV
JEFF3.3 Threshold 3.2095 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
52-Te-128
7

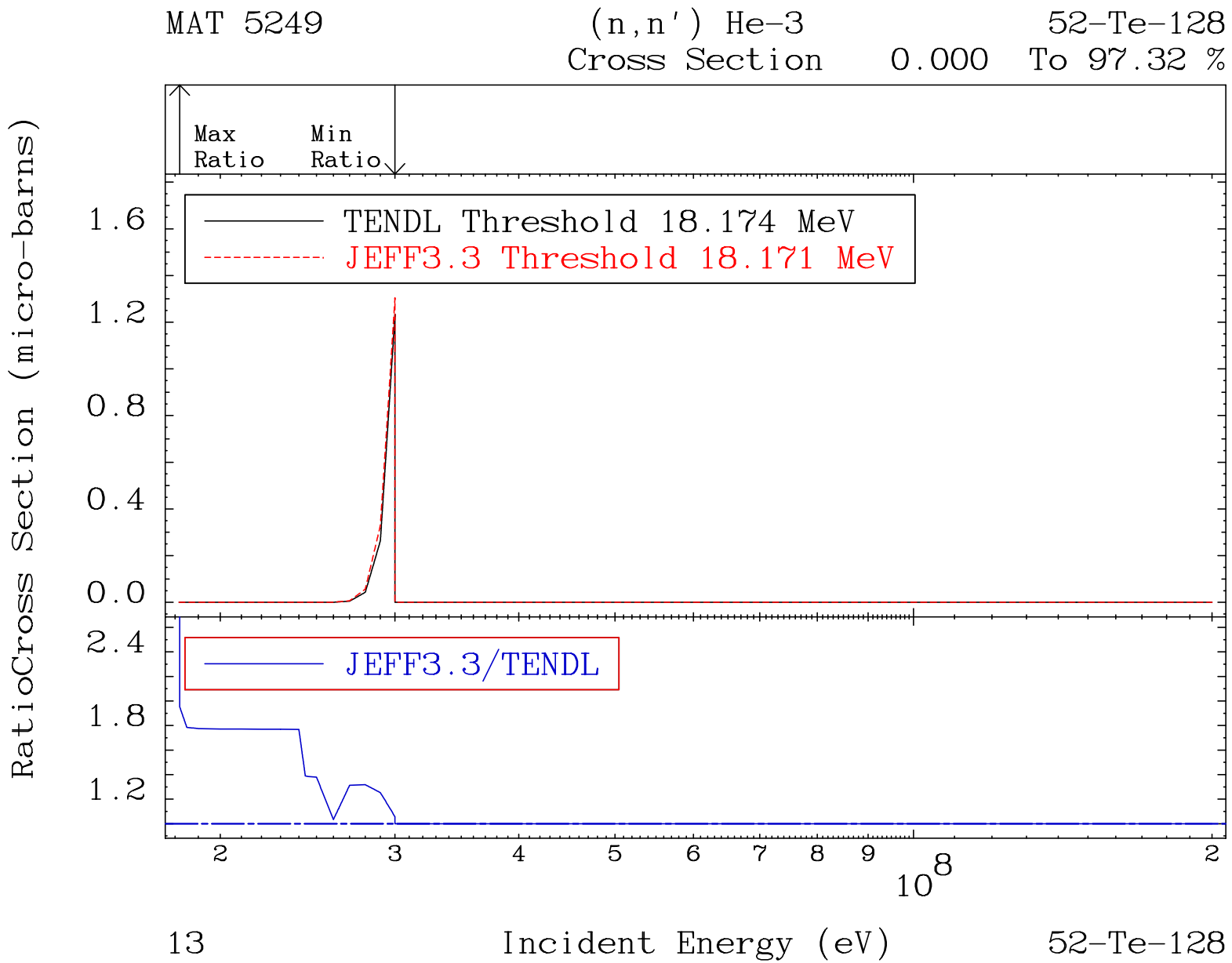

MAT 5249
(n,2n) α
52-Te-128
Cross Section
-76.43 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.767 MeV
JEFF3.3 Threshold 11.766 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
52-Te-128

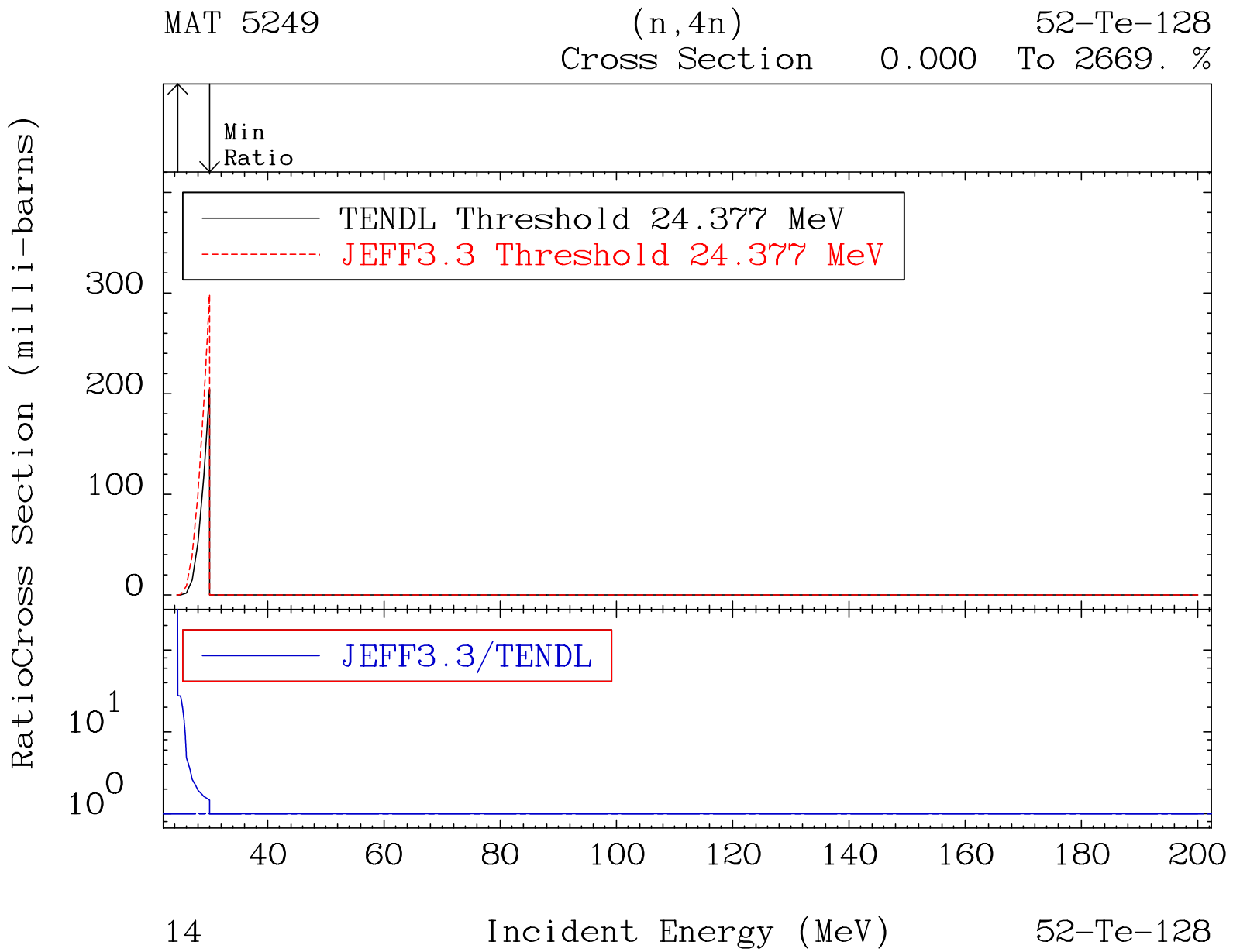

MAT 5249
(n,3n) α
52-Te-128
Cross Section
-49.33 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 17.760 MeV
JEFF3.3 Threshold 17.760 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
9
52-Te-128

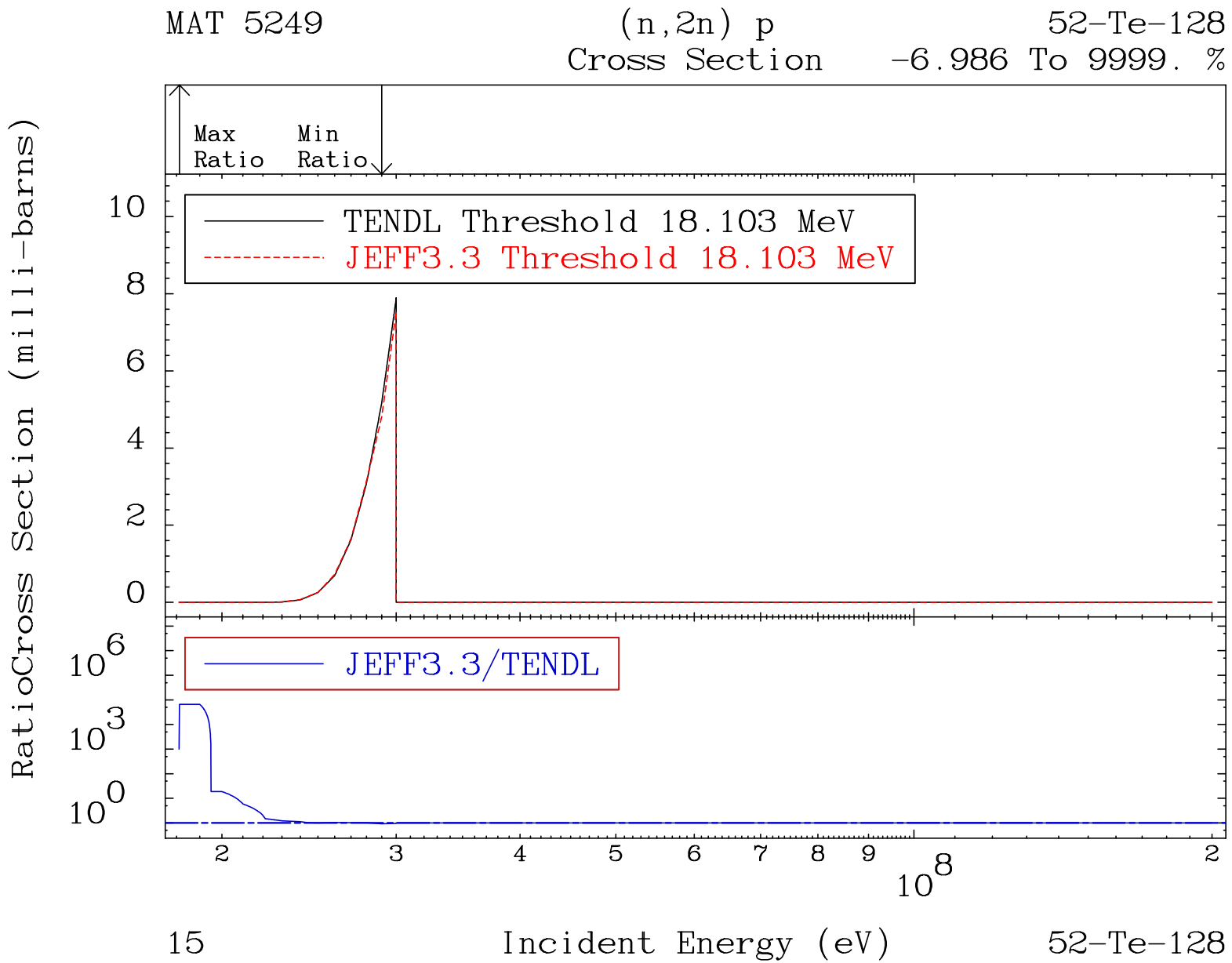

MAT 5249
(n,n') p
Cross Section
52-Te-128
-10.84 To 174.8 %
Max Ratio
Min Ratio
TENDL Threshold 9.6601 MeV
JEFF3.3 Threshold 9.6588 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
40
20
0
3.0
2.0
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
52-Te-128

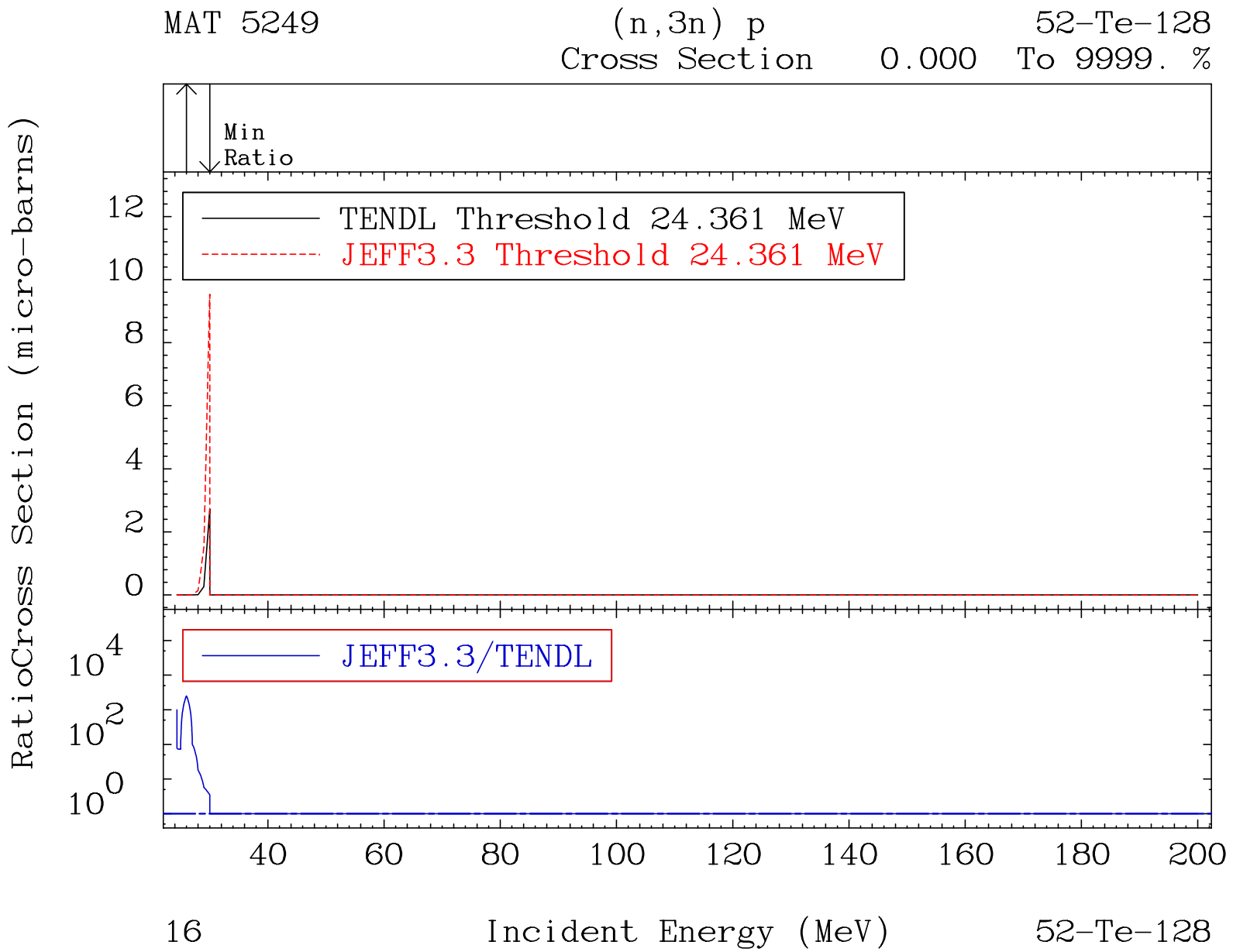

MAT 5249
(n,n') d
Cross Section
52-Te-128
-9.277 To 82.15 %
Max Ratio
Min Ratio
TENDL Threshold 15.860 MeV
JEFF3.3 Threshold 15.860 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
6
4
2
0
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
52-Te-128

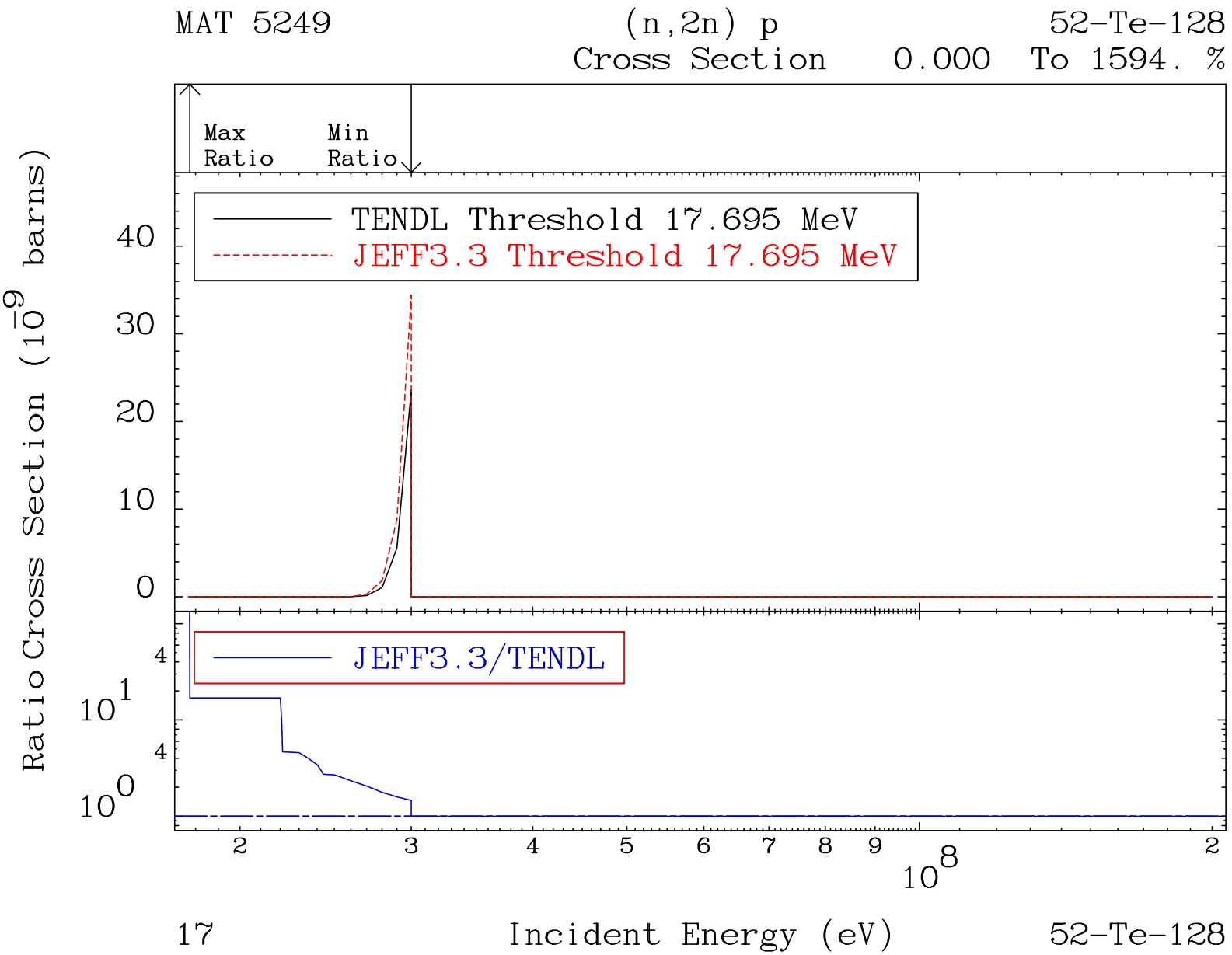

MAT 5249
(n,n') t
52-Te-128
Cross Section 0.000 To 2876. %
Max Ratio
Min Ratio
TENDL Threshold 15.812 MeV
JEFF3.3 Threshold 15.812 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
12
52-Te-128

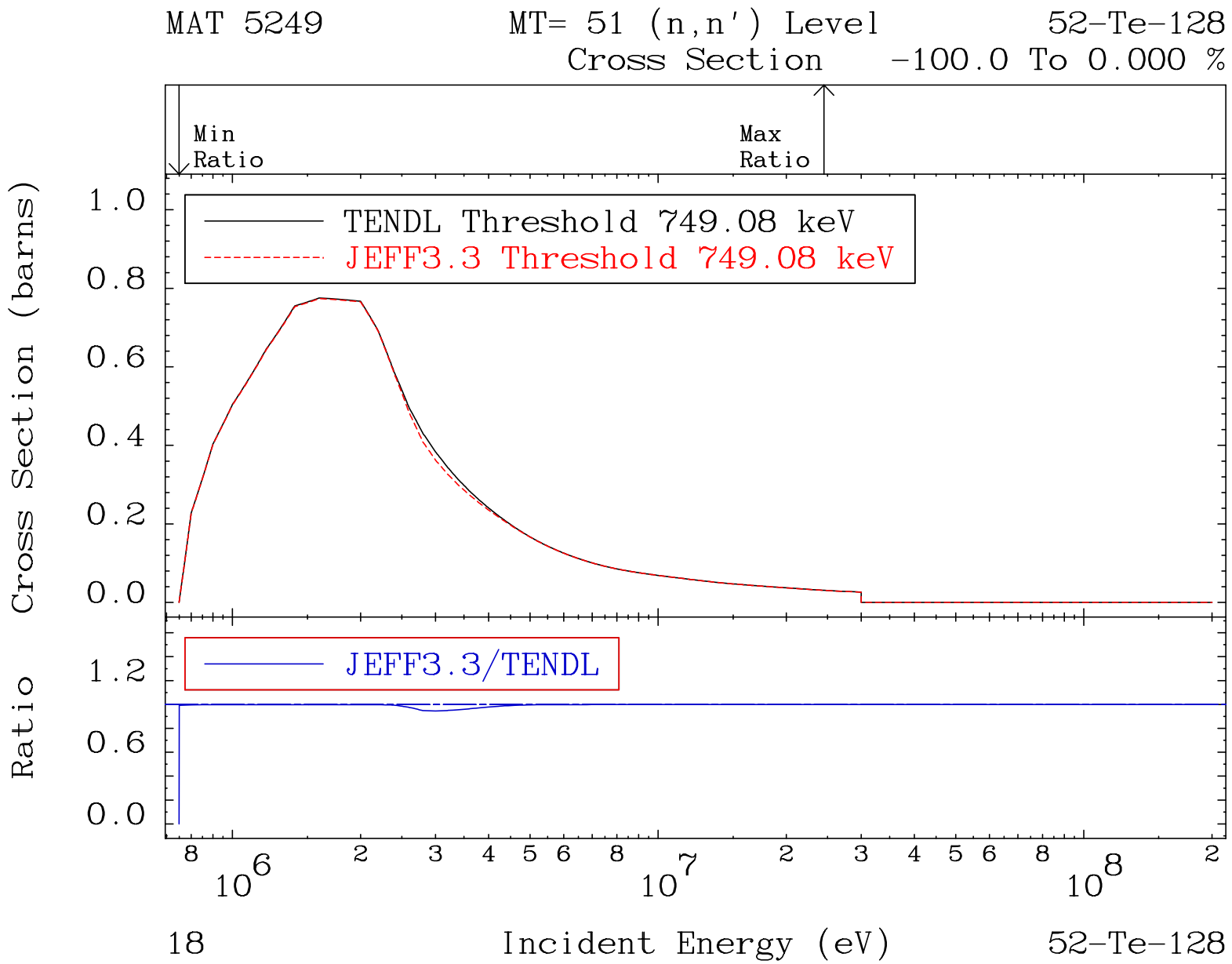

MAT 5249
(n,n') He-3
Cross Section
52-Te-128
0.000 To 97.32 %
Max Ratio
Min Ratio
TENDL Threshold 18.174 MeV
JEFF3.3 Threshold 18.171 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.6
1.2
0.8
0.4
0.0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
52-Te-128

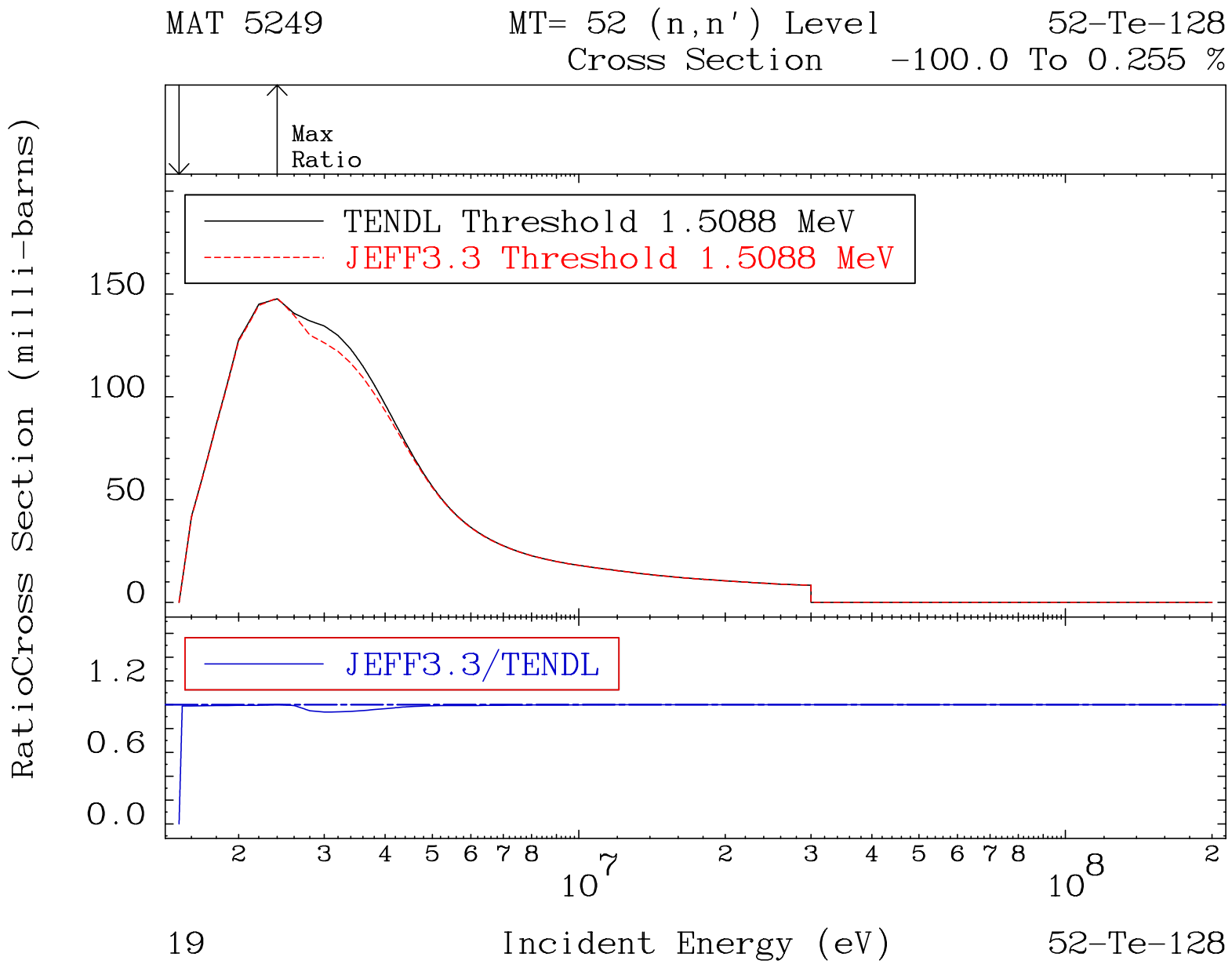

MAT 5249
(n,4n)
52-Te-128
Cross Section 0.000 To 2669. %
Min
Ratio
TENDL Threshold 24.377 MeV
JEFF3.3 Threshold 24.377 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
200
100
0
10^1
10^0
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
52-Te-128

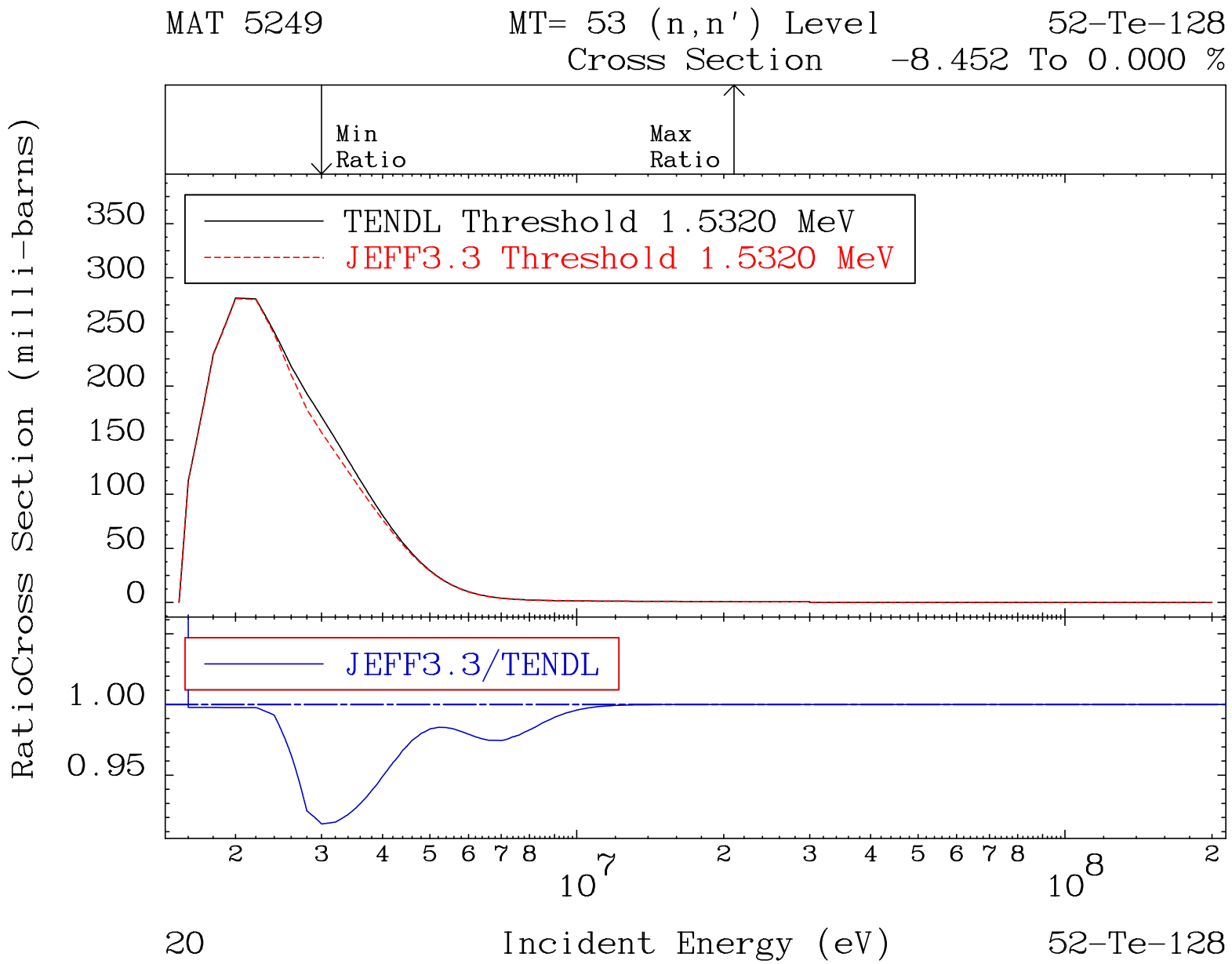

MAT 5249
(n,2n) p
52-Te-128
Cross Section
-6.986 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.103 MeV
JEFF3.3 Threshold 18.103 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
52-Te-128

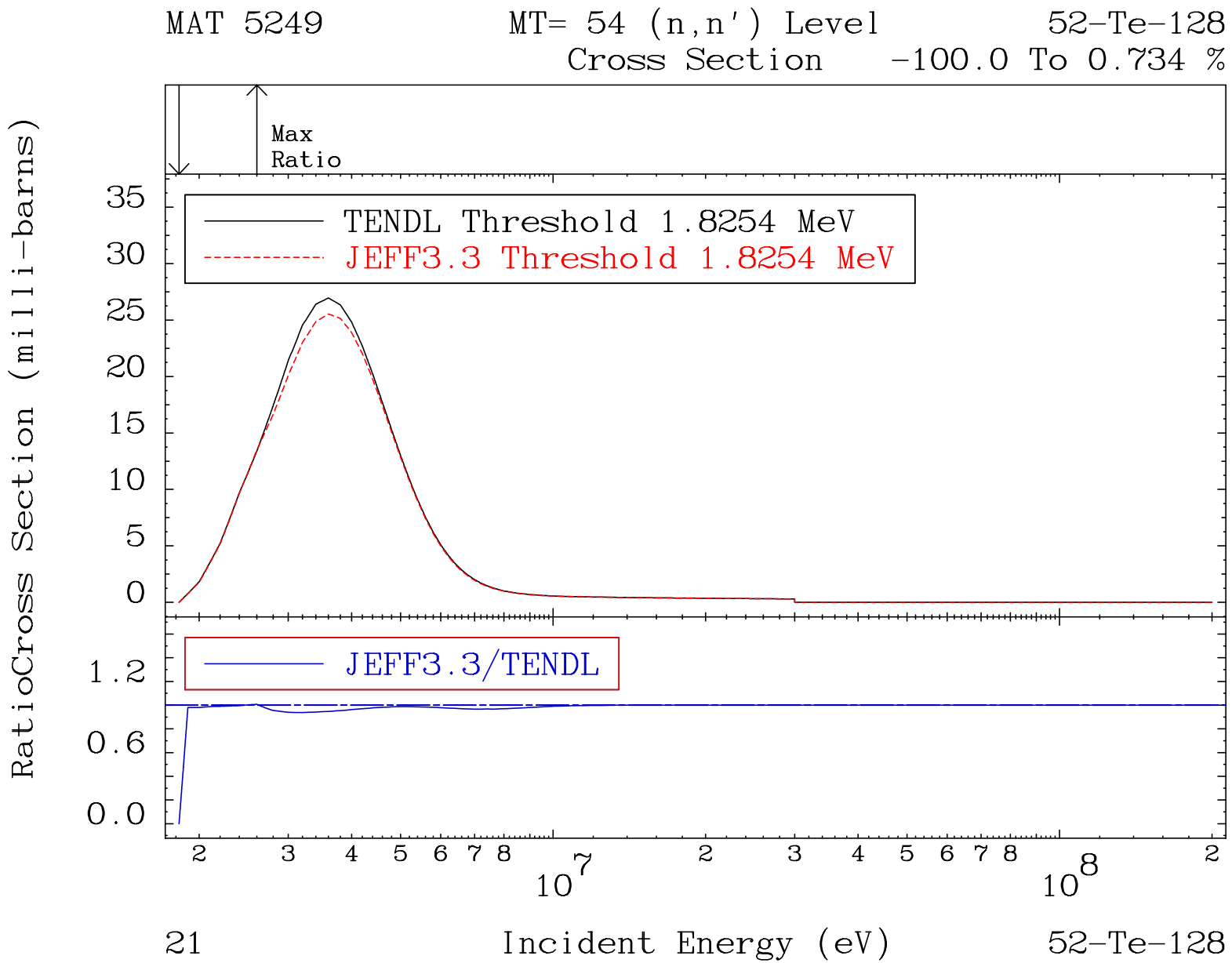

MAT 5249
(n,3n) p
52-Te-128
Cross Section 0.000 To 9999. %
Min
Ratio
TENDL Threshold 24.361 MeV
JEFF3.3 Threshold 24.361 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
12
10
8
6
4
2
0
10^4
10^2
10^0
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
52-Te-128

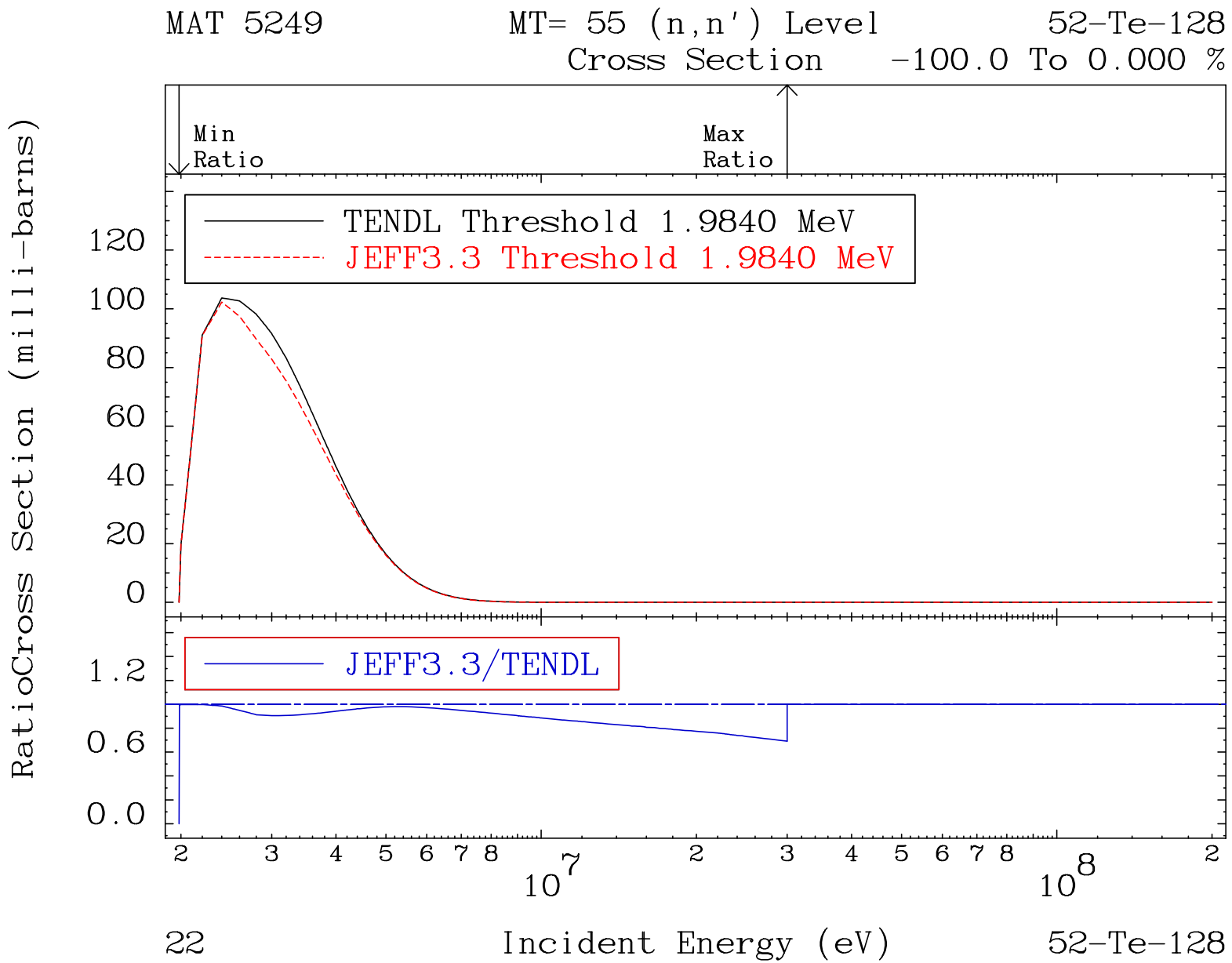

MAT 5249
(n,2n) p
52-Te-128
Cross Section 0.000 To 1594. %
Max Ratio
Min Ratio
TENDL Threshold 17.695 MeV
JEFF3.3 Threshold 17.695 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
40
30
20
10
0
4
10^{1}
4
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
17
Incident Energy (eV)
52-Te-128

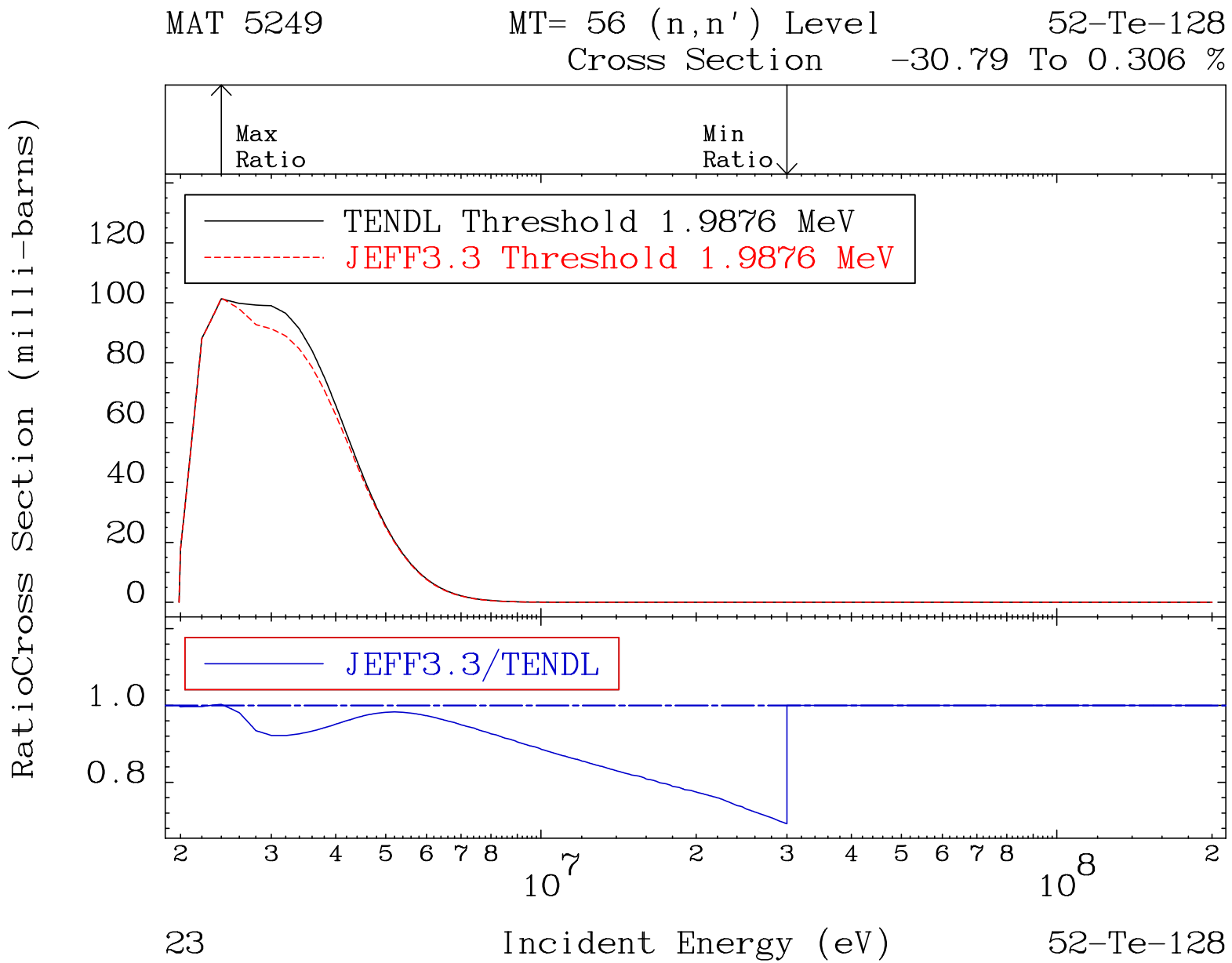

MAT 5249
MT= 51 (n,n') Level
52-Te-128
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JEFF3.3 Threshold 749.08 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.6
0.0
8 2 3 4 5 6 8 2 3 4 5 6 8 2
10^6
10^7
10^8
18
Incident Energy (eV)
52-Te-128

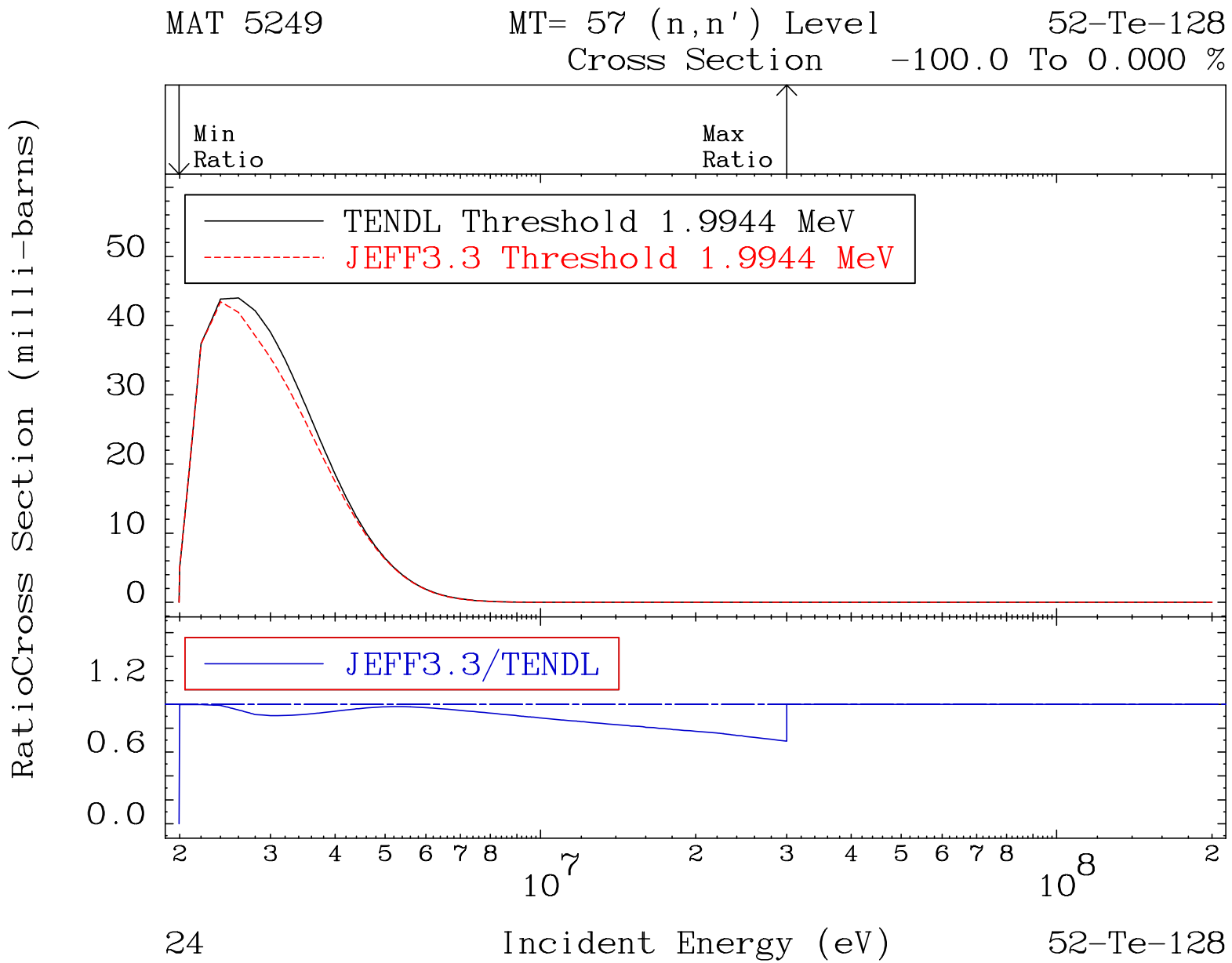

MAT 5249
MT= 52 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.255 %
Max
Ratio
TENDL Threshold 1.5088 MeV
JEFF3.3 Threshold 1.5088 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
150
100
50
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
52-Te-128

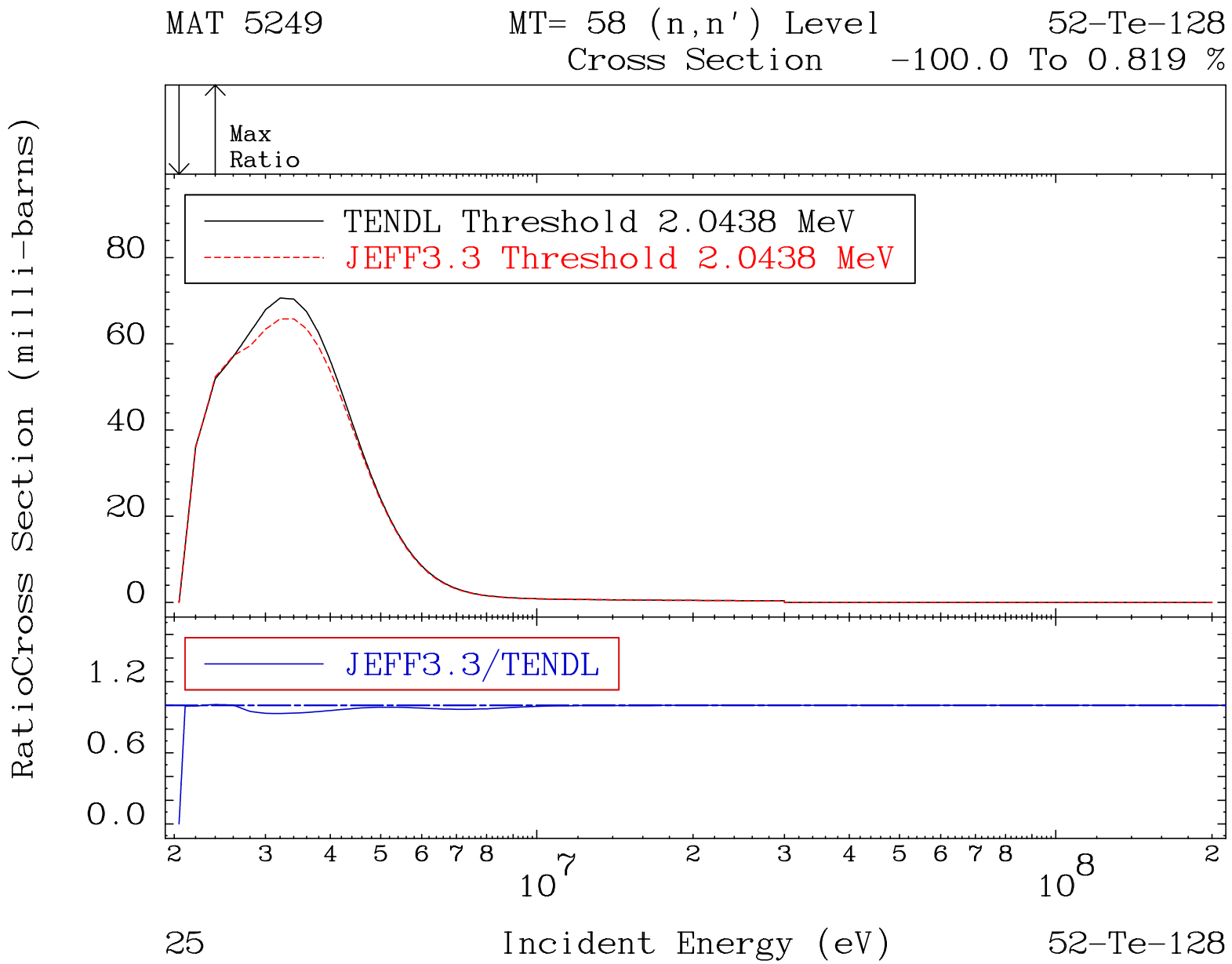

MAT 5249
MT= 53 (n,n') Level
52-Te-128
Cross Section
-8.452 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.5320 MeV
JEFF3.3 Threshold 1.5320 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.00
0.95
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
52-Te-128

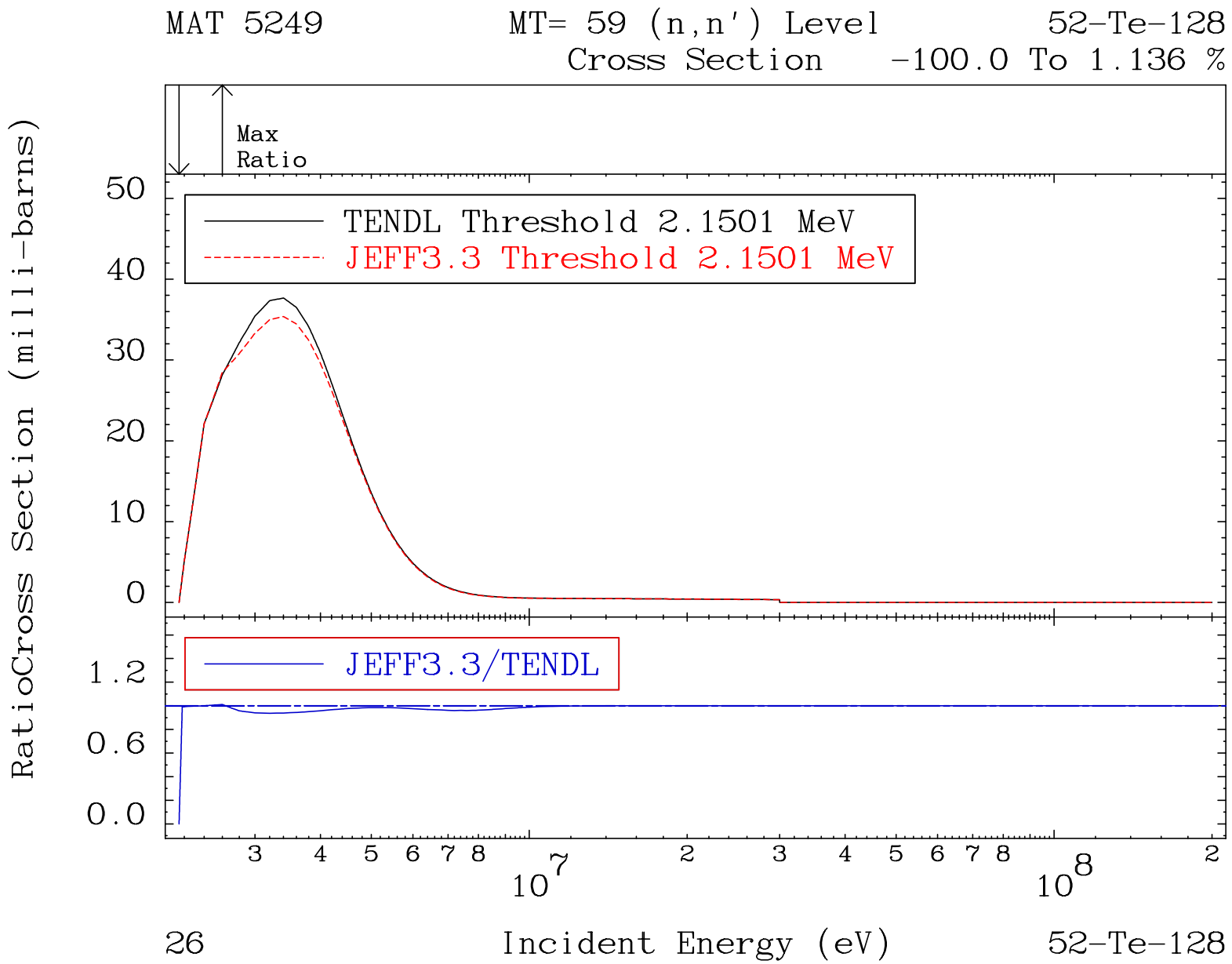

MAT 5249
MT= 54 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.734 %
Max
Ratio
TENDL Threshold 1.8254 MeV
JEFF3.3 Threshold 1.8254 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
10^7
10^8
21
Incident Energy (eV)
52-Te-128

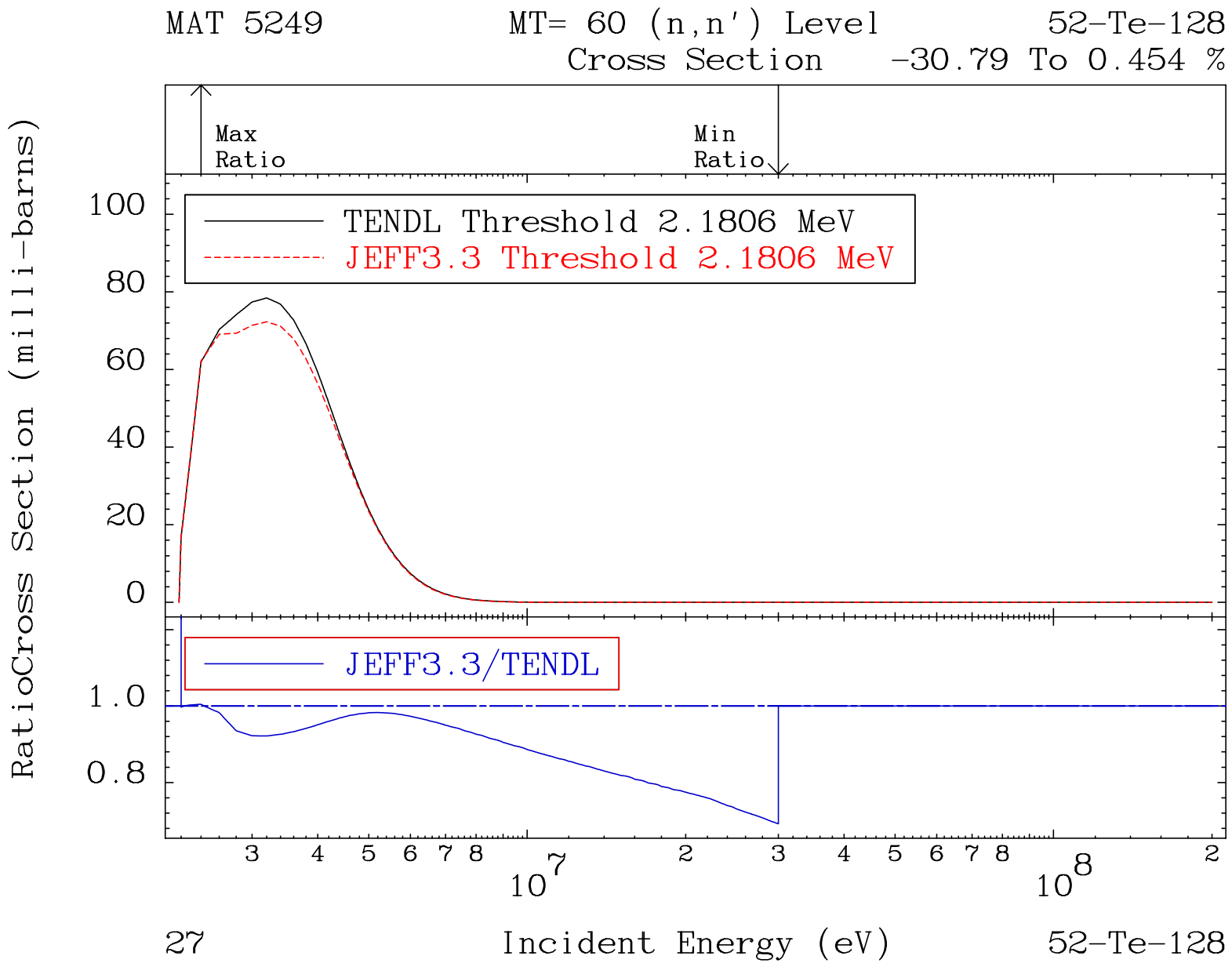

MAT 5249
MT= 55 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.9840 MeV
JEFF3.3 Threshold 1.9840 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
52-Te-128

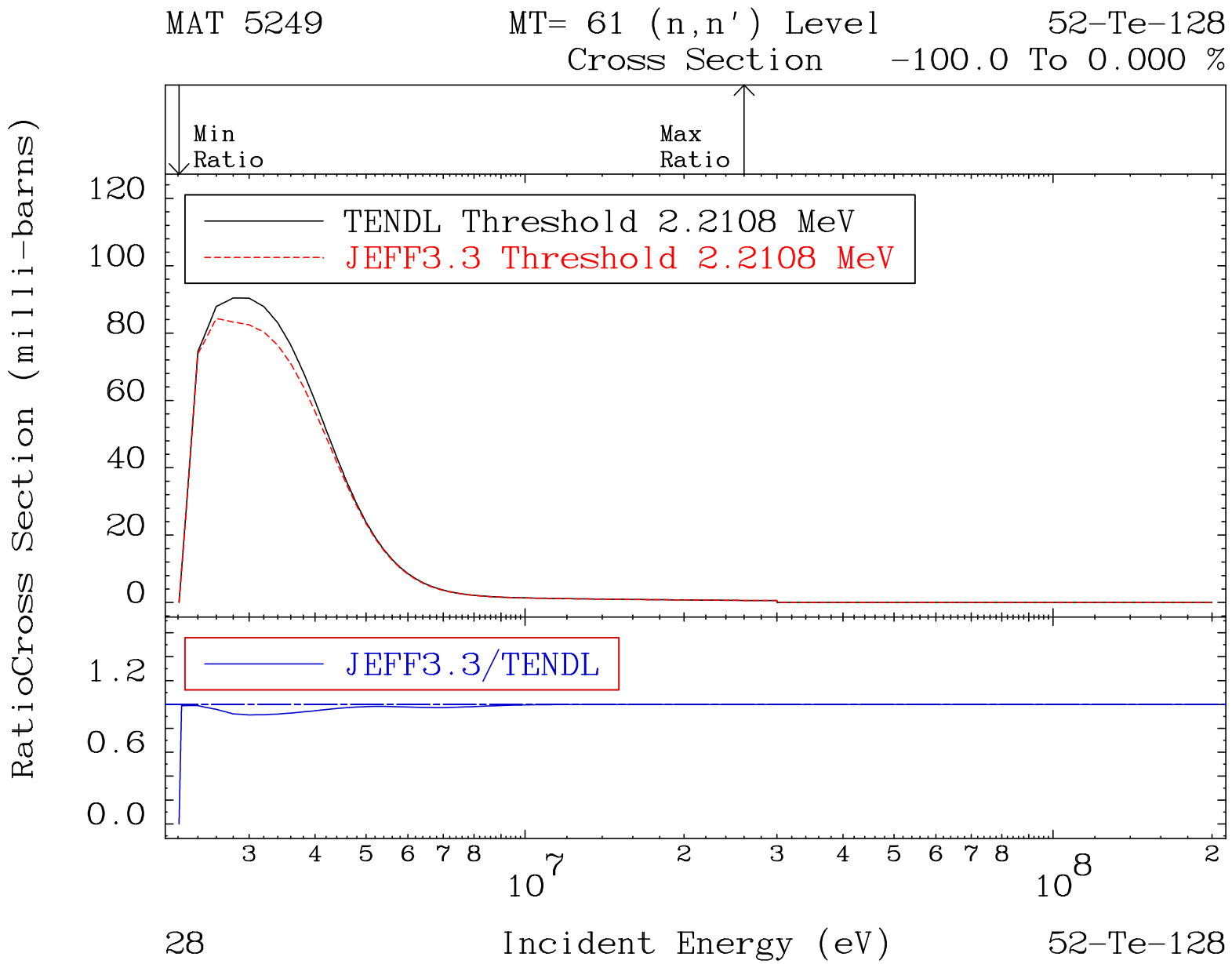

MAT 5249
MT= 56 (n,n') Level
52-Te-128
Cross Section
-30.79 To 0.306 %
Max Ratio
Min Ratio
TENDL Threshold 1.9876 MeV
JEFF3.3 Threshold 1.9876 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.0
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
52-Te-128

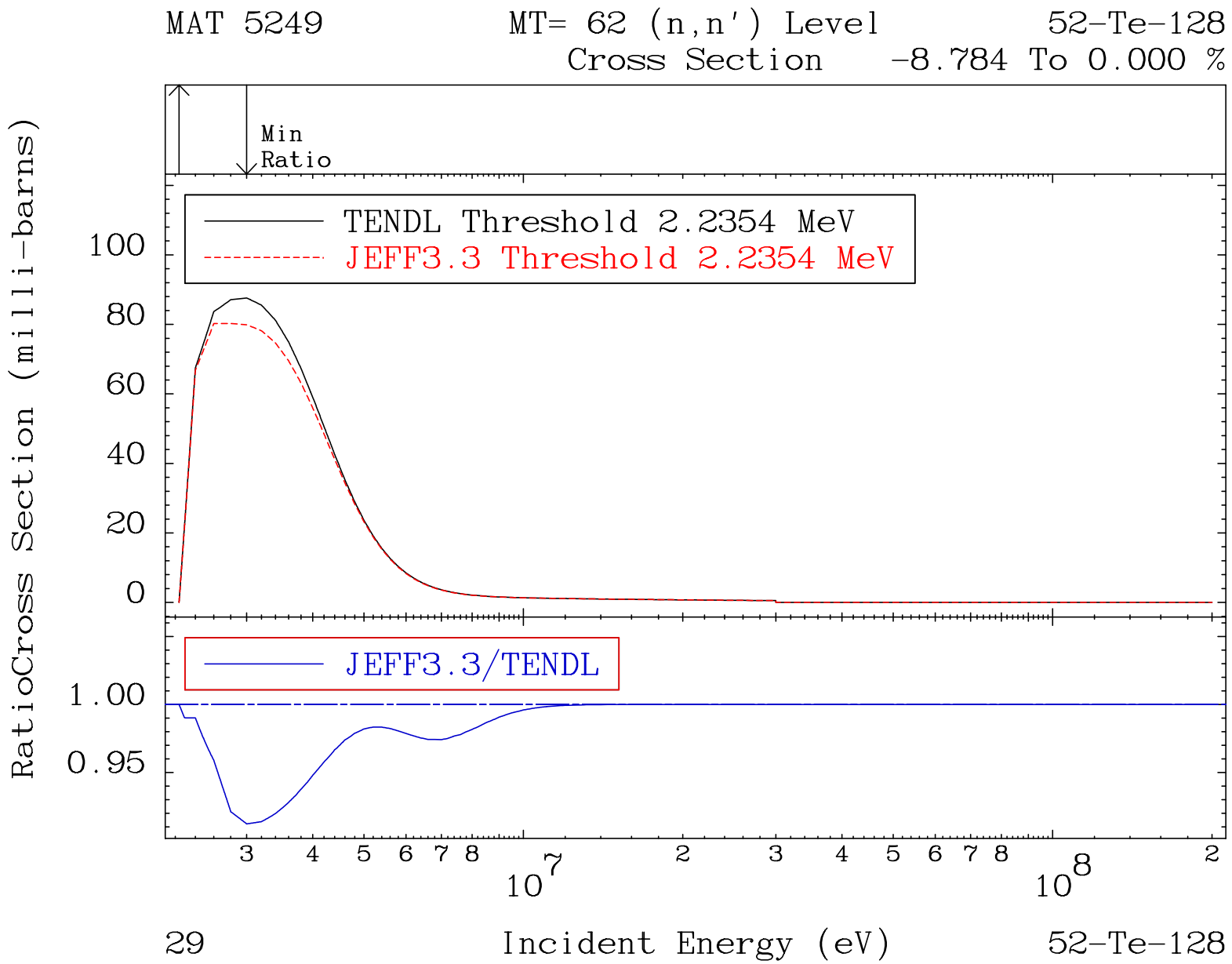

MAT 5249
MT= 57 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.9944 MeV
JEFF3.3 Threshold 1.9944 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
52-Te-128

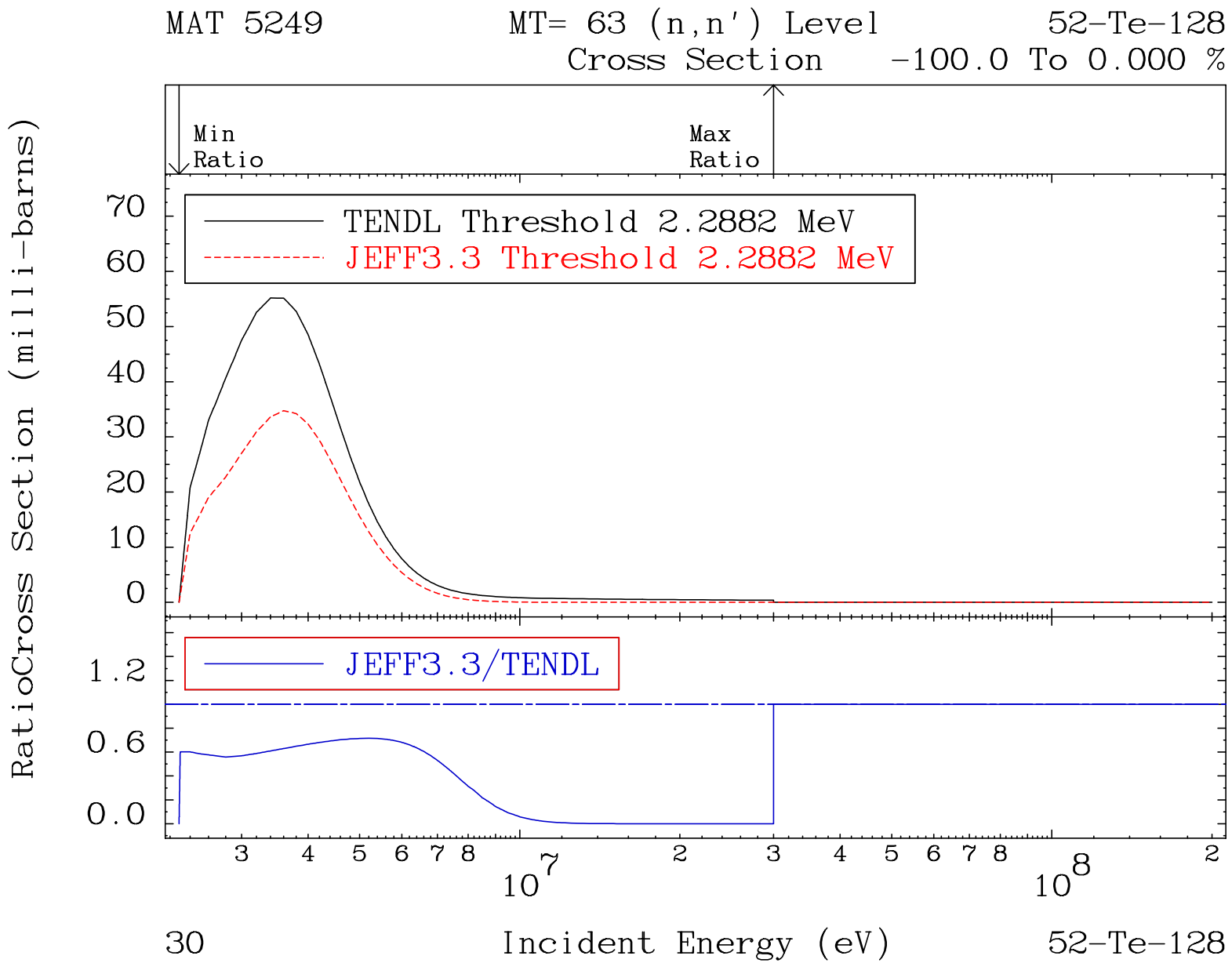

MAT 5249
MT= 58 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.819 %
Max
Ratio
TENDL Threshold 2.0438 MeV
JEFF3.3 Threshold 2.0438 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
52-Te-128

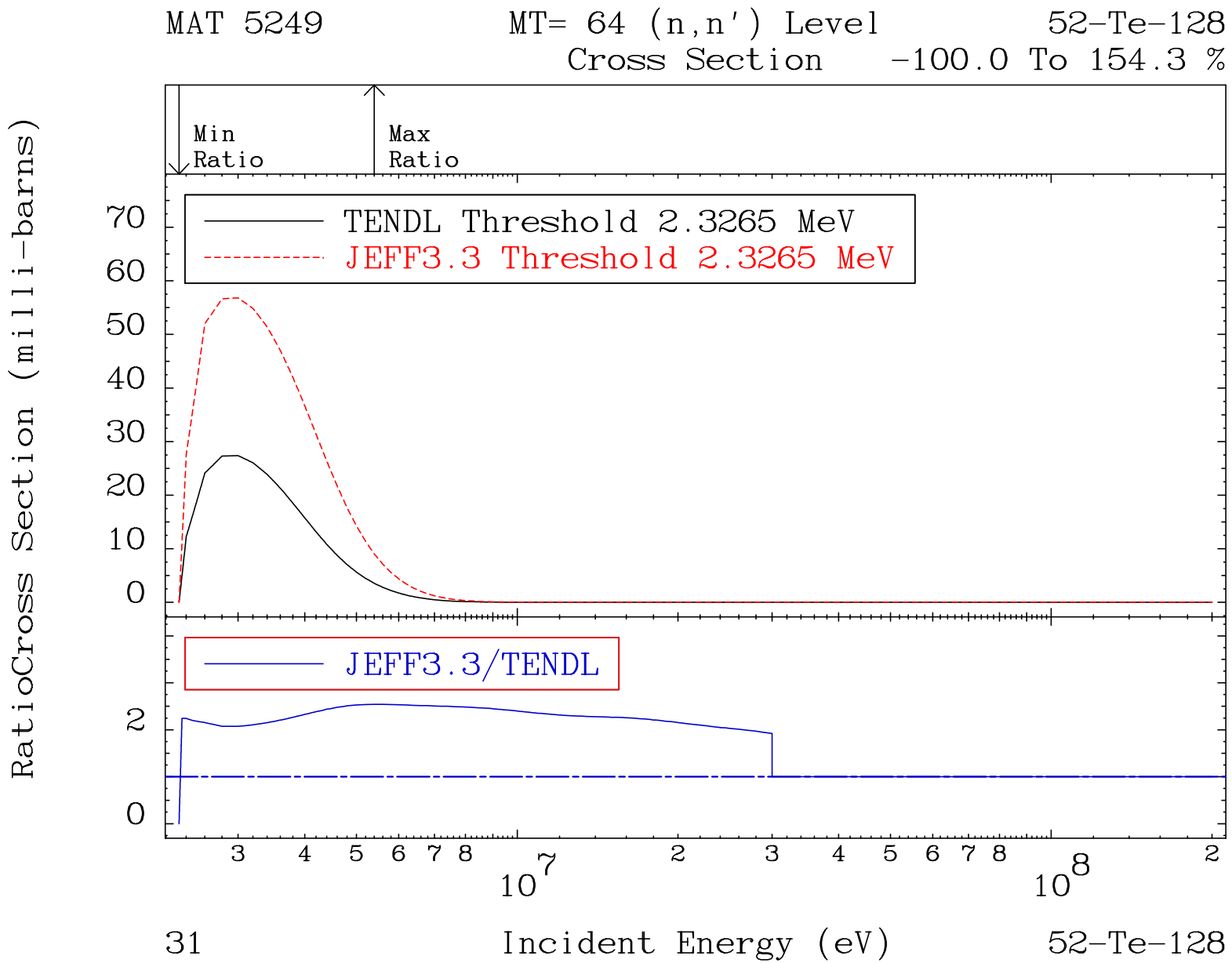

MAT 5249
MT= 59 (n,n') Level
52-Te-128
Cross Section
-100.0 To 1.136 %
Max
Ratio
TENDL Threshold 2.1501 MeV
JEFF3.3 Threshold 2.1501 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
52-Te-128

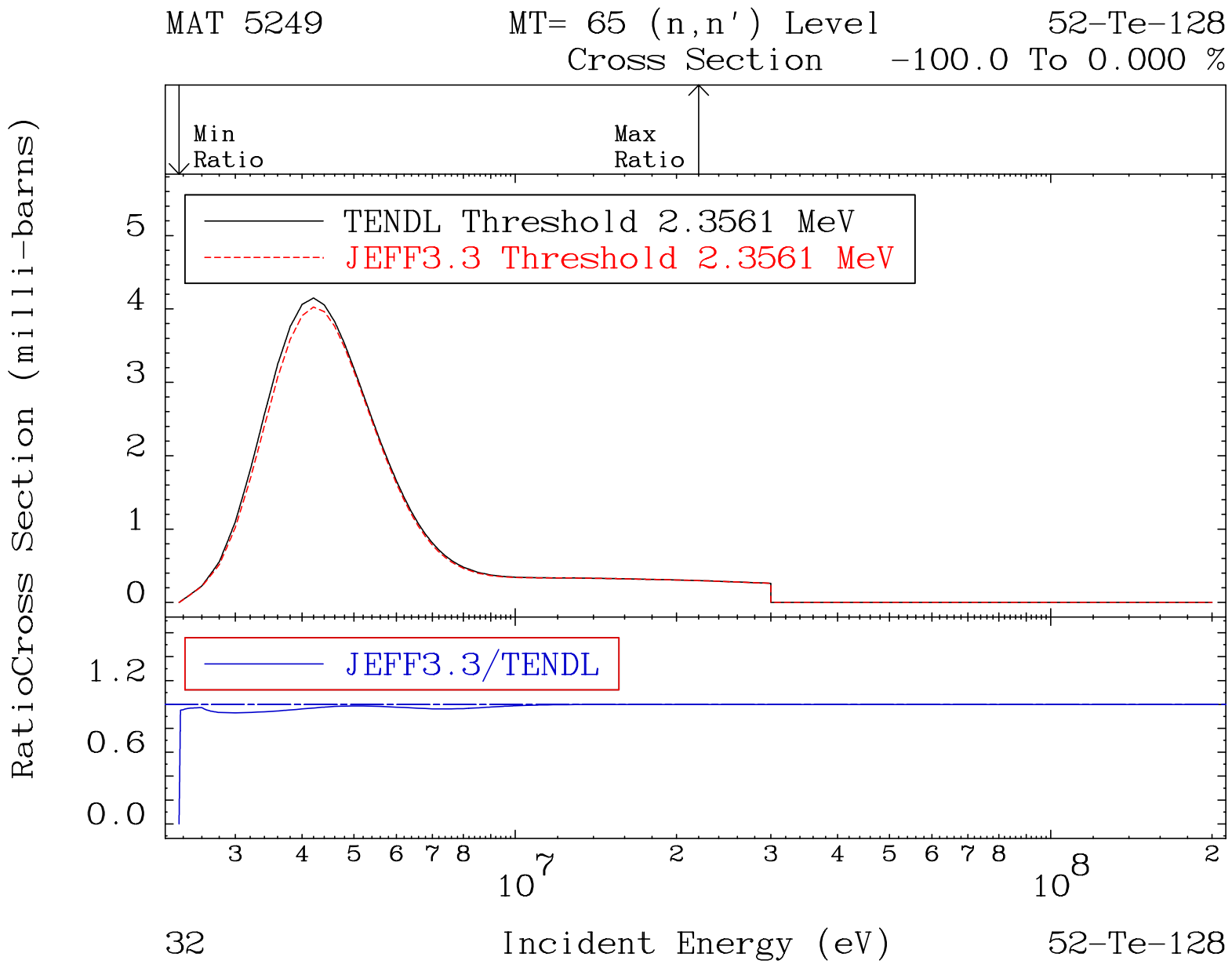

MAT 5249
MT= 60 (n,n') Level
52-Te-128
Cross Section
-30.79 To 0.454 %
Max Ratio
Min Ratio
TENDL Threshold 2.1806 MeV
JEFF3.3 Threshold 2.1806 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.0
0.8
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
52-Te-128

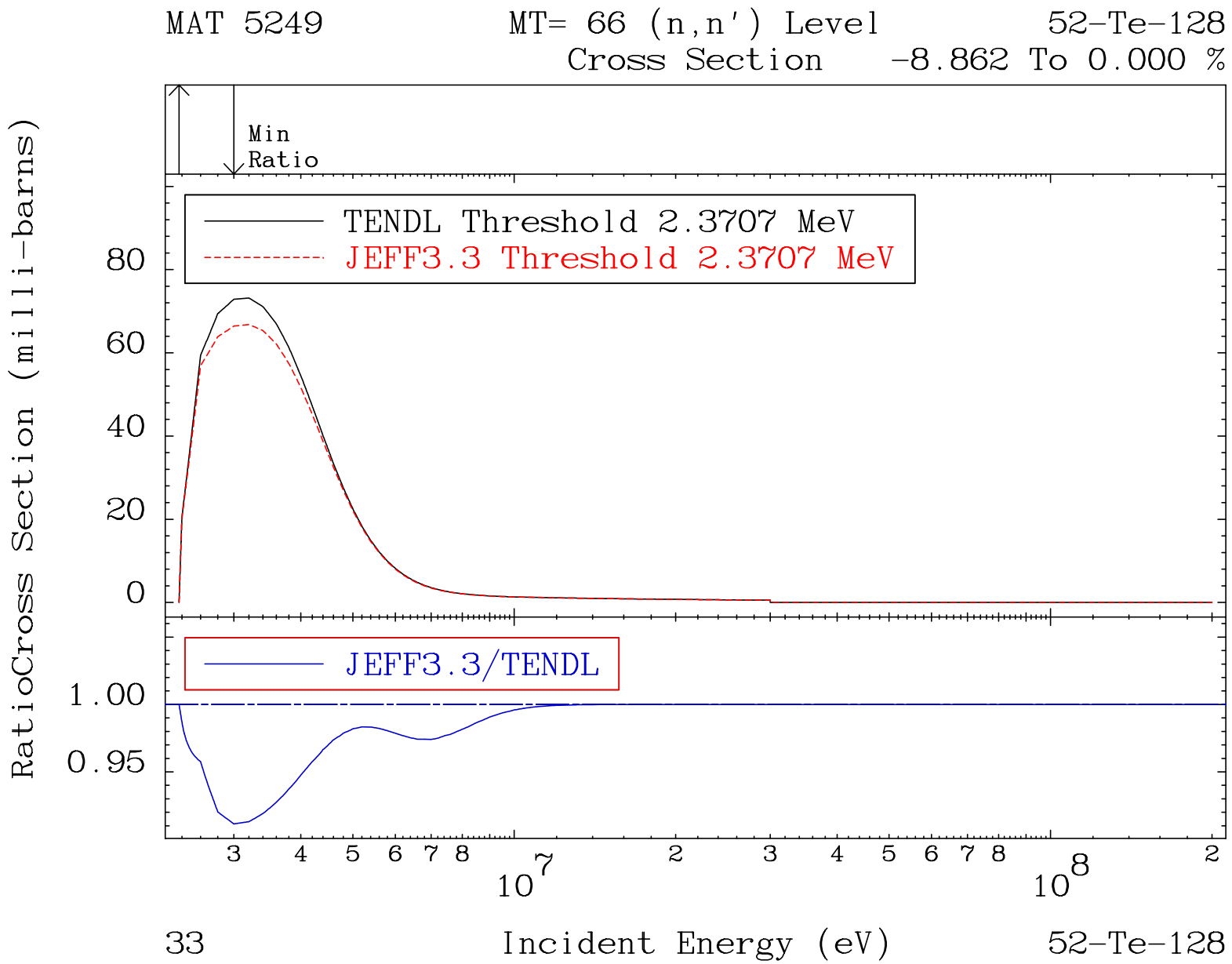

MAT 5249
MT= 61 (n,n') Level
52-Te-128
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.2108 MeV
JEFF3.3 Threshold 2.2108 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
52-Te-128

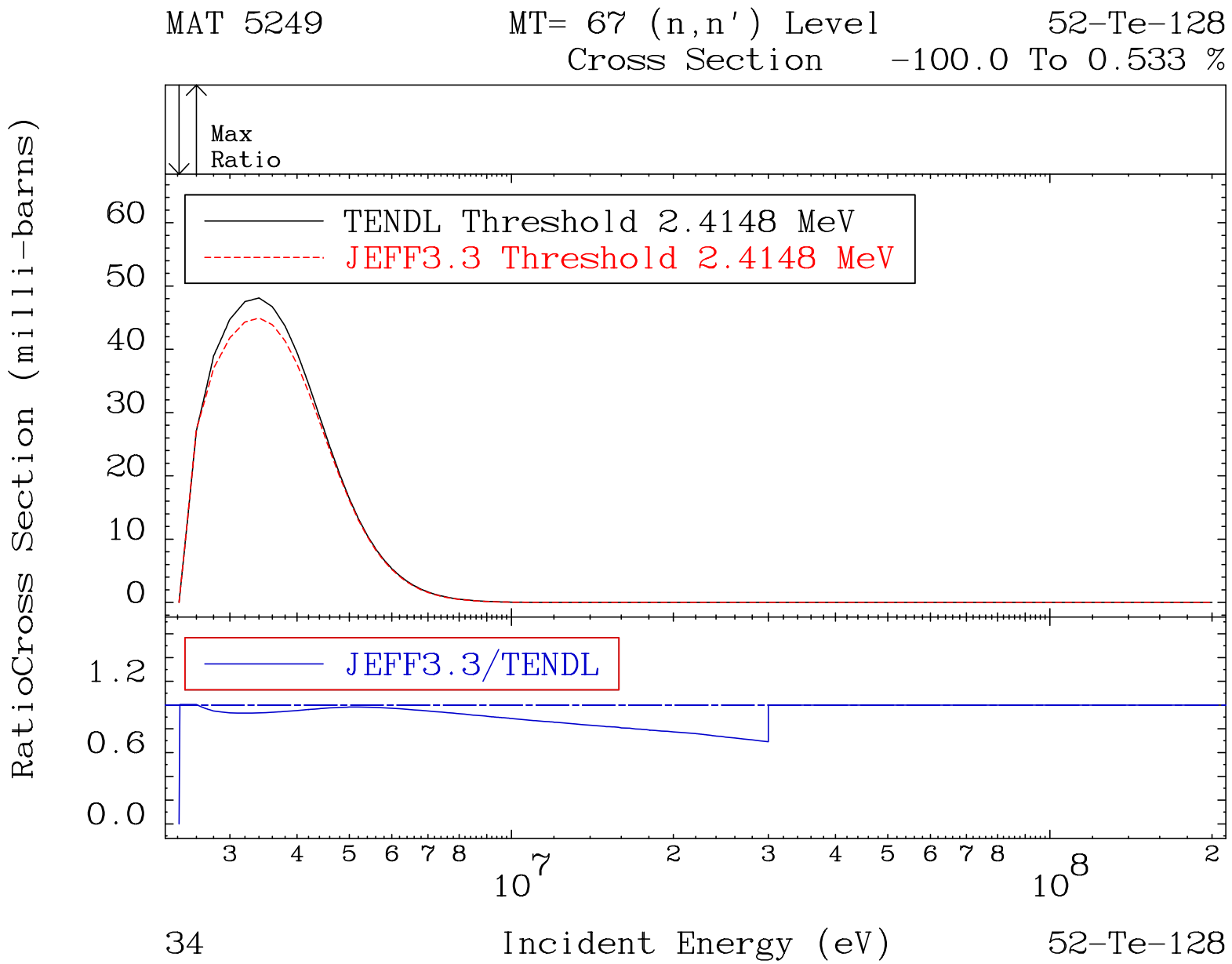

MAT 5249
MT= 62 (n,n') Level
52-Te-128
Cross Section
-8.784 To 0.000 %
Min
Ratio
TENDL Threshold 2.2354 MeV
JEFF3.3 Threshold 2.2354 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.00
0.95
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
52-Te-128

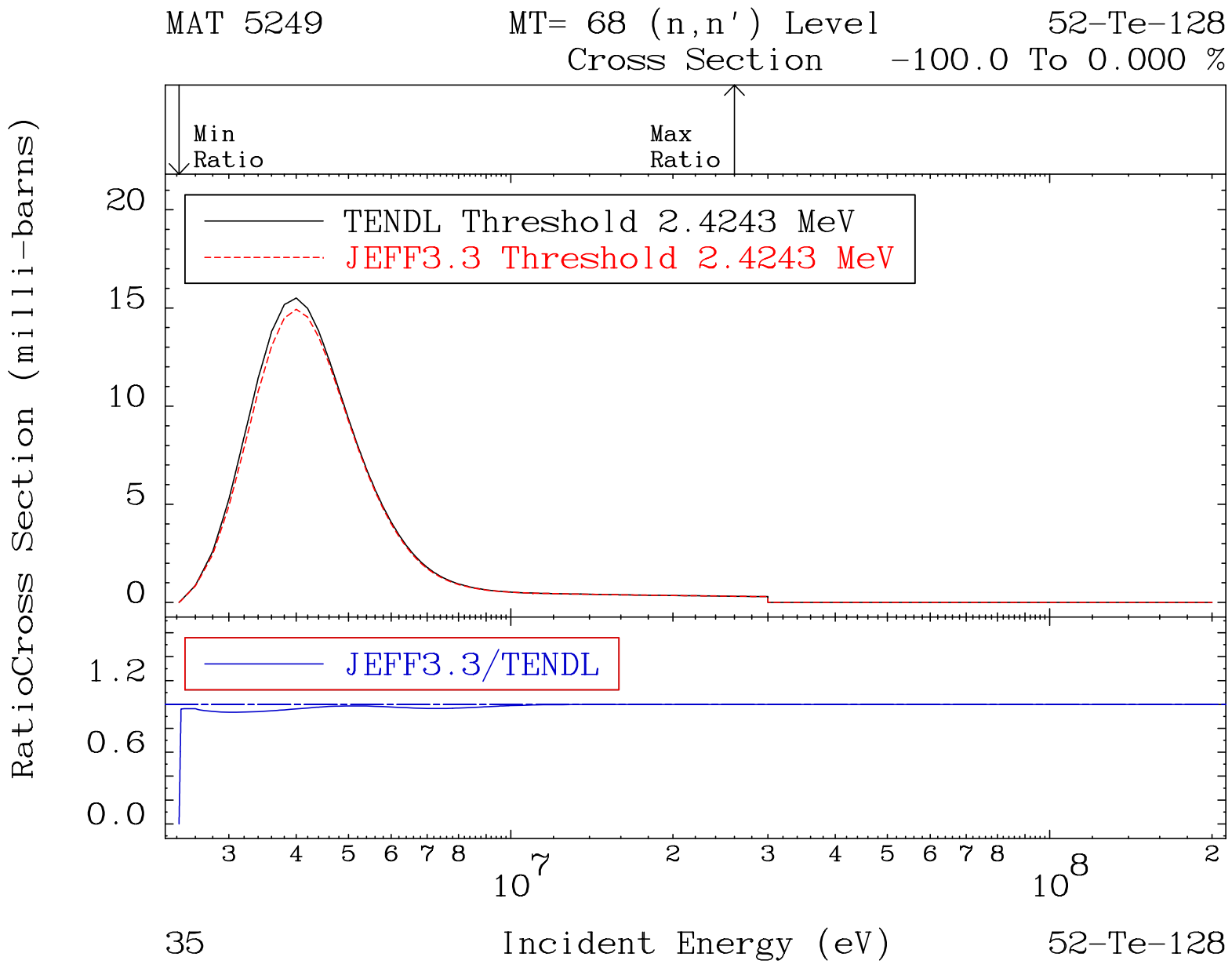

MAT 5249
MT= 63 (n,n') Level
52-Te-128
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.2882 MeV
JEFF3.3 Threshold 2.2882 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
30
52-Te-128

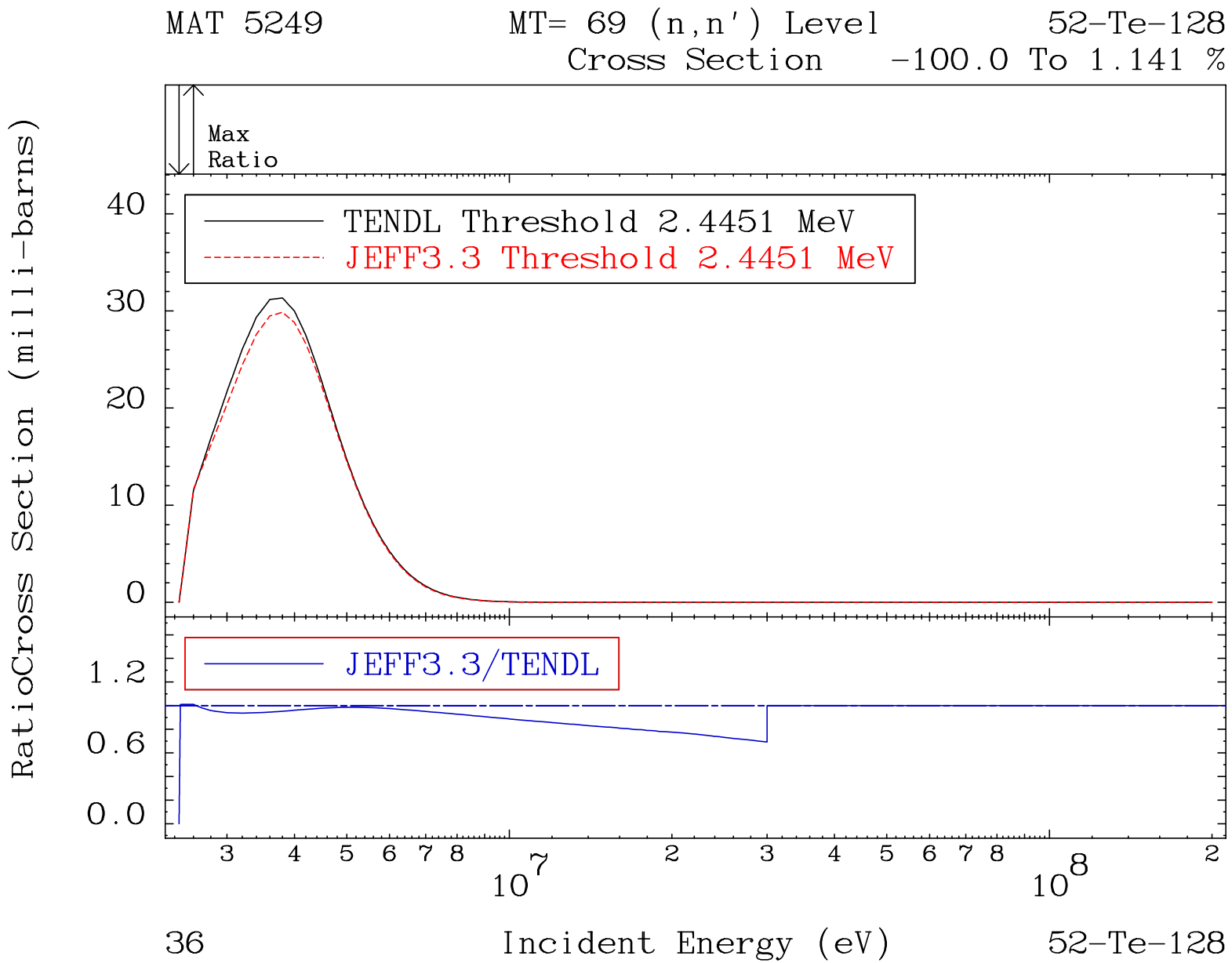

MAT 5249
MT= 64 (n,n') Level
52-Te-128
Cross Section
-100.0 To 154.3 %
Min Ratio
Max Ratio
TENDL Threshold 2.3265 MeV
JEFF3.3 Threshold 2.3265 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
52-Te-128

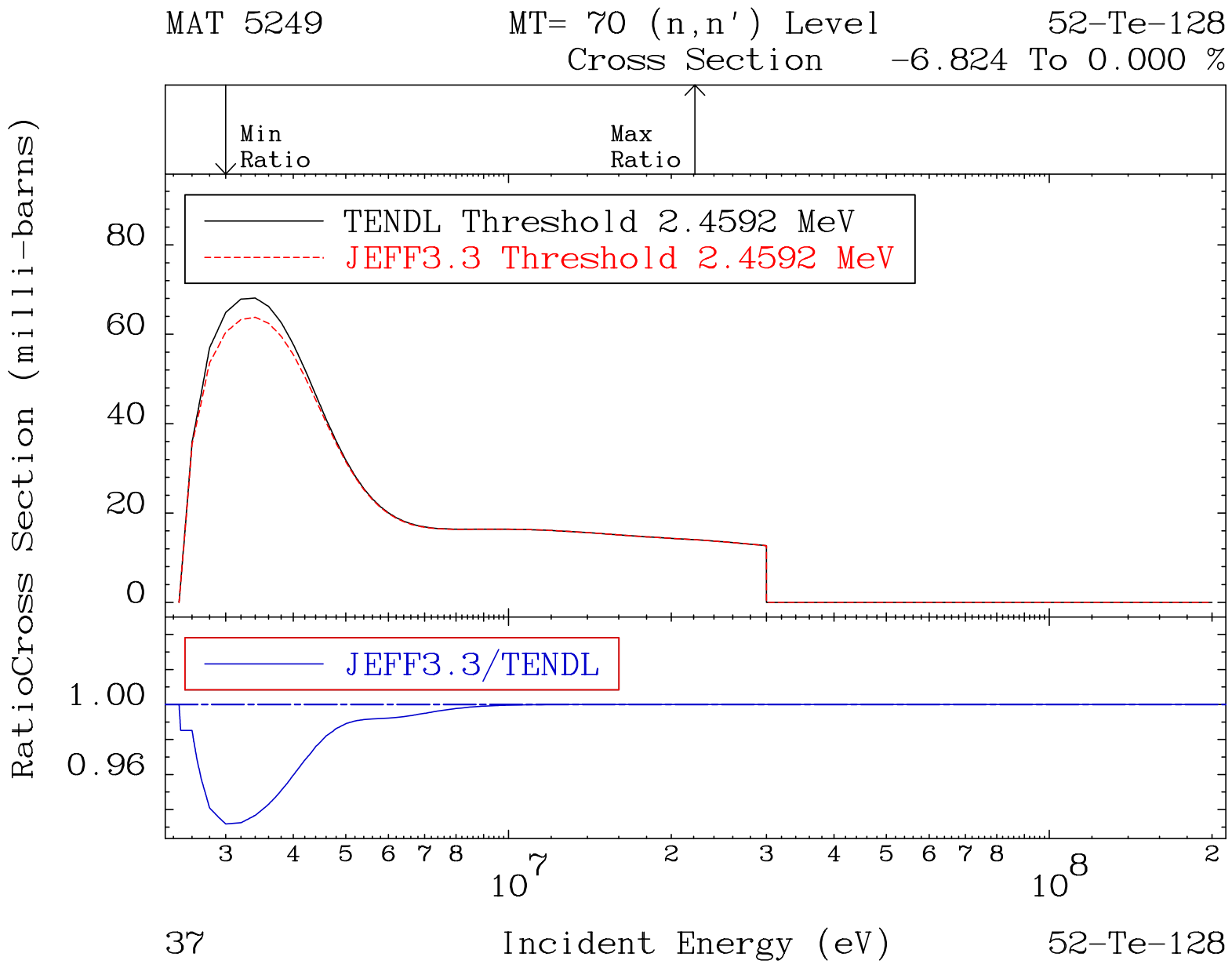

MAT 5249
MT= 65 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.3561 MeV
JEFF3.3 Threshold 2.3561 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
32
52-Te-128

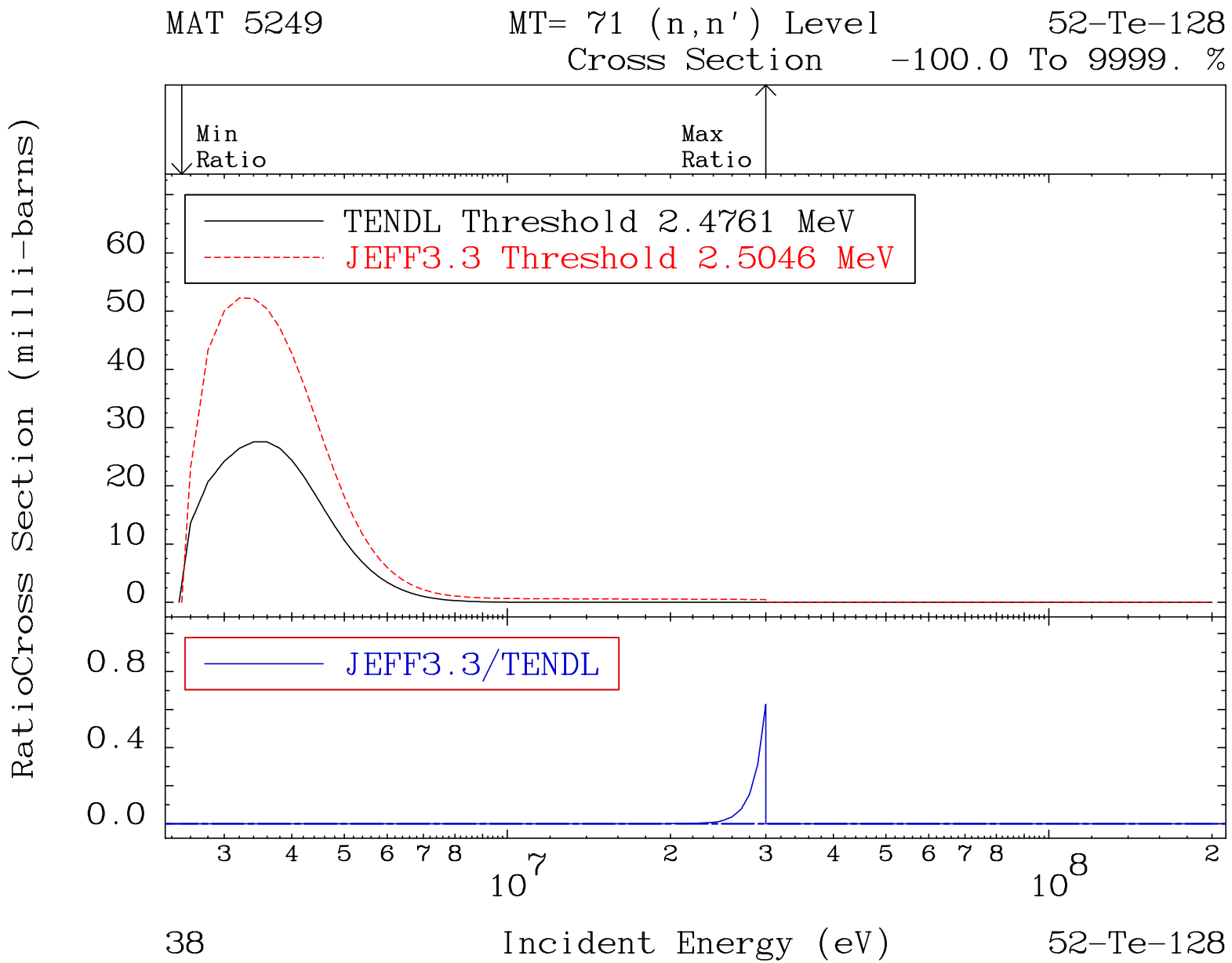

MAT 5249
MT= 66 (n,n') Level
52-Te-128
Cross Section
-8.862 To 0.000 %
Min
Ratio
TENDL Threshold 2.3707 MeV
JEFF3.3 Threshold 2.3707 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.00
0.95
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
52-Te-128

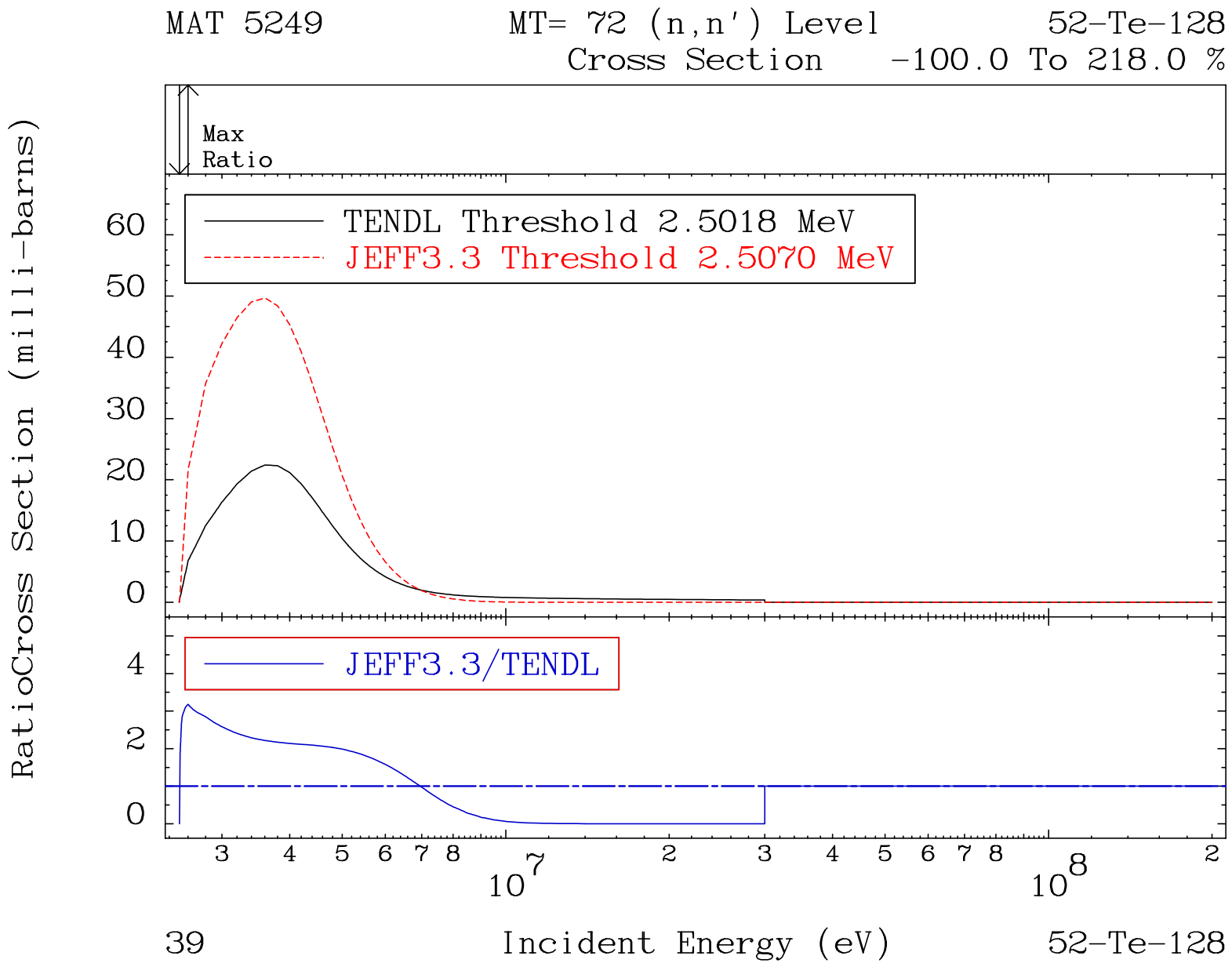

MAT 5249
MT= 67 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.533 %
Max
Ratio
TENDL Threshold 2.4148 MeV
JEFF3.3 Threshold 2.4148 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
52-Te-128

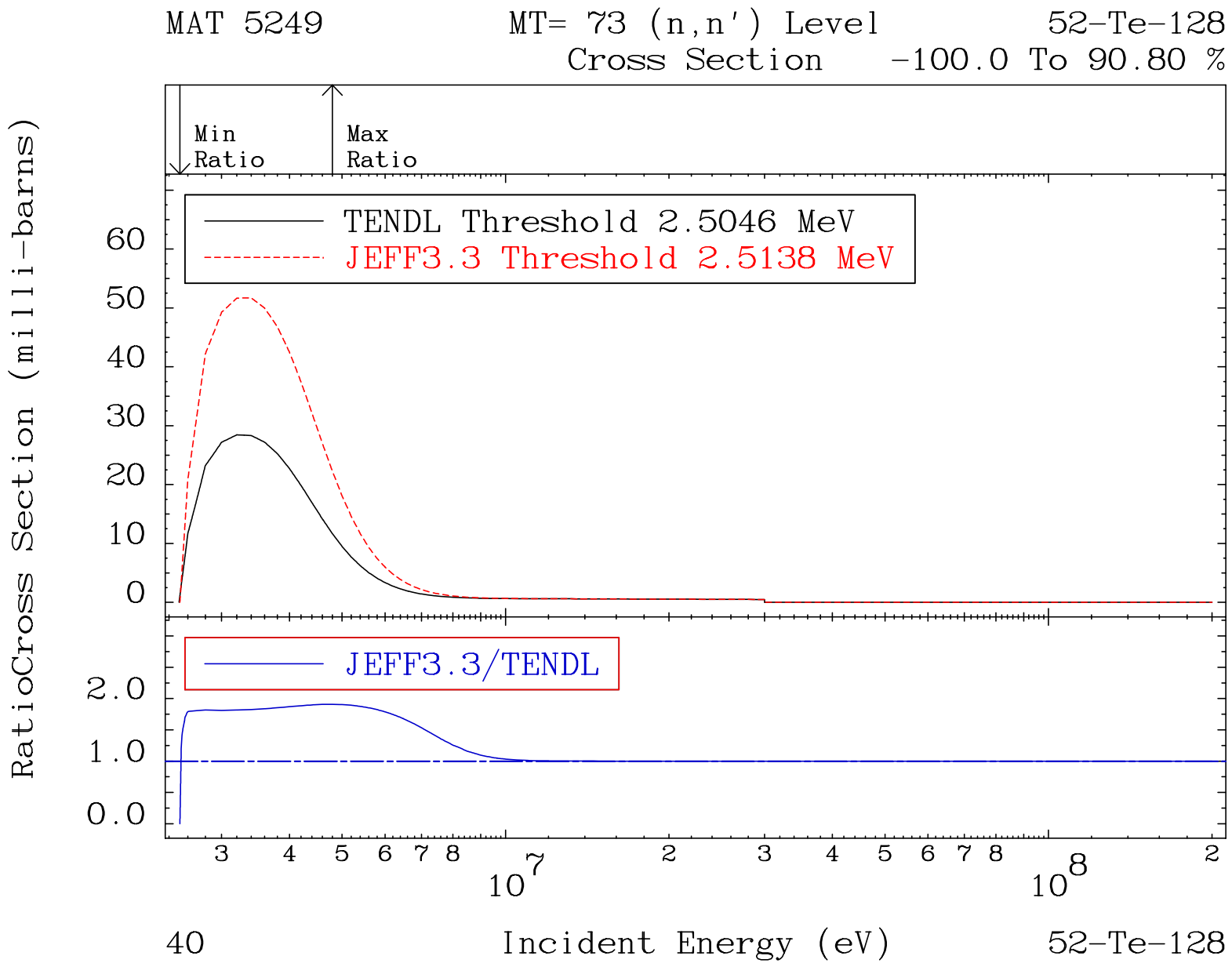

MAT 5249
MT= 68 (n,n') Level
52-Te-128
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.4243 MeV
JEFF3.3 Threshold 2.4243 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
52-Te-128

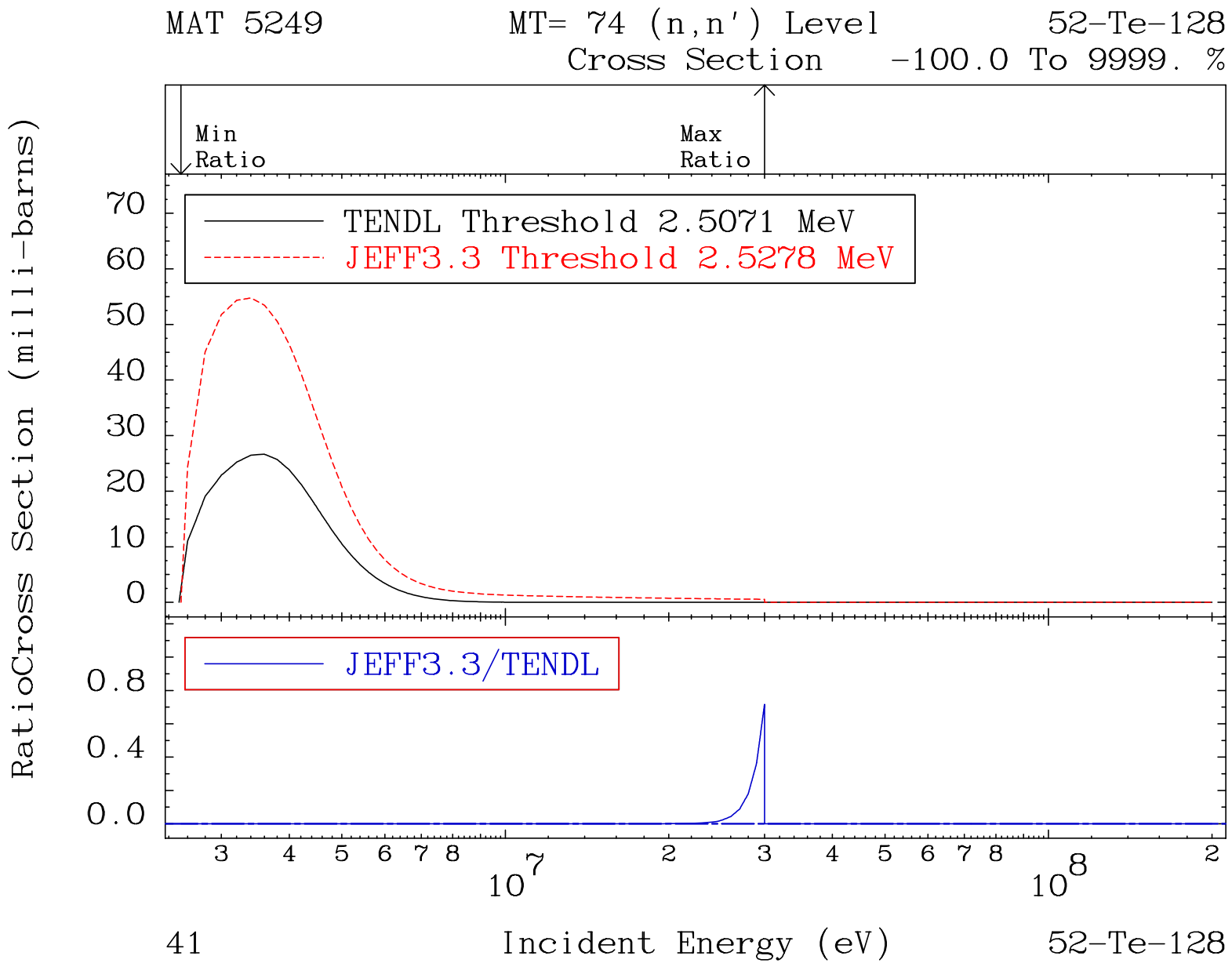

MAT 5249
MT= 69 (n,n') Level
52-Te-128
Cross Section
-100.0 To 1.141 %
Max
Ratio
TENDL Threshold 2.4451 MeV
JEFF3.3 Threshold 2.4451 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
52-Te-128

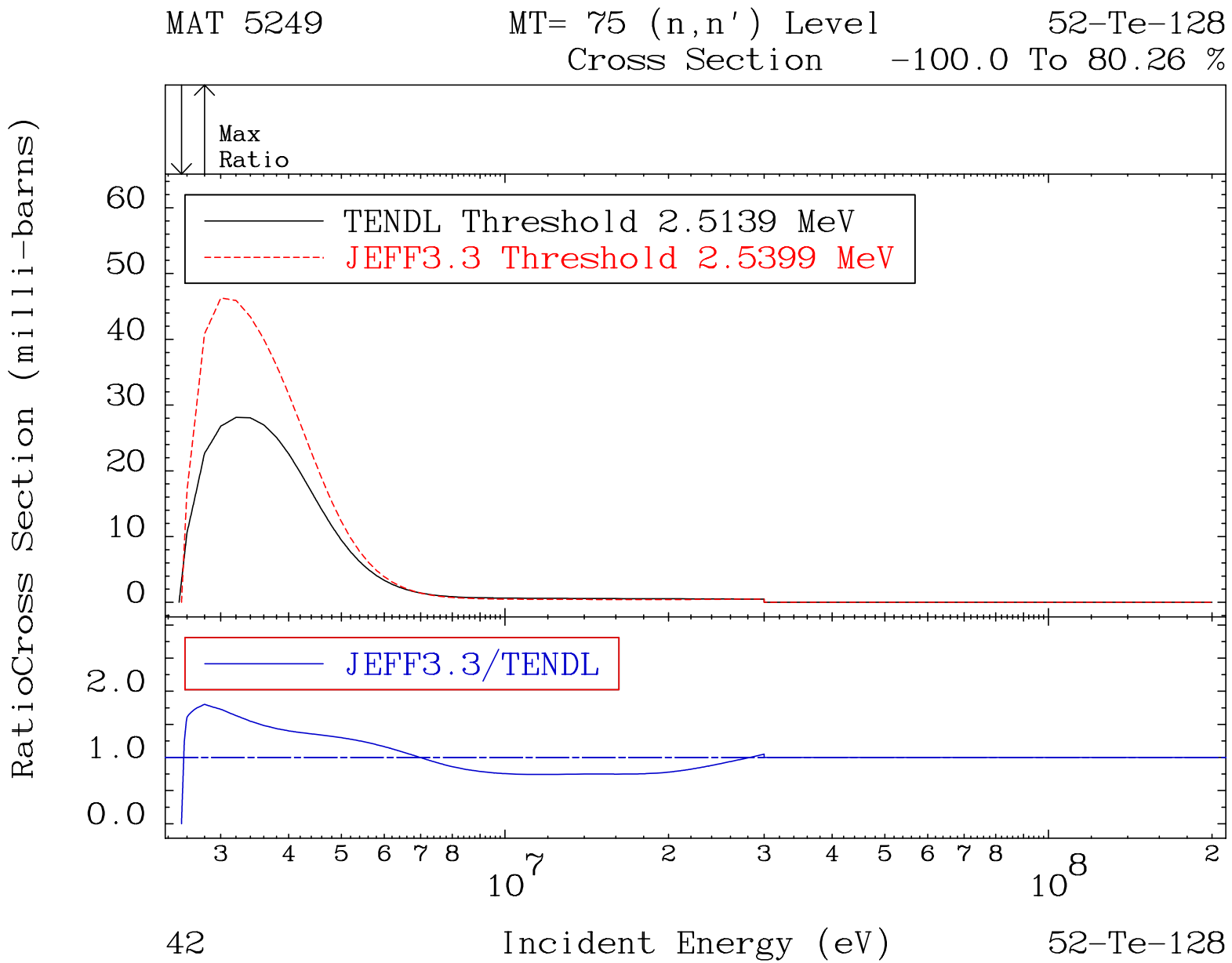

MAT 5249
MT= 70 (n,n') Level
52-Te-128
Cross Section
-6.824 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.4592 MeV
JEFF3.3 Threshold 2.4592 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.00
0.96
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
52-Te-128

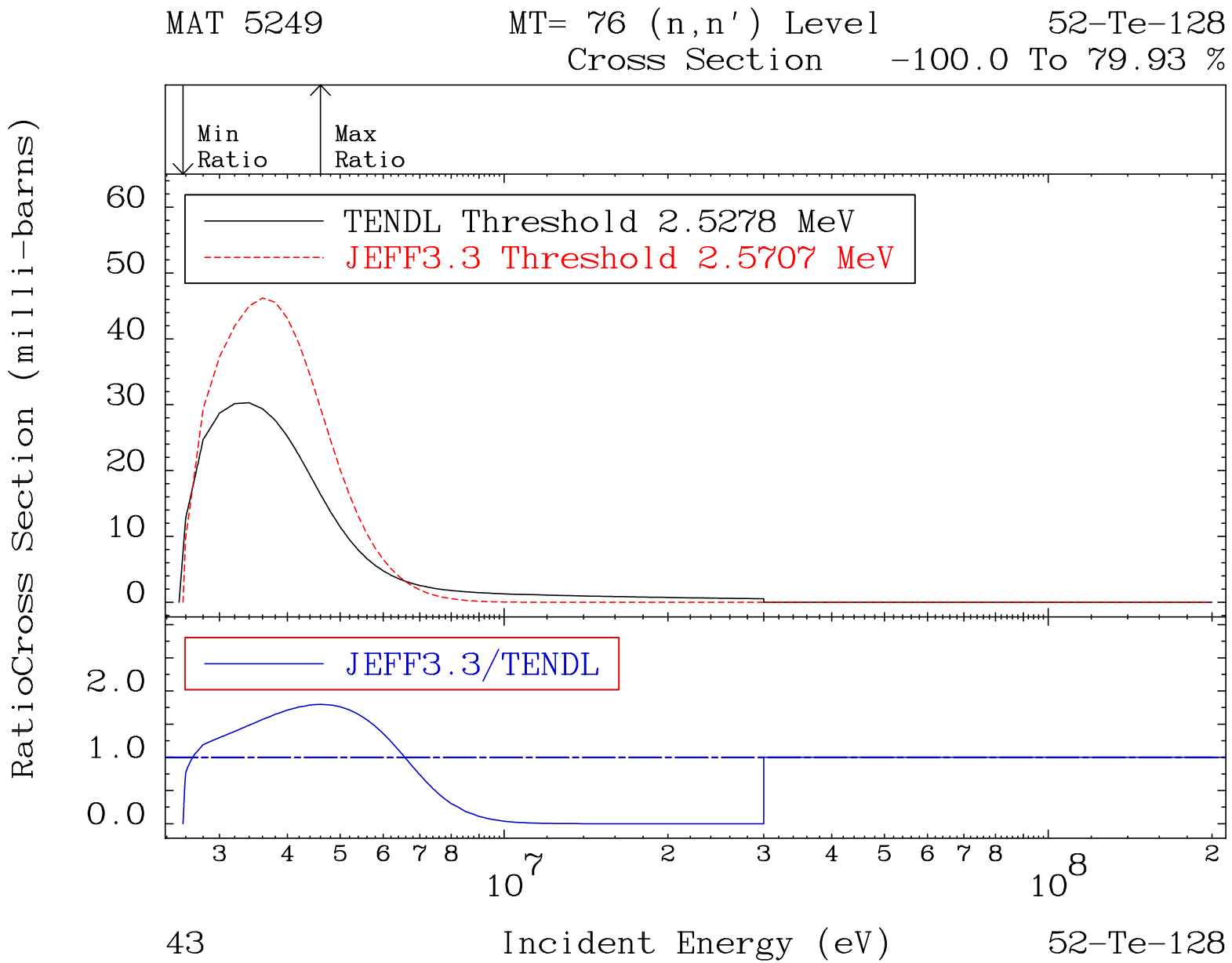

MAT 5249
MT= 71 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.4761 MeV
JEFF3.3 Threshold 2.5046 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
52-Te-128

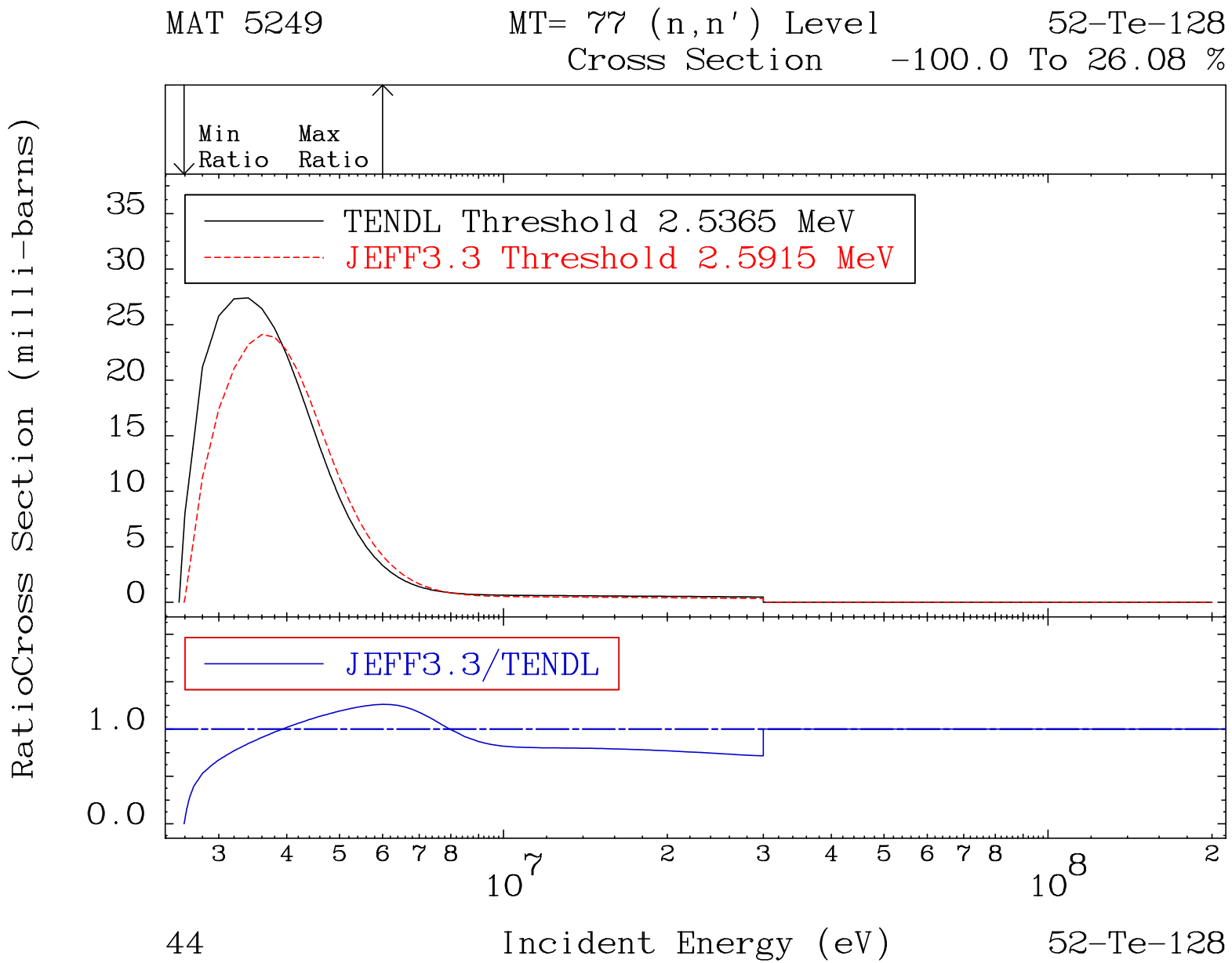

MAT 5249
MT= 72 (n,n') Level
52-Te-128
Cross Section
-100.0 To 218.0 %
Max
Ratio
TENDL Threshold 2.5018 MeV
JEFF3.3 Threshold 2.5070 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
4
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
52-Te-128

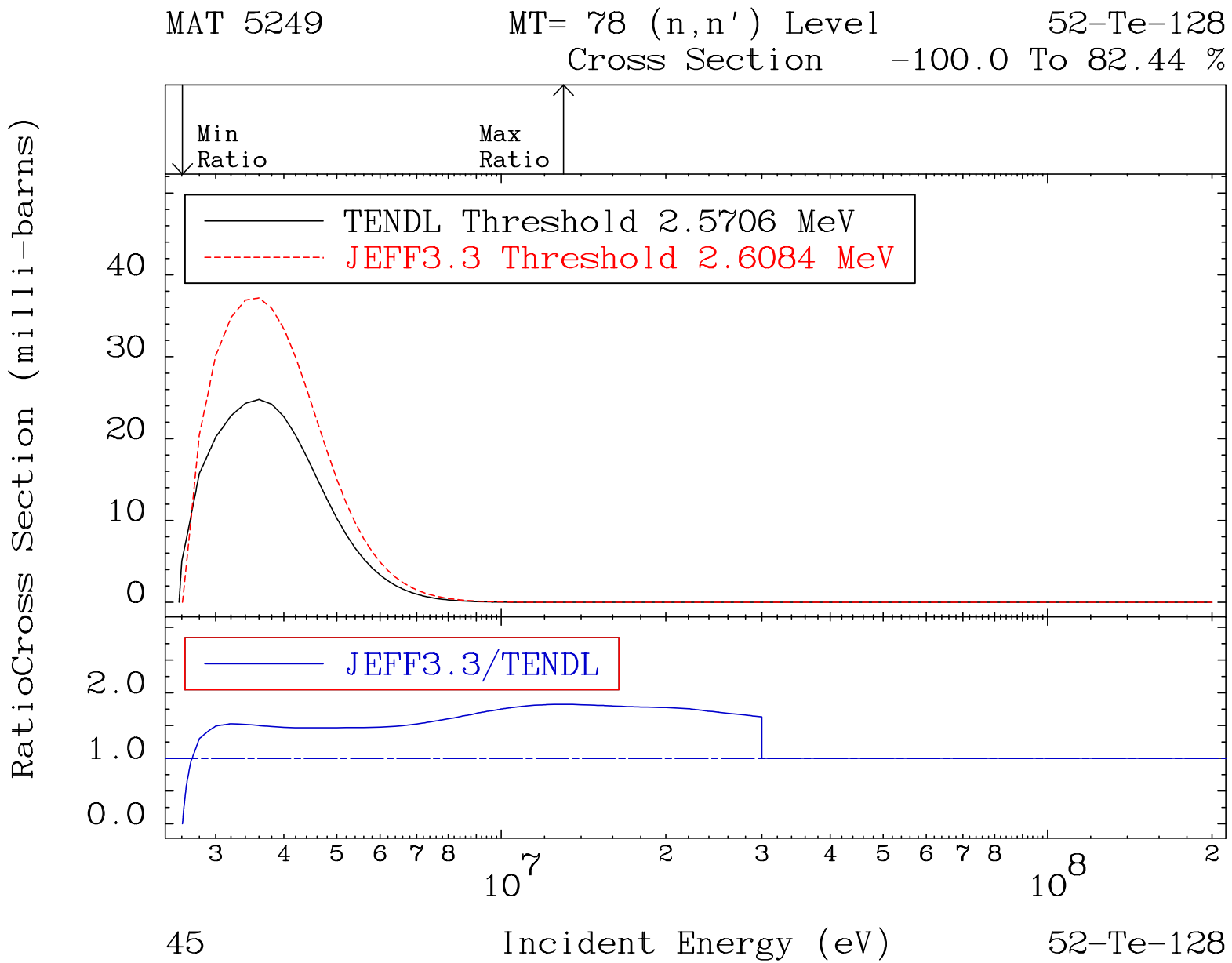

MAT 5249
MT= 73 (n,n') Level
52-Te-128
Cross Section
-100.0 To 90.80 %
Min Ratio
Max Ratio
TENDL Threshold 2.5046 MeV
JEFF3.3 Threshold 2.5138 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
52-Te-128

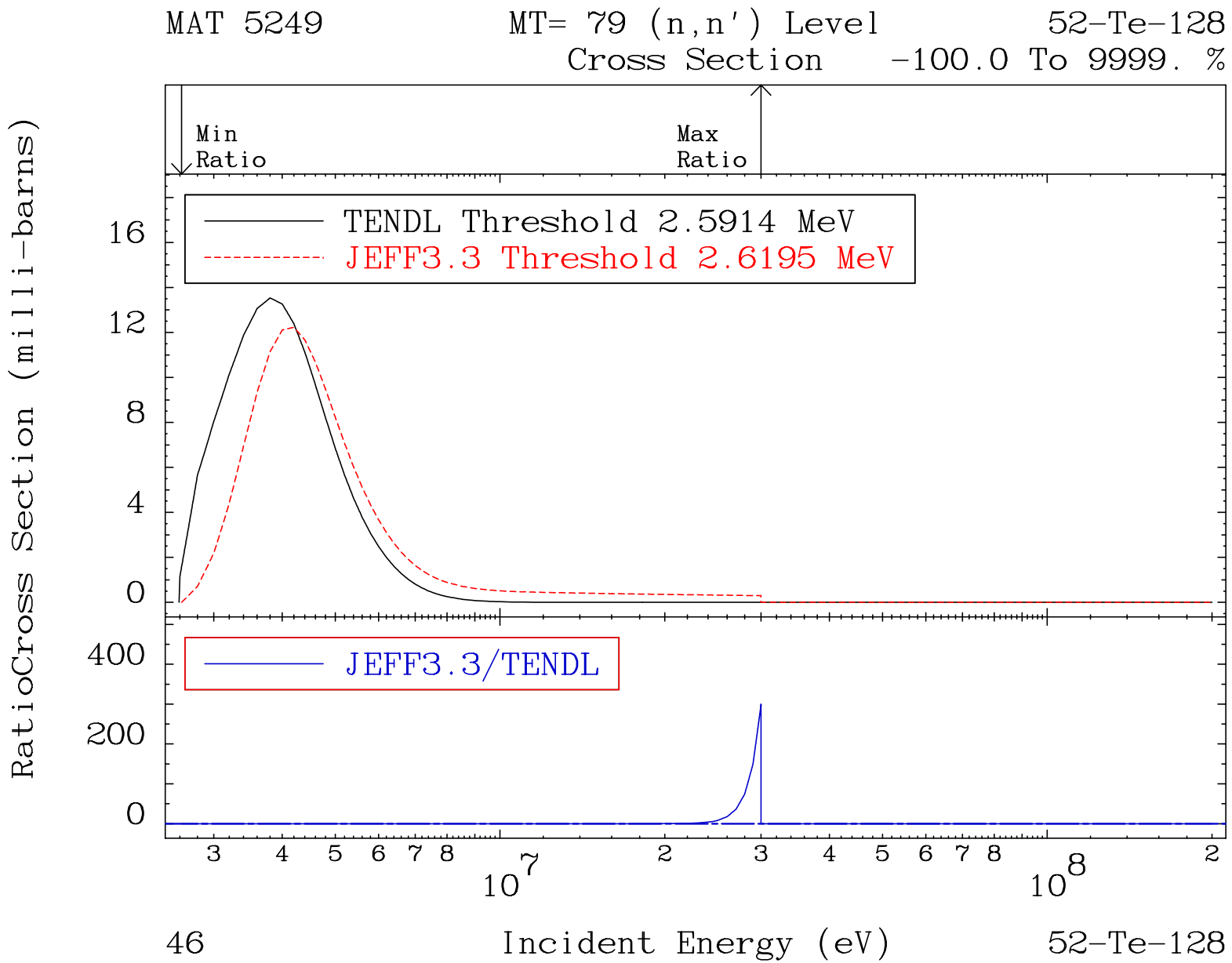

MAT 5249
MT= 74 (n,n') Level
52-Te-128
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5071 MeV
JEFF3.3 Threshold 2.5278 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
41
Incident Energy (eV)
52-Te-128

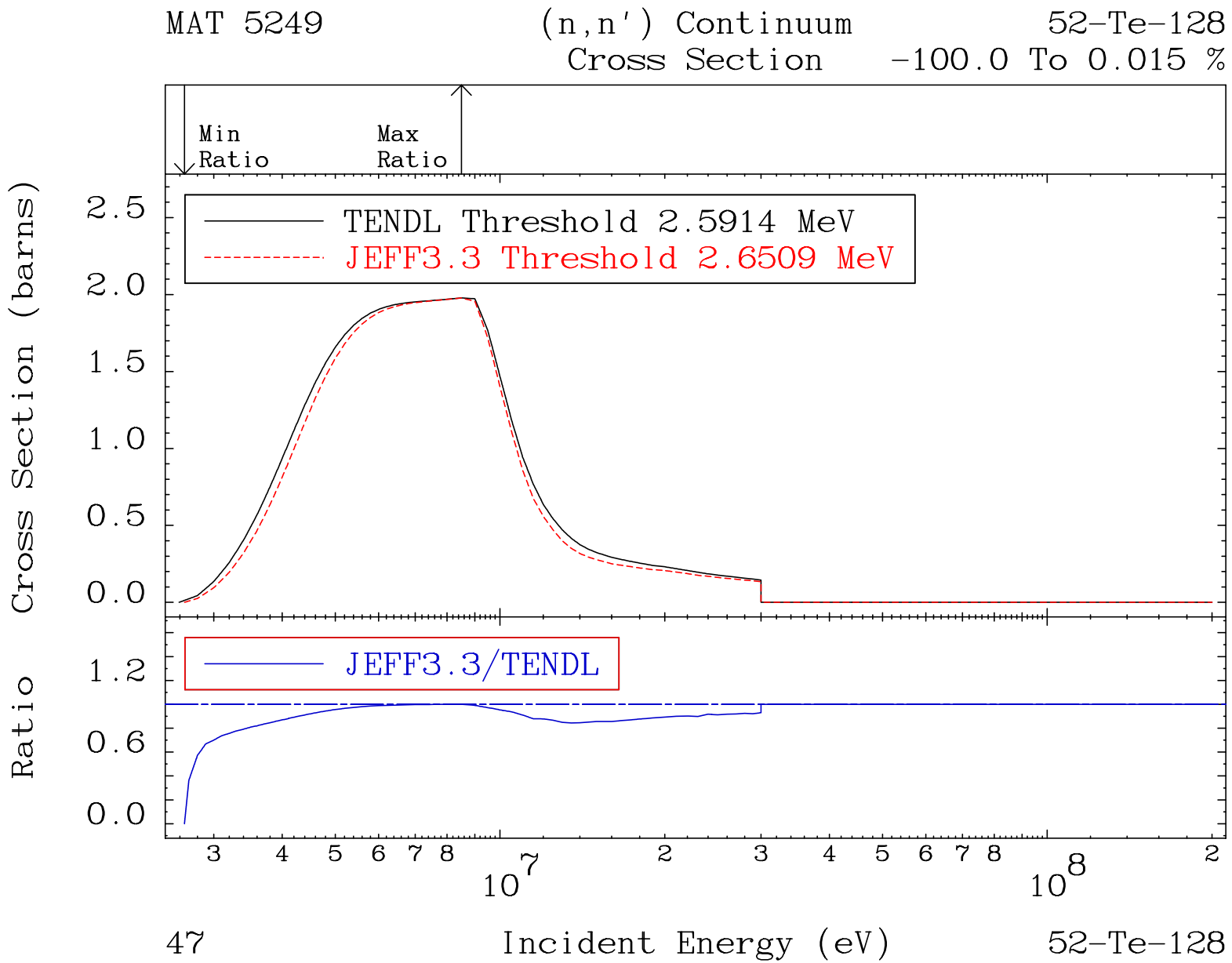

MAT 5249
MT= 75 (n,n') Level
52-Te-128
Cross Section
-100.0 To 80.26 %
Max
Ratio
TENDL Threshold 2.5139 MeV
JEFF3.3 Threshold 2.5399 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
52-Te-128

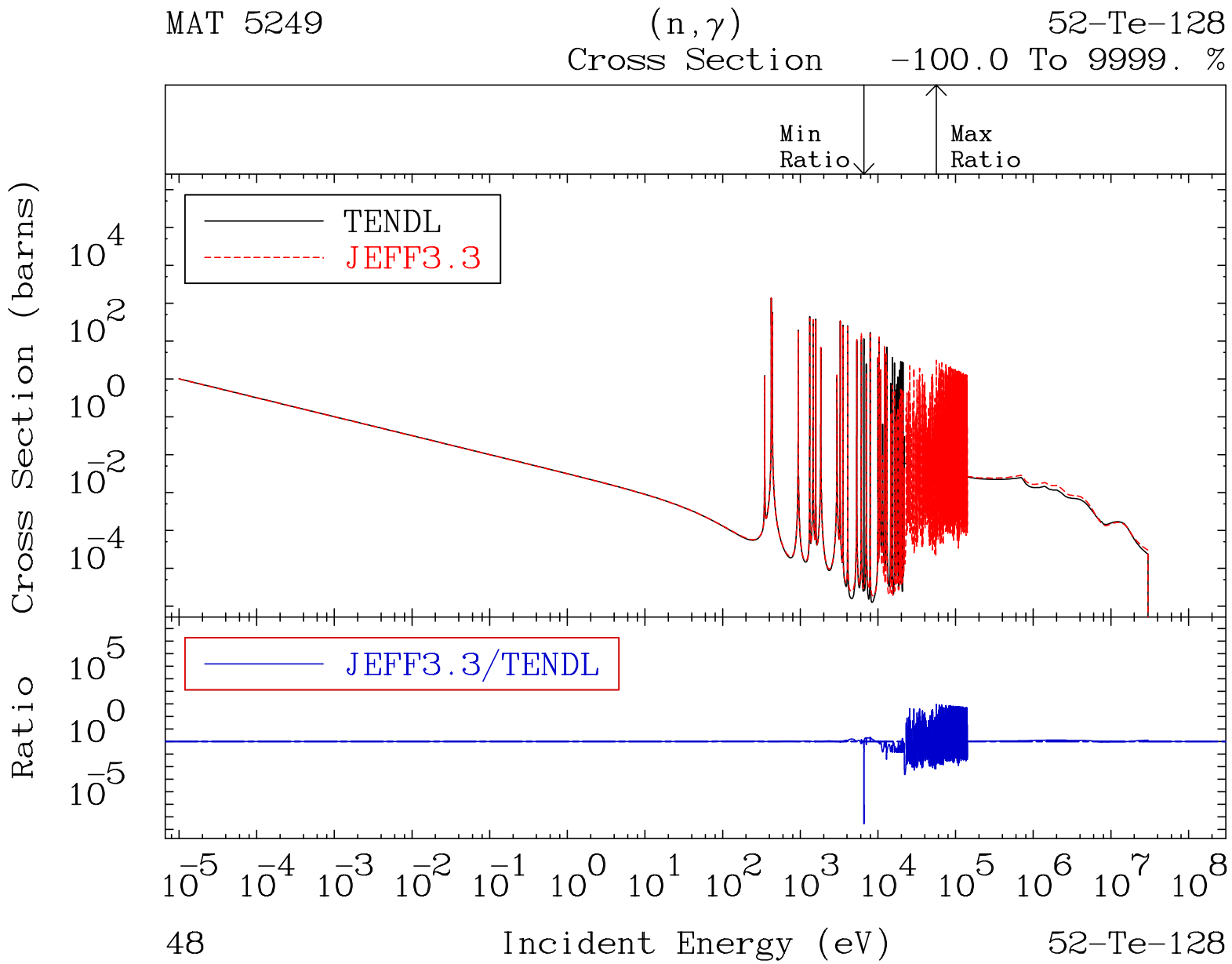

MAT 5249
MT= 76 (n,n') Level
52-Te-128
Cross Section
-100.0 To 79.93 %
Min Ratio
Max Ratio
TENDL Threshold 2.5278 MeV
JEFF3.3 Threshold 2.5707 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
52-Te-128

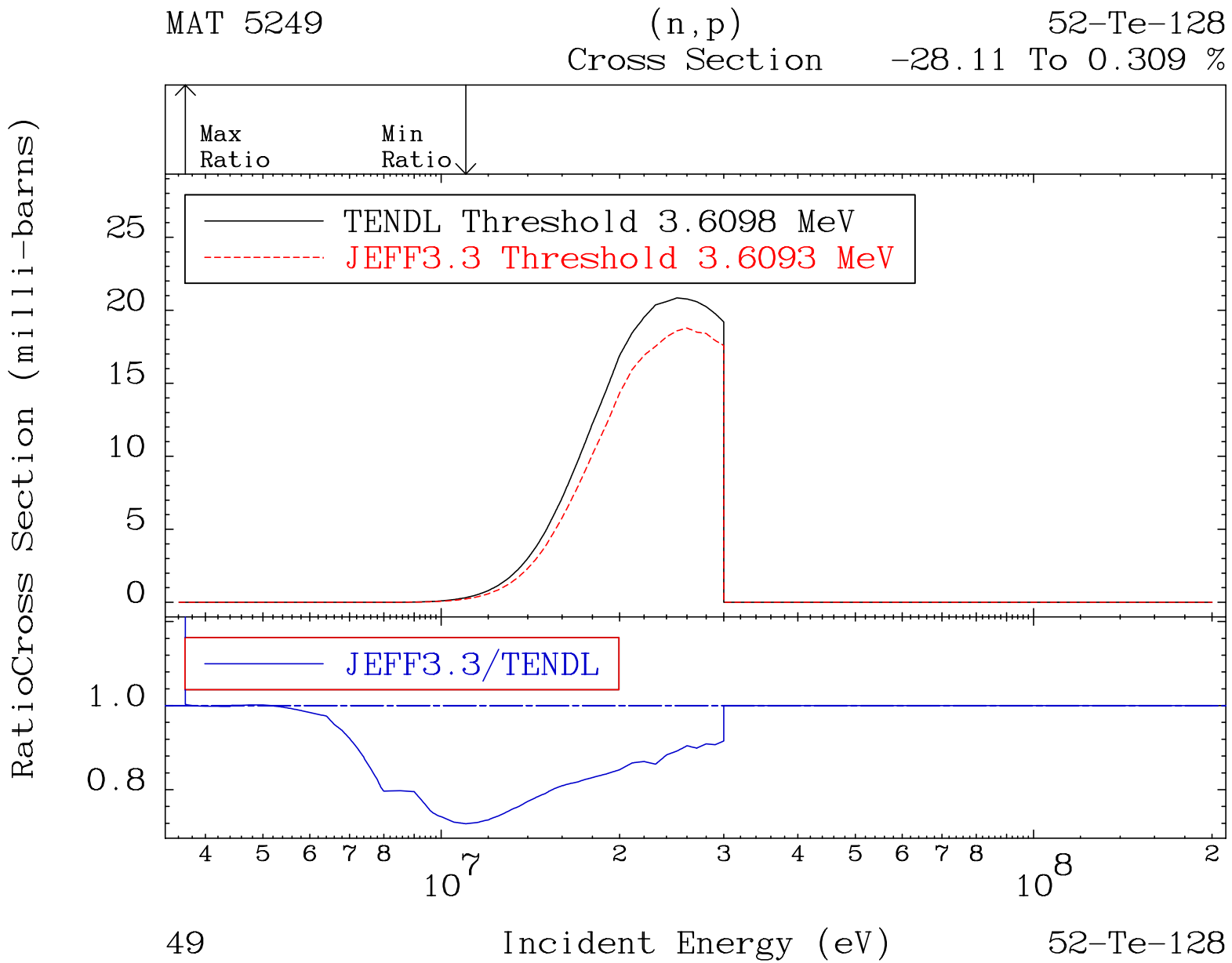

MAT 5249
MT= 77 (n,n') Level
52-Te-128
Cross Section
-100.0 To 26.08 %
Min Ratio
Max Ratio
TENDL Threshold 2.5365 MeV
JEFF3.3 Threshold 2.5915 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
44
Incident Energy (eV)
52-Te-128

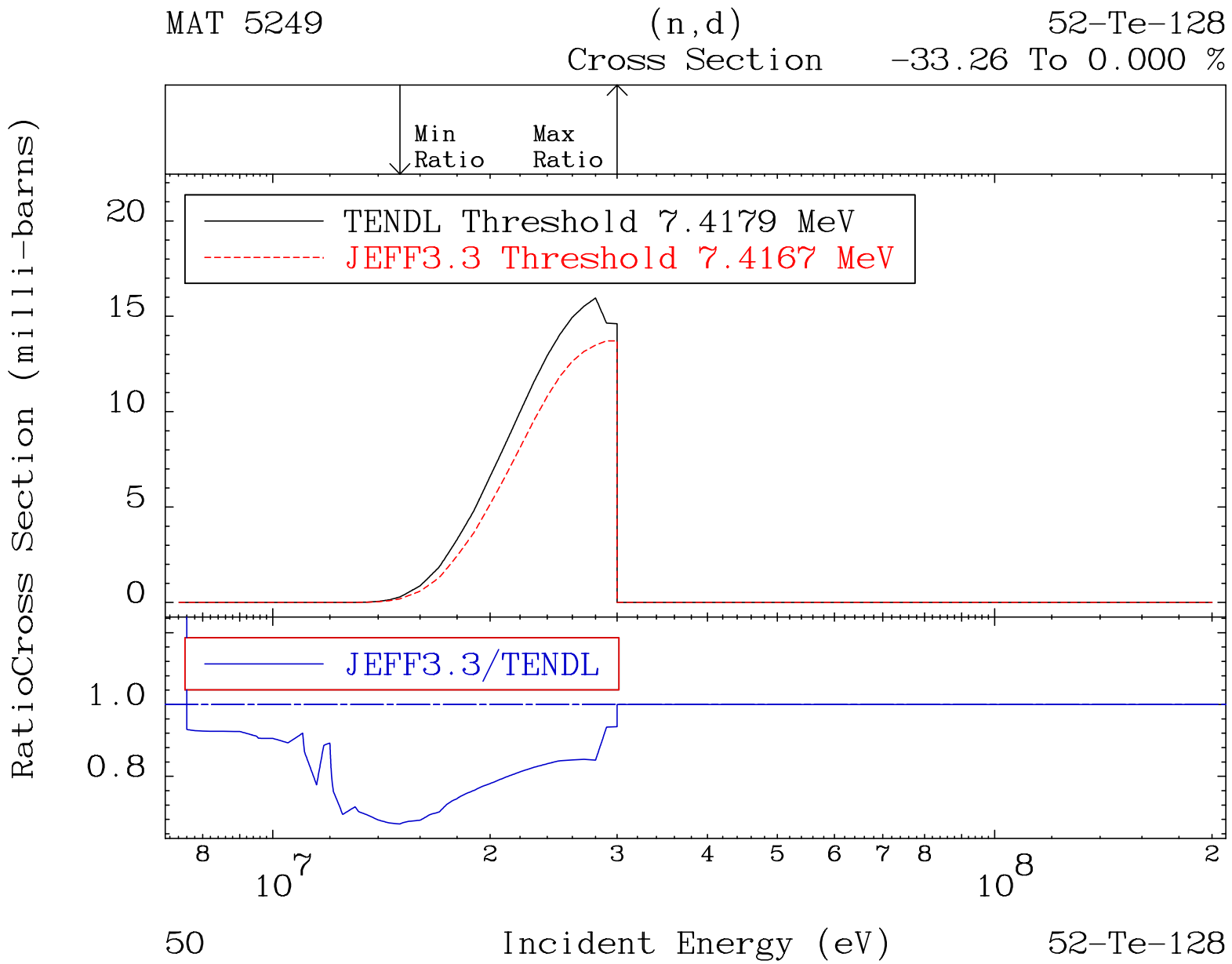

MAT 5249
MT= 78 (n,n') Level
52-Te-128
Cross Section
-100.0 To 82.44 %
Min Ratio
Max Ratio
TENDL Threshold 2.5706 MeV
JEFF3.3 Threshold 2.6084 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
52-Te-128

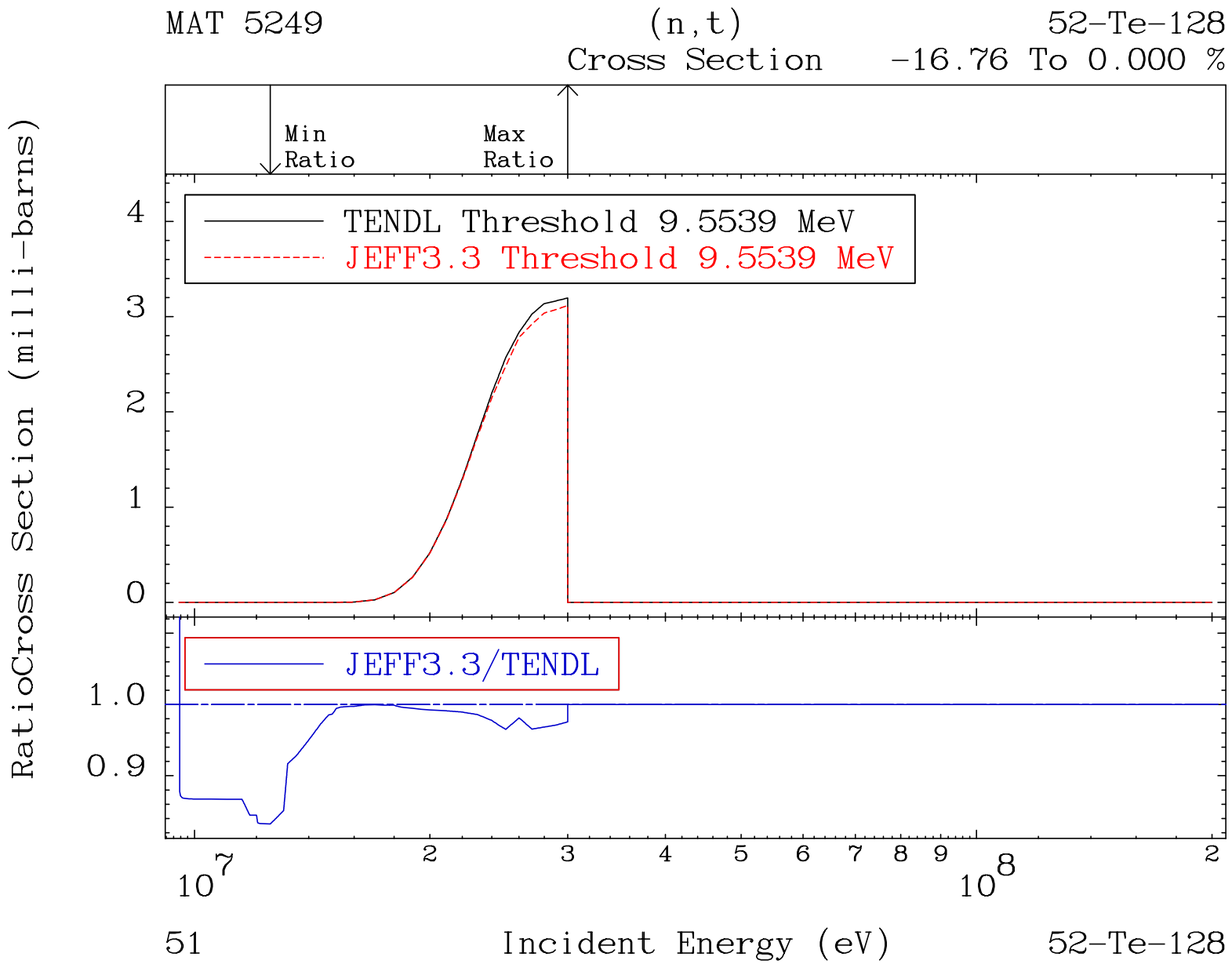

MAT 5249
MT= 79 (n,n') Level
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5914 MeV
JEFF3.3 Threshold 2.6195 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
400
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
46
Incident Energy (eV)
52-Te-128

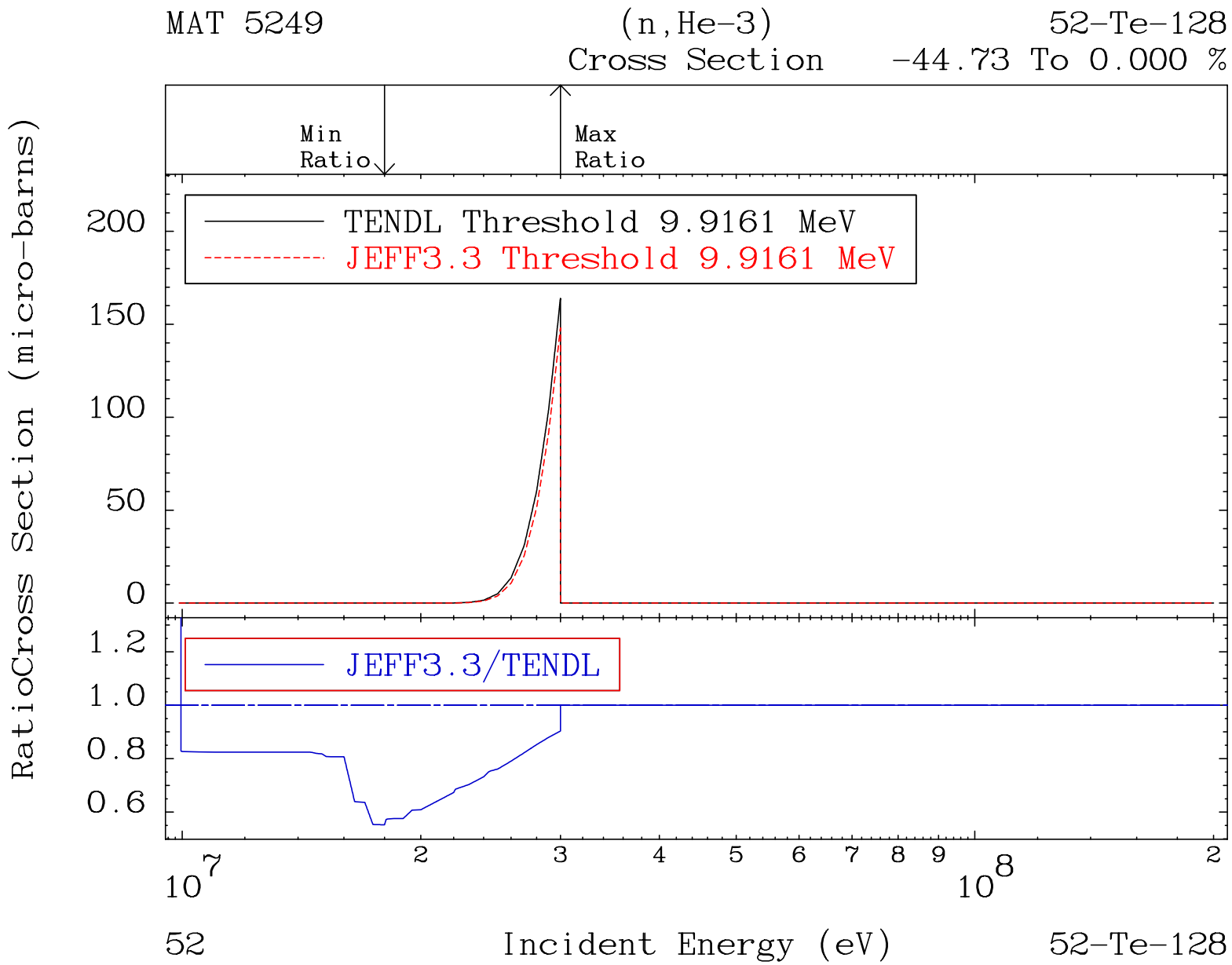

MAT 5249
(n,n') Continuum
Cross Section
52-Te-128
-100.0 To 0.015 %
Min Ratio
Max Ratio
TENDL Threshold 2.5914 MeV
JEFF3.3 Threshold 2.6509 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
52-Te-128

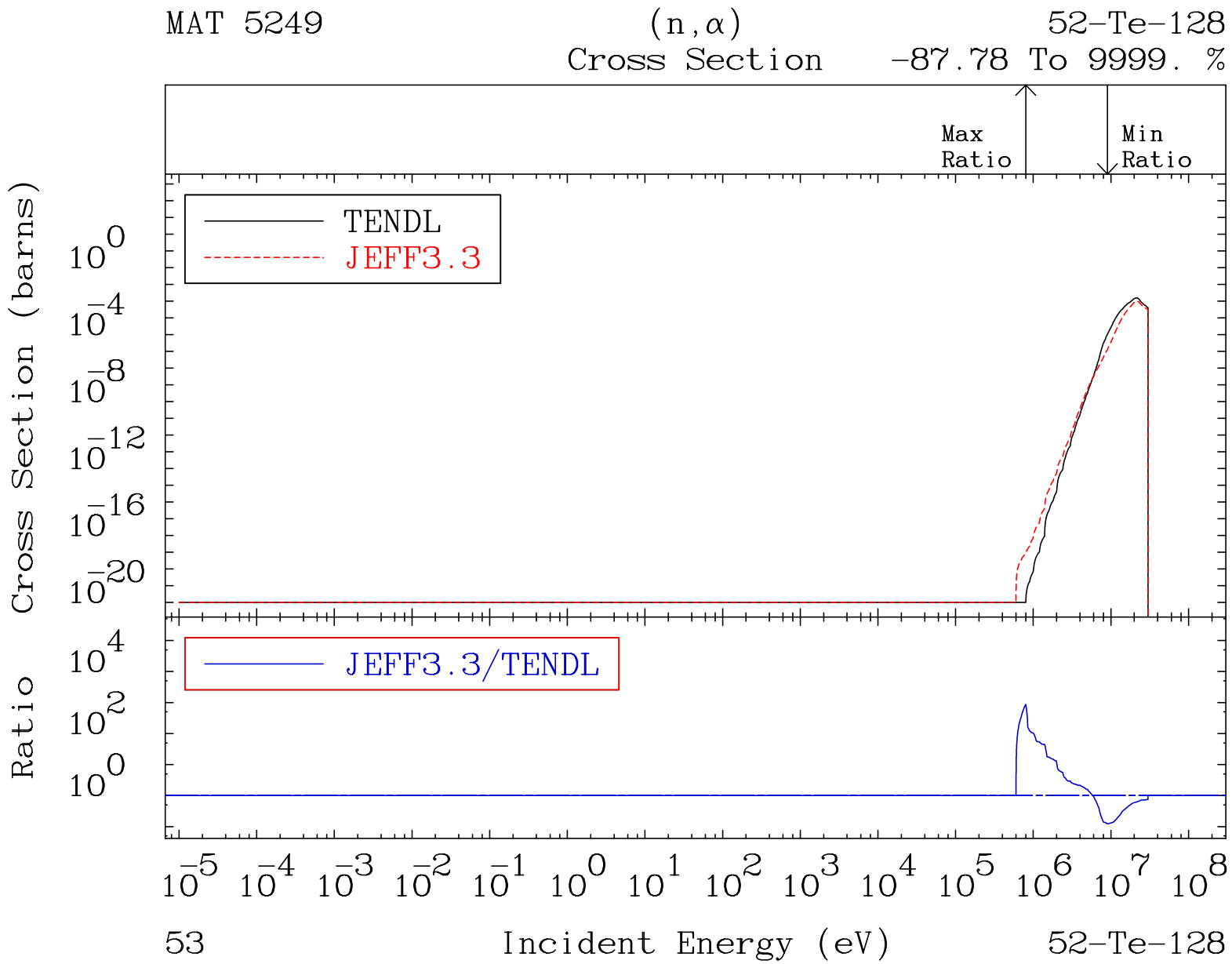

MAT 5249
(n,γ)
Cross Section
52-Te-128
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
52-Te-128

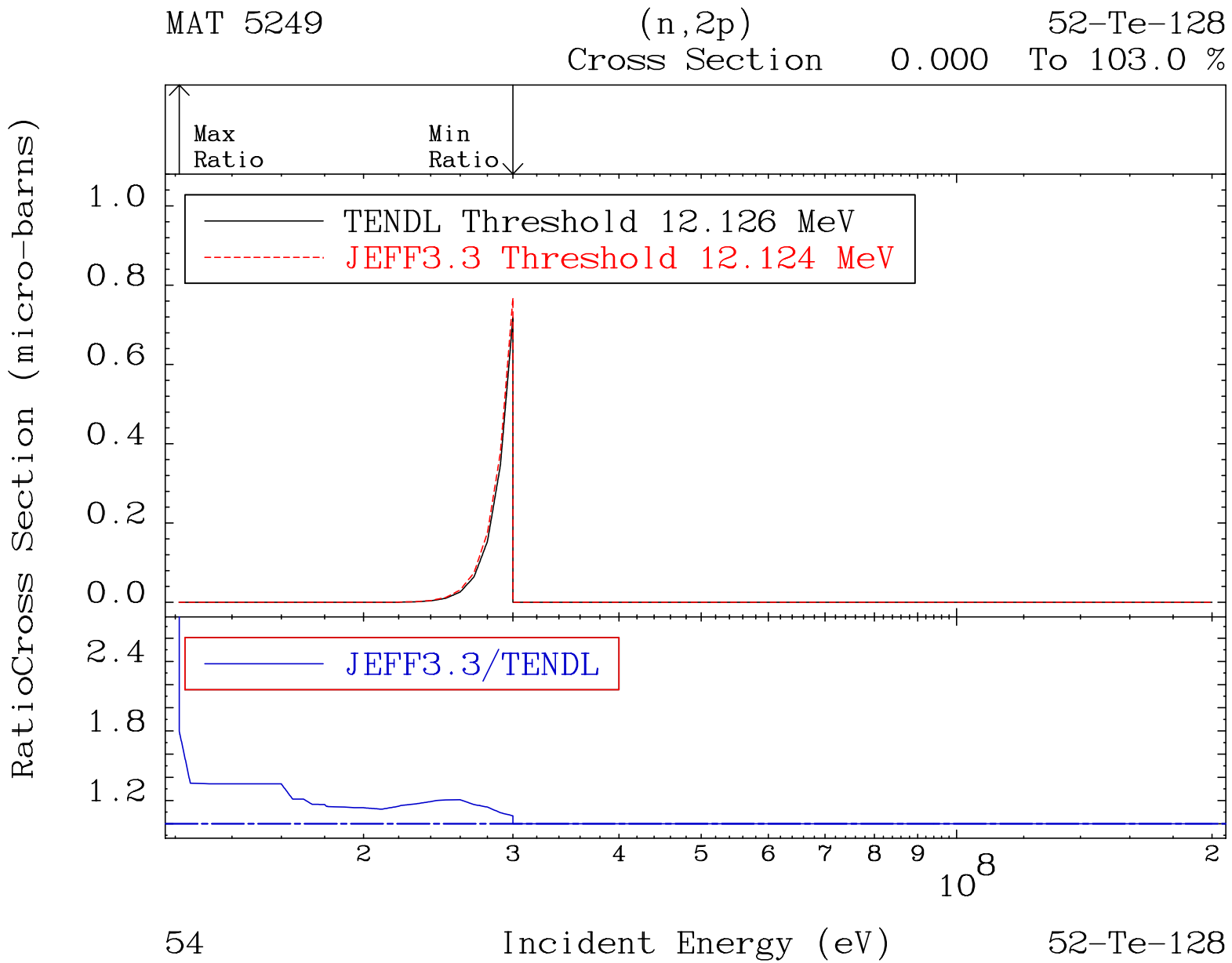

MAT 5249
(n,p)
52-Te-128
Cross Section
-28.11 To 0.309 %
Max Ratio
Min Ratio
TENDL Threshold 3.6098 MeV
JEFF3.3 Threshold 3.6093 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
1.0
0.8
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
49
Incident Energy (eV)
52-Te-128

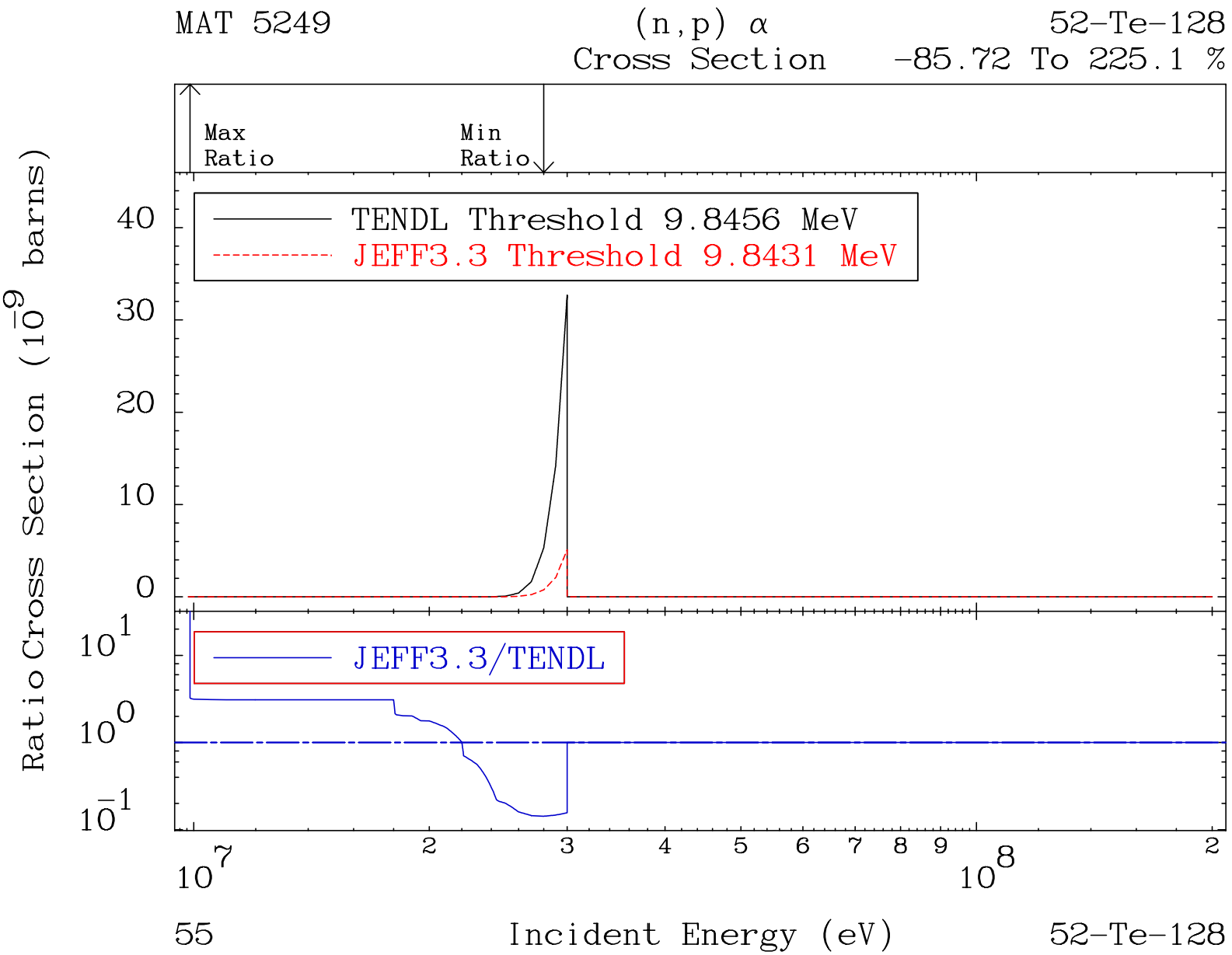

MAT 5249
(n,d)
52-Te-128
Cross Section
-33.26 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 7.4179 MeV
JEFF3.3 Threshold 7.4167 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.0
0.8
8
2
3
4
5
6
7
8
2
10^7
10^8
50
Incident Energy (eV)
52-Te-128

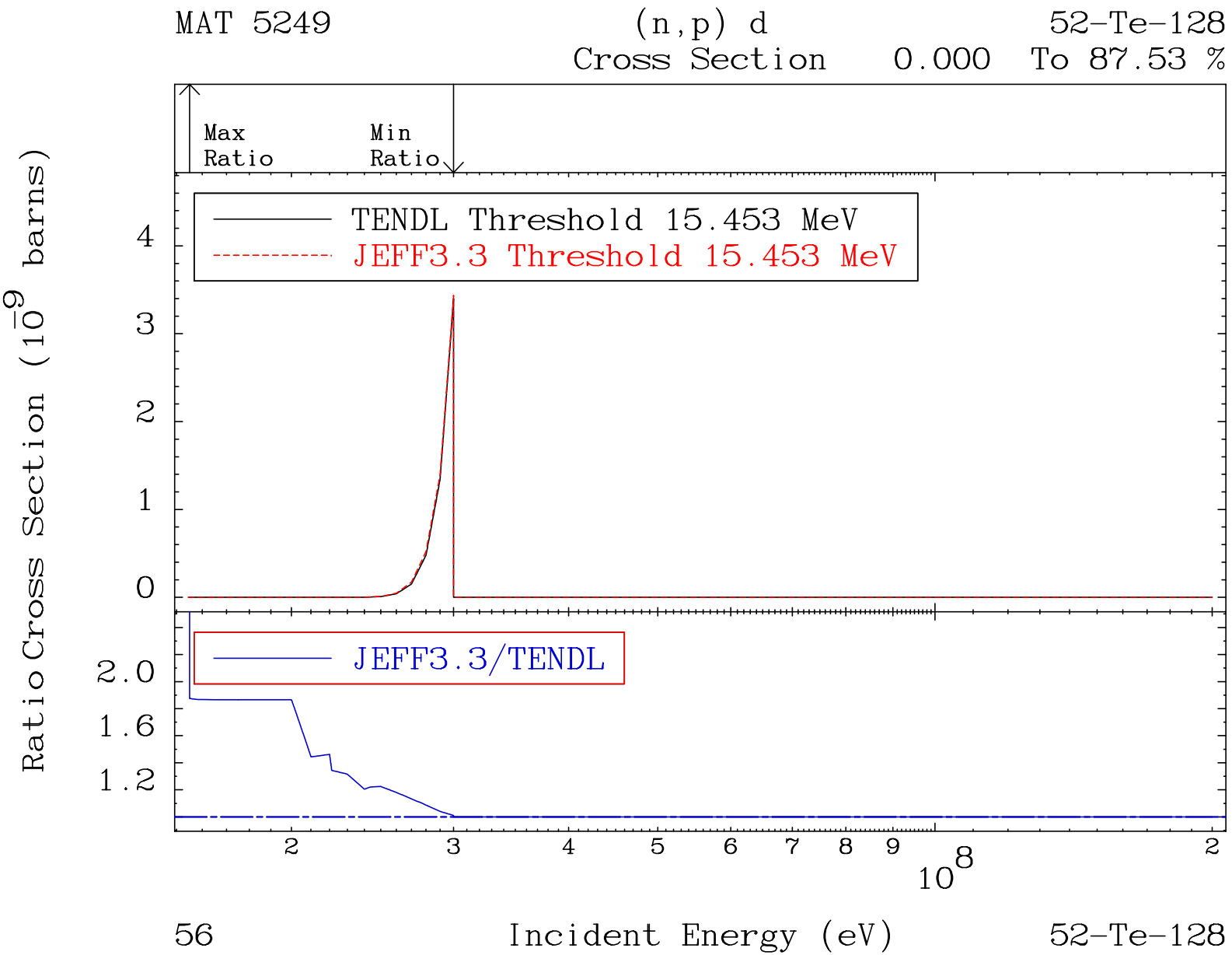

MAT 5249
(n,t)
52-Te-128
Cross Section
-16.76 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.5539 MeV
JEFF3.3 Threshold 9.5539 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
1.0
0.9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
52-Te-128

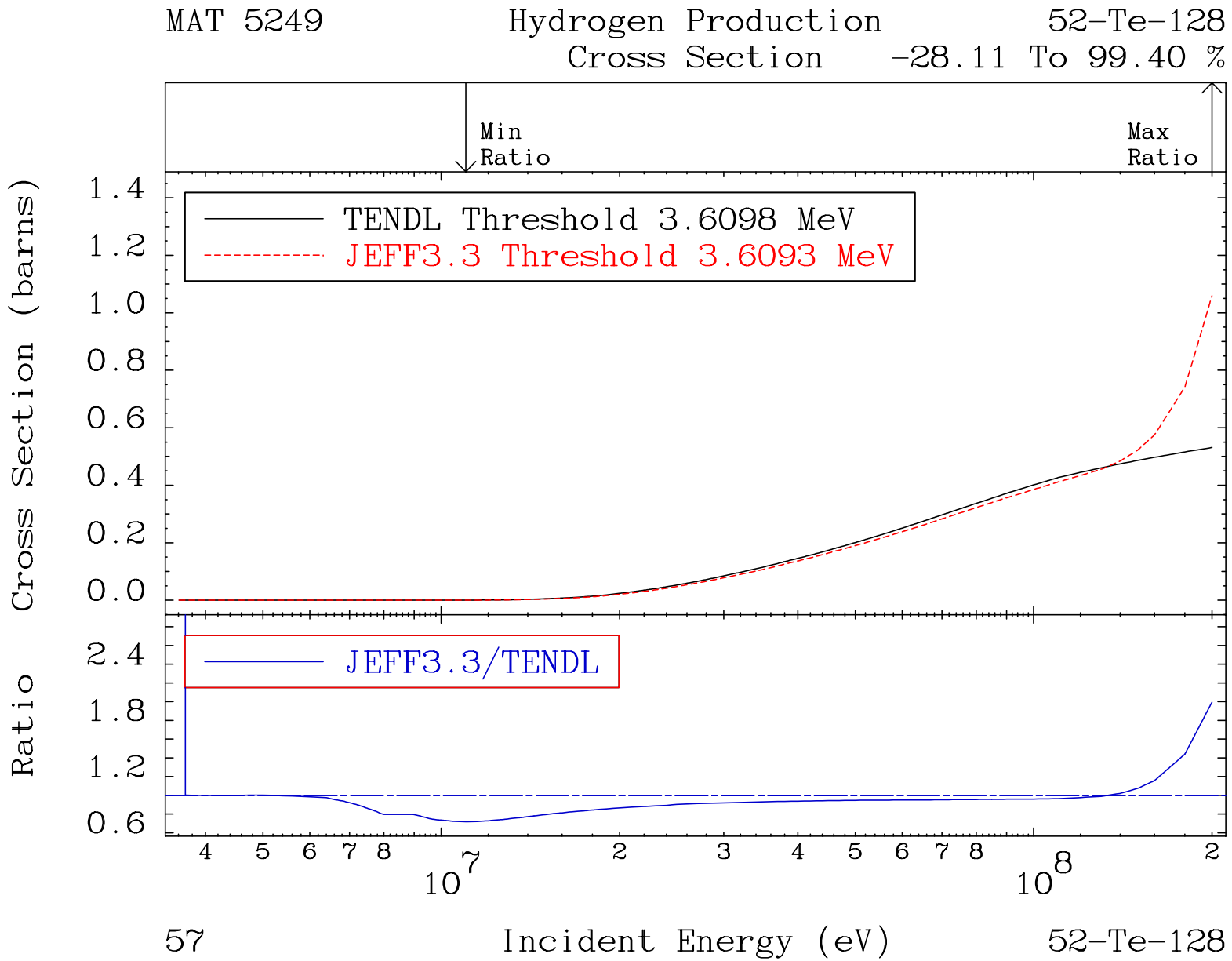

MAT 5249
(n,He-3)
Cross Section
52-Te-128
-44.73 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.9161 MeV
JEFF3.3 Threshold 9.9161 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
1.2
1.0
0.8
0.6
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
52-Te-128

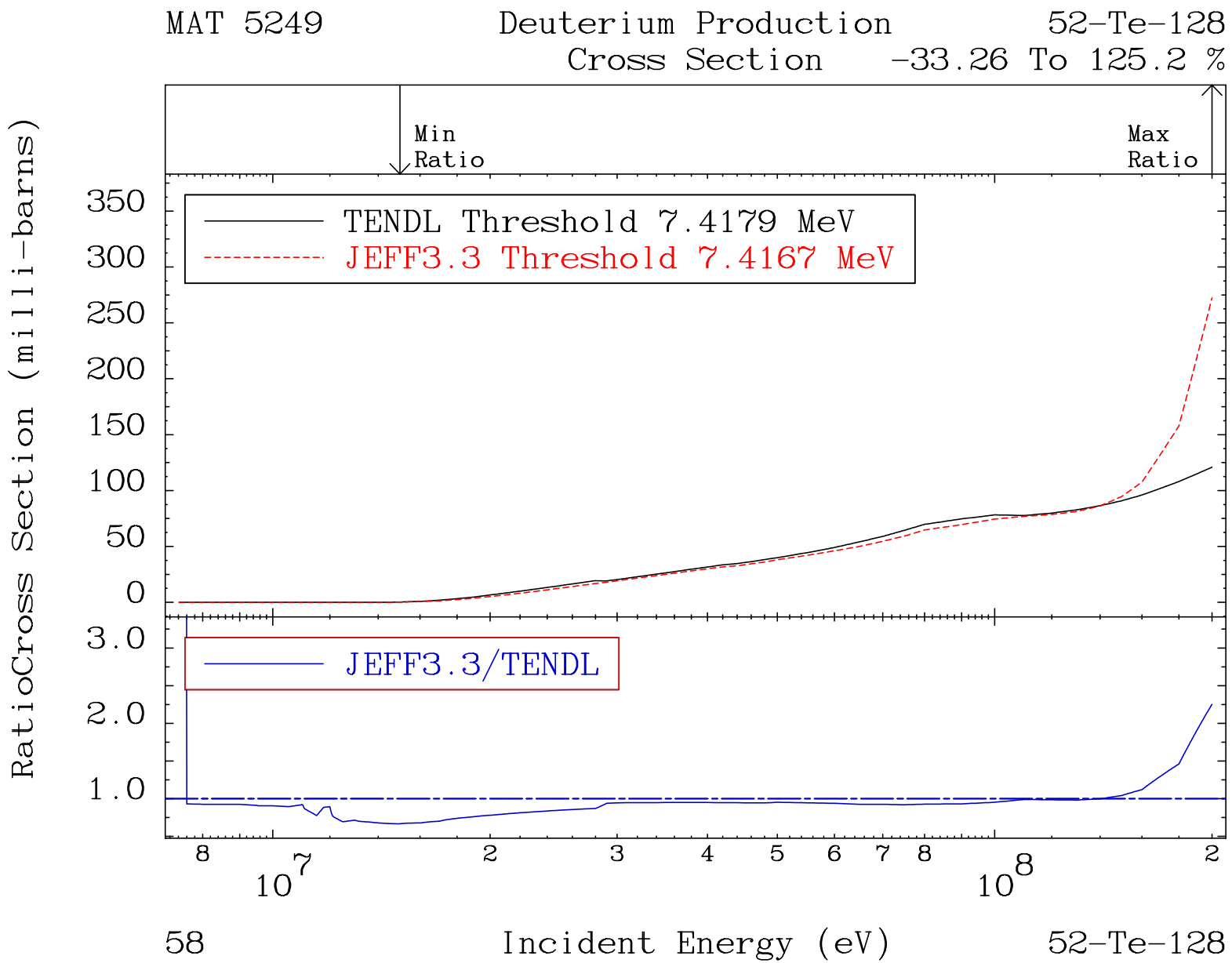

MAT 5249
(n,α)
Cross Section
52-Te-128
-87.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
52-Te-128

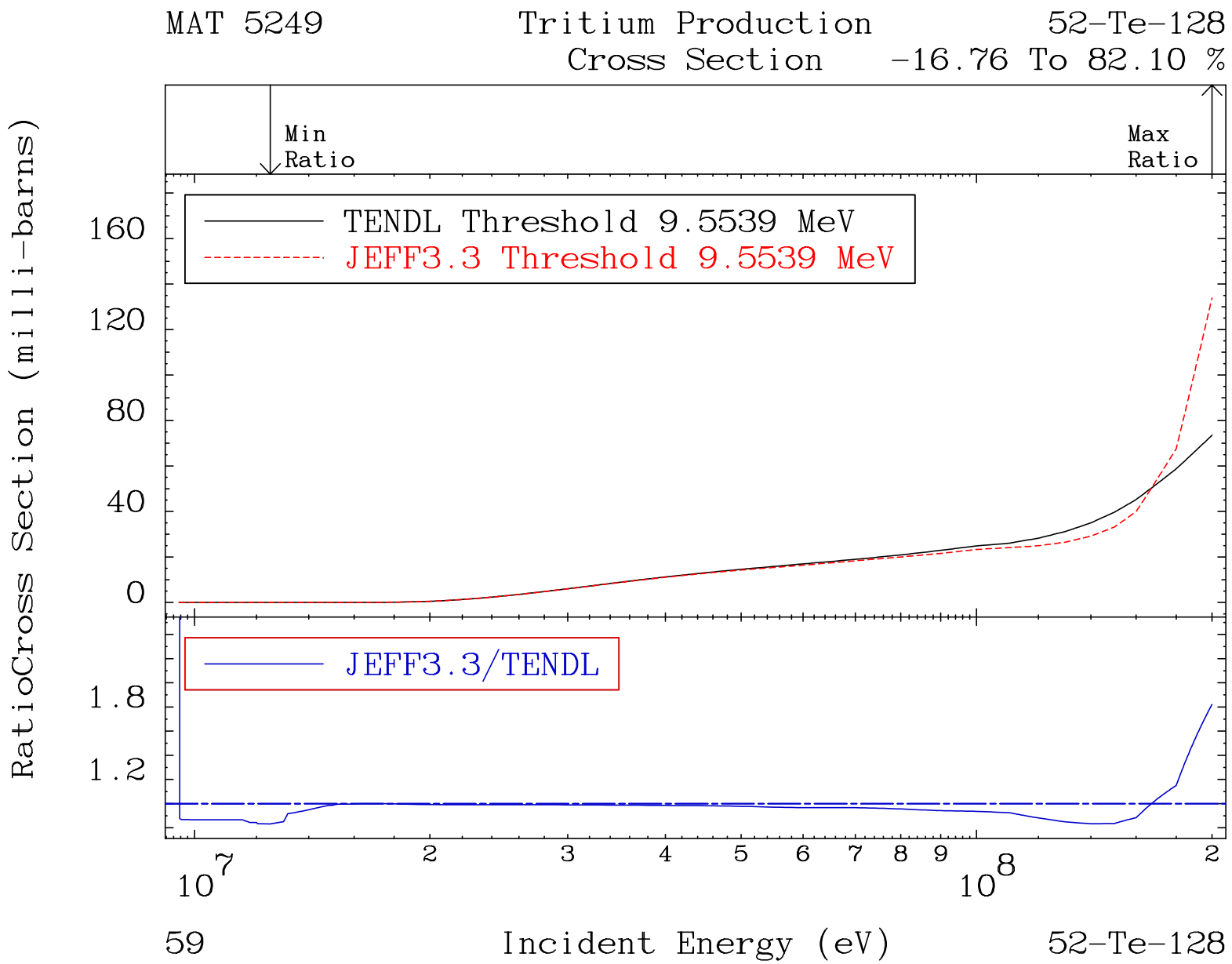

MAT 5249
(n,2p)
52-Te-128
Cross Section 0.000 To 103.0 %
Max Ratio
Min Ratio
TENDL Threshold 12.126 MeV
JEFF3.3 Threshold 12.124 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
52-Te-128

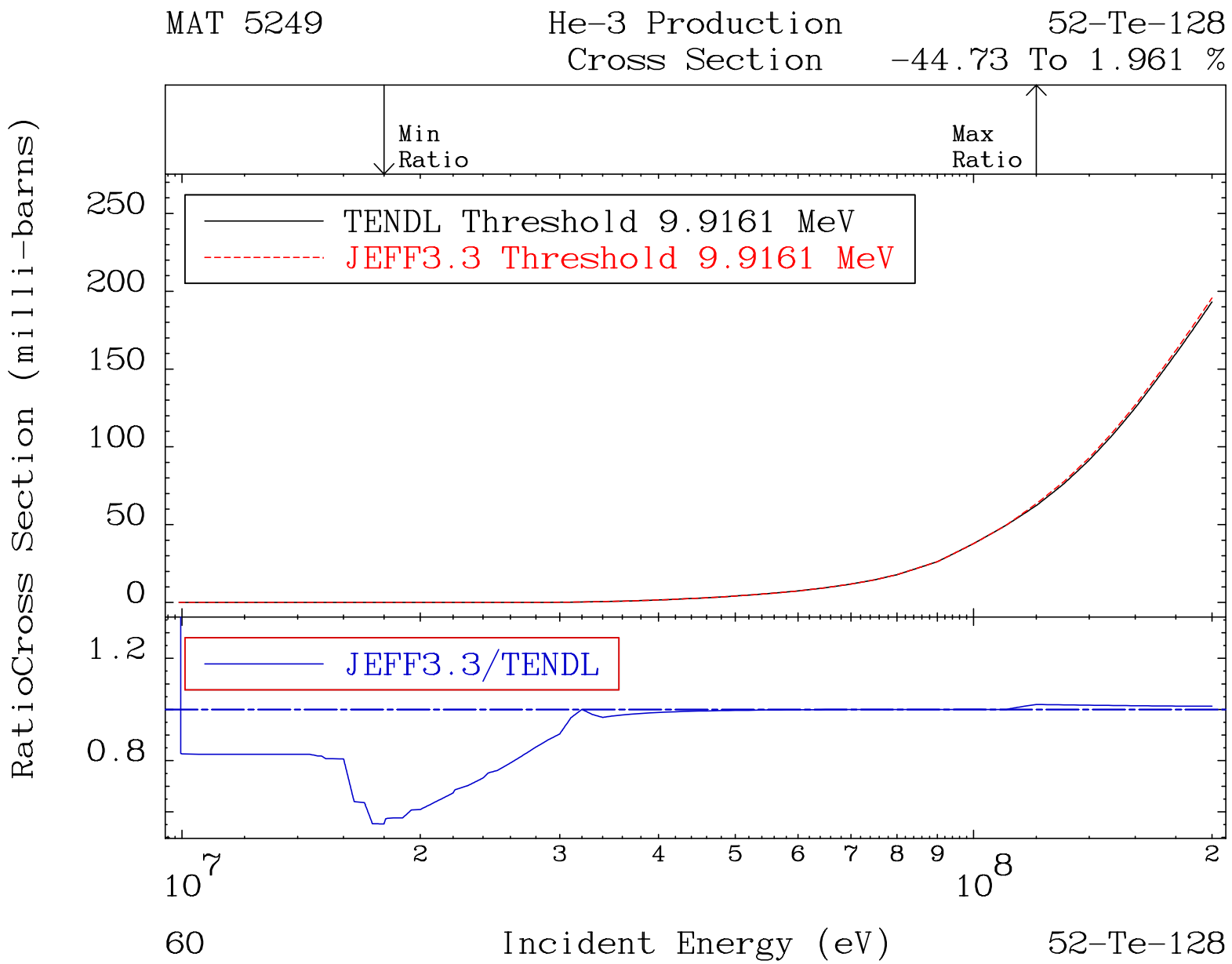

MAT 5249
(n,p) α
52-Te-128
Cross Section
-85.72 To 225.1 %
Max Ratio
Min Ratio
TENDL Threshold 9.8456 MeV
JEFF3.3 Threshold 9.8431 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
40
30
20
10
0
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
52-Te-128

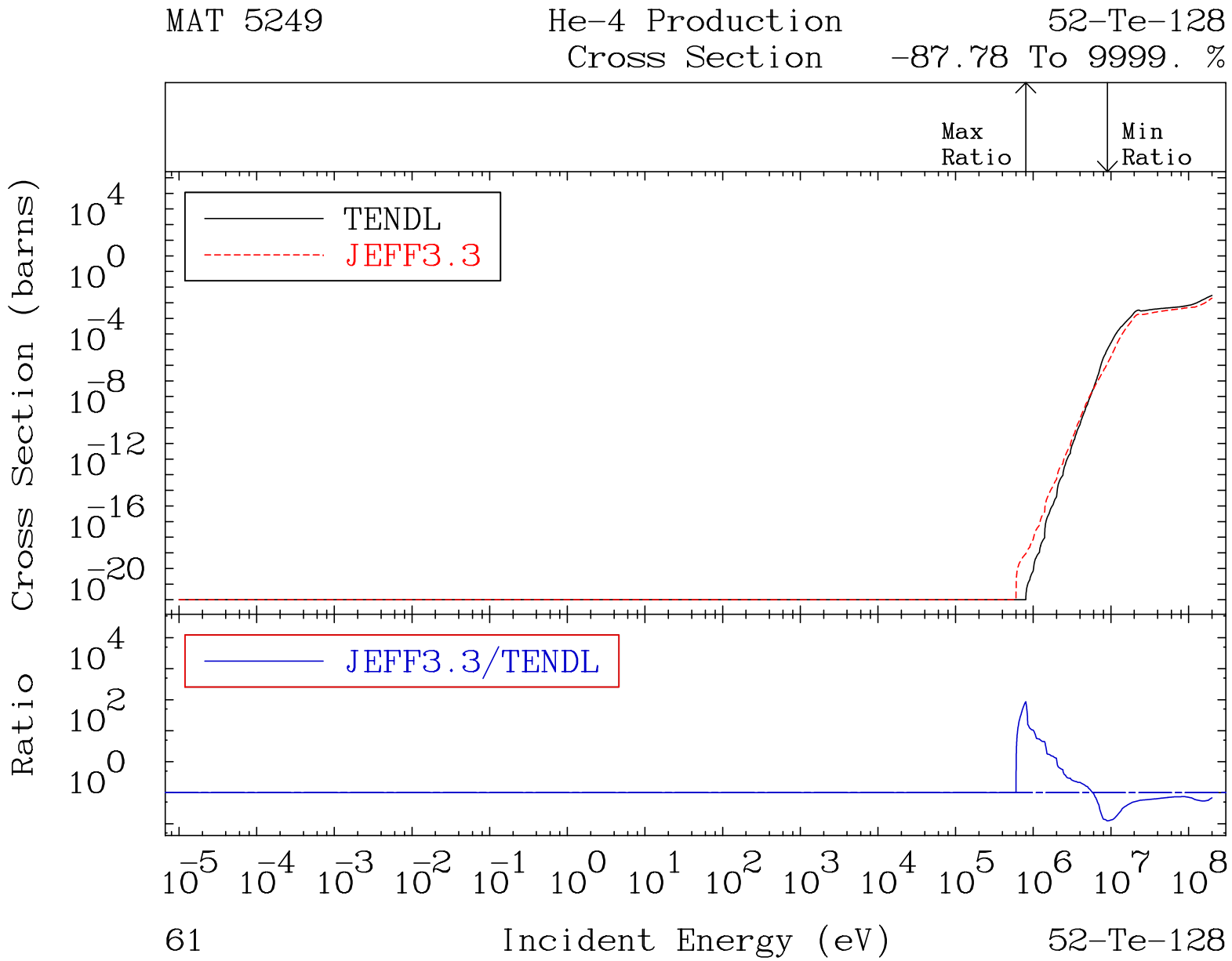

MAT 5249
(n,p) d
Cross Section
52-Te-128
0.000 To 87.53 %
Max Ratio
Min Ratio
TENDL Threshold 15.453 MeV
JEFF3.3 Threshold 15.453 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
4
3
2
1
0
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^{8}
2
56
Incident Energy (eV)
52-Te-128

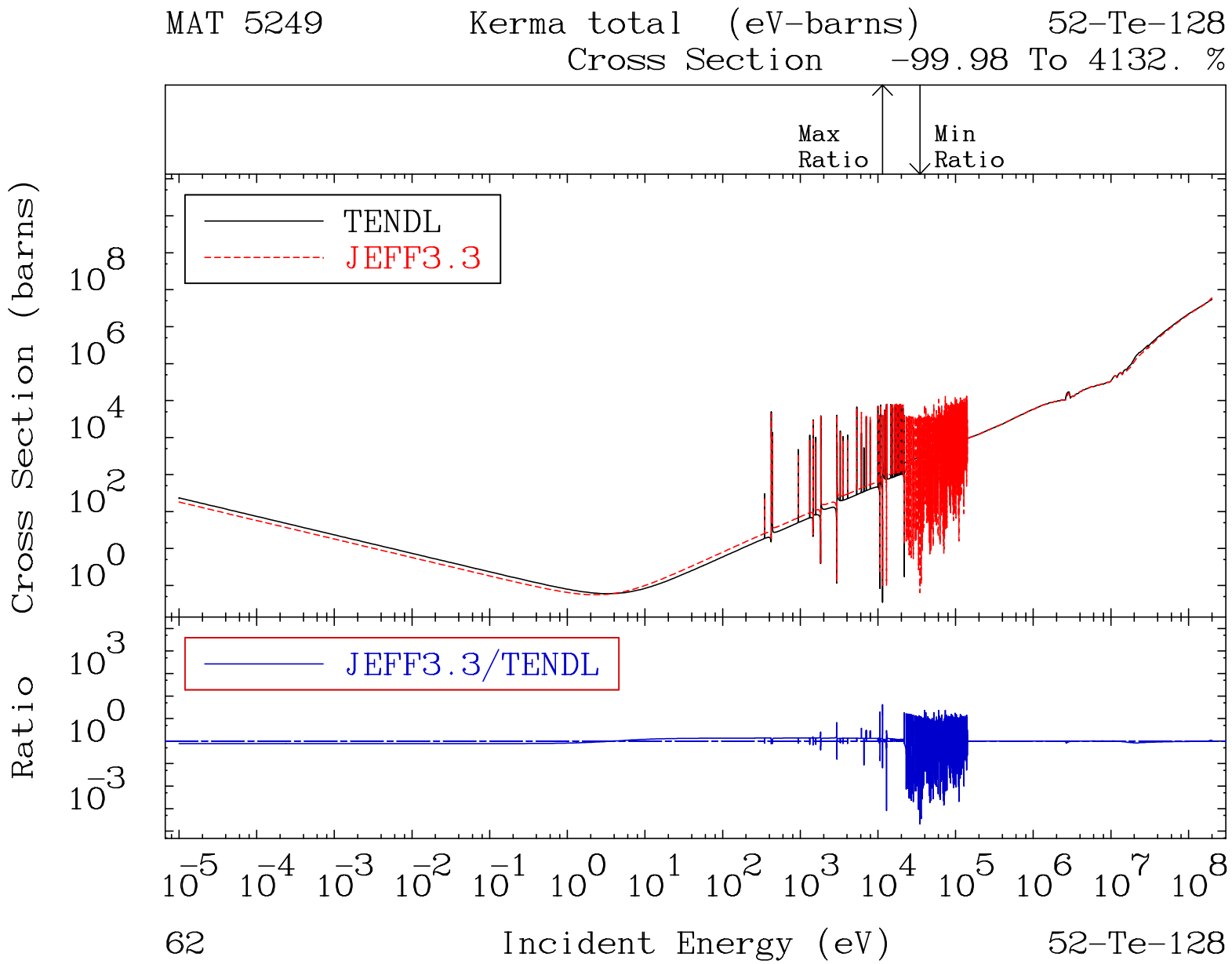

MAT 5249
Hydrogen Production
52-Te-128
Cross Section
-28.11 To 99.40 %
Min Ratio
Max Ratio
TENDL Threshold 3.6098 MeV
JEFF3.3 Threshold 3.6093 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.4
1.8
1.2
0.6
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
57
Incident Energy (eV)
52-Te-128

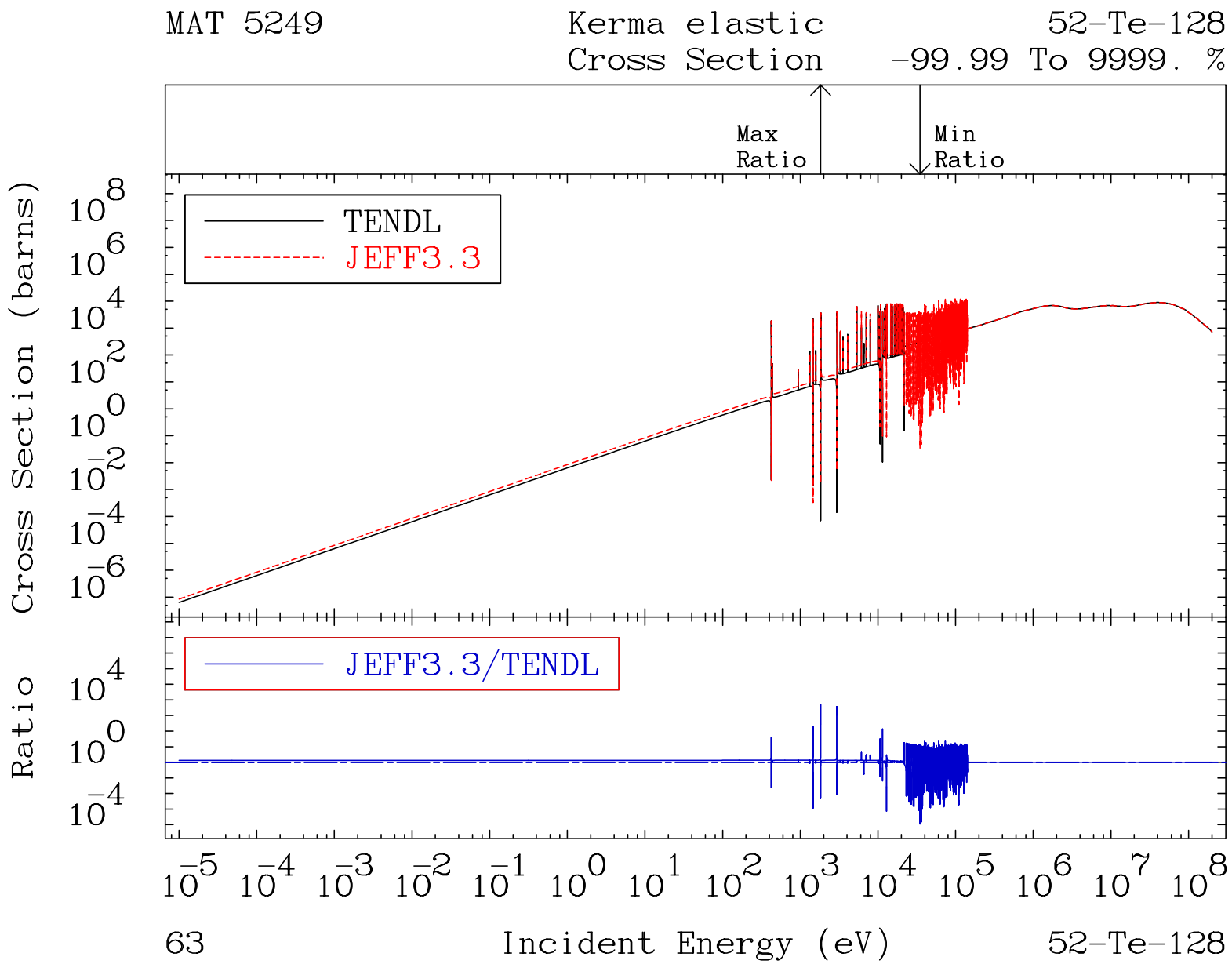

MAT 5249
Deuterium Production
52-Te-128
Cross Section
-33.26 To 125.2 %
Min Ratio
Max Ratio
TENDL Threshold 7.4179 MeV
JEFF3.3 Threshold 7.4167 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
3.0
2.0
1.0
8
10^7
2
3
4
5
6
7
8
10^8
2
58
Incident Energy (eV)
52-Te-128

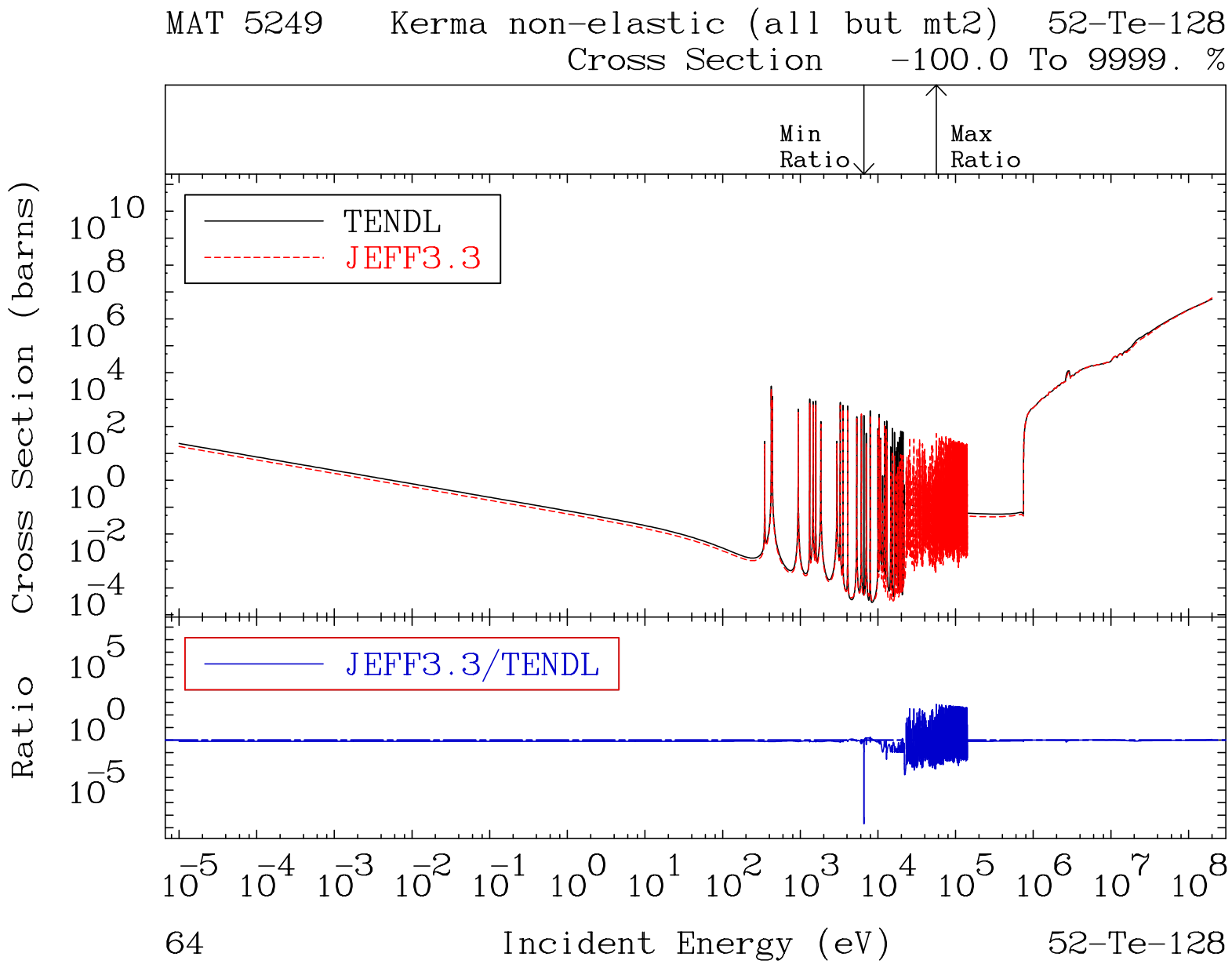

MAT 5249
Tritium Production
Cross Section
52-Te-128
-16.76 To 82.10 %
Min
Ratio
Max
Ratio
TENDL Threshold 9.5539 MeV
JEFF3.3 Threshold 9.5539 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.8
1.2
10^7
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
52-Te-128

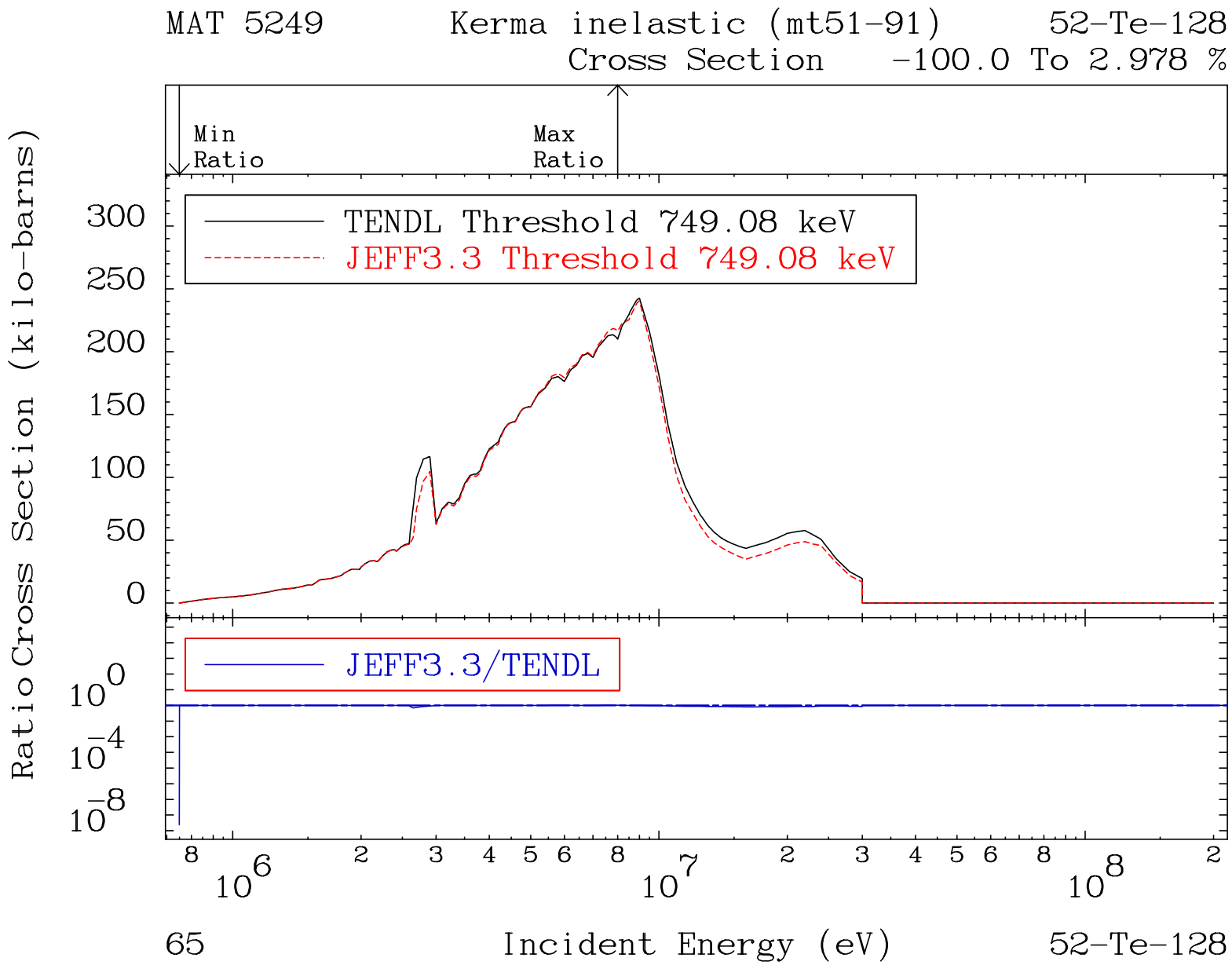

MAT 5249
He-3 Production
Cross Section
52-Te-128
-44.73 To 1.961 %
Min
Ratio
Max
Ratio
TENDL Threshold 9.9161 MeV
JEFF3.3 Threshold 9.9161 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
52-Te-128

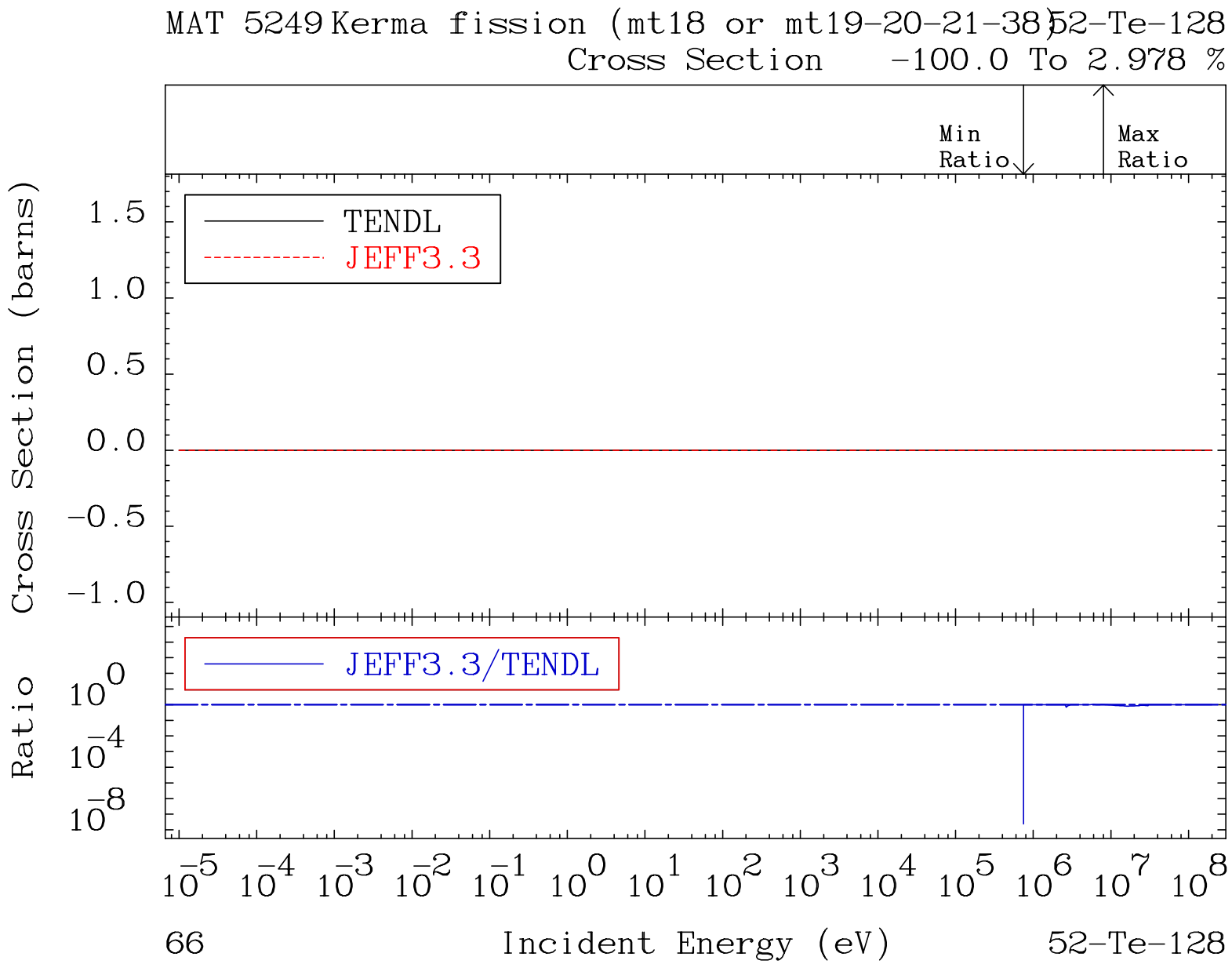

MAT 5249
He-4 Production
Cross Section
52-Te-128
-87.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
52-Te-128

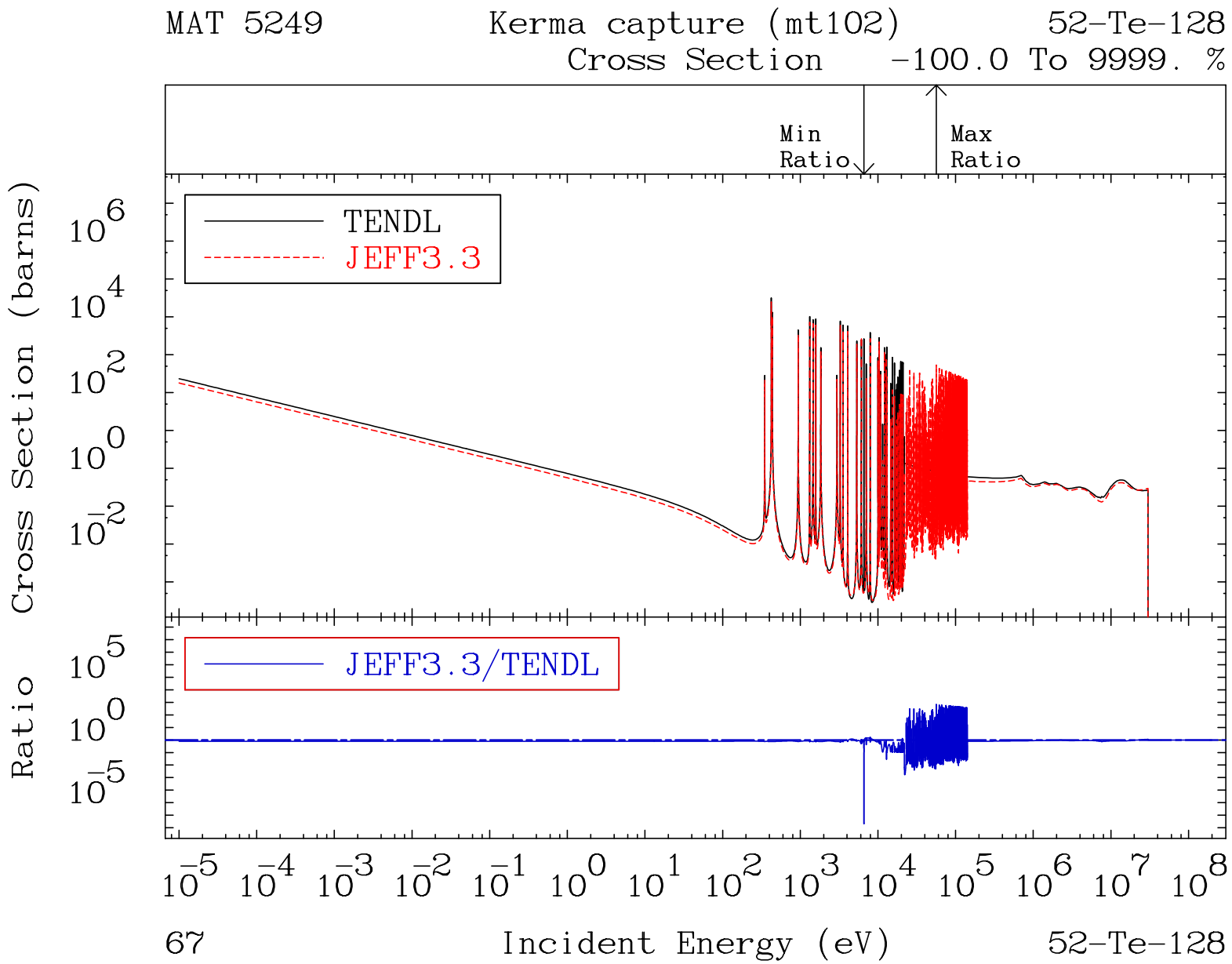

MAT 5249
Kerma total (eV-barns)
52-Te-128
Cross Section -99.98 To 4132. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
52-Te-128

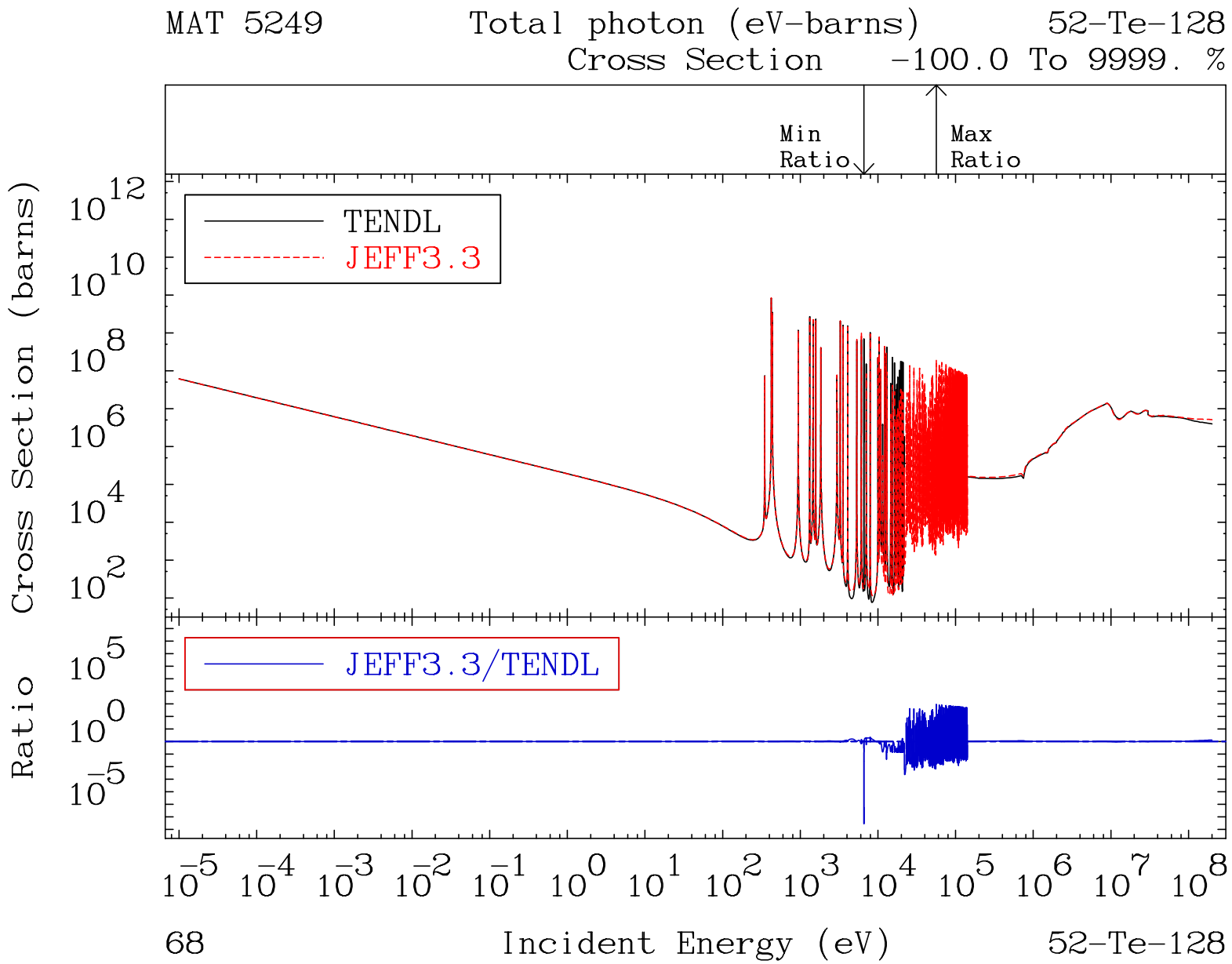

MAT 5249
Kerma elastic
Cross Section
52-Te-128
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
52-Te-128

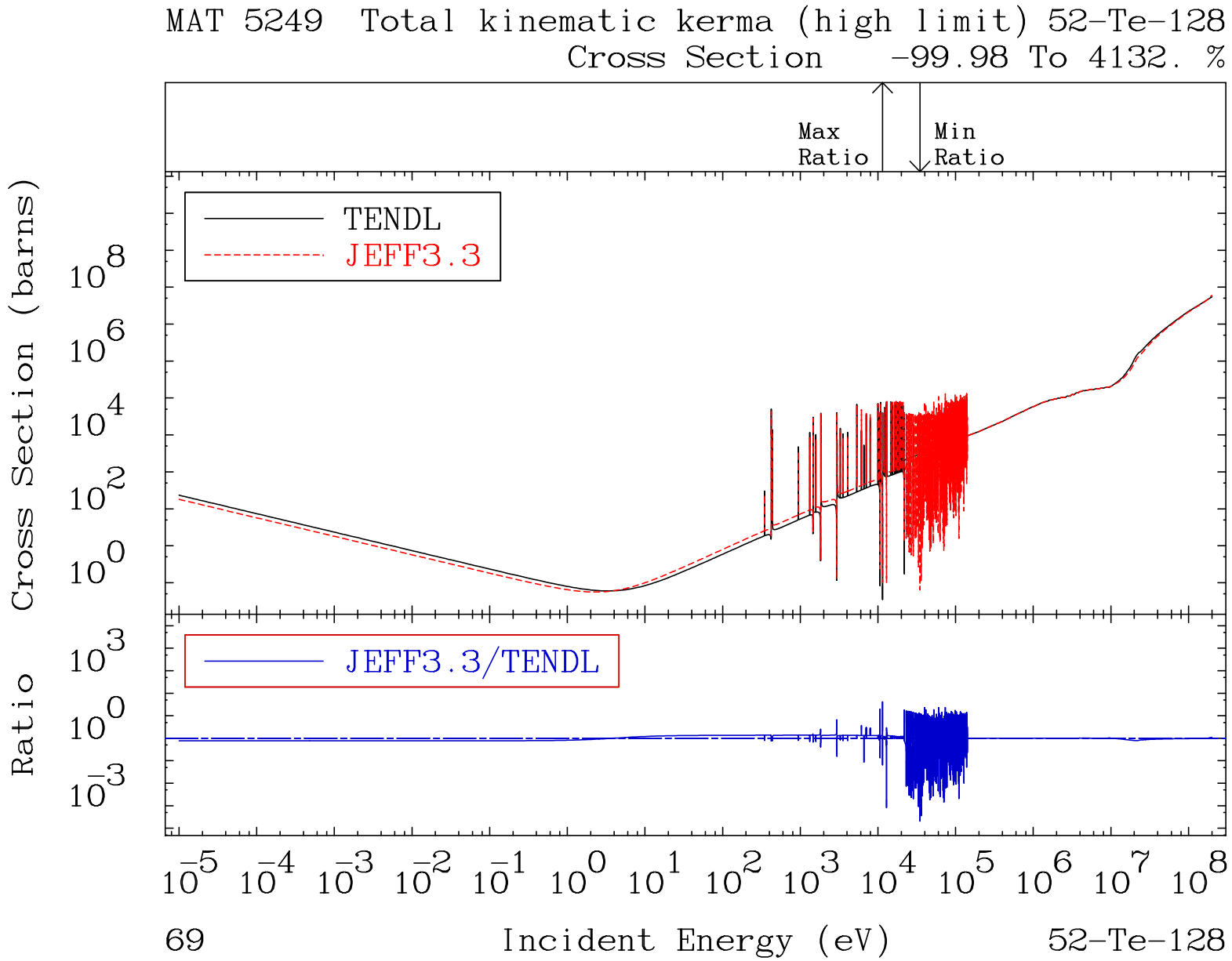

MAT 5249 Kerma non-elastic (all but mt2) 52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
52-Te-128

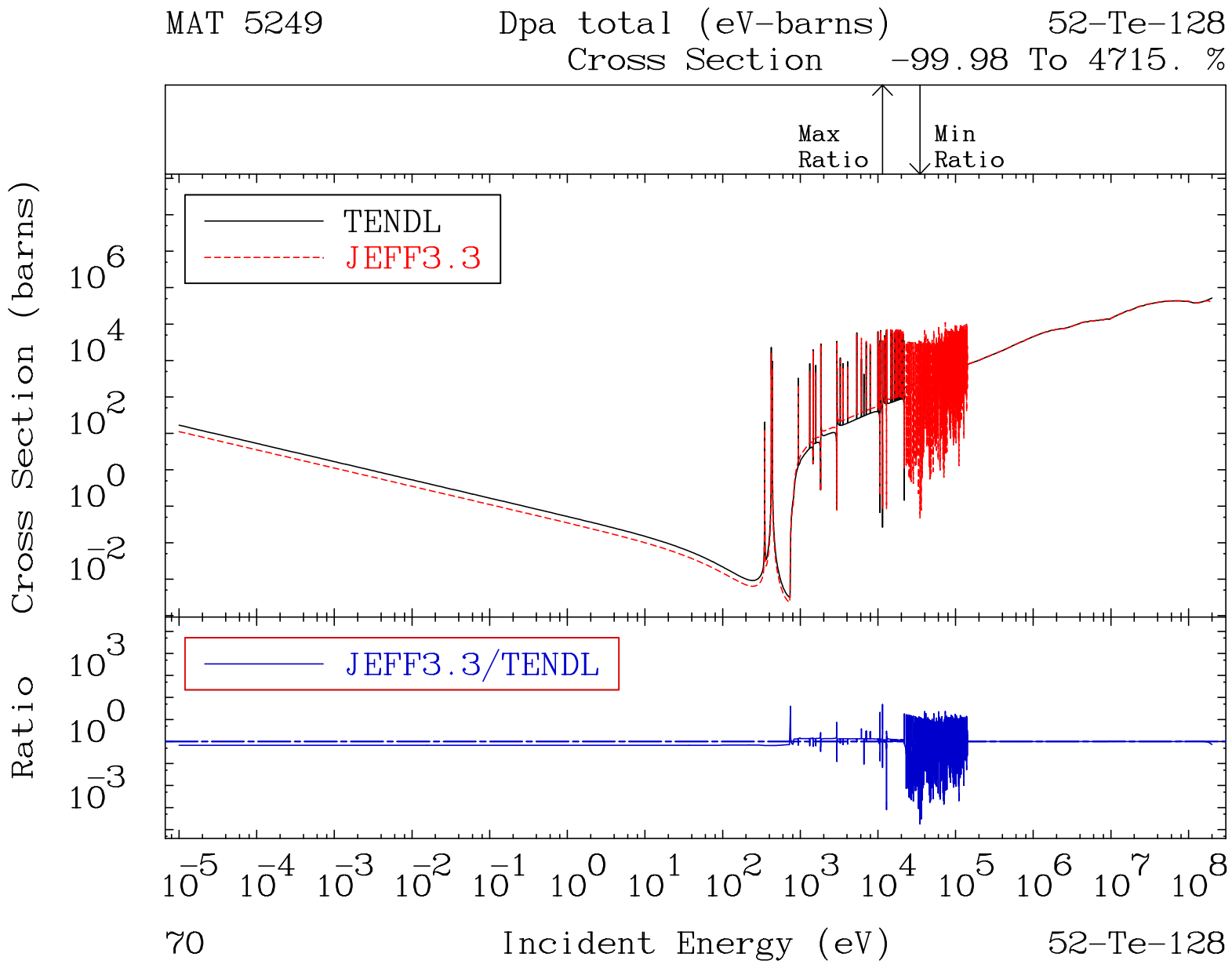

MAT 5249
Kerma inelastic (mt51-91)
52-Te-128
Cross Section -100.0 To 2.978 %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JEFF3.3 Threshold 749.08 keV
JEFF3.3/TENDL
Ratio Cross Section (kilo-barns)
300
250
200
150
100
50
0
10^{0}
10^{-4}
10^{-8}
8
10^{6}
2
3
4
5
6
8
10^{7}
2
3
4
5
6
8
10^{8}
2
65
Incident Energy (eV)
52-Te-128

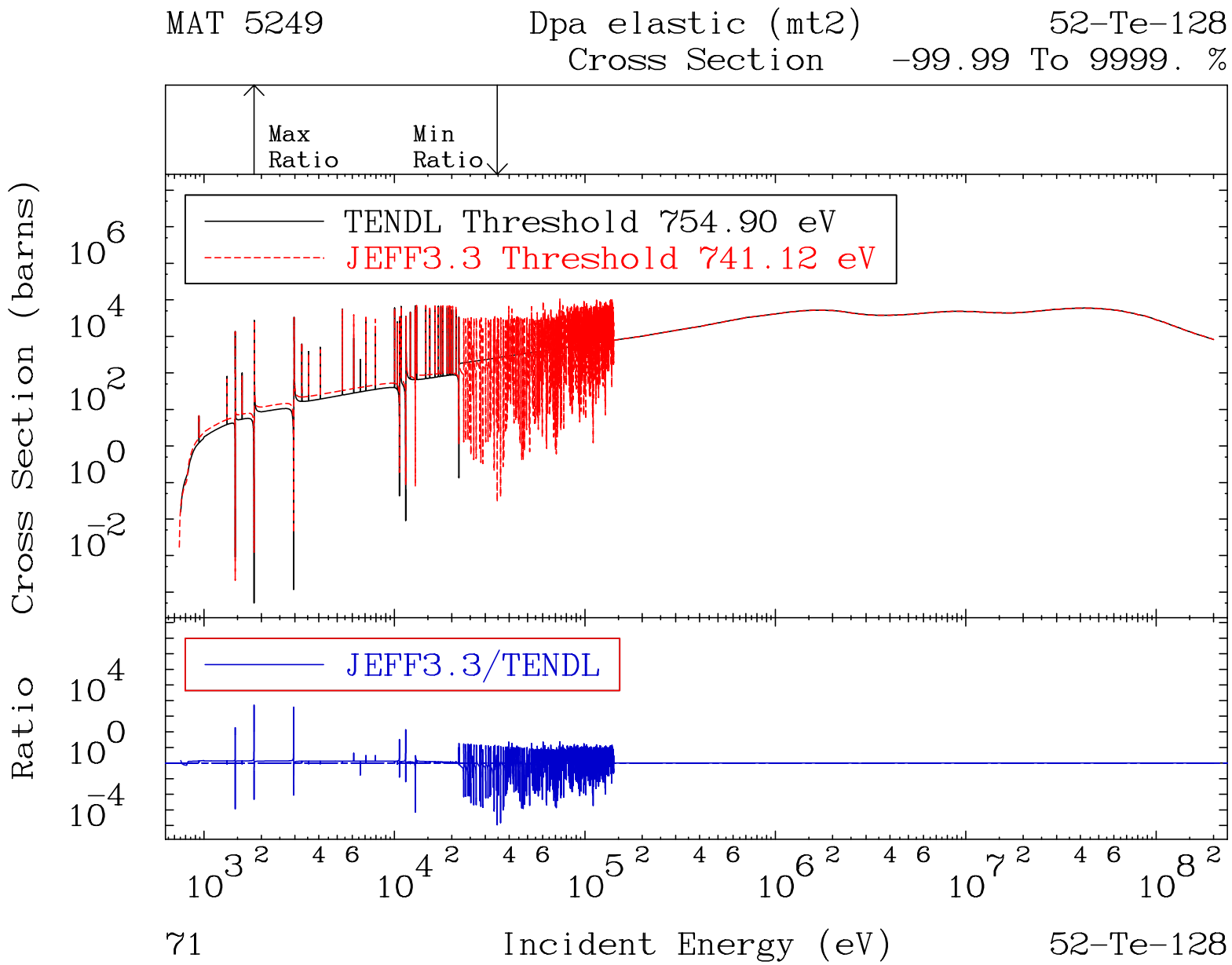

MAT 5249 Kerma fission (mt18 or mt19-20-21-38) 52-Te-128
Cross Section -100.0 To 2.978 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-4}
10^{-8}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
66
Incident Energy (eV)
52-Te-128

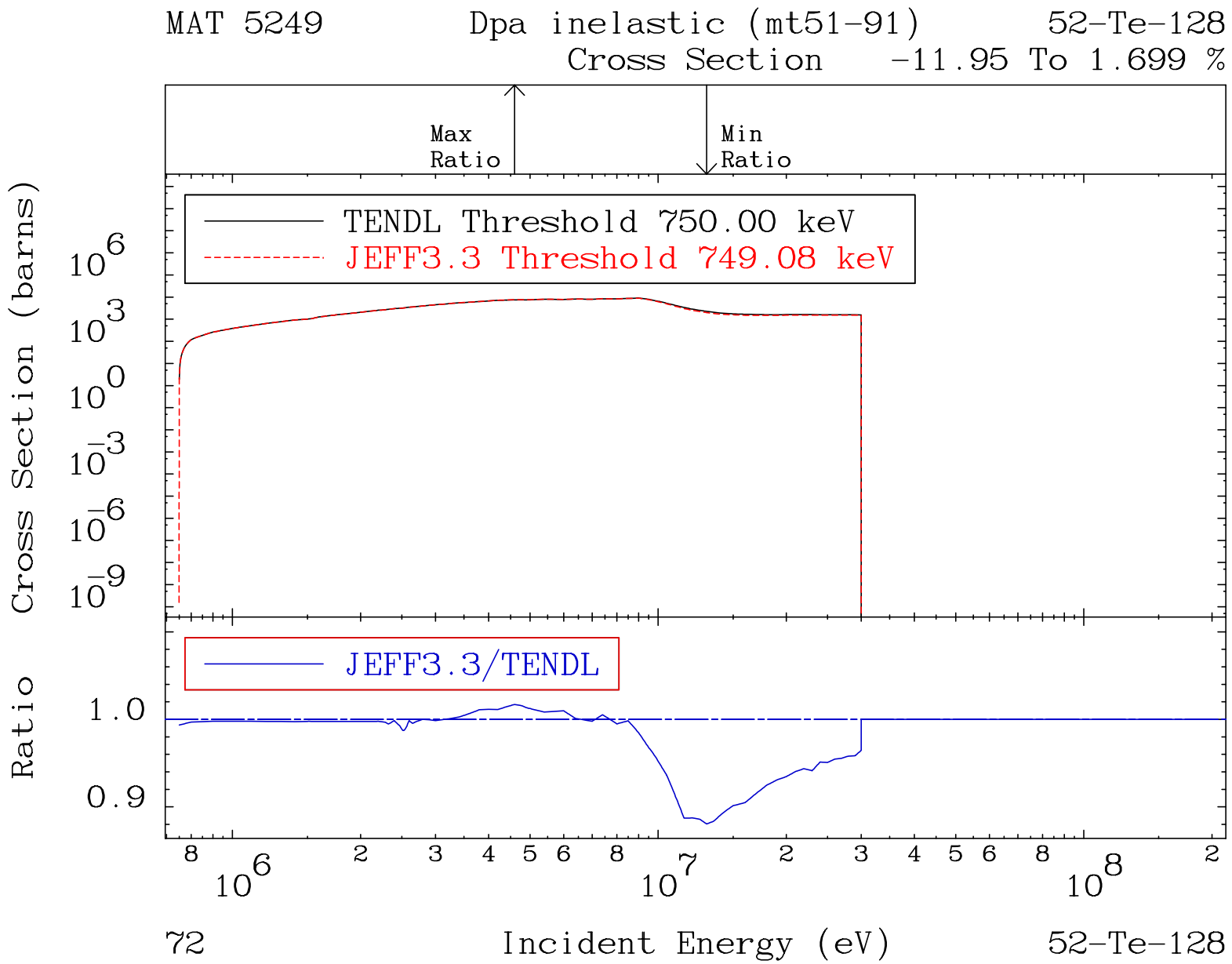

MAT 5249
Kerma capture (mt102)
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
52-Te-128

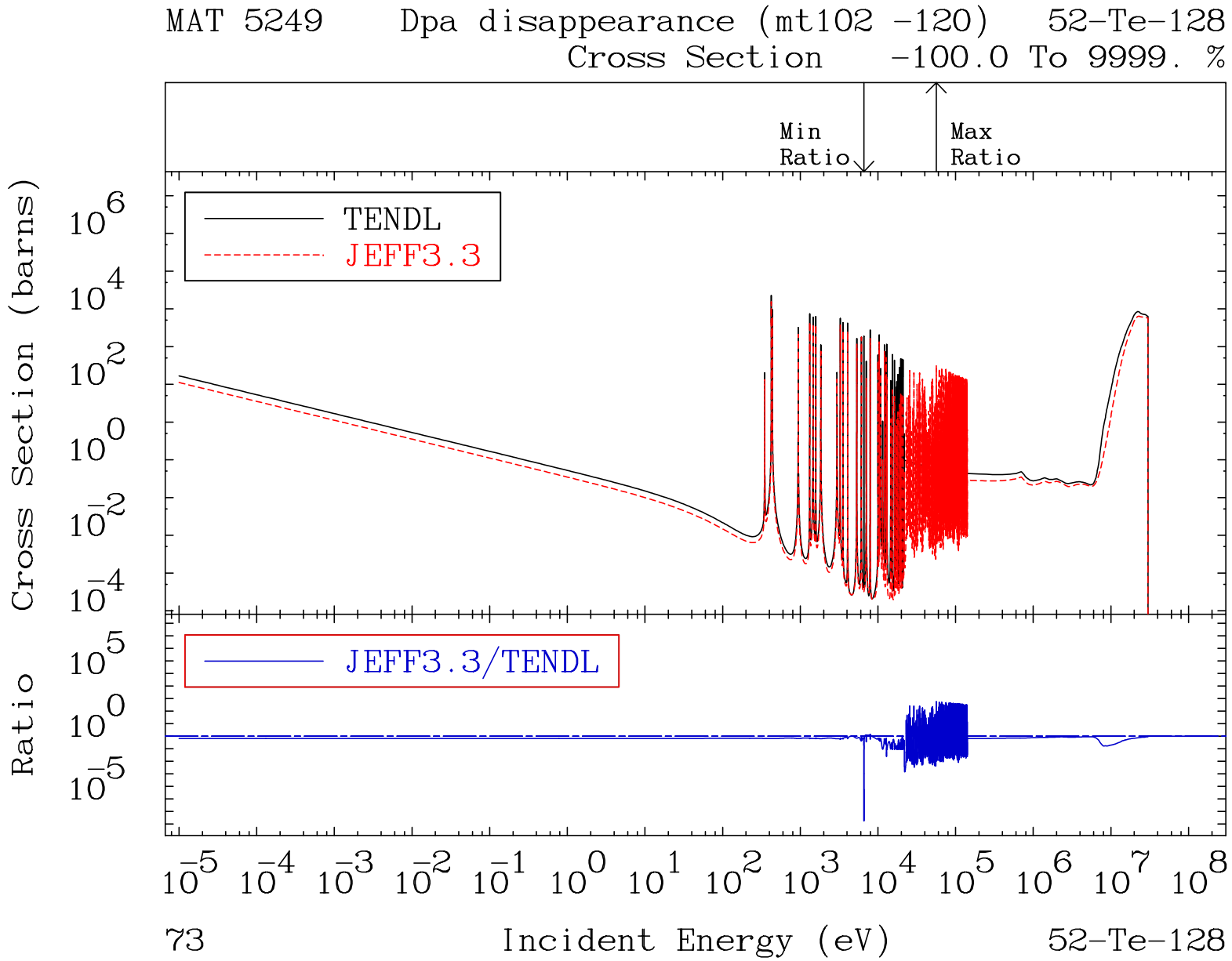

MAT 5249
Total photon (eV-barns)
52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
52-Te-128

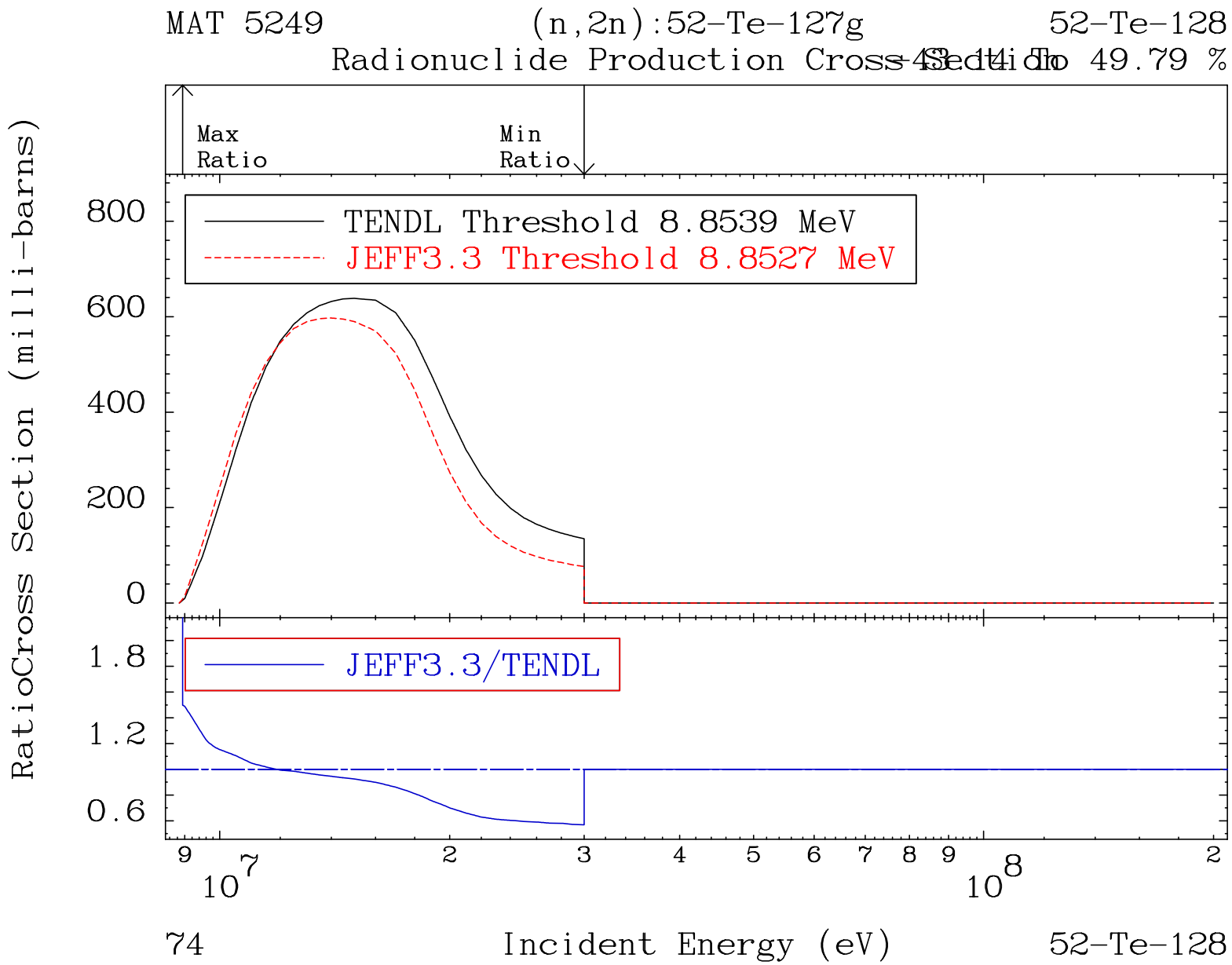

MAT 5249 Total kinematic kerma (high limit) 52-Te-128
Cross Section -99.98 To 4132. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
52-Te-128

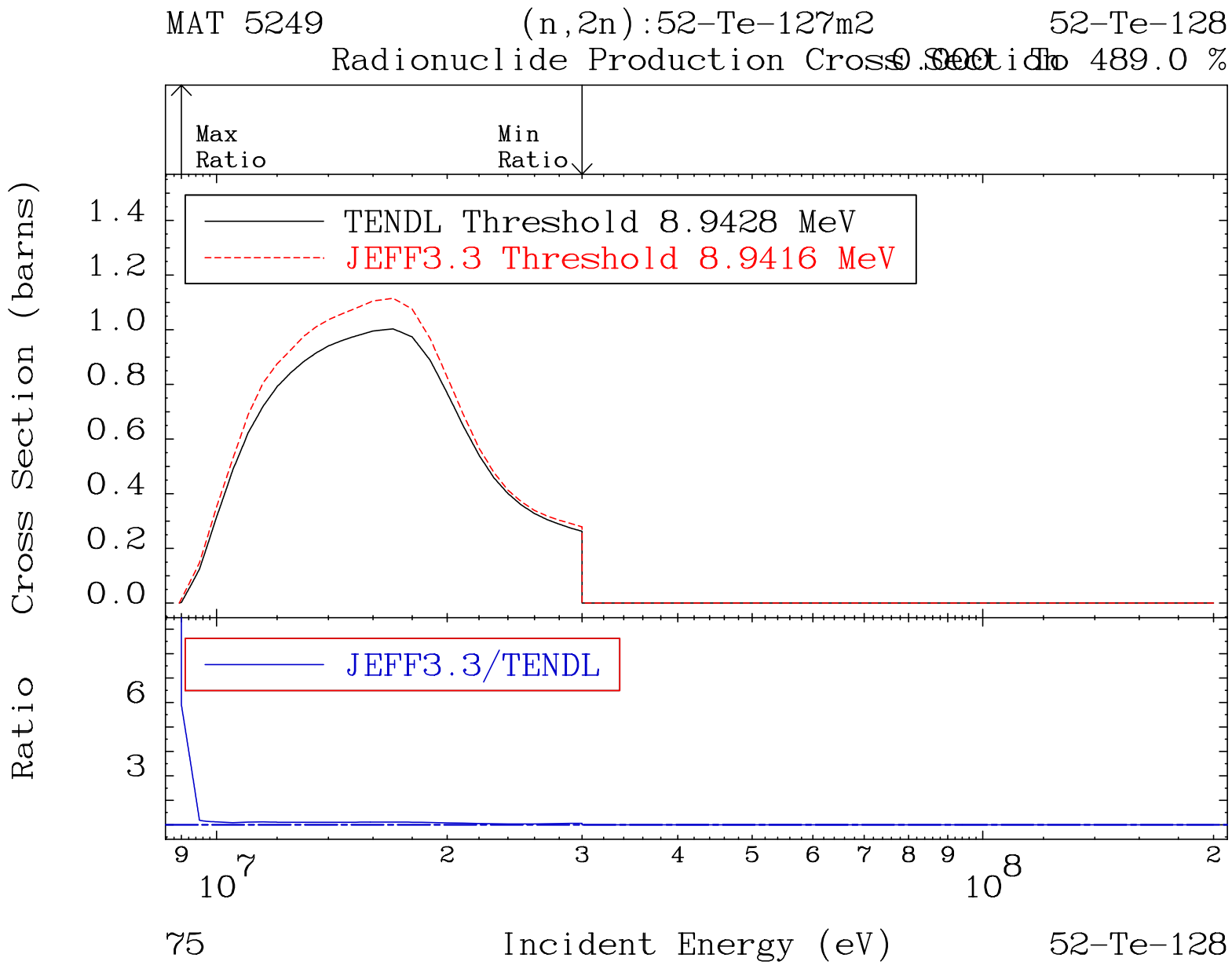

MAT 5249
Dpa total (eV-barns)
52-Te-128
Cross Section -99.98 To 4715. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
52-Te-128

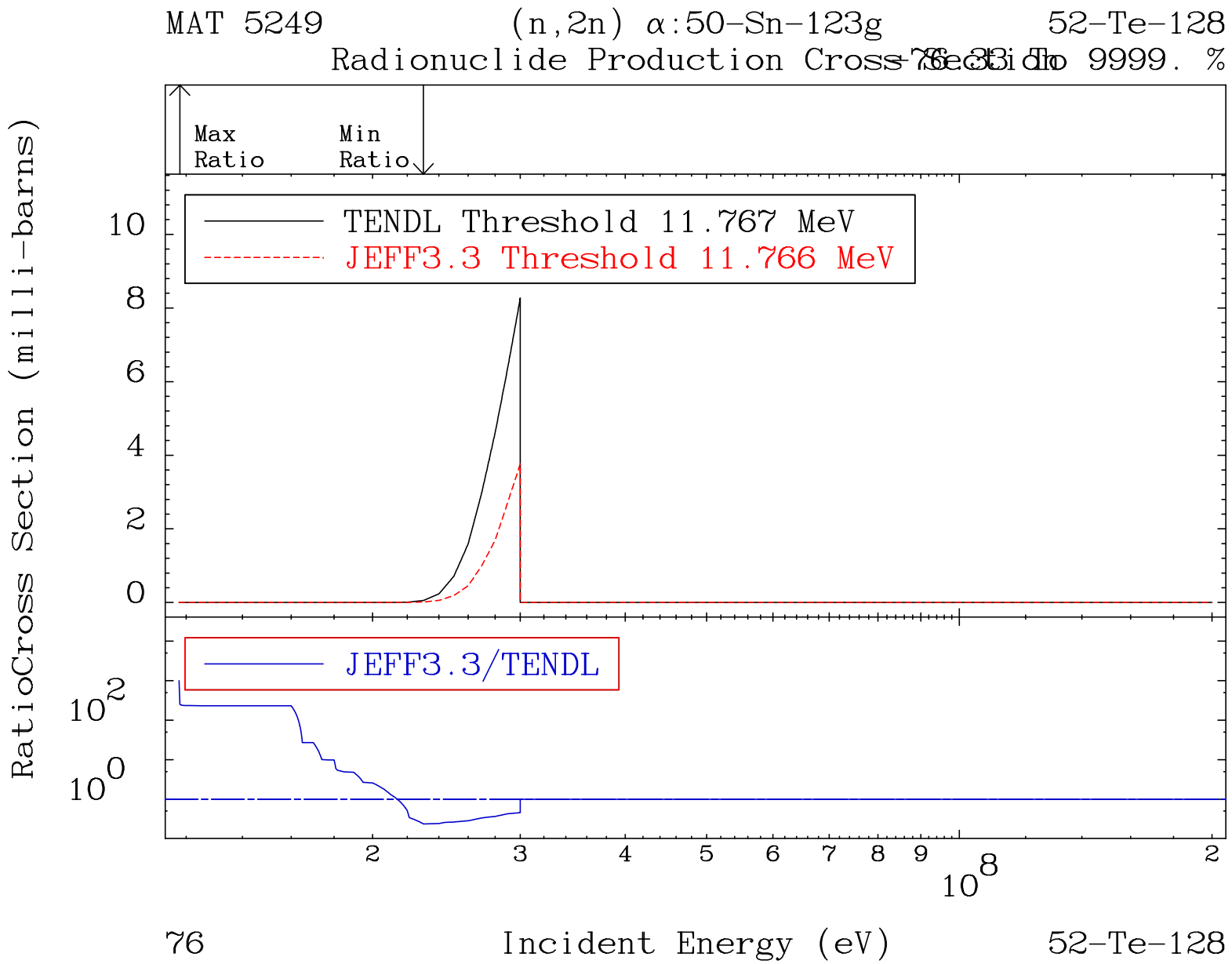

MAT 5249
Dpa elastic (mt2)
Cross Section
52-Te-128
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 754.90 eV
JEFF3.3 Threshold 741.12 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
52-Te-128

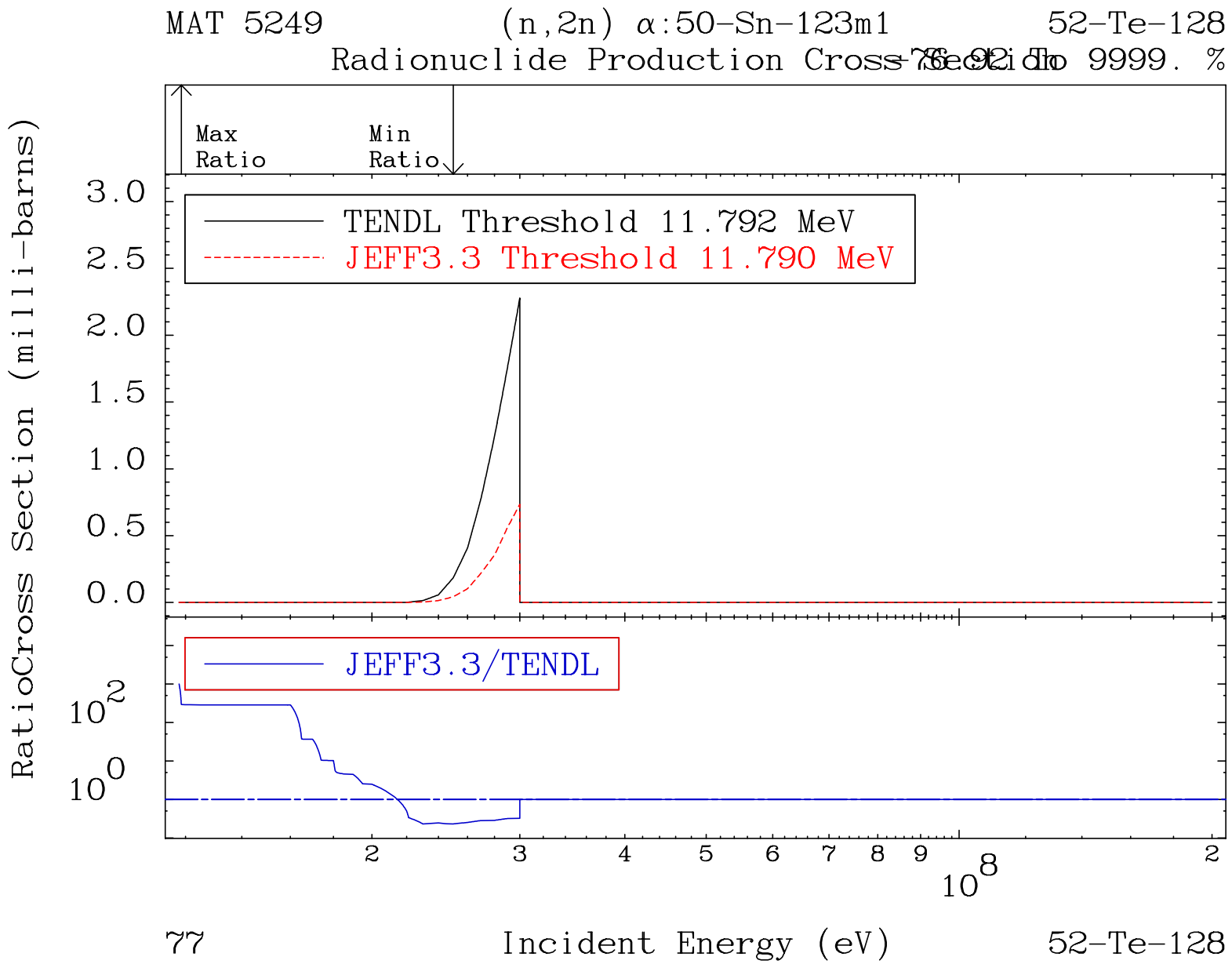

MAT 5249
Dpa inelastic (mt51-91)
52-Te-128
Cross Section
-11.95 To 1.699 %
Max Ratio
Min Ratio
TENDL Threshold 750.00 keV
JEFF3.3 Threshold 749.08 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
52-Te-128

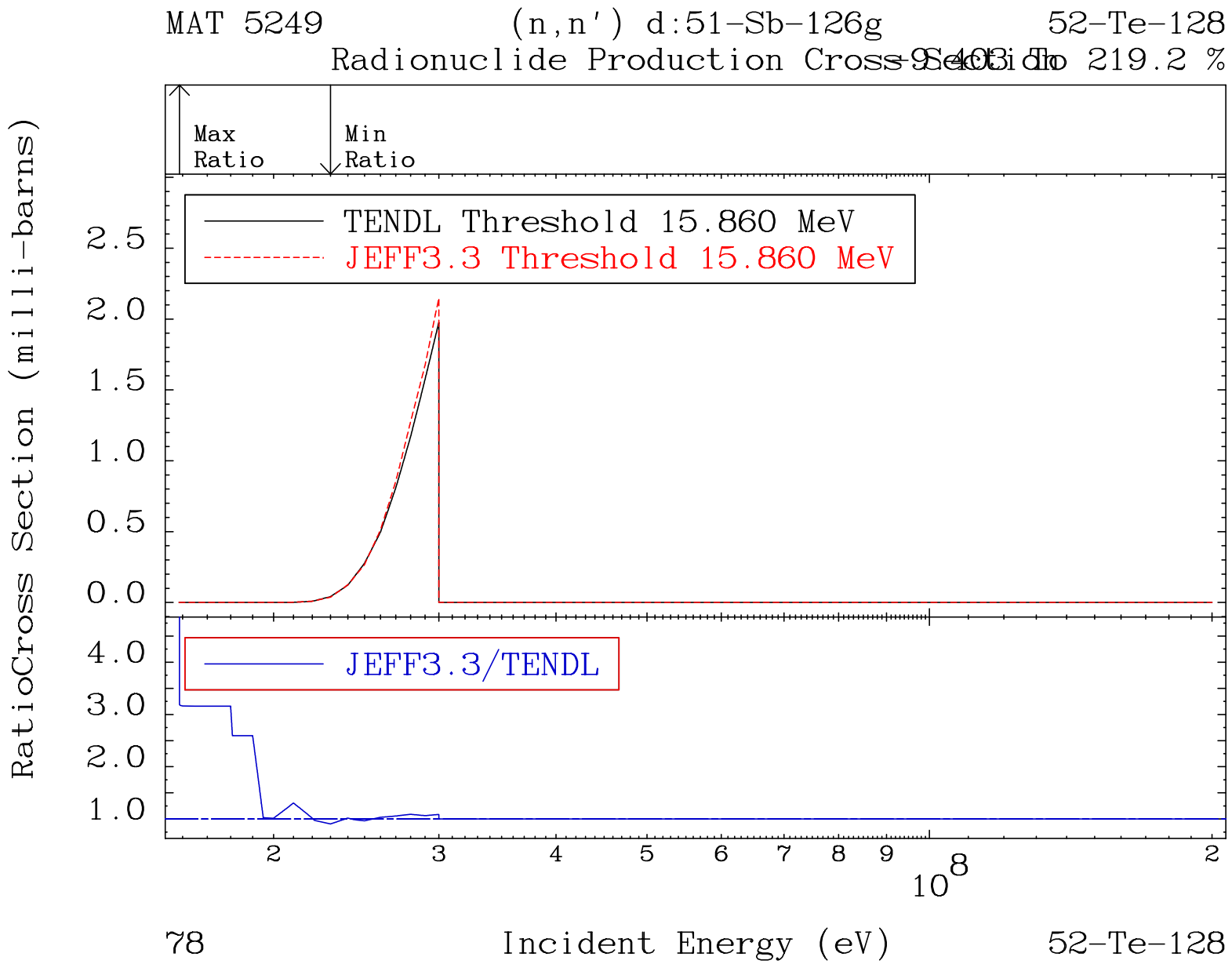

MAT 5249 Dpa disappearance (mt102 -120) 52-Te-128
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
52-Te-128

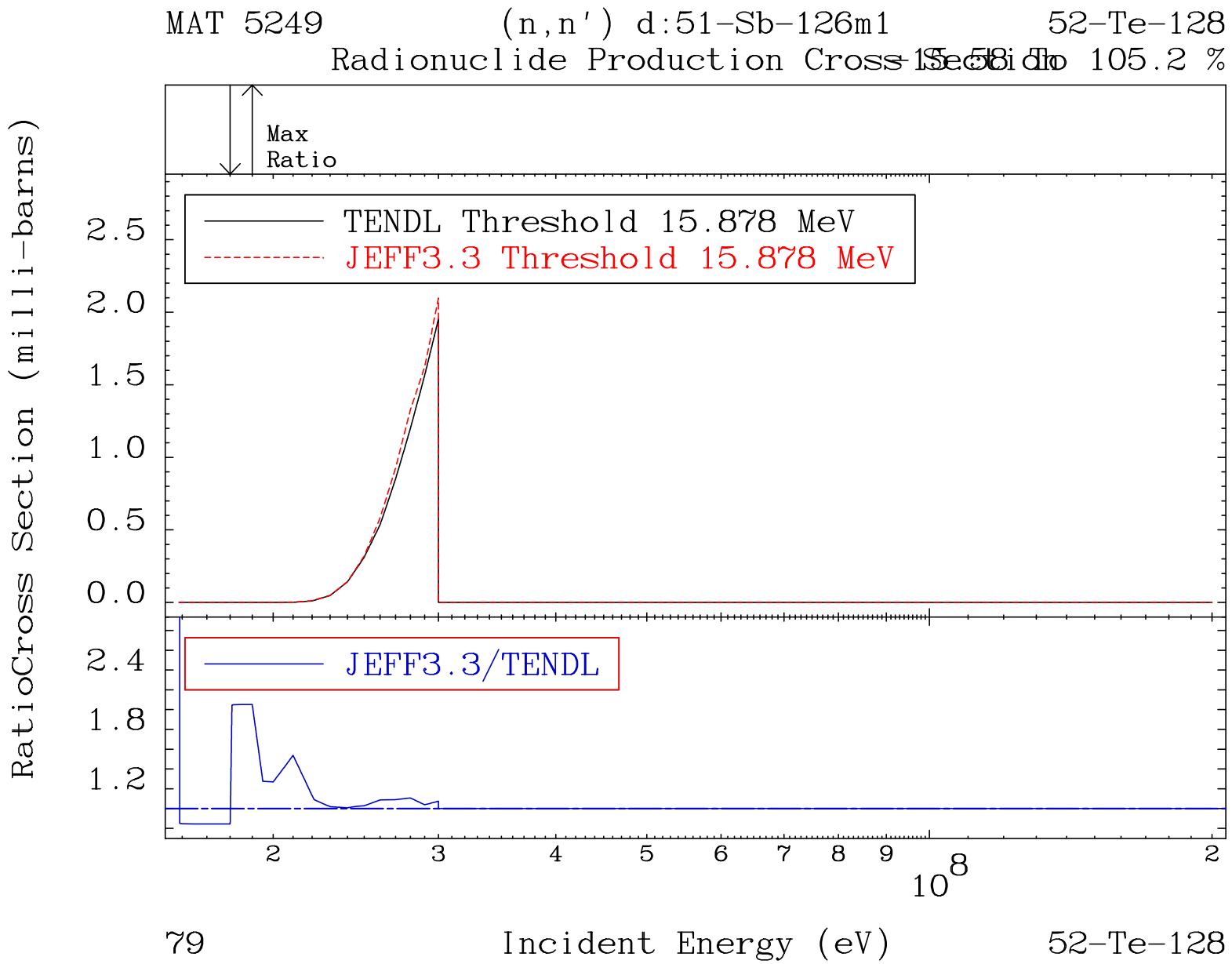

MAT 5249
(n,2n):52-Te-127g
52-Te-128
Radionuclide Production Cross Section To 49.79 %
Max Ratio
Min Ratio
TENDL Threshold 8.8539 MeV
JEFF3.3 Threshold 8.8527 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.8
1.2
0.6
9
10^7
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
52-Te-128

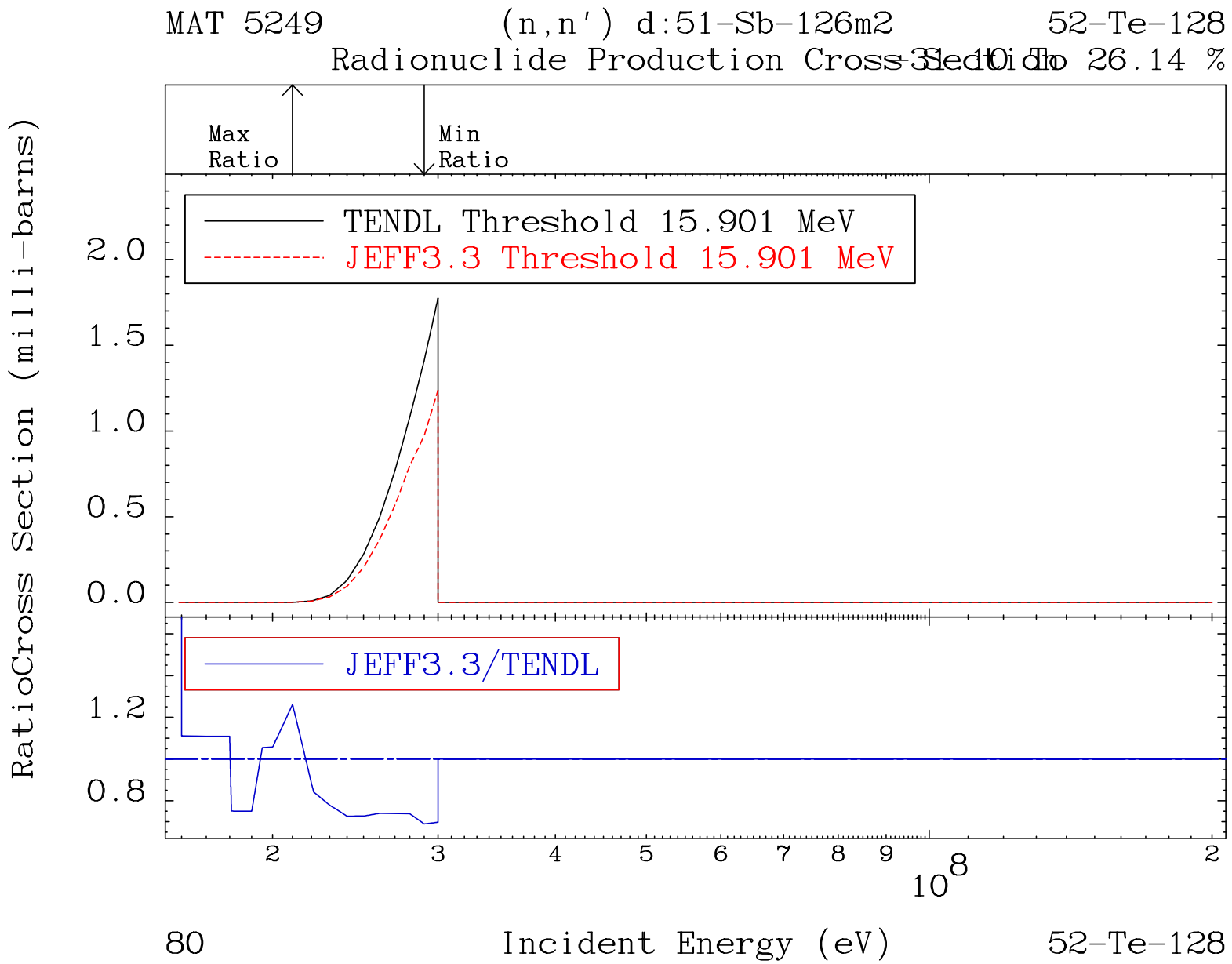

MAT 5249
(n,2n):52-Te-127m2
52-Te-128
Radionuclide Production Cross Section
0.000 To 489.0 %
Max Ratio
Min Ratio
TENDL Threshold 8.9428 MeV
JEFF3.3 Threshold 8.9416 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
6
3
9
10^7
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
52-Te-128

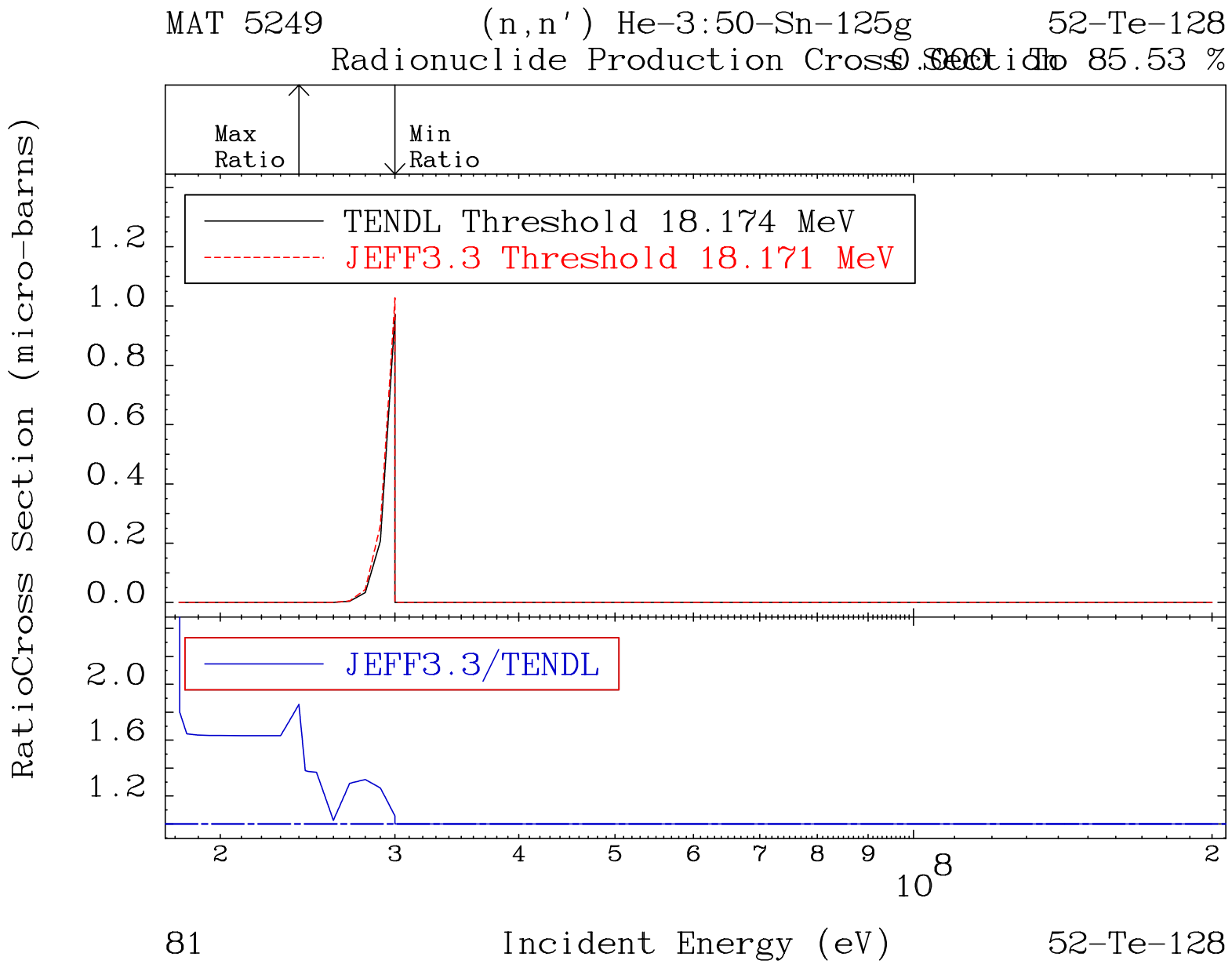

MAT 5249
(n,2n) α:50-Sn-123g
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.767 MeV
JEFF3.3 Threshold 11.766 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
76
52-Te-128

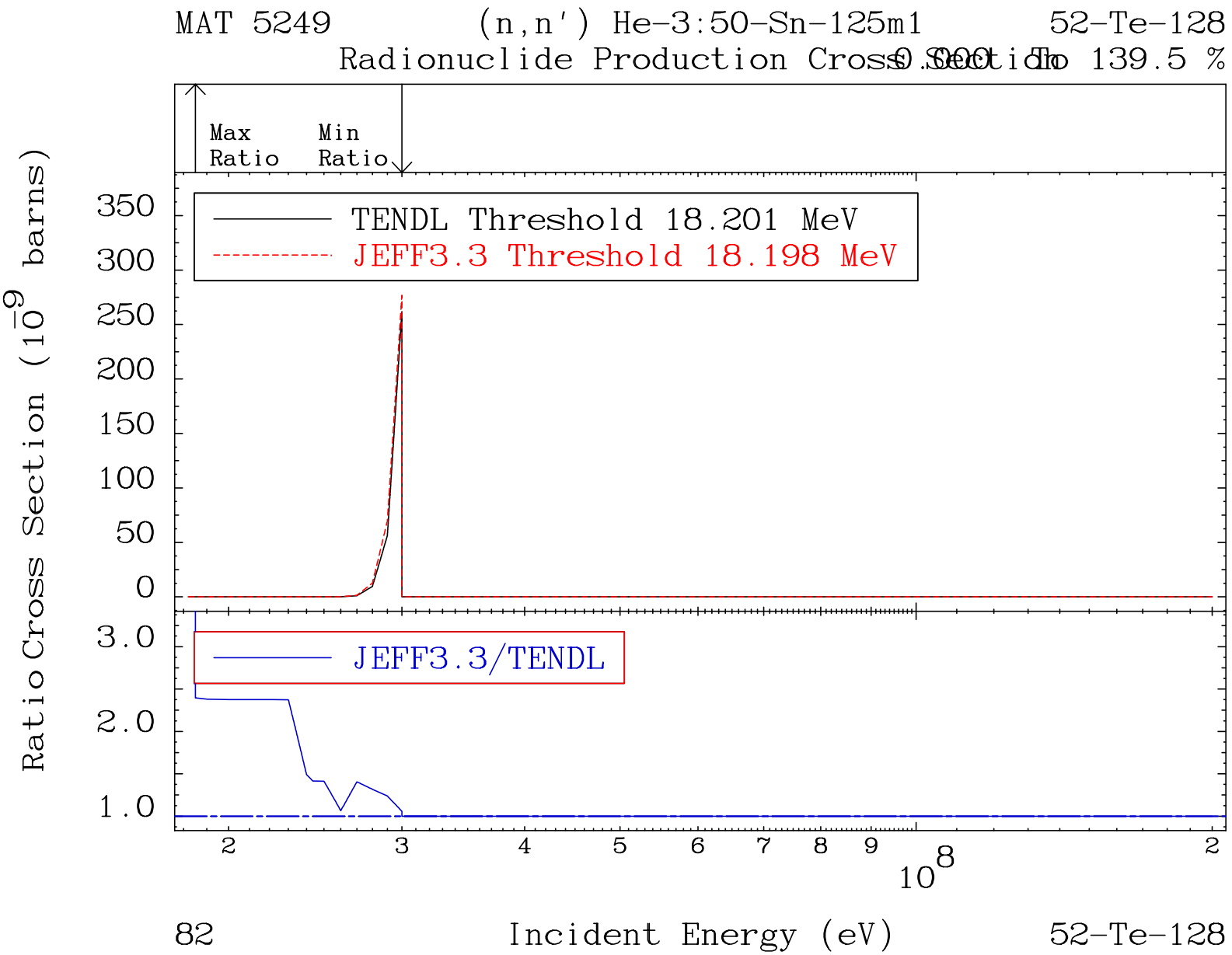

MAT 5249
(n,2n) α:50-Sn-123m1
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.792 MeV
JEFF3.3 Threshold 11.790 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
52-Te-128

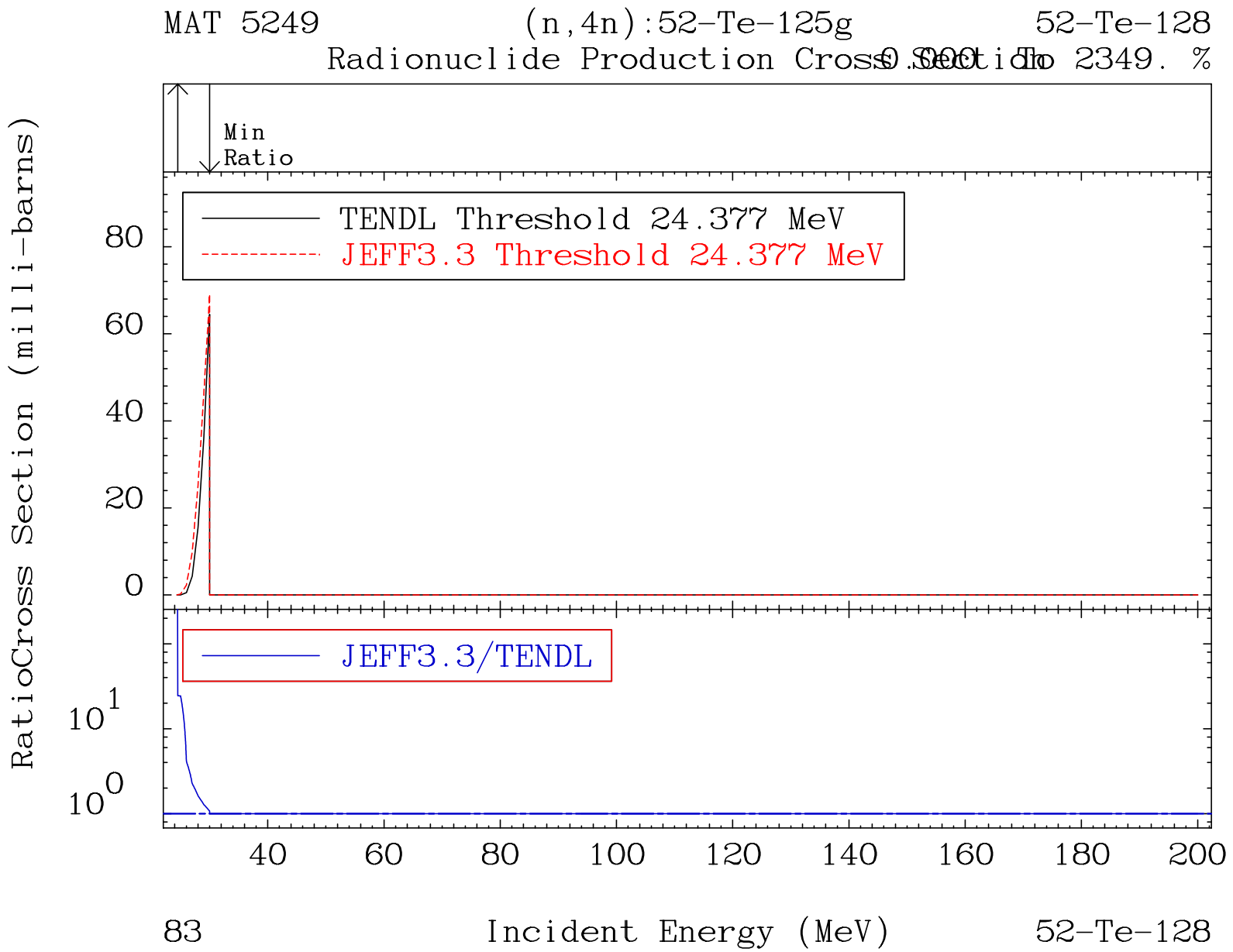

MAT 5249
(n,n') d:51-Sb-126g
52-Te-128
Radionuclide Production Cross-Section To 219.2 %
Max Ratio
Min Ratio
TENDL Threshold 15.860 MeV
JEFF3.3 Threshold 15.860 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
2
10^8
78
Incident Energy (eV)
52-Te-128

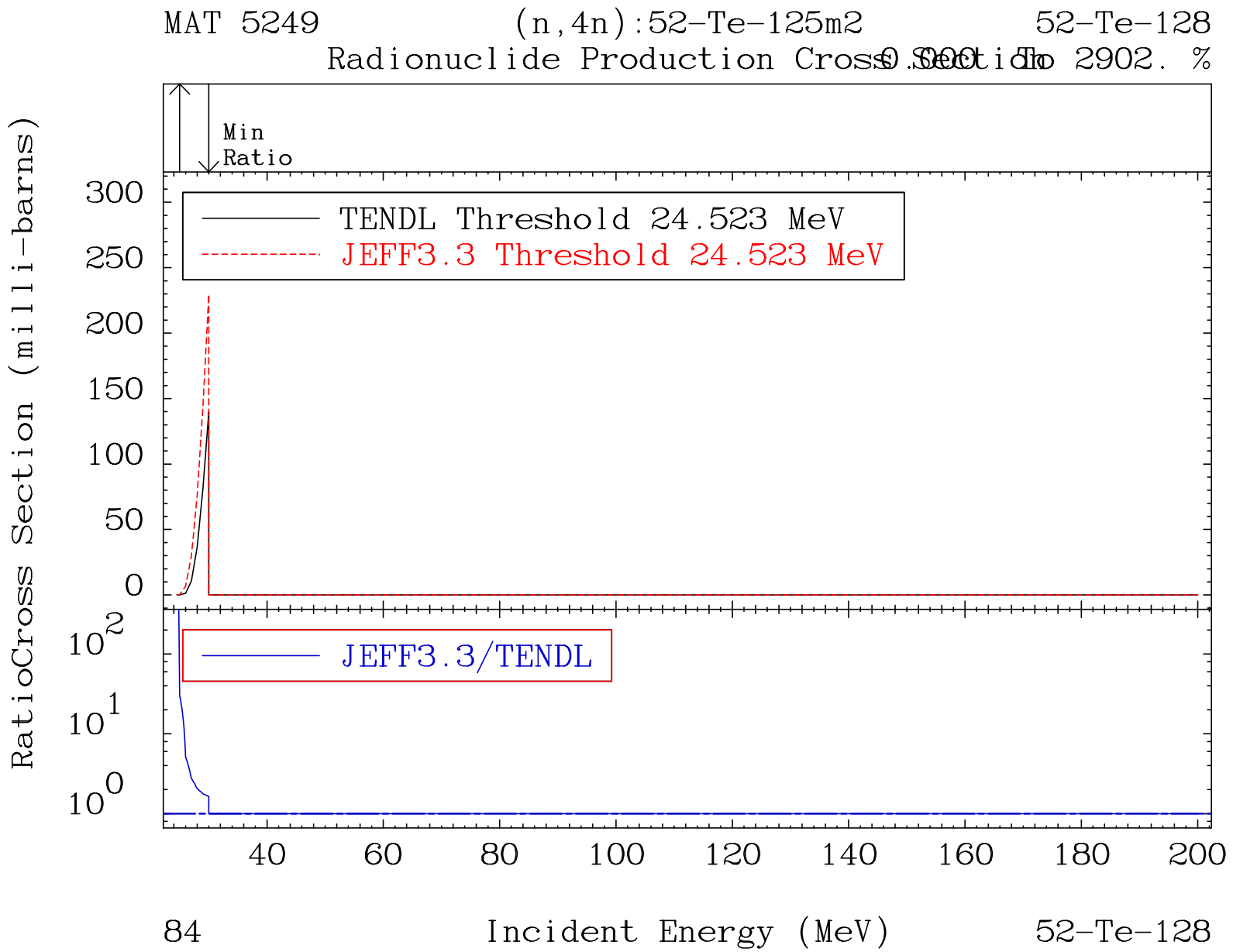

MAT 5249 (n,n') d:51-Sb-126m1 52-Te-128
Radionuclide Production Cross Section To 105.2 %
Max
Ratio
TENDL Threshold 15.878 MeV
JEFF3.3 Threshold 15.878 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
52-Te-128

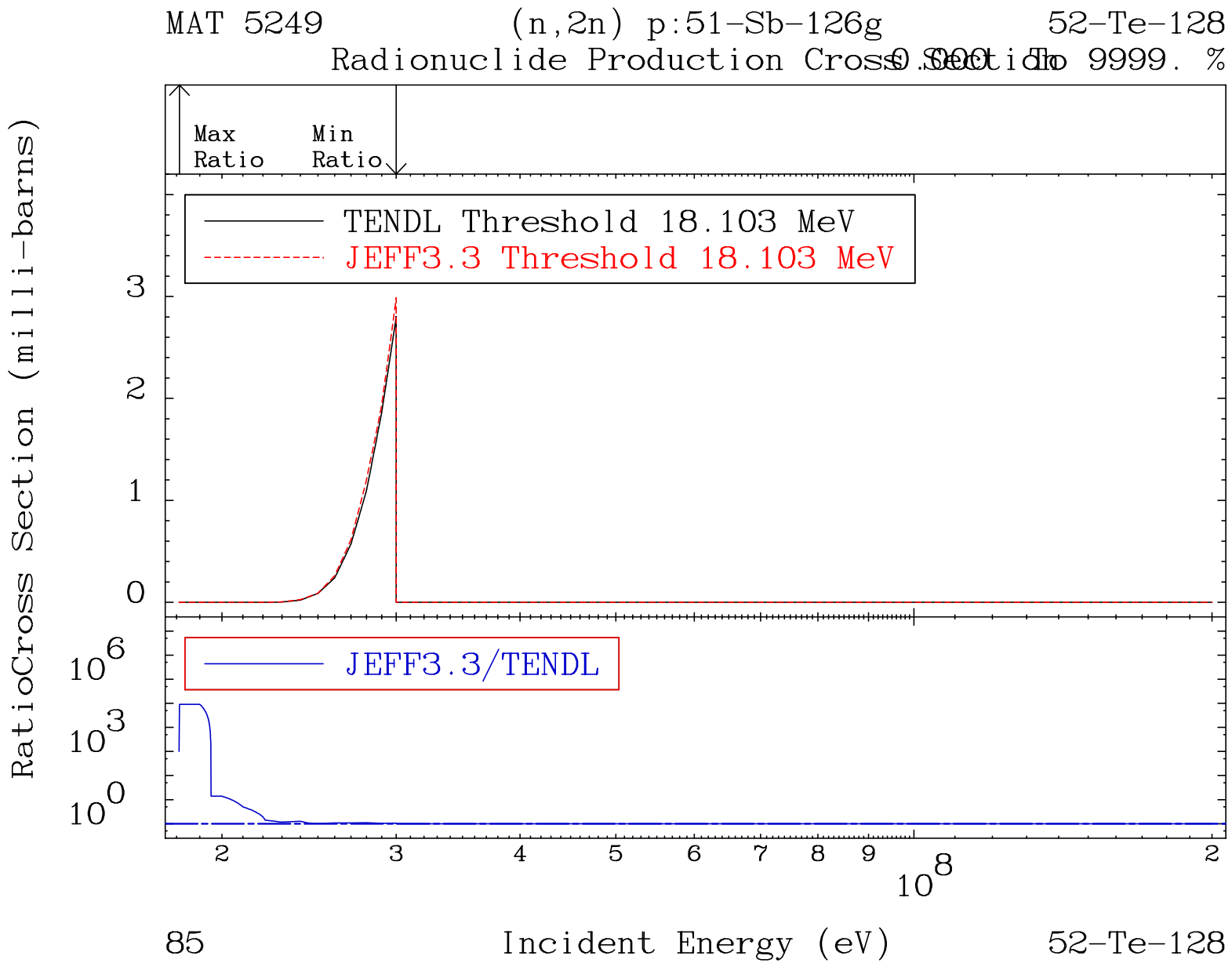

MAT 5249
(n,n') d:51-Sb-126m2
52-Te-128
Radionuclide Production Cross-Section
Max Ratio
Min Ratio
TENDL Threshold 15.901 MeV
JEFF3.3 Threshold 15.901 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
1.2
0.8
2
3
4
5
6
7
8
9
2
10^8
80
Incident Energy (eV)
52-Te-128

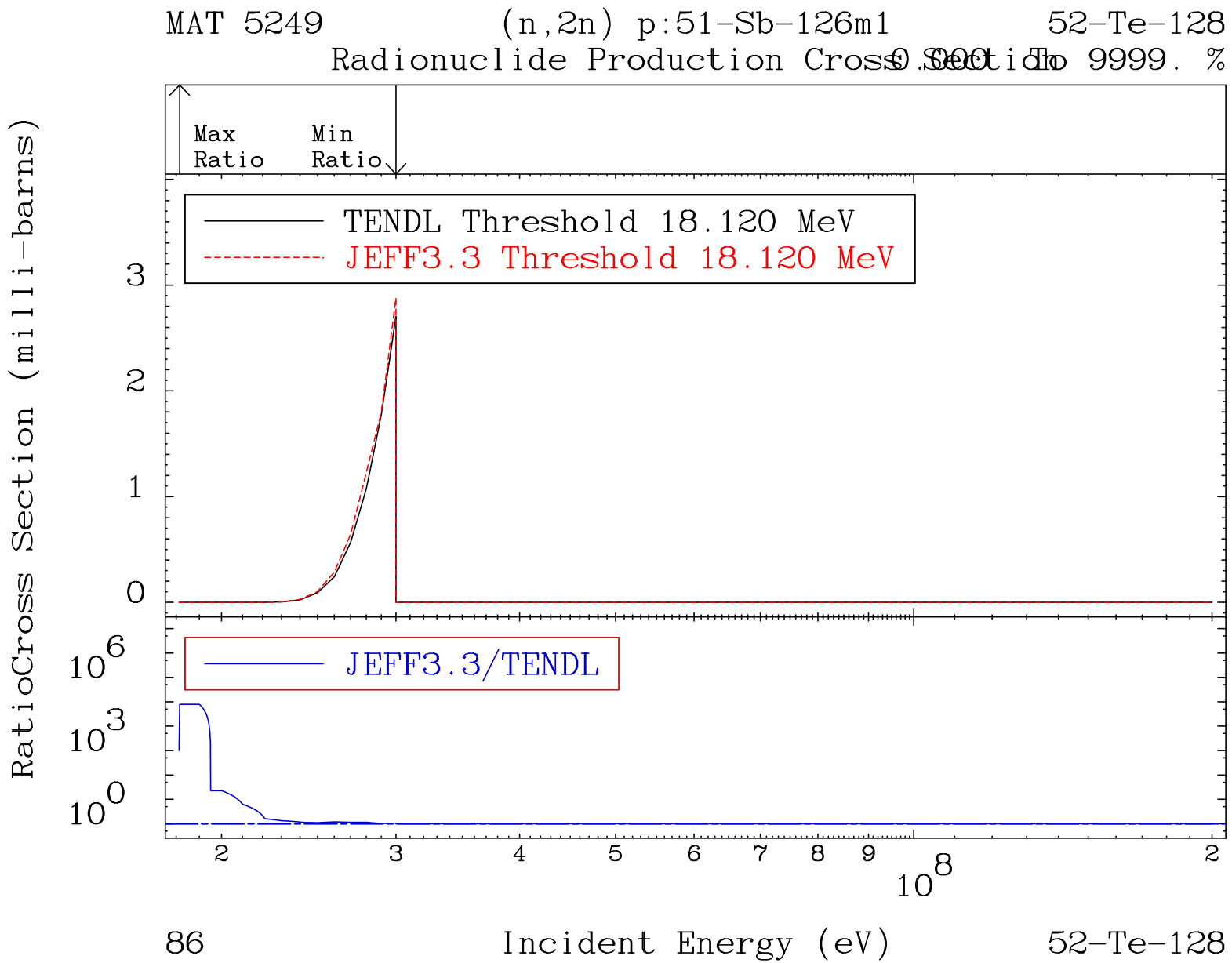

MAT 5249 (n,n') He-3:50-Sn-125g 52-Te-128
Radionuclide Production Cross Section To 85.53 %
Max Ratio
Min Ratio
TENDL Threshold 18.174 MeV
JEFF3.3 Threshold 18.171 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
52-Te-128

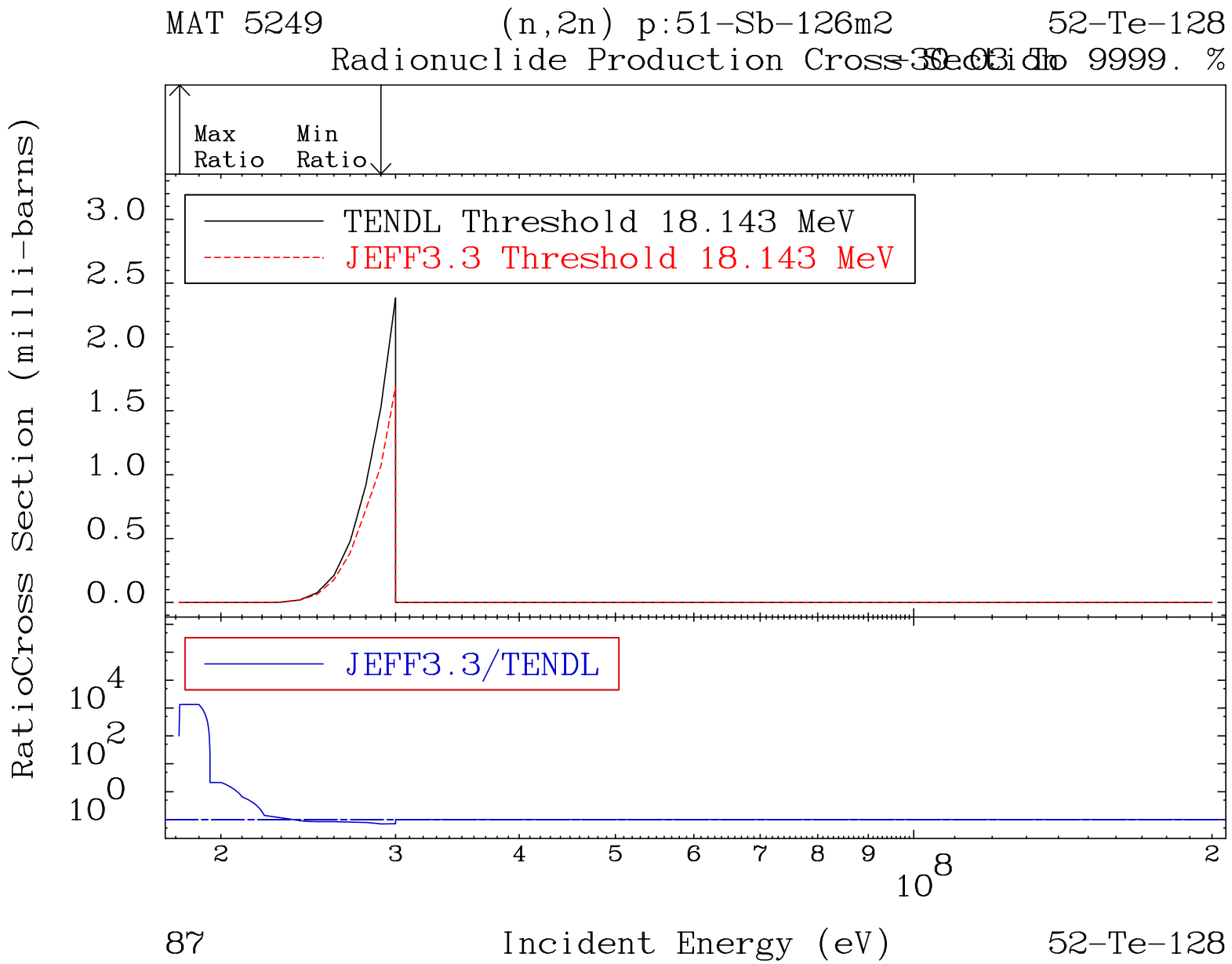

MAT 5249 (n,n') He-3:50-Sn-125m1 52-Te-128
Radionuclide Production Cross Section To 139.5 %
Max Ratio
Min Ratio
TENDL Threshold 18.201 MeV
JEFF3.3 Threshold 18.198 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
350
300
250
200
150
100
50
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
52-Te-128

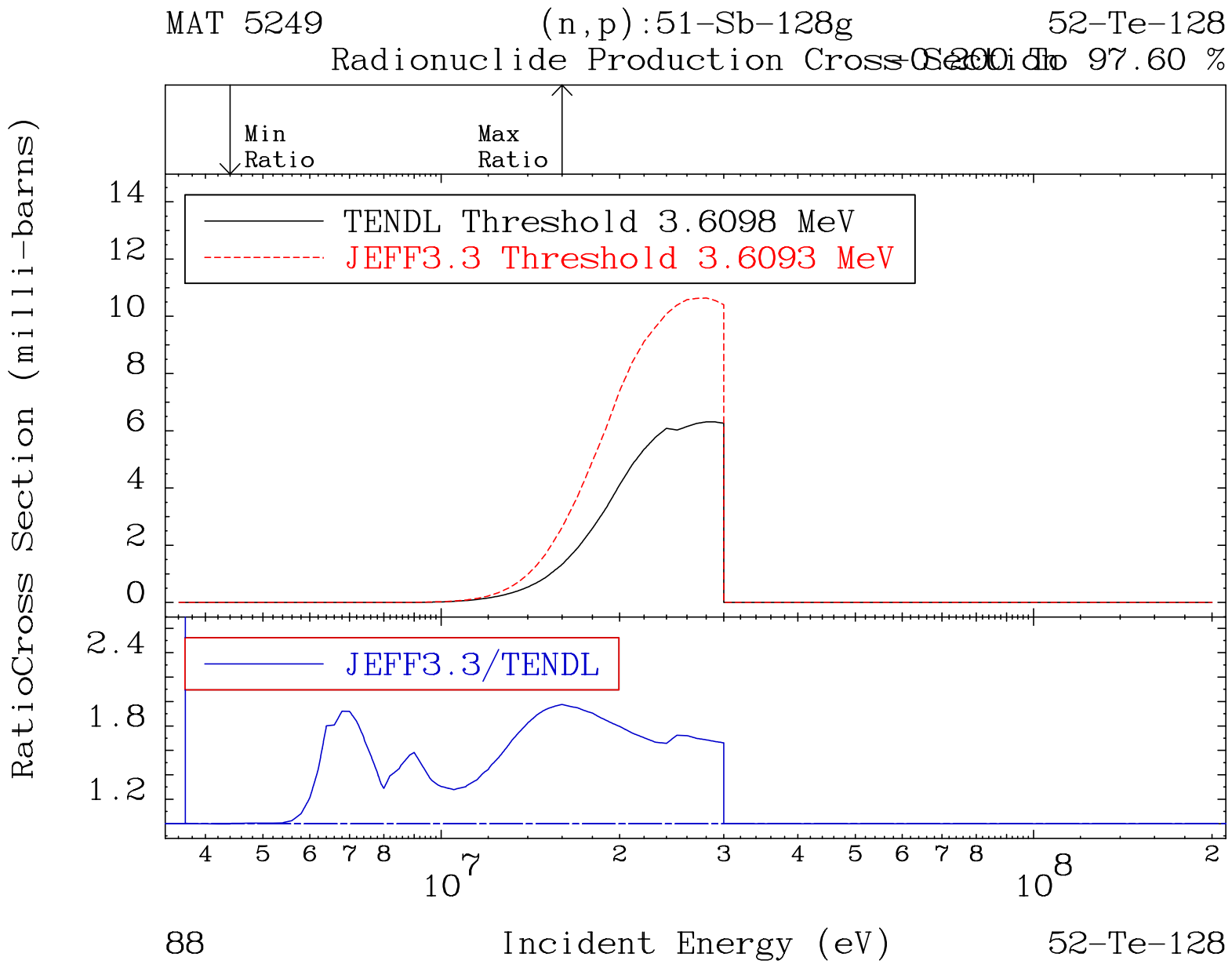

MAT 5249
(n,4n):52-Te-125g
52-Te-128
Radionuclide Production Cross Section
0.000 To 2349. %
Min
Ratio
TENDL Threshold 24.377 MeV
JEFF3.3 Threshold 24.377 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^1
10^0
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
52-Te-128

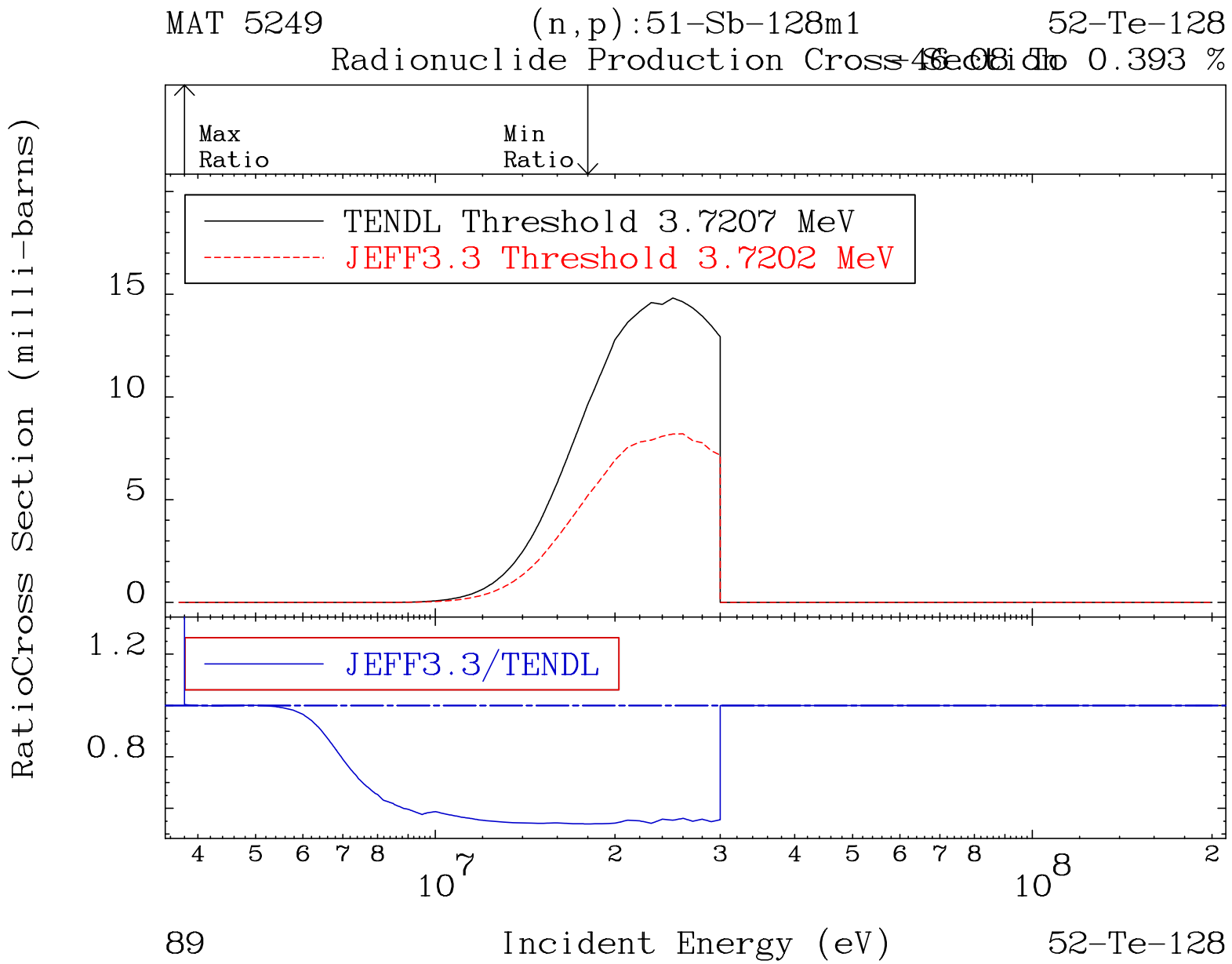

MAT 5249
(n,4n):52-Te-125m2
52-Te-128
Radionuclide Production Cross Section
0.000 To 2902. %
Min
Ratio
TENDL Threshold 24.523 MeV
JEFF3.3 Threshold 24.523 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^2
10^1
10^0
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
52-Te-128

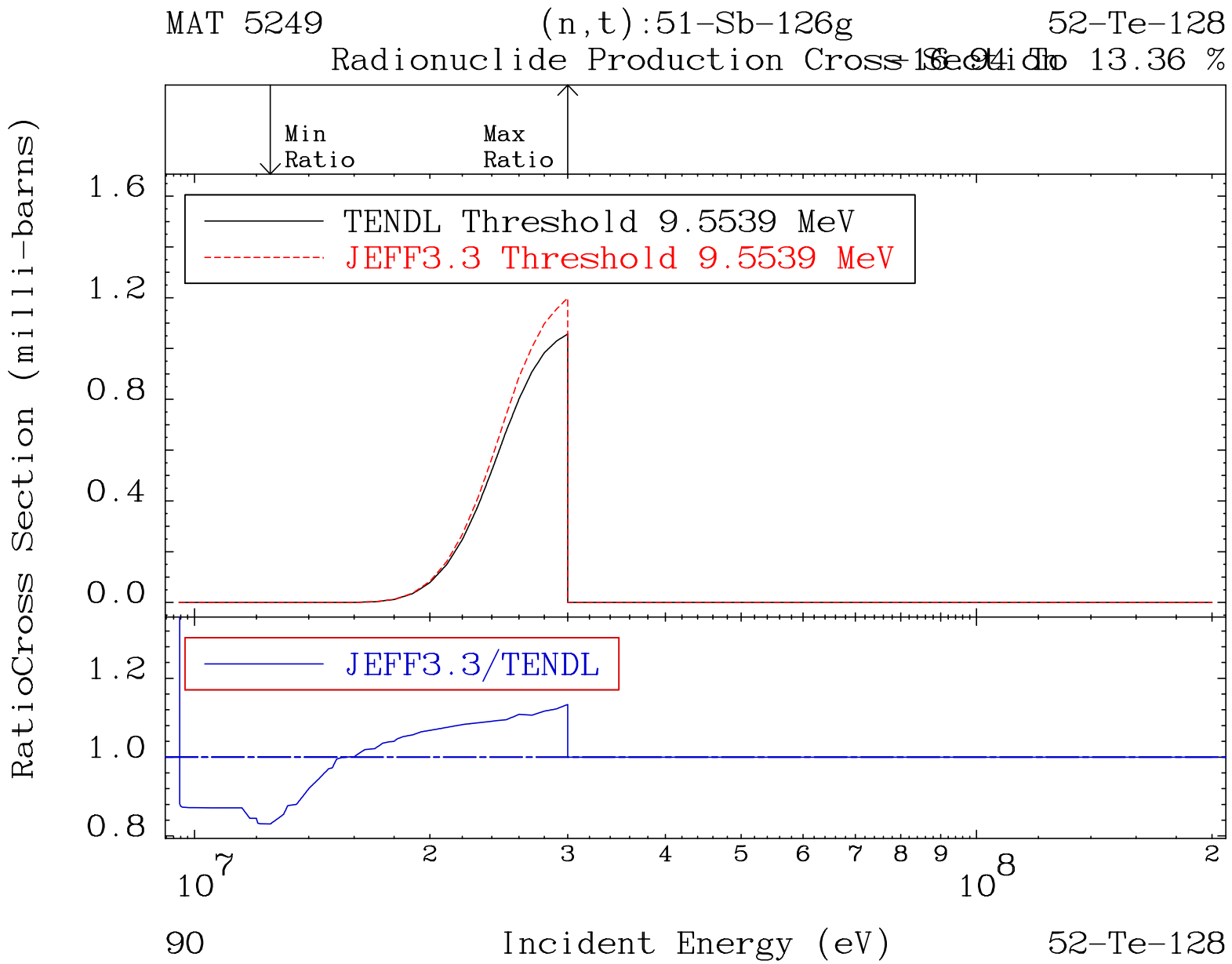

MAT 5249
(n,2n) p:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.103 MeV
JEFF3.3 Threshold 18.103 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
52-Te-128

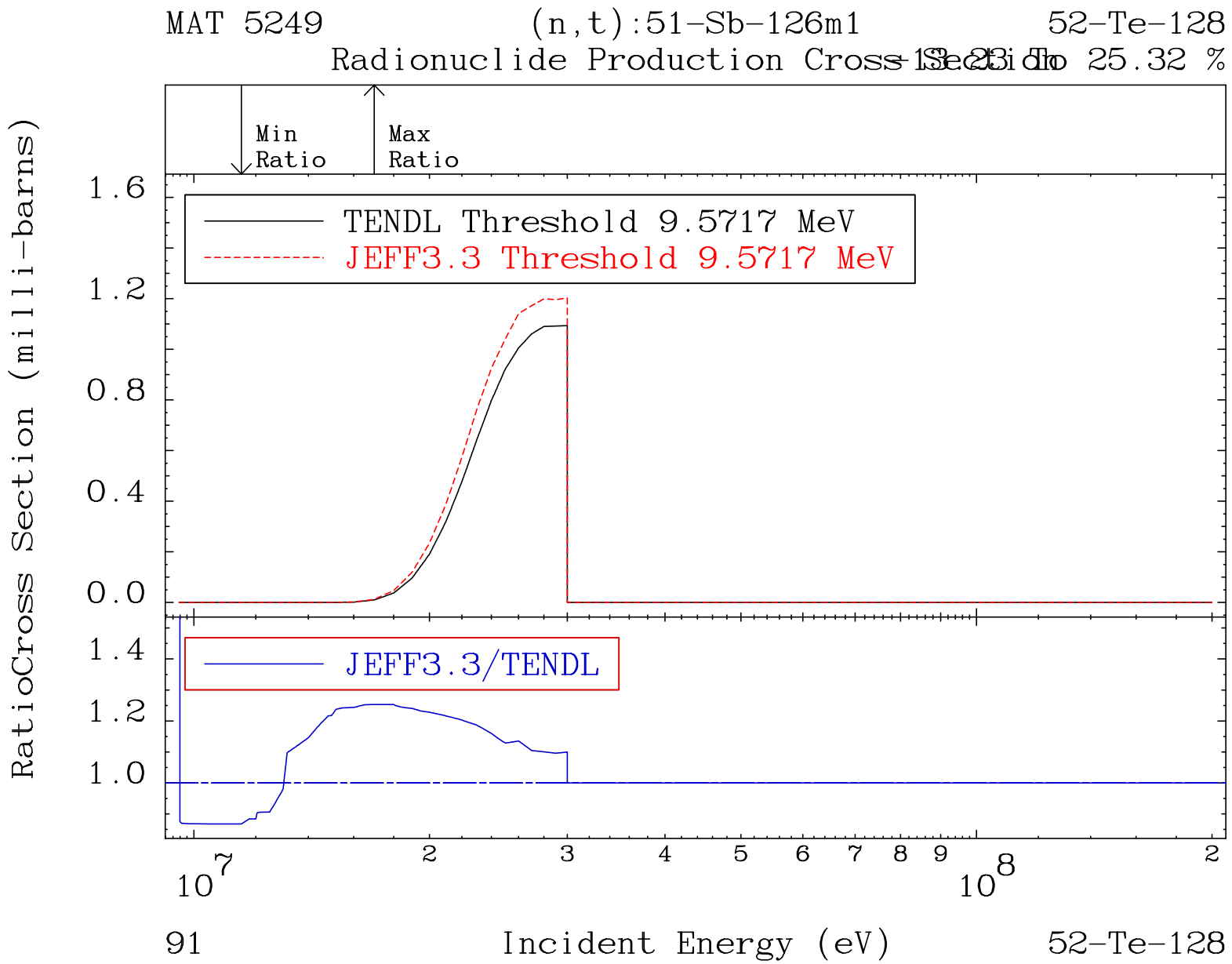

MAT 5249 (n,2n) p:51-Sb-126m1 52-Te-128
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.120 MeV
JEFF3.3 Threshold 18.120 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
86
52-Te-128
52-Te-128

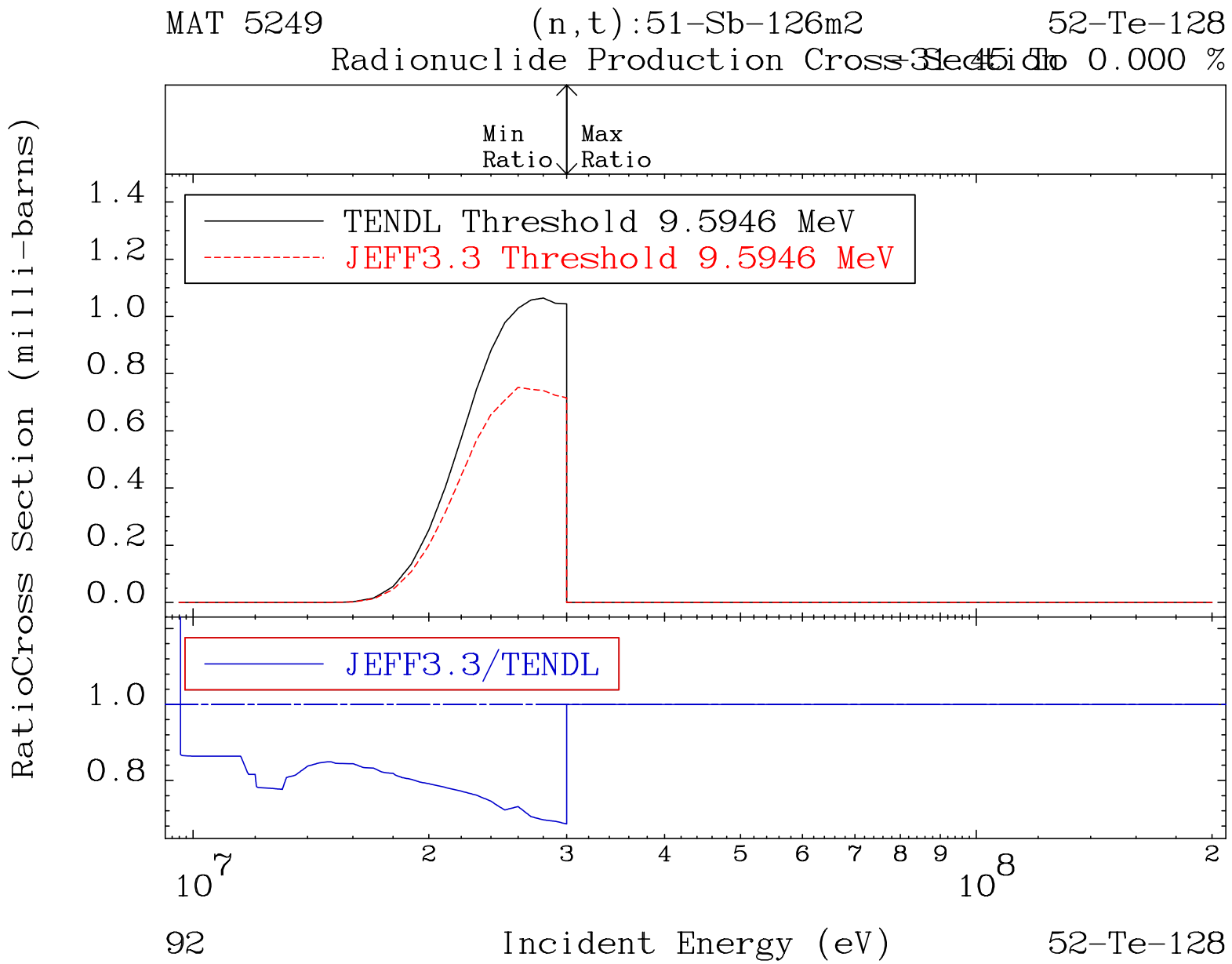

MAT 5249
(n,2n) p:51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.143 MeV
JEFF3.3 Threshold 18.143 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-128

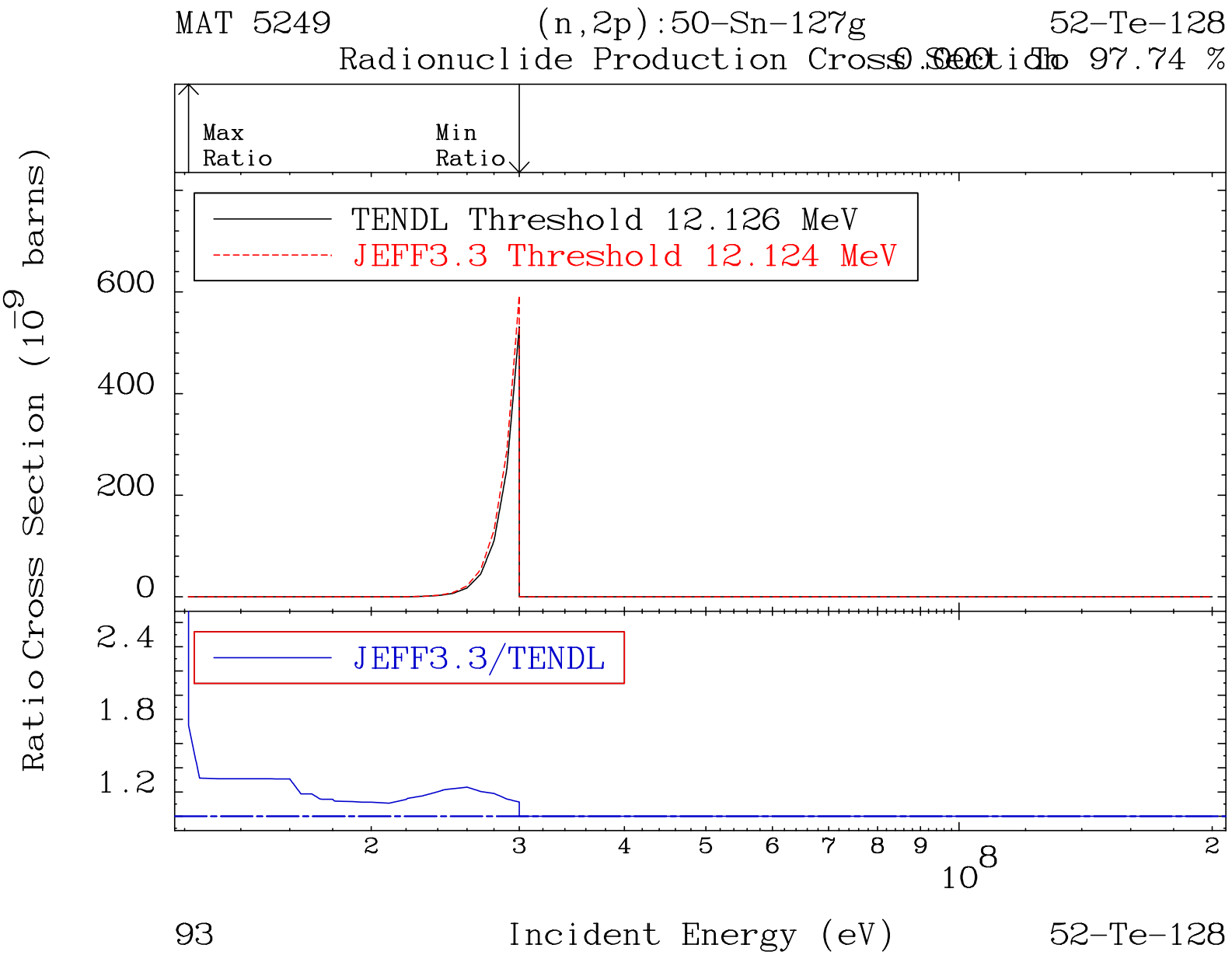

MAT 5249
(n,p):51-Sb-128g
52-Te-128
Radionuclide Production Cross Section To 97.60 %
Min Ratio
Max Ratio
TENDL Threshold 3.6098 MeV
JEFF3.3 Threshold 3.6093 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
88
52-Te-128

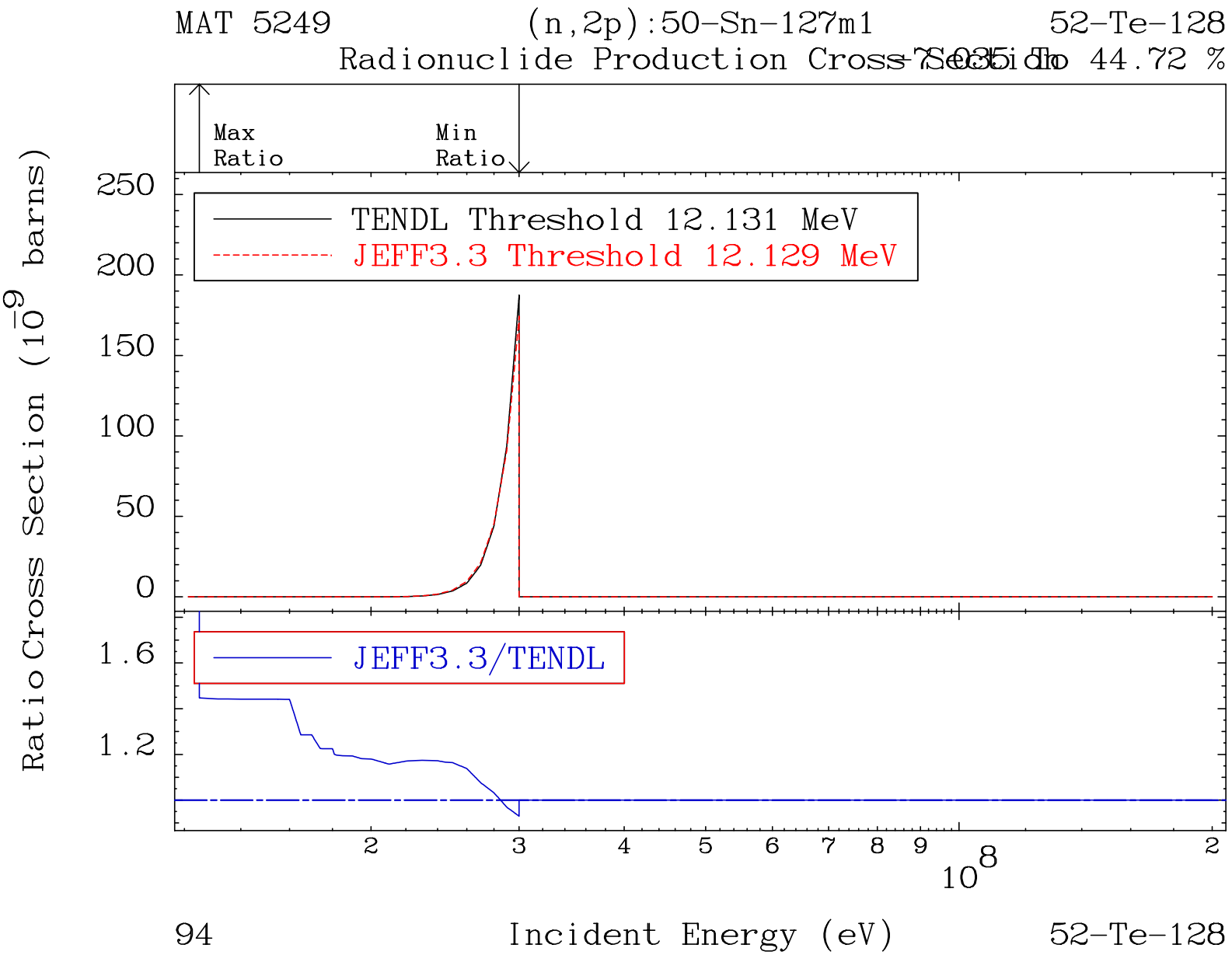

MAT 5249
(n,p):51-Sb-128m1
52-Te-128
Radionuclide Production Cross Section To 0.393 %
Max Ratio
Min Ratio
TENDL Threshold 3.7207 MeV
JEFF3.3 Threshold 3.7202 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
15
10
5
0
1.2
0.8
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
89
Incident Energy (eV)
52-Te-128

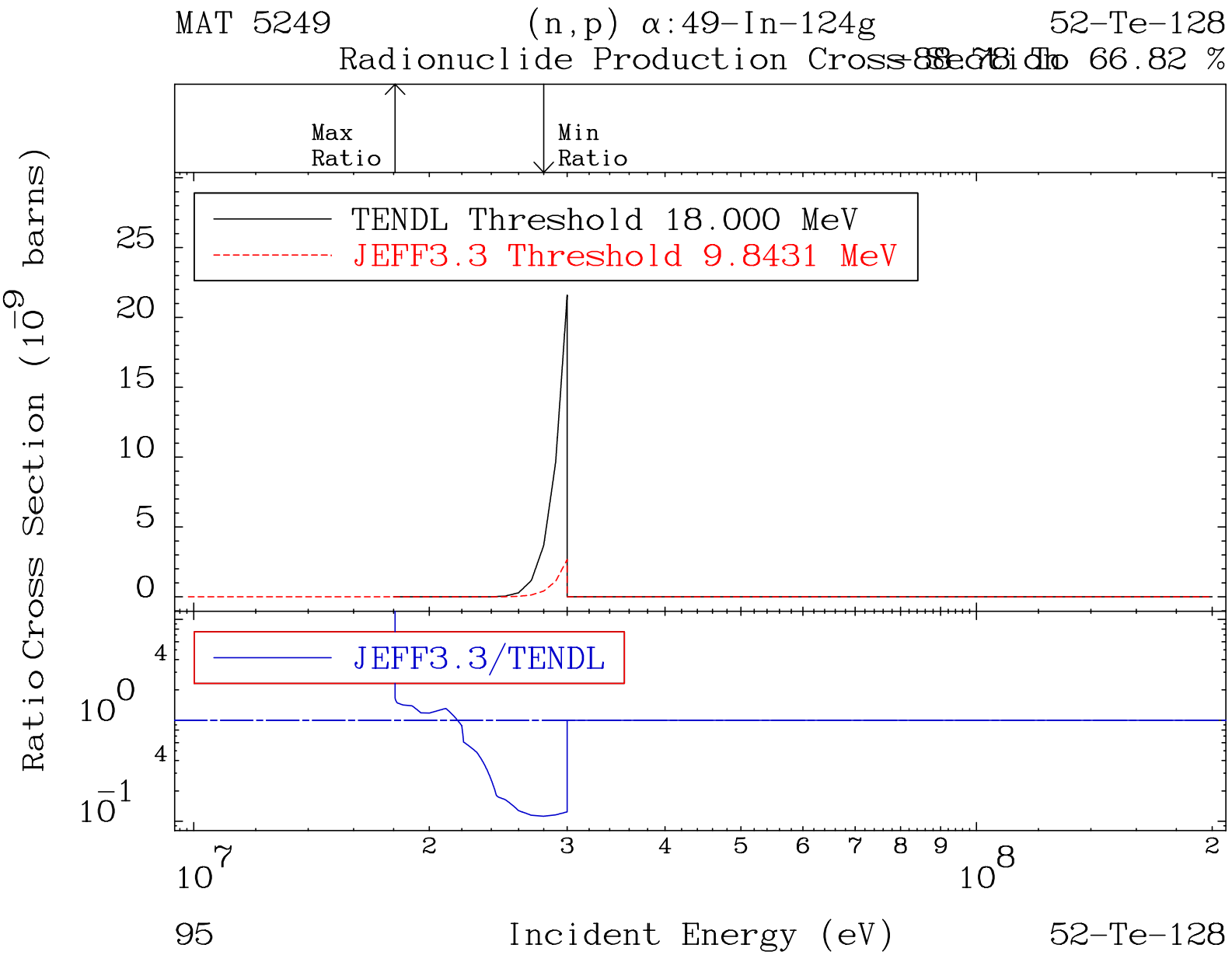

MAT 5249
(n,t):51-Sb-126g
52-Te-128
Radionuclide Production Cross Section To 13.36 %
Min Ratio
Max Ratio
TENDL Threshold 9.5539 MeV
JEFF3.3 Threshold 9.5539 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.2
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
52-Te-128

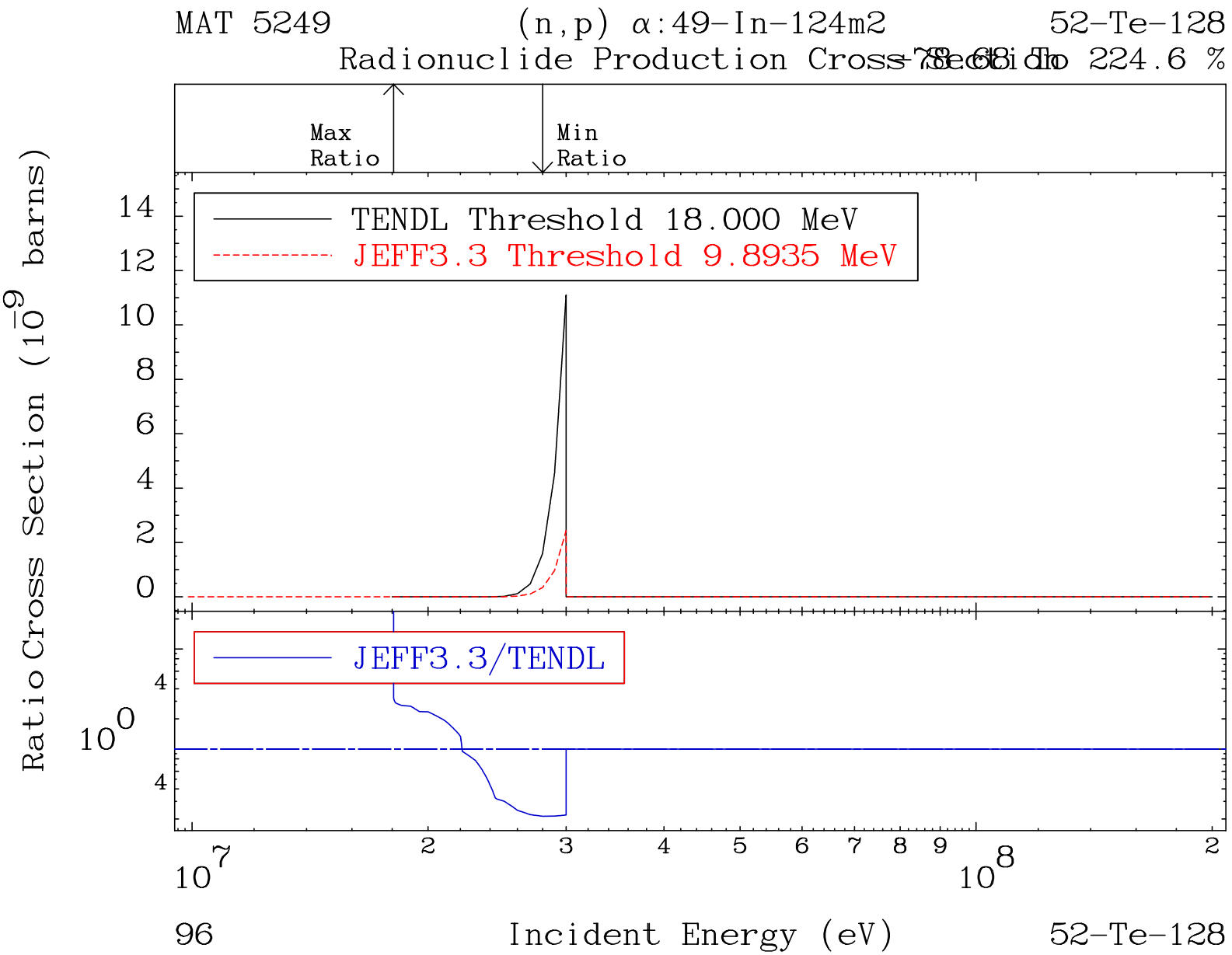

MAT 5249
(n,t):51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section To 25.32 %
Min Ratio
Max Ratio
TENDL Threshold 9.5717 MeV
JEFF3.3 Threshold 9.5717 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.4
1.2
1.0
10^7
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
52-Te-128


MAT 5249
(n,t):51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 9.5946 MeV
JEFF3.3 Threshold 9.5946 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
52-Te-128


MAT 5249
(n,2p):50-Sn-127g
52-Te-128
Radionuclide Production Cross Section
0.000 To 97.74 %
Max Ratio
Min Ratio
TENDL Threshold 12.126 MeV
JEFF3.3 Threshold 12.124 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
600
400
200
0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
52-Te-128


MAT 5249
(n,2p):50-Sn-127m1
52-Te-128
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 12.131 MeV
JEFF3.3 Threshold 12.129 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
94
52-Te-128


MAT 5249
(n,p) α:49-In-124g
52-Te-128
Radionuclide Production Cross Section To 66.82 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8431 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
95
52-Te-128


MAT 5249
(n,p) α:49-In-124m2
52-Te-128
Radionuclide Production Cross Section To 224.6 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8935 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
96
52-Te-128