

Program Complot  
(Version 2021-1)

by

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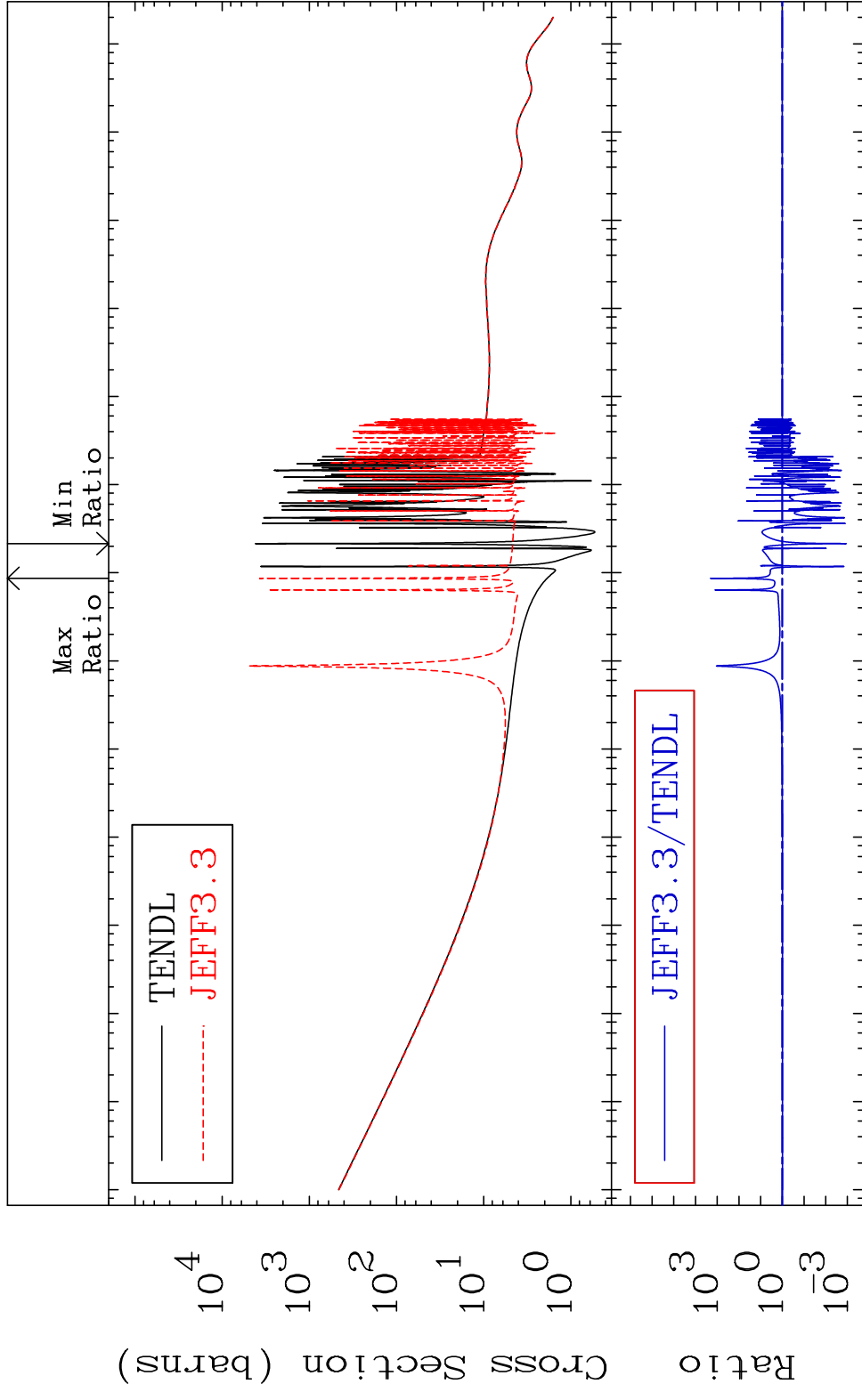
Press Mouse Button to Start

MAT 4119

41-Nb-91

Total

Cross Section -99.89 To 9999. %



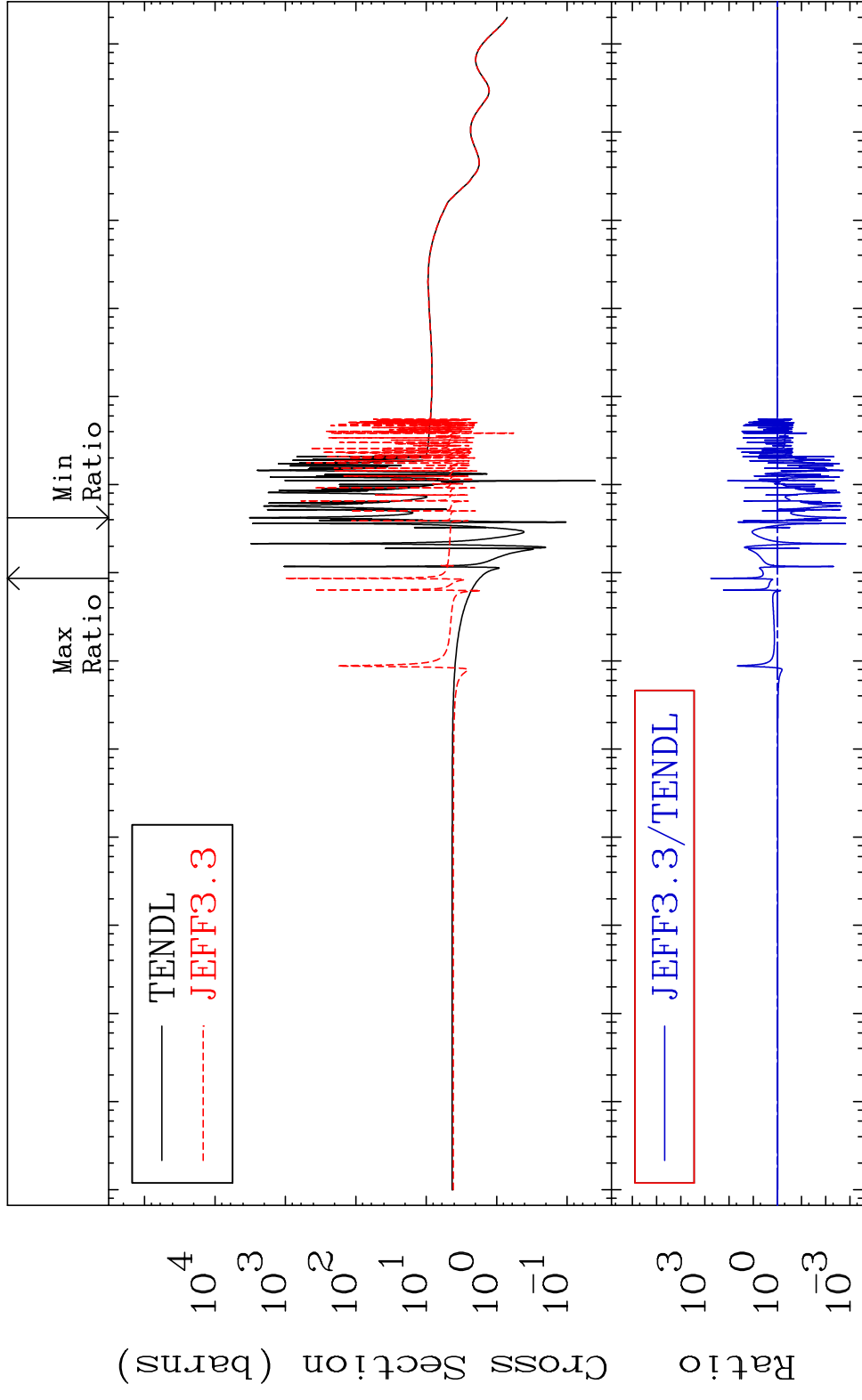
1

Incident Energy (eV)

41-Nb-91

MAT 4119

Elastic Cross Section -99.86 To 9999. % 41-Nb-91



2

Incident Energy (eV)

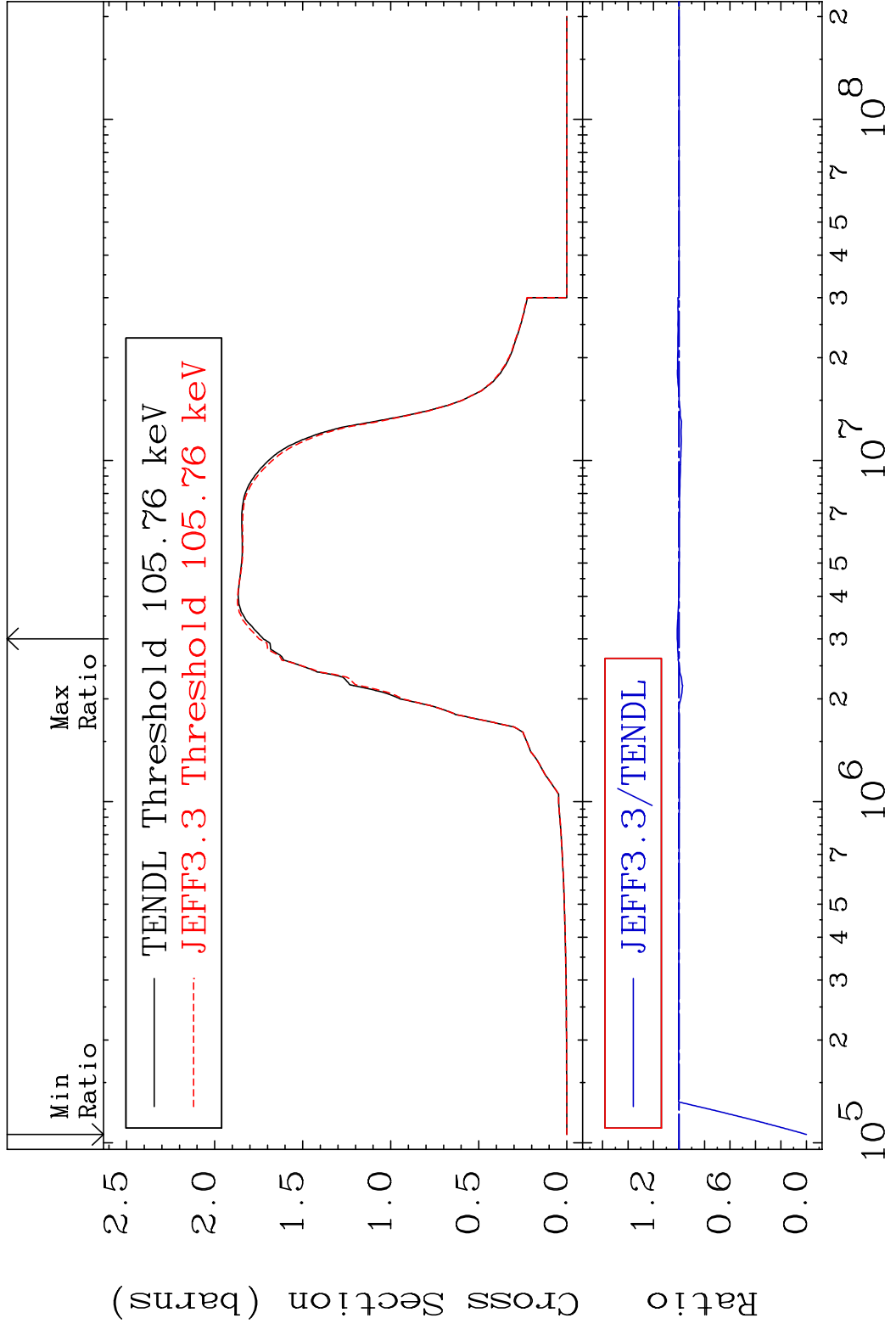
41-Nb-91

MAT 4119

Inelastic

41-Nb-91

Cross Section -100.0 To 1.441 %



3

Incident Energy (eV)

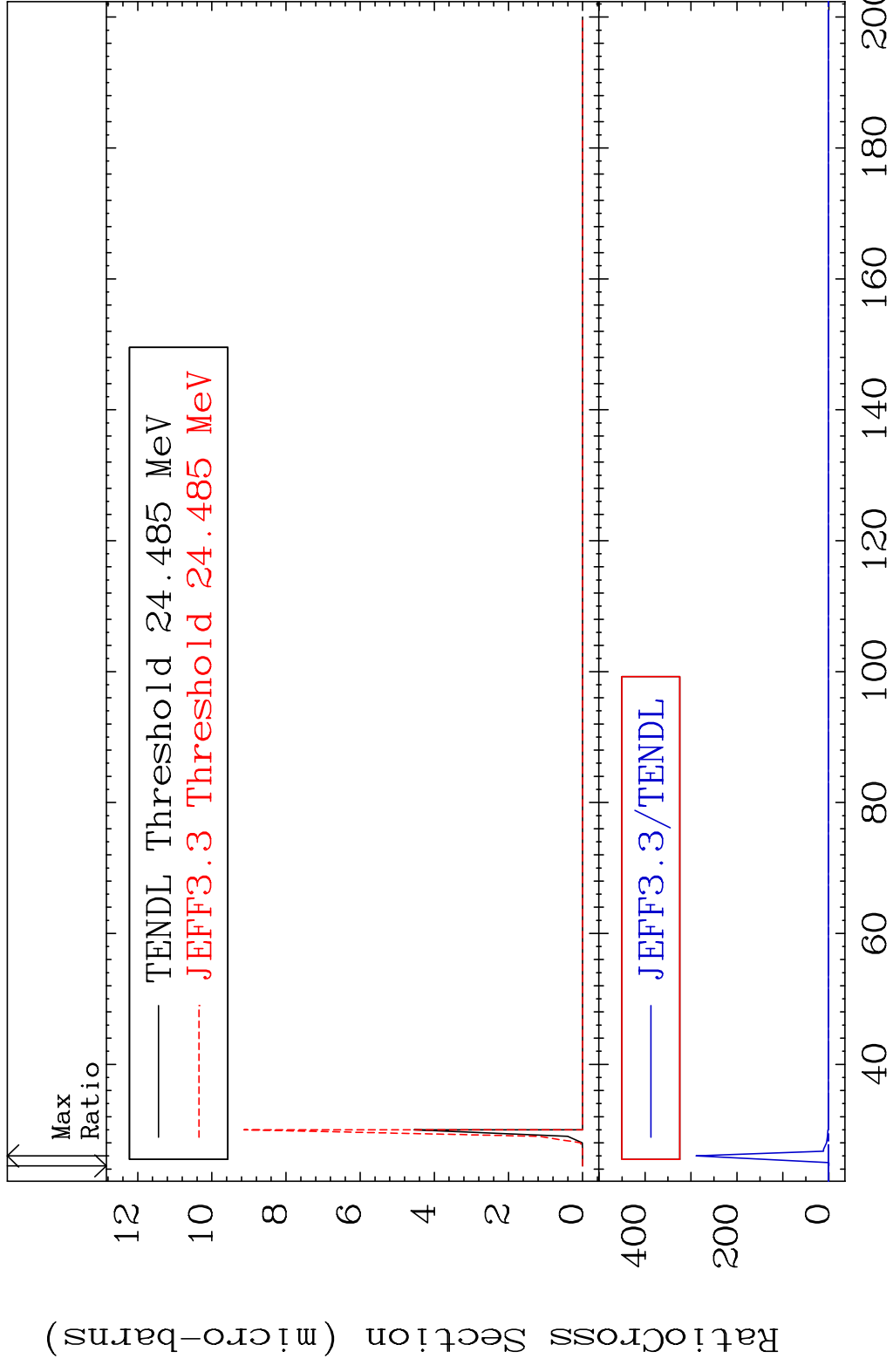
41-Nb-91

MAT 4119

(n,2n) d

41-Nb-91

Cross Section -100.0 To 9999. %



4

Incident Energy (MeV)

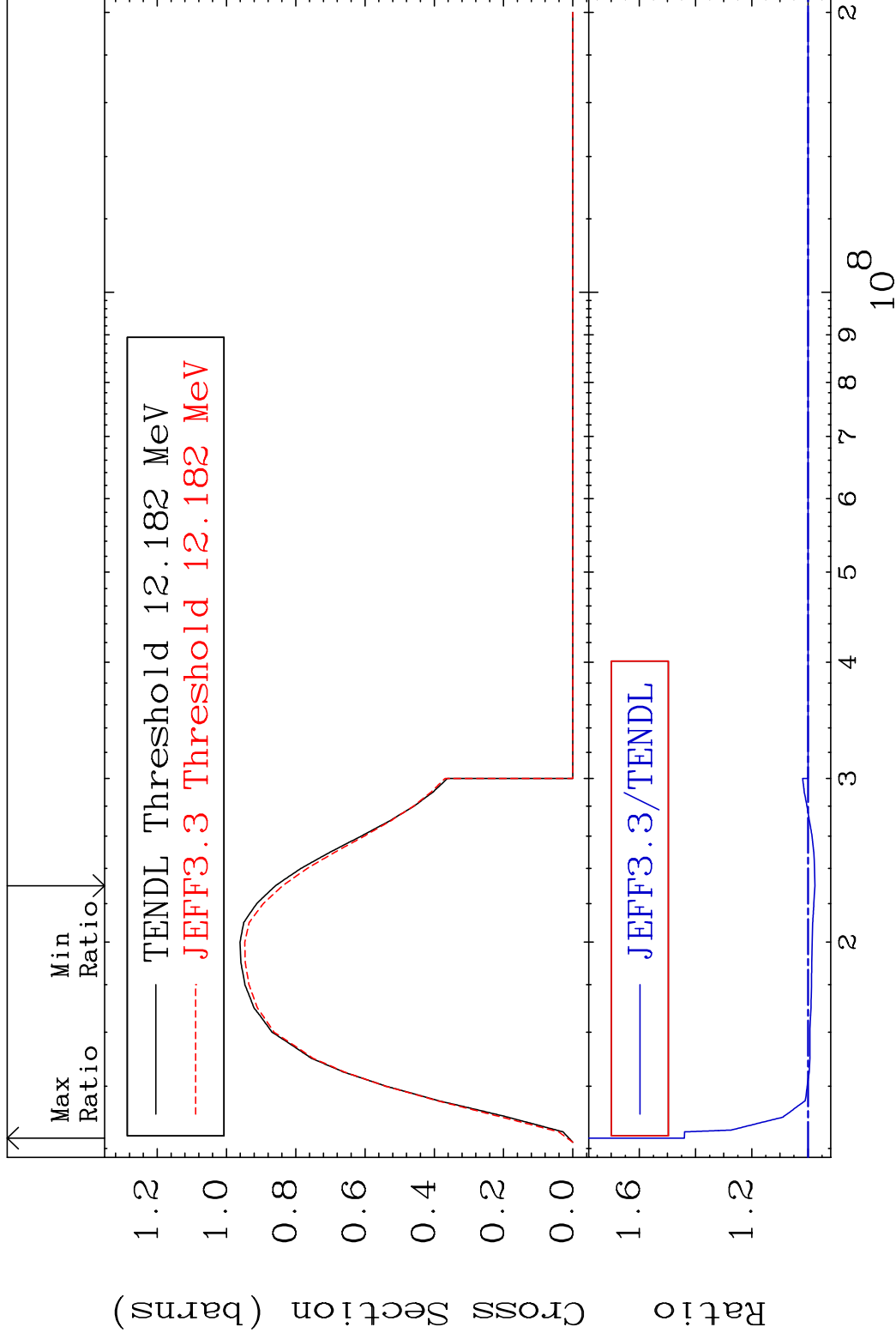
41-Nb-91

MAT 4119

(n,2n)

41-Nb-91

Cross Section -2.434 To 44.01 %



5

Incident Energy (eV)

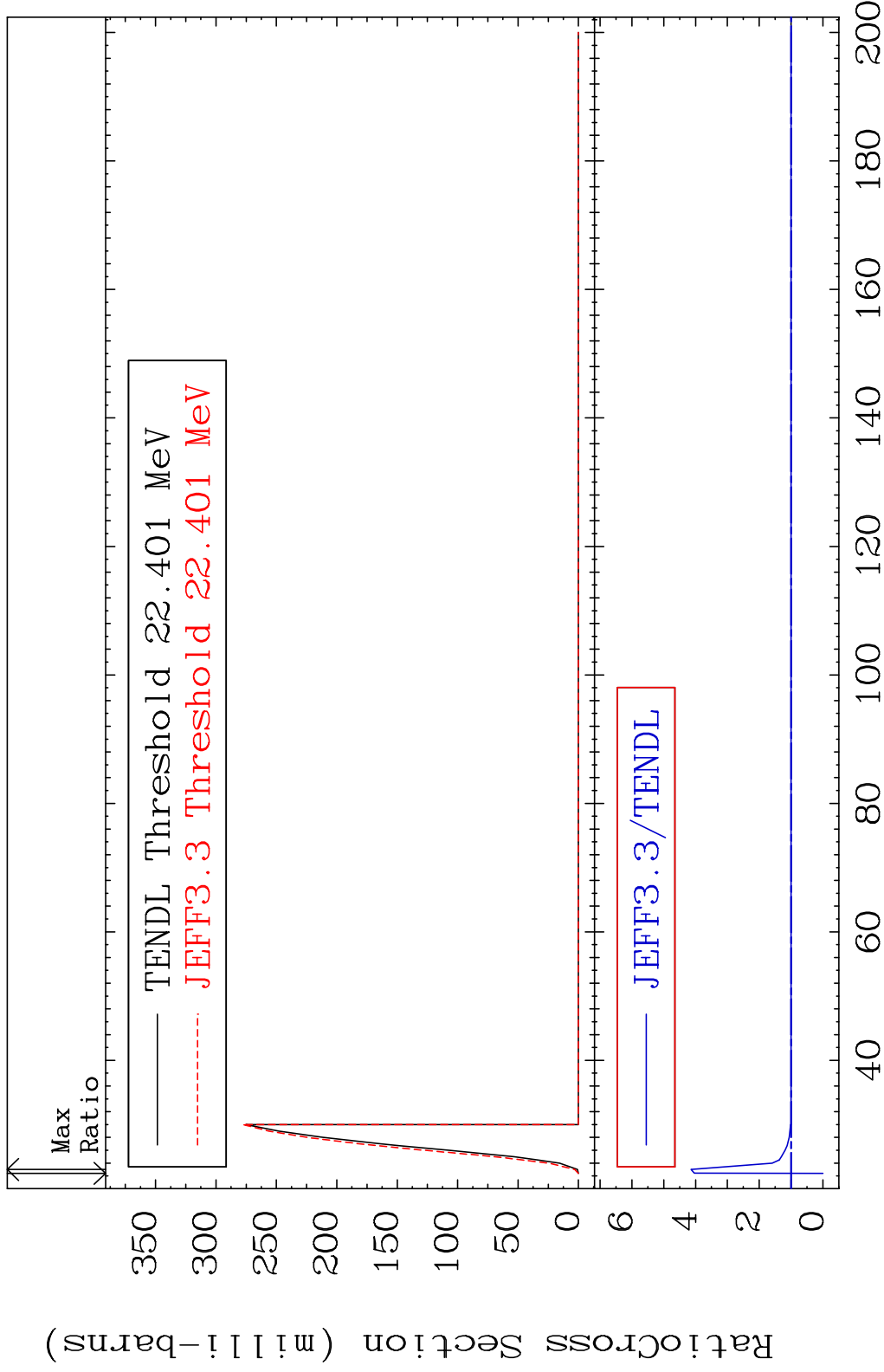
41-Nb-91

MAT 4119

(n,3n)

41-Nb-91

Cross Section -100.0 To 314.3 %

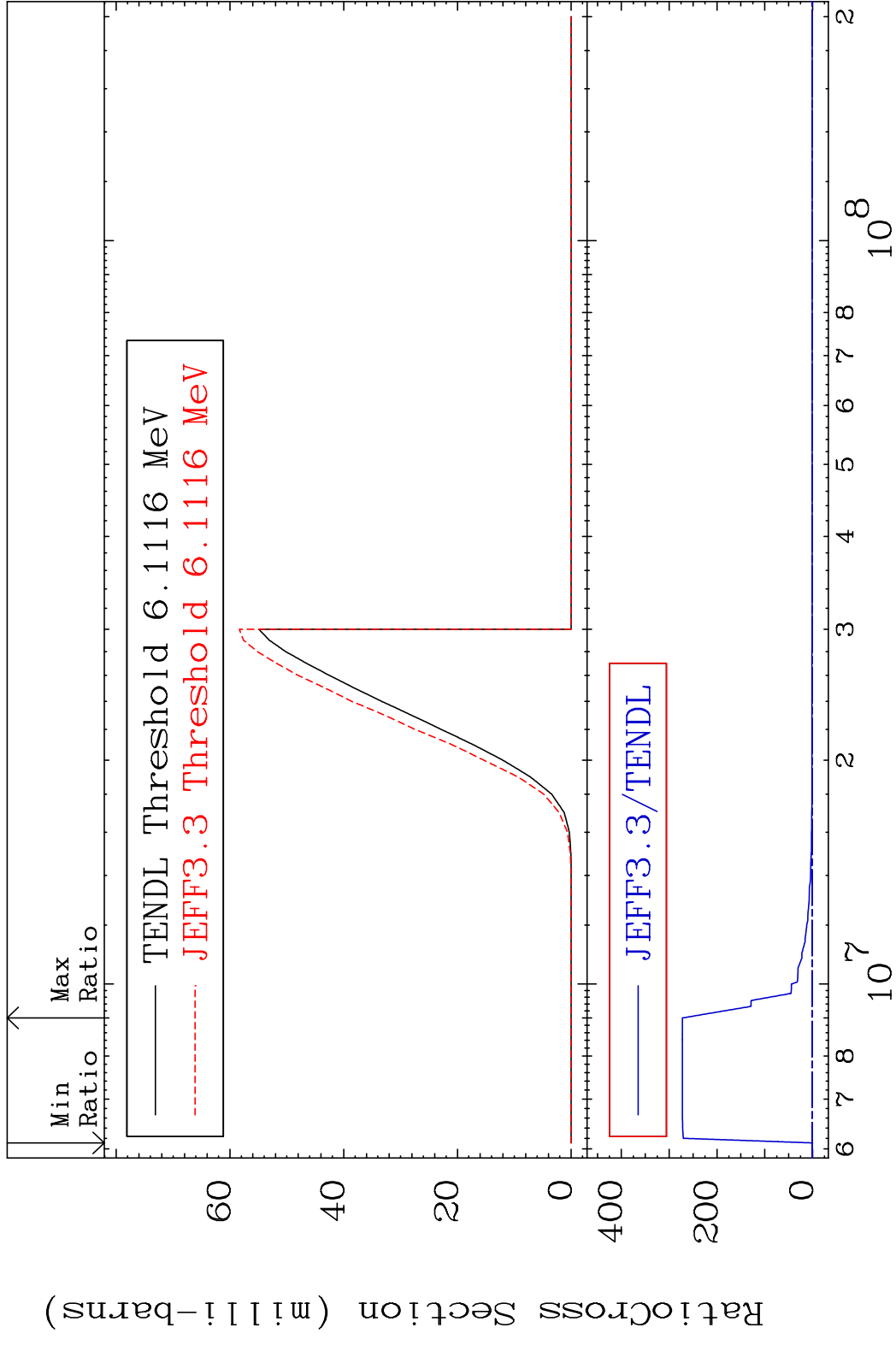


6

Incident Energy (MeV)

41-Nb-91

MAT 4119 (n, n')  $\alpha$  41-Nb-91  
 Cross Section -100.0 To 9999. %



7 Incident Energy (eV) 41-Nb-91

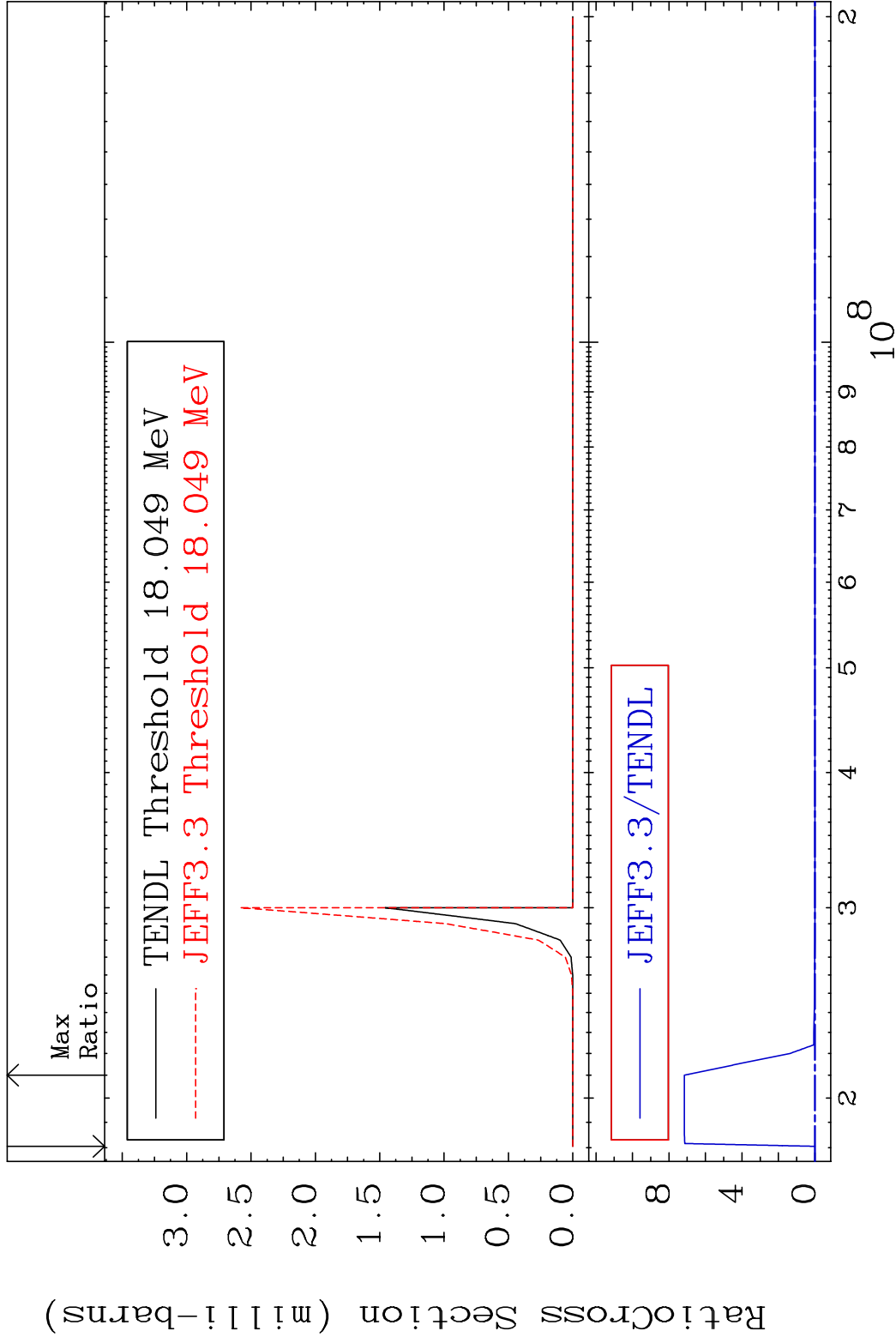


MAT 4119

(n,2n)  $\alpha$

41-Nb-91

Cross Section -100.0 To 9999. %



8

Incident Energy (eV)

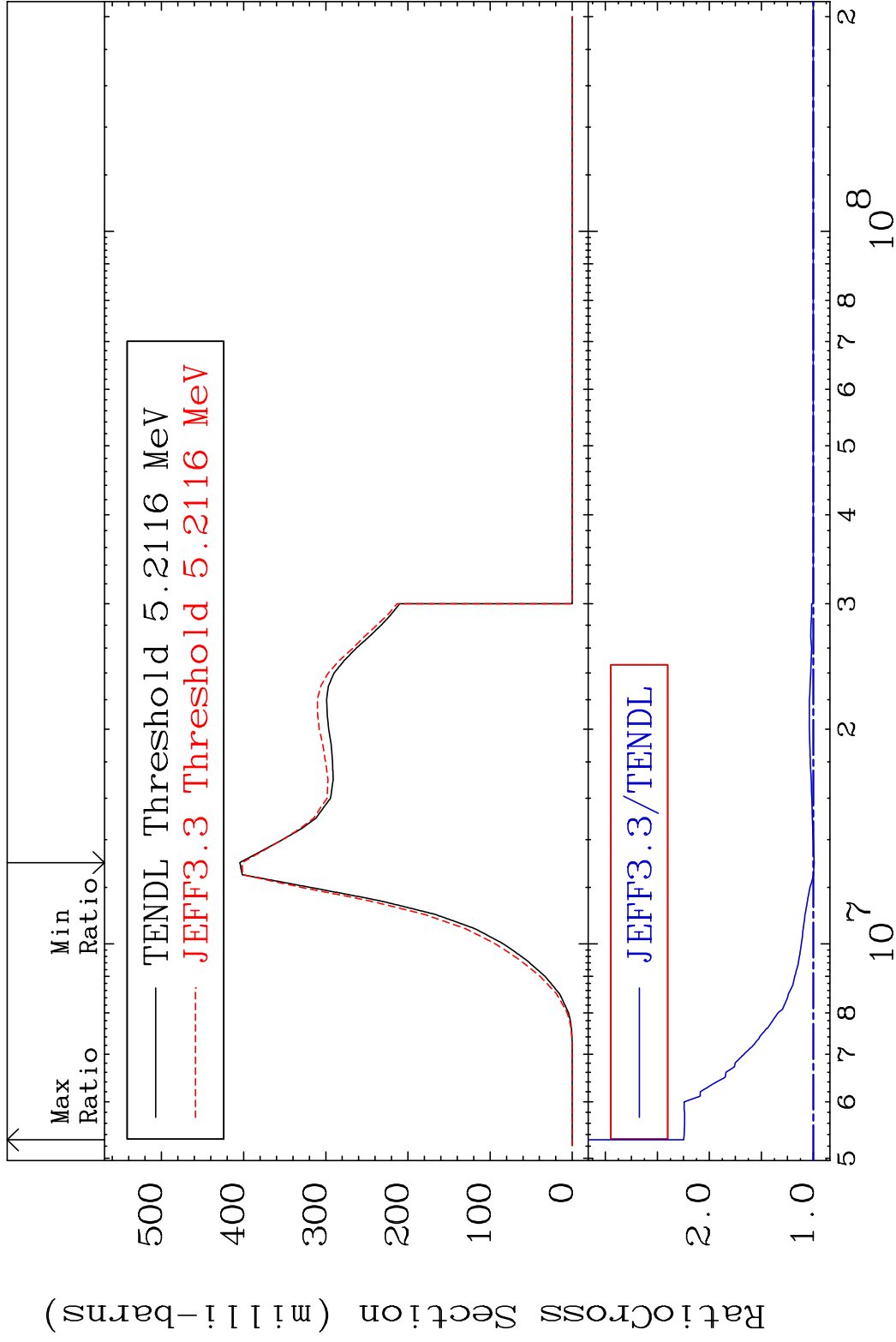
41-Nb-91

MAT 4119

(n, n') p

41-Nb-91

Cross Section -0.723 To 124.7 %



9

Incident Energy (eV)

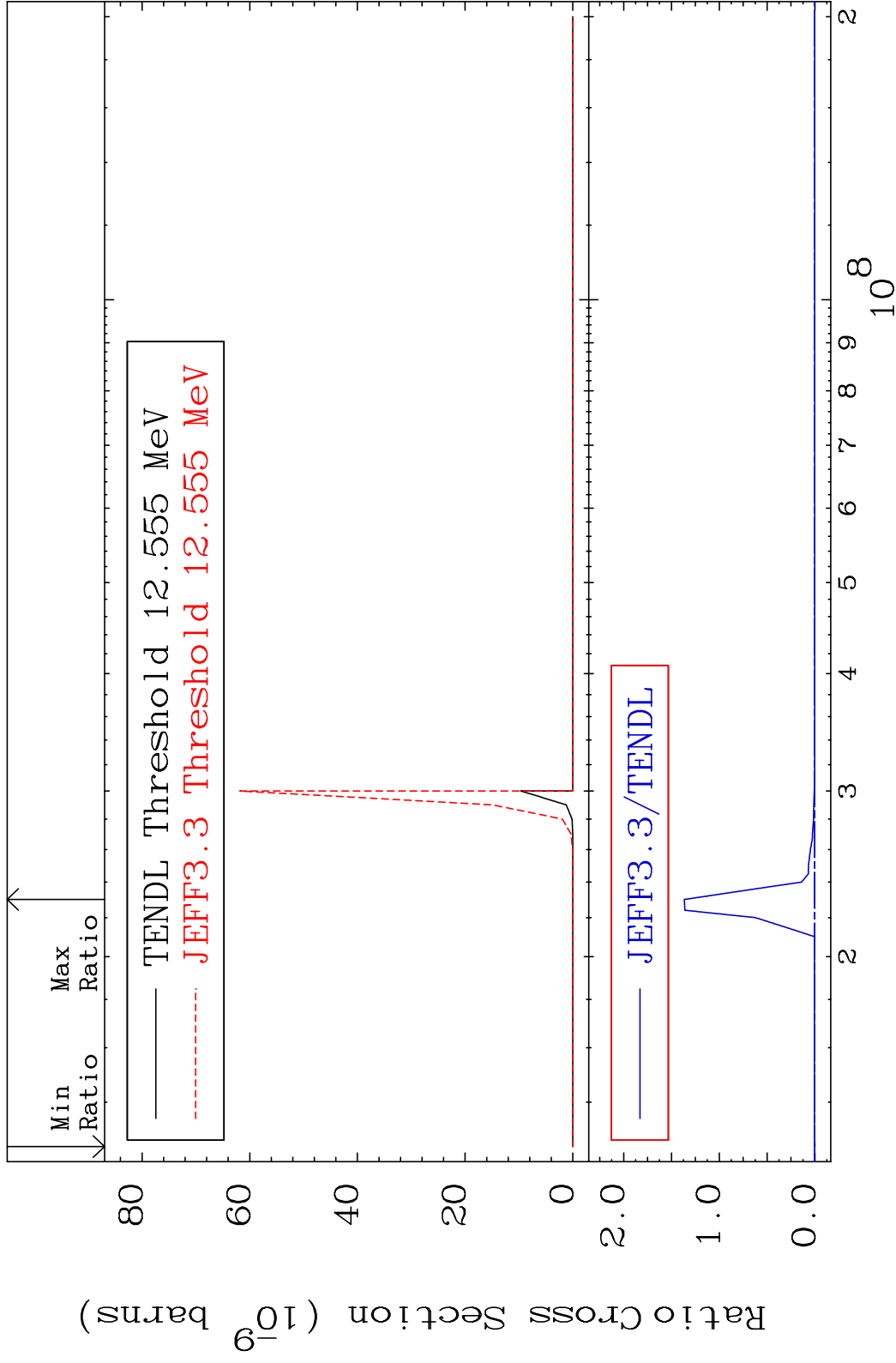
41-Nb-91

MAT 4119

(n, n') 2 $\alpha$

41-Nb-91

Cross Section -100.0 To 9999. %



10

Incident Energy (eV)

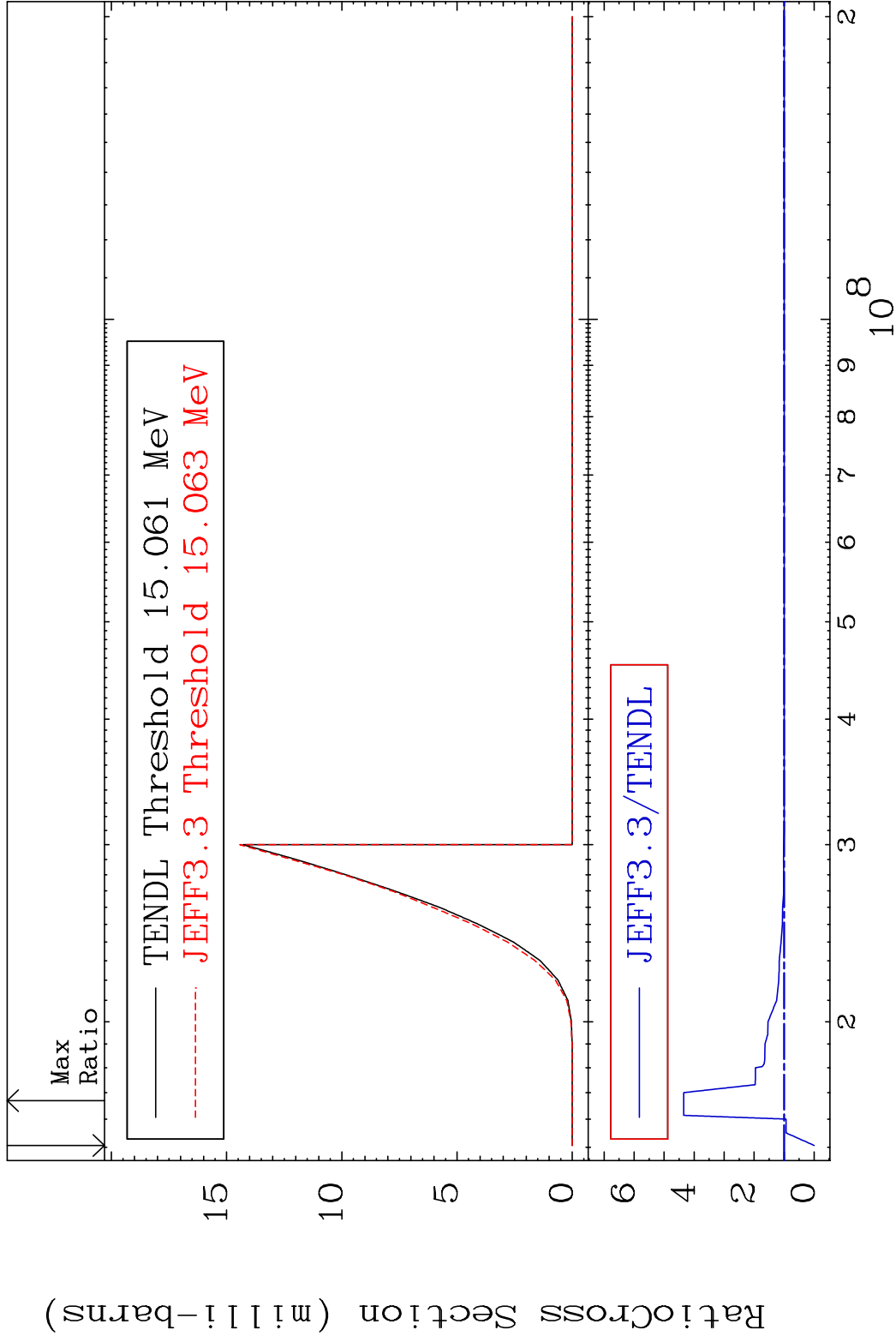
41-Nb-91

MAT 4119

(n, n') d

41-Nb-91

Cross Section -100.0 To 334.9 %



11

Incident Energy (eV)

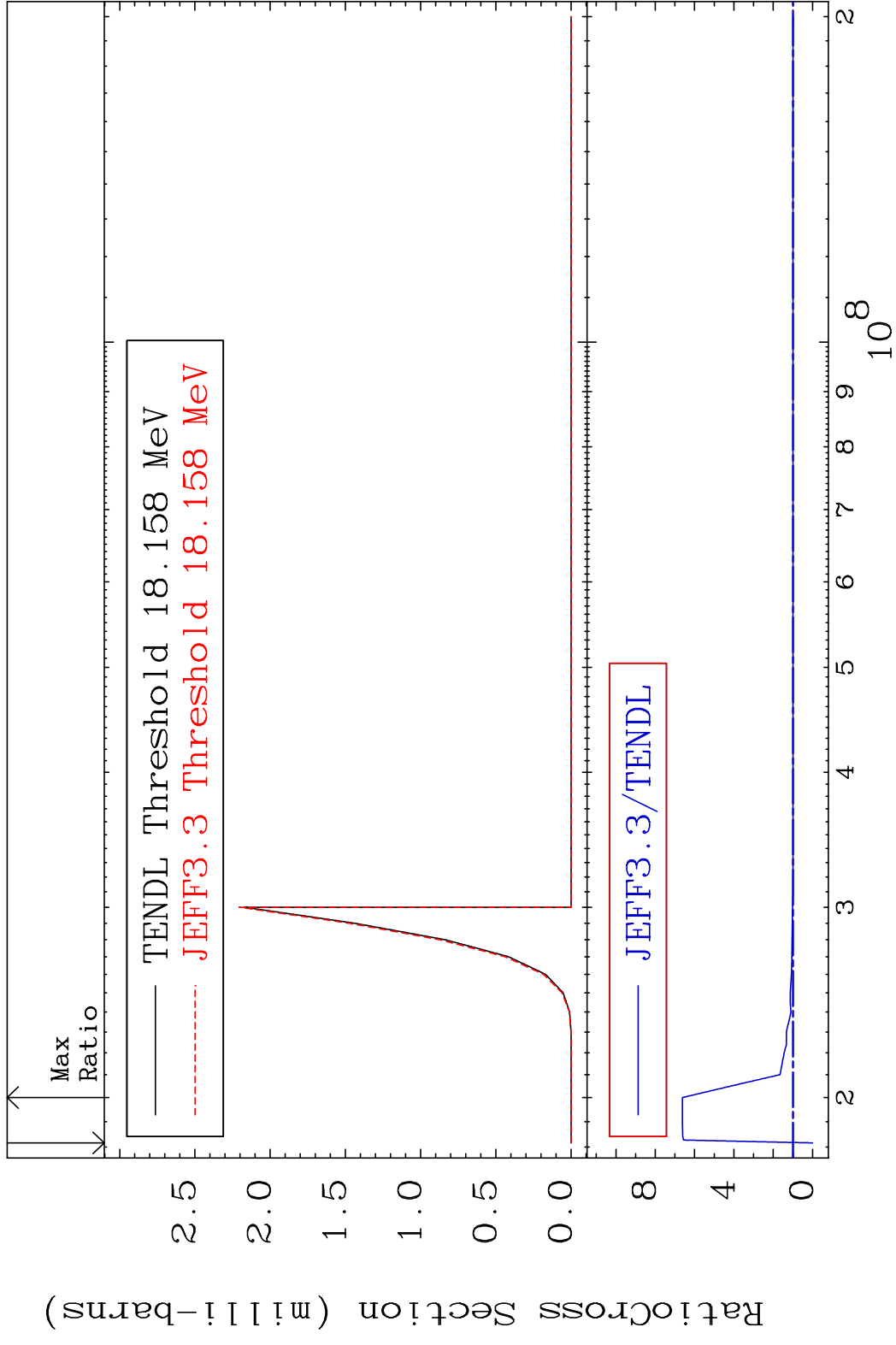
41-Nb-91

MAT 4119

(n, n') t

41-Nb-91

Cross Section -100.0 To 562.1 %



12

Incident Energy (eV)

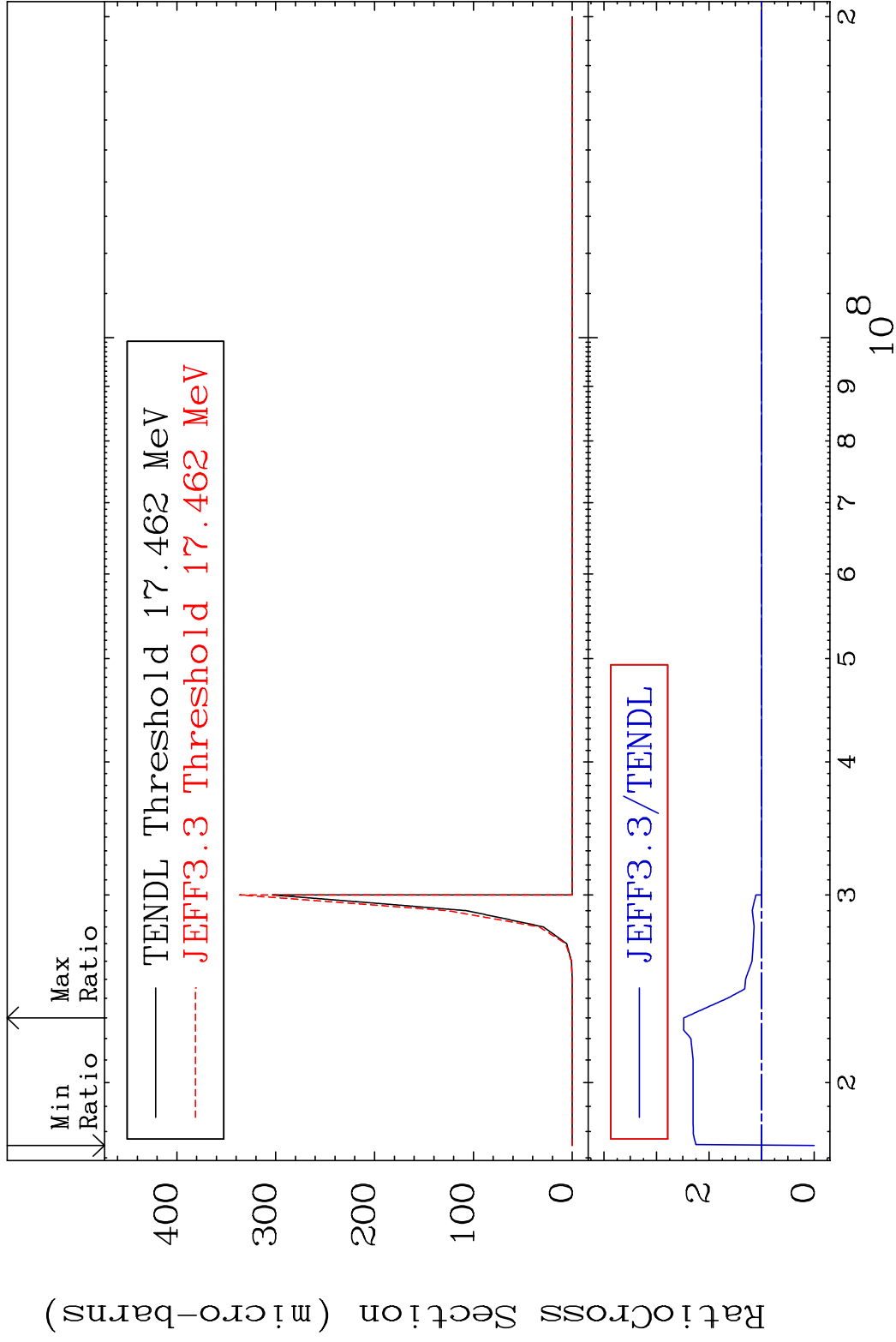
41-Nb-91

MAT 4119

(n,n') He-3

41-Nb-91

Cross Section -100.0 To 148.4 %

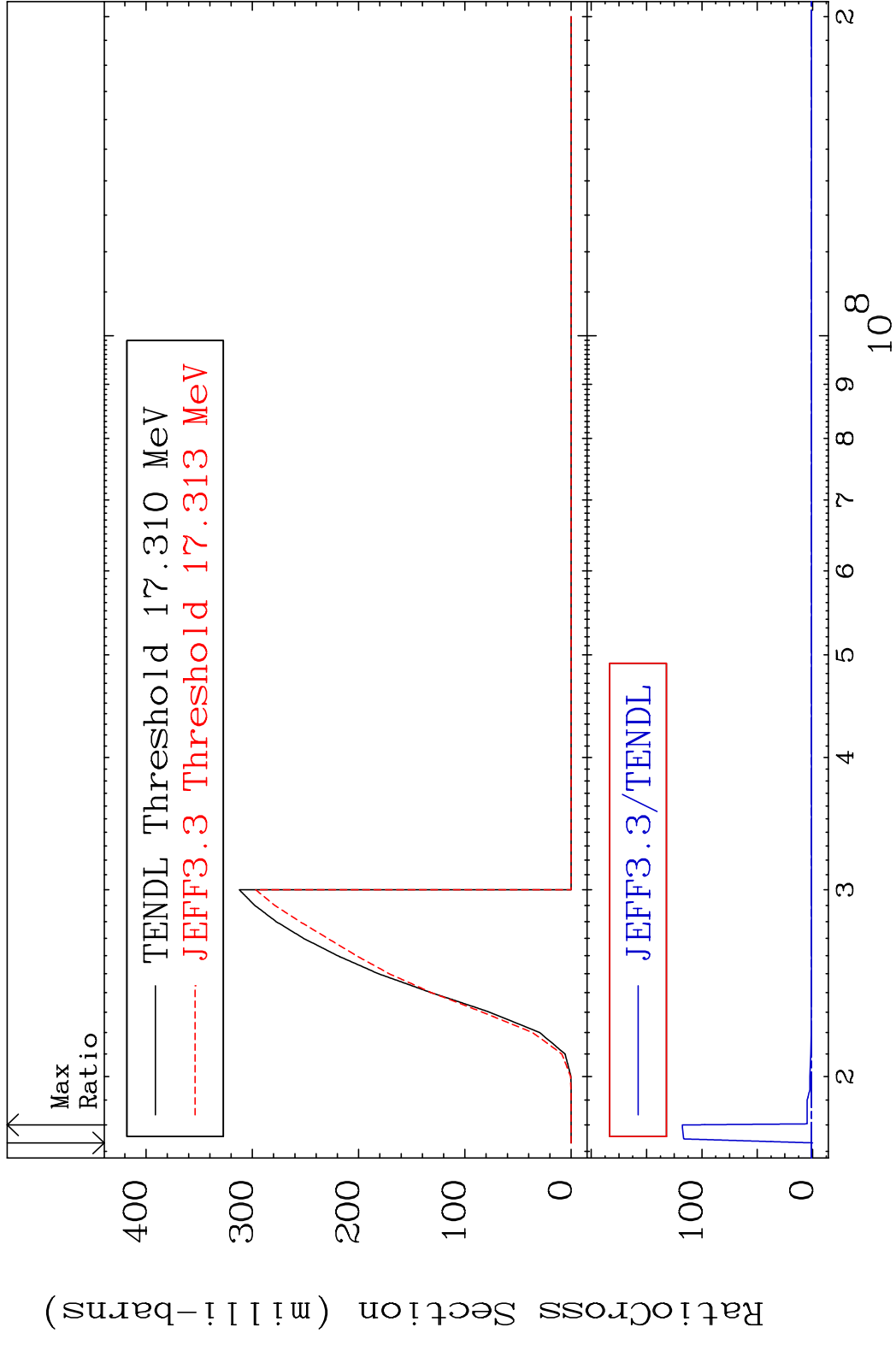


13

Incident Energy (eV)

41-Nb-91

MAT 4119 (n,2n) p 41-Nb-91  
 Cross Section -100.0 To 9999. %

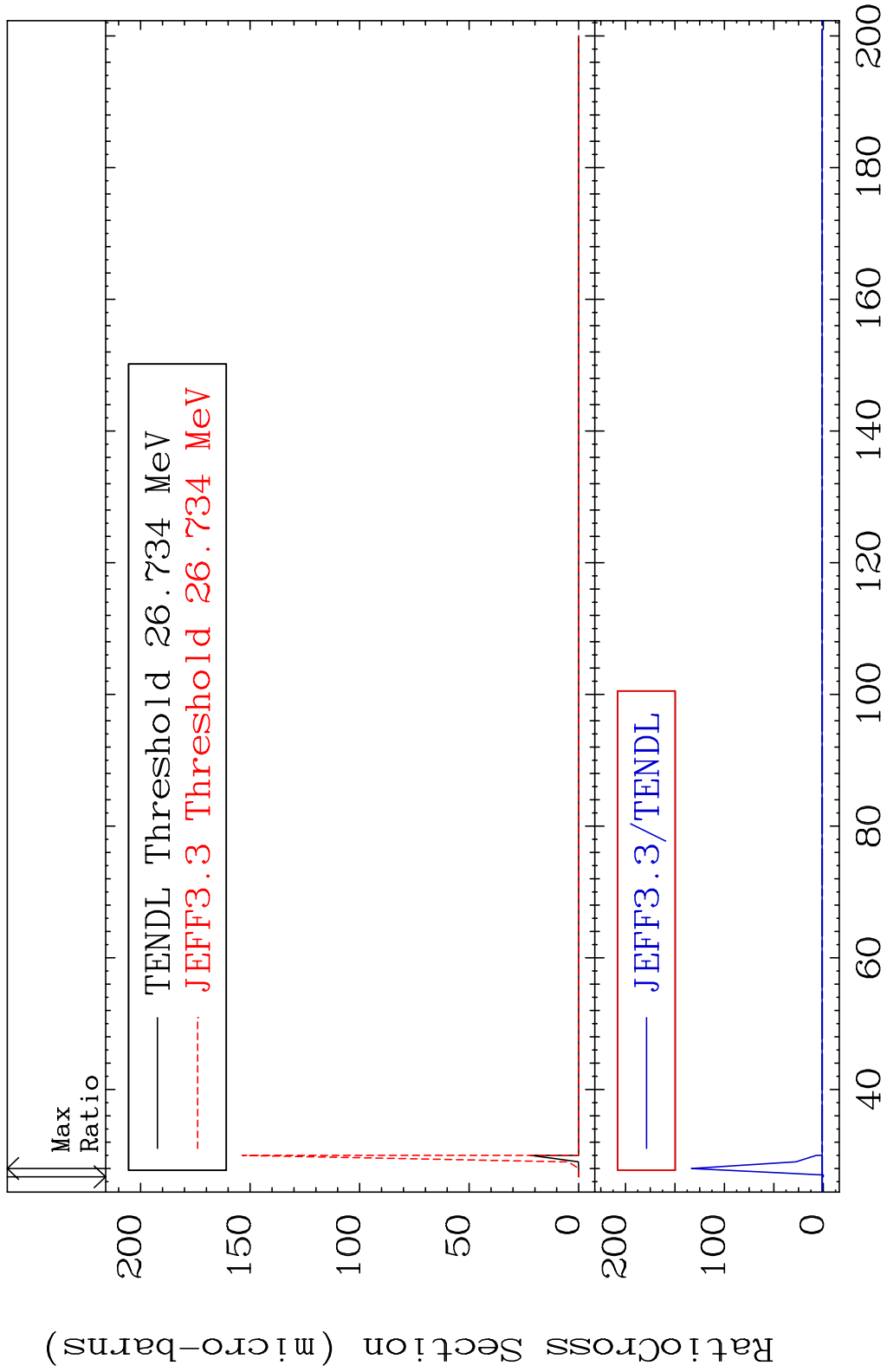


MAT 4119

(n,3n) p

41-Nb-91

Cross Section -100.0 To 9999. %



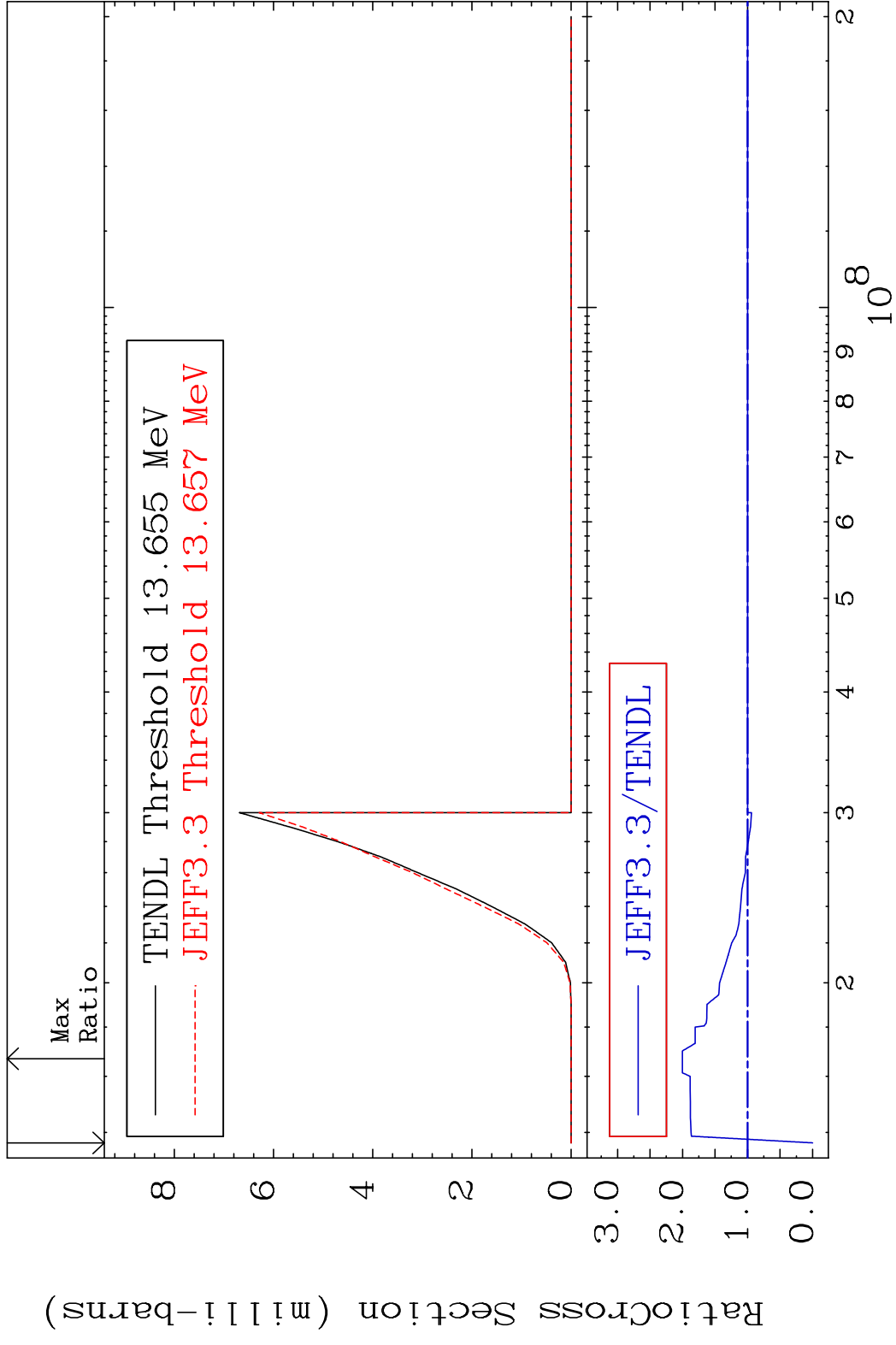


MAT 4119

(n,2n) p

41-Nb-91

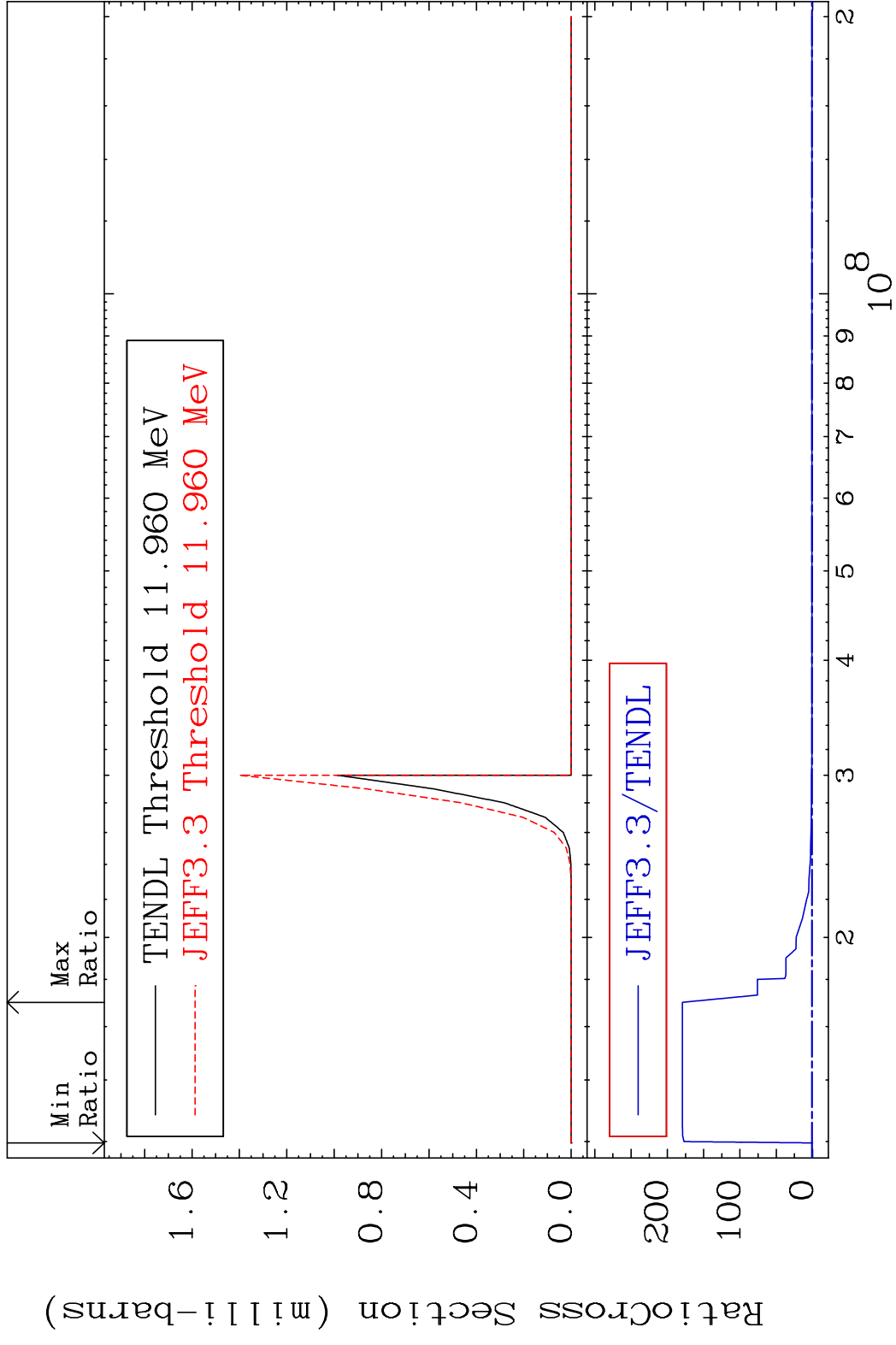
Cross Section -100.0 To 100.3 %



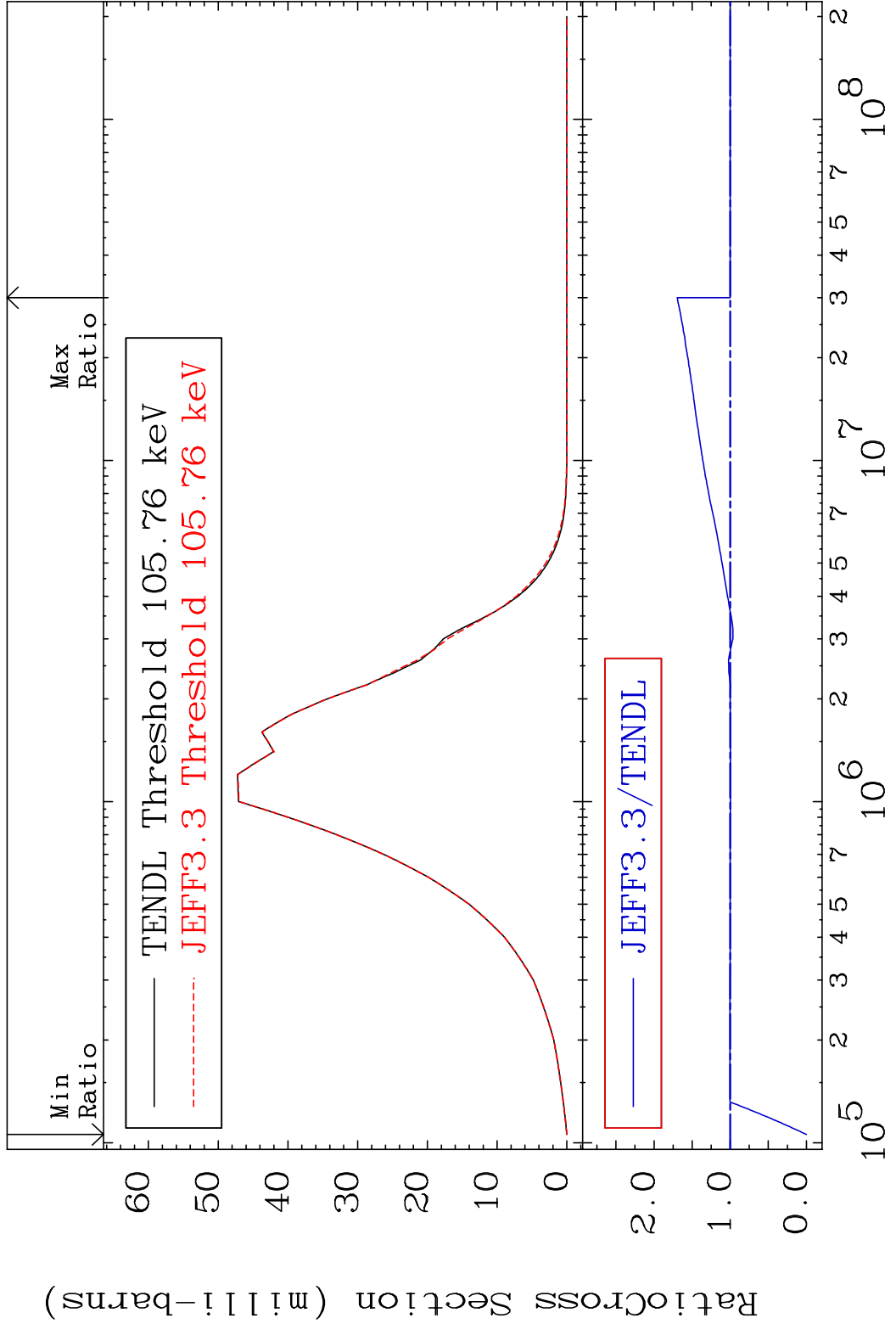
MAT 4119

(n,n') p  $\alpha$  41-Nb-91

Cross Section -100.0 To 9999. %

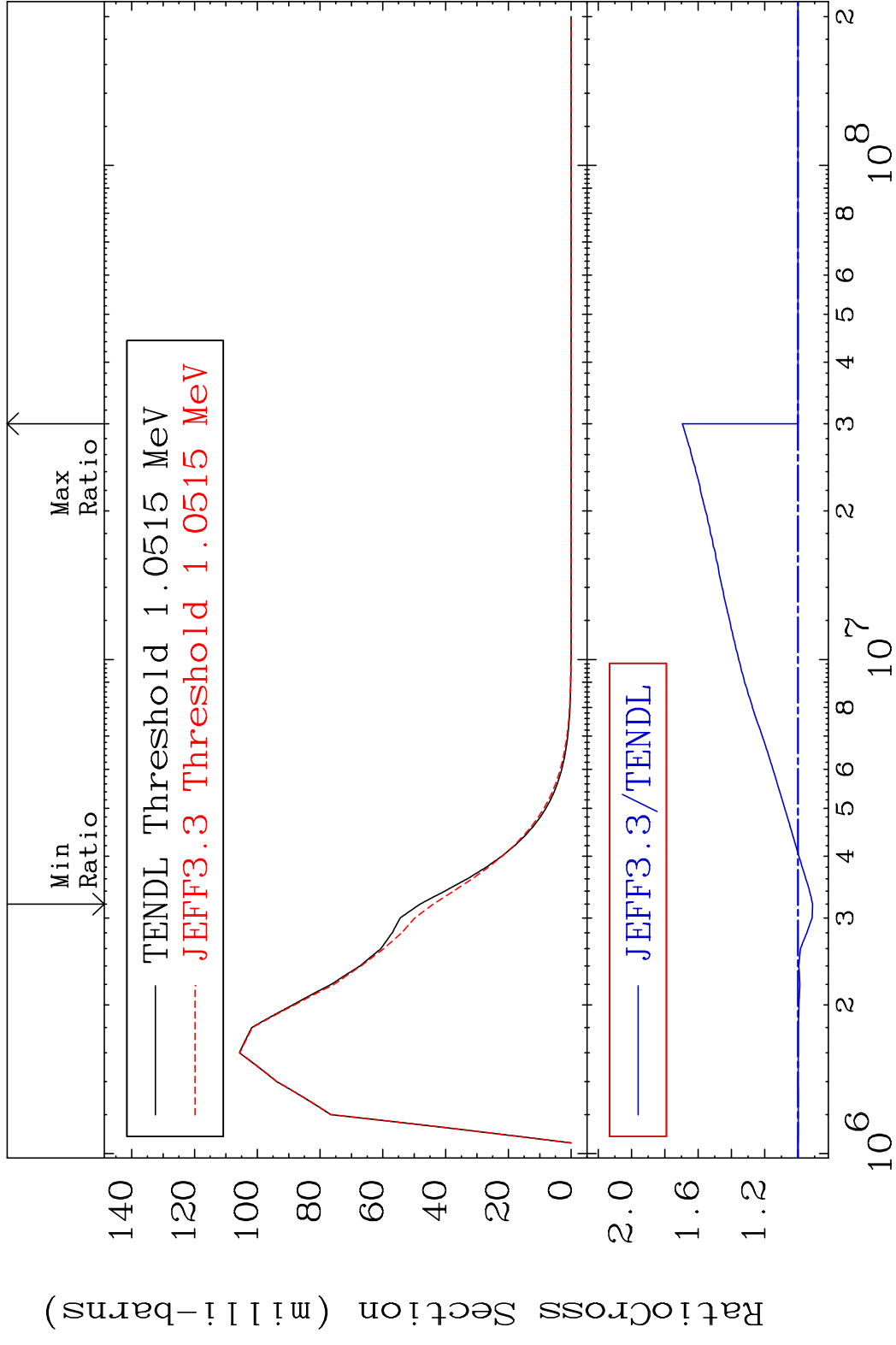


MAT 4119 MT= 51 (n,n') Level 41-Nb-91  
 Cross Section -100.0 To 69.61 %



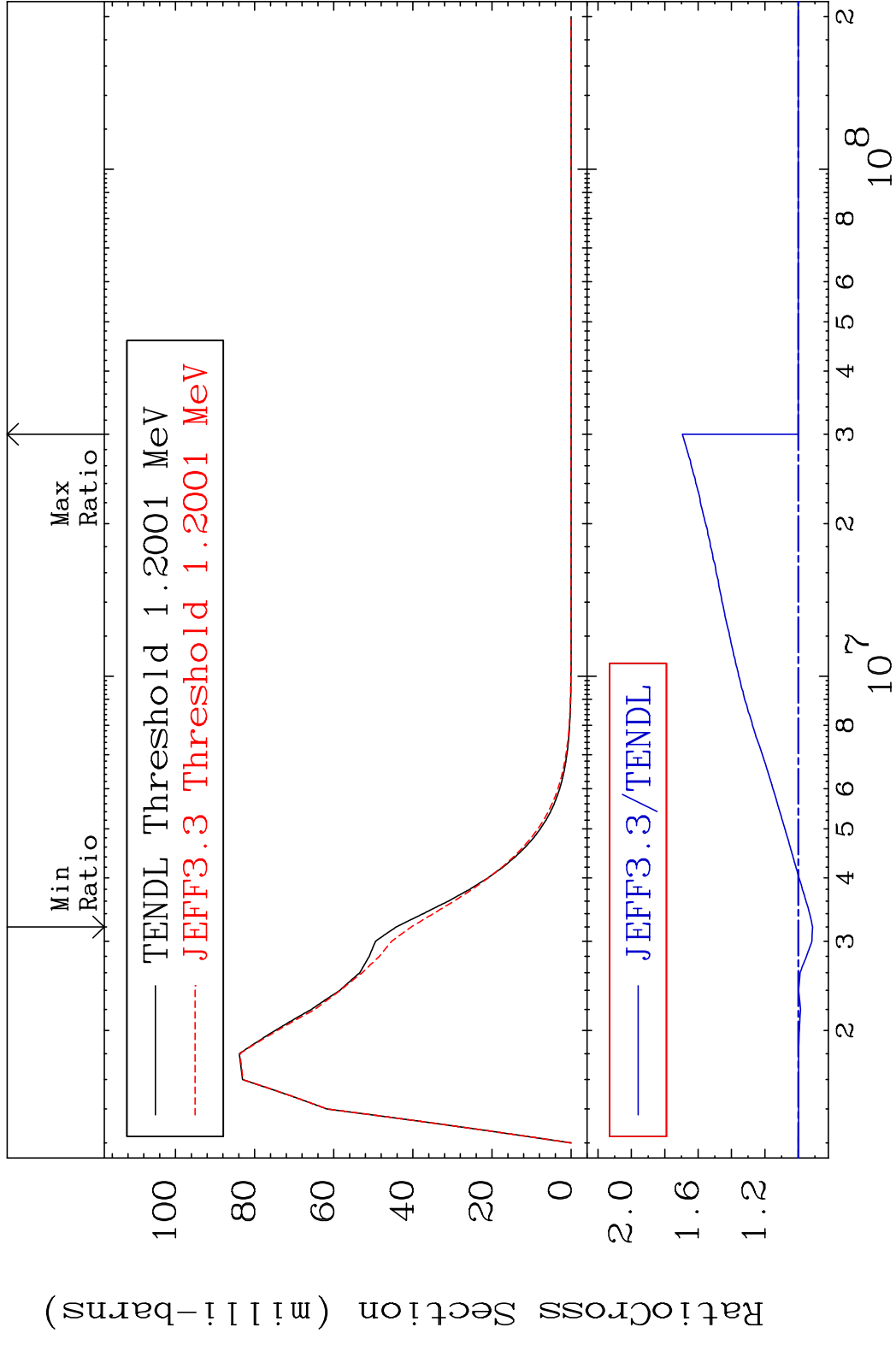
18 41-Nb-91

MAT 4119 MT= 52 (n, n') Level 41-Nb-91  
 Cross Section -8.775 To 69.45 %

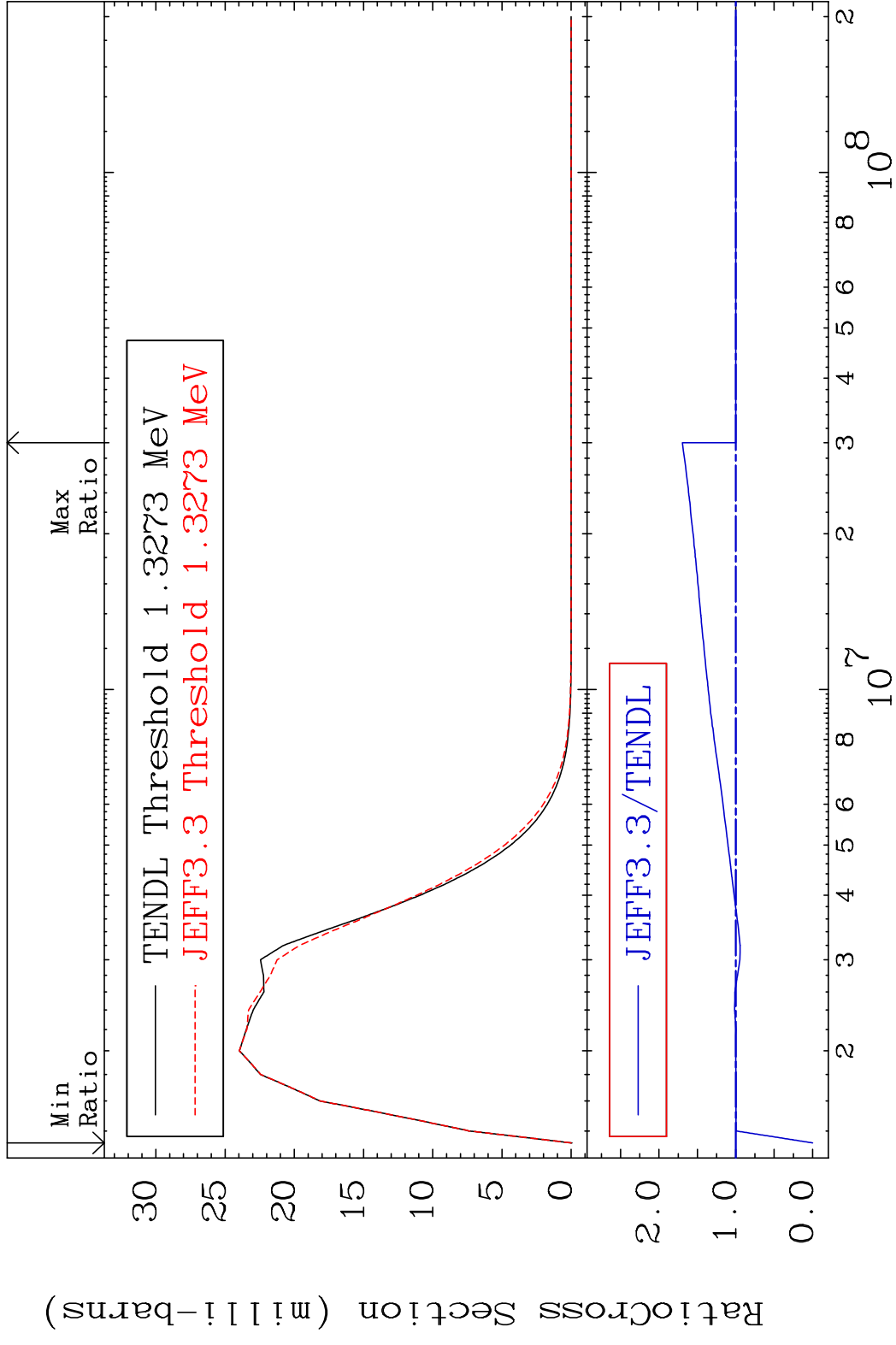


19 41-Nb-91

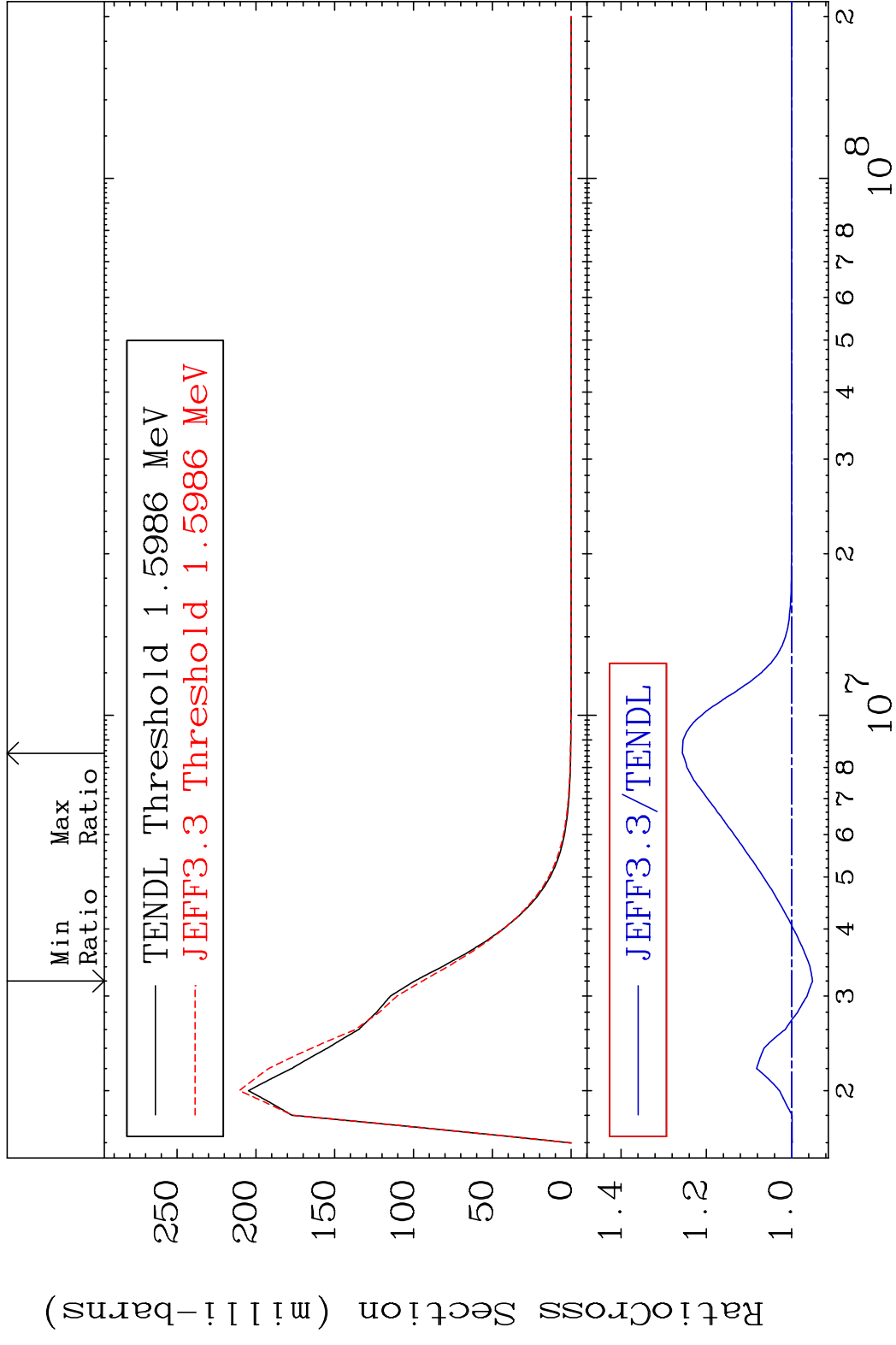
MAT 4119 MT= 53 (n, n') Level 41-Nb-91  
 Cross Section -8.609 To 69.45 %



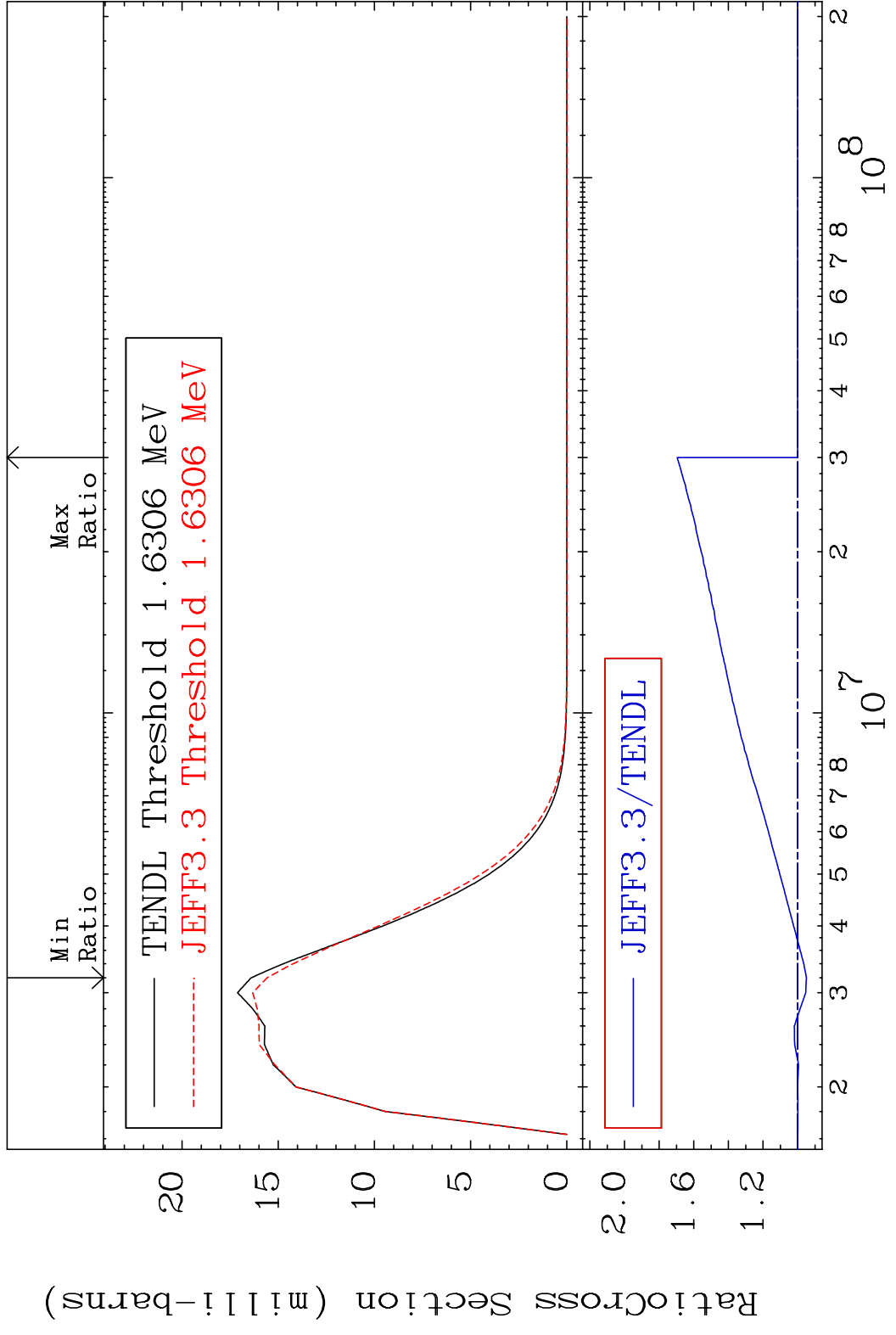
MAT 4119 MT= 54 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 69.57 %



MAT 4119 MT= 55 (n,n') Level 41-Nb-91  
 Cross Section -4.909 To 25.61 %

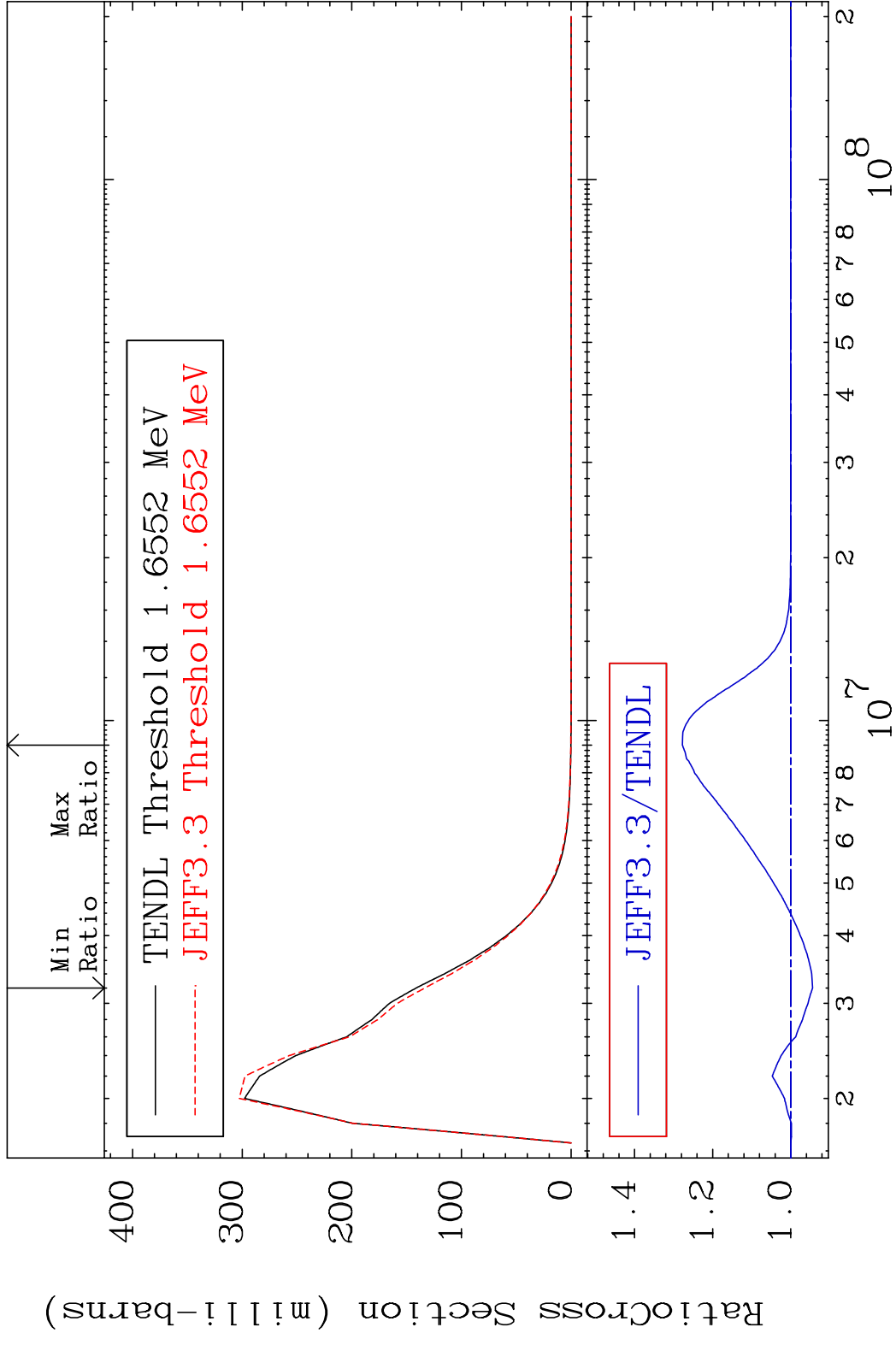


MAT 4119 MT= 56 (n,n') Level 41-Nb-91  
 Cross Section -5.060 To 69.58 %

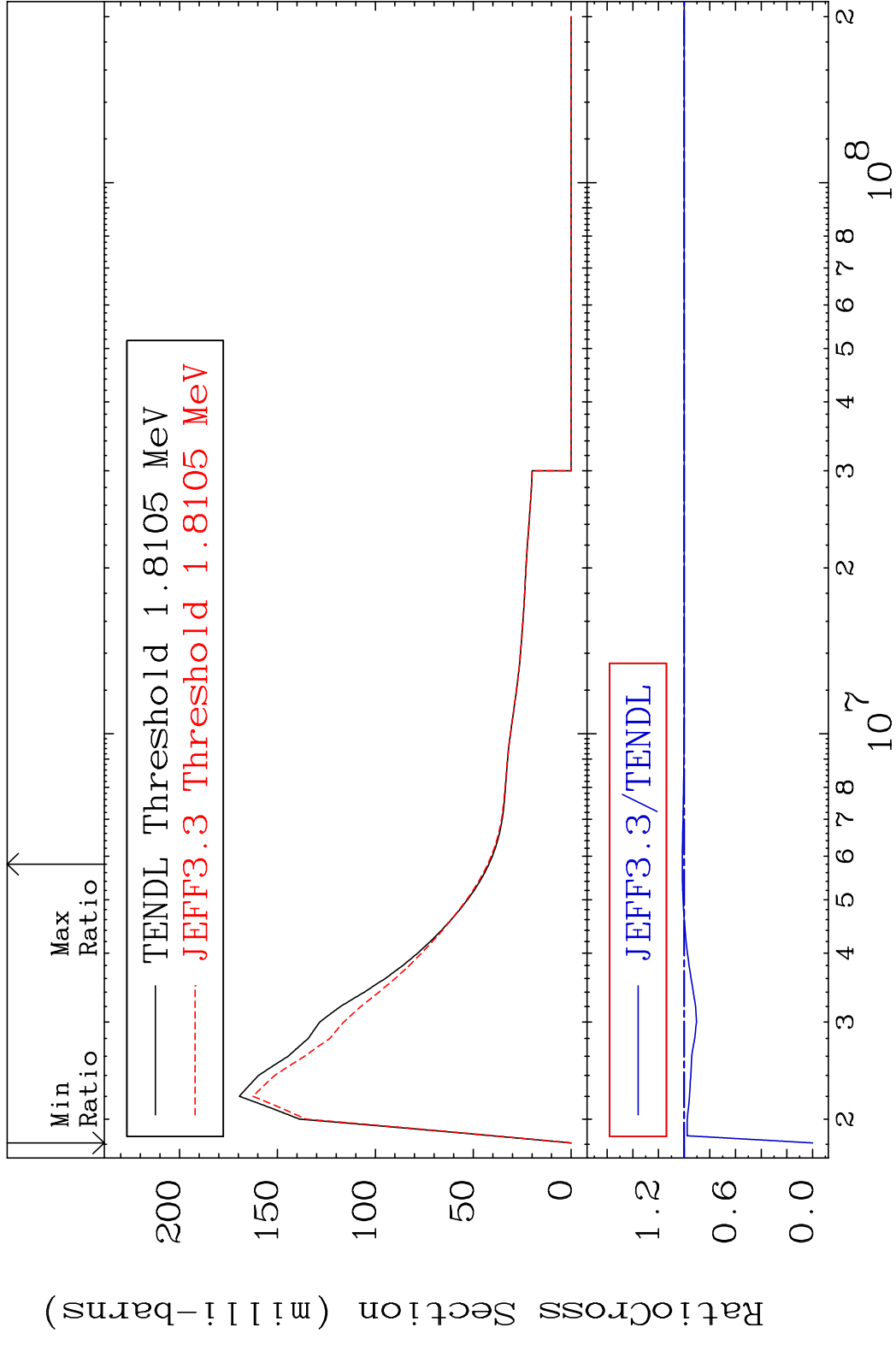




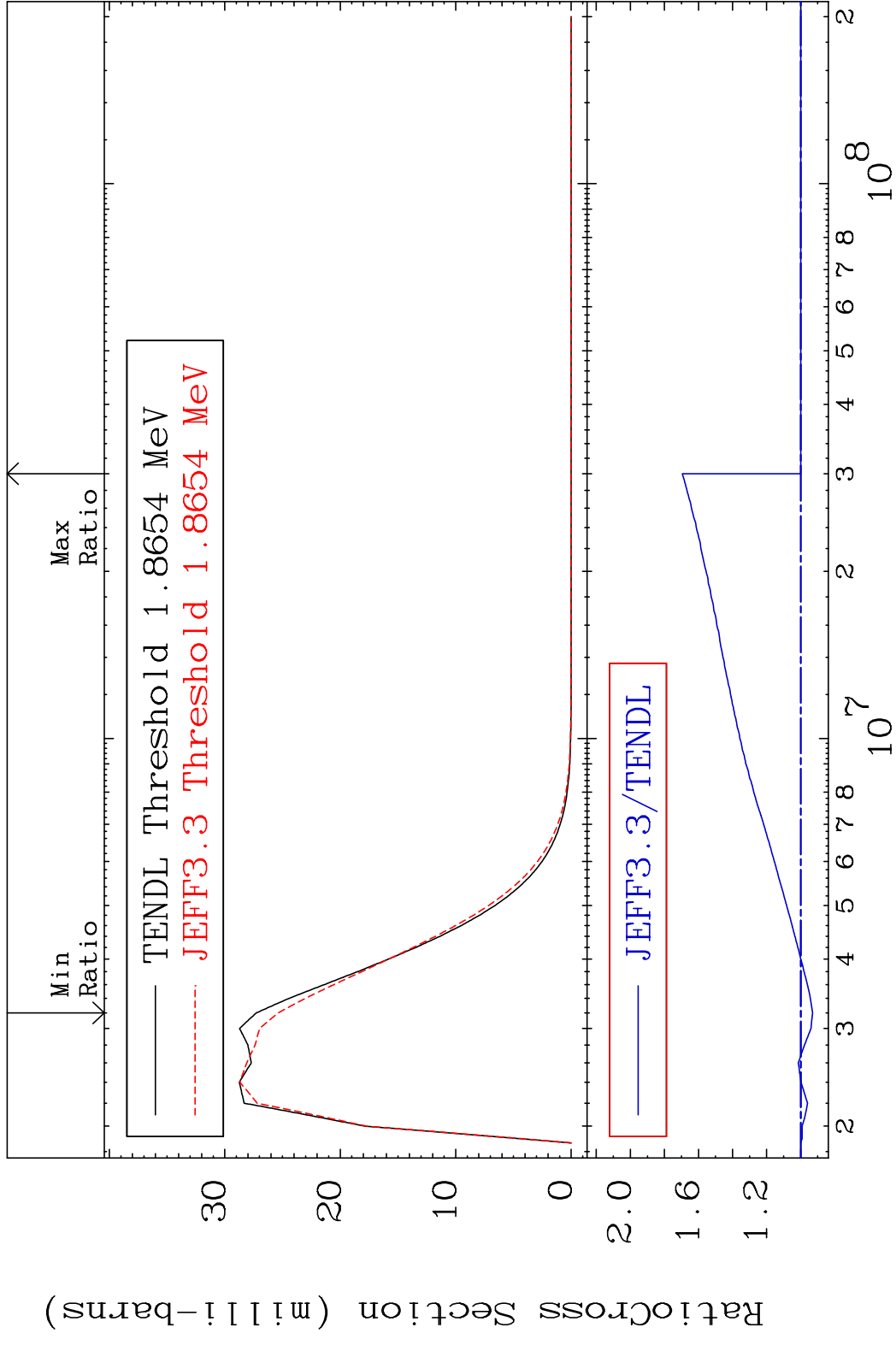
MAT 4119 MT= 57 (n,n') Level 41-Nb-91  
 Cross Section -5.593 To 27.75 %



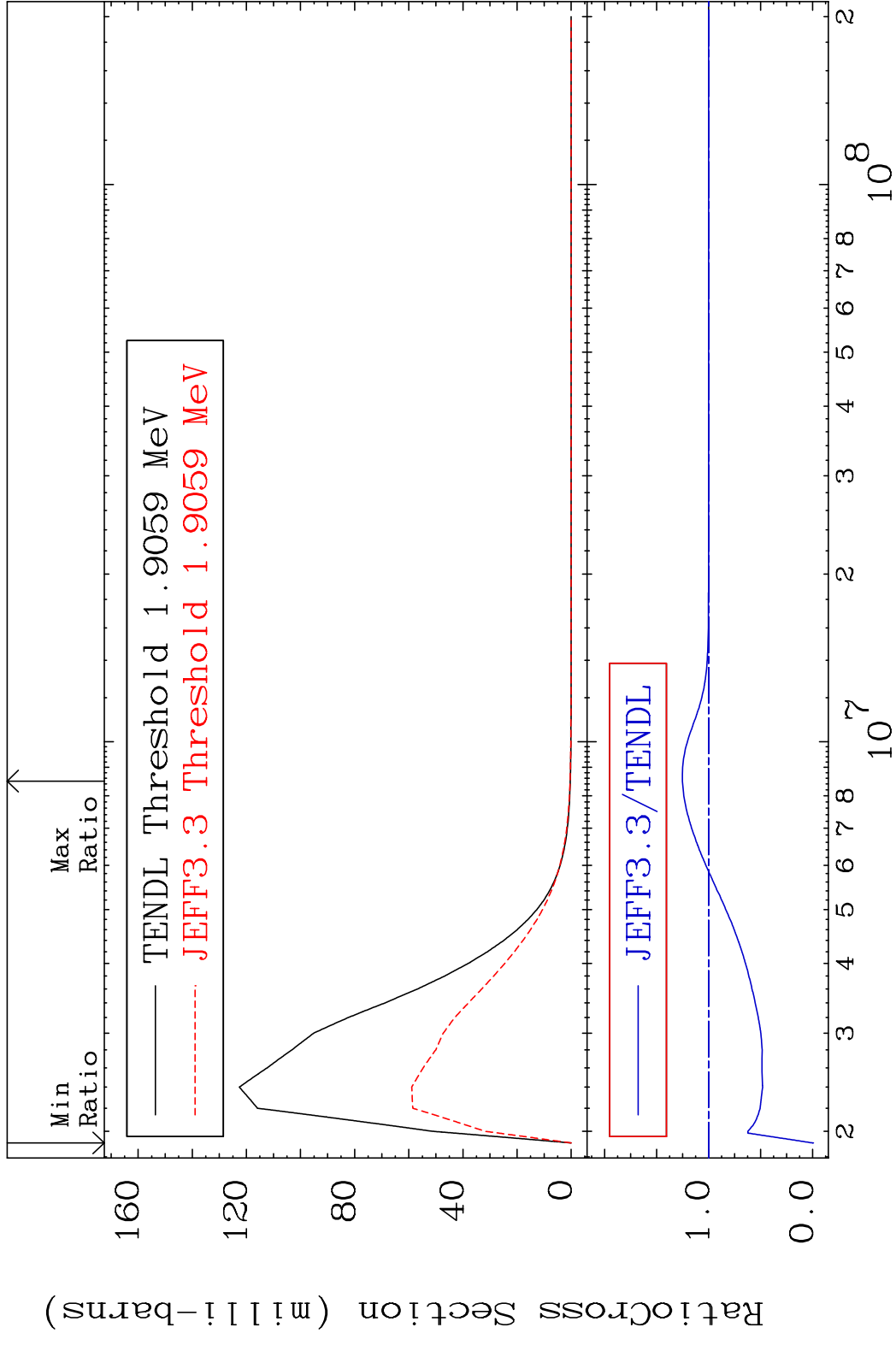
MAT 4119 MT= 58 (n,n') Level 41-Nb-91  
 Cross Section -100.0 To 1.423 %



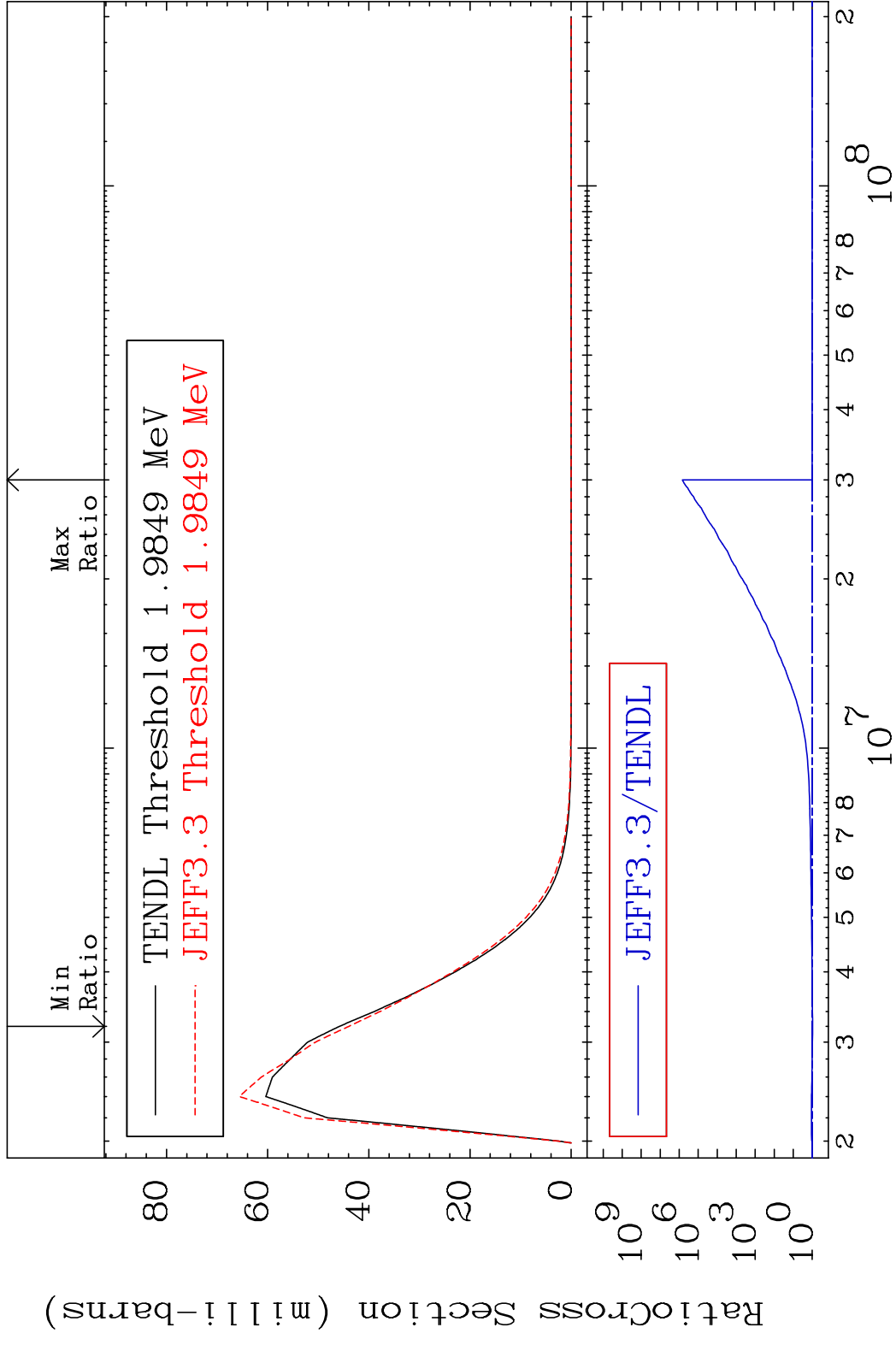
MAT 4119 MT= 59 (n, n') Level 41-Nb-91  
 Cross Section -6.965 To 69.47 %



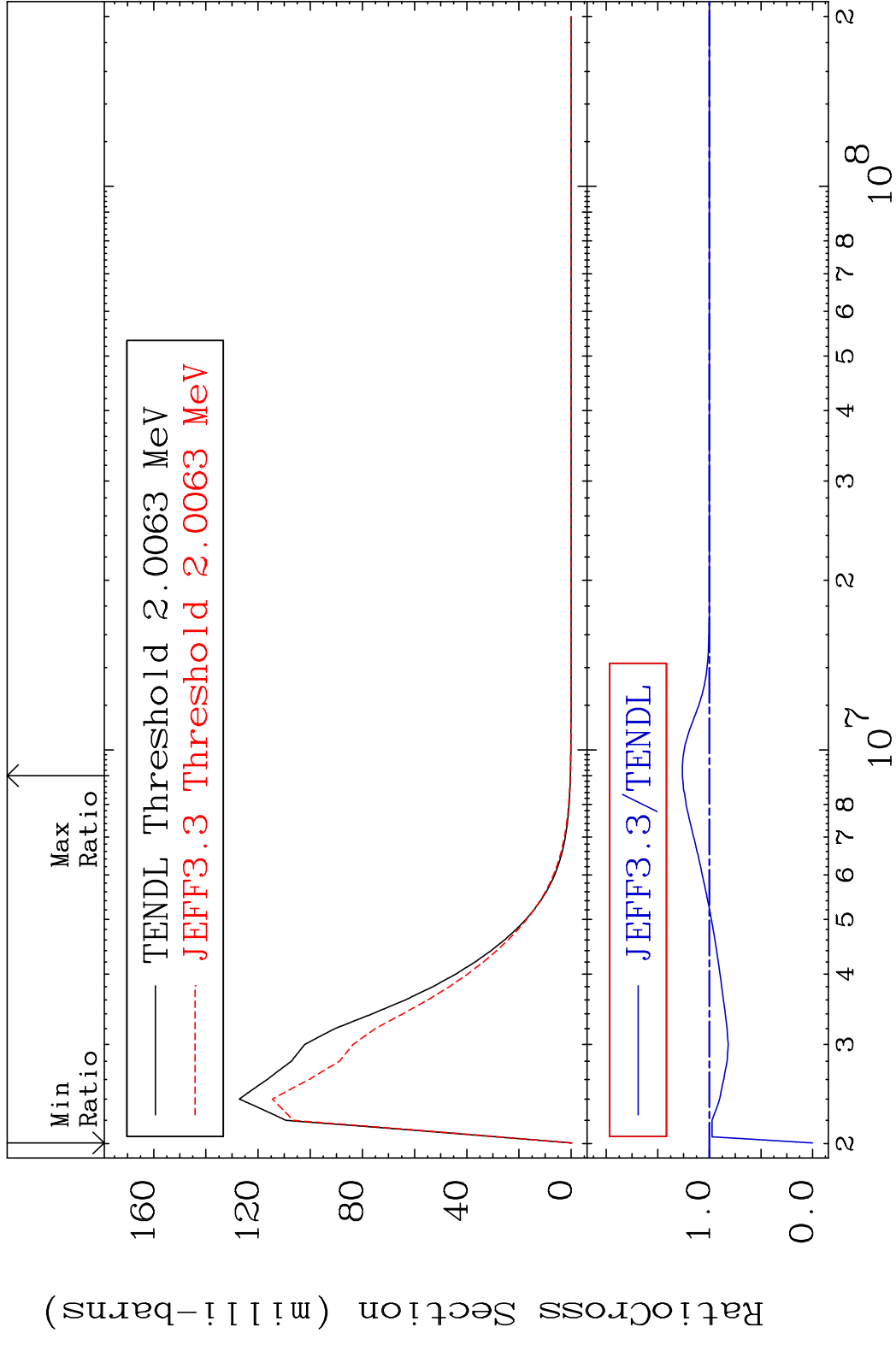
MAT 4119 MT= 60 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 25.17 %



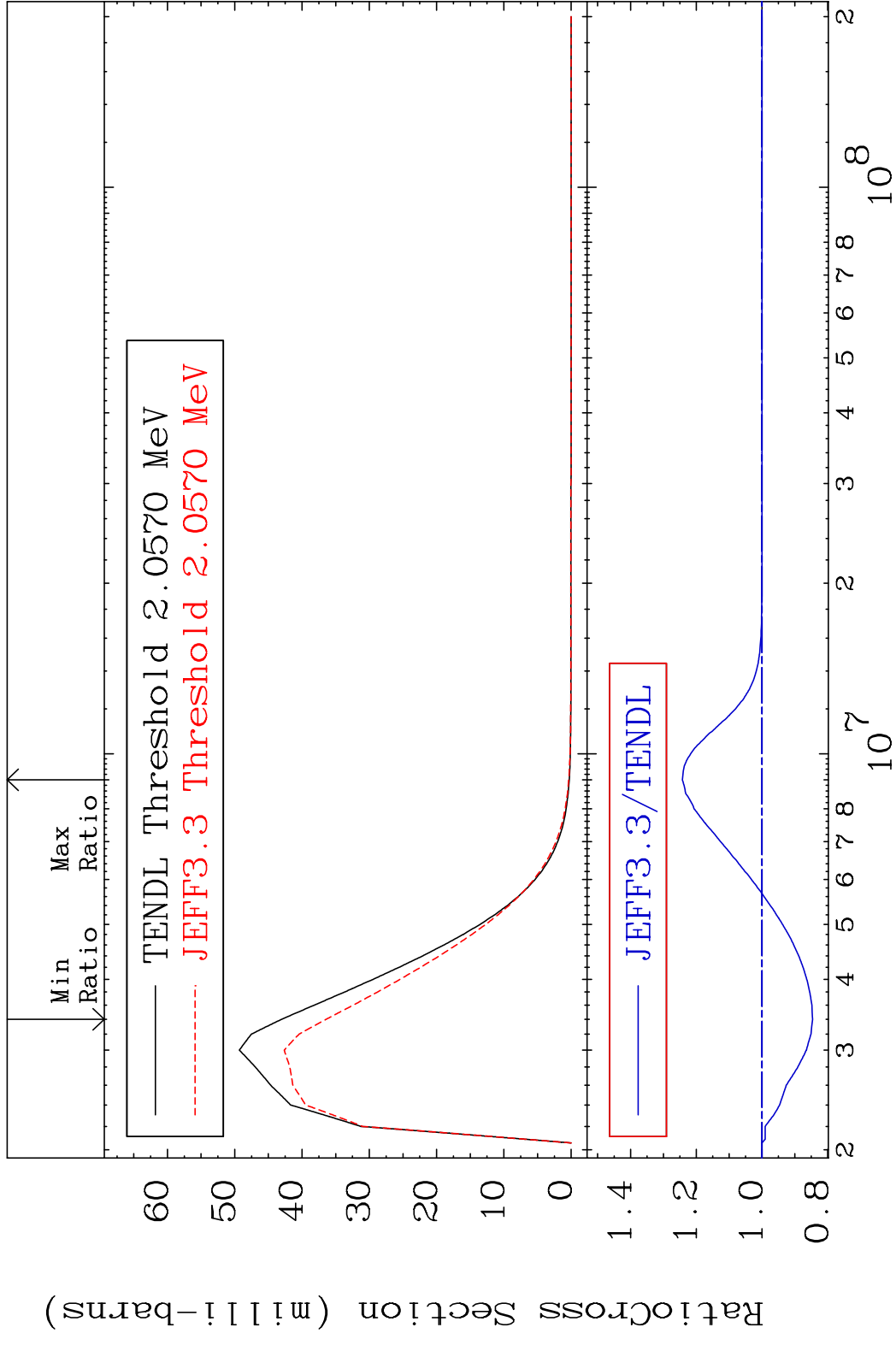
MAT 4119 MT= 61 (n,n') Level 41-Nb-91  
 Cross Section -4.093 To 9999. %



MAT 4119 MT= 62 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 26.22 %

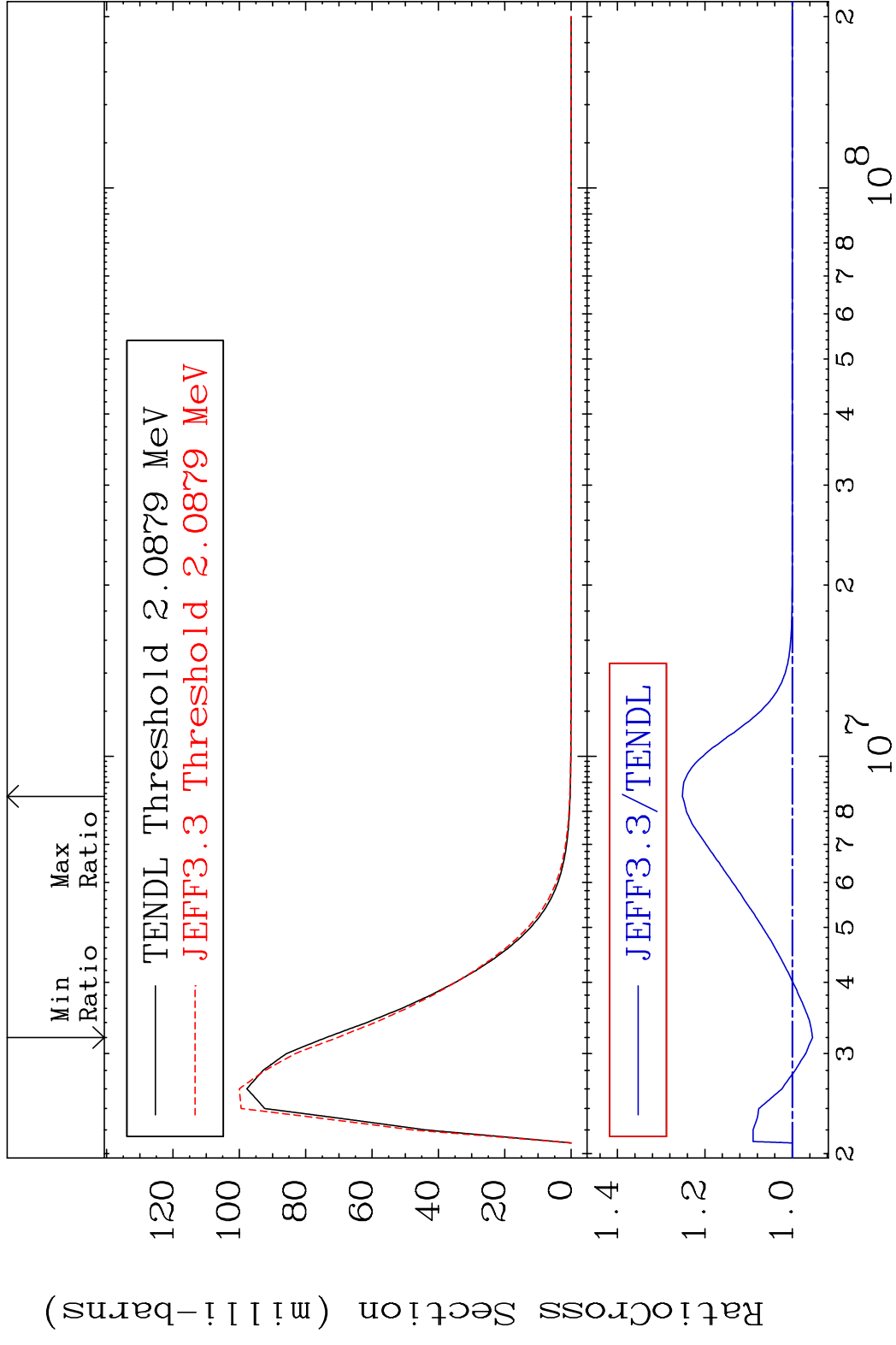


MAT 4119 MT= 63 (n, n') Level 41-Nb-91  
 Cross Section -15.39 To 24.23 %



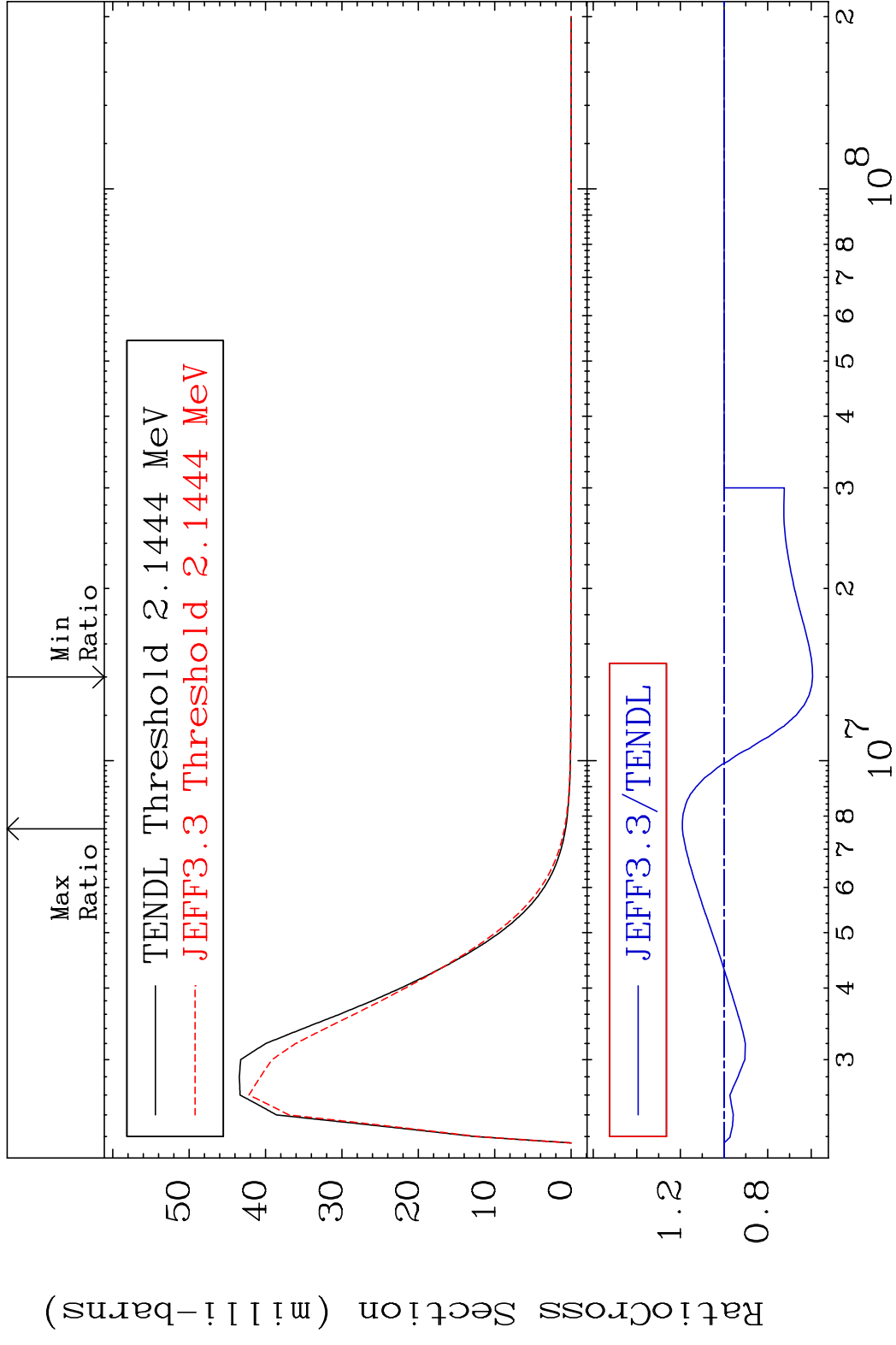
30 Incident Energy (eV) 41-Nb-91

MAT 4119 MT= 64 (n, n') Level 41-Nb-91  
 Cross Section -4.640 To 25.15 %

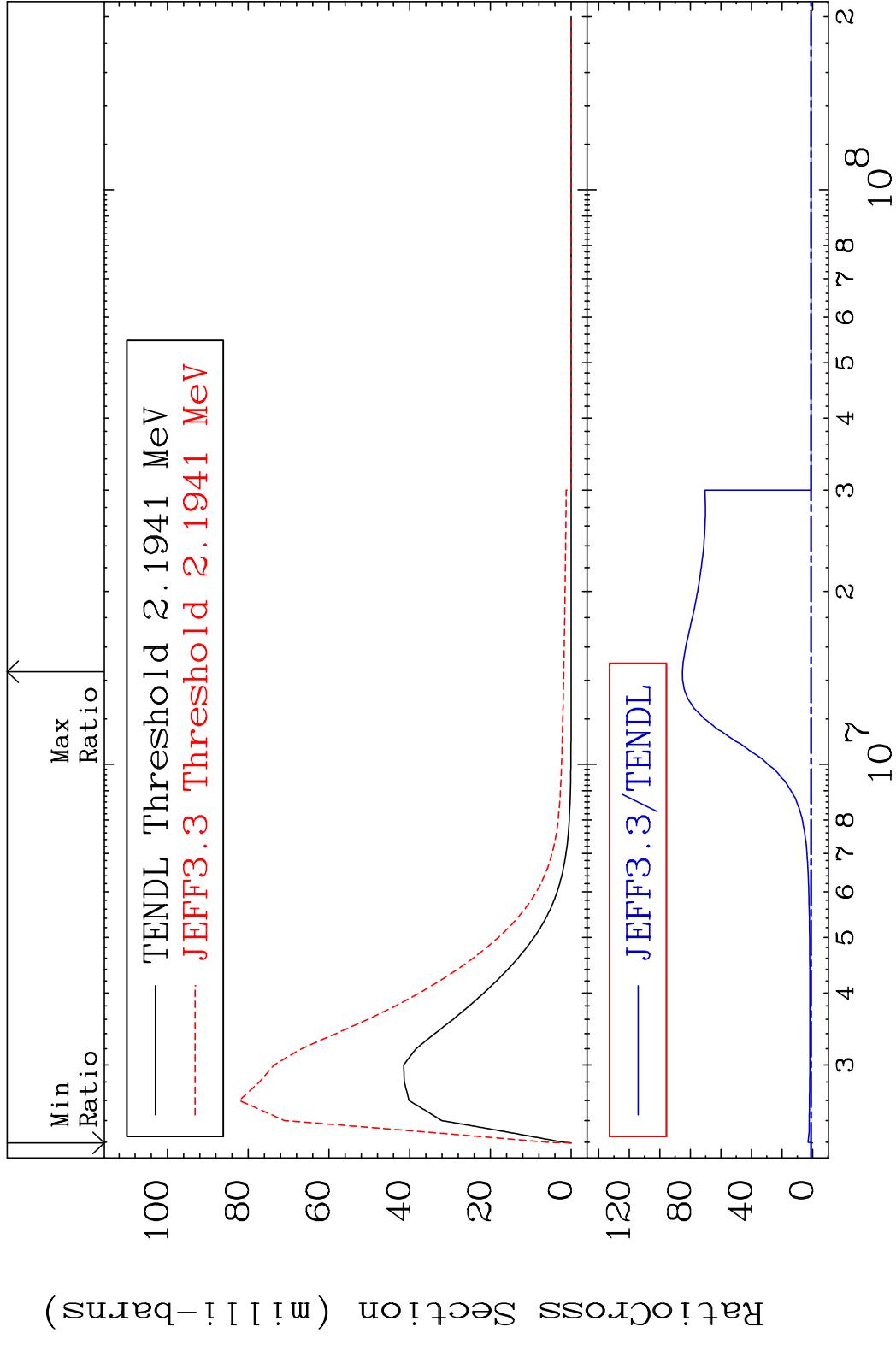




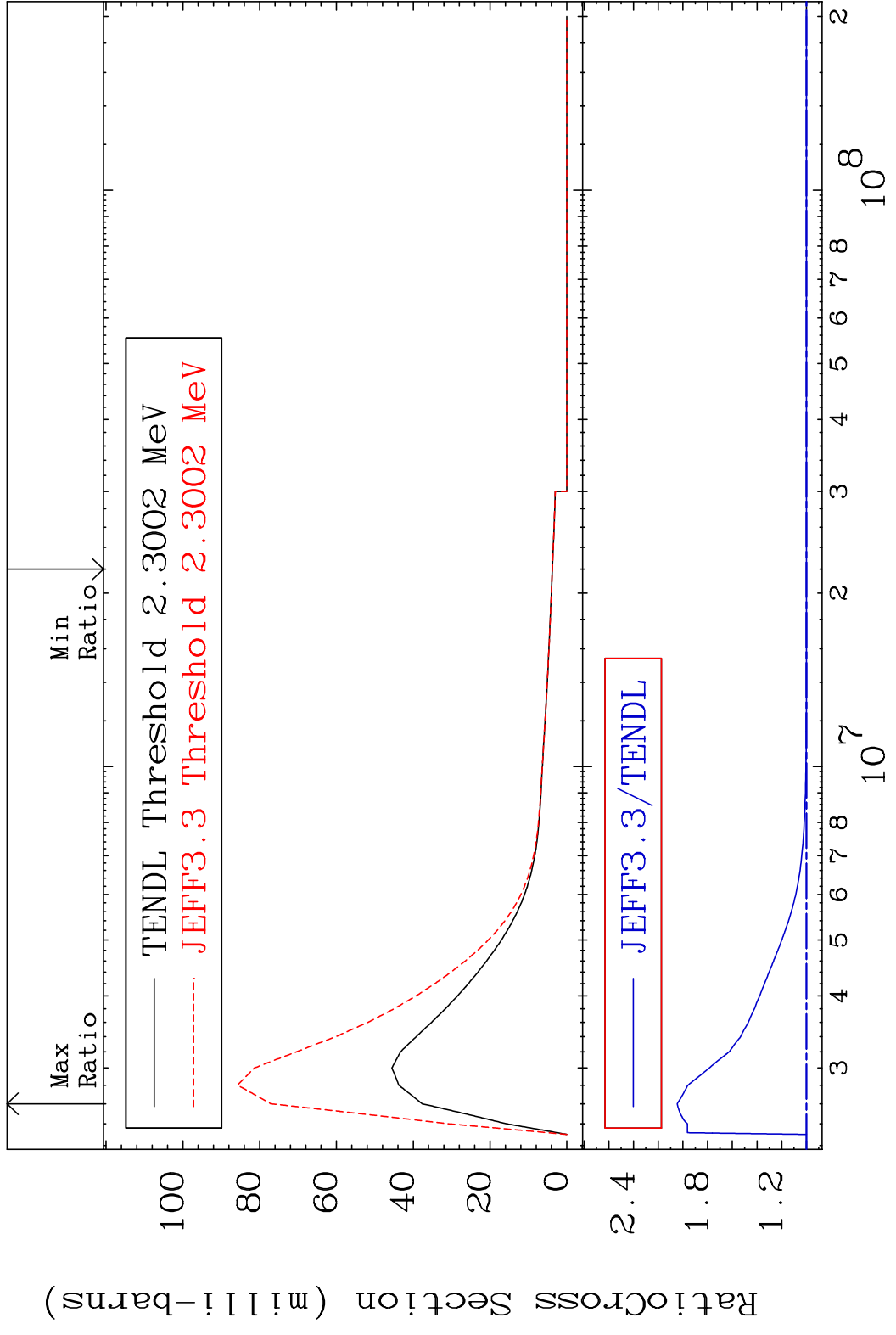
MAT 4119 MT= 65 (n, n') Level 41-Nb-91  
 Cross Section -40.58 To 19.11 %



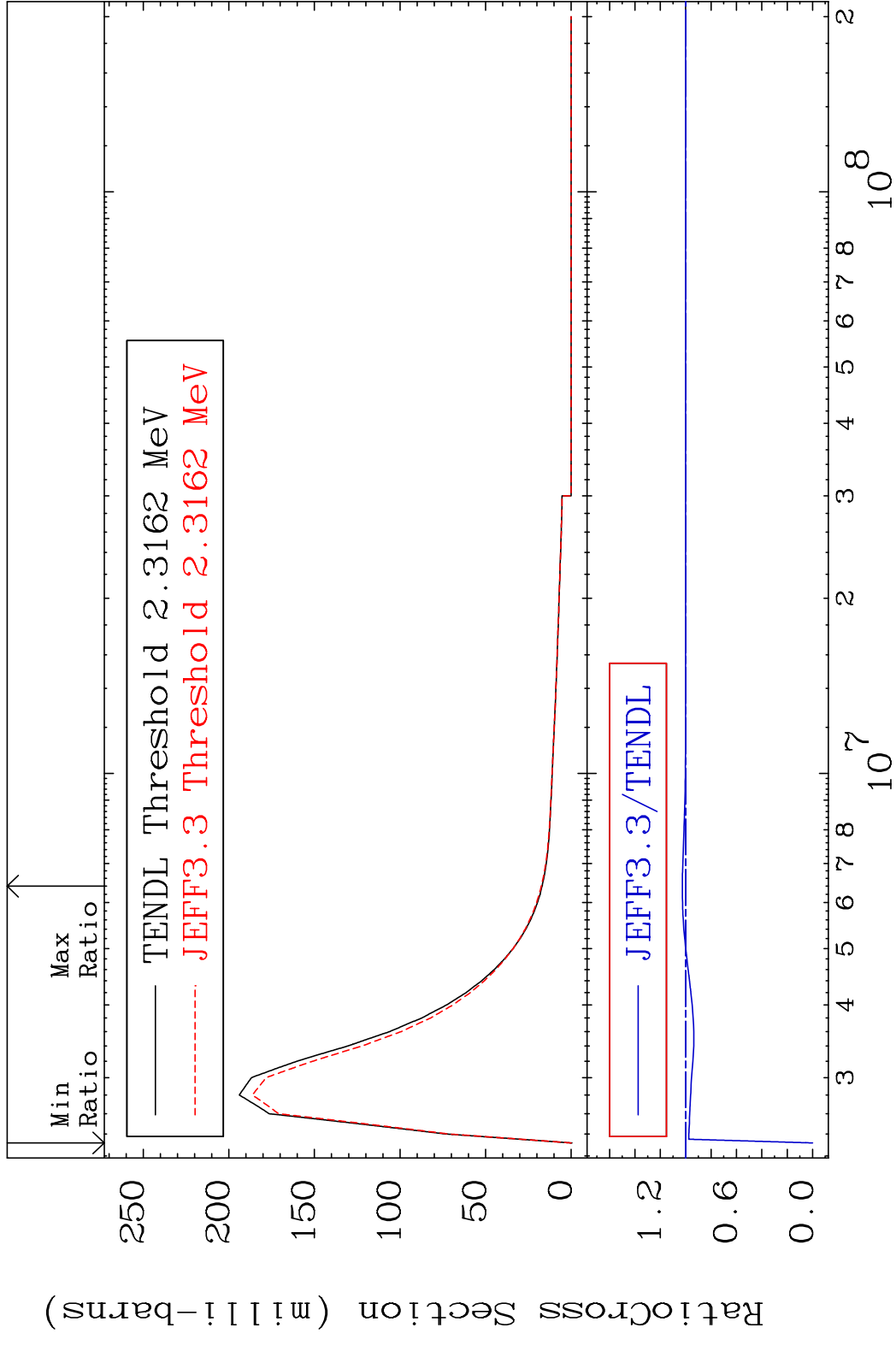
MAT 4119 MT= 66 (n,n') Level 41-Nb-91  
 Cross Section -100.0 To 8427. %



MAT 4119 MT= 67 (n, n') Level 41-Nb-91  
 Cross Section 0.000 To 104.6 %

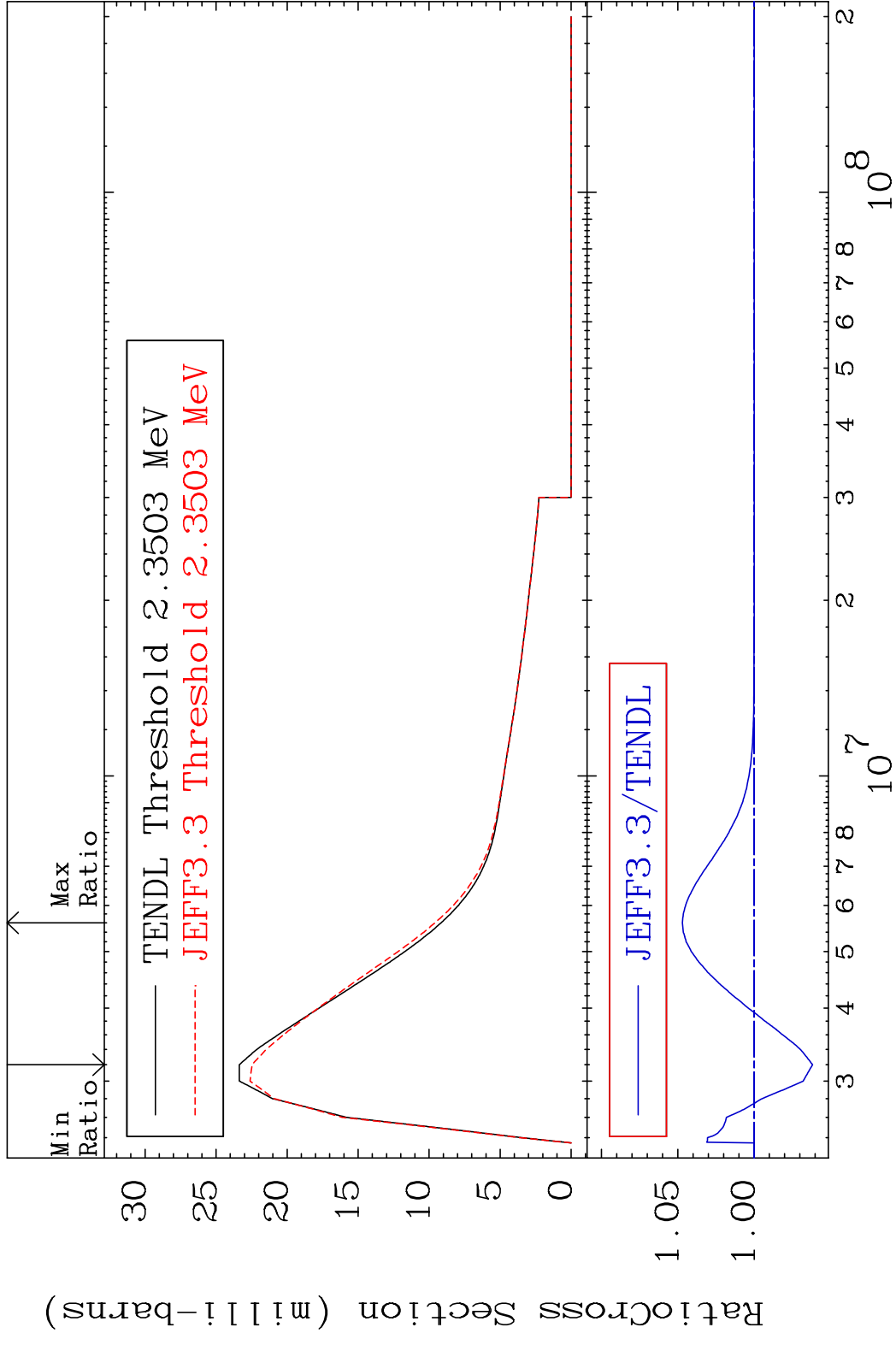


MAT 4119 MT= 68 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 2.628 %

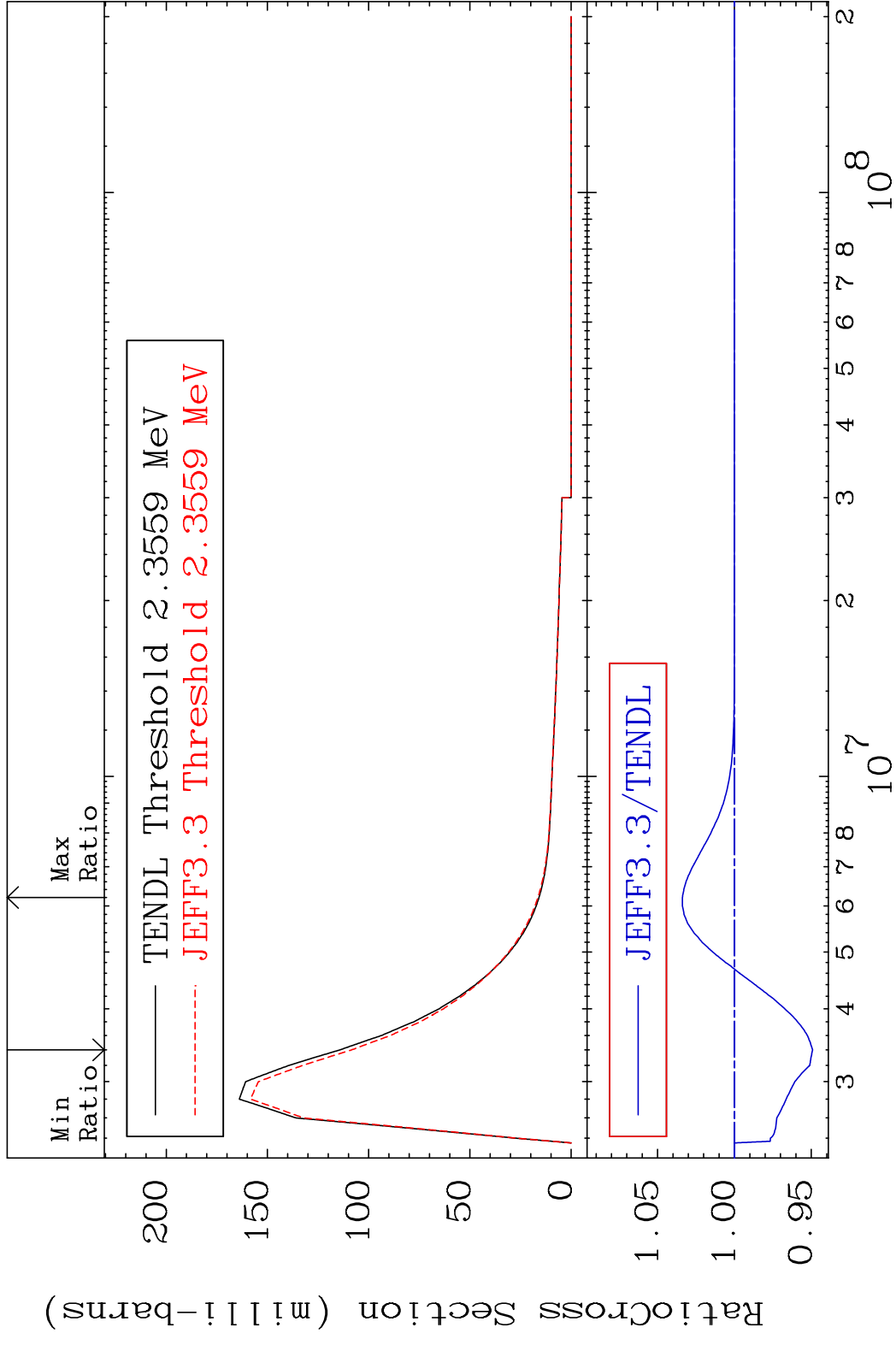


35 Incident Energy (eV) 41-Nb-91

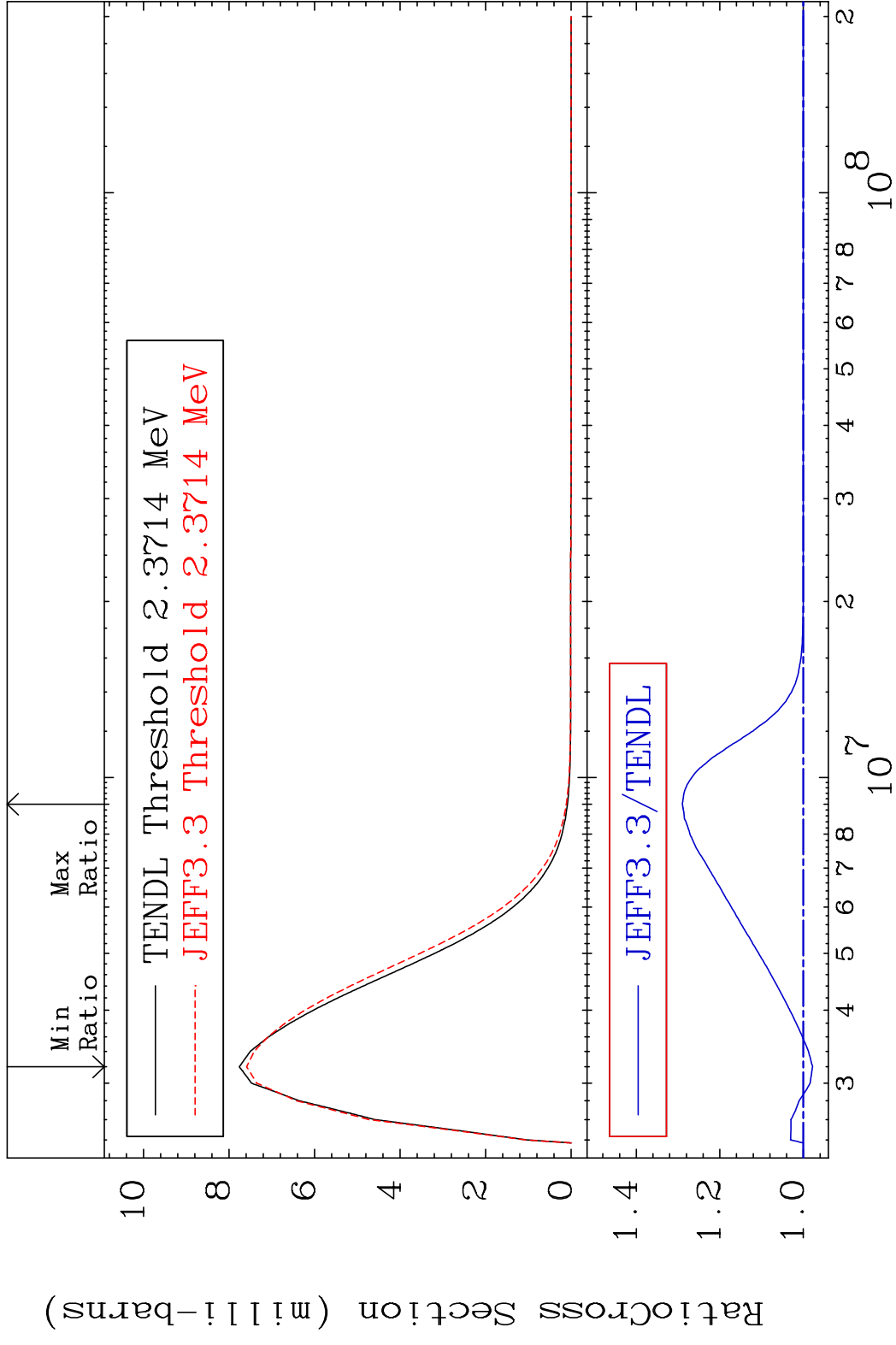
MAT 4119 MT= 69 (n, n') Level 41-Nb-91  
 Cross Section -3.829 To 4.704 %



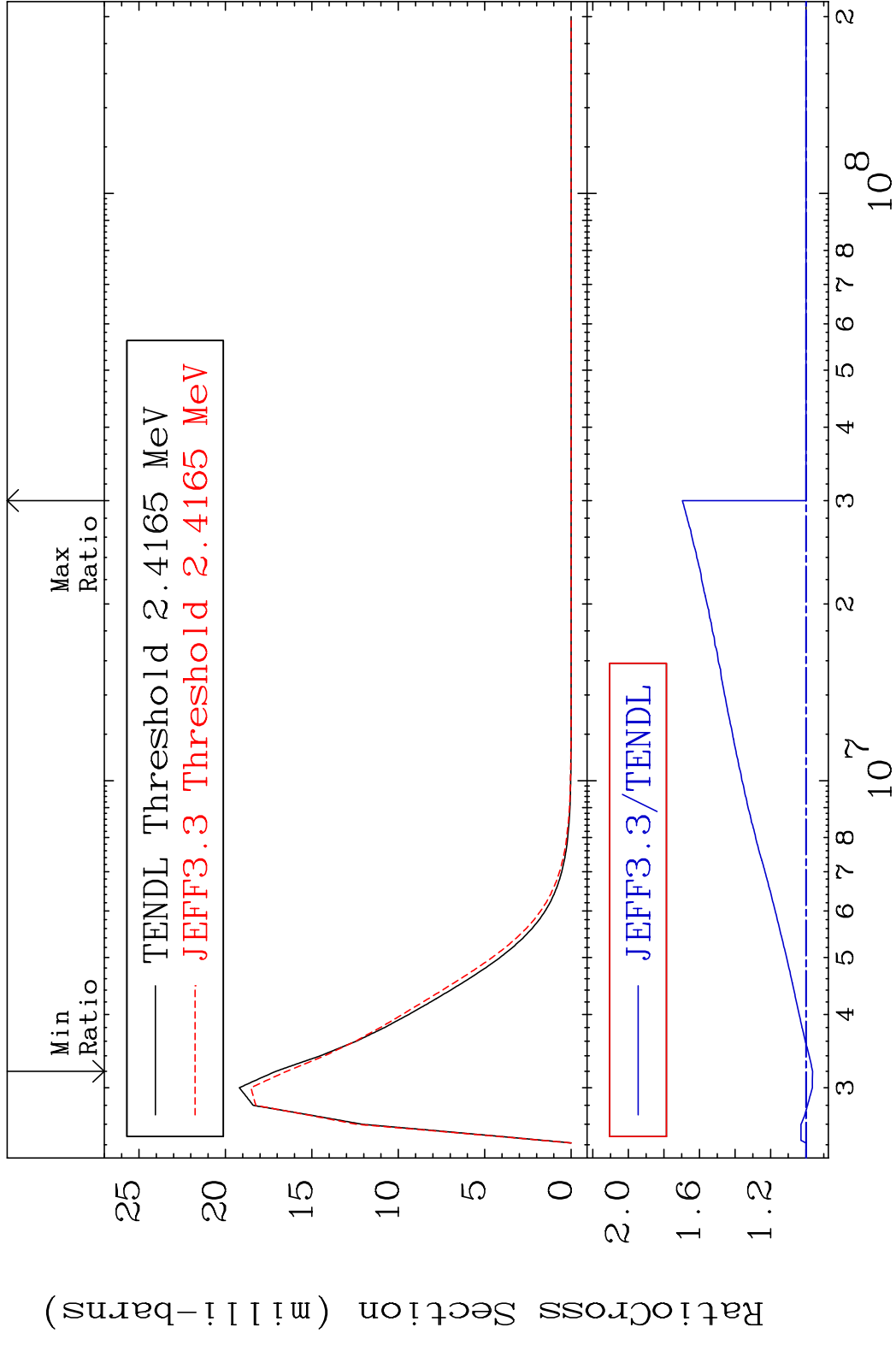
MAT 4119 MT= 70 (n,n') Level 41-Nb-91  
 Cross Section -5.083 To 3.389 %



MAT 4119 MT= 71 (n,n') Level 41-Nb-91  
 Cross Section -2.211 To 28.97 %

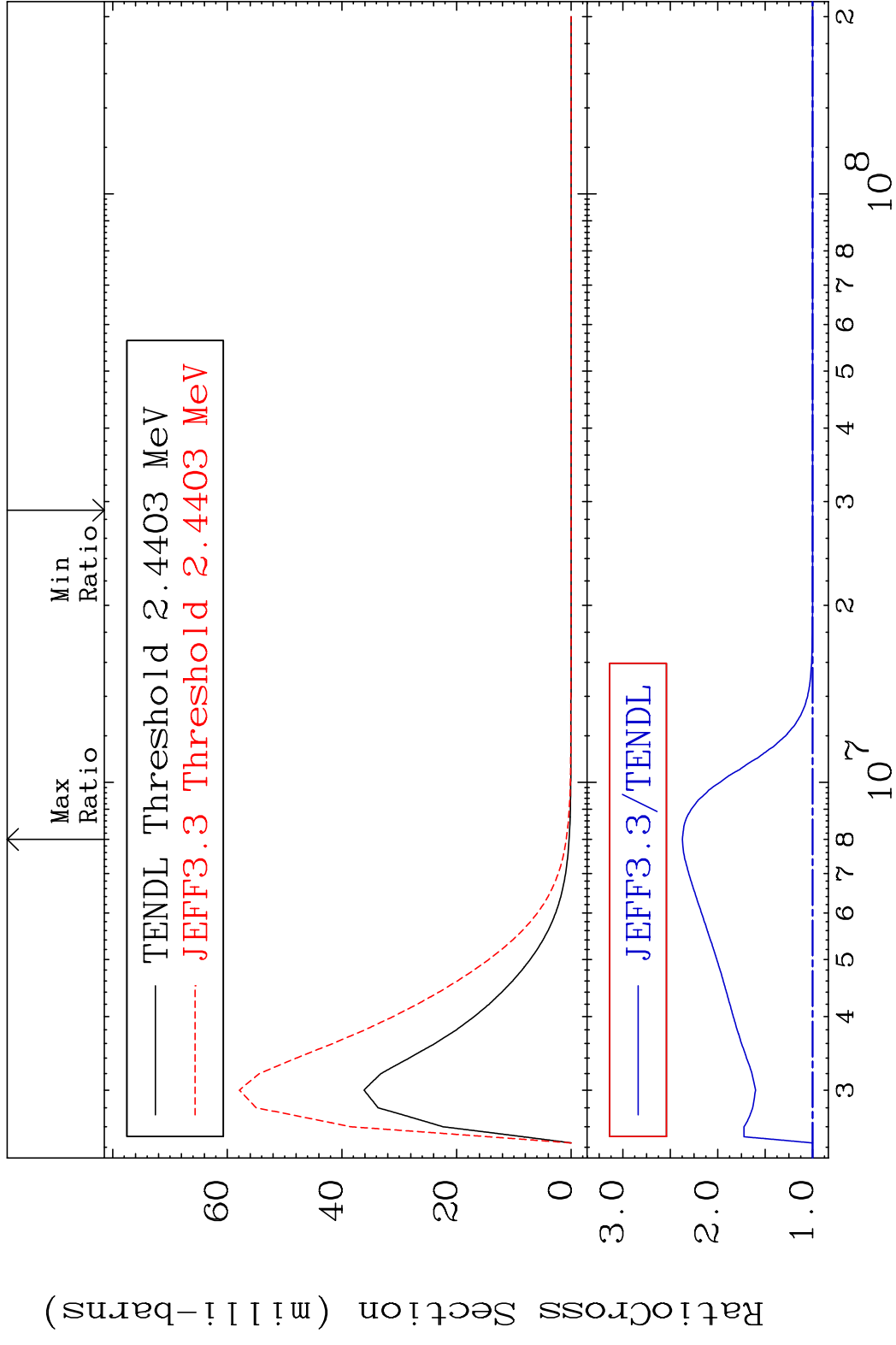


MAT 4119 MT= 72 (n, n') Level 41-Nb-91  
 Cross Section -3.643 To 69.61 %



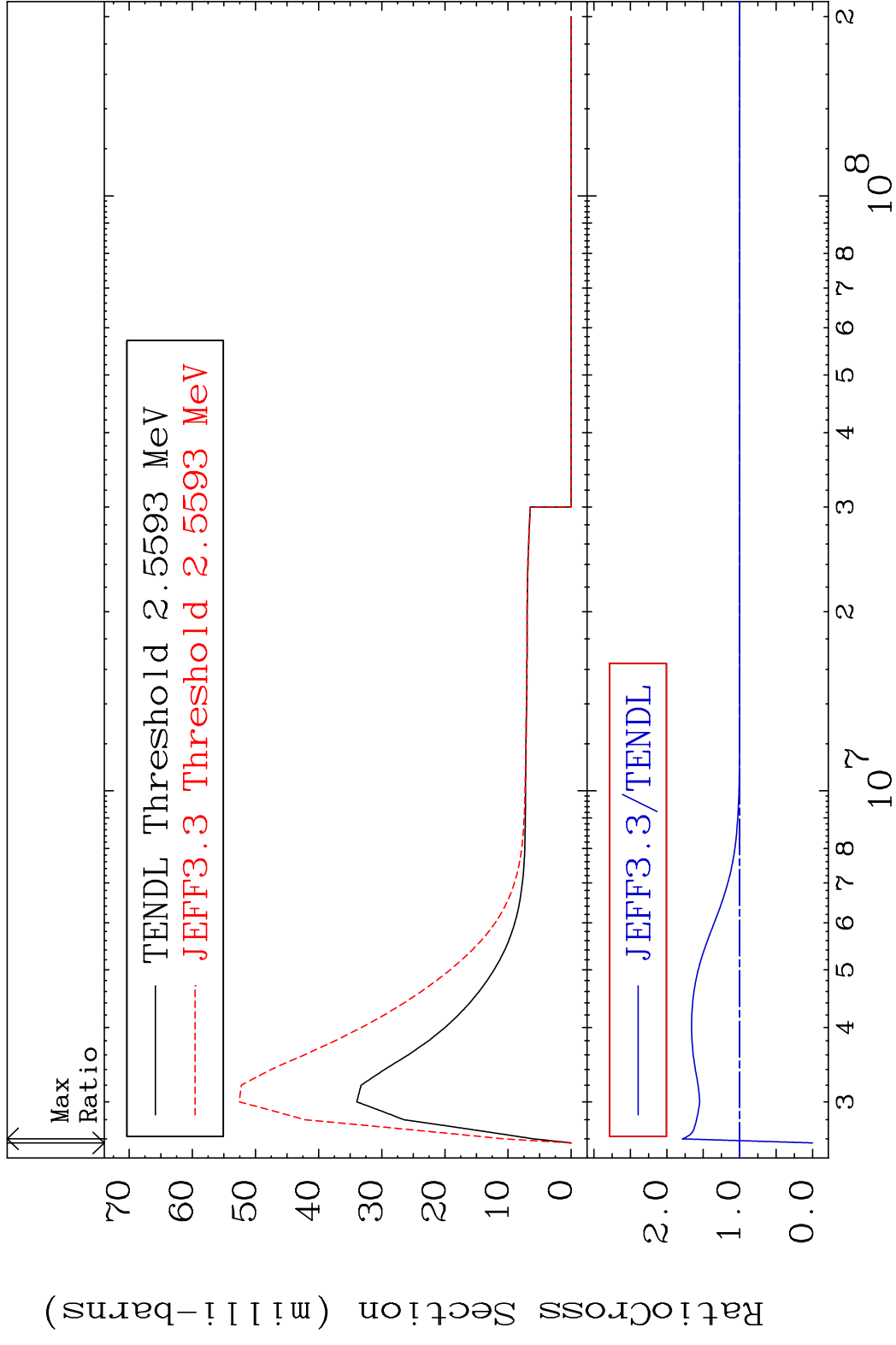


MAT 4119 MT= 73 (n, n') Level 41-Nb-91  
 Cross Section 0.000 To 137.3 %



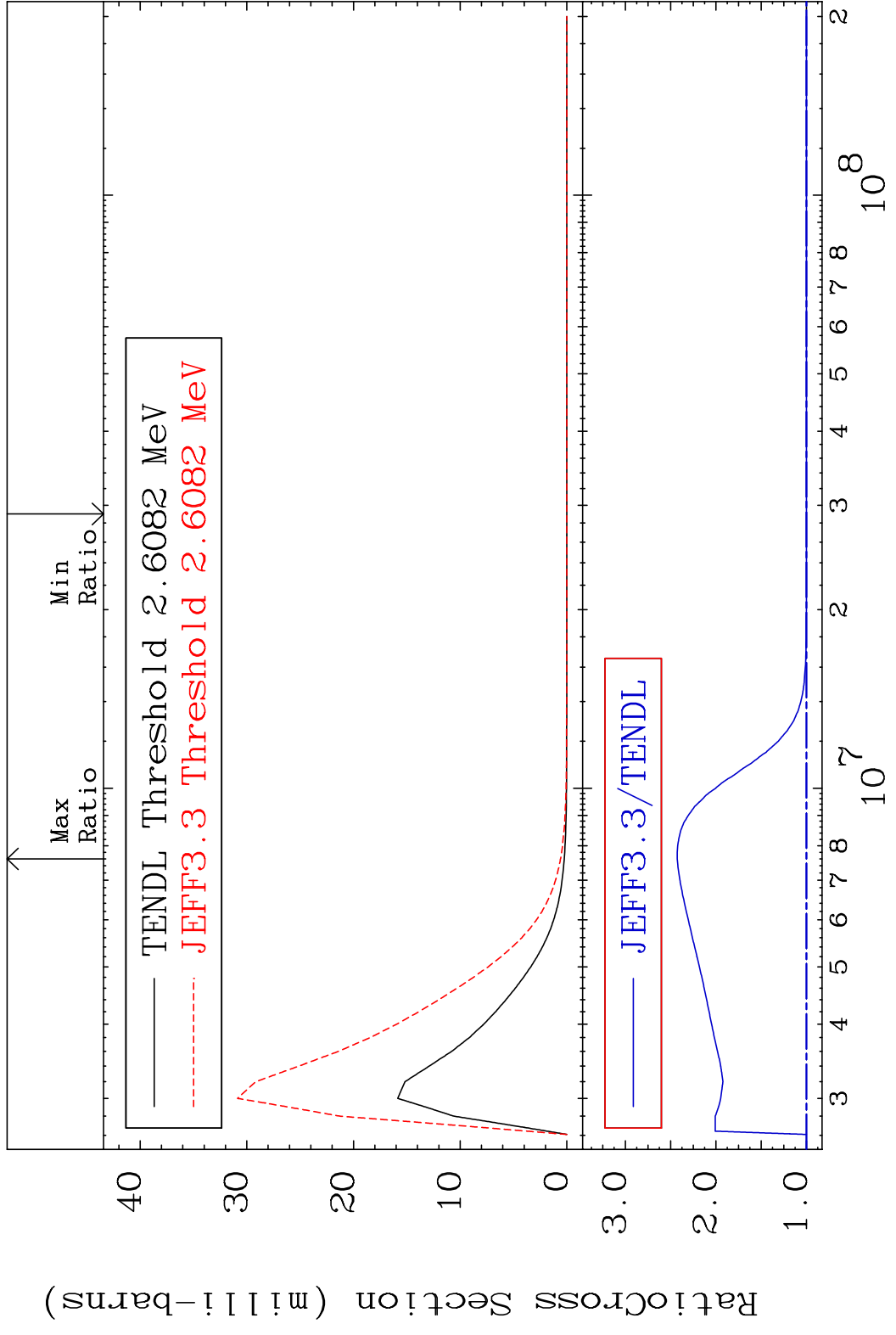
40 Incident Energy (eV) 41-Nb-91

MAT 4119 MT= 74 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 78.68 %

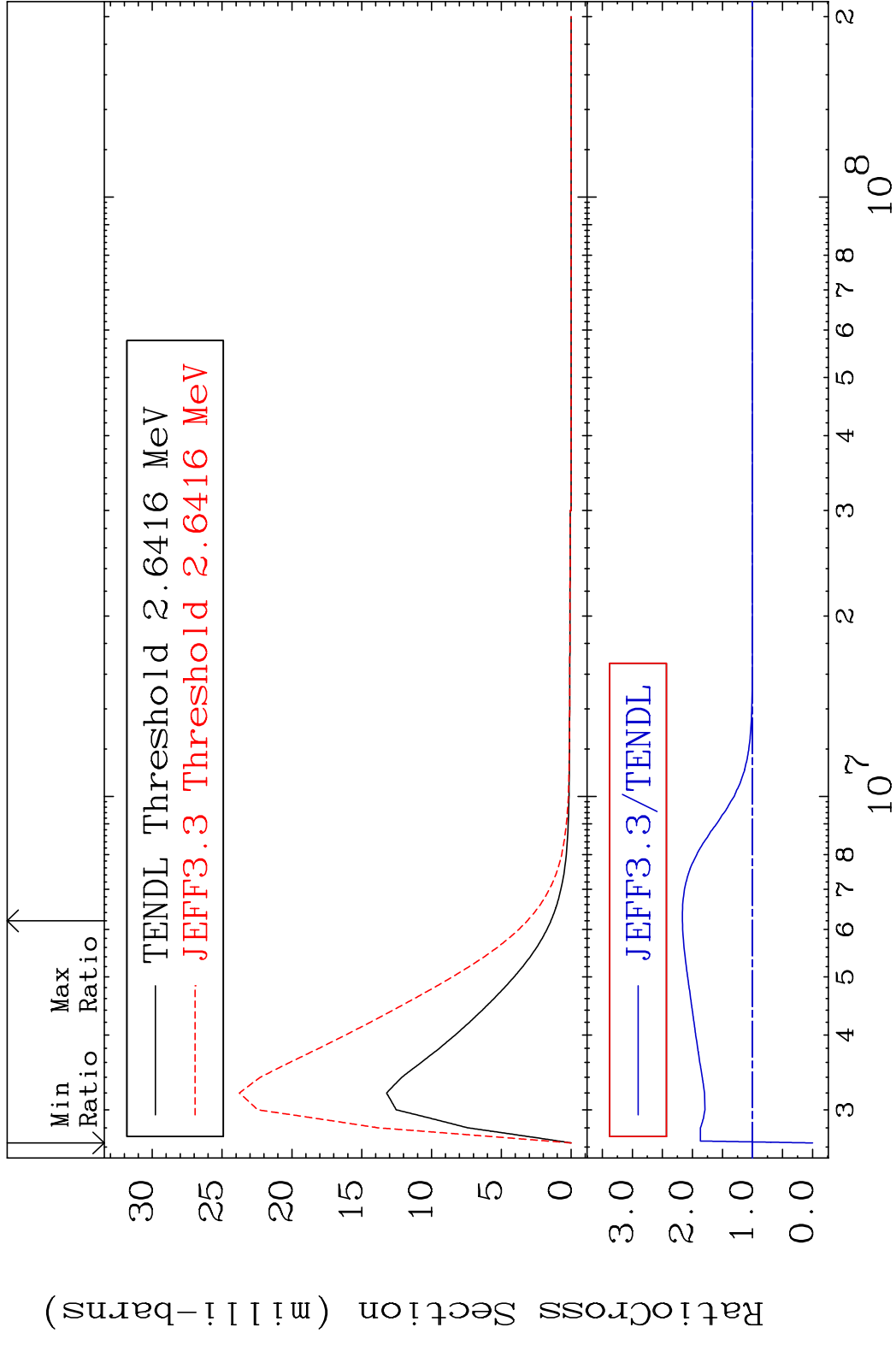


41 Incident Energy (eV) 41-Nb-91

MAT 4119 MT= 75 (n, n') Level 41-Nb-91  
 Cross Section 0.000 To 142.7 %

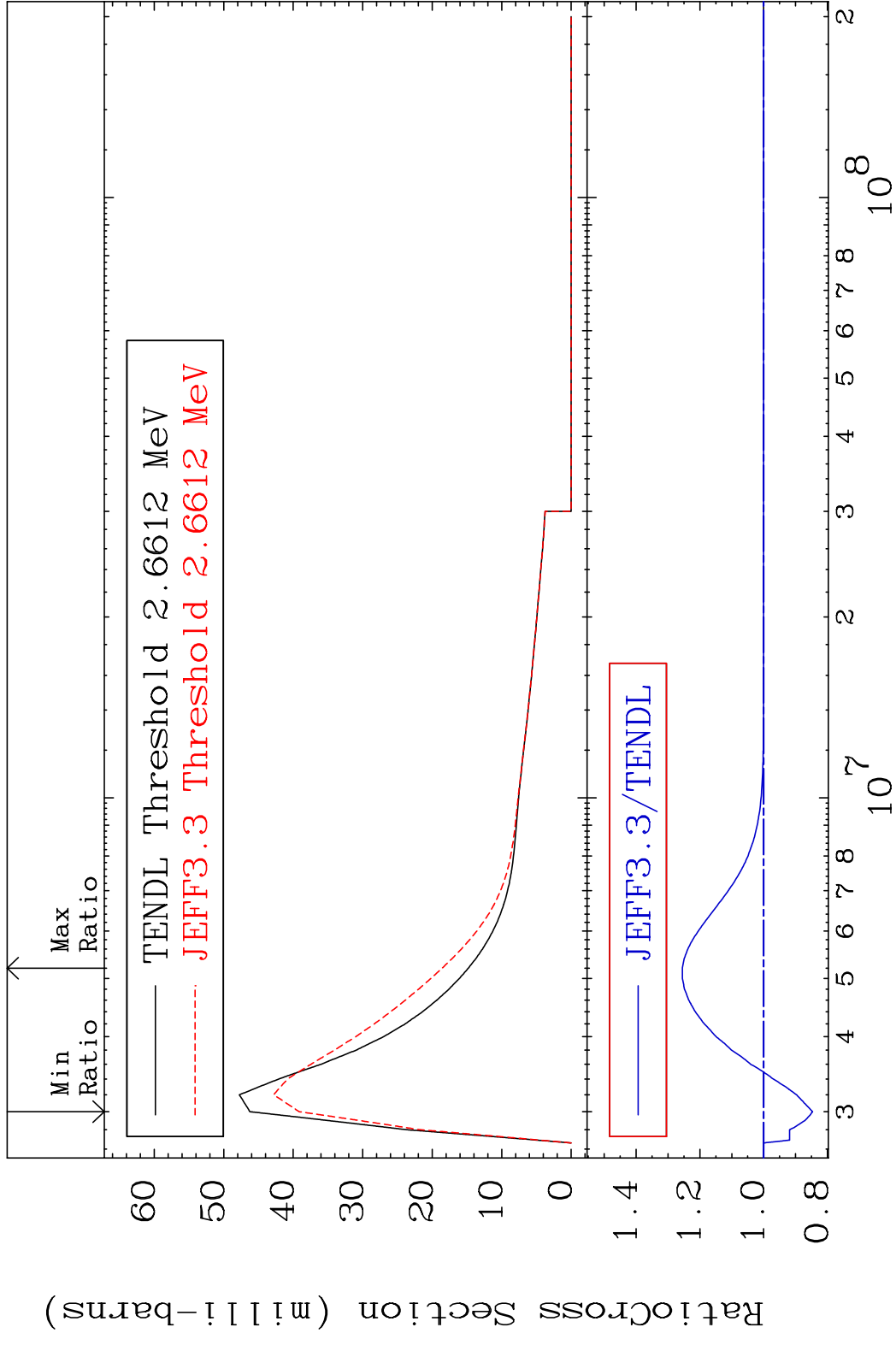


MAT 4119 MT= 76 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 116.7 %

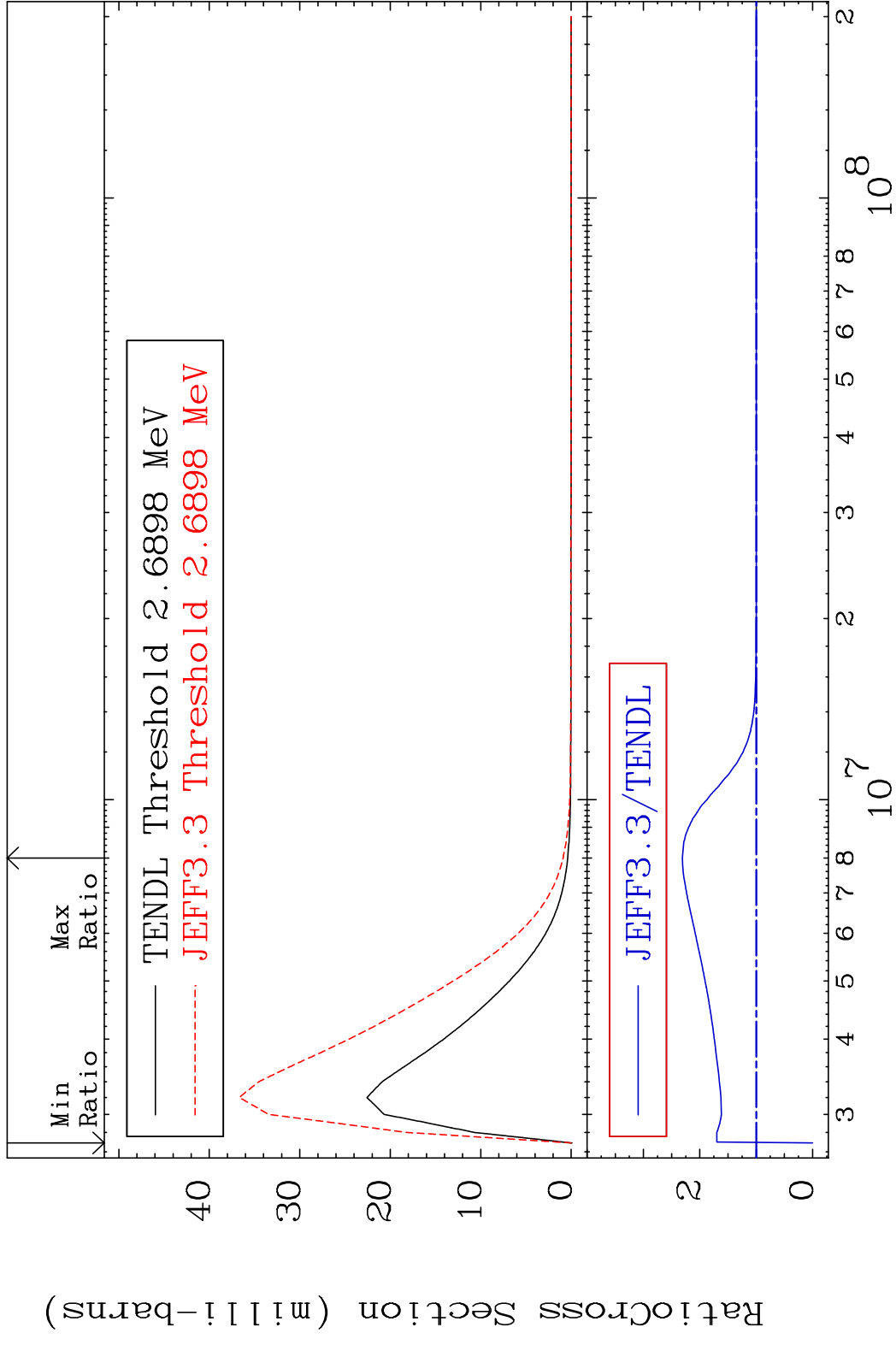


43 Incident Energy (eV) 41-Nb-91

MAT 4119 MT= 77 (n, n') Level 41-Nb-91  
 Cross Section -15.33 To 25.50 %

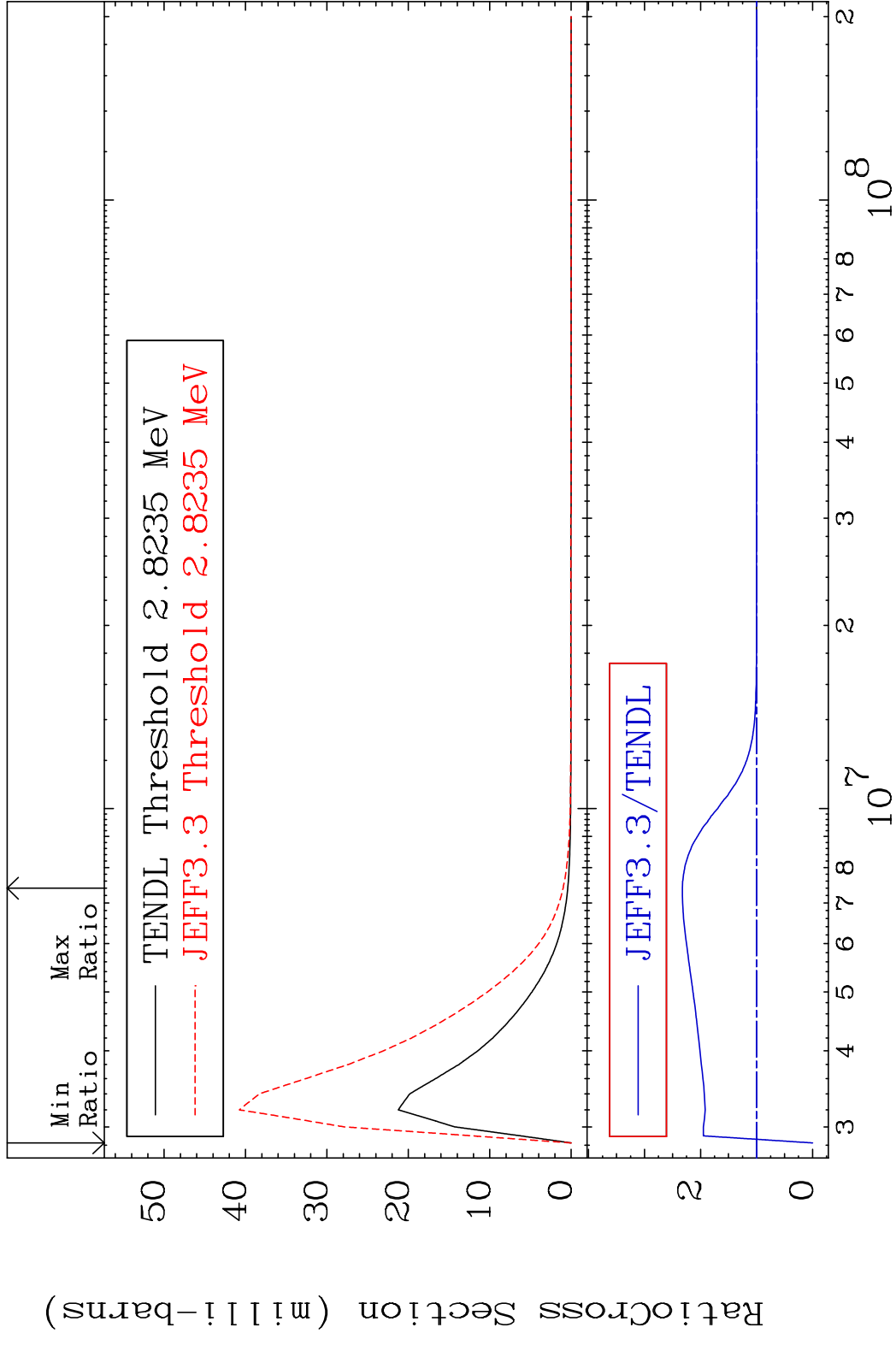


MAT 4119 MT= 78 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 131.0 %

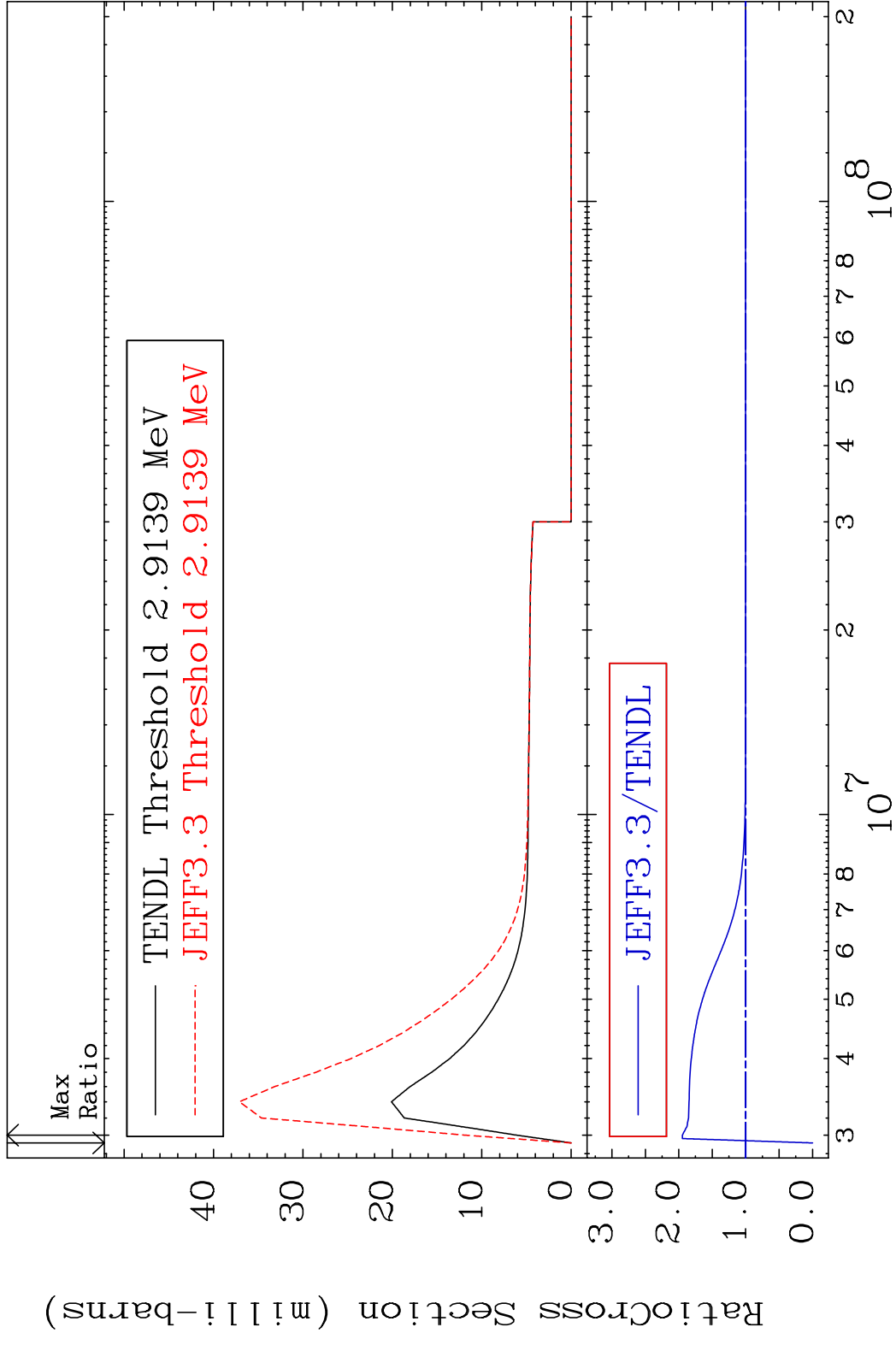


45 Incident Energy (eV) 41-Nb-91

MAT 4119 MT= 79 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 132.5 %

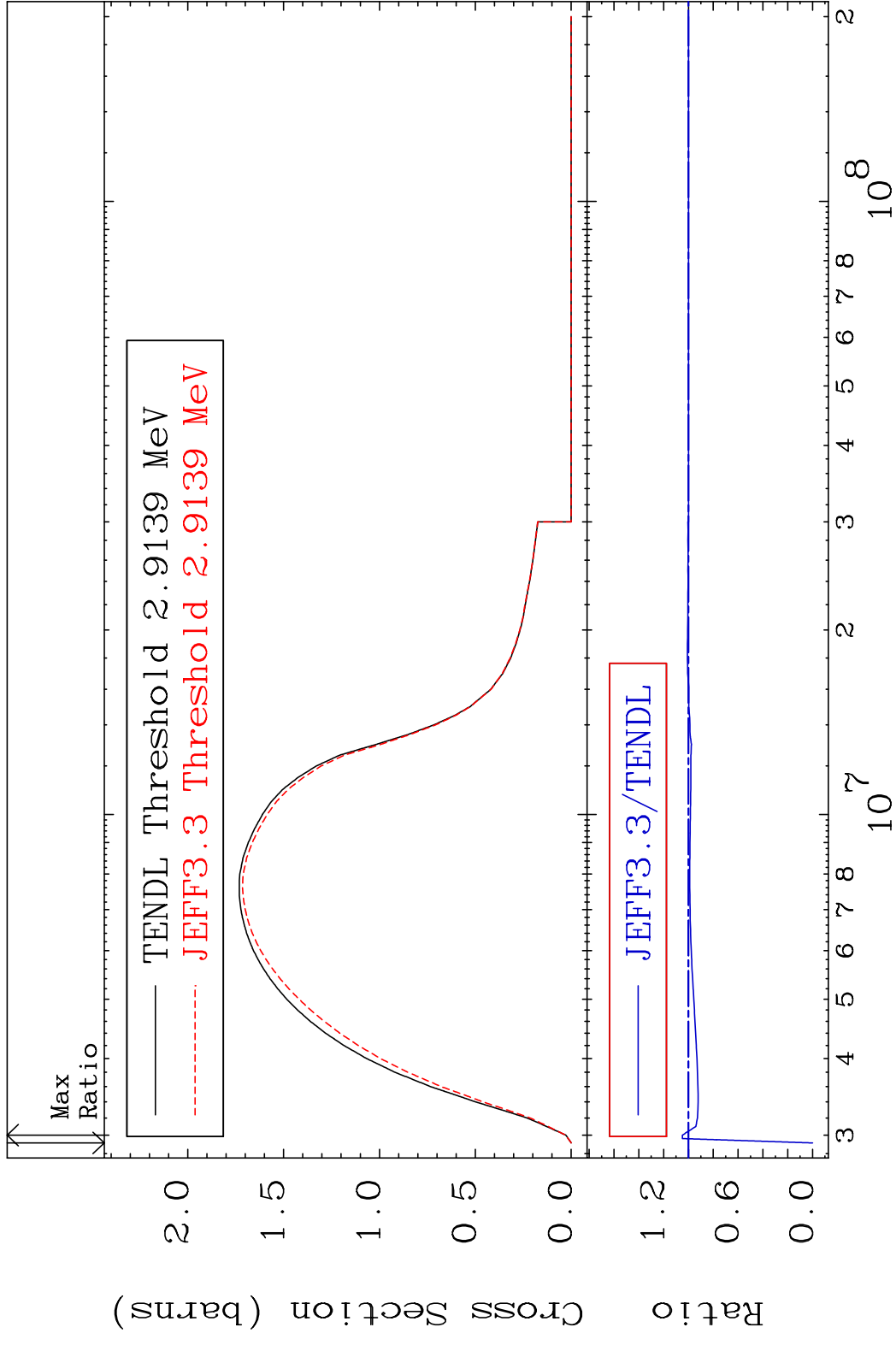


MAT 4119 MT= 80 (n, n') Level 41-Nb-91  
 Cross Section -100.0 To 94.66 %





MAT 4119 (n,n') Continuum 41-Nb-91  
 Cross Section -100.0 To 4.906 %

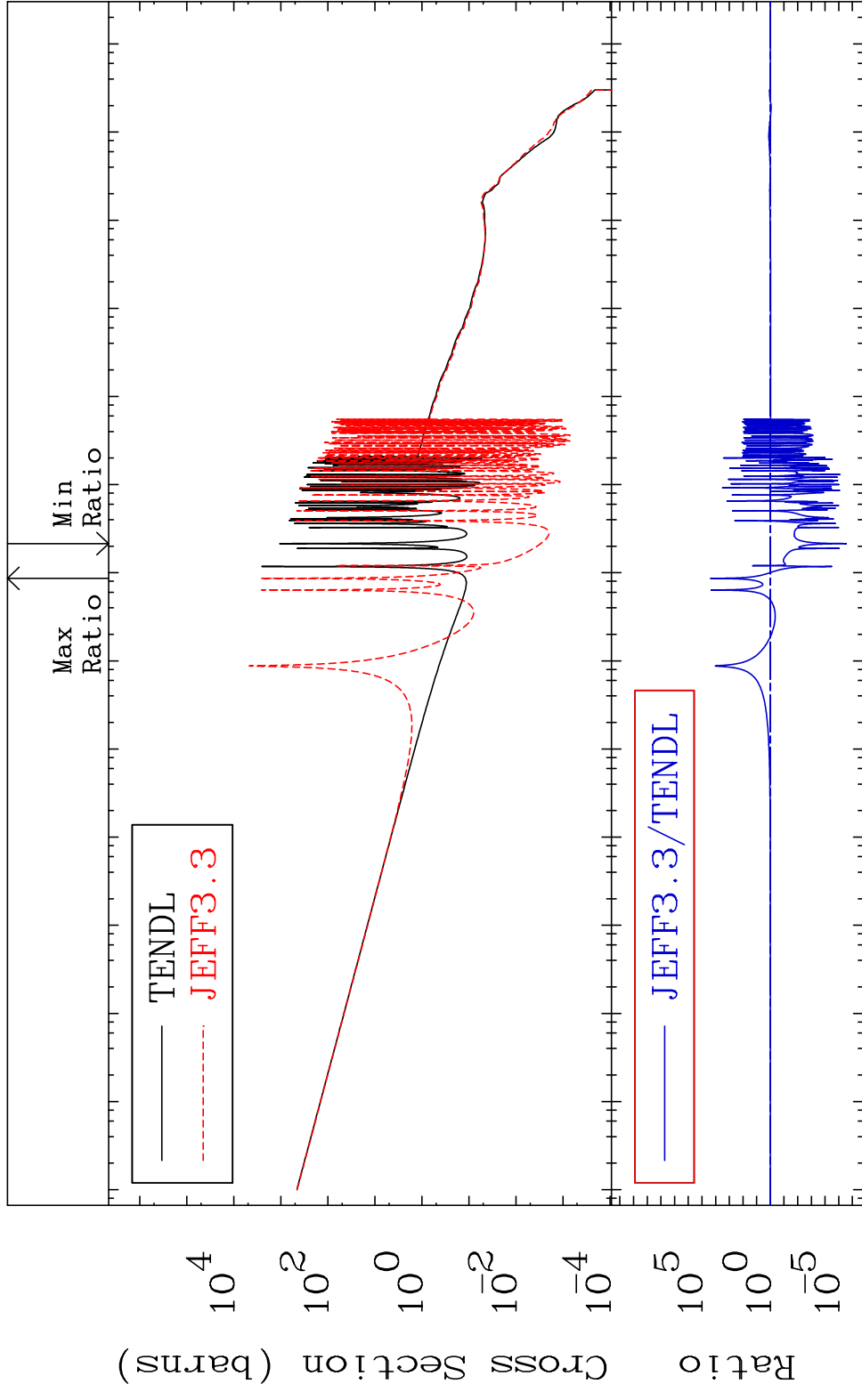


MAT 4119

41-Nb-91

(n,  $\gamma$ )

Cross Section -100.0 To 9999. %



49

Incident Energy (eV)

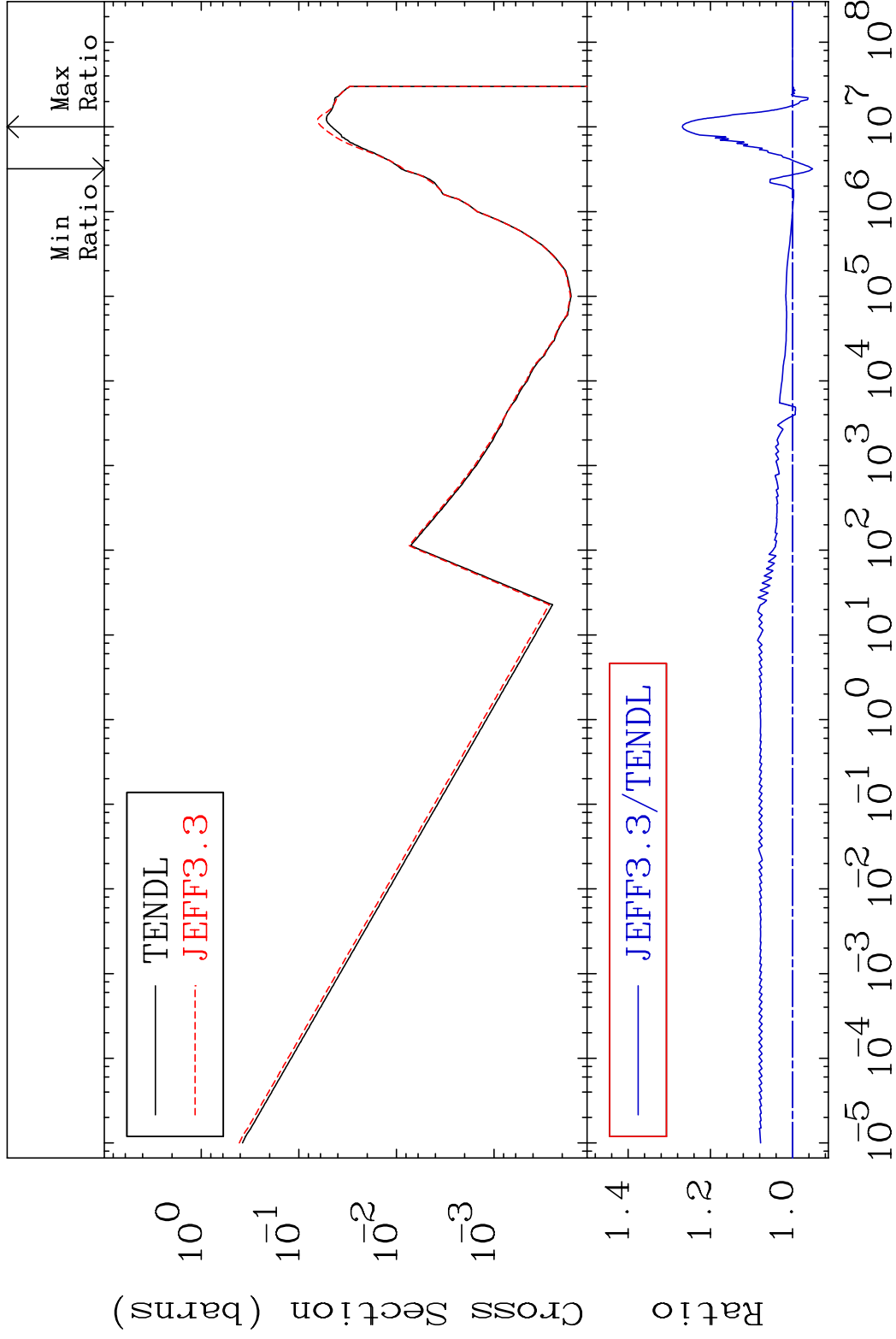
41-Nb-91

MAT 4119

(n, p)

41-Nb-91

Cross Section -4.856 To 26.82 %



50

Incident Energy (eV)

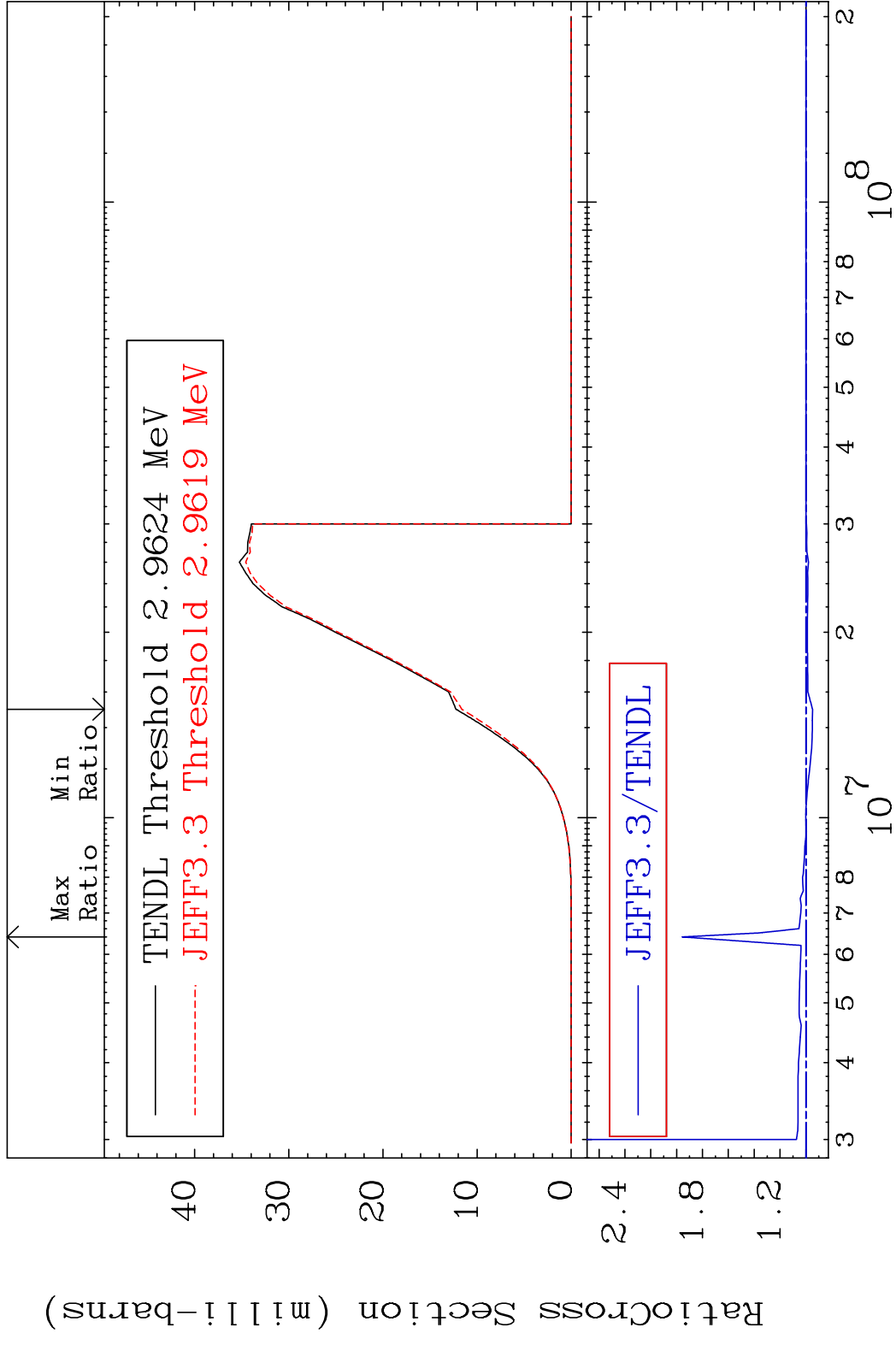
41-Nb-91

MAT 4119

(n, d)

41-Nb-91

Cross Section -5.144 To 95.57 %

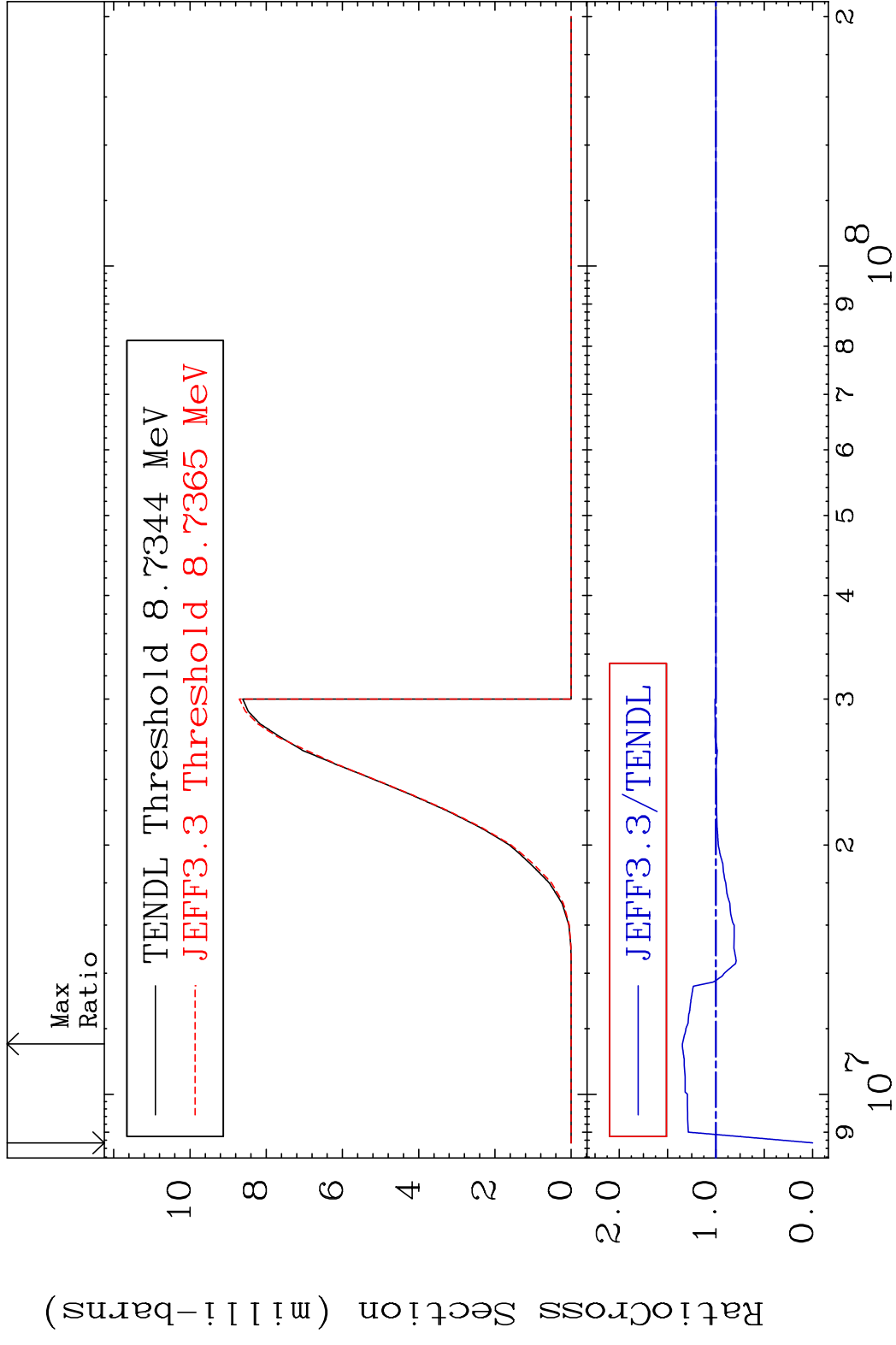


MAT 4119

(n, t)

41-Nb-91

Cross Section -100.0 To 34.67 %



52

Incident Energy (eV)

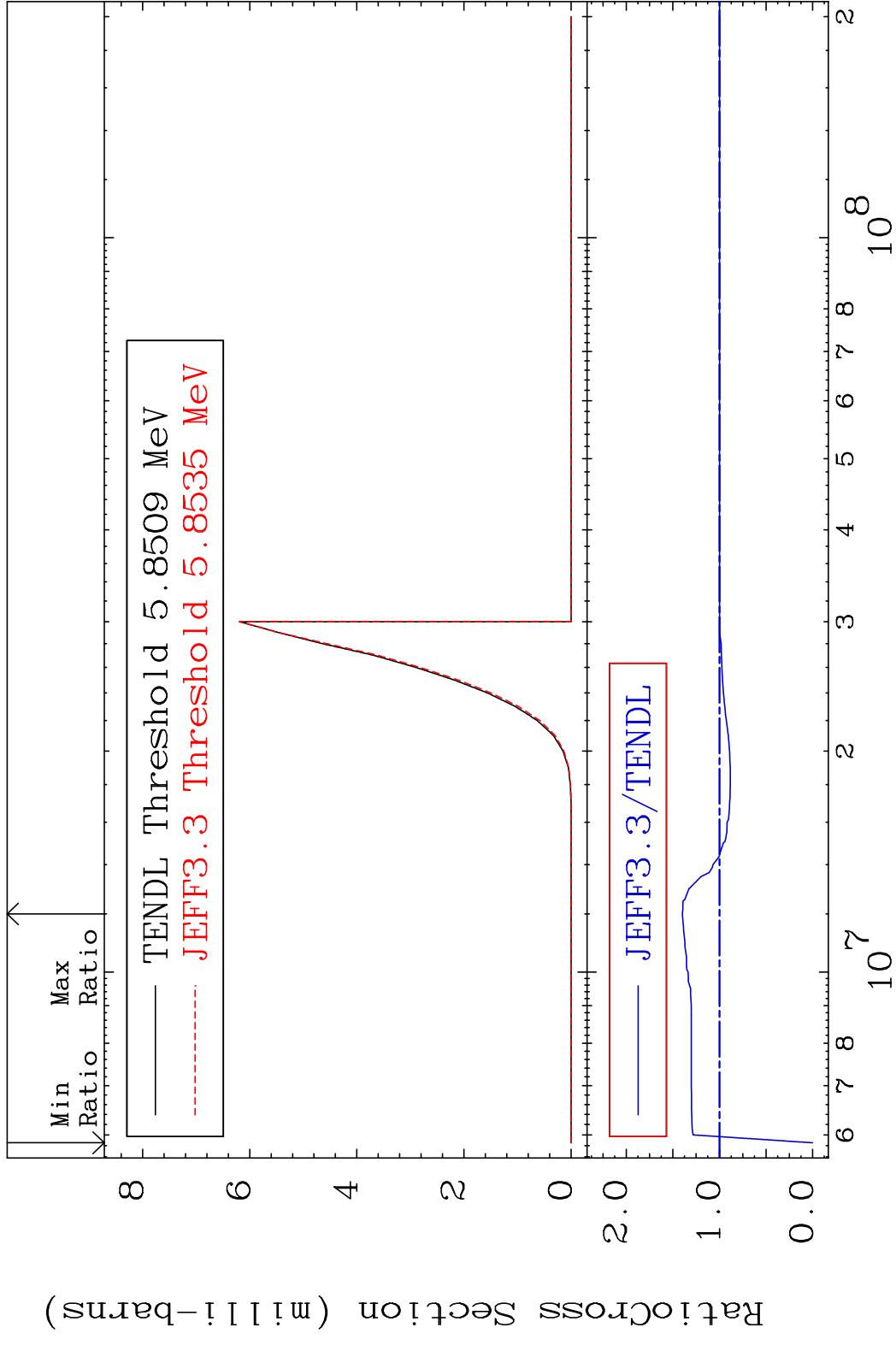
41-Nb-91

MAT 4119

(n, He-3)

41-Nb-91

Cross Section -100.0 To 39.84 %



53

Incident Energy (eV)

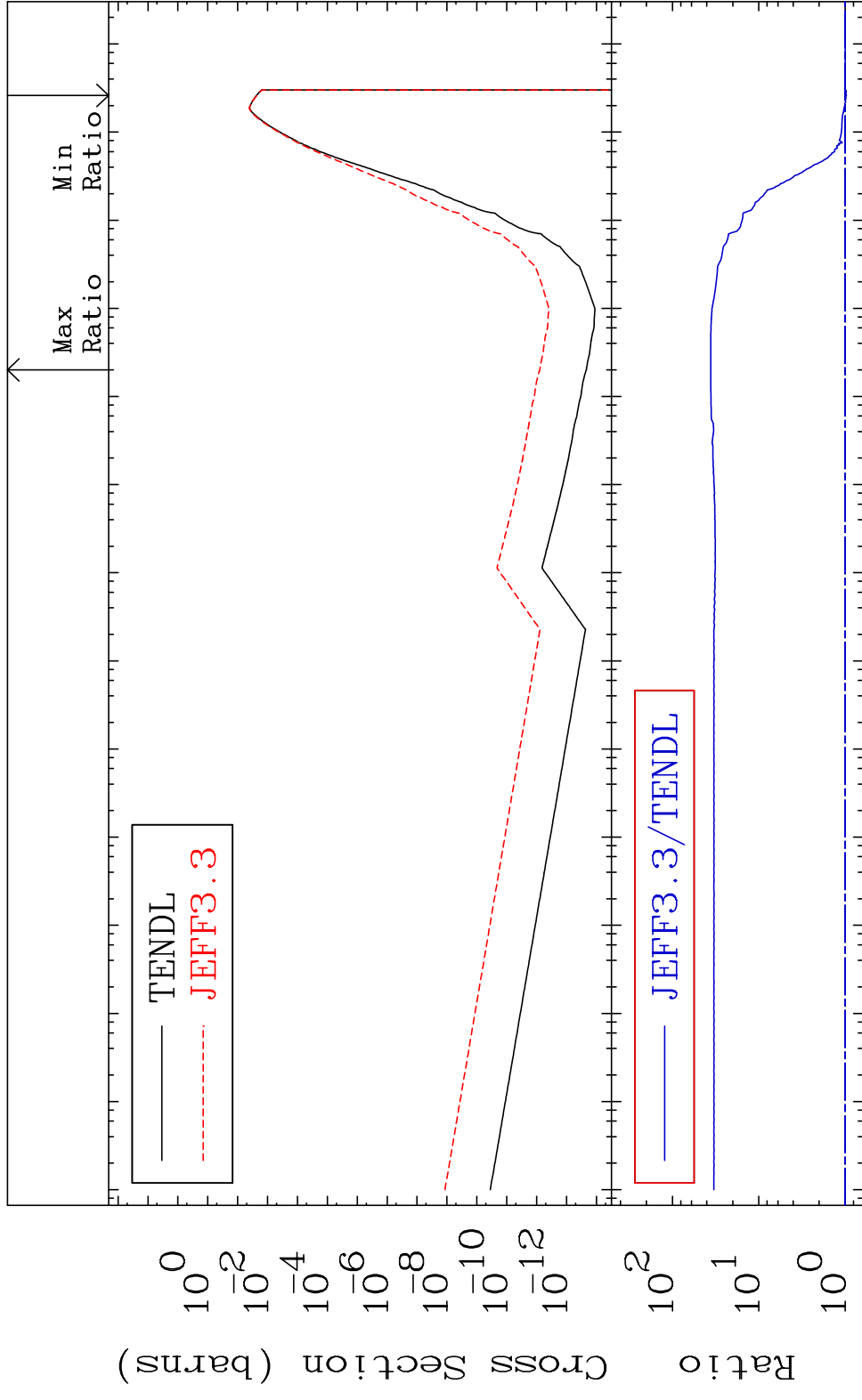
41-Nb-91

MAT 4119

(n,  $\alpha$ )

41-Nb-91

Cross Section -3.223 To 3500. %

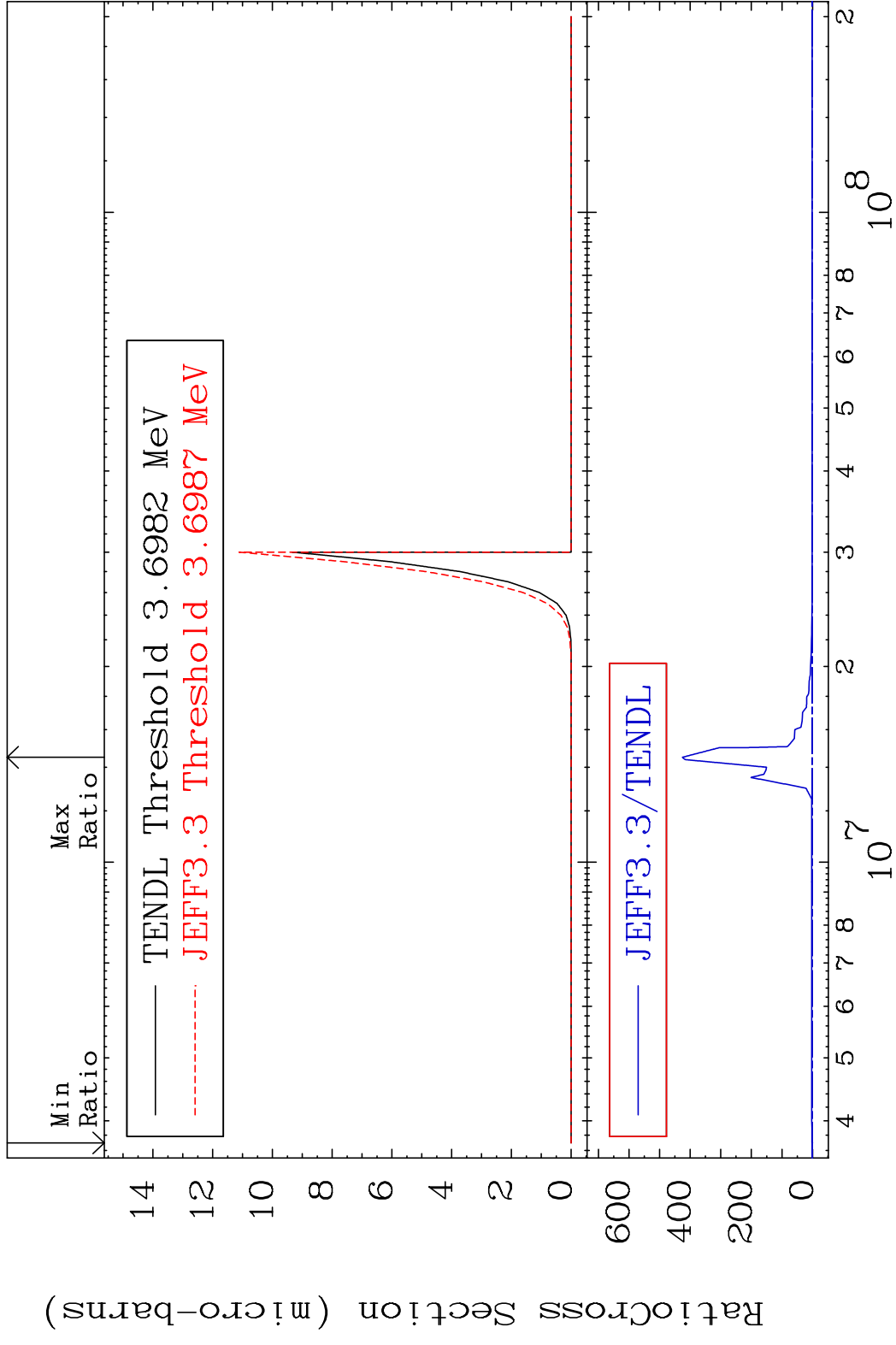


MAT 4119

(n,2α)

41-Nb-91

Cross Section -100.0 To 9999. %



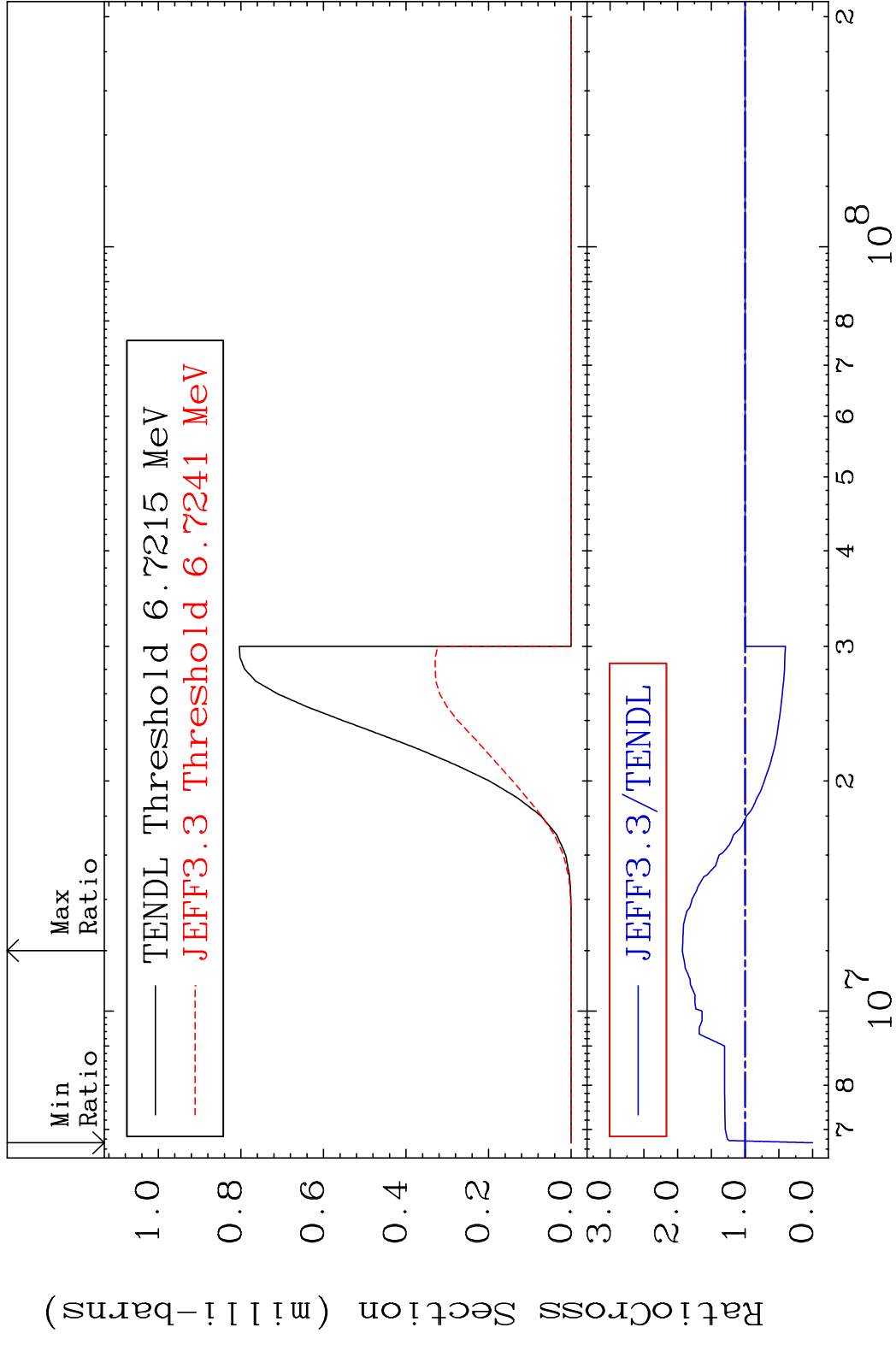


MAT 4119

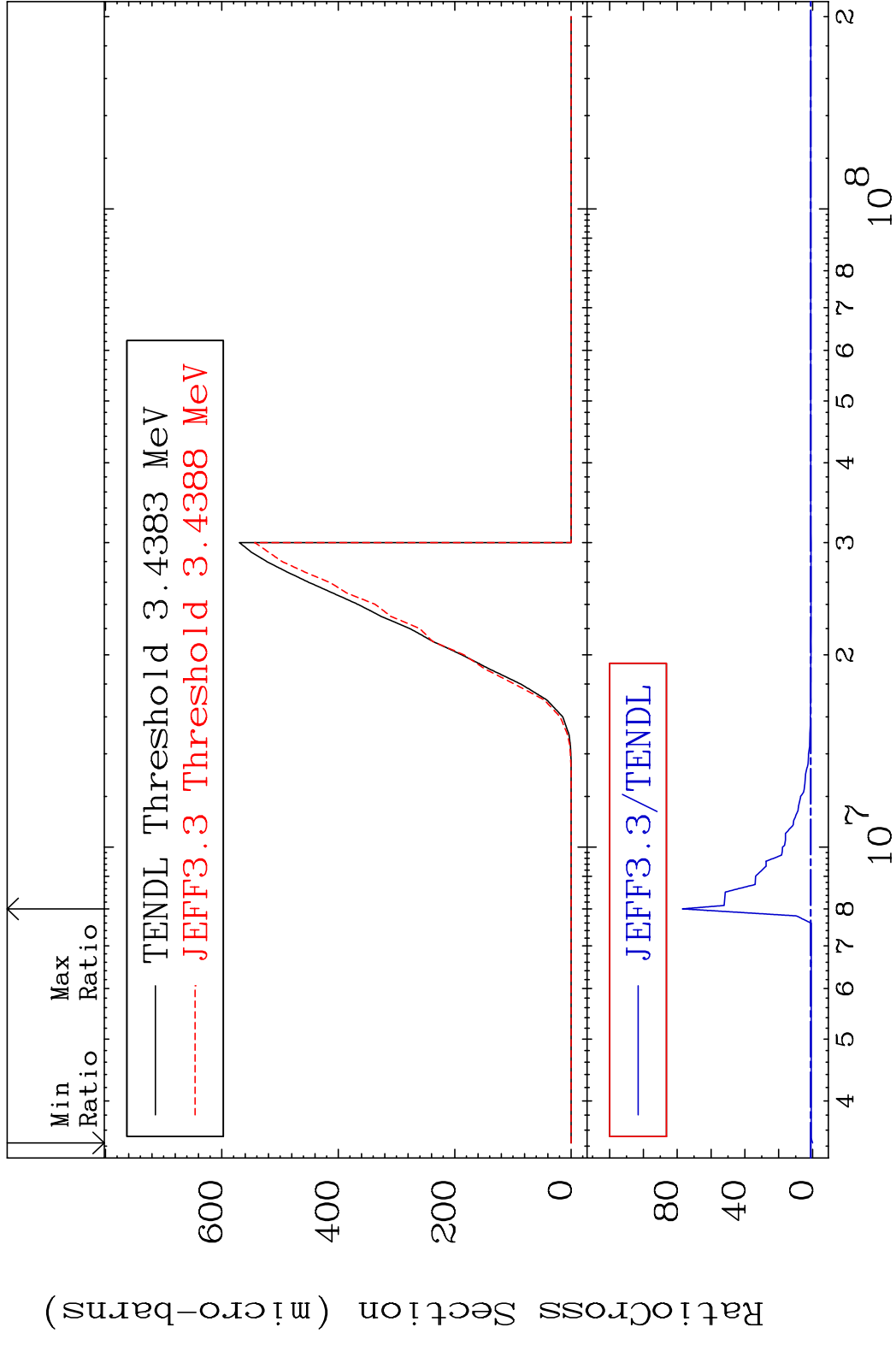
(n,2p)

41-Nb-91

Cross Section -100.0 To 92.85 %



MAT 4119 (n,p)  $\alpha$  41-Nb-91  
 Cross Section -100.0 To 7596. %

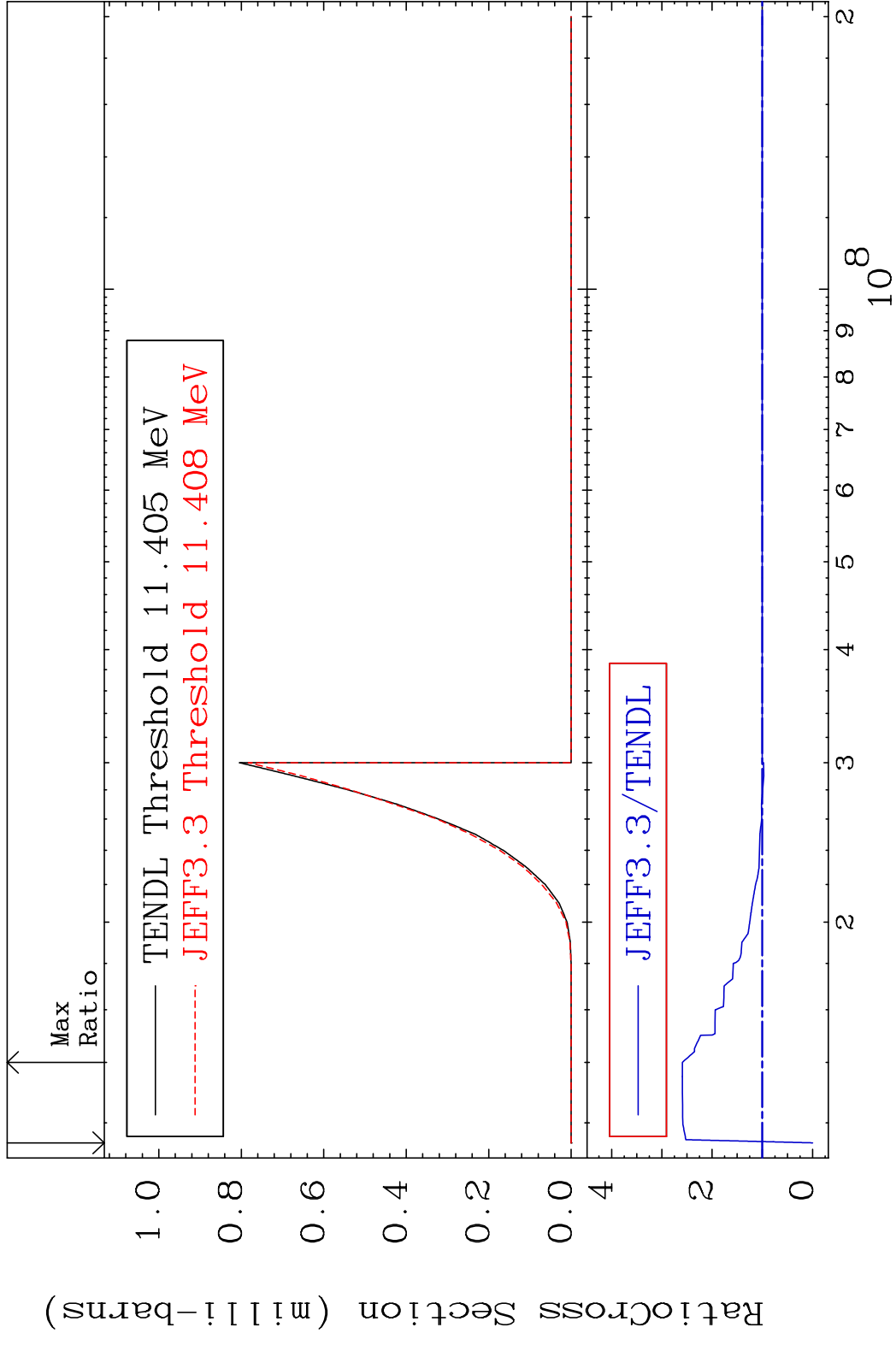


MAT 4119

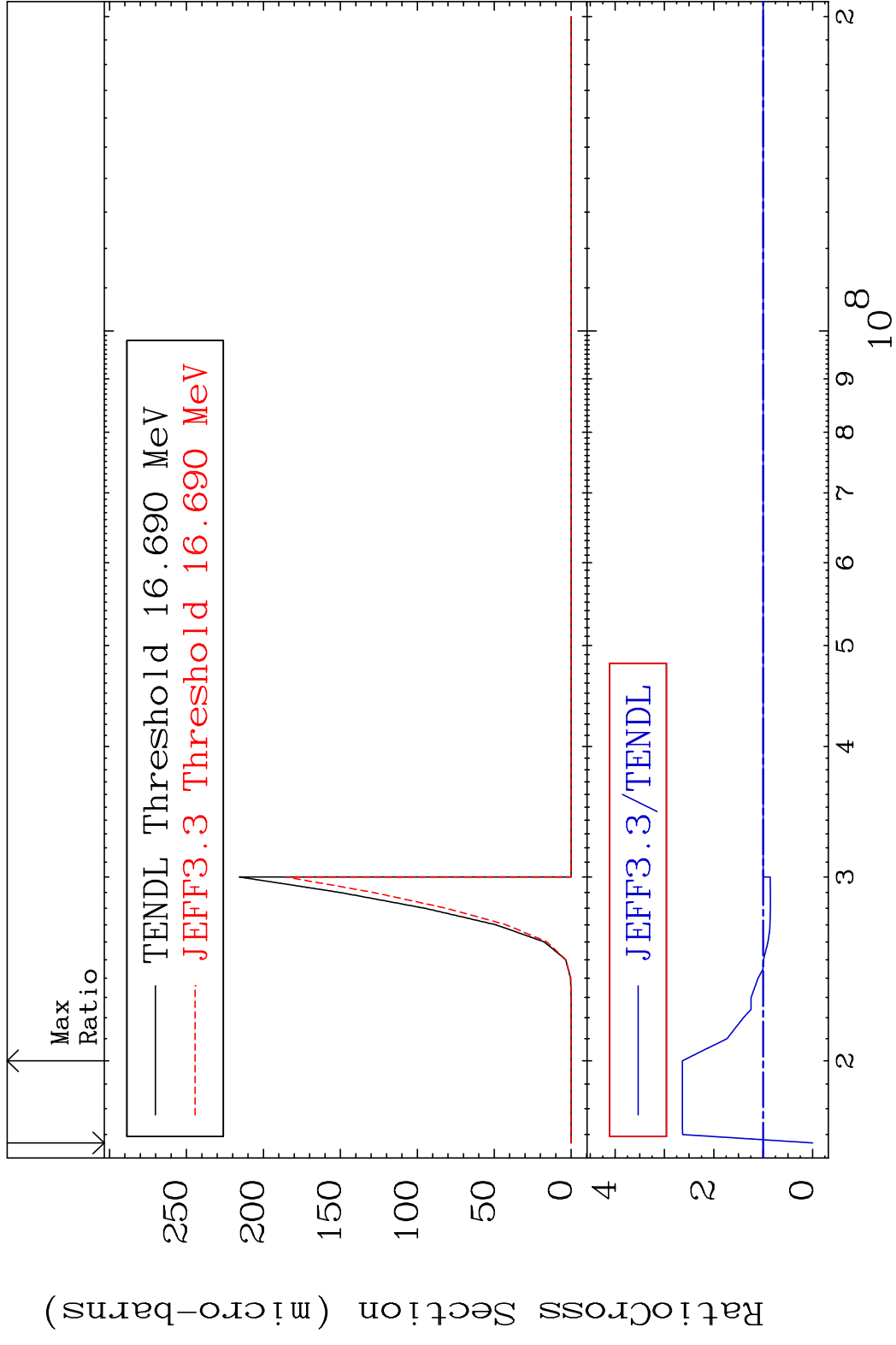
(n,p) d

41-Nb-91

Cross Section -100.0 To 159.2 %



MAT 4119 (n,p) t 41-Nb-91  
 Cross Section -100.0 To 163.7 %

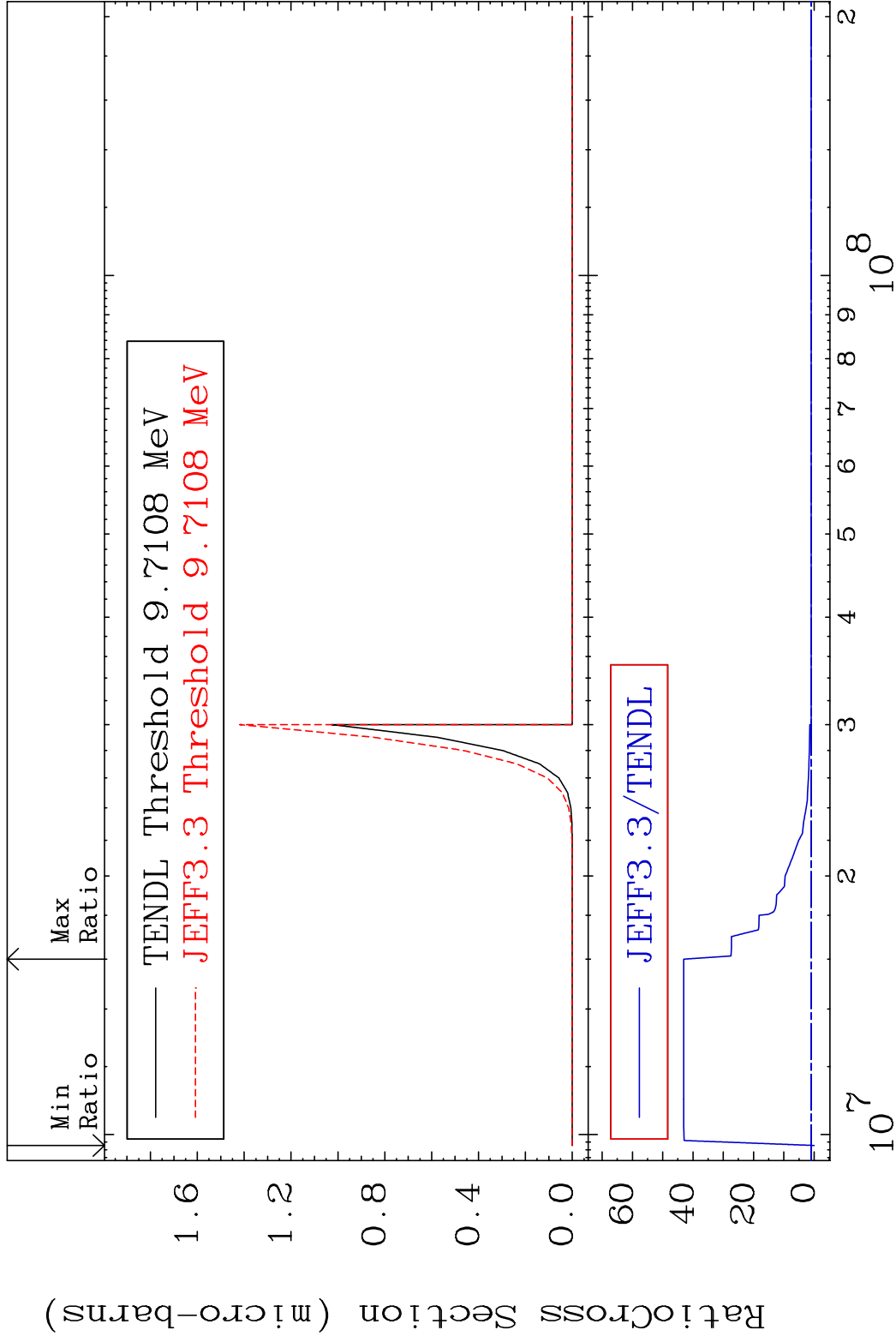


MAT 4119

(n,d)  $\alpha$

41-Nb-91

Cross Section -100.0 To 4208. %



60

Incident Energy (eV)

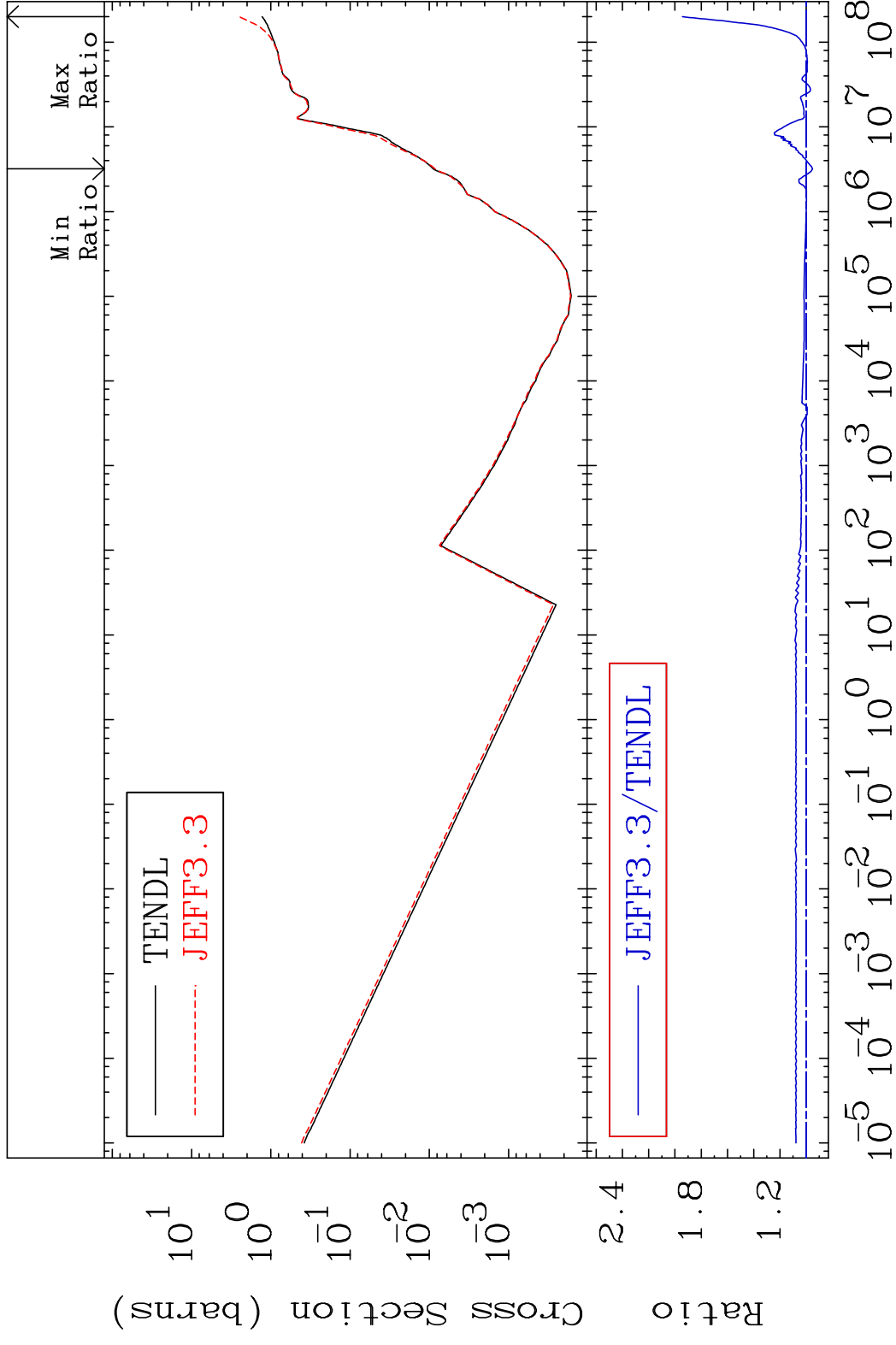
41-Nb-91

MAT 4119

Hydrogen Production

41-Nb-91

Cross Section -4.856 To 94.37 %



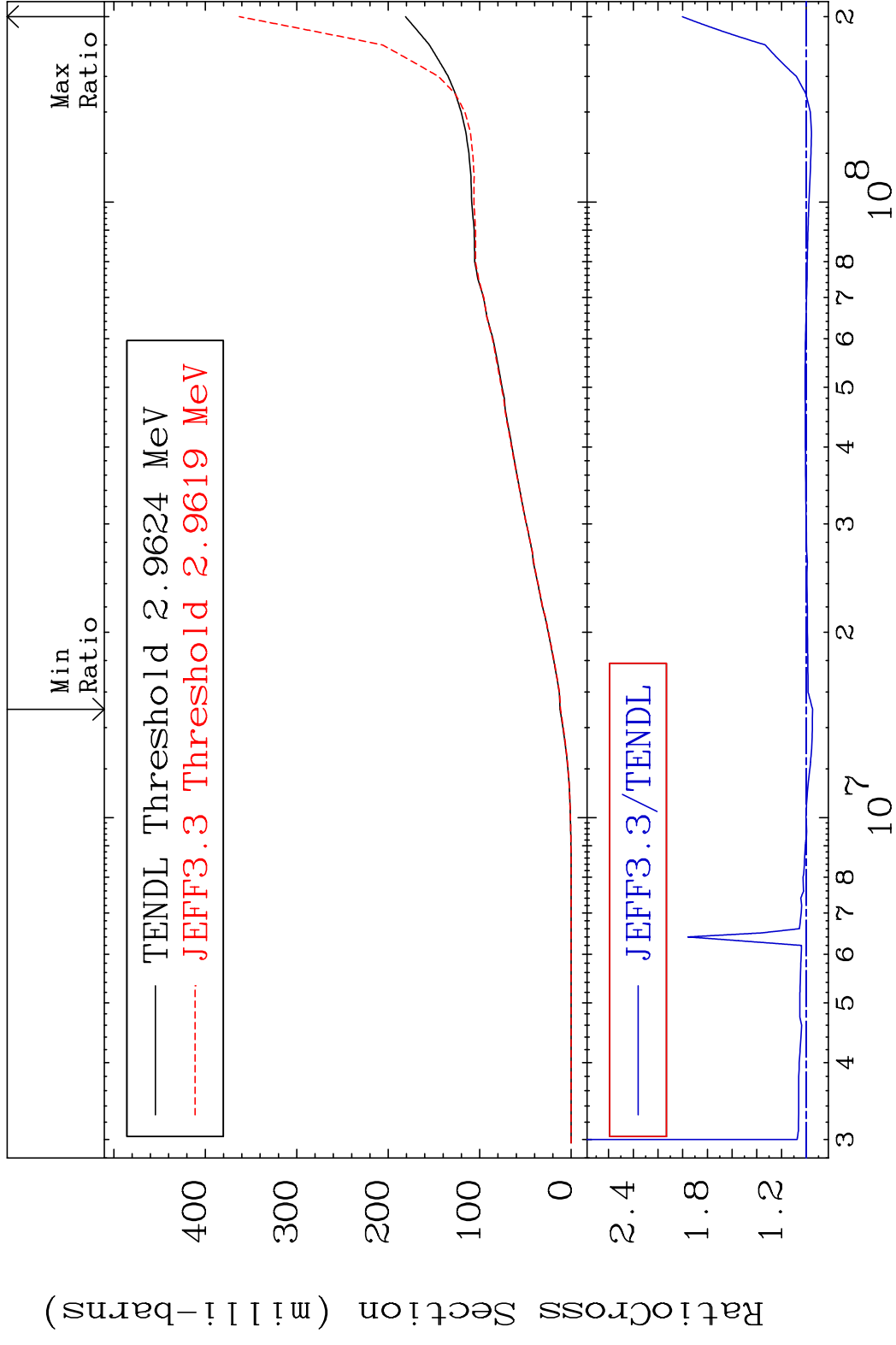
61

Incident Energy (eV)

41-Nb-91

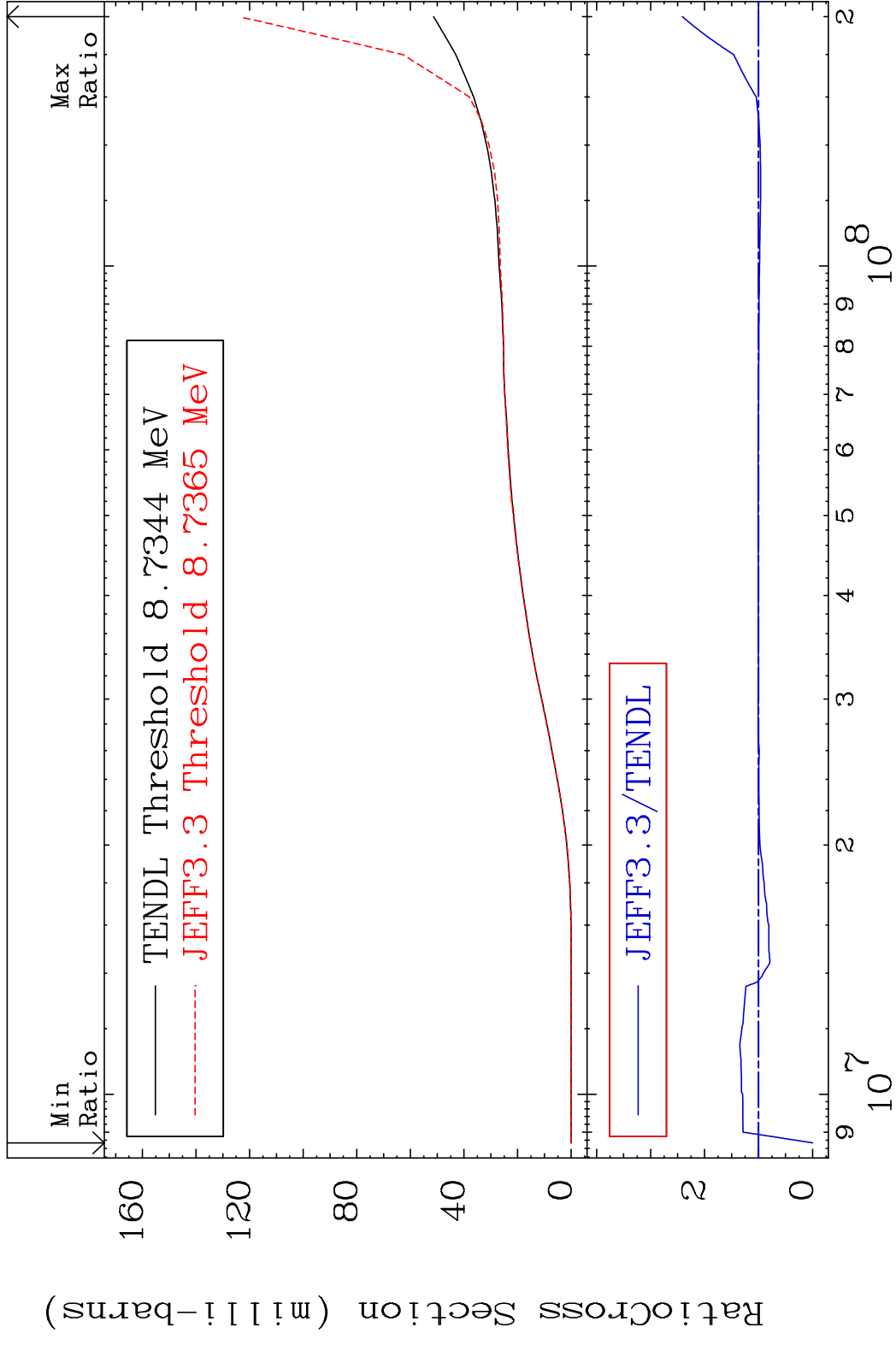
MAT 4119

Deuterium Production 41-Nb-91  
Cross Section -5.144 To 100.3 %



MAT 4119

Tritium Production 41-Nb-91  
Cross Section -100.0 To 141.2 %



63

41-Nb-91

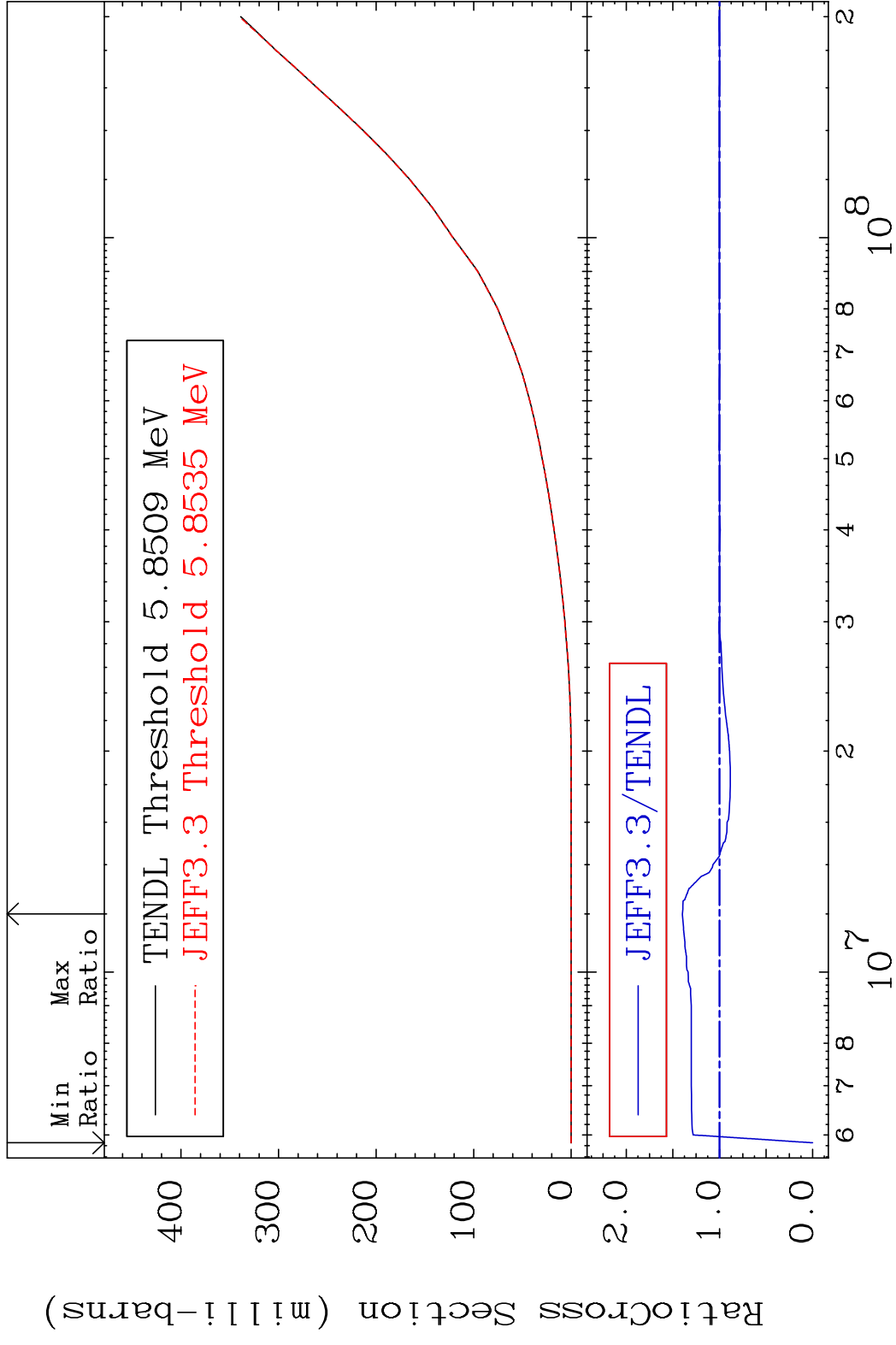


MAT 4119

He-3 Production

41-Nb-91

Cross Section -100.0 To 39.84 %



64

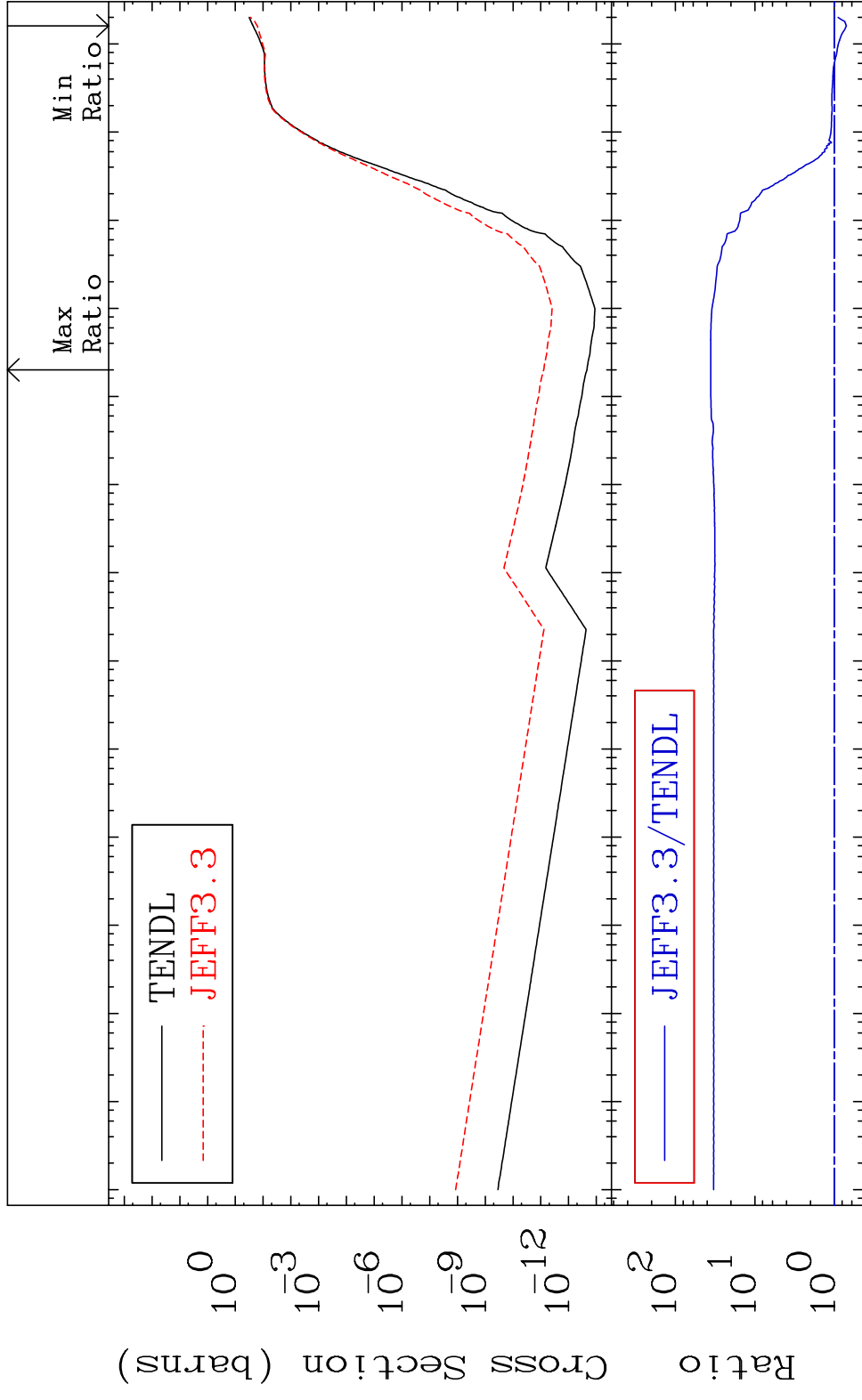
Incident Energy (eV)

41-Nb-91

MAT 4119

He-4 Production  
Cross Section

41-Nb-91  
-29.42 To 3500. %

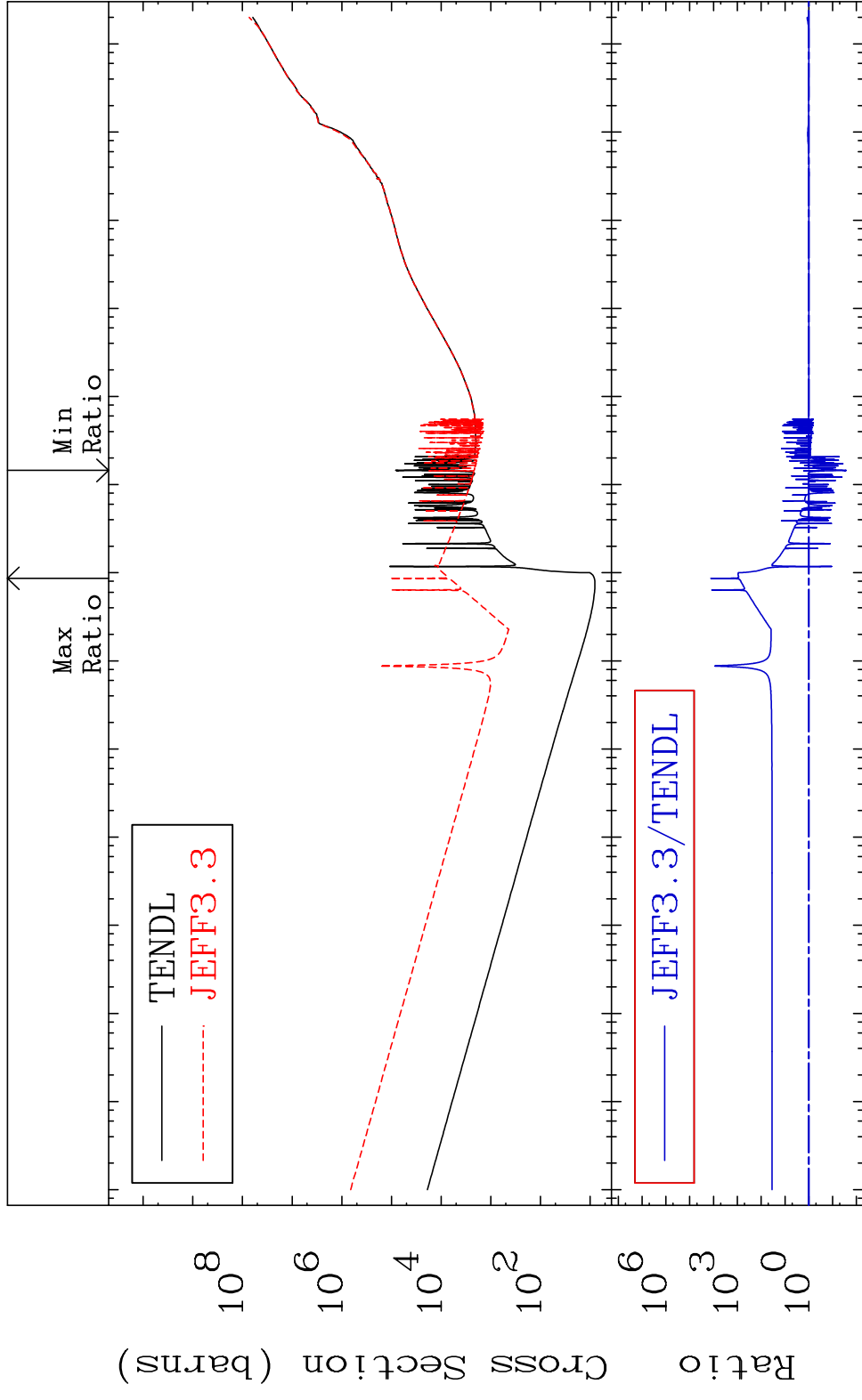


65

Incident Energy (eV)

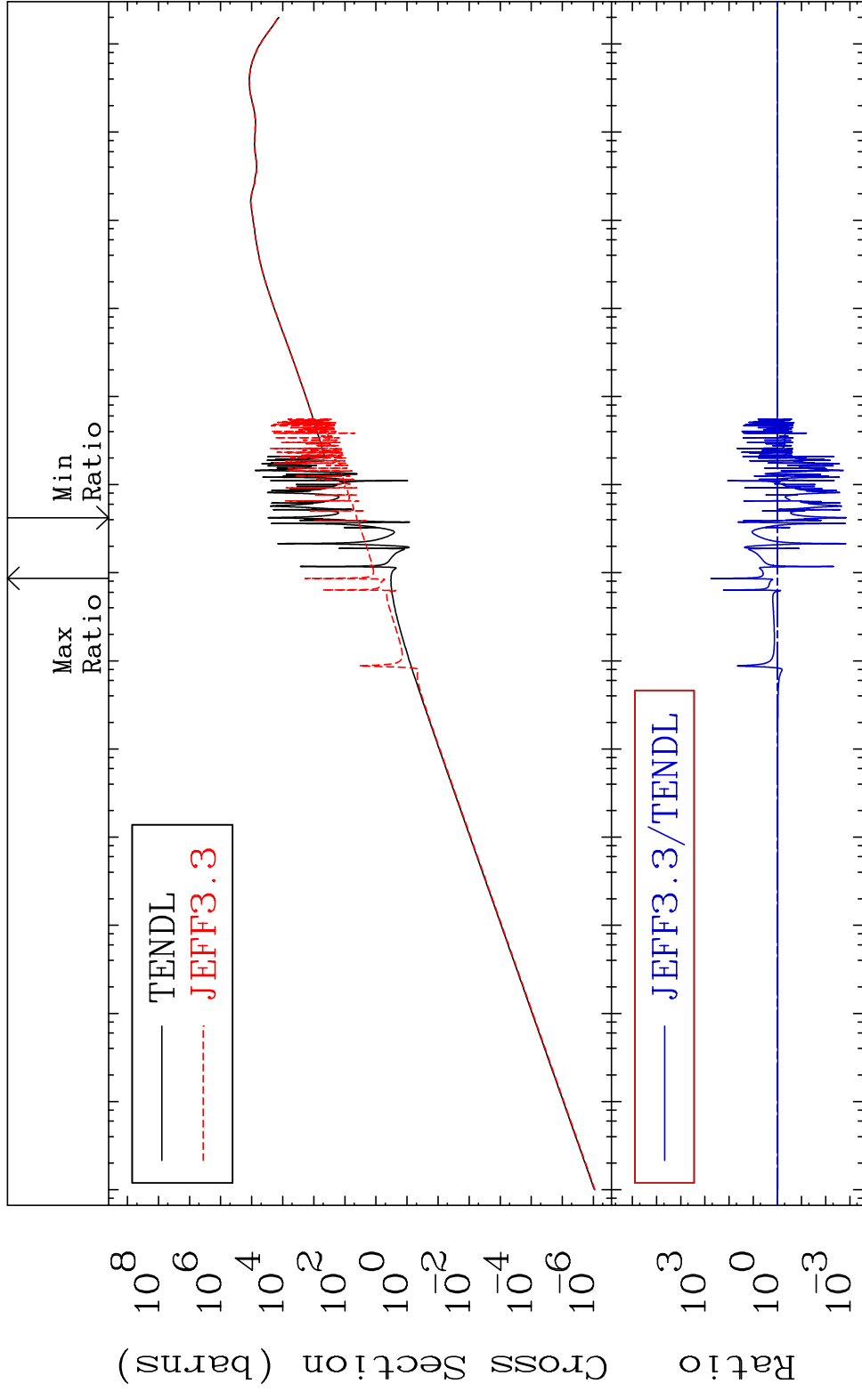
41-Nb-91

MAT 4119 Kerma total (eV-barns) 41-Nb-91  
 Cross Section -97.34 To 9999. %



MAT 4119

Kerma elastic Cross Section -99.86 To 9999. %  
41-Nb-91



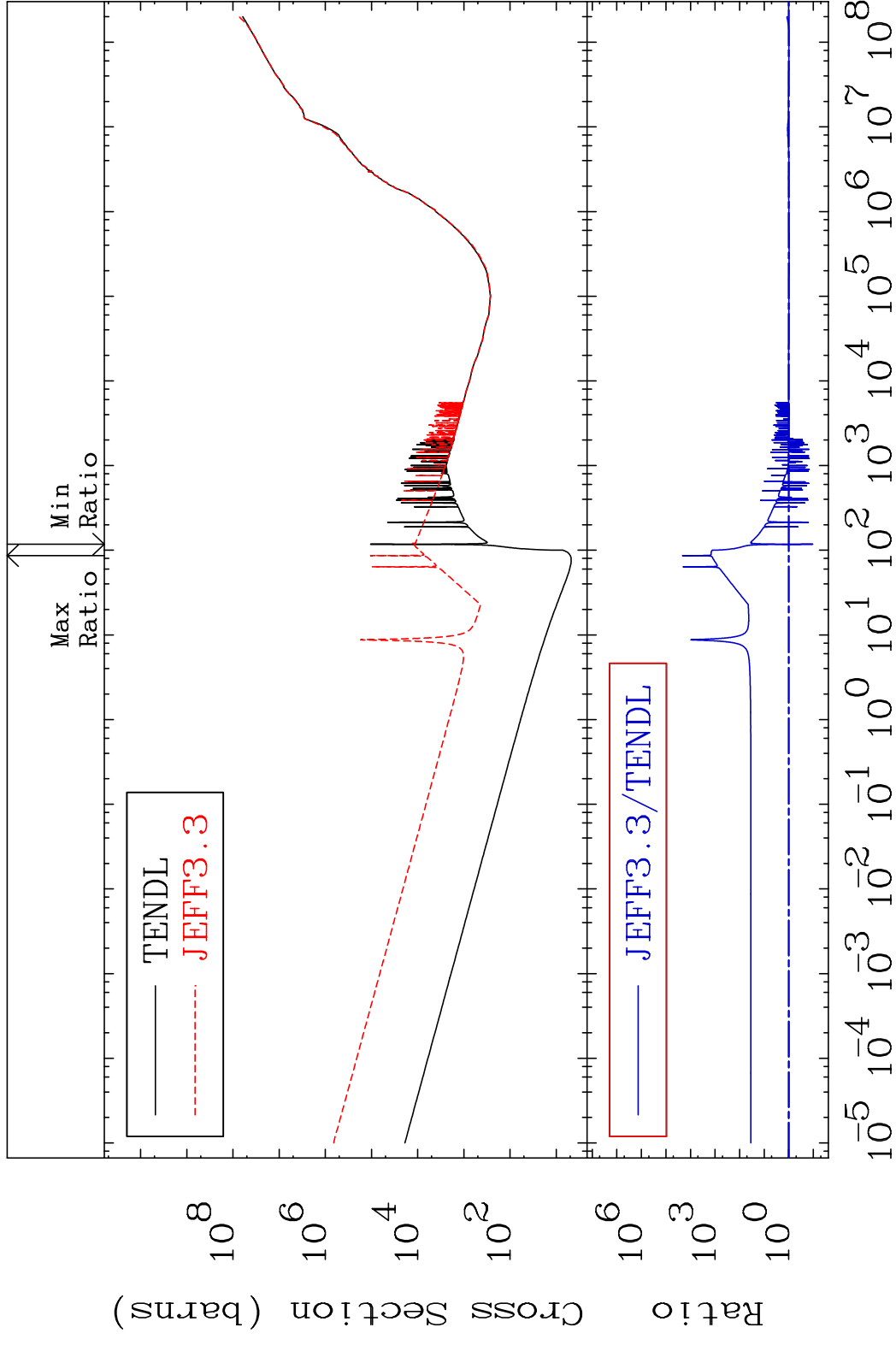
Ratio  
10<sup>8</sup>  
10<sup>6</sup>  
10<sup>4</sup>  
10<sup>2</sup>  
10<sup>0</sup>  
10<sup>-2</sup>  
10<sup>-4</sup>  
10<sup>-6</sup>  
10<sup>-8</sup>  
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

67

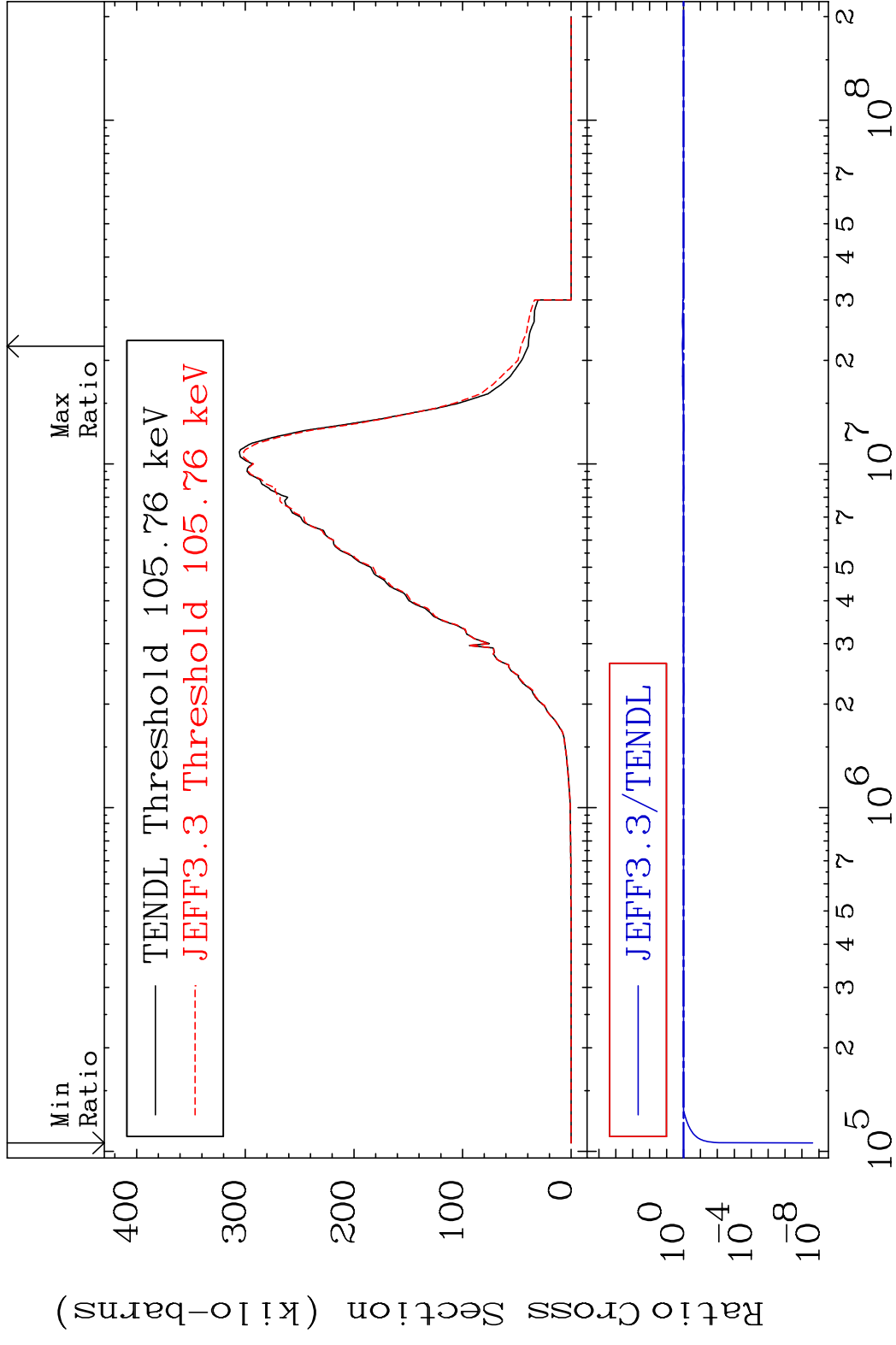
Incident Energy (eV)

41-Nb-91

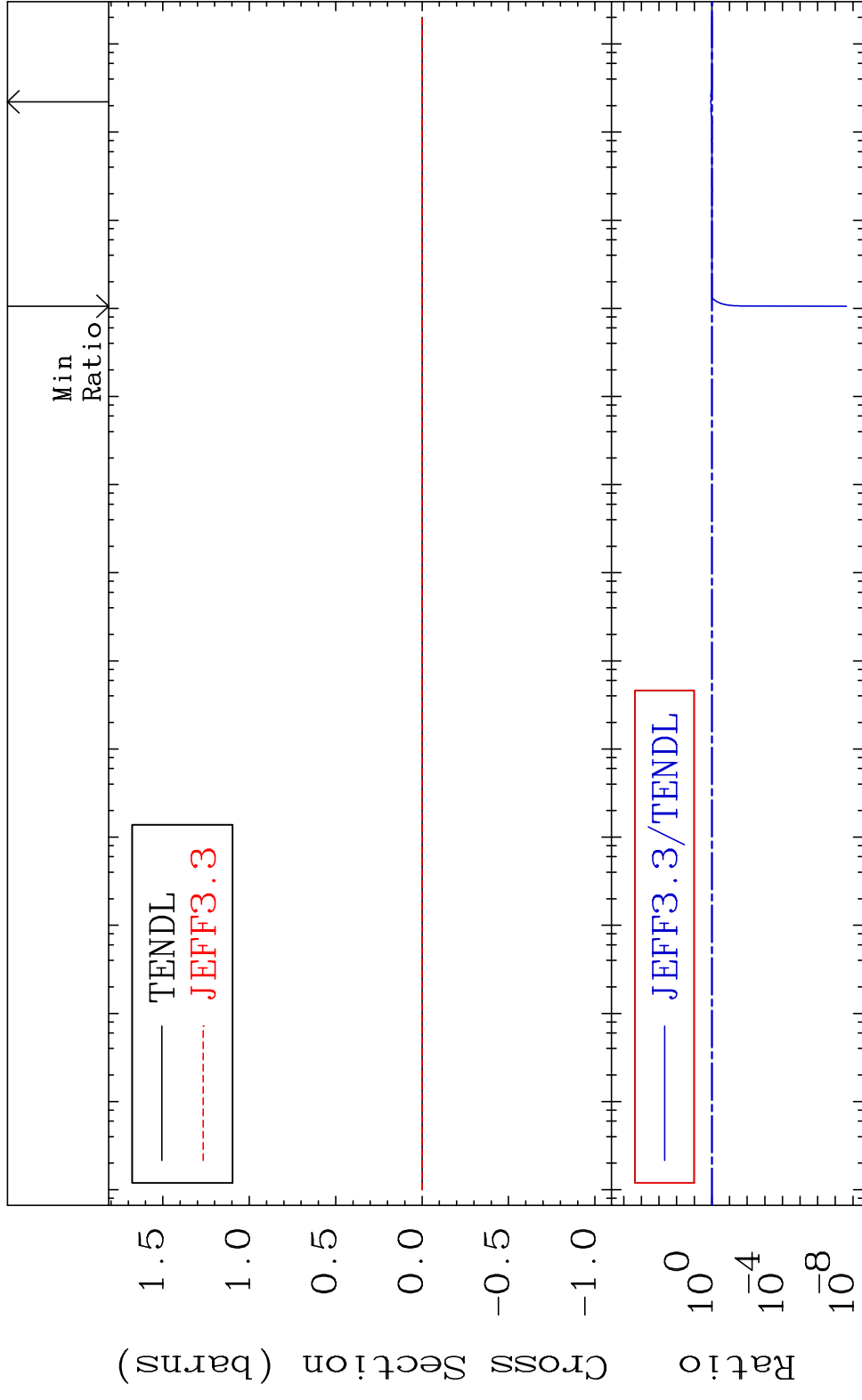
MAT 4119 Kerma non-elastic (all but mt2) 41-Nb-91  
 Cross Section -89.24 To 9999. %



MAT 4119 Kerma inelastic (mt51-91) 41-Nb-91  
 Cross Section -100.0 To 16.96 %



MAT 4119 Kerma fission (mt18 or mt19-20-21-38) 41-Nb-91  
 Cross Section -100.0 To 16.96 %

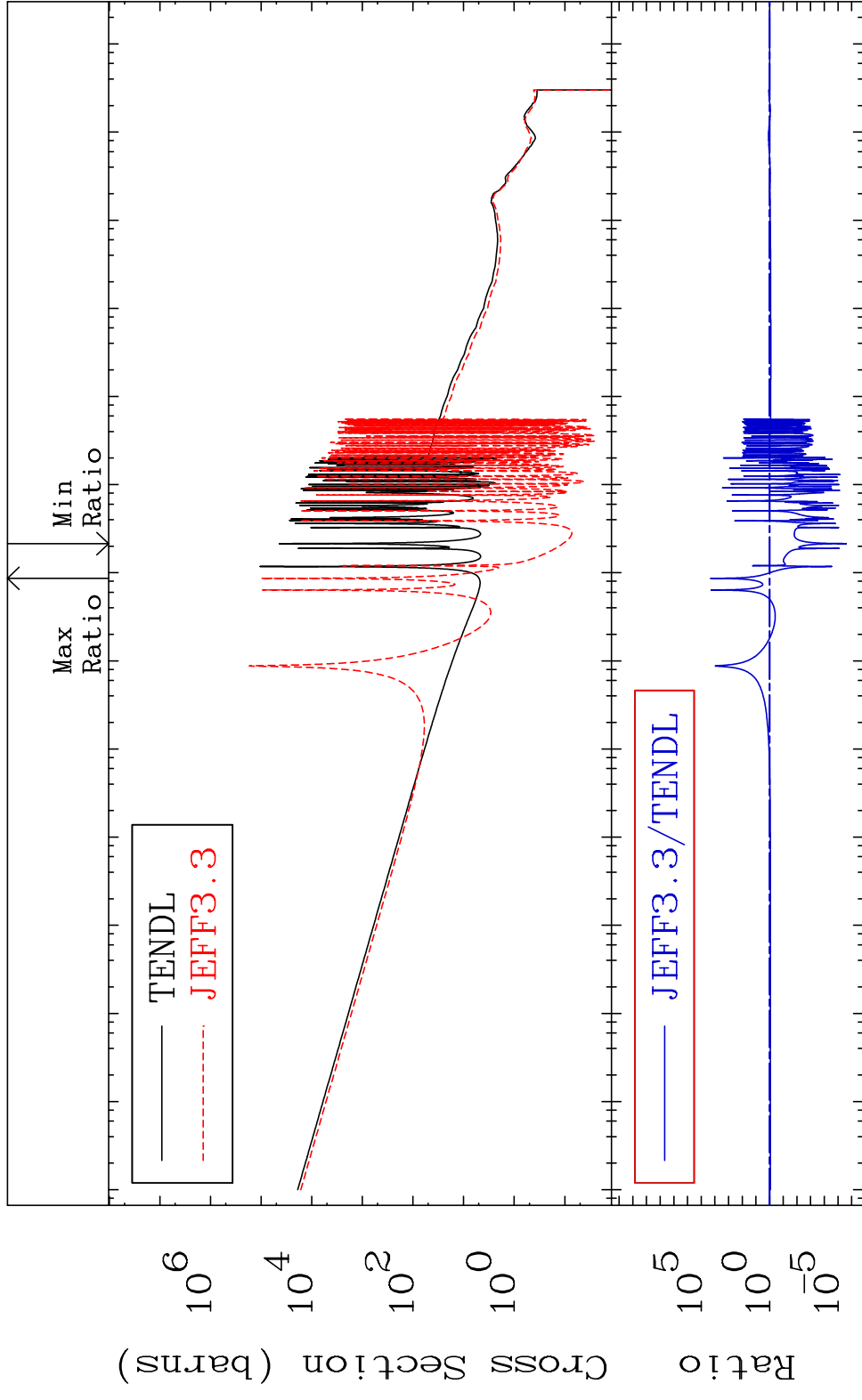


70 Incident Energy (eV) 41-Nb-91

MAT 4119

Kerma capture (mt102) 41-Nb-91

Cross Section -100.0 To 9999. %



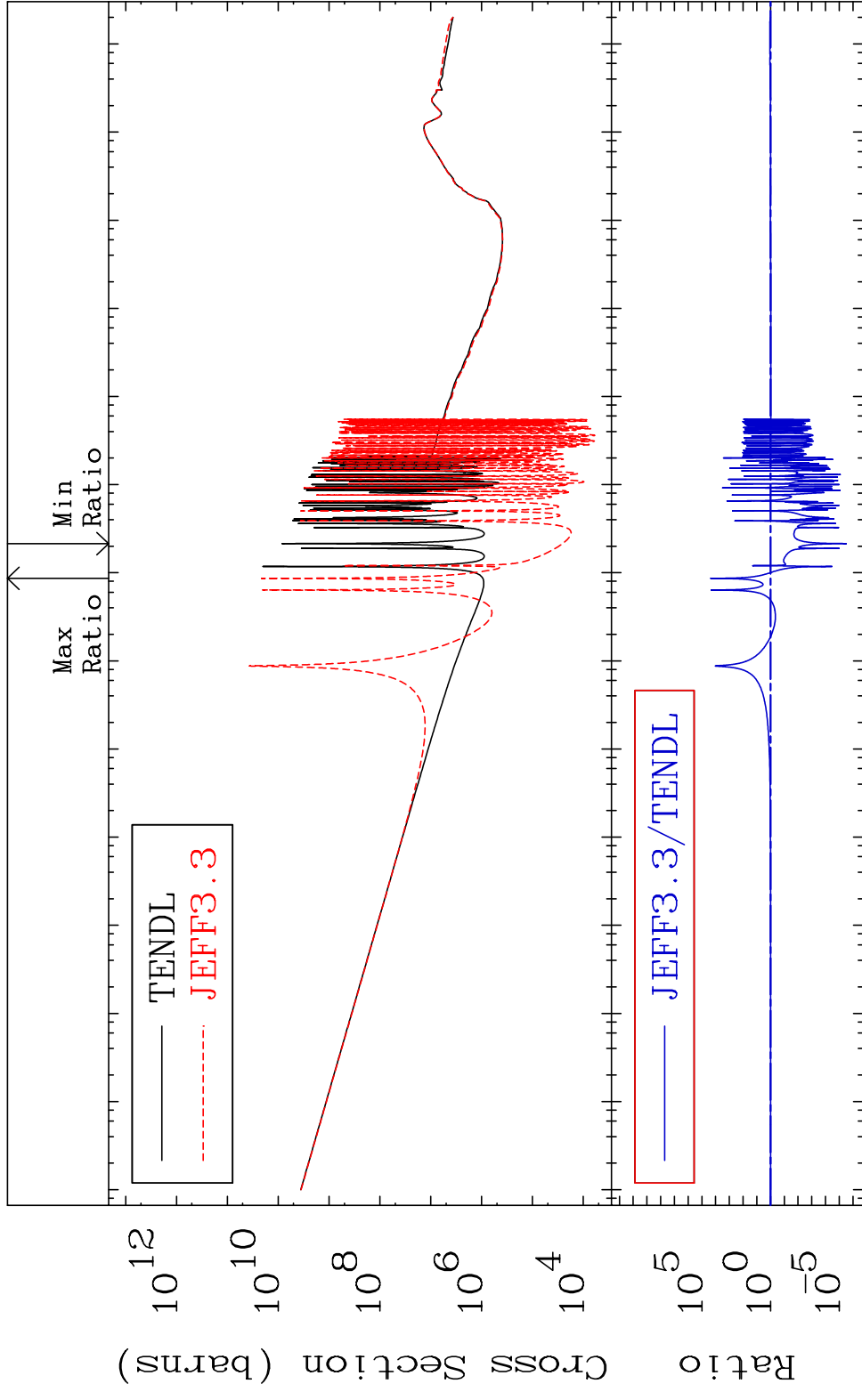
71

Incident Energy (eV)

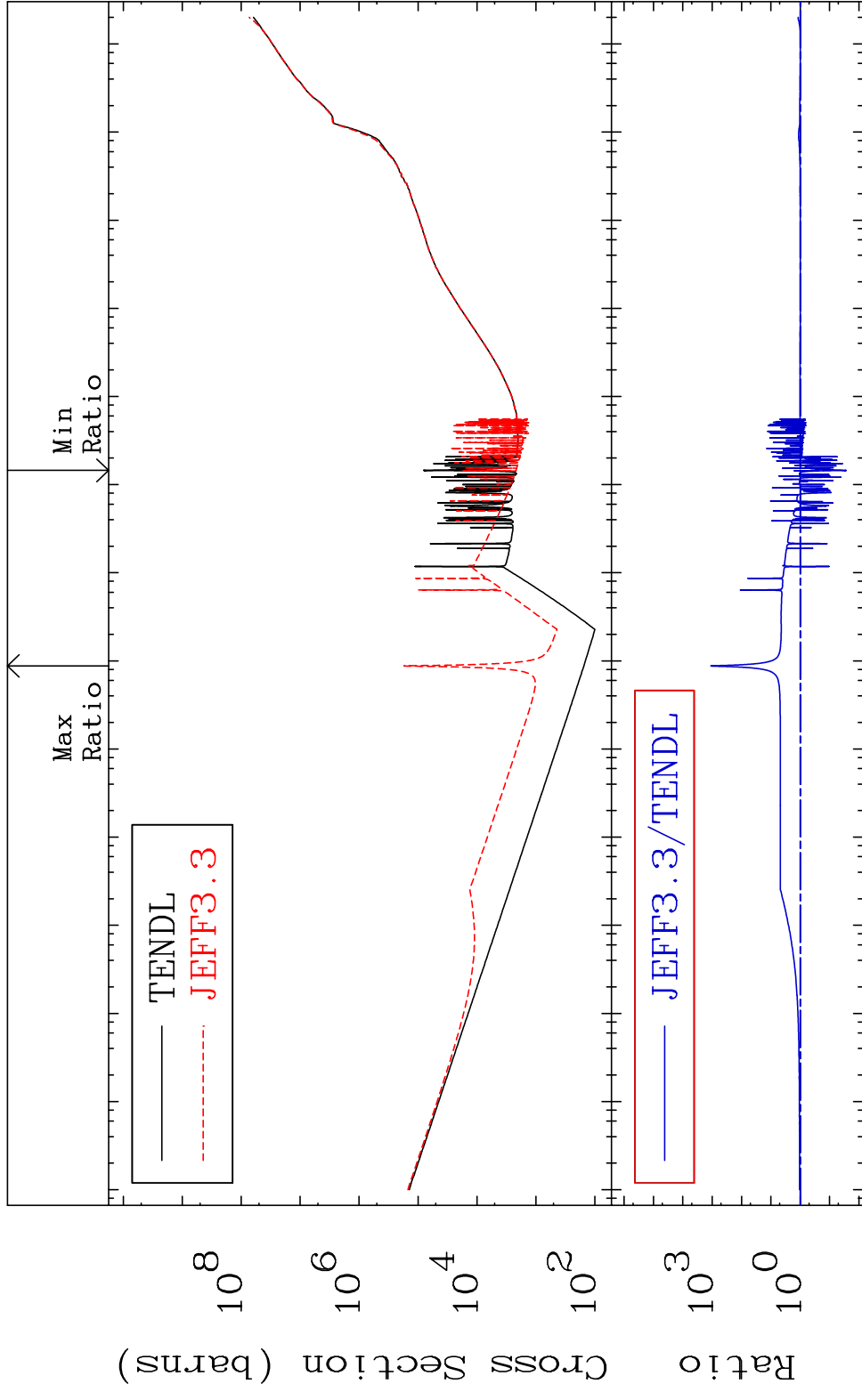
41-Nb-91



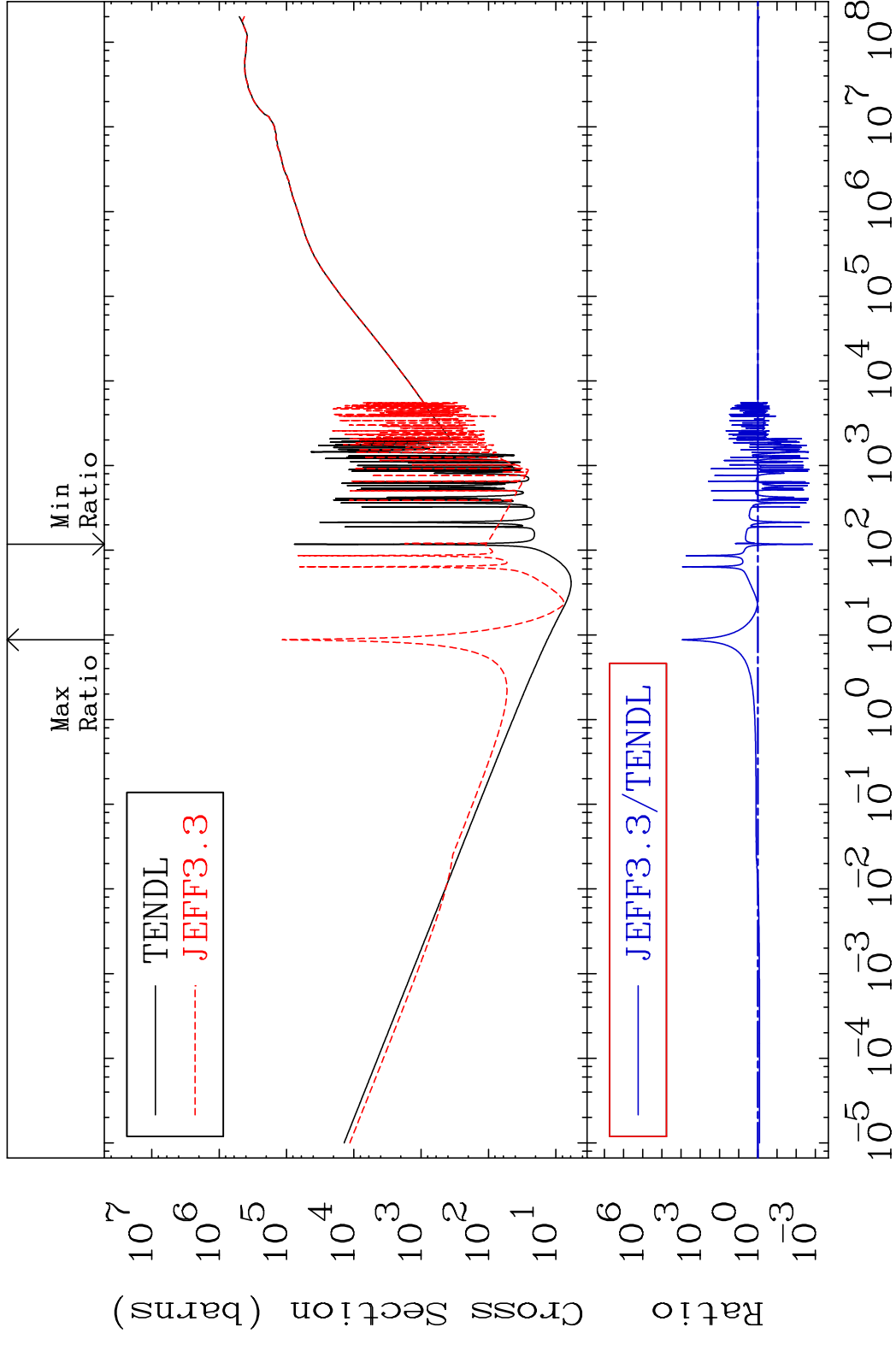
MAT 4119 Total photon (eV-barns) 41-Nb-91  
 Cross Section -100.0 To 9999. %



MAT 4119 Total kinematic kerma (high limit) 41-Nb-91  
 Cross Section -97.32 To 9999. %



MAT 4119      Dpa total (eV-barns)      41-Nb-91  
 Cross Section      -99.86 To 9999. %

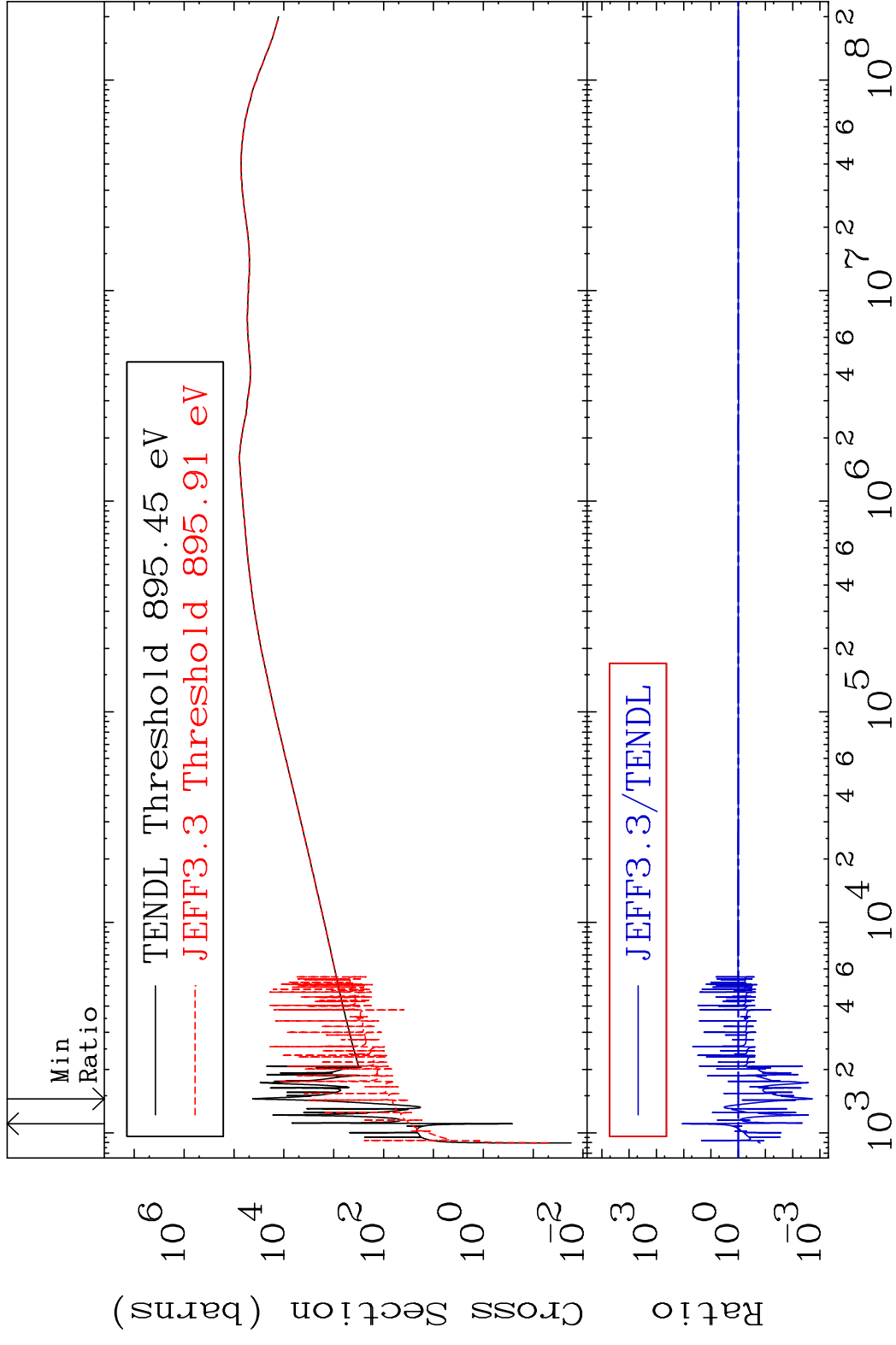


MAT 4119

Dpa elastic (mt2)

41-Nb-91

Cross Section -99.81 To 9999. %



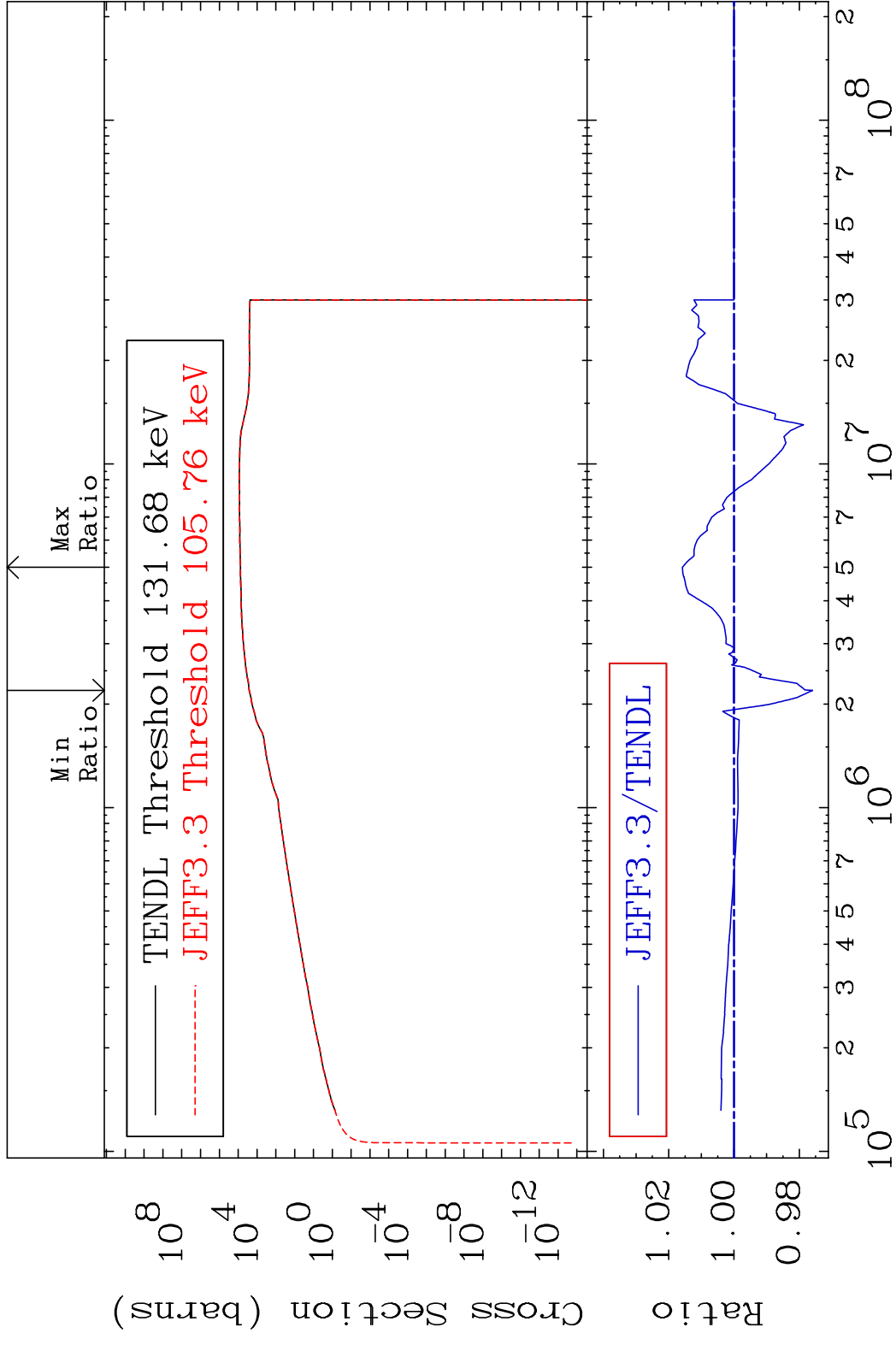
75

Incident Energy (eV)

41-Nb-91

MAT 4119

Dpa inelastic (mt51-91) 41-Nb-91  
Cross Section -2.406 To 1.582 %

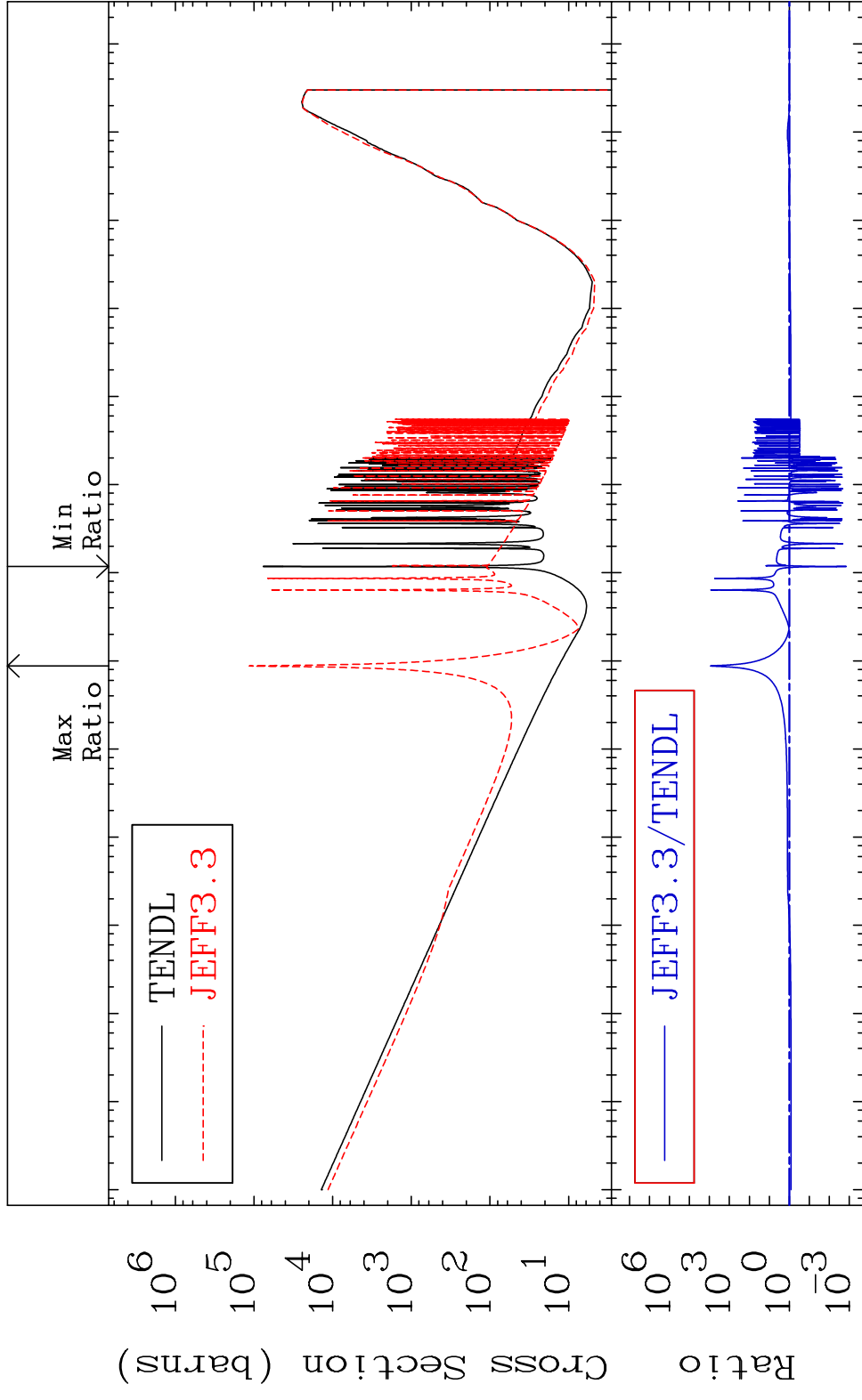


76

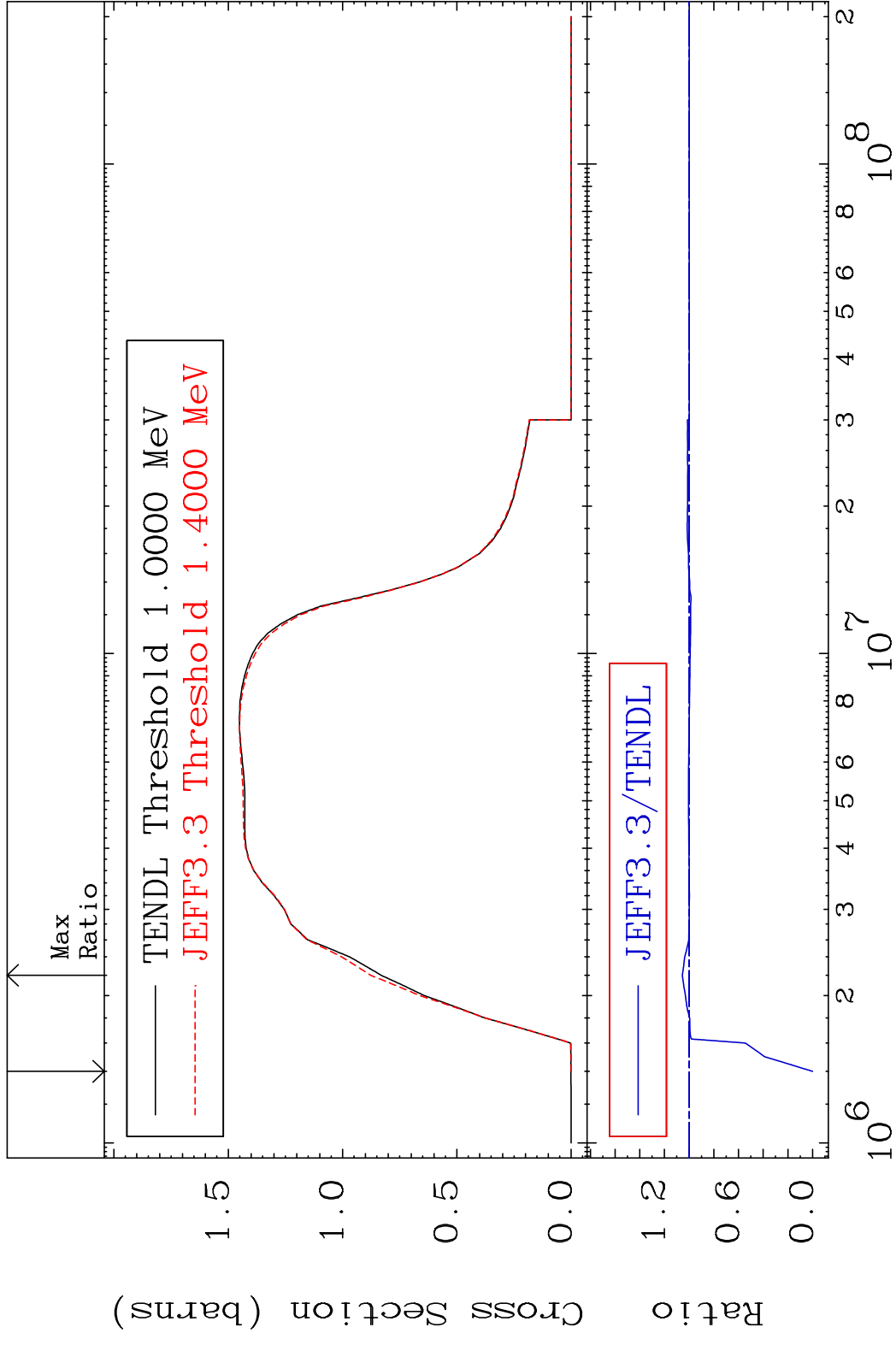
Incident Energy (eV)

41-Nb-91

MAT 4119 Dpa disappearance (mt102 -120) 41-Nb-91  
 Cross Section -99.86 To 9999. %

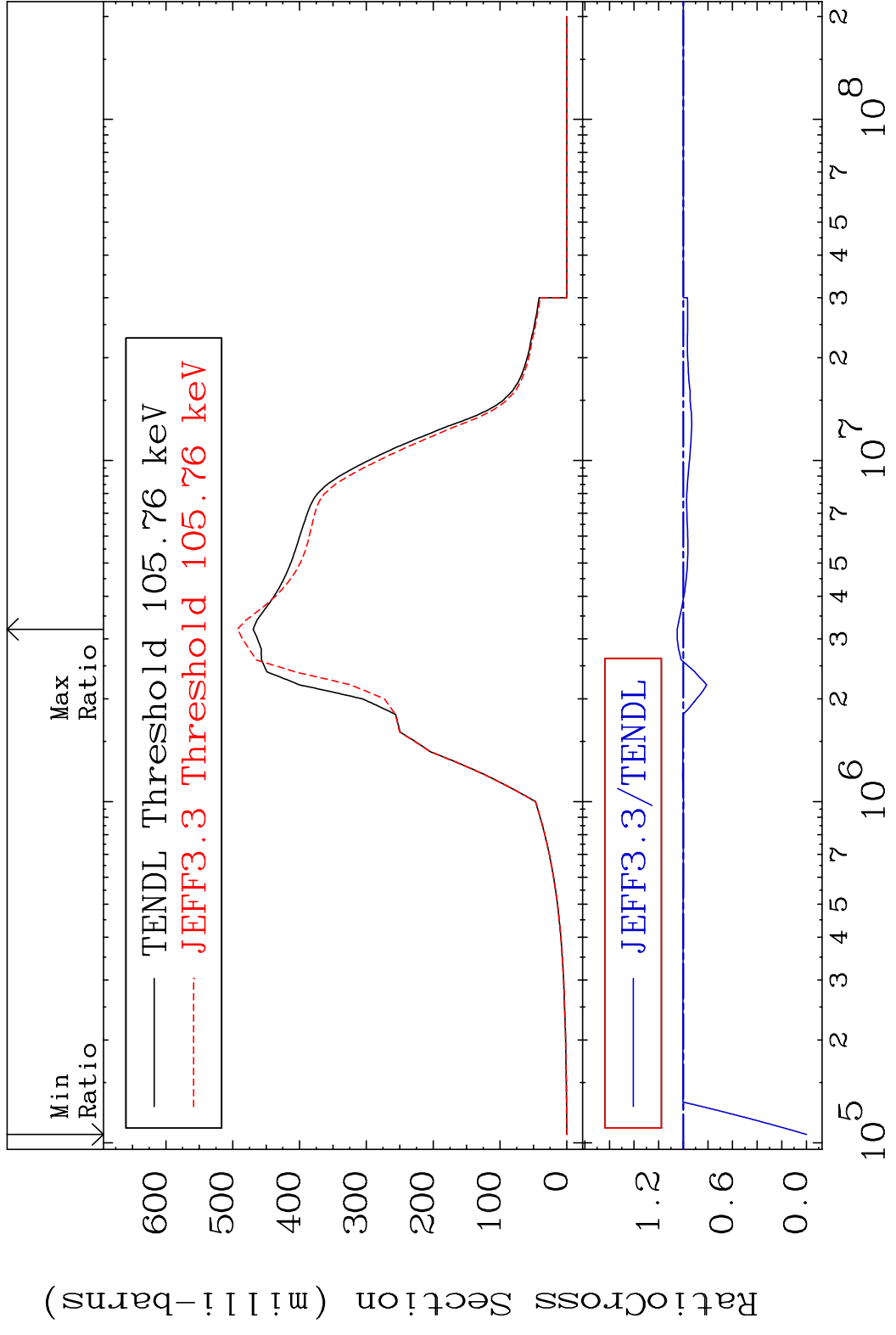


MAT 4119 Inelastic:41-Nb-91g 41-Nb-91  
 Radionuclide Production Cross Section 180.01 dno 5.489 %



78 Incident Energy (eV) 41-Nb-91

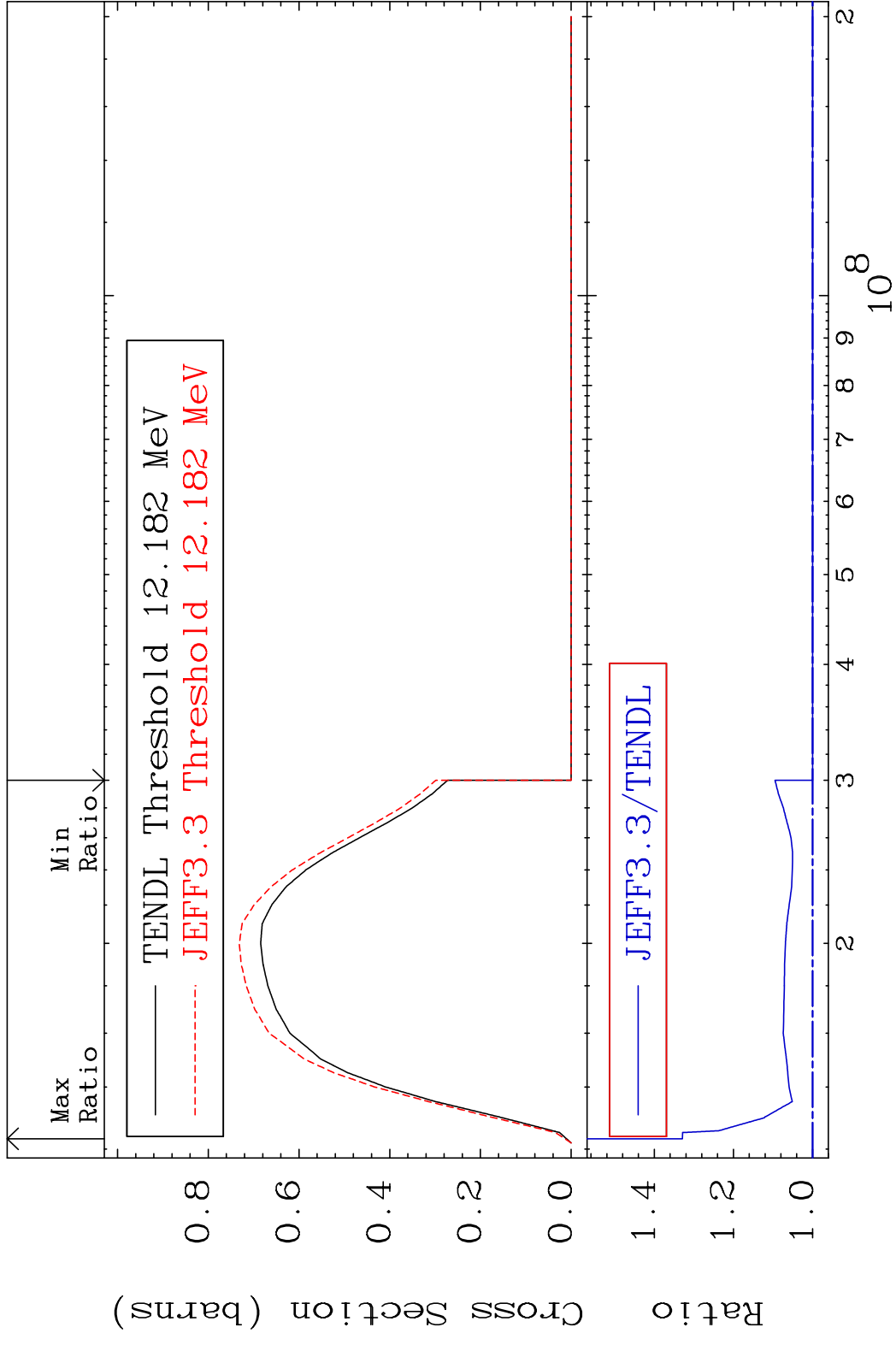
MAT 4119 Inelastic:41-Nb-91m1 41-Nb-91  
 Radionuclide Production Cross Section Ratio 4.970 %



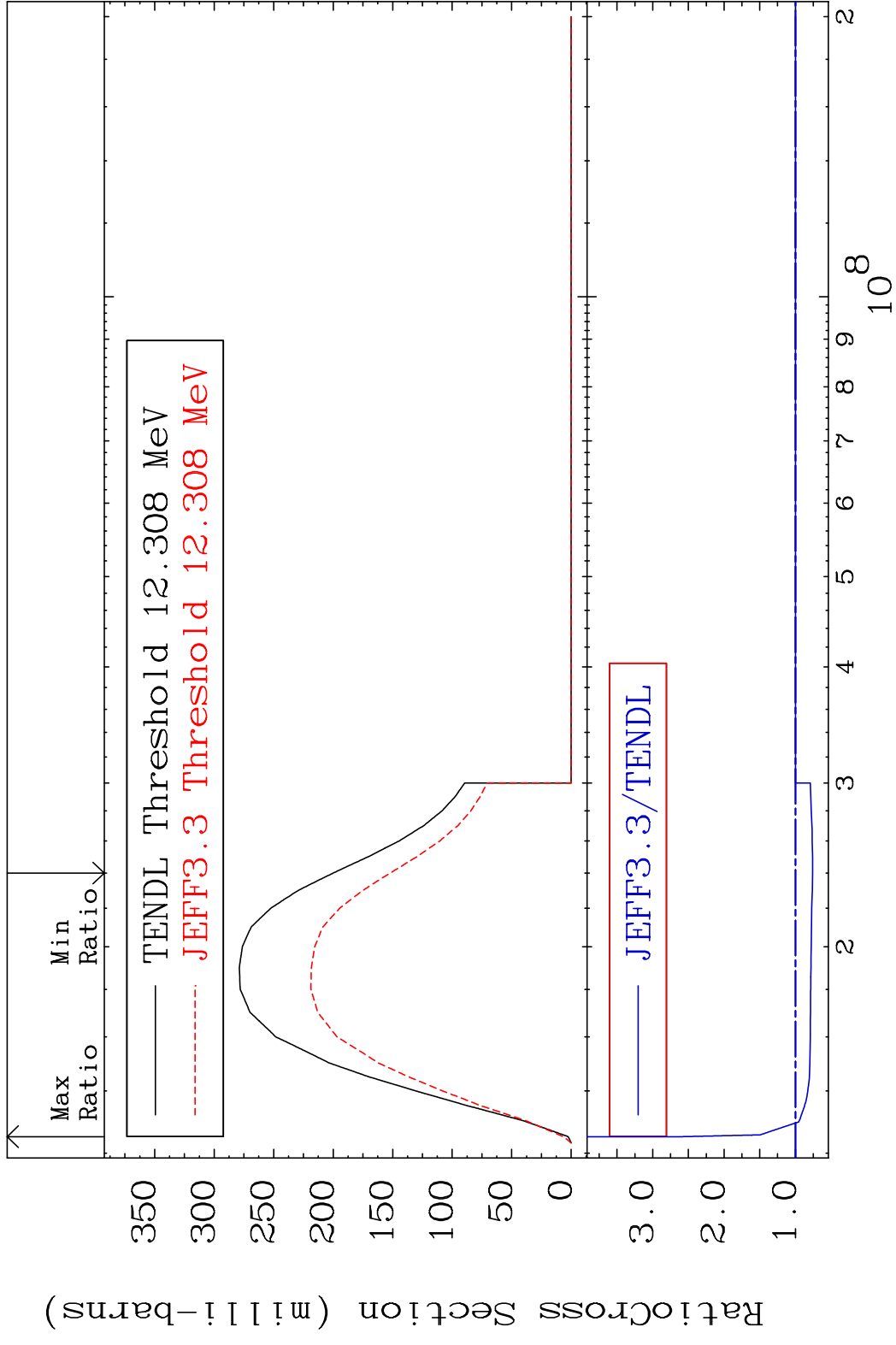
79 Incident Energy (eV) 41-Nb-91



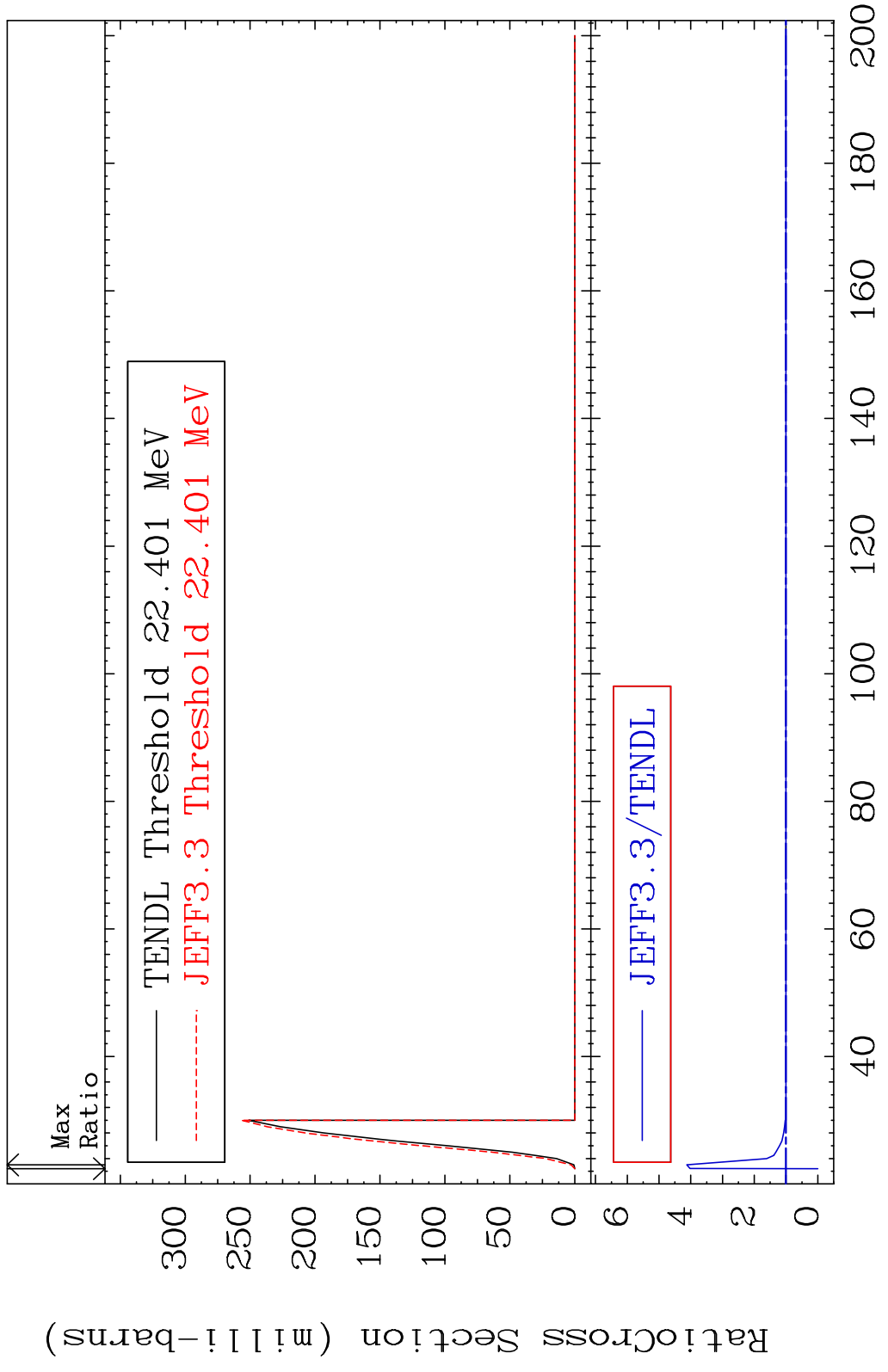
MAT 4119 (n,2n):41-Nb-90g 41-Nb-91  
 Radionuclide Production Cross Section 32.91 %



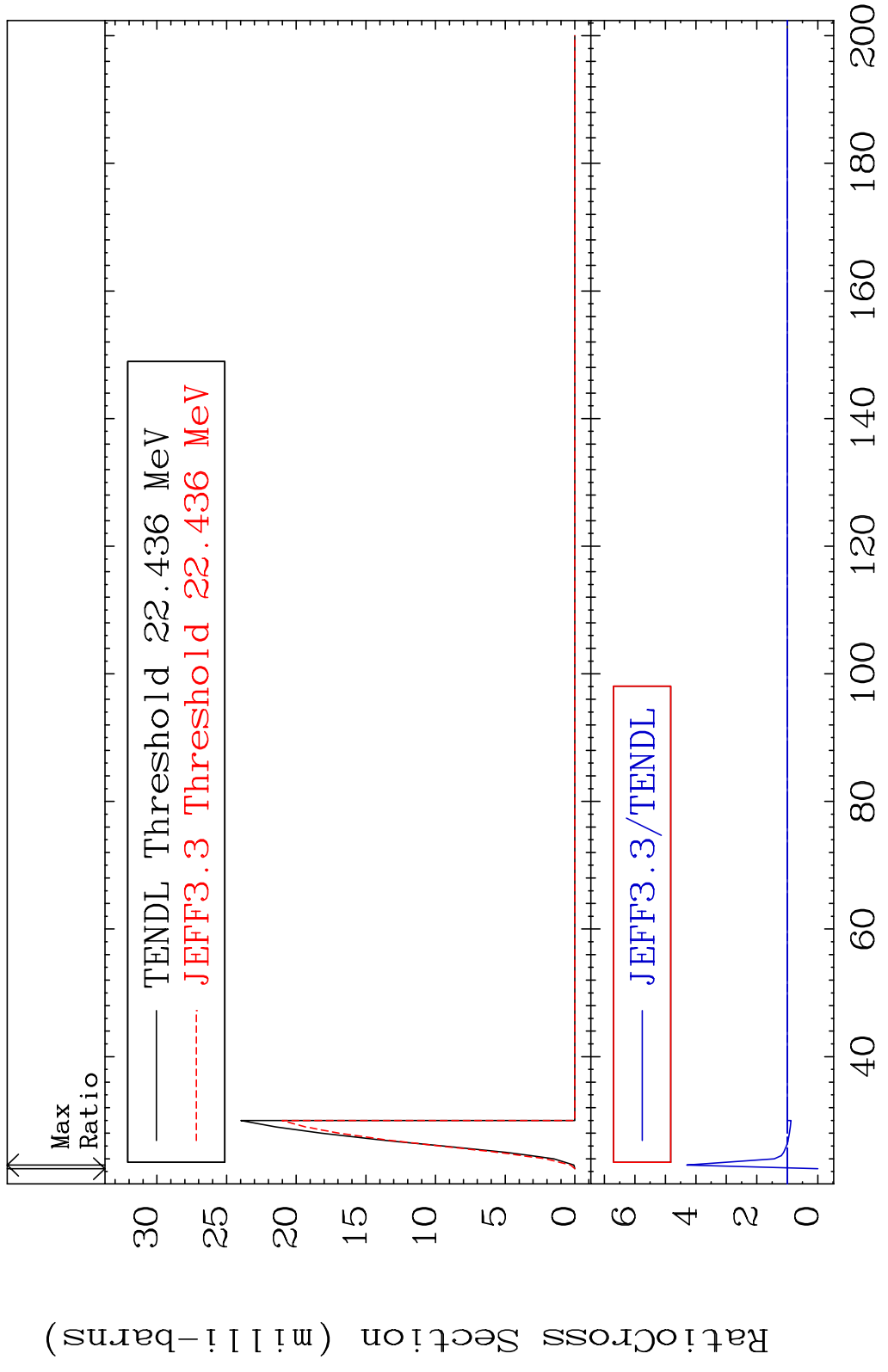
MAT 4119 (n,2n):41-Nb-90m2 41-Nb-91  
 Radionuclide Production Cross Section 158.5 %

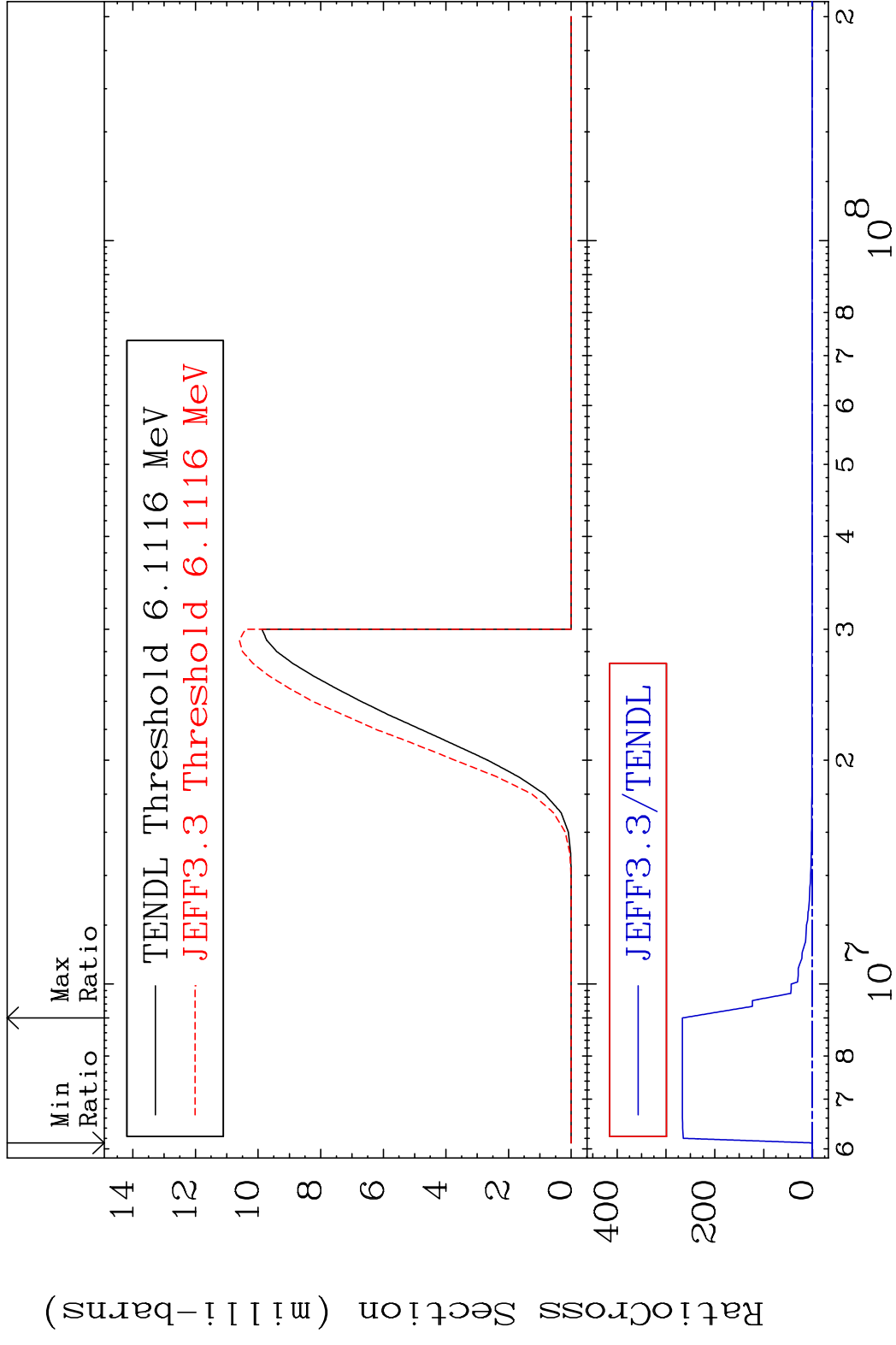


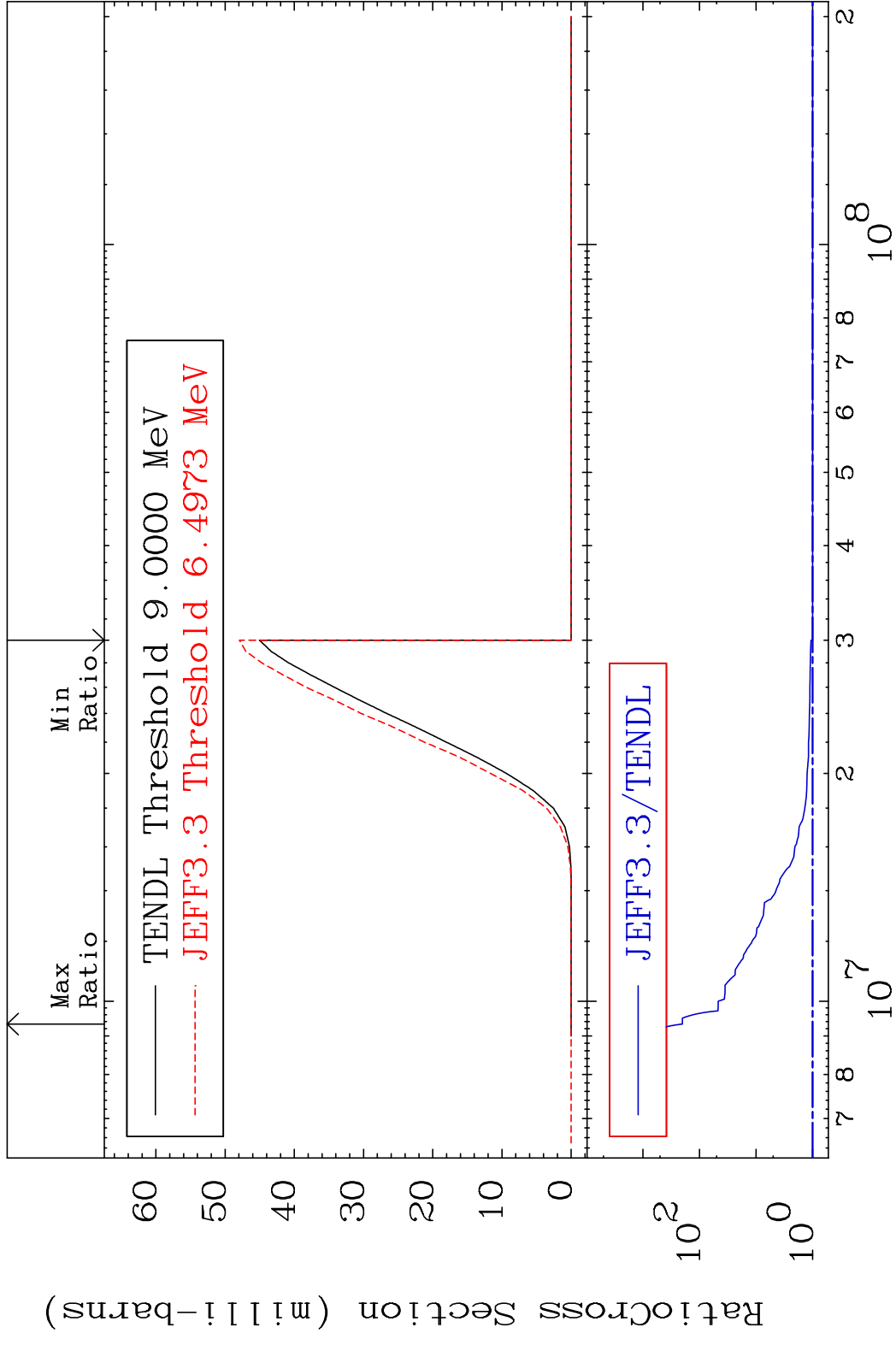
MAT 4119 (n,3n):41-Nb-89g 41-Nb-91  
 Radionuclide Production Cross Section 180.0 dth 312.7 %

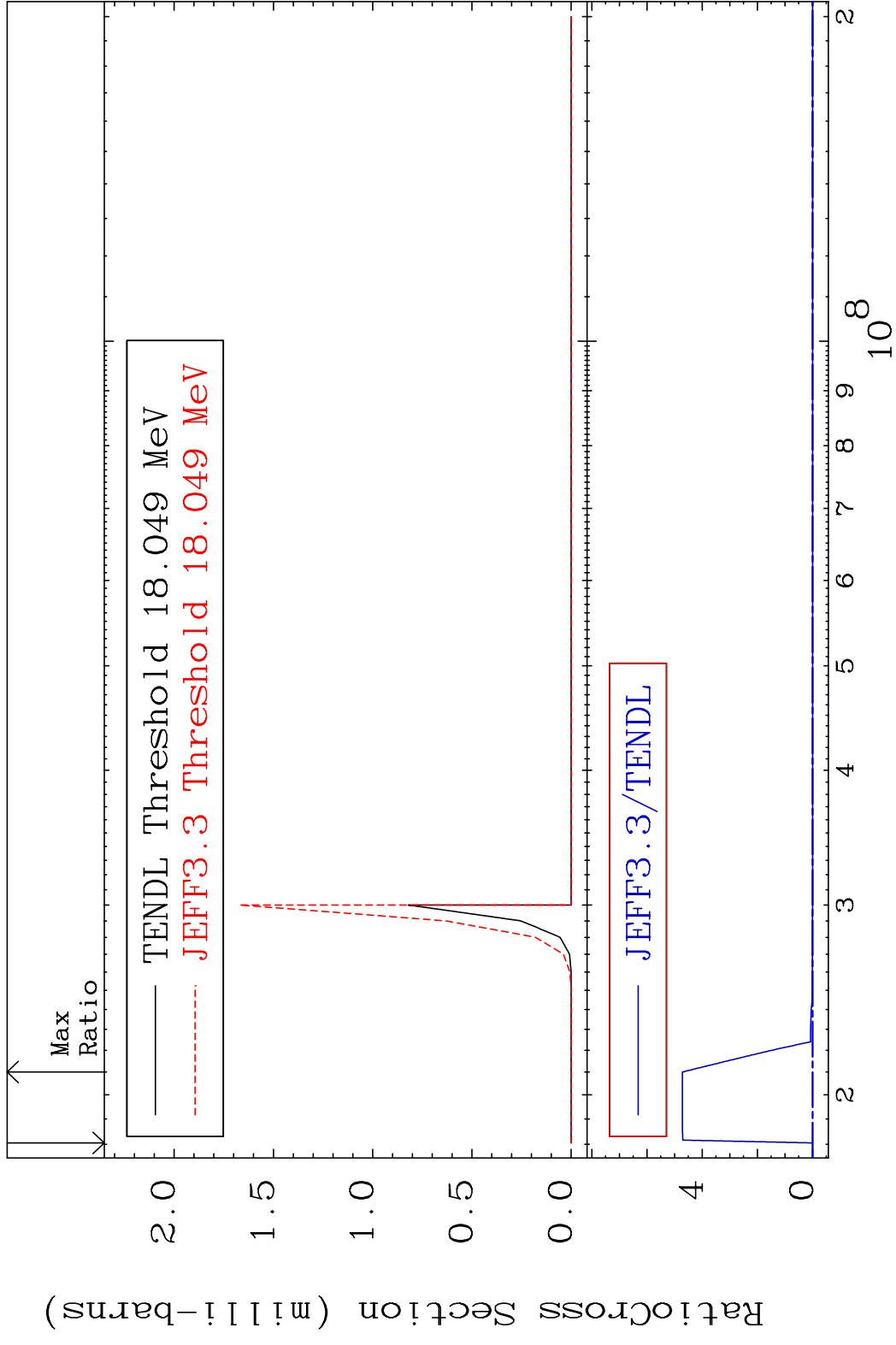


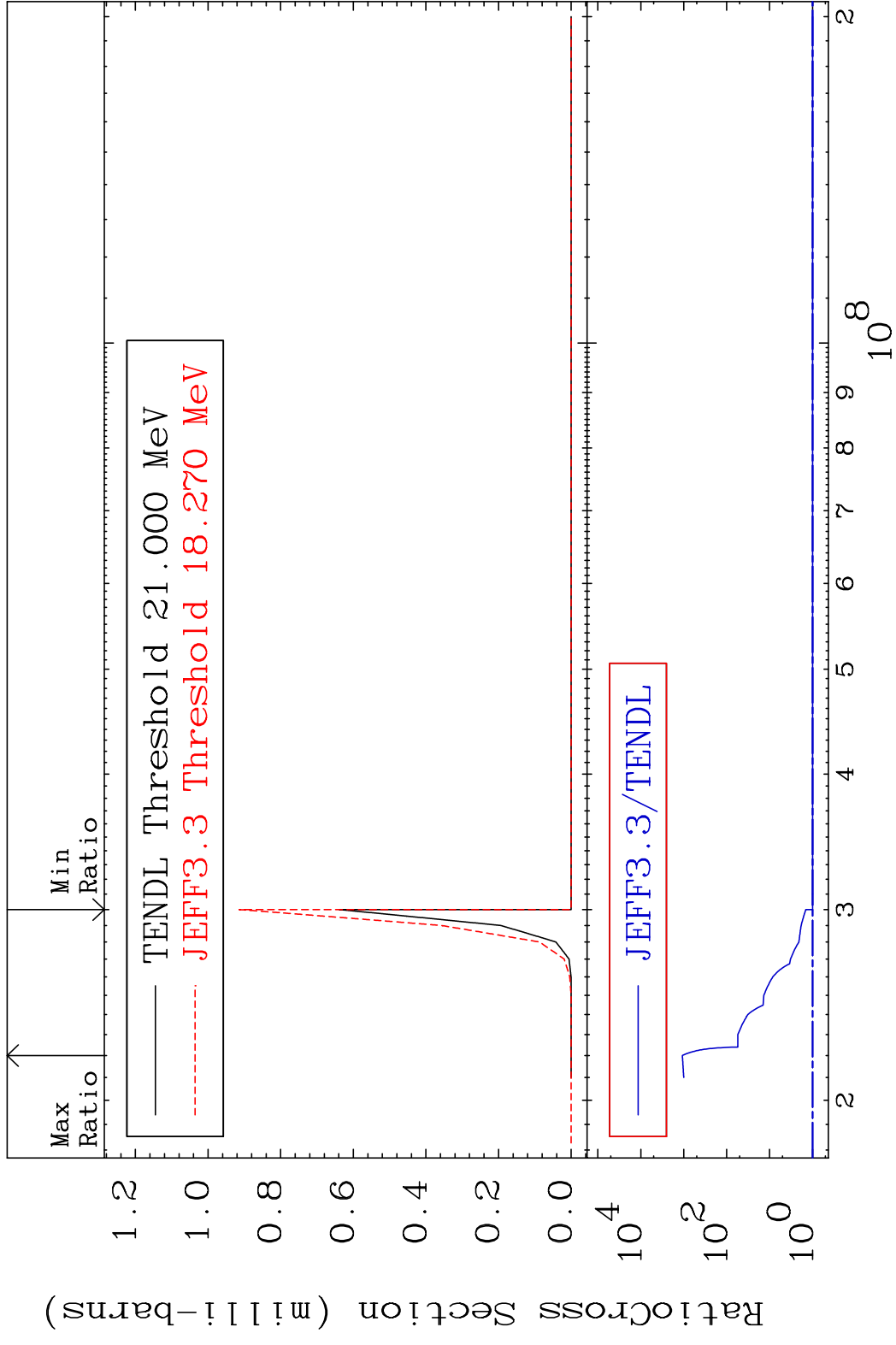
MAT 4119 (n,3n):41-Nb-89m1 41-Nb-91  
 Radionuclide Production Cross Section 180.0 dth 330.0 %





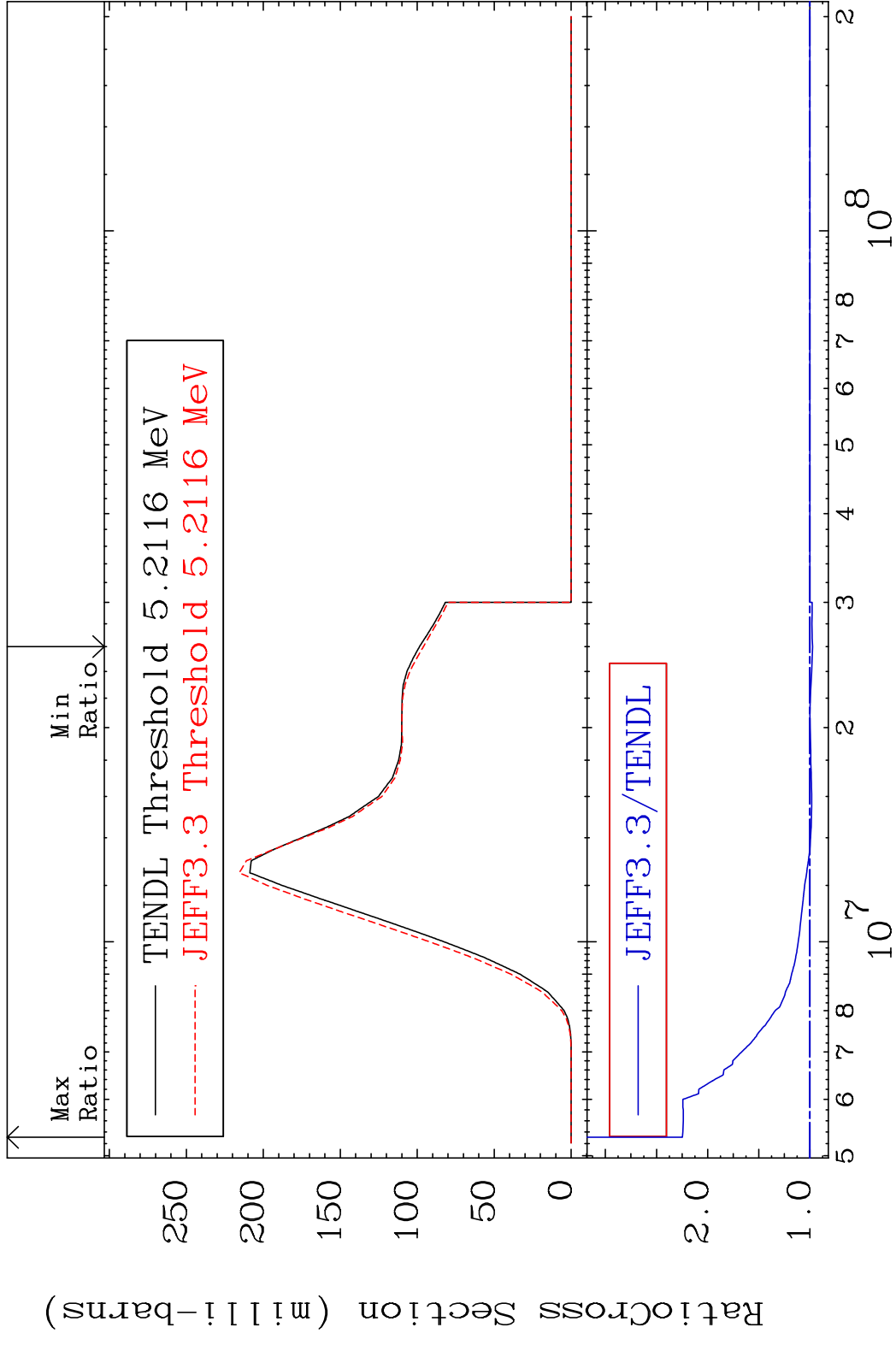




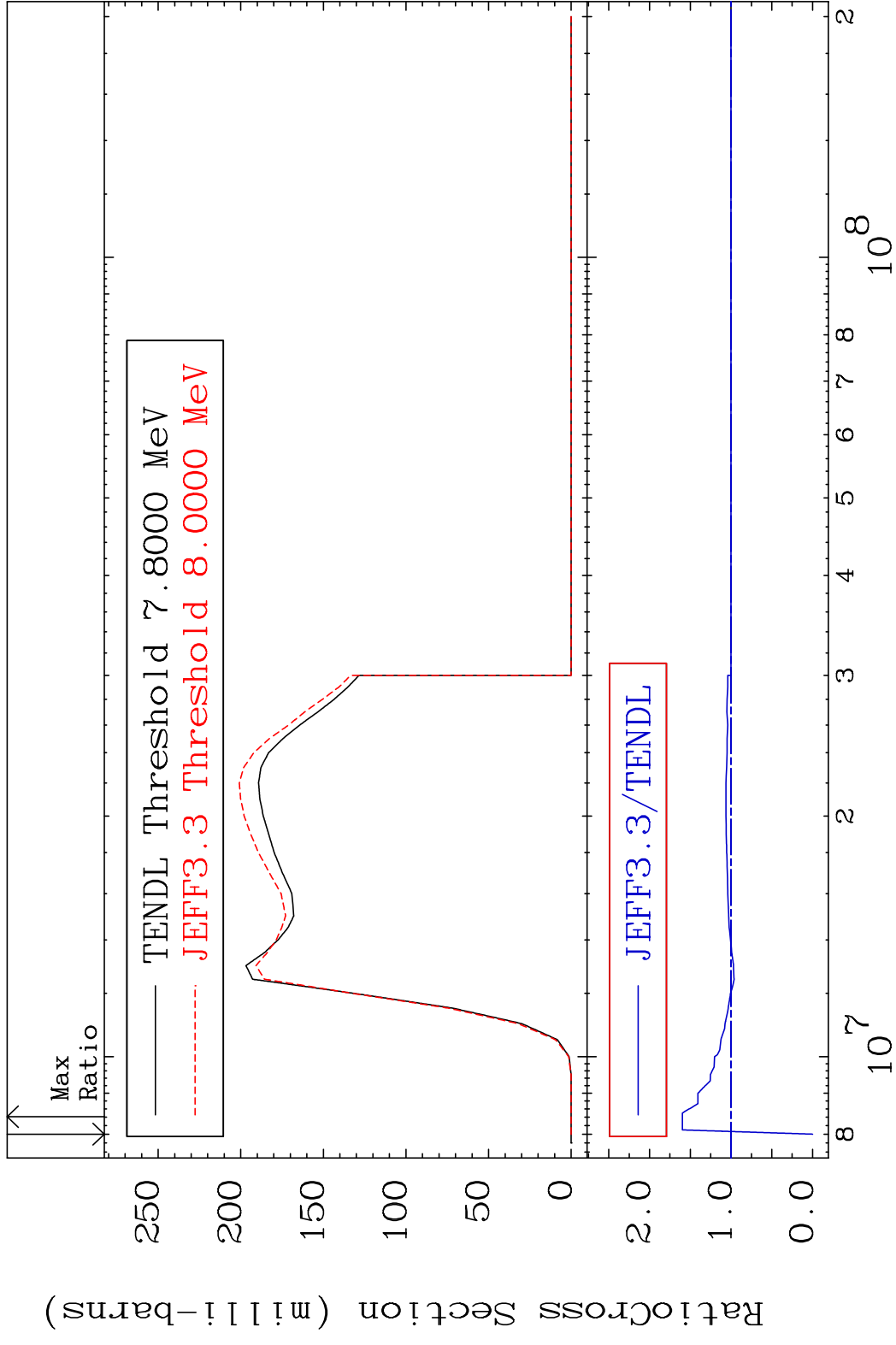




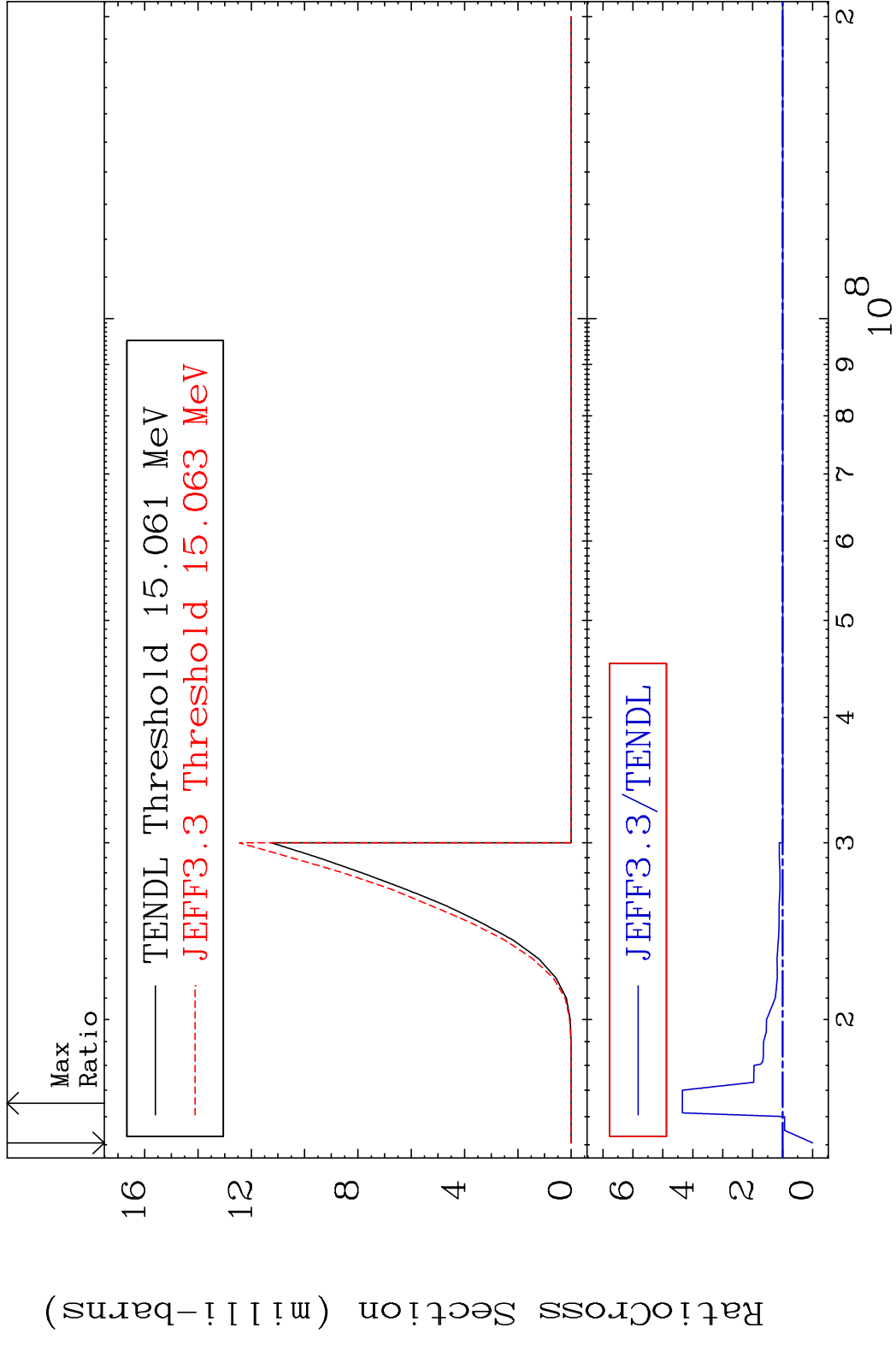
MAT 4119 (n, n') p:40-Zr-90g 41-Nb-91  
 Radionuclide Production Cross Section 124.7 %



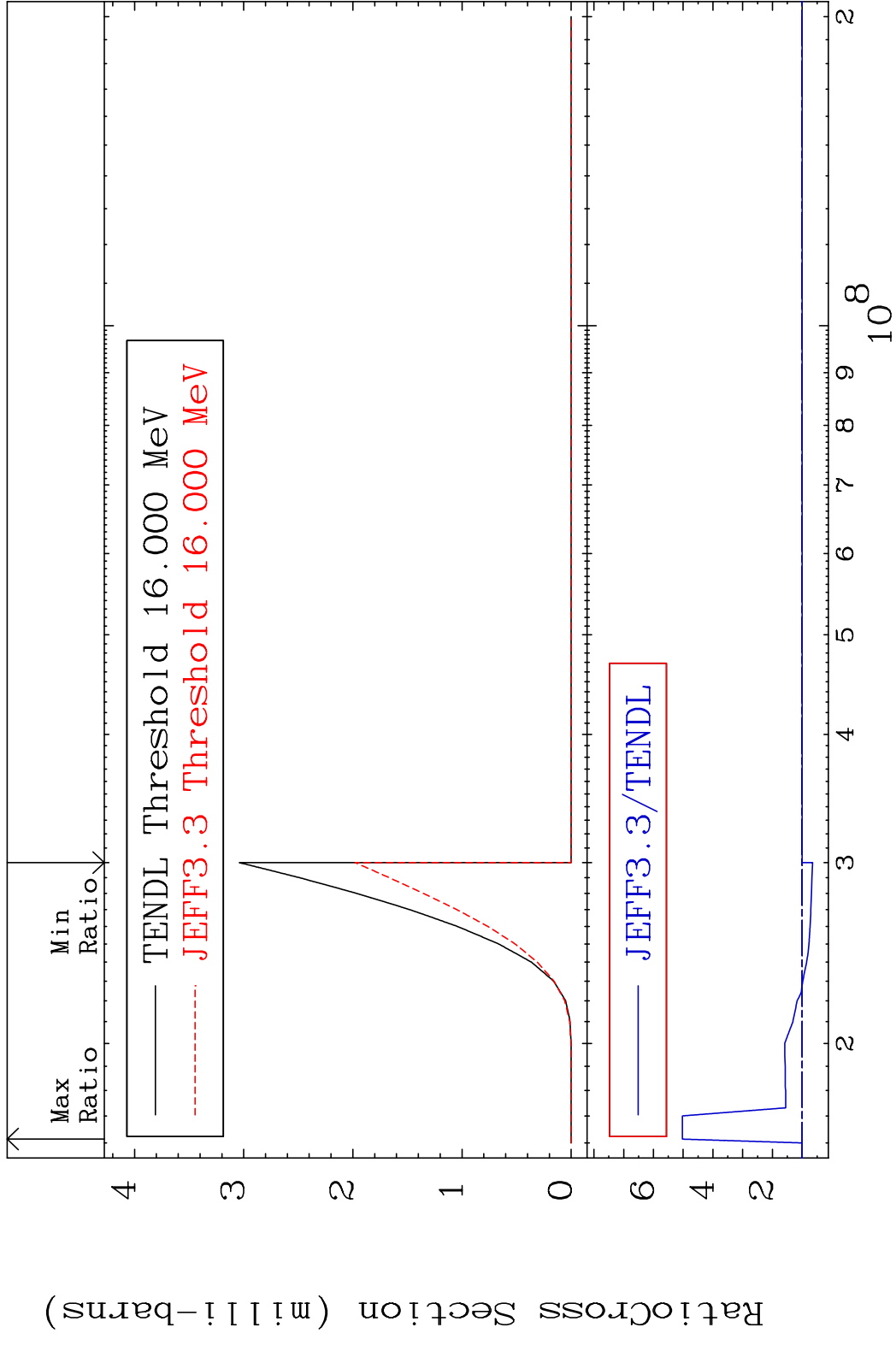
MAT 4119 (n, n') p:40-Zr-90m3 41-Nb-91  
 Radionuclide Production Cross Section Ratio 59.73 %



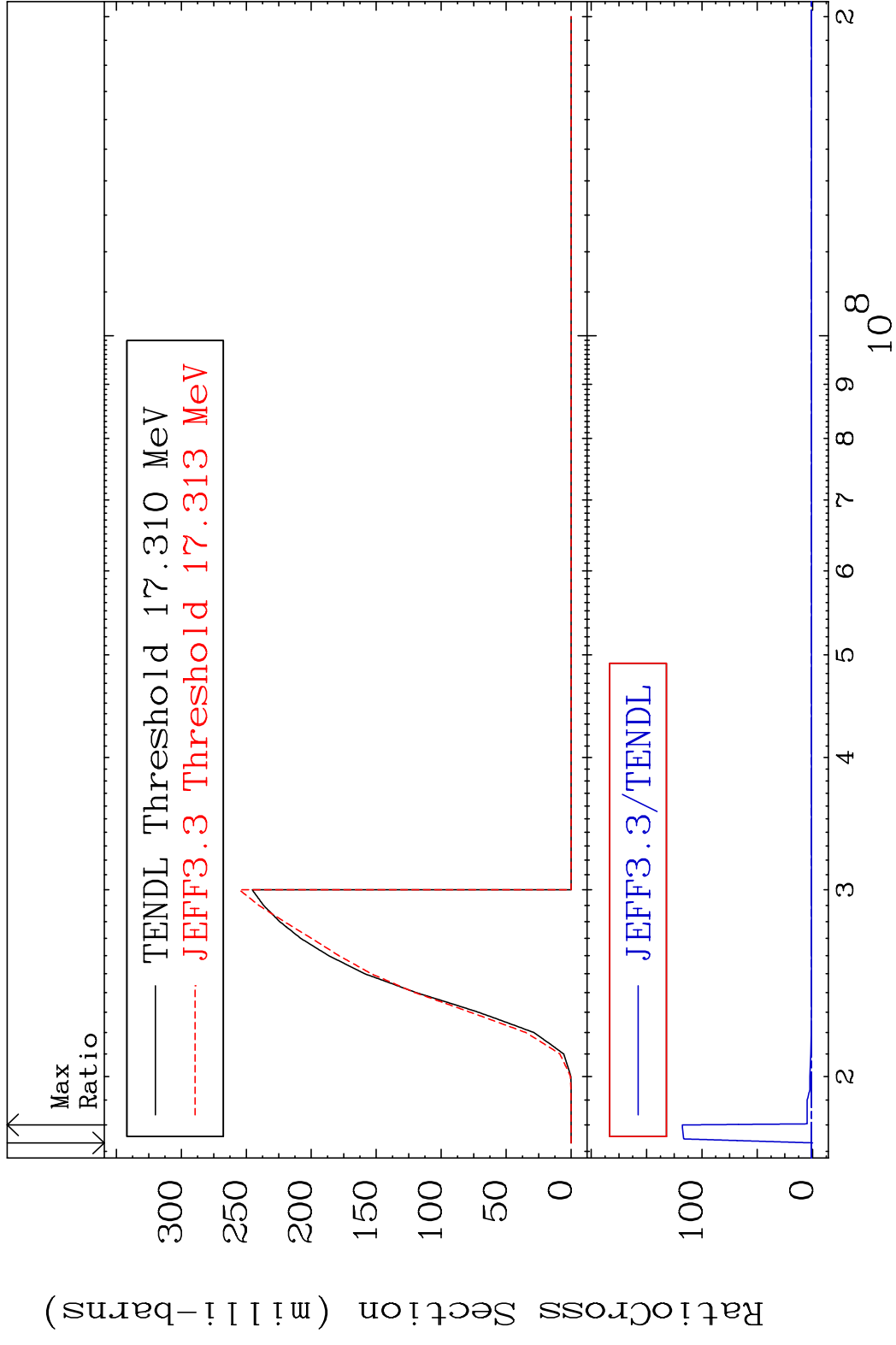
MAT 4119 (n, n') d:40-Zr-89g 41-Nb-91  
 Radionuclide Production Cross Section 180.01 dth 334.9 %



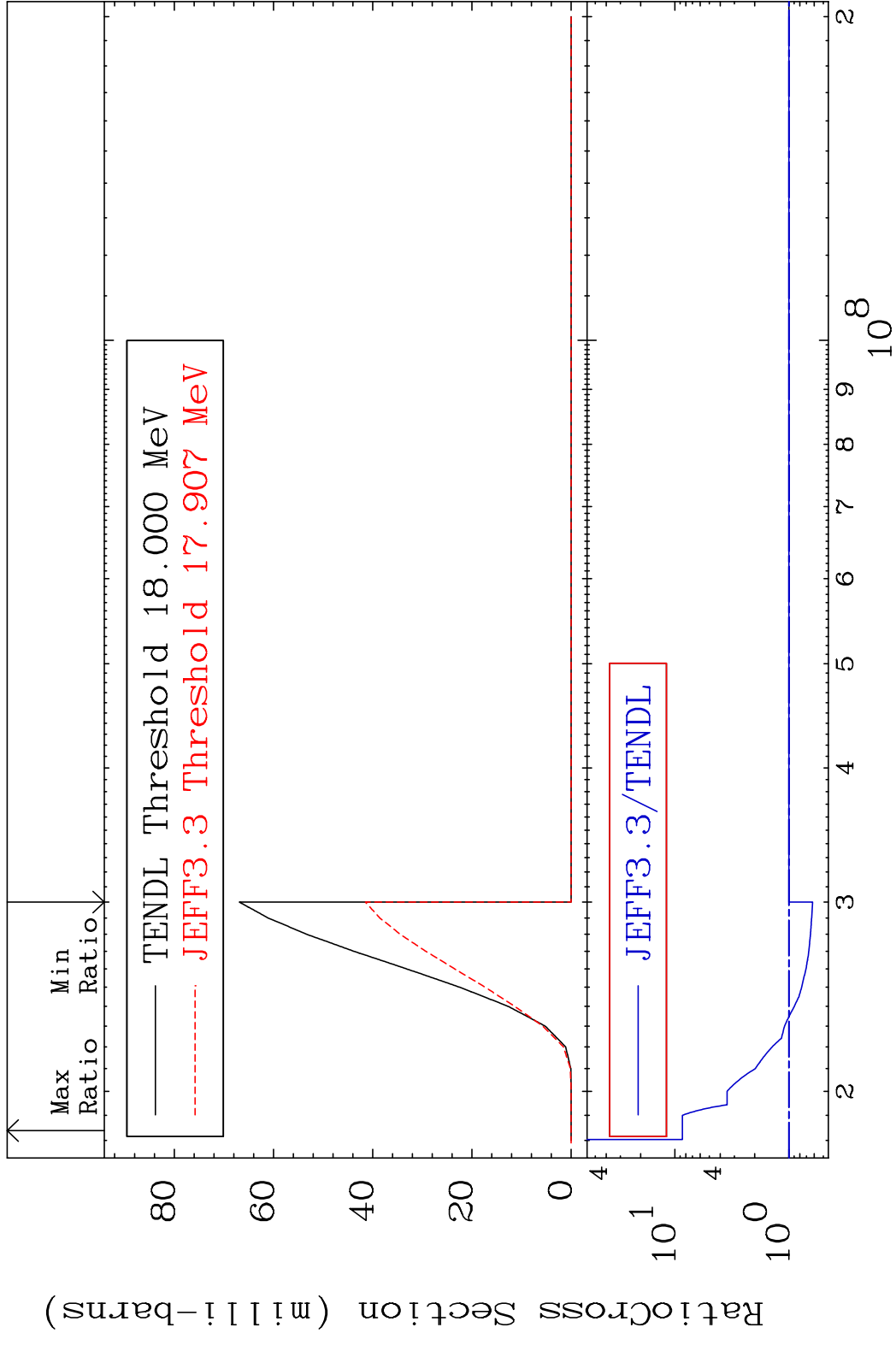
MAT 4119 (n, n') d:40-Zr-89m1 41-Nb-91  
 Radionuclide Production Cross Section 402.8 %



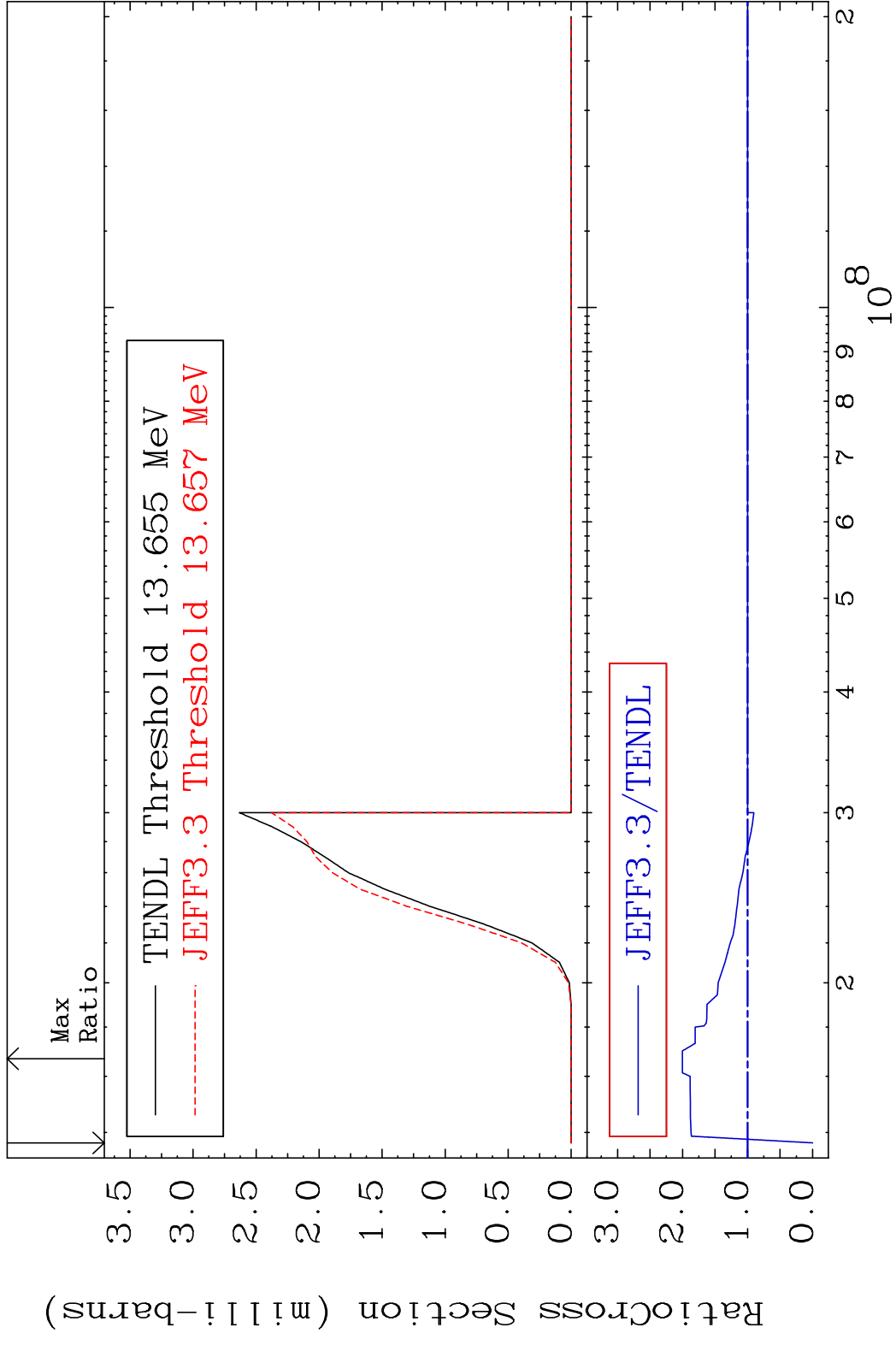
MAT 4119 (n,2n) p:40-Zr-89g 41-Nb-91  
 Radionuclide Production Cross Section 18000 dno 9999. %



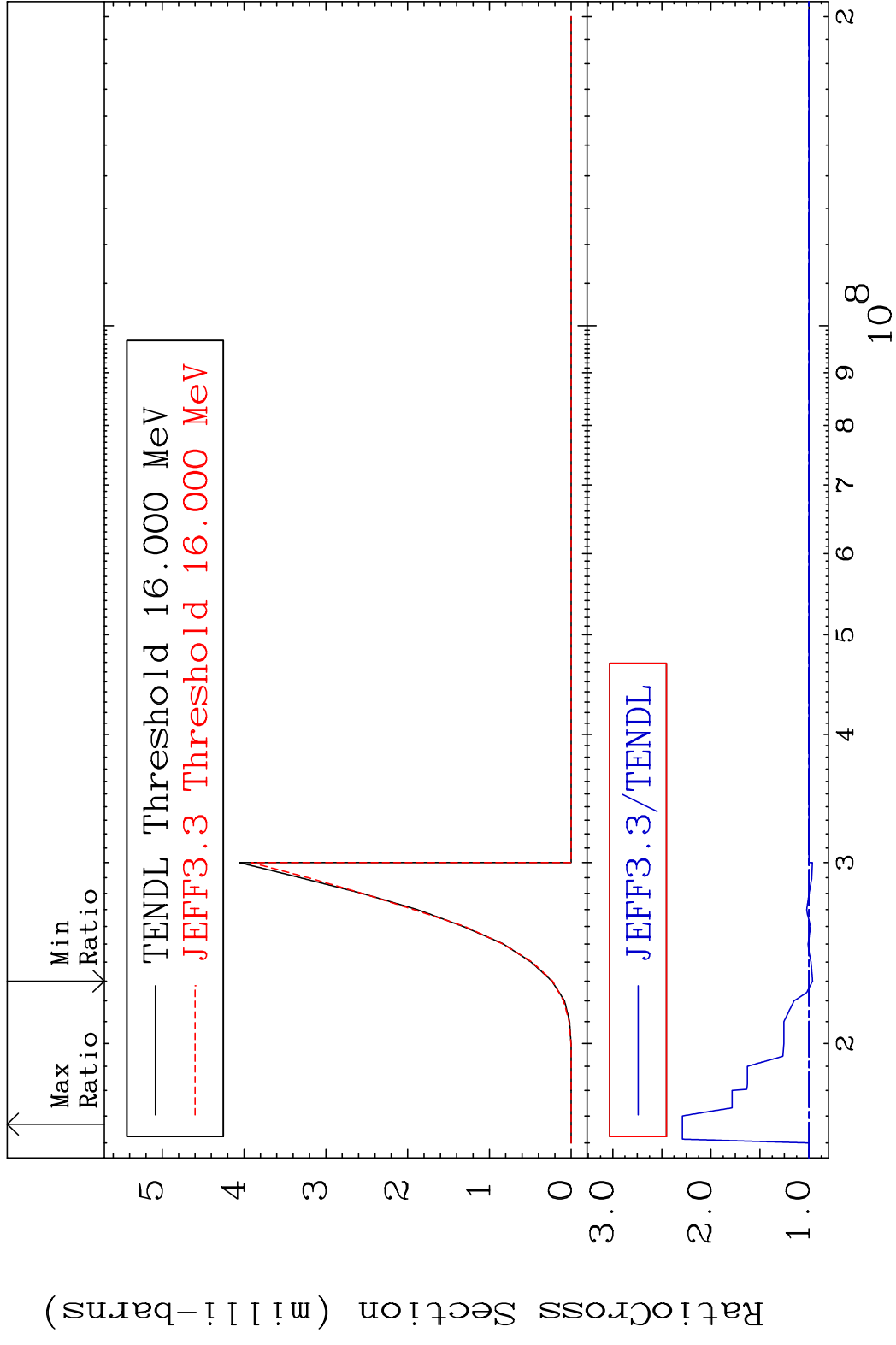
MAT 4119 (n,2n) p:40-Zr-89m1 41-Nb-91  
 Radionuclide Production Cross Section 759.8 %



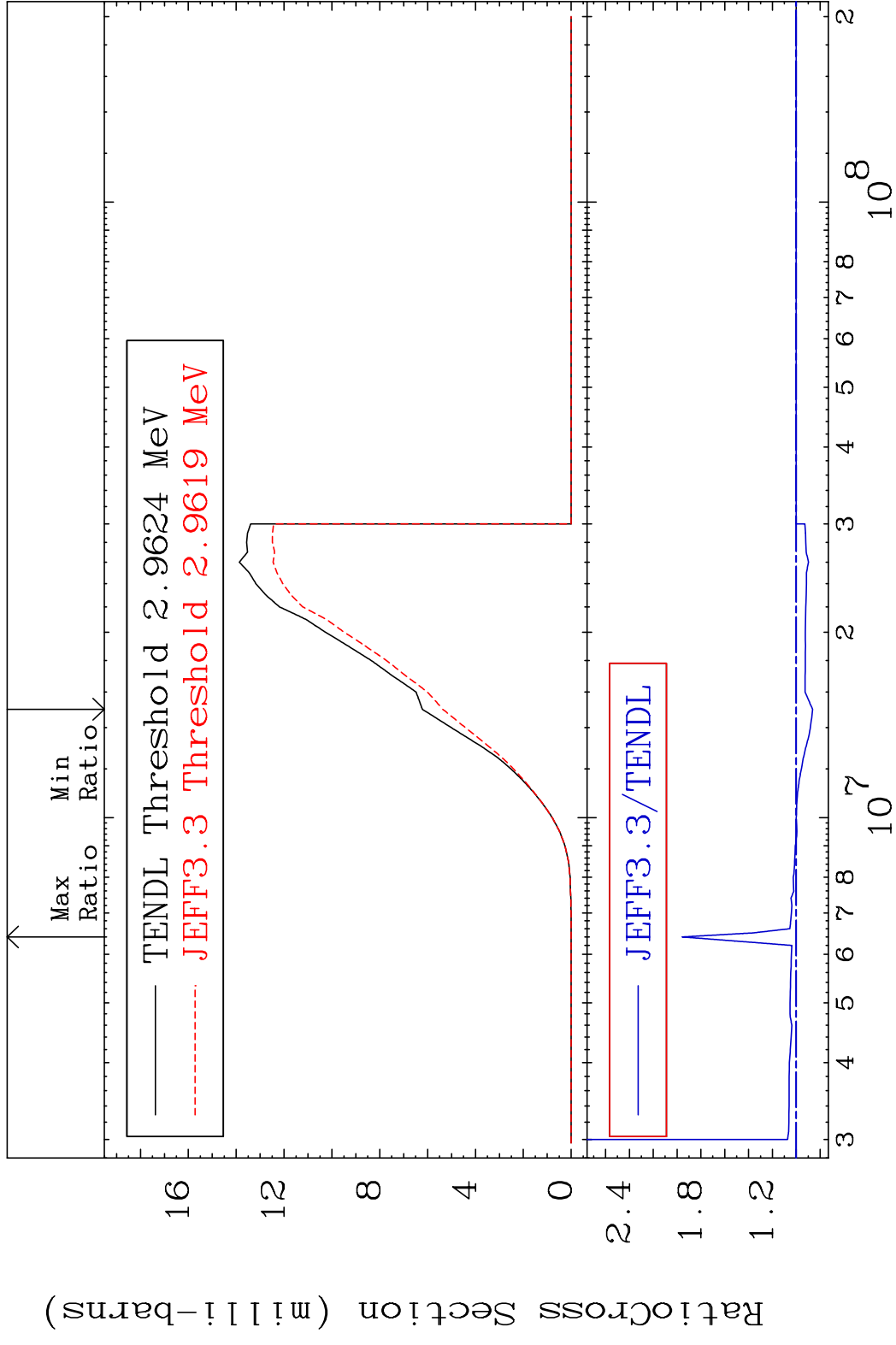
MAT 4119 (n,2n) p:39-Y -89g 41-Nb-91  
 Radionuclide Production Cross Section 100.3 %



MAT 4119 (n,2n) p:39-Y -89m1 41-Nb-91  
 Radionuclide Production Cross Section 3500 dth 129.0 %





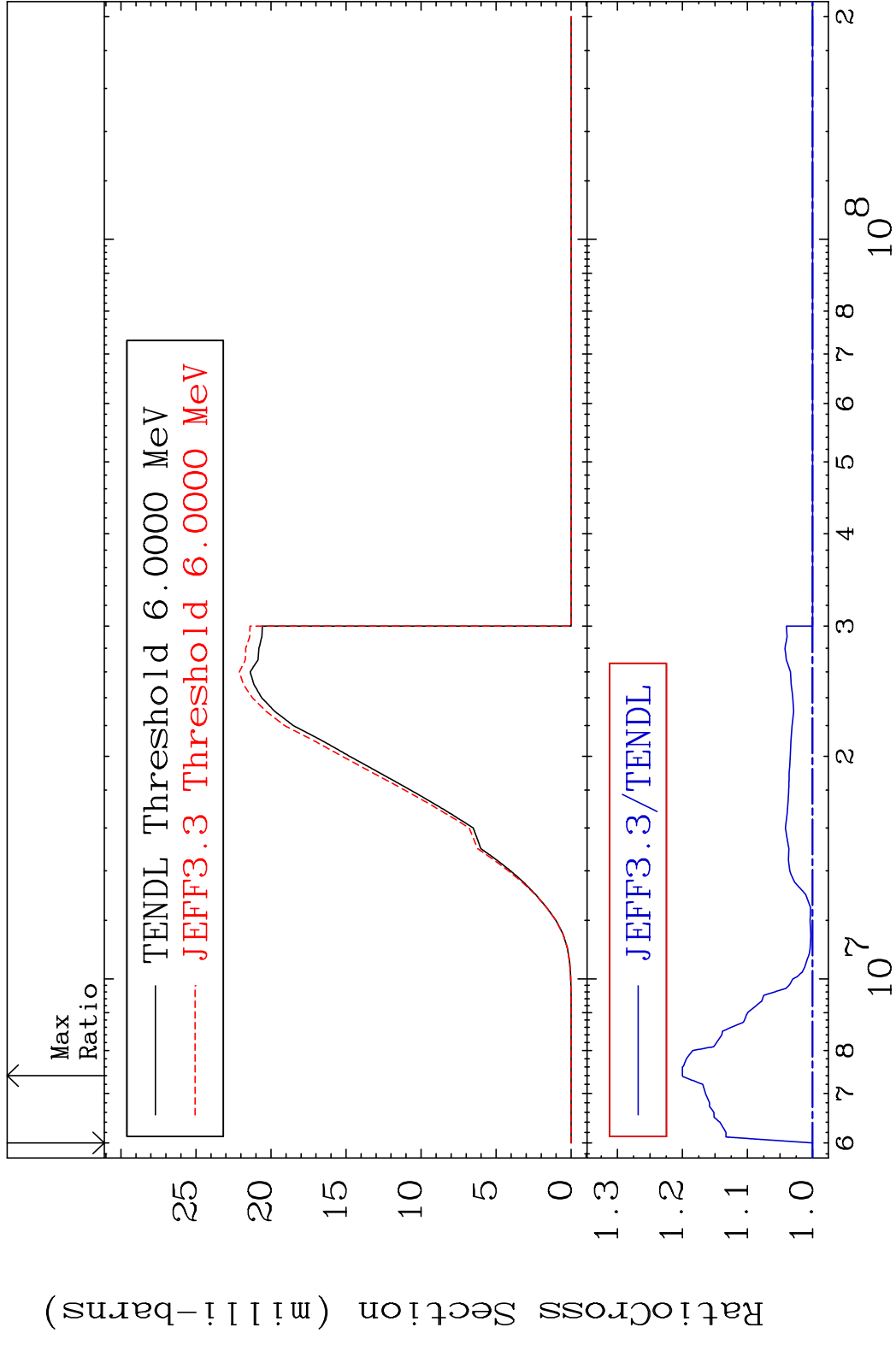


MAT 4119

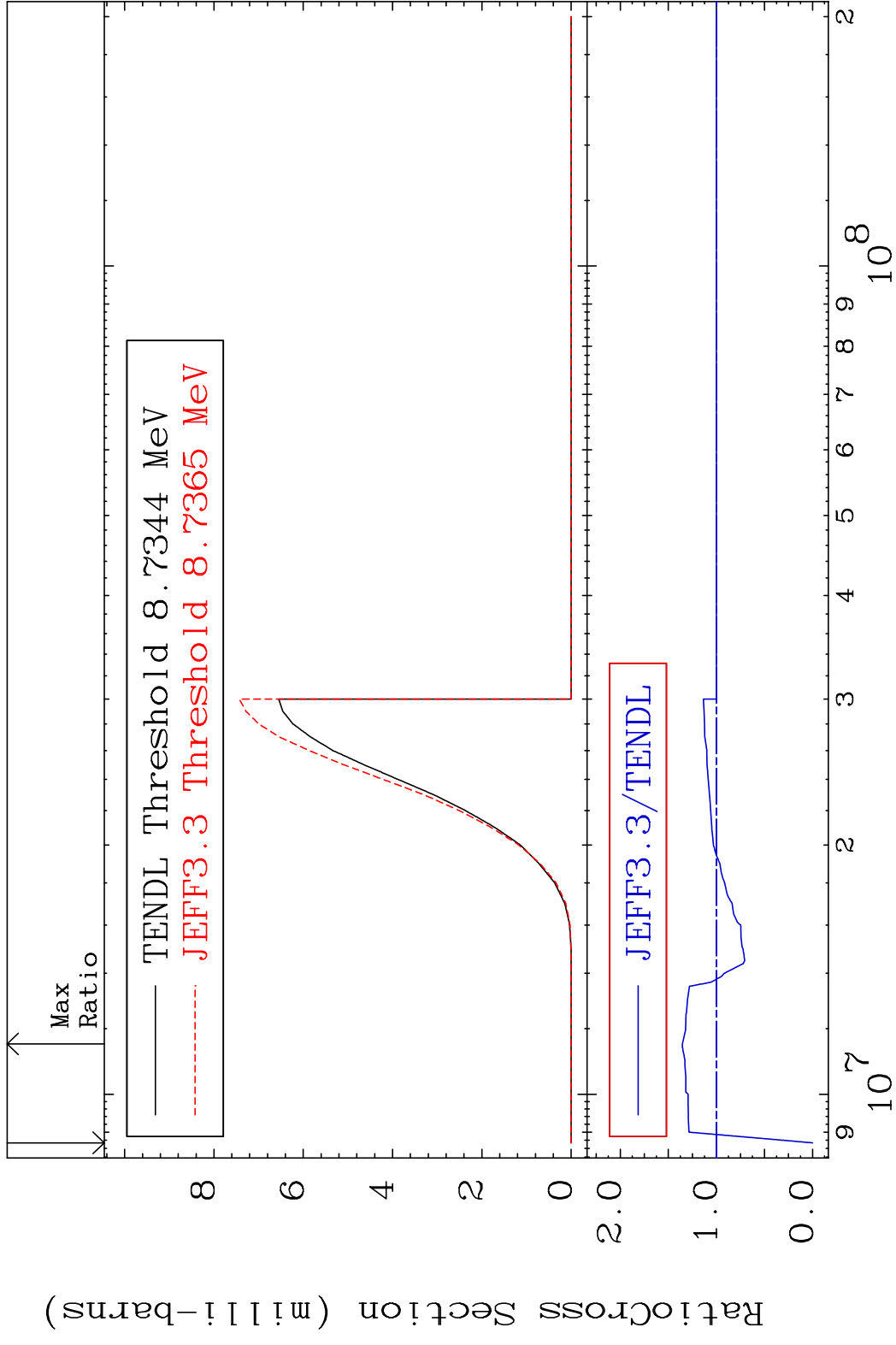
(n, d) : 40-Zr-90m3

41-Nb-91

Radionuclide Production Cross Section 20.01 %



MAT 4119 (n, t): 40-Zr-89g 41-Nb-91  
 Radionuclide Production Cross Section 180.01 dpo 35.44 %



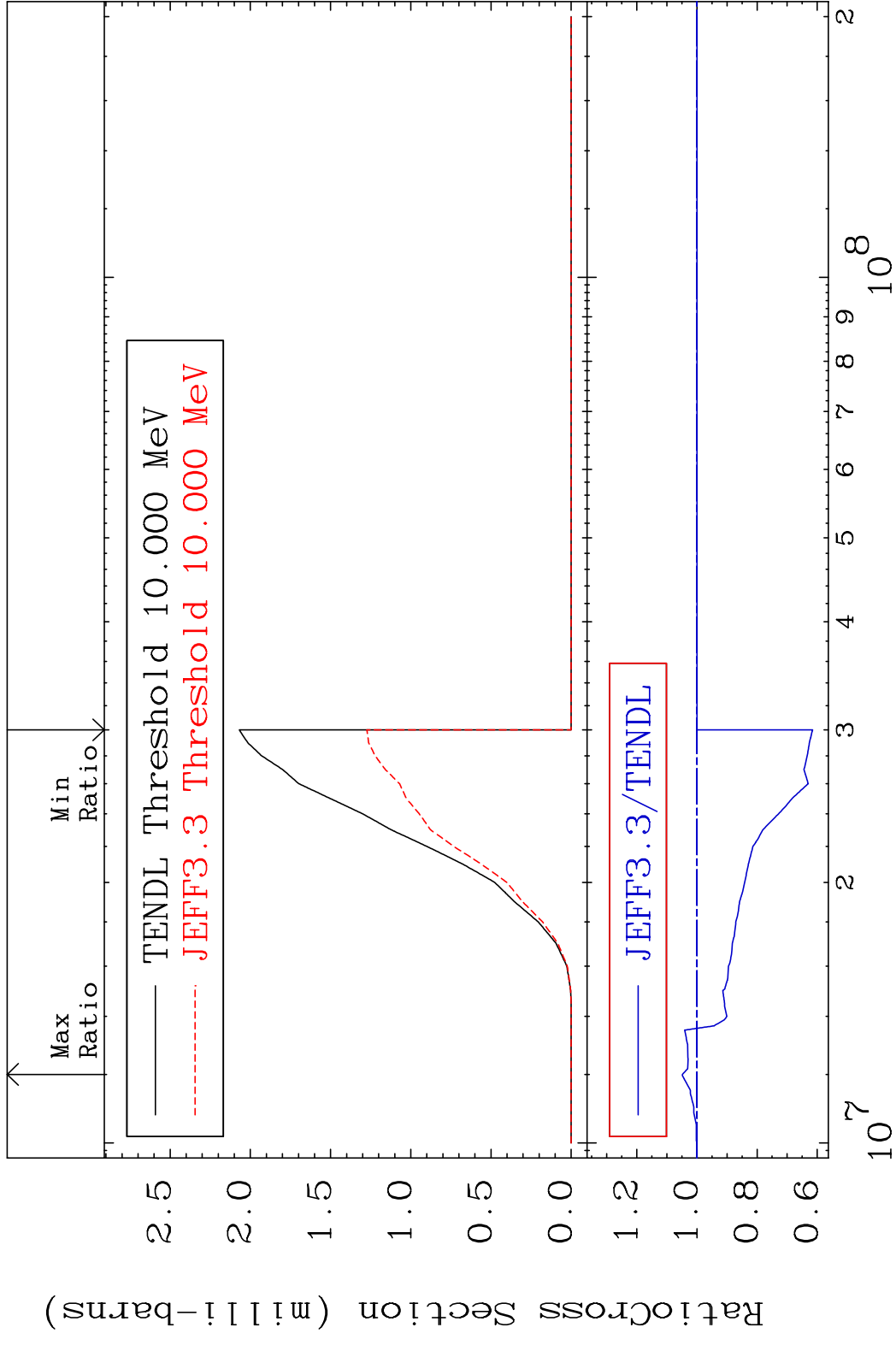
98 Incident Energy (eV) 41-Nb-91

MAT 4119

(n, t): 40-Zr-89m1

41-Nb-91

Radionuclide Production Cross Section 41-Nb-91

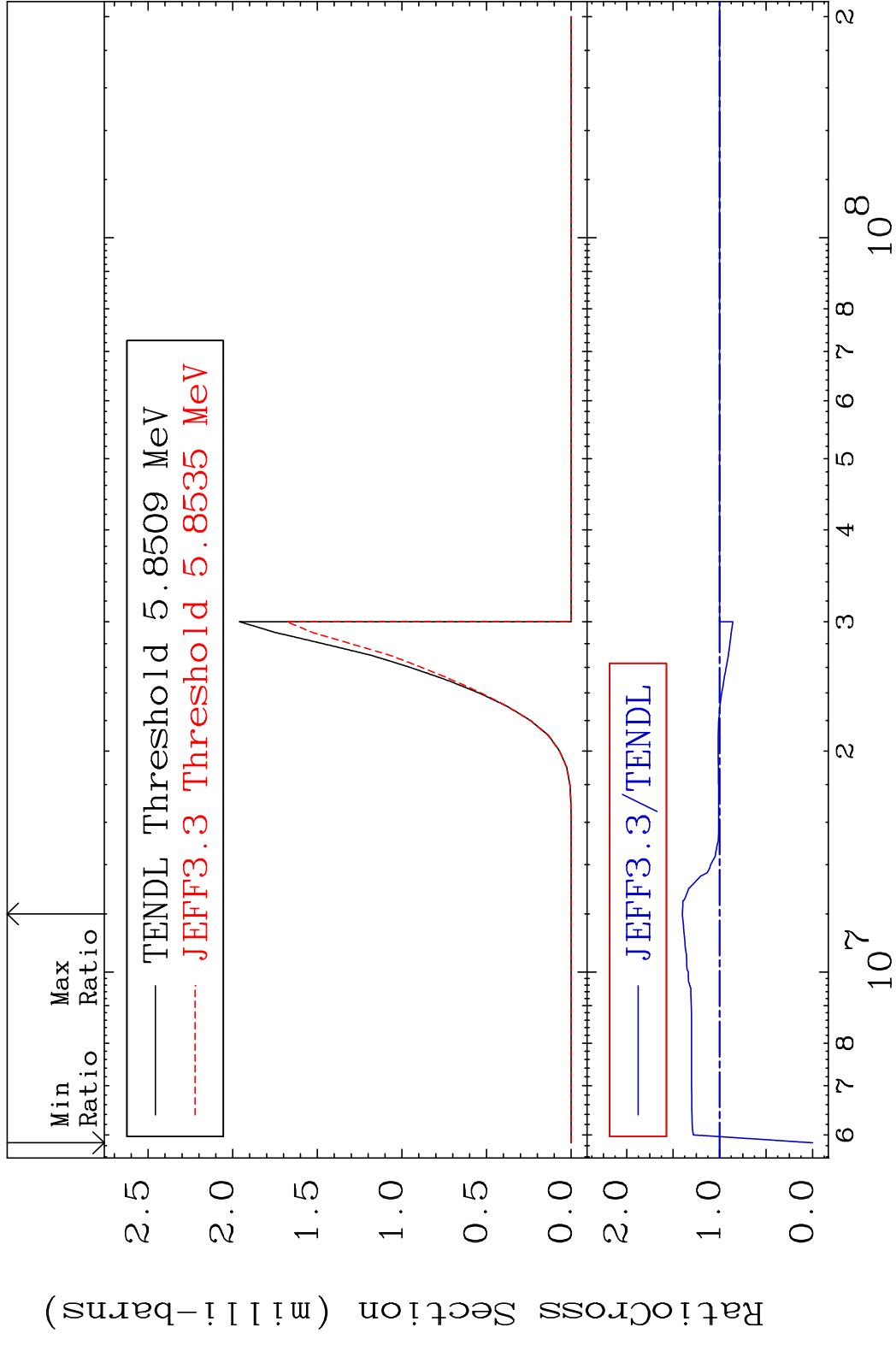


99

Incident Energy (eV)

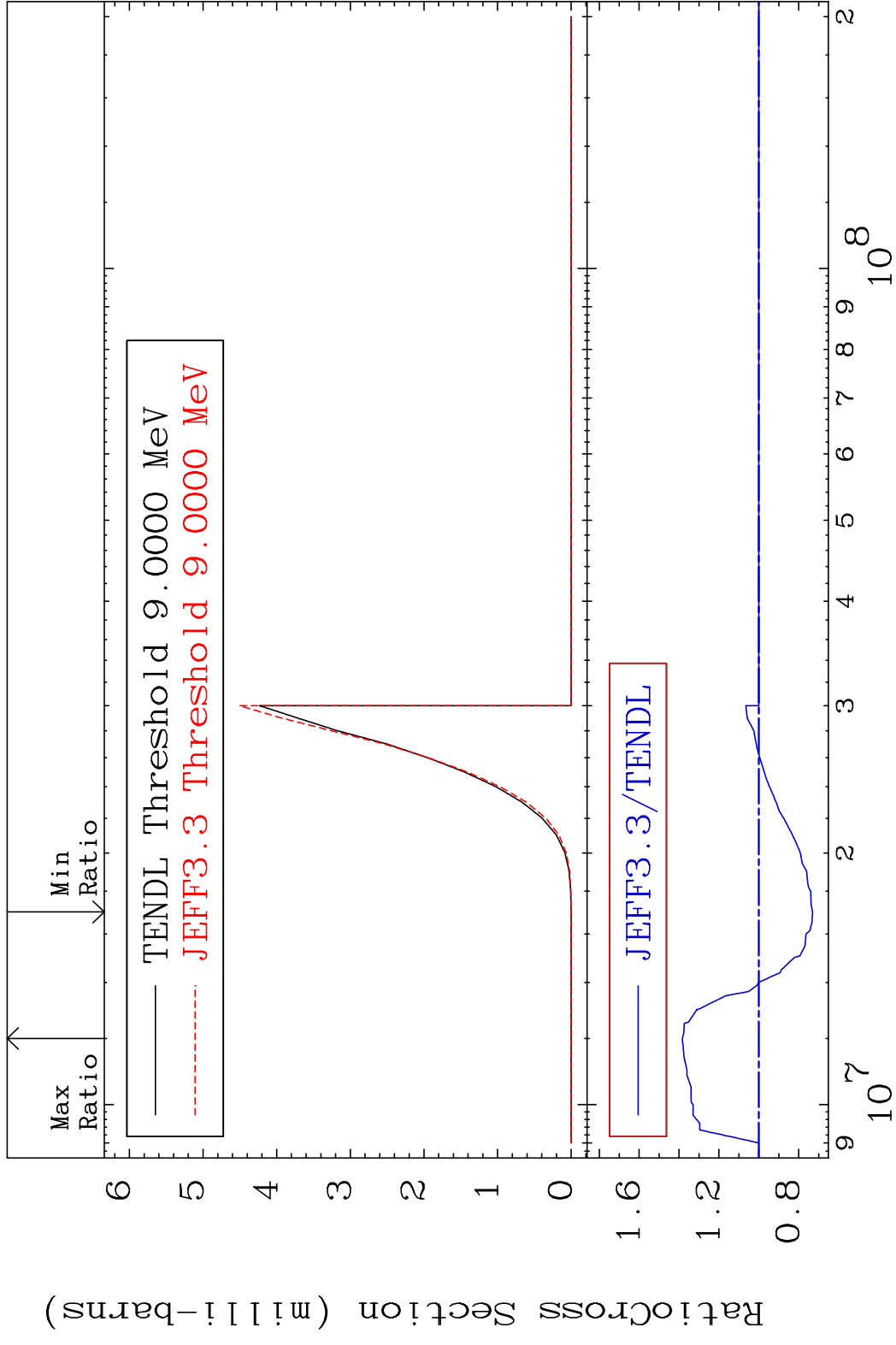
41-Nb-91

MAT 4119 (n, He-3):39-Y -89g 41-Nb-91  
 Radionuclide Production Cross Section 40.08 %



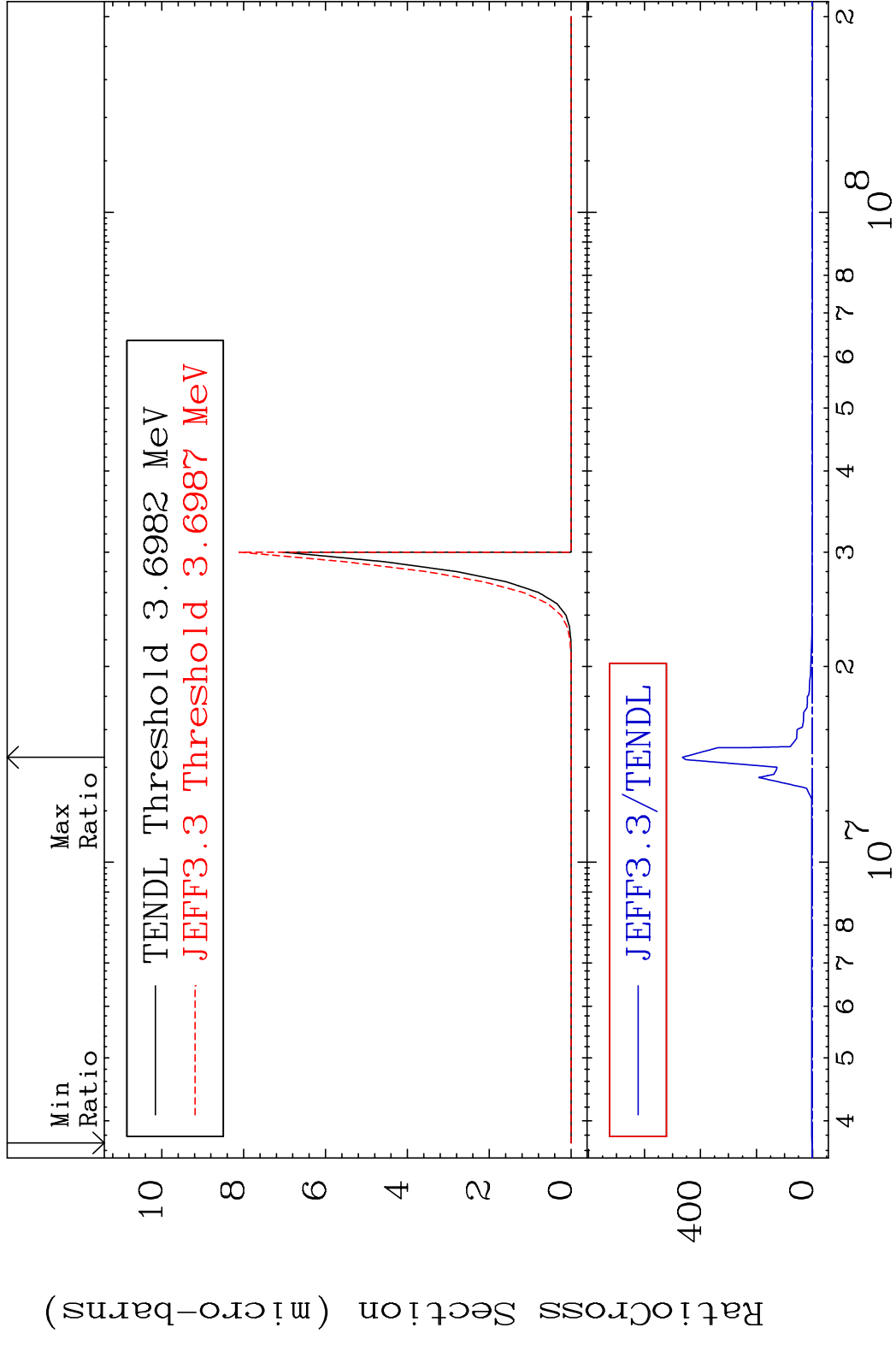
100 Incident Energy (eV) 41-Nb-91

MAT 4119 (n, He-3):39-Y -89m1 41-Nb-91  
 Radionuclide Production Cross Section 38.94 dpo 38.34 %

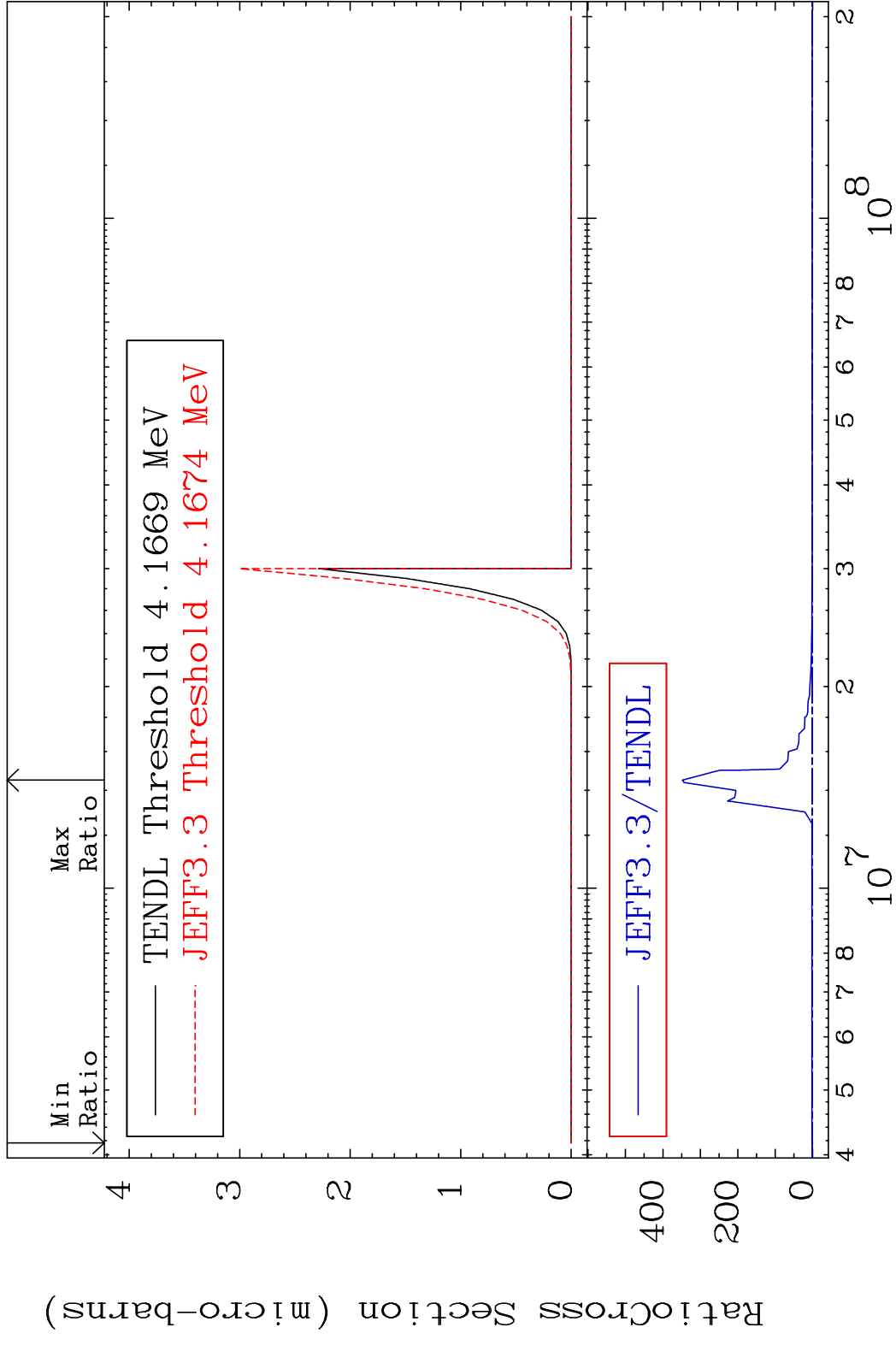


101 Incident Energy (eV) 41-Nb-91

MAT 4119 (n,2α):37-Rb-84g 41-Nb-91  
 Radionuclide Production Cross Section (%) 9999. %

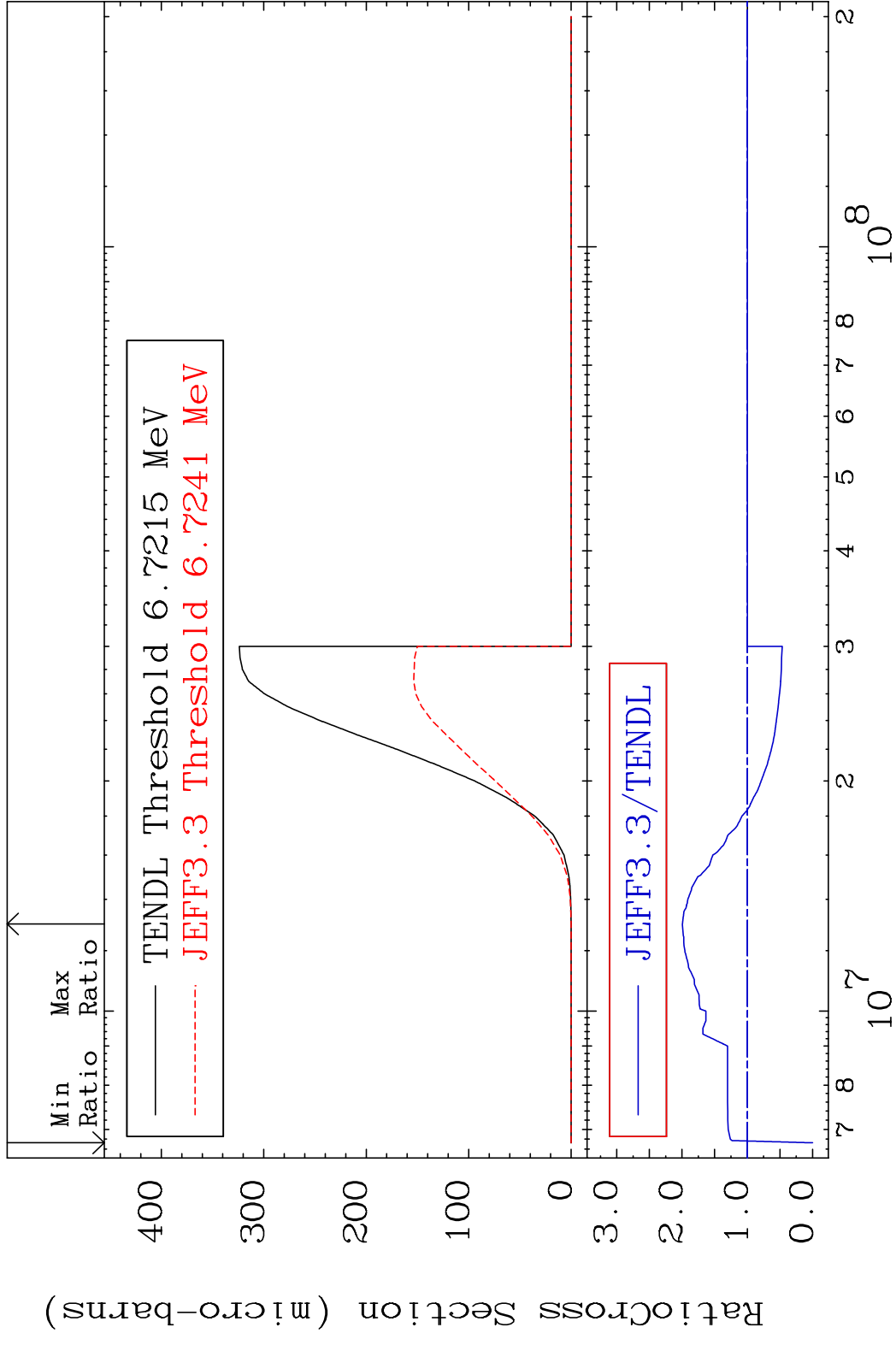


MAT 4119 (n,2α):37-Rb-84m2 41-Nb-91  
 Radionuclide Production Cross Section (%)

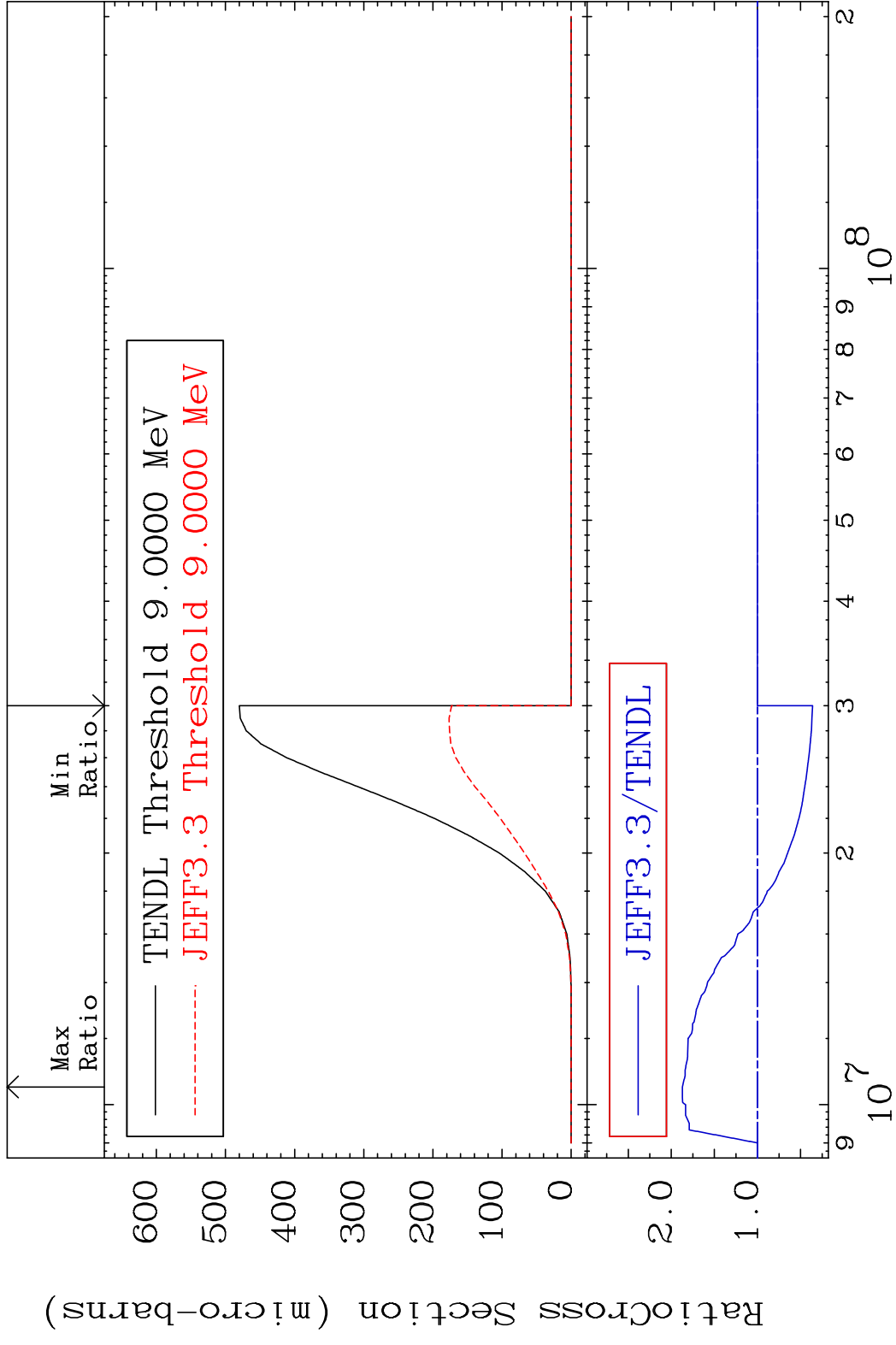




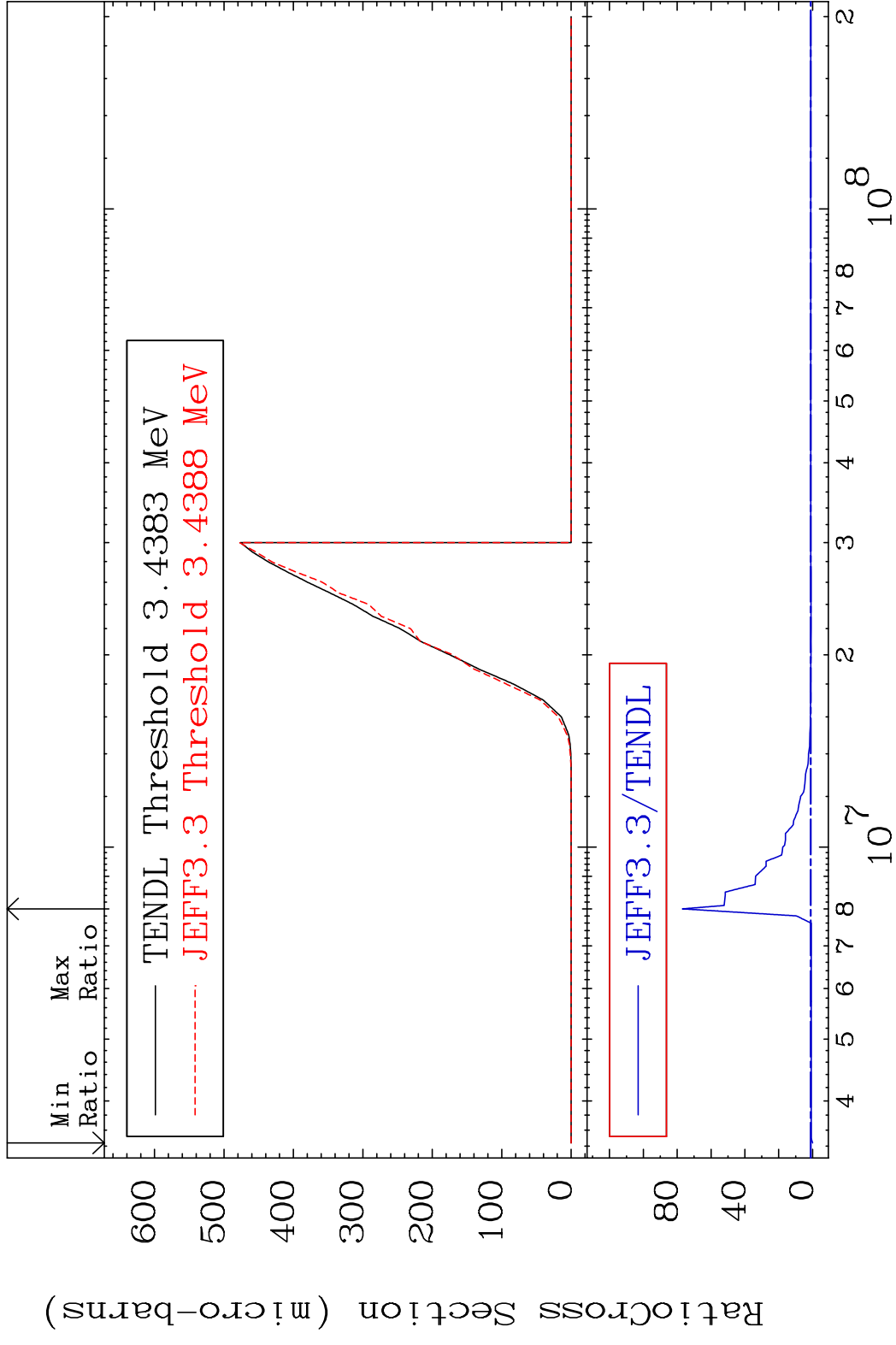
MAT 4119 (n,2p):39-Y -90g 41-Nb-91  
 Radionuclide Production Cross Section 100.00 to 99.49 %



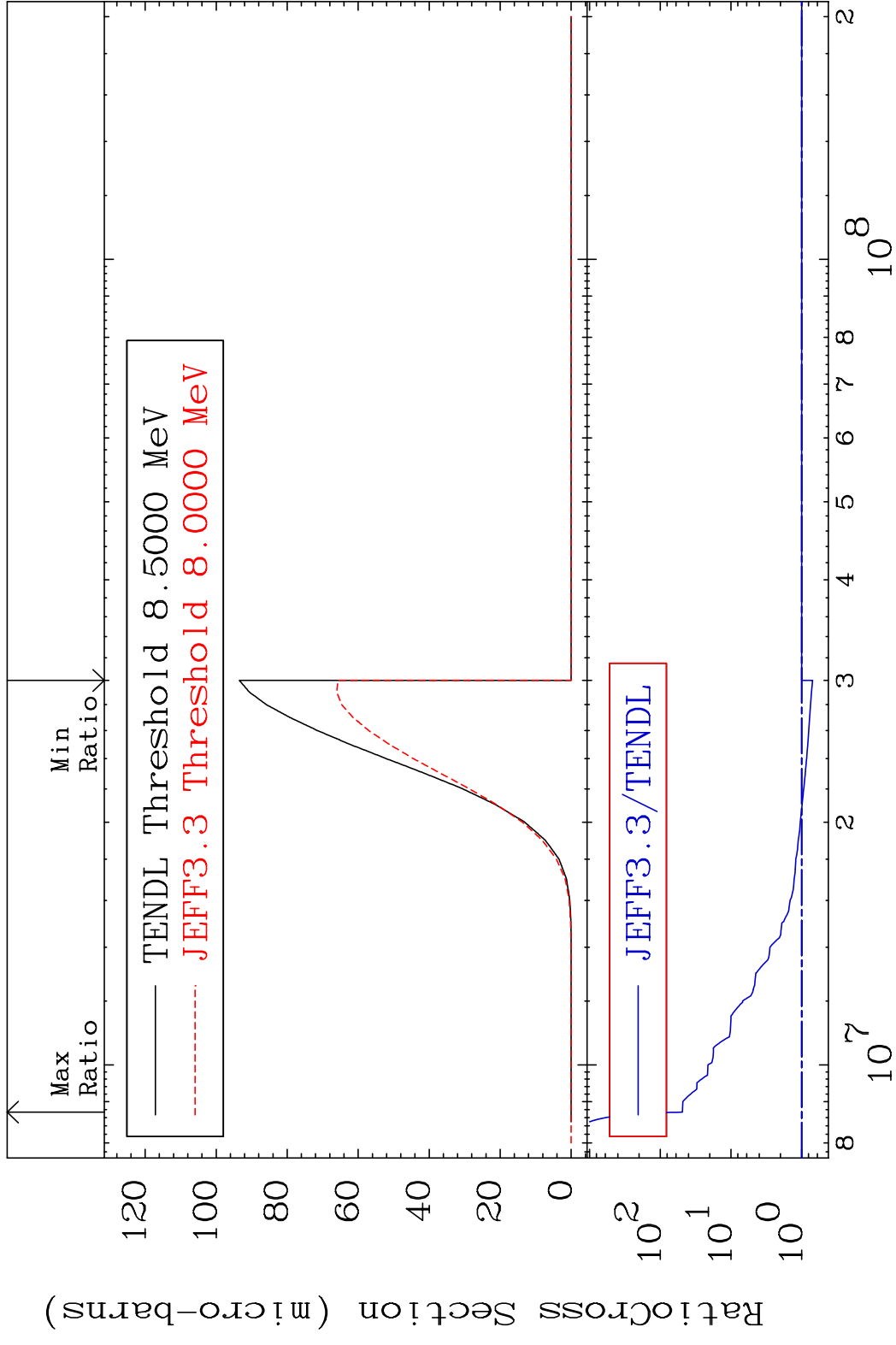
MAT 4119 (n,2p):39-Y -90m2 41-Nb-91  
 Radionuclide Production Cross Section 87.18 %



105 Incident Energy (eV) 41-Nb-91



MAT 4119 (n,p)  $\alpha$ :38-Sr-87m1 41-Nb-91  
 Radionuclide Production Cross Section 4782. %



107 Incident Energy (eV) 41-Nb-91

