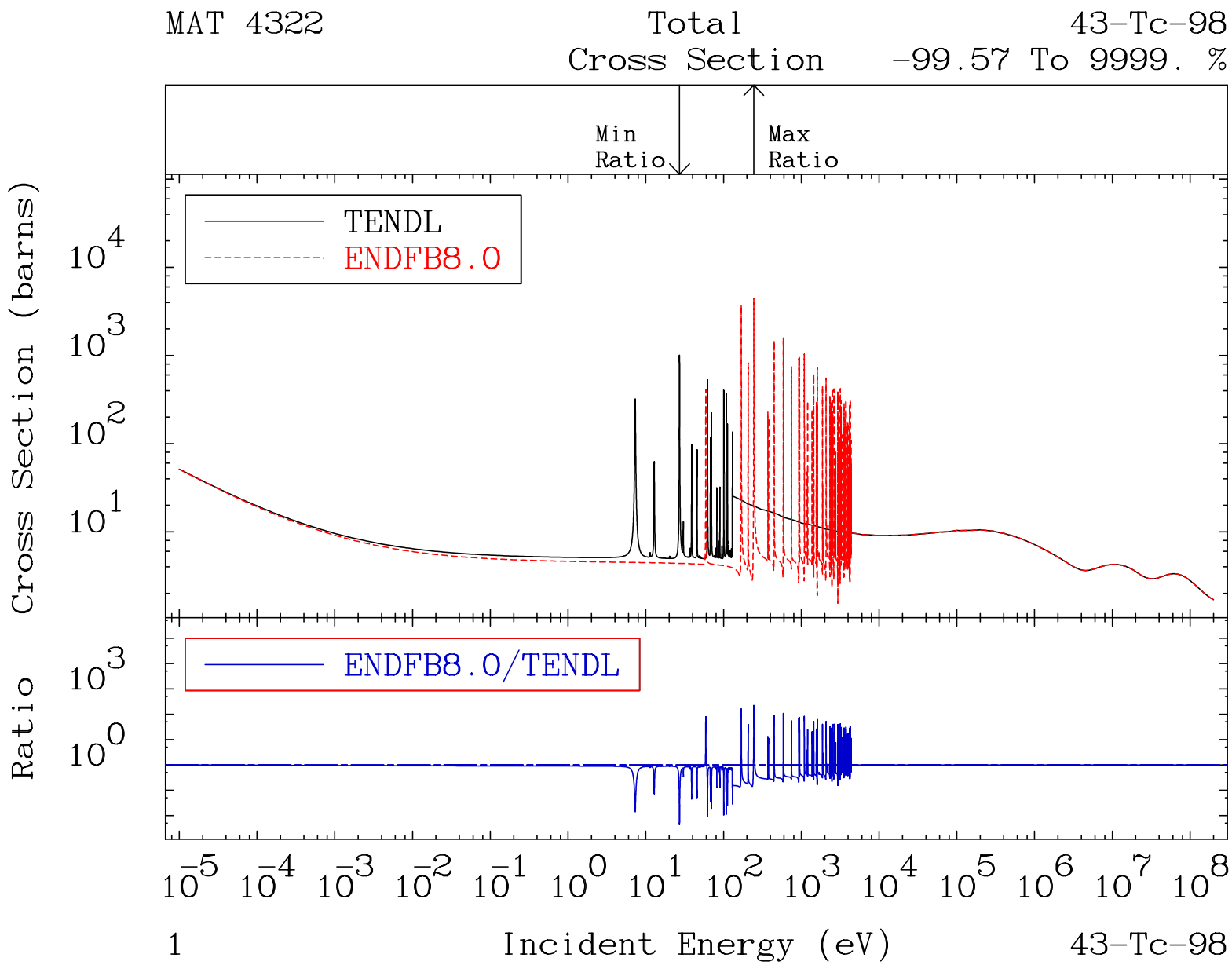
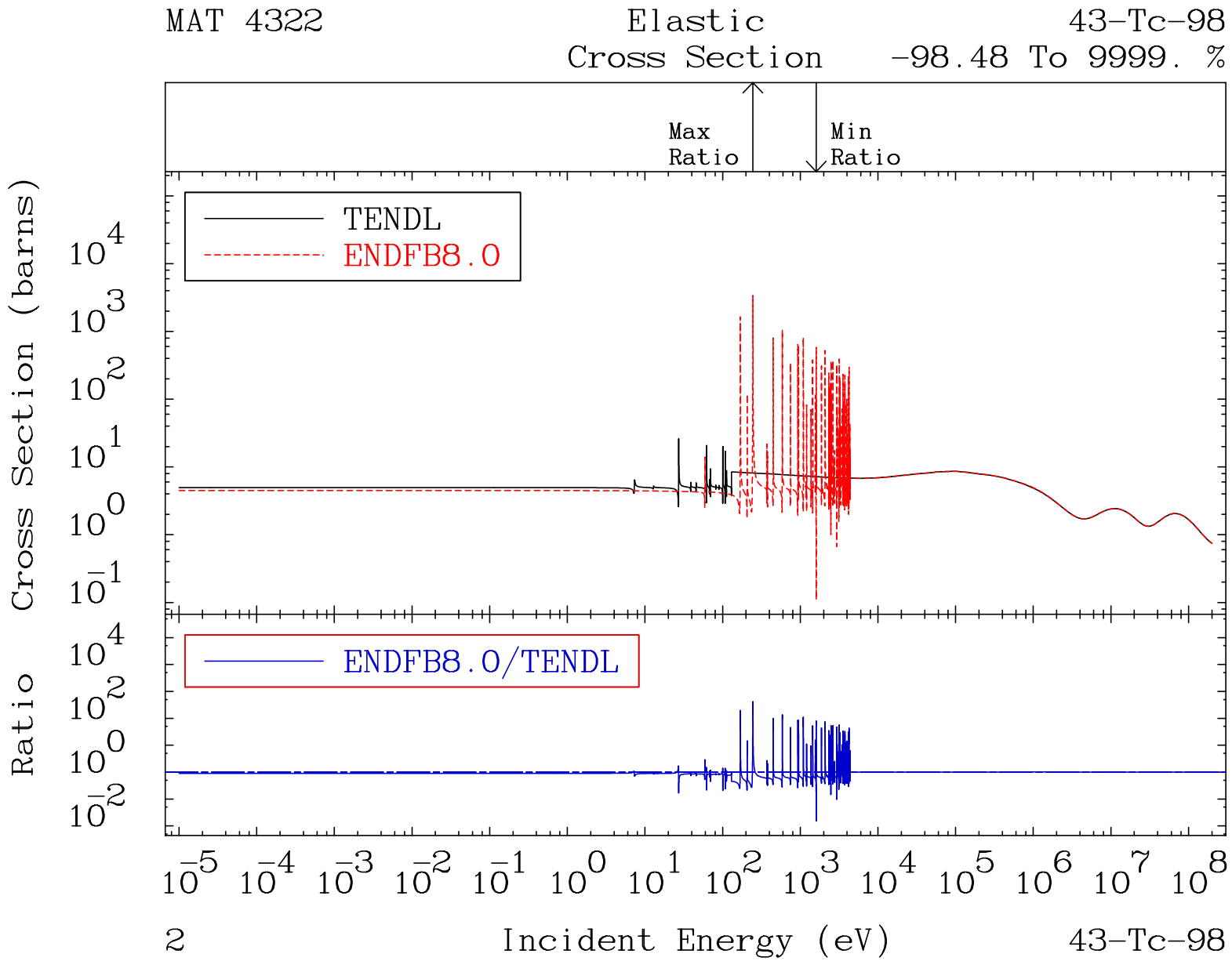
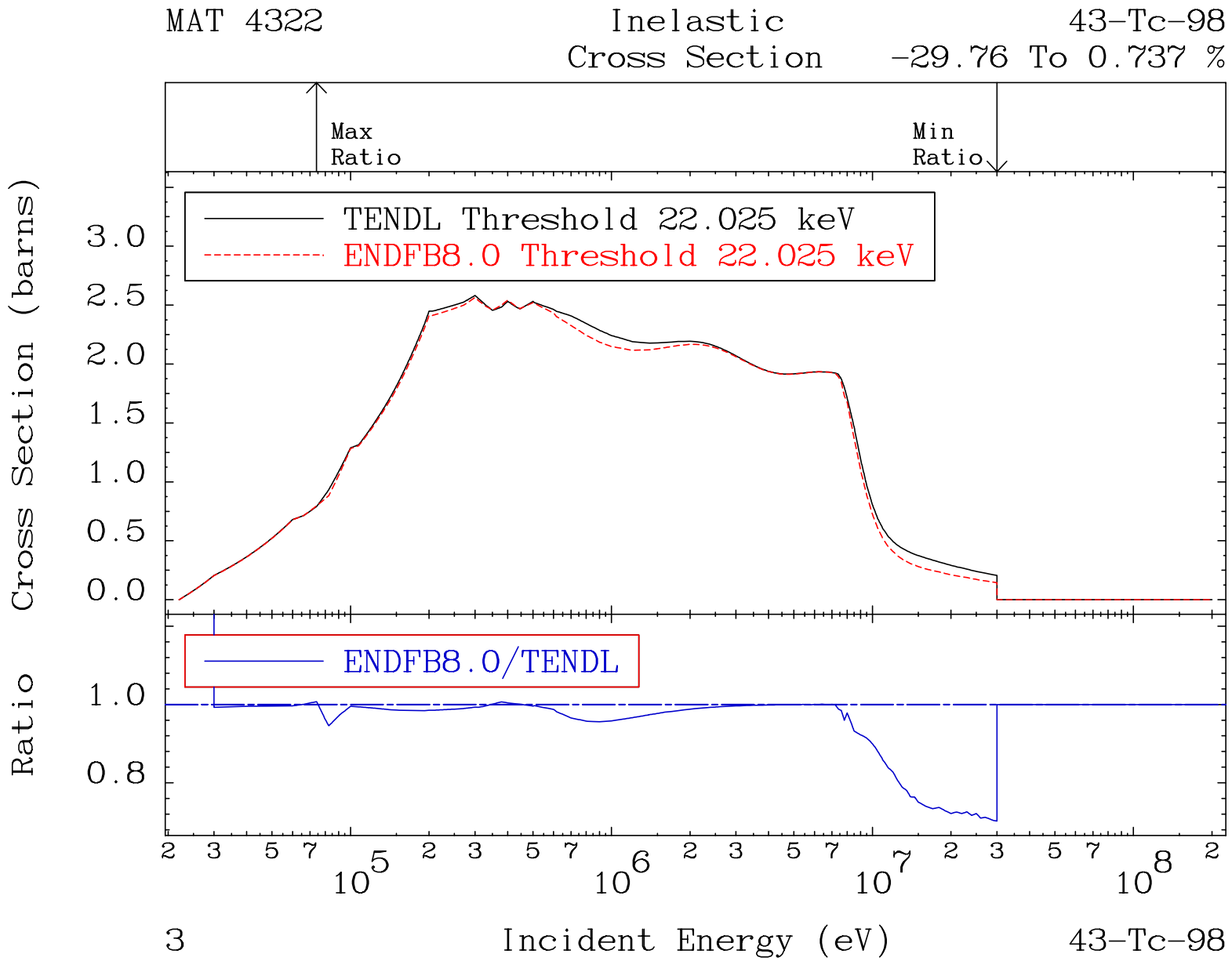
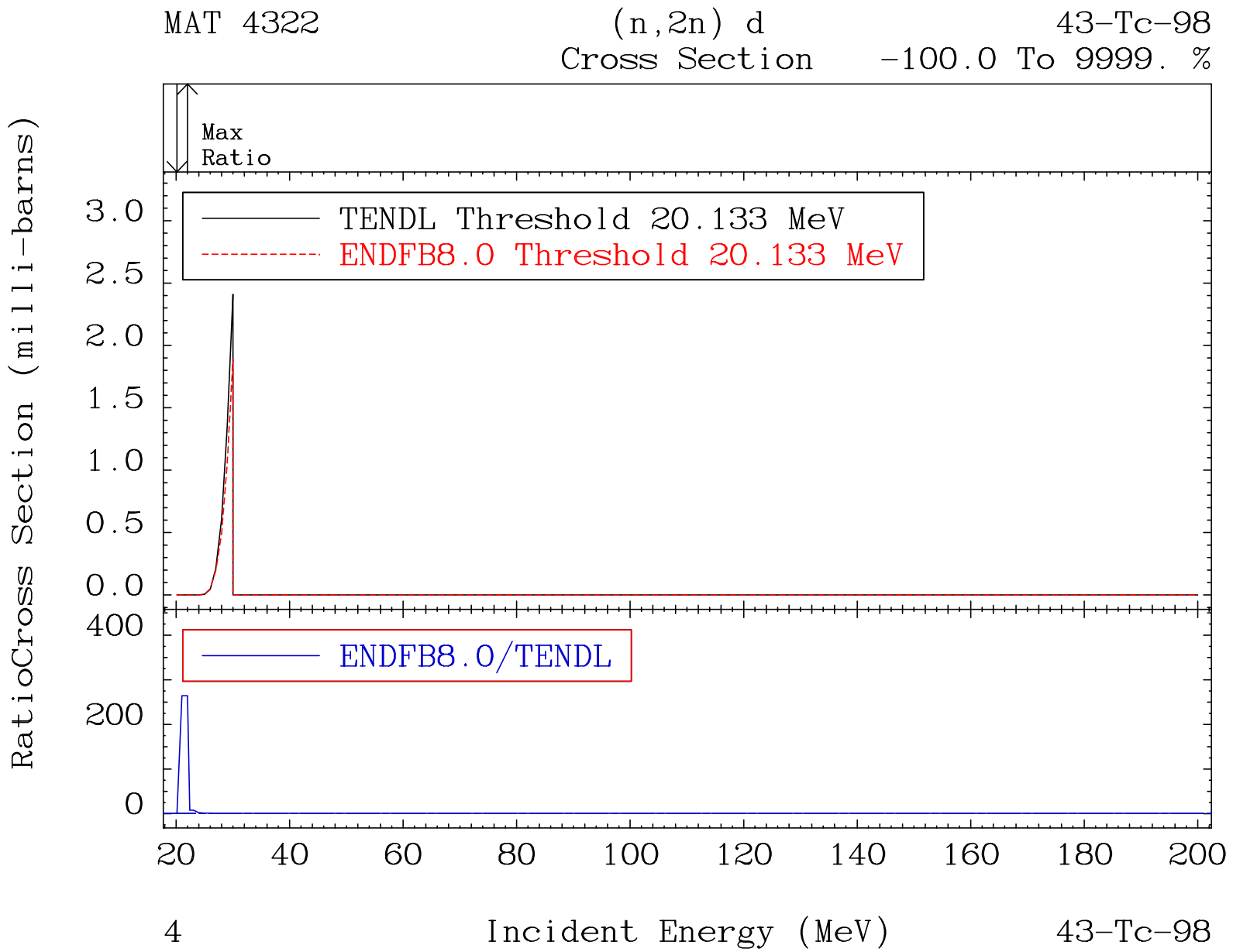
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

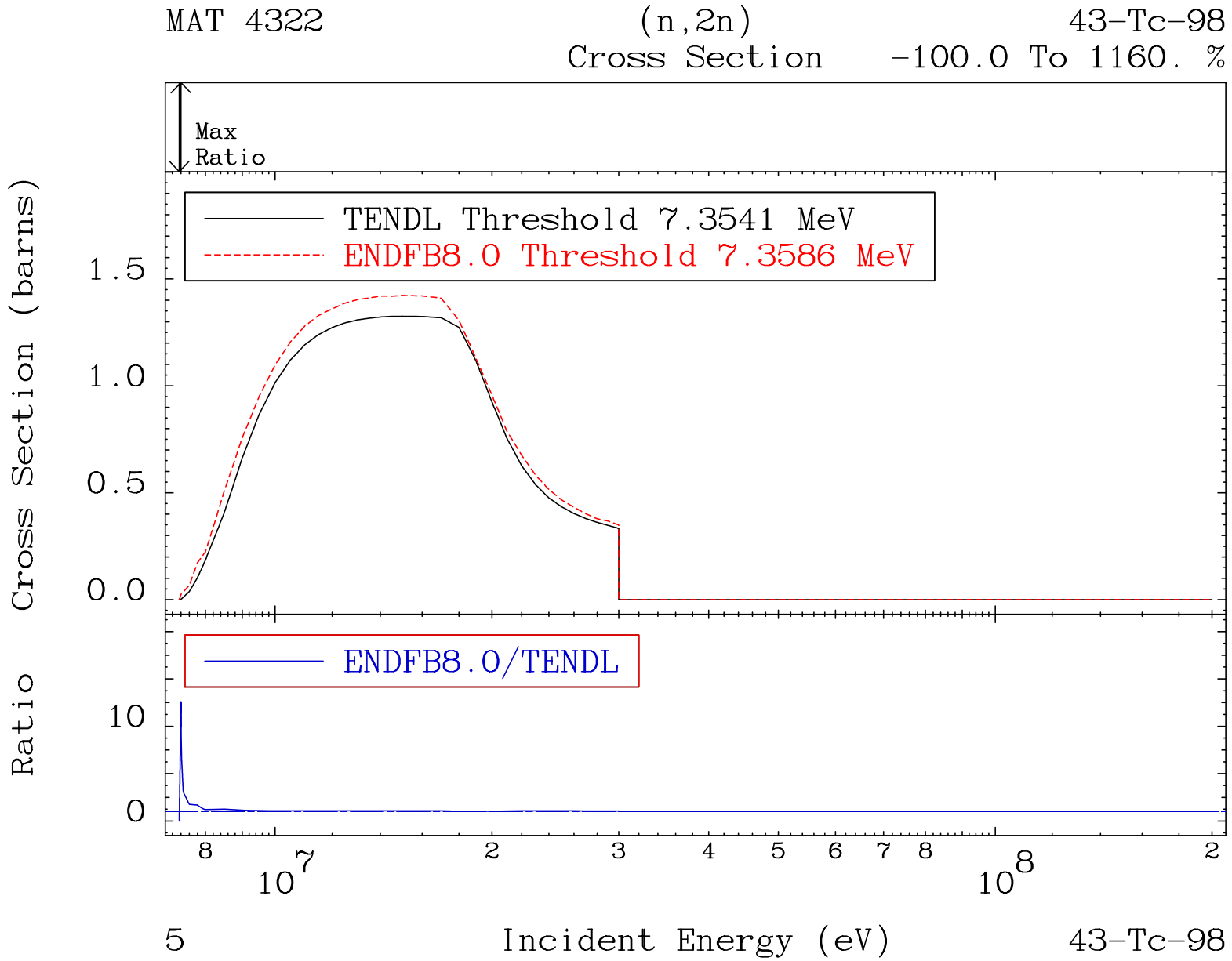
Press Mouse Button to Start

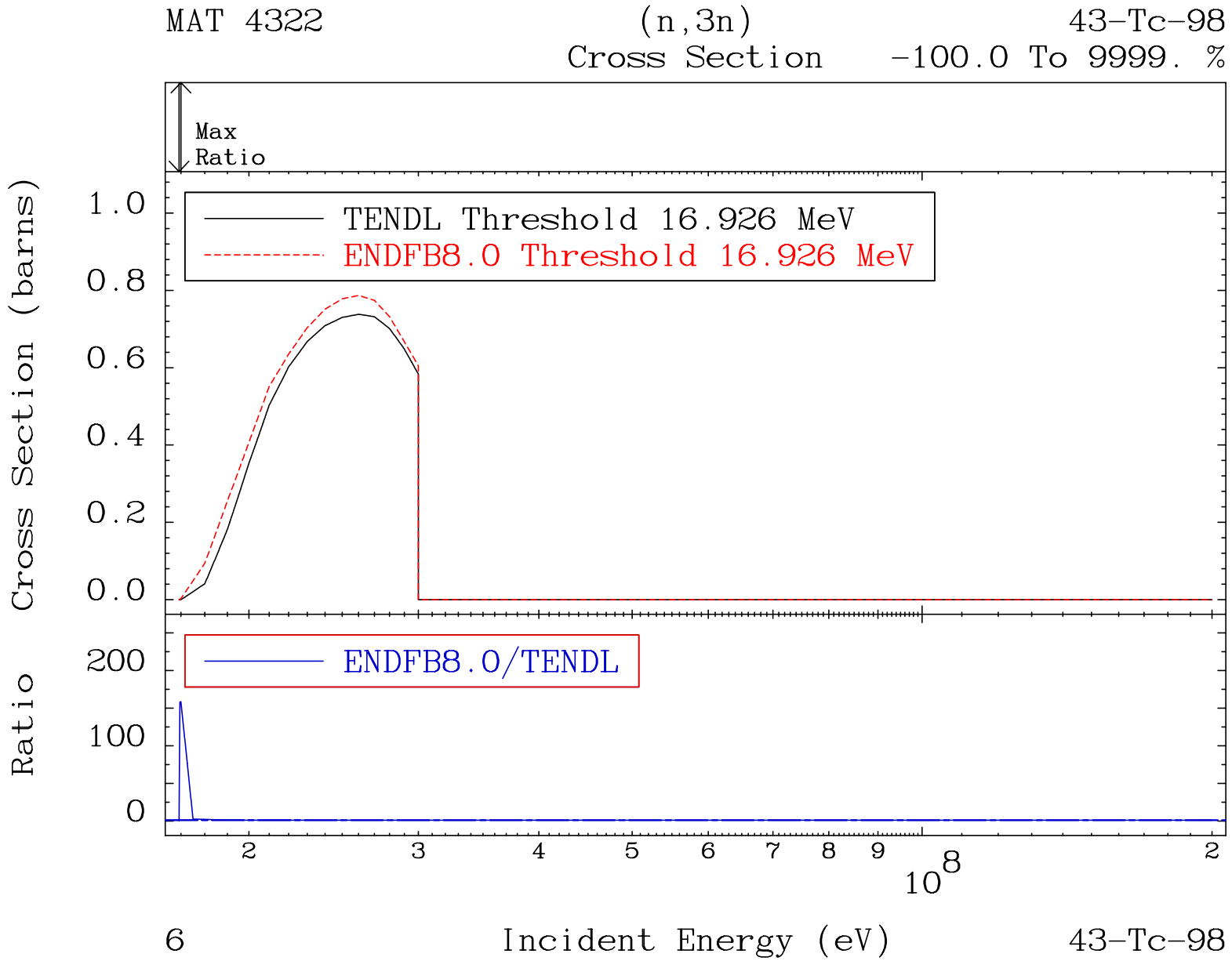

MAT 4322
Total
Cross Section
43-Tc-98
-99.57 To 9999. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
43-Tc-98

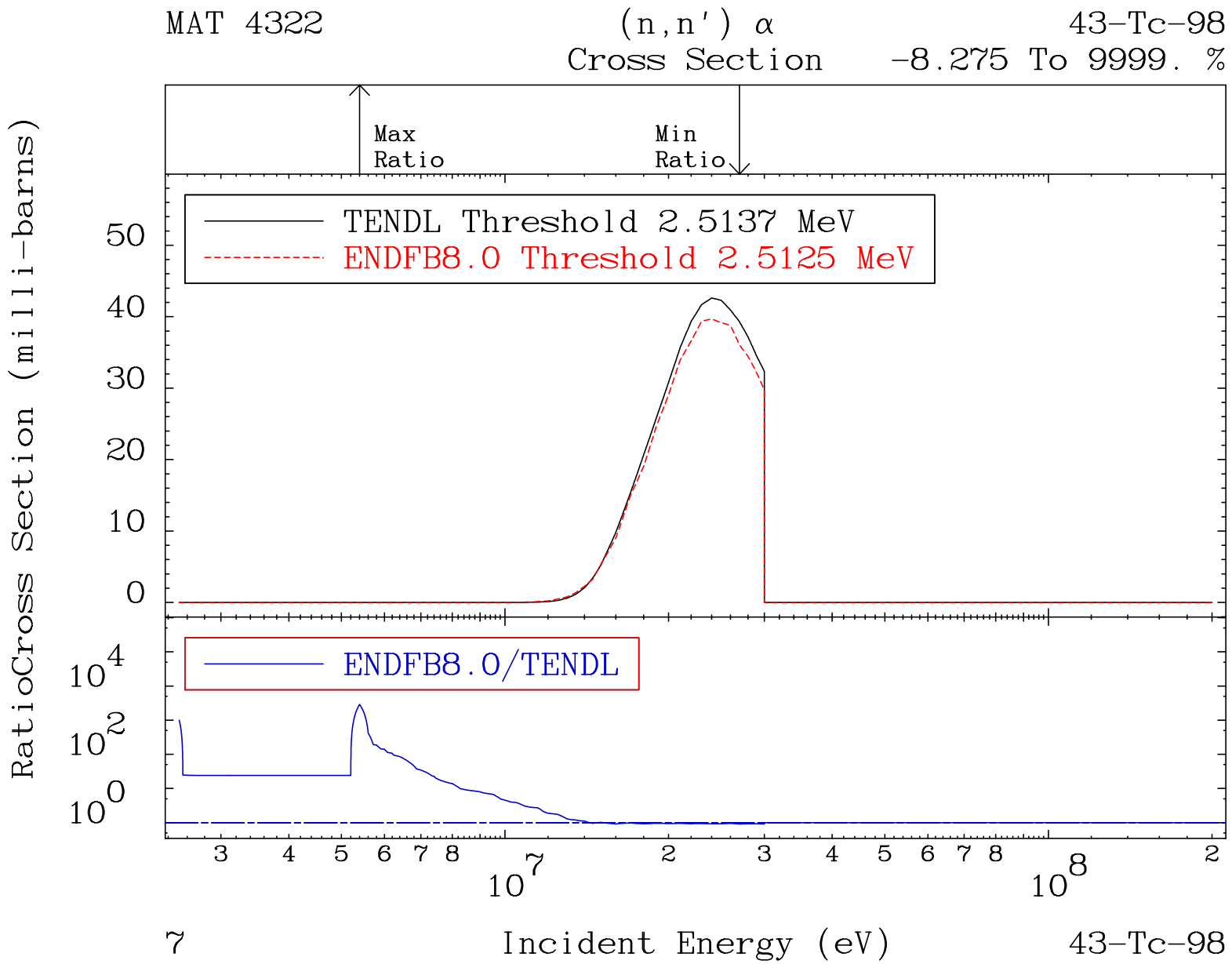

MAT 4322
Elastic
Cross Section
43-Tc-98
-98.48 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
43-Tc-98

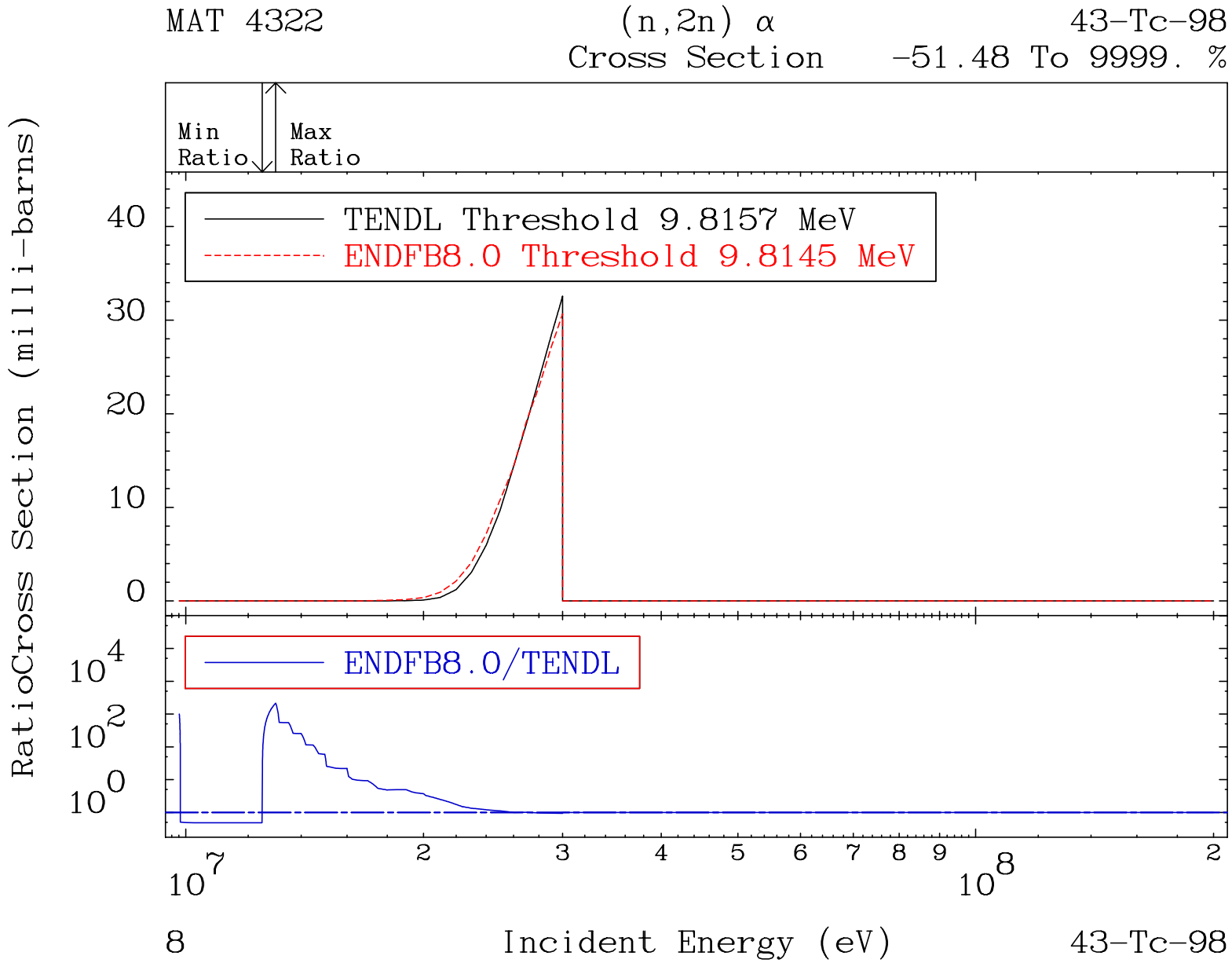

MAT 4322
Inelastic
Cross Section
43-Tc-98
-29.76 To 0.737 %
Max
Ratio
Min
Ratio
TENDL Threshold 22.025 keV
ENDFB8.0 Threshold 22.025 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
1.0
0.8
2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
3
Incident Energy (eV)
43-Tc-98

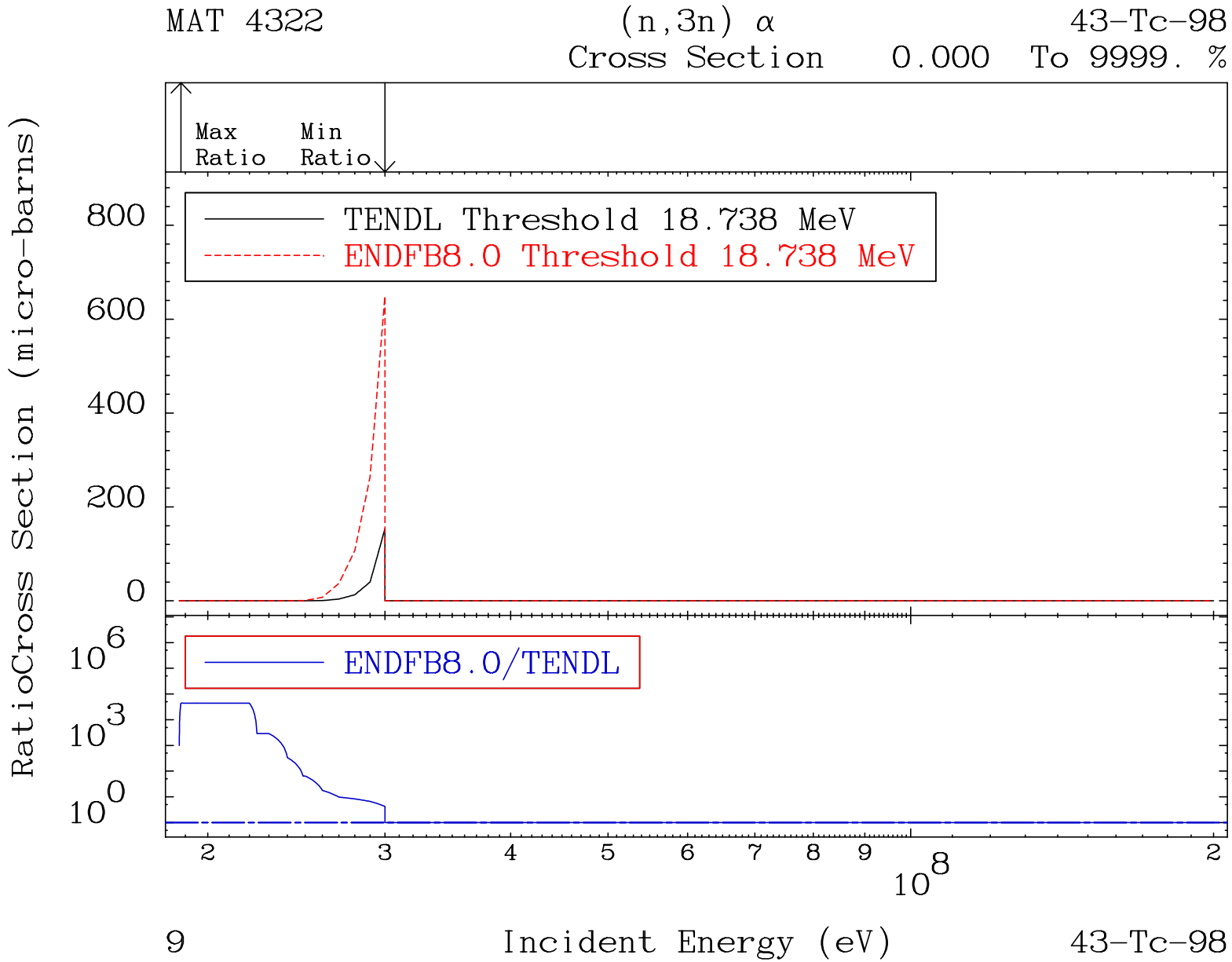

MAT 4322
(n,2n) d
43-Tc-98
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 20.133 MeV
ENDFB8.0 Threshold 20.133 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
400
200
0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
43-Tc-98

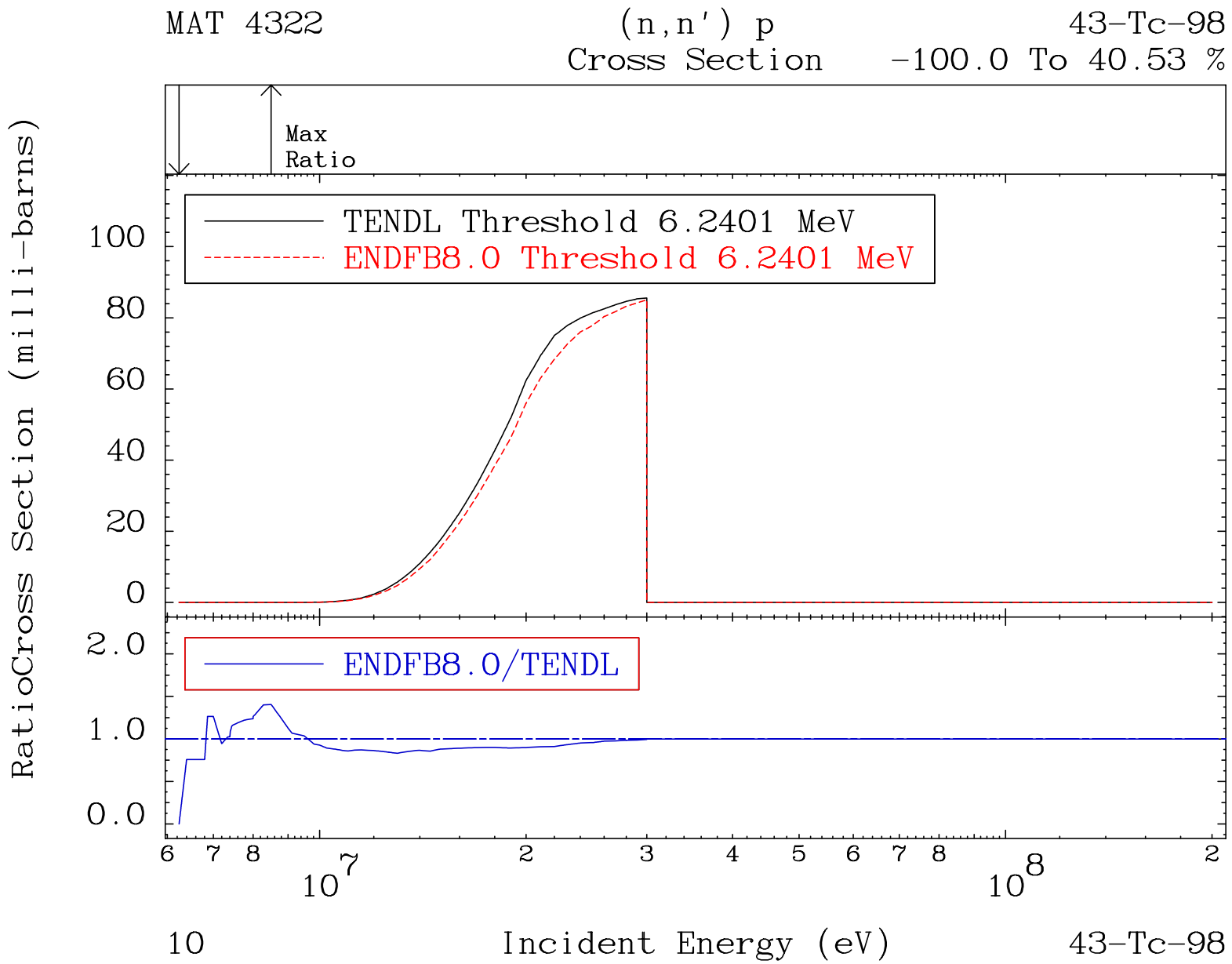

MAT 4322
(n,2n)
Cross Section
43-Tc-98
-100.0 To 1160. %
Max
Ratio
TENDL Threshold 7.3541 MeV
ENDFB8.0 Threshold 7.3586 MeV
1.5
1.0
0.5
0.0
Cross Section (barns)
ENDFB8.0/TENDL
10
0
Ratio
8
10^7
2
3
4
5
6
7
8
10^8
2
5
Incident Energy (eV)
43-Tc-98

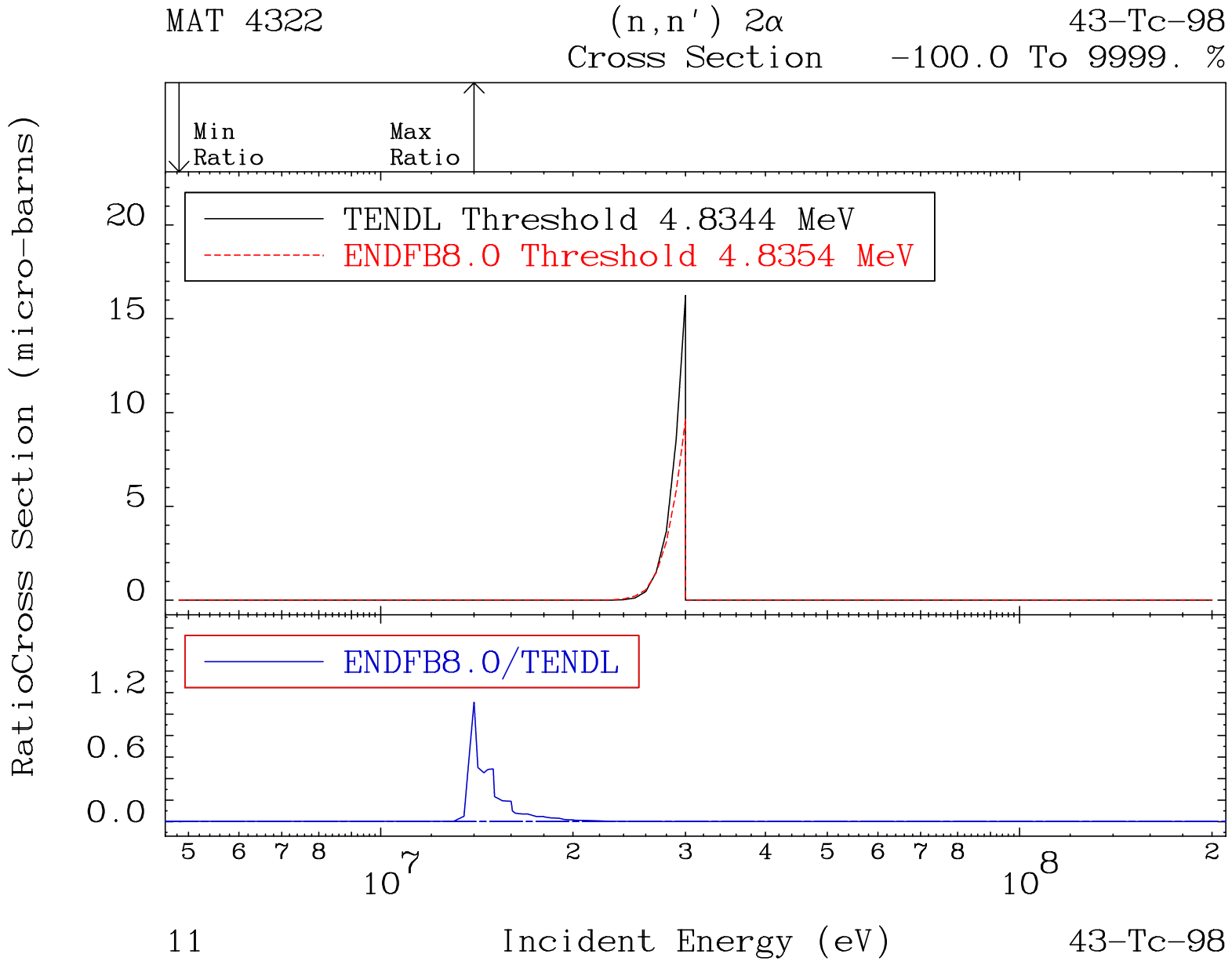

MAT 4322
(n,3n)
Cross Section
43-Tc-98
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 16.926 MeV
ENDFB8.0 Threshold 16.926 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
200
100
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
43-Tc-98

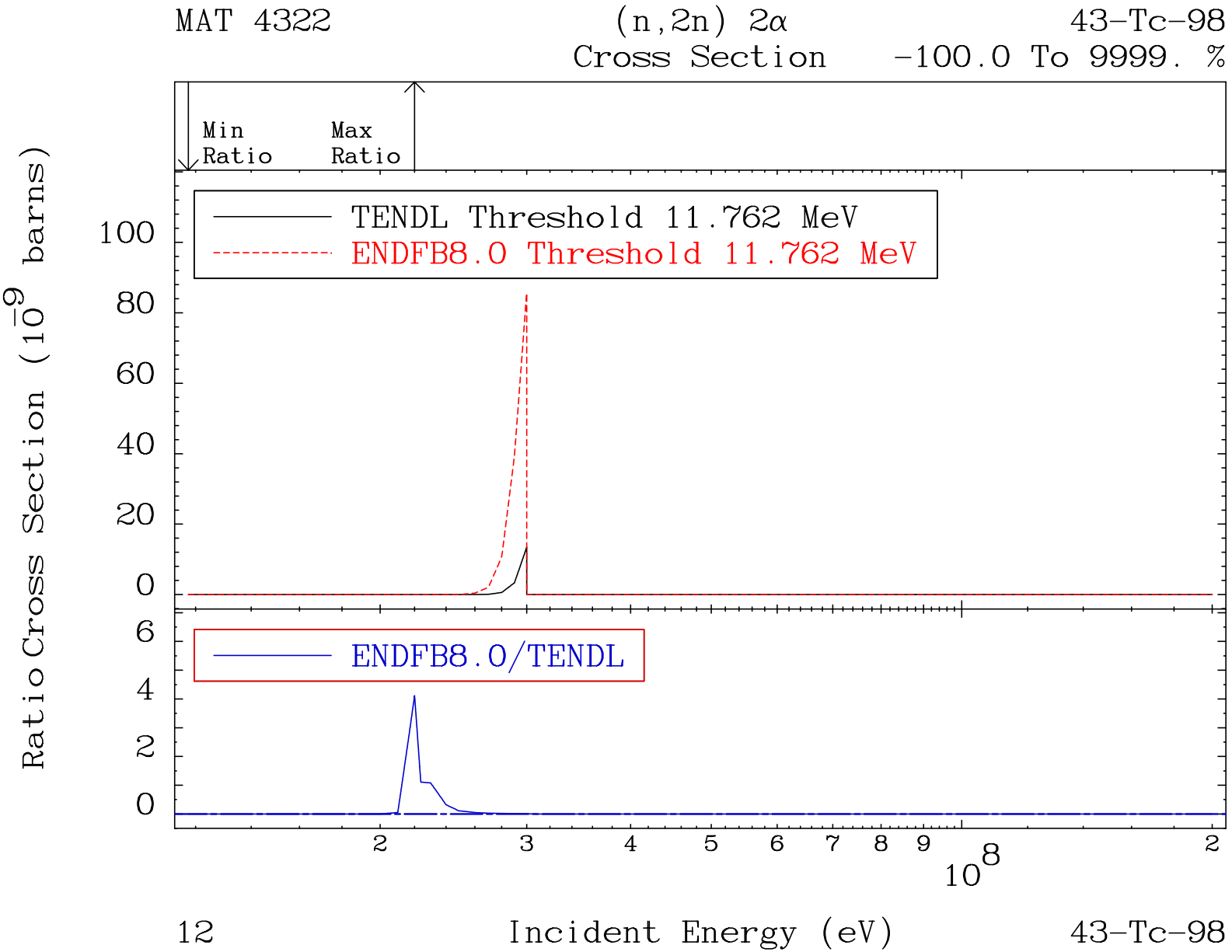

MAT 4322
(n,n') α
Cross Section
43-Tc-98
-8.275 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5137 MeV
ENDFB8.0 Threshold 2.5125 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
7
43-Tc-98

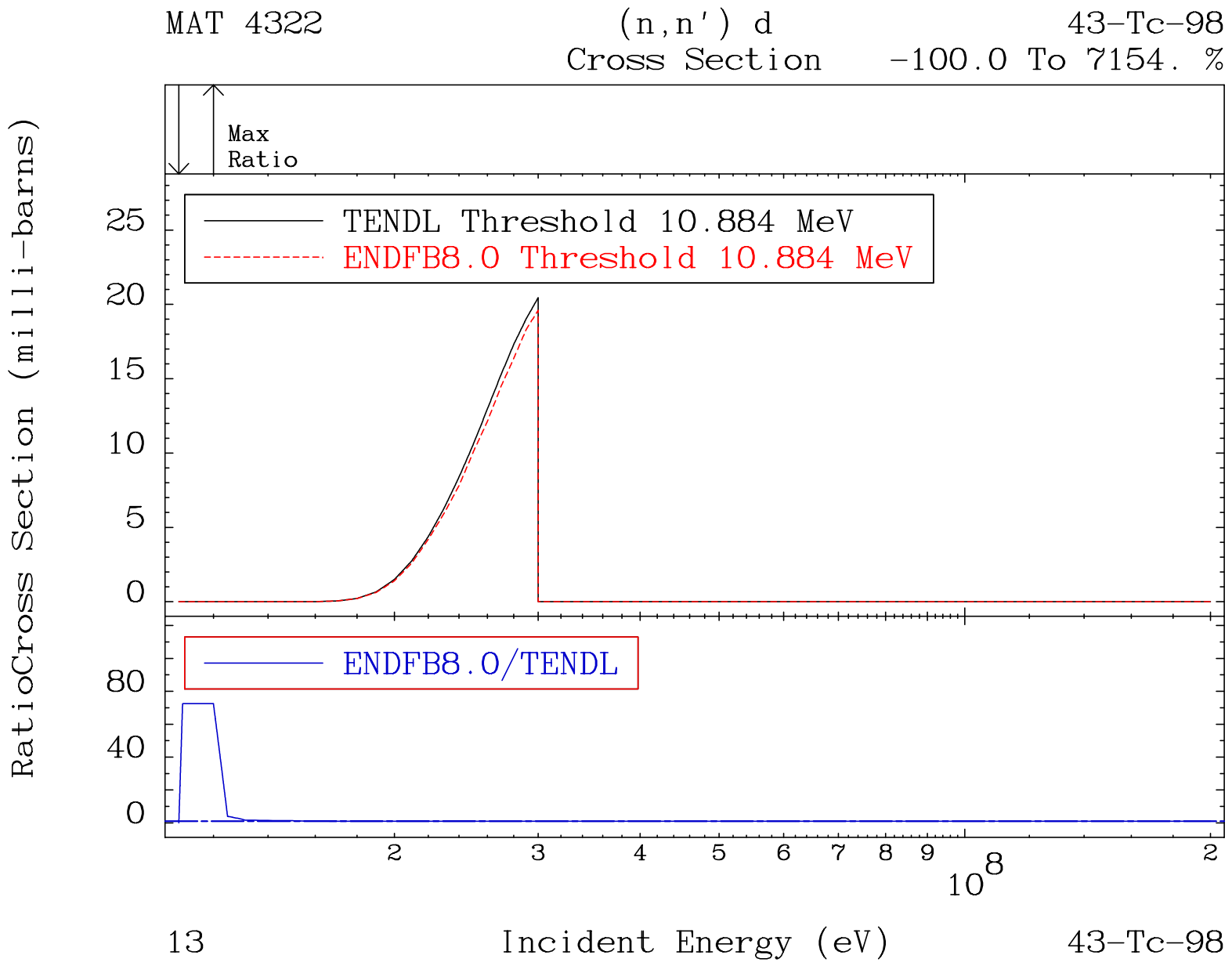

MAT 4322
(n,2n) α
43-Tc-98
Cross Section
-51.48 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.8157 MeV
ENDFB8.0 Threshold 9.8145 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^4
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
43-Tc-98

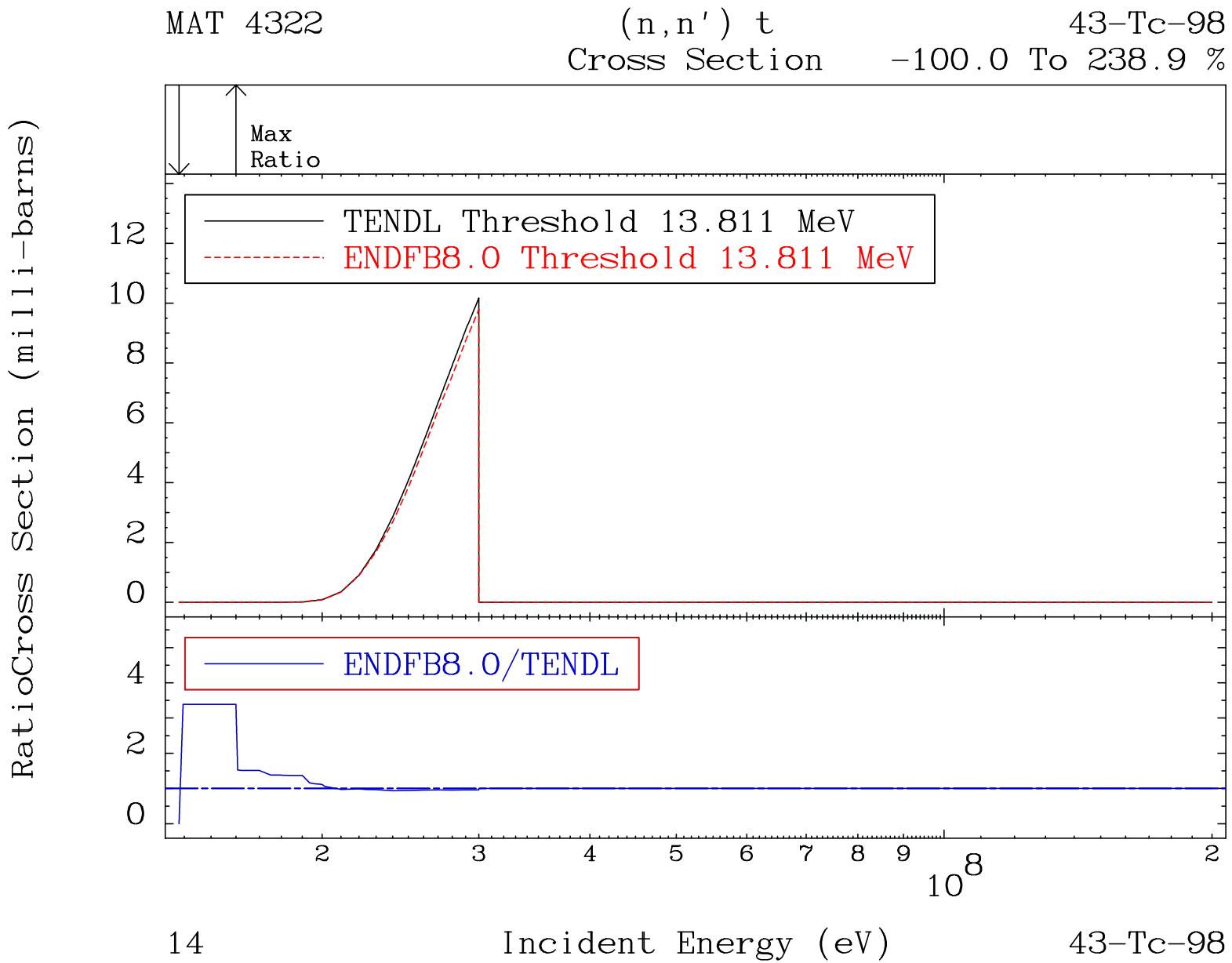

MAT 4322
(n,3n) α
43-Tc-98
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.738 MeV
ENDFB8.0 Threshold 18.738 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
43-Tc-98

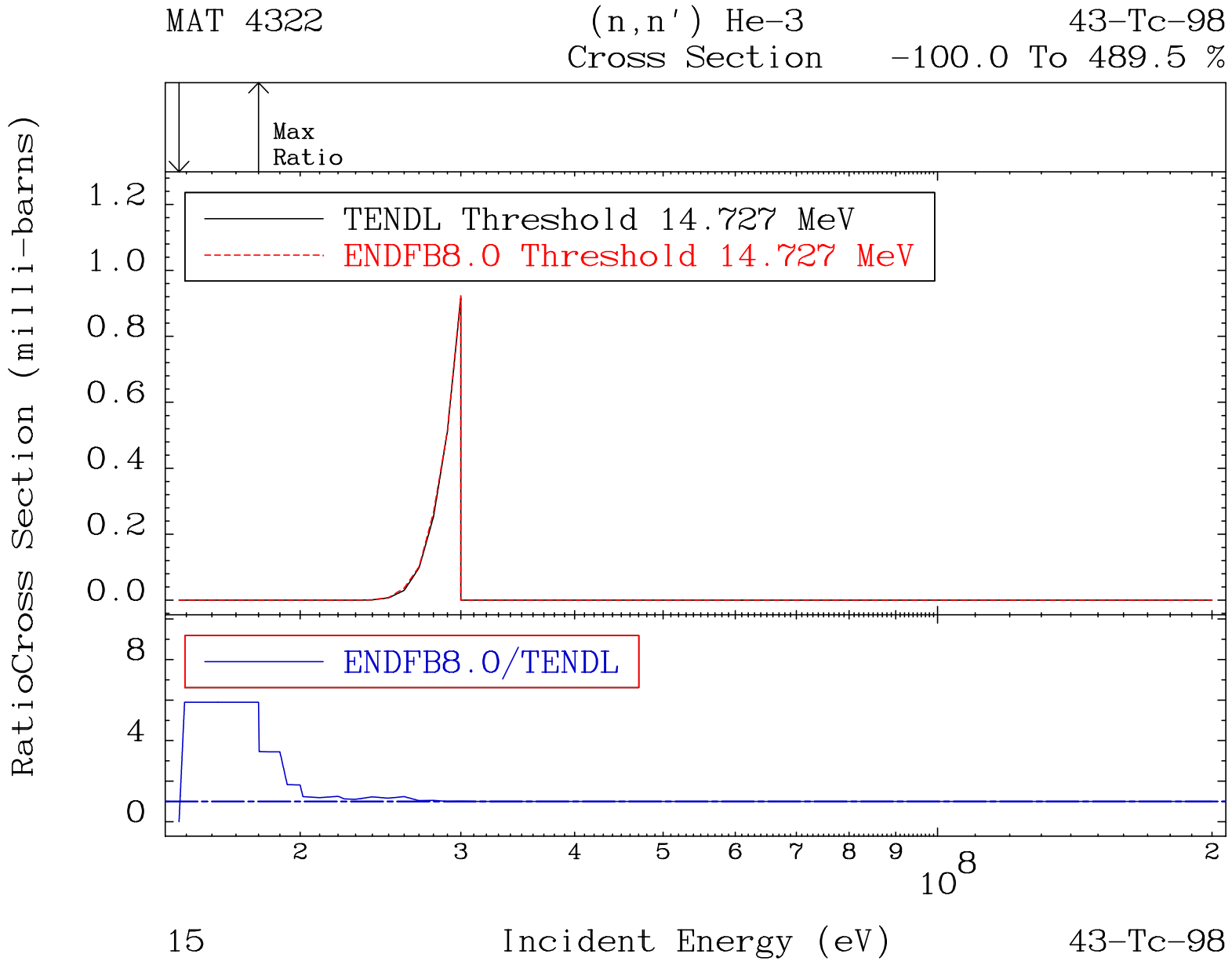

MAT 4322
(n,n') p
Cross Section
43-Tc-98
-100.0 To 40.53 %
Max
Ratio
TENDL Threshold 6.2401 MeV
ENDFB8.0 Threshold 6.2401 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
43-Tc-98

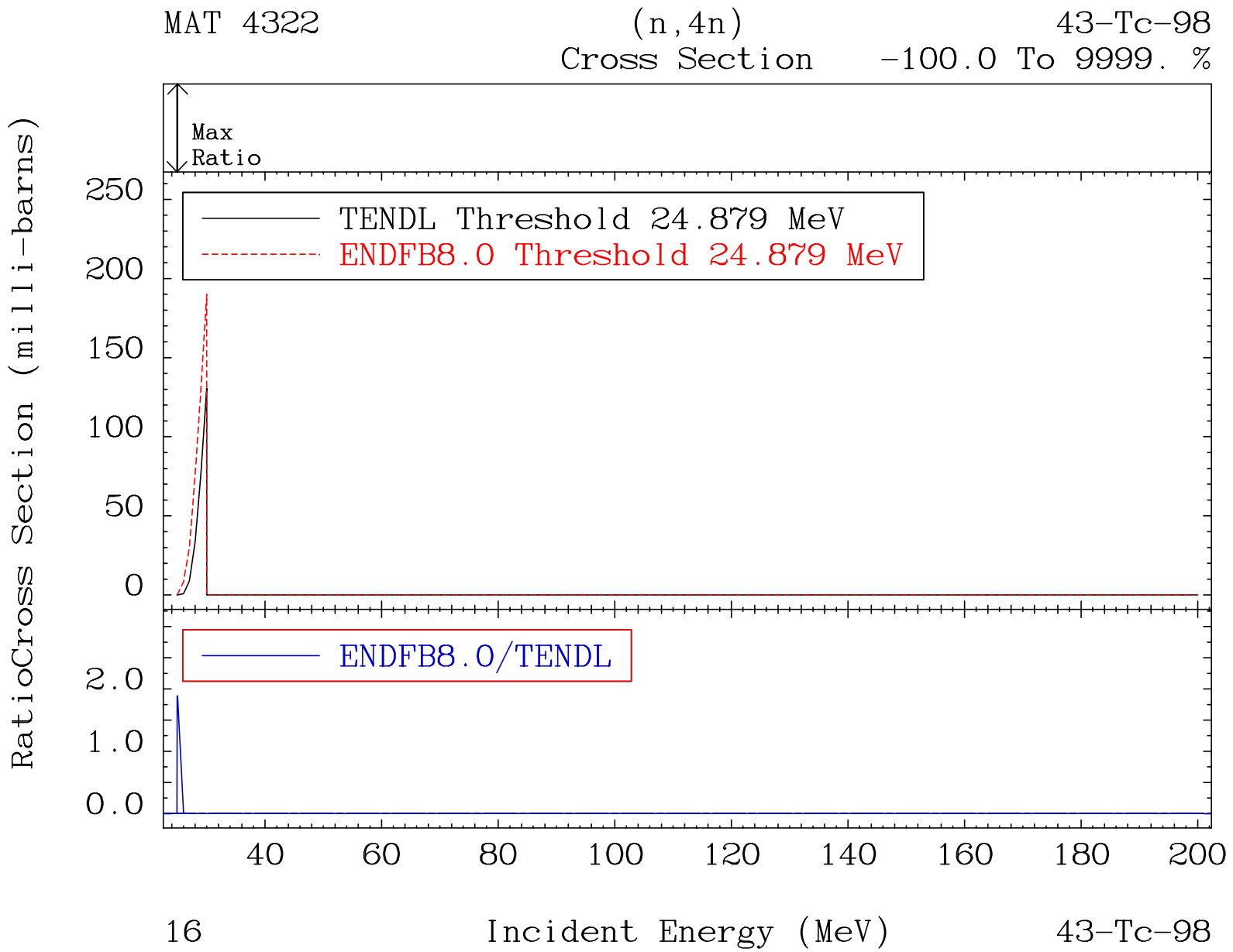

MAT 4322
(n,n') 2α
Cross Section
43-Tc-98
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8344 MeV
ENDFB8.0 Threshold 4.8354 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
11
43-Tc-98

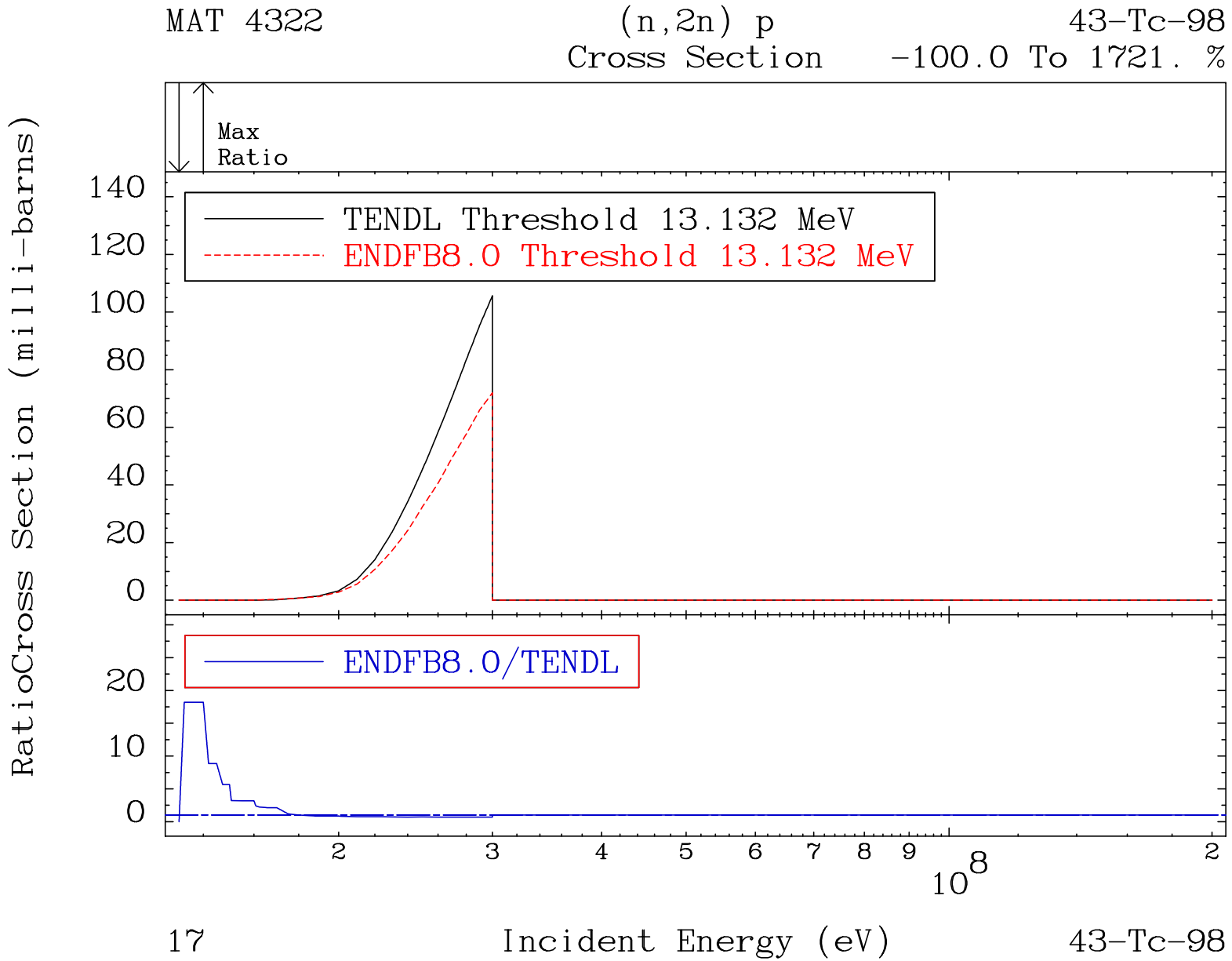

MAT 4322
(n,2n) 2α
43-Tc-98
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.762 MeV
ENDFB8.0 Threshold 11.762 MeV
ENDFB8.0/TENDL
Ratio Cross Section (10^-9 barns)
100
80
60
40
20
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
43-Tc-98

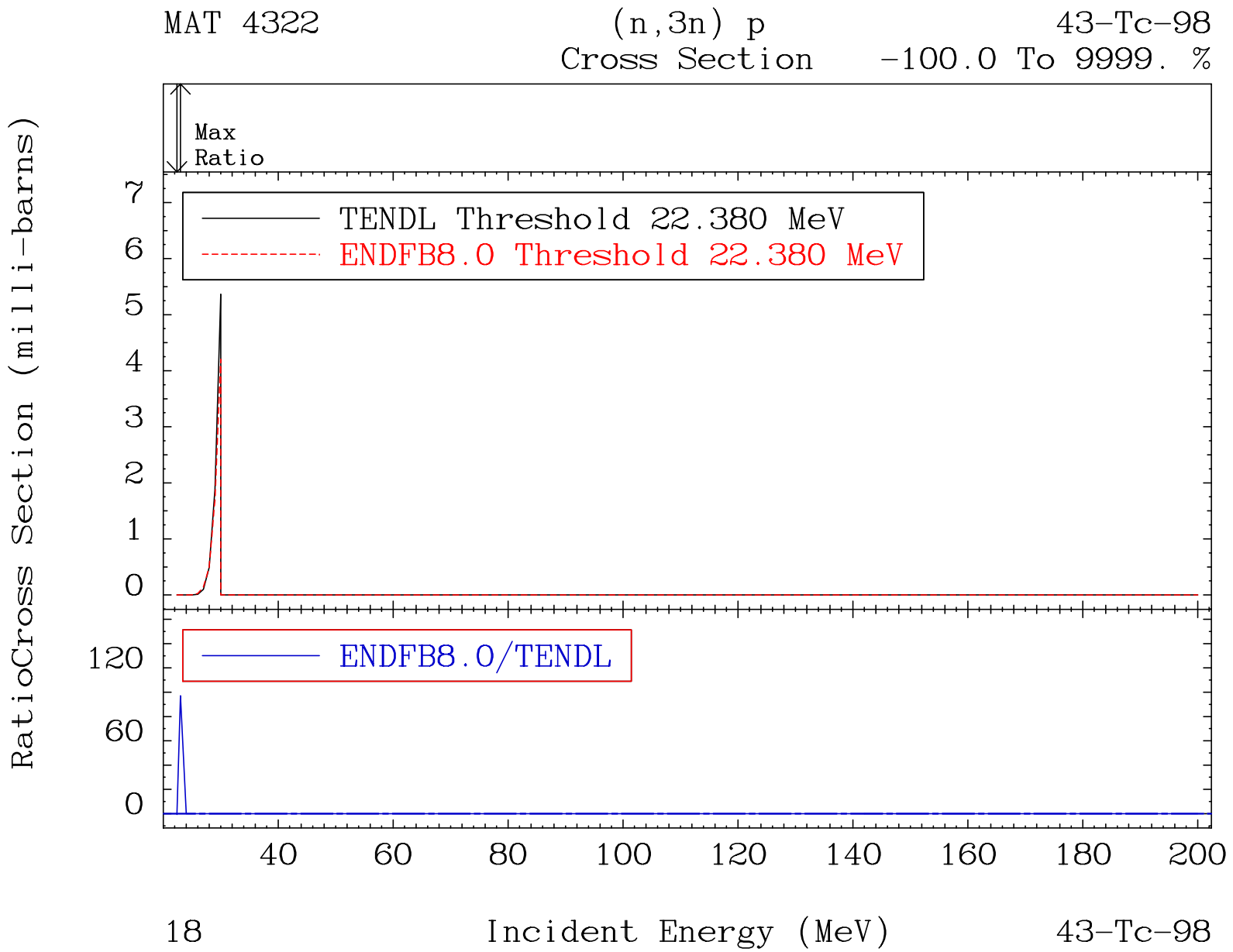

MAT 4322
(n,n') d
Cross Section
43-Tc-98
-100.0 To 7154. %
Max
Ratio
TENDL Threshold 10.884 MeV
ENDFB8.0 Threshold 10.884 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
13
Incident Energy (eV)
43-Tc-98

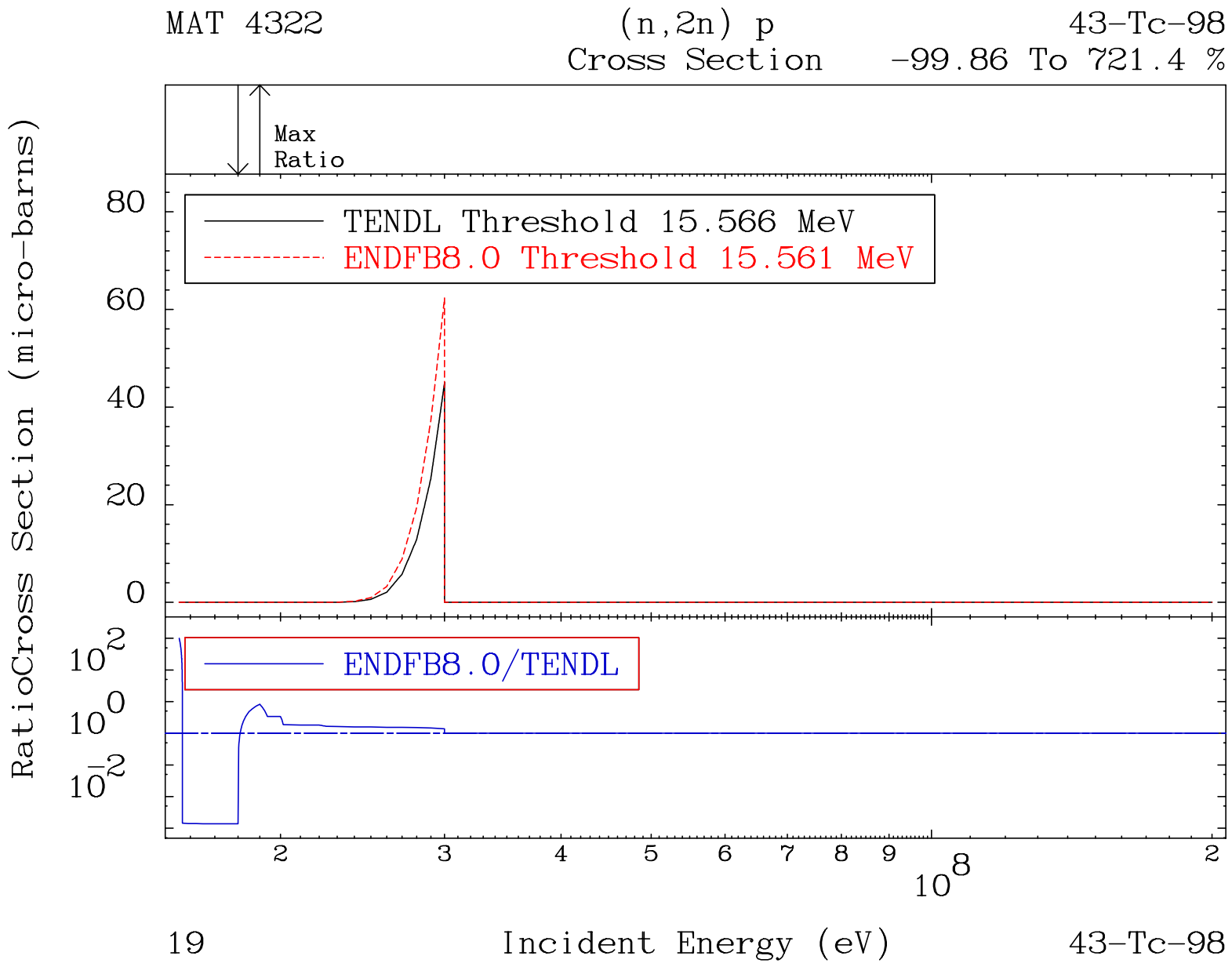

MAT 4322
(n,n') t
Cross Section
43-Tc-98
-100.0 To 238.9 %
Max
Ratio
TENDL Threshold 13.811 MeV
ENDFB8.0 Threshold 13.811 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
0
2
4
6
8
10
12
0
2
4
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
43-Tc-98

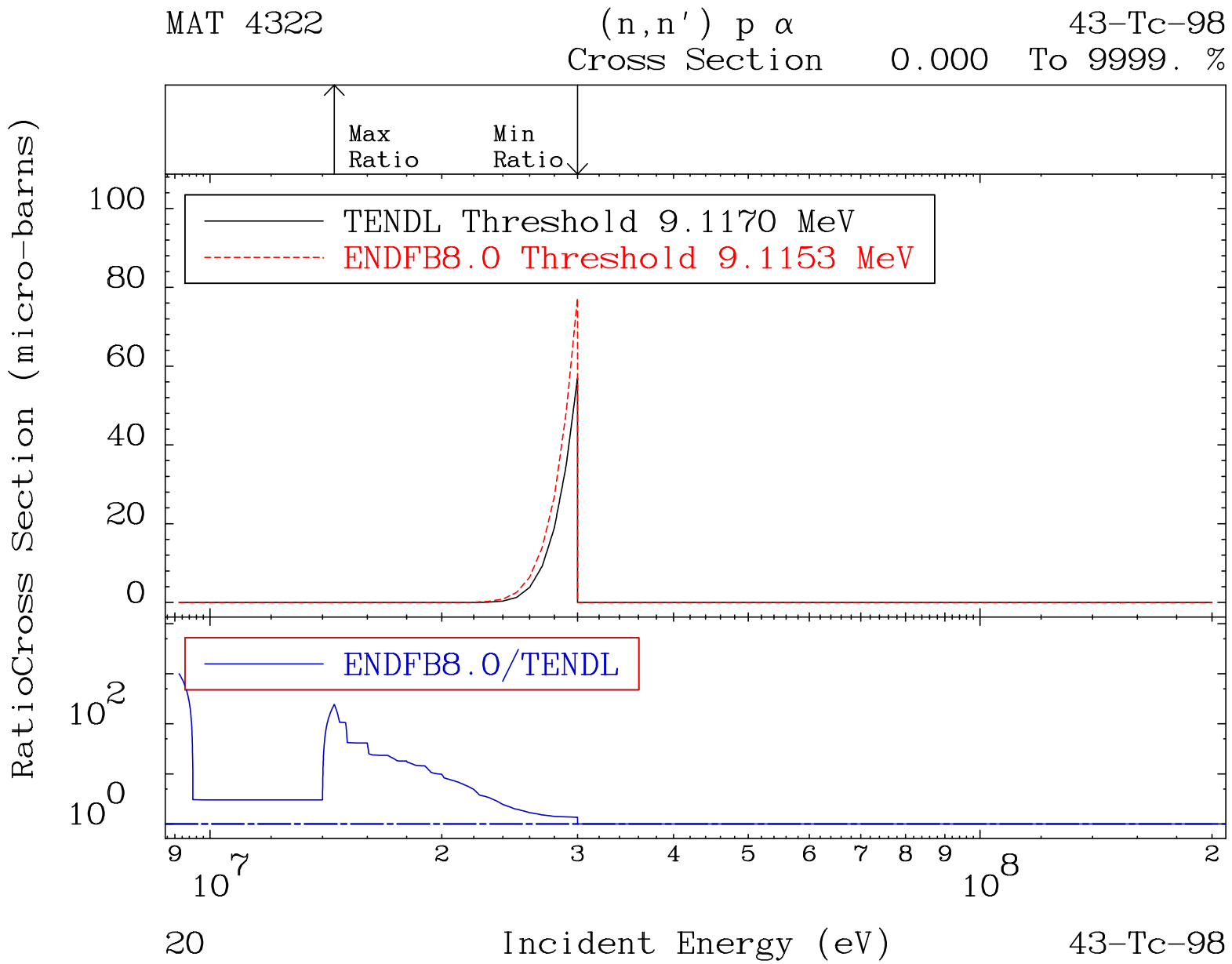

MAT 4322
(n,n') He-3
Cross Section
43-Tc-98
-100.0 To 489.5 %
Max
Ratio
TENDL Threshold 14.727 MeV
ENDFB8.0 Threshold 14.727 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
43-Tc-98

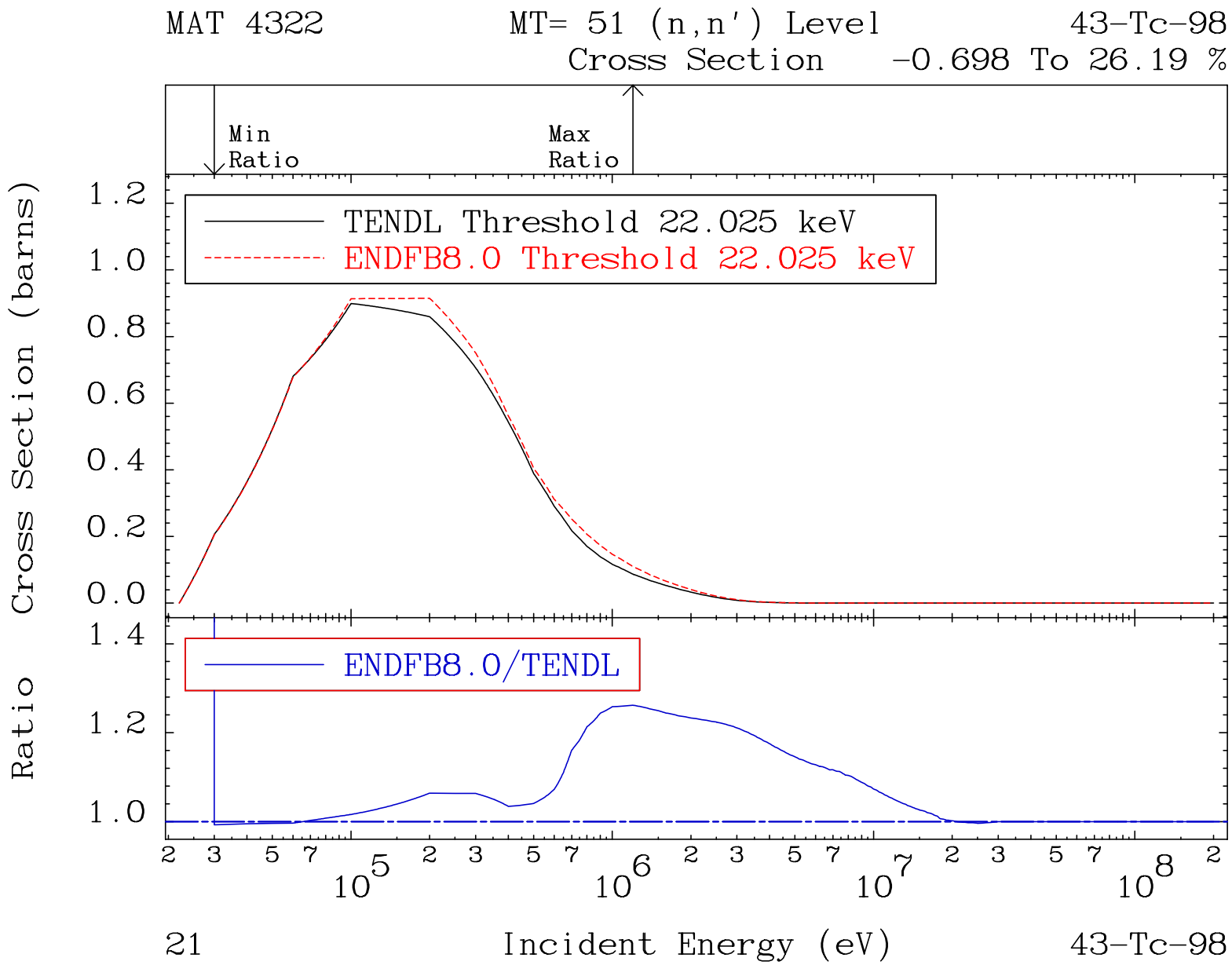

MAT 4322
(n,4n)
Cross Section
43-Tc-98
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 24.879 MeV
ENDFB8.0 Threshold 24.879 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
43-Tc-98

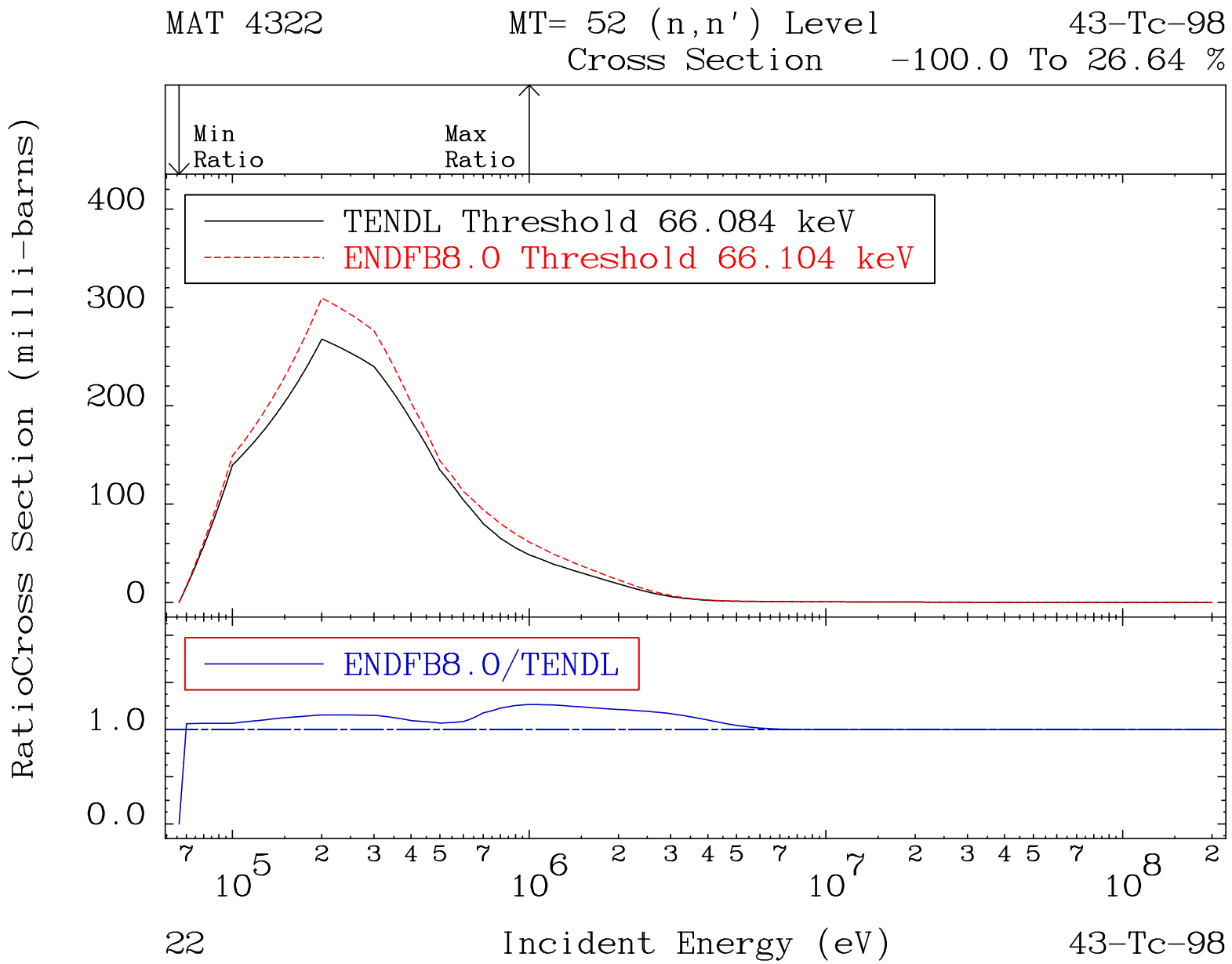

MAT 4322
(n,2n) p
Cross Section
43-Tc-98
-100.0 To 1721. %
Max
Ratio
TENDL Threshold 13.132 MeV
ENDFB8.0 Threshold 13.132 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
20
10
0
2
3
4
5
6
7
8
9
2
10^8
17
Incident Energy (eV)
43-Tc-98

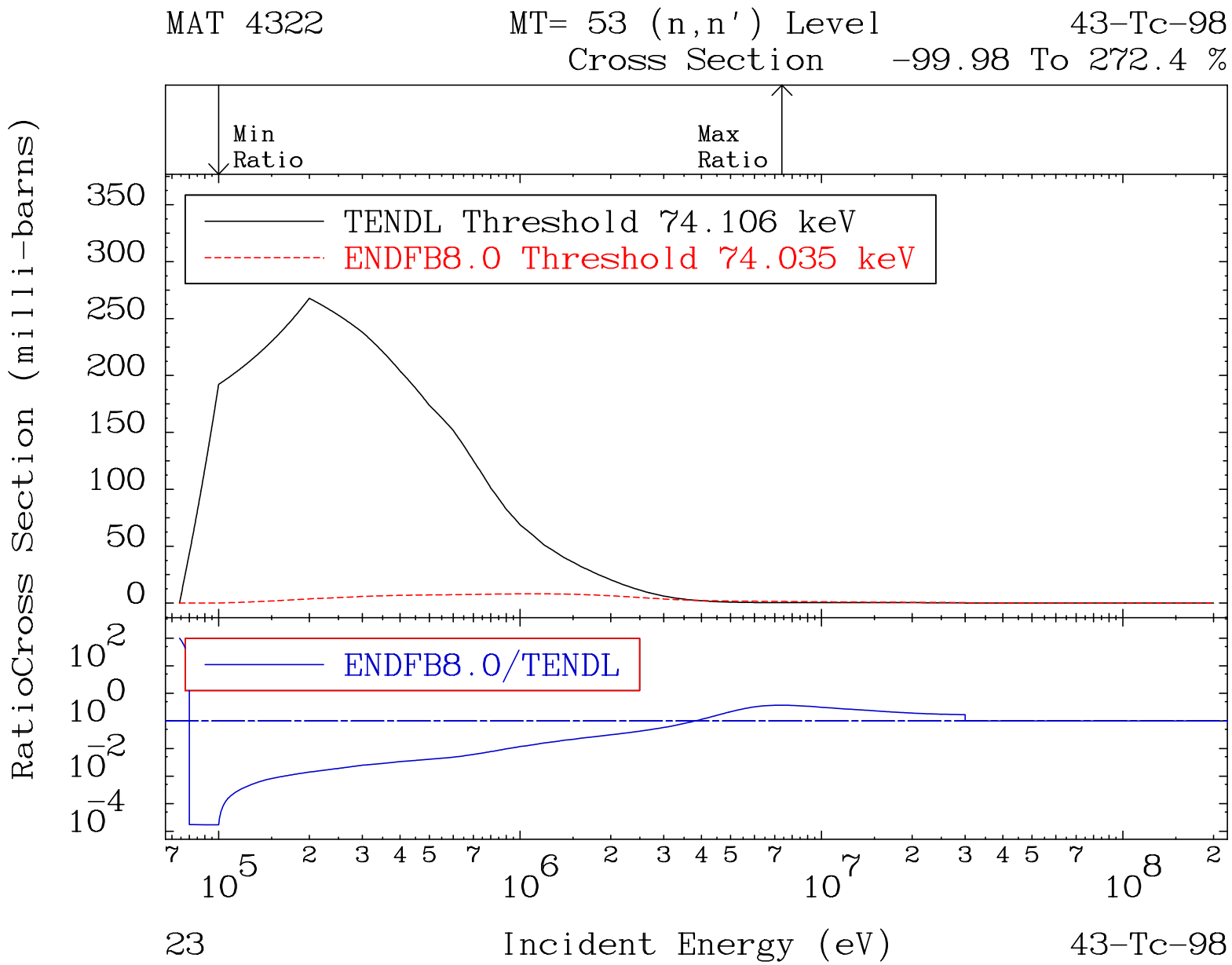

MAT 4322
(n,3n) p
43-Tc-98
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 22.380 MeV
ENDFB8.0 Threshold 22.380 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
18
43-Tc-98

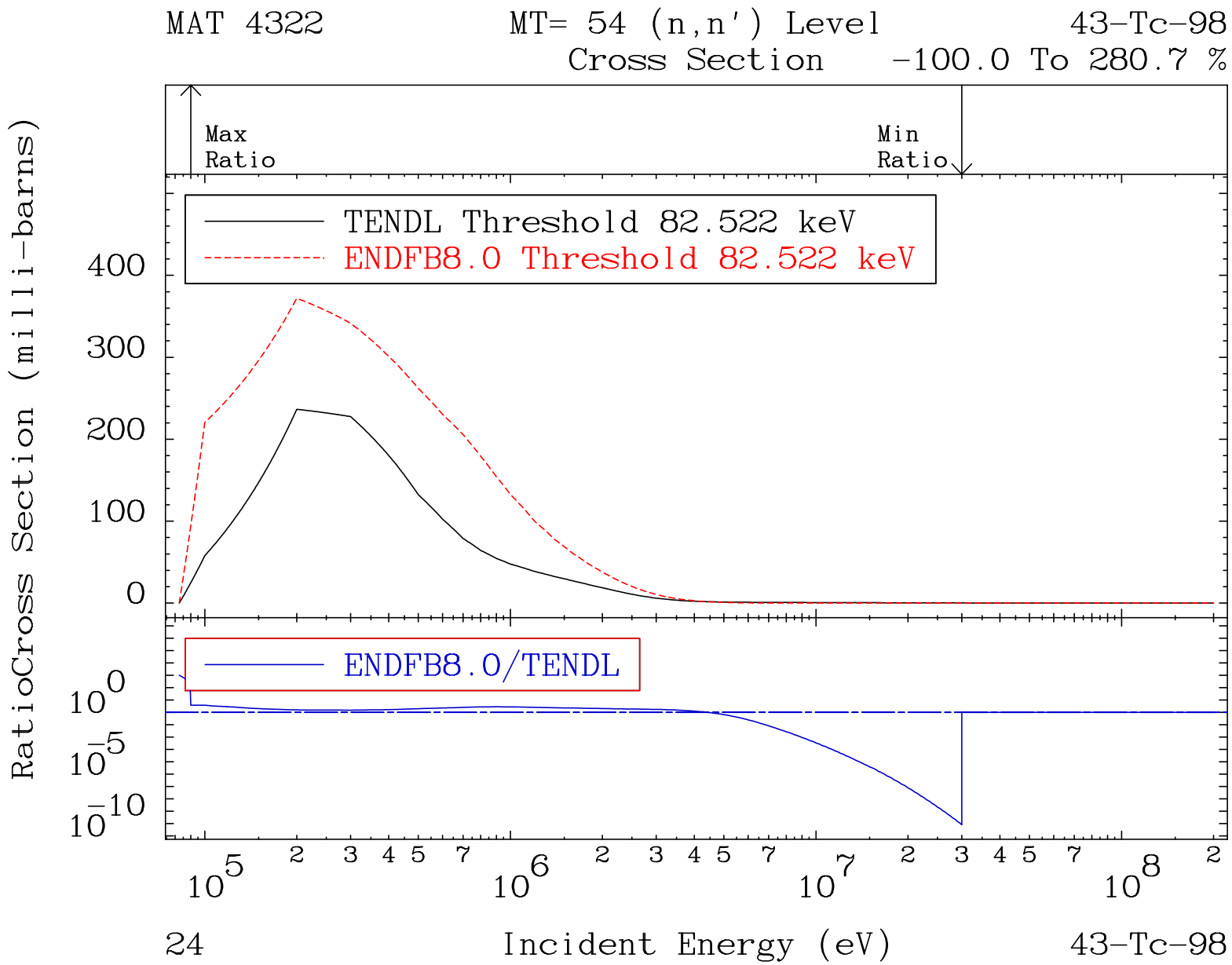

MAT 4322
(n,2n) p
43-Tc-98
Cross Section
-99.86 To 721.4 %
Max
Ratio
TENDL Threshold 15.566 MeV
ENDFB8.0 Threshold 15.561 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
80
60
40
20
0
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
43-Tc-98

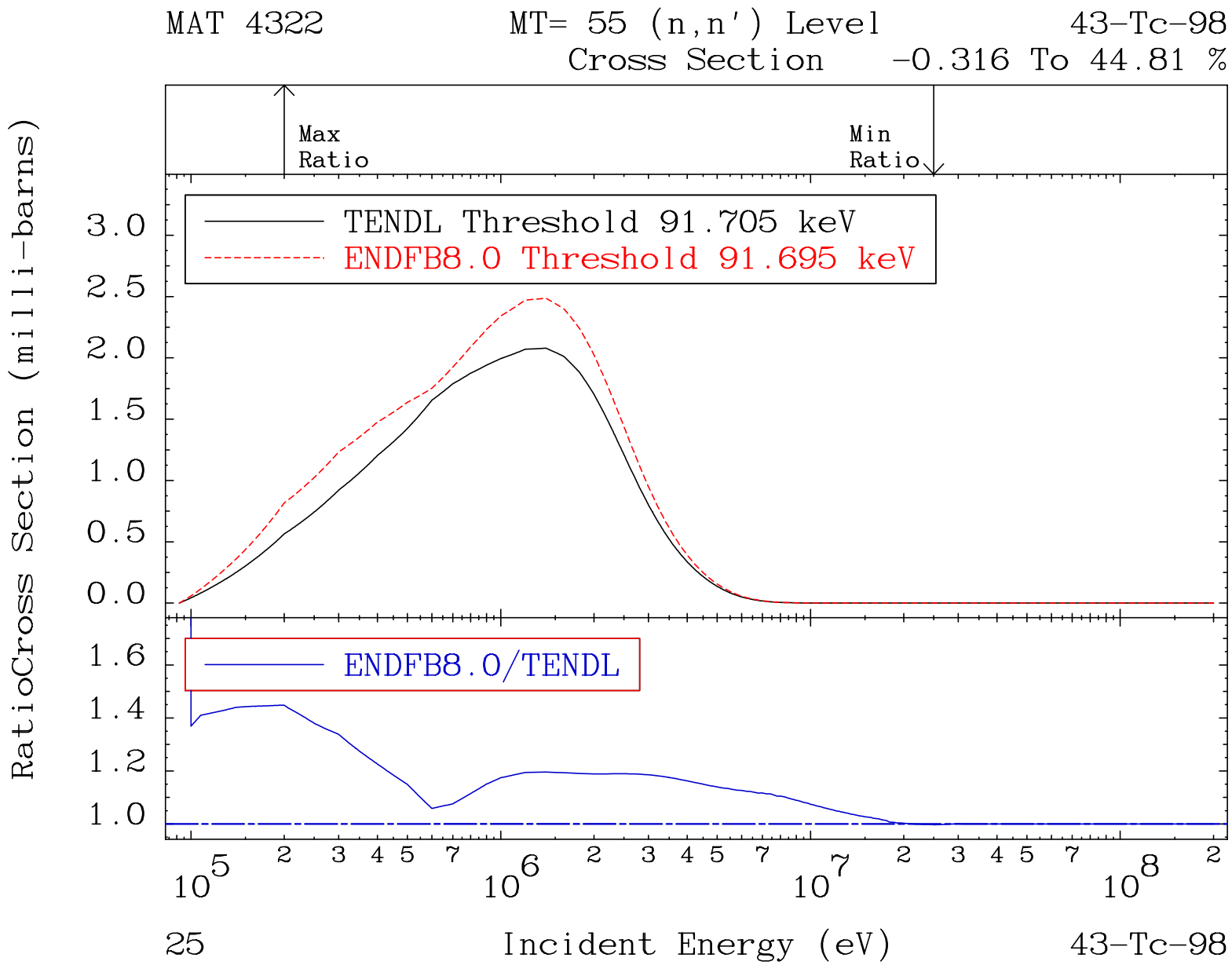

MAT 4322
(n,n') p α
43-Tc-98
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.1170 MeV
ENDFB8.0 Threshold 9.1153 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
10^2
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
43-Tc-98

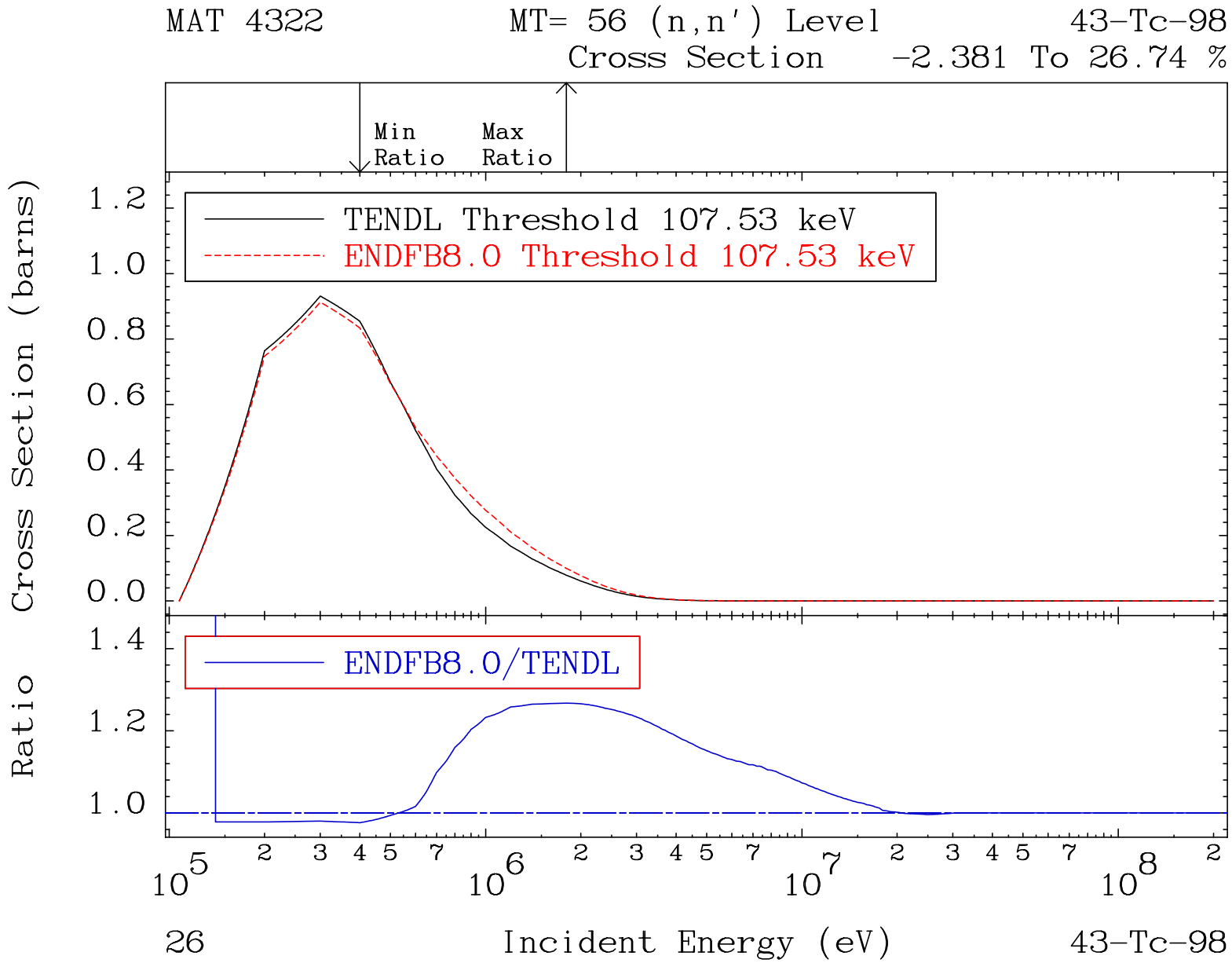

MAT 4322
MT= 51 (n,n') Level
43-Tc-98
Cross Section -0.698 To 26.19 %
Min Ratio
Max Ratio
TENDL Threshold 22.025 keV
ENDFB8.0 Threshold 22.025 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
21
43-Tc-98

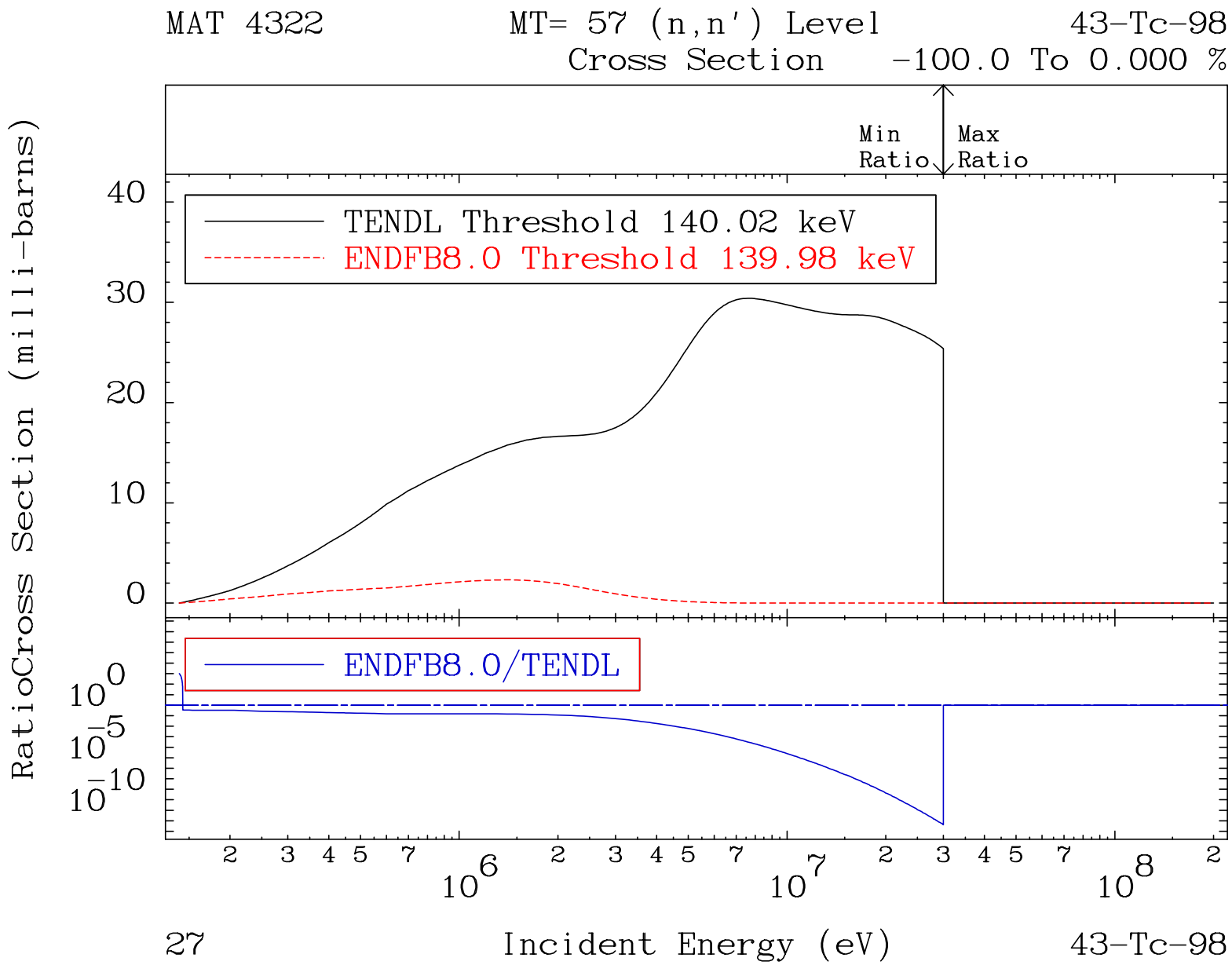

MAT 4322
MT= 52 (n,n') Level
Cross Section
43-Tc-98
-100.0 To 26.64 %
Min Ratio
Max Ratio
TENDL Threshold 66.084 keV
ENDFB8.0 Threshold 66.104 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.0
0.0
7 2 3 4 5 7 2 3 4 5 7 2 3 4 5 7 2
10^5 10^6 10^7 10^8
22
Incident Energy (eV)
43-Tc-98

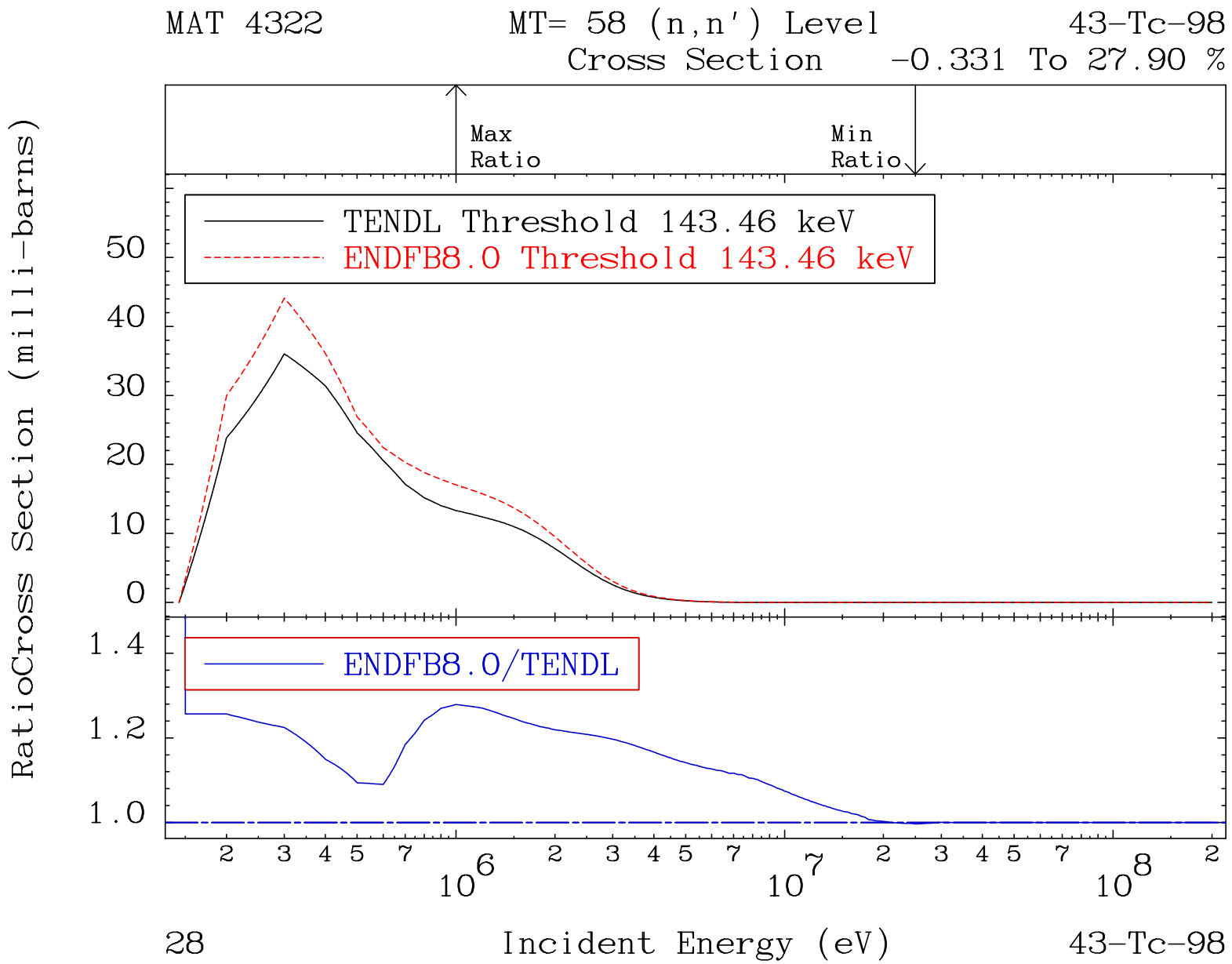

MAT 4322
MT= 53 (n,n') Level
Cross Section
43-Tc-98
-99.98 To 272.4 %
Min Ratio
Max Ratio
TENDL Threshold 74.106 keV
ENDFB8.0 Threshold 74.035 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
10^2
10^0
10^-2
10^-4
7
10^5
2
3
4
5
7
10^6
2
3
4
5
7
10^7
2
3
4
5
7
10^8
2
23
Incident Energy (eV)
43-Tc-98

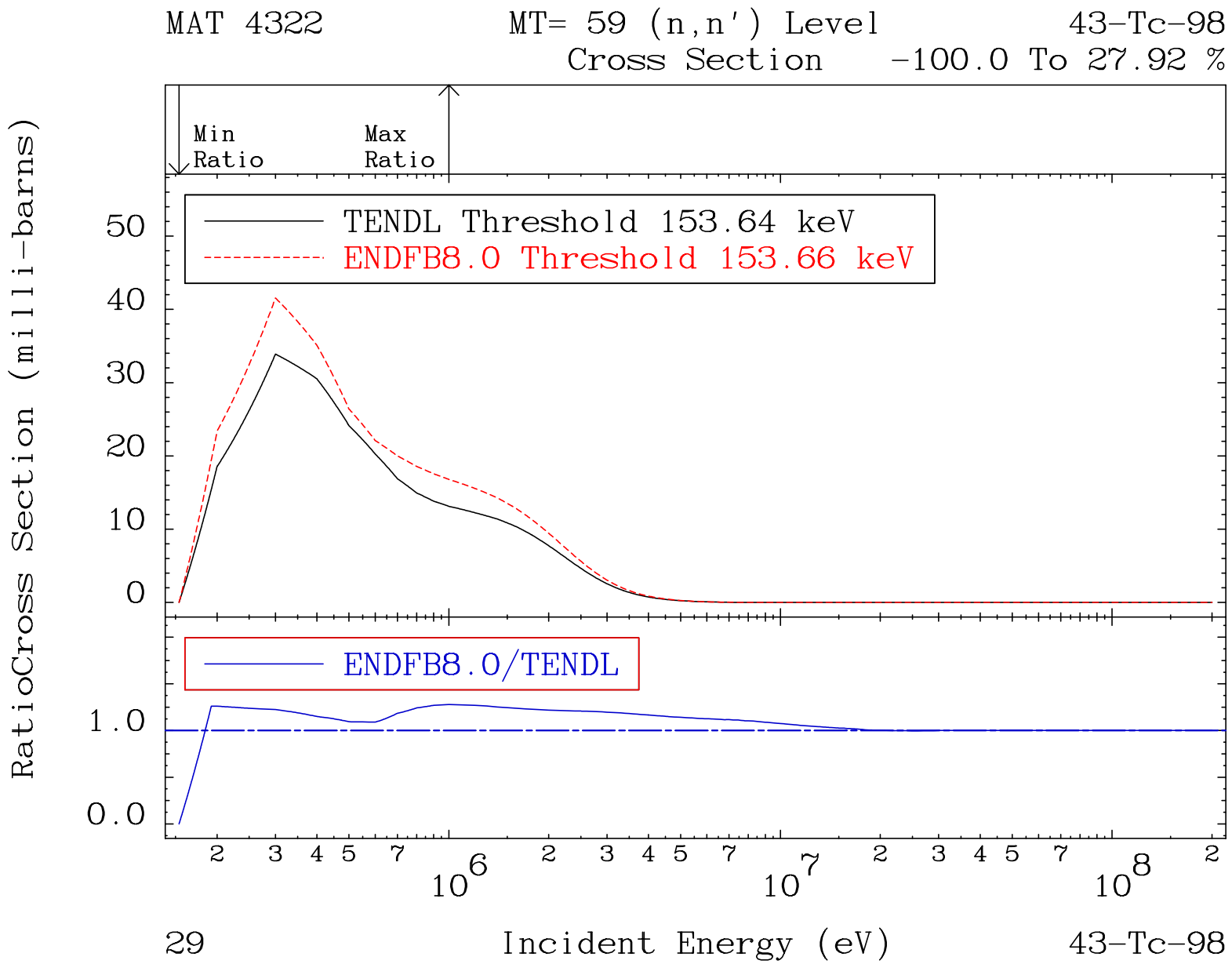

MAT 4322
MT= 54 (n,n') Level
Cross Section
43-Tc-98
-100.0 To 280.7 %
Max Ratio
Min Ratio
TENDL Threshold 82.522 keV
ENDFB8.0 Threshold 82.522 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^0
10^-5
10^-10
10^5
10^6
10^7
10^8
Incident Energy (eV)
24
43-Tc-98

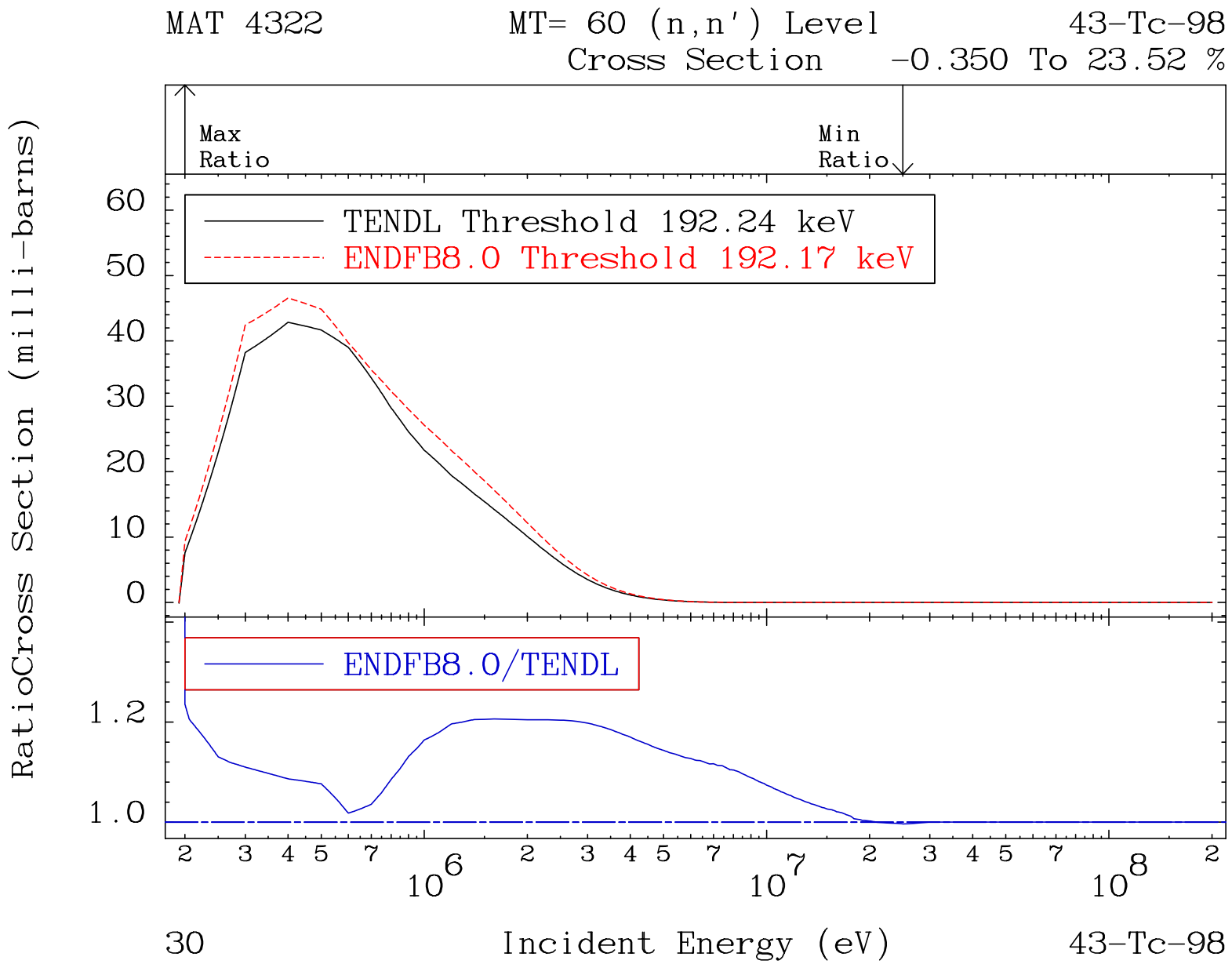

MAT 4322
MT= 55 (n,n') Level
Cross Section
43-Tc-98
-0.316 To 44.81 %
Max Ratio
Min Ratio
TENDL Threshold 91.705 keV
ENDFB8.0 Threshold 91.695 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.4
1.2
1.0
10^5
10^6
10^7
10^8
Incident Energy (eV)
25
43-Tc-98

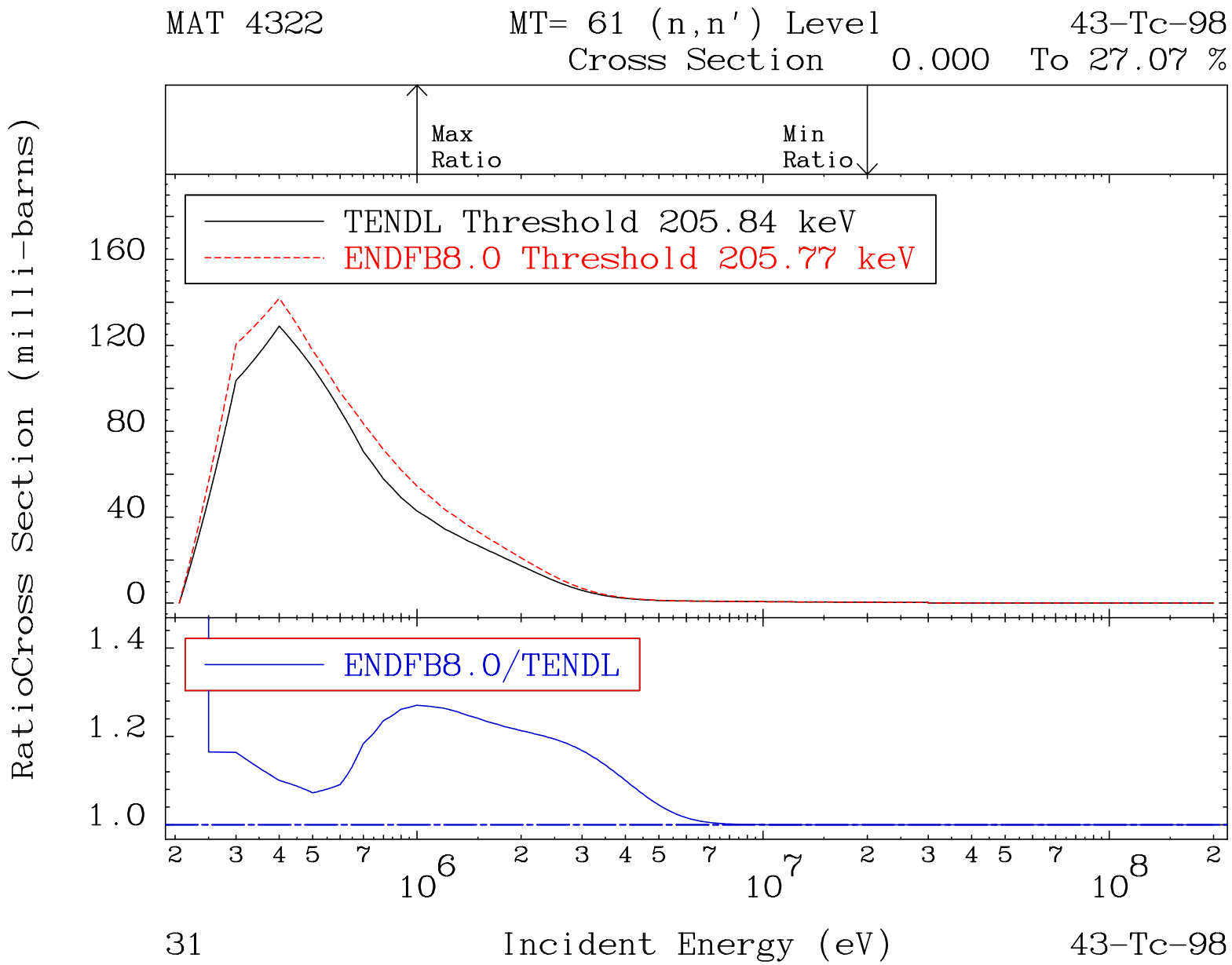

MAT 4322
MT= 56 (n,n') Level
43-Tc-98
Cross Section -2.381 To 26.74 %
Min Ratio
Max Ratio
TENDL Threshold 107.53 keV
ENDFB8.0 Threshold 107.53 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
26
43-Tc-98

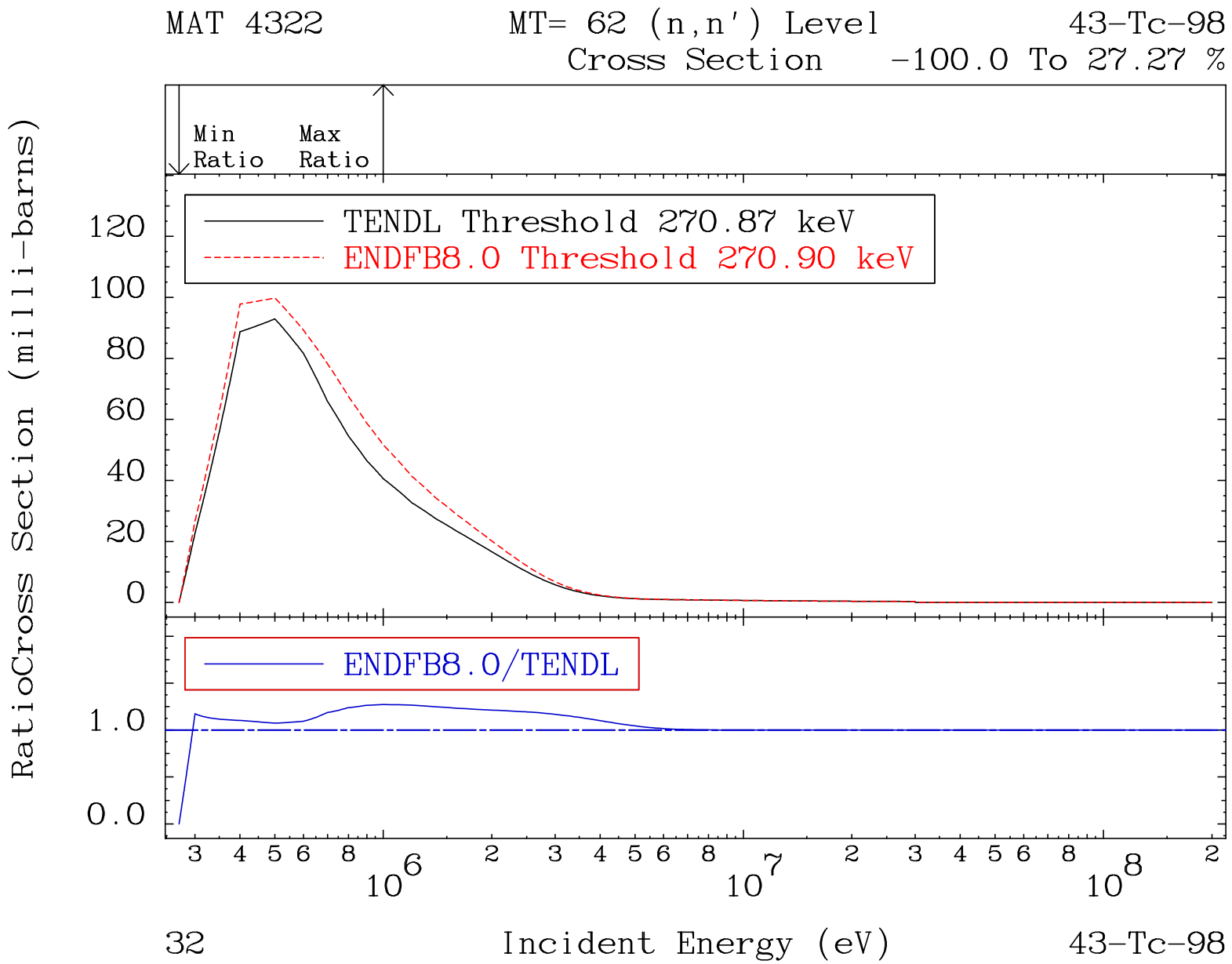

MAT 4322
MT= 57 (n,n') Level
43-Tc-98
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 140.02 keV
ENDFB8.0 Threshold 139.98 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
43-Tc-98

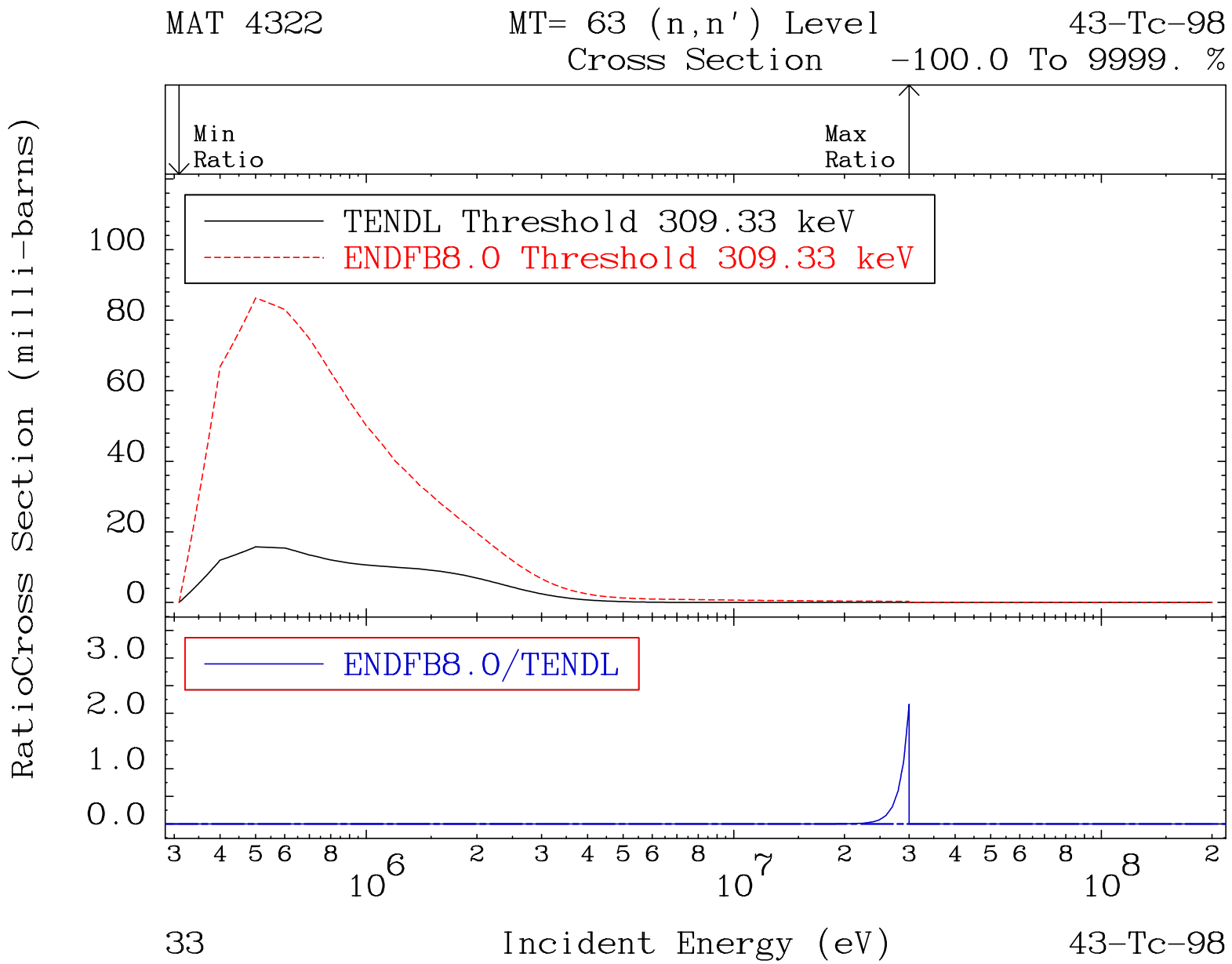

MAT 4322
MT= 58 (n,n') Level
43-Tc-98
Cross Section
-0.331 To 27.90 %
Max Ratio
Min Ratio
TENDL Threshold 143.46 keV
ENDFB8.0 Threshold 143.46 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.4
1.2
1.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
28
Incident Energy (eV)
43-Tc-98

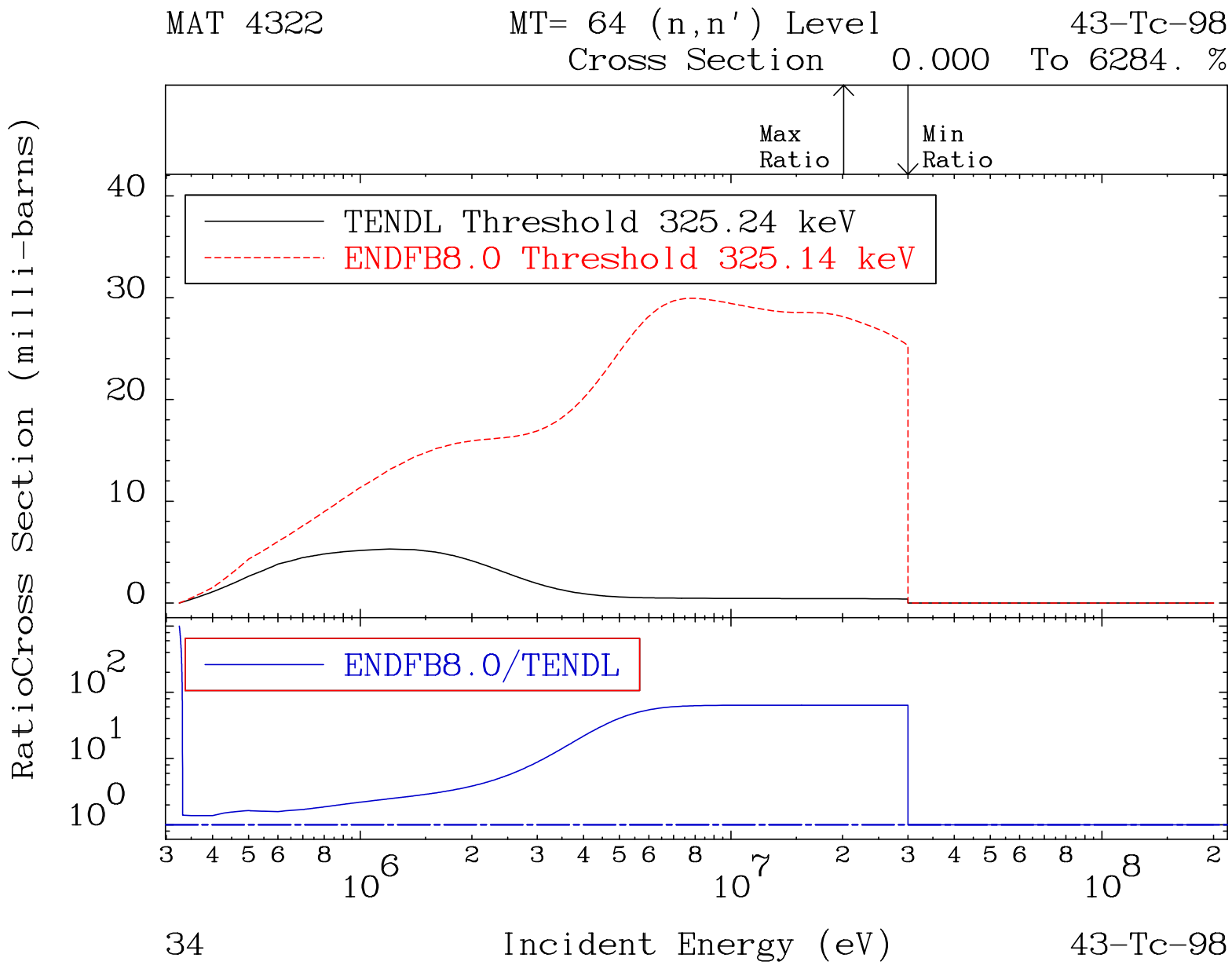

MAT 4322
MT= 59 (n,n') Level
43-Tc-98
Cross Section -100.0 To 27.92 %
Min Ratio
Max Ratio
TENDL Threshold 153.64 keV
ENDFB8.0 Threshold 153.66 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.0
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
29
Incident Energy (eV)
43-Tc-98

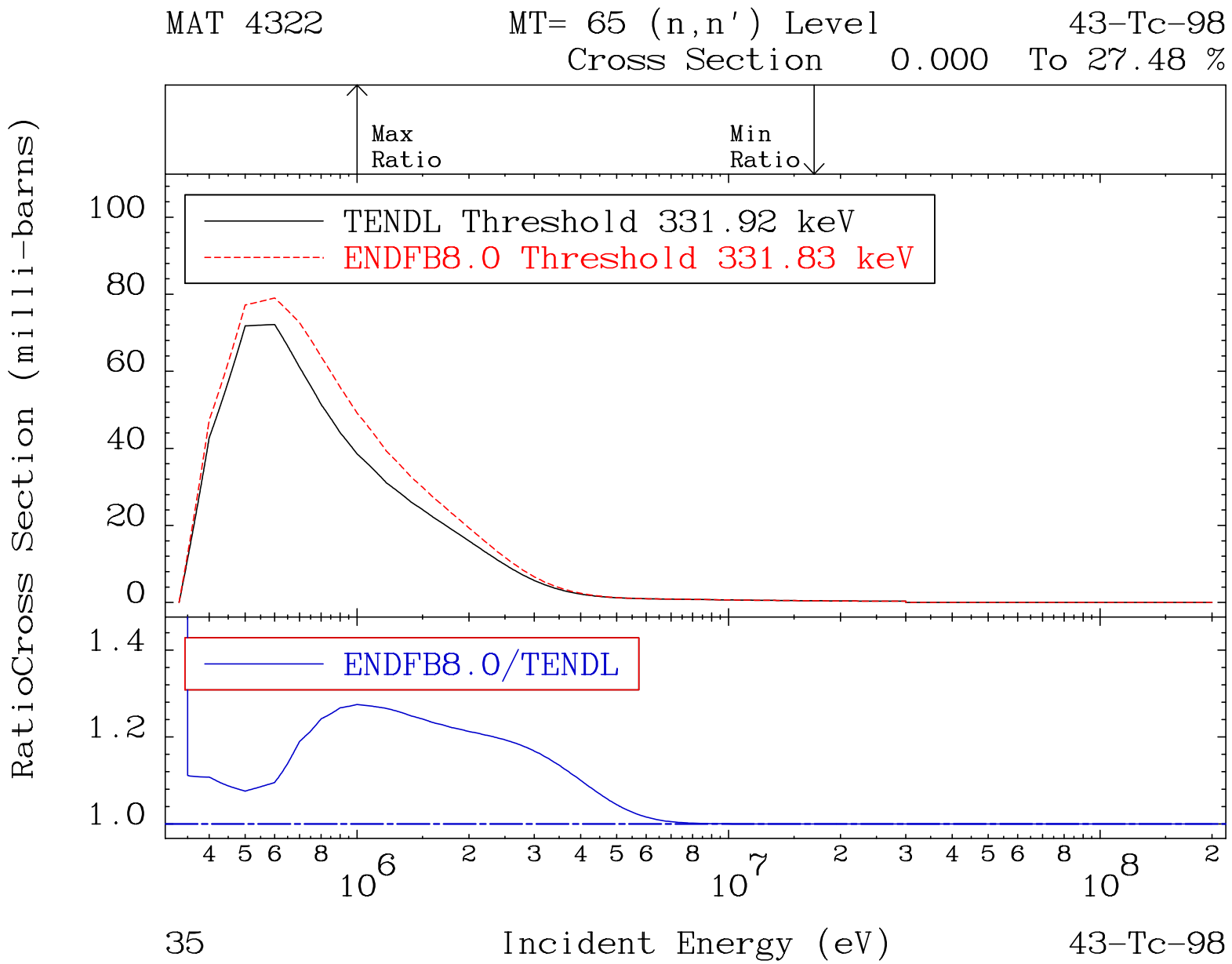

MAT 4322
MT= 60 (n,n') Level
Cross Section
43-Tc-98
-0.350 To 23.52 %
Max Ratio
Min Ratio
TENDL Threshold 192.24 keV
ENDFB8.0 Threshold 192.17 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
1.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
30
Incident Energy (eV)
43-Tc-98

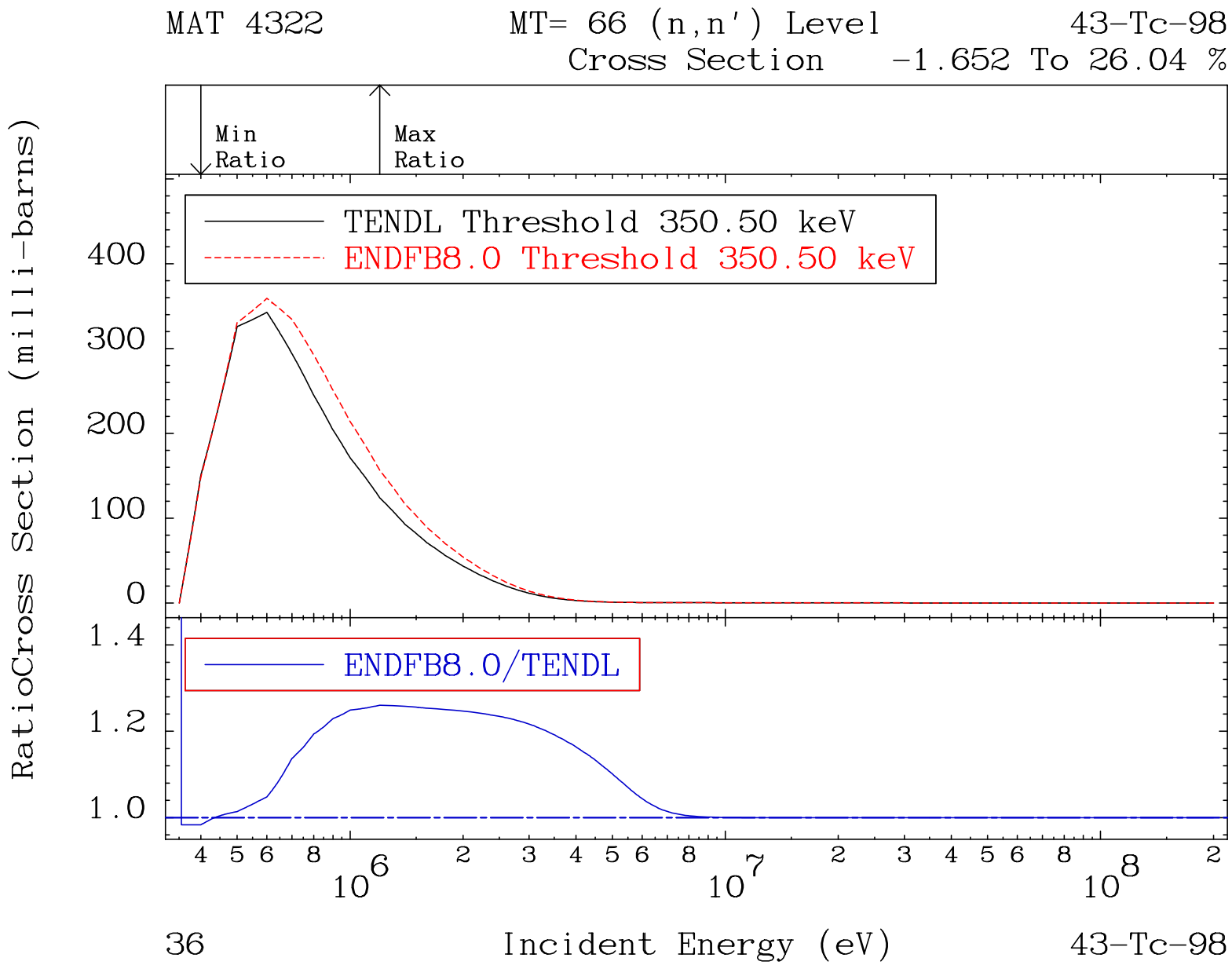

MAT 4322
MT= 61 (n,n') Level
43-Tc-98
Cross Section 0.000 To 27.07 %
Max Ratio
Min Ratio
TENDL Threshold 205.84 keV
ENDFB8.0 Threshold 205.77 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.4
1.2
1.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
31
Incident Energy (eV)
43-Tc-98

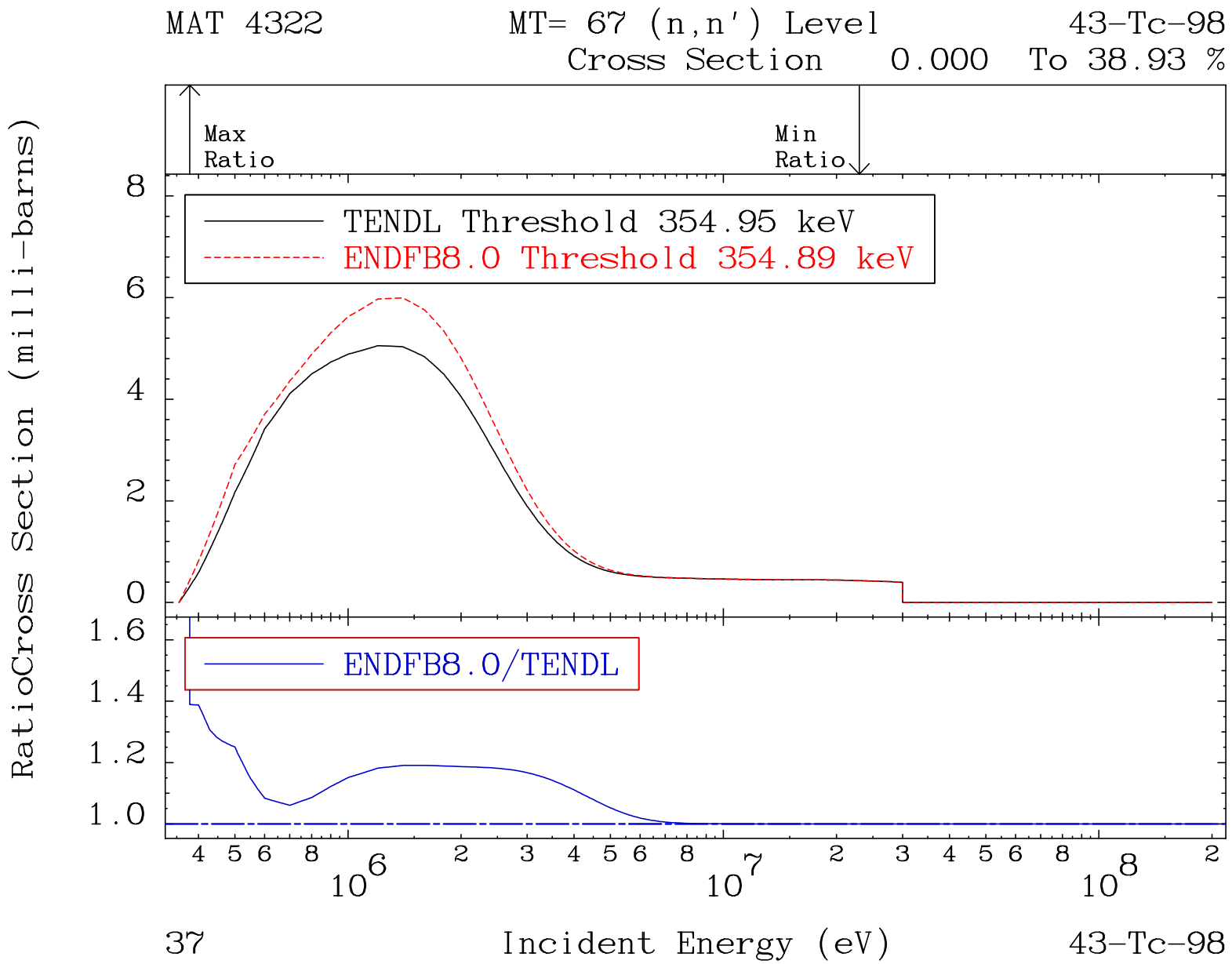

MAT 4322
MT= 62 (n,n') Level
43-Tc-98
Cross Section
-100.0 To 27.27 %
Min Ratio
Max Ratio
TENDL Threshold 270.87 keV
ENDFB8.0 Threshold 270.90 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
32
Incident Energy (eV)
43-Tc-98

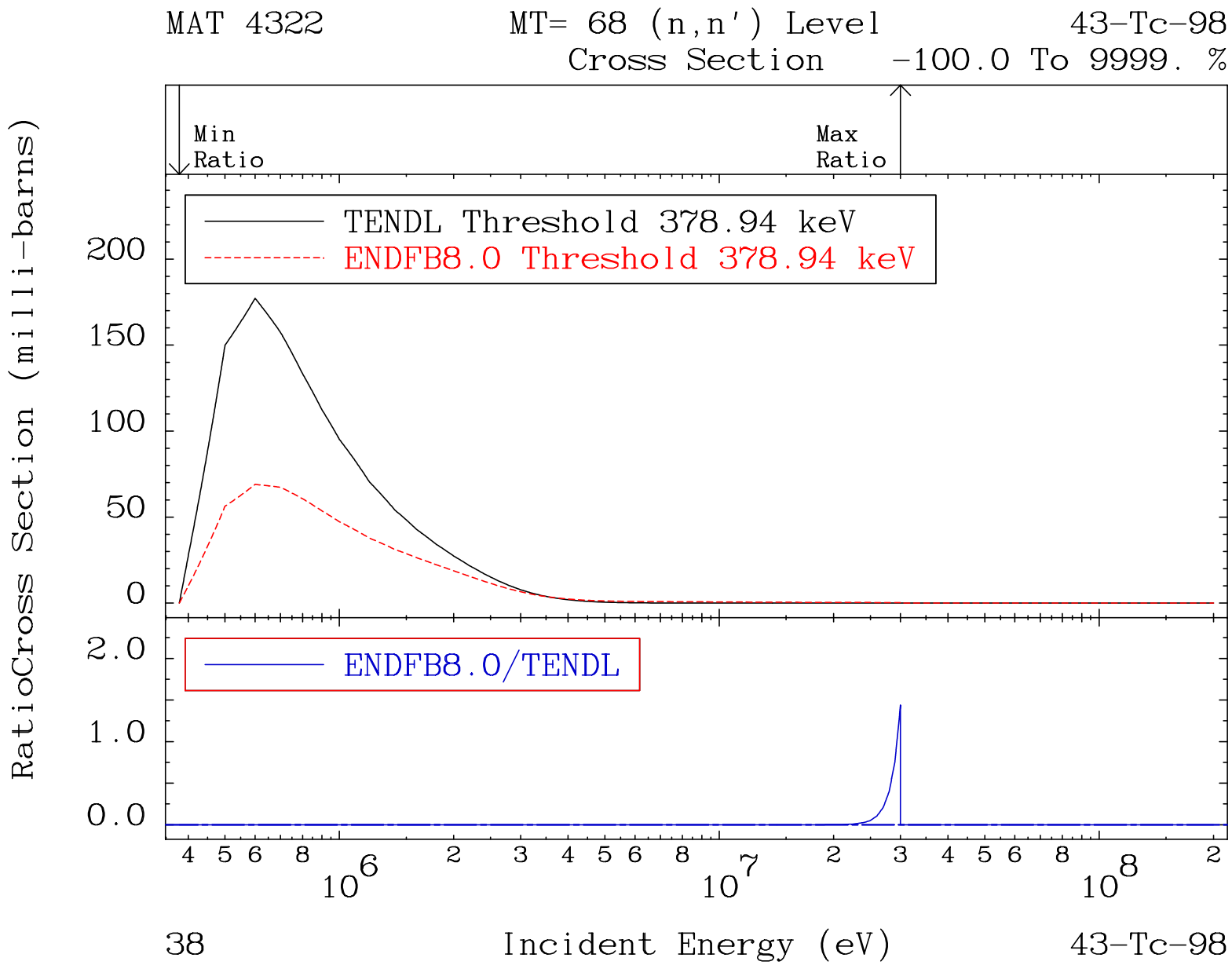

MAT 4322
MT= 63 (n,n') Level
43-Tc-98
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 309.33 keV
ENDFB8.0 Threshold 309.33 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
3.0
2.0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
33
Incident Energy (eV)
43-Tc-98

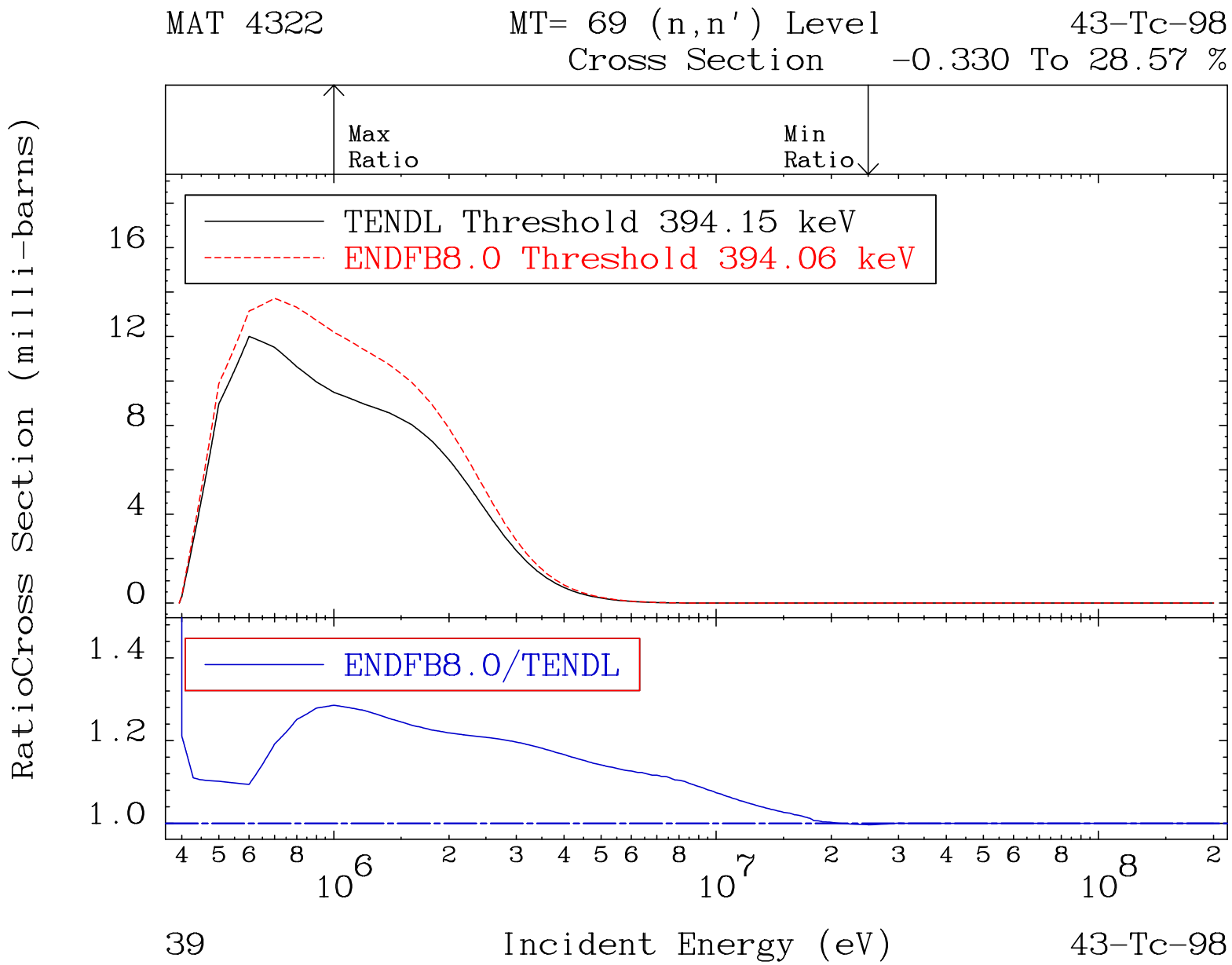

MAT 4322
MT= 64 (n,n') Level
43-Tc-98
Cross Section 0.000 To 6284. %
Max Ratio
Min Ratio
TENDL Threshold 325.24 keV
ENDFB8.0 Threshold 325.14 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
34
43-Tc-98

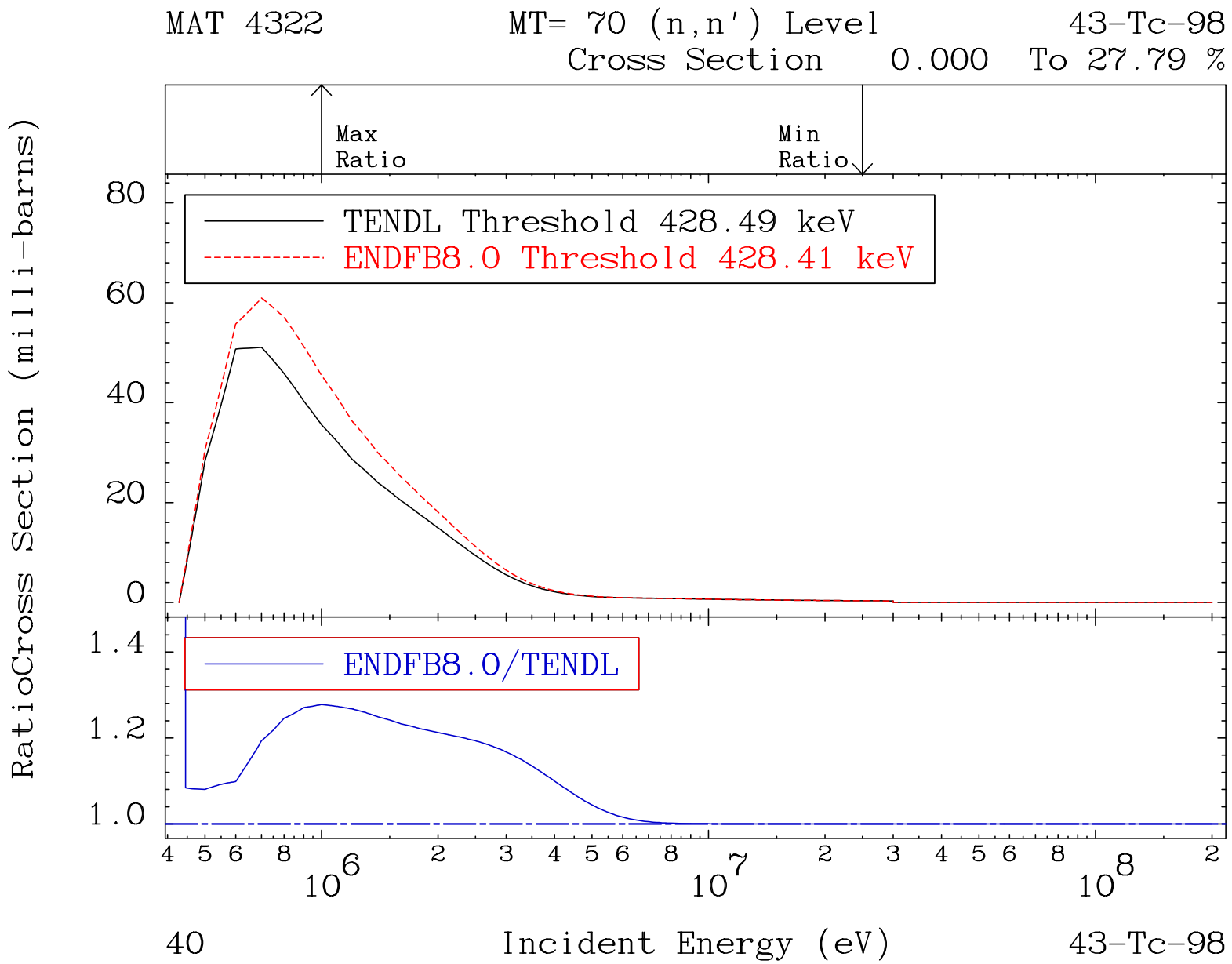

MAT 4322
MT= 65 (n,n') Level
43-Tc-98
Cross Section 0.000 To 27.48 %
Max Ratio
Min Ratio
TENDL Threshold 331.92 keV
ENDFB8.0 Threshold 331.83 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.4
1.2
1.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
35
Incident Energy (eV)
43-Tc-98

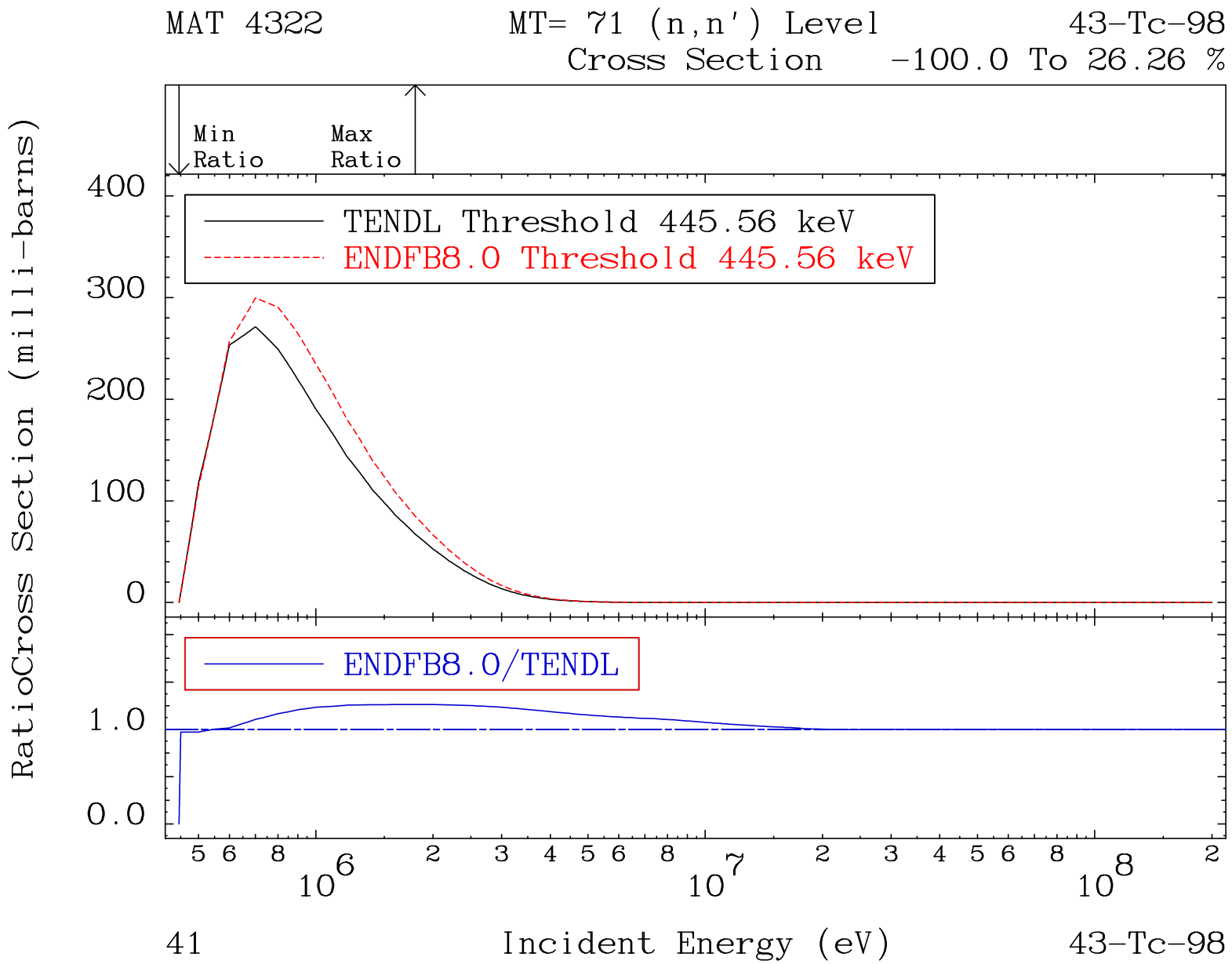

MAT 4322
MT= 66 (n,n') Level
43-Tc-98
Cross Section
-1.652 To 26.04 %
Min Ratio
Max Ratio
TENDL Threshold 350.50 keV
ENDFB8.0 Threshold 350.50 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.4
1.2
1.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
36
Incident Energy (eV)
43-Tc-98

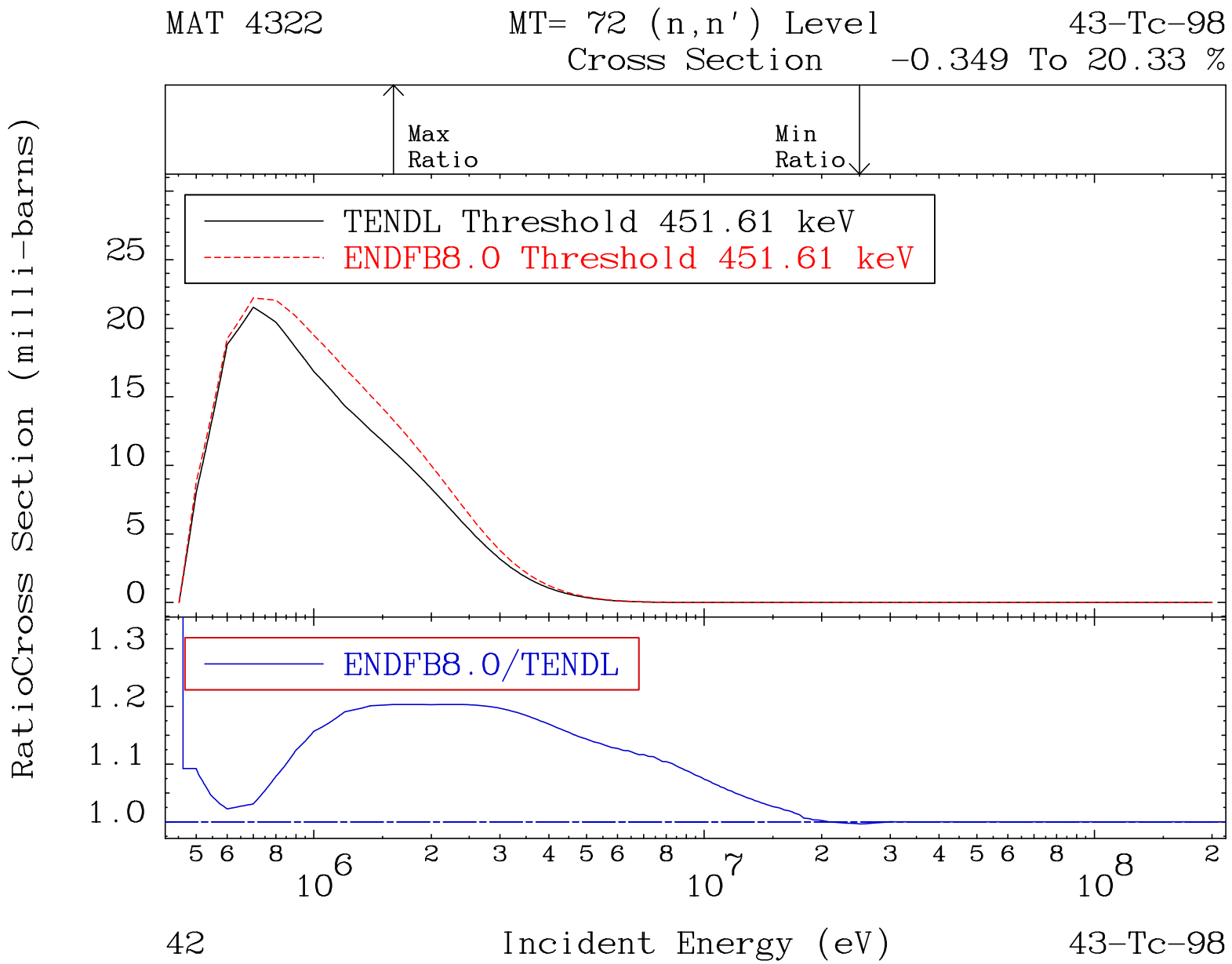

MAT 4322
MT= 67 (n,n') Level
Cross Section
43-Tc-98
0.000
To 38.93 %
Max
Ratio
Min
Ratio
TENDL Threshold 354.95 keV
ENDFB8.0 Threshold 354.89 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37
43-Tc-98

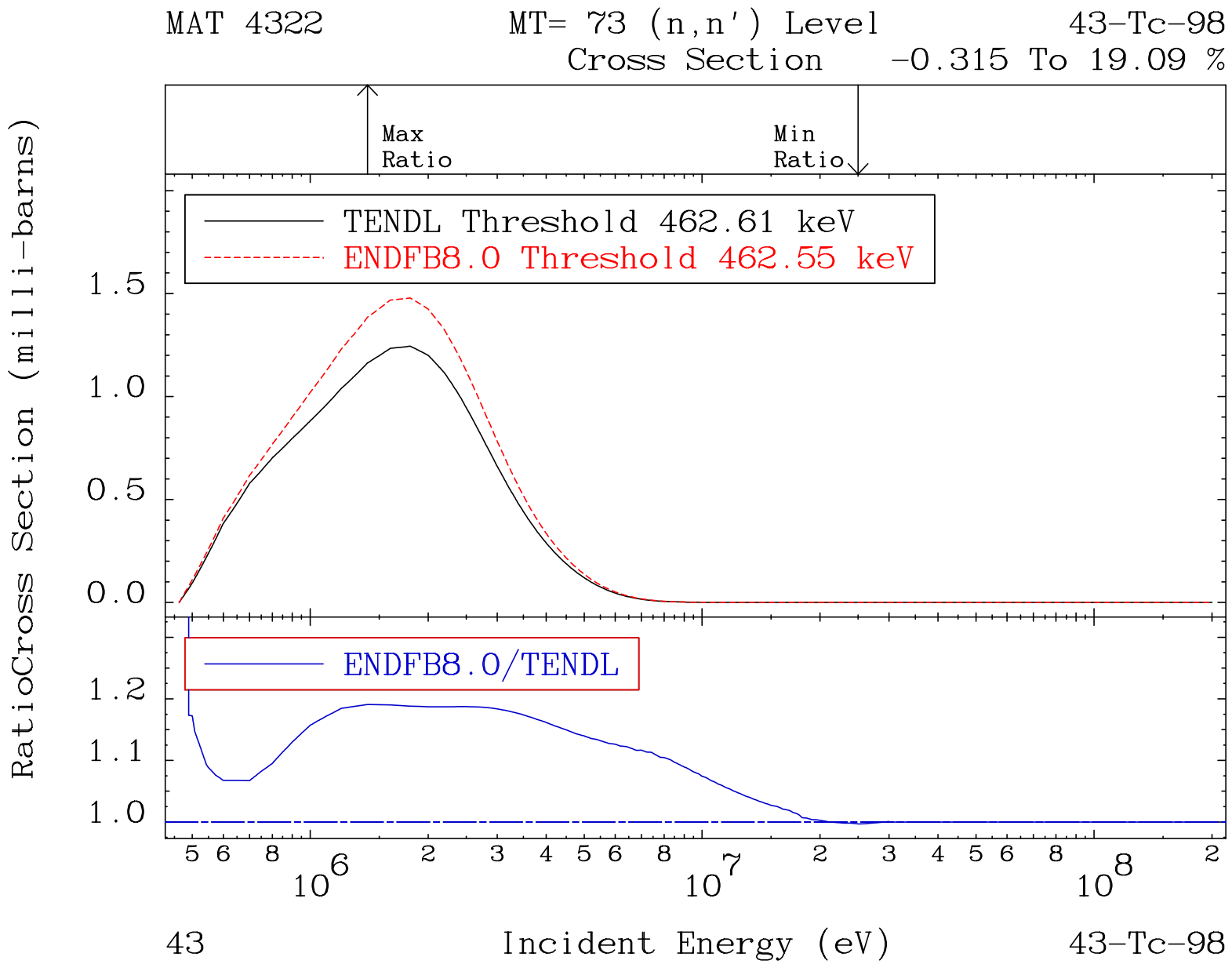

MAT 4322
MT= 68 (n,n') Level
43-Tc-98
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 378.94 keV
ENDFB8.0 Threshold 378.94 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
38
Incident Energy (eV)
43-Tc-98

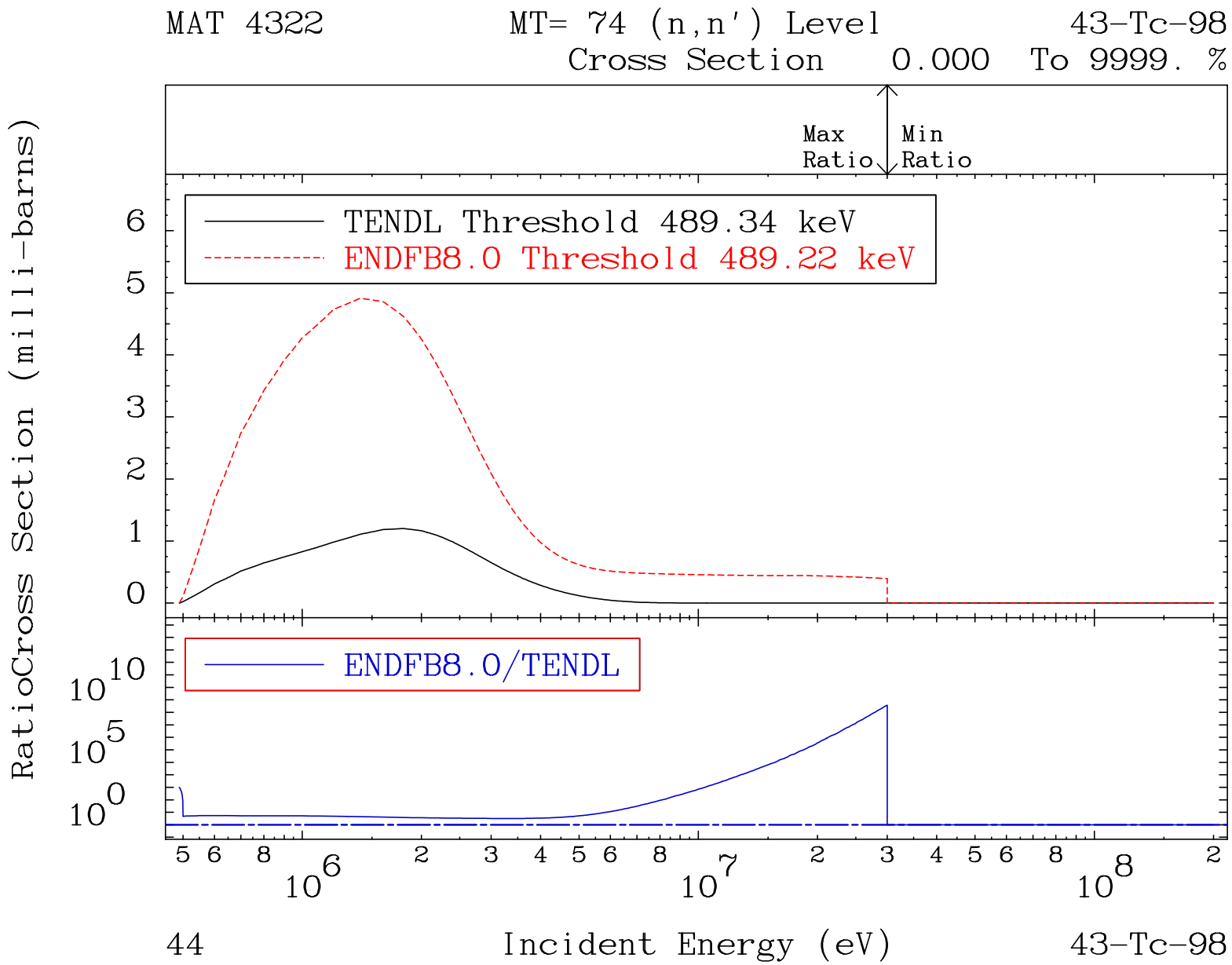

MAT 4322
MT= 69 (n,n') Level
Cross Section
43-Tc-98
-0.330 To 28.57 %
Max Ratio
Min Ratio
TENDL Threshold 394.15 keV
ENDFB8.0 Threshold 394.06 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.4
1.2
1.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
39
Incident Energy (eV)
43-Tc-98

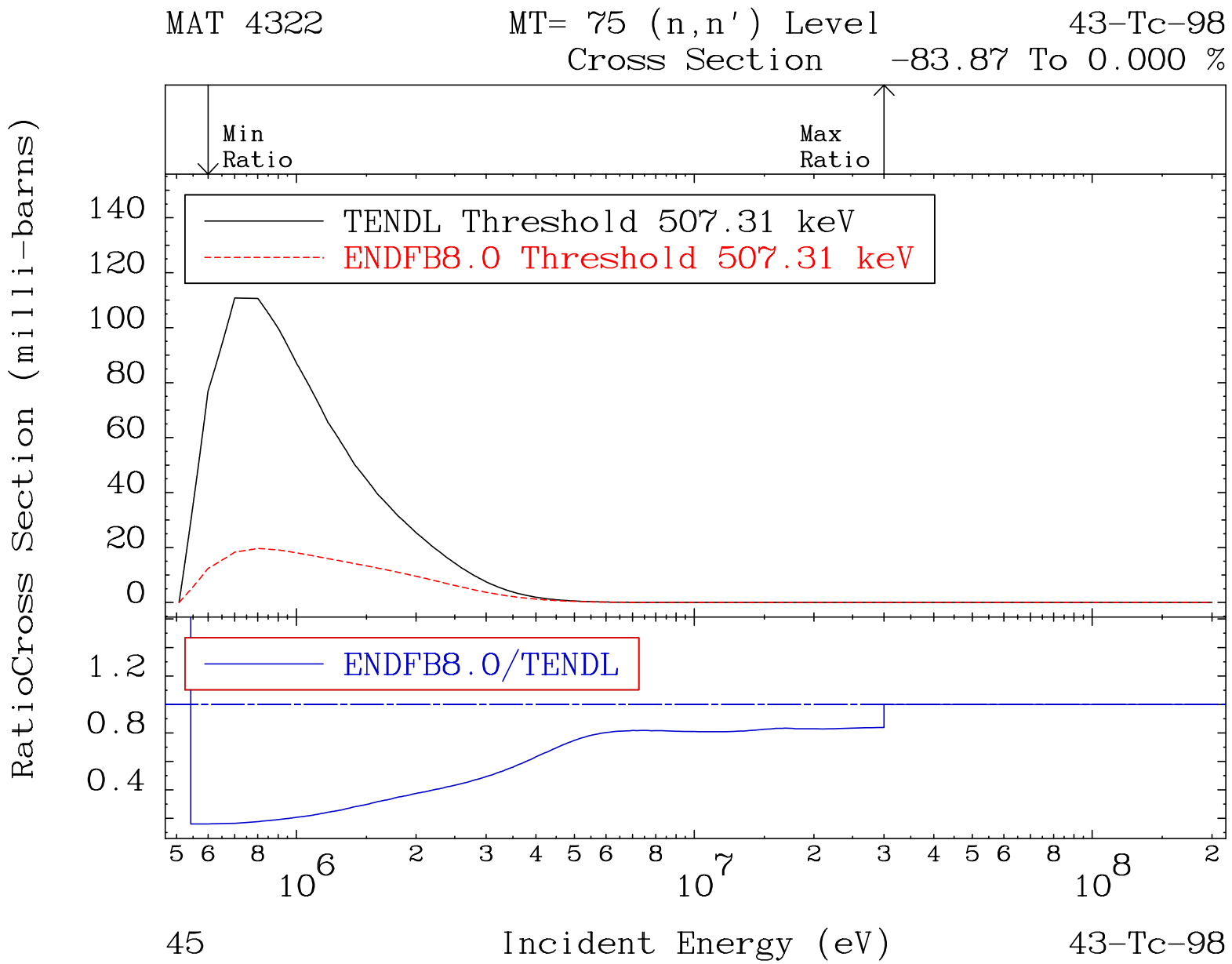

MAT 4322
MT= 70 (n,n') Level
43-Tc-98
Cross Section 0.000 To 27.79 %
Max Ratio
Min Ratio
TENDL Threshold 428.49 keV
ENDFB8.0 Threshold 428.41 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
40
43-Tc-98

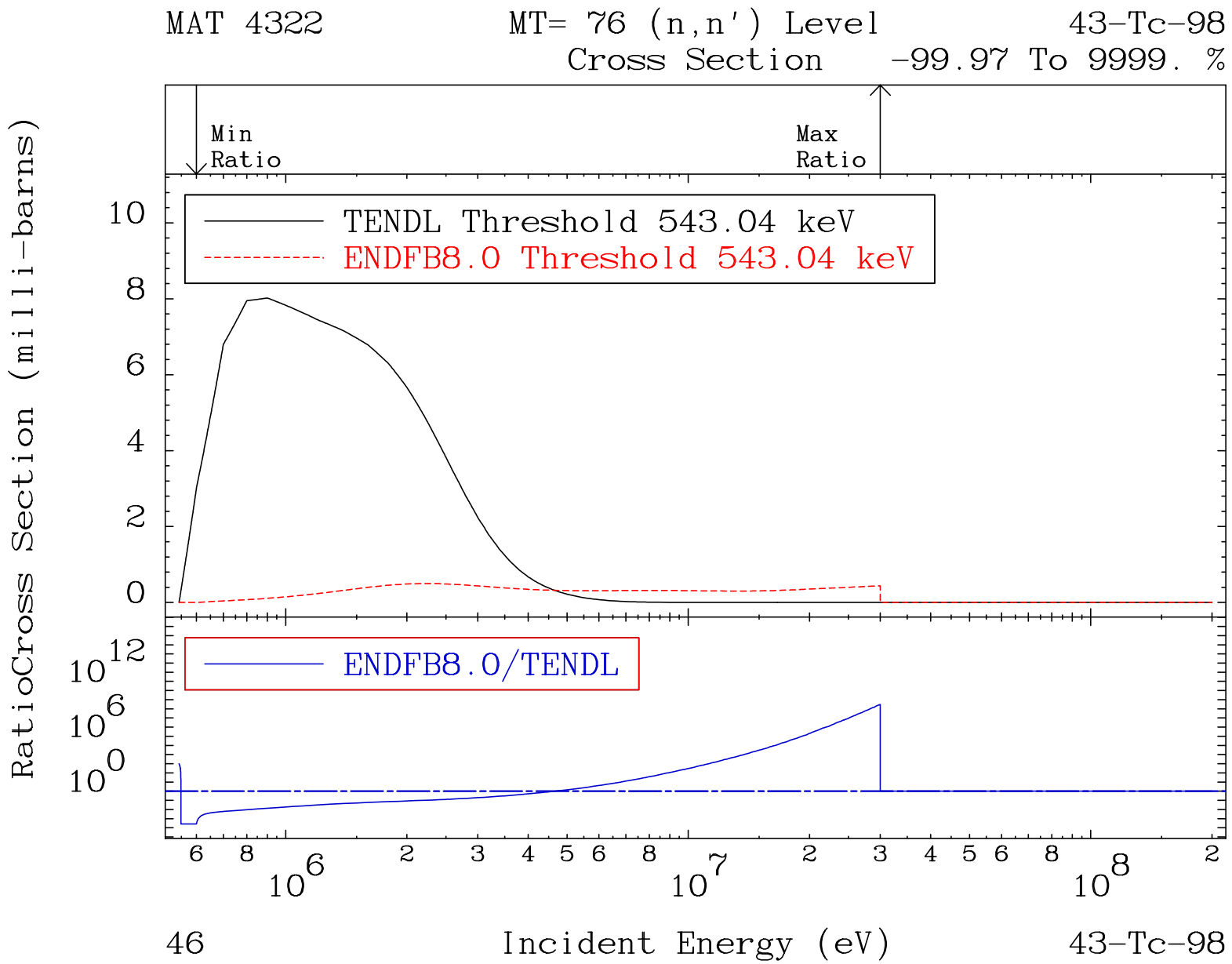

MAT 4322
MT= 71 (n,n') Level
43-Tc-98
Cross Section -100.0 To 26.26 %
Min Ratio
Max Ratio
TENDL Threshold 445.56 keV
ENDFB8.0 Threshold 445.56 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
41
Incident Energy (eV)
43-Tc-98

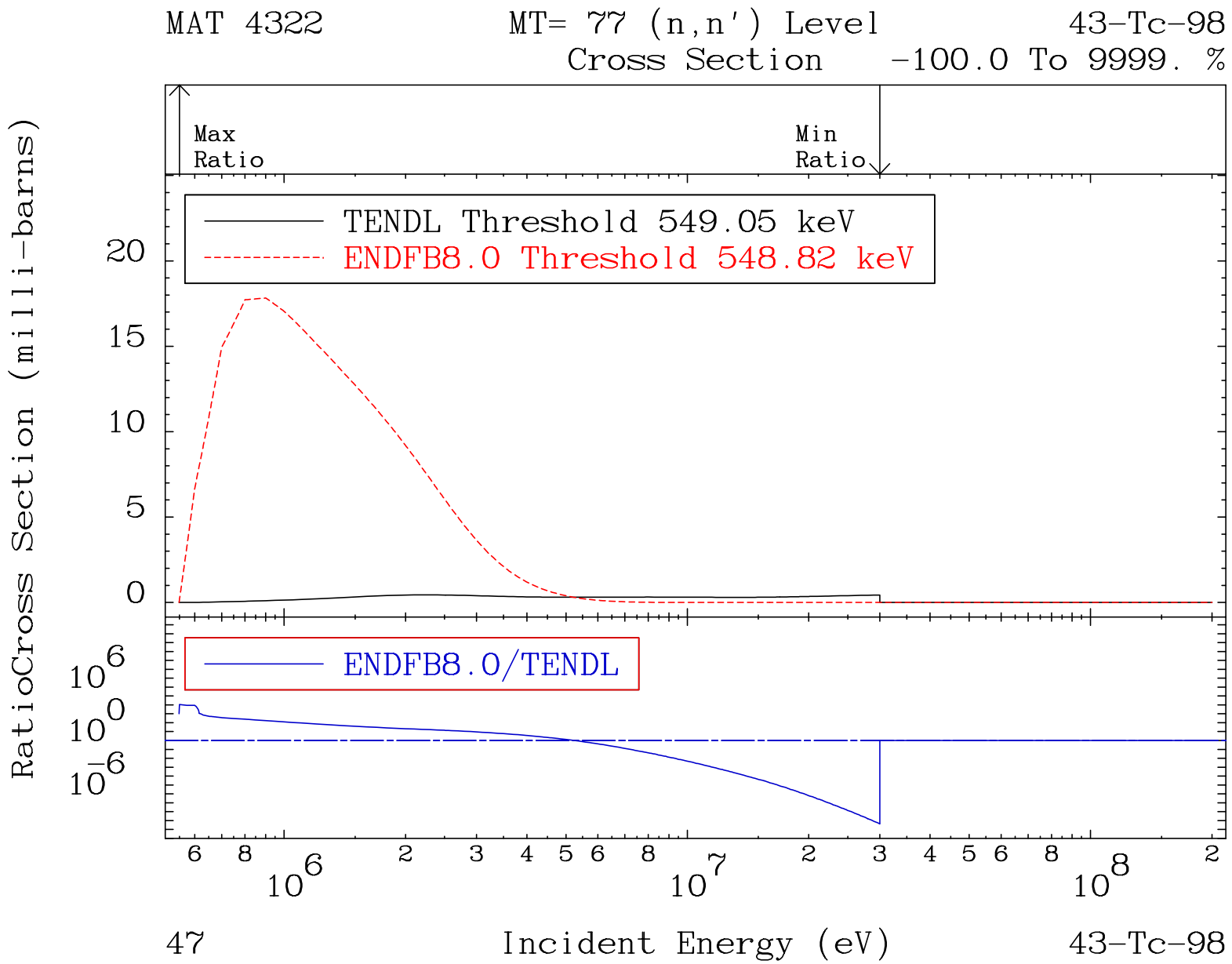

MAT 4322
MT= 72 (n,n') Level
43-Tc-98
Cross Section
-0.349 To 20.33 %
Max Ratio
Min Ratio
TENDL Threshold 451.61 keV
ENDFB8.0 Threshold 451.61 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
42
43-Tc-98

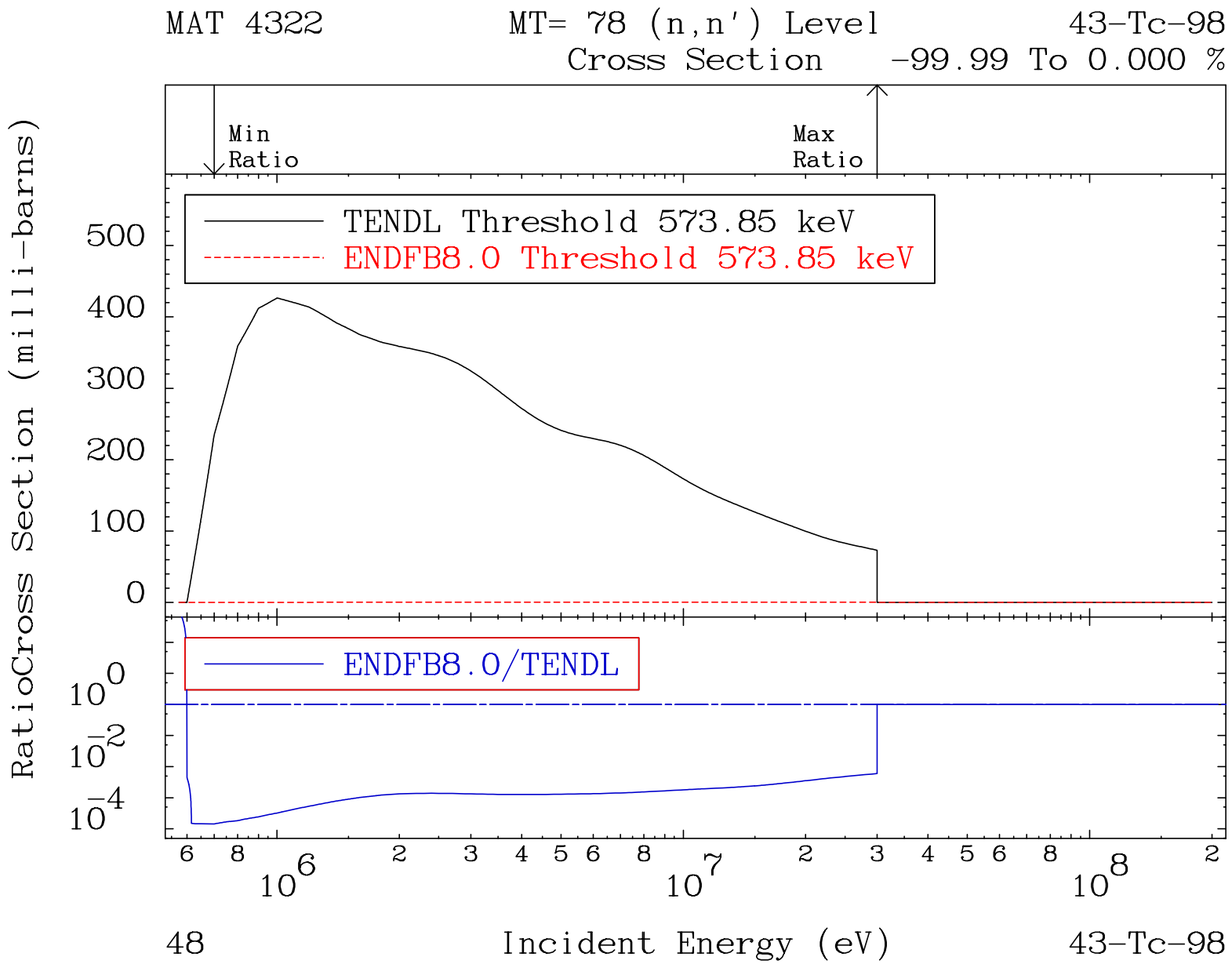

MAT 4322
MT= 73 (n,n') Level
43-Tc-98
Cross Section
-0.315 To 19.09 %
Max Ratio
Min Ratio
TENDL Threshold 462.61 keV
ENDFB8.0 Threshold 462.55 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
1.2
1.1
1.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
43
Incident Energy (eV)
43-Tc-98

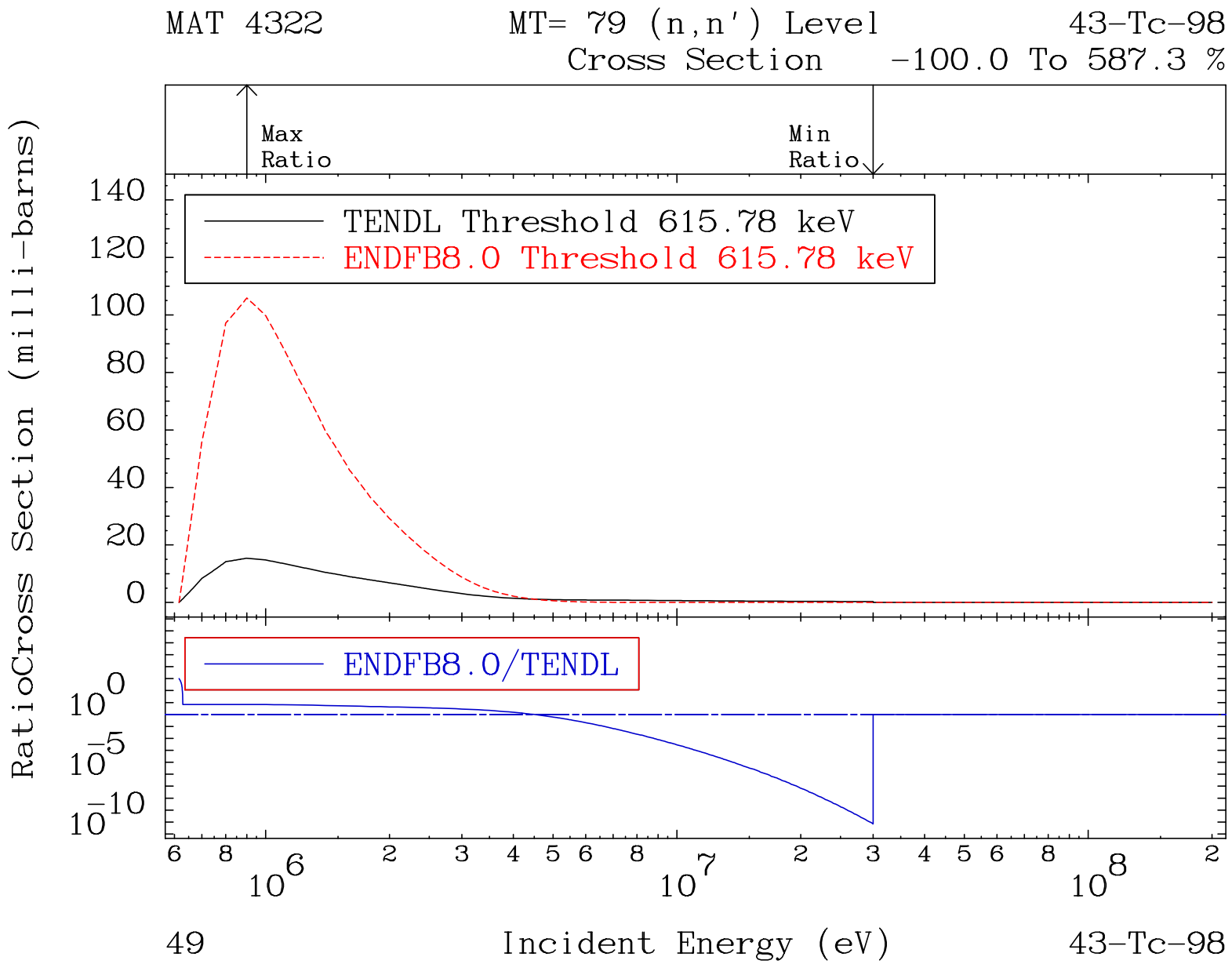

MAT 4322
MT= 74 (n,n') Level
43-Tc-98
Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 489.34 keV
ENDFB8.0 Threshold 489.22 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
44
43-Tc-98

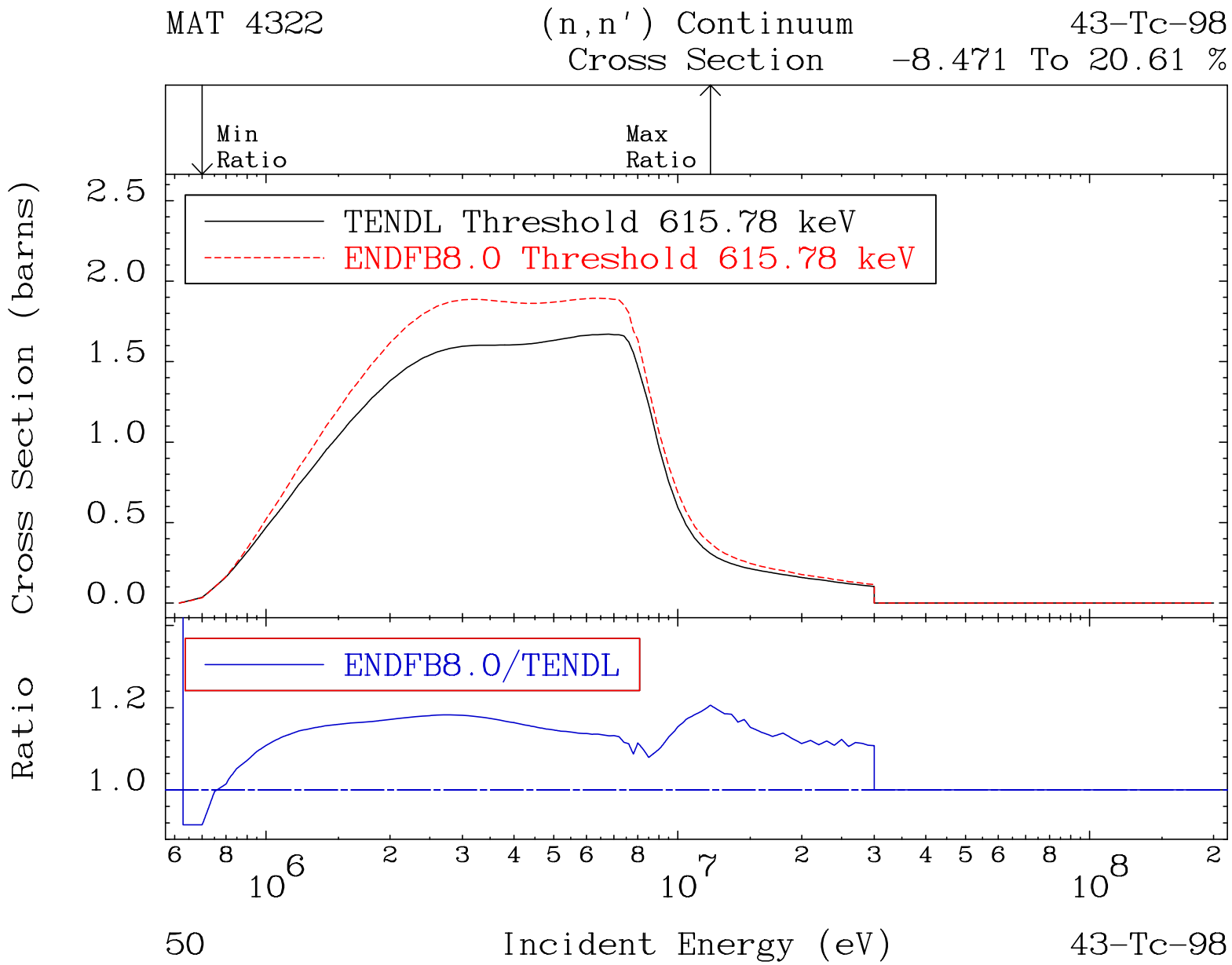

MAT 4322
MT= 75 (n,n') Level
Cross Section
43-Tc-98
-83.87 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 507.31 keV
ENDFB8.0 Threshold 507.31 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.2
0.8
0.4
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
45
Incident Energy (eV)
43-Tc-98

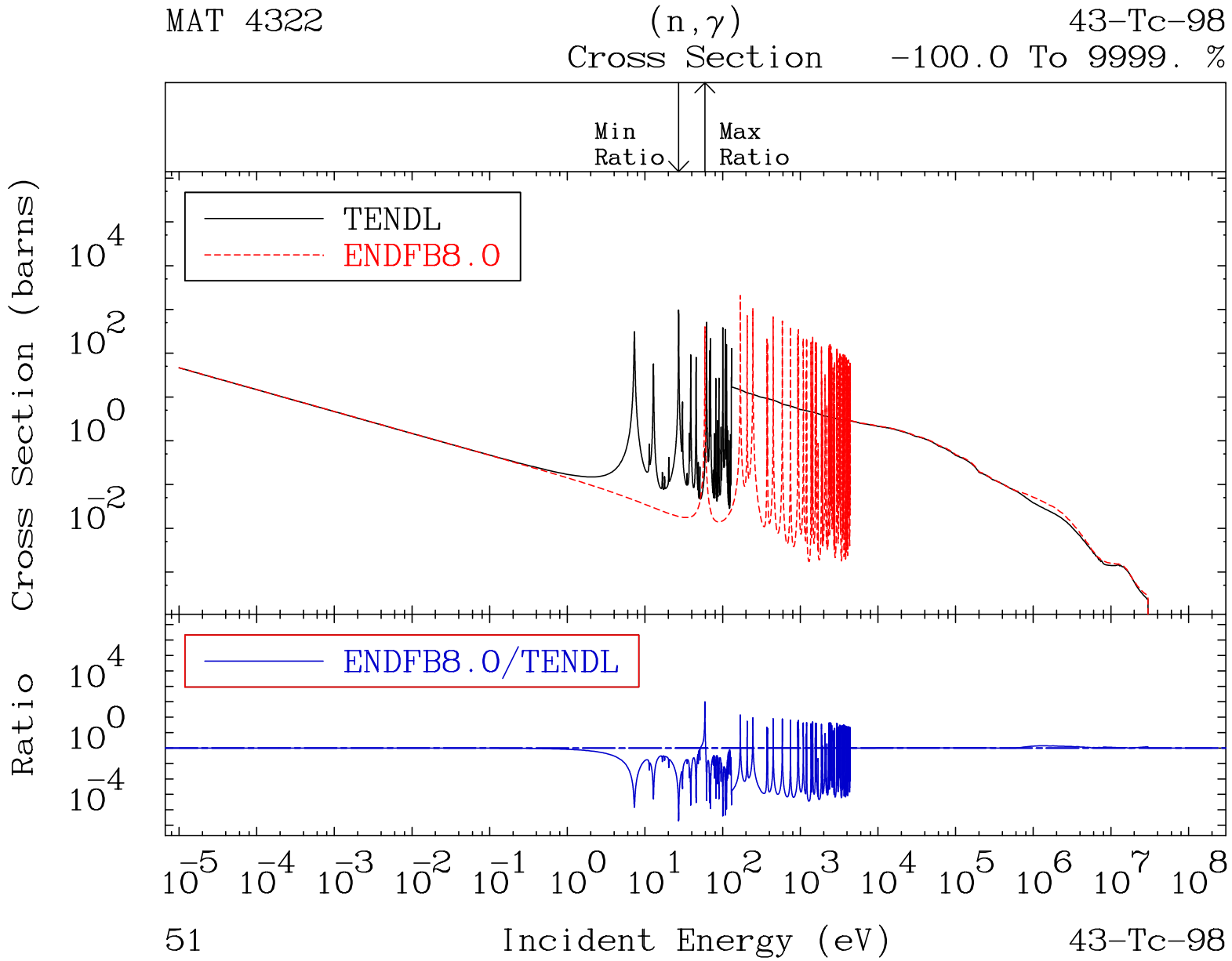

MAT 4322
MT= 76 (n,n') Level
43-Tc-98
Cross Section -99.97 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 543.04 keV
ENDFB8.0 Threshold 543.04 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
46
43-Tc-98

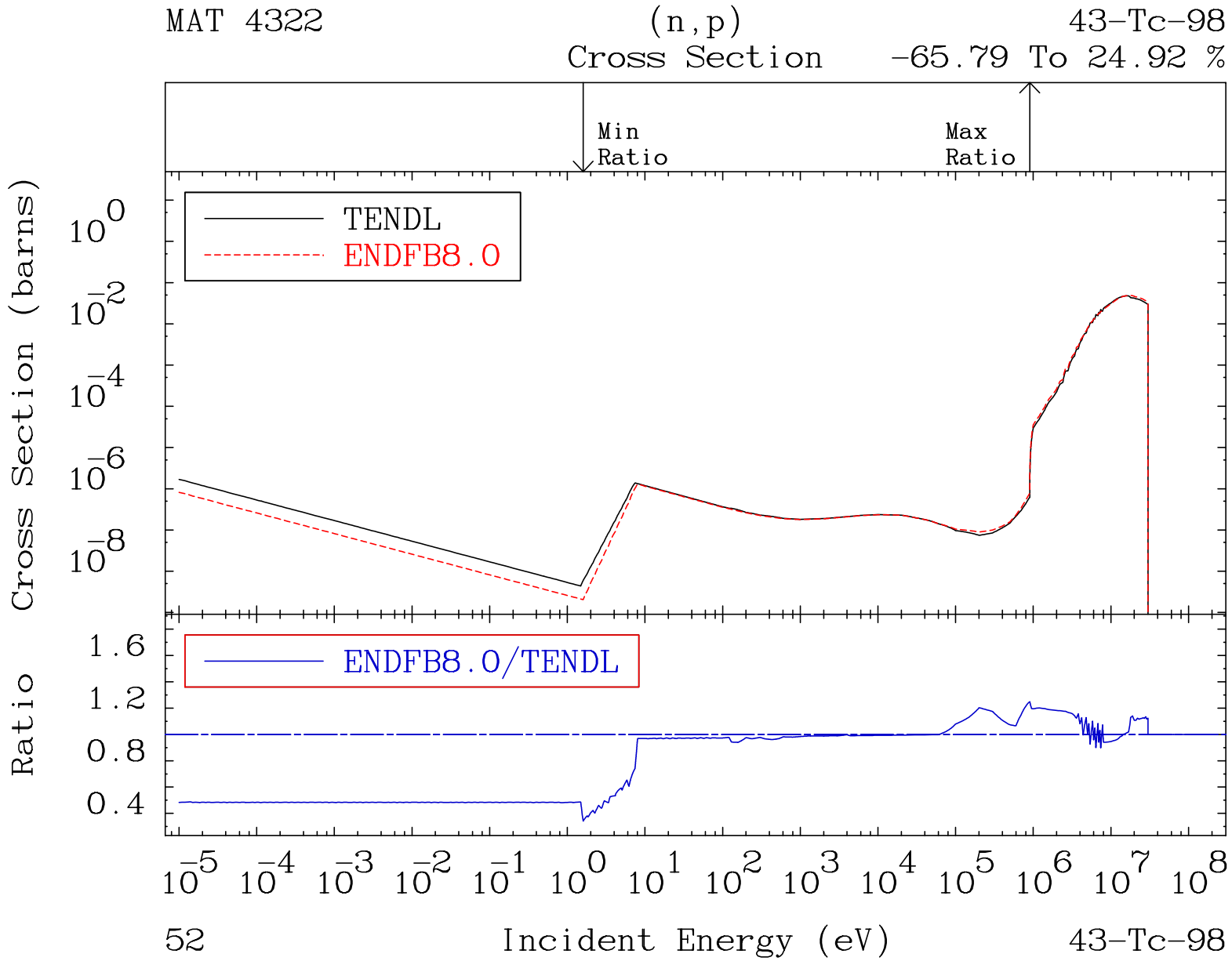

MAT 4322
MT= 77 (n,n') Level
Cross Section
43-Tc-98
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 549.05 keV
ENDFB8.0 Threshold 548.82 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
47
43-Tc-98

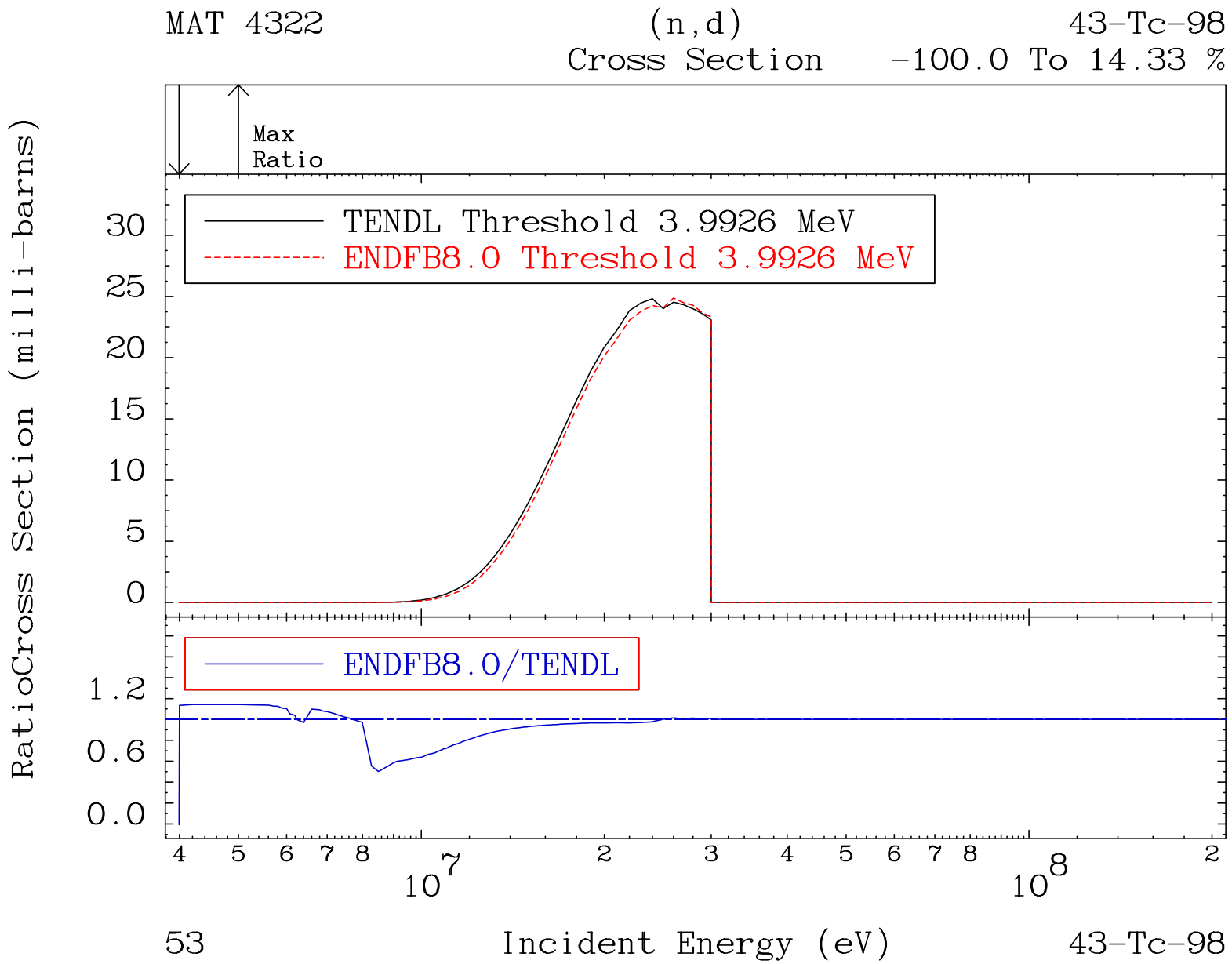

MAT 4322
MT= 78 (n,n') Level
Cross Section
43-Tc-98
-99.99 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 573.85 keV
ENDFB8.0 Threshold 573.85 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^0
10^-2
10^-4
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
48
Incident Energy (eV)
43-Tc-98

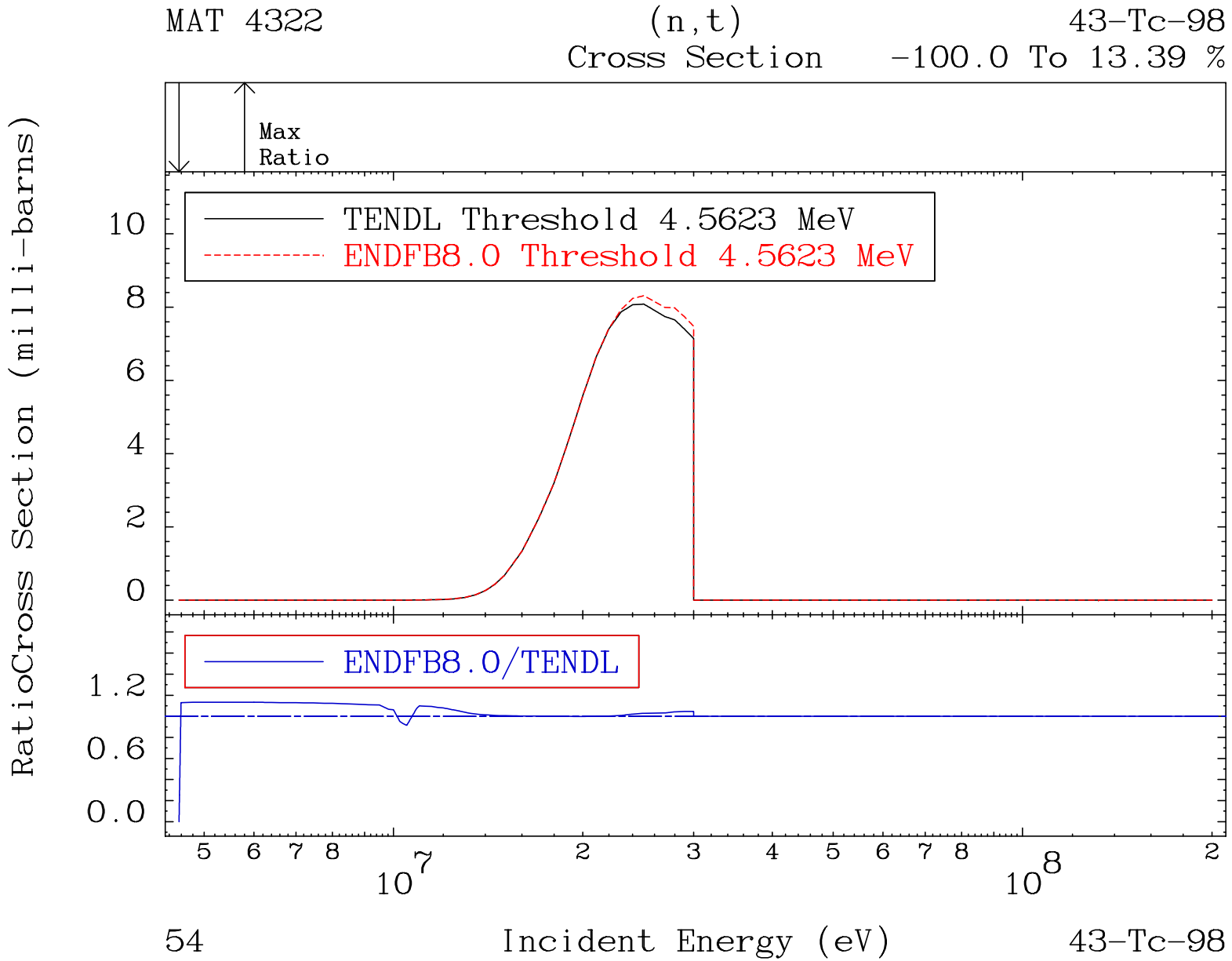

MAT 4322
MT= 79 (n,n') Level
Cross Section
43-Tc-98
-100.0 To 587.3 %
Max Ratio
Min Ratio
TENDL Threshold 615.78 keV
ENDFB8.0 Threshold 615.78 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
10^{0}
10^{-5}
10^{-10}
6 8 10^{6} 2 3 4 5 6 8 10^{7} 2 3 4 5 6 8 10^{8} 2
49
Incident Energy (eV)
43-Tc-98

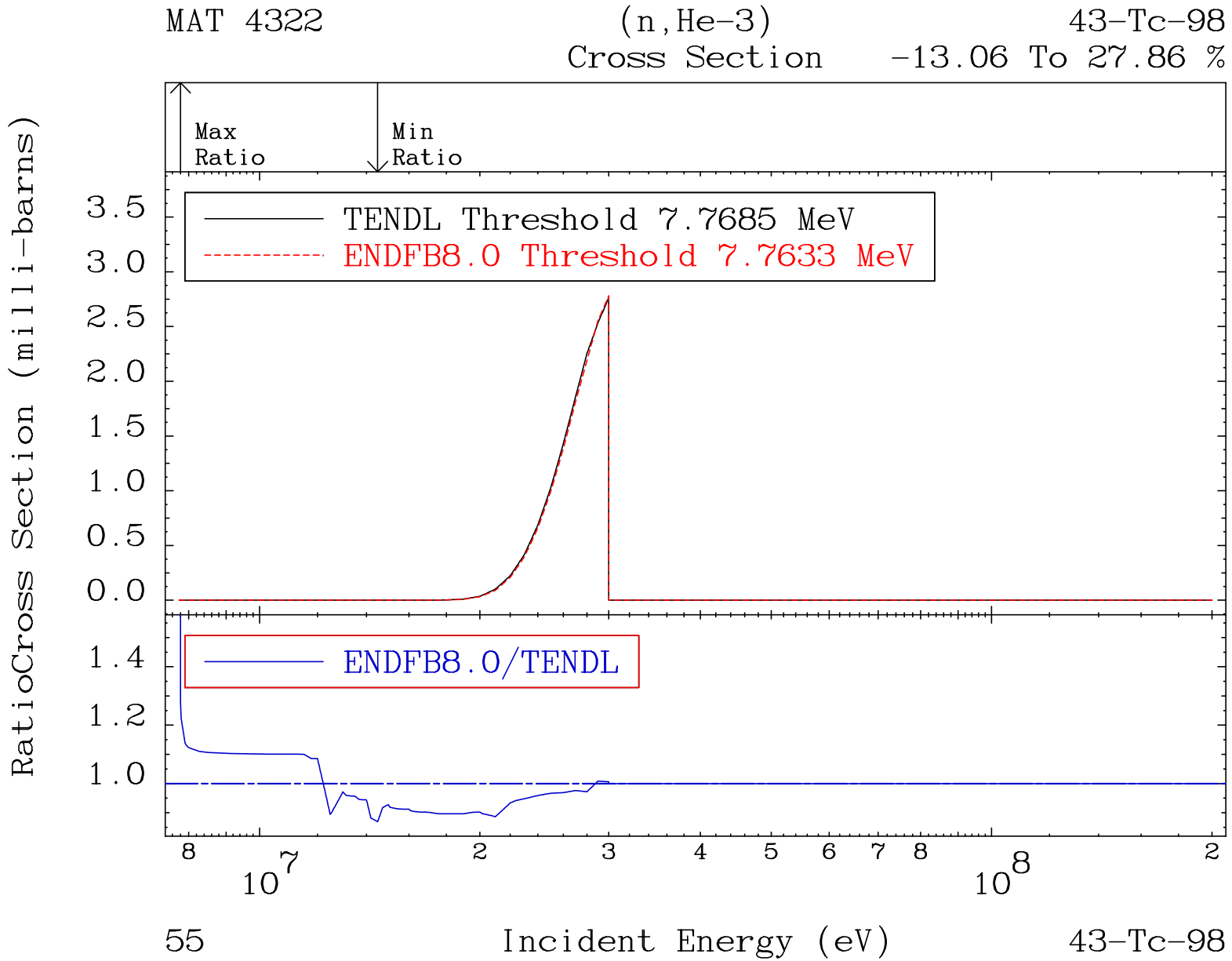

MAT 4322
(n,n') Continuum
Cross Section
43-Tc-98
-8.471 To 20.61 %
Min
Ratio
Max
Ratio
TENDL Threshold 615.78 keV
ENDFB8.0 Threshold 615.78 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
1.2
1.0
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
50
Incident Energy (eV)
43-Tc-98

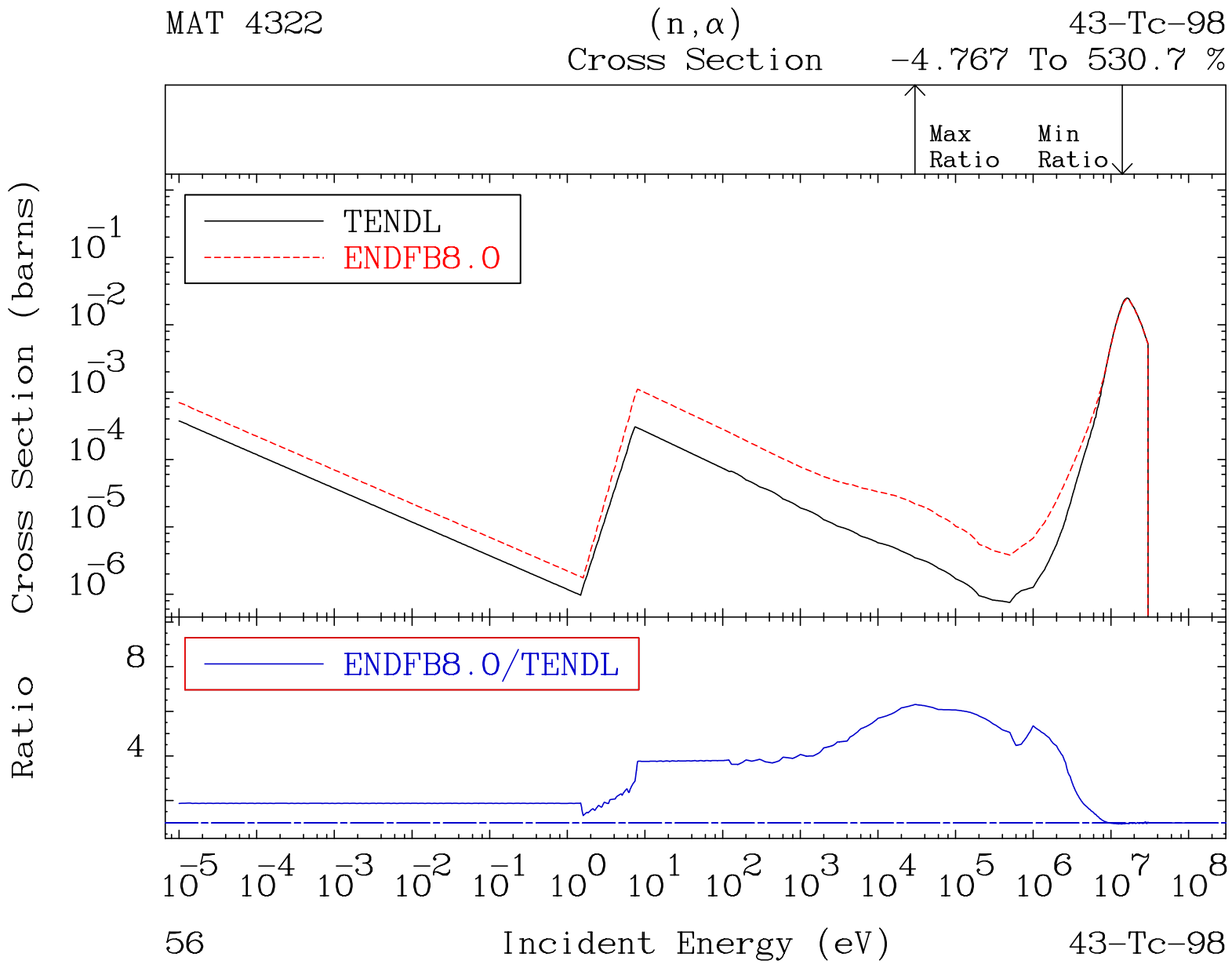

MAT 4322
(n,γ)
43-Tc-98
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
51
43-Tc-98

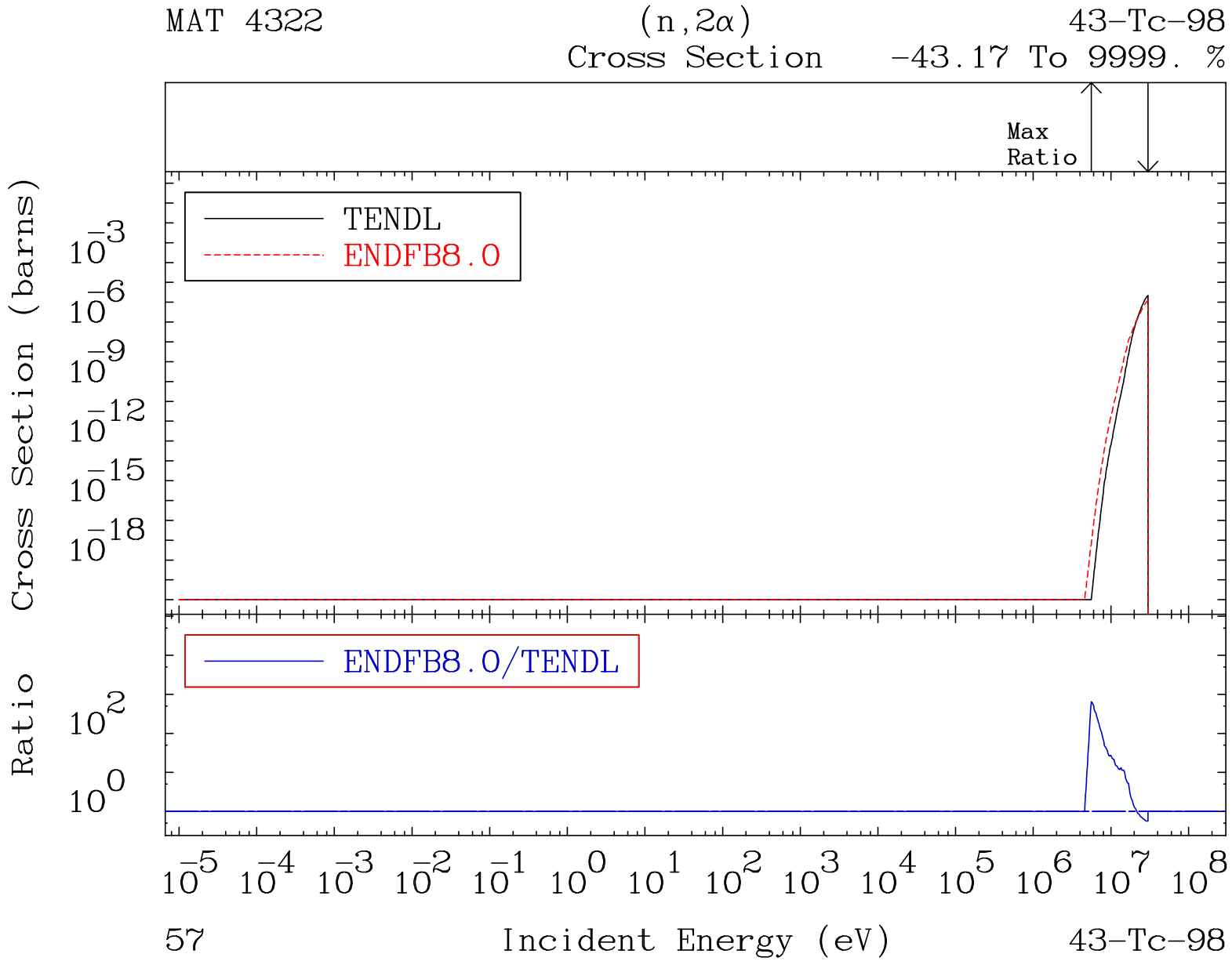

MAT 4322
(n,p)
43-Tc-98
Cross Section
-65.79 To 24.92 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
52
43-Tc-98

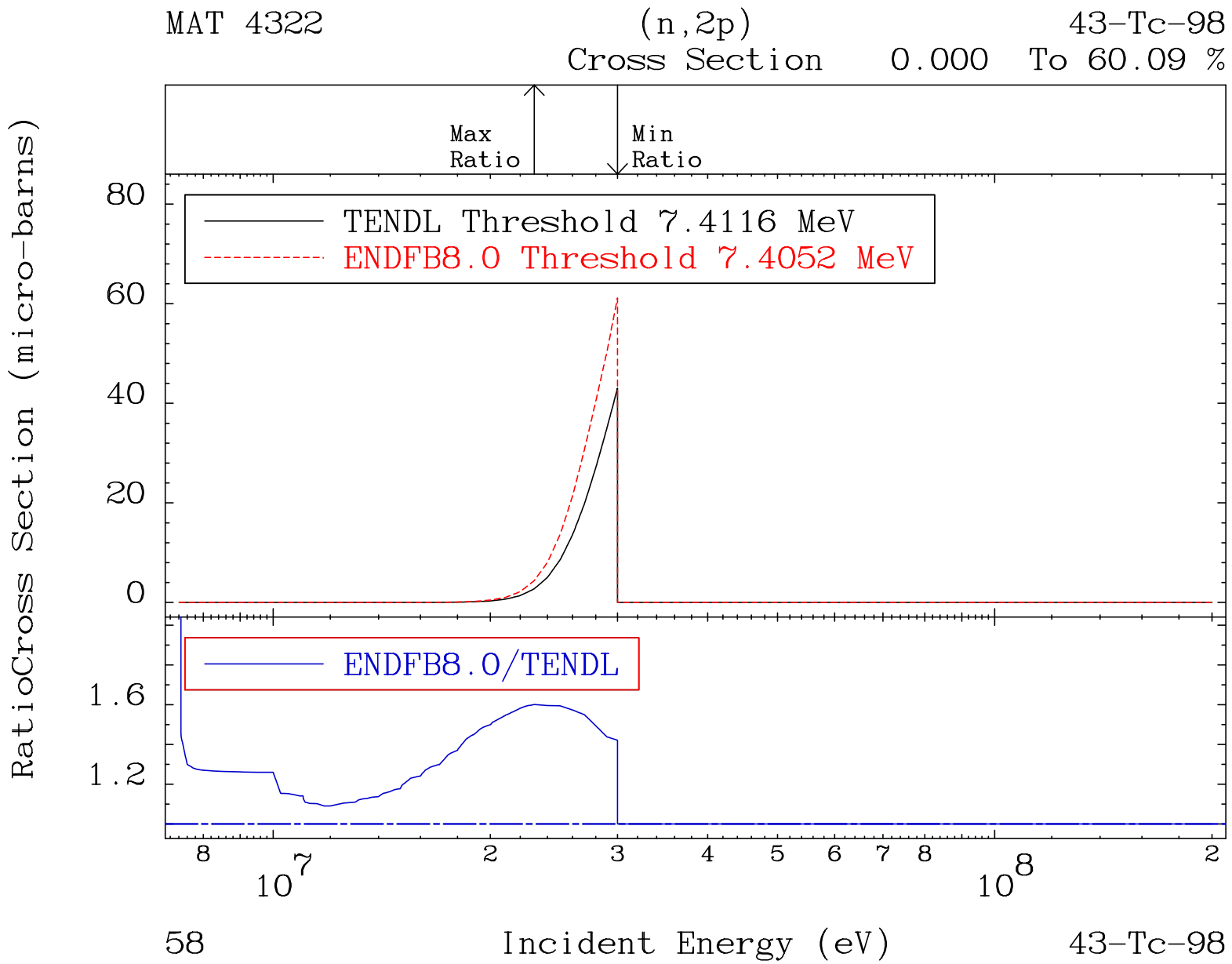

MAT 4322
(n,d)
43-Tc-98
Cross Section
-100.0 To 14.33 %
Max
Ratio
TENDL Threshold 3.9926 MeV
ENDFB8.0 Threshold 3.9926 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
53
Incident Energy (eV)
43-Tc-98

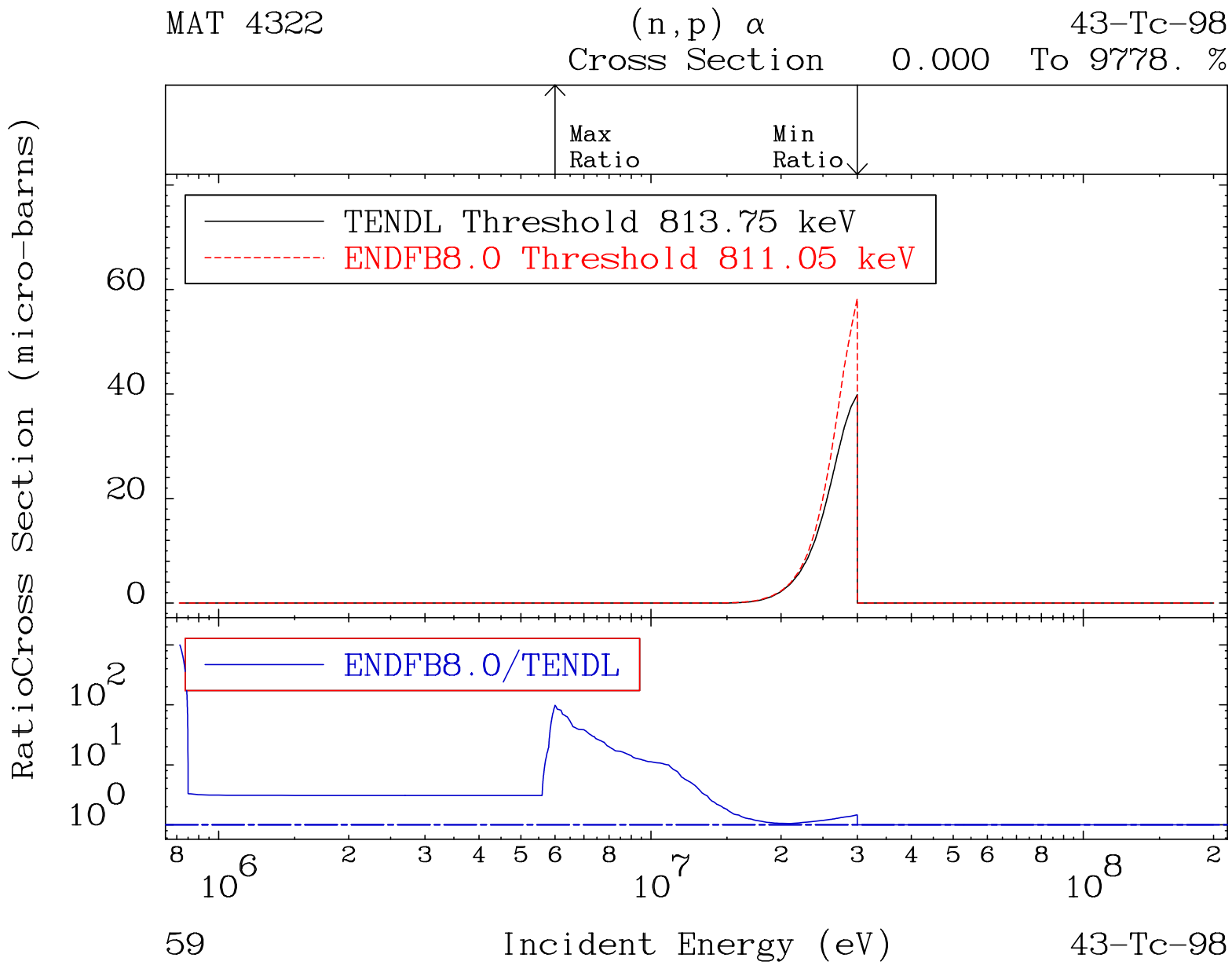

MAT 4322
(n,t)
43-Tc-98
Cross Section
-100.0 To 13.39 %
Max
Ratio
TENDL Threshold 4.5623 MeV
ENDFB8.0 Threshold 4.5623 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.6
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
54
Incident Energy (eV)
43-Tc-98

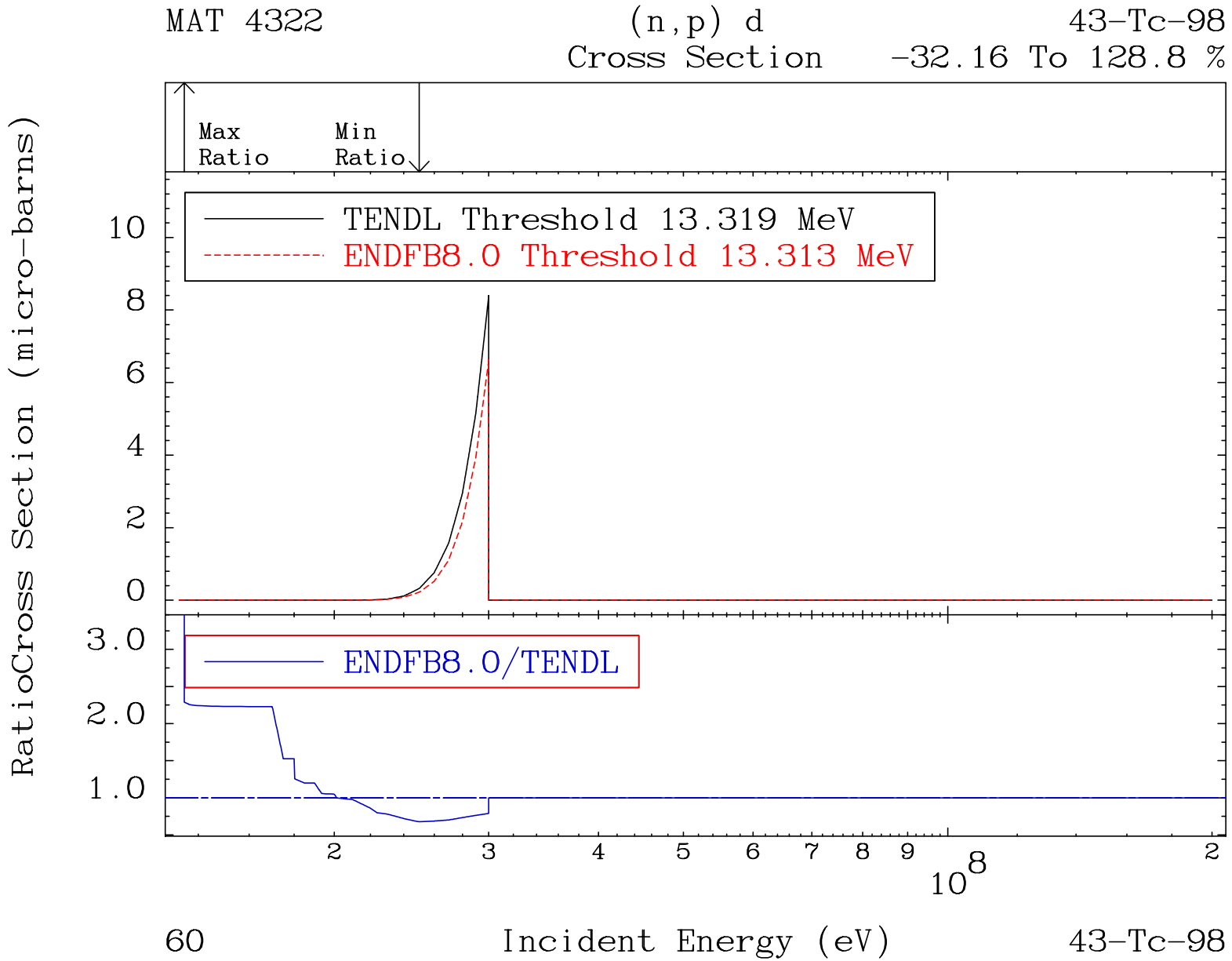

MAT 4322
(n,He-3)
Cross Section
43-Tc-98
-13.06 To 27.86 %
Max Ratio
Min Ratio
TENDL Threshold 7.7685 MeV
ENDFB8.0 Threshold 7.7633 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.4
1.2
1.0
8
10^7
2
3
4
5
6
7
8
10^8
2
55
Incident Energy (eV)
43-Tc-98

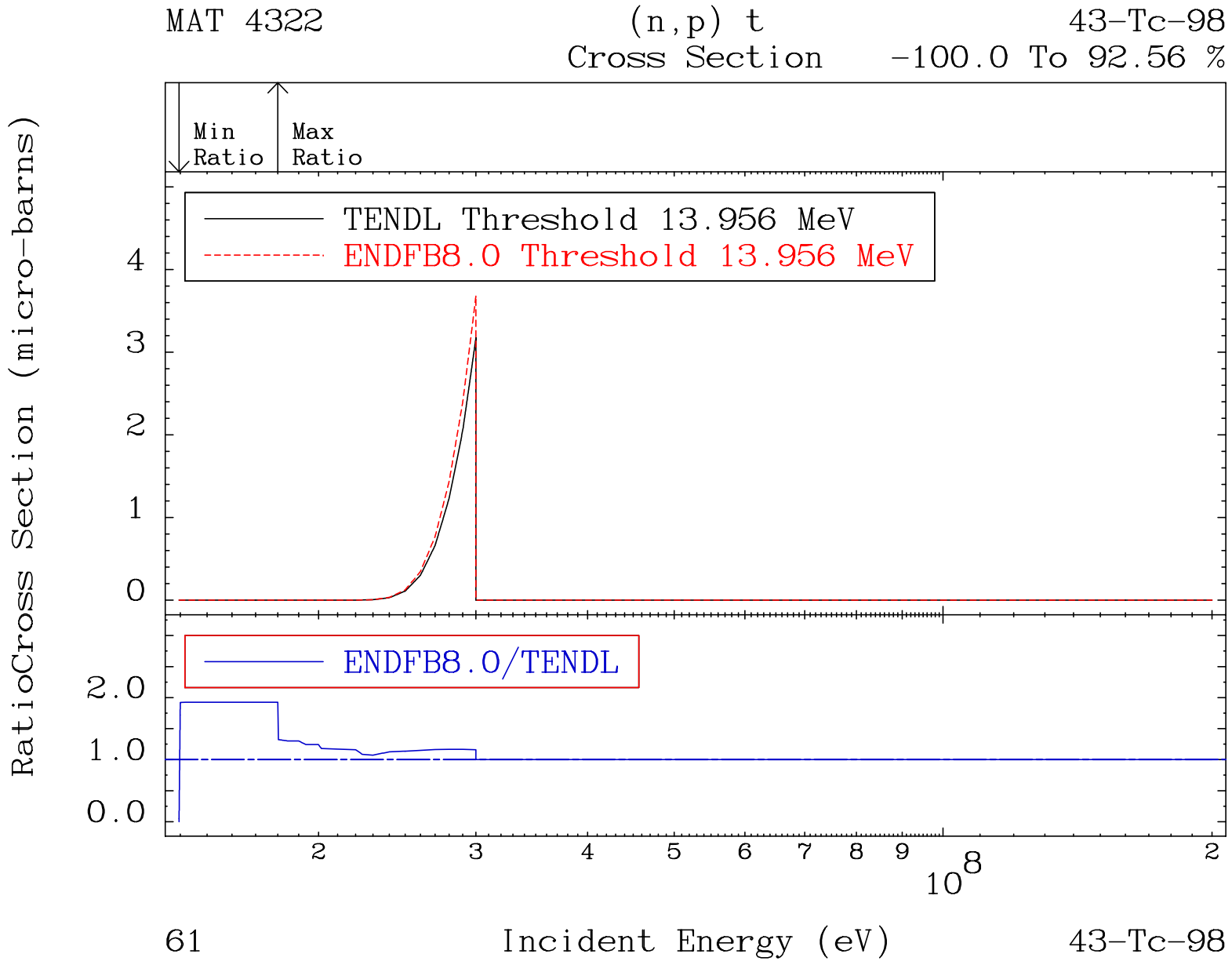

MAT 4322
(n,α)
Cross Section
43-Tc-98
-4.767 To 530.7 %
Max Ratio
Min Ratio
TENDL
ENDFB8.O
Cross Section (barns)
ENDFB8.O/TENDL
Ratio
Incident Energy (eV)
56
43-Tc-98

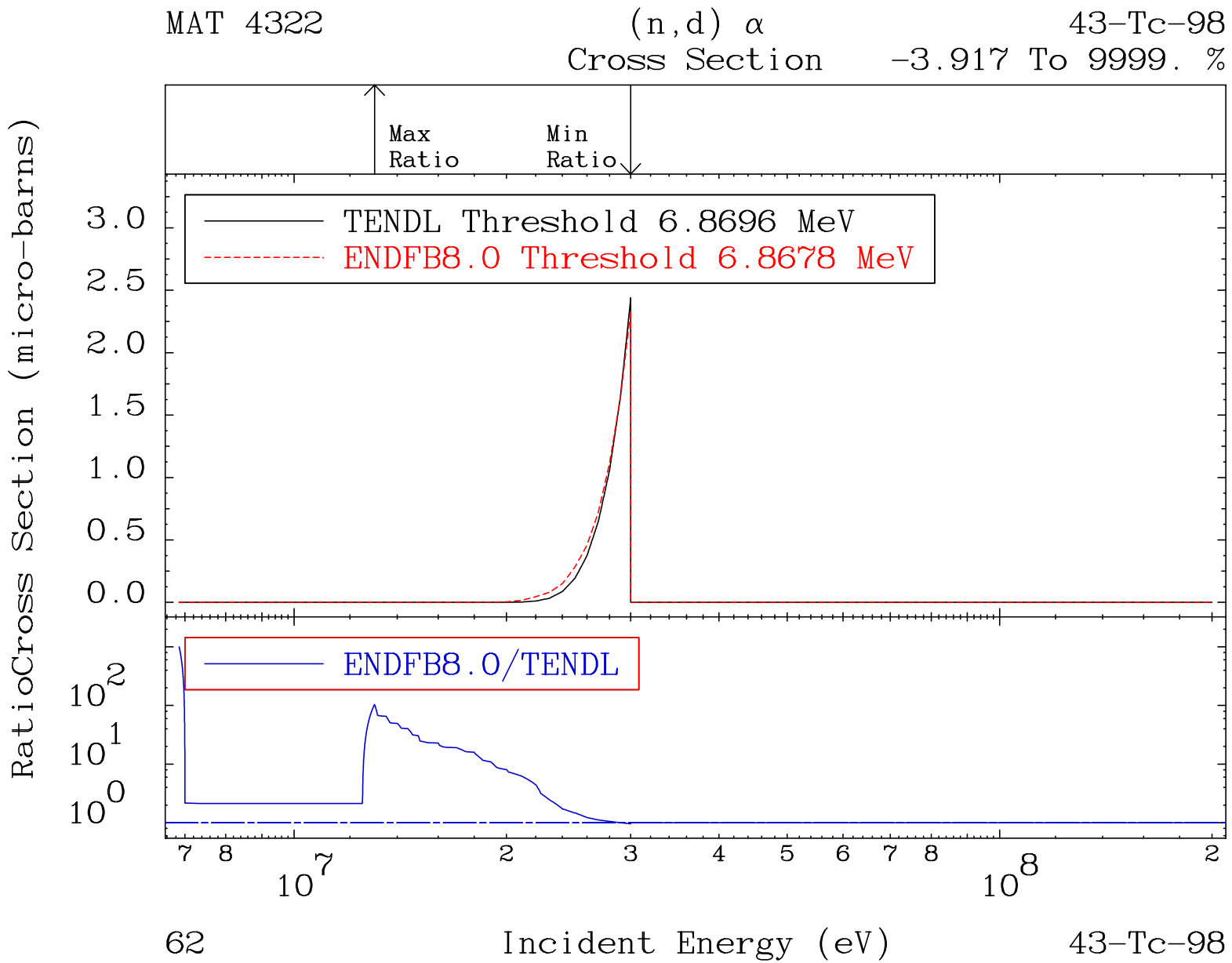

MAT 4322
(n,2α)
43-Tc-98
Cross Section
-43.17 To 9999. %
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
43-Tc-98

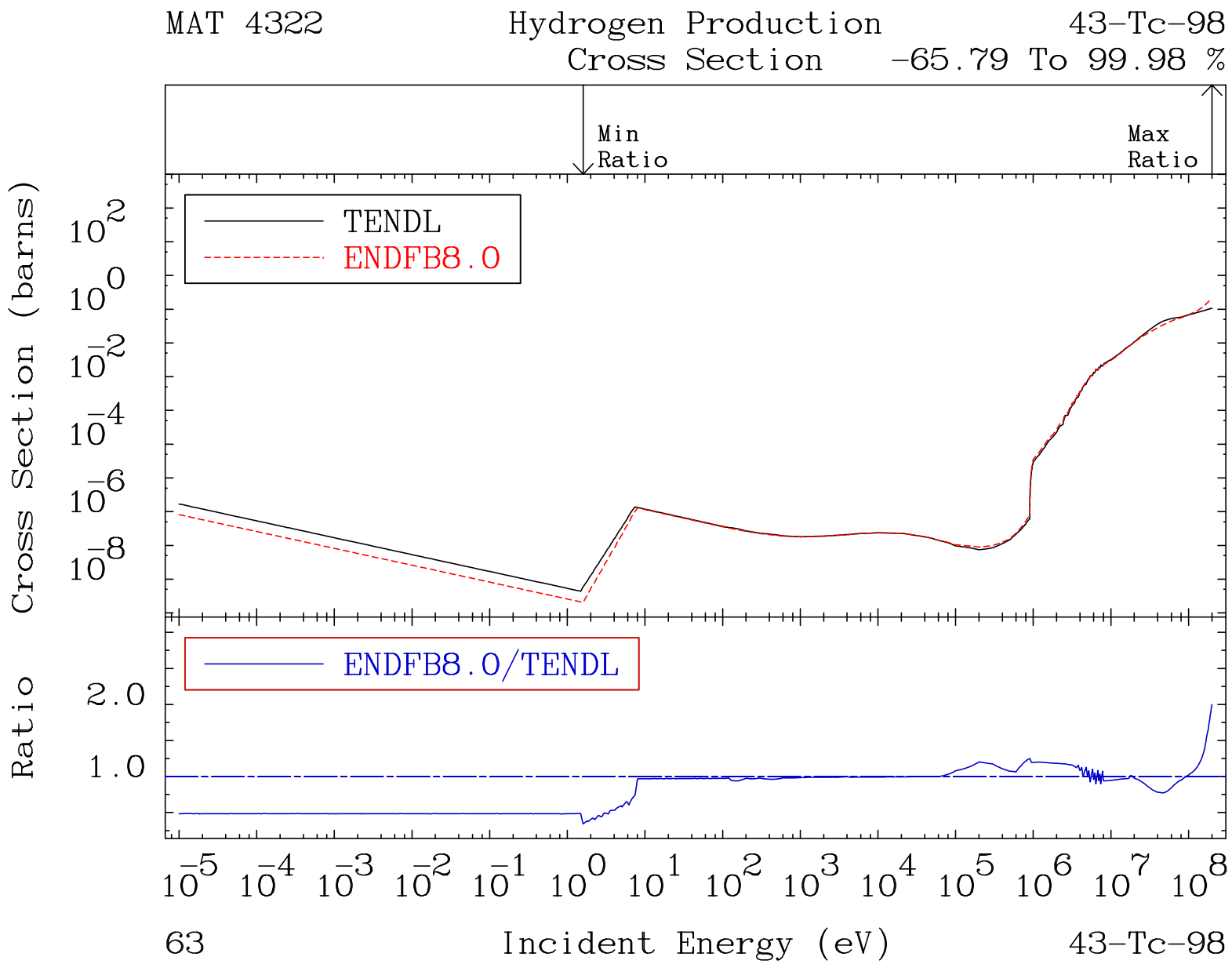

MAT 4322
(n,2p)
43-Tc-98
Cross Section 0.000 To 60.09 %
Max Ratio
Min Ratio
TENDL Threshold 7.4116 MeV
ENDFB8.0 Threshold 7.4052 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
80
60
40
20
0
1.6
1.2
8
10^7
2
3
4
5
6
7
8
10^8
2
58
Incident Energy (eV)
43-Tc-98

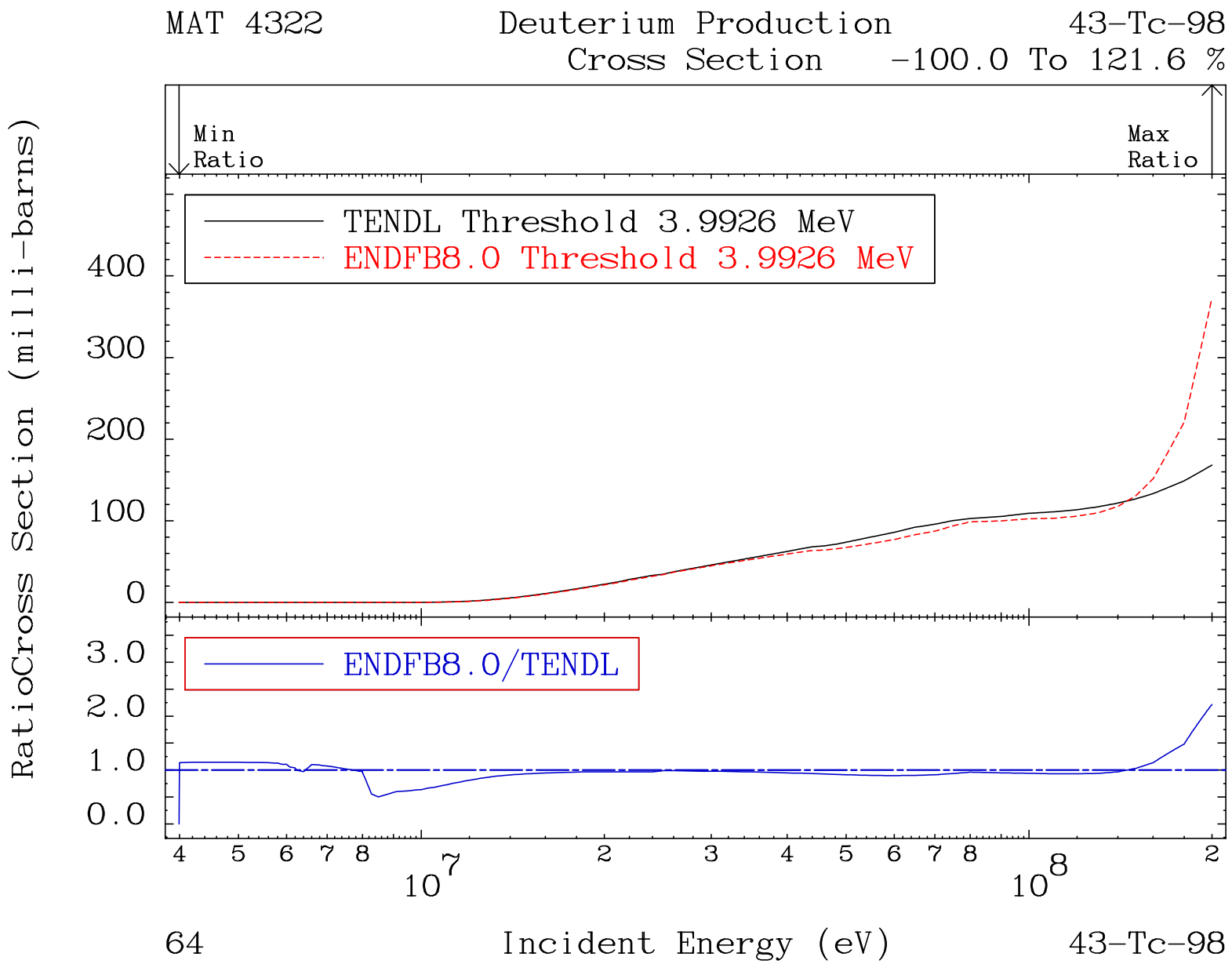

MAT 4322
(n,p) α
43-Tc-98
Cross Section 0.000 To 9778. %
Max Ratio
Min Ratio
TENDL Threshold 813.75 keV
ENDFB8.0 Threshold 811.05 keV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
60
40
20
0
10^2
10^1
10^0
8
2
3
4
5
6
8
10^6
10^7
10^8
59
Incident Energy (eV)
43-Tc-98

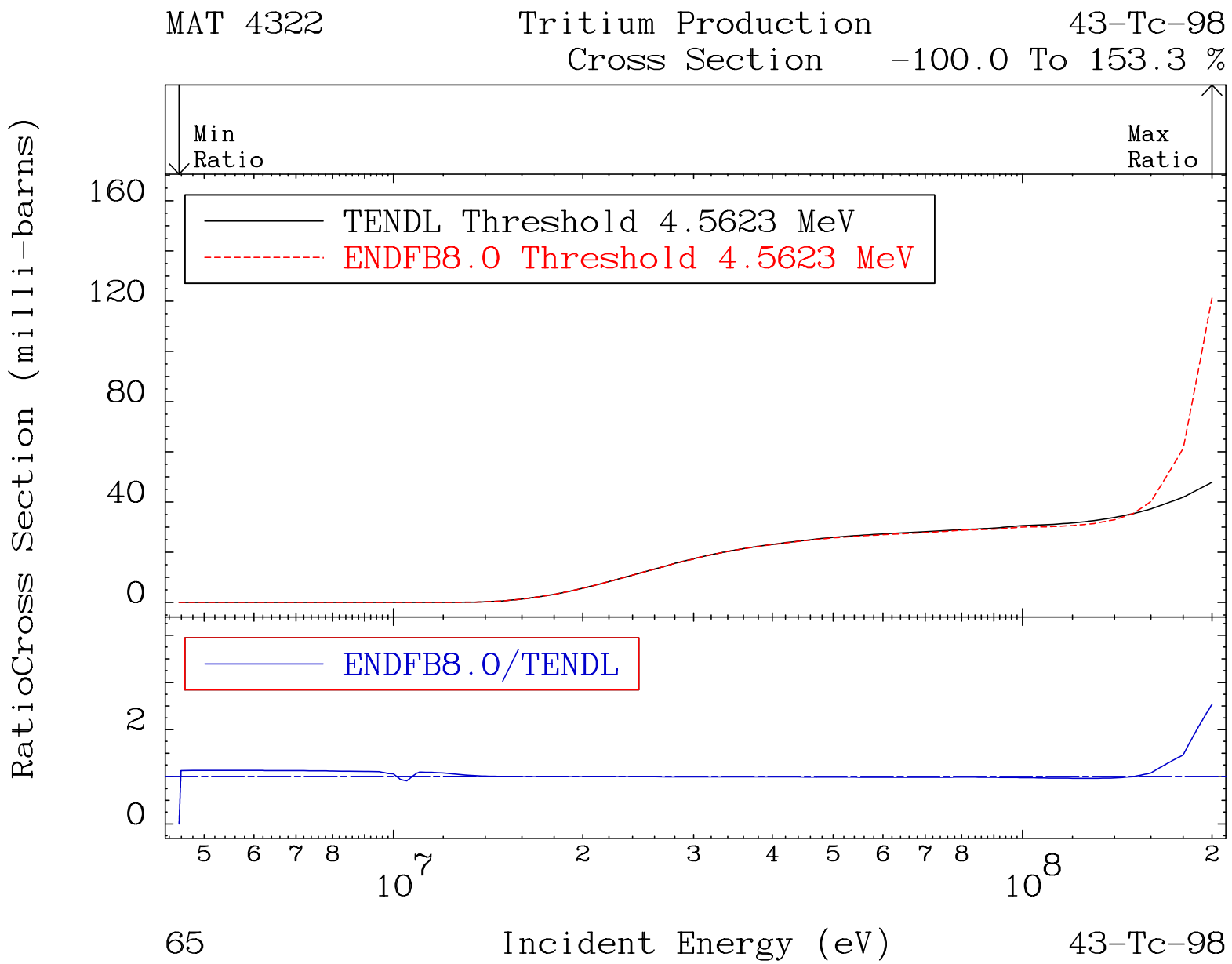

MAT 4322
(n,p) d
Cross Section
43-Tc-98
-32.16 To 128.8 %
Max Ratio
Min Ratio
TENDL Threshold 13.319 MeV
ENDFB8.0 Threshold 13.313 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
10
8
6
4
2
0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
43-Tc-98

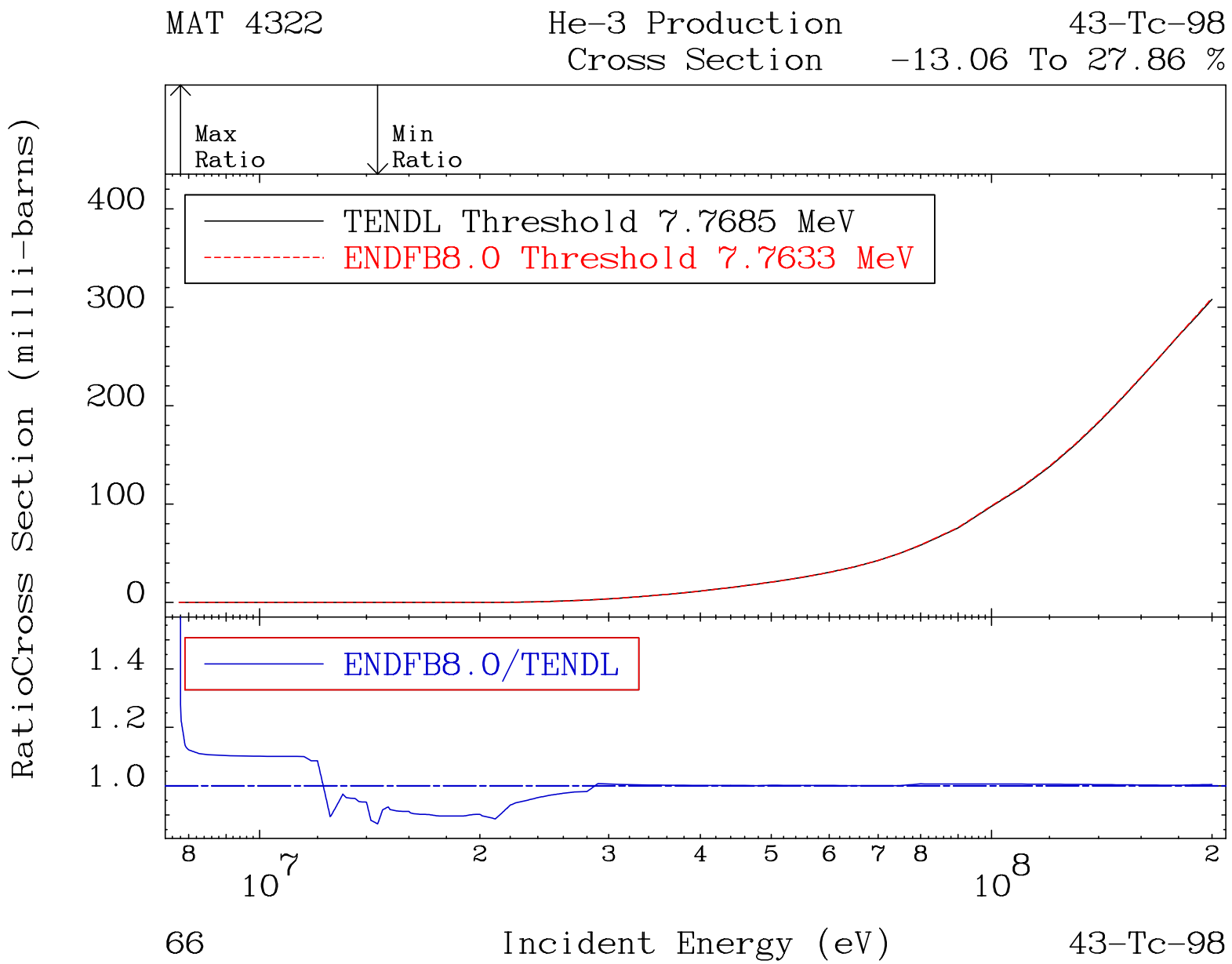

MAT 4322
(n,p) t
Cross Section
43-Tc-98
-100.0 To 92.56 %
Min Ratio
Max Ratio
TENDL Threshold 13.956 MeV
ENDFB8.0 Threshold 13.956 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
0
1
2
3
4
0.0
1.0
2.0
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
43-Tc-98

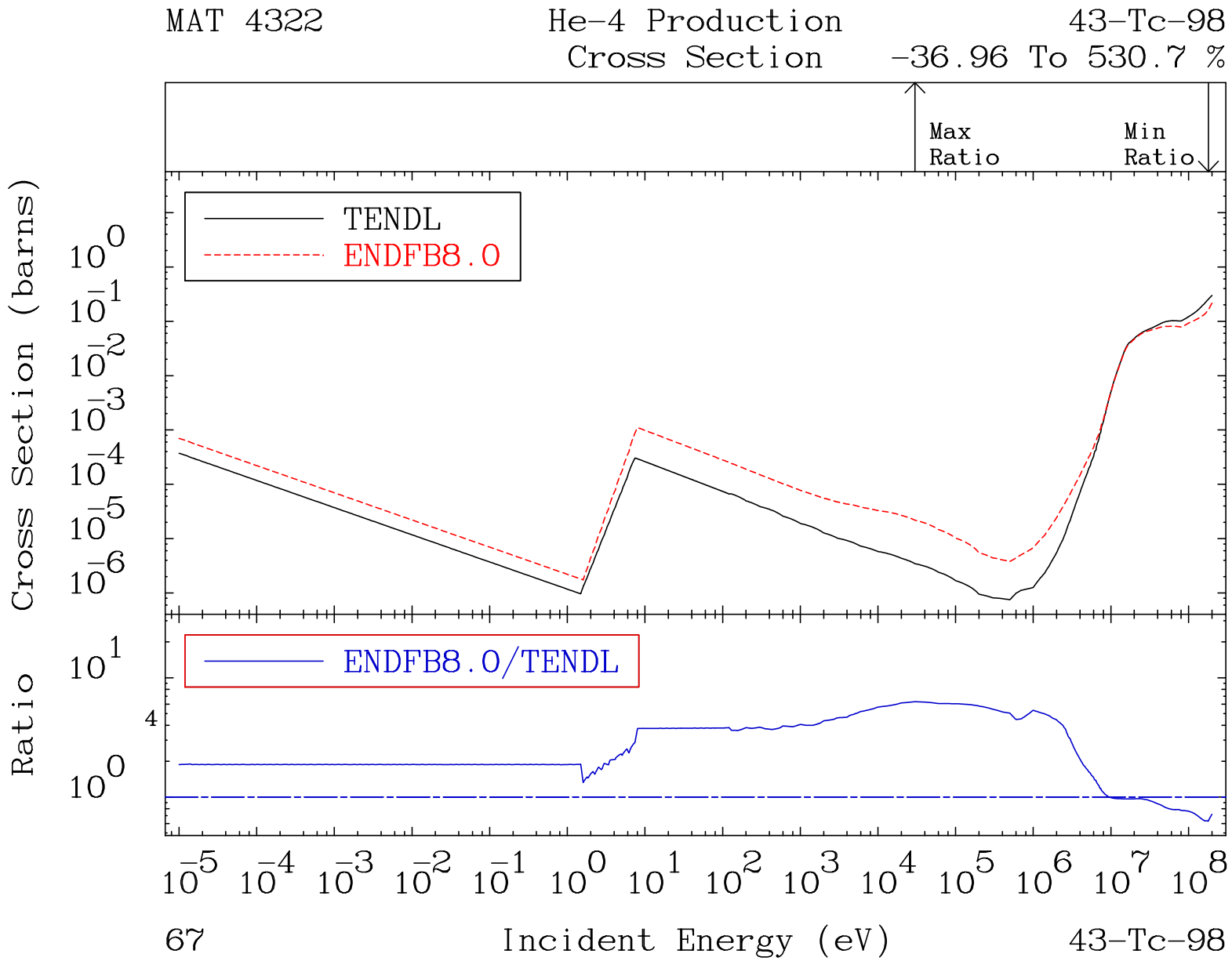

MAT 4322
(n,d) α
43-Tc-98
Cross Section
-3.917 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8696 MeV
ENDFB8.0 Threshold 6.8678 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^2
10^1
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
62
Incident Energy (eV)
43-Tc-98

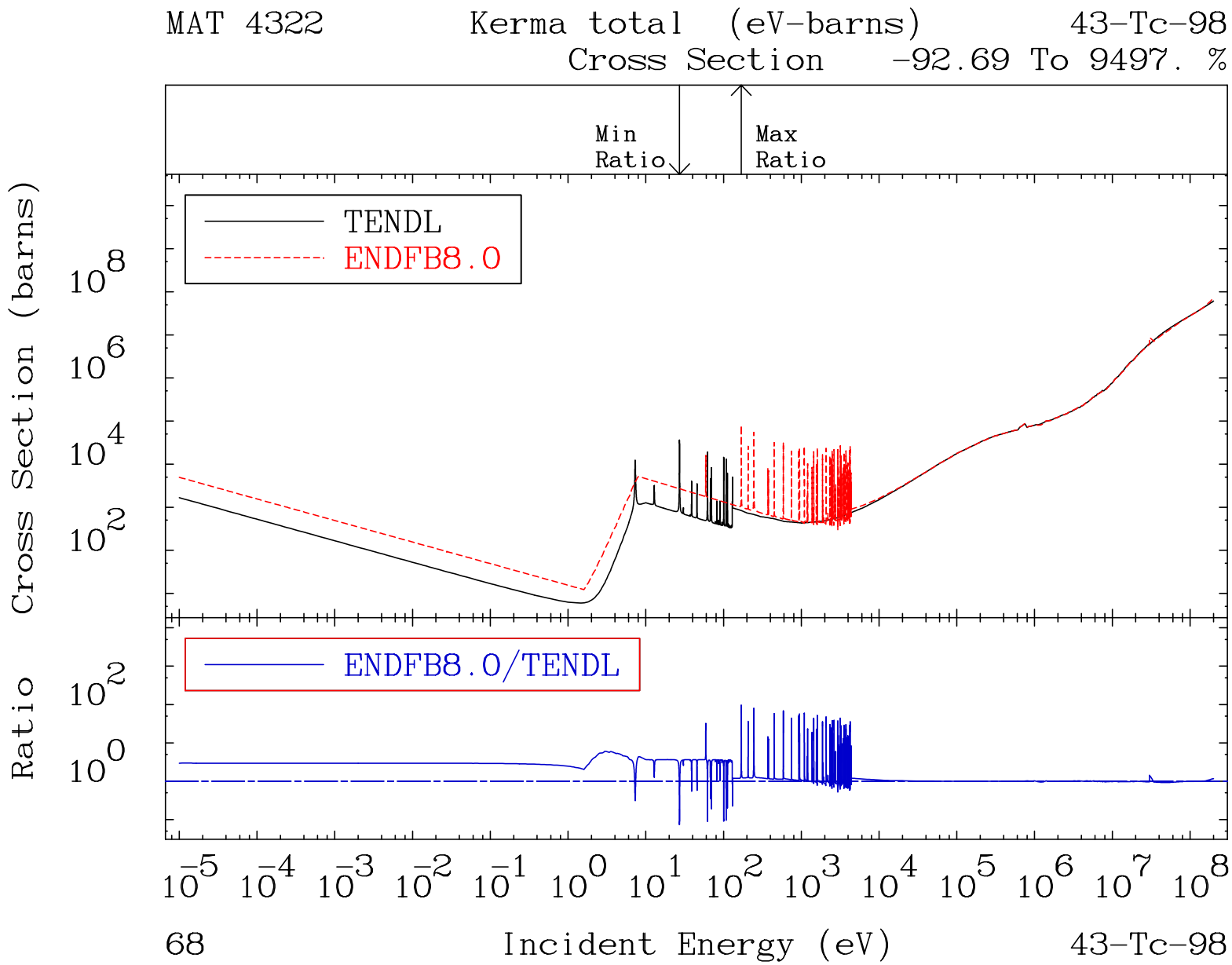

MAT 4322
Hydrogen Production
43-Tc-98
Cross Section
-65.79 To 99.98 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
63
43-Tc-98

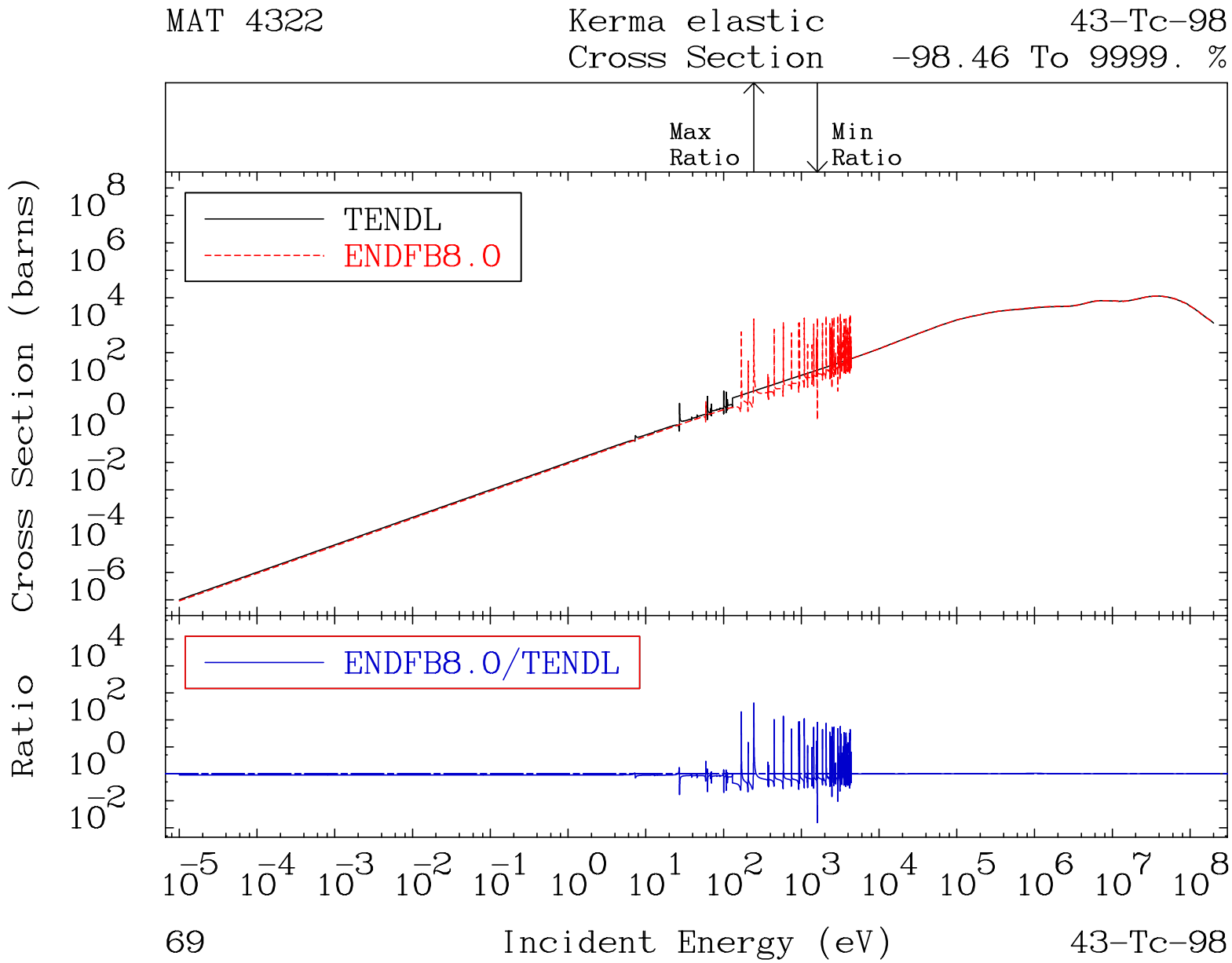

MAT 4322
Deuterium Production
43-Tc-98
Cross Section -100.0 To 121.6 %
Min Ratio
Max Ratio
TENDL Threshold 3.9926 MeV
ENDFB8.0 Threshold 3.9926 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
3.0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
64
Incident Energy (eV)
43-Tc-98

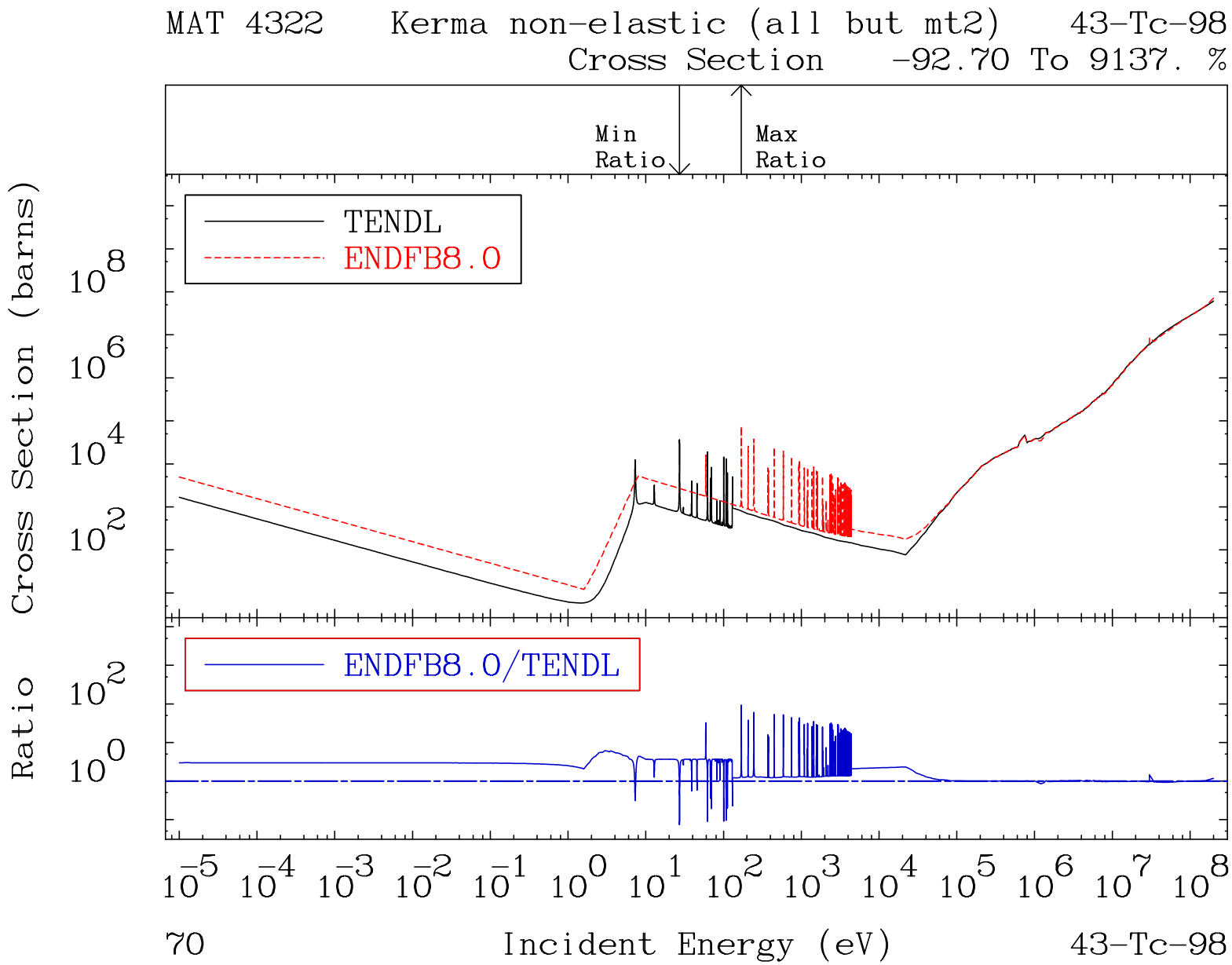

MAT 4322
Tritium Production
Cross Section
43-Tc-98
-100.0 To 153.3 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.5623 MeV
ENDFB8.0 Threshold 4.5623 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
43-Tc-98

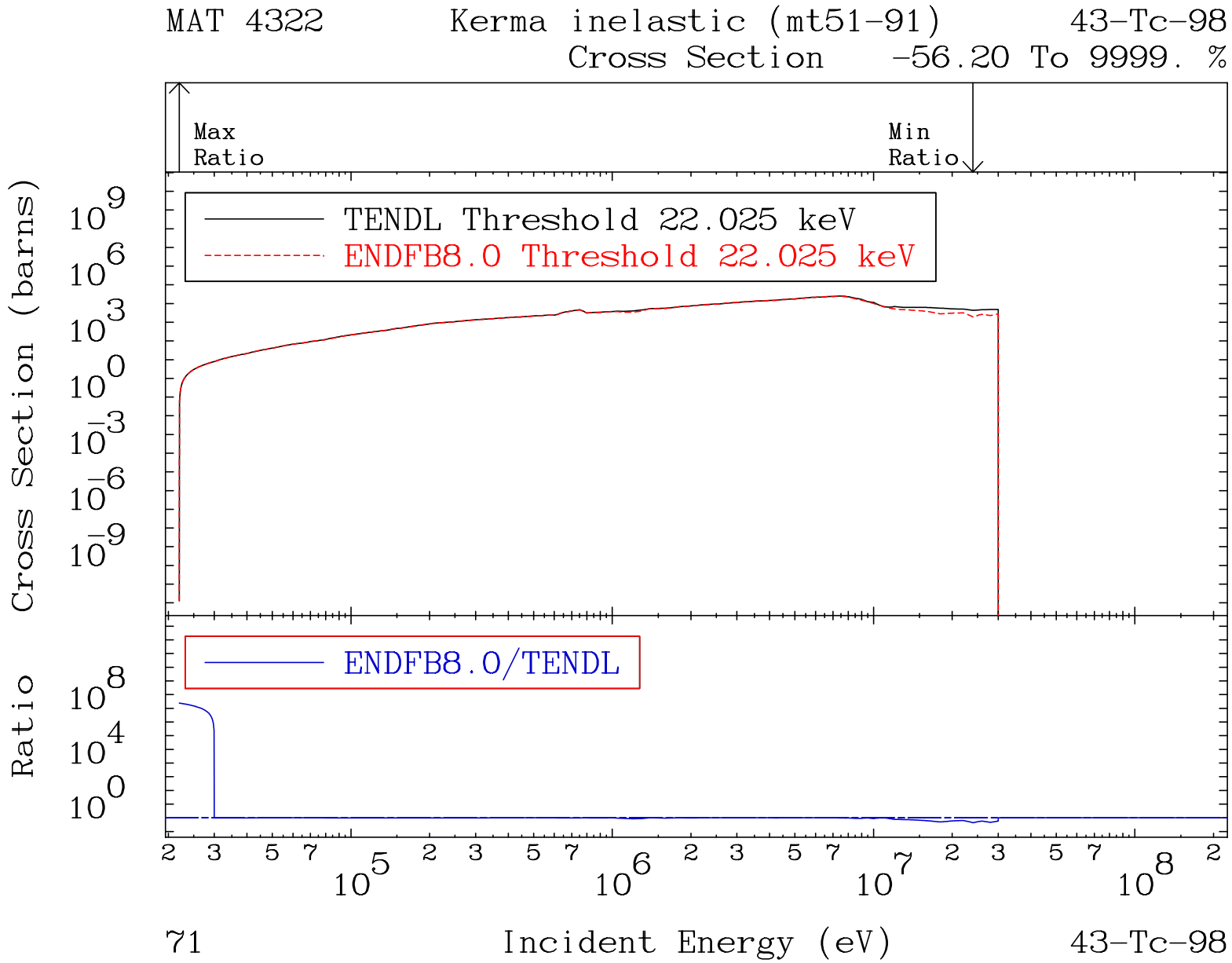

MAT 4322
He-3 Production
Cross Section
43-Tc-98
-13.06 To 27.86 %
Max Ratio
Min Ratio
TENDL Threshold 7.7685 MeV
ENDFB8.0 Threshold 7.7633 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.4
1.2
1.0
8
10^7
2
3
4
5
6
7
8
10^8
2
66
Incident Energy (eV)
43-Tc-98

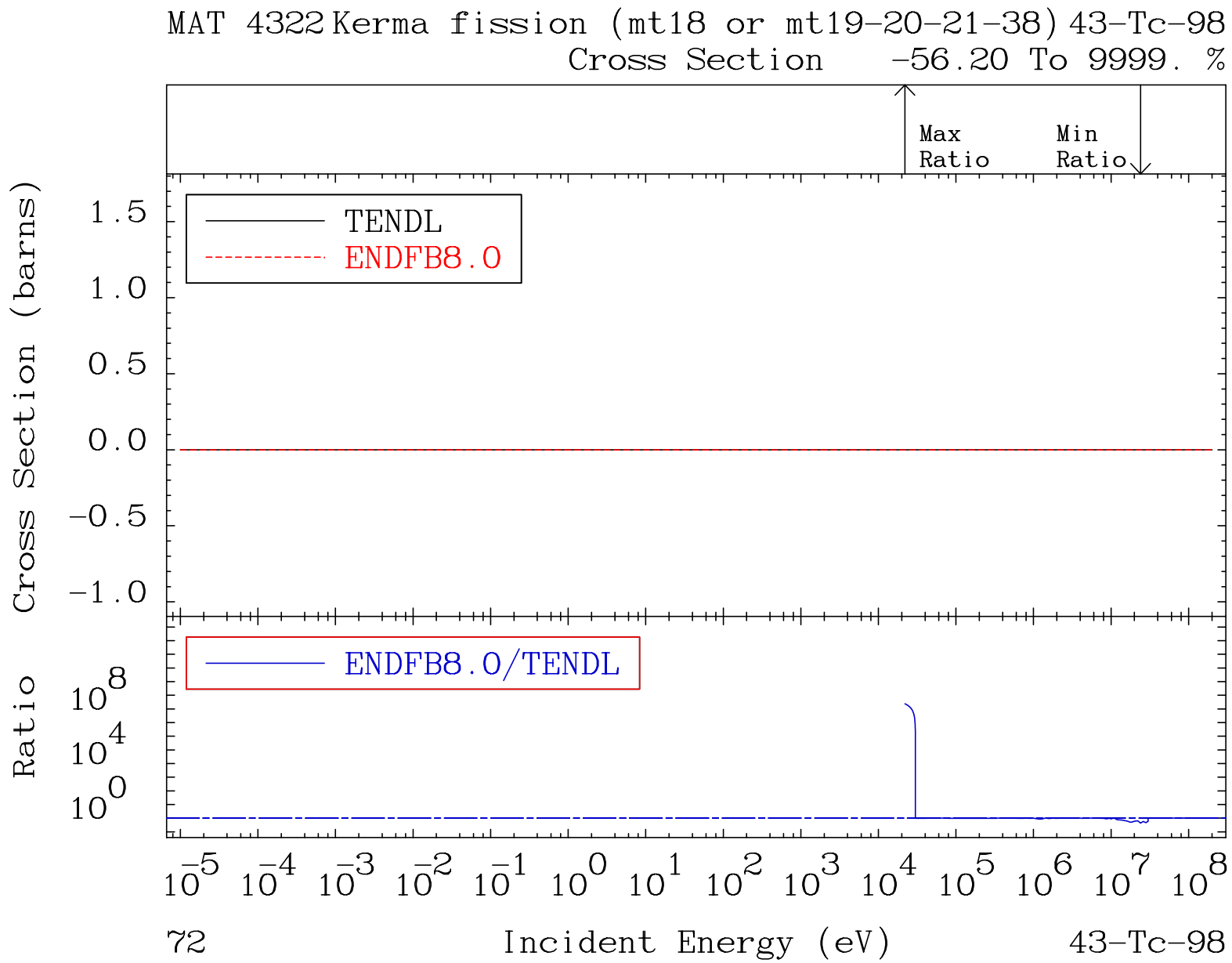

MAT 4322
He-4 Production
Cross Section
43-Tc-98
-36.96 To 530.7 %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
67
43-Tc-98

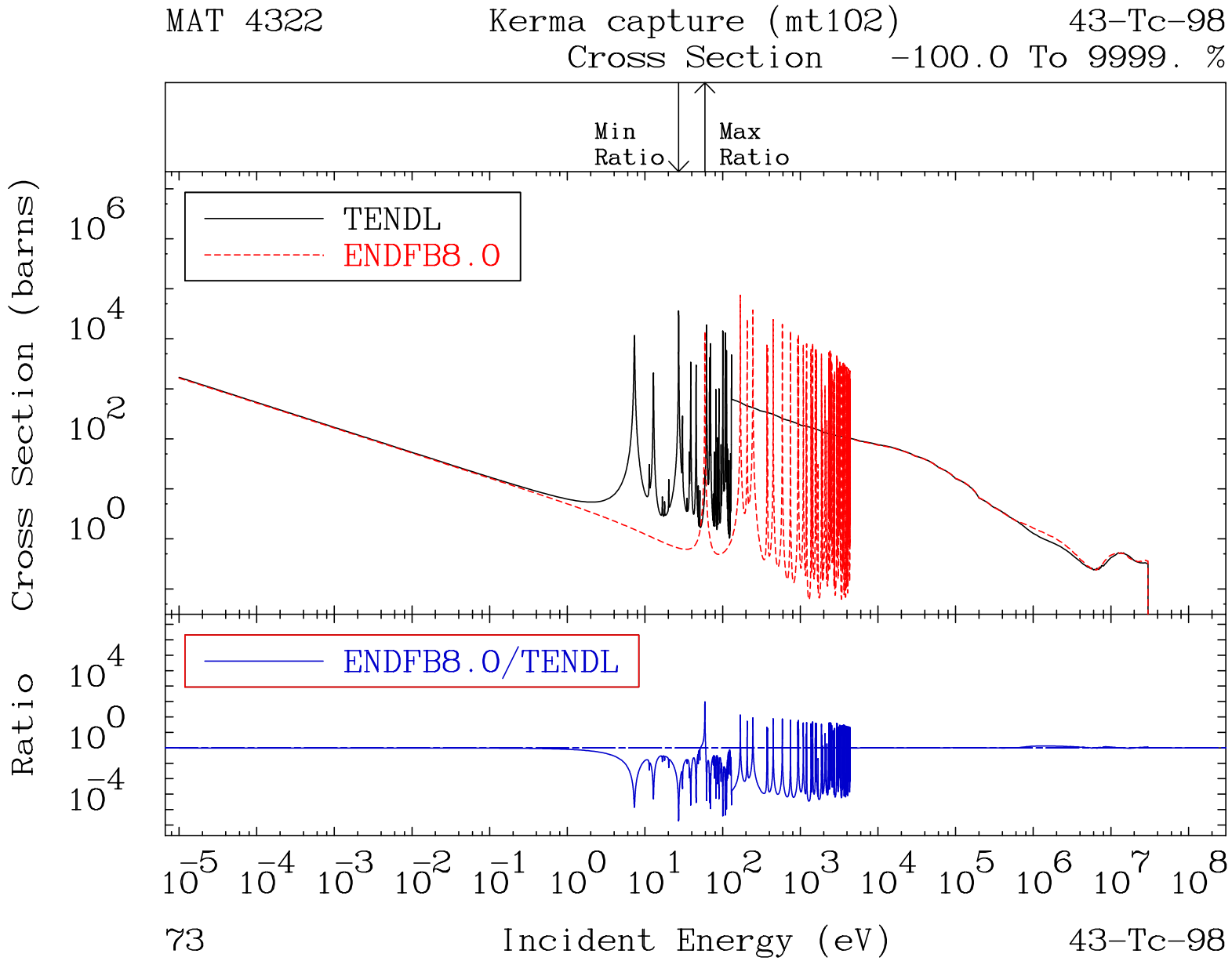

MAT 4322
Kerma total (eV-barns)
43-Tc-98
Cross Section -92.69 To 9497. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
68
43-Tc-98

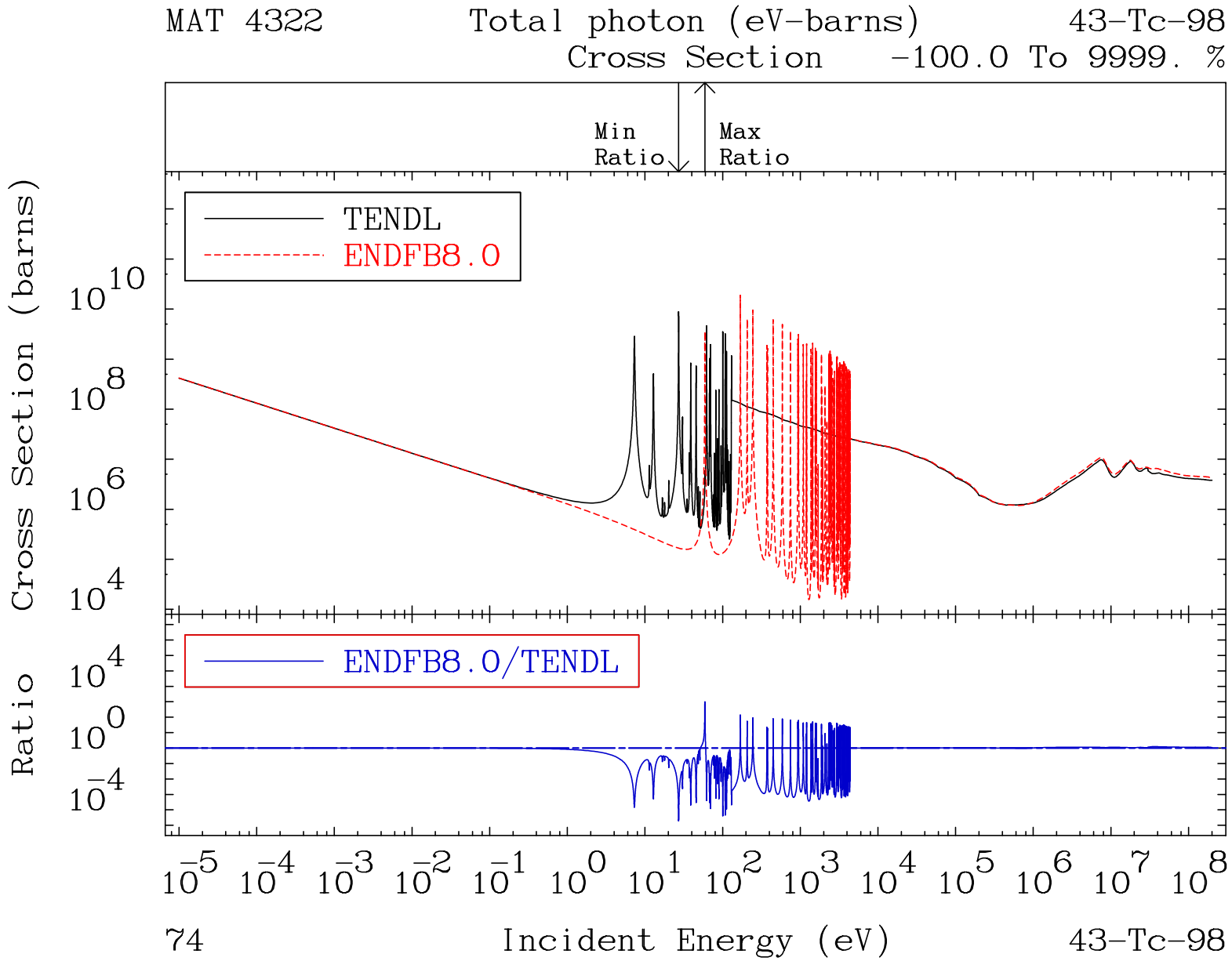

MAT 4322
Kerma elastic
Cross Section
43-Tc-98
-98.46 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
43-Tc-98

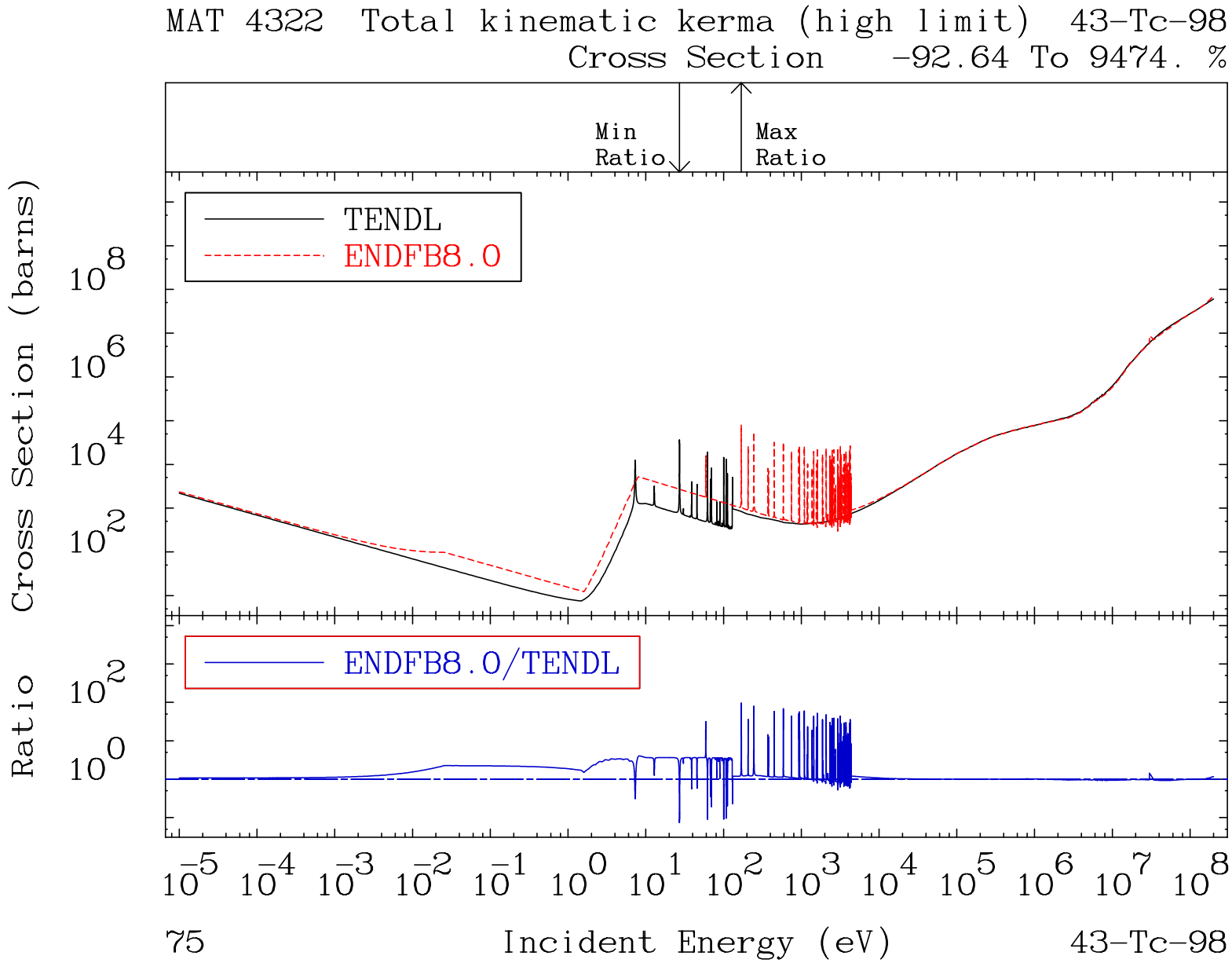

MAT 4322 Kerma non-elastic (all but mt2) 43-Tc-98
Cross Section -92.70 To 9137. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
70
43-Tc-98

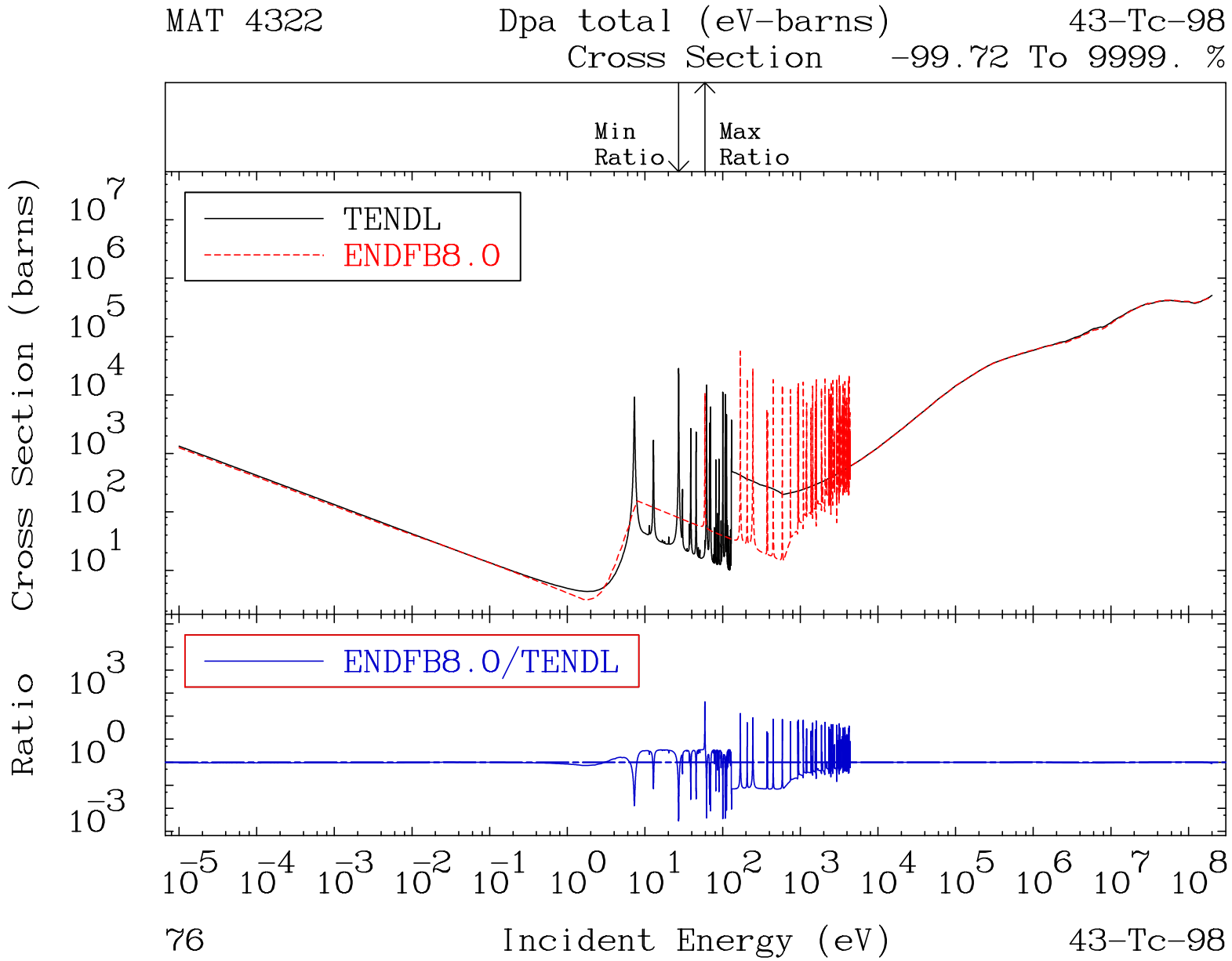

MAT 4322
Kerma inelastic (mt51-91)
43-Tc-98
Cross Section -56.20 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 22.025 keV
ENDFB8.0 Threshold 22.025 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
43-Tc-98

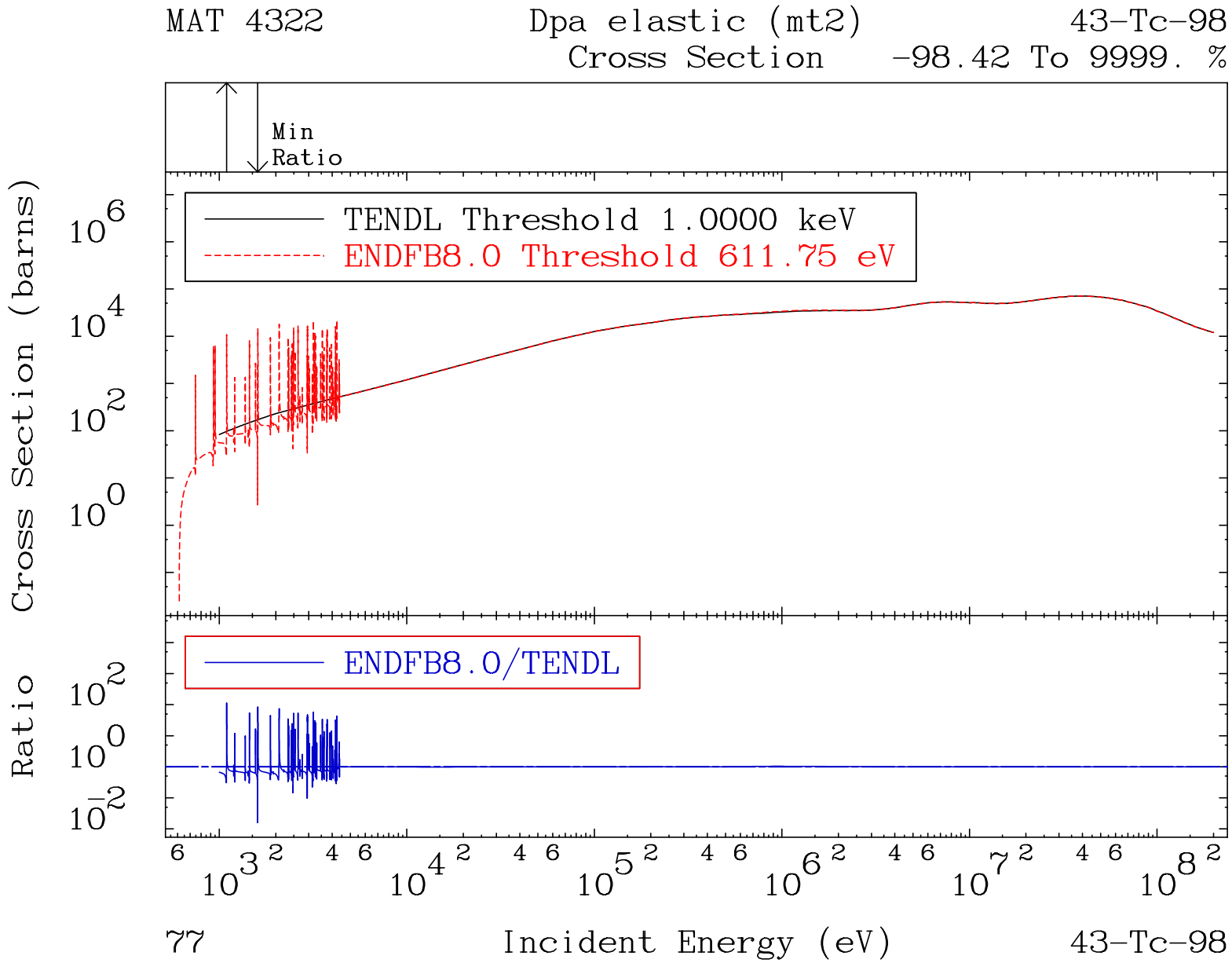

MAT 4322 Kerma fission (mt18 or mt19-20-21-38) 43-Tc-98
Cross Section -56.20 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{8}
10^{4}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
72
Incident Energy (eV)
43-Tc-98

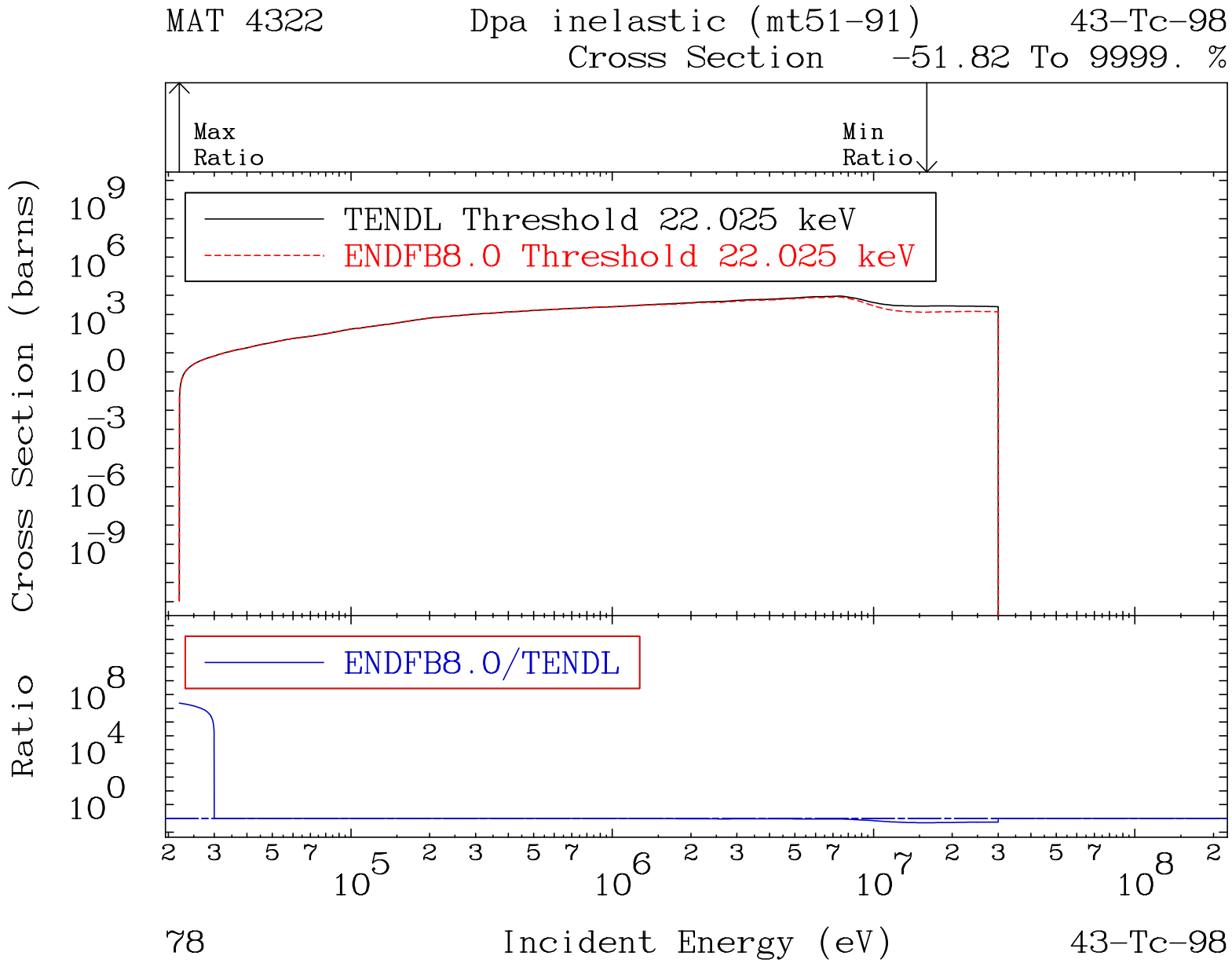

MAT 4322
Kerma capture (mt102)
43-Tc-98
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
73
43-Tc-98

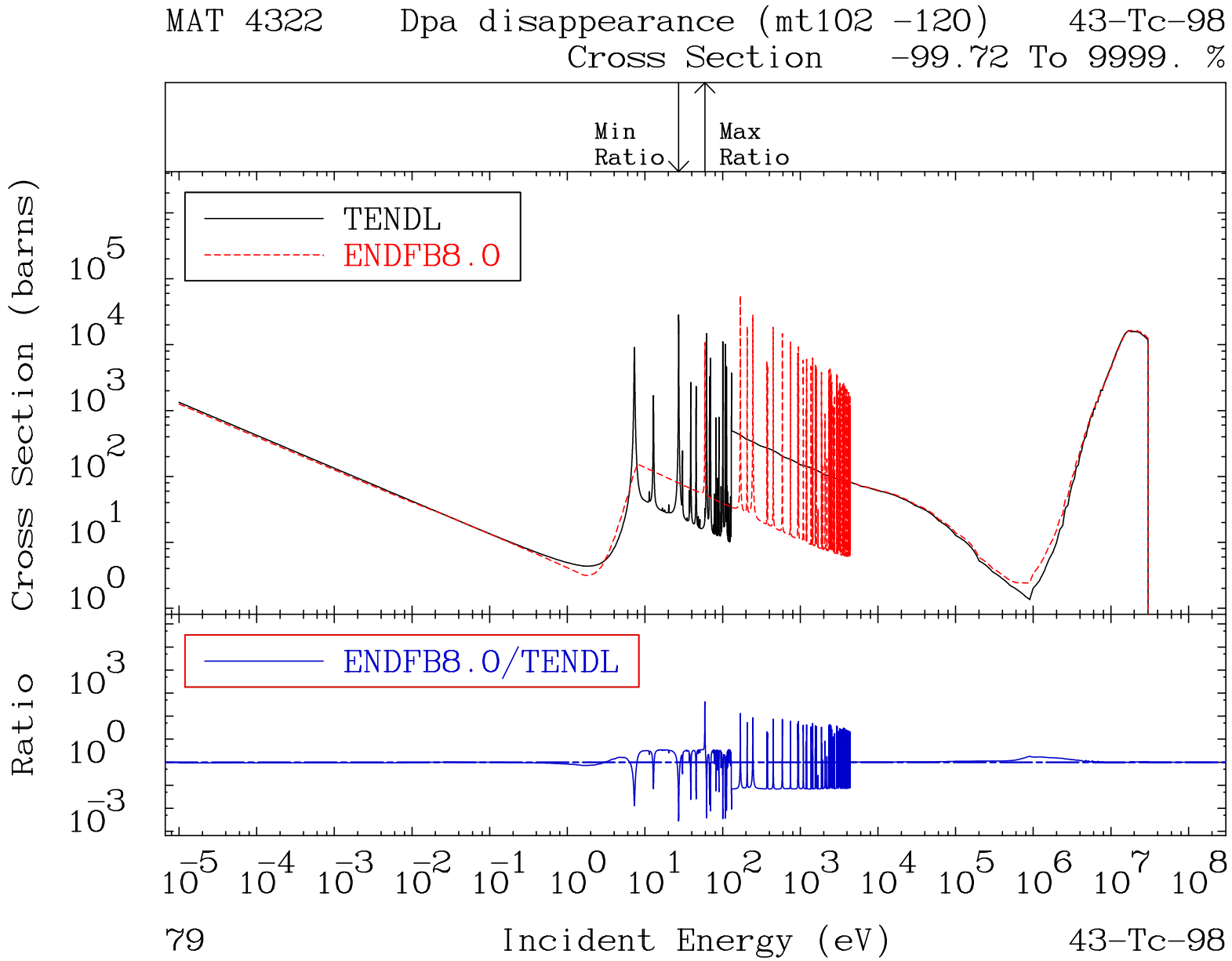

MAT 4322
Total photon (eV-barns)
43-Tc-98
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
43-Tc-98

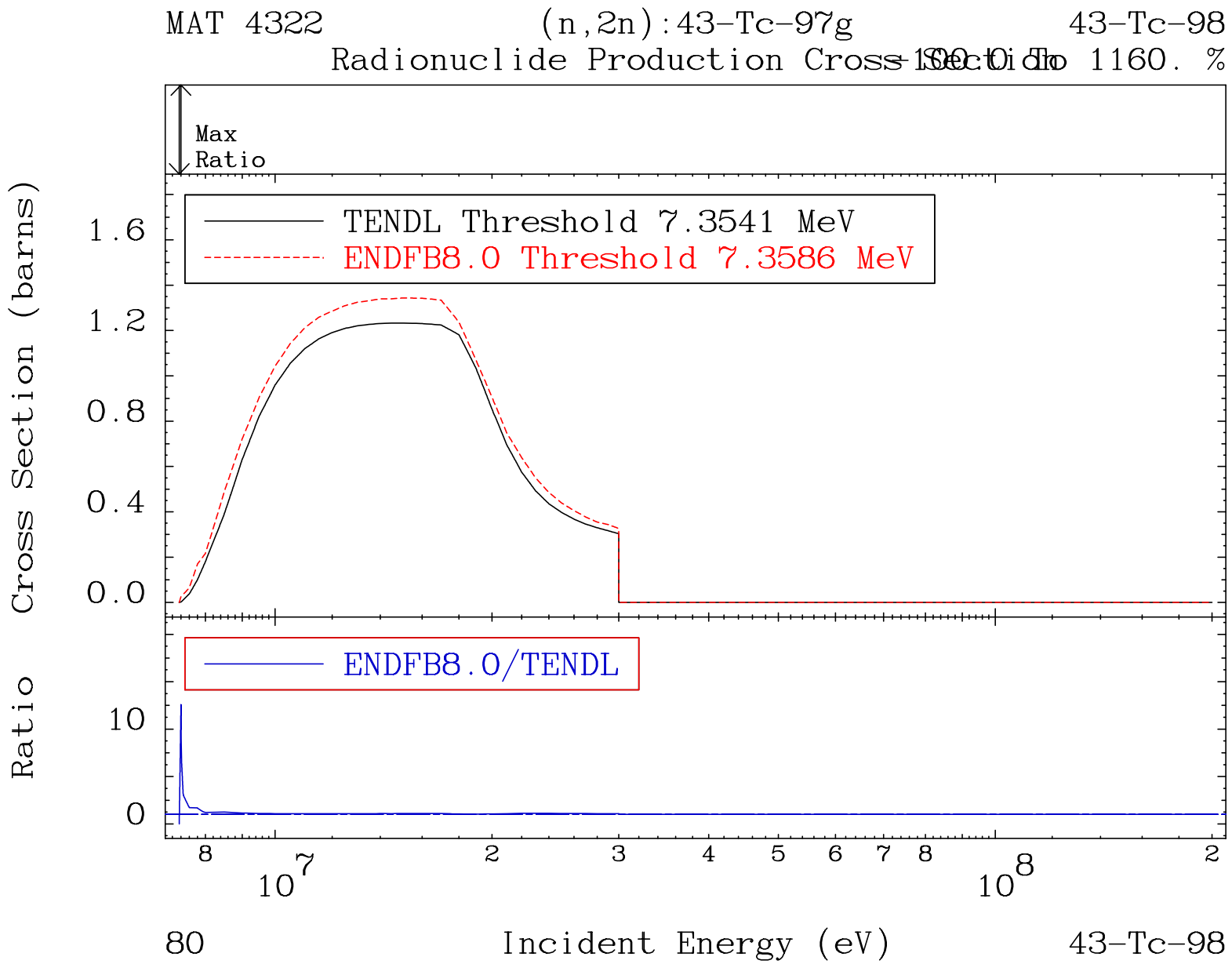

MAT 4322 Total kinematic kerma (high limit) 43-Tc-98
Cross Section -92.64 To 9474. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
75
43-Tc-98

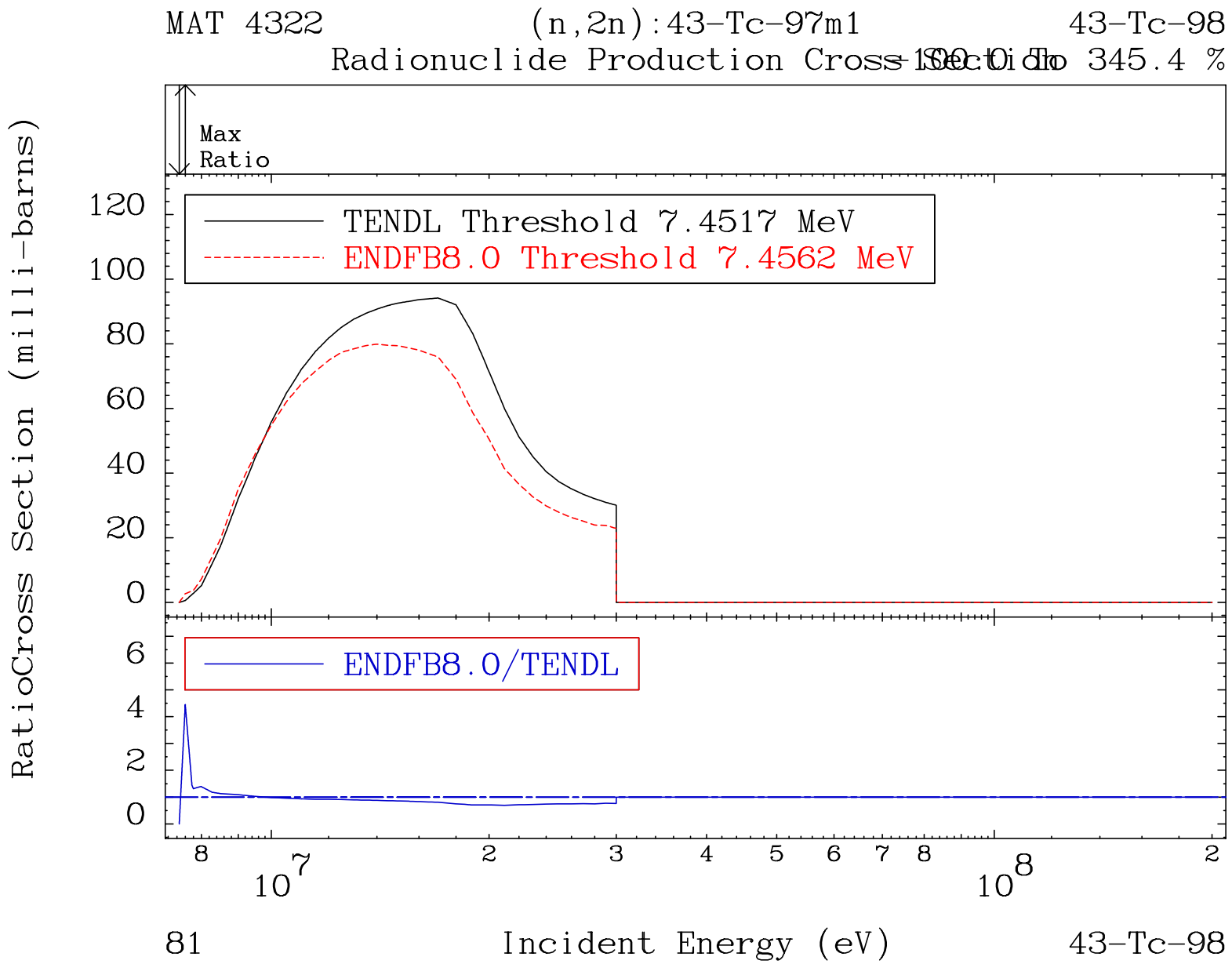

MAT 4322
Dpa total (eV-barns)
43-Tc-98
Cross Section -99.72 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
43-Tc-98

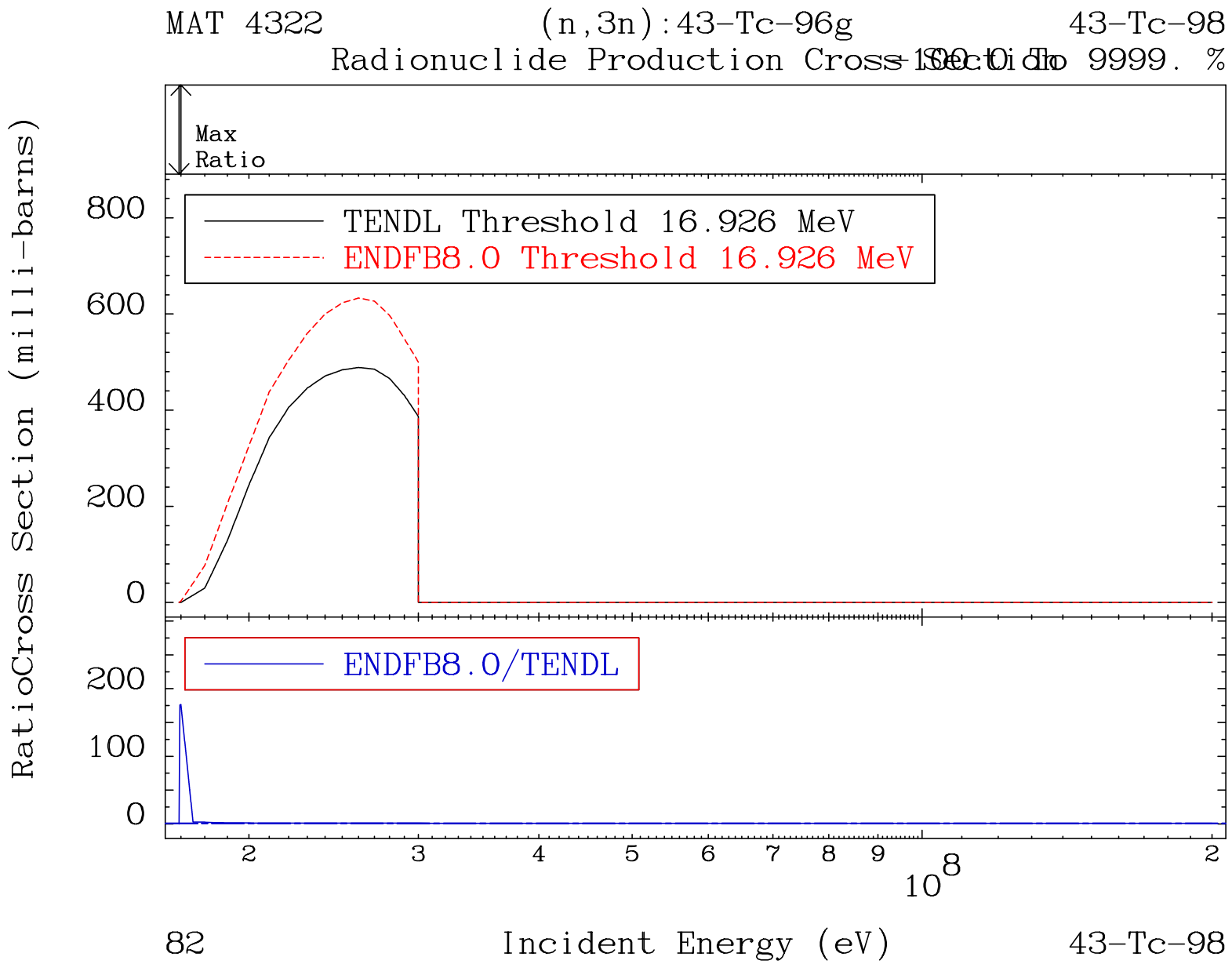

MAT 4322
Dpa elastic (mt2)
Cross Section
43-Tc-98
-98.42 To 9999. %
Min
Ratio
TENDL Threshold 1.0000 keV
ENDFB8.0 Threshold 611.75 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
43-Tc-98

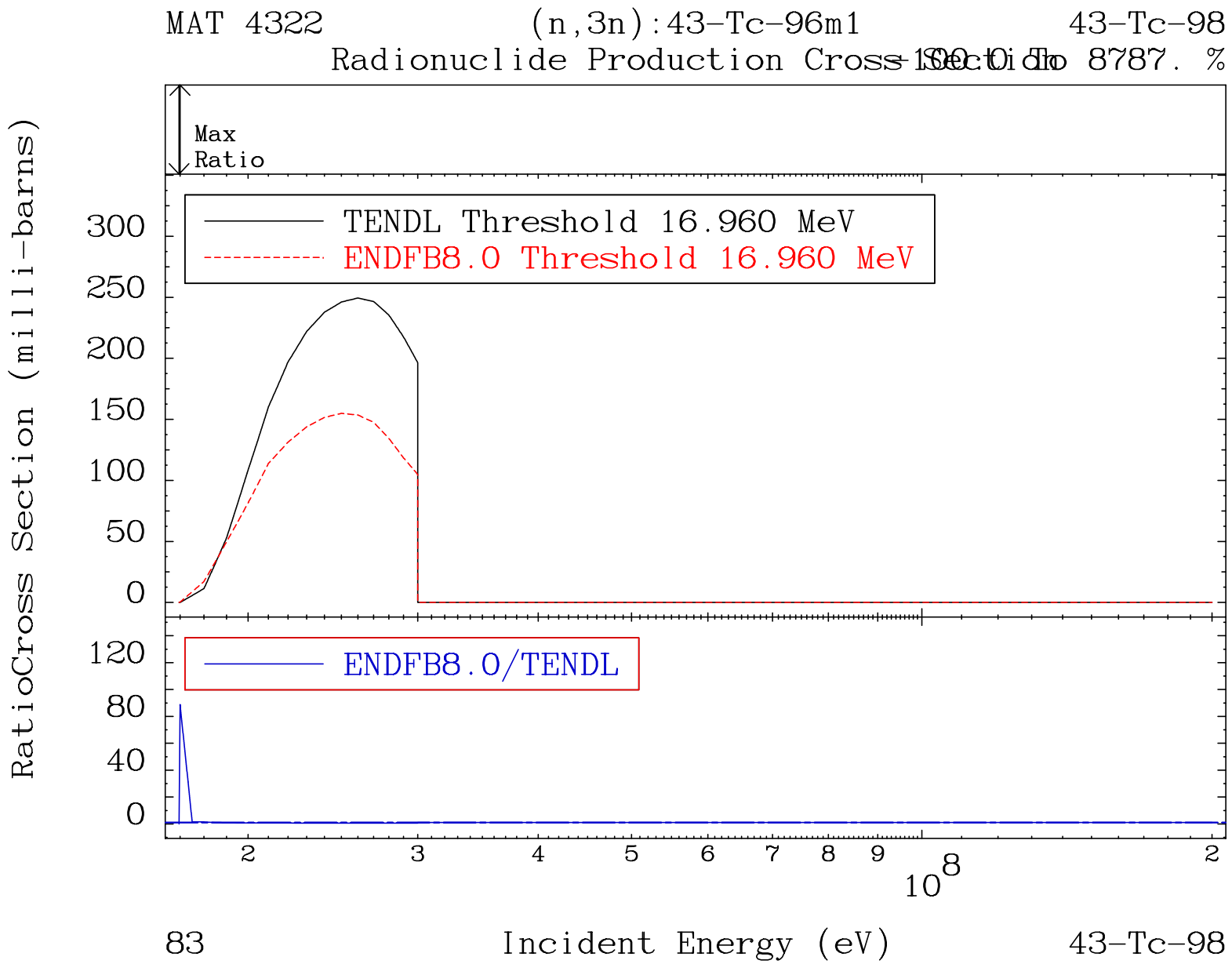

MAT 4322
Dpa inelastic (mt51-91)
43-Tc-98
Cross Section -51.82 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 22.025 keV
ENDFB8.0 Threshold 22.025 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
43-Tc-98

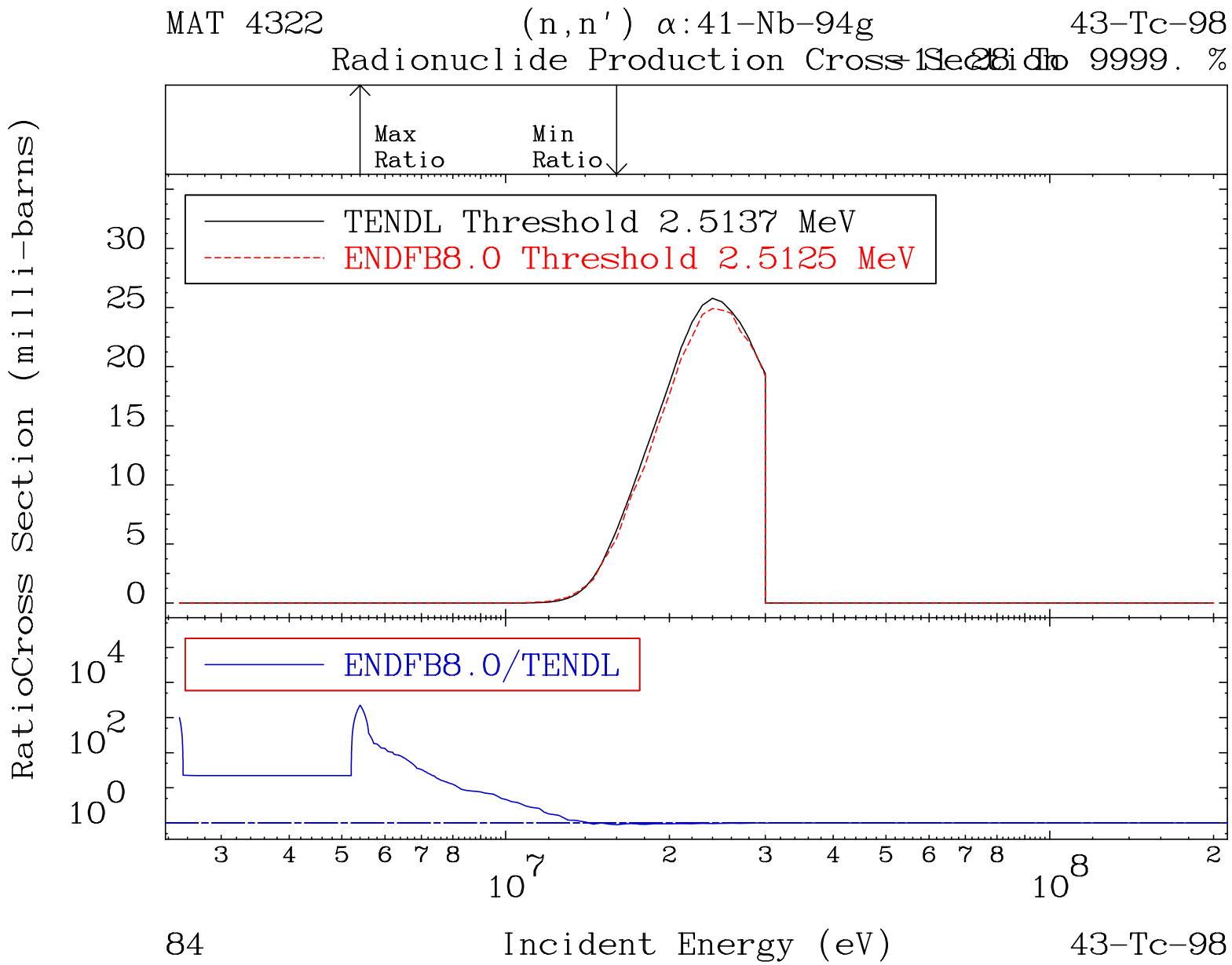

MAT 4322 Dpa disappearance (mt102 -120) 43-Tc-98
Cross Section -99.72 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
79
43-Tc-98

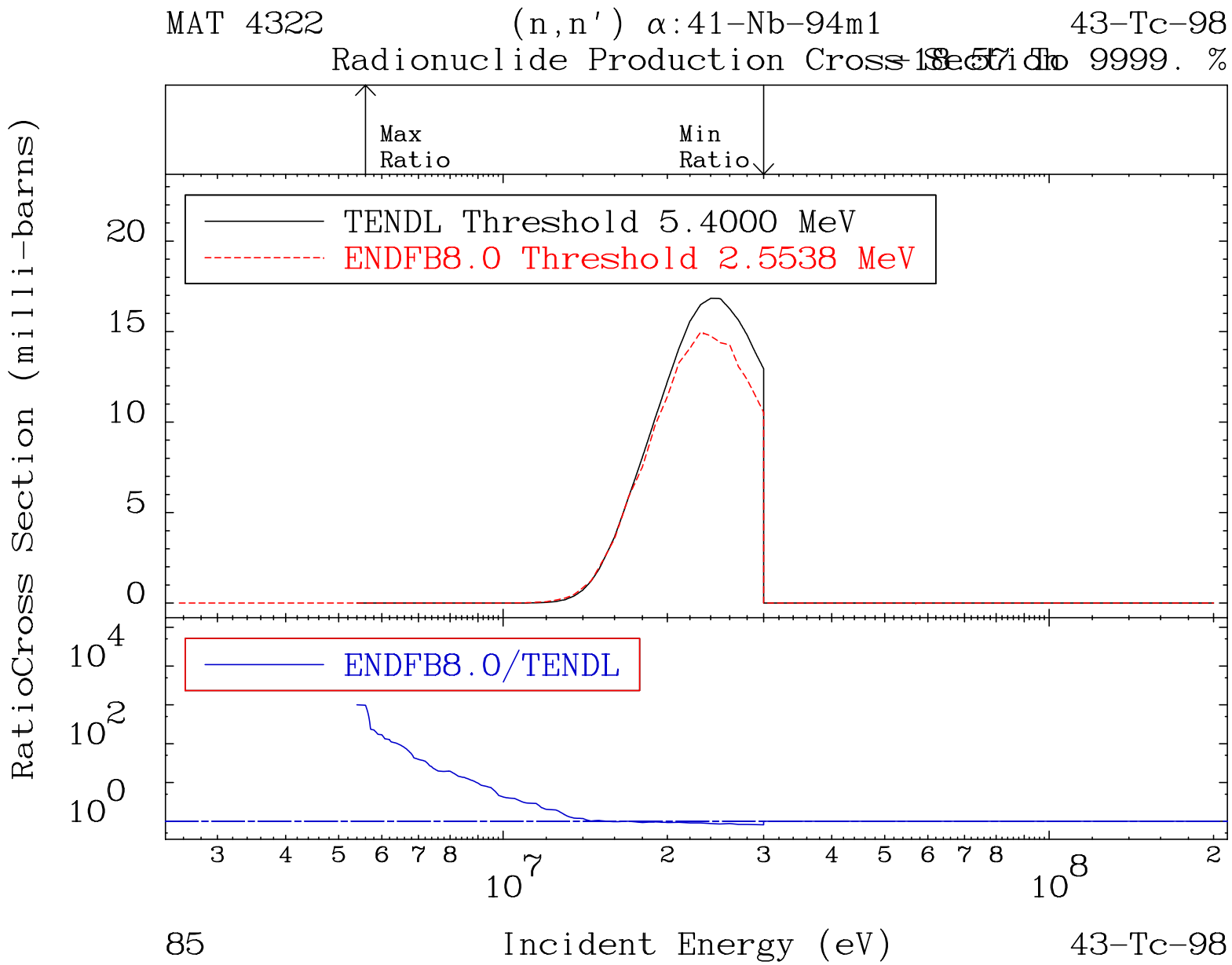

MAT 4322
(n,2n):43-Tc-97g
43-Tc-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 7.3541 MeV
ENDFB8.0 Threshold 7.3586 MeV
1.6
1.2
0.8
0.4
0.0
Cross Section (barns)
ENDFB8.0/TENDL
10
0
Ratio
8
10^7
2
3
4
5
6
7
8
10^8
2
80
Incident Energy (eV)
43-Tc-98

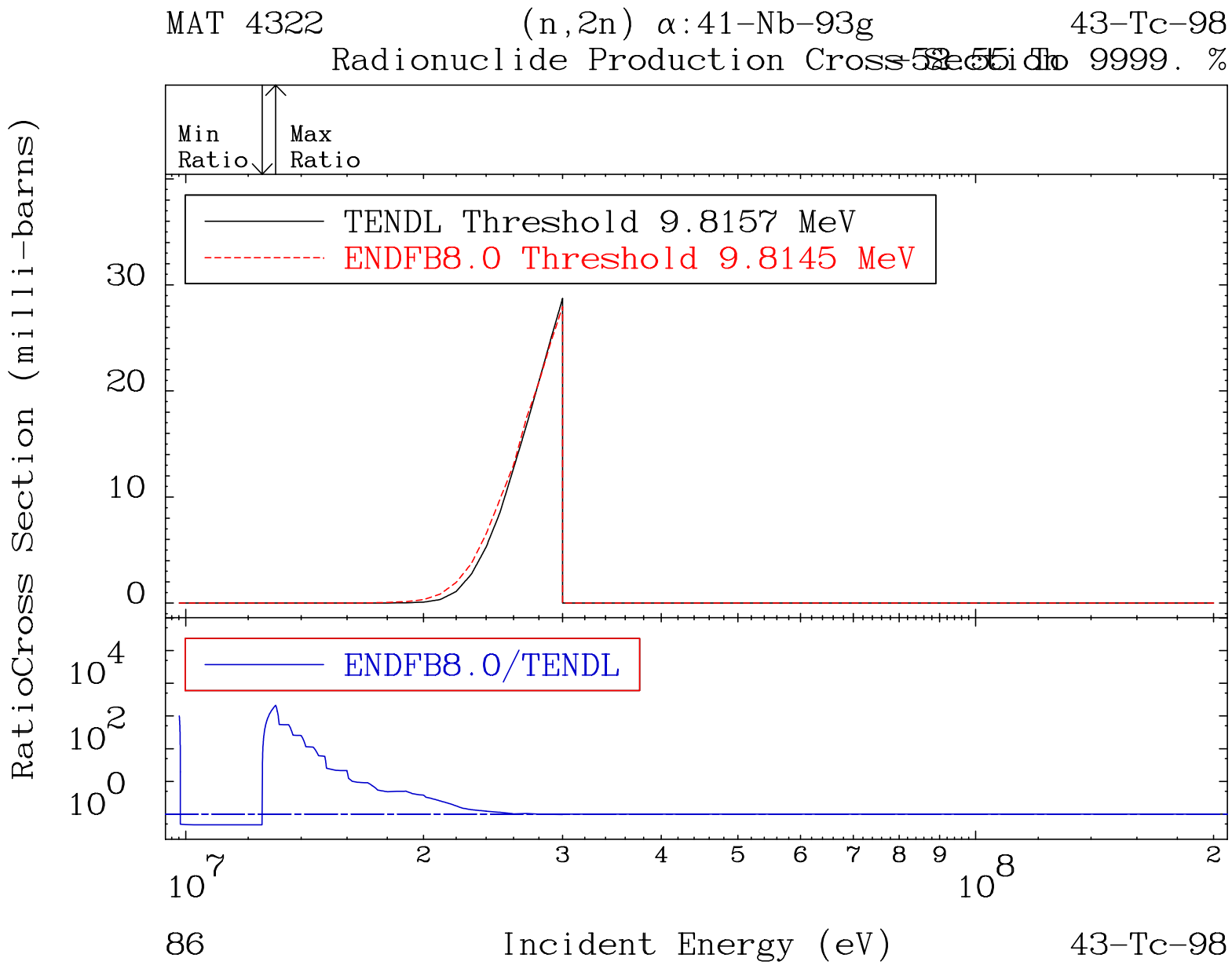

MAT 4322
(n,2n):43-Tc-97m1
43-Tc-98
Radionuclide Production Cross Section To 345.4 %
Max
Ratio
120
100
80
60
40
20
0
TENDL Threshold 7.4517 MeV
ENDFB8.0 Threshold 7.4562 MeV
6
4
2
0
ENDFB8.0/TENDL
8
2
3
4
5
6
7
8
2
10^7
10^8
RatioCross Section (milli-barns)
81
Incident Energy (eV)
43-Tc-98

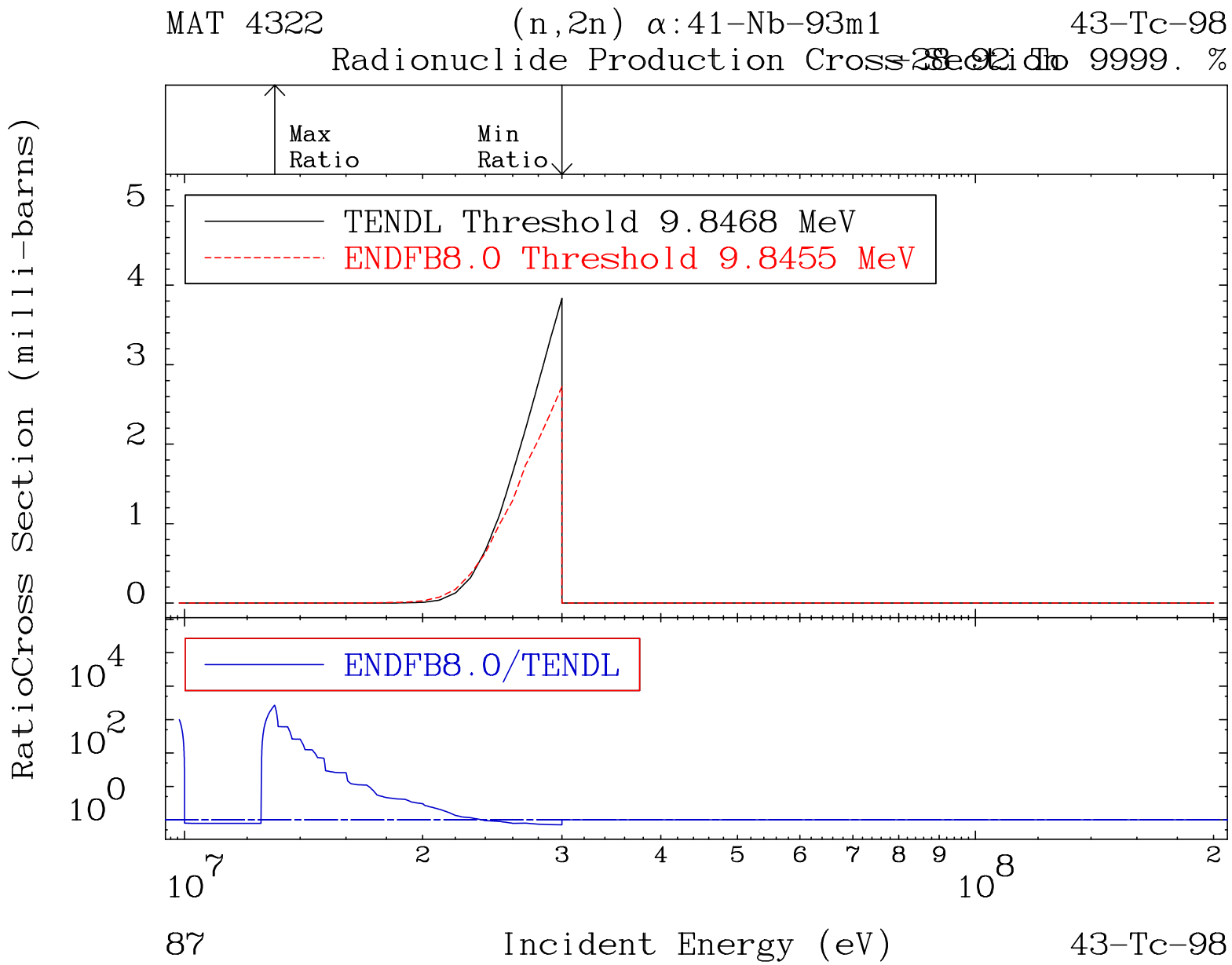

MAT 4322
(n,3n):43-Tc-96g
43-Tc-98
Radionuclide Production Cross Section
1.00 To 9999. %
Max
Ratio
800
600
400
200
0
TENDL Threshold 16.926 MeV
ENDFB8.0 Threshold 16.926 MeV
200
100
0
ENDFB8.0/TENDL
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
82
Incident Energy (eV)
43-Tc-98

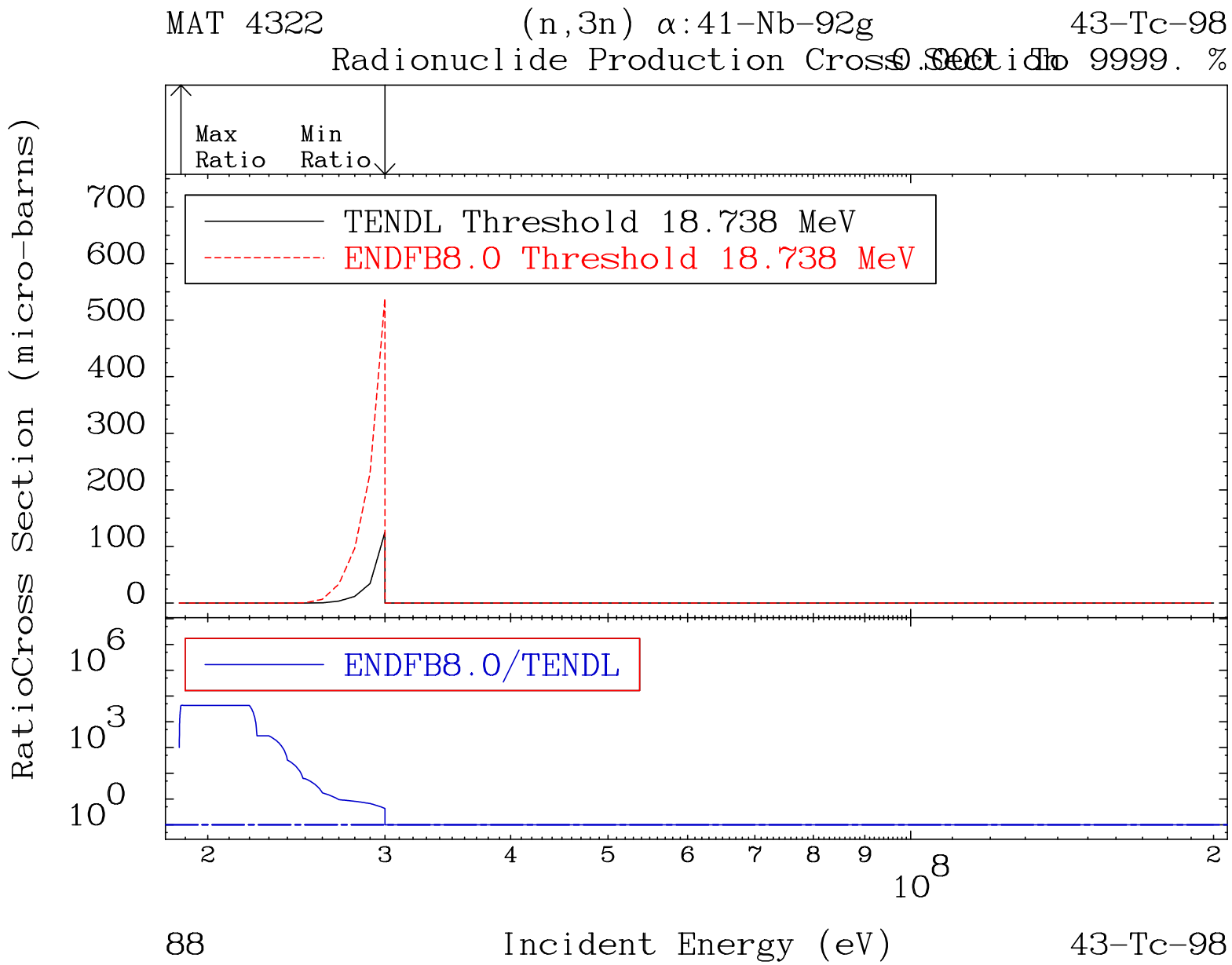

MAT 4322
(n,3n):43-Tc-96m1
43-Tc-98
Radionuclide Production Cross Section
Max Ratio
TENDL Threshold 16.960 MeV
ENDFB8.0 Threshold 16.960 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
120
80
40
0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
43-Tc-98

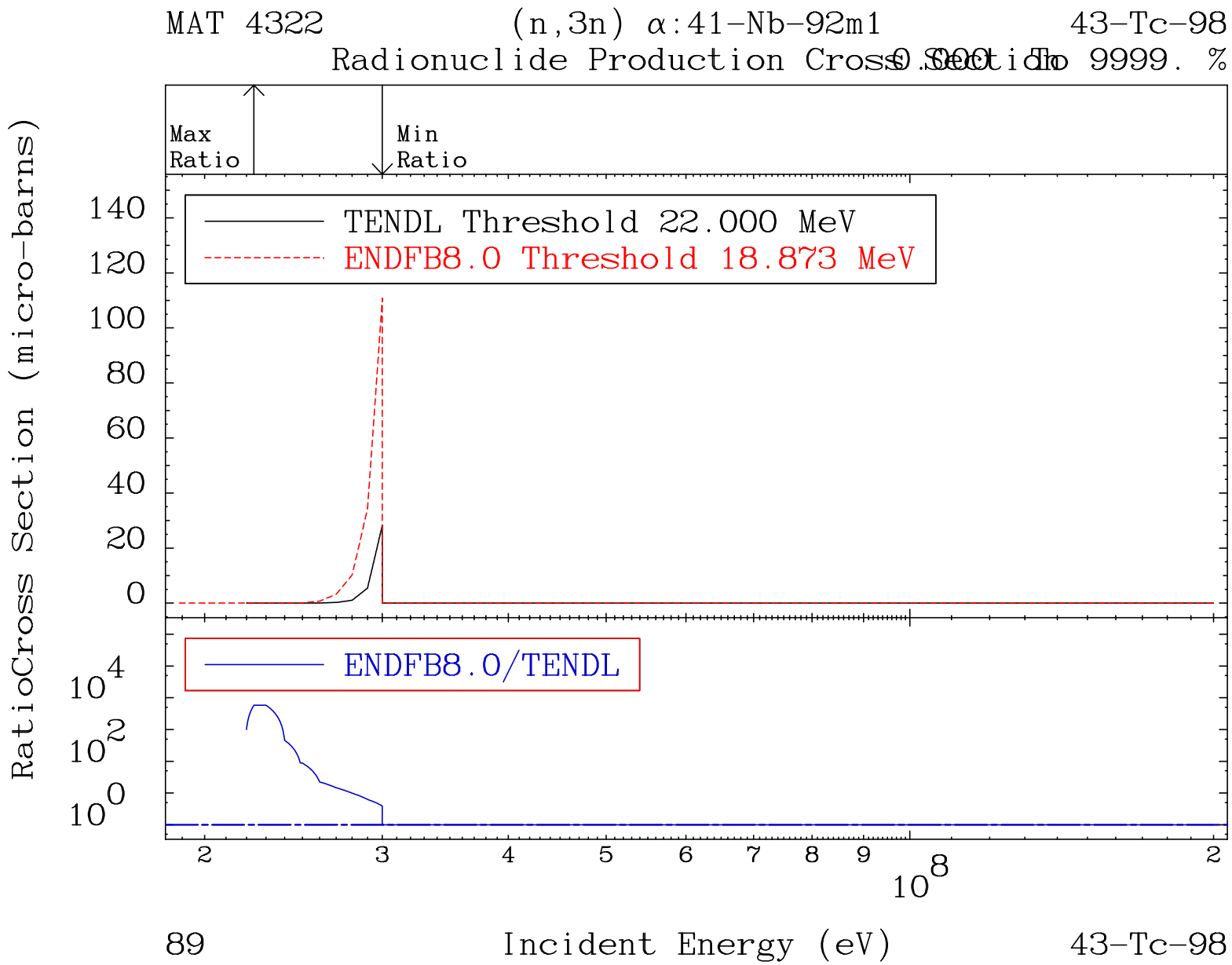

MAT 4322
(n,n') α:41-Nb-94g
43-Tc-98
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 2.5137 MeV
ENDFB8.0 Threshold 2.5125 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
84
43-Tc-98

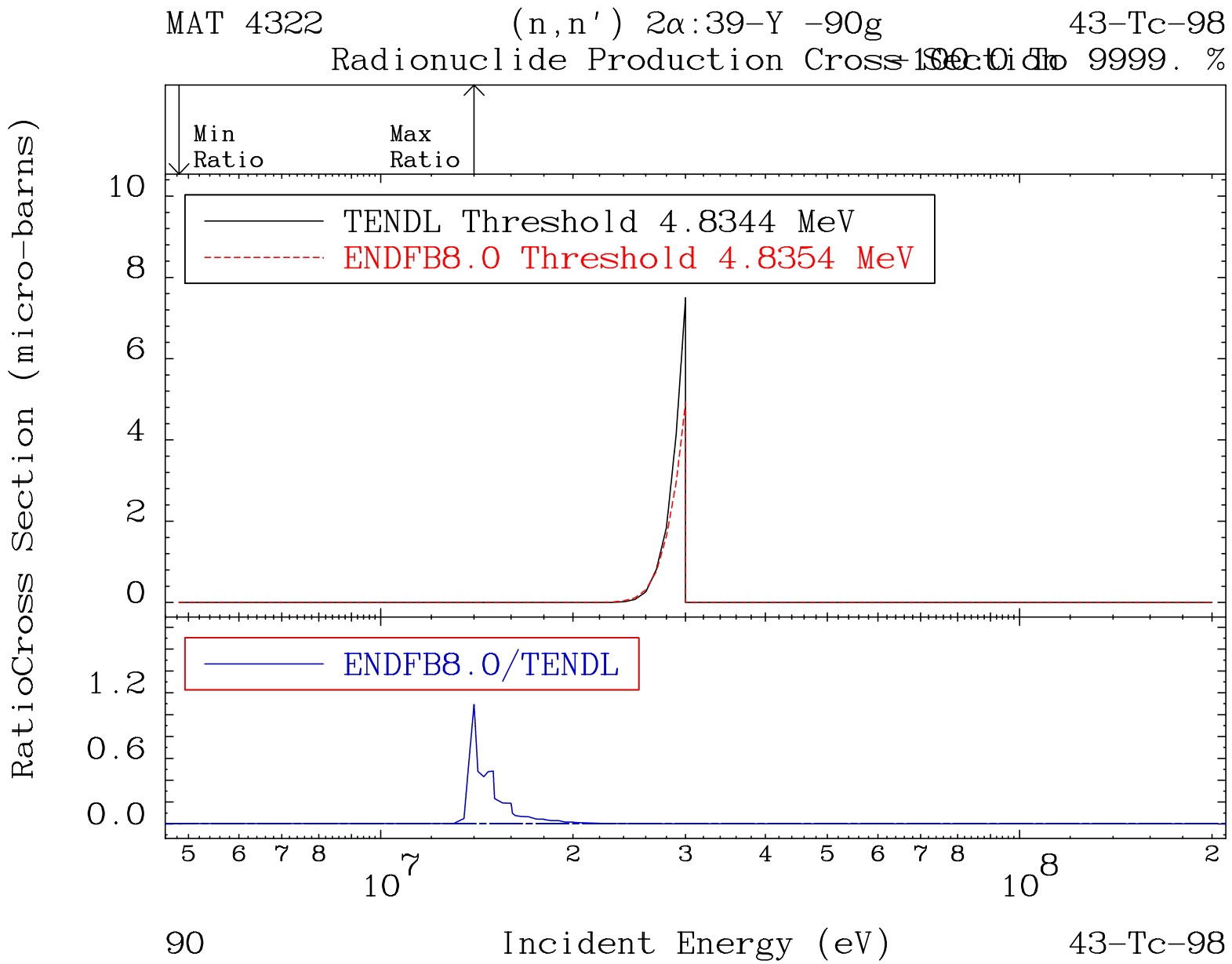

MAT 4322
(n,n') α:41-Nb-94m1
43-Tc-98
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 5.4000 MeV
ENDFB8.0 Threshold 2.5538 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
43-Tc-98

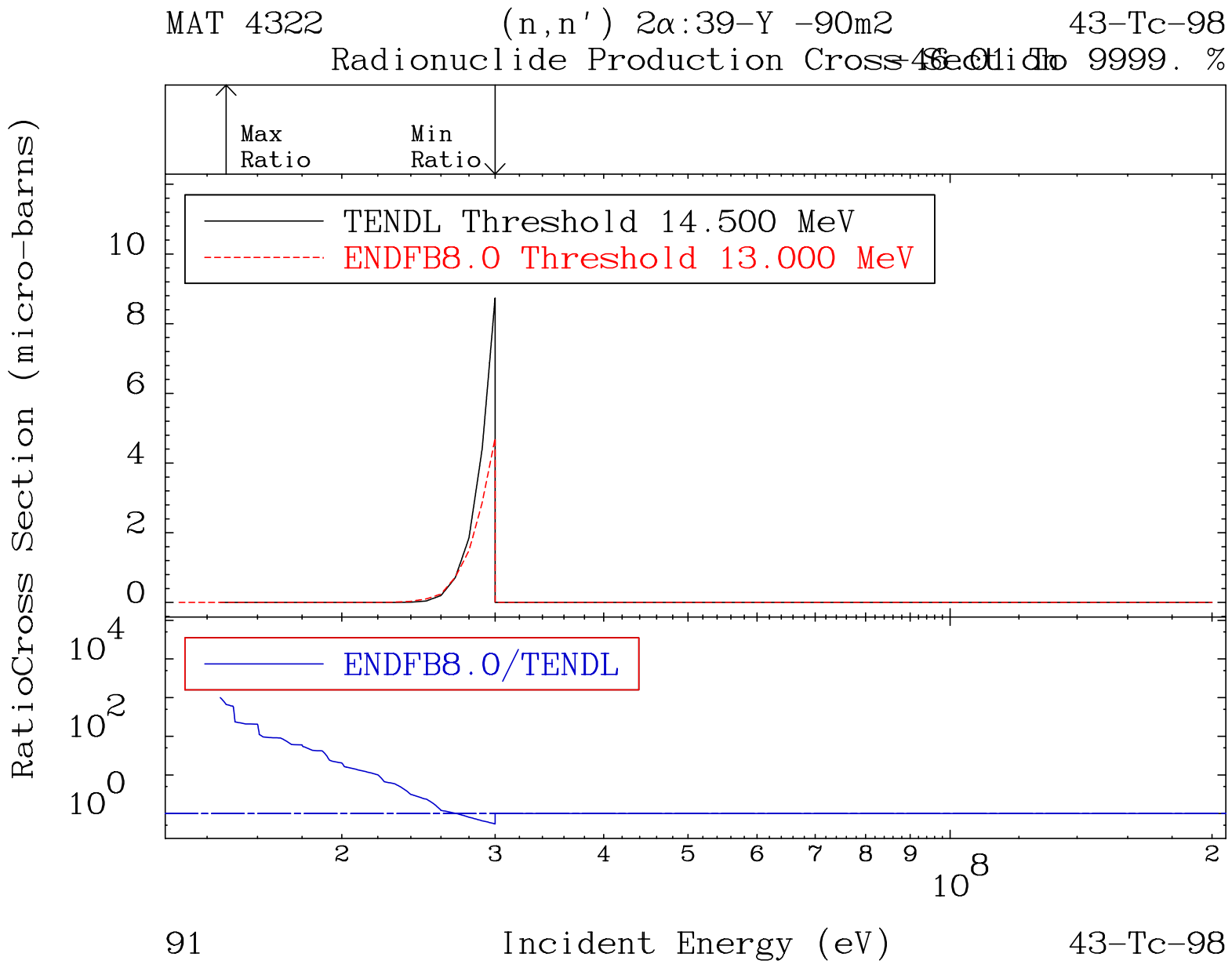

MAT 4322
(n,2n) α:41-Nb-93g
43-Tc-98
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.8157 MeV
ENDFB8.0 Threshold 9.8145 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
10^4
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
43-Tc-98

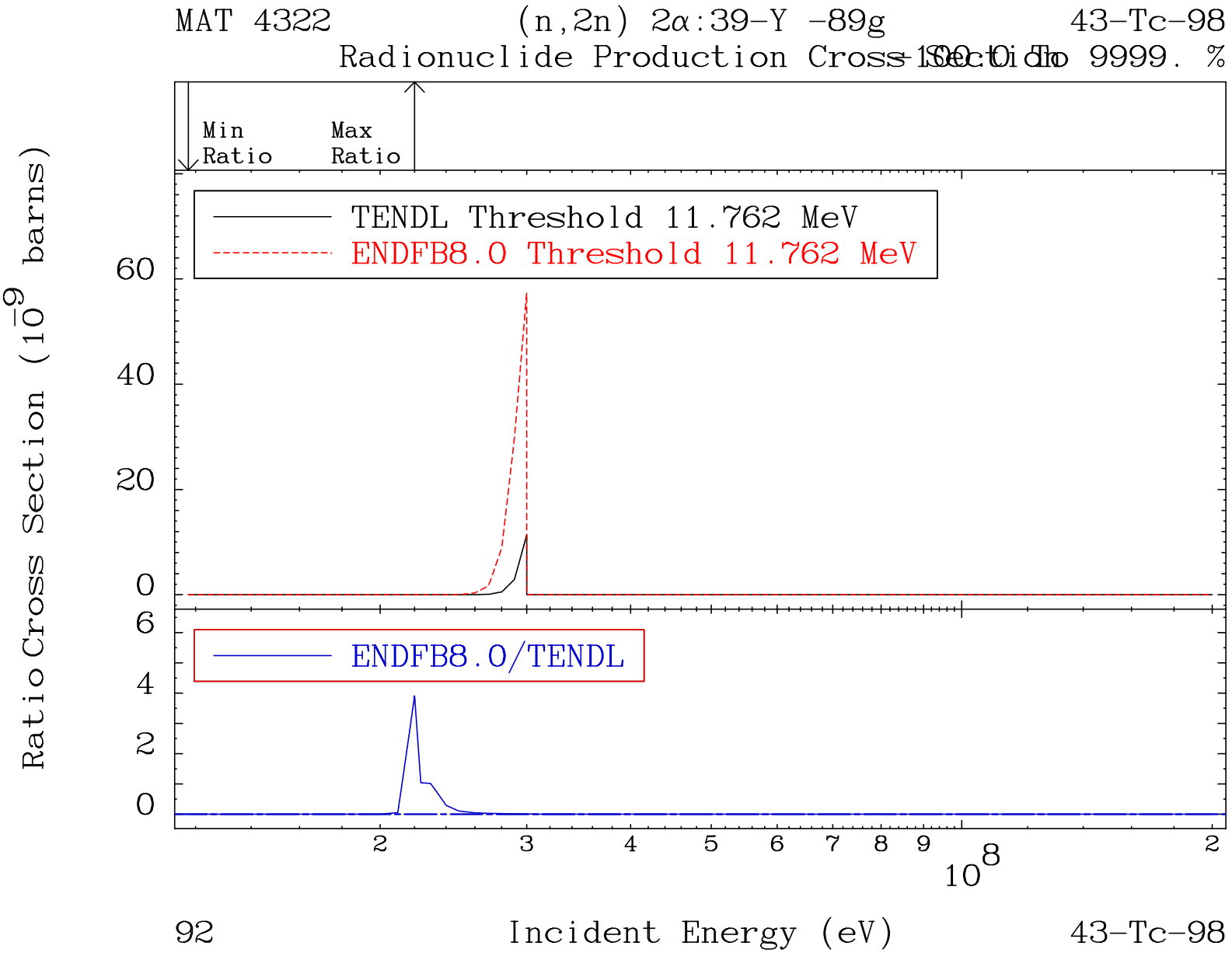

MAT 4322
(n,2n) α:41-Nb-93m1
43-Tc-98
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.8468 MeV
ENDFB8.0 Threshold 9.8455 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
87
43-Tc-98

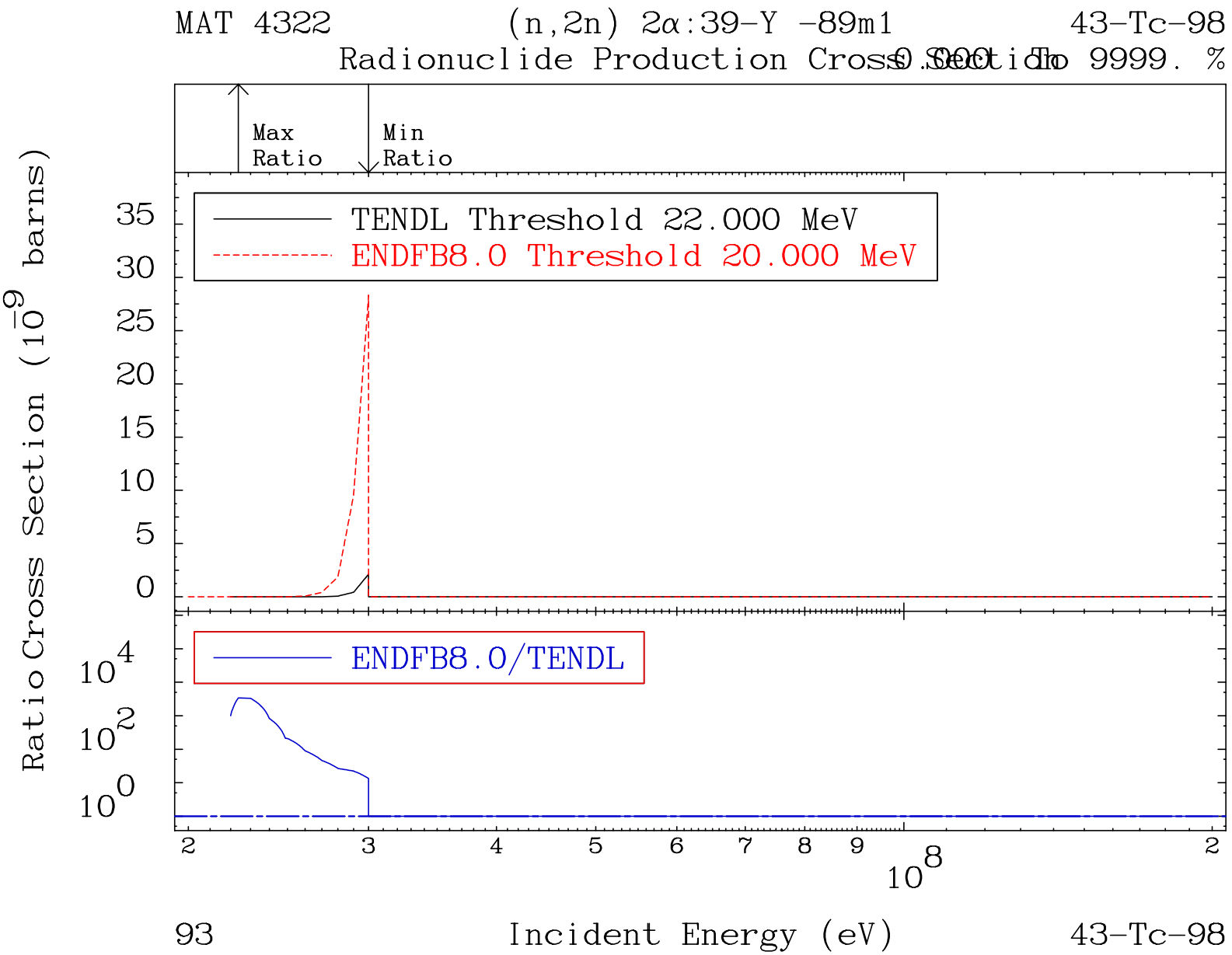

MAT 4322
(n,3n) α:41-Nb-92g
43-Tc-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.738 MeV
ENDFB8.0 Threshold 18.738 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
700
600
500
400
300
200
100
0
10^6
10^3
10^0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
43-Tc-98

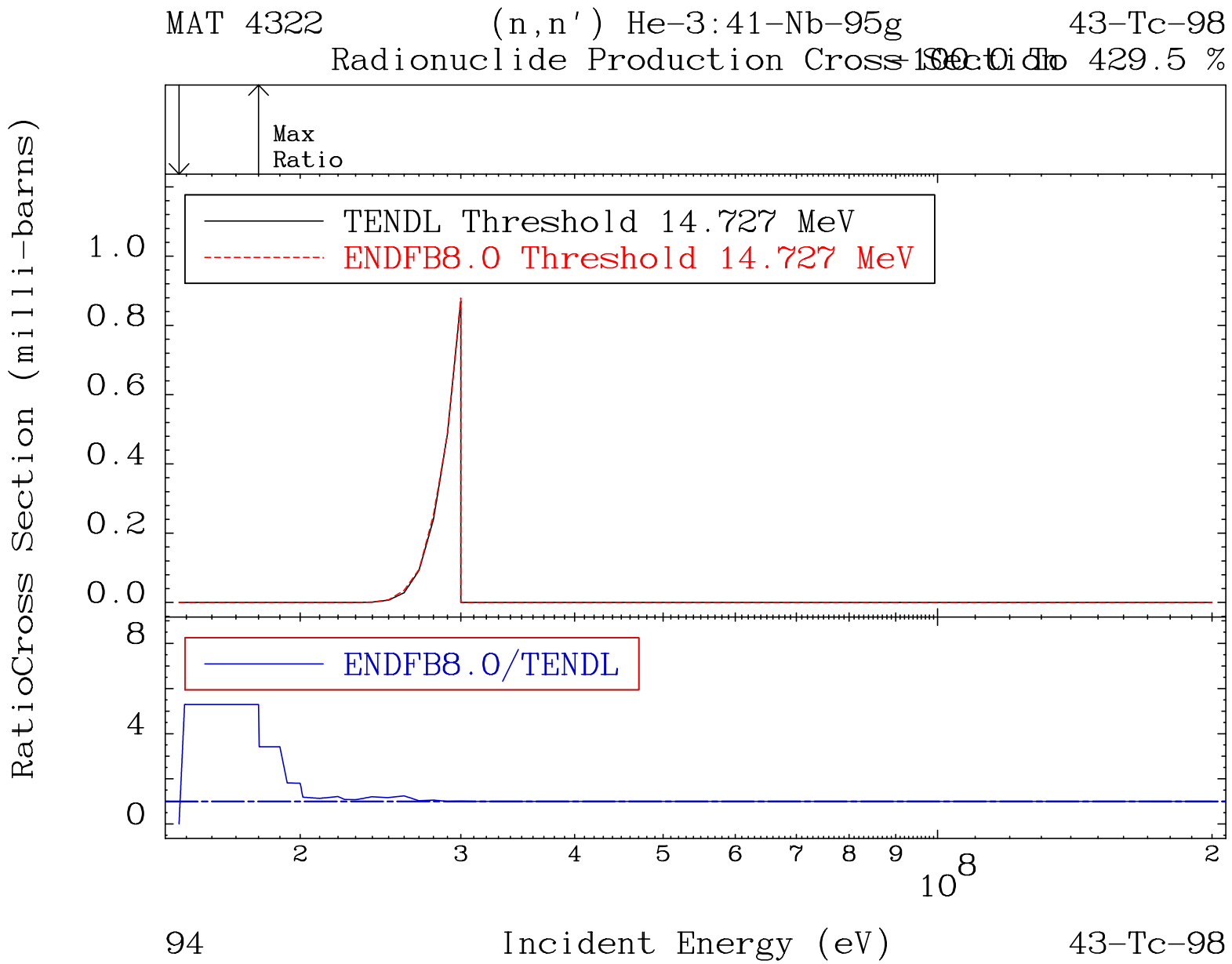

MAT 4322
(n,3n) α:41-Nb-92m1
43-Tc-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 22.000 MeV
ENDFB8.0 Threshold 18.873 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
140
120
100
80
60
40
20
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
43-Tc-98

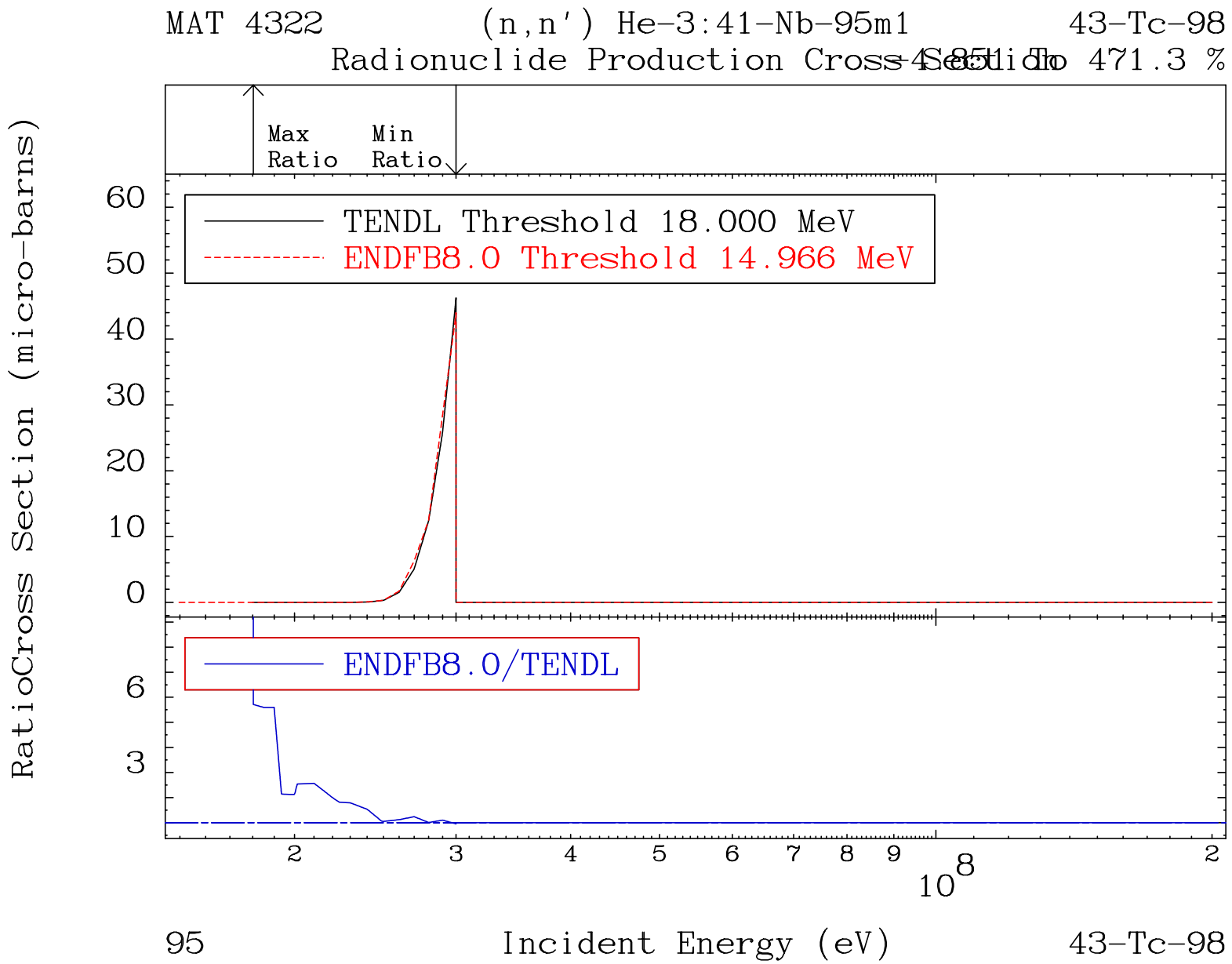

MAT 4322
(n,n') 2α:39-Y -90g
43-Tc-98
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8344 MeV
ENDFB8.0 Threshold 4.8354 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
90
43-Tc-98

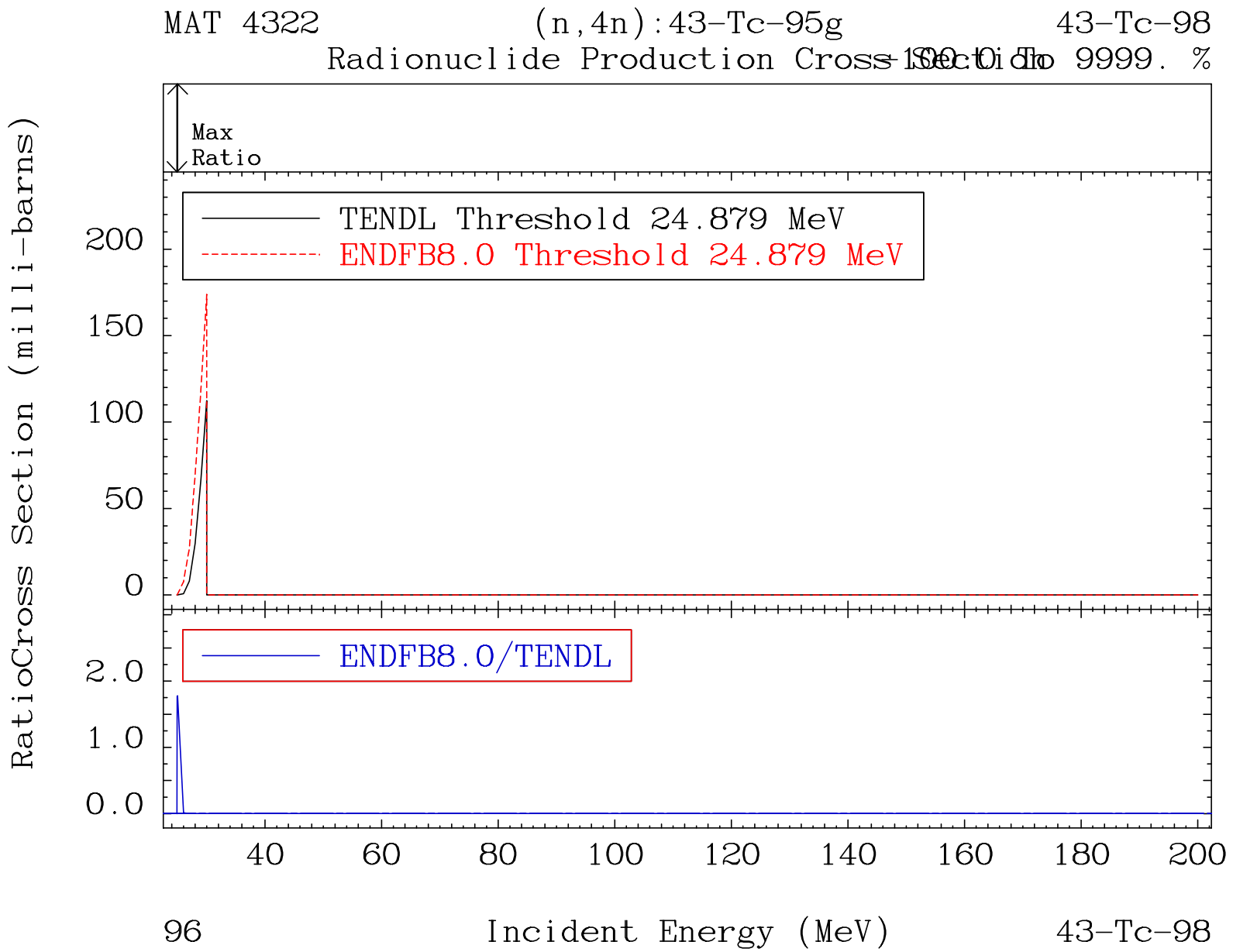

MAT 4322
(n,n') 2α:39-Y -90m2
43-Tc-98
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
ENDFB8.0 Threshold 13.000 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
91
43-Tc-98

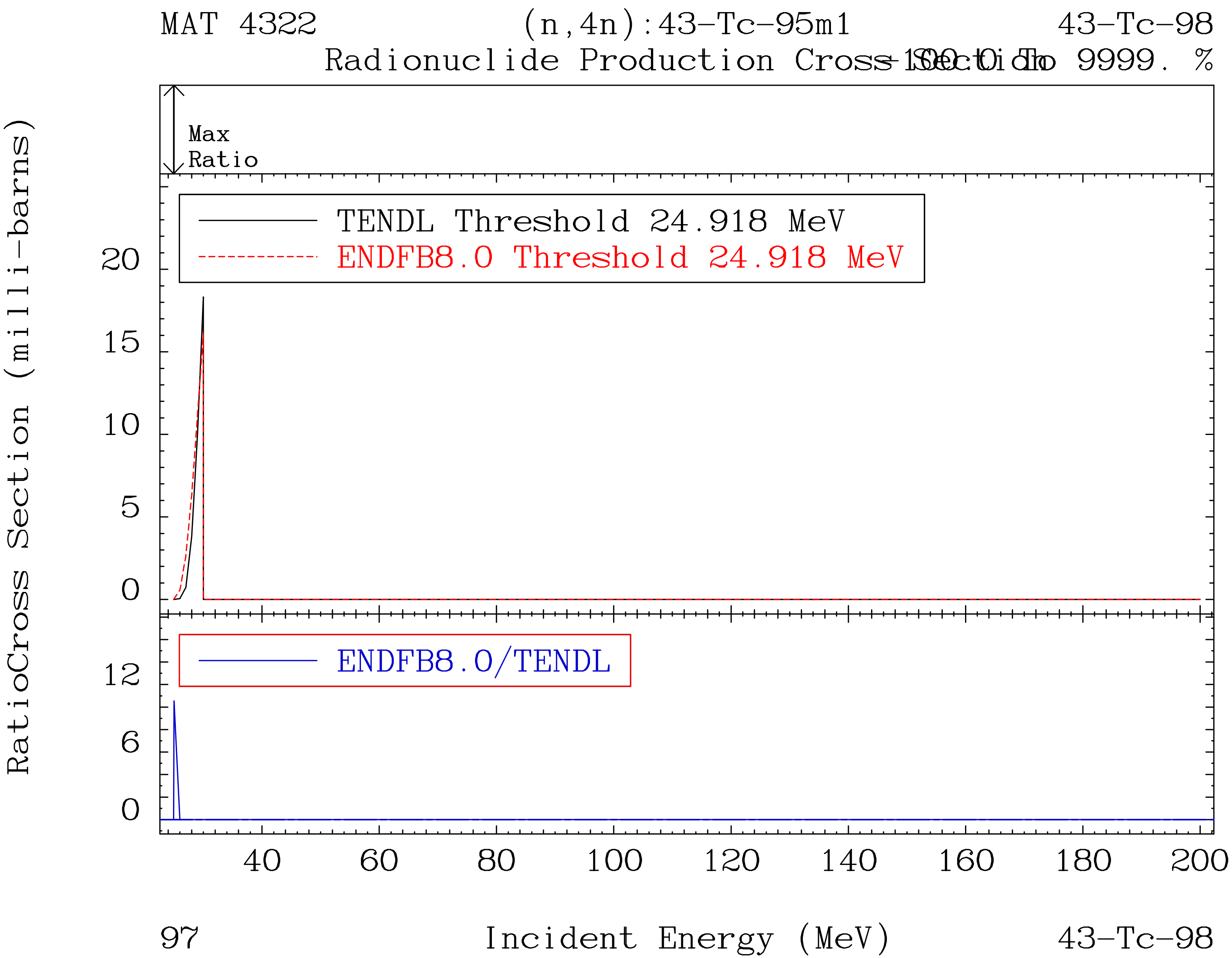

MAT 4322
(n,2n) 2α:39-Y -89g
43-Tc-98
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.762 MeV
ENDFB8.0 Threshold 11.762 MeV
ENDFB8.0/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
92
43-Tc-98

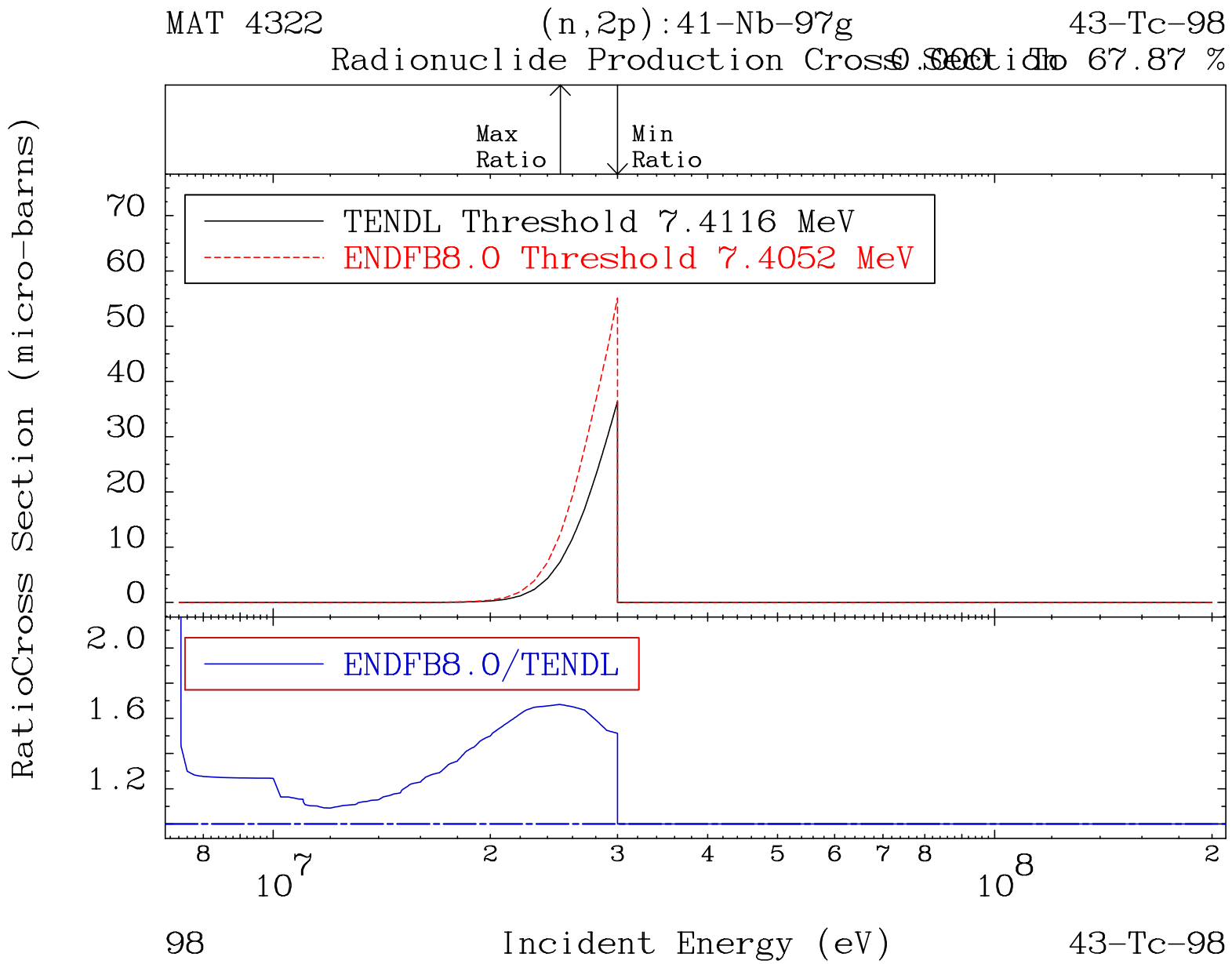

MAT 4322
(n,2n) 2α:39-Y -89m1
43-Tc-98
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 22.000 MeV
ENDFB8.0 Threshold 20.000 MeV
ENDFB8.0/TENDL
Ratio Cross Section (10^-9 barns)
35
30
25
20
15
10
5
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
43-Tc-98

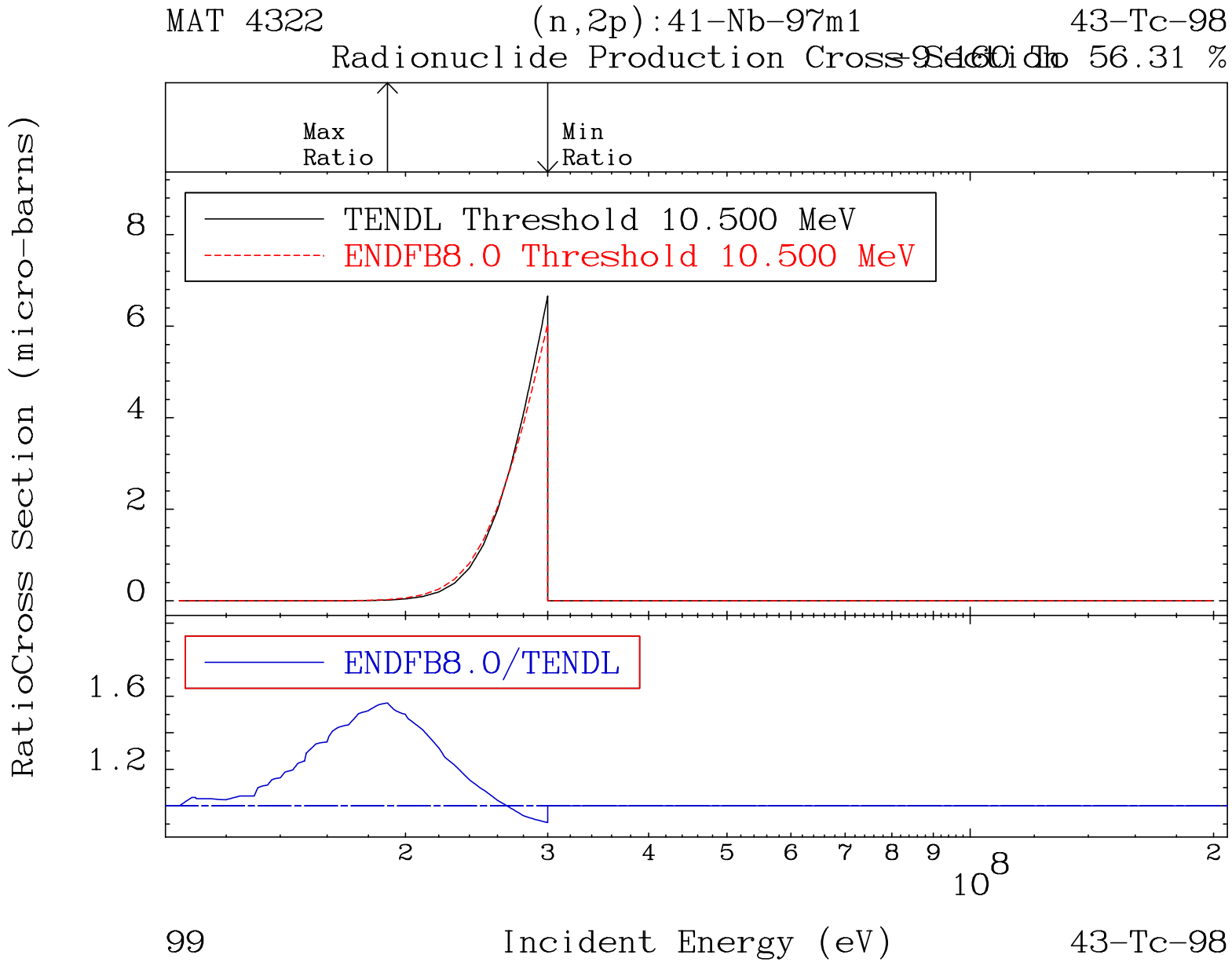

MAT 4322
(n,n') He-3:41-Nb-95g
43-Tc-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 14.727 MeV
ENDFB8.0 Threshold 14.727 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
43-Tc-98

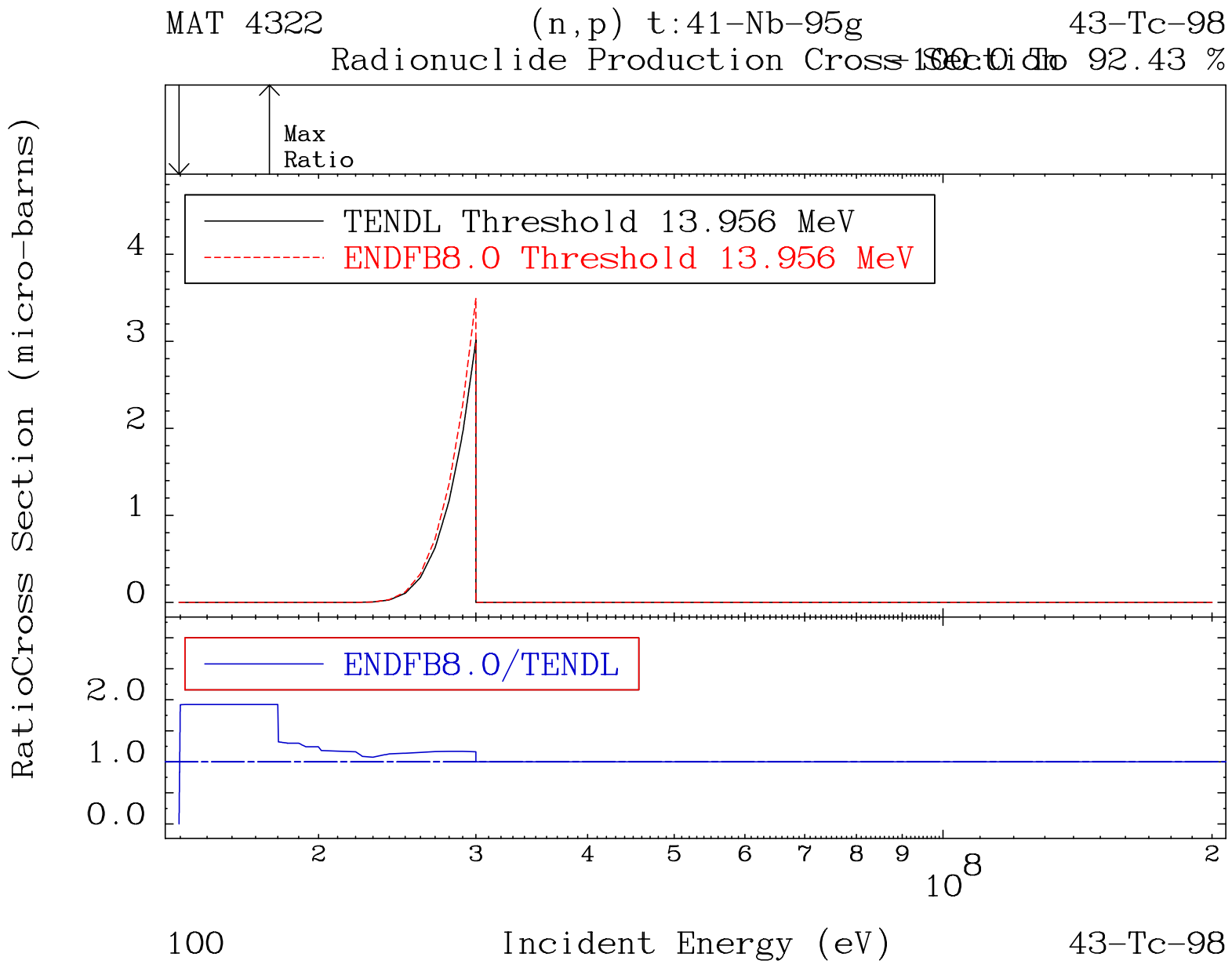

MAT 4322
(n,n') He-3:41-Nb-95m1
43-Tc-98
Radionuclide Production Cross Section
-4.85% to 471.3 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
ENDFB8.0 Threshold 14.966 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
6
3
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
43-Tc-98

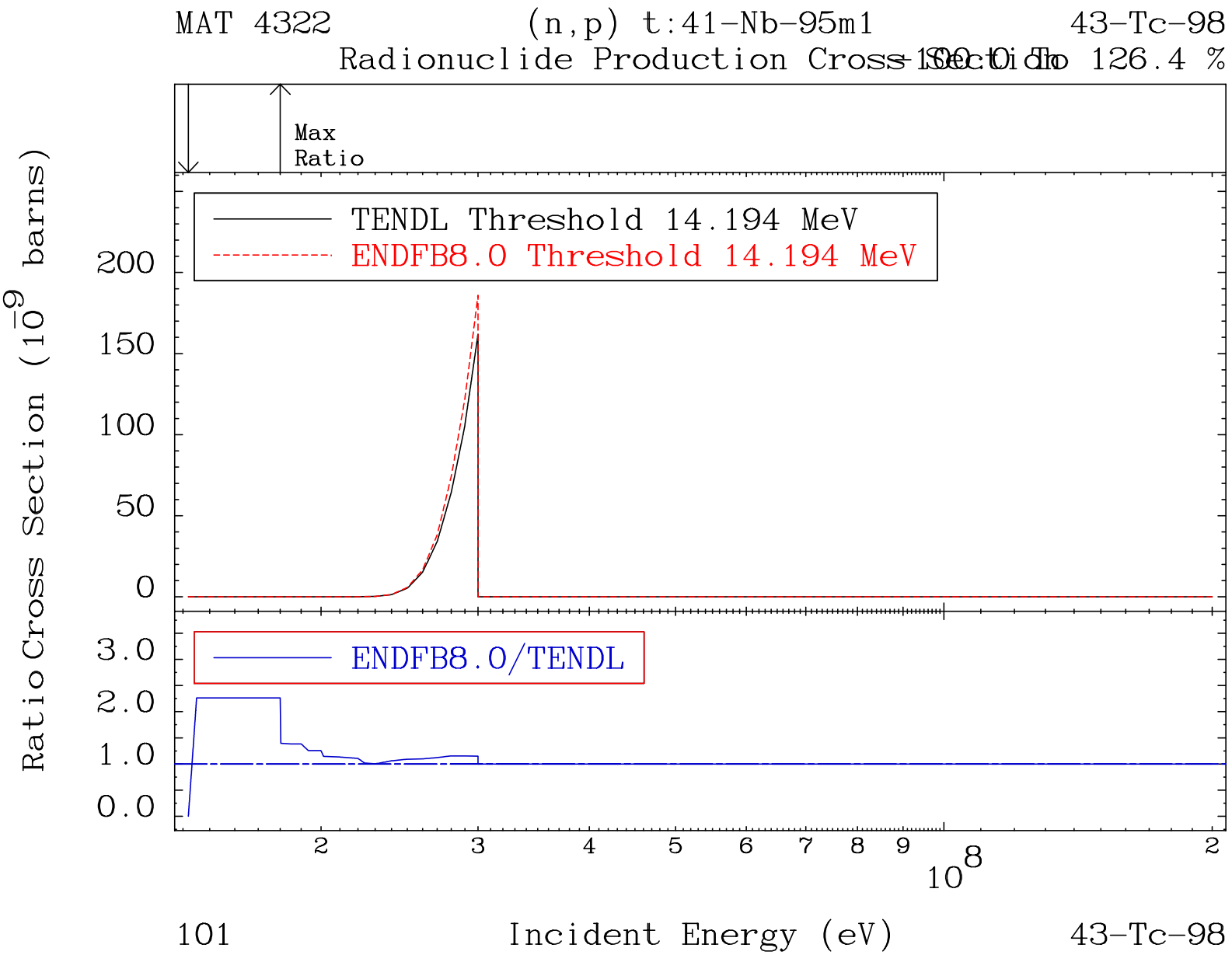

MAT 4322
(n,4n):43-Tc-95g
43-Tc-98
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 24.879 MeV
ENDFB8.0 Threshold 24.879 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
40
60
80
100
120
140
160
180
200
96
Incident Energy (MeV)
43-Tc-98


MAT 4322
(n,4n):43-Tc-95m1
43-Tc-98
Radionuclide Production Cross Section
-100.0 To 9999. %
Max Ratio
TENDL Threshold 24.918 MeV
ENDFB8.0 Threshold 24.918 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
12
6
0
40
60
80
100
120
140
160
180
200
Incident Energy (MeV)
43-Tc-98


MAT 4322
(n,2p):41-Nb-97g
43-Tc-98
Radionuclide Production Cross Section
0.000 To 67.87 %
Max Ratio
Min Ratio
TENDL Threshold 7.4116 MeV
ENDFB8.0 Threshold 7.4052 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
70
60
50
40
30
20
10
0
2.0
1.6
1.2
8
10^7
2
3
4
5
6
7
8
10^8
2
98
Incident Energy (eV)
43-Tc-98


MAT 4322
(n,2p):41-Nb-97m1
43-Tc-98
Radionuclide Production Cross Section To 56.31 %
Max Ratio
Min Ratio
TENDL Threshold 10.500 MeV
ENDFB8.0 Threshold 10.500 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
0
2
4
6
8
1.2
1.6
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
43-Tc-98


MAT 4322
(n,p) t:41-Nb-95g
43-Tc-98
Radionuclide Production Cross Section To 92.43 %
Max
Ratio
TENDL Threshold 13.956 MeV
ENDFB8.0 Threshold 13.956 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
100
43-Tc-98


MAT 4322
(n,p) t:41-Nb-95m1
43-Tc-98
Radionuclide Production Cross Section To 126.4 %
Max
Ratio
TENDL Threshold 14.194 MeV
ENDFB8.0 Threshold 14.194 MeV
ENDFB8.0/TENDL
Ratio Cross Section (10^{-9} barns)
200
150
100
50
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
43-Tc-98