

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

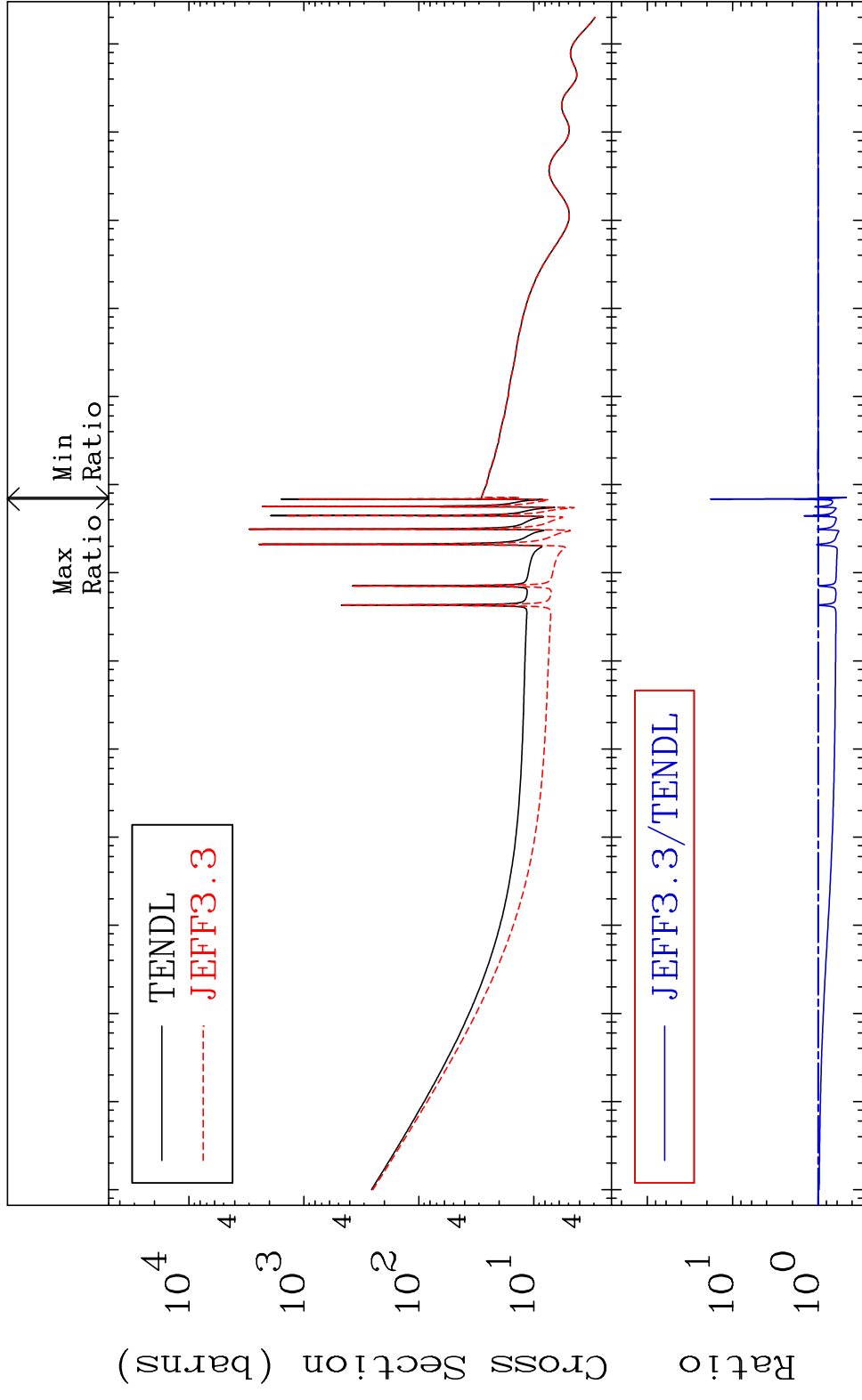
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 8040

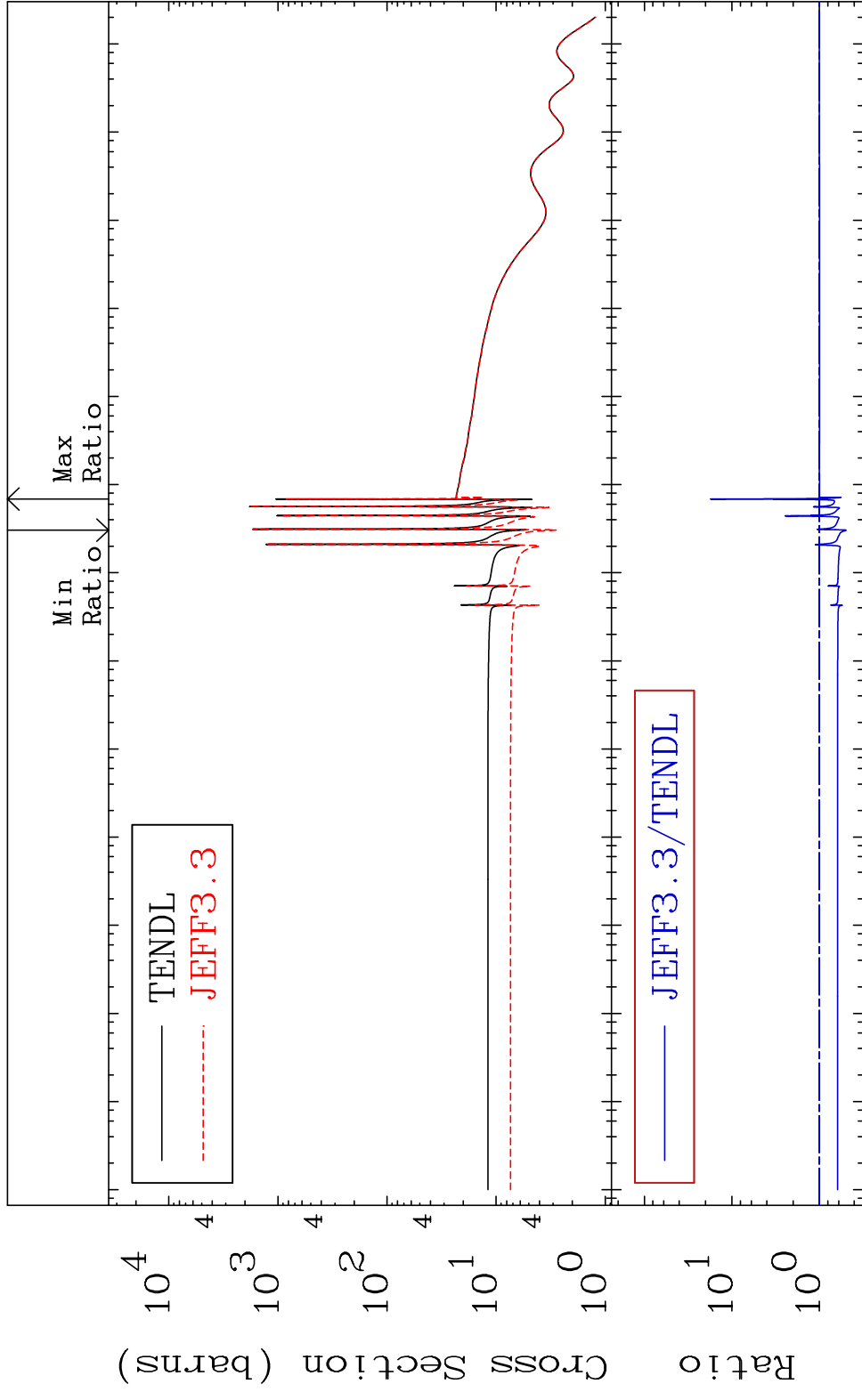
Total Cross Section -53.27 To 1708. %
80-Hg-201



10⁴
10³
10²
10¹
10⁰
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸
Incident Energy (eV) 80-Hg-201

MAT 8040

Elastic Cross Section 80-Hg-201
-50.76 To 1647. %

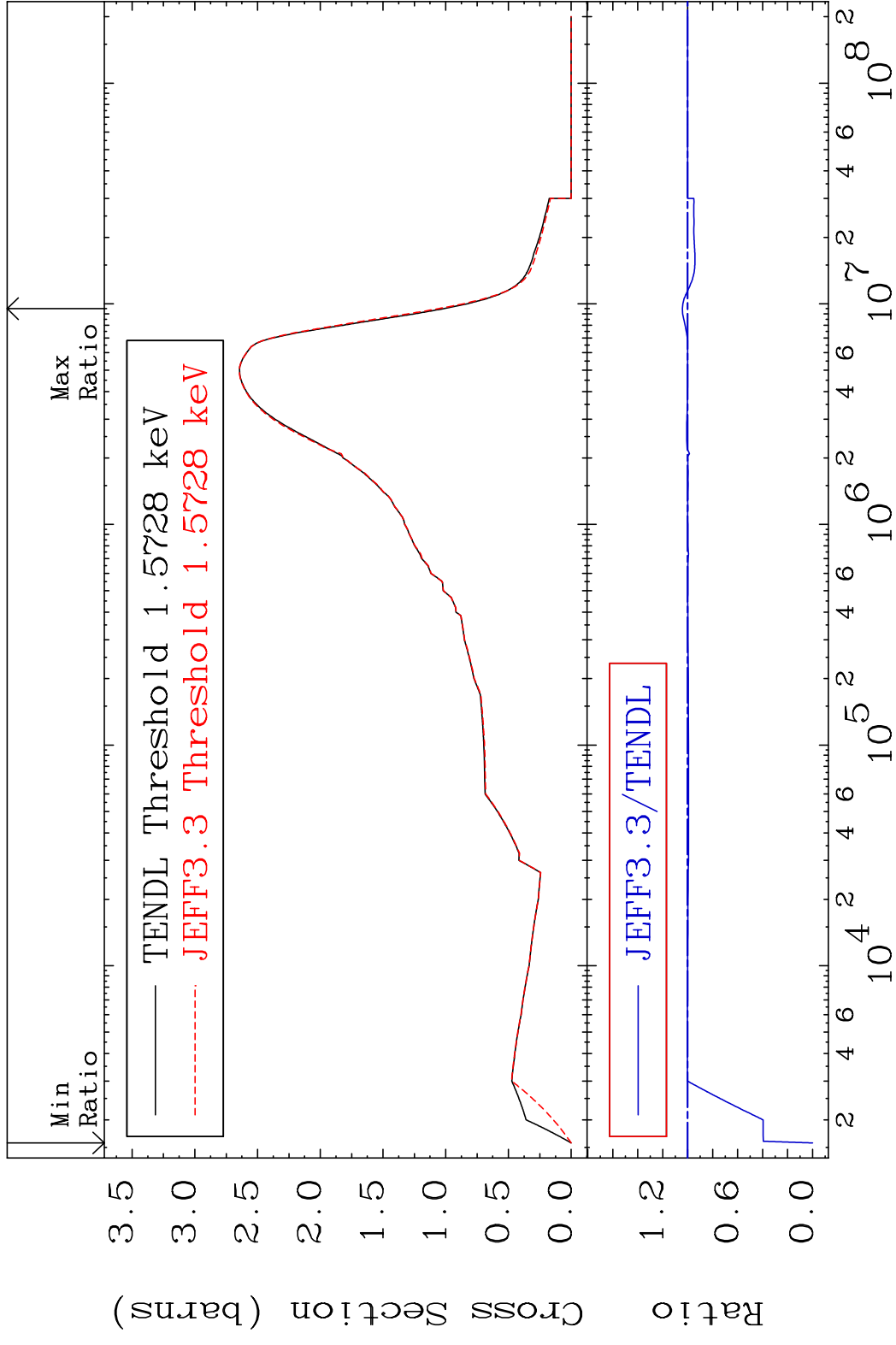


2

Incident Energy (eV)

80-Hg-201

MAT 8040 Inelastic Cross Section -100.0 To 4.277 % 80-Hg-201

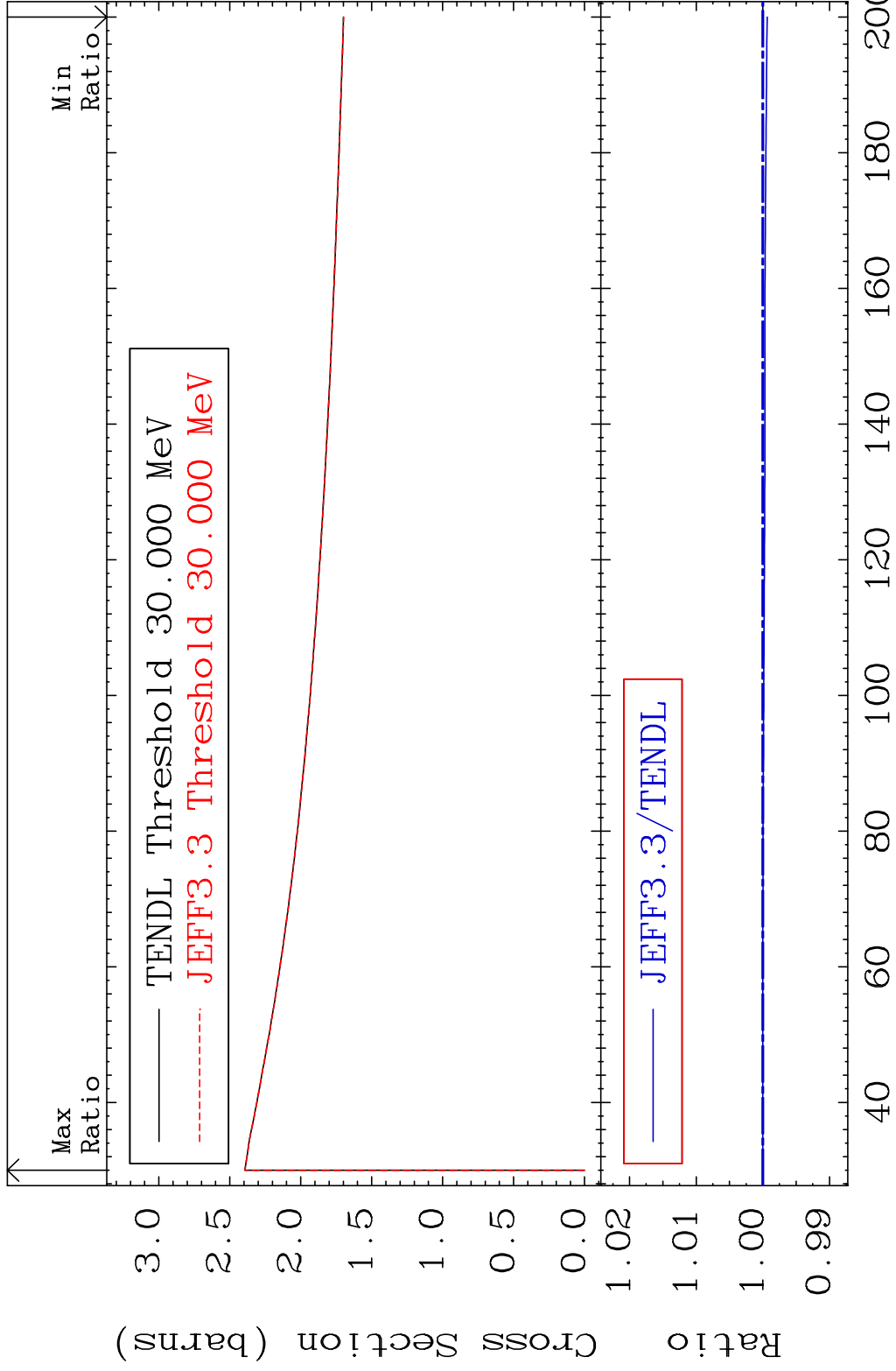


MAT 8040

(n, remainder)

80-Hg-201

Cross Section -0.065 To 0.000 %

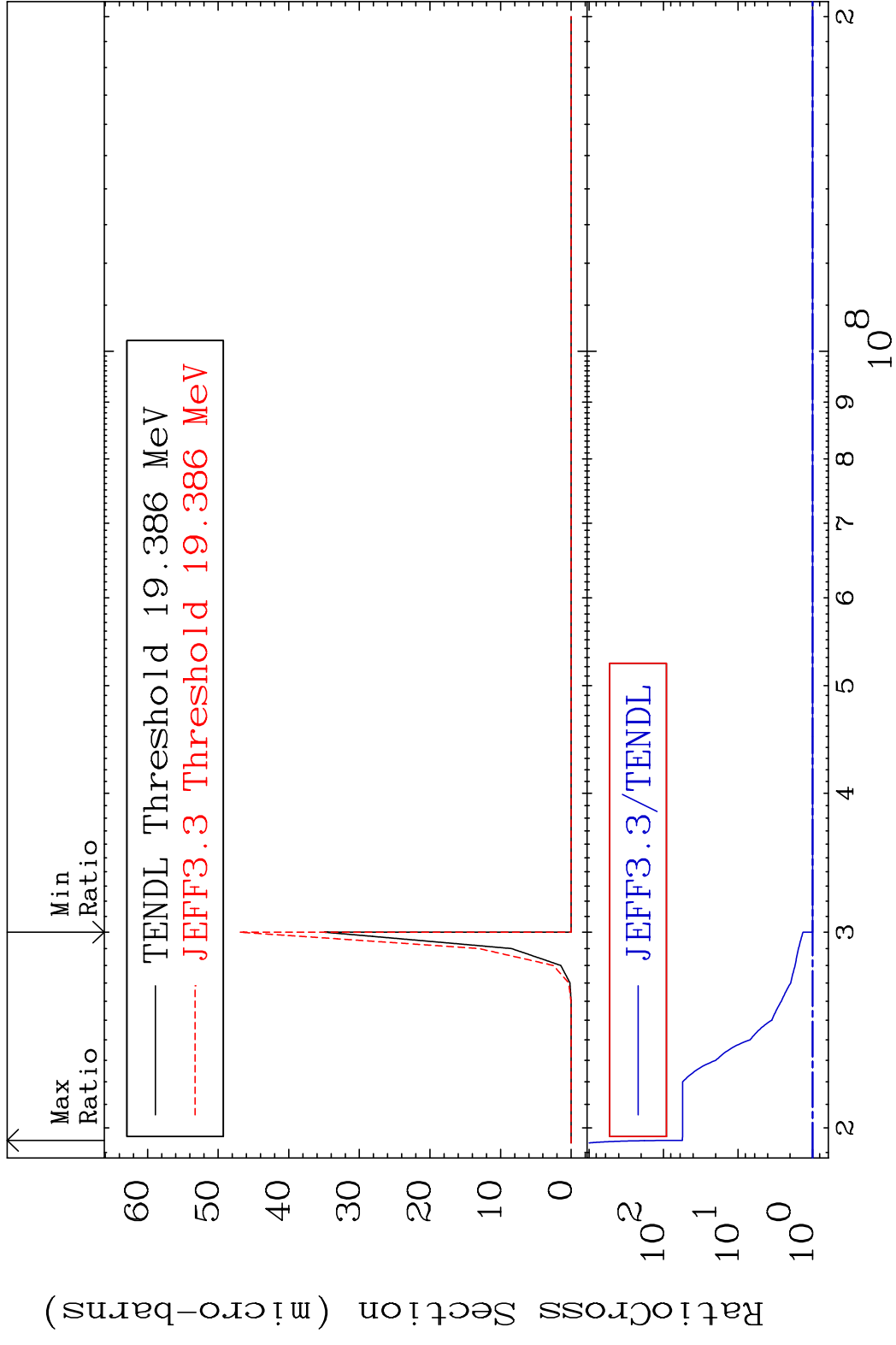


4

Incident Energy (MeV)

80-Hg-201

MAT 8040 (n,2n) d 80-Hg-201
 Cross Section 0.000 To 5489. %



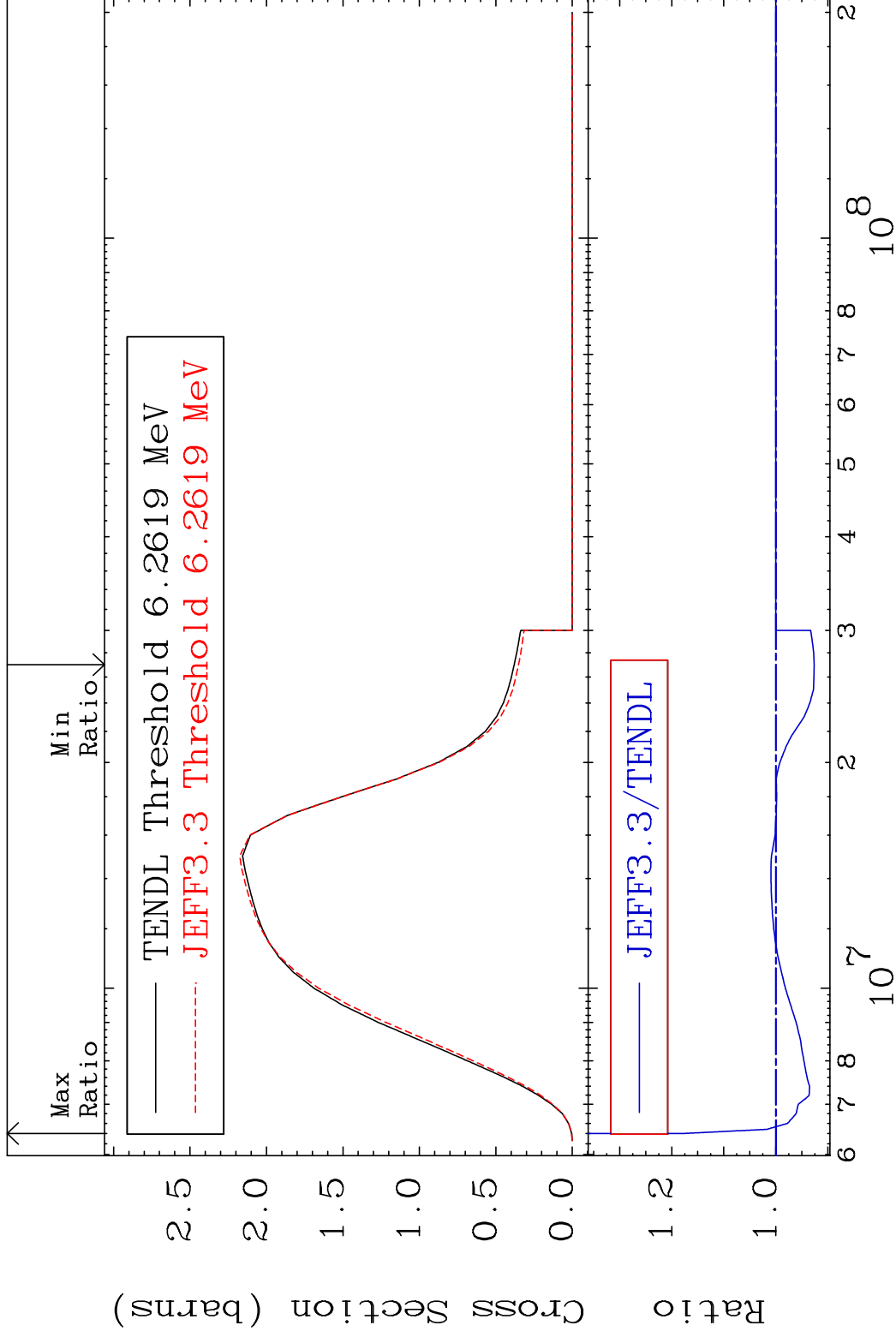
5 Incident Energy (eV) 80-Hg-201

MAT 8040

(n,2n)

80-Hg-201

Cross Section -7.347 To 17.71 %



6

Incident Energy (eV)

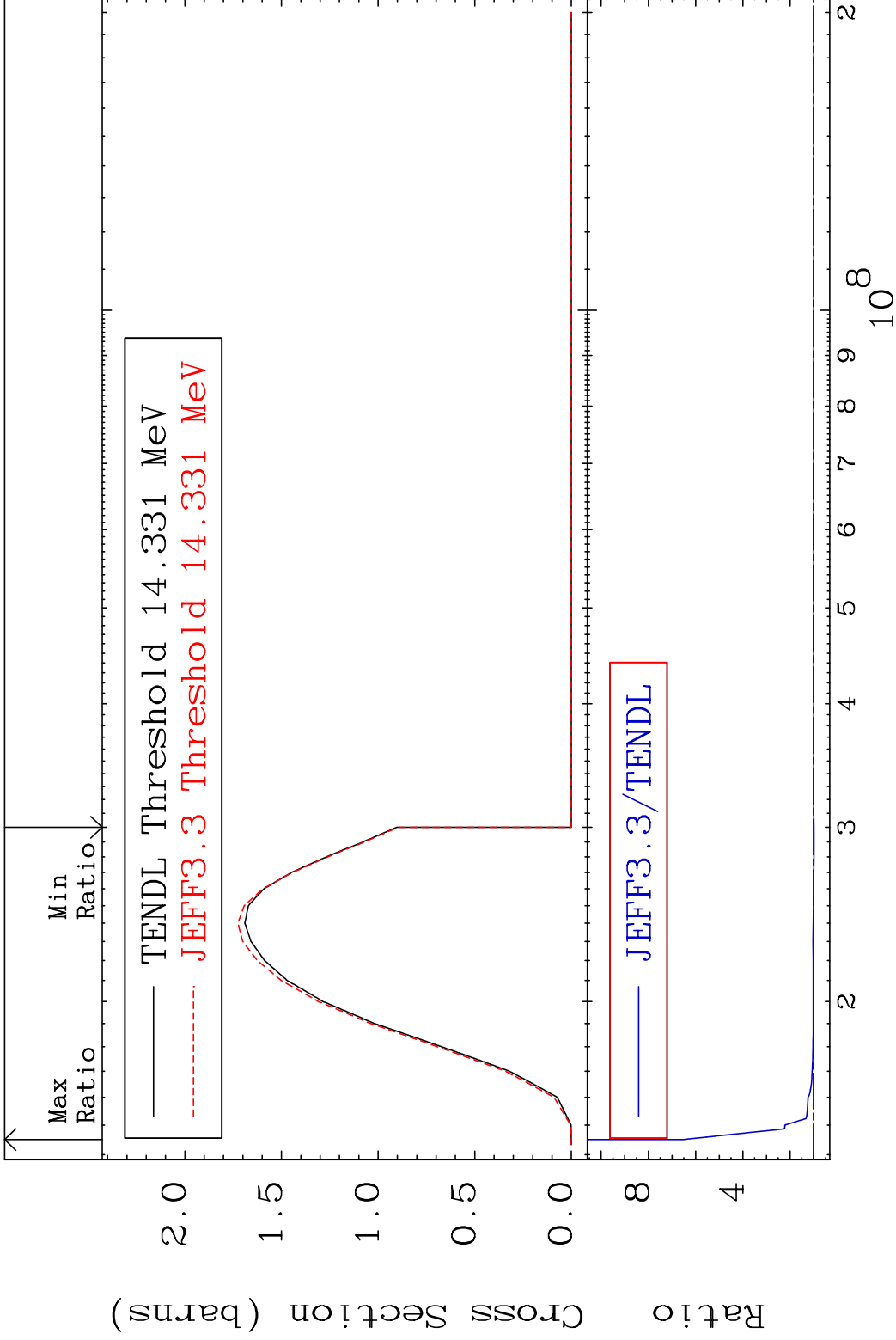
80-Hg-201

MAT 8040

(n,3n)

80-Hg-201

Cross Section -0.725 To 553.2 %



7

Incident Energy (eV)

80-Hg-201

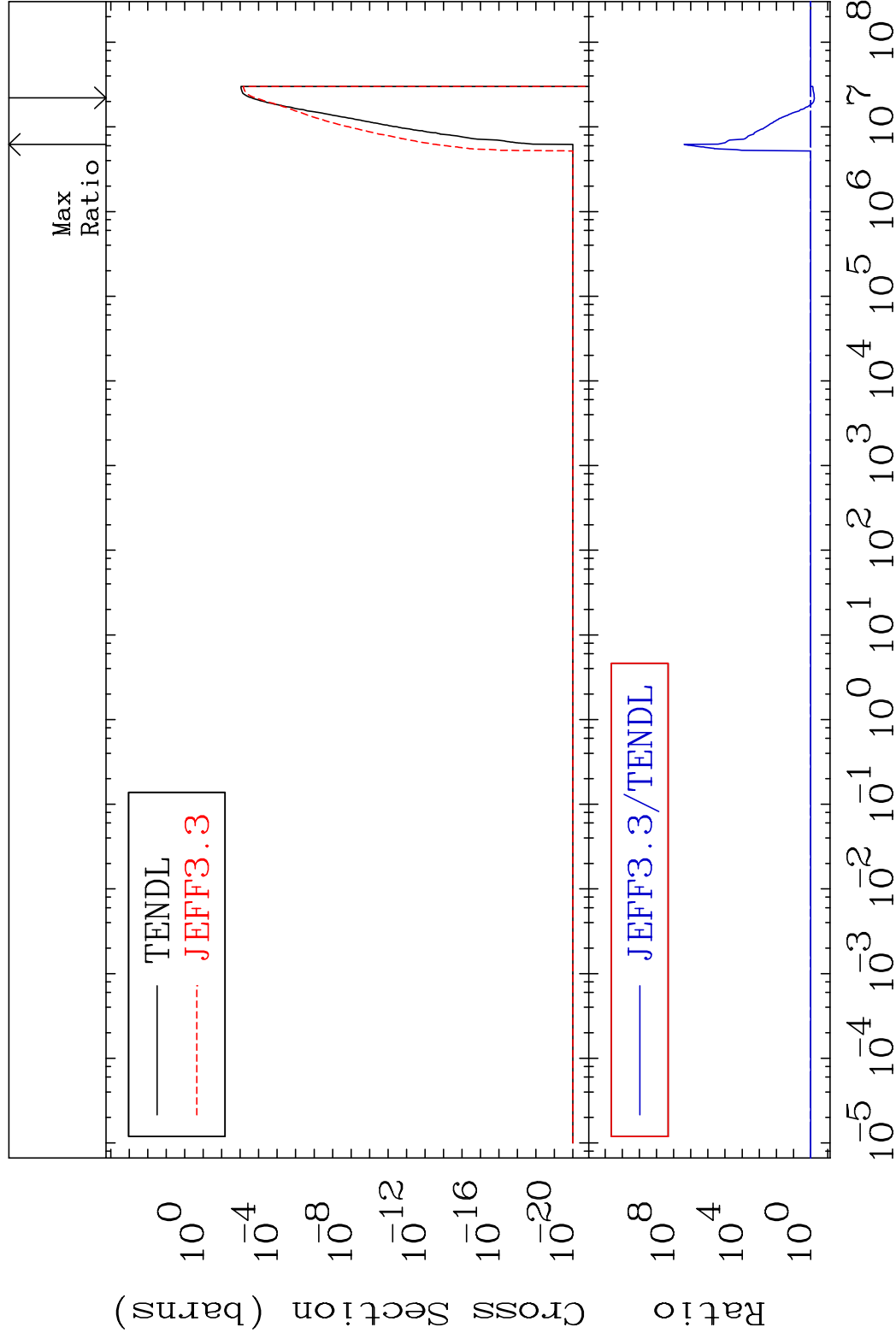
MAT 8040

(n, n') α

80-Hg-201

Cross Section

-38.48 To 9999. %

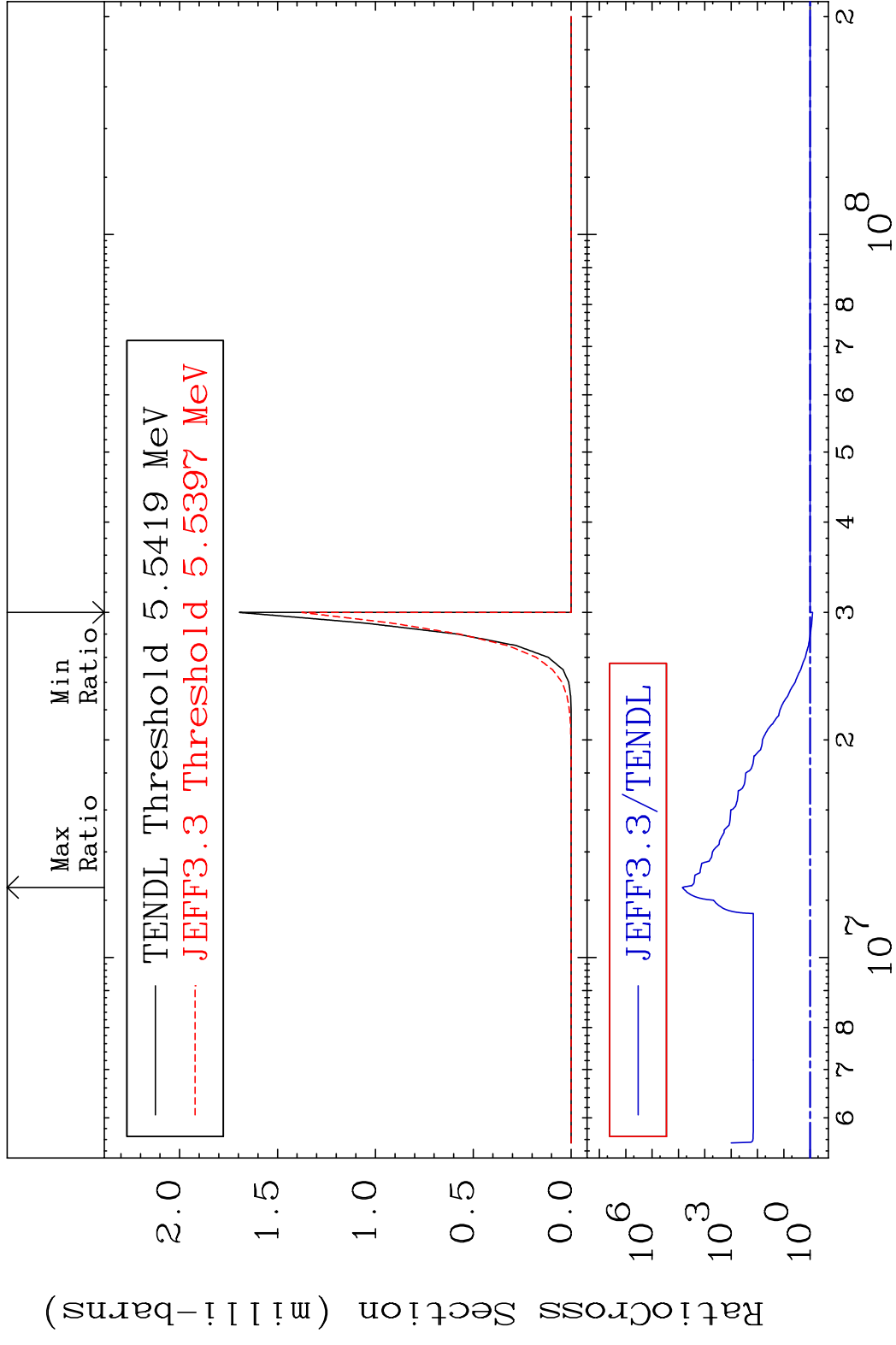


8

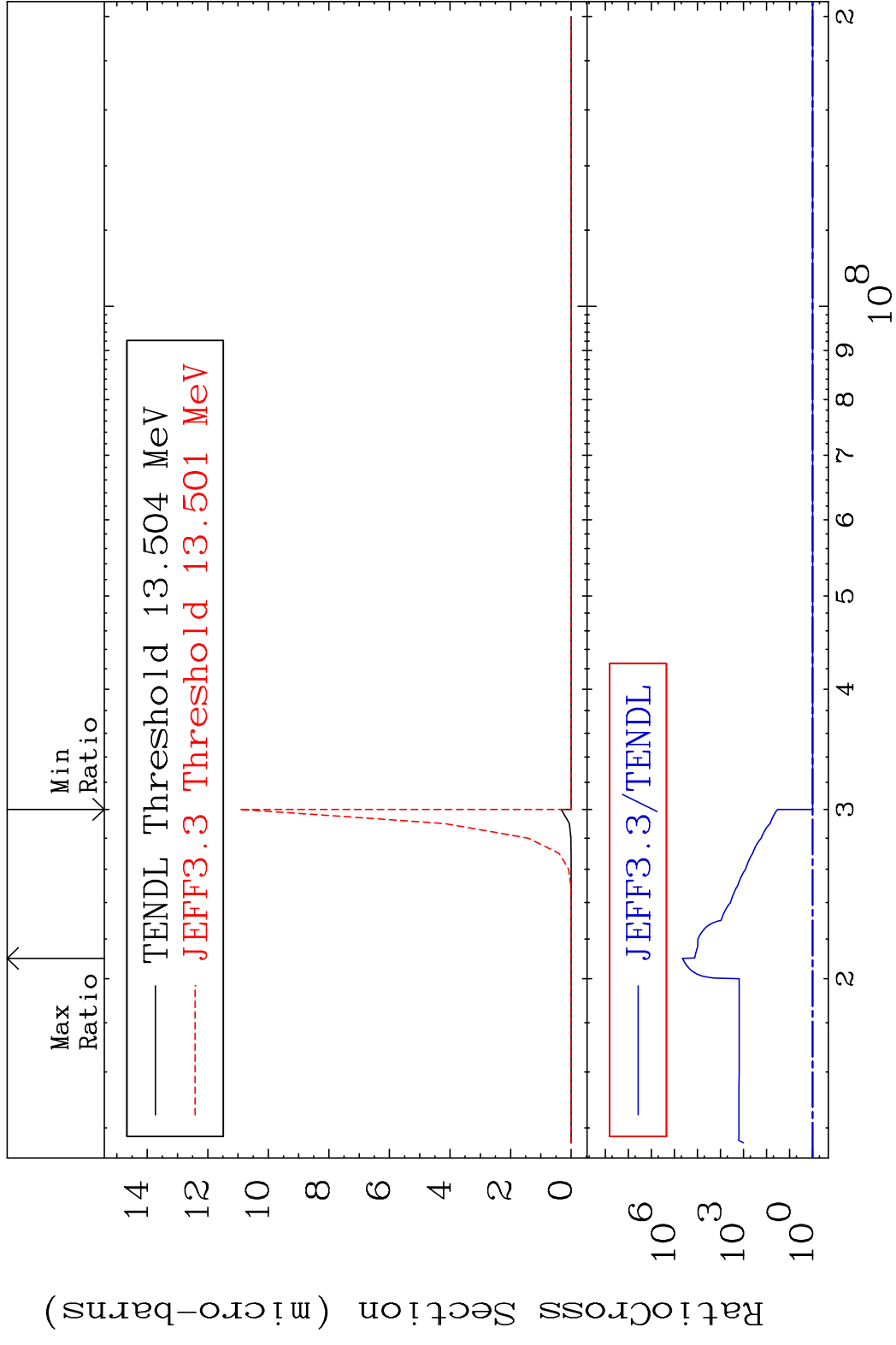
Incident Energy (eV)

80-Hg-201

MAT 8040 (n,2n) α 80-Hg-201
 Cross Section -18.80 To 9999. %

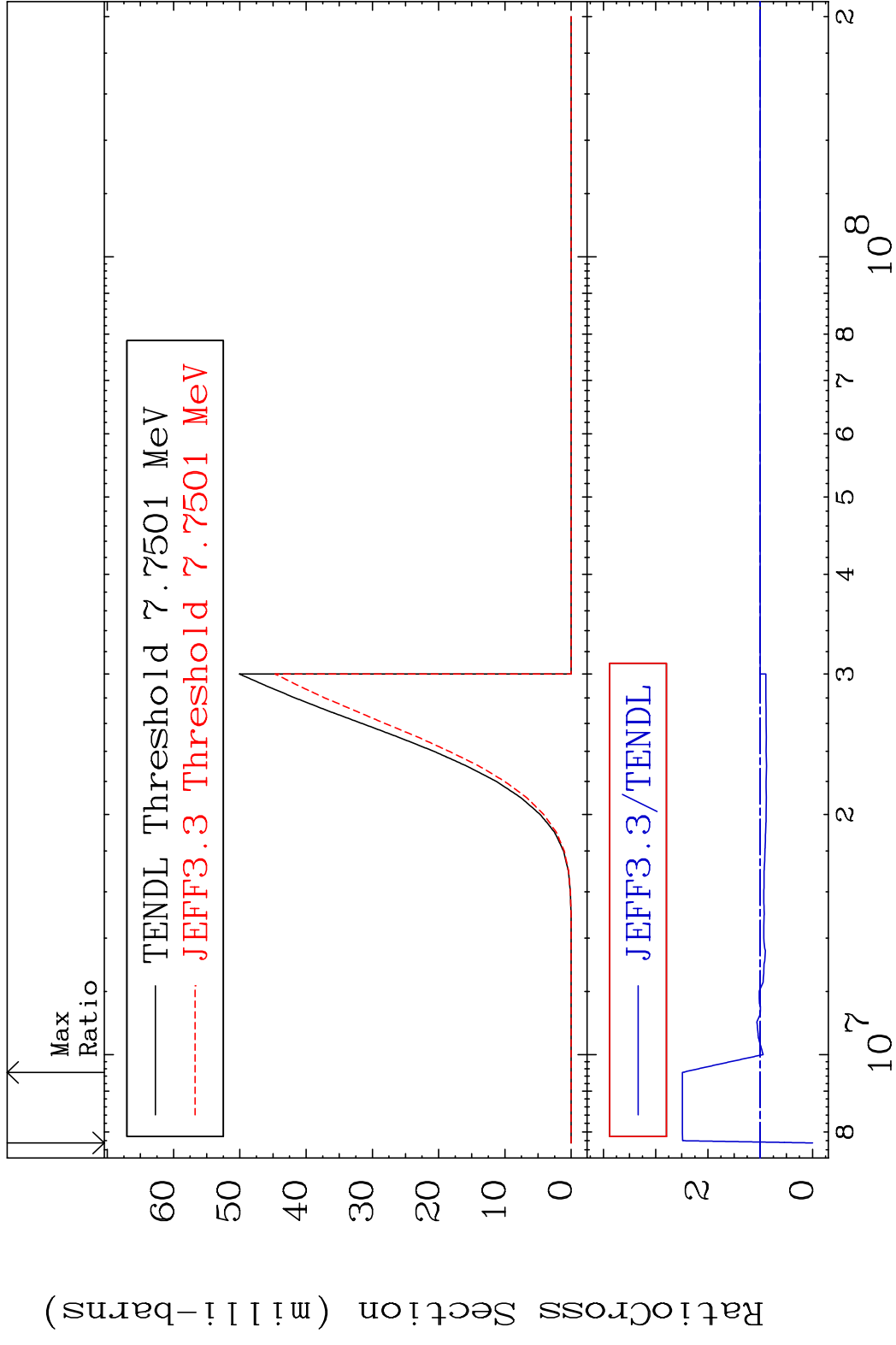


MAT 8040 (n,3n) α 80-Hg-201
 Cross Section 0.000 To 9999. %



10 80-Hg-201

MAT 8040 (n, n') p 80-Hg-201
 Cross Section -100.0 To 149.0 %

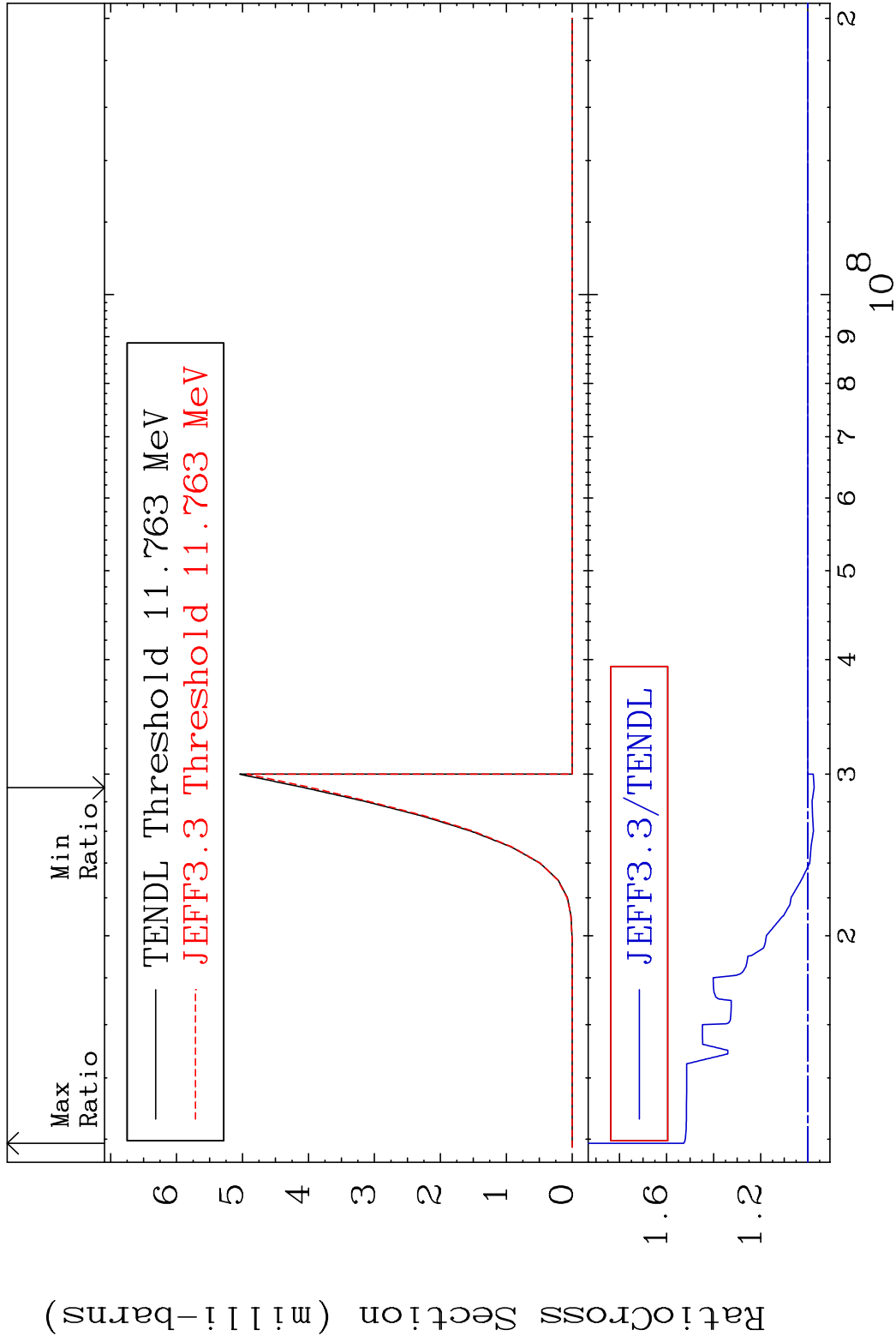


MAT 8040

(n, n') d

80-Hg-201

Cross Section -2.667 To 52.75 %

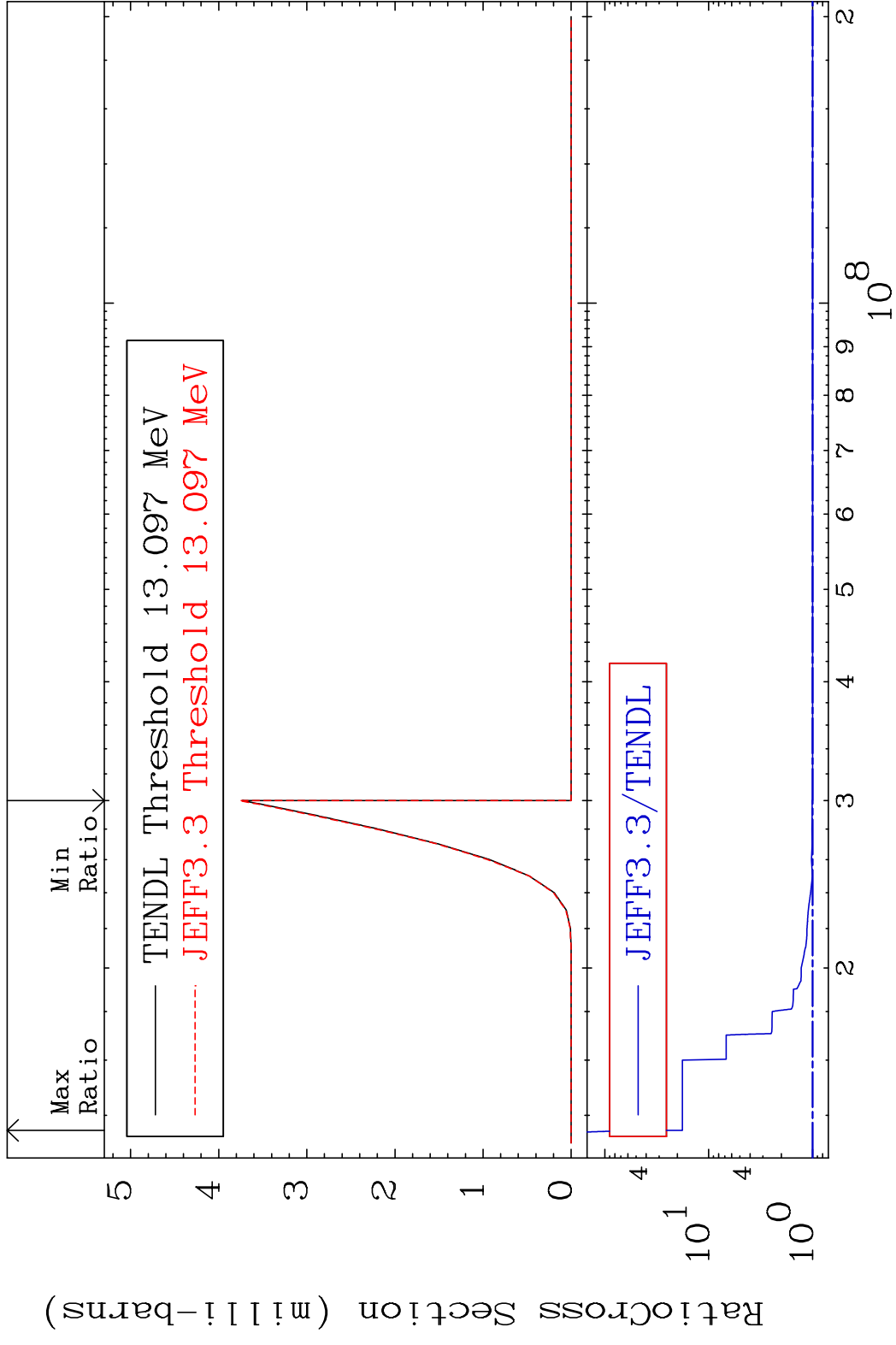


12

Incident Energy (eV)

80-Hg-201

MAT 8040 (n, n') t 80-Hg-201
 Cross Section 0.000 To 1693. %

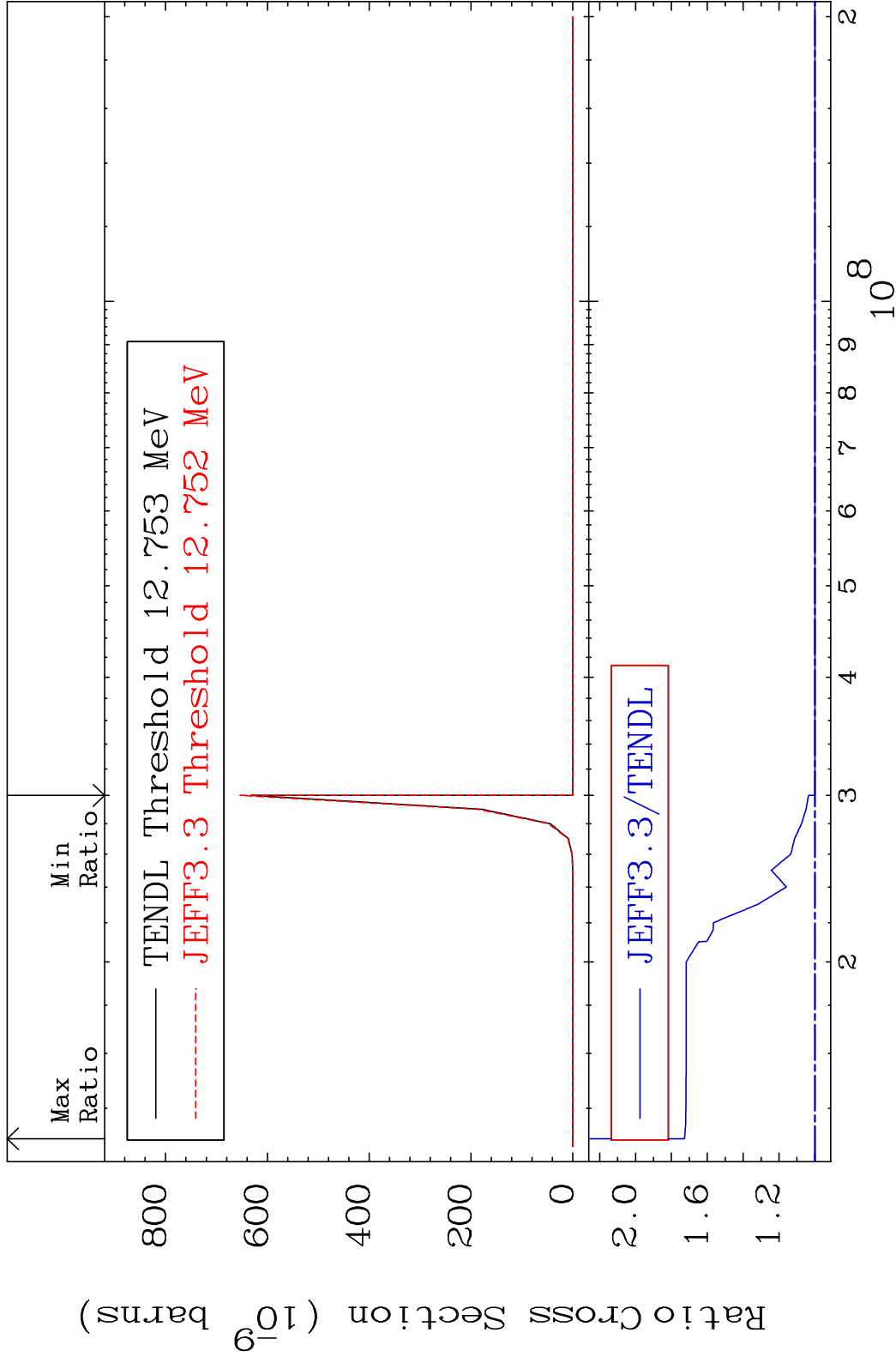


MAT 8040

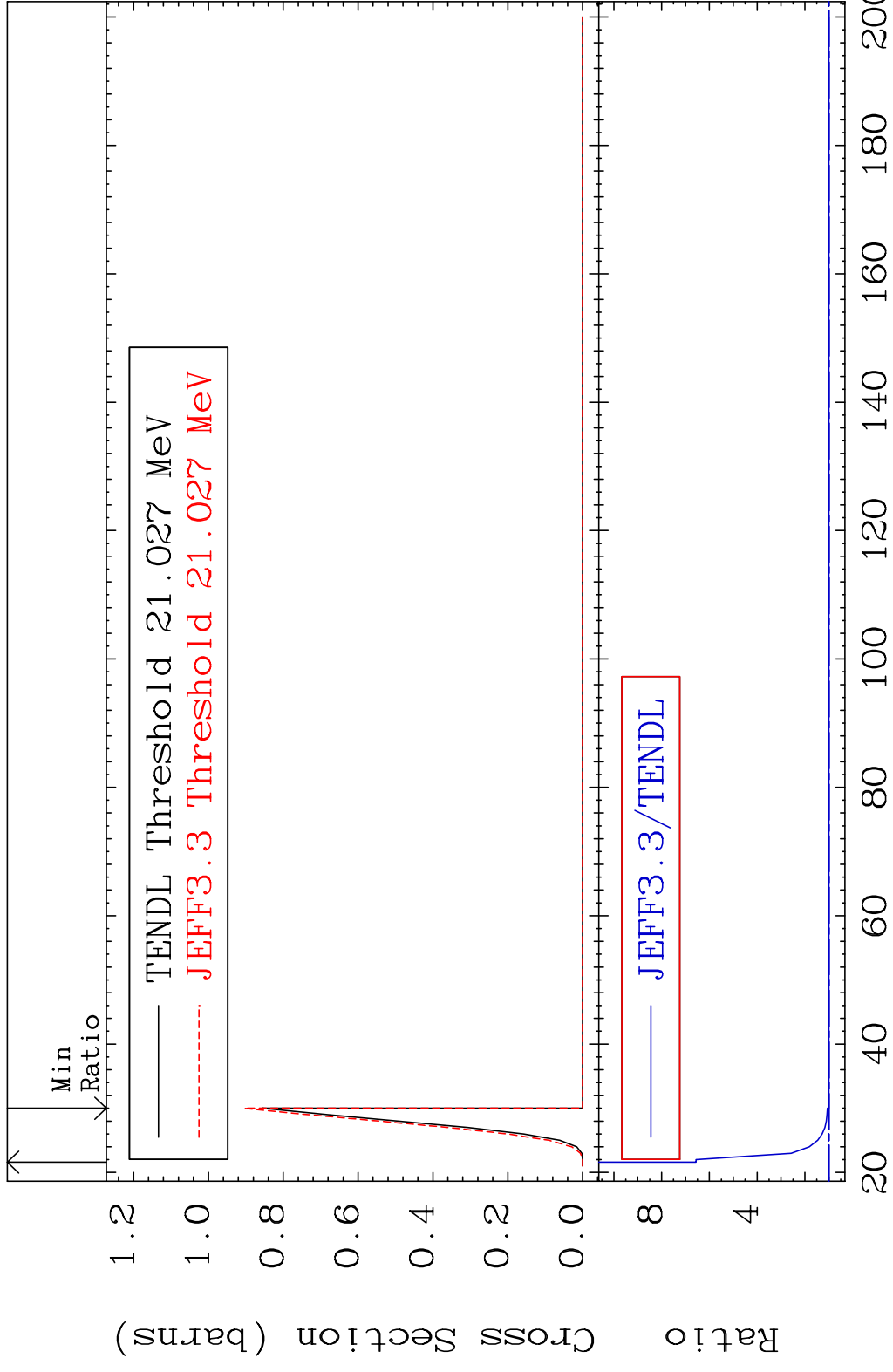
(n,n') He-3

80-Hg-201

Cross Section 0.000 To 72.81 %



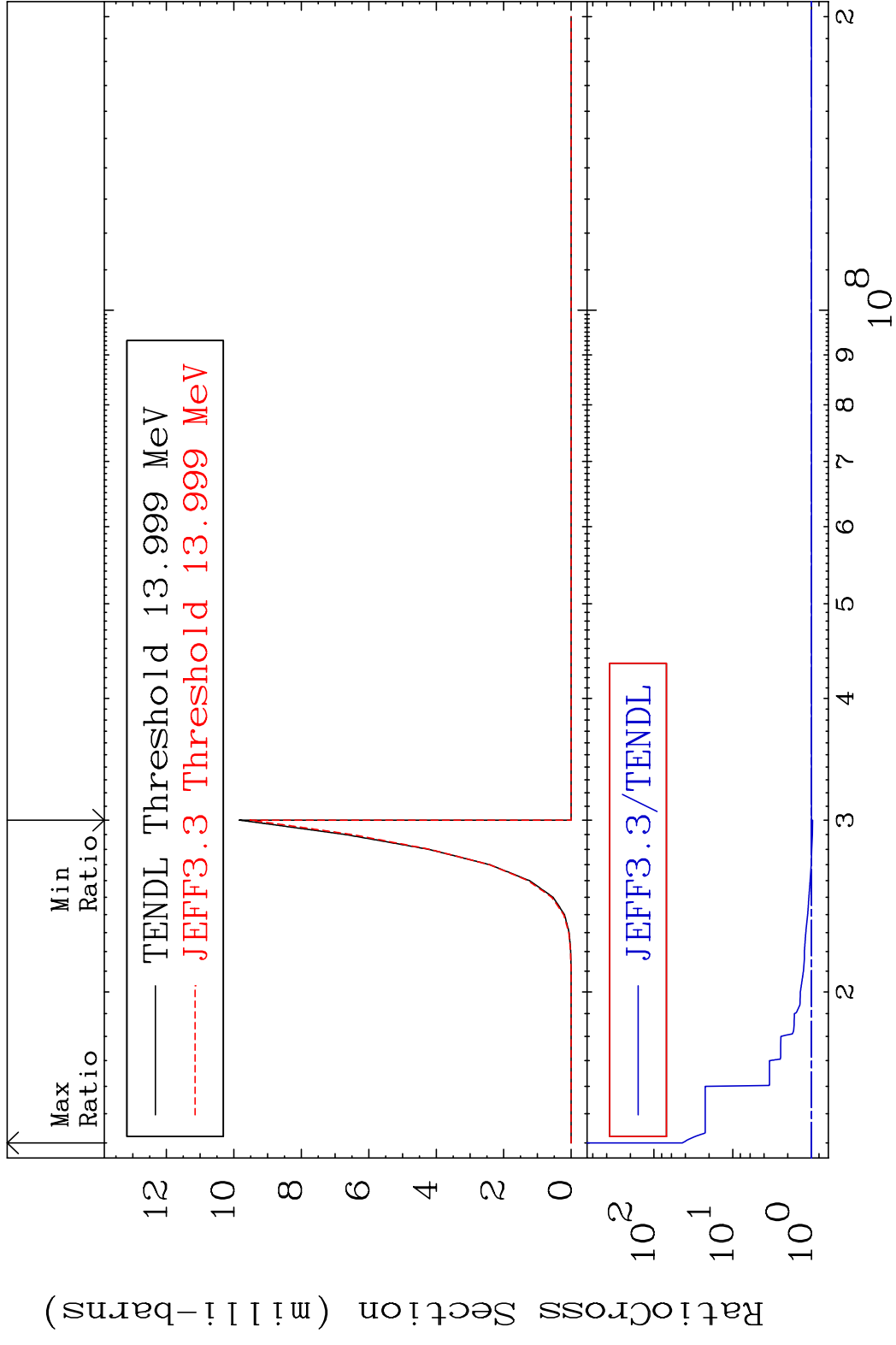
MAT 8040 (n,4n) 80-Hg-201
 Cross Section 0.000 To 556.1 %



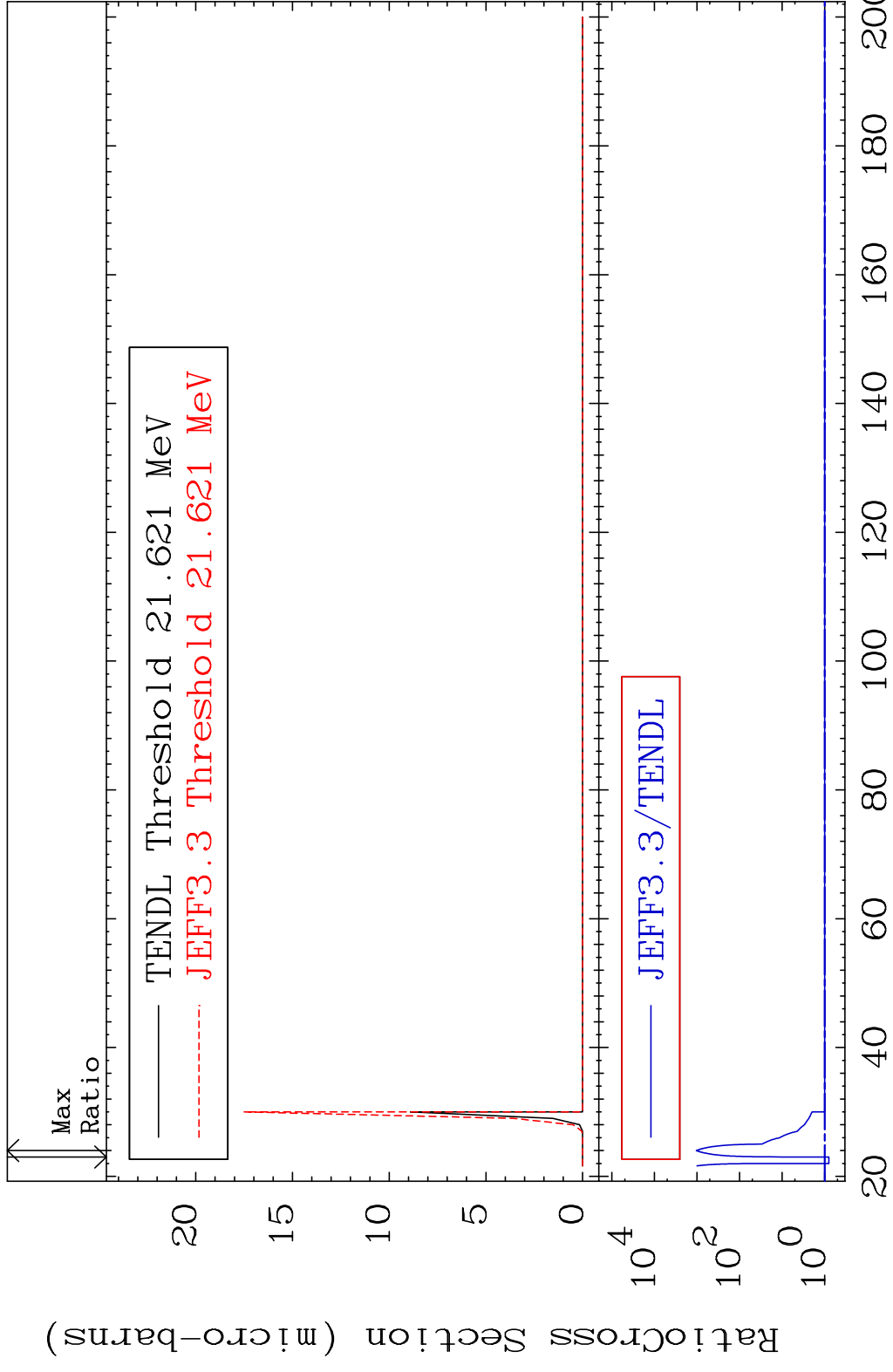
15 Incident Energy (MeV) 80-Hg-201

MAT 8040

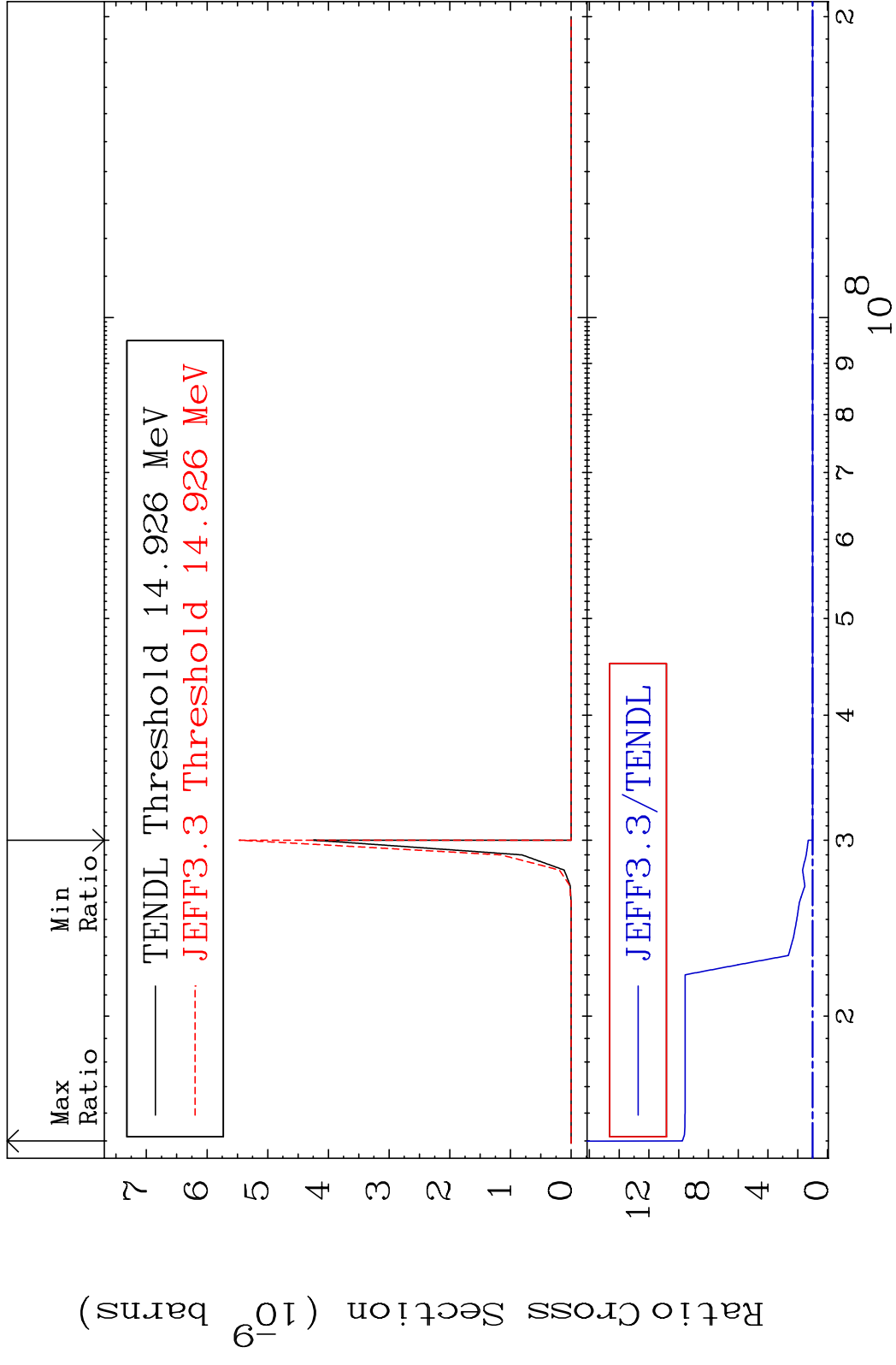
(n,2n) p 80-Hg-201
Cross Section -3.254 To 4262. %



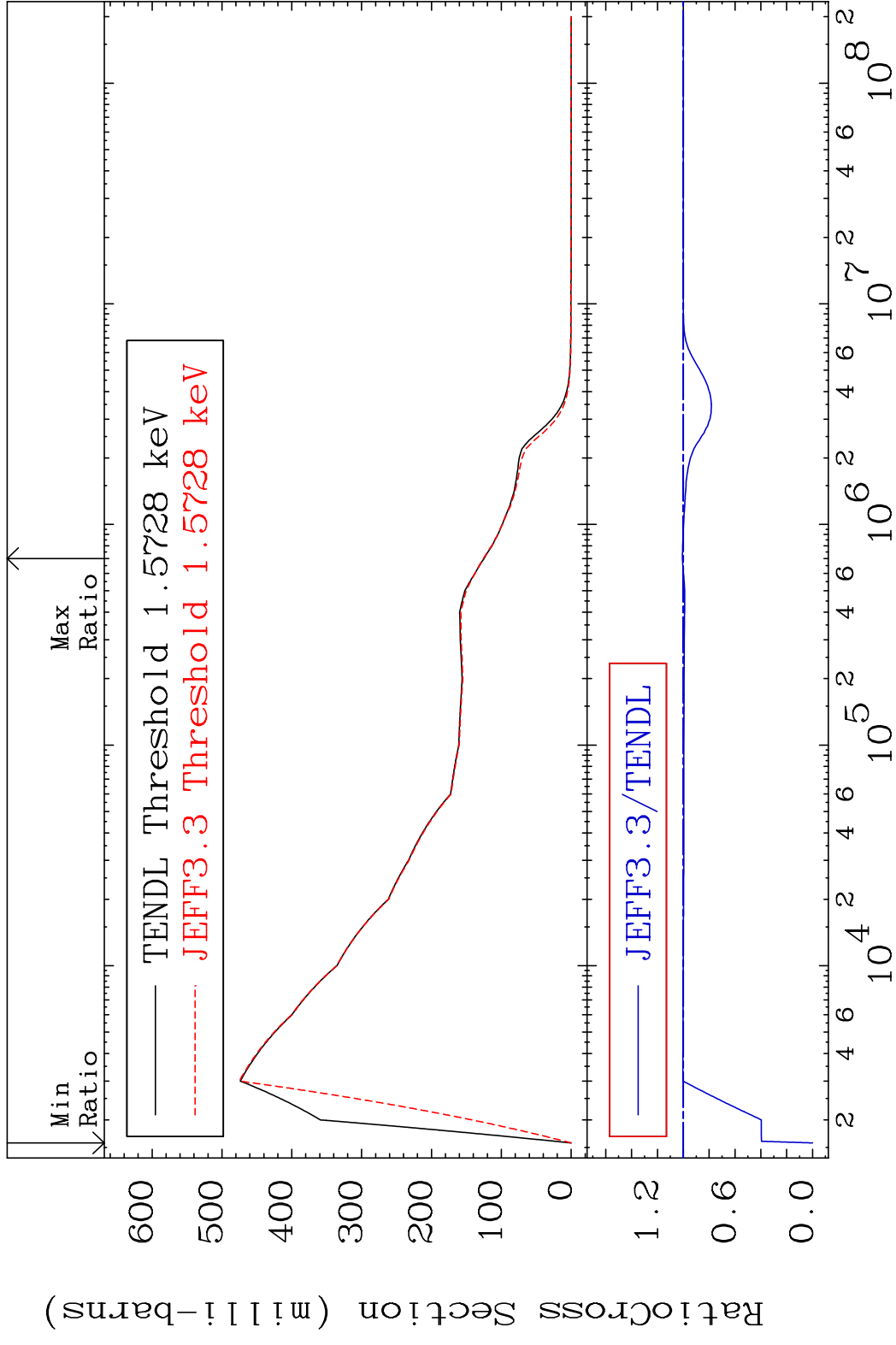
MAT 8040 (n,3n) p 80-Hg-201
 Cross Section -20.45 To 9999. %



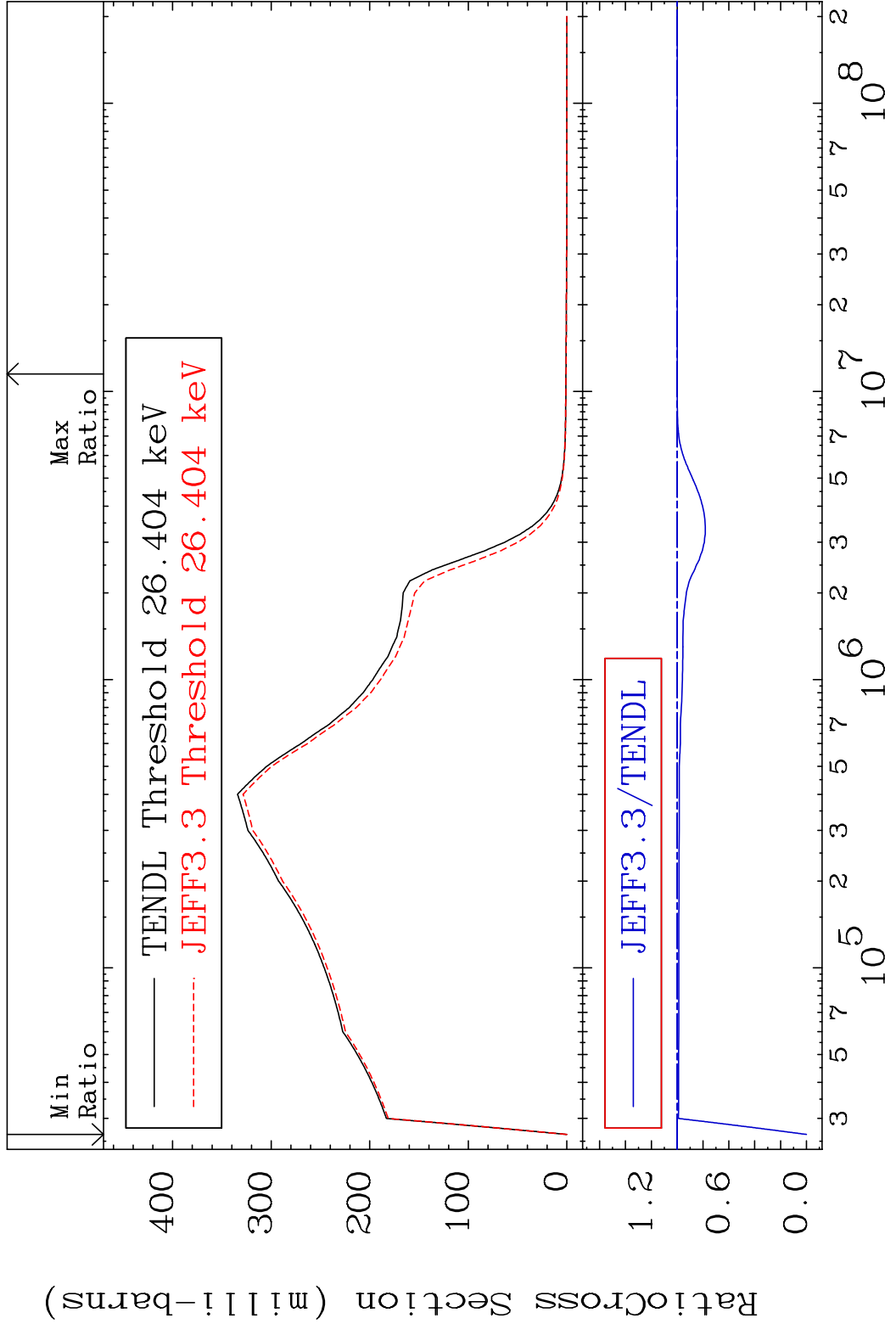
MAT 8040 (n,2n) p 80-Hg-201
 Cross Section 0.000 To 875.1 %



MAT 8040 MT= 51 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.712 %

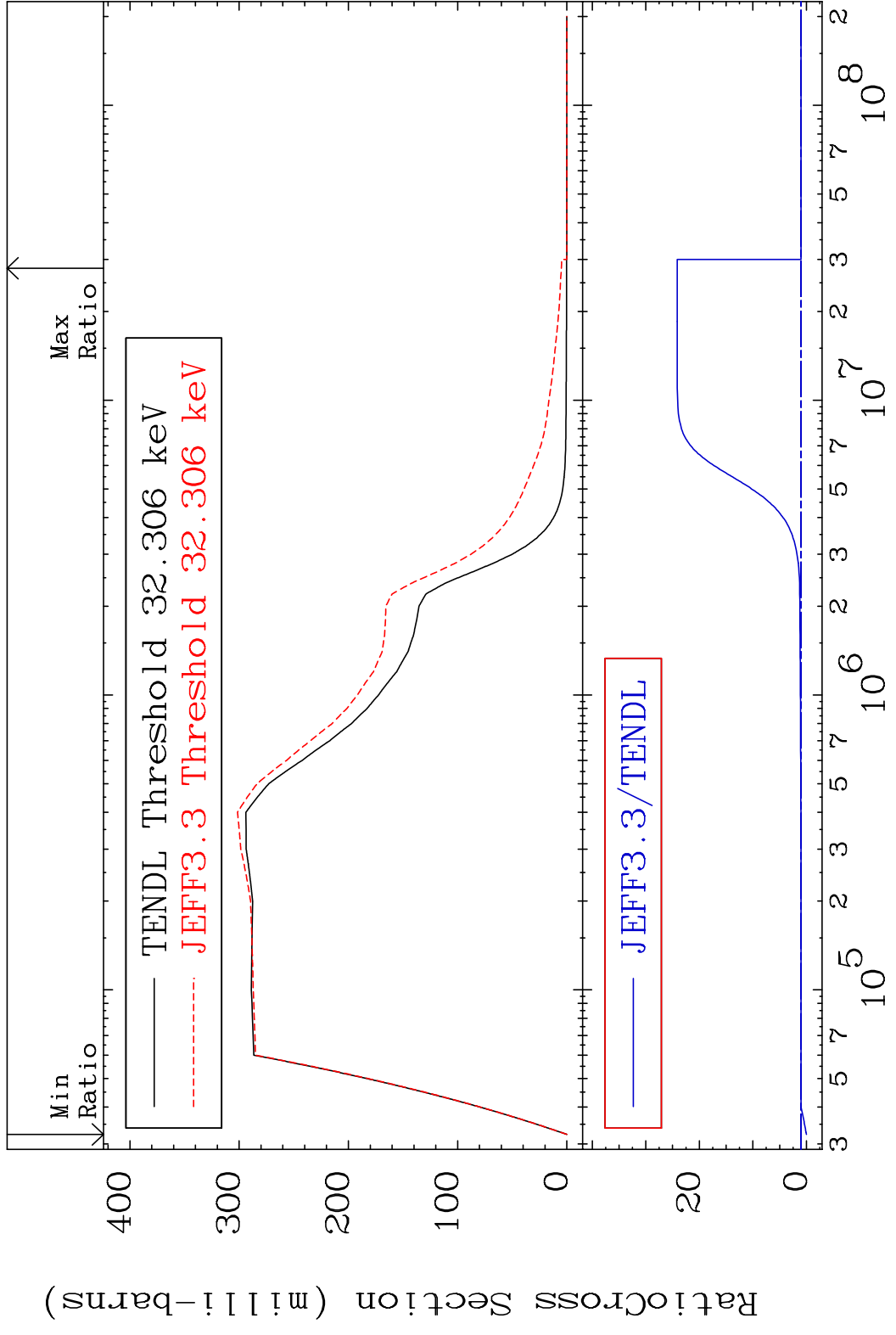


MAT 8040 MT= 52 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.001 %



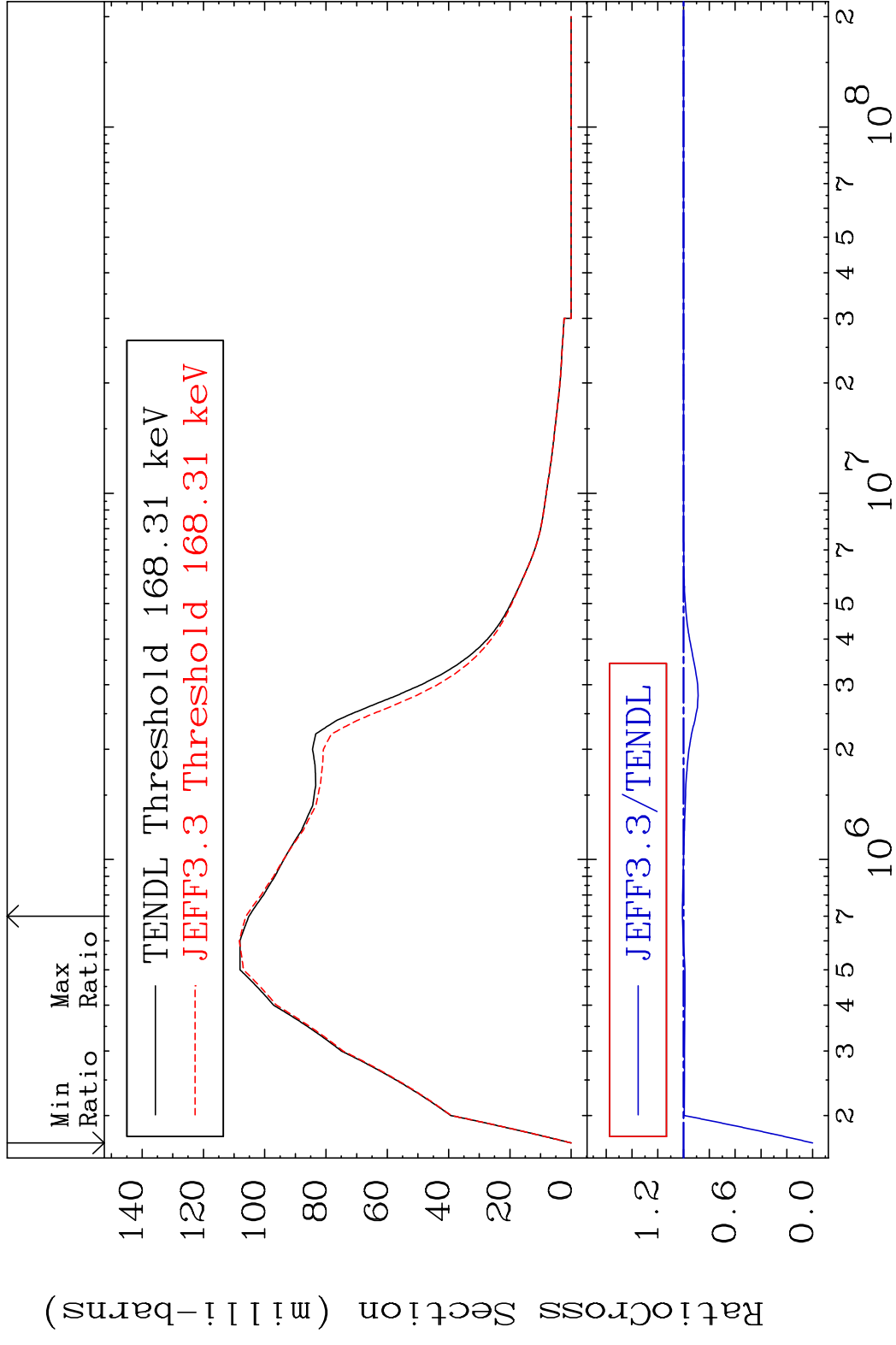
20 Incident Energy (eV) 80-Hg-201

MAT 8040 MT= 53 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 2314. %

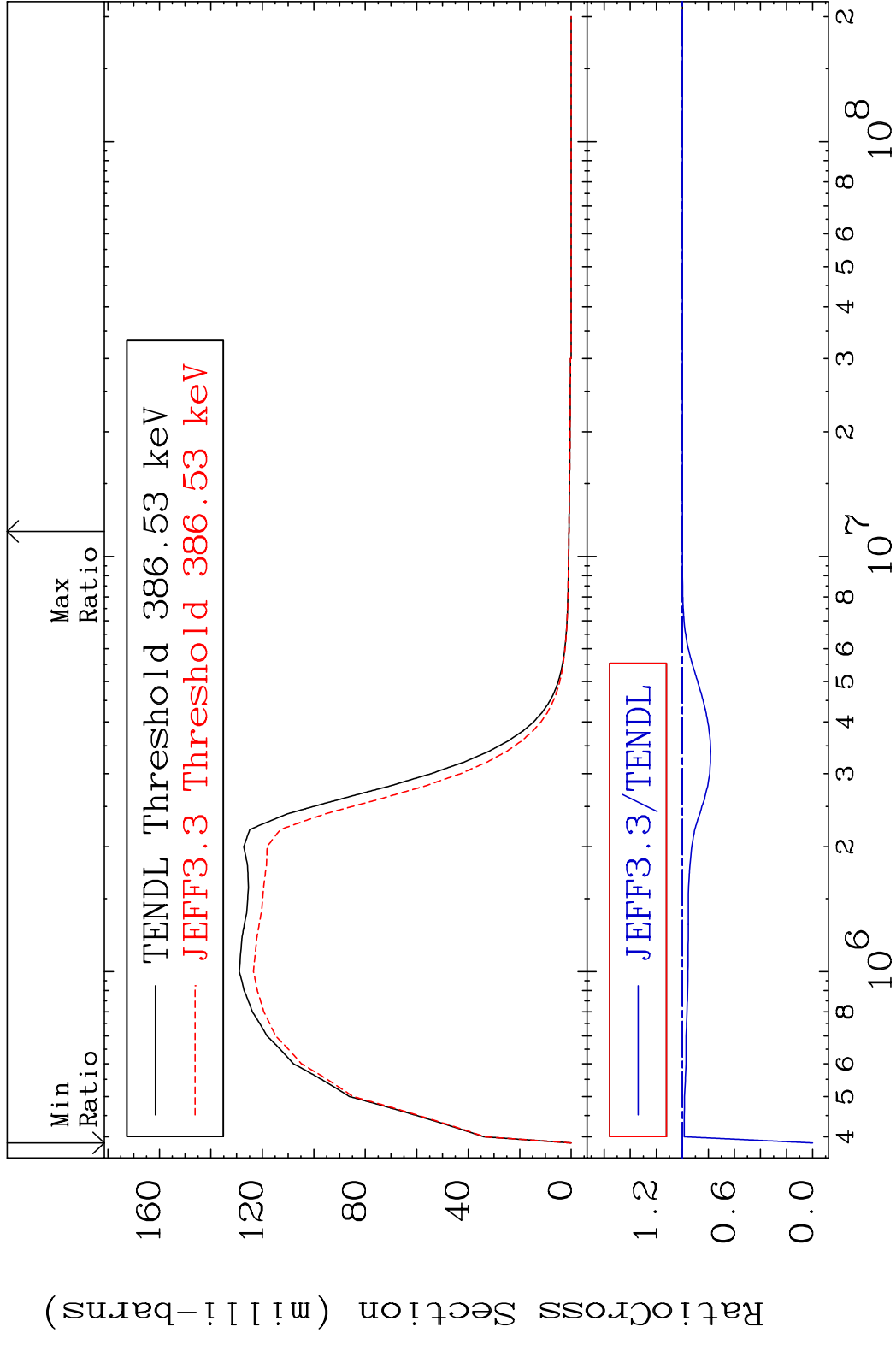


21 Incident Energy (eV) 80-Hg-201

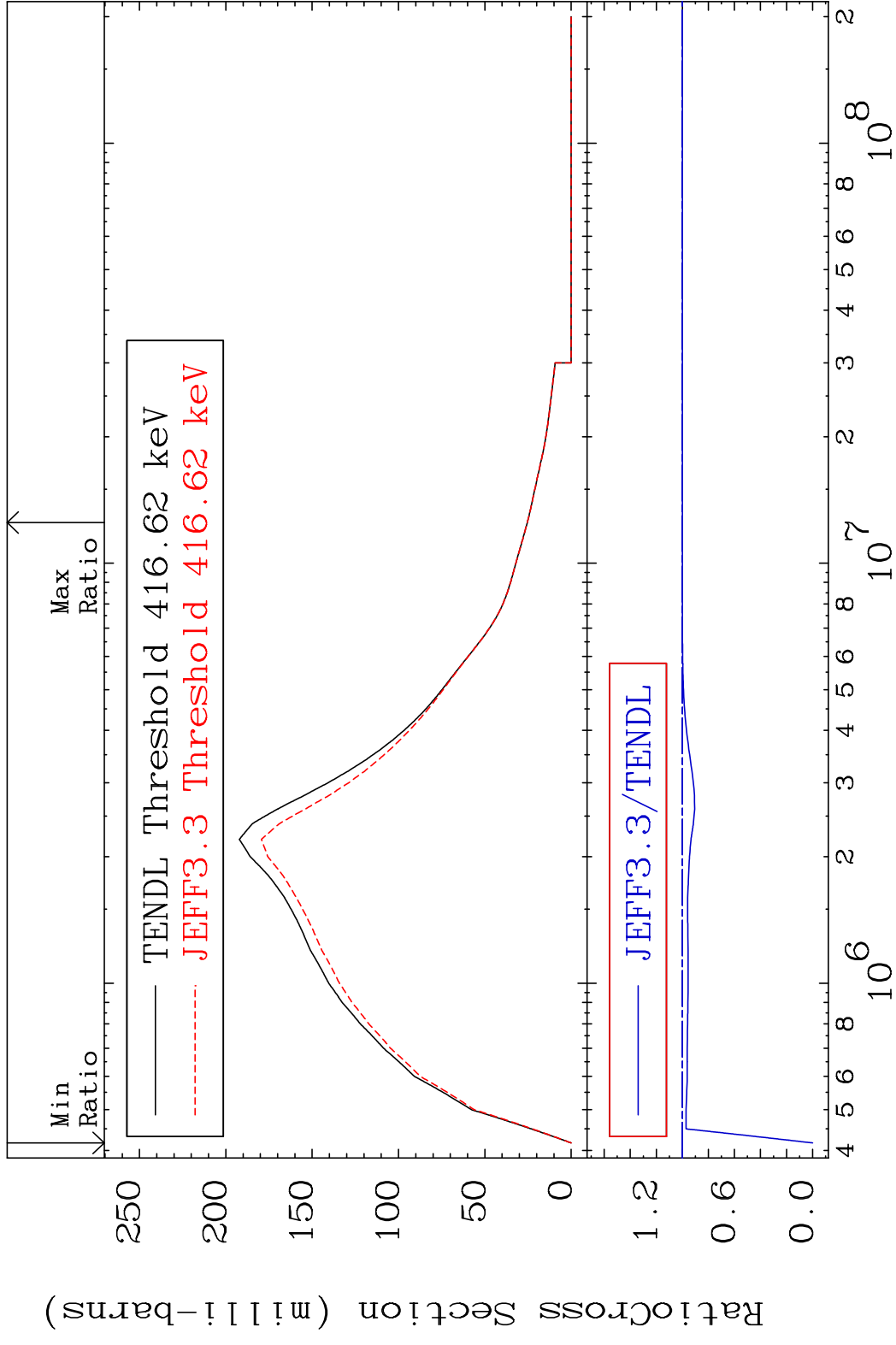
MAT 8040 MT= 54 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.955 %



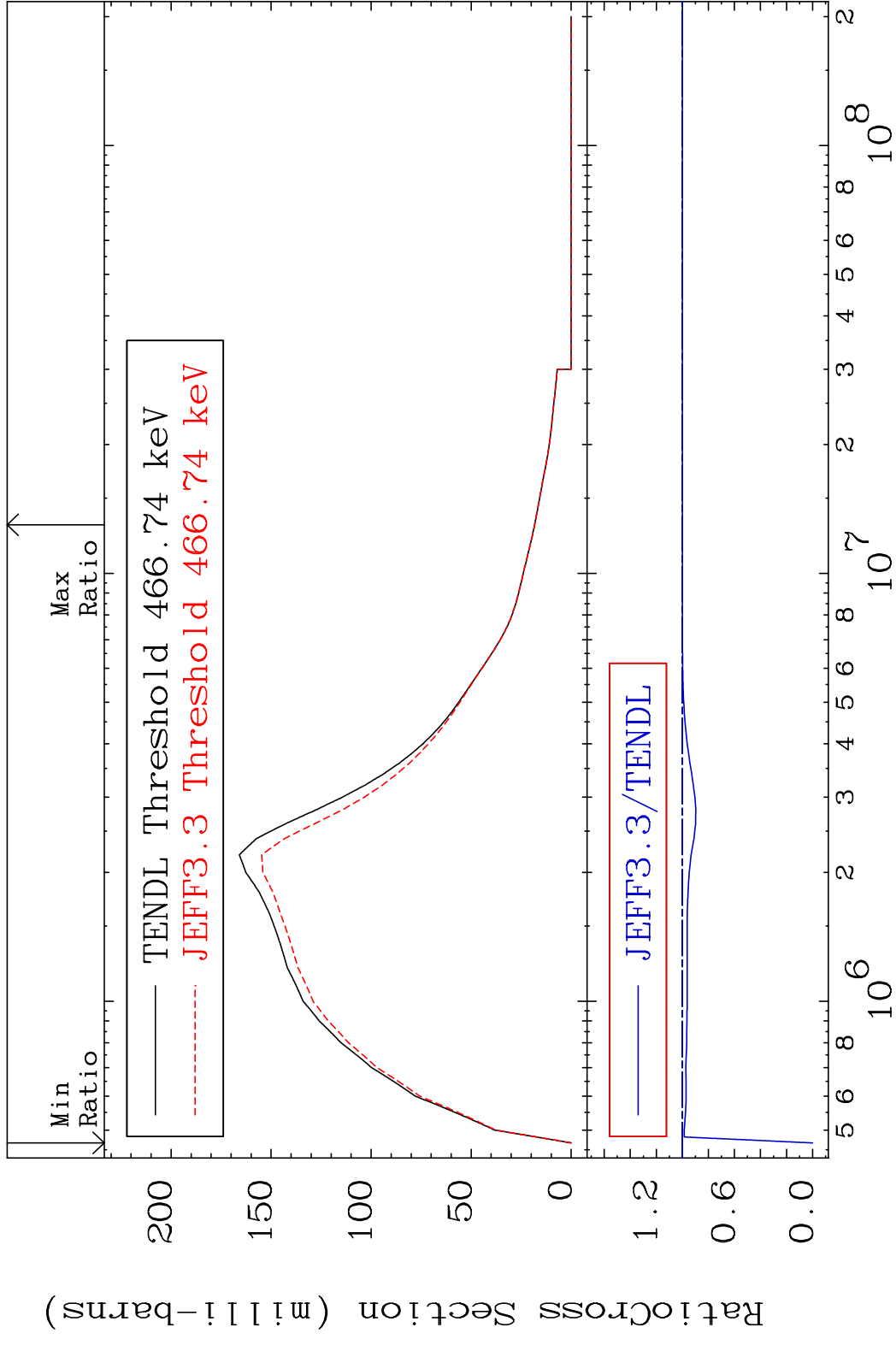
MAT 8040 MT= 55 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.001 %



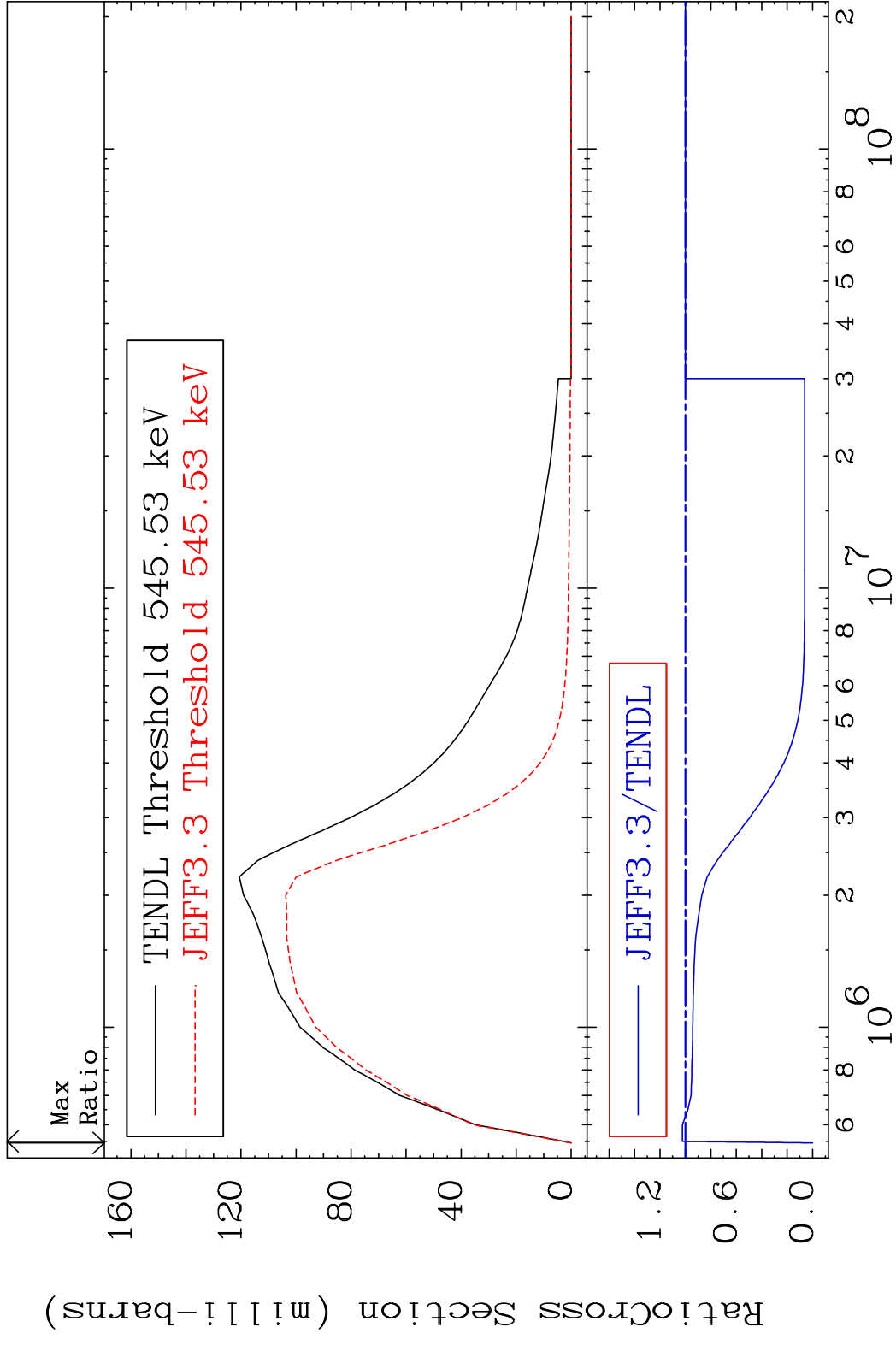
MAT 8040 MT= 56 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %



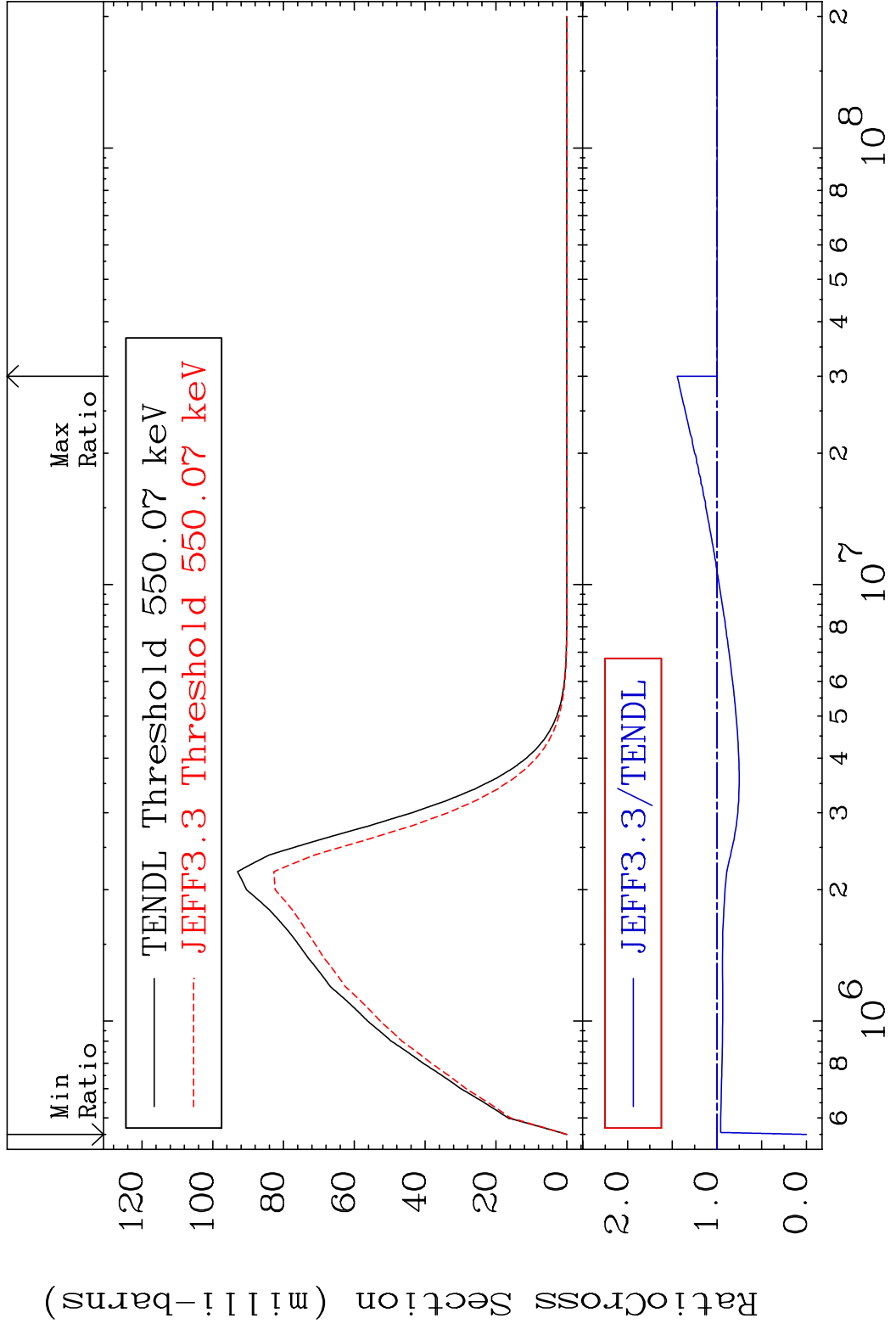
MAT 8040 MT= 57 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %



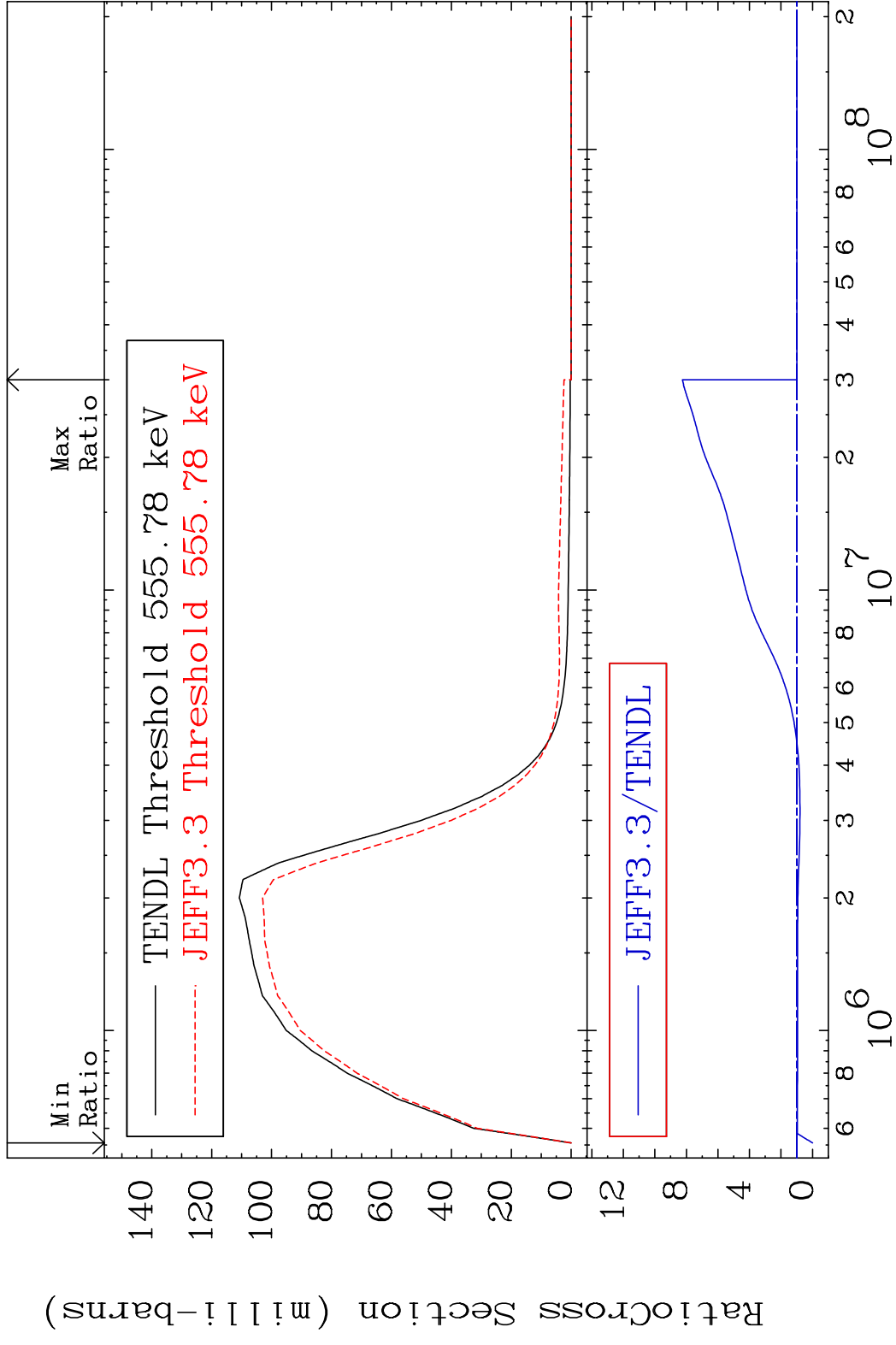
MAT 8040 MT= 58 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 2.385 %



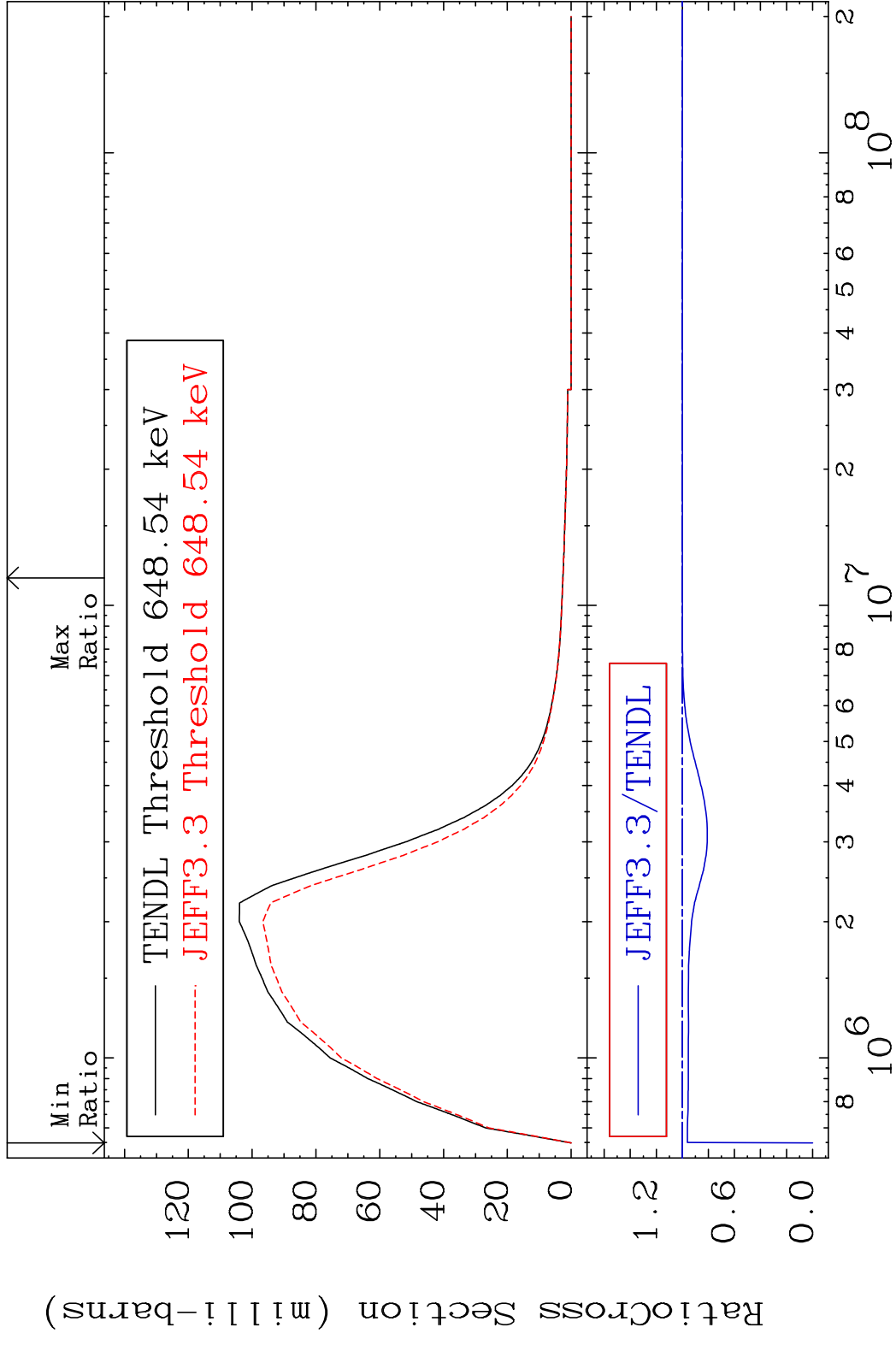
MAT 8040 MT= 59 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 44.51 %



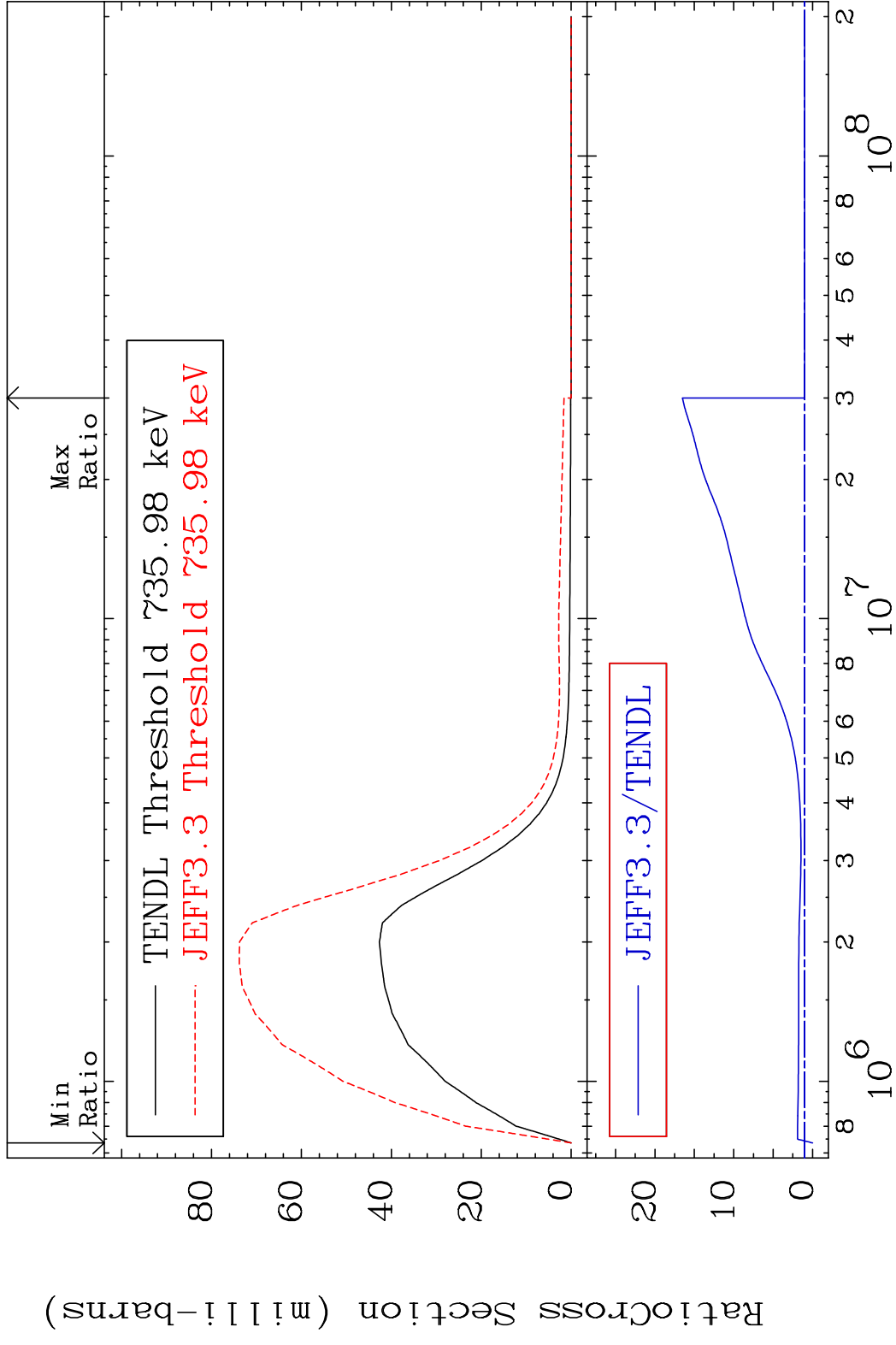
MAT 8040 MT= 60 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 725.6 %



MAT 8040 MT= 61 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %

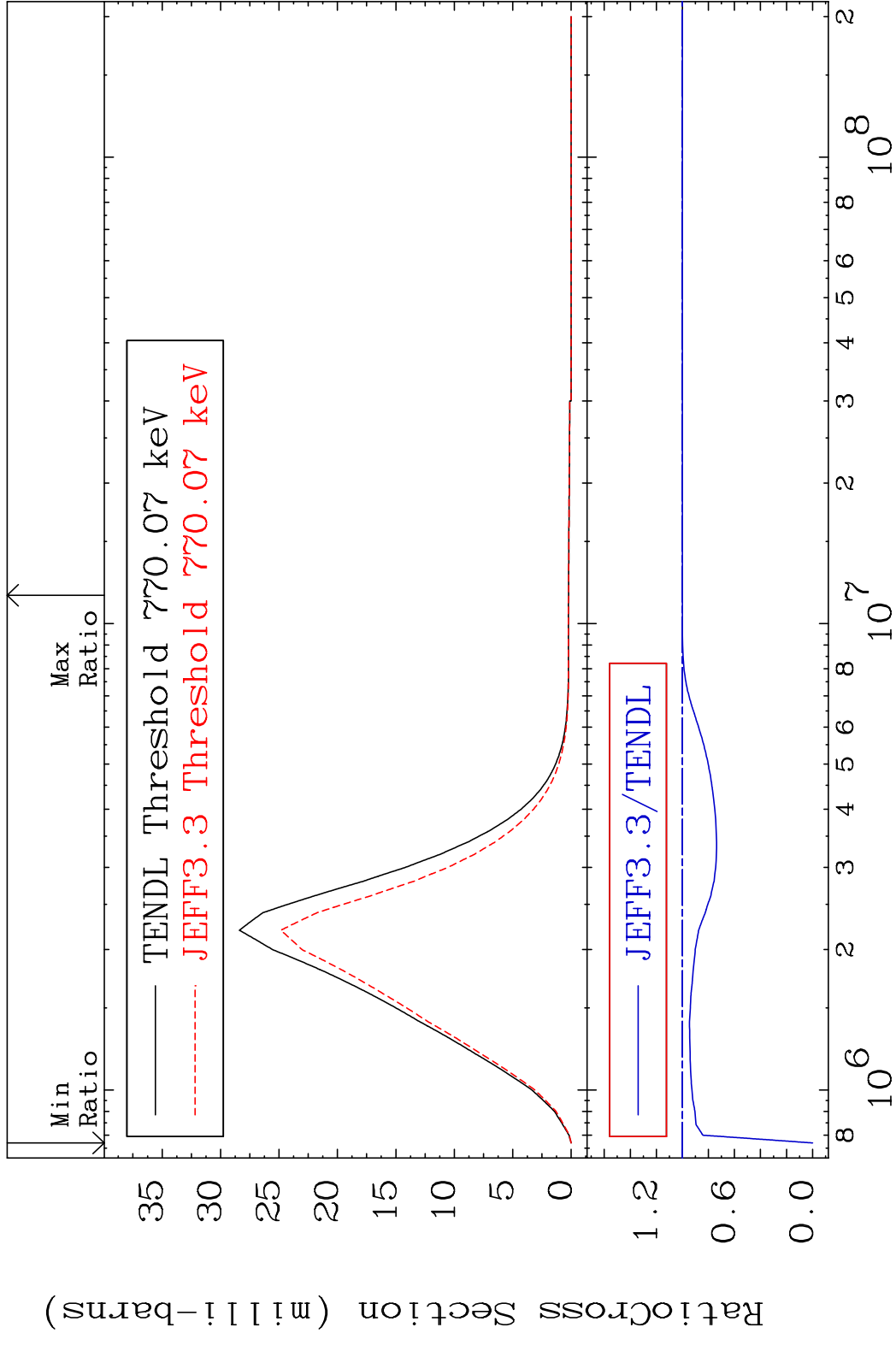


MAT 8040 MT= 62 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 1552. %

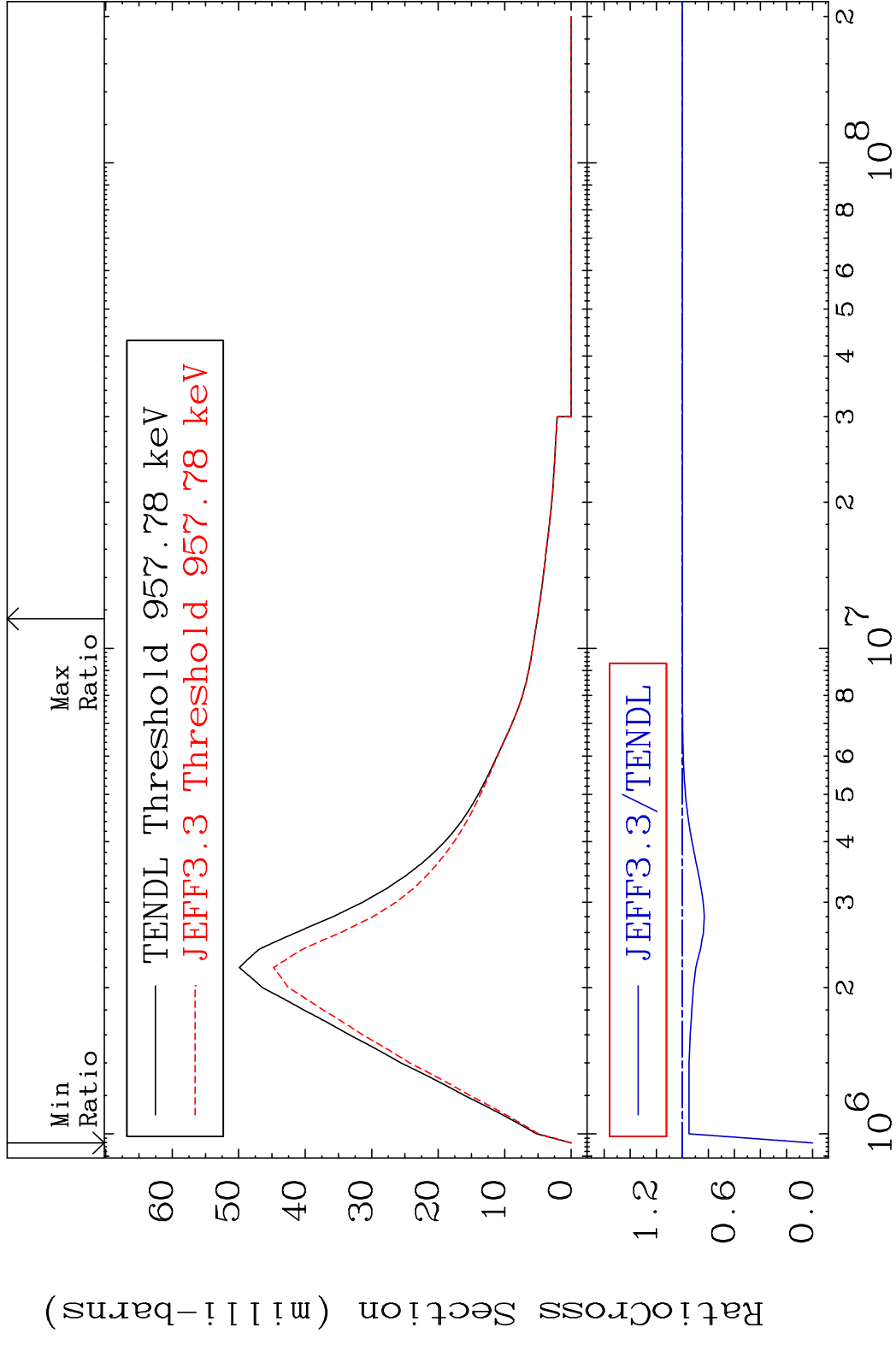


30 Incident Energy (eV) 80-Hg-201

MAT 8040 MT= 63 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.005 %



MAT 8040 MT= 64 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %

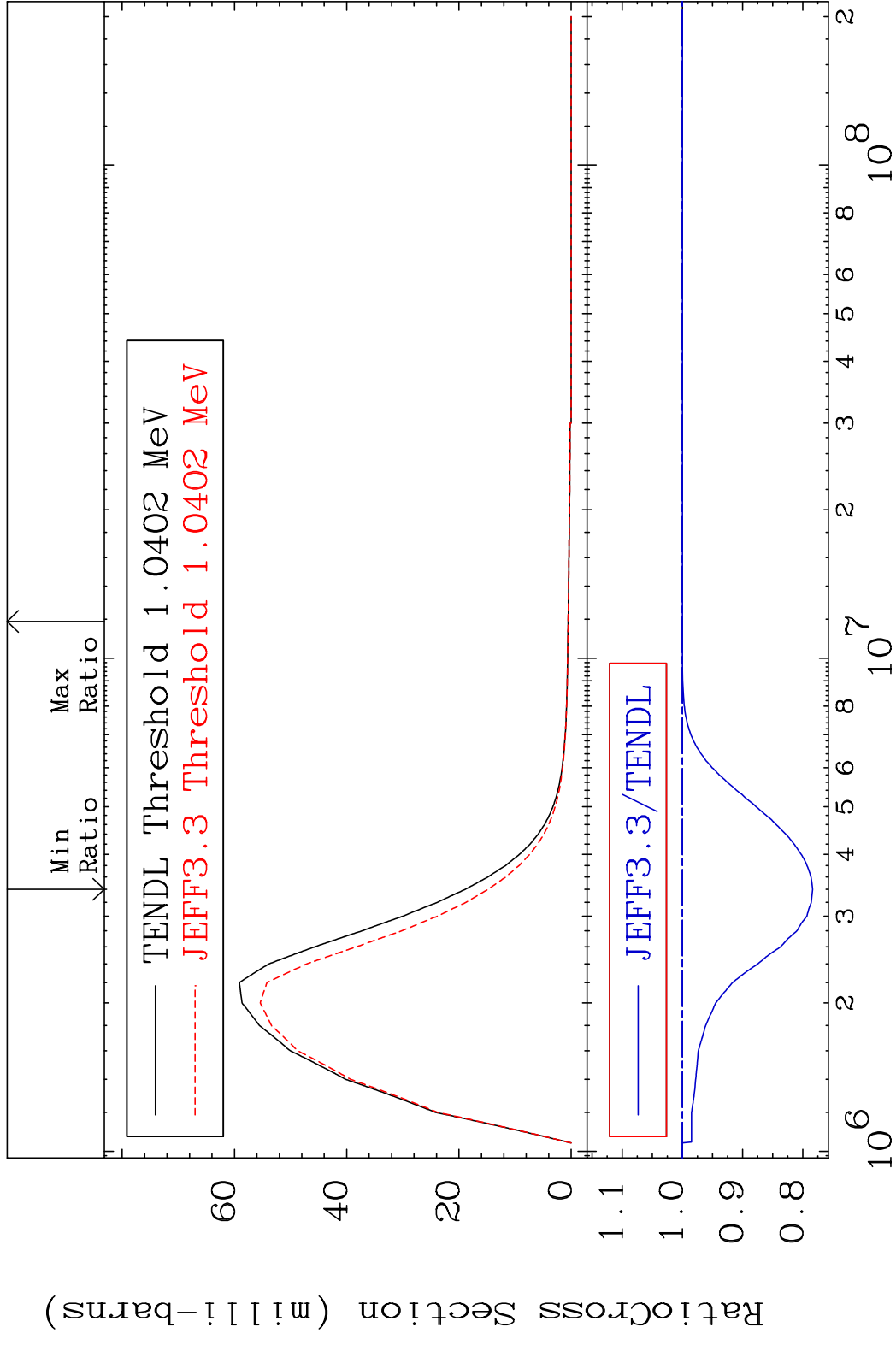


MAT 8040

MT= 65 (n, n') Level

80-Hg-201

Cross Section -21.62 To 0.001 %

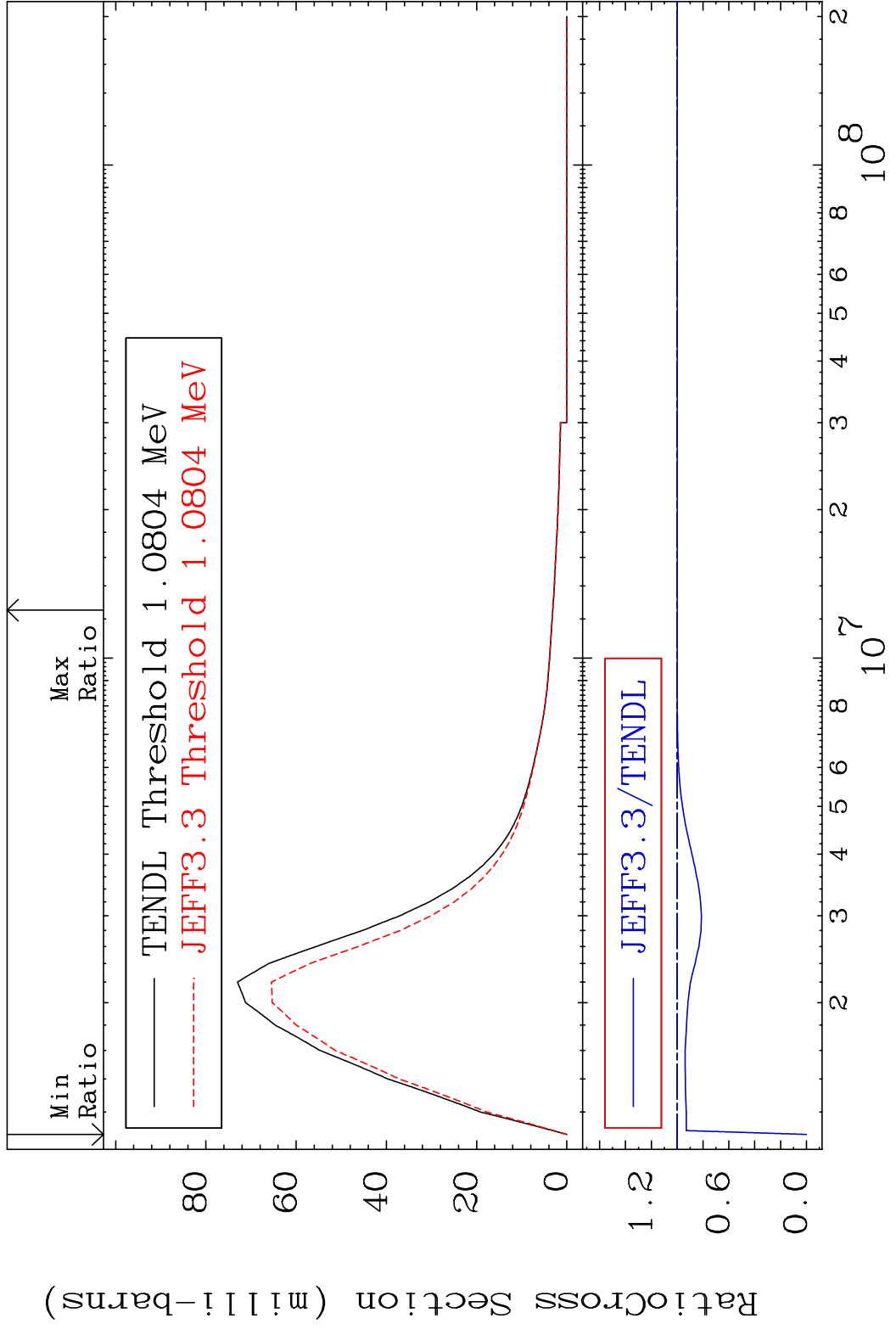


33

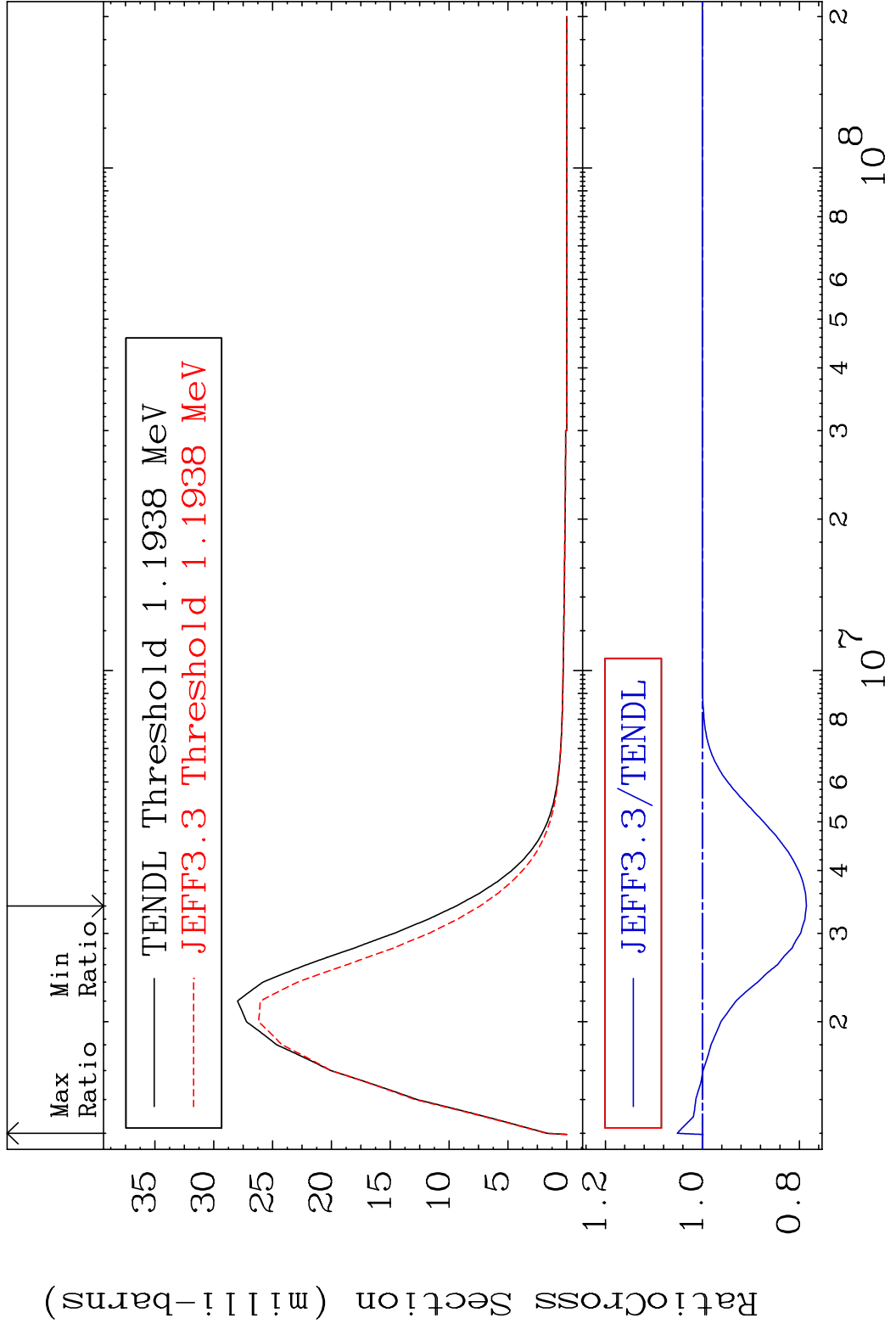
Incident Energy (eV)

80-Hg-201

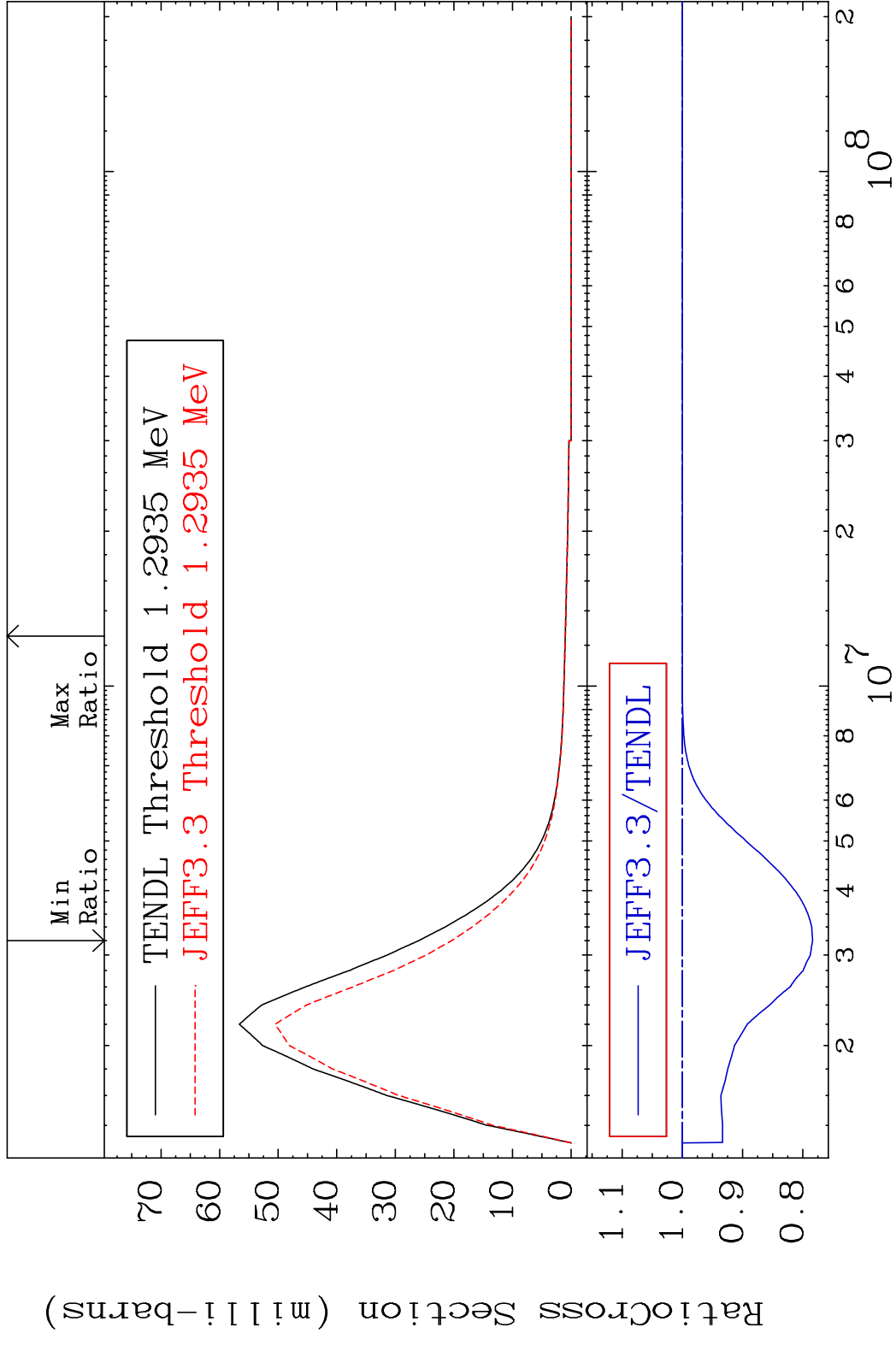
MAT 8040 MT= 66 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %



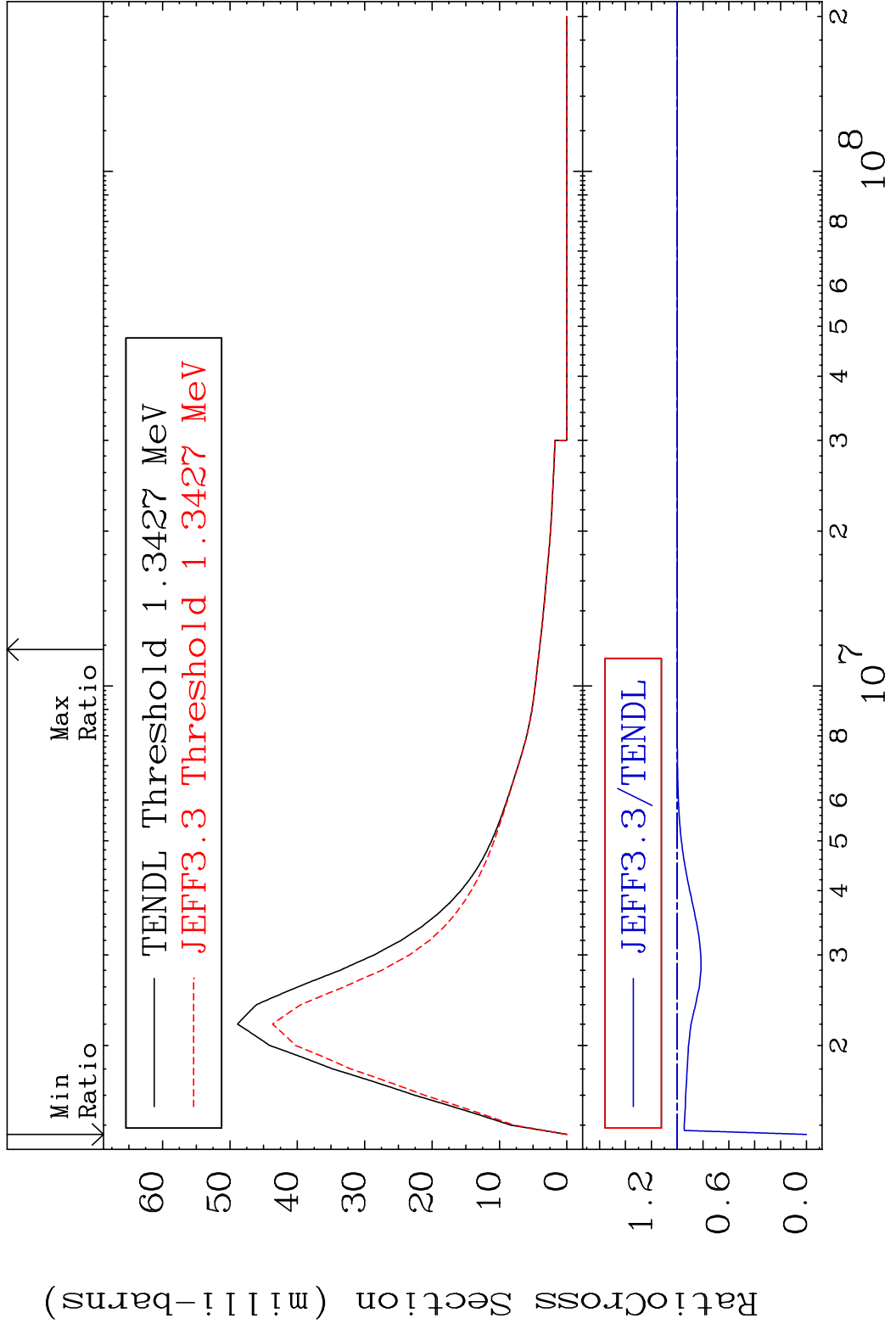
MAT 8040 MT= 67 (n,n') Level 80-Hg-201
 Cross Section -21.46 To 5.194 %



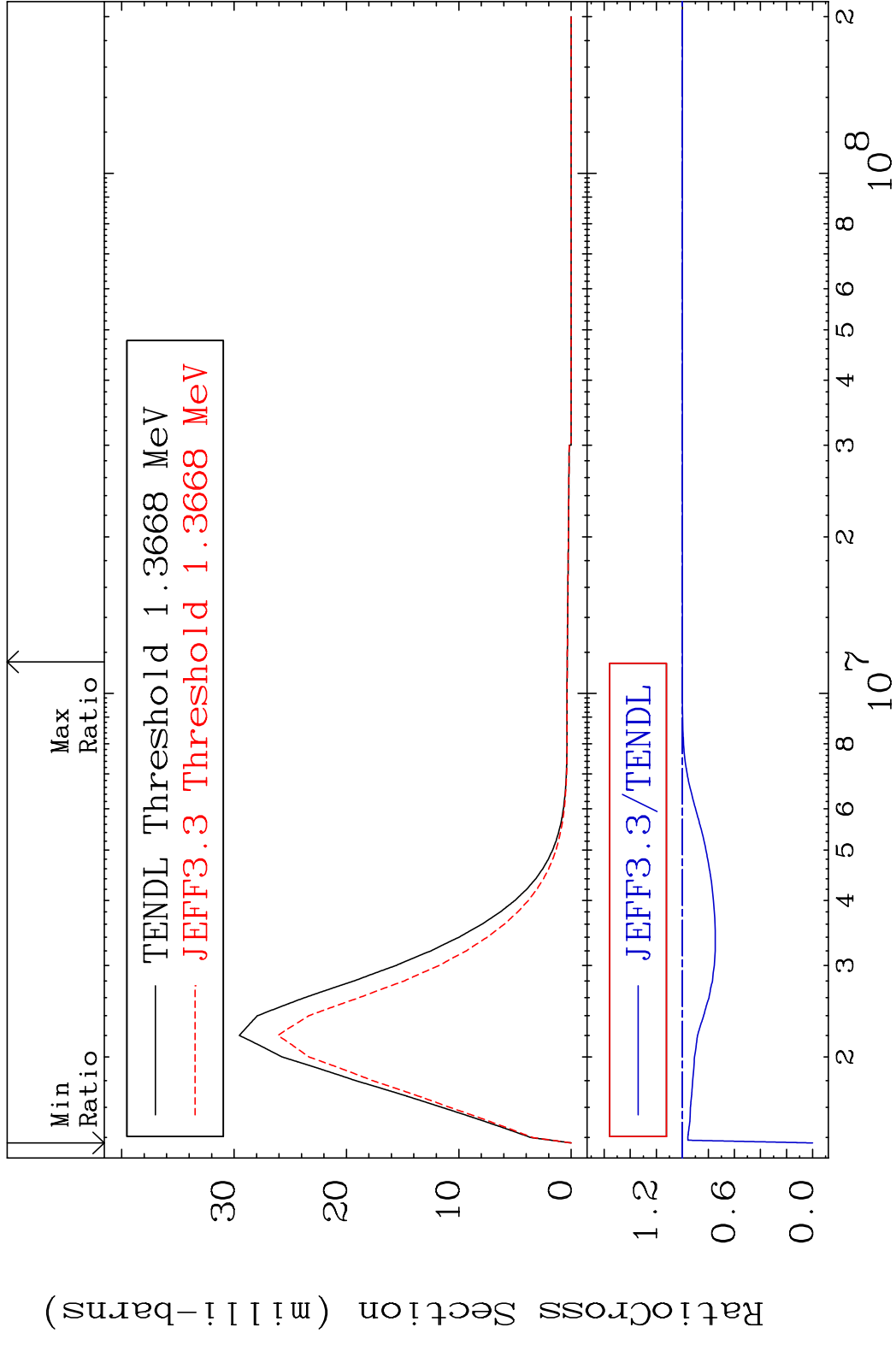
MAT 8040 MT= 68 (n, n') Level 80-Hg-201
 Cross Section -21.62 To 0.001 %



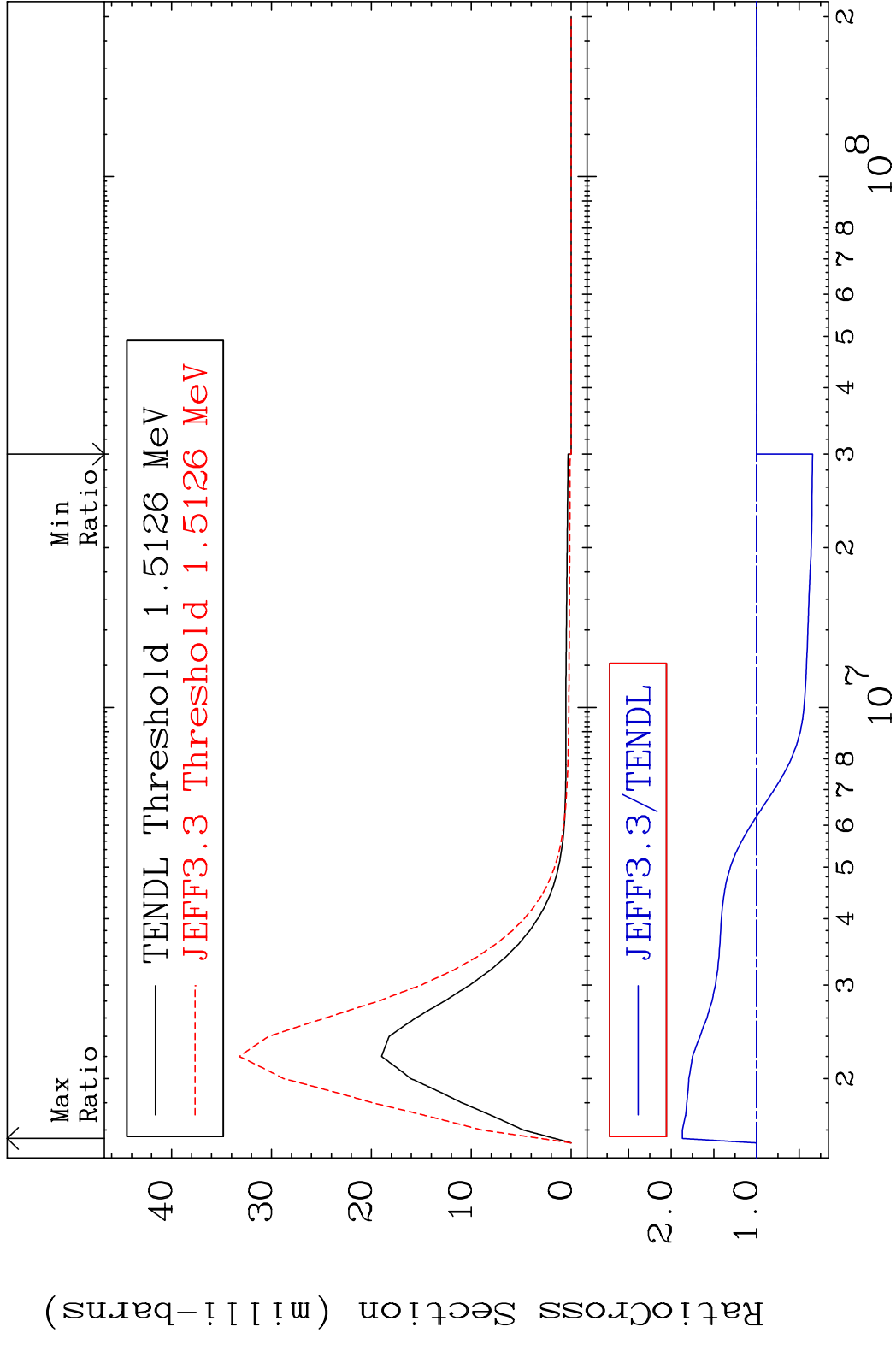
MAT 8040 MT= 69 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.000 %



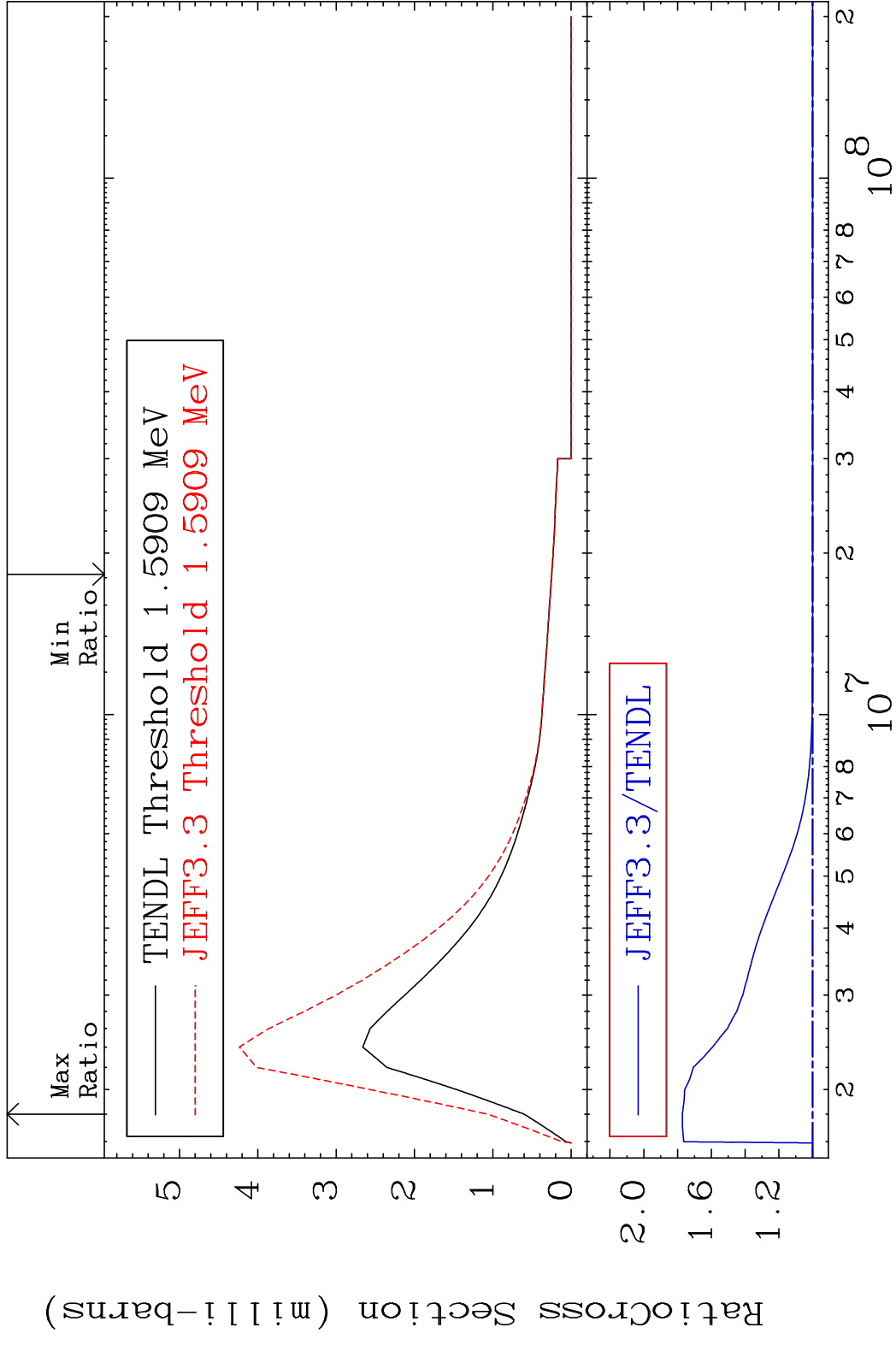
MAT 8040 MT= 70 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 0.003 %



MAT 8040 MT= 71 (n, n') Level 80-Hg-201
 Cross Section -65.67 To 86.87 %

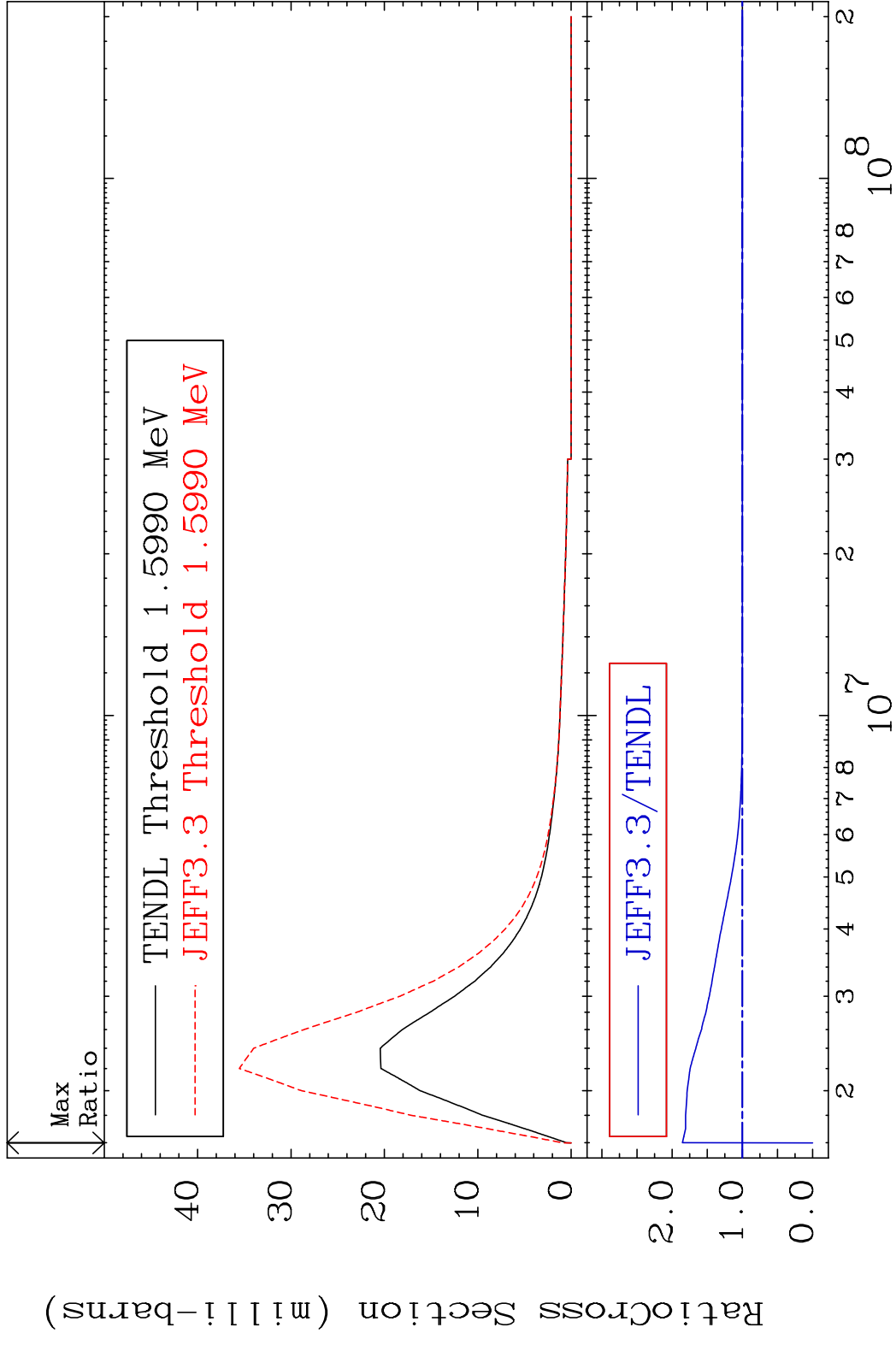


MAT 8040 MT= 72 (n, n') Level 80-Hg-201
 Cross Section 0.000 To 77.13 %

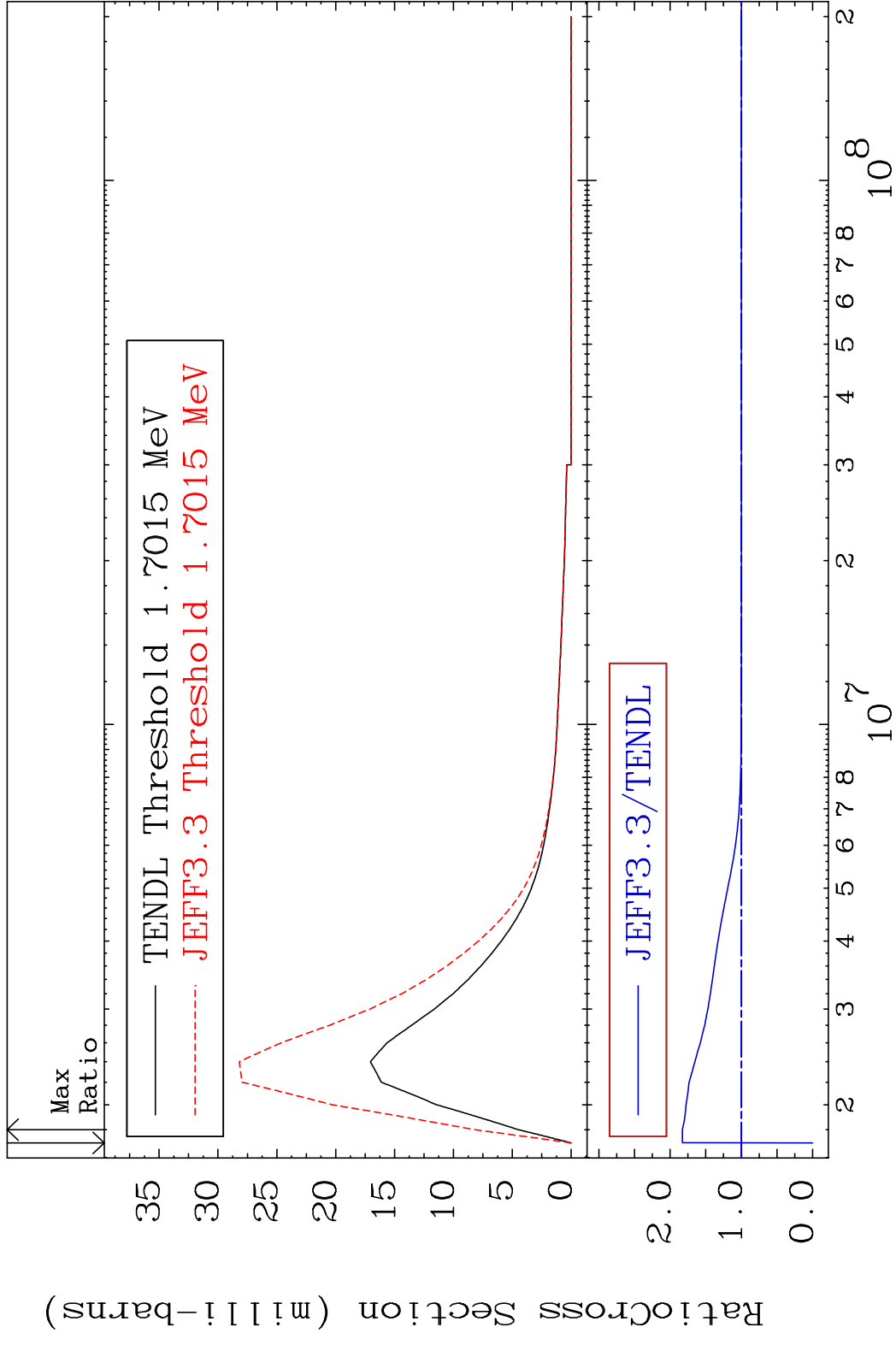


40 Incident Energy (eV) 80-Hg-201

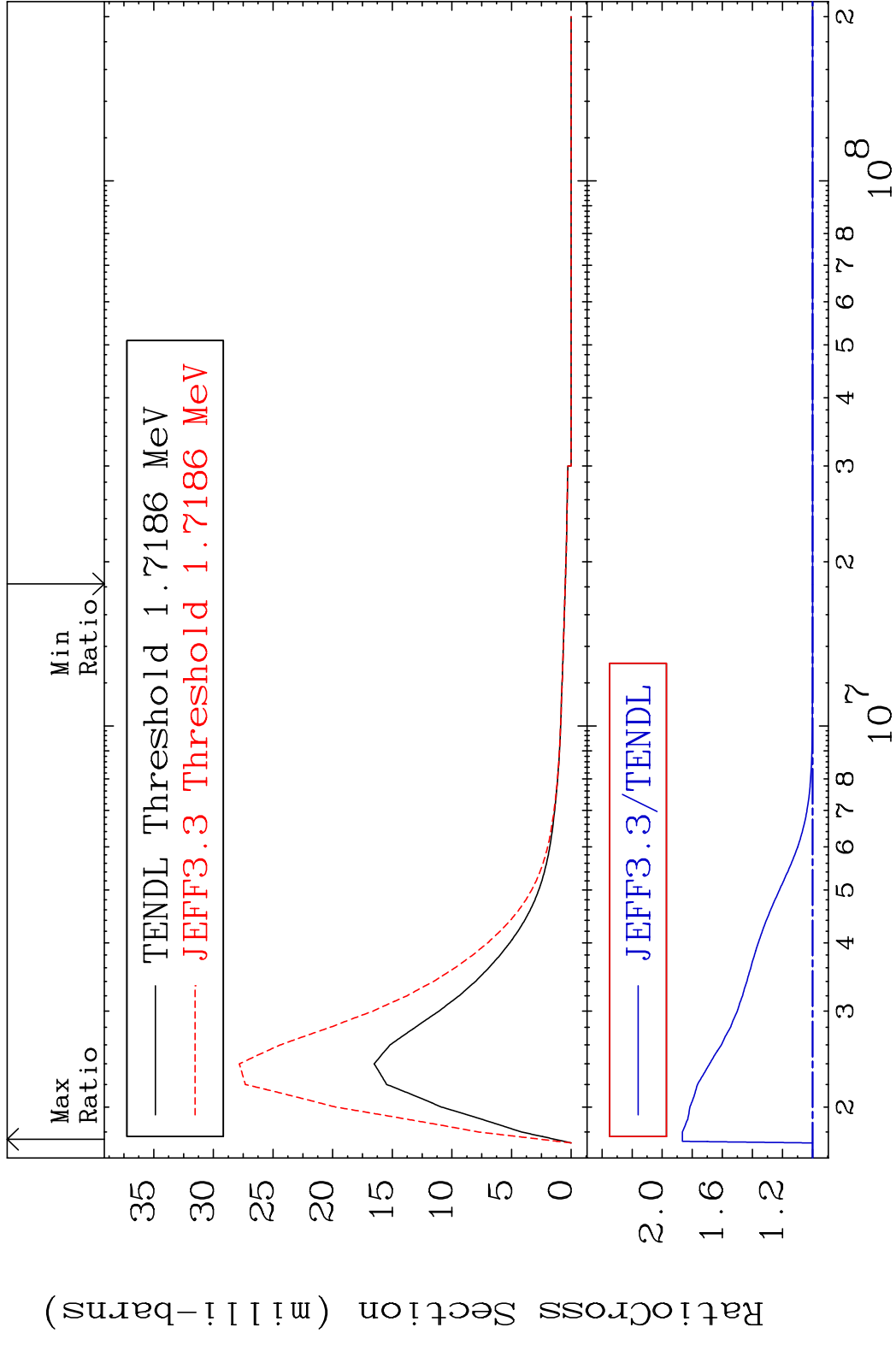
MAT 8040 MT= 73 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 85.36 %



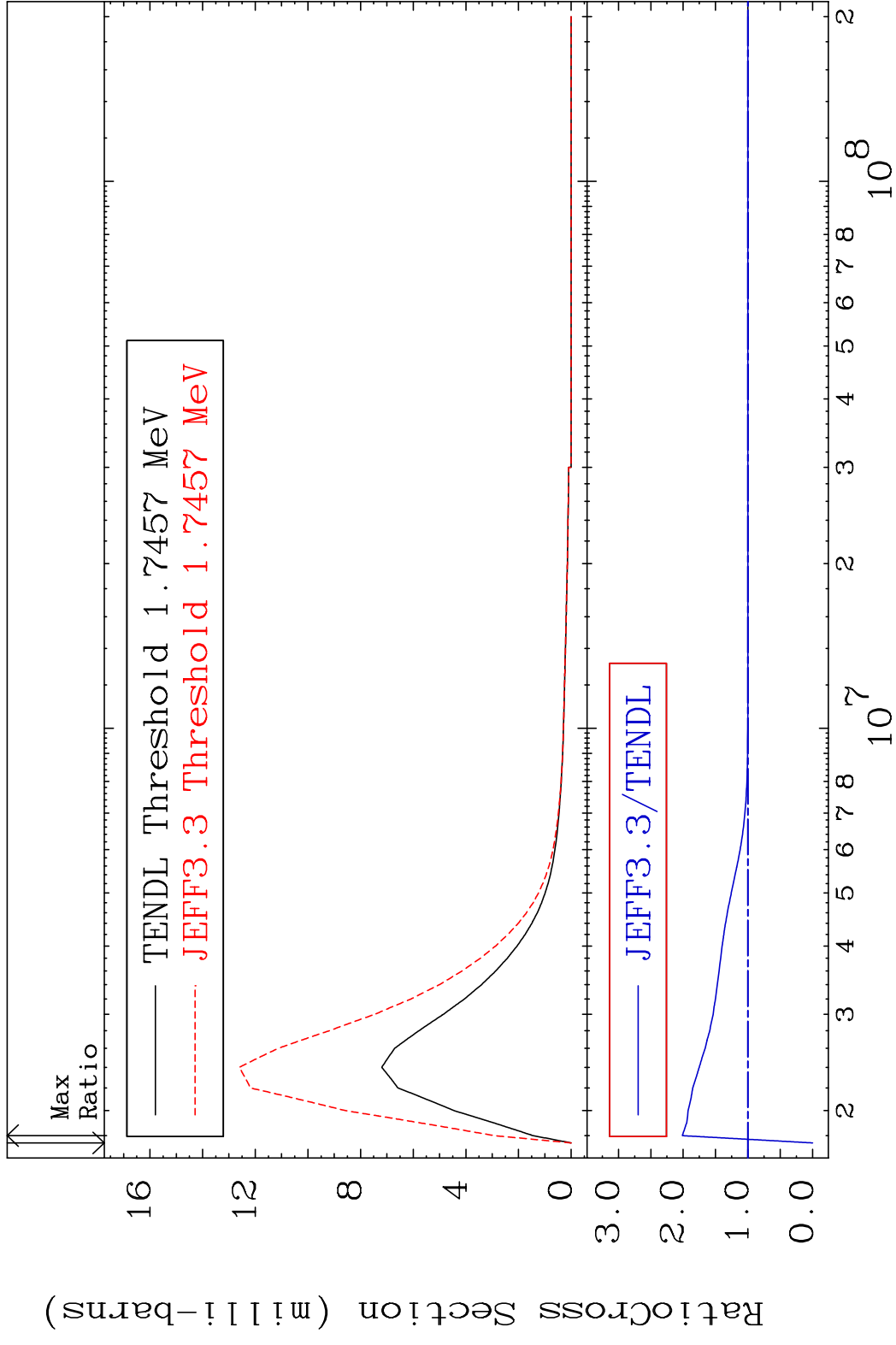
MAT 8040 MT= 74 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 82.86 %



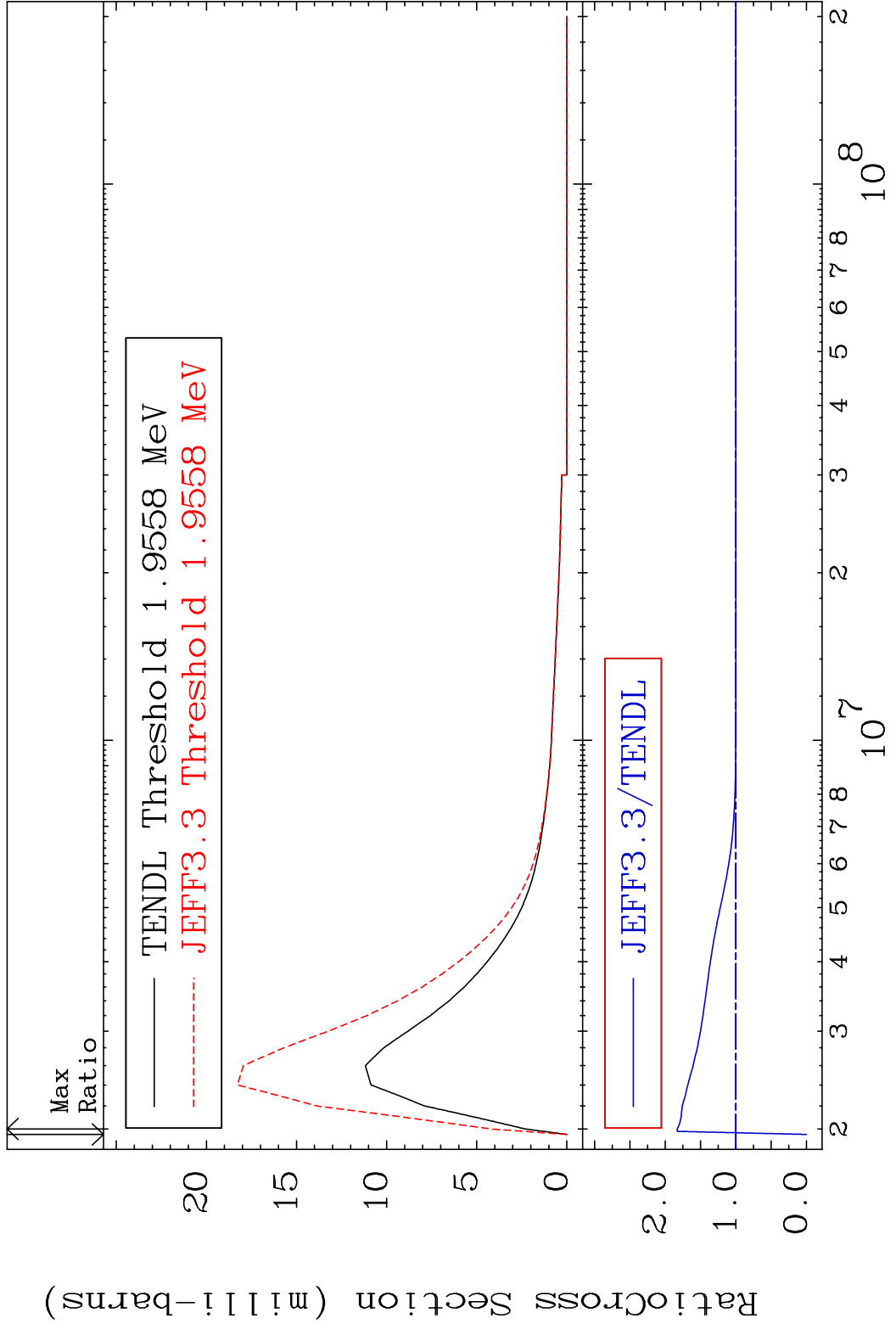
MAT 8040 MT= 75 (n,n') Level 80-Hg-201
 Cross Section 0.000 To 86.59 %



MAT 8040 MT= 76 (n,n') Level 80-Hg-201
 Cross Section -100.0 To 101.2 %

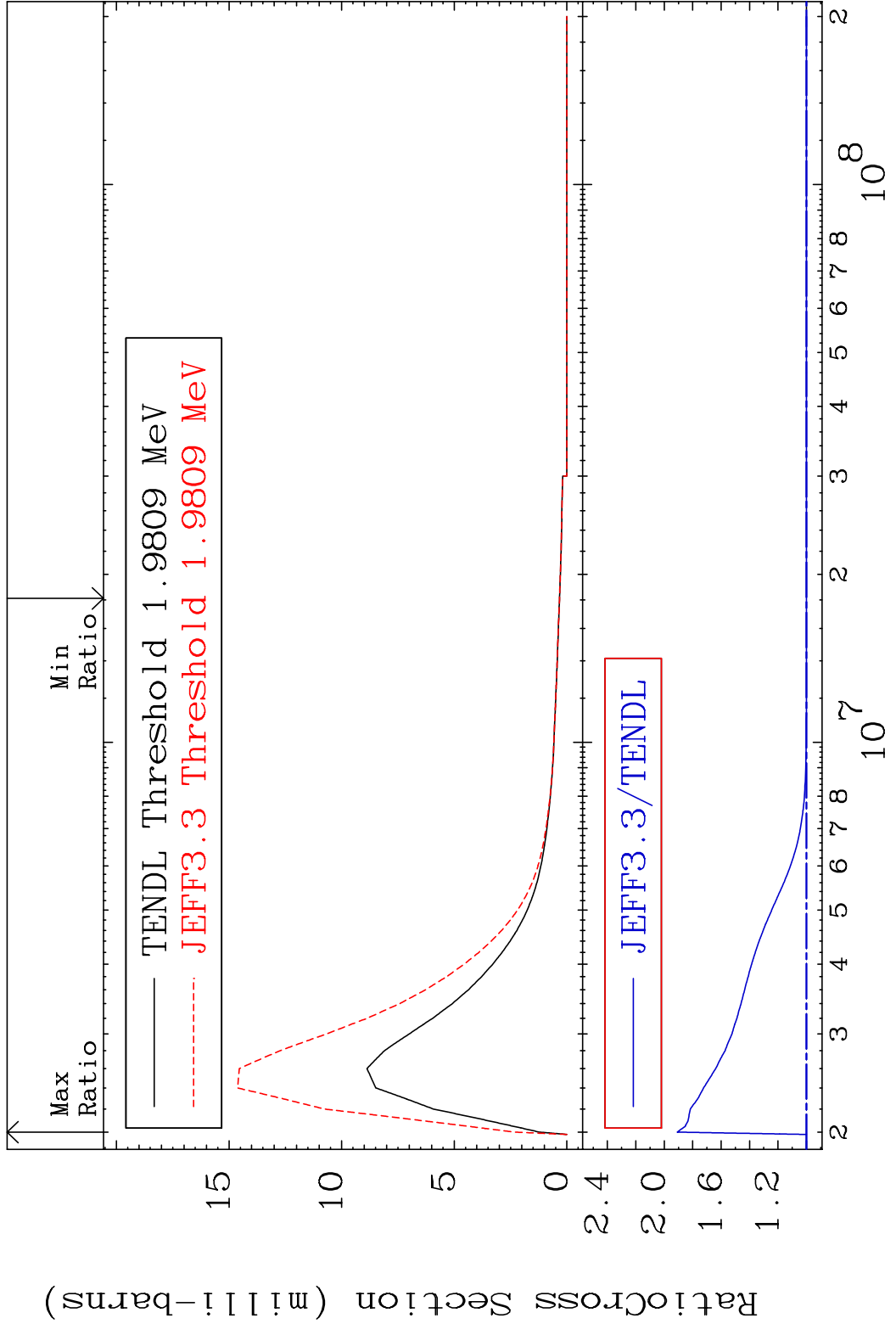


MAT 8040 MT= 77 (n, n') Level 80-Hg-201
 Cross Section -100.0 To 83.12 %

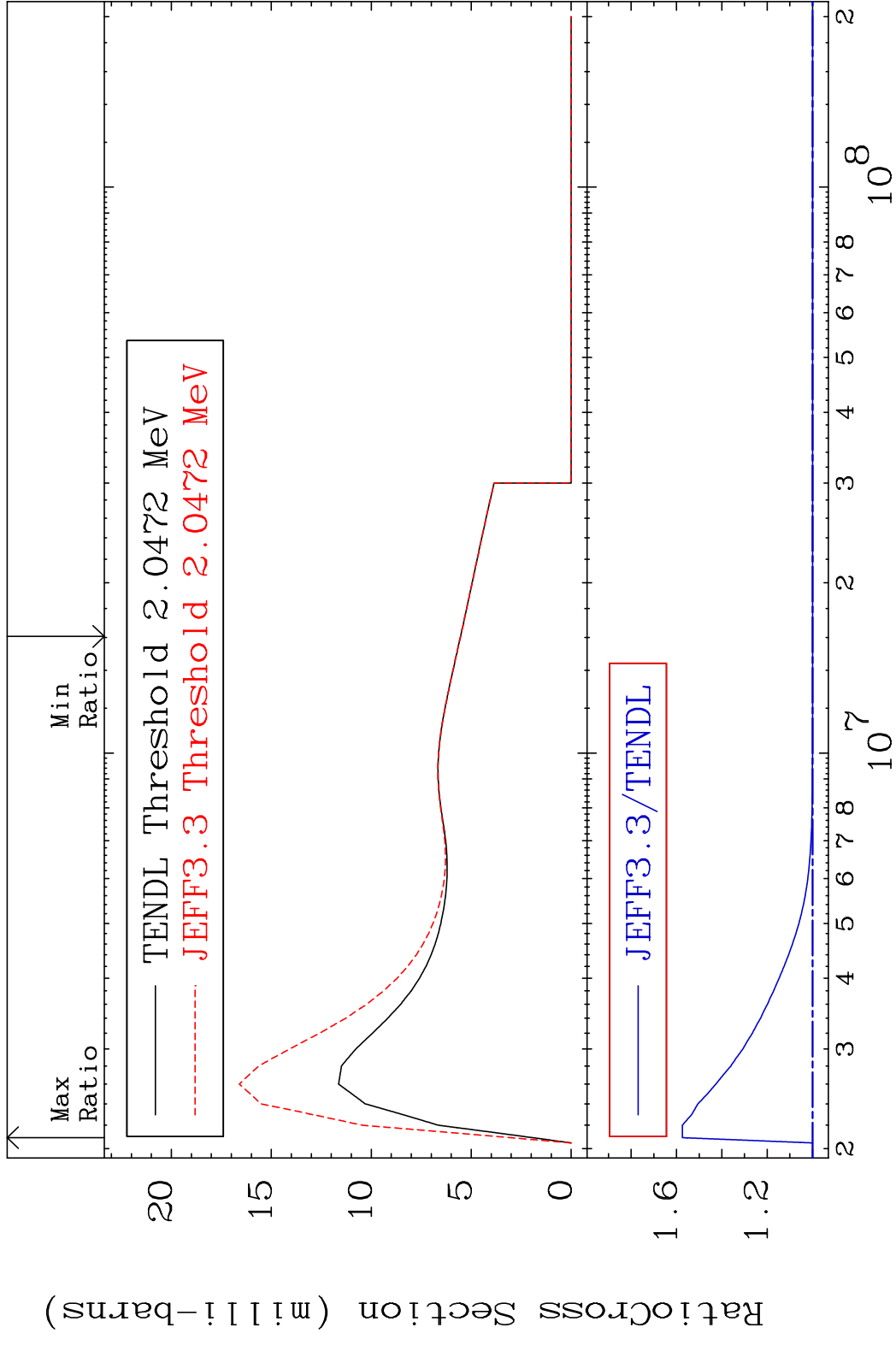


45 Incident Energy (eV) 80-Hg-201

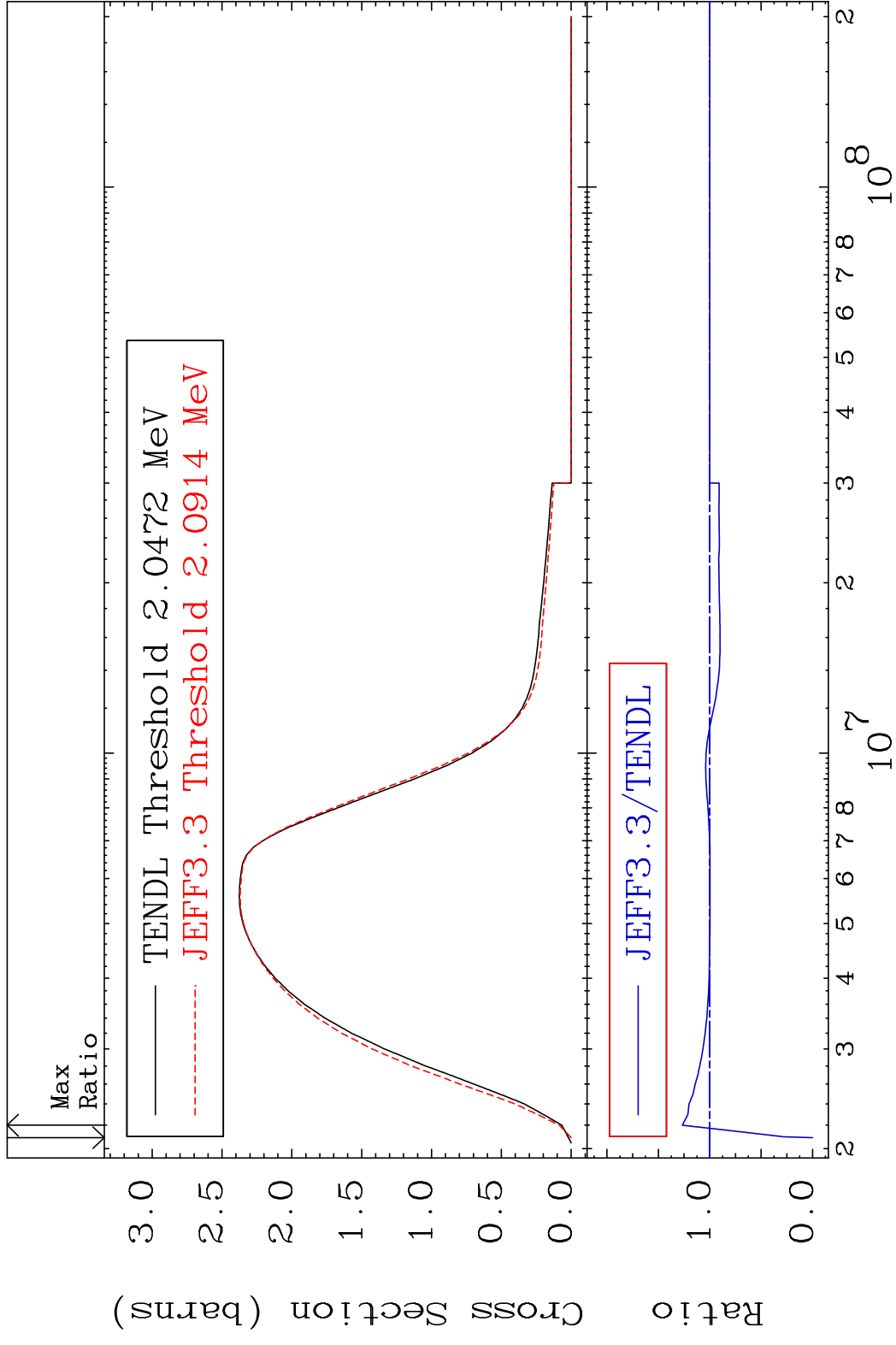
MAT 8040 MT= 78 (n, n') Level 80-Hg-201
 Cross Section 0.000 To 90.90 %



MAT 8040 MT= 79 (n, n') Level 80-Hg-201
 Cross Section 0.000 To 57.41 %

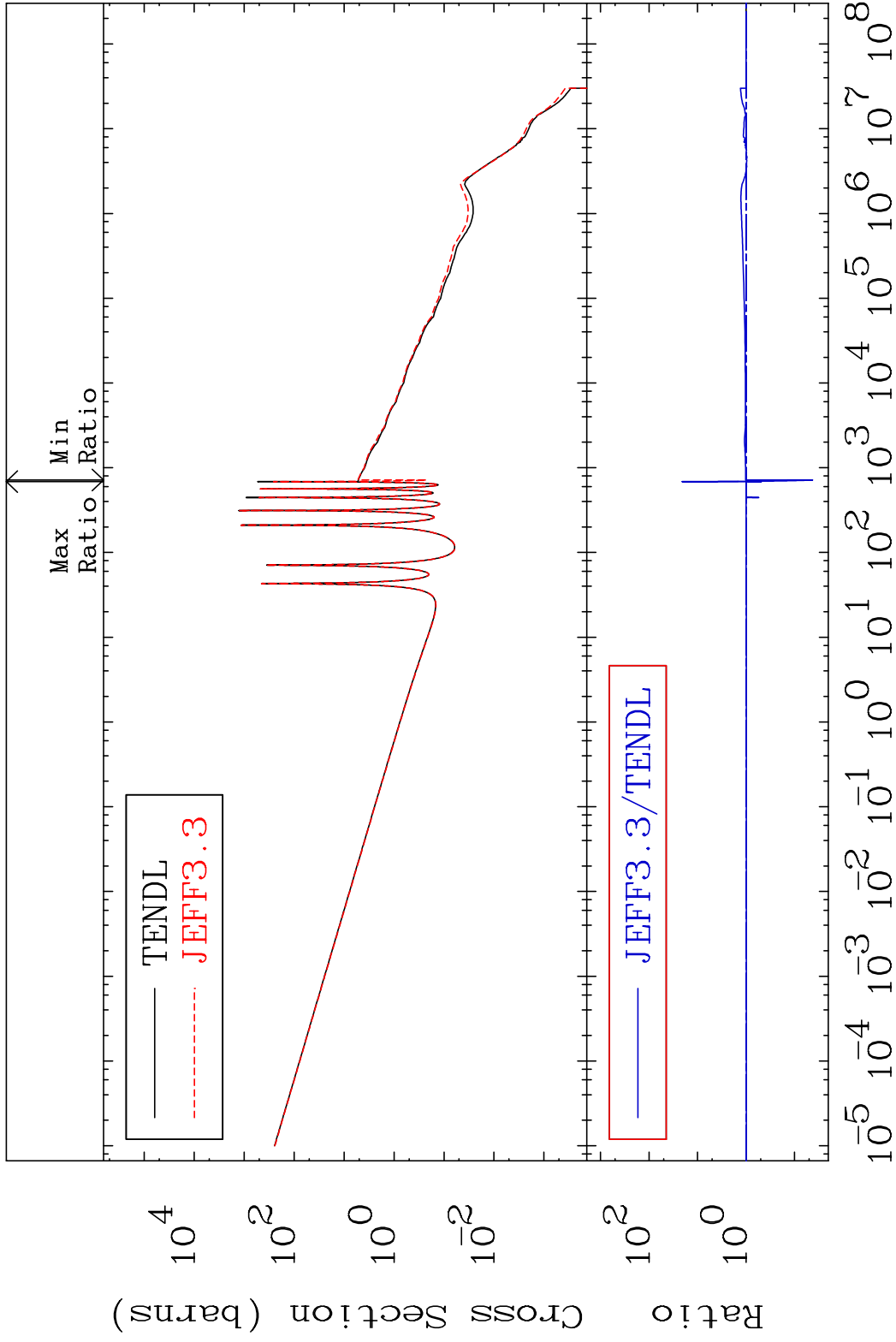


MAT 8040 (n,n') Continuum 80-Hg-201
 Cross Section -100.0 To 26.68 %



MAT 8040

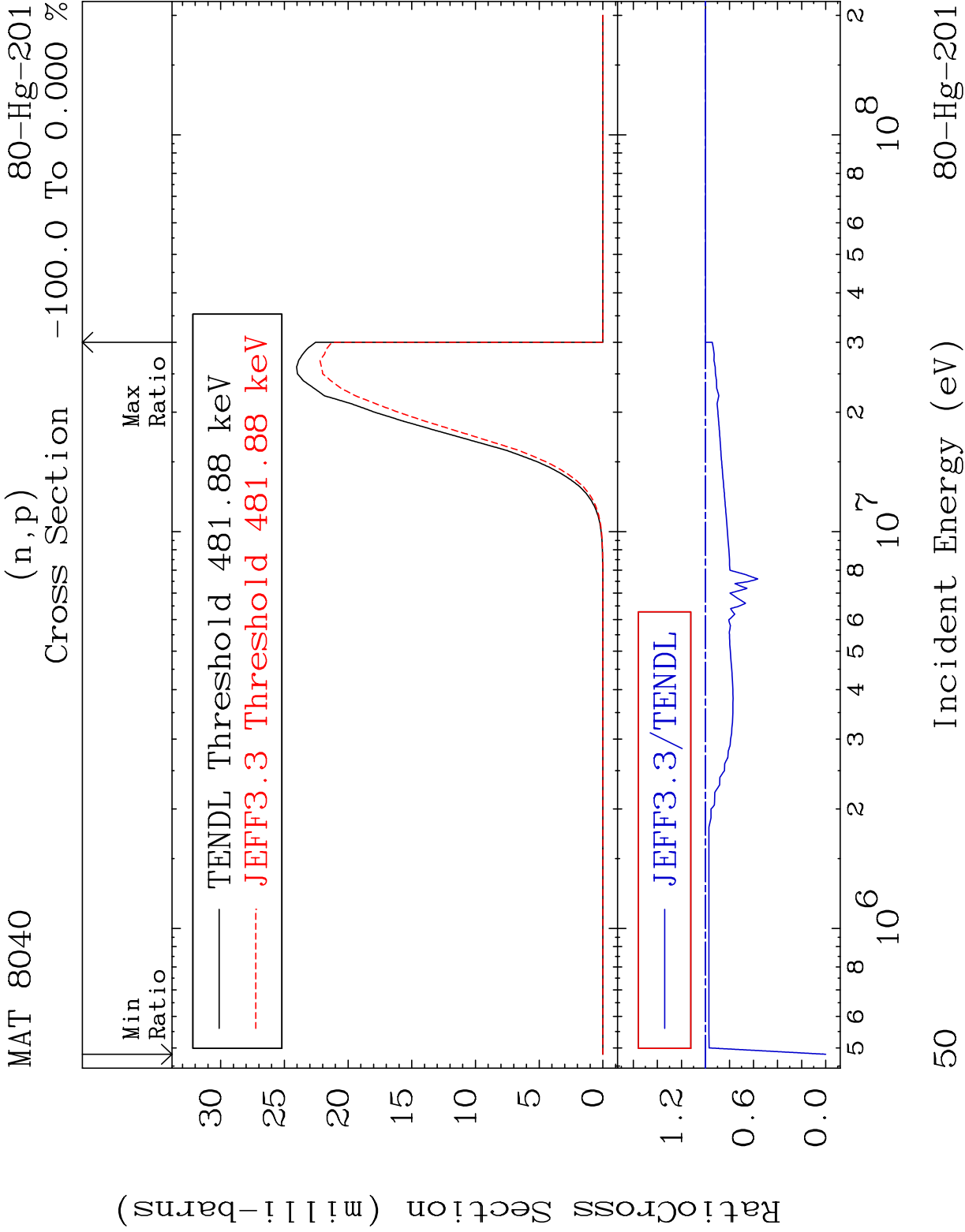
(n, γ)
Cross Section -95.73 To 1976. %
80-Hg-201

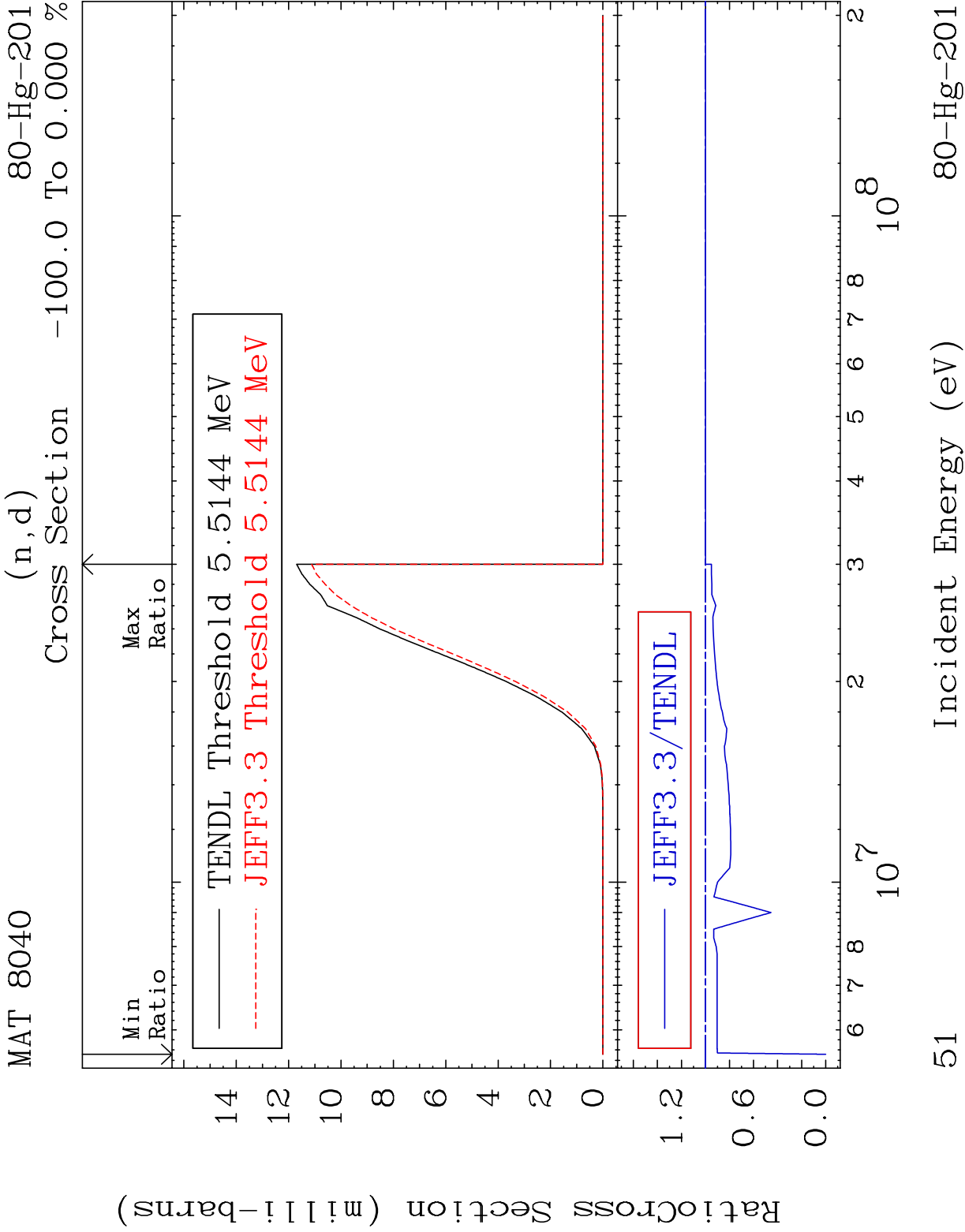


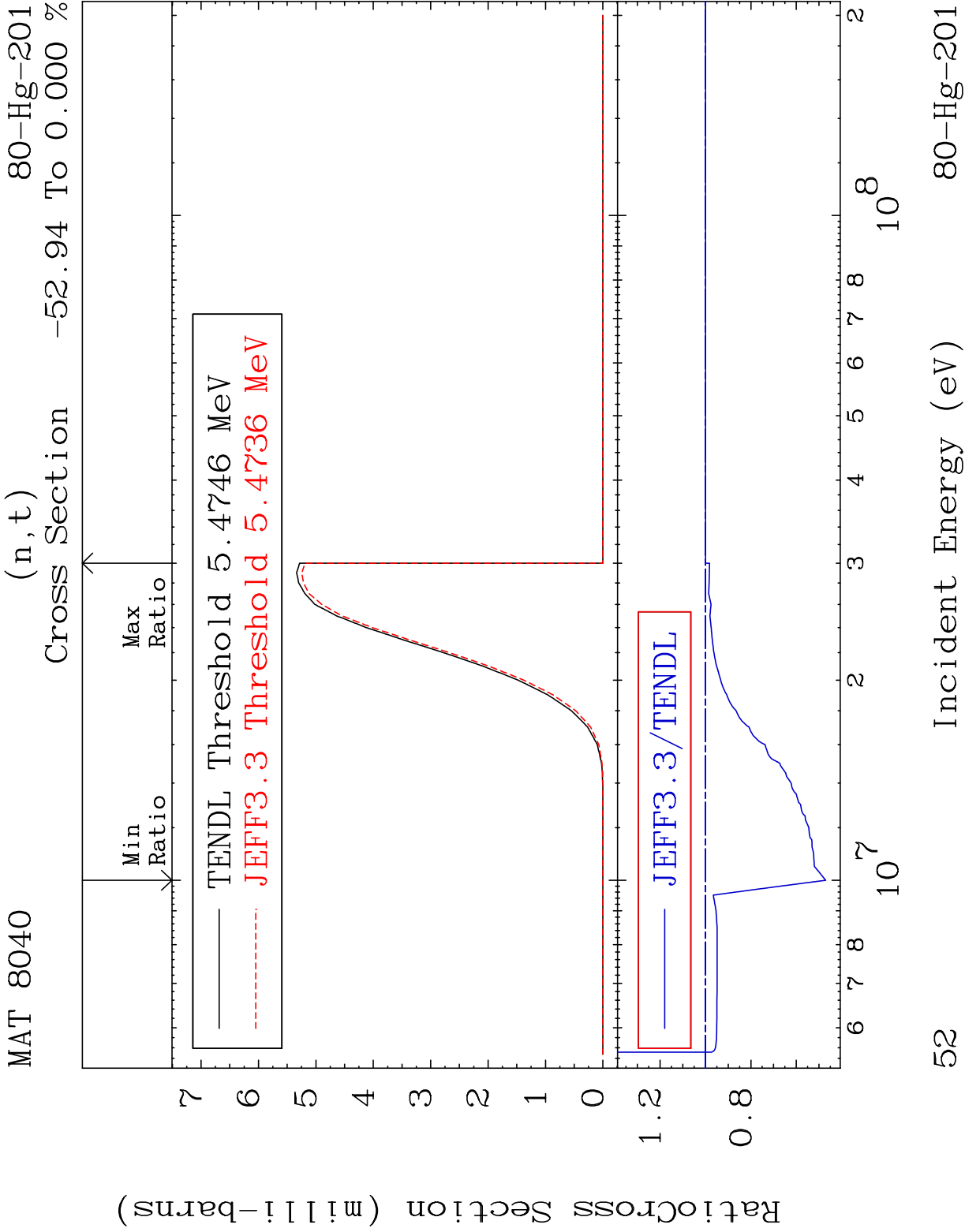
49

Incident Energy (eV)

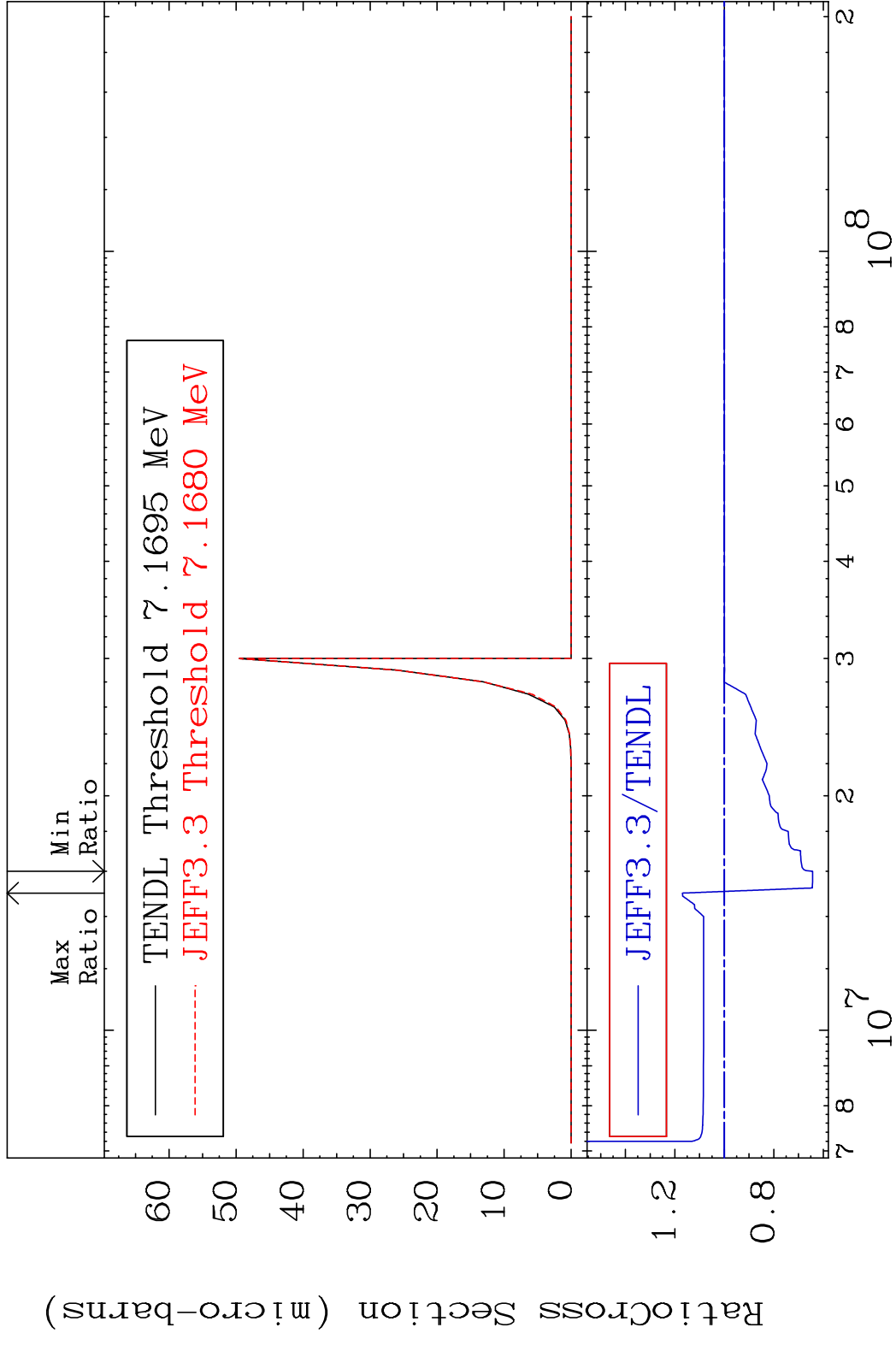
80-Hg-201





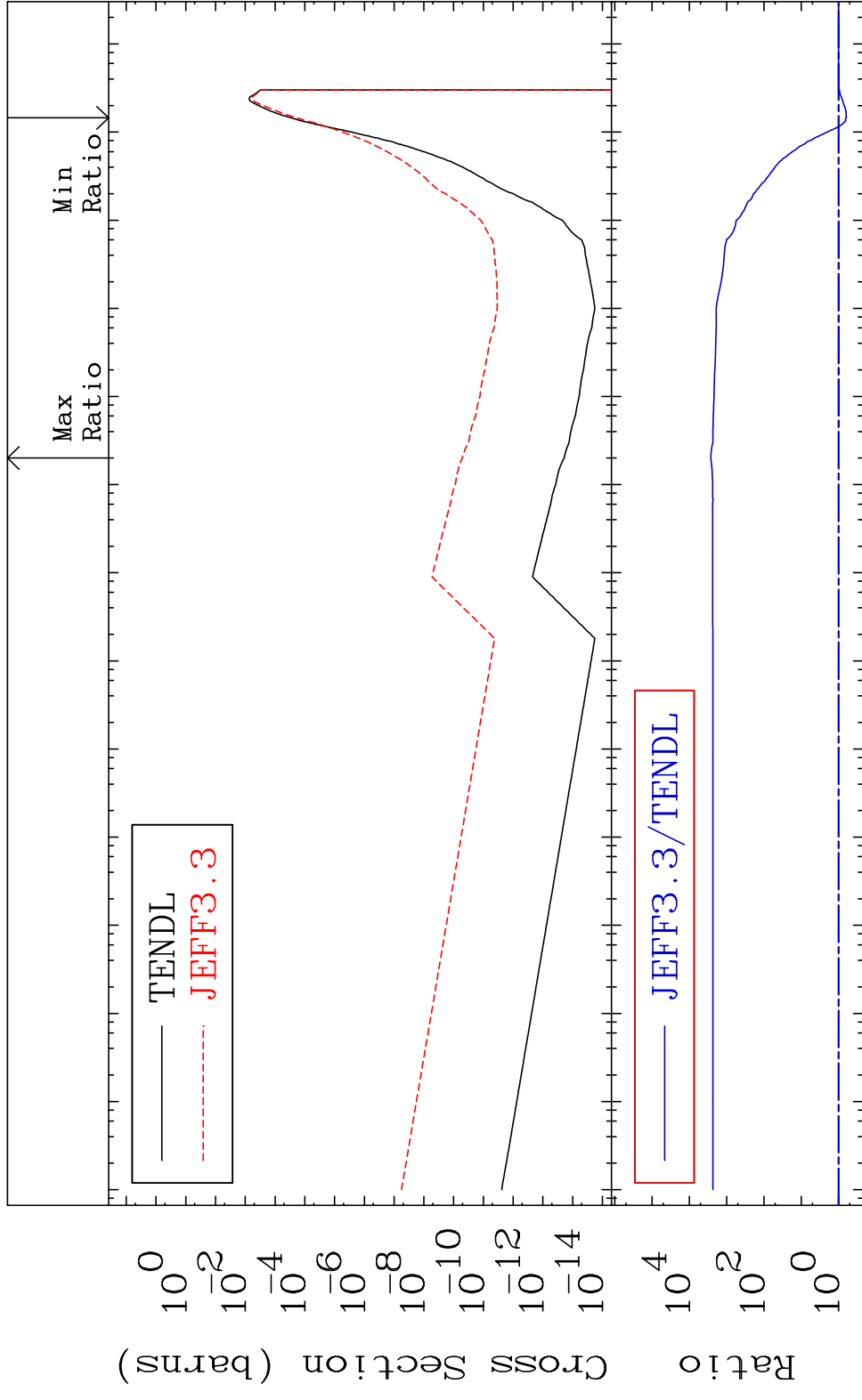


MAT 8040 (n, He-3) 80-Hg-201
 Cross Section -35.67 To 16.97 %



MAT 8040

(n, α)
Cross Section -38.49 To 9999. %
80-Hg-201

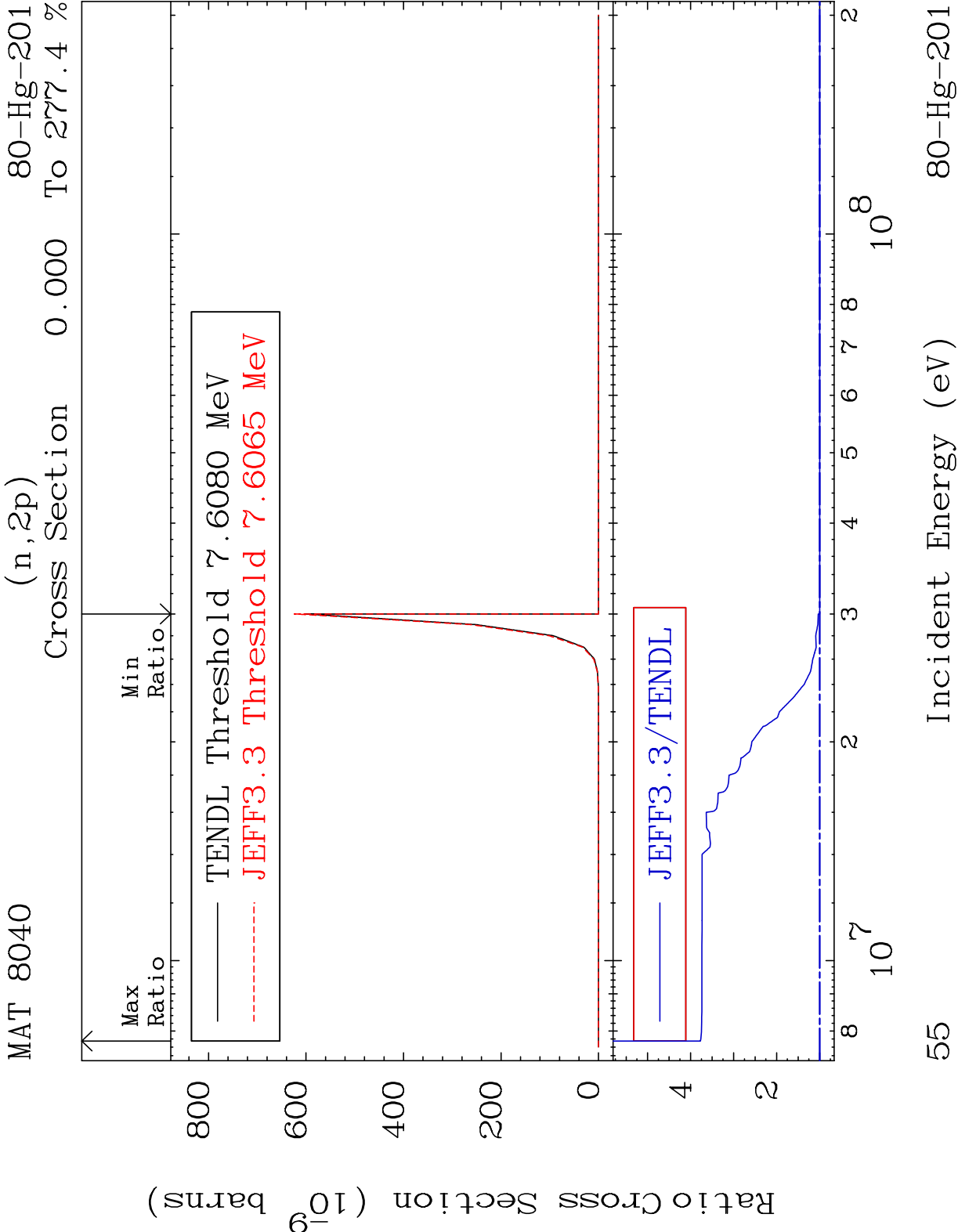


Cross Section (barns)

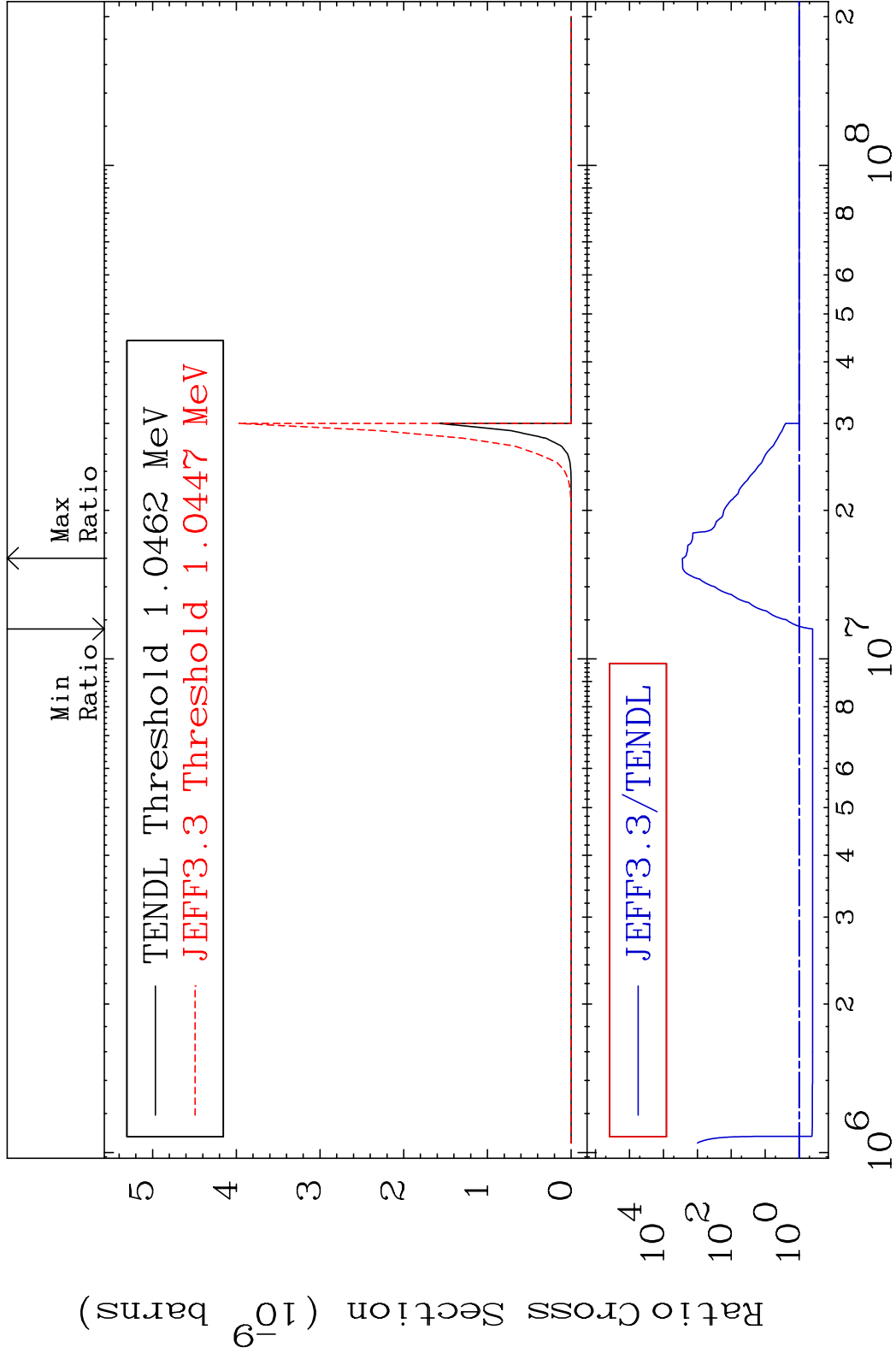
Ratio

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

Incident Energy (eV)

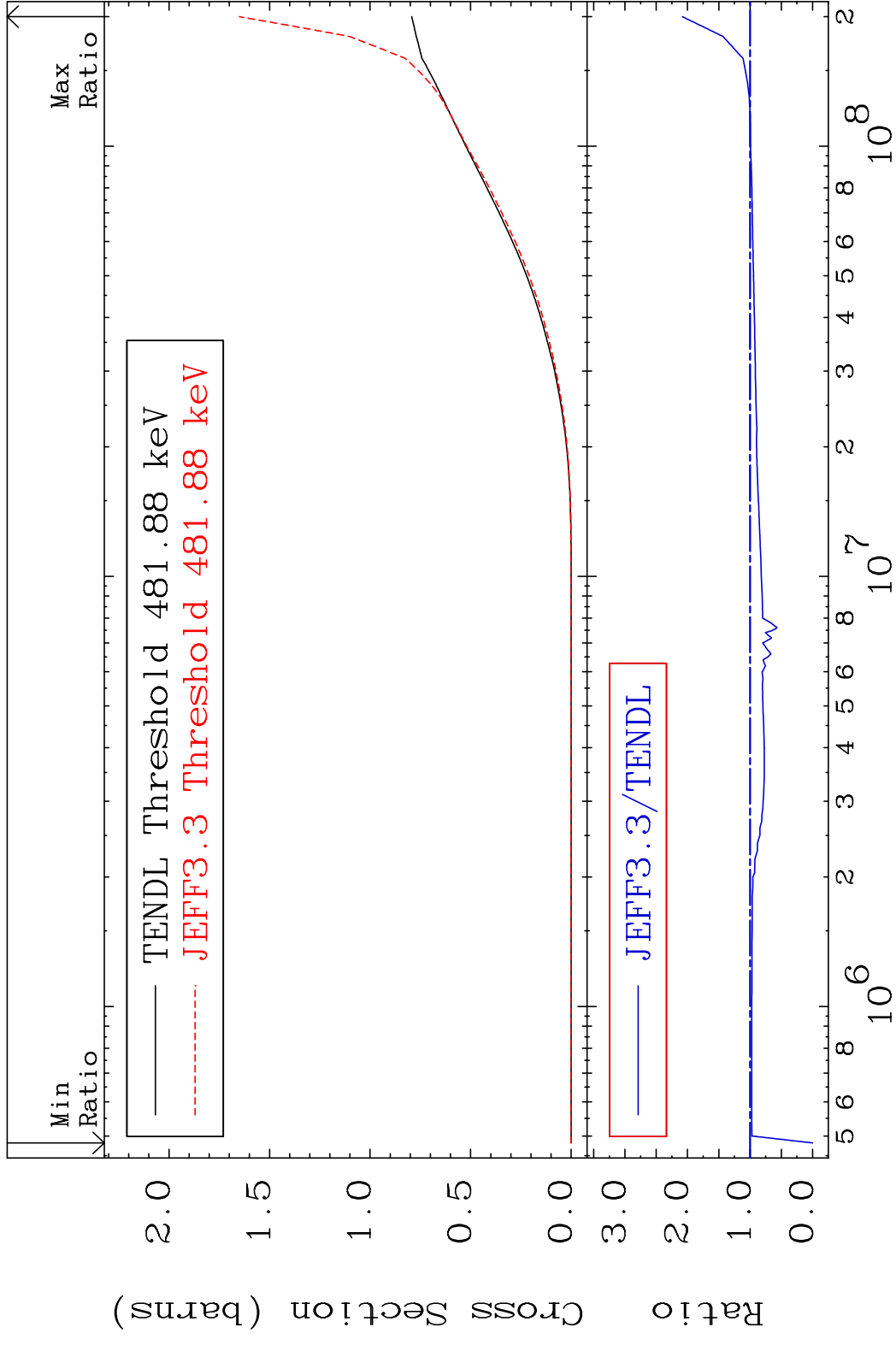


MAT 8040 (n,p) α 80-Hg-201
 Cross Section -59.83 To 9999. %

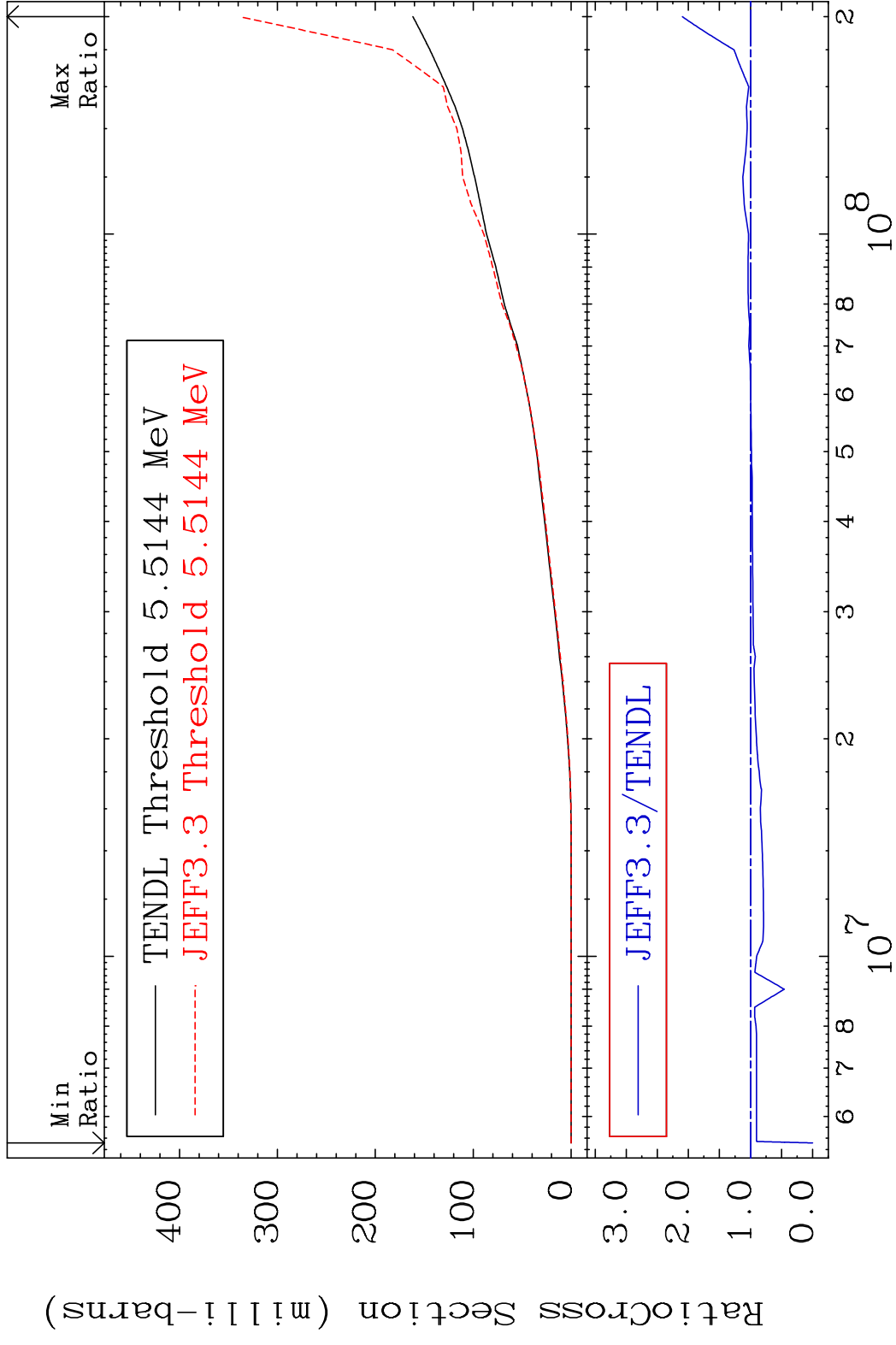


56 Incident Energy (eV) 80-Hg-201

MAT 8040 Hydrogen Production 80-Hg-201
 Cross Section -100.0 To 108.2 %

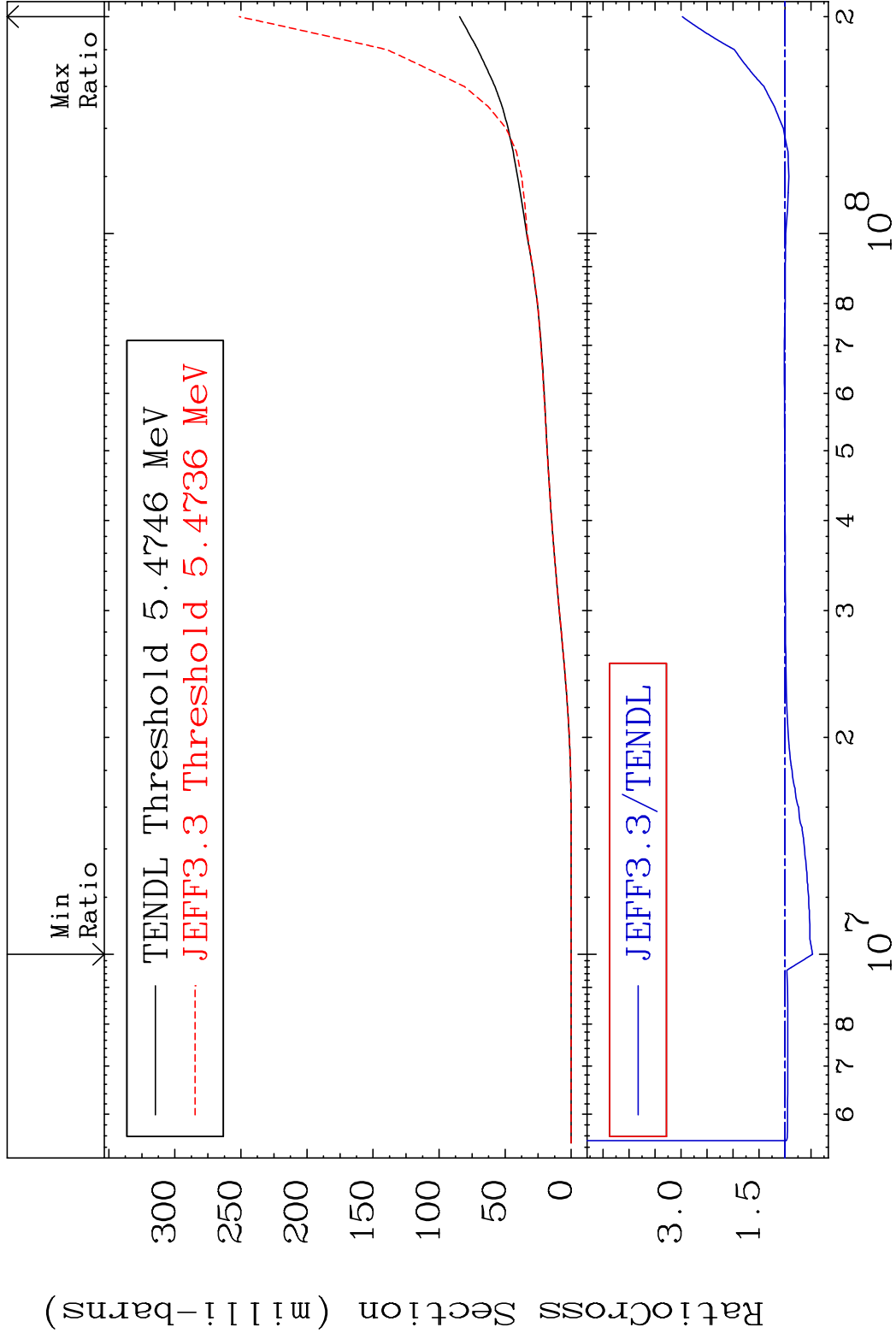


MAT 8040 Deuterium Production 80-Hg-201
 Cross Section -100.0 To 109.7 %



MAT 8040

Tritium Production 80-Hg-201
Cross Section -52.94 To 197.4 %



59

Incident Energy (eV)

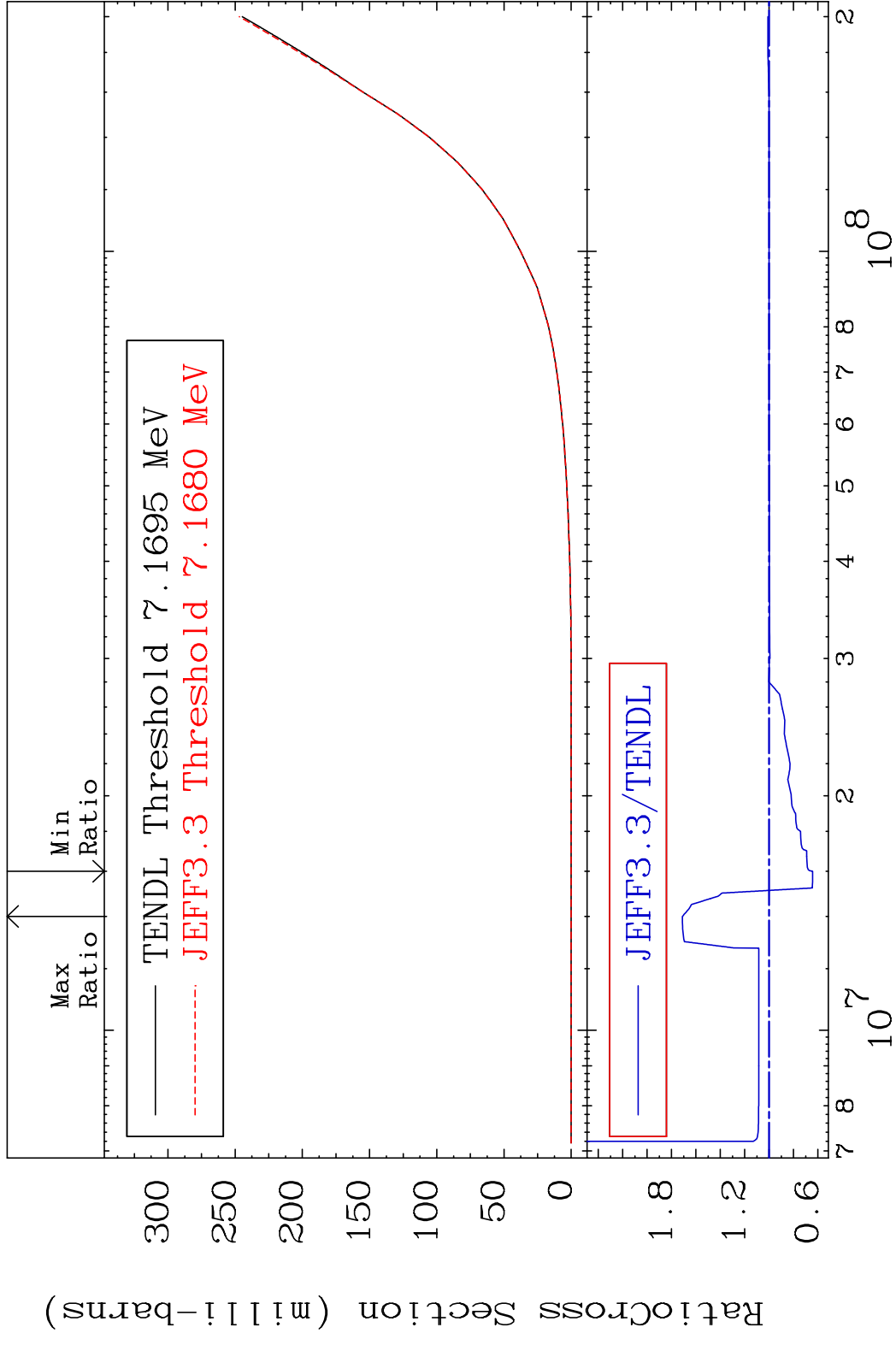
80-Hg-201

MAT 8040

He-3 Production

80-Hg-201

Cross Section -35.64 To 71.12 %



60

Incident Energy (eV)

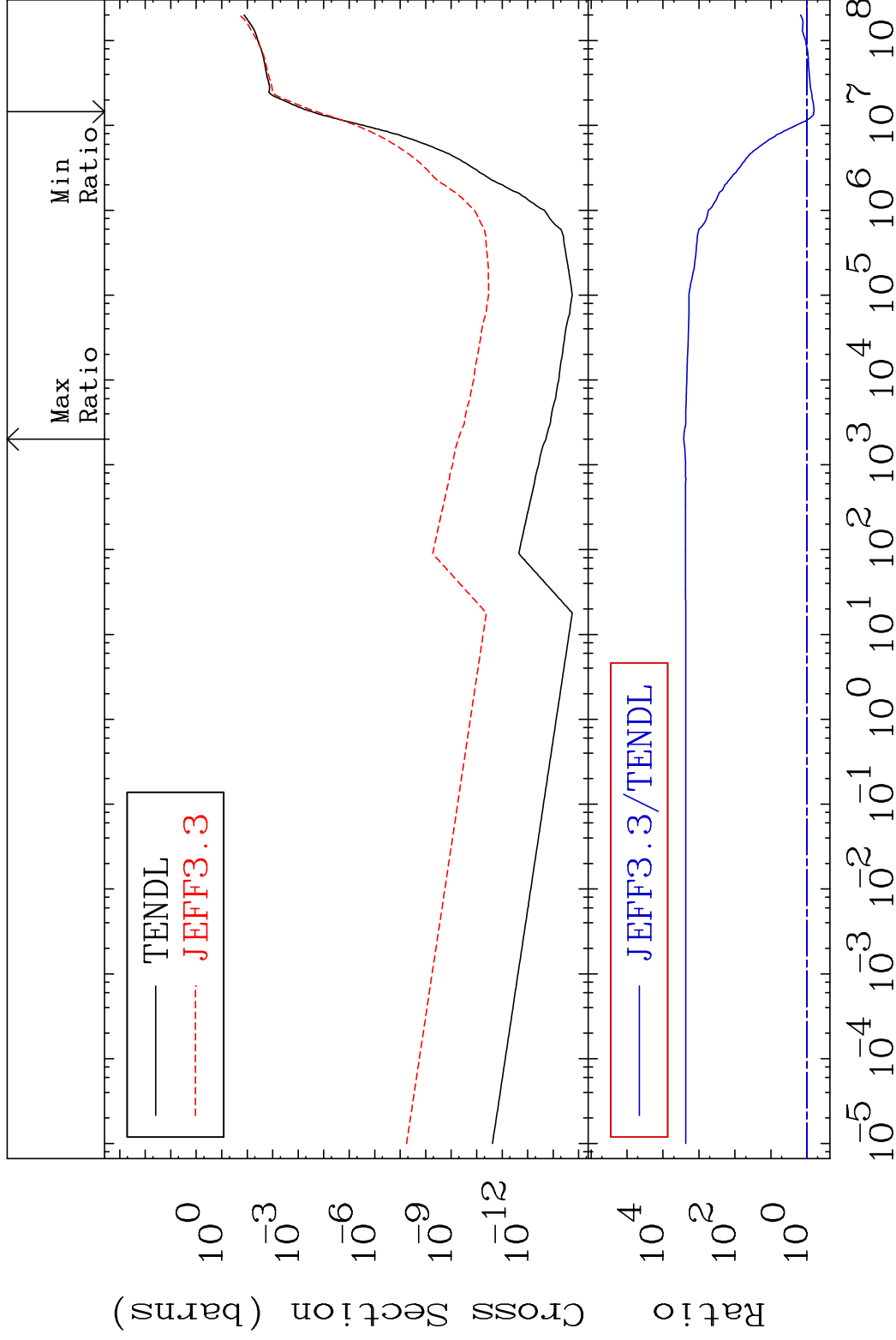
80-Hg-201

MAT 8040

He-4 Production

80-Hg-201

Cross Section -37.08 To 9999. %



61

Incident Energy (eV)

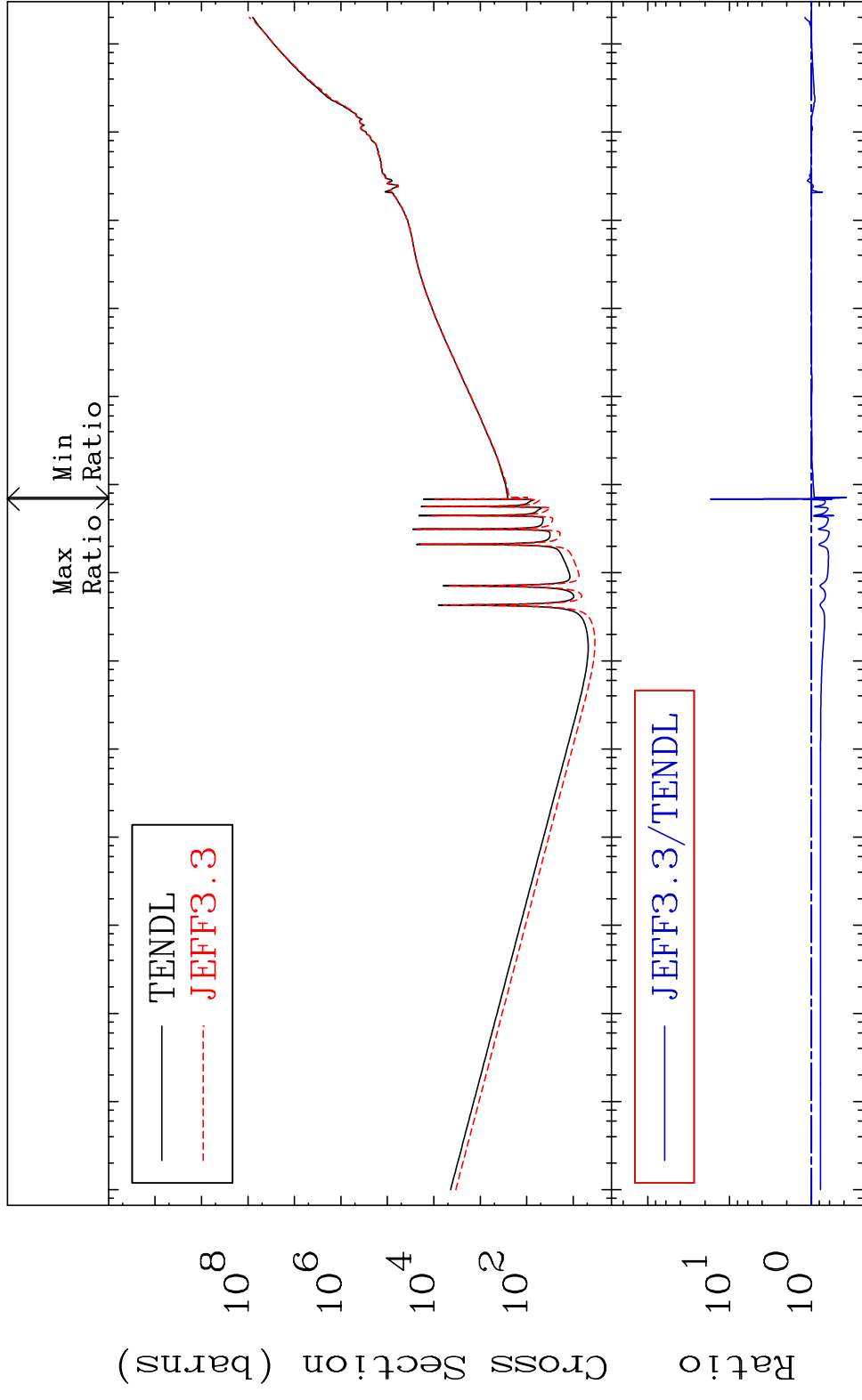
80-Hg-201

MAT 8040

Kerma total (eV-barns)

80-Hg-201

Cross Section -62.66 To 1600. %



10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

62

Incident Energy (eV)

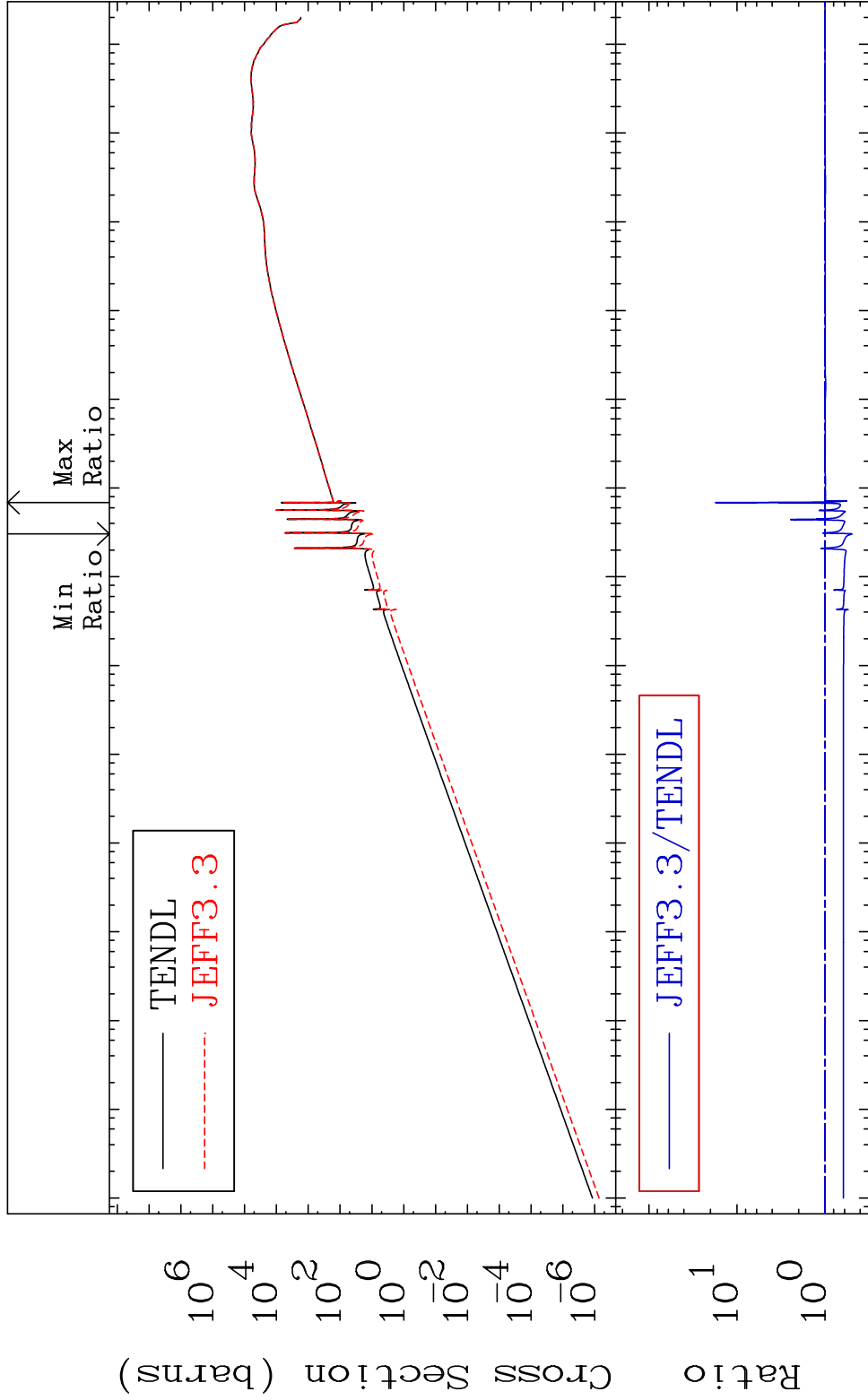
80-Hg-201

MAT 8040

Kerma elastic

80-Hg-201

Cross Section -50.76 To 1647. %

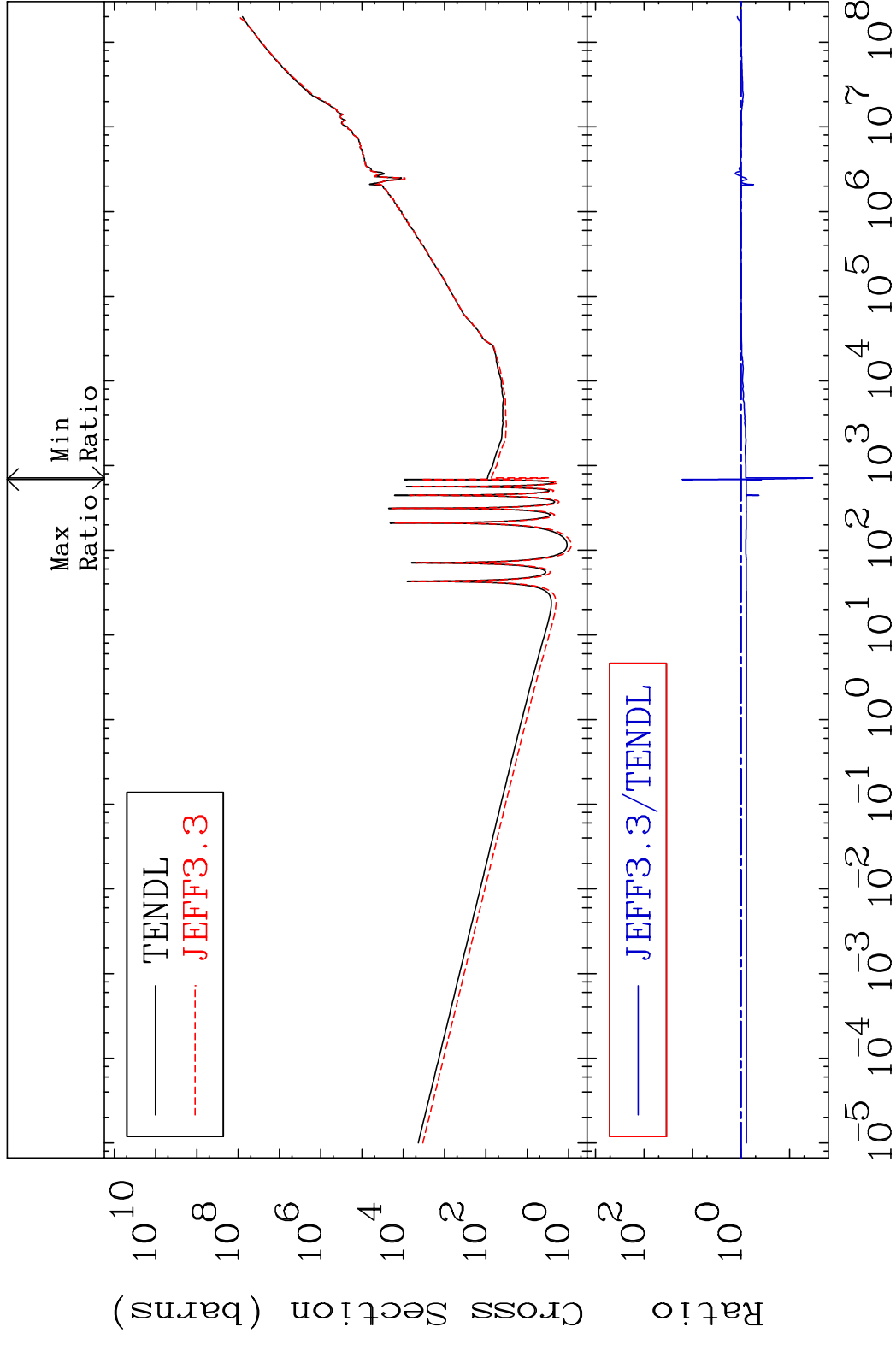


63

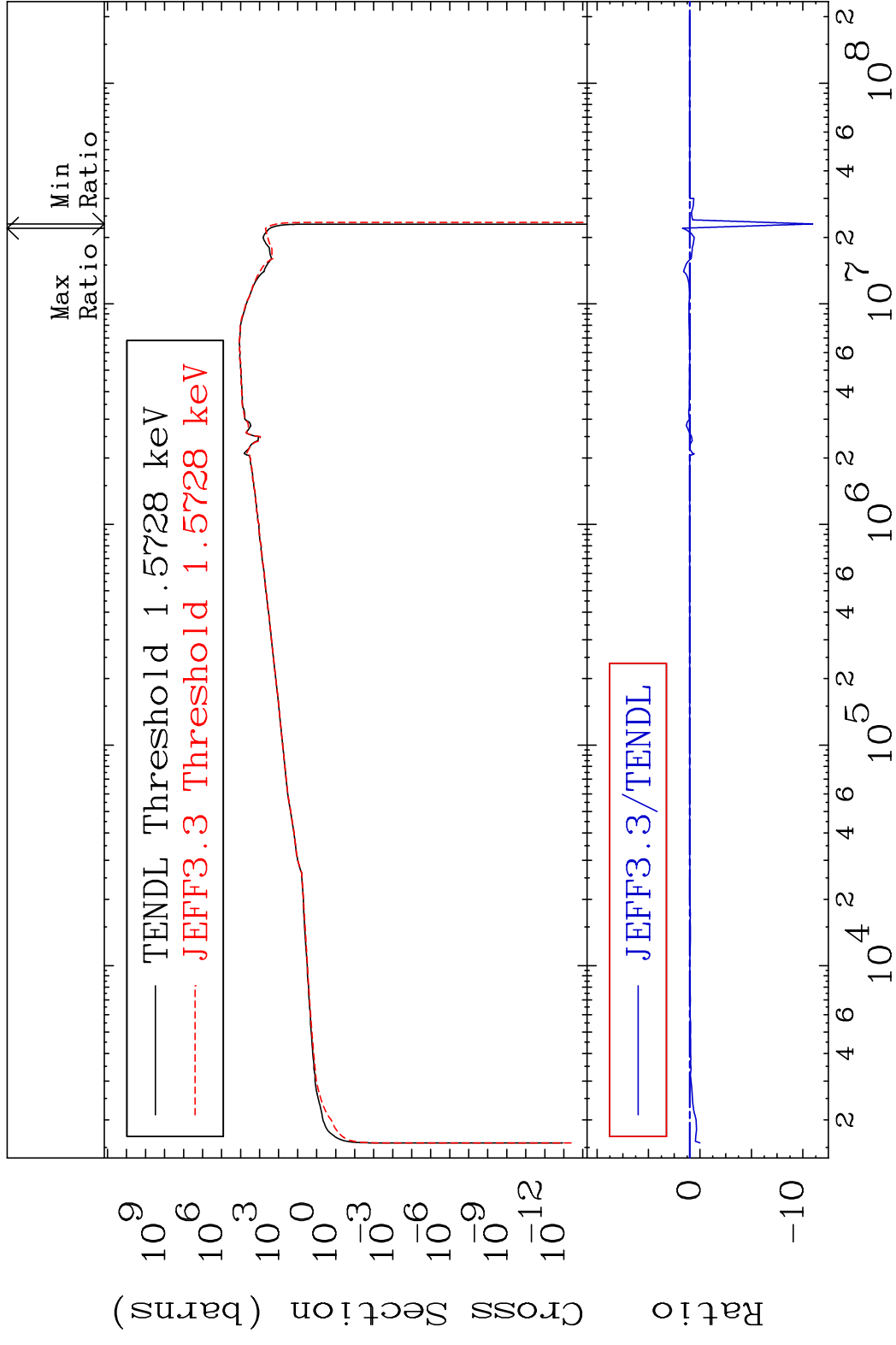
Incident Energy (eV)

80-Hg-201

MAT 8040 Kerma non-elastic (all but mt2) 80-Hg-201
 Cross Section -96.66 To 1521. %

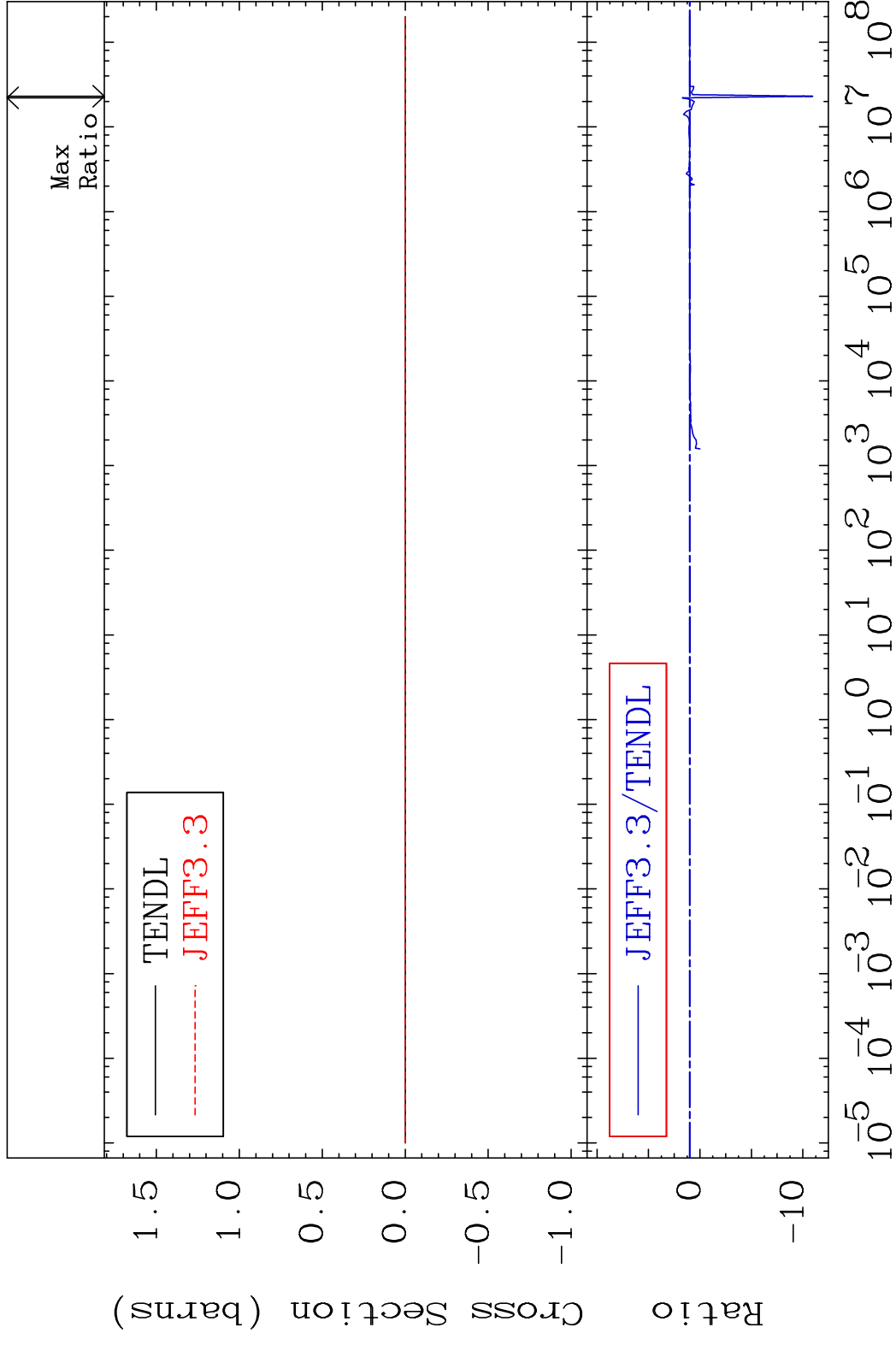


MAT 8040 Kerma inelastic (mt51-91) 80-Hg-201
 Cross Section -1195. To 70.94 %



65 Incident Energy (eV) 80-Hg-201

MAT 8040 Kerma fission (mt18 or mt19-20-21-38)80-Hg-201
 Cross Section -1195. To 70.94 %

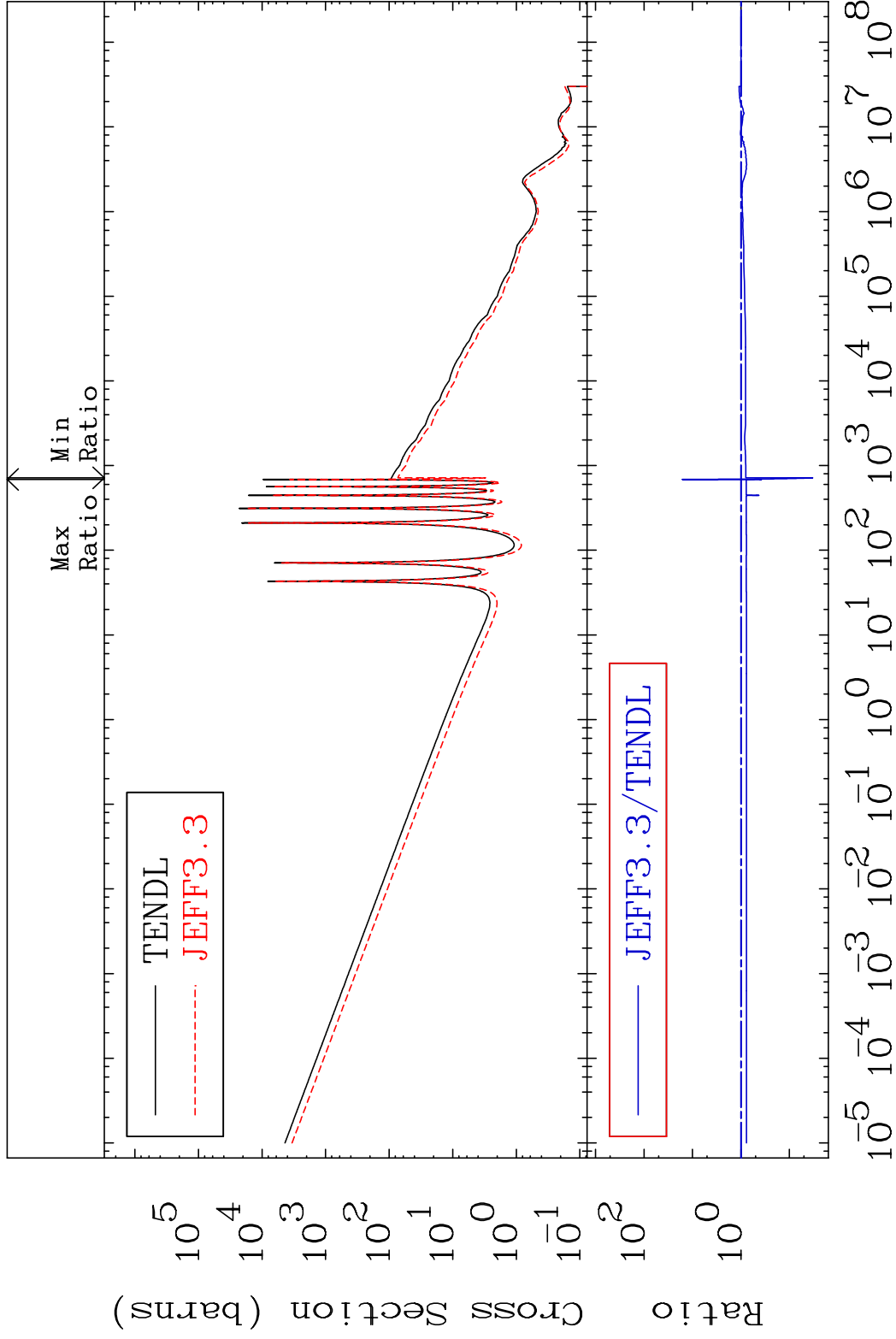


MAT 8040

Kerma capture (mt102)

80-Hg-201

Cross Section -96.66 To 1521. %



67

Incident Energy (eV)

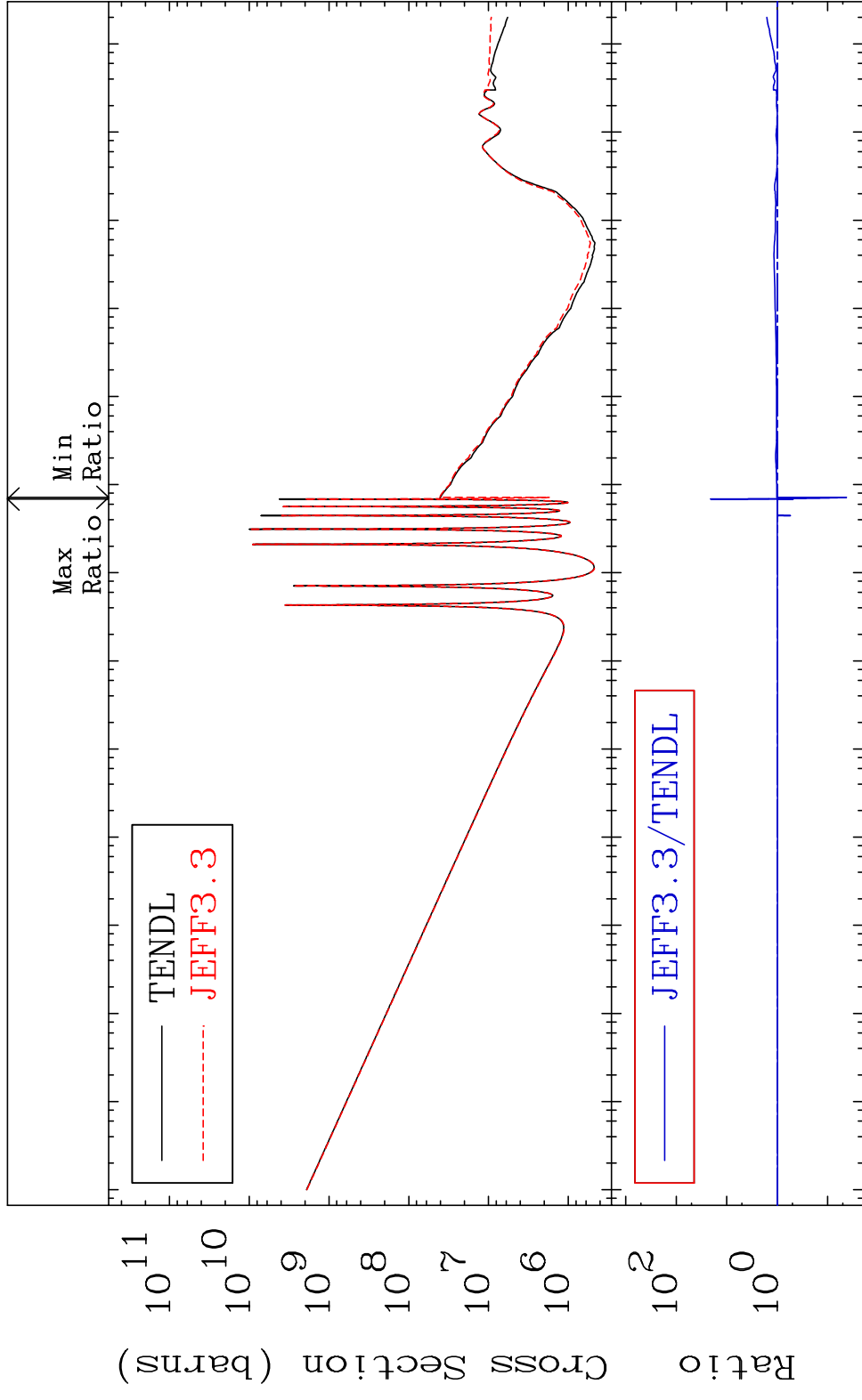
80-Hg-201

MAT 8040

Total photon (eV-barns)

80-Hg-201

Cross Section -95.73 To 1976. %

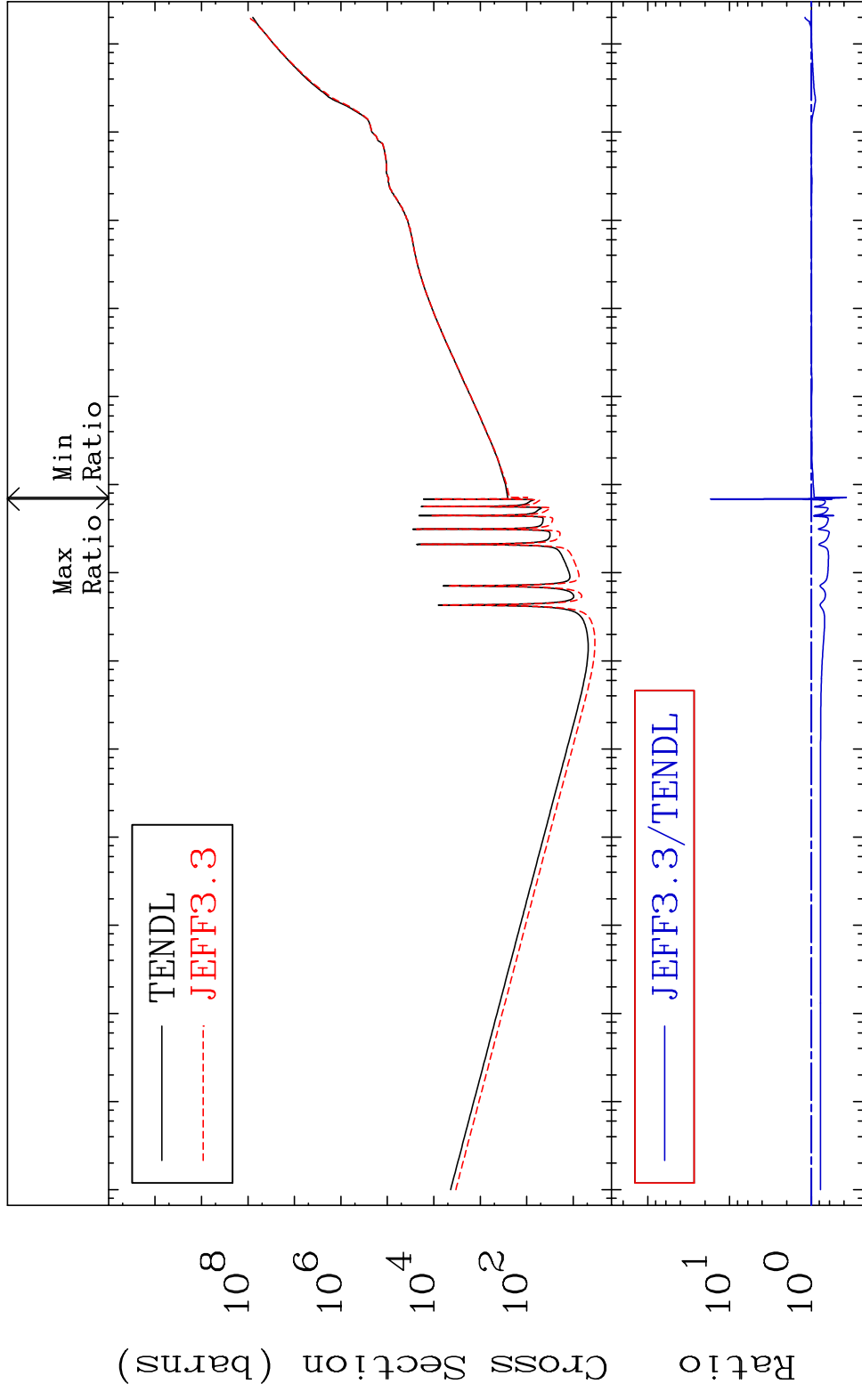


68

Incident Energy (eV)

80-Hg-201

MAT 8040 Total kinematic kerma (high limit) 80-Hg-201
 Cross Section -62.66 To 1600. %



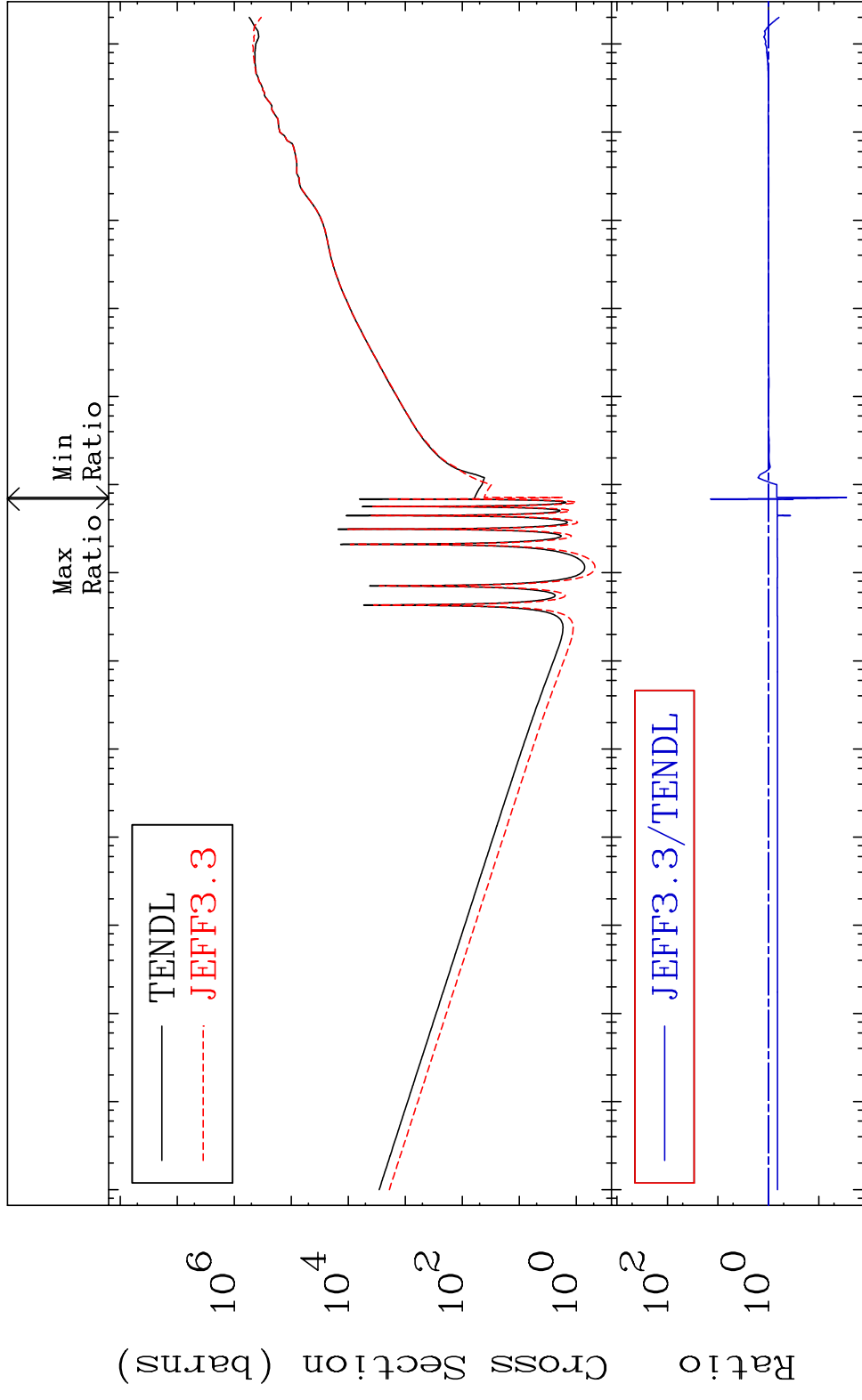
69 Incident Energy (eV) 80-Hg-201

MAT 8040

Dpa total (eV-barns)

80-Hg-201

Cross Section -97.14 To 1291. %



Ratio

10⁶

10⁴

10²

10⁰

10²

10⁰

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

70

Incident Energy (eV)

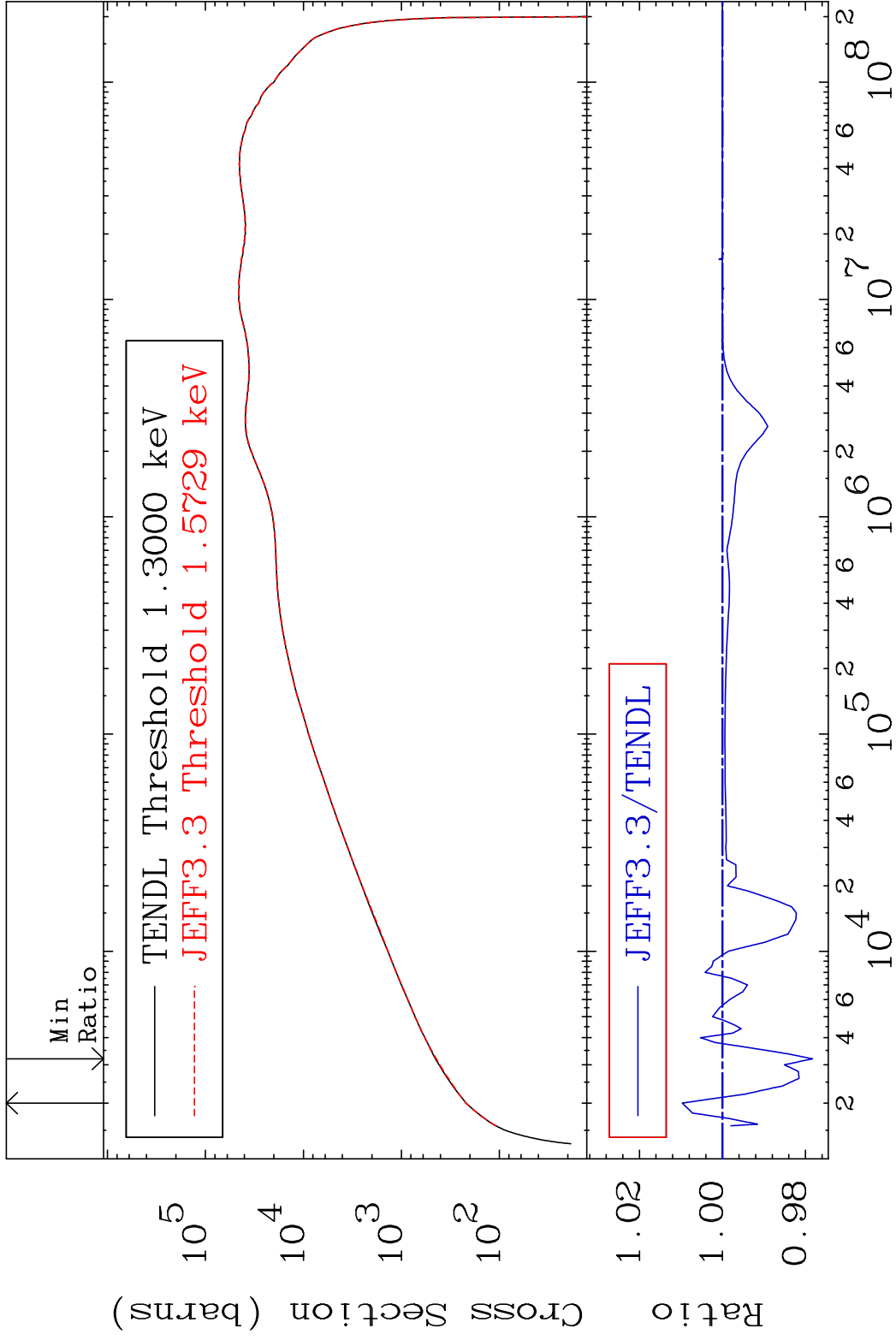
80-Hg-201

MAT 8040

Dpa elastic (mt2)

80-Hg-201

Cross Section -2.169 To 0.971 %



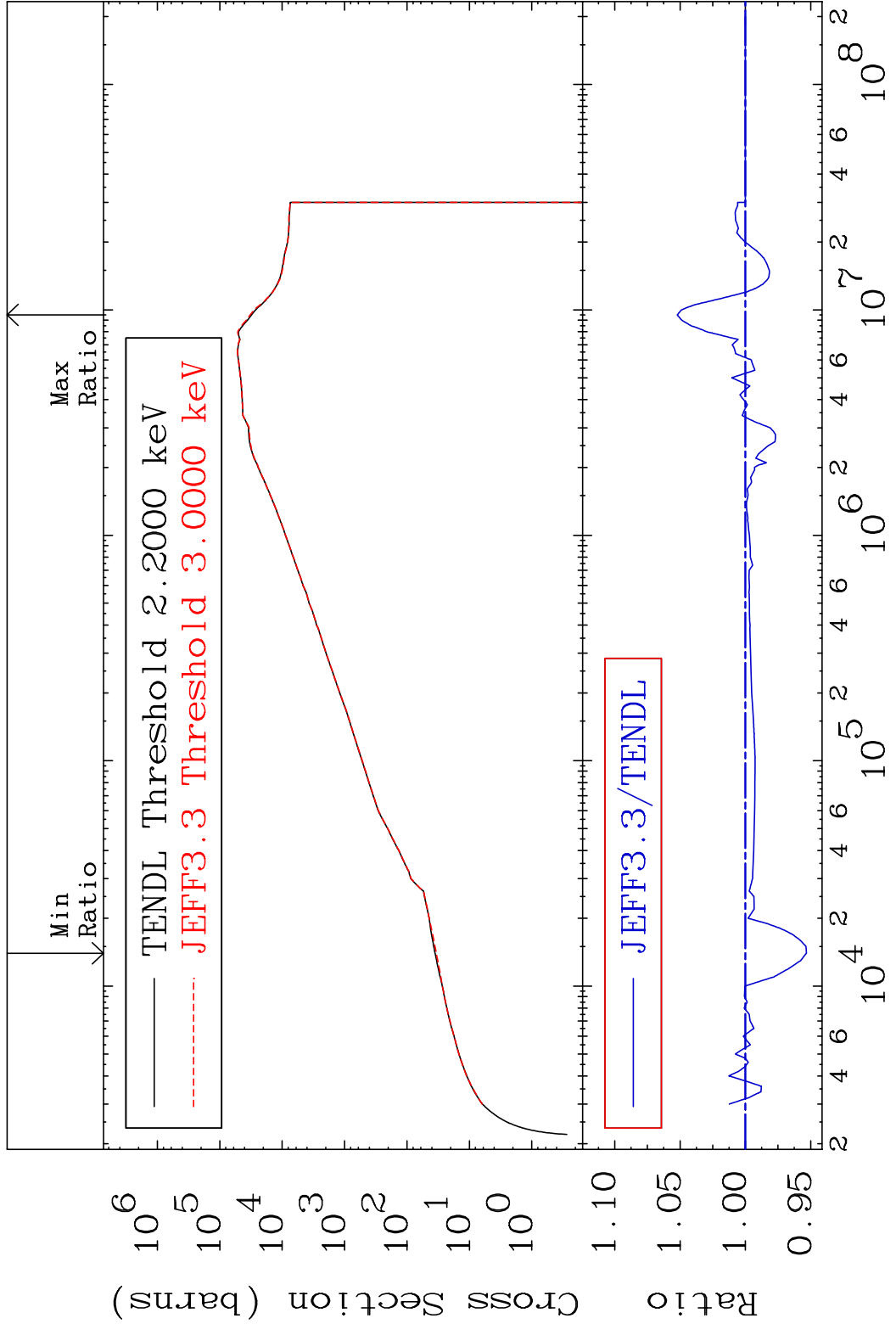
71

Incident Energy (eV)

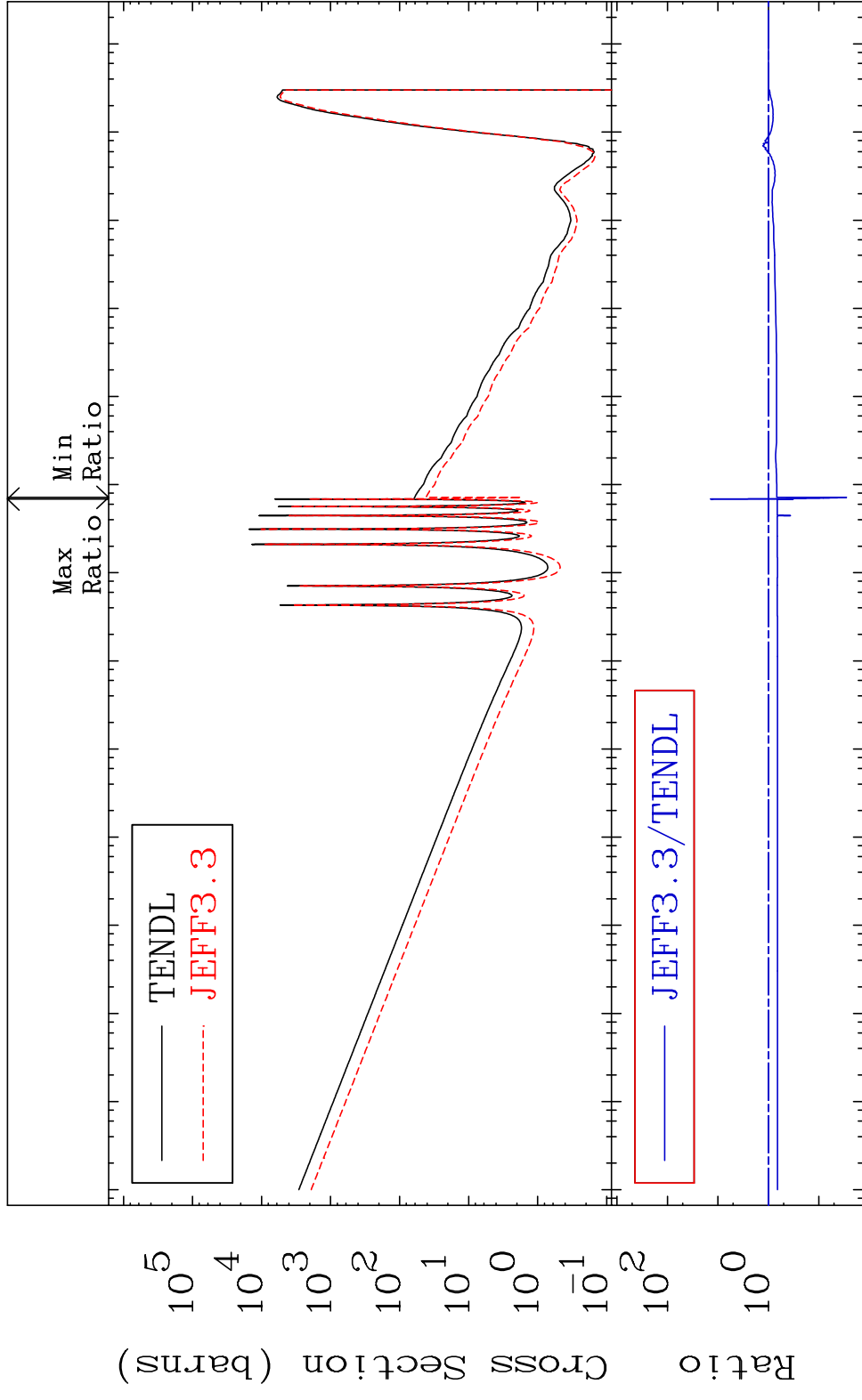
80-Hg-201

MAT 8040

Dpa inelastic (mt51-91) 80-Hg-201
Cross Section -4.673 To 5.219 %

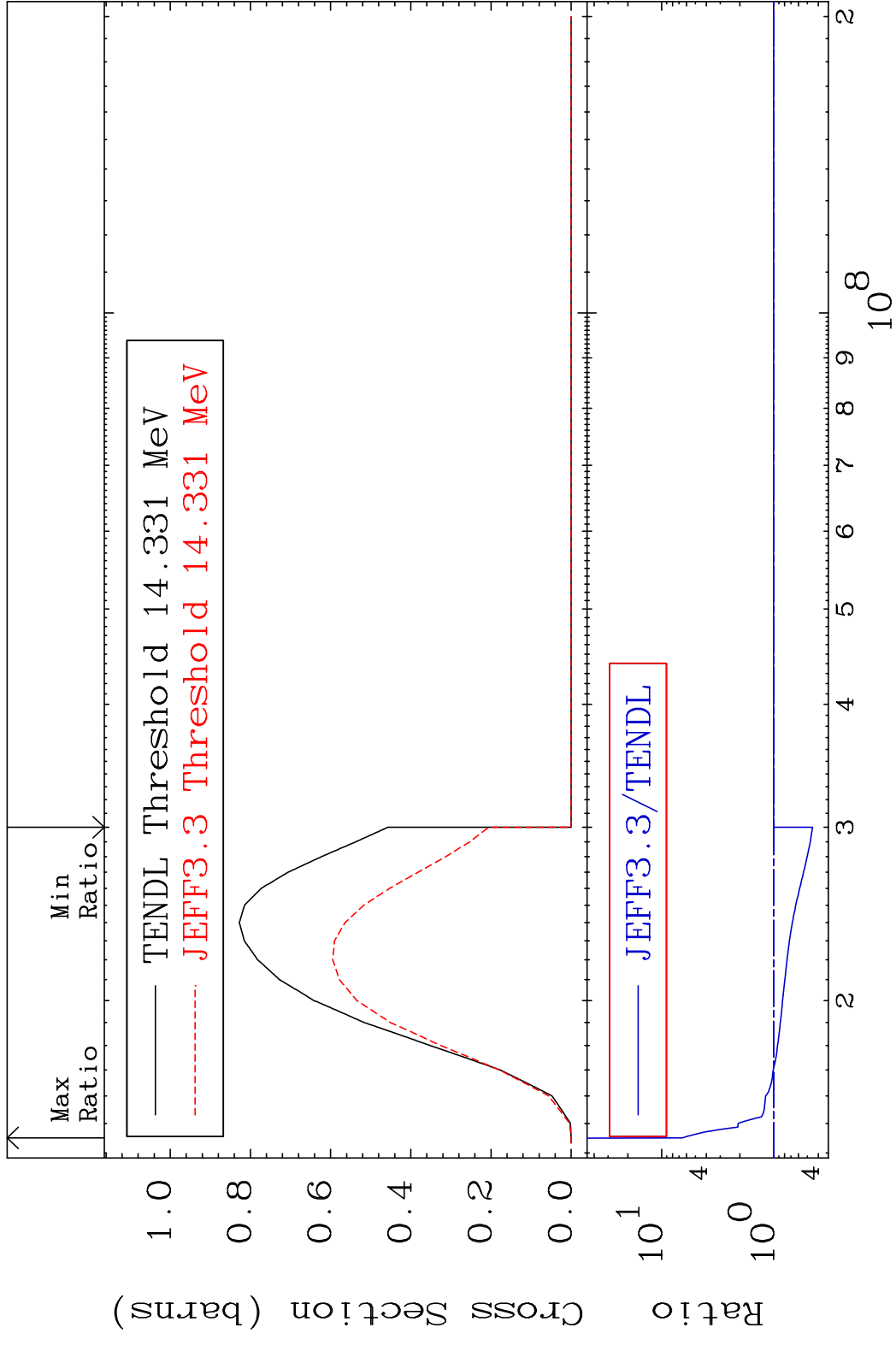


MAT 8040 Dpa disappearance (mt102 -120) 80-Hg-201
 Cross Section -97.14 To 1291. %

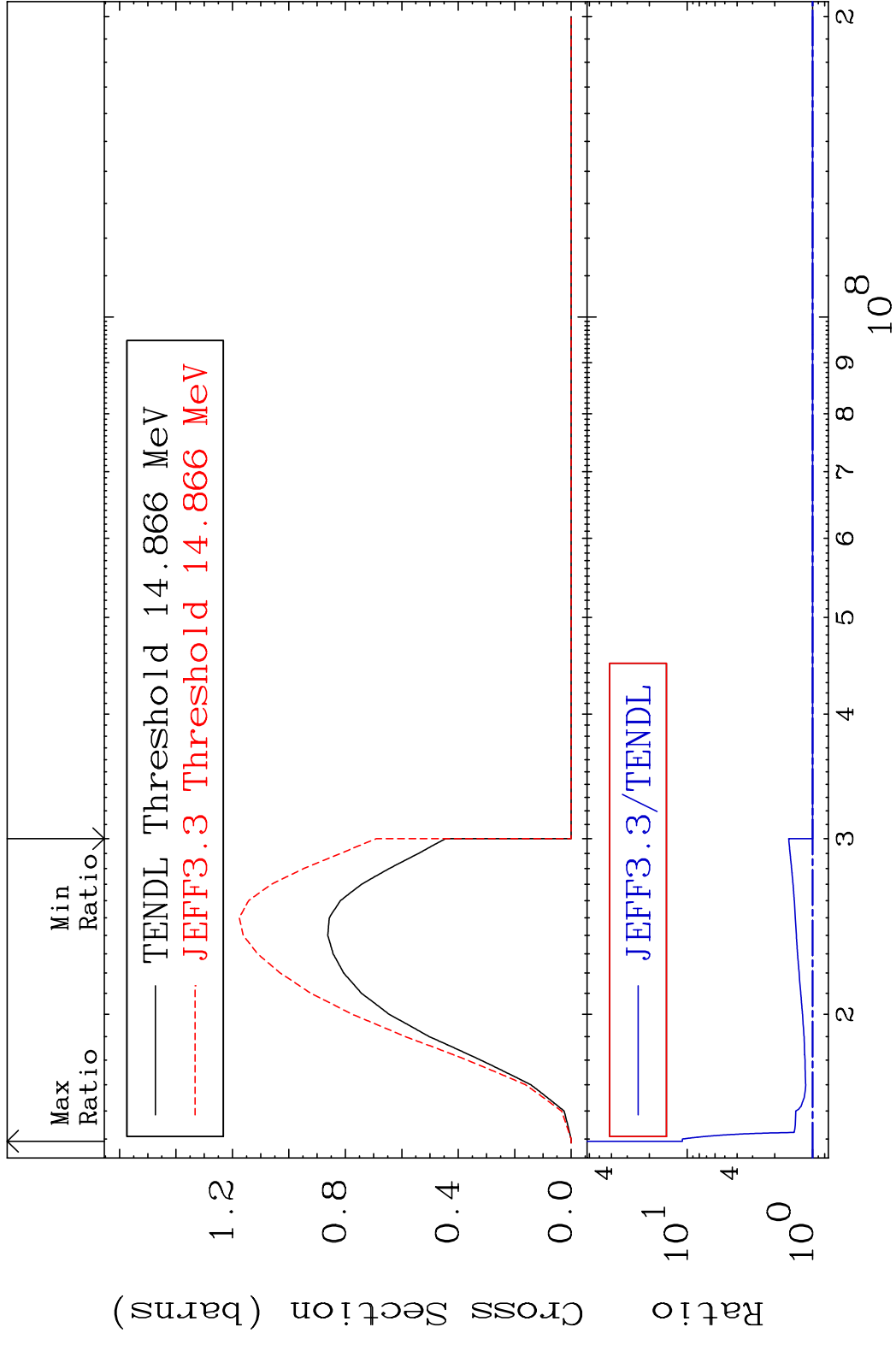


73 Incident Energy (eV) 80-Hg-201

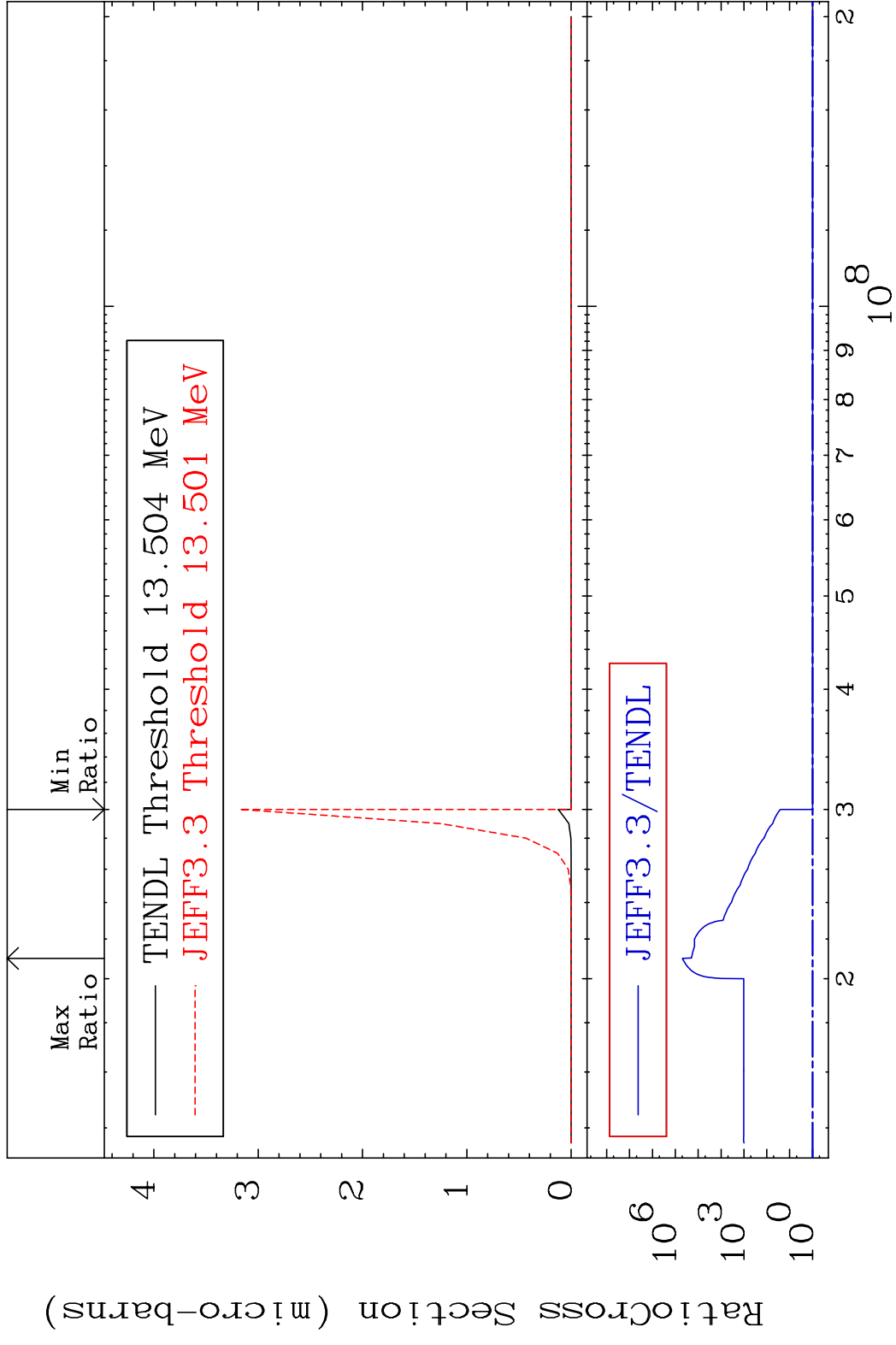
MAT 8040 (n,3n):80-Hg-199g 80-Hg-201
 Radionuclide Production Cross Section 55600 dth 553.2 %

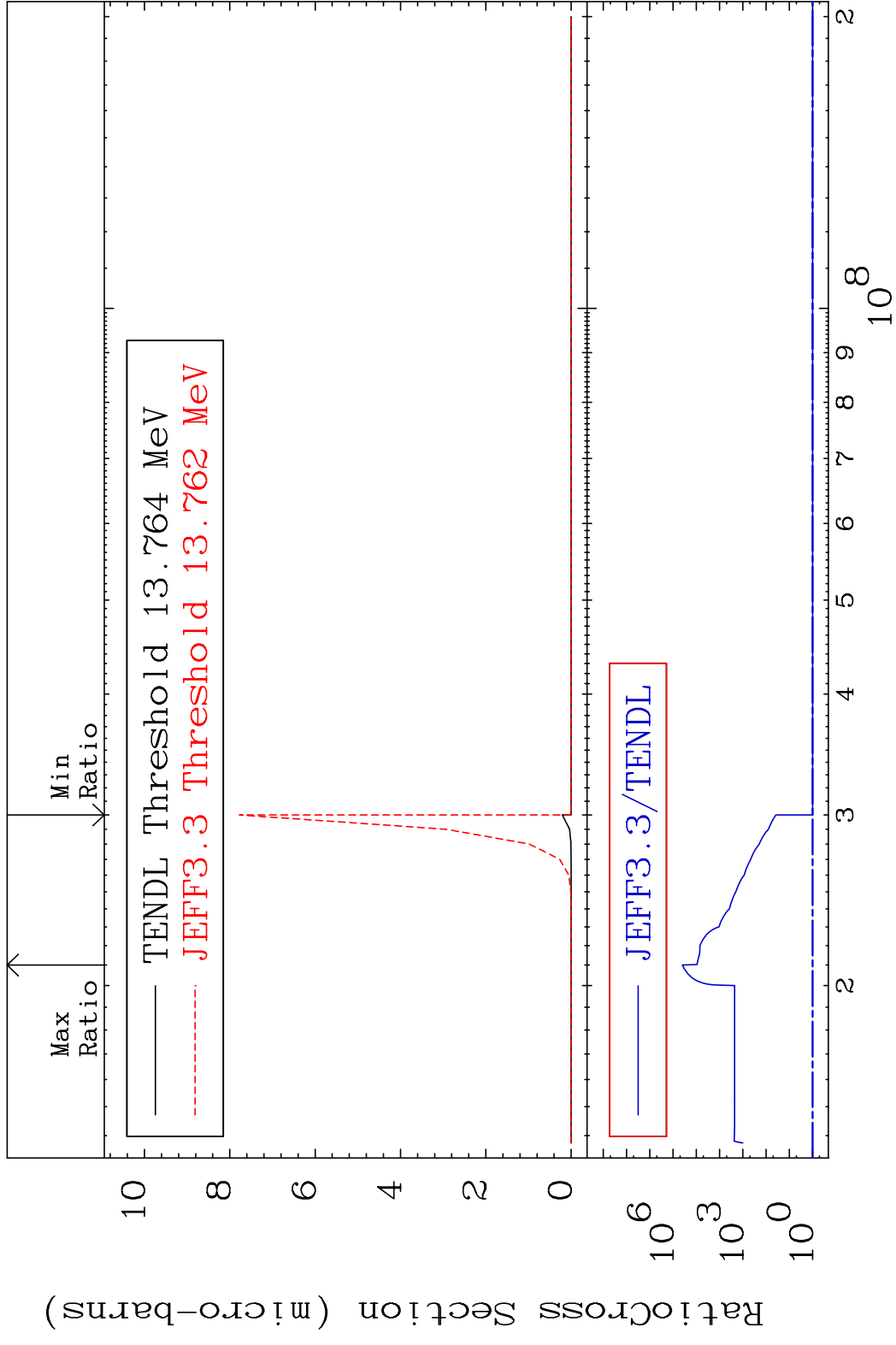


MAT 8040 (n, 3n):80-Hg-199m7 80-Hg-201
 Radionuclide Production Cross Section 990.7 %

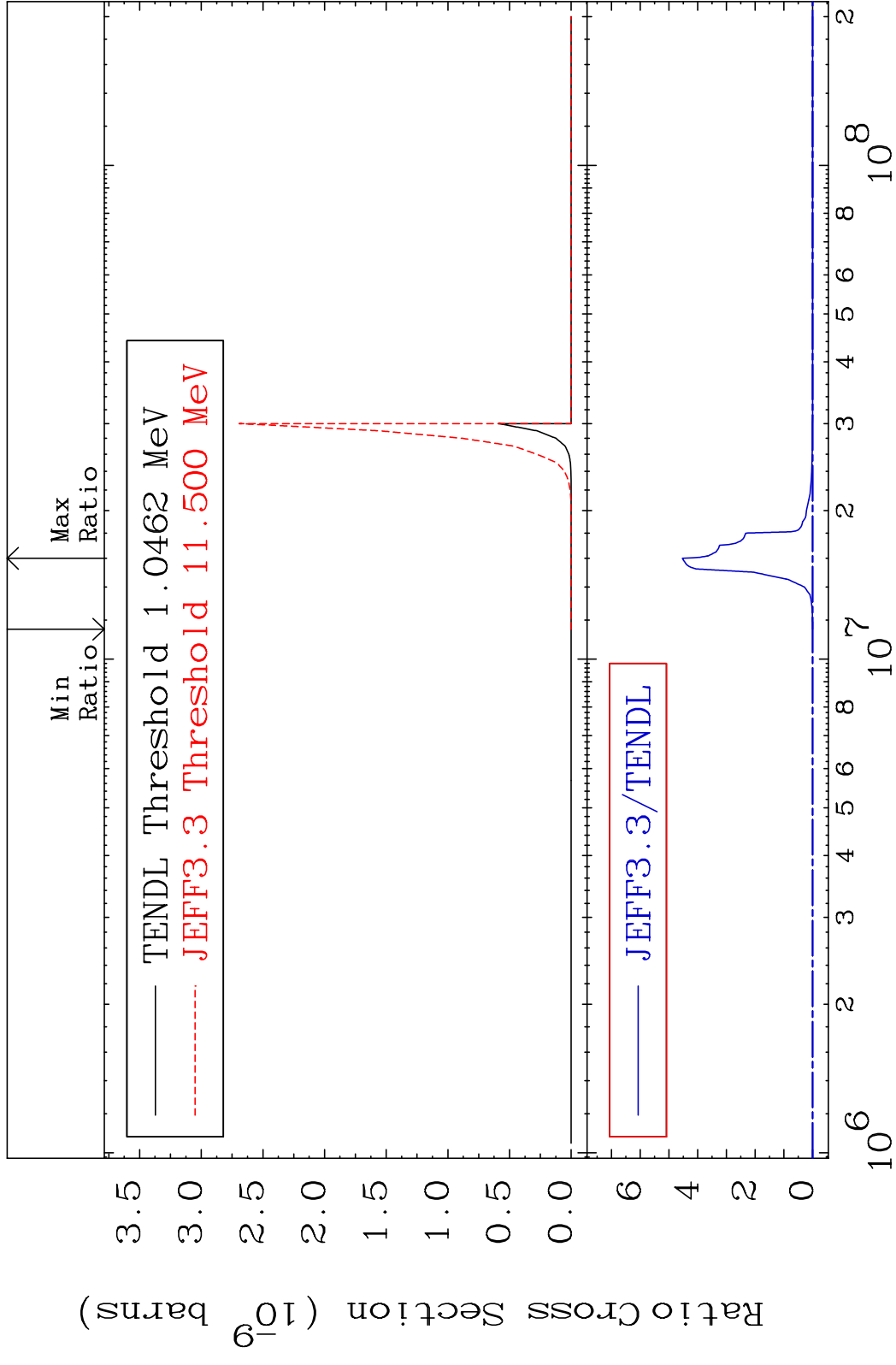


MAT 8040 (n,3n) α :78-Pt-195g 80-Hg-201
 Radionuclide Production Cross Section 9999. %





MAT 8040 (n, p) α :77-Ir-197g 80-Hg-201
 Radionuclide Production Cross Section Ratio 9999. %



78 Incident Energy (eV) 80-Hg-201

