

Program Complot  
(Version 2021-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

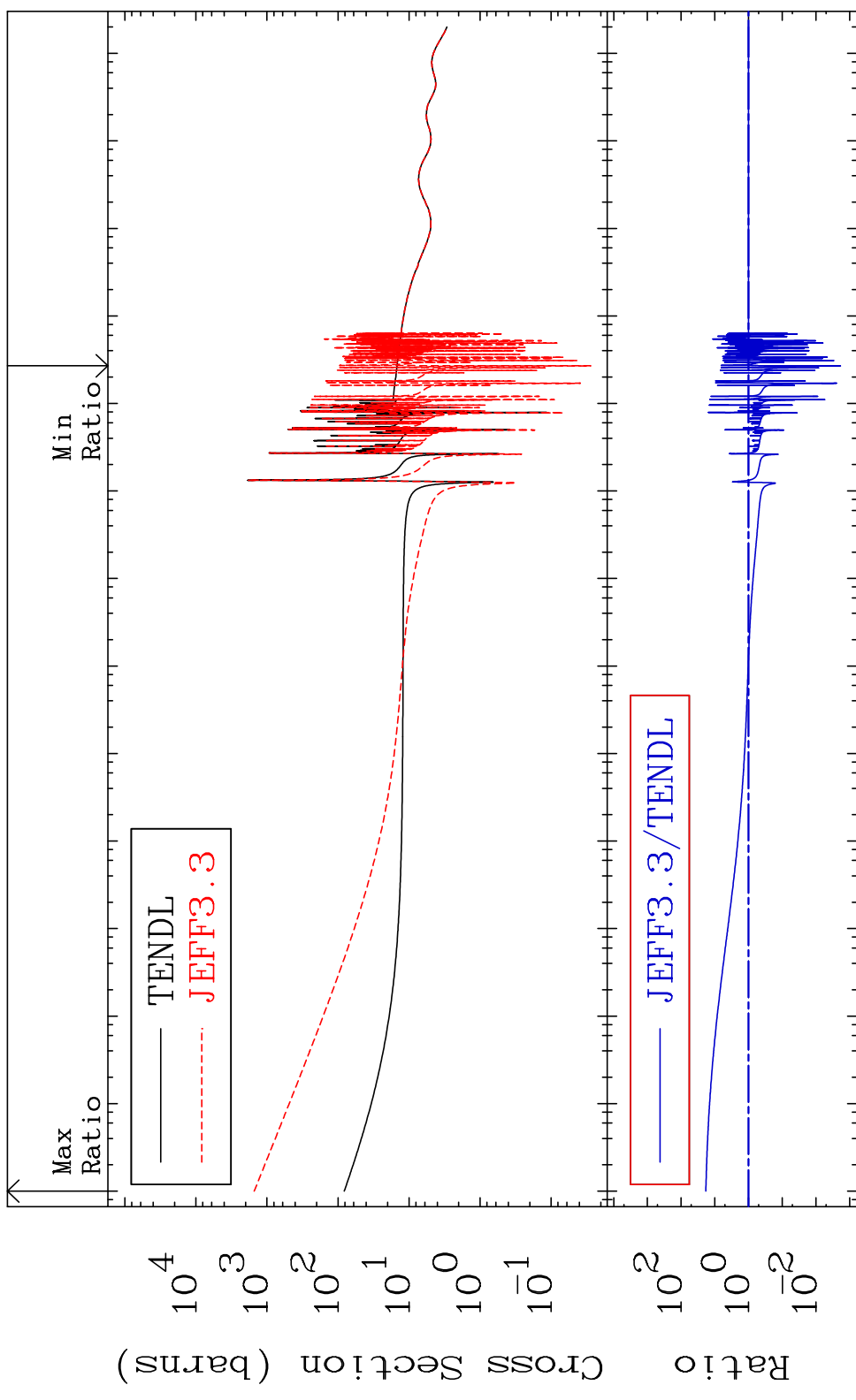
MAT 8037

Total

80-Hg-200

Cross Section

-99.81 To 1754. %



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>

1

Incident Energy (eV)

80-Hg-200

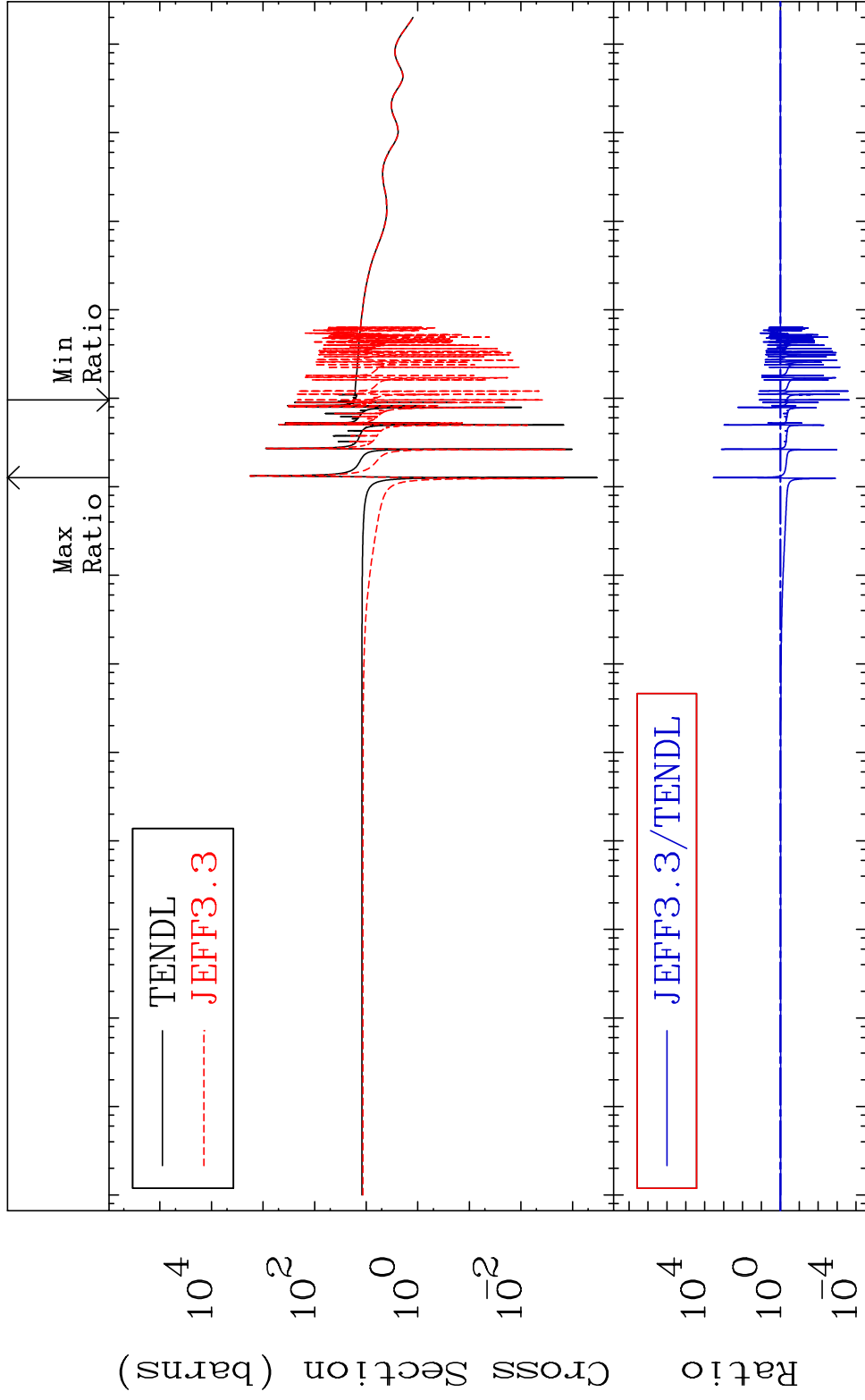
MAT 8037

Elastic

80-Hg-200

Cross Section

-99.98 To 9999. %



2

Incident Energy (eV)

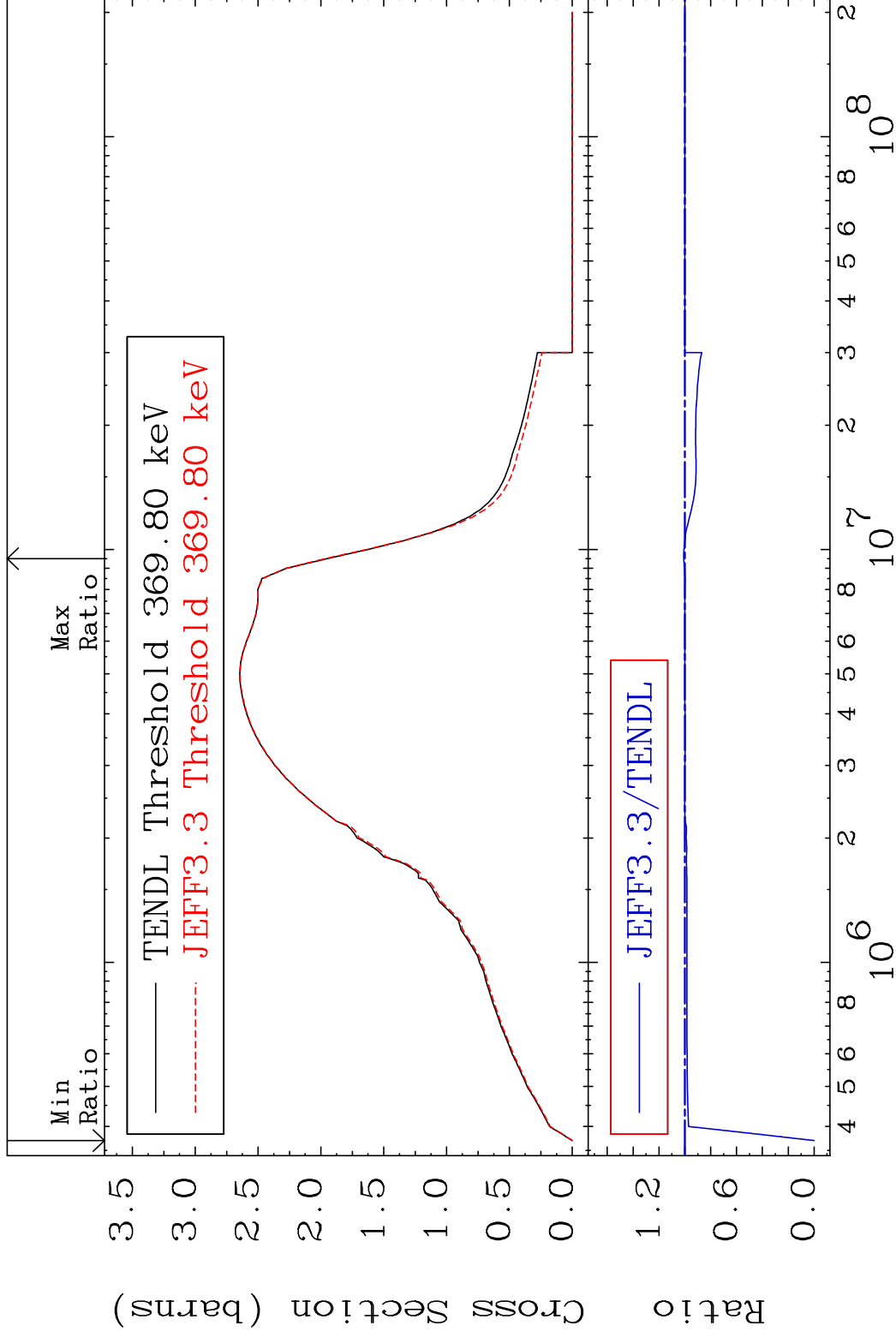
80-Hg-200

MAT 8037

Inelastic

80-Hg-200

Cross Section -100.0 To 0.898 %



3

Incident Energy (eV)

80-Hg-200

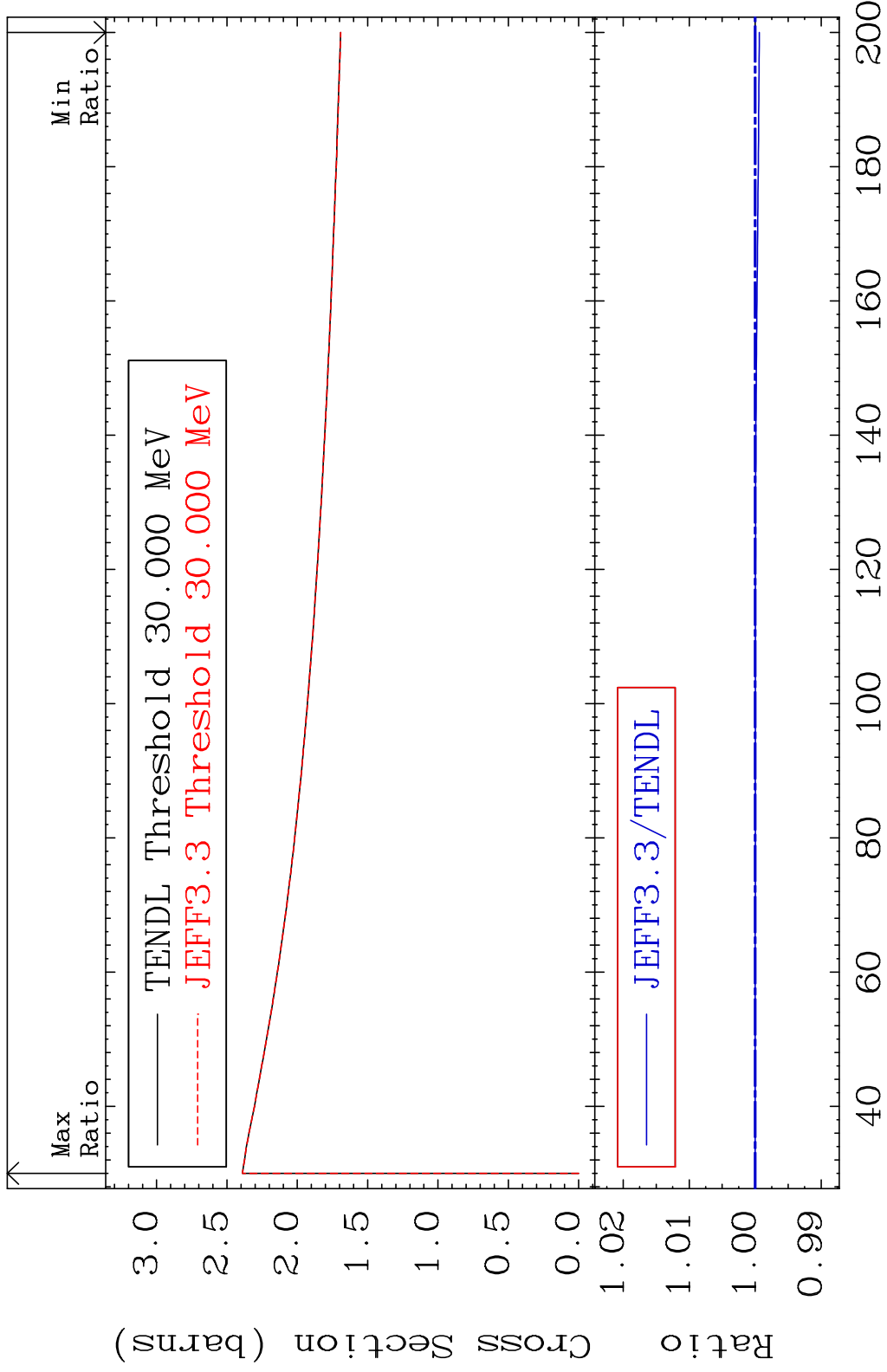
MAT 8037

(n, remainder)

80-Hg-200

Cross Section

-0.064 To 0.000 %



4

Incident Energy (MeV)

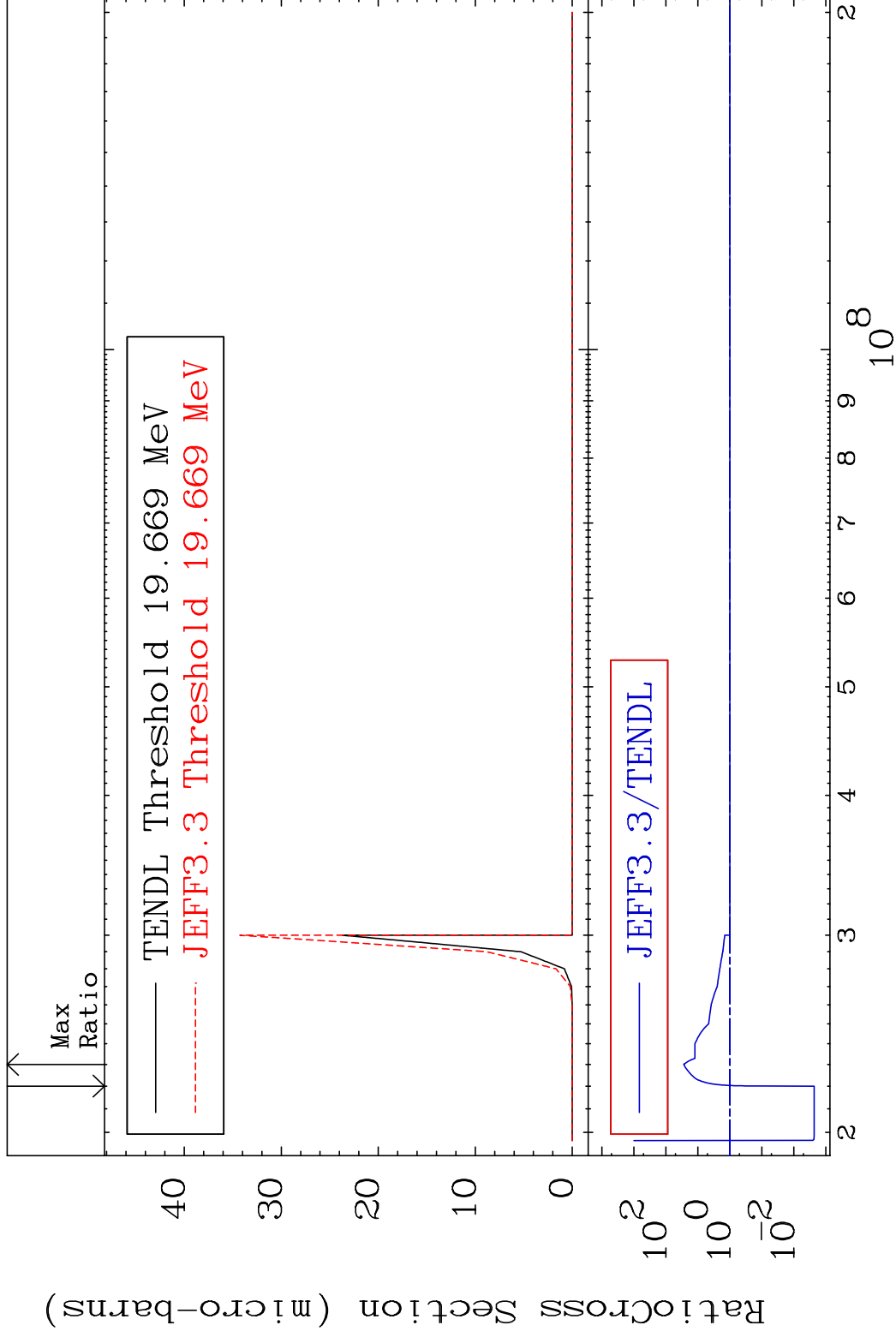
80-Hg-200

MAT 8037

(n,2n) d

80-Hg-200

Cross Section -99.77 To 2687. %



5

Incident Energy (eV)

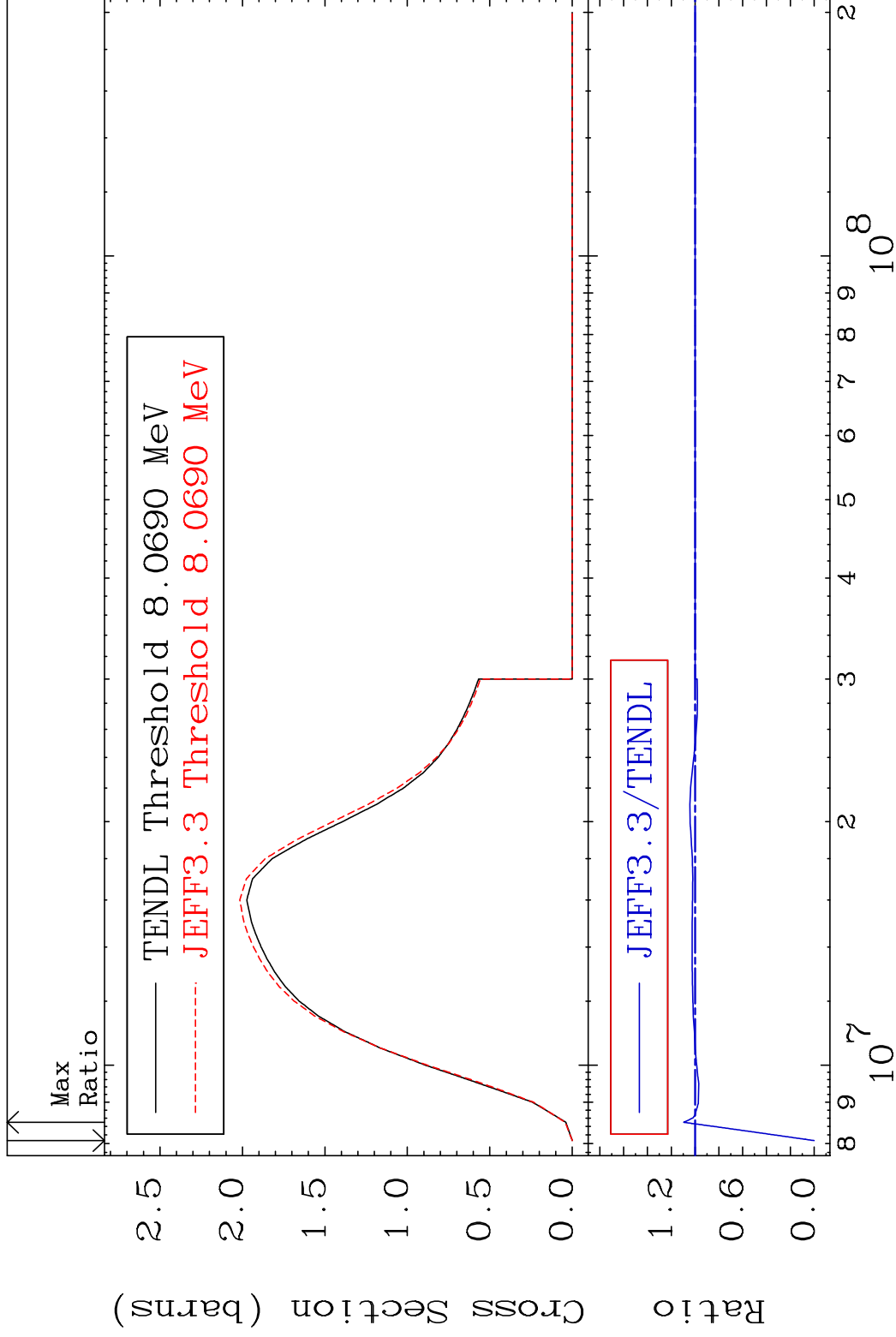
80-Hg-200

MAT 8037

(n,2n)

80-Hg-200

Cross Section -100.0 To 9.580 %



6

Incident Energy (eV)

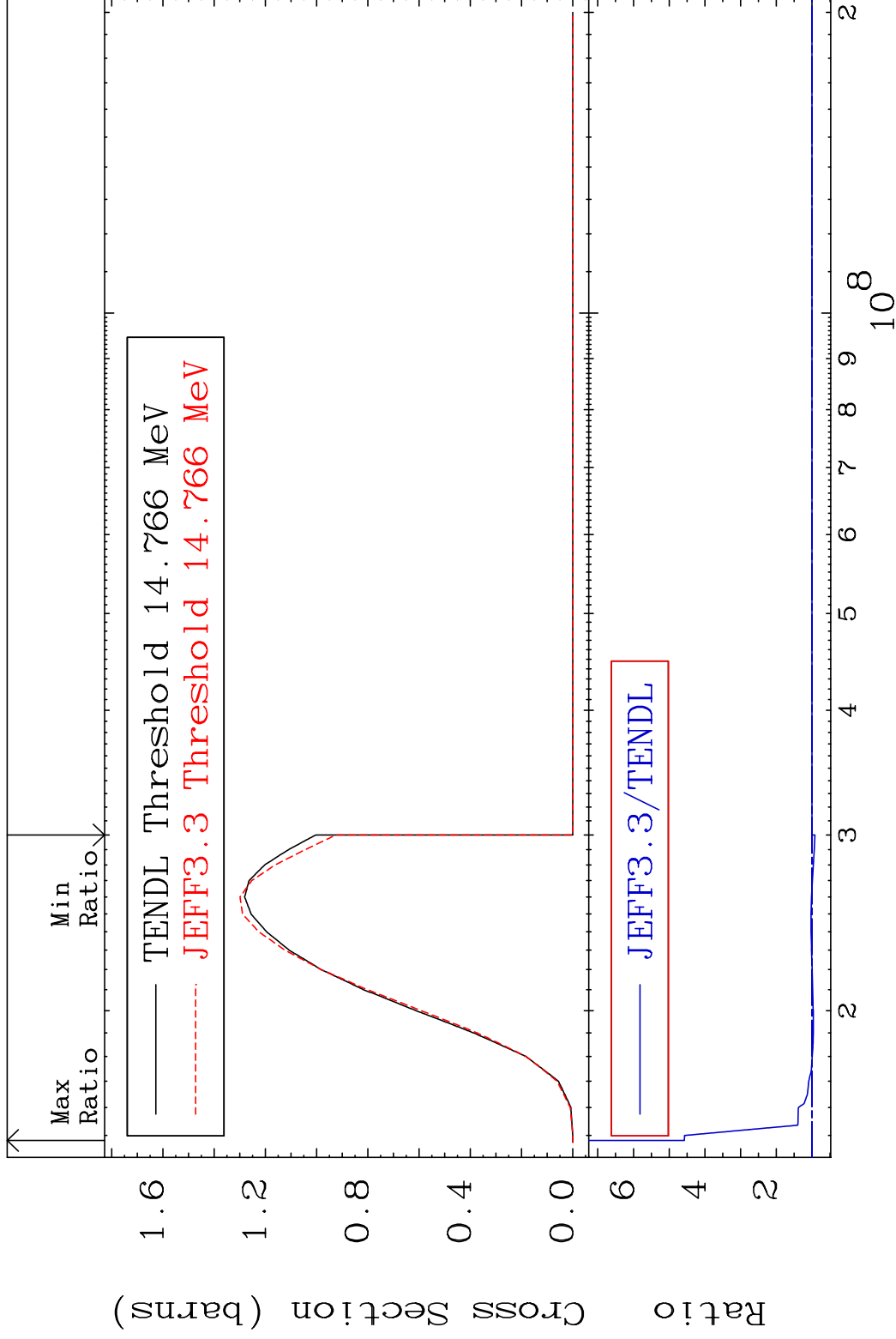
80-Hg-200

MAT 8037

(n,3n)

80-Hg-200

Cross Section -7.879 To 357.7 %



7

Incident Energy (eV)

80-Hg-200

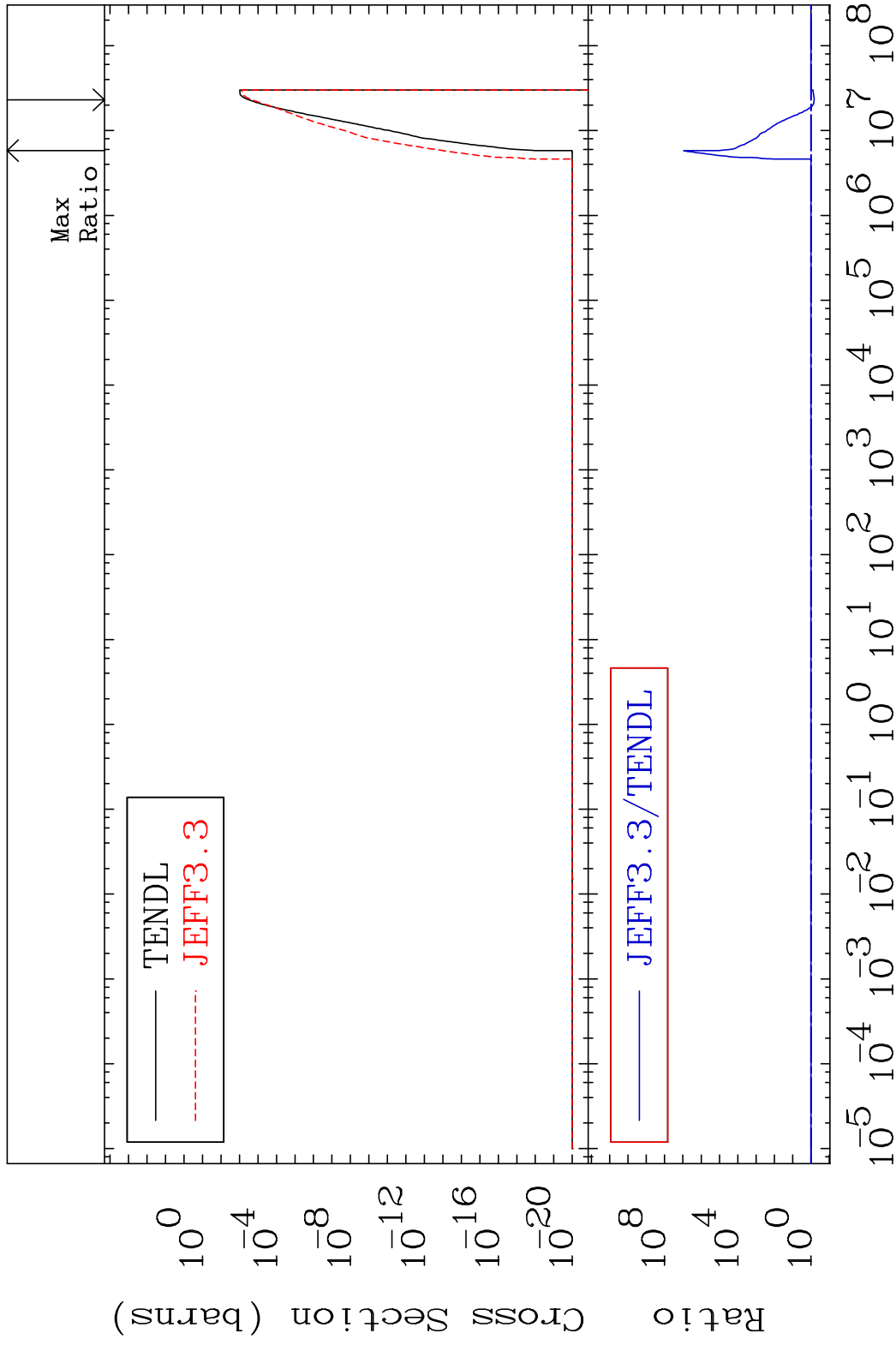


MAT 8037

(n, n')  $\alpha$

80-Hg-200

Cross Section -33.19 To 9999. %



8

Incident Energy (eV)

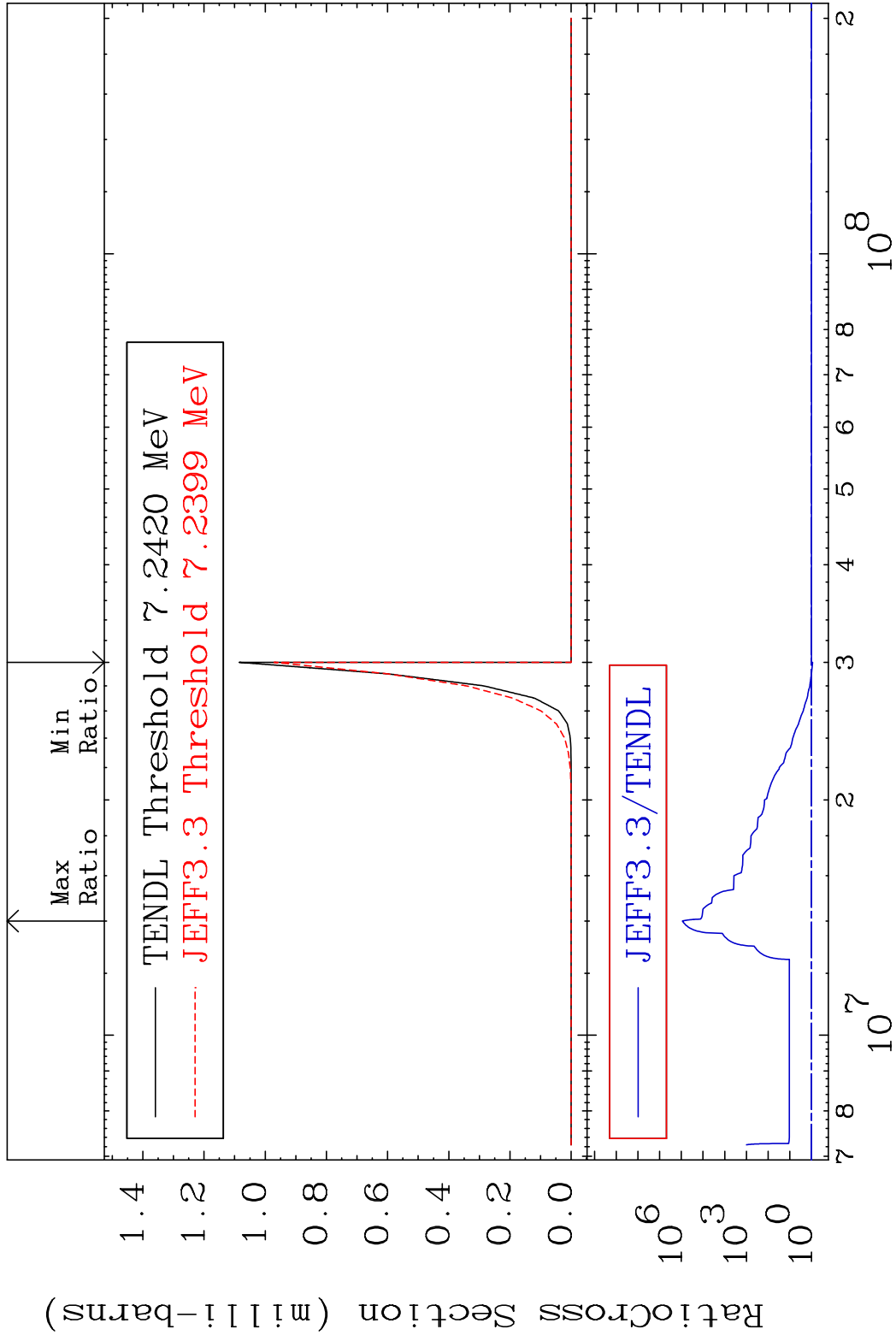
80-Hg-200

MAT 8037

(n,2n)  $\alpha$

80-Hg-200

Cross Section -10.48 To 9999. %



9

Incident Energy (eV)

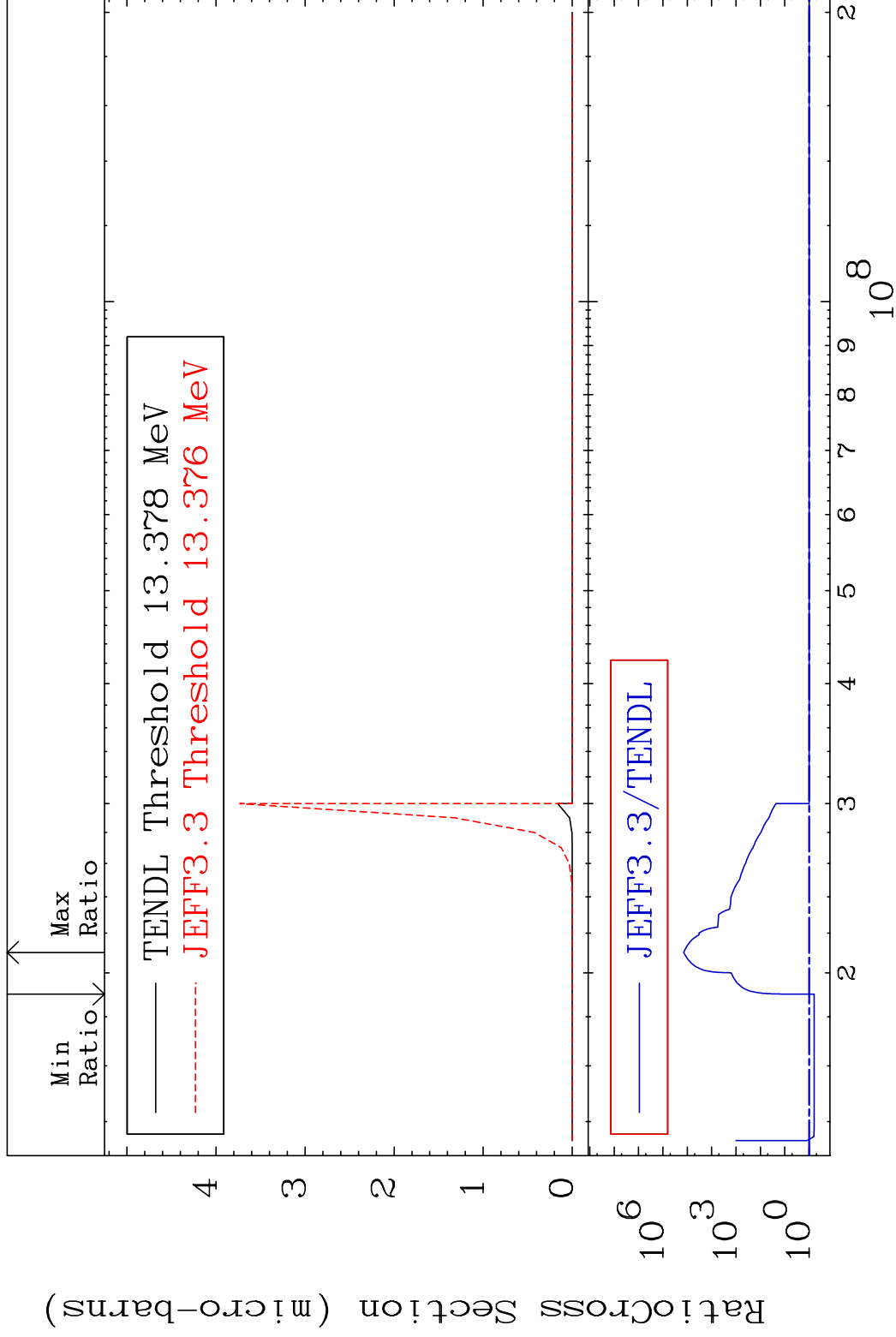
80-Hg-200

MAT 8037

(n,3n)  $\alpha$

80-Hg-200

Cross Section -37.61 To 9999. %

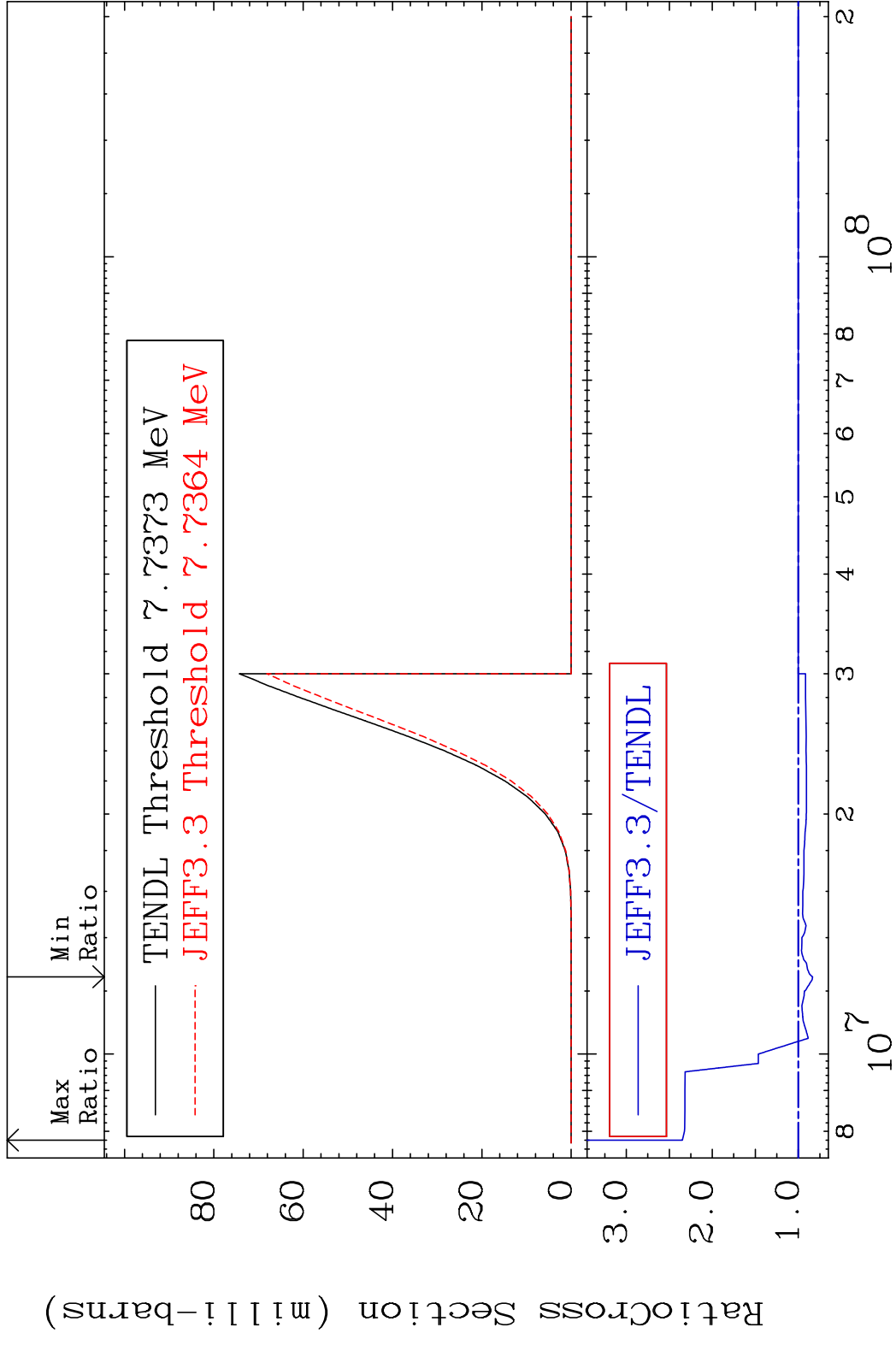


10

Incident Energy (eV)

80-Hg-200

MAT 8037 (n, n') p 80-Hg-200  
 Cross Section -16.56 To 134.8 %

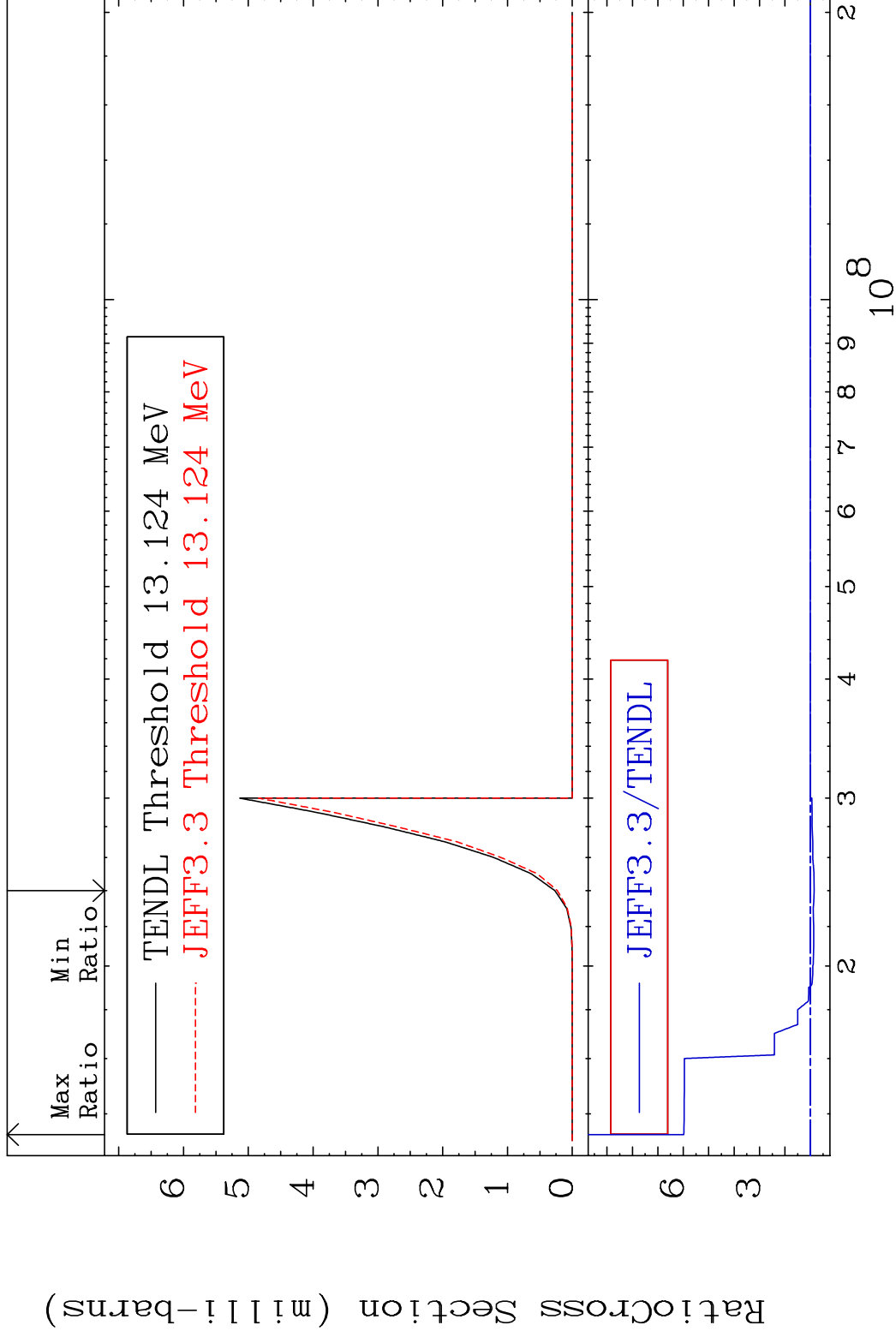


MAT 8037

(n, n') d

80-Hg-200

Cross Section -14.69 To 498.5 %



12

Incident Energy (eV)

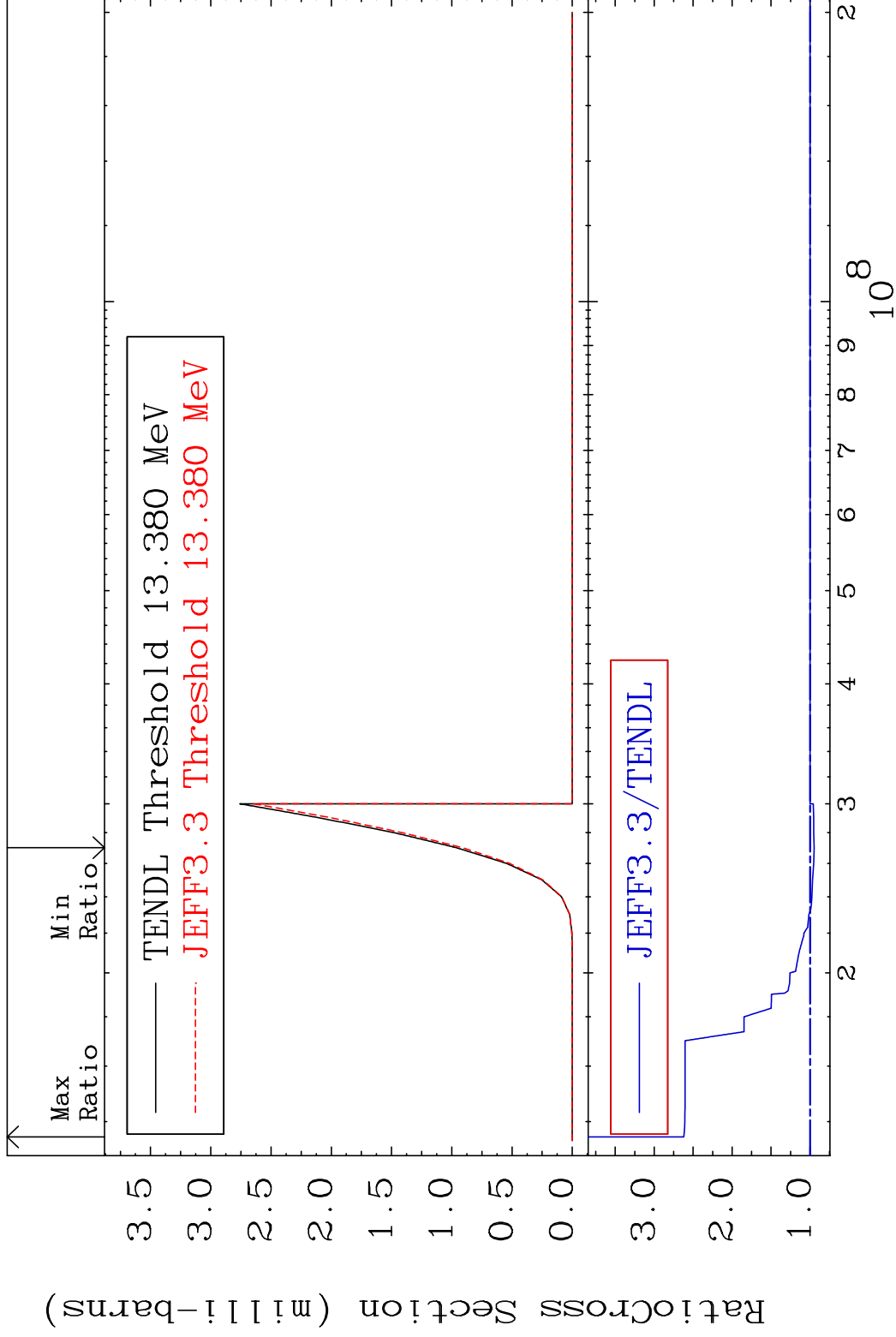
80-Hg-200

MAT 8037

(n, n') t

80-Hg-200

Cross Section -5.220 To 162.2 %



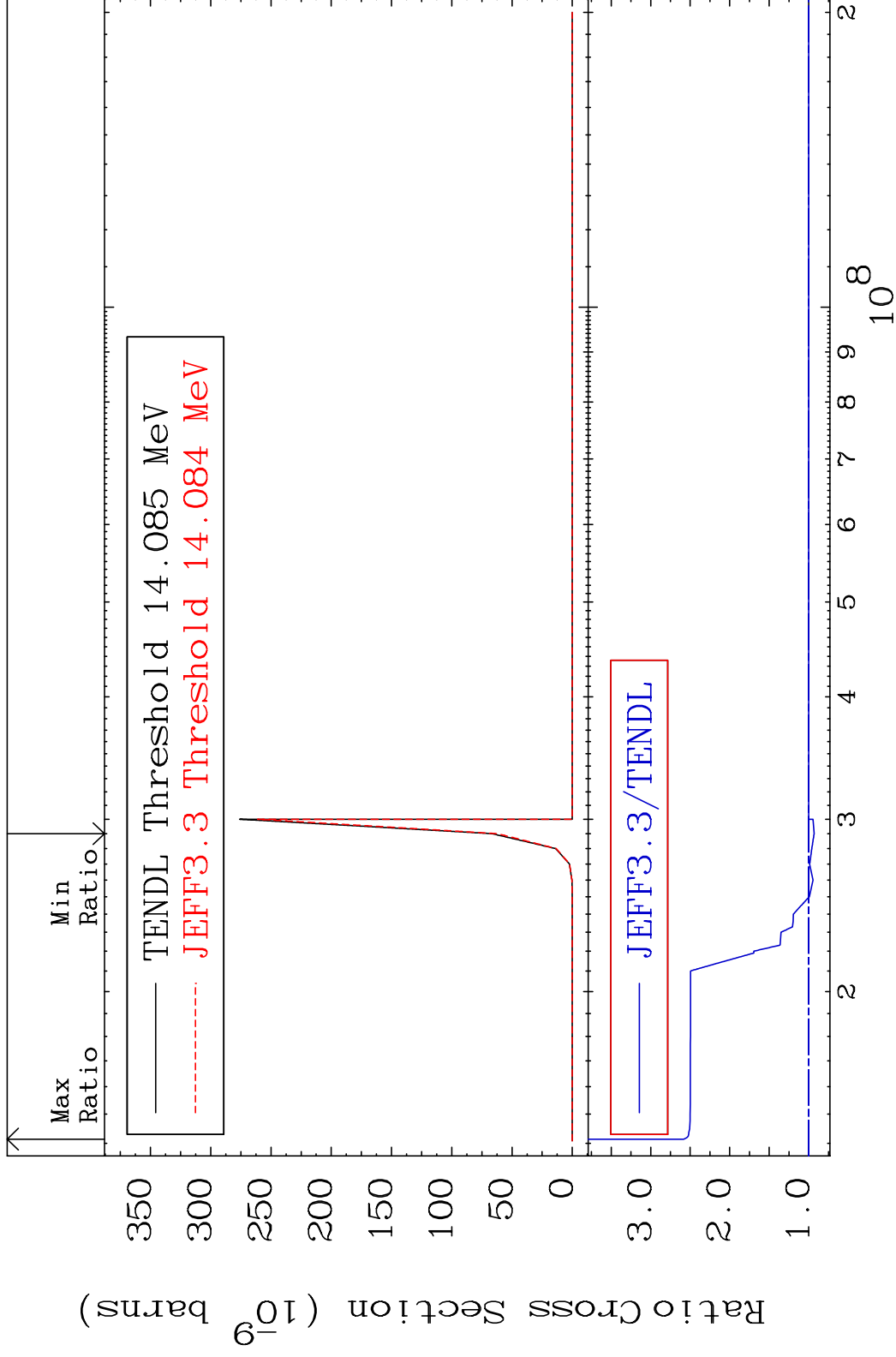
MAT 8037

(n,n') He-3

80-Hg-200

Cross Section

-6.854 To 158.3 %

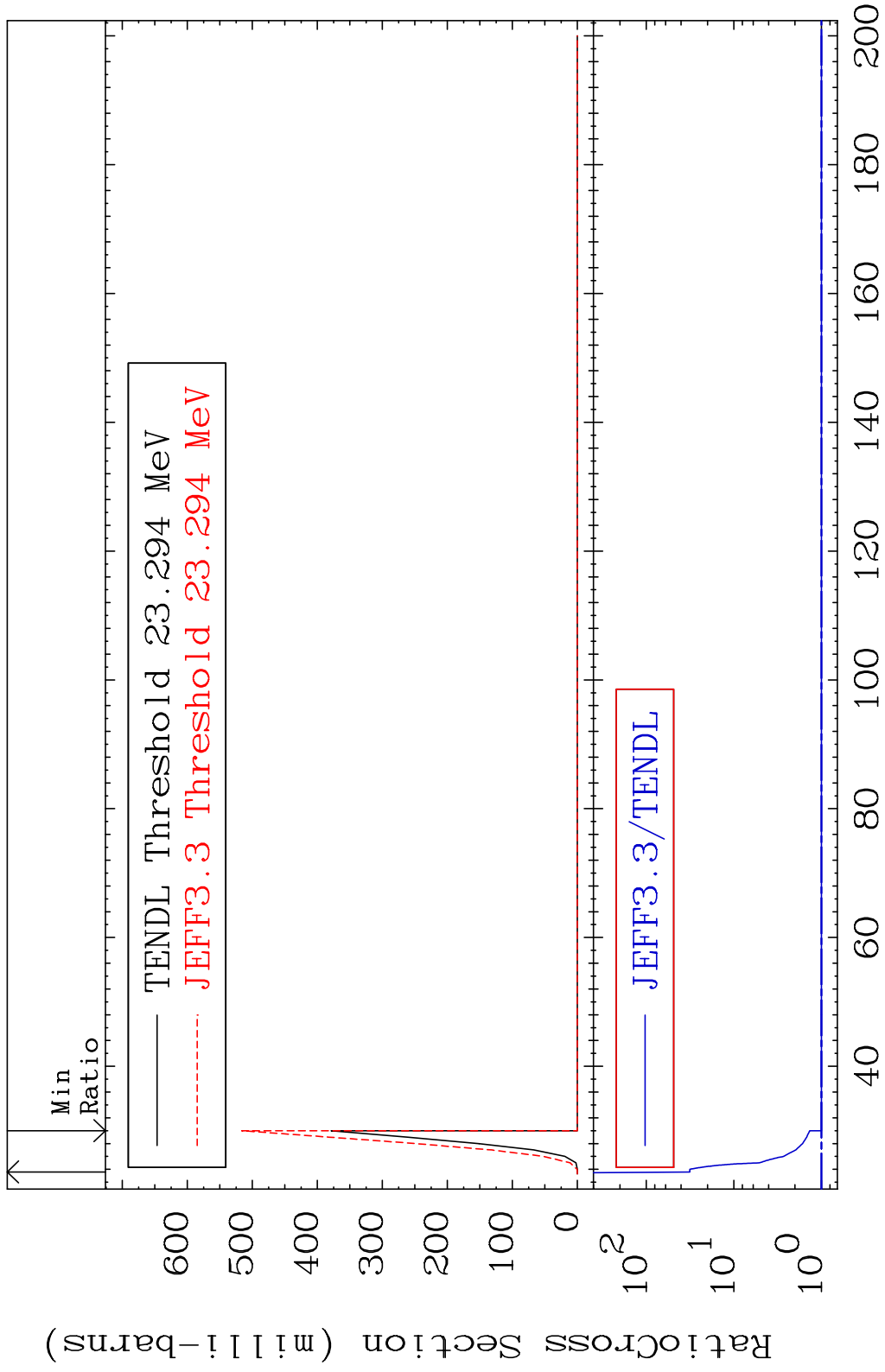


MAT 8037

(n,4n)

80-Hg-200

Cross Section 0.000 To 3083. %





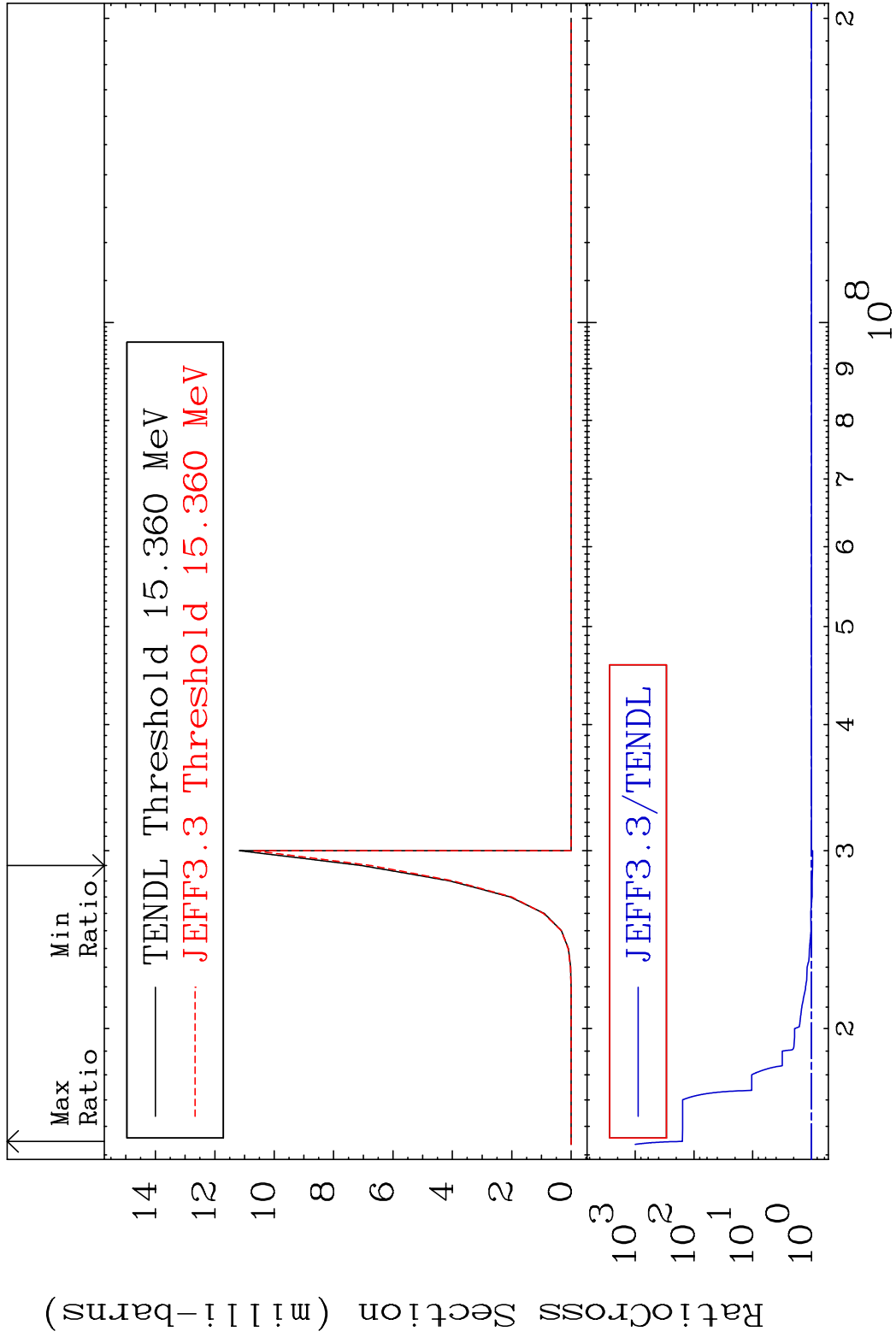
MAT 8037

(n,2n) p

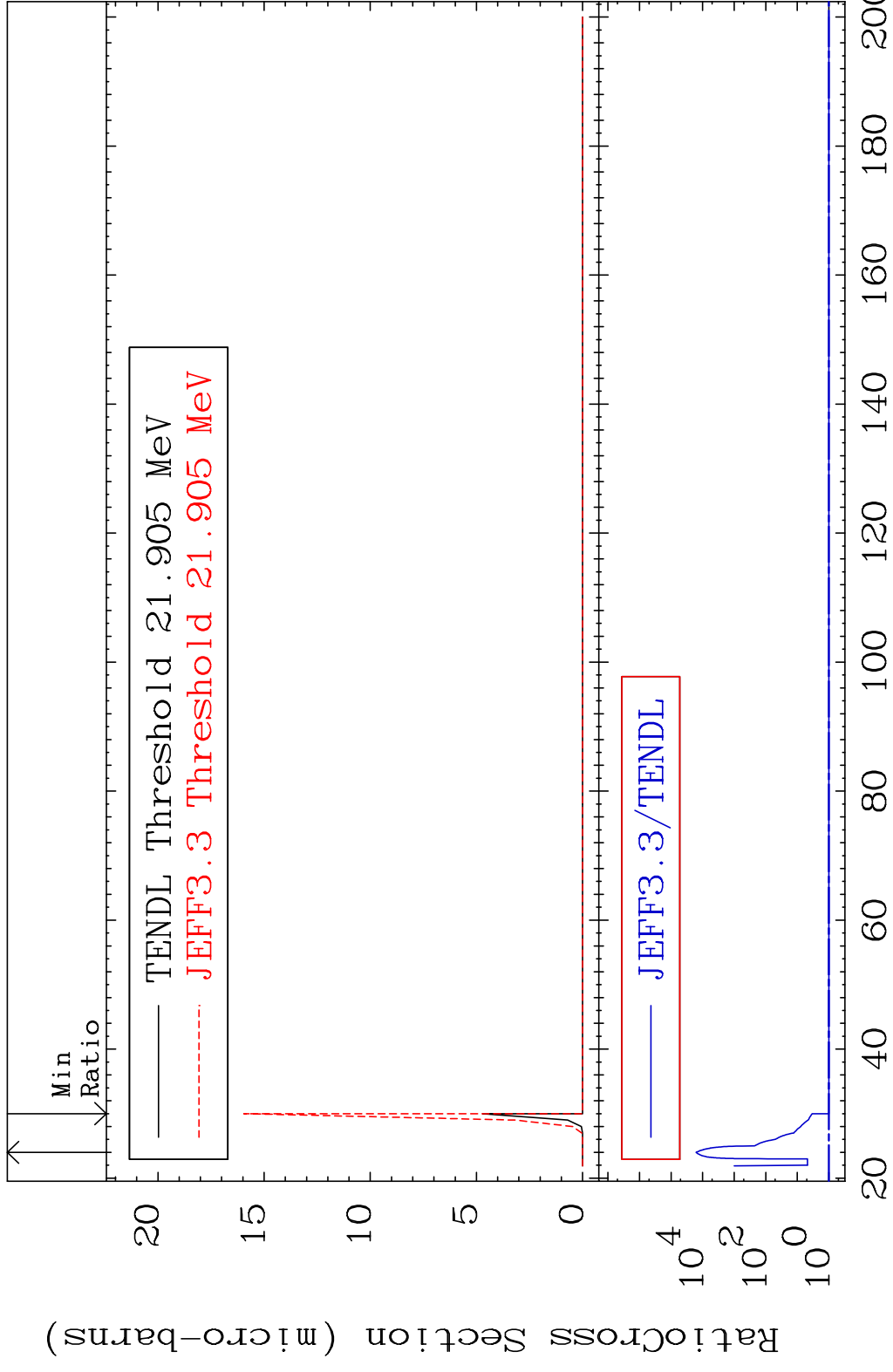
80-Hg-200

Cross Section

-4.500 To 9999. %



MAT 8037 (n,3n) p 80-Hg-200  
 Cross Section 0.000 To 9999. %



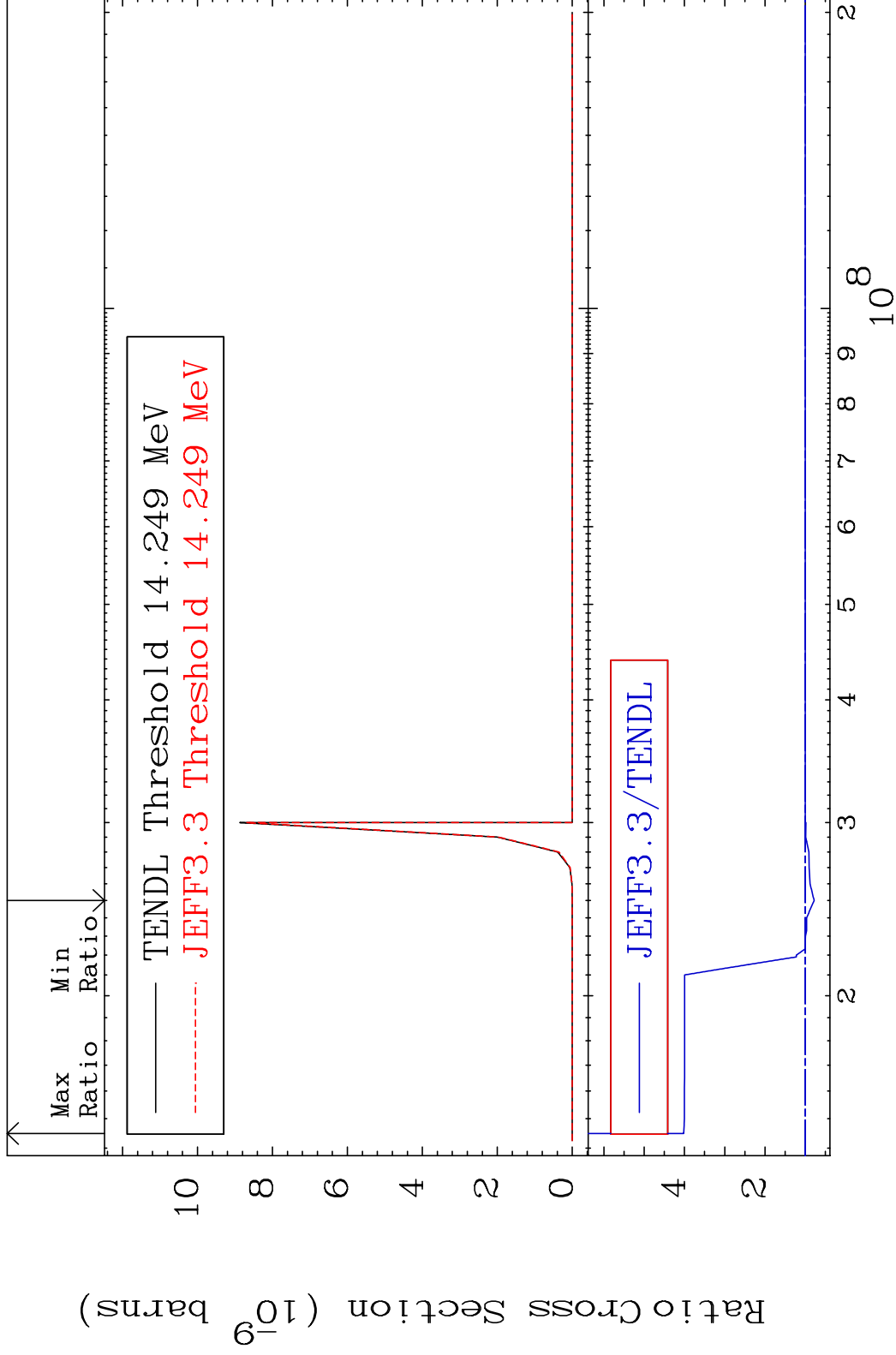
MAT 8037

(n,2n) p

80-Hg-200

Cross Section

-22.03 To 302.0 %

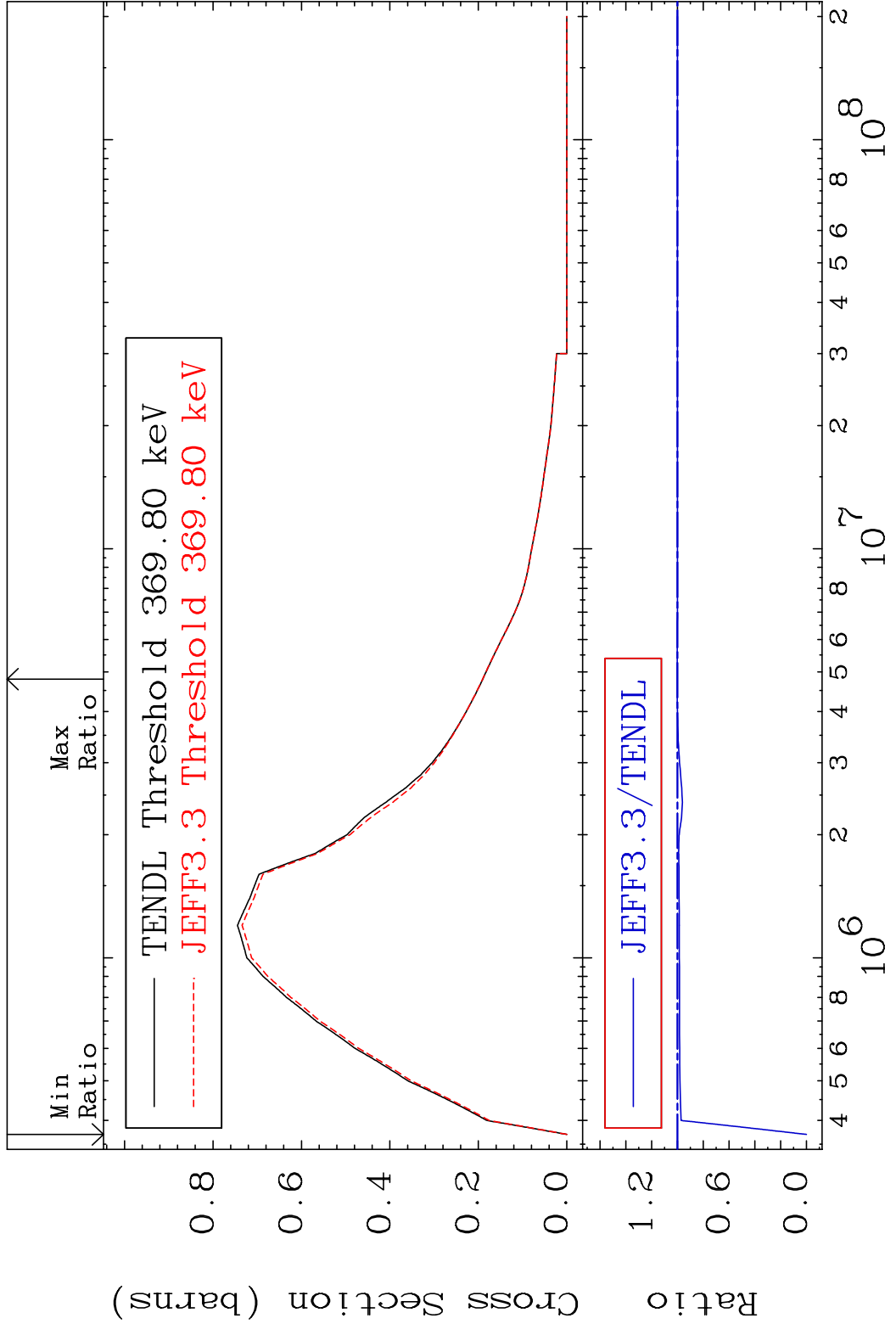


18

Incident Energy (eV)

80-Hg-200

MAT 8037 MT= 51 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 0.185 %

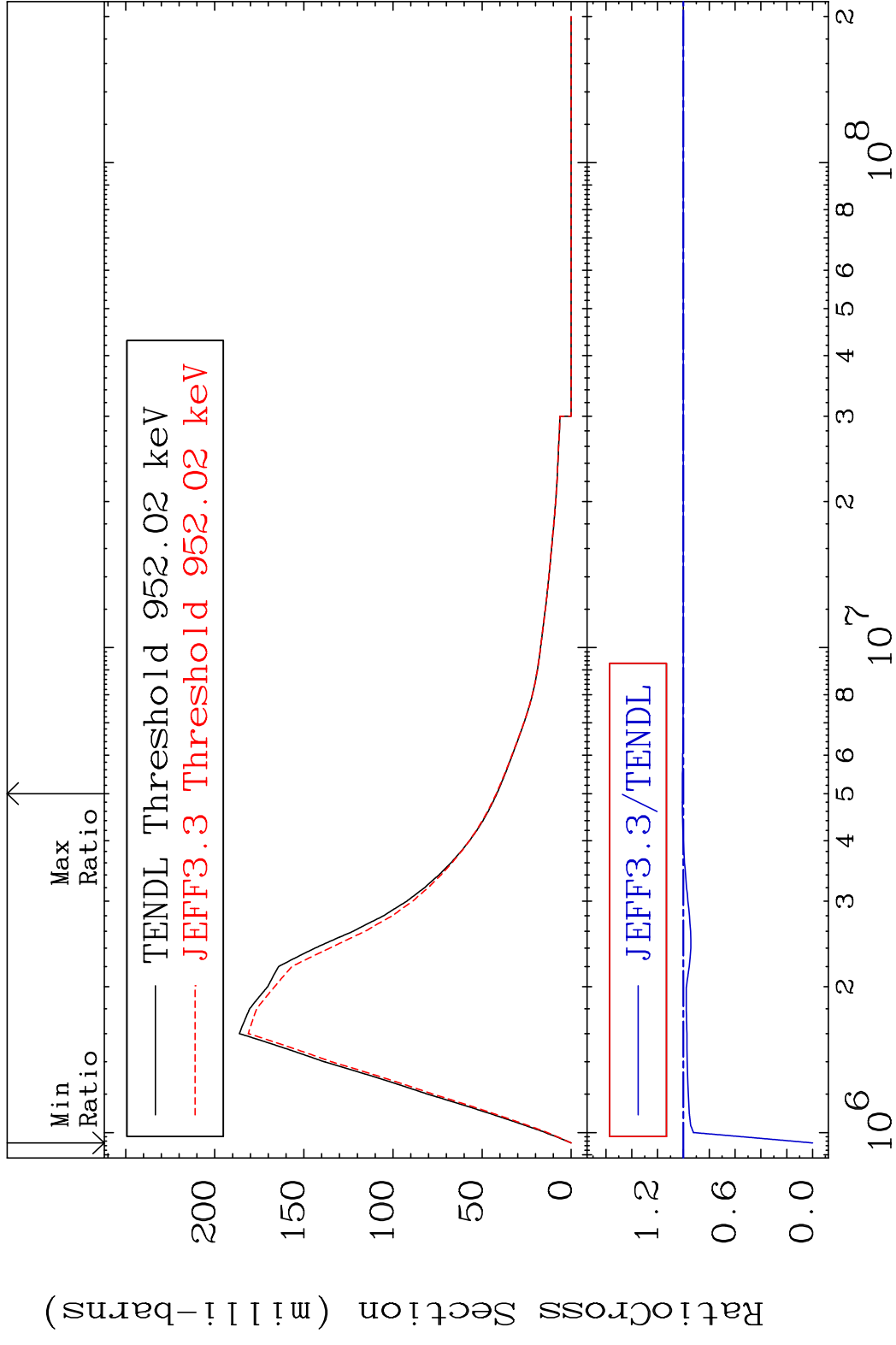


MAT 8037

MT= 52 (n, n') Level

80-Hg-200

Cross Section -100.0 To 0.814 %

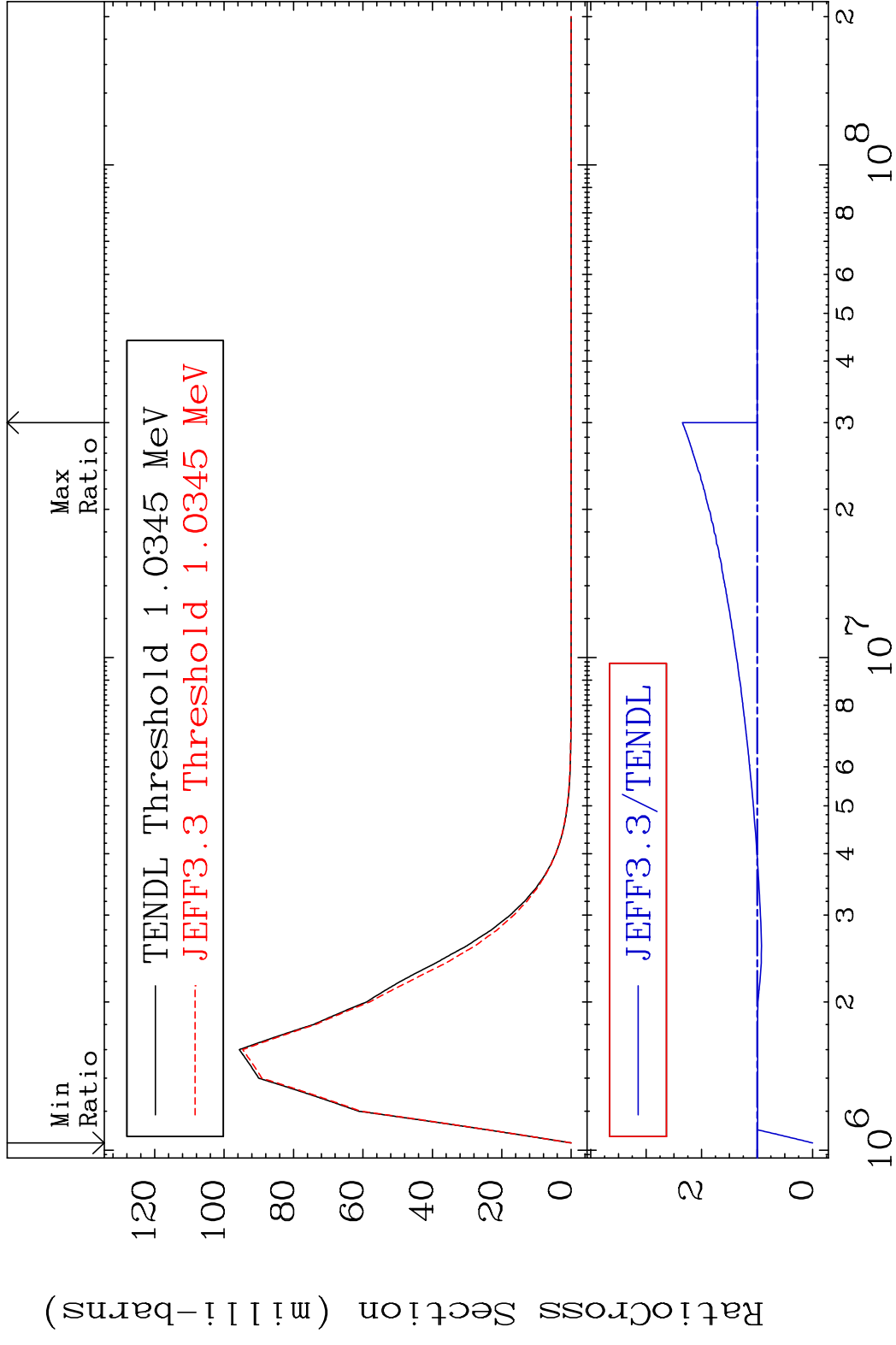


20

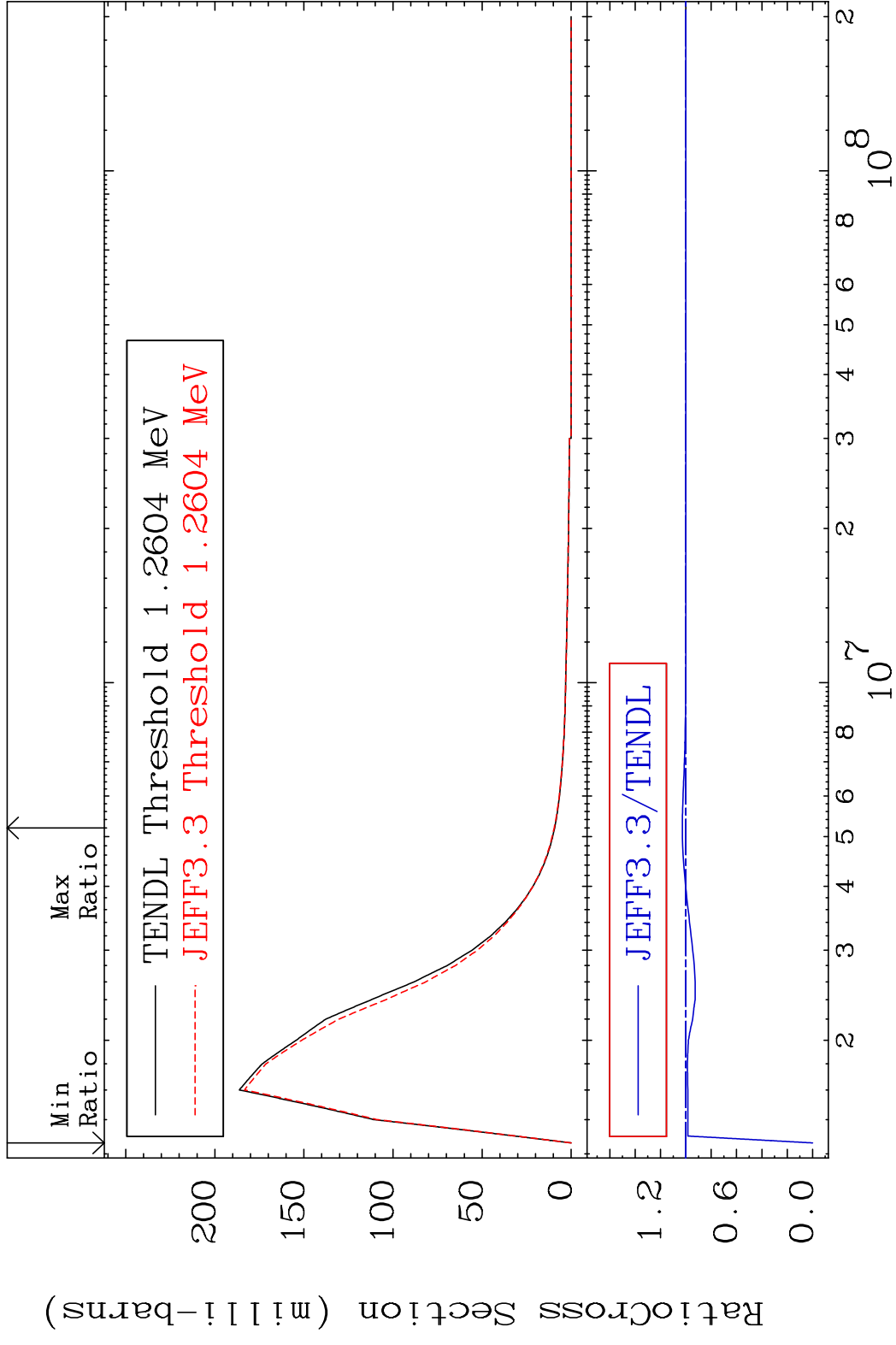
Incident Energy (eV)

80-Hg-200

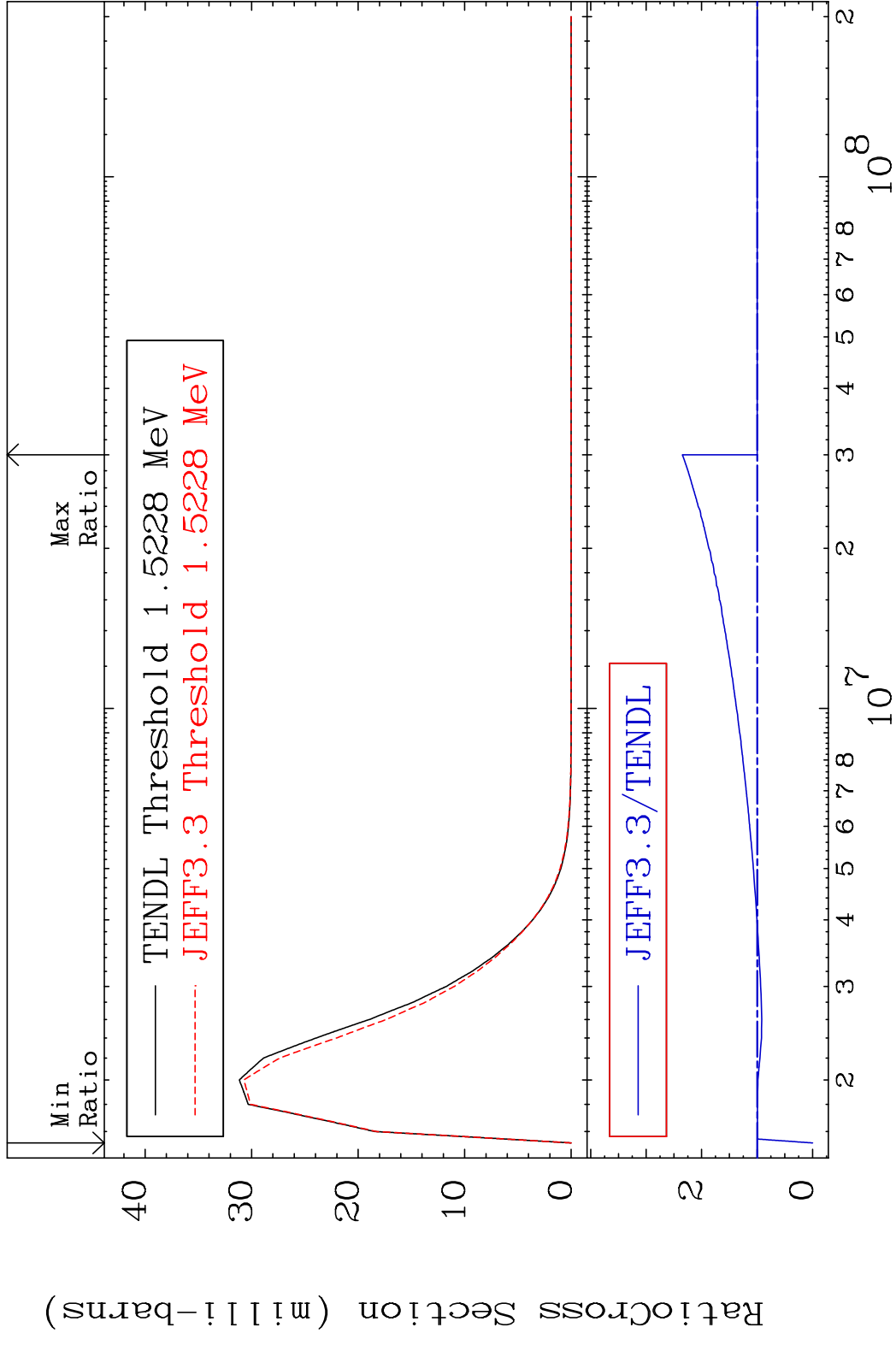
MAT 8037 MT= 53 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.7 %



MAT 8037 MT= 54 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 2.746 %

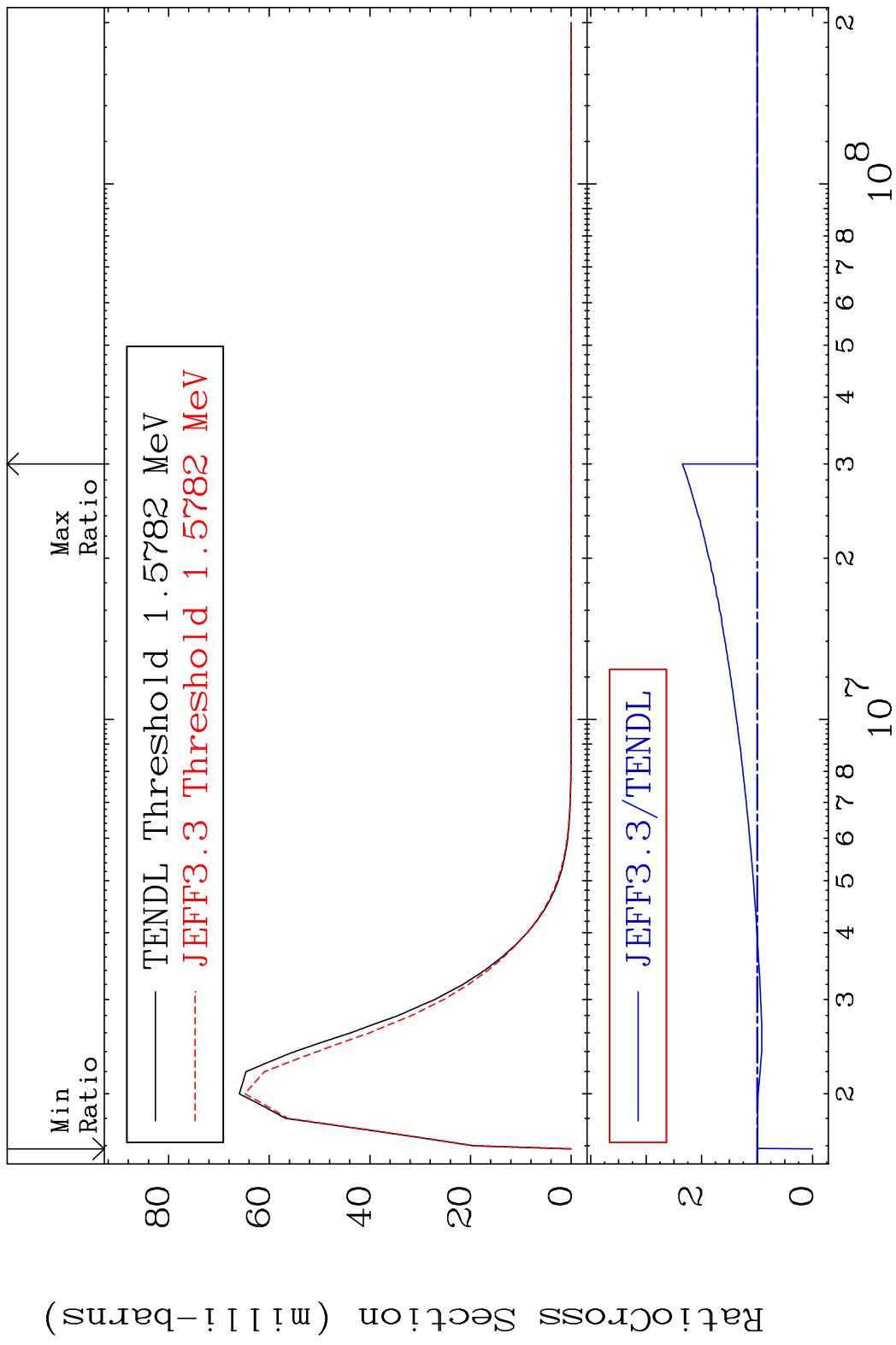


MAT 8037 MT= 55 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.8 %





MAT 8037 MT= 56 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.8 %

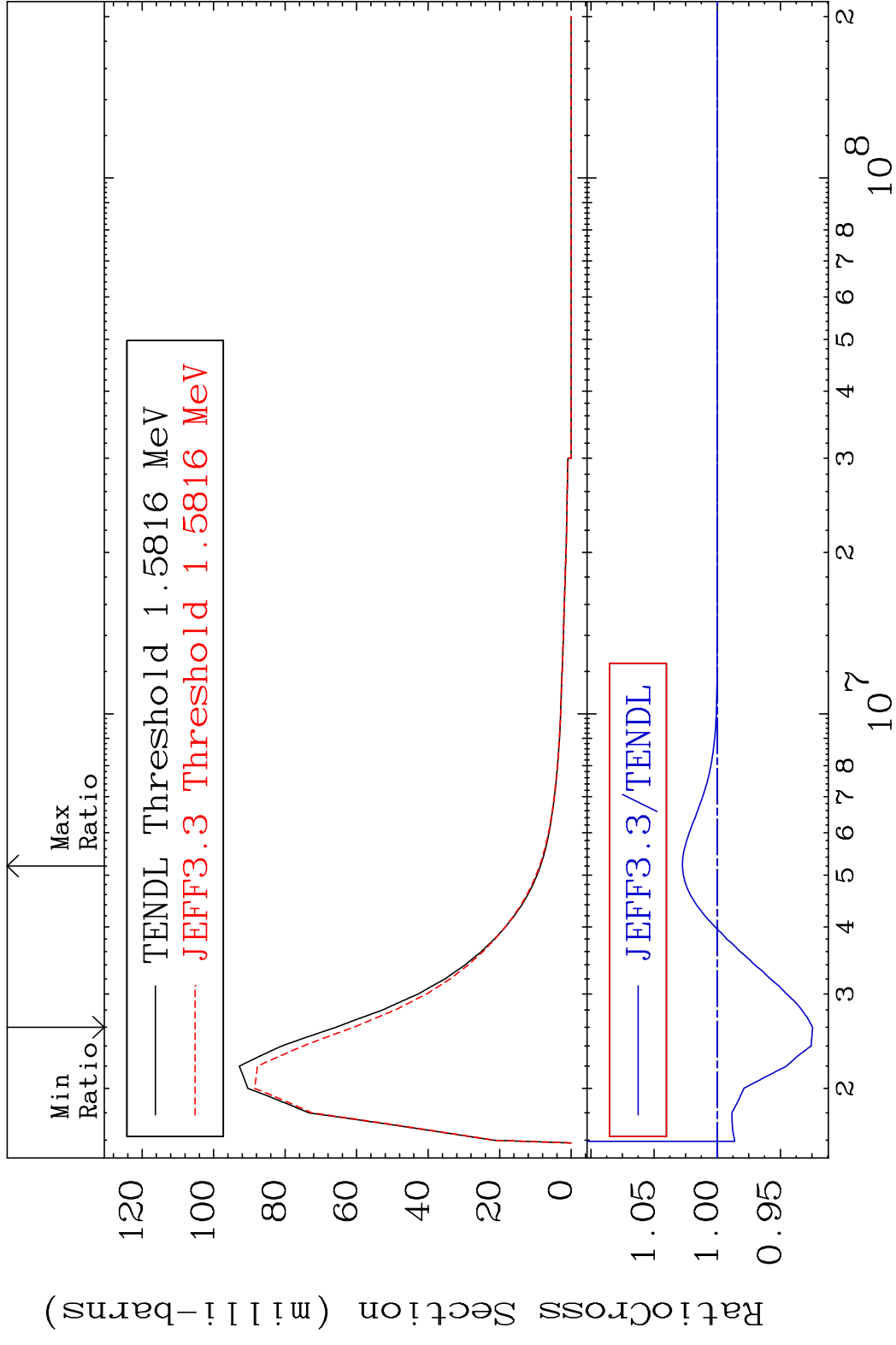


MAT 8037

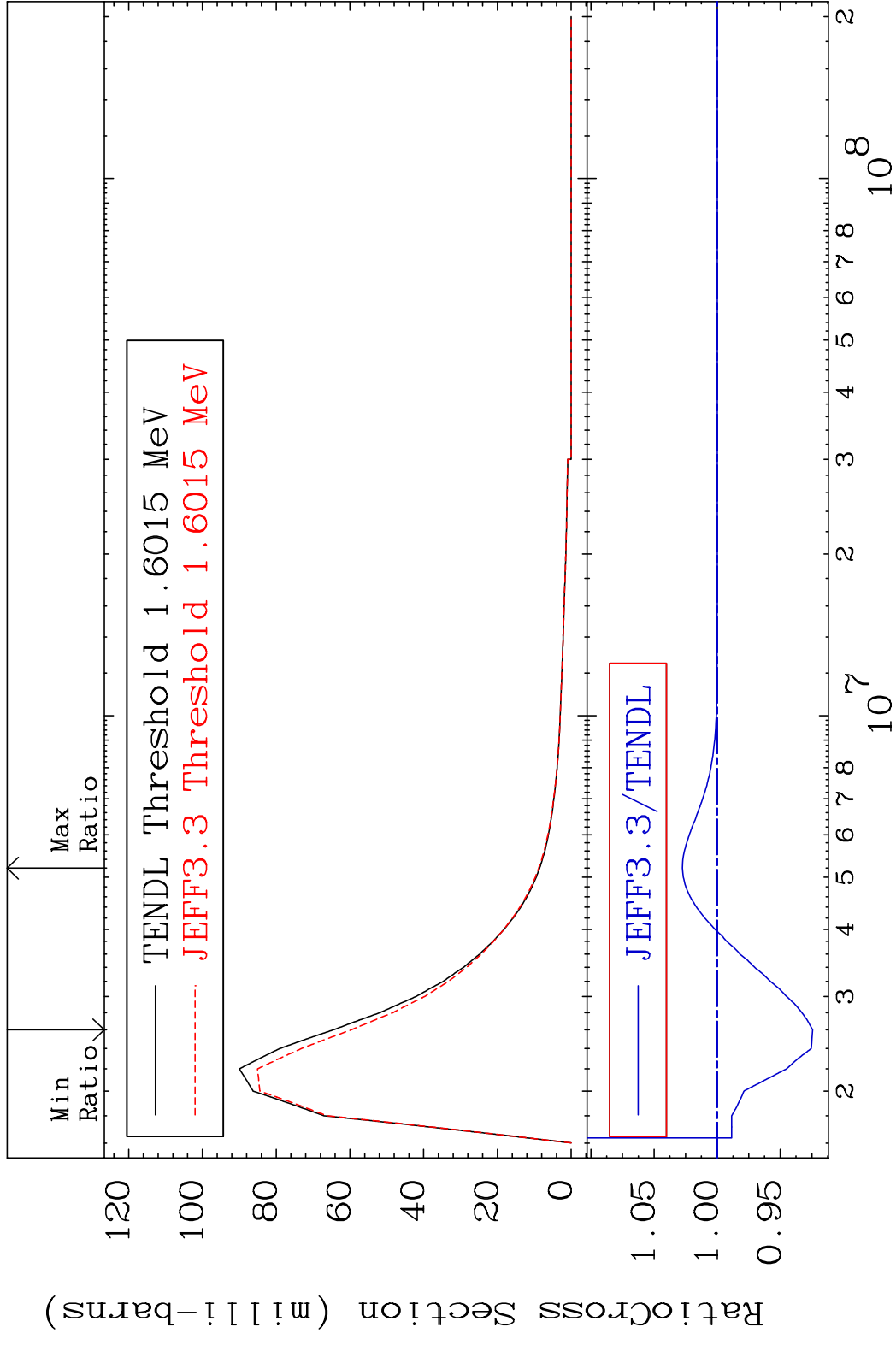
MT= 57 (n,n') Level

80-Hg-200

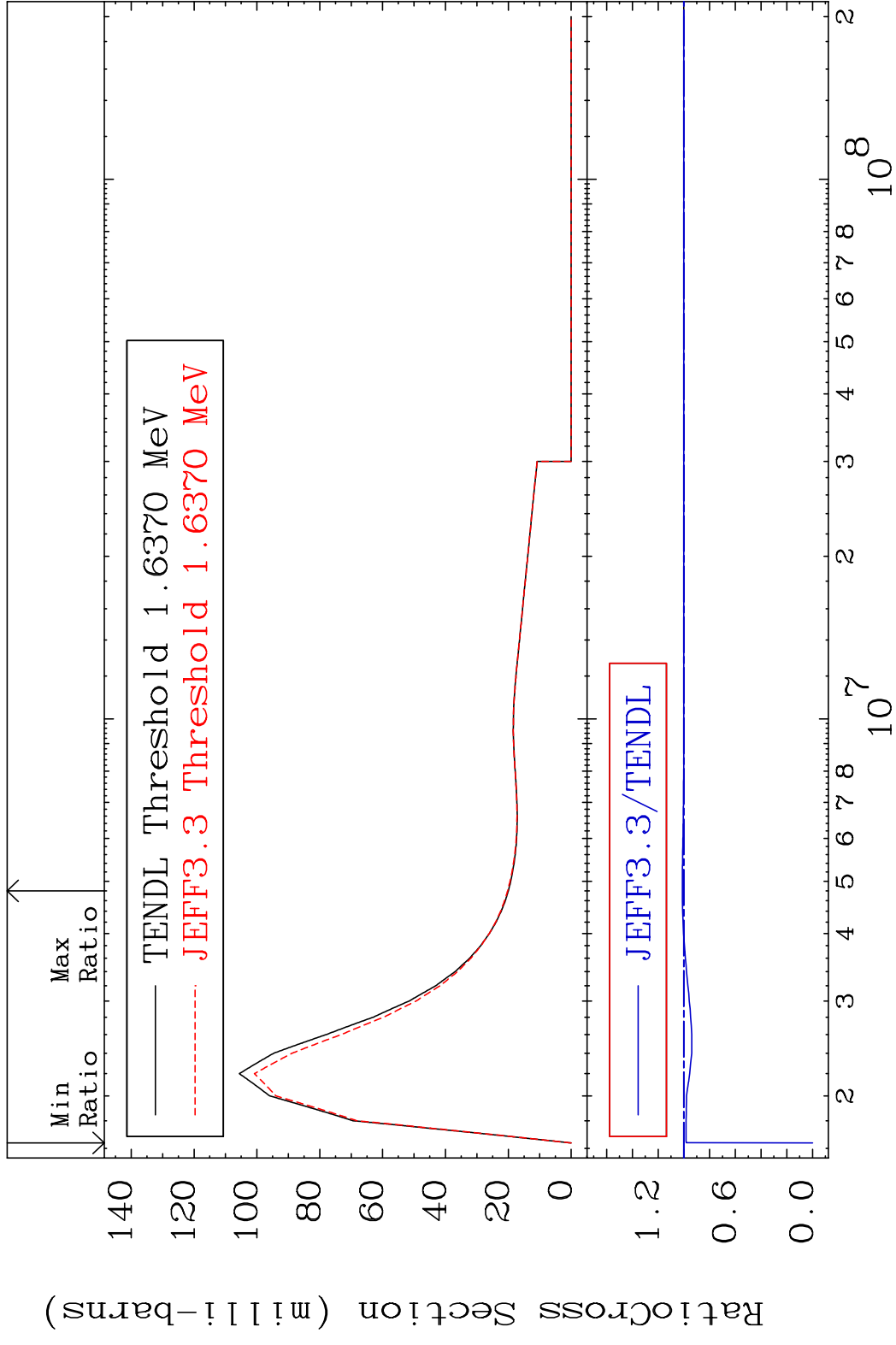
Cross Section -7.550 To 2.758 %



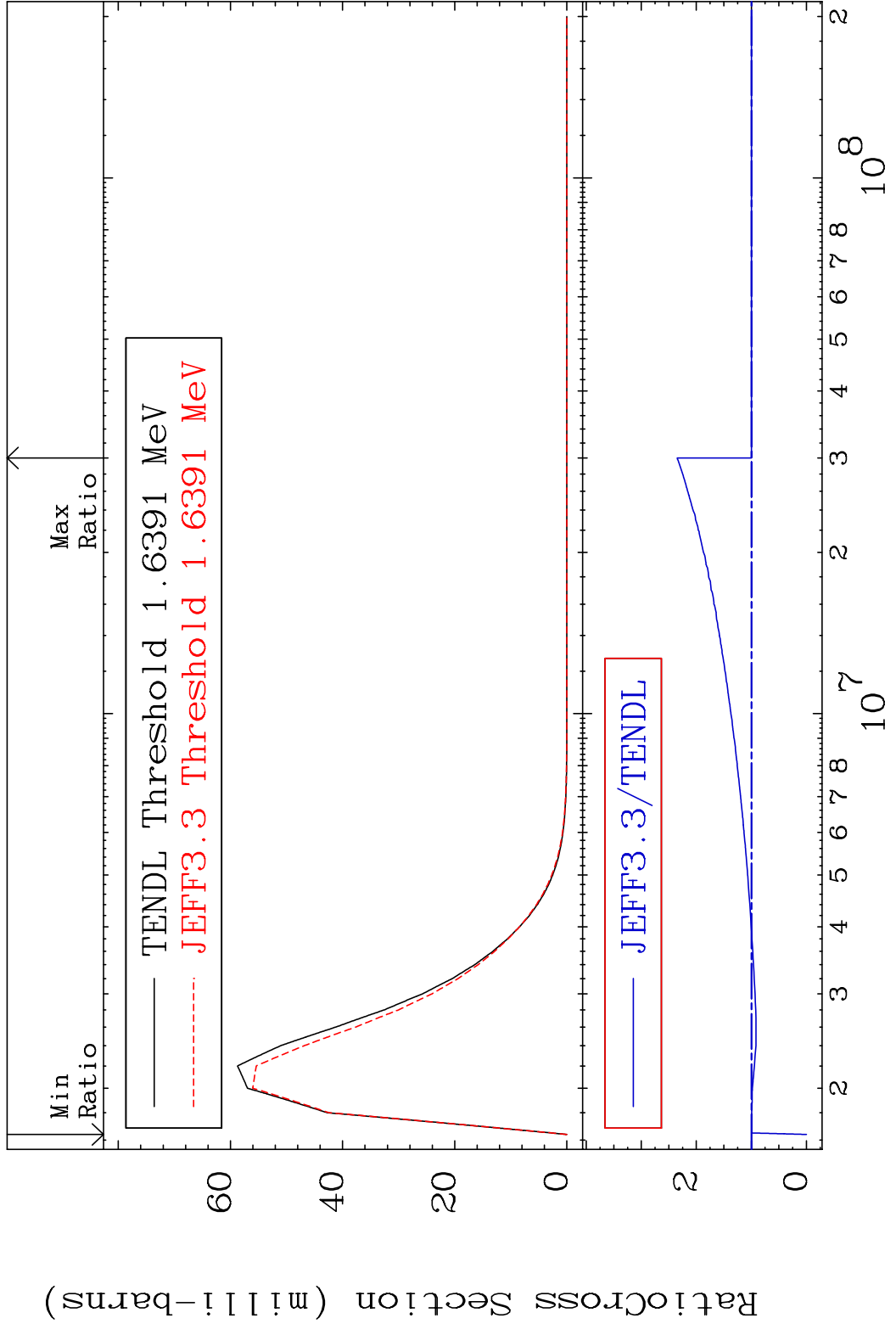
MAT 8037 MT= 58 (n,n') Level 80-Hg-200  
 Cross Section -7.558 To 2.759 %



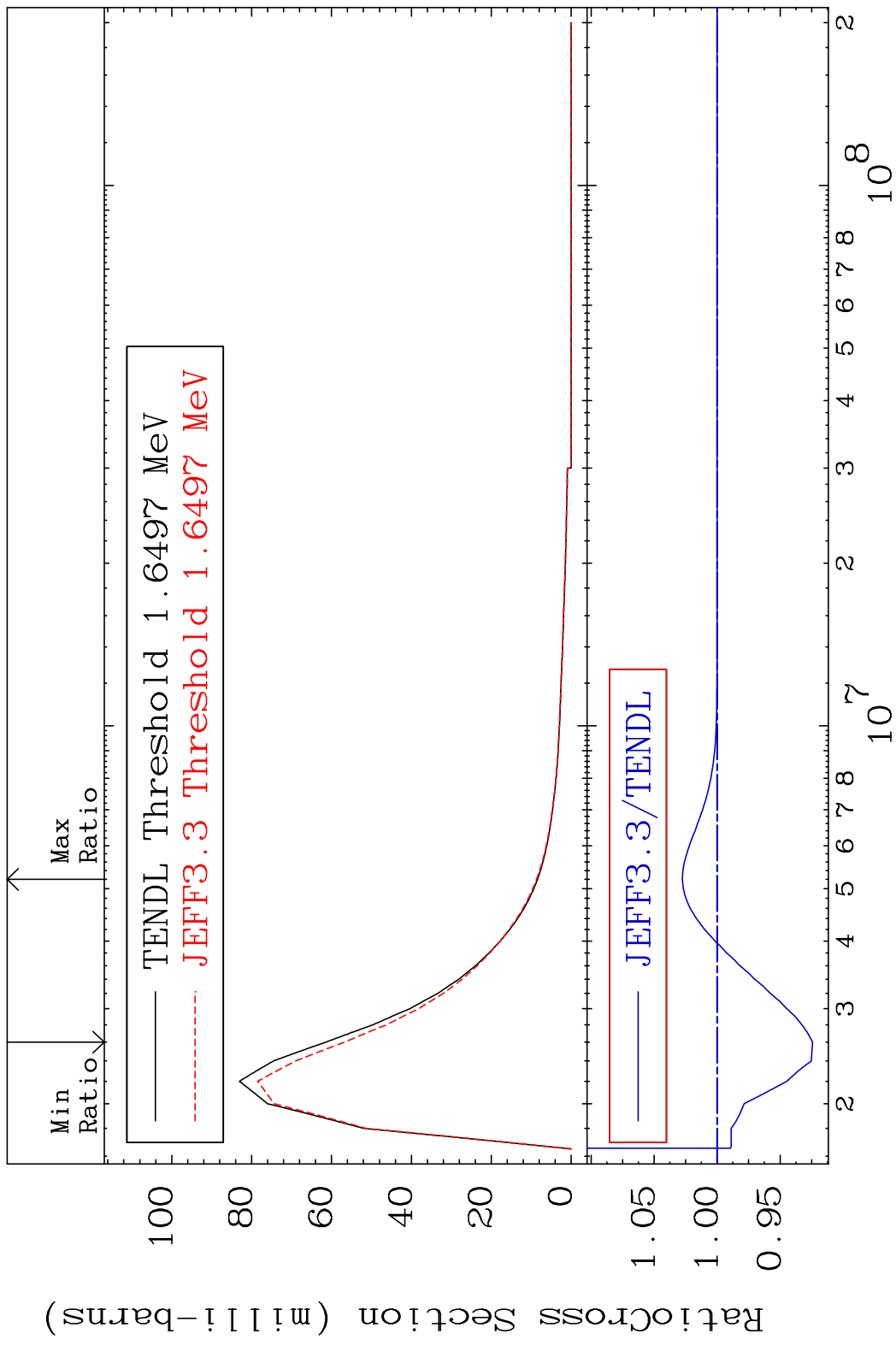
MAT 8037 MT= 59 (n,n') Level 80-Hg-200  
 Cross Section -100.0 To 1.160 %



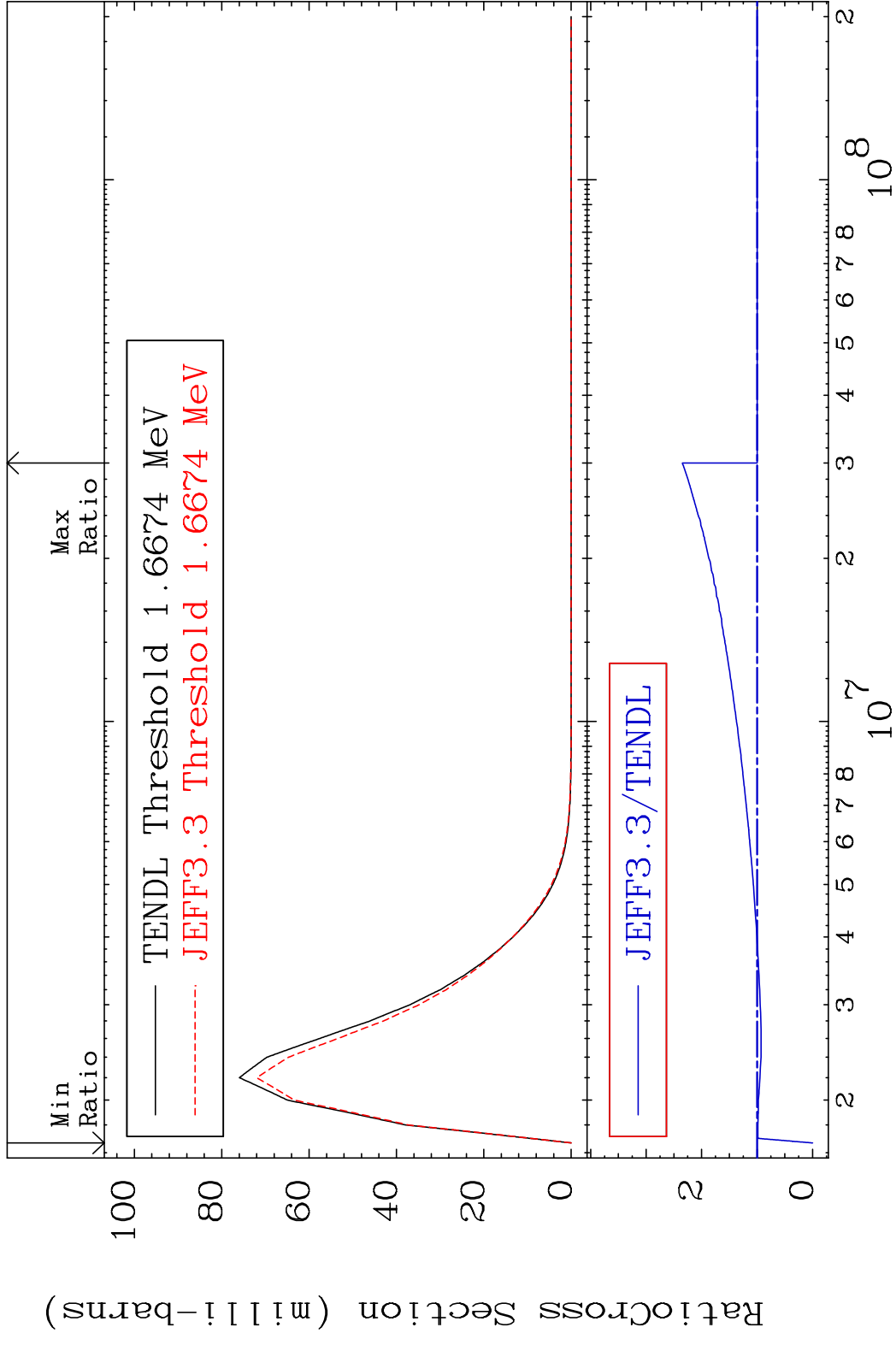
MAT 8037 MT= 60 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.8 %



MAT 8037 MT= 61 (n, n') Level 80-Hg-200  
 Cross Section -7.576 To 2.761 %



MAT 8037 MT= 62 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.7 %

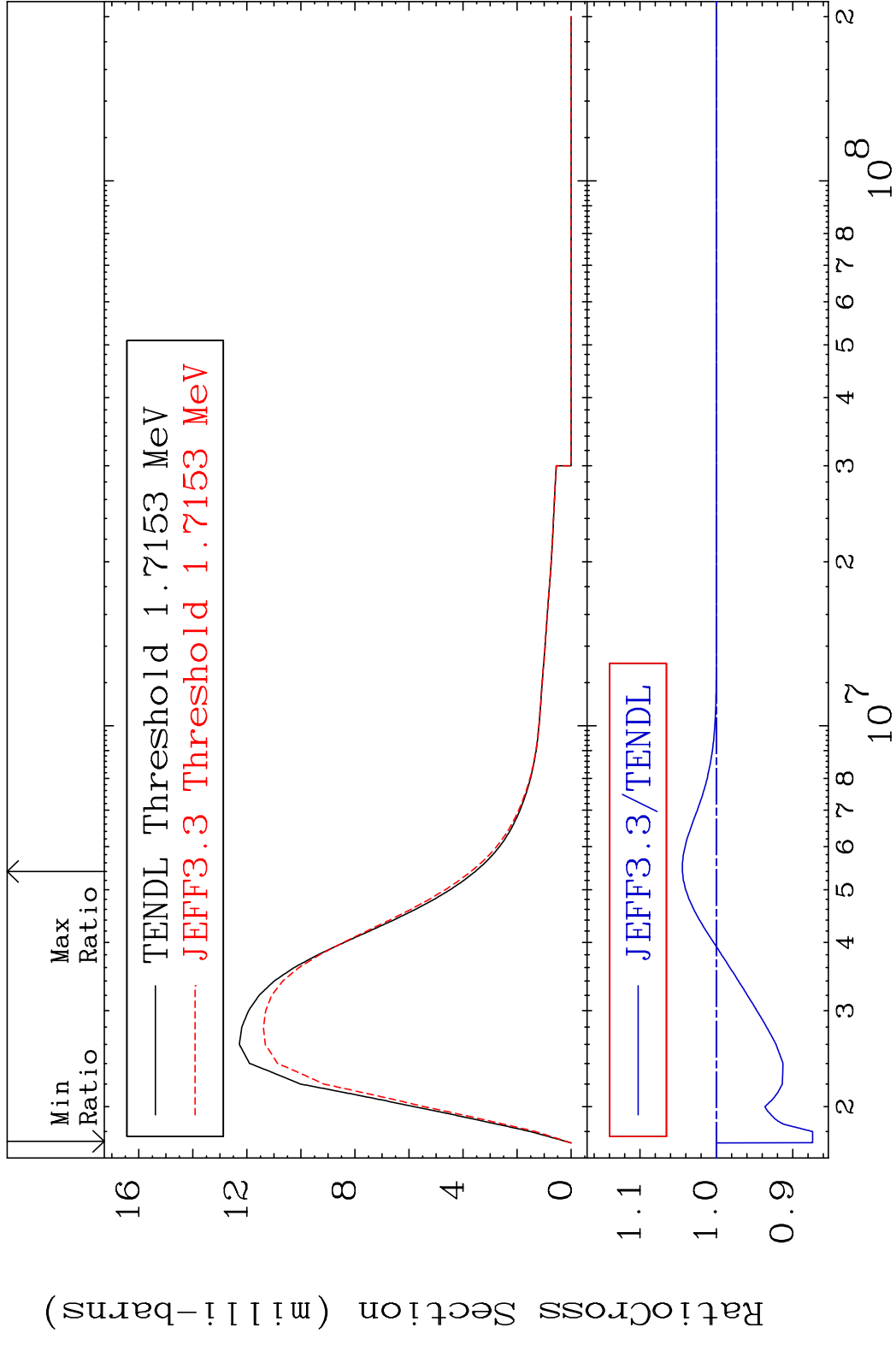


30

Incident Energy (eV)

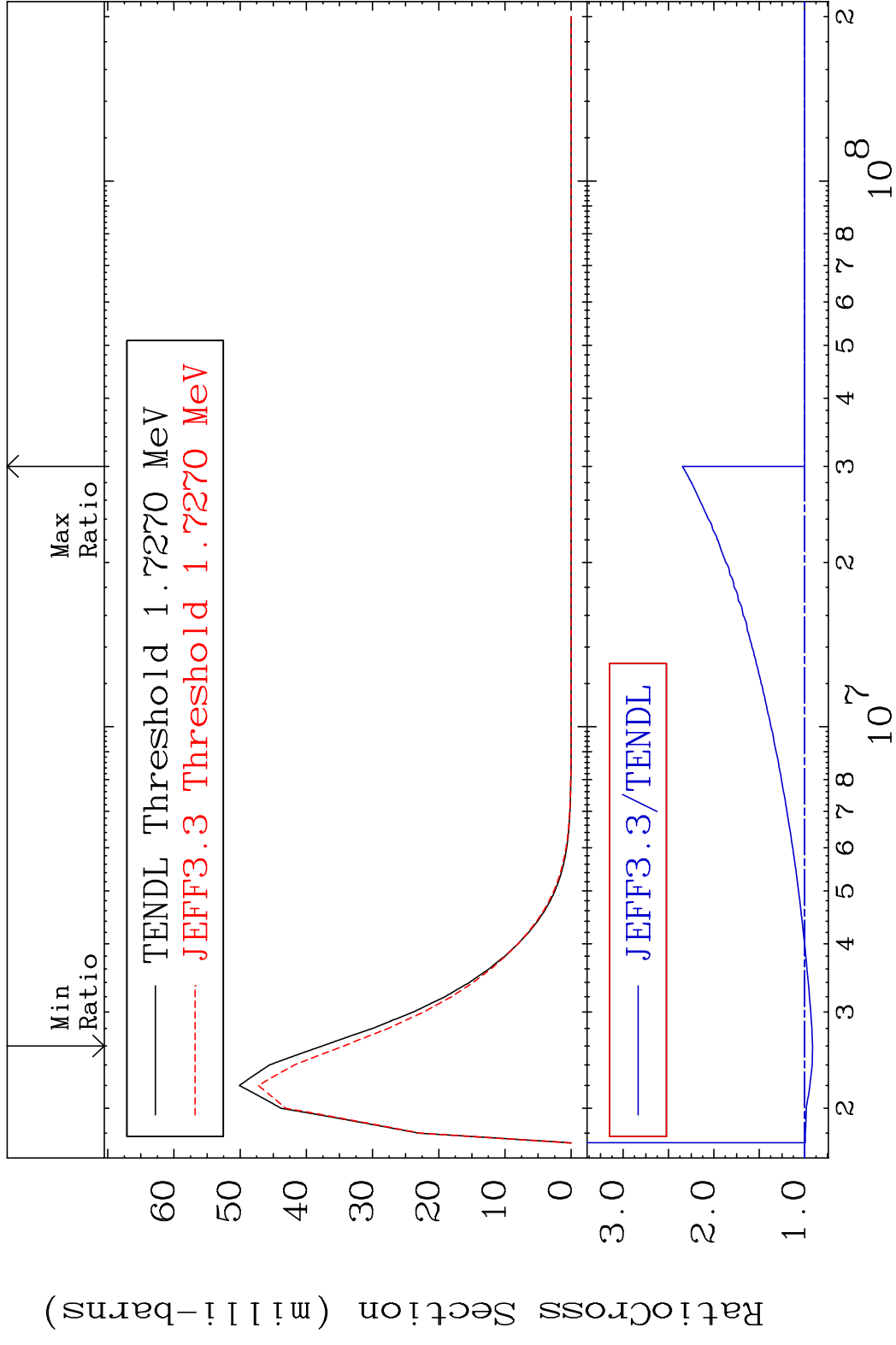
80-Hg-200

MAT 8037 MT= 63 (n,n') Level 80-Hg-200  
 Cross Section -12.58 To 4.459 %

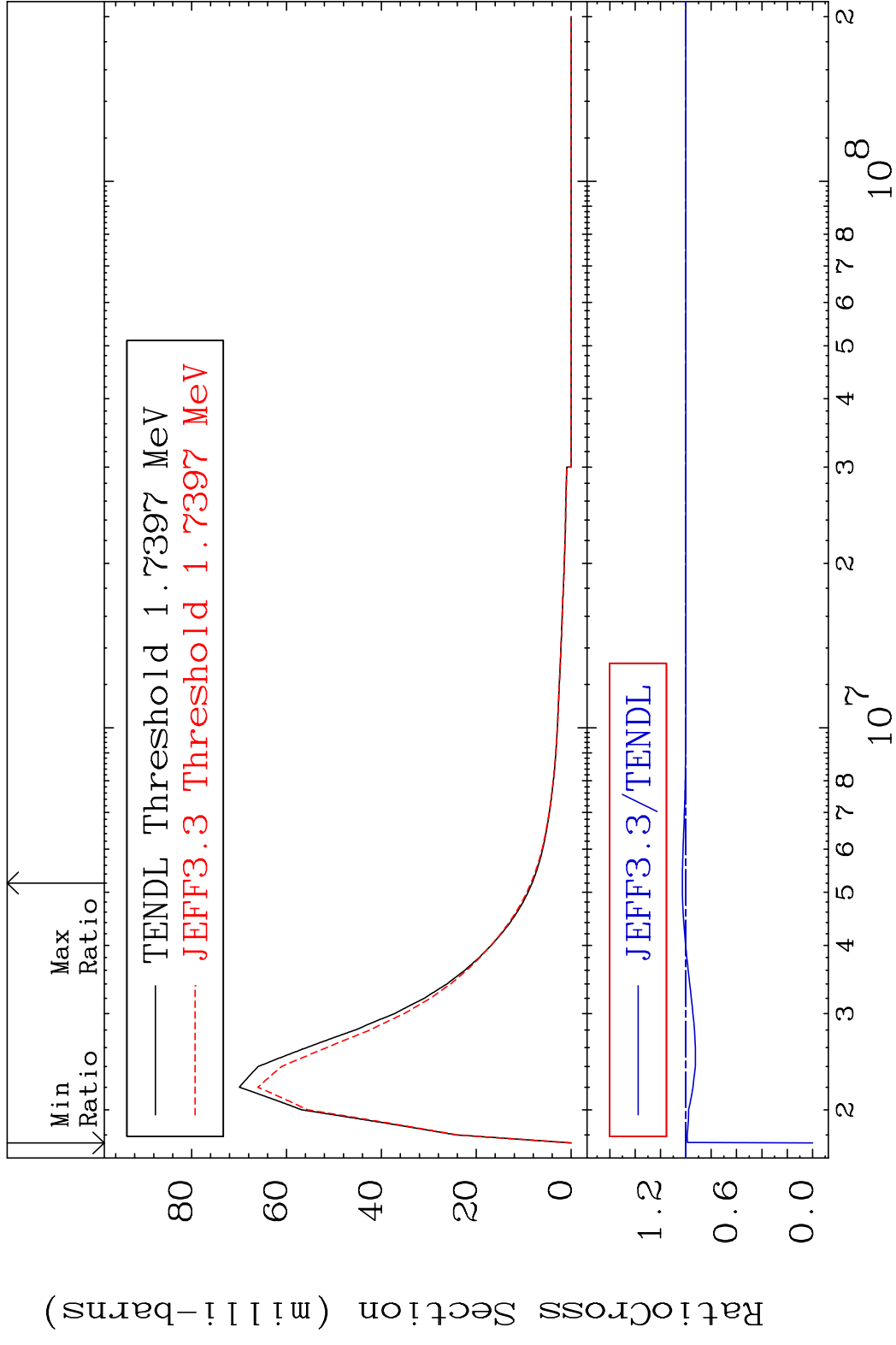




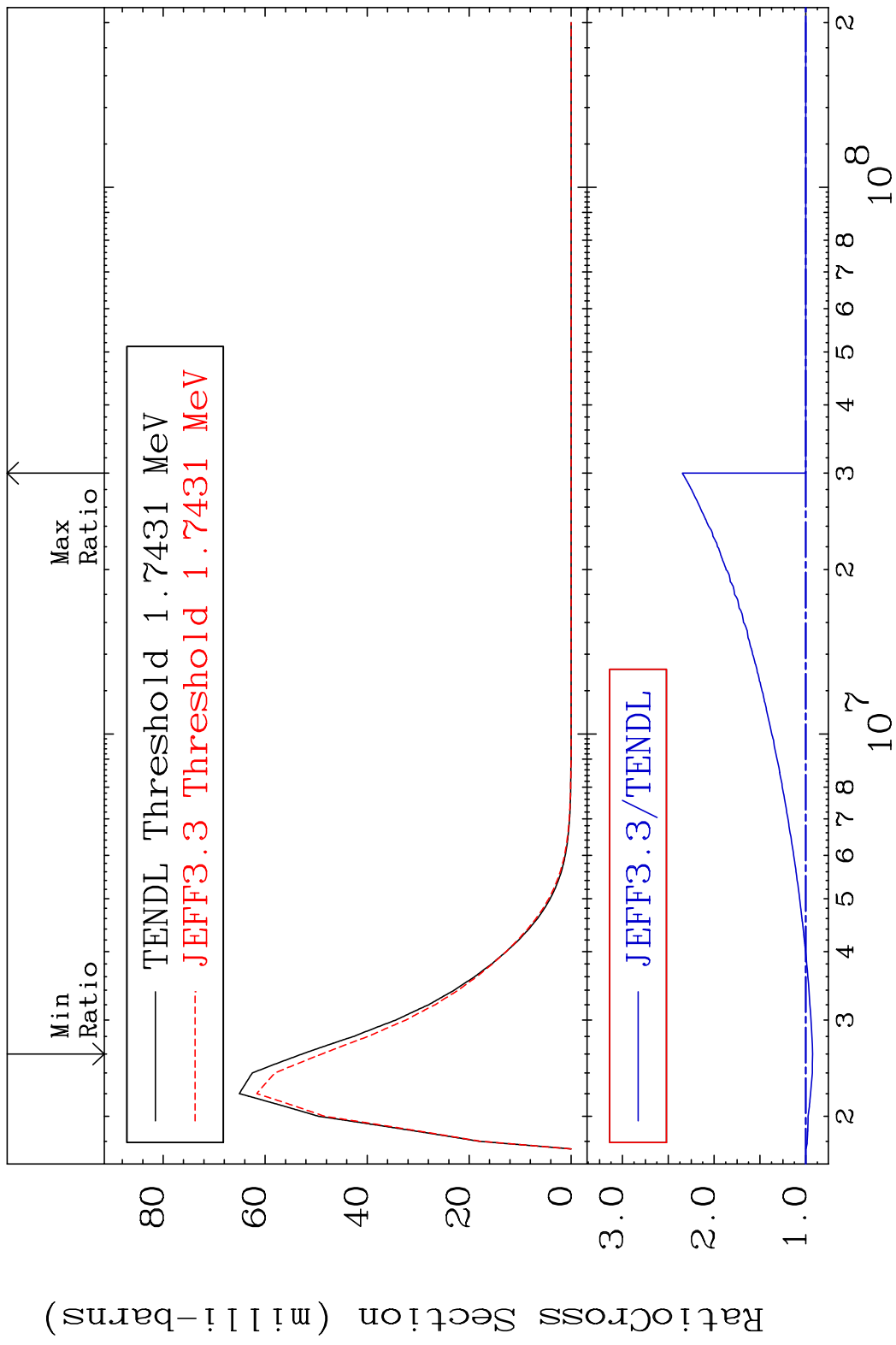
MAT 8037 MT= 64 (n, n') Level 80-Hg-200  
 Cross Section -8.638 To 134.8 %



MAT 8037 MT= 65 (n,n') Level 80-Hg-200  
 Cross Section -100.0 To 2.767 %

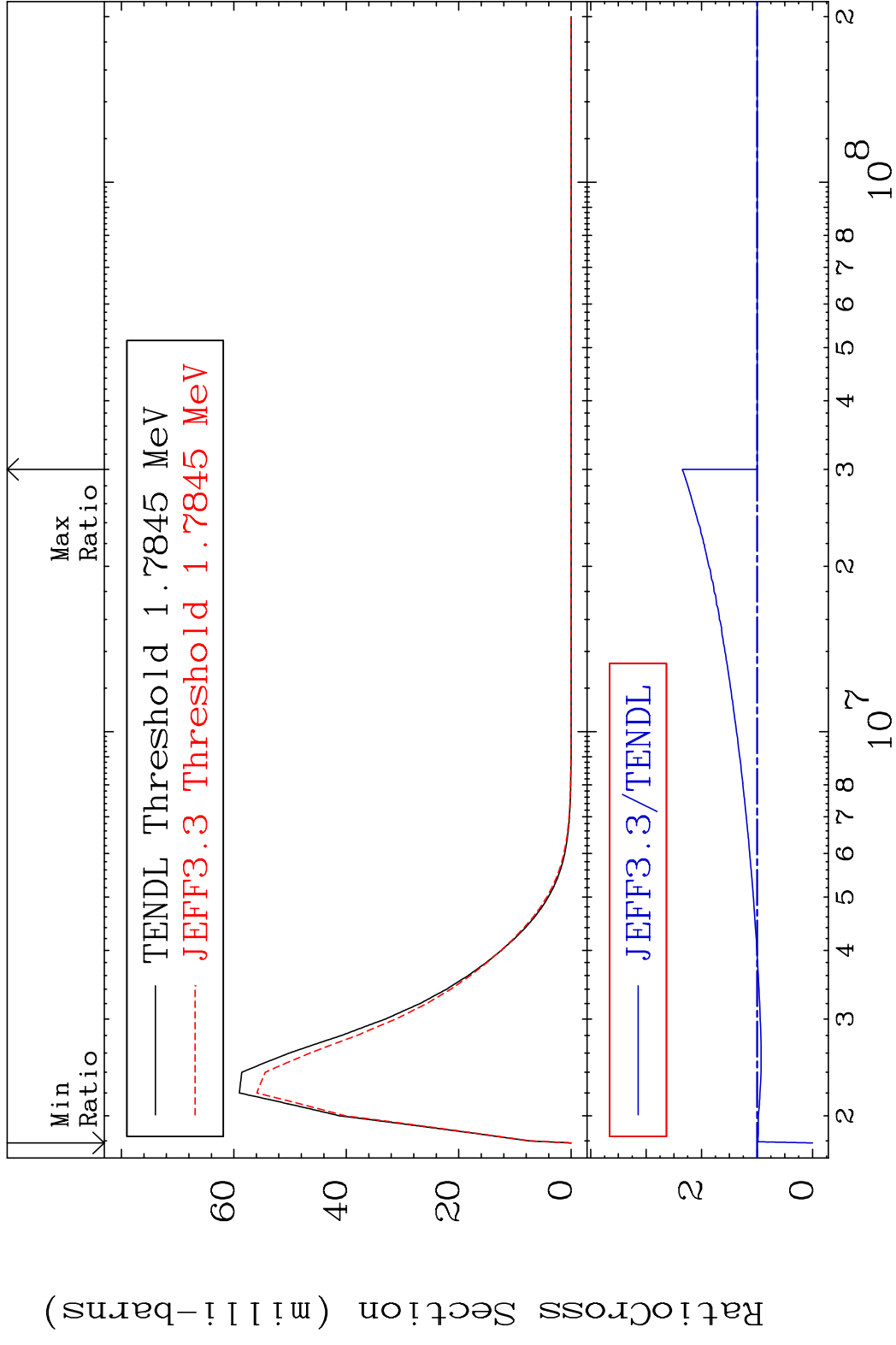


MAT 8037 MT= 66 (n, n') Level 80-Hg-200  
 Cross Section -7.334 To 134.7 %

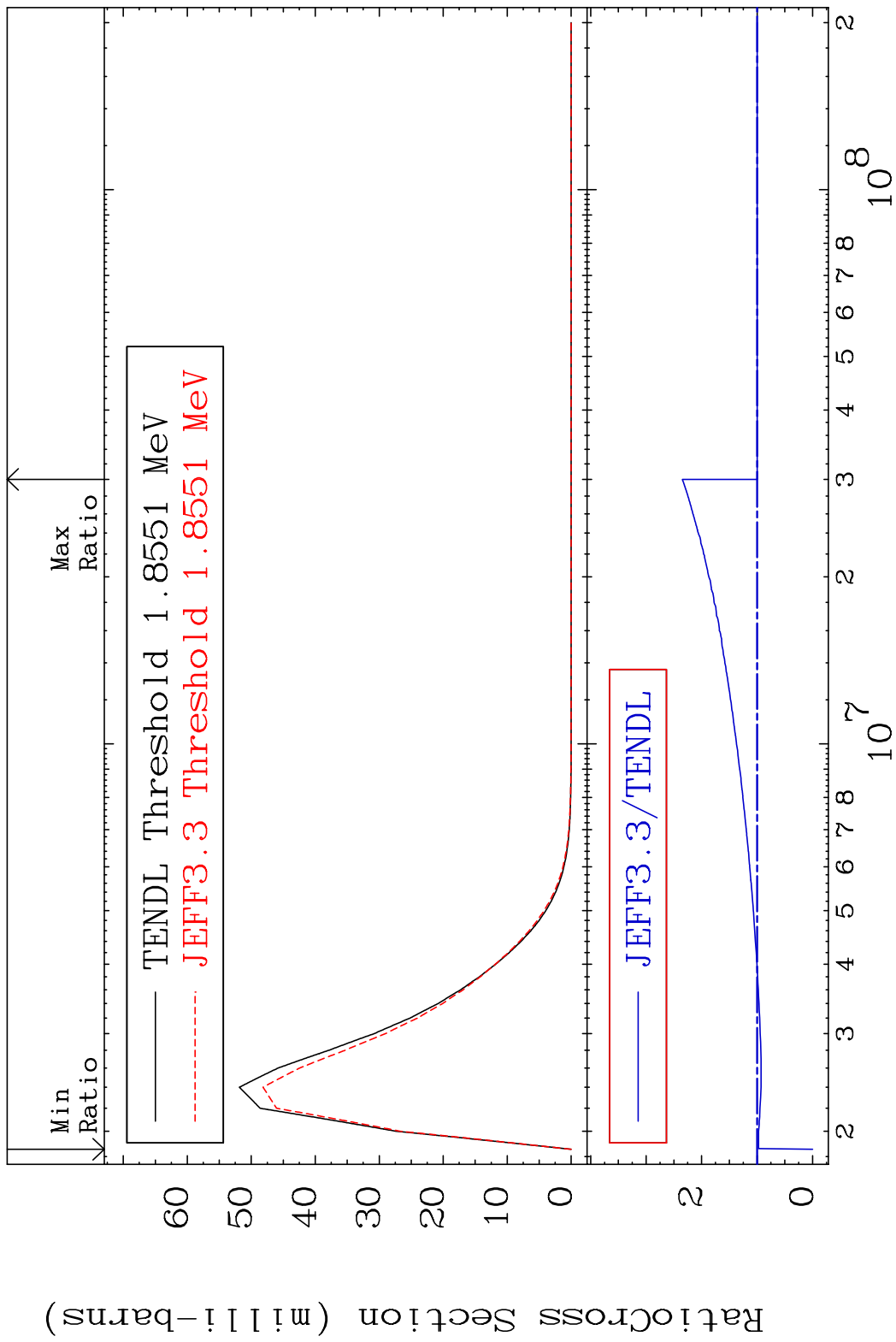


34 Incident Energy (eV) 80-Hg-200

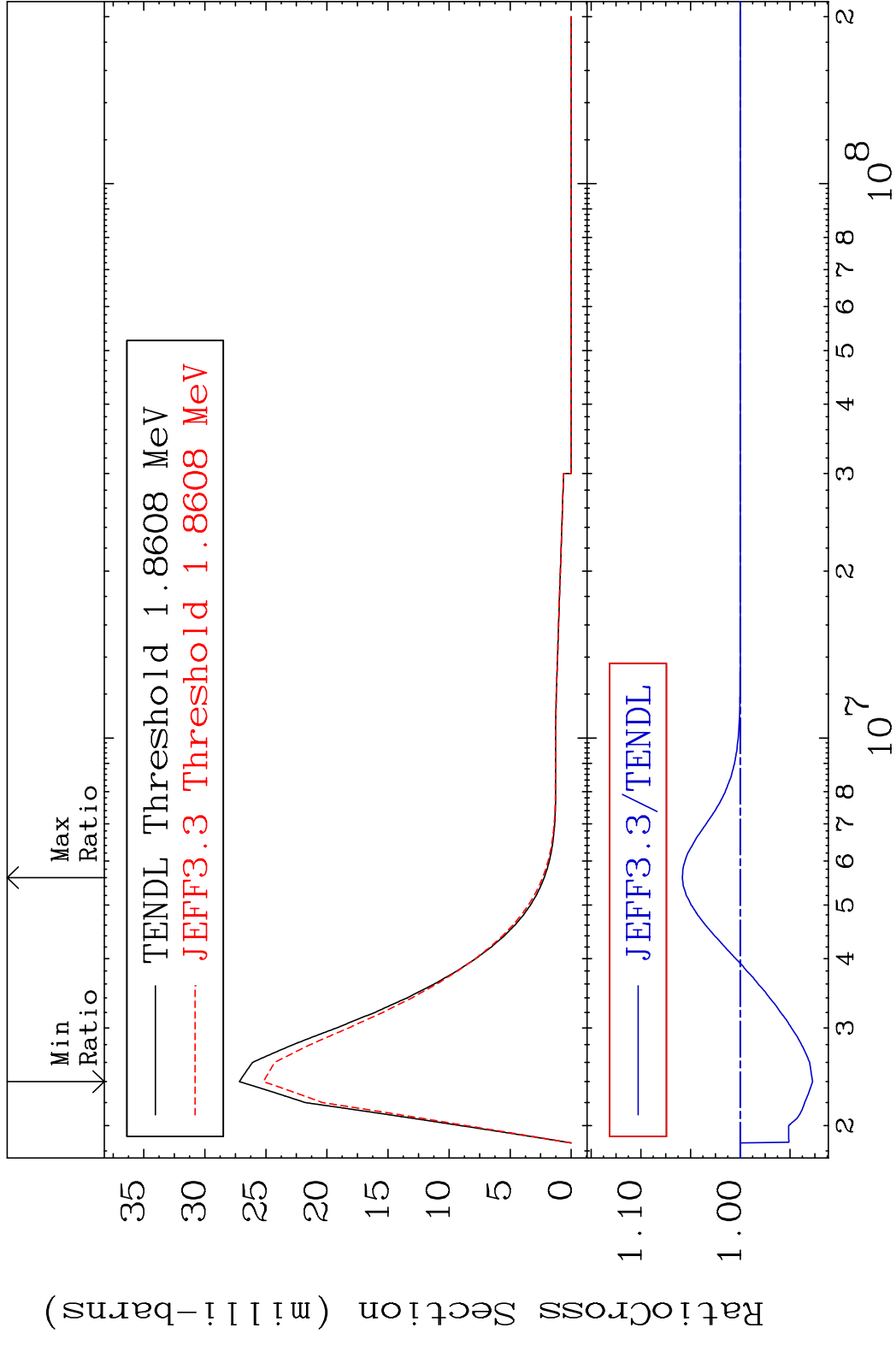
MAT 8037 MT= 67 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.7 %



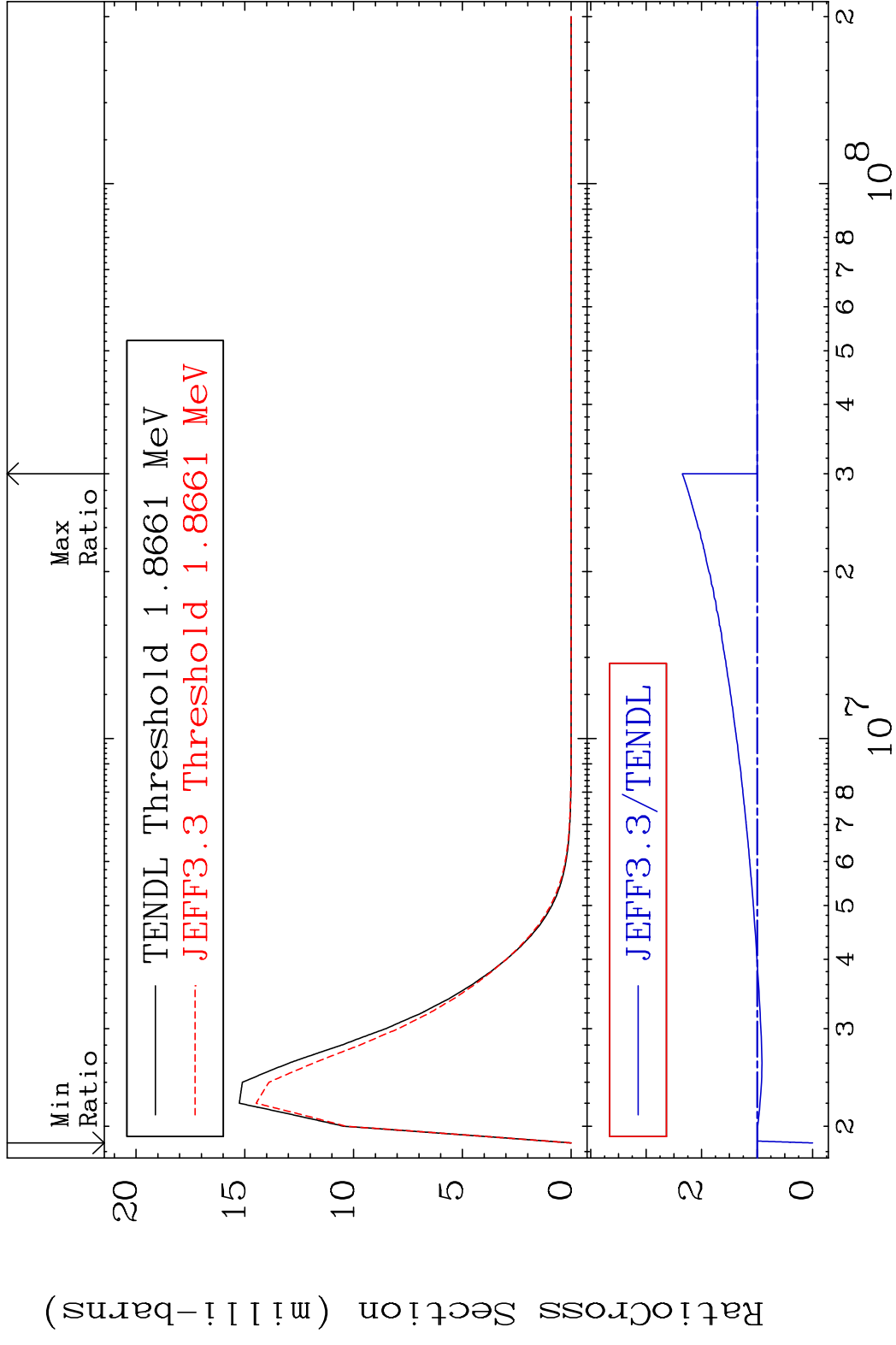
MAT 8037 MT= 68 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.7 %



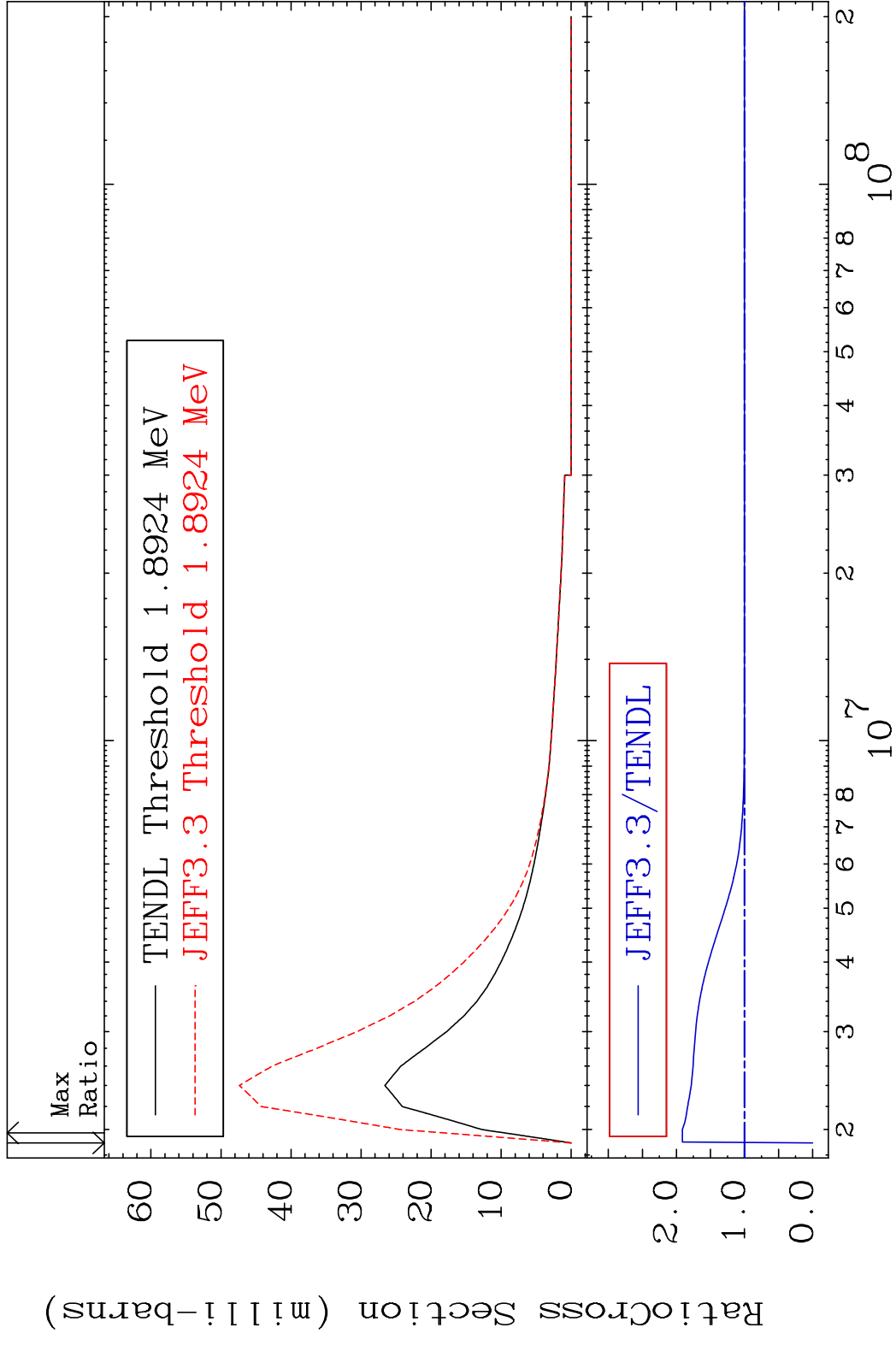
MAT 8037 MT= 69 (n, n') Level 80-Hg-200  
 Cross Section -7.268 To 5.825 %



MAT 8037 MT= 70 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 134.8 %

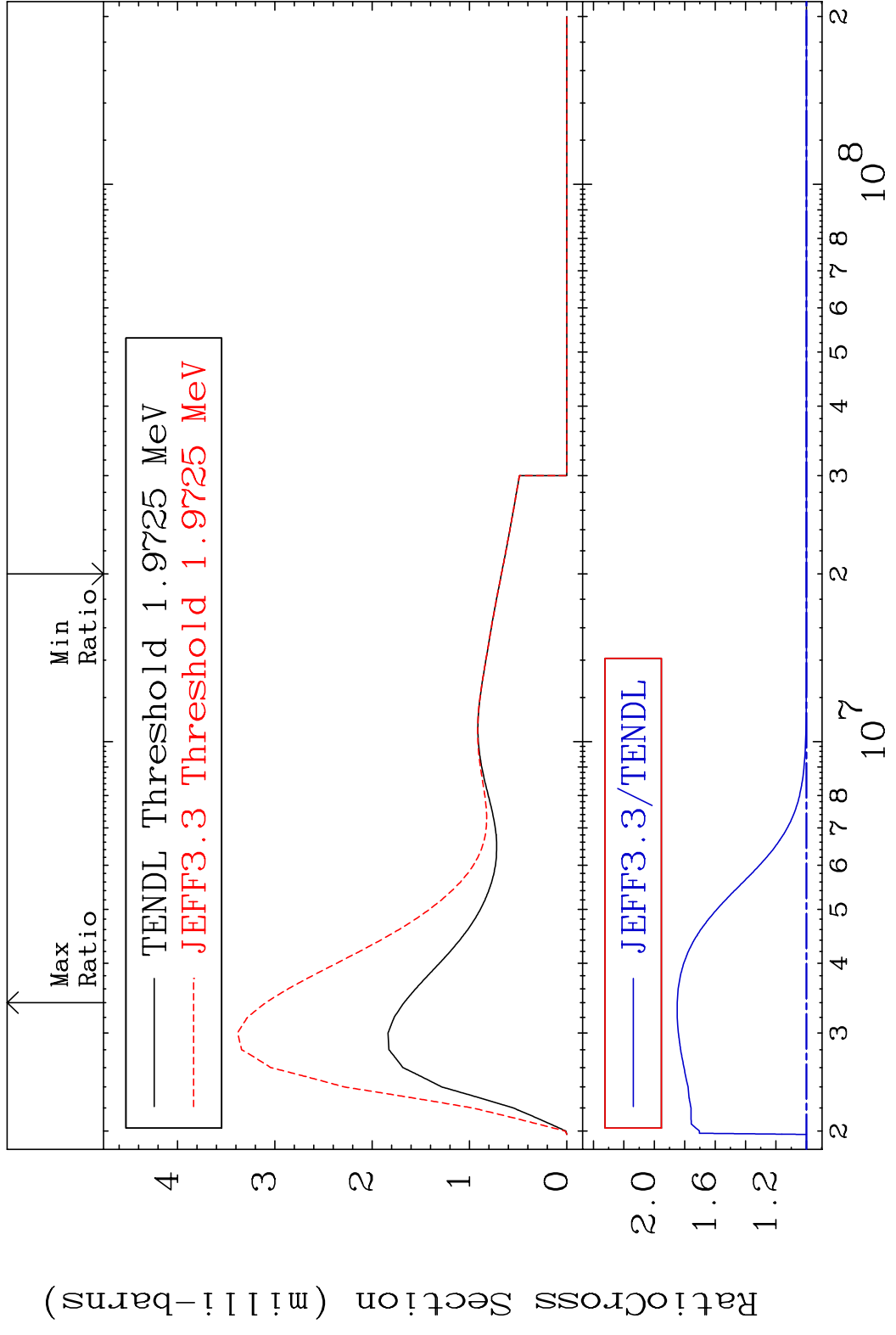


MAT 8037 MT= 71 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 91.27 %



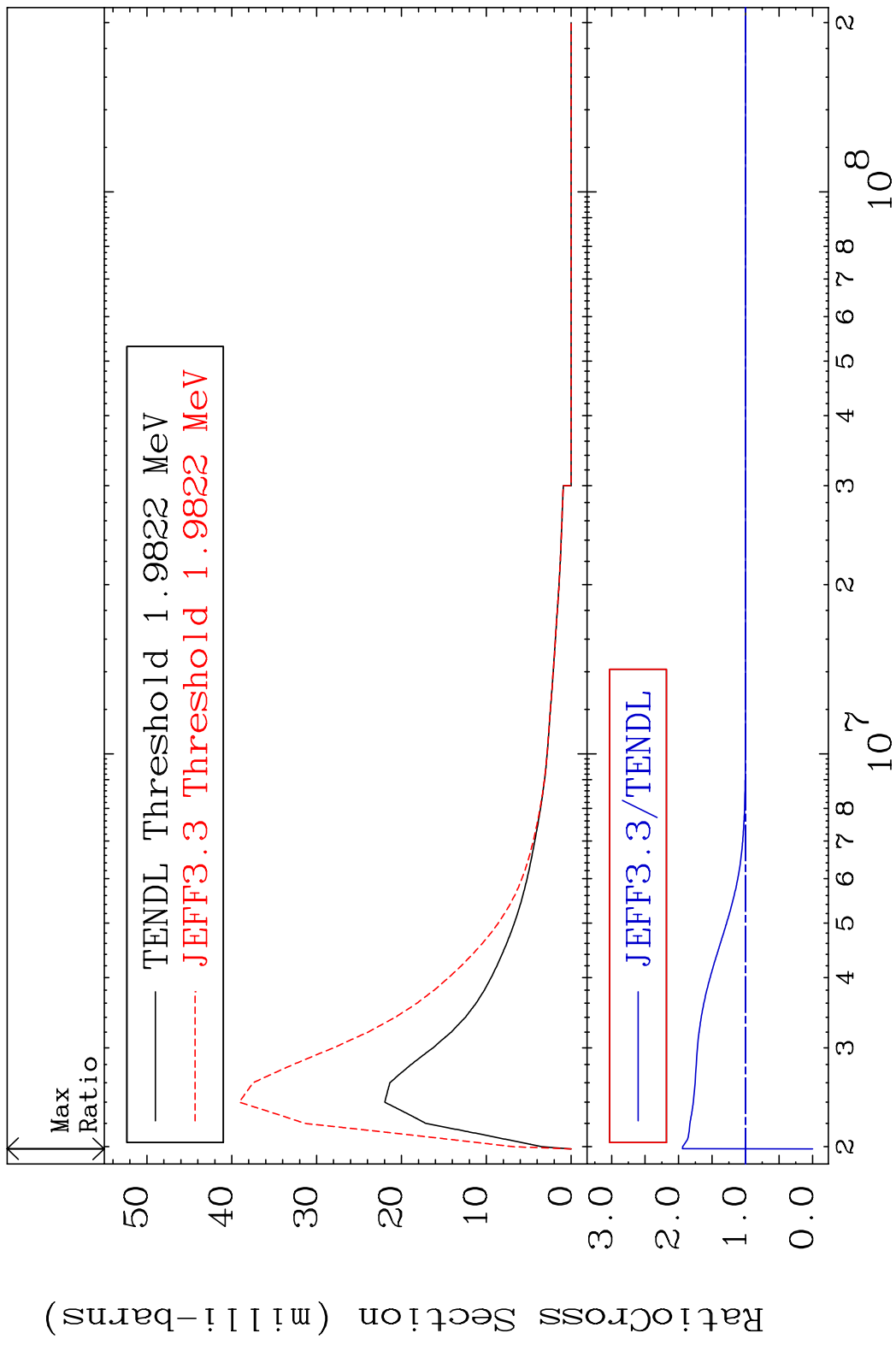


MAT 8037 MT= 72 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 84.97 %

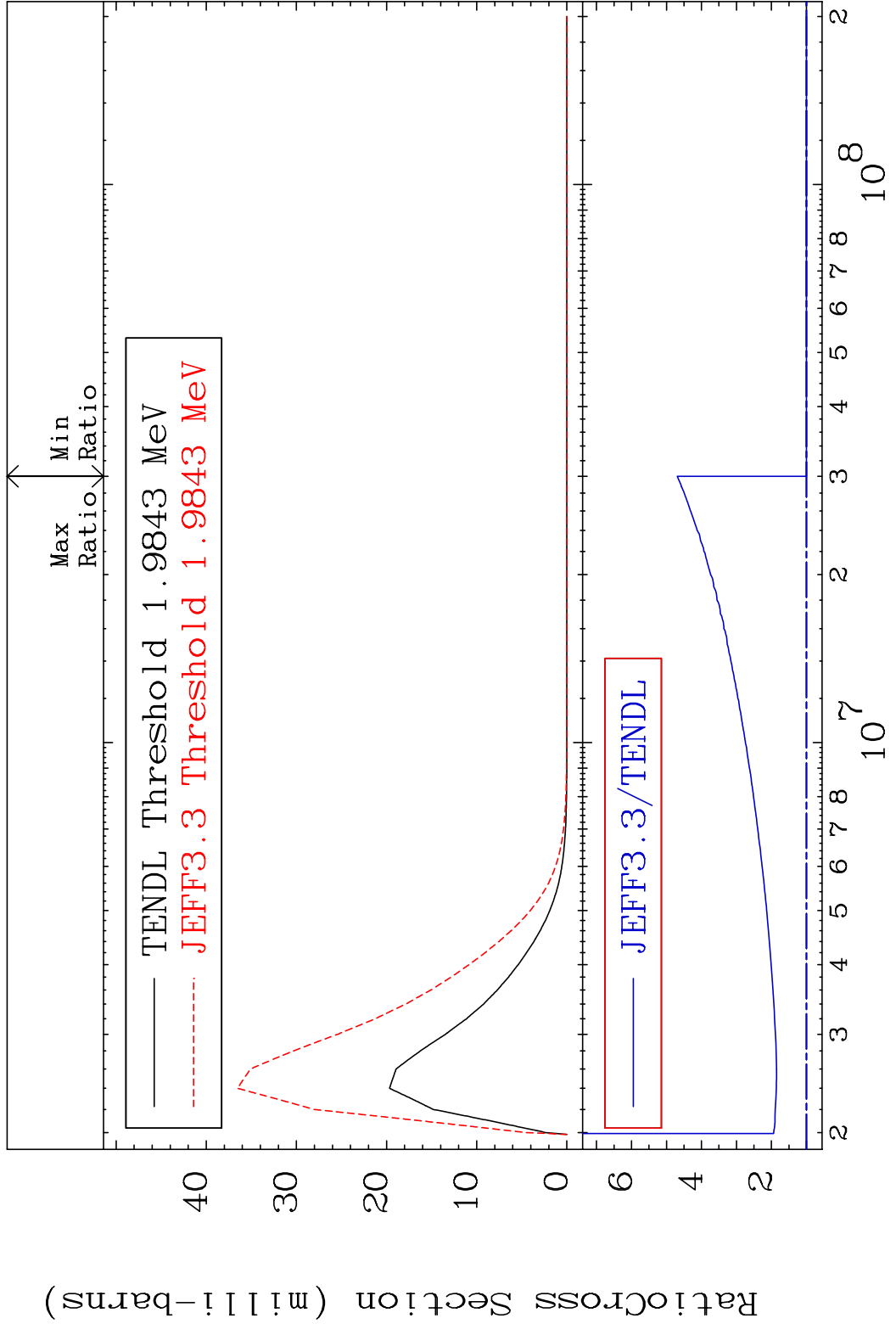


40 40 80-Hg-200

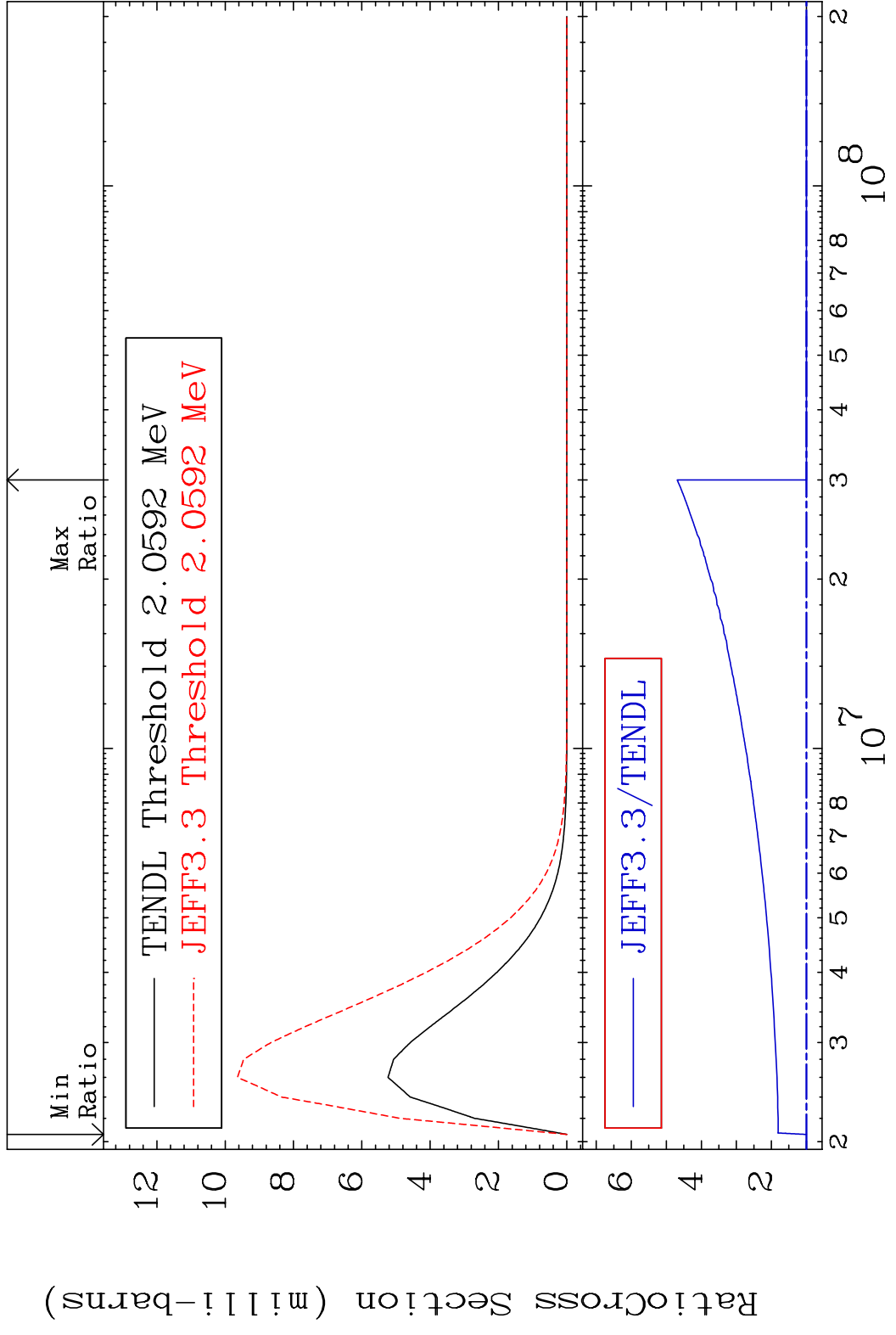
MAT 8037 MT= 73 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 94.36 %



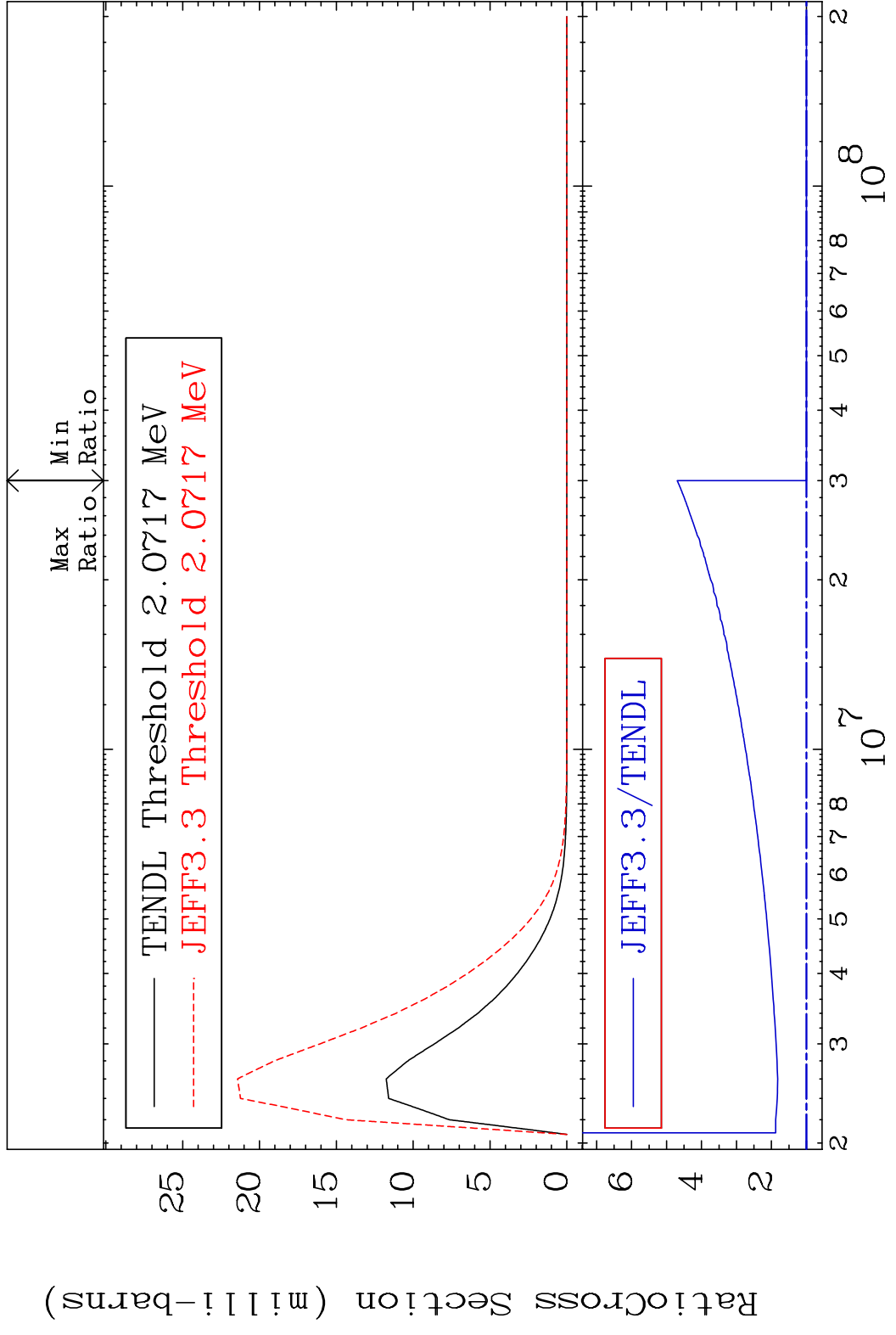
MAT 8037 MT= 74 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 369.4 %



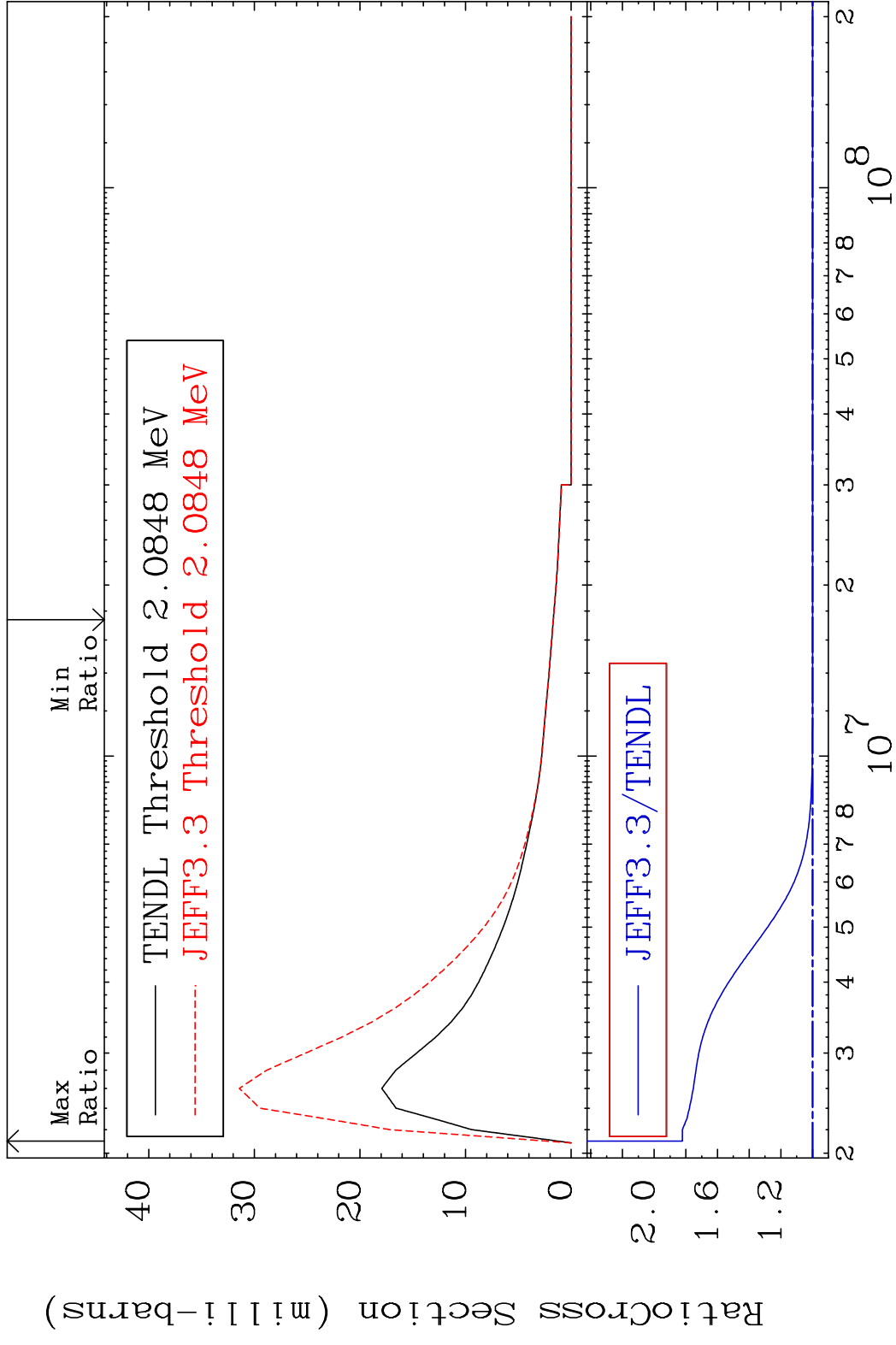
MAT 8037 MT= 75 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 369.0 %



MAT 8037 MT= 76 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 369.6 %

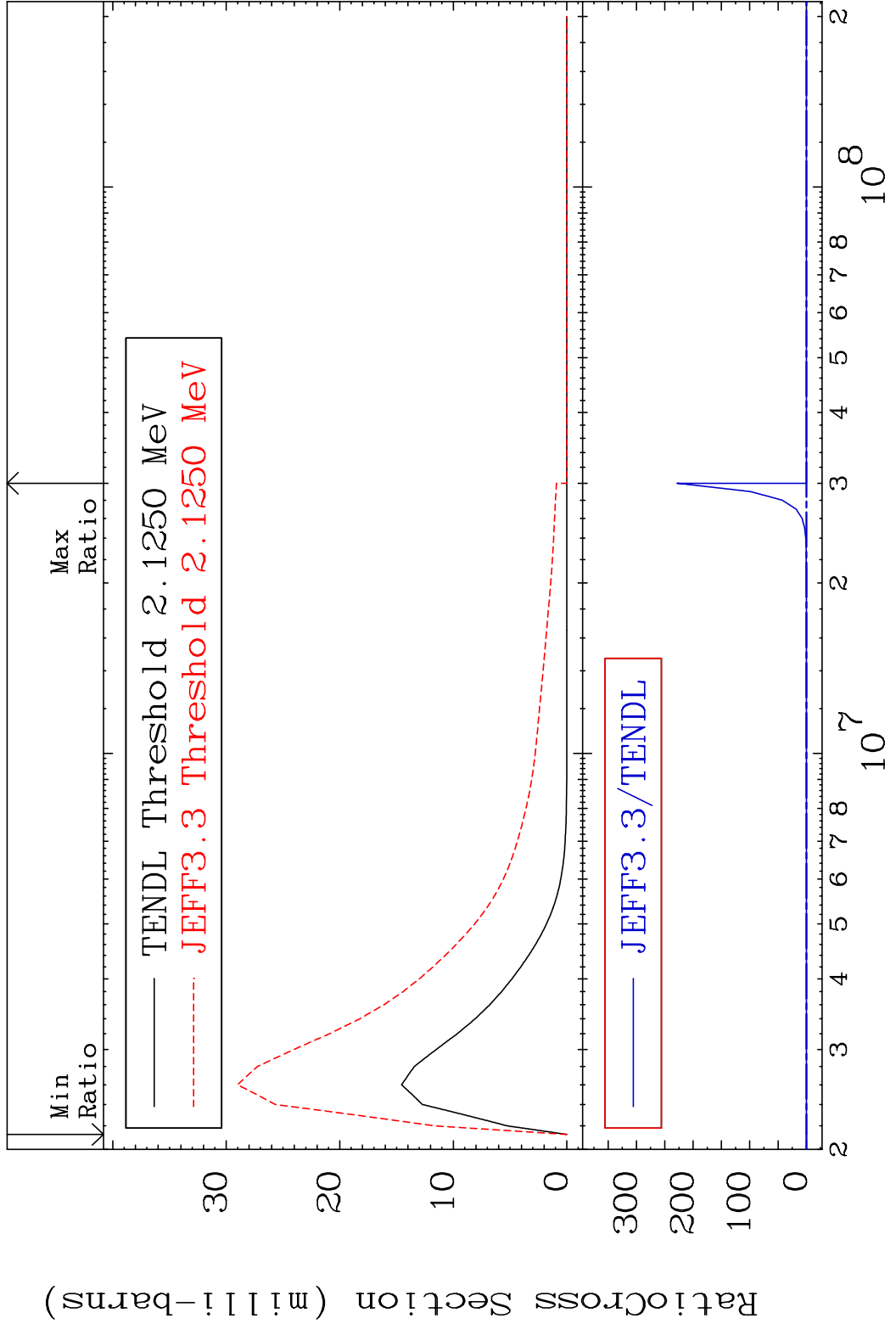


MAT 8037 MT= 77 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 82.19 %

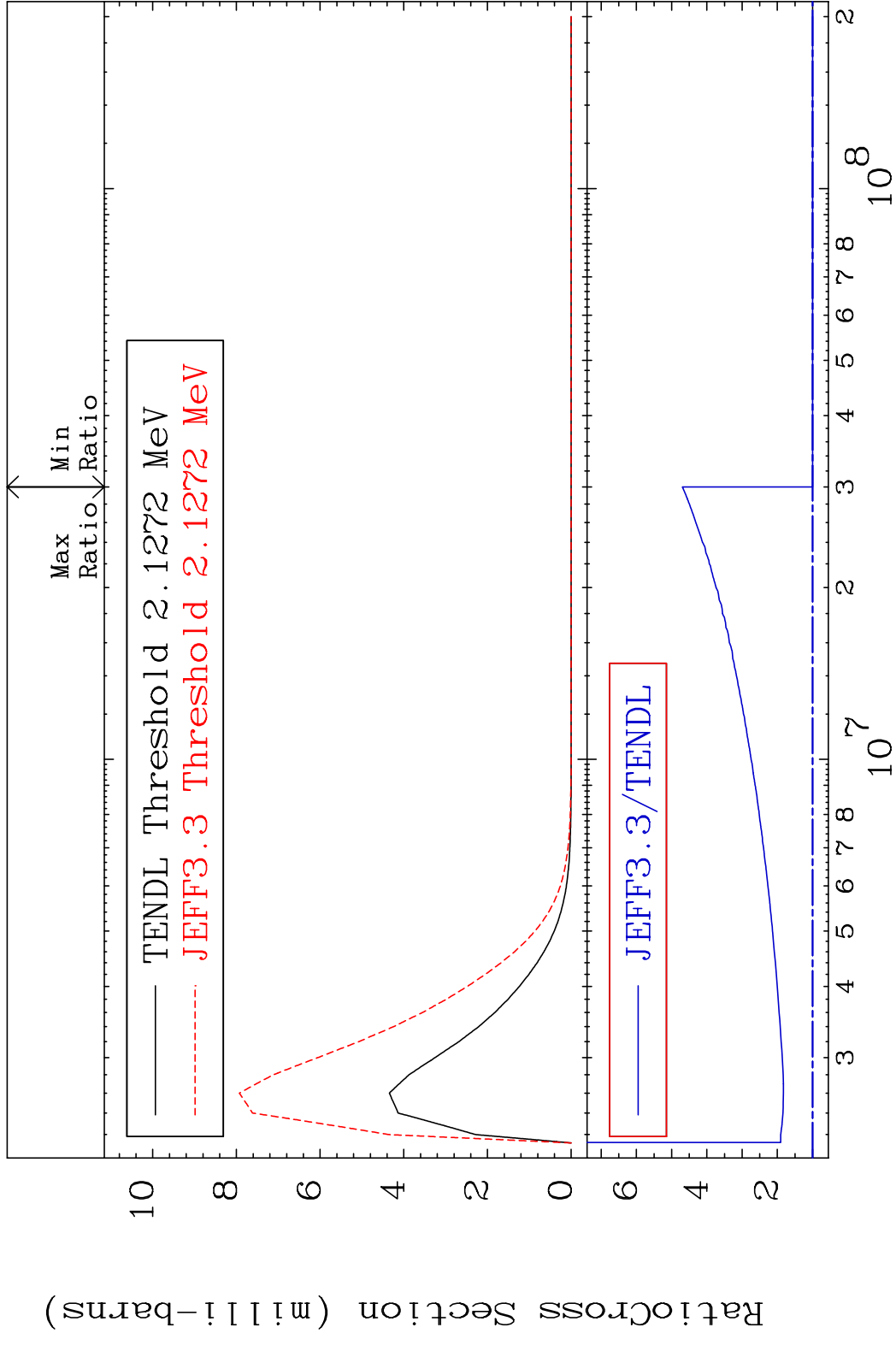


45 Incident Energy (eV) 80-Hg-200

MAT 8037 MT= 78 (n, n') Level 80-Hg-200  
 Cross Section -100.0 To 9999. %

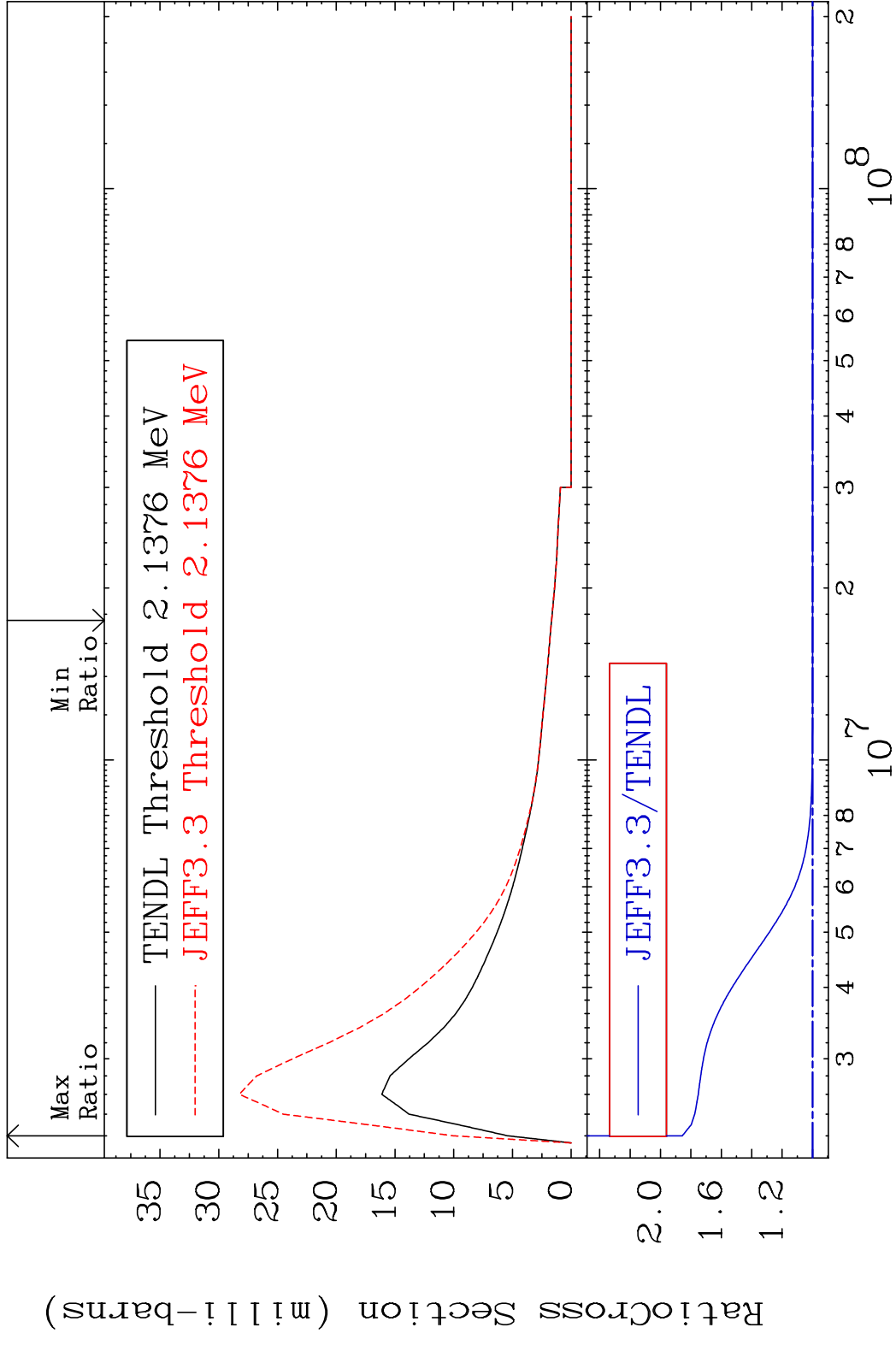


MAT 8037 MT= 79 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 369.6 %

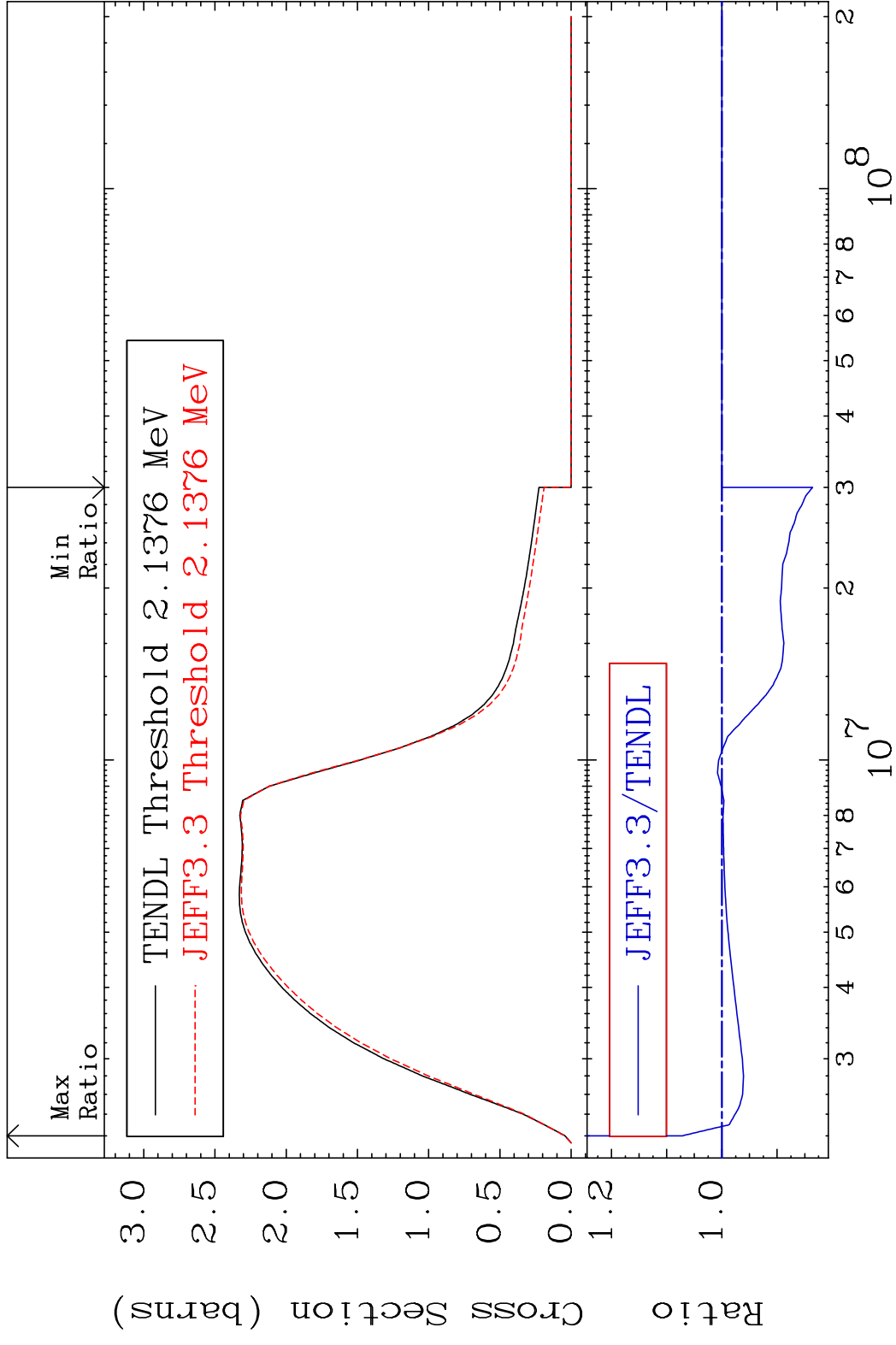




MAT 8037 MT= 80 (n, n') Level 80-Hg-200  
 Cross Section 0.000 To 85.63 %



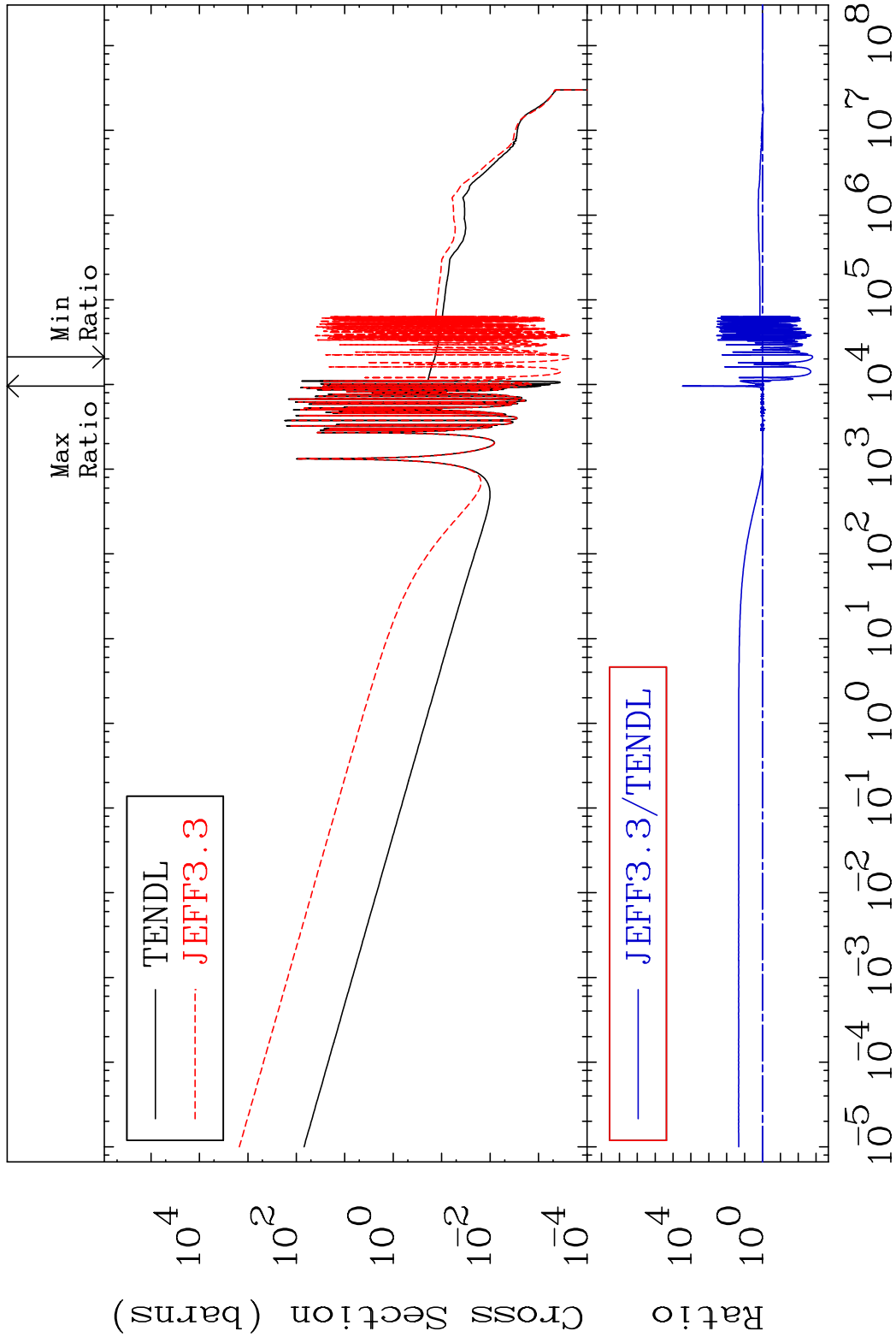
MAT 8037 (n,n') Continuum 80-Hg-200  
 Cross Section -16.41 To 7.166 %



MAT 8037

(n,  $\gamma$ )

Cross Section      -99.84 To 9999. %      80-Hg-200

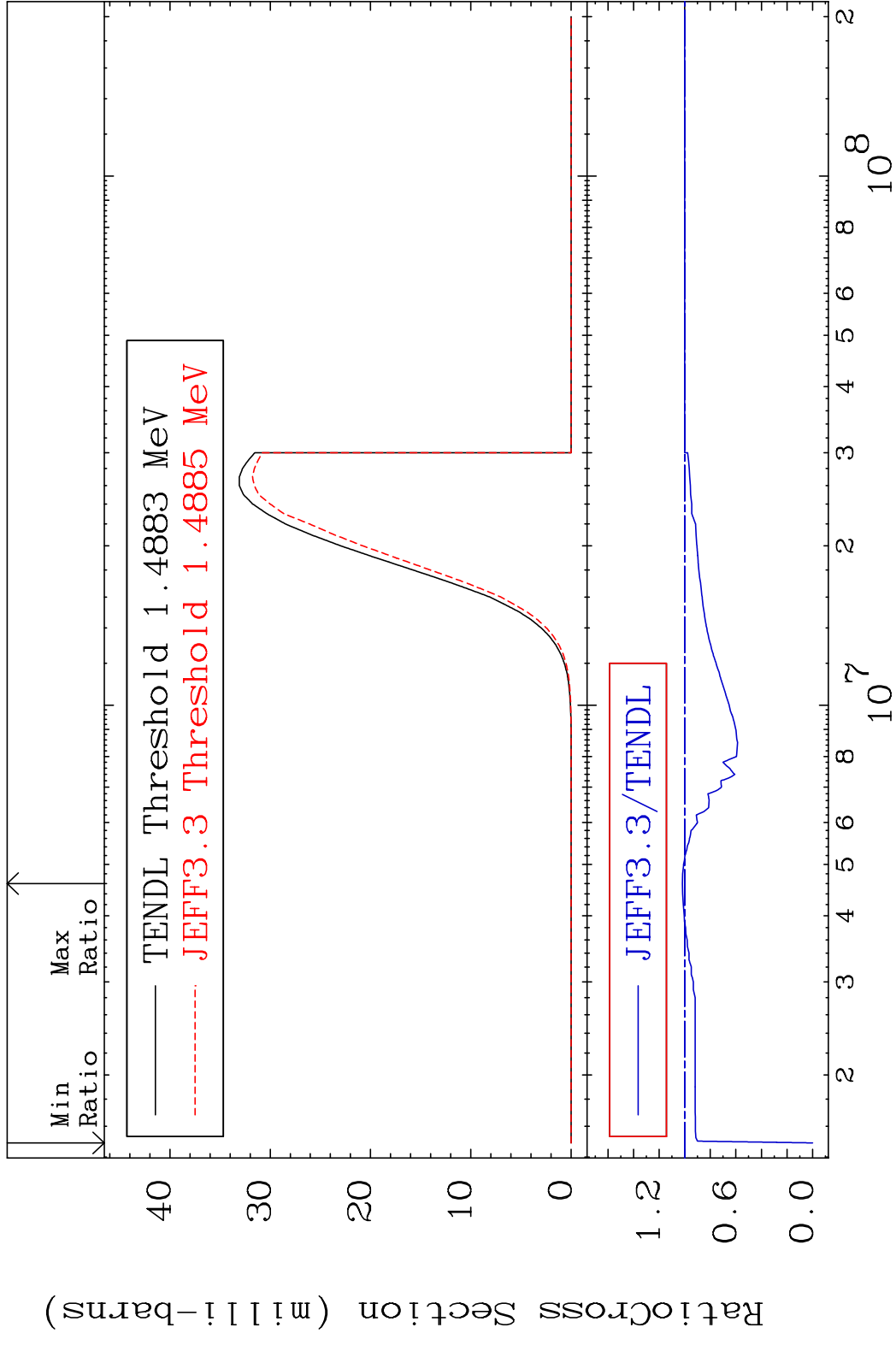


50

Incident Energy (eV)

80-Hg-200

MAT 8037 (n,p) 80-Hg-200  
 Cross Section -100.0 To 1.842 %

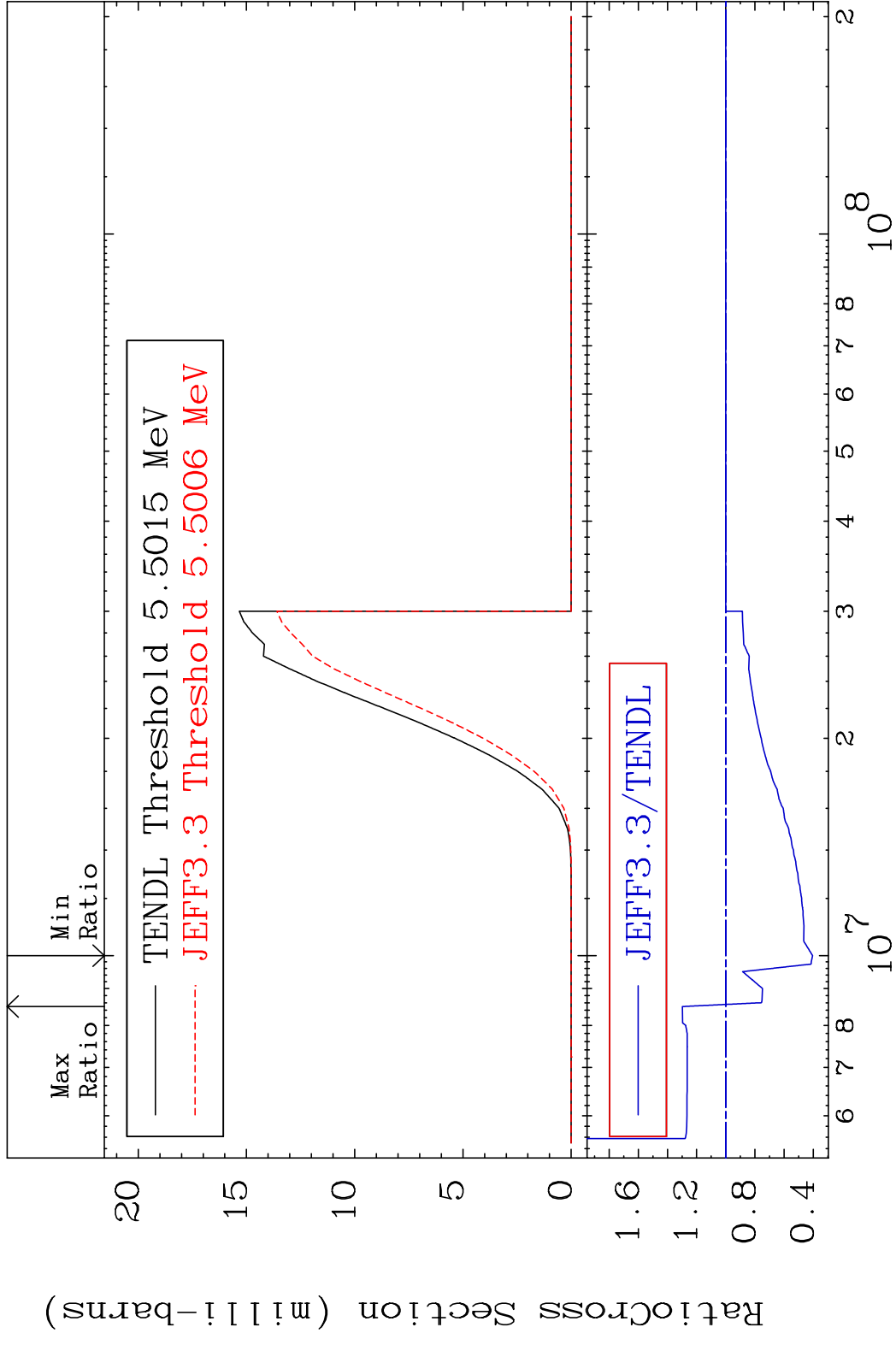


MAT 8037

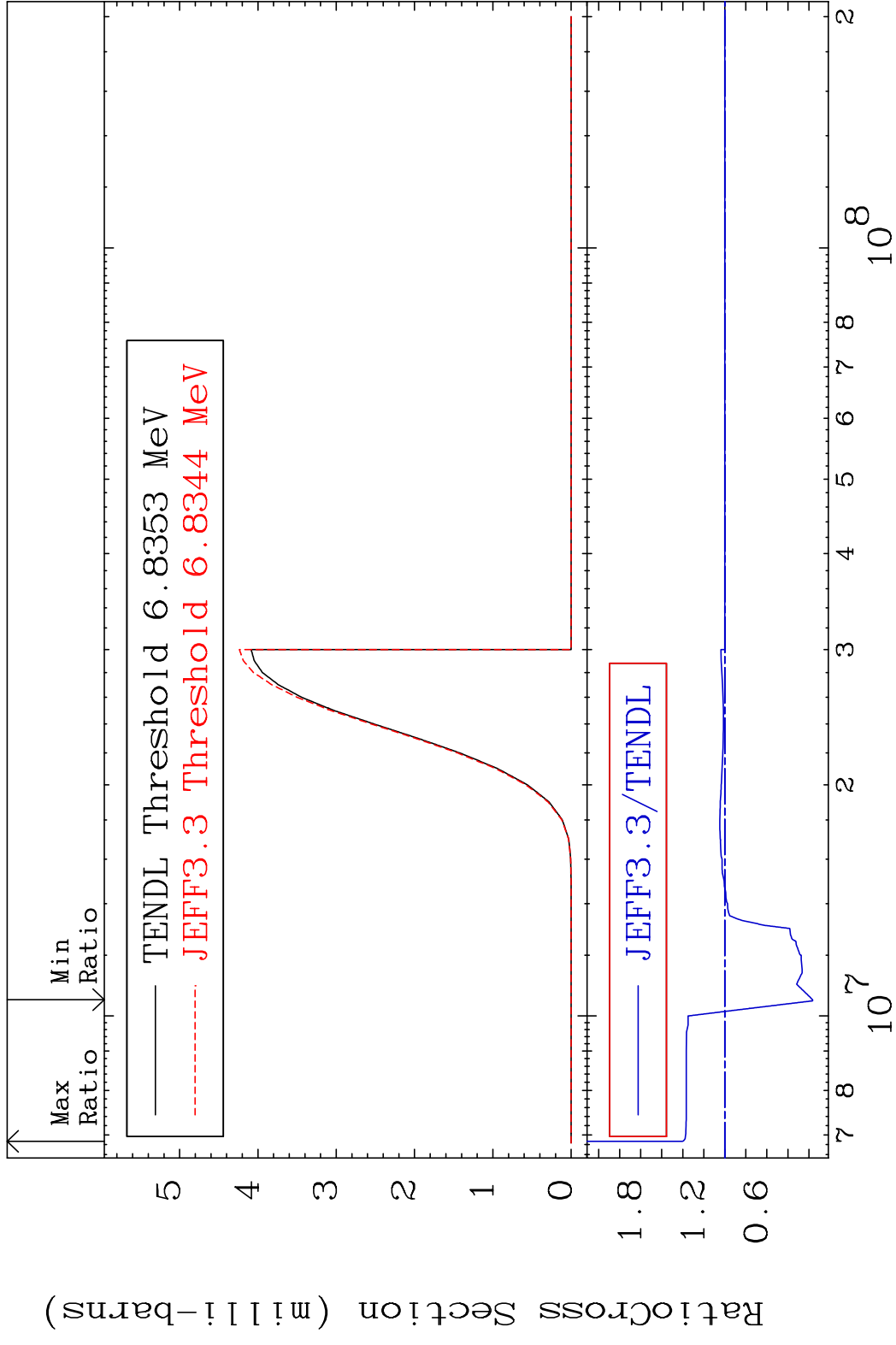
(n, d)

80-Hg-200

Cross Section -59.45 To 29.79 %



MAT 8037 (n, t) 80-Hg-200  
 Cross Section -83.44 To 40.38 %

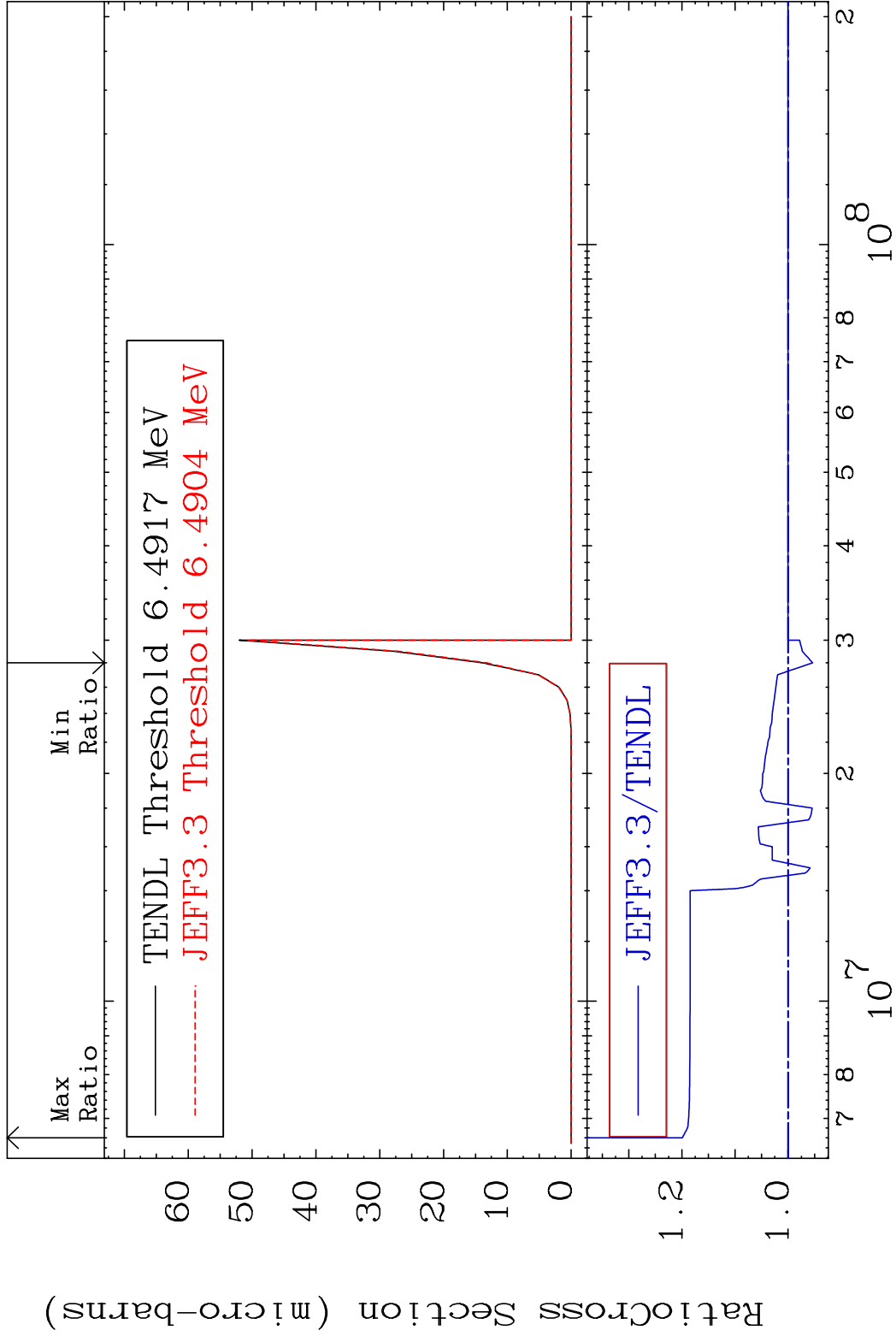


MAT 8037

(n, He-3)

80-Hg-200

Cross Section -4.613 To 19.92 %



54

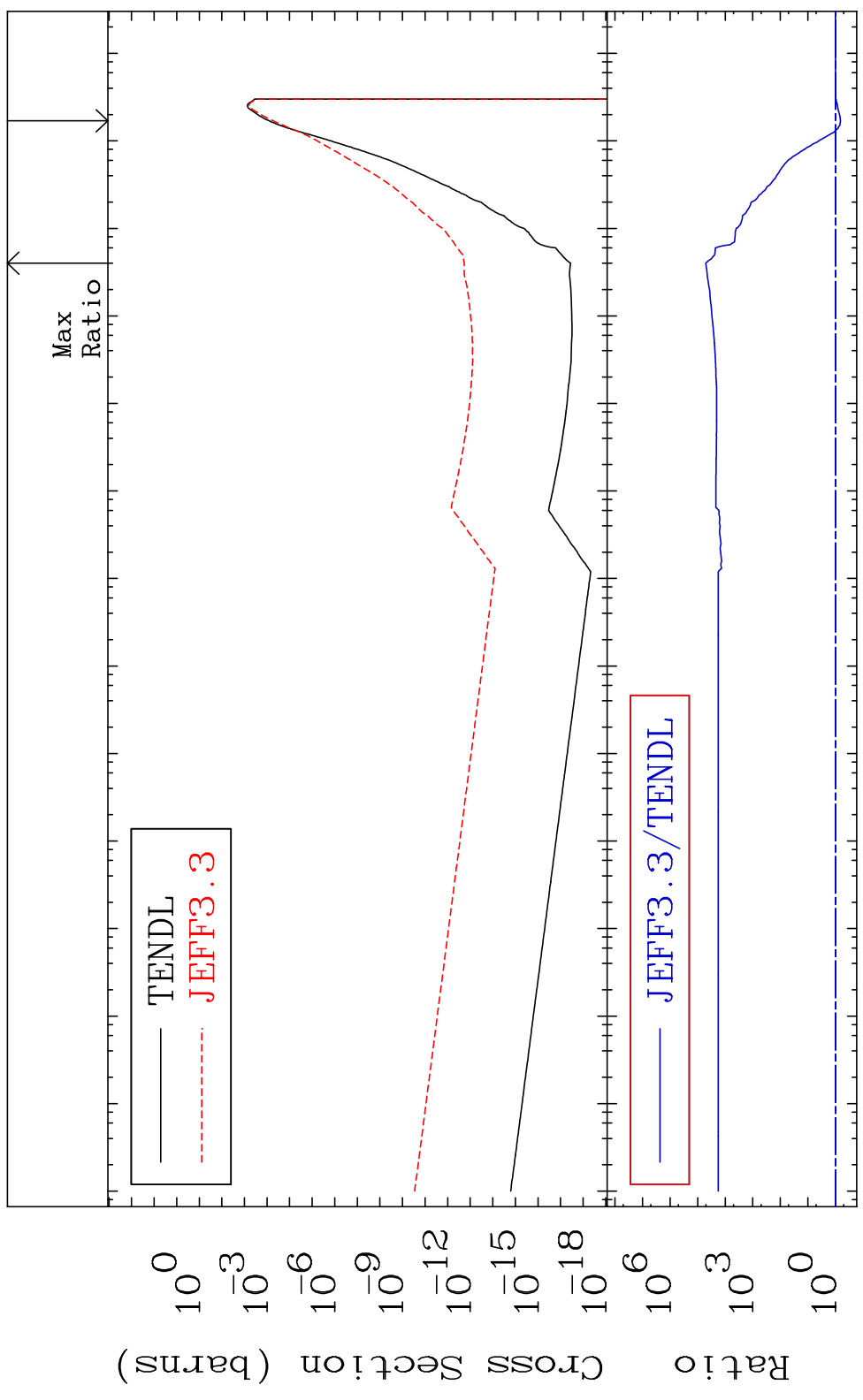
Incident Energy (eV)

80-Hg-200

MAT 8037

(n,  $\alpha$ )

Cross Section -33.65 To 9999. %  
80-Hg-200



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>

55

Incident Energy (eV)

80-Hg-200

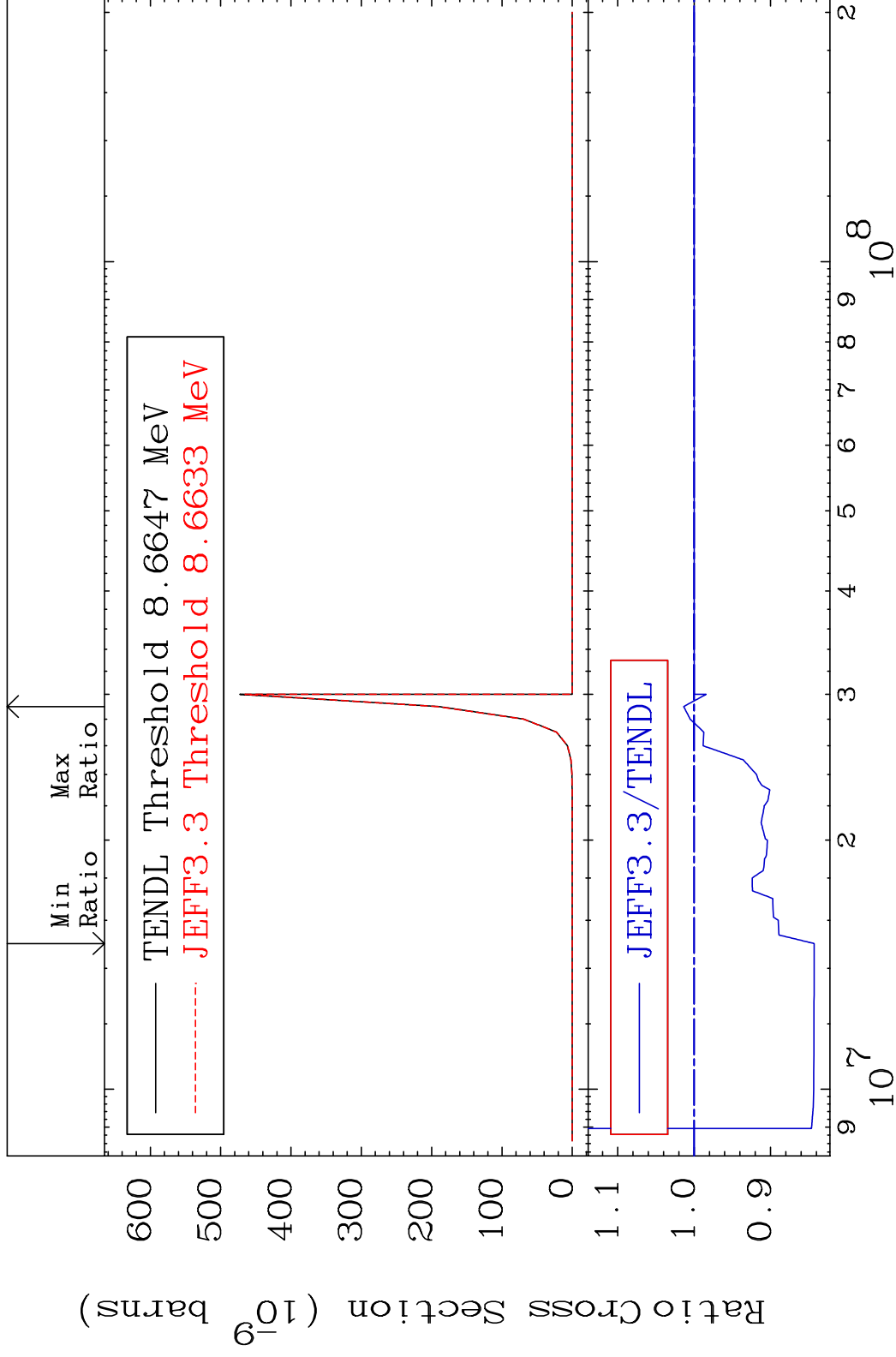


MAT 8037

(n,2p)

80-Hg-200

Cross Section -15.71 To 1.373 %



56

Incident Energy (eV)

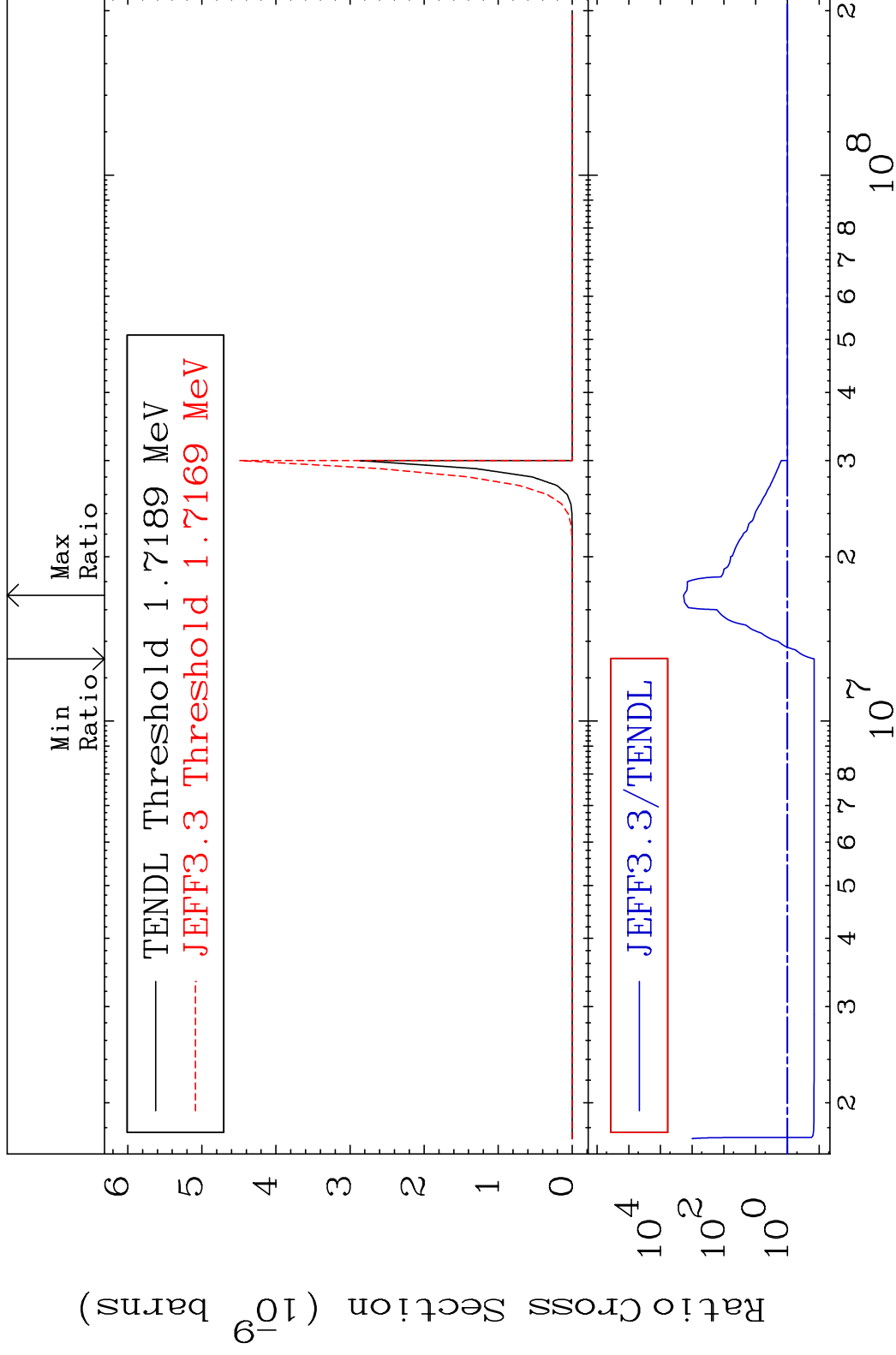
80-Hg-200

MAT 8037

(n,p)  $\alpha$

80-Hg-200

Cross Section -85.55 To 9999. %

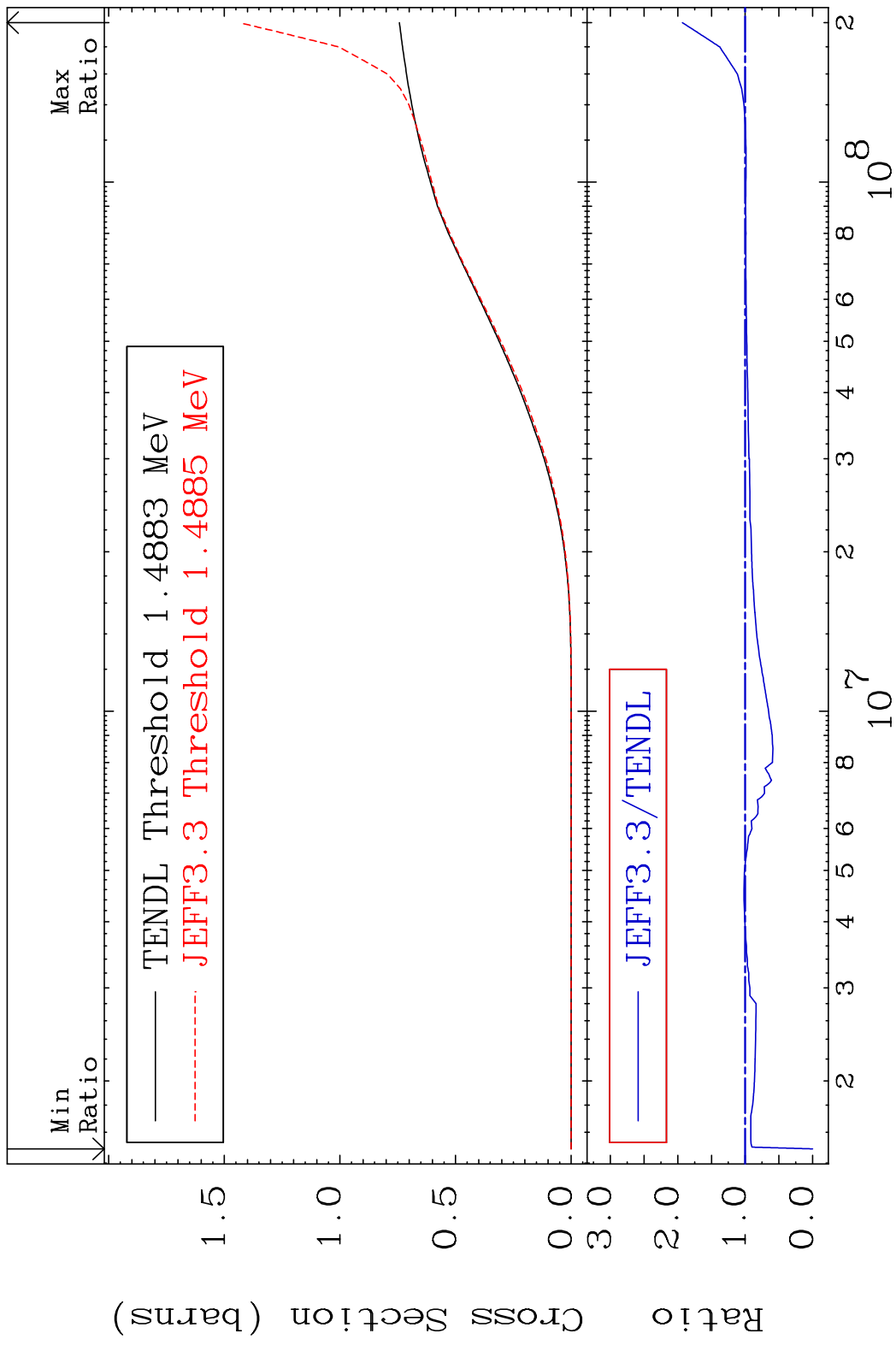


57

Incident Energy (eV)

80-Hg-200

MAT 8037 Hydrogen Production 80-Hg-200  
 Cross Section -100.0 To 93.22 %



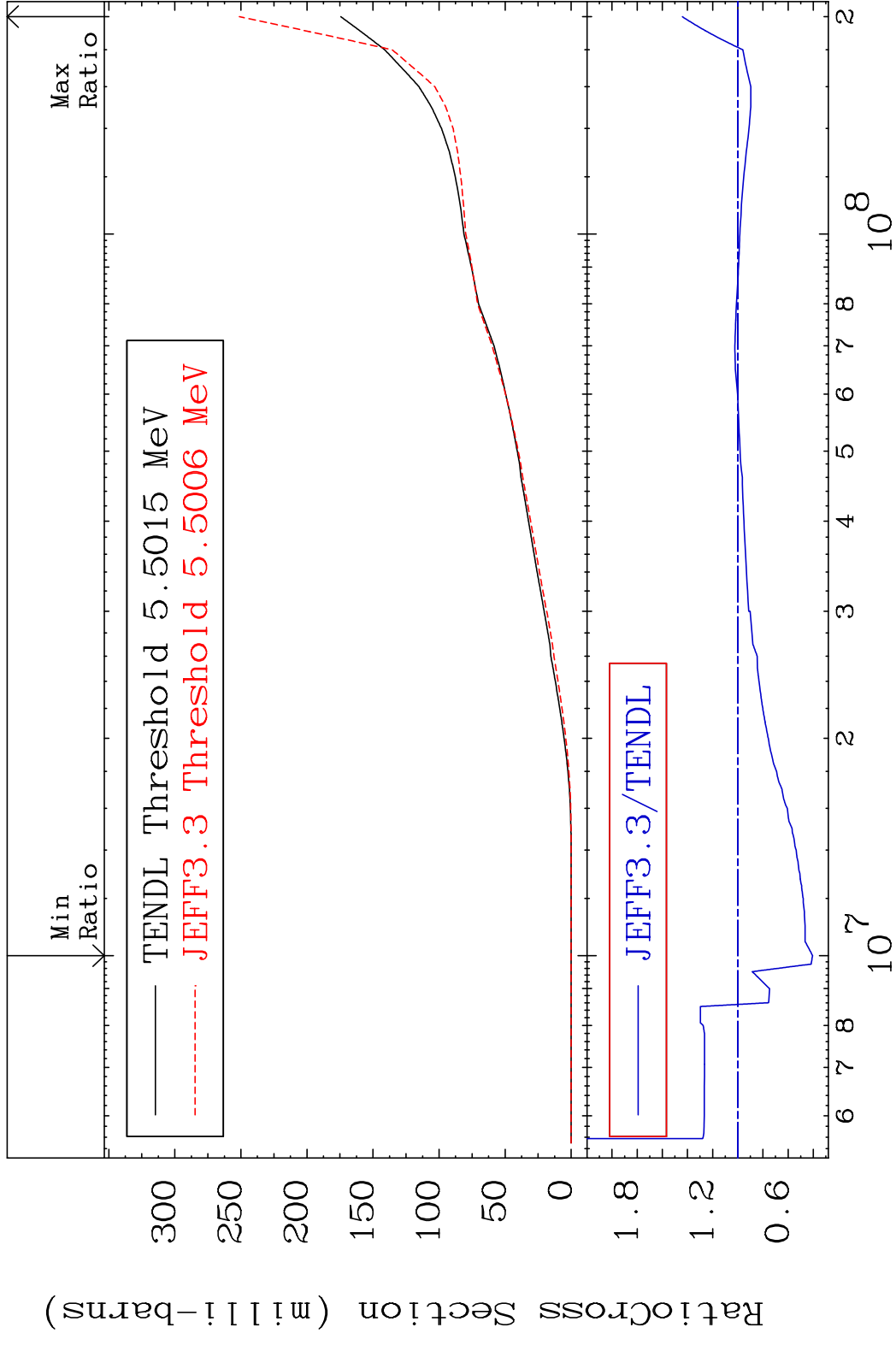
58 Incident Energy (eV) 80-Hg-200

MAT 8037

Deuterium Production

80-Hg-200

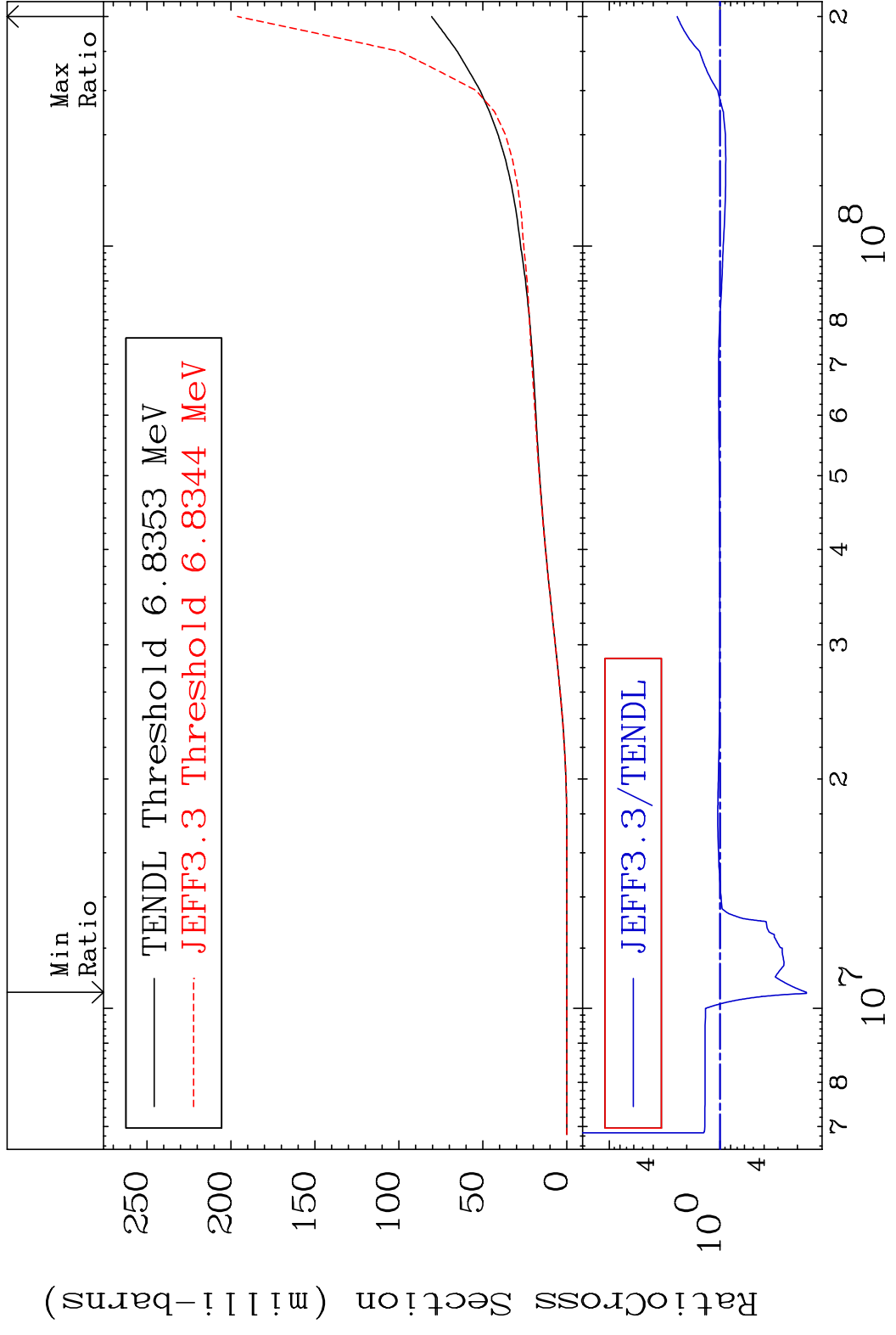
Cross Section -59.45 To 44.07 %



MAT 8037

Tritium Production  
Cross Section -83.44 To 143.5 %

80-Hg-200



60

Incident Energy (eV)

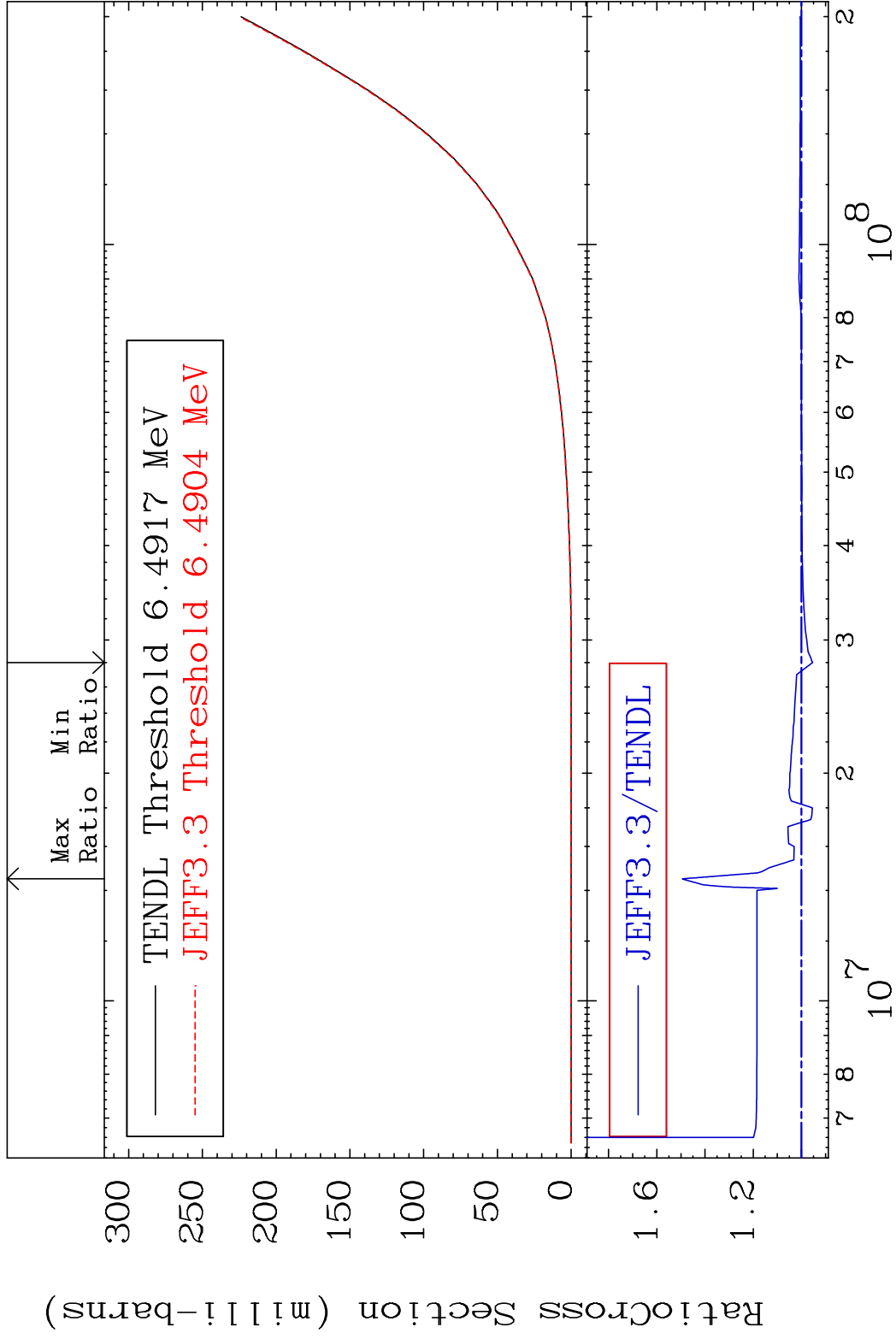
80-Hg-200

MAT 8037

He-3 Production

80-Hg-200

Cross Section -4.612 To 49.40 %



61

Incident Energy (eV)

80-Hg-200

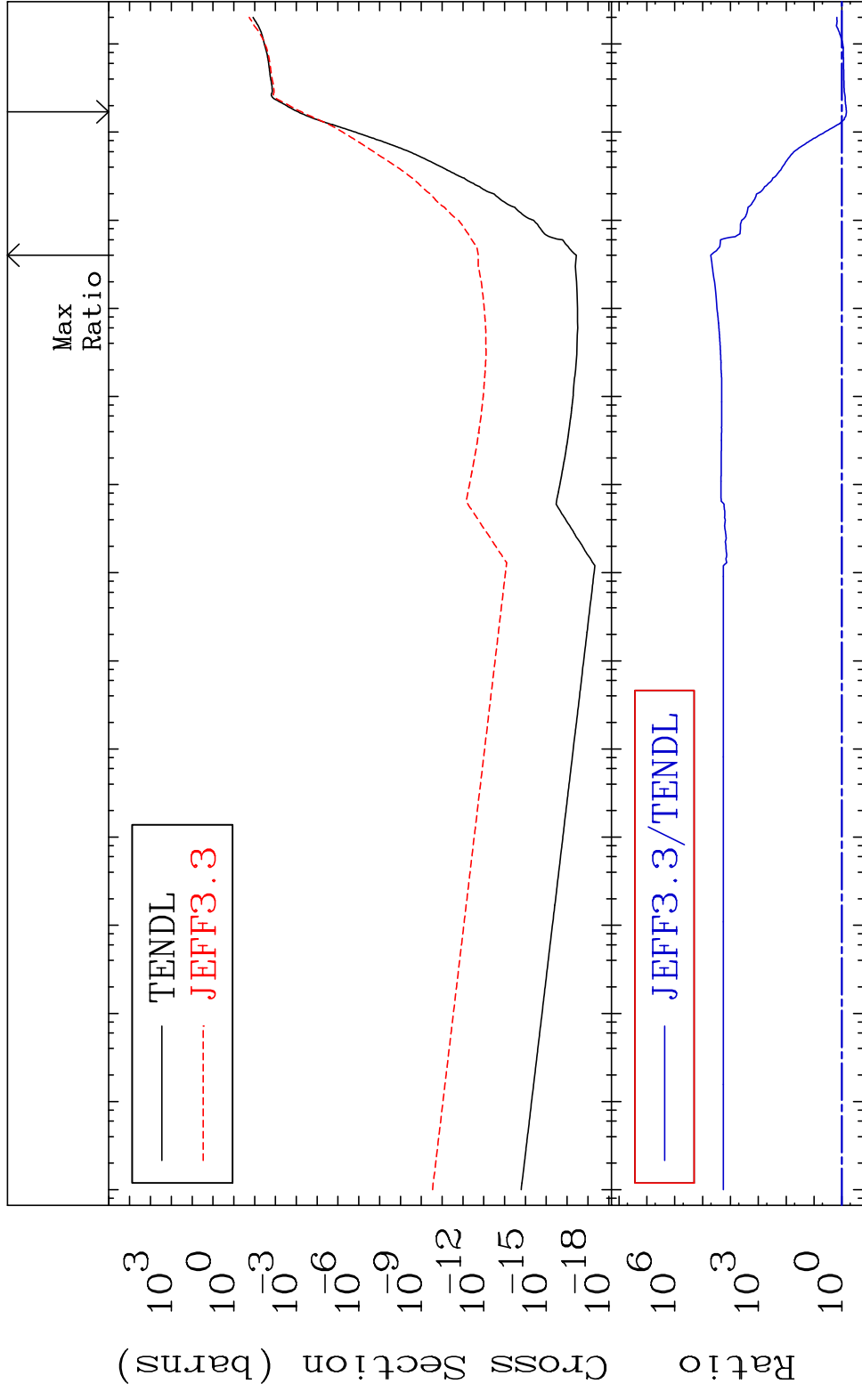
MAT 8037

He-4 Production

80-Hg-200

Cross Section

-30.58 To 9999. %

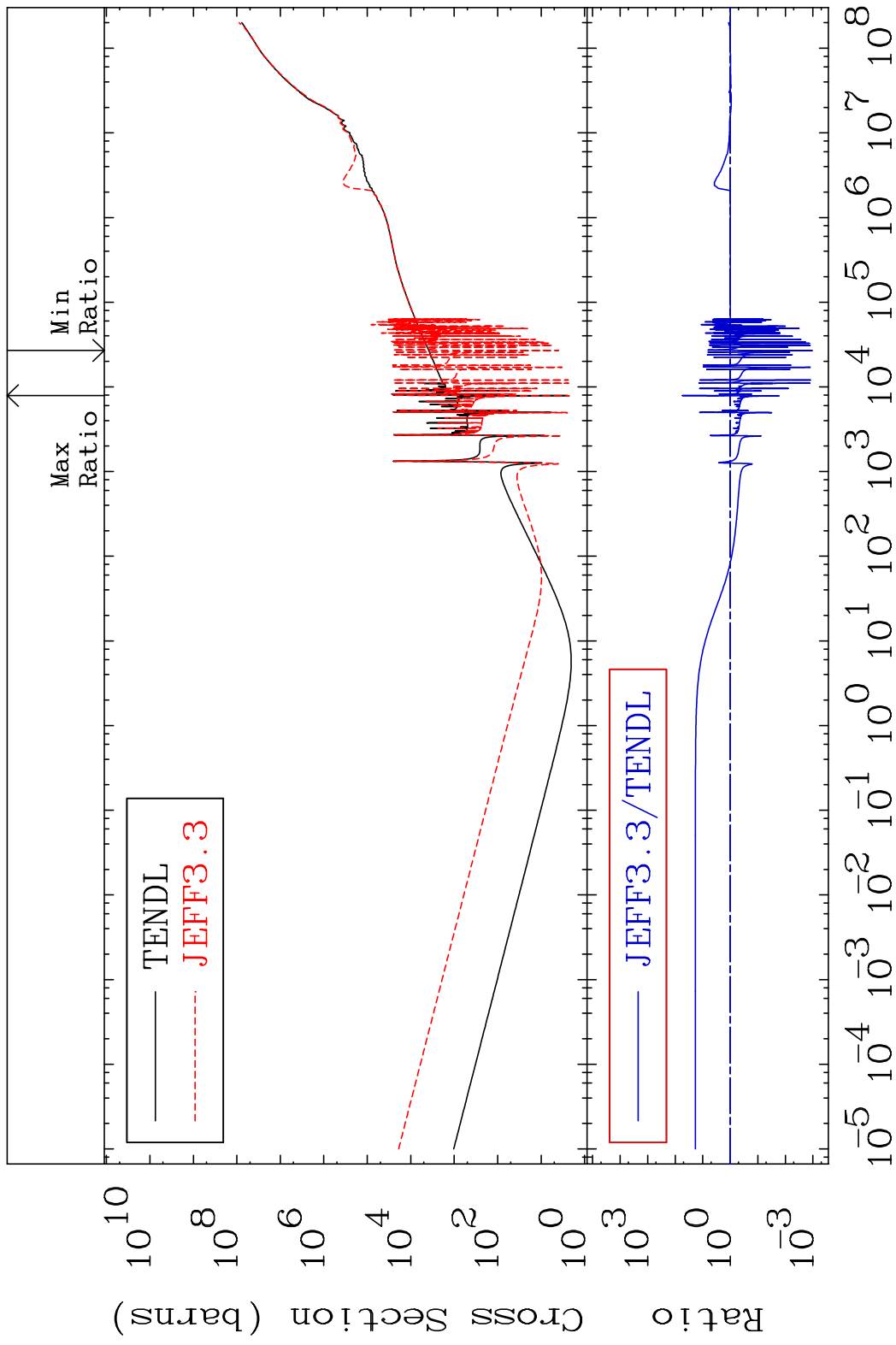


62

Incident Energy (eV)

80-Hg-200

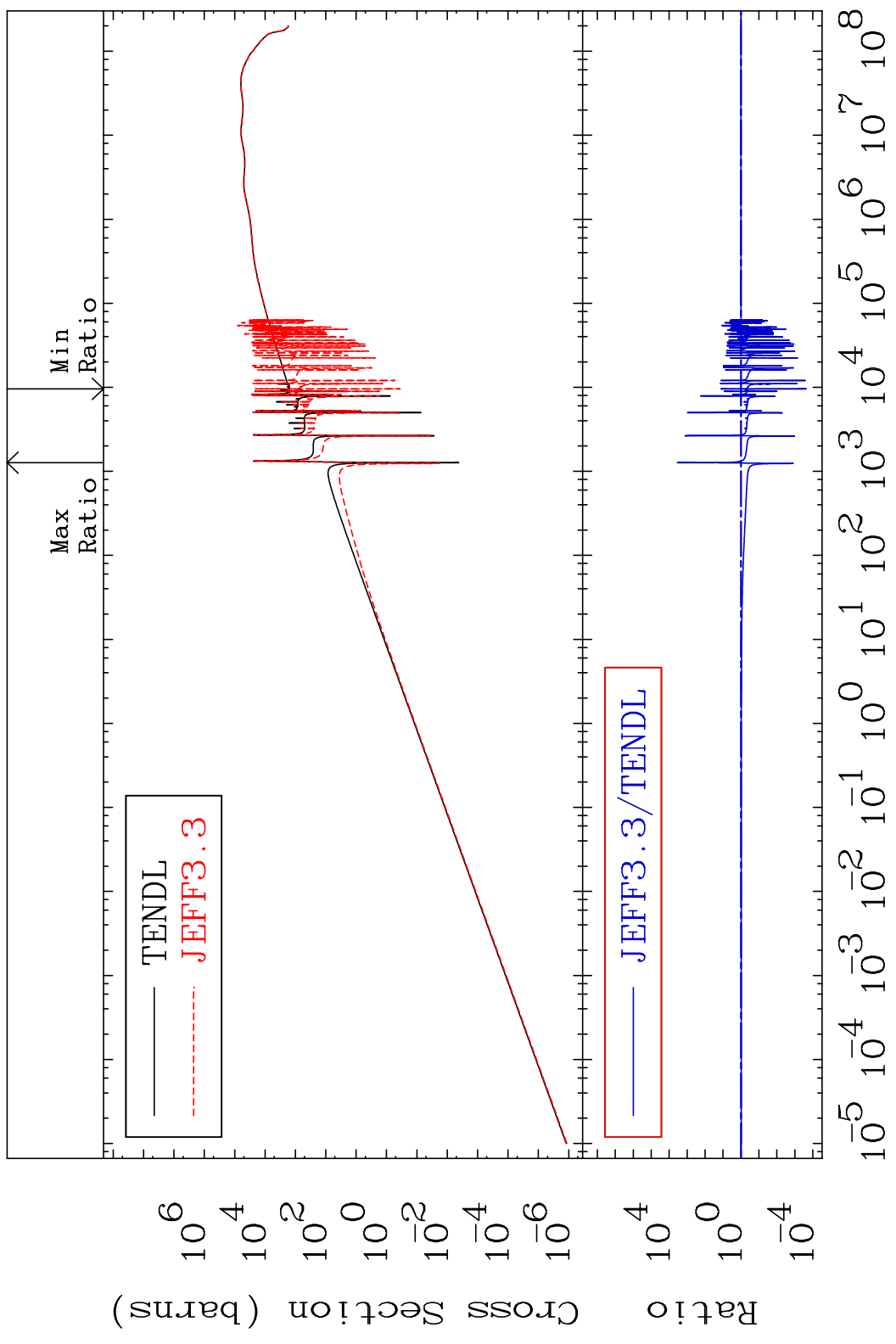
MAT 8037 Kerma total (eV-barns) 80-Hg-200  
 Cross Section -99.90 To 5406. %



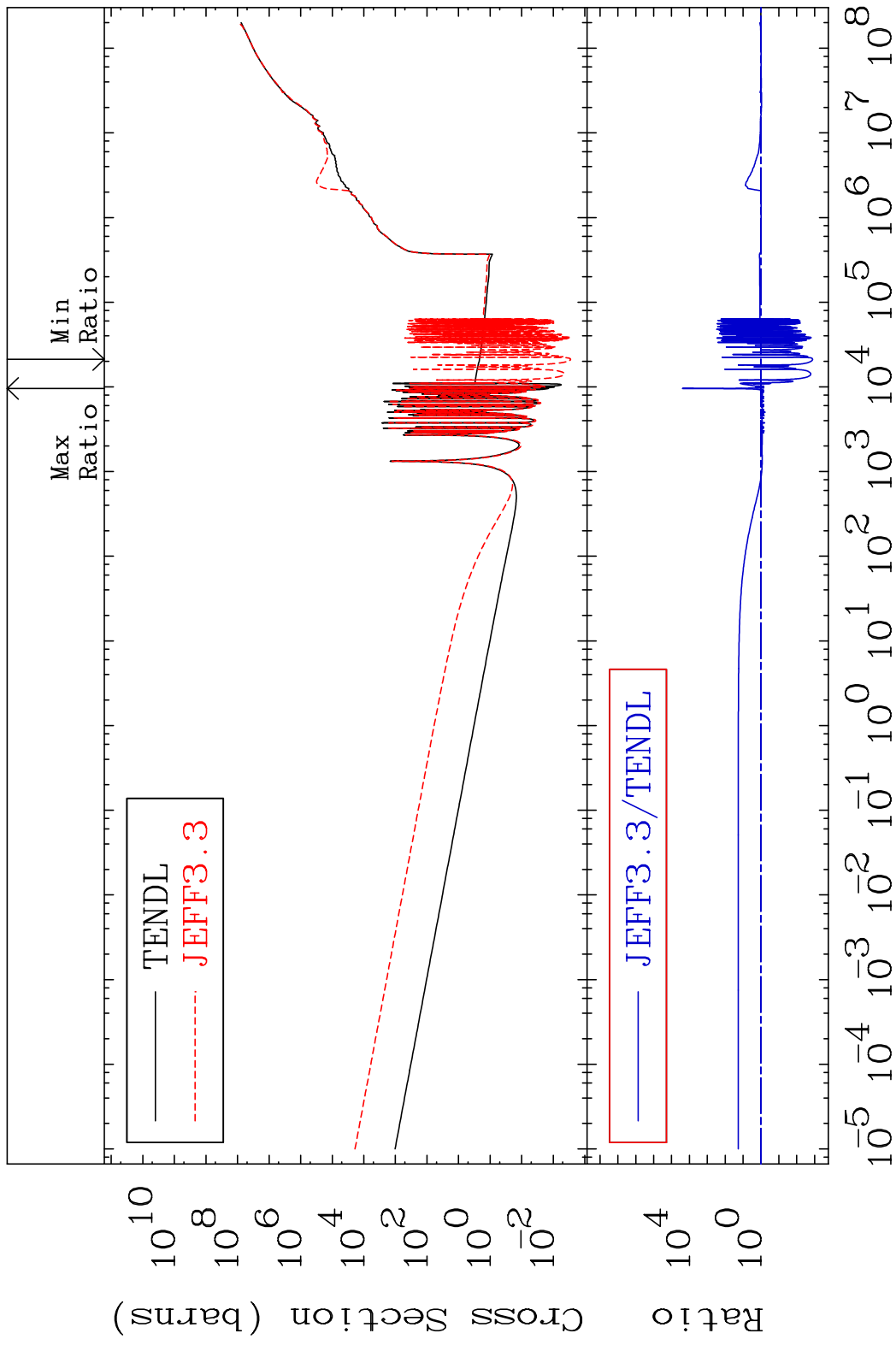


MAT 8037

Kerma elastic Cross Section -99.98 To 9999. %  
80-Hg-200

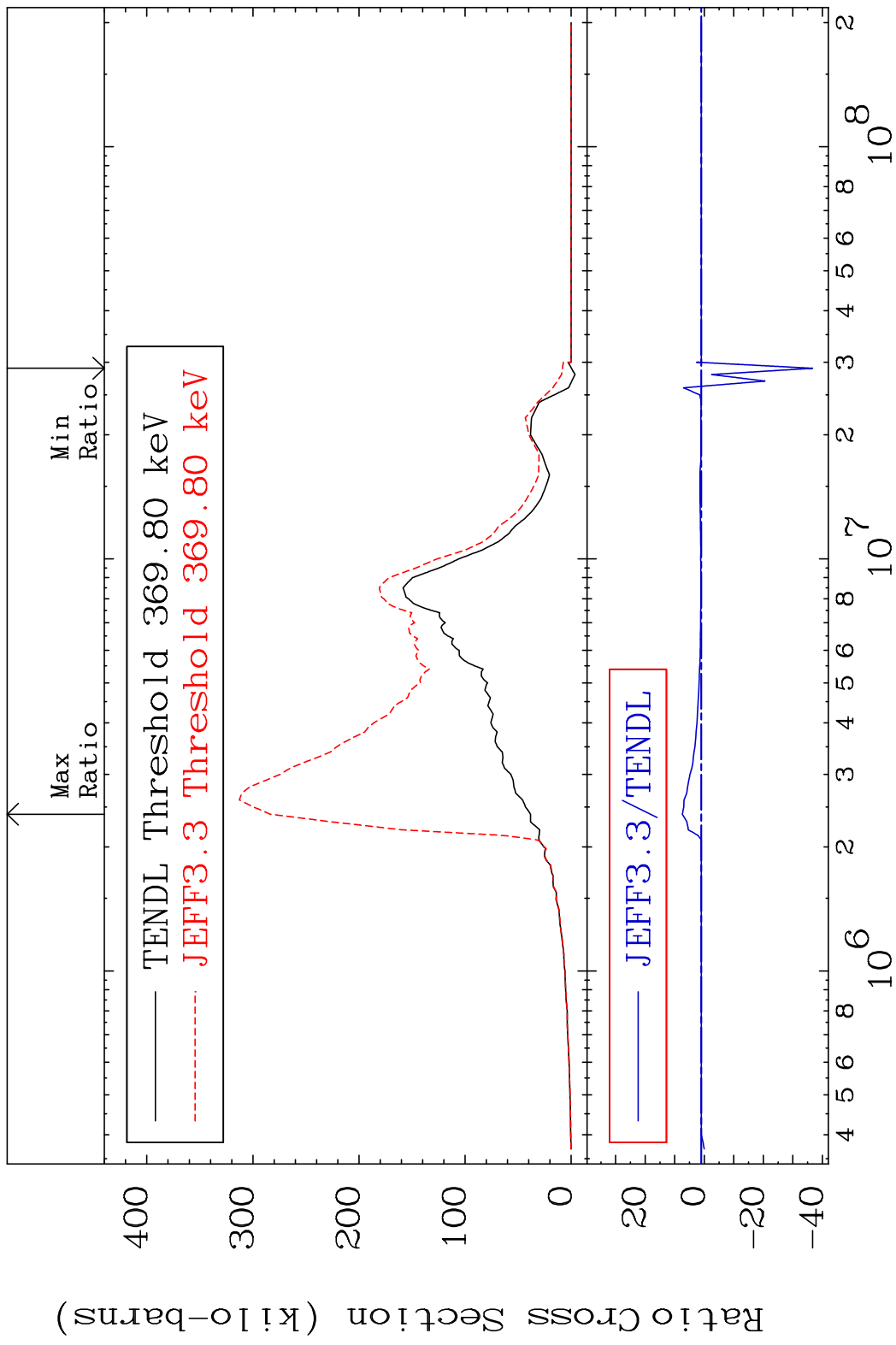


MAT 8037 Kerma non-elastic (all but mt2) 80-Hg-200  
 Cross Section -99.87 To 9999. %

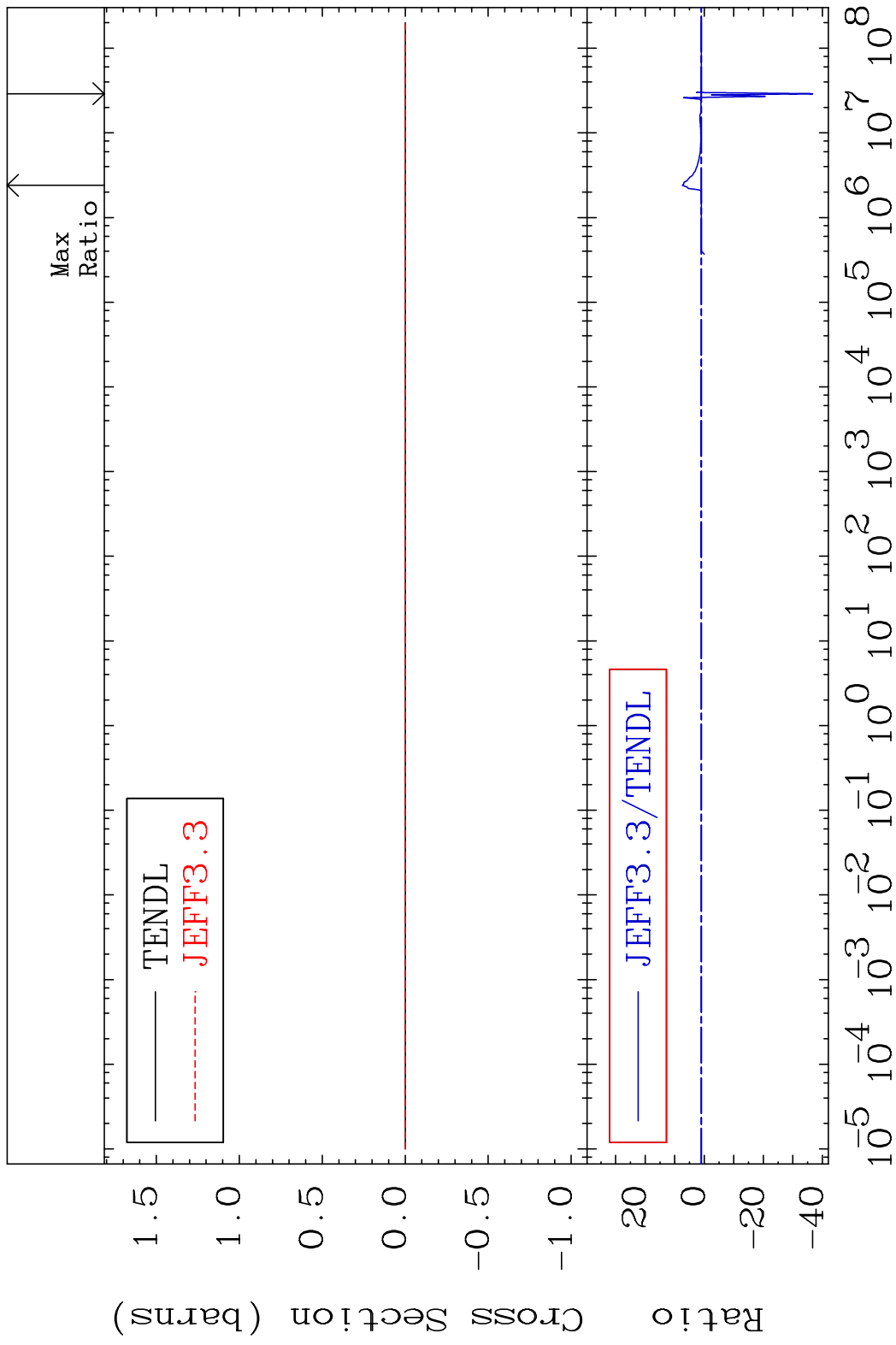


65 Incident Energy (eV) 80-Hg-200

MAT 8037 Kerma inelastic (mt51-91) 80-Hg-200  
 Cross Section -3766. To 641.7 %

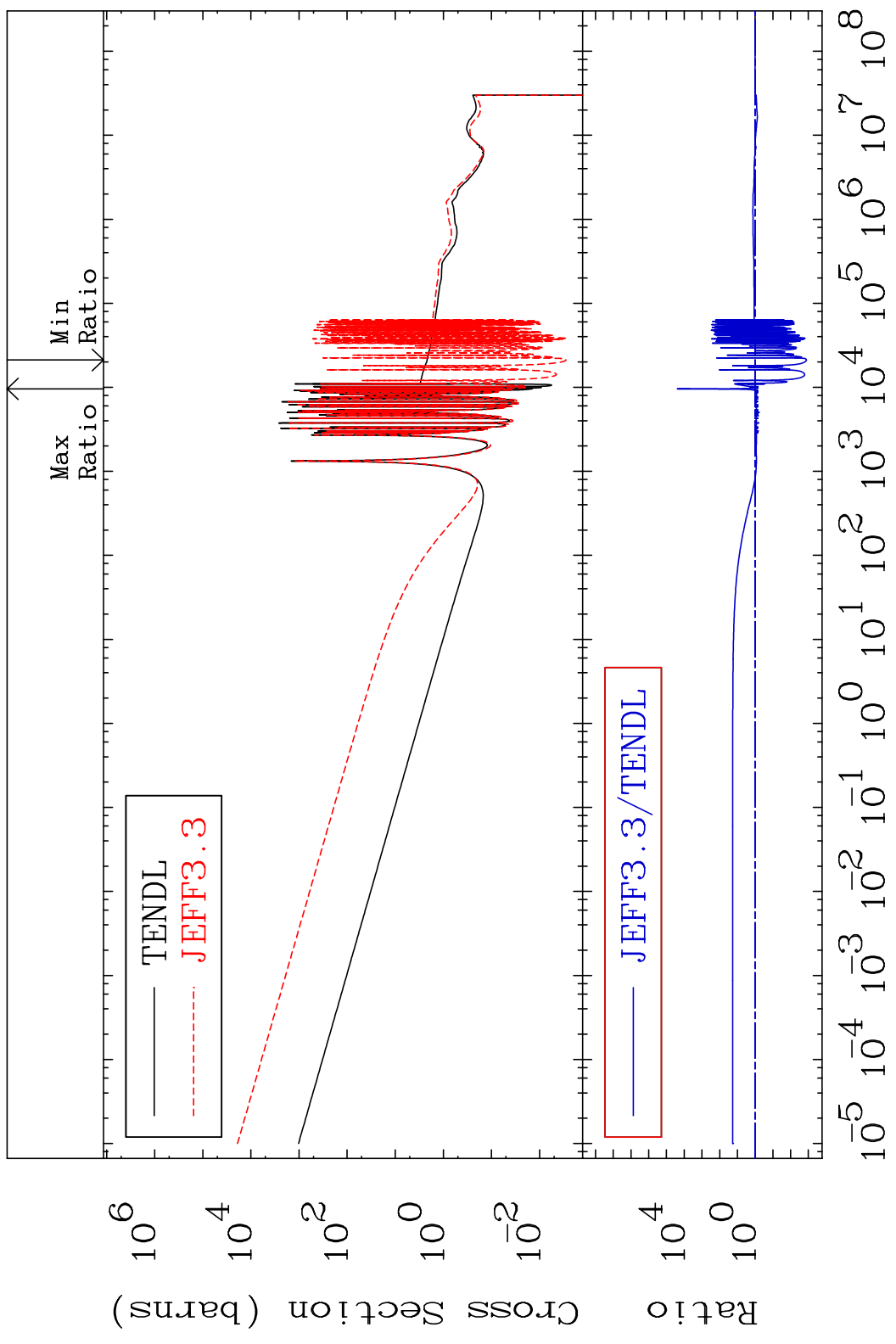


MAT 8037 Kerma fission (mt18 or mt19-20-21-38)80-Hg-200  
 Cross Section -3766. To 641.7 %



MAT 8037

Kerma capture (mt102) 80-Hg-200  
Cross Section -99.87 To 9999. %



68

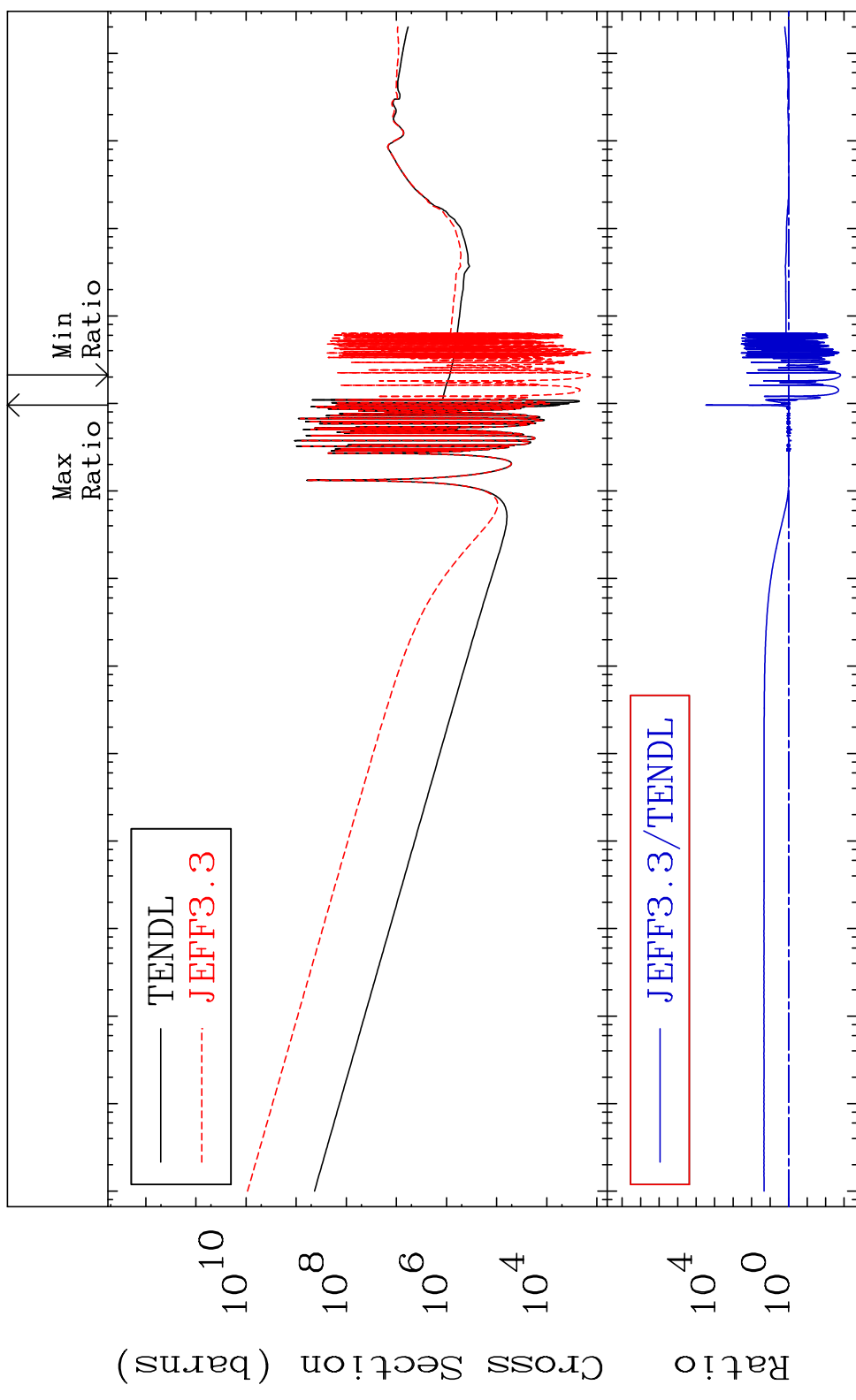
Incident Energy (eV) 80-Hg-200

MAT 8037

Total photon (eV-barns)

80-Hg-200

Cross Section -99.84 To 9999. %

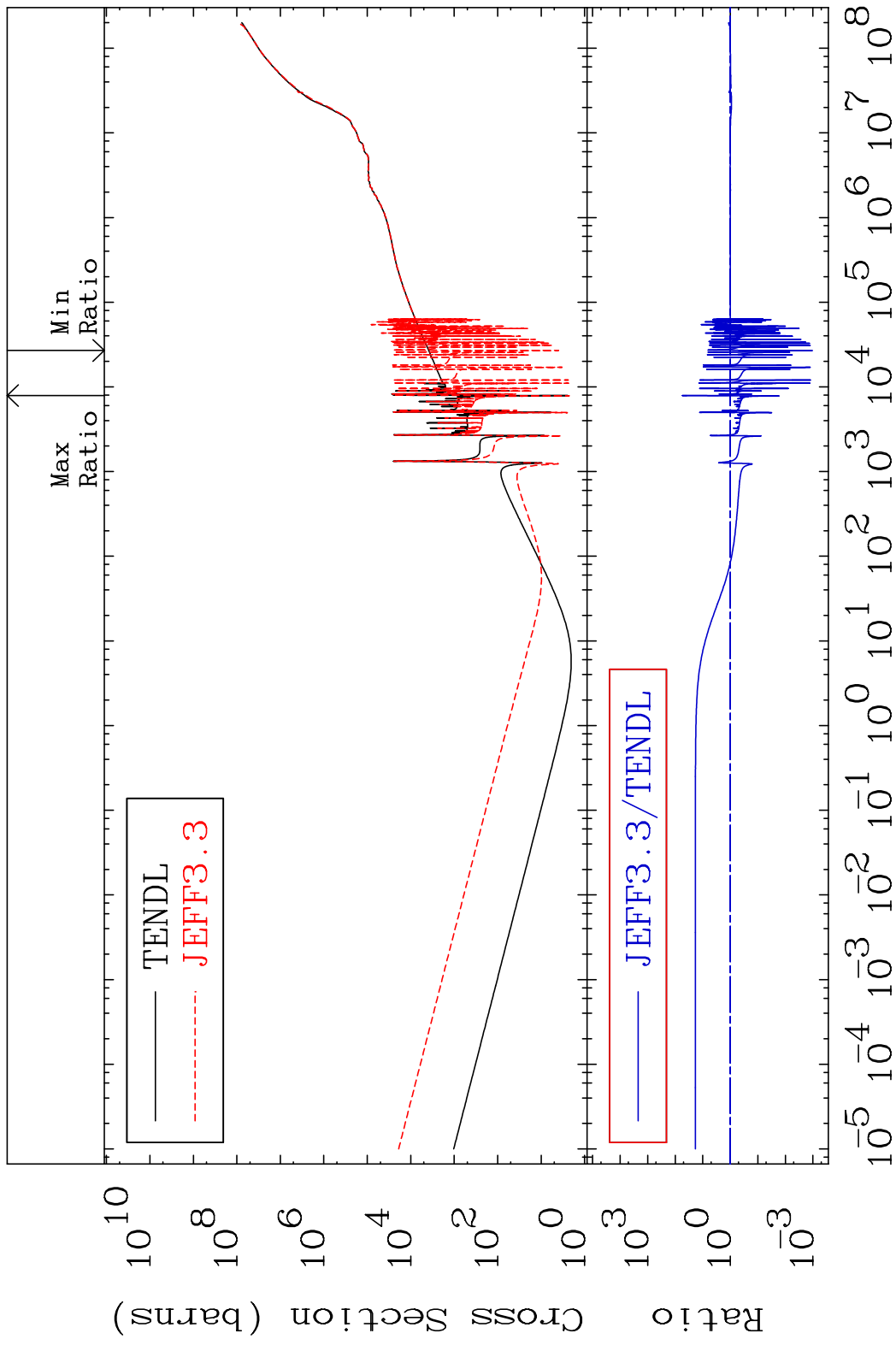


69

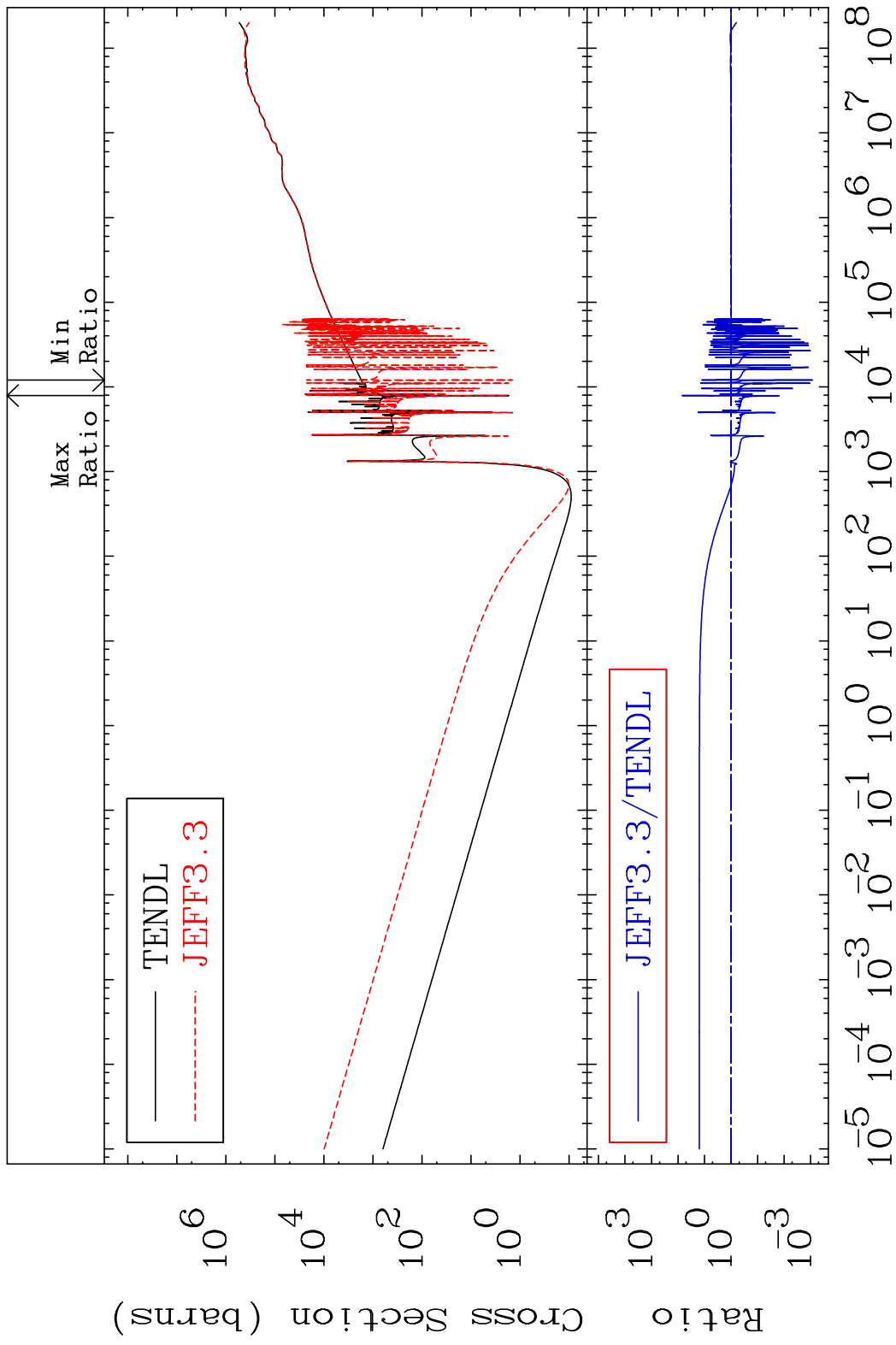
Incident Energy (eV)

80-Hg-200

MAT 8037 Total kinematic kerma (high limit) 80-Hg-200  
 Cross Section -99.90 To 5406. %



MAT 8037      Dpa total (eV-barns)      80-Hg-200  
 Cross Section      -99.92 To 6778. %



71      Incident Energy (eV)      80-Hg-200

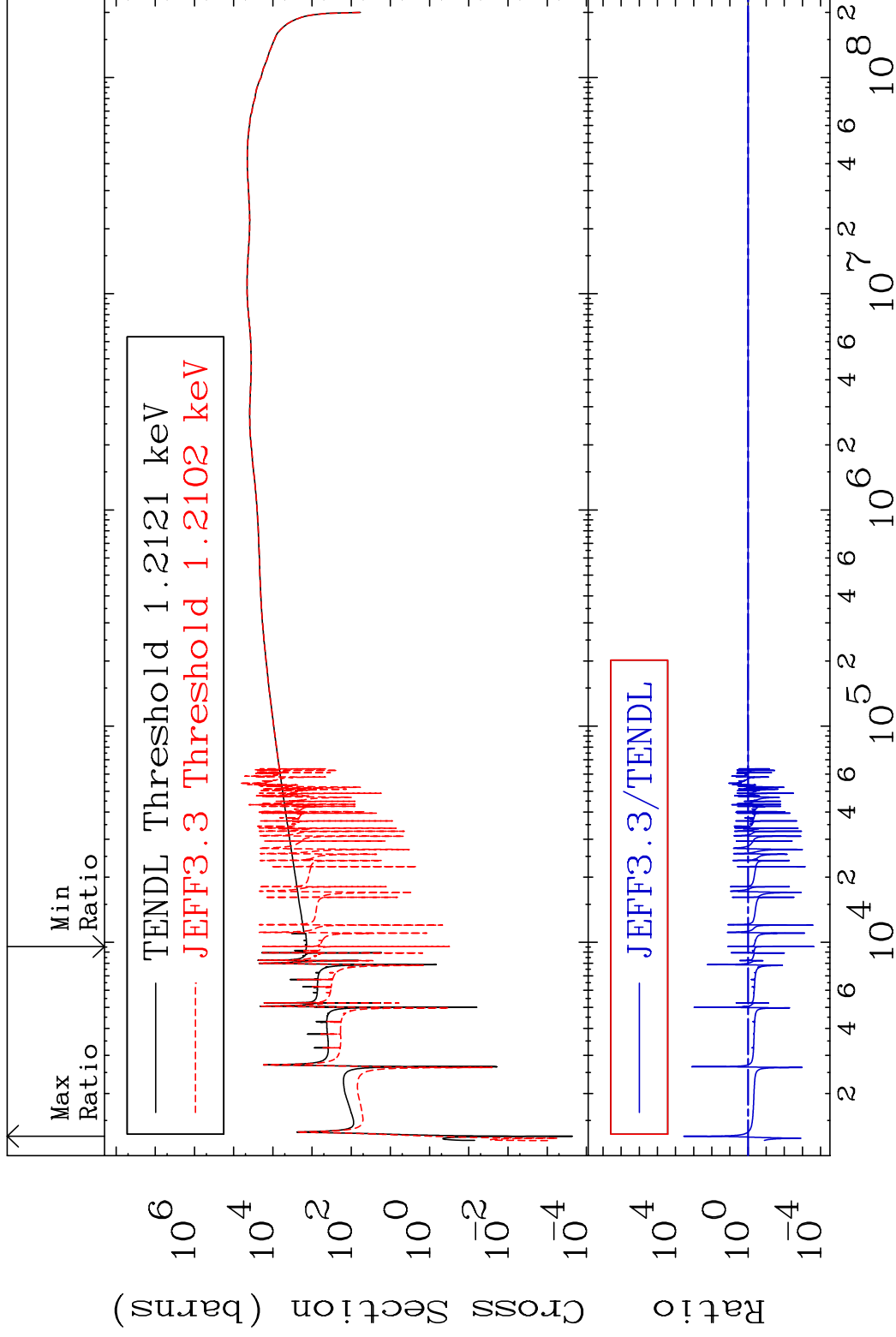


MAT 8037

Dpa elastic (mt2)

80-Hg-200

Cross Section -99.98 To 9999. %

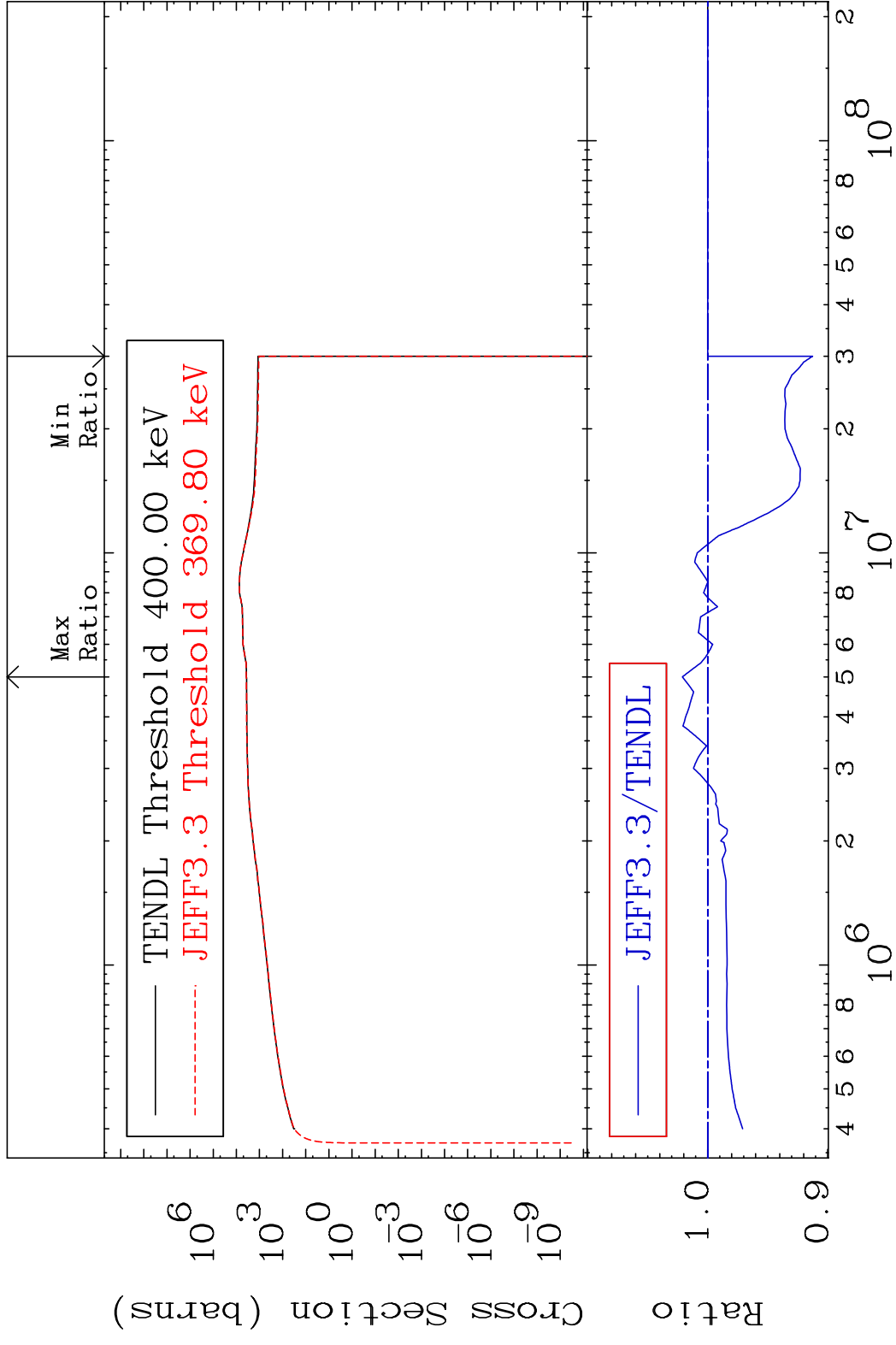


MAT 8037

Dpa inelastic (mt51-91)

80-Hg-200

Cross Section -8.740 To 2.114 %

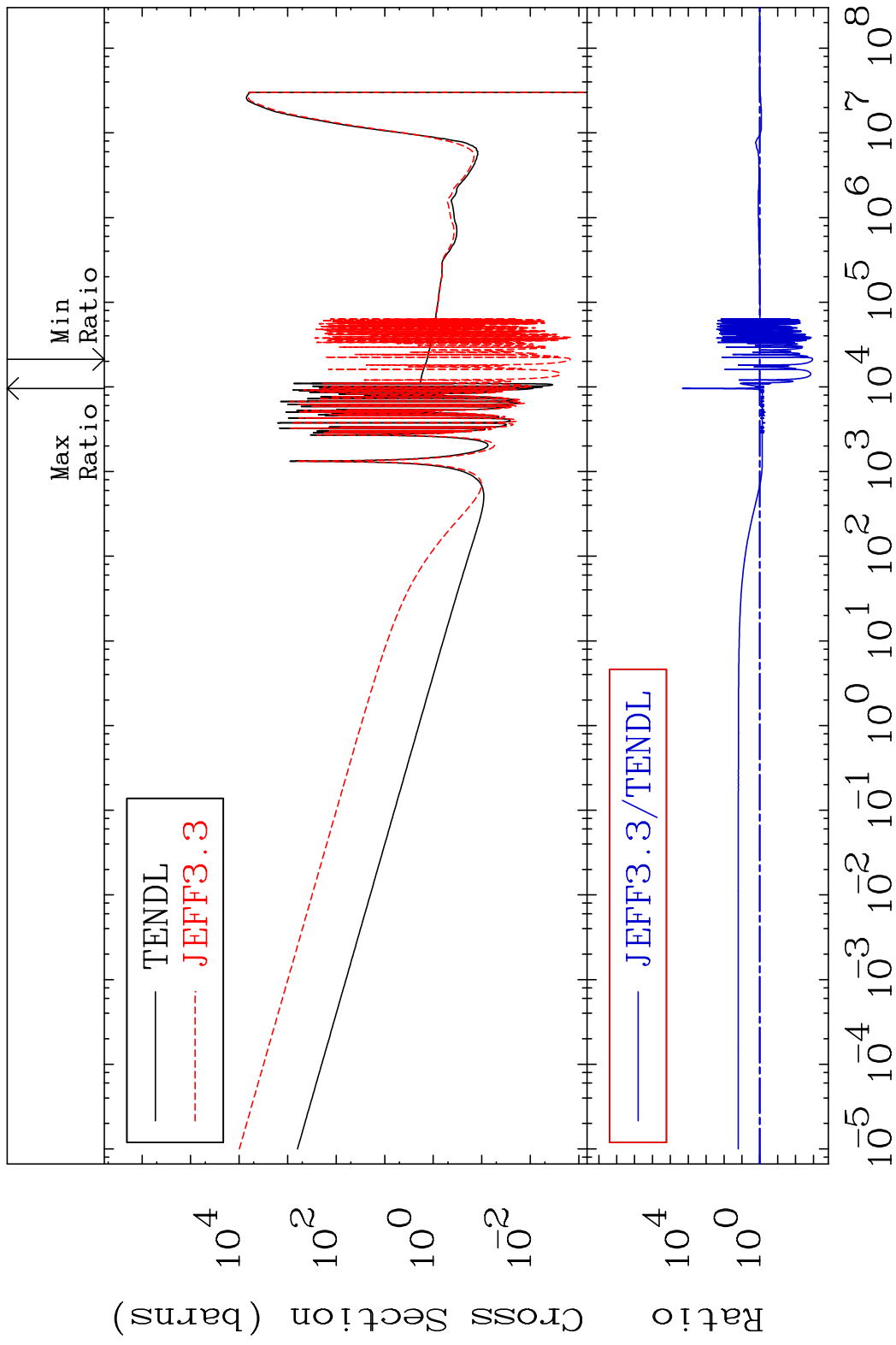


73

Incident Energy (eV)

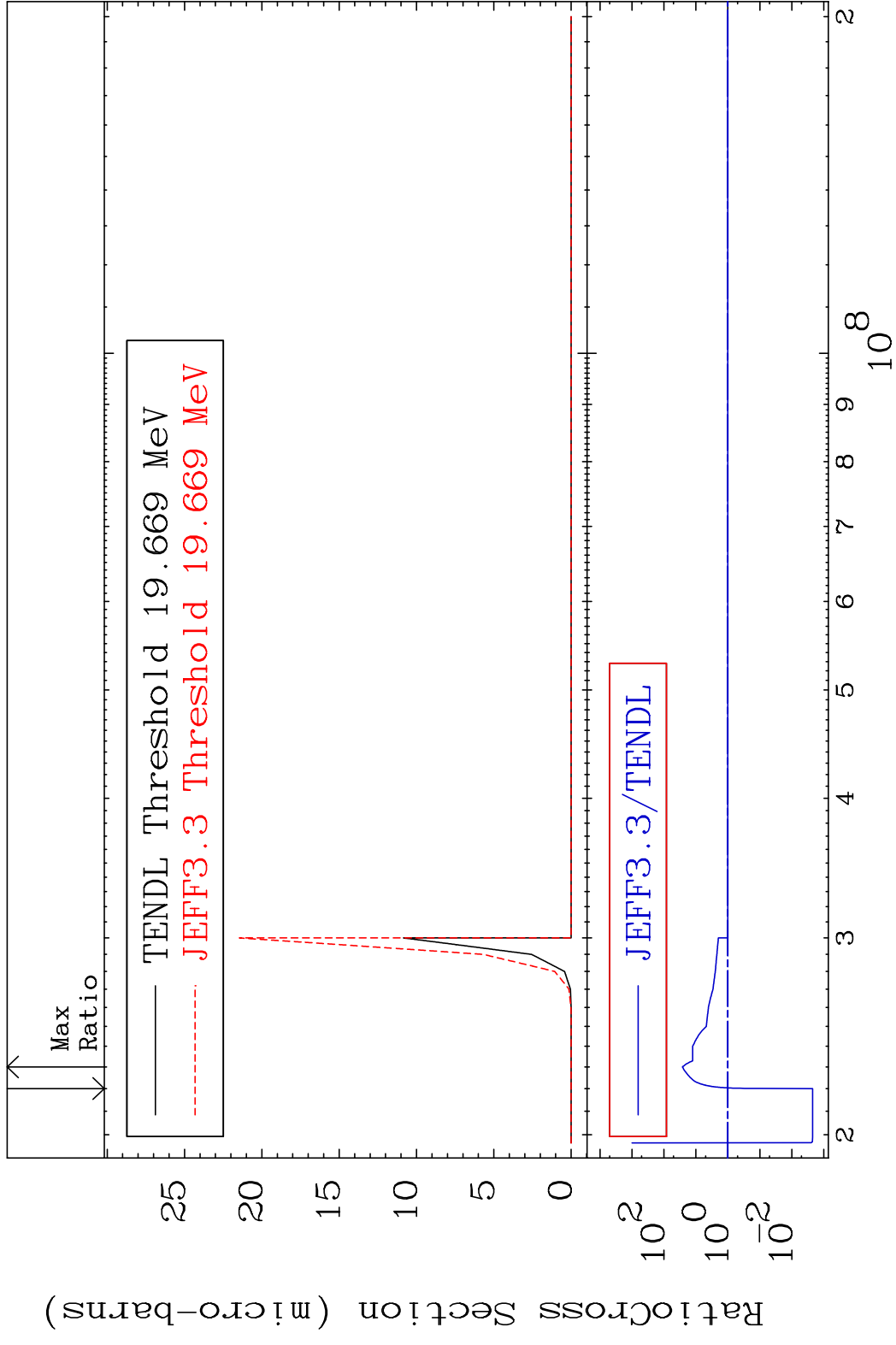
80-Hg-200

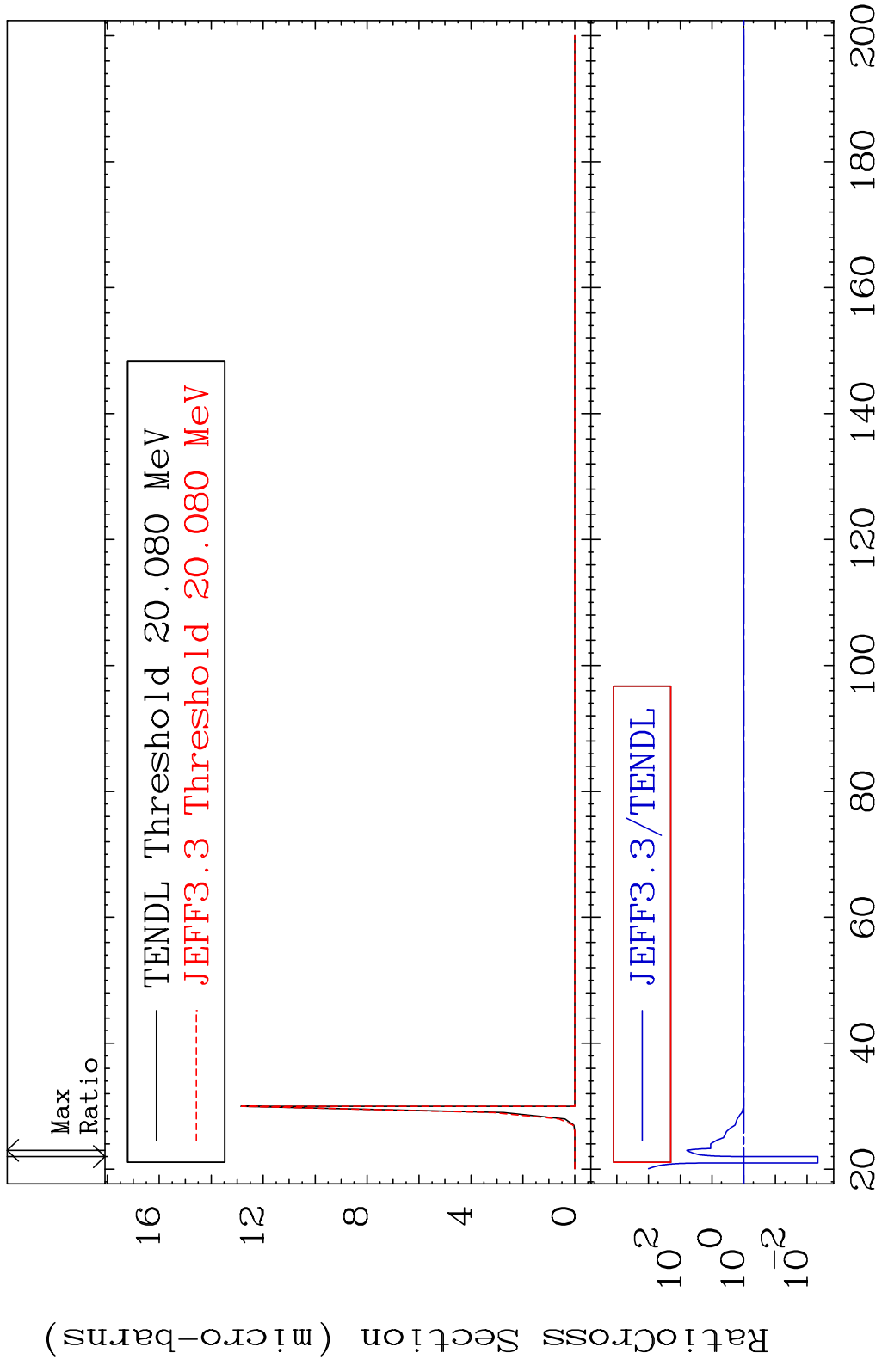
MAT 8037 Dpa disappearance (mt102 -120) 80-Hg-200  
 Cross Section -99.89 To 9999. %



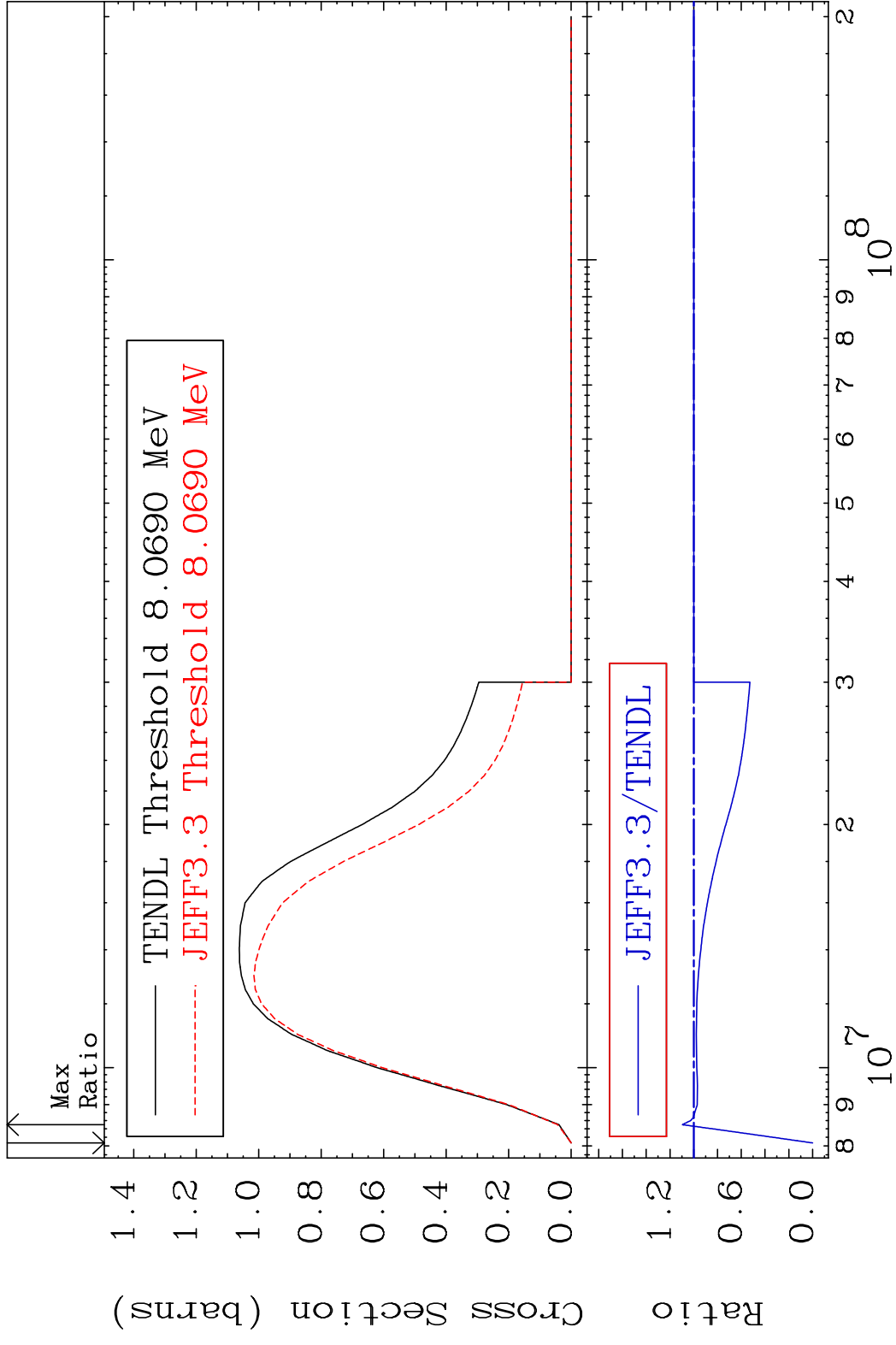
74 Incident Energy (eV) 80-Hg-200

MAT 8037 (n,2n) d:79-Au-197g 80-Hg-200  
 Radionuclide Production Cross Section 98.6781 dth 25556. %

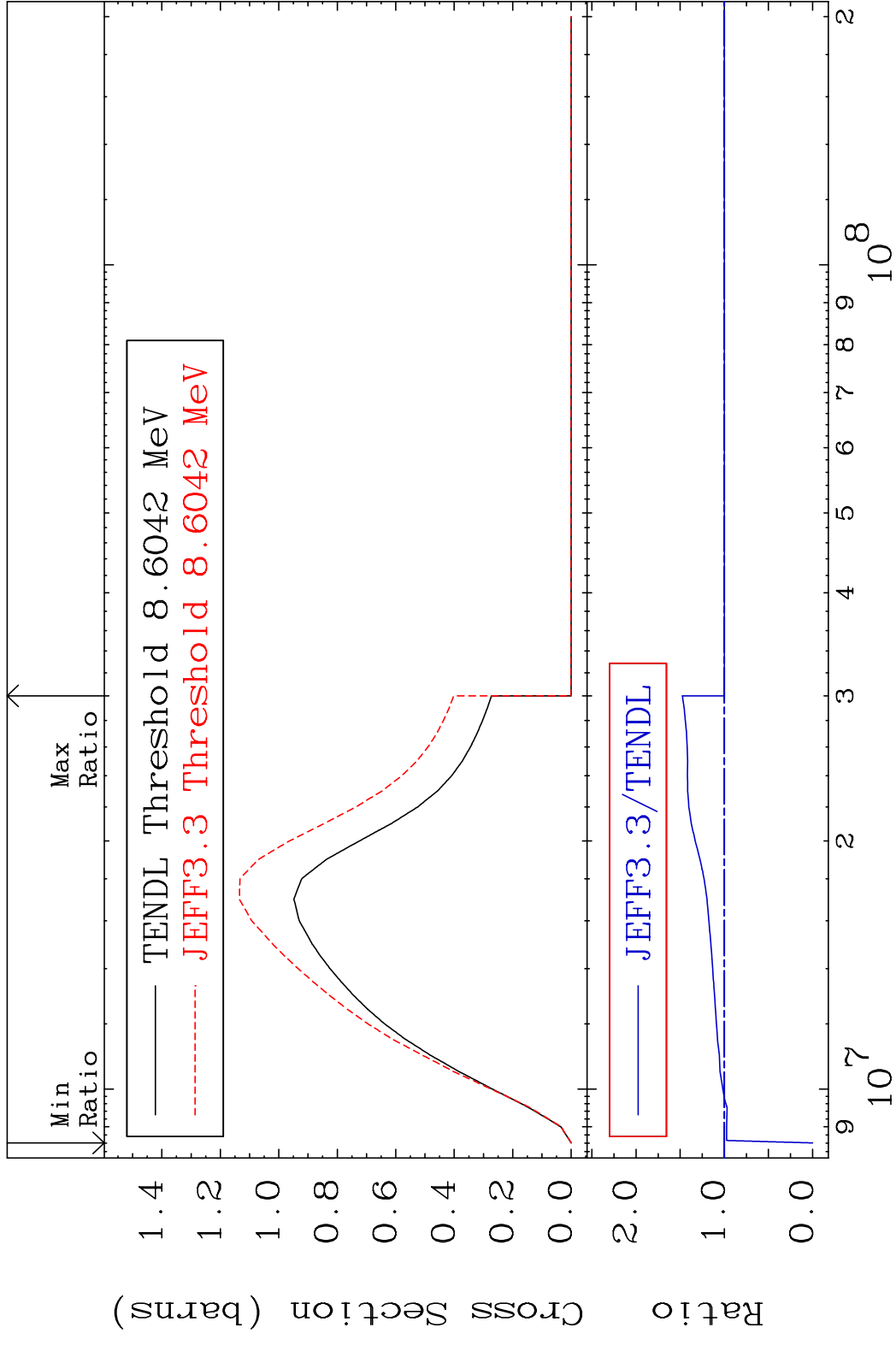




MAT 8037 (n,2n):80-Hg-199g 80-Hg-200  
 Radionuclide Production Cross Section Ratio 9.580 %

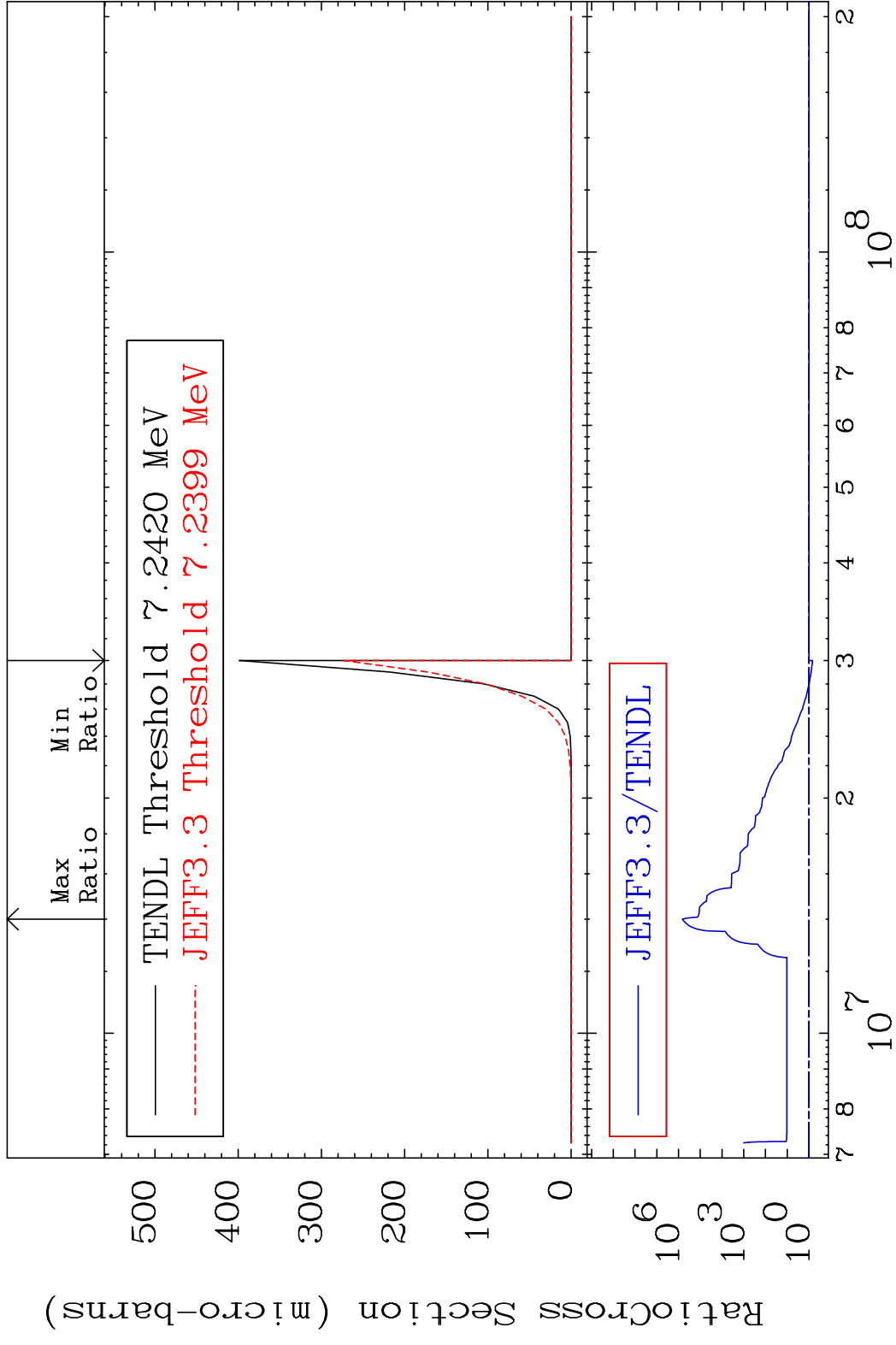


MAT 8037 (n,2n):80-Hg-199m7 80-Hg-200  
 Radionuclide Production Cross Section 1800.0 dth 47.56 %



78 Incident Energy (eV) 80-Hg-200

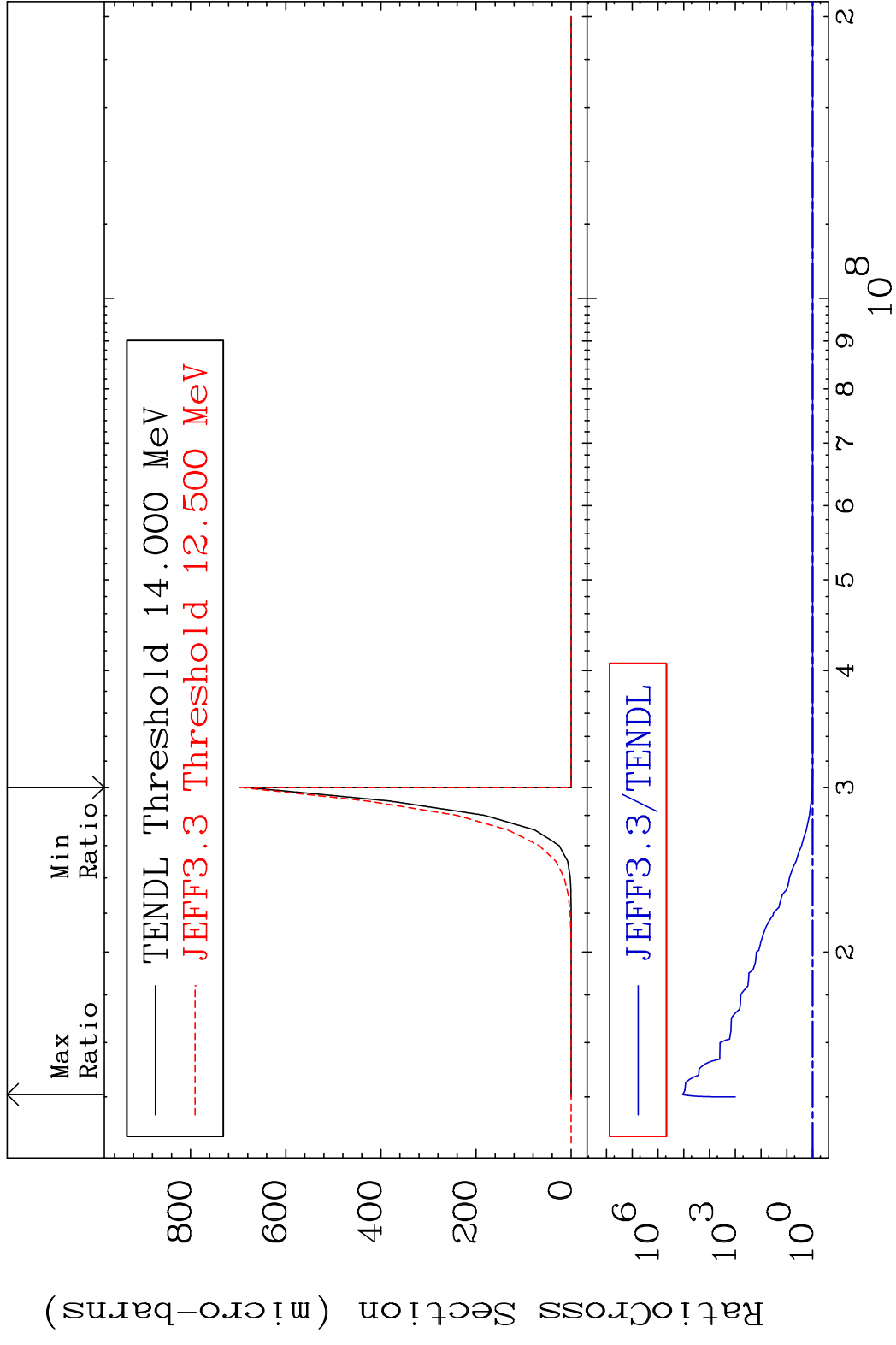
MAT 8037 (n,2n)  $\alpha$ :78-Pt-195g 80-Hg-200  
 Radionuclide Production Cross Section 9999. %



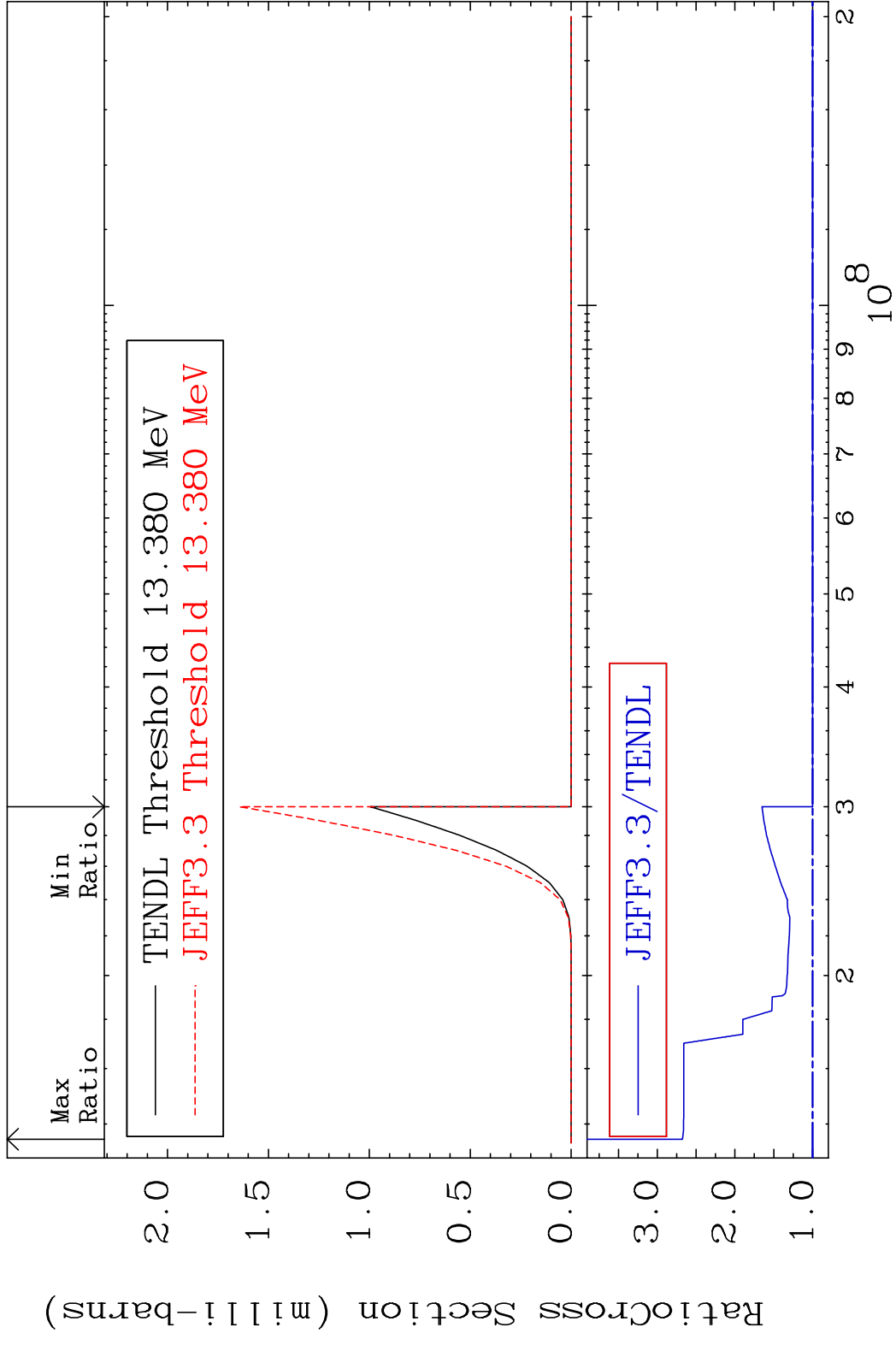
79 Incident Energy (eV) 80-Hg-200

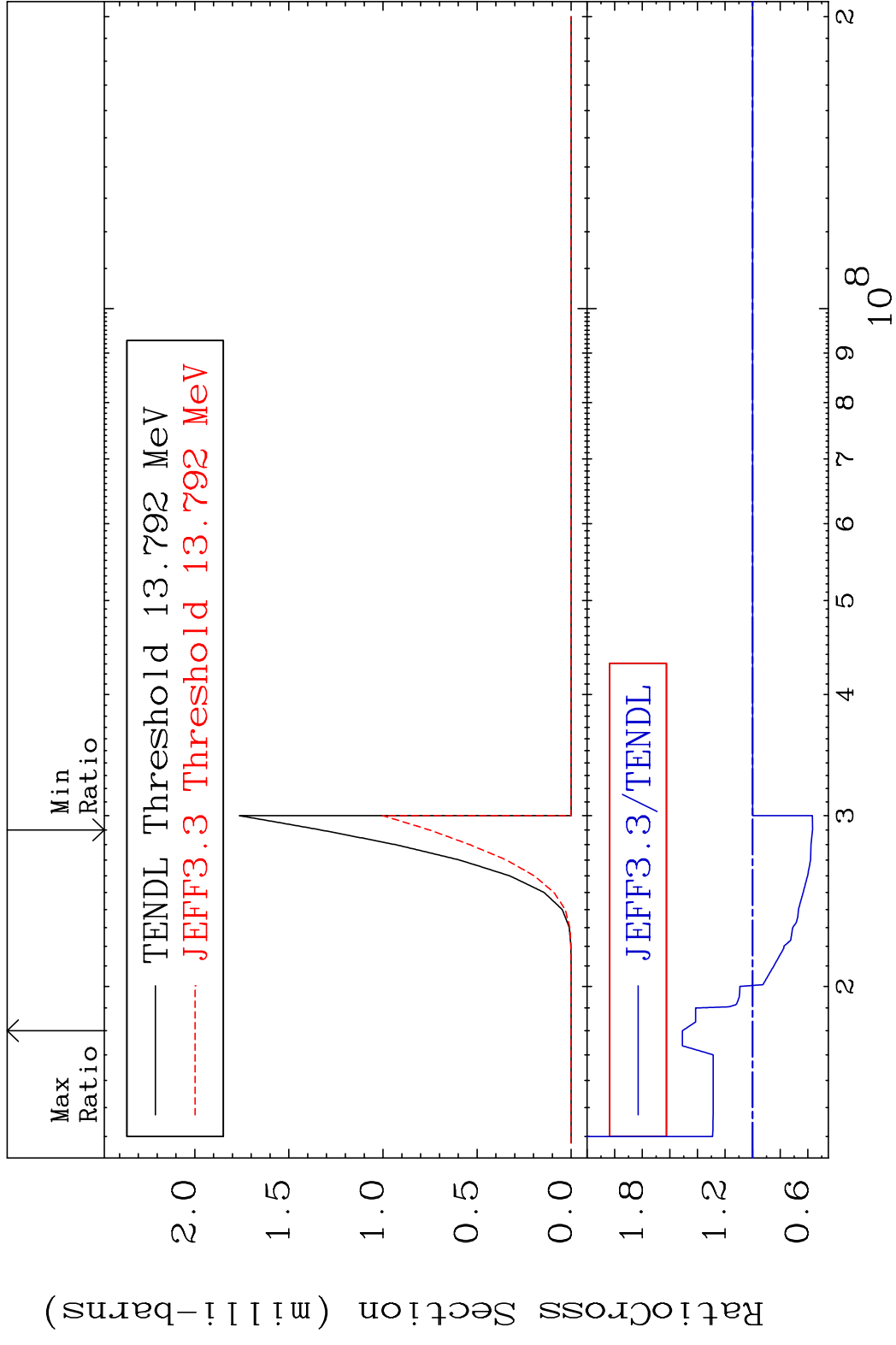


MAT 8037 (n,2n)  $\alpha$ :78-Pt-195m7 80-Hg-200  
 Radionuclide Production Cross Section 9999. %

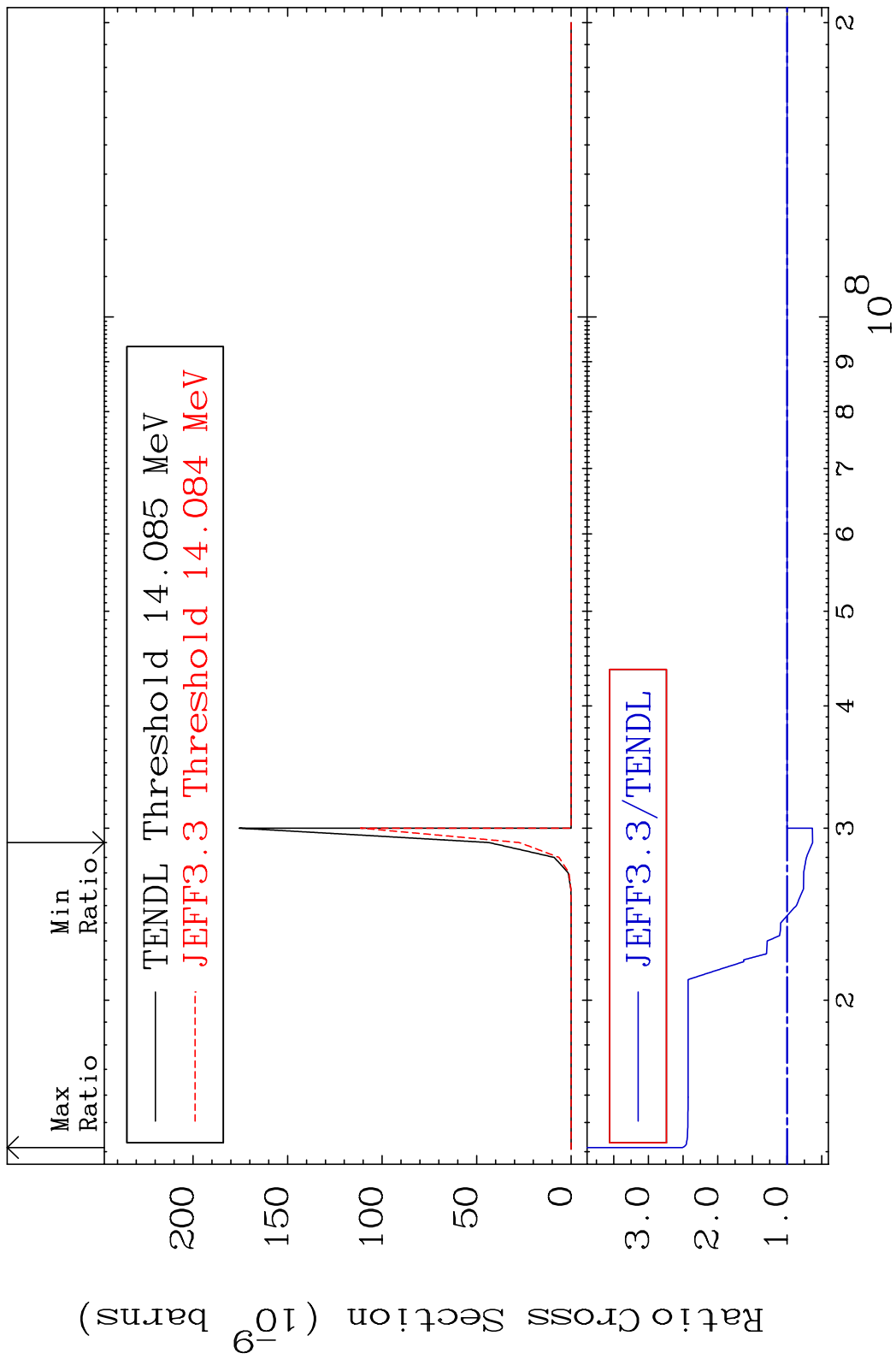


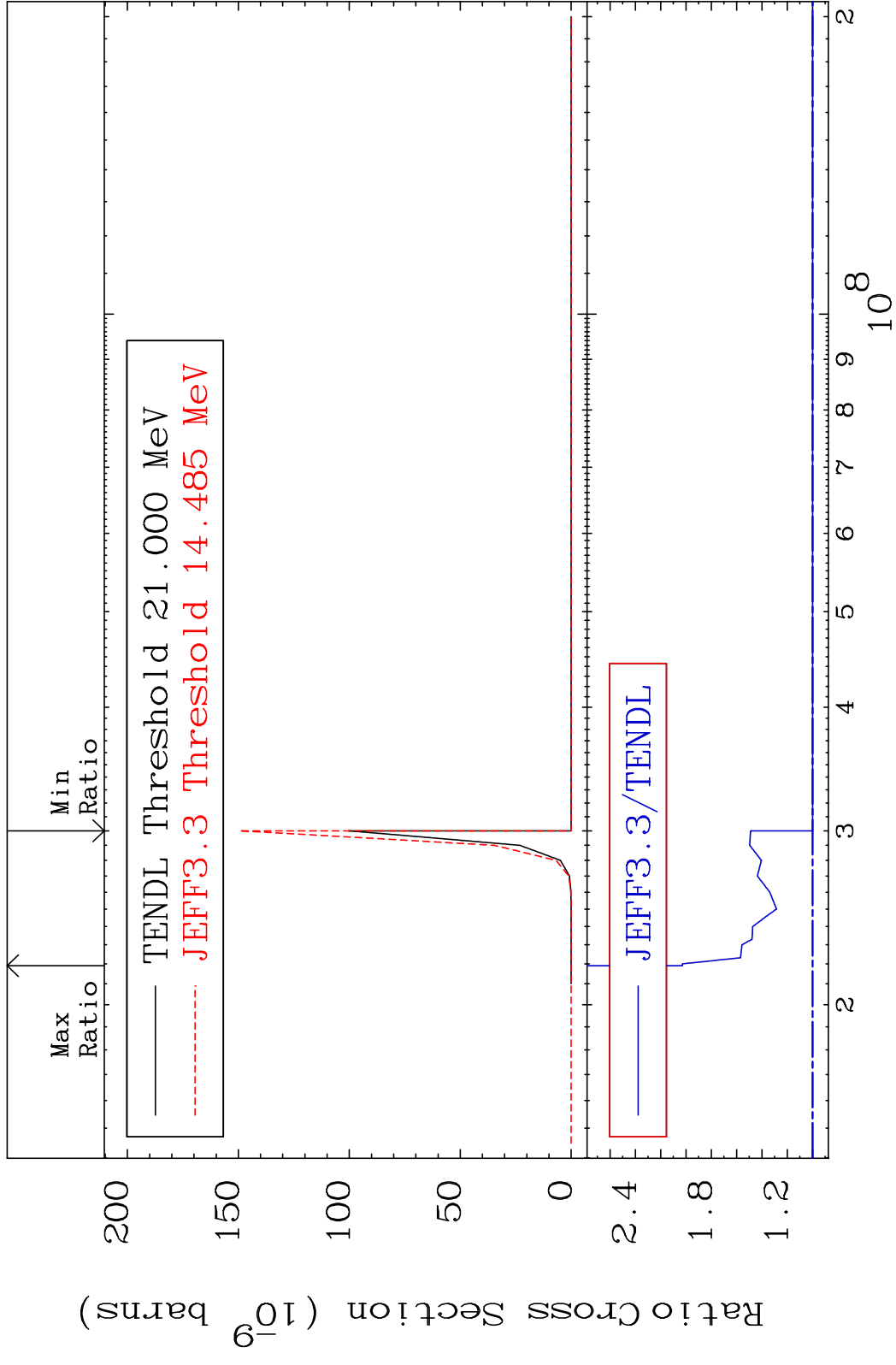
MAT 8037 (n, n') t:79-Au-197g 80-Hg-200  
 Radionuclide Production Cross Section 167.7 %



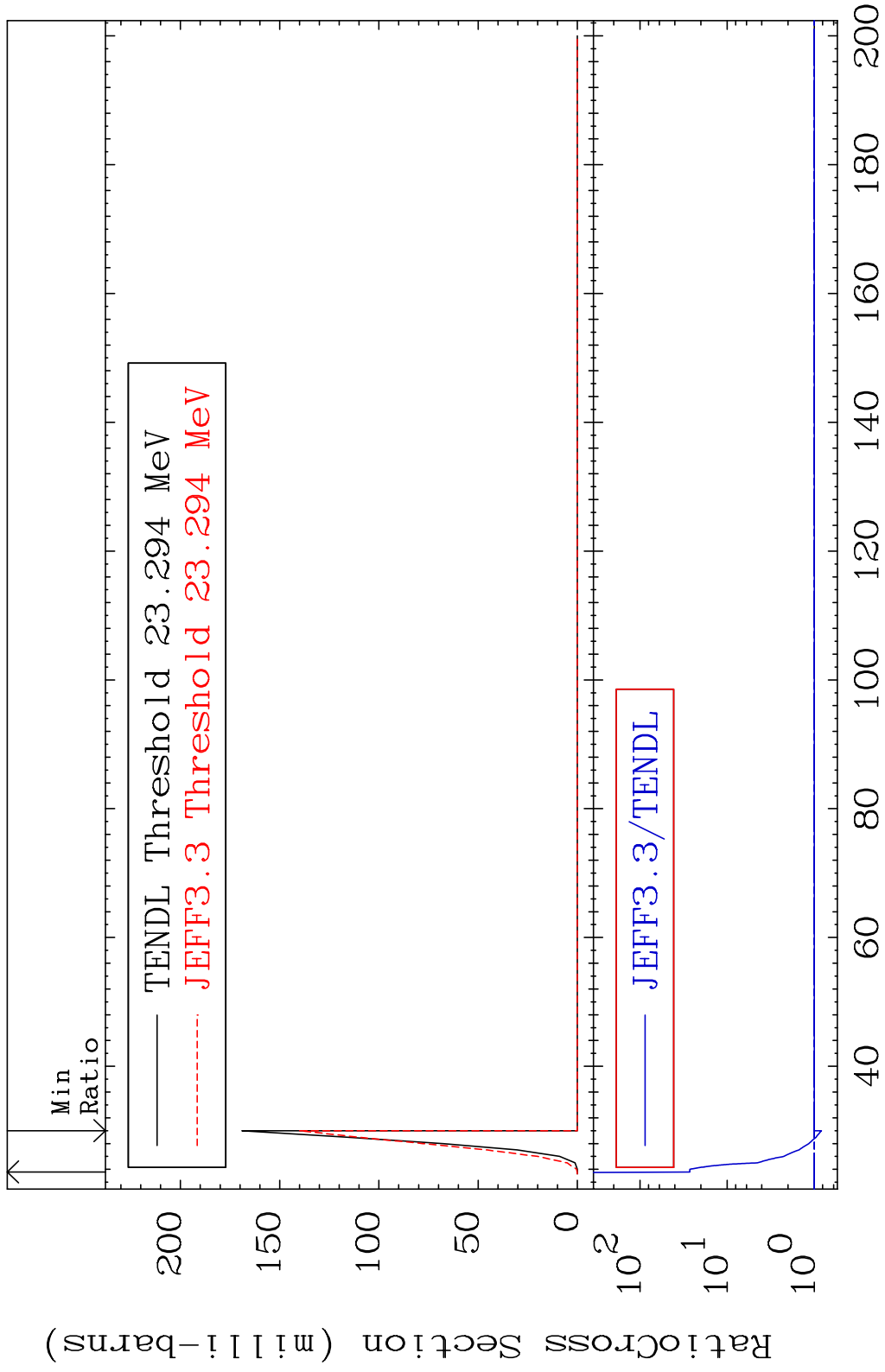


MAT 8037 (n, n') He-3:78-Pt-197g 80-Hg-200  
 Radionuclide Production Cross Section 36.881 dth 150.9 %



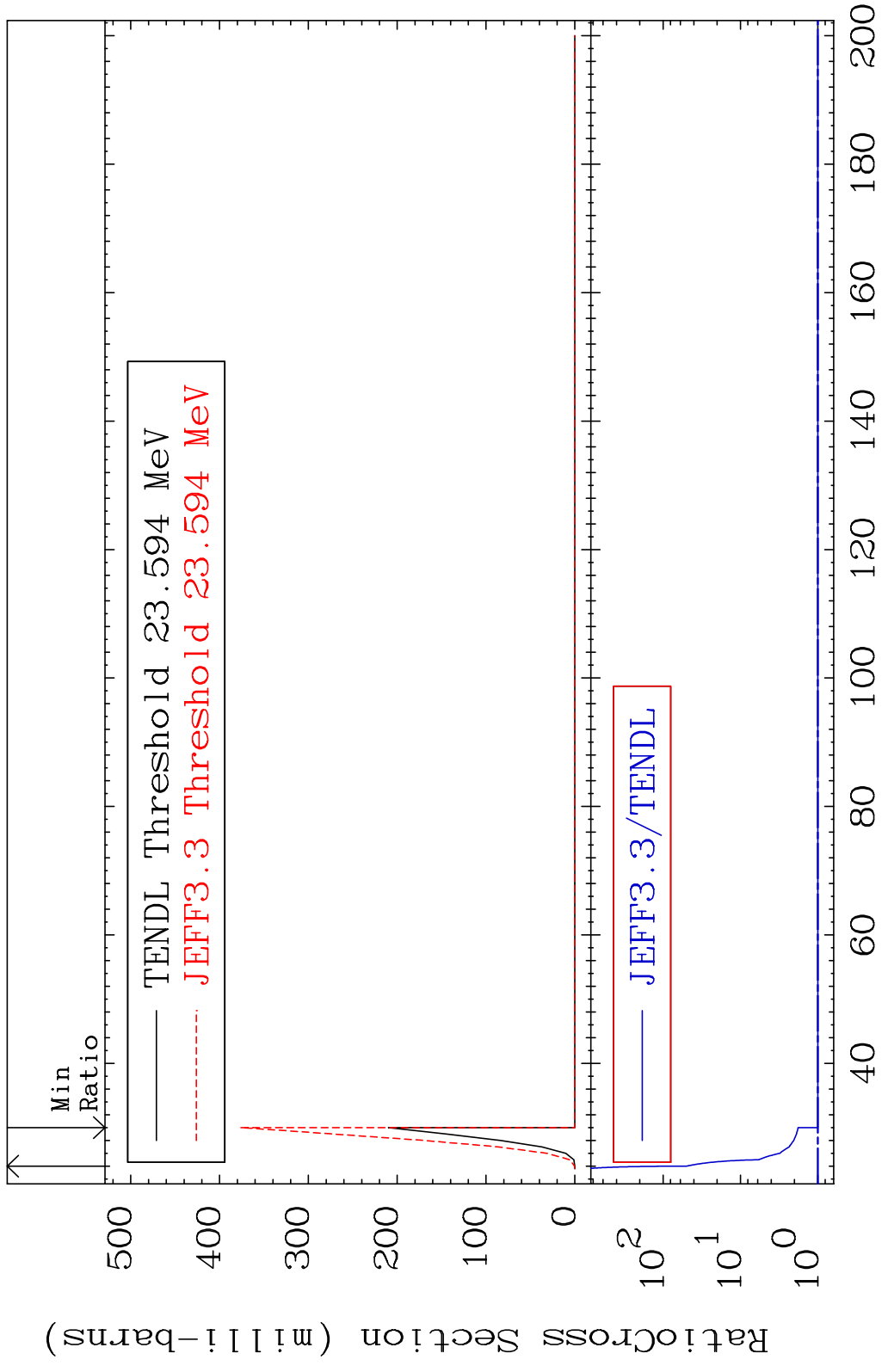


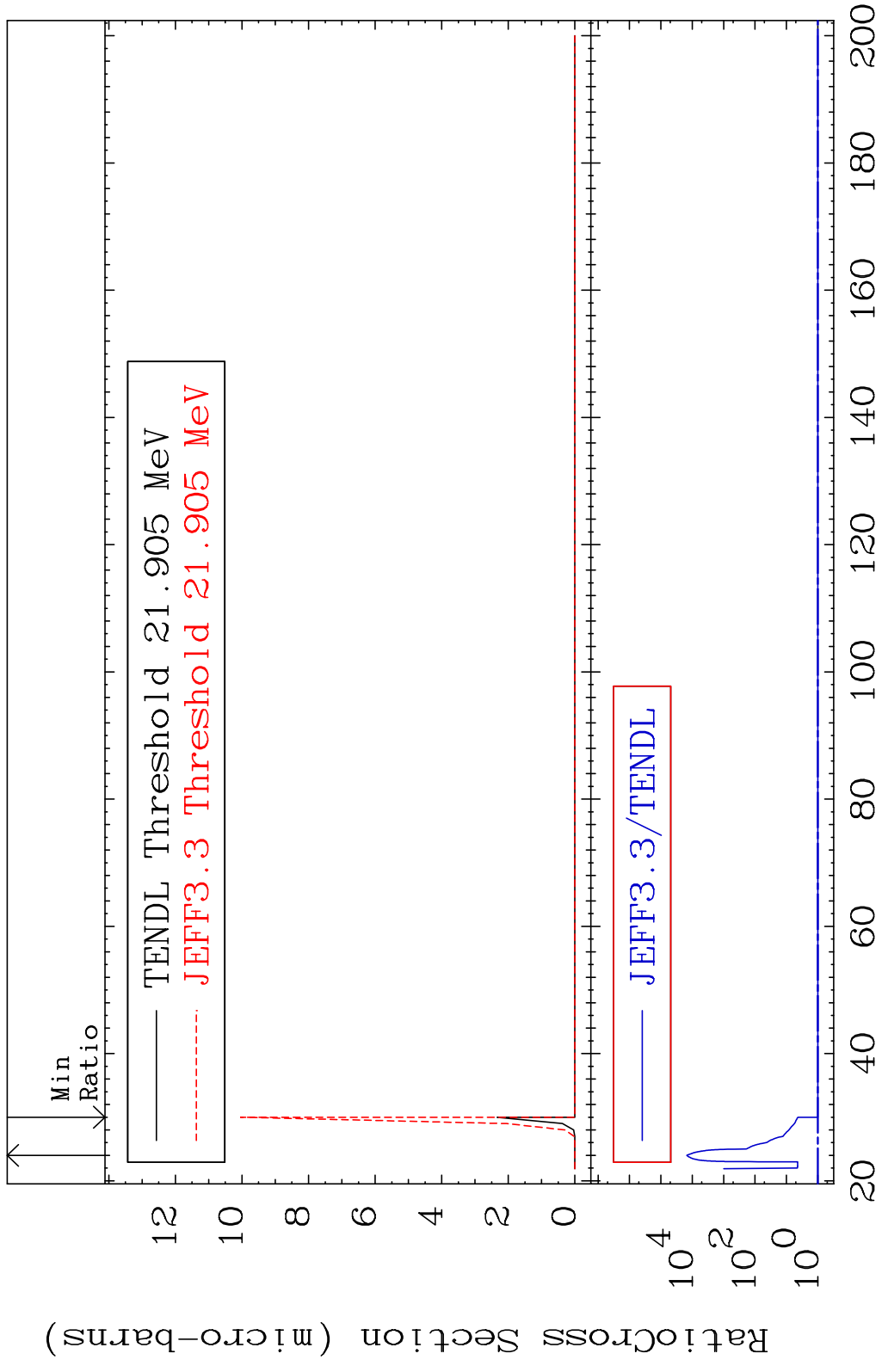
MAT 8037 (n,4n):80-Hg-197g 80-Hg-200  
 Radionuclide Production Cross Section 15649.110 2586. %



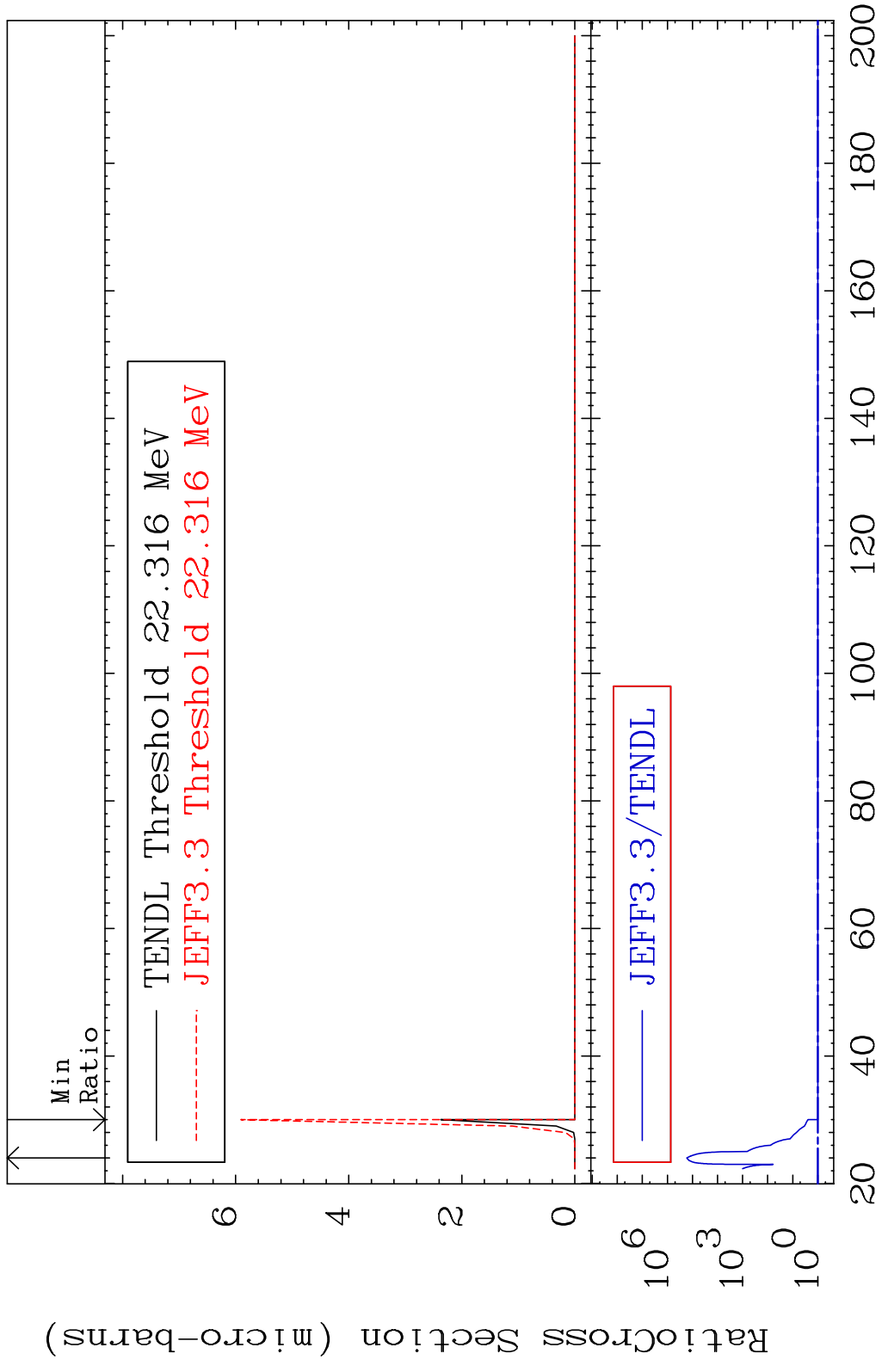
85 Incident Energy (MeV) 80-Hg-200

MAT 8037 (n, 4n):80-Hg-197m4 80-Hg-200  
 Radionuclide Production Cross Section 4844. %

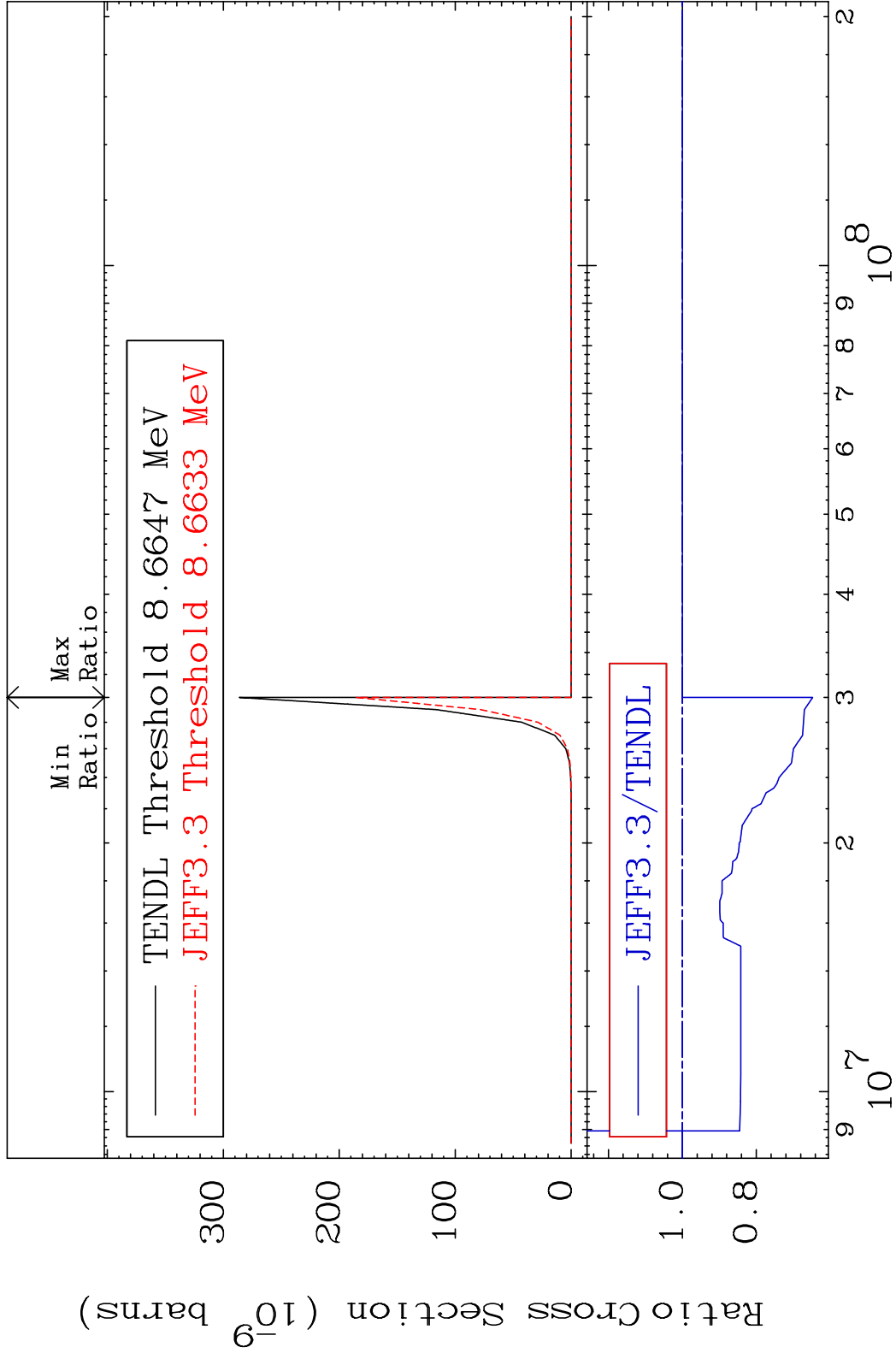




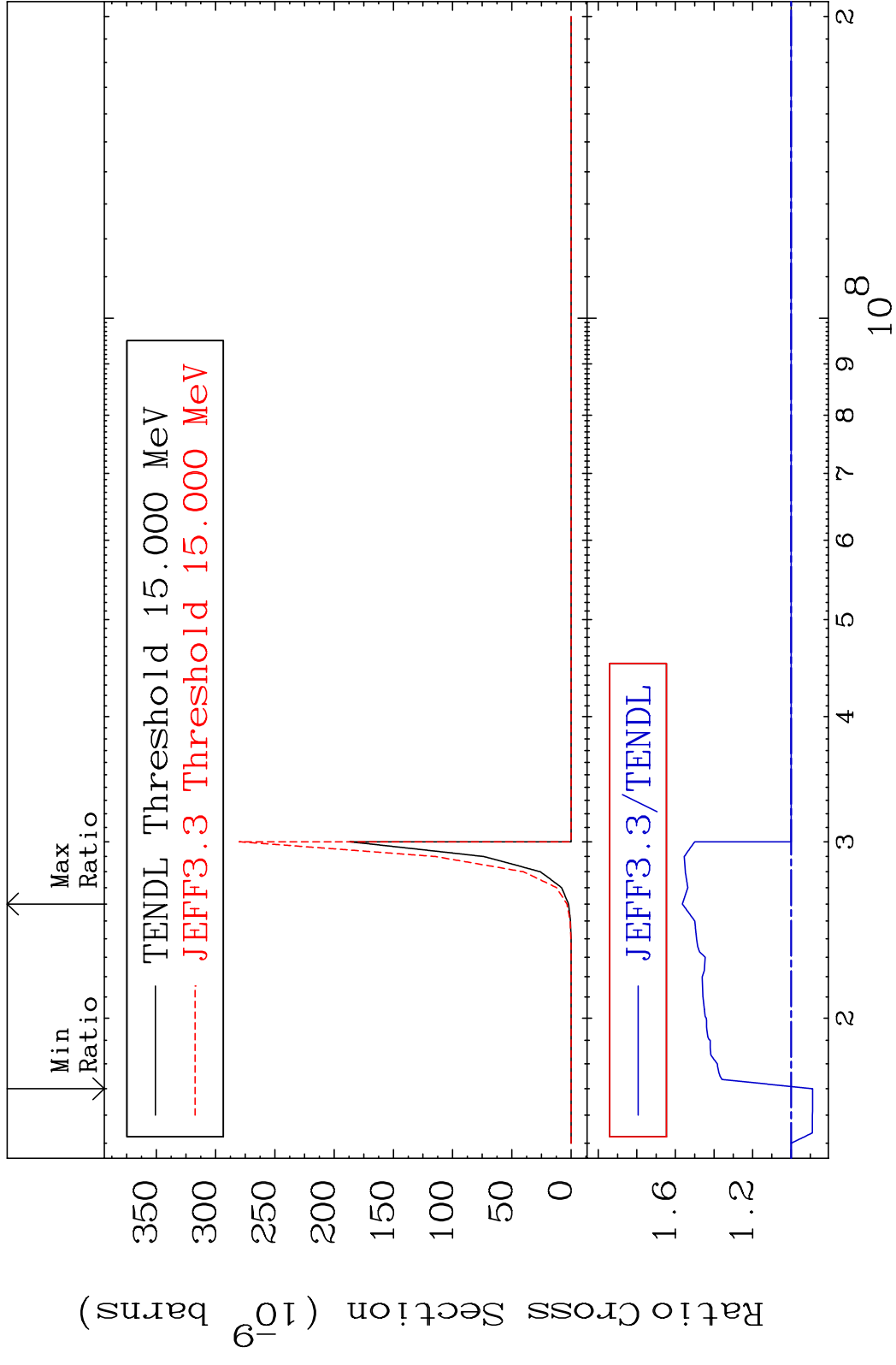




MAT 8037 (n,2p):78-Pt-199g 80-Hg-200  
 Radionuclide Production Cross Section 35.221 dpo 0.000 %



89 Incident Energy (eV) 80-Hg-200



MAT 8037 (n, p)  $\alpha$ : 77-Ir-196g 80-Hg-200  
 Radionuclide Production Cross Section Ratio 9999. %

