

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

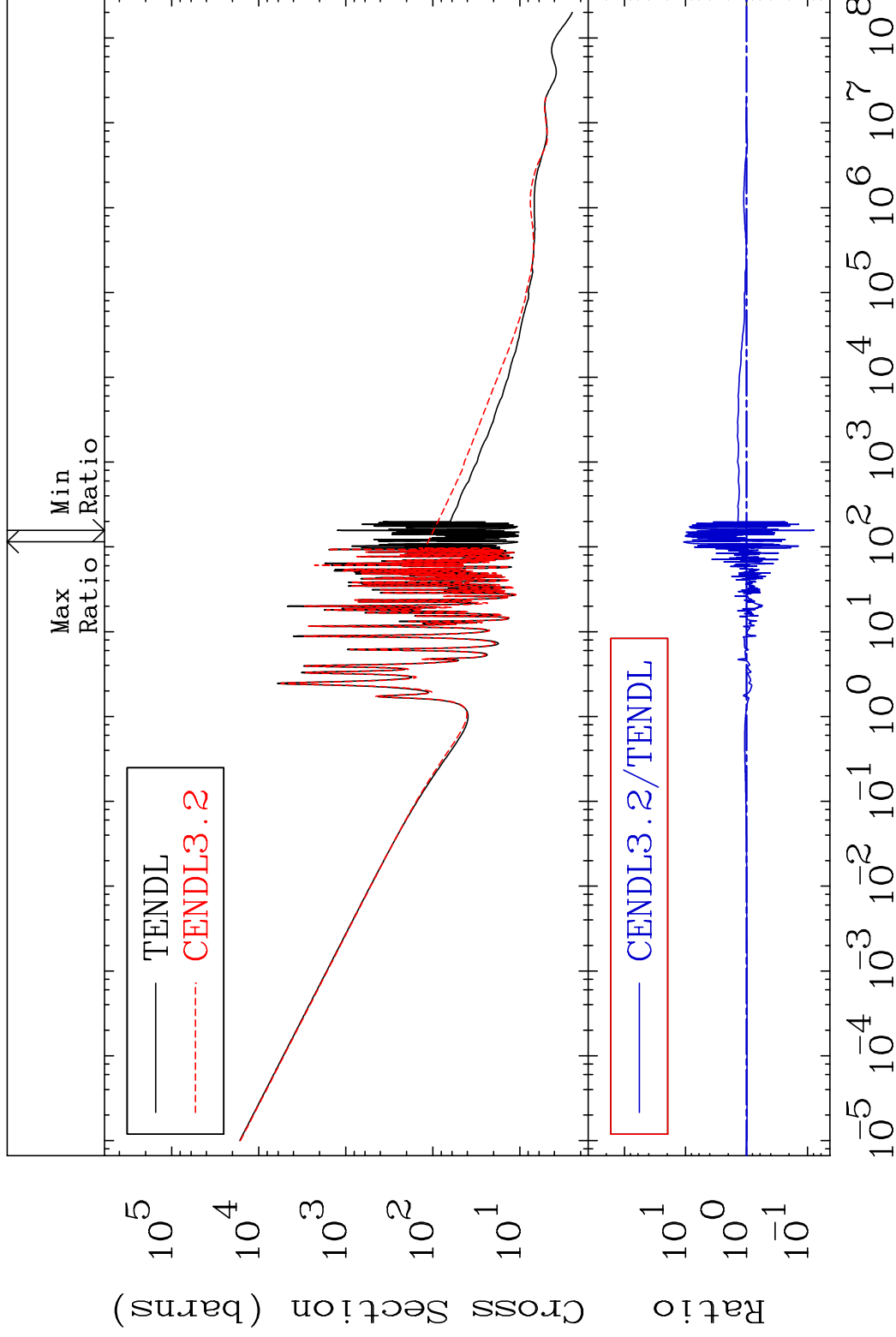
MAT 6331

Total

63-Eu-153

Cross Section

-92.22 To 973.5 %



1

Incident Energy (eV)

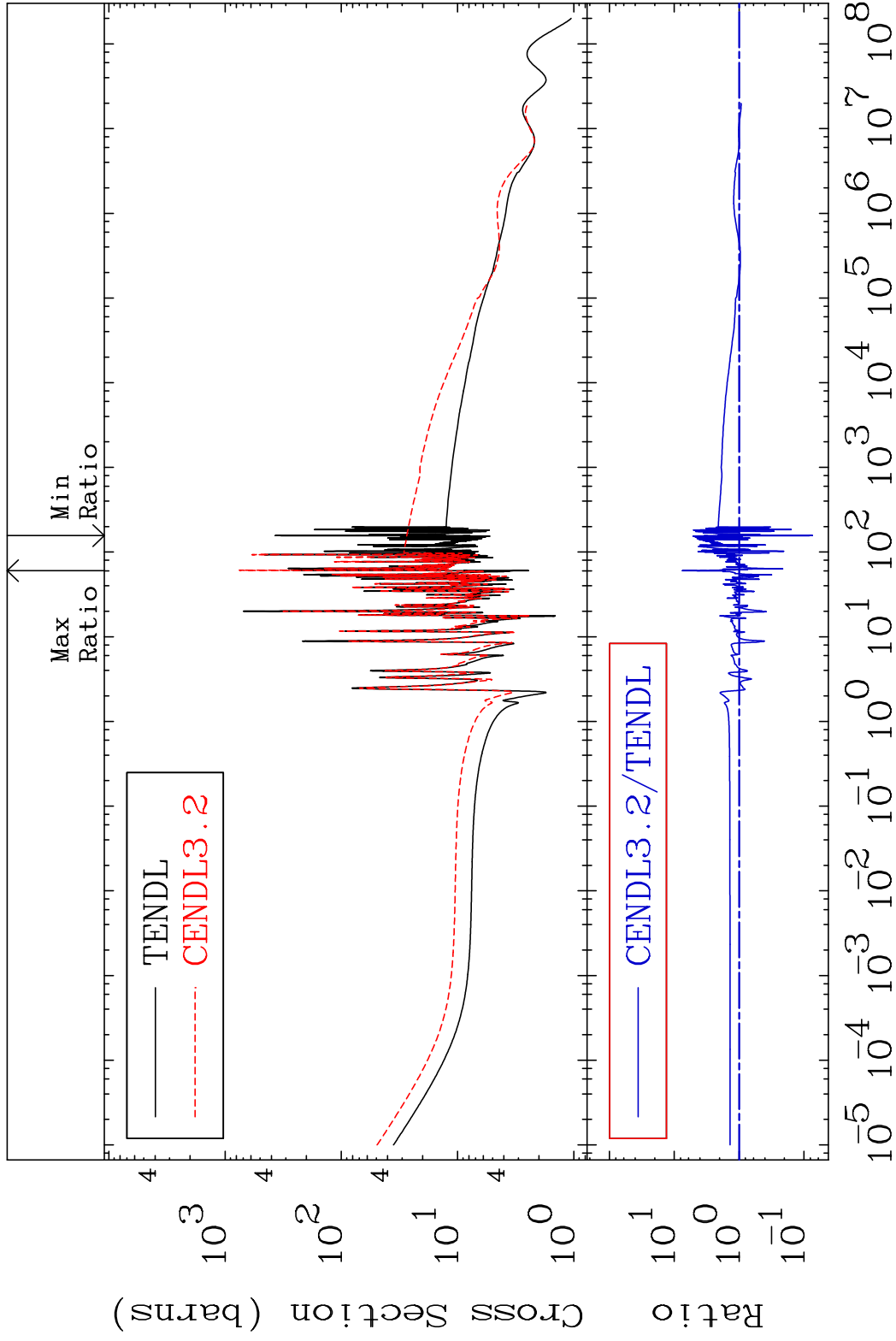
63-Eu-153

MAT 6331

Elastic

63-Eu-153

Cross Section -92.63 To 650.0 %

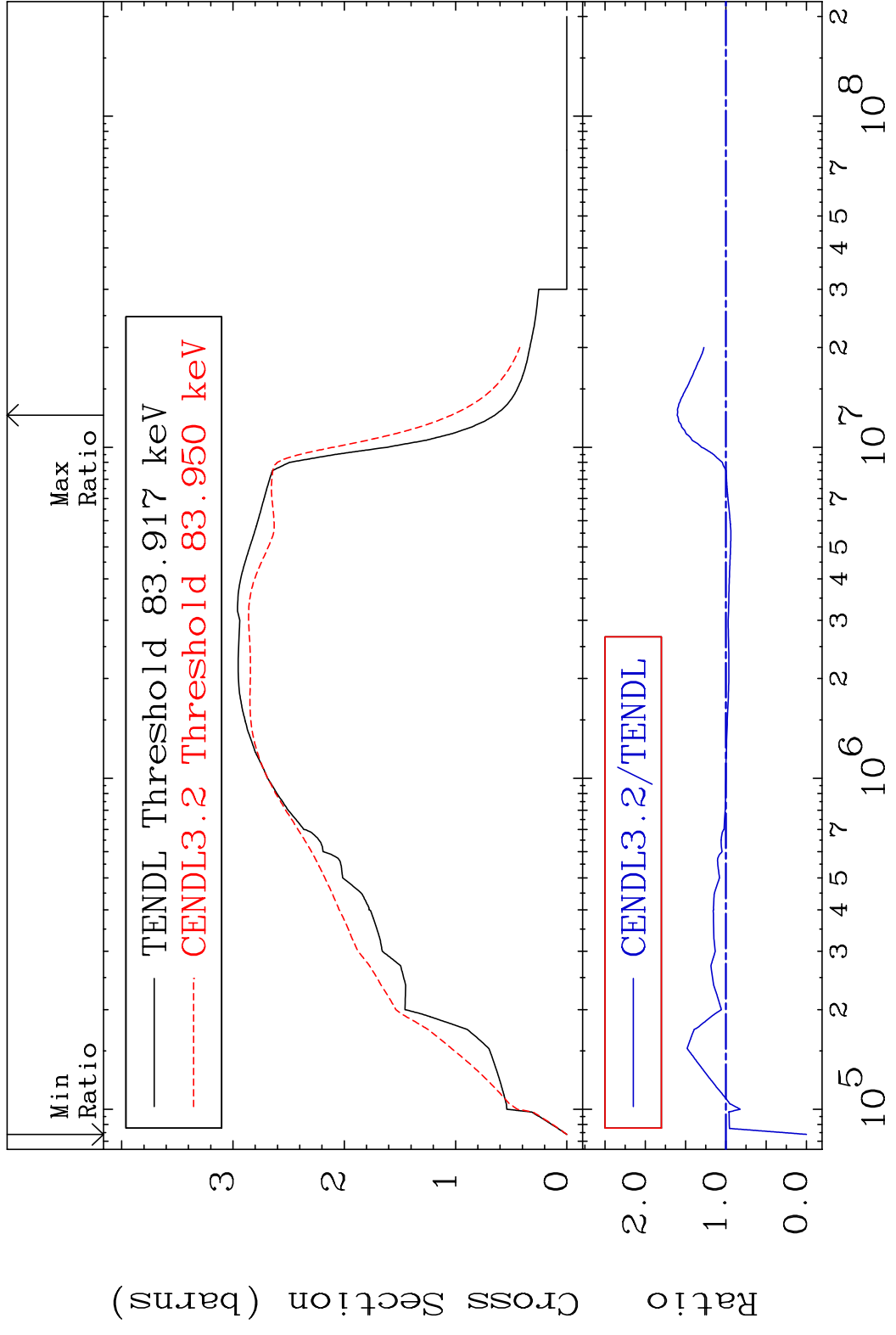


2

Incident Energy (eV)

63-Eu-153

MAT 6331 Inelastic Cross Section -100.0 To 60.47 % 63-Eu-153



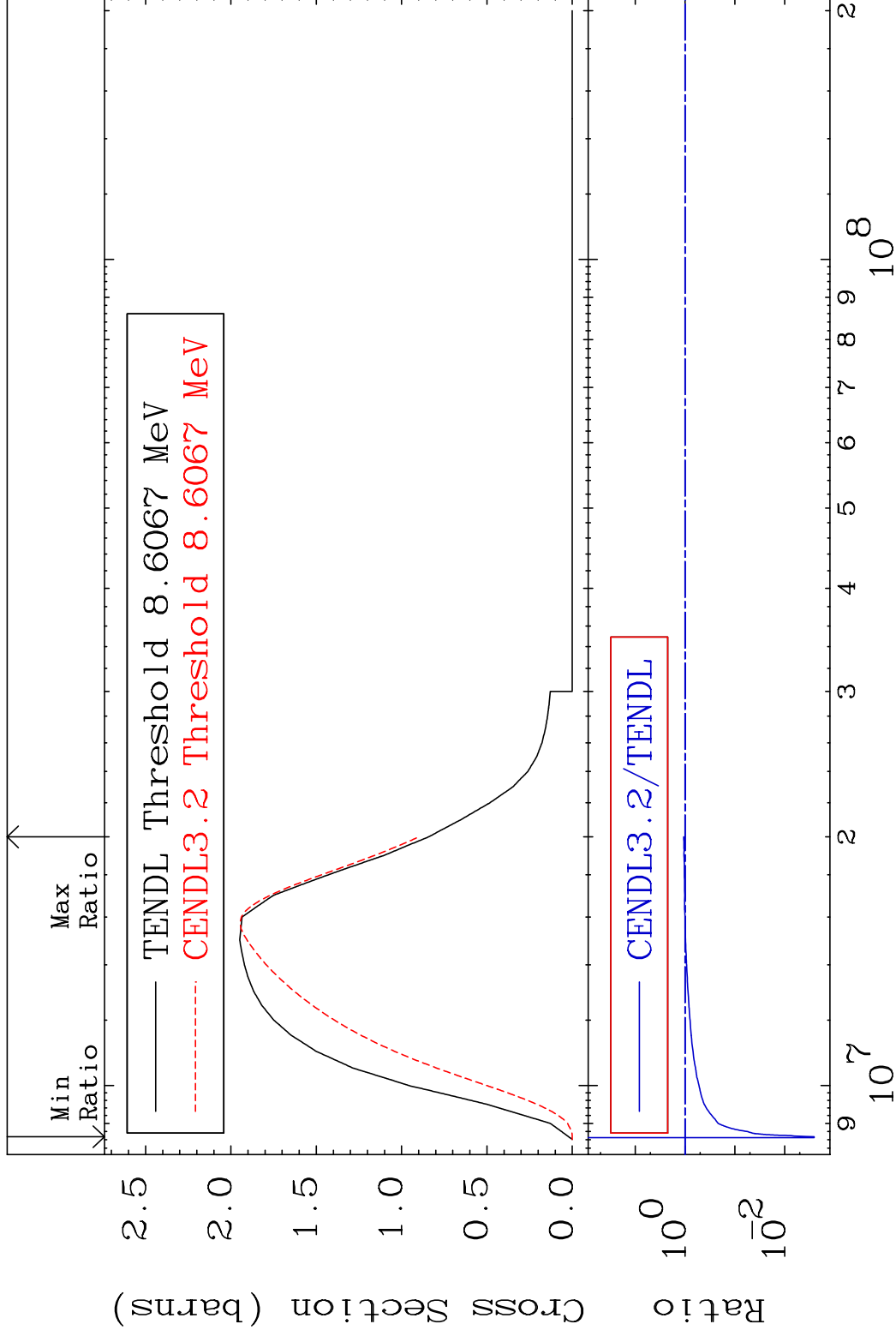
3 2 3 4 5 7 2 3 4 5 7 10⁵ 10⁶ 10⁷ 10⁸ 63-Eu-153

MAT 6331

(n,2n)

63-Eu-153

Cross Section -99.74 To 6.766 %



4

Incident Energy (eV)

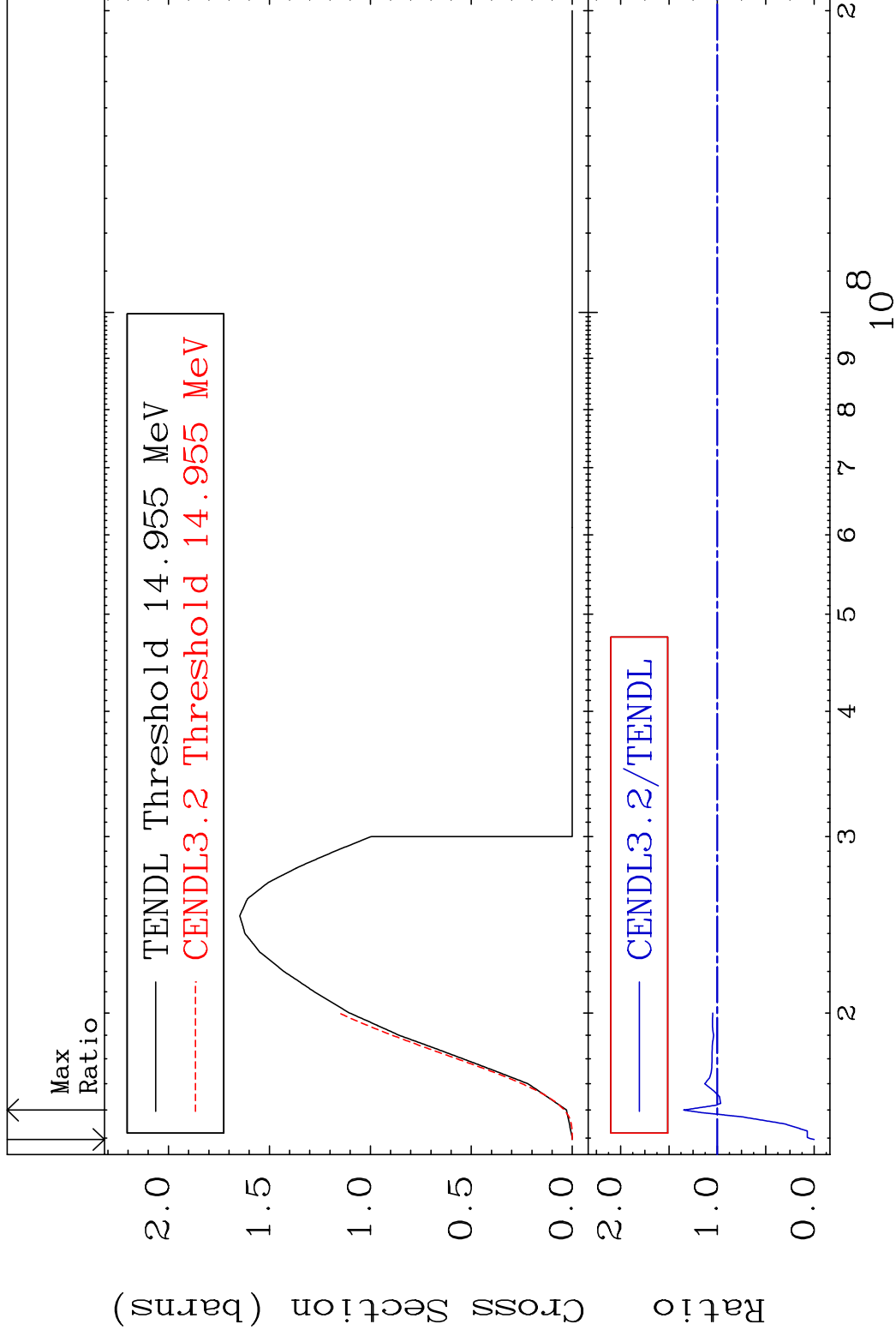
63-Eu-153

MAT 6331

(n,3n)

63-Eu-153

Cross Section -100.0 To 34.81 %



5

Incident Energy (eV)

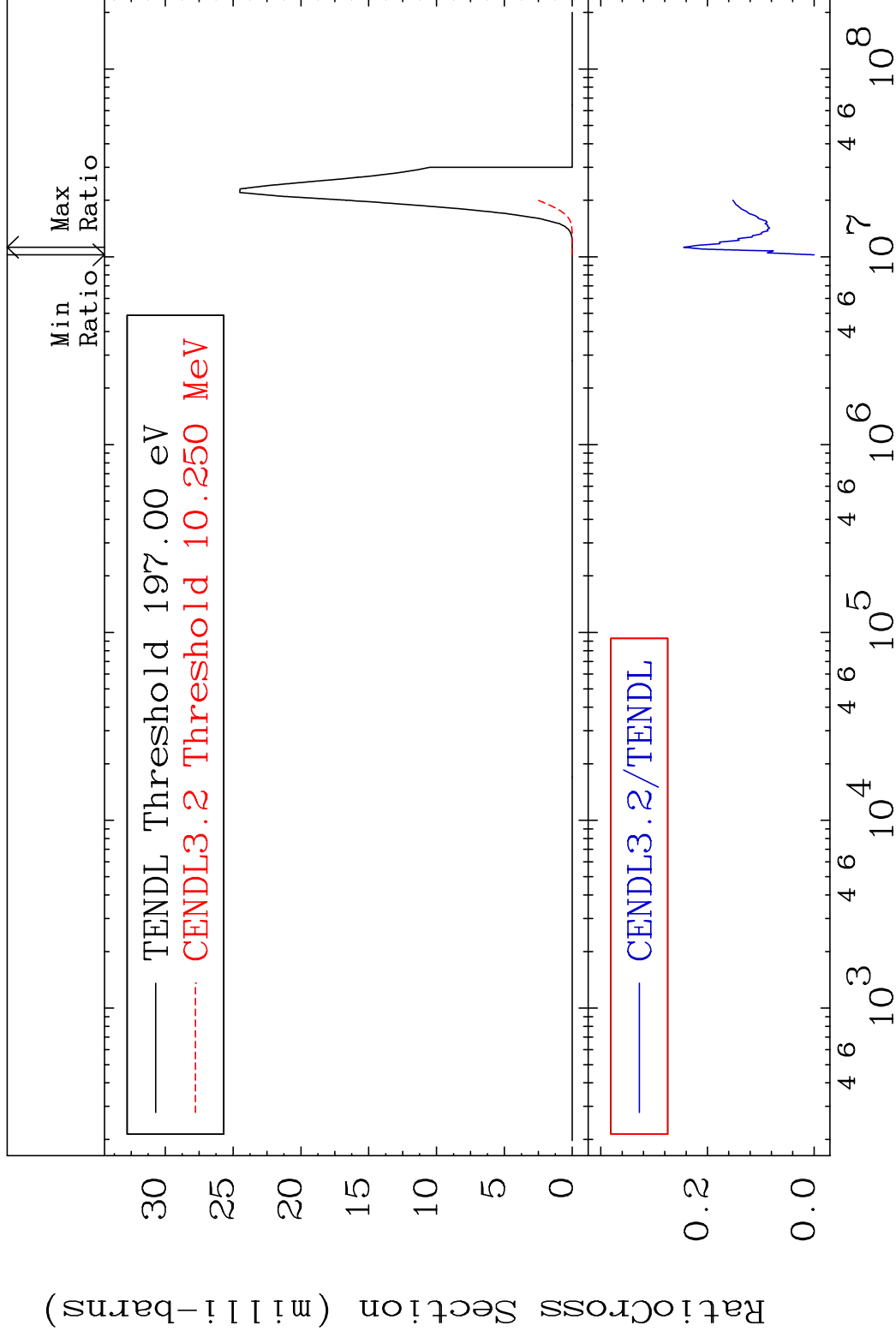
63-Eu-153

MAT 6331

(n, n') α

63-Eu-153

Cross Section -100.0 To -75.54%



6

Incident Energy (eV)

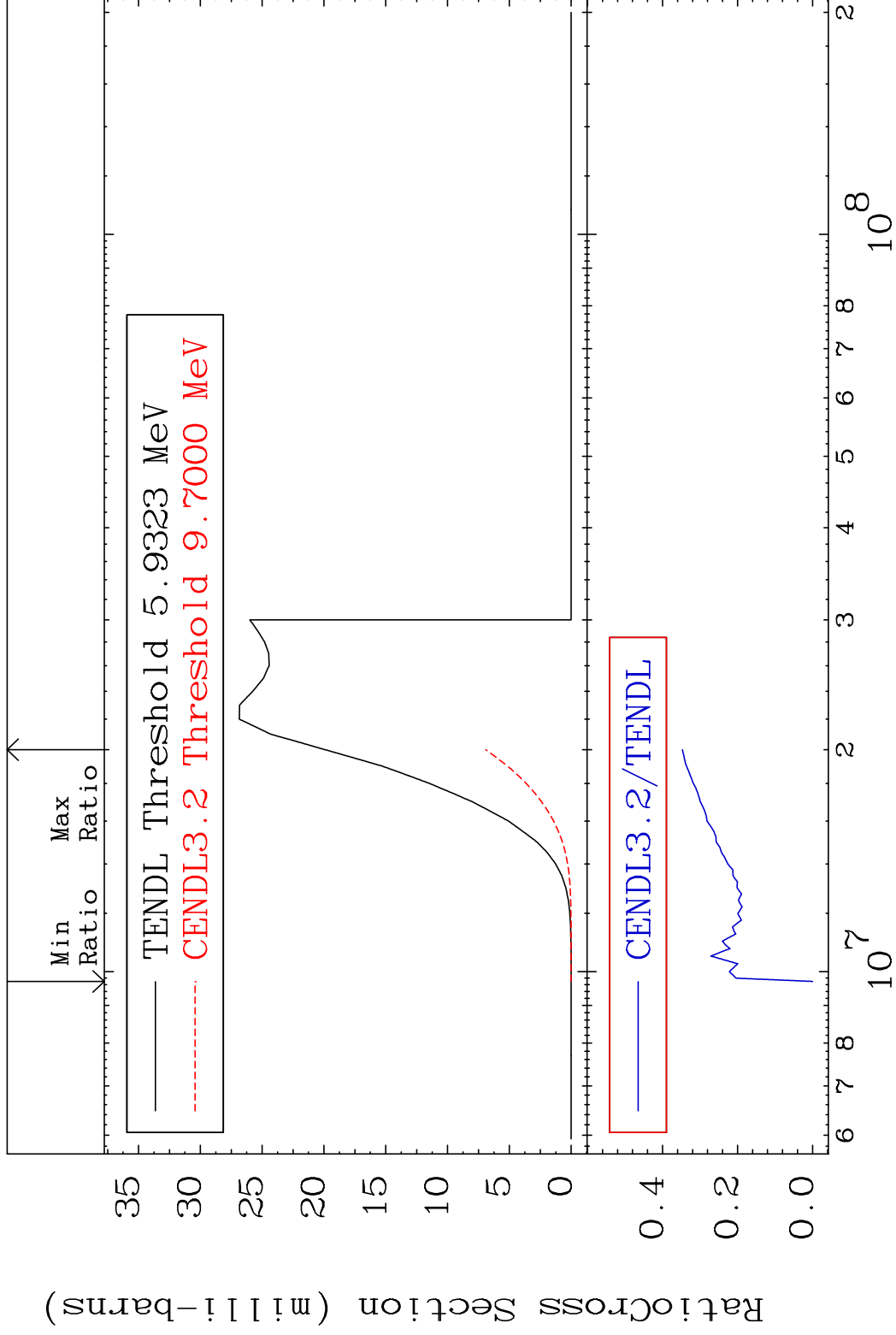
63-Eu-153

MAT 6331

(n, n') p

63-Eu-153

Cross Section -100.0 To -65.28%

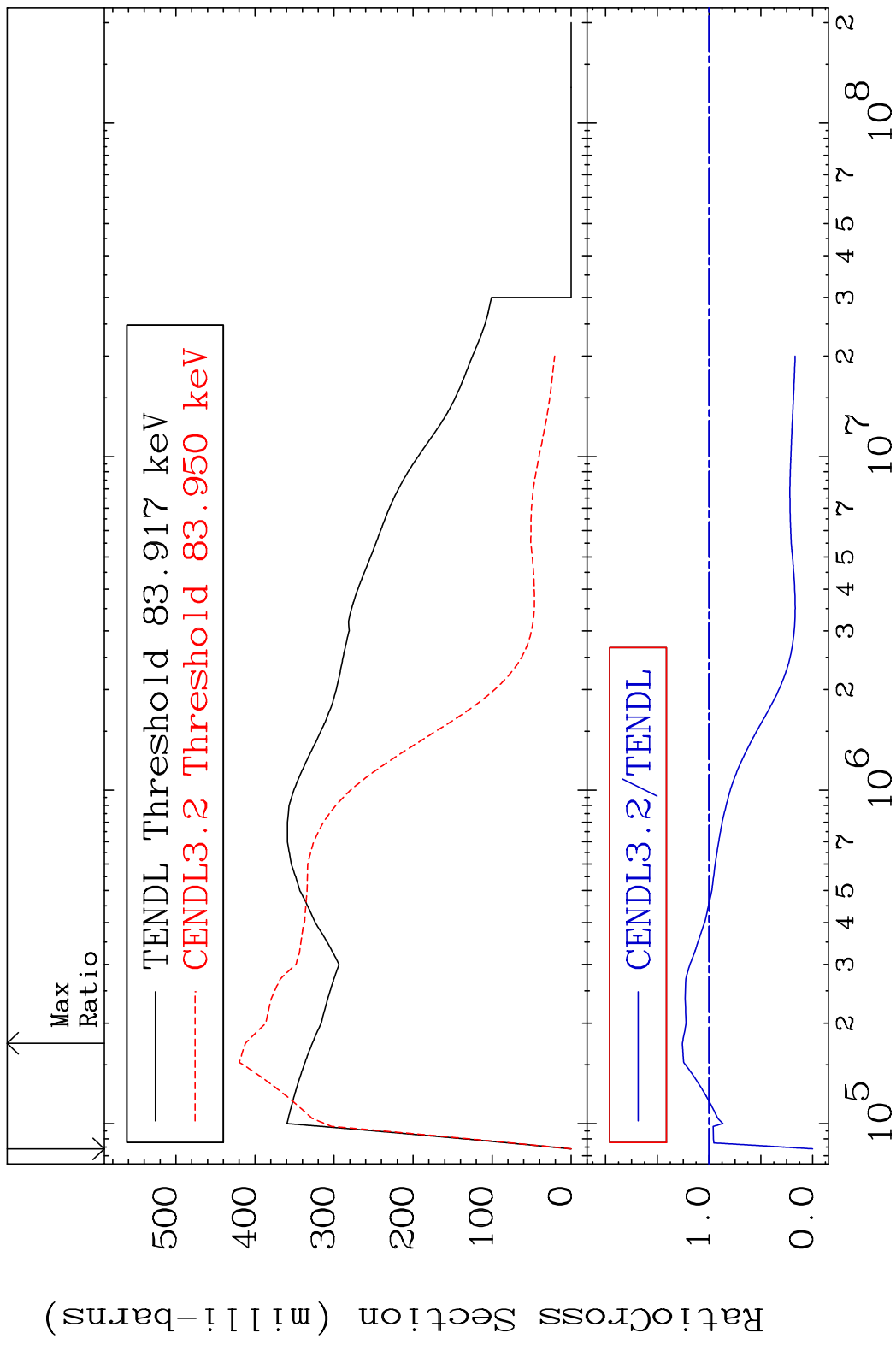


7

Incident Energy (eV)

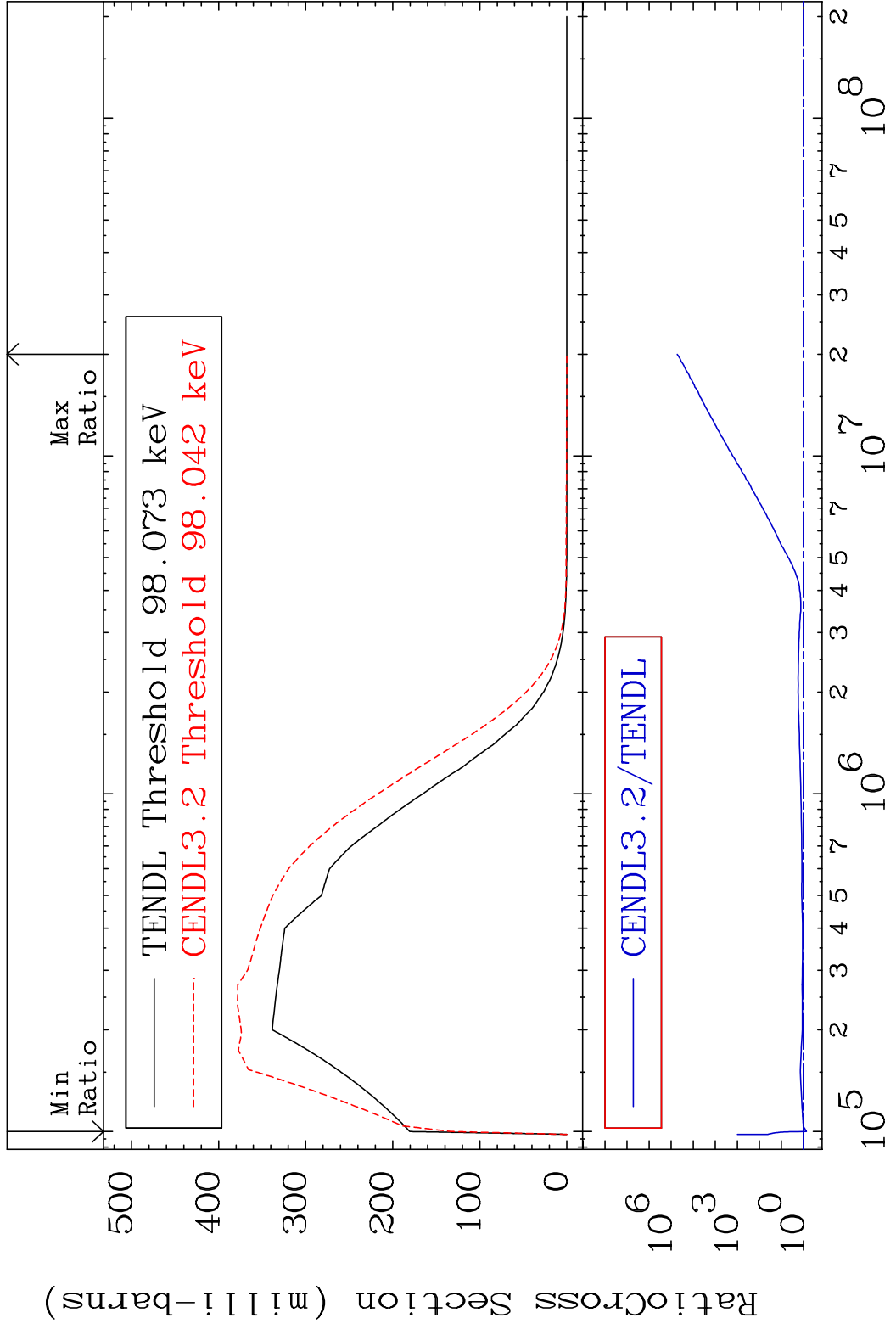
63-Eu-153

MAT 6331 MT= 51 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 25.85 %



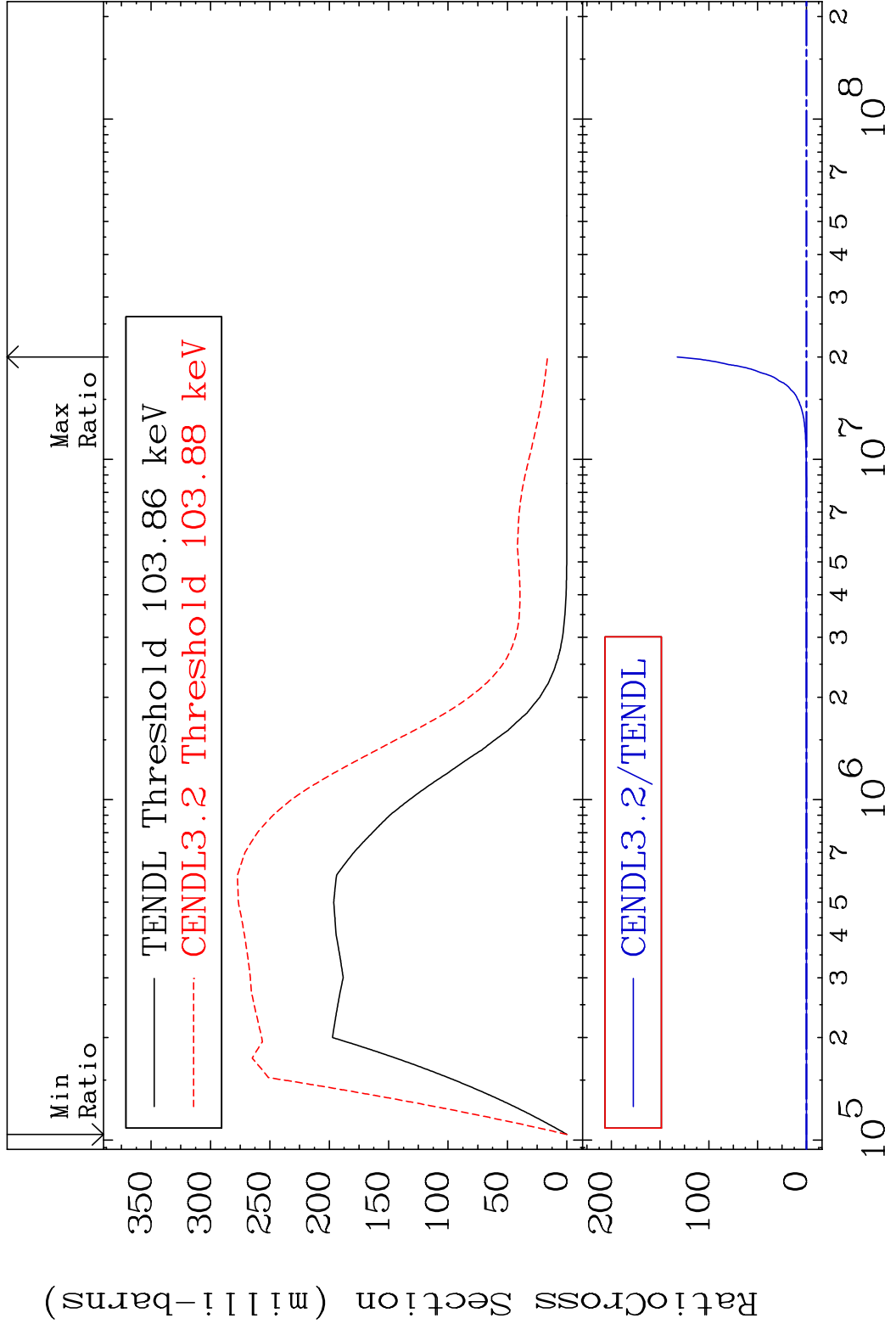
8 Incident Energy (eV) 63-Eu-153

MAT 6331 MT= 52 (n,n') Level 63-Eu-153
 Cross Section -26.54 To 9999. %



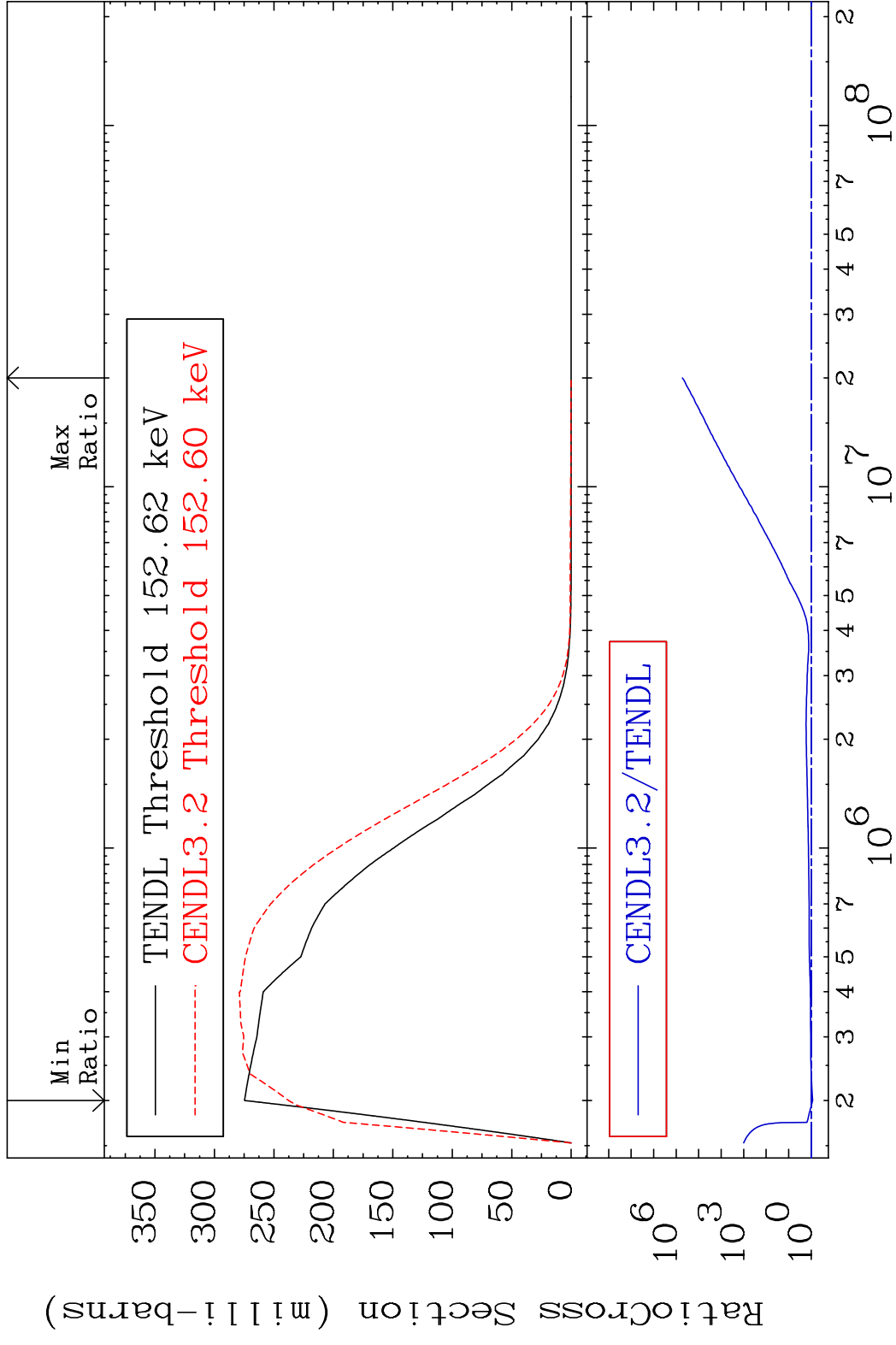
9 Incident Energy (eV) 63-Eu-153

MAT 6331 MT= 53 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 9999. %

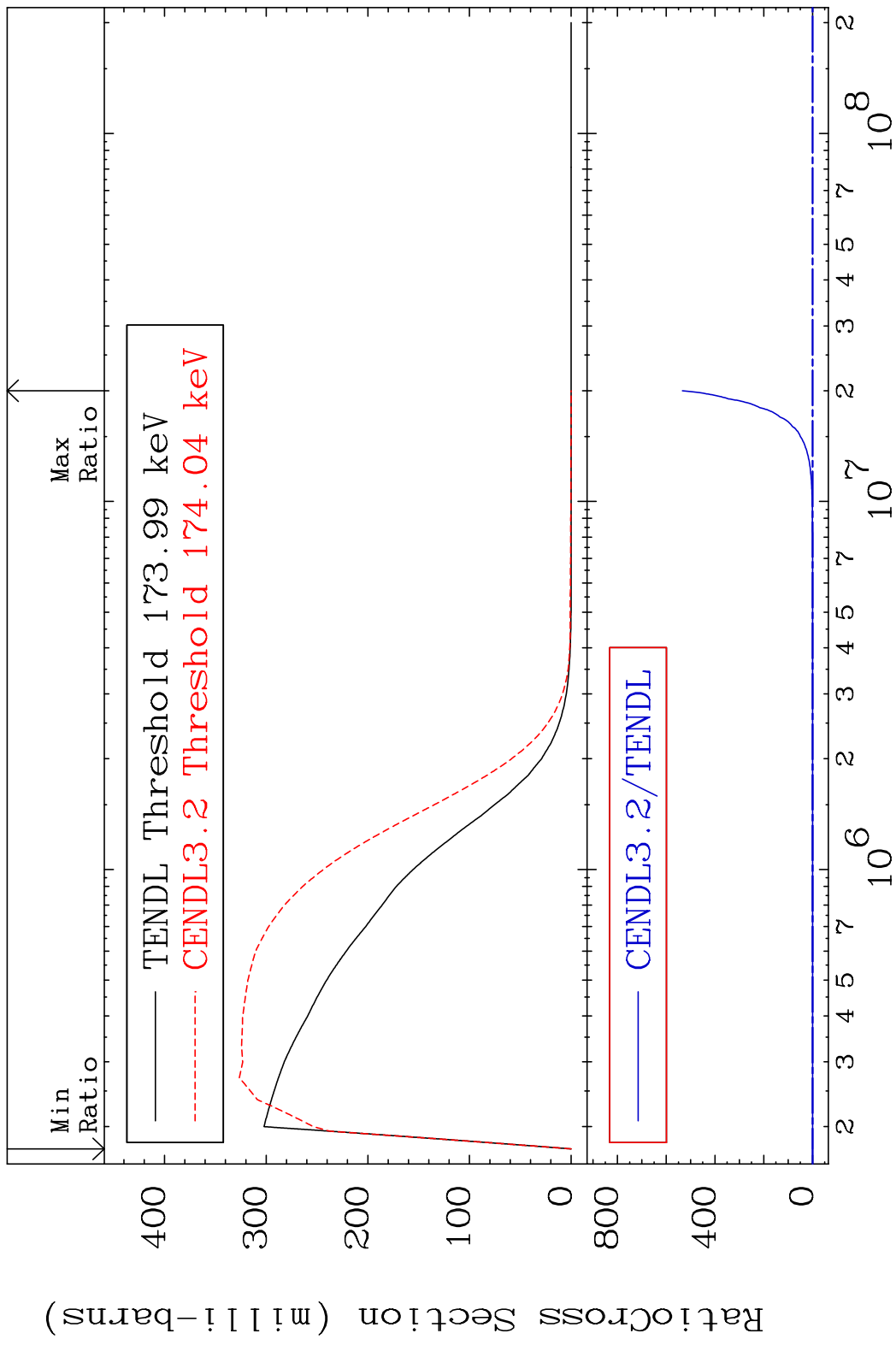


10 2 3 4 5 6 7 8 2 3 4 5 6 7 8 2 10⁵ 10⁶ 10⁷ 10⁸ 63-Eu-153

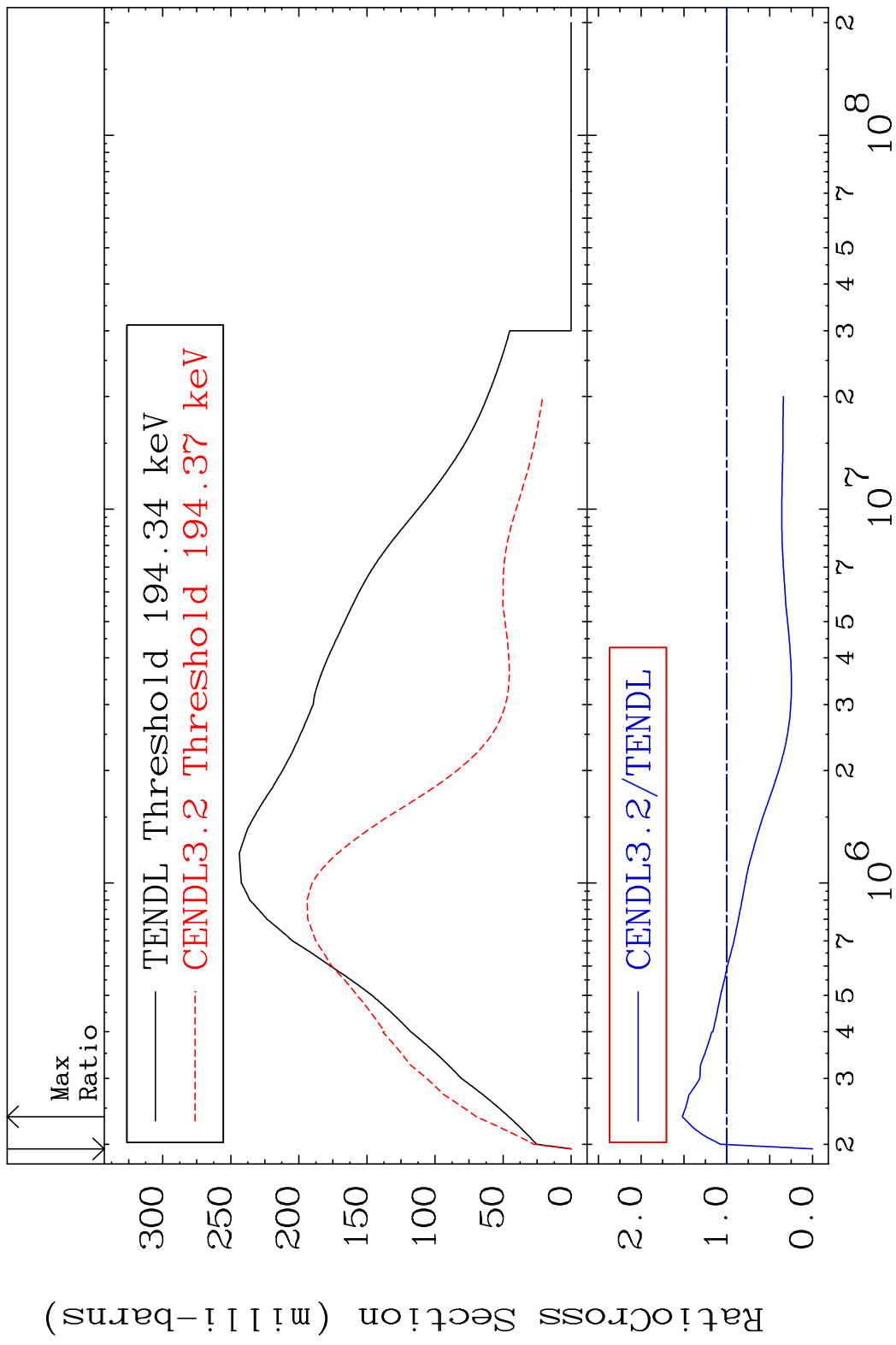
MAT 6331 MT= 54 (n,n') Level 63-Eu-153
 Cross Section -13.49 To 9999. %



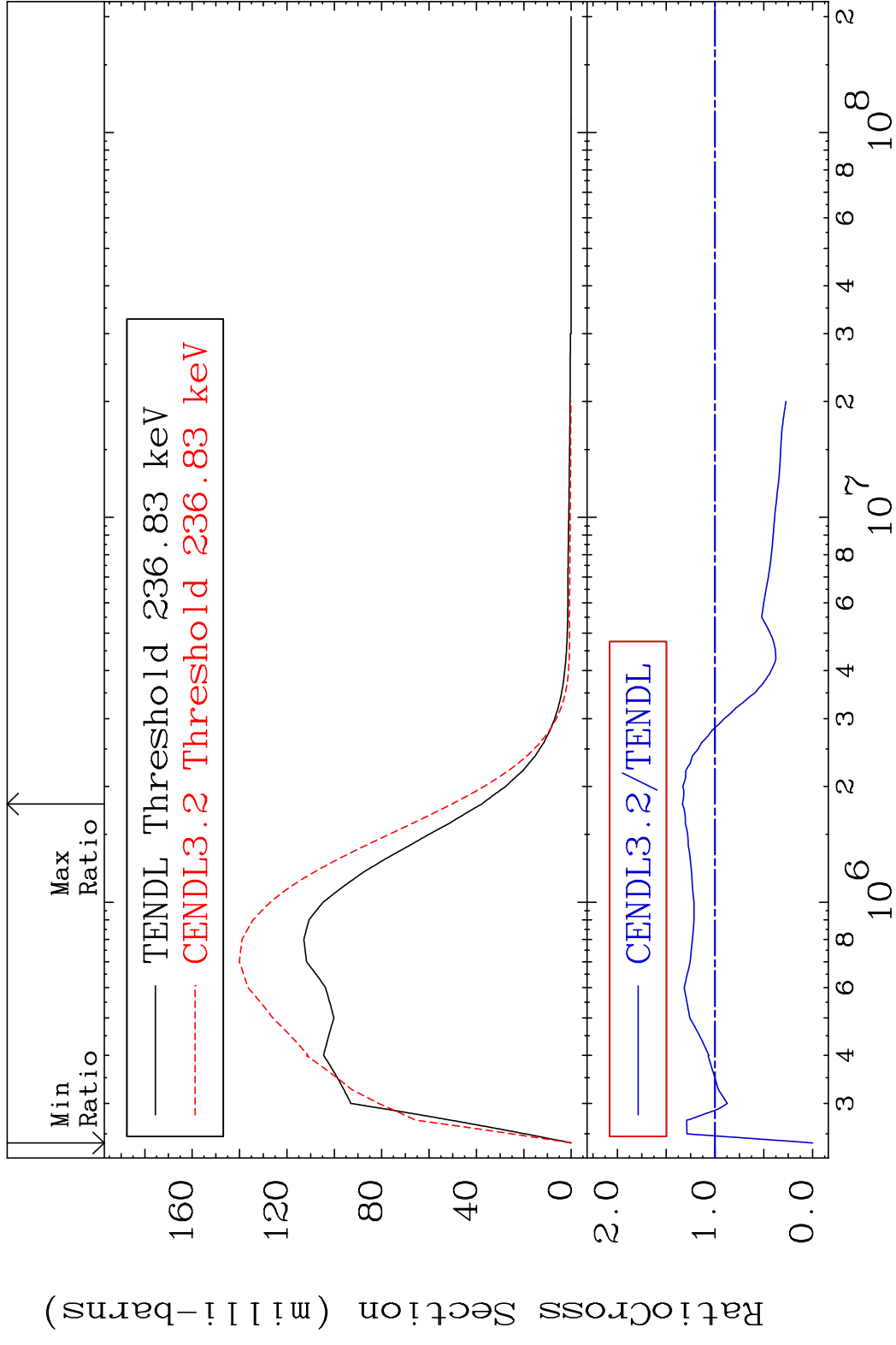
MAT 6331 MT= 55 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 9999. %



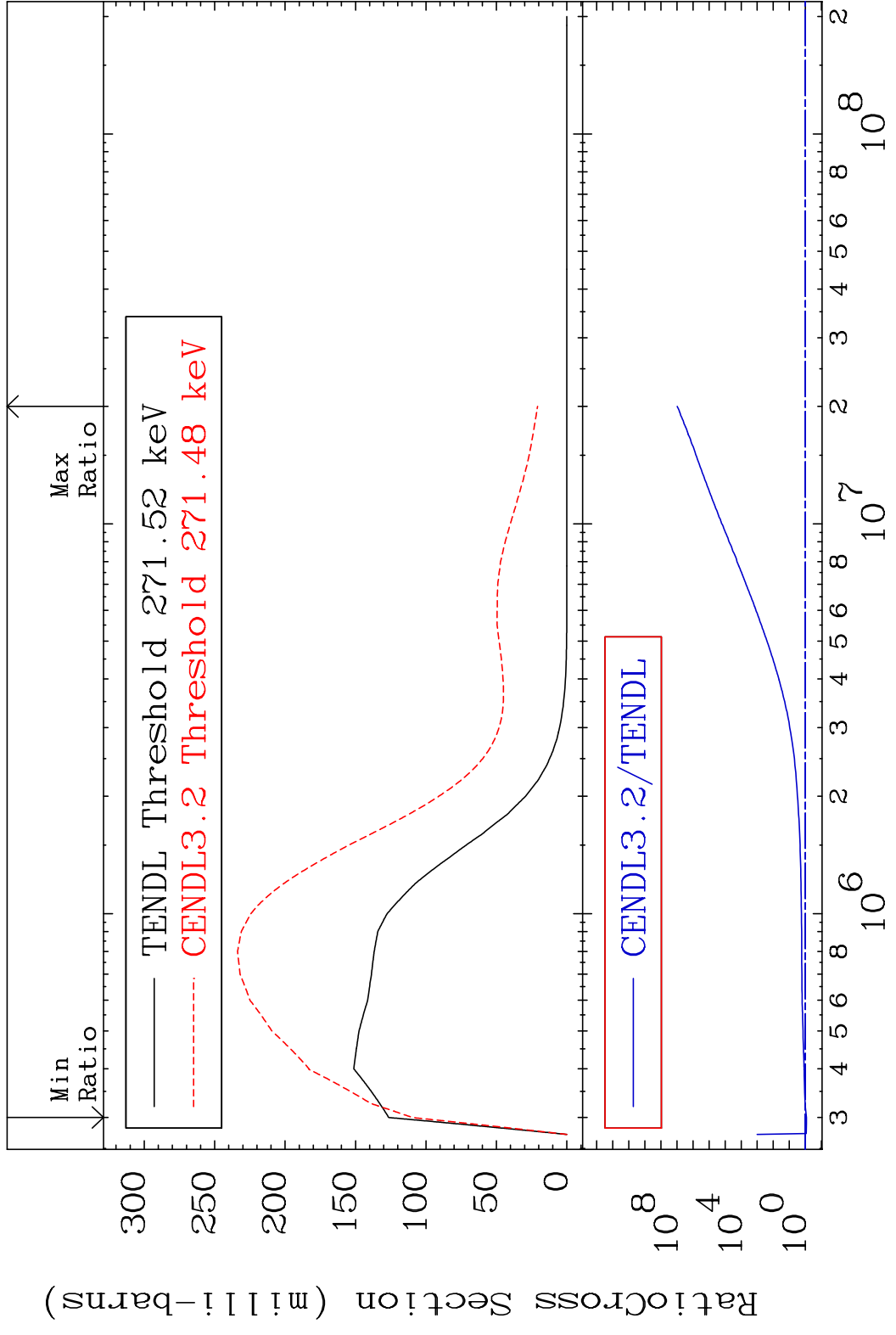
MAT 6331 MT= 56 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 51.98 %



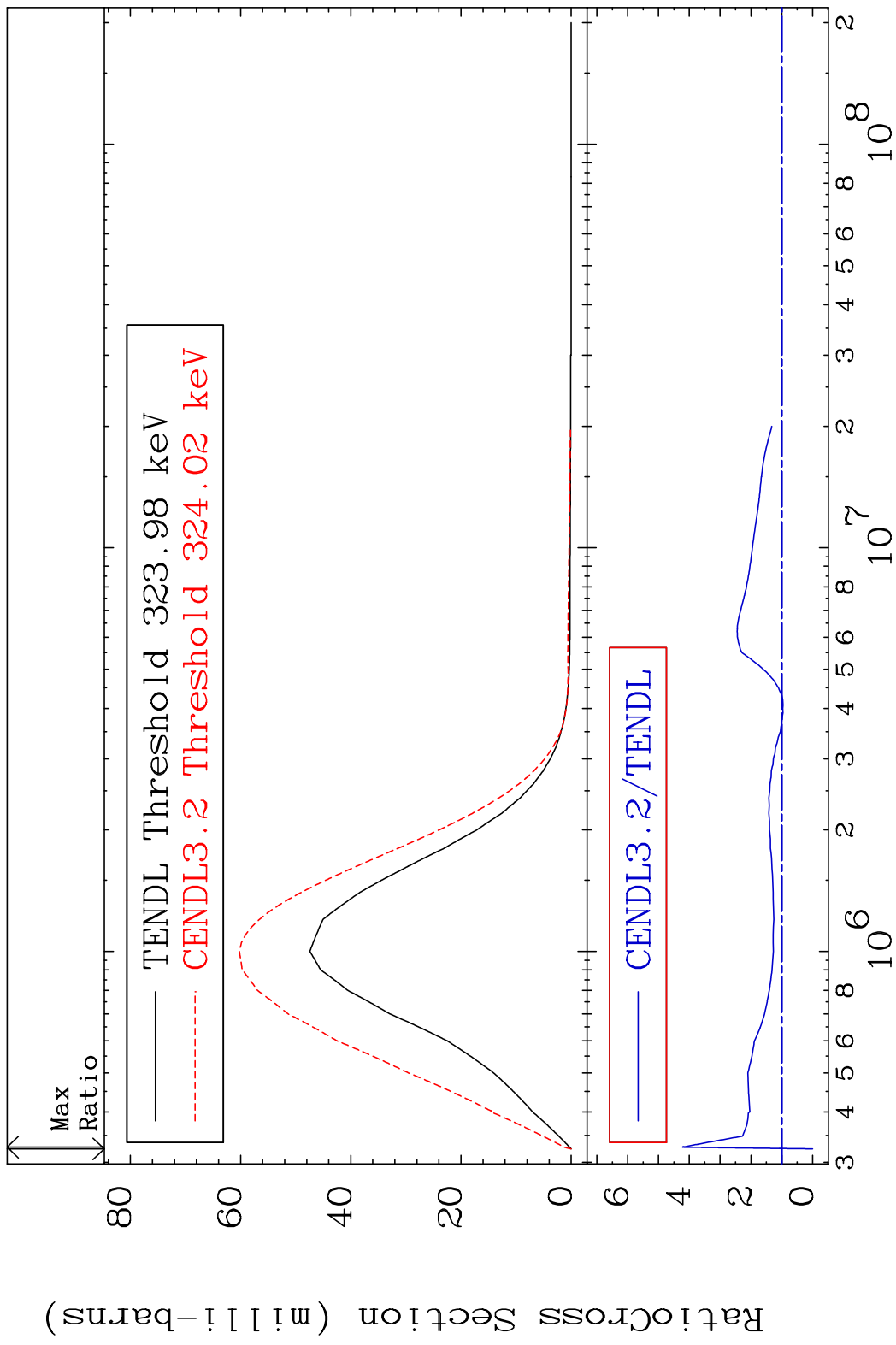
MAT 6331 MT= 57 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 33.40 %



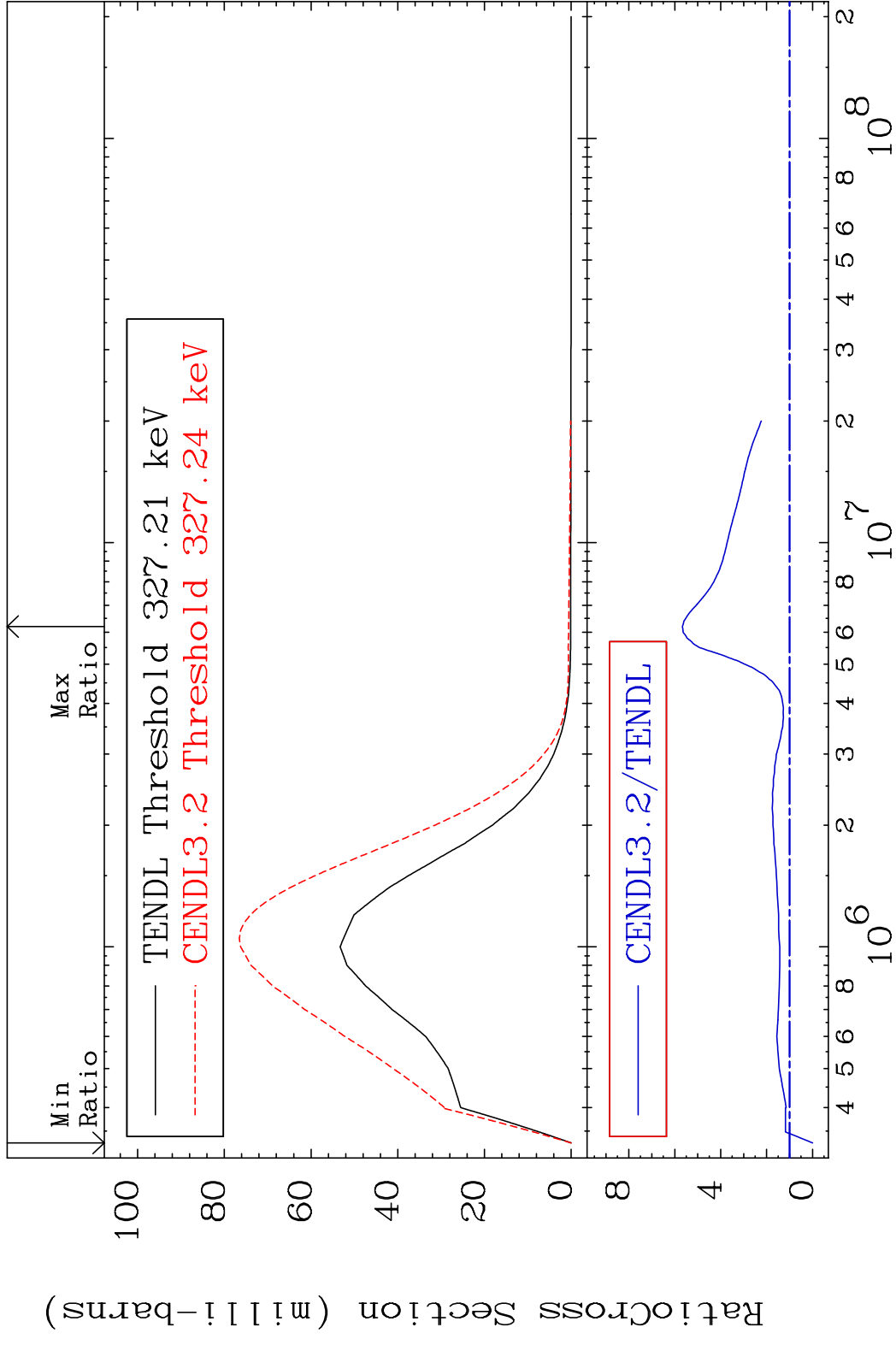
MAT 6331 MT= 58 (n, n') Level 63-Eu-153
 Cross Section -13.26 To 9999. %



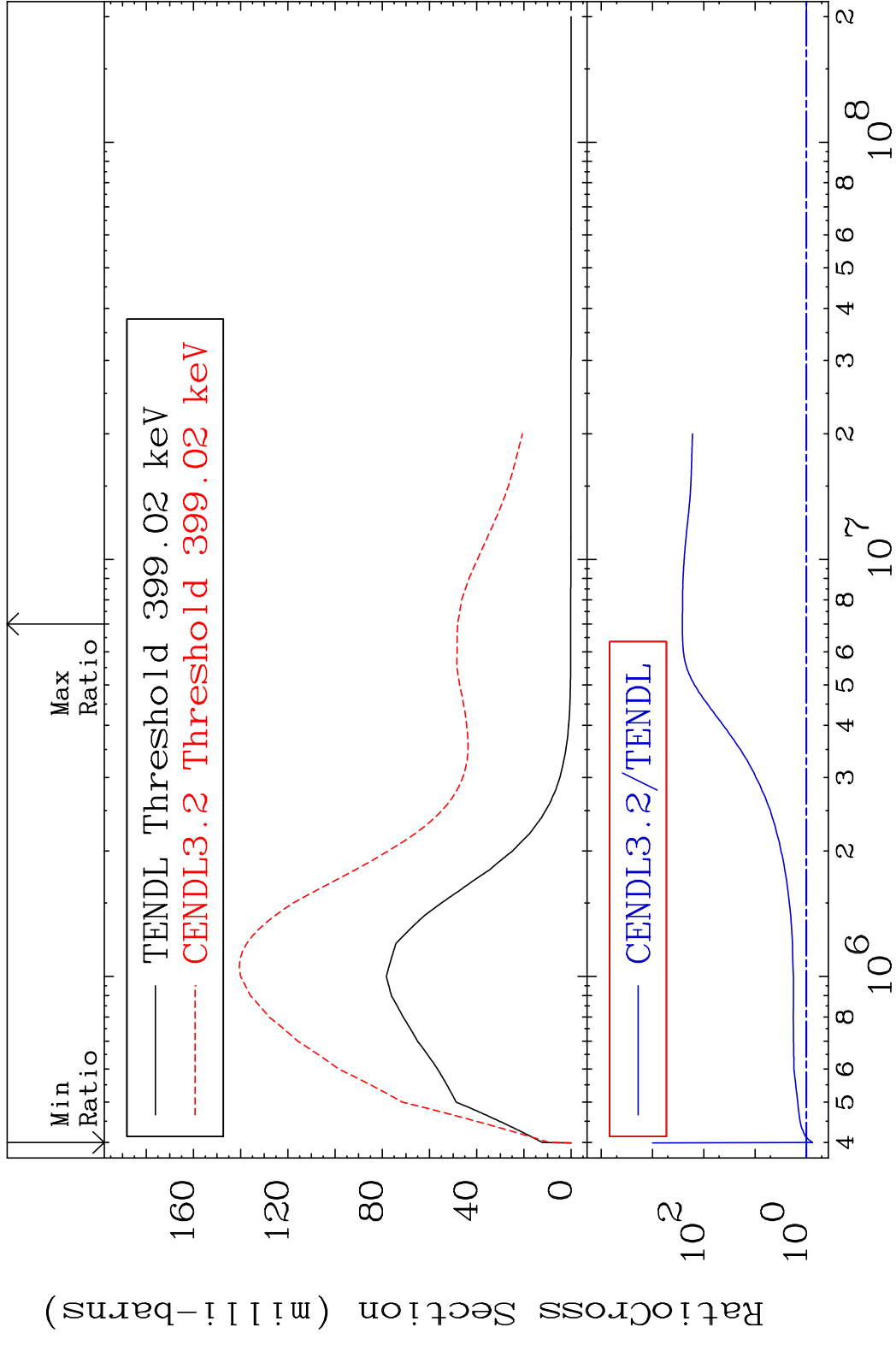
MAT 6331 MT= 59 (n,n') Level 63-Eu-153
 Cross Section -100.0 To 322.6 %



MAT 6331 MT= 60 (n, n') Level 63-Eu-153
 Cross Section -100.0 To 467.0 %



MAT 6331 MT= 61 (n, n') Level 63-Eu-153
 Cross Section -24.31 To 9999. %

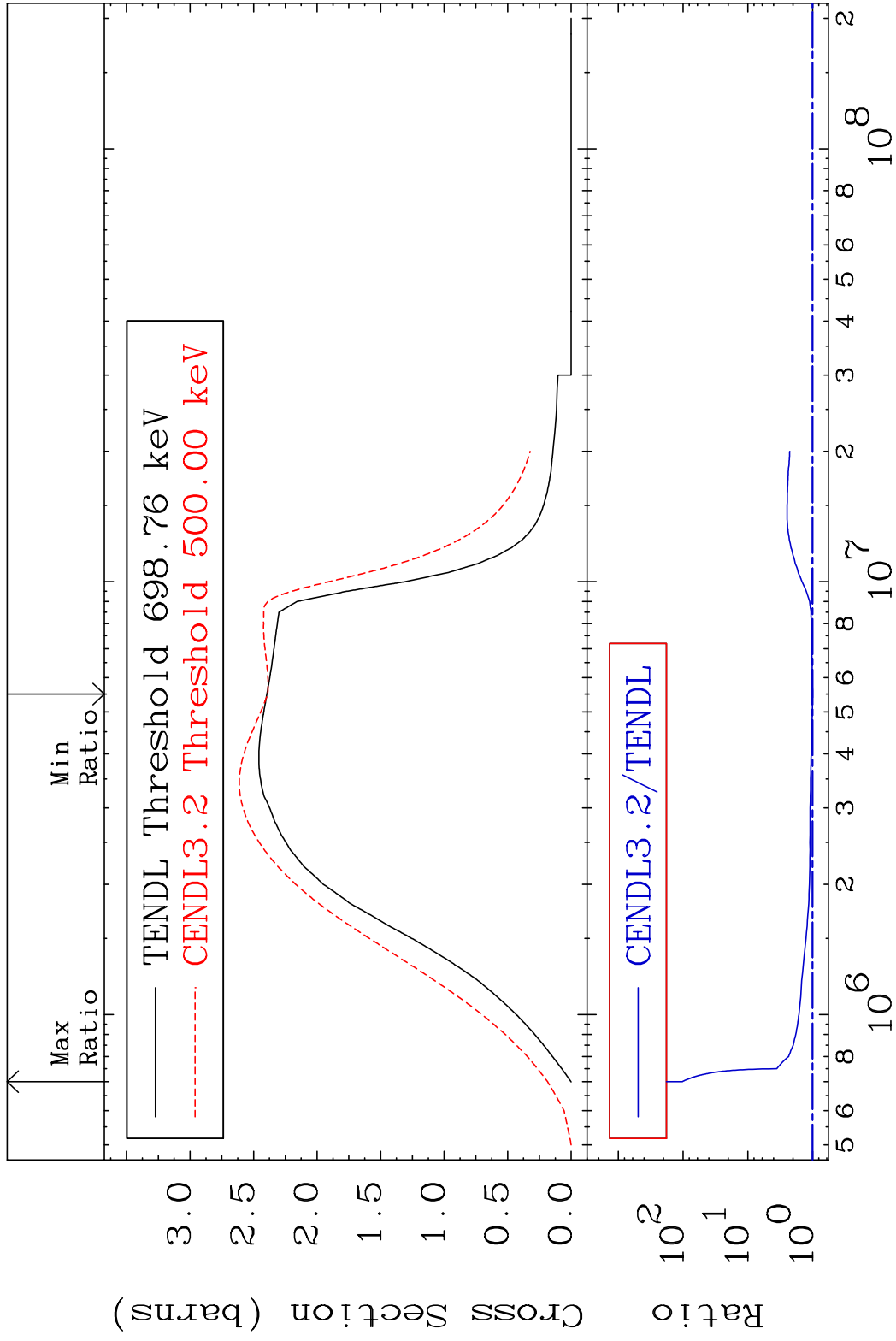


MAT 6331

(n, n') Continuum

63-Eu-153

Cross Section -0.224 To 9999. %

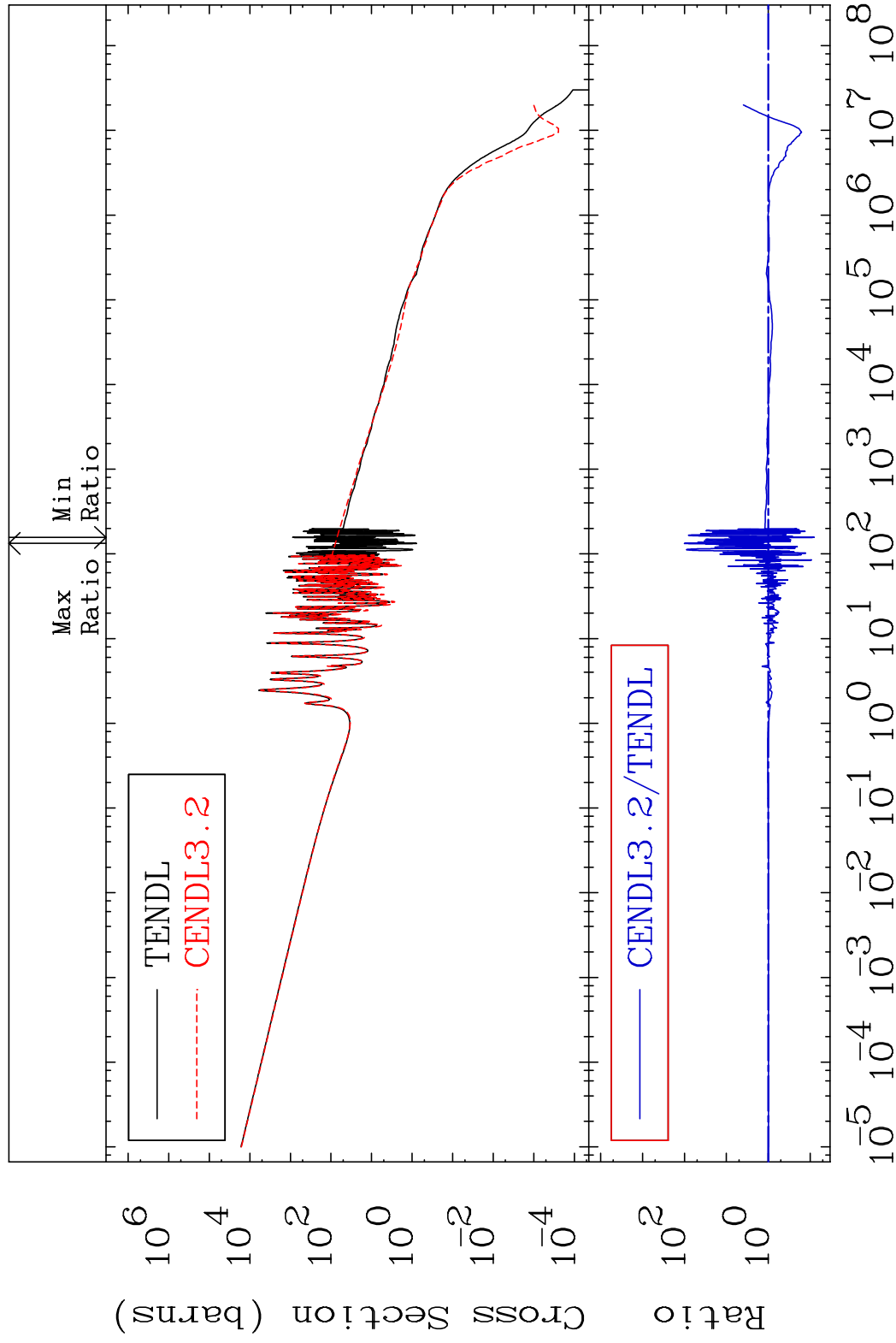


MAT 6331

(n, γ)

63-Eu-153

Cross Section -92.04 To 9999. %



20

Incident Energy (eV)

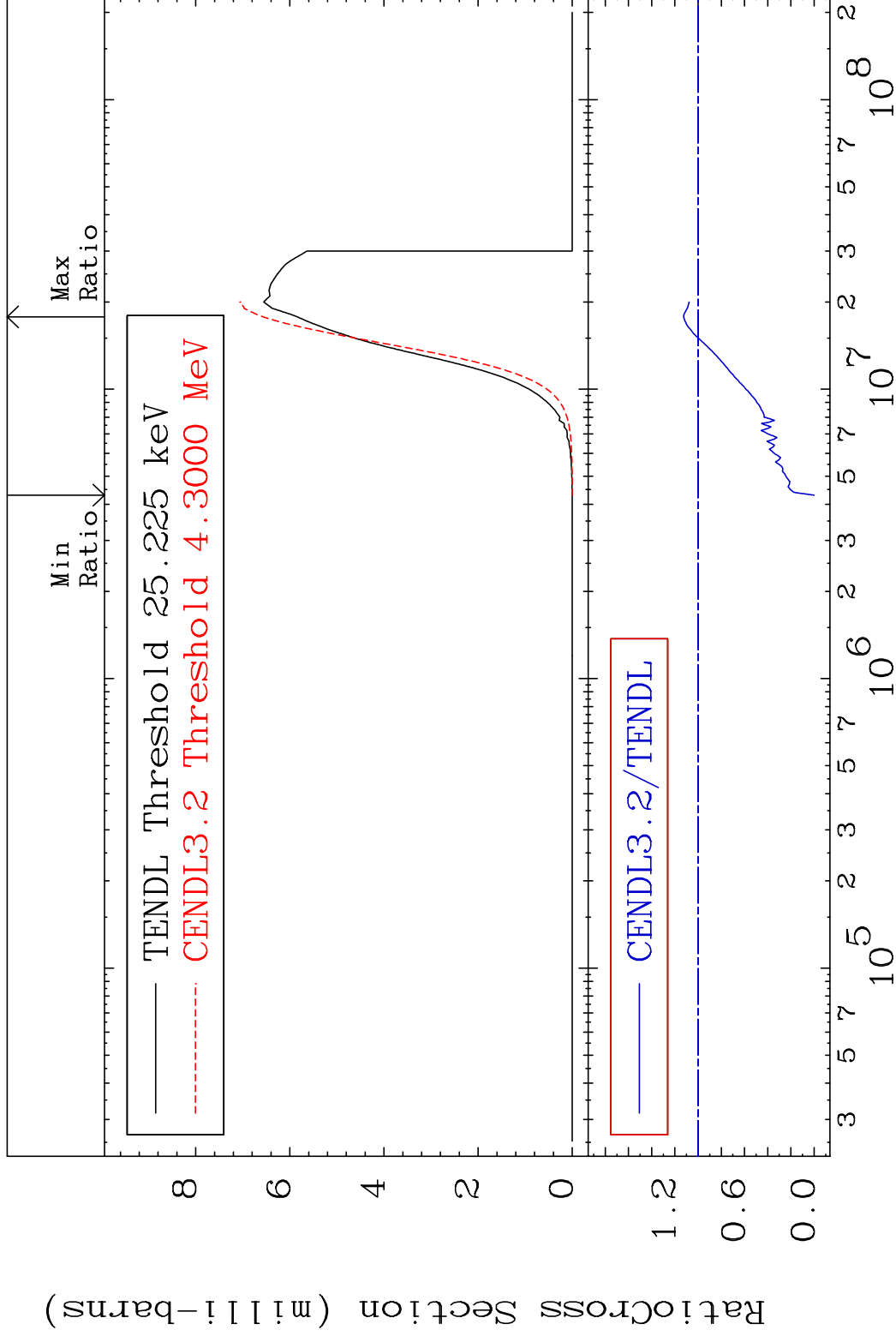
63-Eu-153

MAT 6331

(n, p)

63-Eu-153

Cross Section -100.0 To 12.44 %



21

Incident Energy (eV)

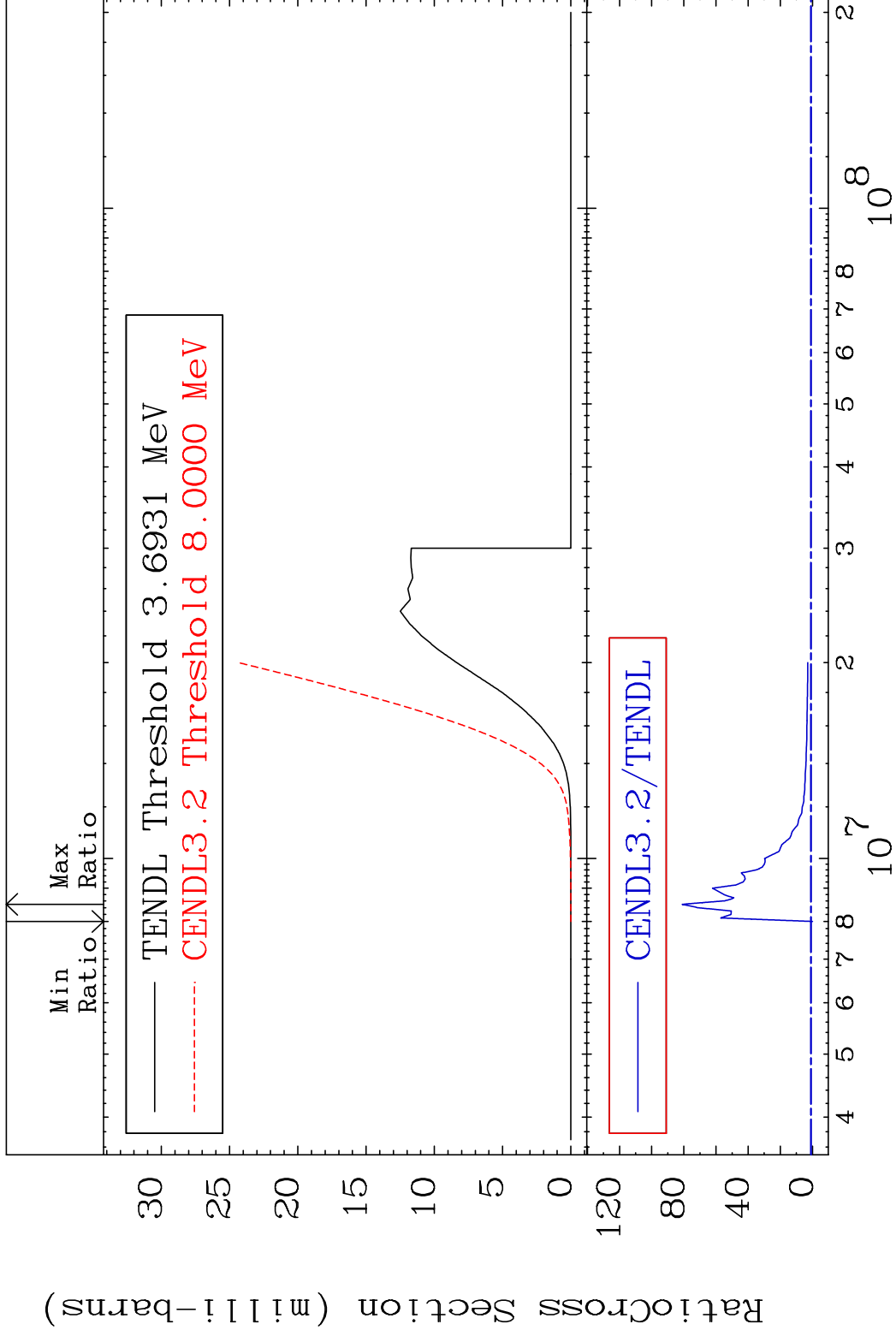
63-Eu-153

MAT 6331

(n, d)

63-Eu-153

Cross Section -100.0 To 8005. %

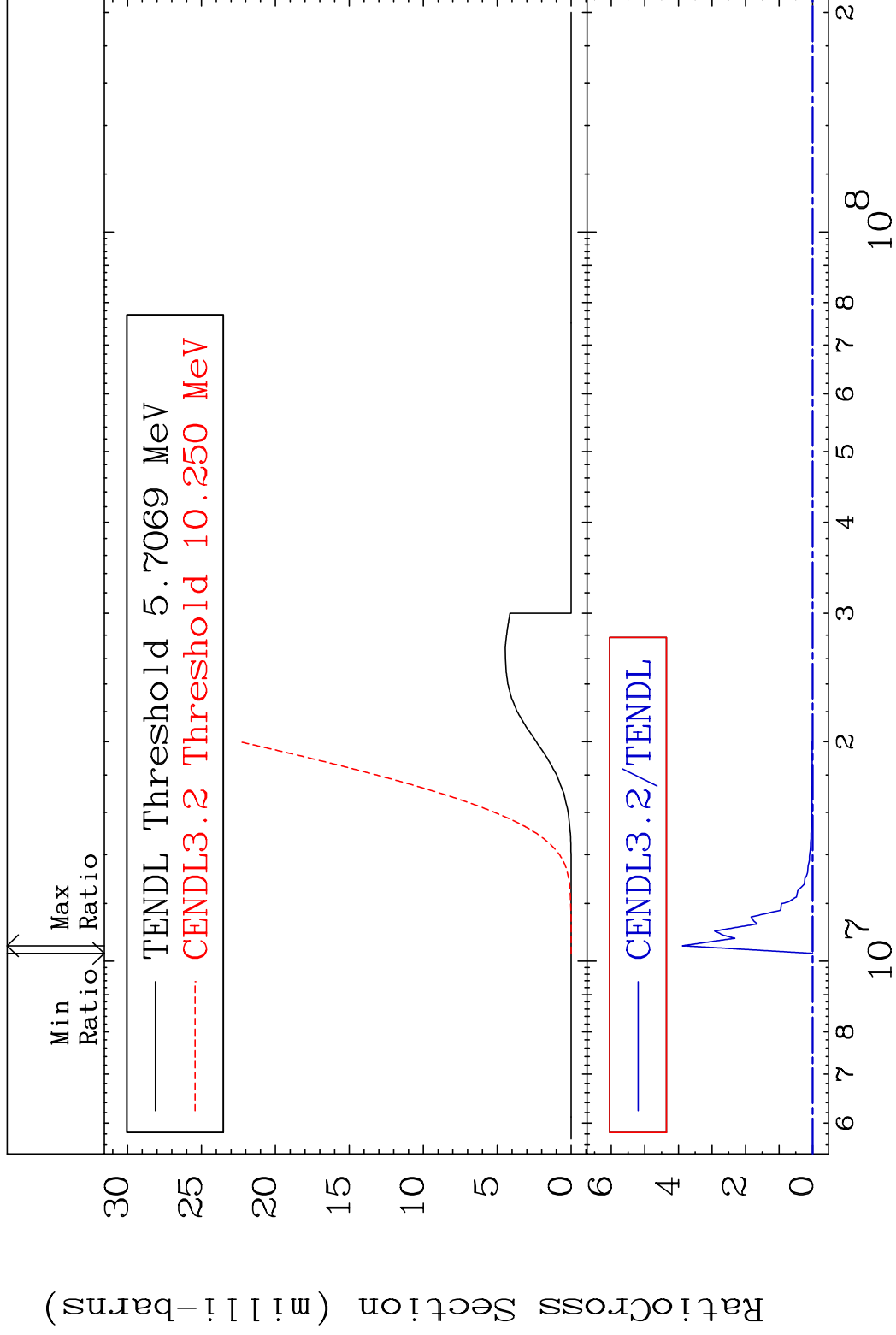


MAT 6331

(n, t)

63-Eu-153

Cross Section -100.0 To 9999. %



23

Incident Energy (eV)

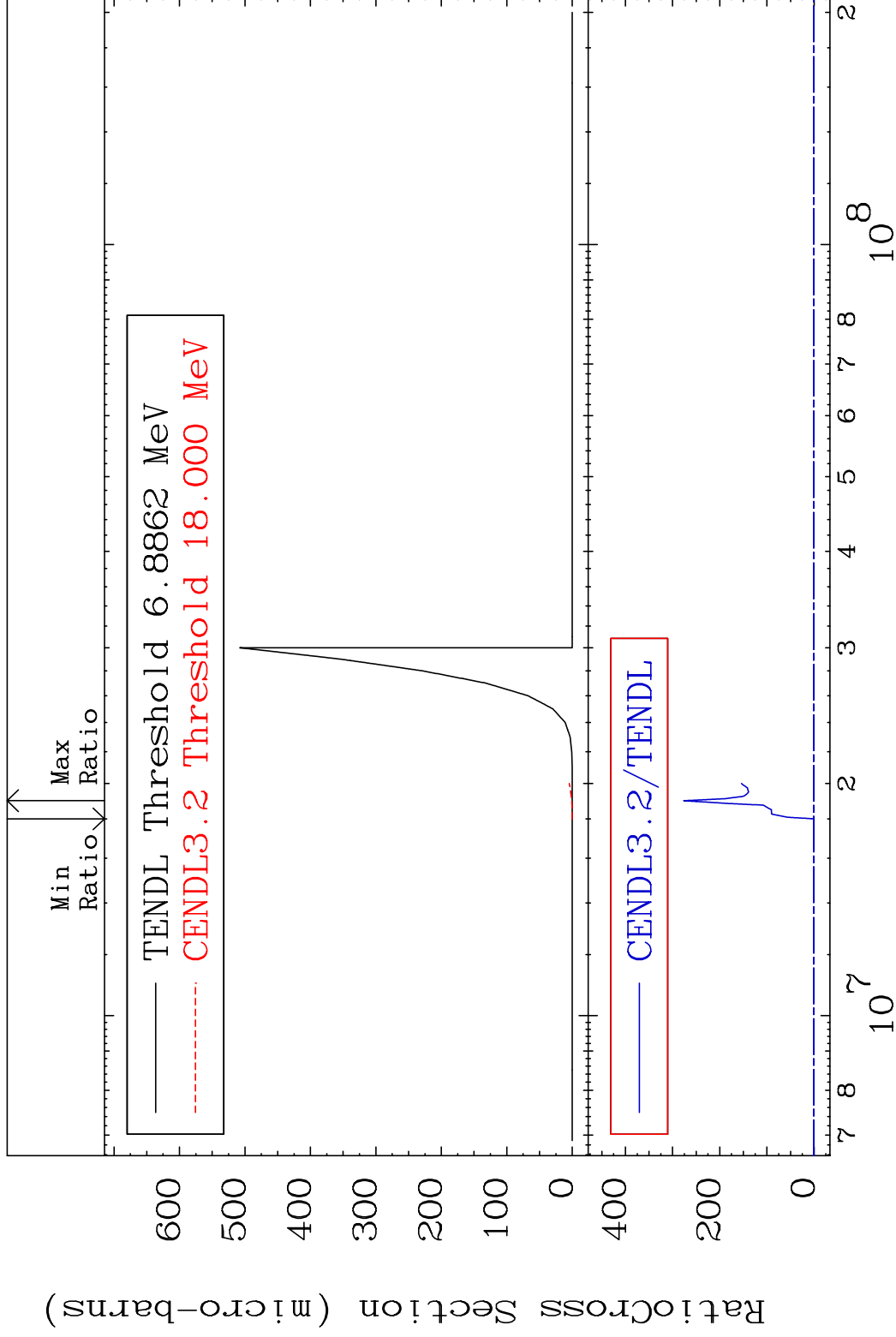
63-Eu-153

MAT 6331

(n, He-3)

63-Eu-153

Cross Section -100.0 To 9999. %

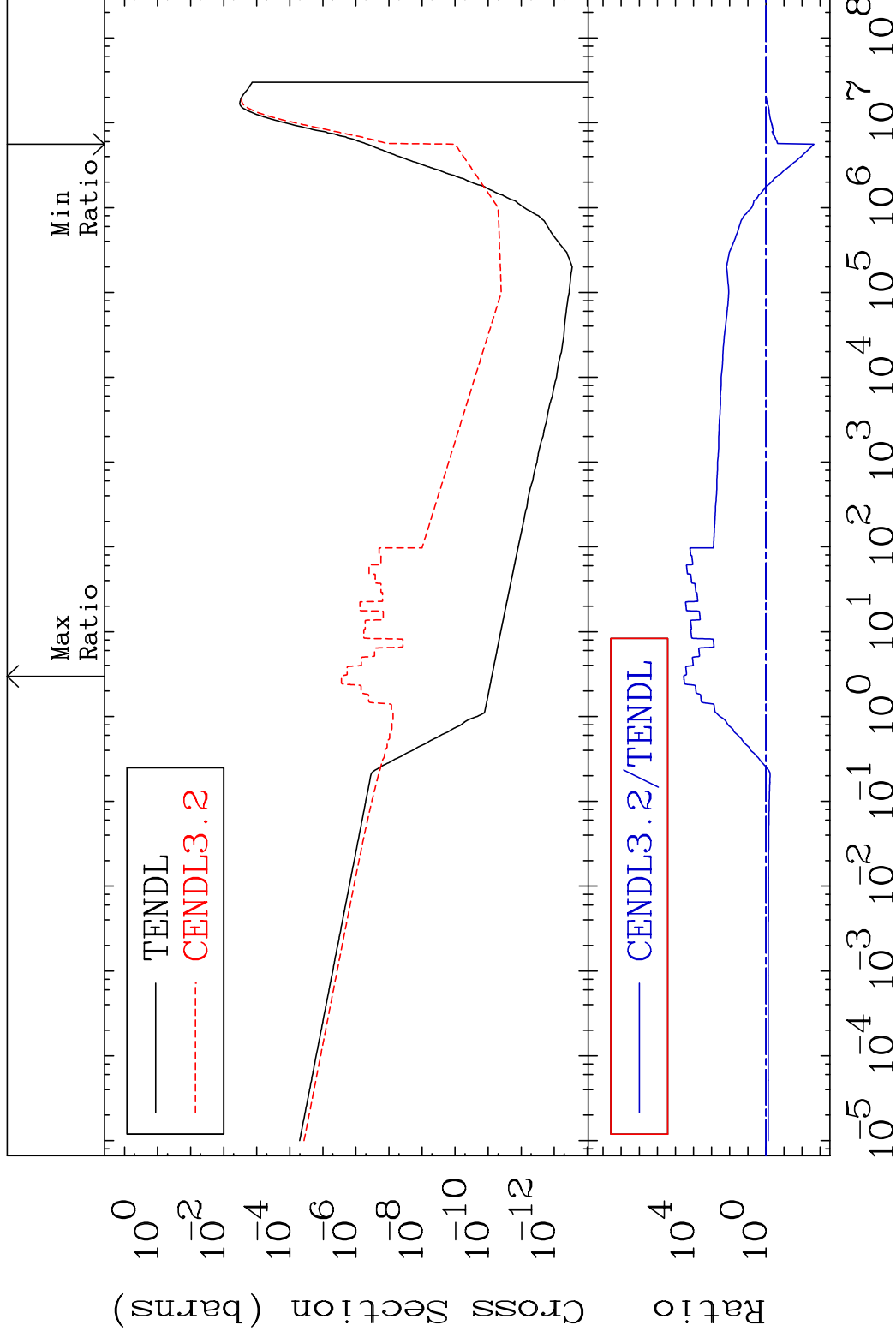


MAT 6331

(n, α)

63-Eu-153

Cross Section -99.78 To 9999. %



25

Incident Energy (eV)

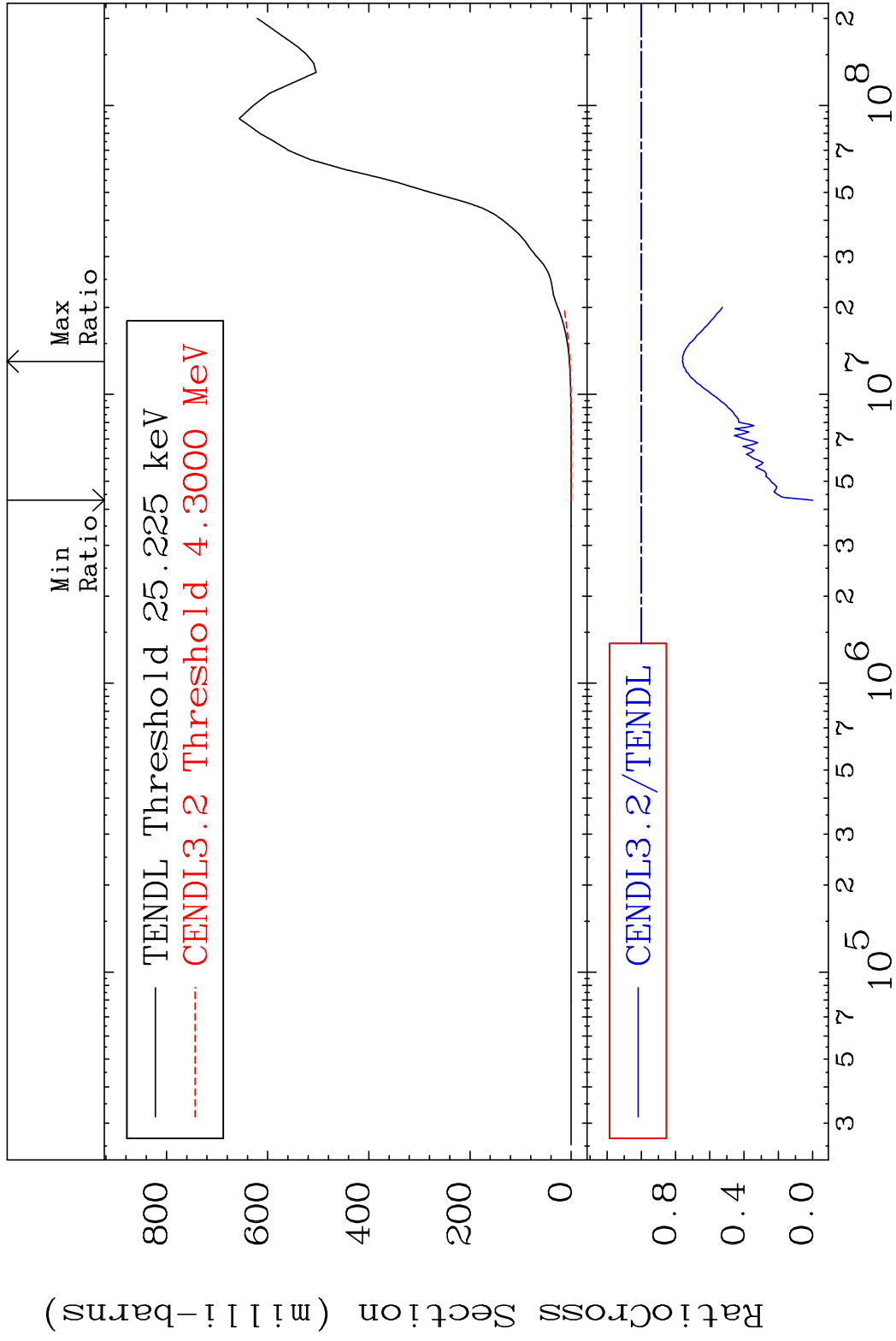
63-Eu-153

MAT 6331

Hydrogen Production

63-Eu-153

Cross Section -100.0 To -23.97%



26

Incident Energy (eV)

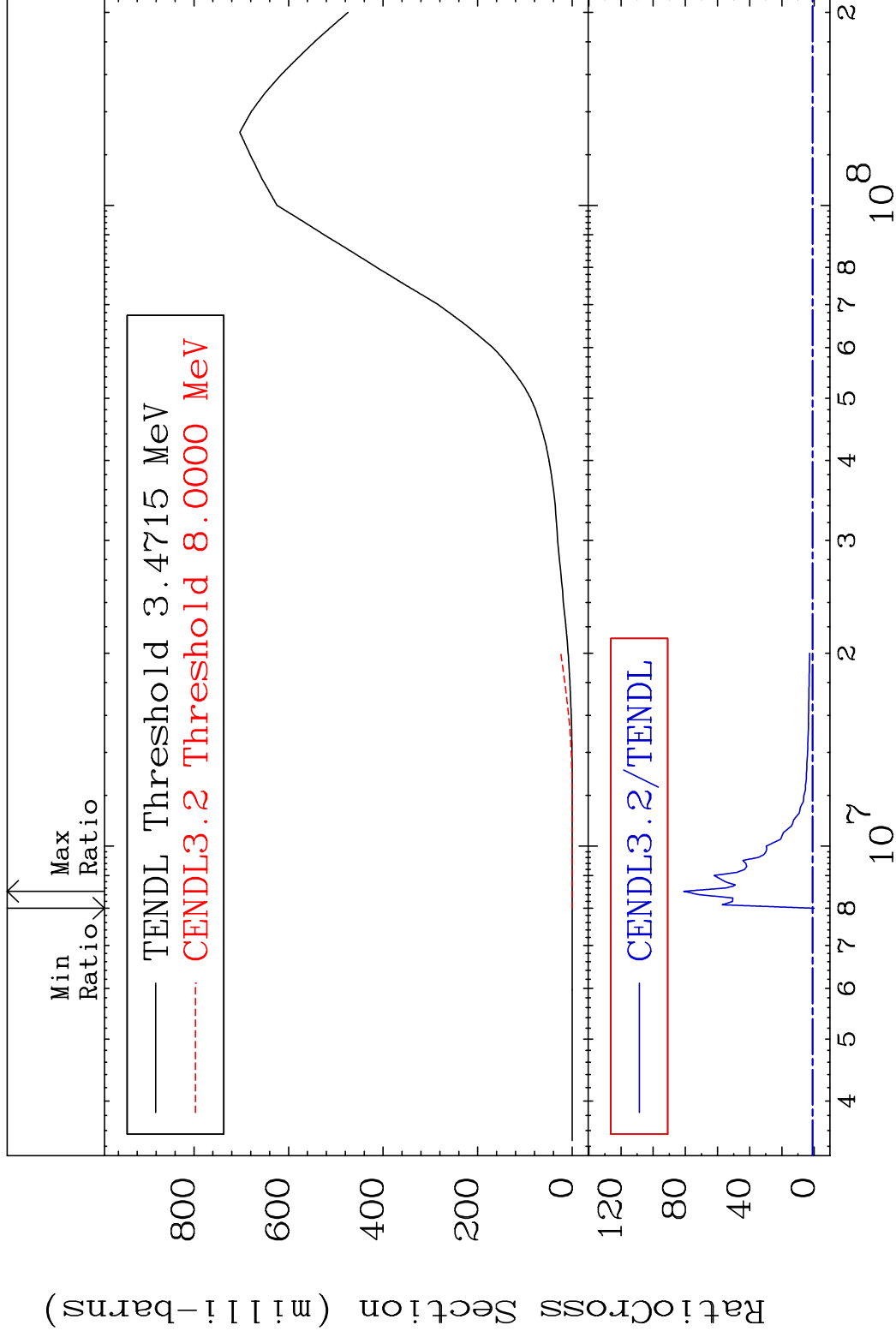
63-Eu-153

MAT 6331

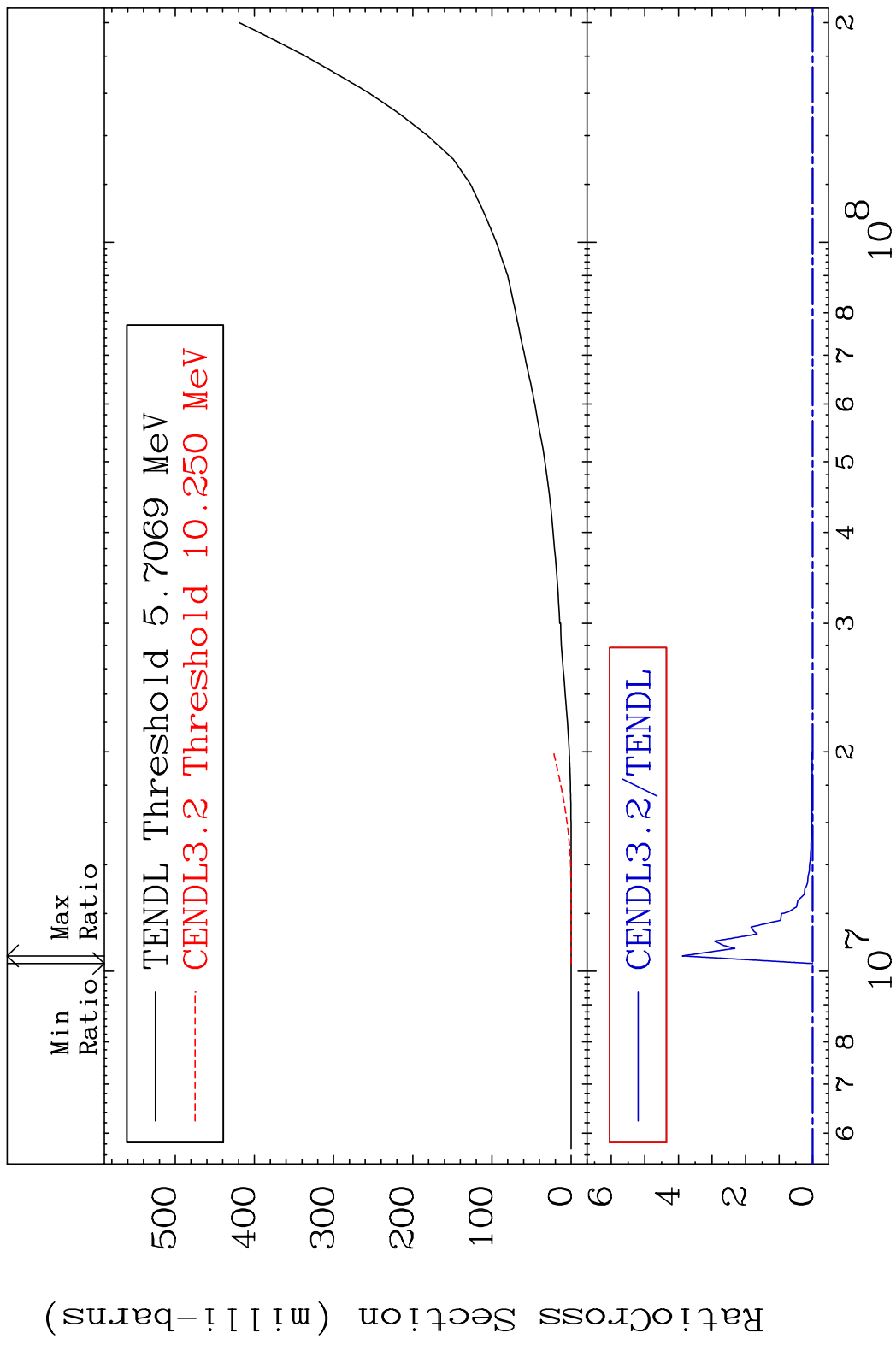
Deuterium Production

63-Eu-153

Cross Section -100.0 To 8005. %



MAT 6331 Tritium Production 63-Eu-153
 Cross Section -100.0 To 9999. %

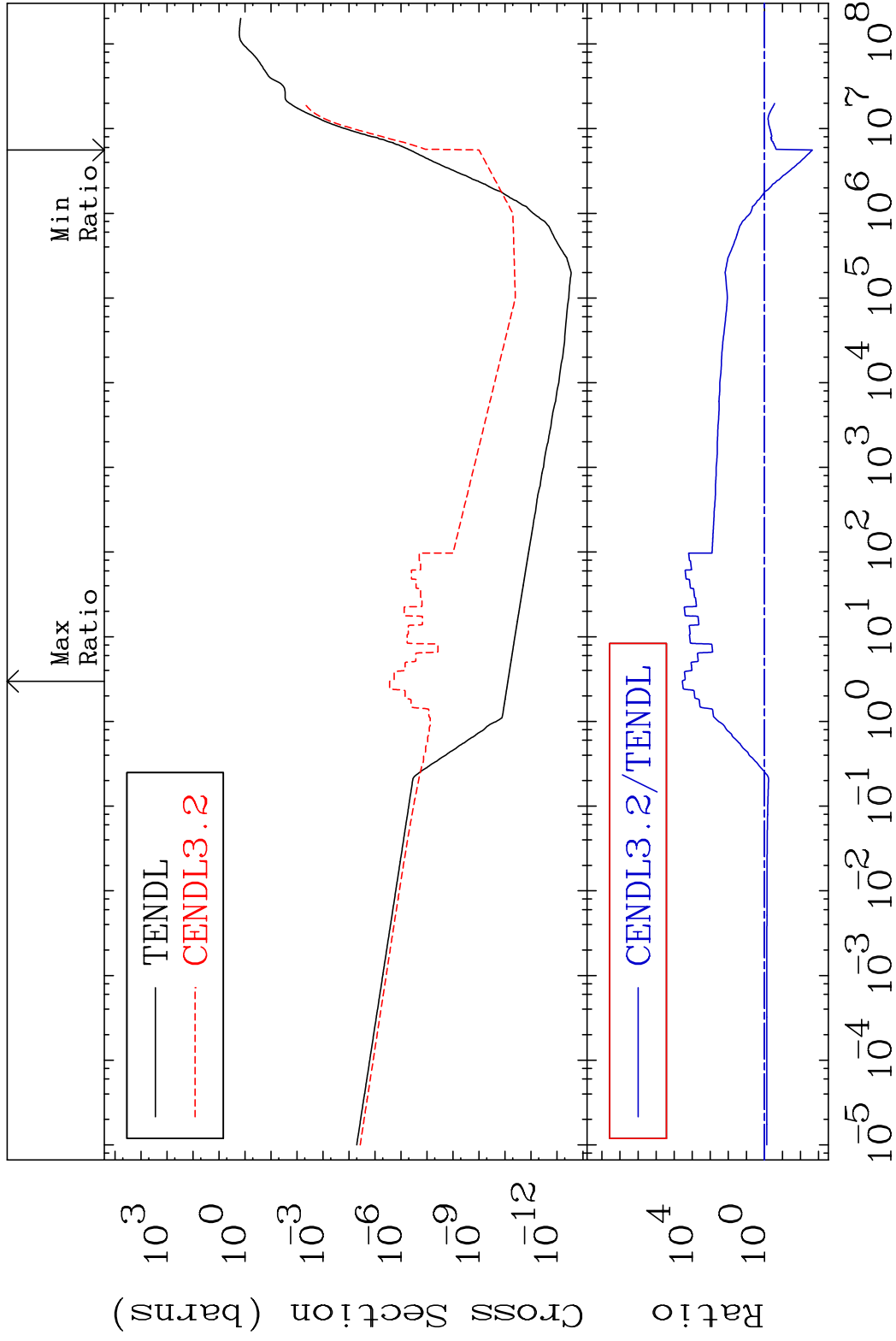


MAT 6331

He-4 Production

63-Eu-153

Cross Section -99.78 To 9999. %

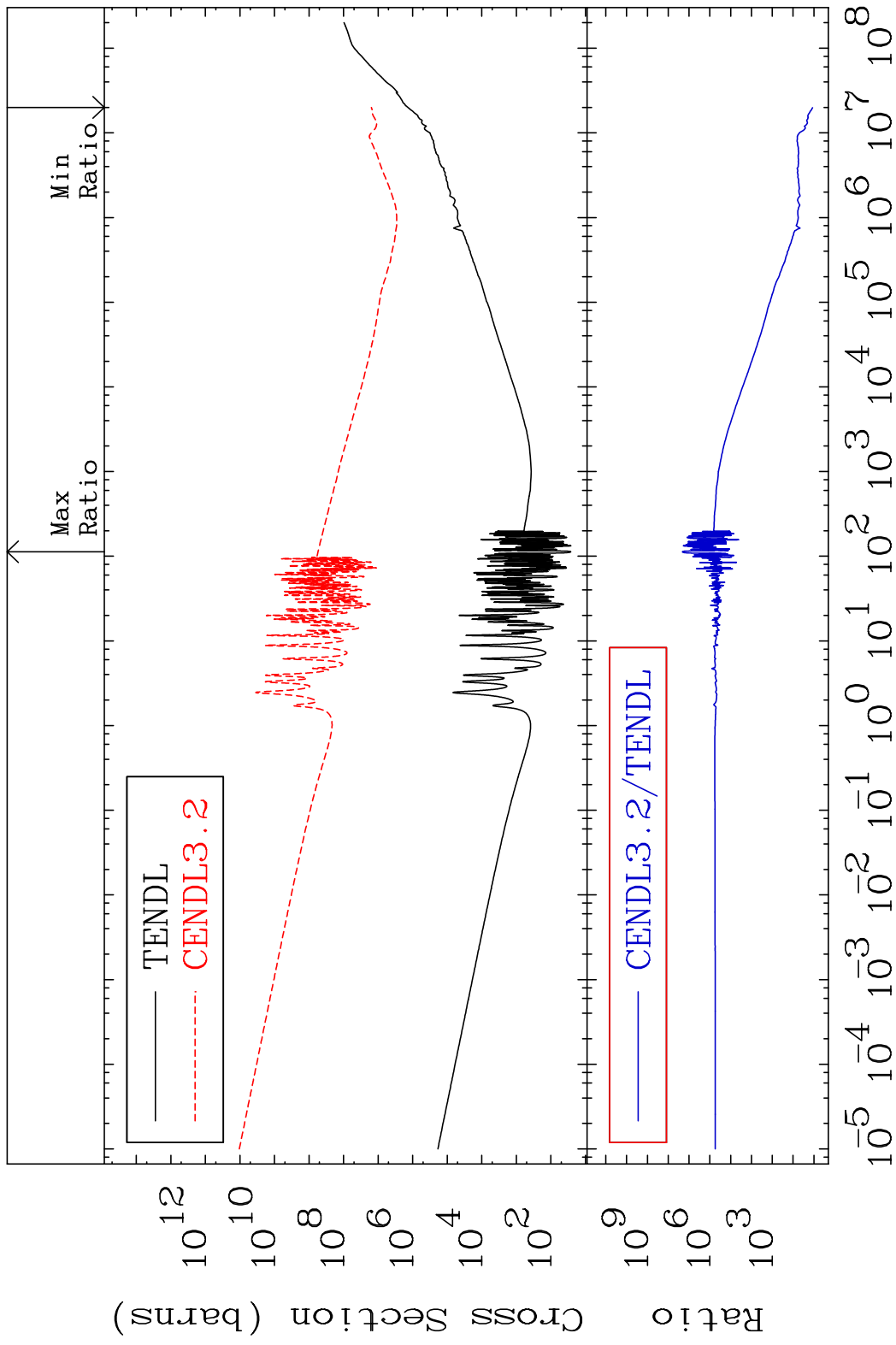


30

Incident Energy (eV)

63-Eu-153

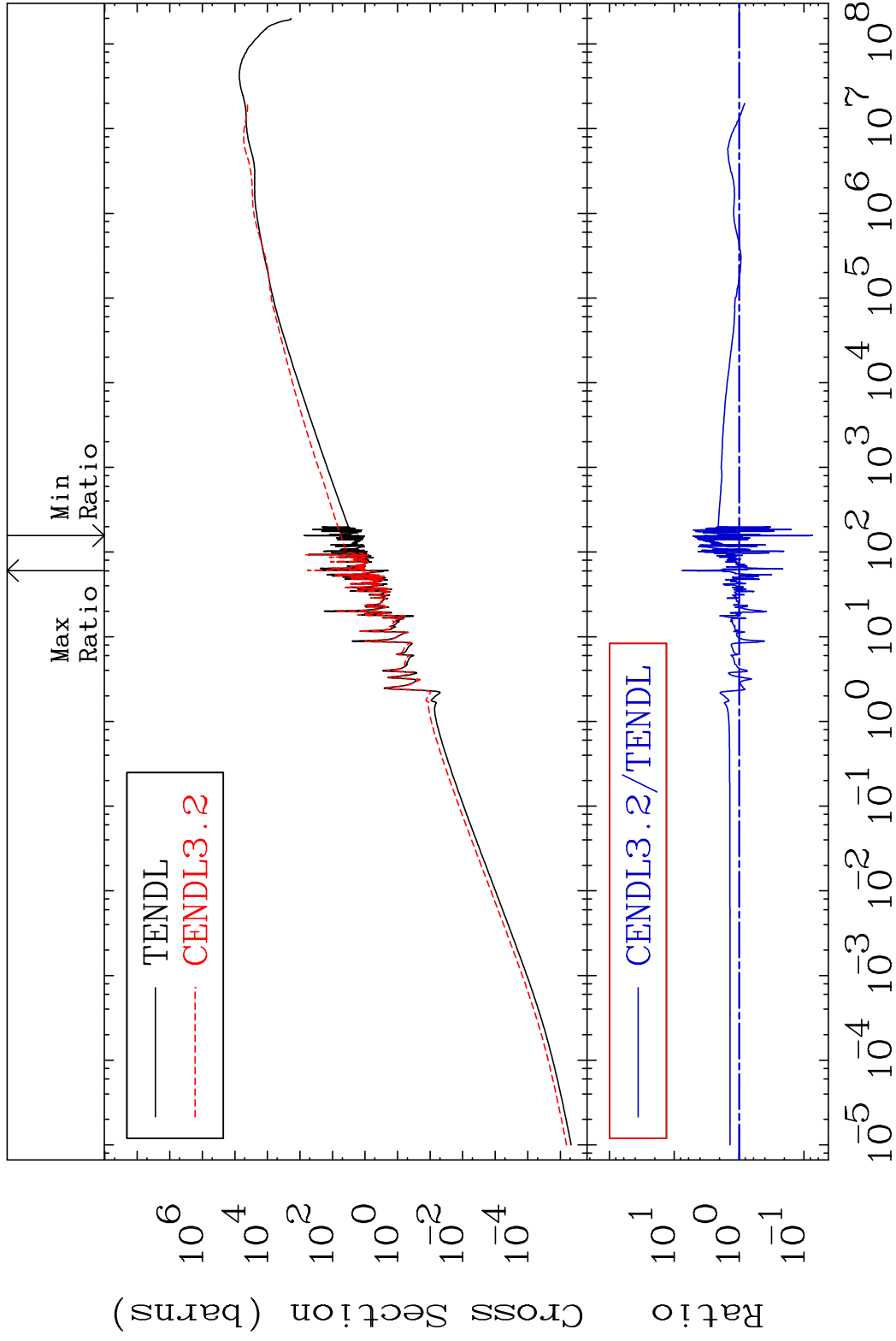
MAT 6331 Kerma total (eV-barns) 63-Eu-153
 Cross Section 1059. To 9999. %



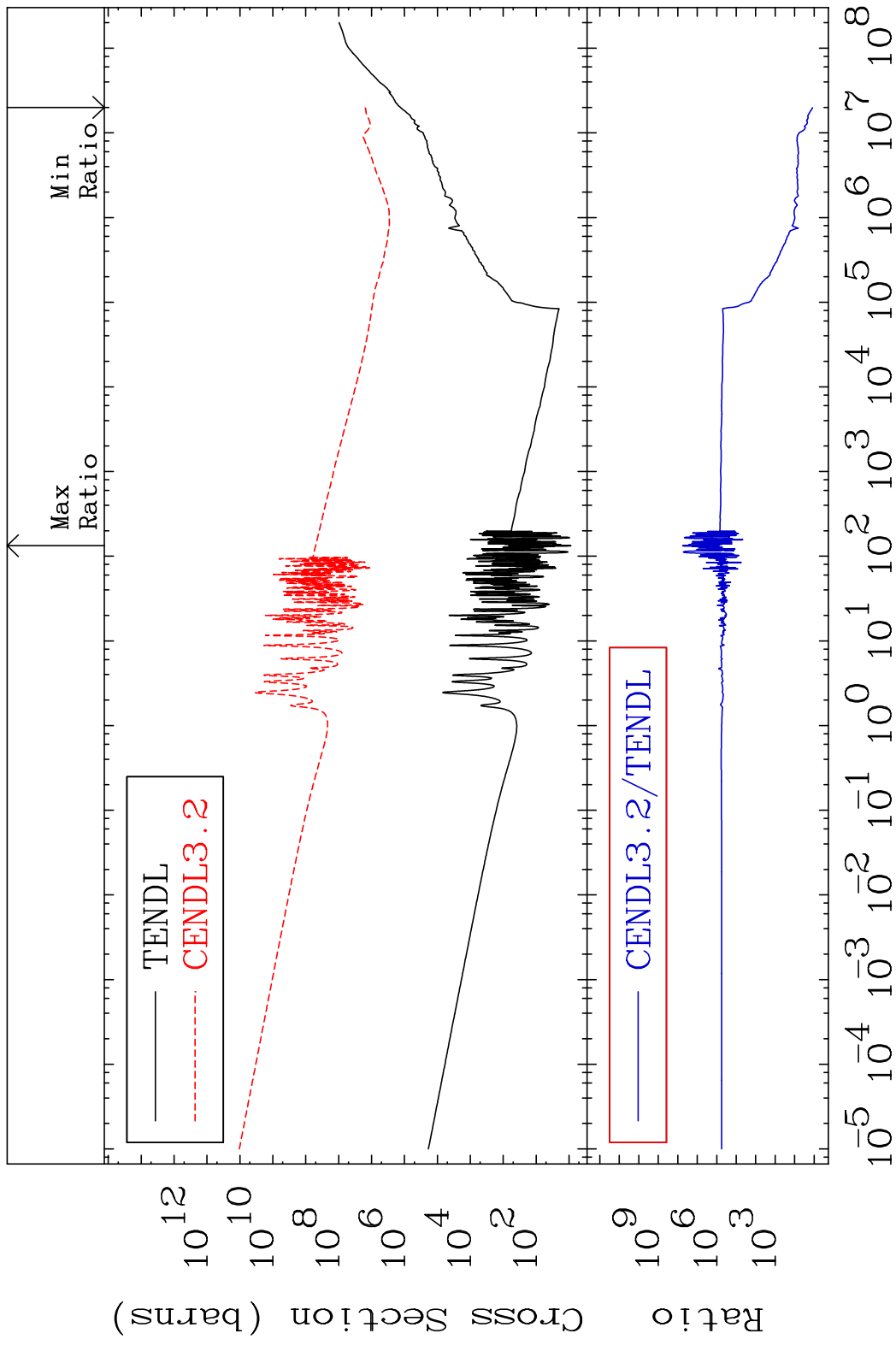
MAT 6331

Kerma elastic
Cross Section

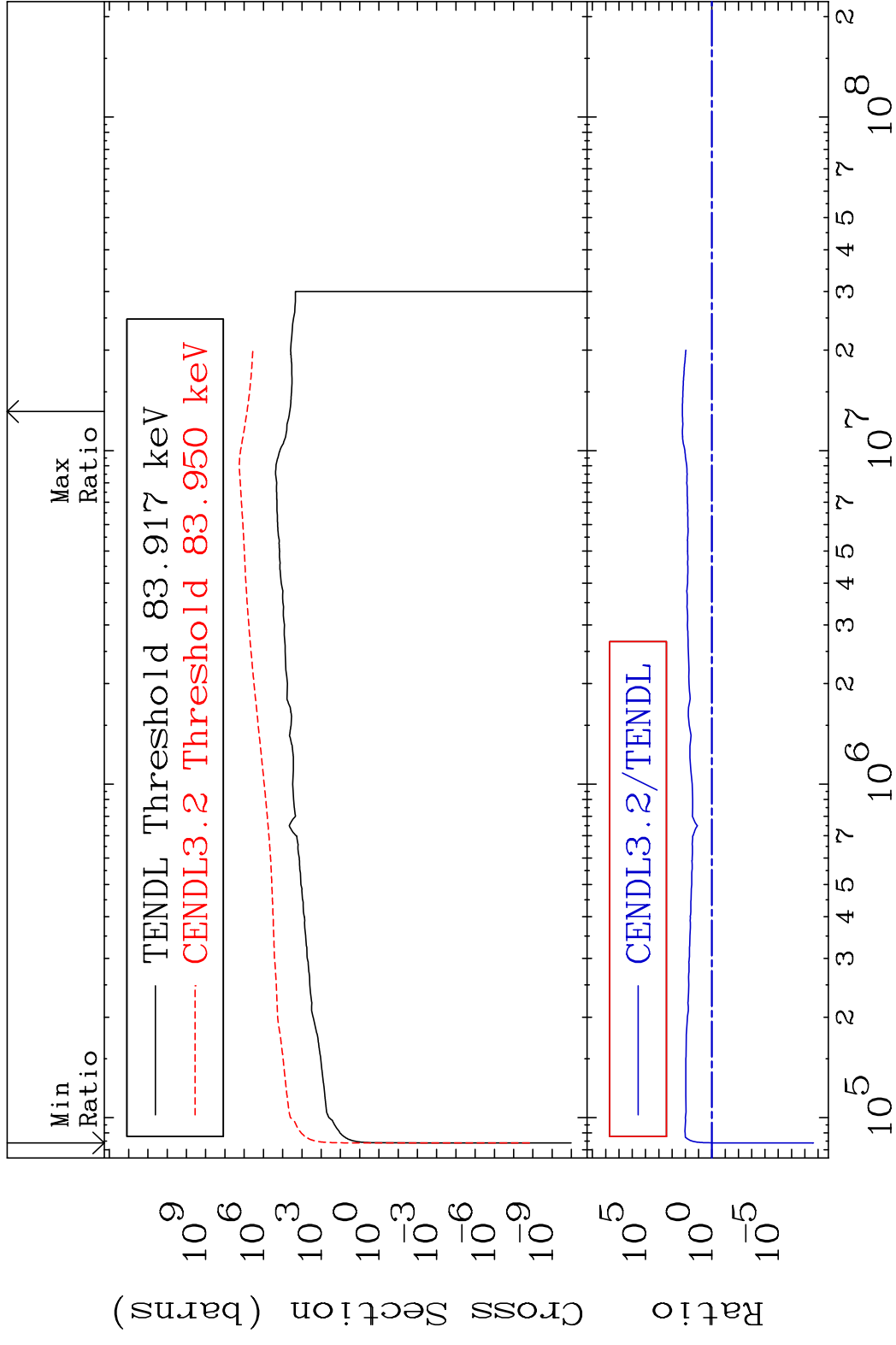
63-Eu-153
-92.63 To 649.9 %



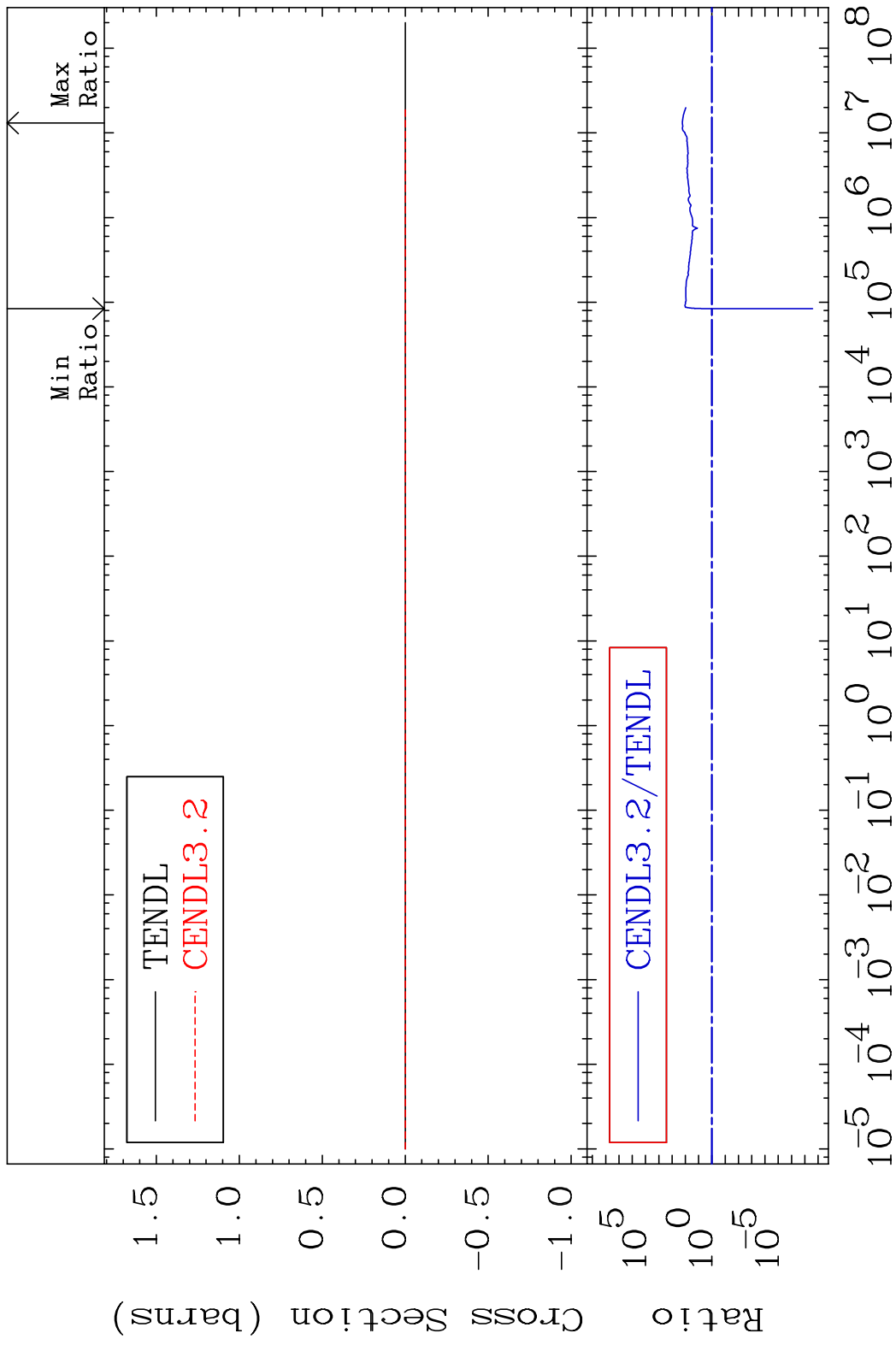
MAT 6331 Kerma non-elastic (all but mt2) 63-Eu-153
 Cross Section 1099. To 9999. %



MAT 6331 Kerma inelastic (mt51-91) 63-Eu-153
 Cross Section -100.0 To 9999. %



MAT 6331 Kerma fission (mt18 or mt19-20-21-38)63-Eu-153
 Cross Section -100.0 To 9999. %

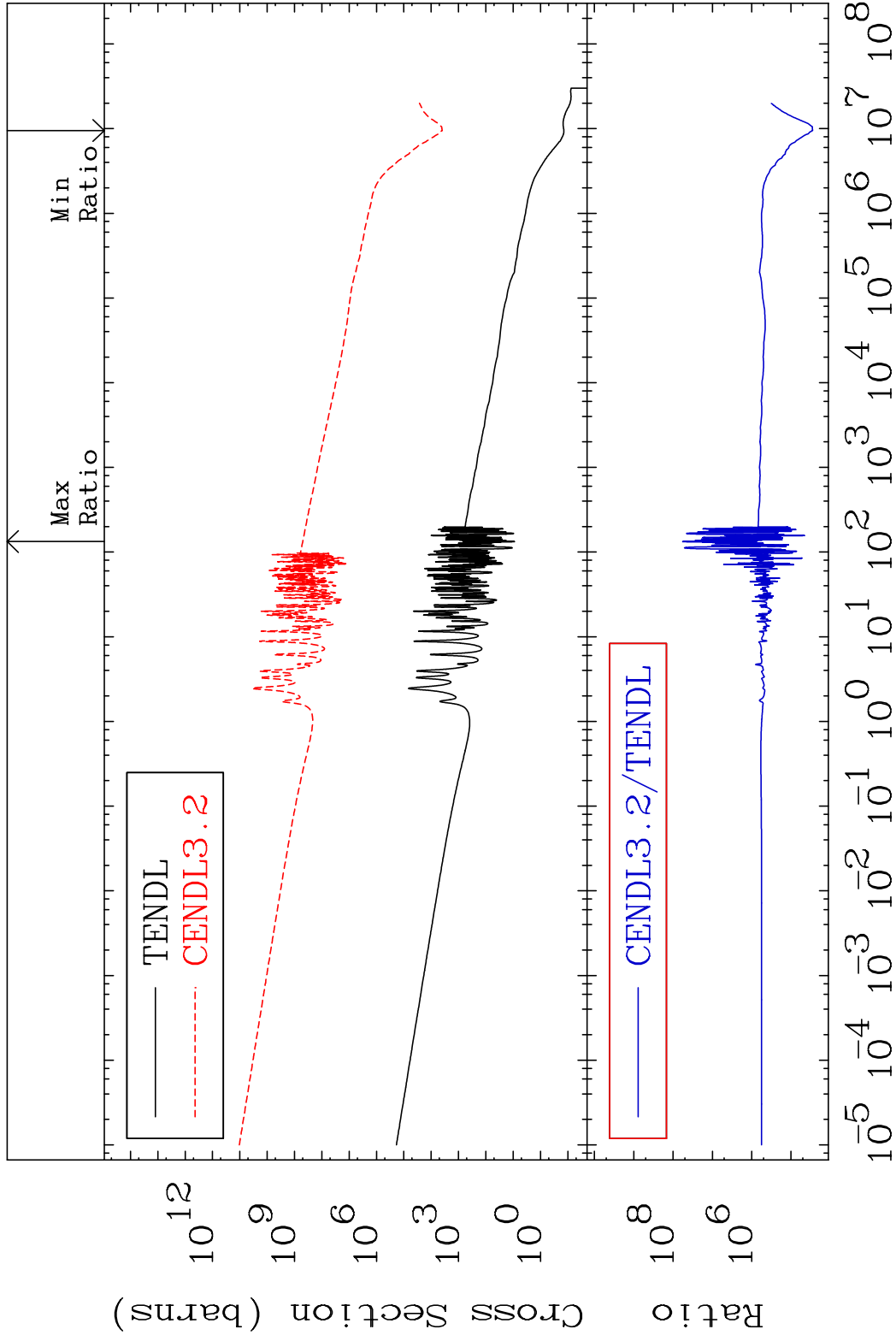


MAT 6331

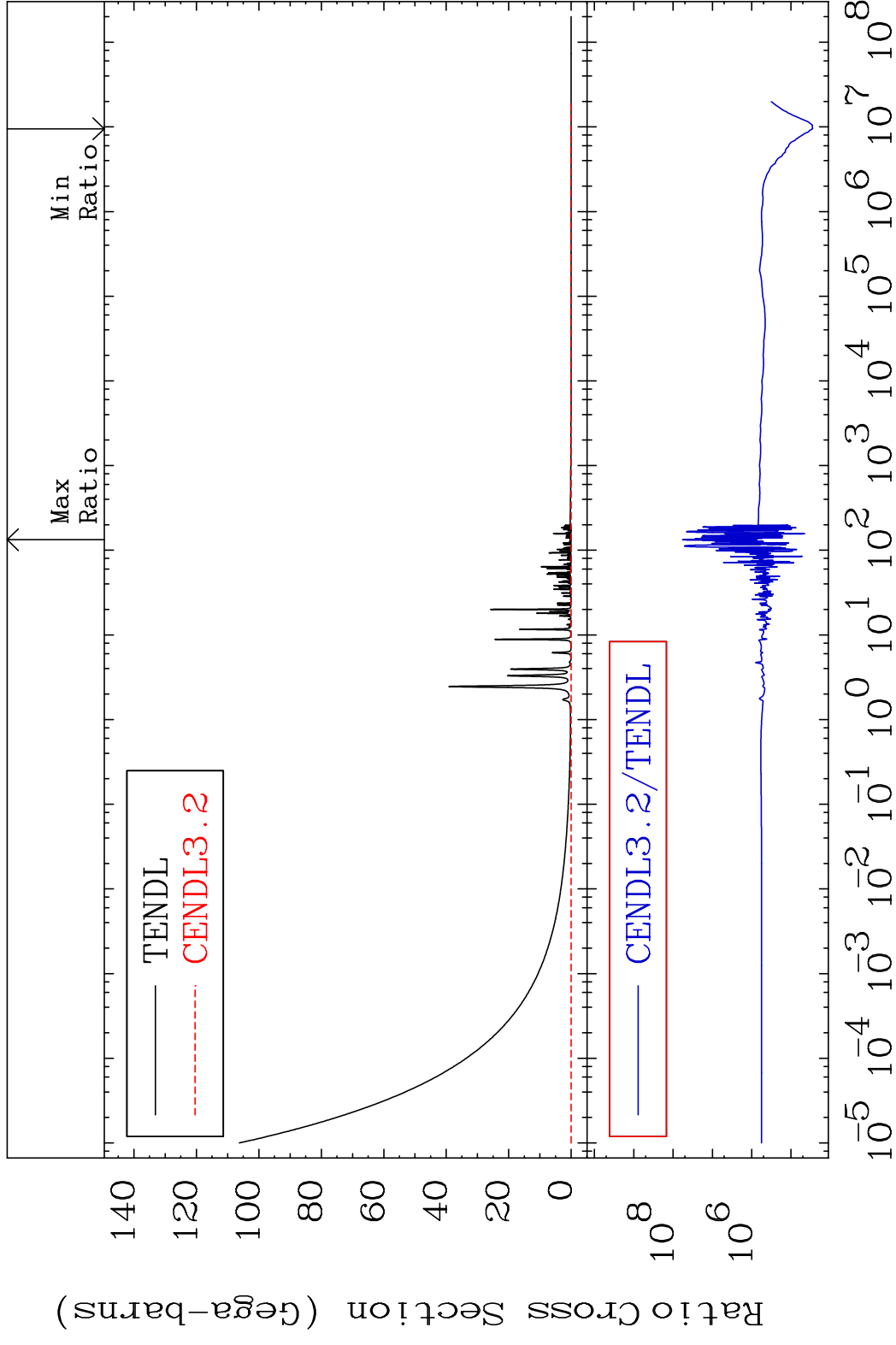
Kerma capture (mt102)

63-Eu-153

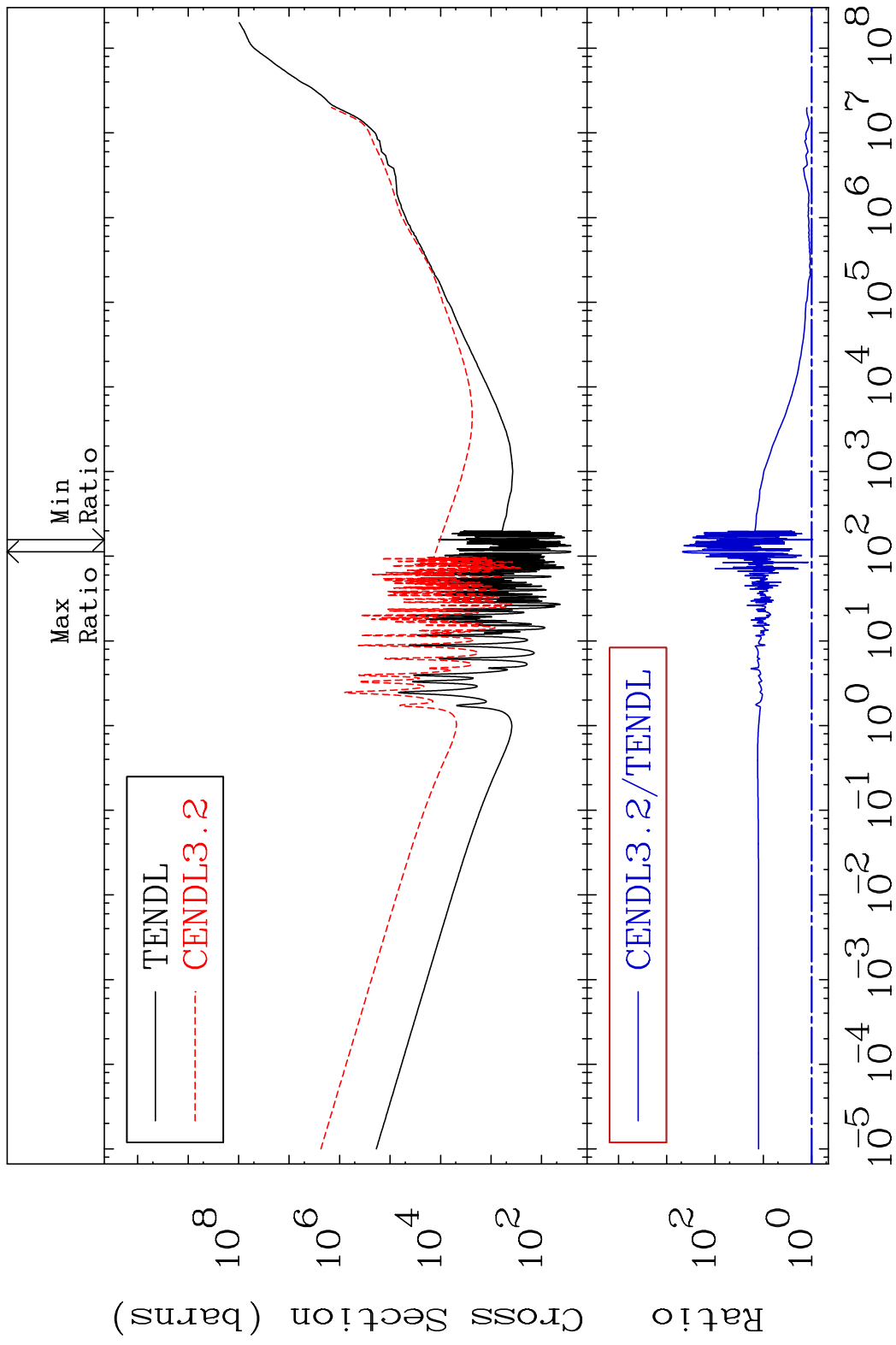
Cross Section 9999. To 9999. %



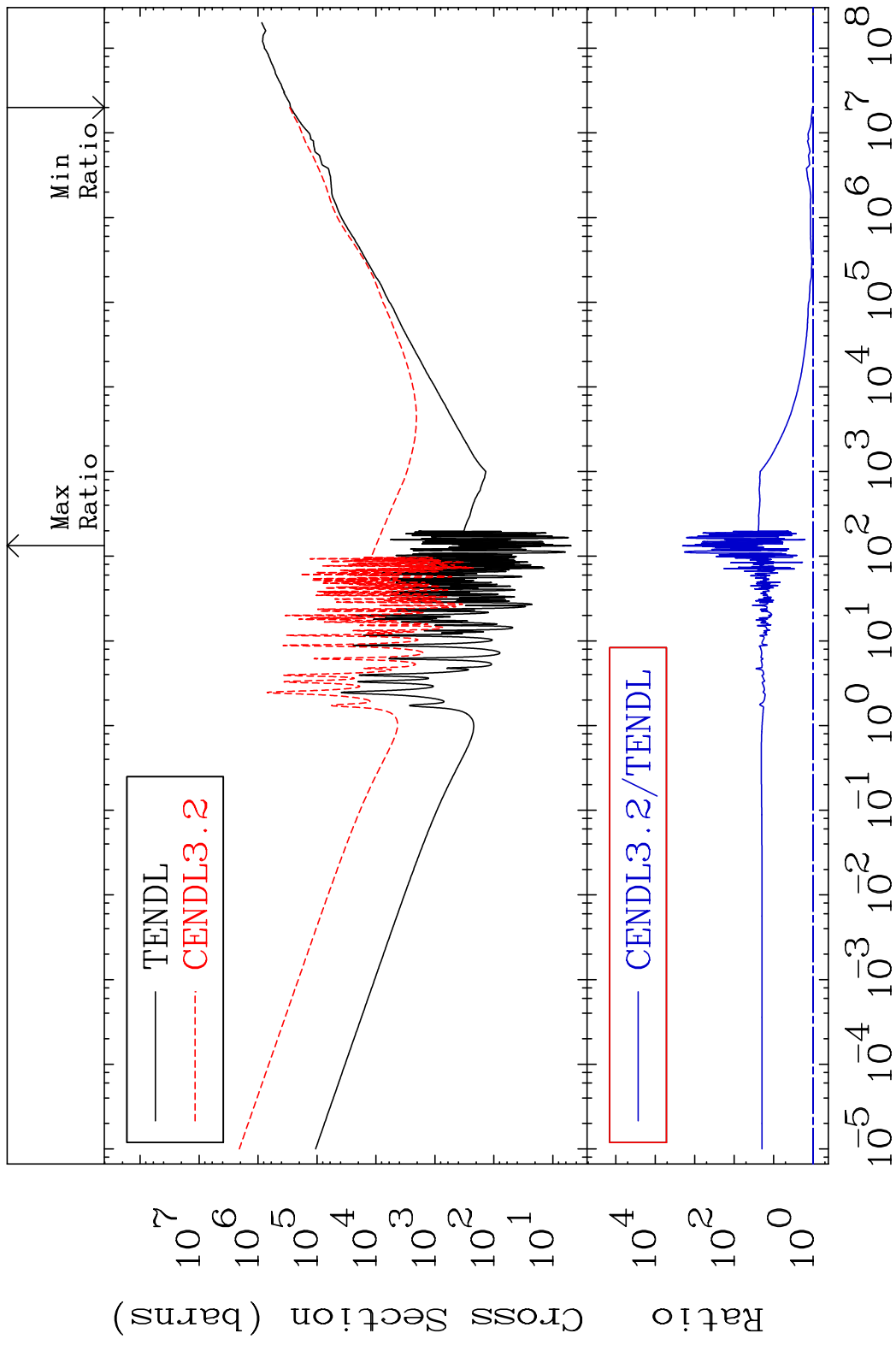
MAT 6331 Total photon (eV-barns) 63-Eu-153
 Cross Section 9999. To 9999. %



MAT 6331 Total kinematic kerma (high limit) 63-Eu-153
 Cross Section -4.250 To 9999. %



MAT 6331 Dpa total (eV-barns) 63-Eu-153
 Cross Section 3.155 To 9999. %



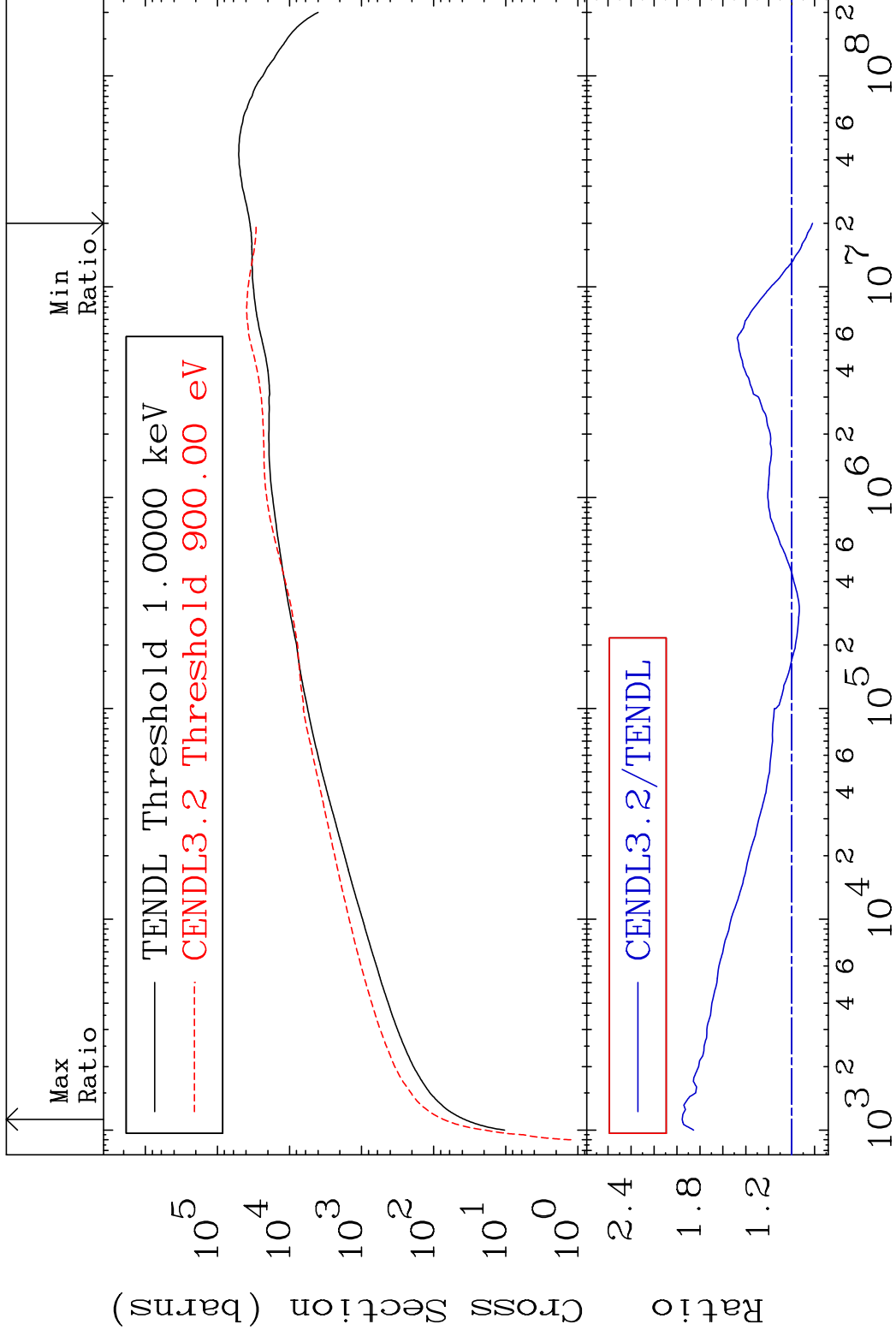
39 Incident Energy (eV) 63-Eu-153

MAT 6331

Dpa elastic (mt2)

63-Eu-153

Cross Section -18.12 To 95.46 %

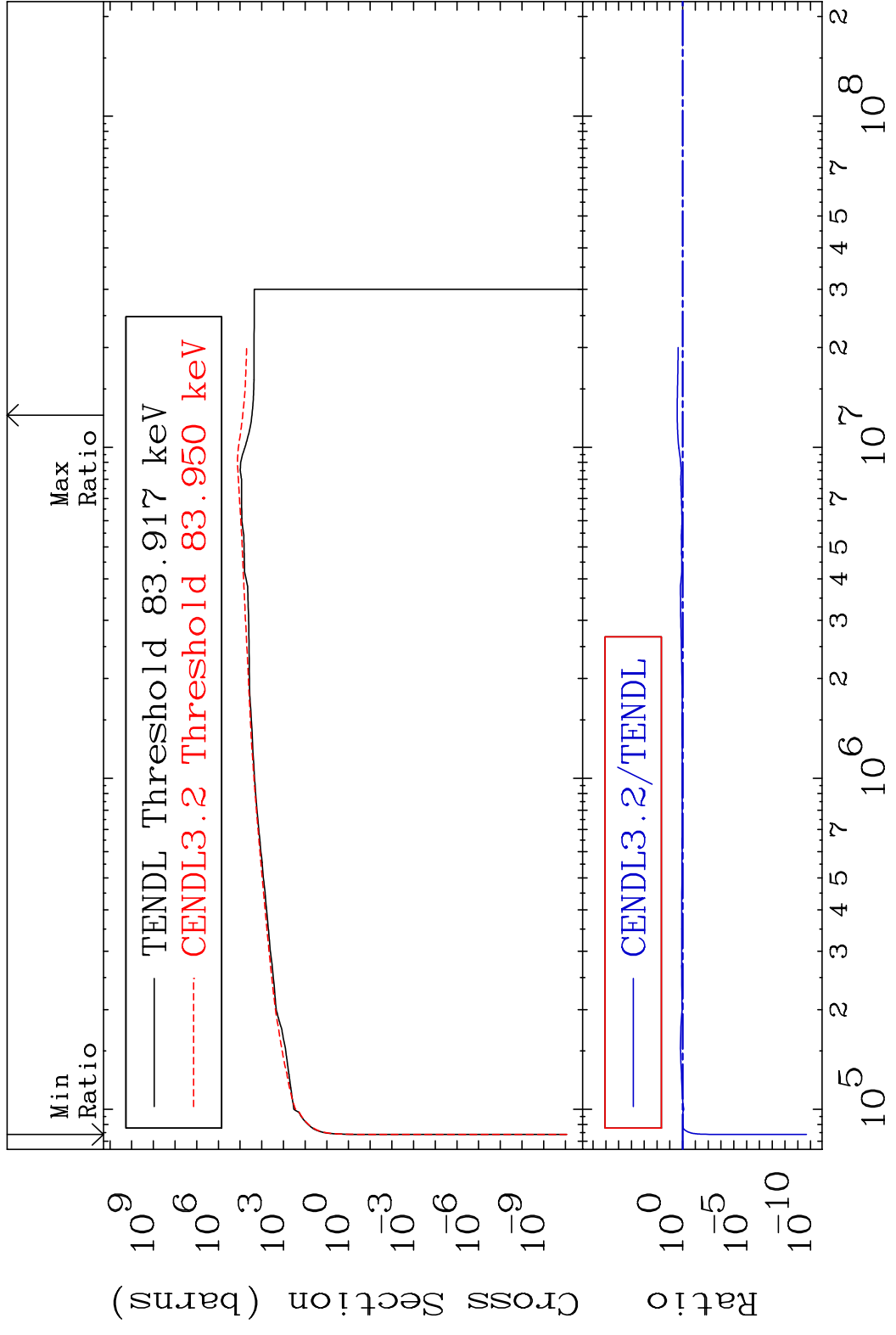


40

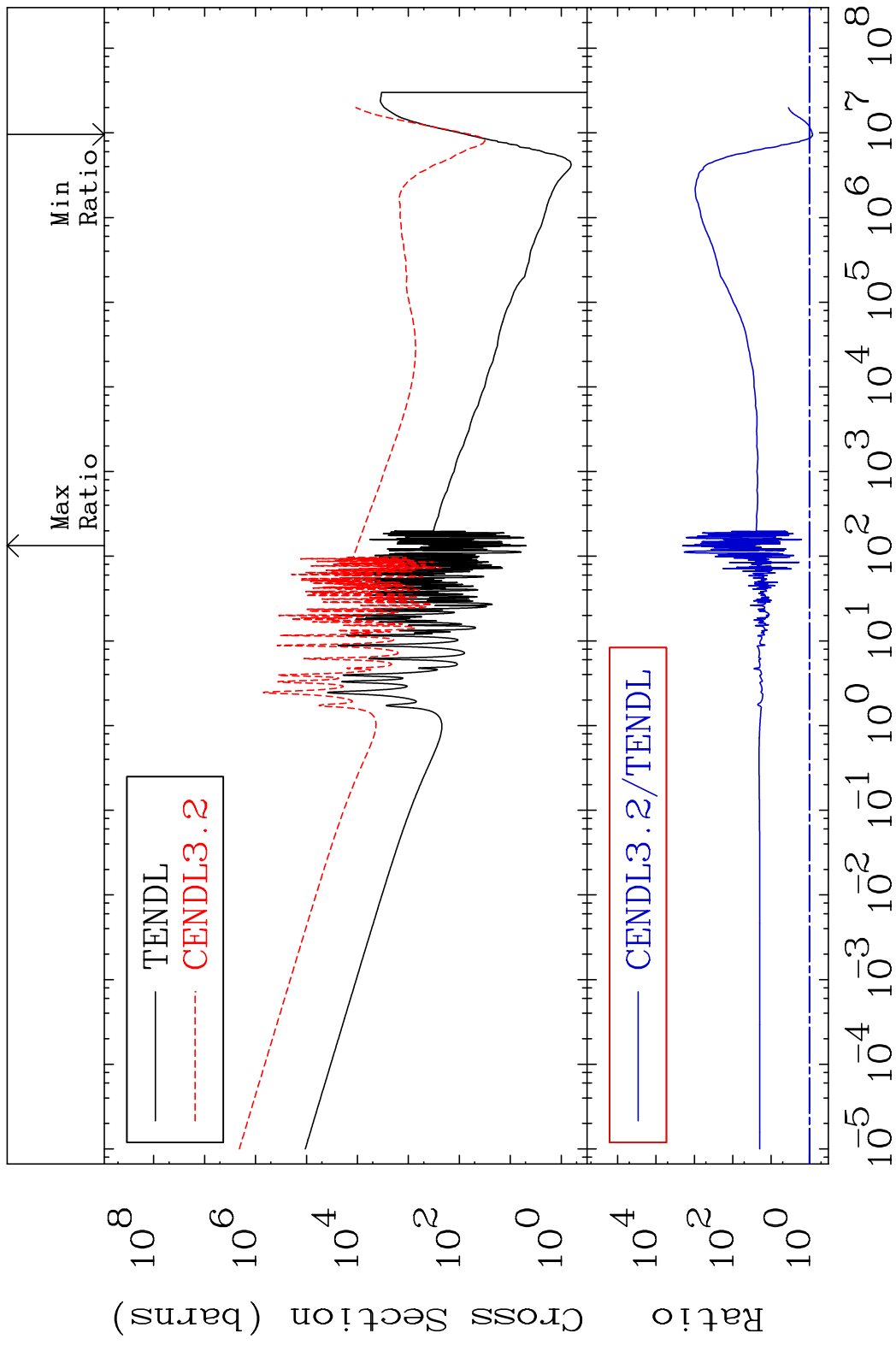
Incident Energy (eV)

63-Eu-153

MAT 6331 Dpa inelastic (mt51-91) 63-Eu-153
 Cross Section -100.0 To 165.9 %



MAT 6331 Dpa disappearance (mt102 -120) 63-Eu-153
 Cross Section -17.03 To 9999. %

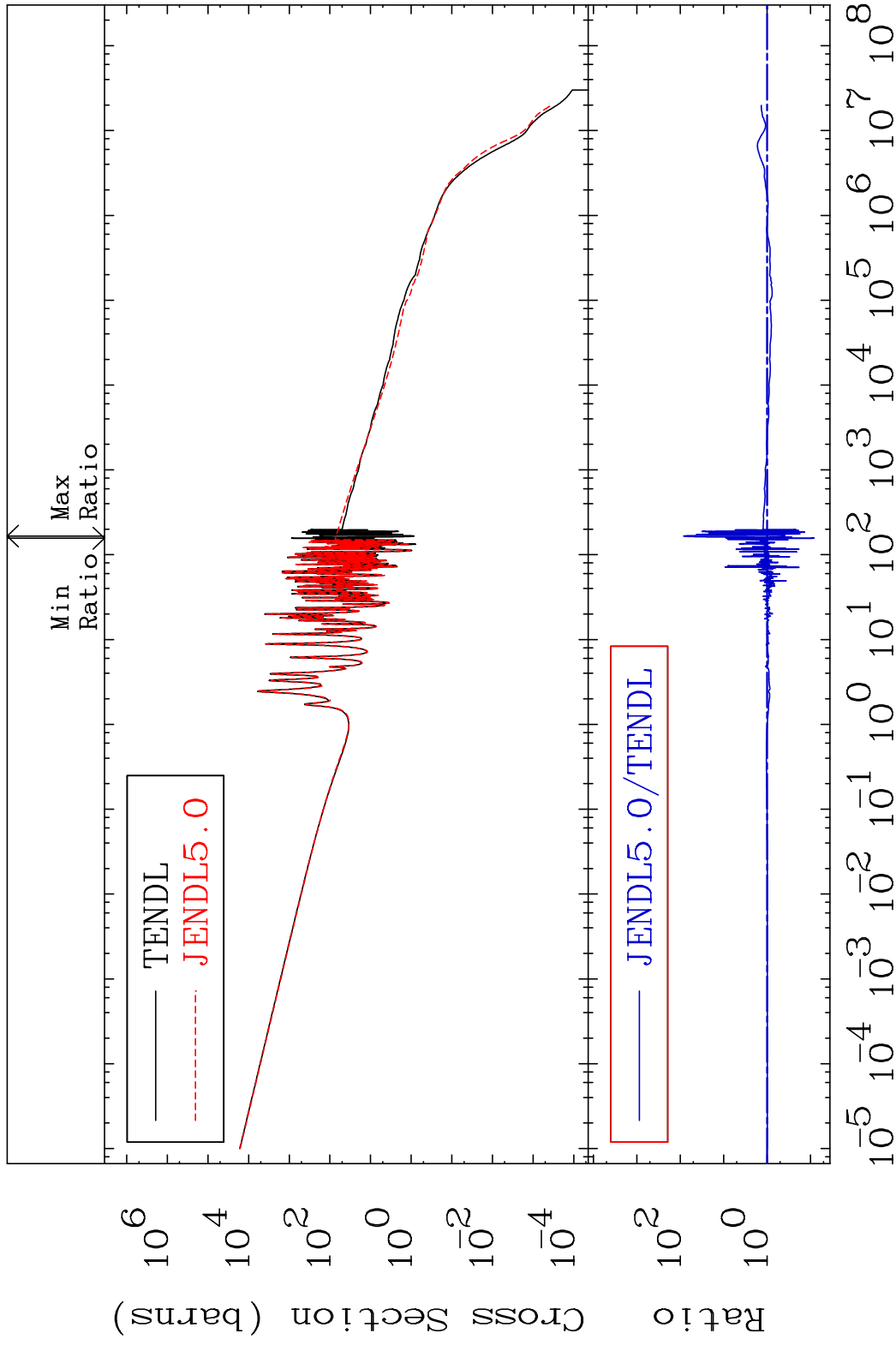


MAT 6331

(n, γ)

63-Eu-153

Cross Section -91.75 To 8257. %



43

Incident Energy (eV)

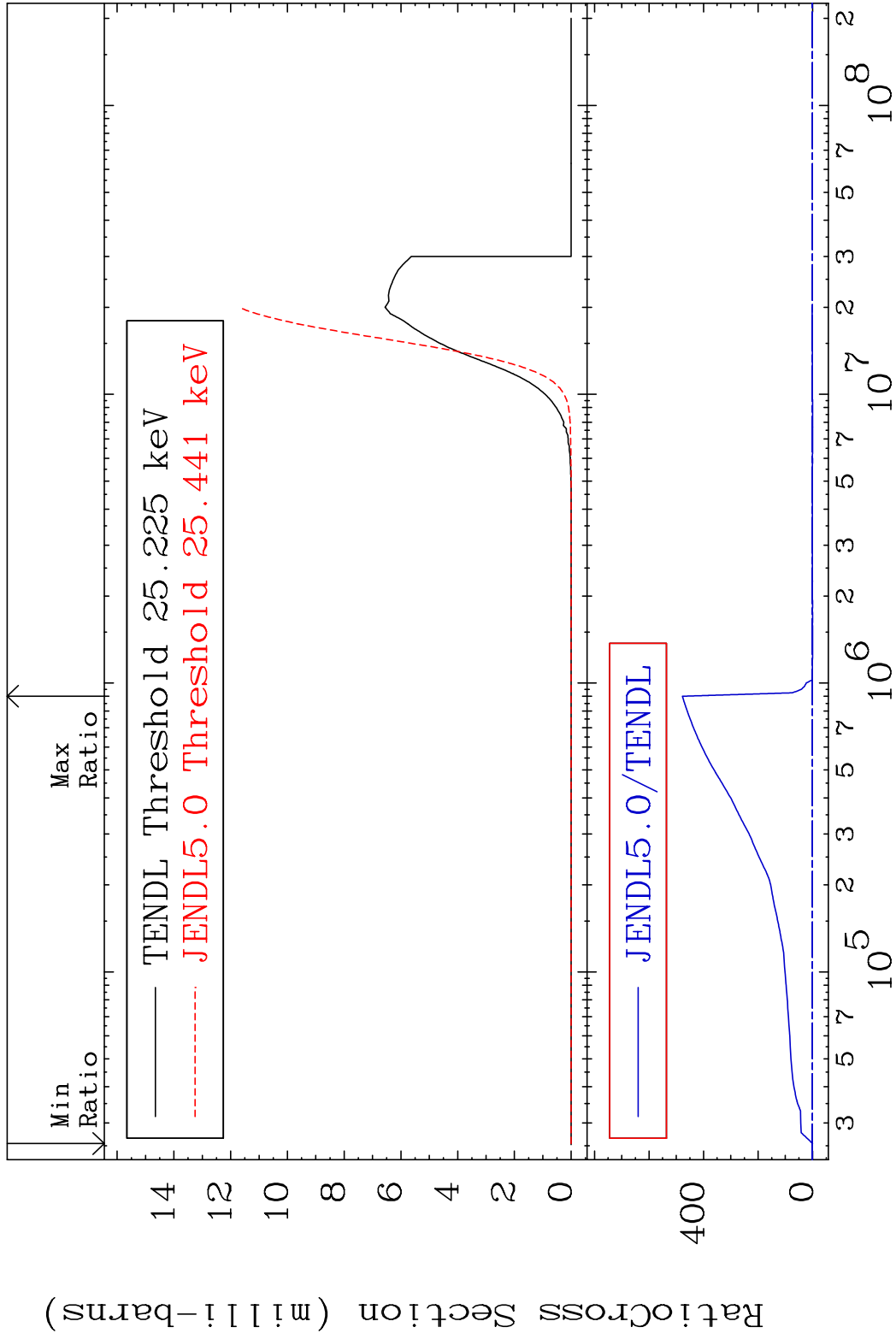
63-Eu-153

MAT 6331

(n,p)

63-Eu-153

Cross Section -100.0 To 9999. %



44

Incident Energy (eV)

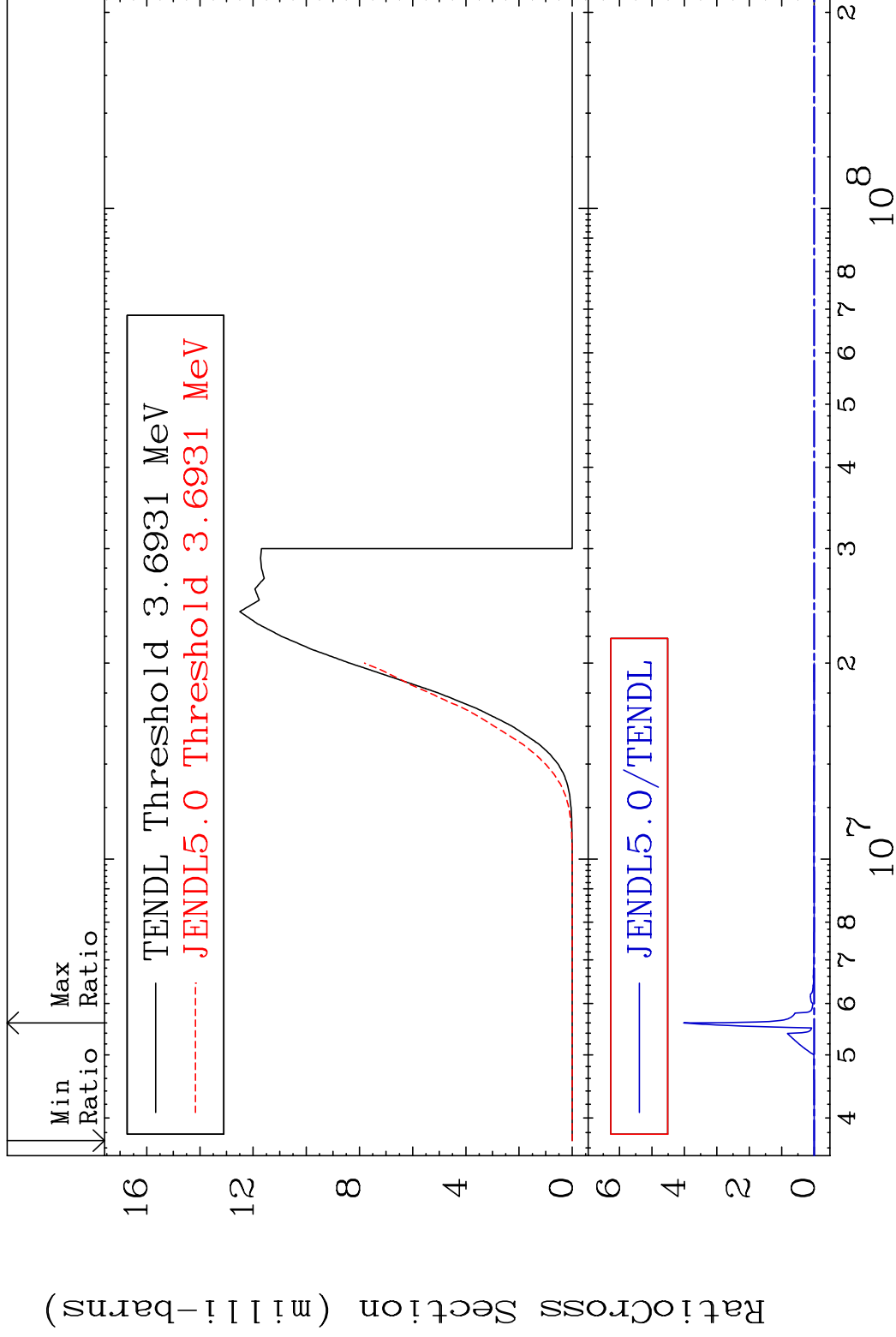
63-Eu-153

MAT 6331

(n,d)

63-Eu-153

Cross Section -100.0 To 9999. %



45

Incident Energy (eV)

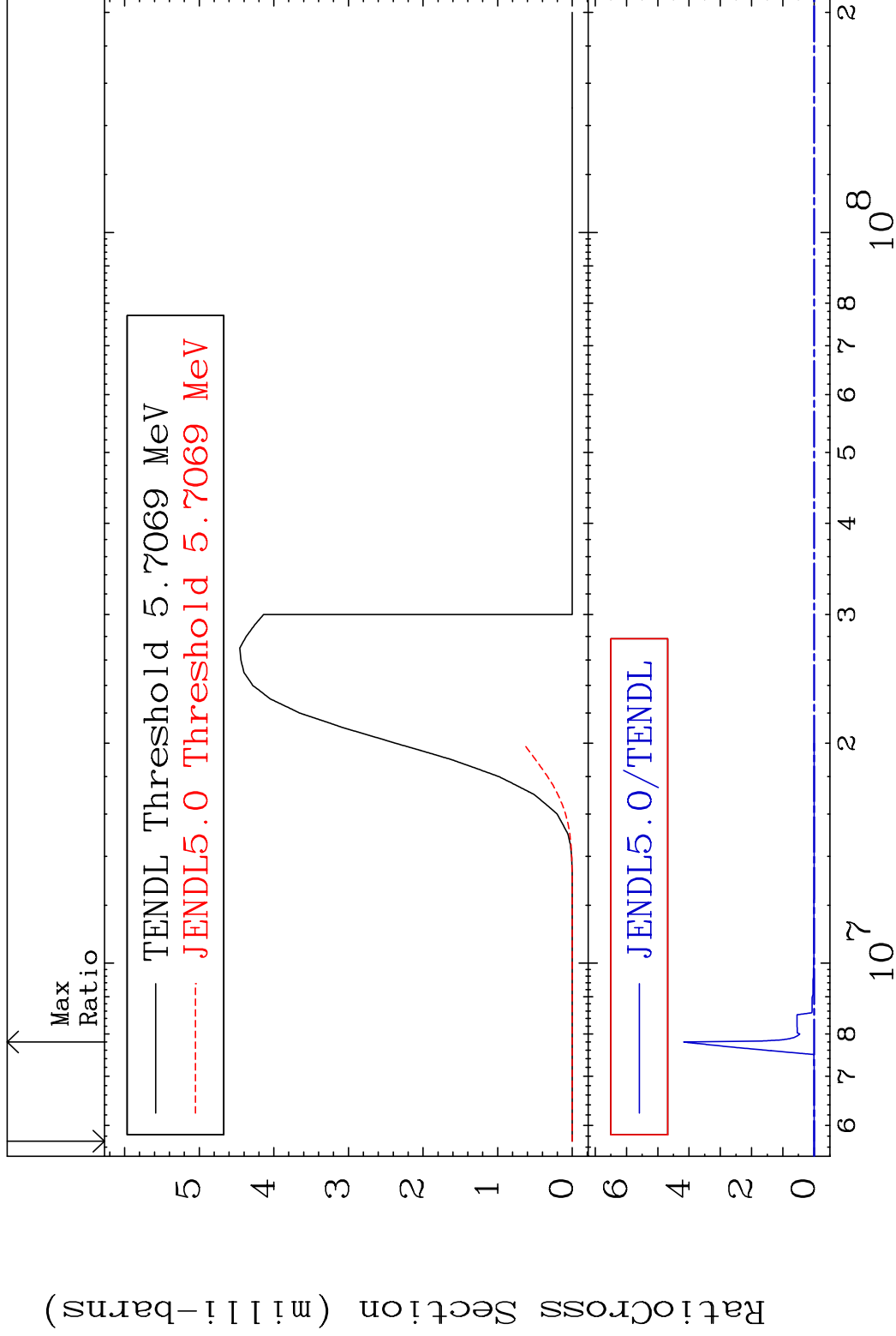
63-Eu-153

MAT 6331

(n, t)

63-Eu-153

Cross Section -100.0 To 9999. %



46

Incident Energy (eV)

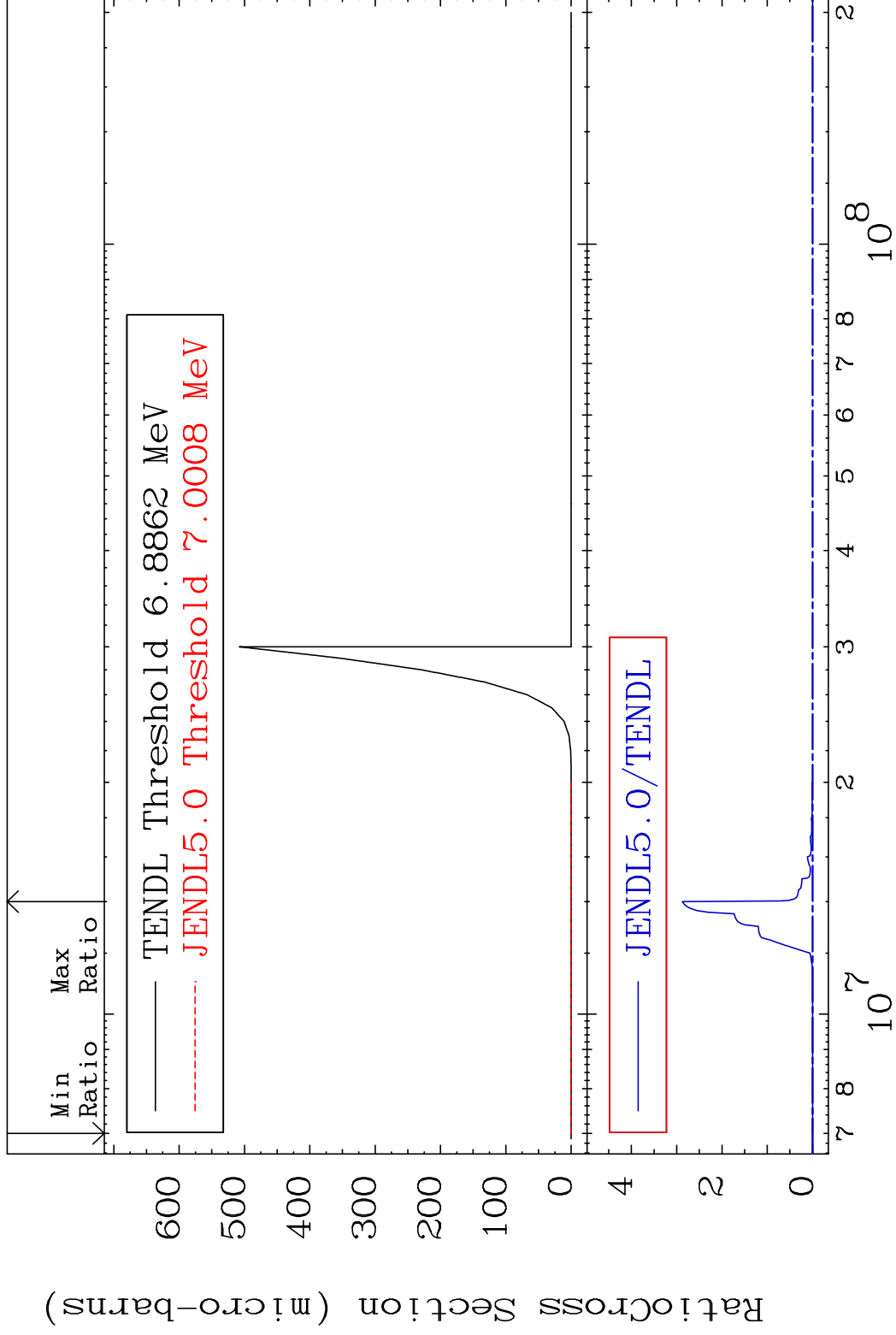
63-Eu-153

MAT 6331

(n, He-3)

63-Eu-153

Cross Section -100.0 To 9999. %



47

Incident Energy (eV)

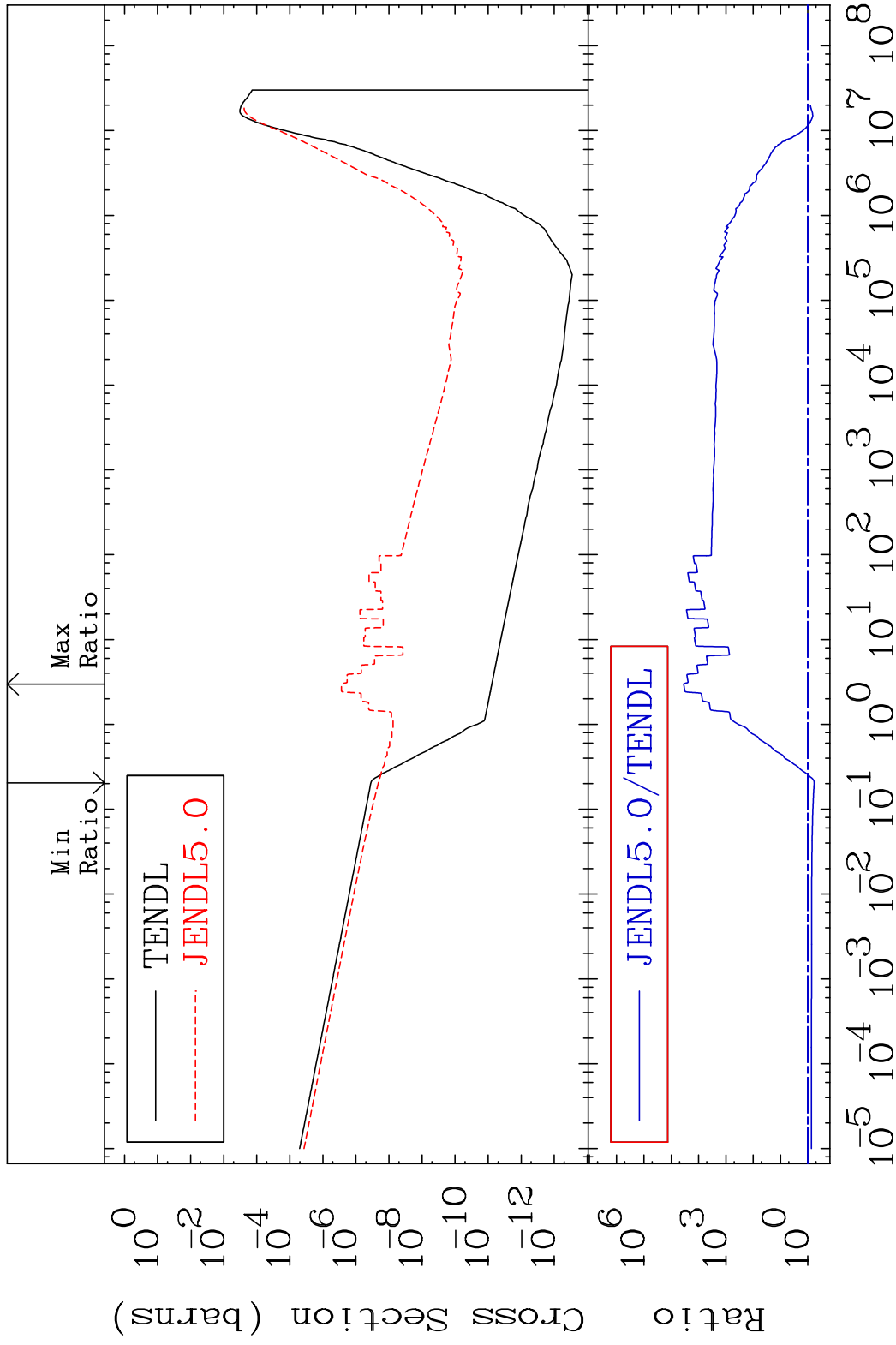
63-Eu-153

MAT 6331

(n, α)

63-Eu-153

Cross Section -40.94 To 9999. %

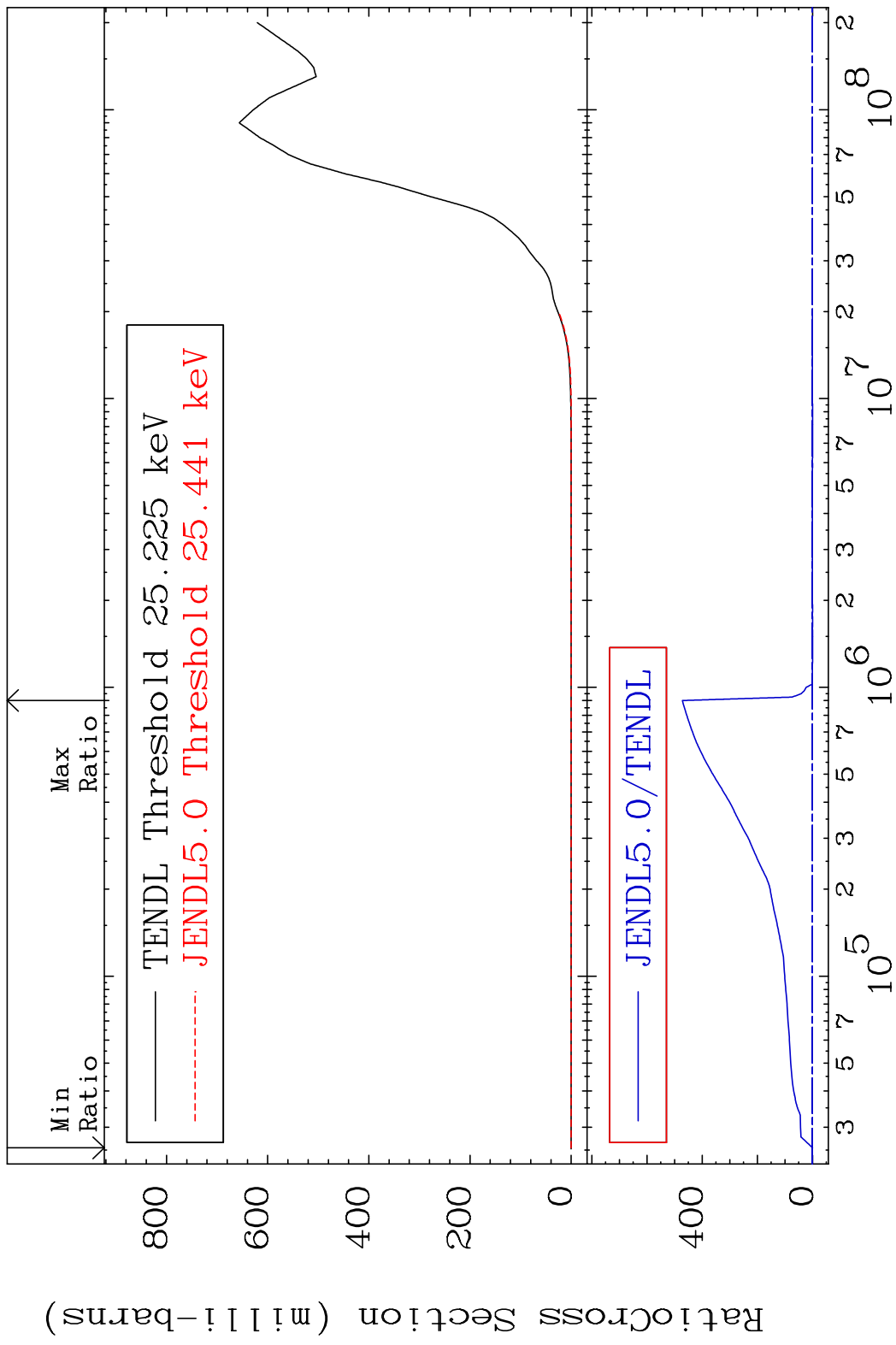


48

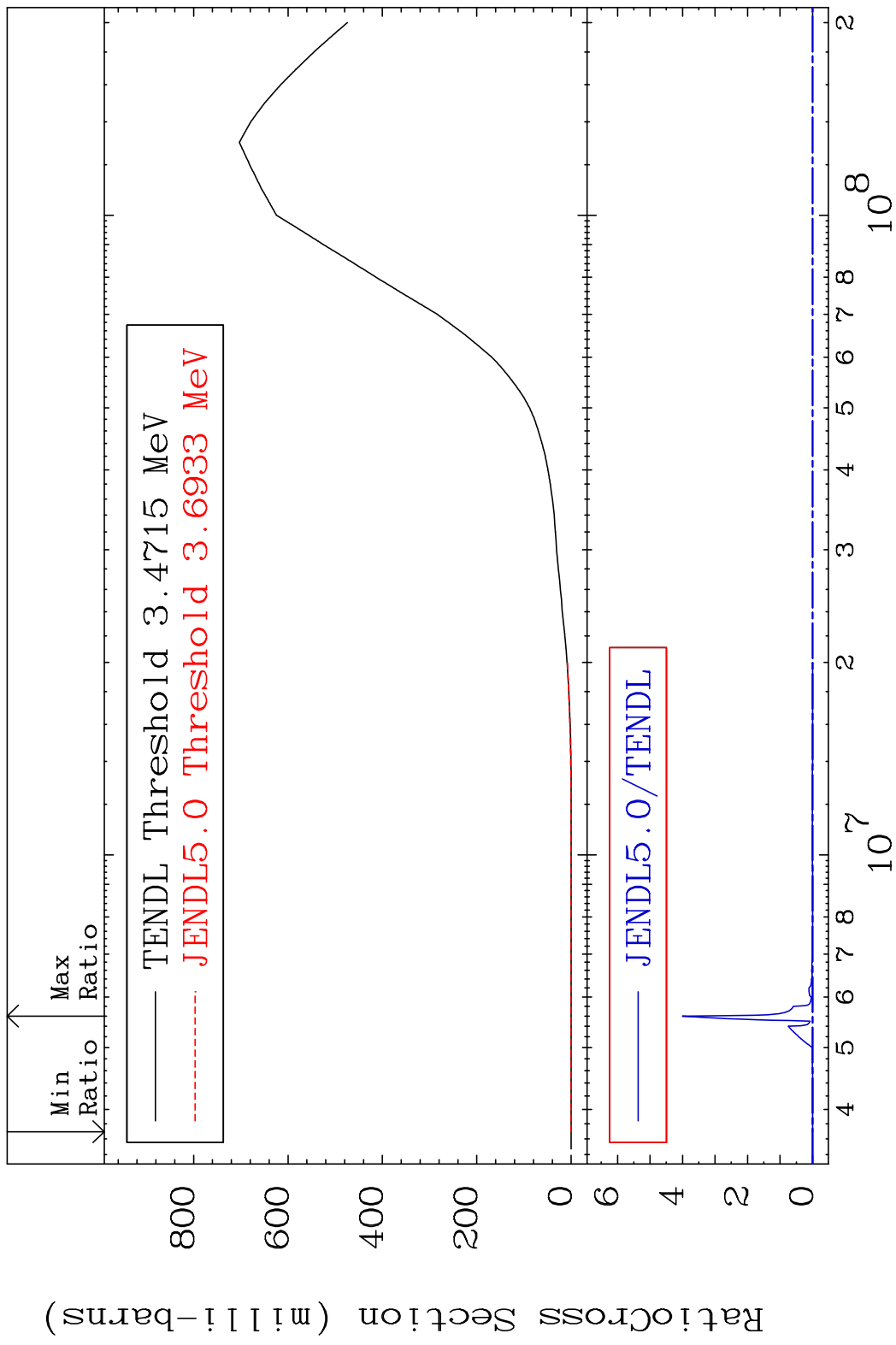
Incident Energy (eV)

63-Eu-153

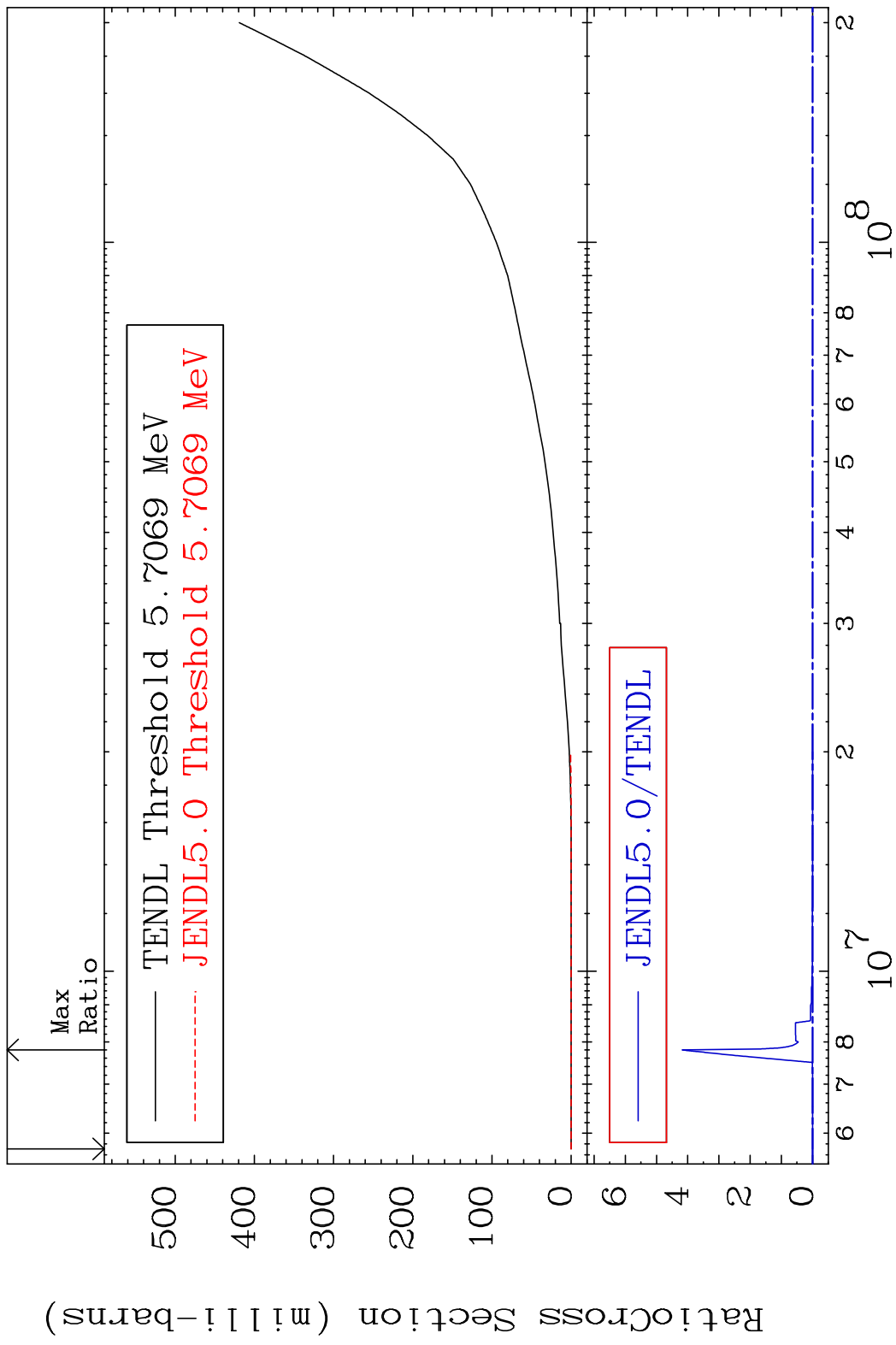
MAT 6331 Hydrogen Production 63-Eu-153
 Cross Section -100.0 To 9999. %



MAT 6331 Deuterium Production 63-Eu-153
 Cross Section -100.0 To 9999. %



MAT 6331 Tritium Production 63-Eu-153
 Cross Section -100.0 To 9999. %

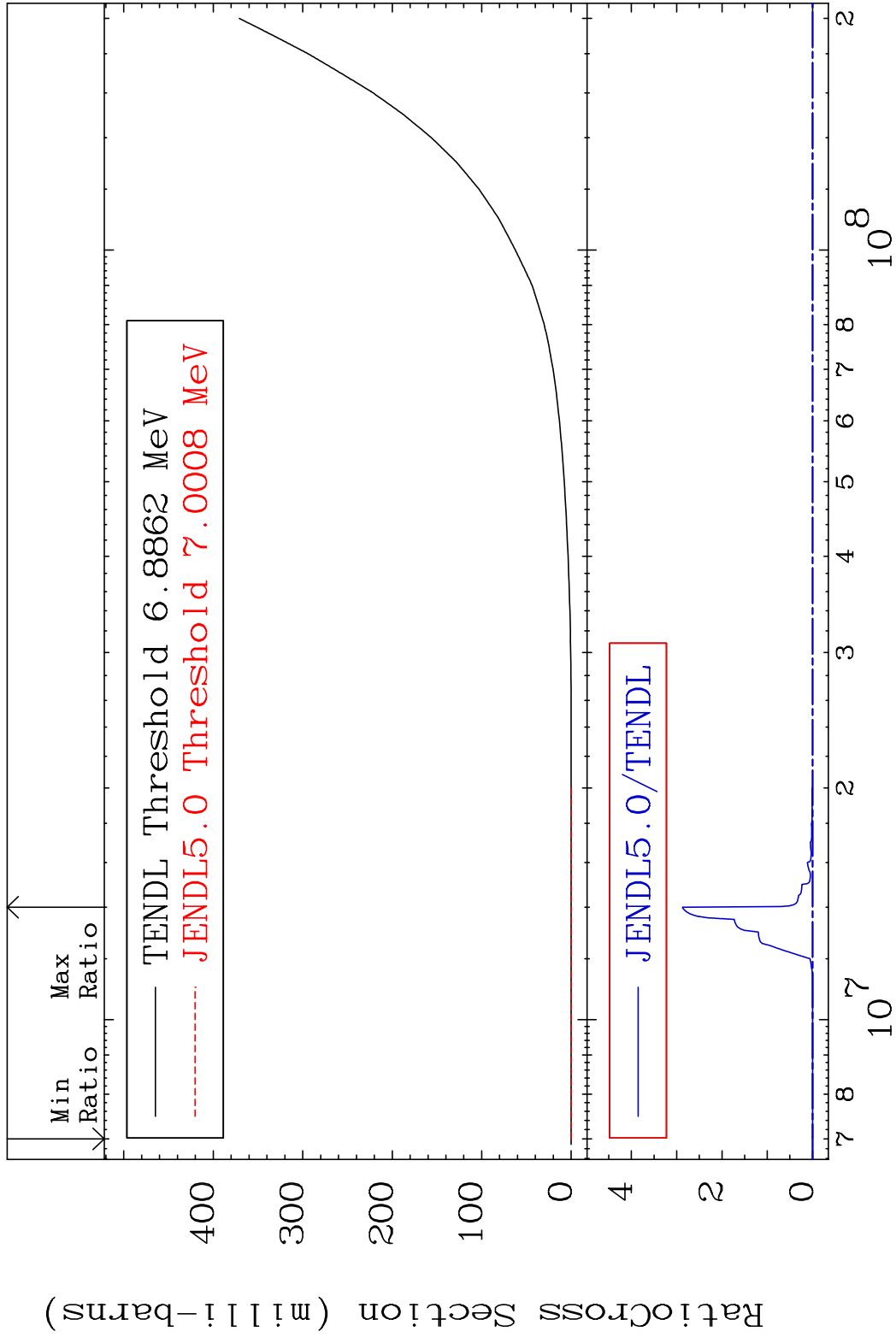


MAT 6331

He-3 Production

63-Eu-153

Cross Section -100.0 To 9999. %

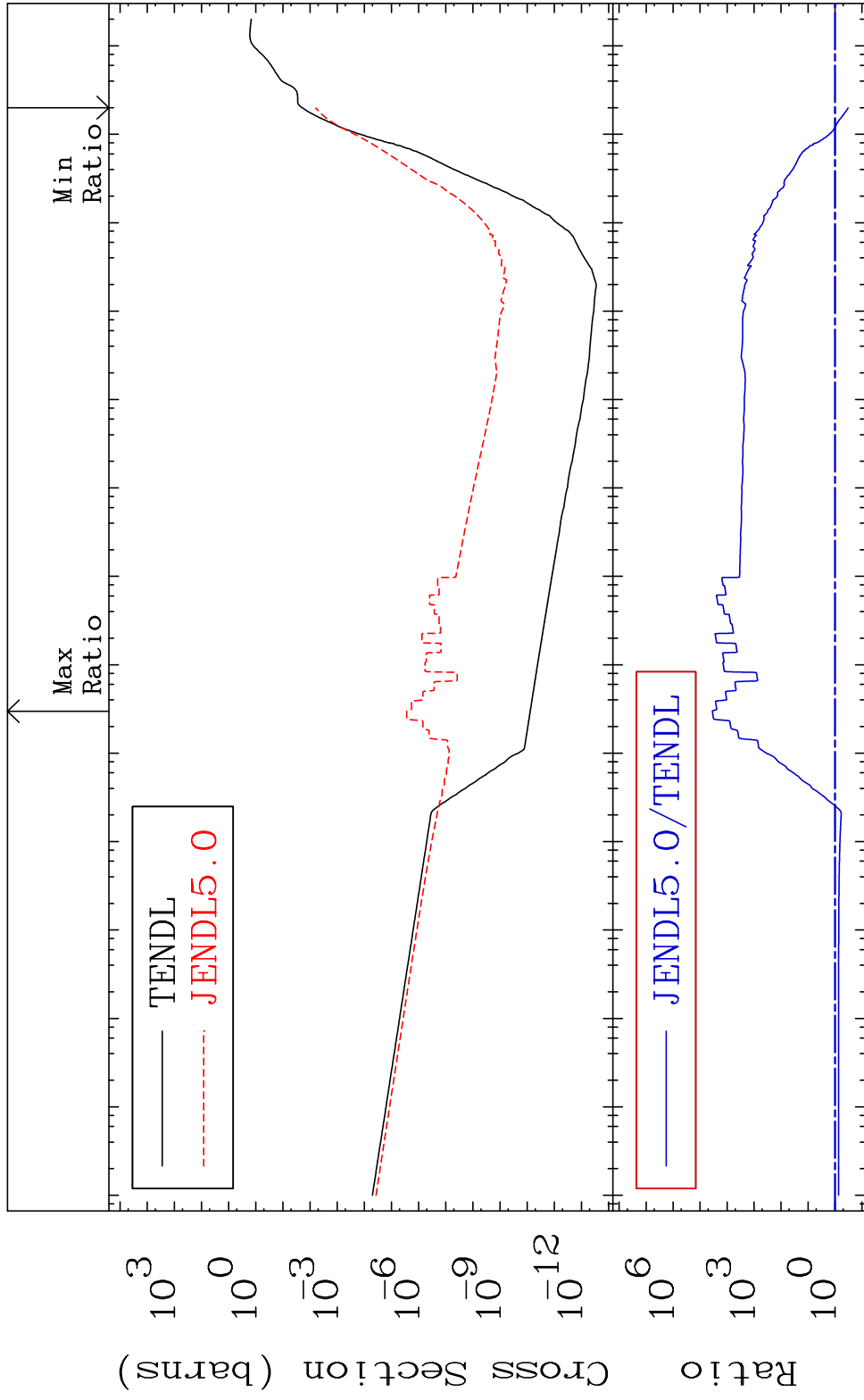


MAT 6331

He-4 Production

63-Eu-153

Cross Section -67.90 To 9999. %



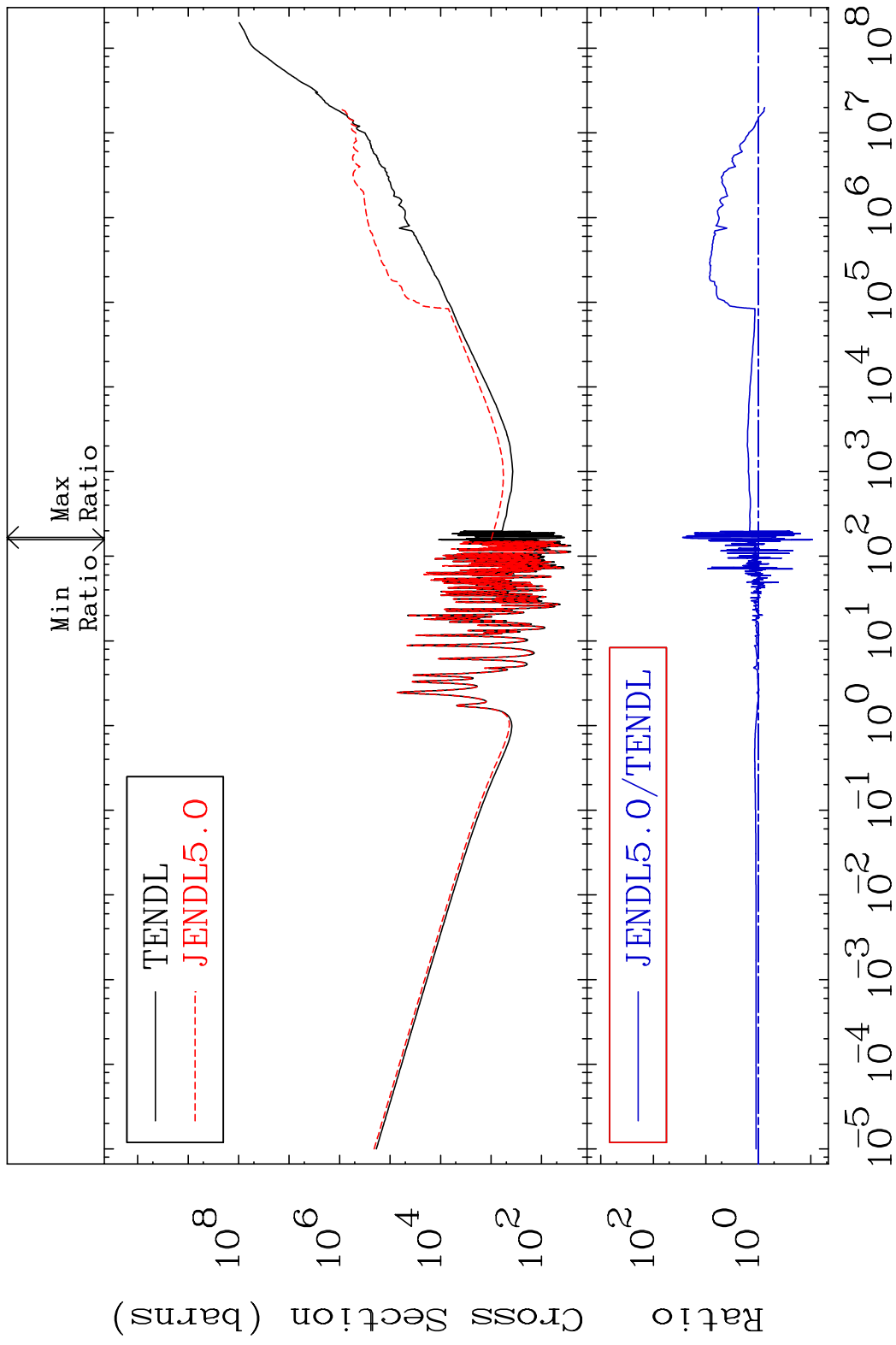
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

53

Incident Energy (eV)

63-Eu-153

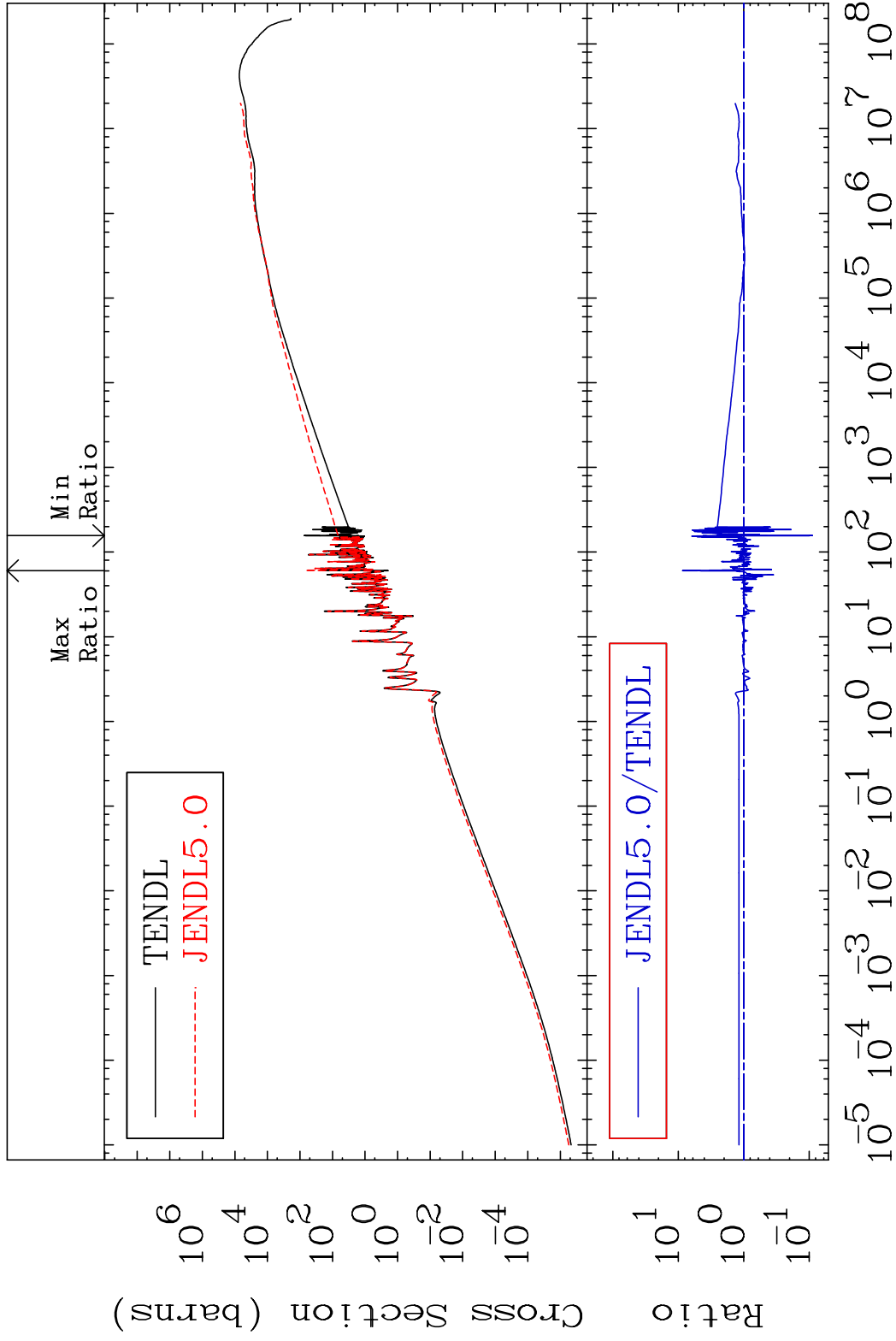
MAT 6331 Kerma total (eV-barns) 63-Eu-153
 Cross Section -90.73 To 2701. %



MAT 6331

Kerma elastic
Cross Section

63-Eu-153
-91.10 To 765.6 %

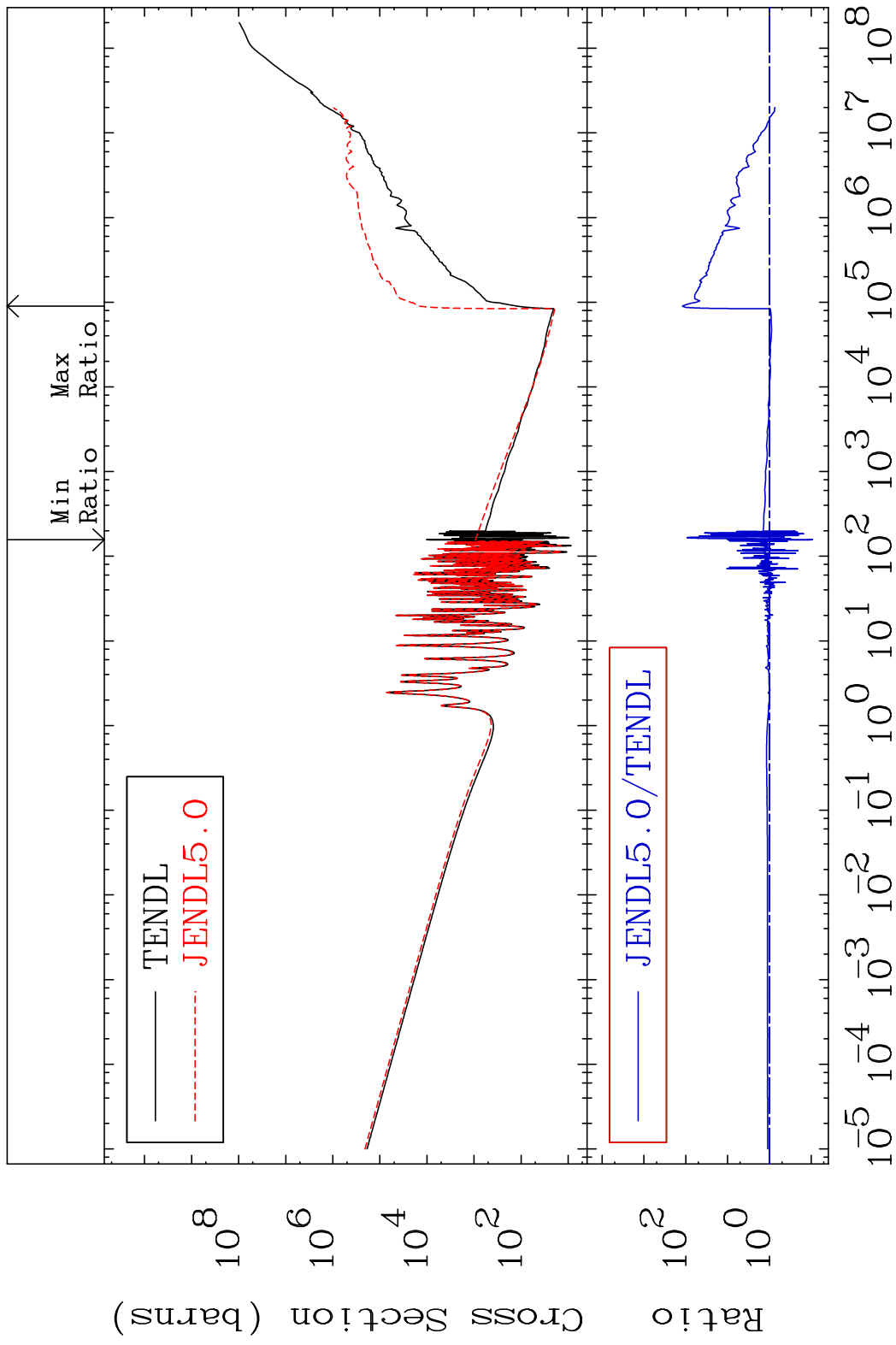


55

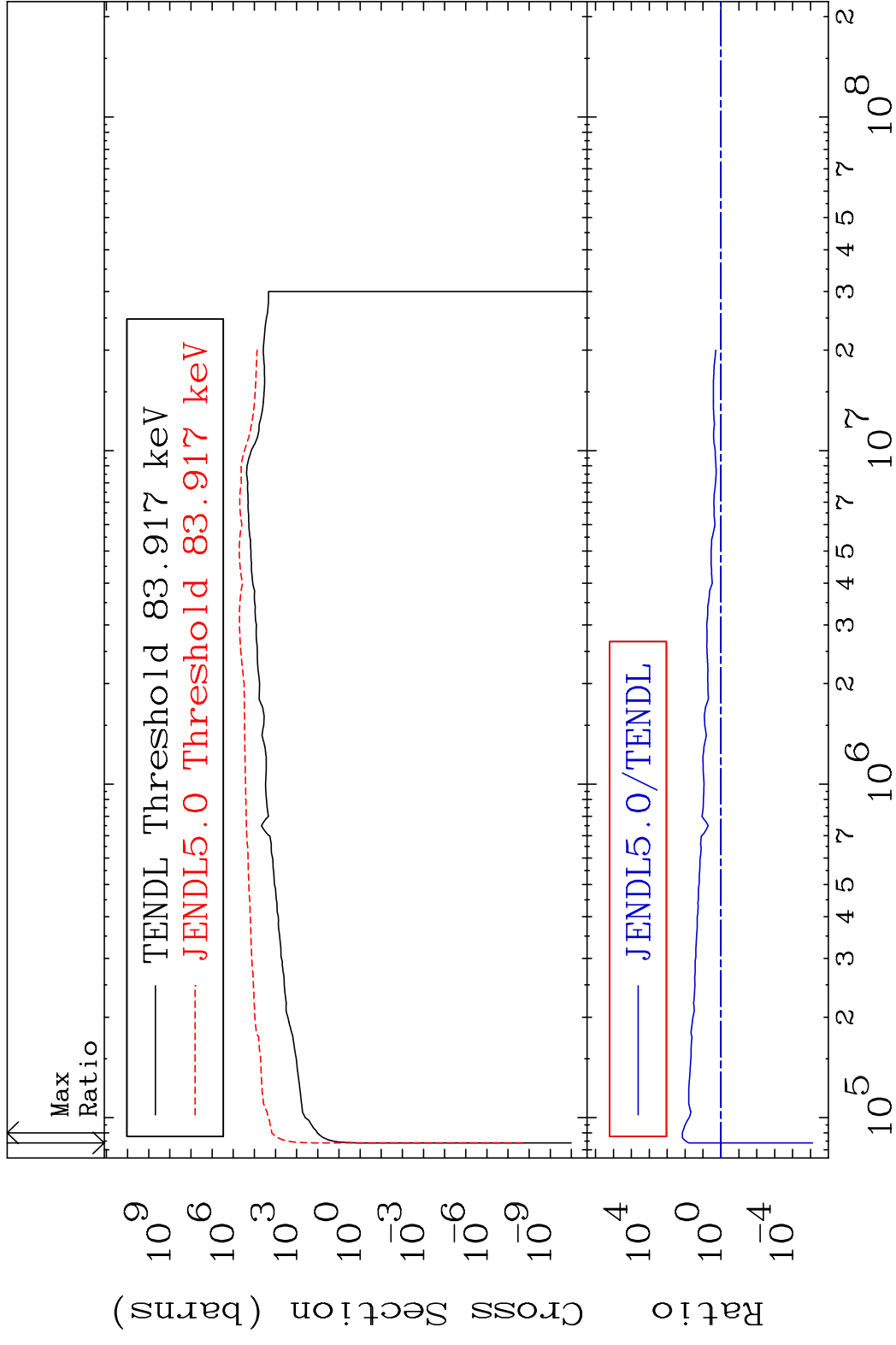
Incident Energy (eV)

63-Eu-153

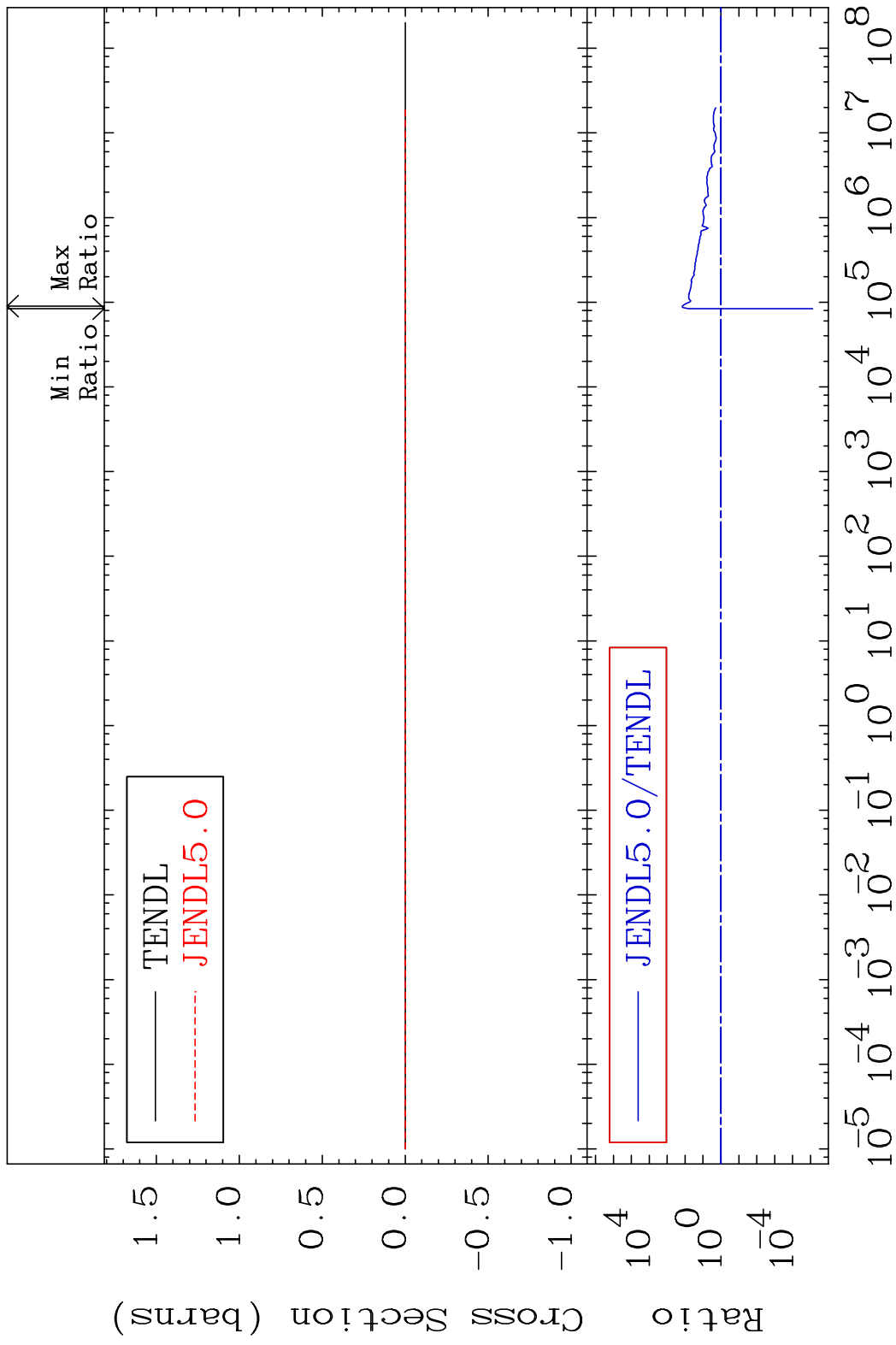
MAT 6331 Kerma non-elastic (all but mt2) 63-Eu-153
 Cross Section -90.70 To 9999. %



MAT 6331 Kerma inelastic (mt51-91) 63-Eu-153
 Cross Section -100.0 To 9999. %

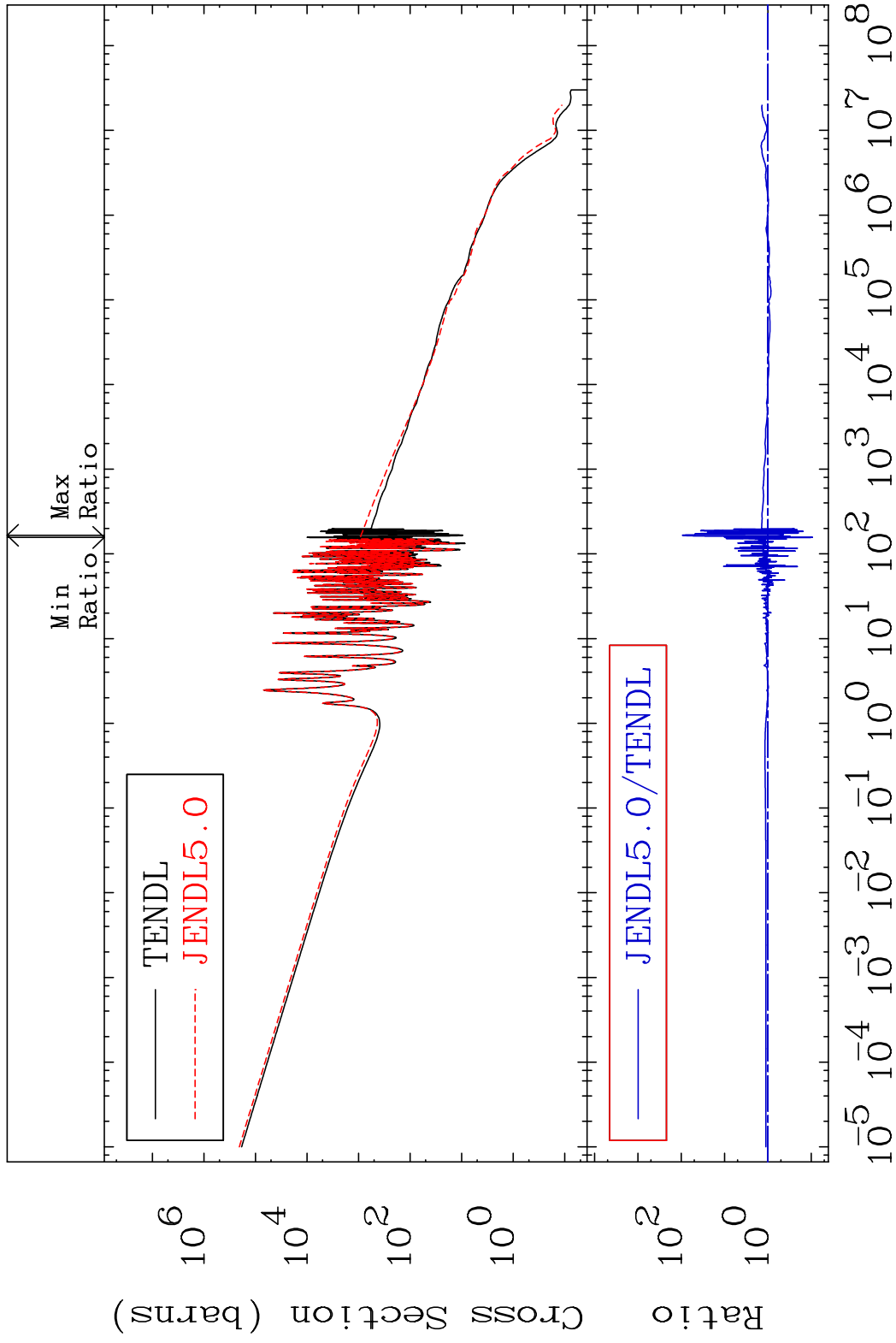


MAT 6331 Kerma fission (mt18 or mt19-20-21-38)63-Eu-153
 Cross Section -100.0 To 9999. %



MAT 6331

Kerma capture (mt102) 63-Eu-153
Cross Section -90.70 To 9317. %



59

Incident Energy (eV)

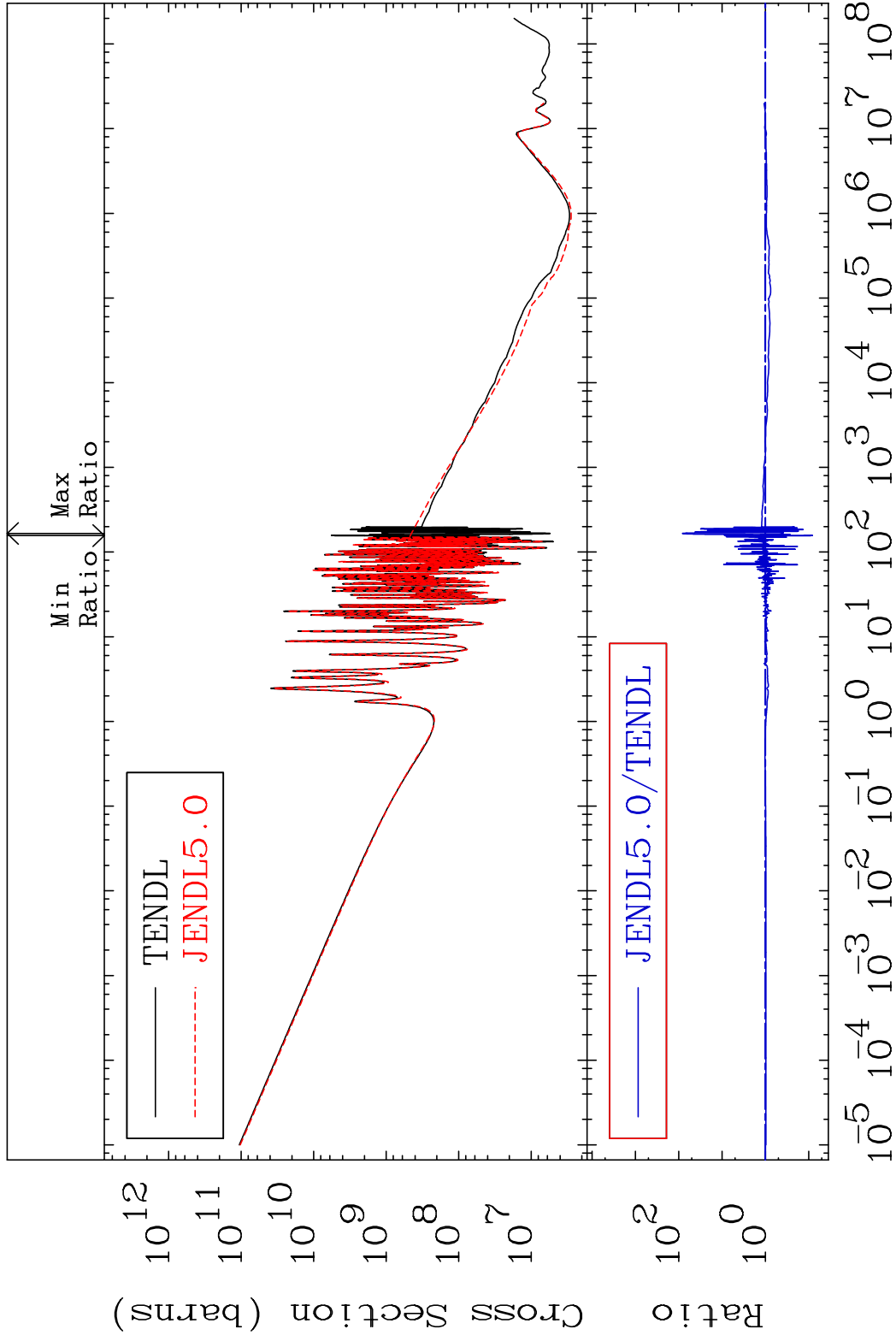
63-Eu-153

MAT 6331

Total photon (eV-barns)

63-Eu-153

Cross Section -91.84 To 8163. %

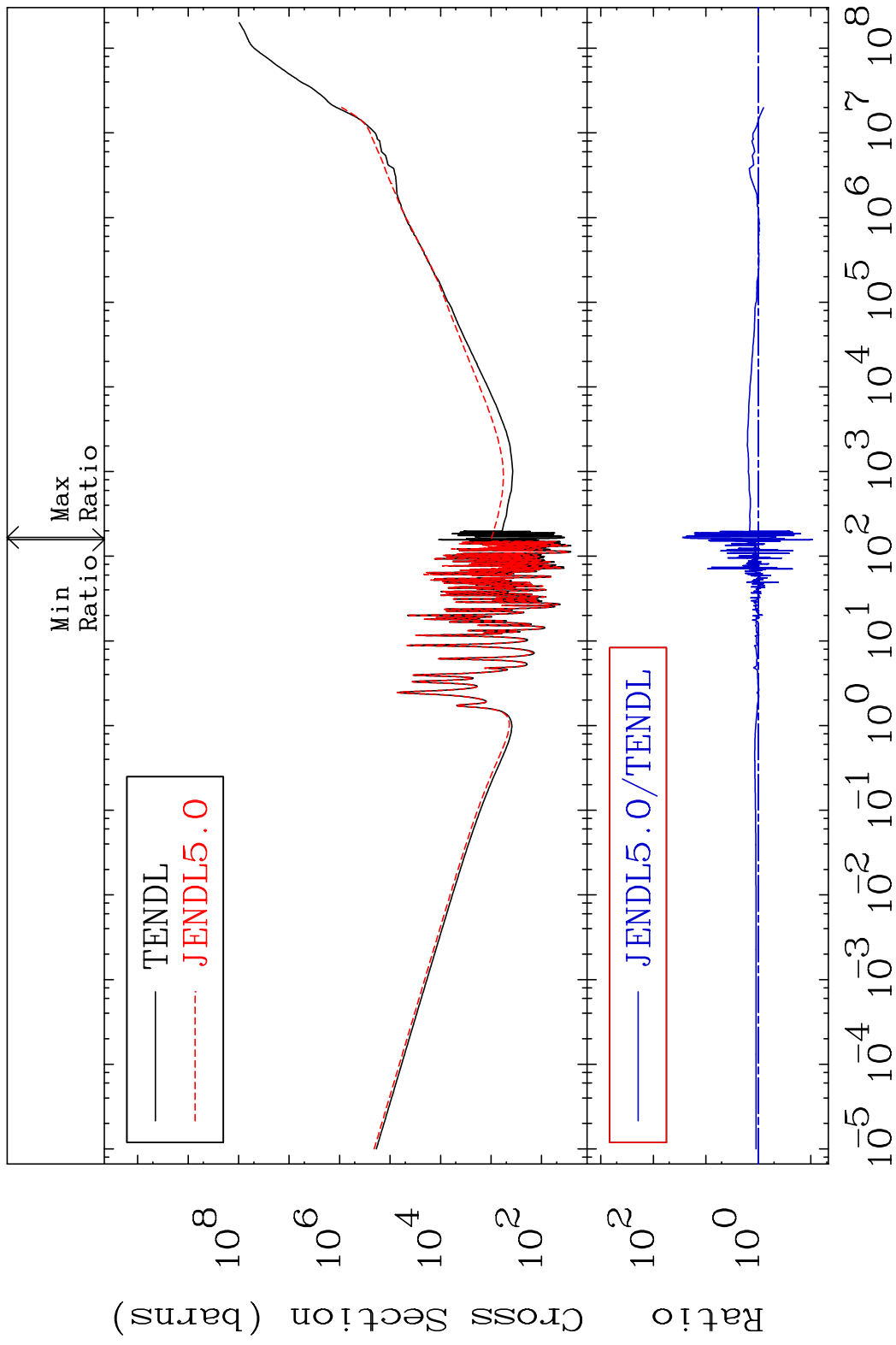


60

Incident Energy (eV)

63-Eu-153

MAT 6331 Total kinematic kerma (high limit) 63-Eu-153
 Cross Section -90.73 To 2701. %

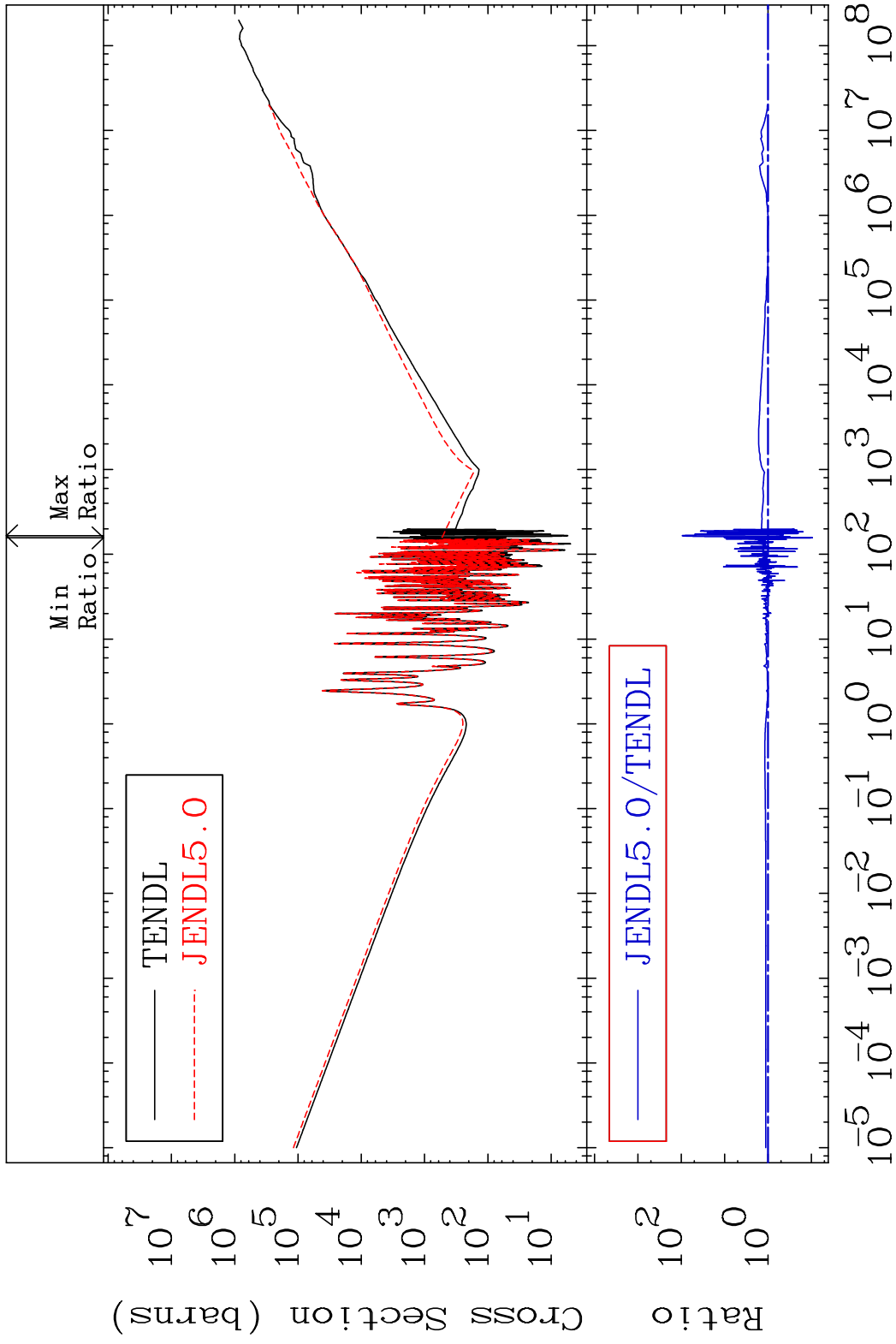


MAT 6331

Dpa total (eV-barns)

63-Eu-153

Cross Section -90.61 To 9406. %



62

Incident Energy (eV)

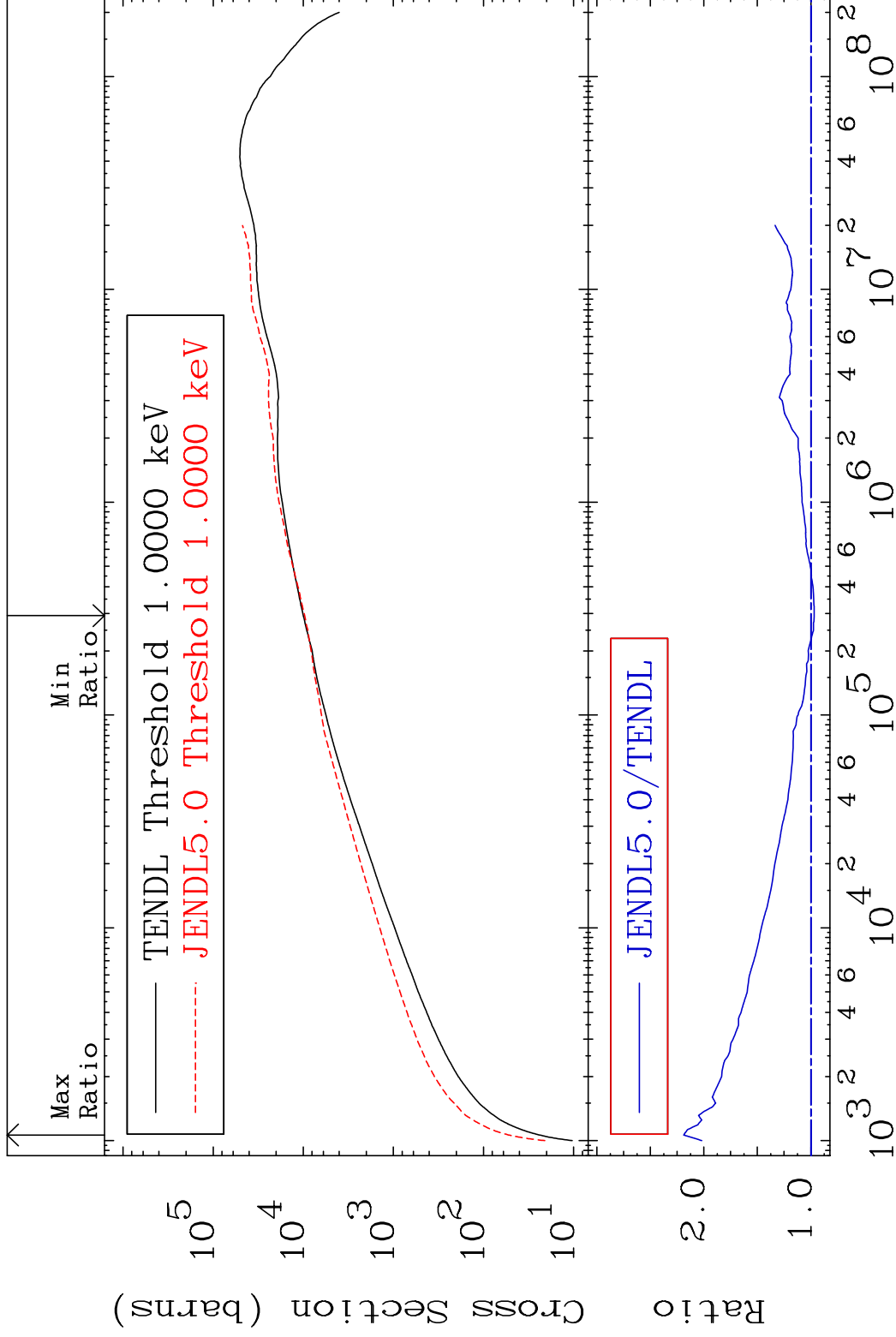
63-Eu-153

MAT 6331

Dpa elastic (mt2)

63-Eu-153

Cross Section -3.040 To 118.9 %

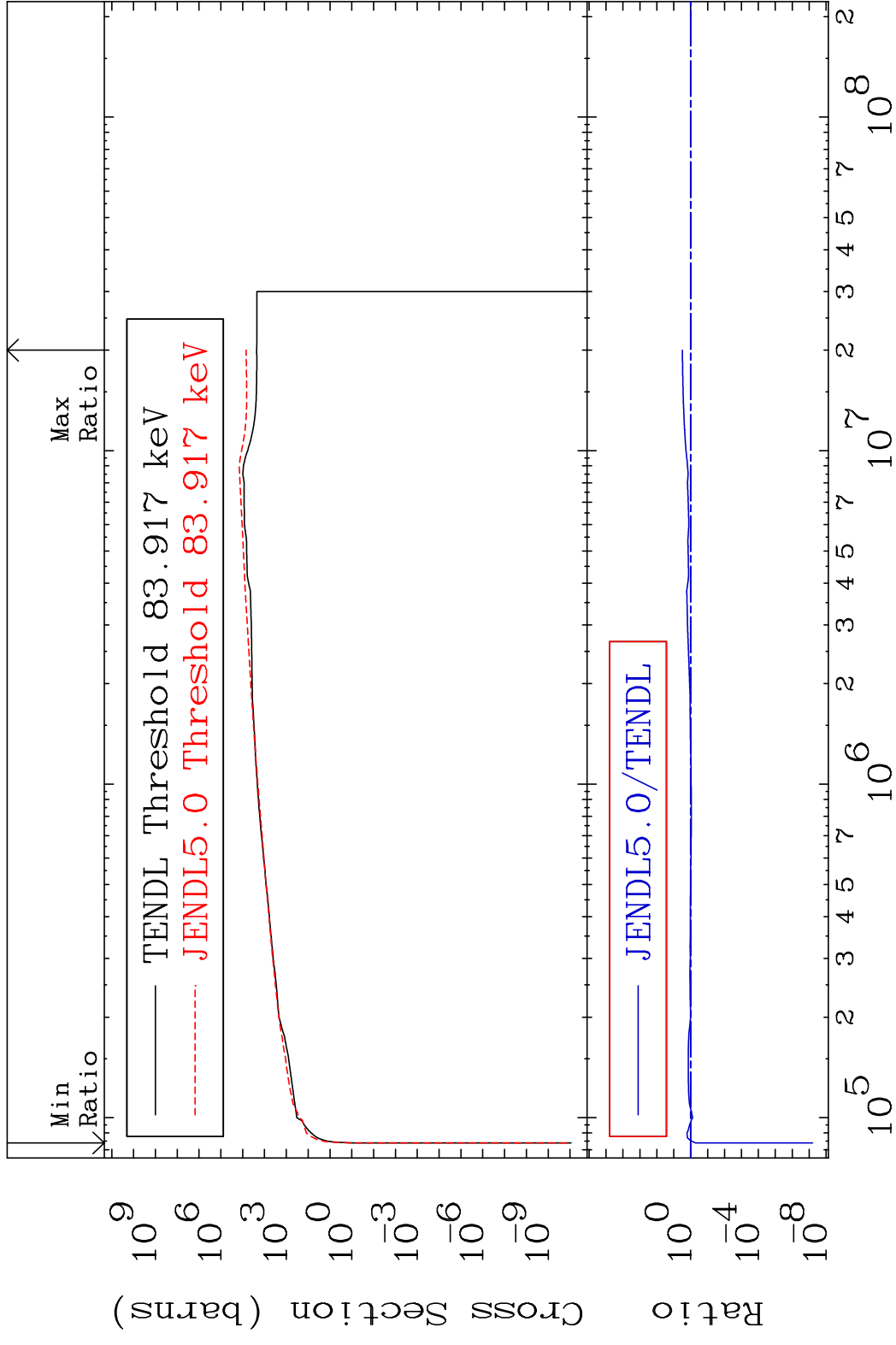


63

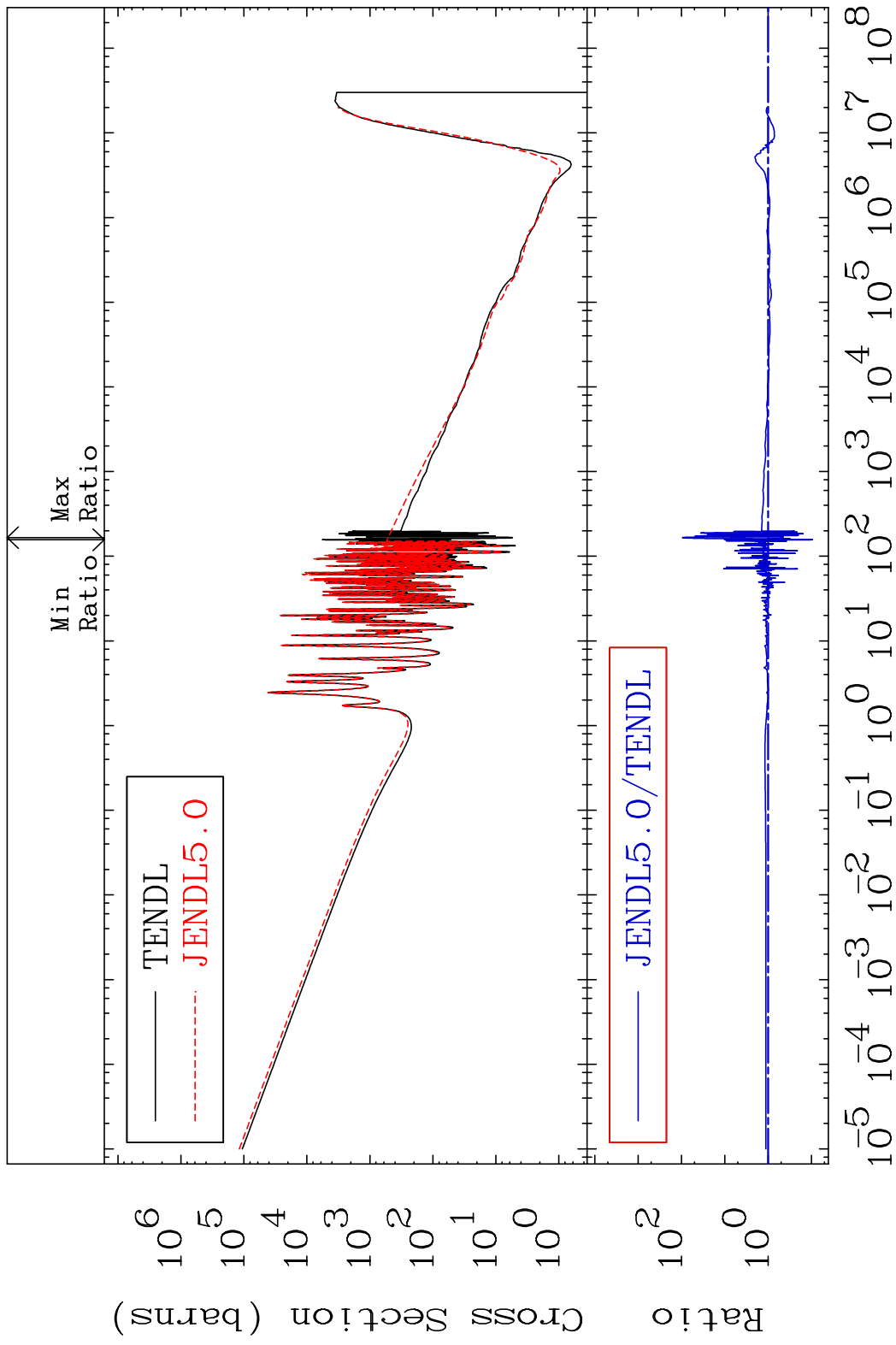
Incident Energy (eV)

63-Eu-153

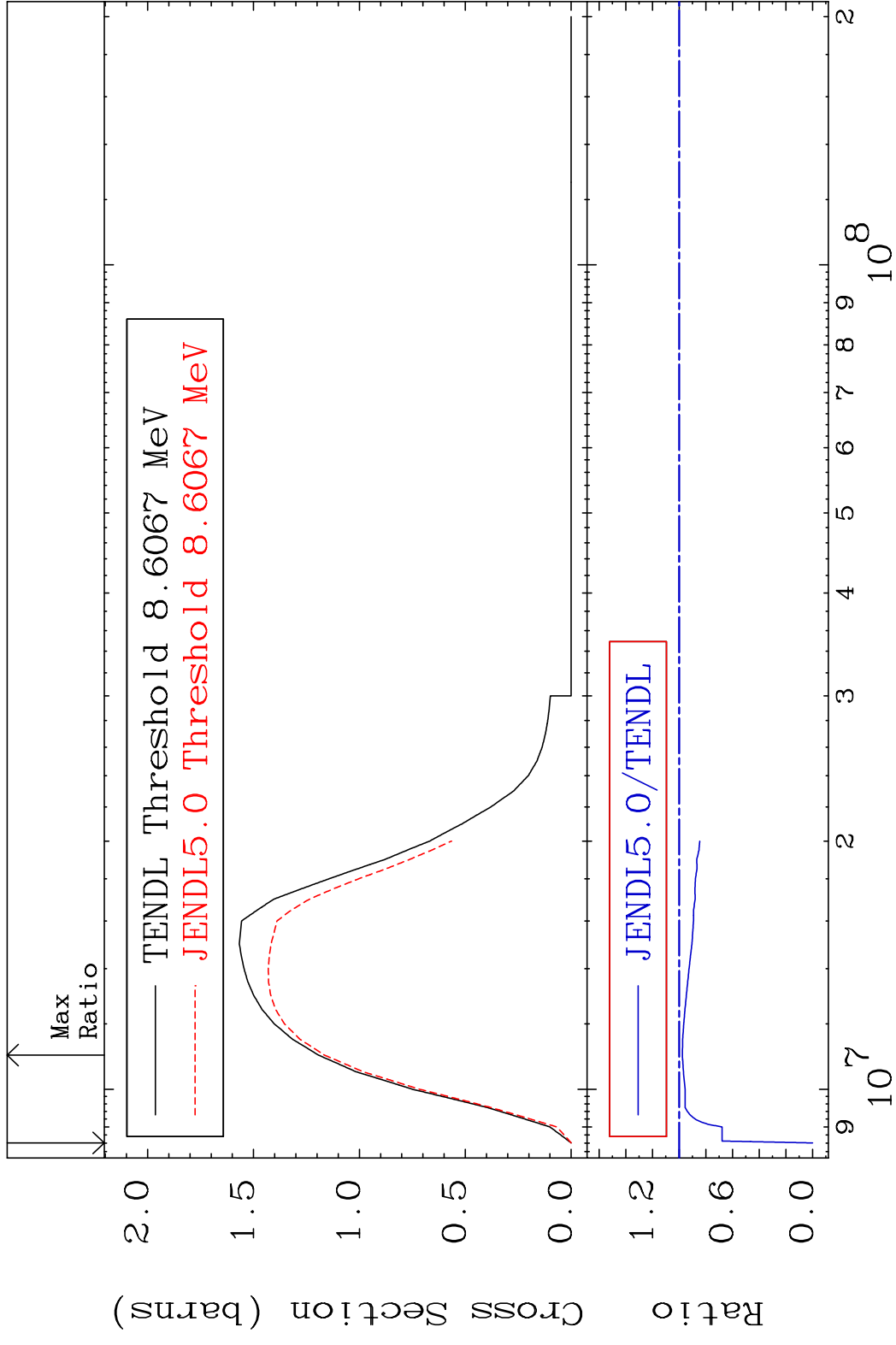
MAT 6331 Dpa inelastic (mt51-91) 63-Eu-153
 Cross Section -100.0 To 209.3 %



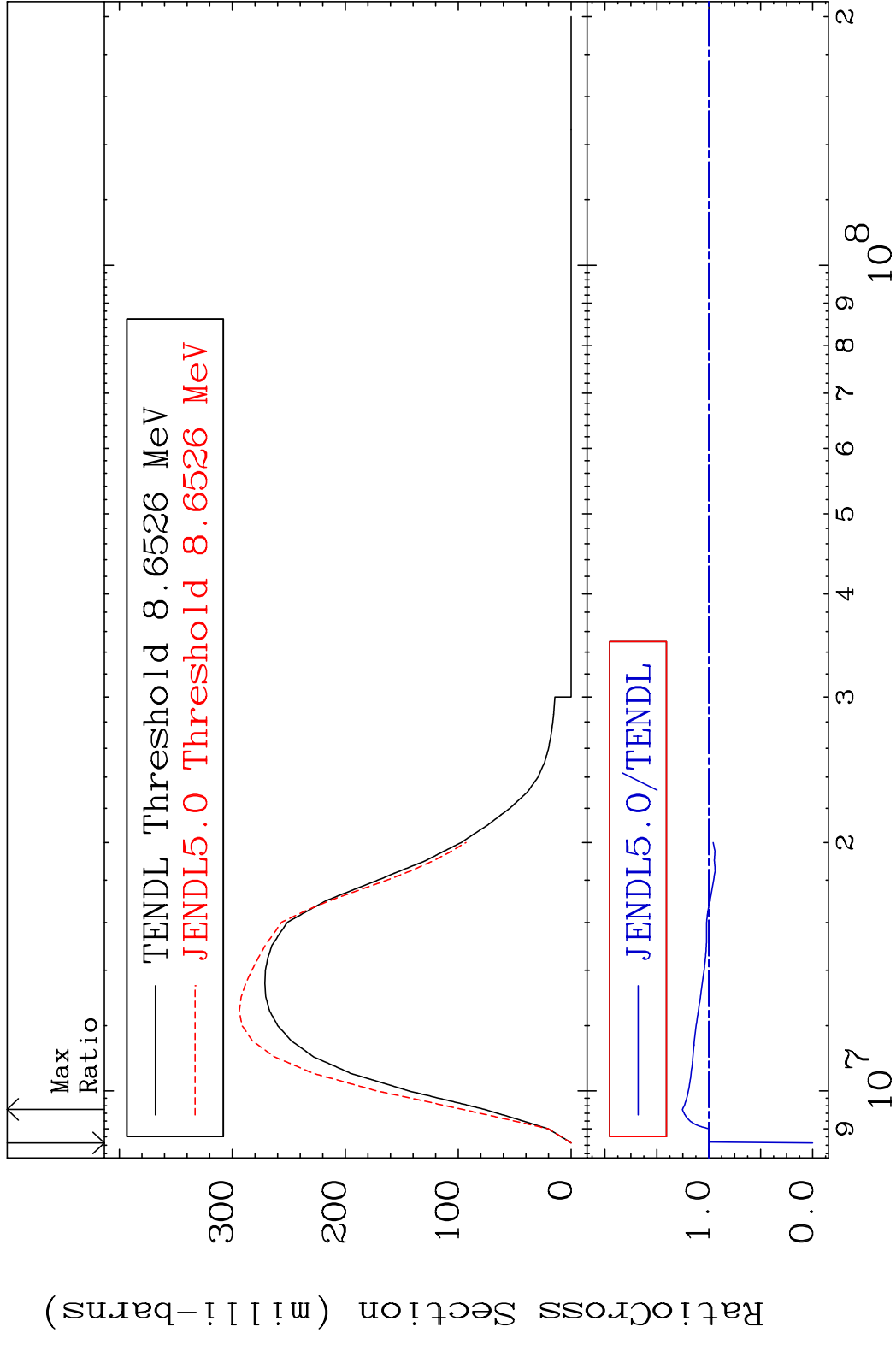
MAT 6331 Dpa disappearance (mt102 -120) 63-Eu-153
 Cross Section -90.61 To 9406. %



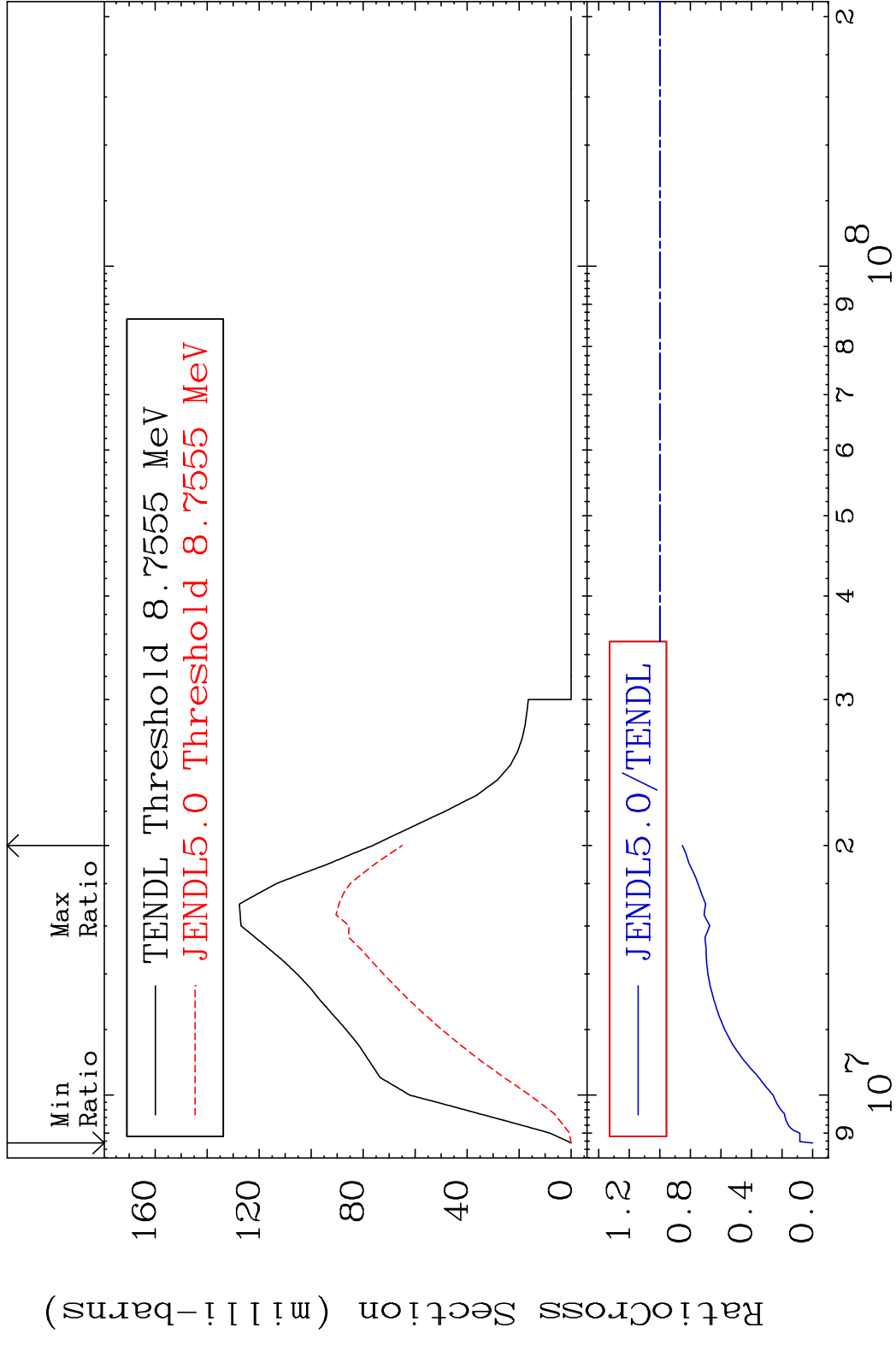
MAT 6331 (n,2n):63-Eu-152g 63-Eu-153
 Radionuclide Production Cross Section Ratio -2.399%

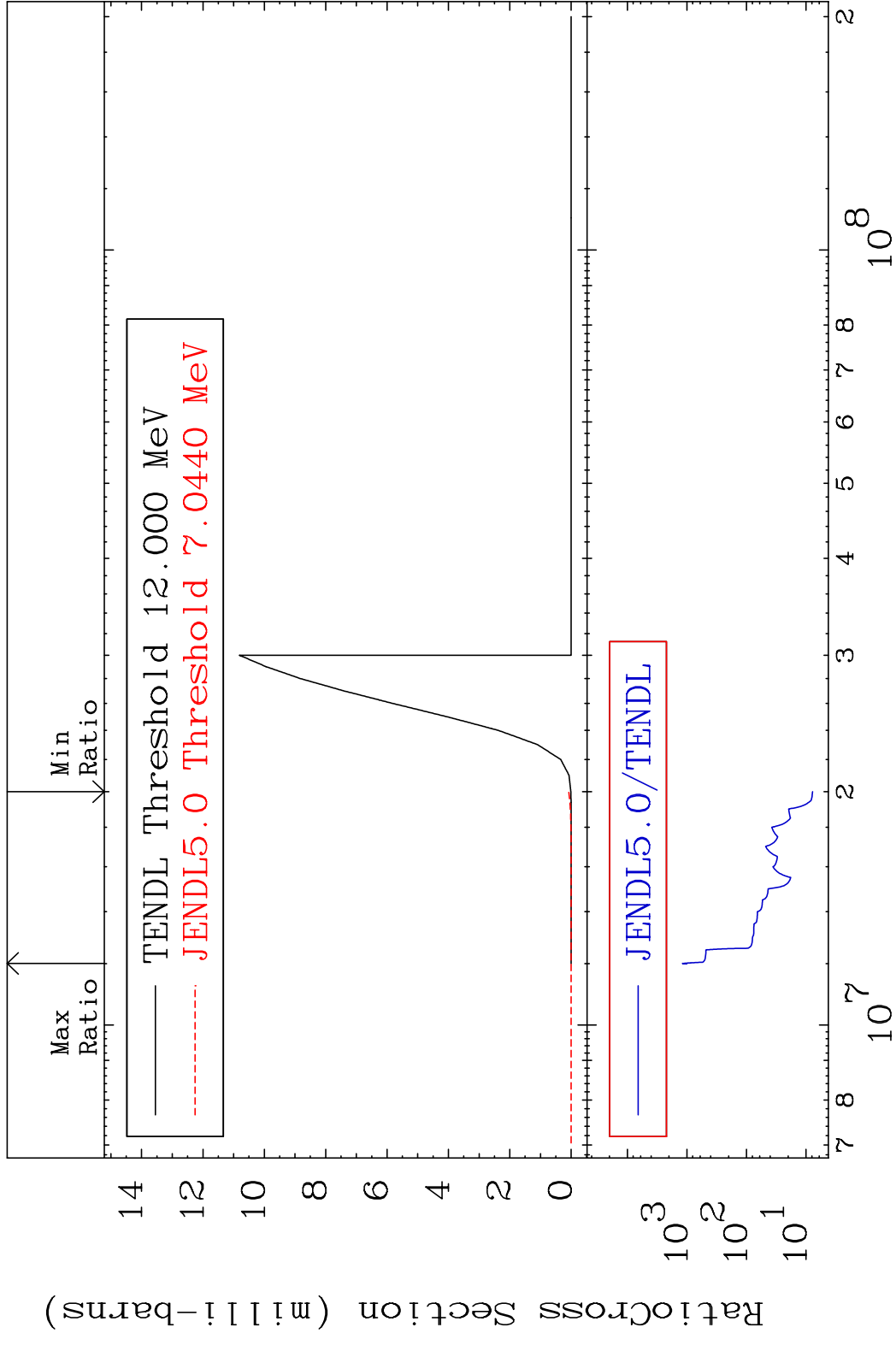


MAT 6331 (n, 2n):63-Eu-152m1 63-Eu-153
 Radionuclide Production Cross Section Ratio 25.43 %



MAT 6331 (n,2n):63-Eu-152m16 63-Eu-153
 Radionuclide Production Cross Section Ratio -14.80%





MAT 6331 (n,2n) α :61-Pm-148m3 63-Eu-153
 Radionuclide Production Cross Section to 9999. %

