

Program Complot
(Version 2018-1)

by

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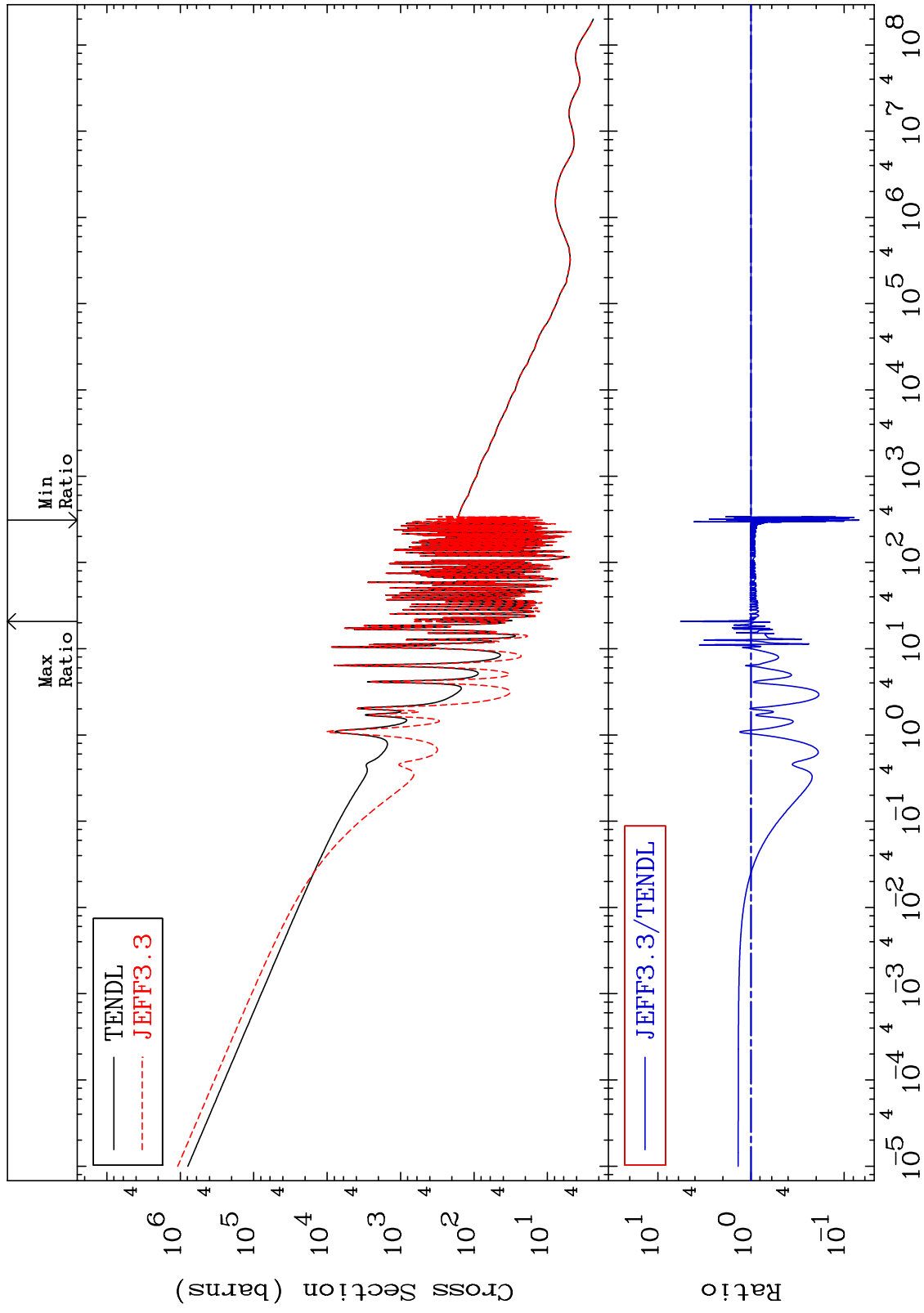
Press Mouse Button to Start

MAT 6246

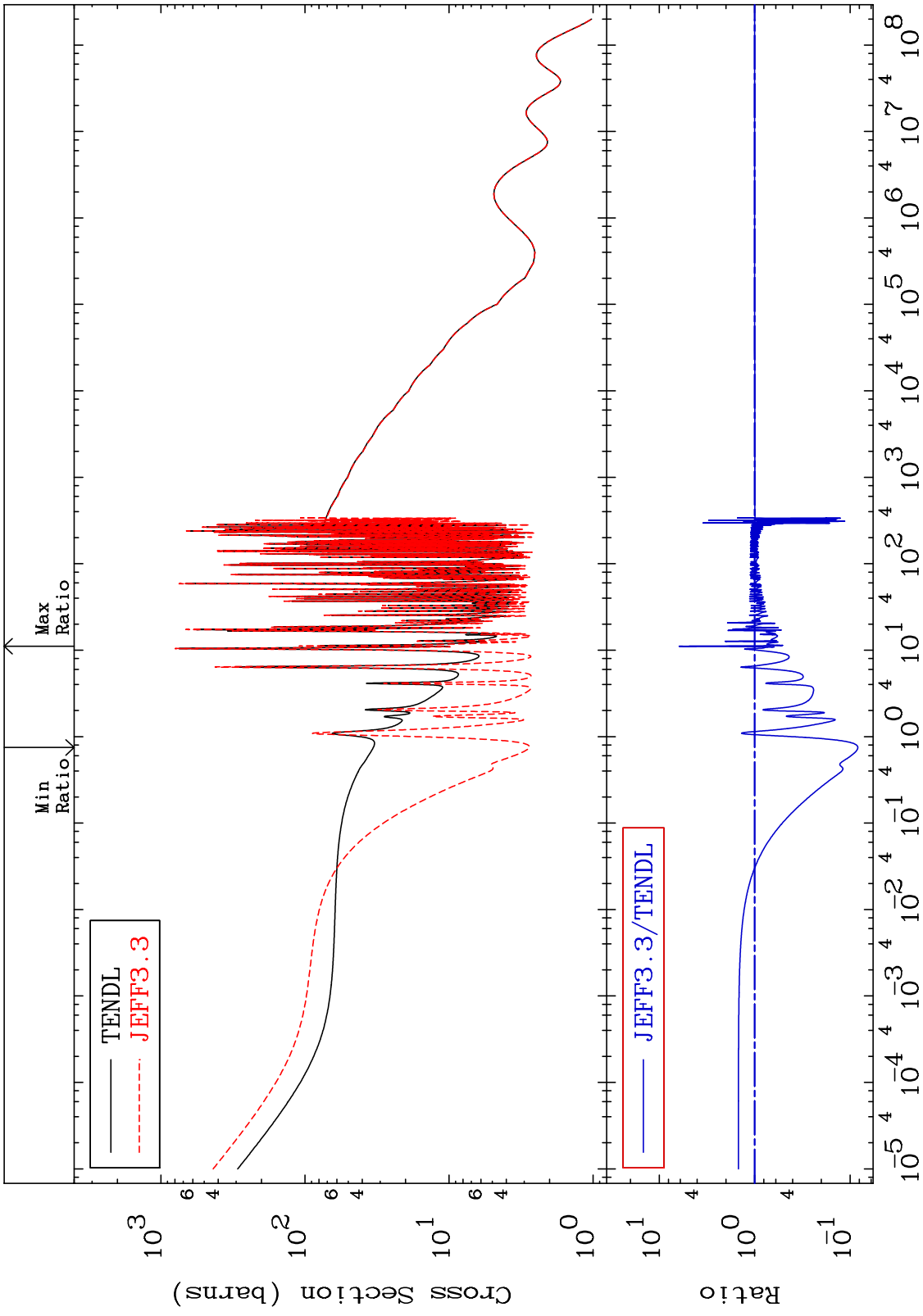
Total
Cross Section

62-Sm-151

-93.06 To 468.9 %

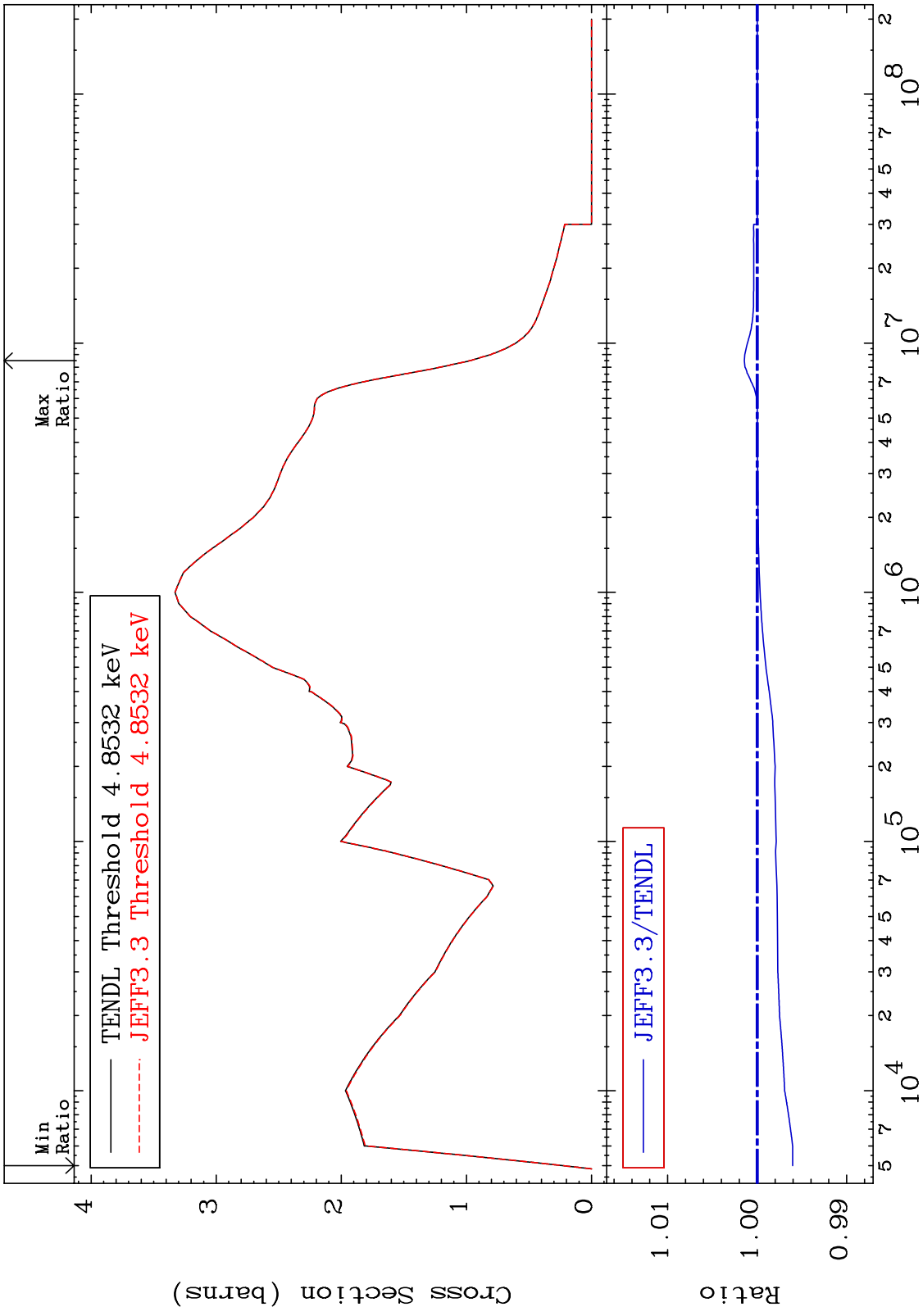


MAT 6246 Elastic Cross Section 62-Sm-151 -91.72 To 519.4 %



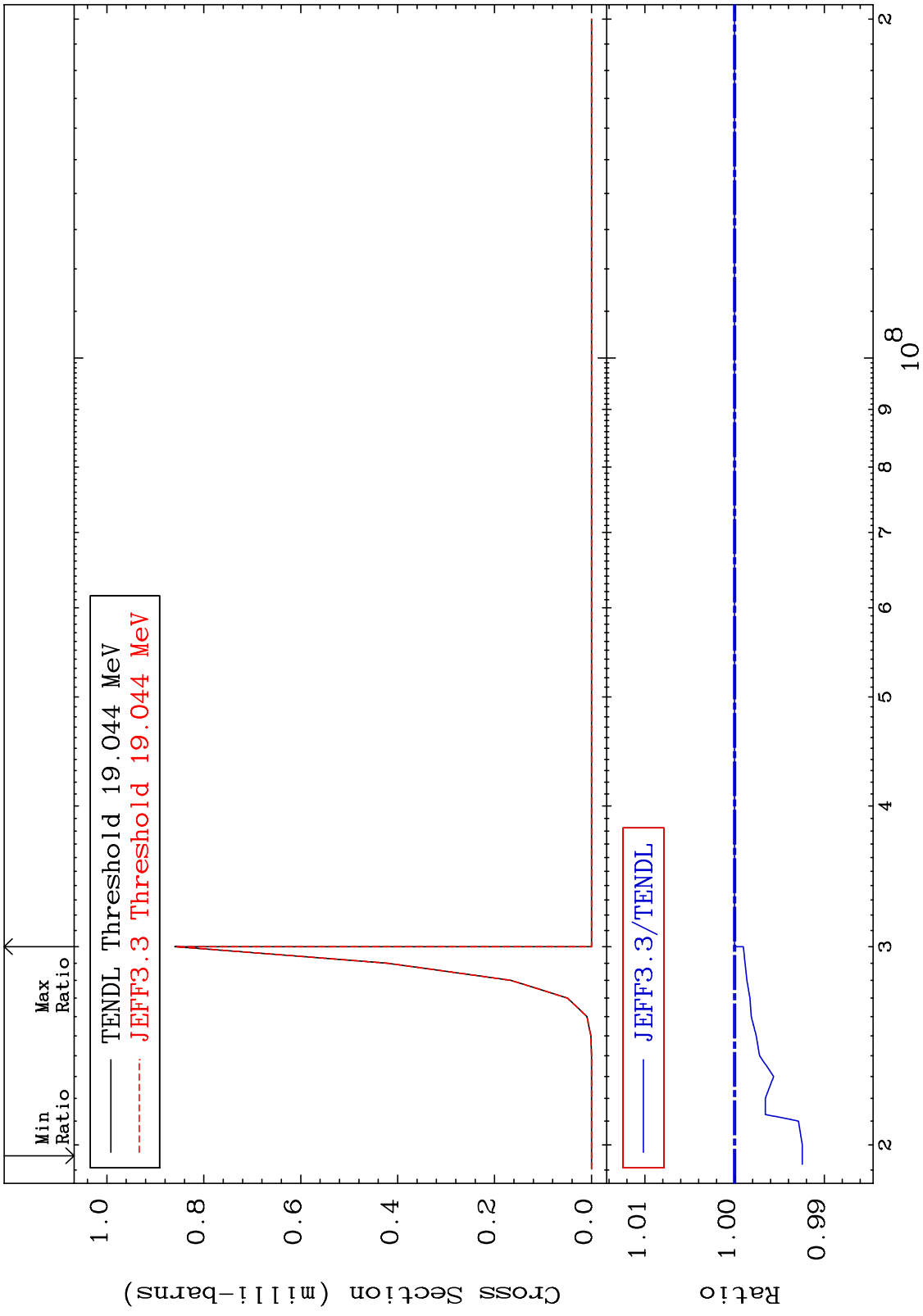
2 62-Sm-151

MAT 6246 Inelastic Cross Section 62-Sm-151 -0.396 To 0.145 %

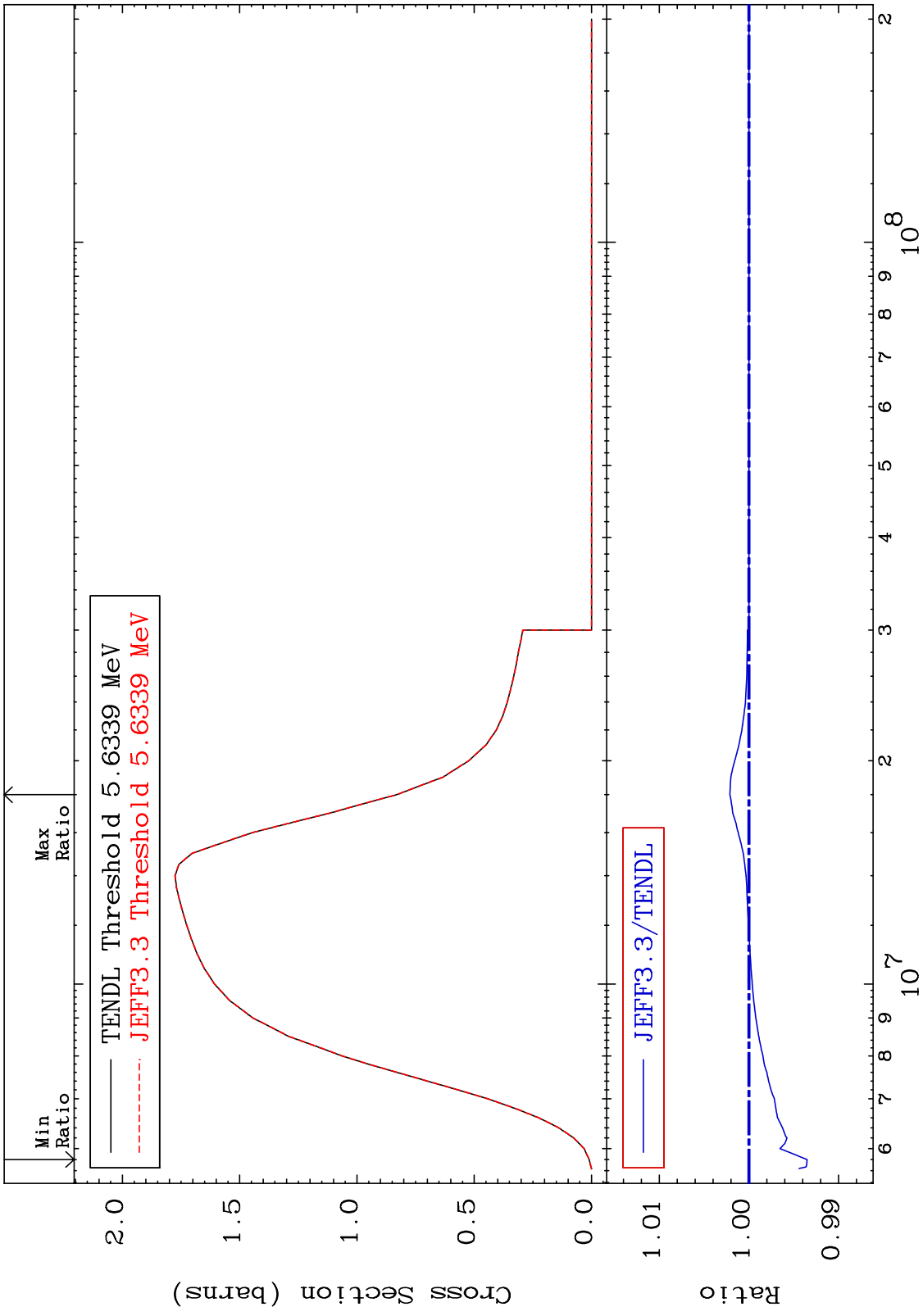


3 Incident Energy (eV) 62-Sm-151

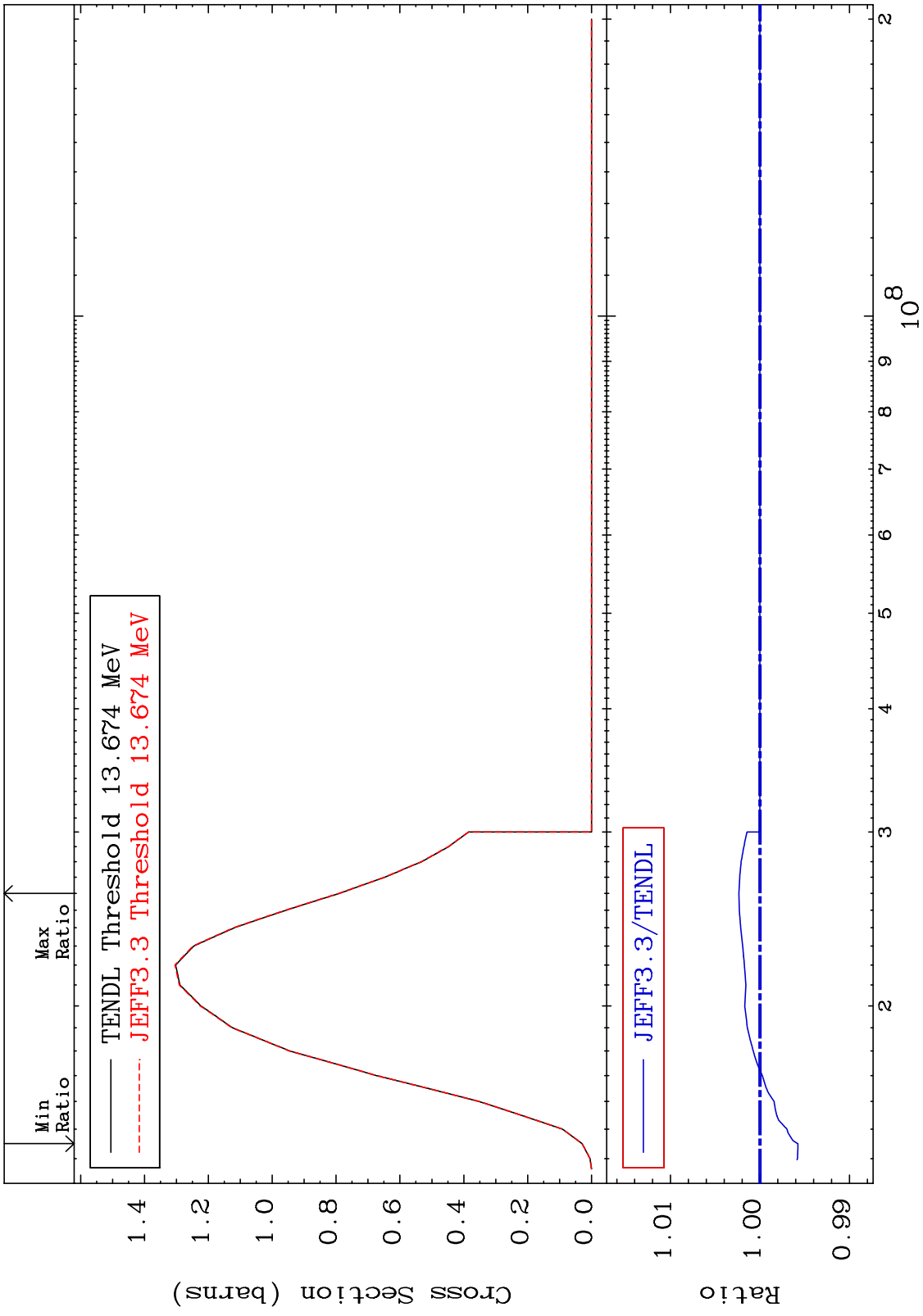
MAT 6246 (n,2n) d 62-Sm-151
 Cross Section -0.754 To 0.000 %



MAT 6246 (n,2n) 62-Sm-151
Cross Section -0.647 To 0.213 %



MAT 6246 $(n, 3n)$ Cross Section $^{62}\text{Sm}-151$ -0.424 To 0.235 %



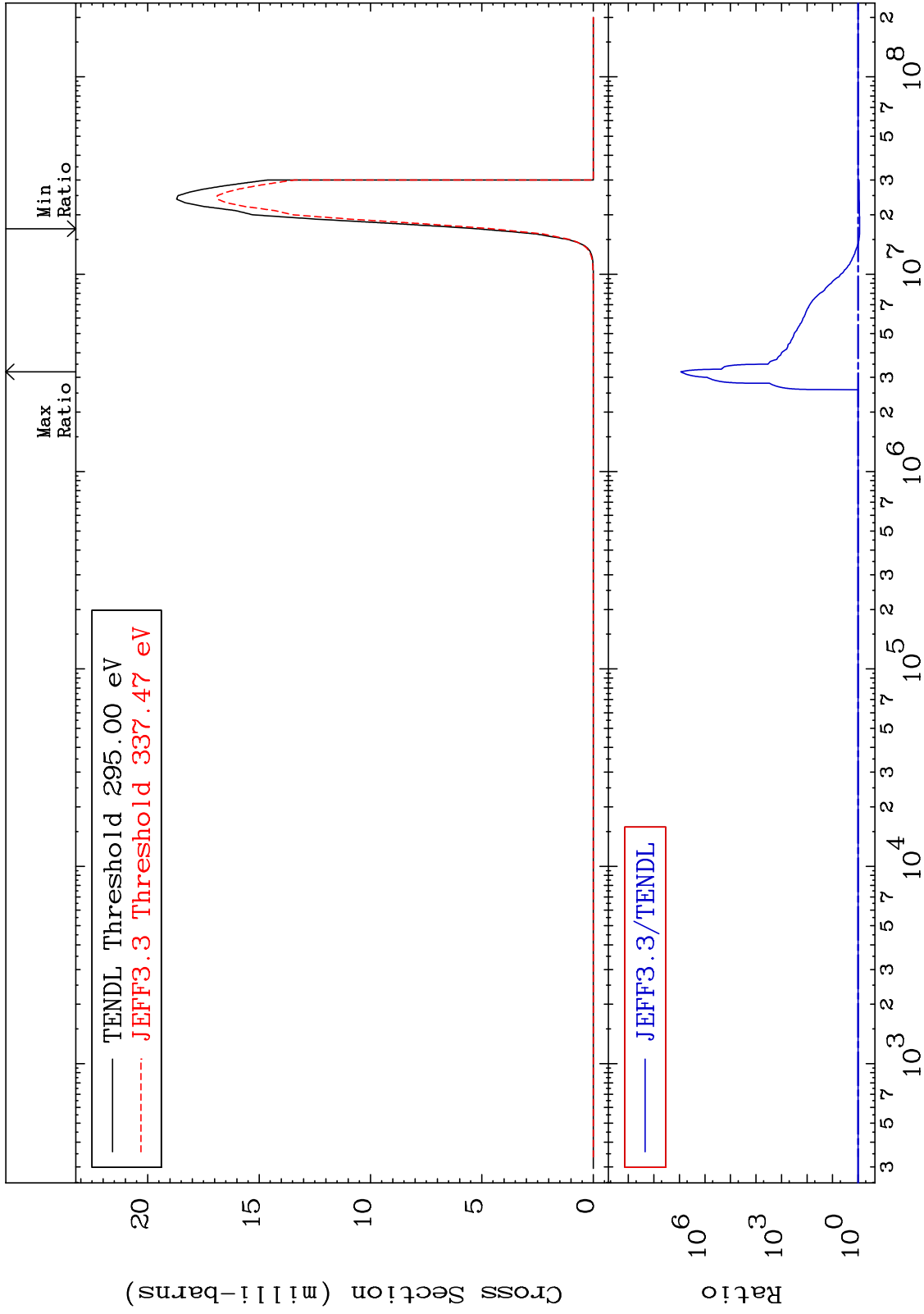
MAT 6246

(n, n') α

62-Sm-151

Cross Section

-13.00 To 9999. %

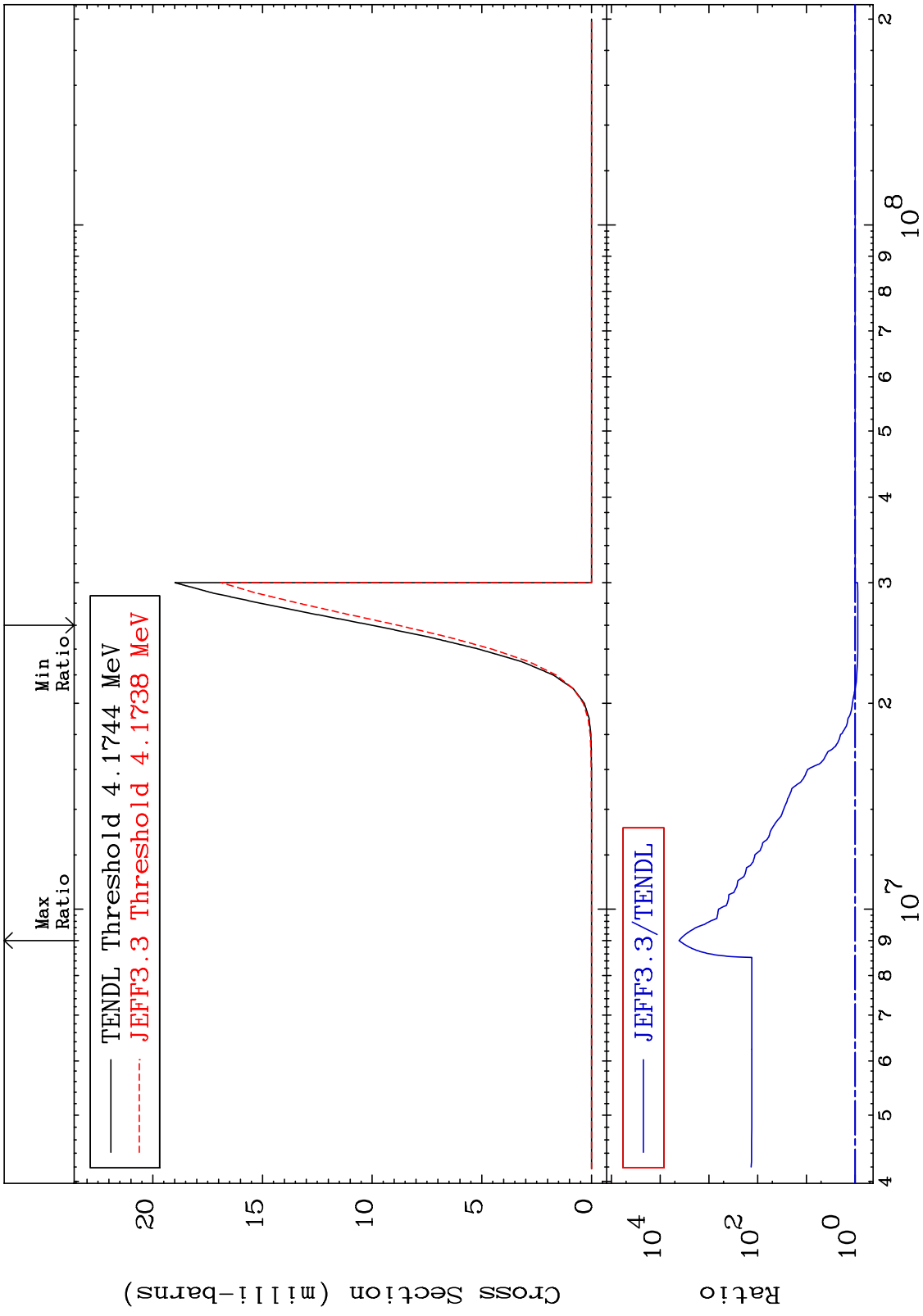


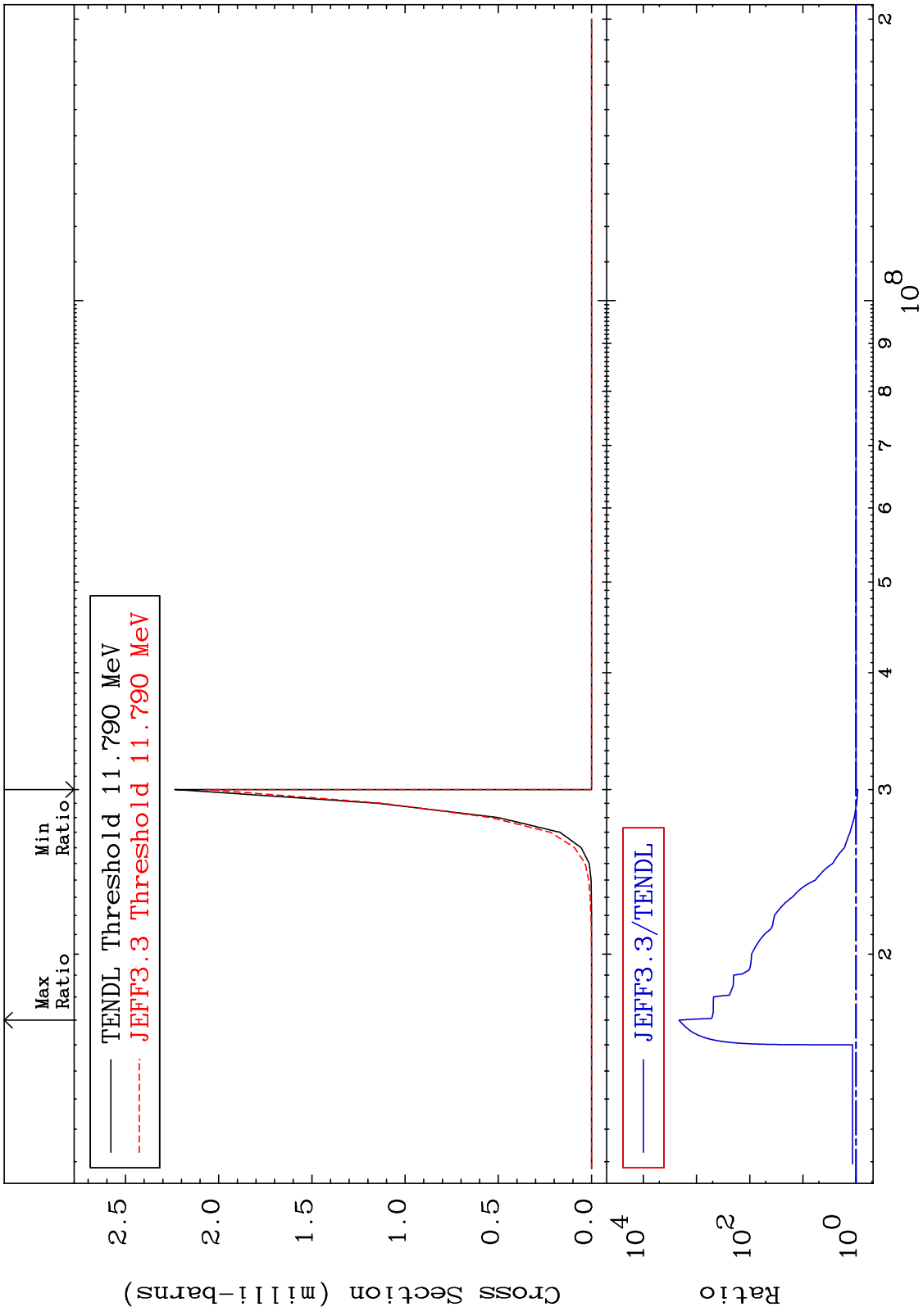
7

Incident Energy (eV)

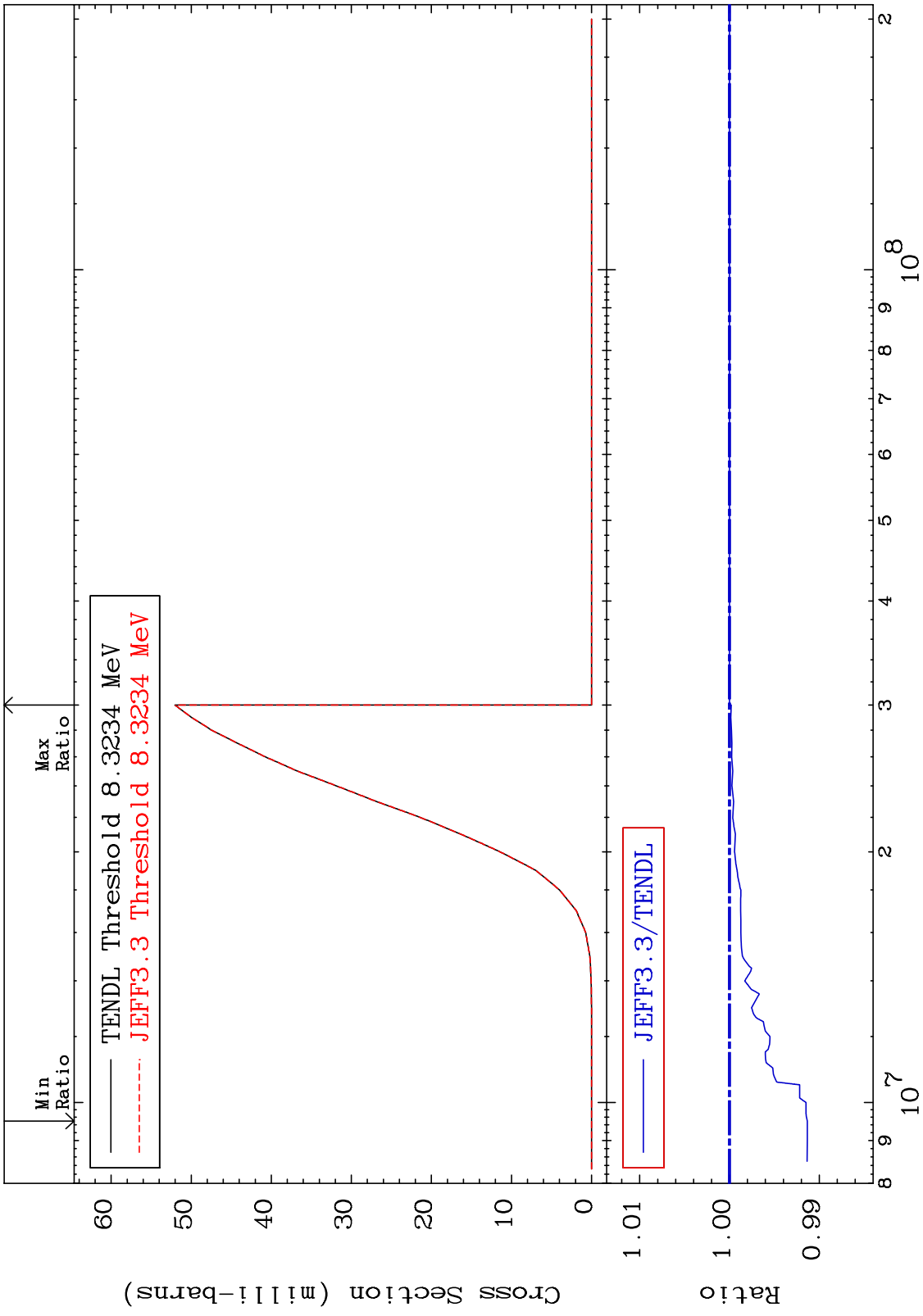
62-Sm-151

MAT 6246 $(n, 2n) \alpha$ $^{62}\text{Sm}-151$
 Cross Section -11.83 To 9999. %





MAT 6246 (n,n') p 62-Sm-151
Cross Section -0.868 To 0.000 %

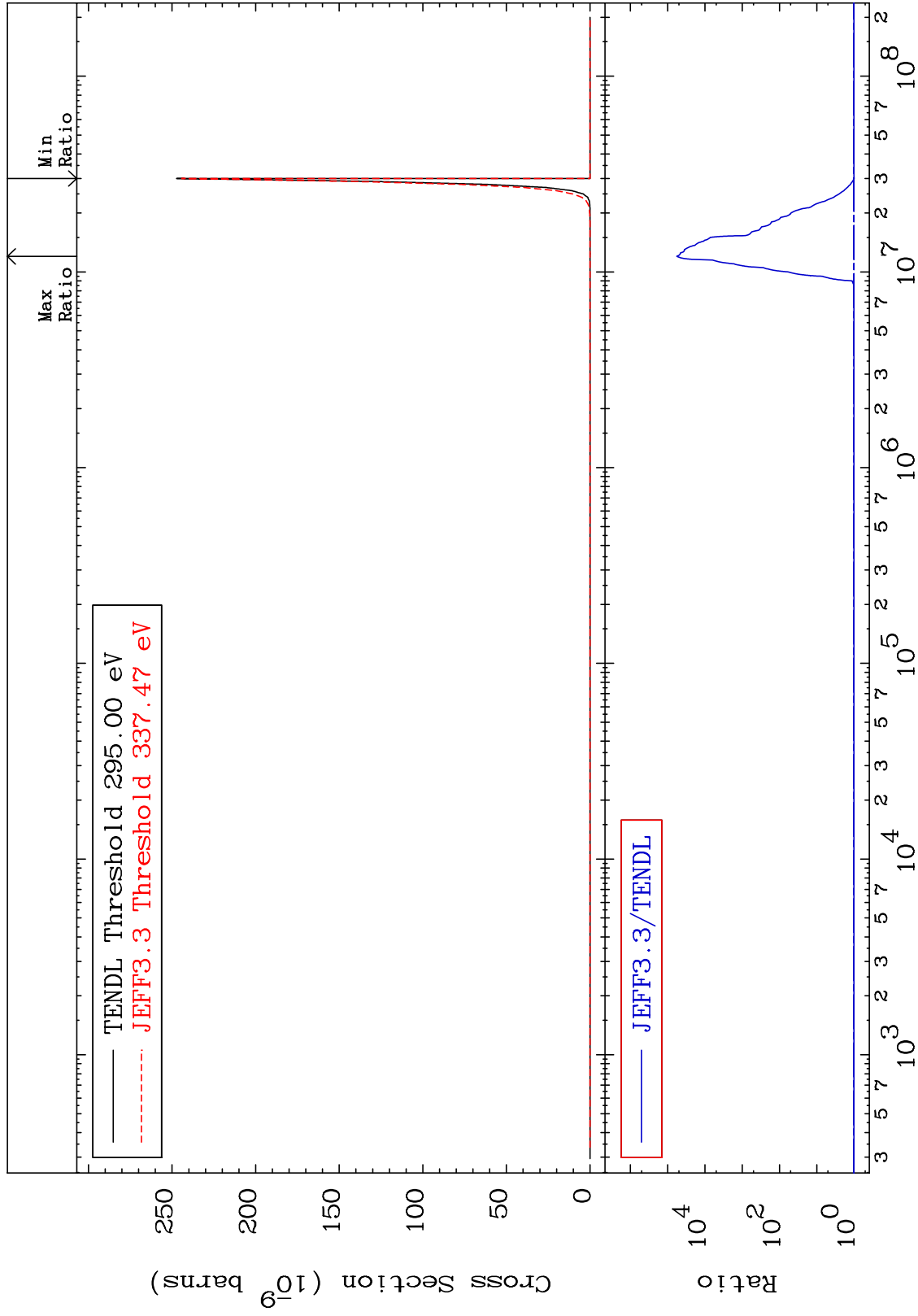


10 0.99 1.00 1.01
Ratio
8 9 10⁷ 2 3 4 5 6 7 8 9 10⁸
Incident Energy (eV) 62-Sm-151

MAT 6246

(n,n') 2 α
Cross Section

62-Sm-151
-1.199 To 9999. %

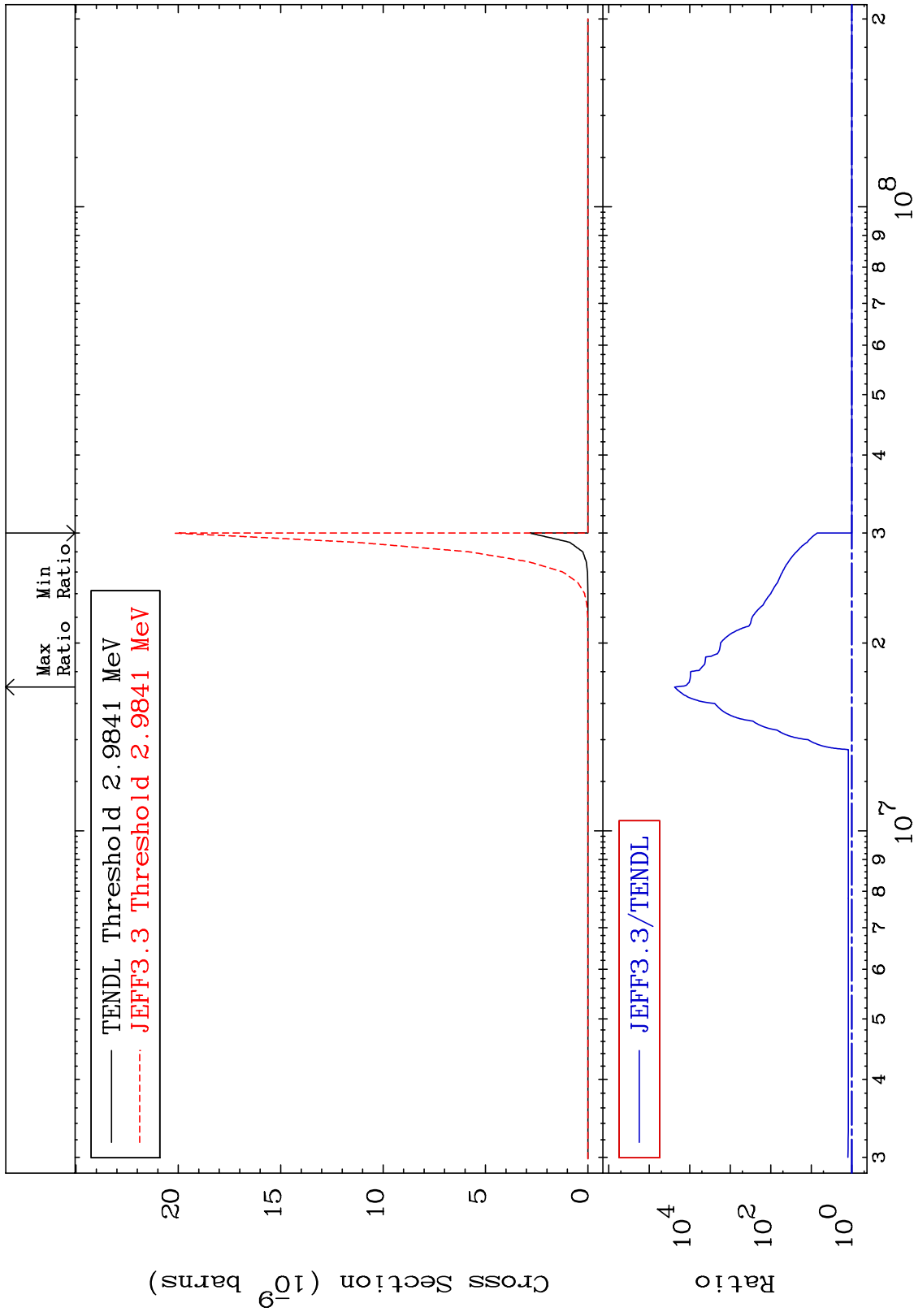


MAT 6246

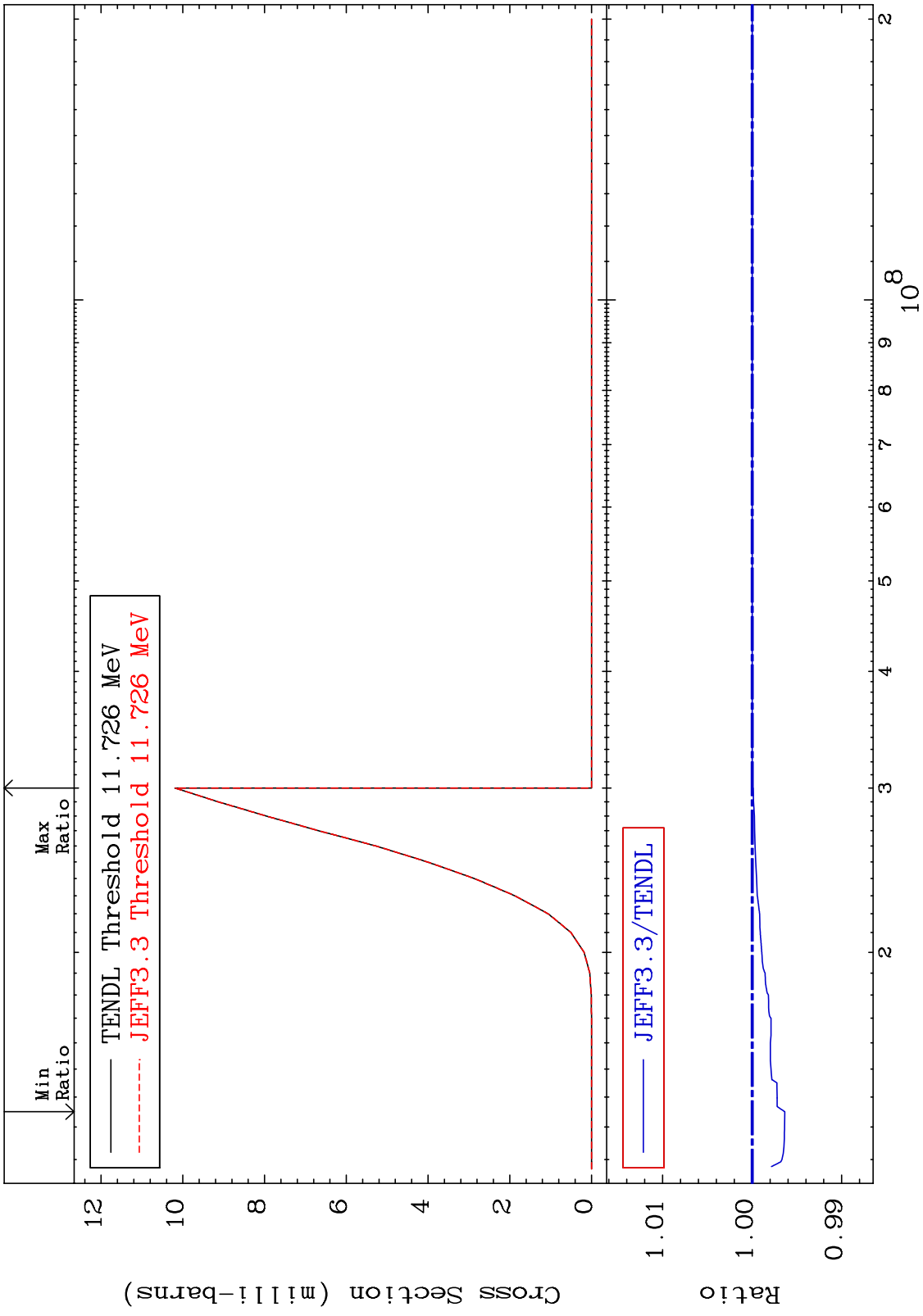
(n,2n) 2α

62-Sm-151

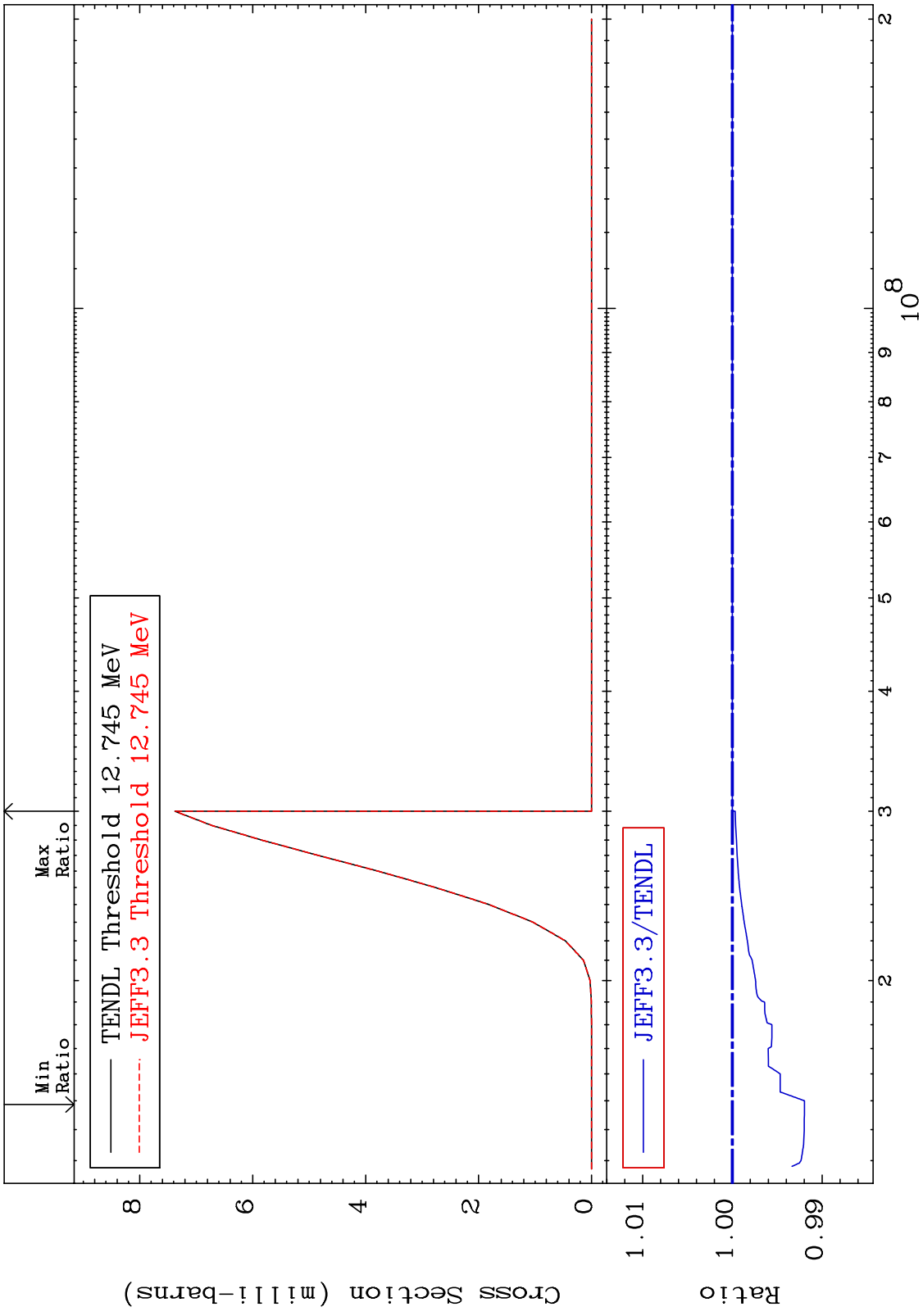
0.000 To 9999. %



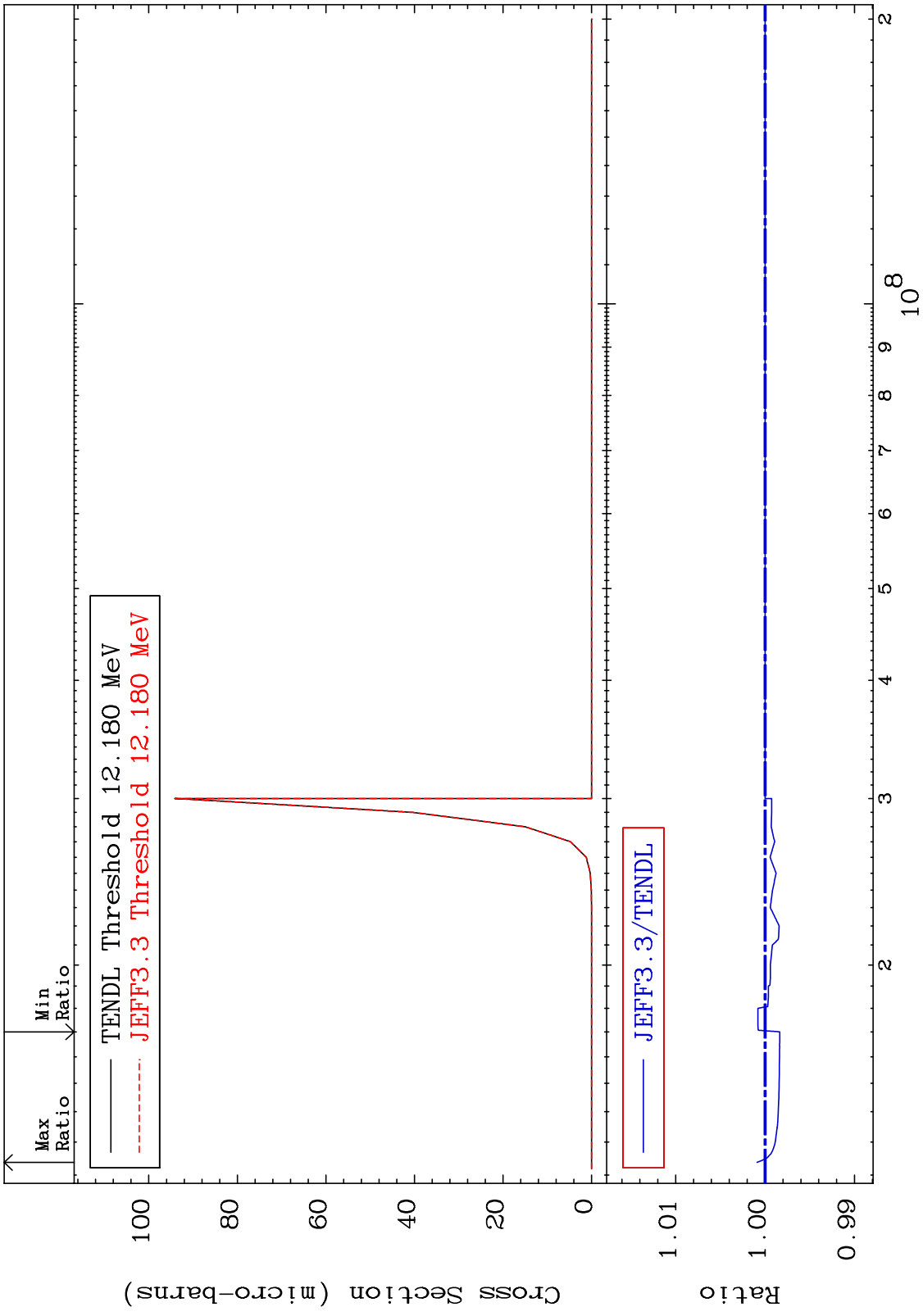
MAT 6246 (n,n') d 62-Sm-151
 Cross Section -0.364 To 0.000 %



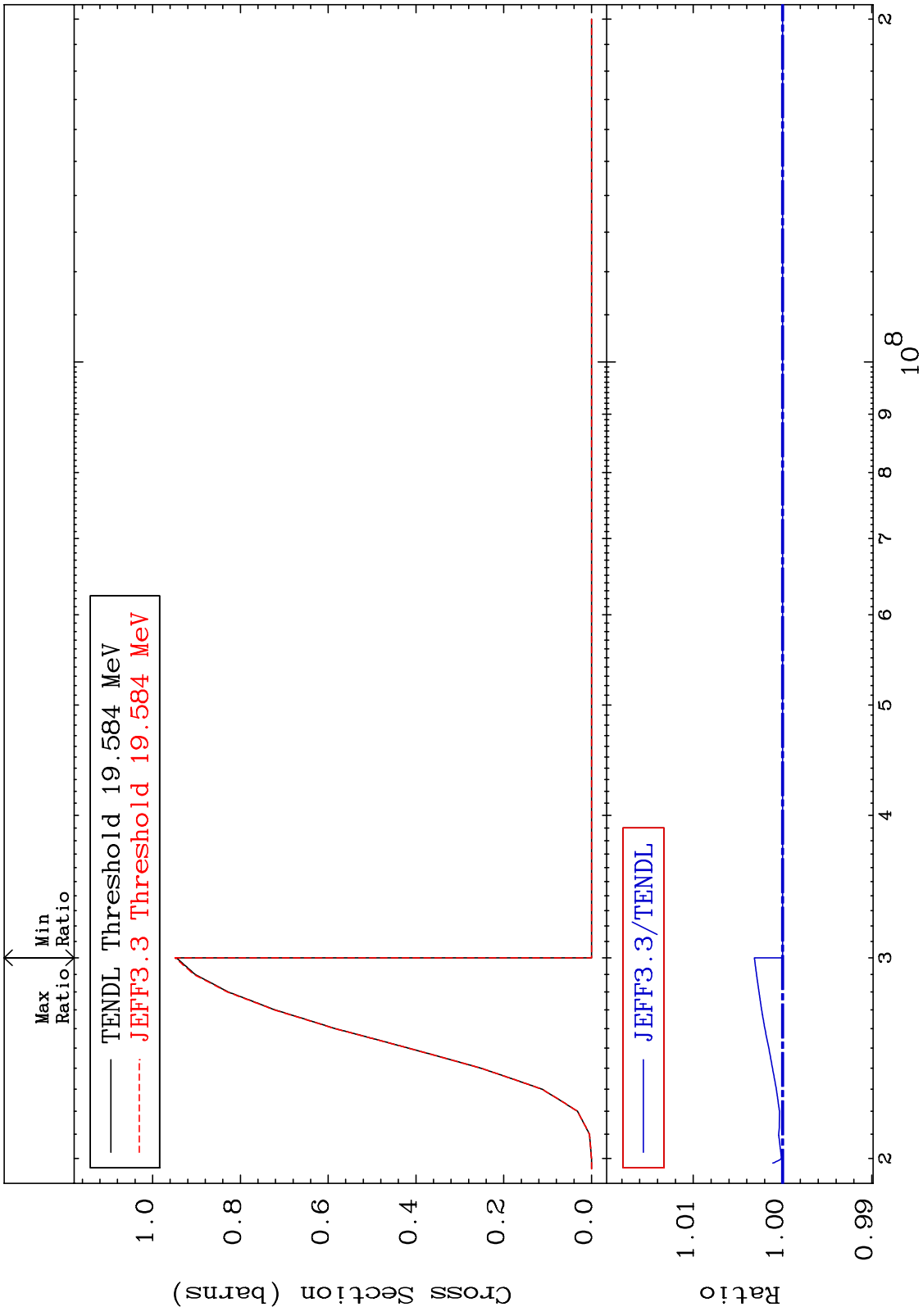
MAT 6246 (n, n') t 62-Sm-151
 Cross Section -0.803 To 0.000 %



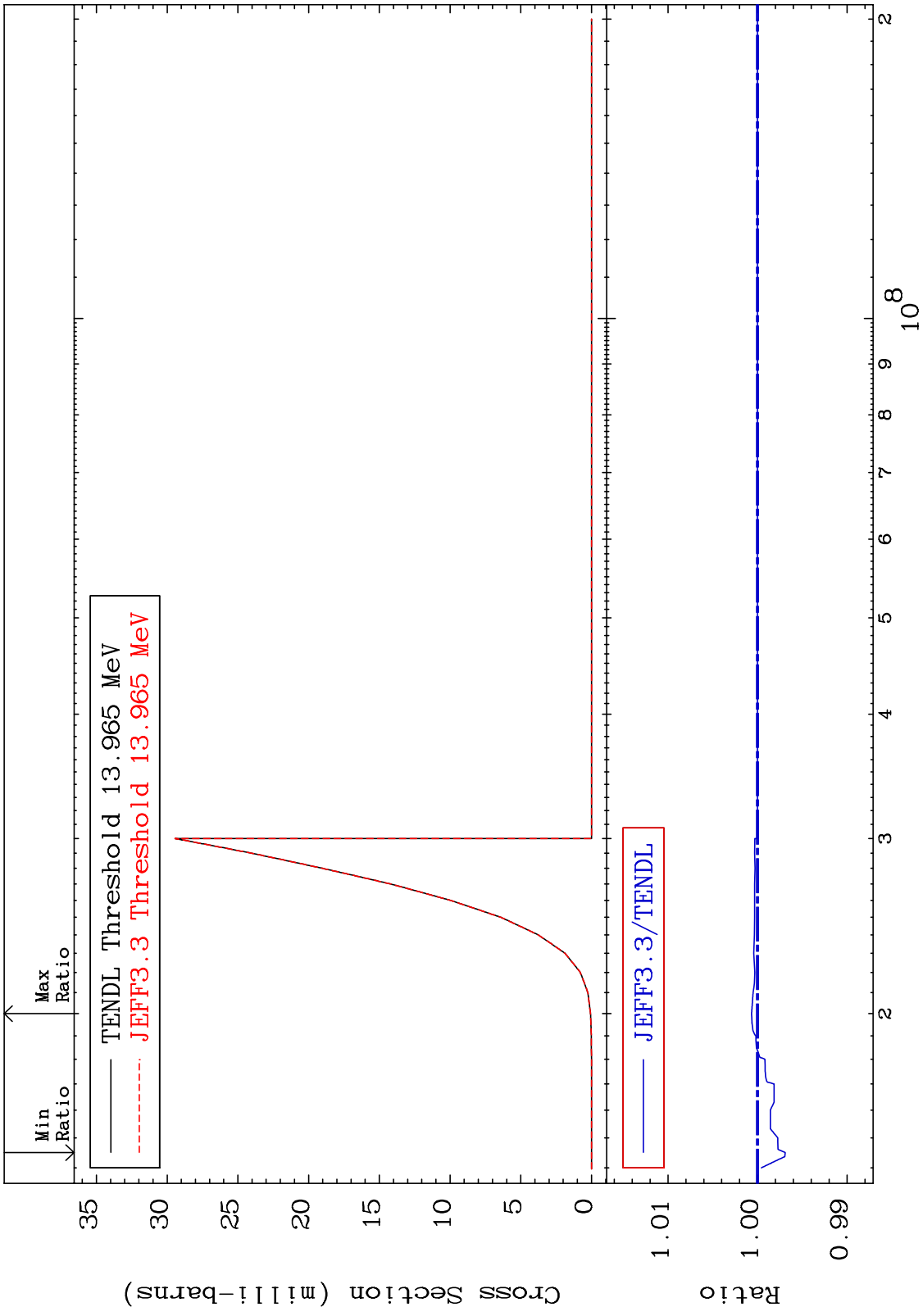
MAT 6246 (n, n') He-3 62-Sm-151
 Cross Section -0.164 To 0.089 %



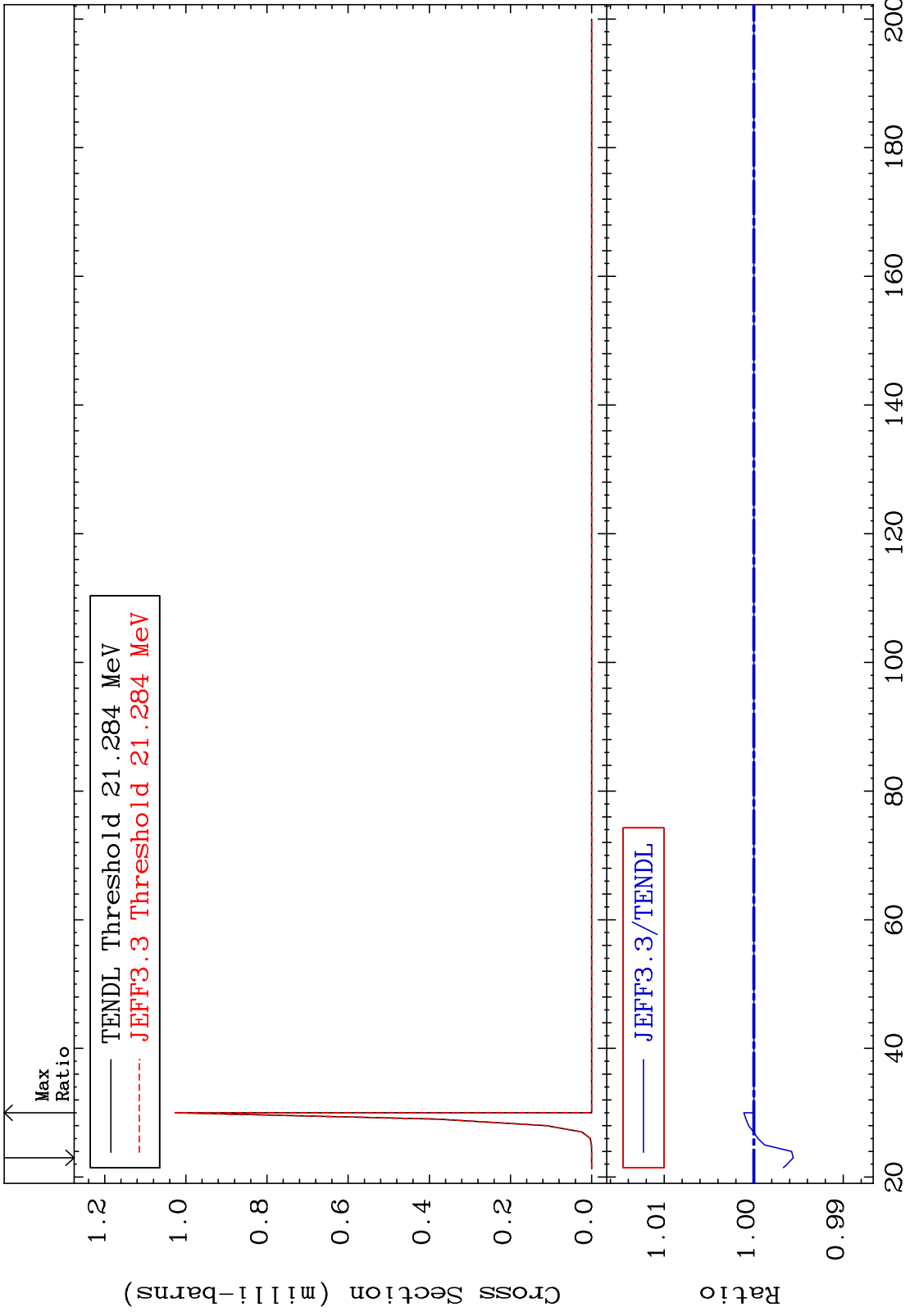
MAT 6246 $(n,4n)$ Cross Section $^{62}\text{Sm}-151$ To 0.316 %



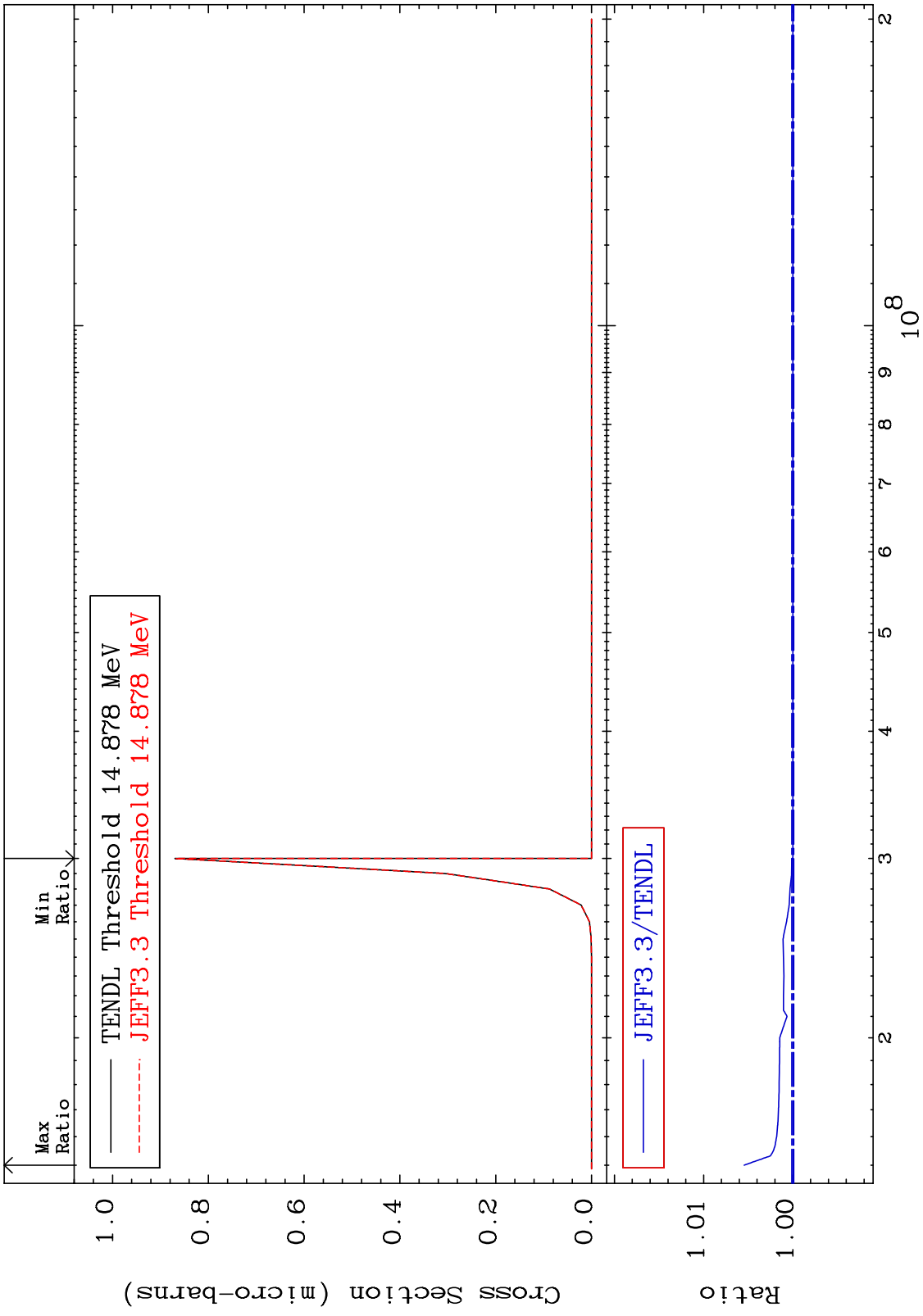
MAT 6246 (n,2n) p 62-Sm-151
 Cross Section -0.311 To 0.066 %



MAT 6246 (n,3n) p 62-Sm-151
 Cross Section -0.441 To 0.111 %



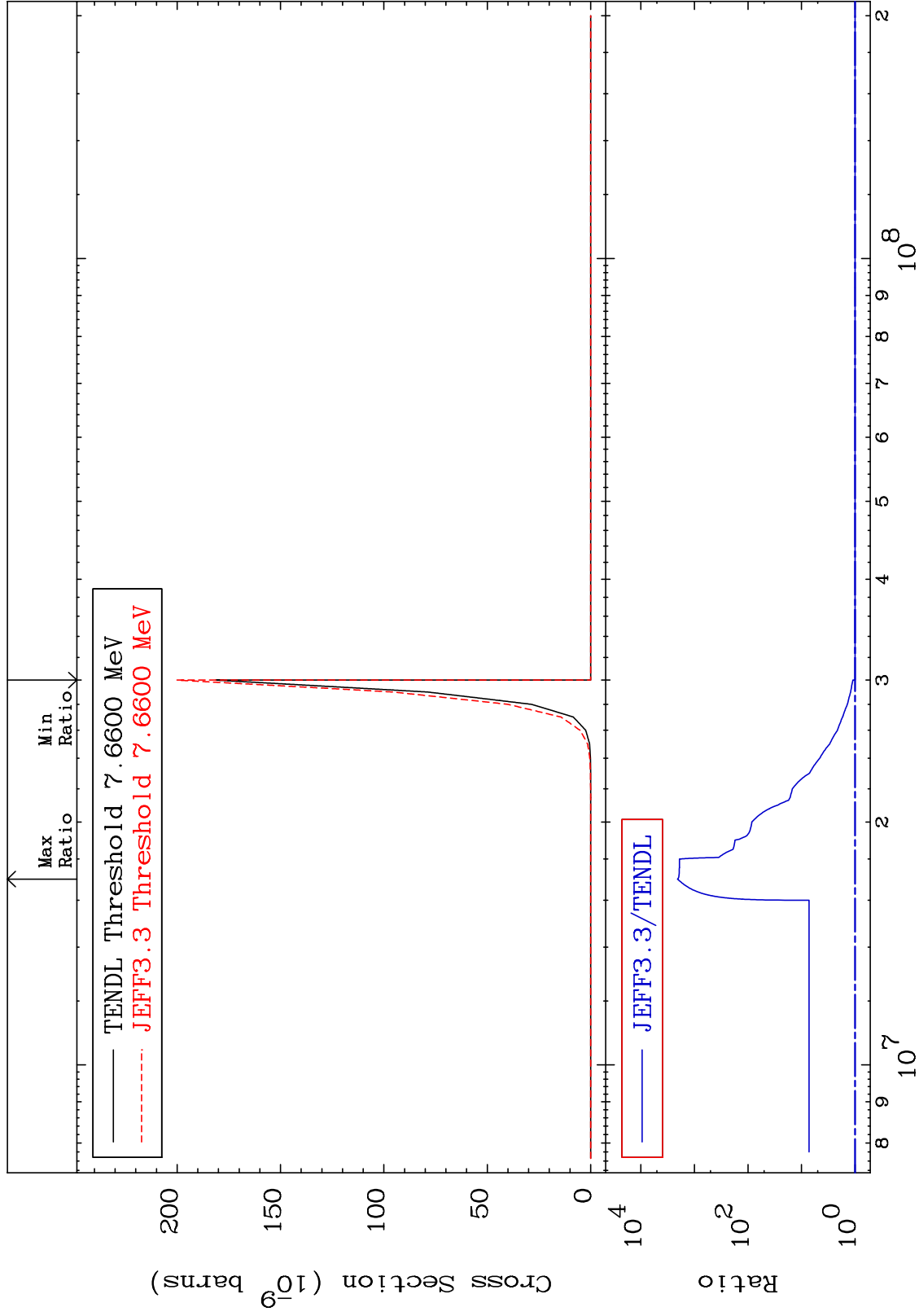
MAT 6246 (n,2n) p 62-Sm-151
 Cross Section 0.000 To 0.546 %



MAT 6246

(n,n') p α
Cross Section

62-Sm-151
To 9999. %
0.000

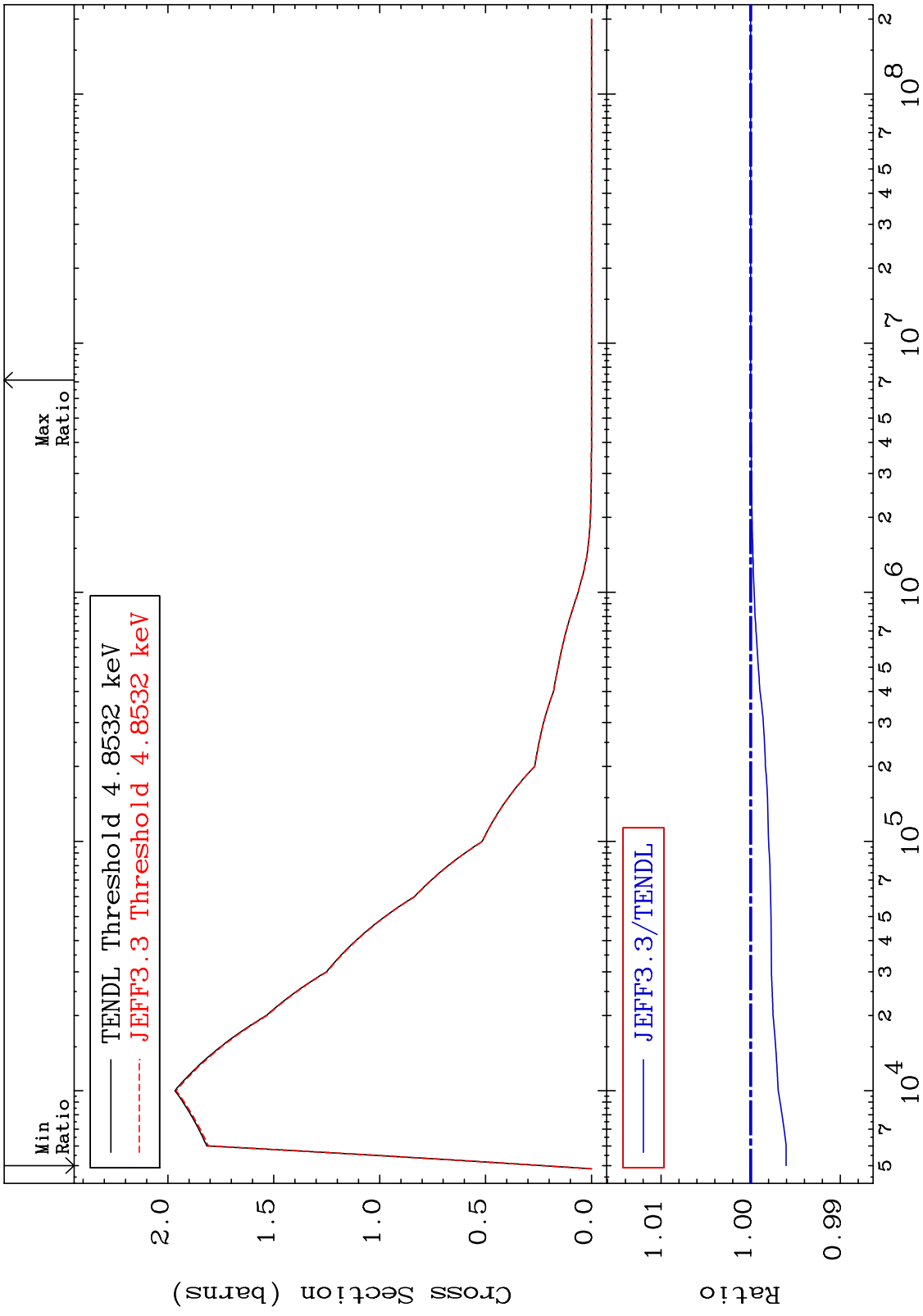


20

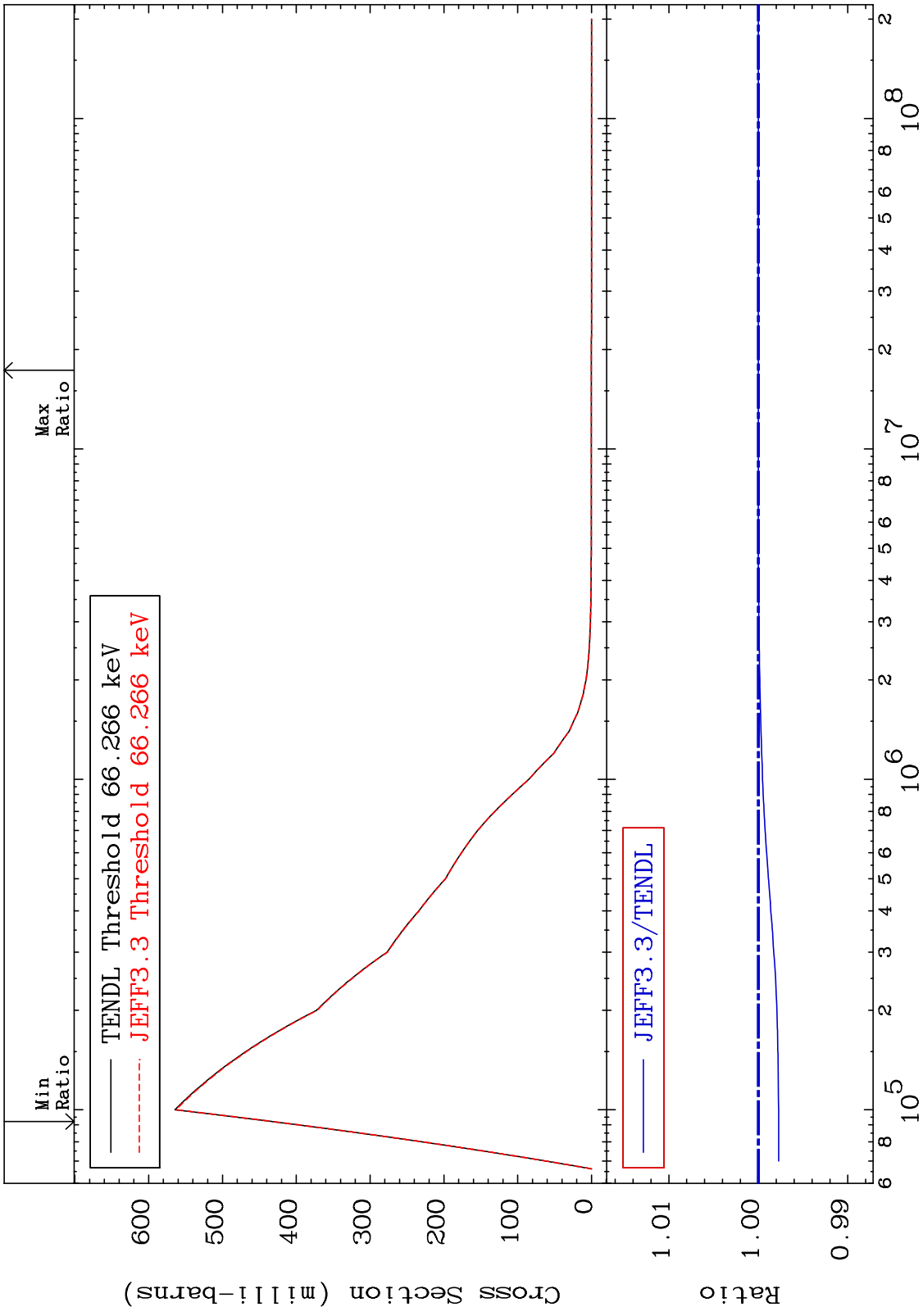
Incident Energy (eV)

62-Sm-151

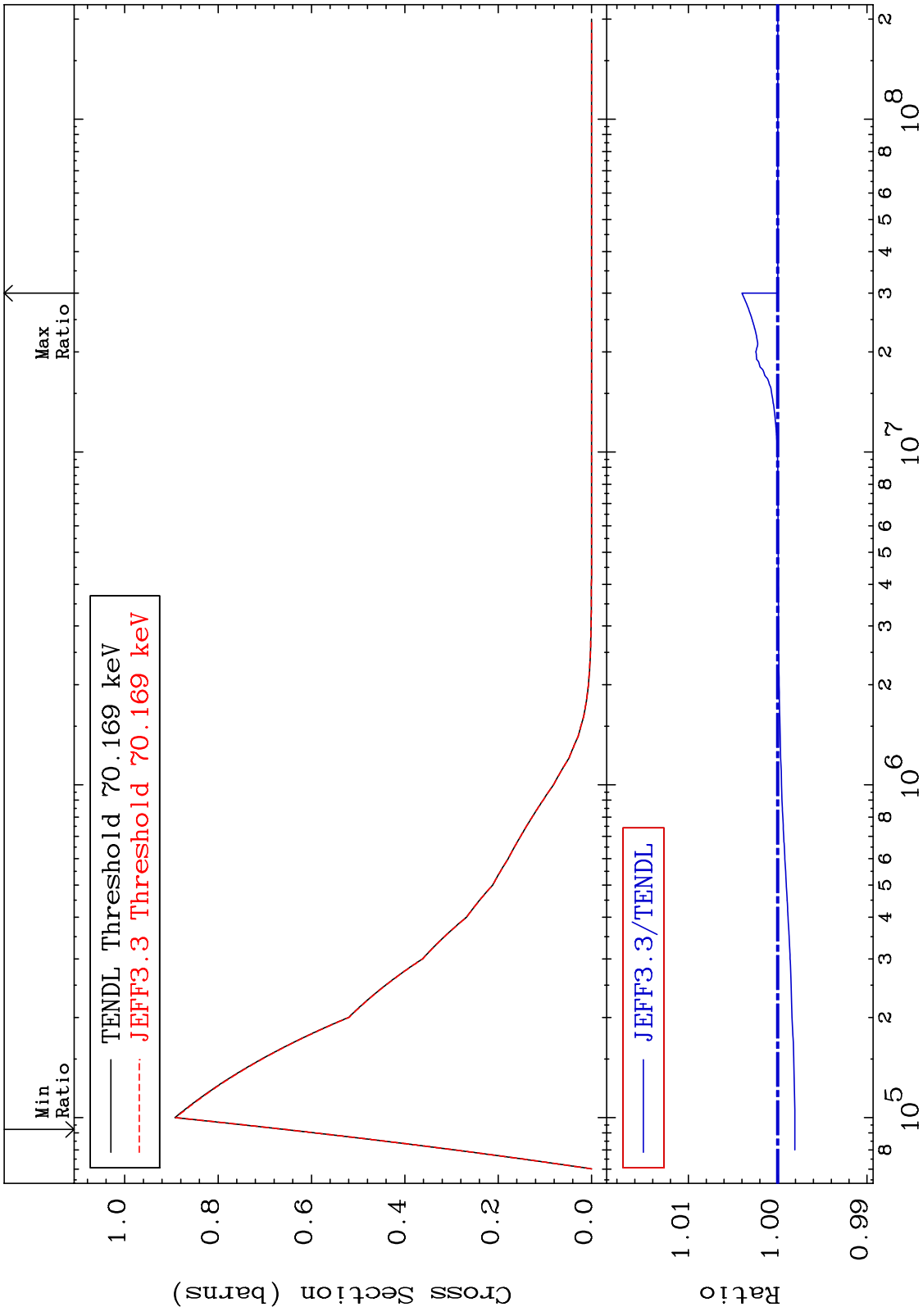
MAT 6246 MT= 51 (n,n') Level Cross Section 62-Sm-151 -0.396 To 0.000 %



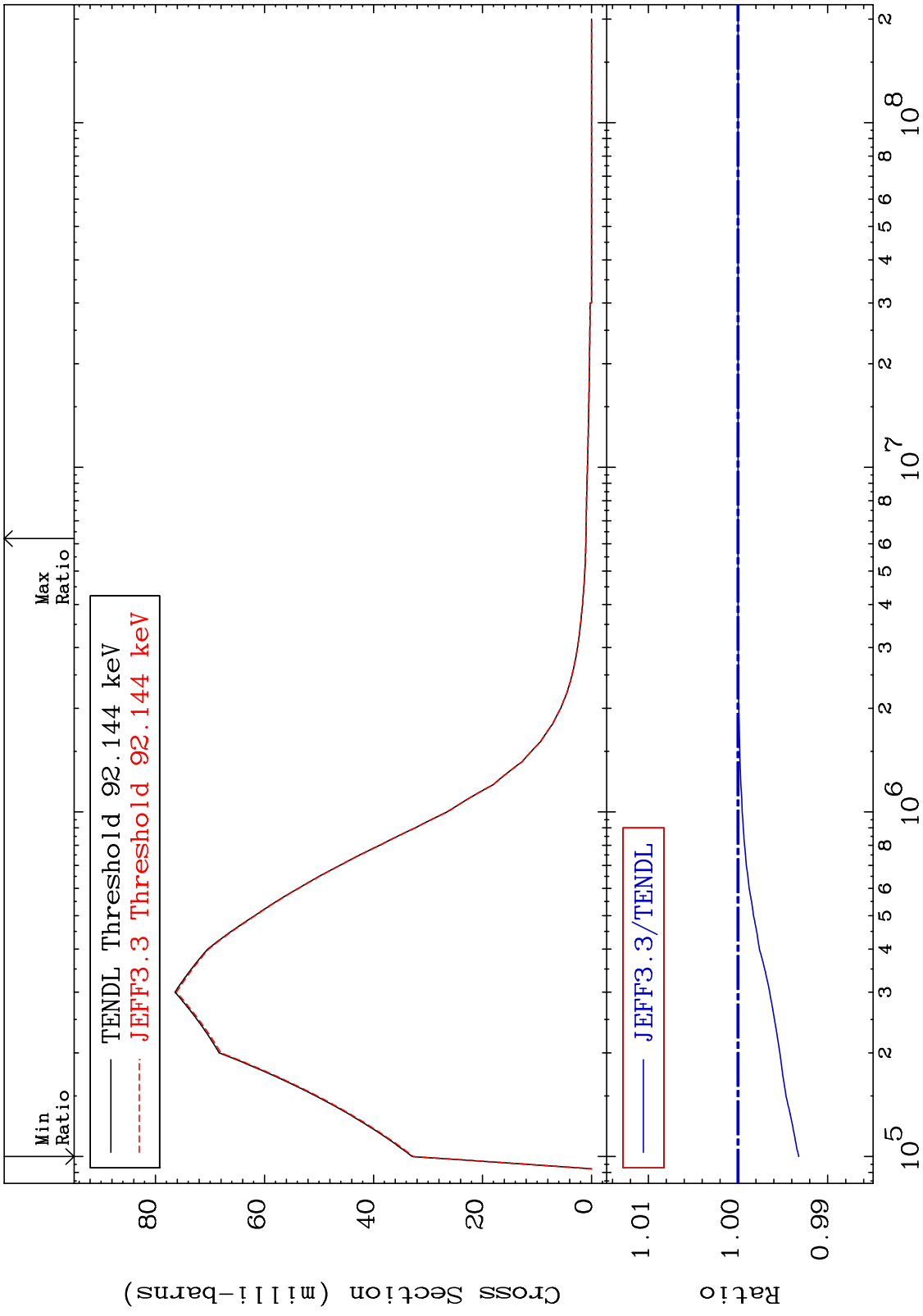
MAT 6246 MT= 52 (n,n') Level Cross Section 62-Sm-151
 -0.226 To 0.000 %



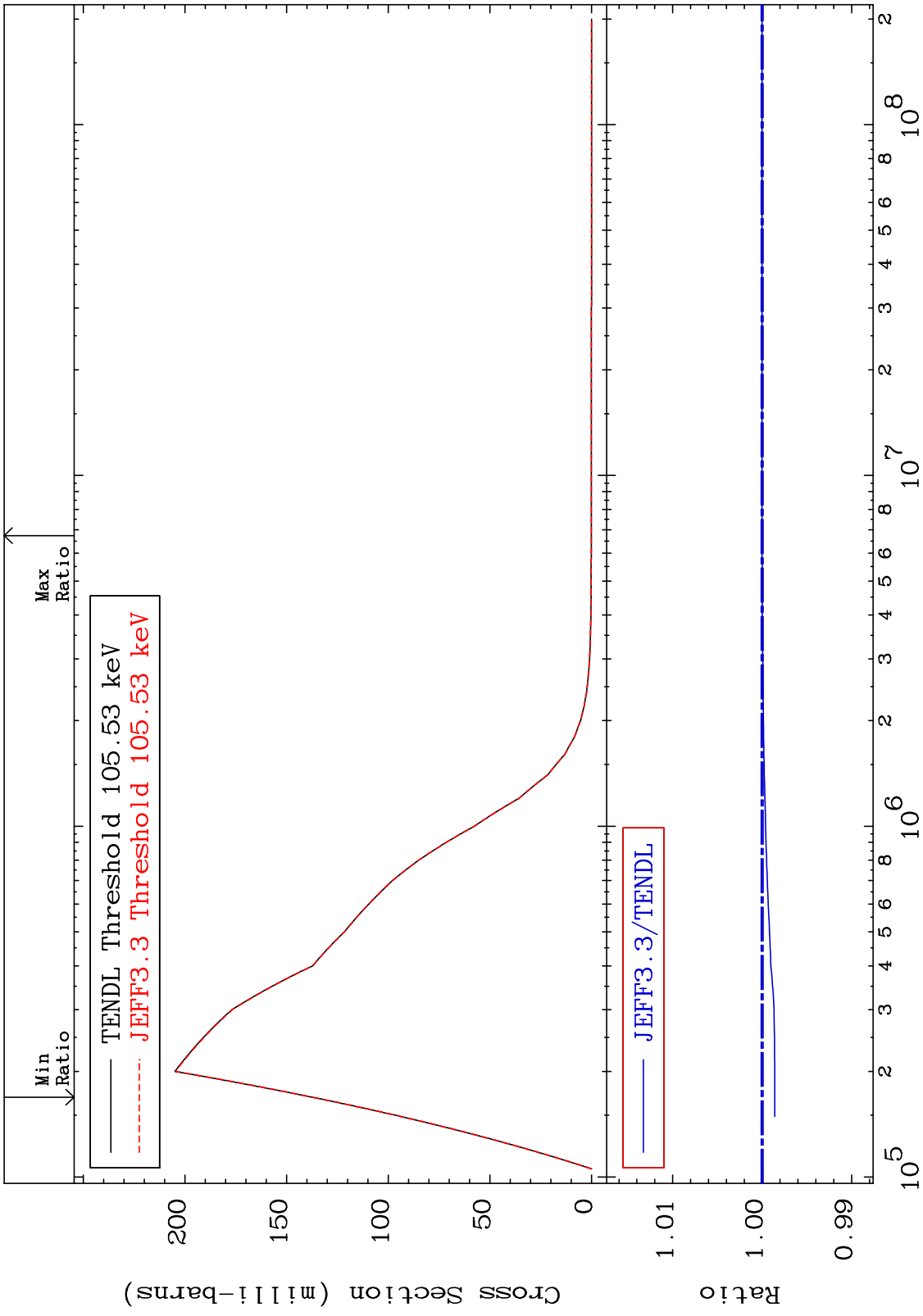
MAT 6246 MT= 53 (n,n') Level Cross Section 62-Sm-151 -0.193 To 0.400 %



MAT 6246 MT= 54 (n,n') Level Cross Section 62-Sm-151 -0.678 To 0.000 %

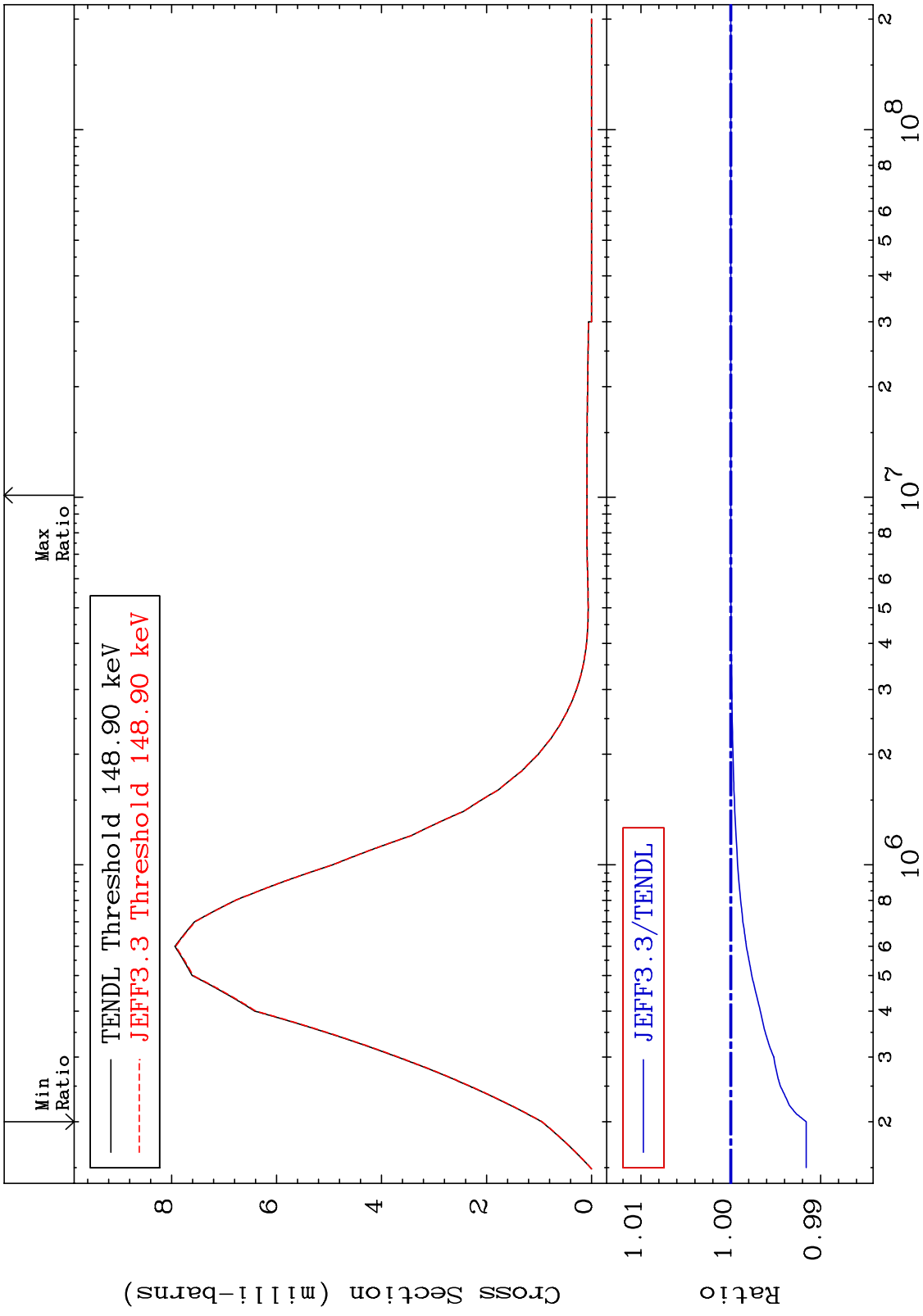


MAT 6246 MT= 55 (n,n') Level Cross Section 62-Sm-151
 -0.141 To 0.000 %

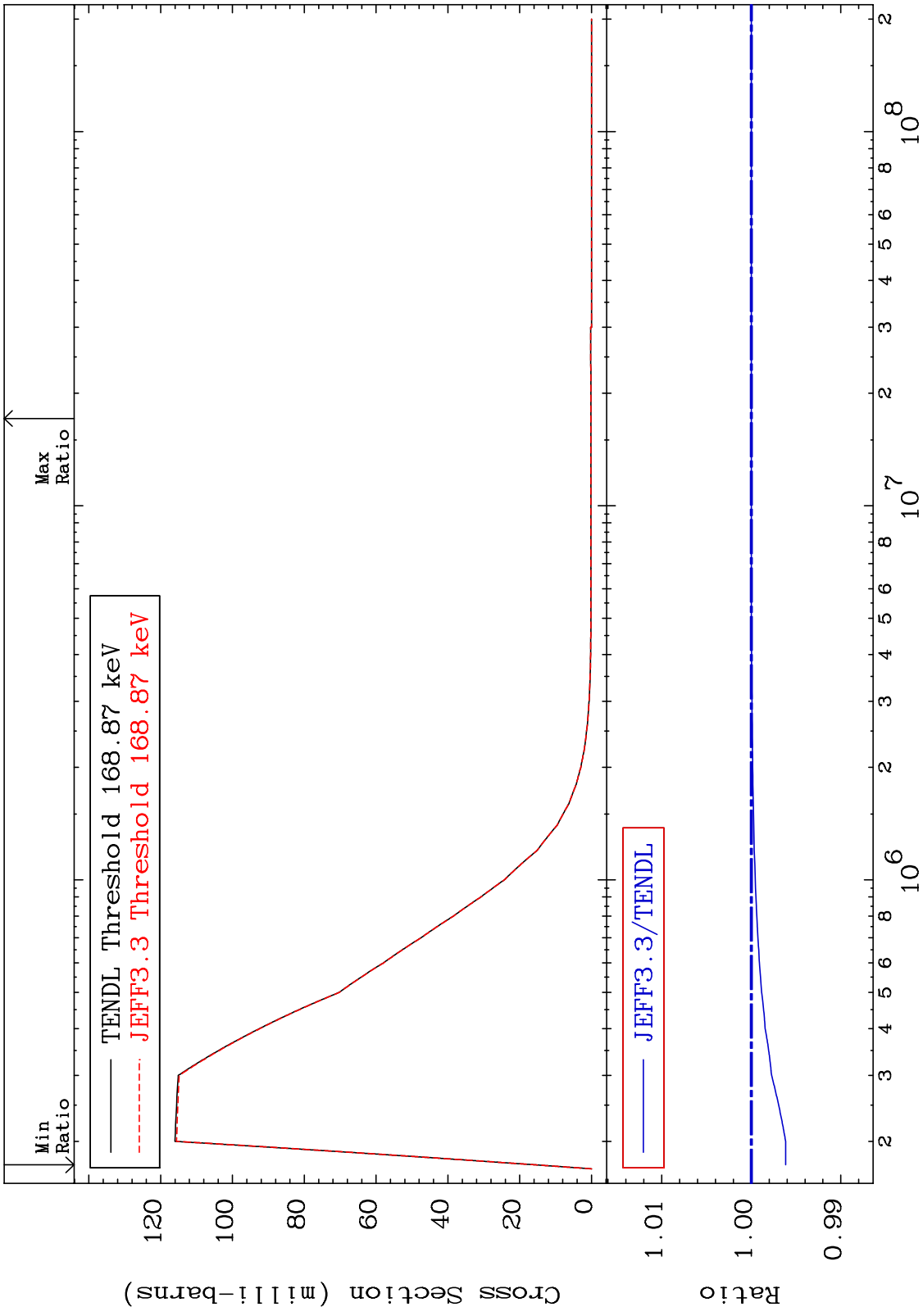


25 Incident Energy (eV) 62-Sm-151

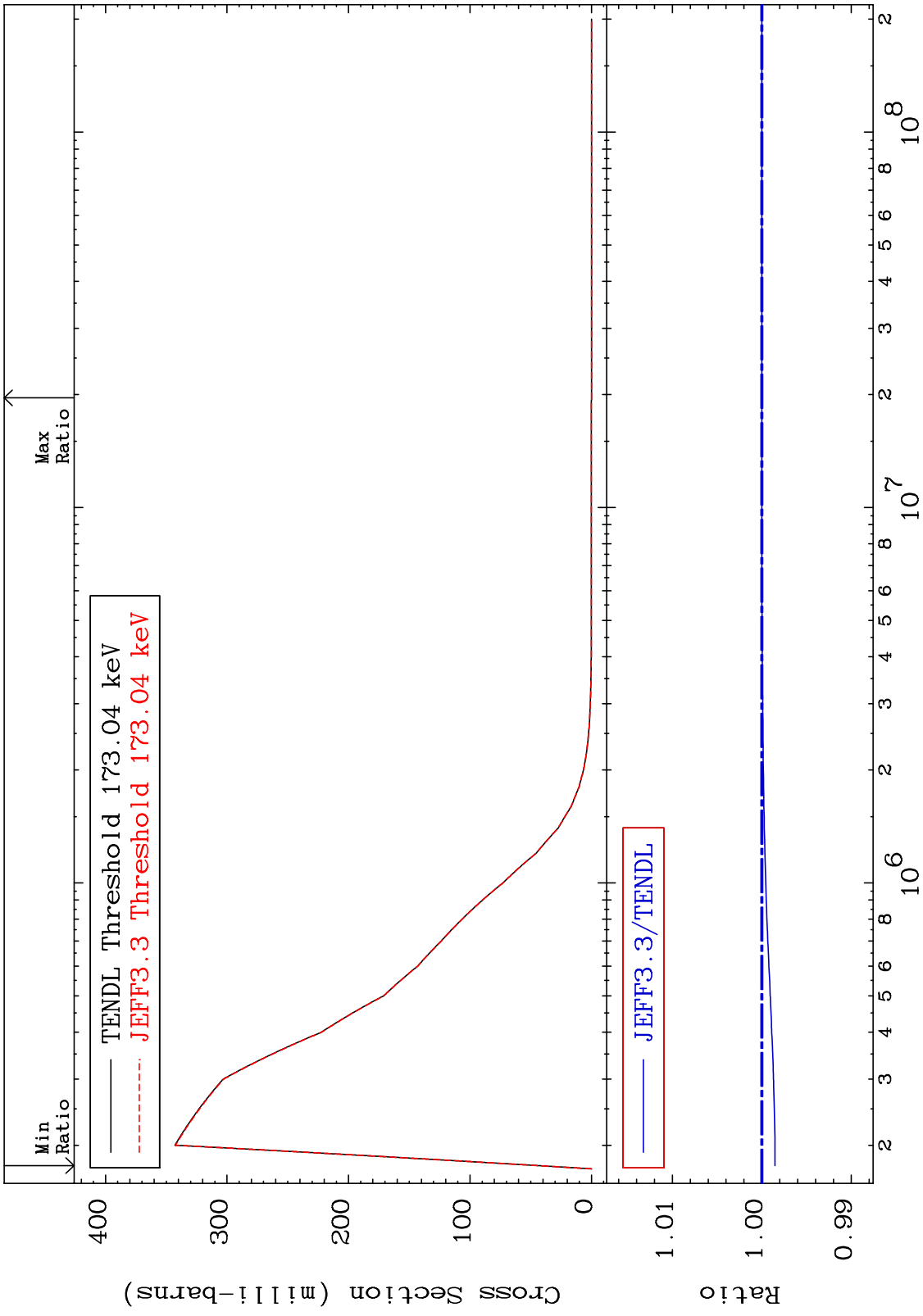
MAT 6246 MT= 56 (n,n') Level Cross Section 62-Sm-151 -0.839 To 0.000 %



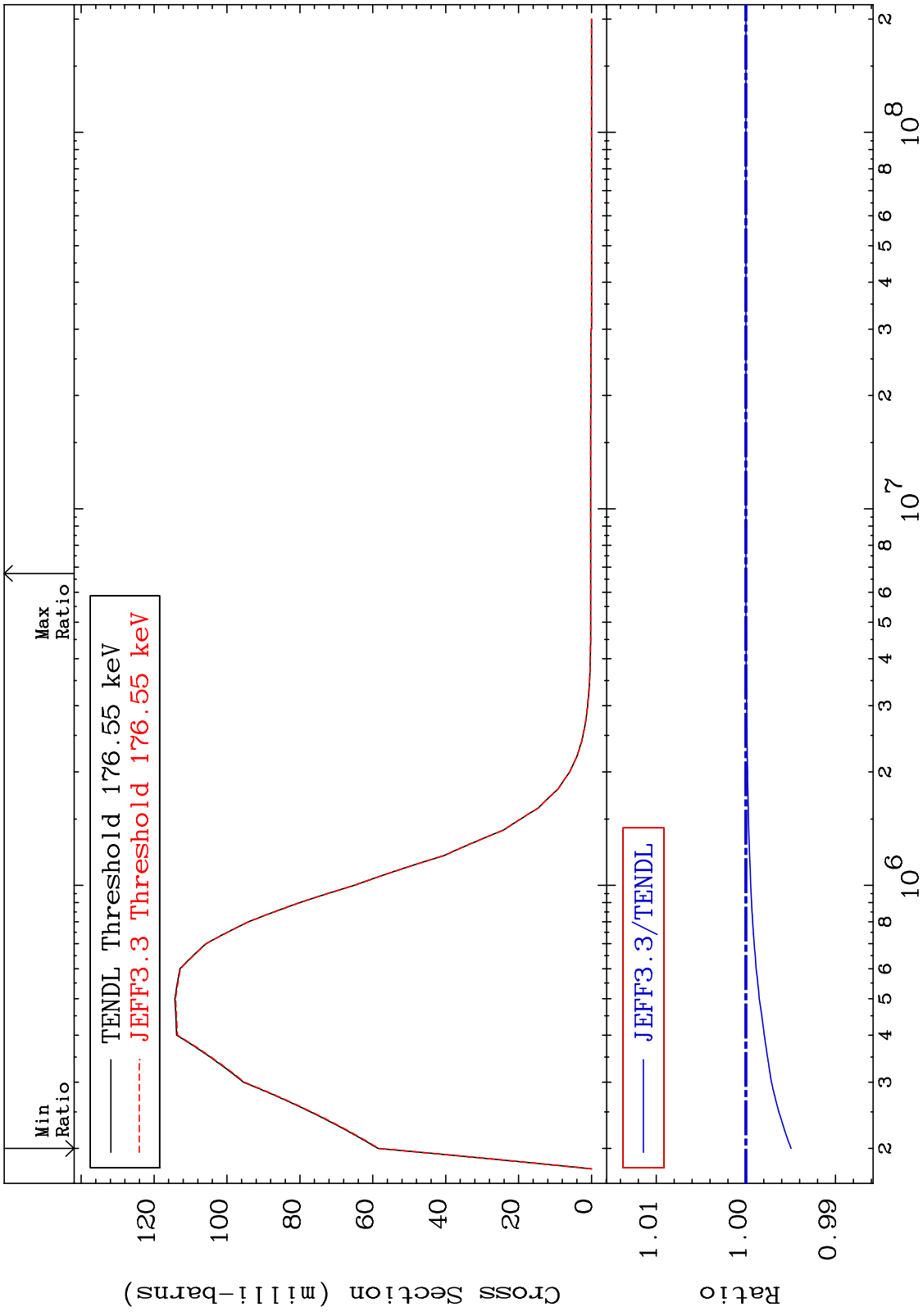
MAT 6246 MT= 57 (n,n') Level Cross Section 62-Sm-151 -0.384 To 0.000 %



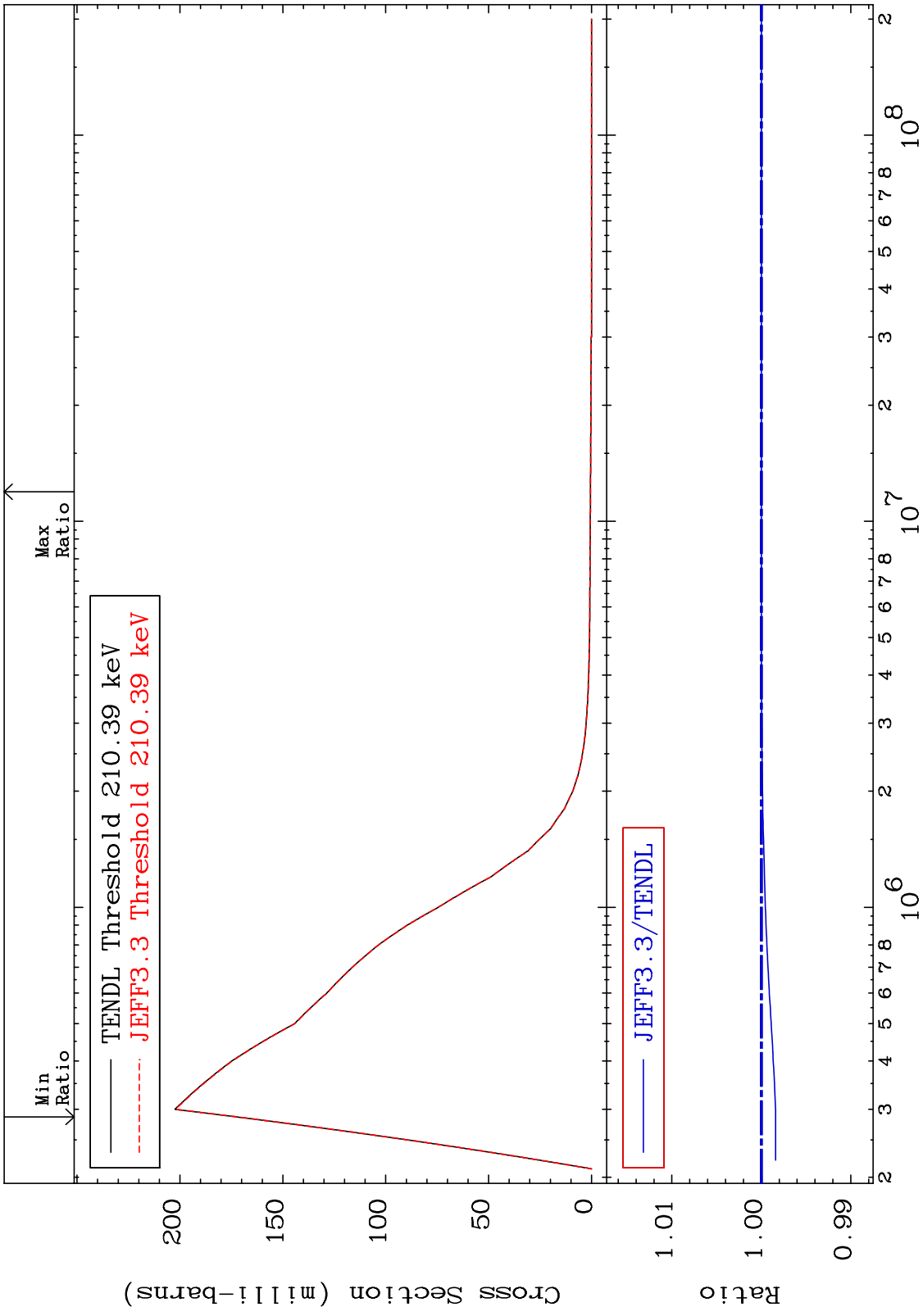
MAT 6246 MT= 58 (n,n') Level Cross Section 62-Sm-151 -0.147 To 0.000 %



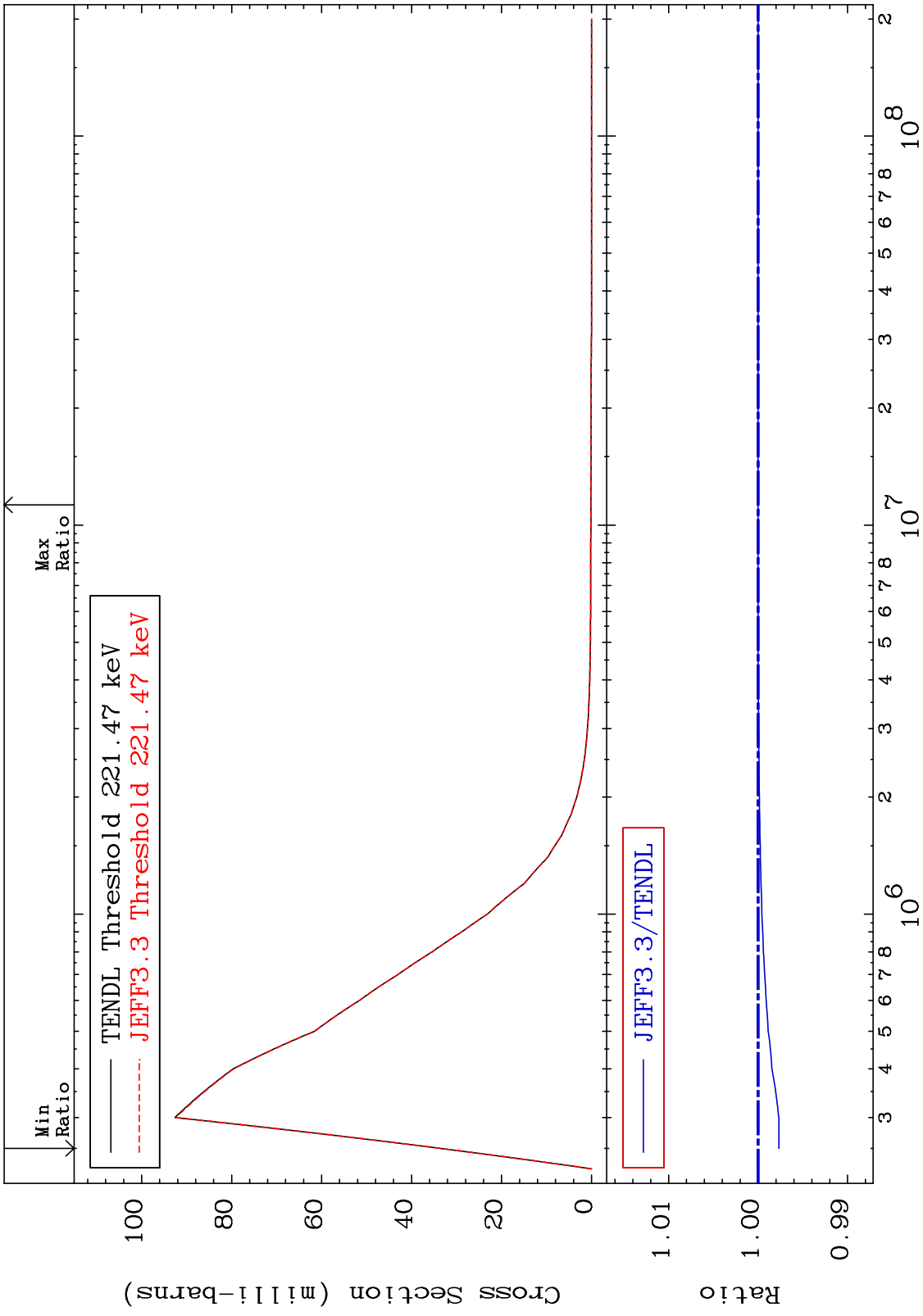
MAT 6246 MT= 59 (n,n') Level 62-Sm-151
 Cross Section -0.505 To 0.000 %



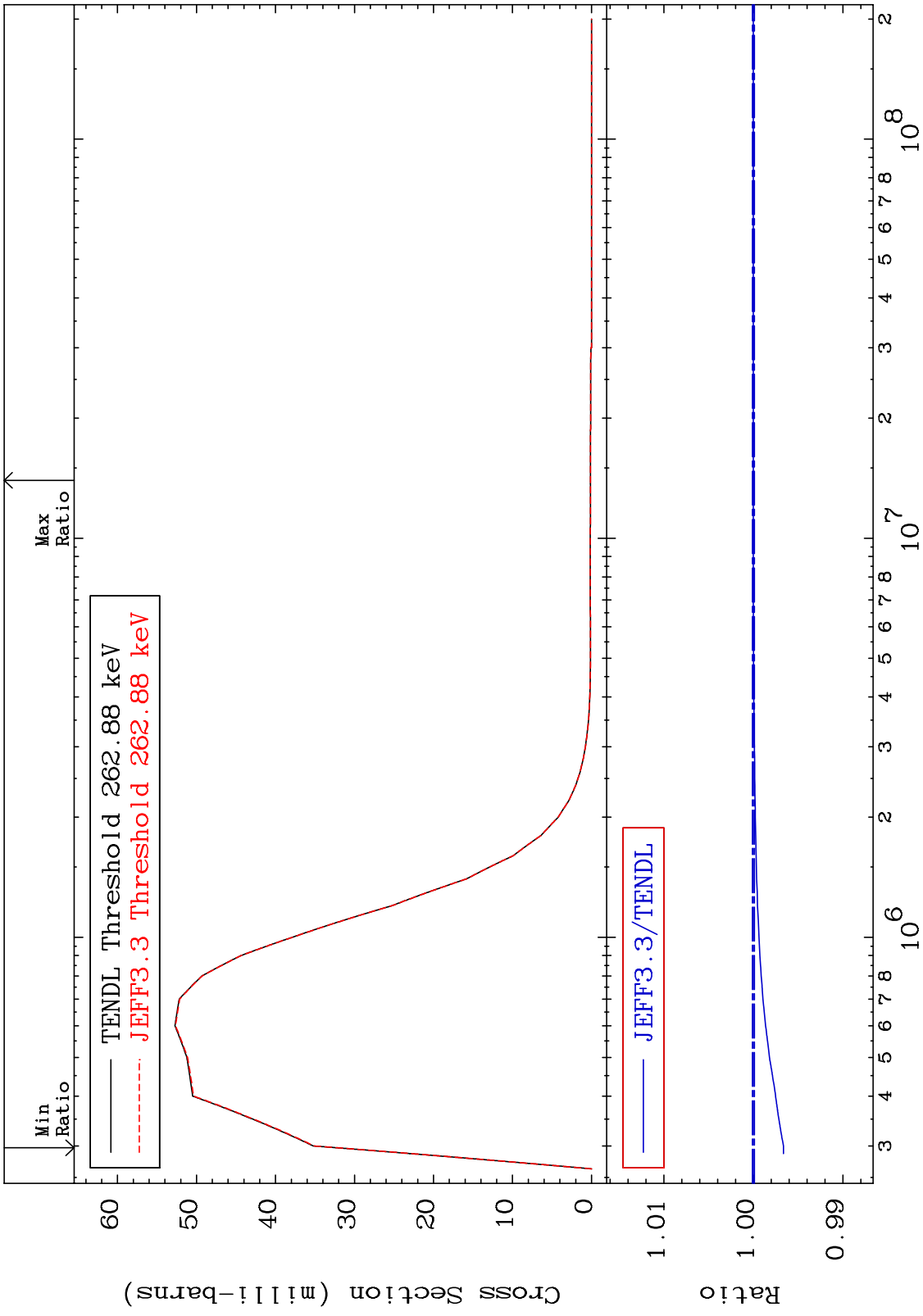
MAT 6246 MT= 60 (n,n') Level Cross Section 62-Sm-151
 -0.159 To 0.000 %



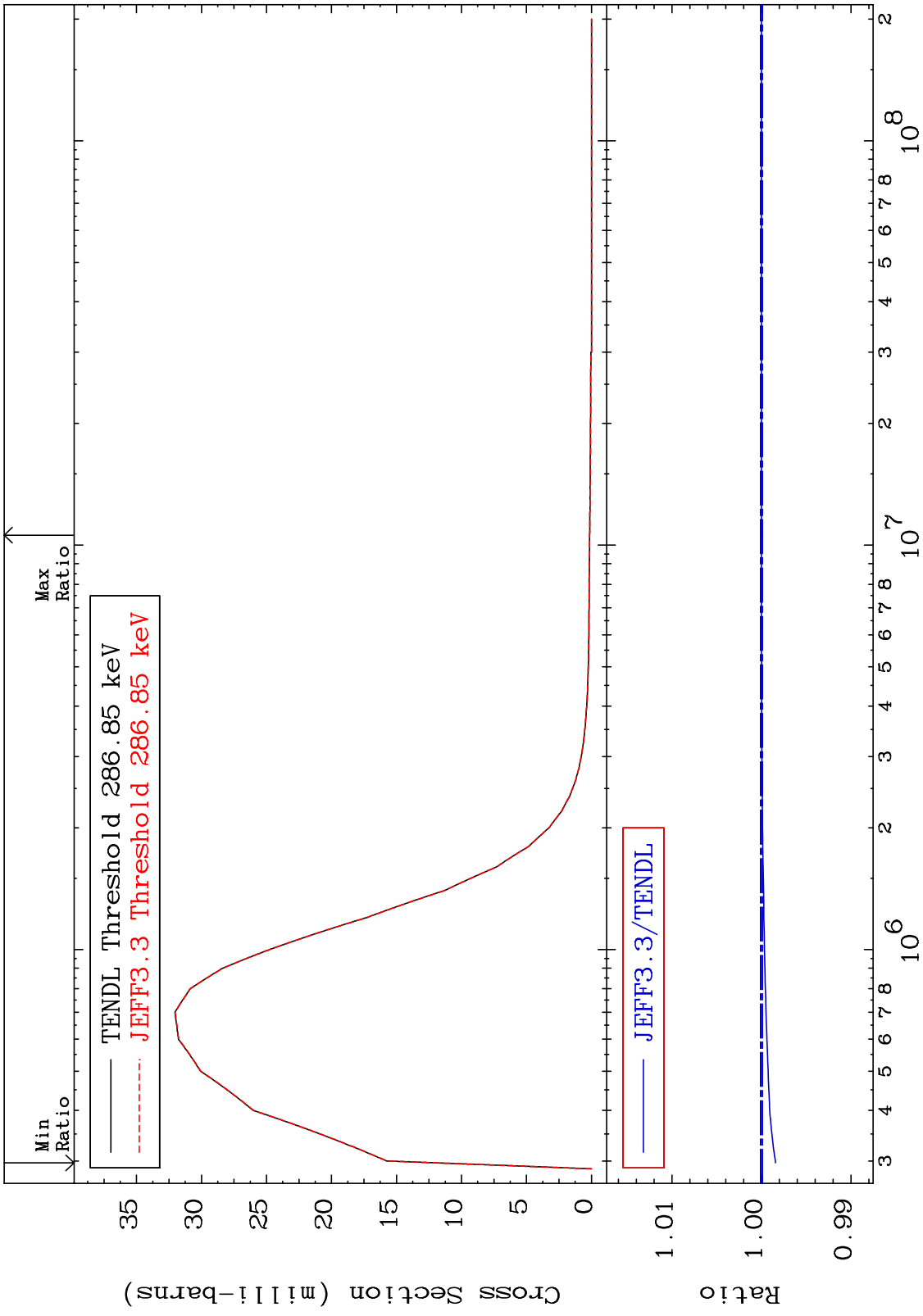
MAT 6246 MT= 61 (n,n') Level Cross Section 62-Sm-151
 -0.231 To 0.000 %

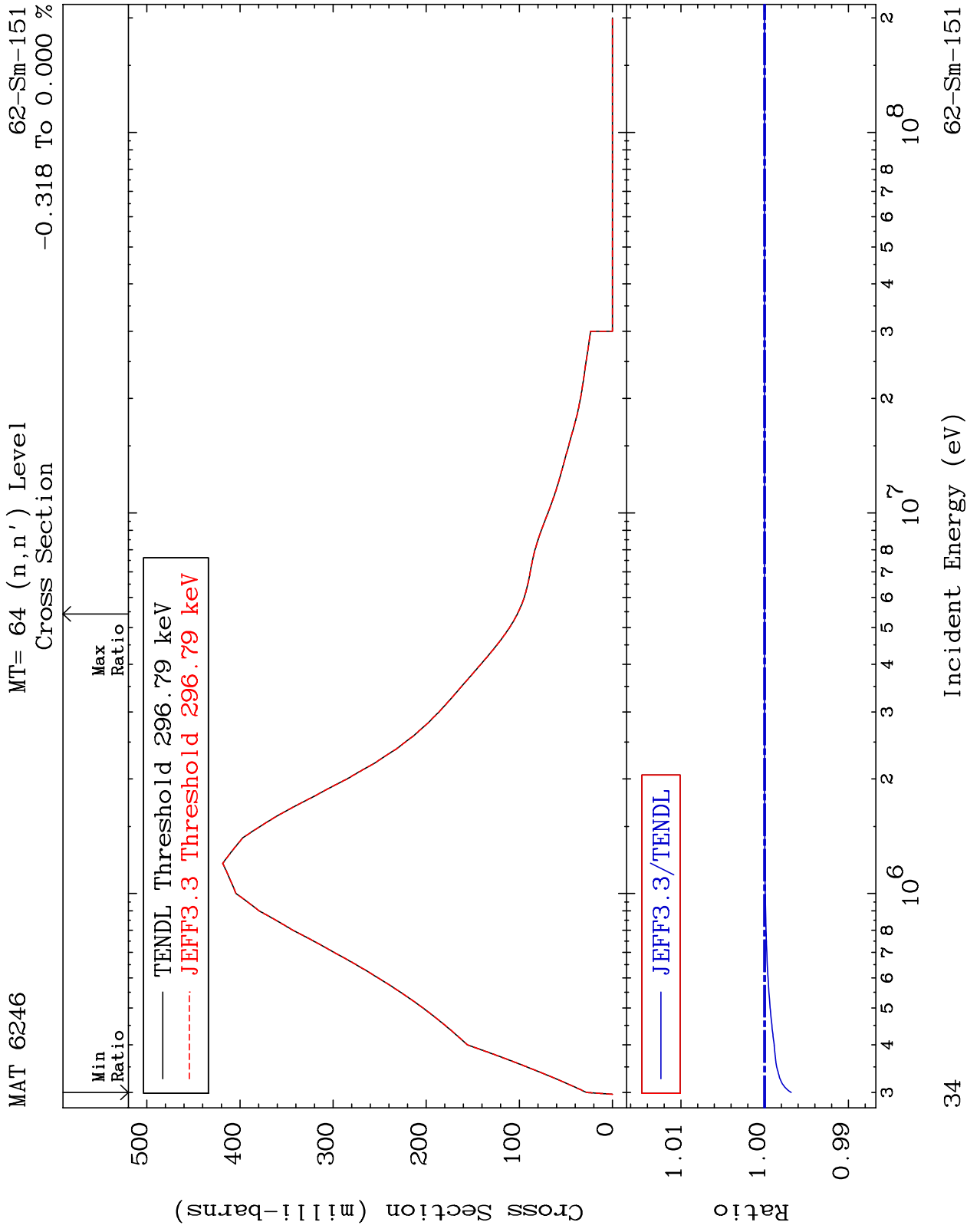


MAT 6246 MT= 62 (n,n') Level Cross Section 62-Sm-151 -0.336 To 0.000 %

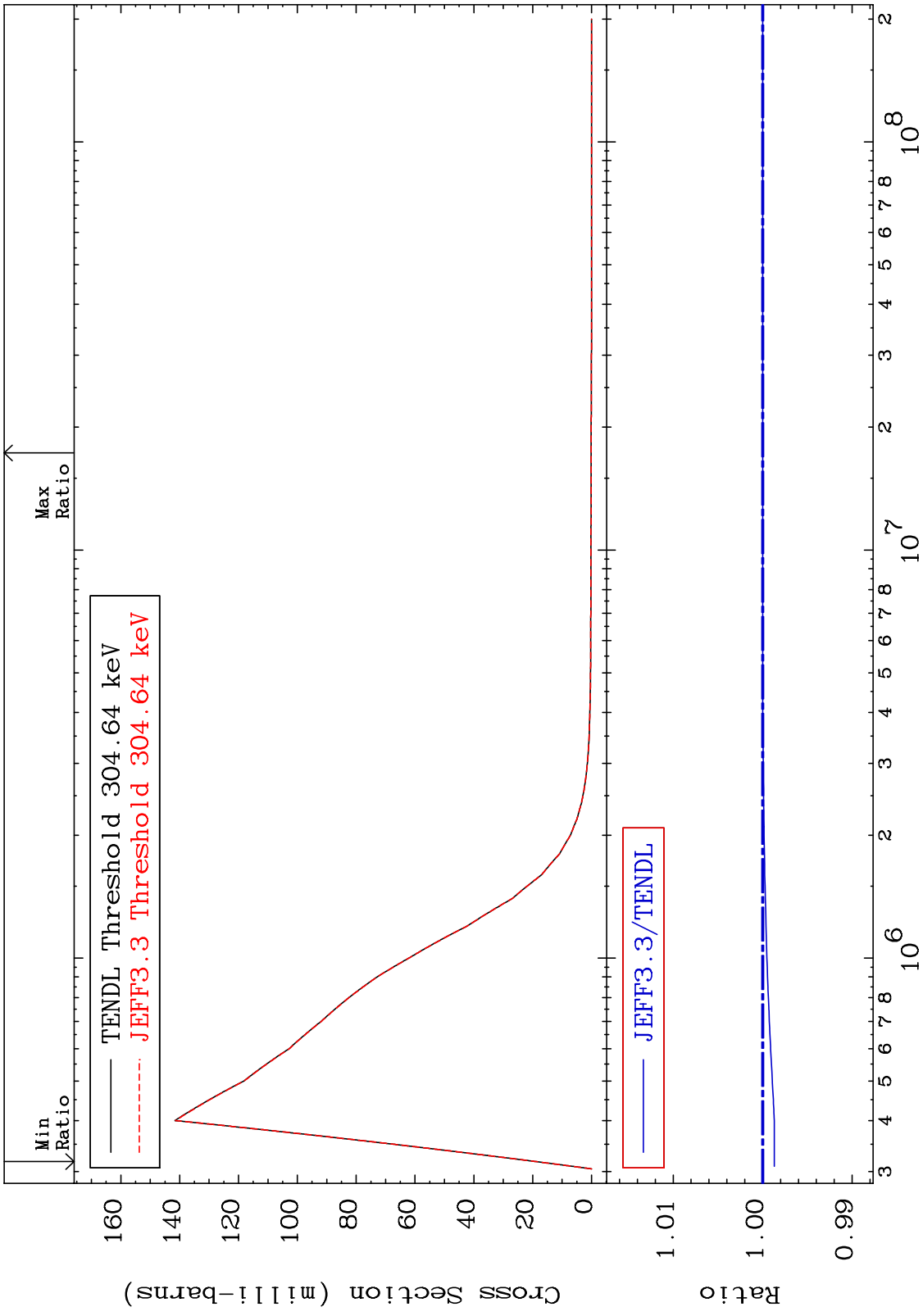


MAT 6246 MT= 63 (n,n') Level Cross Section 62-Sm-151
 -0.155 To 0.000 %

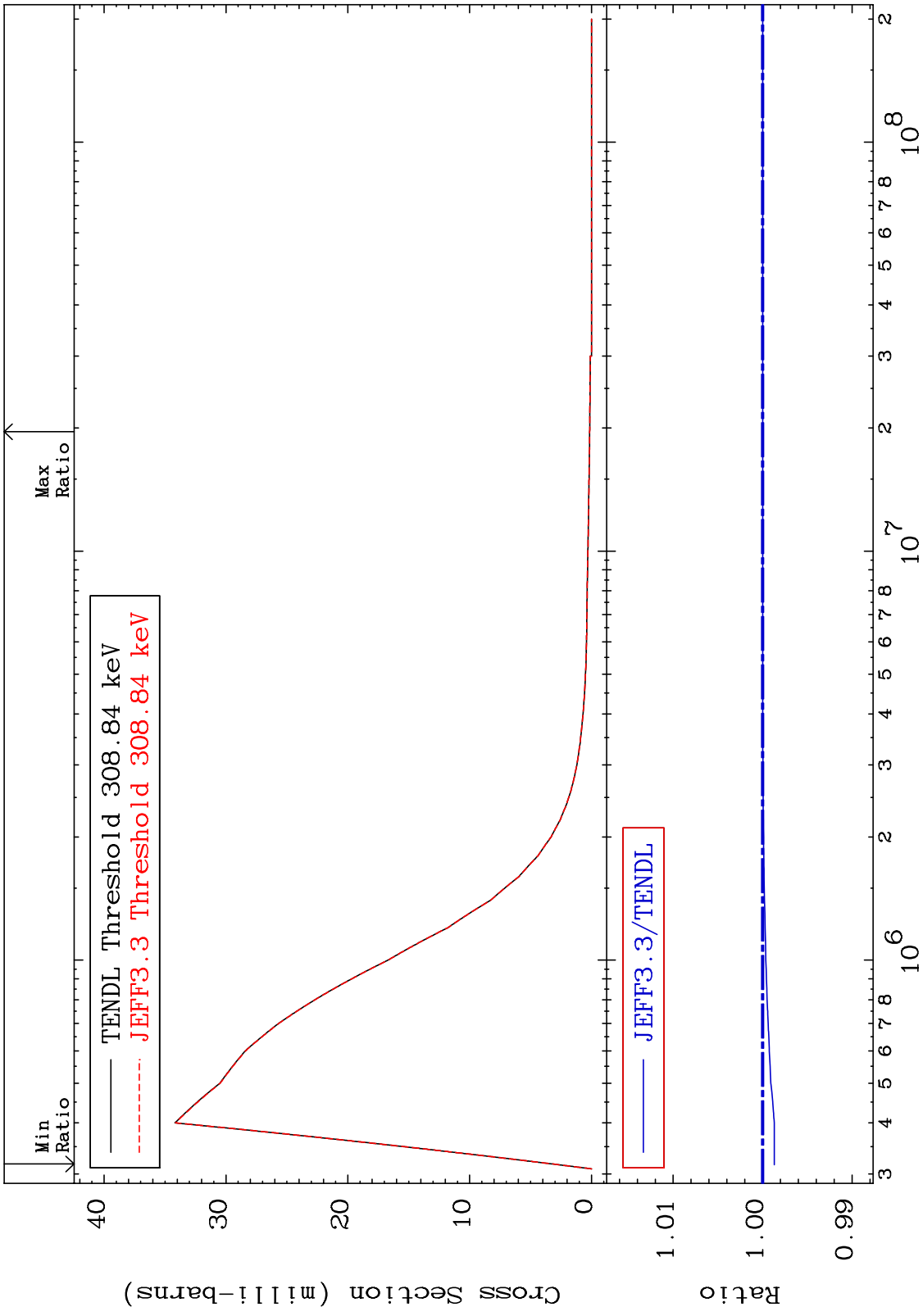




MAT 6246 MT= 65 (n,n') Level Cross Section 62-Sm-151 -0.129 To 0.000 %



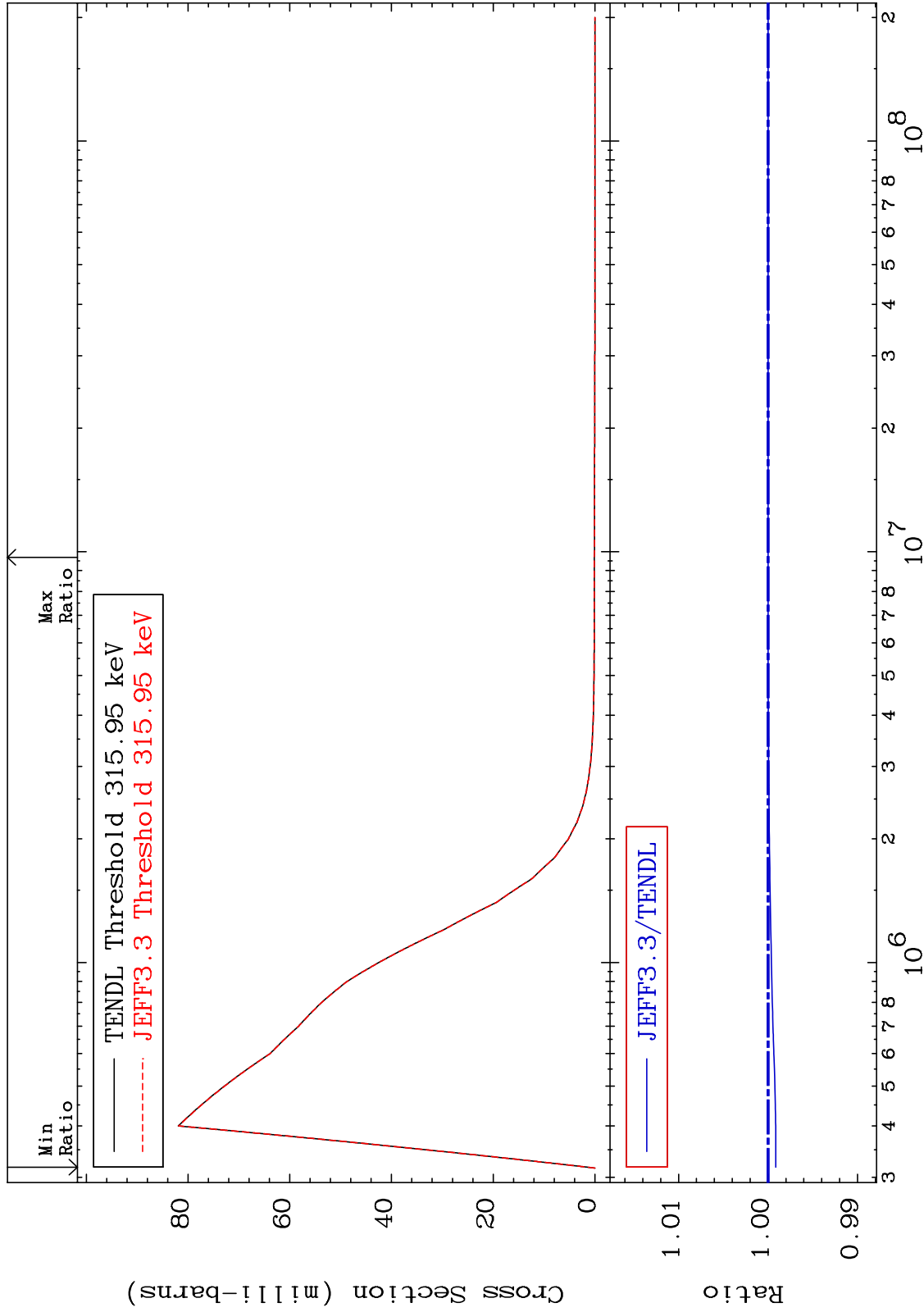
MAT 6246 MT= 66 (n,n') Level Cross Section 62-Sm-151 -0.130 To 0.000 %



MAT 6246

MT= 67 (n,n') Level
Cross Section

62-Sm-151
-0.085 To 0.000 %

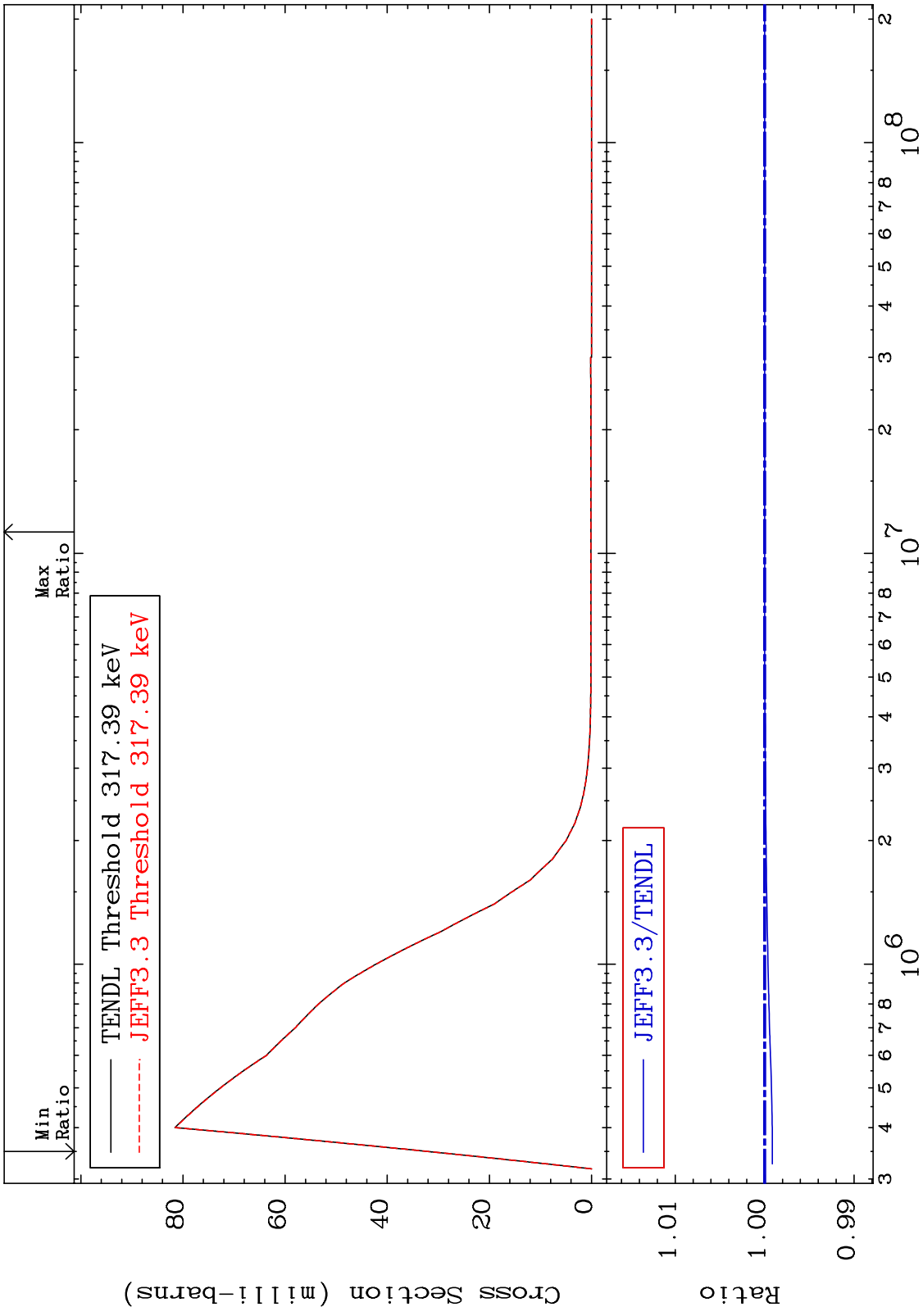


37

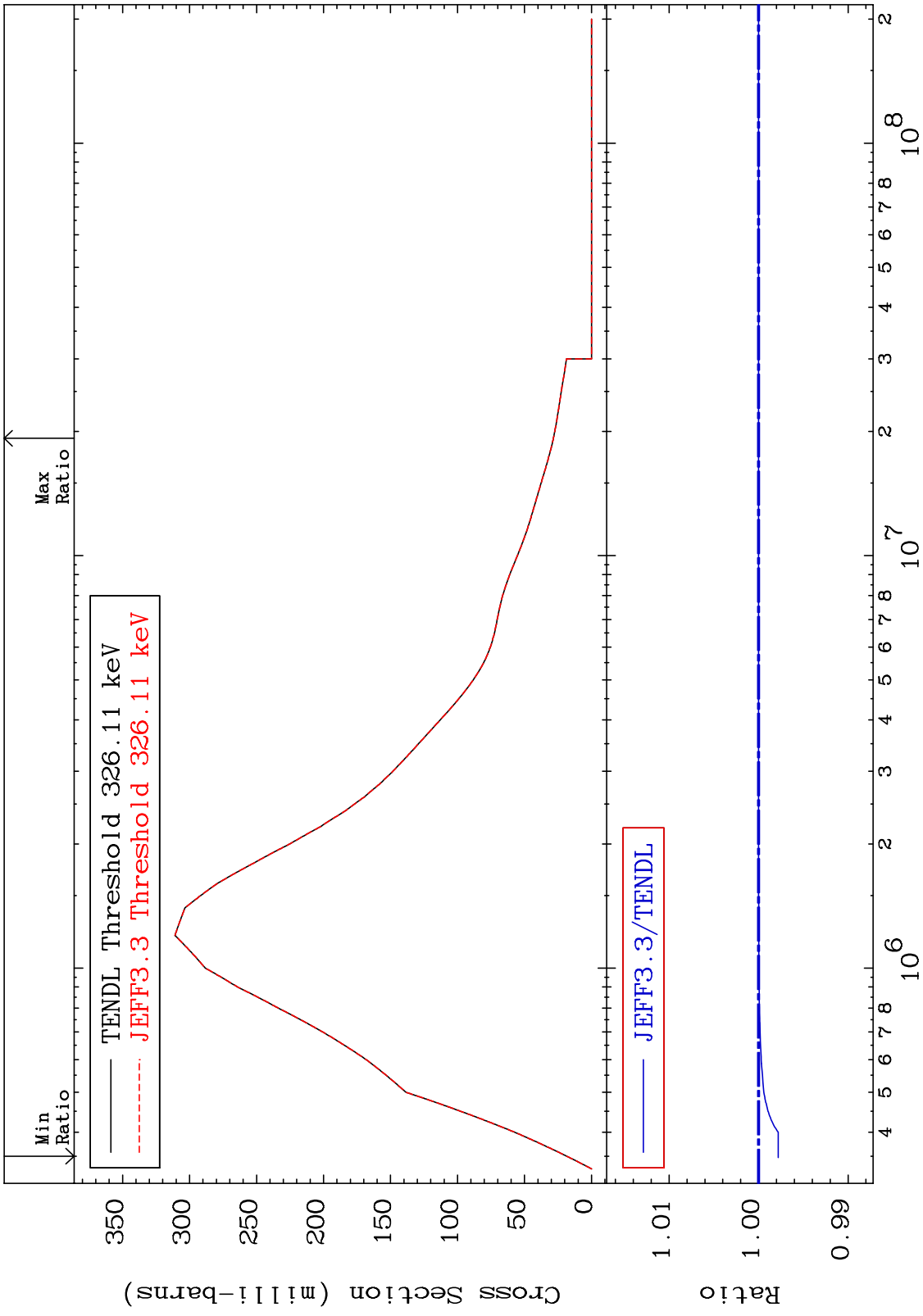
Incident Energy (eV)

62-Sm-151

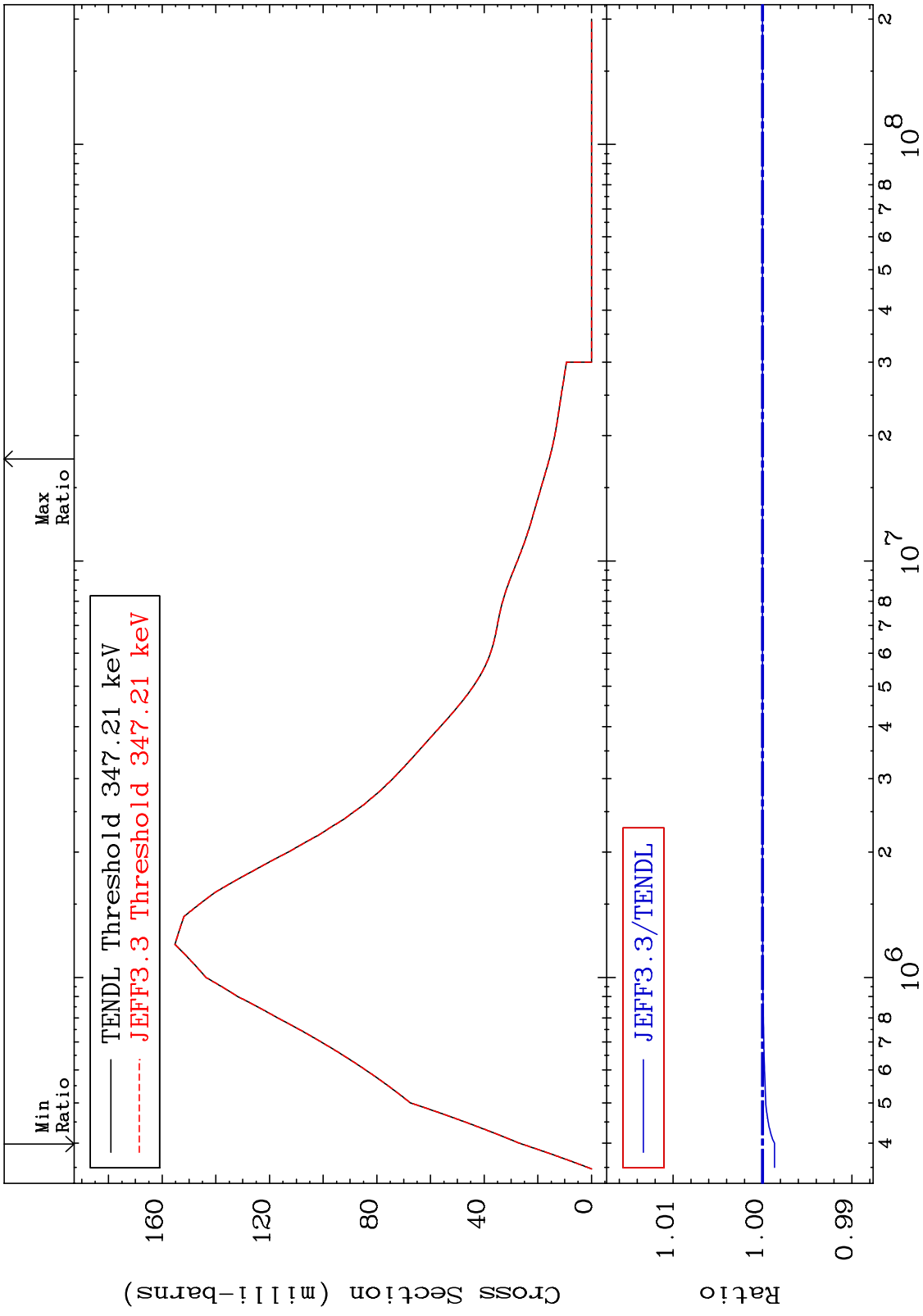
MAT 6246 MT= 68 (n,n') Level Cross Section -0.085 To 0.000 % 62-Sm-151



MAT 6246 MT= 69 (n,n') Level Cross Section 62-Sm-151 -0.220 To 0.000 %

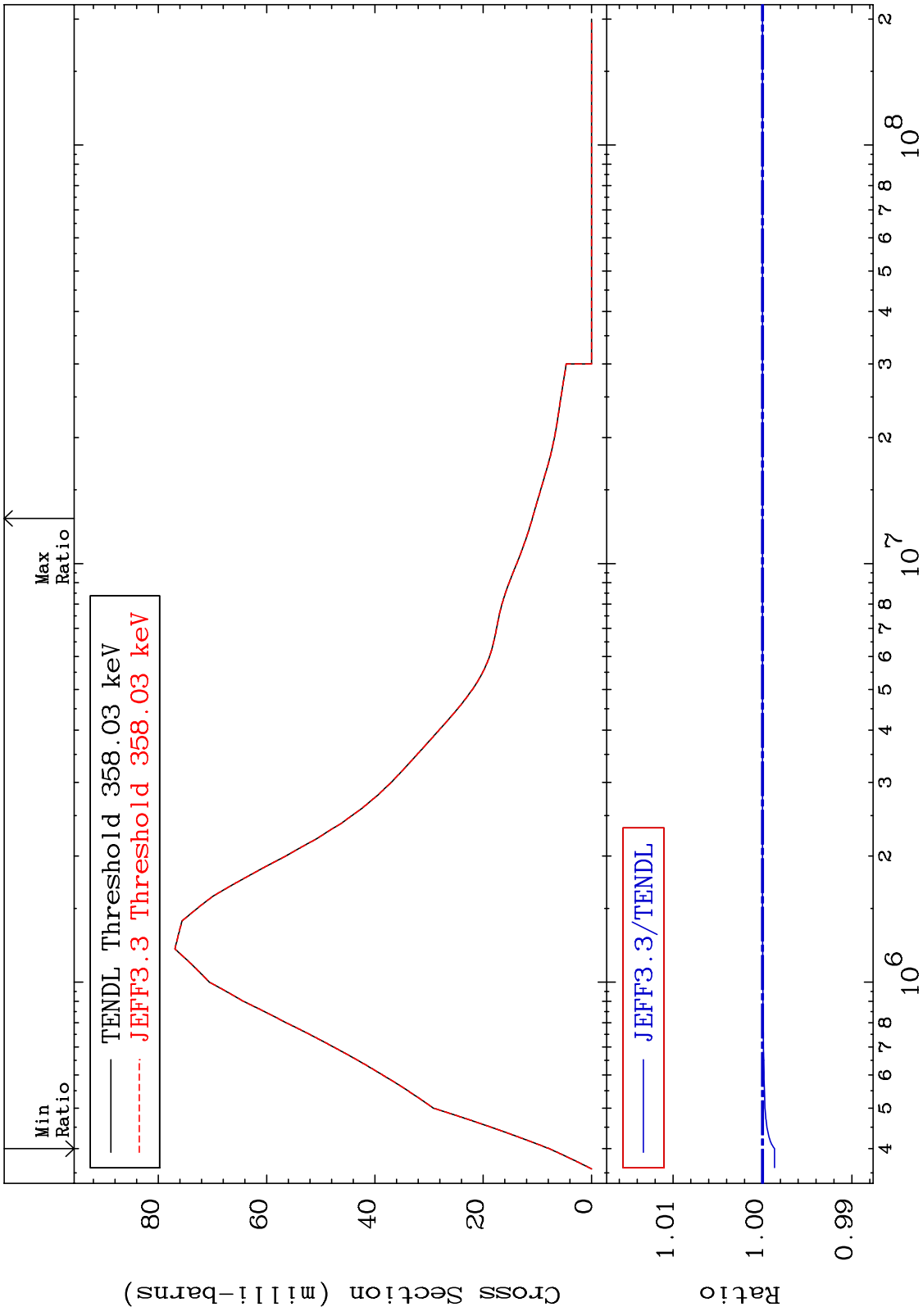


MAT 6246 MT= 70 (n,n') Level Cross Section 62-Sm-151
 -0.133 To 0.000 %

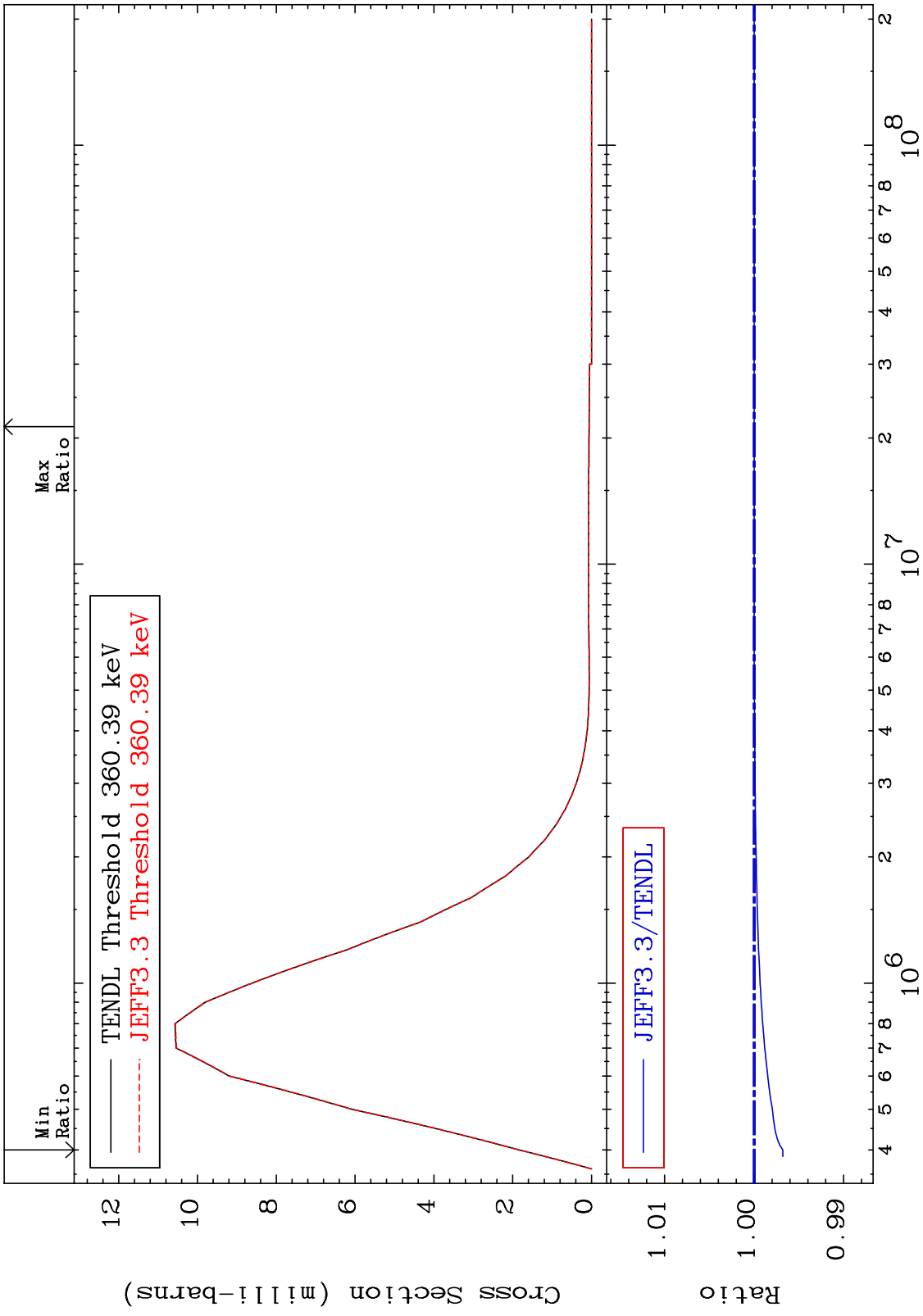


40 Incident Energy (eV) 62-Sm-151

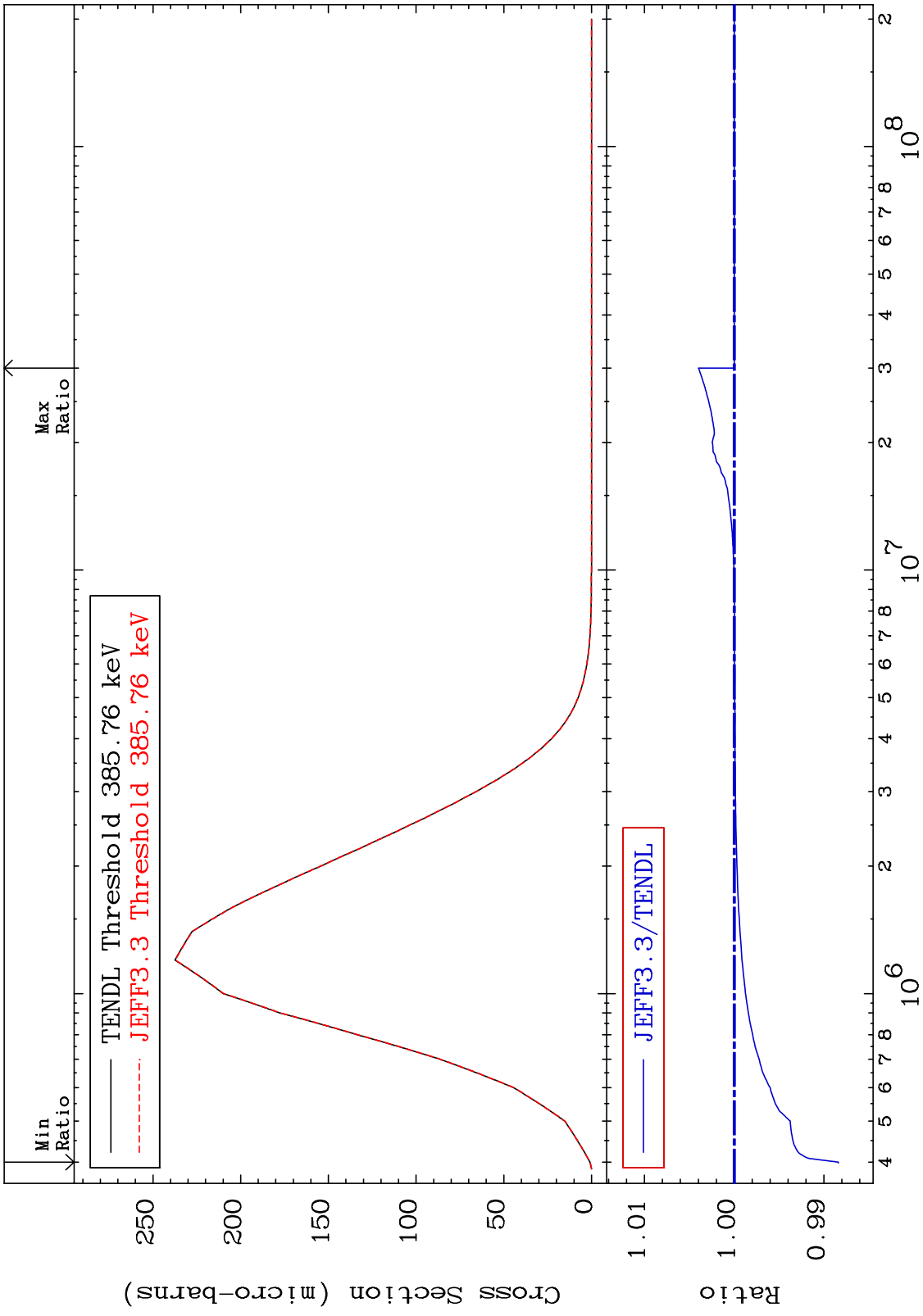
MAT 6246 MT= 71 (n, n') Level Cross Section -0.134 To 0.000 % 62-Sm-151



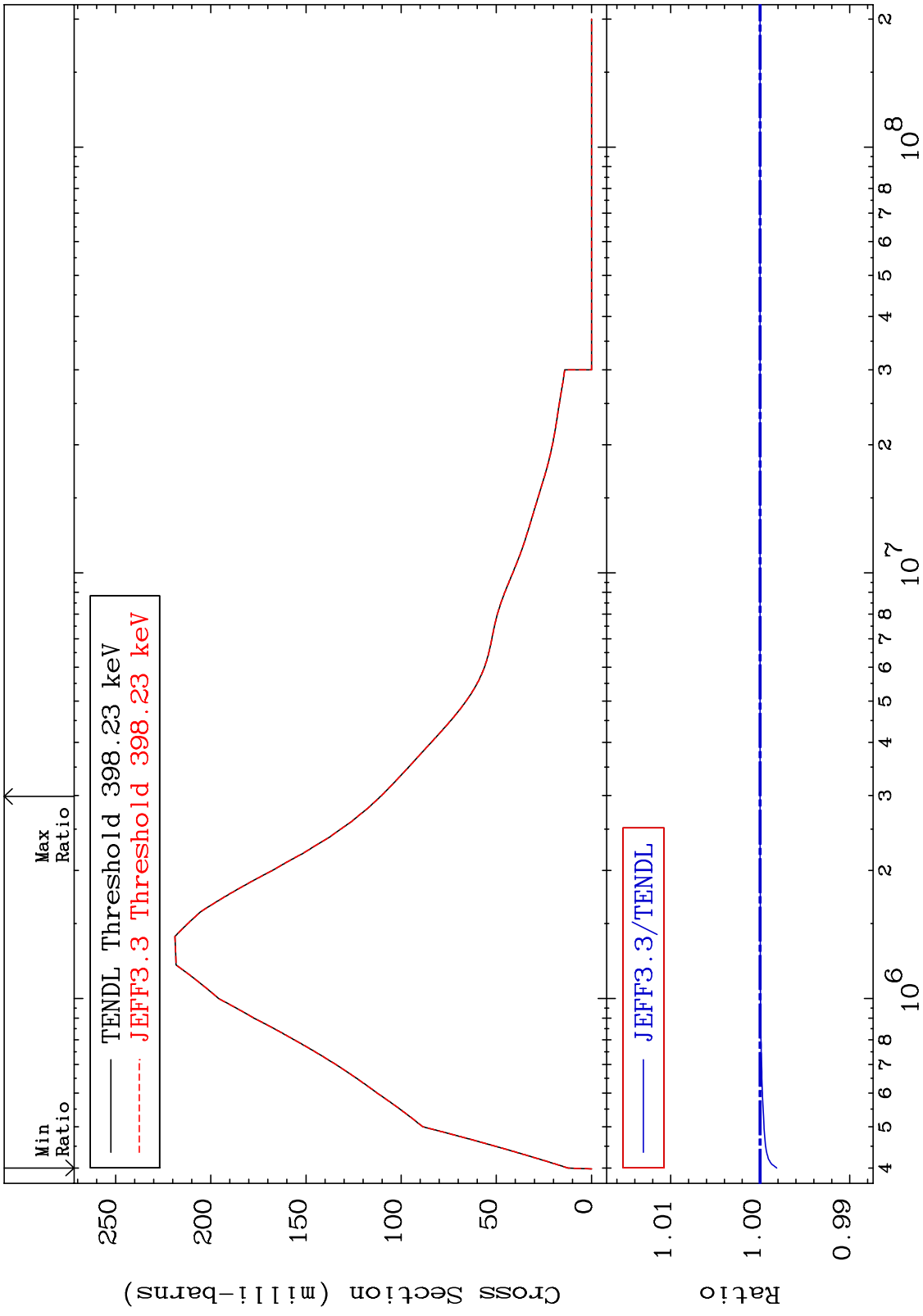
MAT 6246 MT= 72 (n,n') Level Cross Section 62-Sm-151 -0.320 To 0.000 %



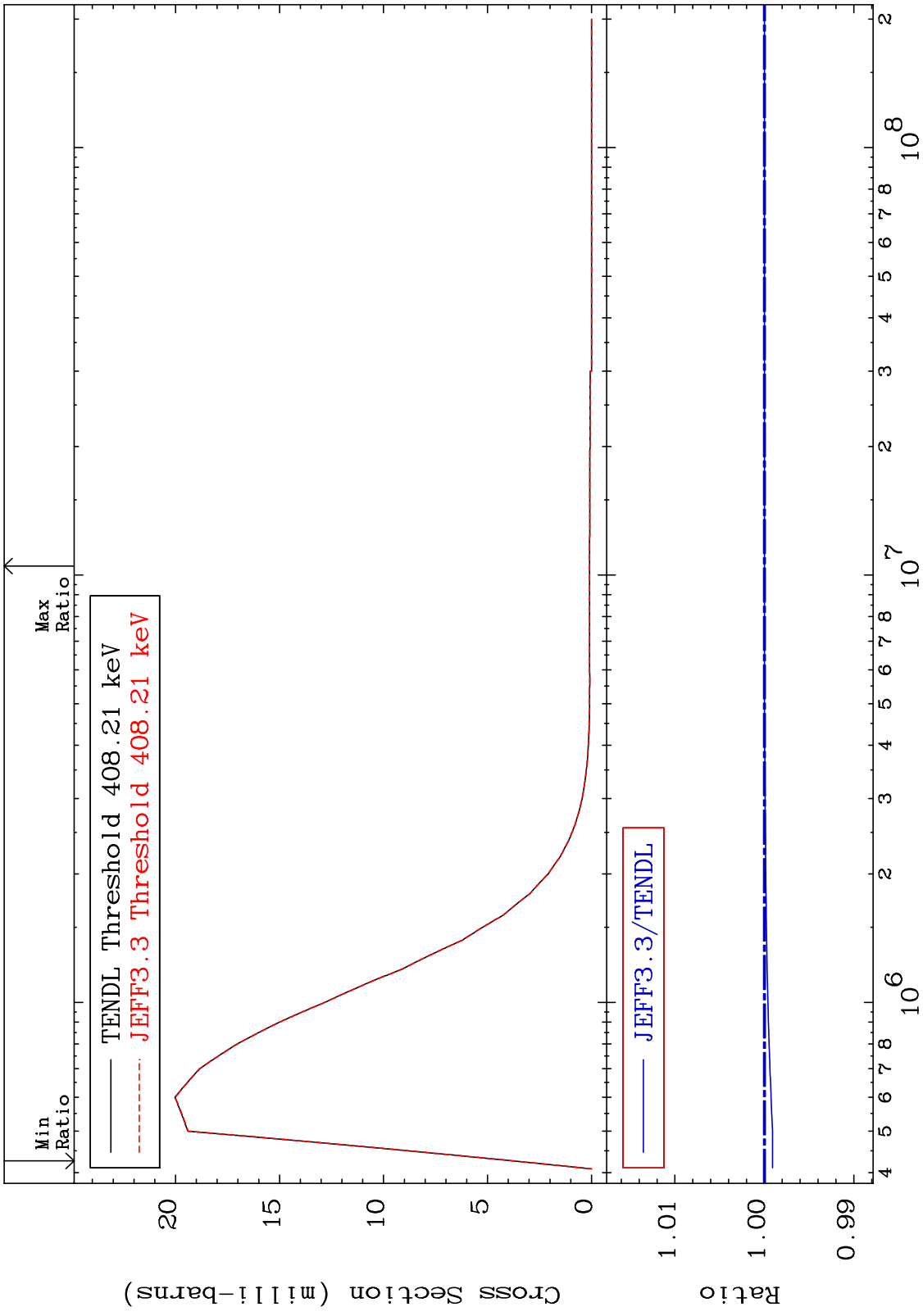
MAT 6246 MT= 73 (n,n') Level 62-Sm-151
 Cross Section -1.161 To 0.398 %



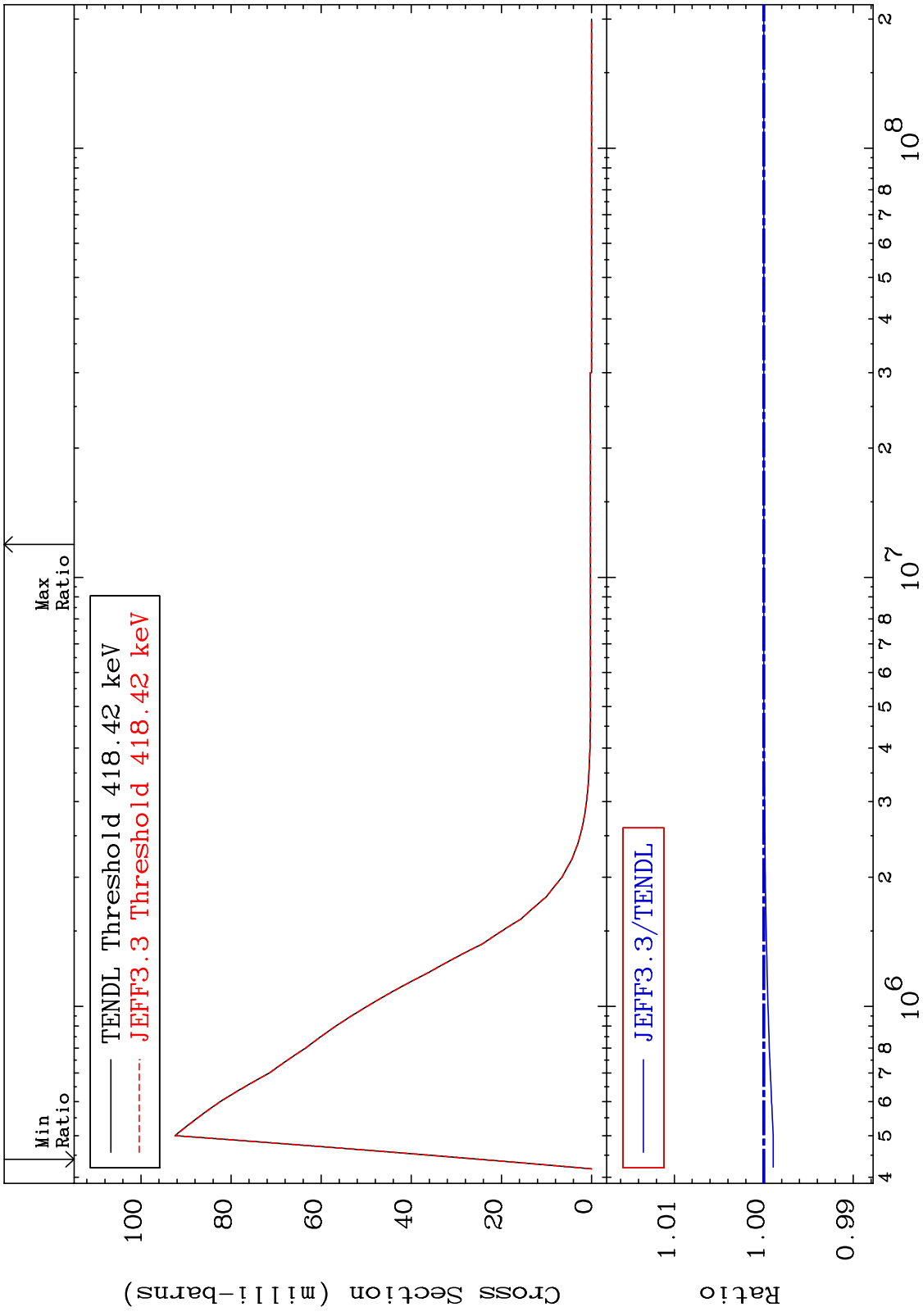
MAT 6246 MT= 74 (n,n') Level Cross Section 62-Sm-151
 -0.185 To 0.000 %



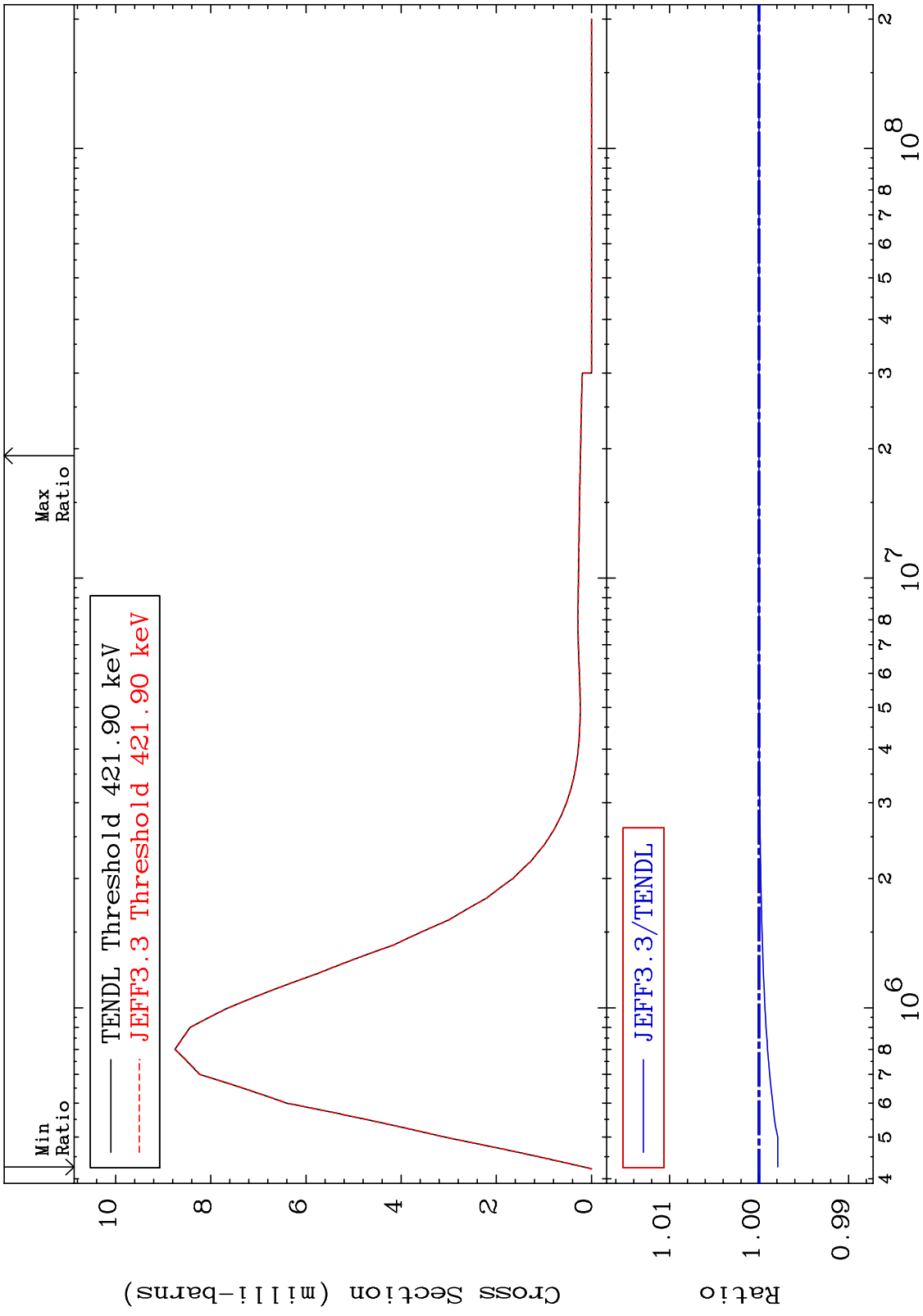
MAT 6246 MT= 75 (n,n') Level Cross Section 62-Sm-151 -0.091 To 0.000 %



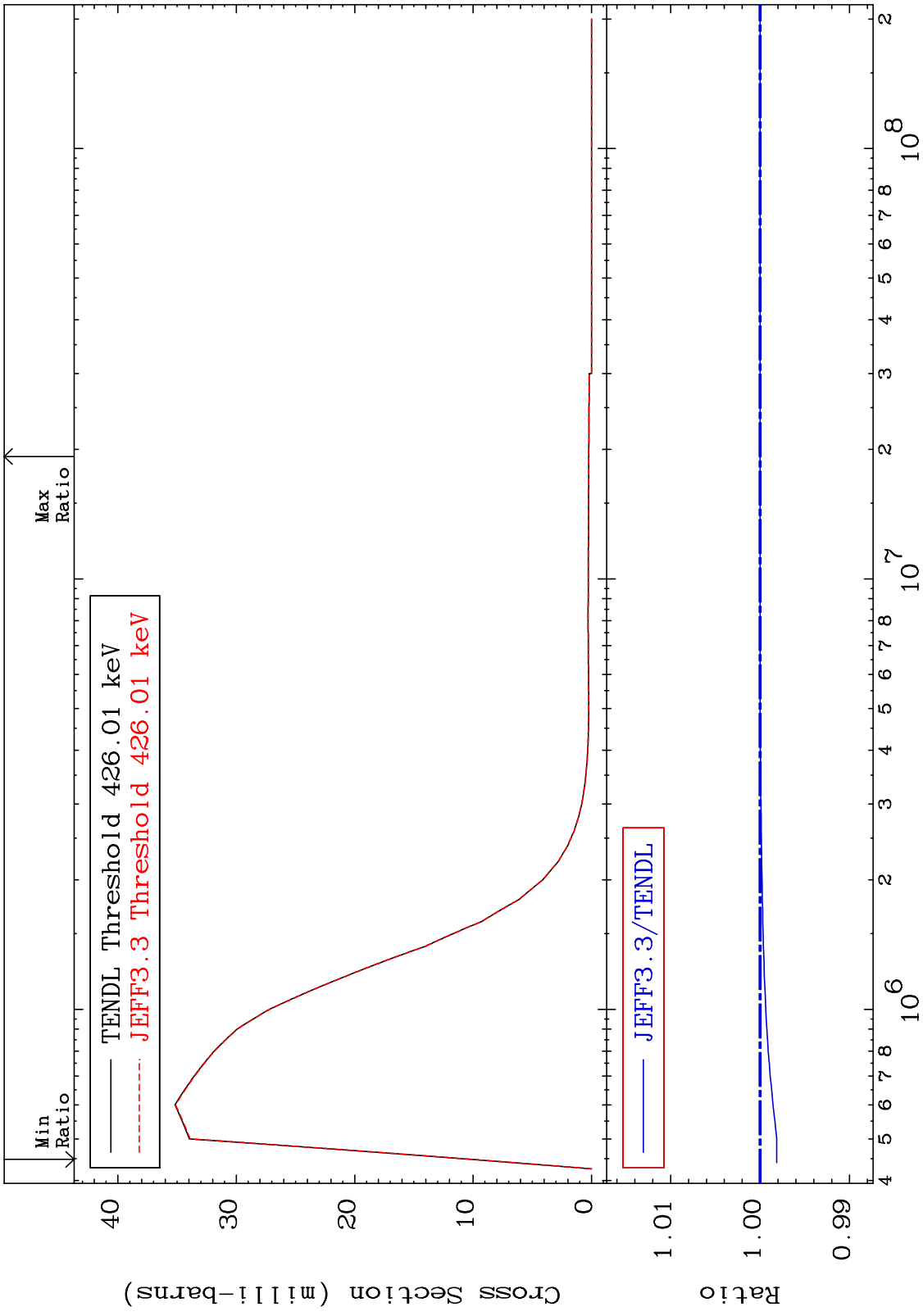
MAT 6246 MT= 76 (n,n') Level Cross Section 62-Sm-151
 -0.105 To 0.000 %



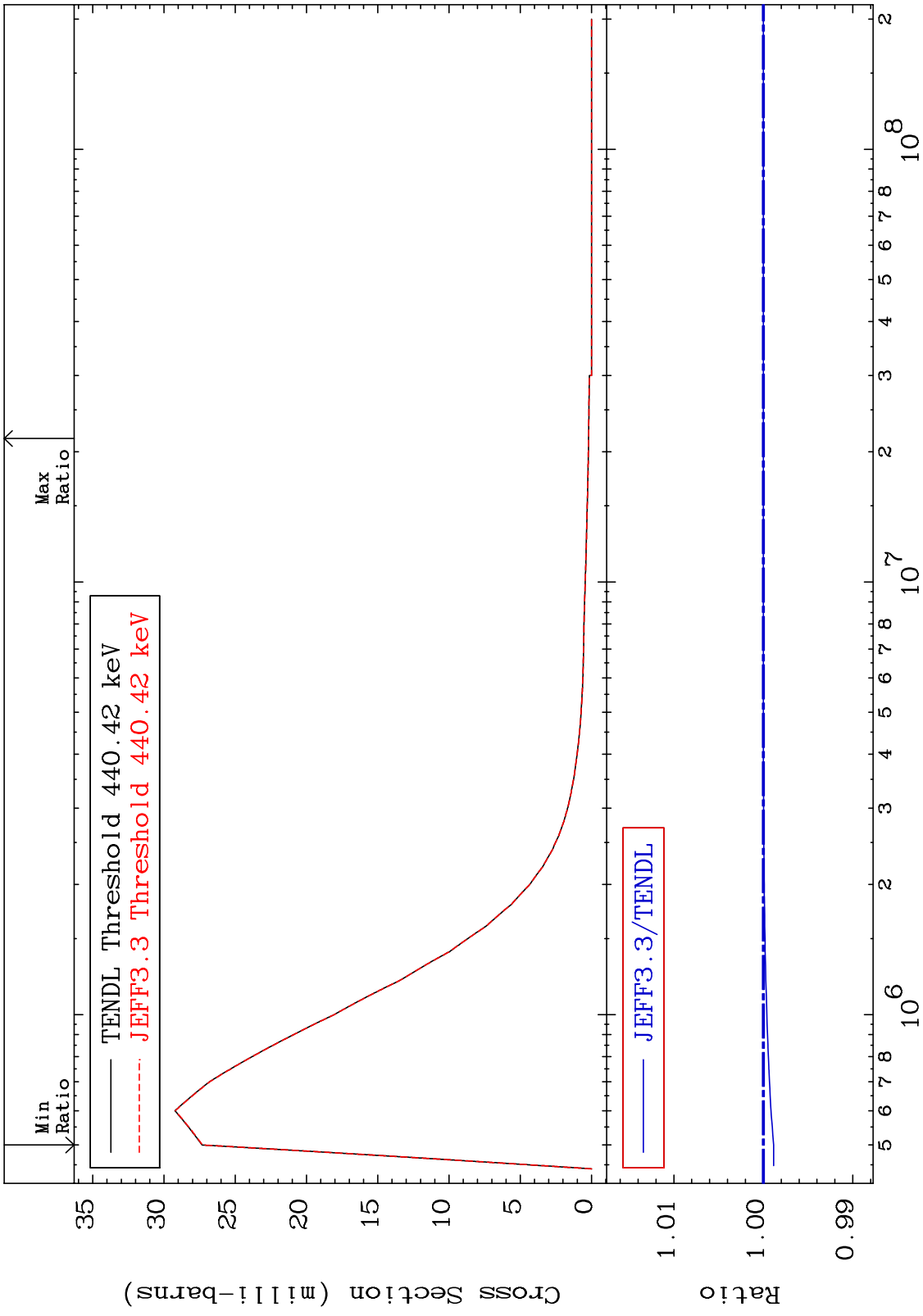
MAT 6246 MT= 77 (n,n') Level Cross Section 62-Sm-151 -0.211 To 0.000 %



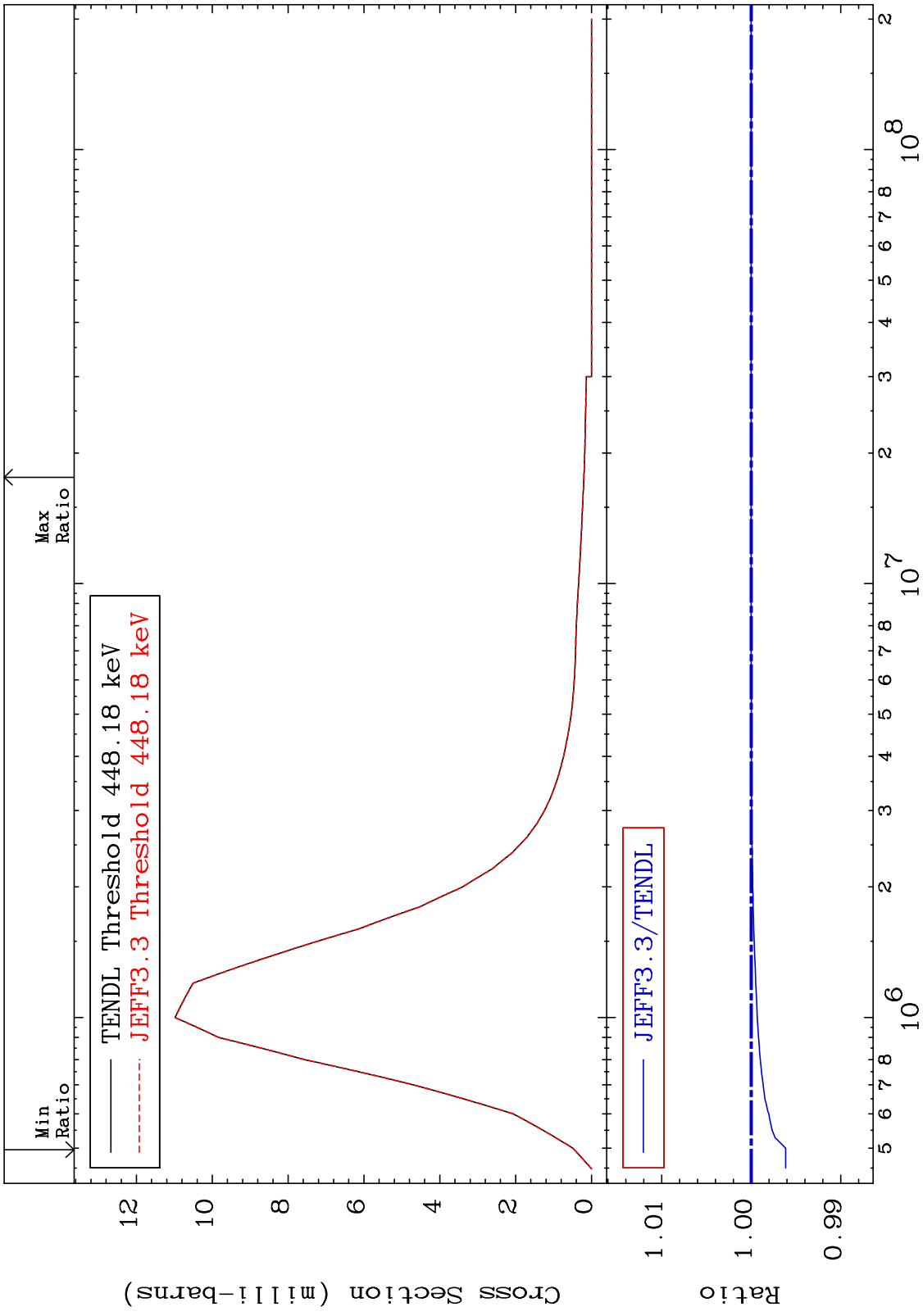
MAT 6246 MT= 78 (n,n') Level Cross Section 62-Sm-151
 -0.186 To 0.000 %



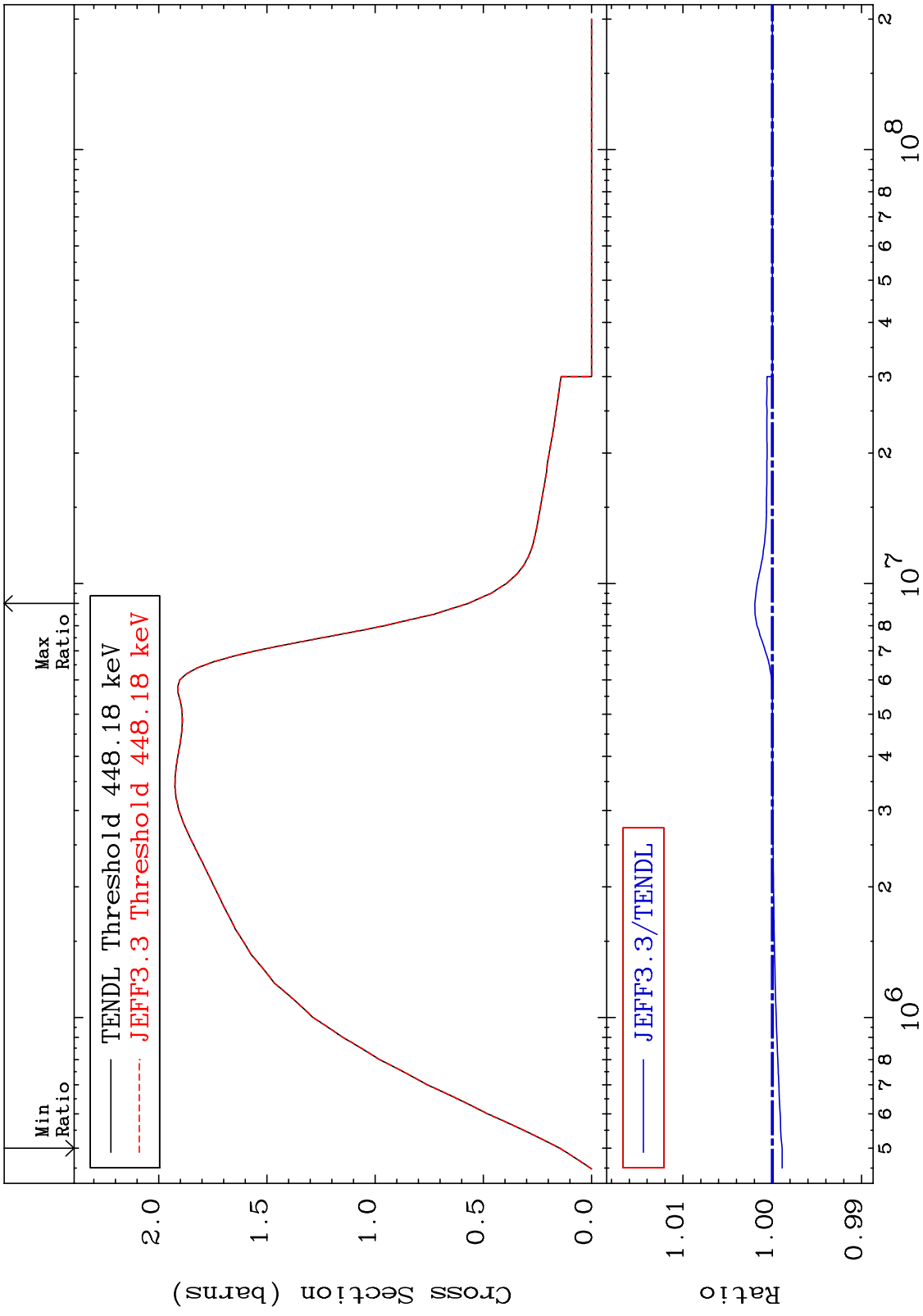
MAT 6246 MT= 79 (n,n') Level Cross Section 62-Sm-151 -0.115 To 0.000 %



MAT 6246 MT= 80 (n,n') Level Cross Section 62-Sm-151
 -0.385 To 0.000 %



MAT 6246 (n,n') Continuum Cross Section 62-Sm-151 -0.110 To 0.195 %



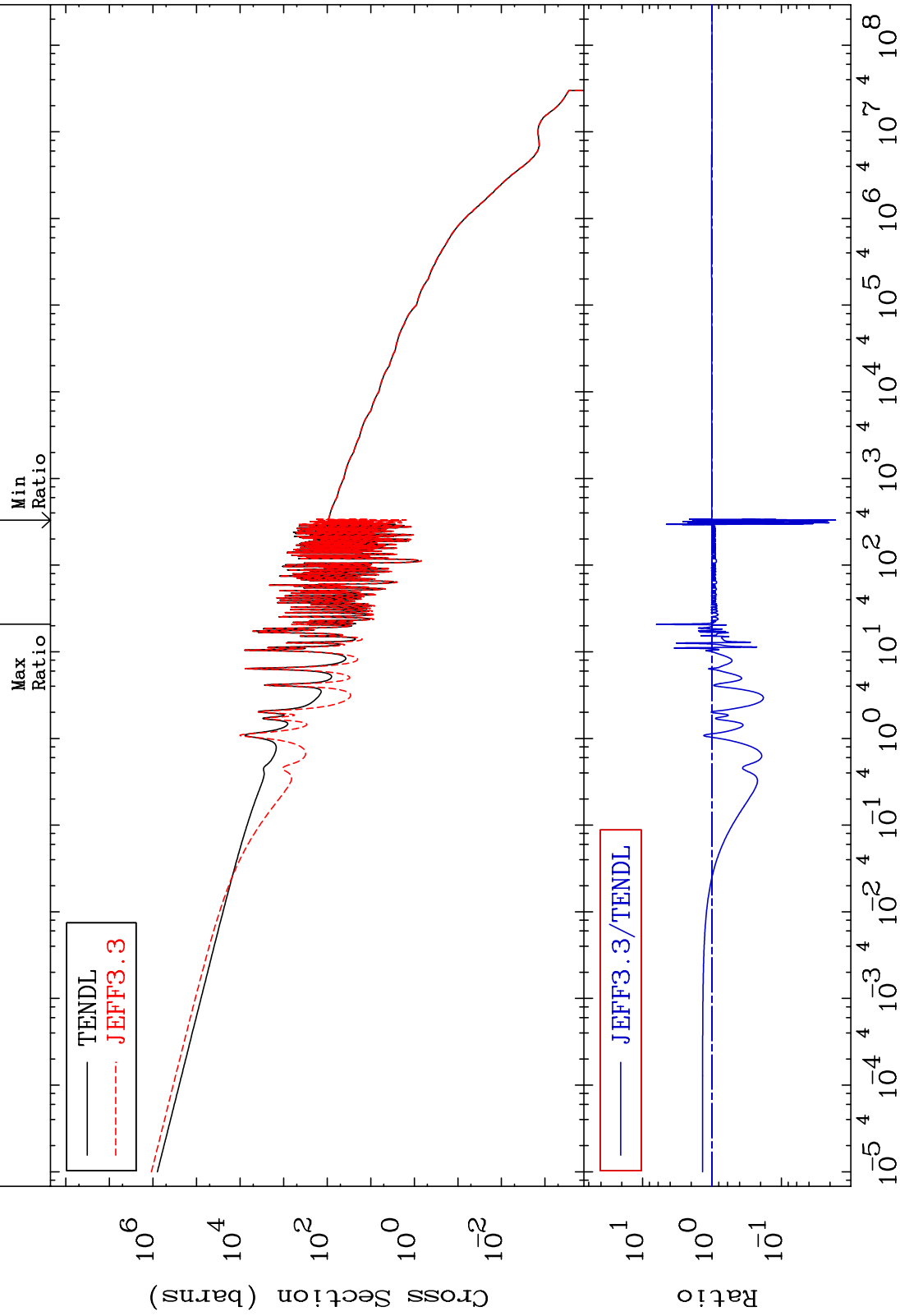
MAT 6246

62-Sm-151

-98.34 To 532.8 %

(n, γ)

Cross Section



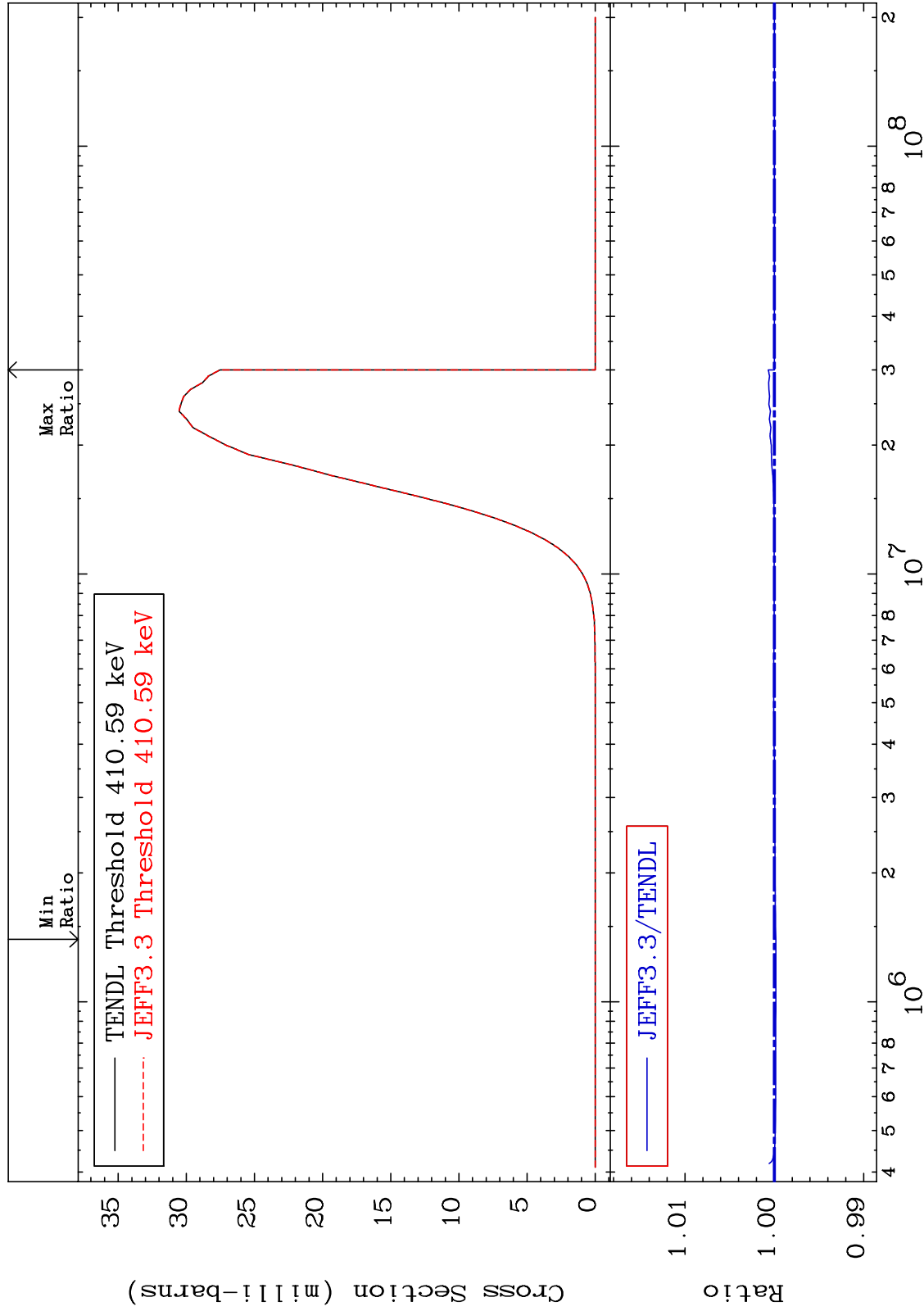
MAT 6246

(n,p)

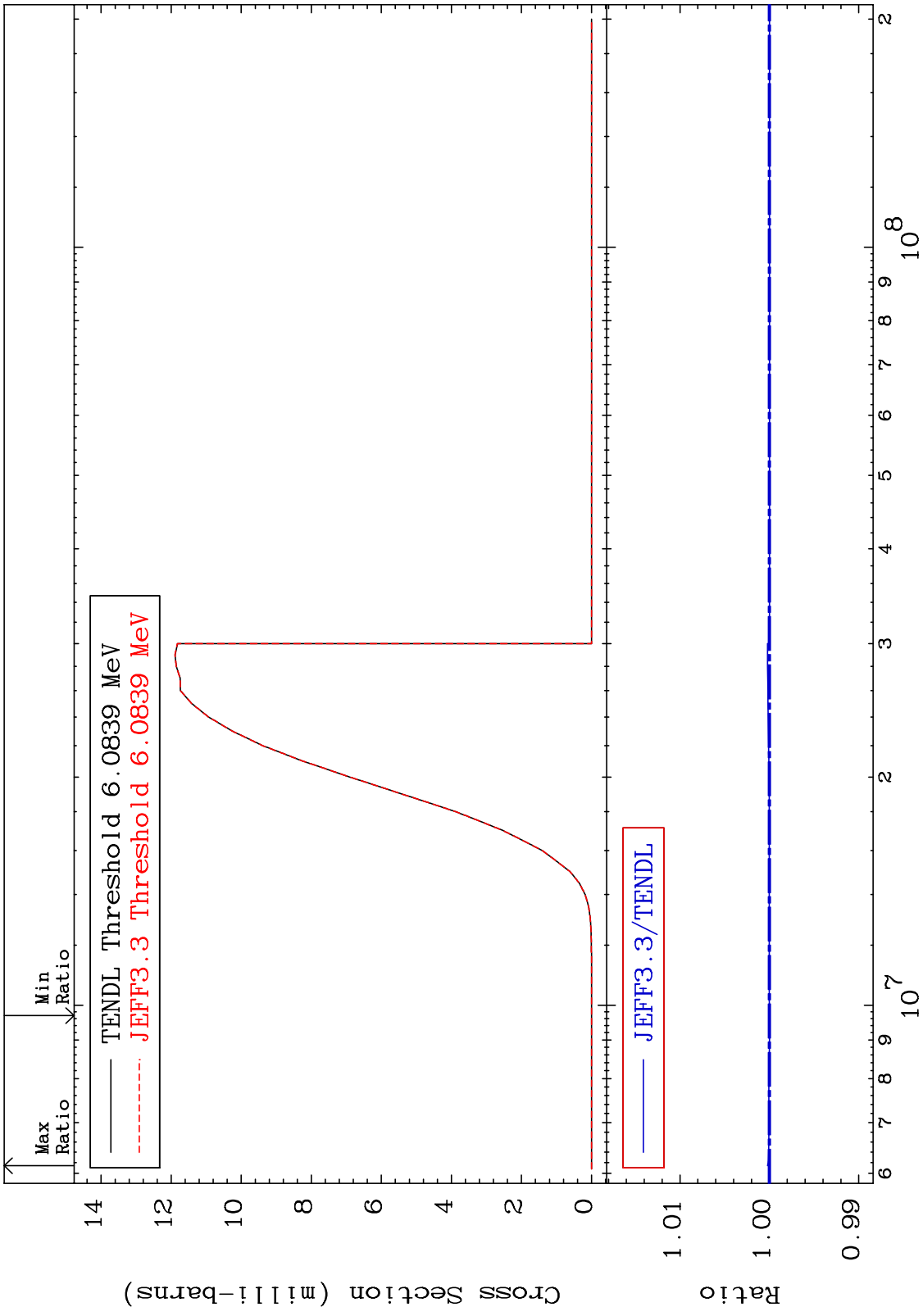
62-Sm-151

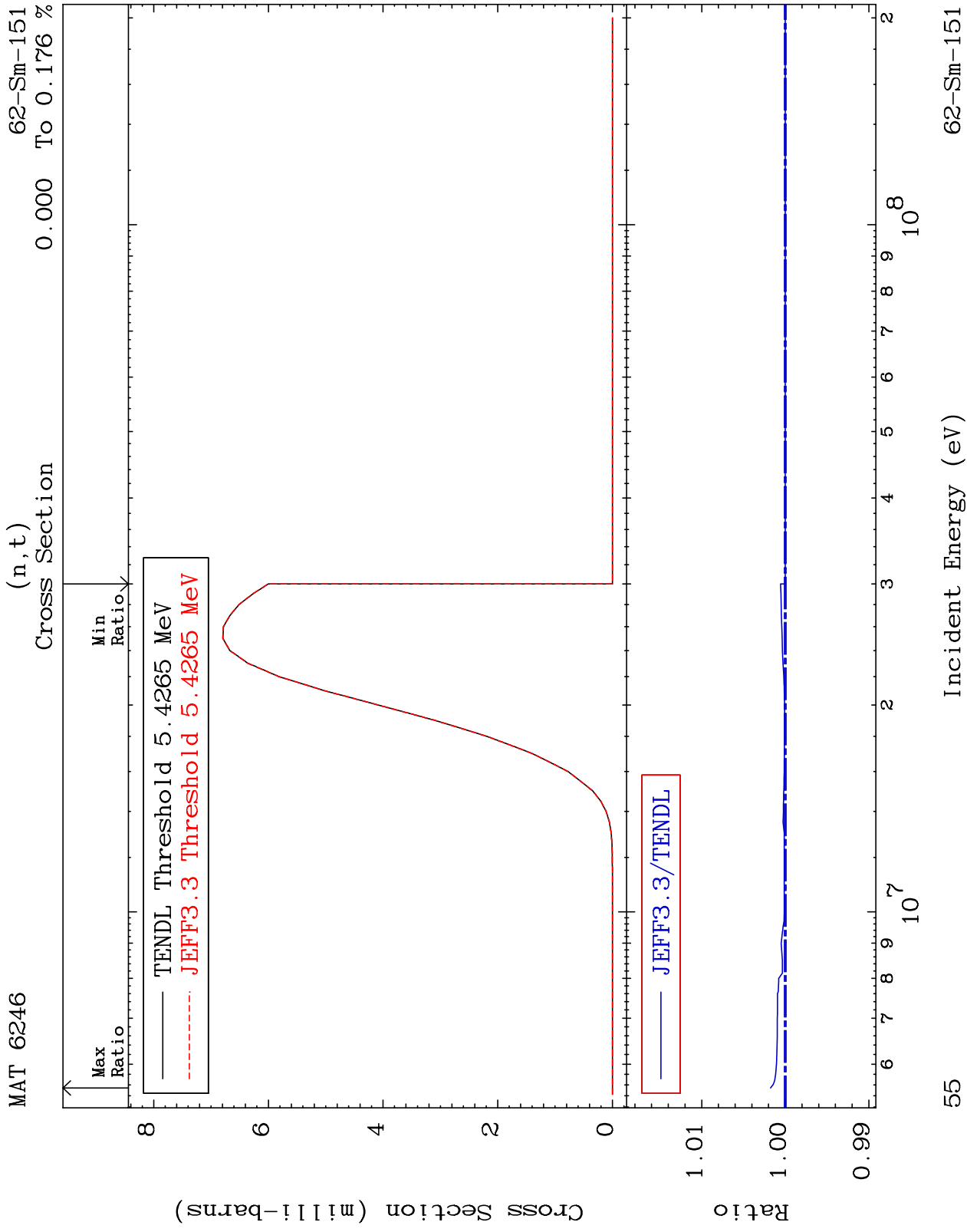
Cross Section

-0.017 To 0.068 %

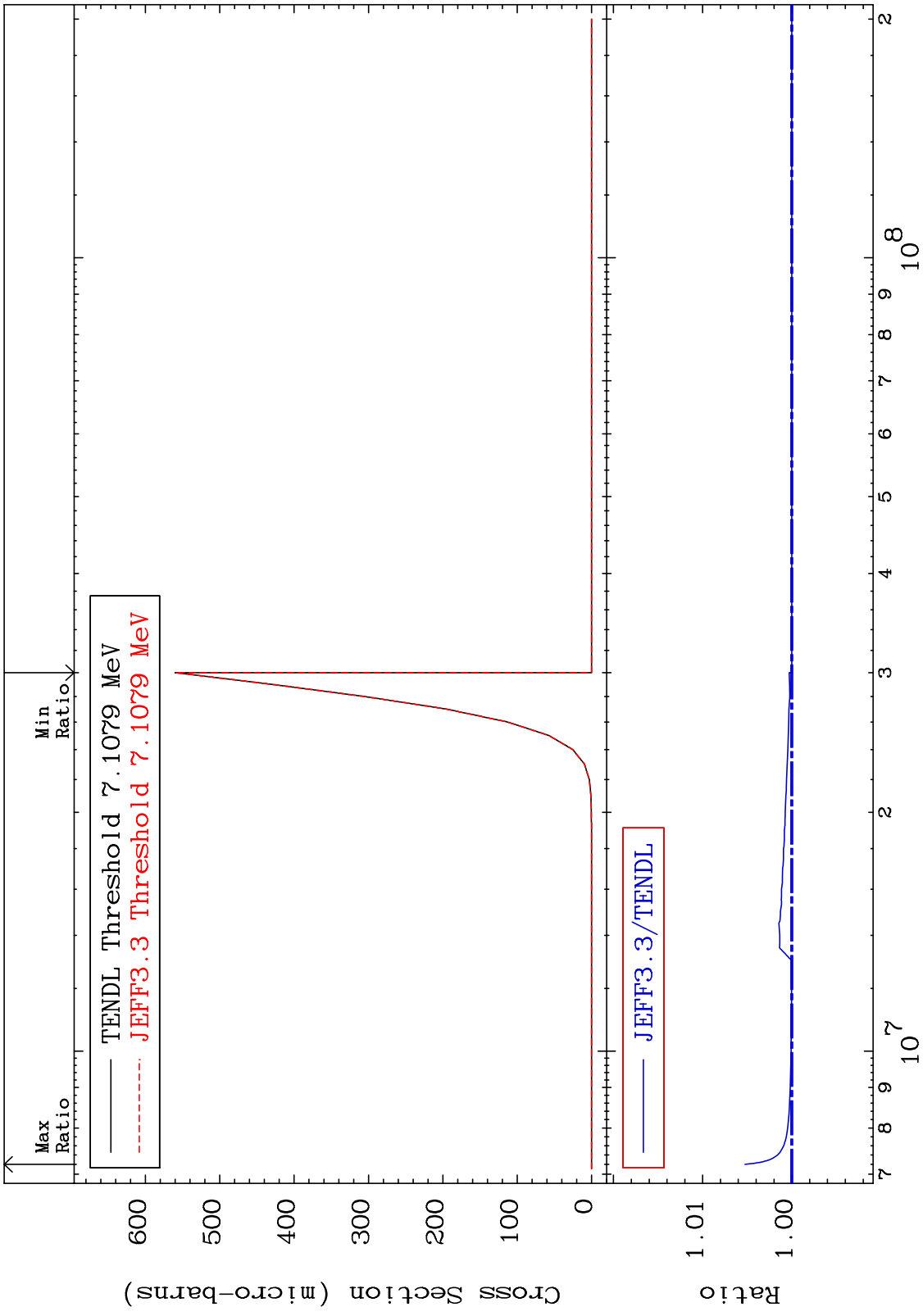


MAT 6246 (n,d) Cross Section 62-Sm-151 To 0.022 %





MAT 6246 (n, He-3) Cross Section 62-Sm-151 To 0.524 %

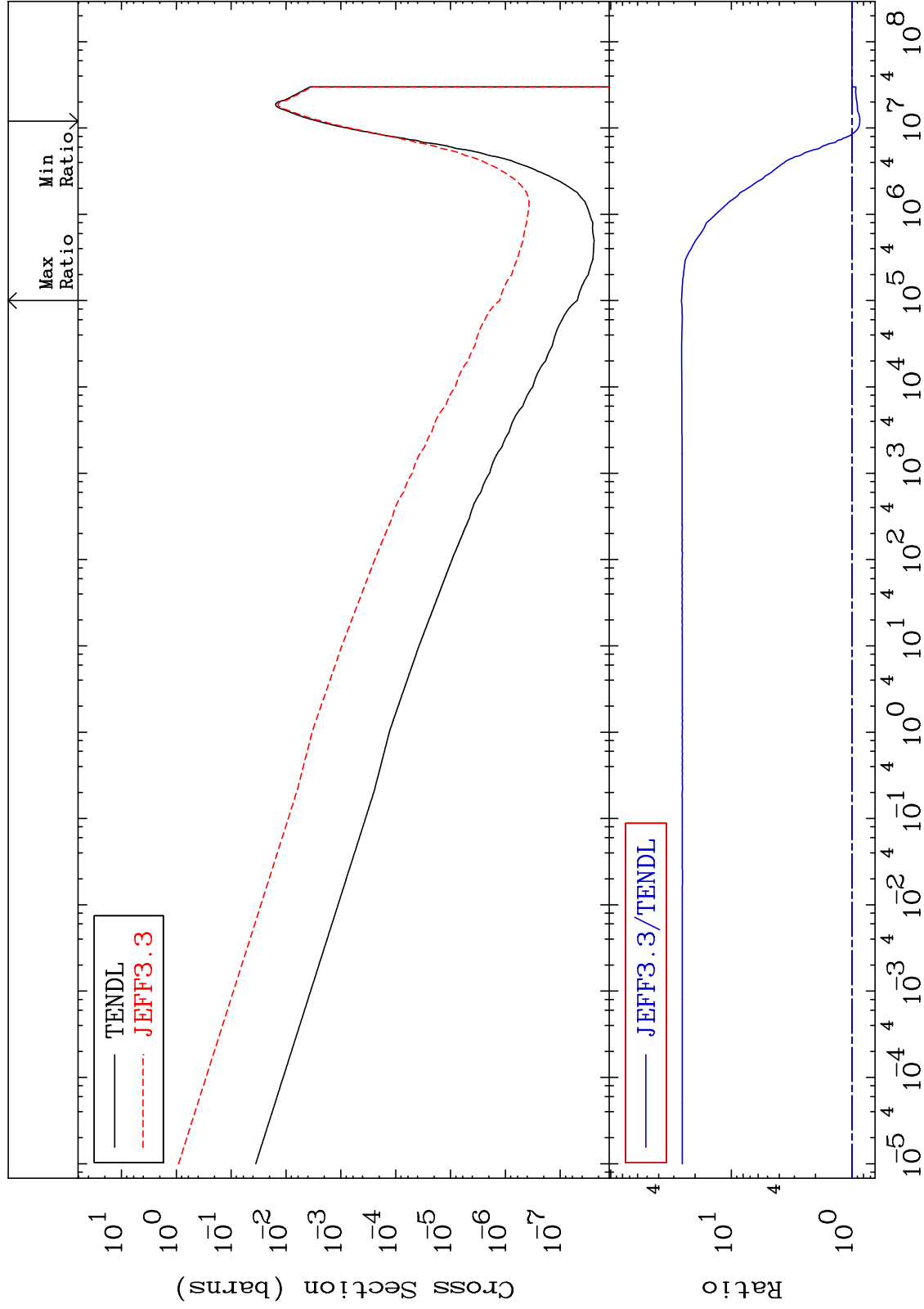


MAT 6246

(n, α)

Cross Section

62-Sm-151
-14.15 To 2493. %



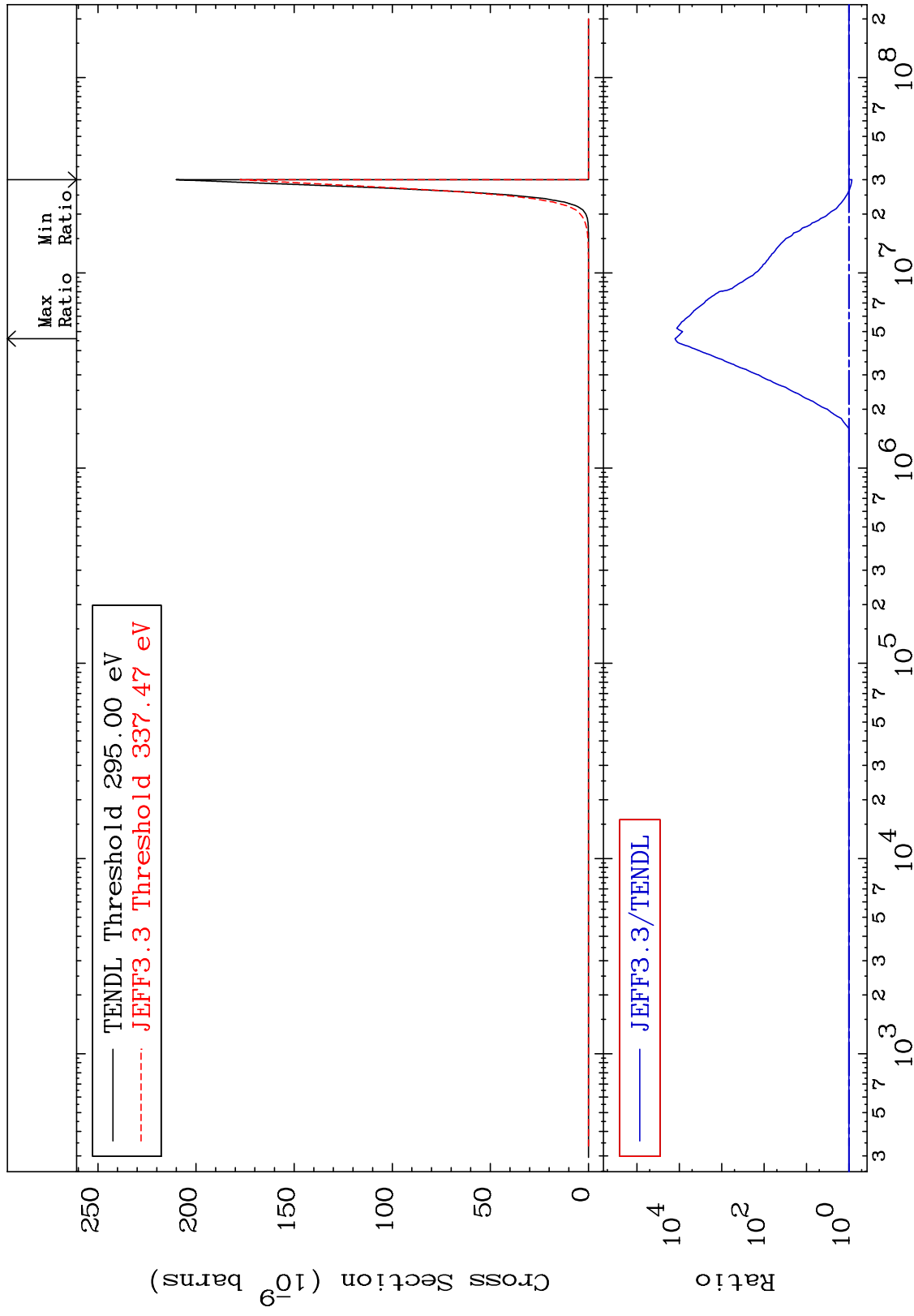
MAT 6246

(n,2α)

62-Sm-151

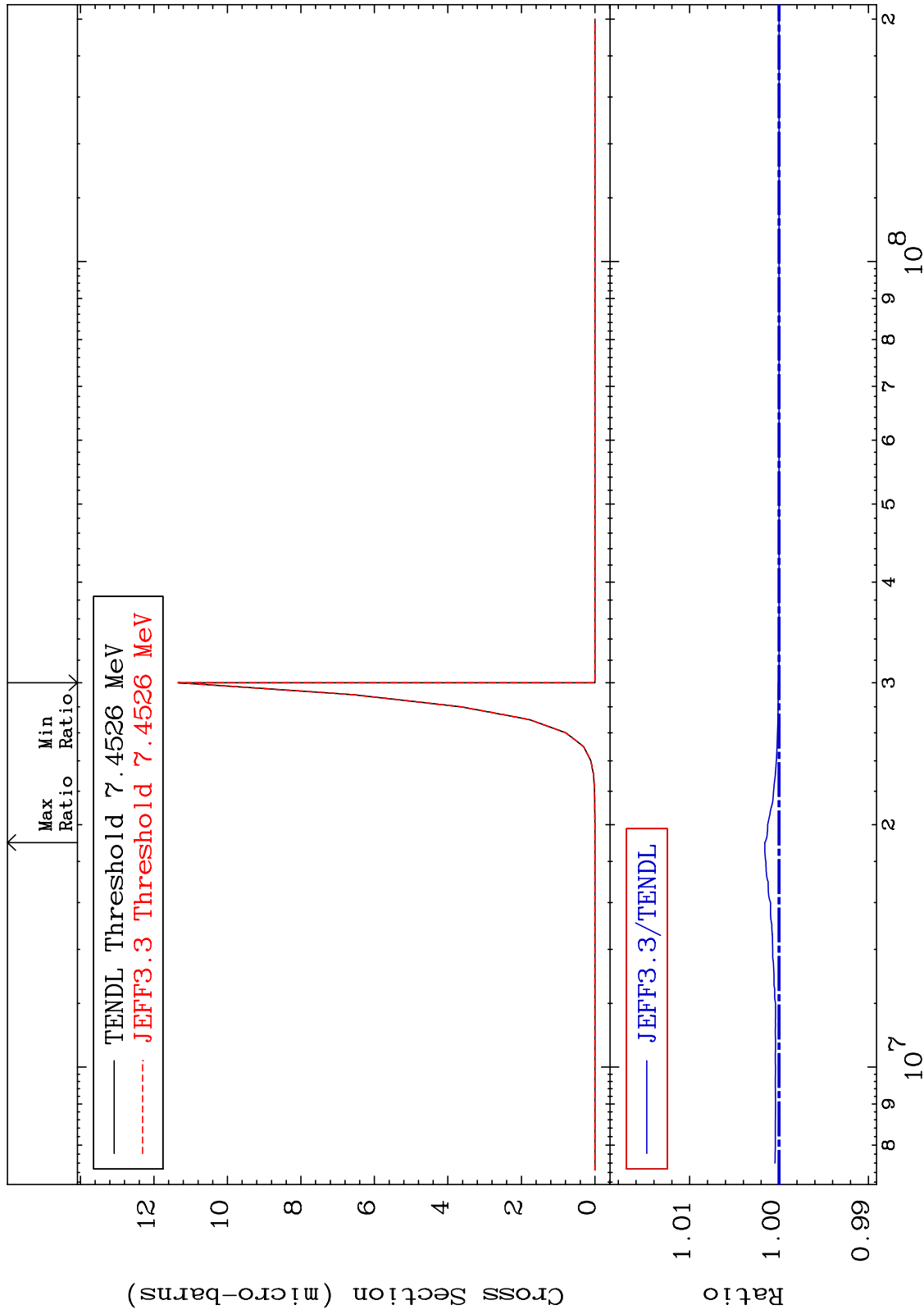
Cross Section

-15.52 To 9999. %



MAT 6246

(n,2p) Cross Section
62-Sm-151
To 0.161 %



MAT 6246

(n,p) α

62-Sm-151

-2.035 To 9999. %

Cross Section

Max Ratio

Min Ratio

TENDL Threshold 779.95 keV
JEFF3.3 Threshold 779.32 keV

Cross Section (10^9 barns)

500
400
300
200
100
0

JEFF3.3/TENDL

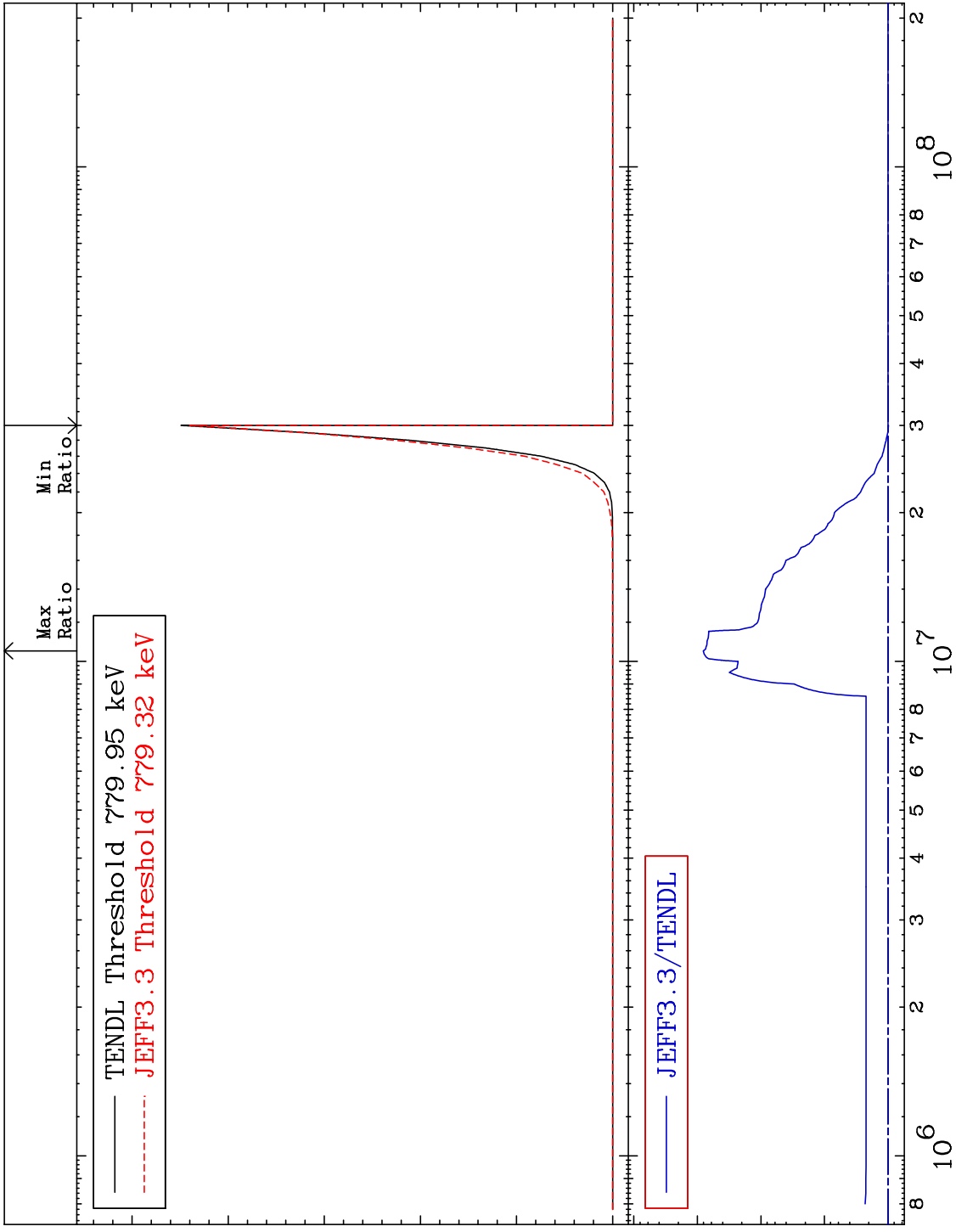
Ratio

10^3
 10^2
 10^1
 10^0

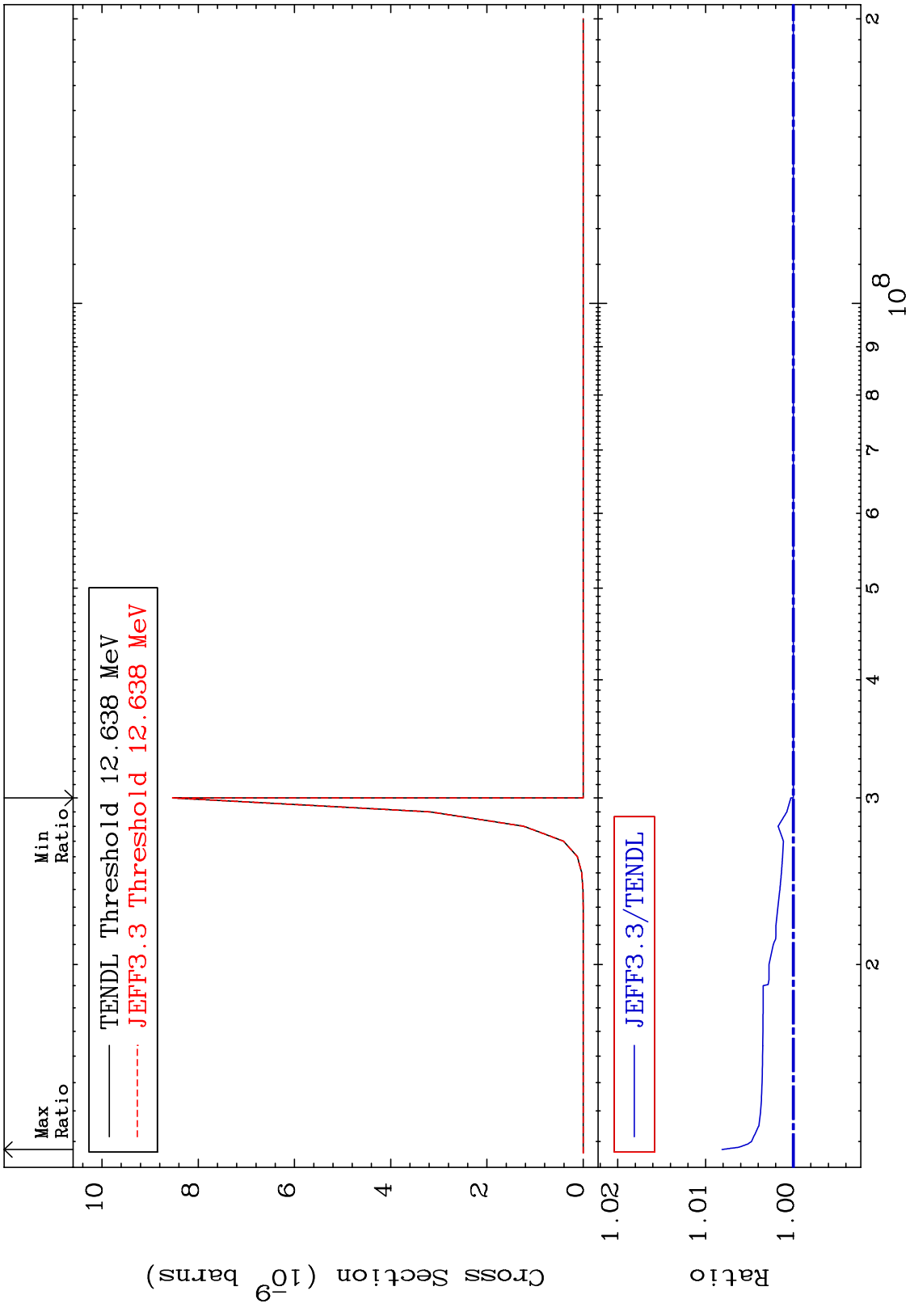
60

Incident Energy (eV)

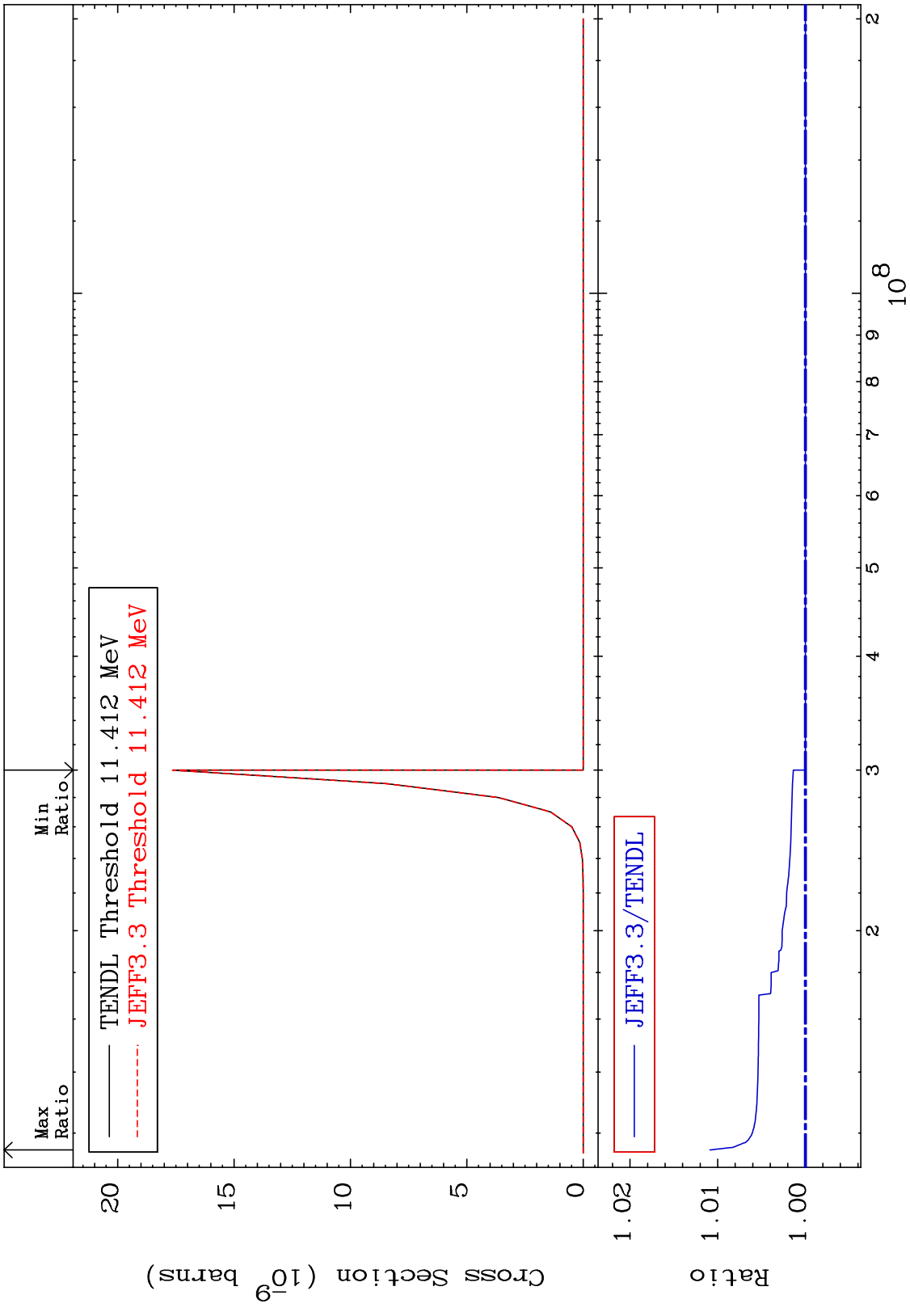
62-Sm-151



MAT 6246 (n,p) d 62-Sm-151
 Cross Section 0.000 To 0.814 %



MAT 6246 (n,p) t 62-Sm-151
 Cross Section 0.000 To 1.089 %



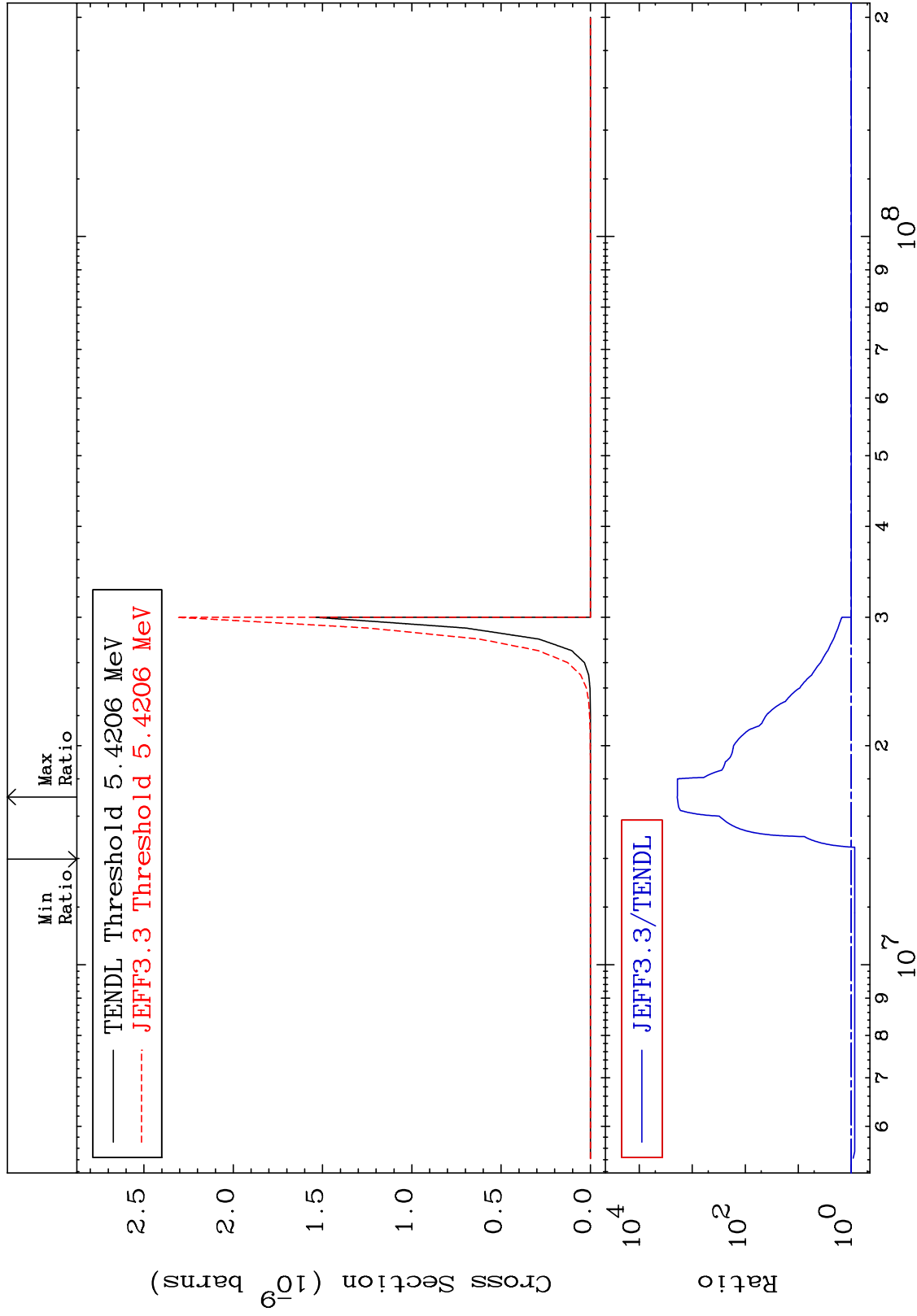
MAT 6246

(n,d) α

62-Sm-151

-14.16 To 9999. %

Cross Section



63

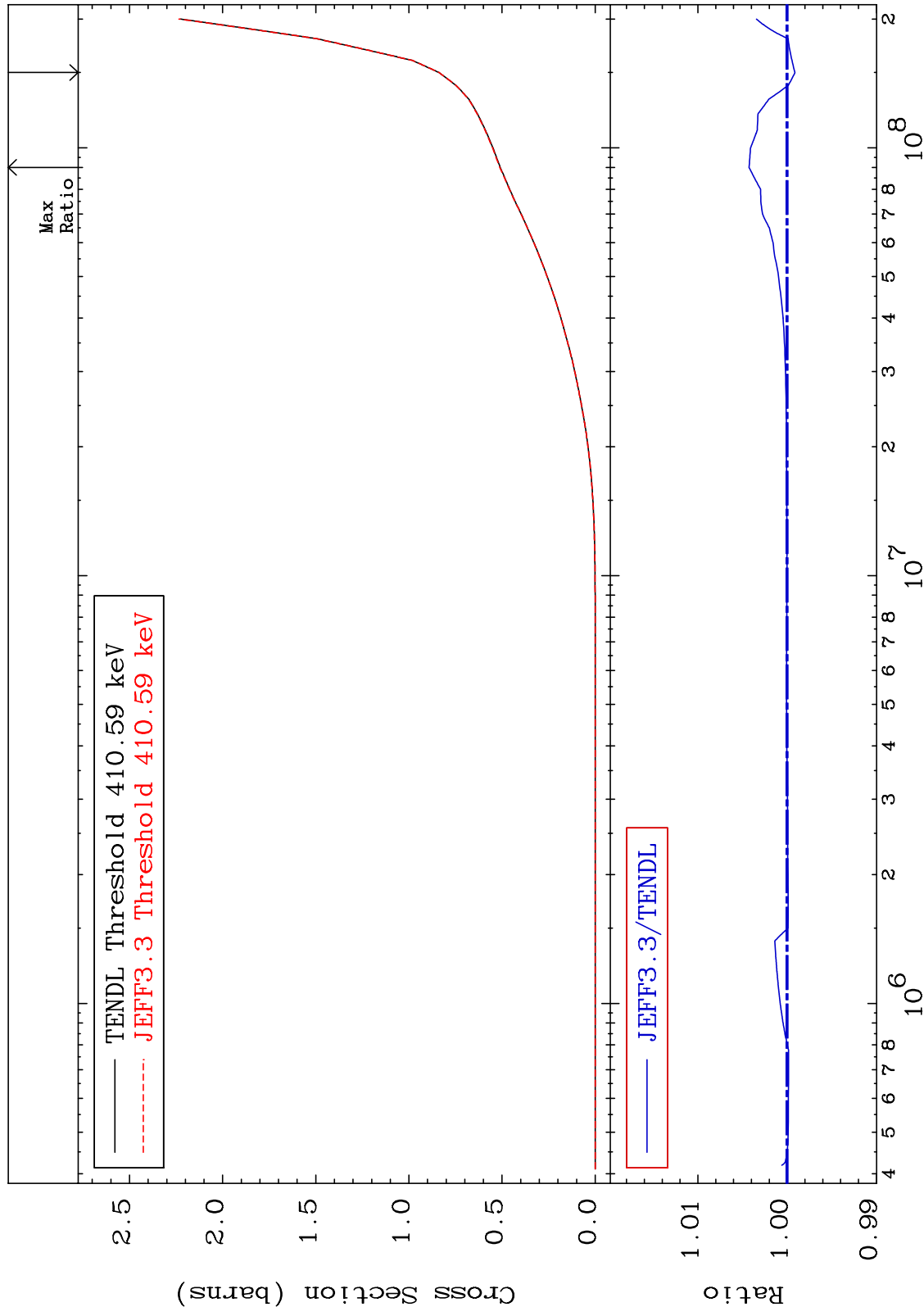
Incident Energy (eV)

62-Sm-151

MAT 6246

Hydrogen Production
Cross Section

62-Sm-151
-0.089 To 0.427 %



64

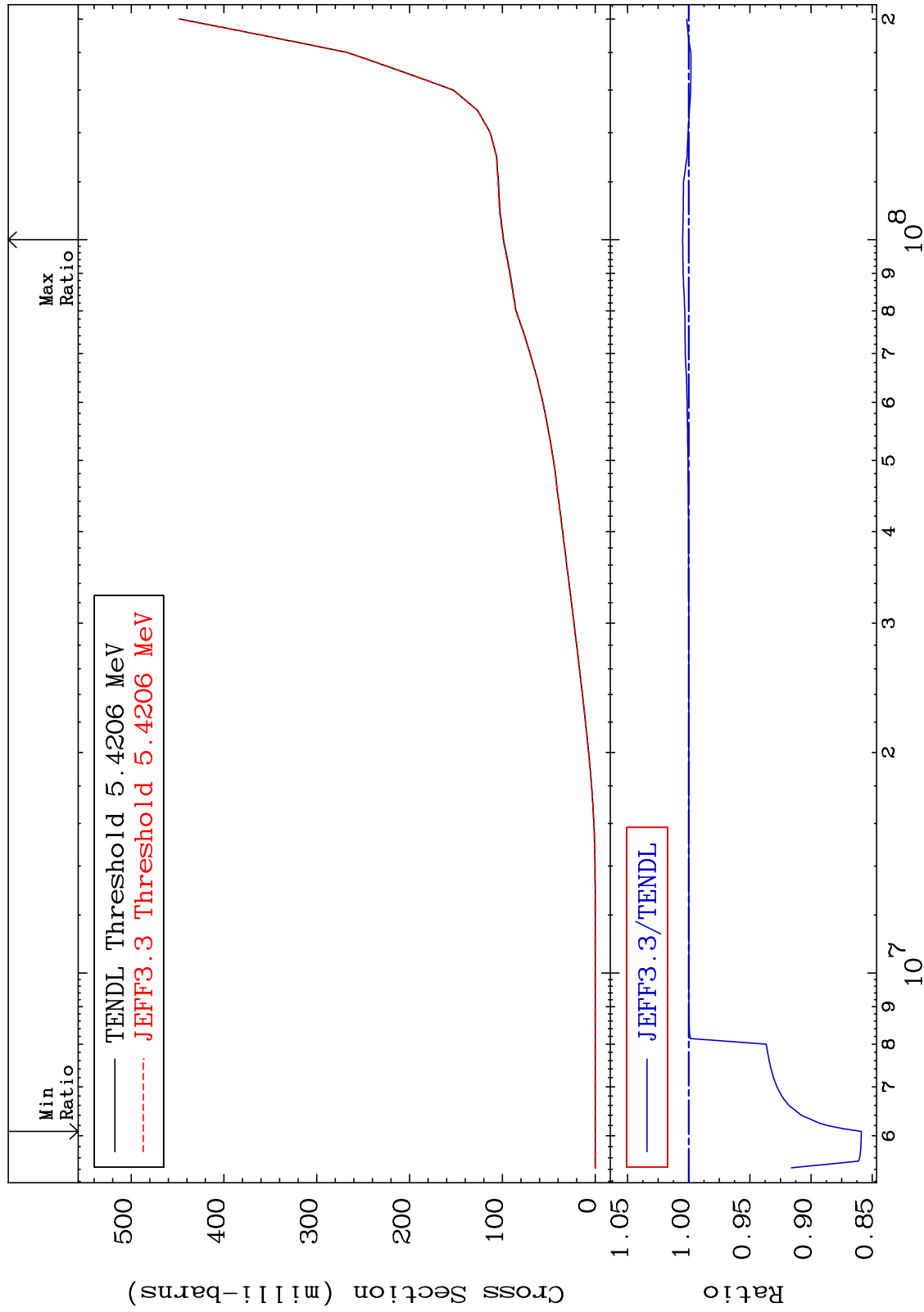
Incident Energy (eV)

62-Sm-151

MAT 6246

Deuterium Production
Cross Section

62-Sm-151
-14.11 To 0.489 %



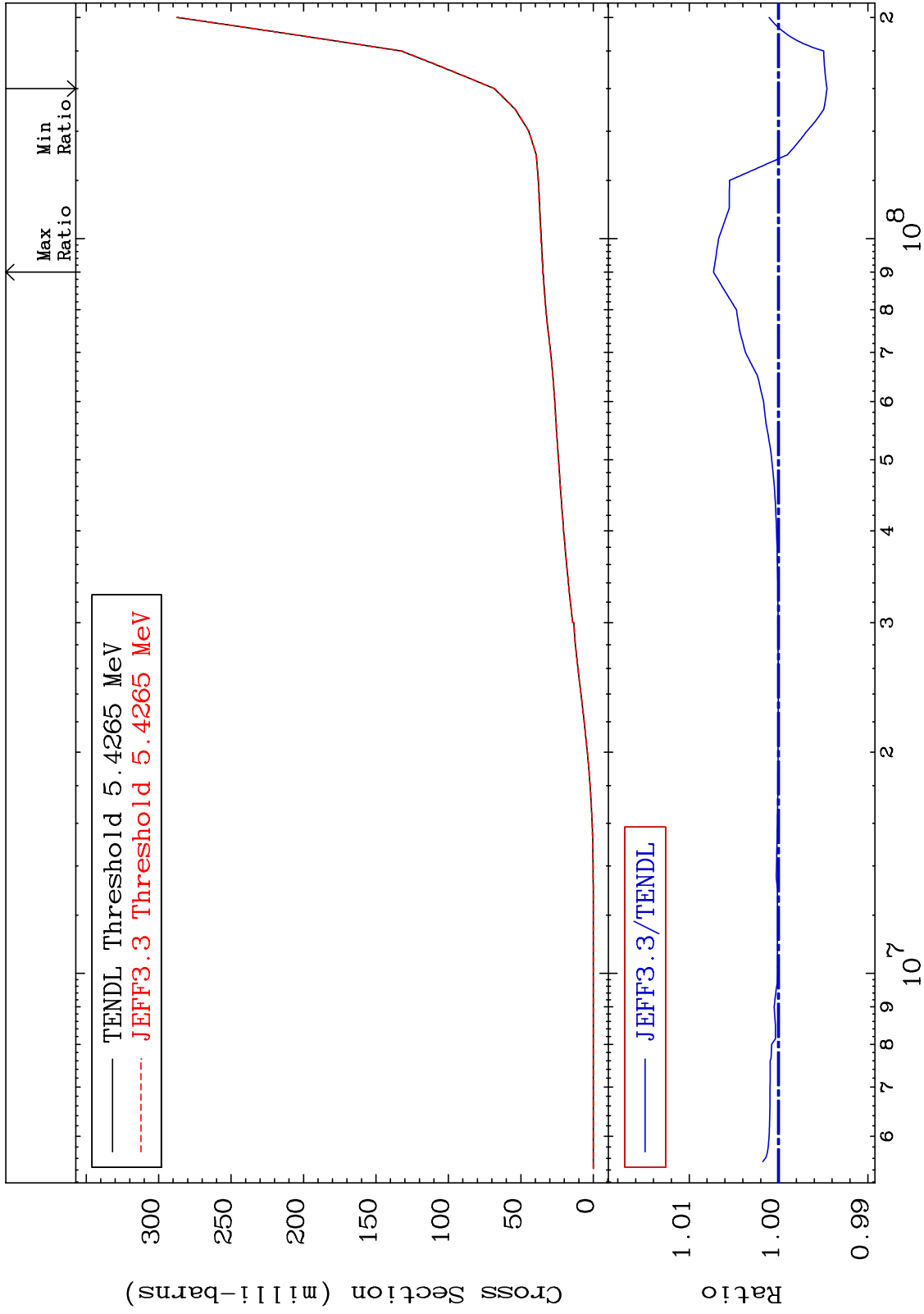
65

62-Sm-151

MAT 6246

Tritium Production Cross Section

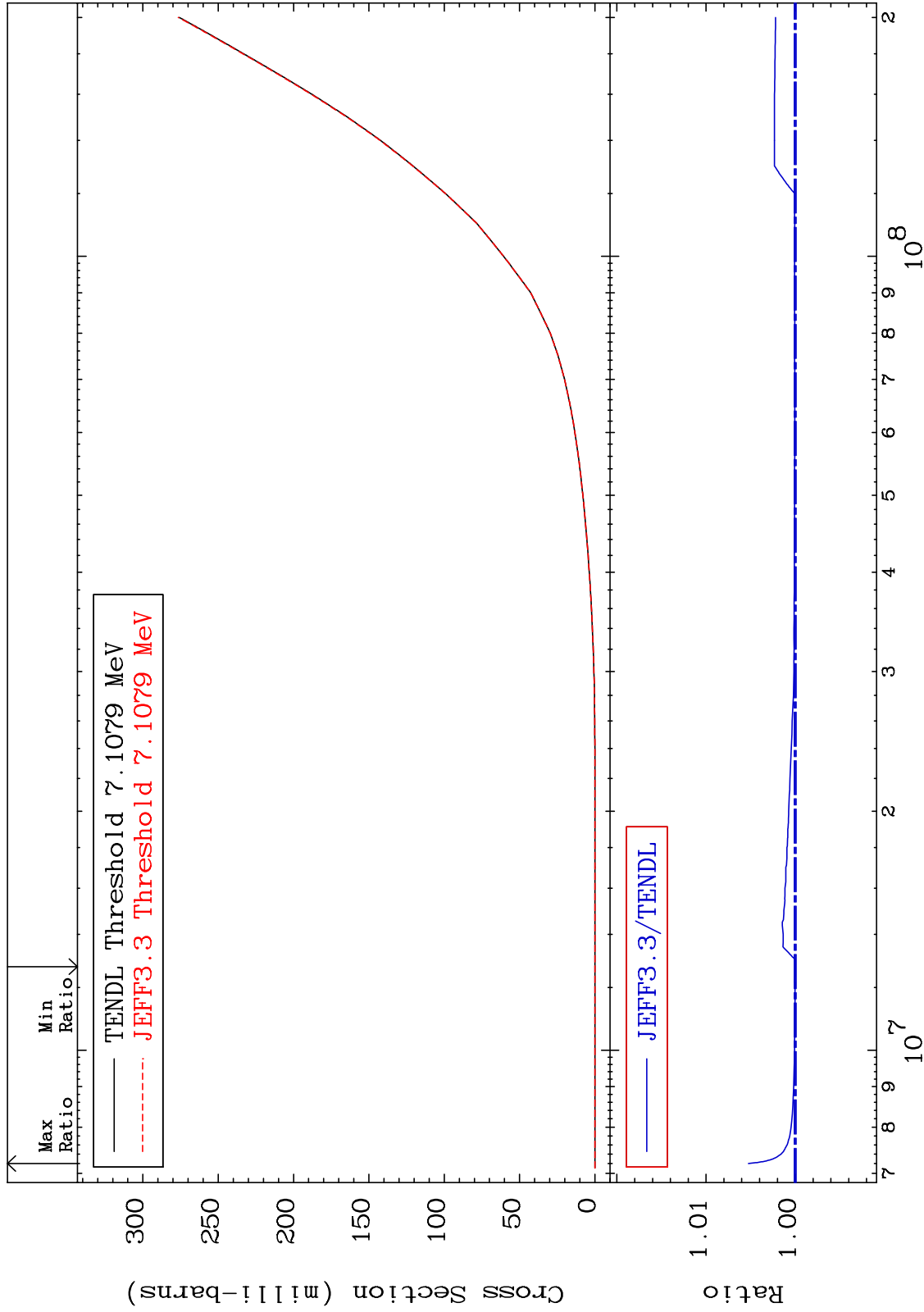
62-Sm-151
-0.542 To 0.728 %



MAT 6246

He-3 Production
Cross Section

62-Sm-151
To 0.524 %



67

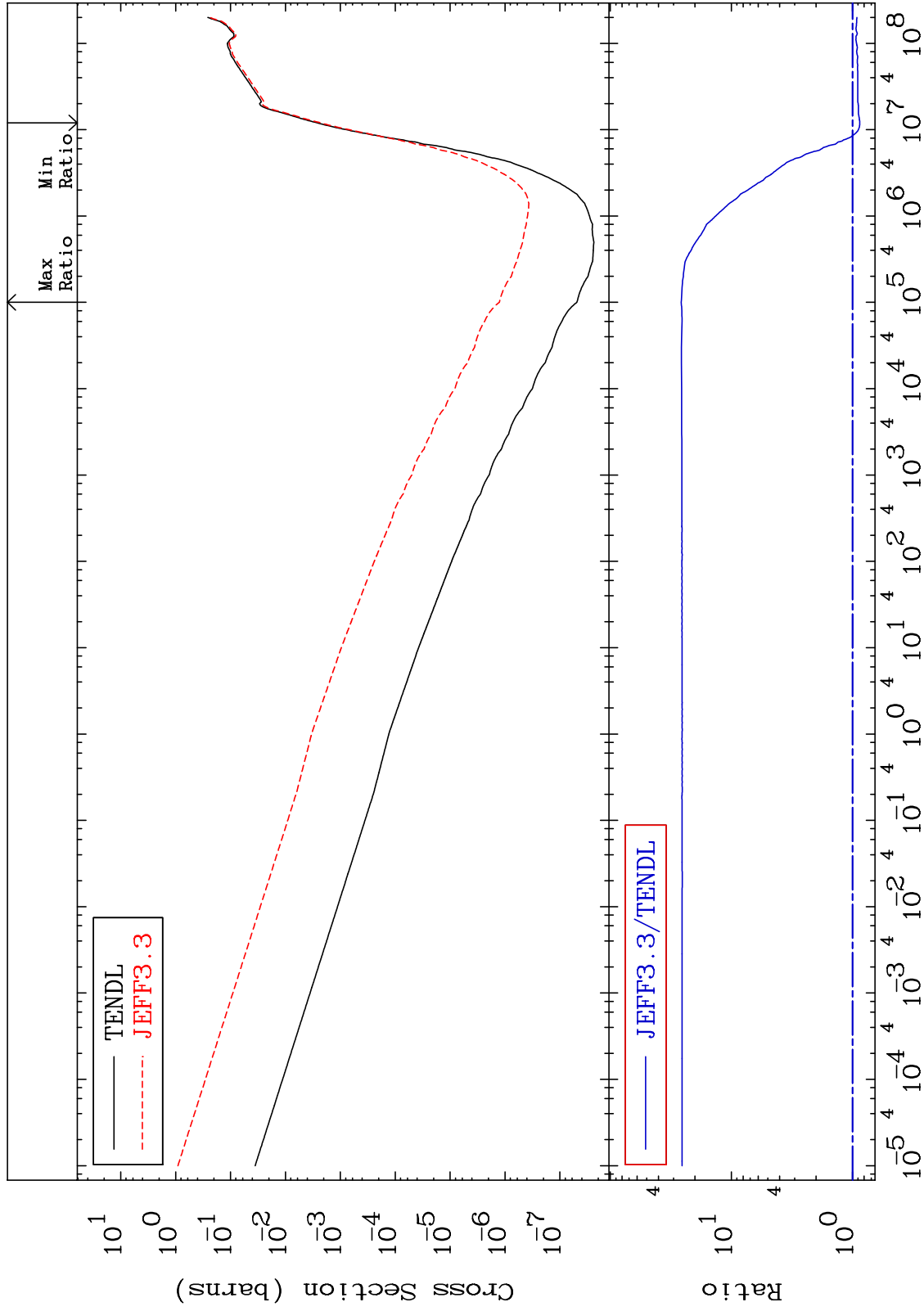
Incident Energy (eV)

62-Sm-151

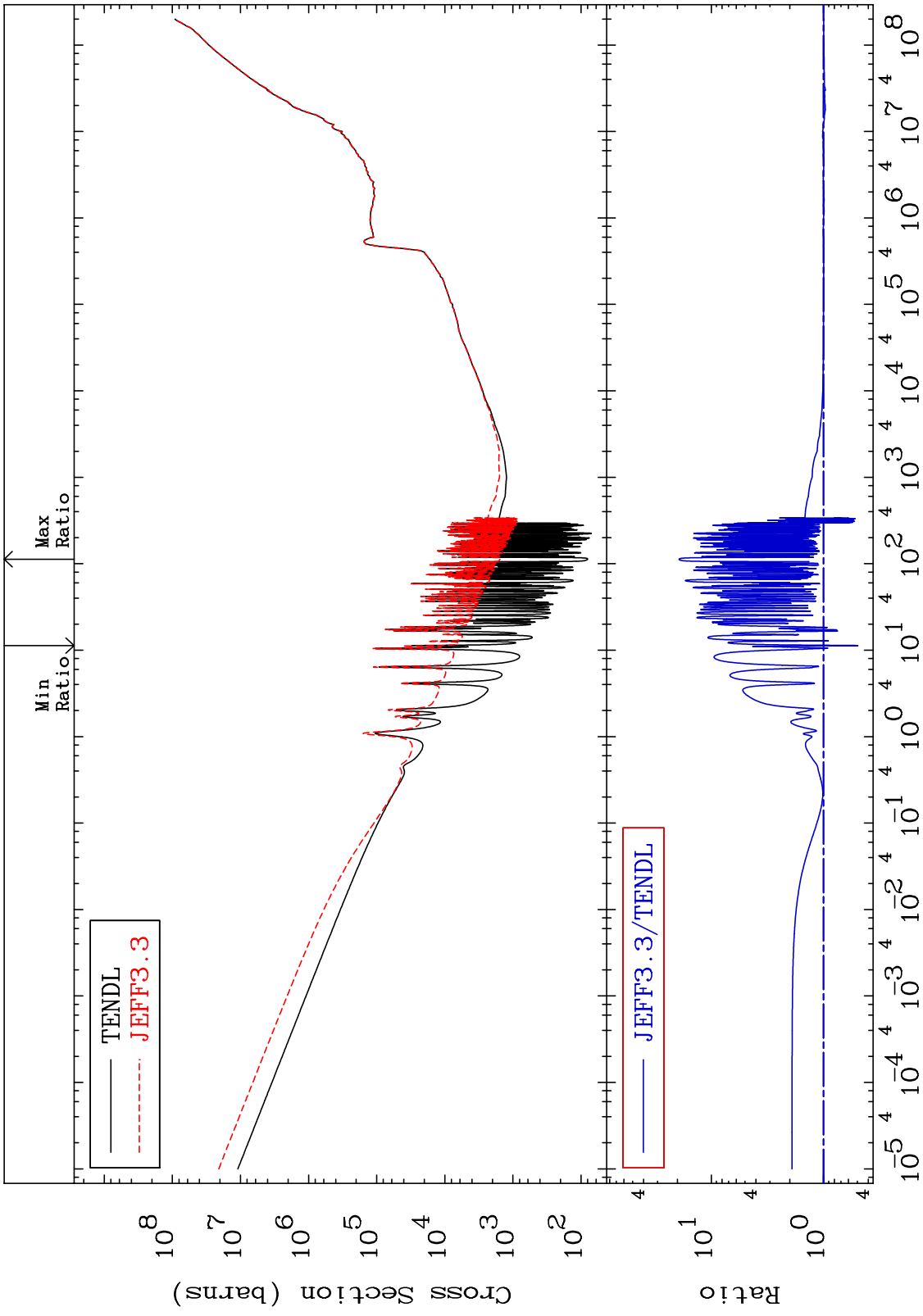
MAT 6246

He-4 Production
Cross Section

62-Sm-151
-12.97 To 2493. %



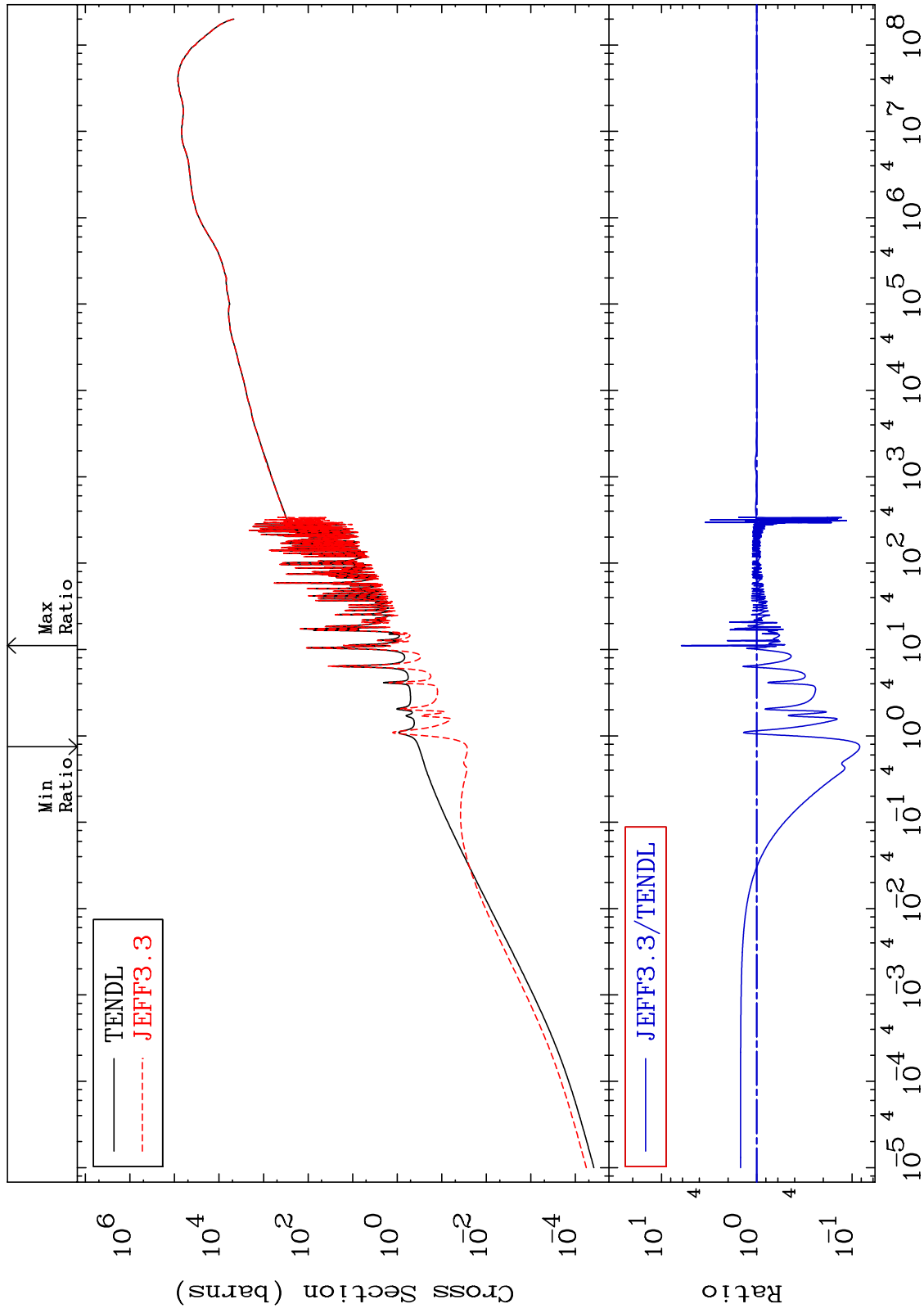
MAT 6246 Kerma total (eV-barns) 62-Sm-151
 Cross Section -50.46 To 1834. %



MAT 6246

Kerma elastic
Cross Section

62-Sm-151
-91.72 To 519.4 %

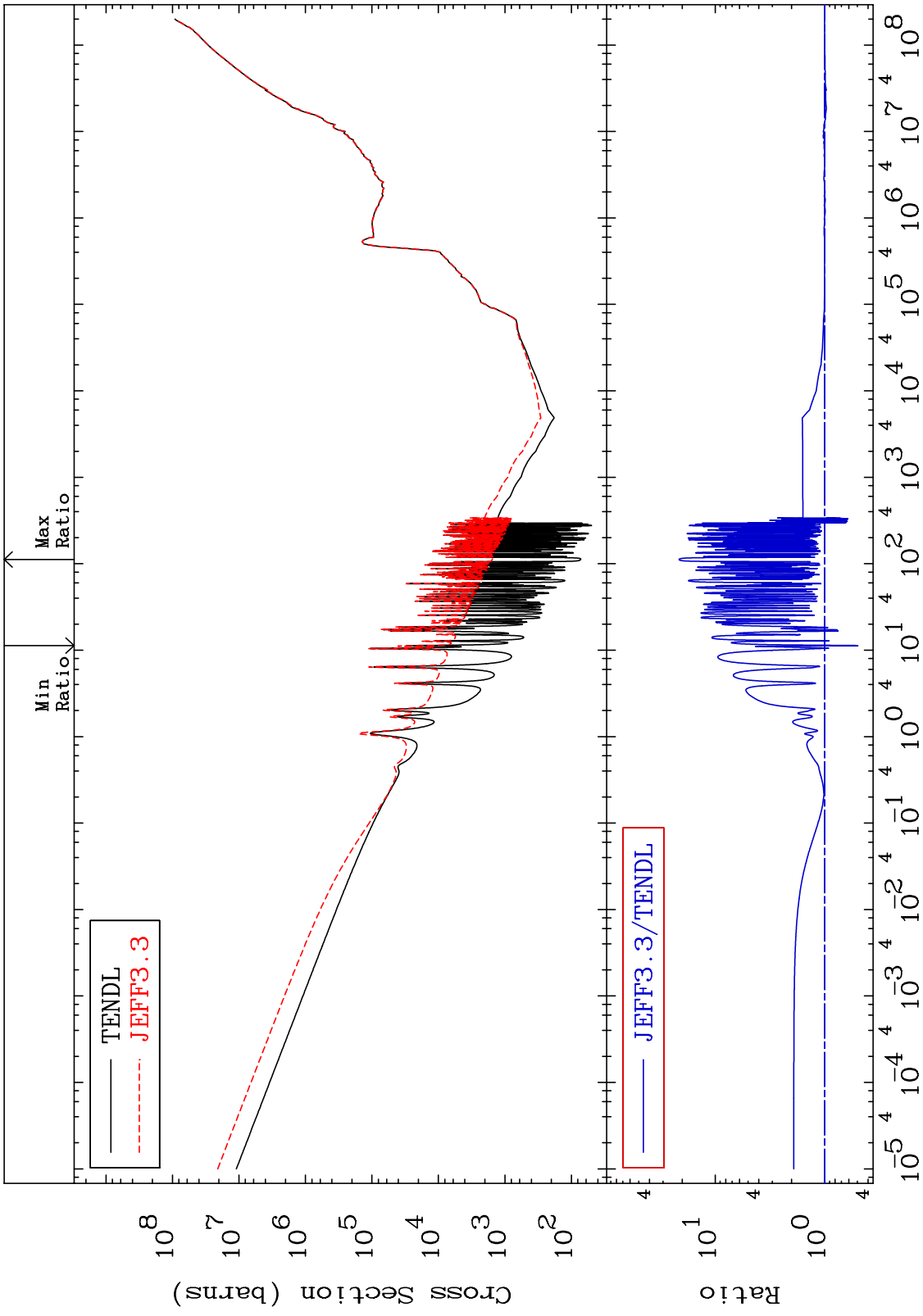


70

Incident Energy (eV)

62-Sm-151

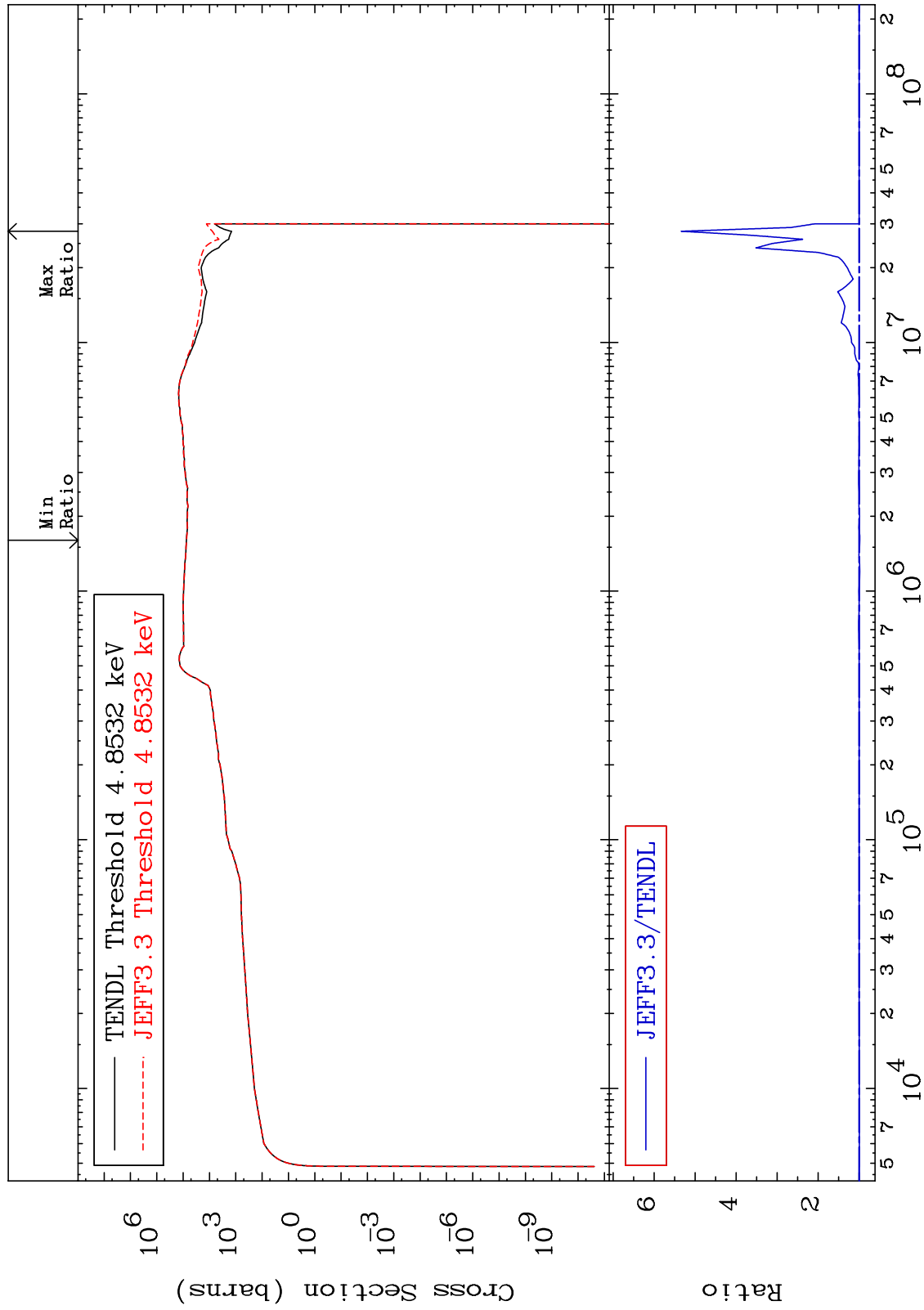
MAT 6246 Kerma non-elastic (all but mt2) 62-Sm-151
 Cross Section -50.47 To 2041. %



MAT 6246

Kerma inelastic (mt51-91)
Cross Section

62-Sm-151
-1.713 To 433.3 %



72

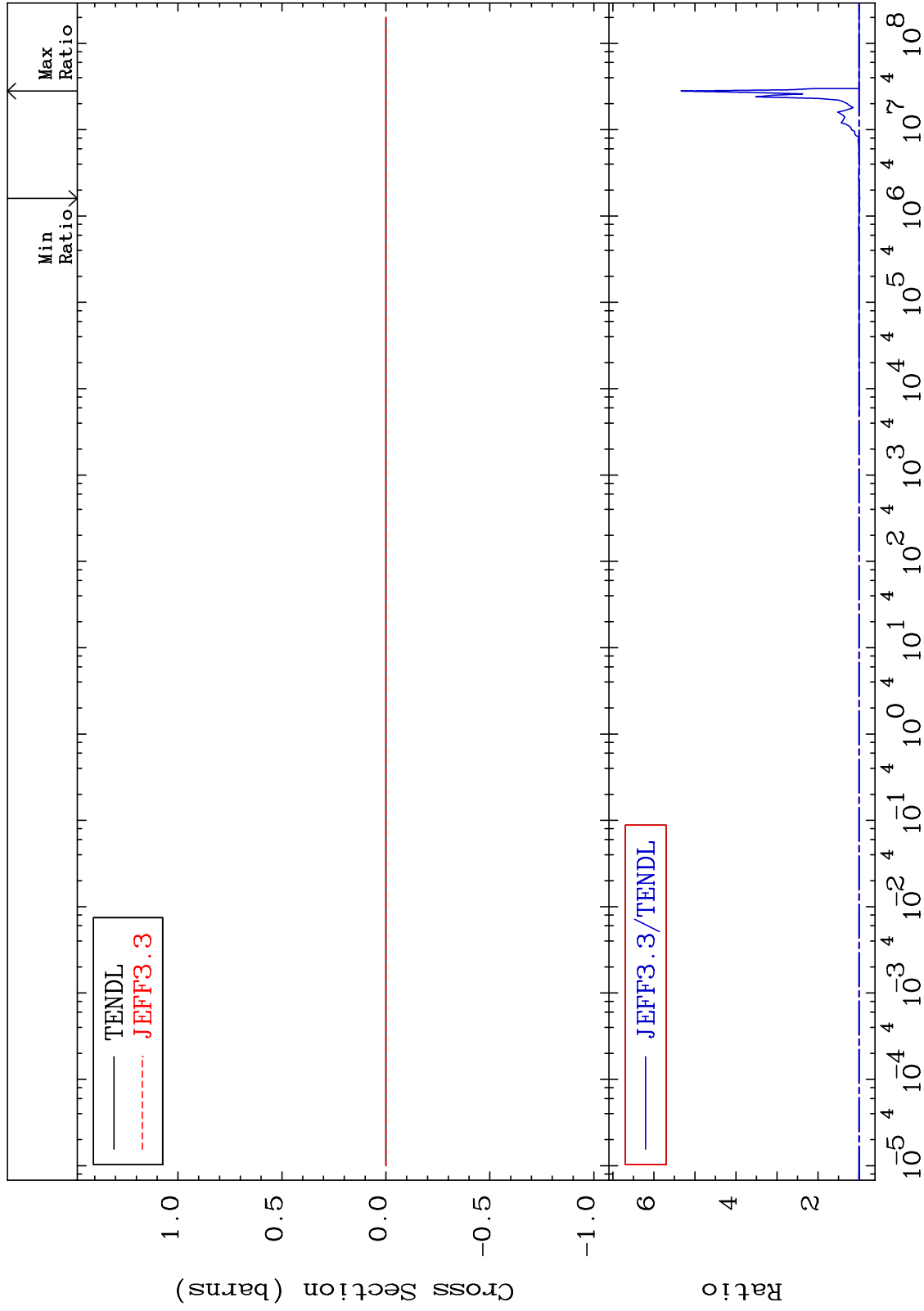
Incident Energy (eV)

62-Sm-151

MAT 6246

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

62-Sm-151
-1.713 To 433.3 %

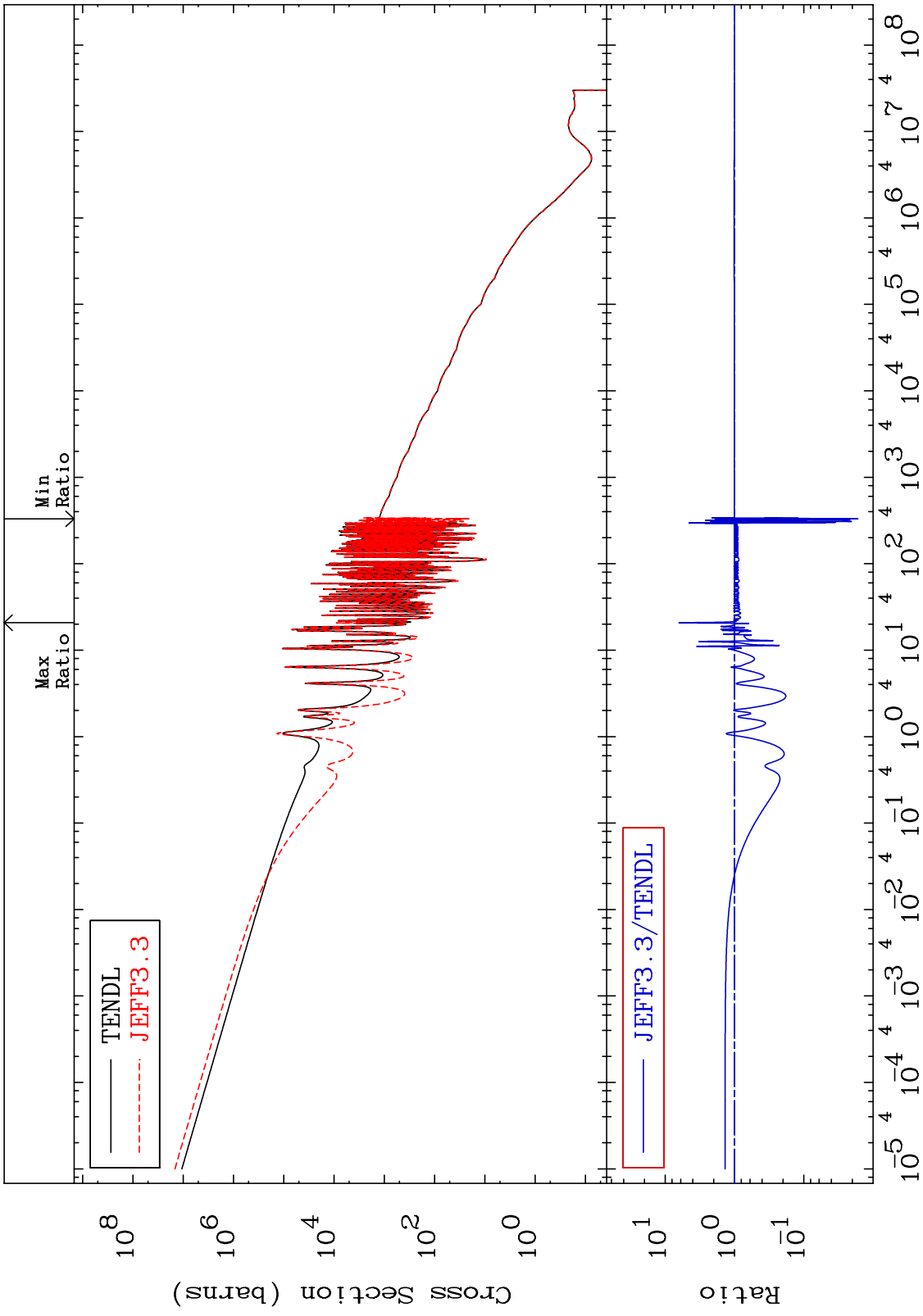


73

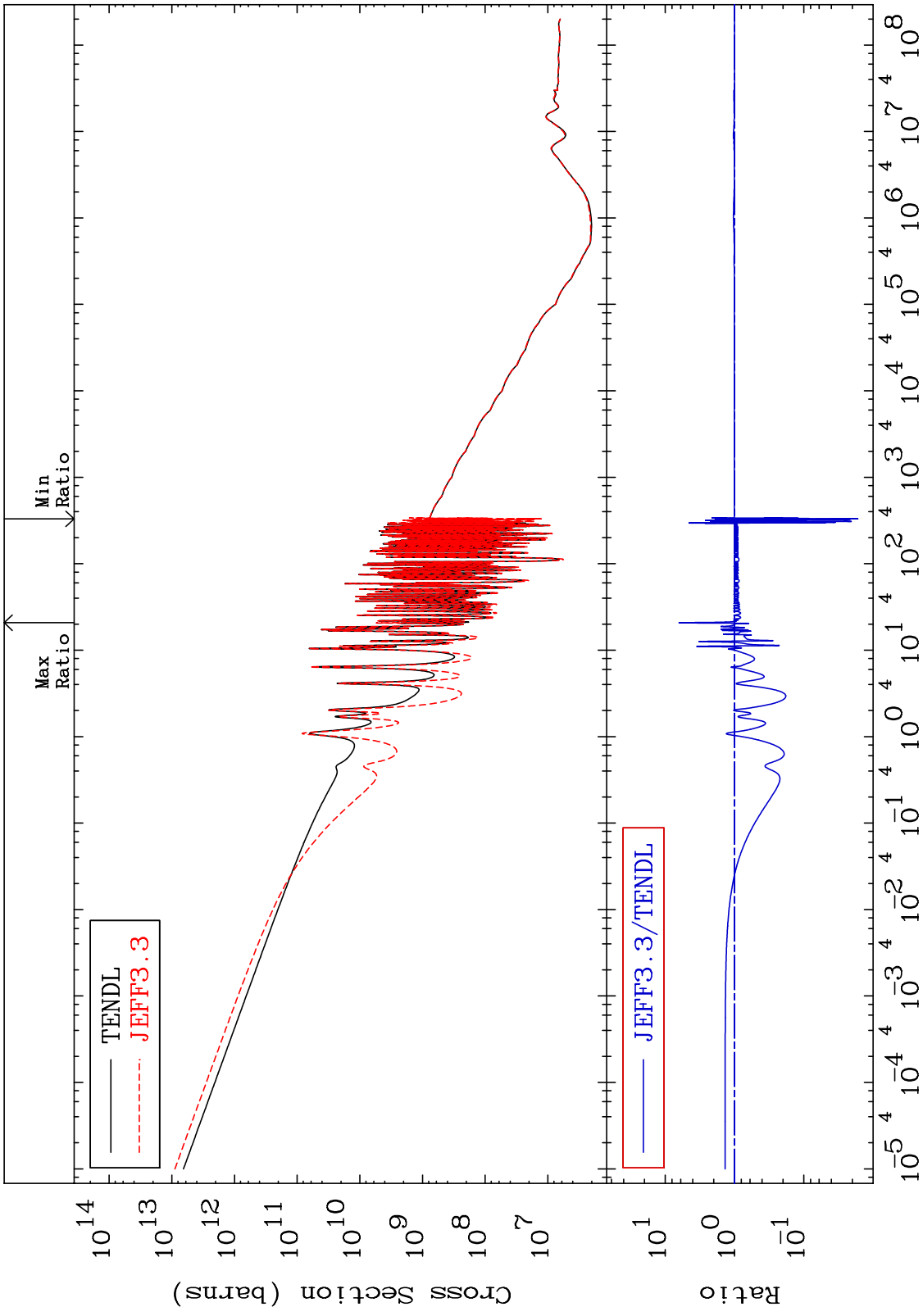
Incident Energy (eV)

62-Sm-151

MAT 6246 62-Sm-151
 Kerma capture (mt102) -98.34 To 532.8 %
 Cross Section

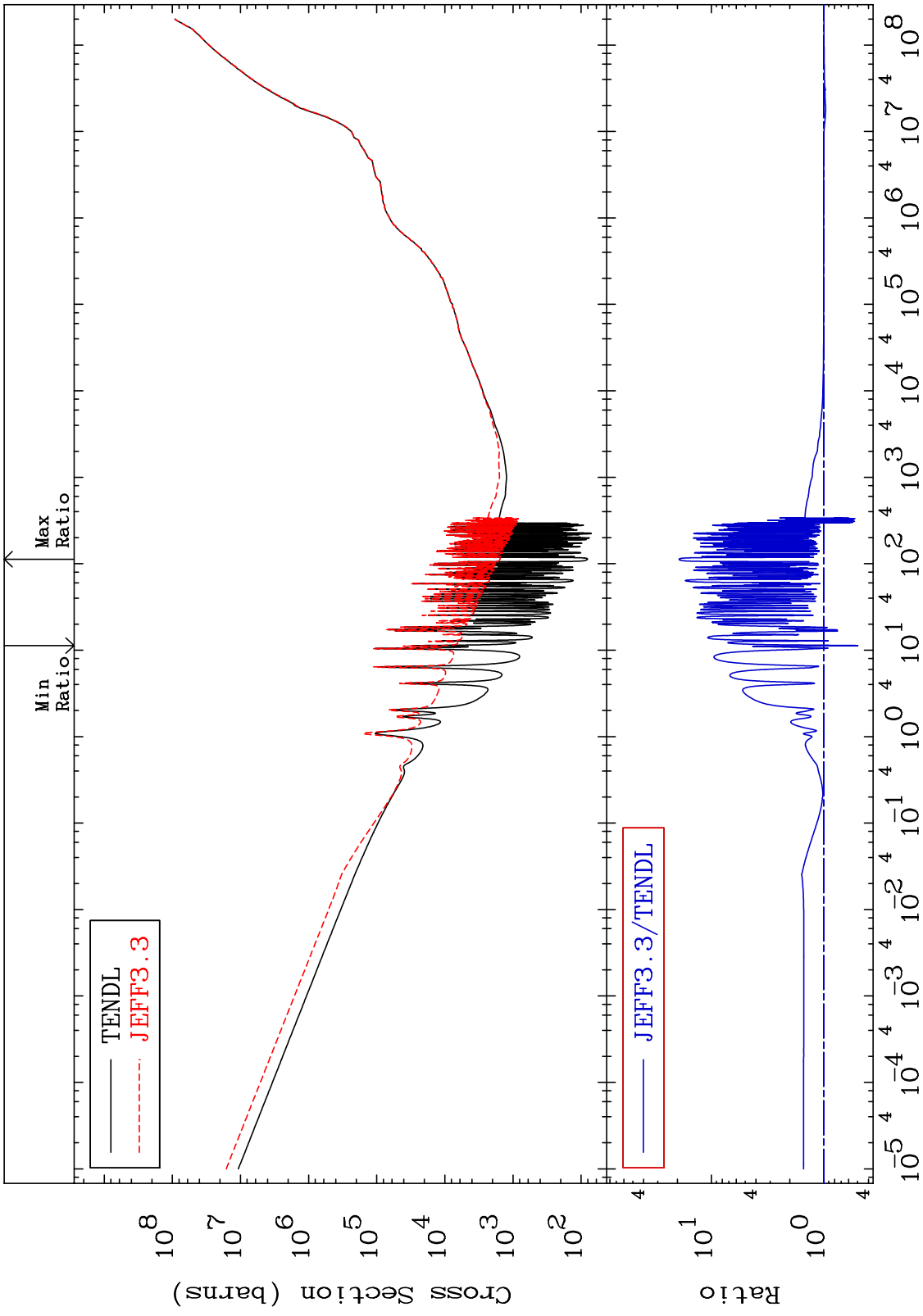


MAT 6246 62-Sm-151 -98.34 To 532.8 %
Total photon (eV-barns)
Cross Section

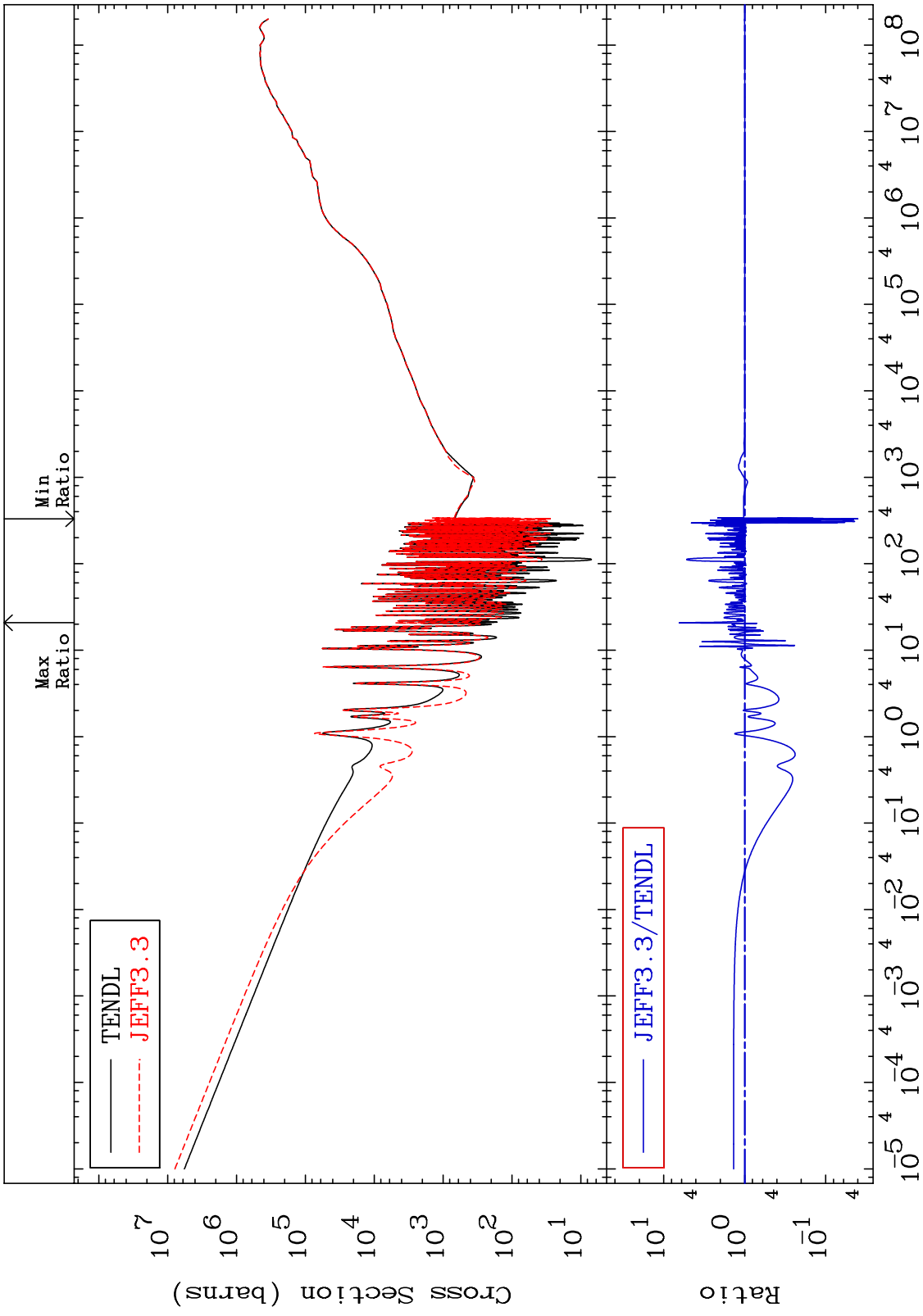


75 62-Sm-151

MAT 6246 Total kinematic kerma (high limit) 62-Sm-151
Cross Section -50.33 To 1836. %

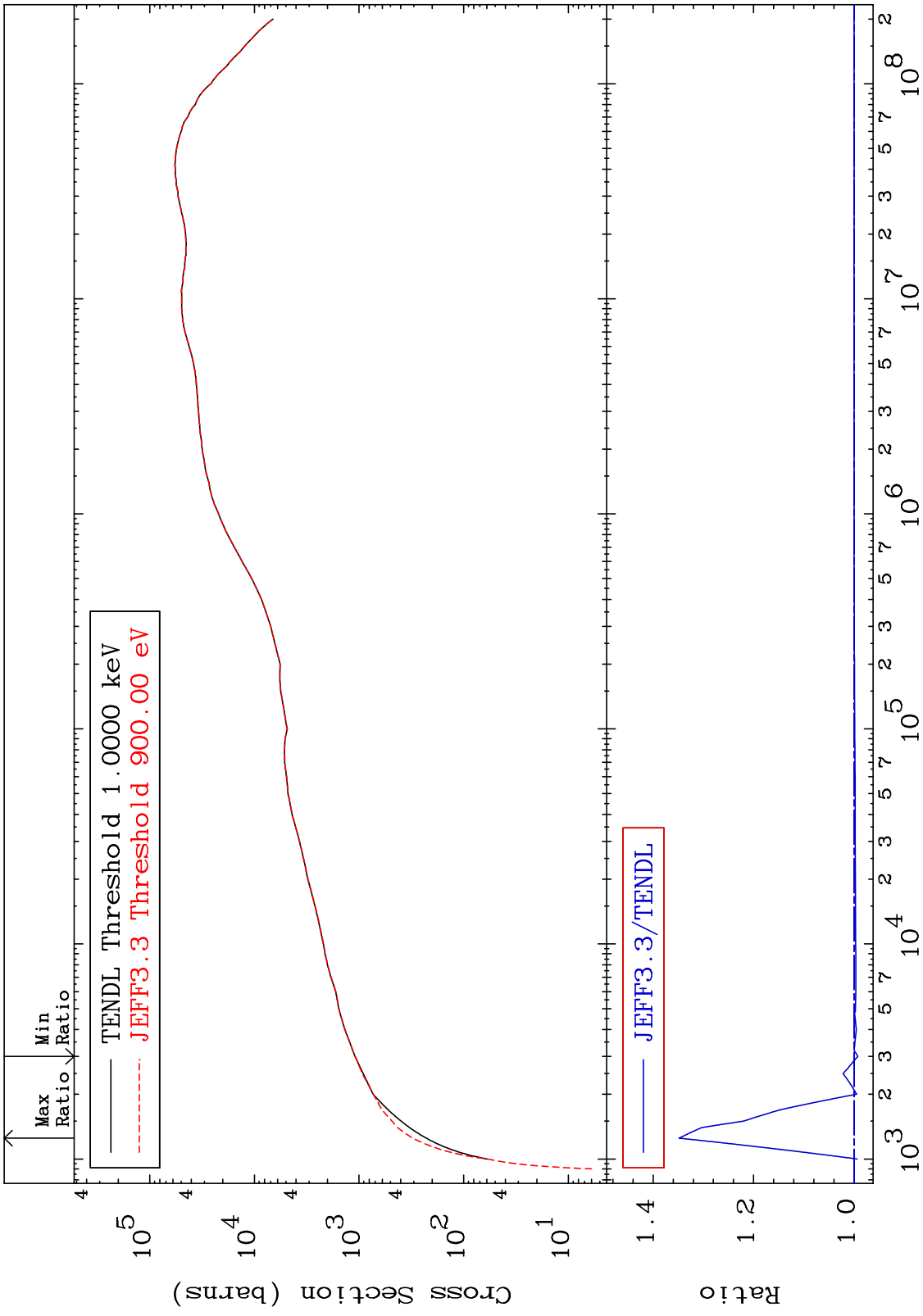


MAT 6246 62-Sm-151
 Dpa total (eV-barns) -95.99 To 546.3 %
 Cross Section

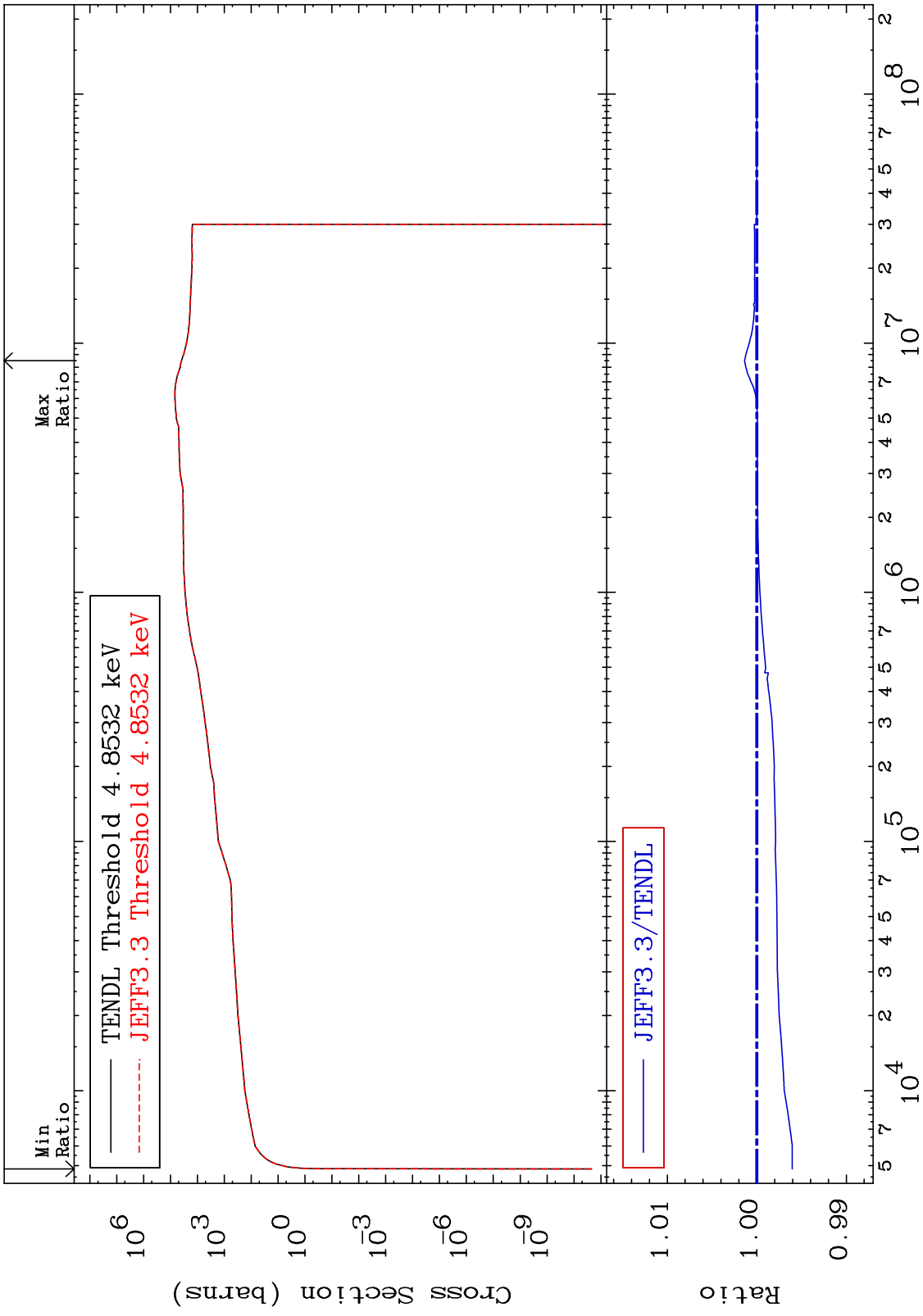


77 62-Sm-151

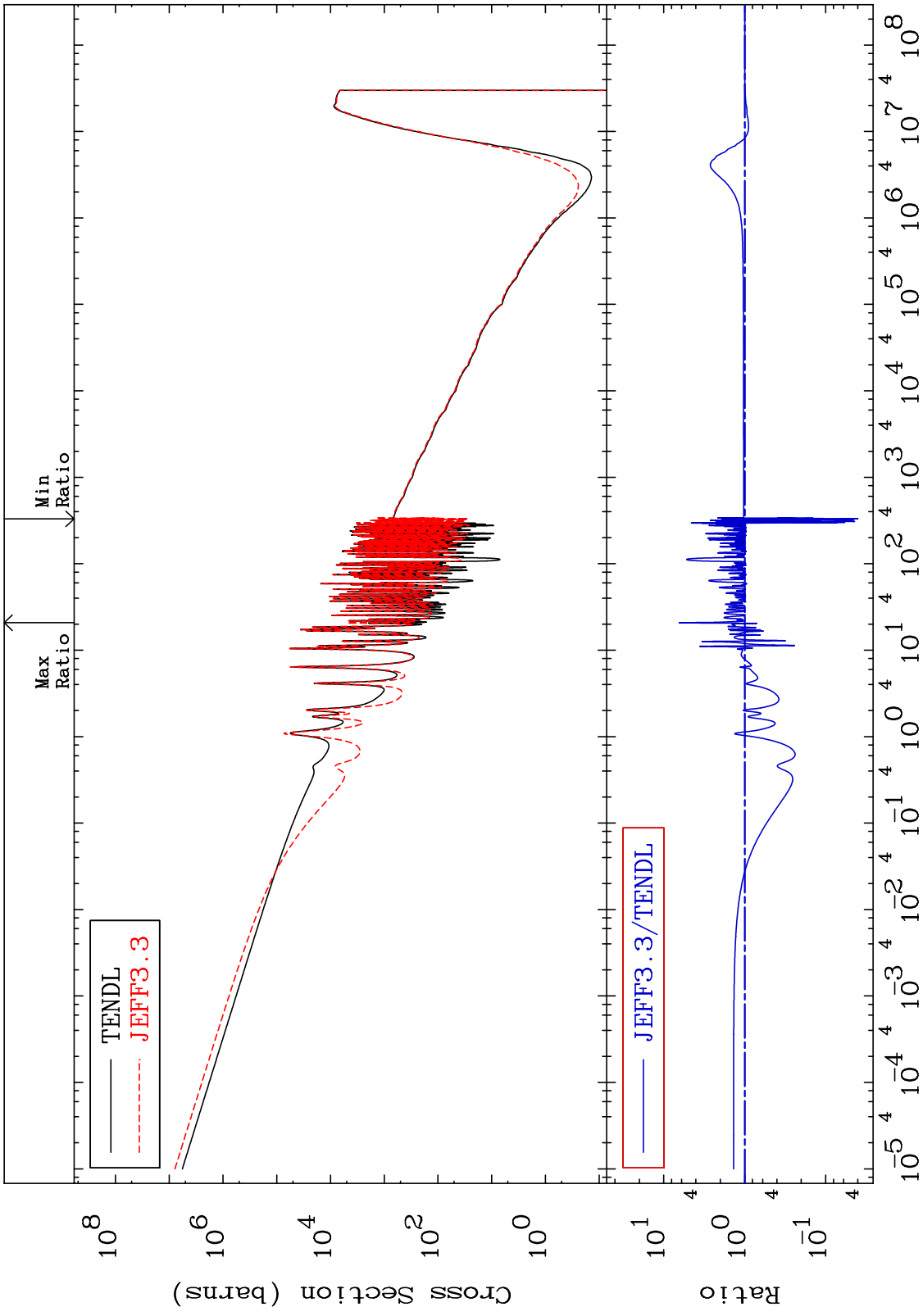
MAT 6246 Dpa elastic (mt2) 62-Sm-151
Cross Section -0.758 To 34.84 %

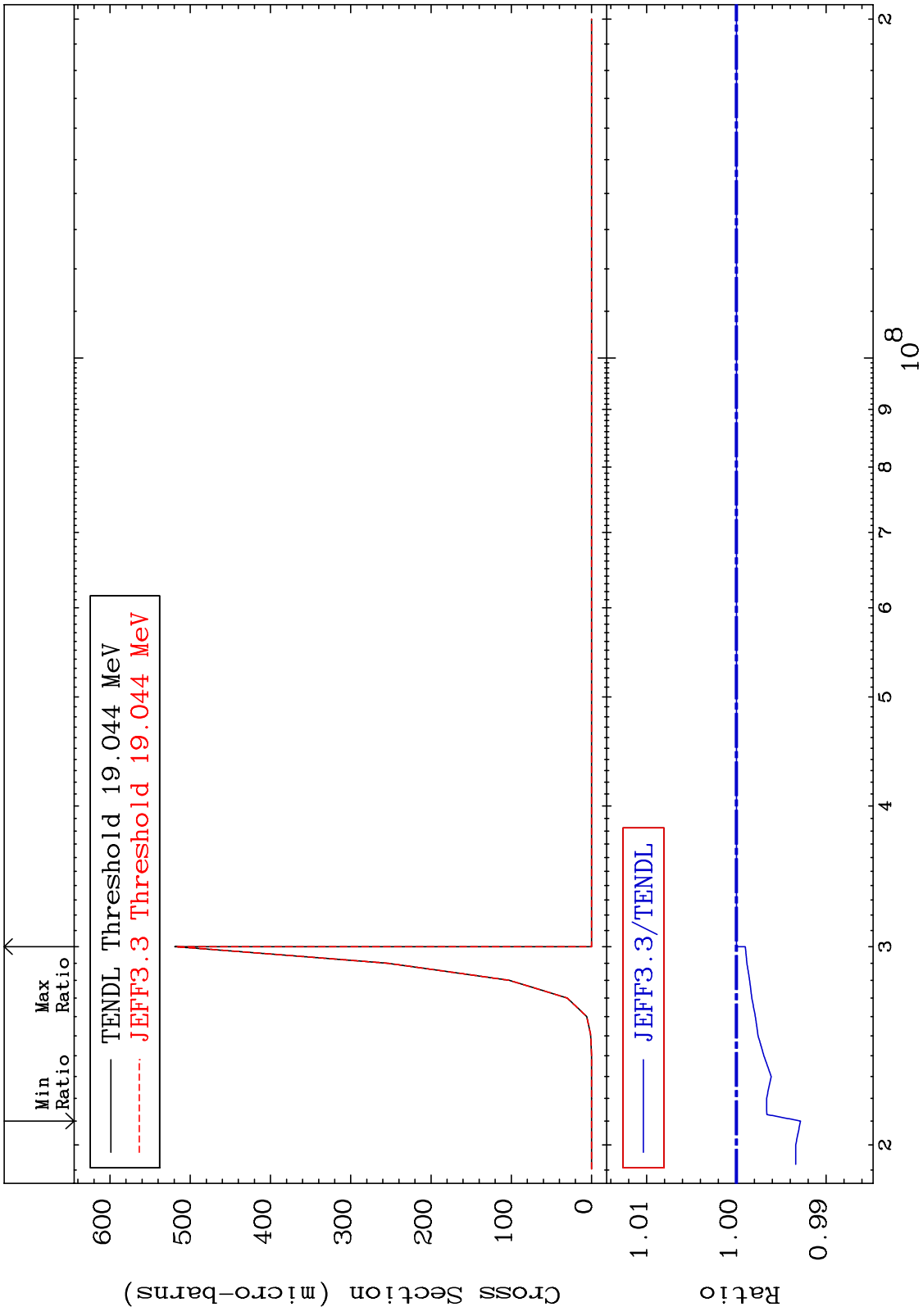


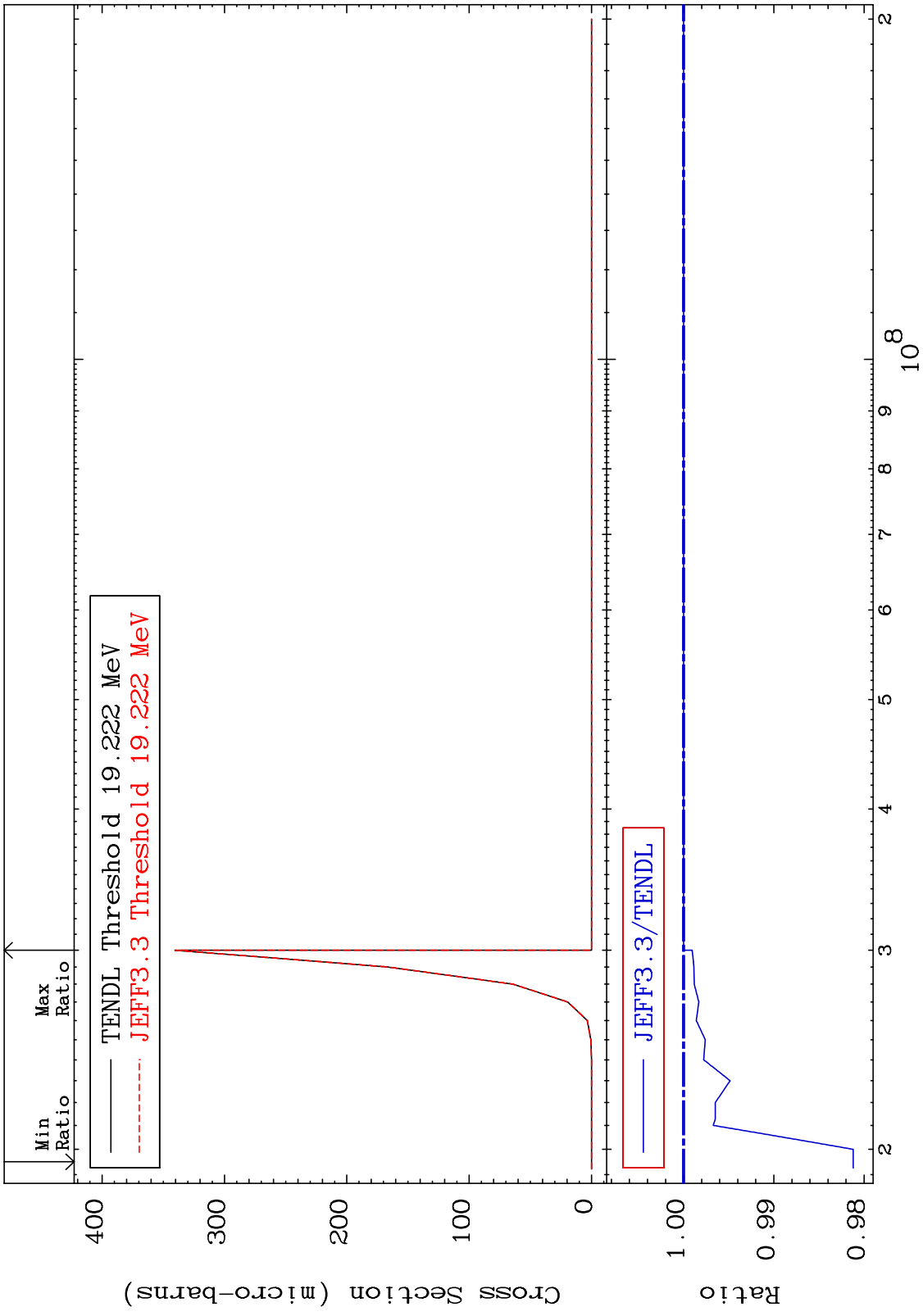
MAT 6246 Dpa inelastic (mt51-91) 62-Sm-151
Cross Section -0.396 To 0.136 %



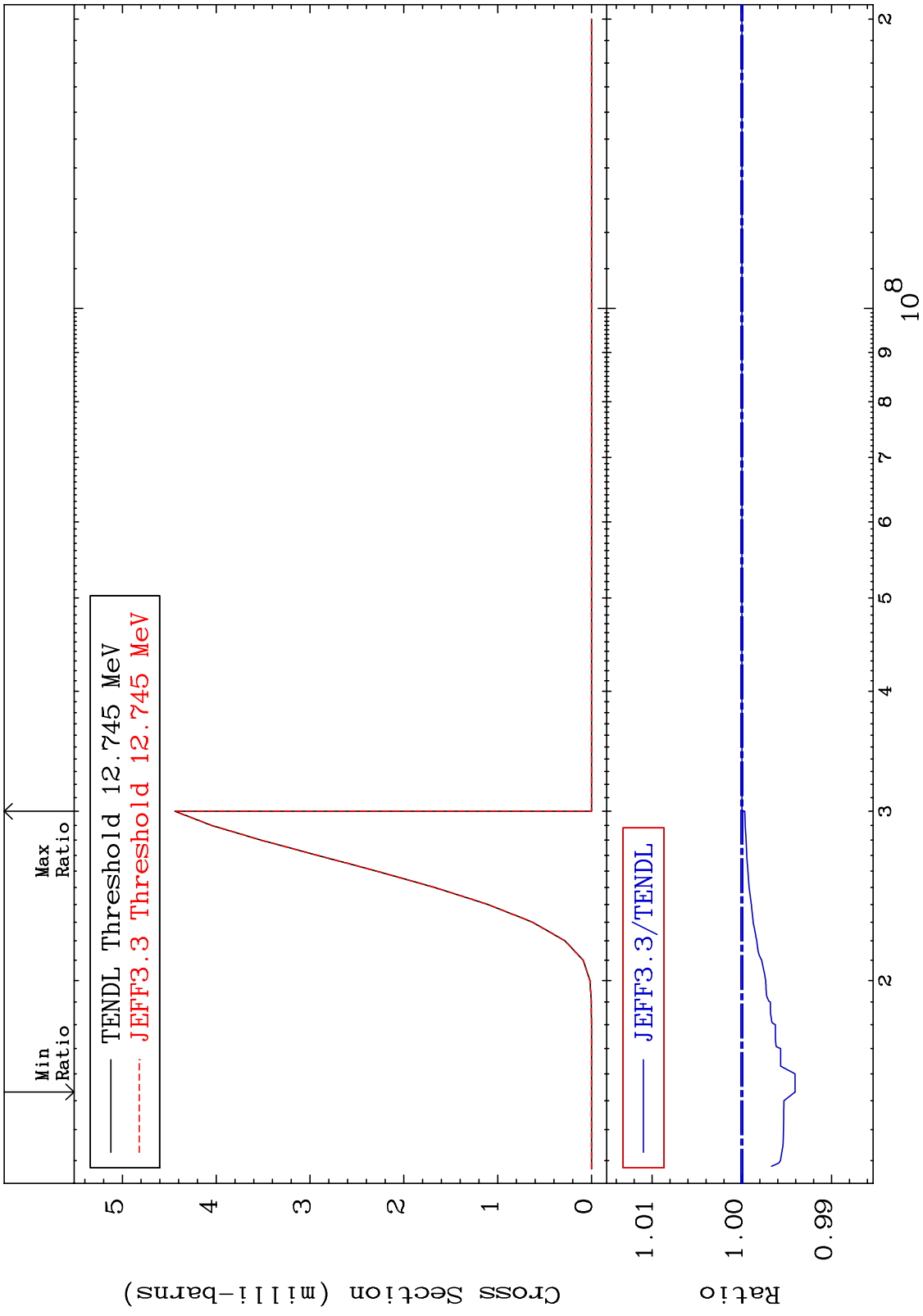
MAT 6246 Dpa disappearance (mt102 -120) 62-Sm-151
 Cross Section -95.99 To 546.3 %



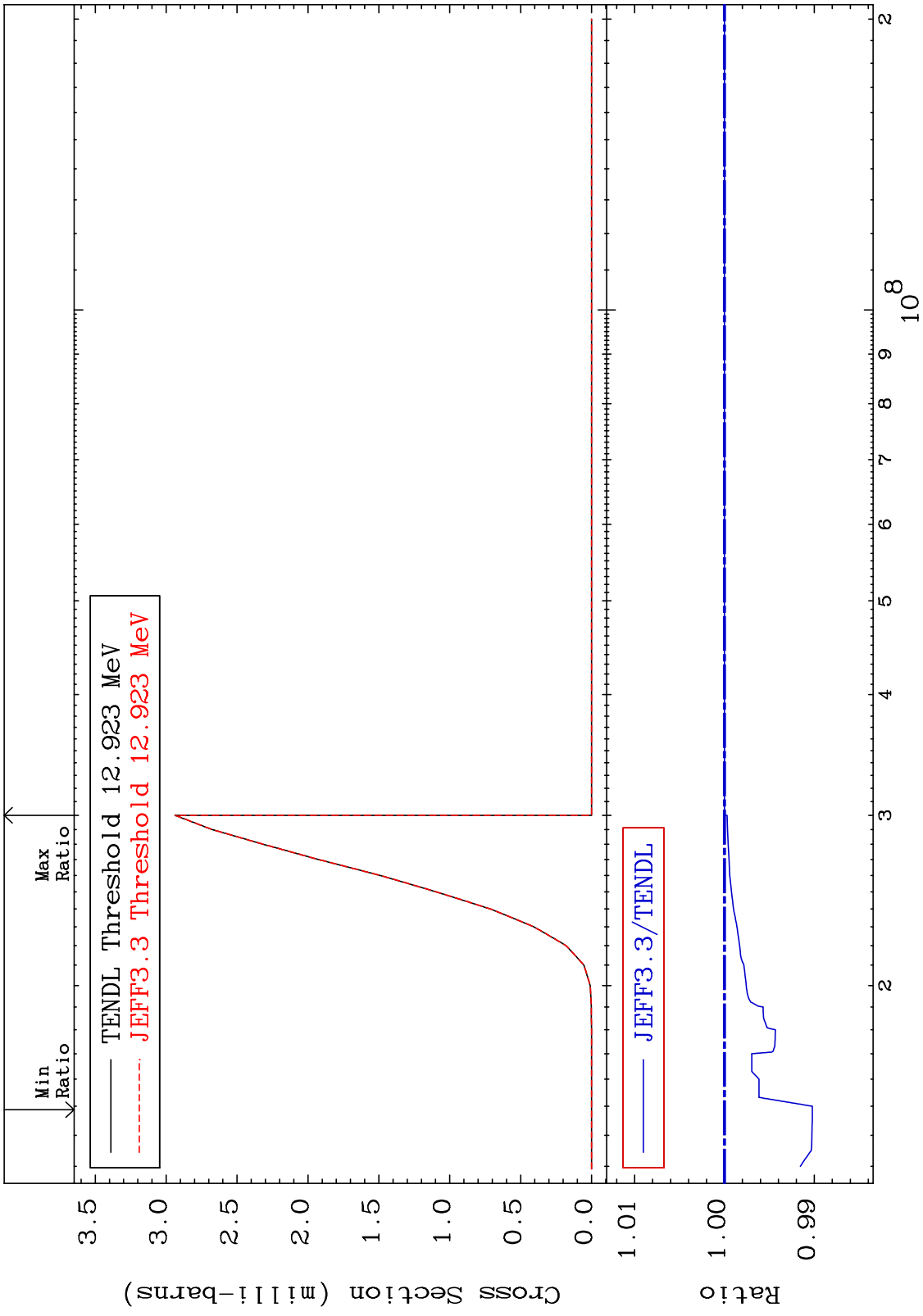




MAT 6246 (n, n') t:61-Pm-148g 62-Sm-151
 Radionuclide Production Cross Section -0.593 To 0.000 %



MAT 6246 (n,n') t:61-Pm-148m3 62-Sm-151
 Radionuclide Production Cross Section -0.979 To 0.000 %

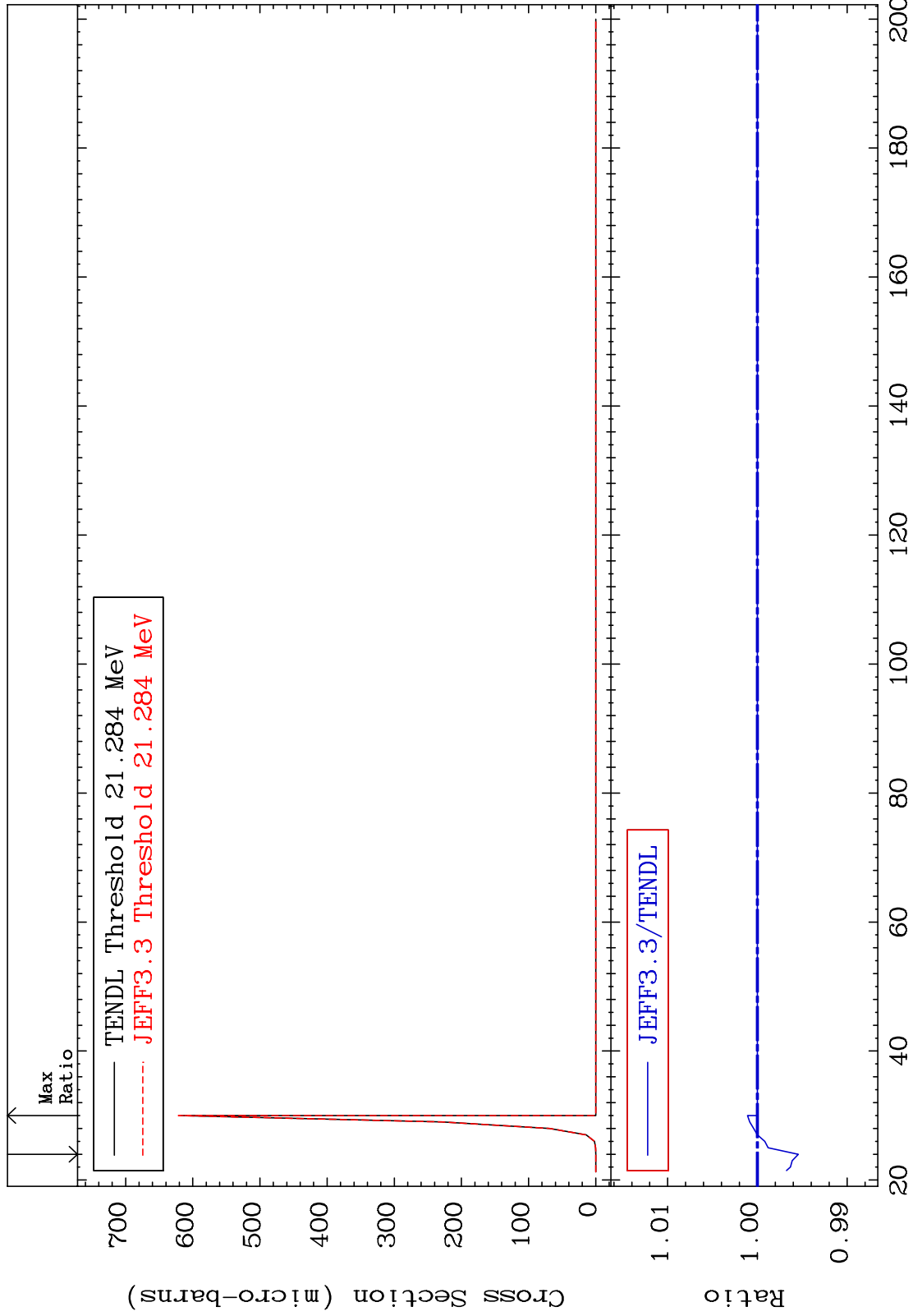


MAT 6246

(n,3n) p:61-Pm-148g

62-Sm-151

Radionuclide Production Cross Section -0.457 To 0.109 %



85

Incident Energy (MeV)

62-Sm-151

MAT 6246

(n,3n) p:61-Pm-148m3

62-Sm-151

Radionuclide Production Cross Section -0.531 To 0.115 %

