

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

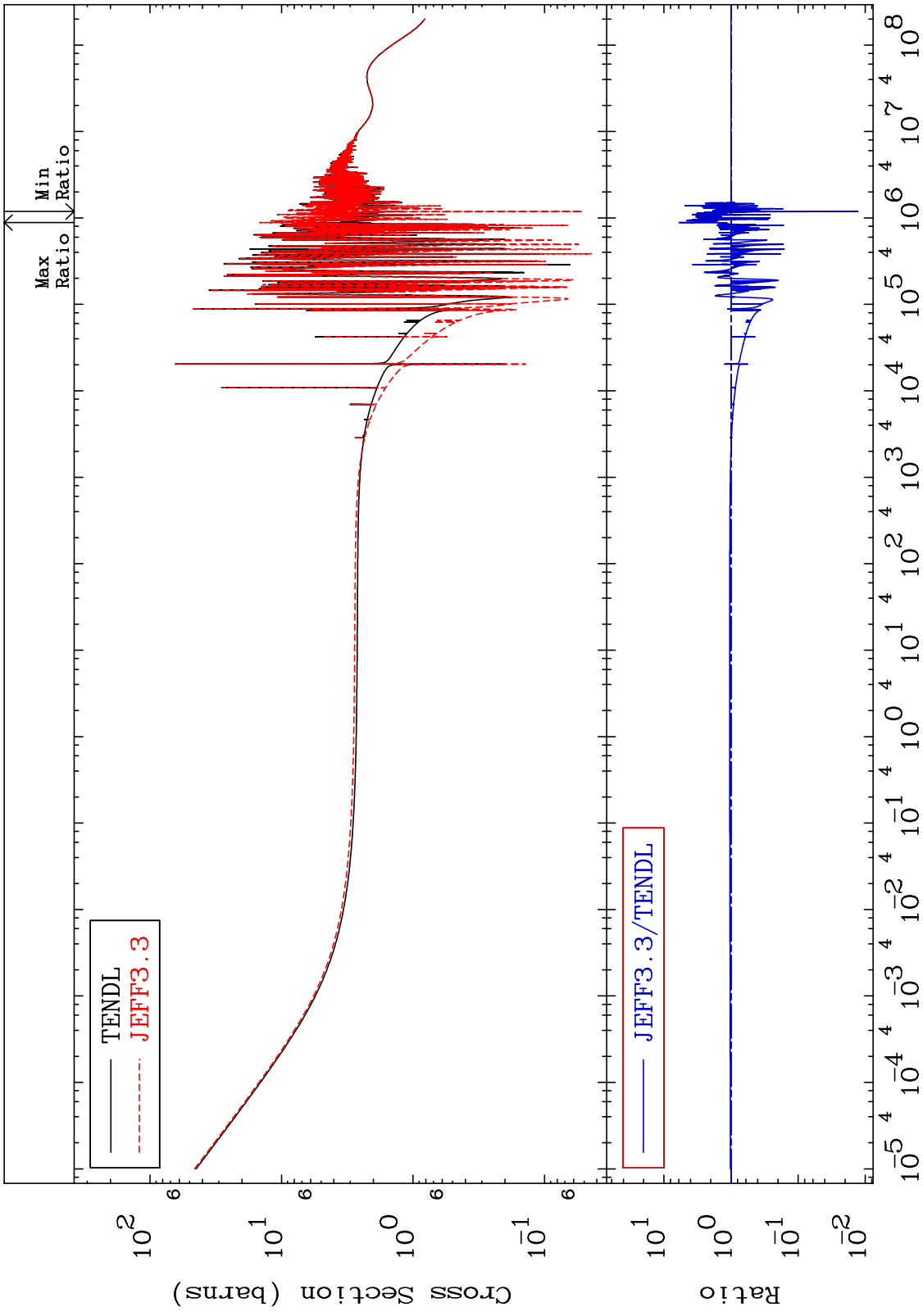
U.S.A.

Tele: 925-443-1911

E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 2025 Total Cross Section 20-Ca-40
-98.71 To 493.7 %

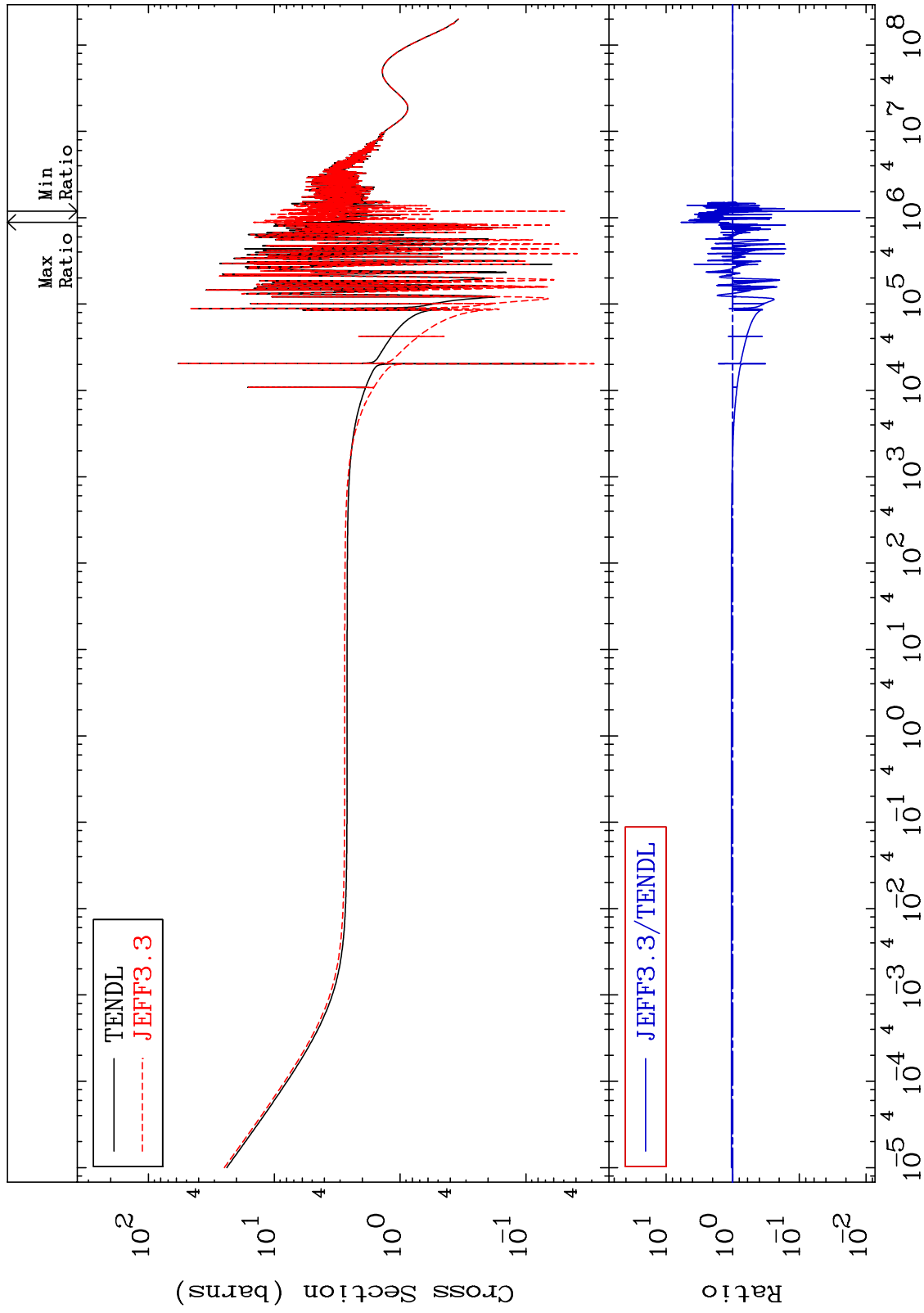


Ratio JEFF3.3/TENDL Incident Energy (eV) 20-Ca-40

MAT 2025

Elastic
Cross Section

20-Ca-40
-98.76 To 490.9 %



2

Incident Energy (eV)

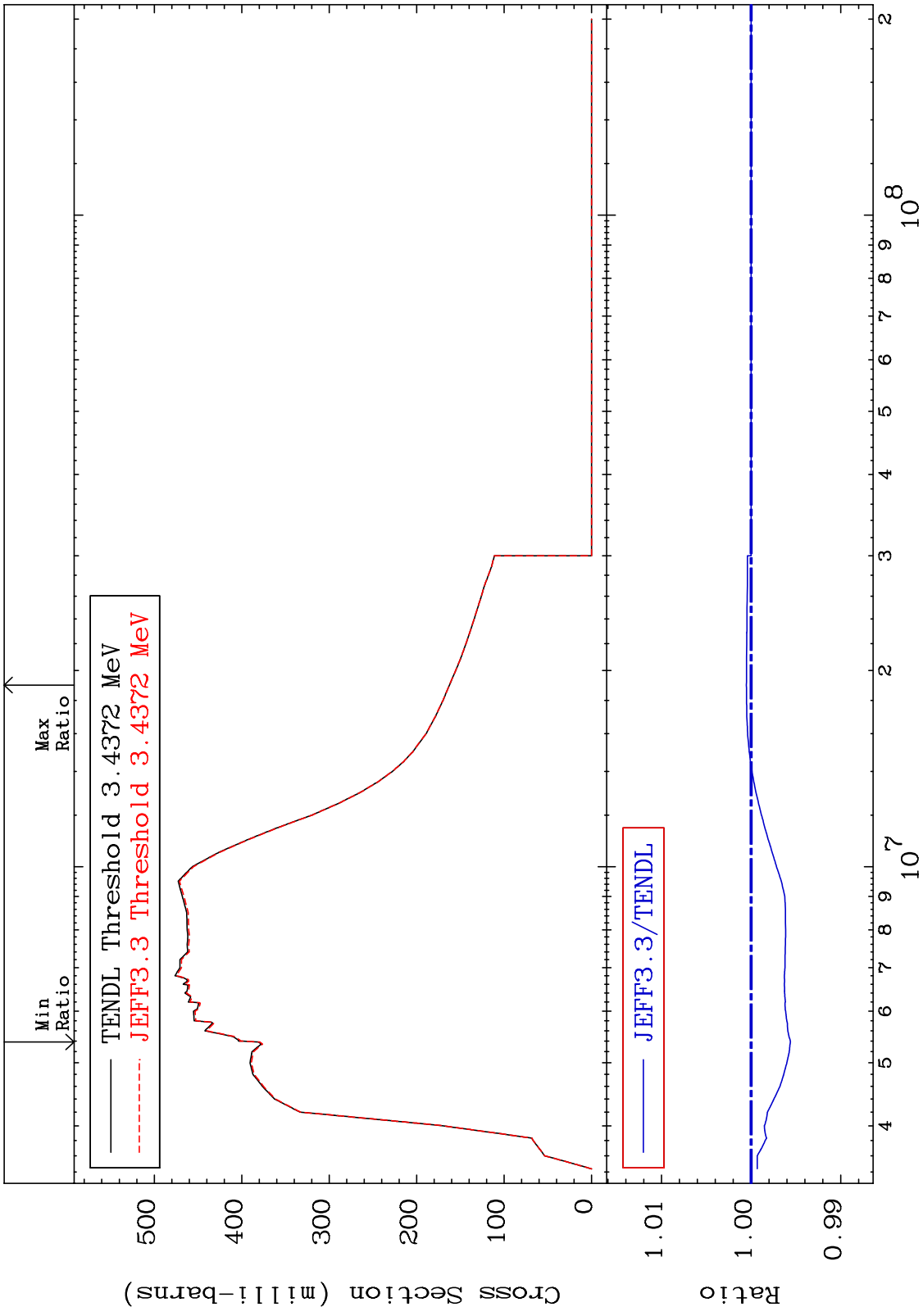
20-Ca-40

MAT 2025

Inelastic
Cross Section

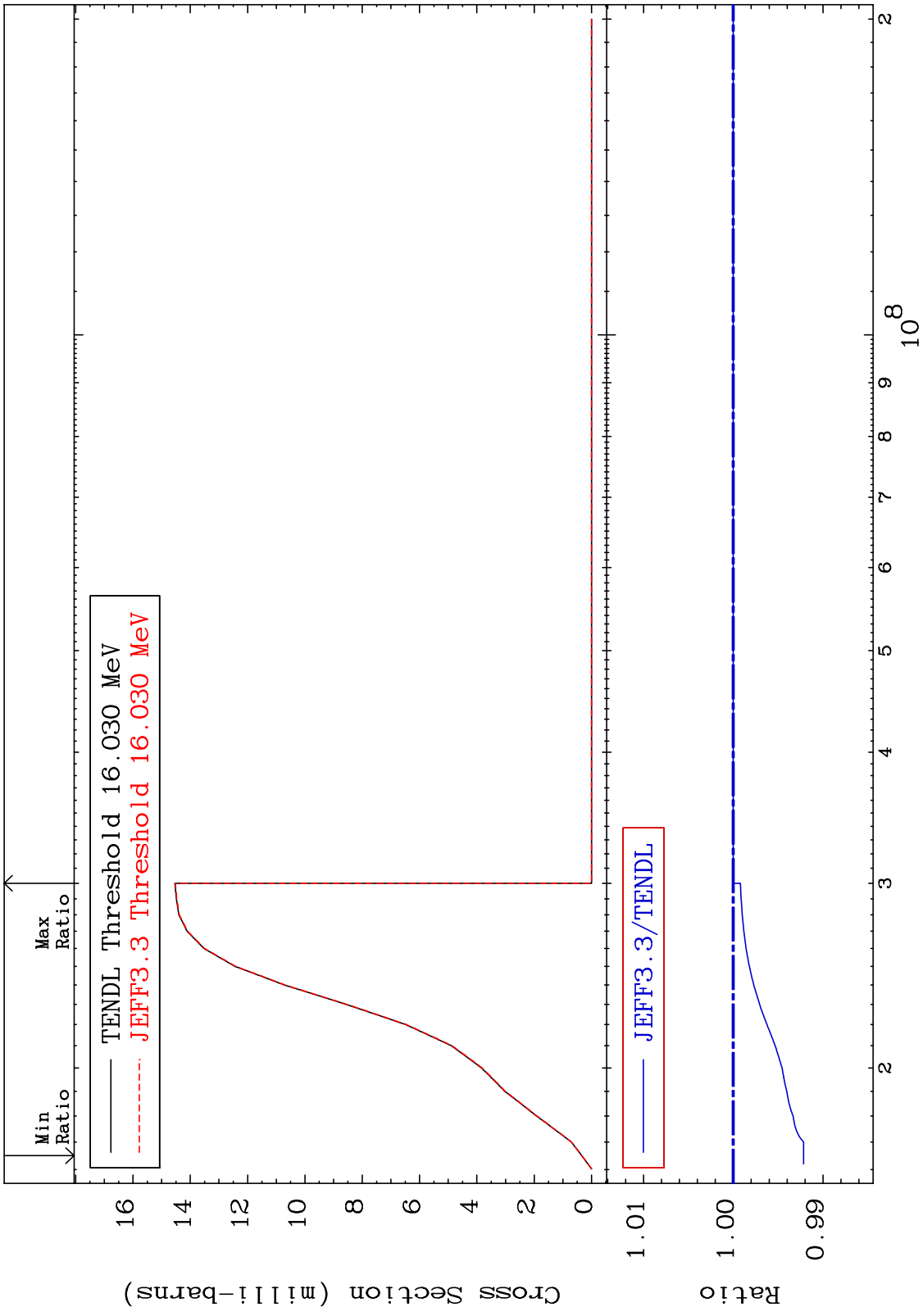
20-Ca-40

-0.439 To 0.053 %

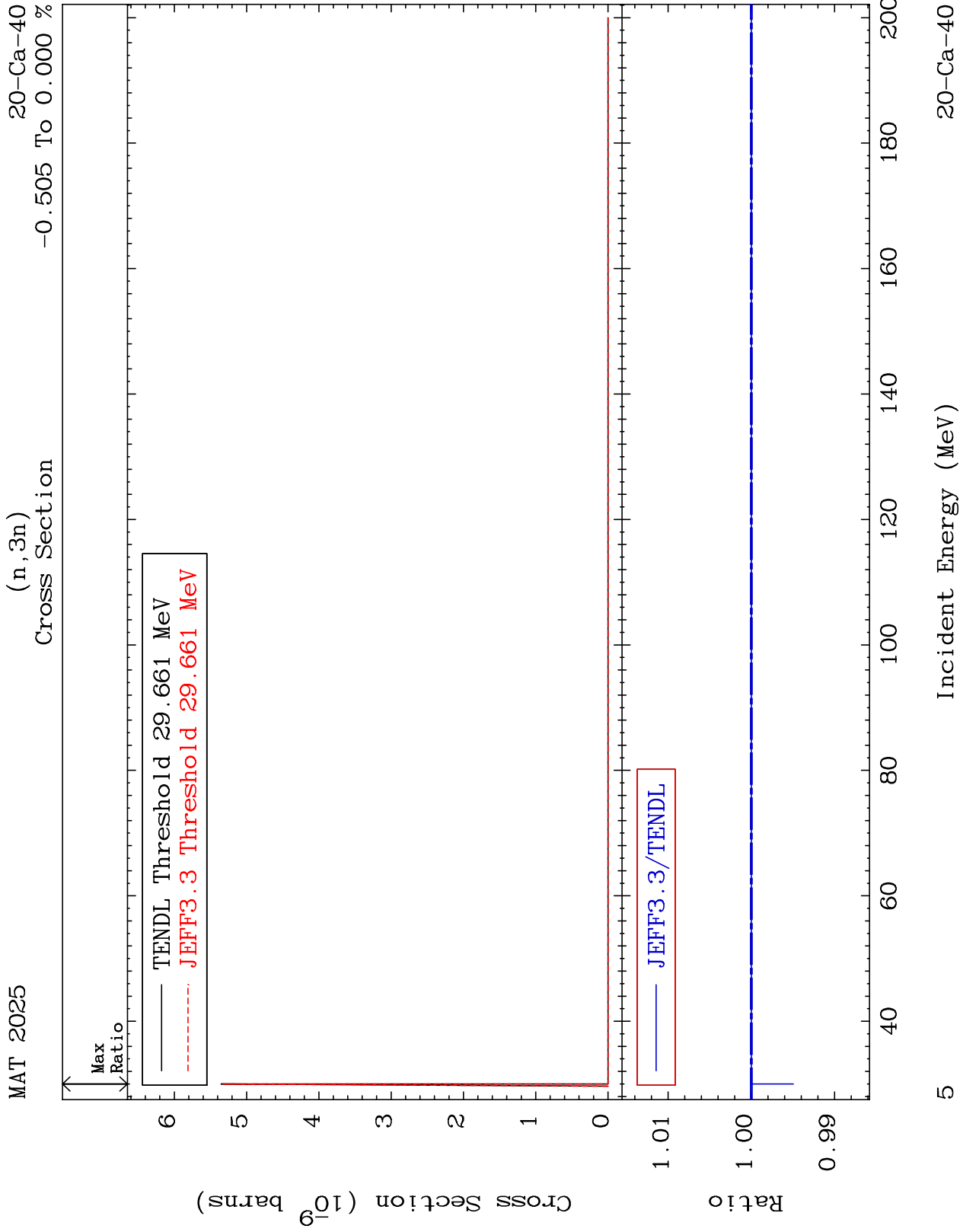


3

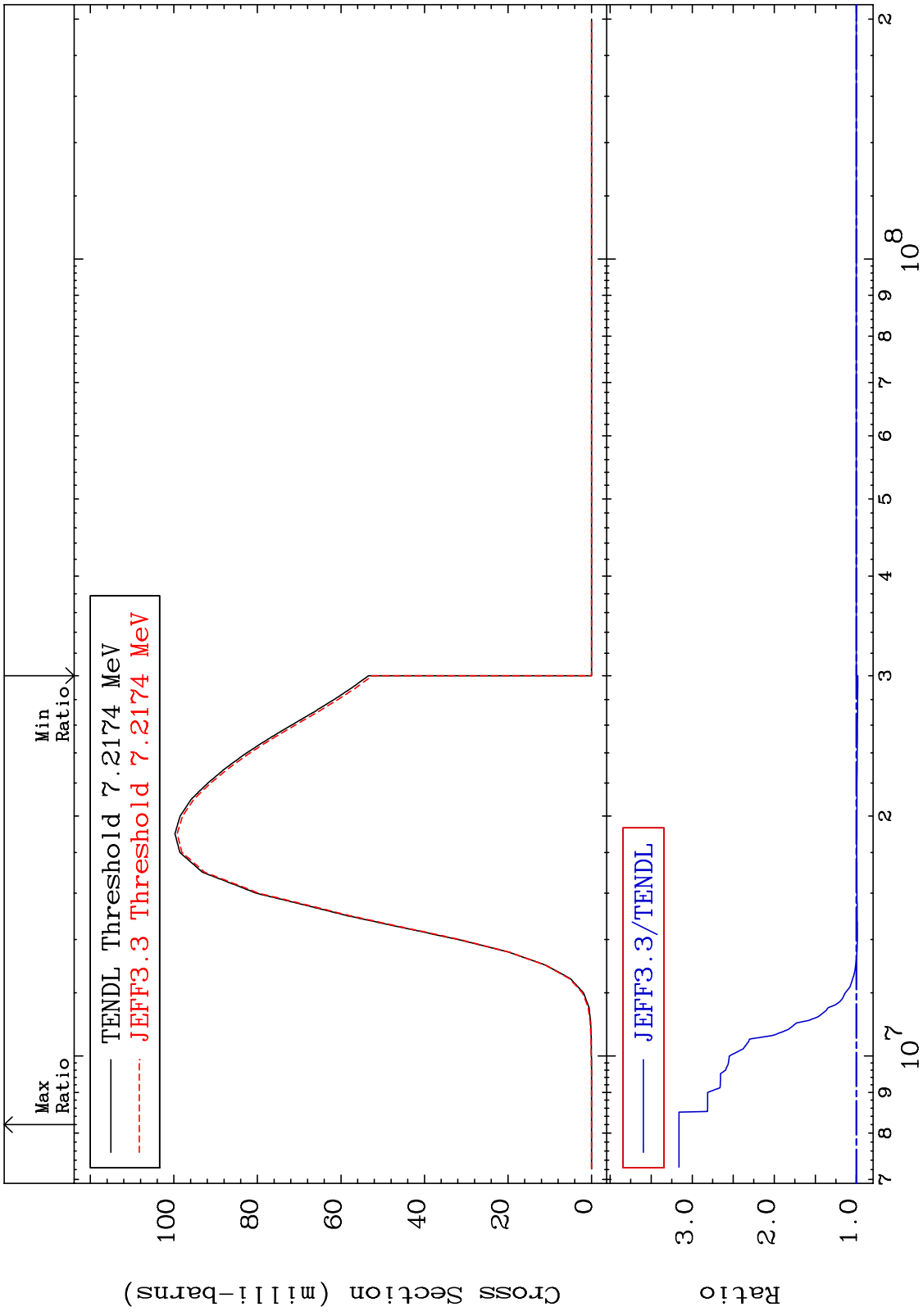
MAT 2025 $(n,2n)$ Cross Section 20-Ca-40
 -0.784 To 0.000 %



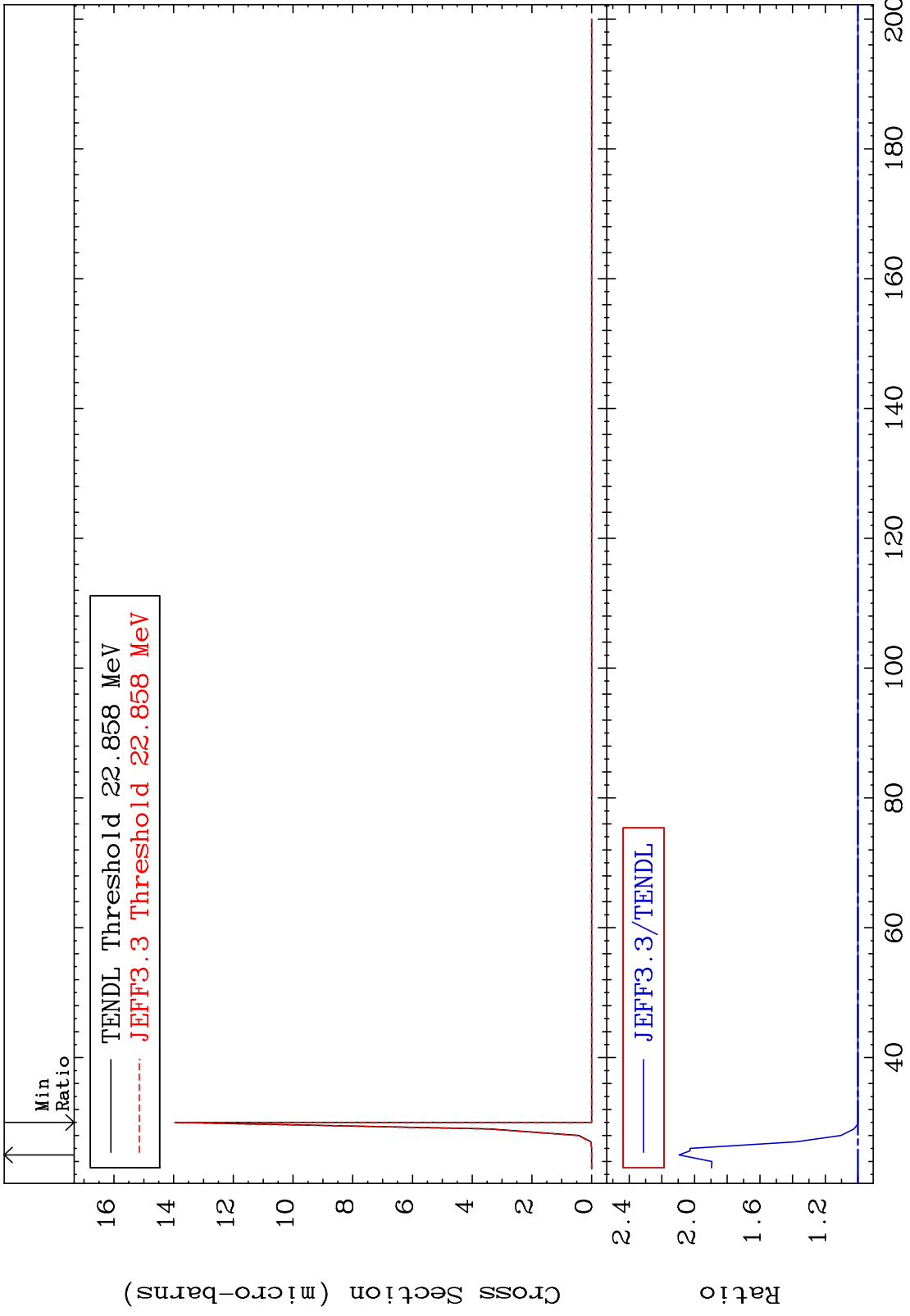
4 Incident Energy (eV) 20-Ca-40



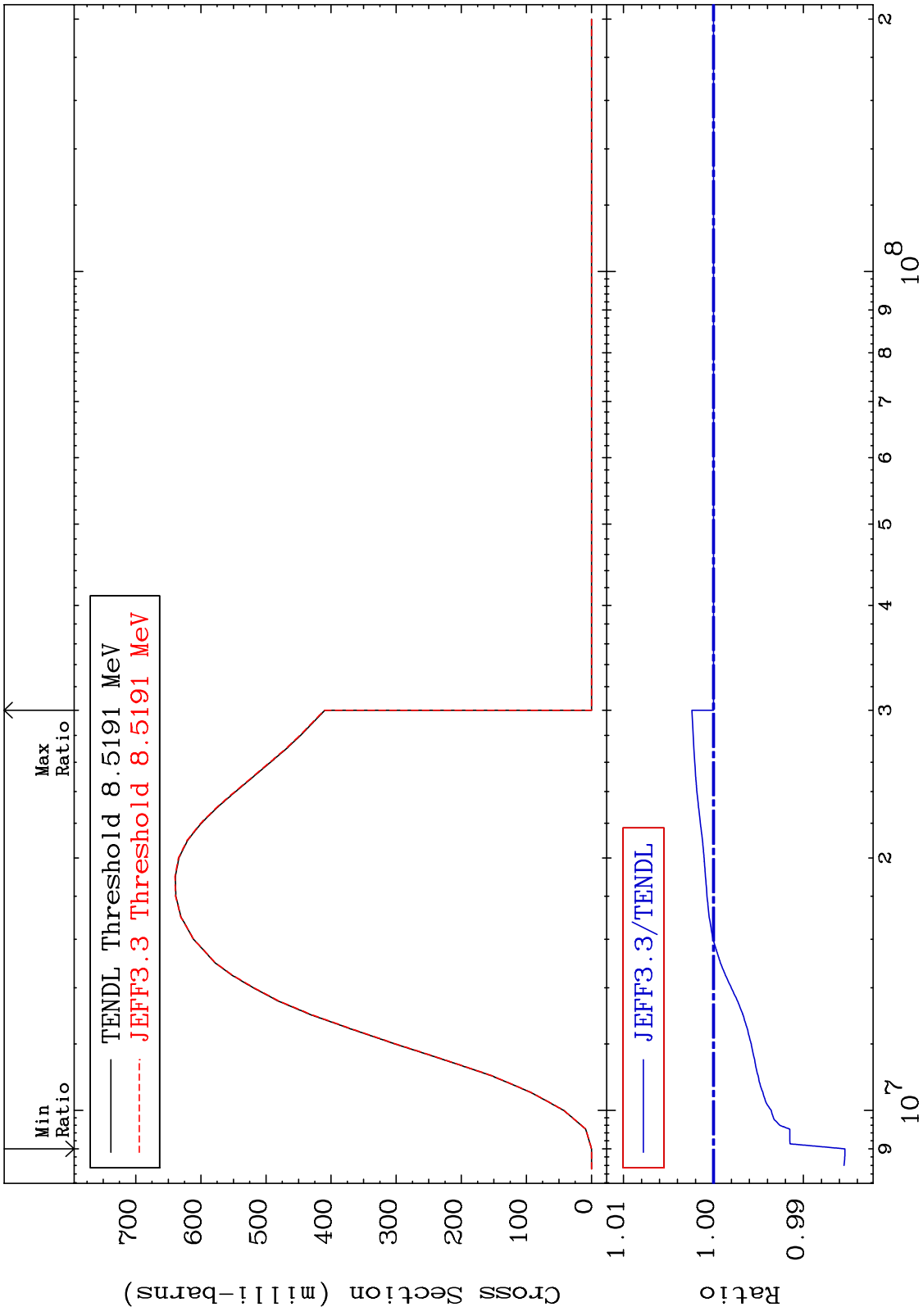
MAT 2025 $(n, n') \alpha$ 20-Ca-40
Cross Section -1.791 To 216.0 %



MAT 2025 (n,2n) α 20-Ca-40
Cross Section 0.000 To 109.4 %

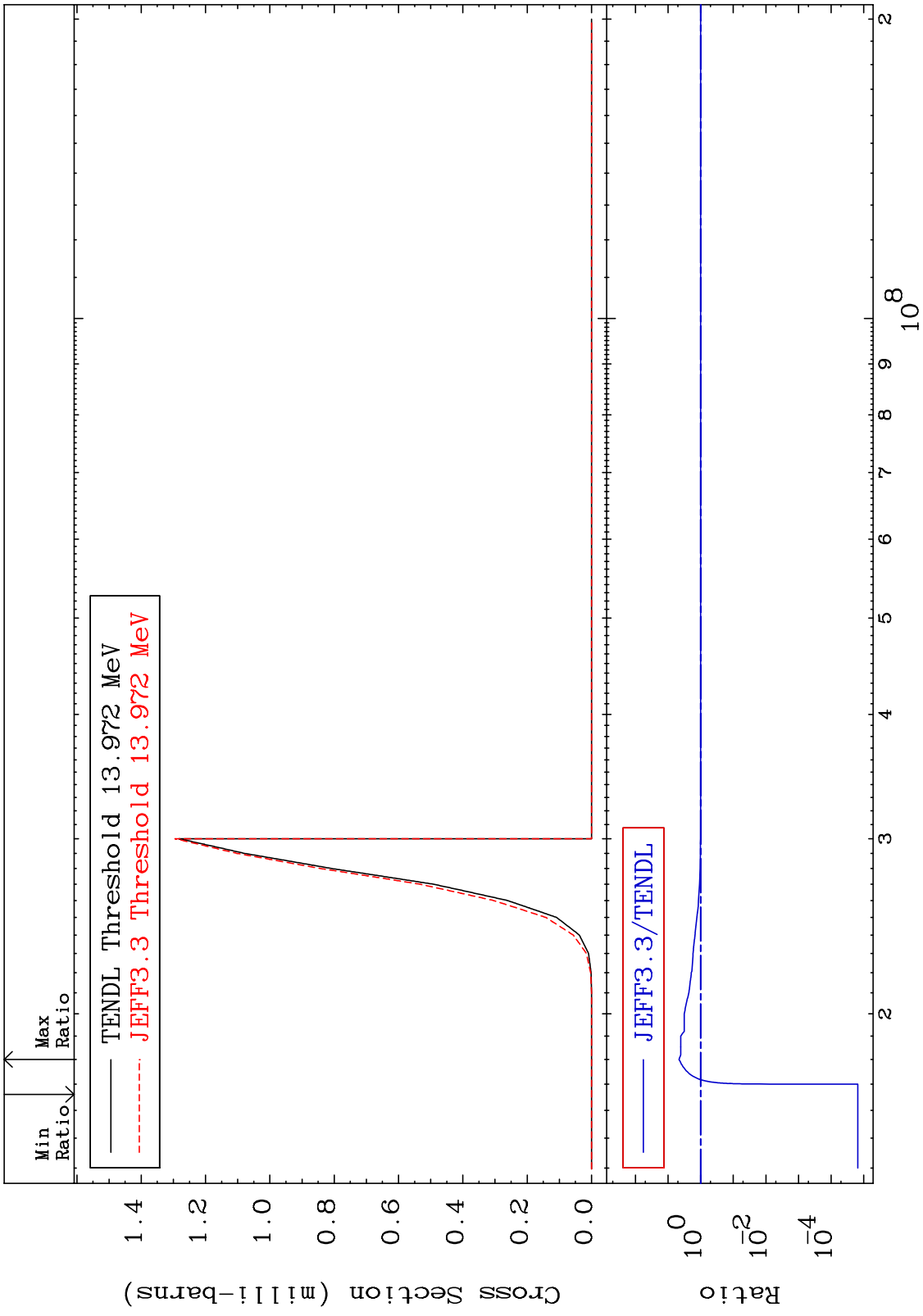


MAT 2025 (n, n') p 20-Ca-40
Cross Section -1.461 To 0.239 %

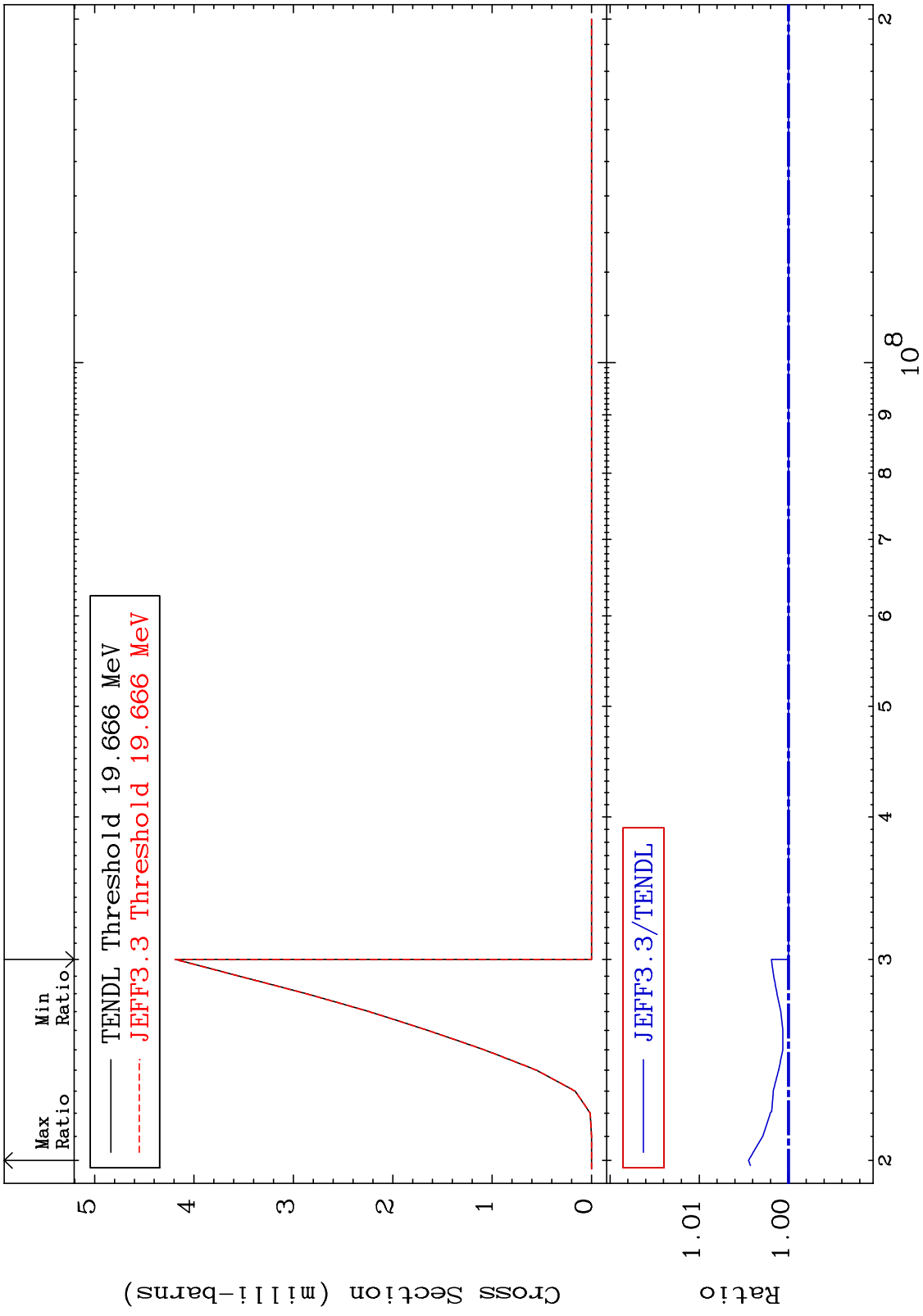


8 Incident Energy (eV) 20-Ca-40

MAT 2025 (n,n') 2α Cross Section 20-Ca-40 -100.0 To 360.1 %

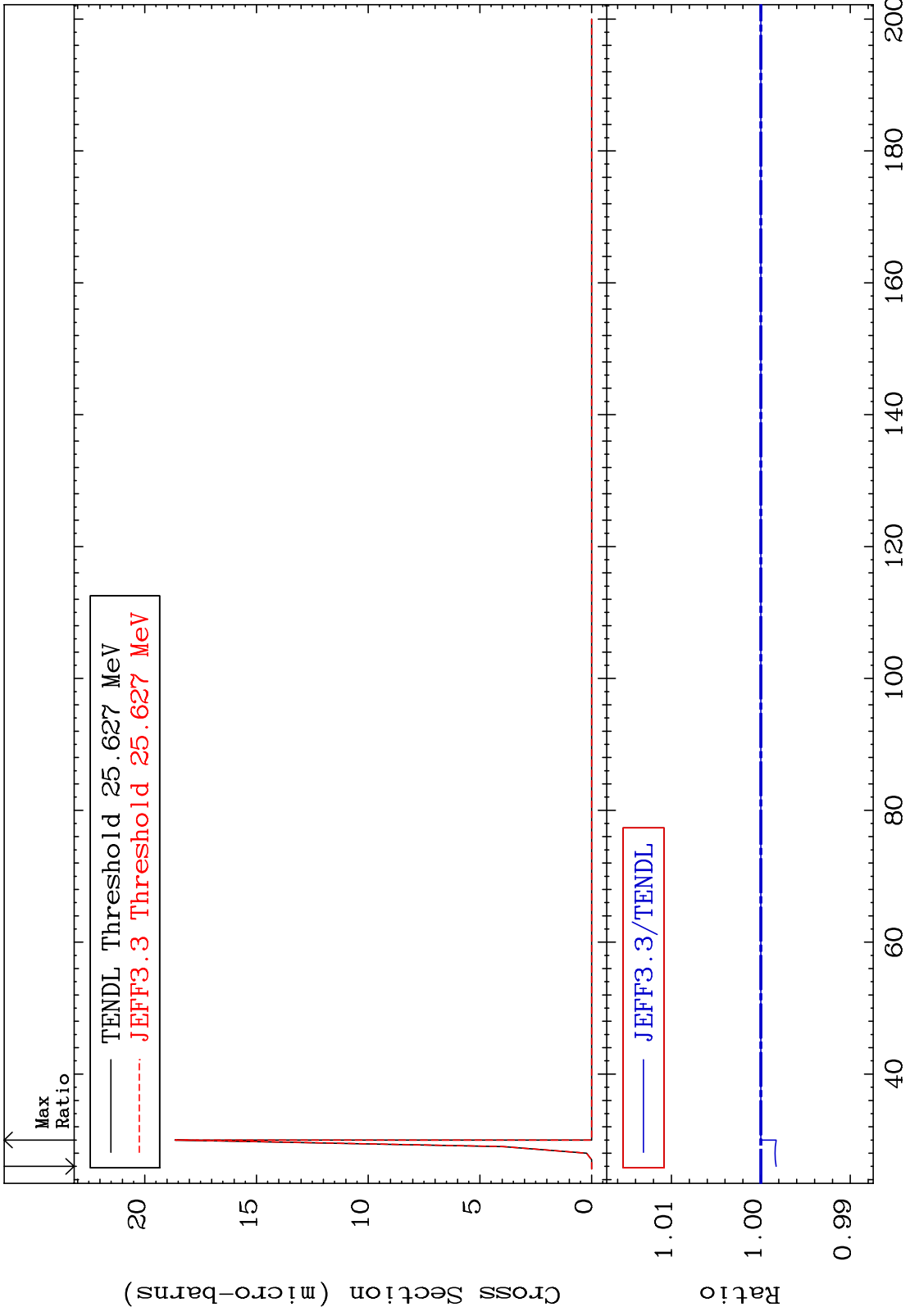


MAT 2025 (n,n') d 20-Ca-40
Cross Section 0.000 To 0.448 %

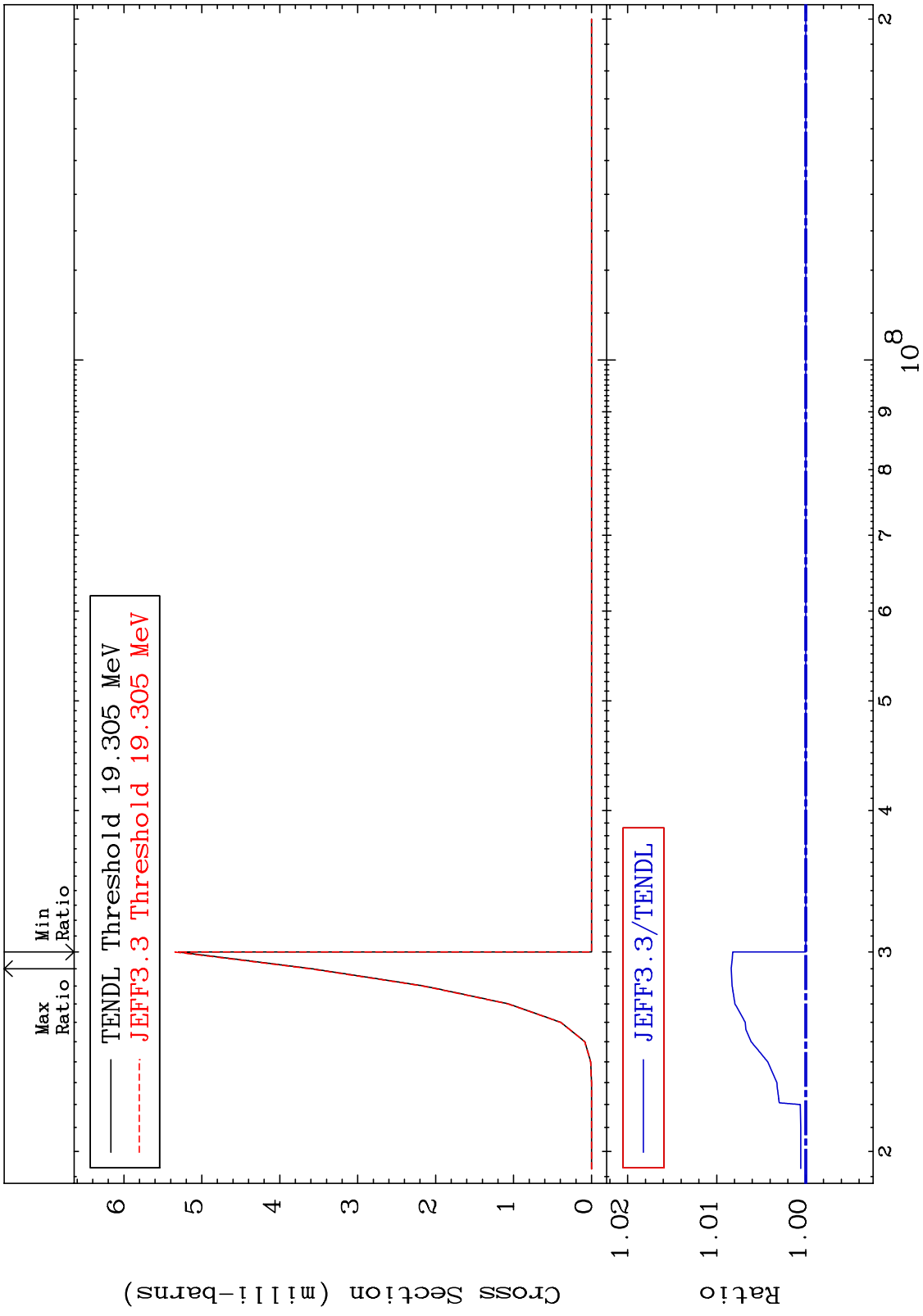


10 Incident Energy (eV) 20-Ca-40

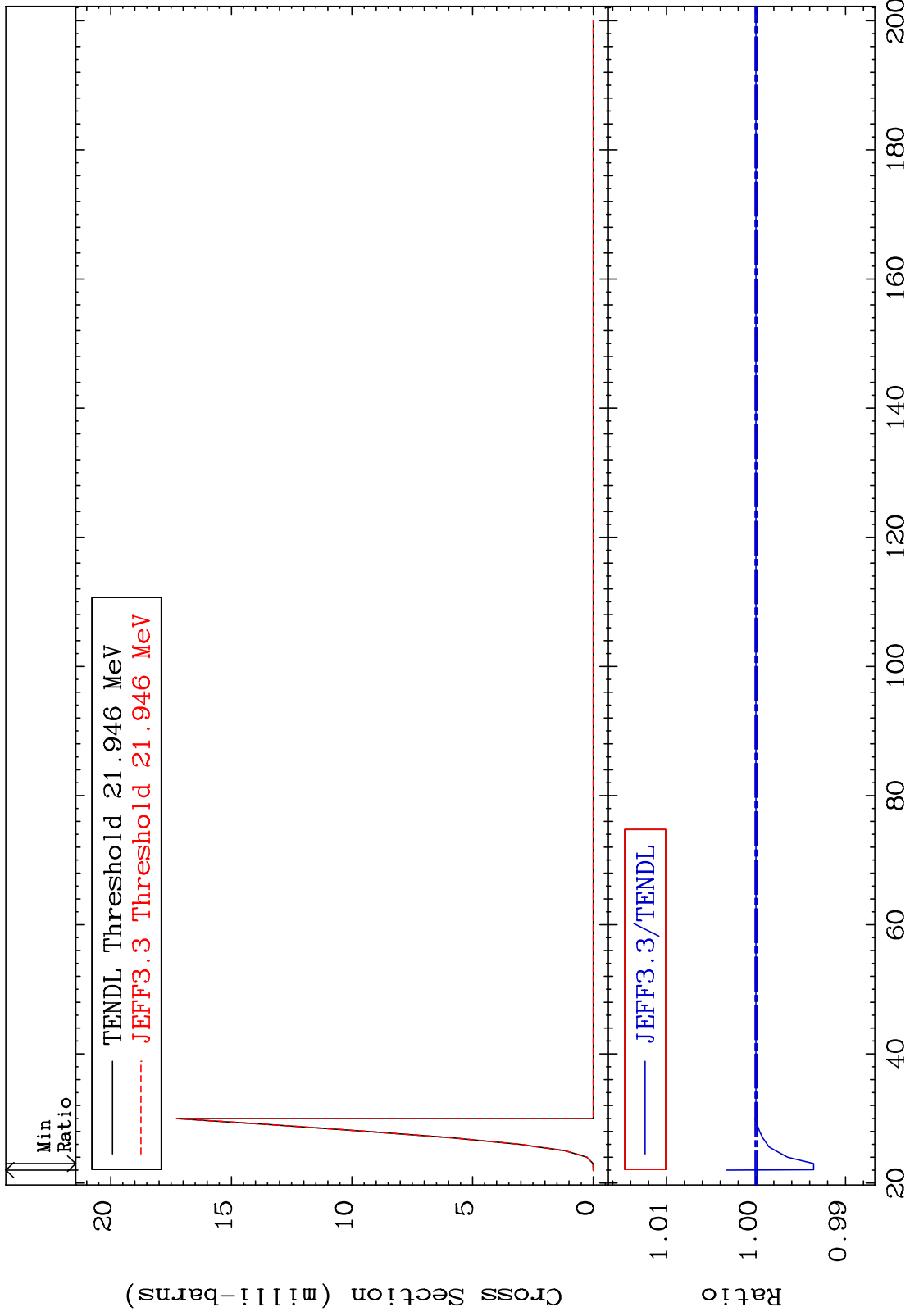
MAT 2025 (n,n') t 20-Ca-40
 Cross Section -0.172 To 0.000 %



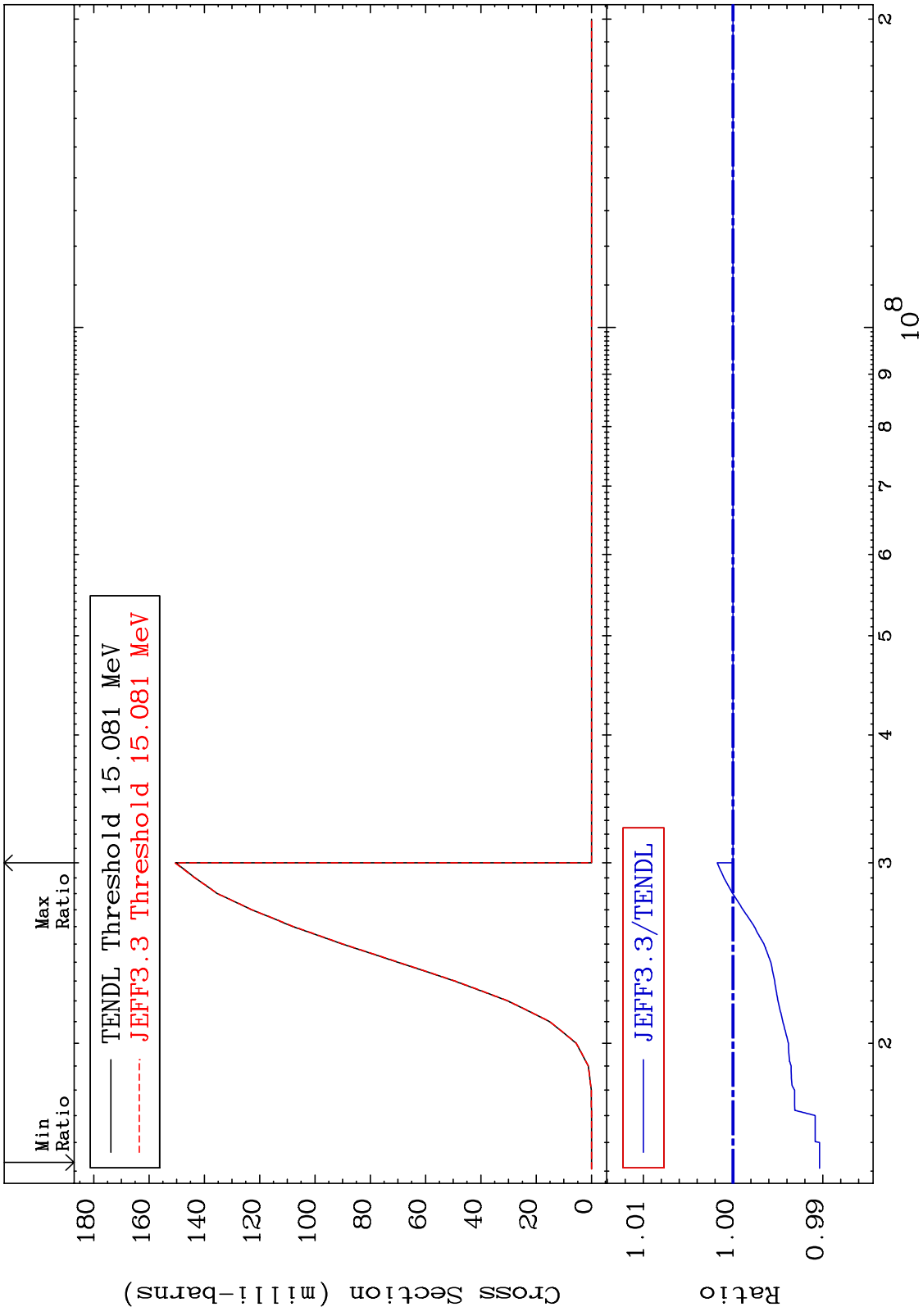
MAT 2025 (n, n') He-3 20-Ca-40
 Cross Section 0.000 To 0.838 %



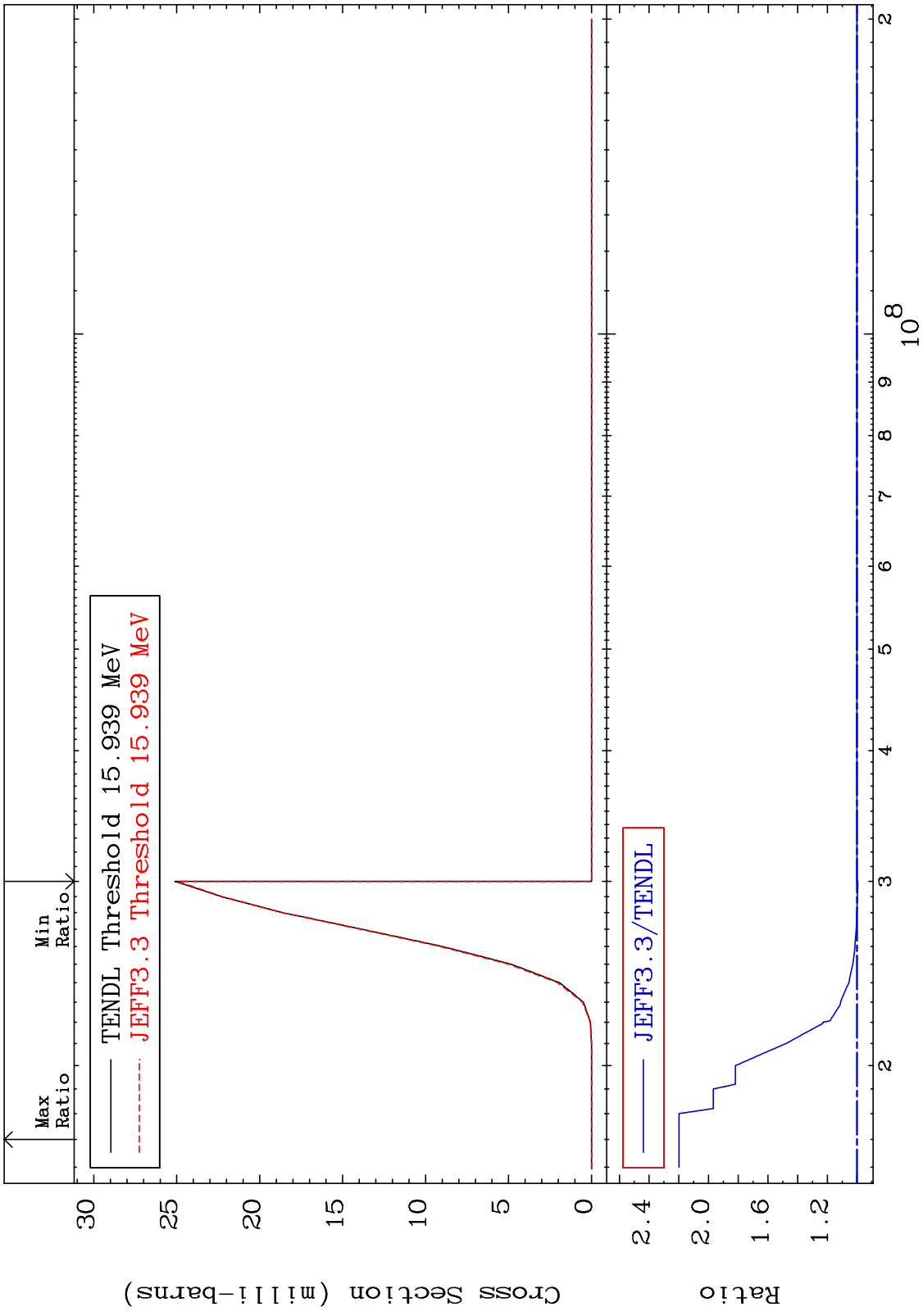
MAT 2025 (n,2n) p 20-Ca-40
Cross Section -0.644 To 0.327 %



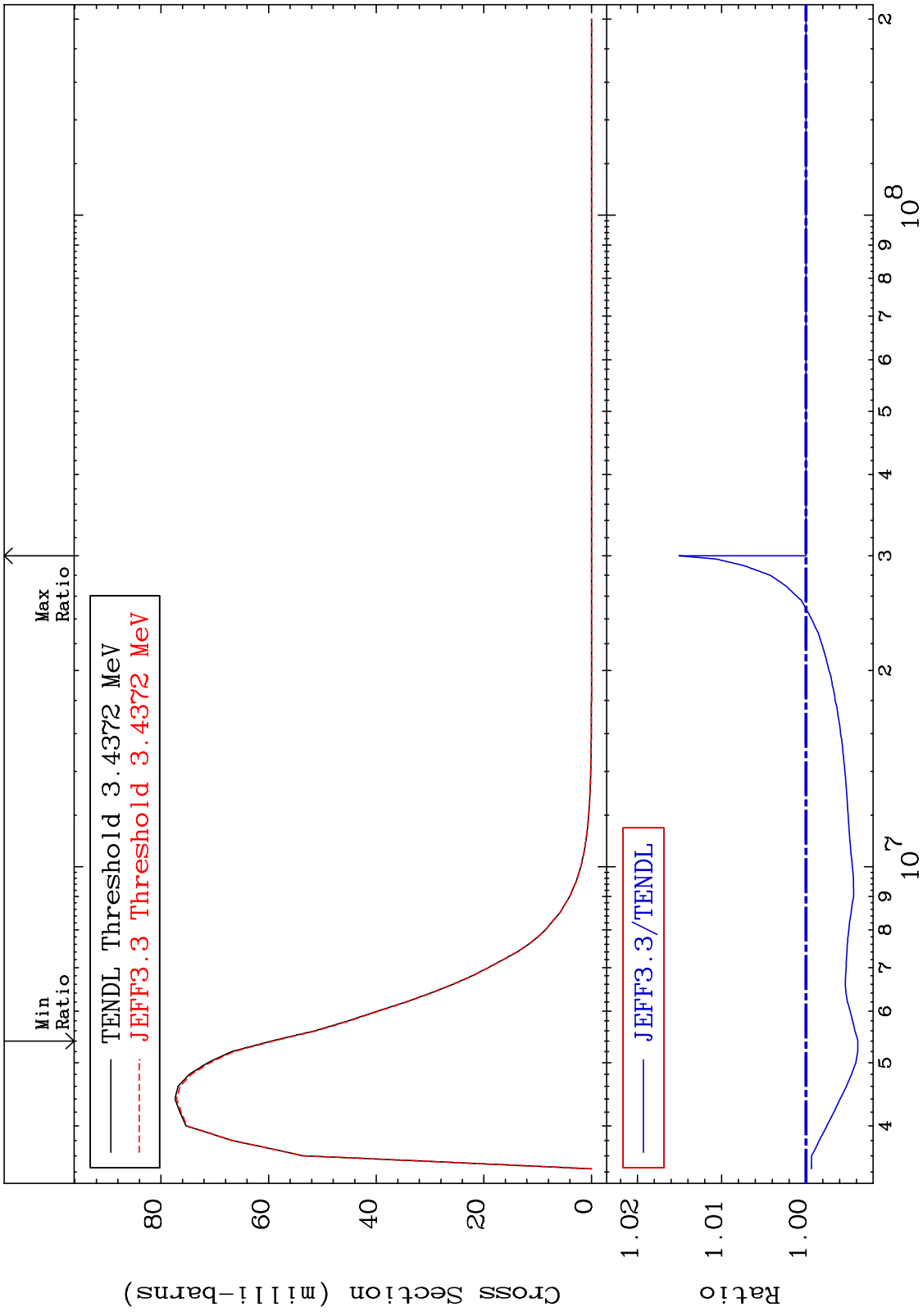
MAT 2025 (n,2n) p
Cross Section
20-Ca-40
-0.965 To 0.176 %



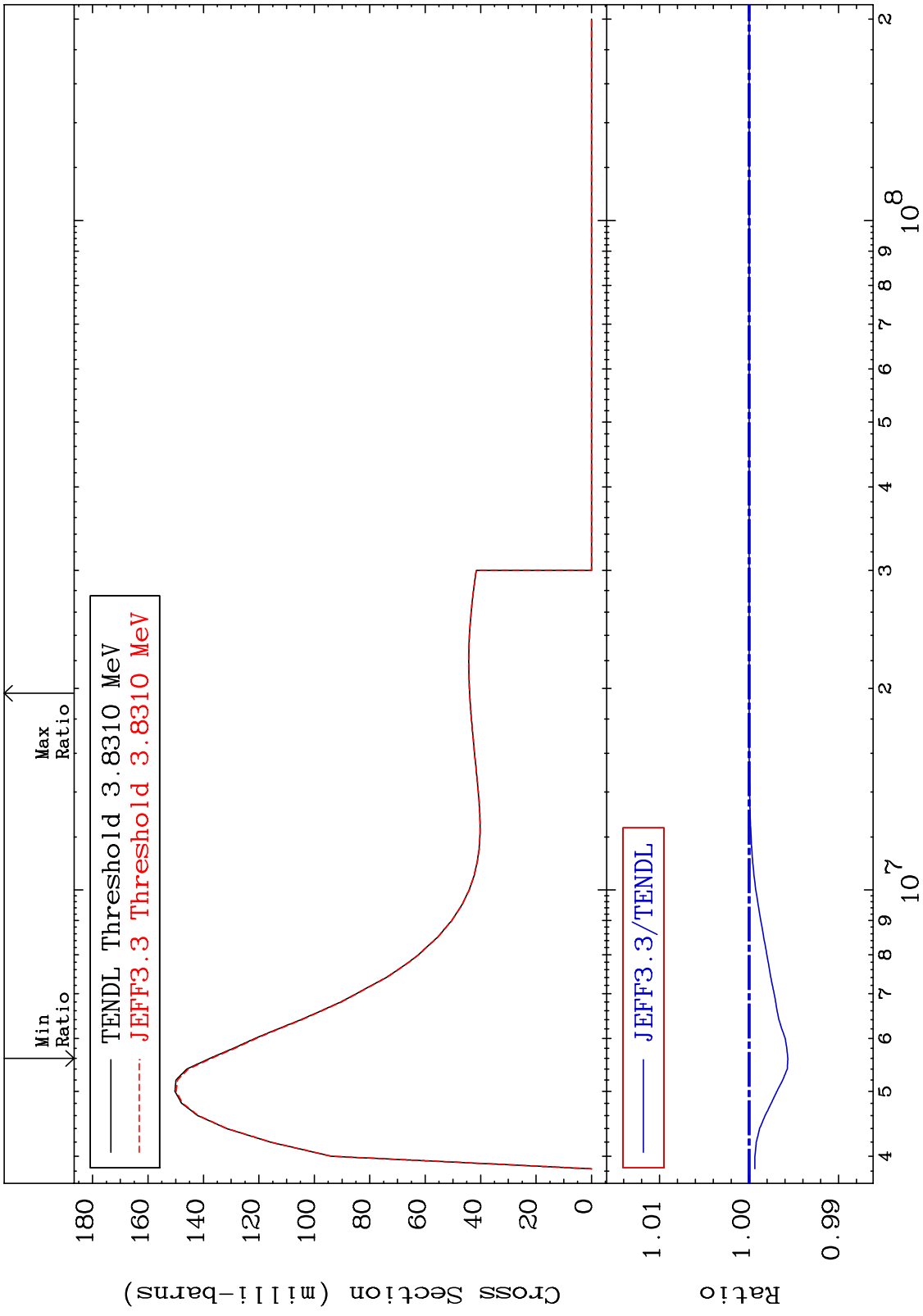
MAT 2025 (n, n') p α 20-Ca-40
 Cross Section -0.556 To 119.8 %



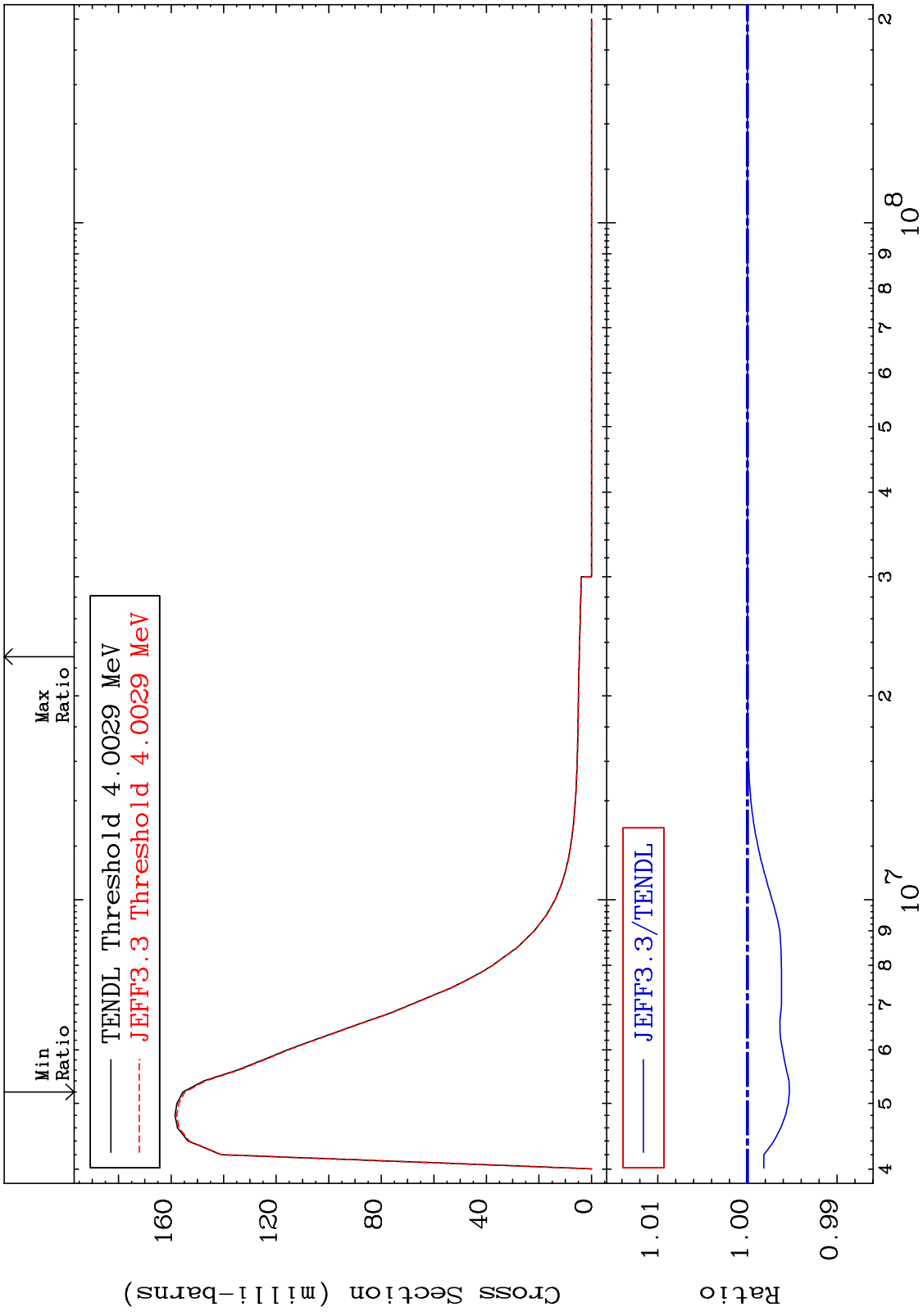
MAT 2025 MT= 51 (n,n') Level Cross Section -0.617 To 1.506 % 20-Ca-40



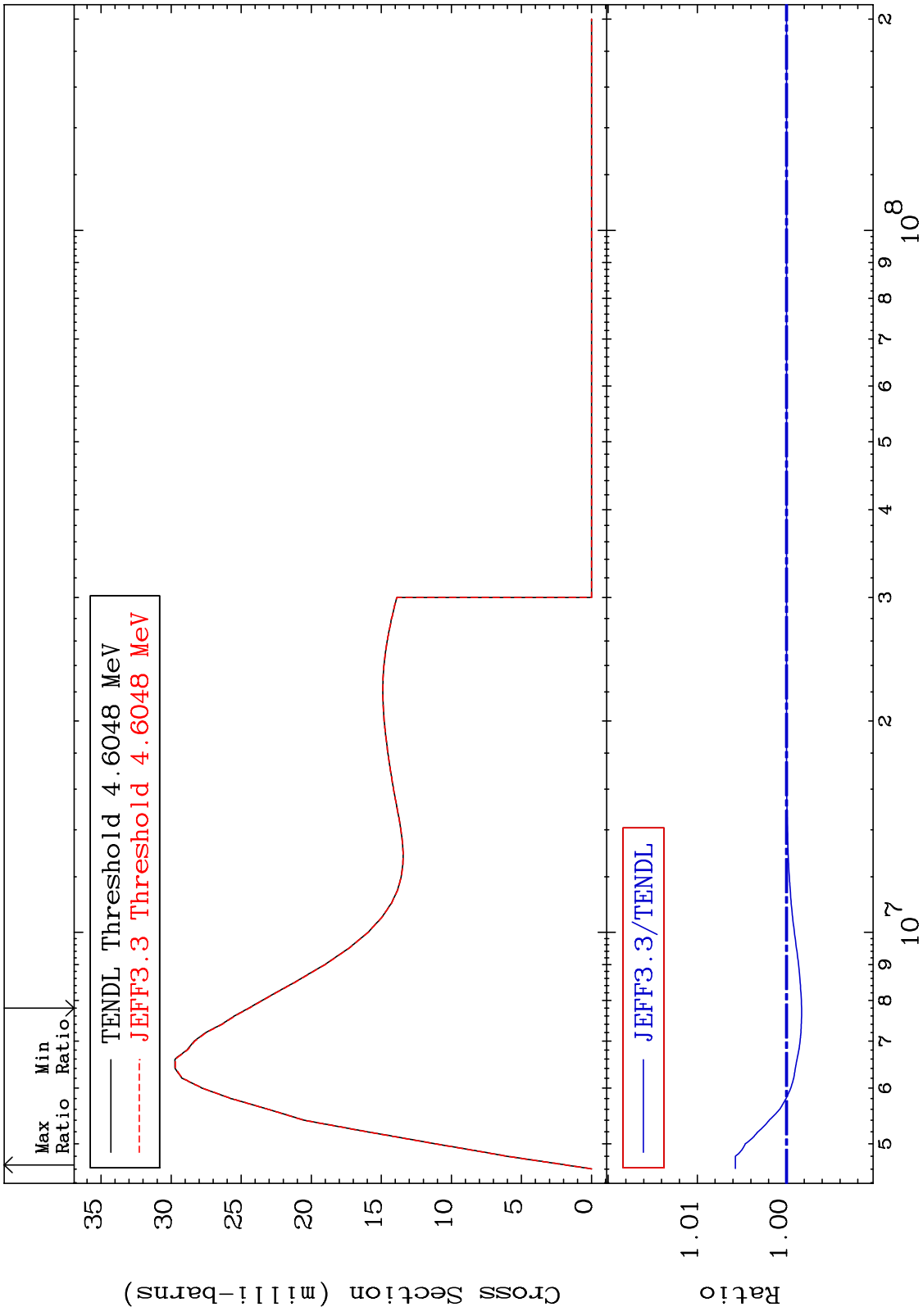
MAT 2025 MT= 52 (n,n') Level Cross Section -0.433 To 0.000 % 20-Ca-40



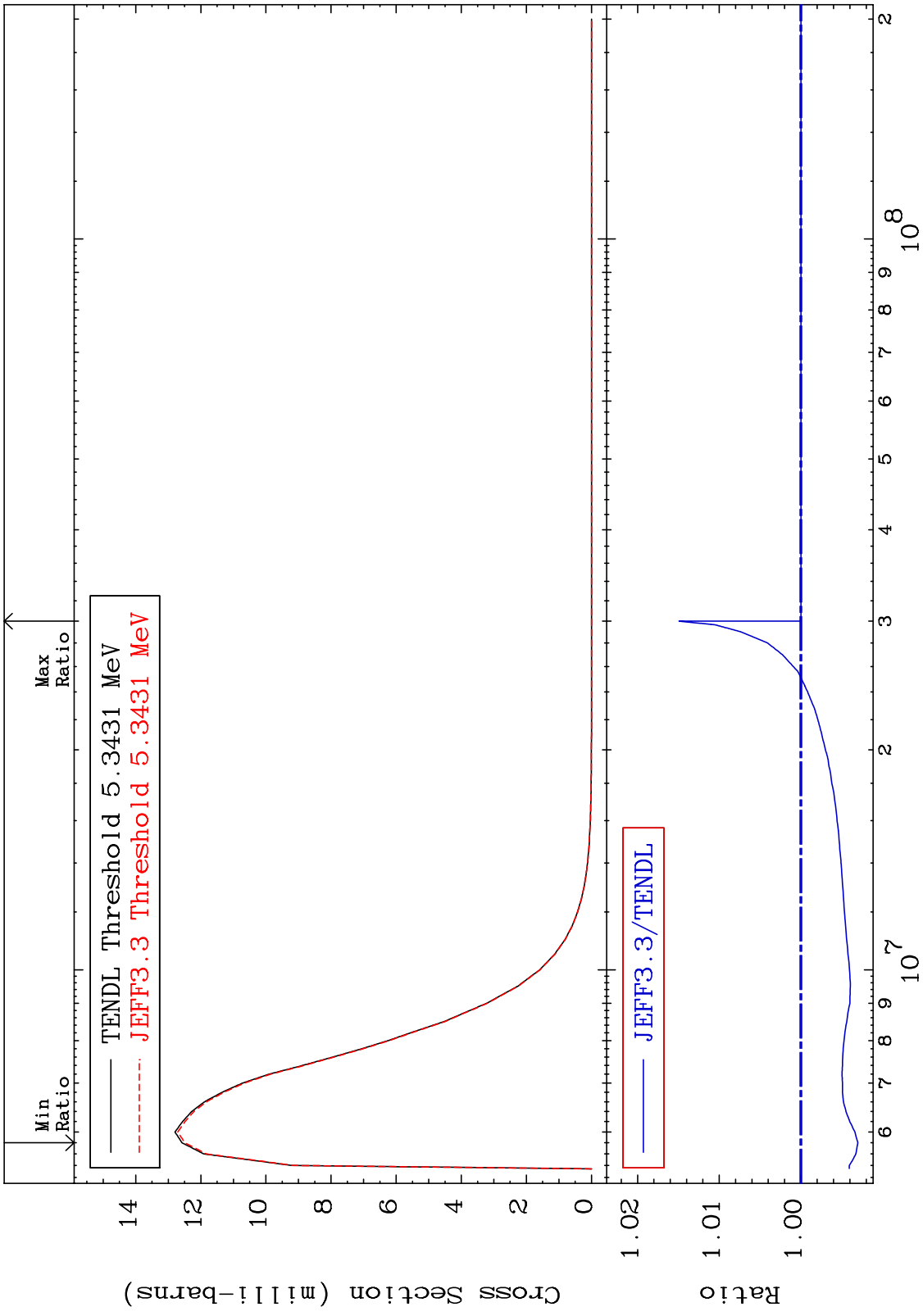
MAT 2025 MT= 53 (n,n') Level Cross Section -0.469 To 0.000 % 20-Ca-40



MAT 2025 MT= 54 (n,n') Level Cross Section -0.169 To 0.573 % 20-Ca-40

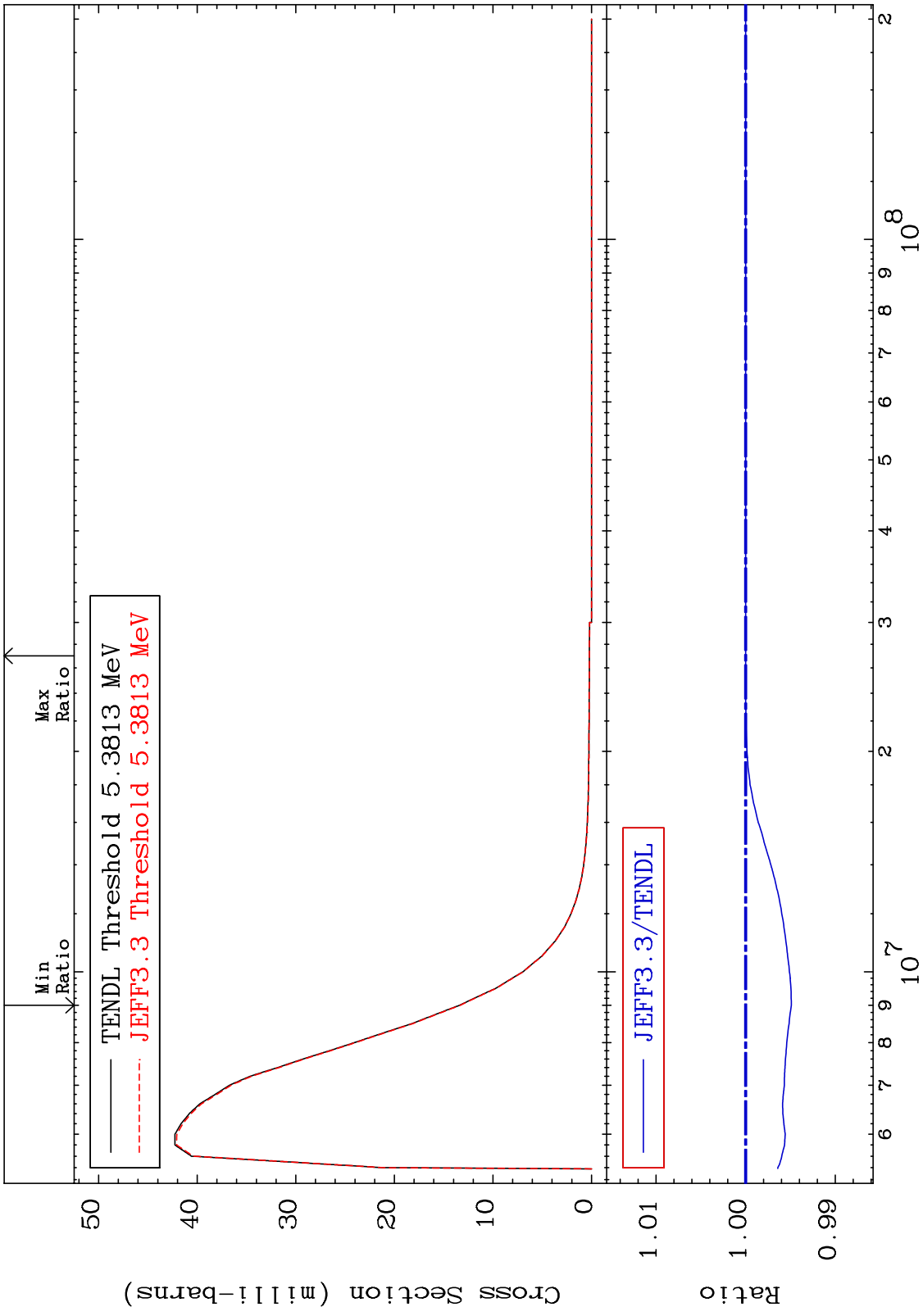


MAT 2025 MT= 55 (n,n') Level Cross Section -0.697 To 1.492 % 20-Ca-40

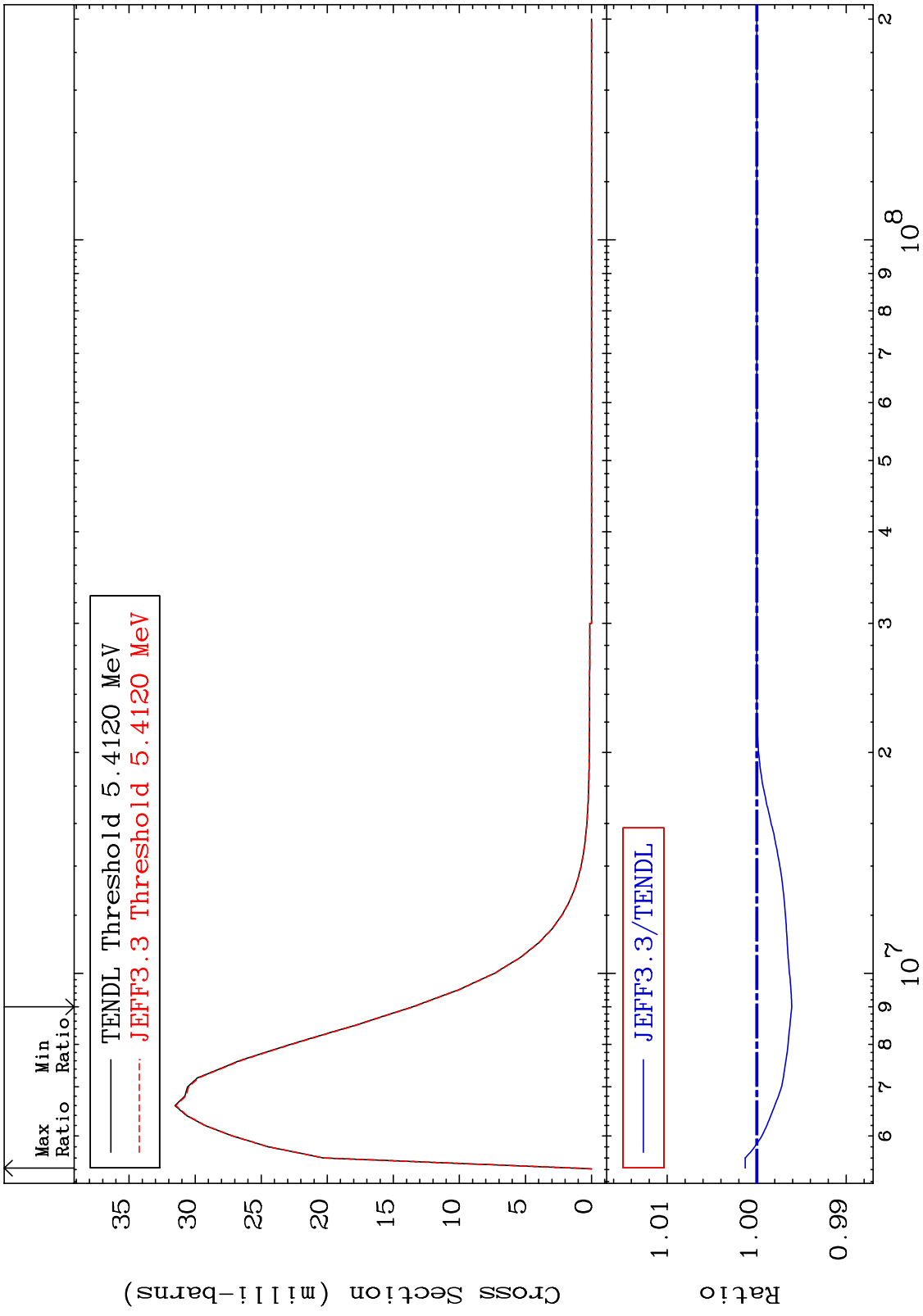


20 Incident Energy (eV) 20-Ca-40

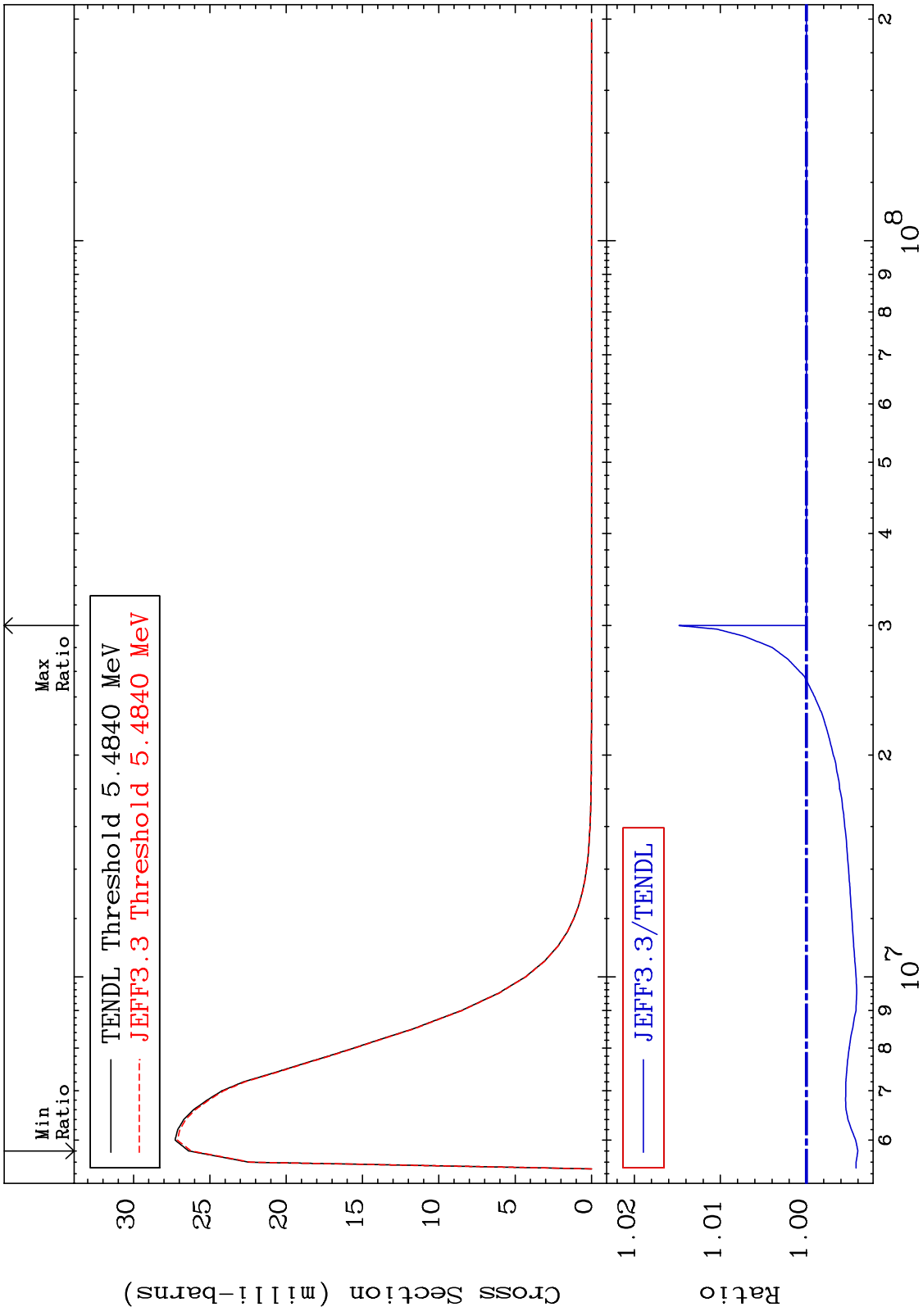
MAT 2025 MT= 56 (n,n') Level Cross Section 20-Ca-40
 -0.509 To 0.000 %



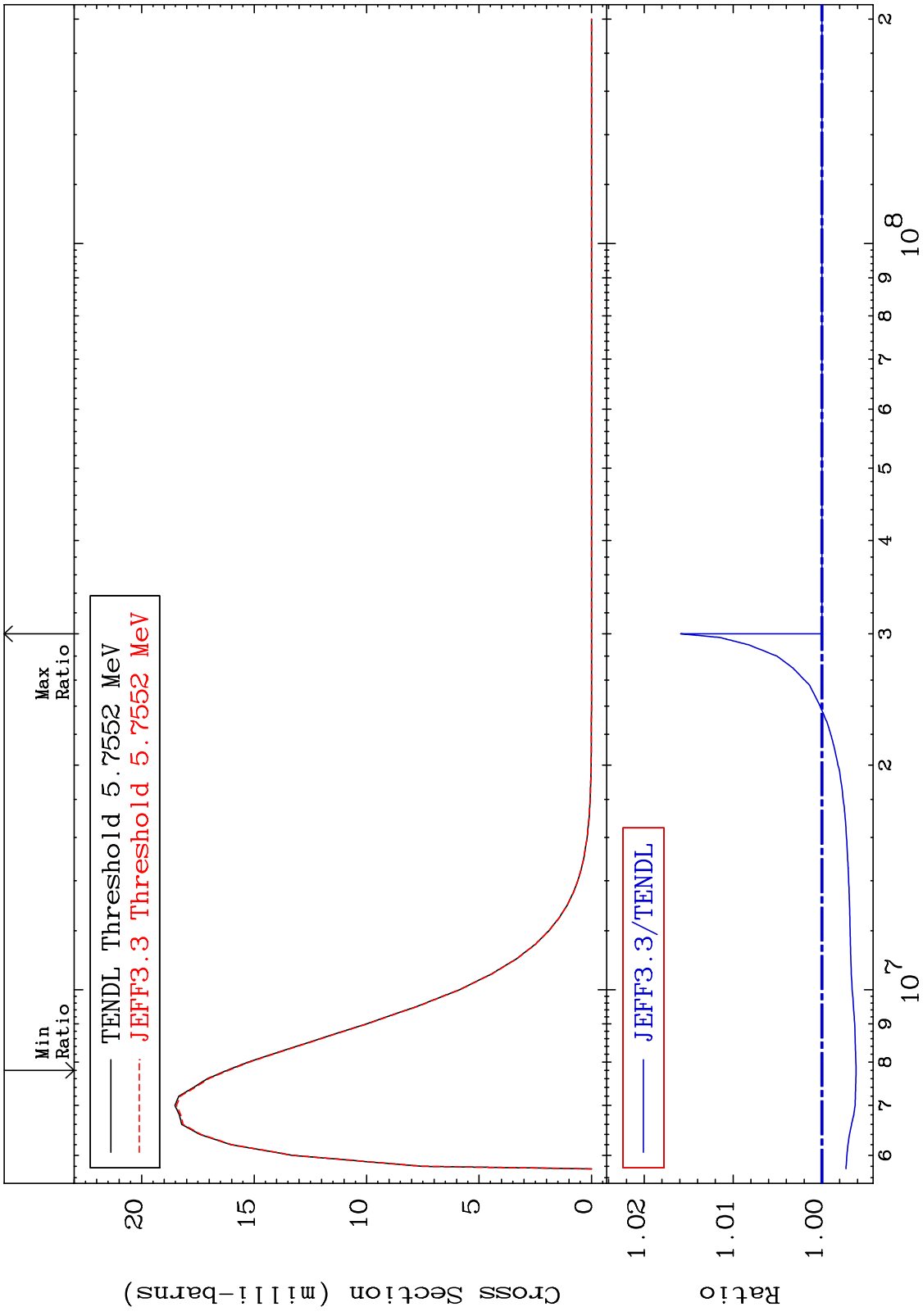
MAT 2025 MT= 57 (n,n') Level Cross Section 20-Ca-40 -0.391 To 0.130 %



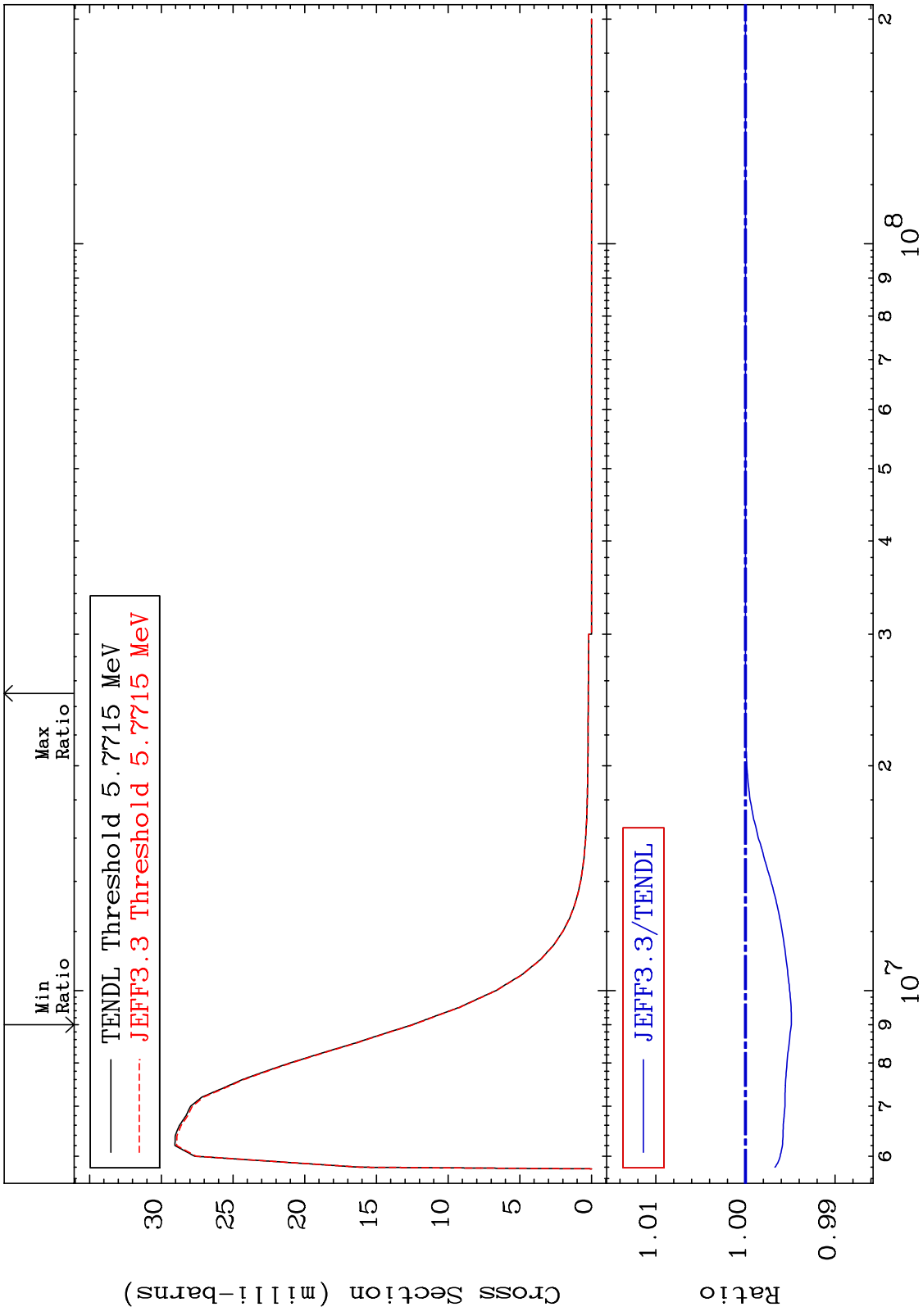
MAT 2025 MT= 58 (n,n') Level Cross Section -0.597 To 1.480 % 20-Ca-40



MAT 2025 MT= 59 (n,n') Level Cross Section -0.384 To 1.588 % 20-Ca-40

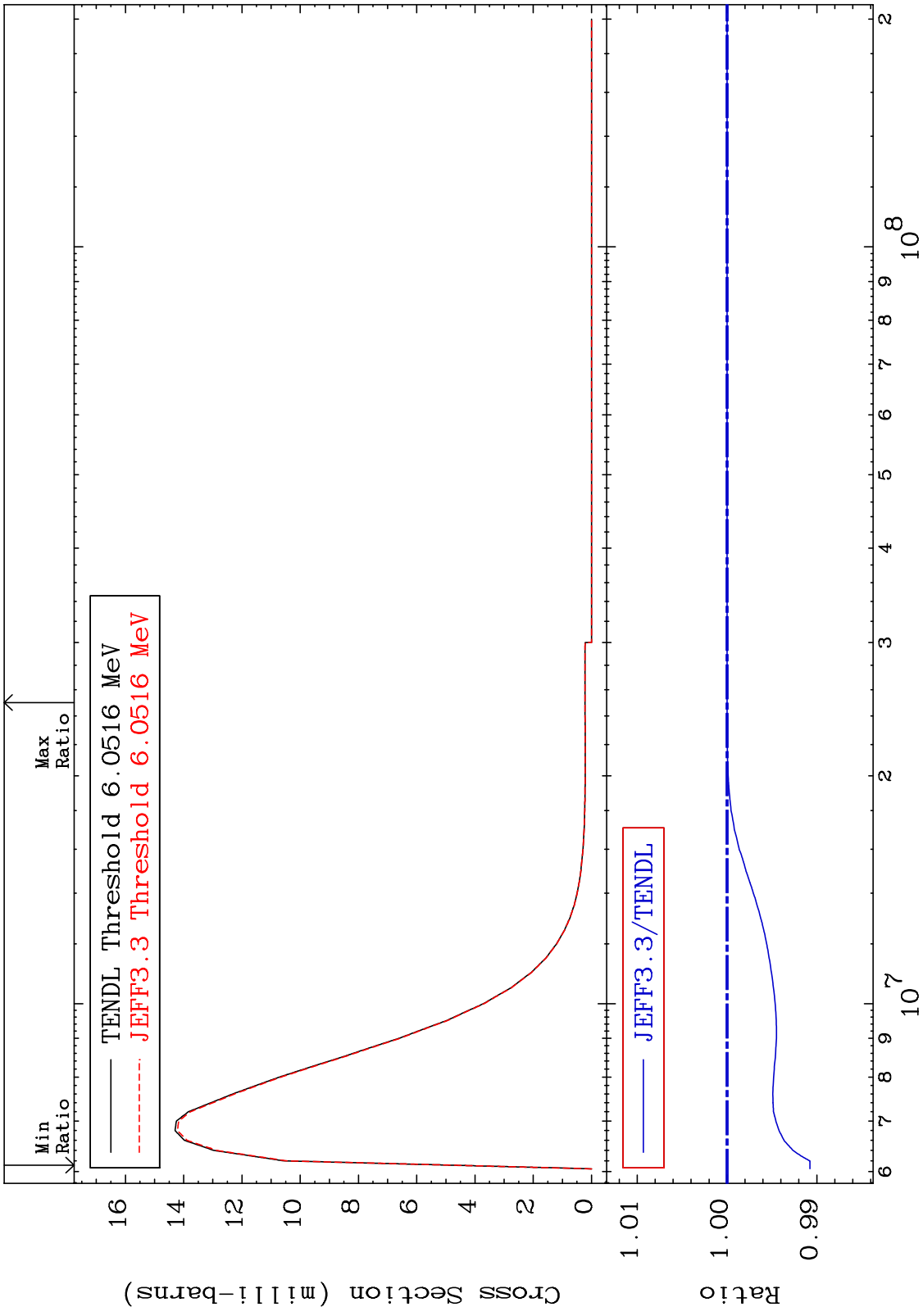


MAT 2025 MT= 60 (n,n') Level Cross Section 20-Ca-40
 -0.512 To 0.000 %

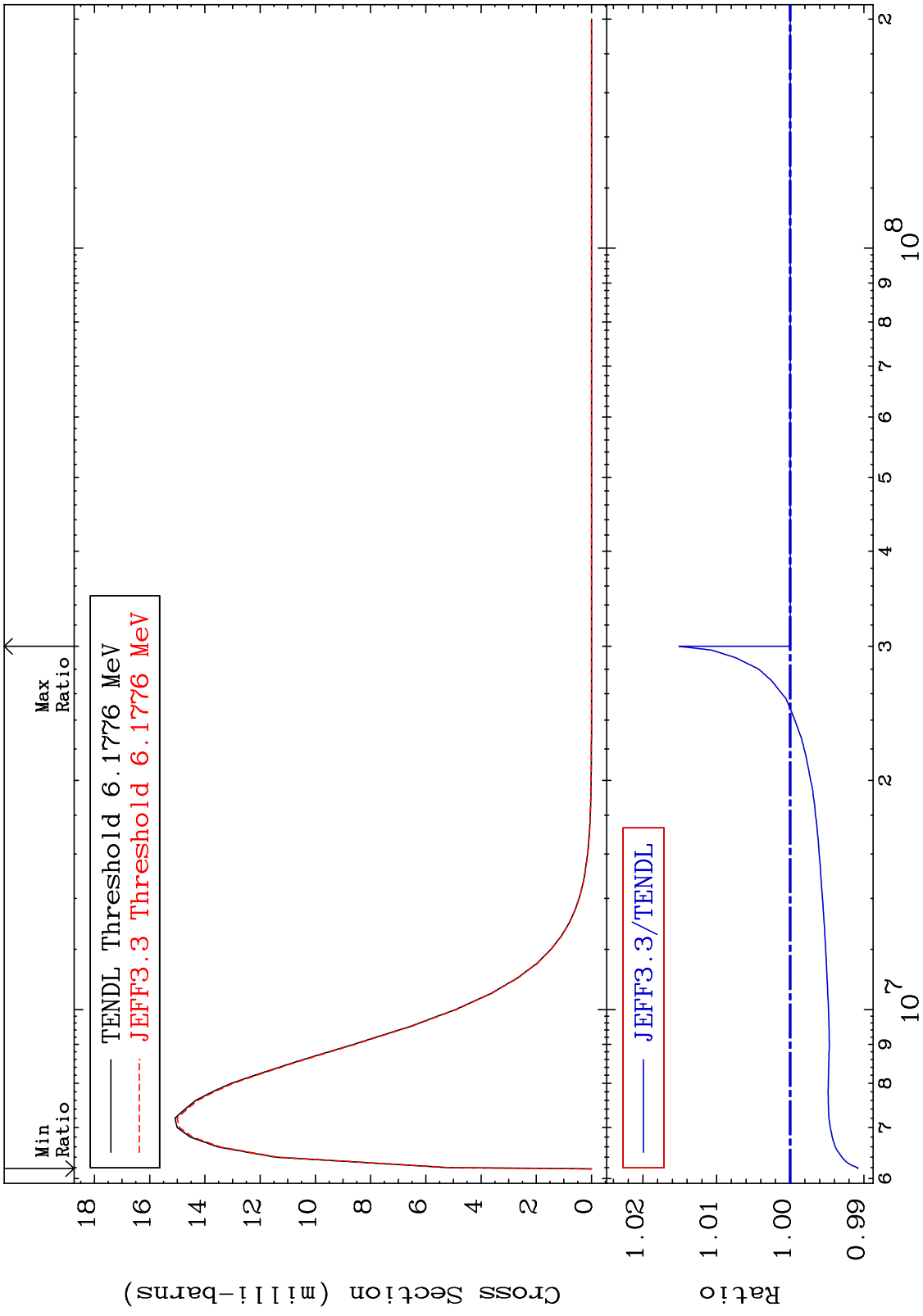


25 20-Ca-40 Incident Energy (eV)

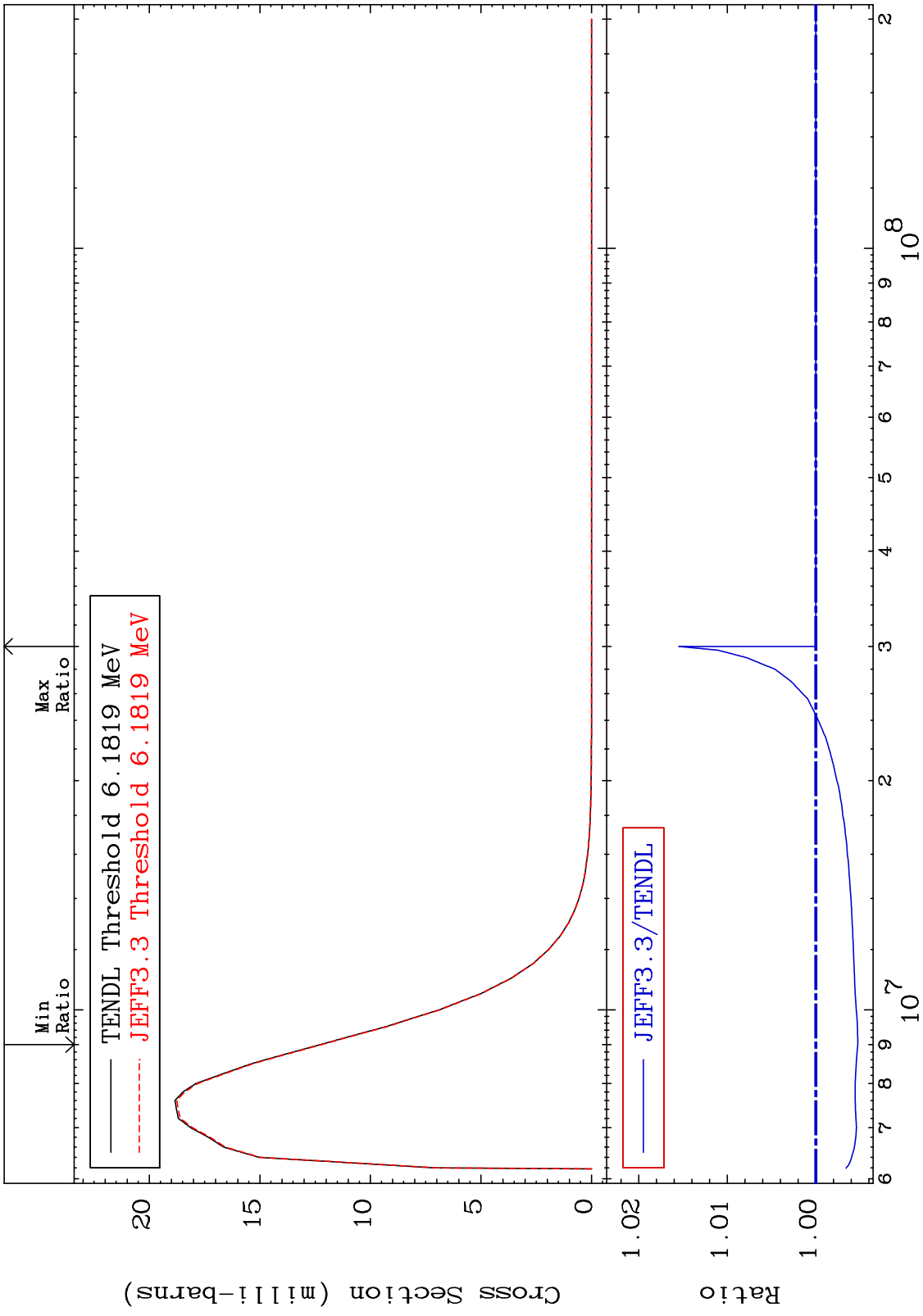
MAT 2025 MT= 61 (n,n') Level Cross Section -0.922 To 0.000 % 20-Ca-40



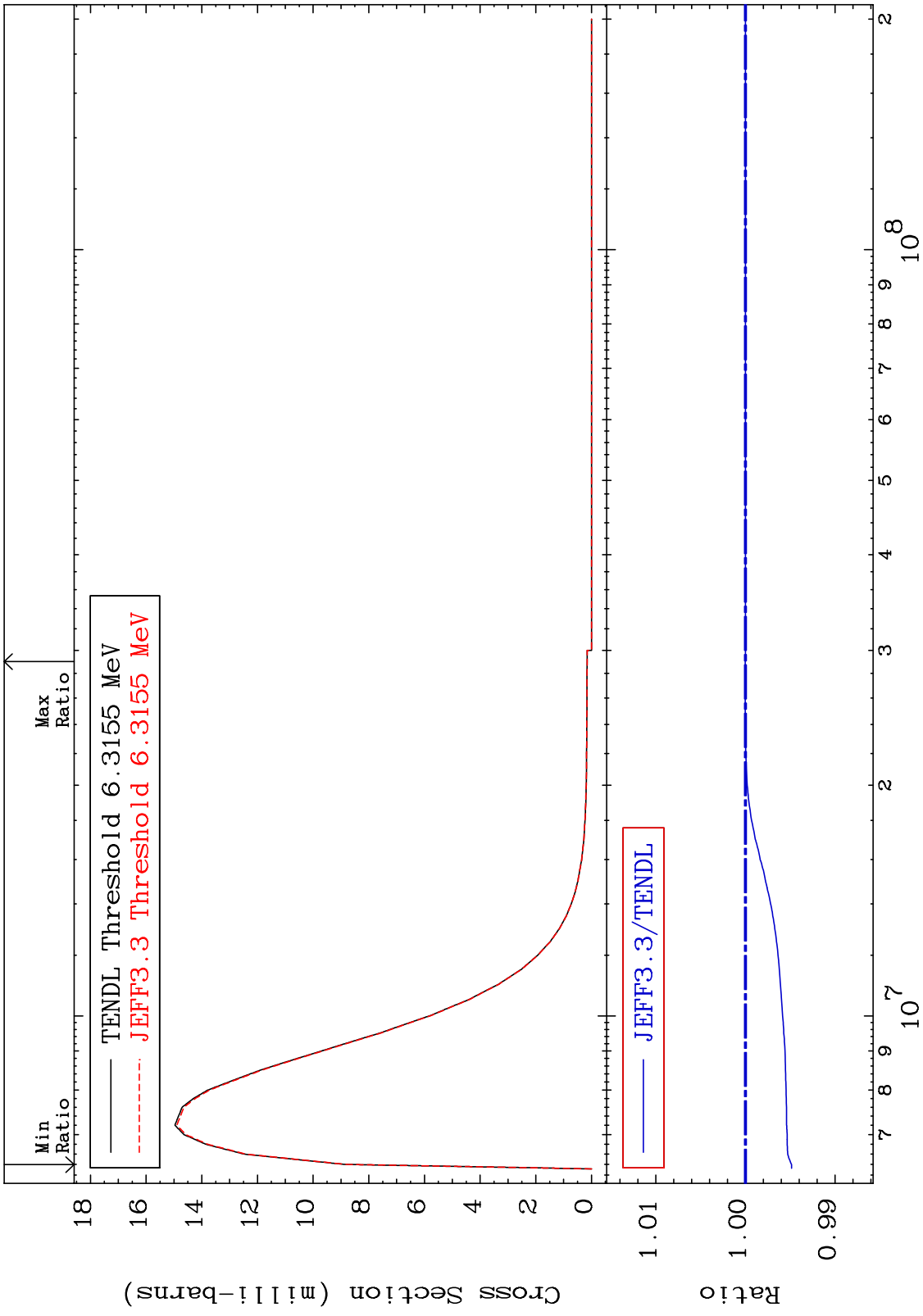
MAT 2025 MT= 62 (n,n') Level Cross Section -0.918 To 1.510 % 20-Ca-40



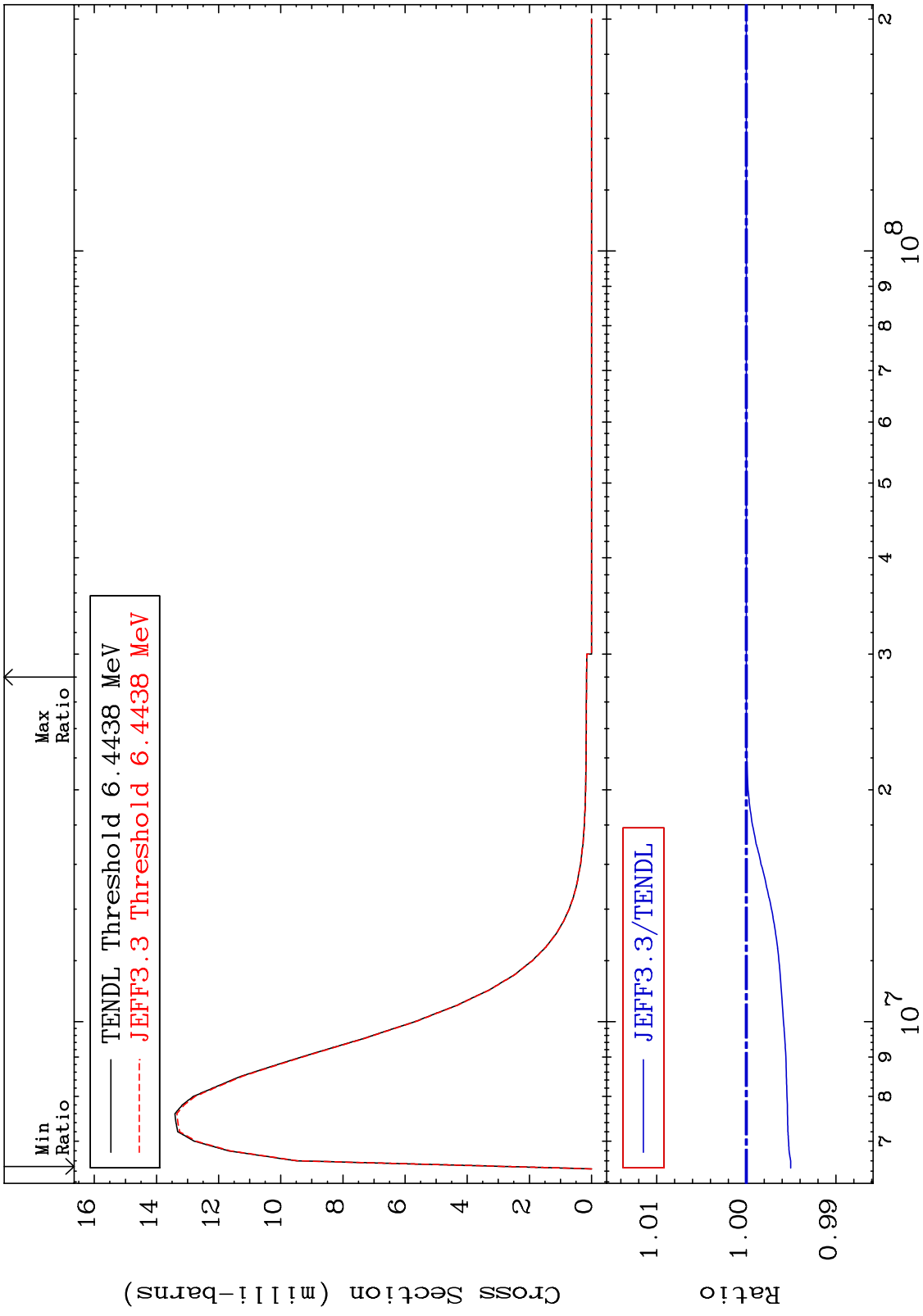
MAT 2025 MT= 63 (n,n') Level Cross Section -0.474 To 1.544 % 20-Ca-40



MAT 2025 MT= 64 (n,n') Level Cross Section 20-Ca-40 -0.516 To 0.000 %

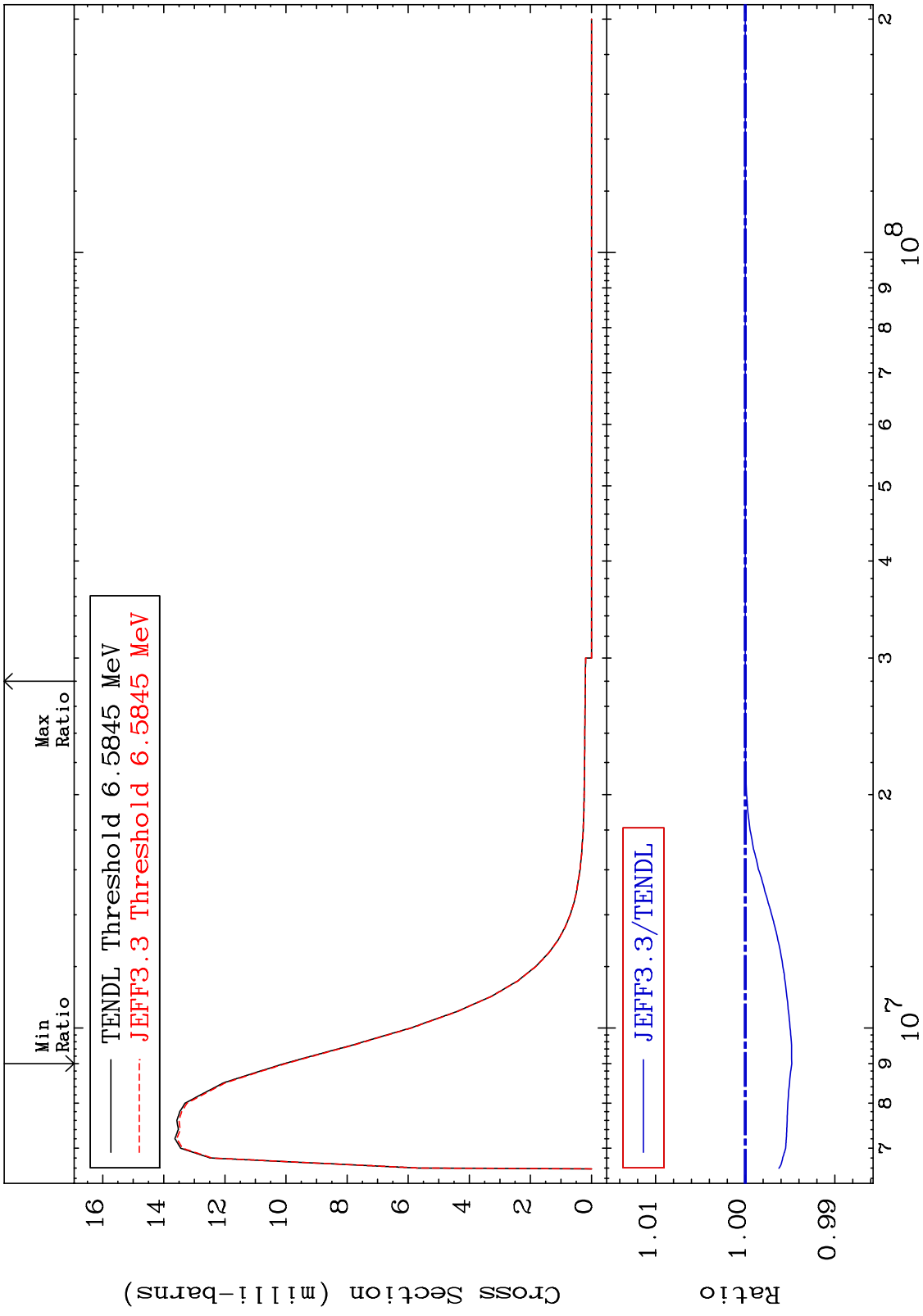


MAT 2025 MT= 65 (n,n') Level Cross Section -0.496 To 0.000 % 20-Ca-40

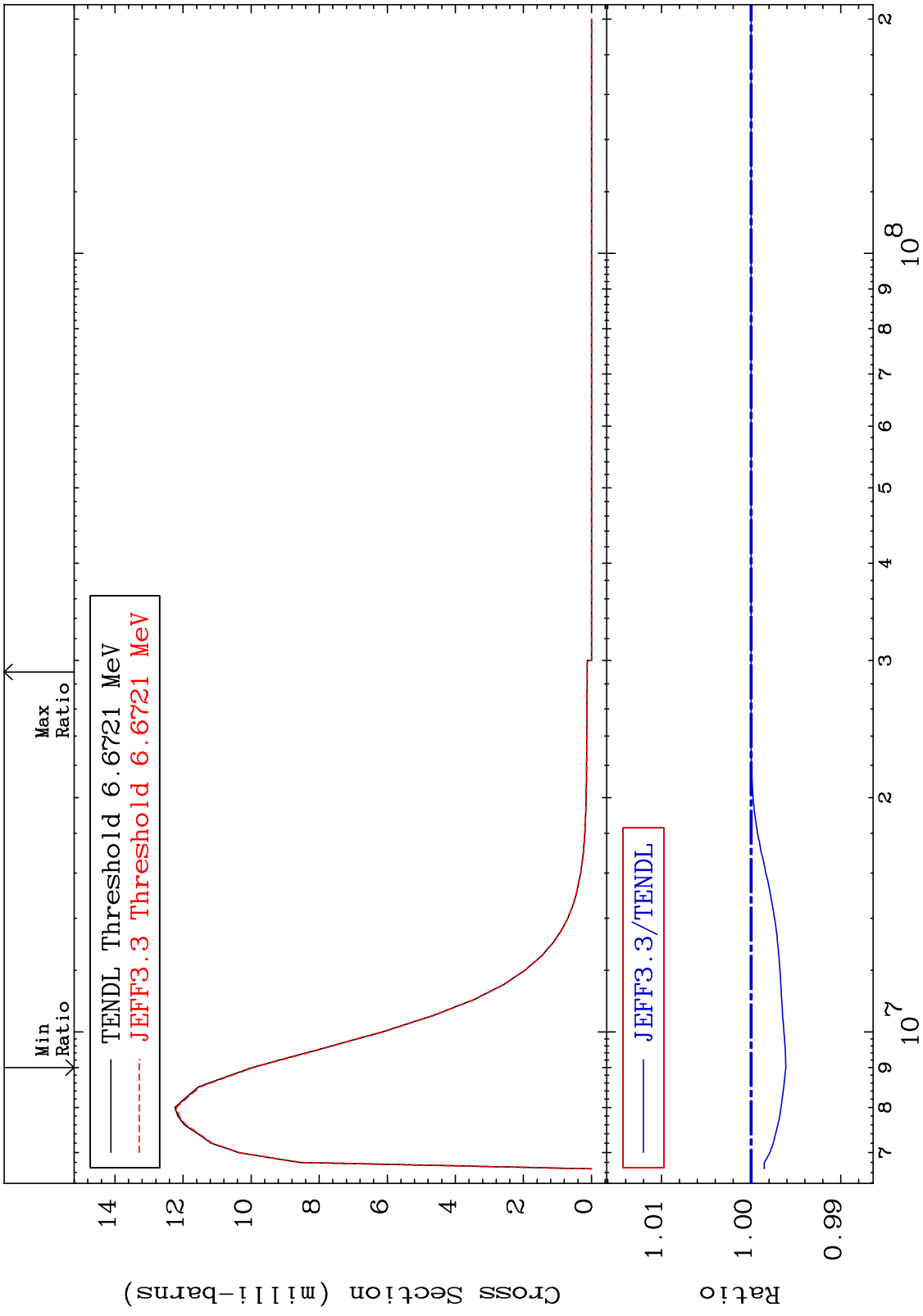


30 Incident Energy (eV) 20-Ca-40

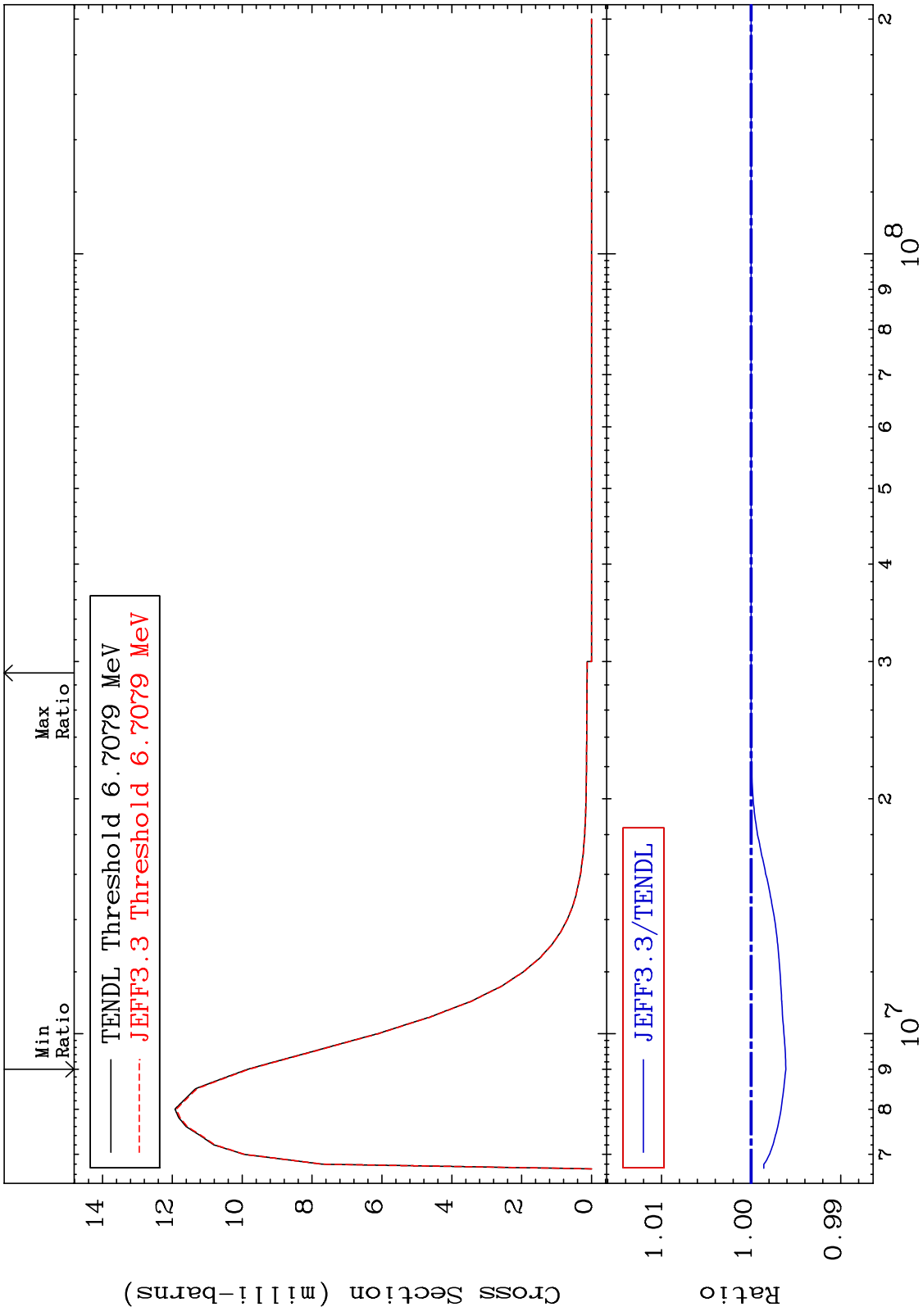
MAT 2025 MT= 66 (n,n') Level Cross Section -0.518 To 0.000 % 20-Ca-40



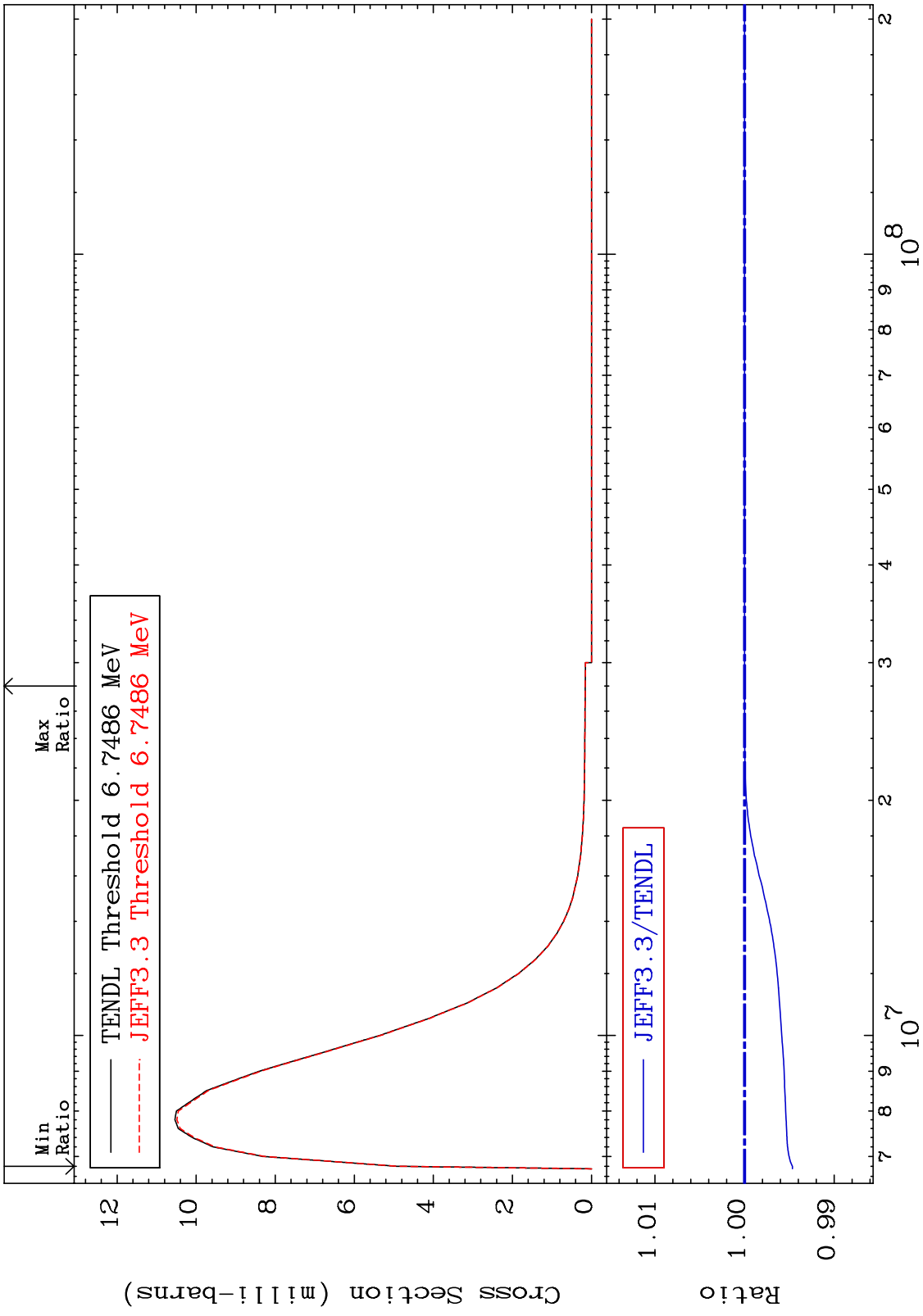
MAT 2025 MT= 67 (n,n') Level Cross Section 20-Ca-40 -0.388 To 0.000 %



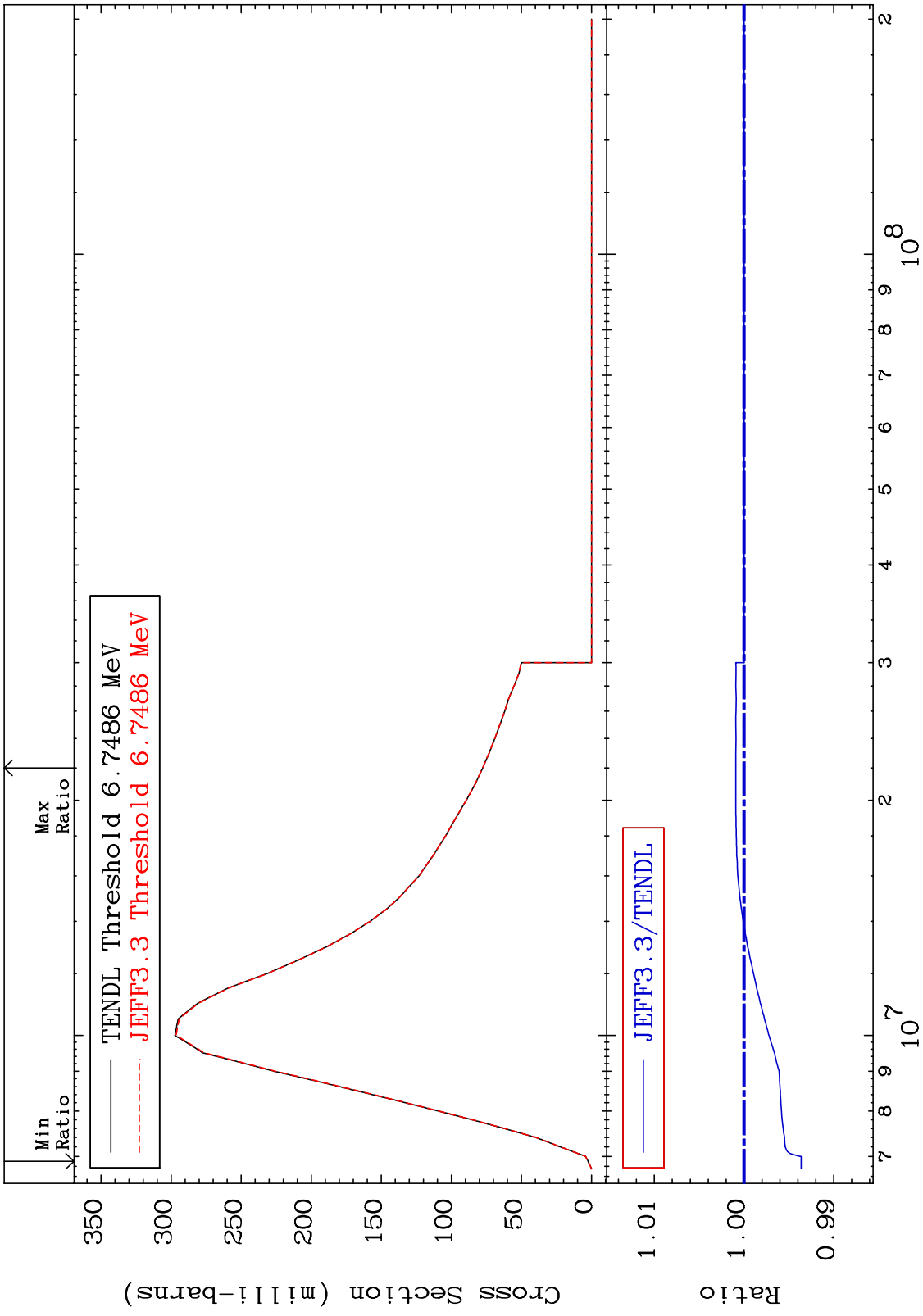
MAT 2025 MT= 68 (n,n') Level Cross Section 20-Ca-40 -0.388 To 0.000 %



MAT 2025 MT= 69 (n,n') Level Cross Section -0.534 To 0.000 % 20-Ca-40



MAT 2025 (n,n') Continuum Cross Section 20-Ca-40 -0.637 To 0.092 %



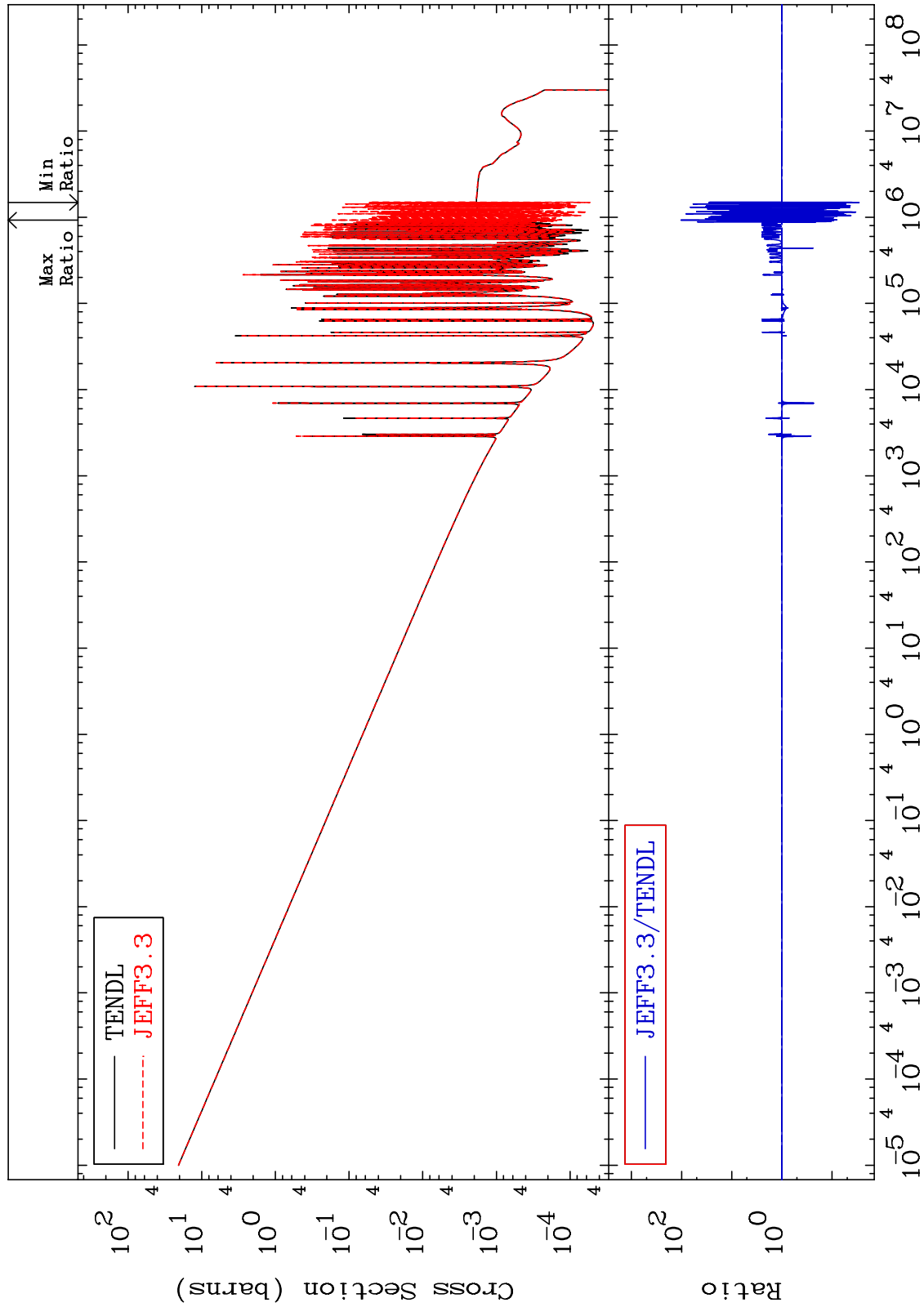
MAT 2025

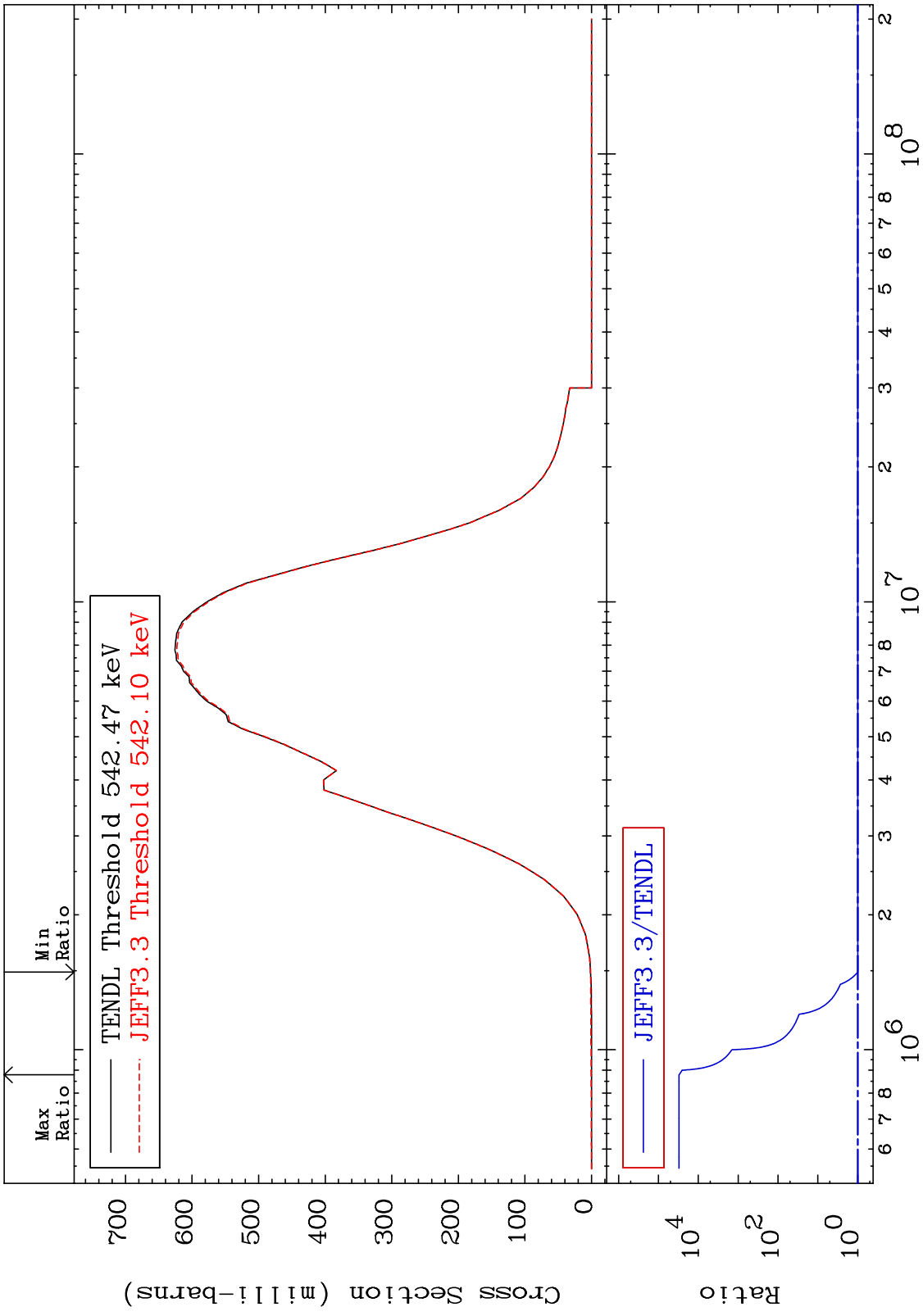
(n, γ)

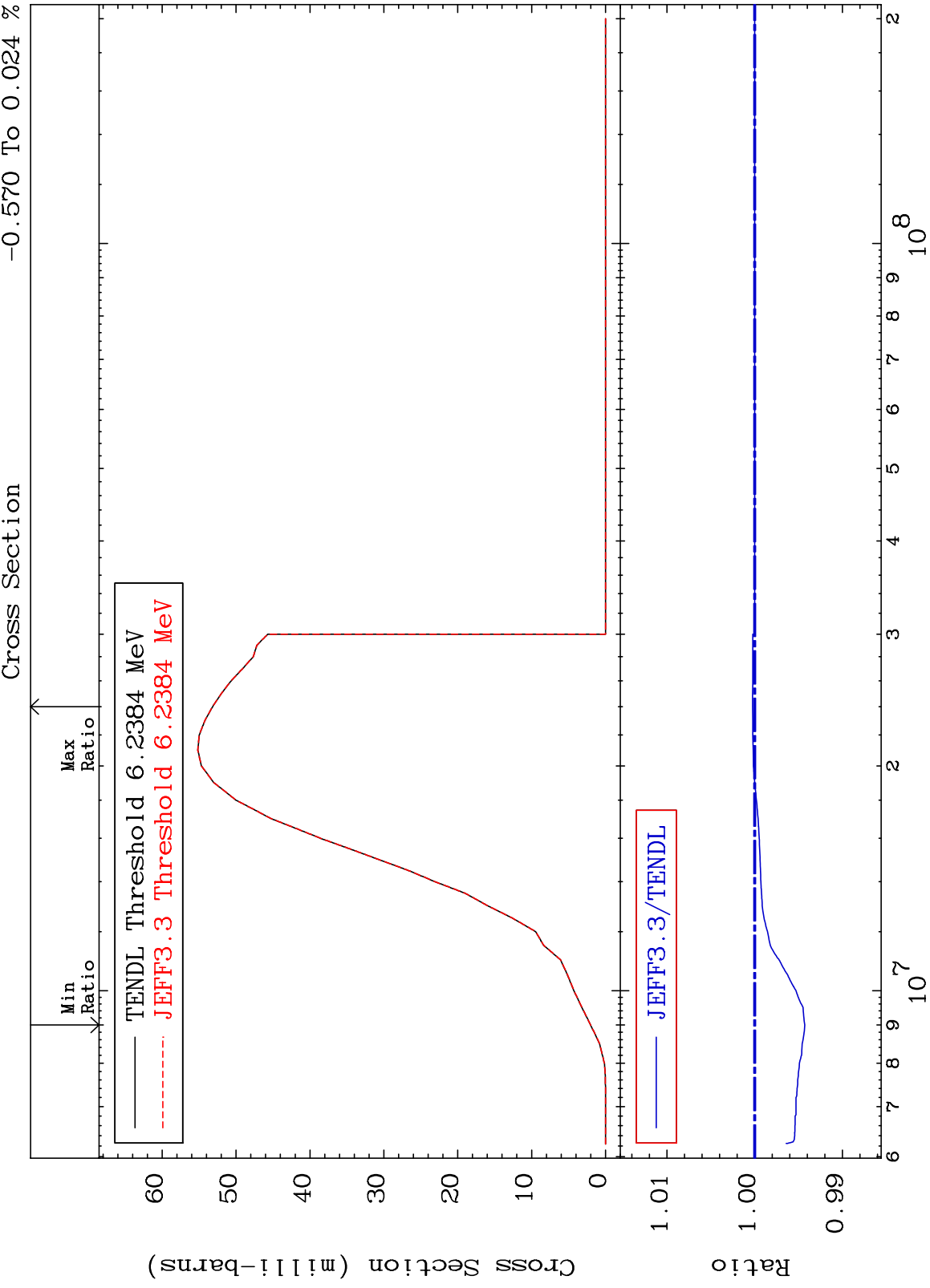
20-Ca-40

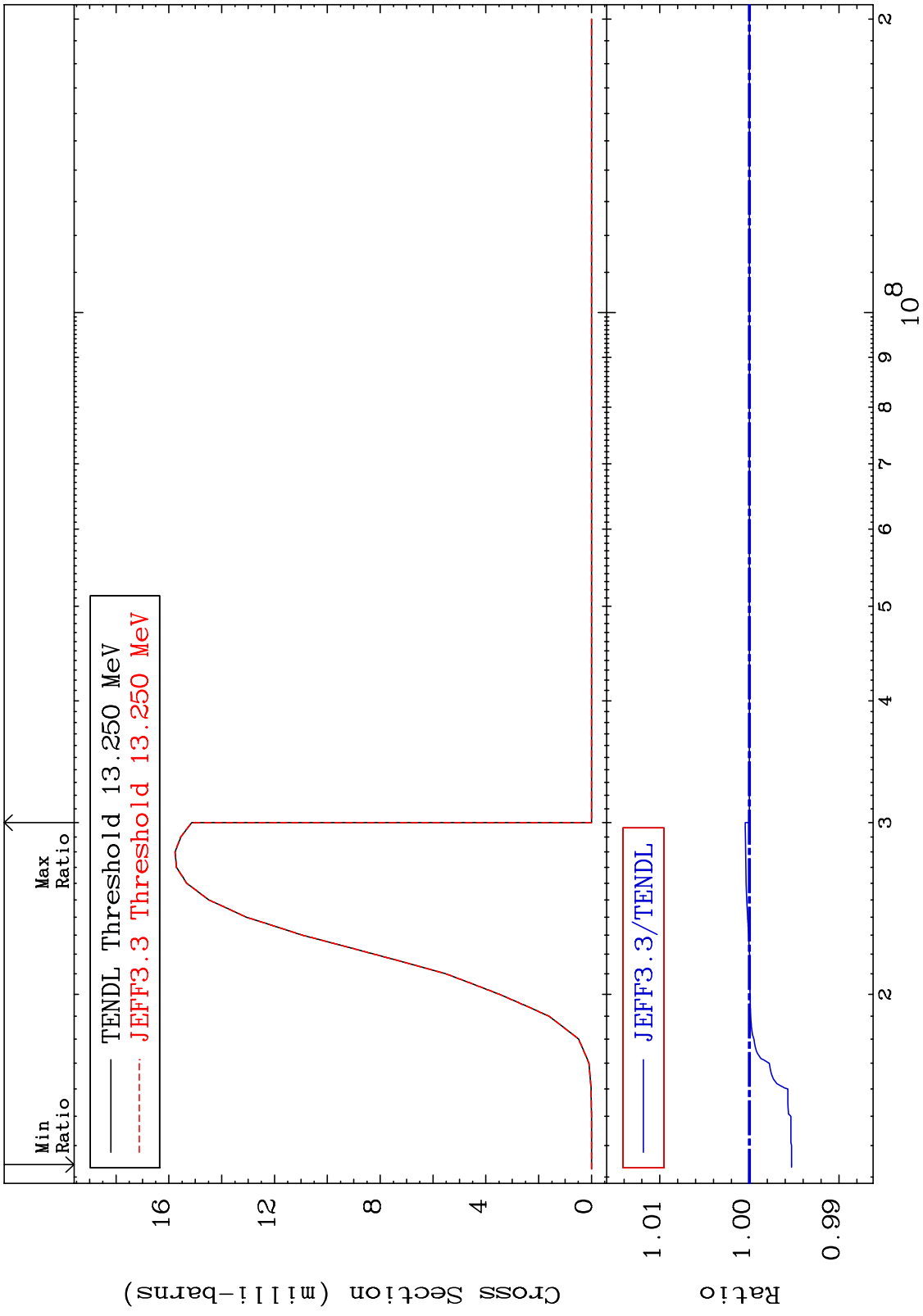
Cross Section

-97.10 To 9999. %

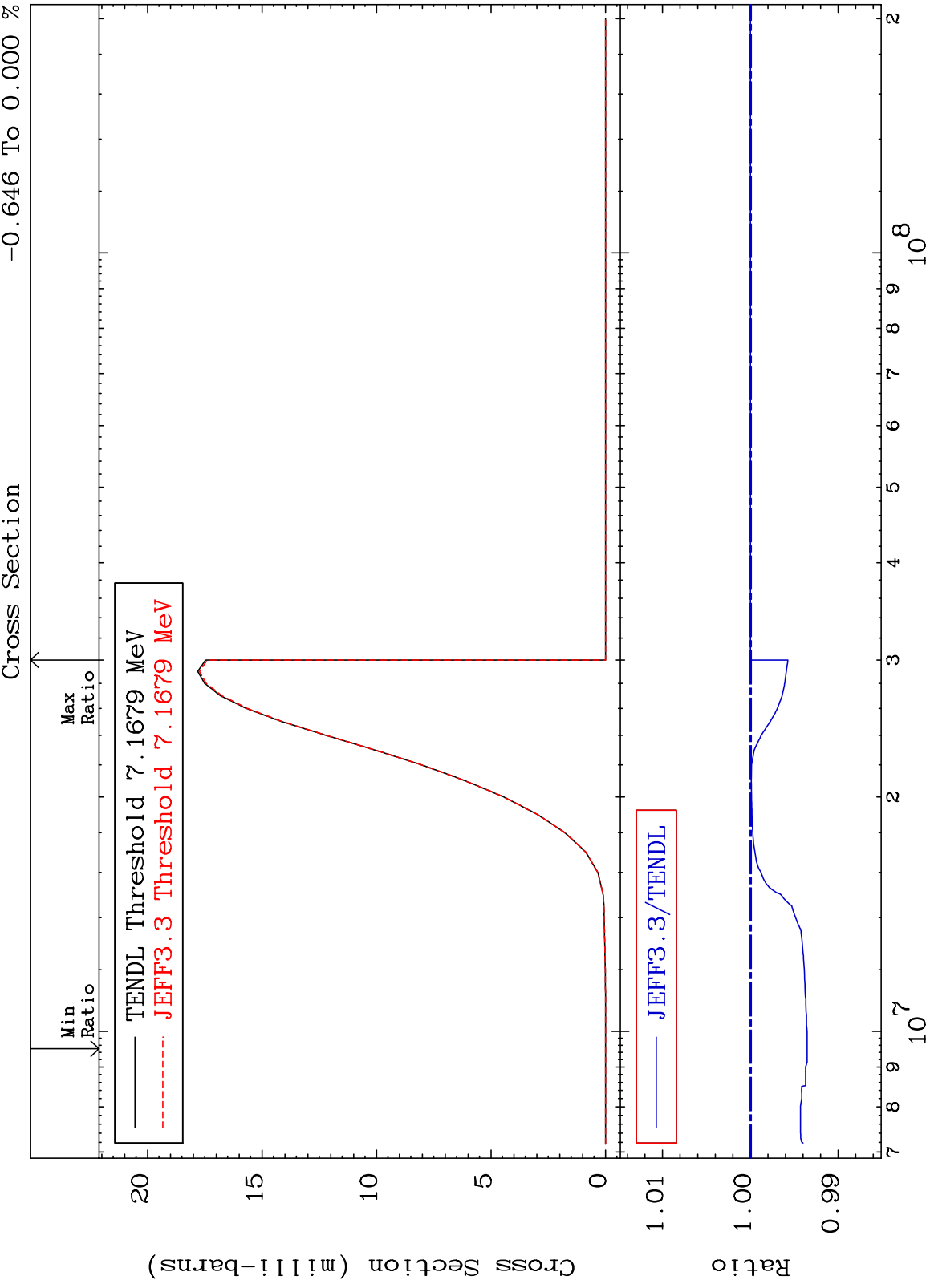








MAT 2025 (n, He-3) 20-Ca-40 -0.646 To 0.000 %



40 Incident Energy (eV) 20-Ca-40

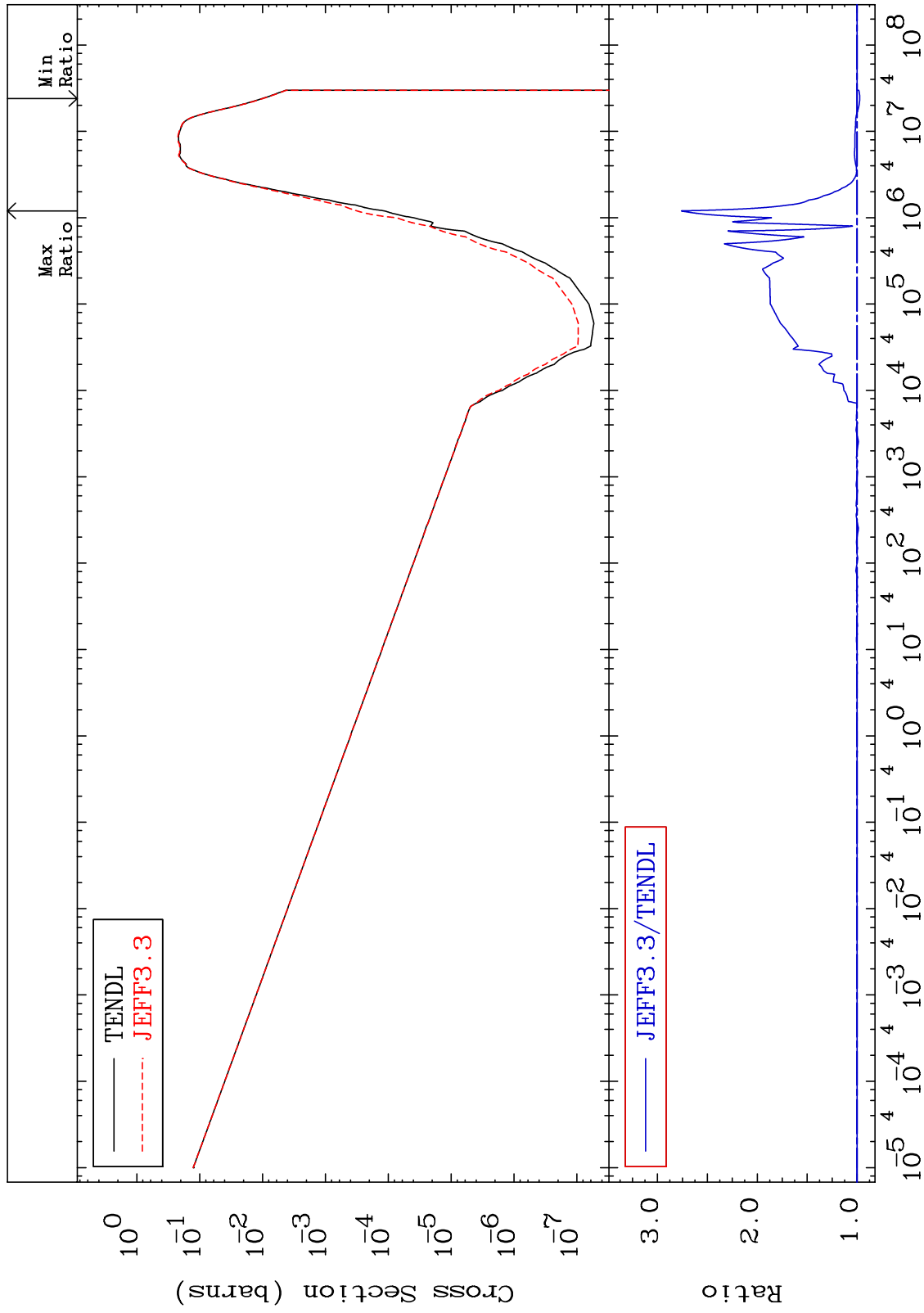
MAT 2025

(n, α)

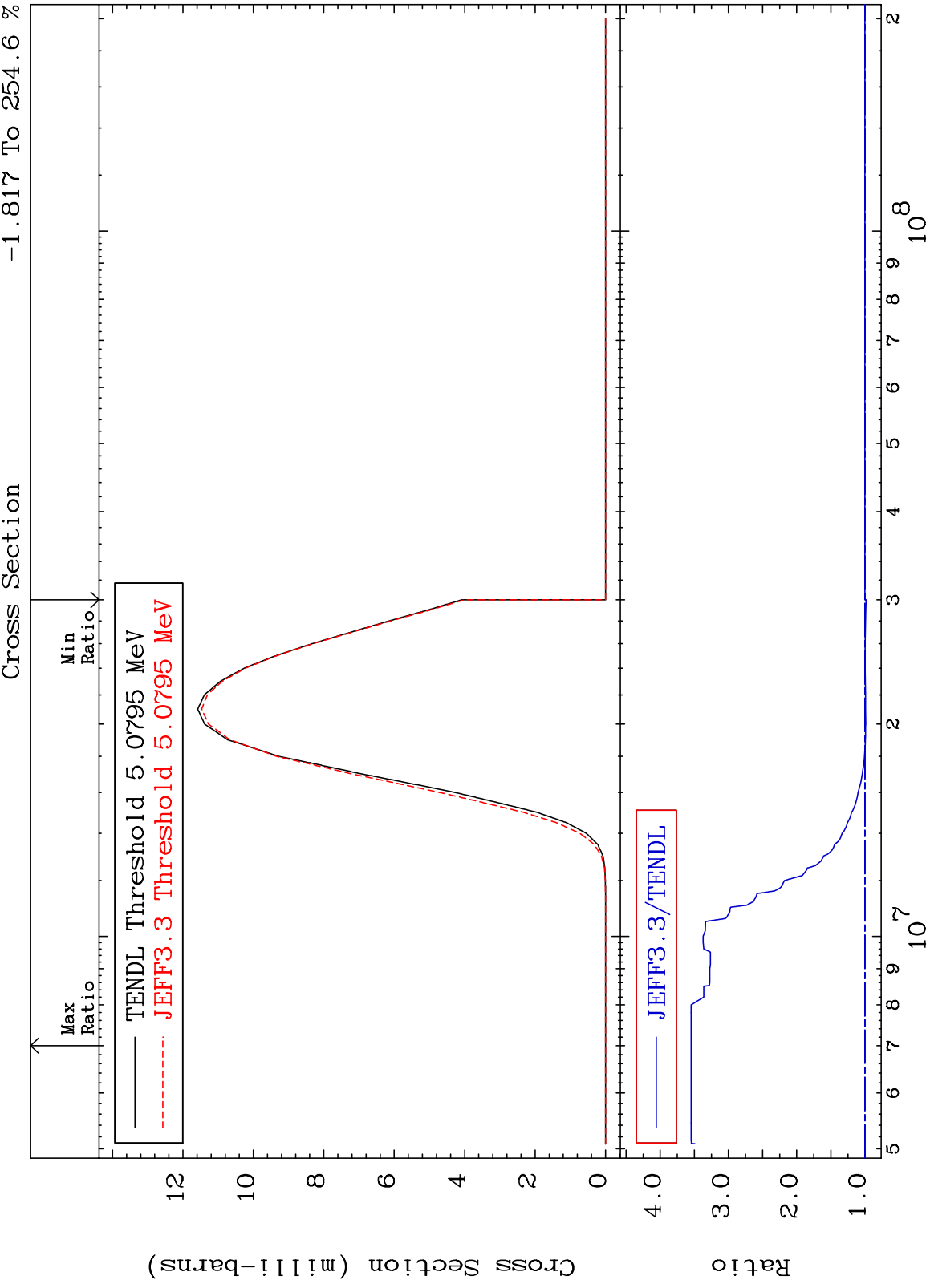
20-Ca-40

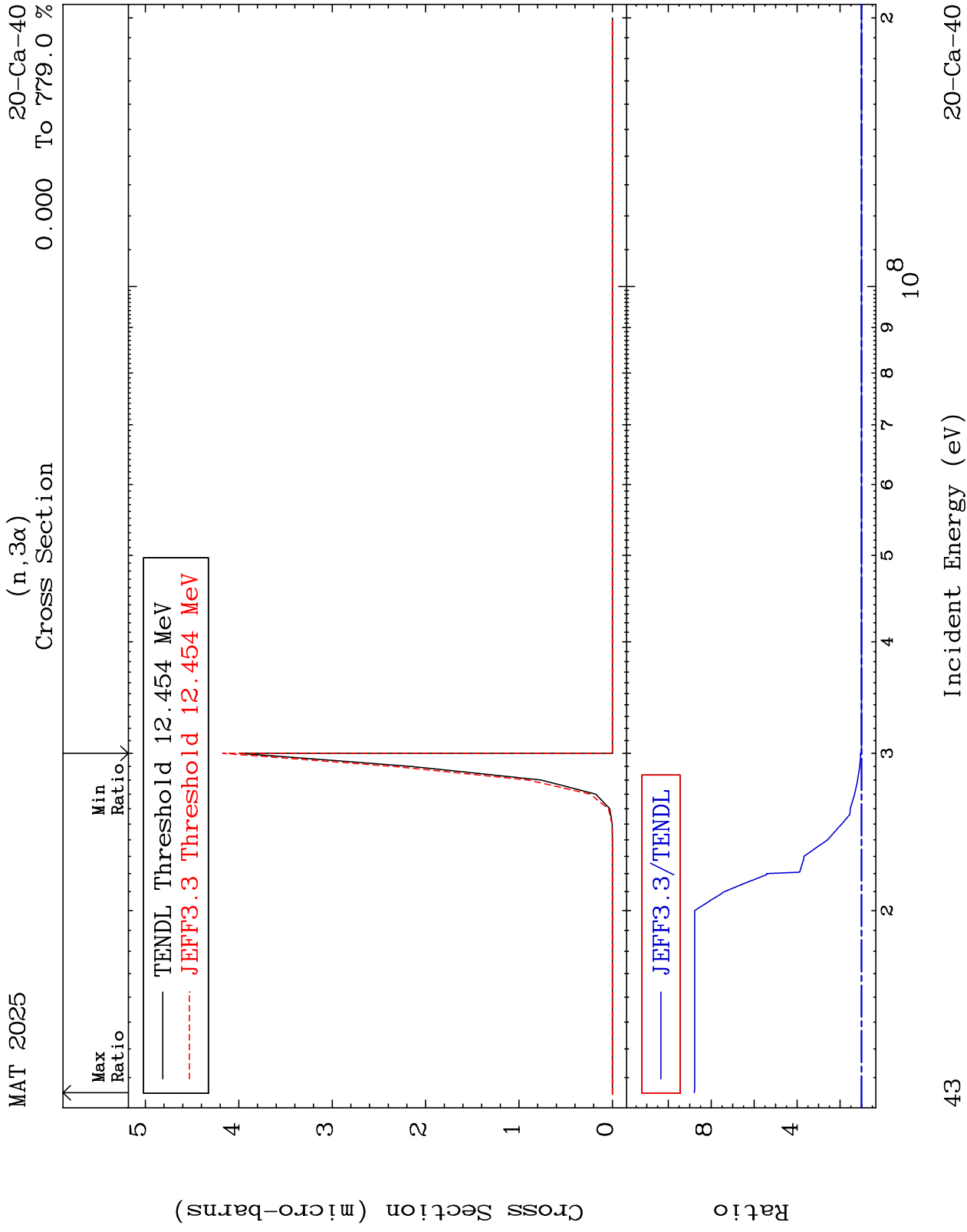
Cross Section

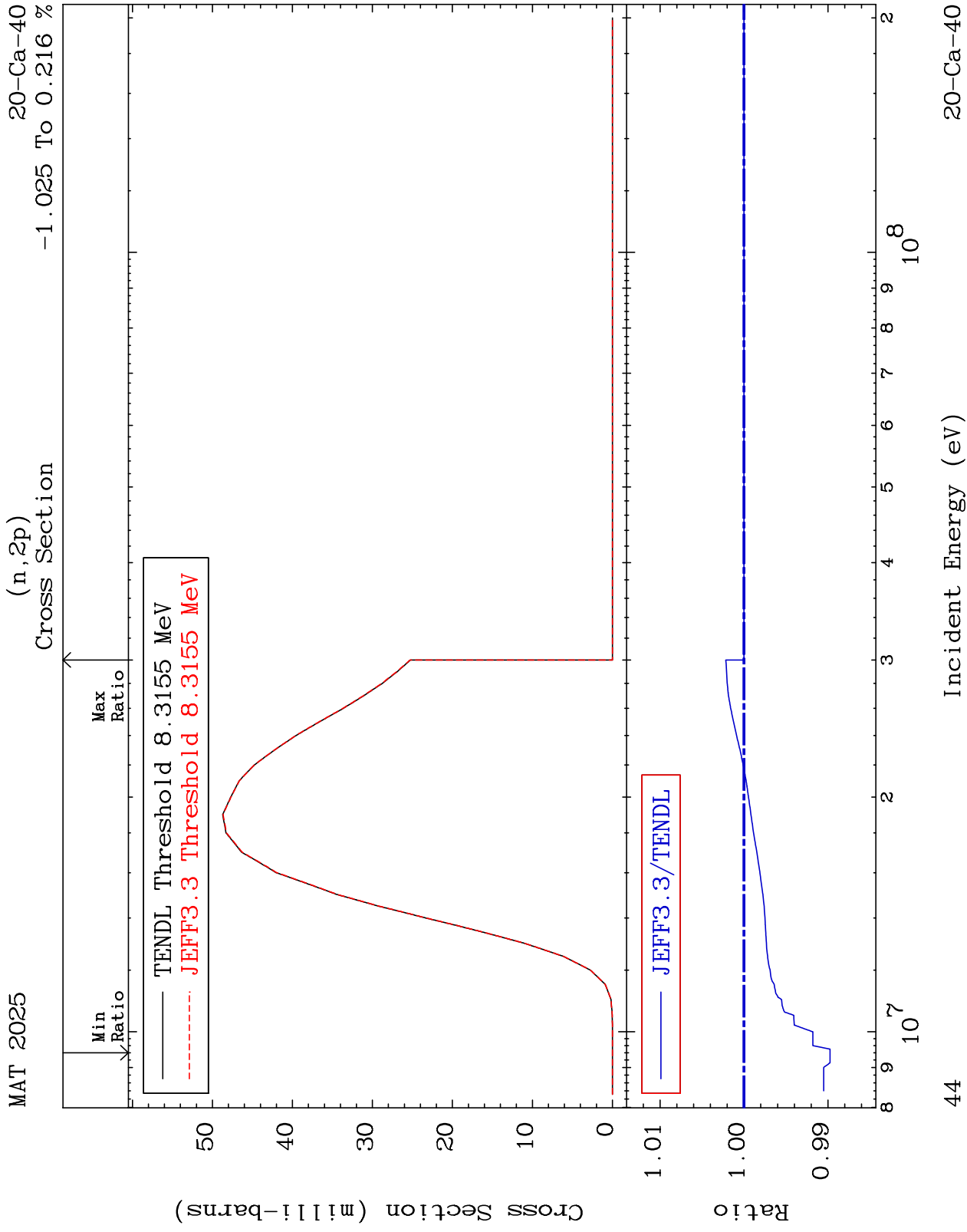
-2.709 To 176.2 %



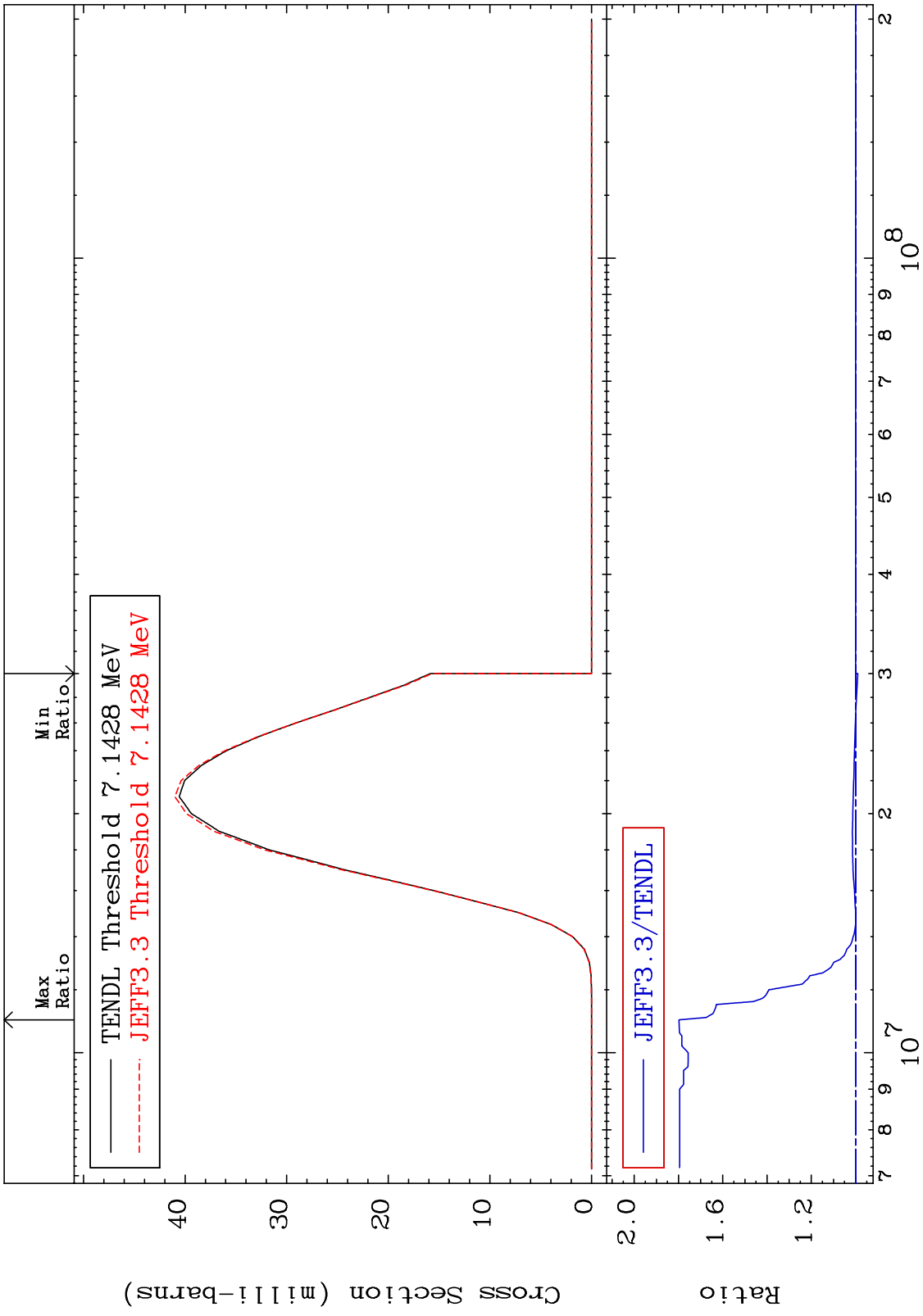
MAT 2025 $(n, 2\alpha)$ 20-Ca-40 -1.817 To 254.6 %



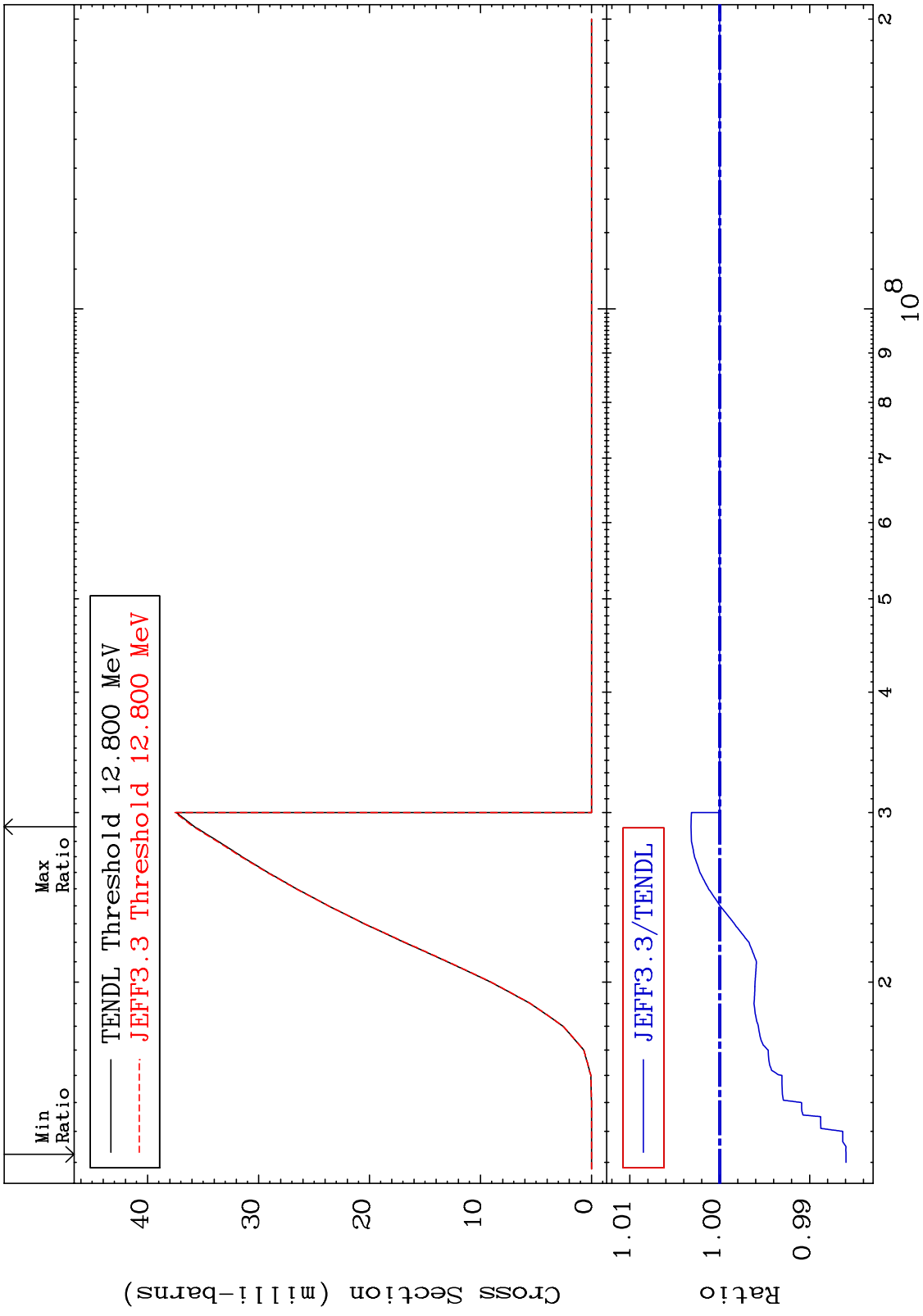




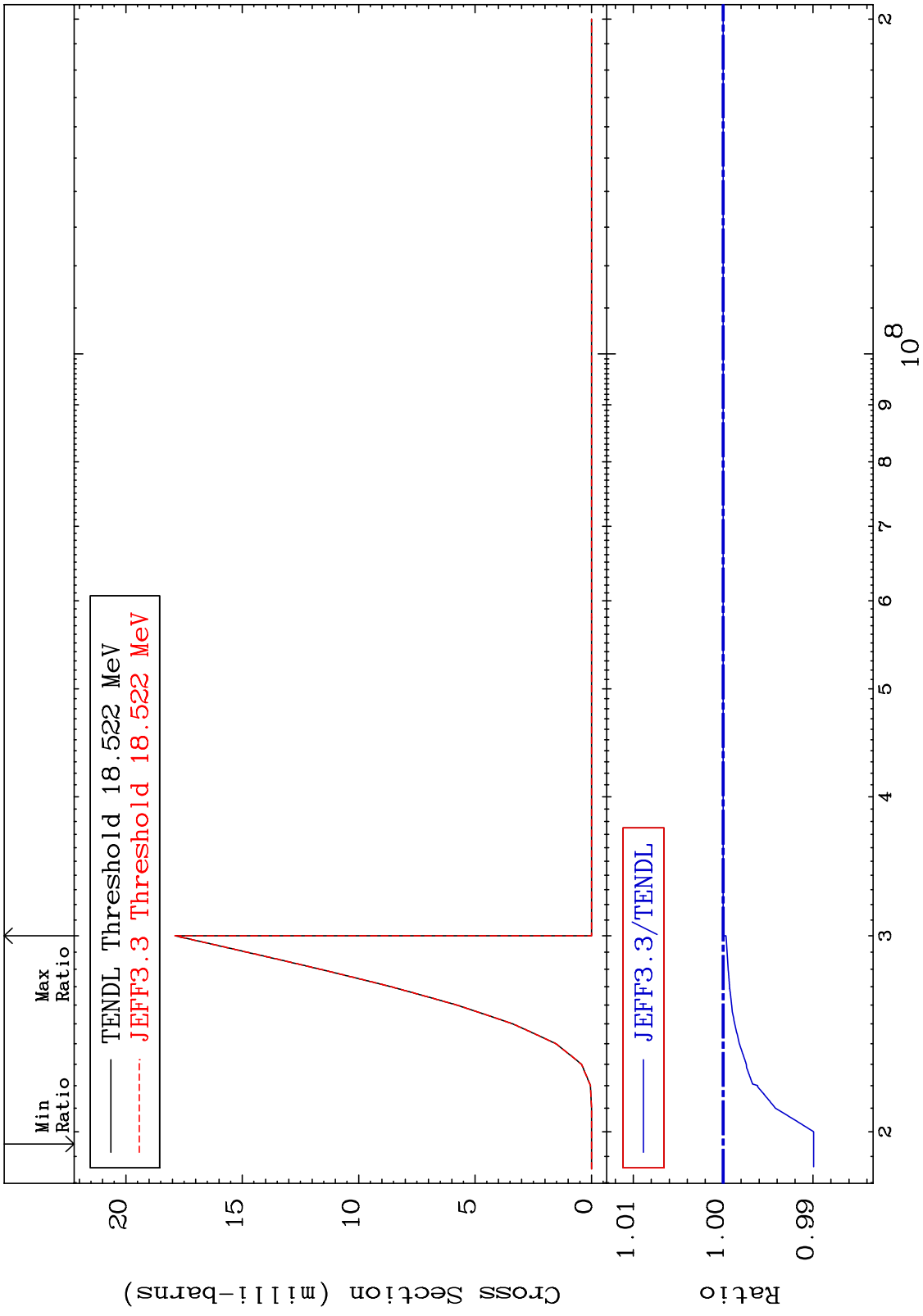
MAT 2025 (n,p) α 20-Ca-40
Cross Section -1.020 To 79.77 %



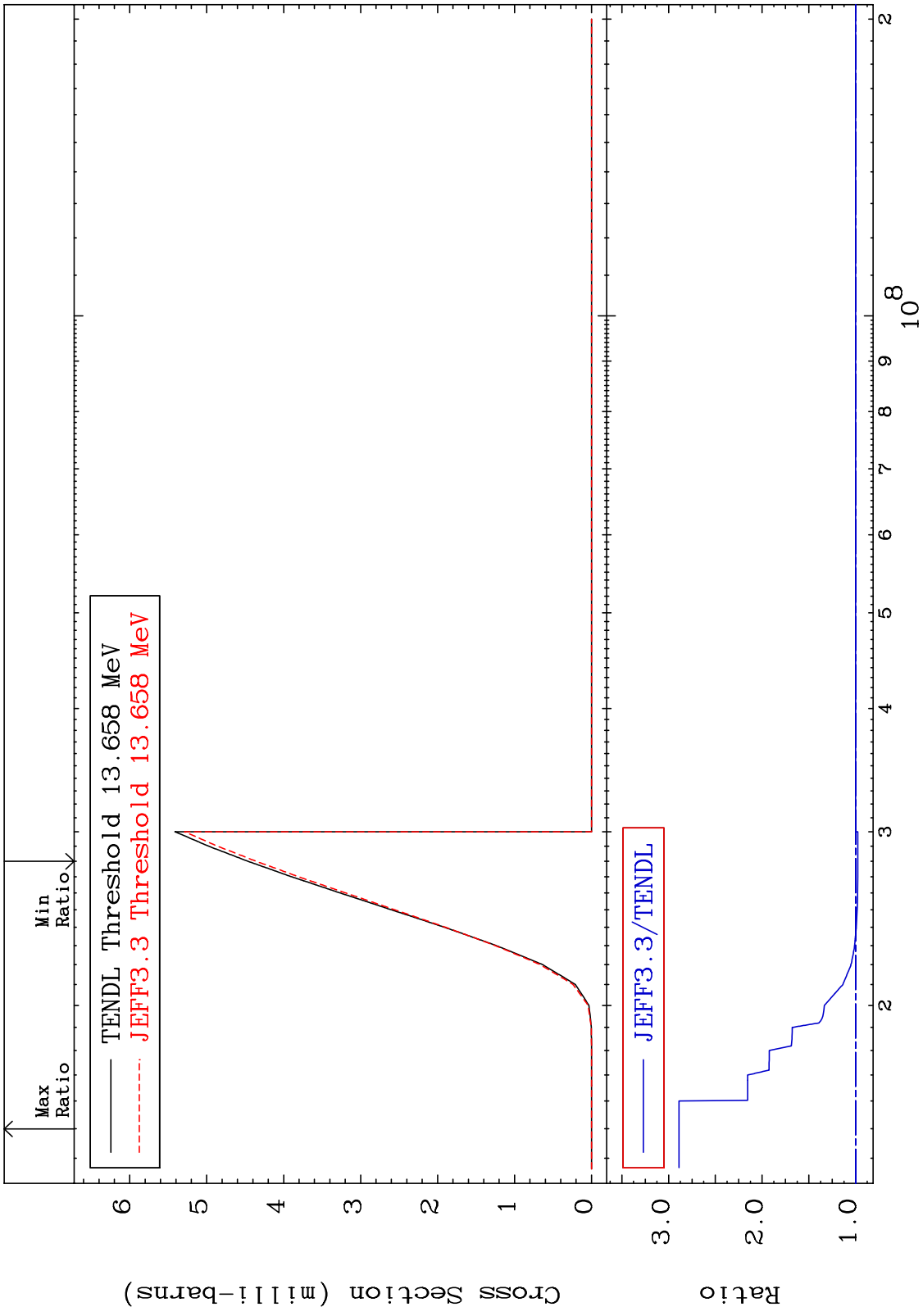
MAT 2025 (n,p) d
Cross Section
20-Ca-40
-1.404 To 0.320 %



MAT 2025 (n,p) t 20-Ca-40
 Cross Section -1.007 To 0.000 %



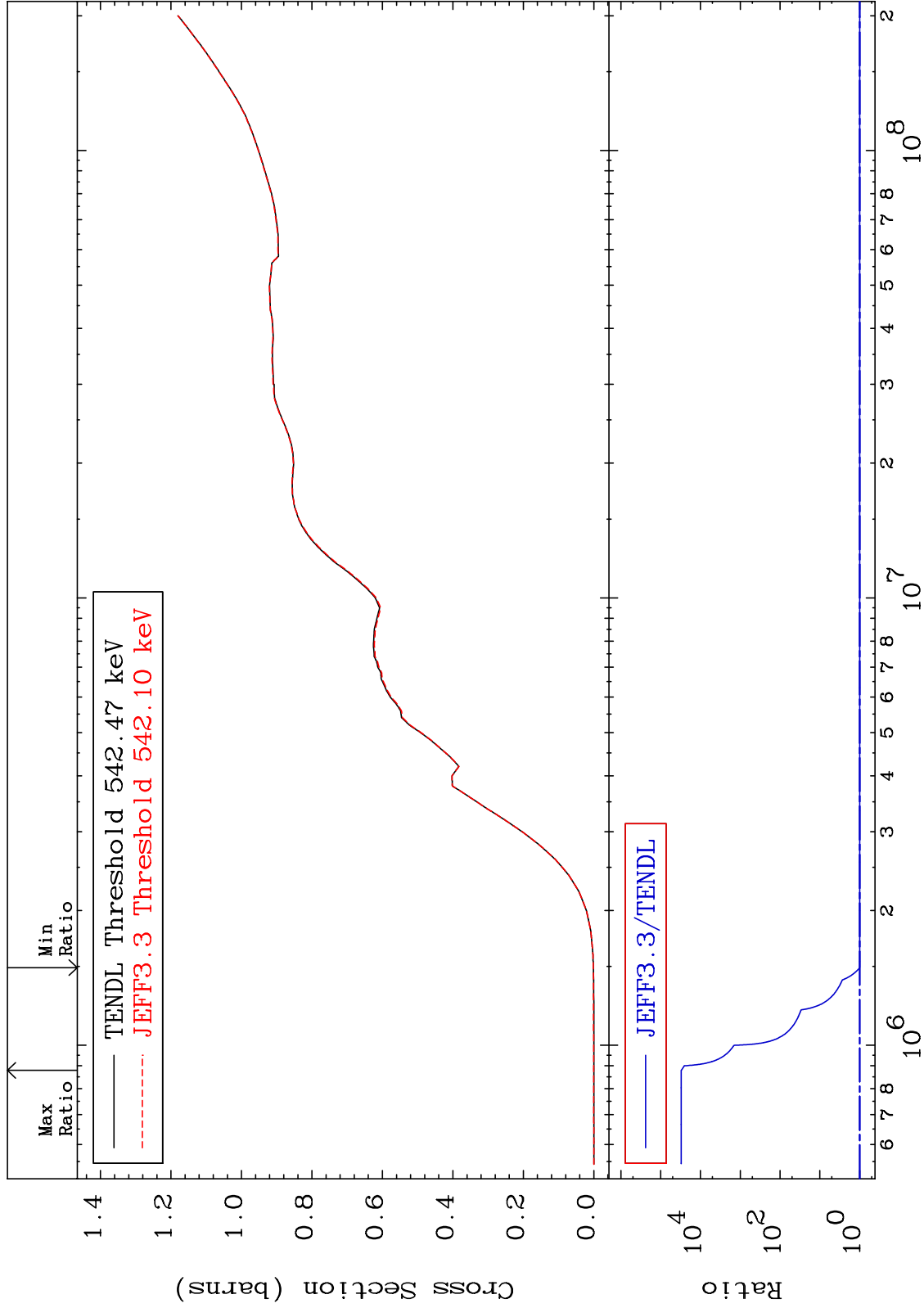
MAT 2025 (n,d) α
Cross Section
20-Ca-40
-2.386 To 188.9 %



MAT 2025

Hydrogen Production
Cross Section

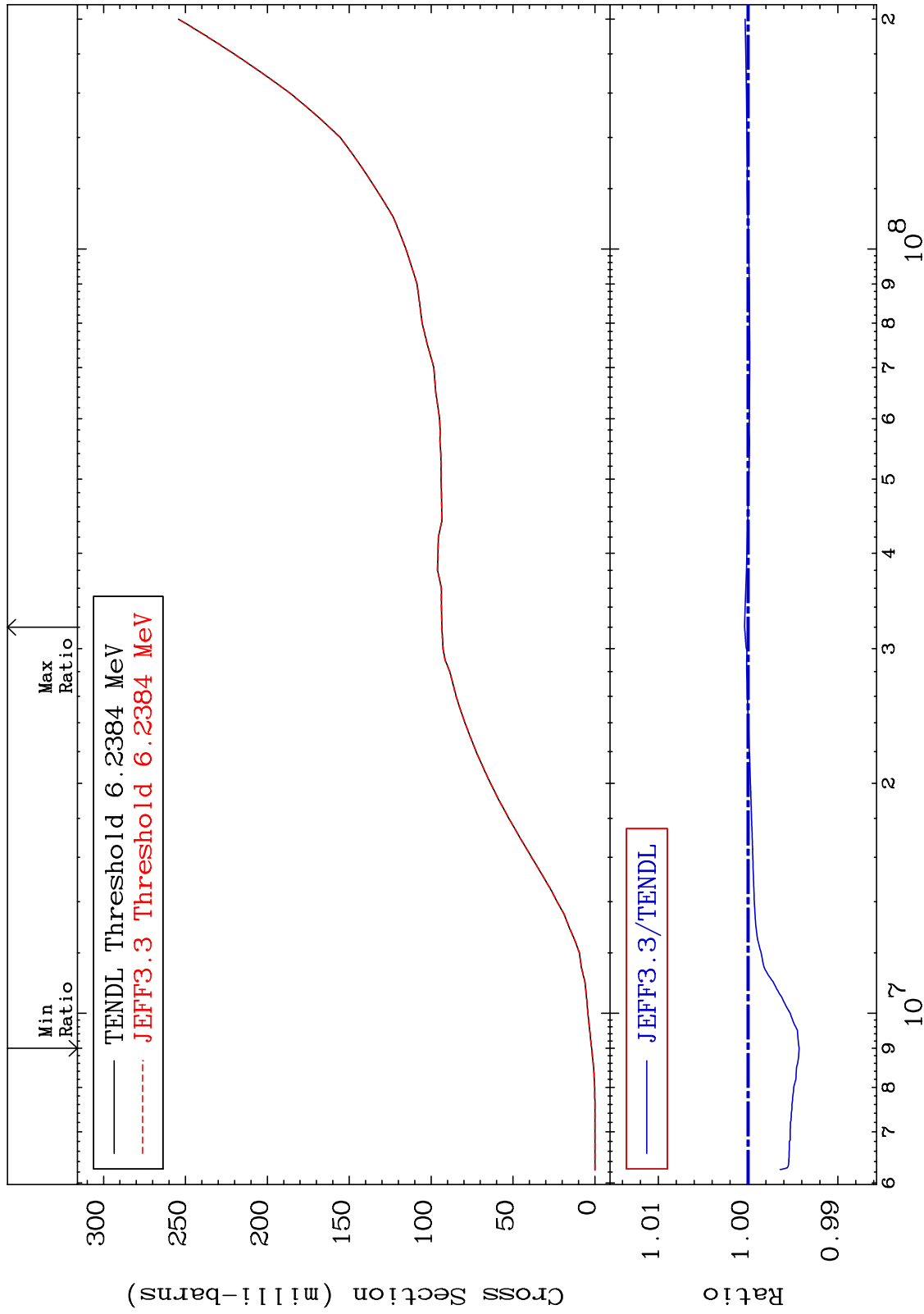
20-Ca-40
-0.509 To 9999. %



MAT 2025

Deuterium Production Cross Section

20-Ca-40
-0.570 To 0.039 %

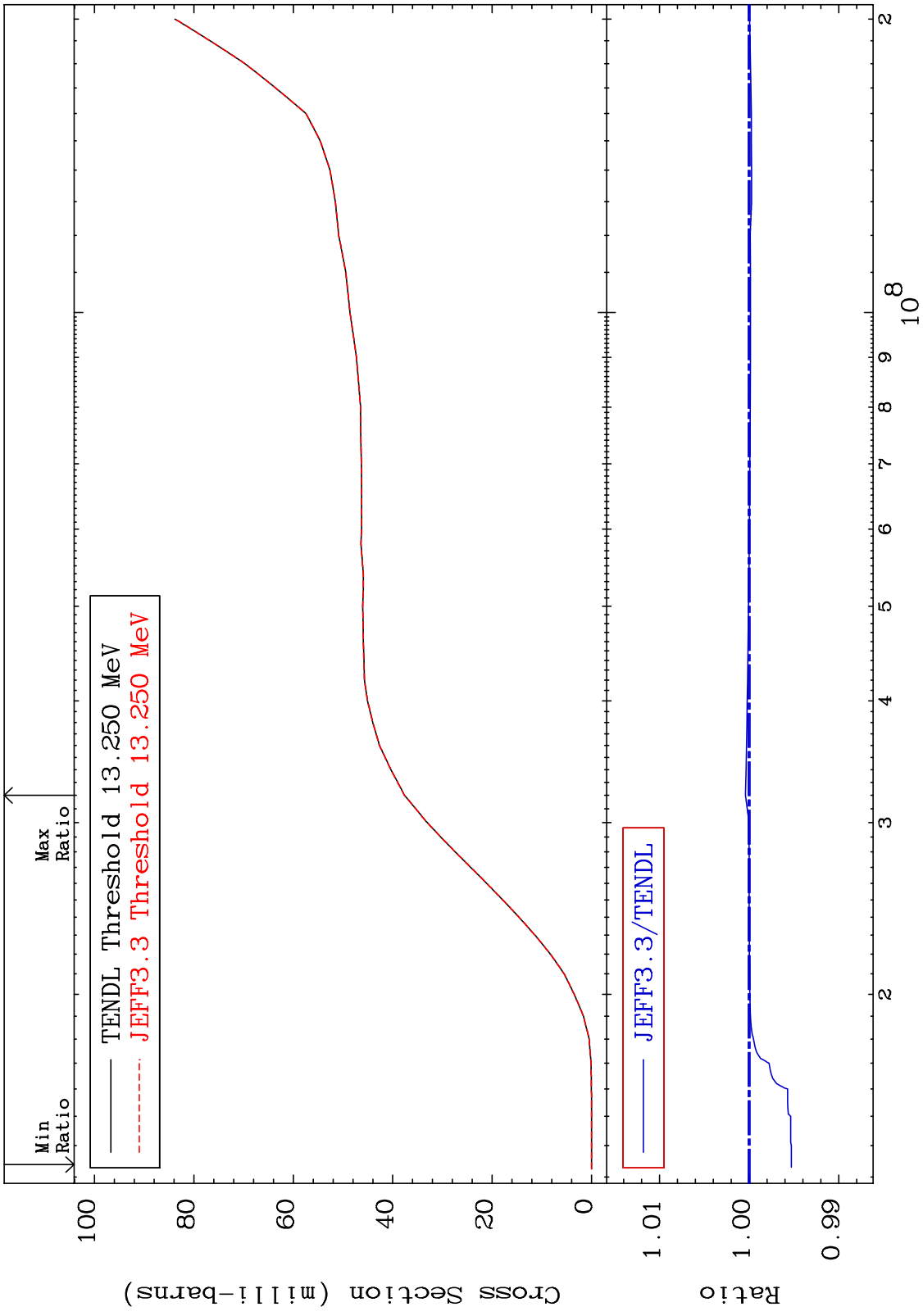


50

Incident Energy (eV)

20-Ca-40

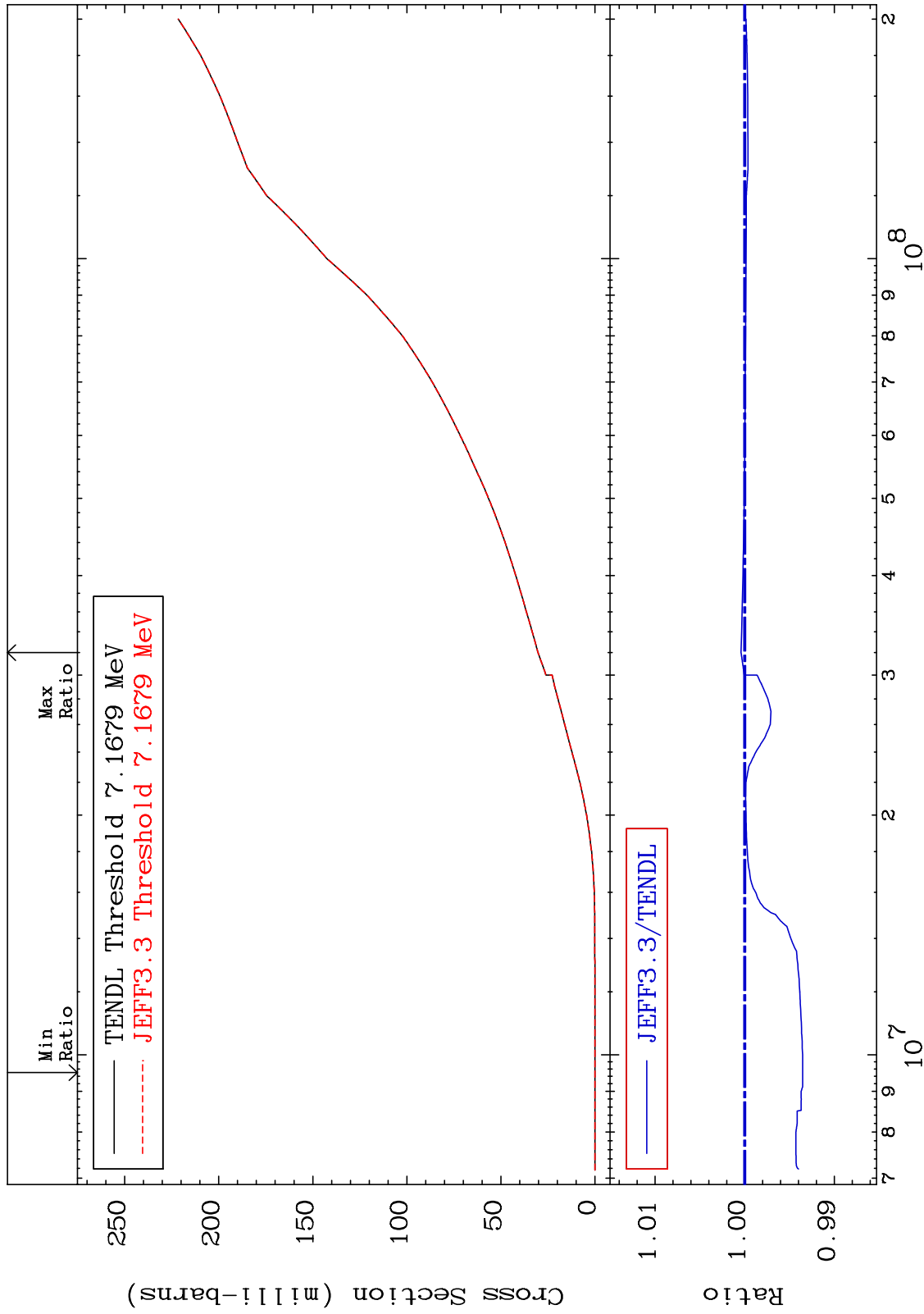
MAT 2025 Tritium Production Cross Section 20-Ca-40 -0.472 To 0.041 %



MAT 2025

He-3 Production
Cross Section

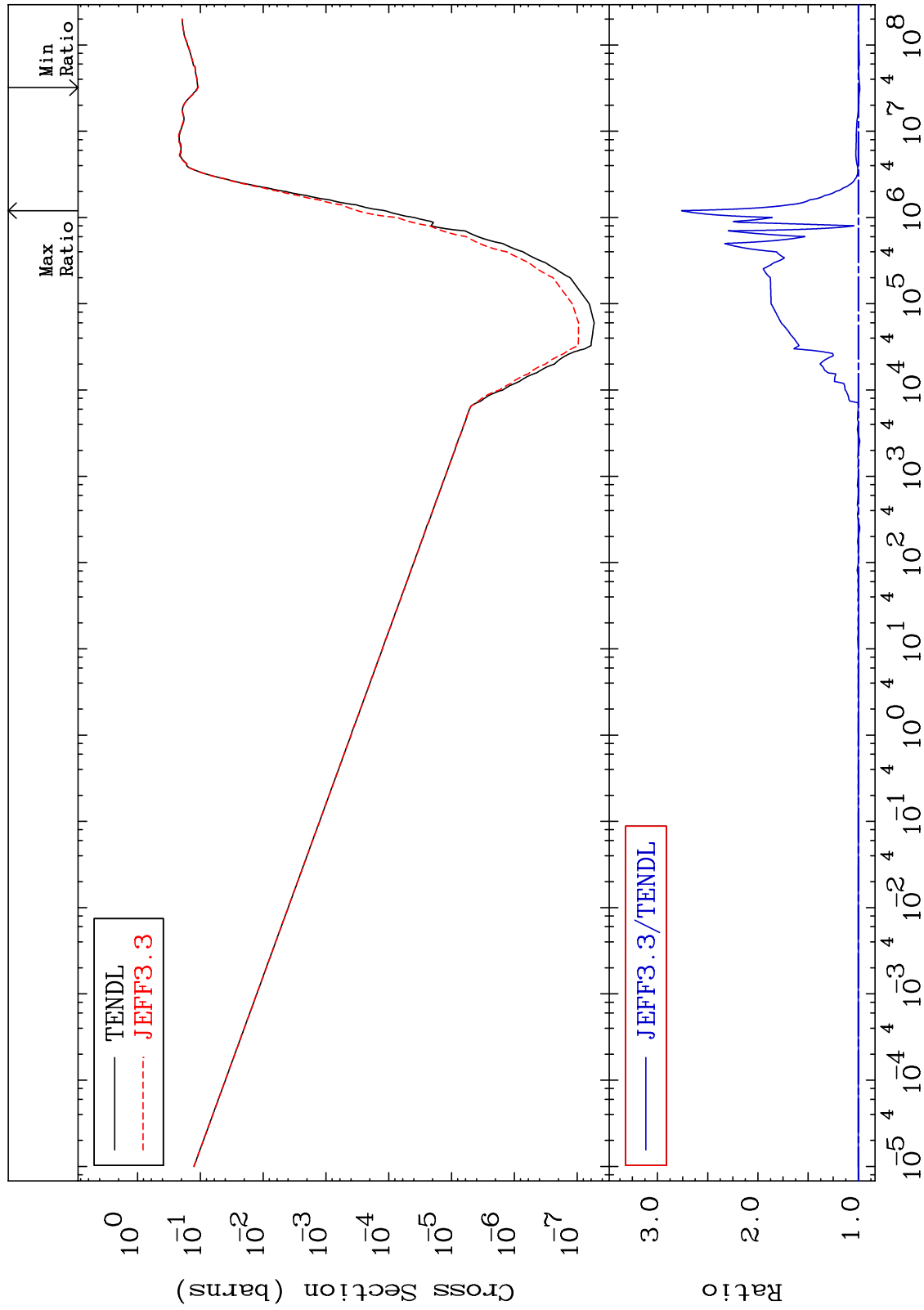
20-Ca-40
-0.646 To 0.041 %



MAT 2025

He-4 Production
Cross Section

20-Ca-40
-1.450 To 176.2 %

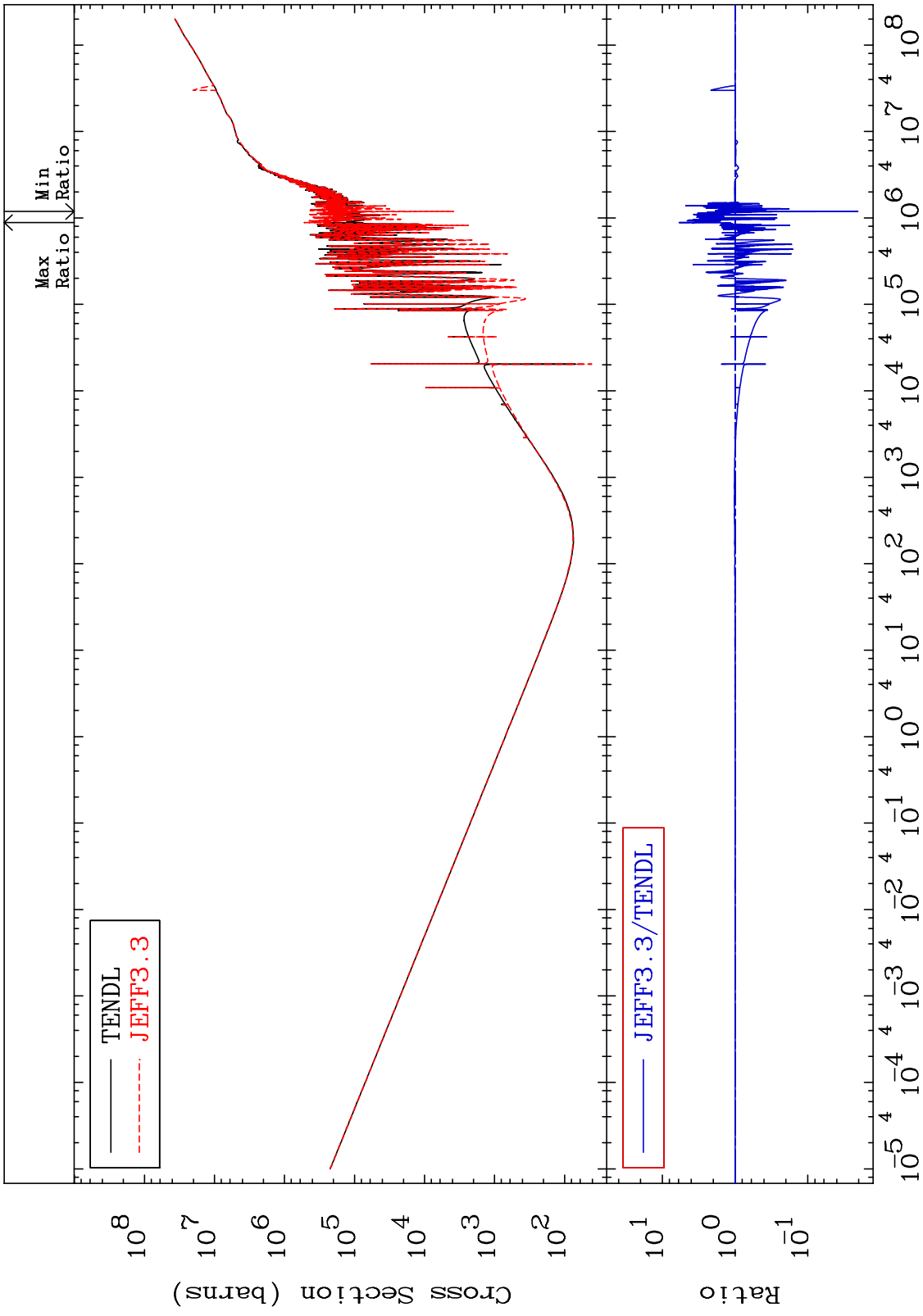


53

Incident Energy (eV)

20-Ca-40

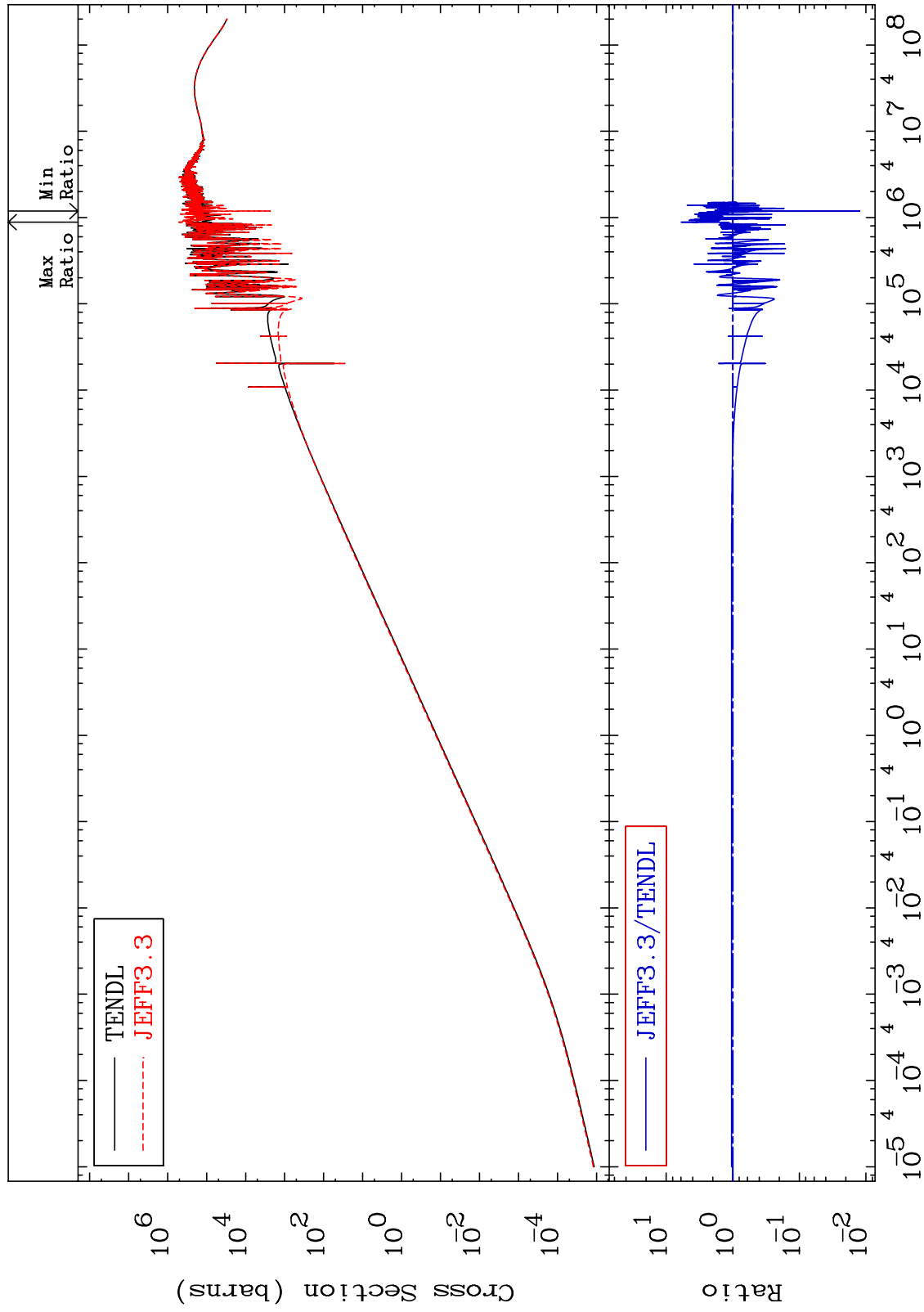
MAT 2025 Kerma total (eV-barns) Cross Section 20-Ca-40
 -97.95 To 489.6 %



MAT 2025

Kerma elastic
Cross Section

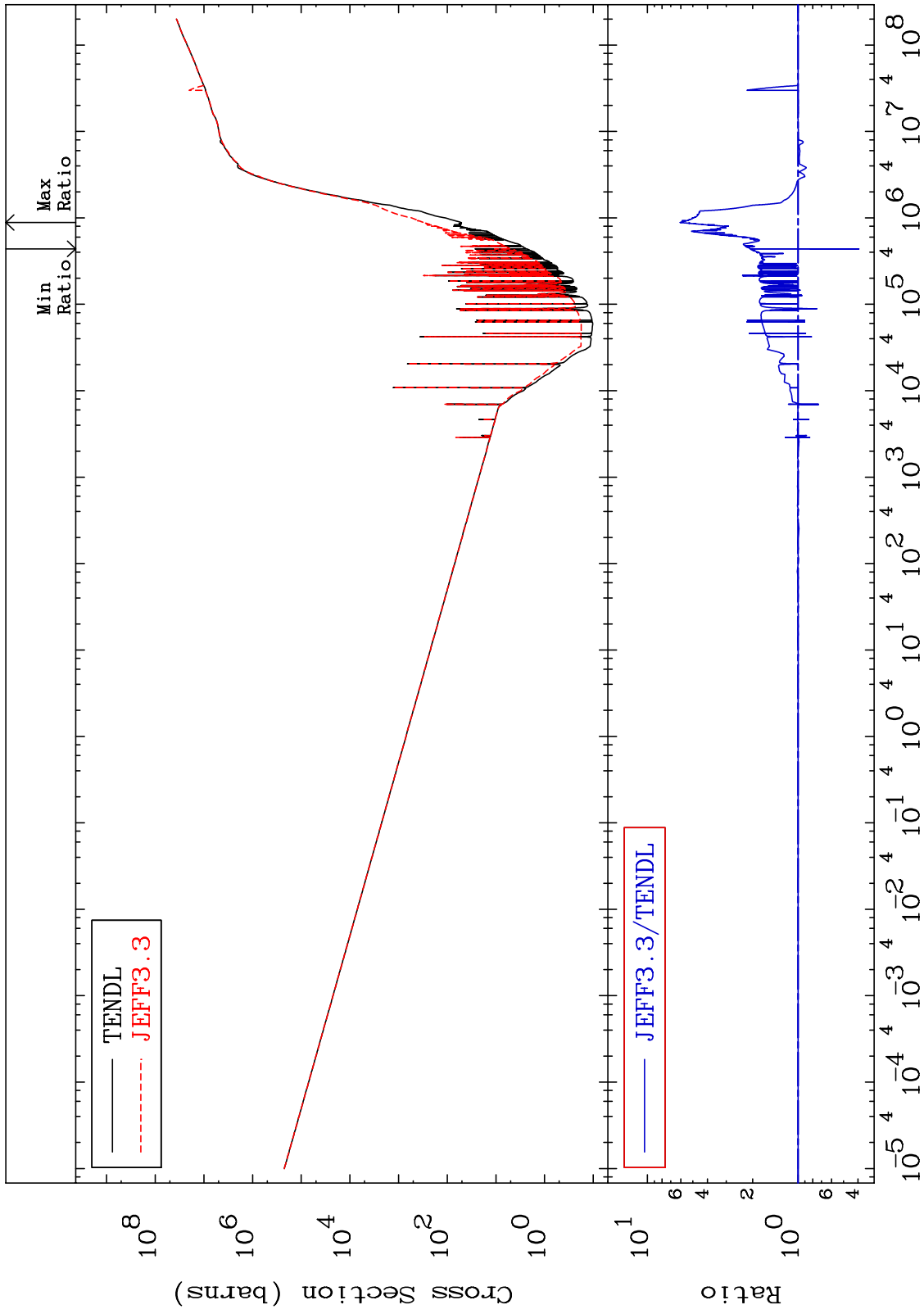
20-Ca-40
-98.77 To 489.6 %



MAT 2025

Kerma non-elastic (all but mt2)
Cross Section

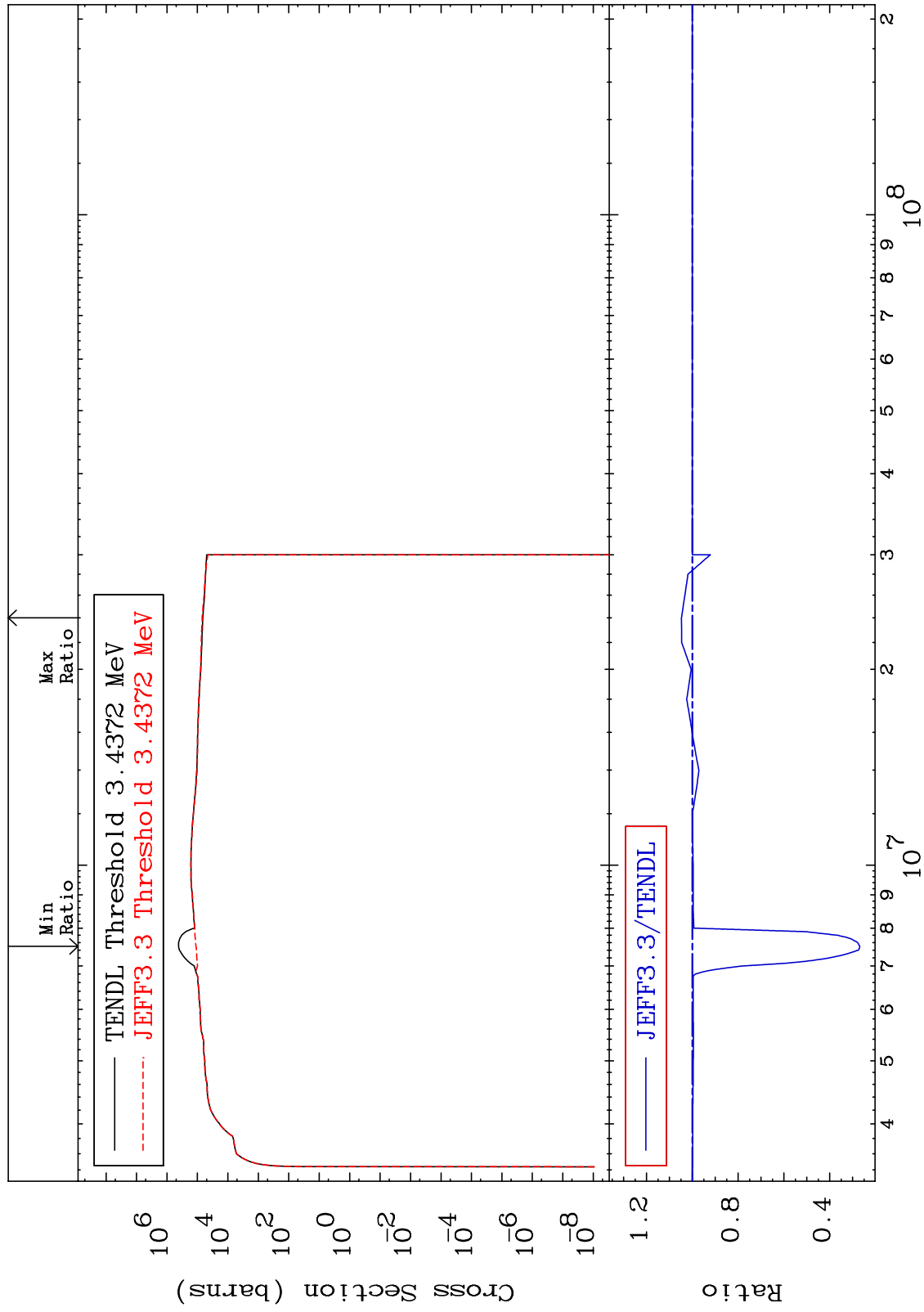
20-Ca-40
-60.50 To 505.5 %



MAT 2025

Kerma inelastic (mt51-91)
Cross Section

20-Ca-40
-73.13 To 4.749 %



57

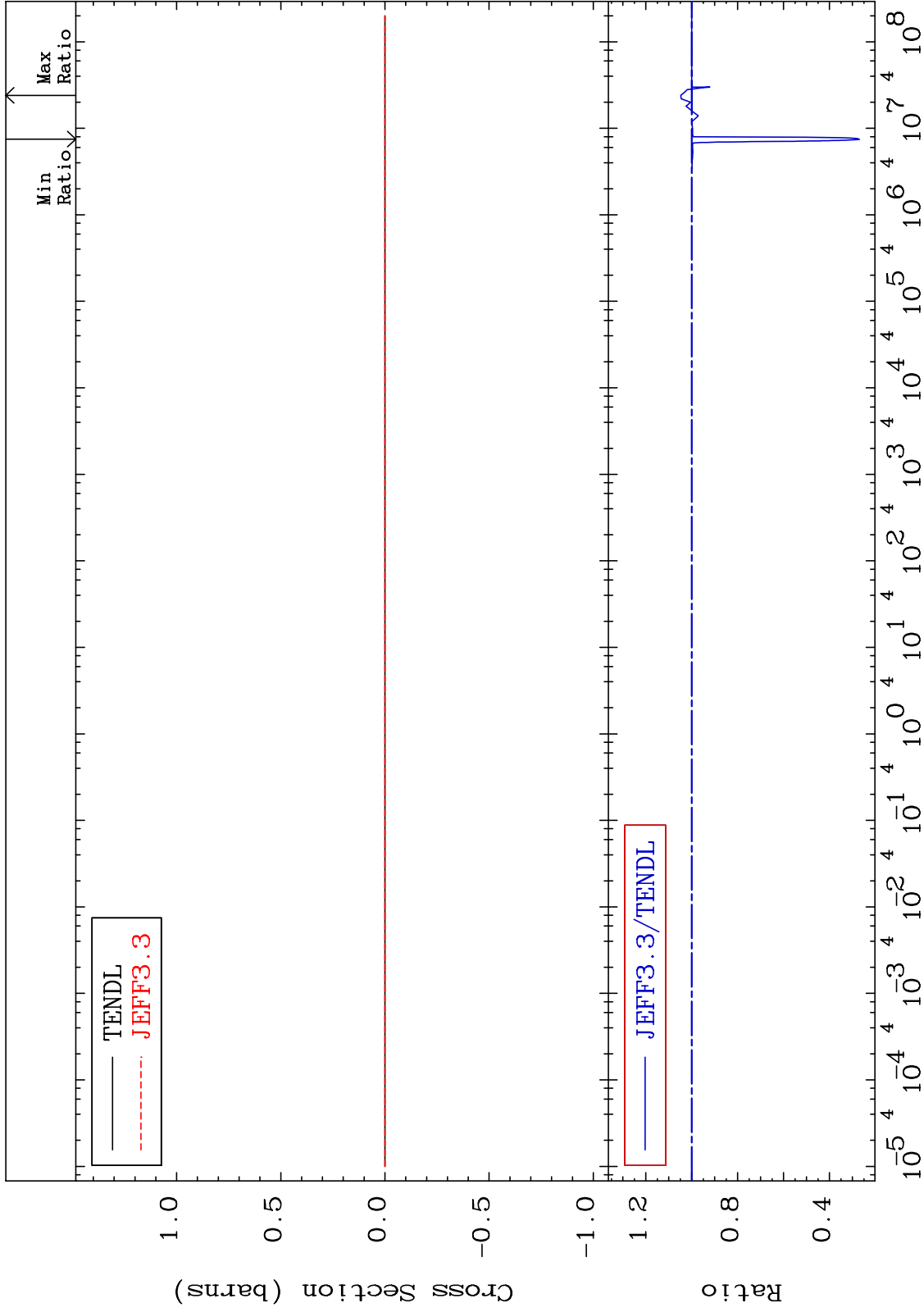
Incident Energy (eV)

20-Ca-40

MAT 2025

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

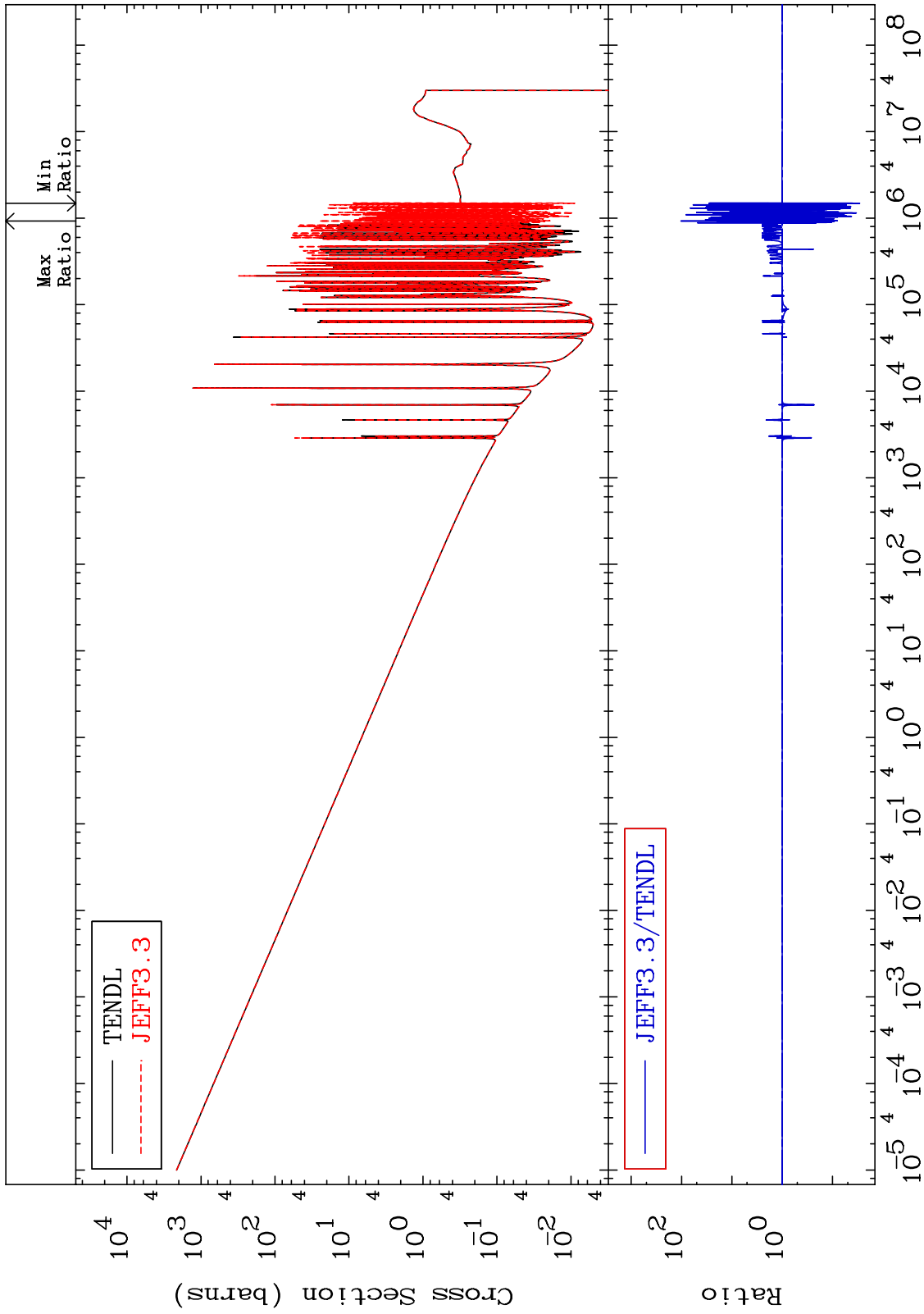
20-Ca-40
-73.13 To 4.749 %



MAT 2025

Kerma capture (mt102)
Cross Section

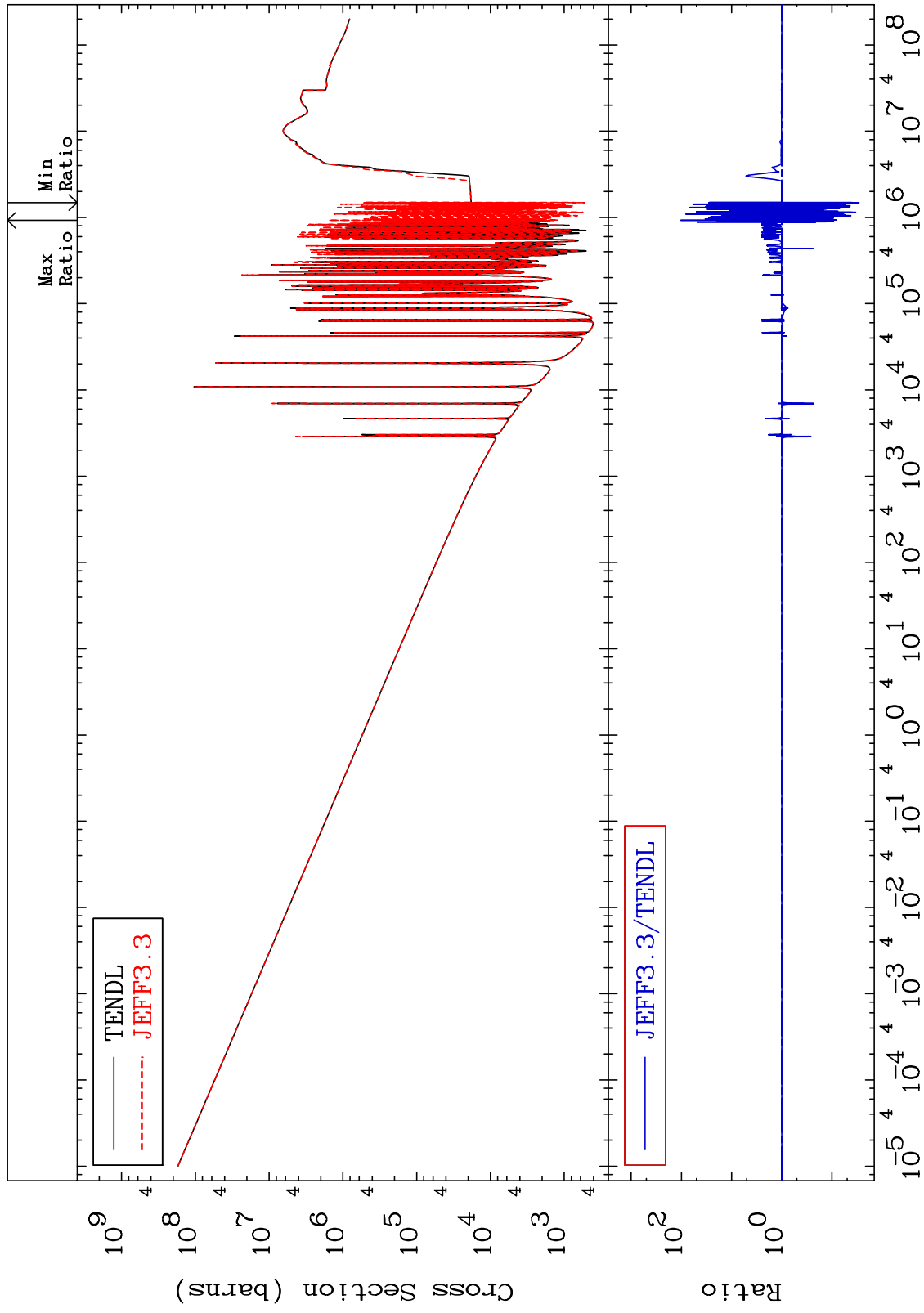
20-Ca-40
-97.11 To 9999. %



MAT 2025

Total photon (eV-barns)
Cross Section

20-Ca-40
-97.10 To 9999. %



60

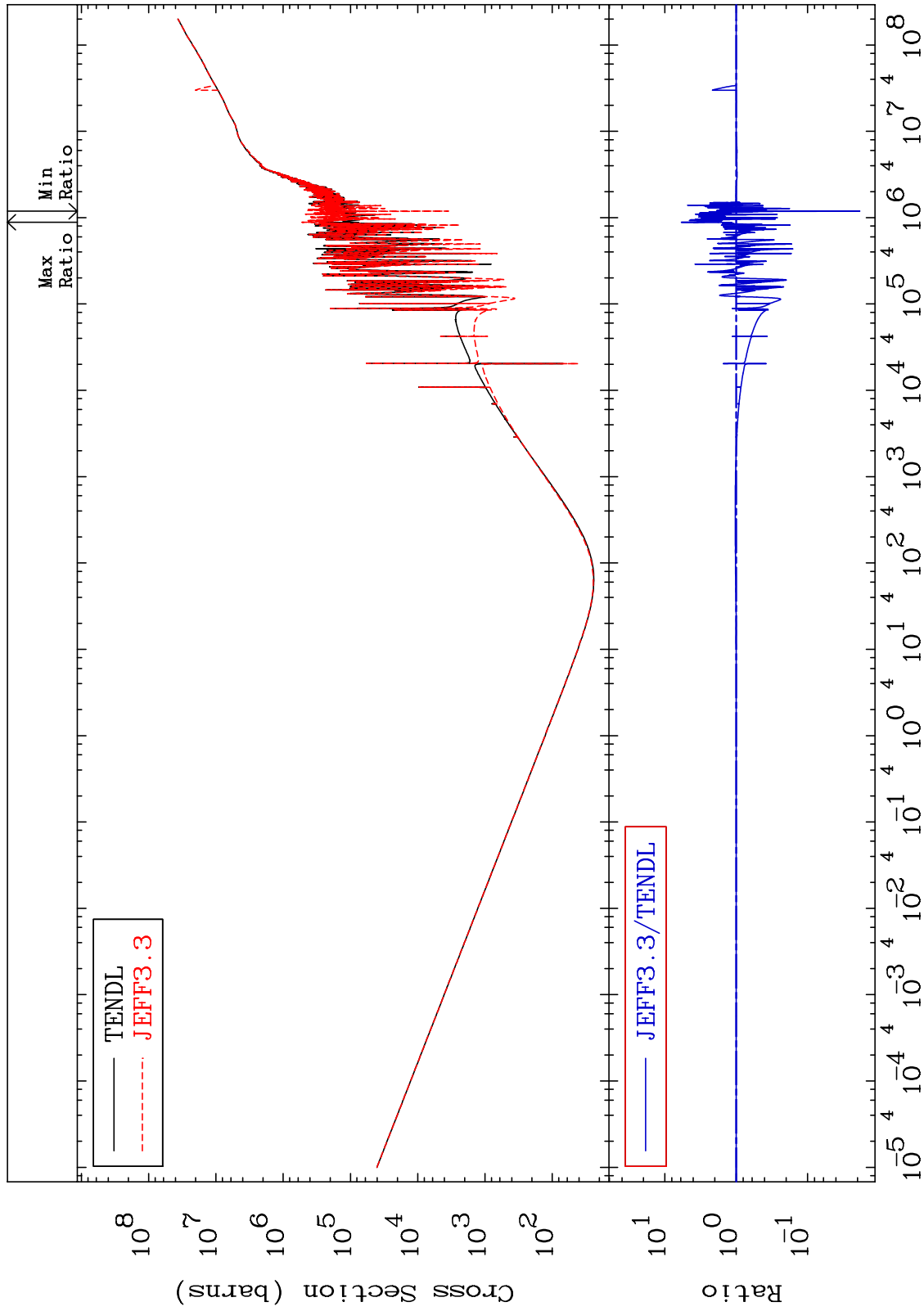
Incident Energy (eV)

20-Ca-40

MAT 2025

Total kinematic kerma (high limit)
Cross Section

20-Ca-40
-98.14 To 489.6 %



61

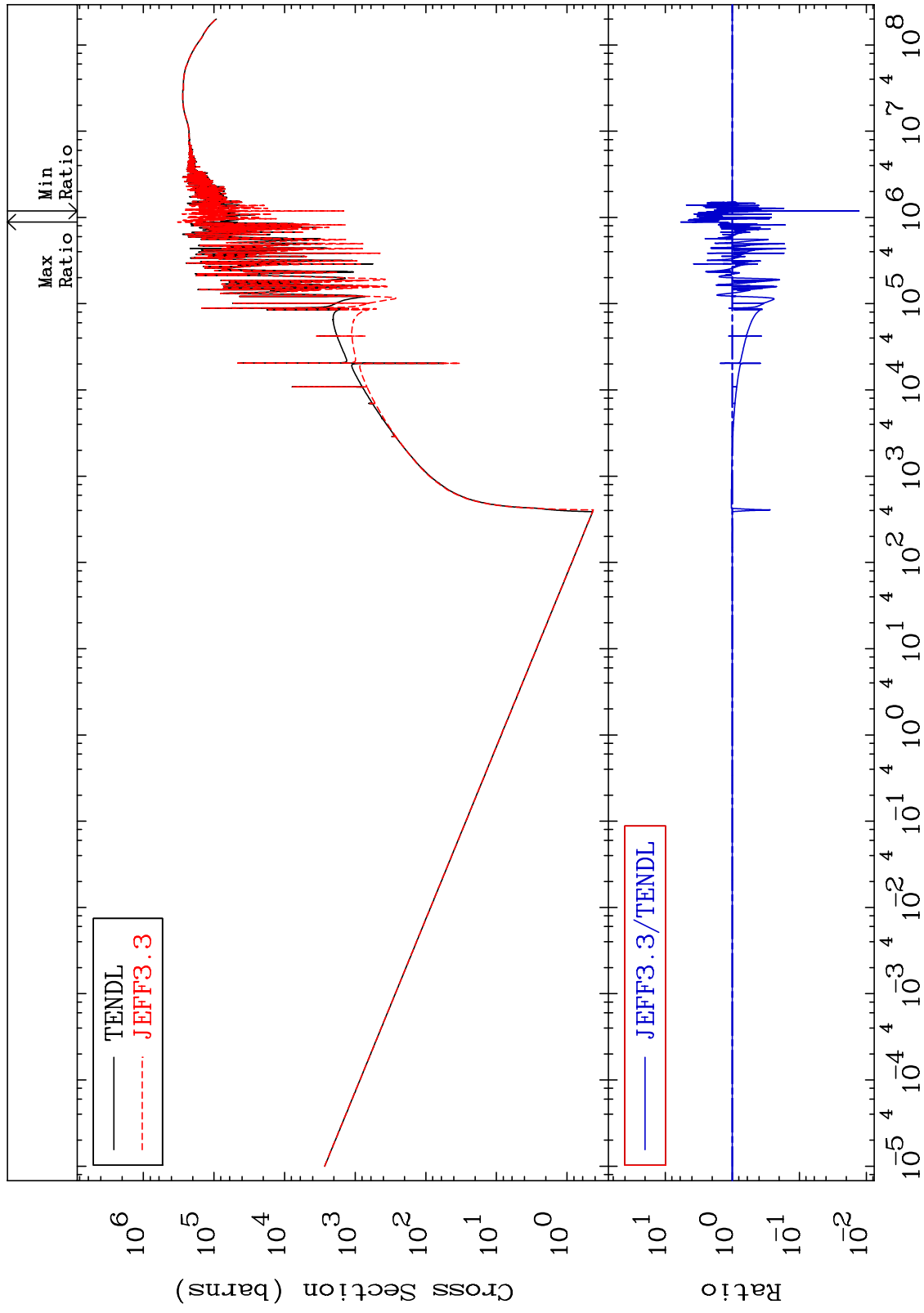
Incident Energy (eV)

20-Ca-40

MAT 2025

Dpa total (eV-barns)
Cross Section

20-Ca-40
-98.71 To 489.8 %

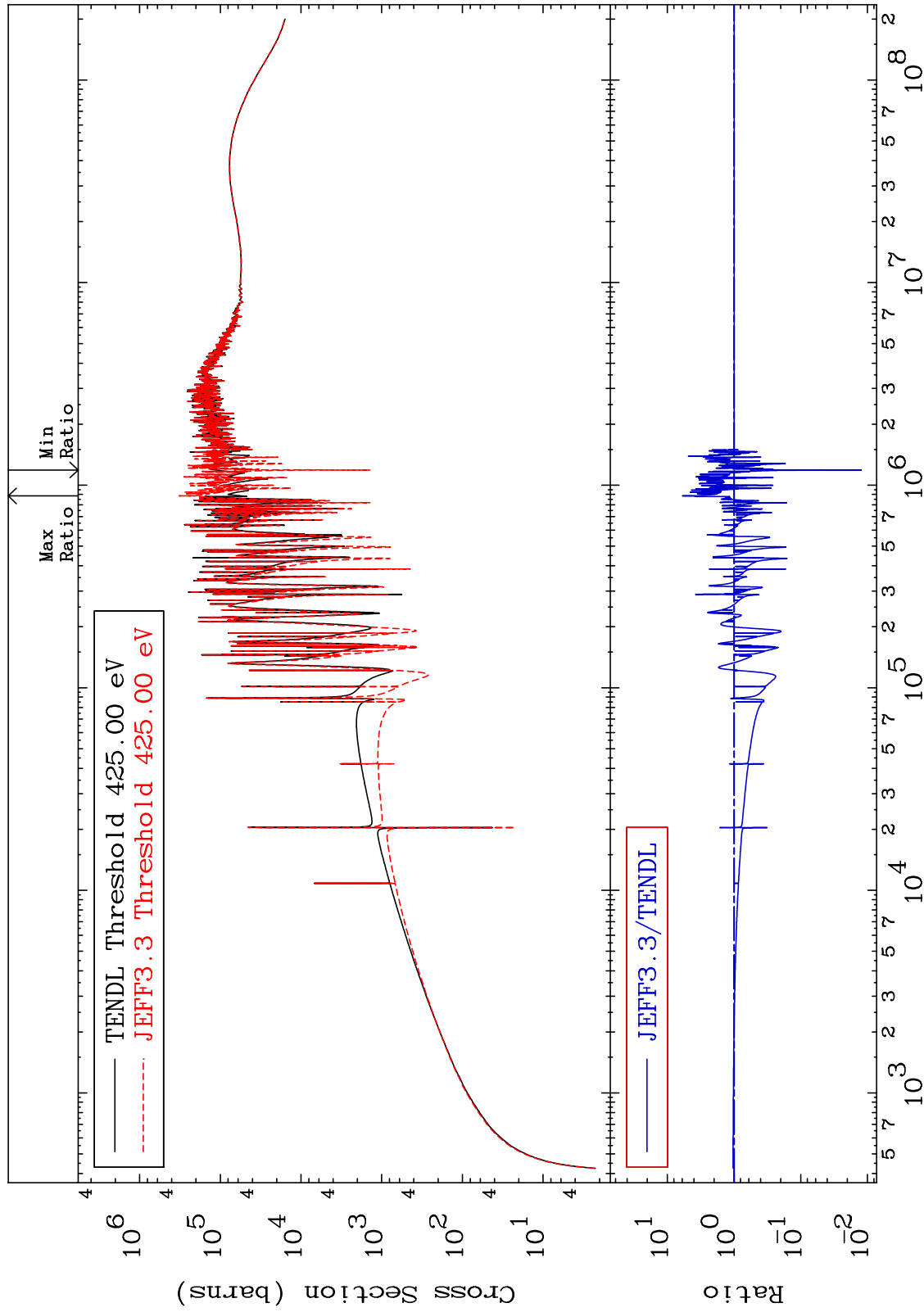


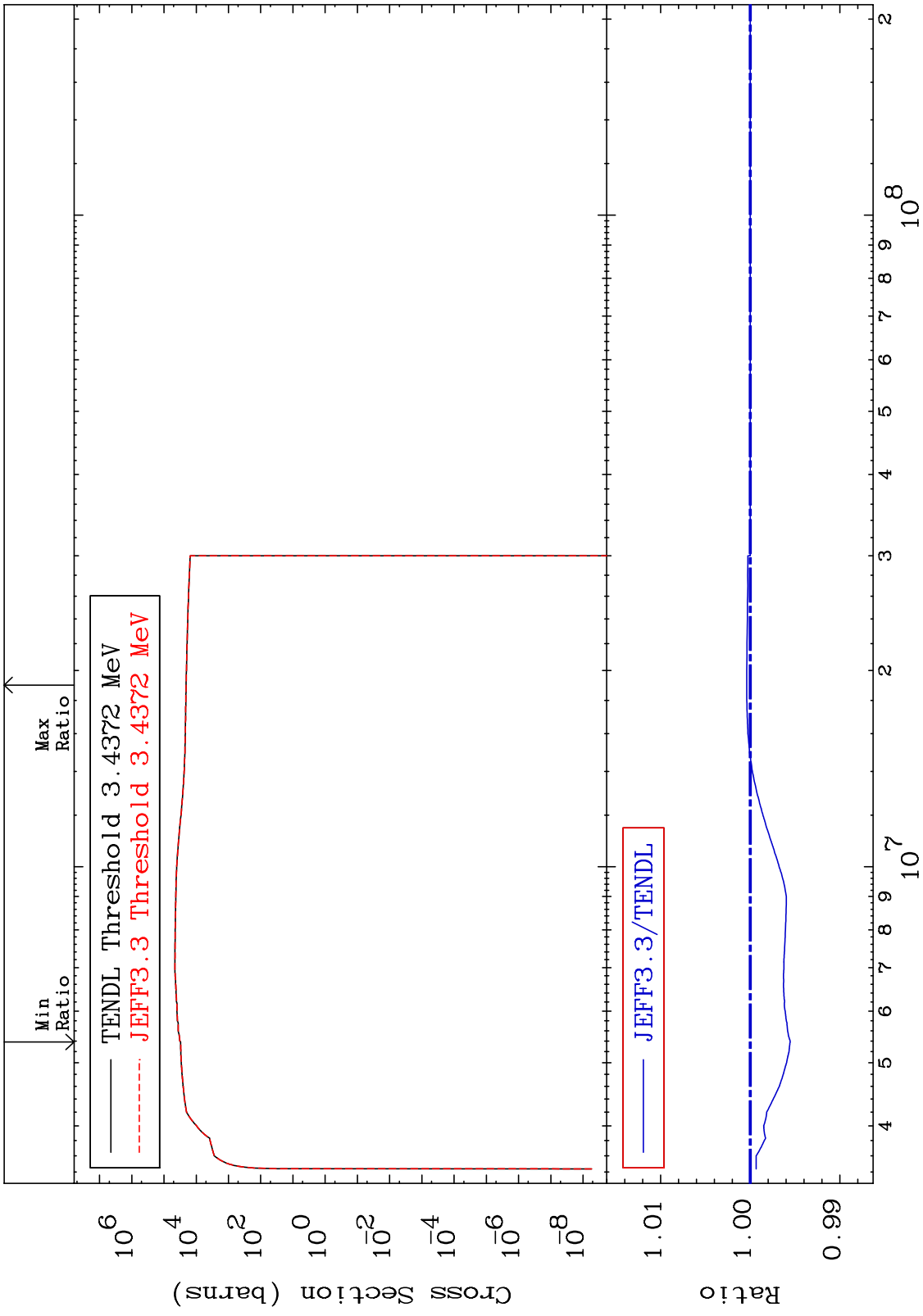
MAT 2025

Dpa elastic (mt2)
Cross Section

20-Ca-40

-98.76 To 489.8 %

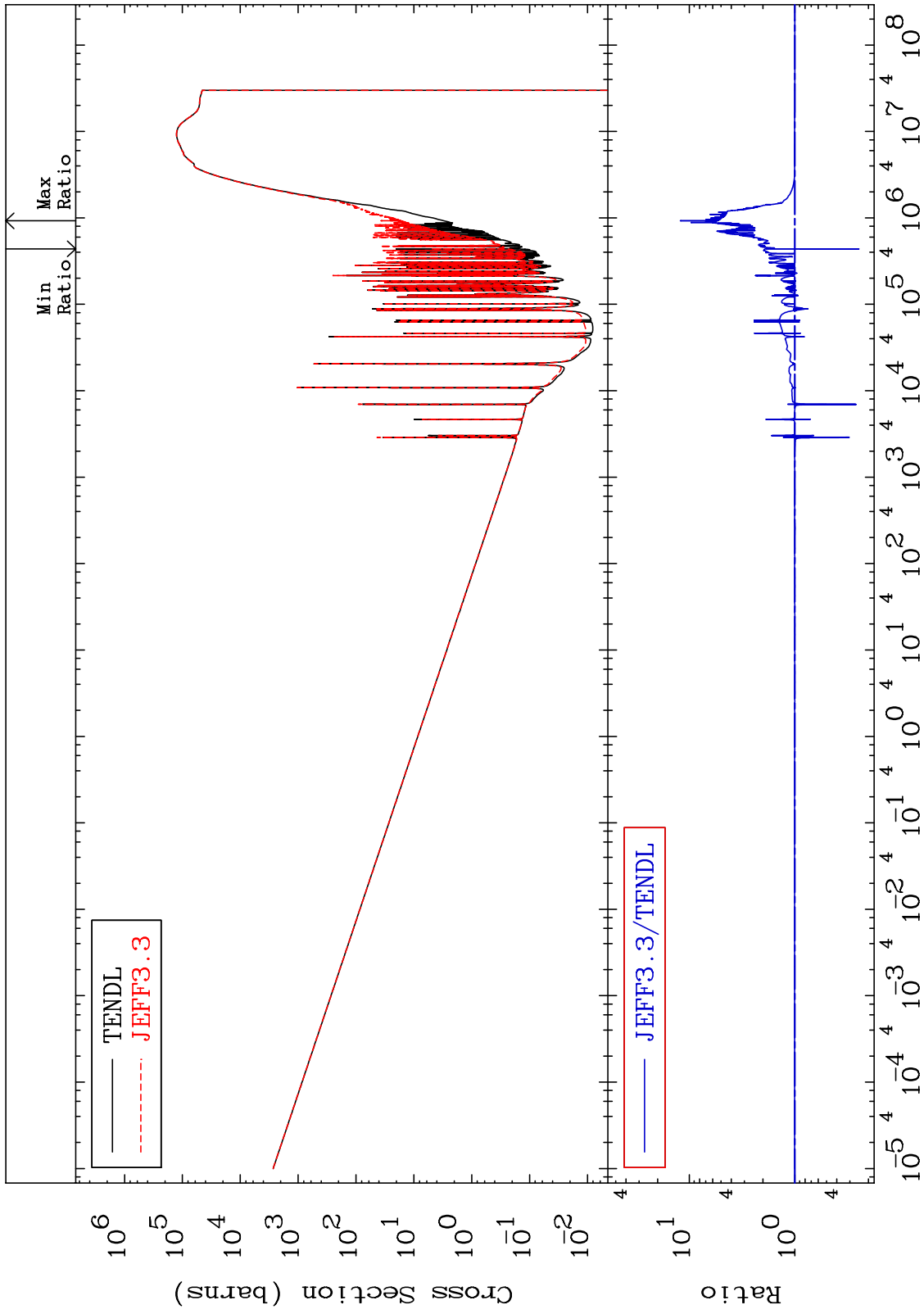


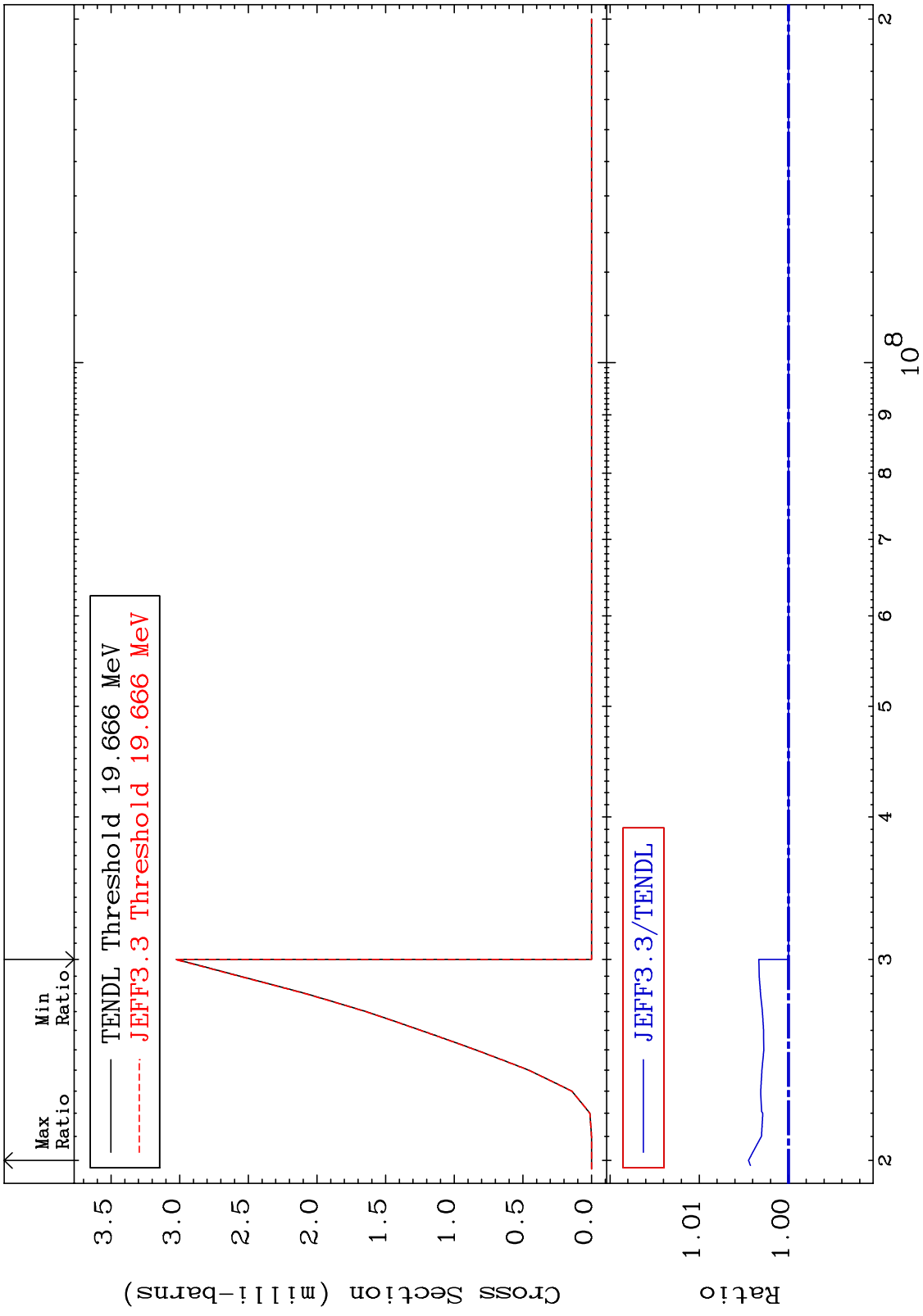


MAT 2025

Dpa disappearance (mt102 -120)
Cross Section

20-Ca-40
-75.34 To 1121. %



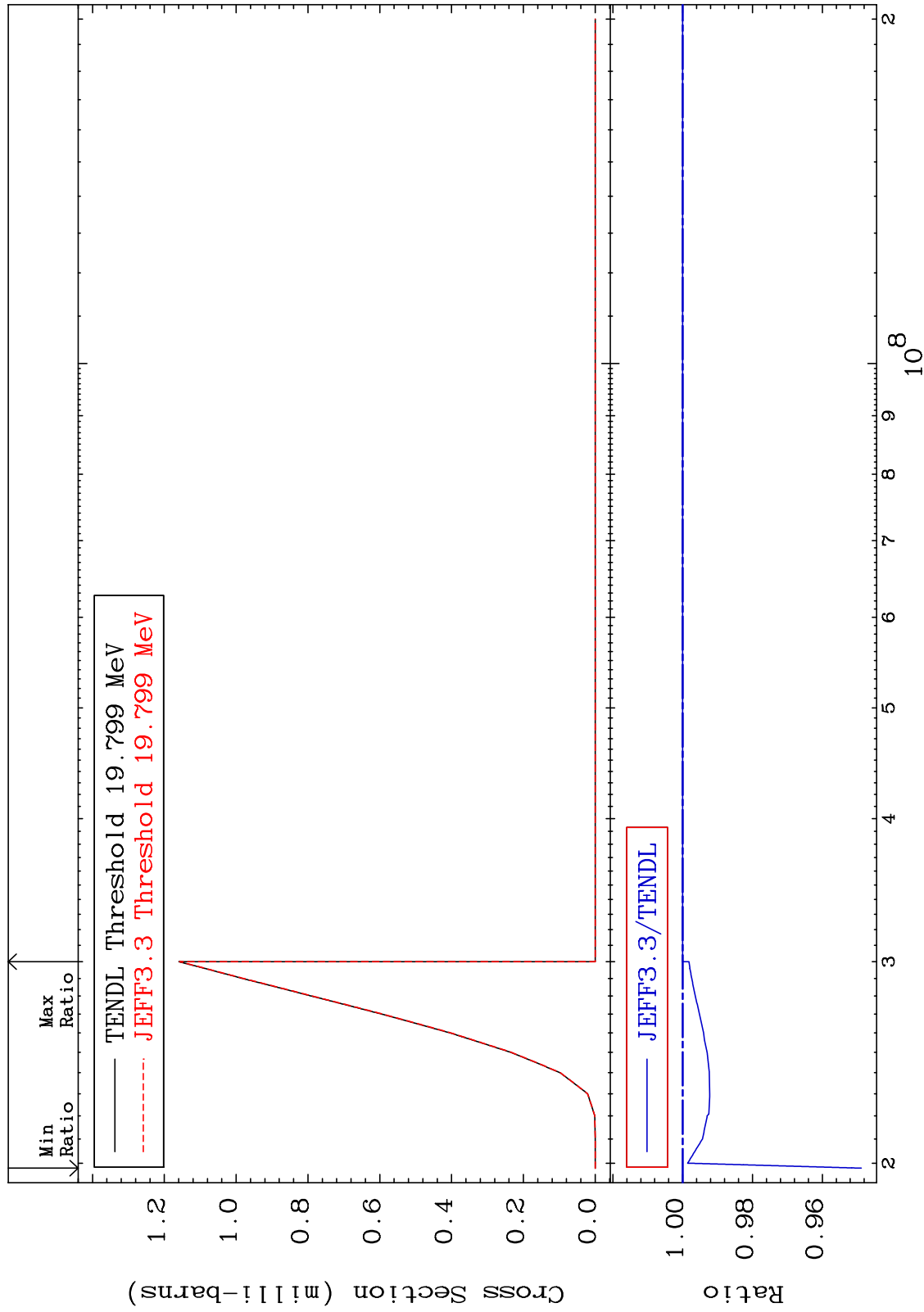


MAT 2025

(n, n') d:19-K -38m1

20-Ca-40

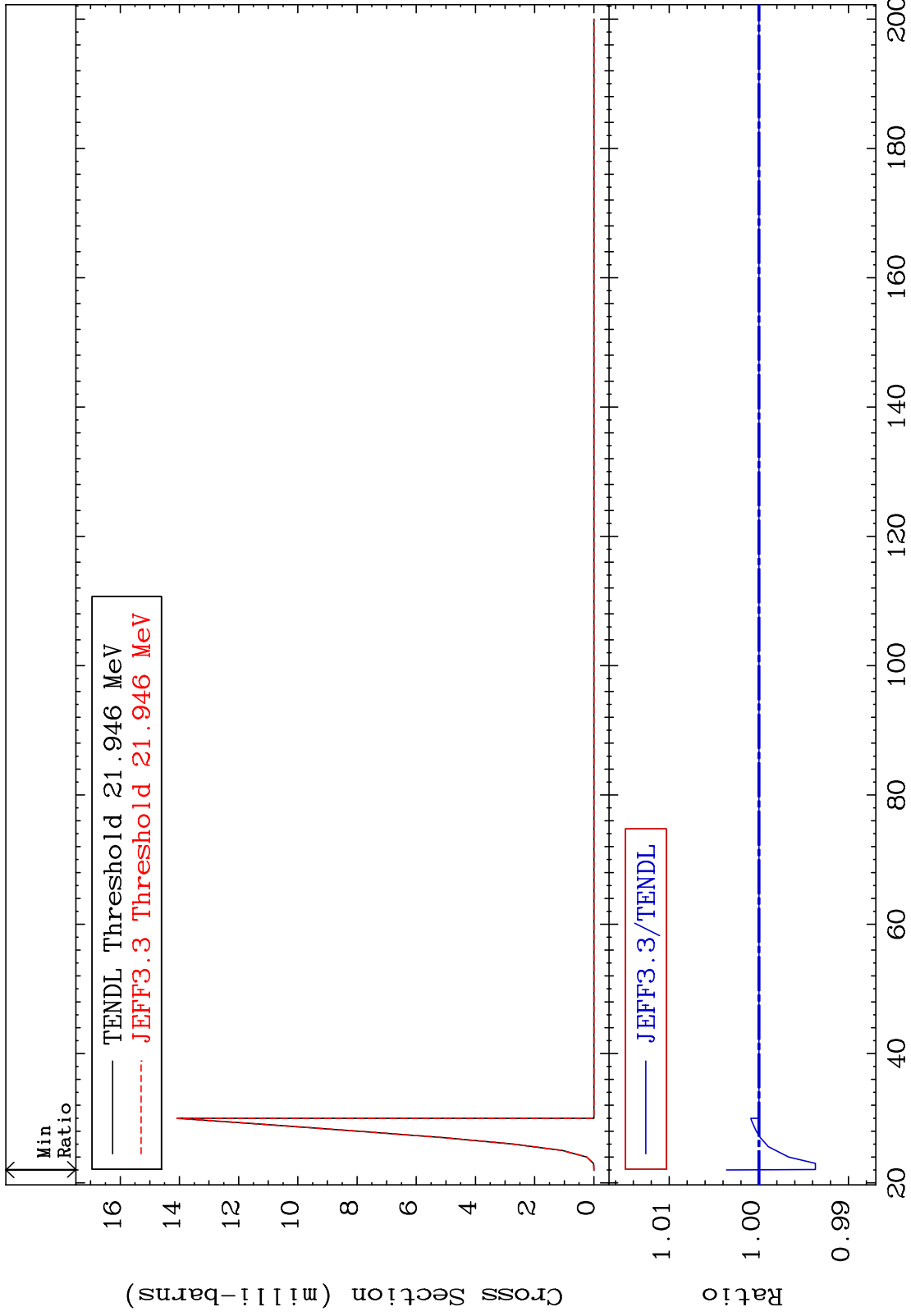
Radionuclide Production Cross Section -5.117 To 0.000 %



67

MAT 2025

(n,2n) p:19-K -38g 20-Ca-40
Radionuclide Production Cross Section -0.632 To 0.361 %

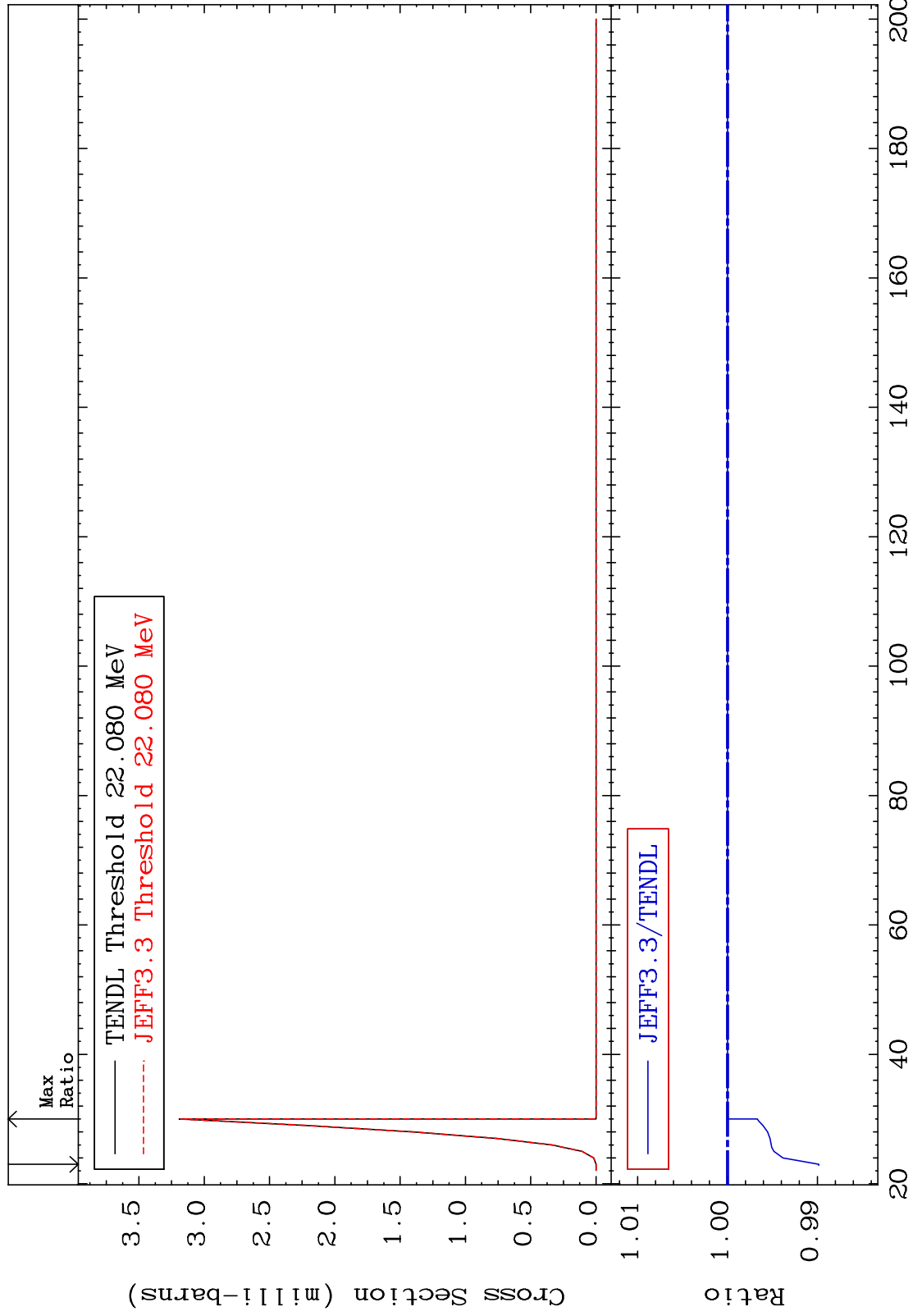


MAT 2025

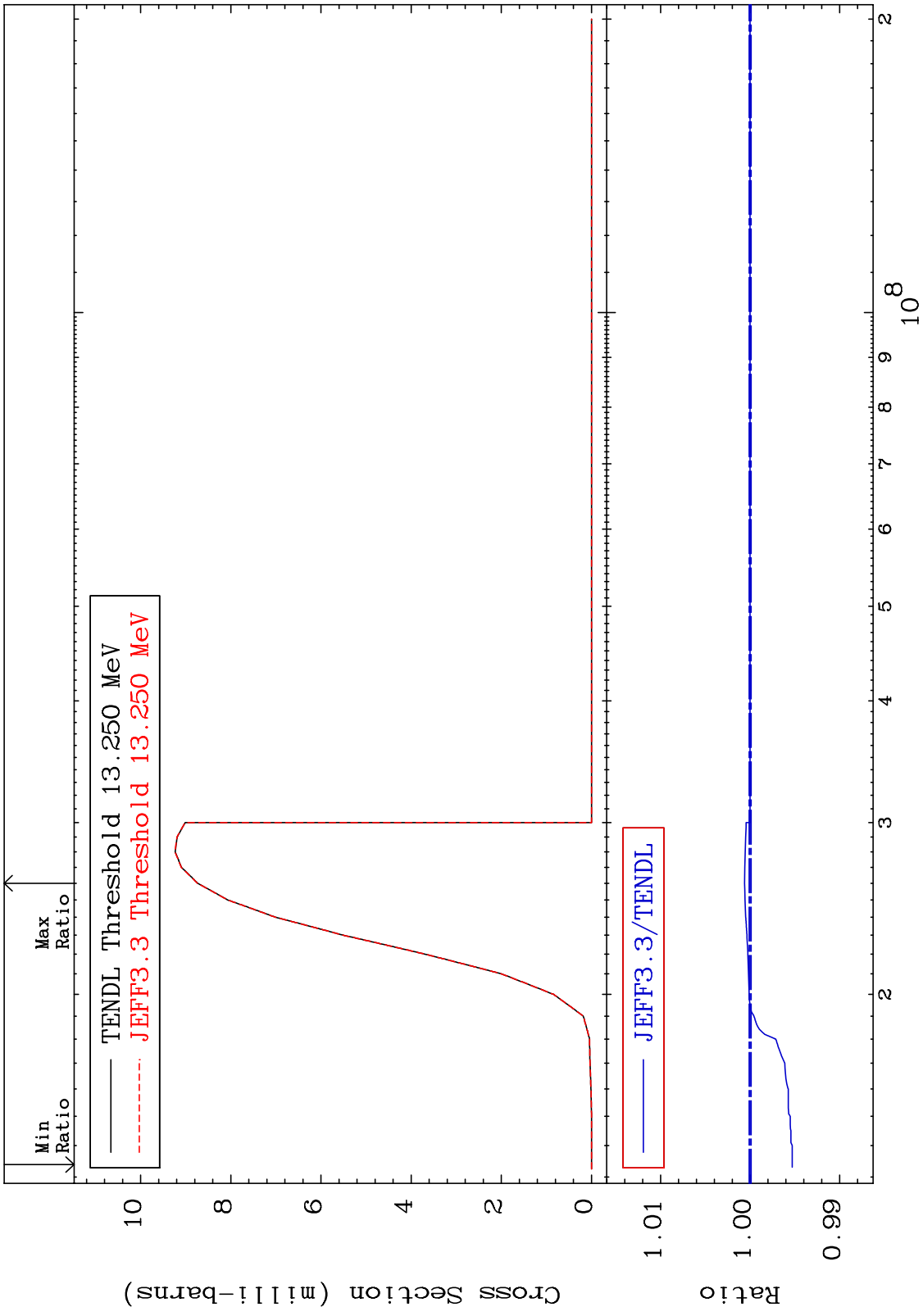
(n,2n) p:19-K -38m1

20-Ca-40

Radionuclide Production Cross Section -1.015 To 0.000 %



MAT 2025 (n,t):19-K -38g 20-Ca-40
 Radionuclide Production Cross Section -0.471 To 0.062 %



MAT 2025 (n,t):19-K -38m1 20-Ca-40
 Radionuclide Production Cross Section -0.636 To 0.051 %

