

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

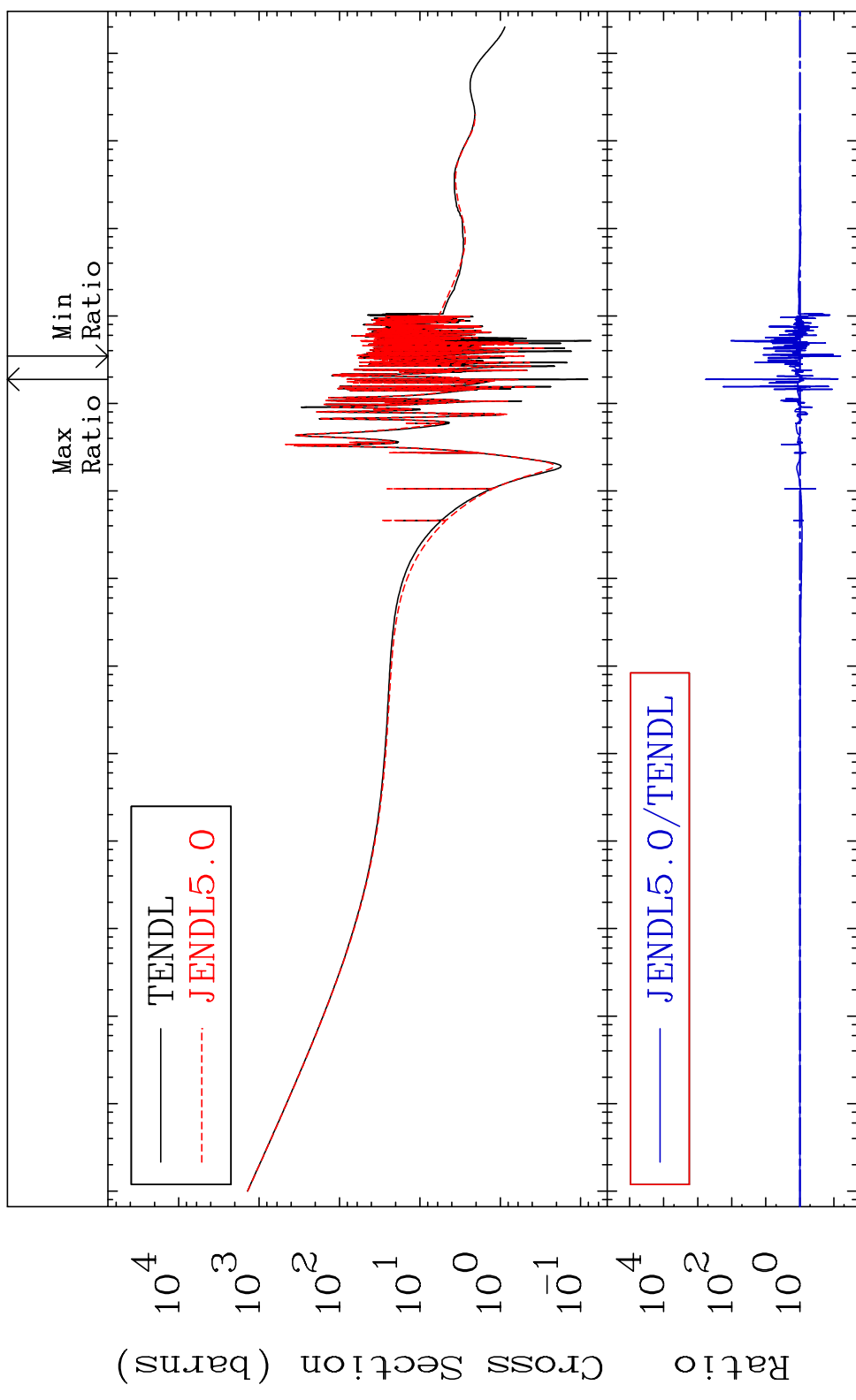
Press Mouse Button to Start

MAT 2125

Total

21-Sc-45

Cross Section -93.60 To 9999. %



1

Incident Energy (eV)

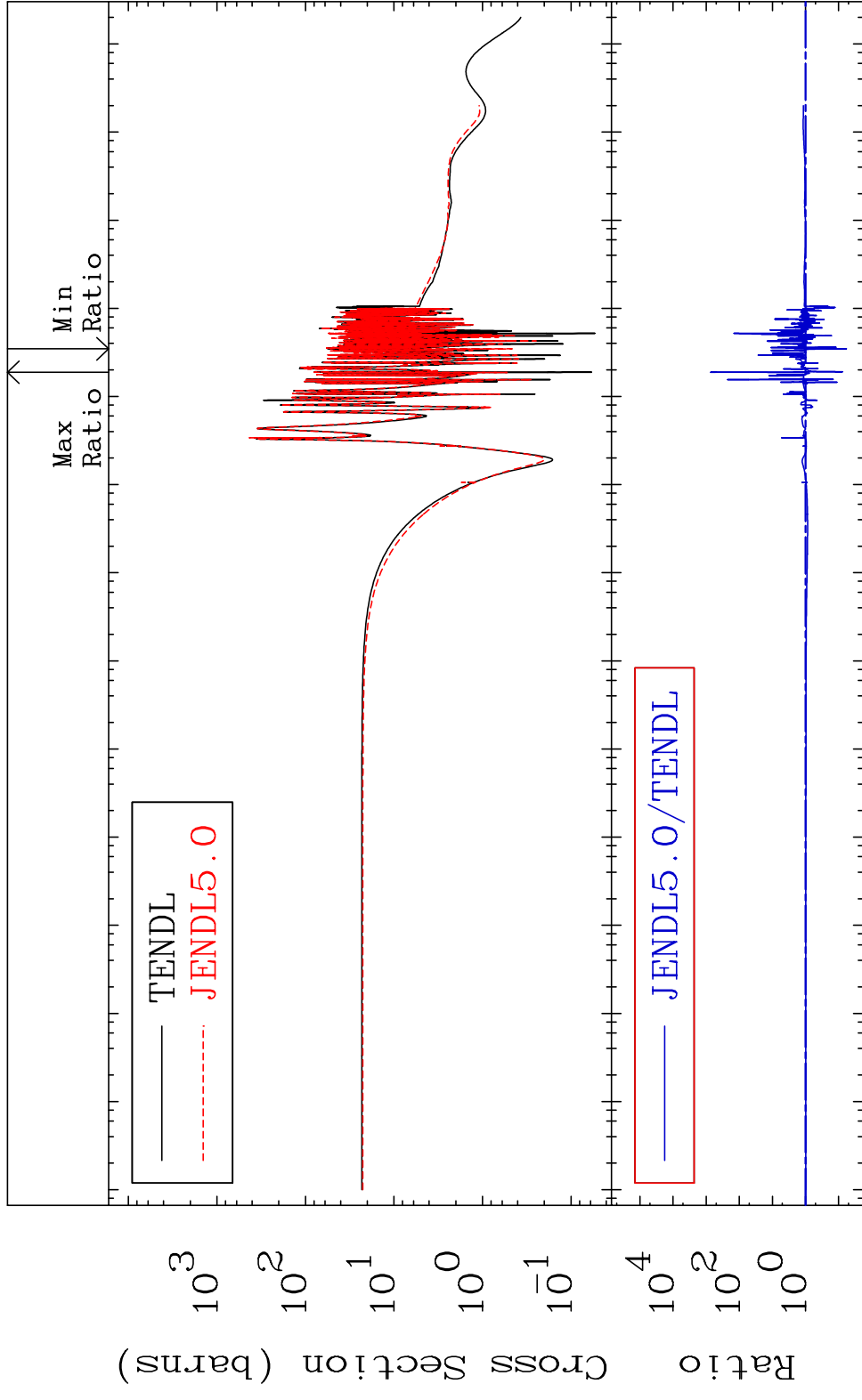
21-Sc-45

MAT 2125

Elastic

21-Sc-45

Cross Section -94.15 To 9999. %



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

2

Incident Energy (eV)

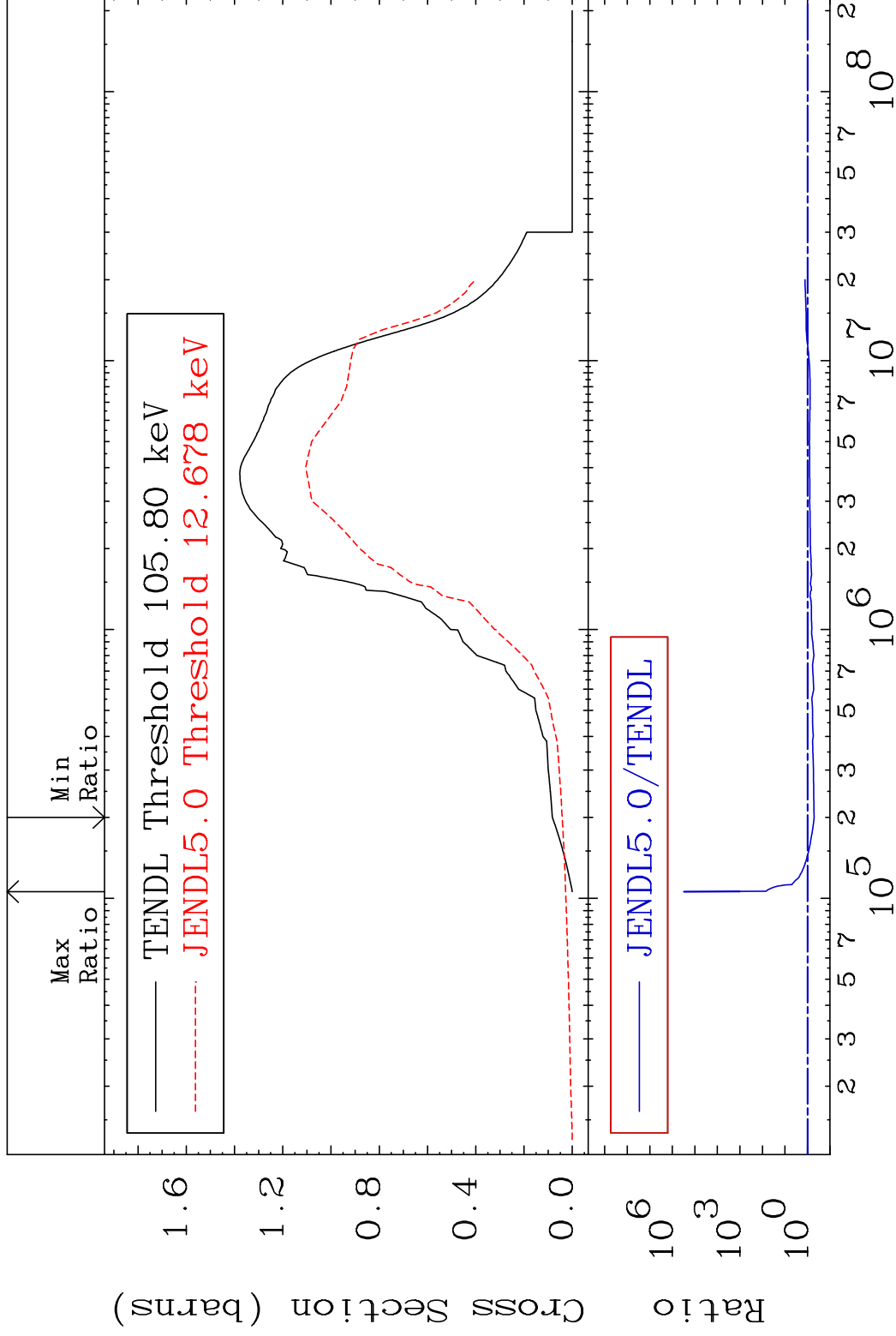
21-Sc-45

MAT 2125

Inelastic

21-Sc-45

Cross Section -49.27 To 9999. %

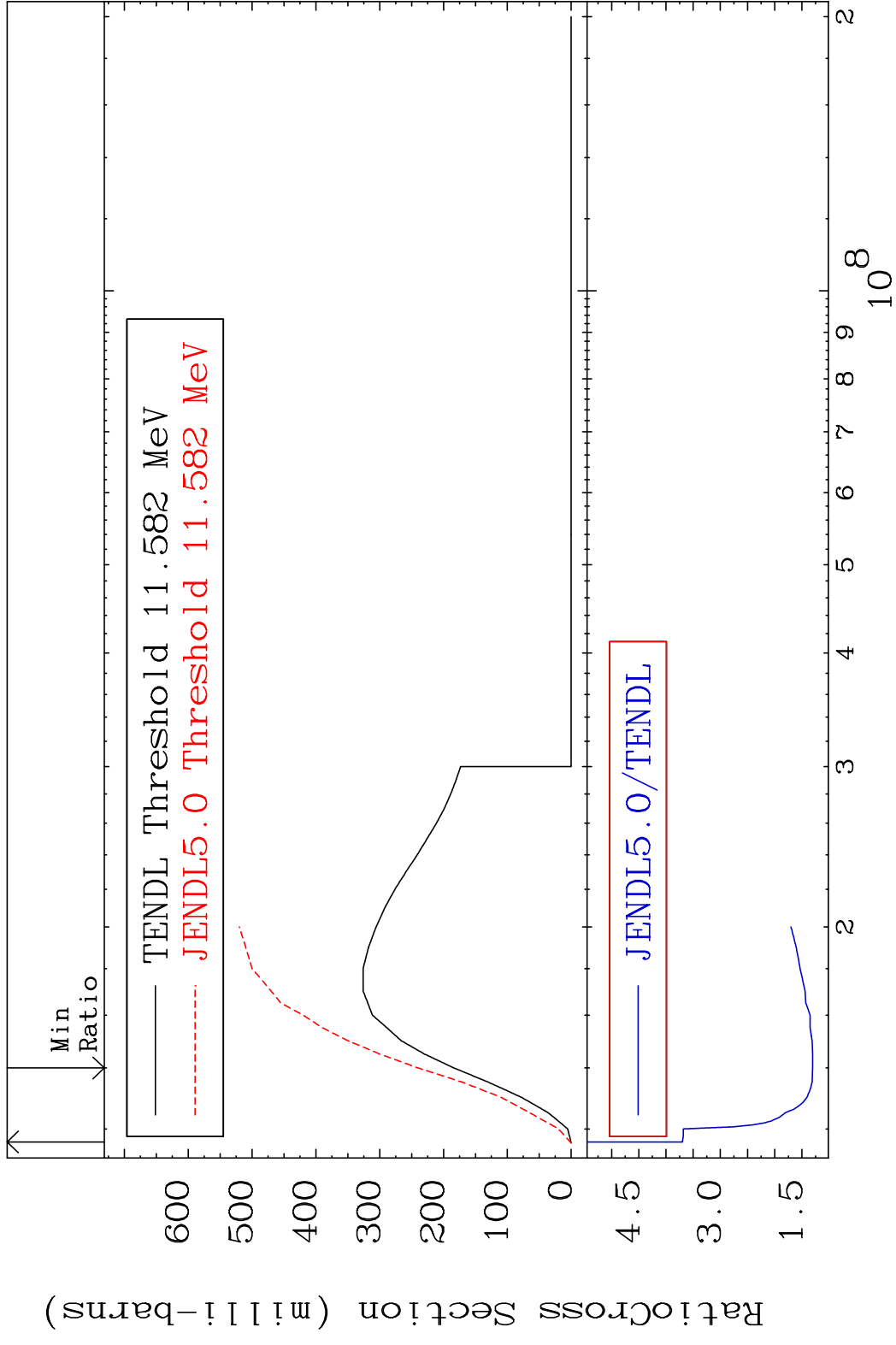


MAT 2125

(n,2n)

21-Sc-45

Cross Section 30.46 To 269.9 %

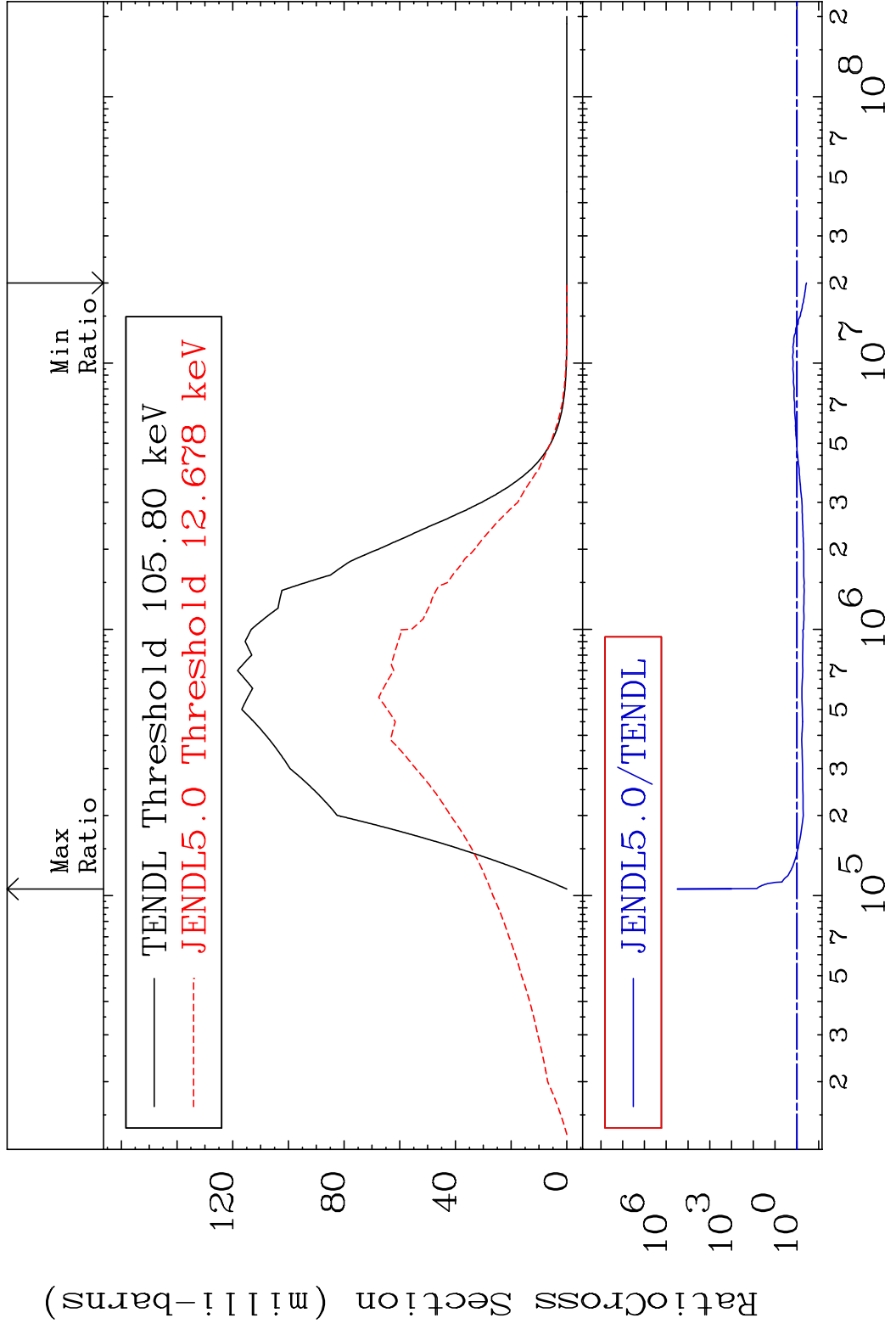


4

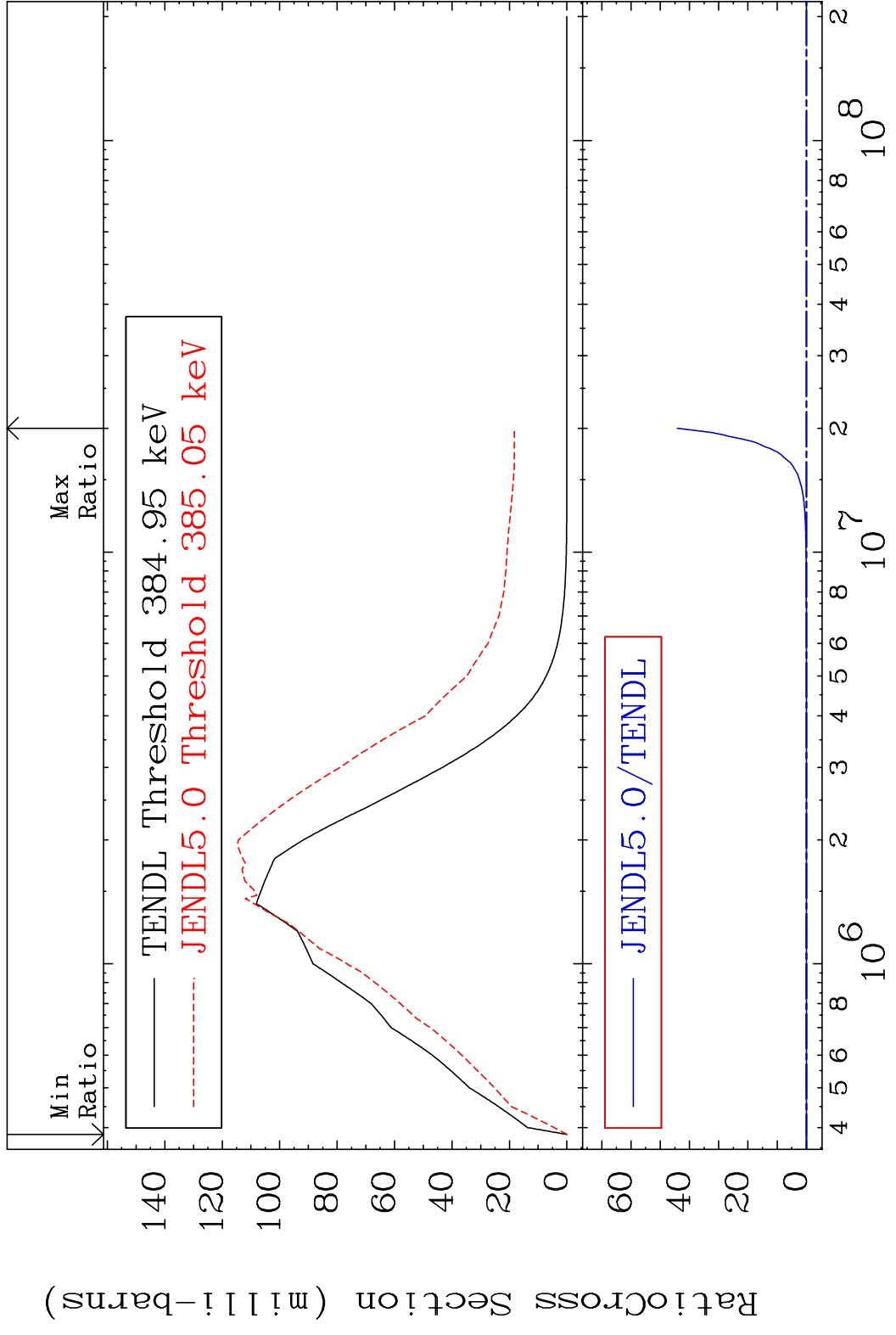
Incident Energy (eV)

21-Sc-45

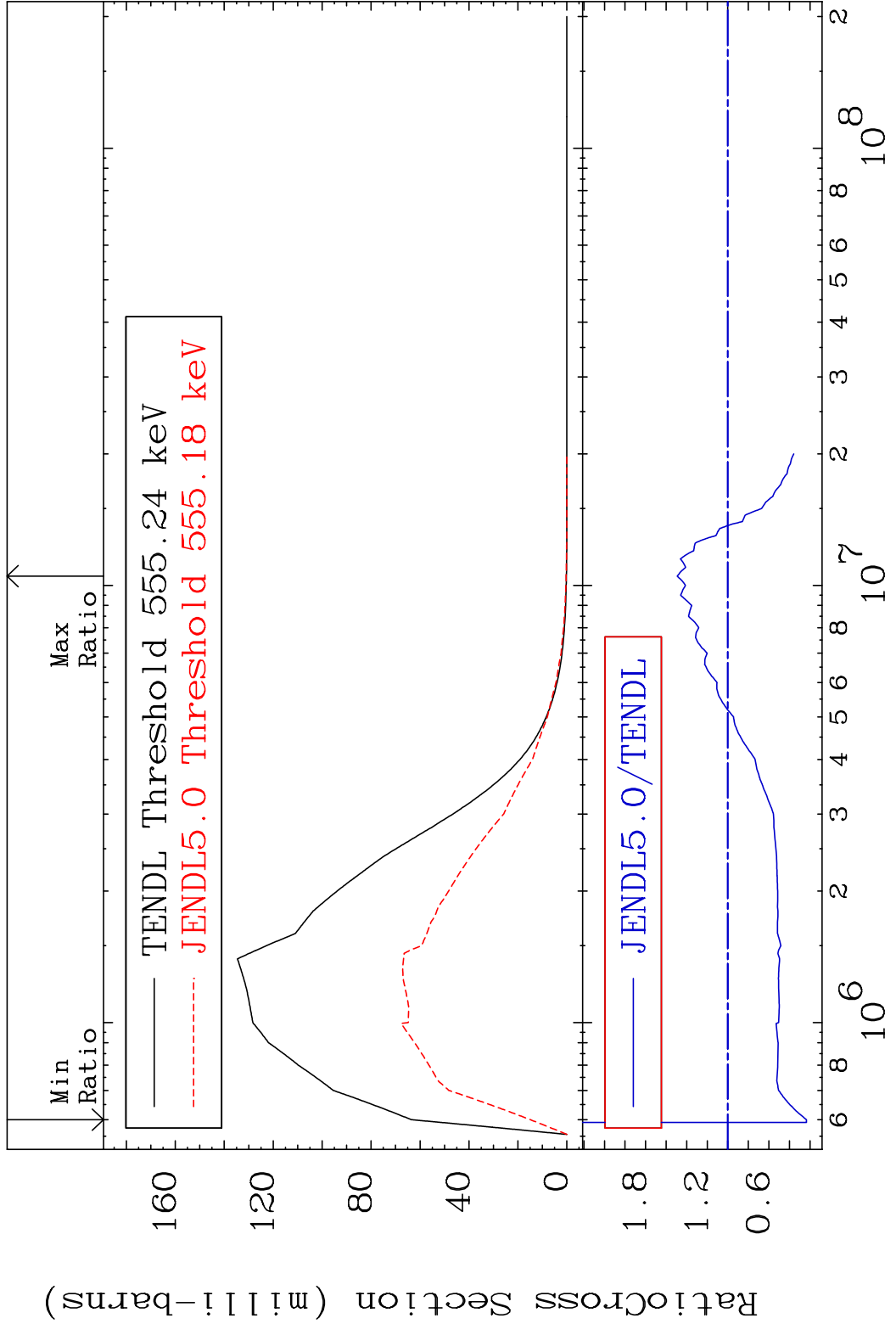
MAT 2125 MT= 51 (n, n') Level 21-Sc-45
 Cross Section -63.65 To 9999. %



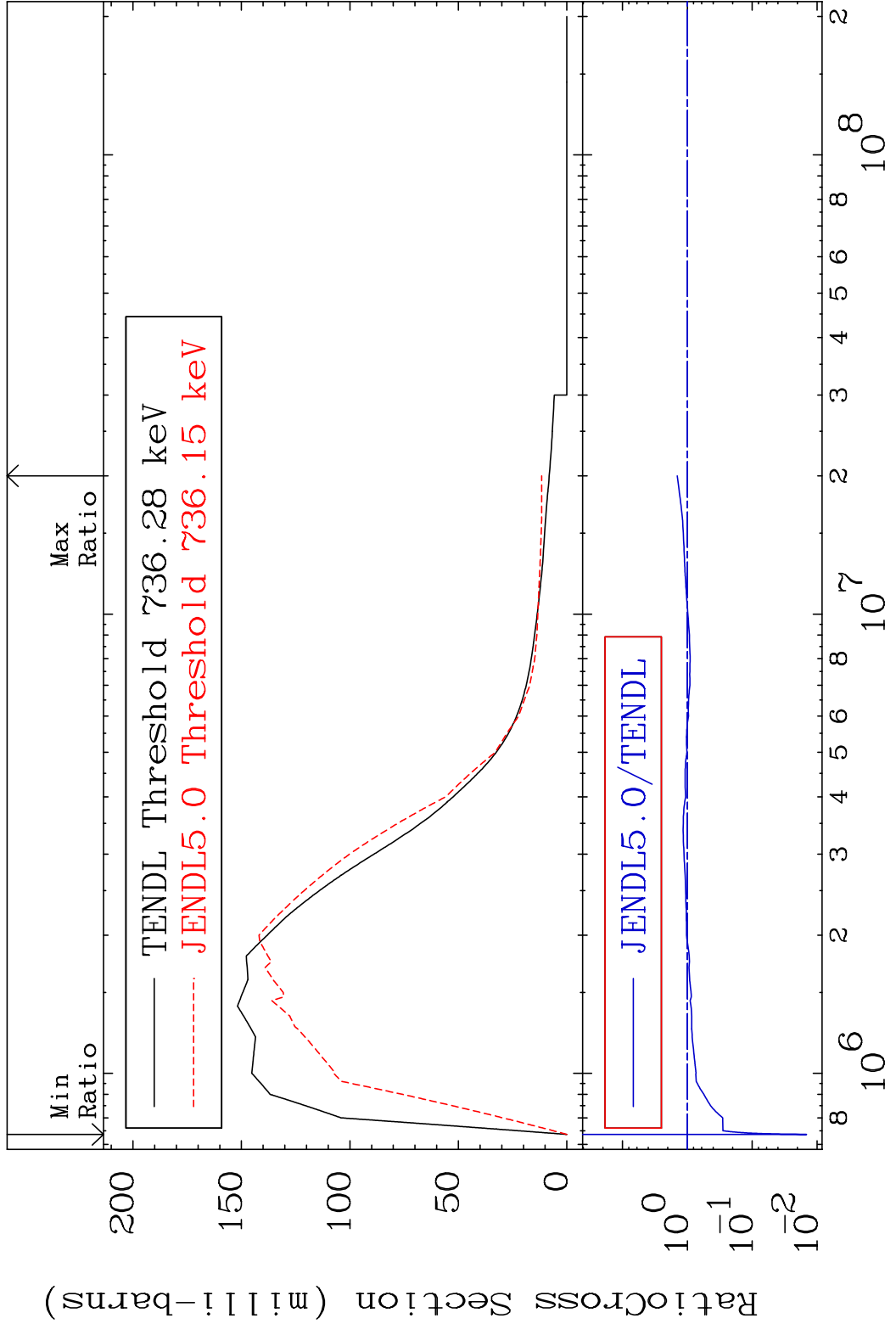
MAT 2125 MT= 52 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 9999. %



MAT 2125 MT= 53 (n, n') Level 21-Sc-45
 Cross Section -76.52 To 49.25 %

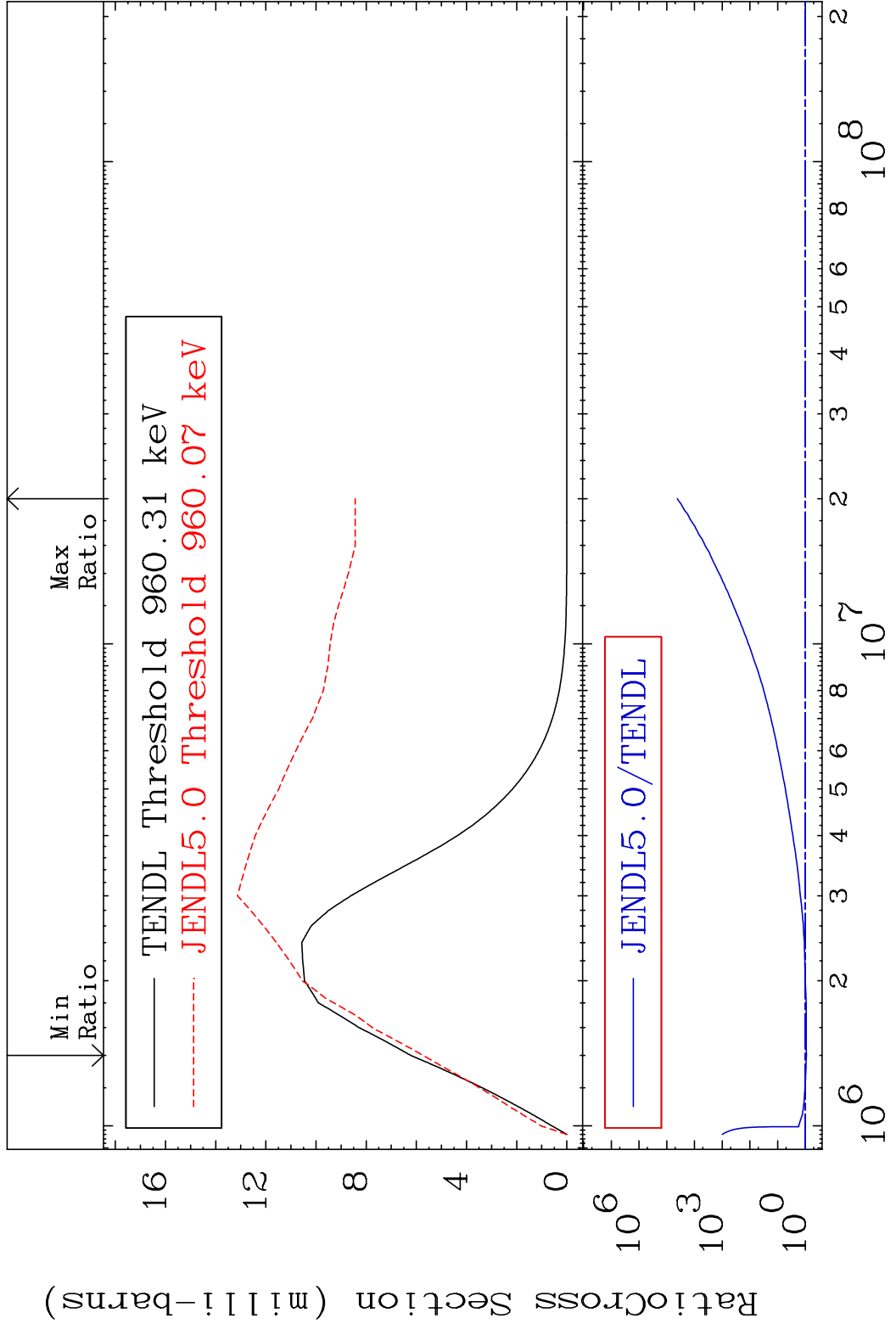


MAT 2125 MT= 54 (n, n') Level 21-Sc-45
 Cross Section -98.54 To 43.25 %



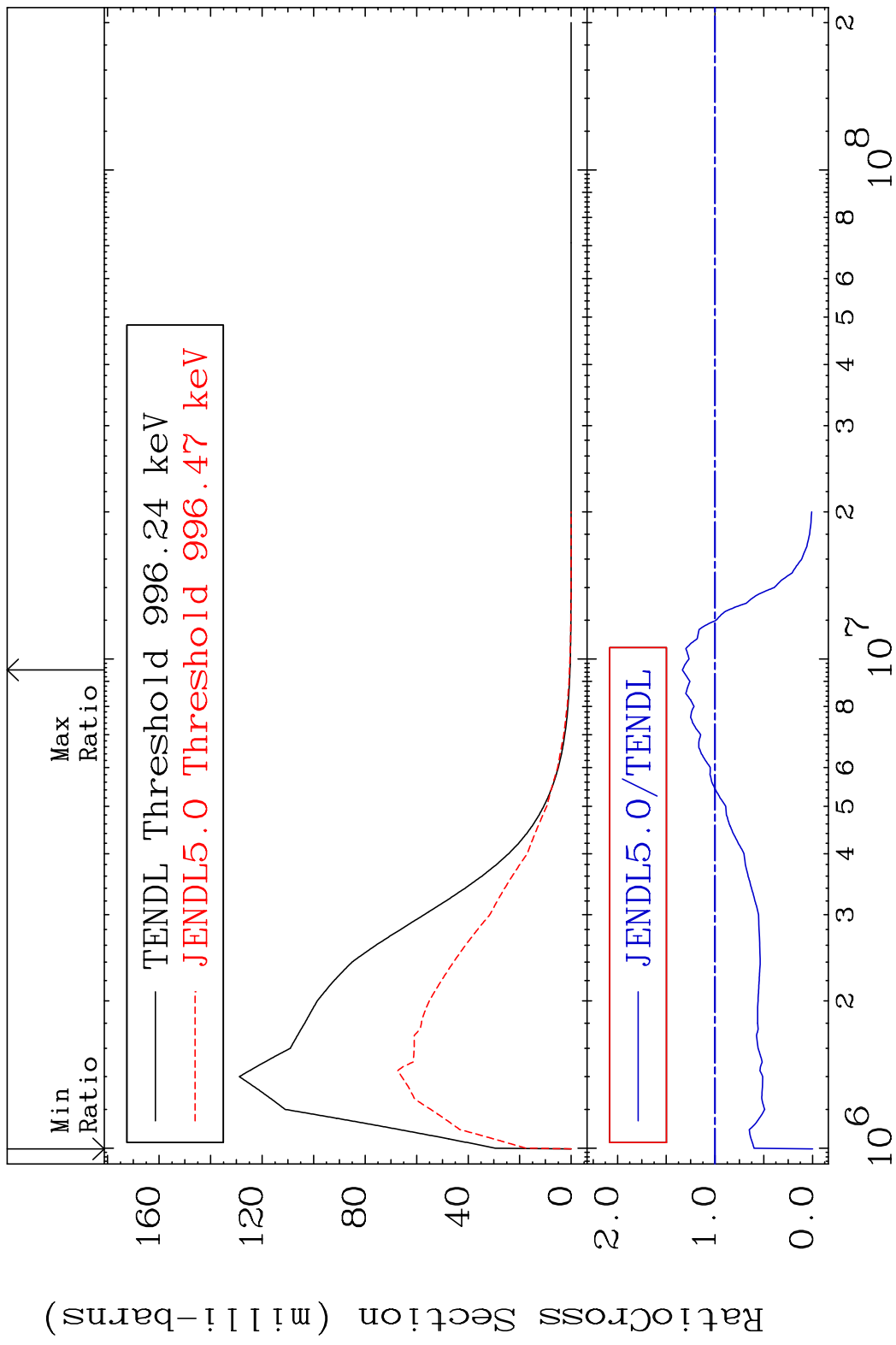
8 Incident Energy (eV) 21-Sc-45

MAT 2125 MT= 55 (n, n') Level 21-Sc-45
 Cross Section -7.955 To 9999. %



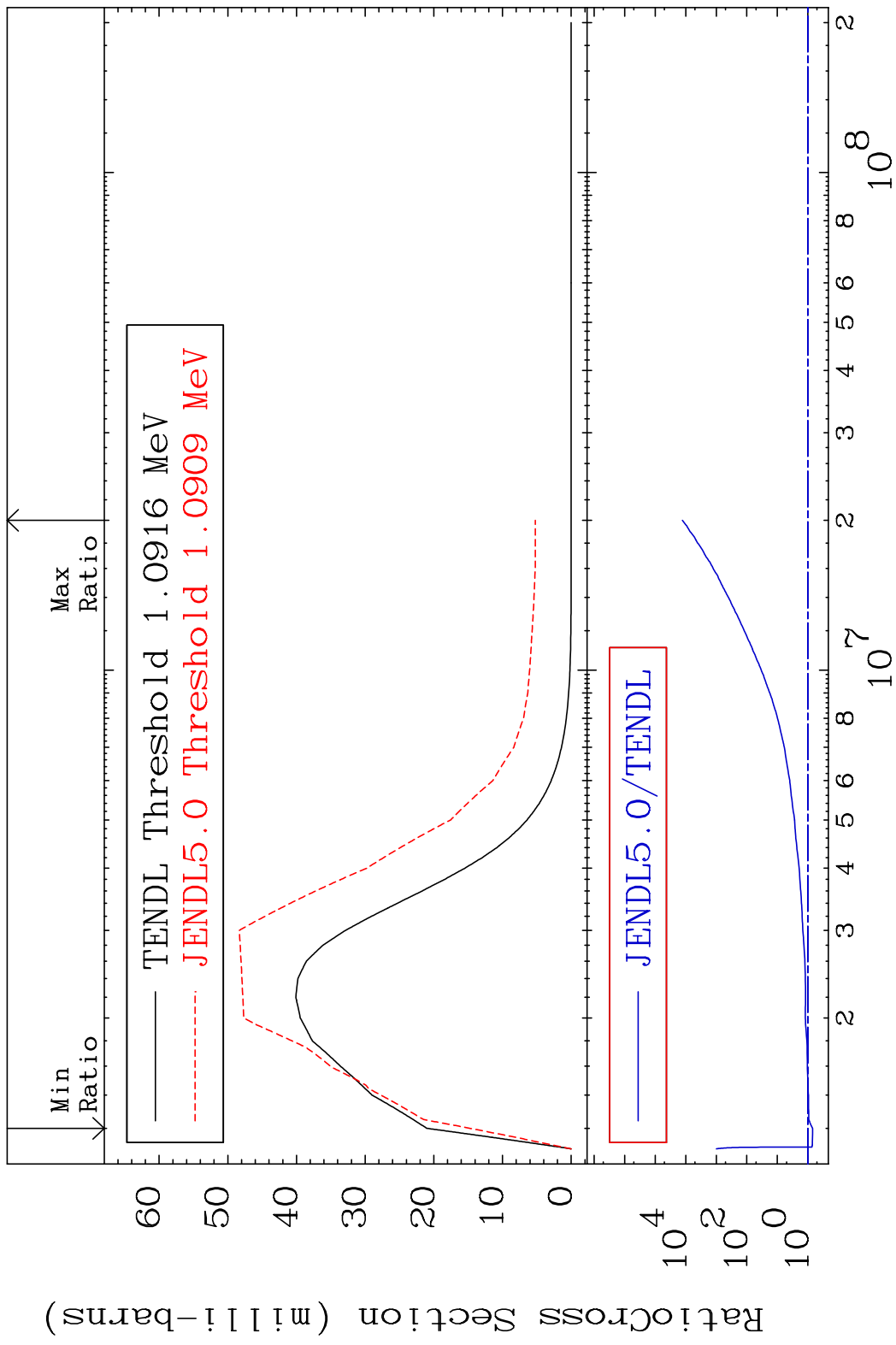
9 Incident Energy (eV) 21-Sc-45

MAT 2125 MT= 56 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 33.51 %

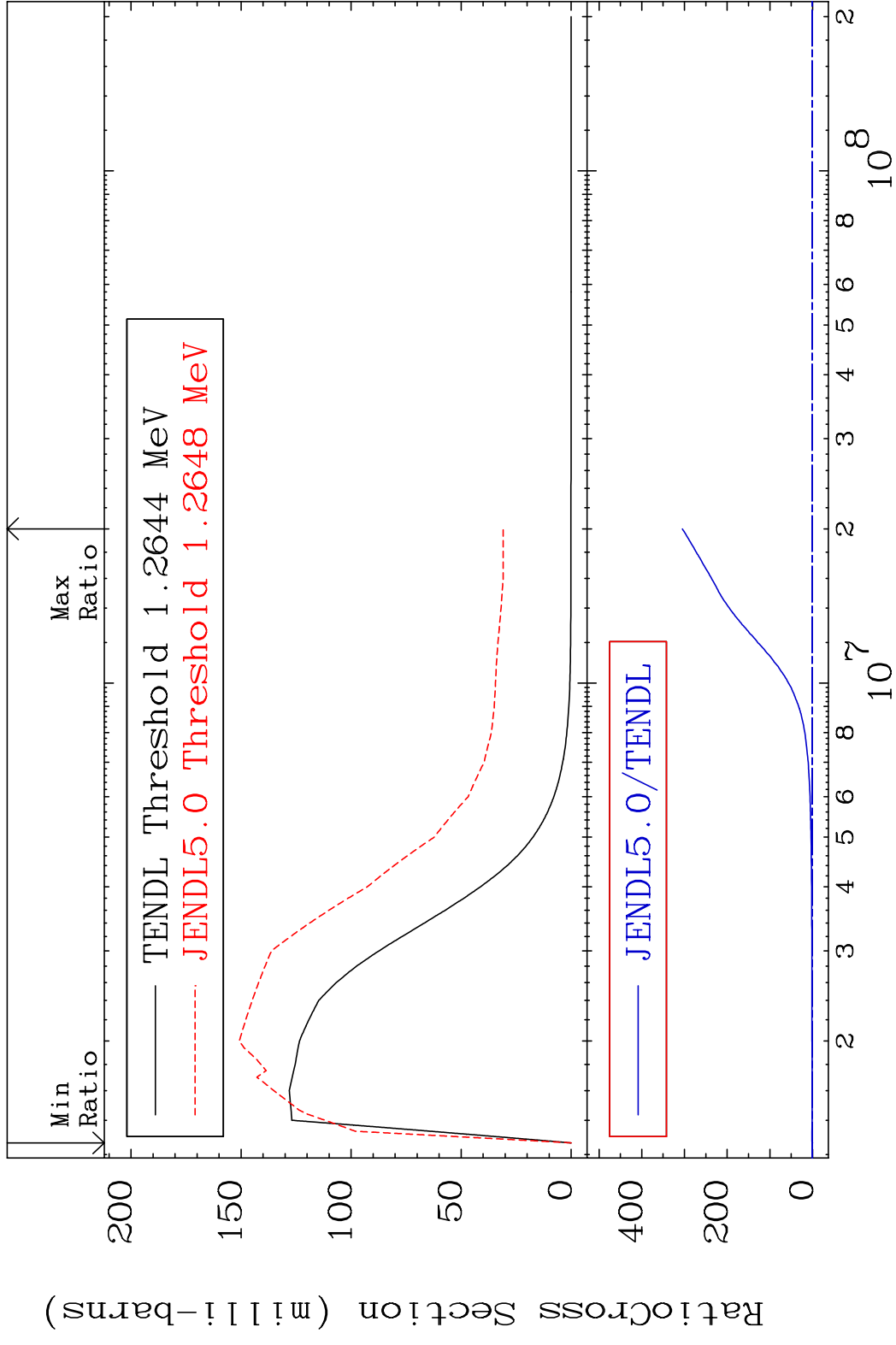


10 10 2 3 4 5 6 8 10⁸ 21-Sc-45

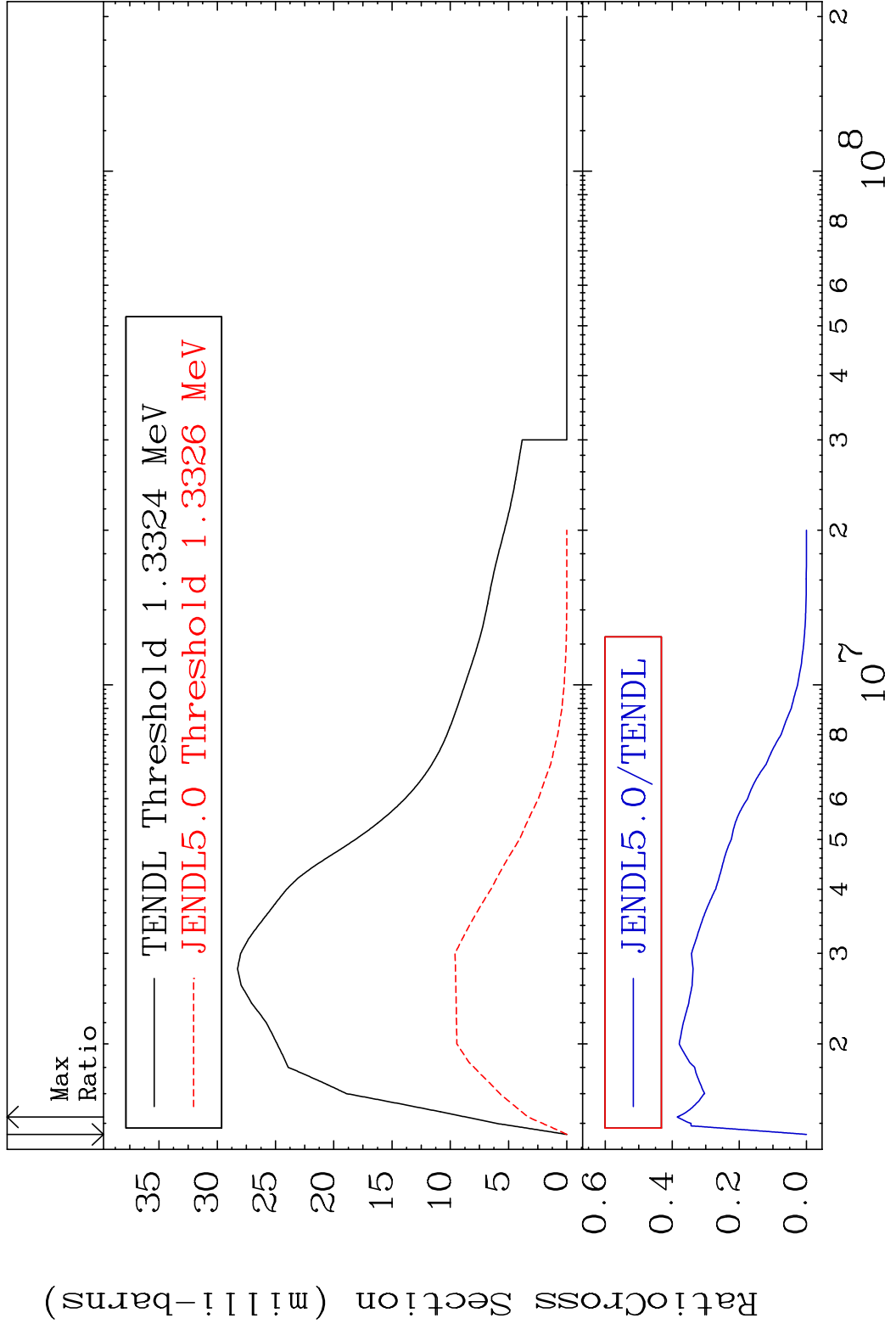
MAT 2125 MT= 57 (n, n') Level 21-Sc-45
 Cross Section -29.90 To 9999. %



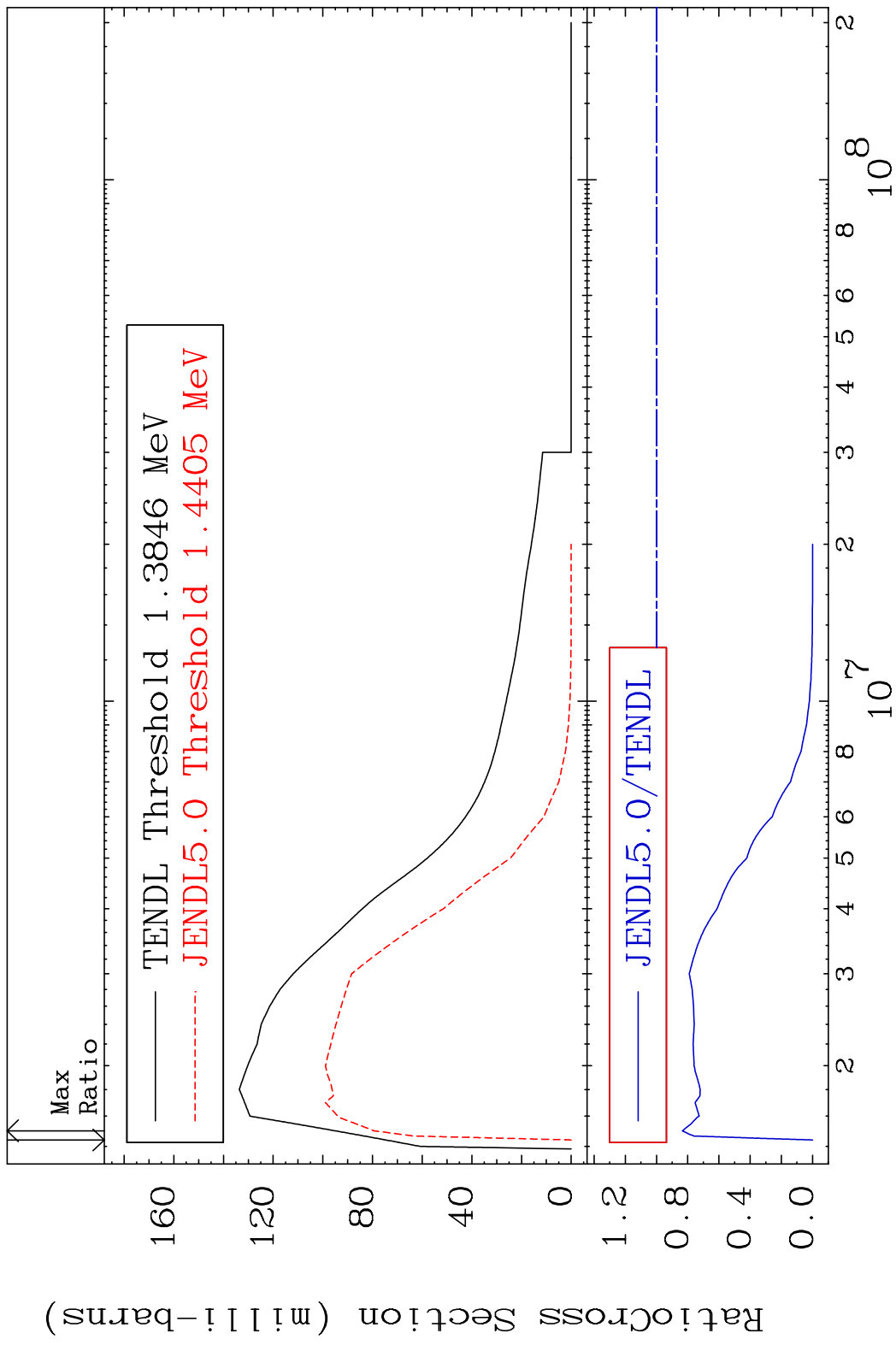
MAT 2125 MT= 58 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 9999. %



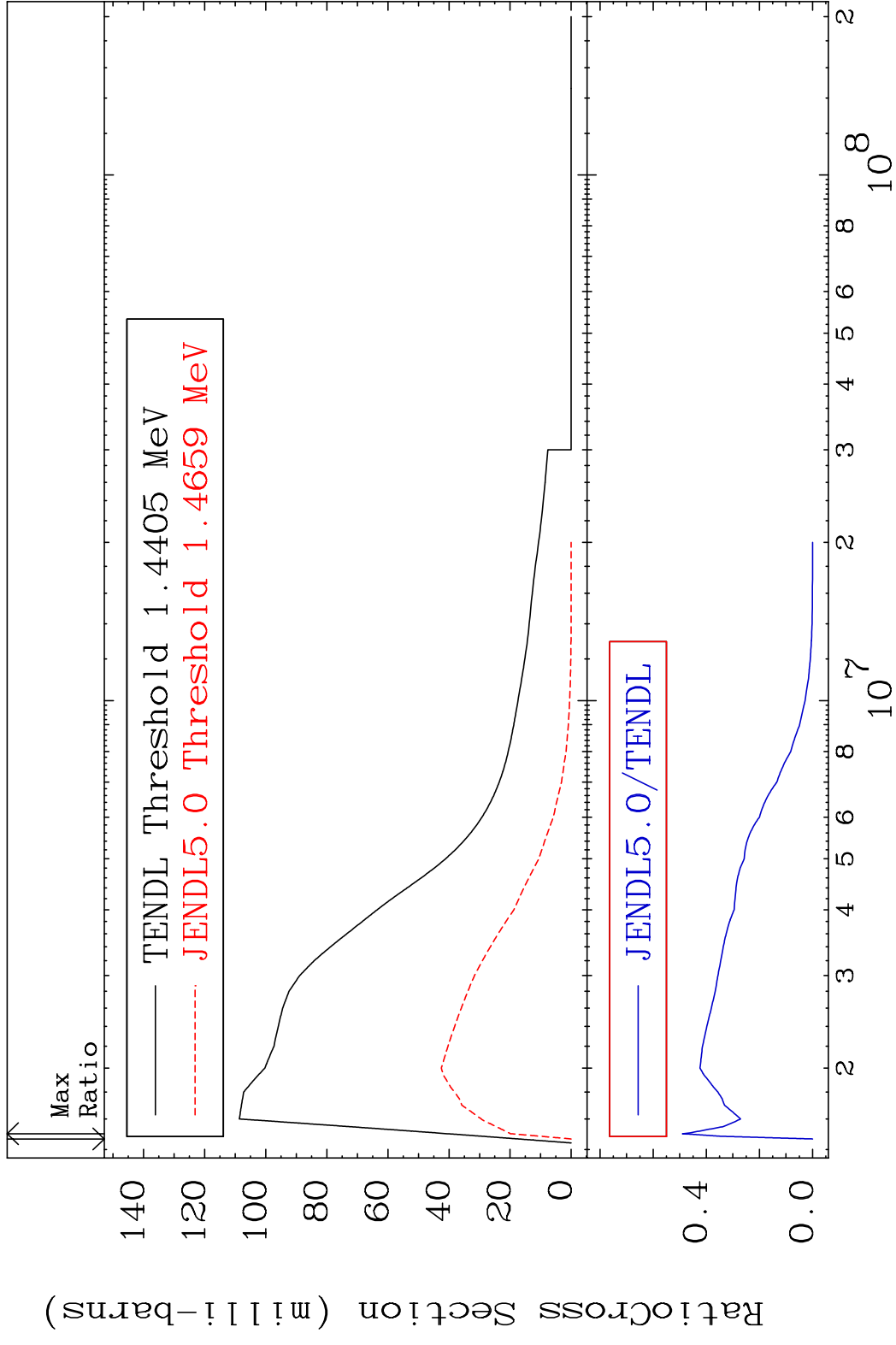
MAT 2125 MT= 59 (n, n') Level 21-Sc-45
 Cross Section -100.0 To -61.46%



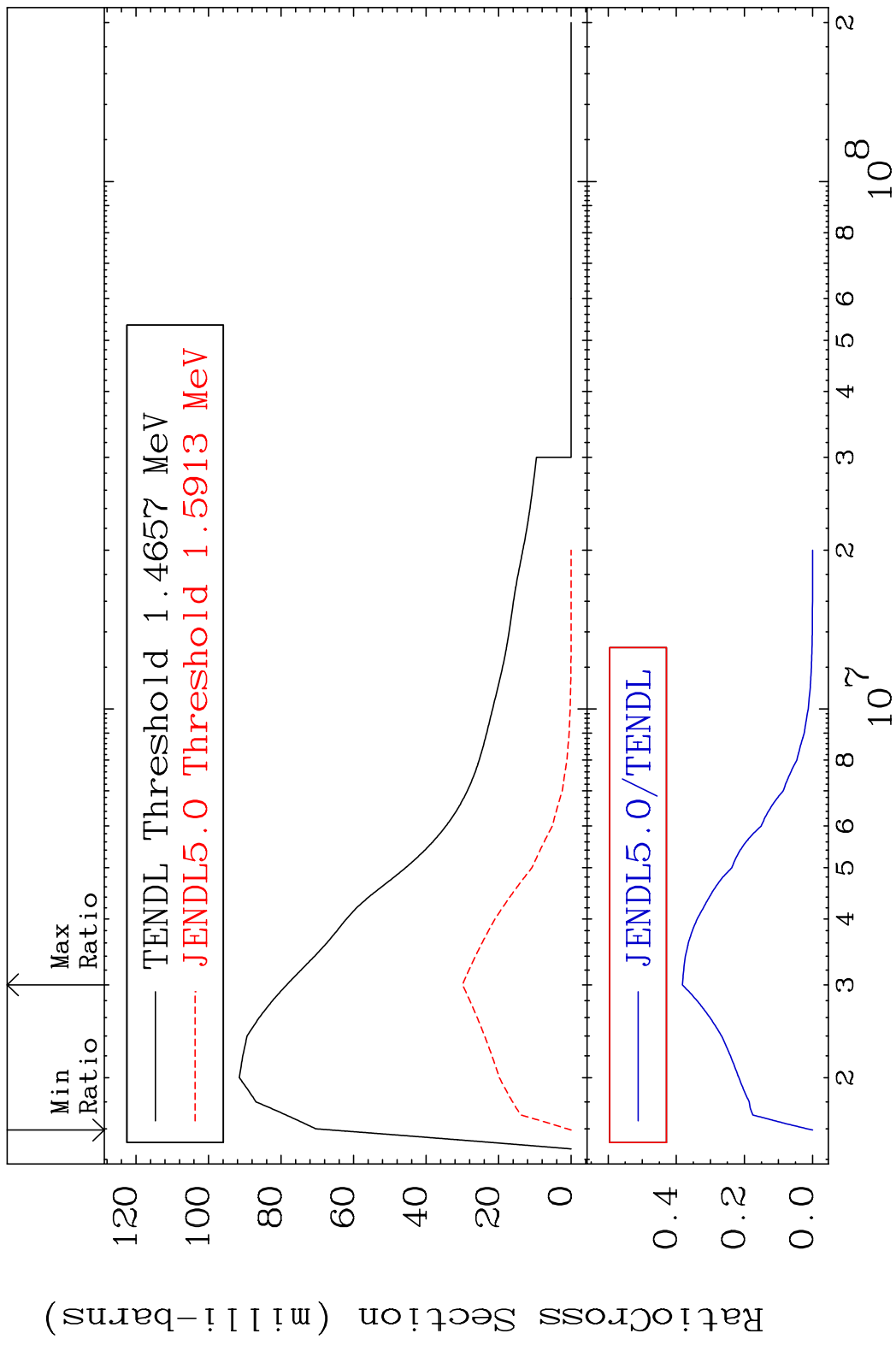
MAT 2125 MT= 60 (n,n') Level 21-Sc-45
 Cross Section -100.0 To -16.56%



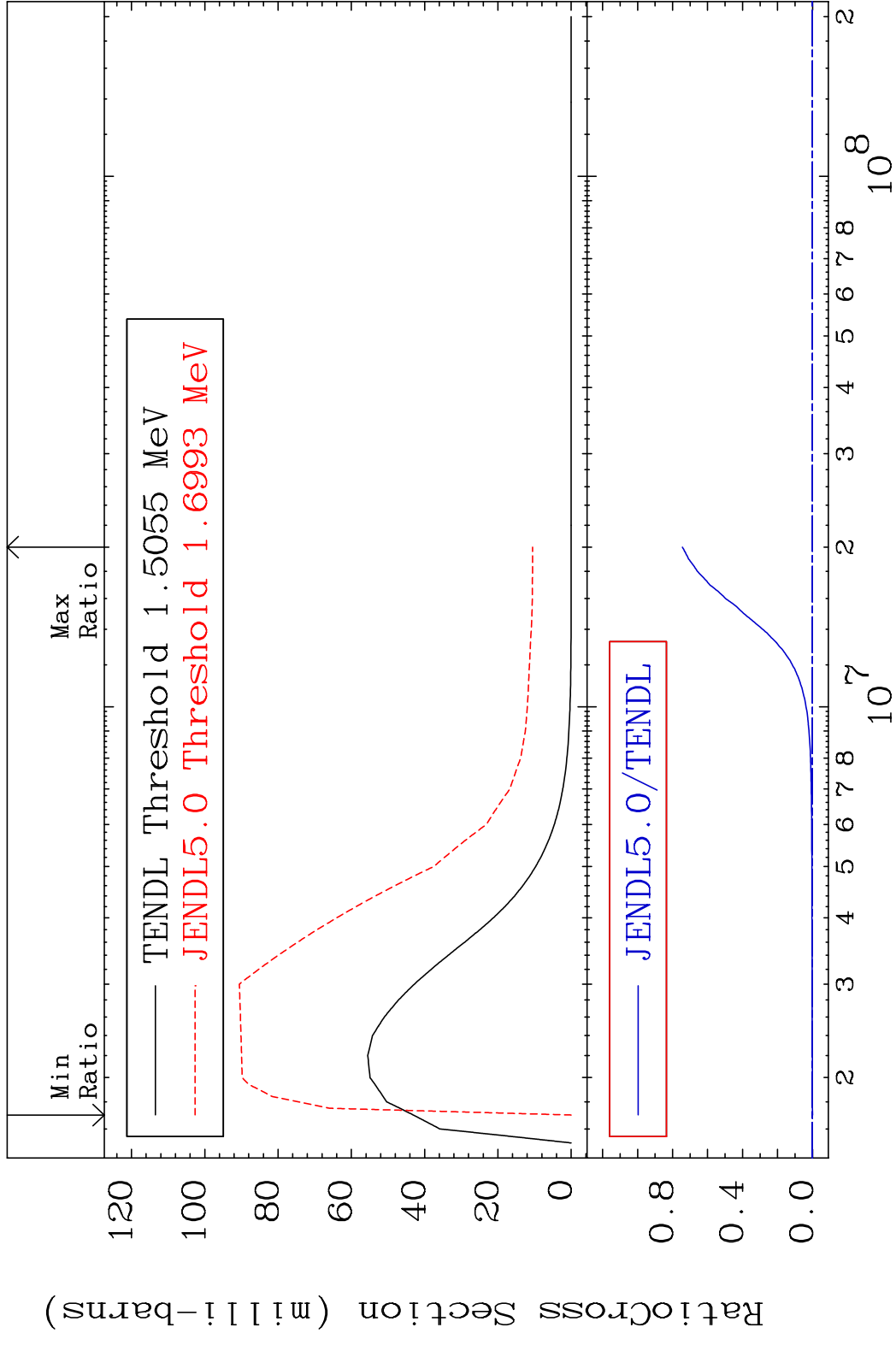
MAT 2125 MT= 61 (n,n') Level 21-Sc-45
 Cross Section -100.0 To -50.98%



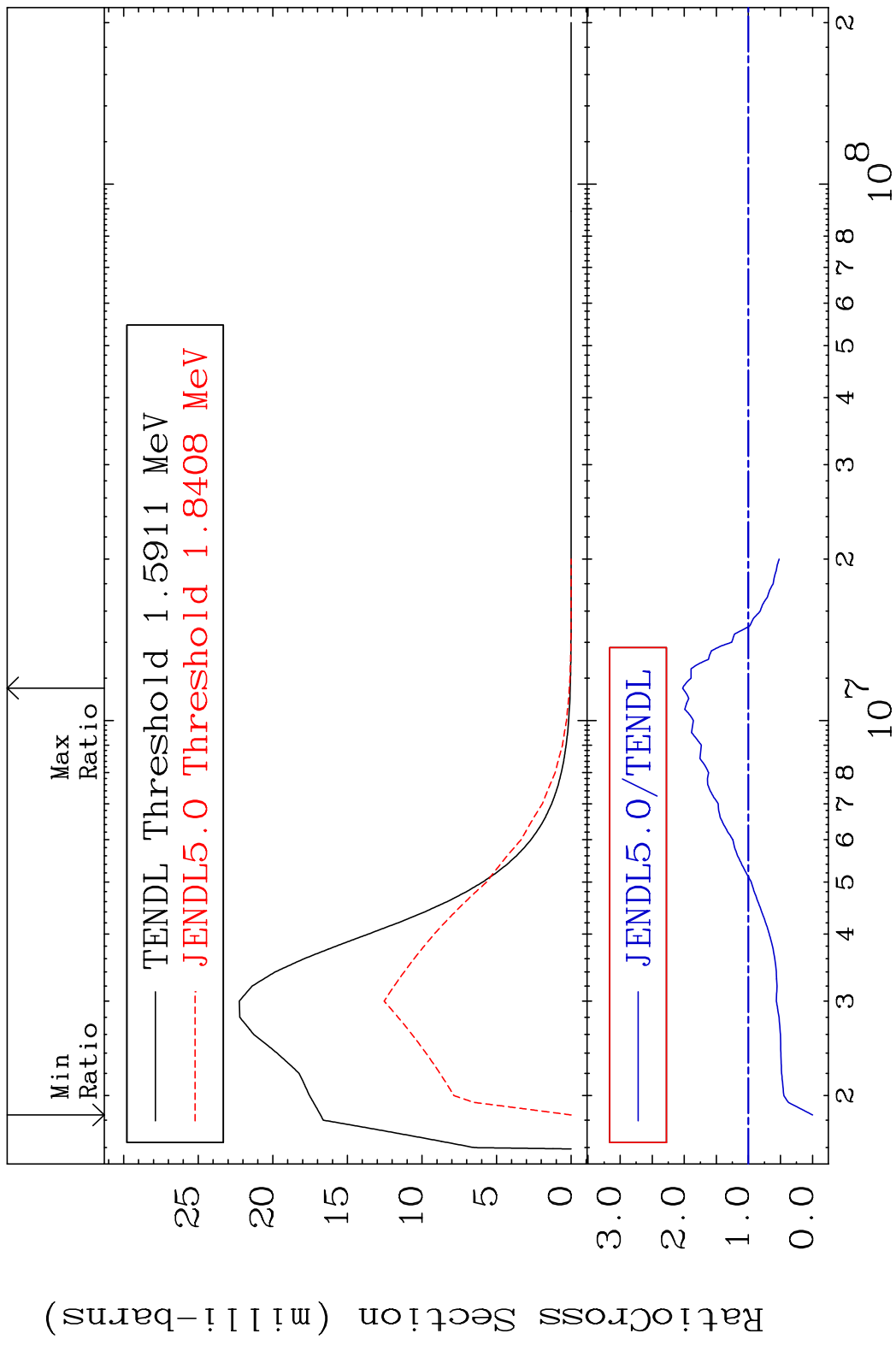
MAT 2125 MT= 62 (n, n') Level 21-Sc-45
 Cross Section -100.0 To -61.77%



MAT 2125 MT= 63 (n, n') Level 21-Sc-45
Cross Section -100.0 To 9999. %



MAT 2125 MT= 64 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 103.0 %

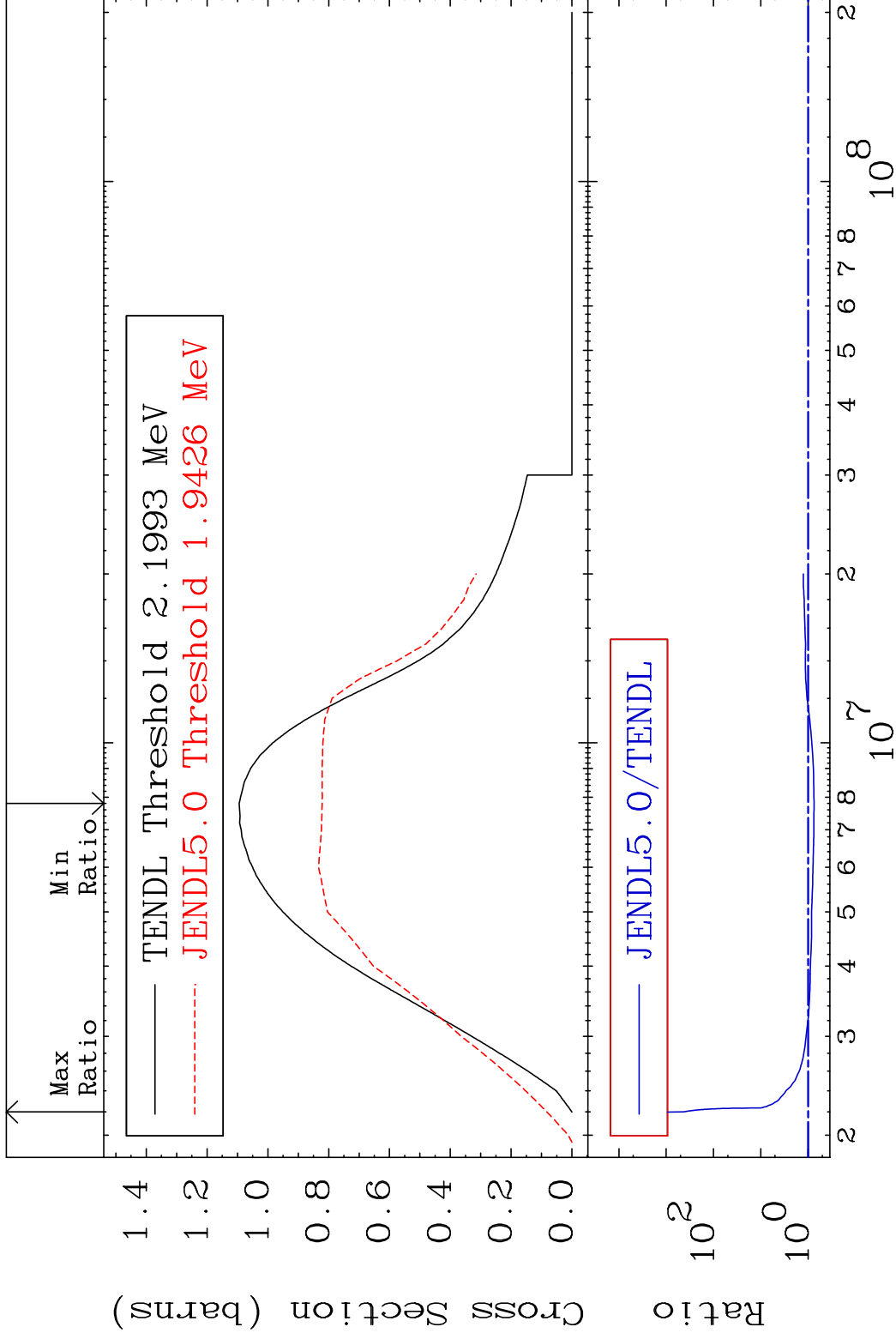


MAT 2125

(n,n') Continuum

21-Sc-45

Cross Section -24.93 To 9999. %



19

Incident Energy (eV)

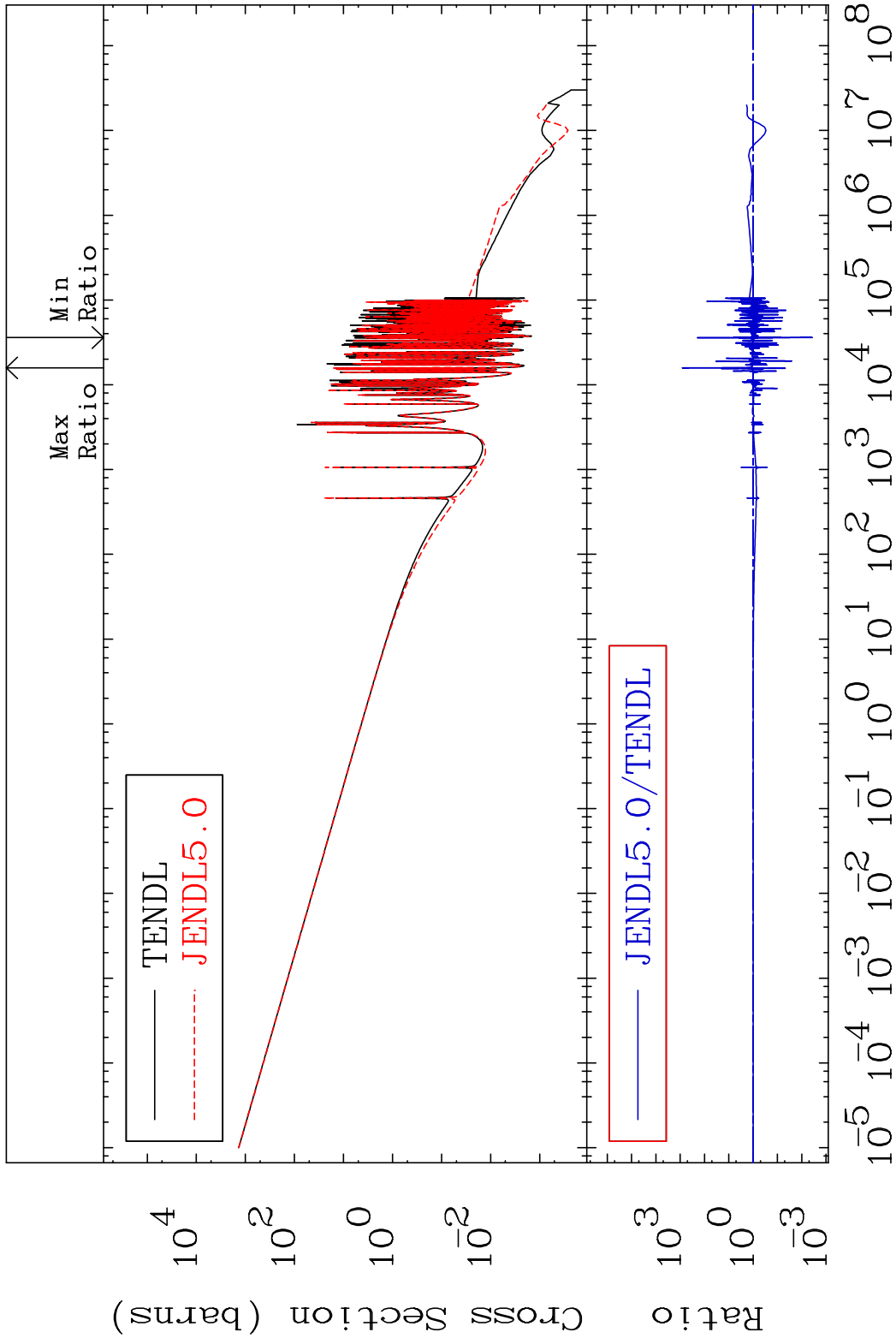
21-Sc-45

MAT 2125

(n, γ)

21-Sc-45

Cross Section -99.64 To 9999. %



20

Incident Energy (eV)

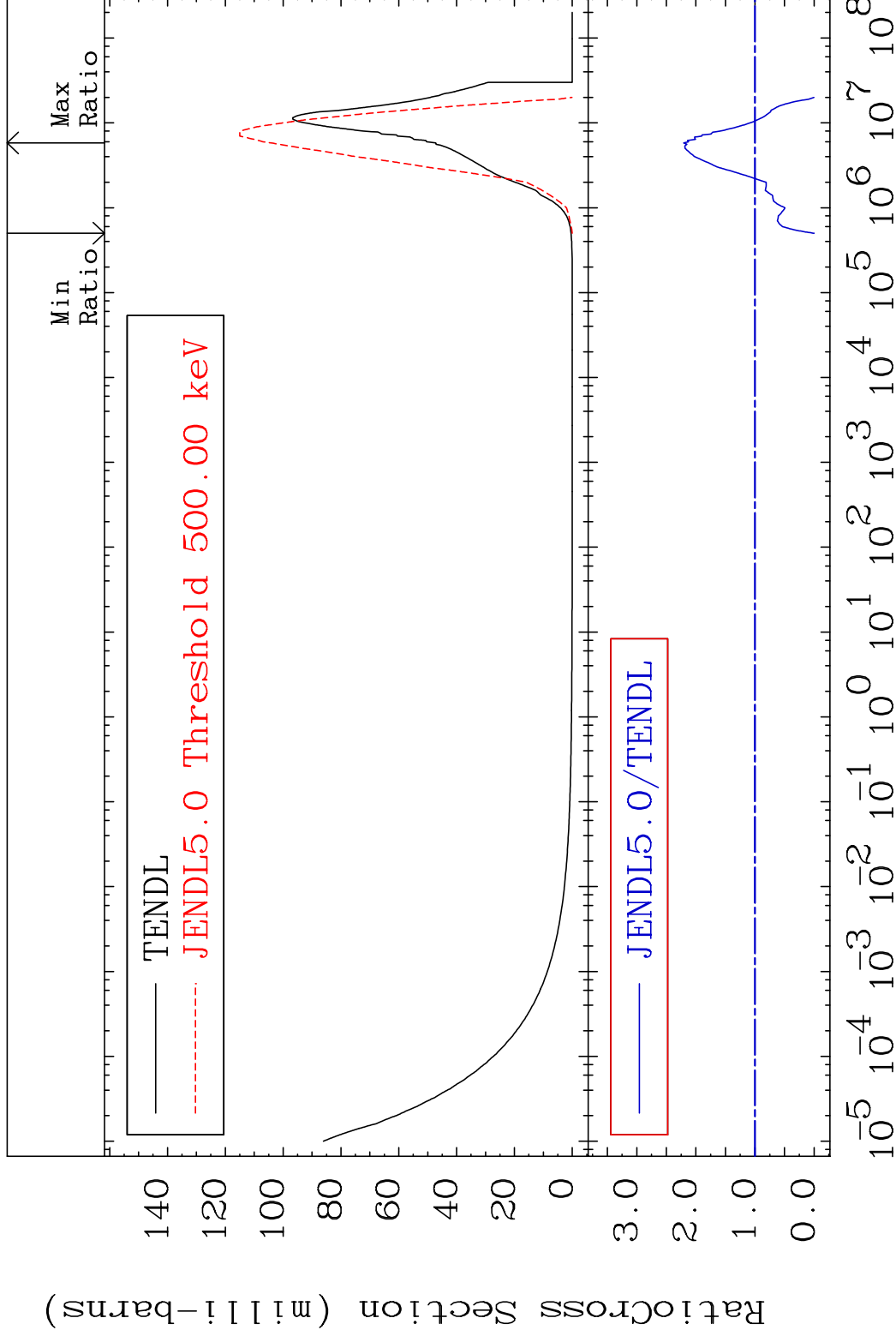
21-Sc-45

MAT 2125

(n,p)

21-Sc-45

Cross Section -100.0 To 120.7 %

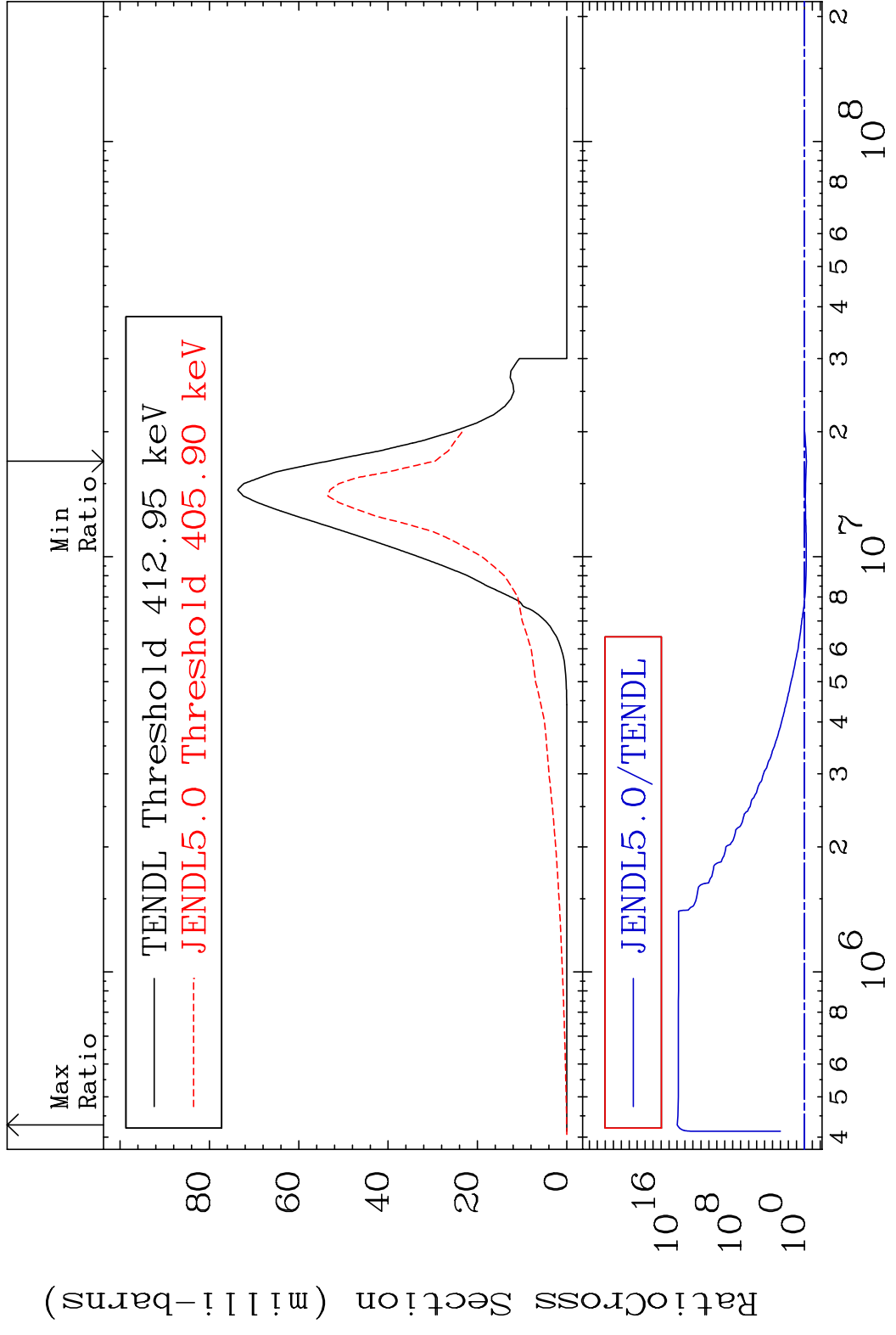


21

Incident Energy (eV)

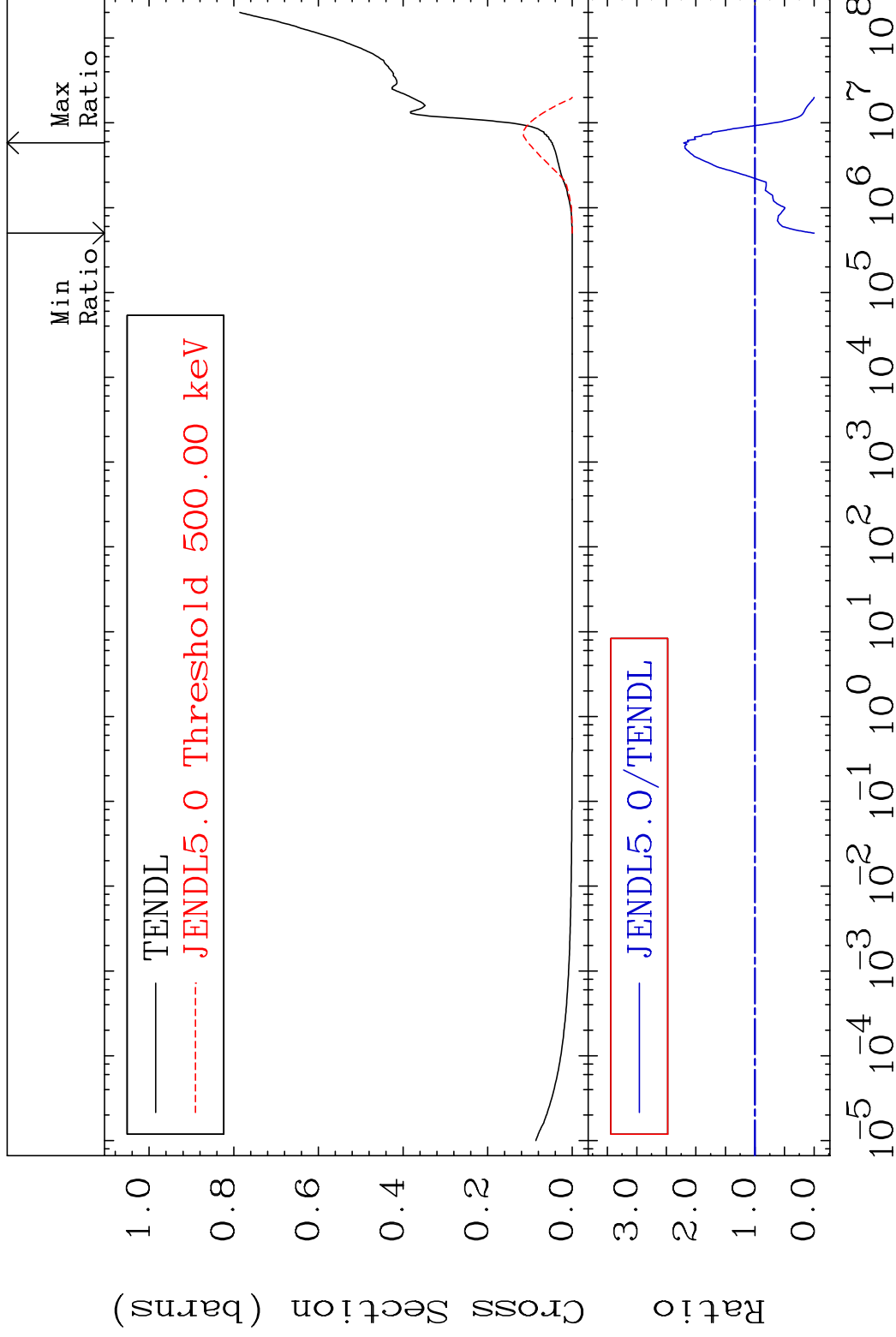
21-Sc-45

MAT 2125 (n, α) 21-Sc-45
 Cross Section -44.75 To 9999. %

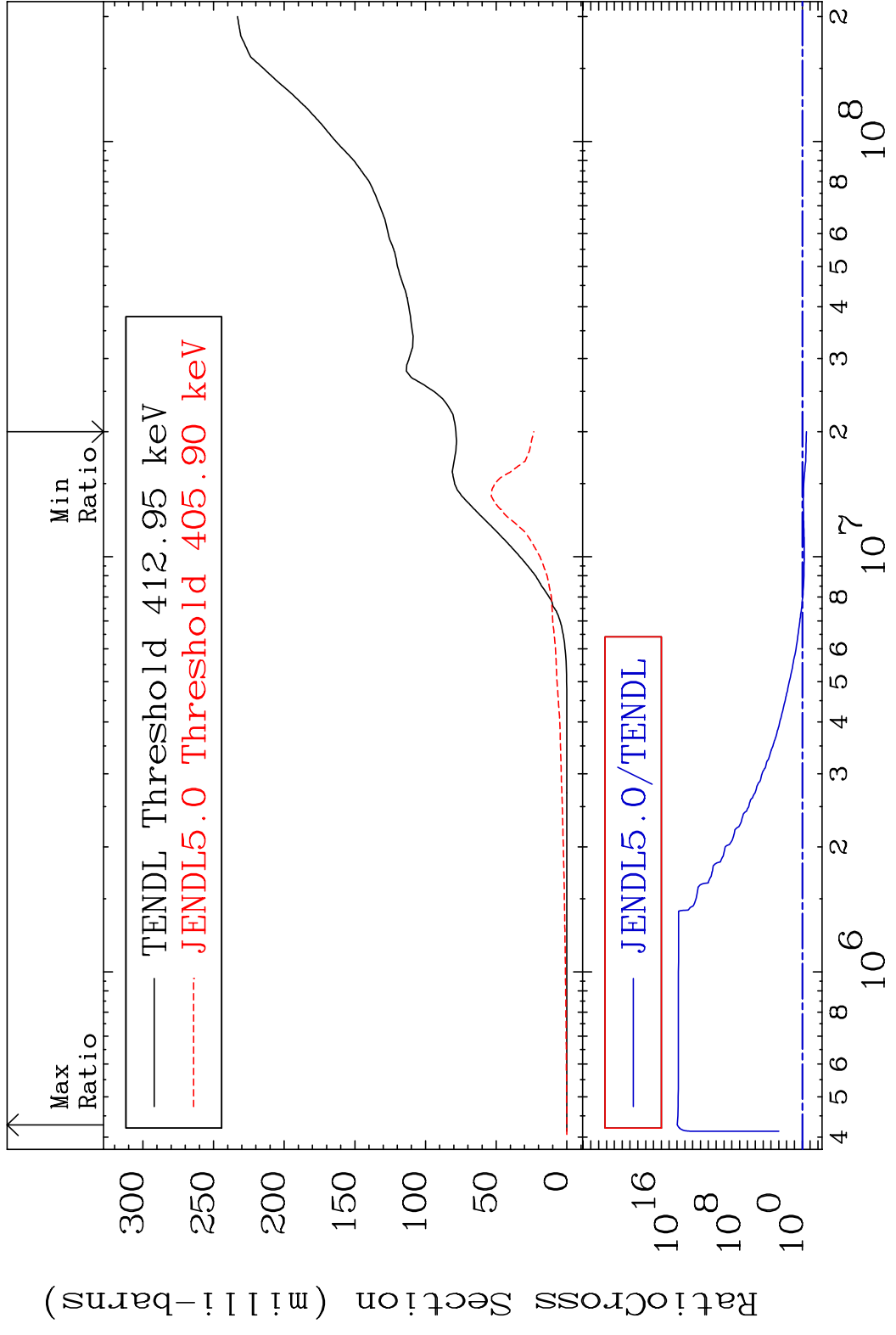


22 Incident Energy (eV) 21-Sc-45

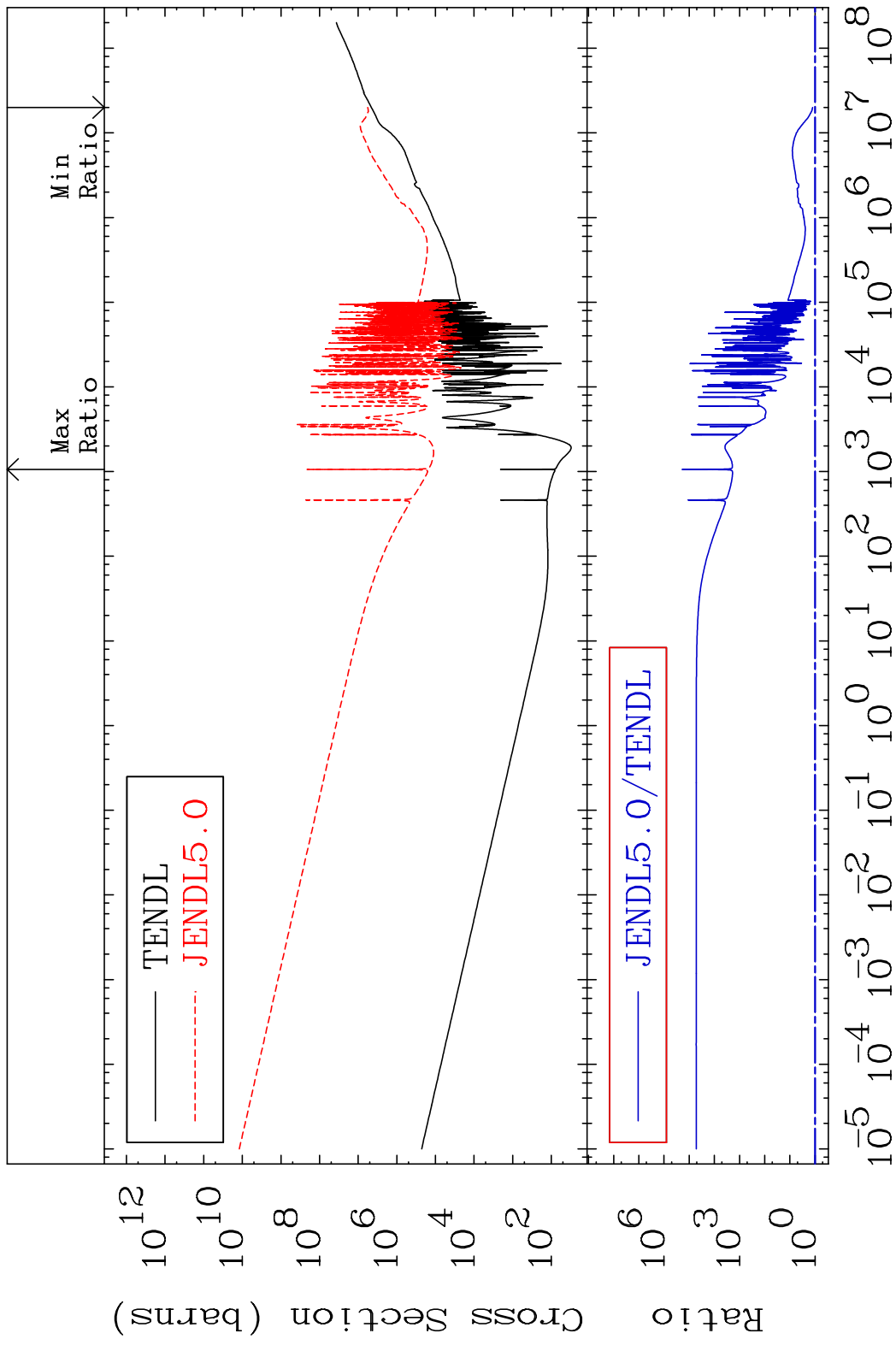
Cross Section -100.0 To 120.7 %



MAT 2125 He-4 Production 21-Sc-45
 Cross Section -70.18 To 9999. %



MAT 2125 Kerma total (eV-barns) 21-Sc-45
 Cross Section 25.59 To 9999. %

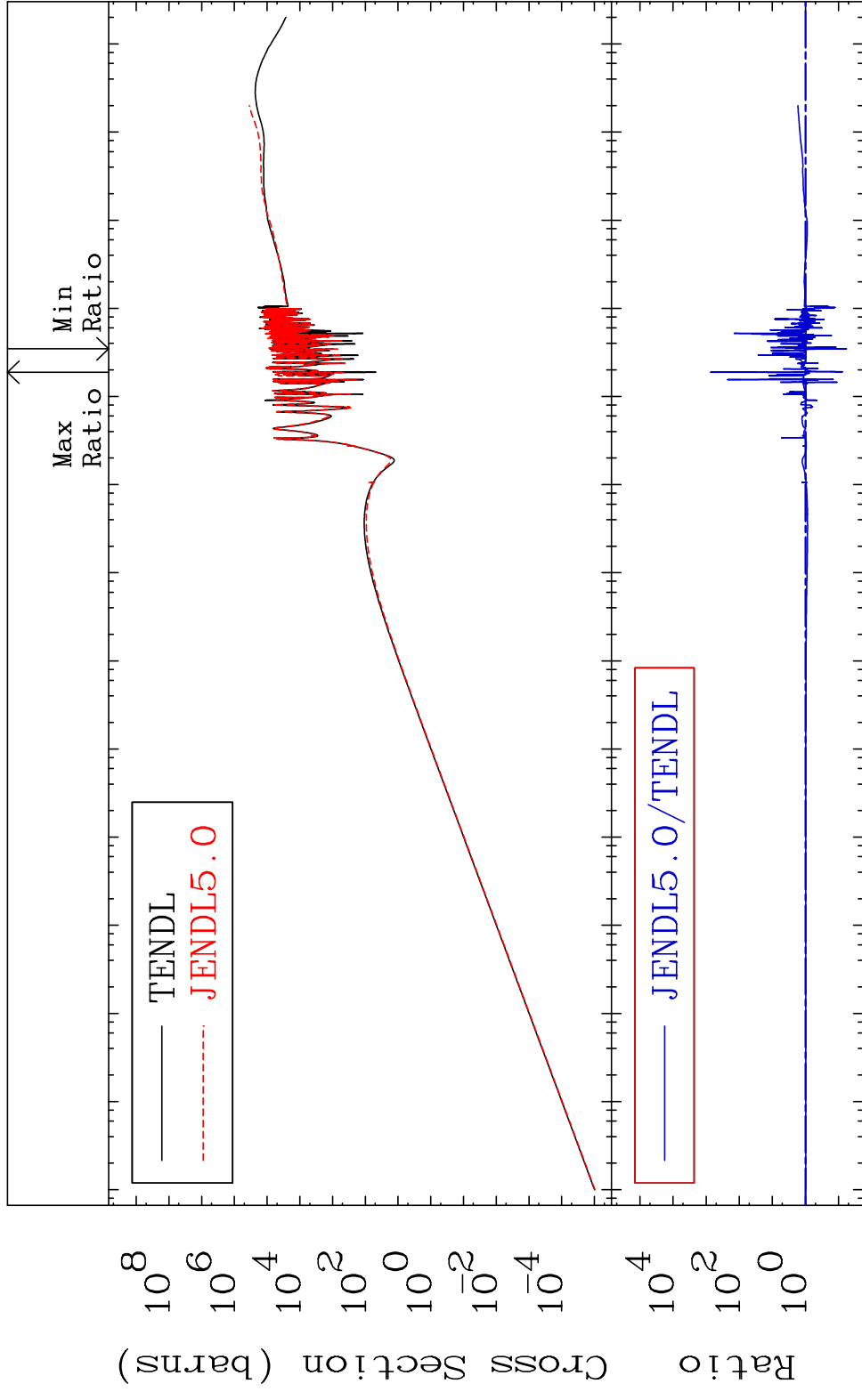


25 Incident Energy (eV) 21-Sc-45

MAT 2125

Kerma elastic
Cross Section

21-Sc-45
-94.16 To 9999. %

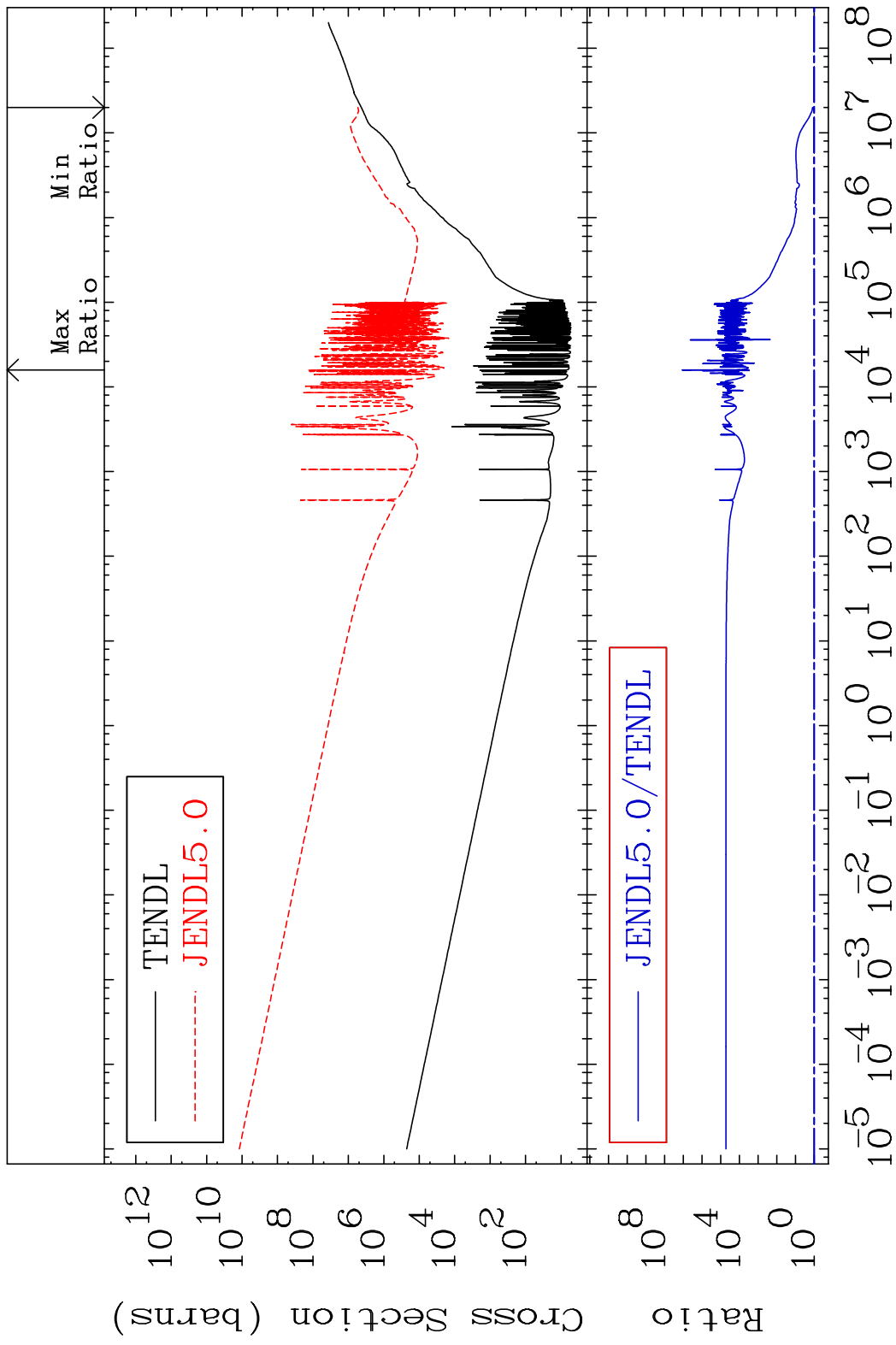


26

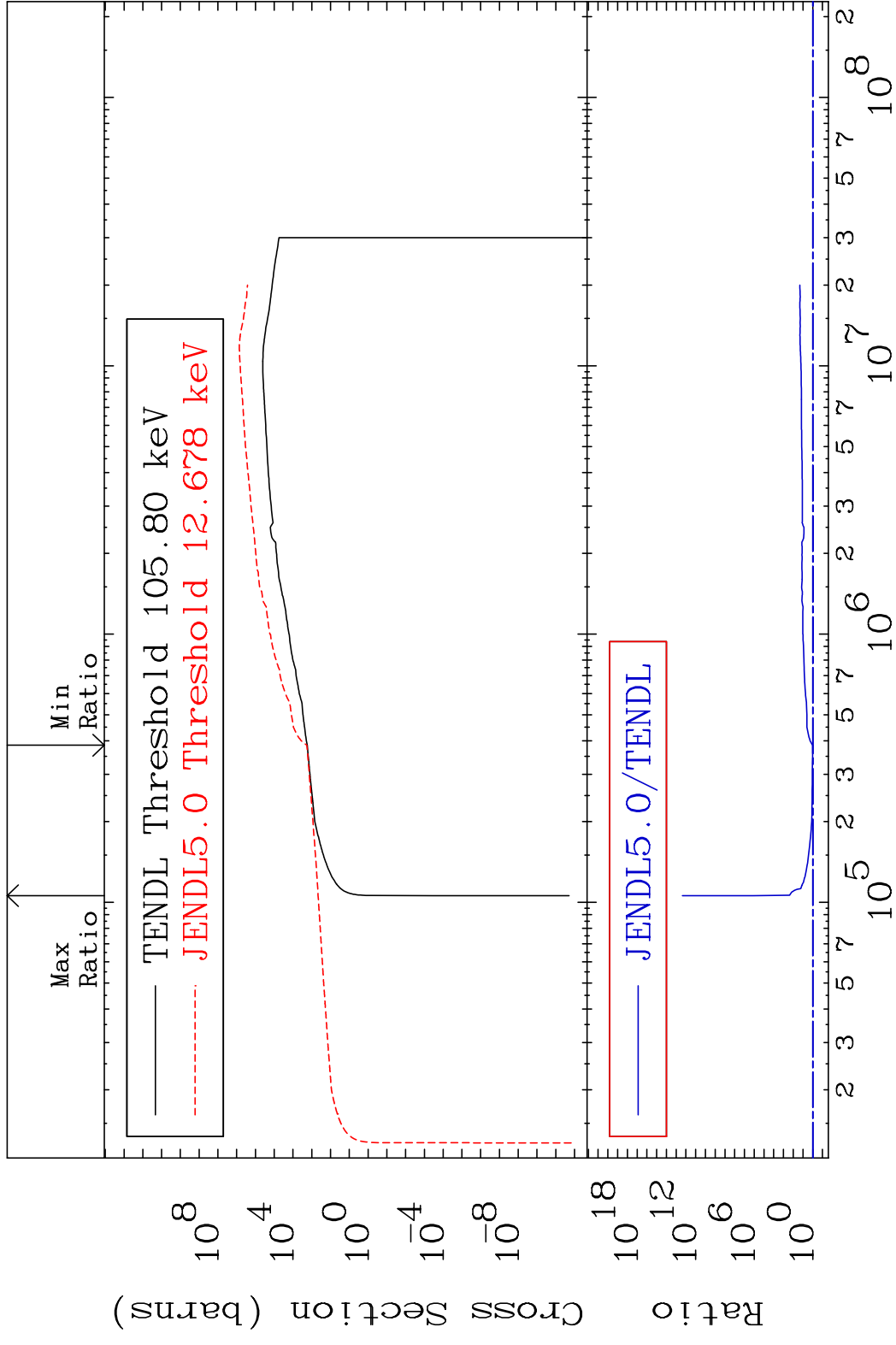
Incident Energy (eV)

21-Sc-45

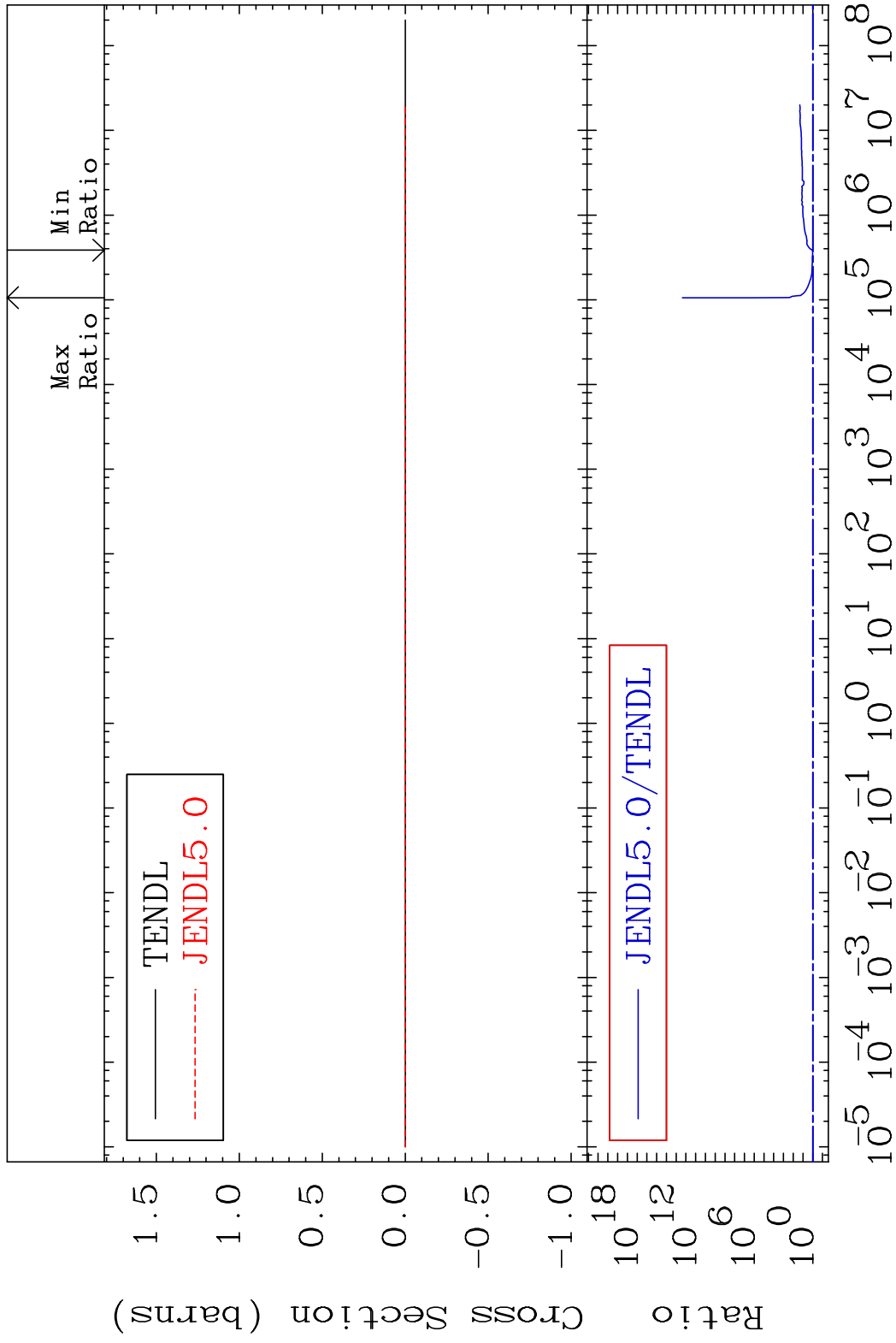
MAT 2125 Kerma non-elastic (all but mt2) 21-Sc-45
 Cross Section 23.54 To 9999. %



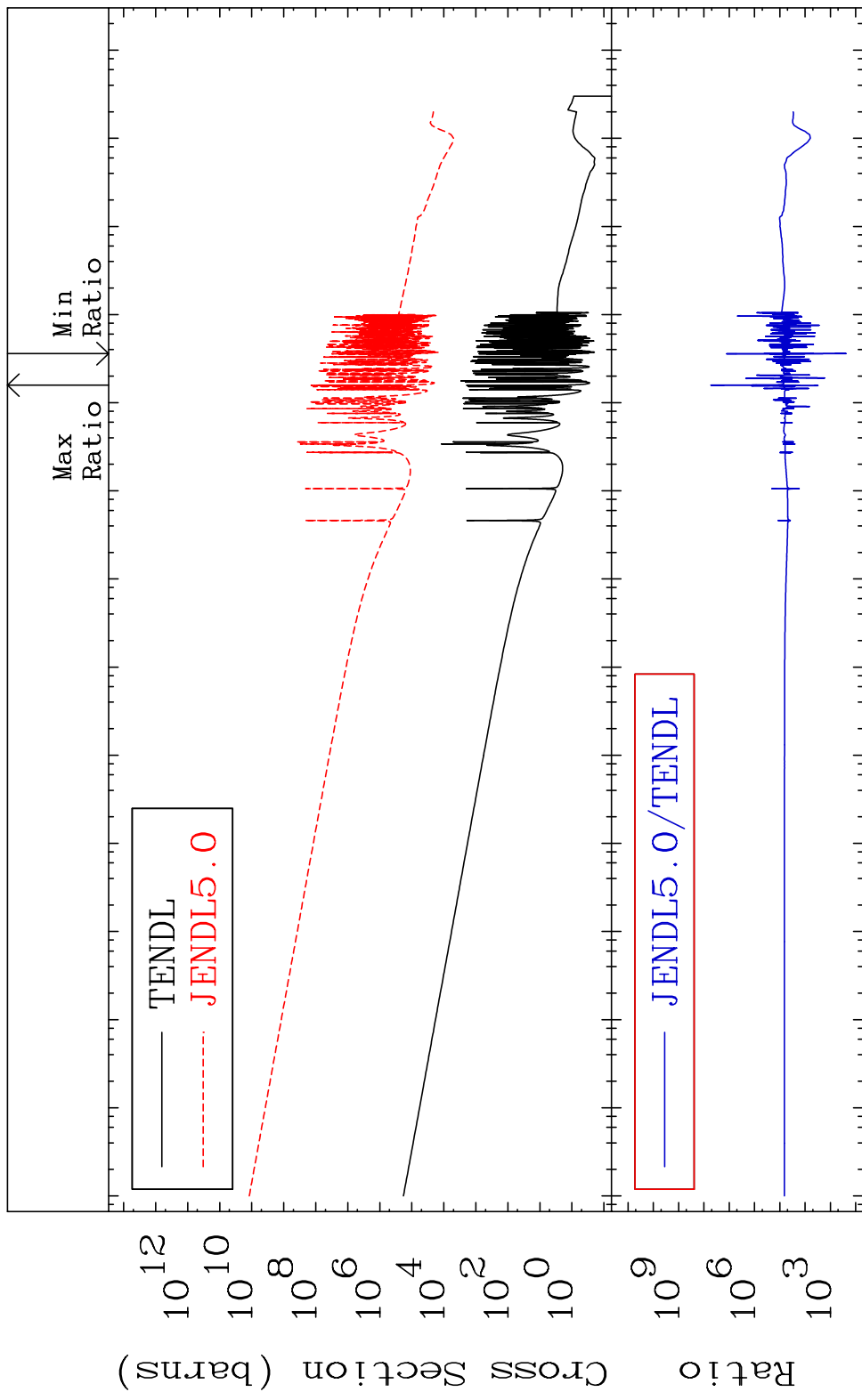
MAT 2125 Kerma inelastic (mt51-91) 21-Sc-45
 Cross Section 4.543 To 9999. %



MAT 2125 Kerma fission (mt18 or mt19-20-21-38) 21-Sc-45
 Cross Section 4.543 To 9999. %

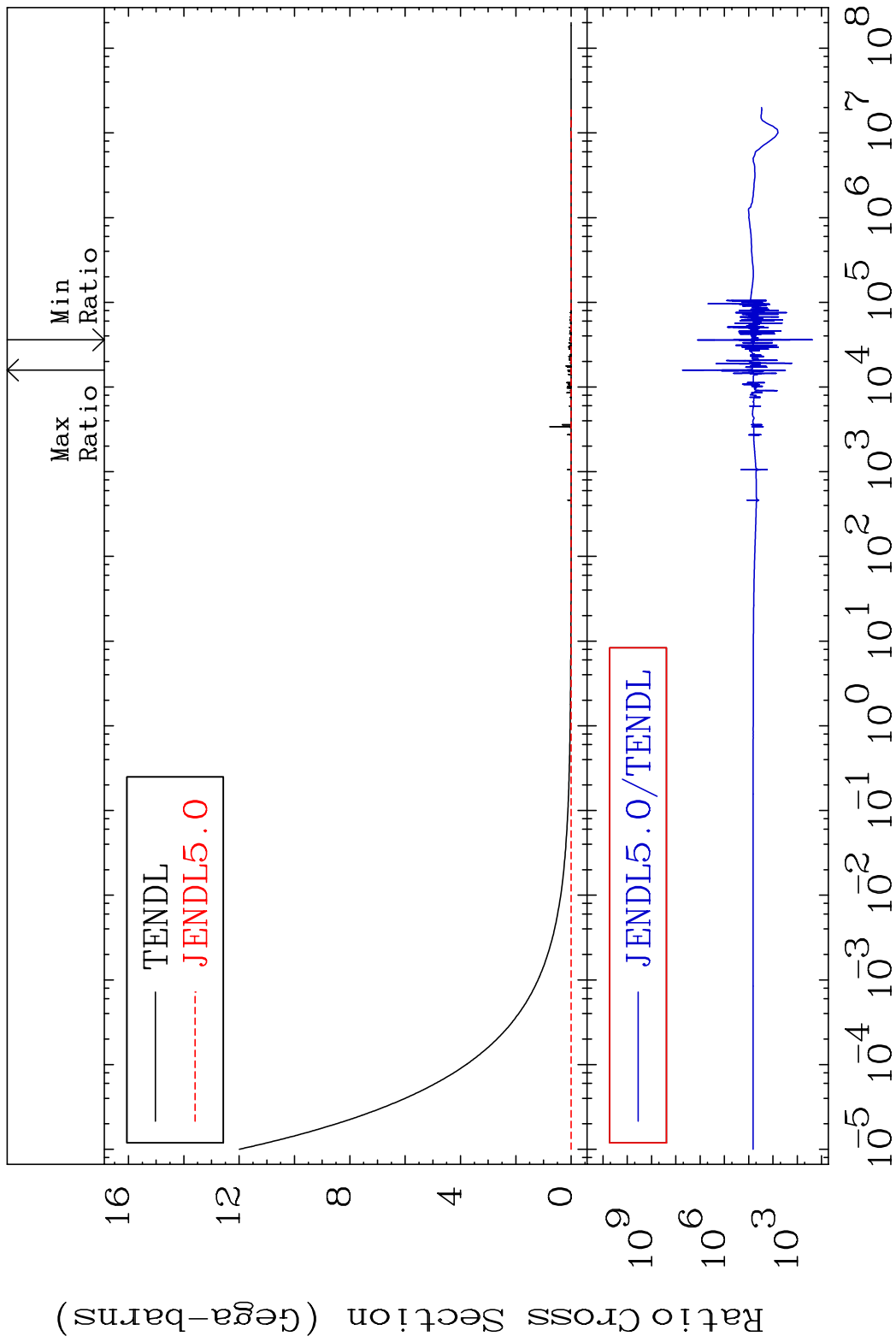


MAT 2125 Kerma capture (mt102) 21-Sc-45
 Cross Section 9999. To 9999. %



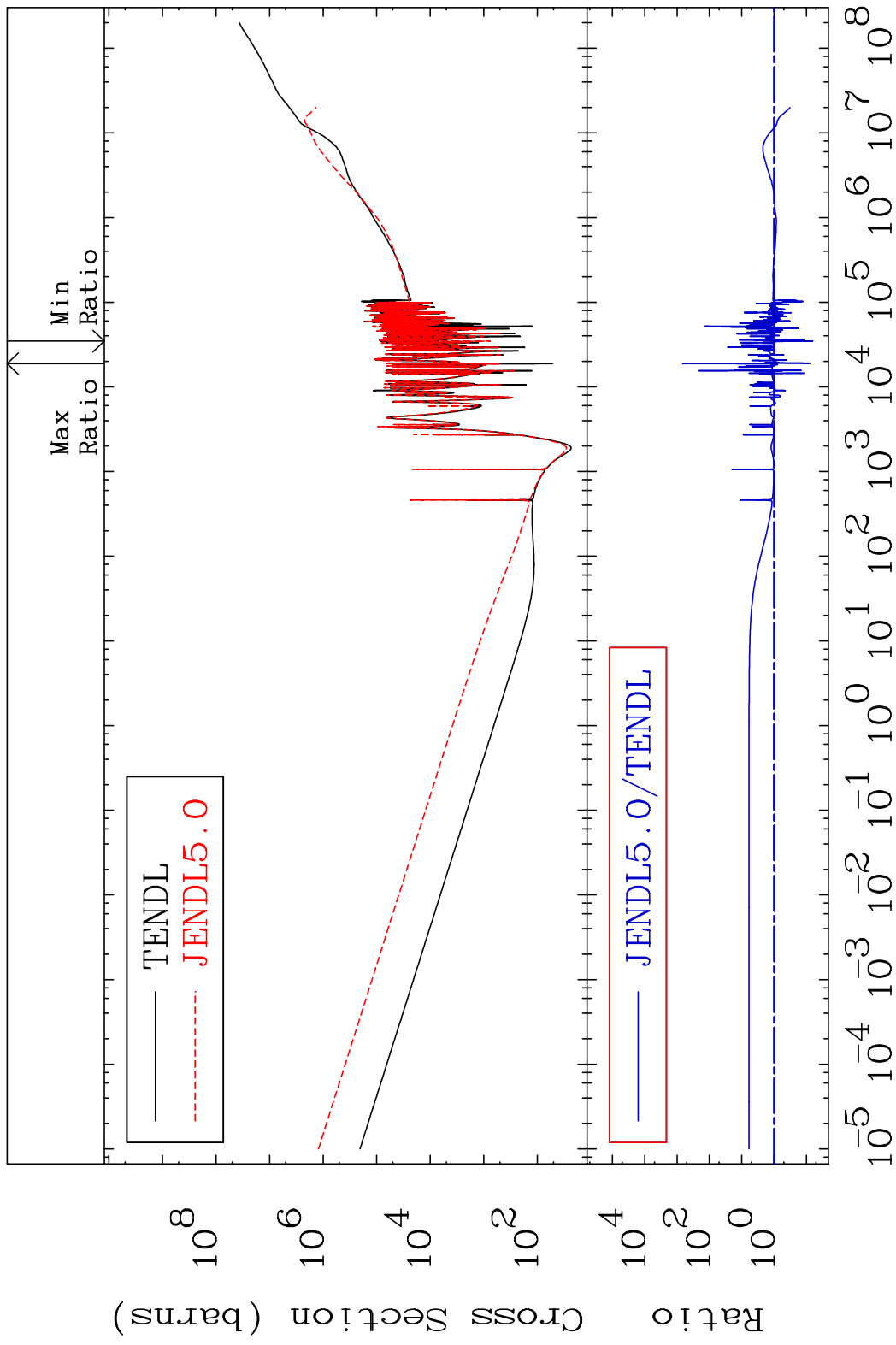
30 Incident Energy (eV) 21-Sc-45

MAT 2125 Total photon (eV-barns) 21-Sc-45
 Cross Section 9999. To 9999. %

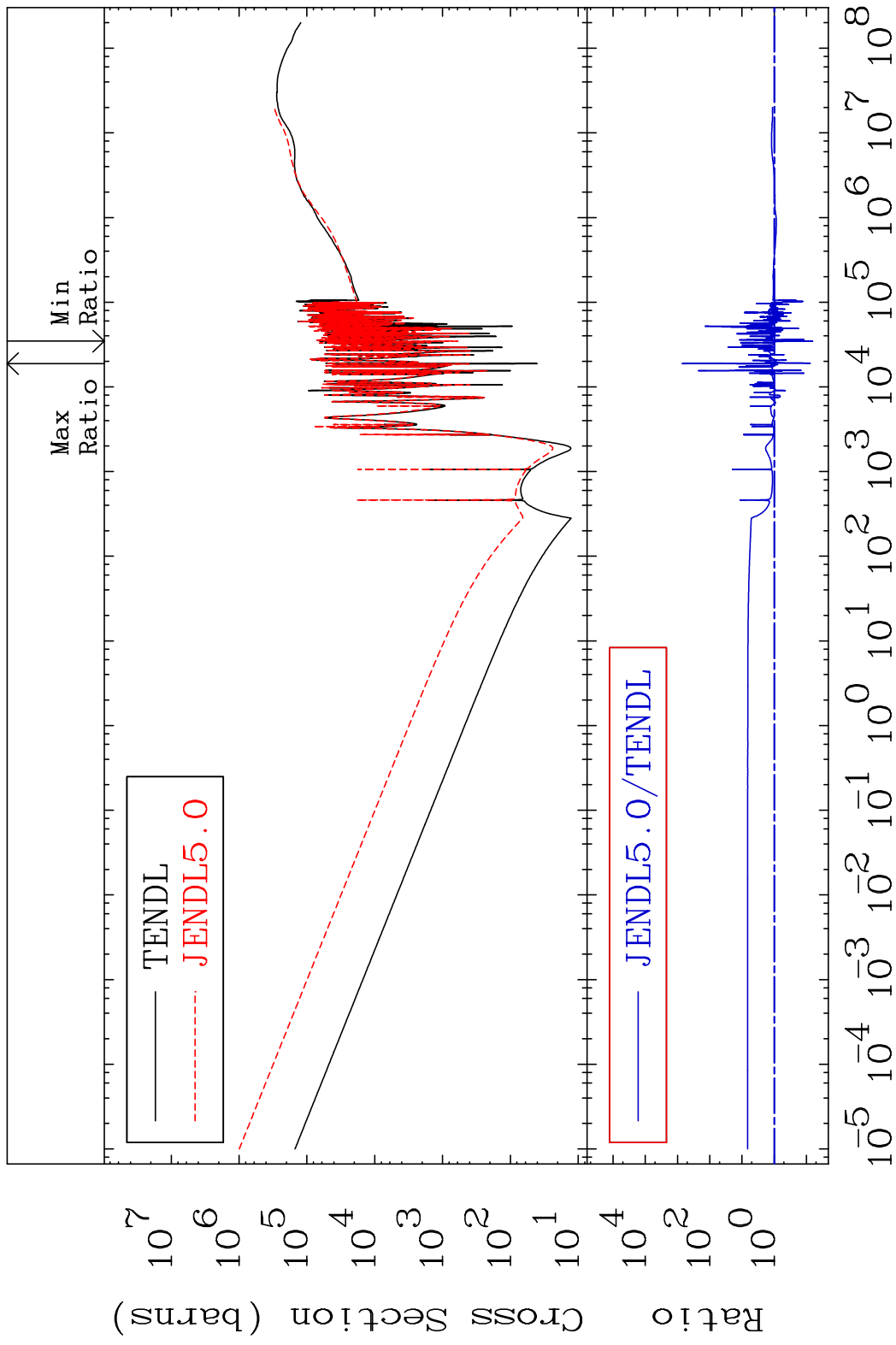


31 Incident Energy (eV) 21-Sc-45

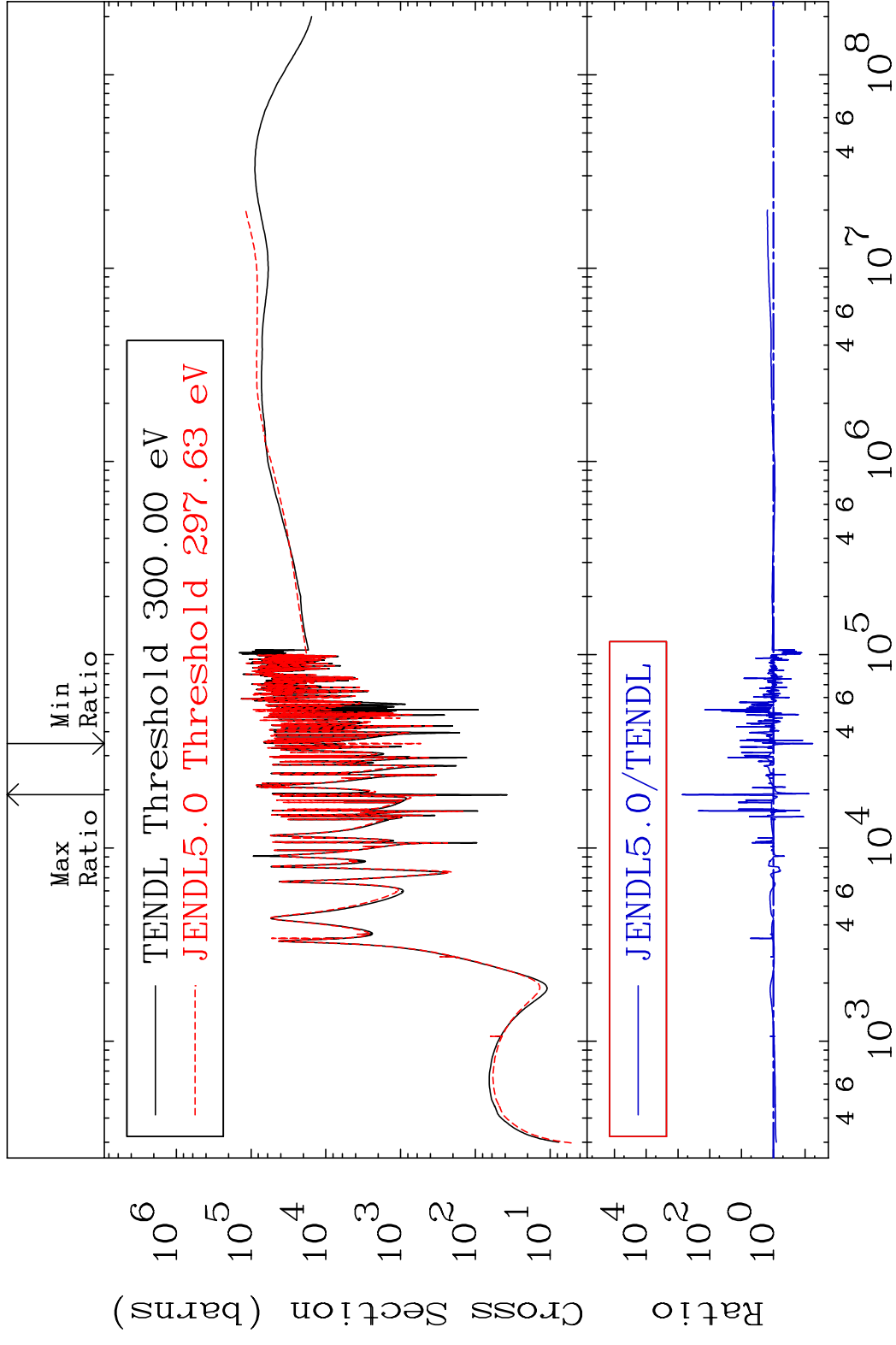
MAT 2125 Total kinematic kerma (high limit) 21-Sc-45
 Cross Section -93.56 To 9999. %



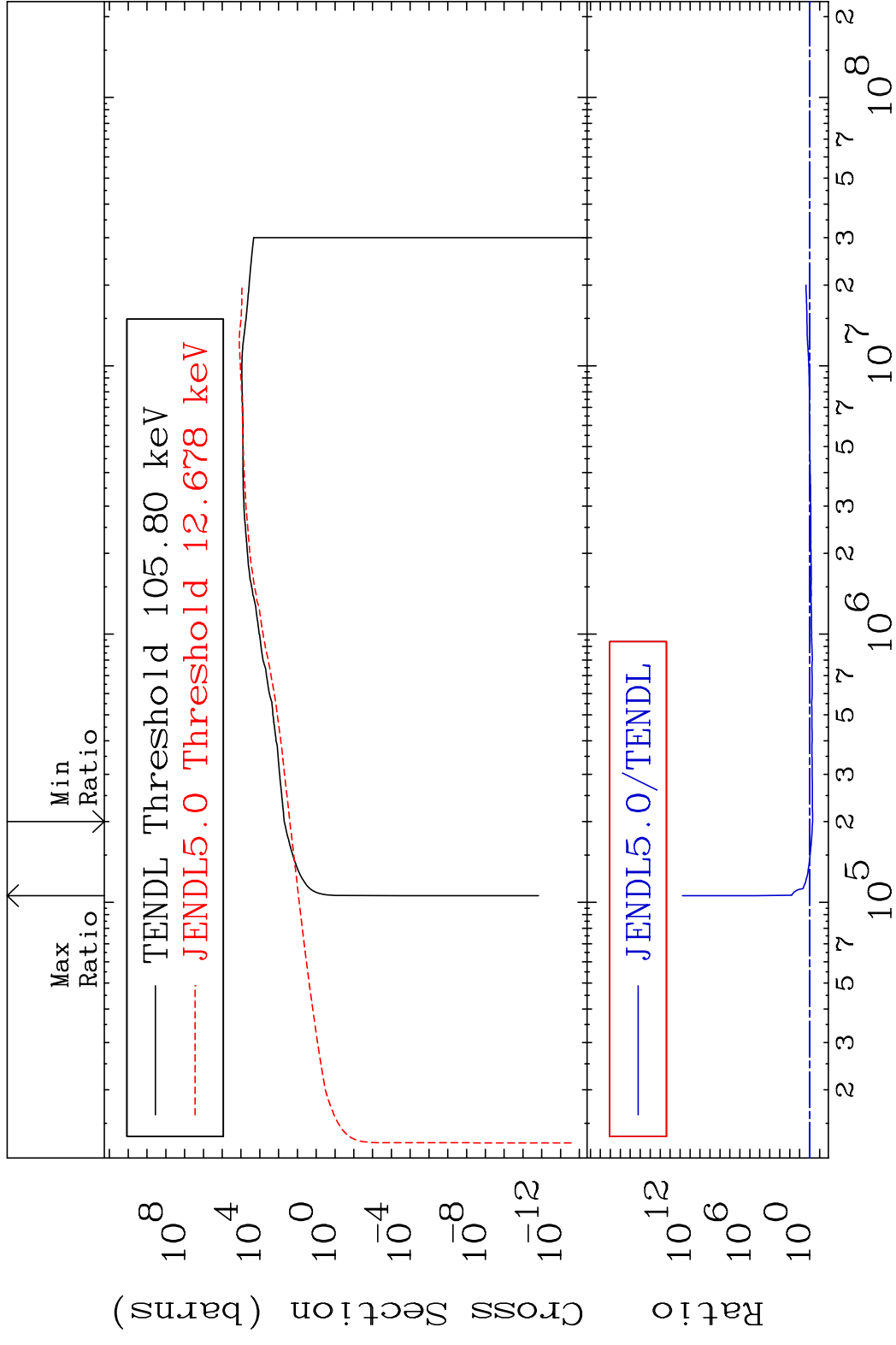
MAT 2125 Dpa total (eV-barns) 21-Sc-45
 Cross Section -93.55 To 9999. %



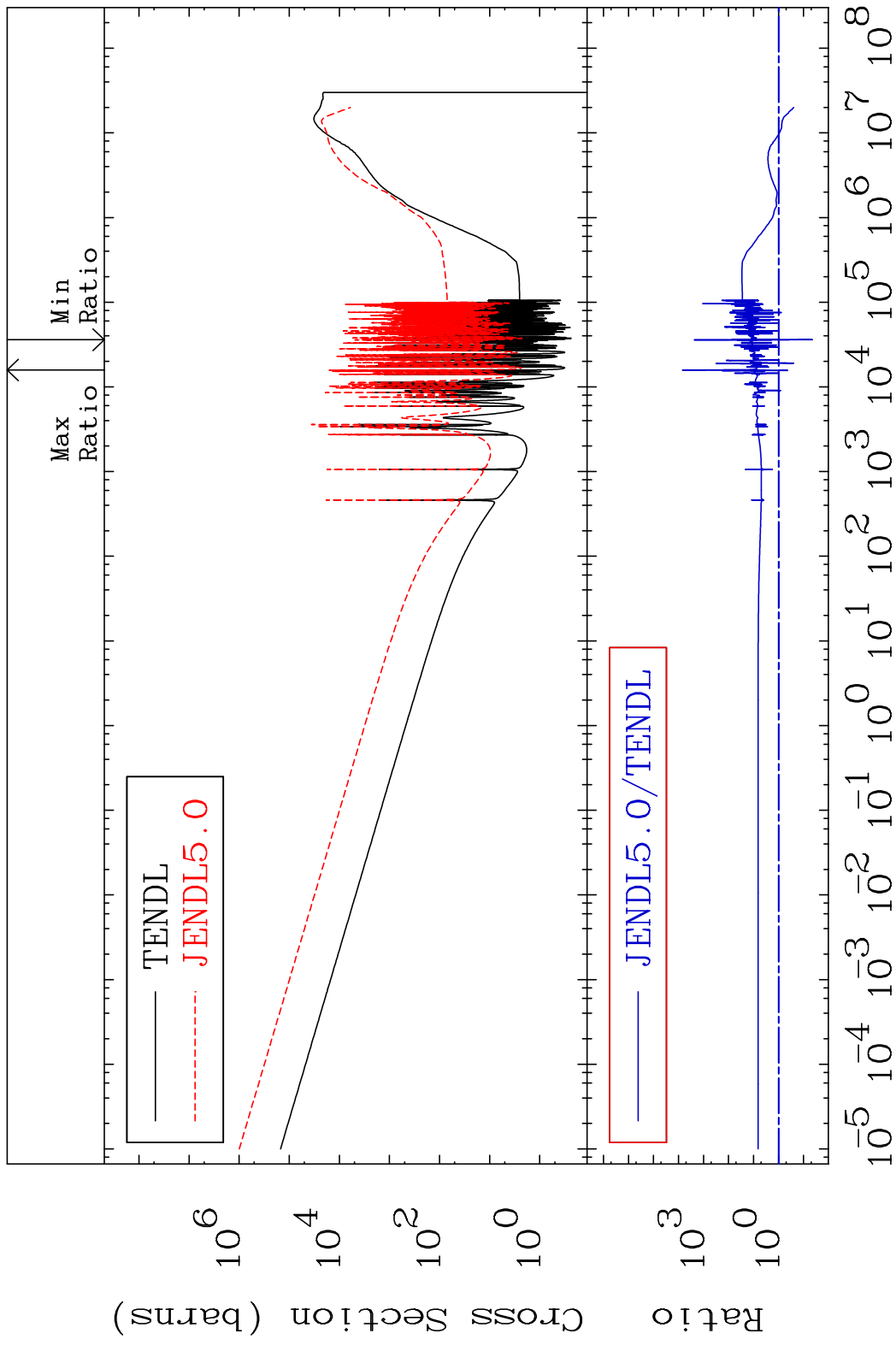
MAT 2125 Dpa elastic (mt2) 21-Sc-45
 Cross Section -94.16 To 9999. %

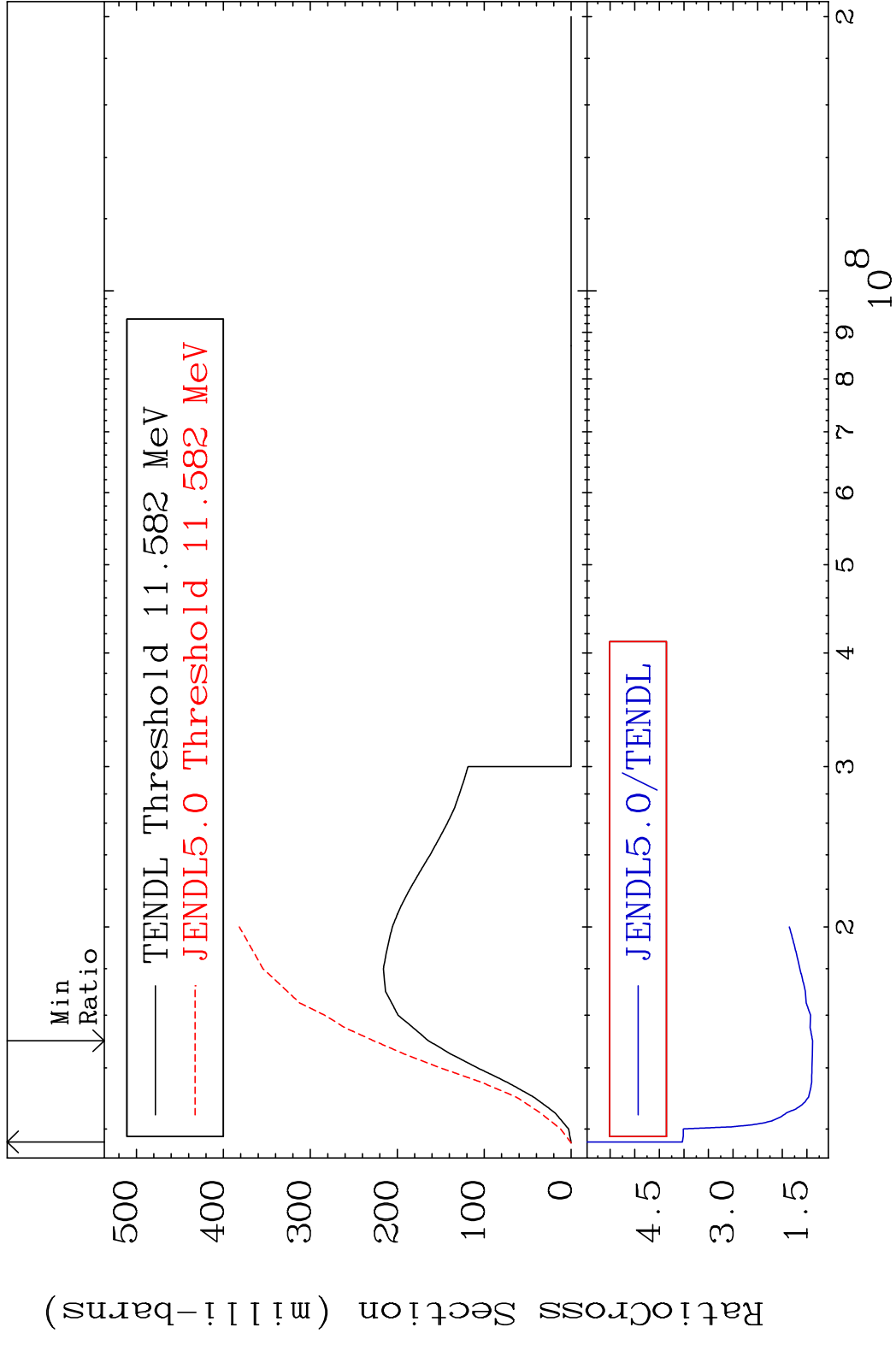


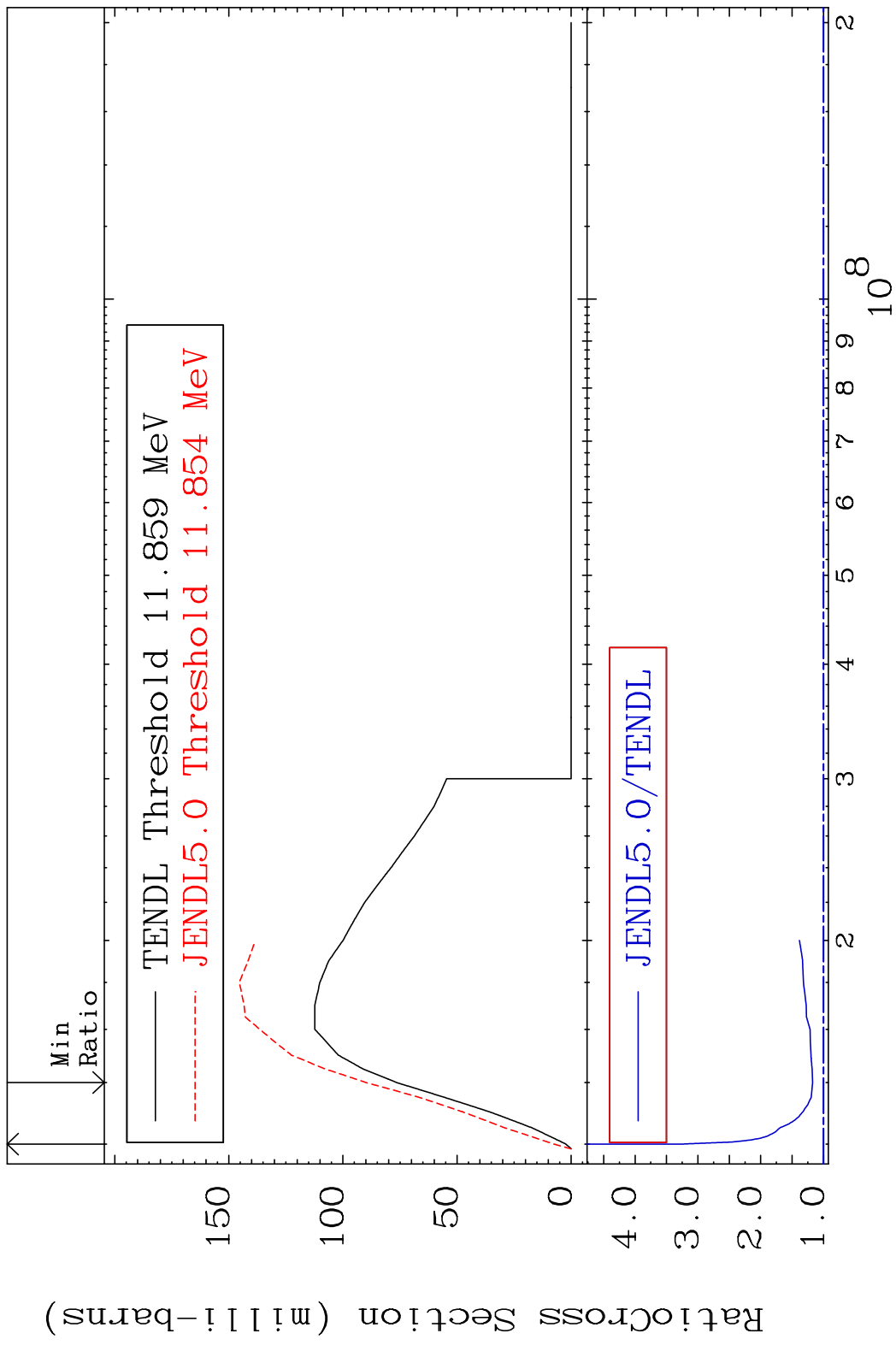
MAT 2125 Dpa inelastic (mt51-91) 21-Sc-45
 Cross Section -49.27 To 9999. %



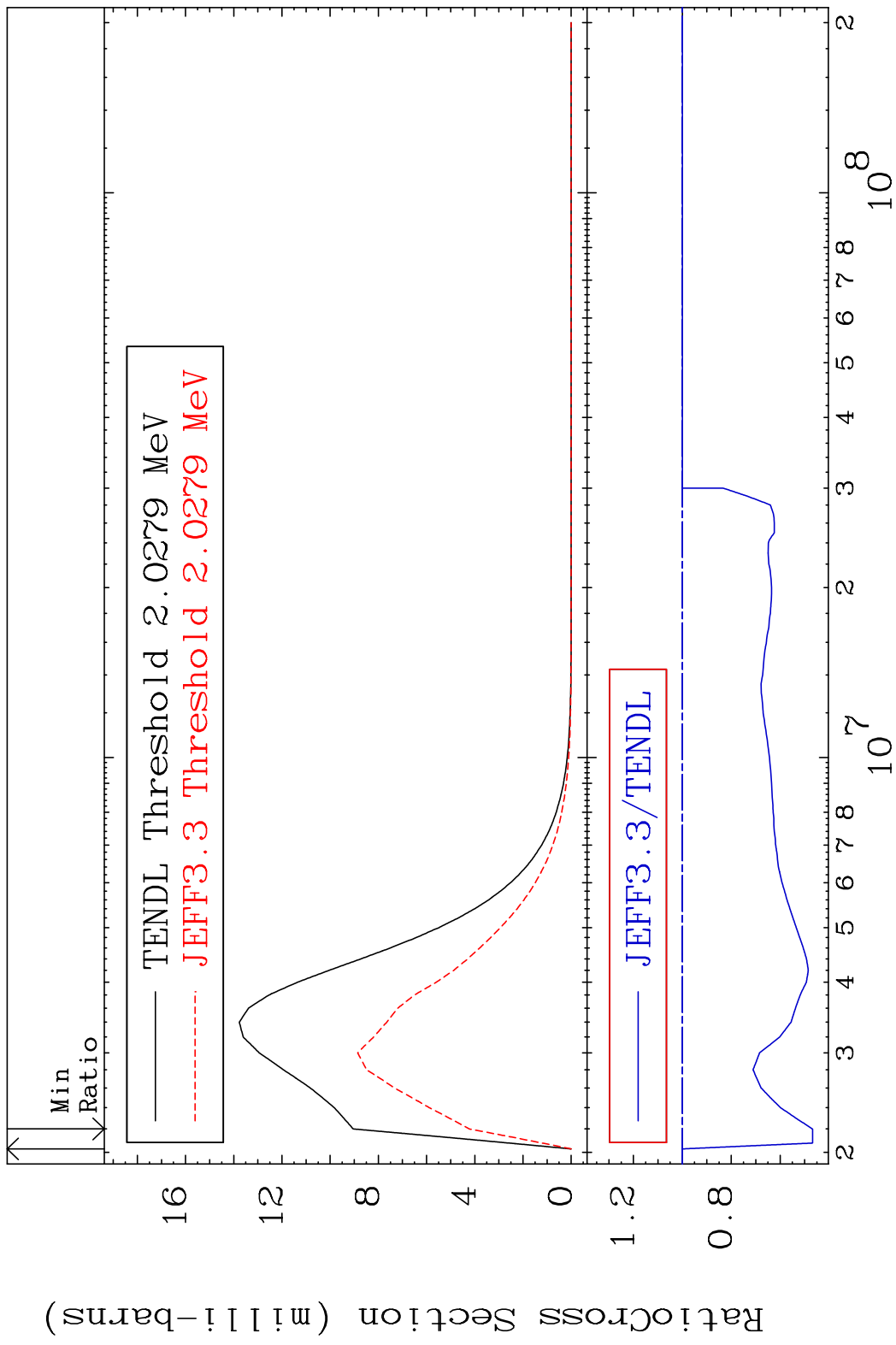
MAT 2125 Dpa disappearance (mt102 -120) 21-Sc-45
 Cross Section -95.62 To 9999. %



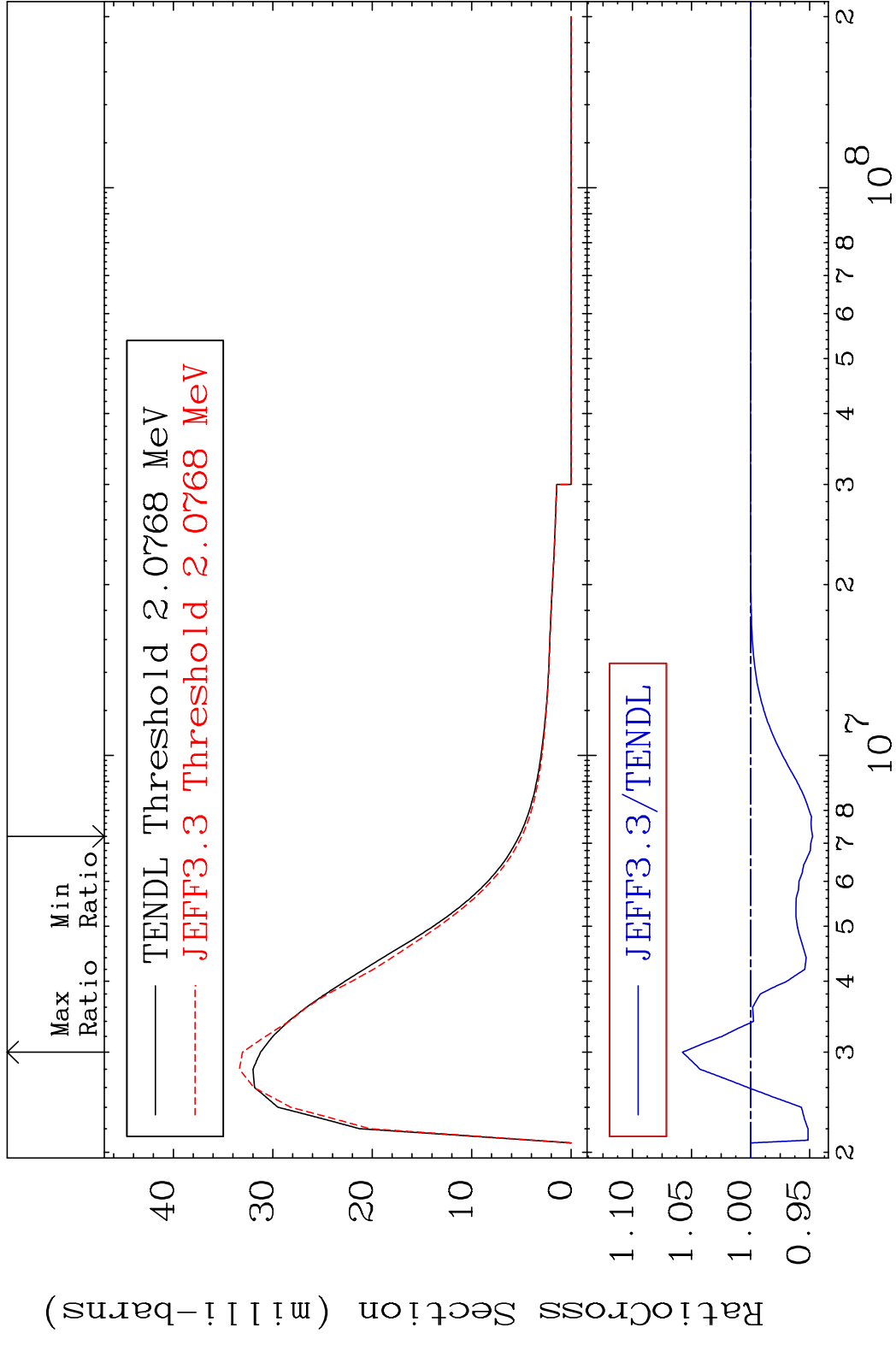




MAT 2125 MT= 71 (n, n') Level 21-Sc-45
 Cross Section -53.23 To 0.000 %

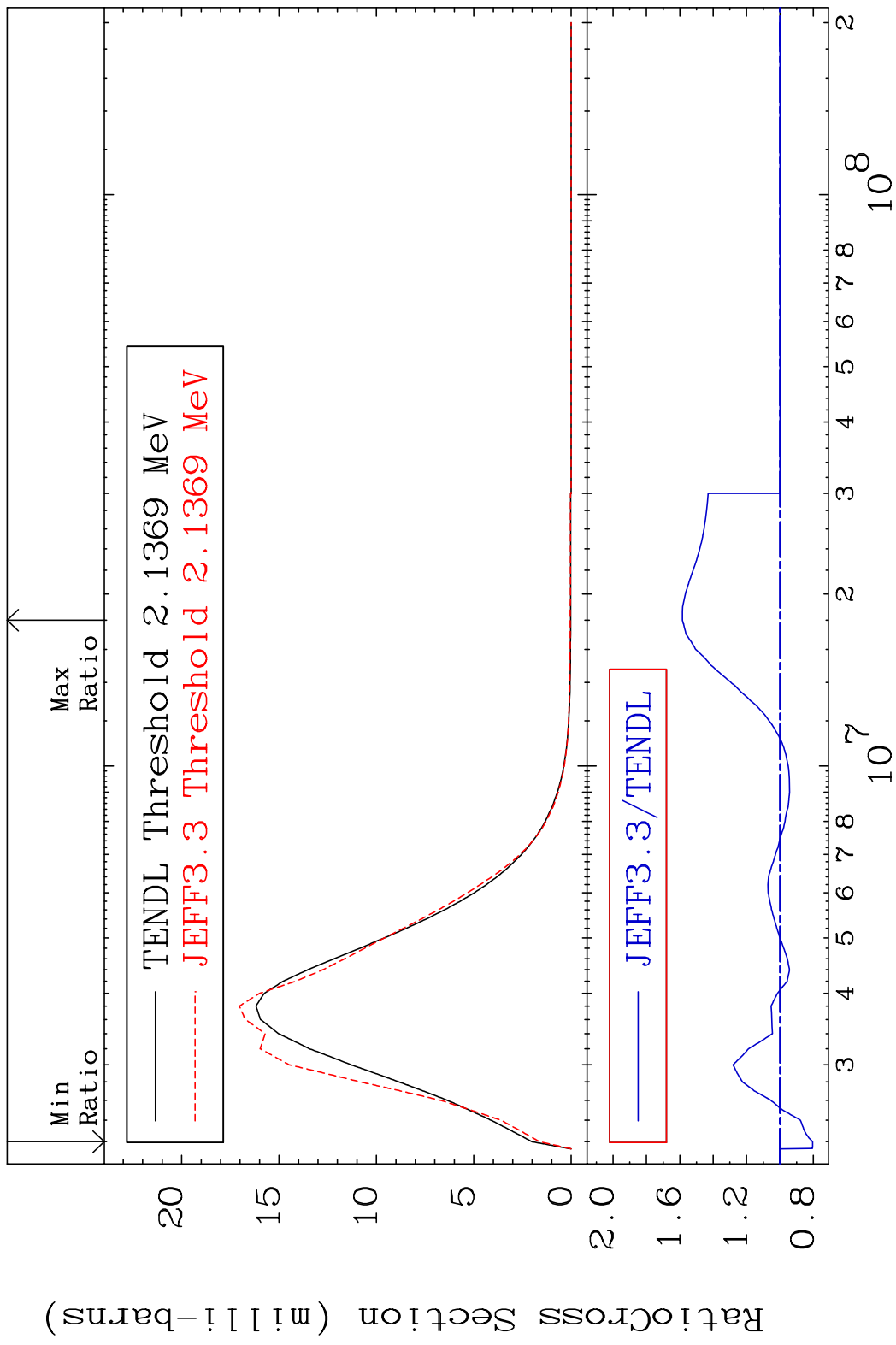


MAT 2125 MT= 72 (n, n') Level 21-Sc-45
 Cross Section -5.243 To 5.778 %

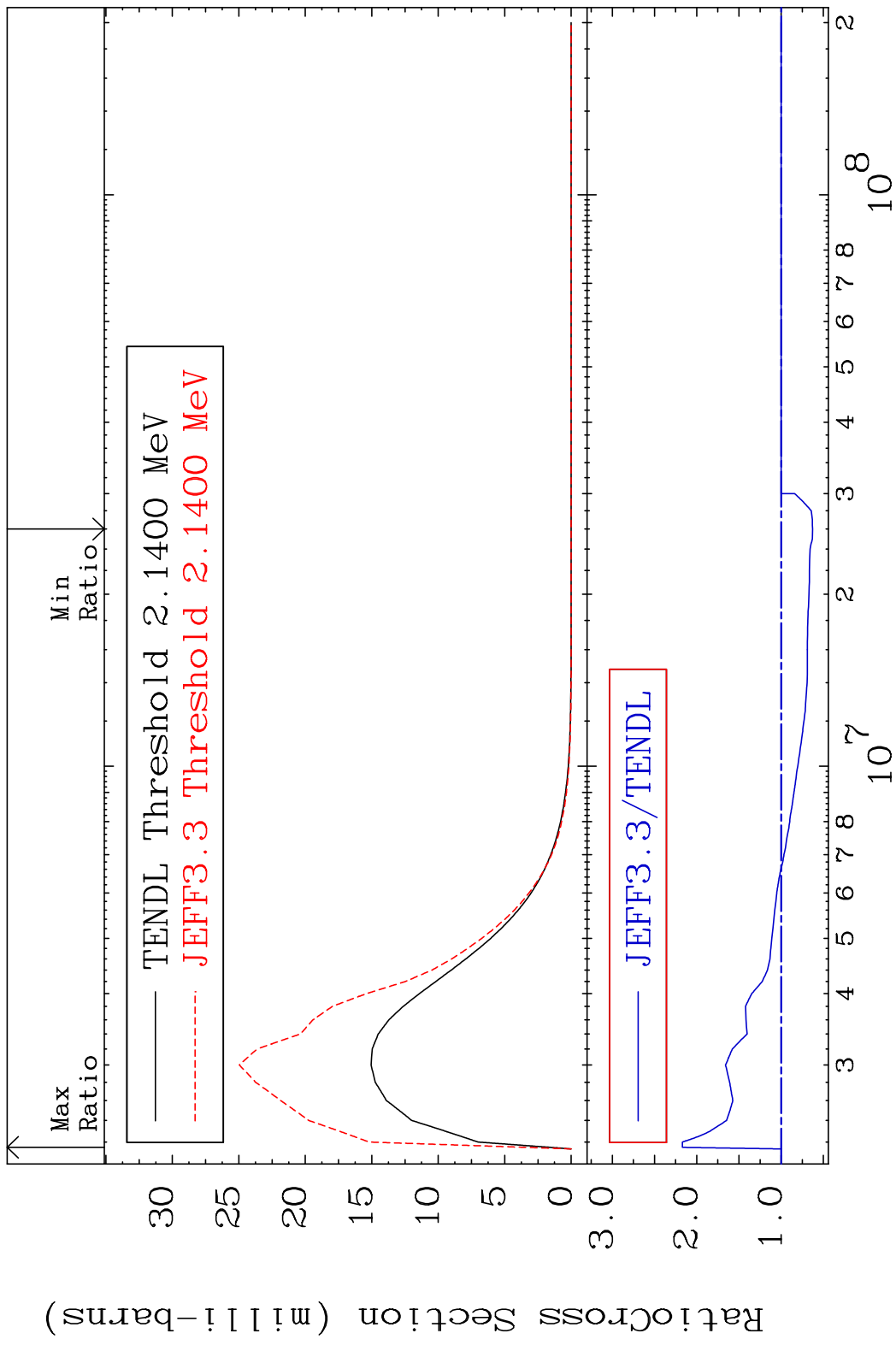


40 Incident Energy (eV) 21-Sc-45

MAT 2125 MT= 73 (n, n') Level 21-Sc-45
 Cross Section -19.52 To 58.48 %

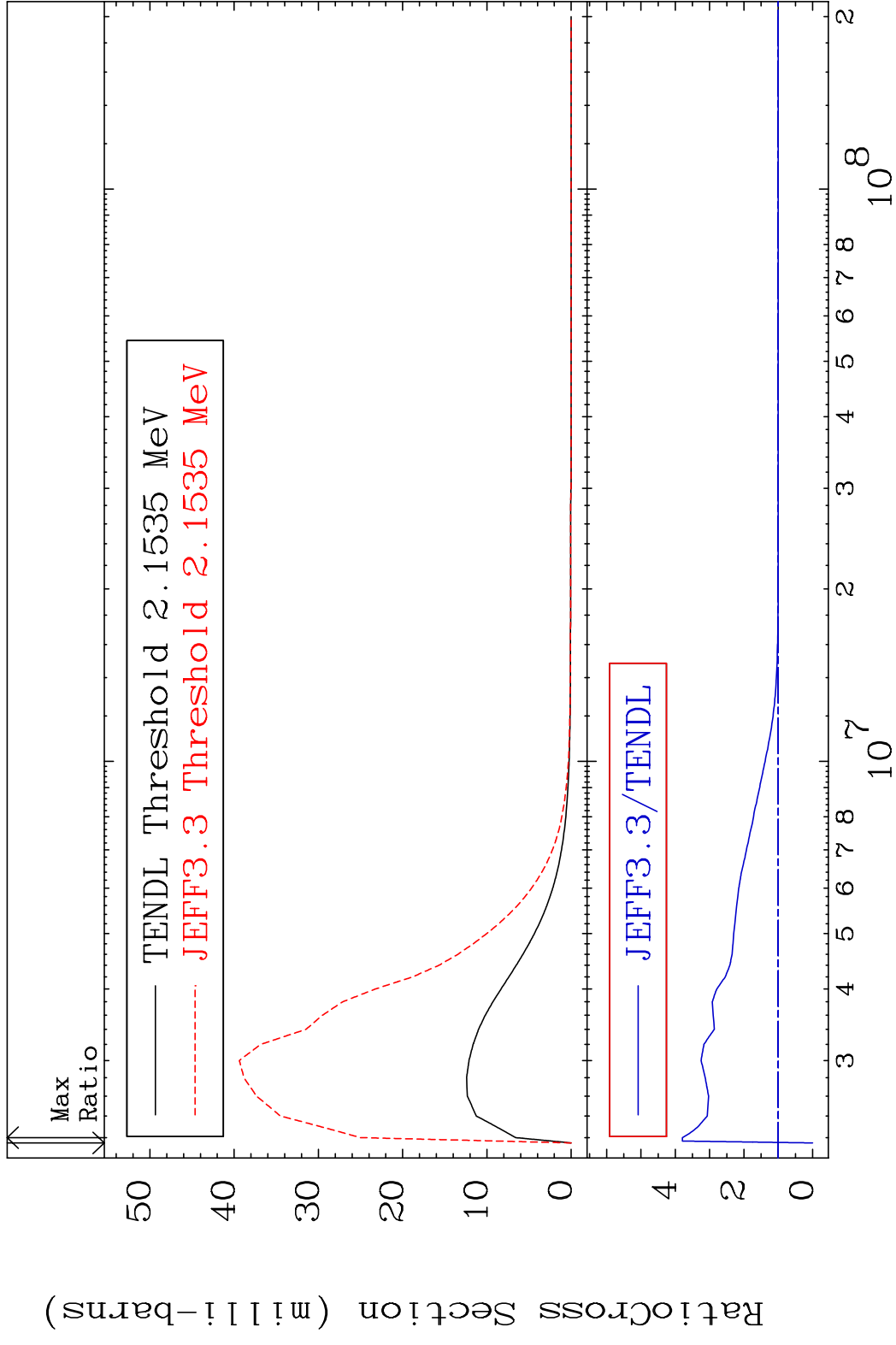


MAT 2125 MT= 74 (n, n') Level 21-Sc-45
 Cross Section -37.19 To 117.0 %



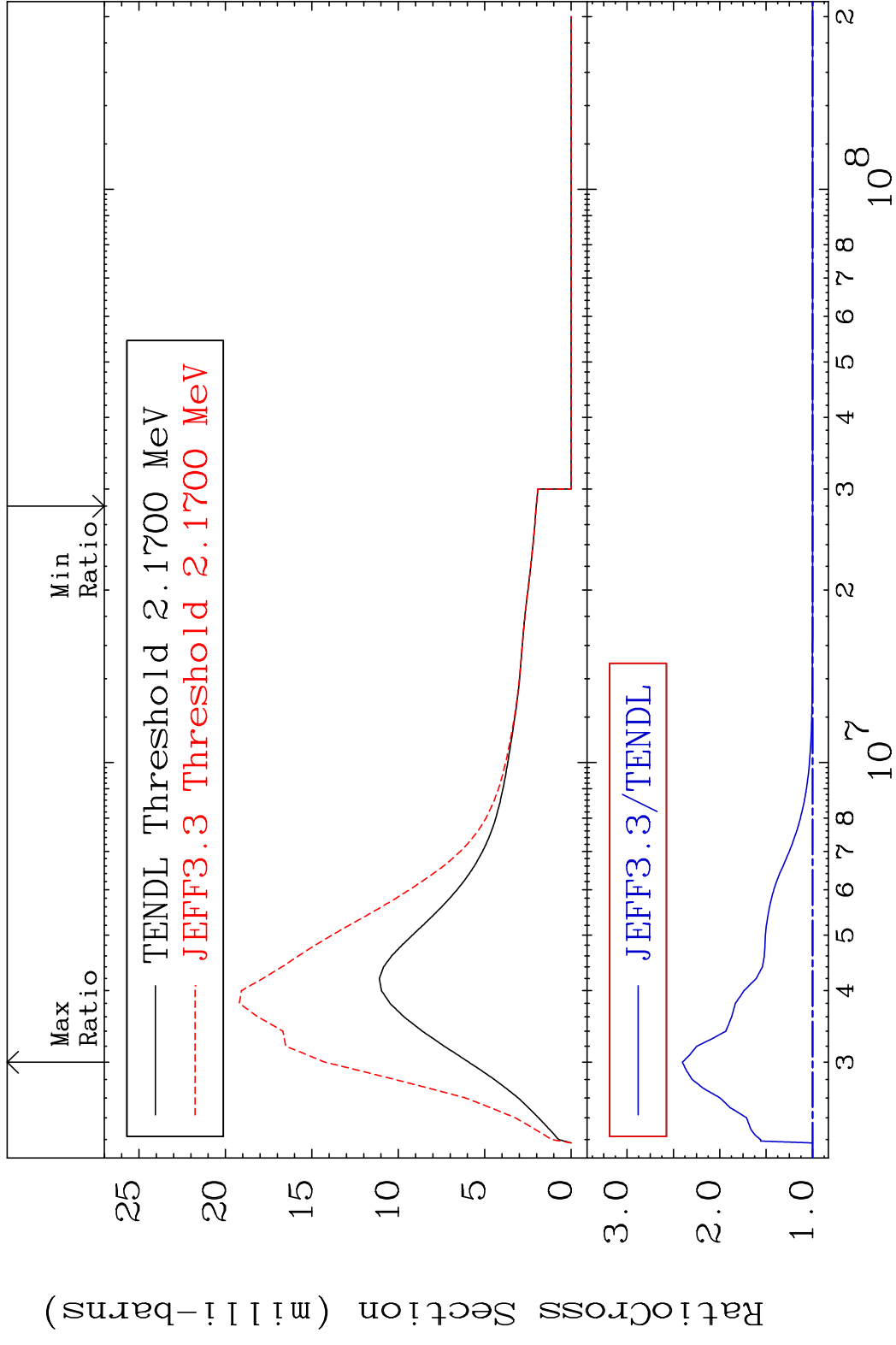
42 21-Sc-45

MAT 2125 MT= 75 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 279.4 %

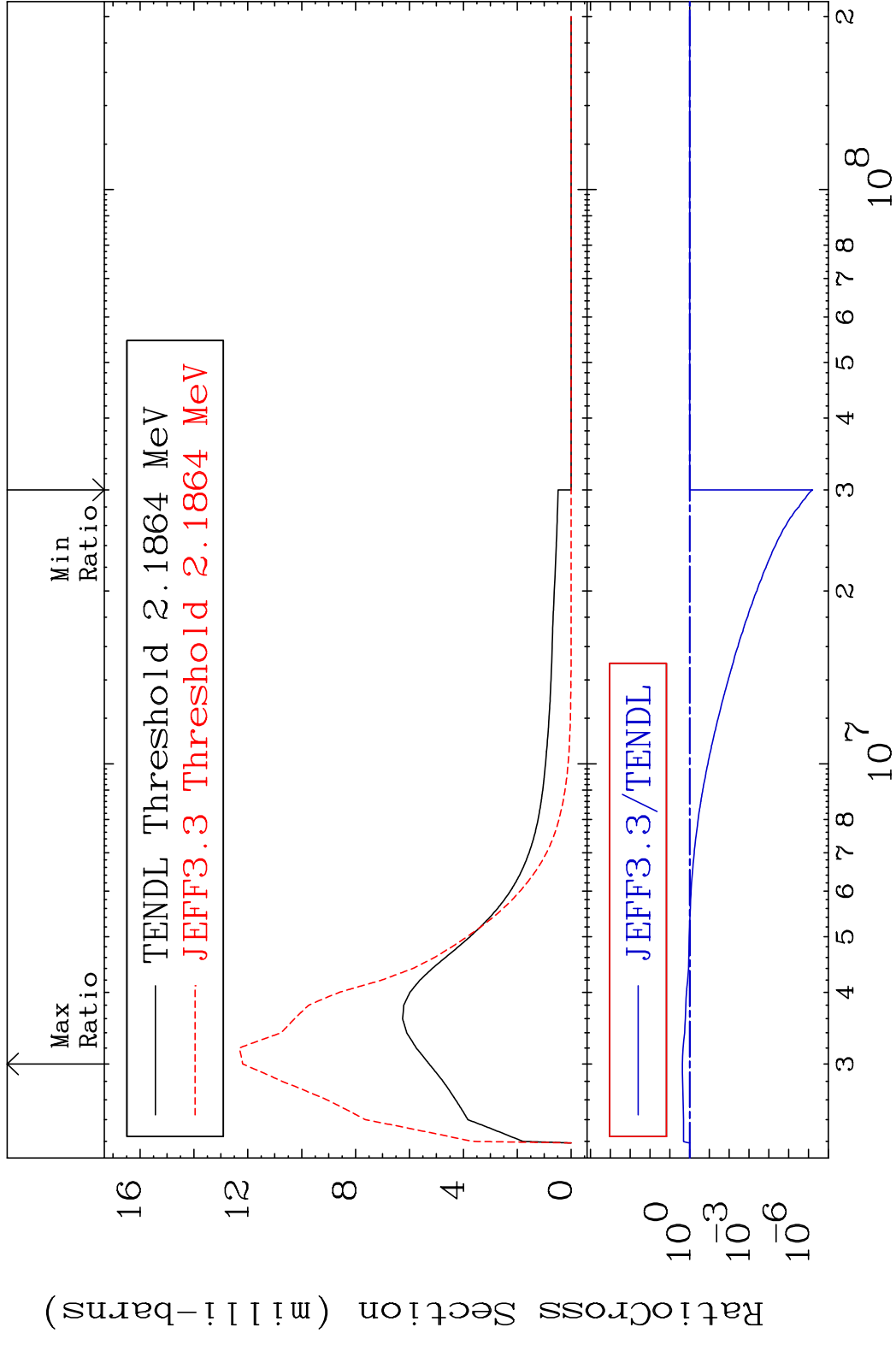


43 Incident Energy (eV) 21-Sc-45

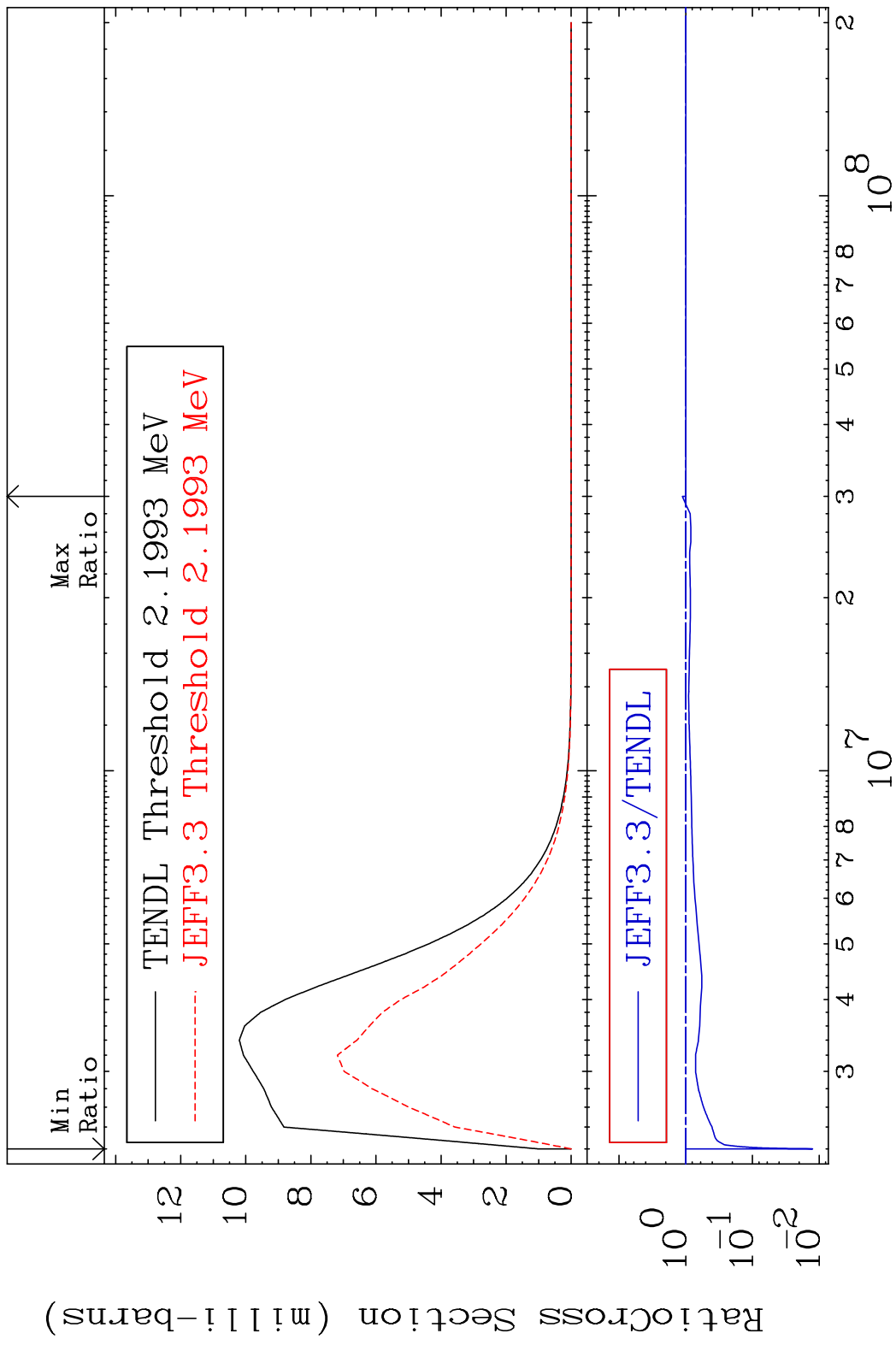
MAT 2125 MT= 76 (n, n') Level 21-Sc-45
 Cross Section 0.000 To 140.3 %



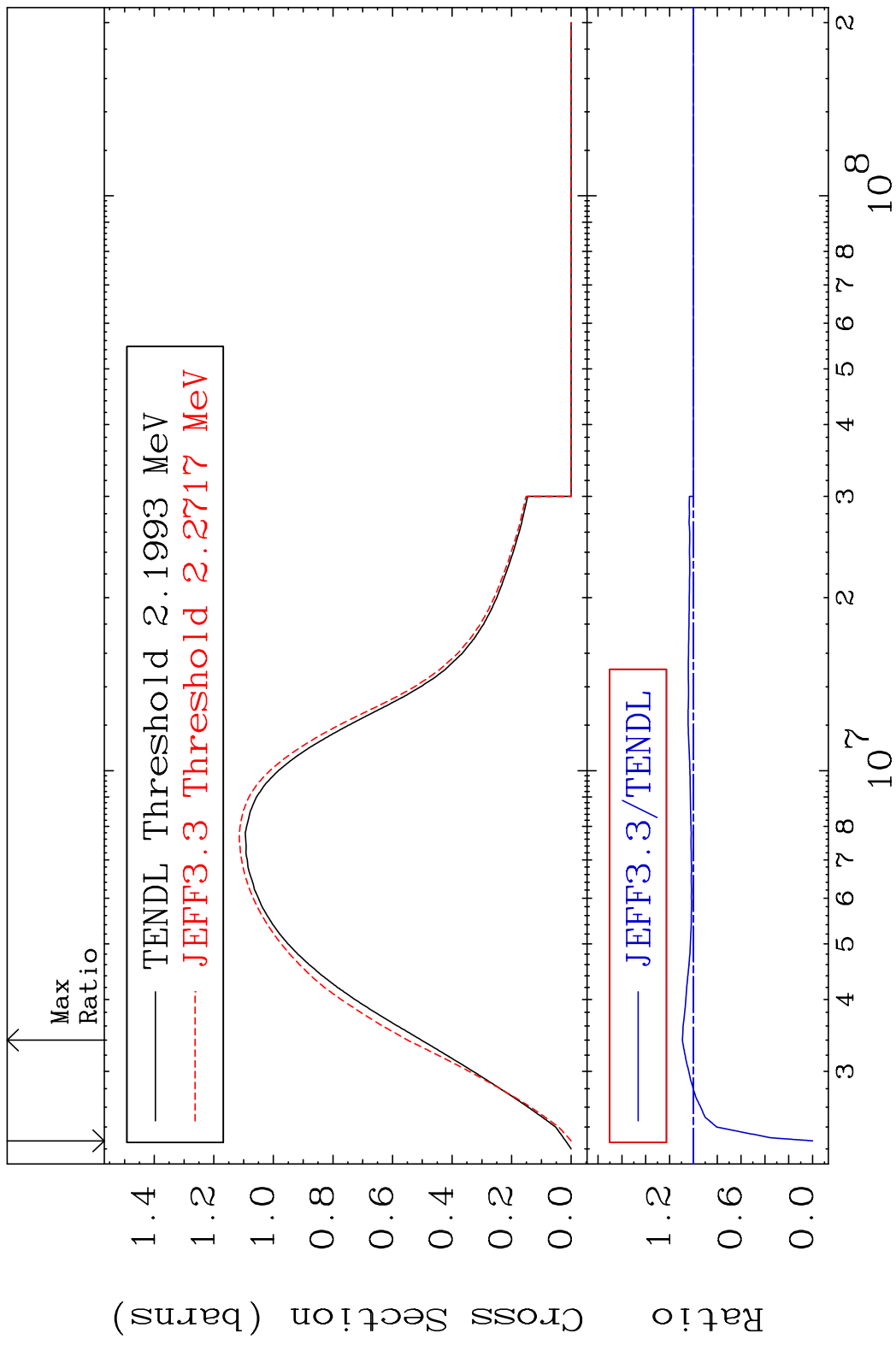
MAT 2125 MT= 77 (n, n') Level 21-Sc-45
 Cross Section -100.0 To 131.2 %



MAT 2125 MT= 78 (n, n') Level 21-Sc-45
 Cross Section -98.74 To 12.56 %



MAT 2125 (n,n') Continuum 21-Sc-45
 Cross Section -100.0 To 9.244 %

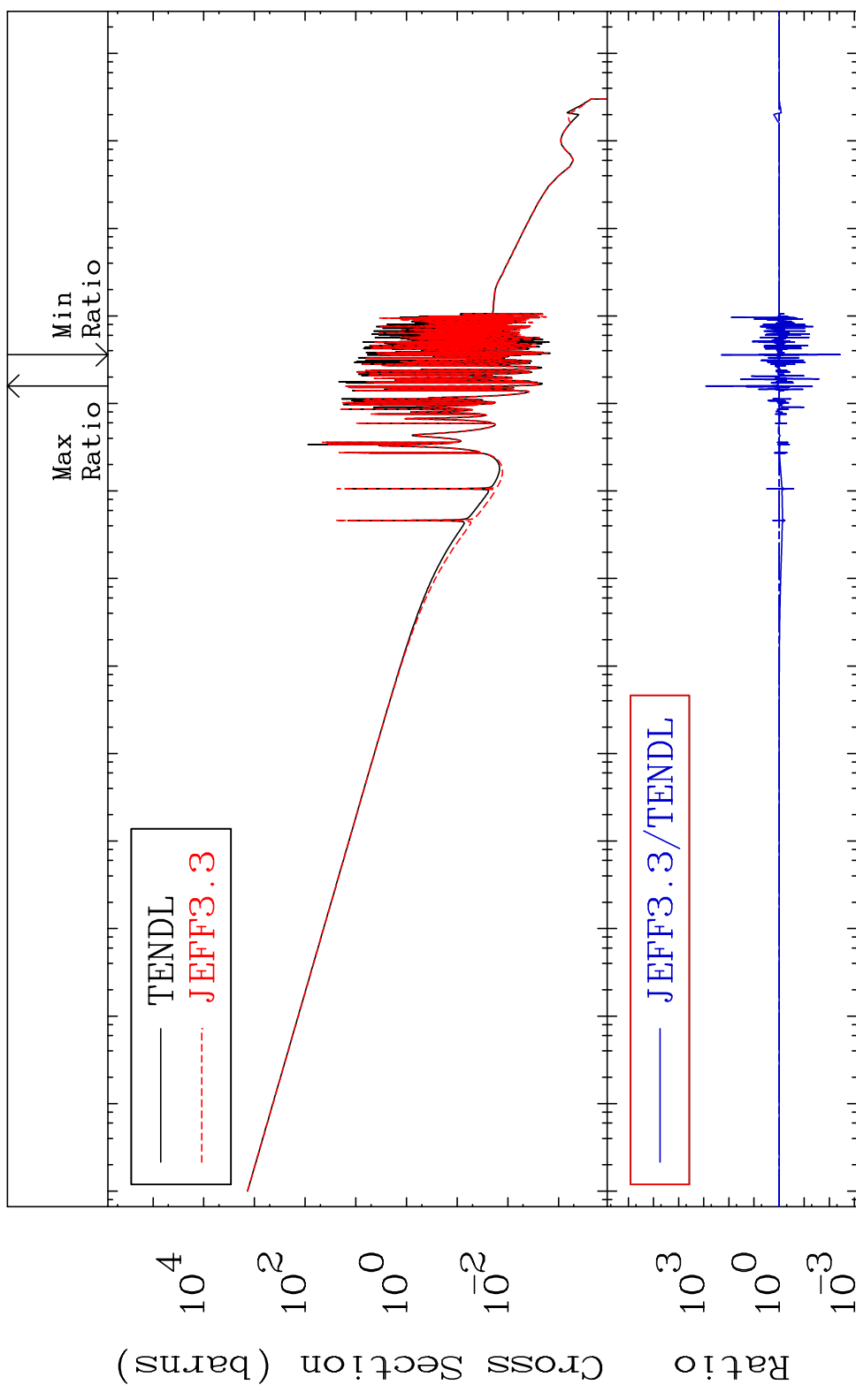


MAT 2125

(n, γ)

21-Sc-45

Cross Section -99.64 To 9999. %



48

Incident Energy (eV)

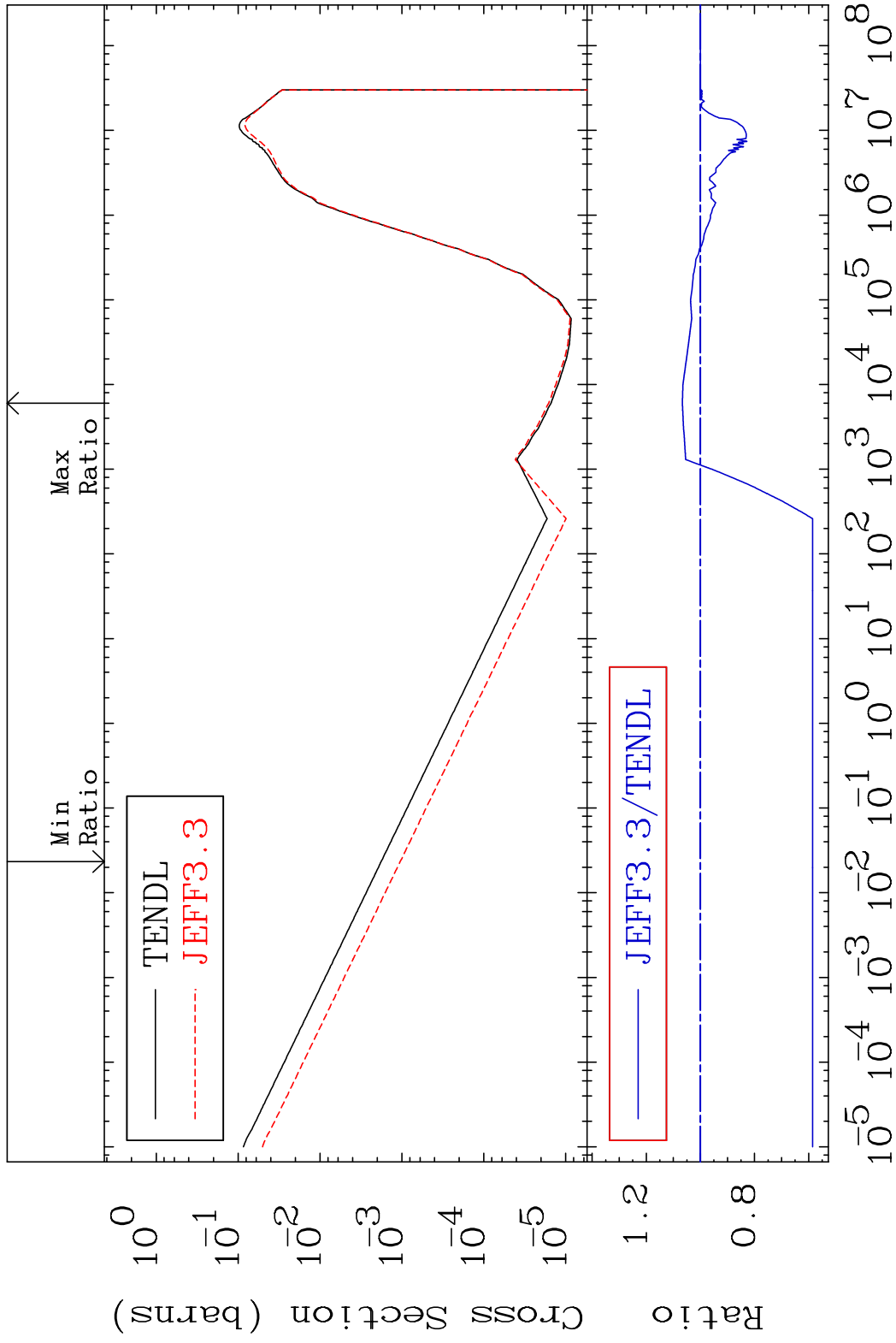
21-Sc-45

MAT 2125

(n, p)

21-Sc-45

Cross Section -41.44 To 6.677 %



49

Incident Energy (eV)

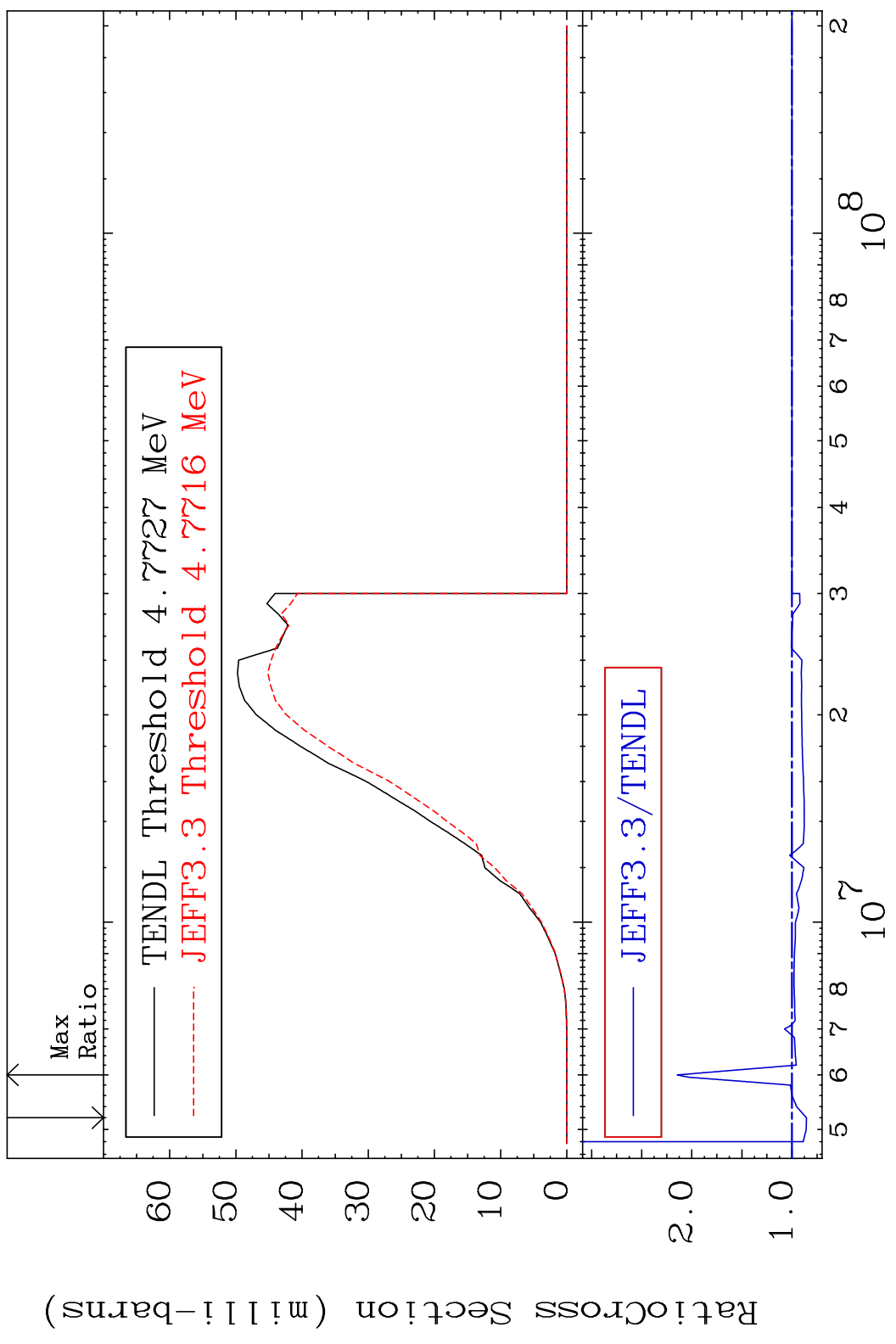
21-Sc-45

MAT 2125

(n, d)

21-Sc-45

Cross Section -14.44 To 114.5 %



50

Incident Energy (eV)

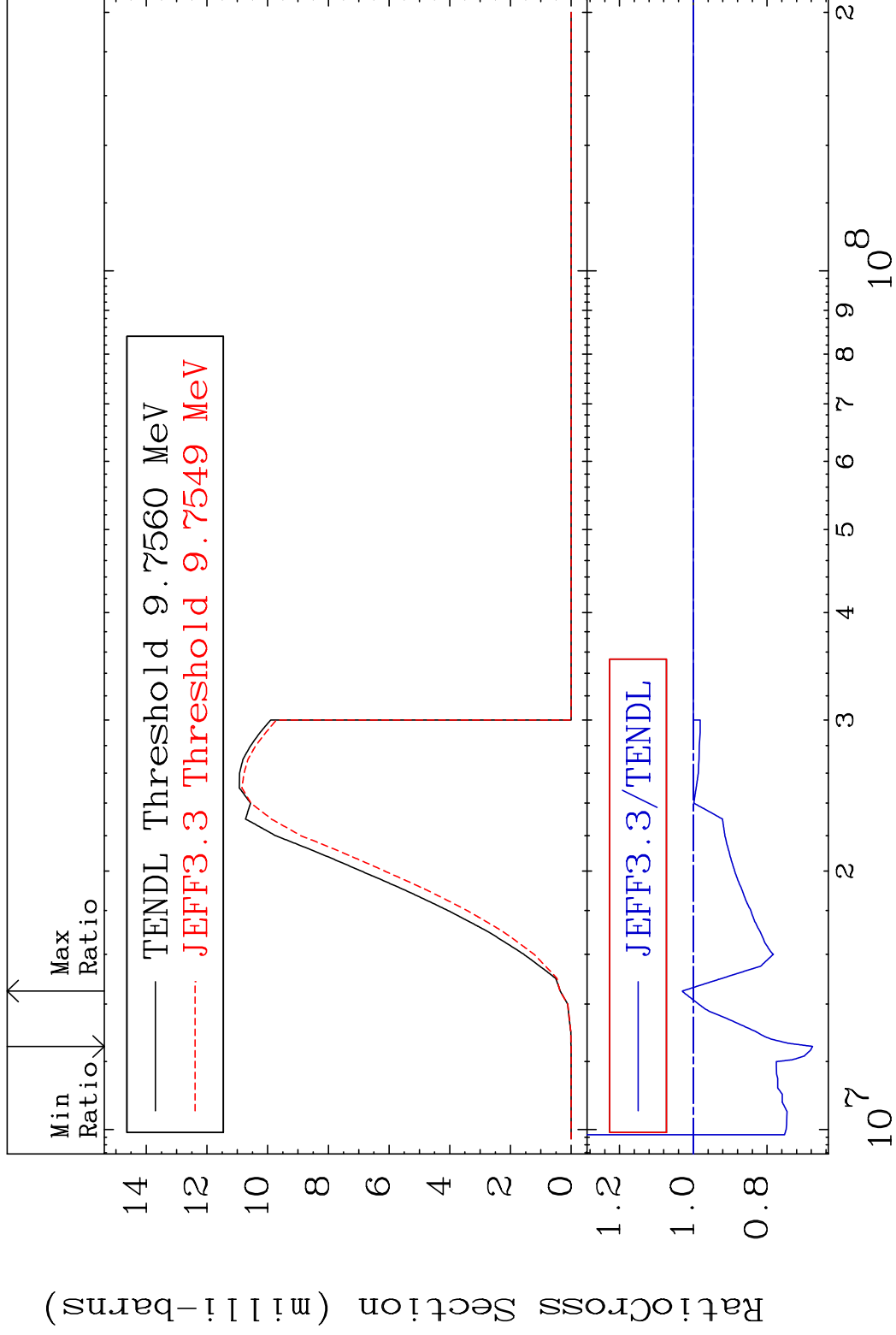
21-Sc-45

MAT 2125

(n, t)

21-Sc-45

Cross Section -32.34 To 2.968 %



51

Incident Energy (eV)

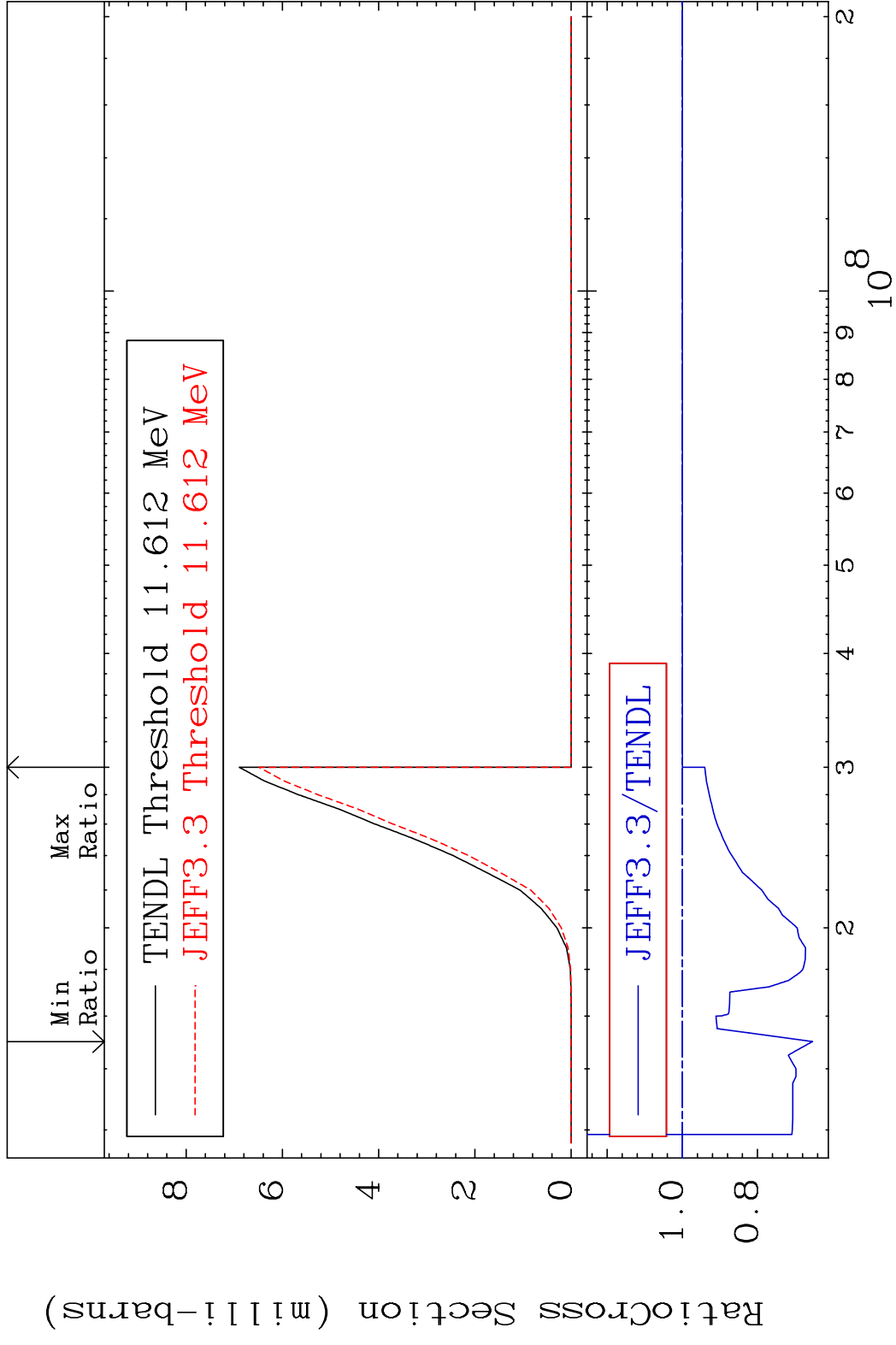
21-Sc-45

MAT 2125

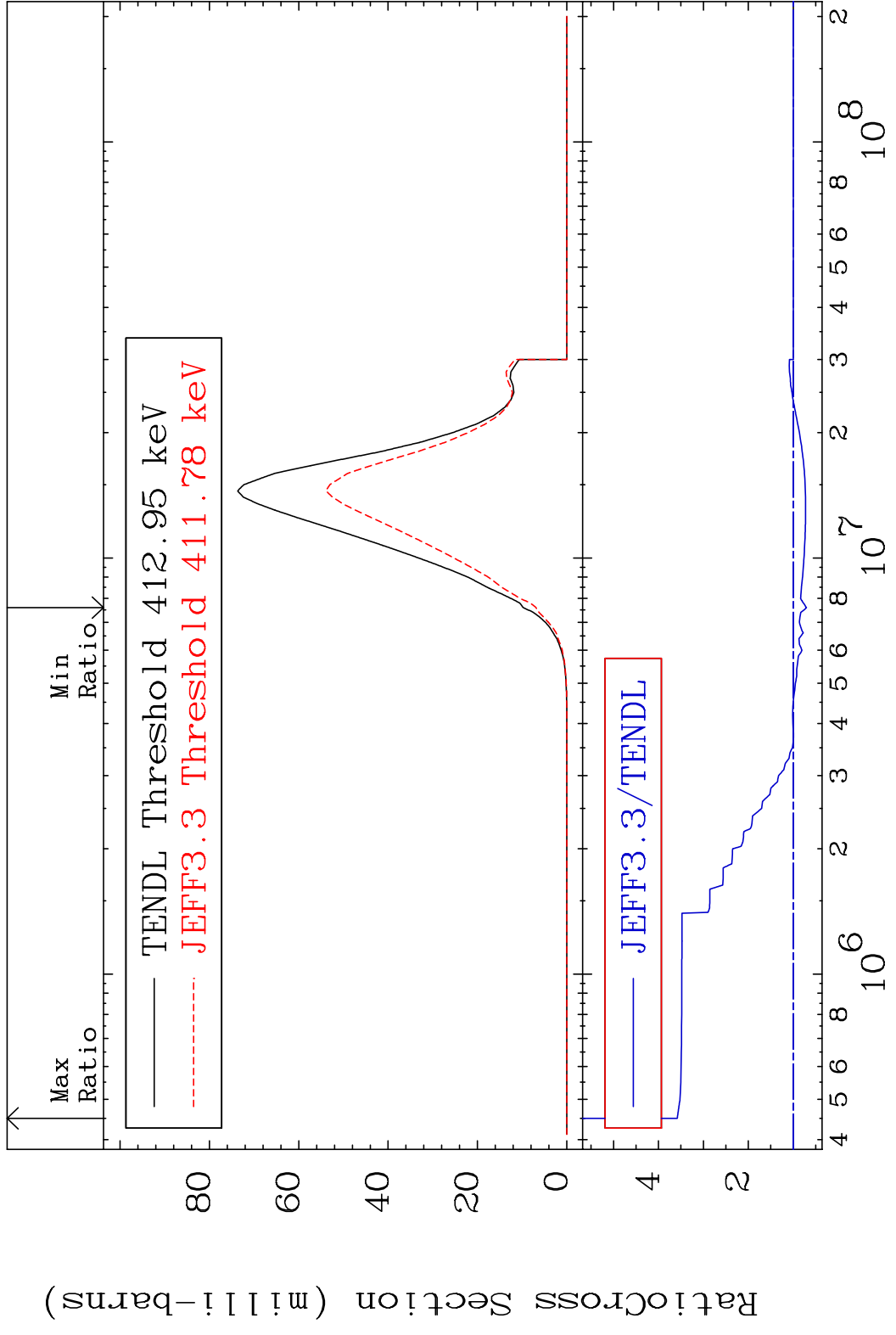
(n, He-3)

21-Sc-45

Cross Section -34.65 To 0.000 %



MAT 2125 (n, α) 21-Sc-45
 Cross Section -29.28 To 258.3 %

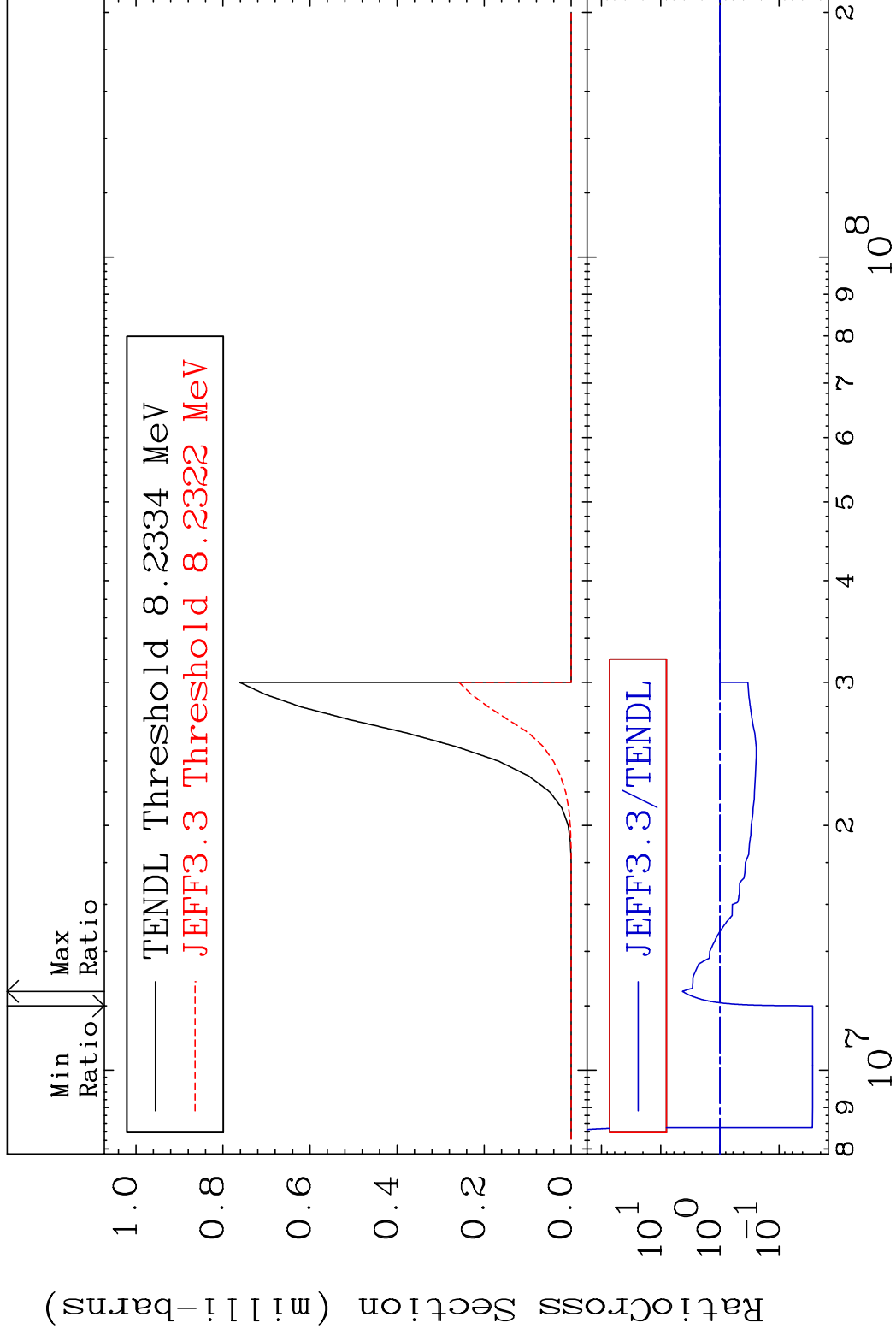


MAT 2125

(n,2 α)

21-Sc-45

Cross Section -97.28 To 330.9 %



54

Incident Energy (eV)

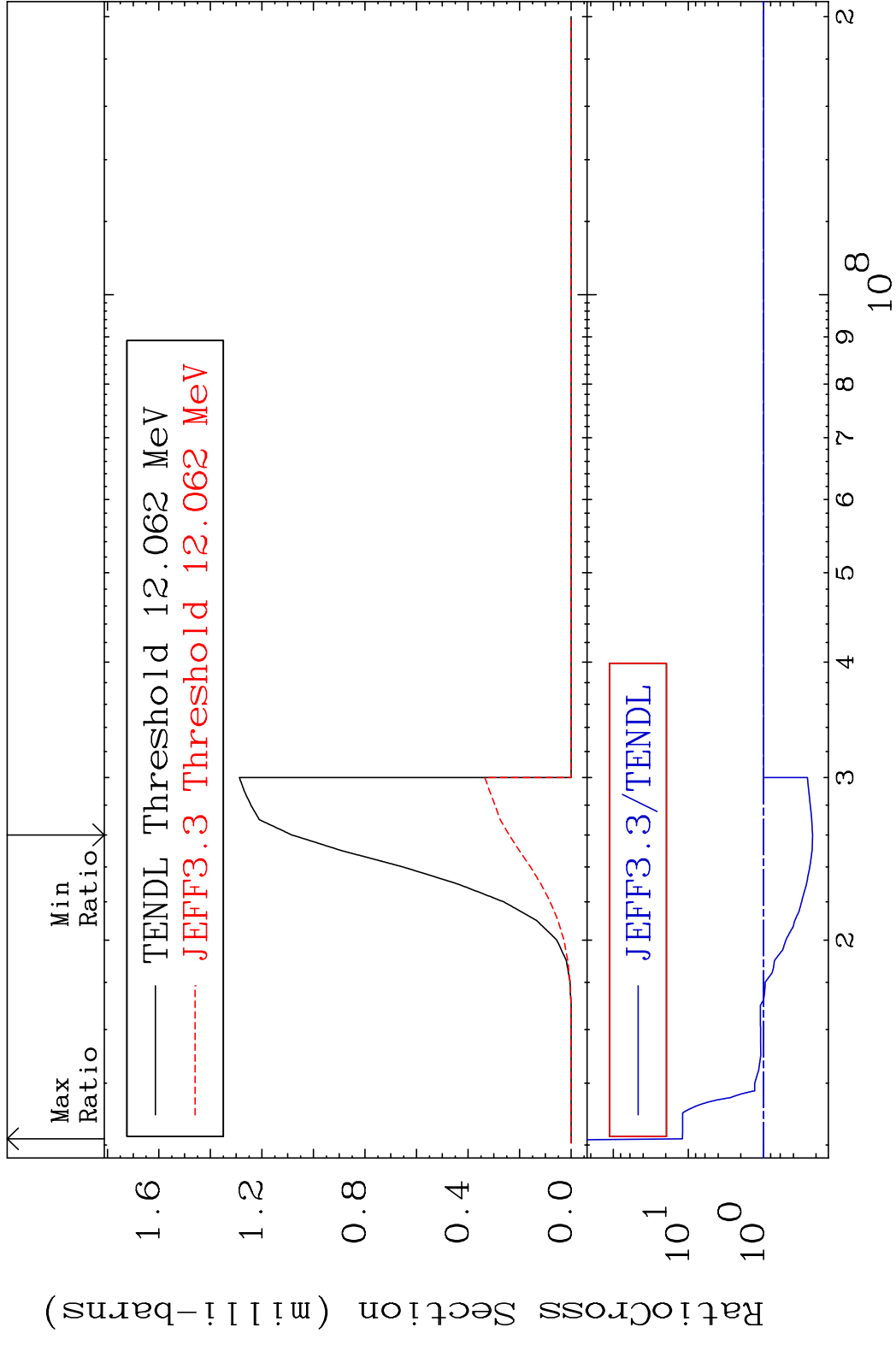
21-Sc-45

MAT 2125

(n,2p)

21-Sc-45

Cross Section -77.79 To 1103. %

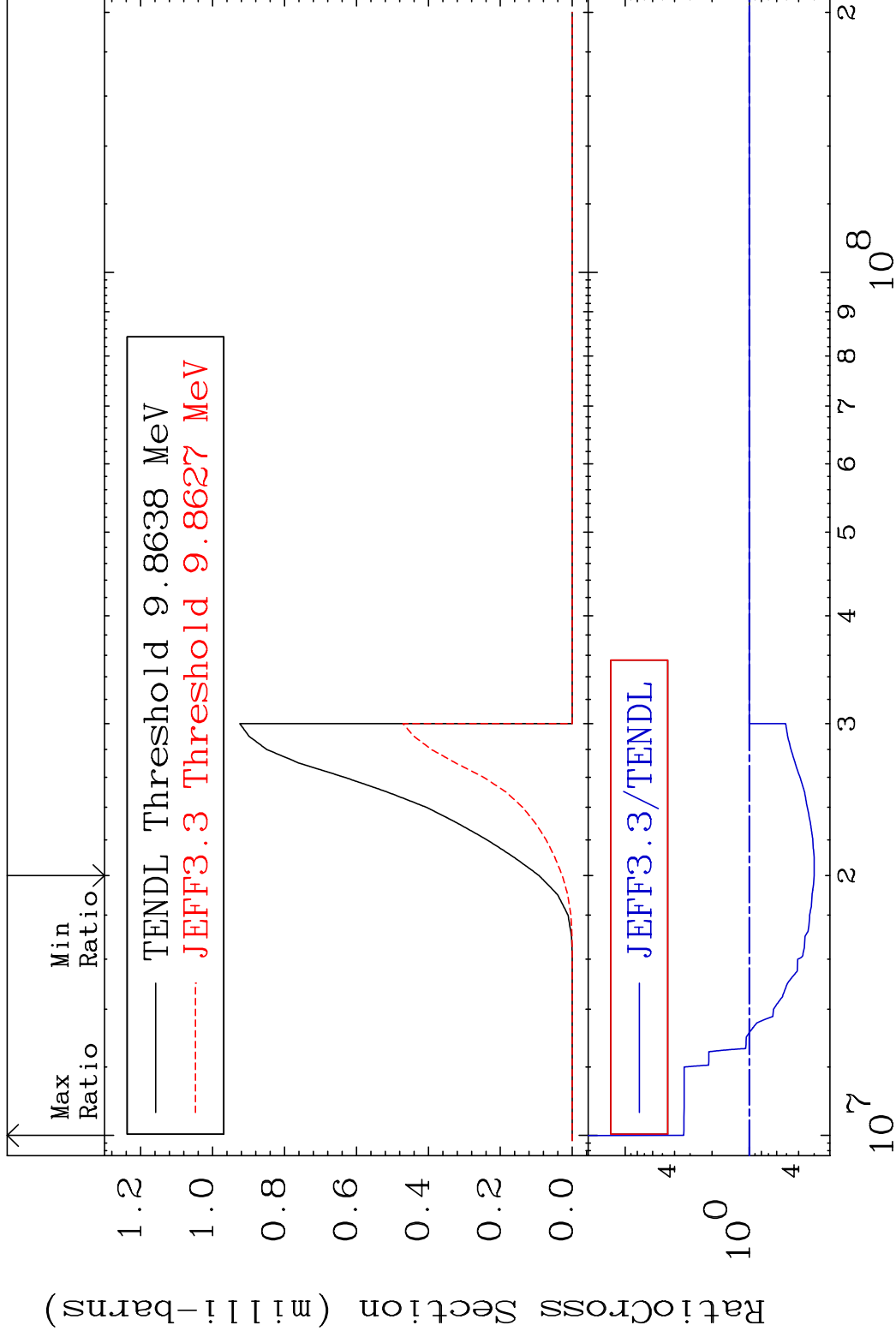


MAT 2125

(n,p) α

21-Sc-45

Cross Section -69.99 To 237.9 %



56

Incident Energy (eV)

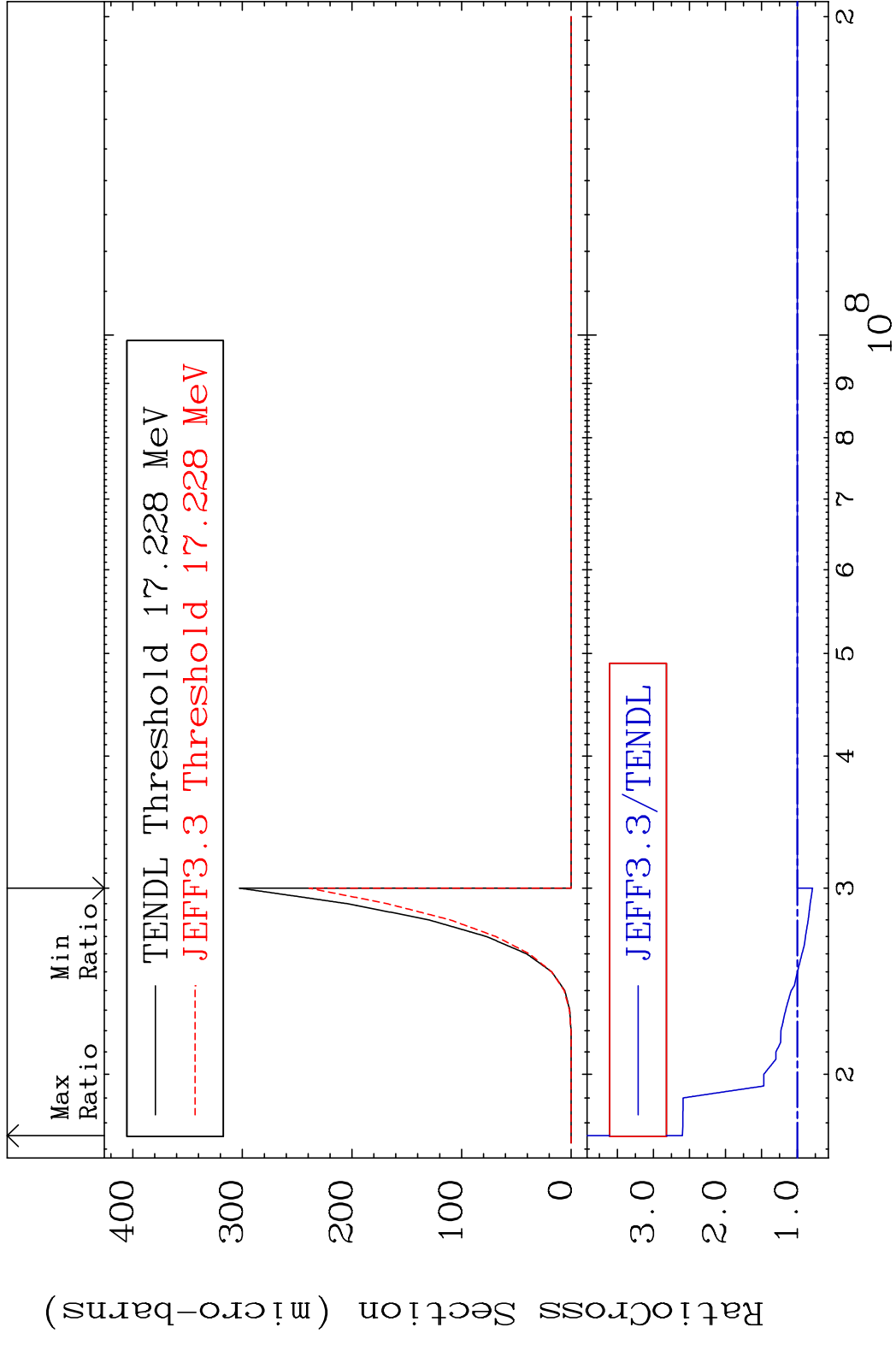
21-Sc-45

MAT 2125

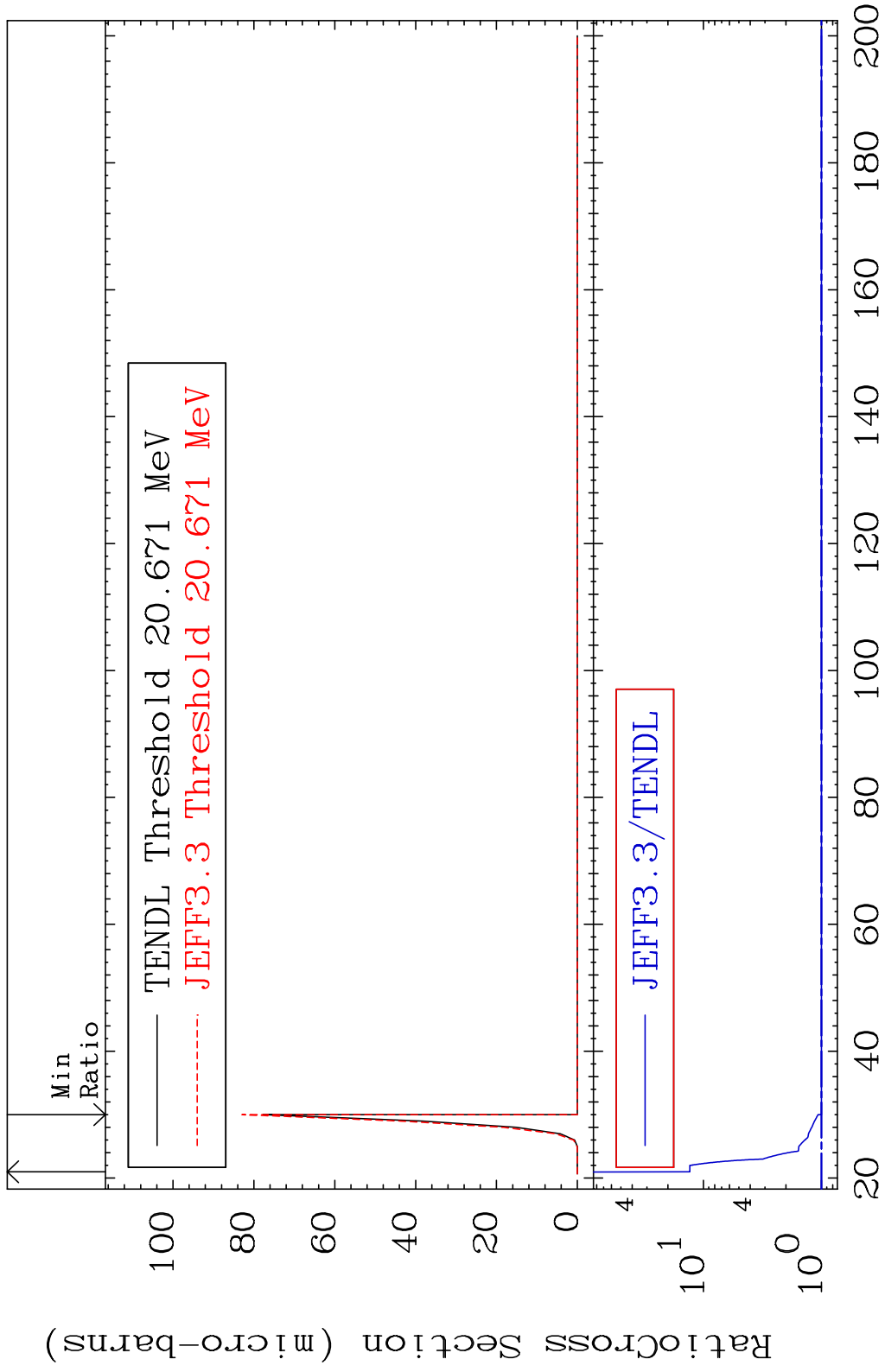
(n,p) d

21-Sc-45

Cross Section -21.02 To 159.9 %



MAT 2125 (n,p) t 21-Sc-45
 Cross Section 0.000 To 1203. %

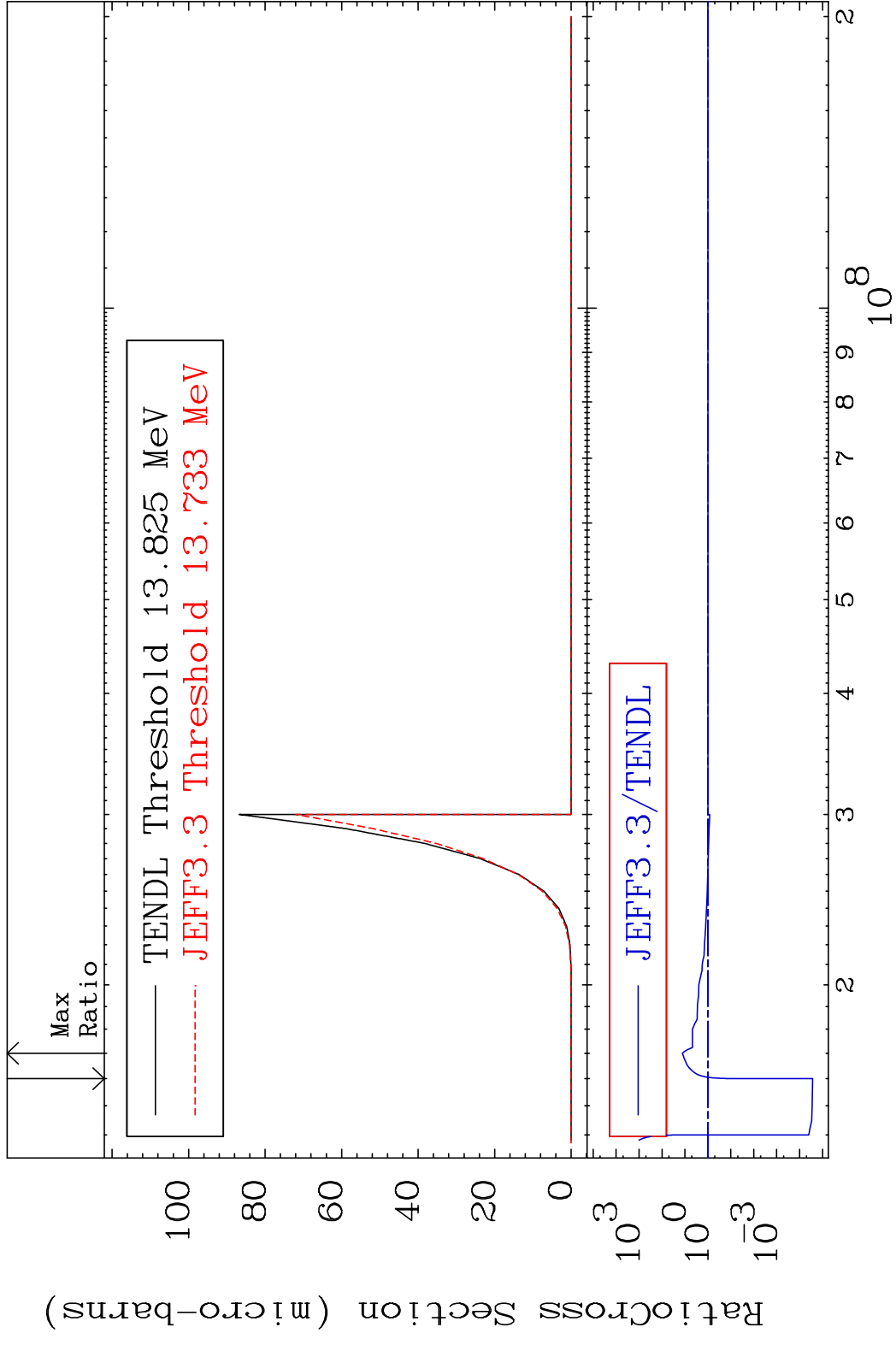


MAT 2125

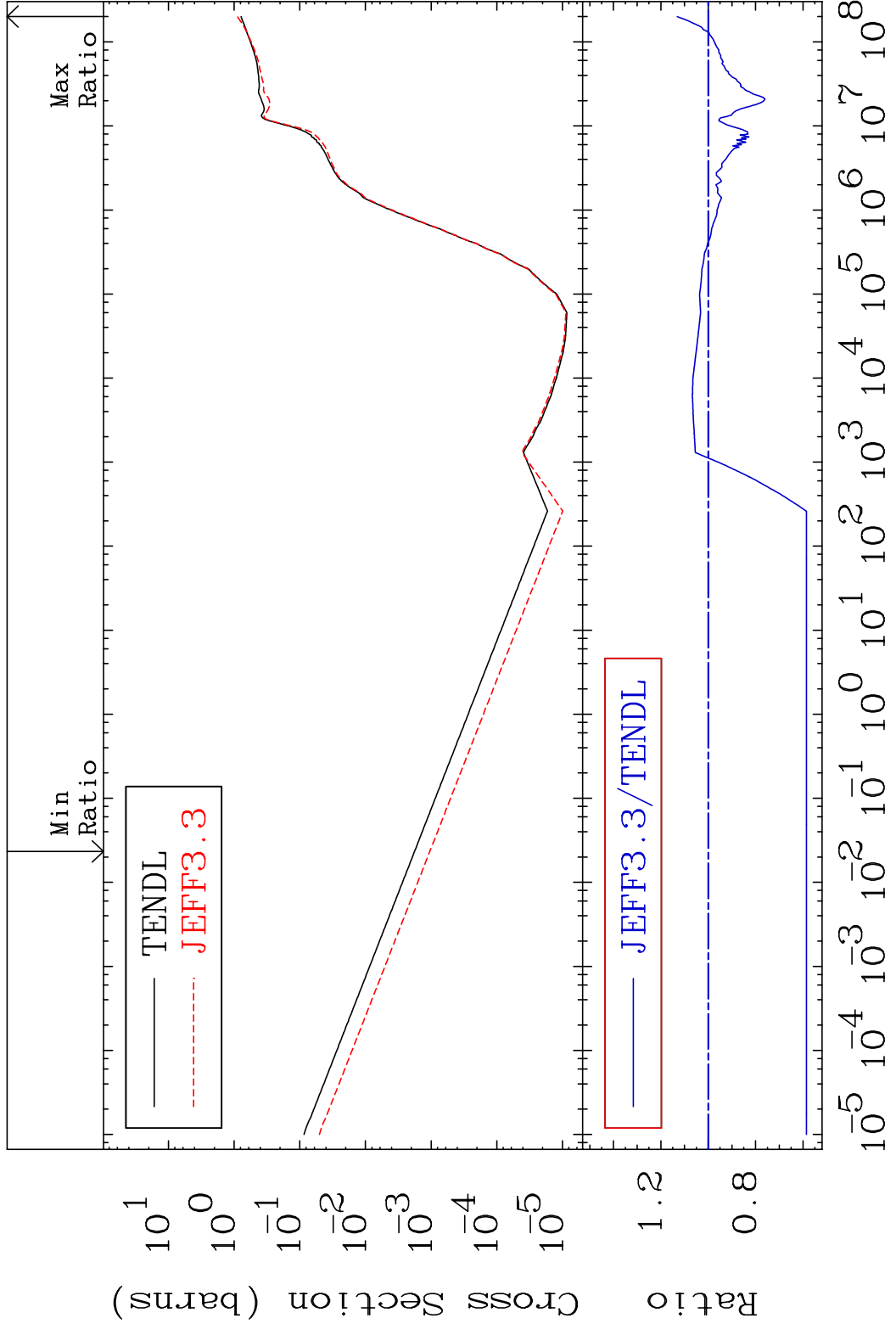
(n,d) α

21-Sc-45

Cross Section -100.0 To 1194. %



MAT 2125 Hydrogen Production 21-Sc-45
 Cross Section -41.44 To 13.11 %



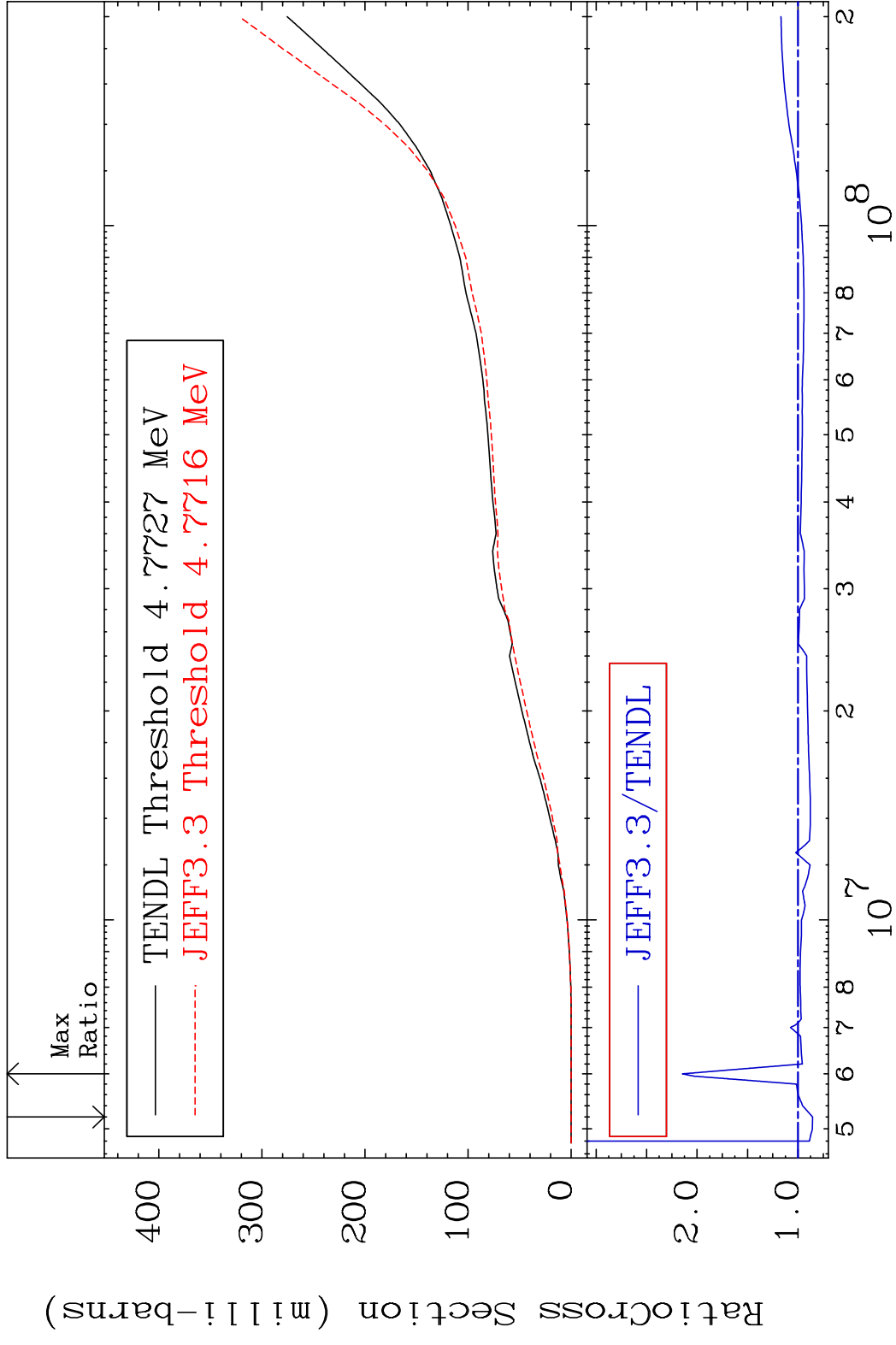
60 Incident Energy (eV) 21-Sc-45

MAT 2125

Deuterium Production

21-Sc-45

Cross Section -14.44 To 114.5 %



61

Incident Energy (eV)

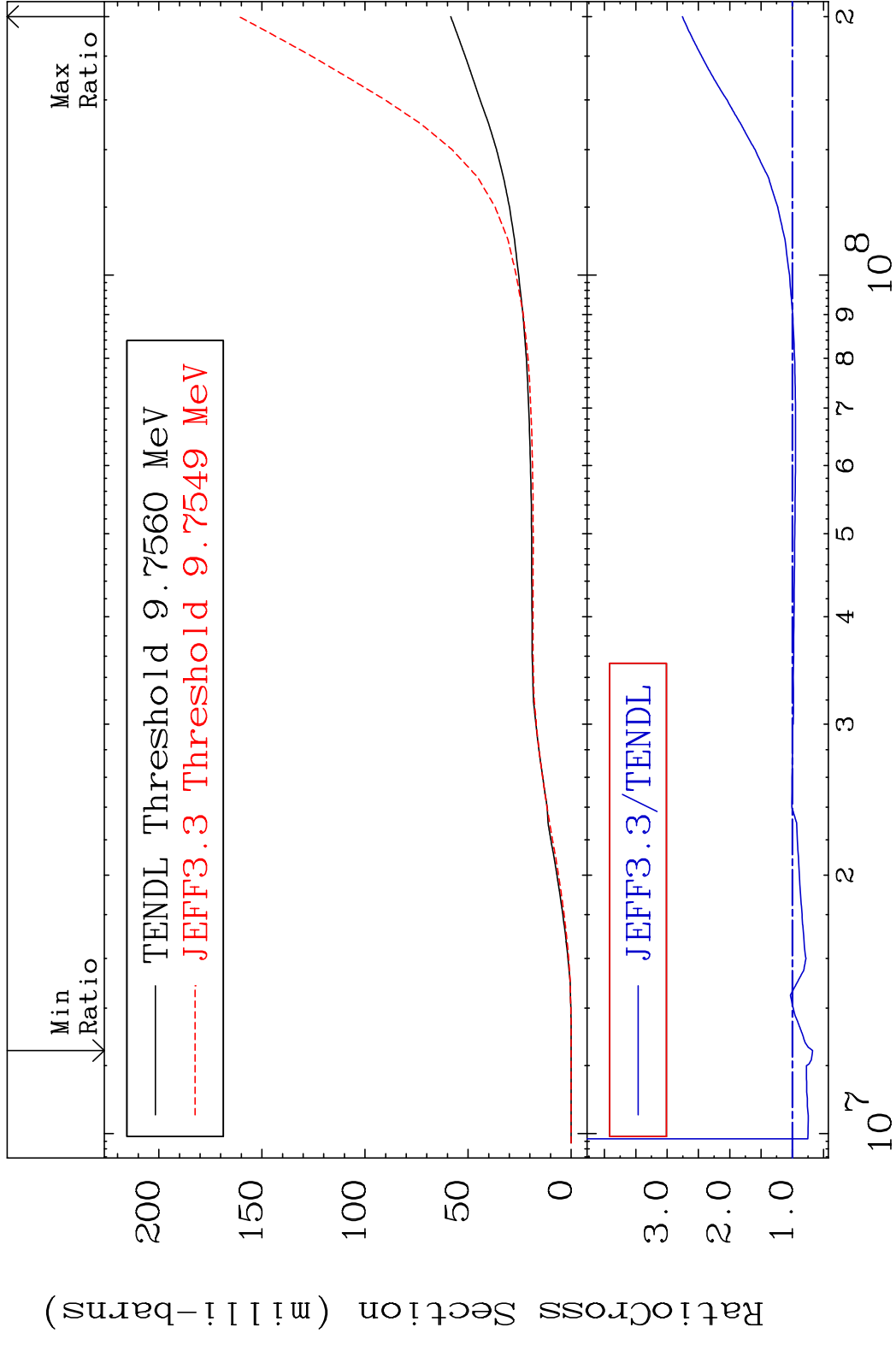
21-Sc-45

MAT 2125

Tritium Production

21-Sc-45

Cross Section -32.34 To 175.6 %



62

Incident Energy (eV)

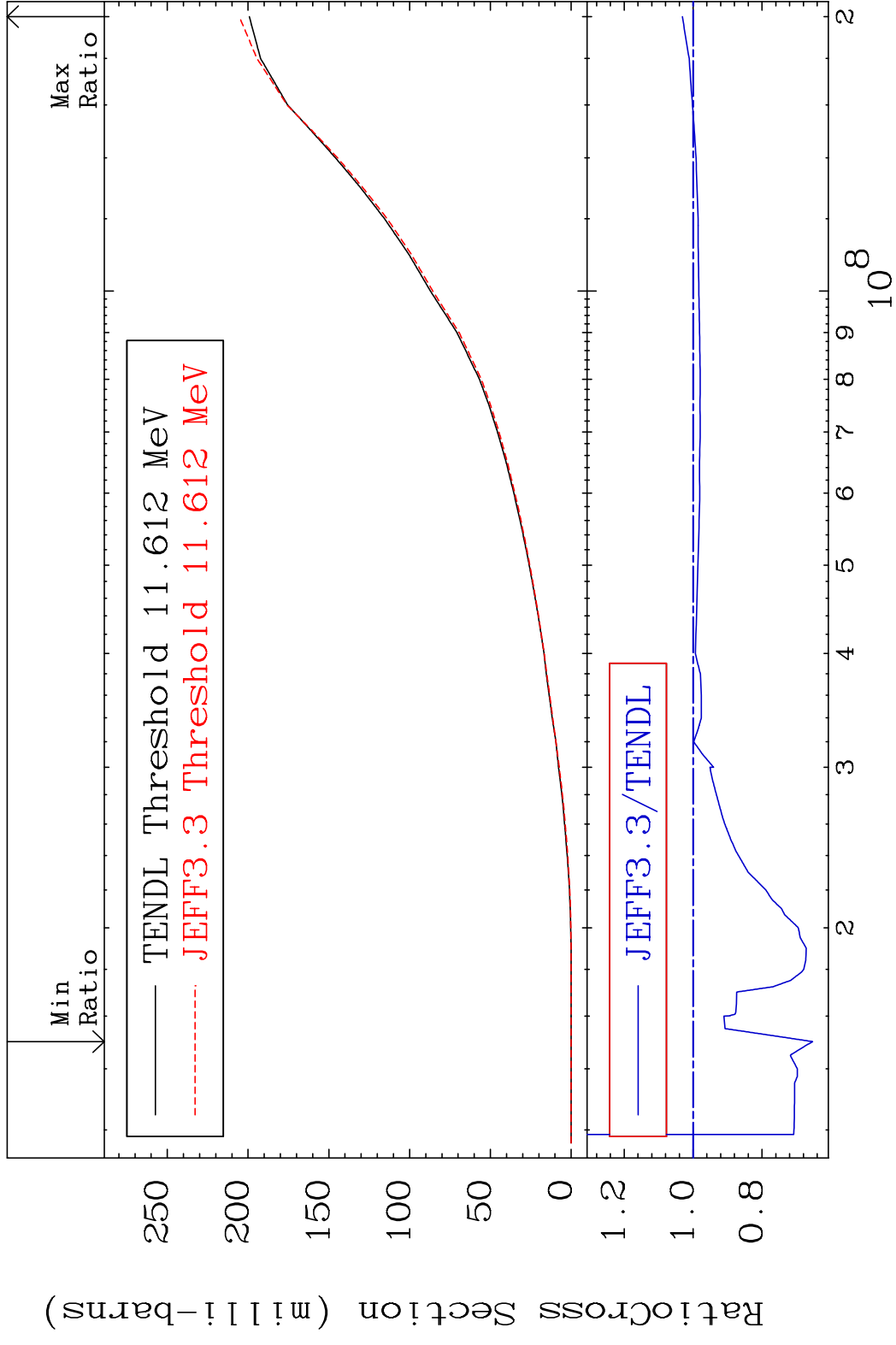
21-Sc-45

MAT 2125

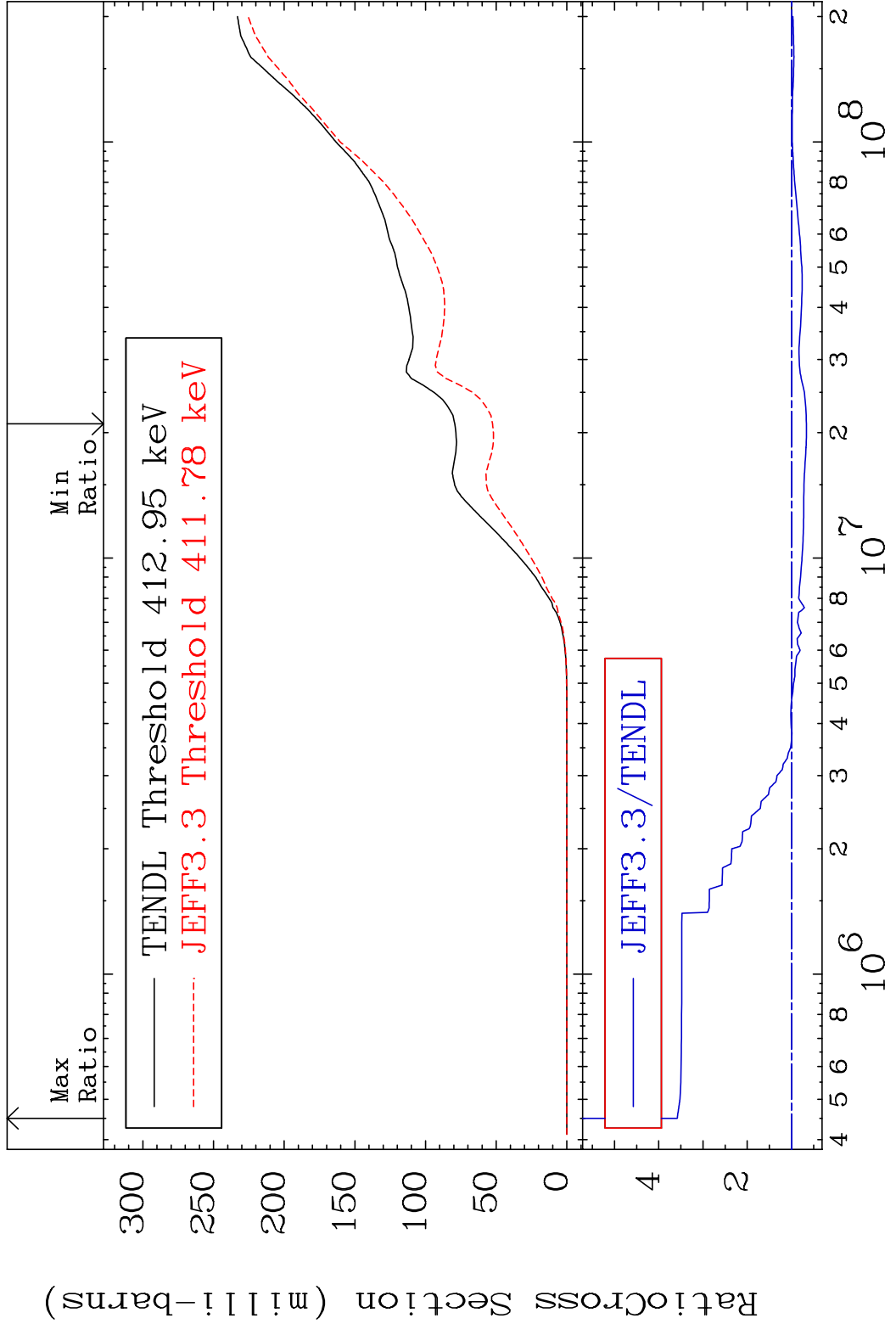
He-3 Production

21-Sc-45

Cross Section -34.65 To 3.120 %



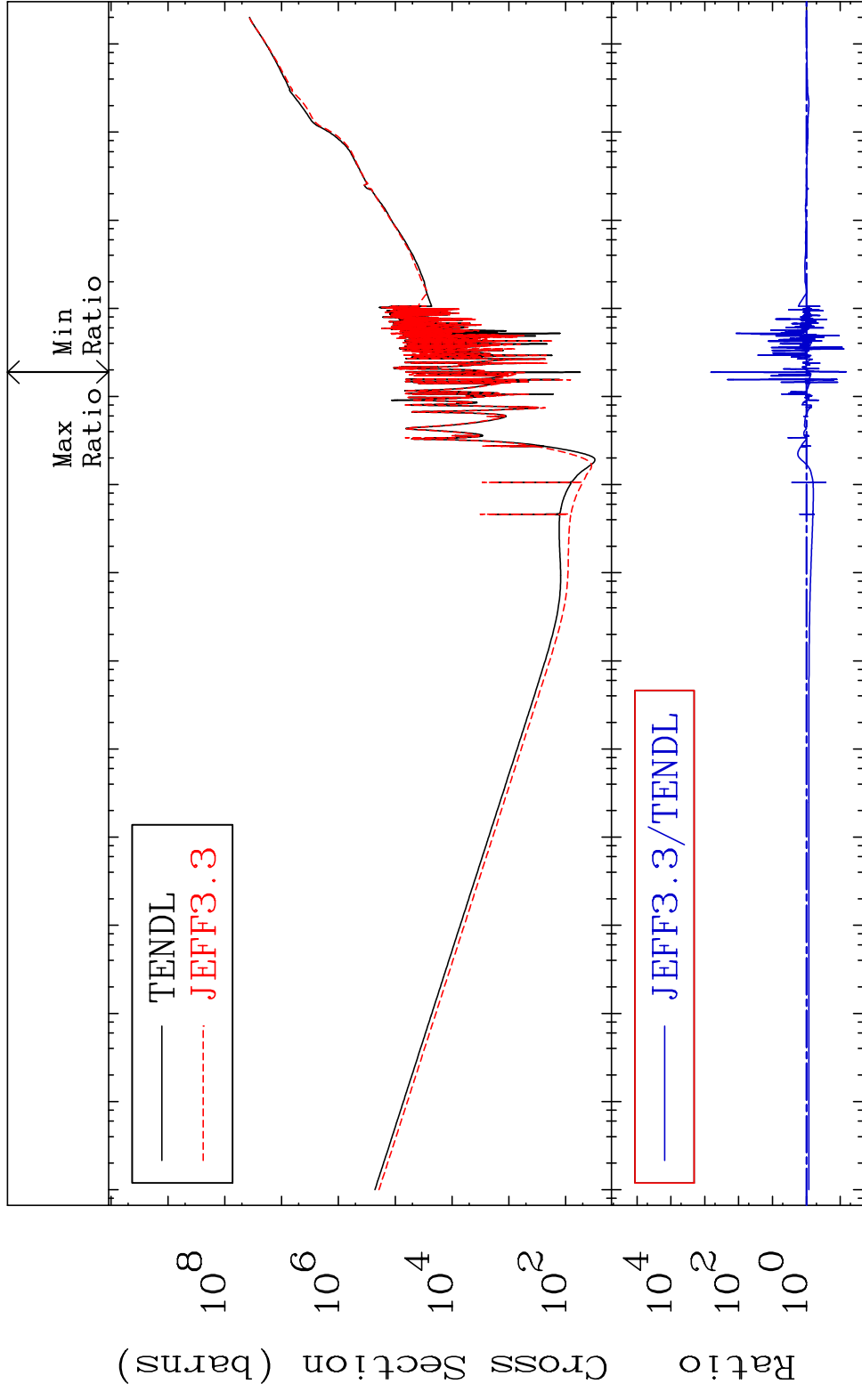
MAT 2125 He-4 Production 21-Sc-45
 Cross Section -33.73 To 258.3 %



MAT 2125

Kerma total (eV-barns) 21-Sc-45

Cross Section -93.39 To 9999. %



65

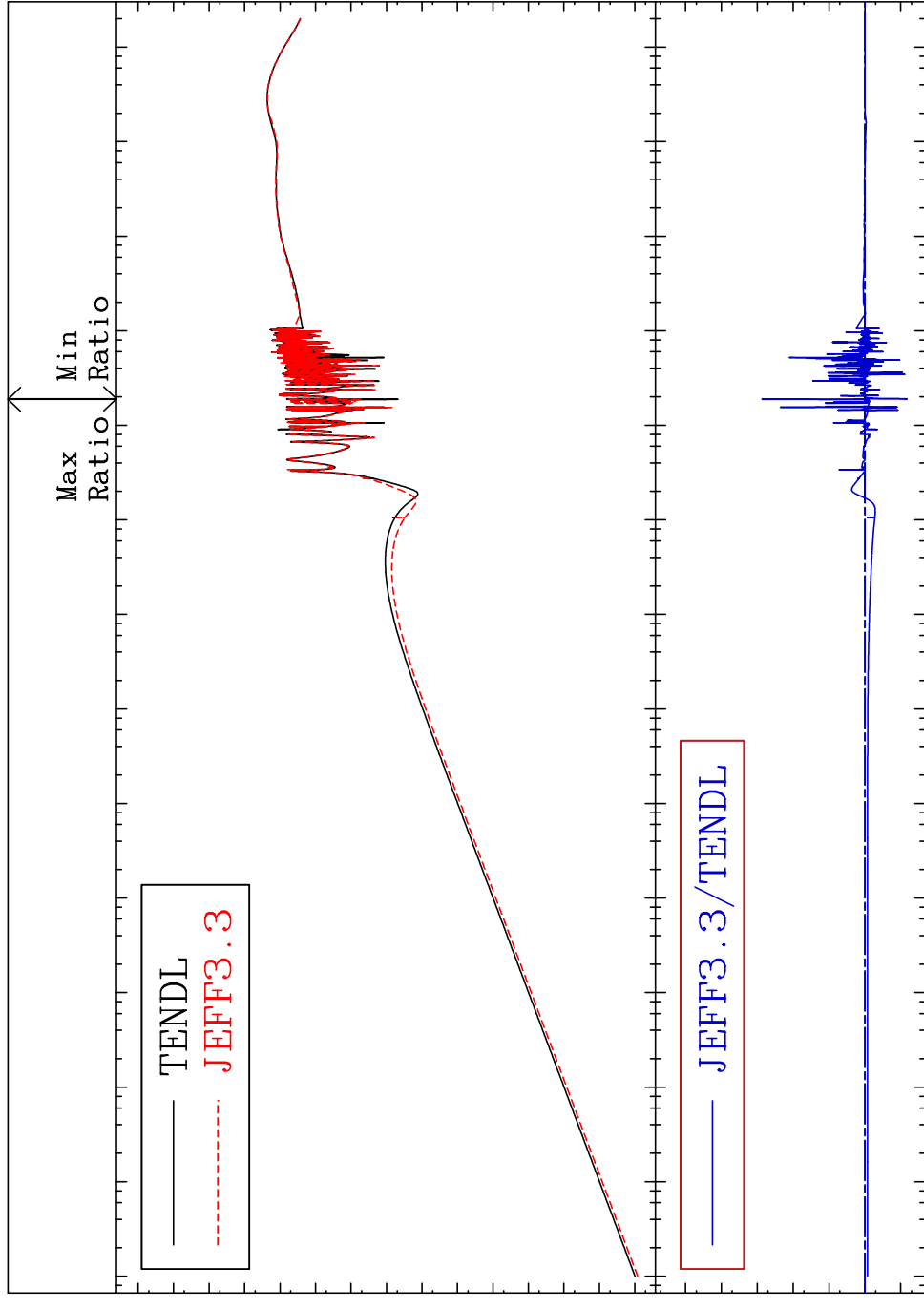
Incident Energy (eV)

21-Sc-45

MAT 2125

Kerma elastic
Cross Section

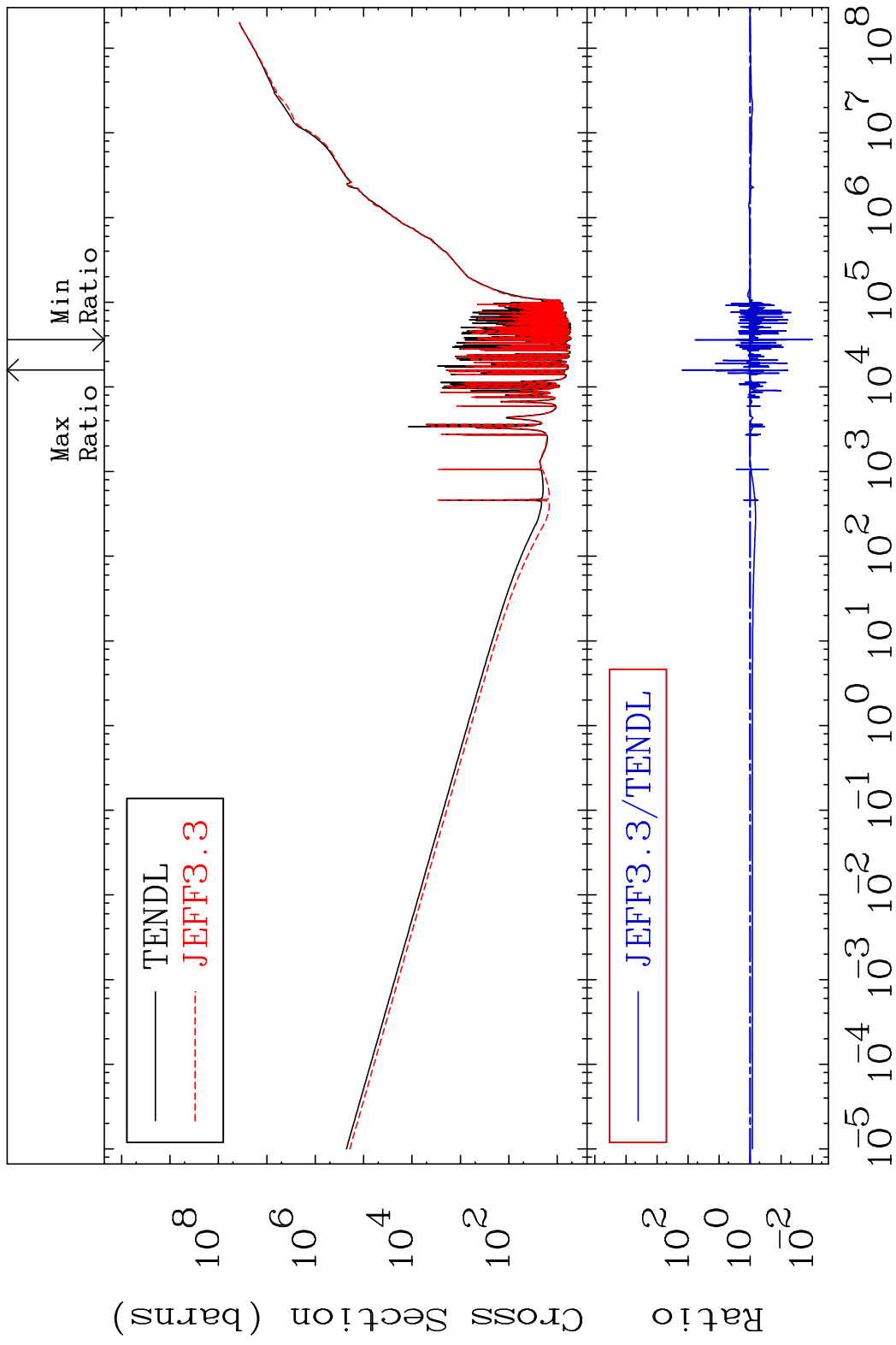
21-Sc-45
-93.39 To 9999. %



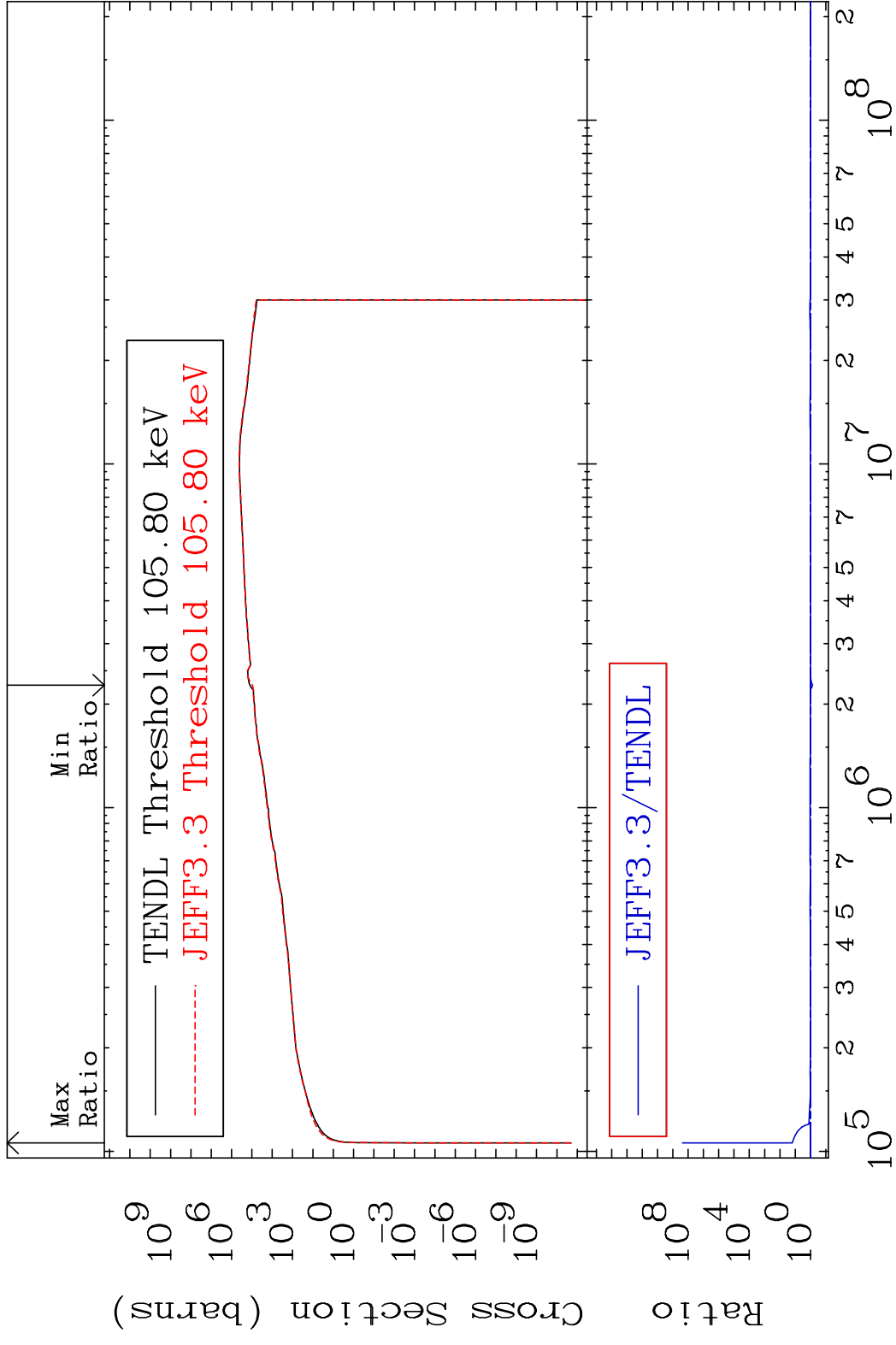
Cross Section (barns)
Ratio

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

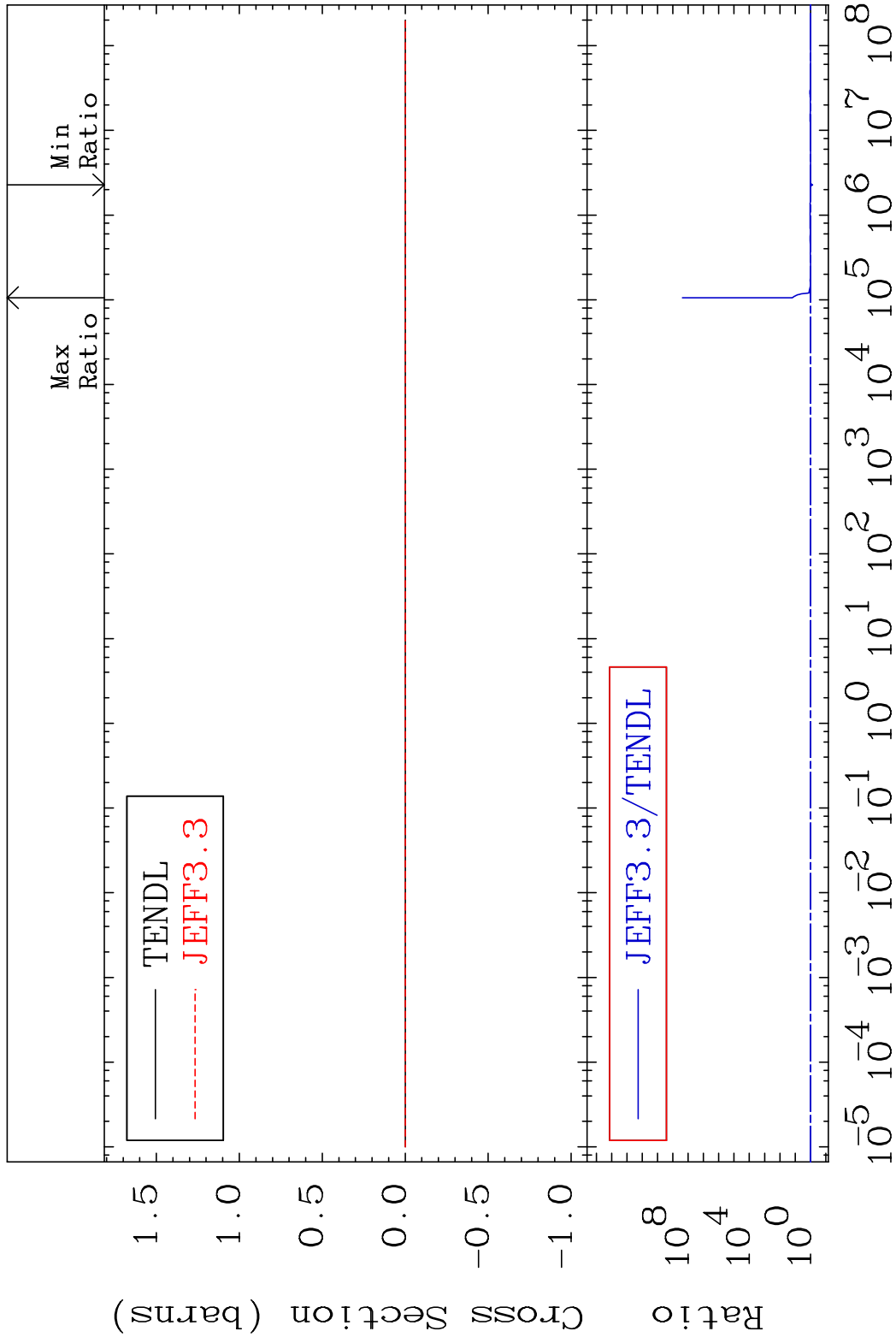
MAT 2125 Kerma non-elastic (all but mt2) 21-Sc-45
 Cross Section -99.02 To 9999. %



MAT 2125 Kerma inelastic (mt51-91) 21-Sc-45
 Cross Section -26.45 To 9999. %



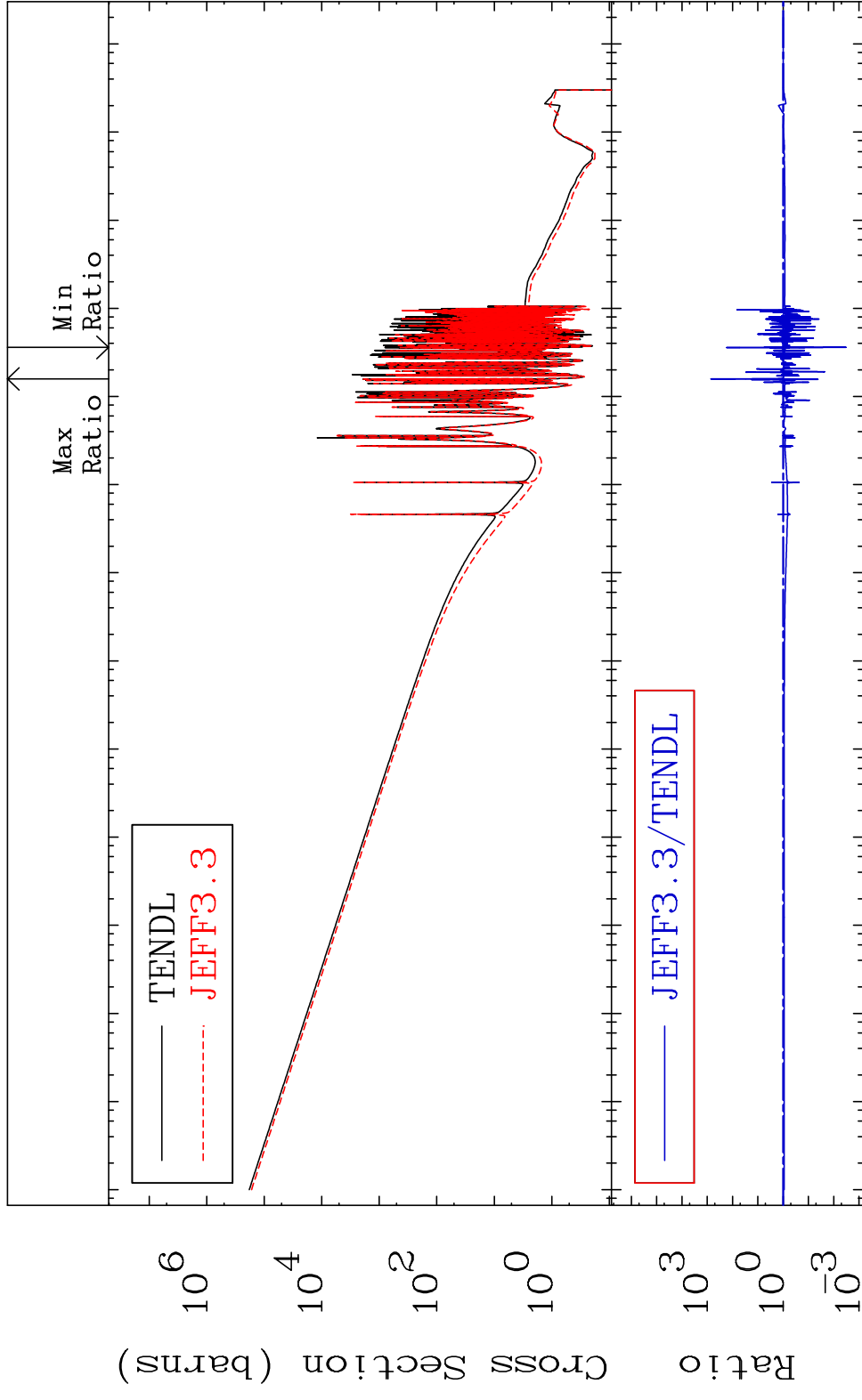
MAT 2125 Kerma fission (mt18 or mt19-20-21-38) 21-Sc-45
 Cross Section -26.45 To 9999. %



MAT 2125

Kerma capture (mt102) 21-Sc-45

Cross Section -99.68 To 9999. %

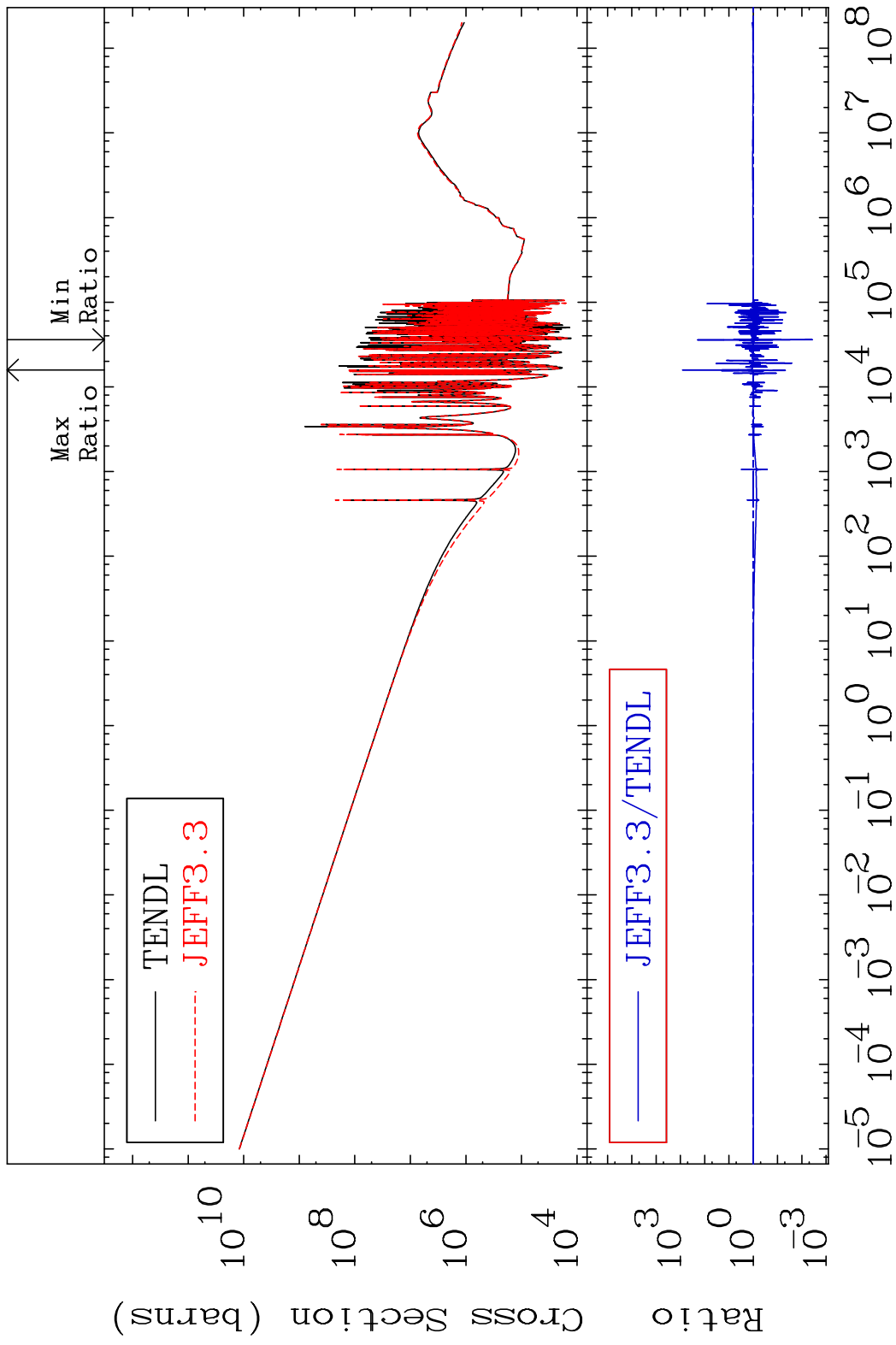


70

Incident Energy (eV)

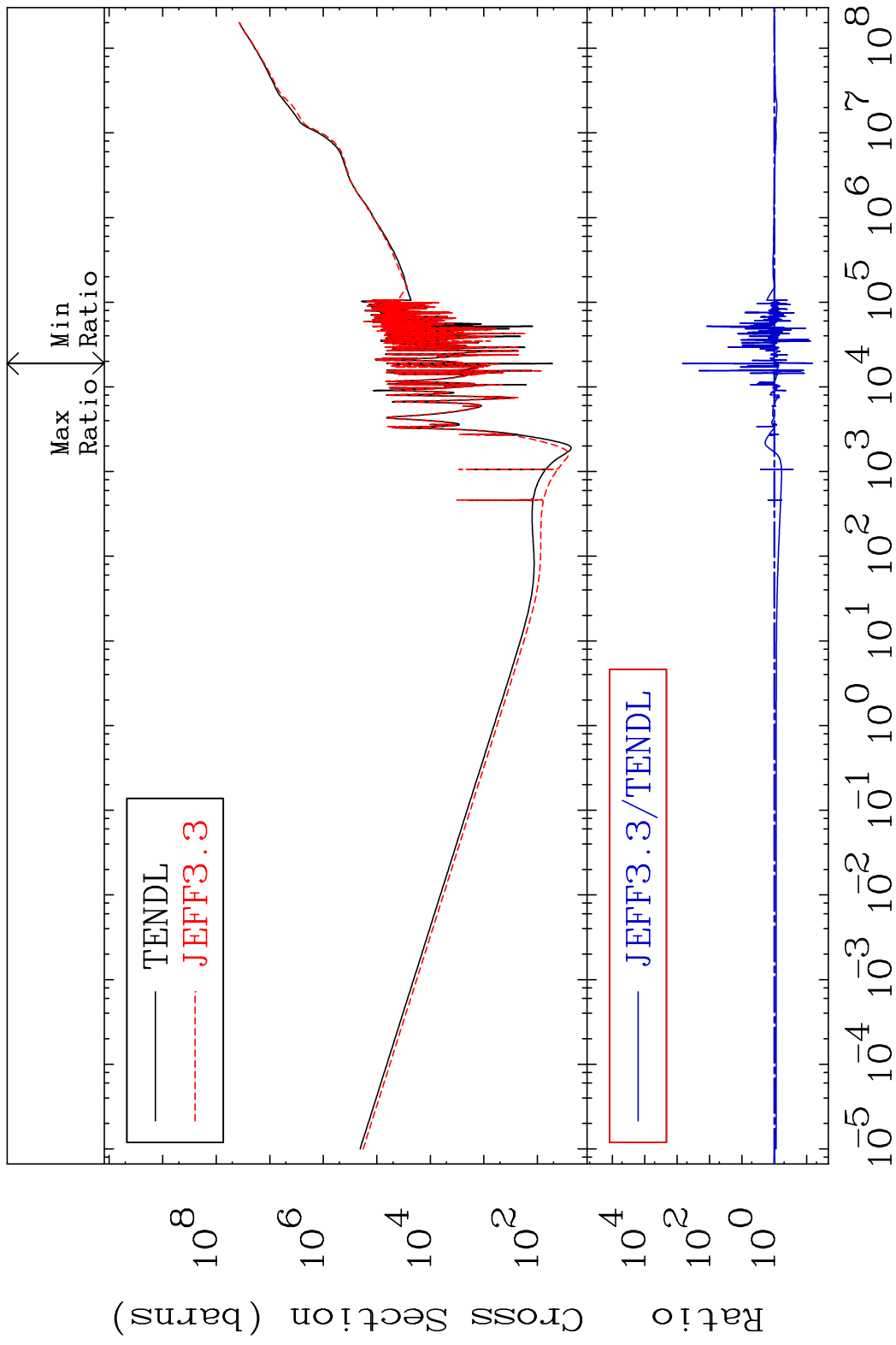
21-Sc-45

MAT 2125 Total photon (eV-barns) 21-Sc-45
Cross Section -99.64 To 9999. %



71 Incident Energy (eV) 21-Sc-45

MAT 2125 Total kinematic kerma (high limit) 21-Sc-45
 Cross Section -93.39 To 9999. %

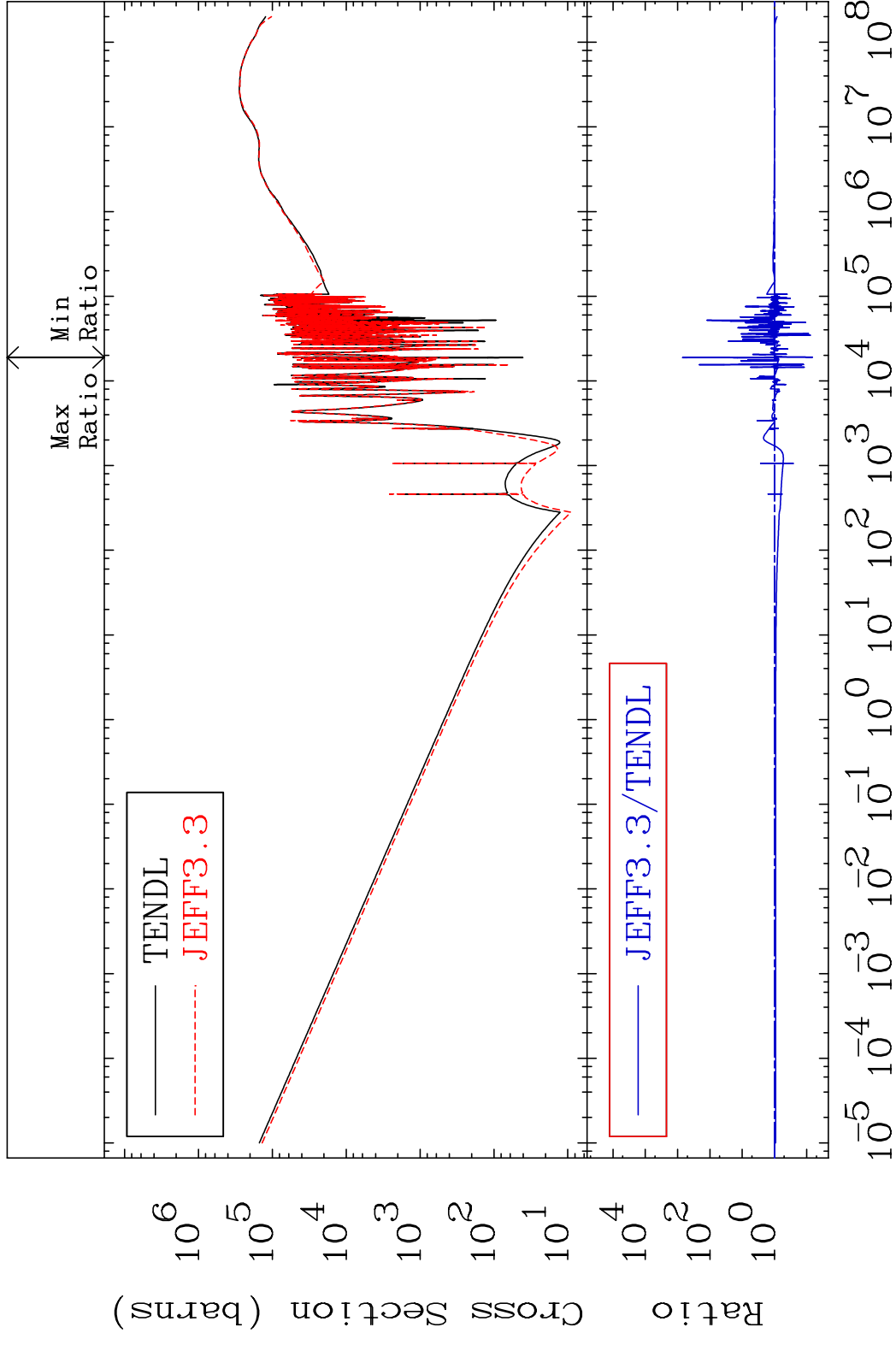


MAT 2125

Dpa total (eV-barns)

21-Sc-45

Cross Section -93.40 To 9999. %

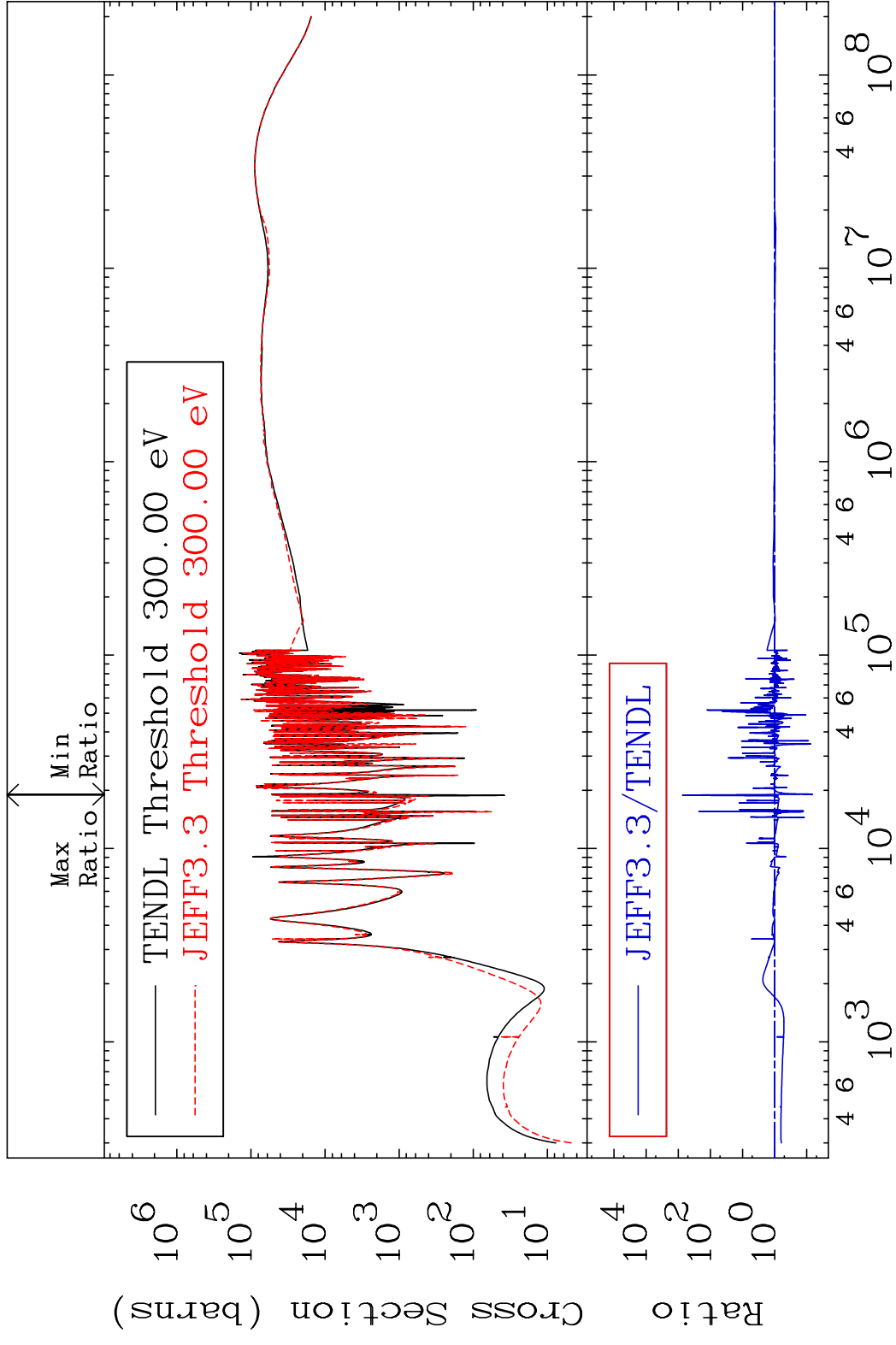


73

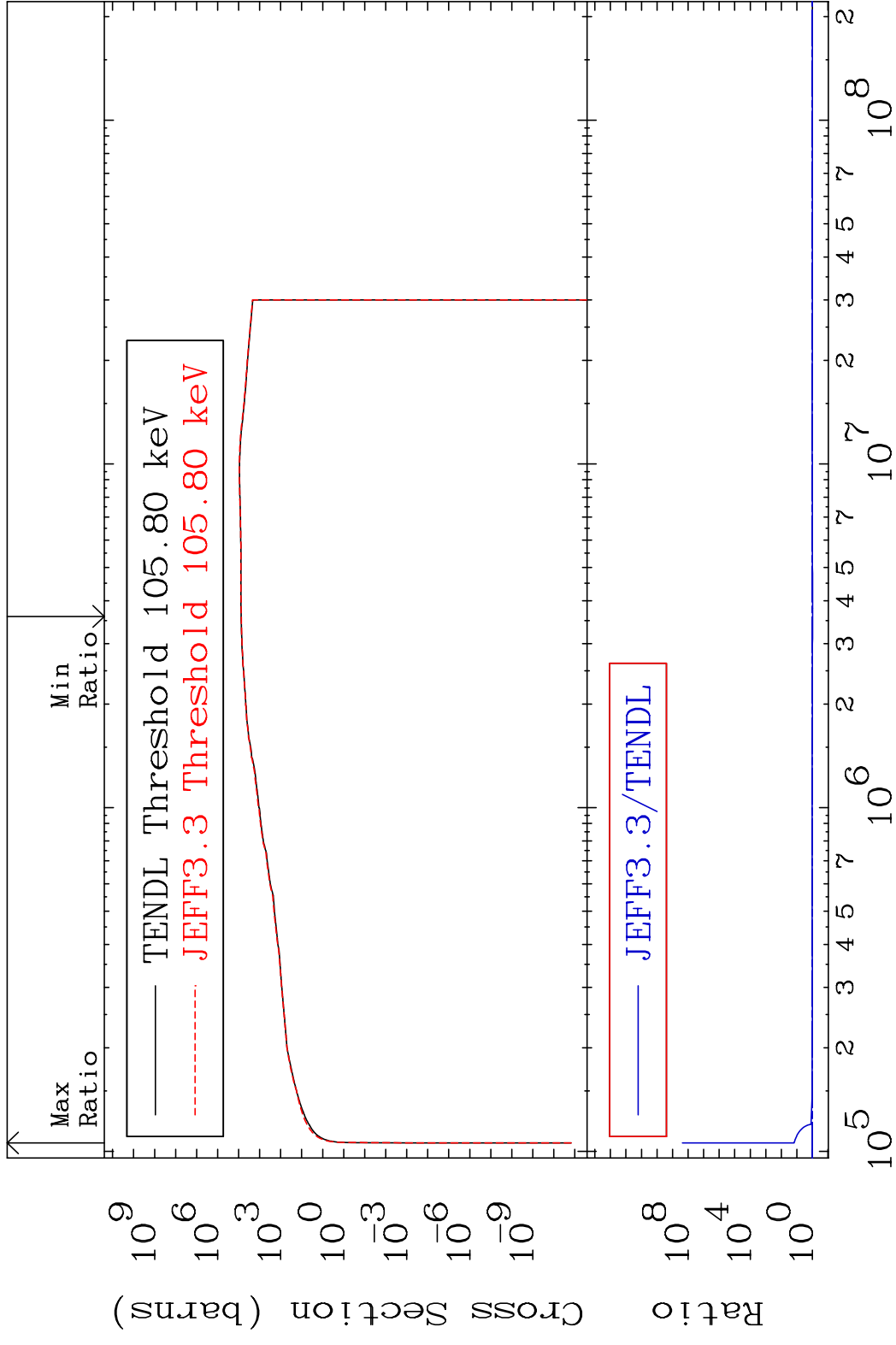
Incident Energy (eV)

21-Sc-45

MAT 2125 Dpa elastic (mt2) 21-Sc-45
 Cross Section -93.39 To 9999. %

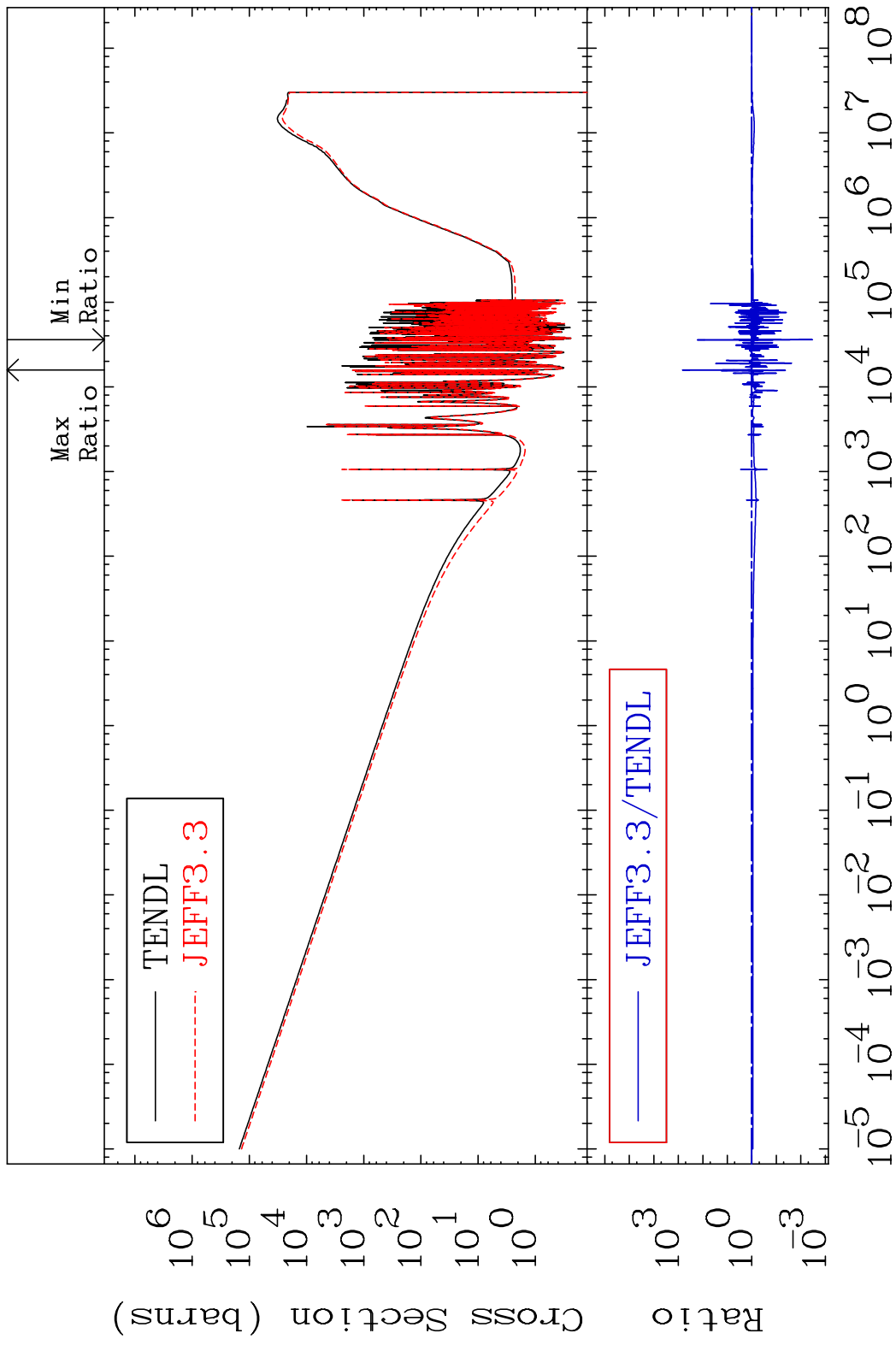


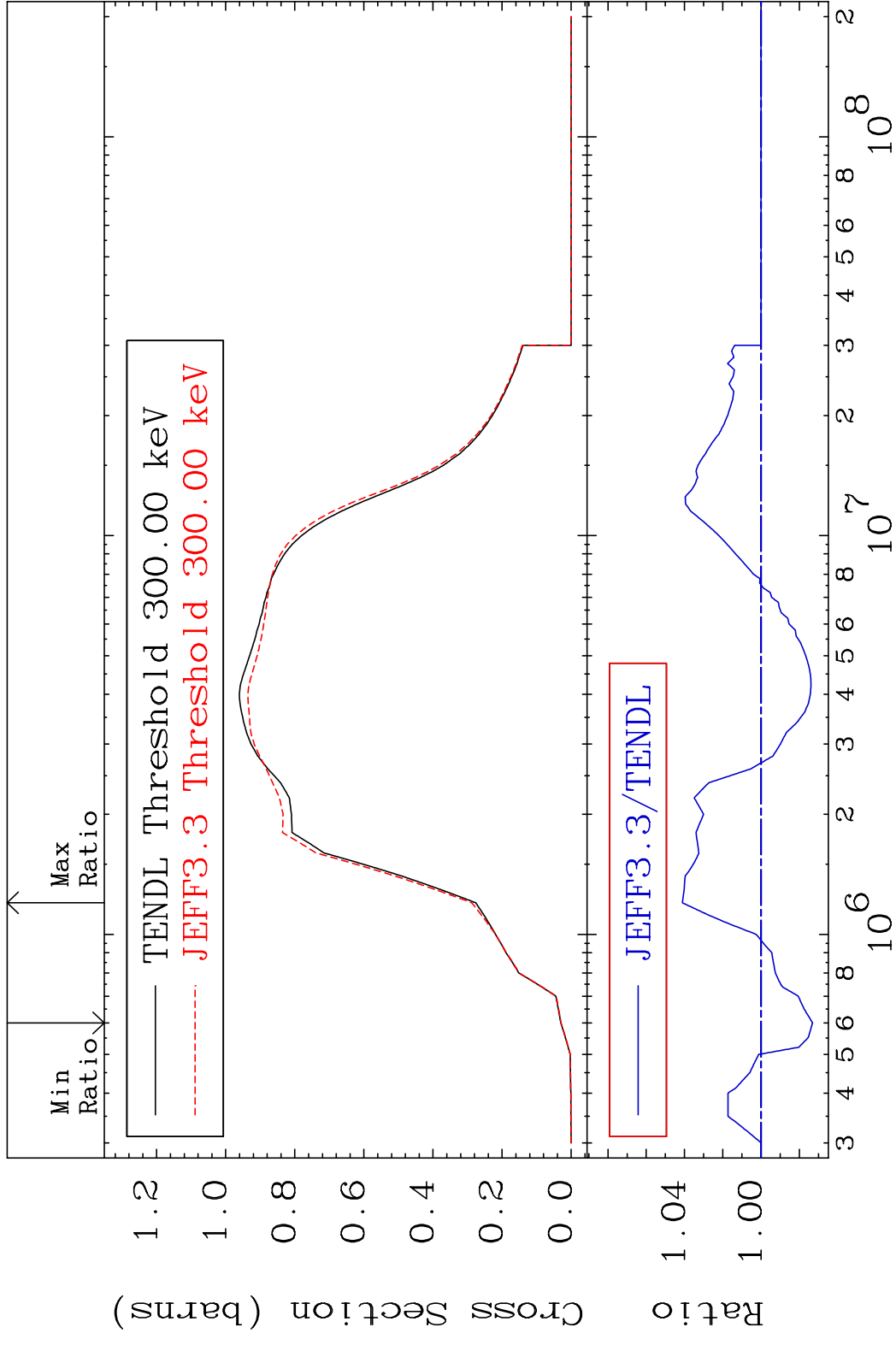
MAT 2125 Dpa inelastic (mt51-91) 21-Sc-45
 Cross Section -1.812 To 9999. %

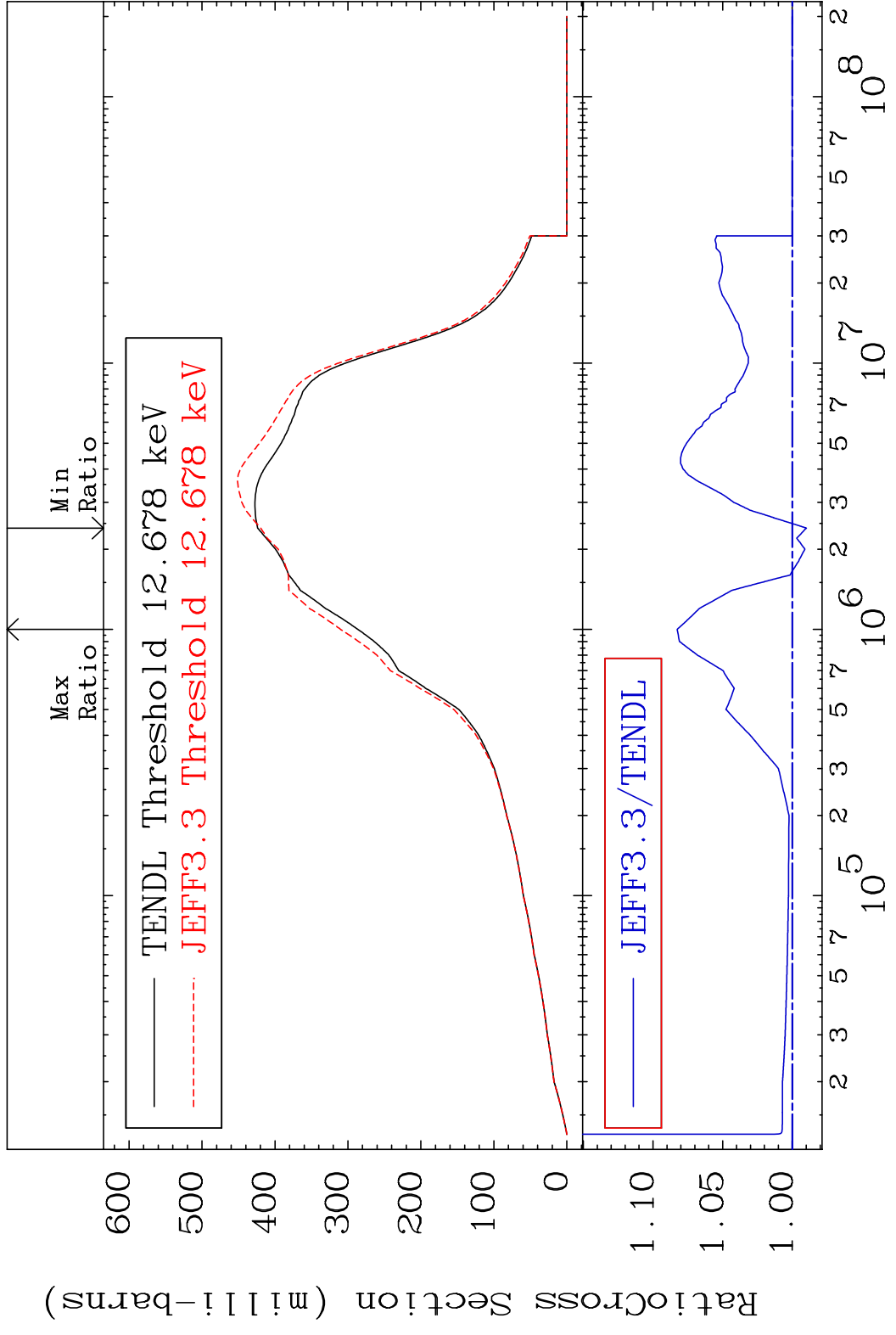


75 Incident Energy (eV) 21-Sc-45

MAT 2125 Dpa disappearance (mt102 -120) 21-Sc-45
 Cross Section -99.67 To 9999. %







MAT 2125 (n,2n):21-Sc-44g 21-Sc-45
 Radionuclide Production Cross Section 72.67 %

