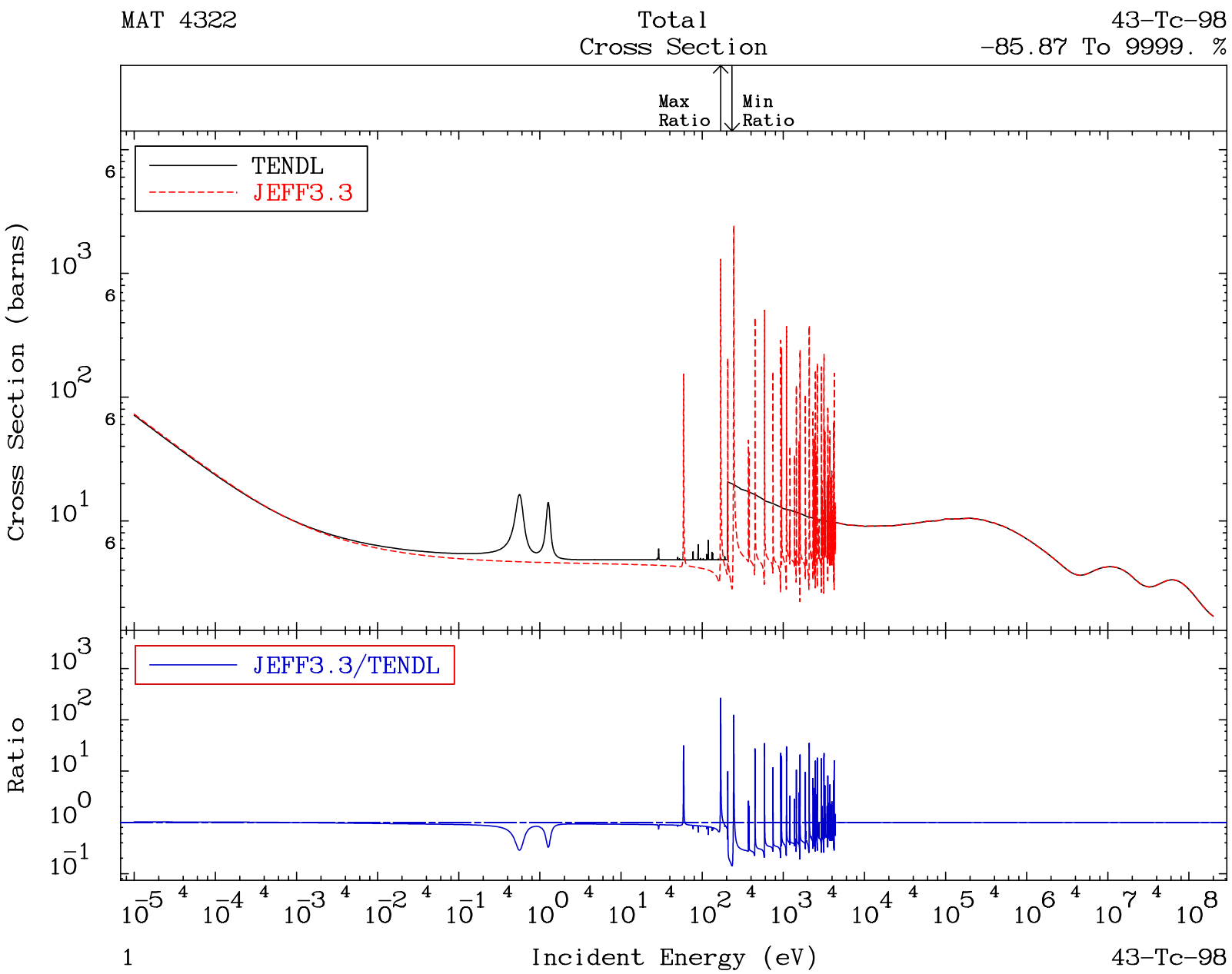
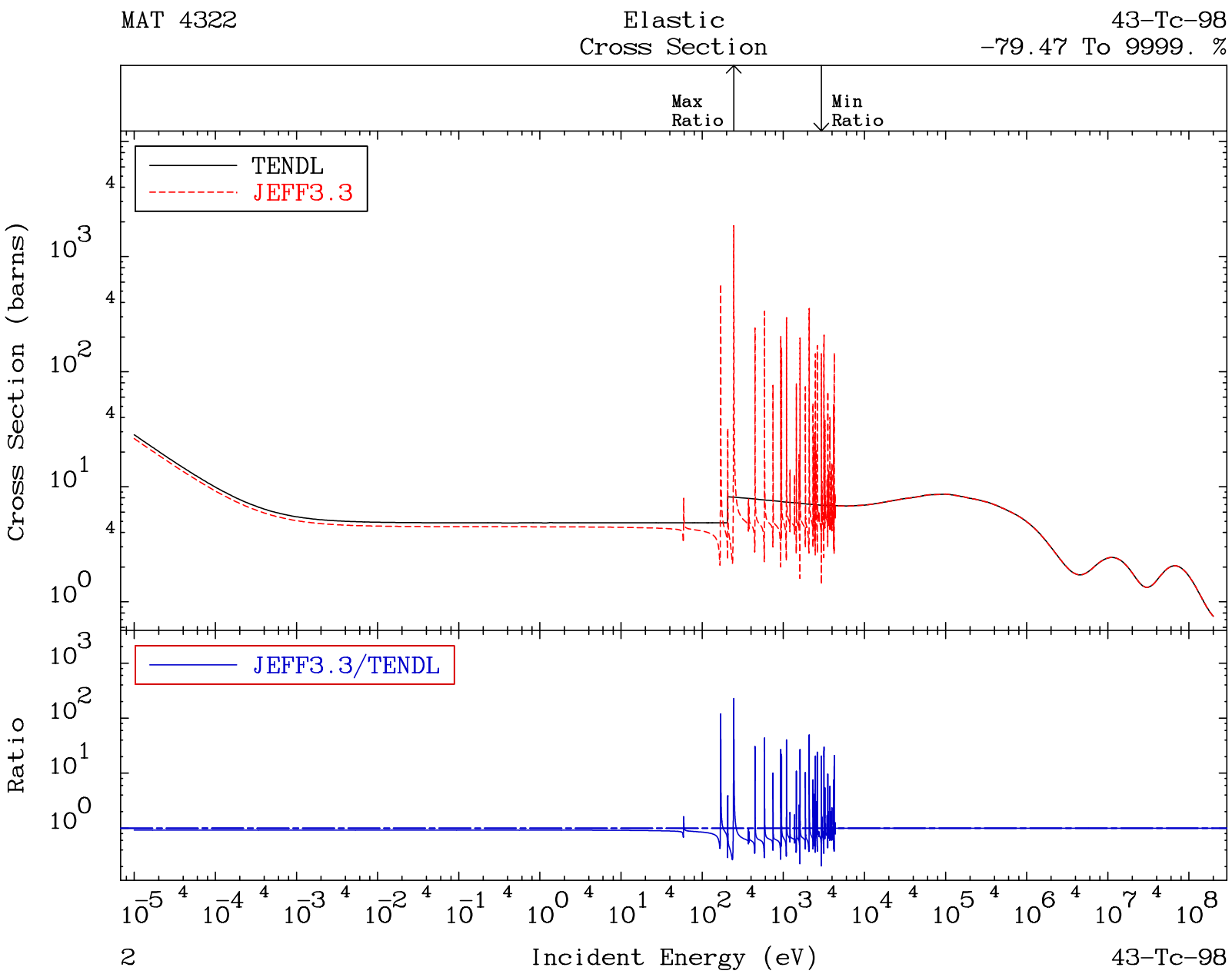
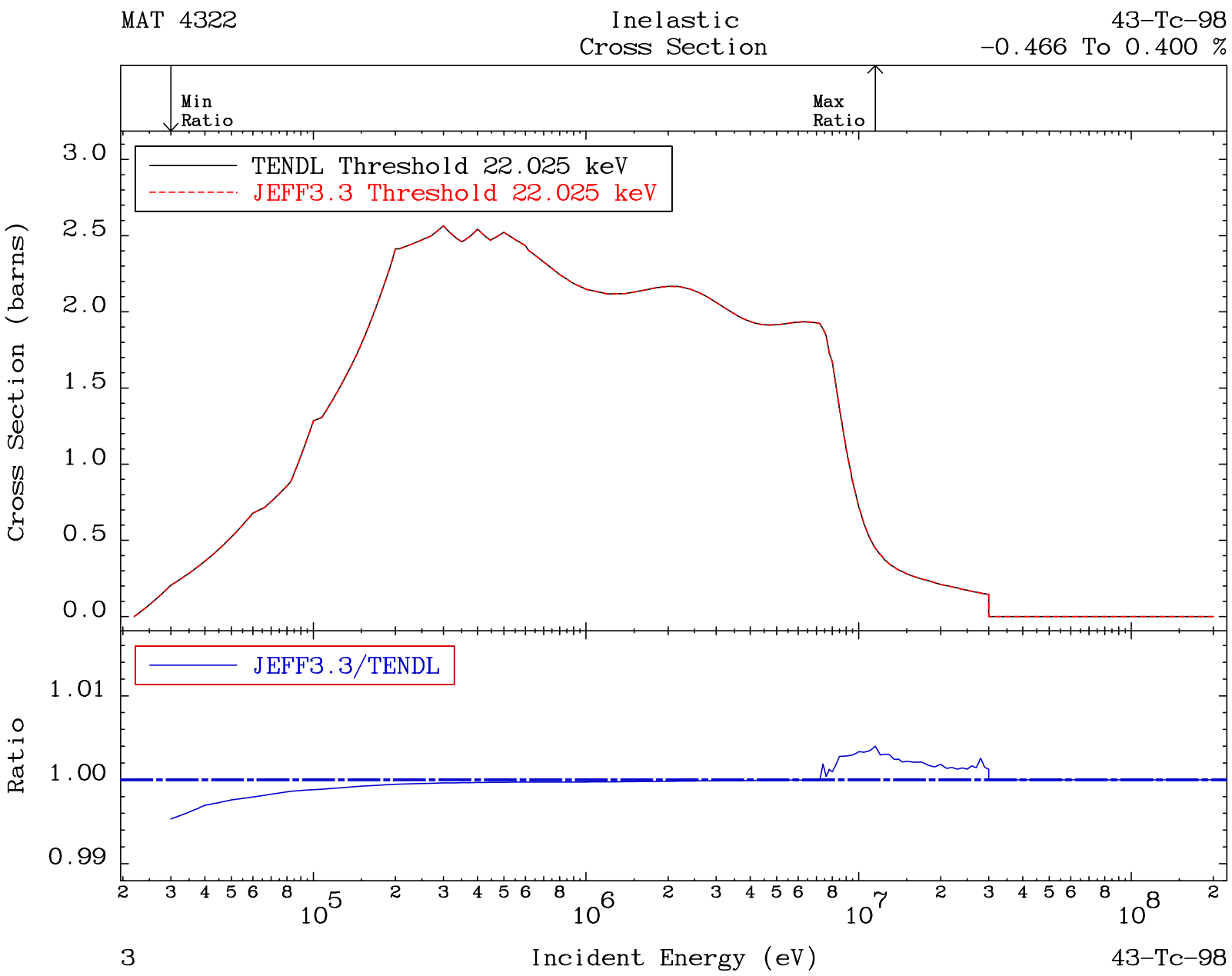
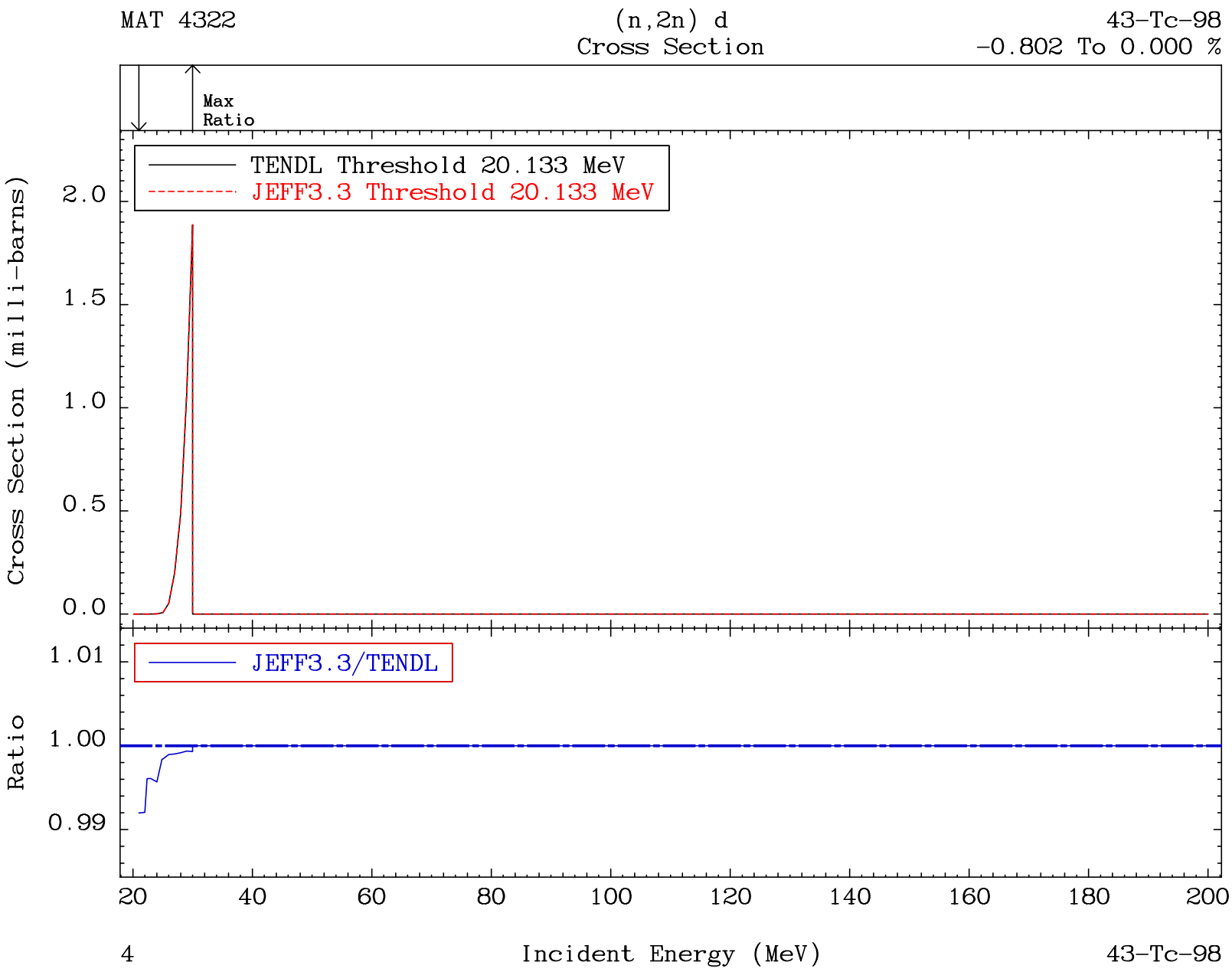
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

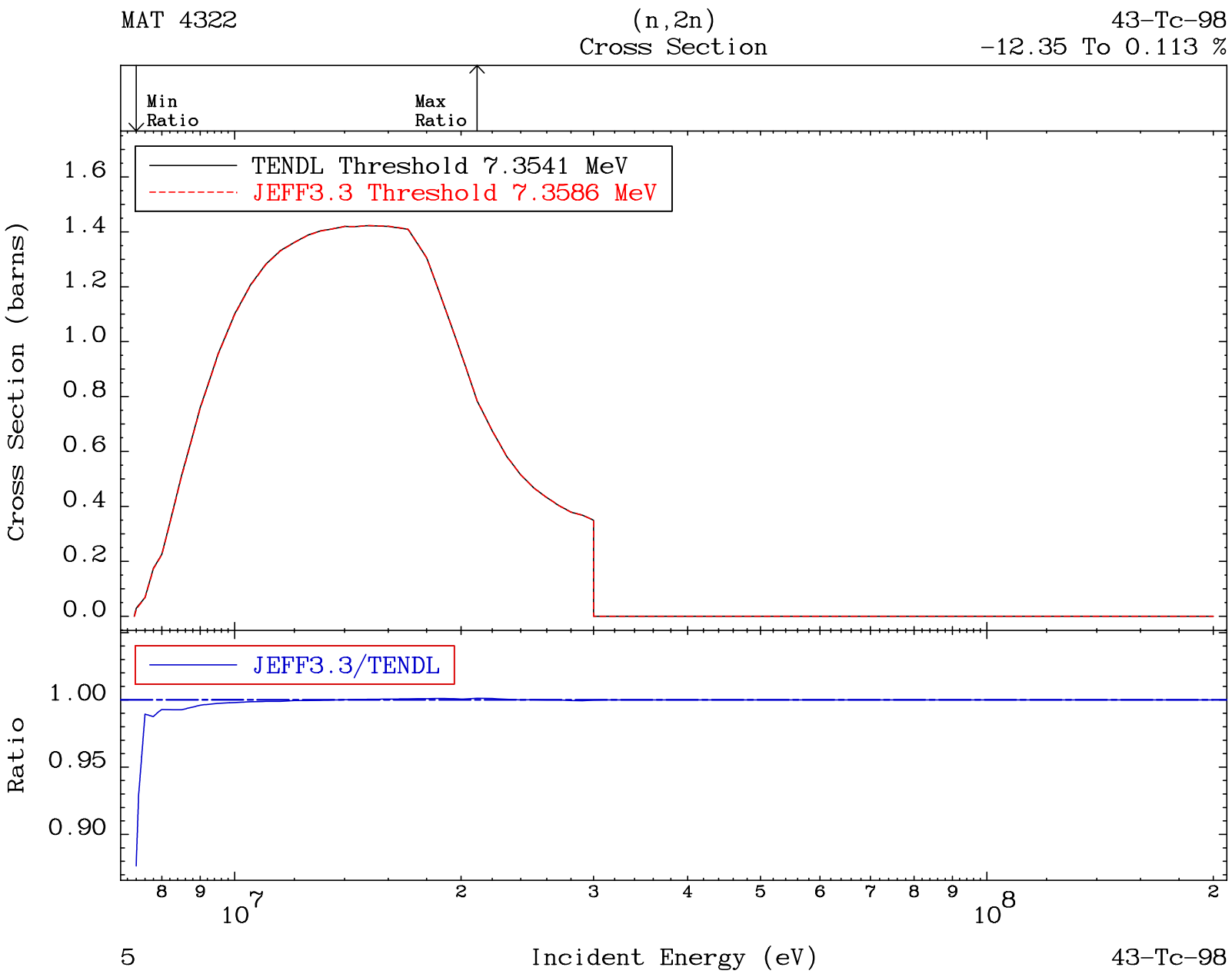
Press Mouse Button to Start

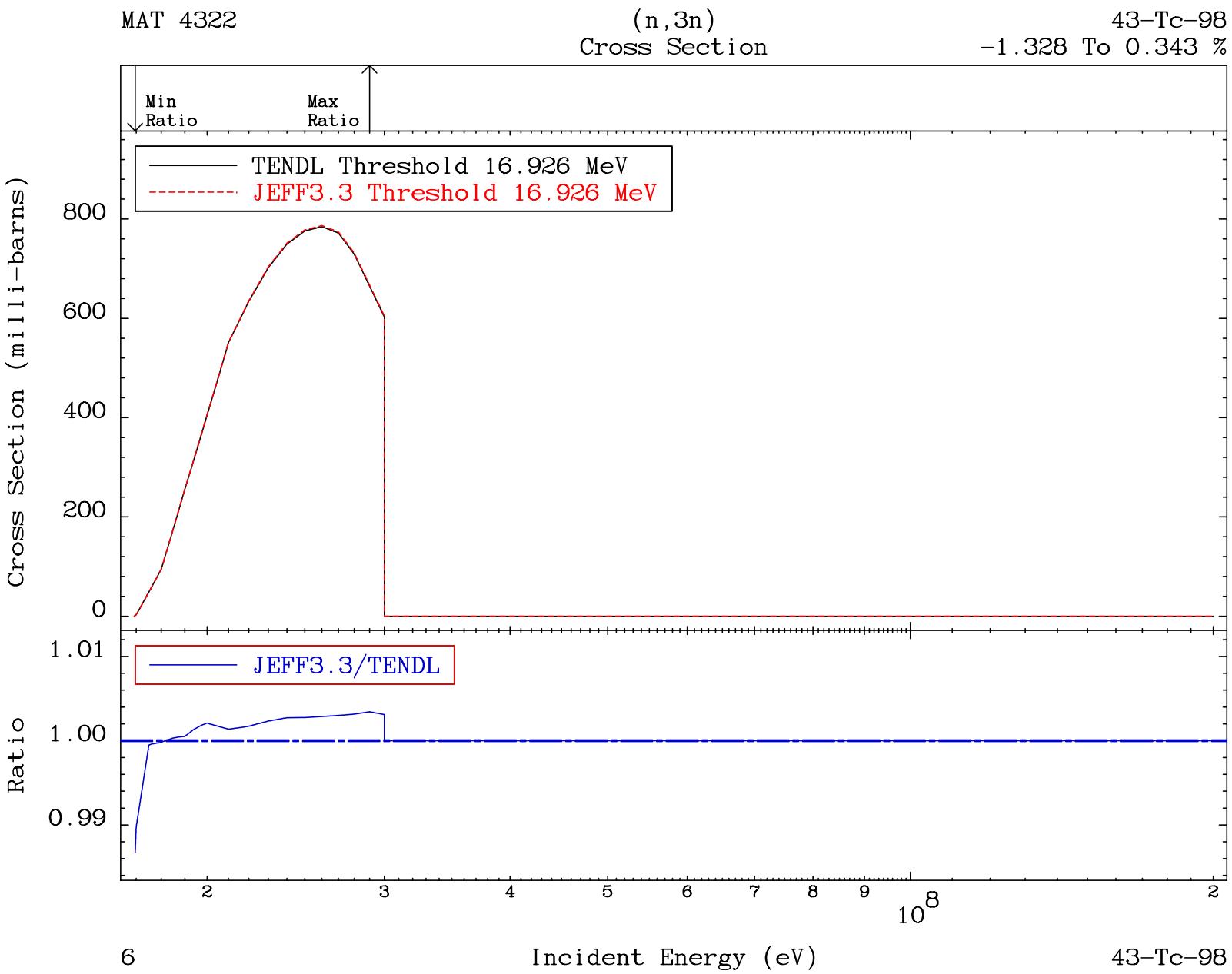

MAT 4322
Total
Cross Section
43-Tc-98
-85.87 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
43-Tc-98

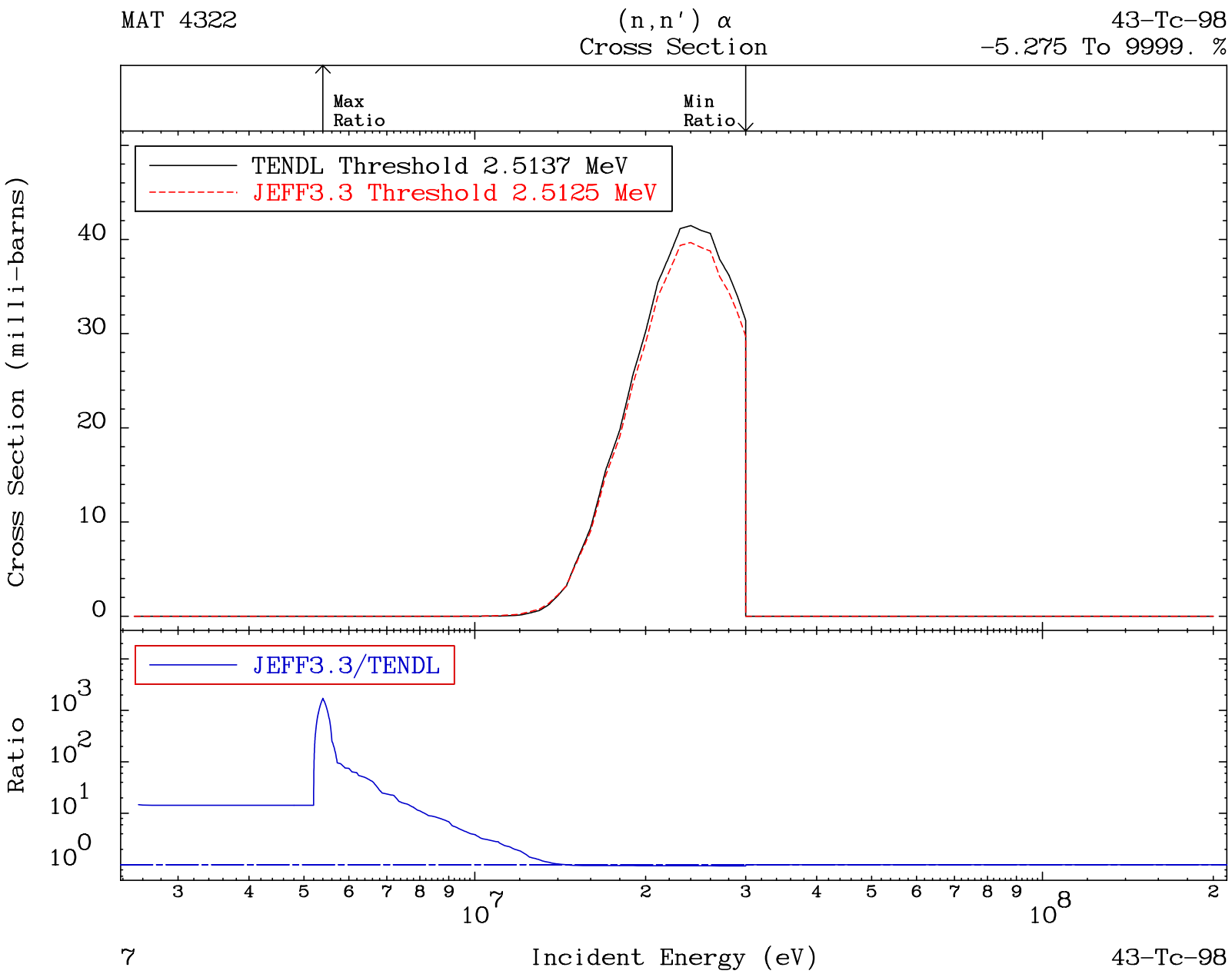

MAT 4322
Elastic
Cross Section
43-Tc-98
-79.47 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
43-Tc-98

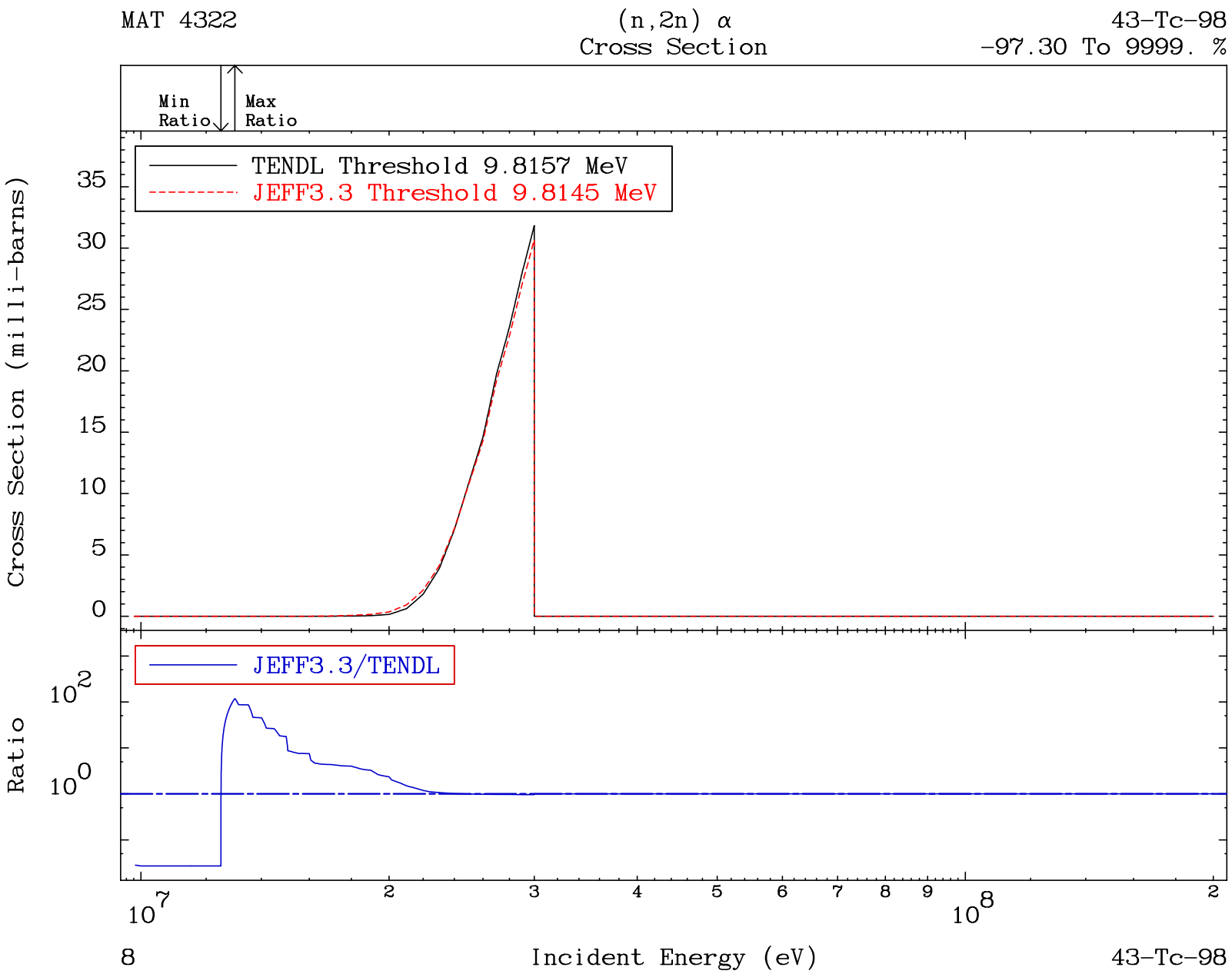

MAT 4322
Inelastic
Cross Section
43-Tc-98
-0.466 To 0.400 %
Min
Ratio
Max
Ratio
TENDL Threshold 22.025 keV
JEFF3.3 Threshold 22.025 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
43-Tc-98

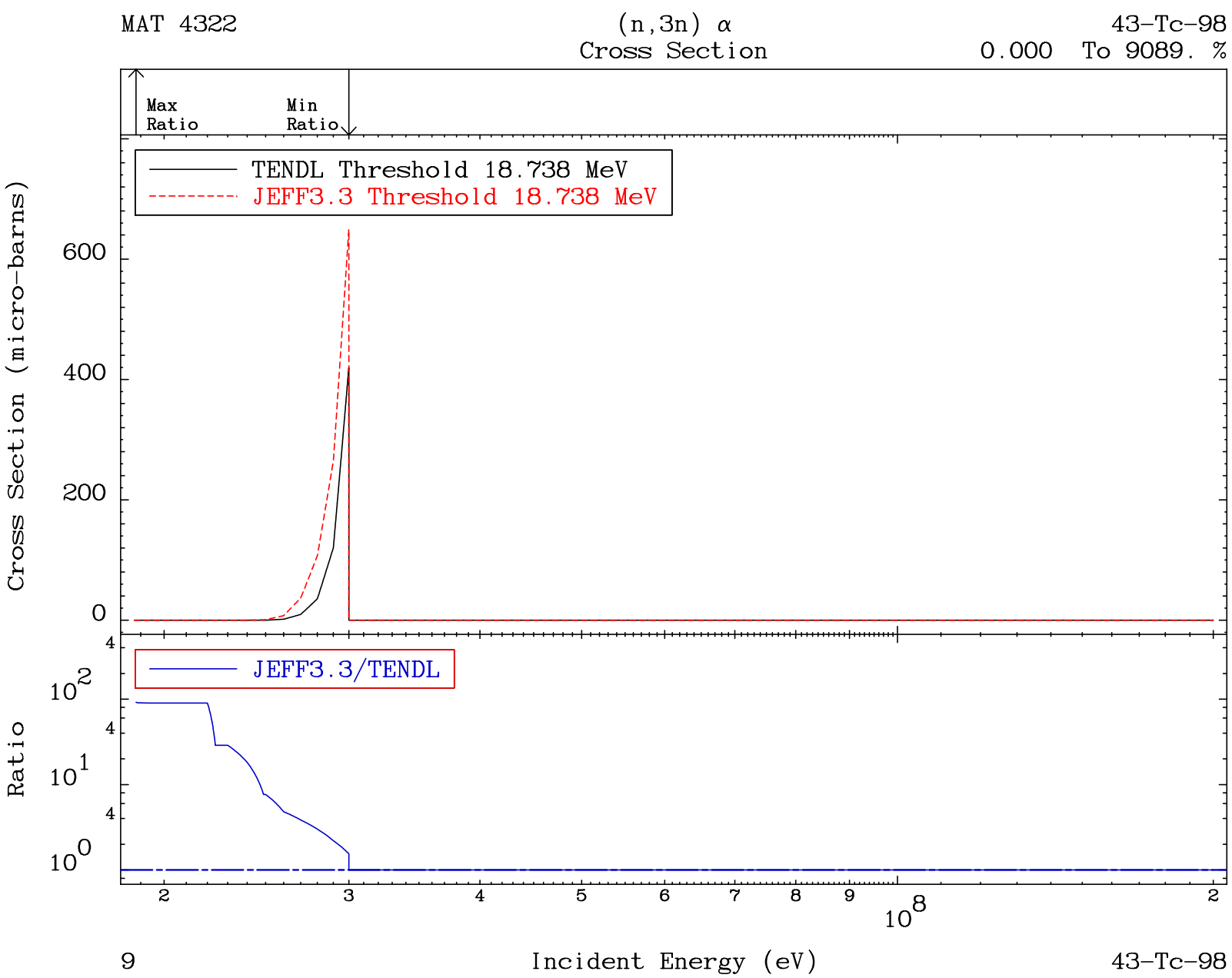

MAT 4322
(n,2n) d
Cross Section
43-Tc-98
-0.802 To 0.000 %
Max
Ratio
TENDL Threshold 20.133 MeV
JEFF3.3 Threshold 20.133 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
43-Tc-98

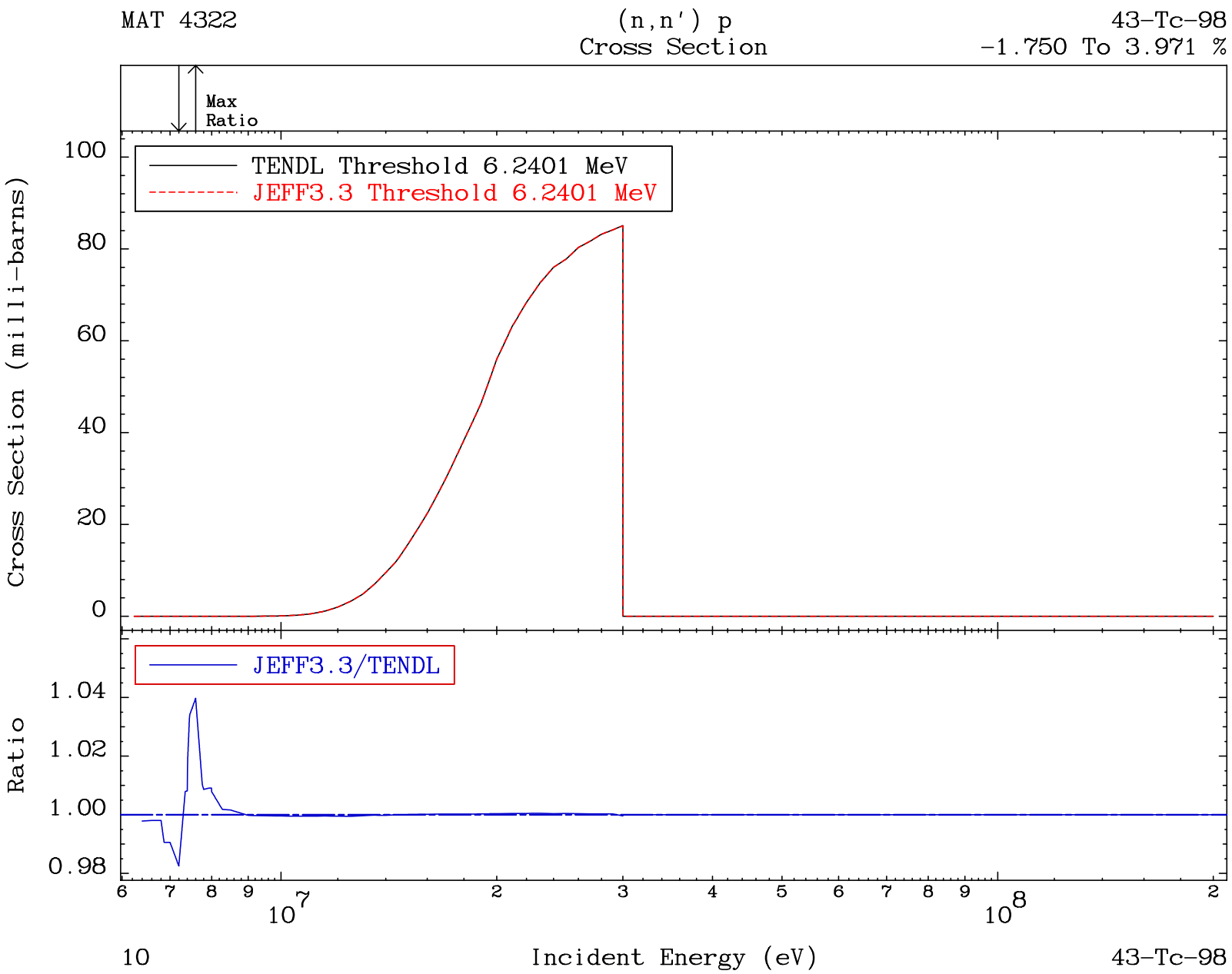

MAT 4322
(n,2n)
Cross Section
43-Tc-98
-12.35 To 0.113 %
Min Ratio
Max Ratio
TENDL Threshold 7.3541 MeV
JEFF3.3 Threshold 7.3586 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
43-Tc-98

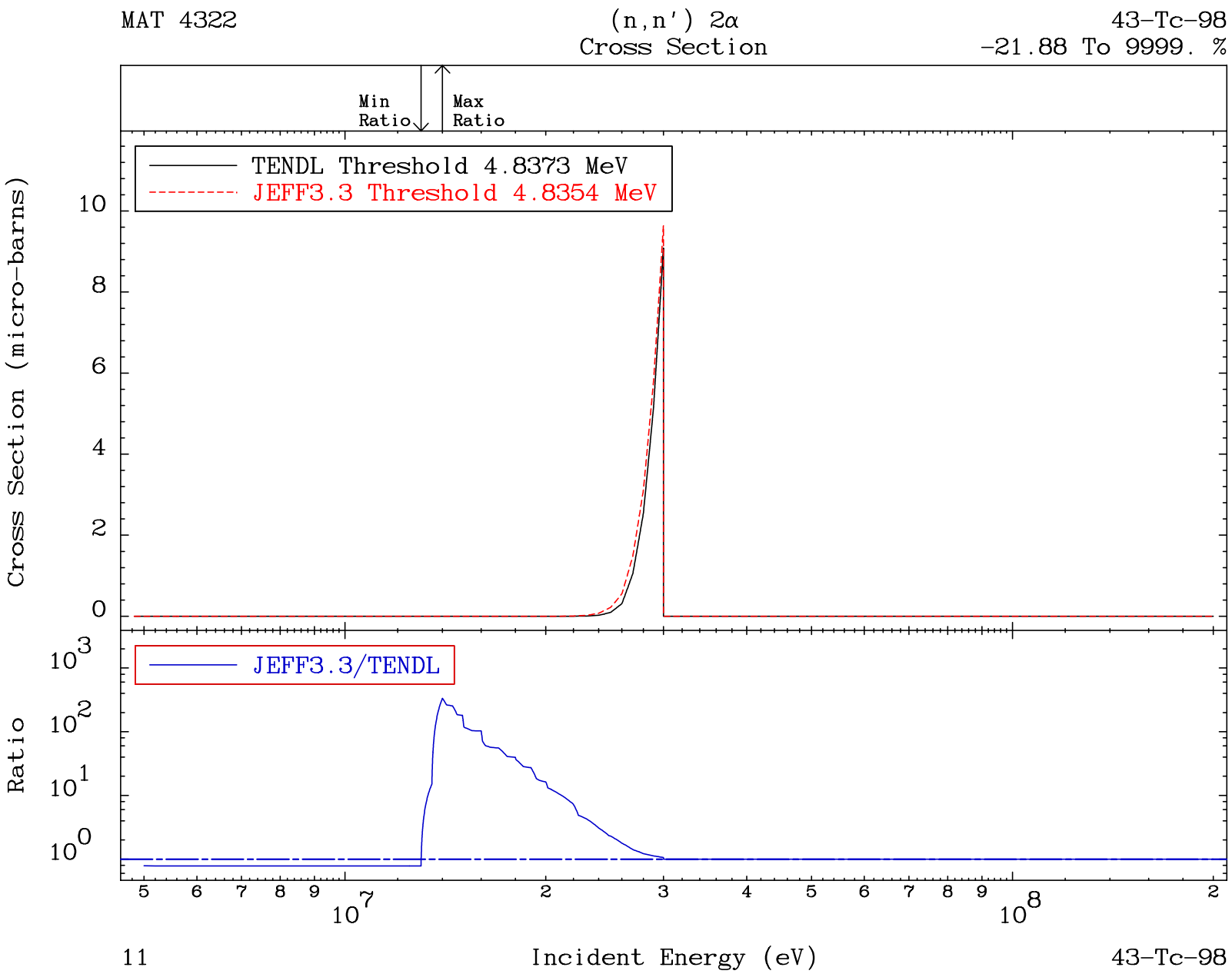

MAT 4322
(n,3n)
Cross Section
43-Tc-98
-1.328 To 0.343 %
Min Ratio
Max Ratio
TENDL Threshold 16.926 MeV
JEFF3.3 Threshold 16.926 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
43-Tc-98

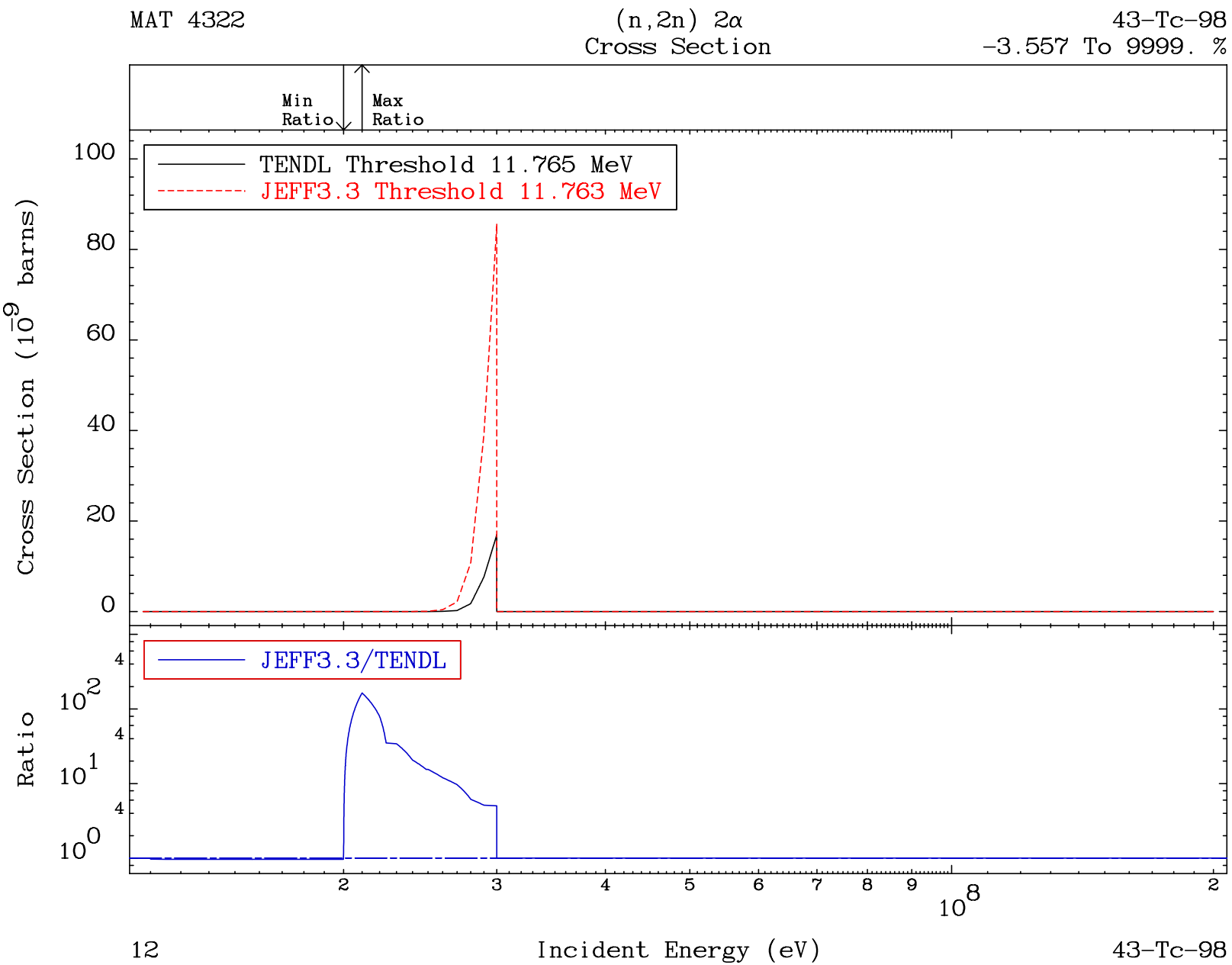

MAT 4322
(n,n') α
Cross Section
43-Tc-98
-5.275 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5137 MeV
JEFF3.3 Threshold 2.5125 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
7
Incident Energy (eV)
43-Tc-98

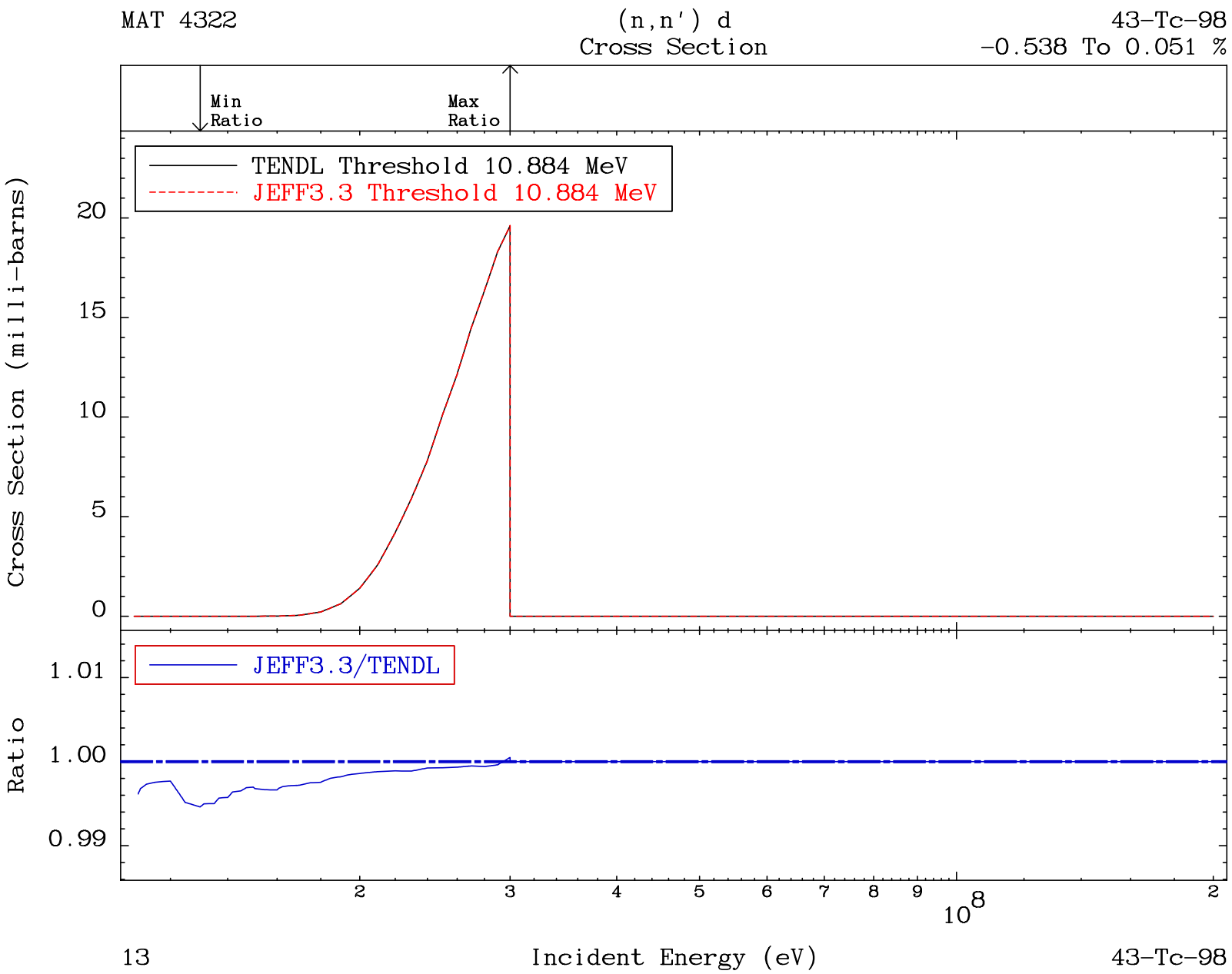

MAT 4322
(n,2n) α
Cross Section
43-Tc-98
-97.30 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.8157 MeV
JEFF3.3 Threshold 9.8145 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
43-Tc-98

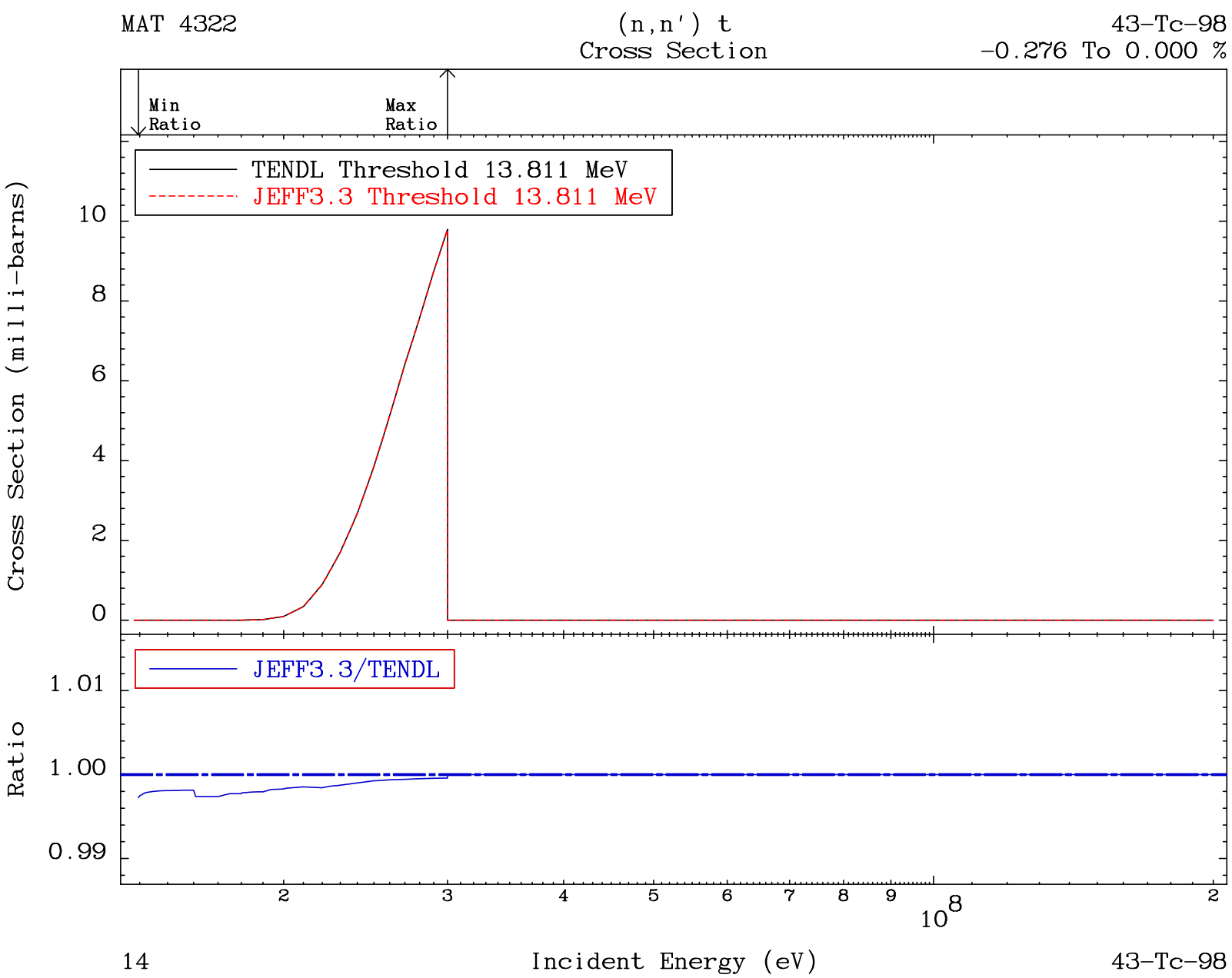

MAT 4322
(n,3n) α
Cross Section
43-Tc-98
0.000 To 9089. %
Max Ratio
Min Ratio
TENDL Threshold 18.738 MeV
JEFF3.3 Threshold 18.738 MeV
Cross Section (micro-barns)
600
400
200
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
43-Tc-98

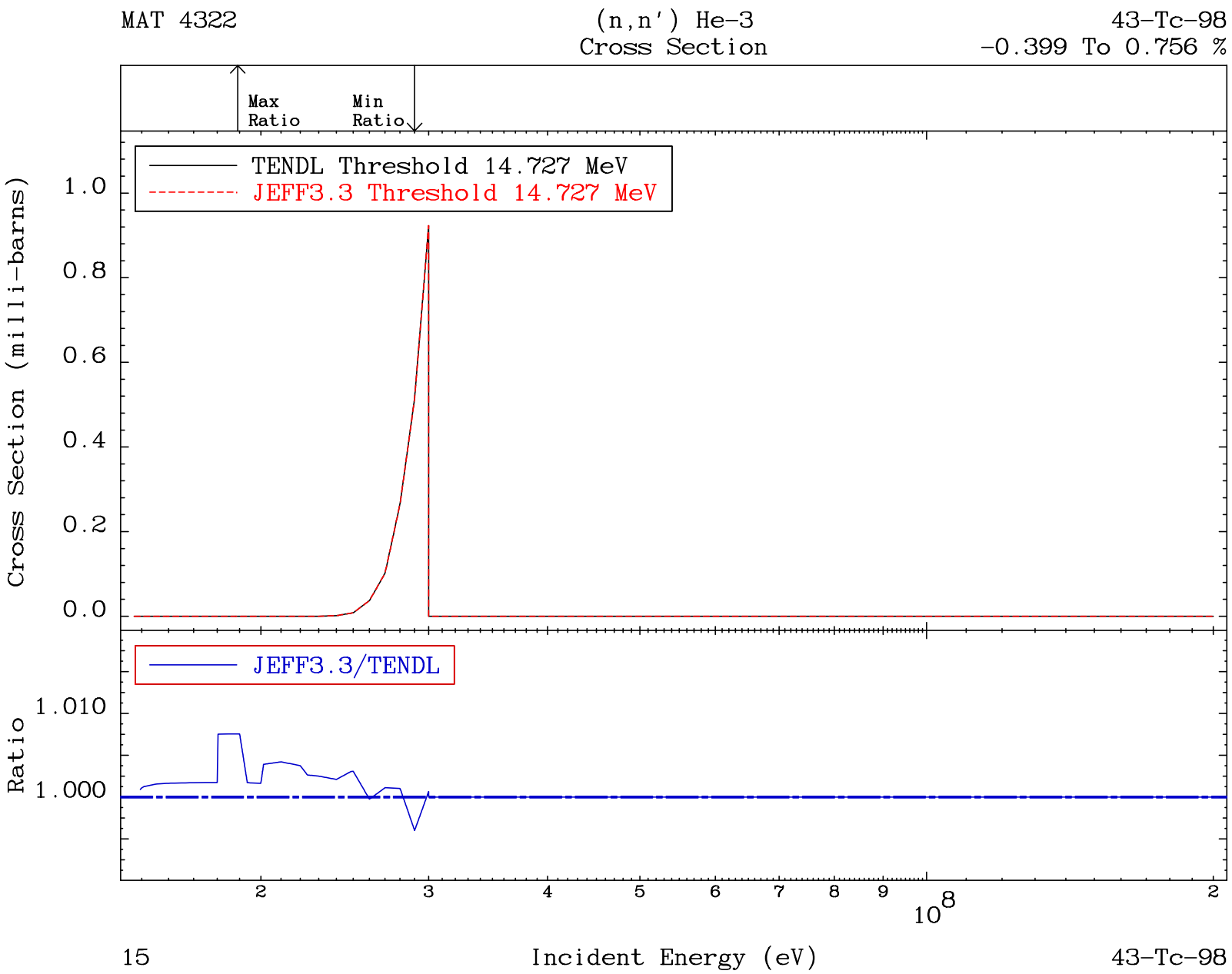

MAT 4322
(n,n') p
Cross Section
43-Tc-98
-1.750 To 3.971 %
Max
Ratio
TENDL Threshold 6.2401 MeV
JEFF3.3 Threshold 6.2401 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
0.98
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
43-Tc-98

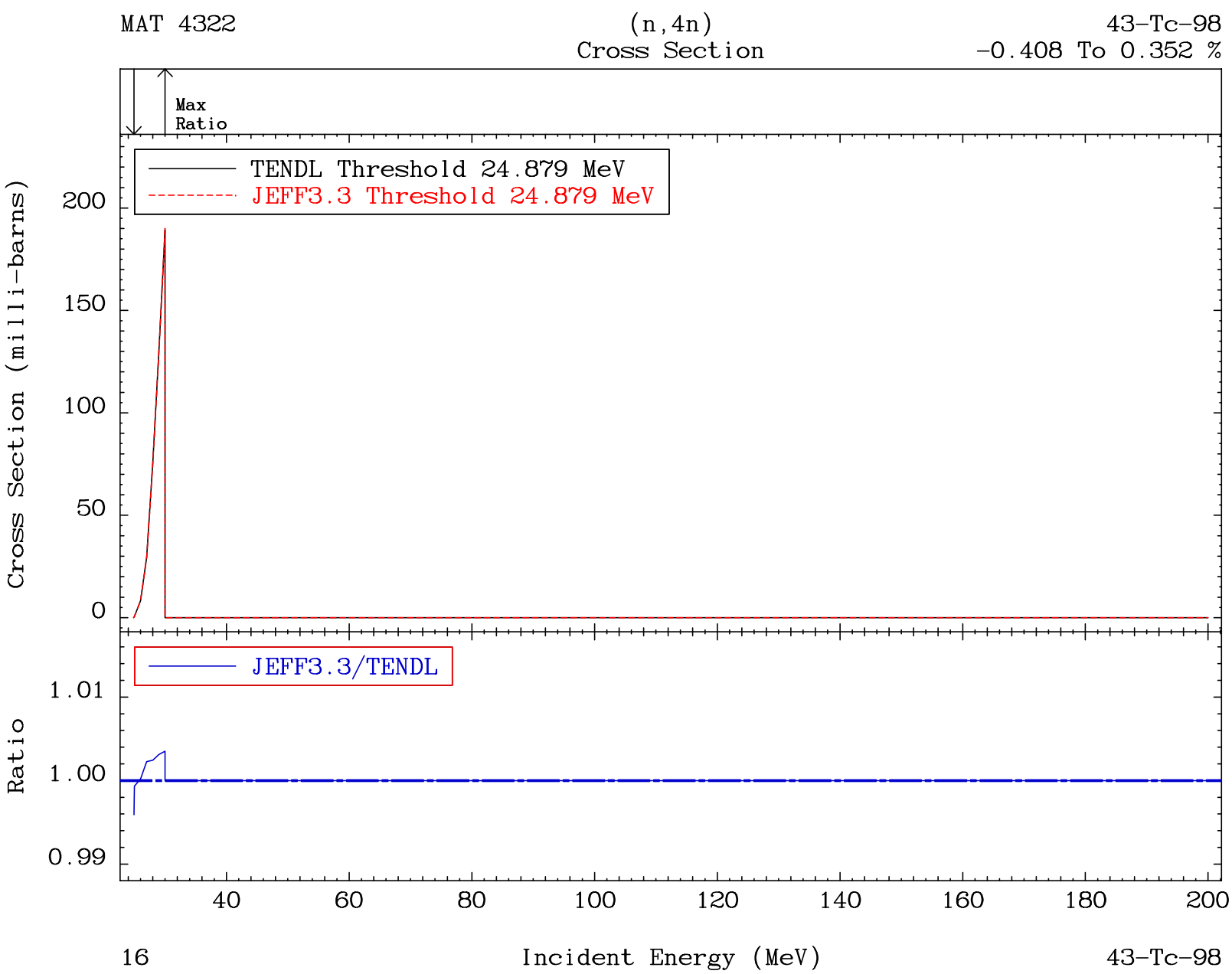

MAT 4322
(n,n') 2α
Cross Section
43-Tc-98
-21.88 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8373 MeV
JEFF3.3 Threshold 4.8354 MeV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
11
43-Tc-98

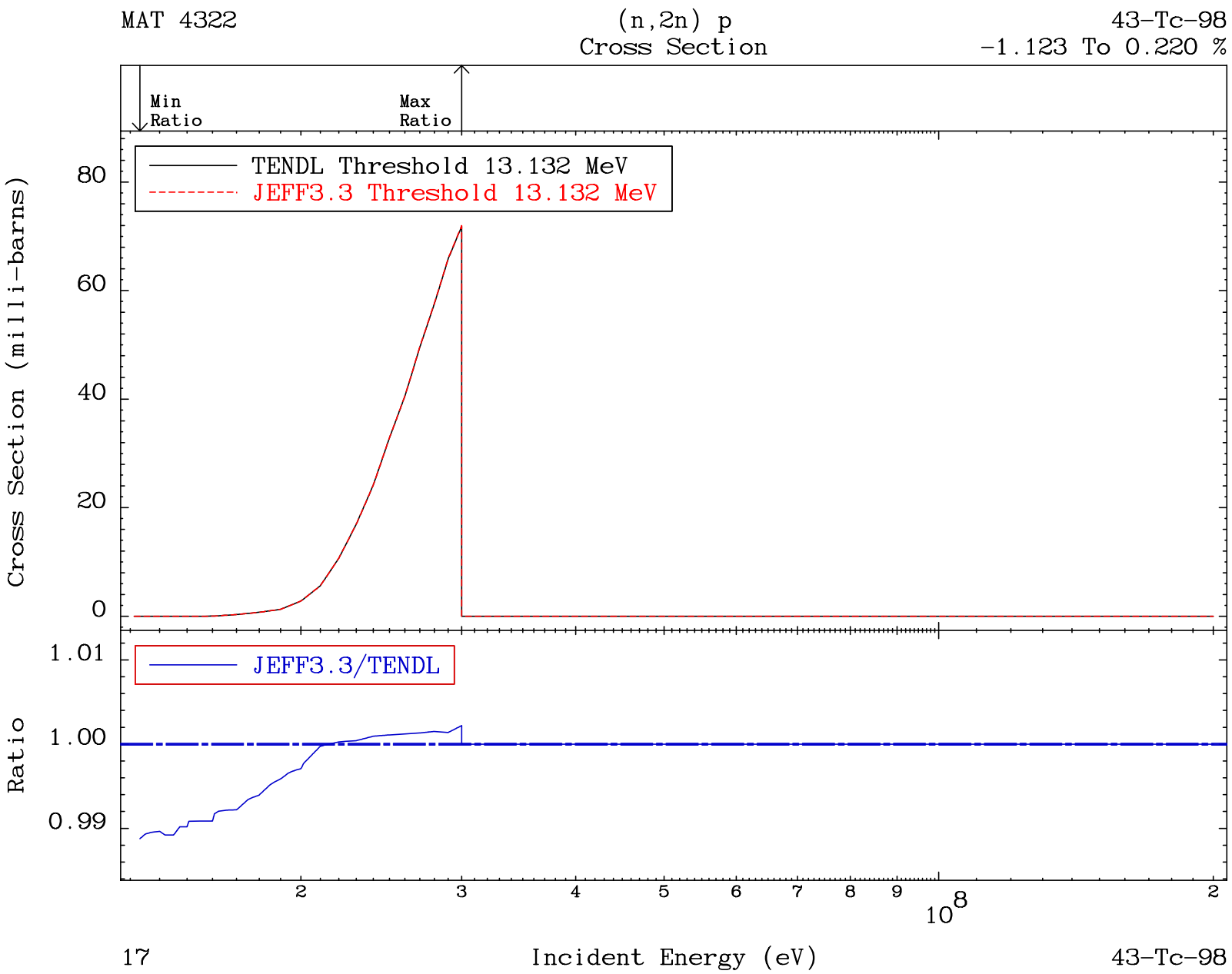

MAT 4322
(n,2n) 2α
Cross Section
43-Tc-98
-3.557 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.765 MeV
JEFF3.3 Threshold 11.763 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
12
Incident Energy (eV)
43-Tc-98

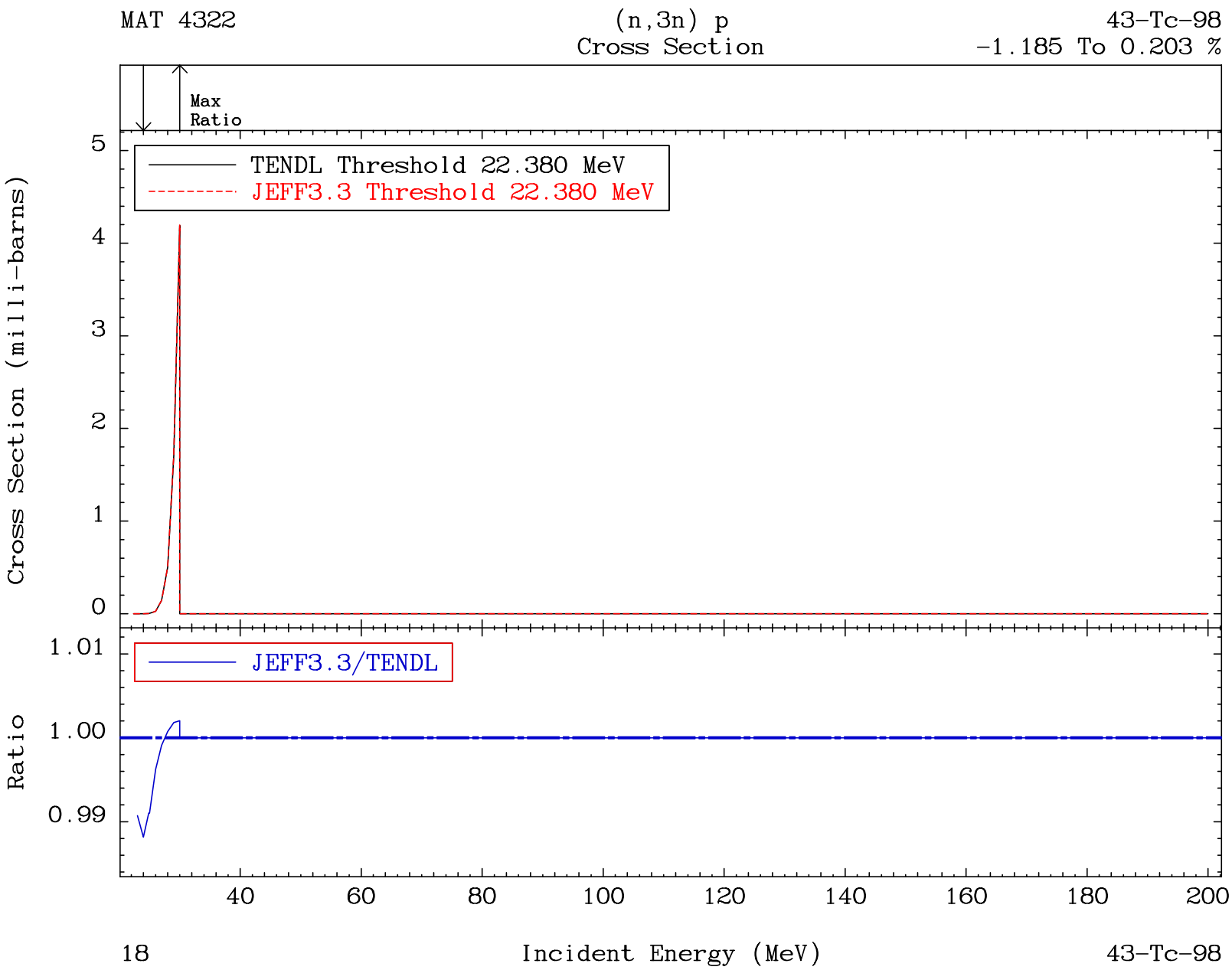

MAT 4322
(n,n') d
Cross Section
43-Tc-98
-0.538 To 0.051 %
Min Ratio
Max Ratio
TENDL Threshold 10.884 MeV
JEFF3.3 Threshold 10.884 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
43-Tc-98

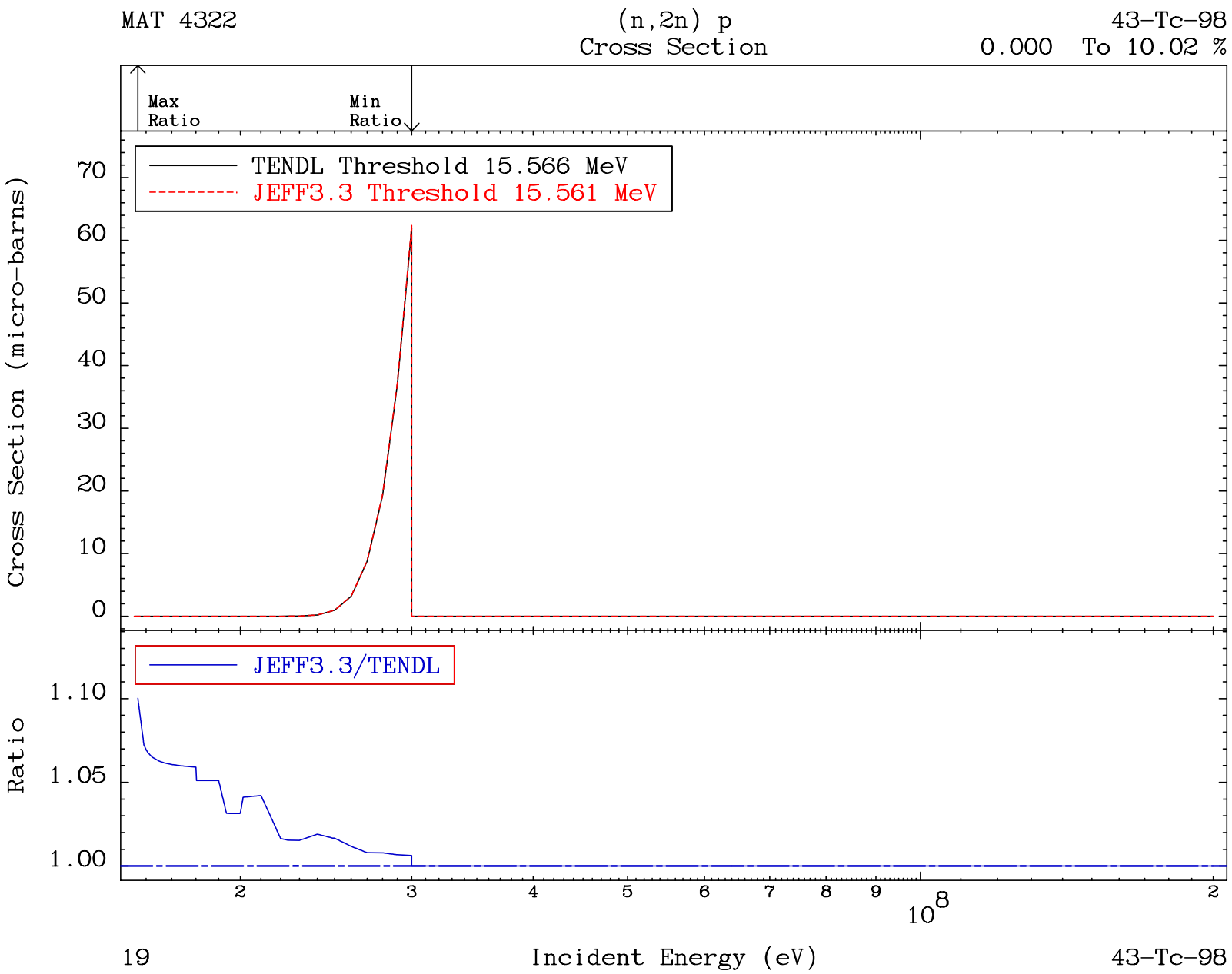

MAT 4322
(n,n') t
Cross Section
43-Tc-98
-0.276 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.811 MeV
JEFF3.3 Threshold 13.811 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
43-Tc-98

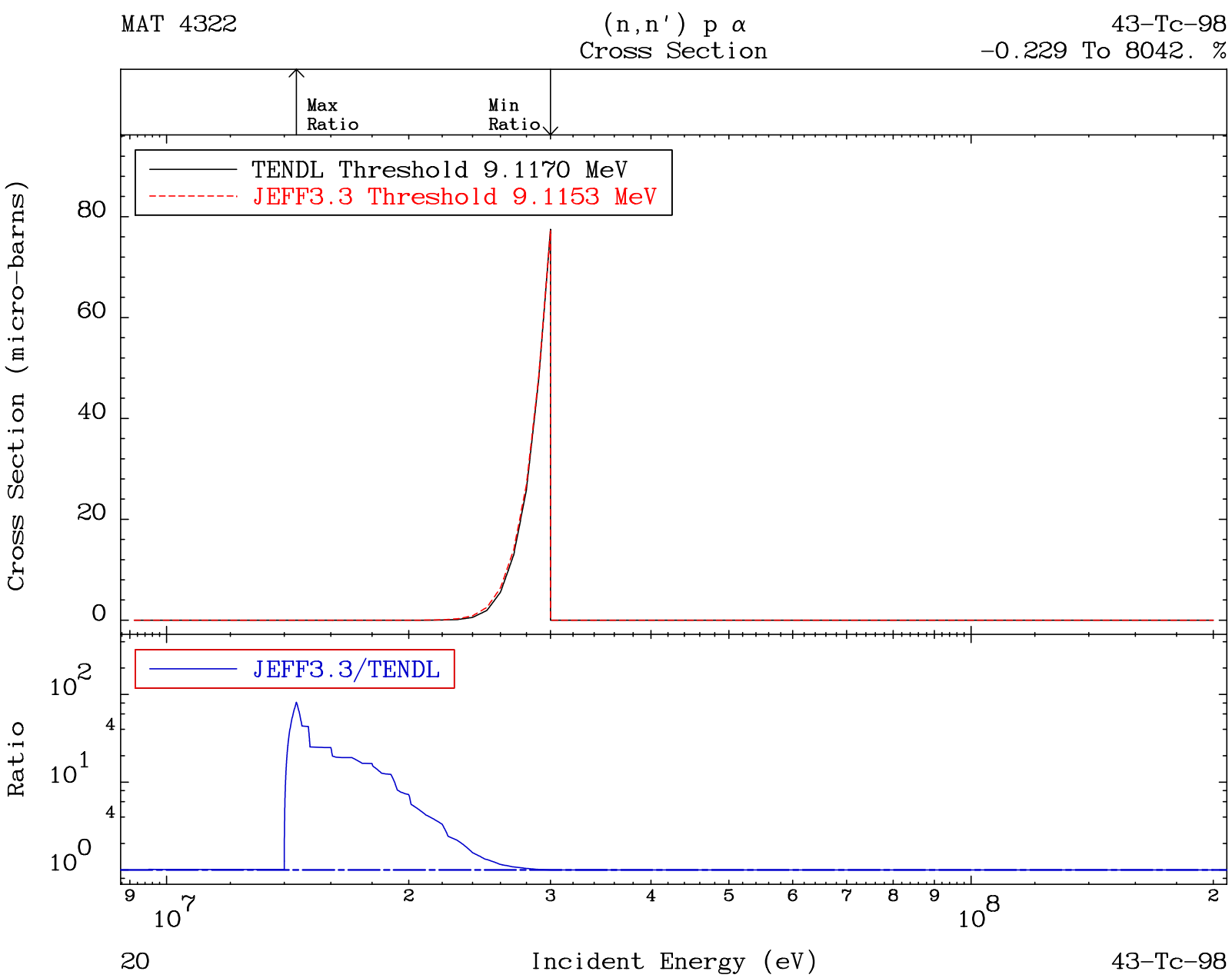

MAT 4322
(n,n') He-3
Cross Section
43-Tc-98
-0.399 To 0.756 %
Max Ratio
Min Ratio
TENDL Threshold 14.727 MeV
JEFF3.3 Threshold 14.727 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.010
1.000
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
43-Tc-98

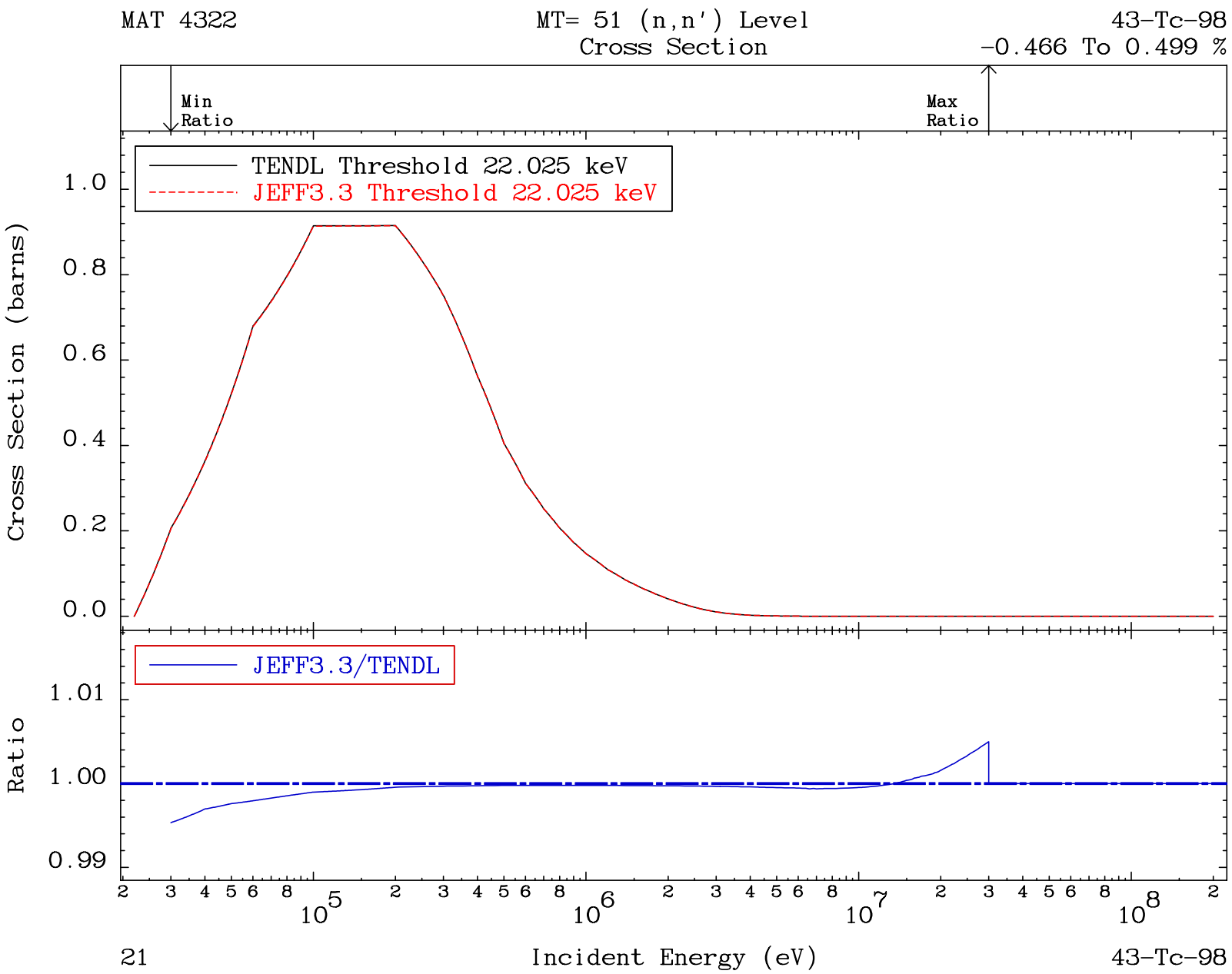

MAT 4322
(n,4n)
Cross Section
43-Tc-98
-0.408 To 0.352 %
Max
Ratio
TENDL Threshold 24.879 MeV
JEFF3.3 Threshold 24.879 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
43-Tc-98

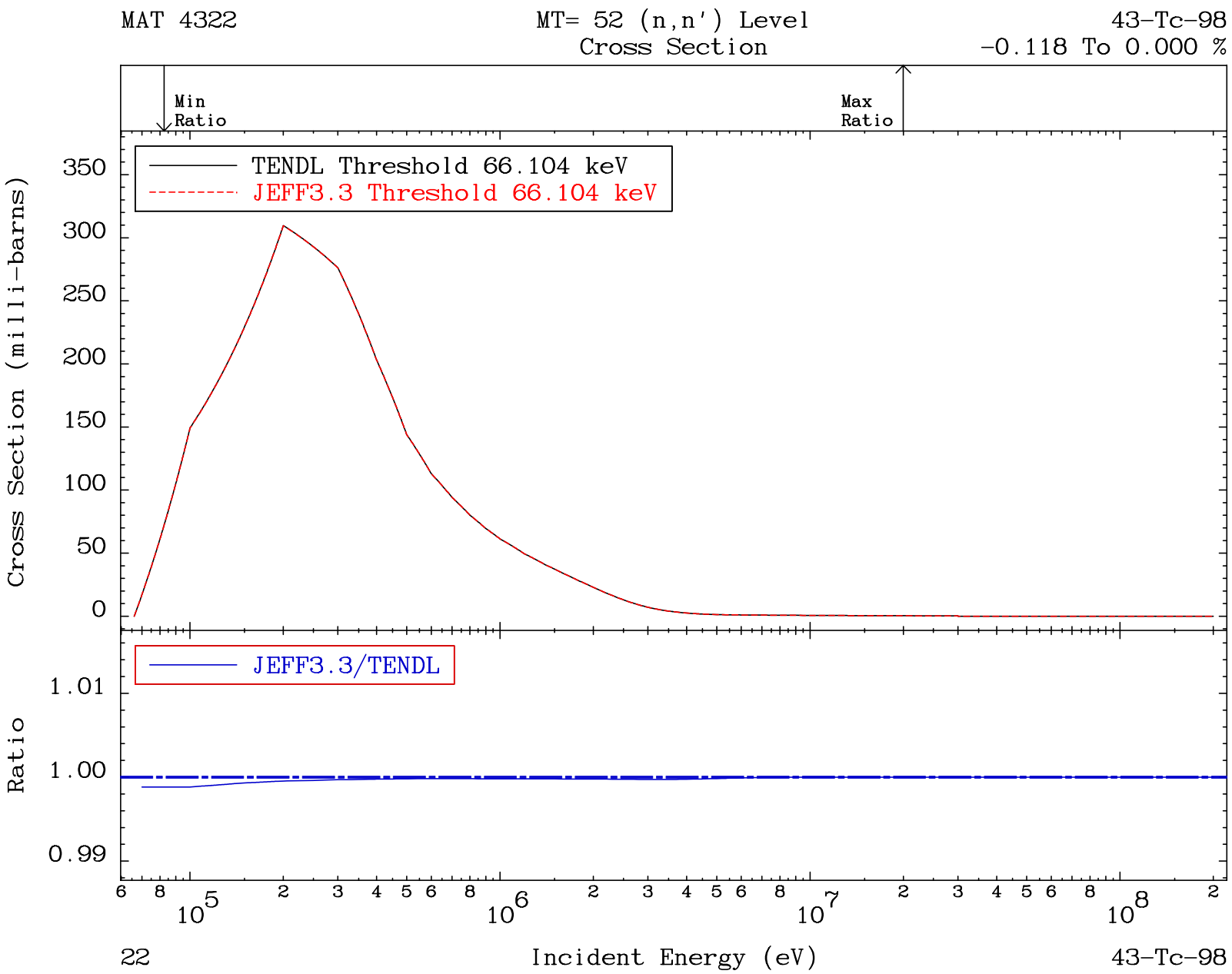

MAT 4322
(n,2n) p
Cross Section
43-Tc-98
-1.123 To 0.220 %
Min Ratio
Max Ratio
TENDL Threshold 13.132 MeV
JEFF3.3 Threshold 13.132 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
43-Tc-98

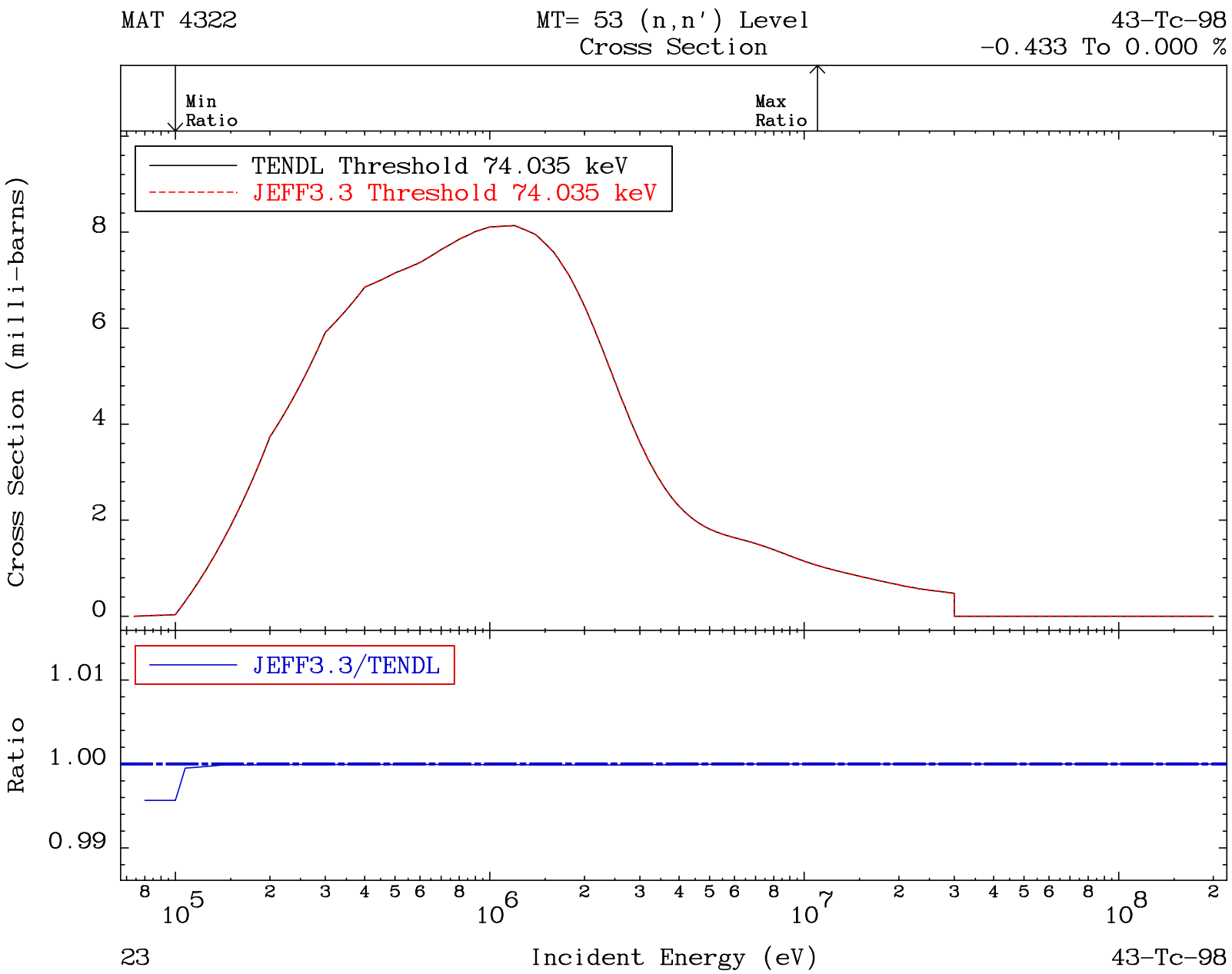

MAT 4322
(n,3n) p
Cross Section
43-Tc-98
-1.185 To 0.203 %
Max
Ratio
TENDL Threshold 22.380 MeV
JEFF3.3 Threshold 22.380 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (MeV)
18
43-Tc-98

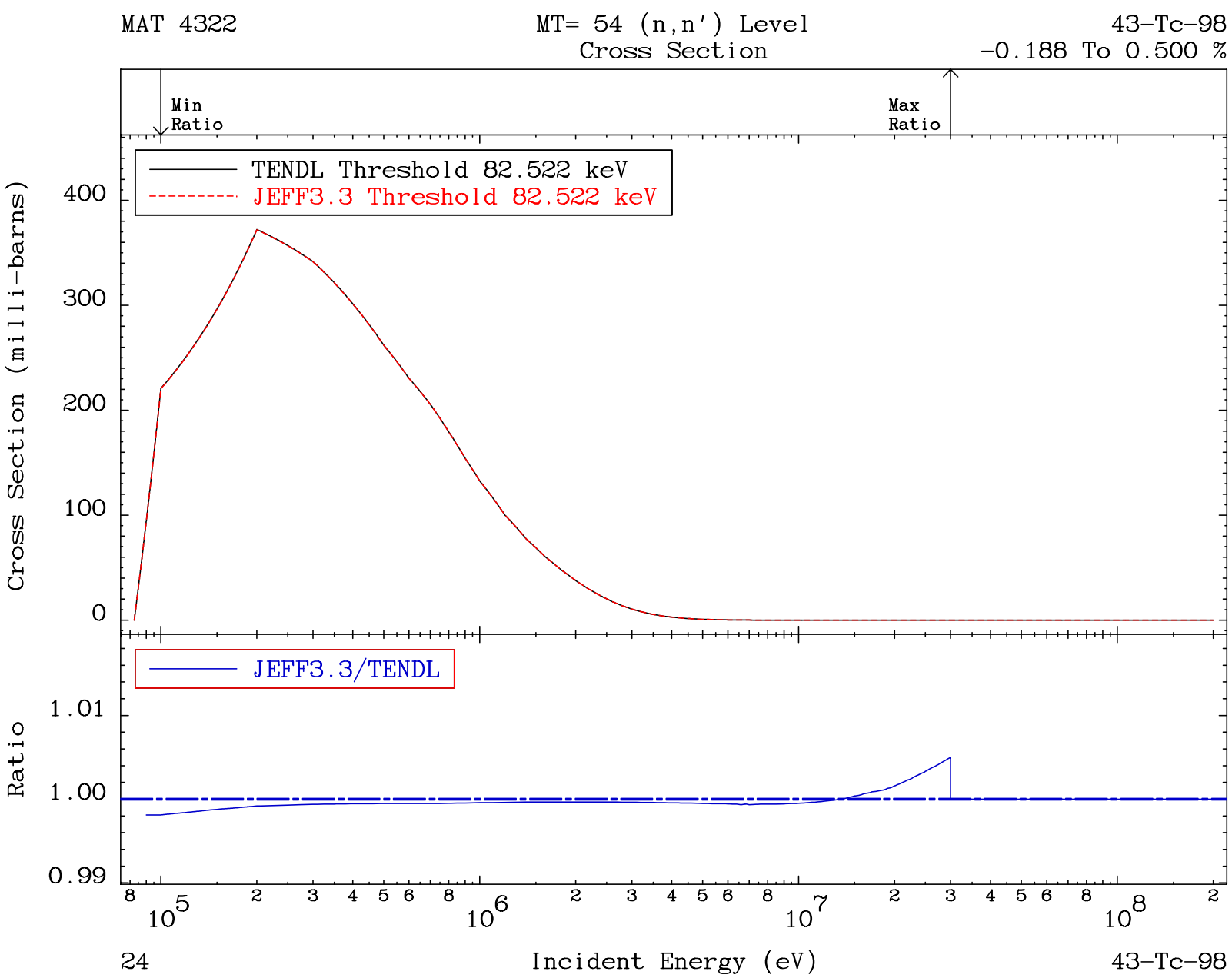

MAT 4322
(n,2n) p
Cross Section
43-Tc-98
0.000 To 10.02 %
Max Ratio
Min Ratio
TENDL Threshold 15.566 MeV
JEFF3.3 Threshold 15.561 MeV
Cross Section (micro-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
43-Tc-98

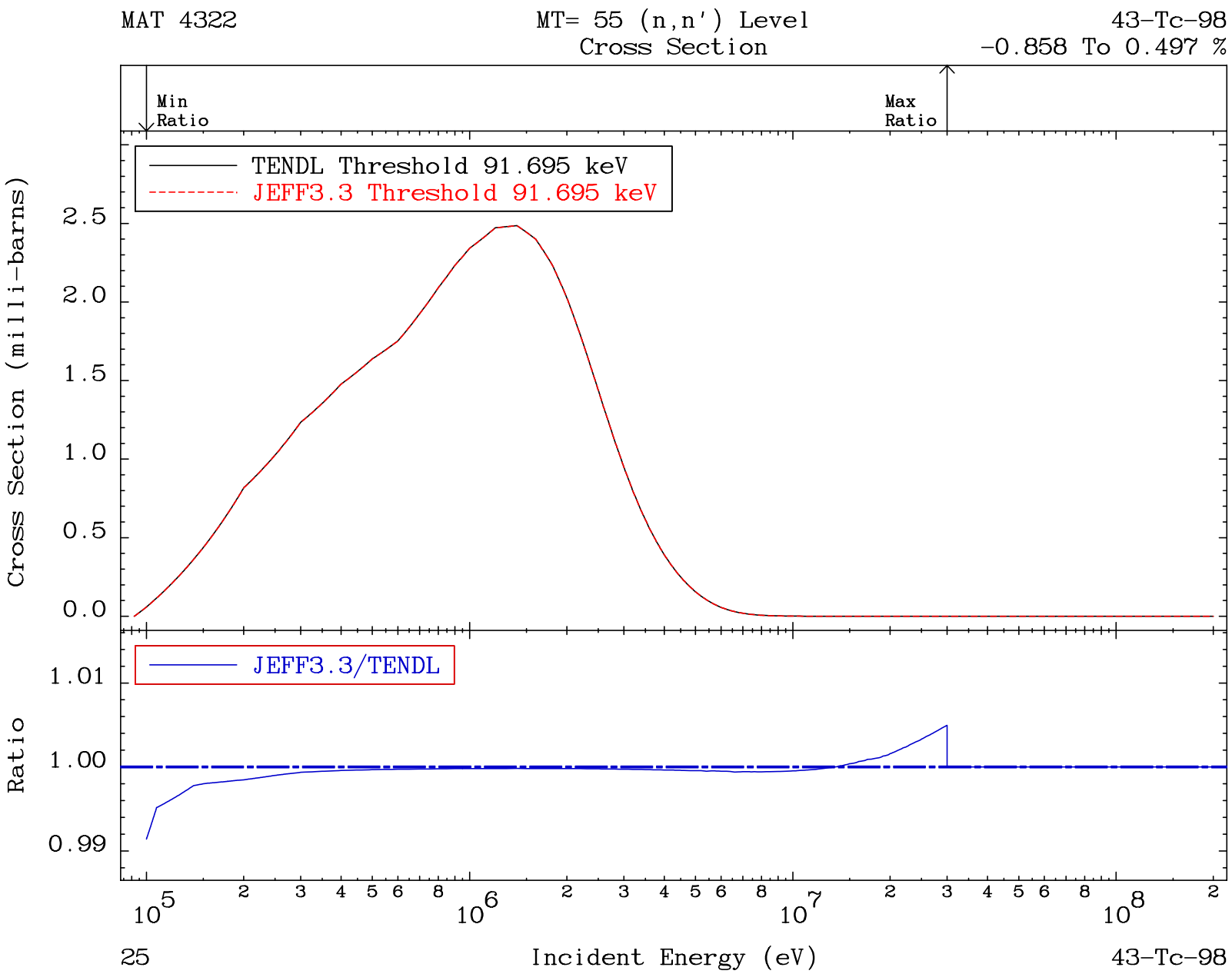

MAT 4322
(n,n') p α
Cross Section
43-Tc-98
-0.229 To 8042. %
Max Ratio
Min Ratio
TENDL Threshold 9.1170 MeV
JEFF3.3 Threshold 9.1153 MeV
Cross Section (micro-barns)
0
20
40
60
80
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
10^7
10^8
Incident Energy (eV)
20
43-Tc-98

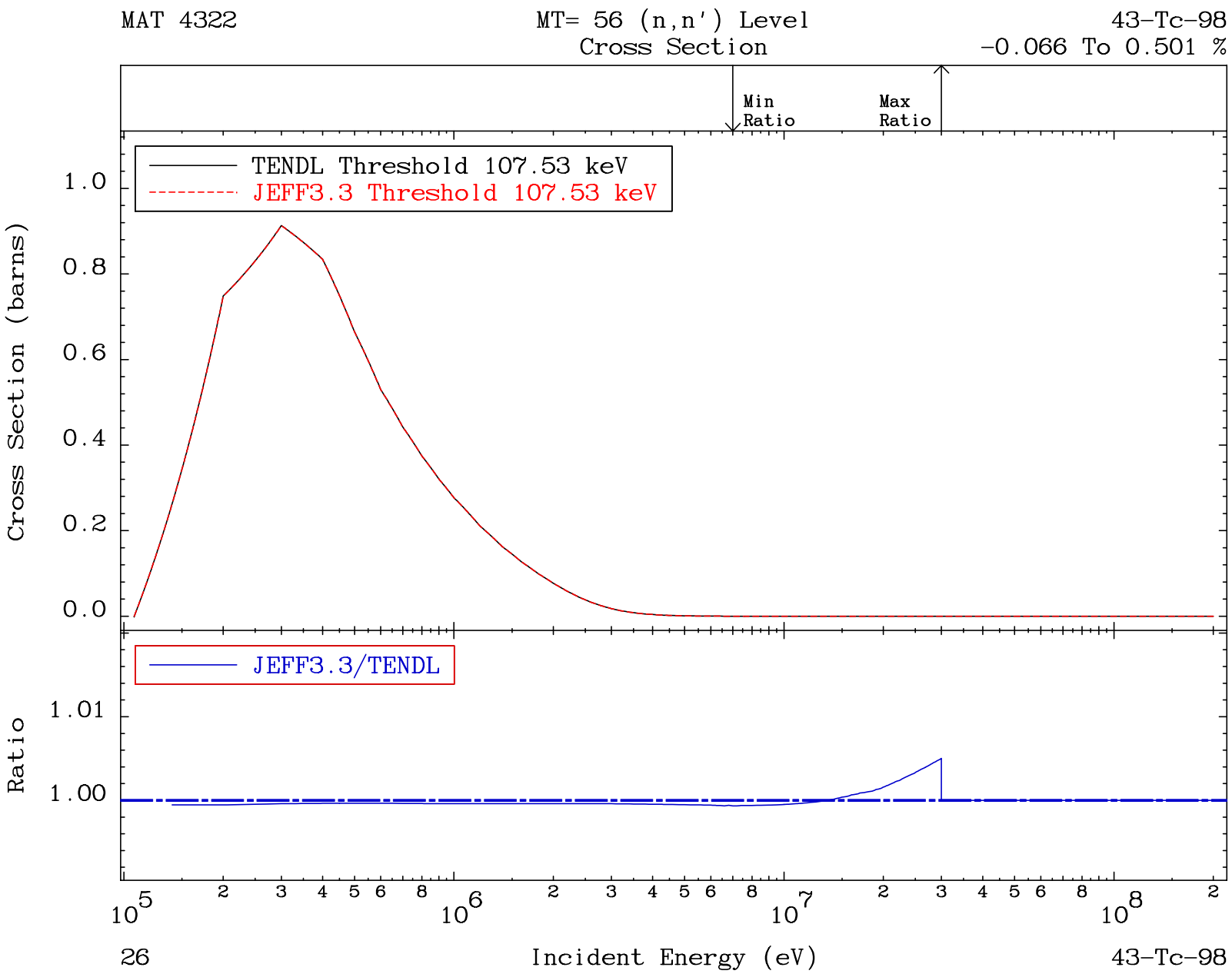

MAT 4322
MT= 51 (n,n') Level
Cross Section
43-Tc-98
-0.466 To 0.499 %
Min
Ratio
Max
Ratio
TENDL Threshold 22.025 keV
JEFF3.3 Threshold 22.025 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
43-Tc-98

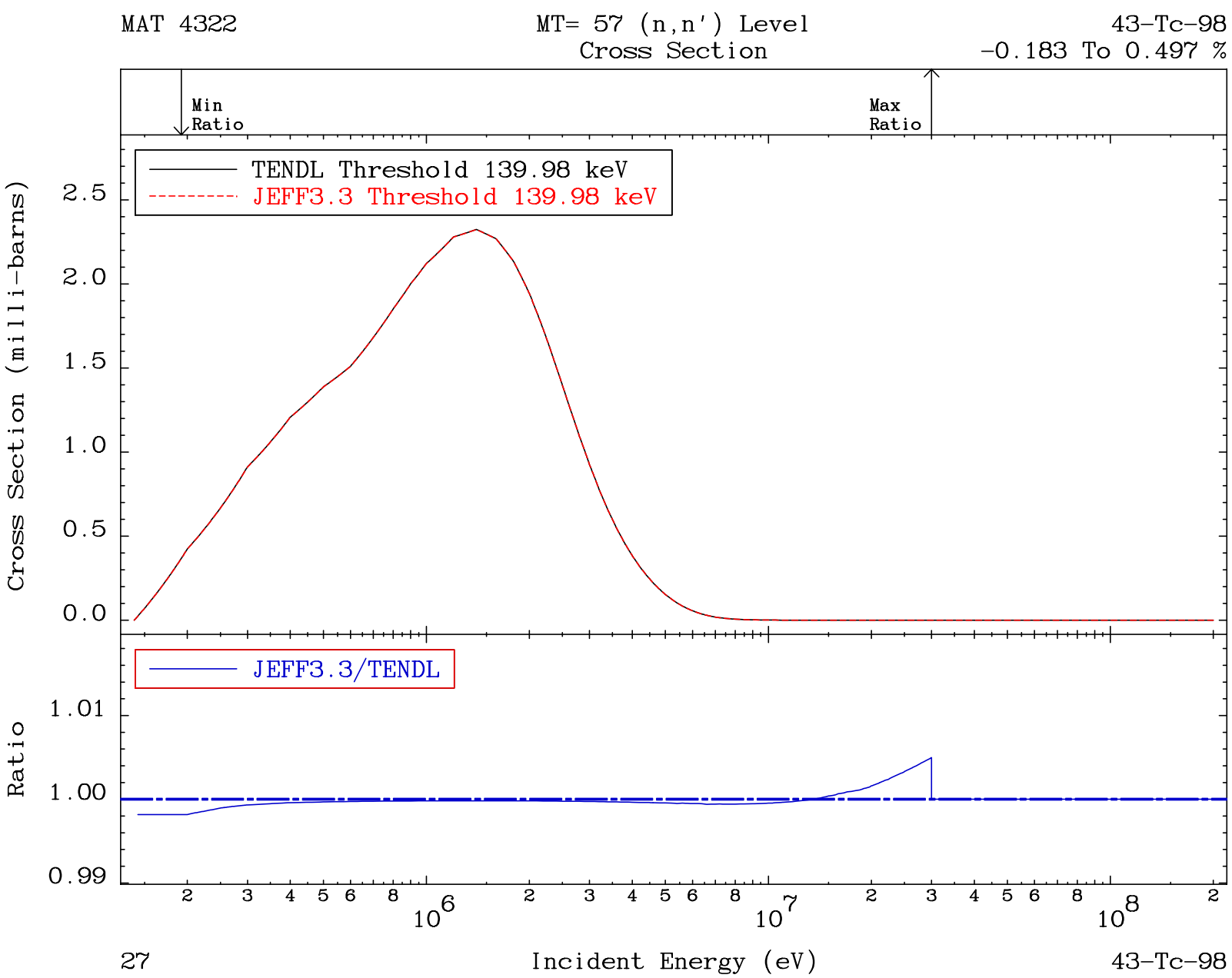

MAT 4322
MT= 52 (n,n') Level
Cross Section
43-Tc-98
-0.118 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 66.104 keV
JEFF3.3 Threshold 66.104 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
43-Tc-98

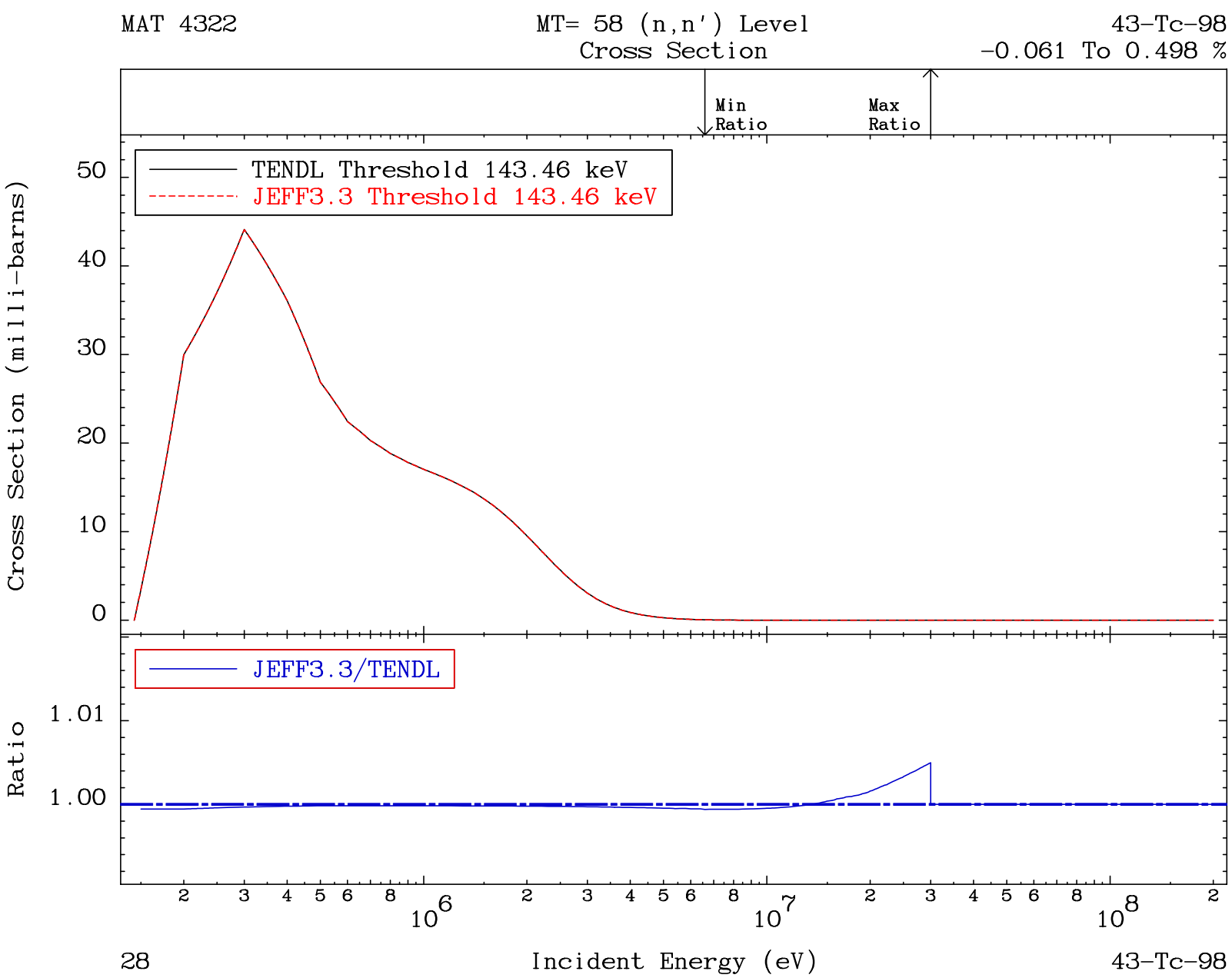

MAT 4322
MT= 53 (n,n') Level
Cross Section
43-Tc-98
-0.433 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 74.035 keV
JEFF3.3 Threshold 74.035 keV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
10^5
10^6
10^7
10^8
Incident Energy (eV)
23
43-Tc-98

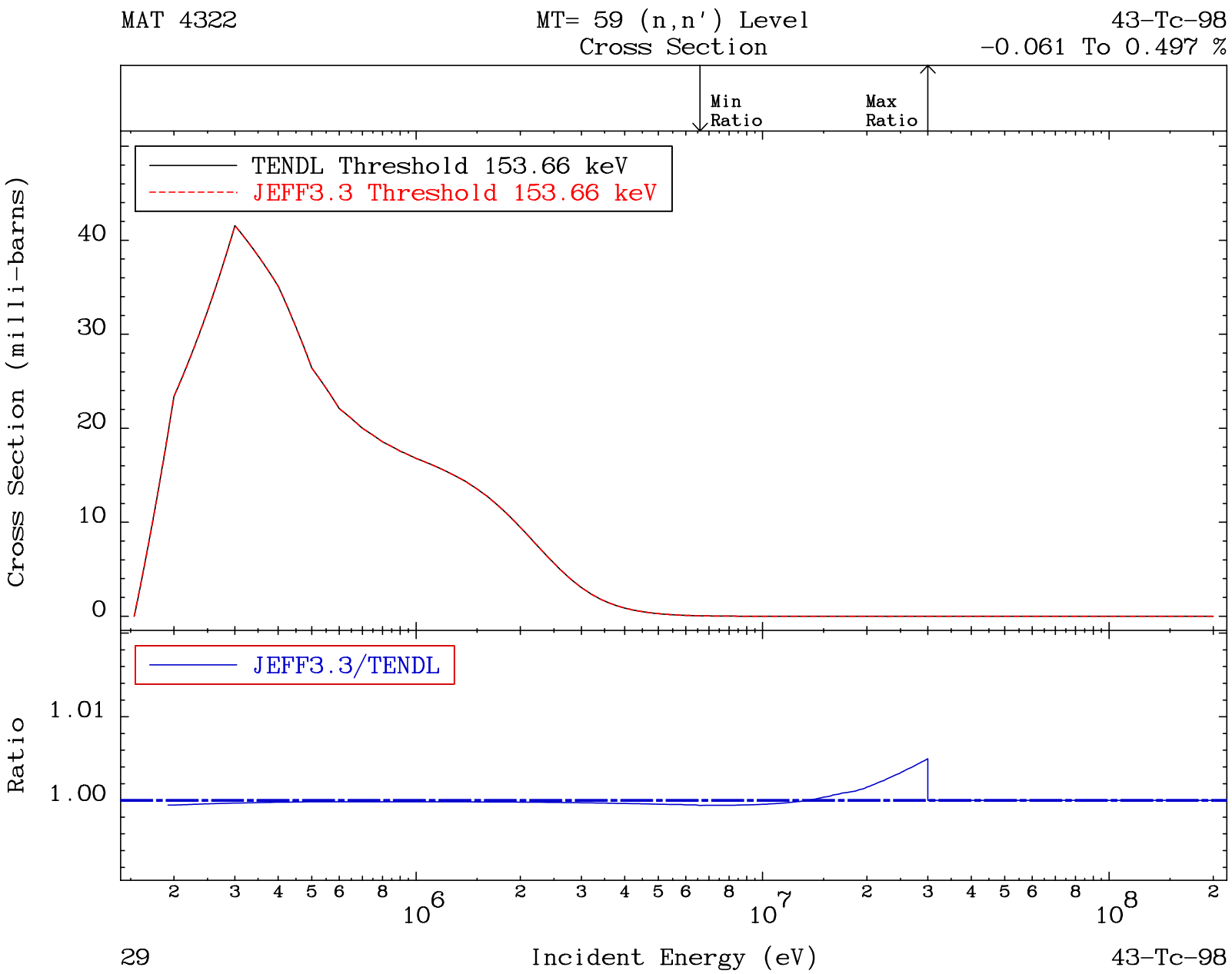

MAT 4322
MT= 54 (n,n') Level
Cross Section
43-Tc-98
-0.188 To 0.500 %
Min
Ratio
Max
Ratio
TENDL Threshold 82.522 keV
JEFF3.3 Threshold 82.522 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8
2
3
4
5
6
8
10^5
10^6
10^7
10^8
24
Incident Energy (eV)
43-Tc-98

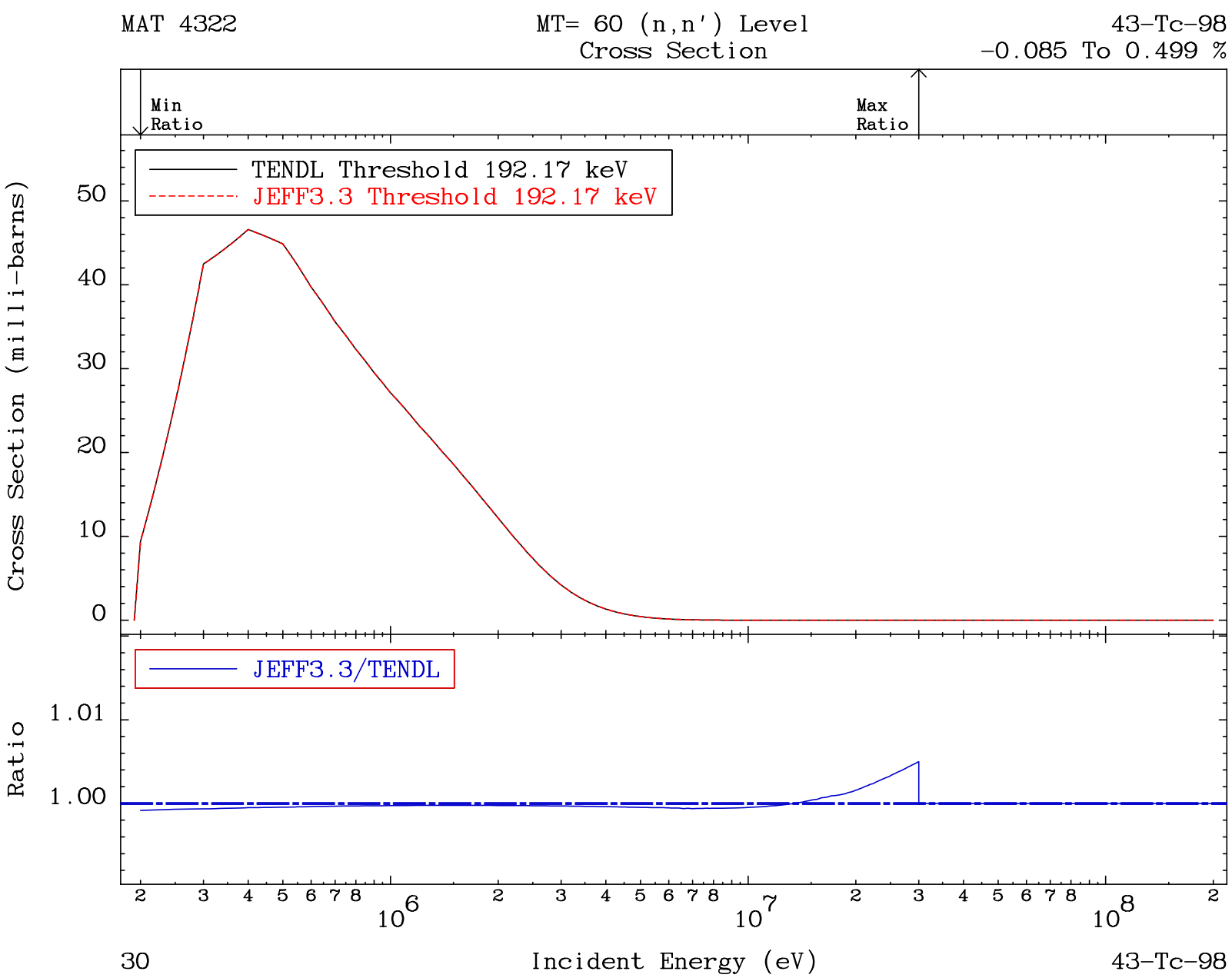

MAT 4322
MT= 55 (n,n') Level
Cross Section
43-Tc-98
-0.858 To 0.497 %
Min
Ratio
Max
Ratio
TENDL Threshold 91.695 keV
JEFF3.3 Threshold 91.695 keV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
25
Incident Energy (eV)
43-Tc-98

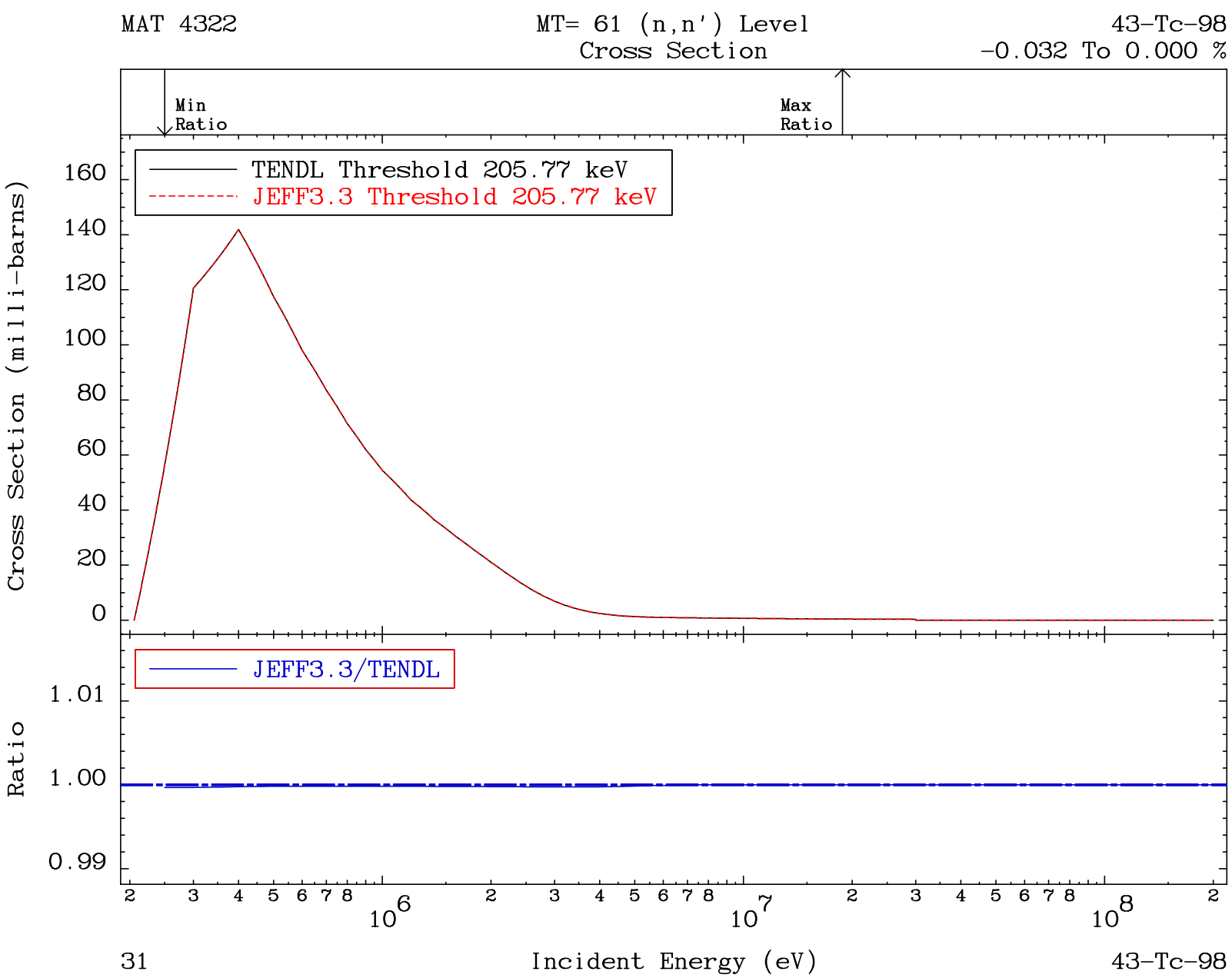

MAT 4322
MT= 56 (n,n') Level
Cross Section
43-Tc-98
-0.066 To 0.501 %
Min
Ratio
Max
Ratio
TENDL Threshold 107.53 keV
JEFF3.3 Threshold 107.53 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
10^5
10^6
10^7
10^8
Incident Energy (eV)
26
43-Tc-98

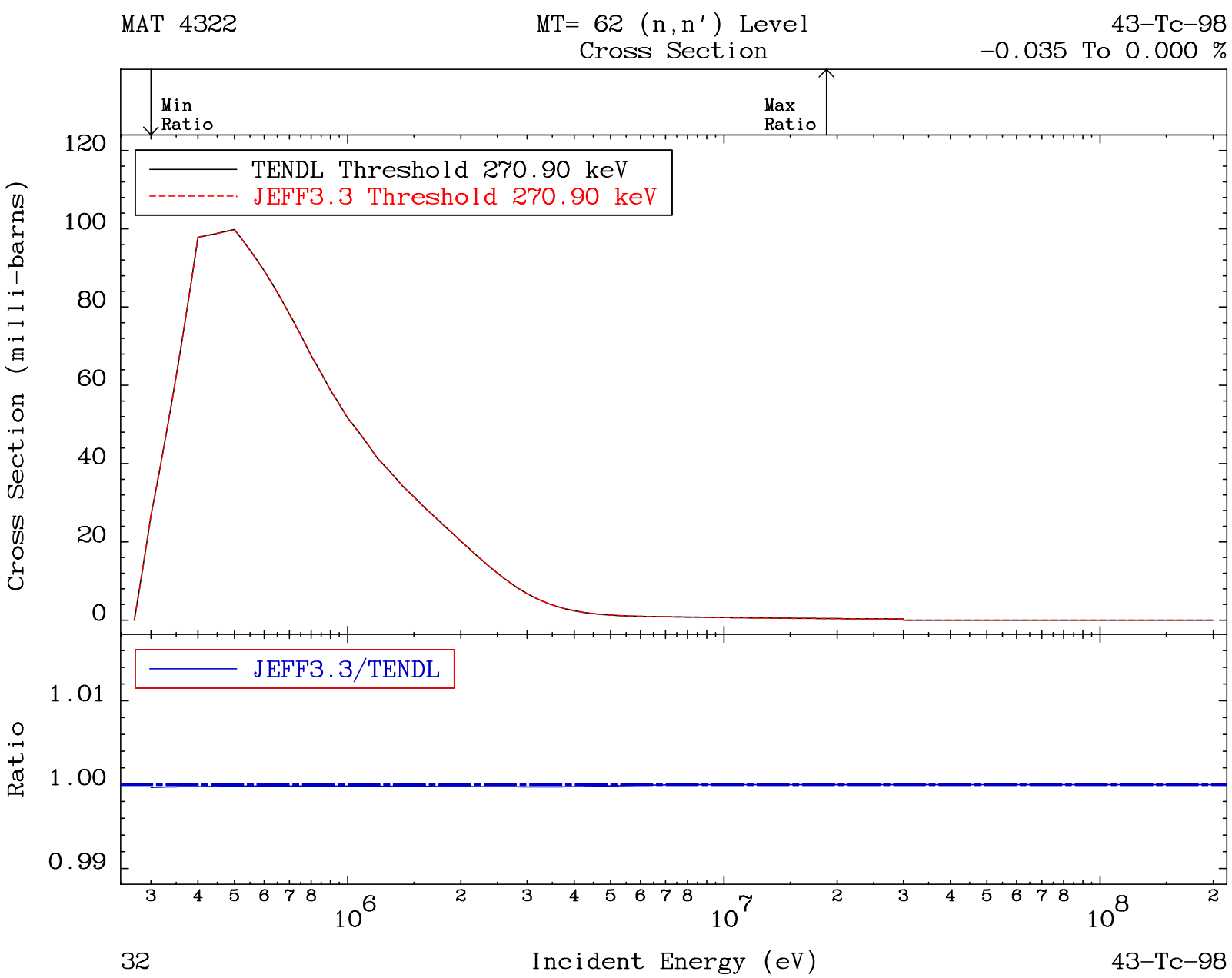

MAT 4322
MT= 57 (n,n') Level
Cross Section
43-Tc-98
-0.183 To 0.497 %
Min
Ratio
Max
Ratio
TENDL Threshold 139.98 keV
JEFF3.3 Threshold 139.98 keV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
43-Tc-98

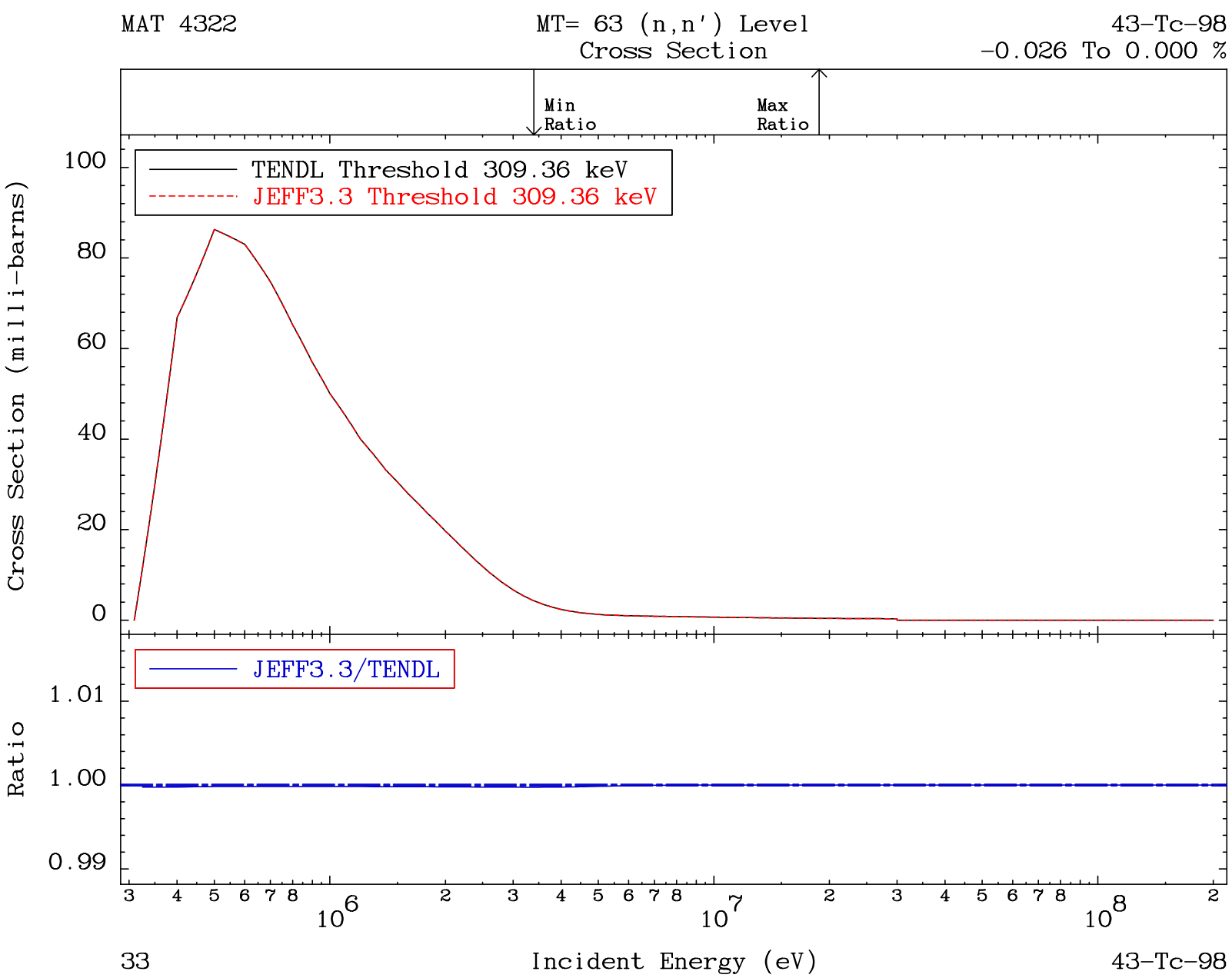

MAT 4322
MT= 58 (n,n') Level
Cross Section
43-Tc-98
-0.061 To 0.498 %
Min Ratio
Max Ratio
TENDL Threshold 143.46 keV
JEFF3.3 Threshold 143.46 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
43-Tc-98

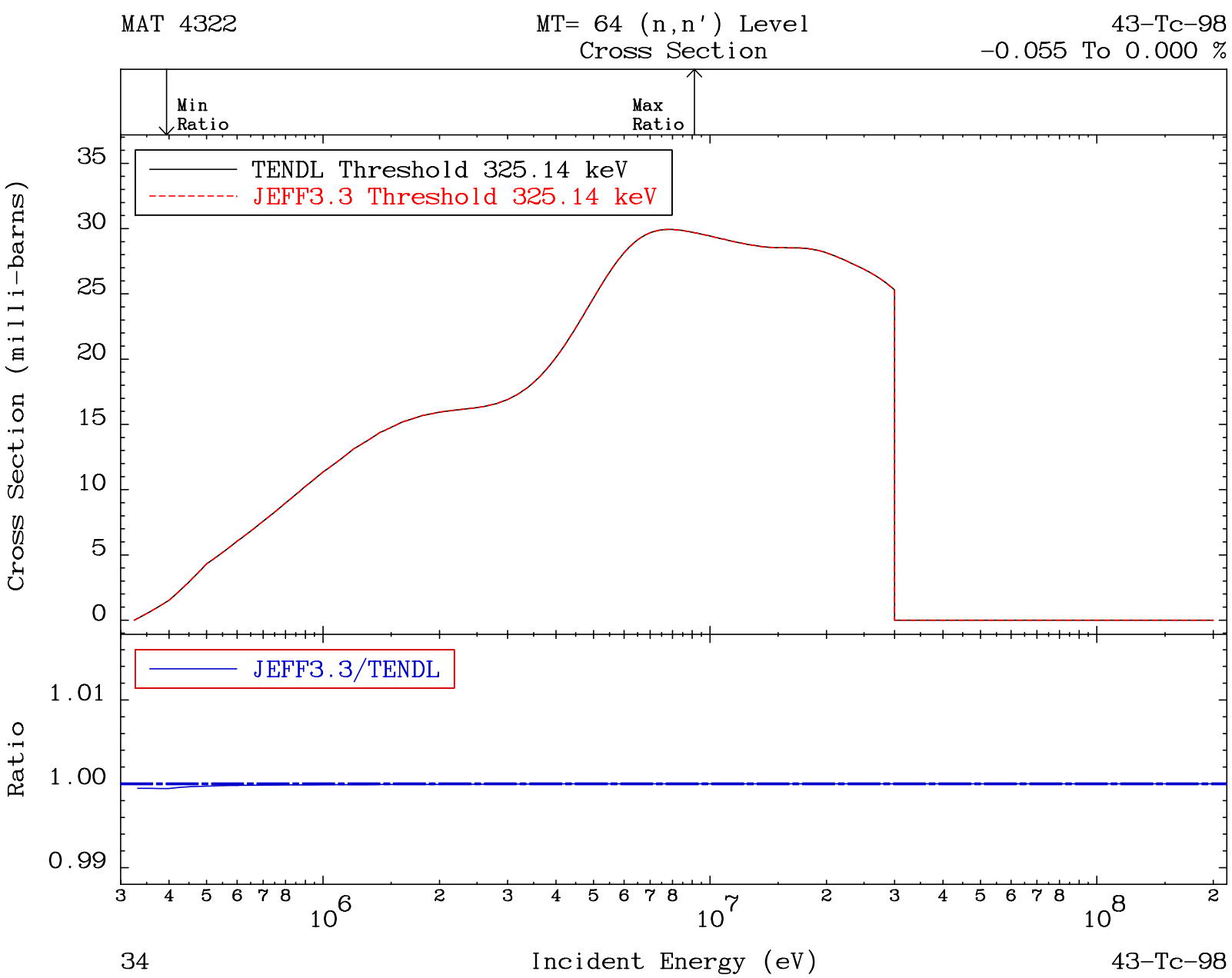

MAT 4322
MT= 59 (n,n') Level
Cross Section
43-Tc-98
-0.061 To 0.497 %
Min
Ratio
Max
Ratio
TENDL Threshold 153.66 keV
JEFF3.3 Threshold 153.66 keV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
29
Incident Energy (eV)
43-Tc-98

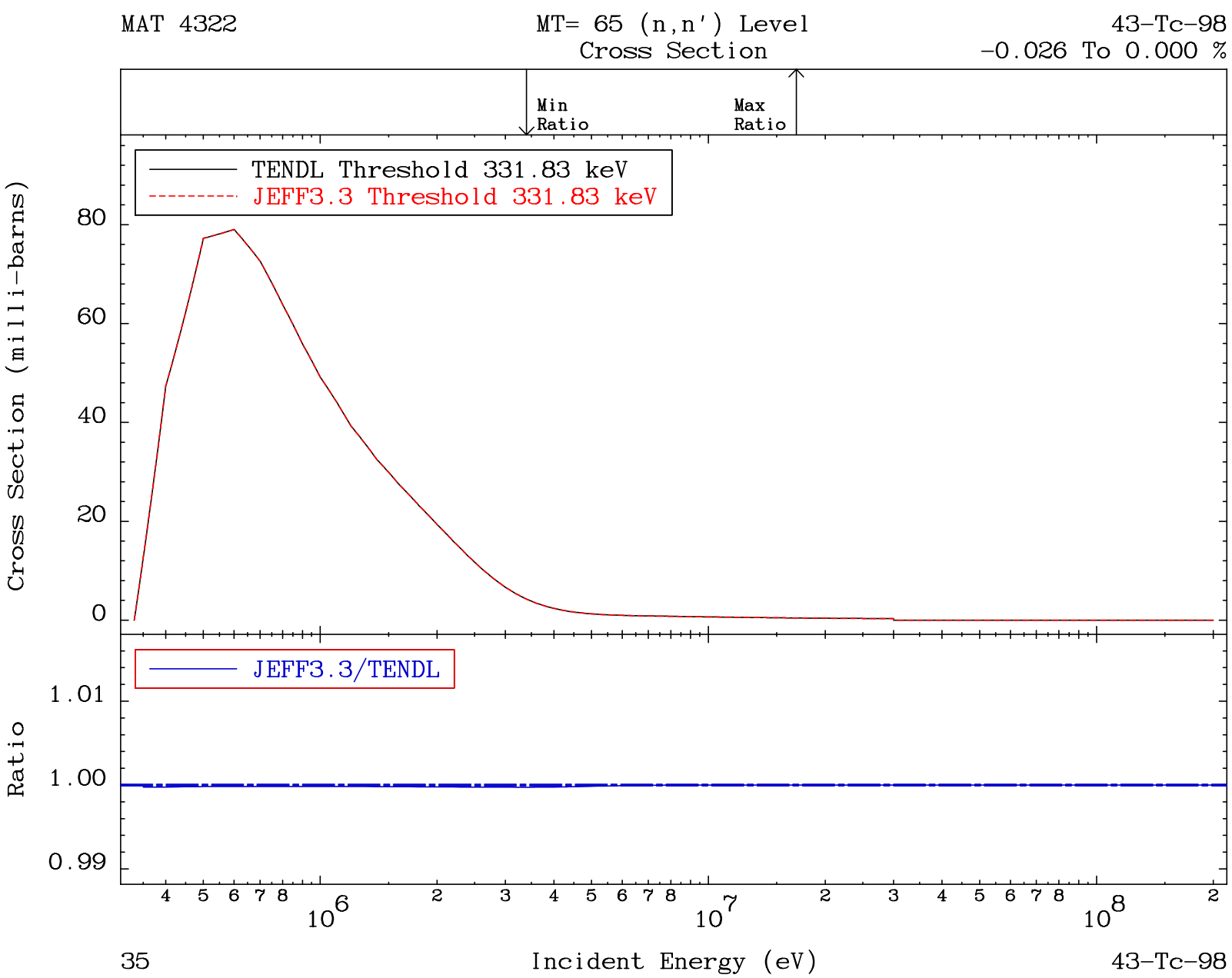

MAT 4322
MT= 60 (n,n') Level
Cross Section
43-Tc-98
-0.085 To 0.499 %
Min
Ratio
Max
Ratio
TENDL Threshold 192.17 keV
JEFF3.3 Threshold 192.17 keV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
43-Tc-98

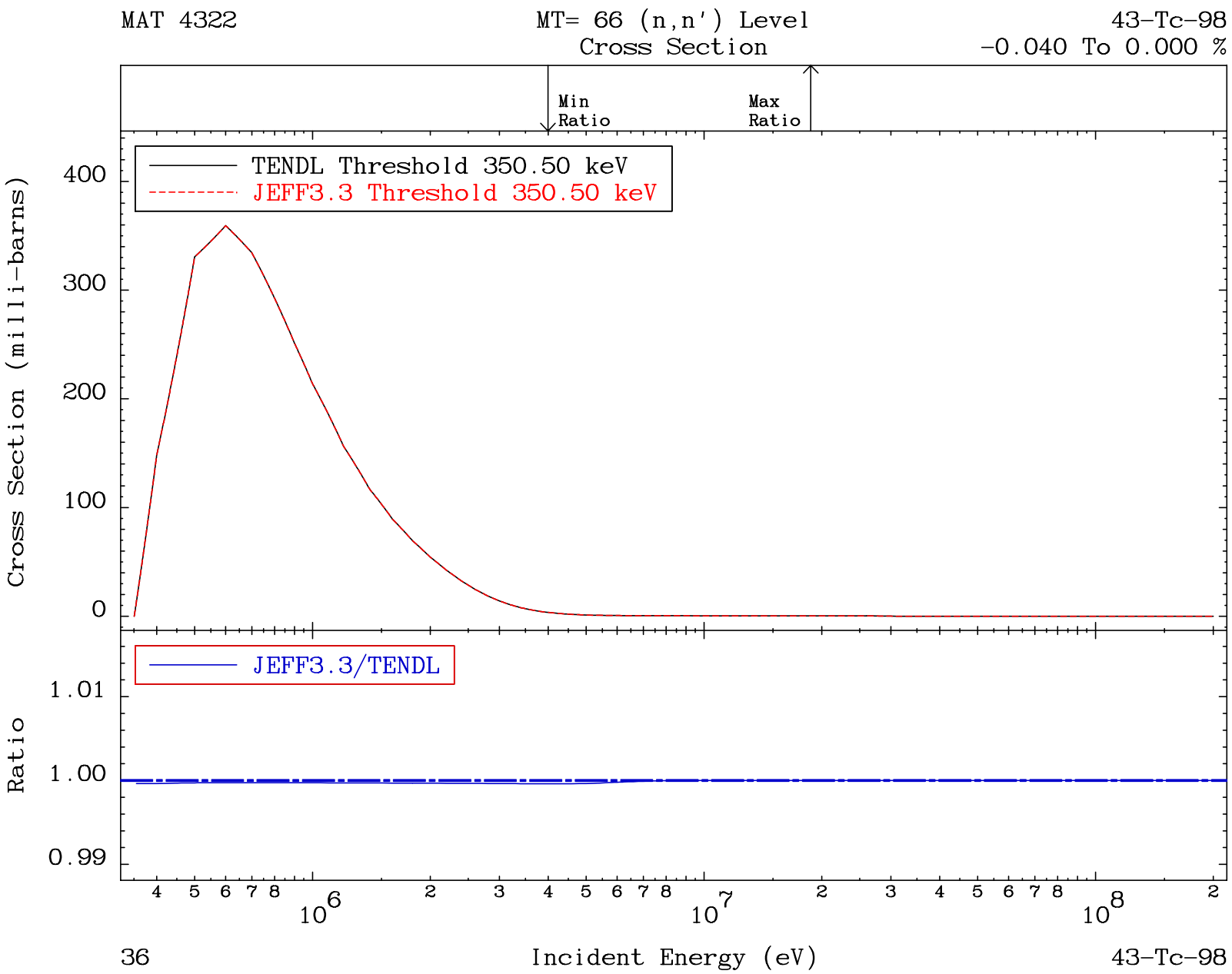

MAT 4322
MT= 61 (n,n') Level
Cross Section
43-Tc-98
-0.032 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 205.77 keV
JEFF3.3 Threshold 205.77 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
43-Tc-98

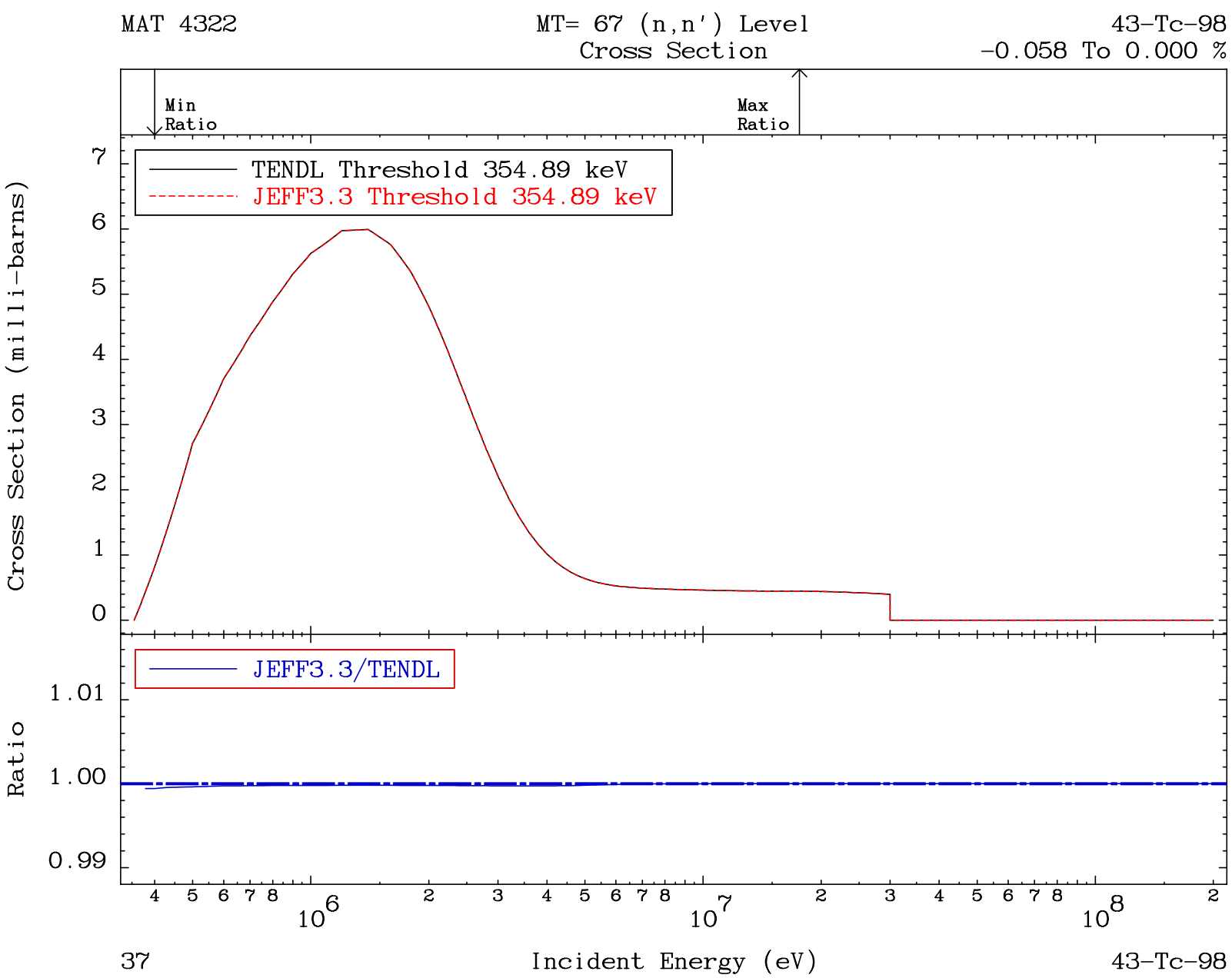

MAT 4322
MT= 62 (n,n') Level
Cross Section
43-Tc-98
-0.035 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 270.90 keV
JEFF3.3 Threshold 270.90 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
43-Tc-98

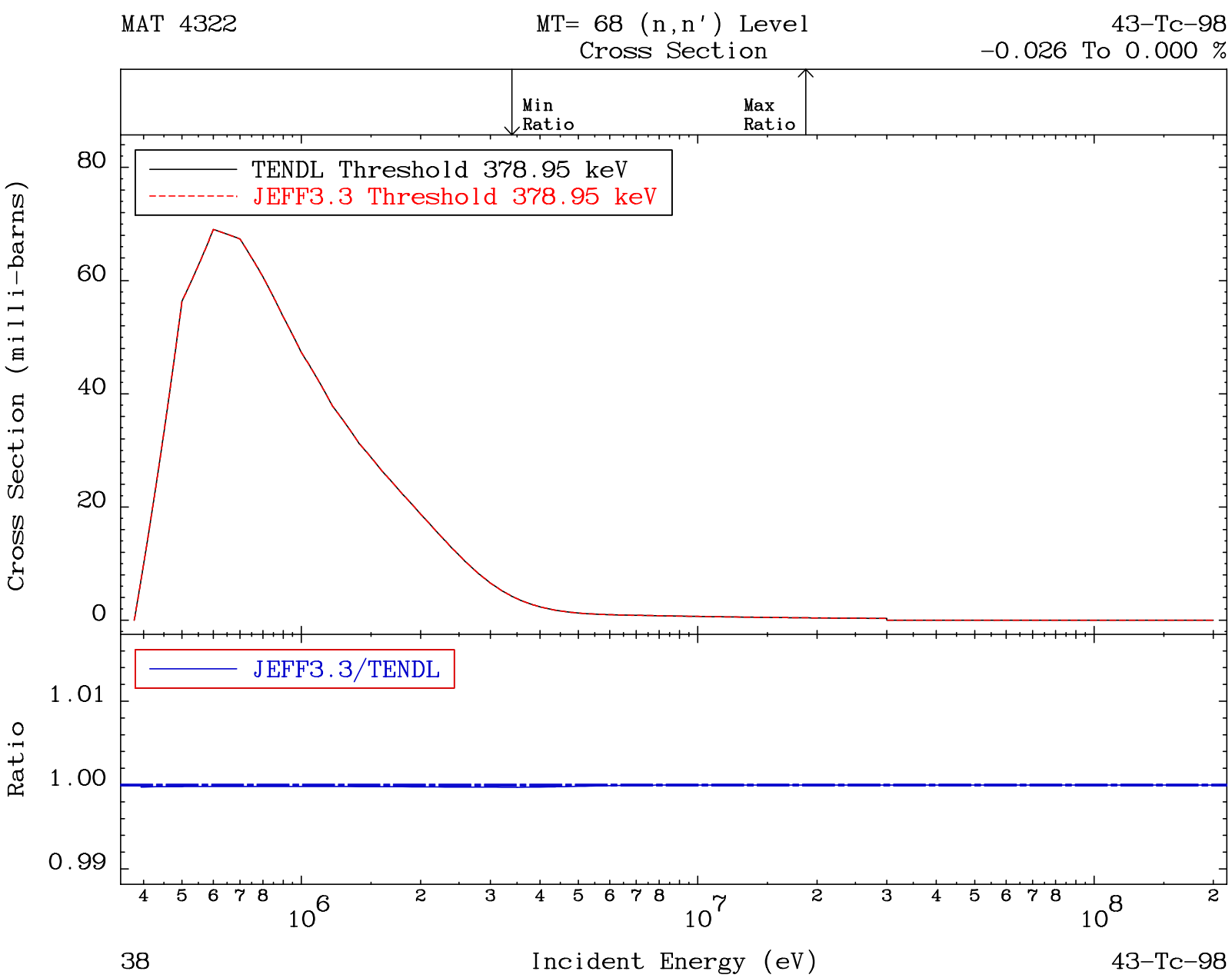

MAT 4322
MT= 63 (n,n') Level
Cross Section
43-Tc-98
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 309.36 keV
JEFF3.3 Threshold 309.36 keV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
43-Tc-98

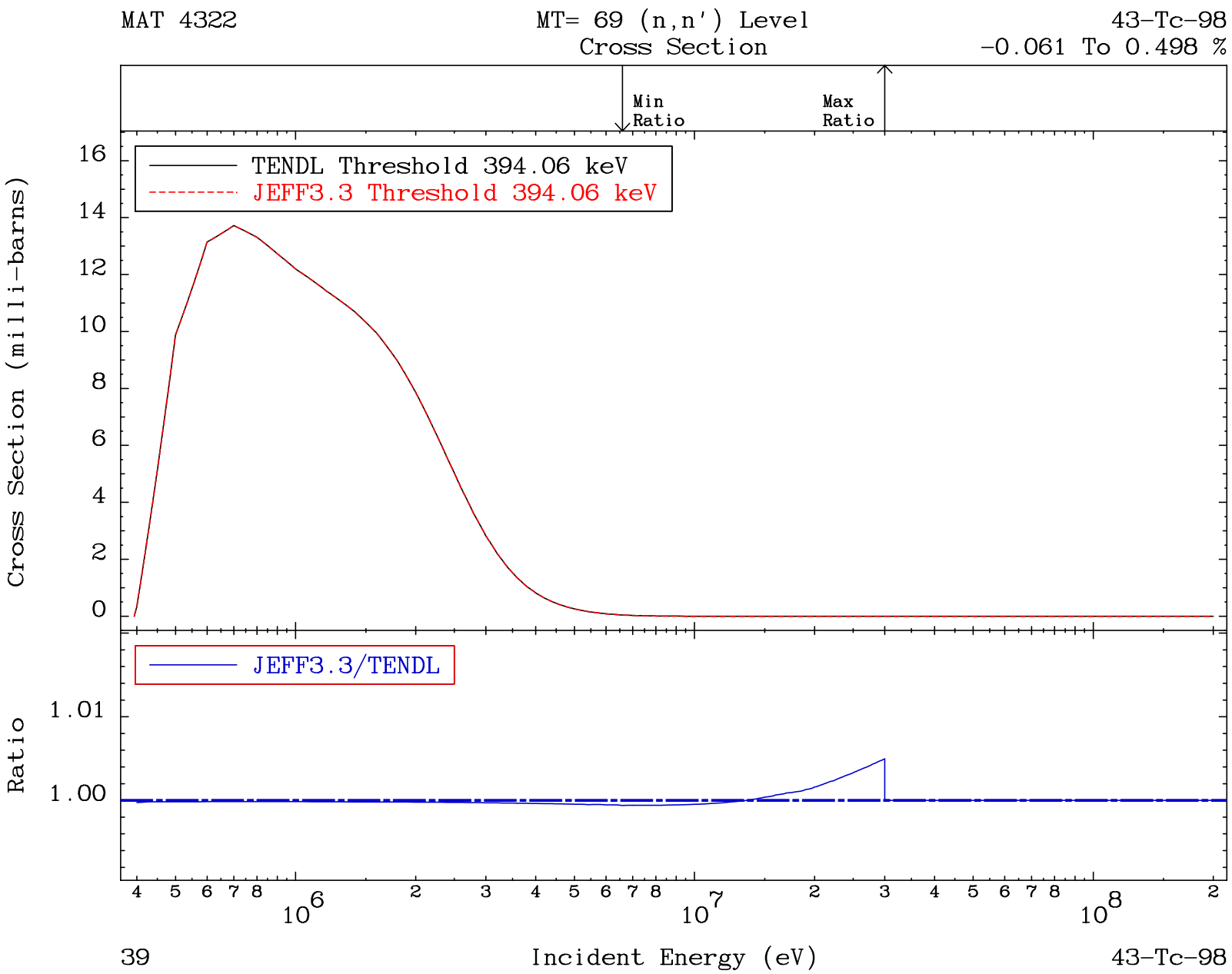

MAT 4322
MT= 64 (n,n') Level
Cross Section
43-Tc-98
-0.055 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 325.14 keV
JEFF3.3 Threshold 325.14 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
43-Tc-98

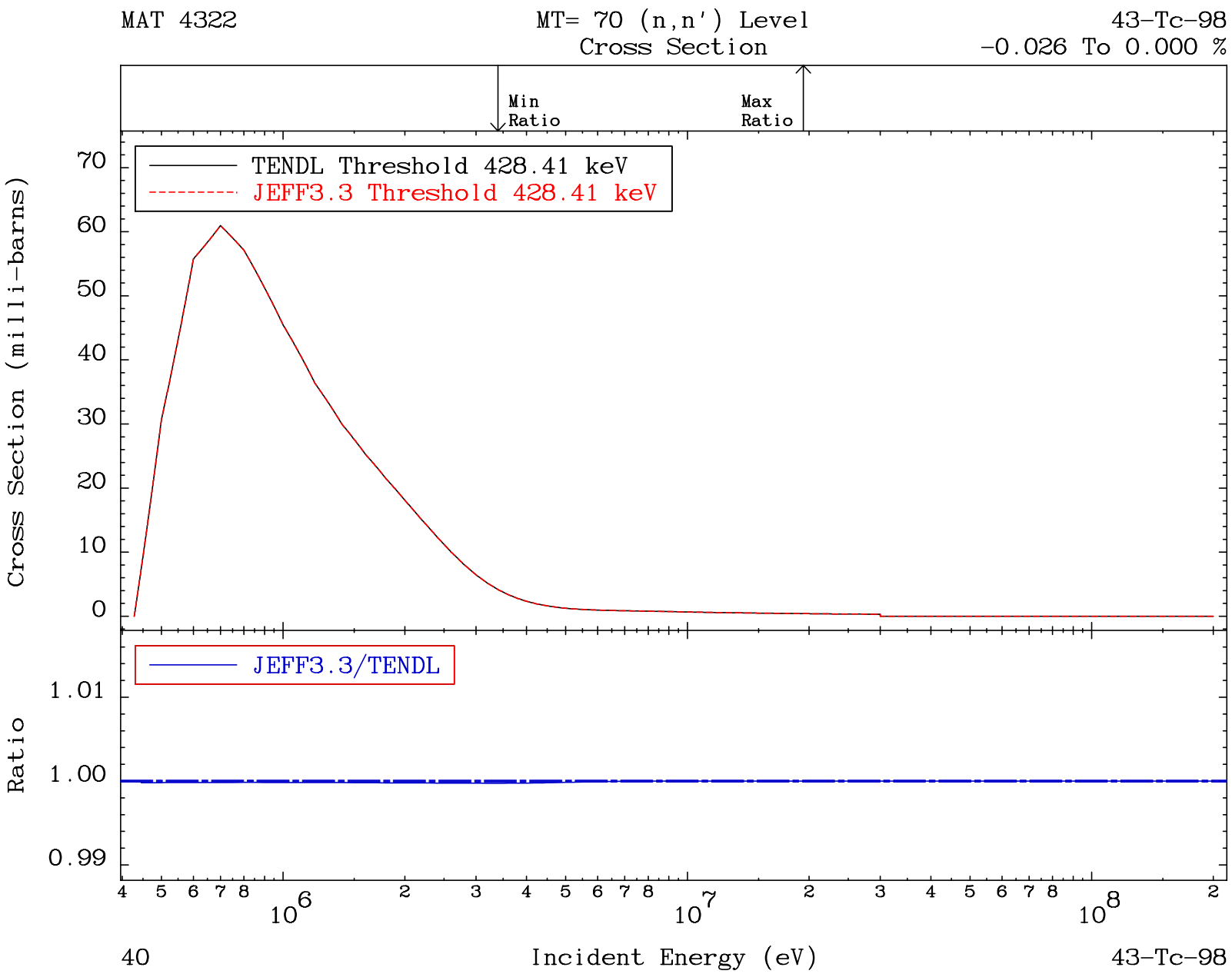

MAT 4322
MT= 65 (n,n') Level
Cross Section
43-Tc-98
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 331.83 keV
JEFF3.3 Threshold 331.83 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
43-Tc-98

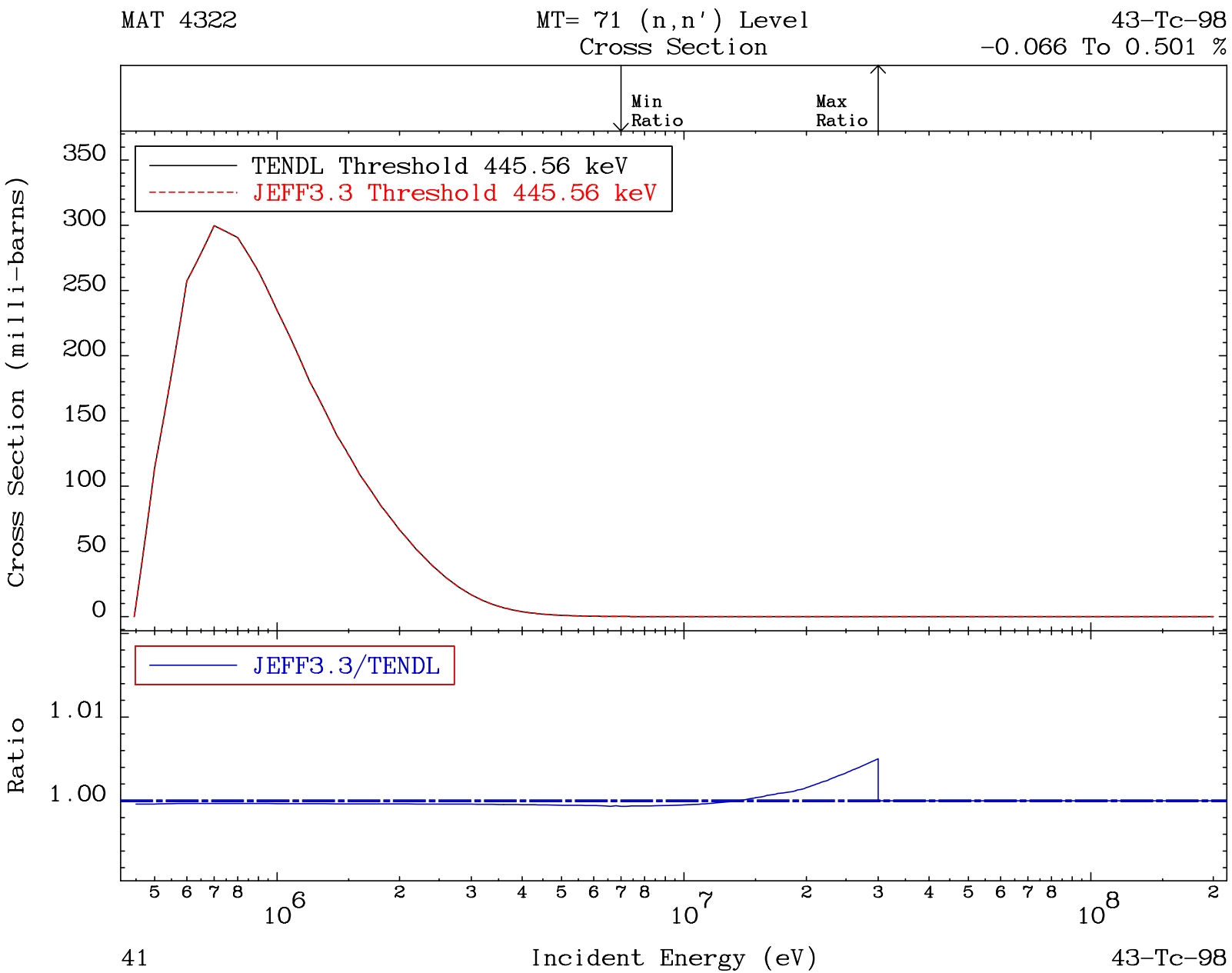

MAT 4322
MT= 66 (n,n') Level
Cross Section
43-Tc-98
-0.040 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 350.50 keV
JEFF3.3 Threshold 350.50 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
43-Tc-98

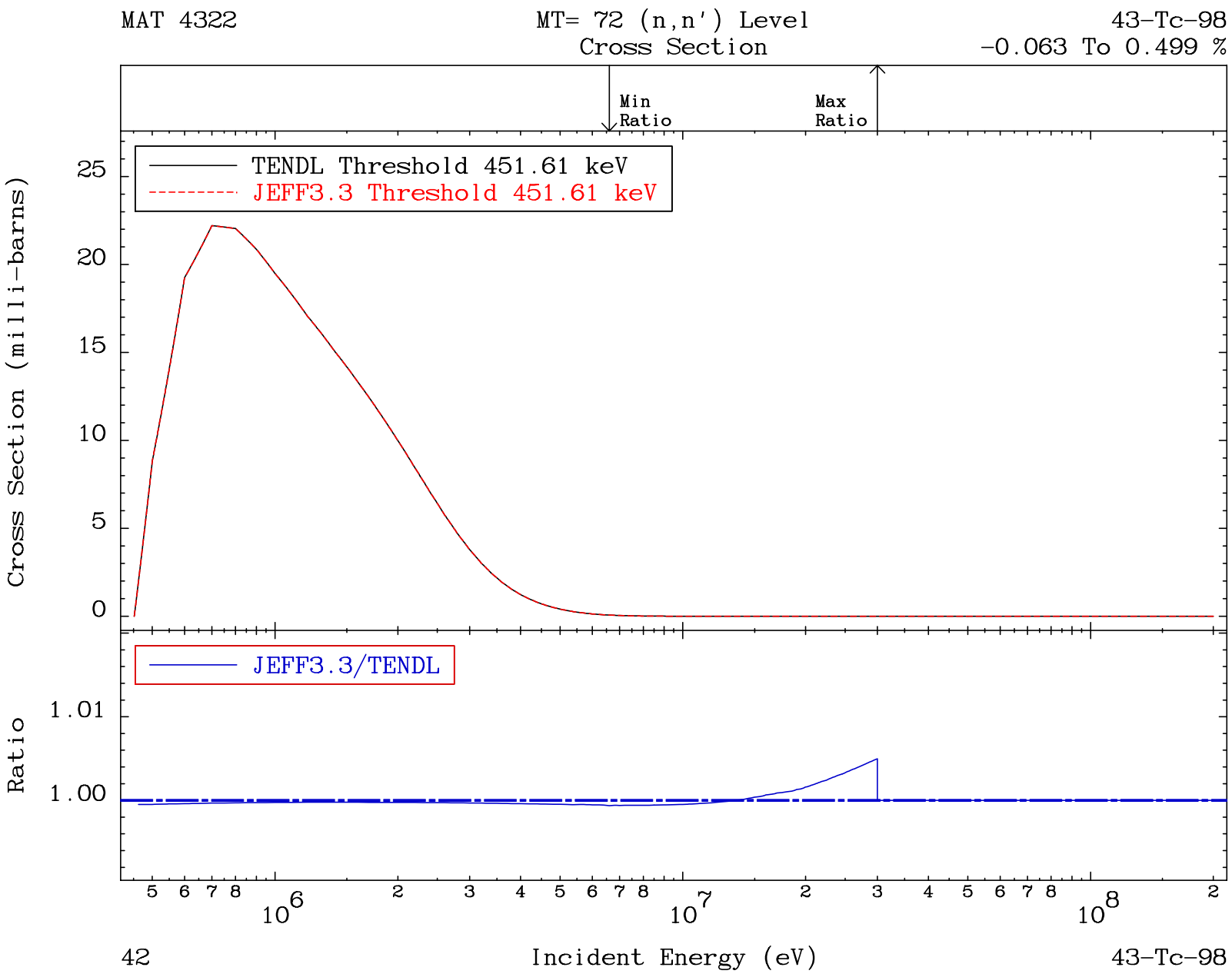

MAT 4322
MT= 67 (n,n') Level
Cross Section
43-Tc-98
-0.058 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 354.89 keV
JEFF3.3 Threshold 354.89 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
37
43-Tc-98

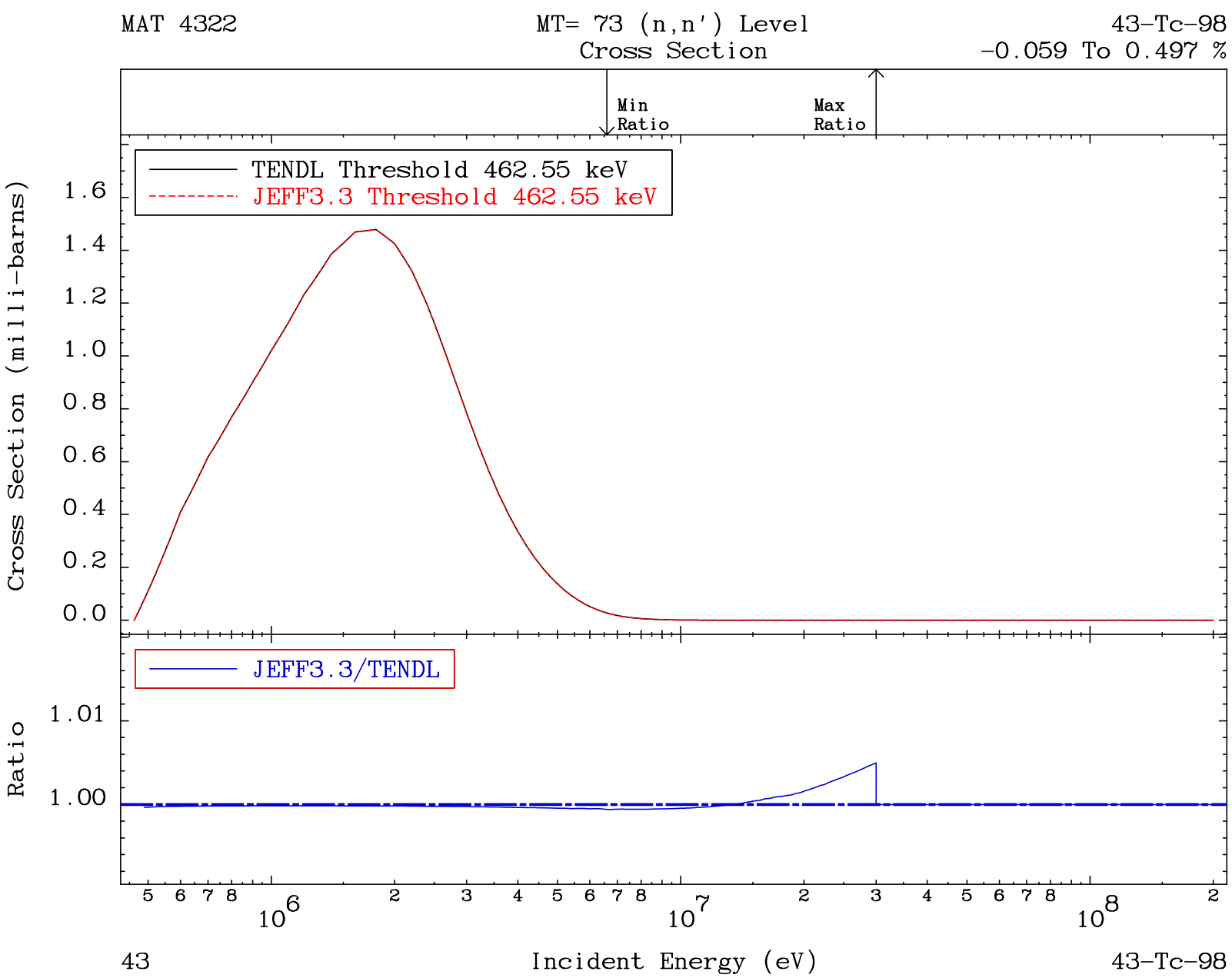

MAT 4322
MT= 68 (n,n') Level
Cross Section
43-Tc-98
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 378.95 keV
JEFF3.3 Threshold 378.95 keV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
43-Tc-98

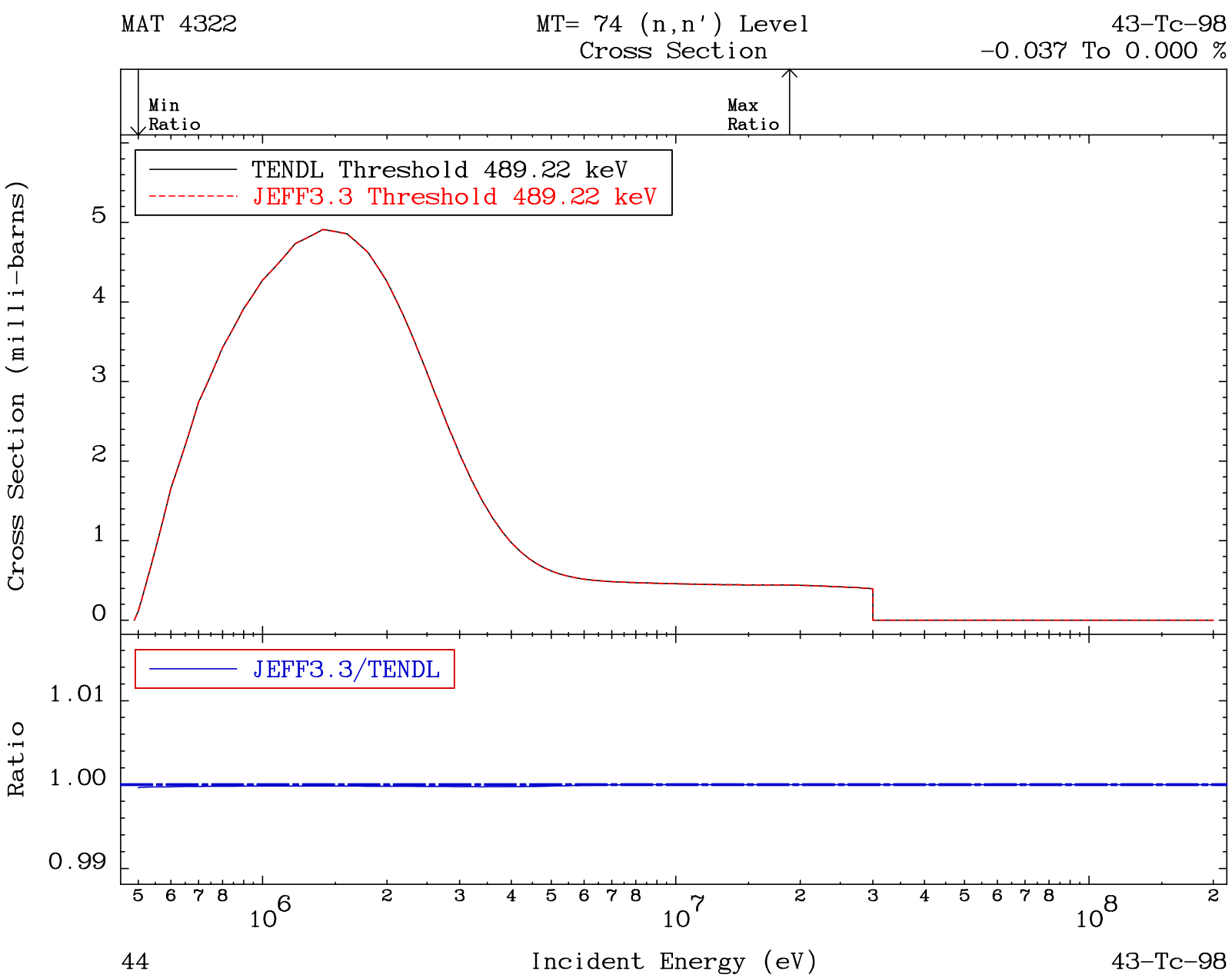

MAT 4322
MT= 69 (n,n') Level
Cross Section
43-Tc-98
-0.061 To 0.498 %
Min
Ratio
Max
Ratio
TENDL Threshold 394.06 keV
JEFF3.3 Threshold 394.06 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
43-Tc-98

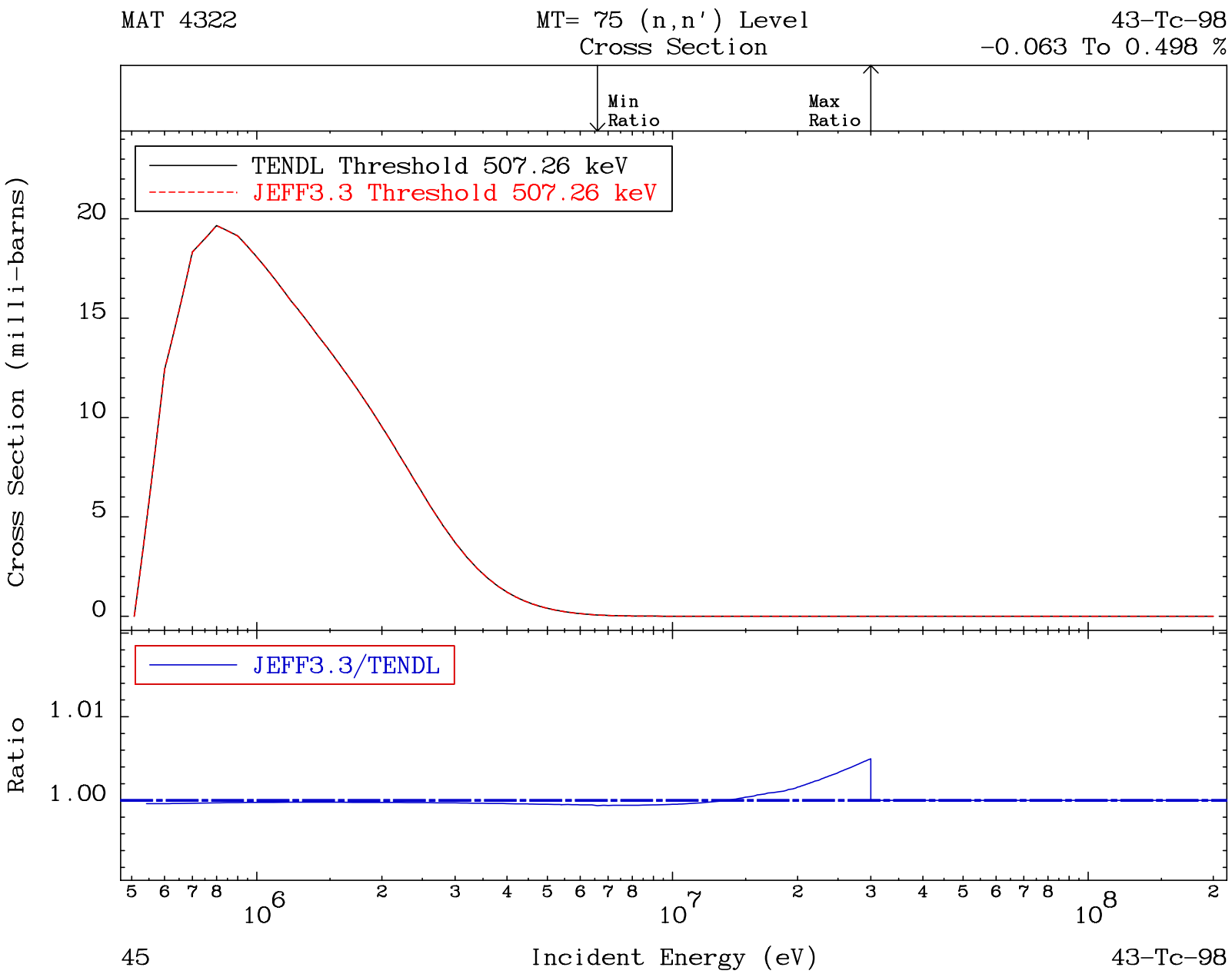

MAT 4322
MT= 70 (n,n') Level
Cross Section
43-Tc-98
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 428.41 keV
JEFF3.3 Threshold 428.41 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
43-Tc-98

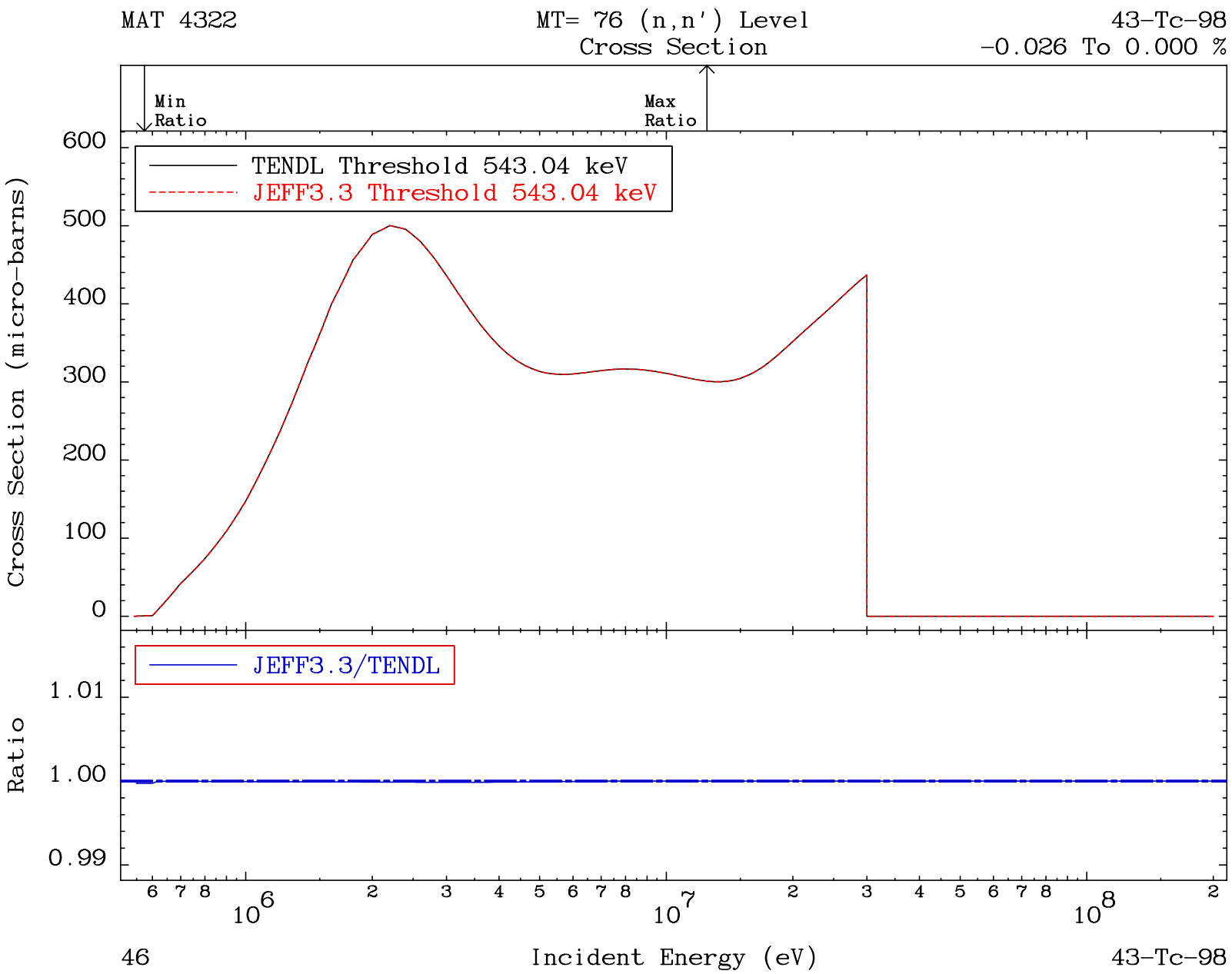

MAT 4322
MT= 71 (n,n') Level
Cross Section
43-Tc-98
-0.066 To 0.501 %
Min Ratio
Max Ratio
TENDL Threshold 445.56 keV
JEFF3.3 Threshold 445.56 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
41
Incident Energy (eV)
43-Tc-98

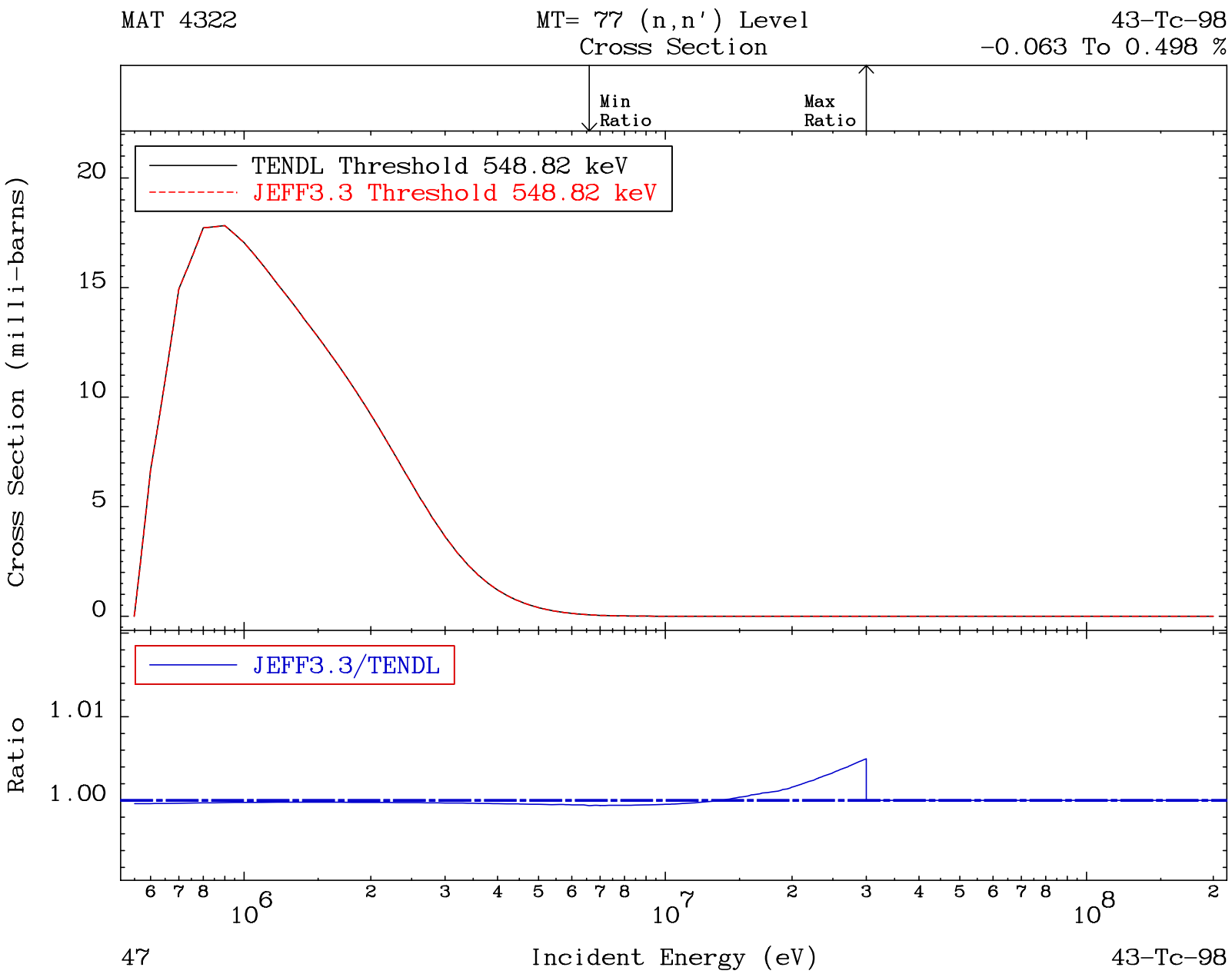

MAT 4322
MT= 72 (n,n') Level
Cross Section
43-Tc-98
-0.063 To 0.499 %
Min
Ratio
Max
Ratio
TENDL Threshold 451.61 keV
JEFF3.3 Threshold 451.61 keV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
43-Tc-98

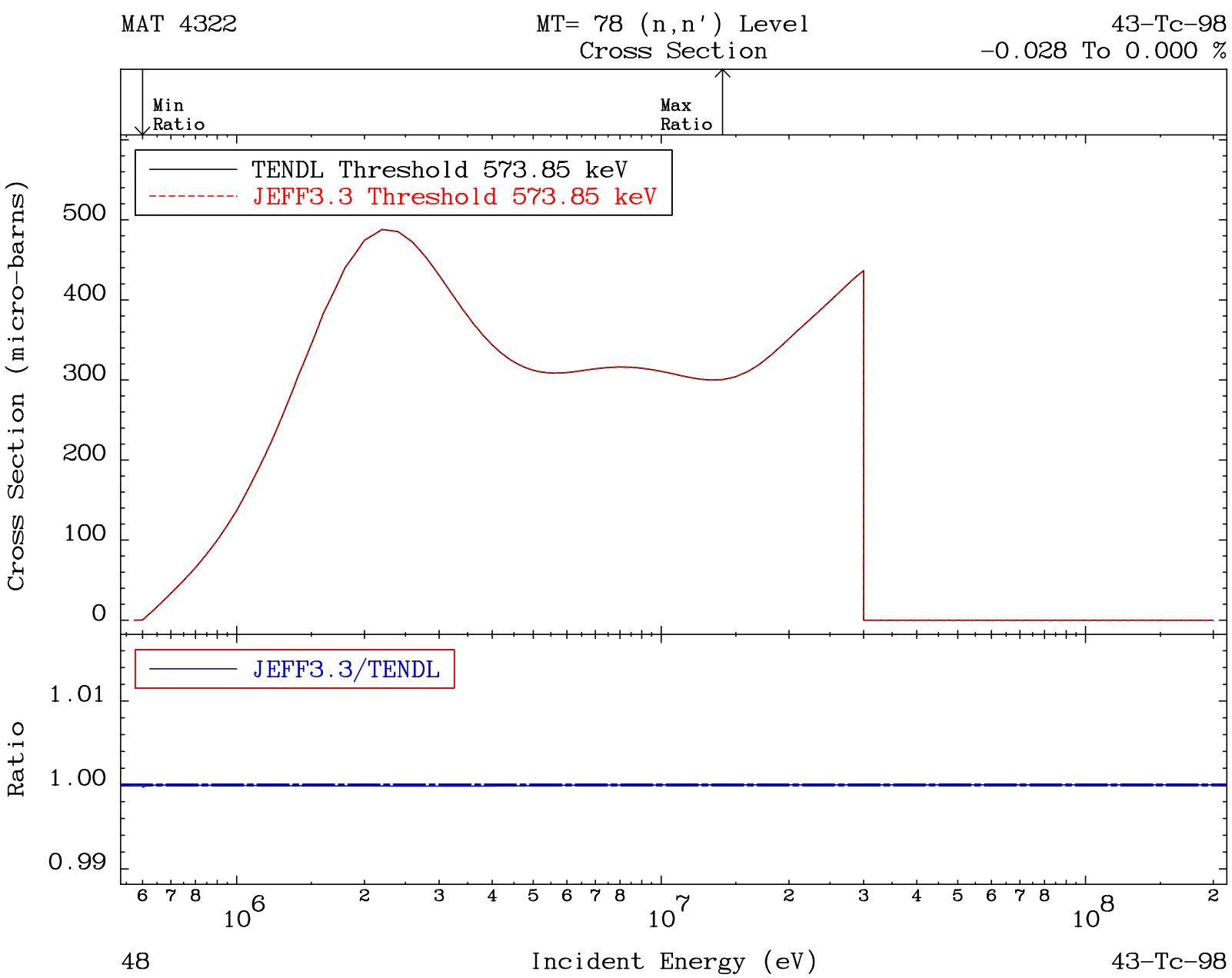

MAT 4322
MT= 73 (n,n') Level
Cross Section
43-Tc-98
-0.059 To 0.497 %
Min Ratio
Max Ratio
TENDL Threshold 462.55 keV
JEFF3.3 Threshold 462.55 keV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
43-Tc-98

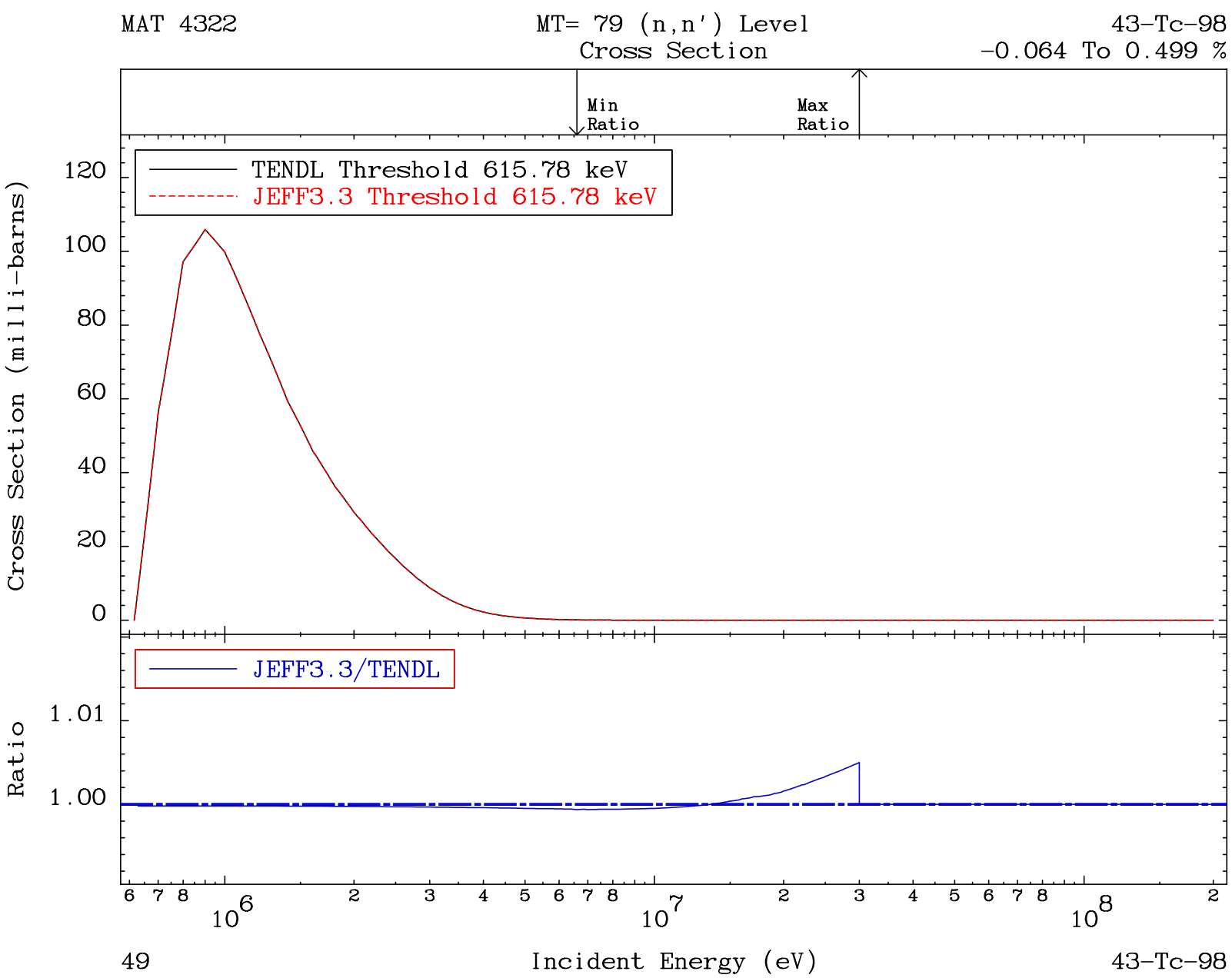

MAT 4322
MT= 74 (n,n') Level
Cross Section
43-Tc-98
-0.037 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 489.22 keV
JEFF3.3 Threshold 489.22 keV
Cross Section (milli-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
44
Incident Energy (eV)
43-Tc-98

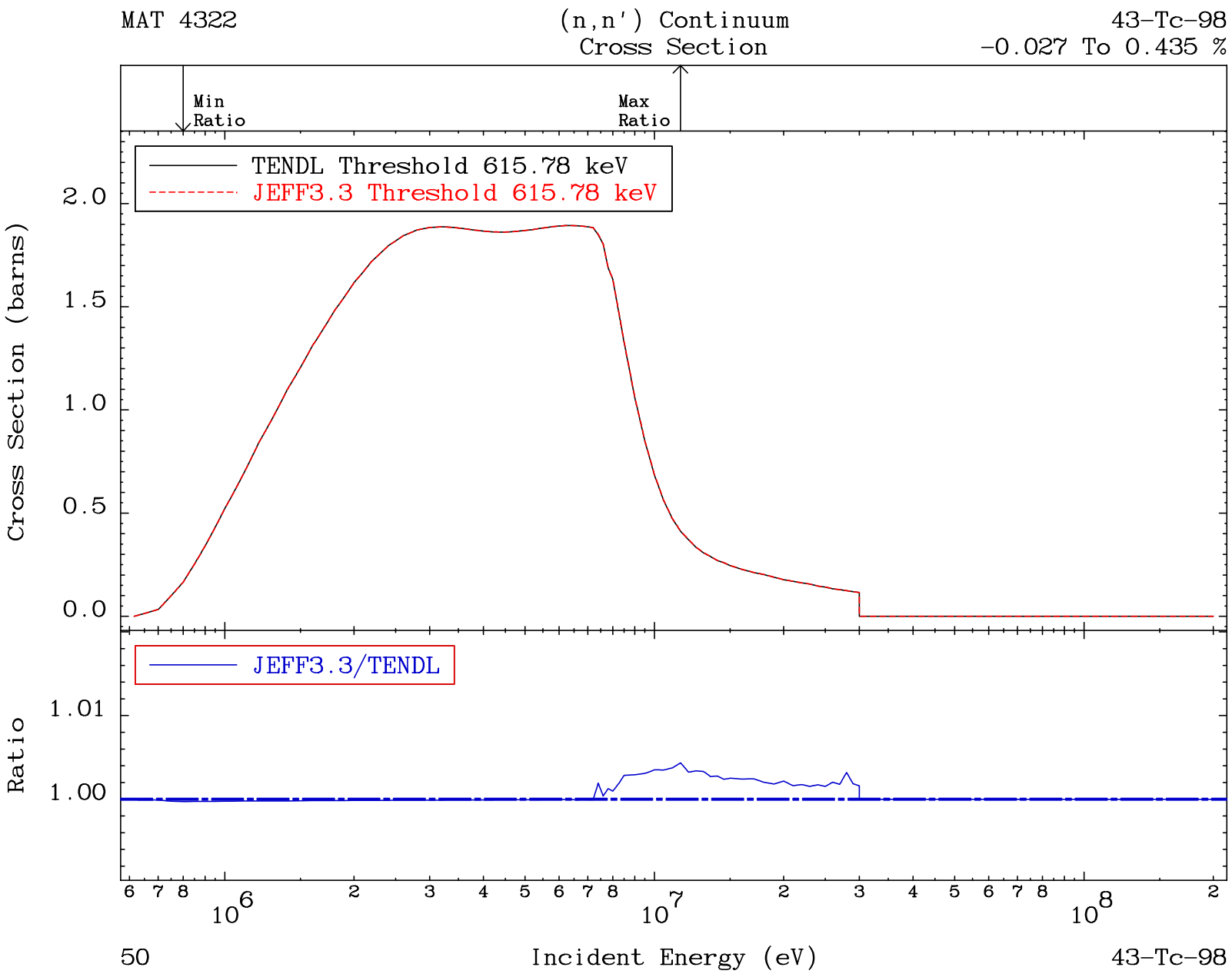

MAT 4322
MT= 75 (n,n') Level
Cross Section
43-Tc-98
-0.063 To 0.498 %
Min Ratio
Max Ratio
TENDL Threshold 507.26 keV
JEFF3.3 Threshold 507.26 keV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
43-Tc-98

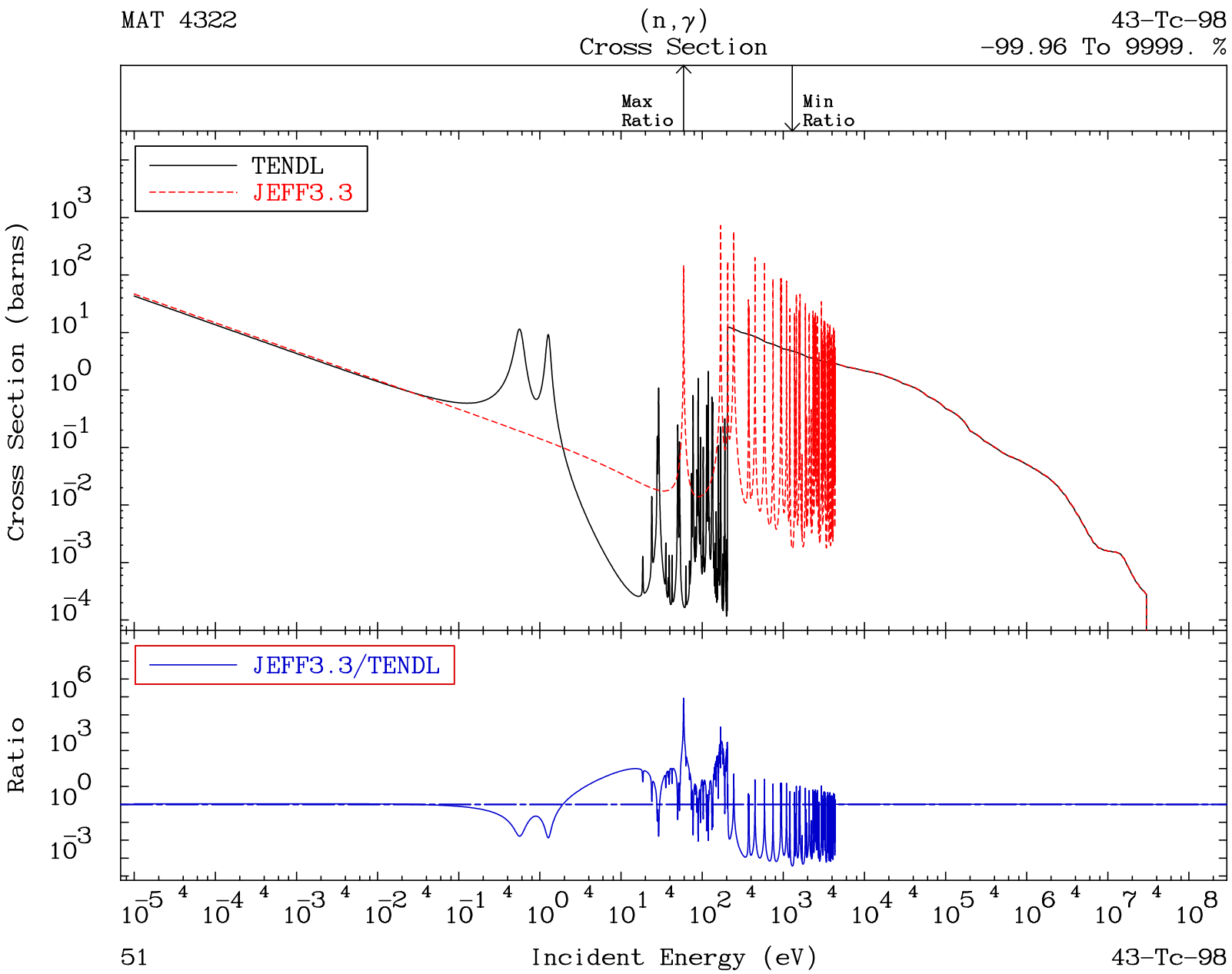

MAT 4322
MT= 76 (n,n') Level
Cross Section
43-Tc-98
-0.026 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 543.04 keV
JEFF3.3 Threshold 543.04 keV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
43-Tc-98

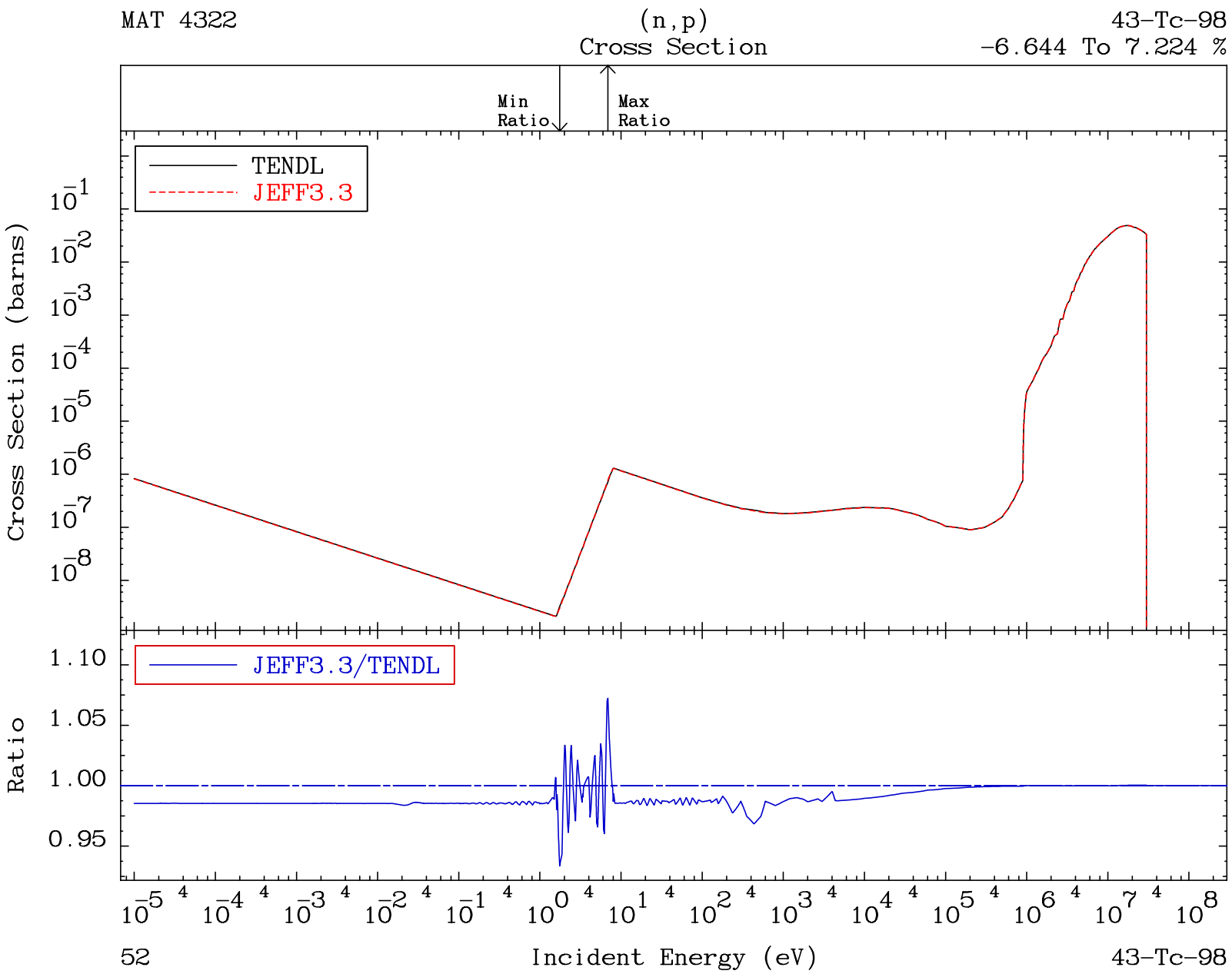

MAT 4322
MT= 77 (n,n') Level
Cross Section
43-Tc-98
-0.063 To 0.498 %
Min
Ratio
Max
Ratio
TENDL Threshold 548.82 keV
JEFF3.3 Threshold 548.82 keV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
47
Incident Energy (eV)
43-Tc-98

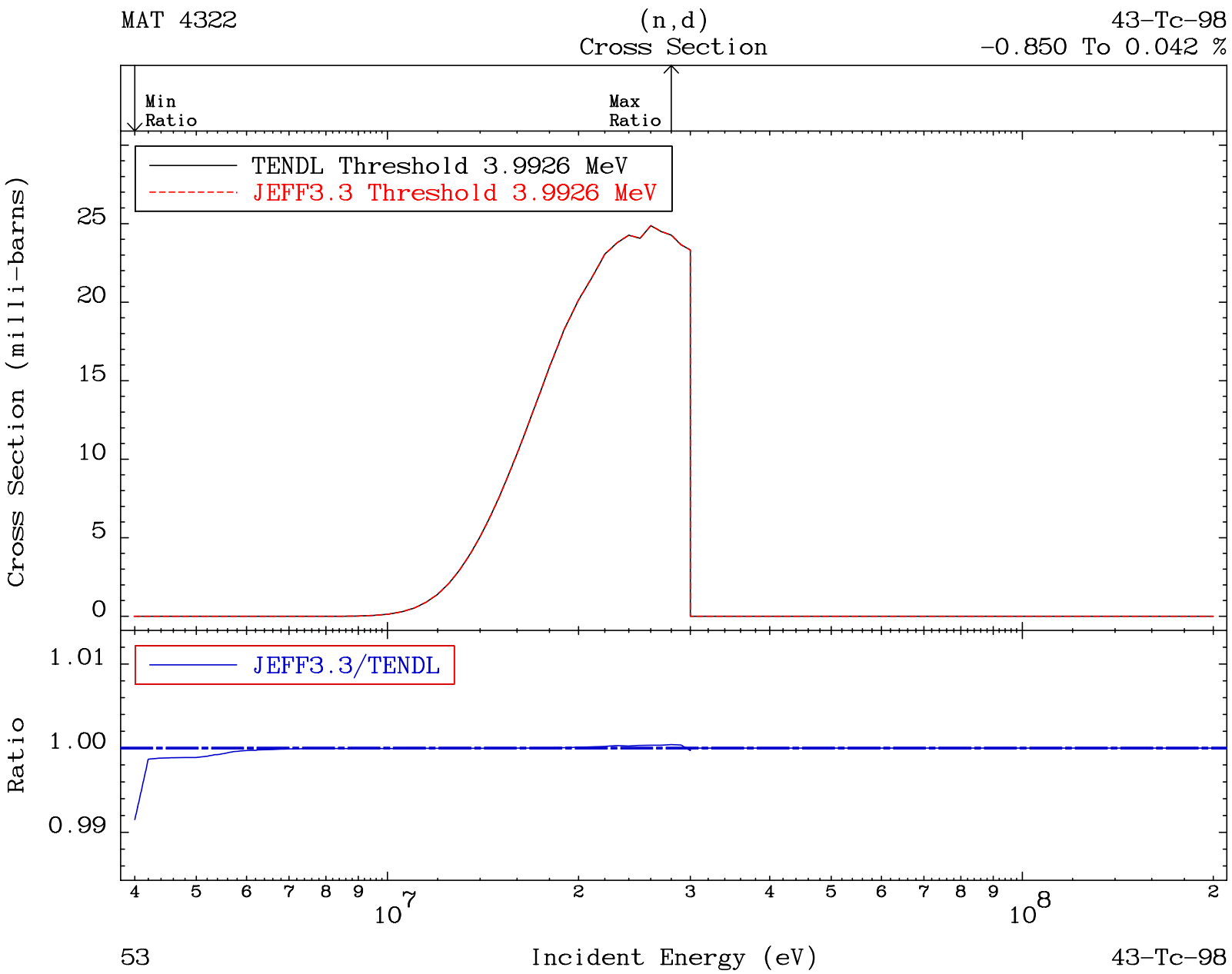

MAT 4322
MT= 78 (n,n') Level
Cross Section
43-Tc-98
-0.028 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 573.85 keV
JEFF3.3 Threshold 573.85 keV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
43-Tc-98

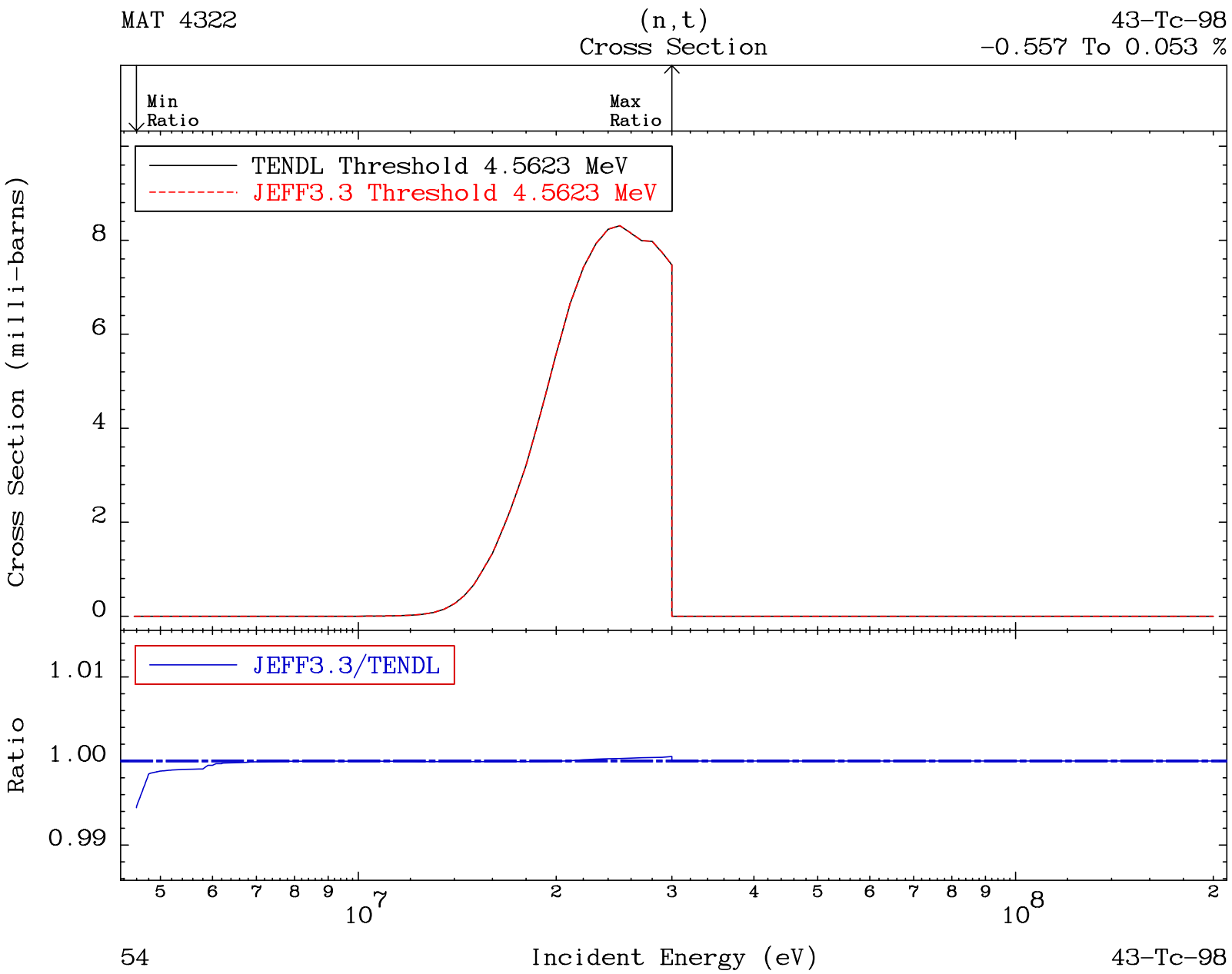

MAT 4322
MT= 79 (n,n') Level
Cross Section
43-Tc-98
-0.064 To 0.499 %
Min
Ratio
Max
Ratio
TENDL Threshold 615.78 keV
JEFF3.3 Threshold 615.78 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
49
Incident Energy (eV)
43-Tc-98

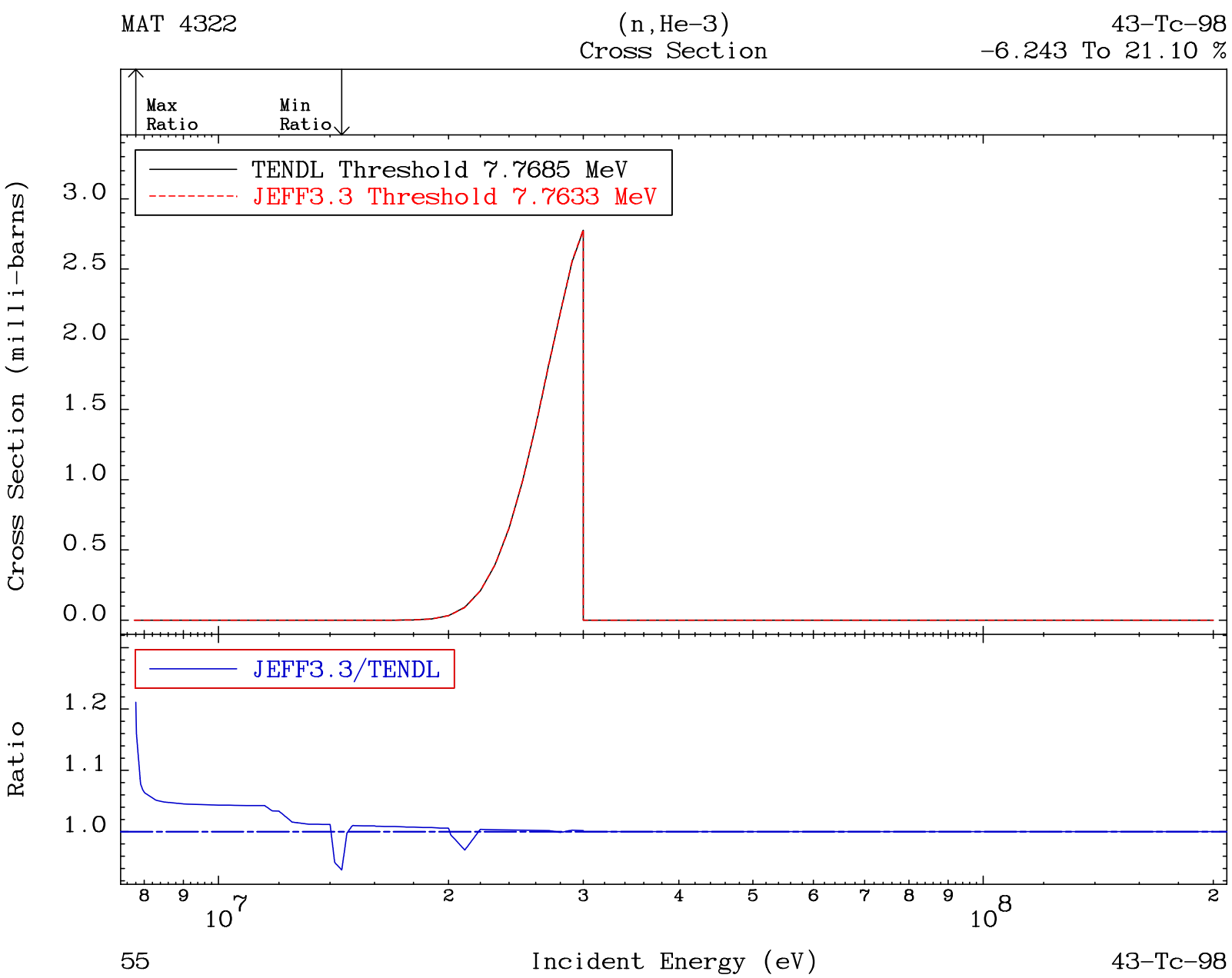

MAT 4322
(n,n') Continuum
Cross Section
43-Tc-98
-0.027 To 0.435 %
Min
Ratio
Max
Ratio
TENDL Threshold 615.78 keV
JEFF3.3 Threshold 615.78 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
50
Incident Energy (eV)
43-Tc-98

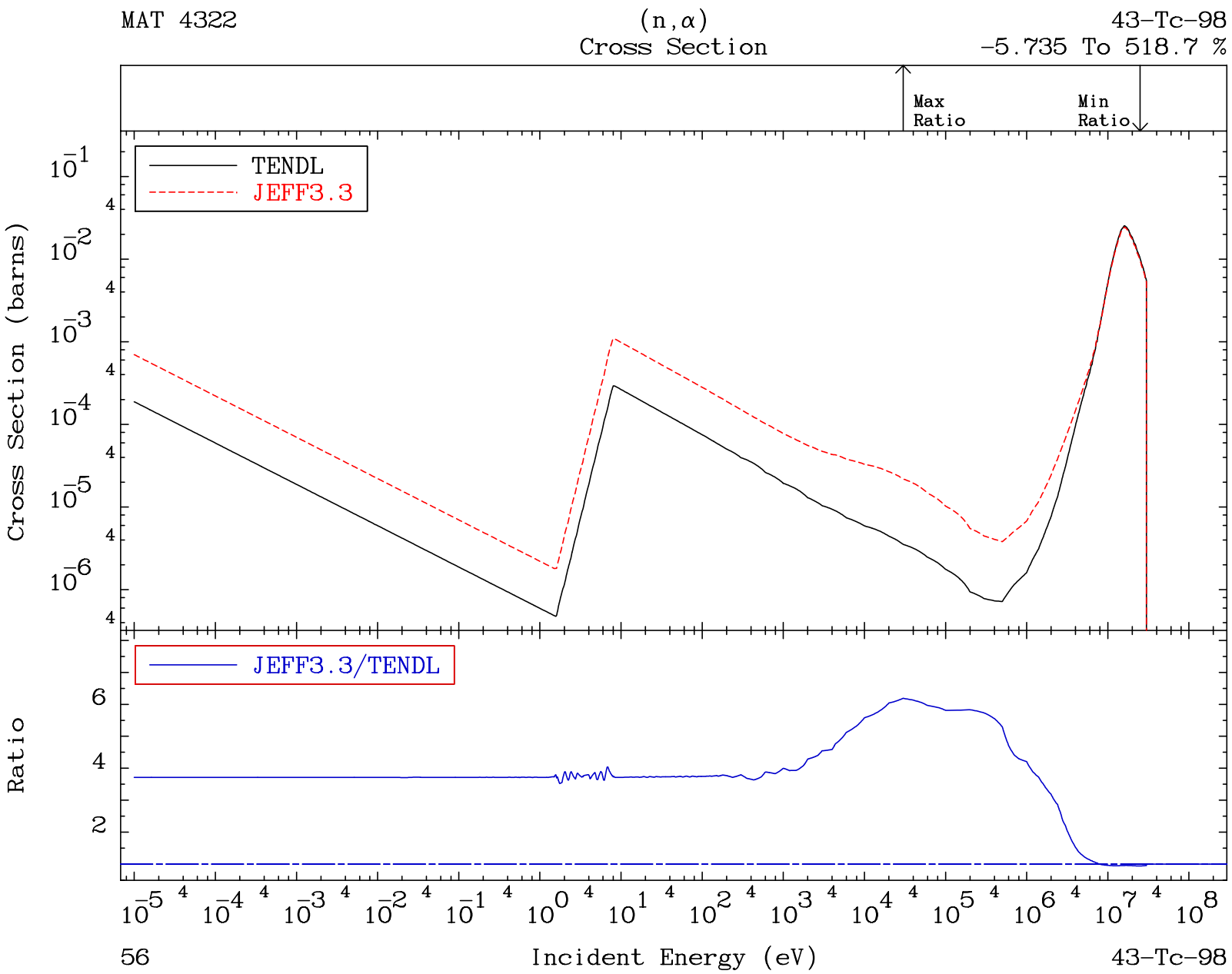

MAT 4322
(n,γ)
Cross Section
43-Tc-98
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
51
43-Tc-98

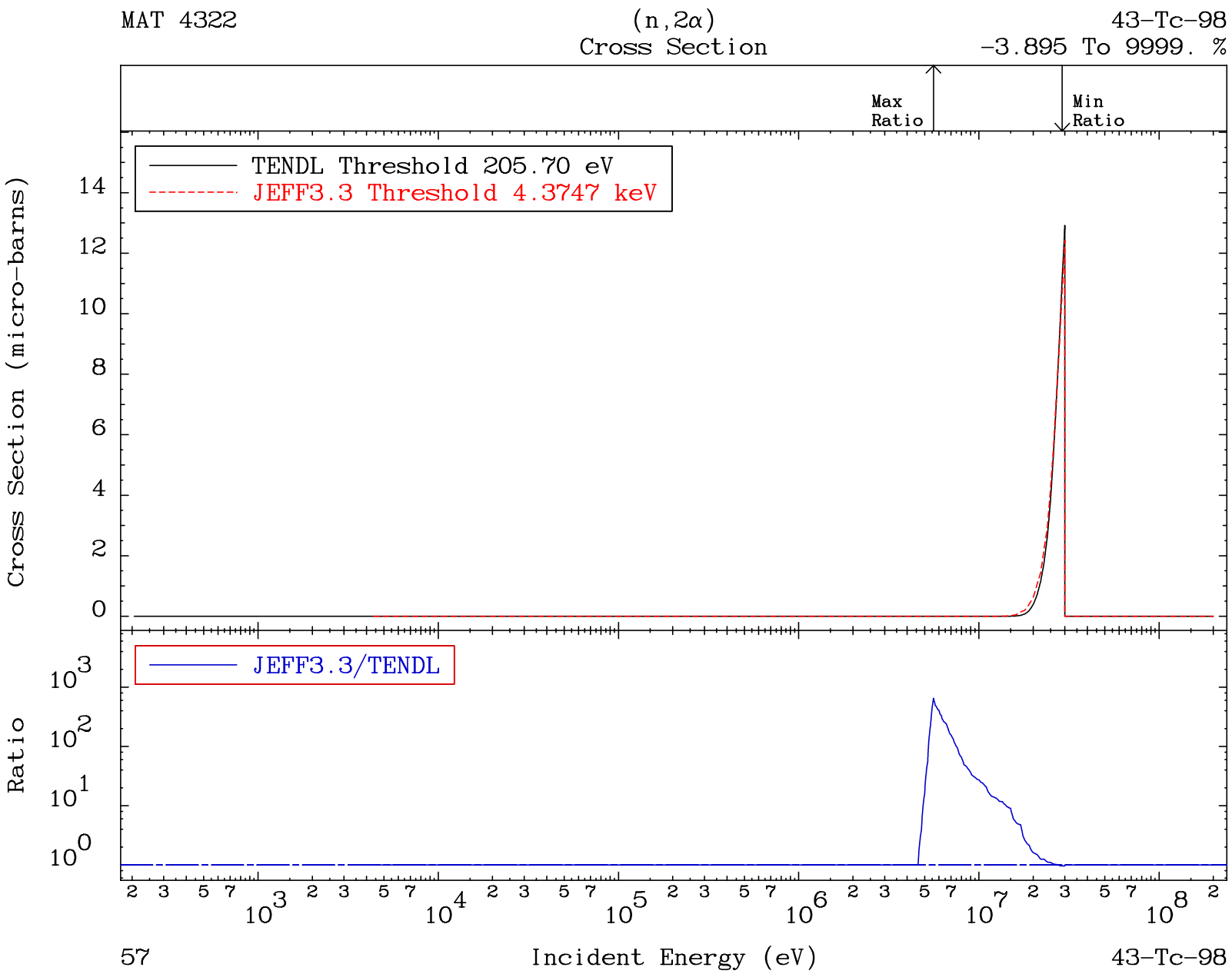

MAT 4322
(n,p)
Cross Section
43-Tc-98
-6.644 To 7.224 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
43-Tc-98

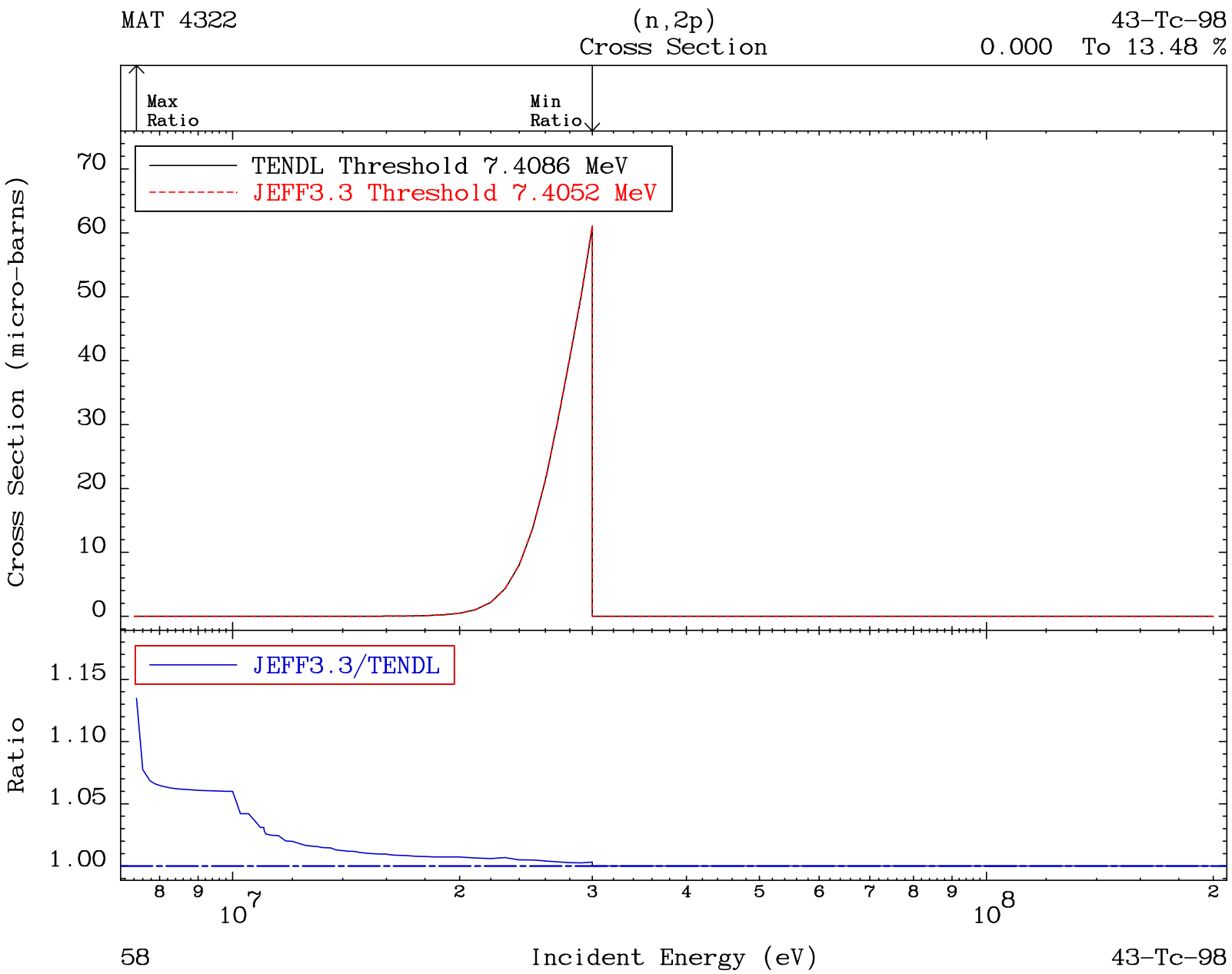

MAT 4322
(n,d)
Cross Section
43-Tc-98
-0.850 To 0.042 %
Min Ratio
Max Ratio
TENDL Threshold 3.9926 MeV
JEFF3.3 Threshold 3.9926 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
43-Tc-98

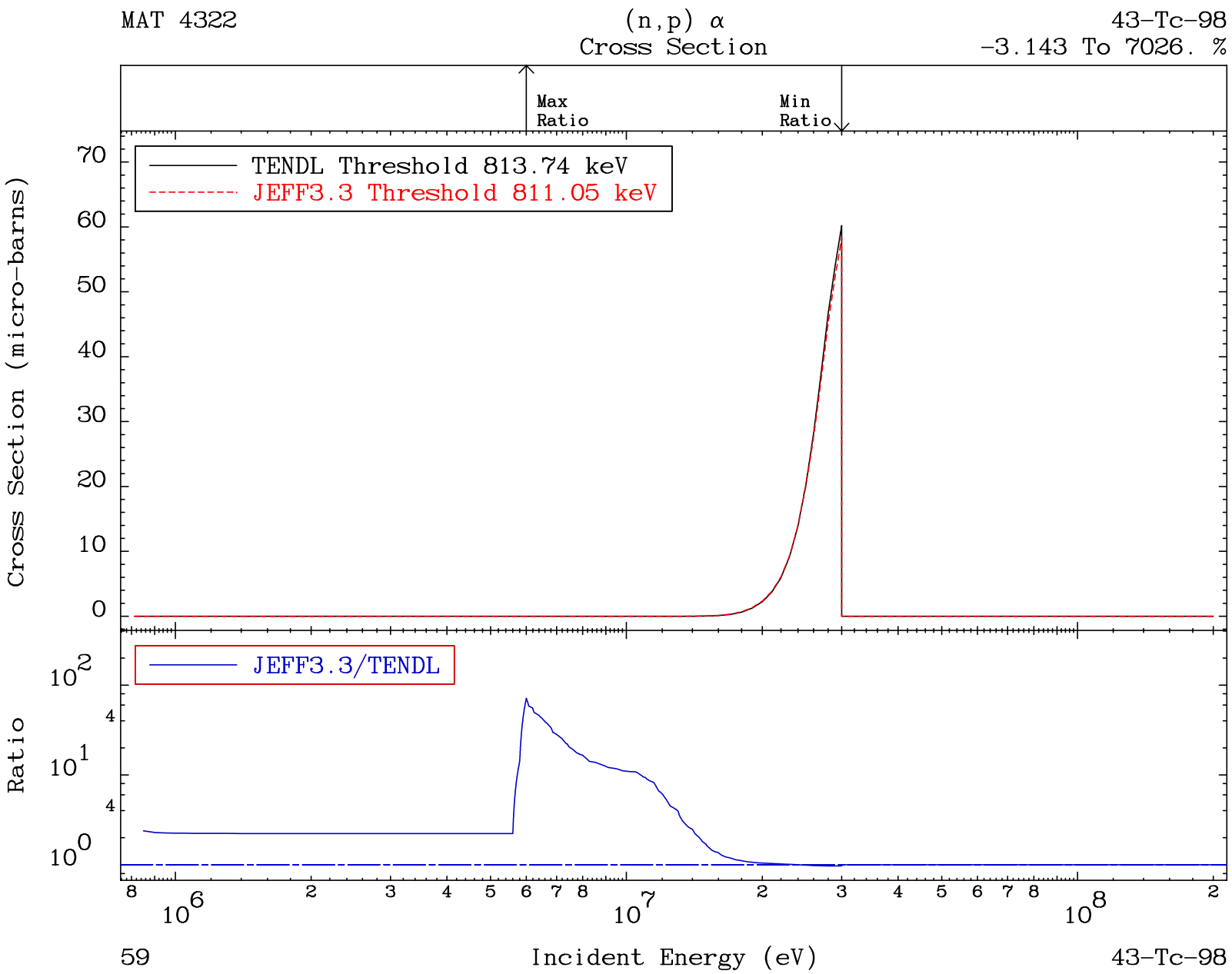

MAT 4322
(n,t)
Cross Section
43-Tc-98
-0.557 To 0.053 %
Min Ratio
Max Ratio
TENDL Threshold 4.5623 MeV
JEFF3.3 Threshold 4.5623 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
43-Tc-98

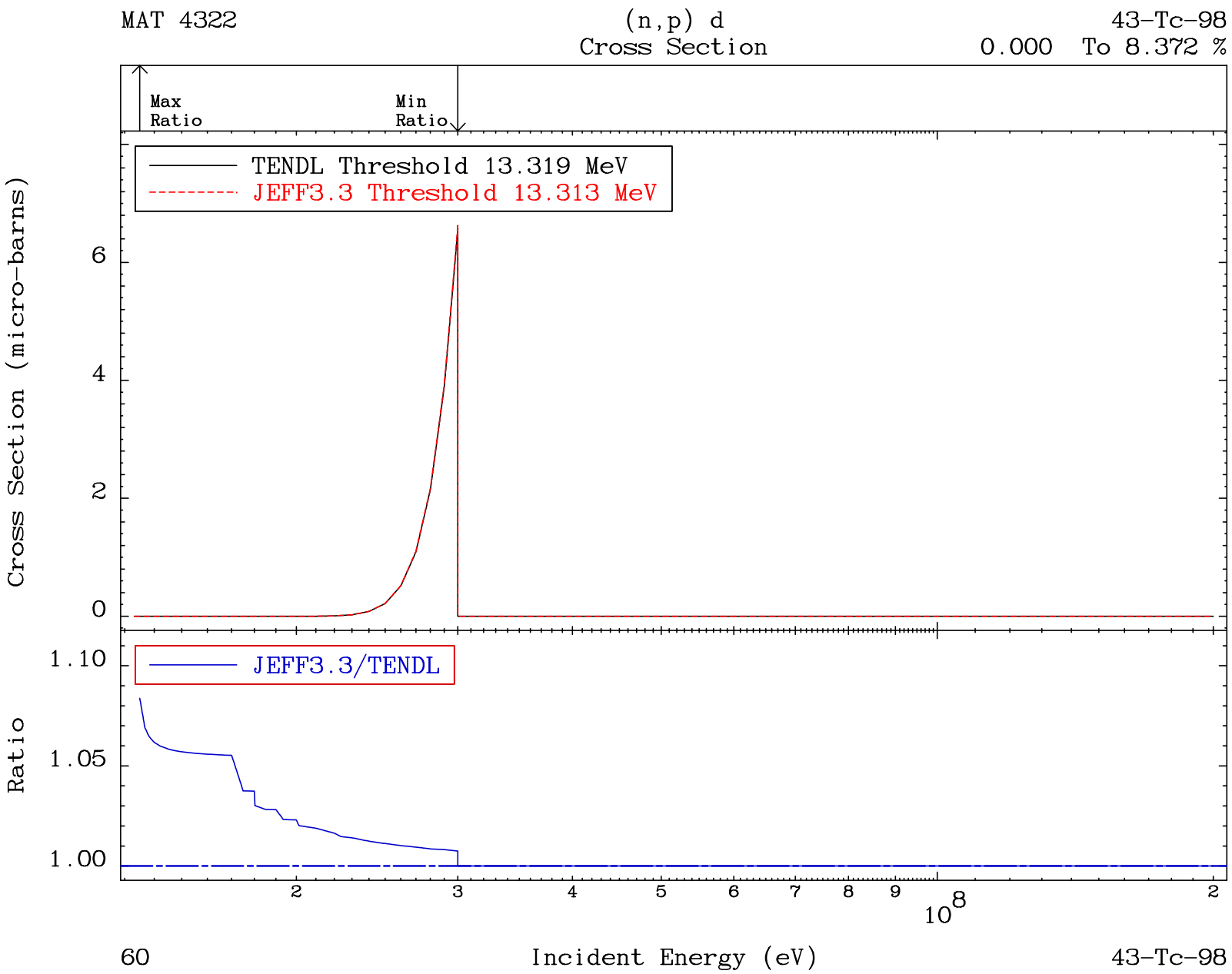

MAT 4322
(n,He-3)
Cross Section
43-Tc-98
-6.243 To 21.10 %
Max Ratio
Min Ratio
TENDL Threshold 7.7685 MeV
JEFF3.3 Threshold 7.7633 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
43-Tc-98

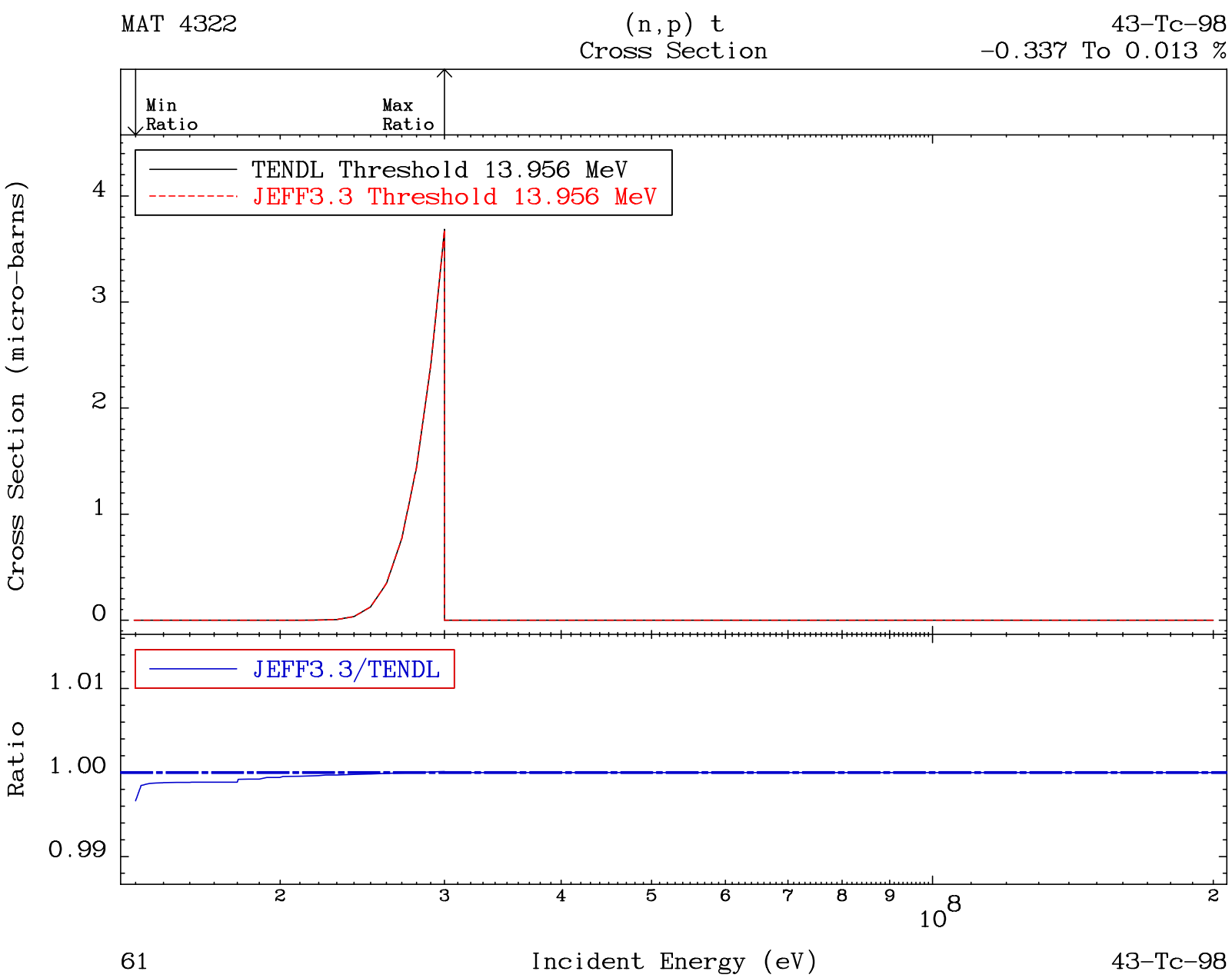

MAT 4322
(n,α)
Cross Section
43-Tc-98
-5.735 To 518.7 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
56
Incident Energy (eV)
43-Tc-98

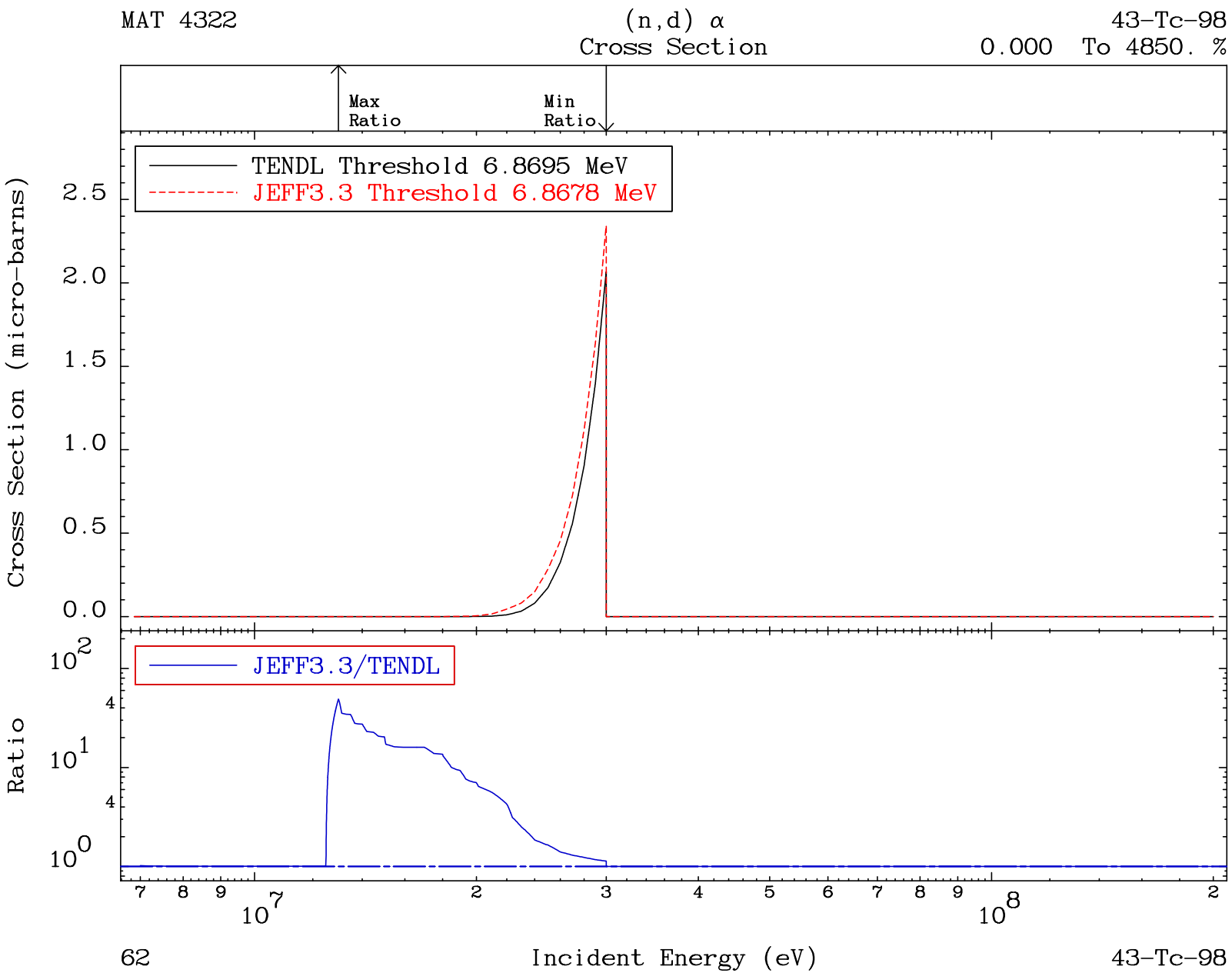

MAT 4322
(n,2α)
Cross Section
43-Tc-98
-3.895 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 205.70 eV
JEFF3.3 Threshold 4.3747 keV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
43-Tc-98

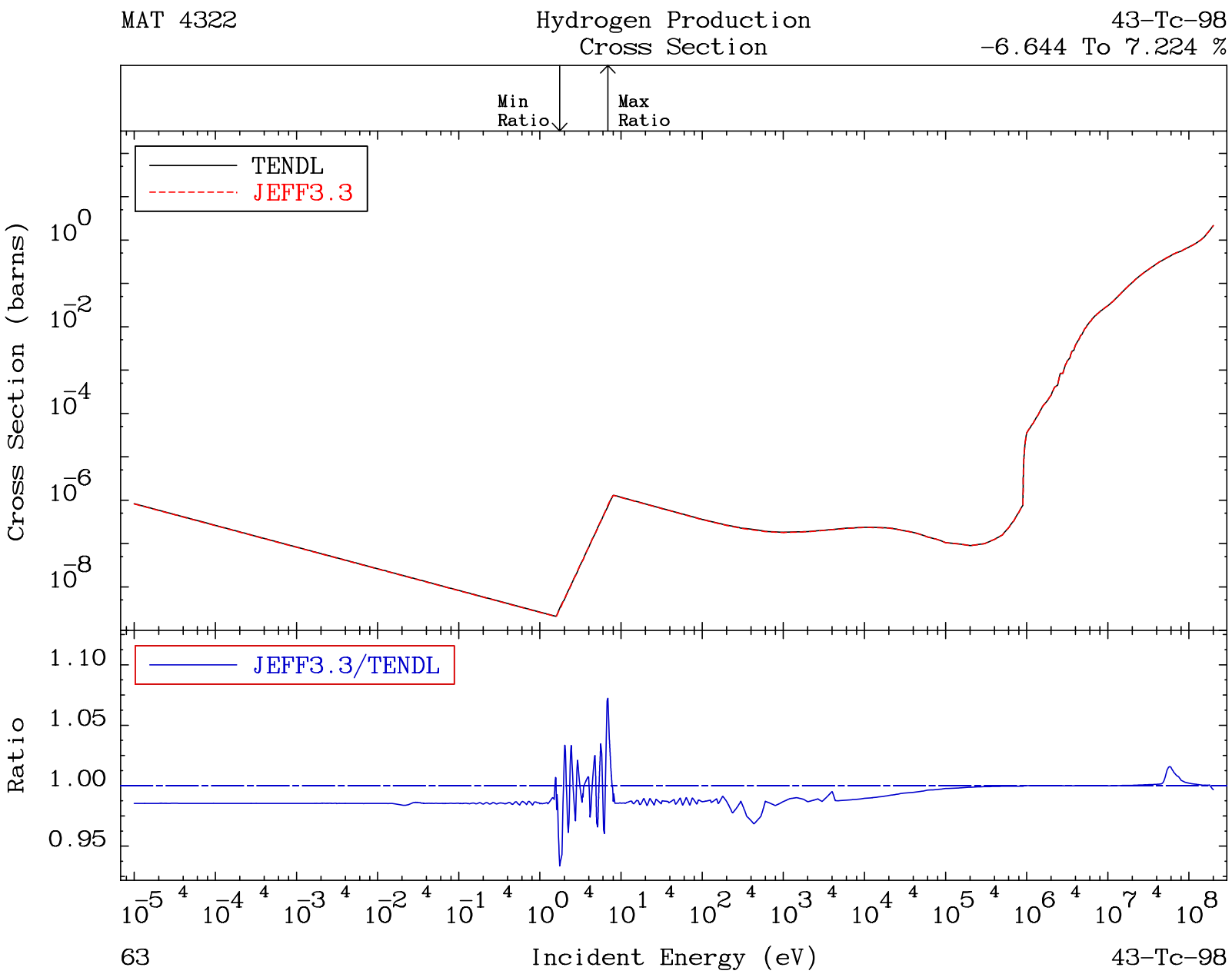

MAT 4322
(n,2p)
Cross Section
43-Tc-98
0.000 To 13.48 %
Max Ratio
Min Ratio
TENDL Threshold 7.4086 MeV
JEFF3.3 Threshold 7.4052 MeV
Cross Section (micro-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
43-Tc-98

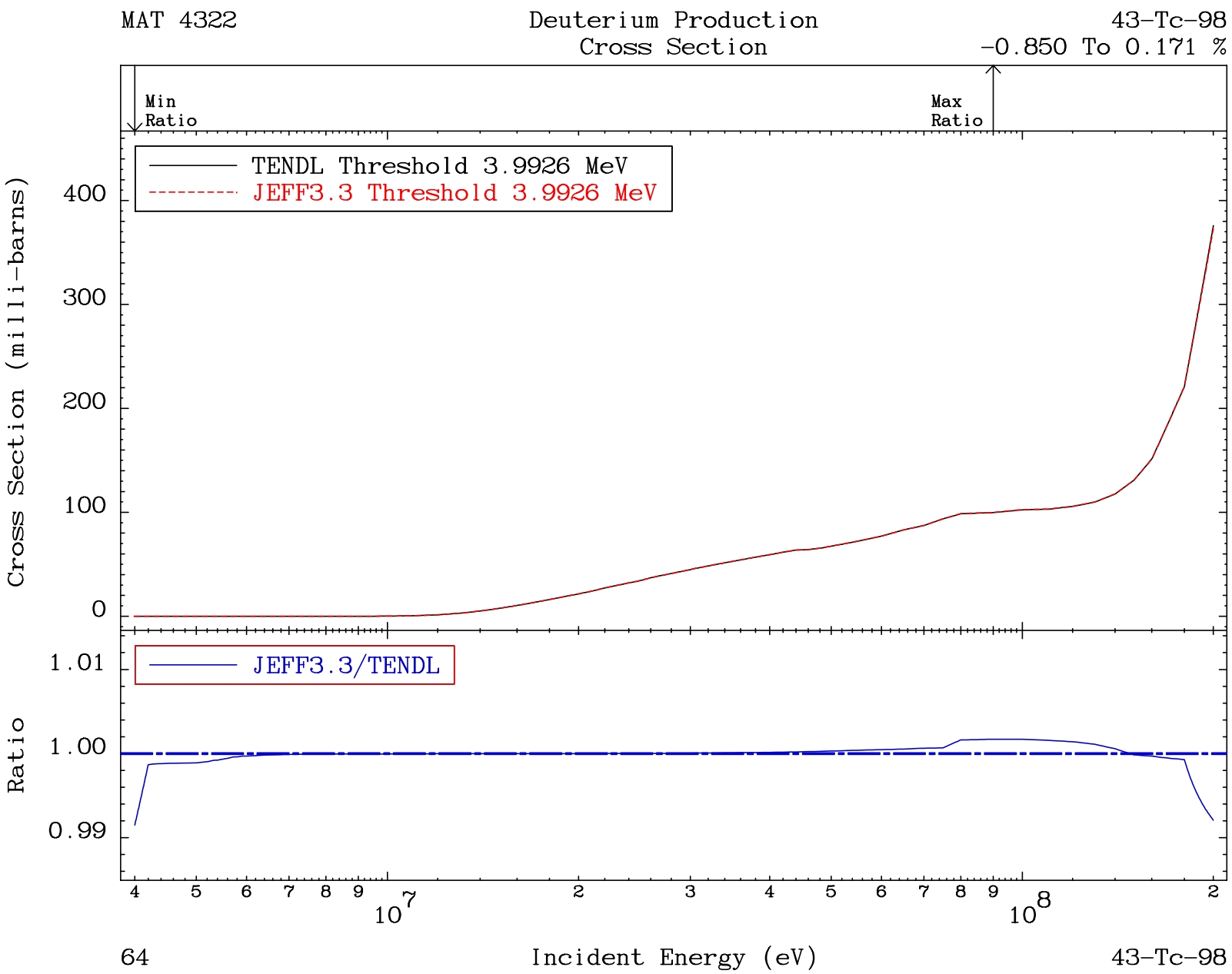

MAT 4322
(n,p) α
Cross Section
43-Tc-98
-3.143 To 7026. %
Max Ratio
Min Ratio
TENDL Threshold 813.74 keV
JEFF3.3 Threshold 811.05 keV
Cross Section (micro-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
59
43-Tc-98

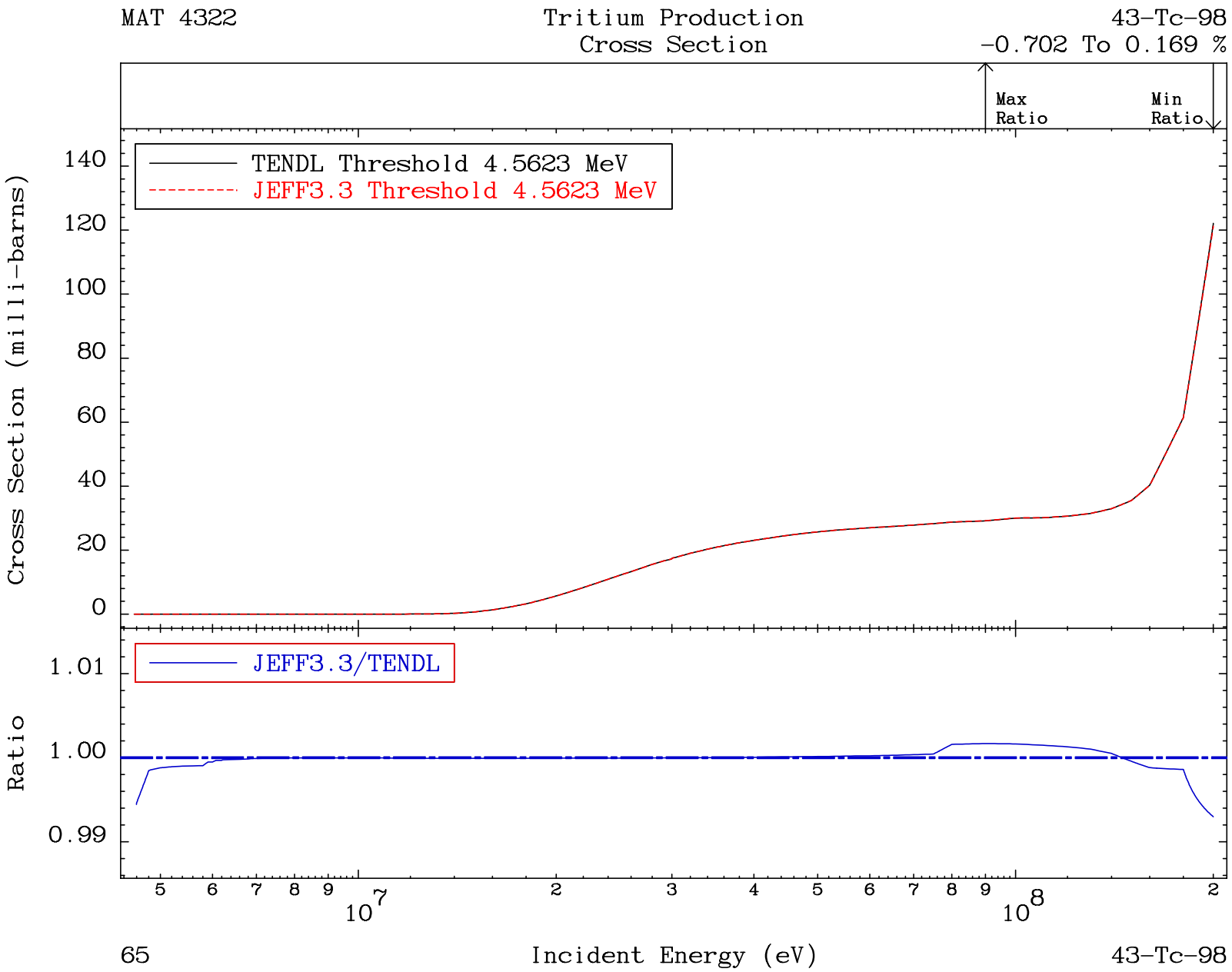

MAT 4322
(n,p) d
Cross Section
43-Tc-98
0.000 To 8.372 %
Max Ratio
Min Ratio
TENDL Threshold 13.319 MeV
JEFF3.3 Threshold 13.313 MeV
Cross Section (micro-barns)
0
2
4
6
JEFF3.3/TENDL
Ratio
1.00
1.05
1.10
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
43-Tc-98

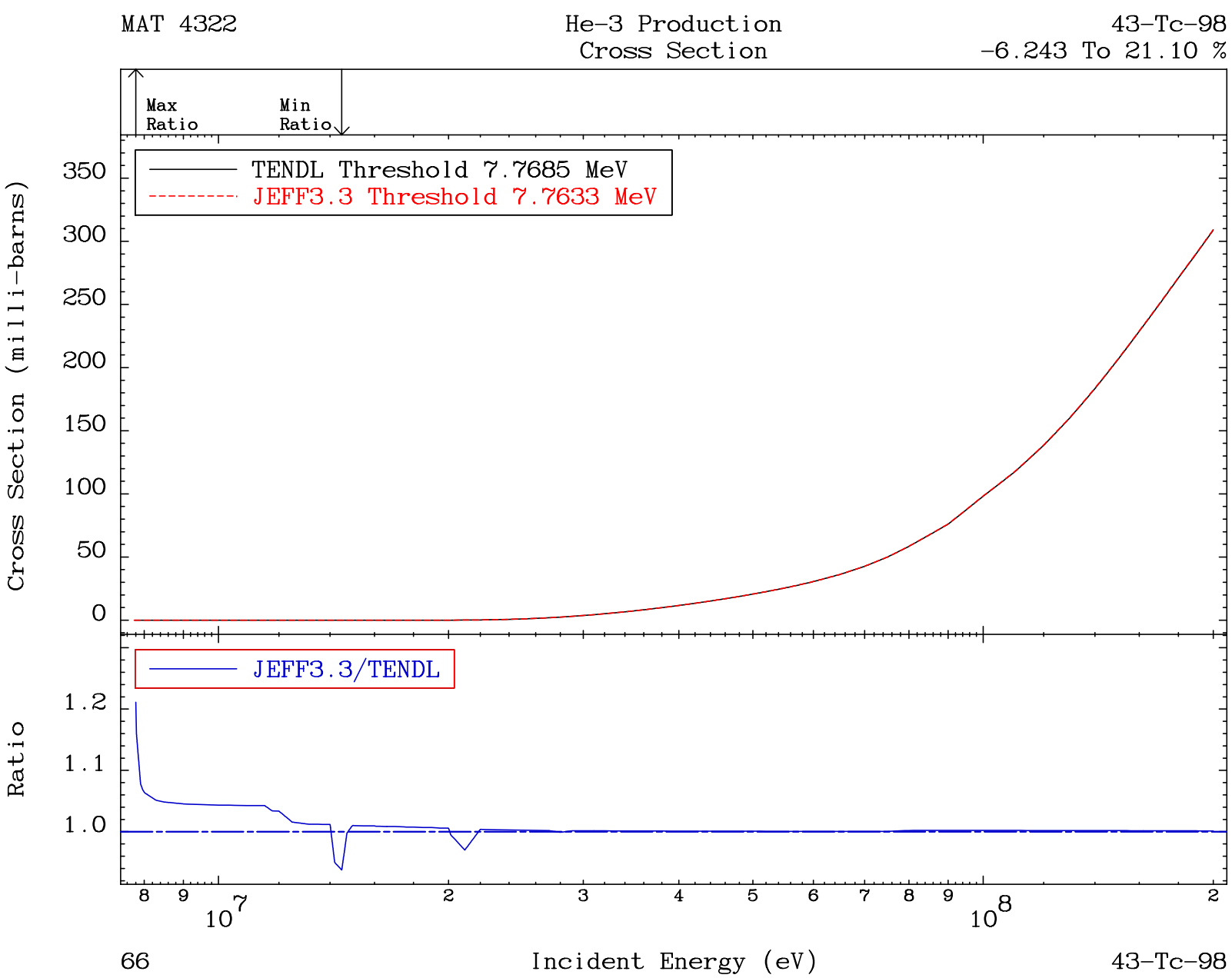

MAT 4322
(n,p) t
Cross Section
43-Tc-98
-0.337 To 0.013 %
Min Ratio
Max Ratio
TENDL Threshold 13.956 MeV
JEFF3.3 Threshold 13.956 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
43-Tc-98

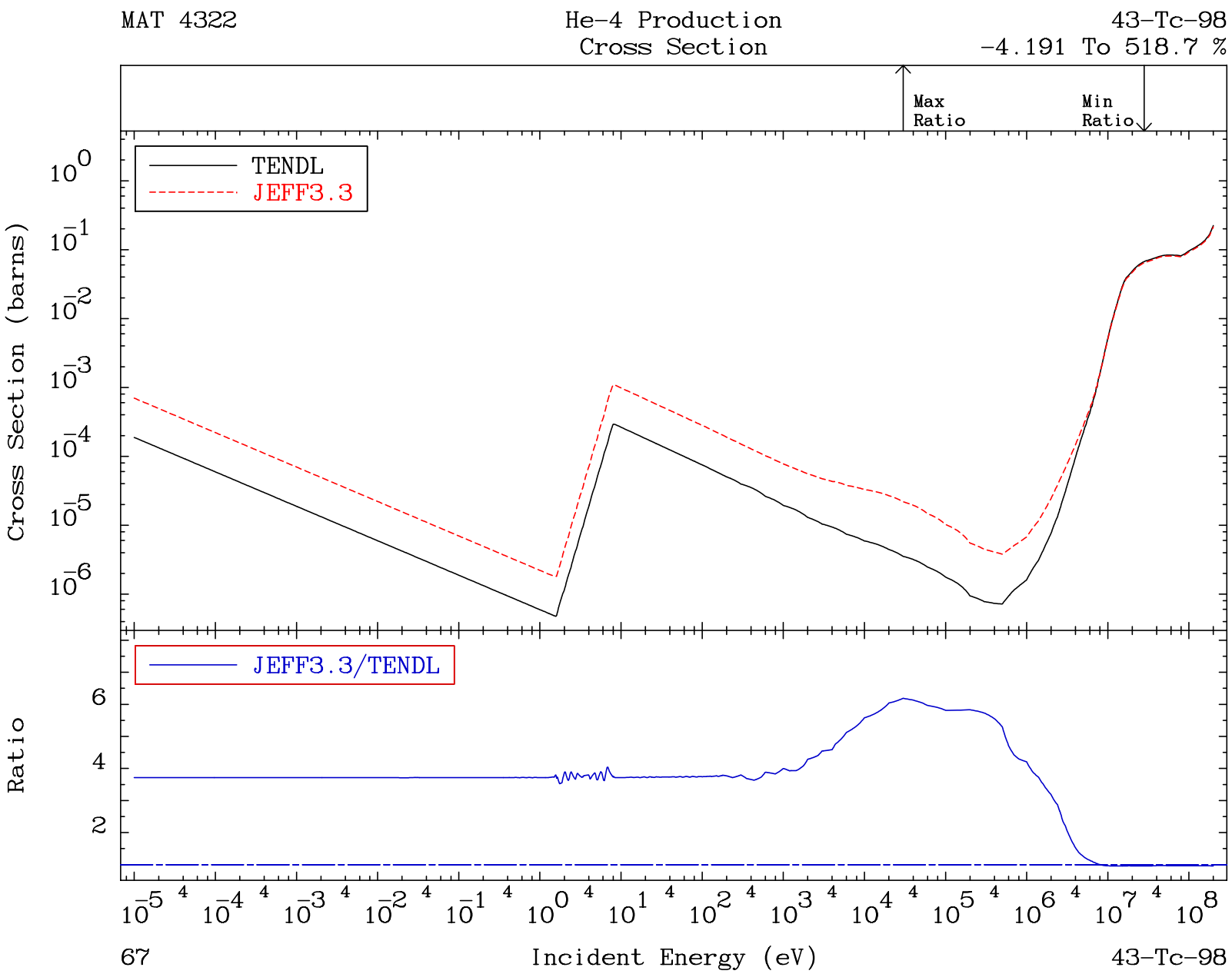

MAT 4322
(n,d) α
Cross Section
43-Tc-98
0.000 To 4850. %
Max Ratio
Min Ratio
TENDL Threshold 6.8695 MeV
JEFF3.3 Threshold 6.8678 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
4
10^1
4
10^0
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
62
Incident Energy (eV)
43-Tc-98

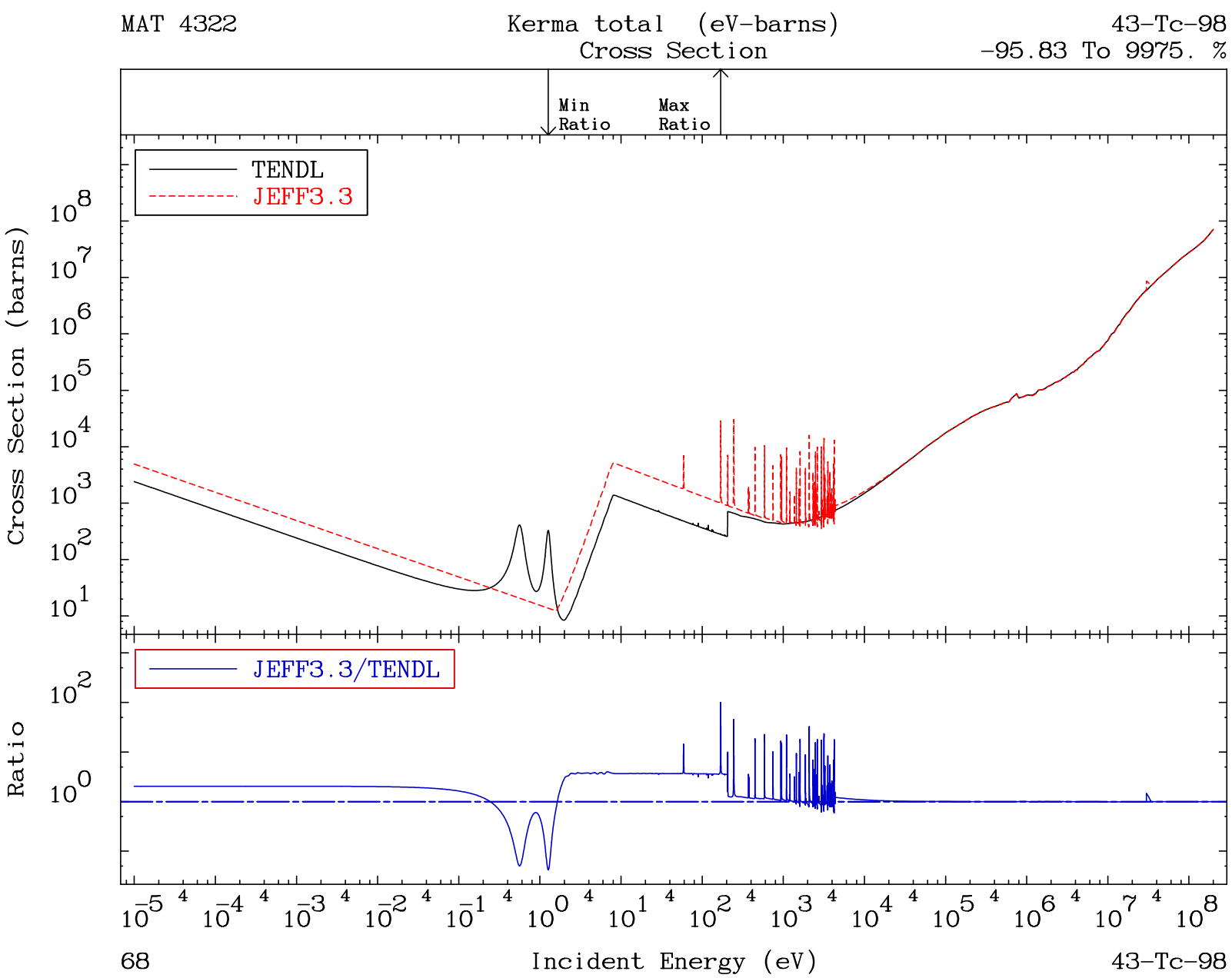

MAT 4322
Hydrogen Production
Cross Section
43-Tc-98
-6.644 To 7.224 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
63
43-Tc-98

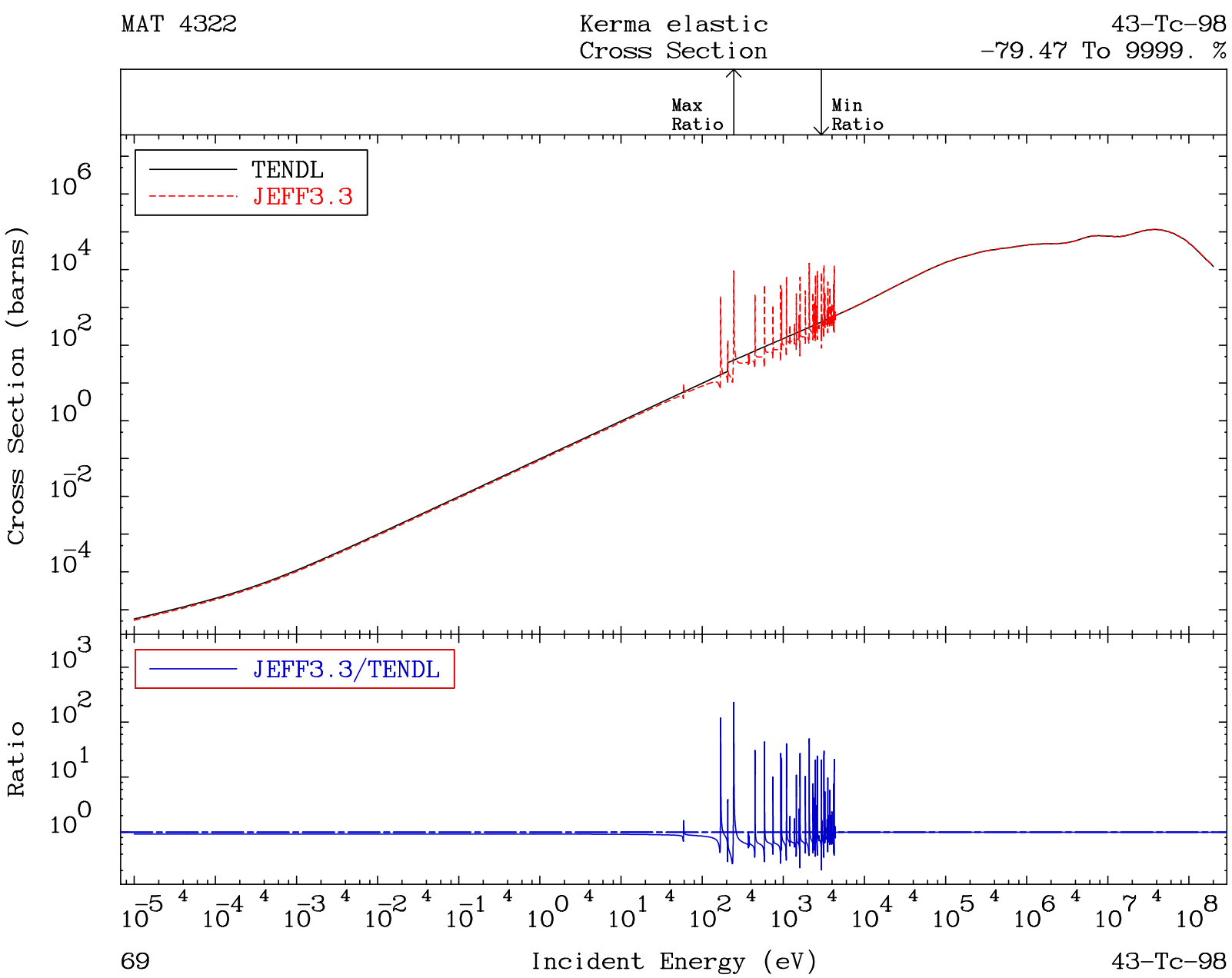

MAT 4322
Deuterium Production
Cross Section
43-Tc-98
-0.850 To 0.171 %
Min
Ratio
Max
Ratio
TENDL Threshold 3.9926 MeV
JEFF3.3 Threshold 3.9926 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
43-Tc-98

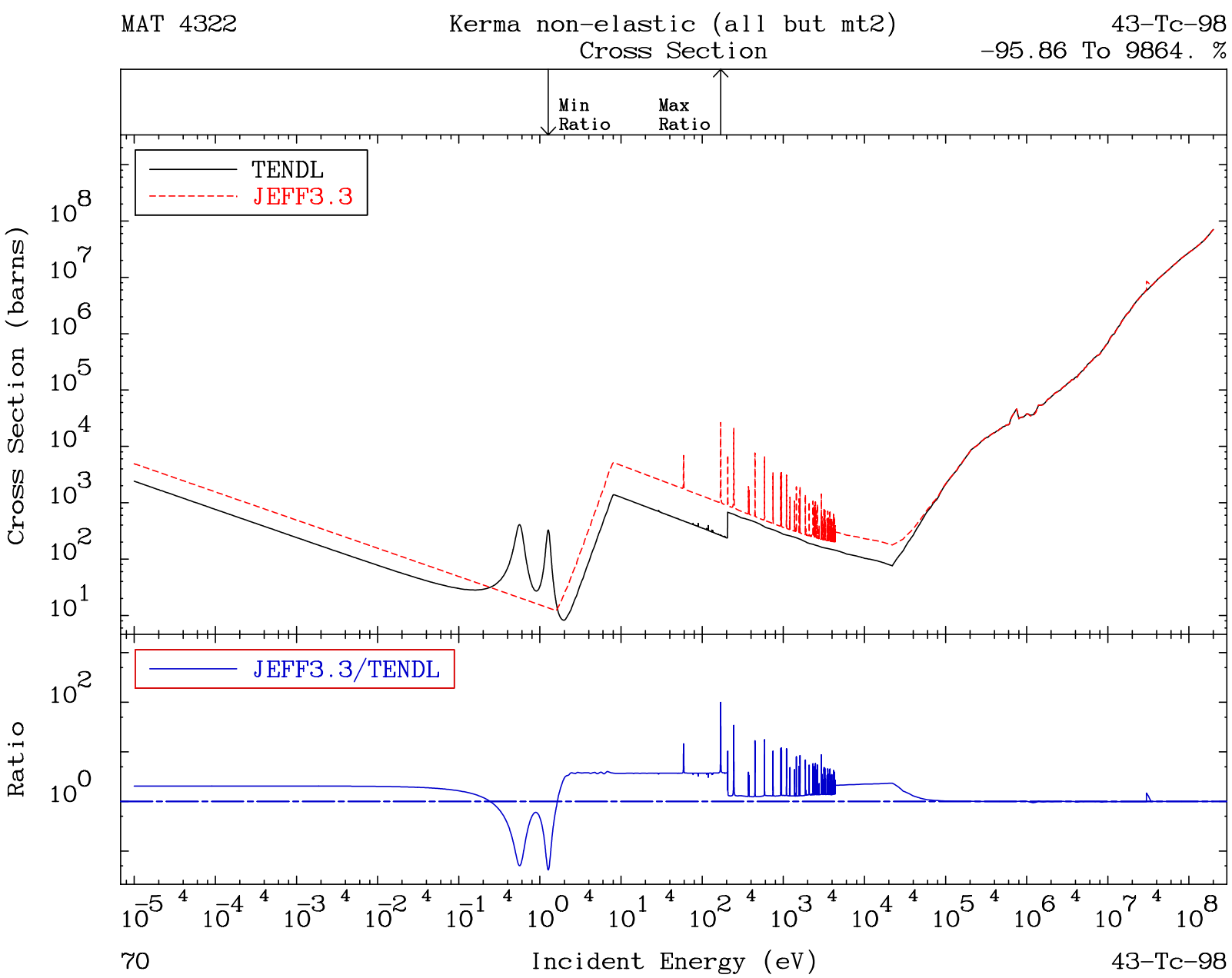

MAT 4322
Tritium Production
Cross Section
43-Tc-98
-0.702 To 0.169 %
Max Ratio
Min Ratio
TENDL Threshold 4.5623 MeV
JEFF3.3 Threshold 4.5623 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
43-Tc-98

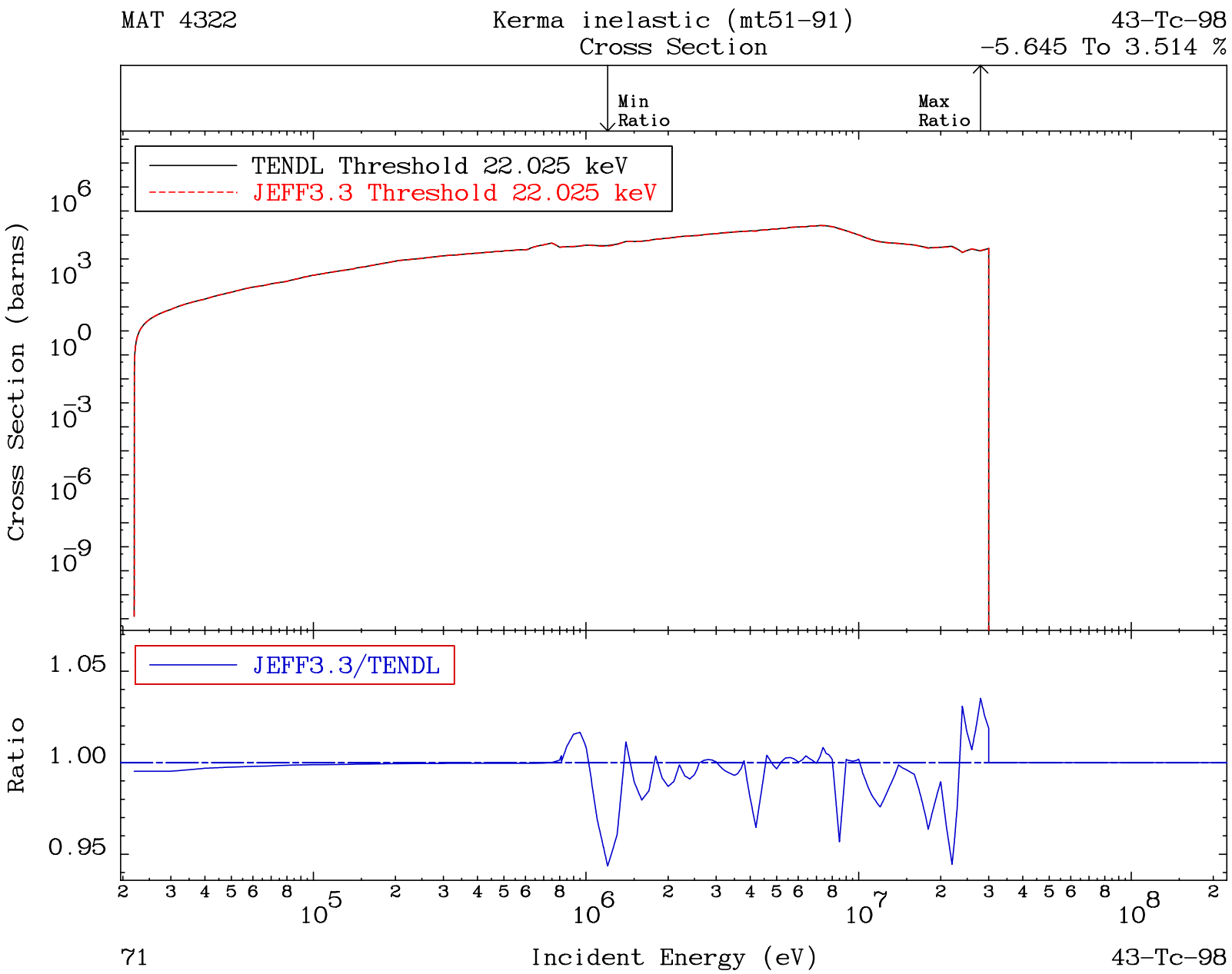

MAT 4322
He-3 Production
Cross Section
43-Tc-98
-6.243 To 21.10 %
Max Ratio
Min Ratio
TENDL Threshold 7.7685 MeV
JEFF3.3 Threshold 7.7633 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
43-Tc-98

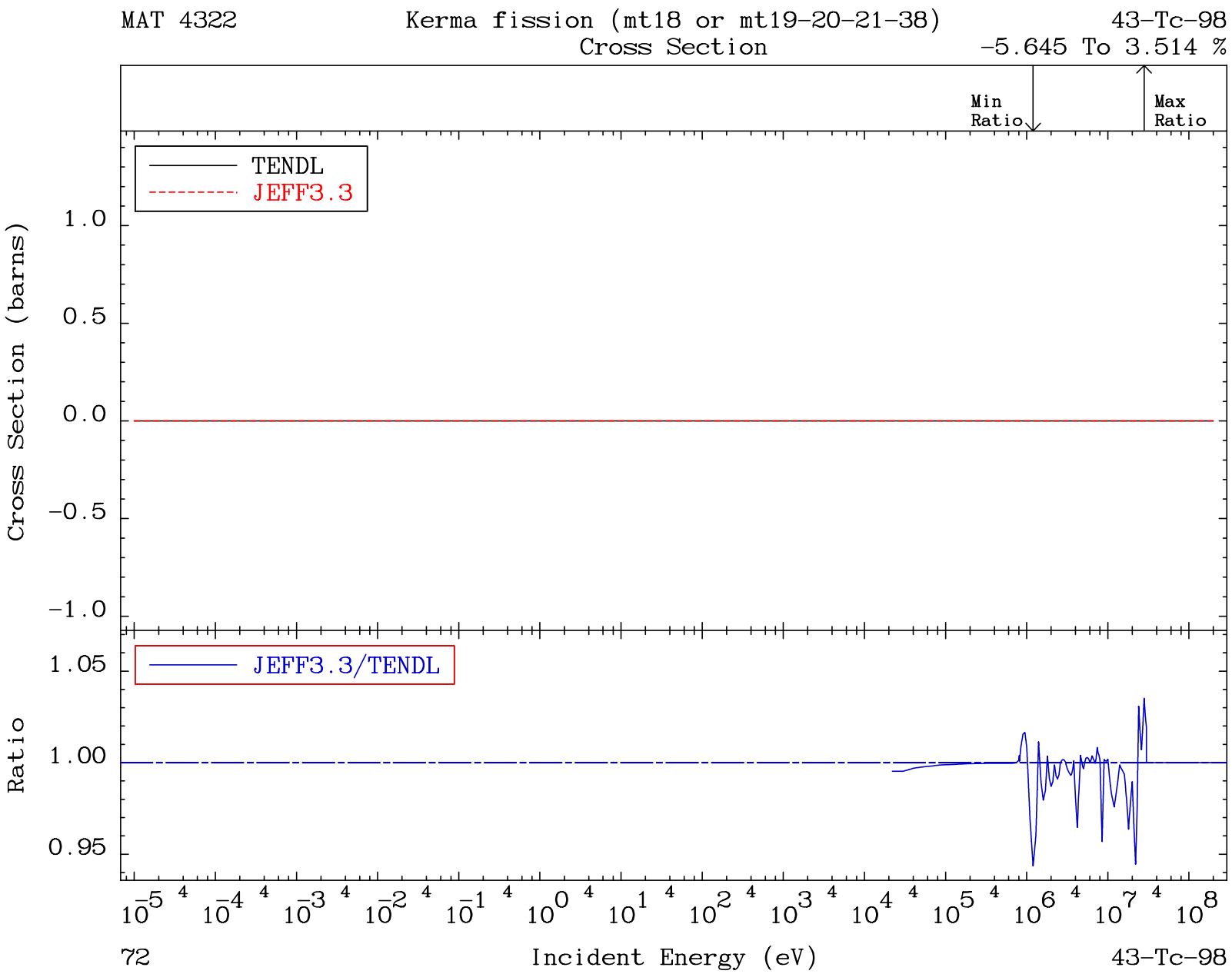

MAT 4322
He-4 Production
Cross Section
43-Tc-98
-4.191 To 518.7 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
43-Tc-98

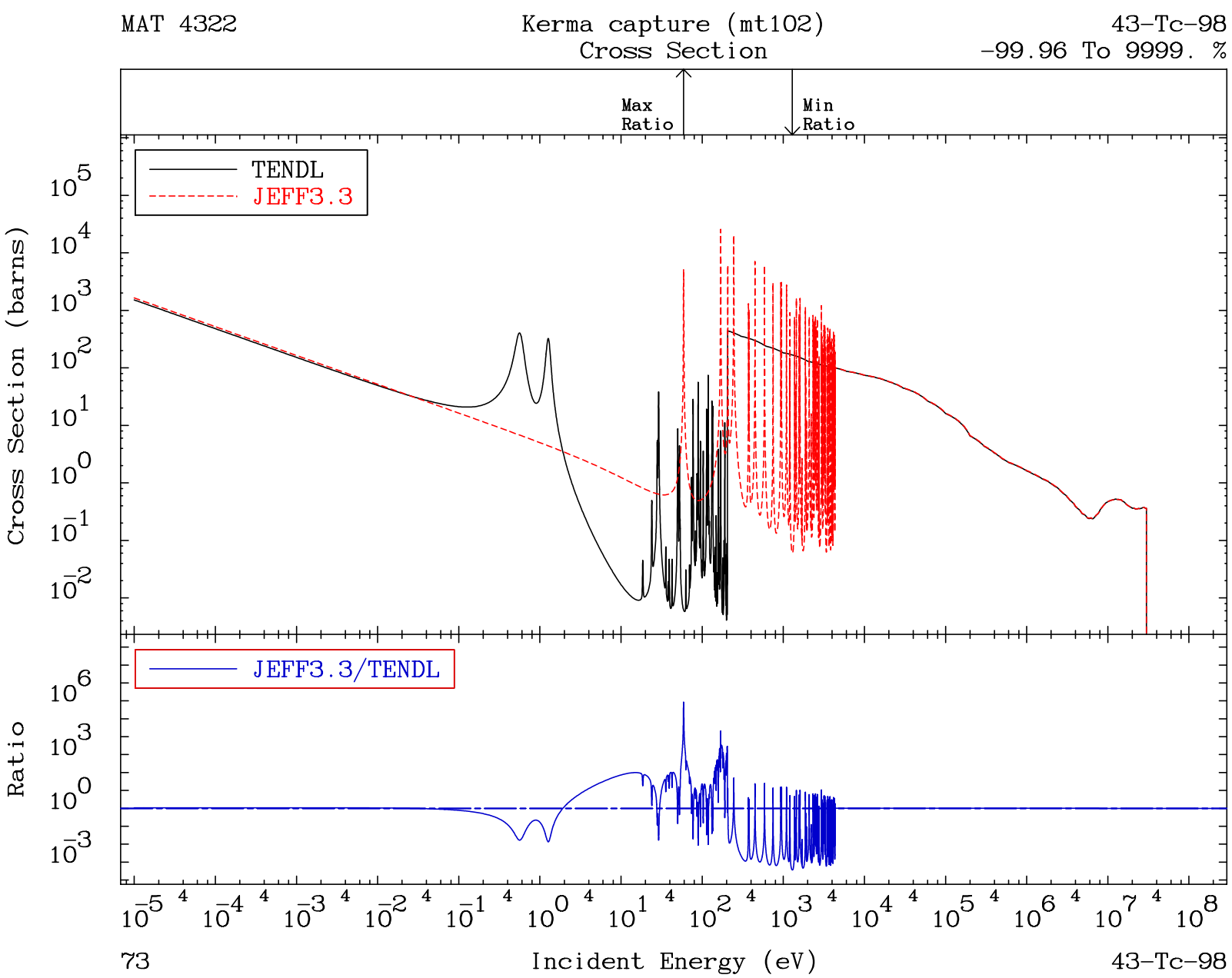

MAT 4322
Kerma total (eV-barns)
Cross Section
43-Tc-98
-95.83 To 9975. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
43-Tc-98

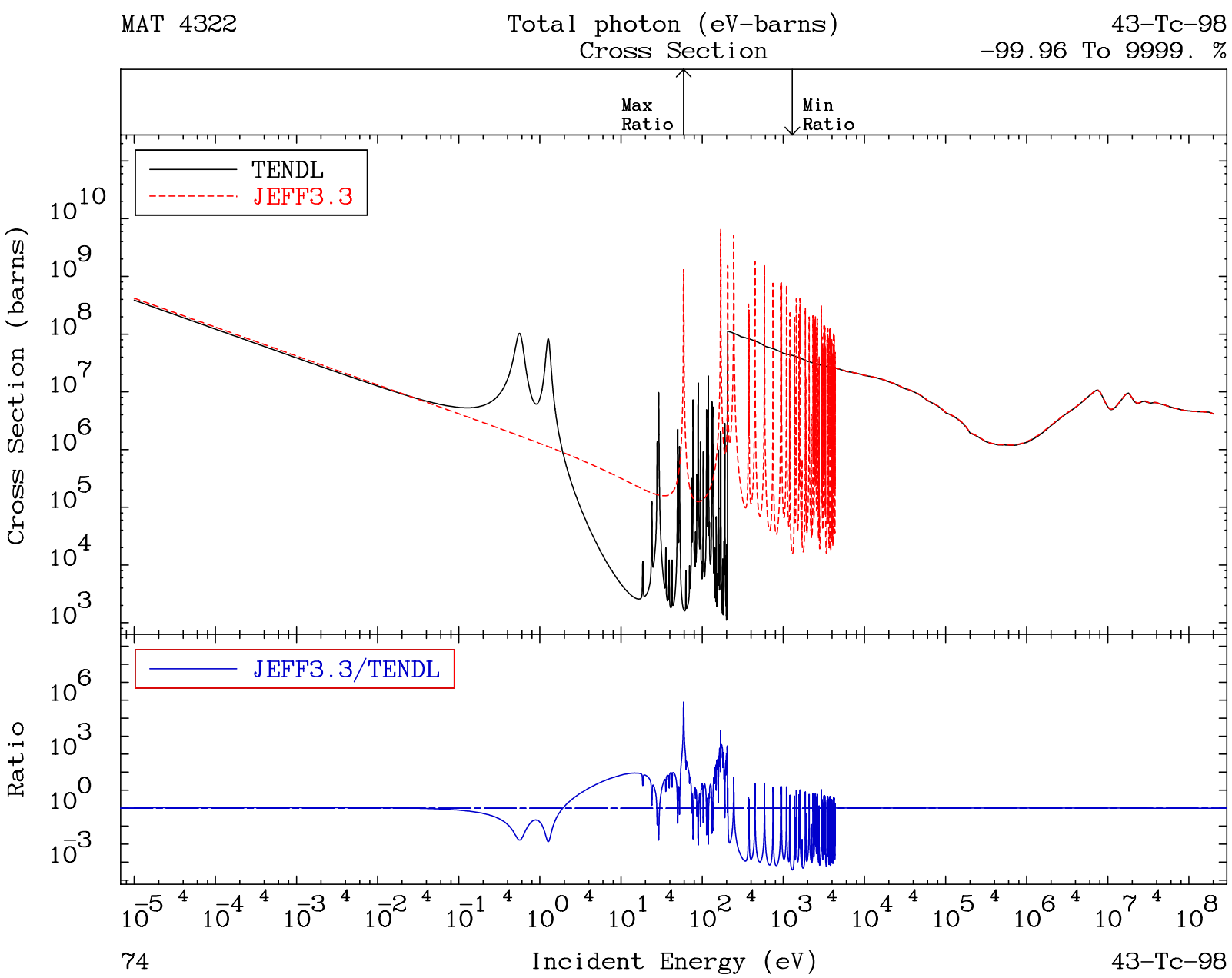

MAT 4322
Kerma elastic
Cross Section
43-Tc-98
-79.47 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
43-Tc-98

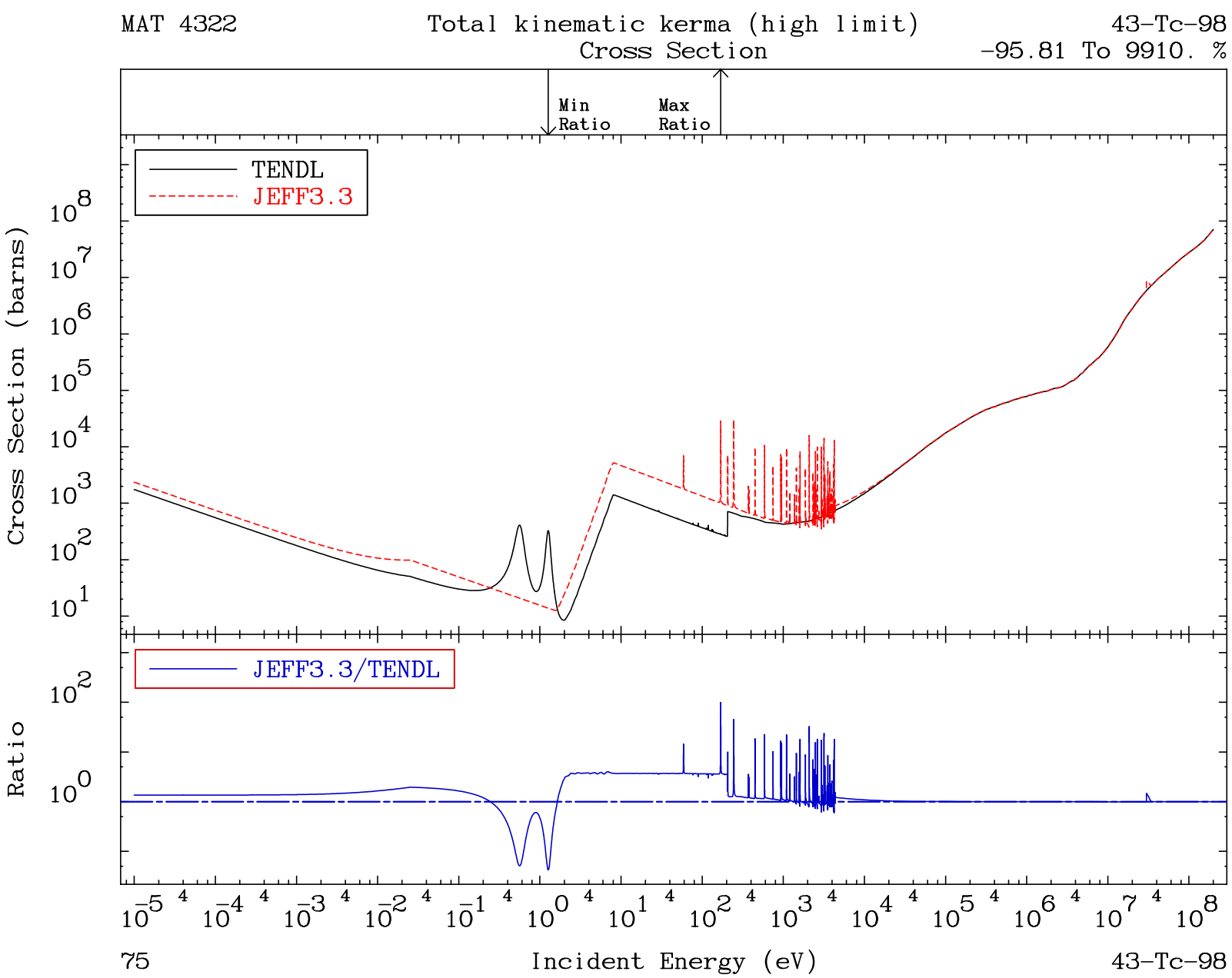

MAT 4322
Kerma non-elastic (all but mt2)
Cross Section
43-Tc-98
-95.86 To 9864. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
43-Tc-98

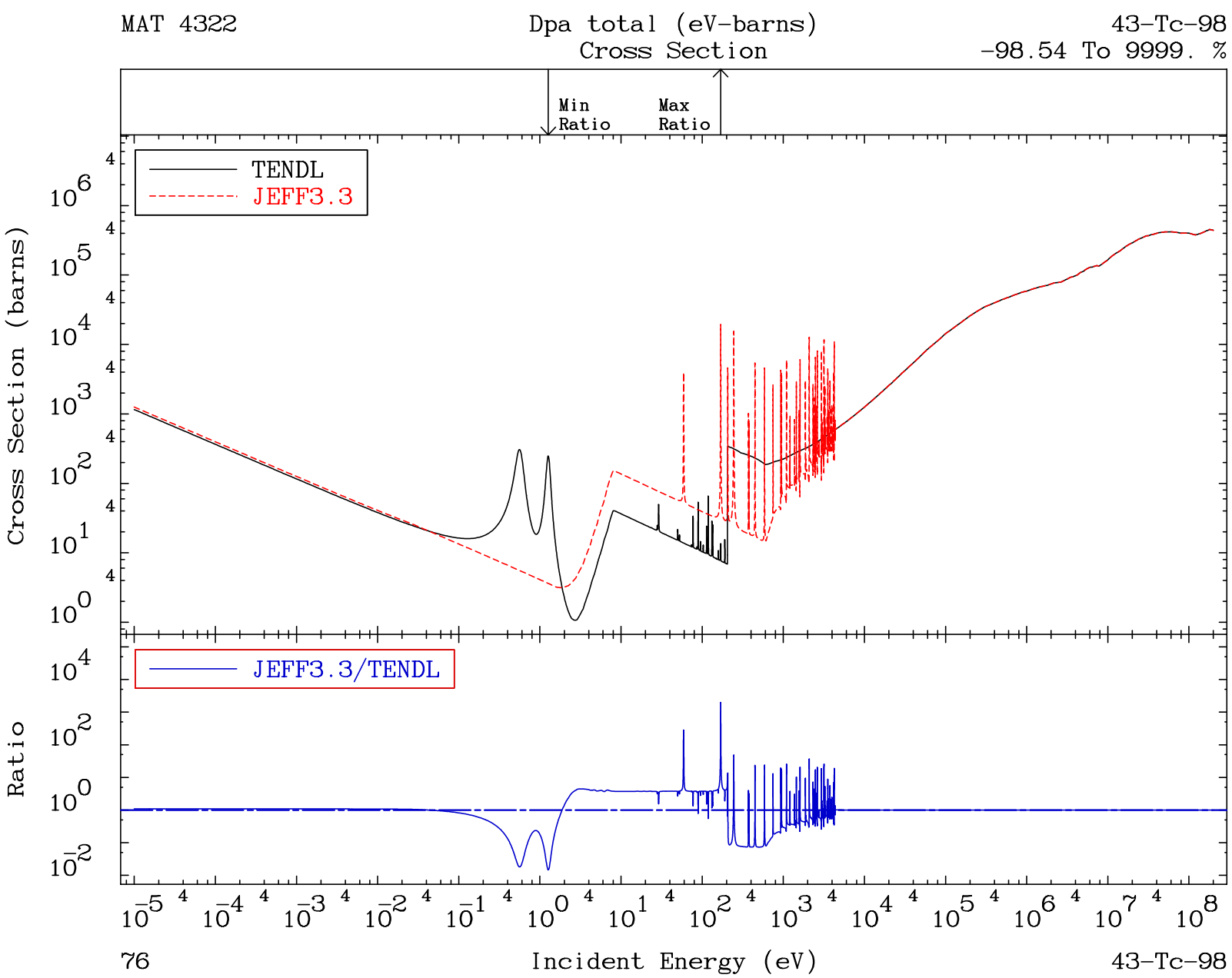

MAT 4322
Kerma inelastic (mt51-91)
Cross Section
43-Tc-98
-5.645 To 3.514 %
Min Ratio
Max Ratio
TENDL Threshold 22.025 keV
JEFF3.3 Threshold 22.025 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
43-Tc-98

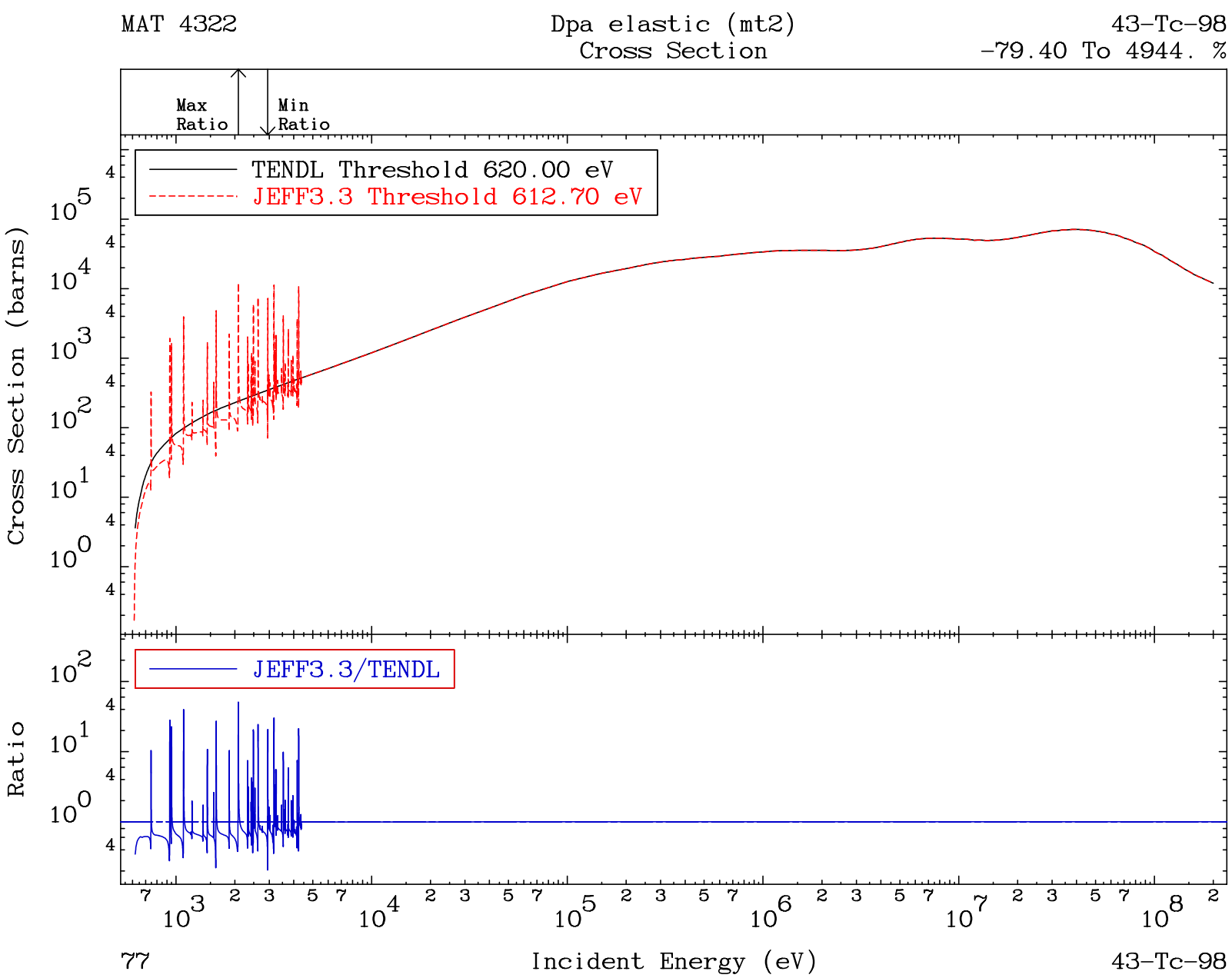

MAT 4322
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
43-Tc-98
-5.645 To 3.514 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
72
Incident Energy (eV)
43-Tc-98

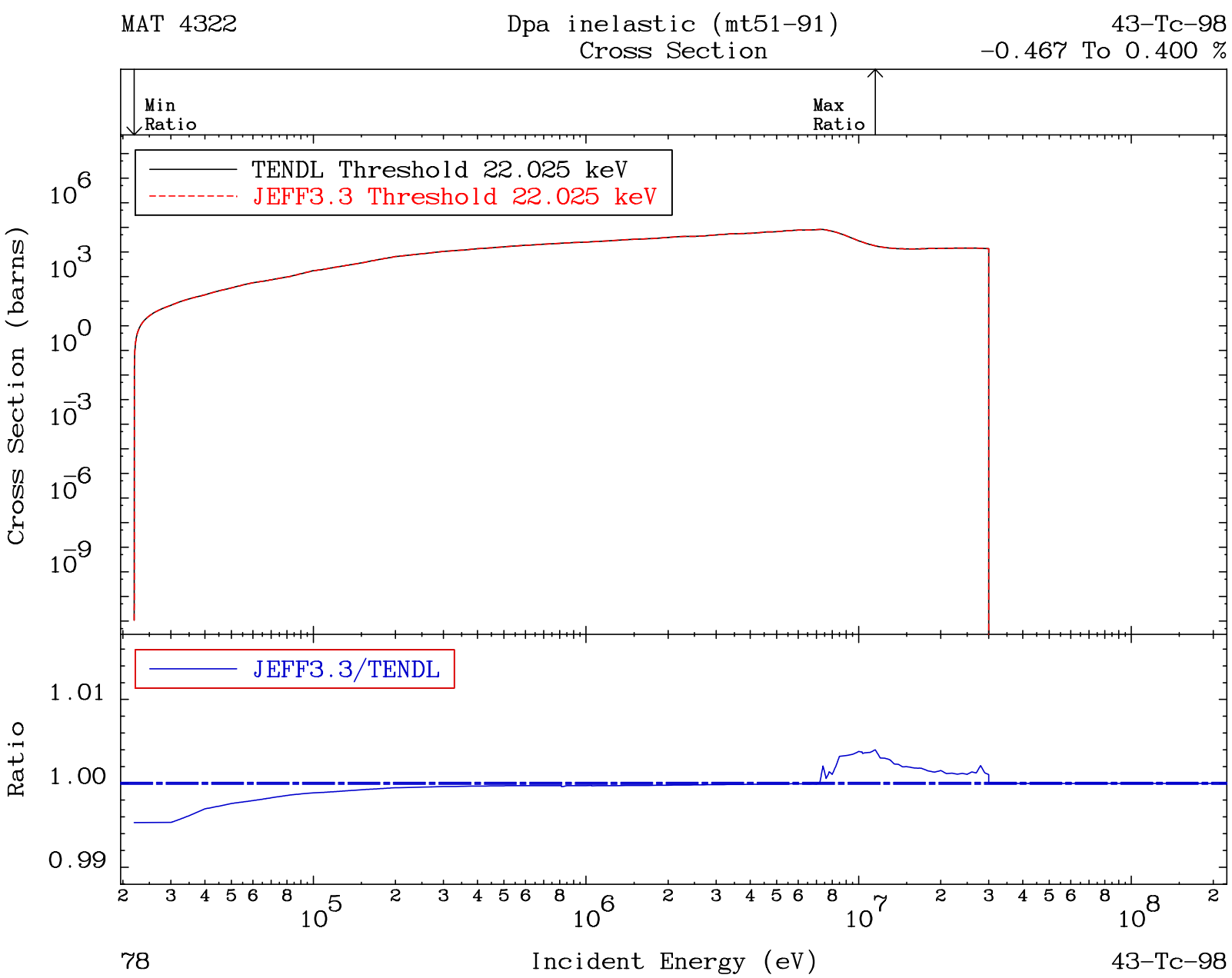

MAT 4322
Kerma capture (mt102)
Cross Section
43-Tc-98
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
43-Tc-98

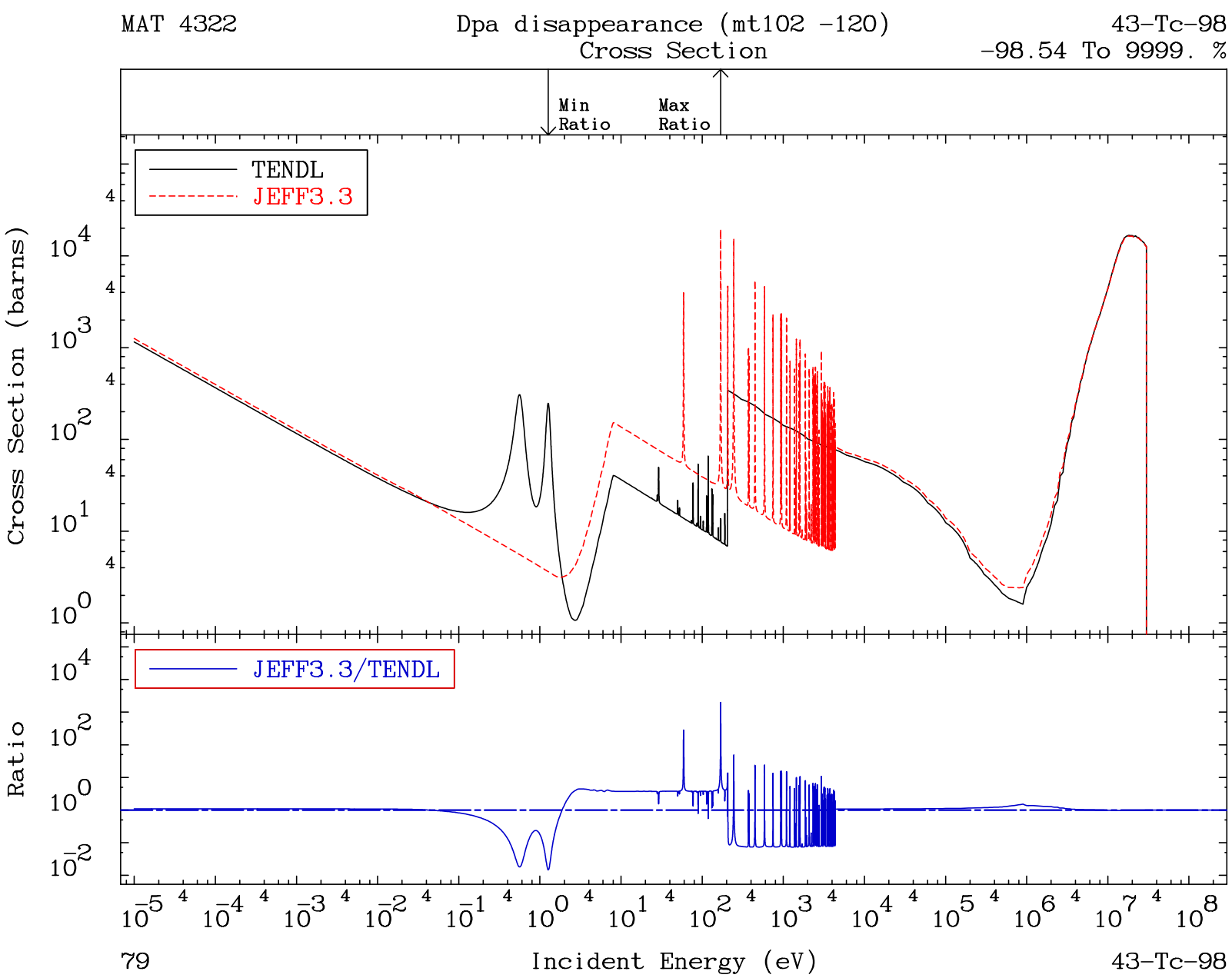

MAT 4322
Total photon (eV-barns)
Cross Section
43-Tc-98
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
74
Incident Energy (eV)
43-Tc-98

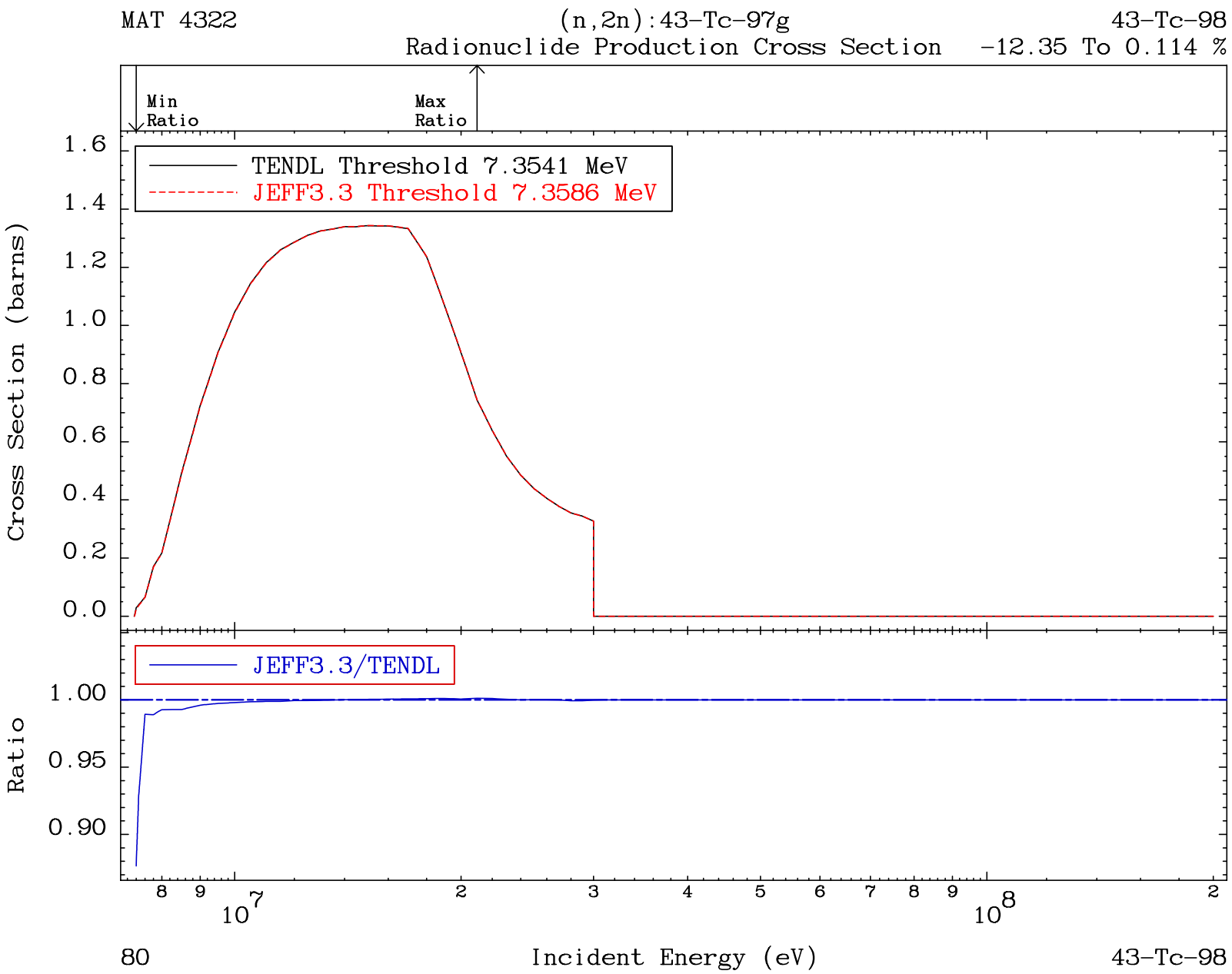

MAT 4322
Total kinematic kerma (high limit)
Cross Section
43-Tc-98
-95.81 To 9910. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
43-Tc-98

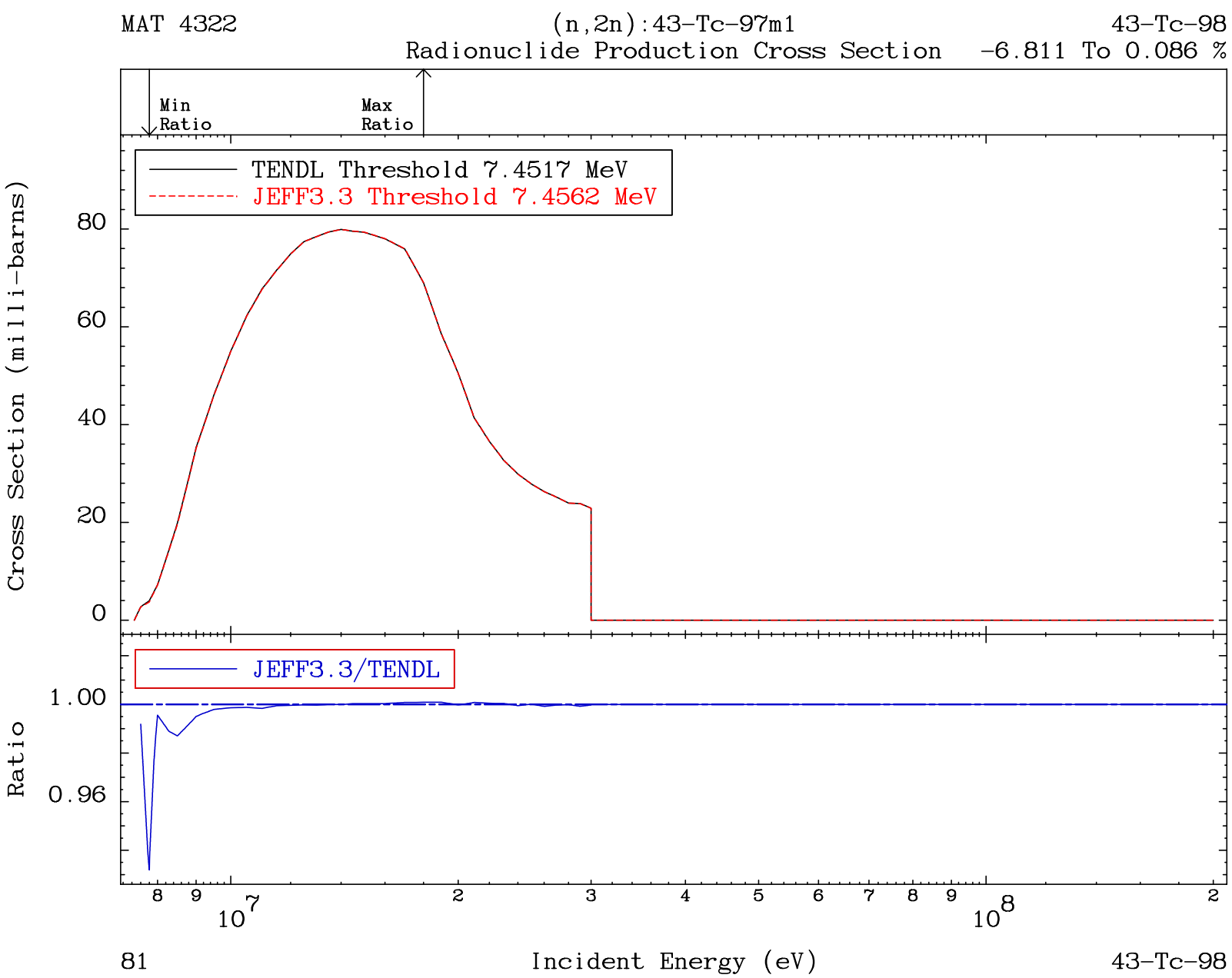

MAT 4322
Dpa total (eV-barns)
Cross Section
43-Tc-98
-98.54 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
43-Tc-98

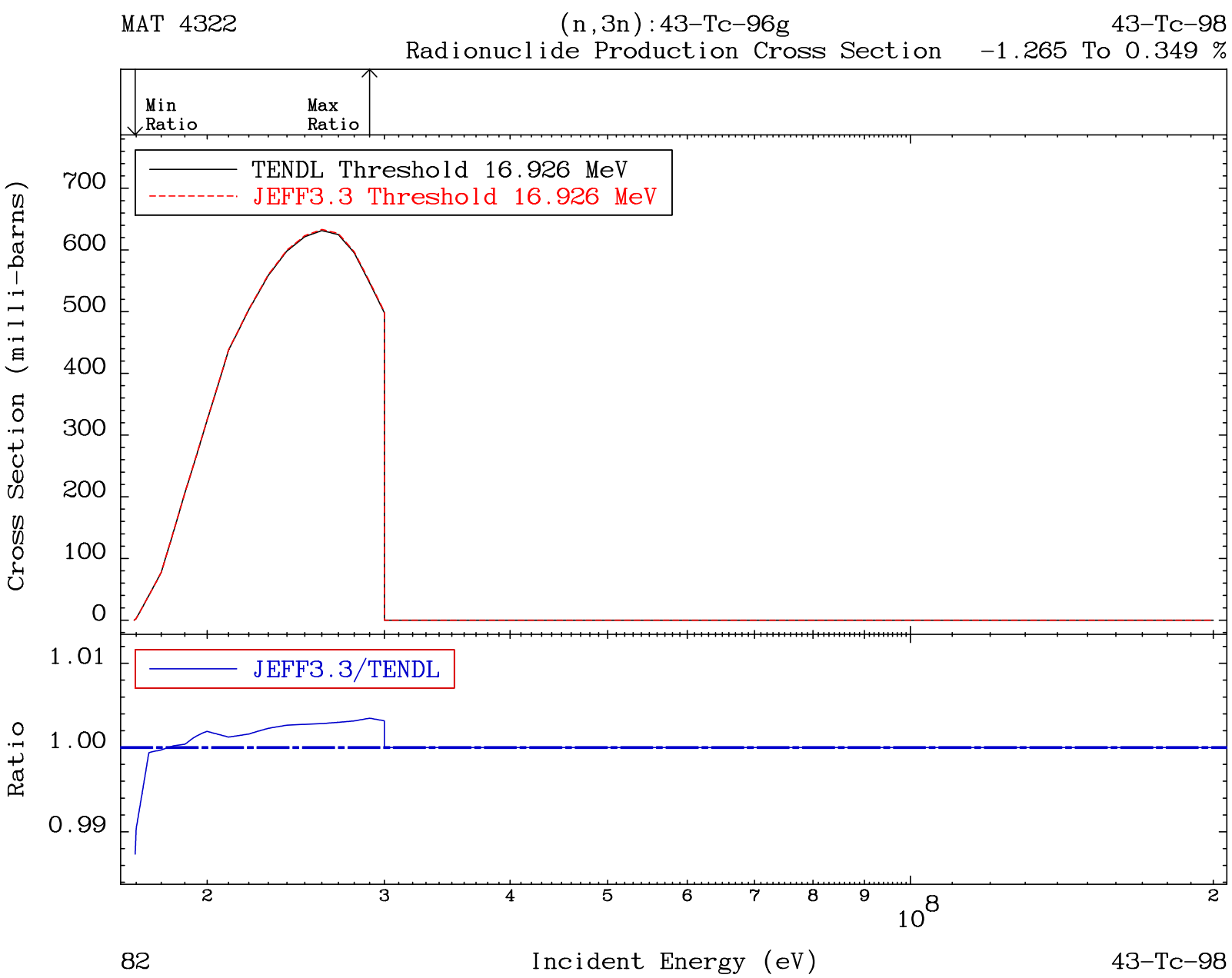

MAT 4322
Dpa elastic (mt2)
Cross Section
43-Tc-98
-79.40 To 4944. %
Max Ratio
Min Ratio
TENDL Threshold 620.00 eV
JEFF3.3 Threshold 612.70 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
43-Tc-98

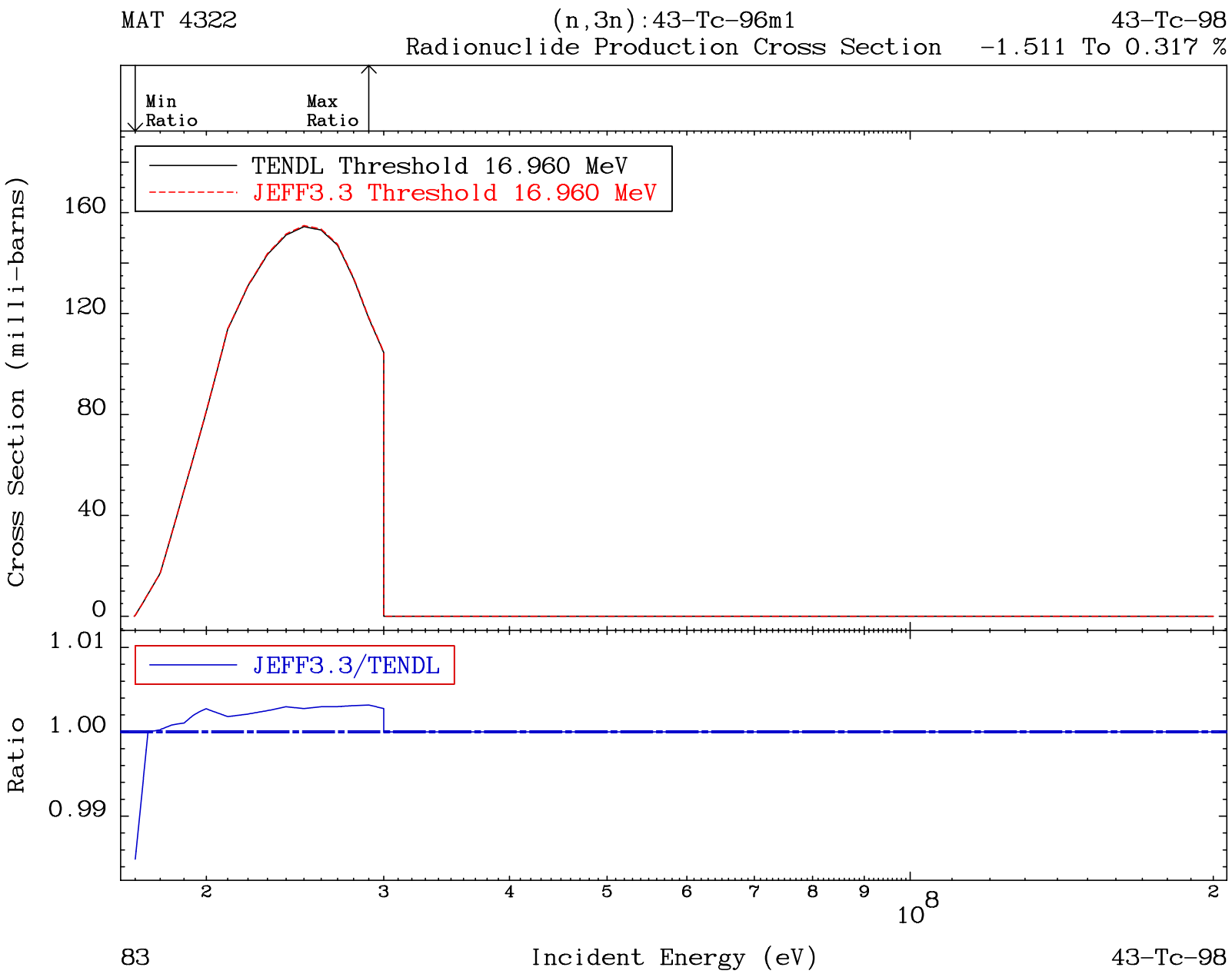

MAT 4322
Dpa inelastic (mt51-91)
Cross Section
43-Tc-98
-0.467 To 0.400 %
Min Ratio
Max Ratio
TENDL Threshold 22.025 keV
JEFF3.3 Threshold 22.025 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
43-Tc-98

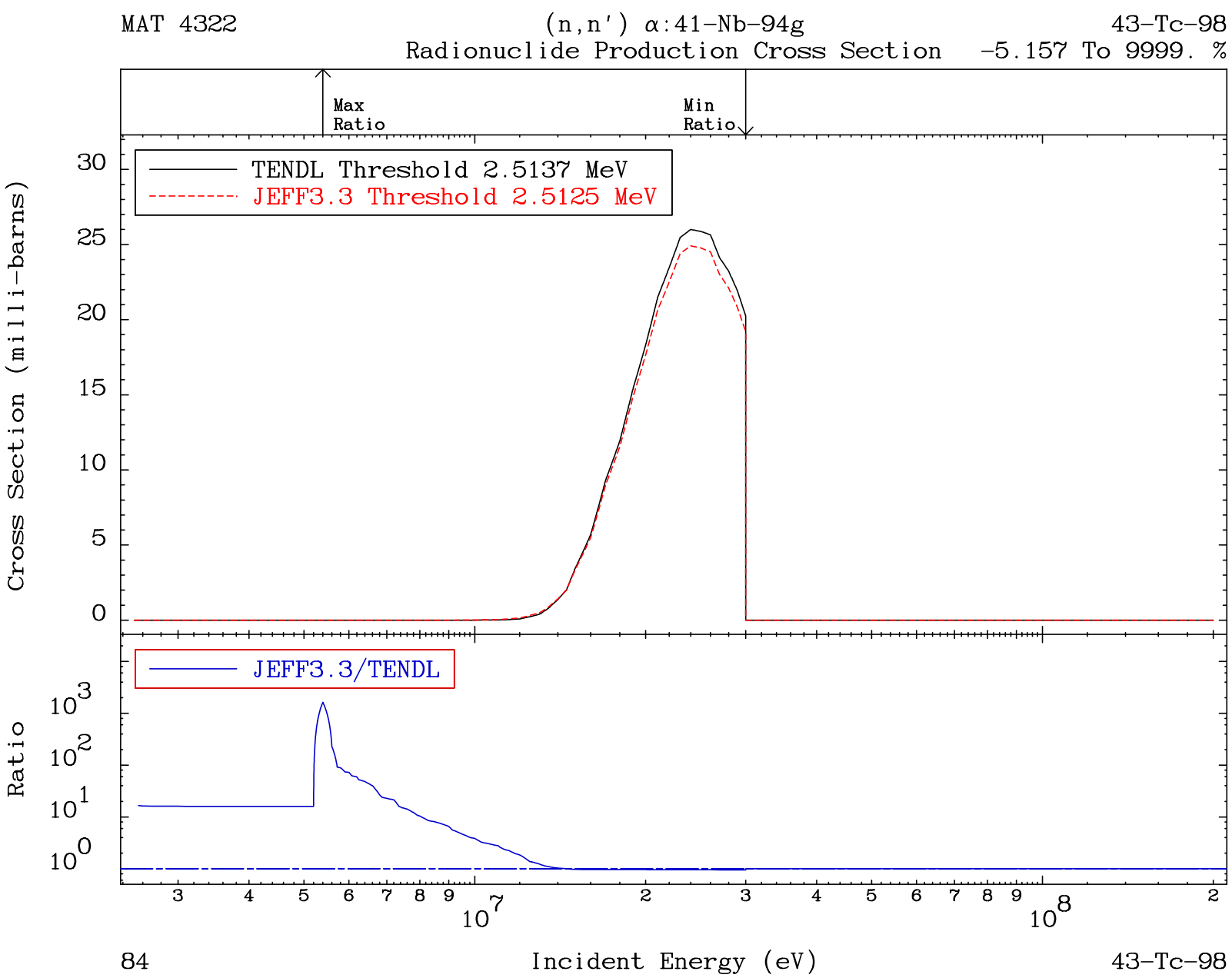

MAT 4322
Dpa disappearance (mt102 -120)
Cross Section
43-Tc-98
-98.54 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
79
43-Tc-98

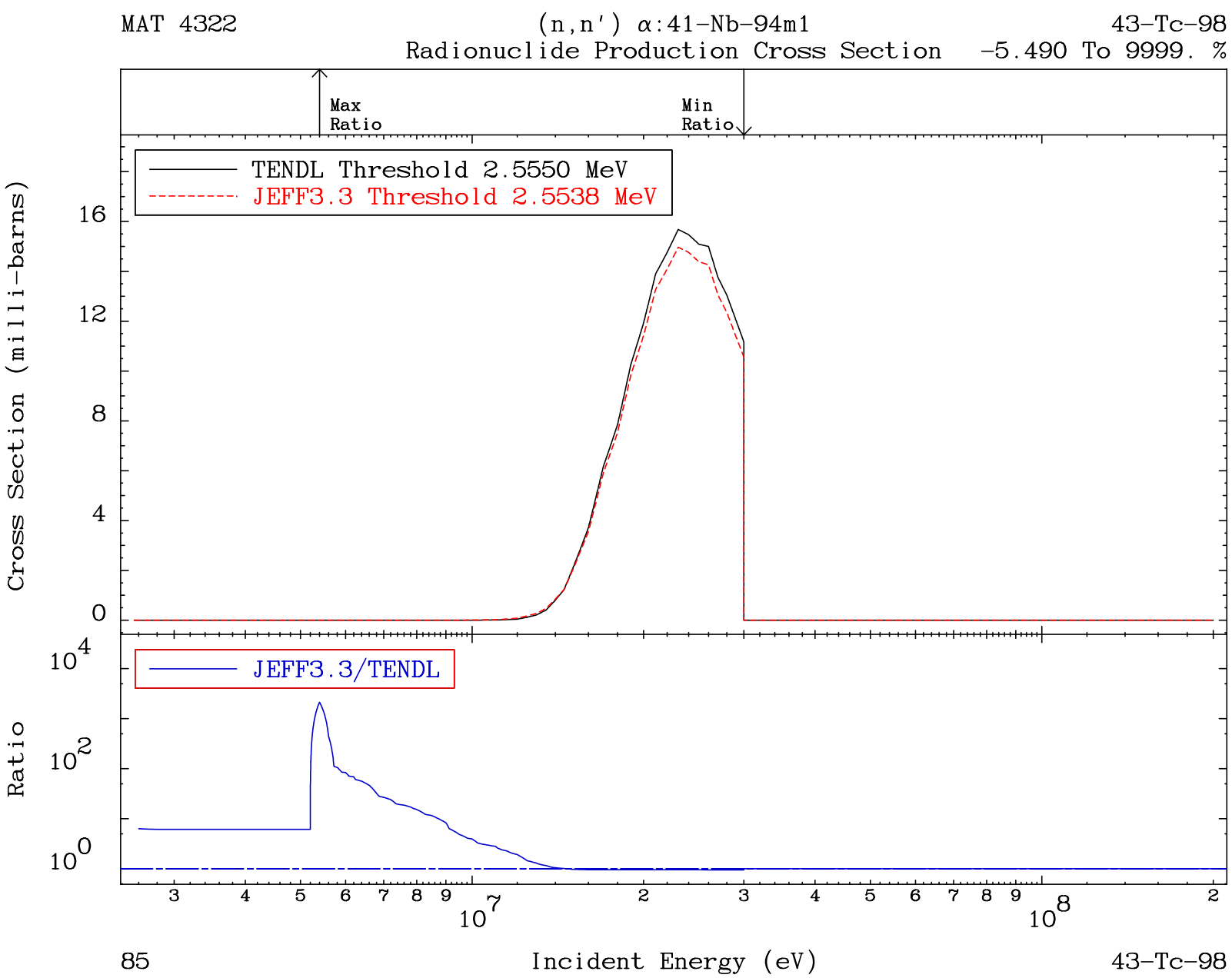

MAT 4322
(n,2n):43-Tc-97g
43-Tc-98
Radionuclide Production Cross Section
-12.35 To 0.114 %
Min Ratio
Max Ratio
TENDL Threshold 7.3541 MeV
JEFF3.3 Threshold 7.3586 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
80
Incident Energy (eV)
43-Tc-98

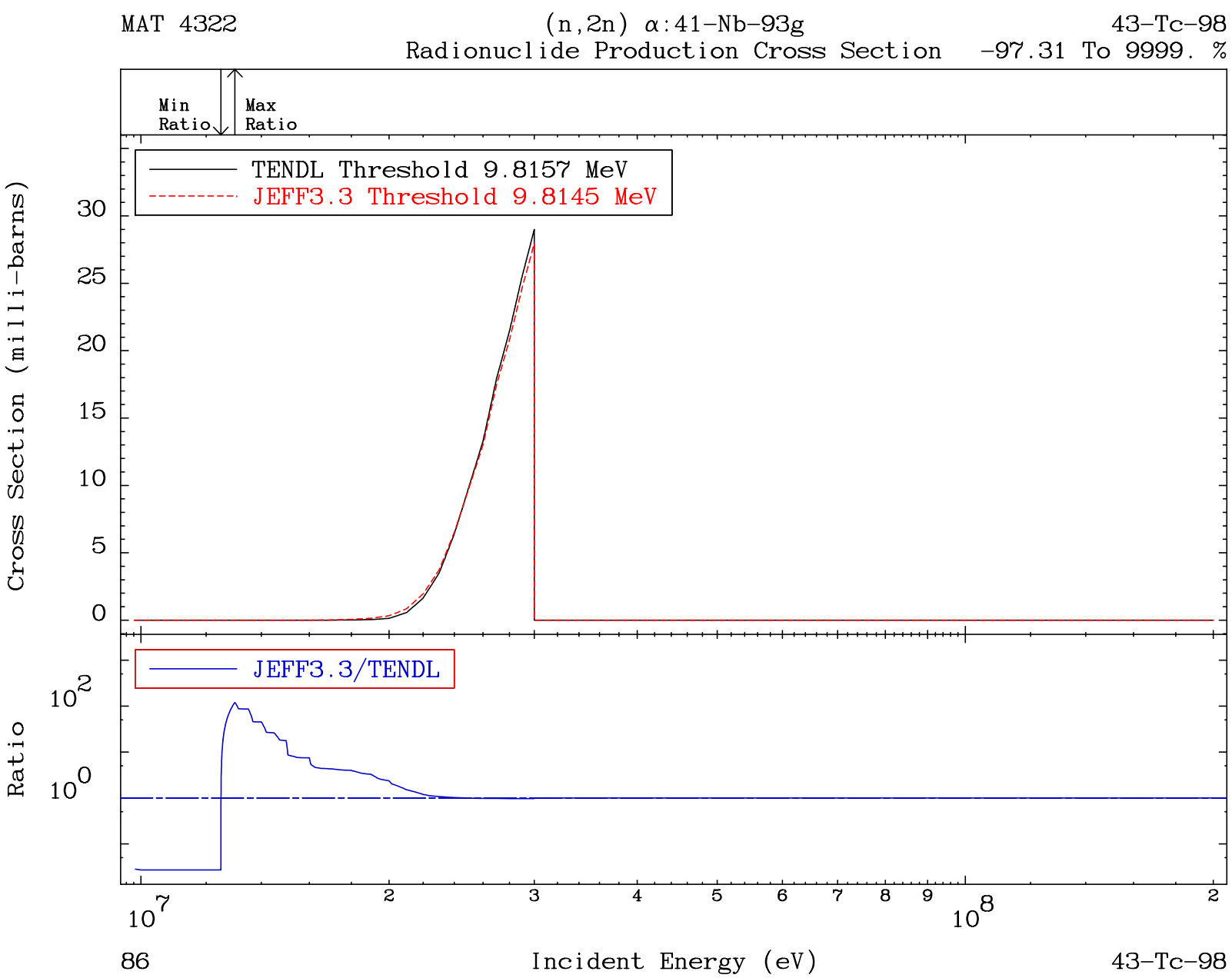

MAT 4322
(n,2n):43-Tc-97m1
43-Tc-98
Radionuclide Production Cross Section
-6.811 To 0.086 %
Min Ratio
Max Ratio
TENDL Threshold 7.4517 MeV
JEFF3.3 Threshold 7.4562 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.96
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
81
Incident Energy (eV)
43-Tc-98

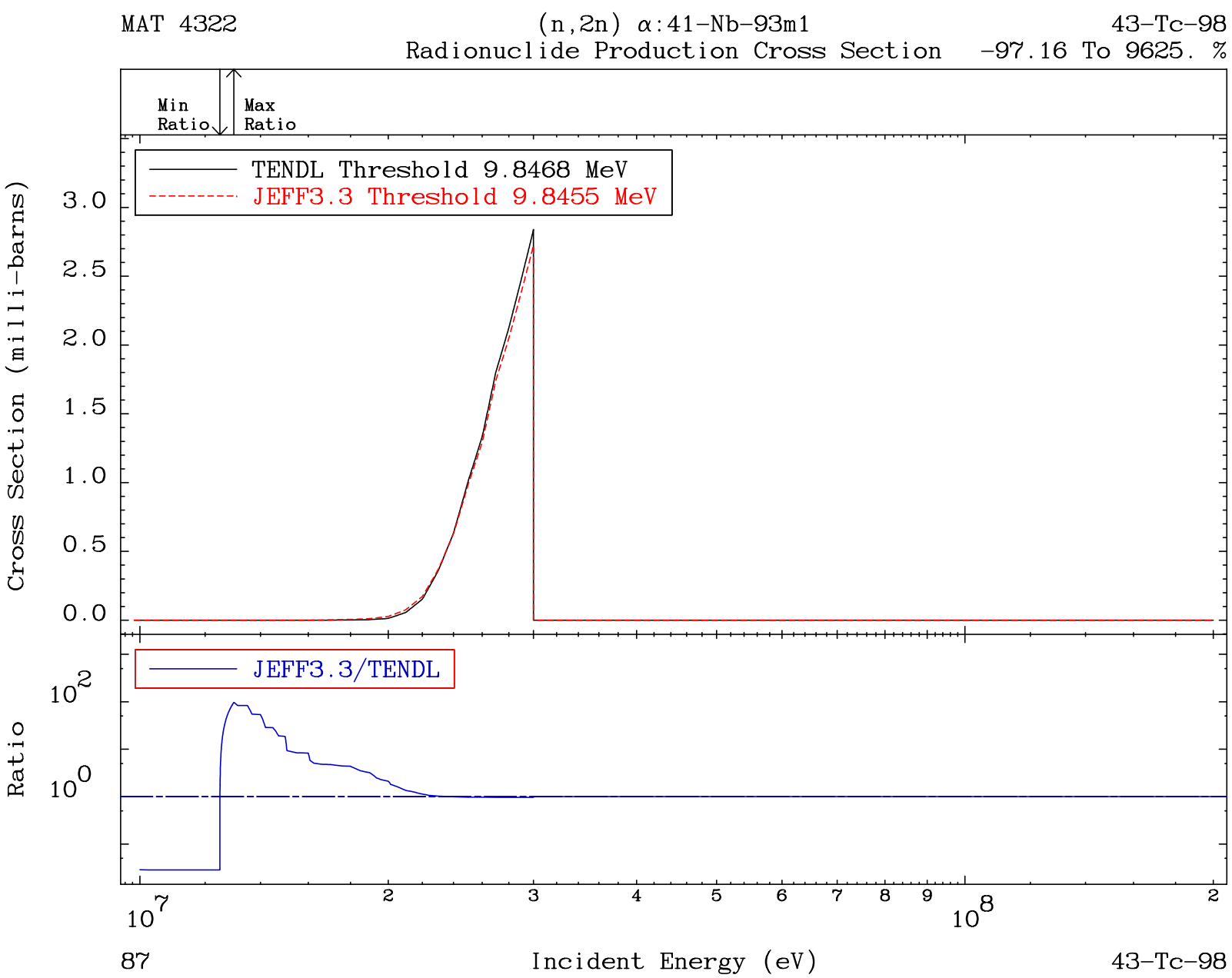

MAT 4322
(n,3n):43-Tc-96g
43-Tc-98
Radionuclide Production Cross Section -1.265 To 0.349 %
Min Ratio
Max Ratio
TENDL Threshold 16.926 MeV
JEFF3.3 Threshold 16.926 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
43-Tc-98

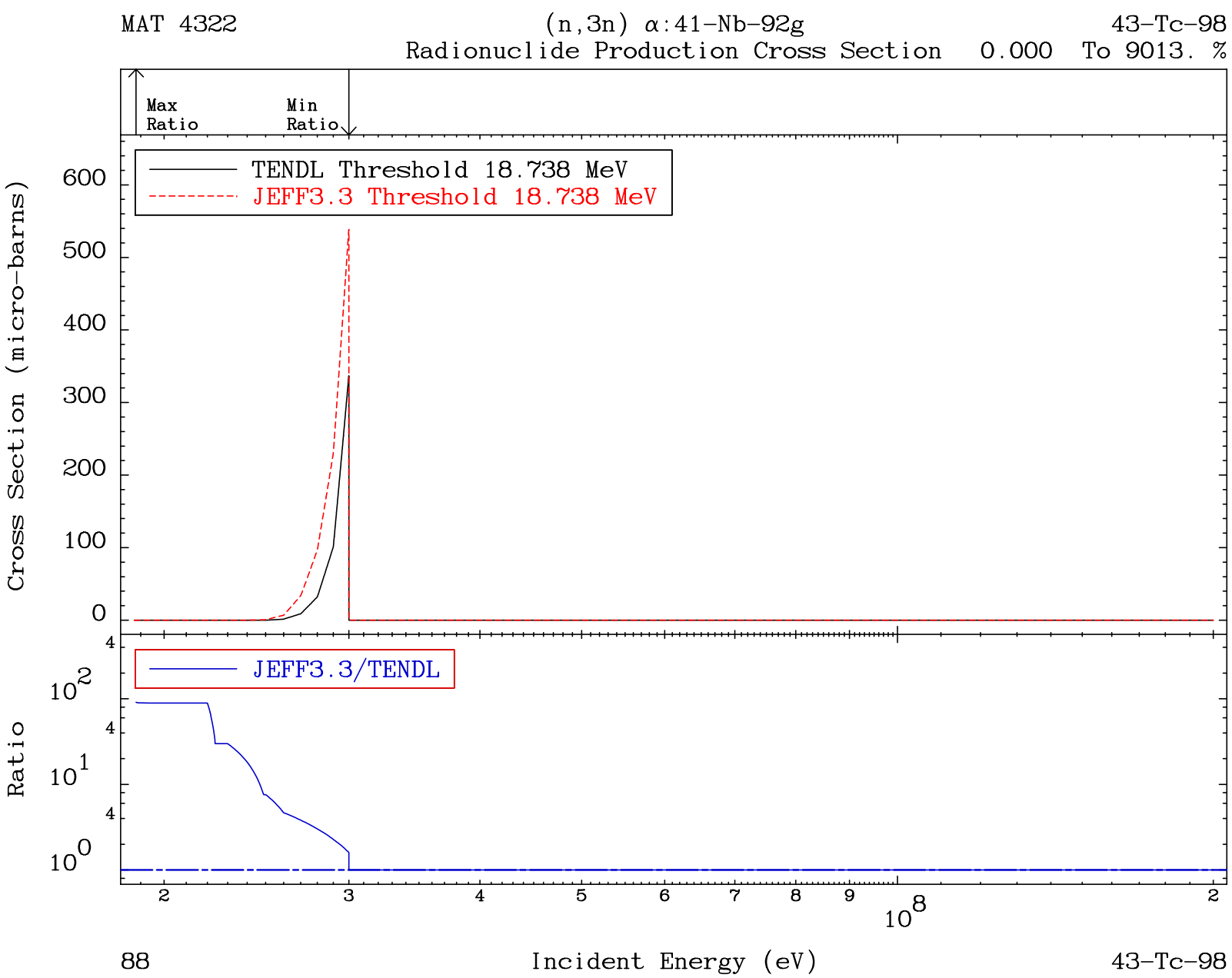

MAT 4322
(n,3n):43-Tc-96m1
43-Tc-98
Radionuclide Production Cross Section -1.511 To 0.317 %
Min Ratio
Max Ratio
TENDL Threshold 16.960 MeV
JEFF3.3 Threshold 16.960 MeV
Cross Section (milli-barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
43-Tc-98

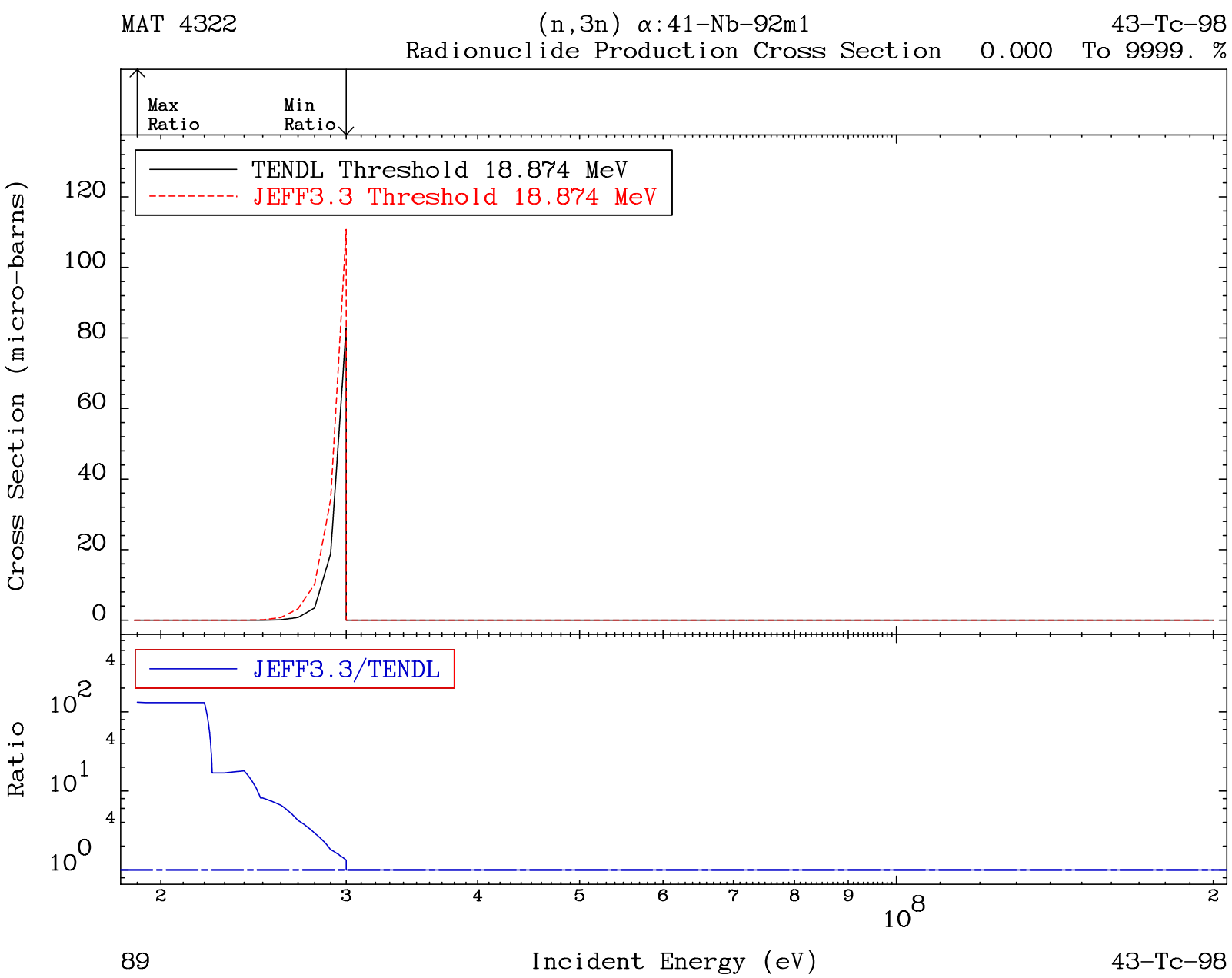

MAT 4322
(n,n') α:41-Nb-94g
43-Tc-98
Radionuclide Production Cross Section -5.157 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5137 MeV
JEFF3.3 Threshold 2.5125 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
84
43-Tc-98

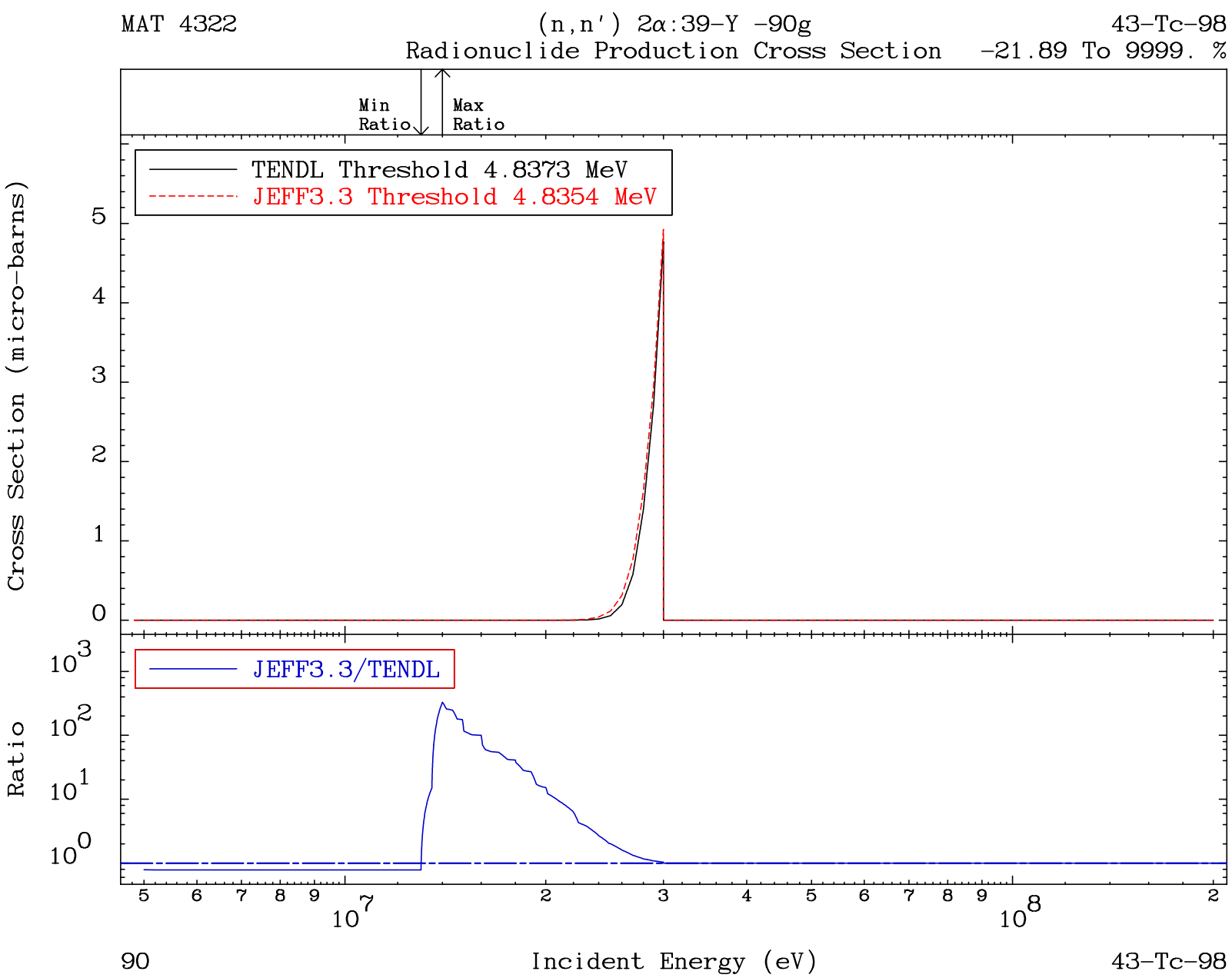

MAT 4322
(n,n') α:41-Nb-94m1
43-Tc-98
Radionuclide Production Cross Section -5.490 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.5550 MeV
JEFF3.3 Threshold 2.5538 MeV
Cross Section (milli-barns)
16
12
8
4
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
43-Tc-98

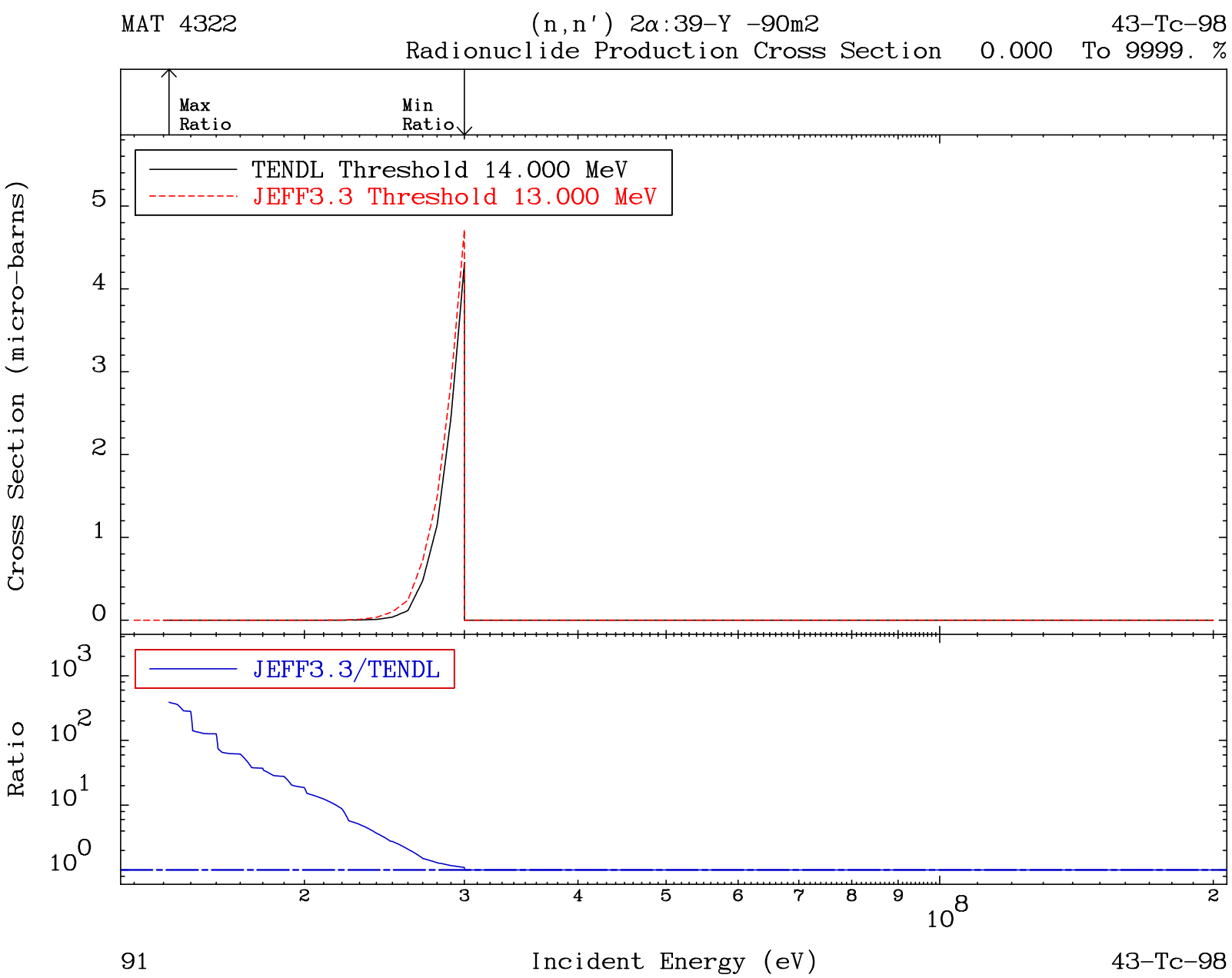

MAT 4322
(n,2n) α:41-Nb-93g
43-Tc-98
Radionuclide Production Cross Section -97.31 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 9.8157 MeV
JEFF3.3 Threshold 9.8145 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
43-Tc-98

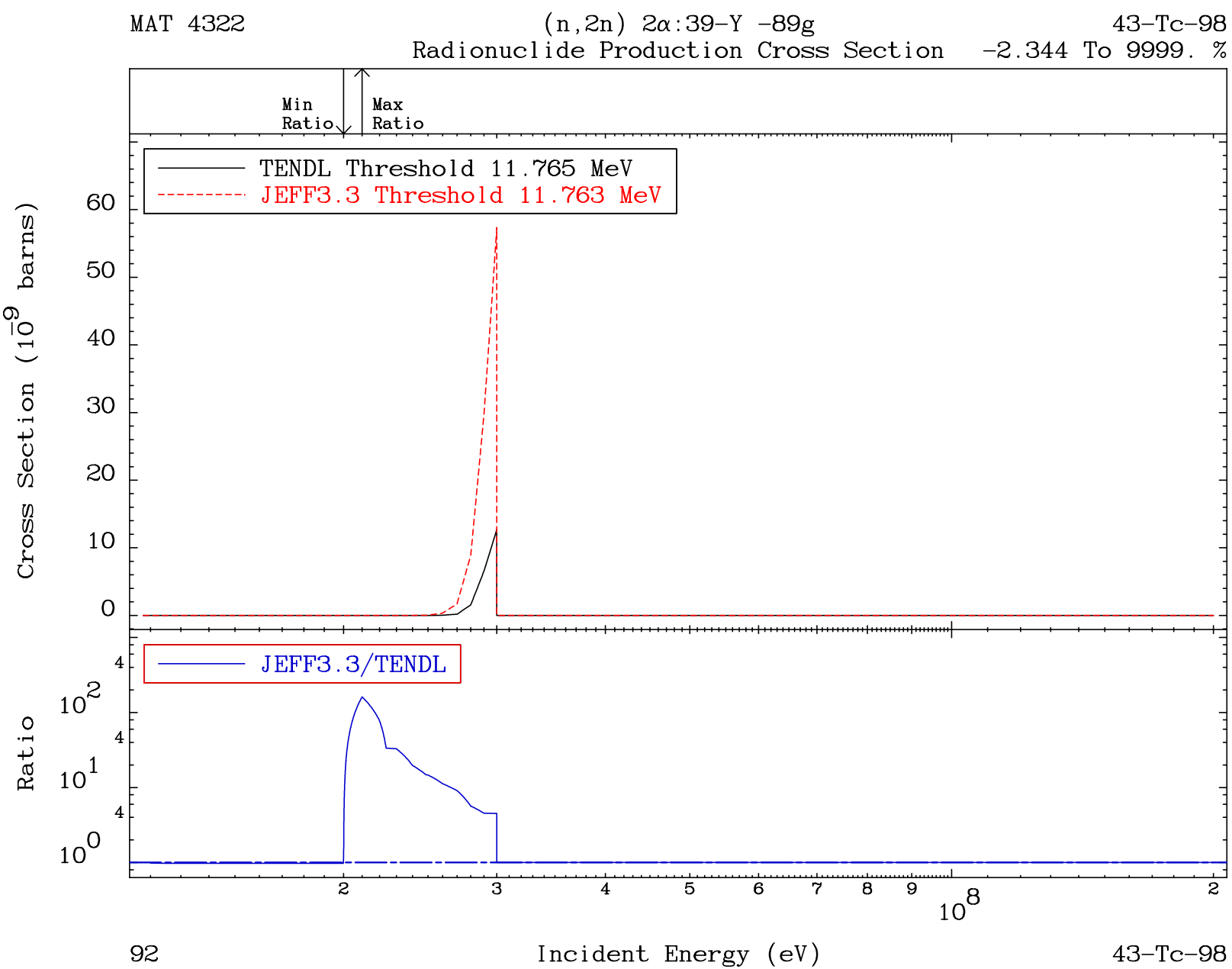

MAT 4322
(n,2n) α:41-Nb-93m1
43-Tc-98
Radionuclide Production Cross Section -97.16 To 9625. %
Min Ratio
Max Ratio
TENDL Threshold 9.8468 MeV
JEFF3.3 Threshold 9.8455 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
43-Tc-98

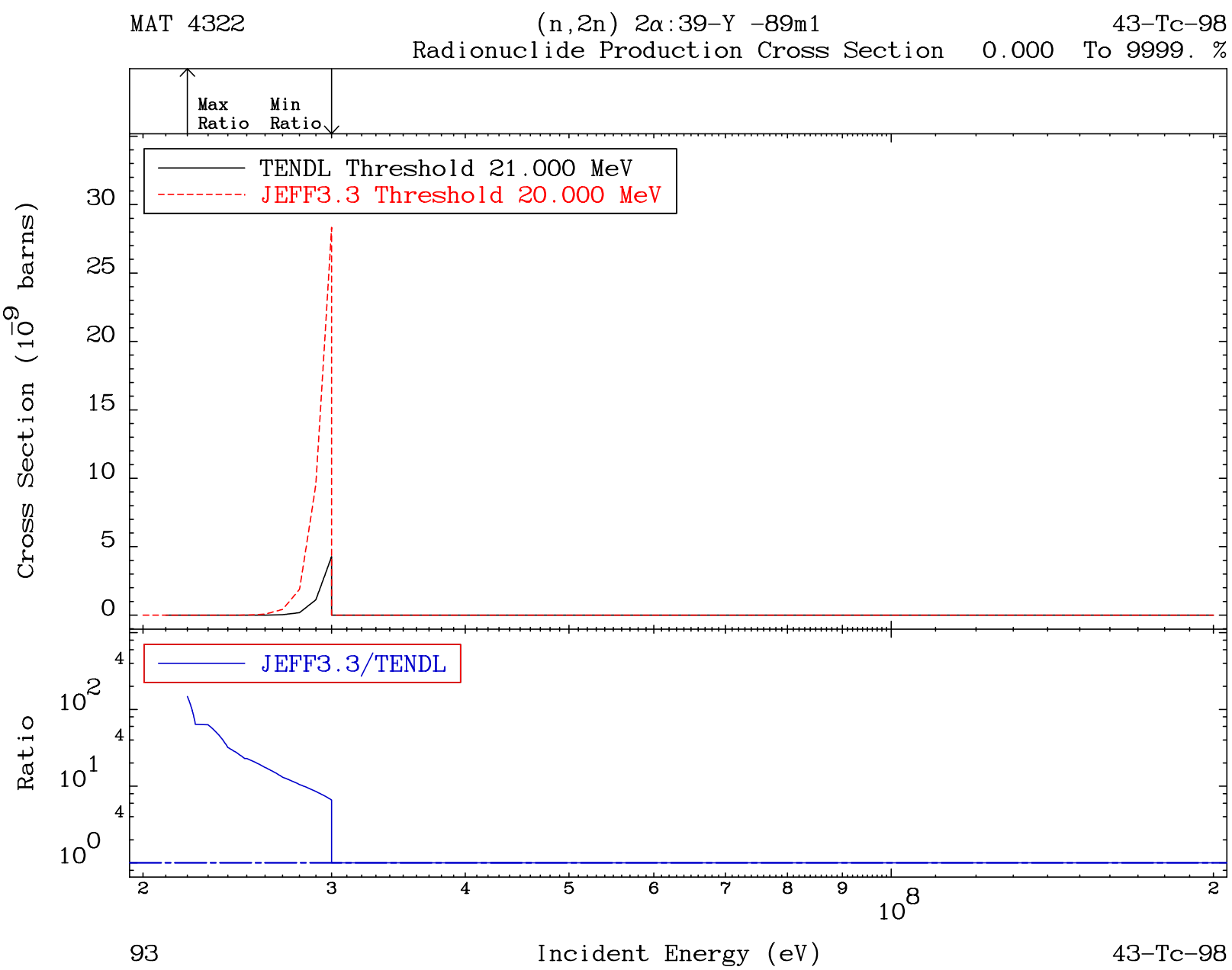

MAT 4322
(n,3n) α:41-Nb-92g
43-Tc-98
Radionuclide Production Cross Section 0.000 To 9013. %
Max Ratio
Min Ratio
TENDL Threshold 18.738 MeV
JEFF3.3 Threshold 18.738 MeV
Cross Section (micro-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
43-Tc-98

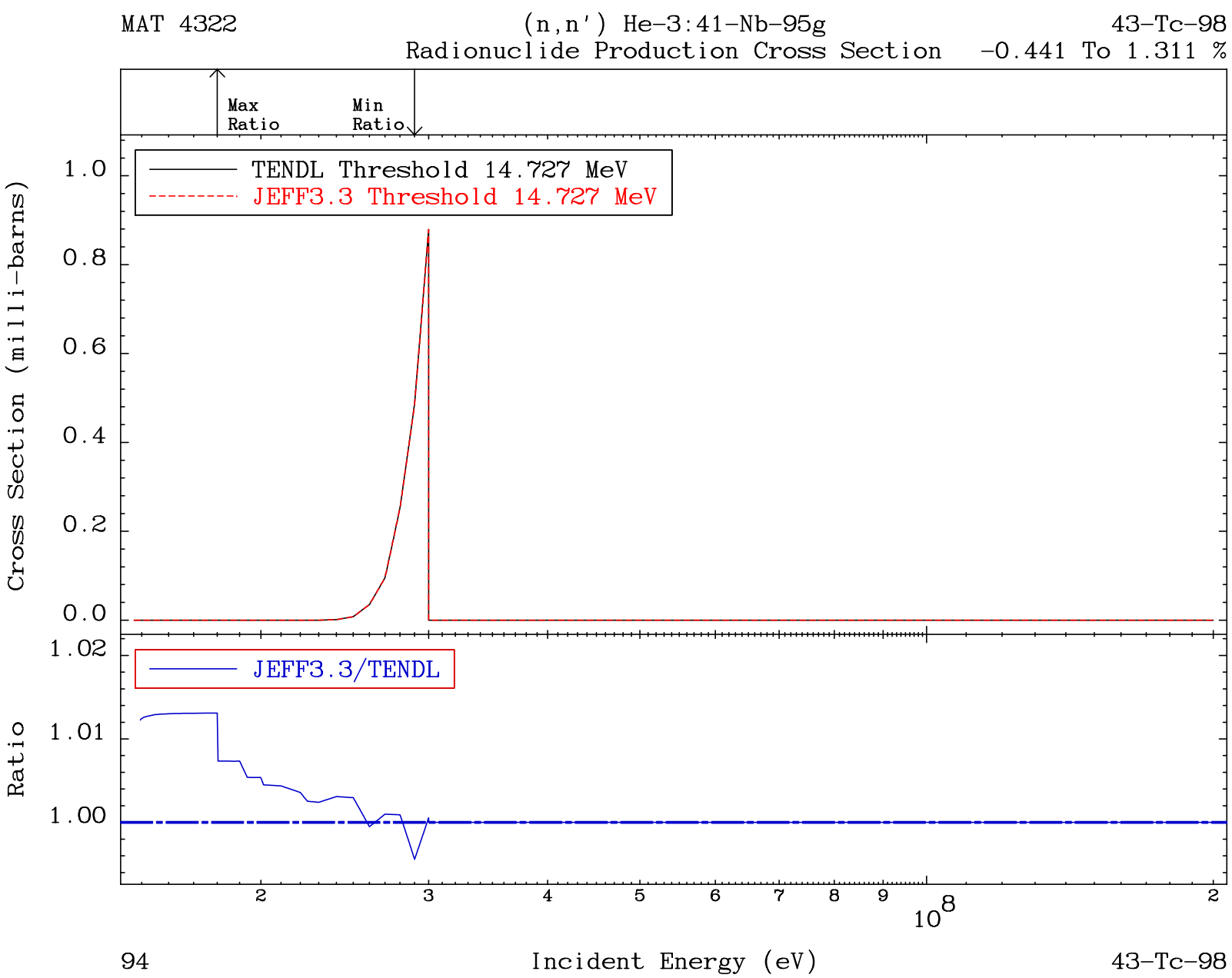

MAT 4322
(n,3n) α:41-Nb-92m1
43-Tc-98
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 18.874 MeV
JEFF3.3 Threshold 18.874 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
43-Tc-98

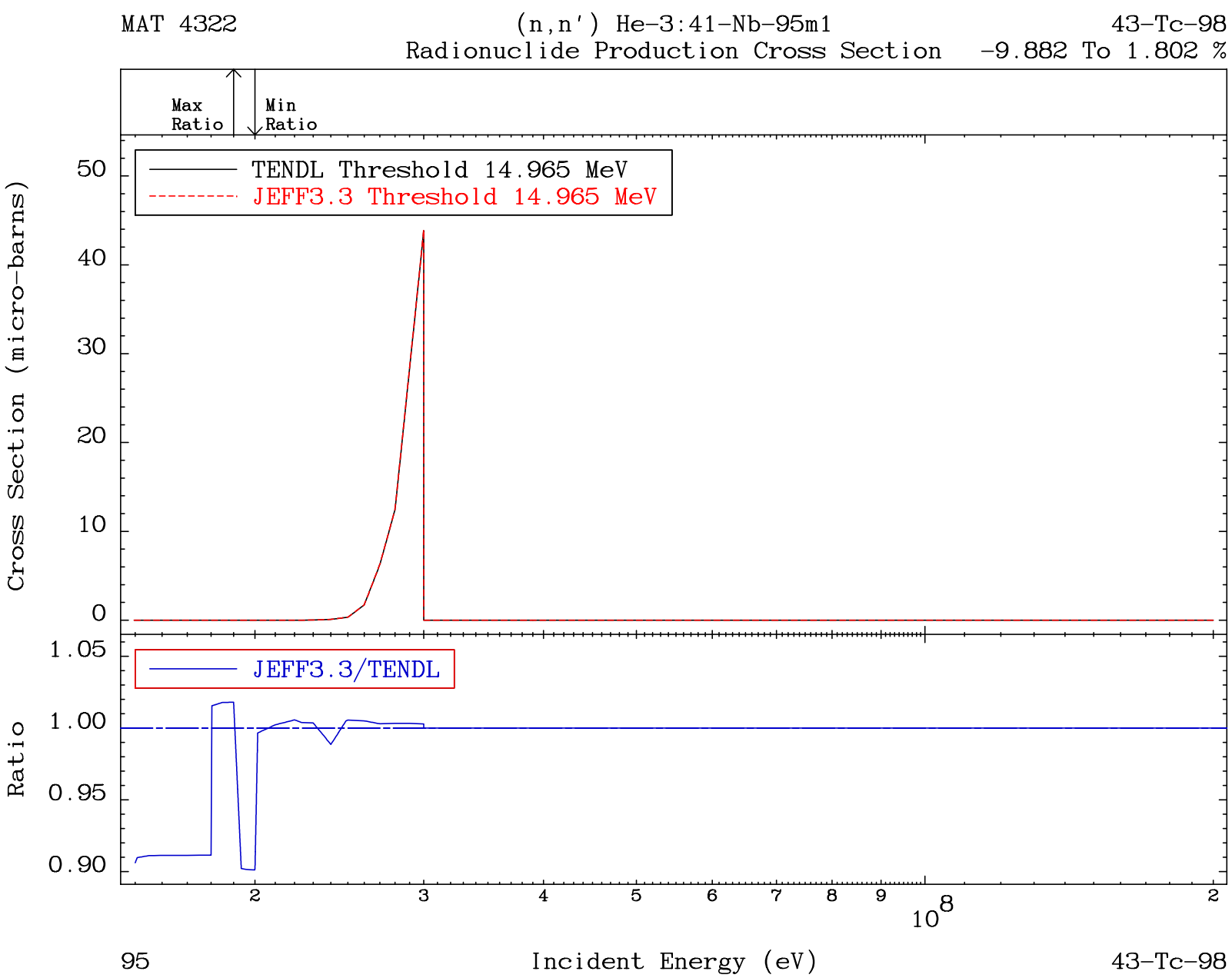

MAT 4322
(n,n') 2α:39-Y -90g
43-Tc-98
Radionuclide Production Cross Section -21.89 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8373 MeV
JEFF3.3 Threshold 4.8354 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
10^3
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
43-Tc-98

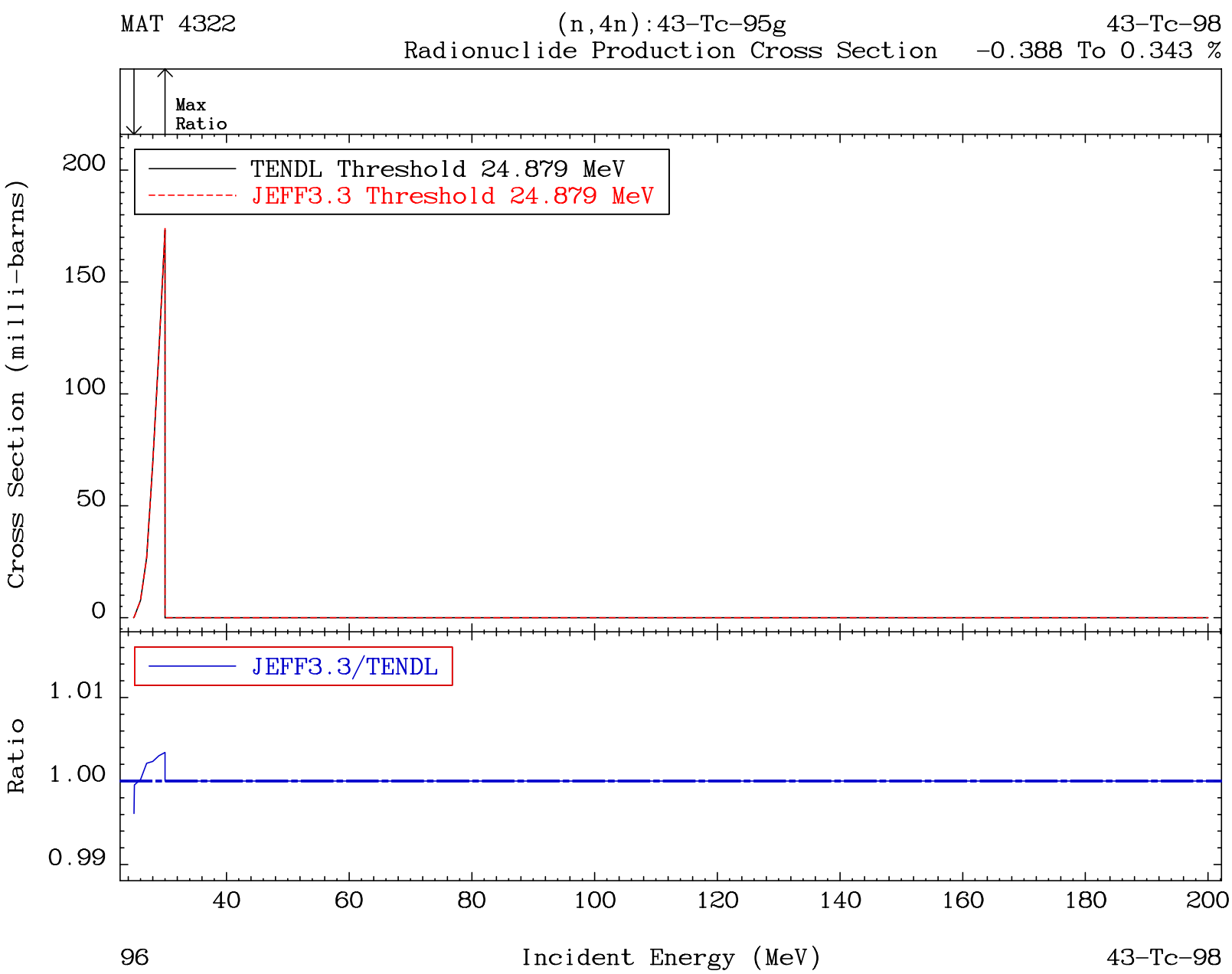

MAT 4322
(n,n') 2α:39-Y -90m2
43-Tc-98
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 14.000 MeV
JEFF3.3 Threshold 13.000 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
JEFF3.3/TENDL
Ratio
10^0
10^1
10^2
10^3
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
43-Tc-98

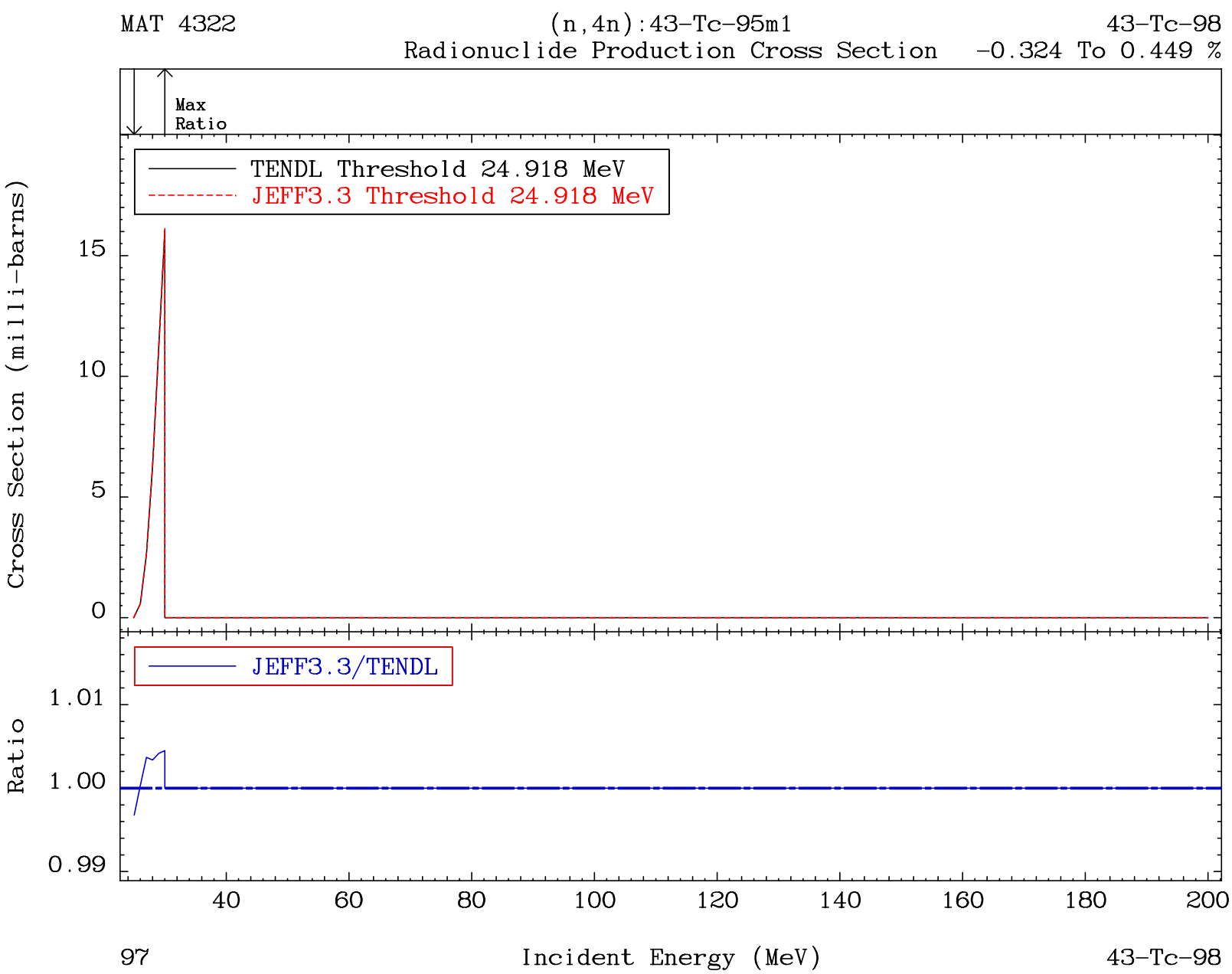

MAT 4322
(n,2n) 2α:39-Y -89g
43-Tc-98
Radionuclide Production Cross Section -2.344 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.765 MeV
JEFF3.3 Threshold 11.763 MeV
Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
92
Incident Energy (eV)
43-Tc-98

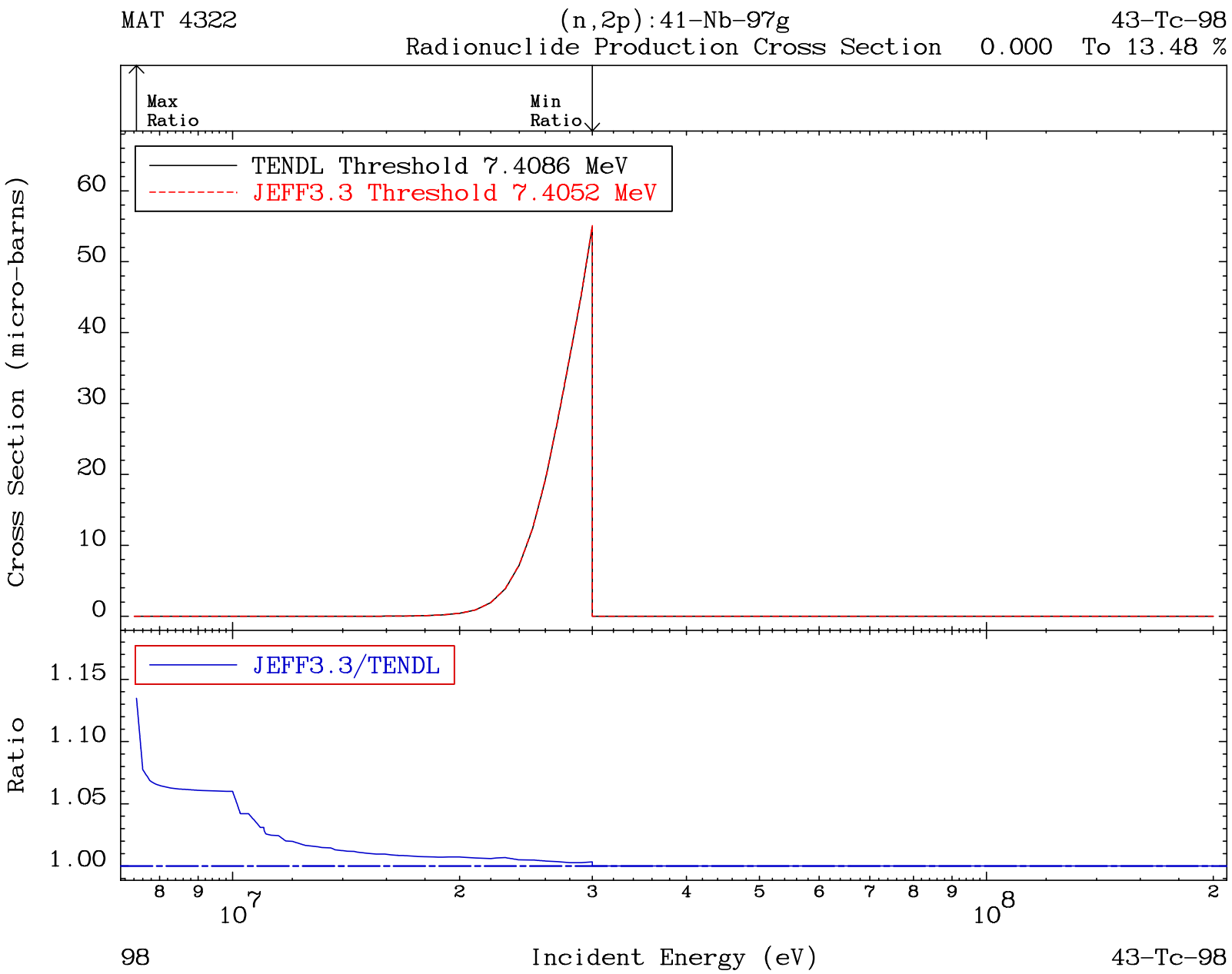

MAT 4322
(n,2n) 2α:39-Y -89m1
43-Tc-98
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.000 MeV
JEFF3.3 Threshold 20.000 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
93
Incident Energy (eV)
43-Tc-98

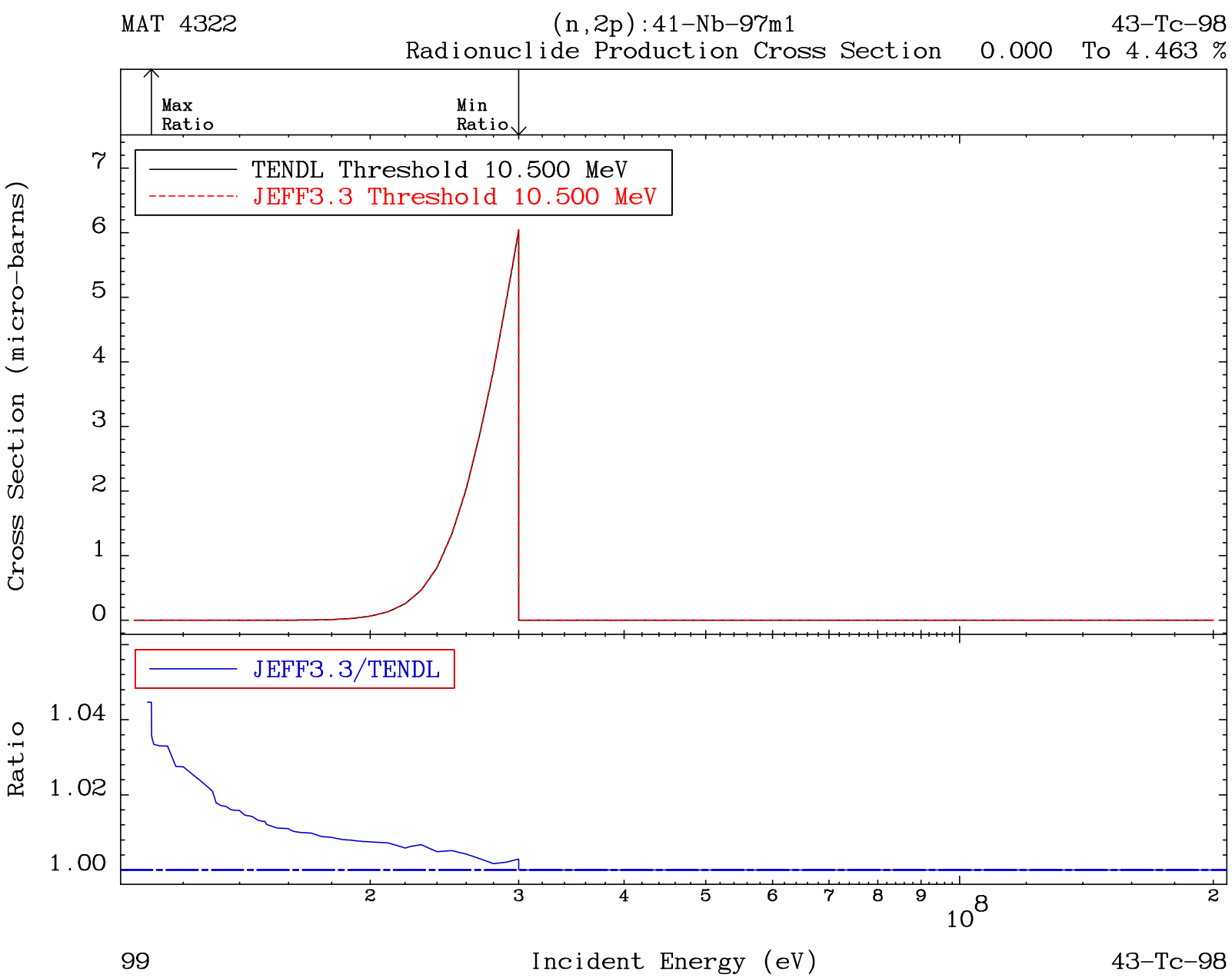

MAT 4322
(n,n') He-3:41-Nb-95g
43-Tc-98
Radionuclide Production Cross Section
-0.441 To 1.311 %
Max Ratio
Min Ratio
TENDL Threshold 14.727 MeV
JEFF3.3 Threshold 14.727 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
43-Tc-98

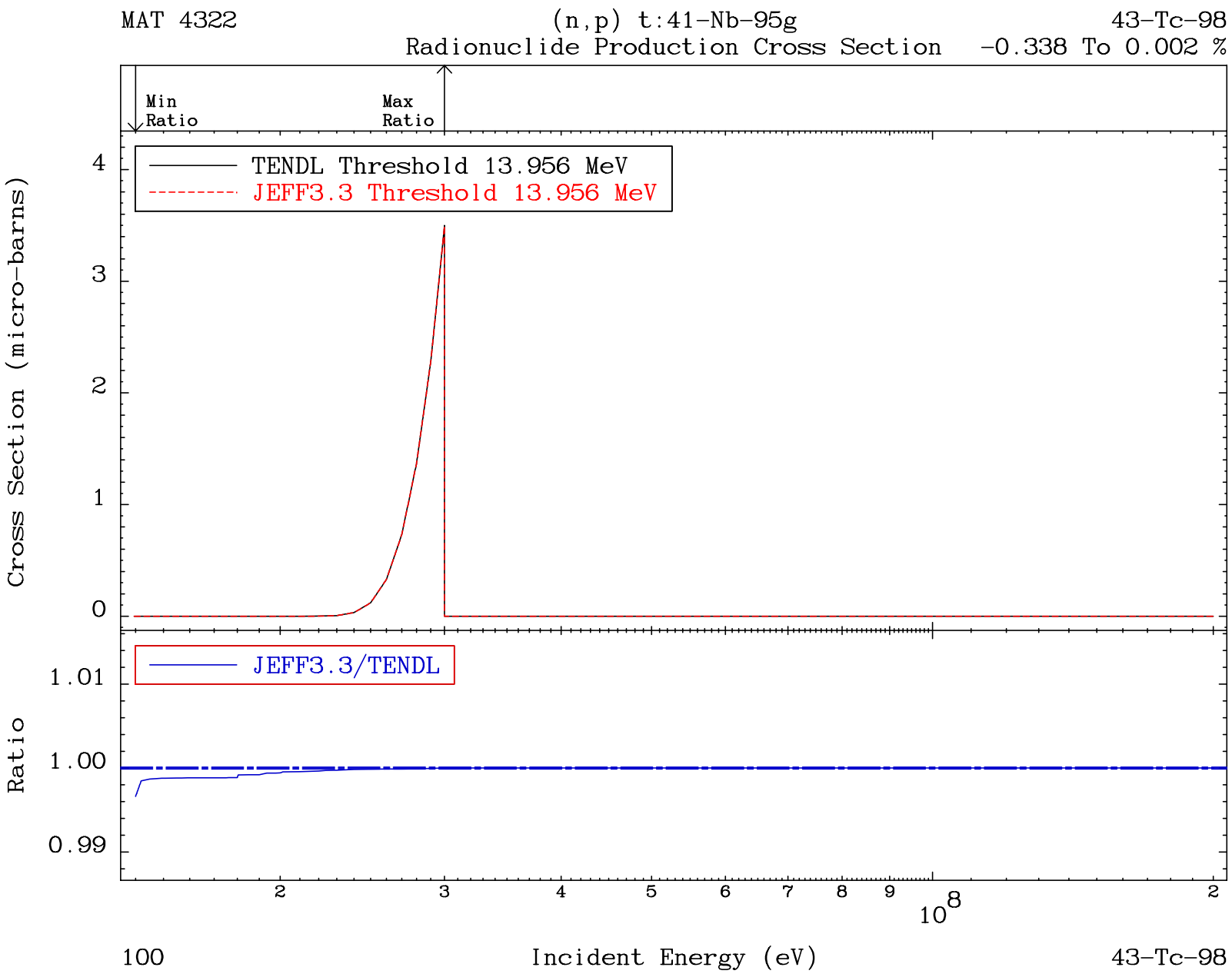

MAT 4322
(n,n') He-3:41-Nb-95m1
43-Tc-98
Radionuclide Production Cross Section
-9.882 To 1.802 %
Max Ratio
Min Ratio
TENDL Threshold 14.965 MeV
JEFF3.3 Threshold 14.965 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
43-Tc-98

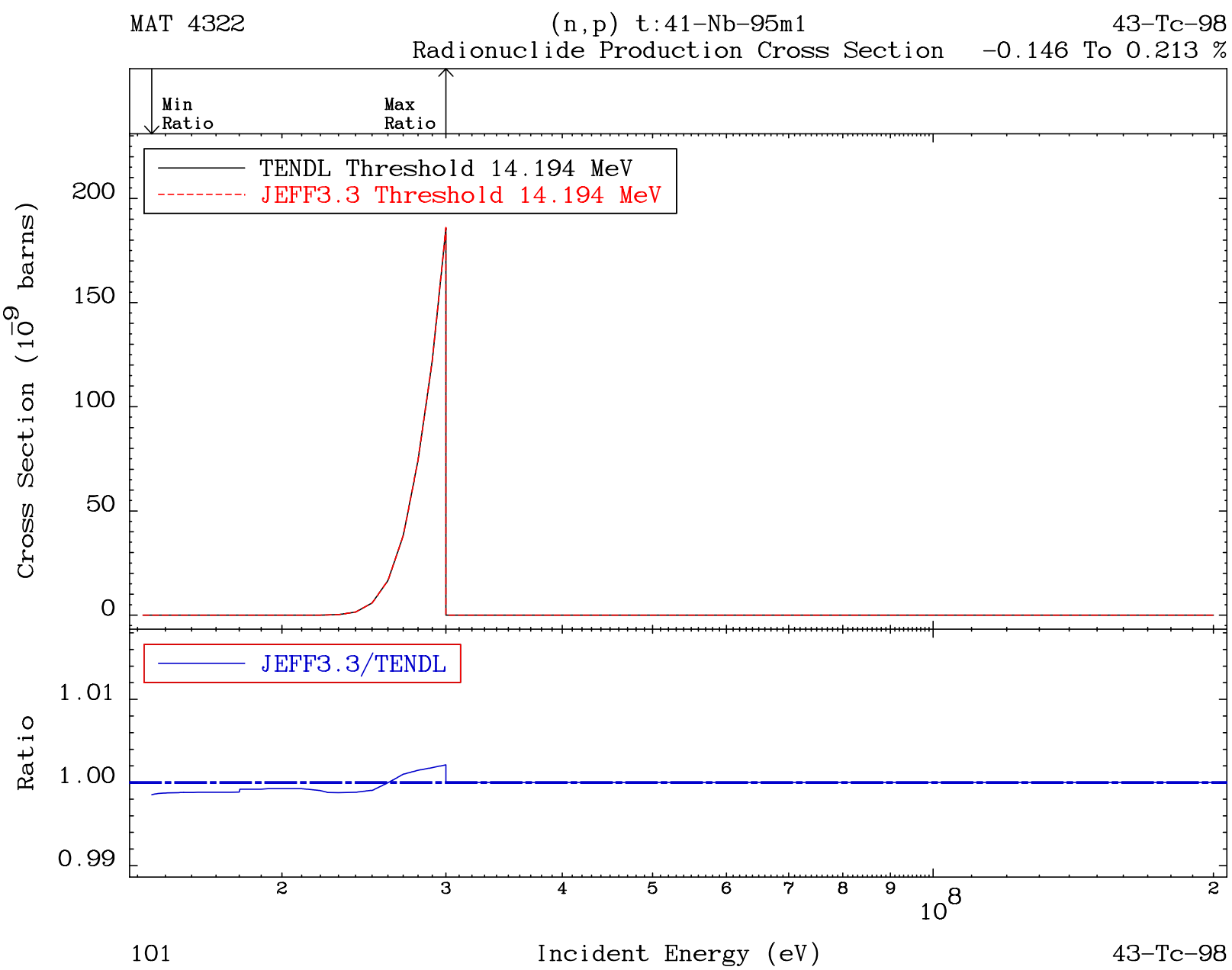

MAT 4322
(n,4n):43-Tc-95g
43-Tc-98
Radionuclide Production Cross Section
-0.388 To 0.343 %
Max
Ratio
TENDL Threshold 24.879 MeV
JEFF3.3 Threshold 24.879 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
96
Incident Energy (MeV)
43-Tc-98


MAT 4322
(n,4n):43-Tc-95m1
43-Tc-98
Radionuclide Production Cross Section
-0.324 To 0.449 %
Max
Ratio
TENDL Threshold 24.918 MeV
JEFF3.3 Threshold 24.918 MeV
Cross Section (milli-barns)
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
97
Incident Energy (MeV)
43-Tc-98


MAT 4322
(n,2p):41-Nb-97g
43-Tc-98
Radionuclide Production Cross Section 0.000 To 13.48 %
Max Ratio
Min Ratio
TENDL Threshold 7.4086 MeV
JEFF3.3 Threshold 7.4052 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.15
1.10
1.05
1.00
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
98
Incident Energy (eV)
43-Tc-98


MAT 4322
(n,2p):41-Nb-97m1
43-Tc-98
Radionuclide Production Cross Section 0.000 To 4.463 %
Max Ratio
Min Ratio
TENDL Threshold 10.500 MeV
JEFF3.3 Threshold 10.500 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.00
1.02
1.04
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
-0.338 To 0.002 %
Min Ratio
Max Ratio
TENDL Threshold 13.956 MeV
JEFF3.3 Threshold 13.956 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
100
Incident Energy (eV)
43-Tc-98


MAT 4322
(n,p) t:41-Nb-95m1
43-Tc-98
Radionuclide Production Cross Section -0.146 To 0.213 %
Min Ratio
Max Ratio
TENDL Threshold 14.194 MeV
JEFF3.3 Threshold 14.194 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
43-Tc-98