

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

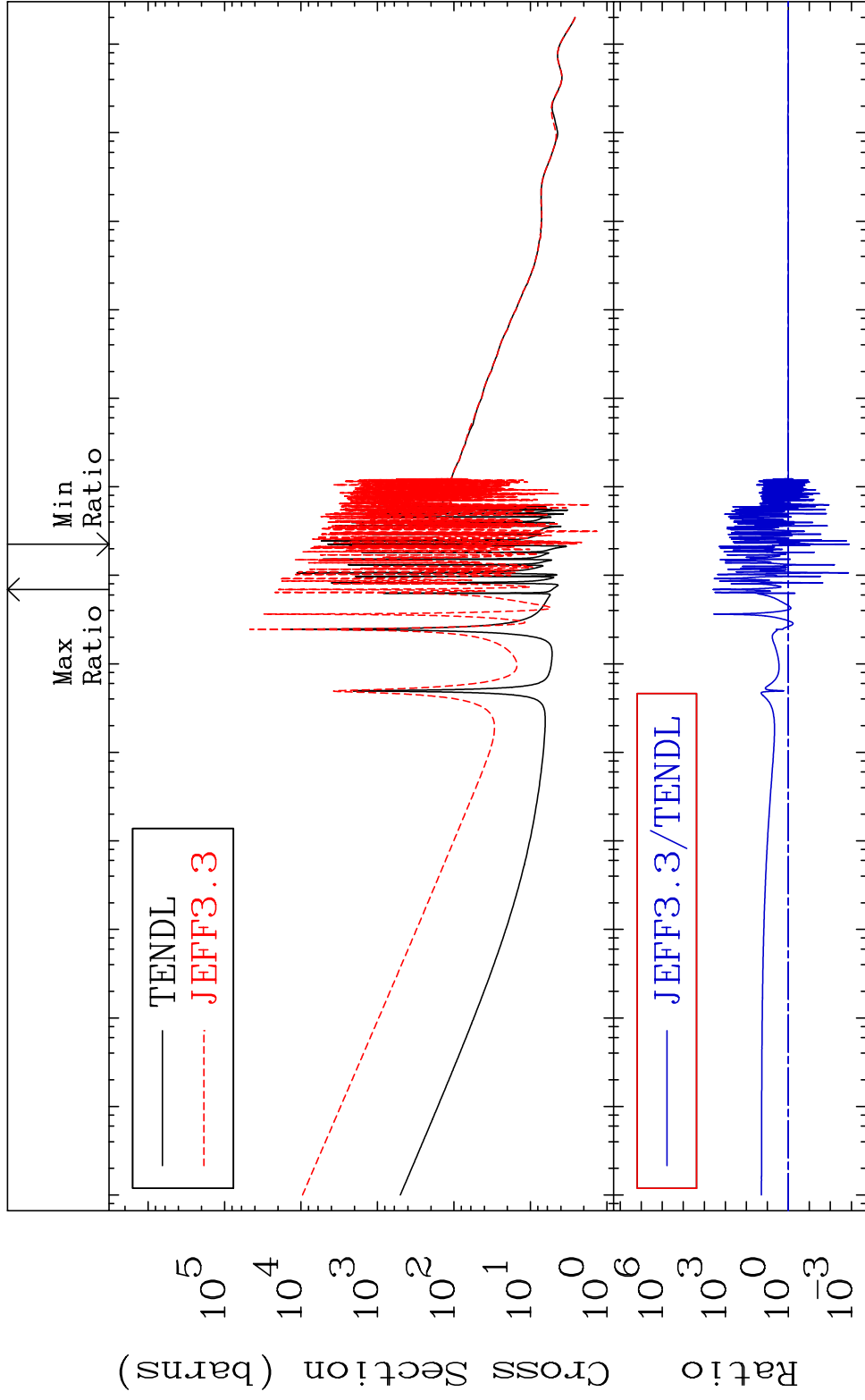
Press Mouse Button to Start

MAT 6931

Total

69-Tm-171

Cross Section -99.87 To 9999. %



1

Incident Energy (eV)

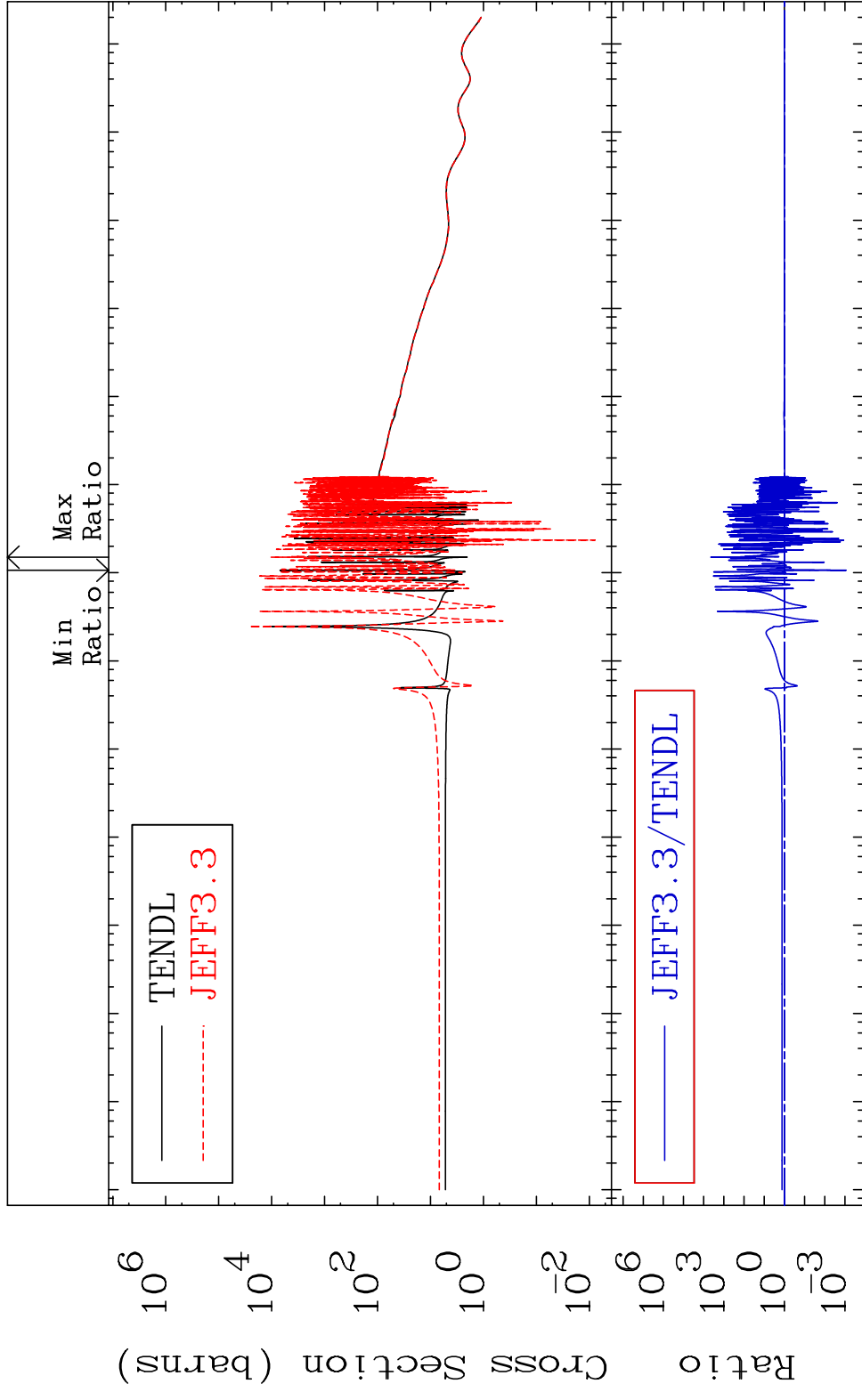
69-Tm-171

MAT 6931

Elastic

69-Tm-171

Cross Section -99.91 To 9999. %



2

Incident Energy (eV)

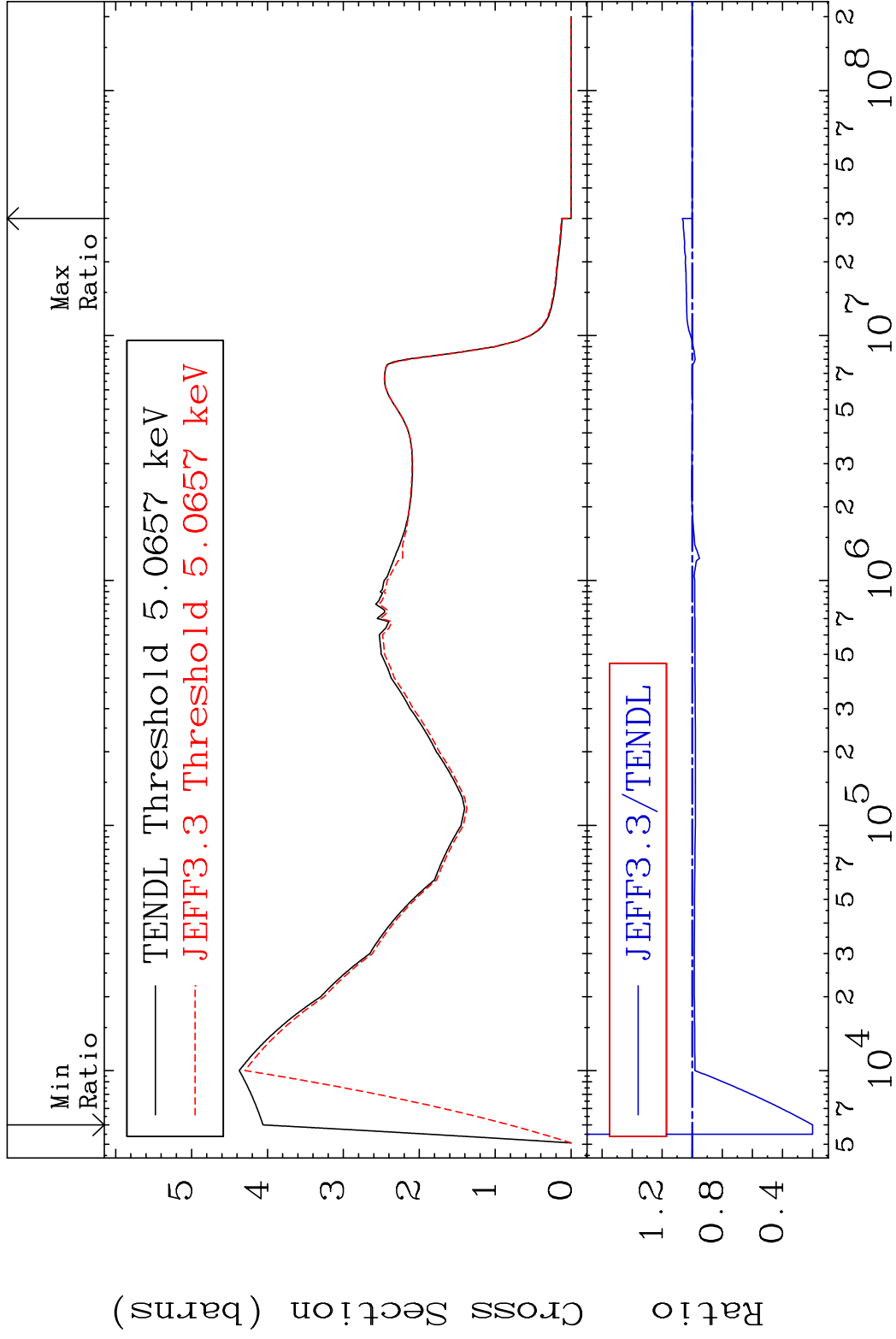
69-Tm-171

MAT 6931

Inelastic

69-Tm-171

Cross Section -79.96 To 6.598 %



3

Incident Energy (eV)

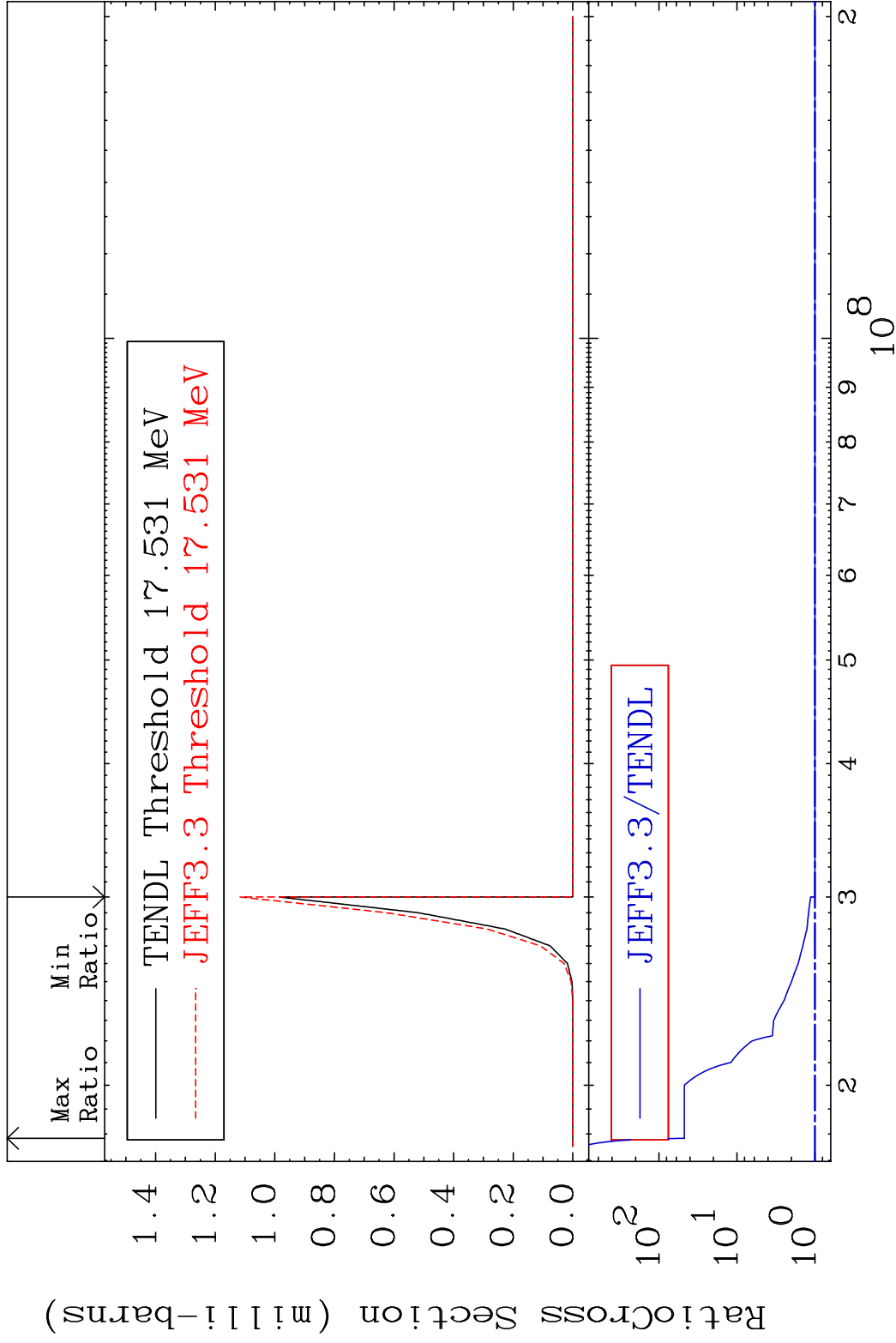
69-Tm-171

MAT 6931

(n,2n) d

69-Tm-171

Cross Section 0.000 To 4635. %



4

Incident Energy (eV)

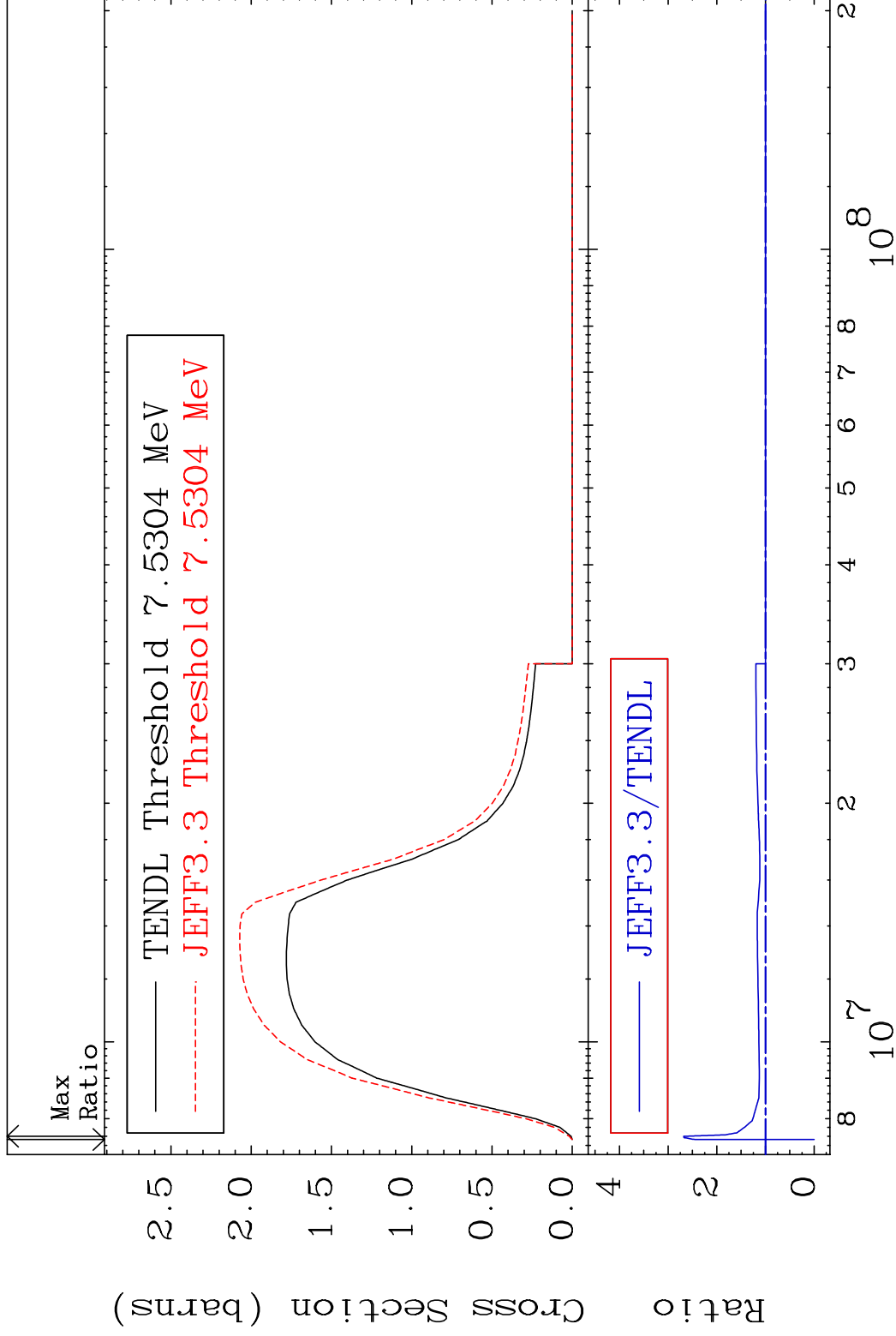
69-Tm-171

MAT 6931

(n,2n)

69-Tm-171

Cross Section -100.0 To 168.1 %



5

Incident Energy (eV)

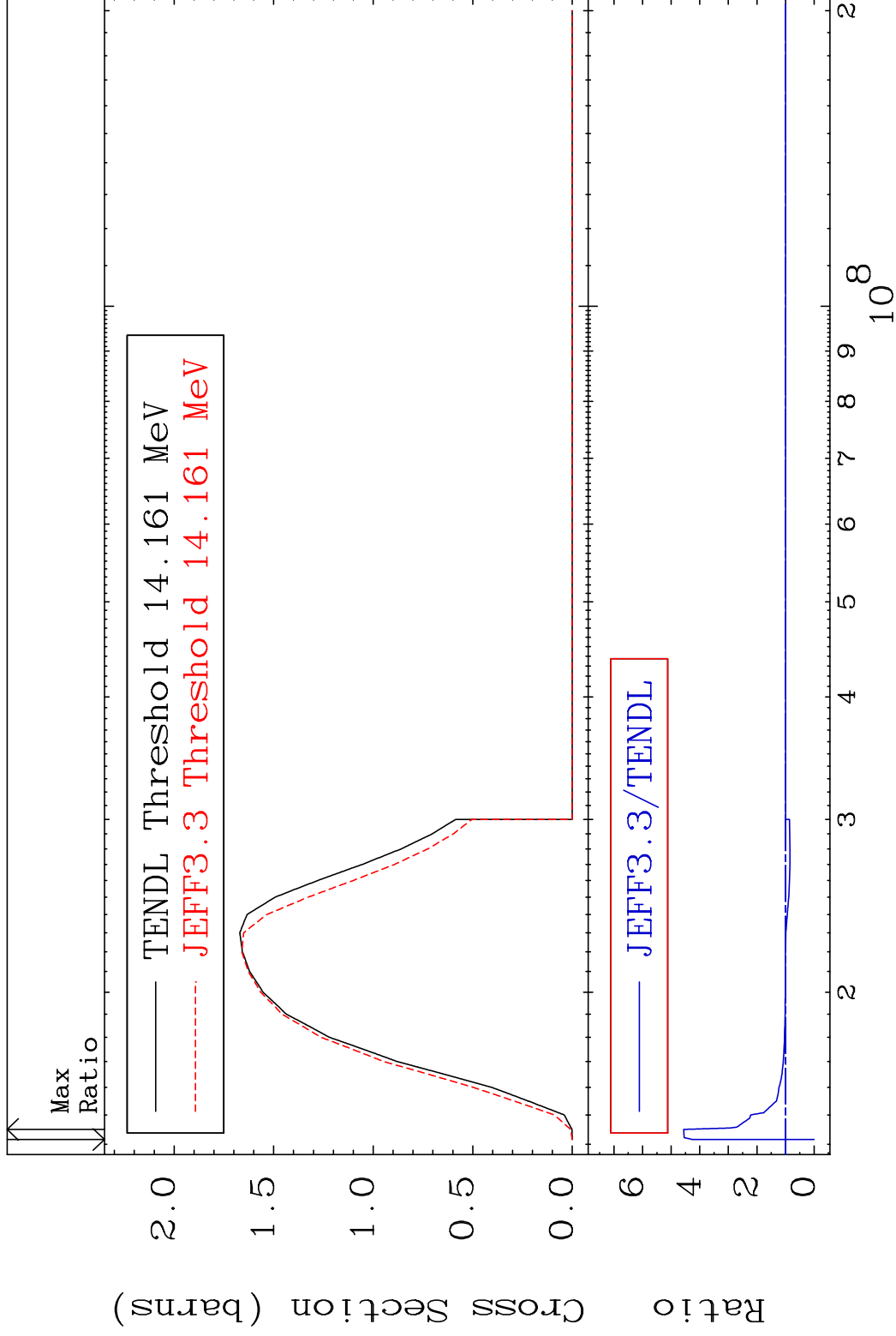
69-Tm-171

MAT 6931

(n,3n)

69-Tm-171

Cross Section -100.0 To 356.3 %



6

Incident Energy (eV)

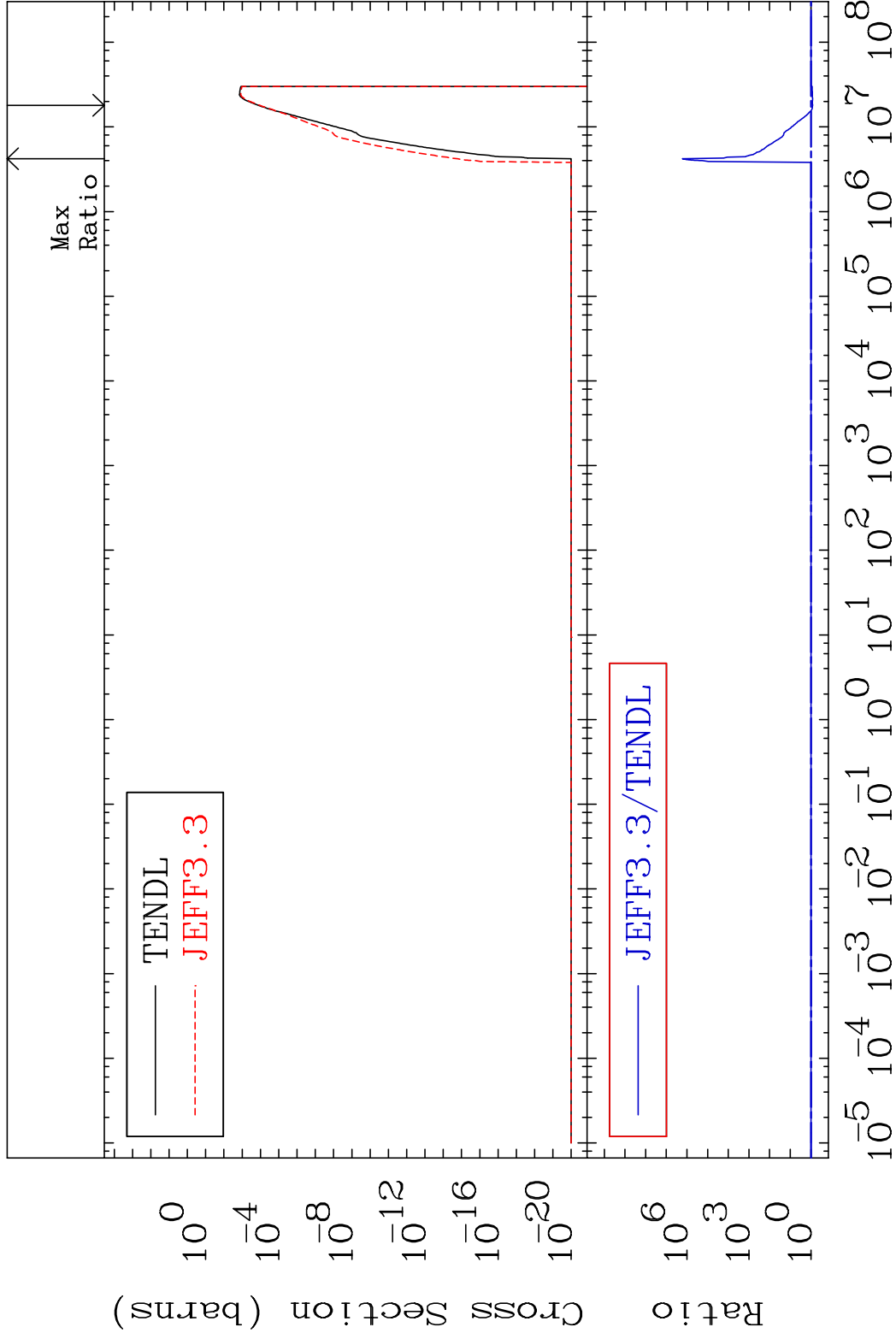
69-Tm-171

MAT 6931

(n, n') α

69-Tm-171

Cross Section -16.69 To 9999. %



7

Incident Energy (eV)

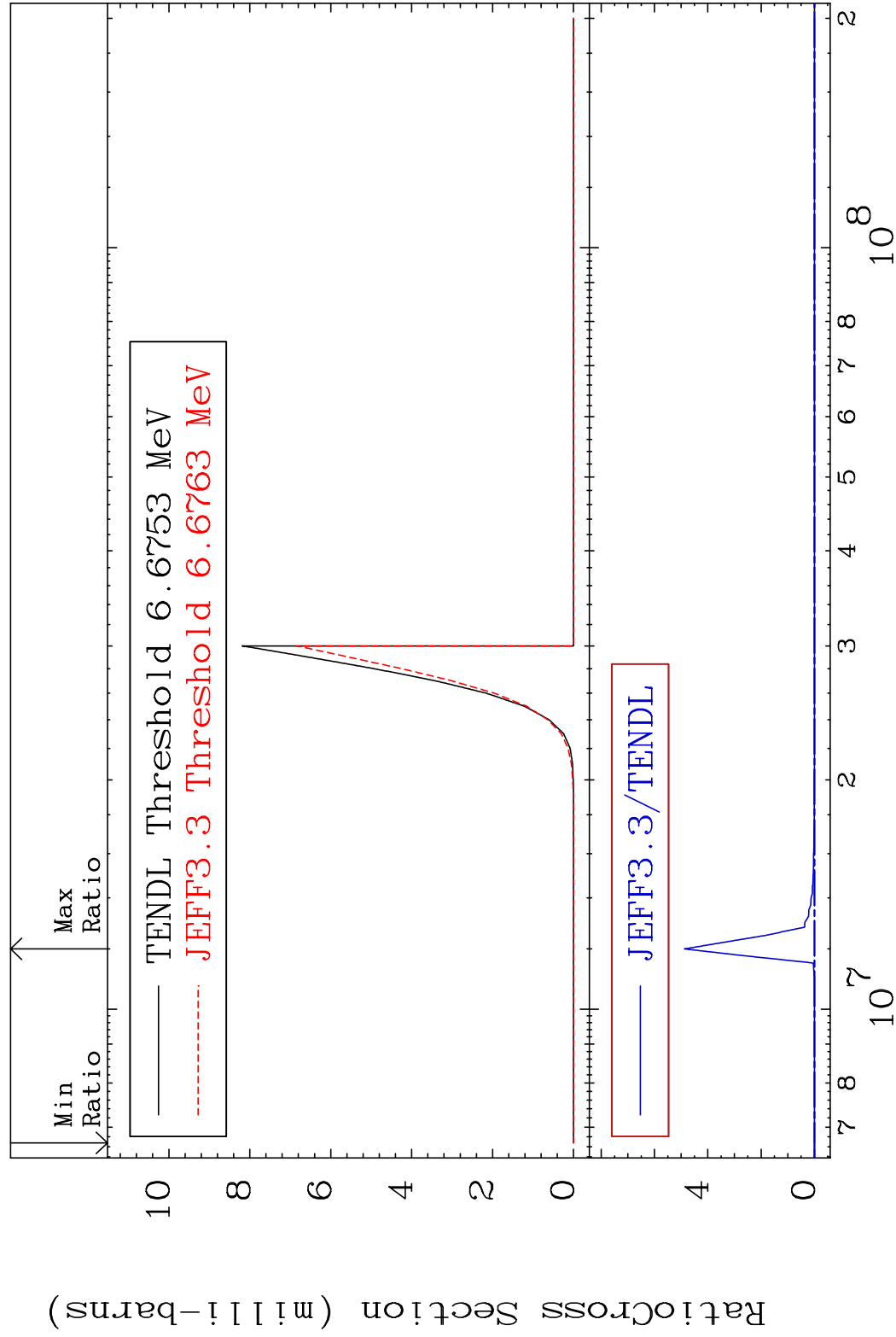
69-Tm-171

MAT 6931

(n,2n) α

69-Tm-171

Cross Section -100.0 To 9999. %



8

Incident Energy (eV)

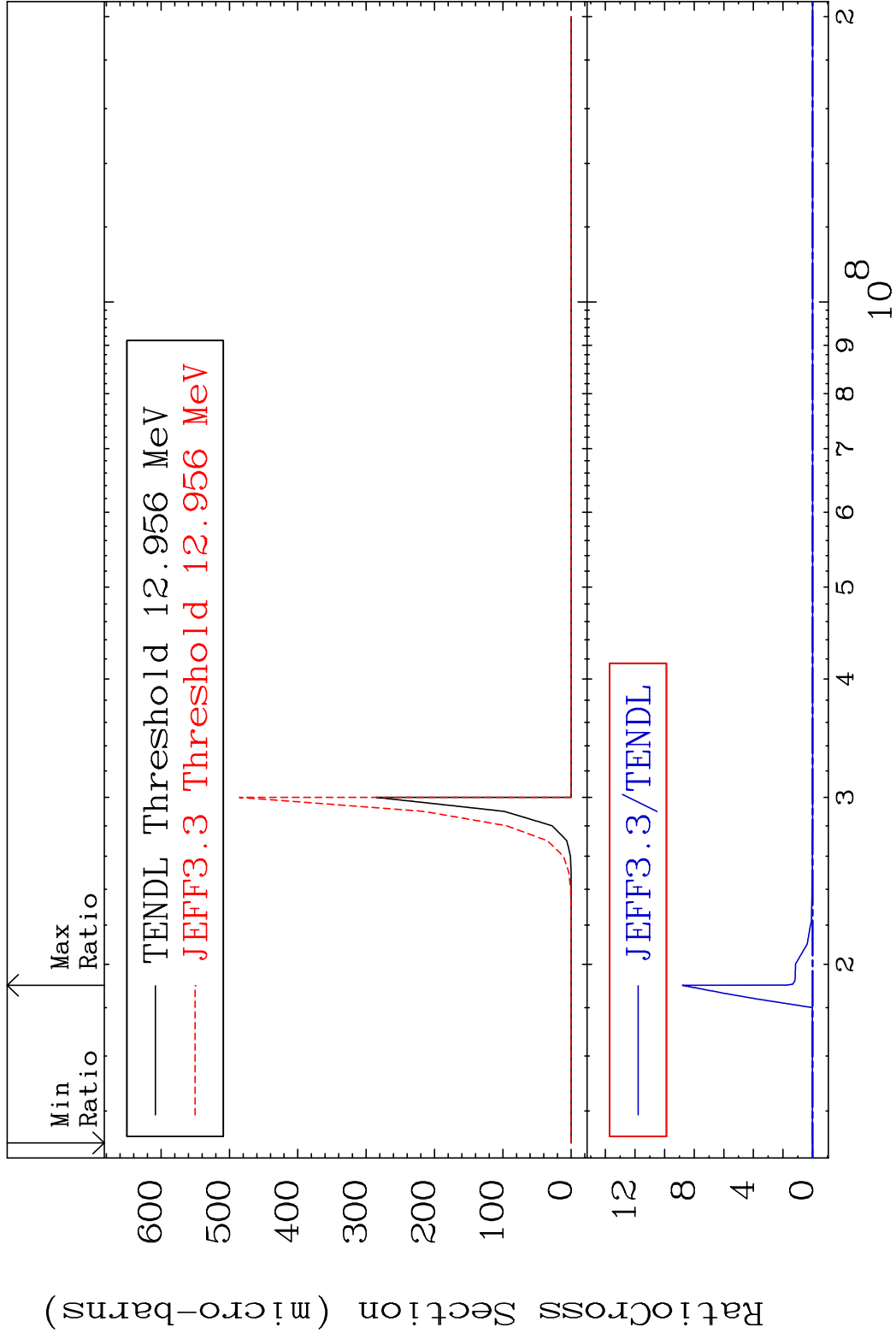
69-Tm-171

MAT 6931

(n,3n) α

69-Tm-171

Cross Section -100.0 To 9999. %



9

Incident Energy (eV)

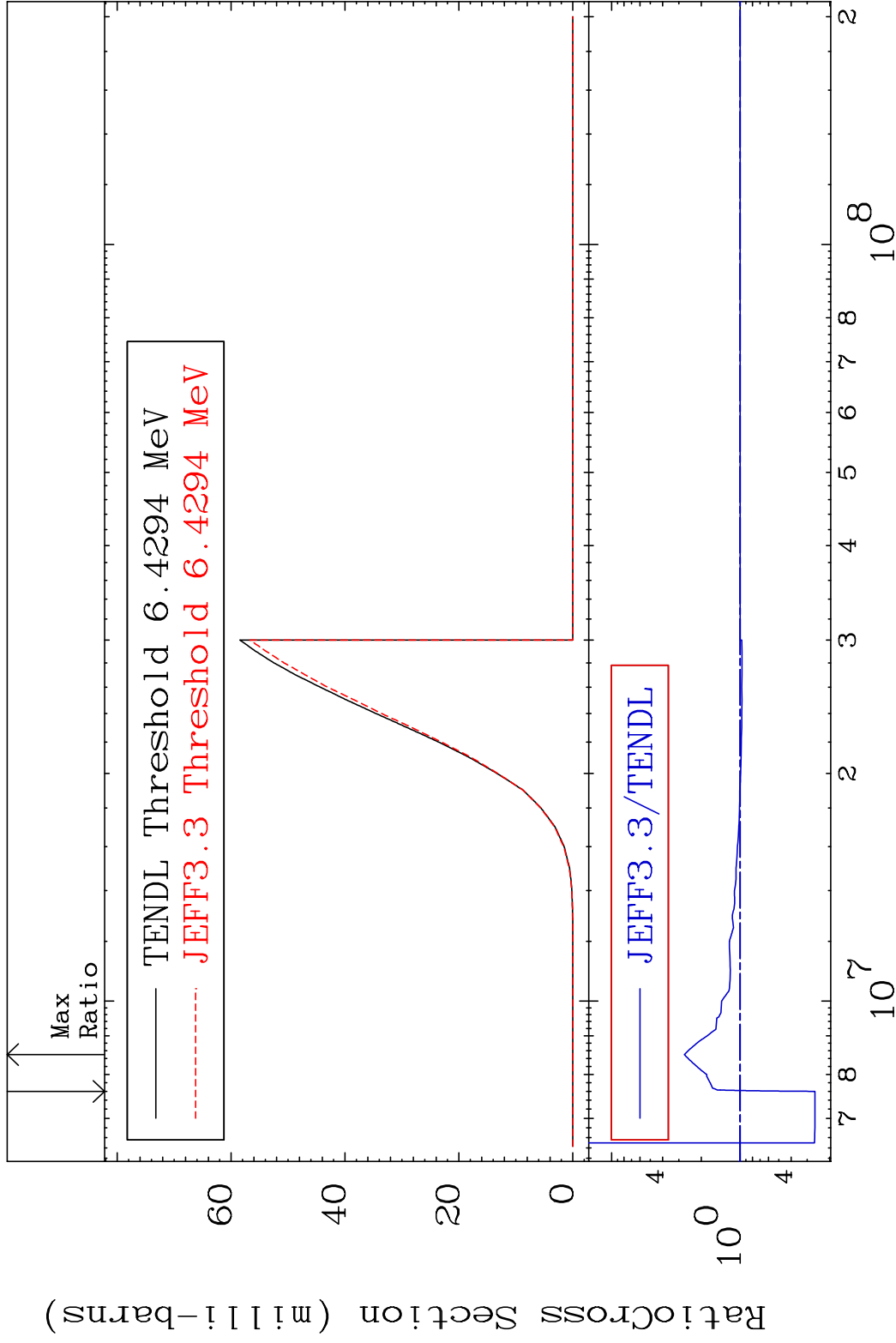
69-Tm-171

MAT 6931

(n, n') p

69-Tm-171

Cross Section -73.84 To 171.6 %



10

Incident Energy (eV)

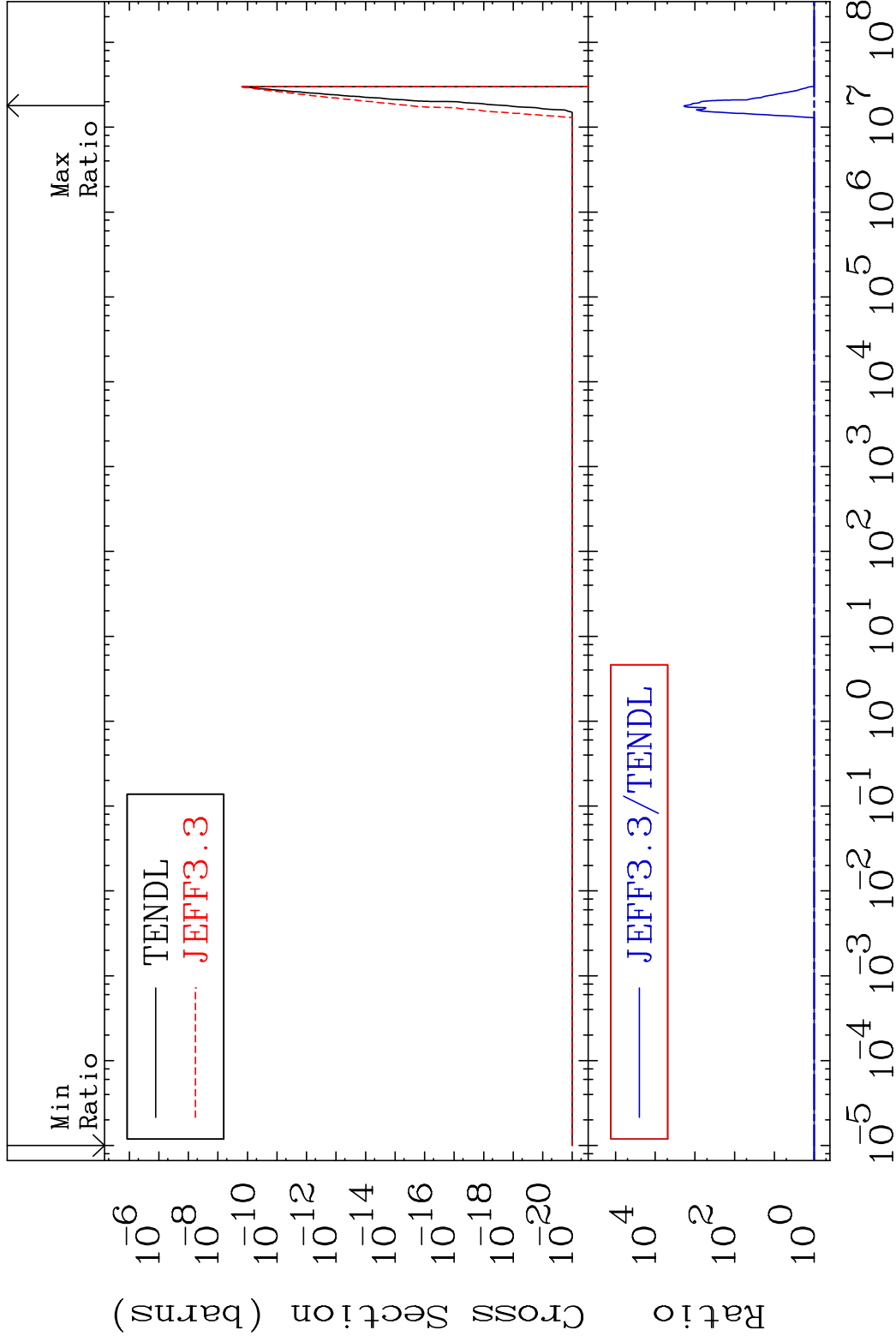
69-Tm-171

MAT 6931

(n, n') 2α

69-Tm-171

Cross Section 0.000 To 9999. %



11

Incident Energy (eV)

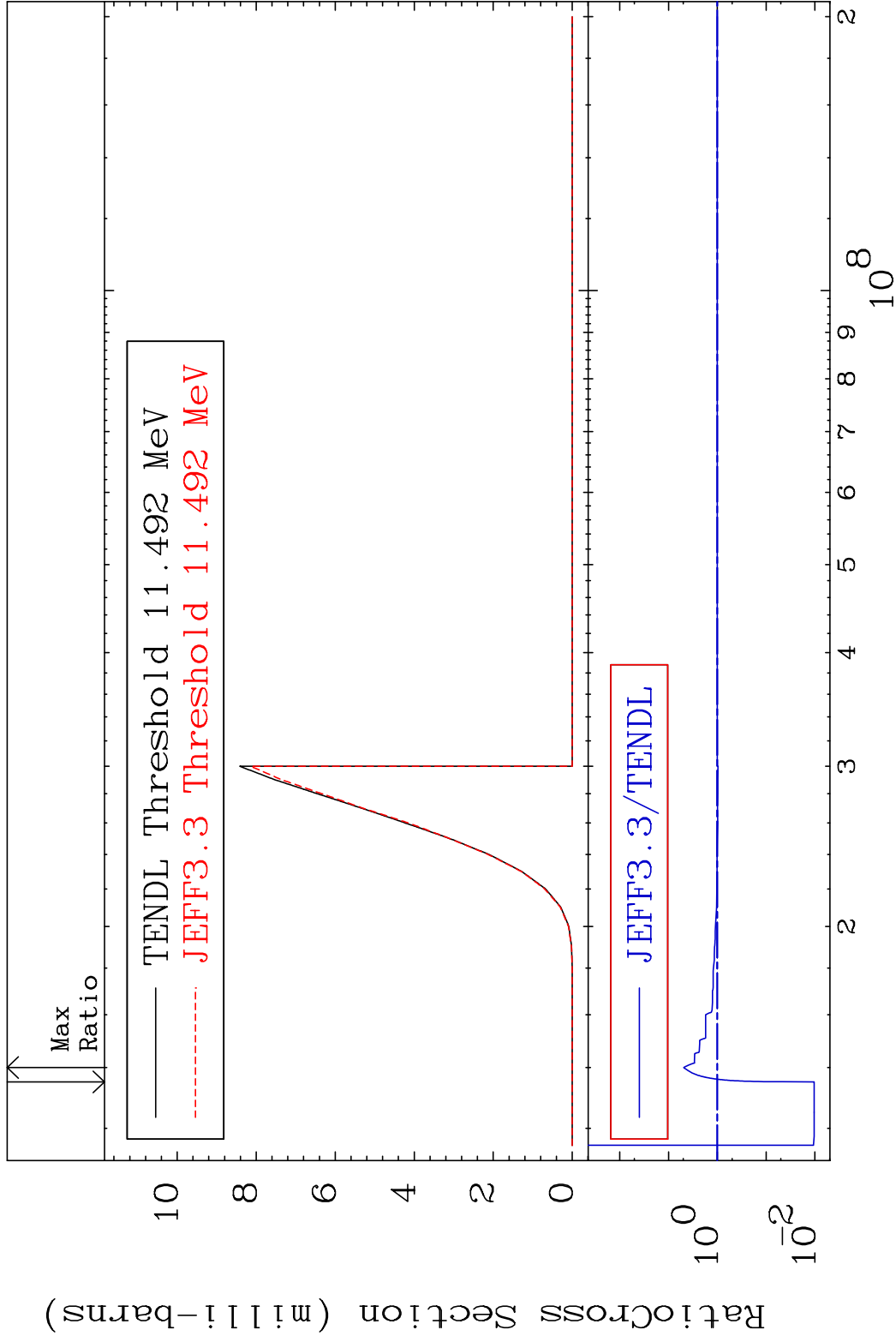
69-Tm-171

MAT 6931

(n, n') d

69-Tm-171

Cross Section -98.96 To 389.9 %



12

Incident Energy (eV)

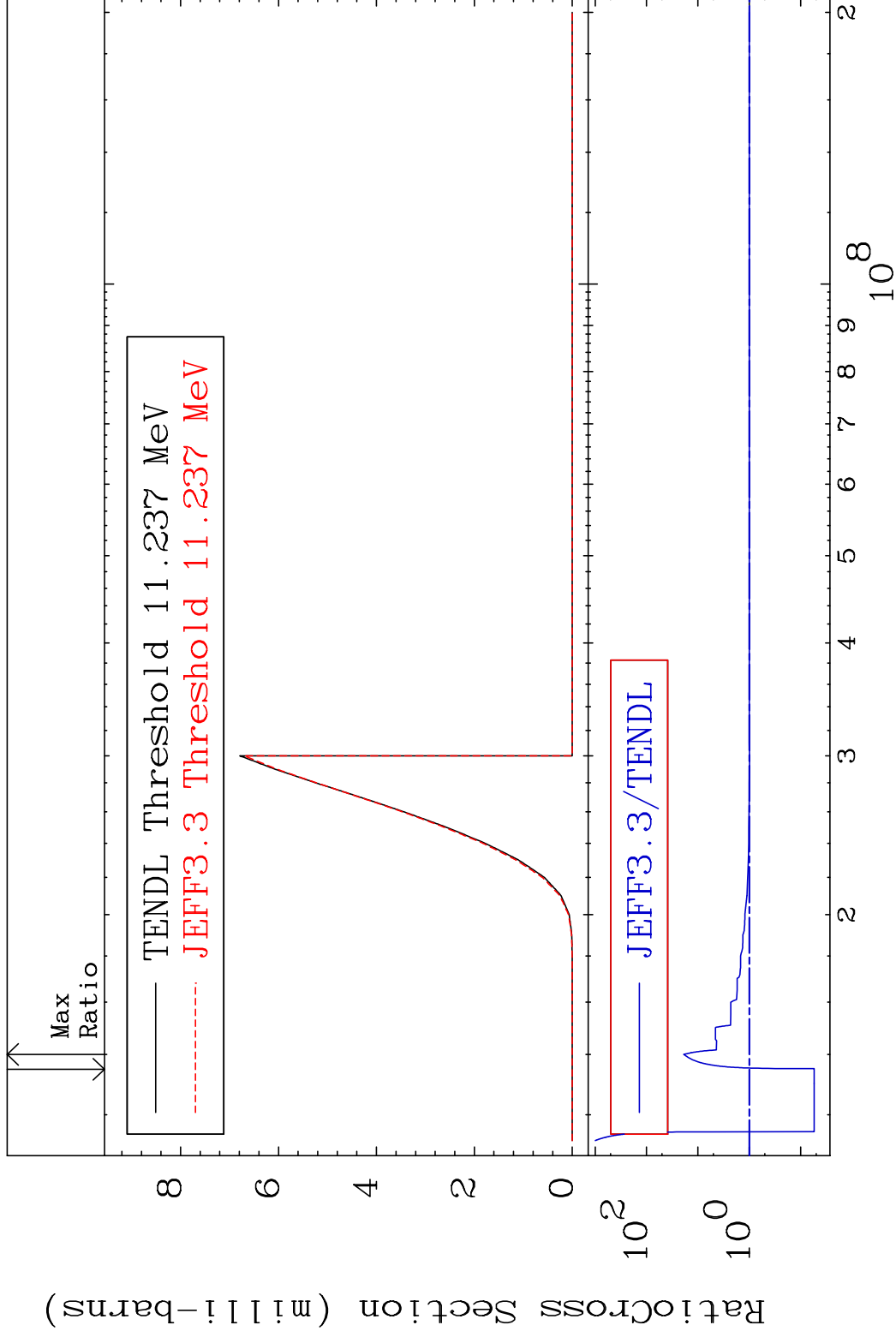
69-Tm-171

MAT 6931

(n, n') t

69-Tm-171

Cross Section -94.53 To 1794. %



13

Incident Energy (eV)

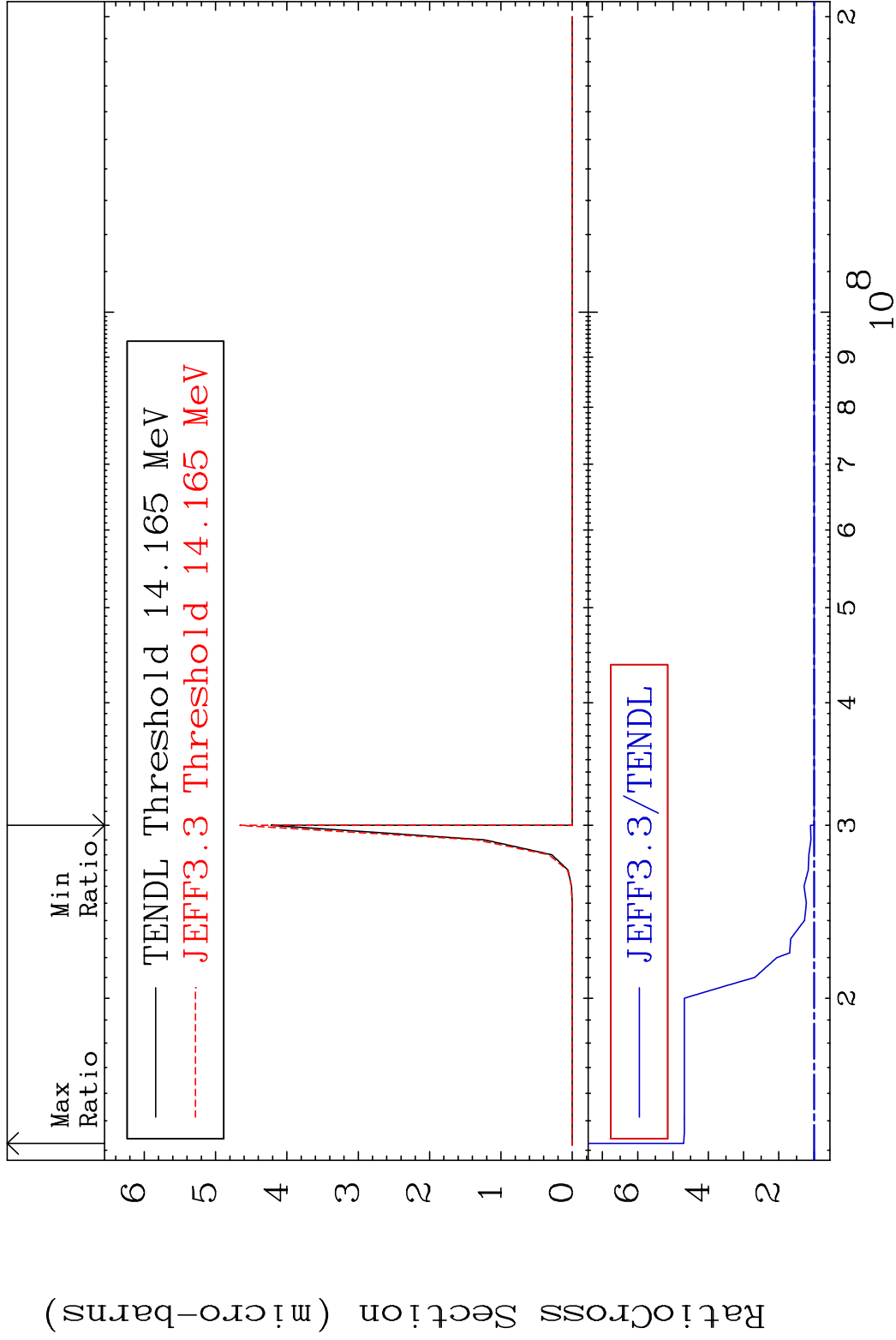
69-Tm-171

MAT 6931

(n,n') He-3

69-Tm-171

Cross Section 0.000 To 369.8 %

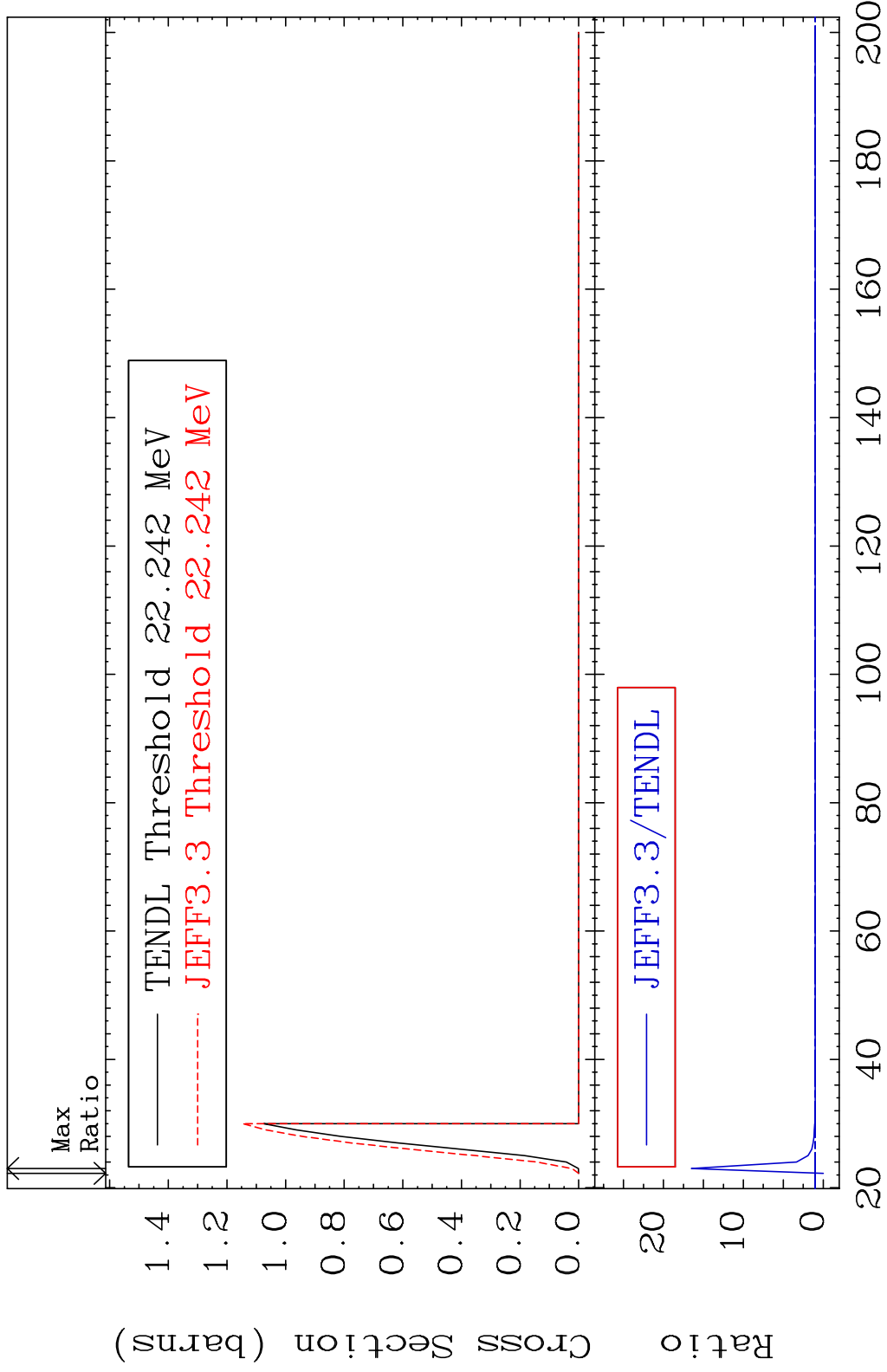


MAT 6931

(n,4n)

69-Tm-171

Cross Section -100.0 To 1551. %



15

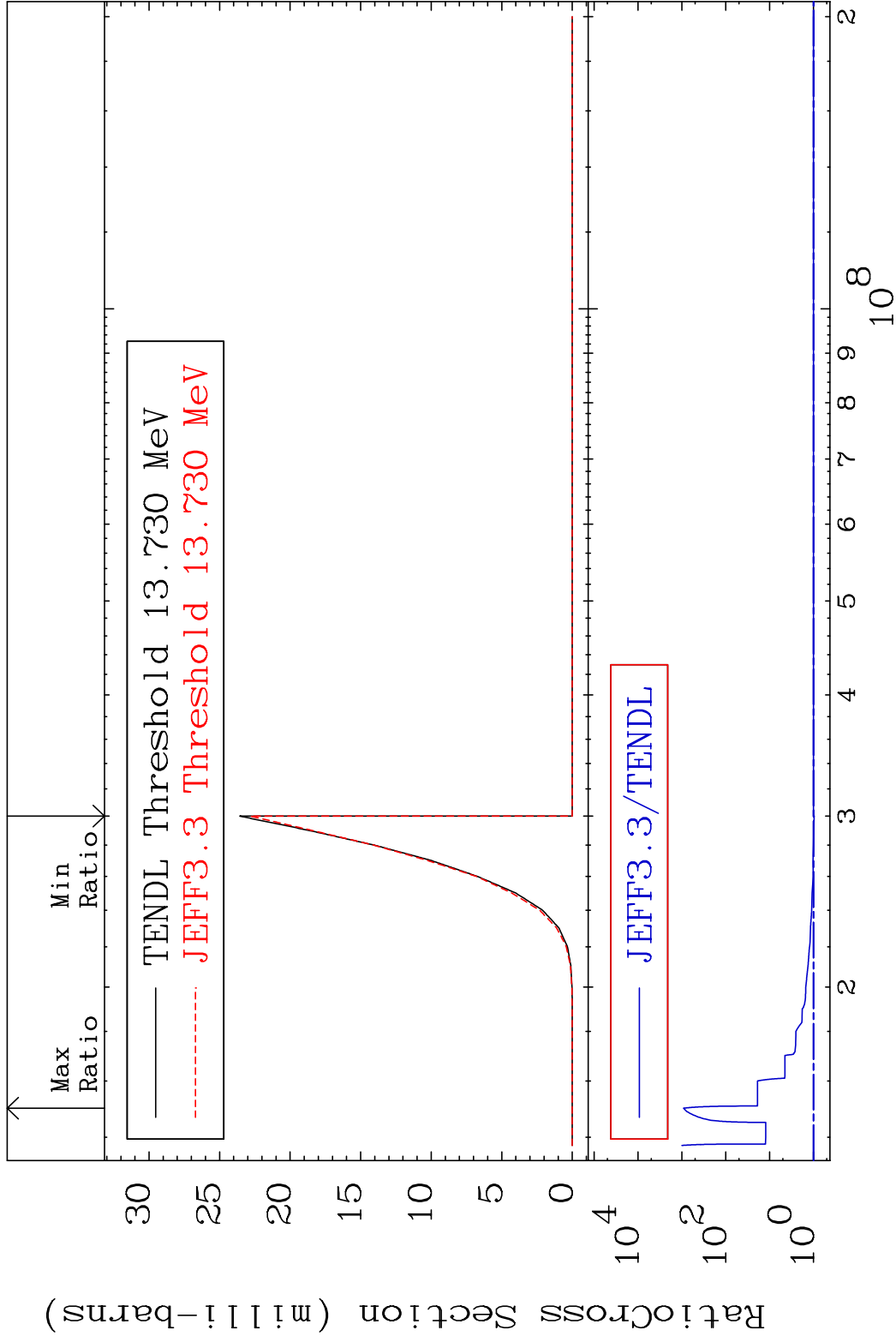
Incident Energy (MeV)

69-Tm-171

MAT 6931

(n,2n) p 69-Tm-171

Cross Section -3.164 To 9999. %



16

Incident Energy (eV)

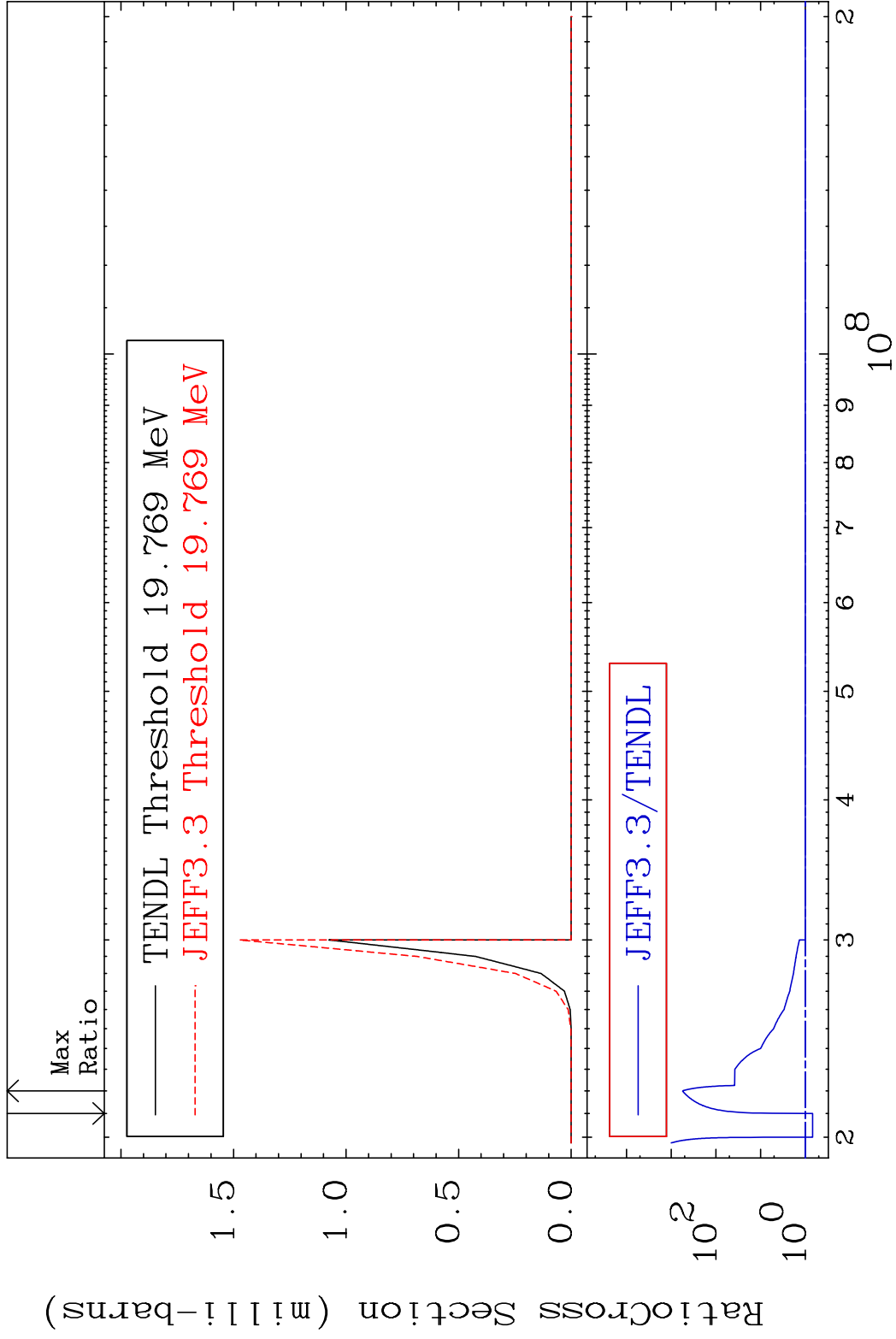
69-Tm-171

MAT 6931

(n,3n) p

69-Tm-171

Cross Section -30.84 To 9999. %



17

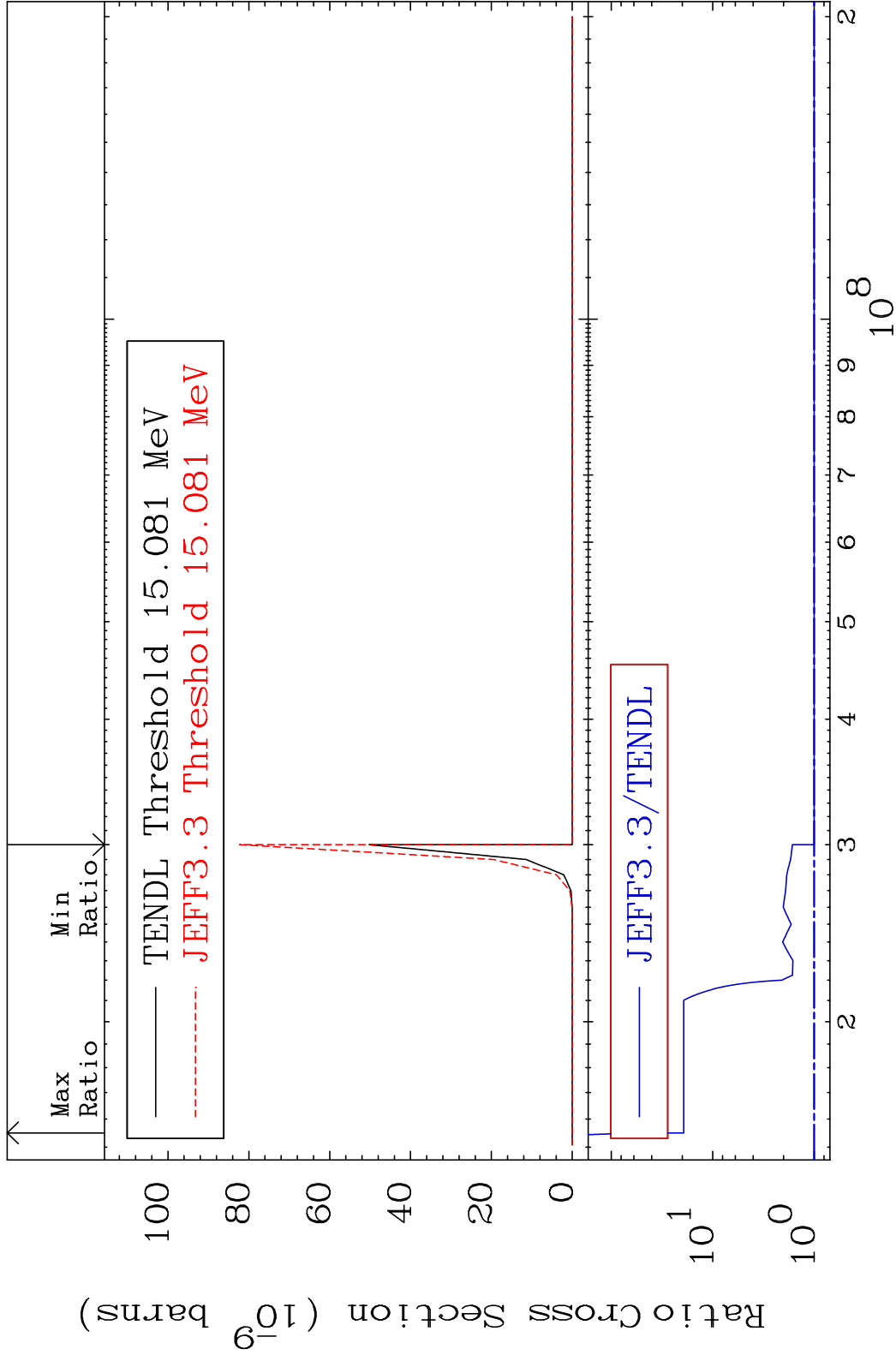
Incident Energy (eV)

69-Tm-171

MAT 6931

(n,2n) p
Cross Section 0.000 To 1836. %

69-Tm-171



18

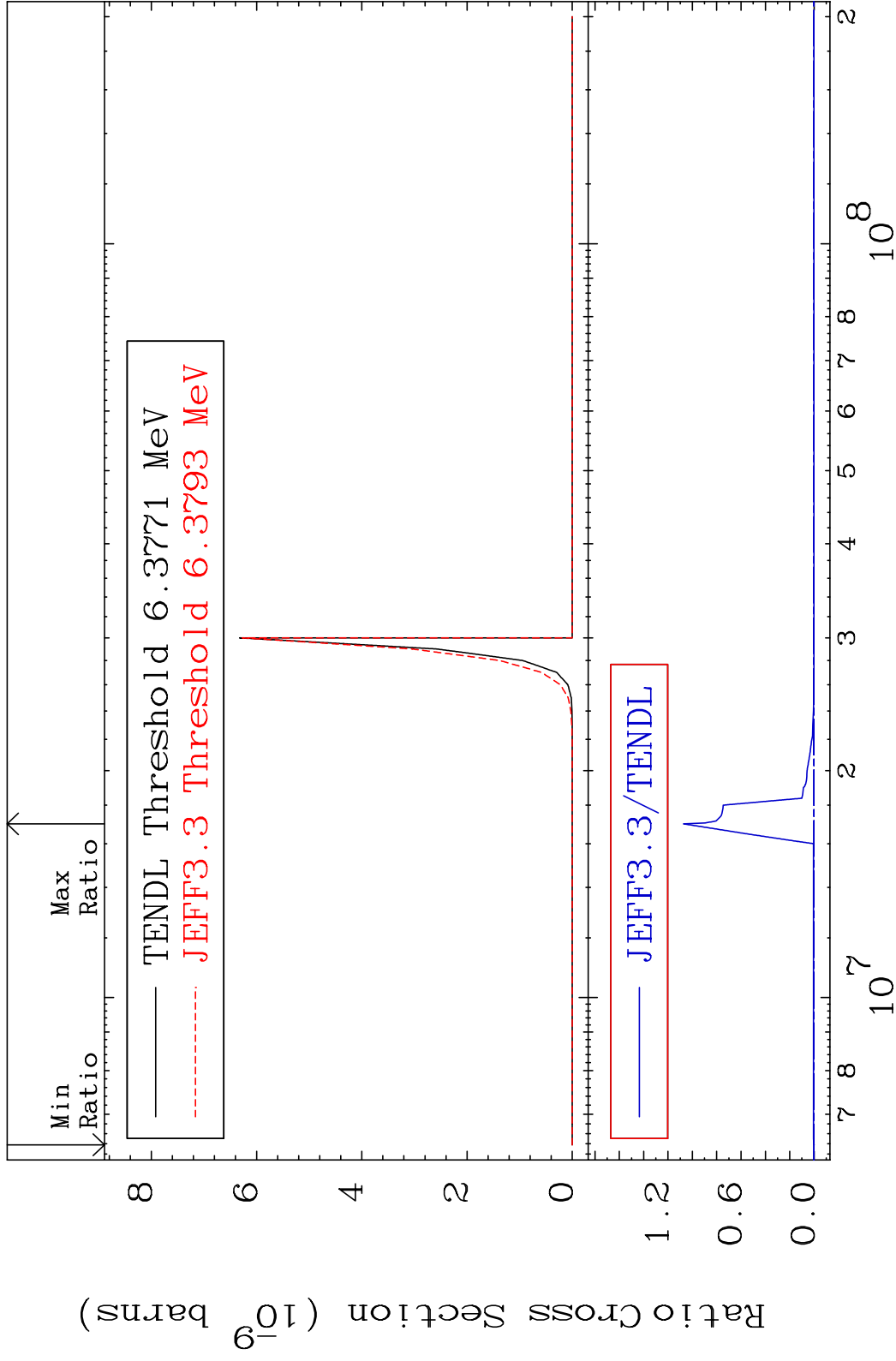
Incident Energy (eV)

69-Tm-171

MAT 6931

(n, n') p α 69-Tm-171

Cross Section -100.0 To 9999. %

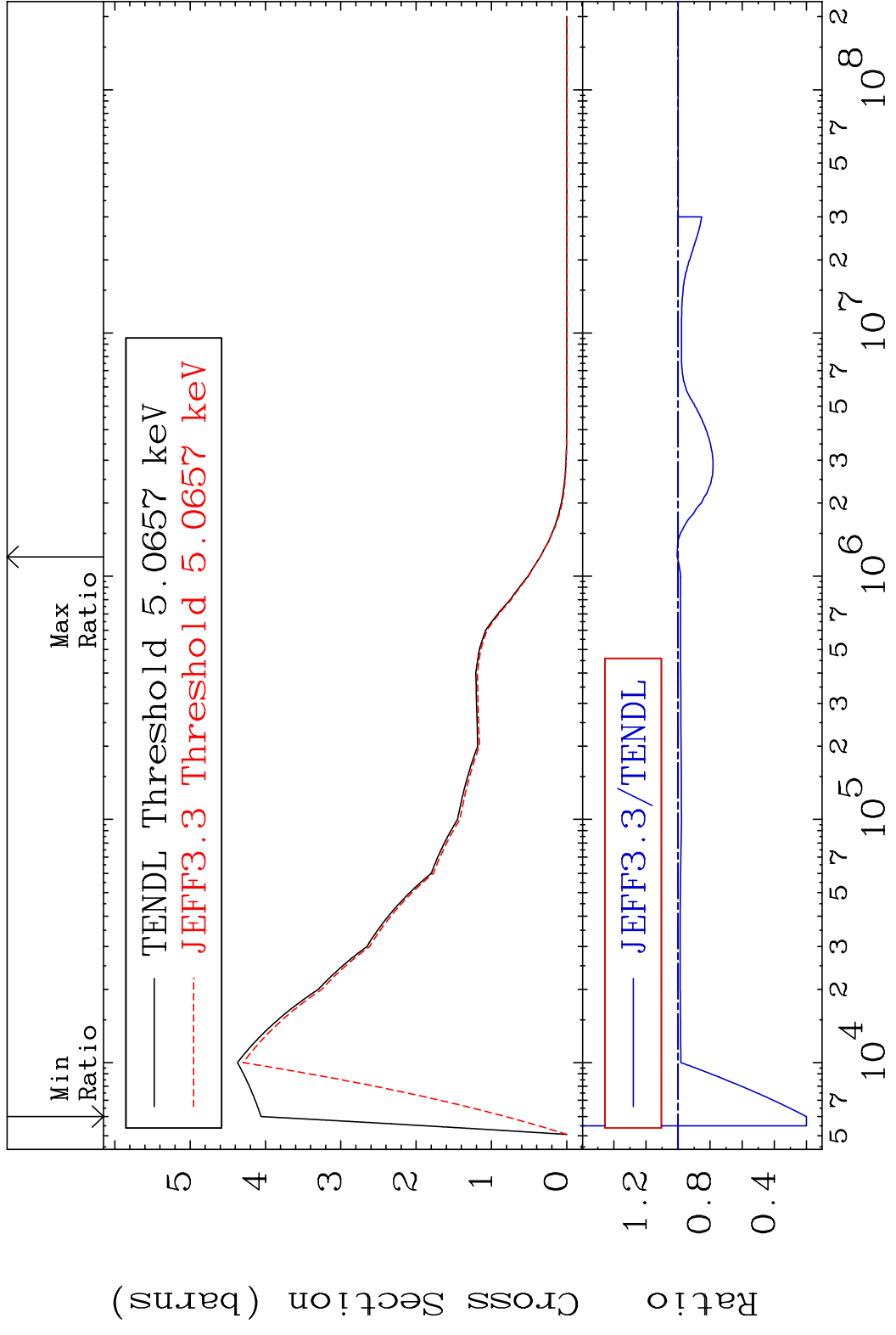


19

Incident Energy (eV)

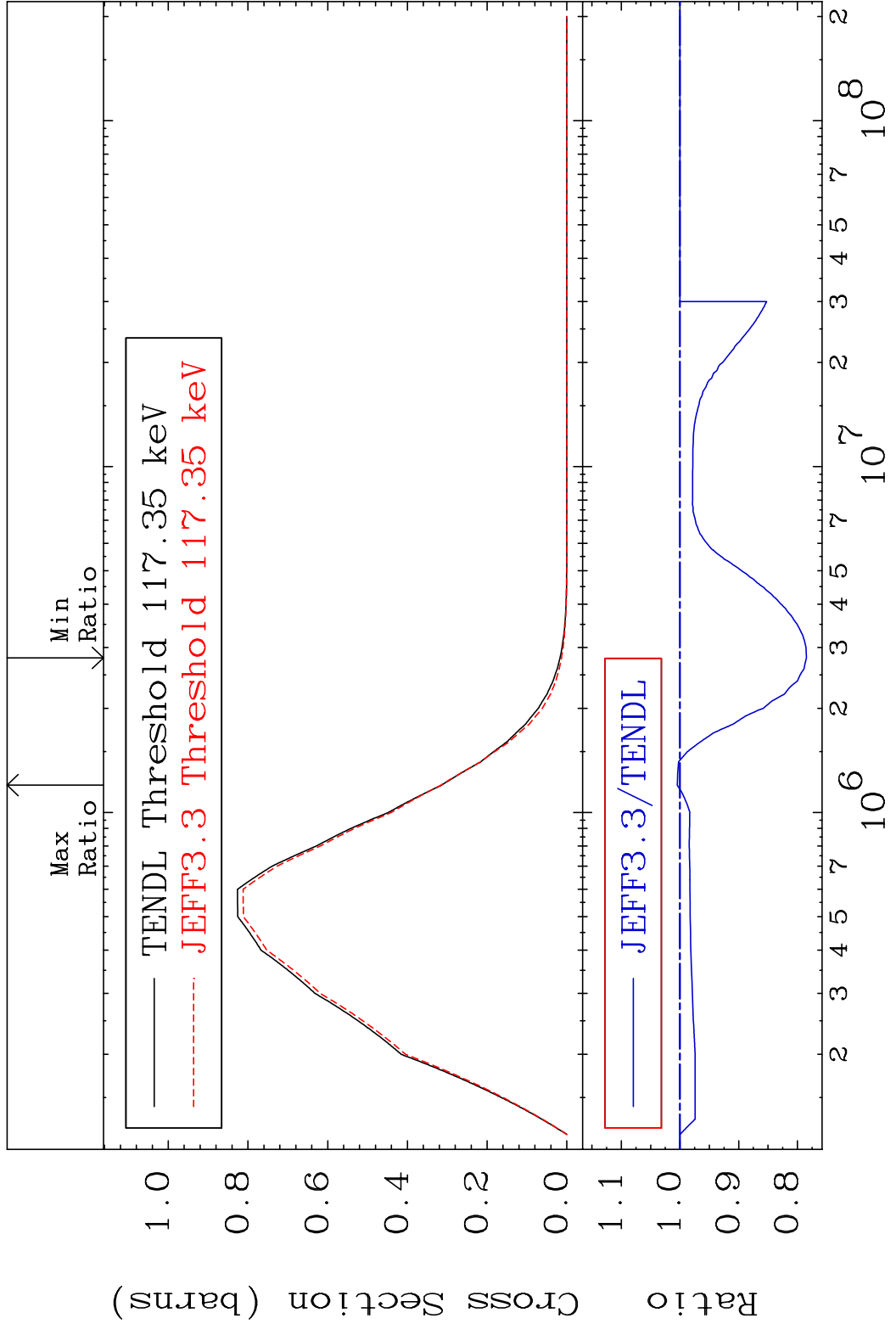
69-Tm-171

MAT 6931 MT= 51 (n, n') Level 69-Tm-171
 Cross Section -79.96 To 0.525 %

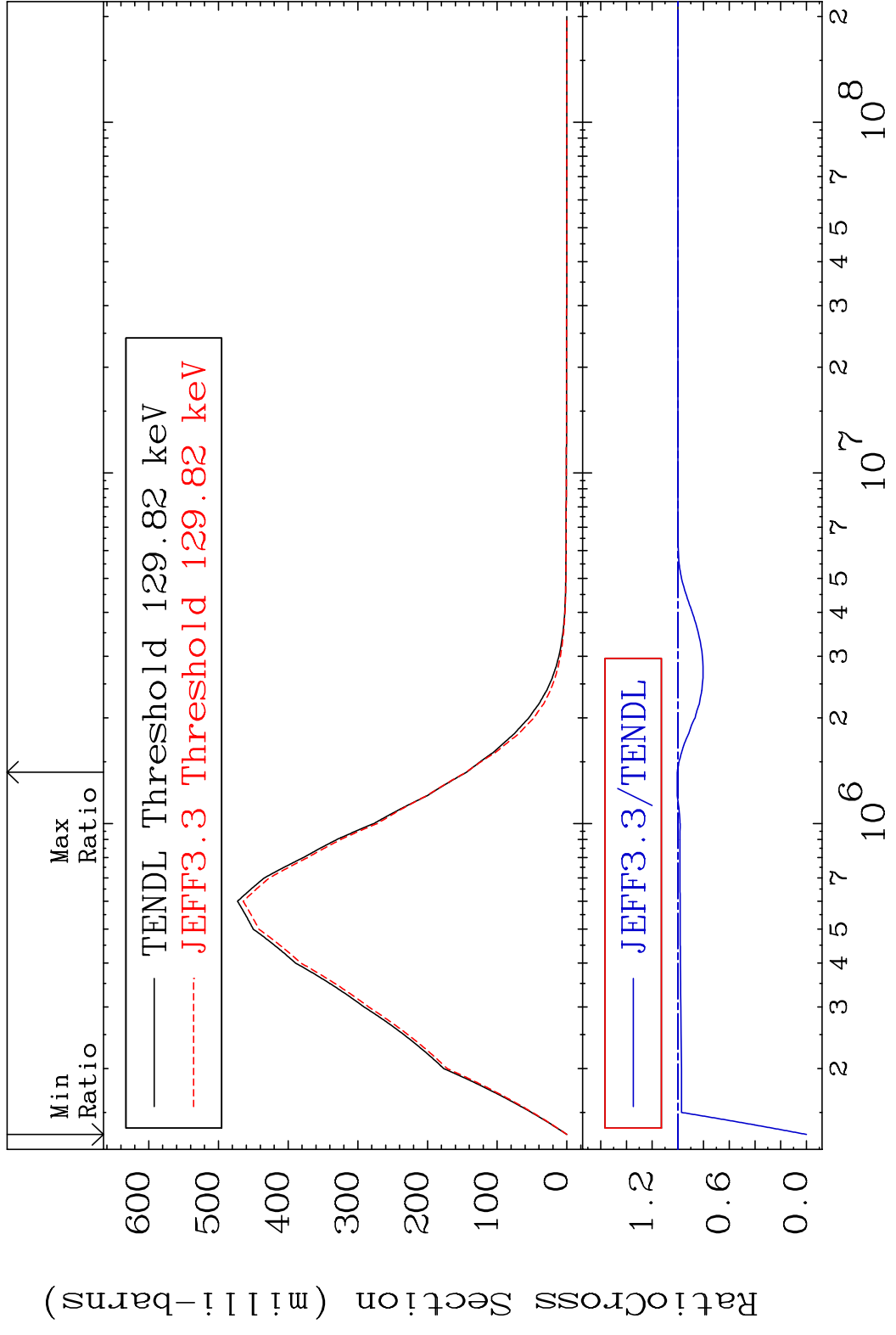


20 Incident Energy (eV) 69-Tm-171

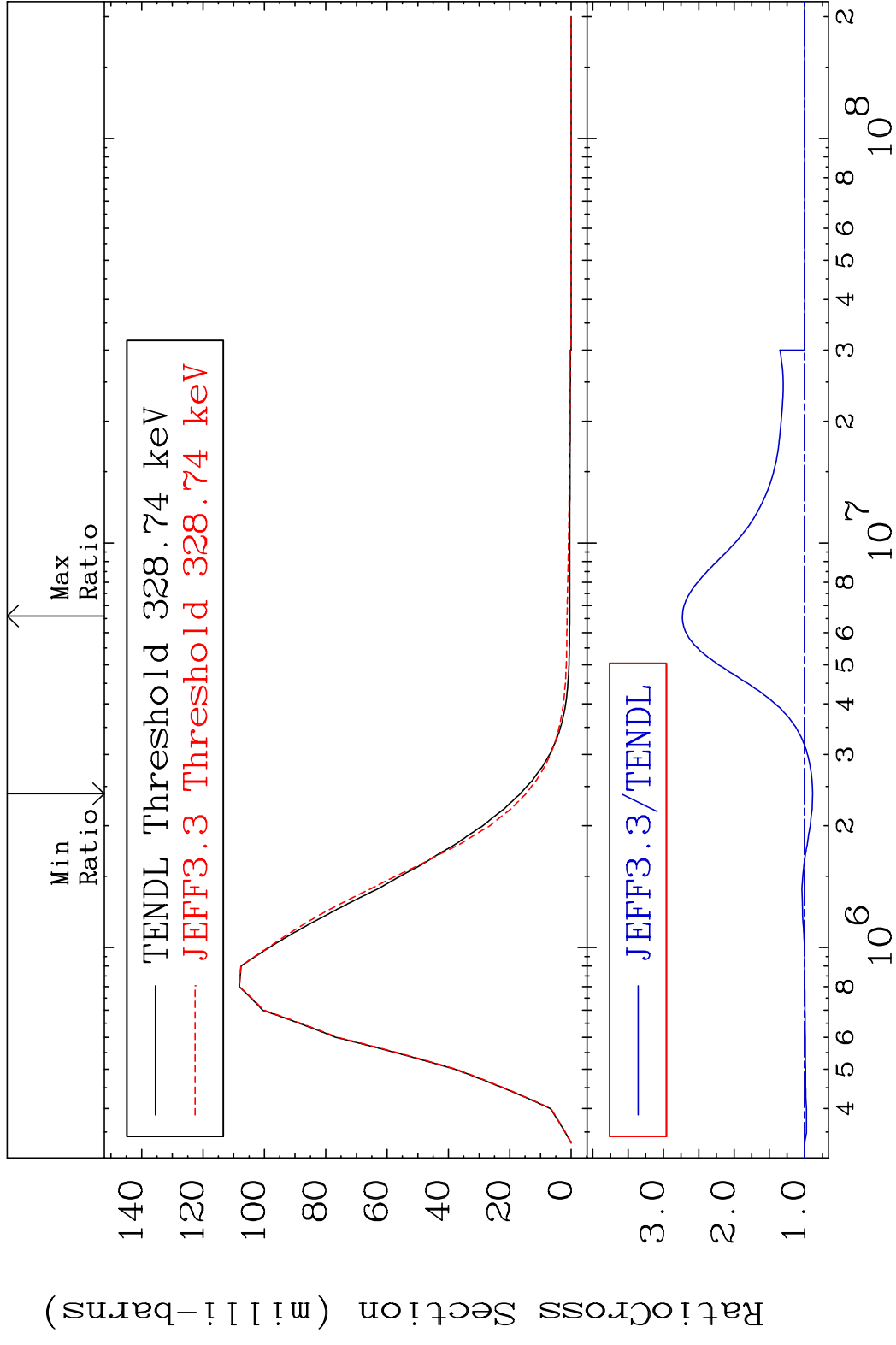
MAT 6931 MT= 52 (n, n') Level 69-Tm-171
 Cross Section -21.54 To 0.477 %



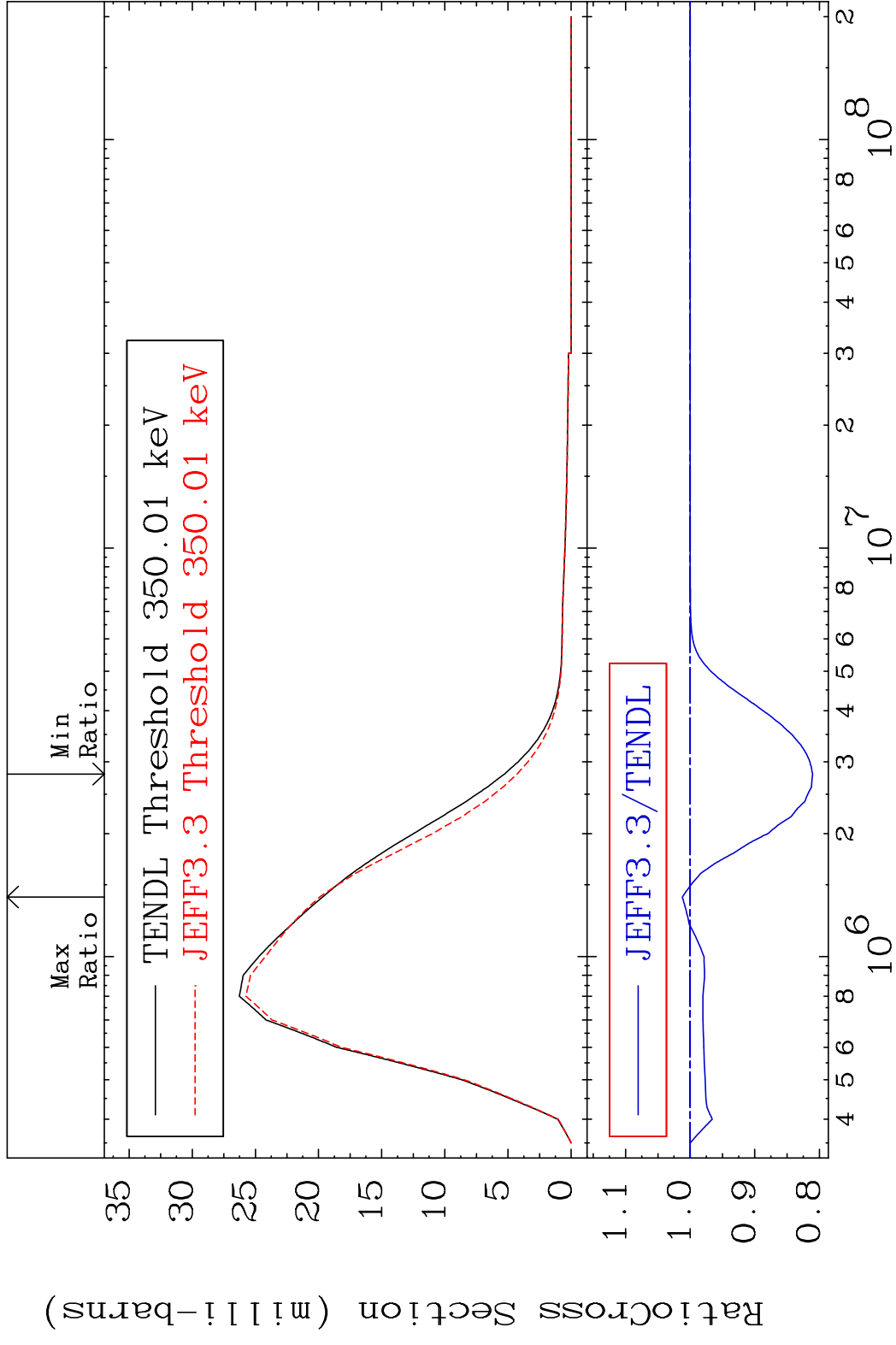
MAT 6931 MT= 53 (n,n') Level 69-Tm-171
 Cross Section -100.0 To 0.521 %



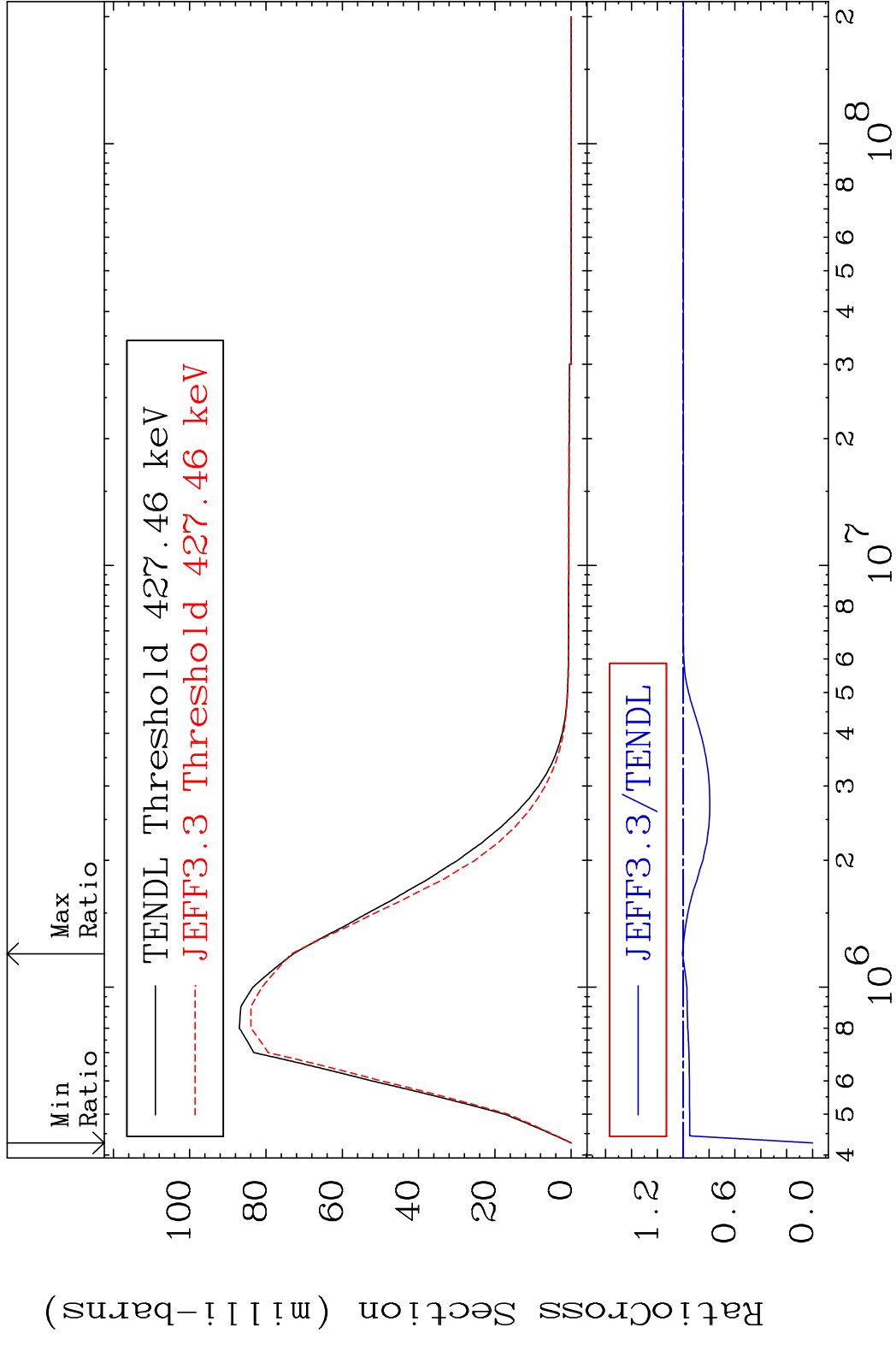
MAT 6931 MT= 54 (n, n') Level 69-Tm-171
 Cross Section -11.16 To 173.2 %



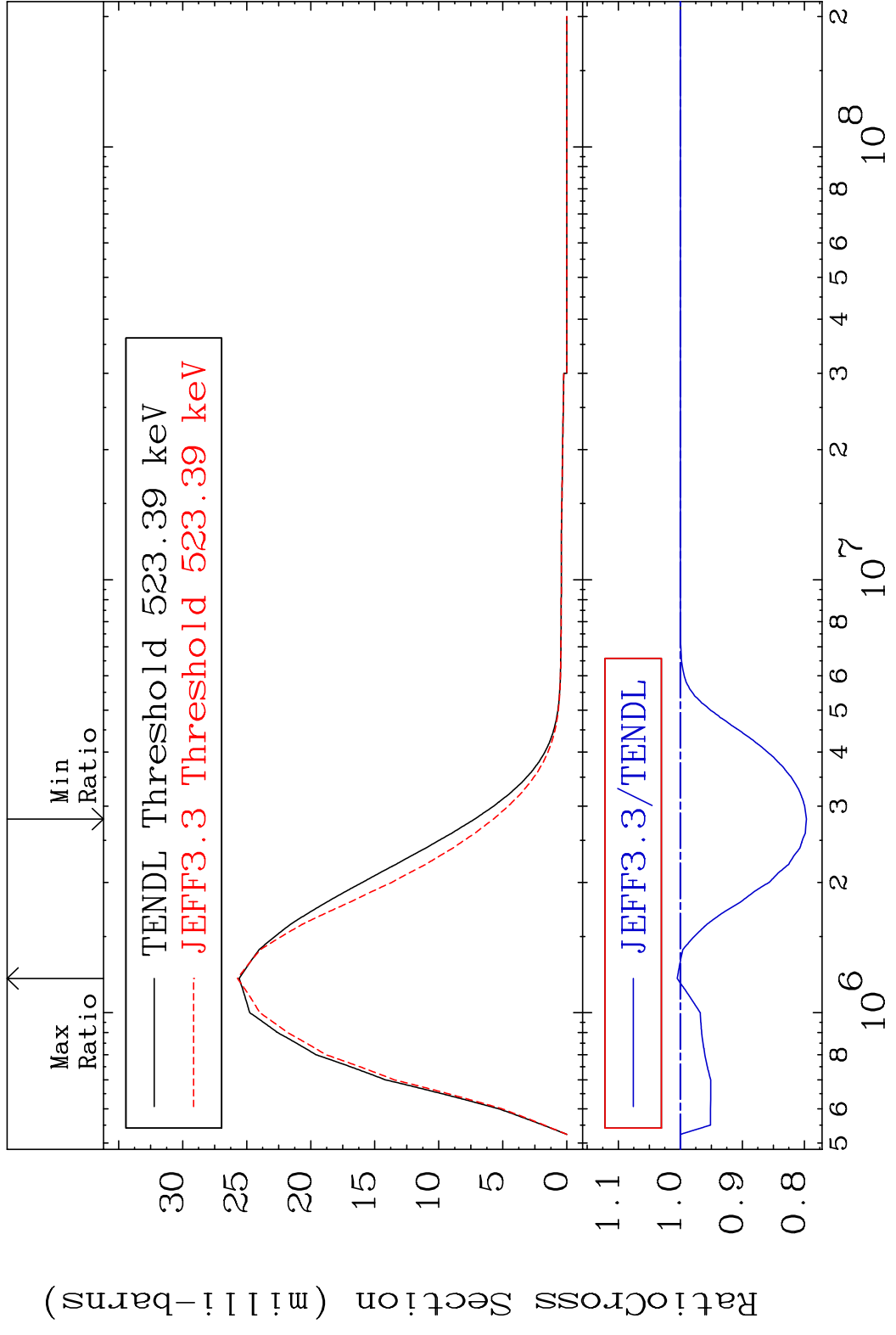
MAT 6931 MT= 55 (n,n') Level 69-Tm-171
 Cross Section -18.94 To 1.212 %



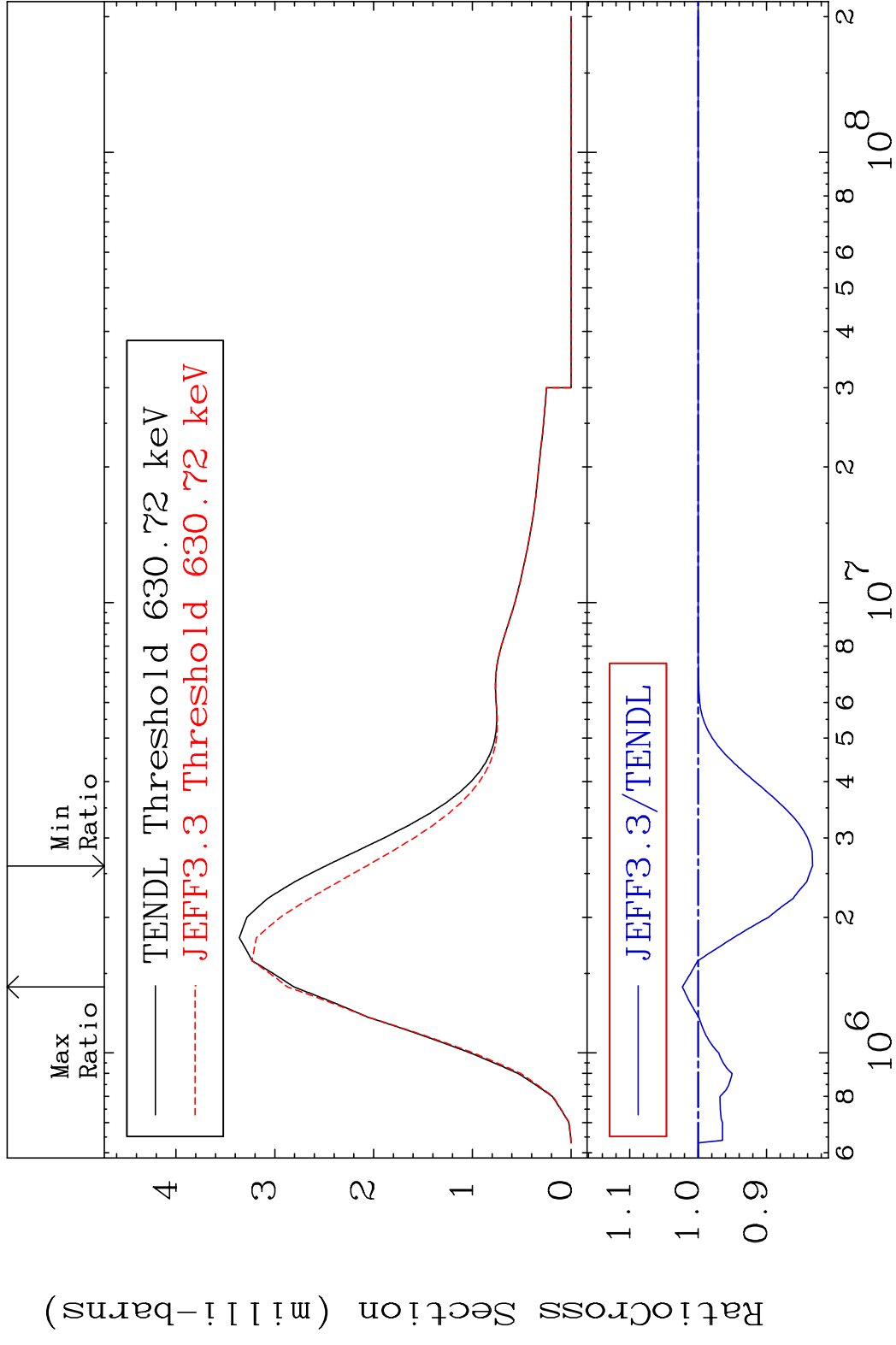
MAT 6931 MT= 56 (n,n') Level 69-Tm-171
 Cross Section -100.0 To 0.652 %



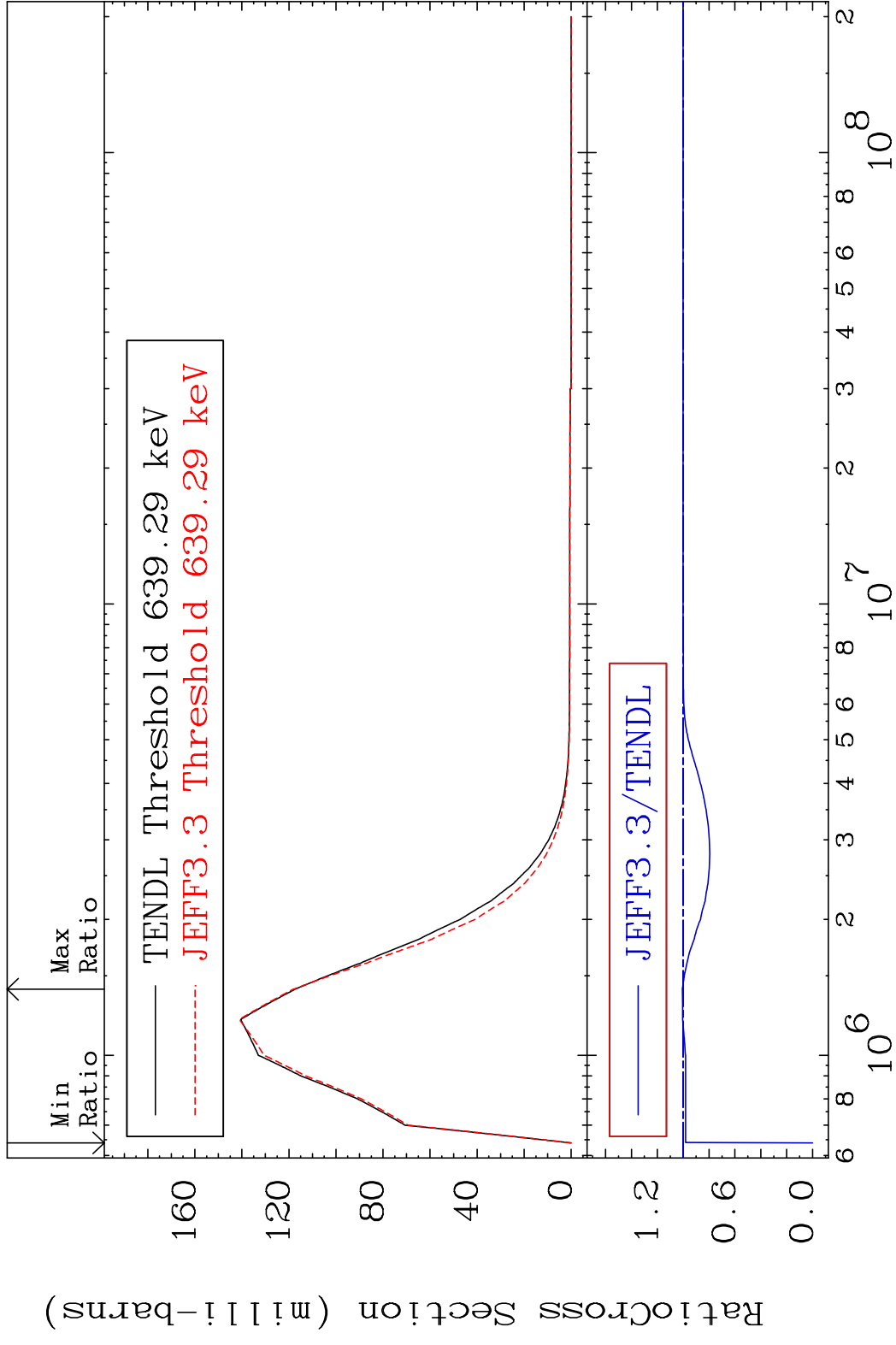
MAT 6931 MT= 57 (n, n') Level 69-Tm-171
 Cross Section -20.33 To 0.500 %



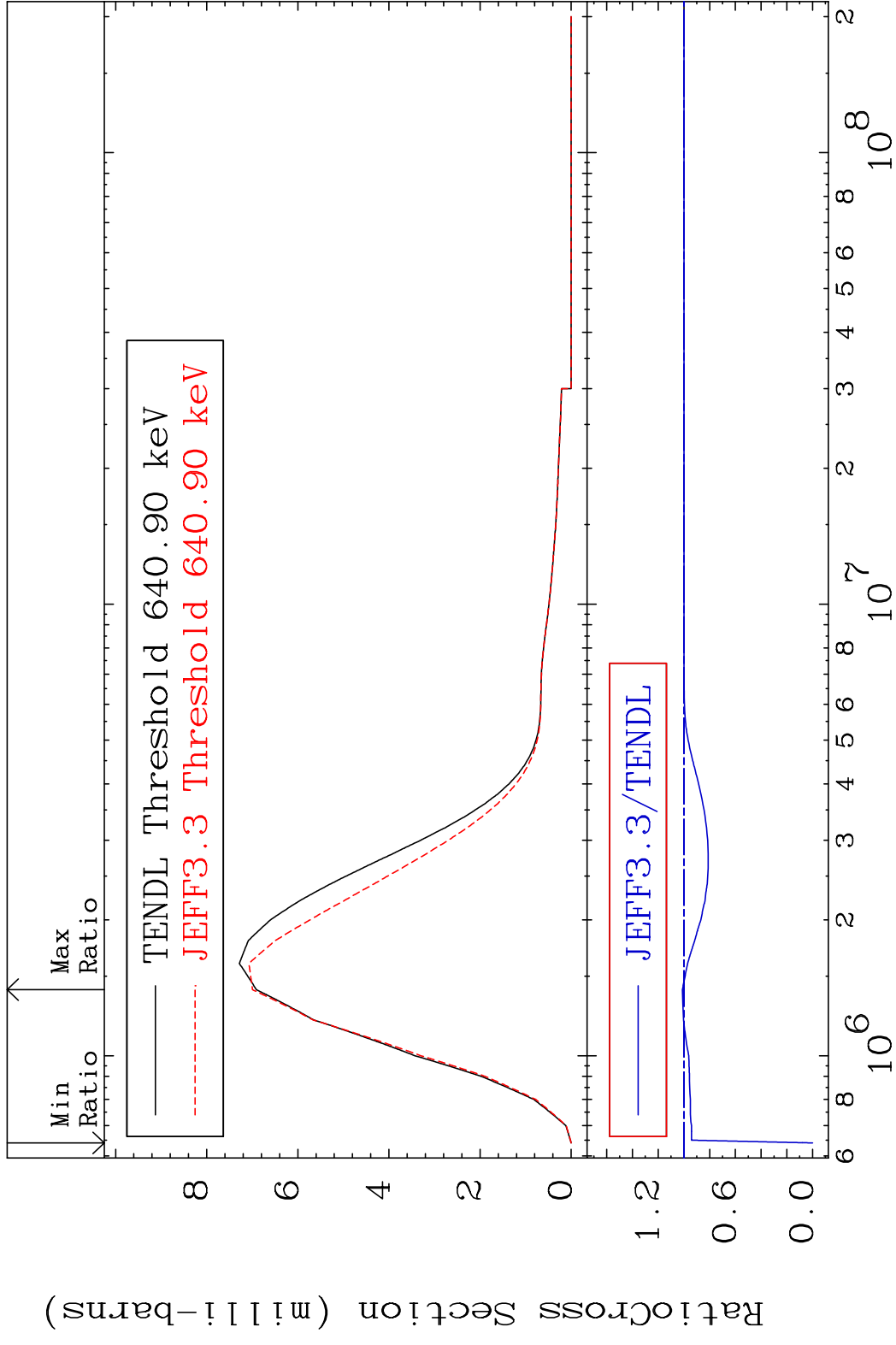
MAT 6931 MT= 58 (n, n') Level 69-Tm-171
 Cross Section -16.72 To 2.297 %



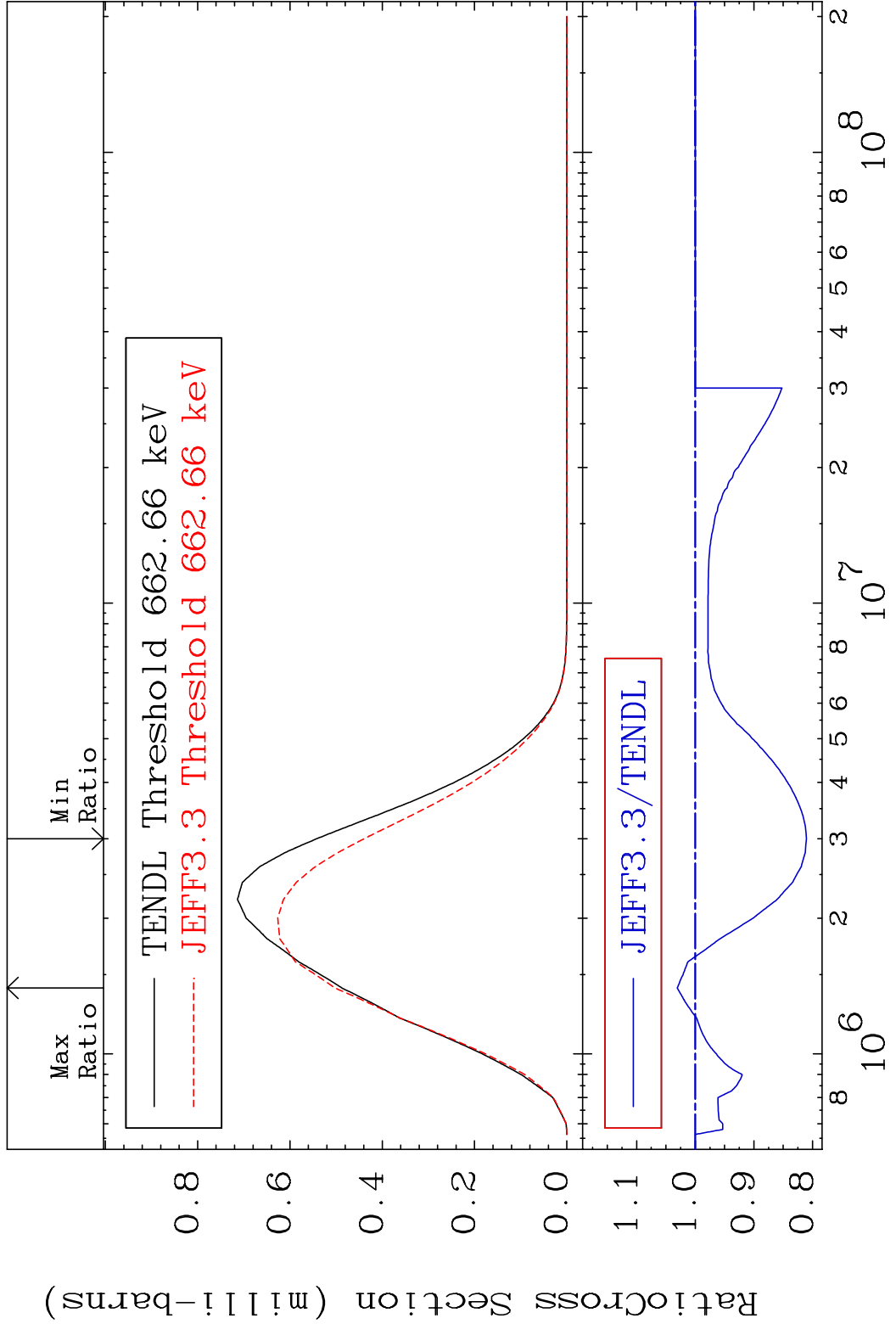
MAT 6931 MT= 59 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 0.637 %



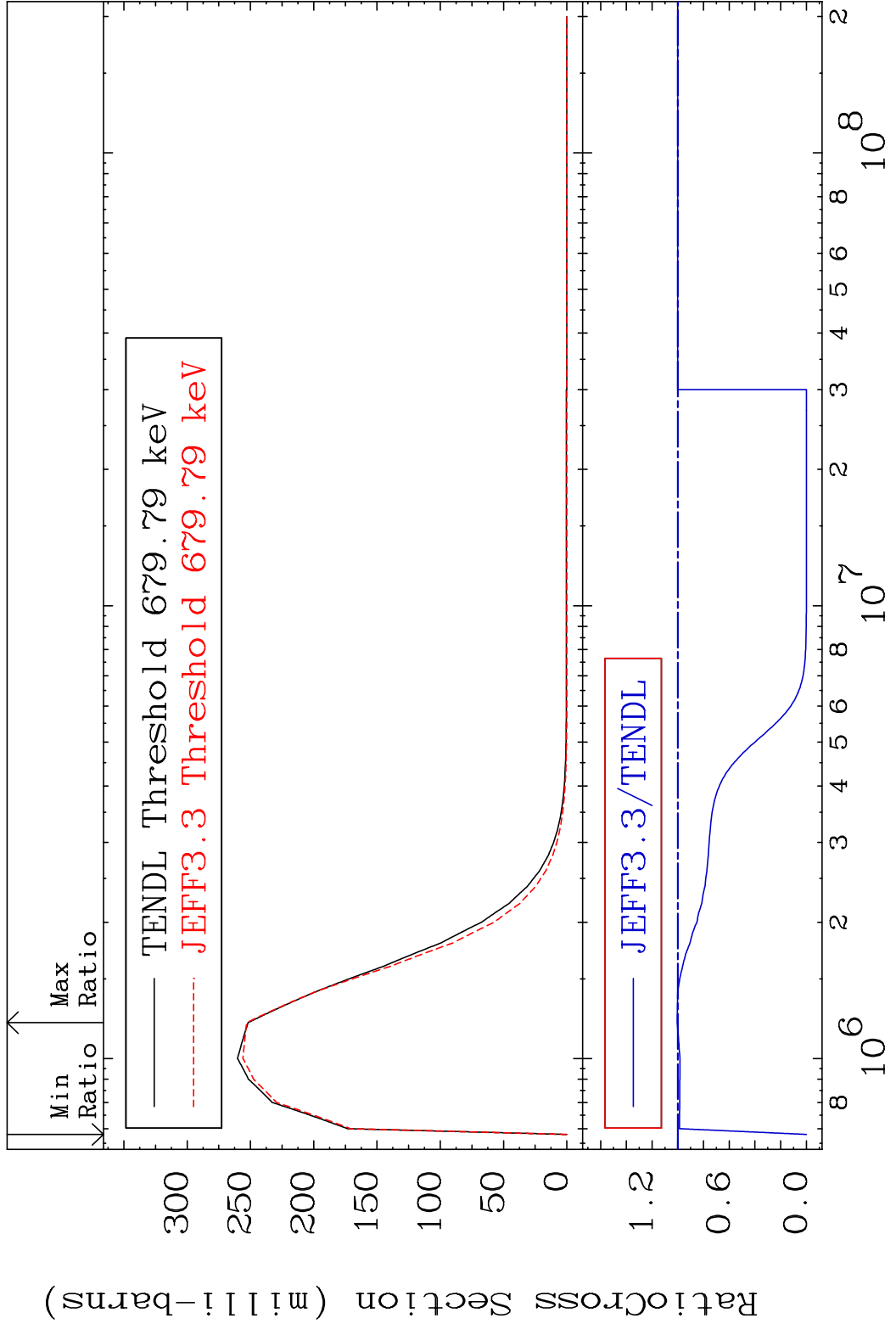
MAT 6931 MT= 60 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 1.212 %



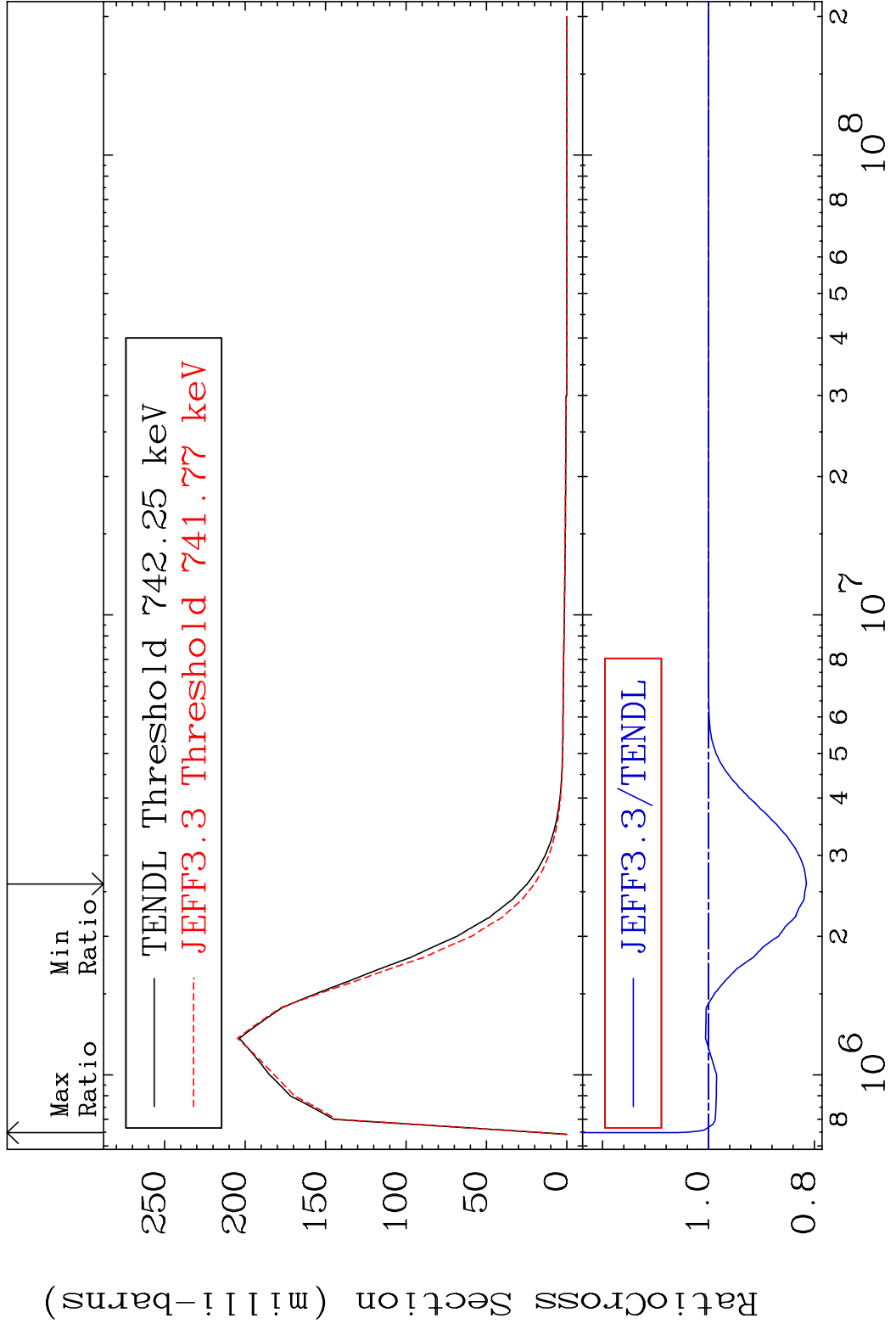
MAT 6931 MT= 61 (n, n') Level 69-Tm-171
 Cross Section -18.95 To 3.084 %



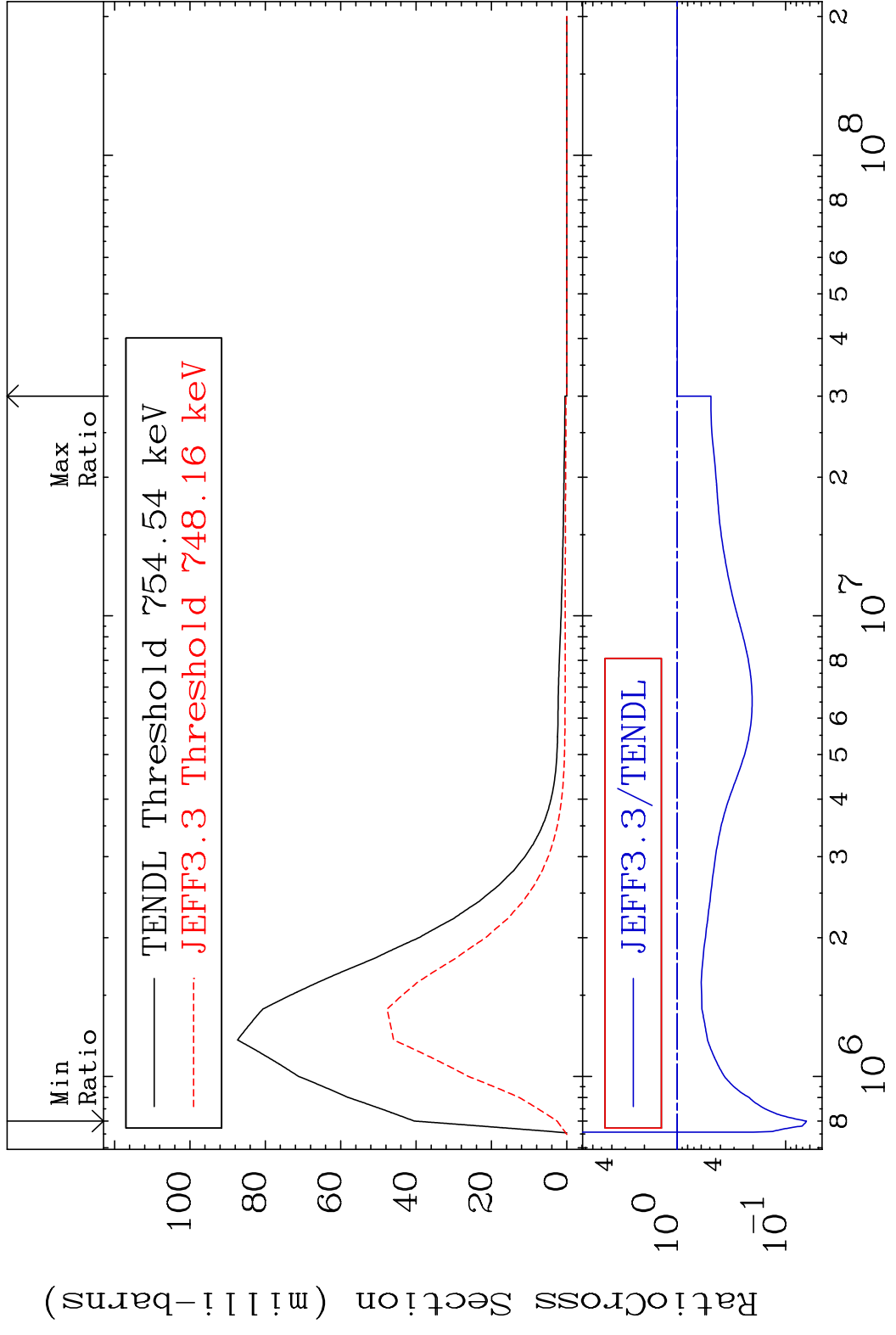
MAT 6931 MT= 62 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 0.466 %



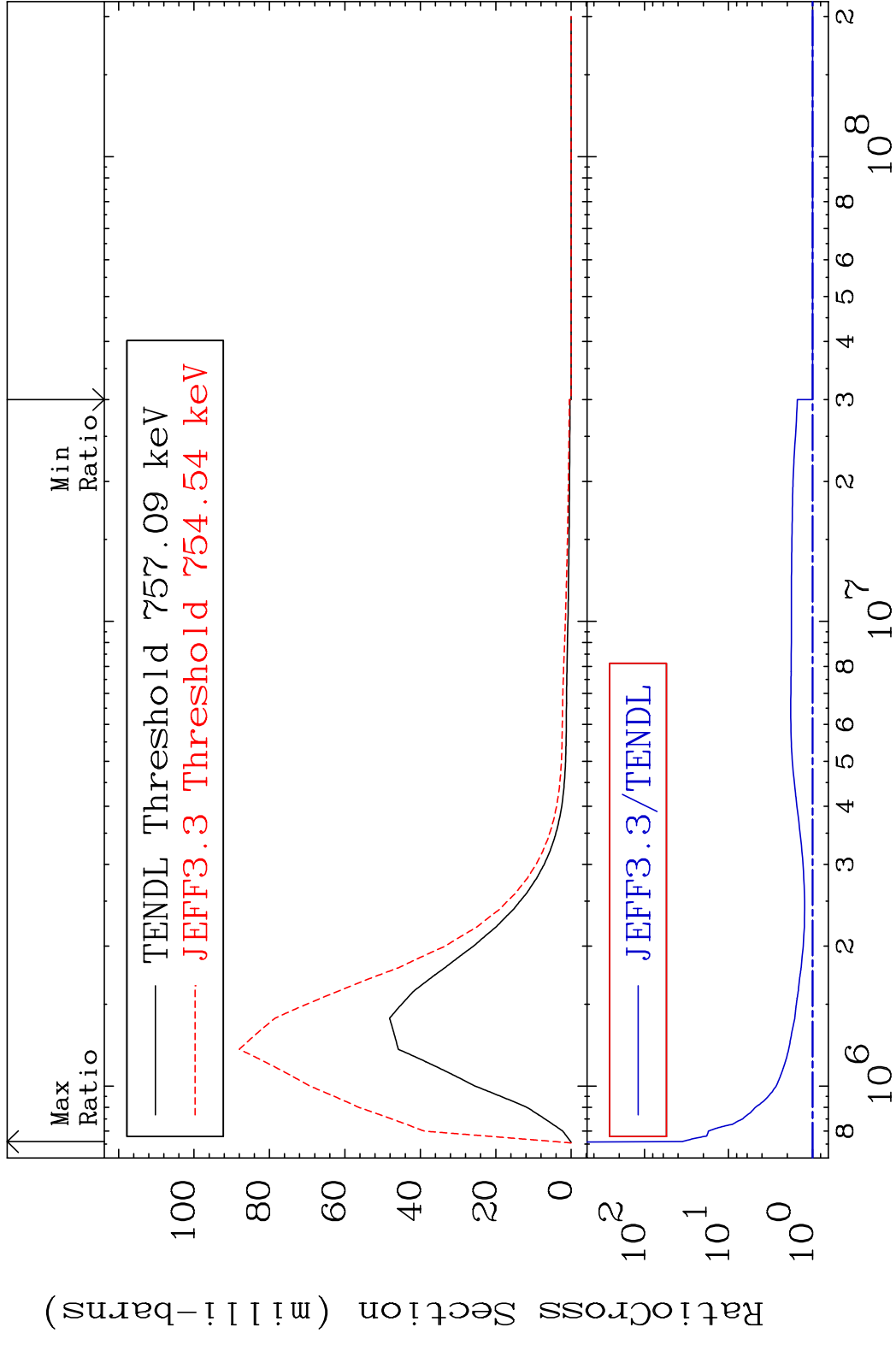
MAT 6931 MT= 63 (n, n') Level 69-Tm-171
 Cross Section -18.50 To 5.912 %



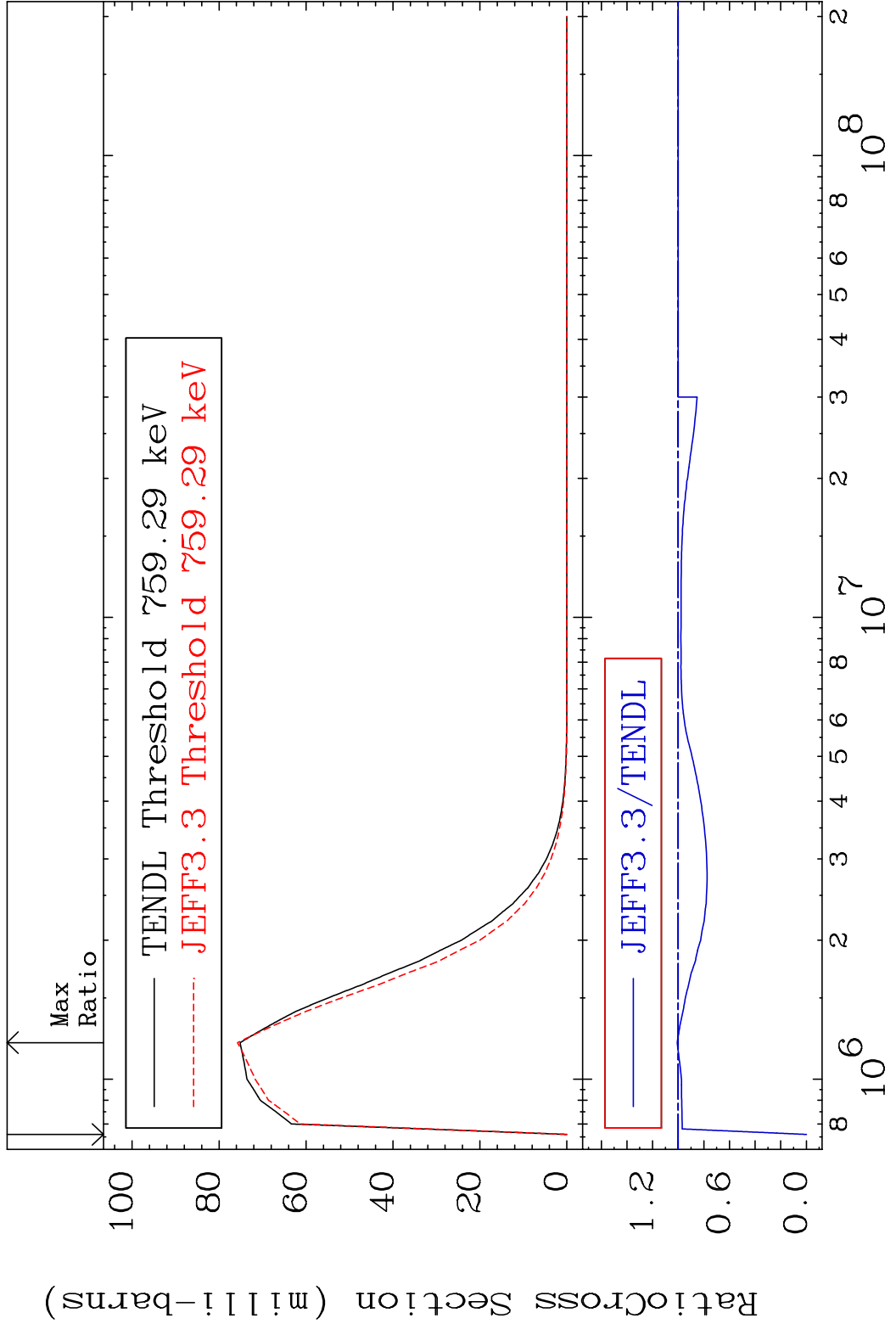
MAT 6931 MT= 64 (n,n') Level 69-Tm-171
 Cross Section -93.55 To 0.000 %



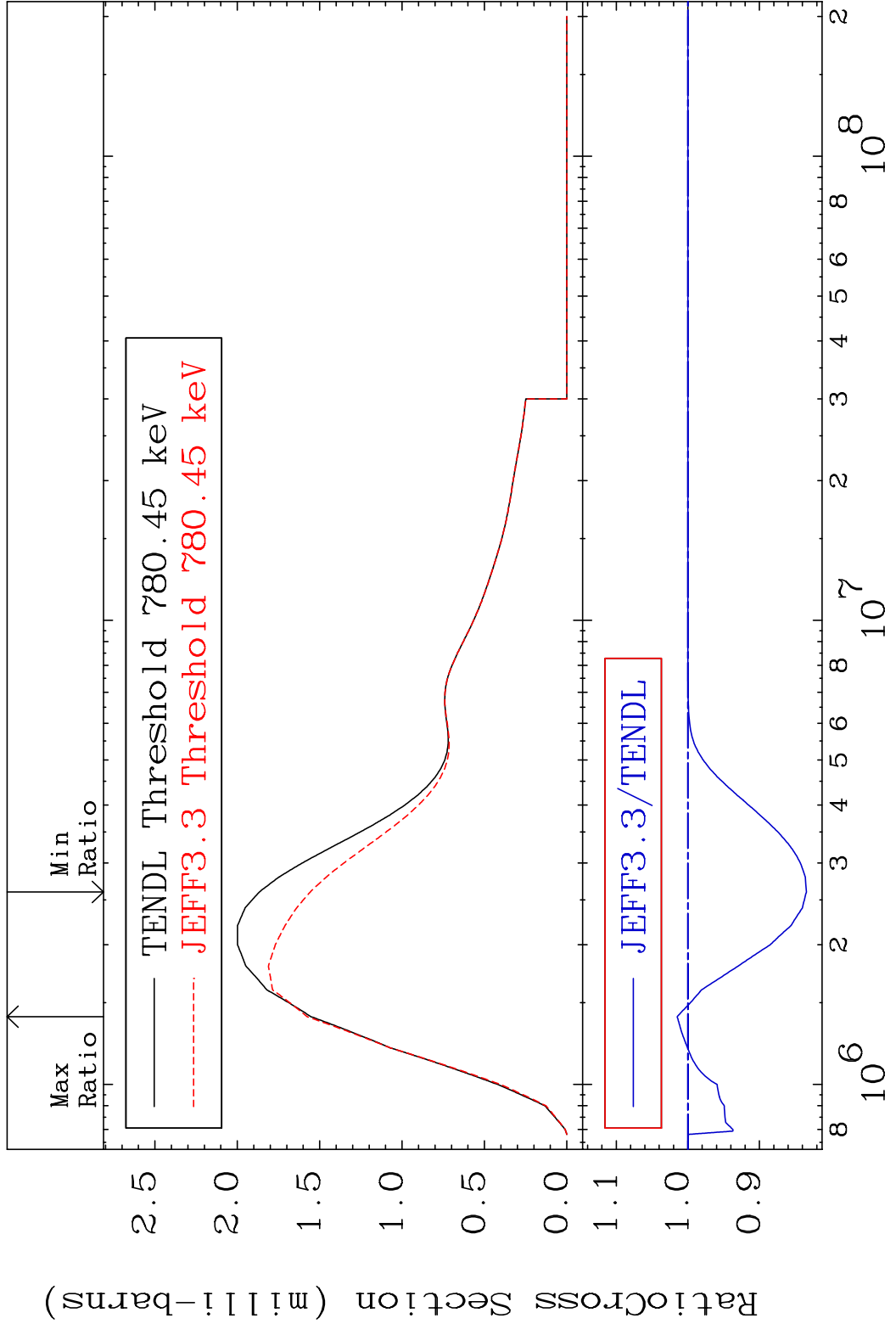
MAT 6931 MT= 65 (n, n') Level 69-Tm-171
 Cross Section 0.000 To 3450. %



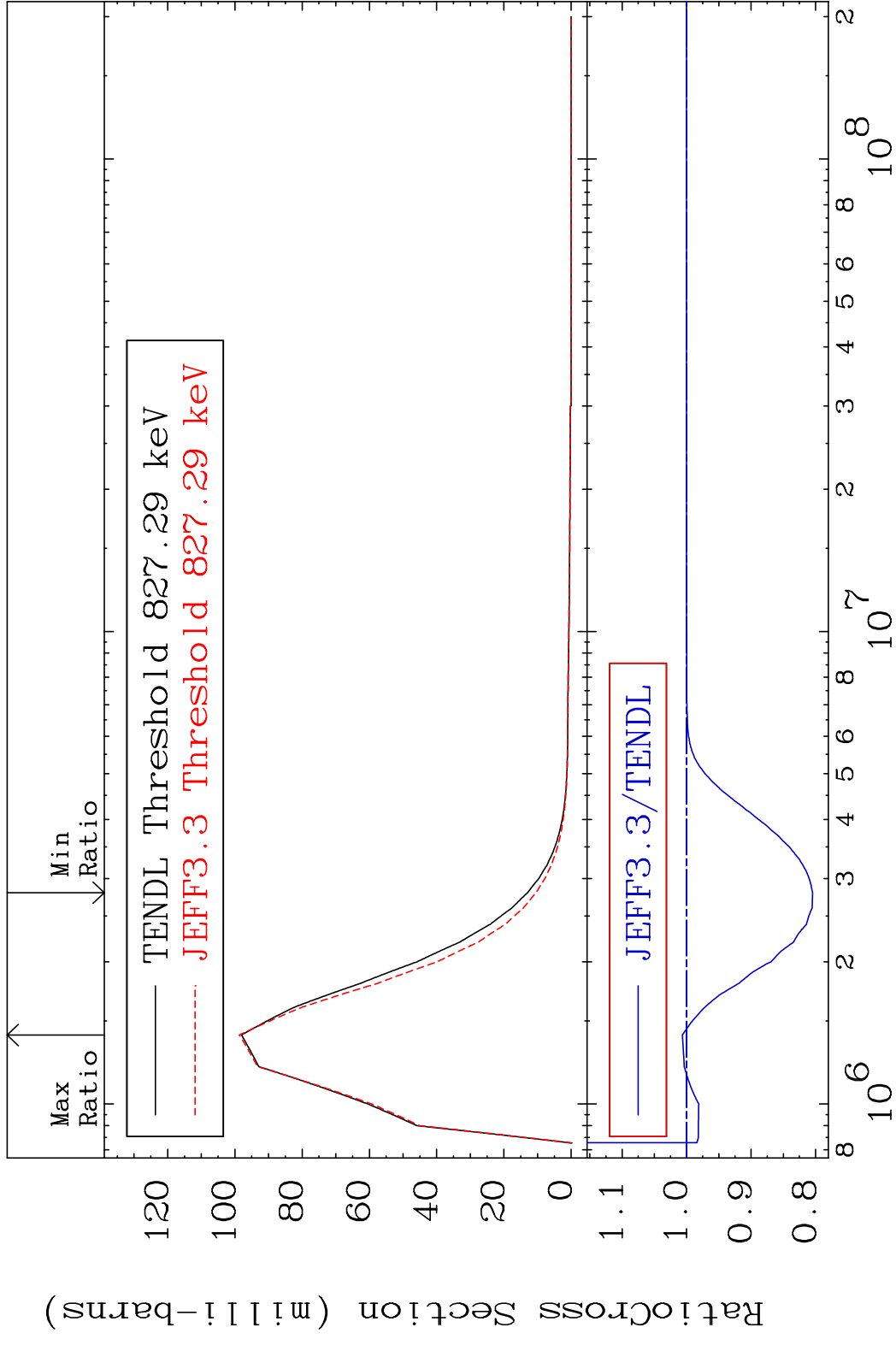
MAT 6931 MT= 66 (n,n') Level 69-Tm-171
 Cross Section -100.0 To 0.796 %



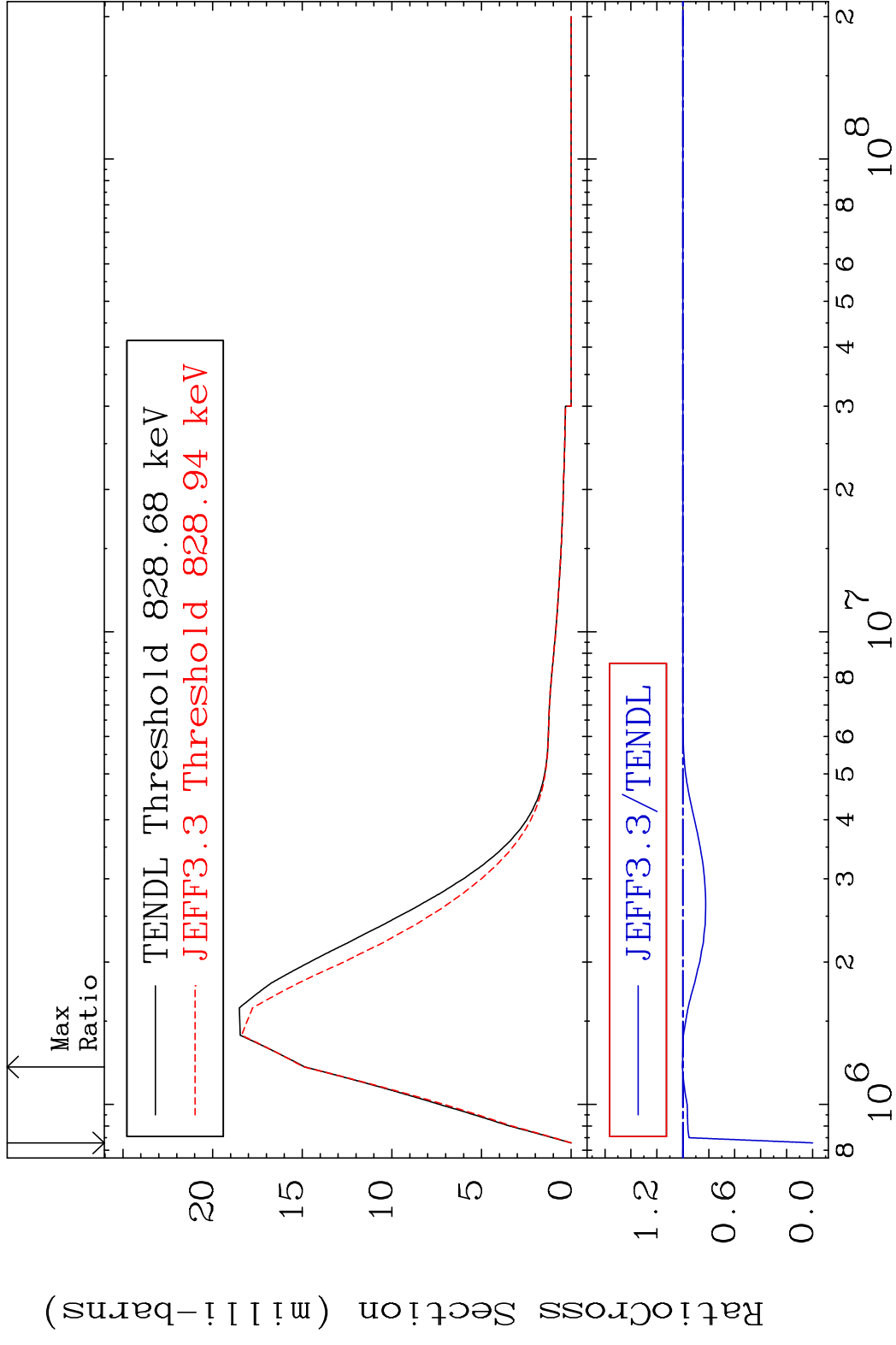
MAT 6931 MT= 67 (n, n') Level 69-Tm-171
 Cross Section -16.55 To 1.490 %



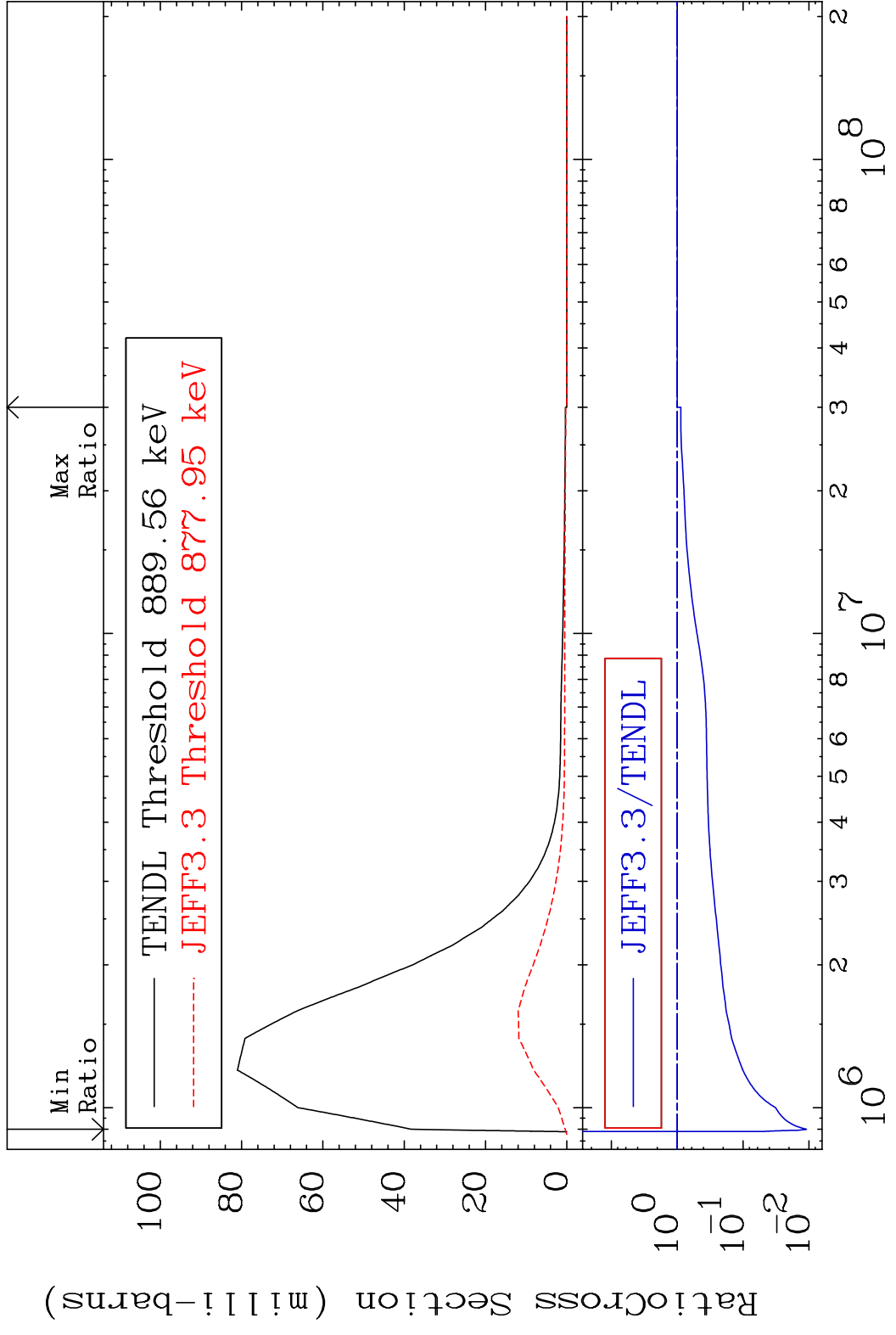
MAT 6931 MT= 68 (n, n') Level 69-Tm-171
 Cross Section -19.54 To 0.659 %



MAT 6931 MT= 69 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 0.365 %

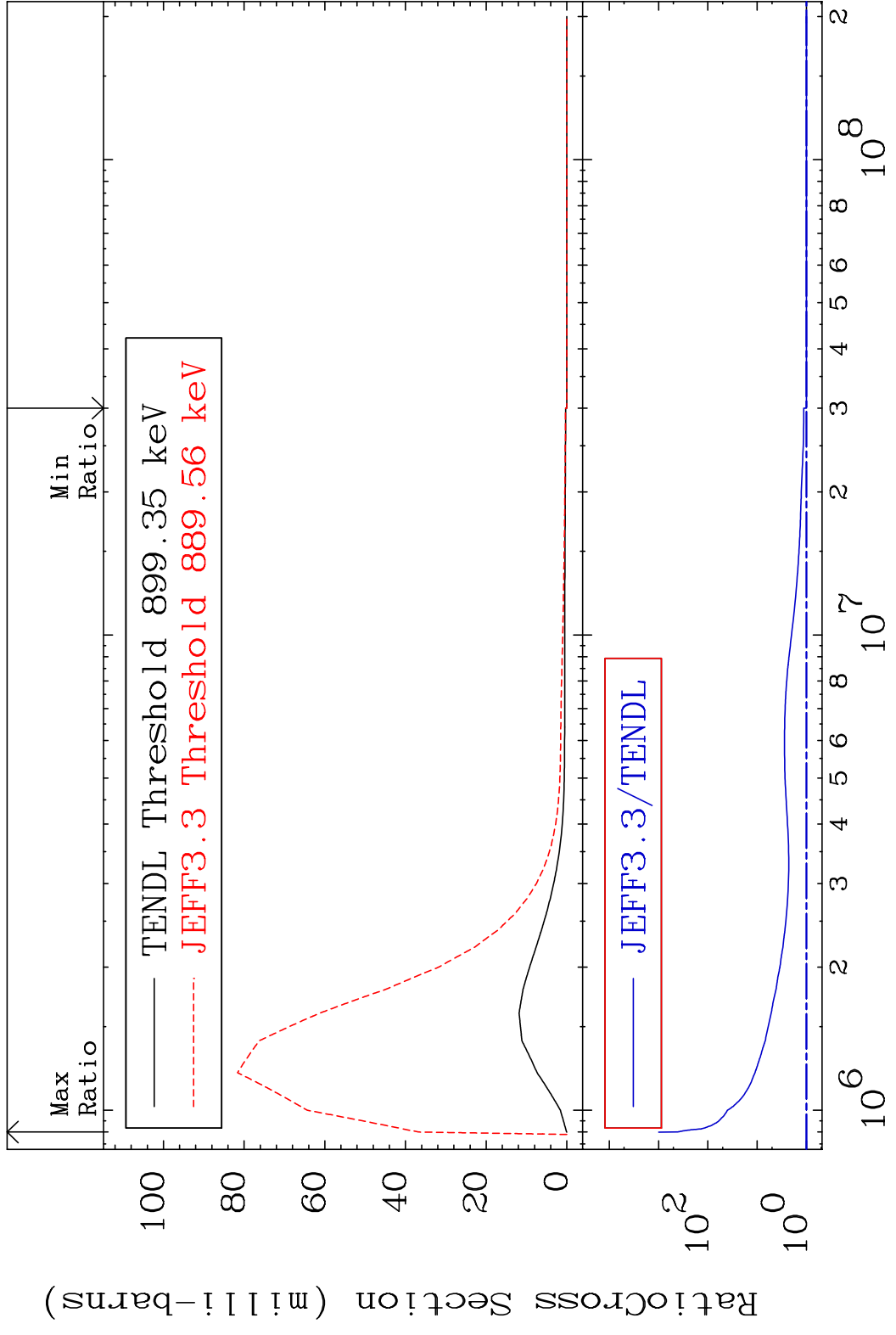


MAT 6931 MT= 70 (n,n') Level 69-Tm-171
 Cross Section -98.91 To 0.000 %



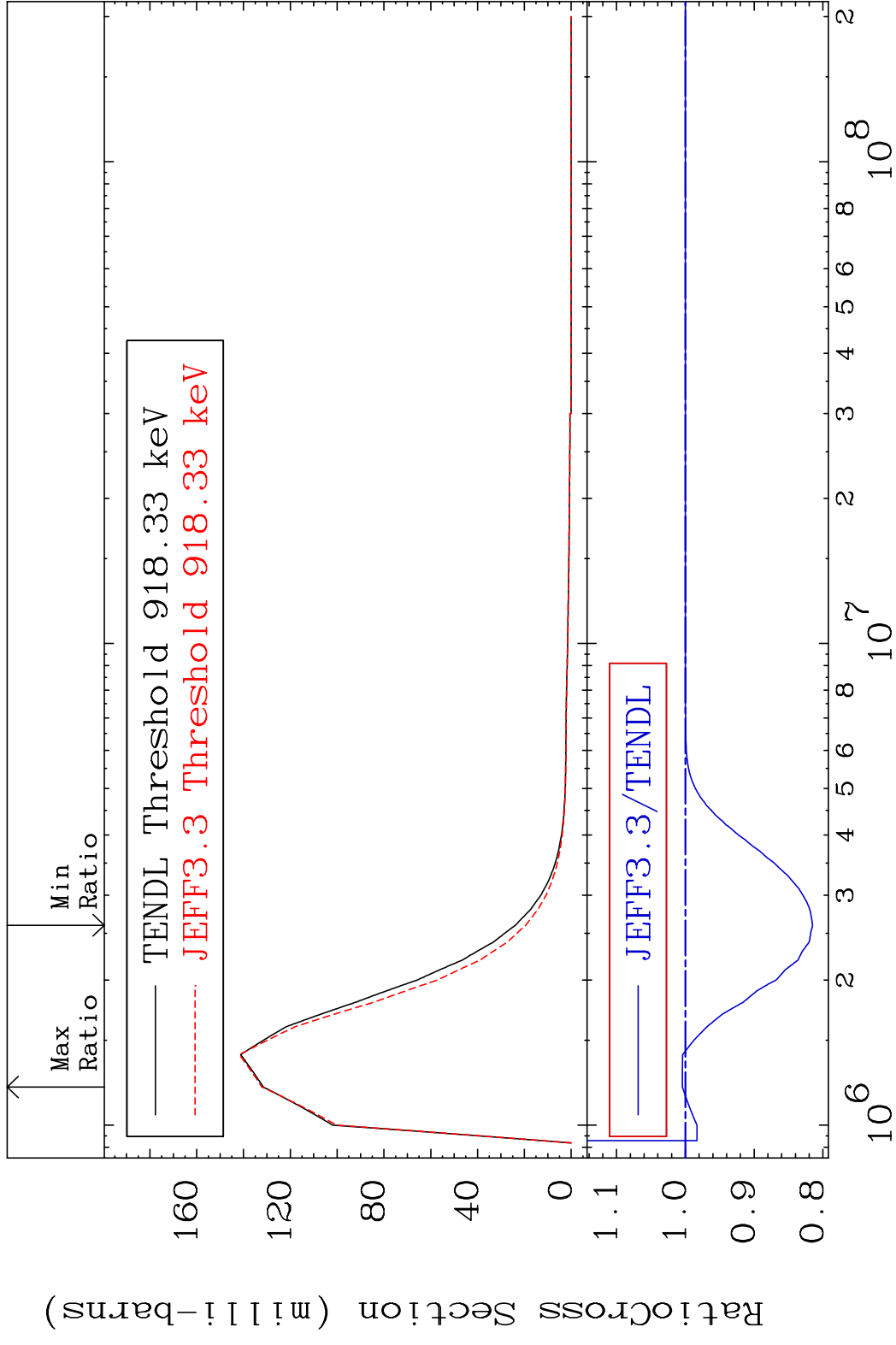
39 Incident Energy (eV) 69-Tm-171

MAT 6931 MT= 71 (n,n') Level 69-Tm-171
 Cross Section 0.000 To 9999. %



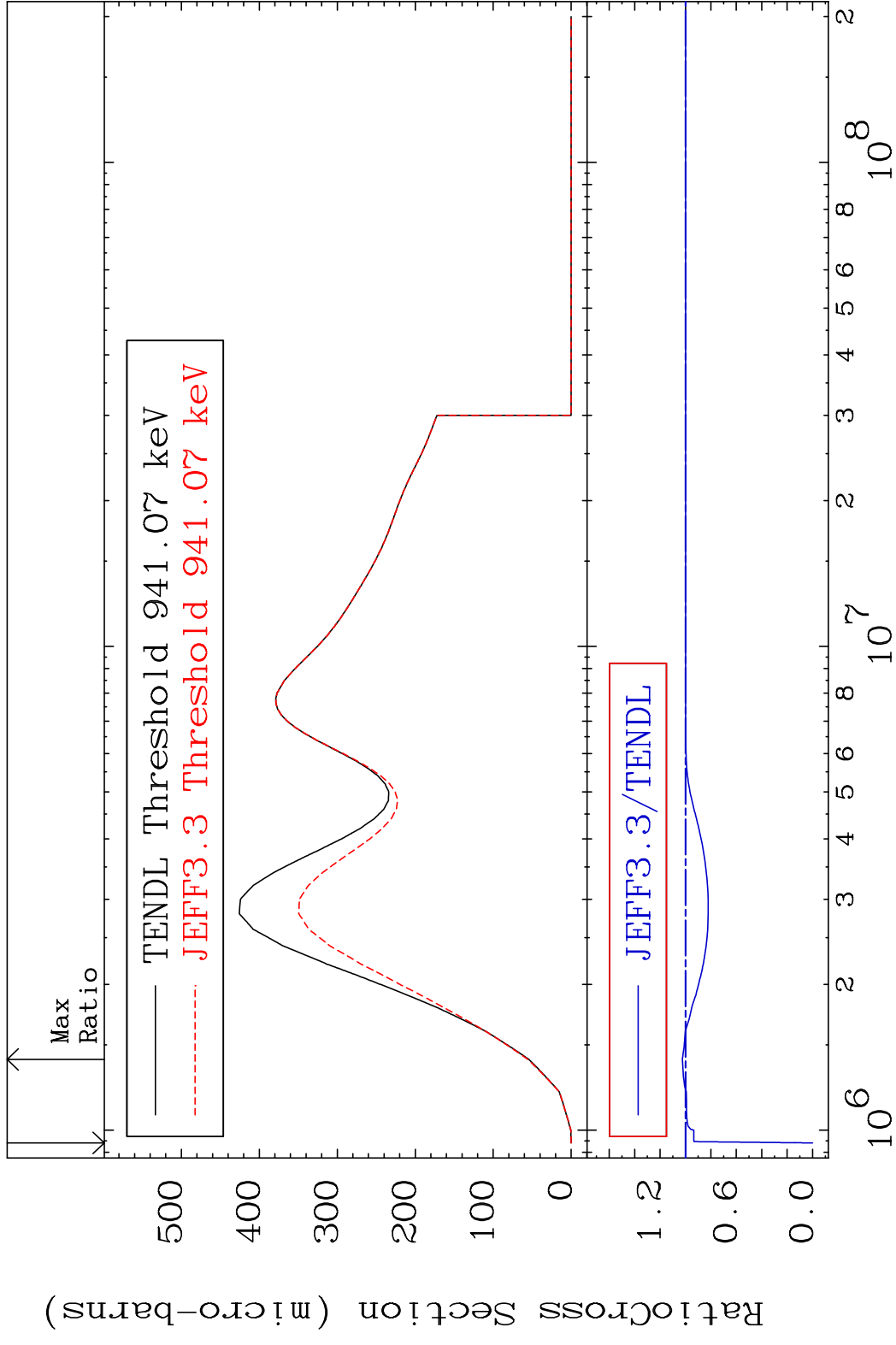
40 Incident Energy (eV) 69-Tm-171

MAT 6931 MT= 72 (n, n') Level 69-Tm-171
 Cross Section -18.49 To 0.440 %



41 Incident Energy (eV) 69-Tm-171

MAT 6931 MT= 73 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 2.456 %



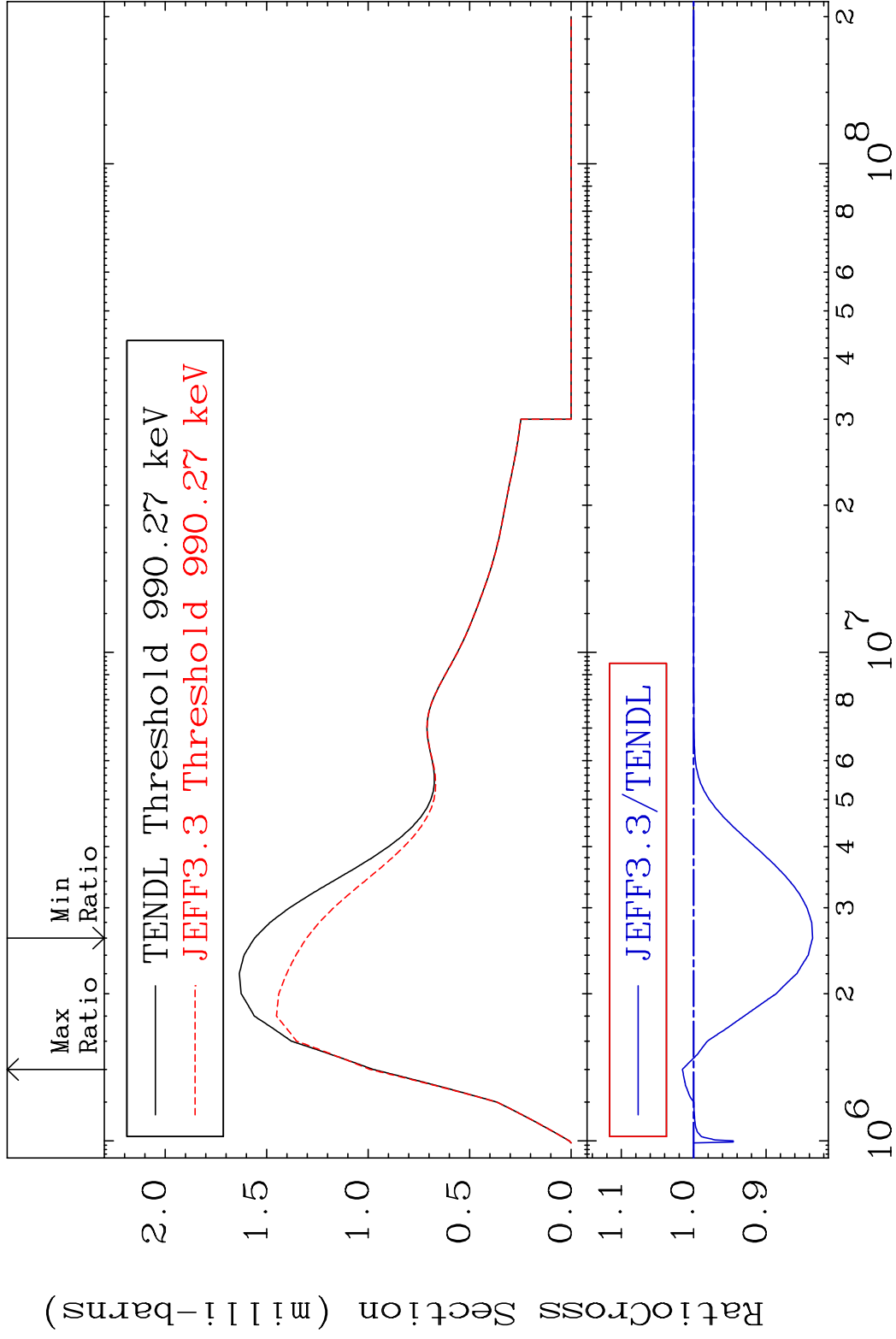
42 69-Tm-171

MAT 6931

MT= 74 (n, n') Level

69-Tm-171

Cross Section -16.44 To 1.561 %

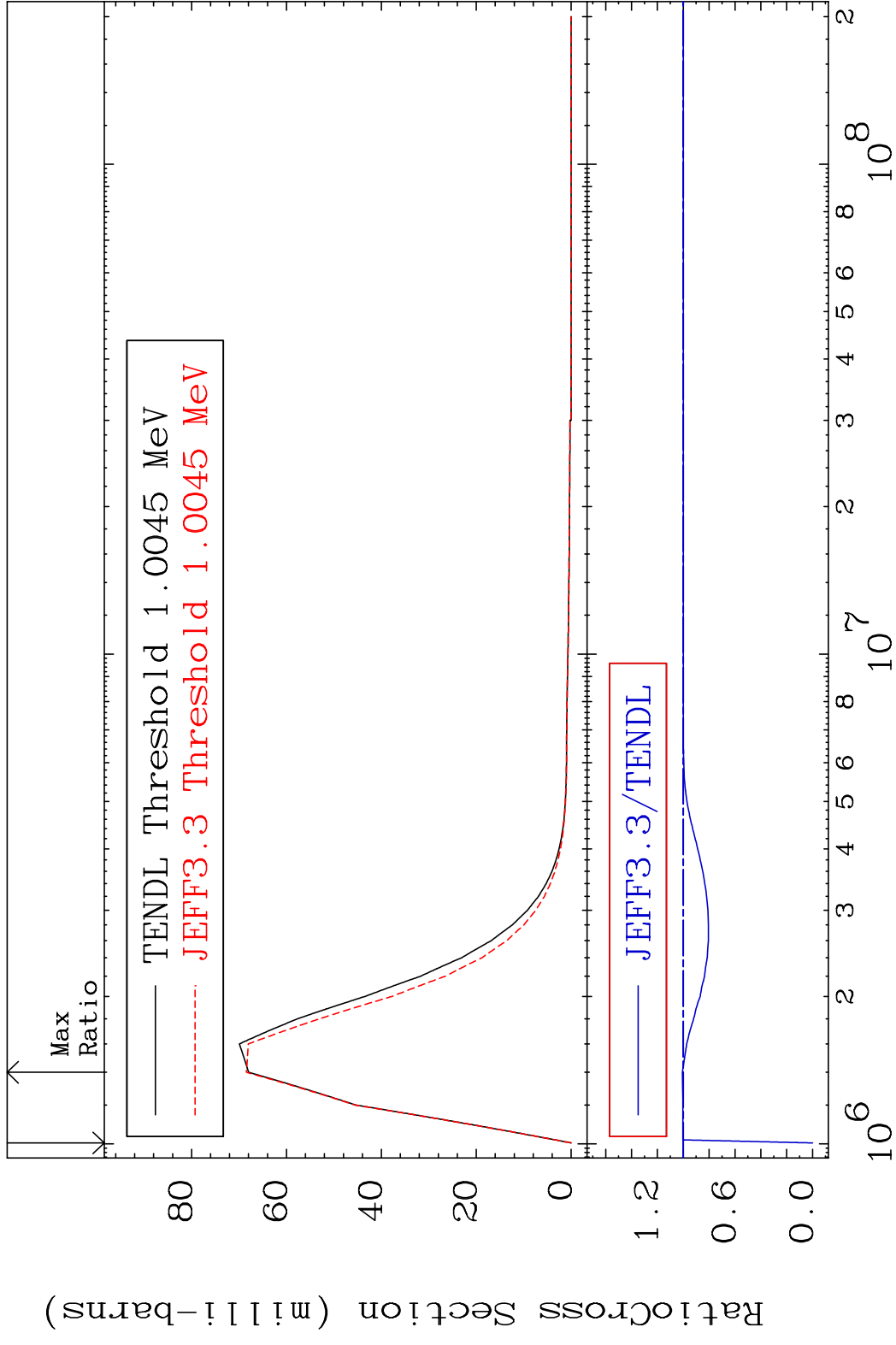


43

Incident Energy (eV)

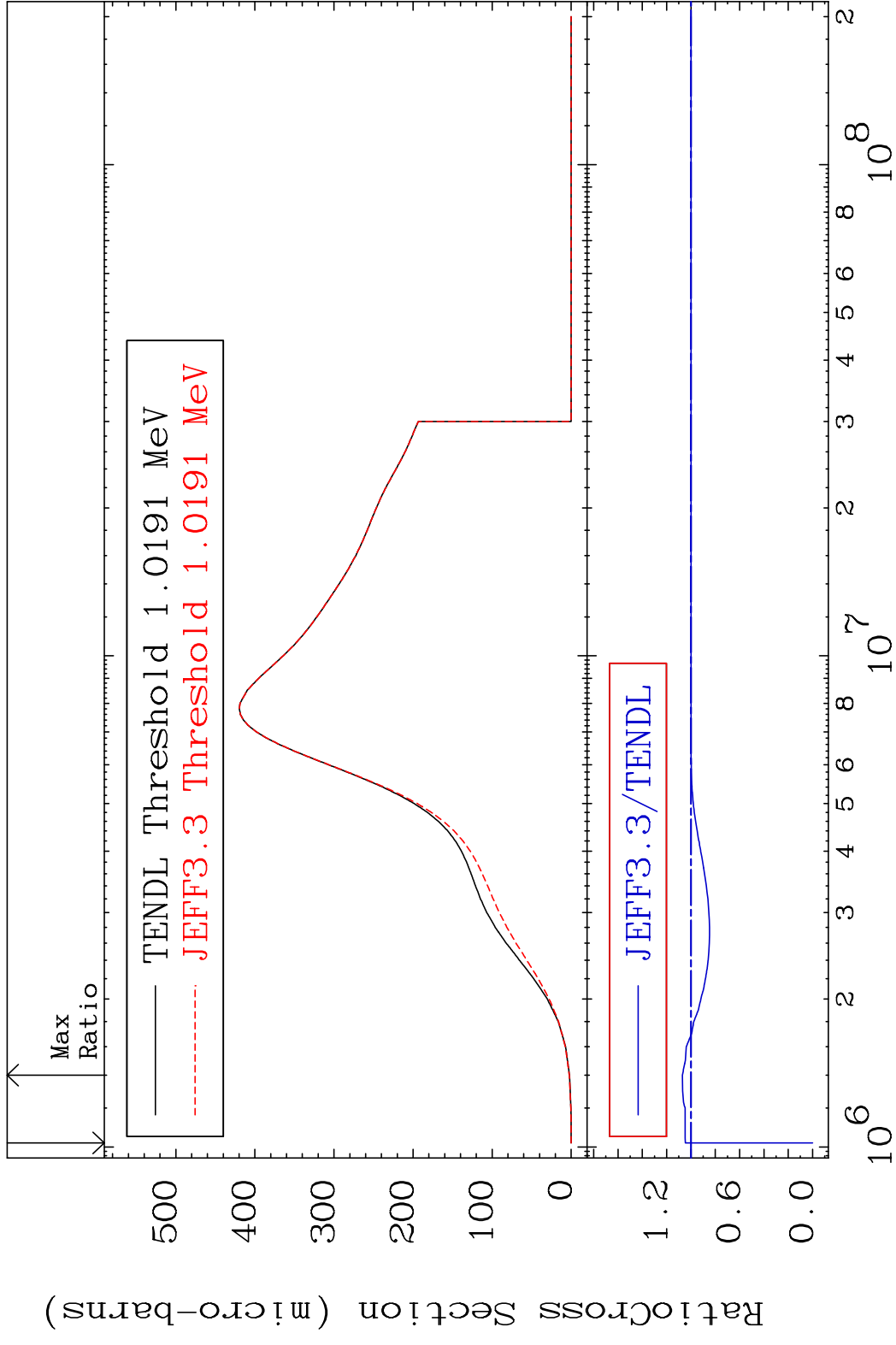
69-Tm-171

MAT 6931 MT= 75 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 0.6887 %



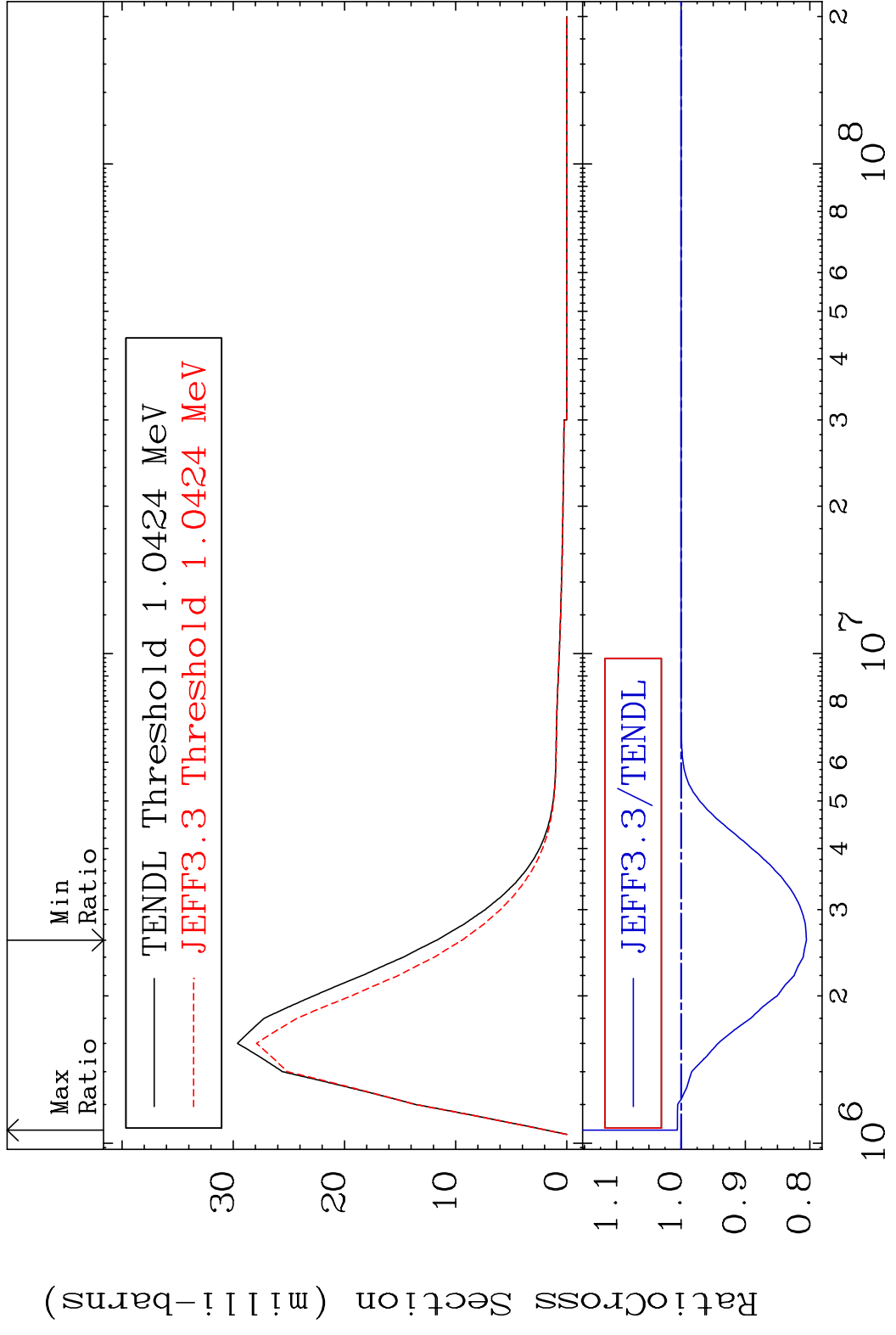
44 Incident Energy (eV) 69-Tm-171

MAT 6931 MT= 76 (n, n') Level 69-Tm-171
 Cross Section -100.0 To 7.077 %



45 Incident Energy (eV) 69-Tm-171

MAT 6931 MT= 77 (n,n') Level 69-Tm-171
 Cross Section -19.48 To 0.597 %

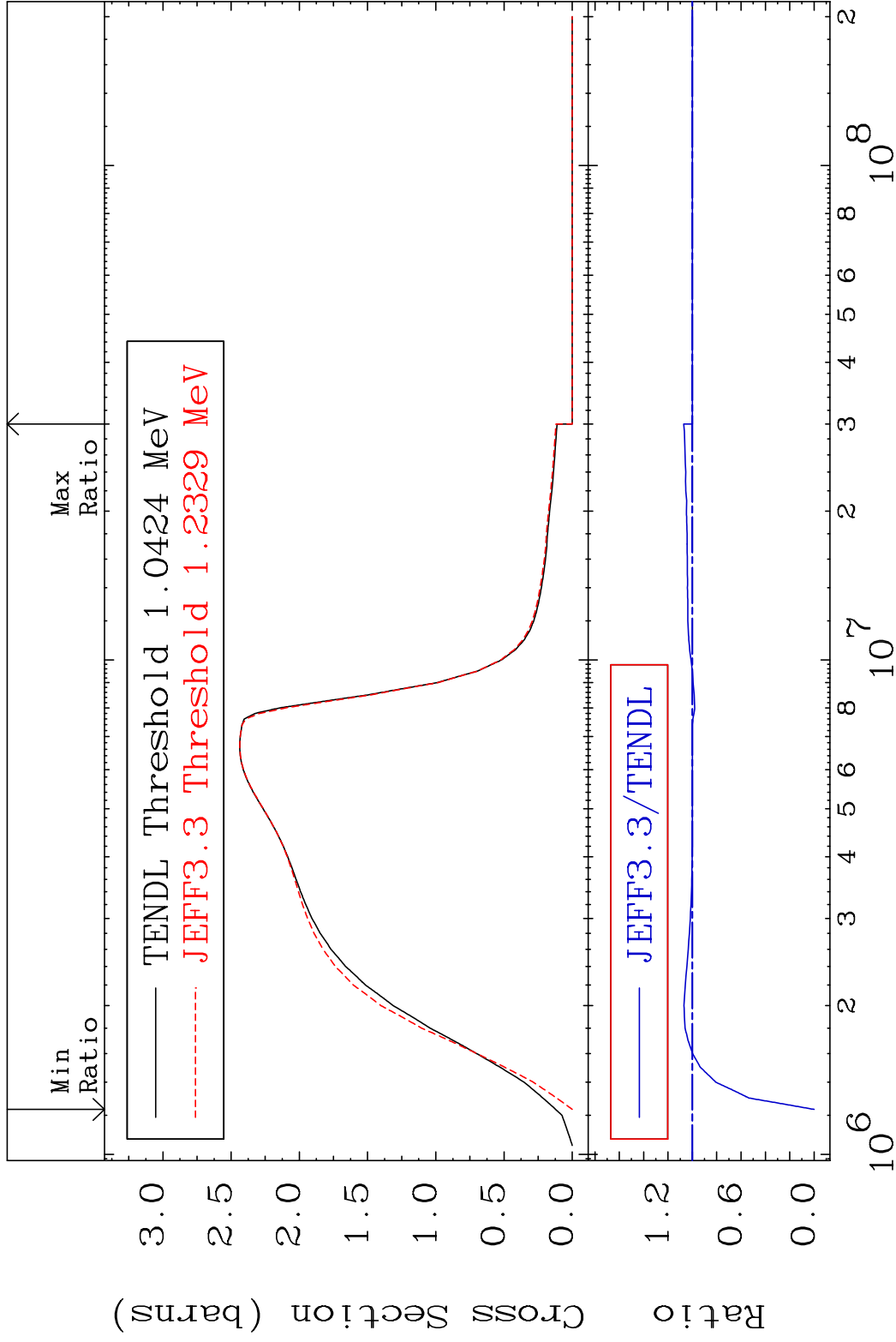


46 Incident Energy (eV) 69-Tm-171

MAT 6931

(n, n') Continuum
Cross Section -100.0 To 7.144 %

69-Tm-171



47

Incident Energy (eV)

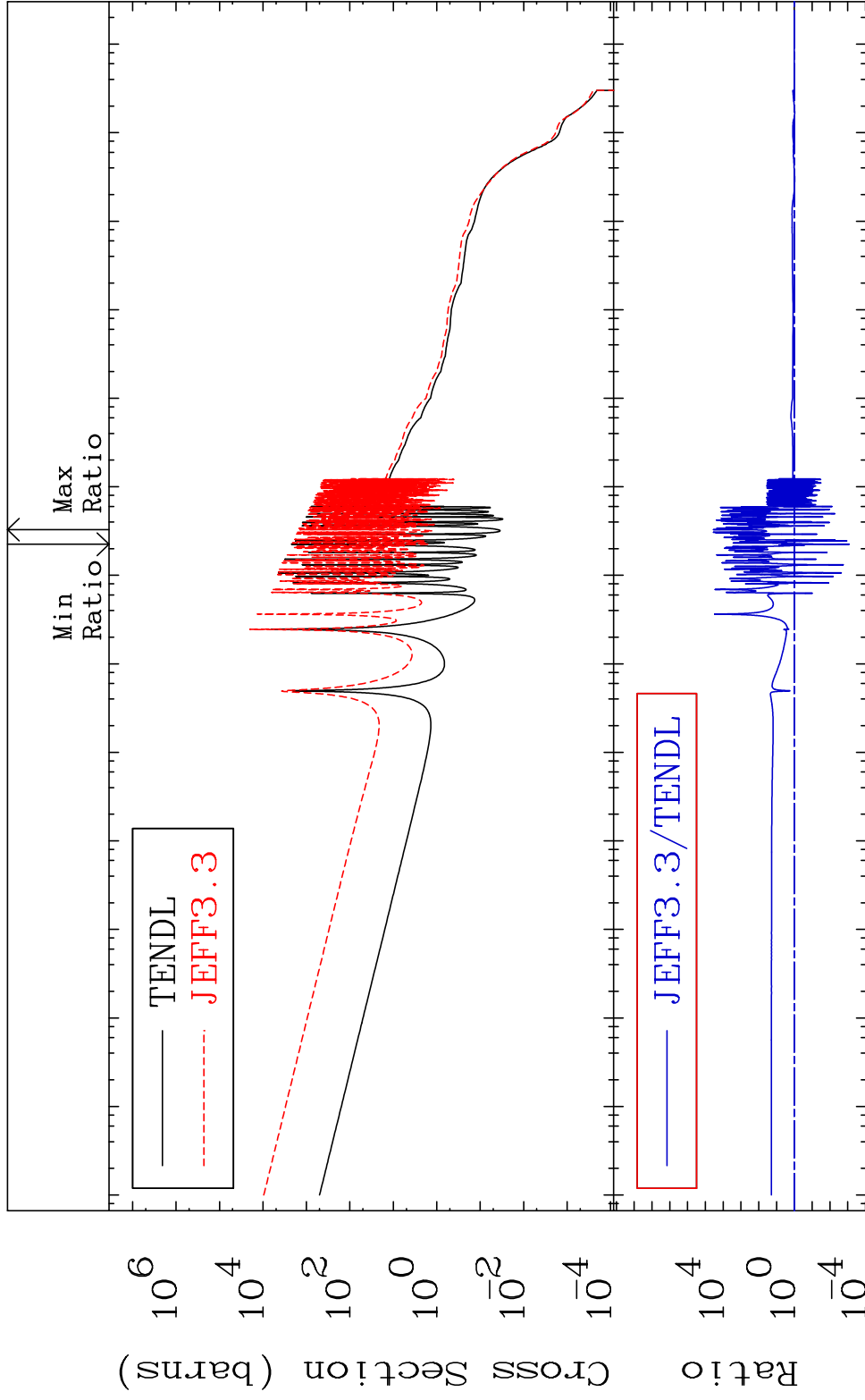
69-Tm-171

MAT 6931

(n, γ)

69-Tm-171

Cross Section -99.92 To 9999. %



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

48

Incident Energy (eV)

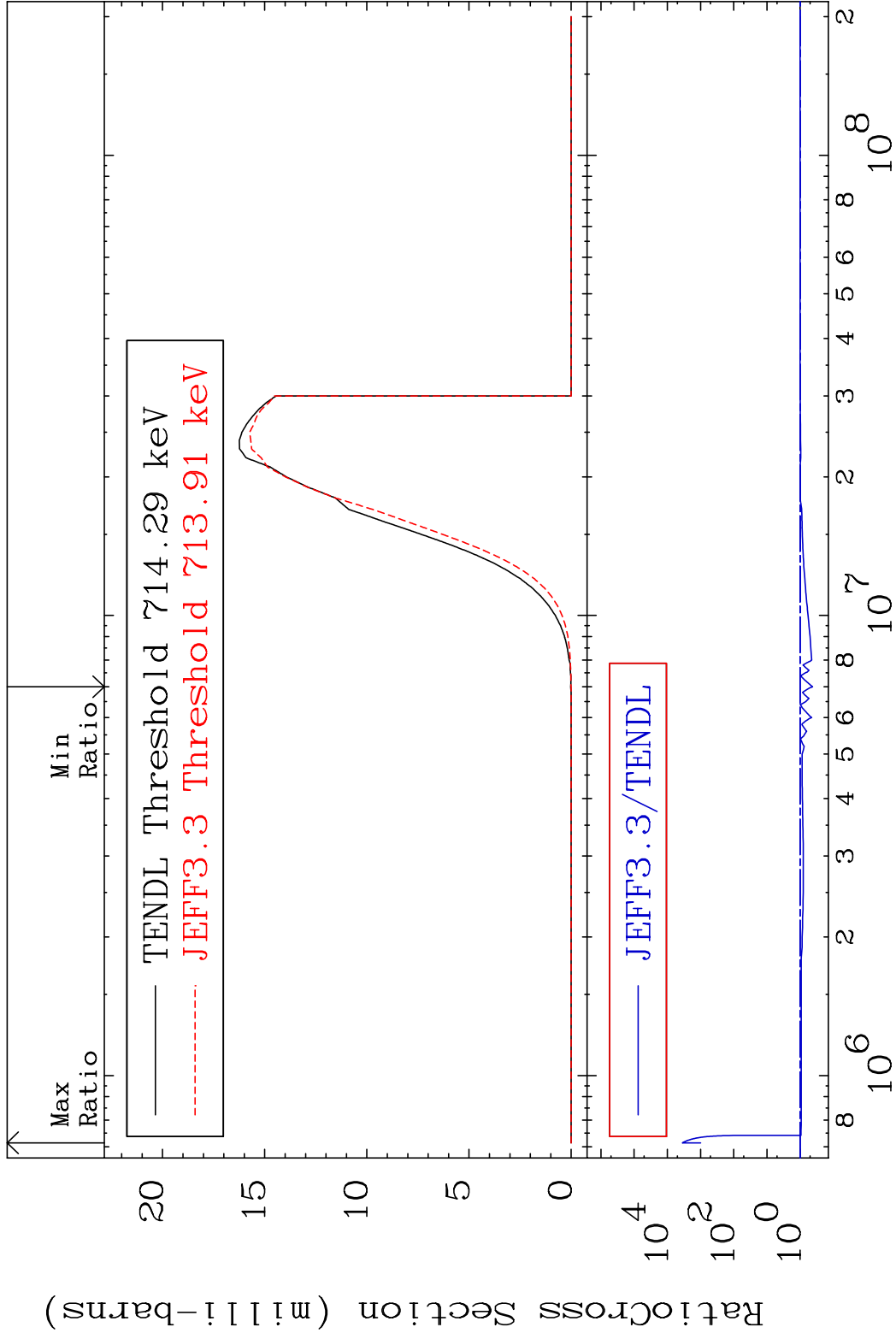
69-Tm-171

MAT 6931

(n, p)

69-Tm-171

Cross Section -57.78 To 9999. %



49

Incident Energy (eV)

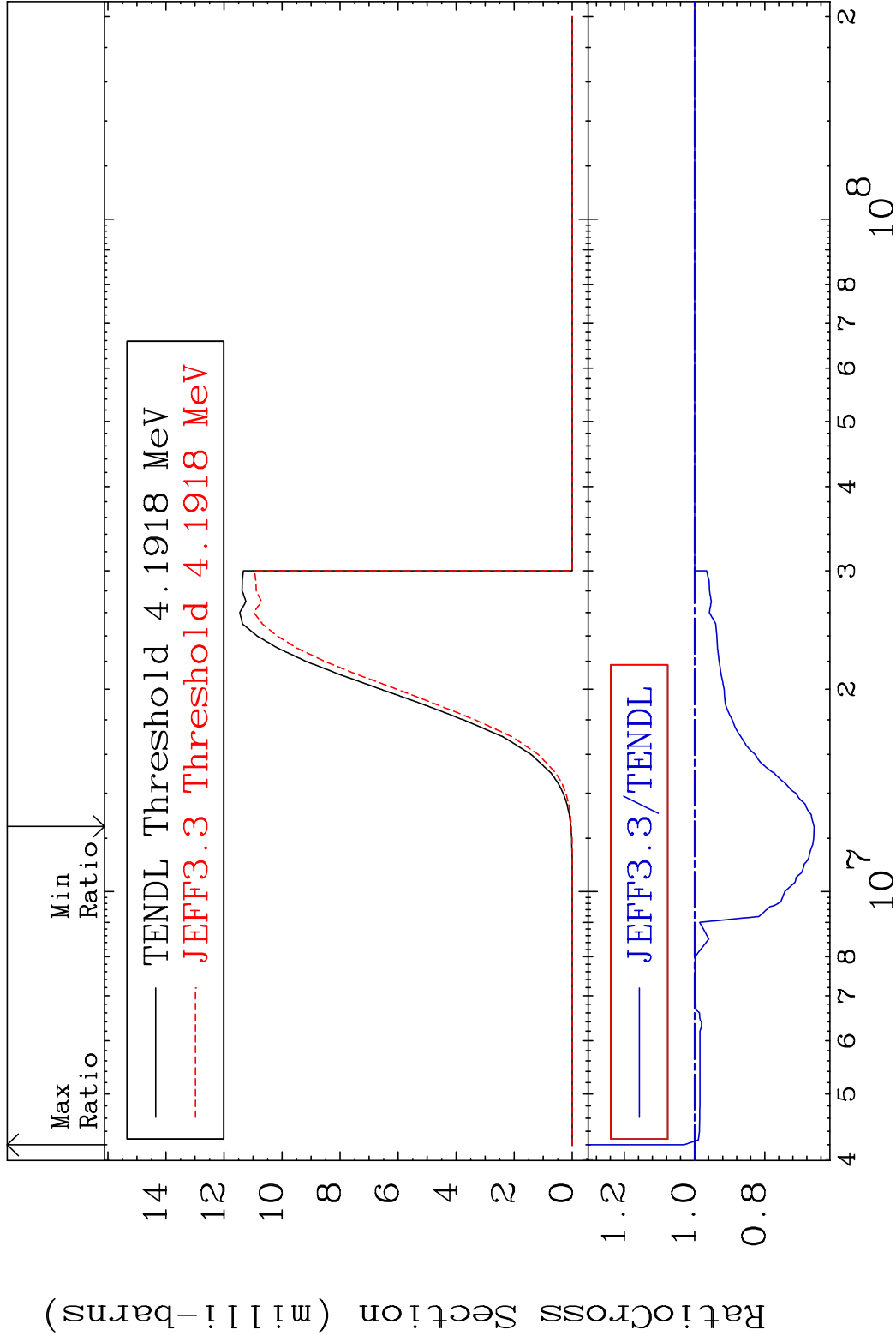
69-Tm-171

MAT 6931

(n, d)

69-Tm-171

Cross Section -34.06 To 3.110 %



50

Incident Energy (eV)

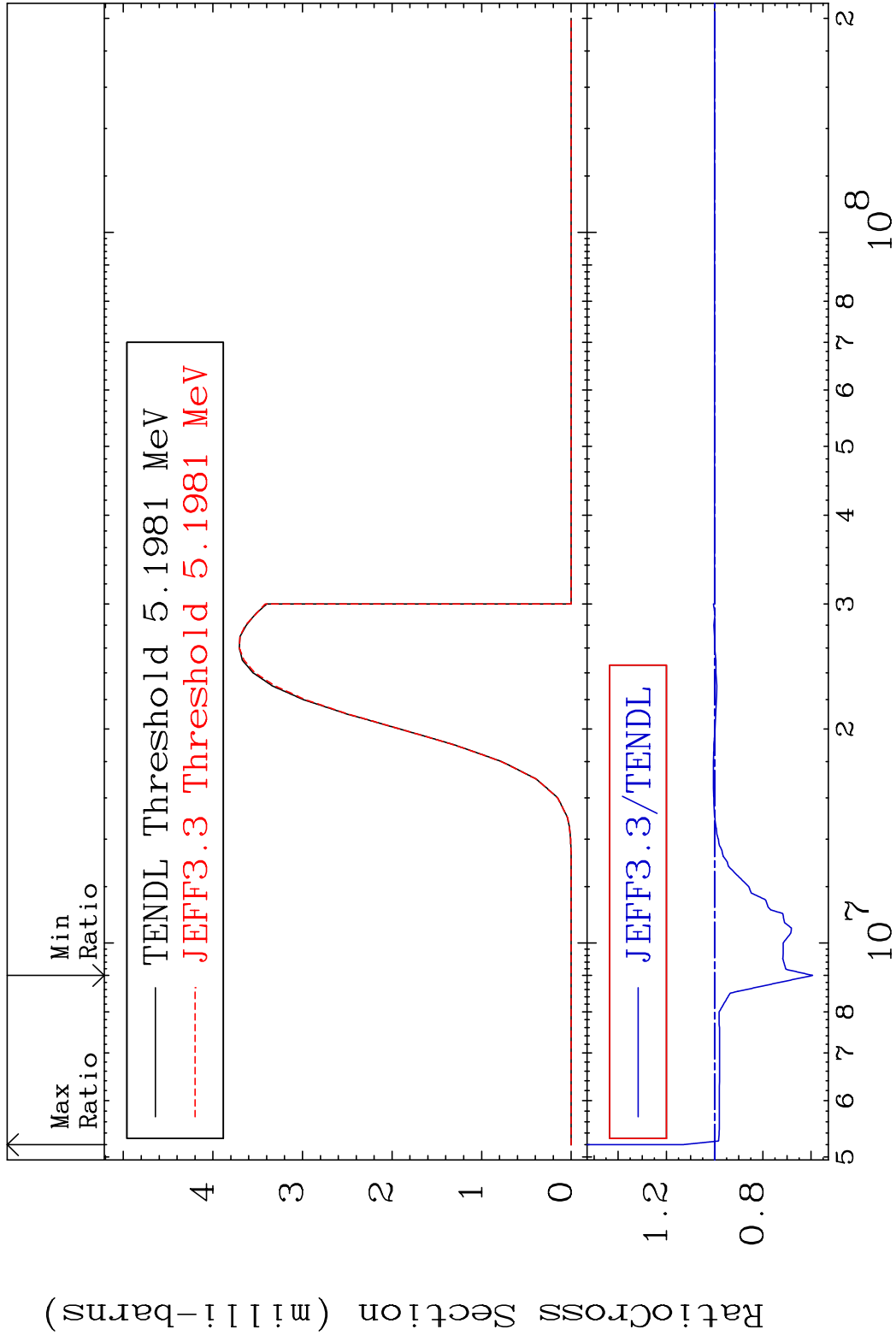
69-Tm-171

MAT 6931

(n, t)

69-Tm-171

Cross Section -40.60 To 13.38 %



51

Incident Energy (eV)

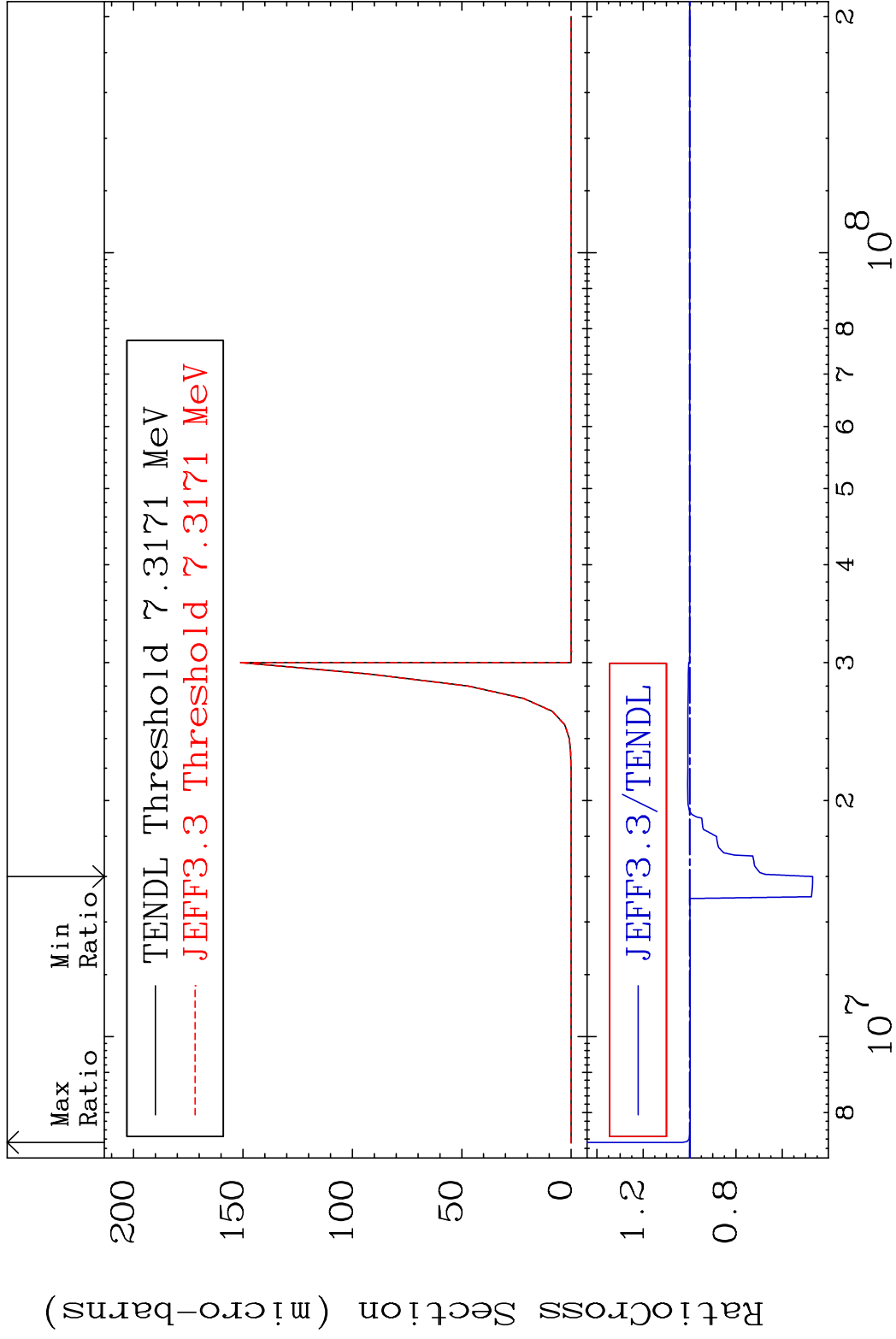
69-Tm-171

MAT 6931

(n, He-3)

69-Tm-171

Cross Section -53.01 To 3.138 %



52

Incident Energy (eV)

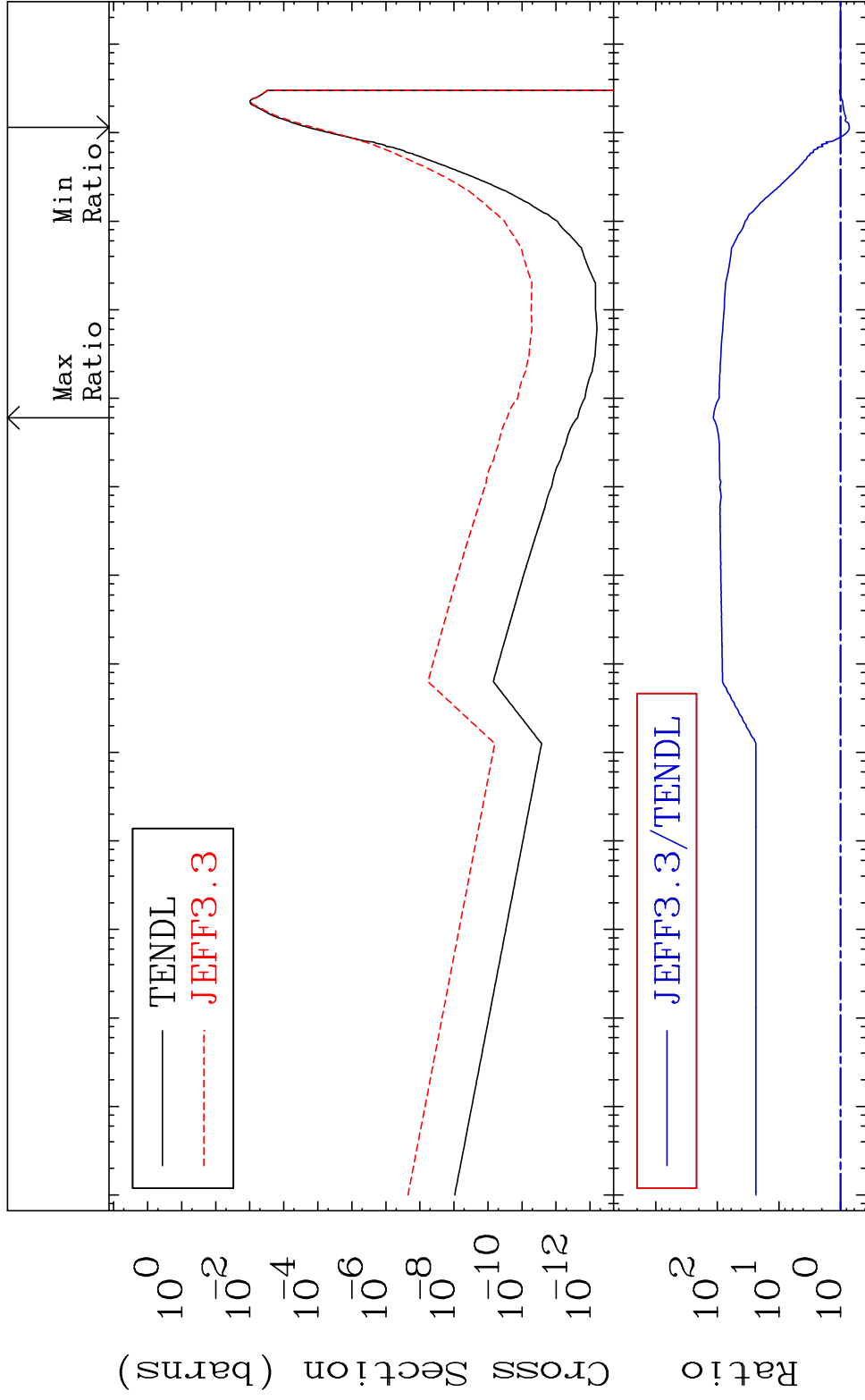
69-Tm-171

MAT 6931

(n, α)

69-Tm-171

Cross Section -28.07 To 9999. %



53

Incident Energy (eV)

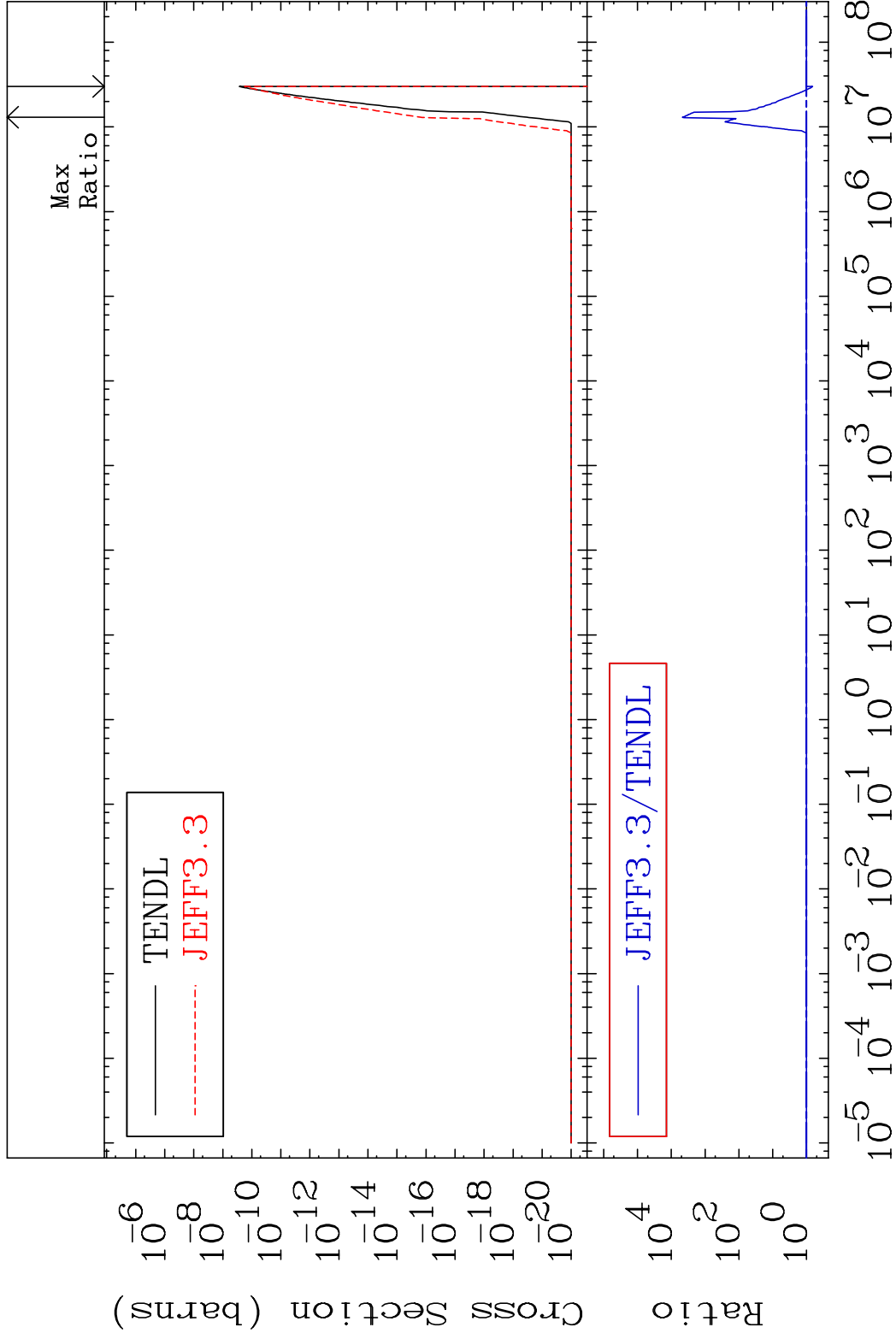
69-Tm-171

MAT 6931

(n, 2α)

69-Tm-171

Cross Section -33.58 To 9999. %

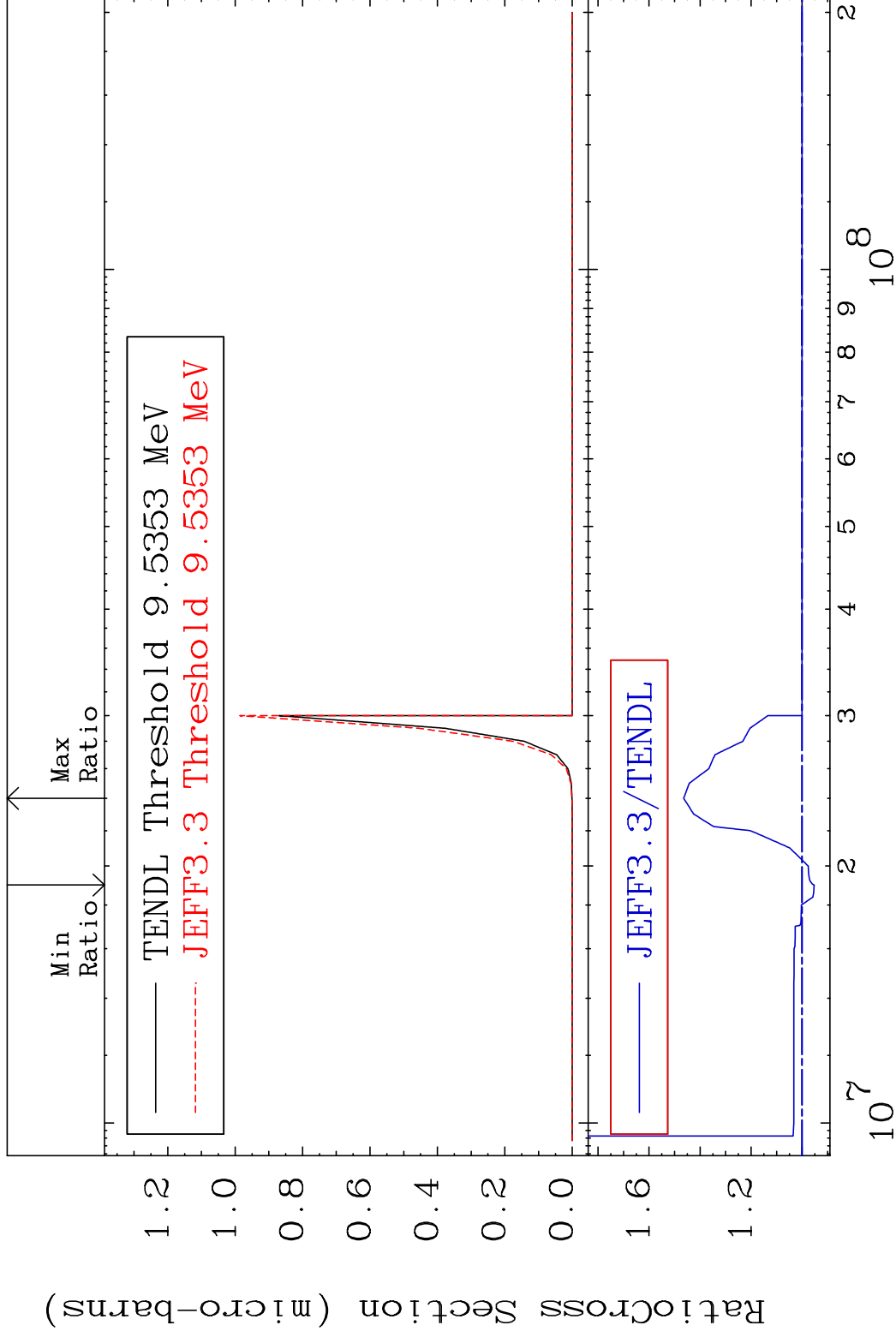


MAT 6931

(n,2p)

69-Tm-171

Cross Section -4.695 To 46.44 %



55

Incident Energy (eV)

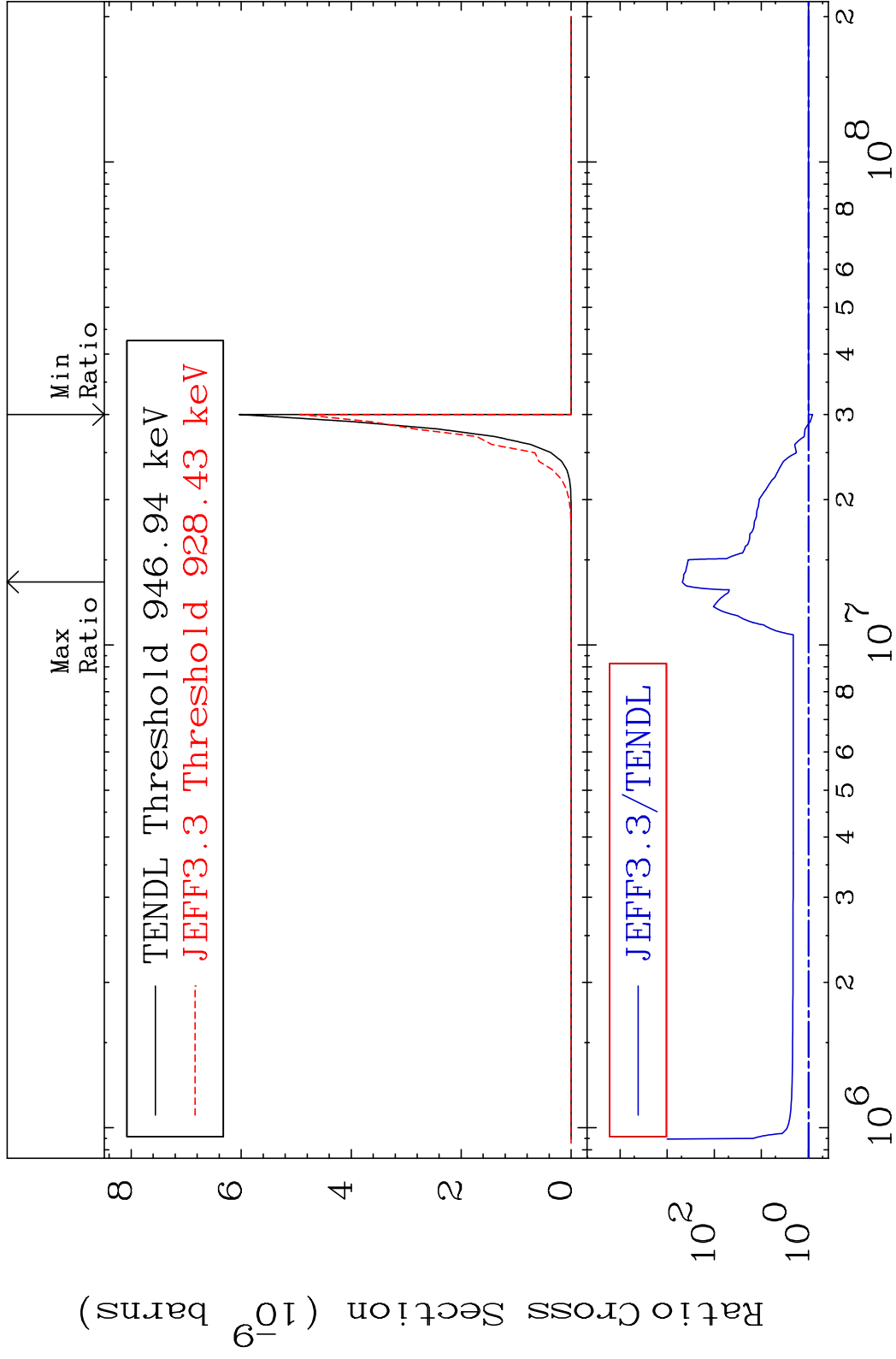
69-Tm-171

MAT 6931

(n, p) α

69-Tm-171

Cross Section -18.31 To 9999. %



56

Incident Energy (eV)

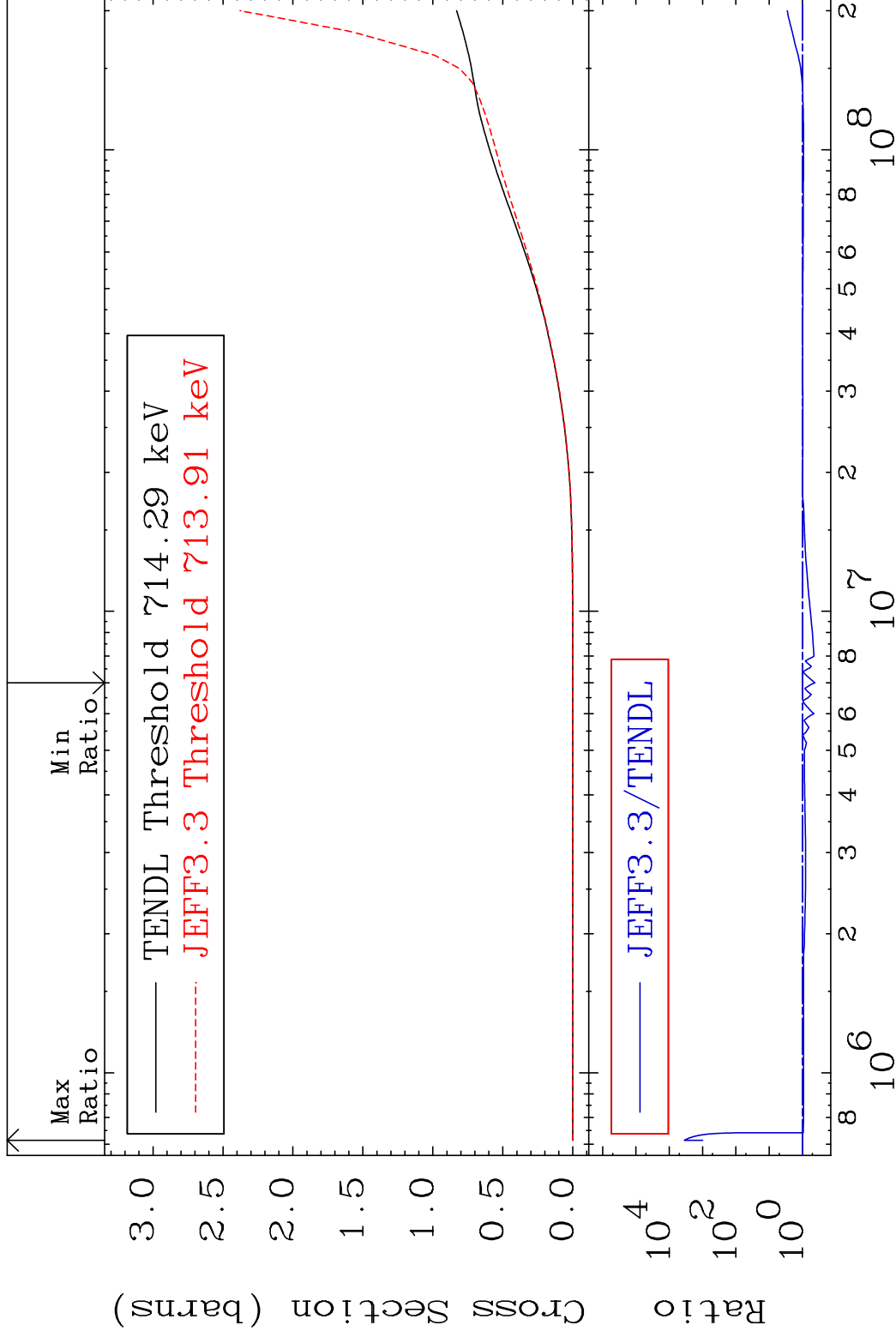
69-Tm-171

MAT 6931

Hydrogen Production

69-Tm-171

Cross Section -57.78 To 9999. %



57

Incident Energy (eV)

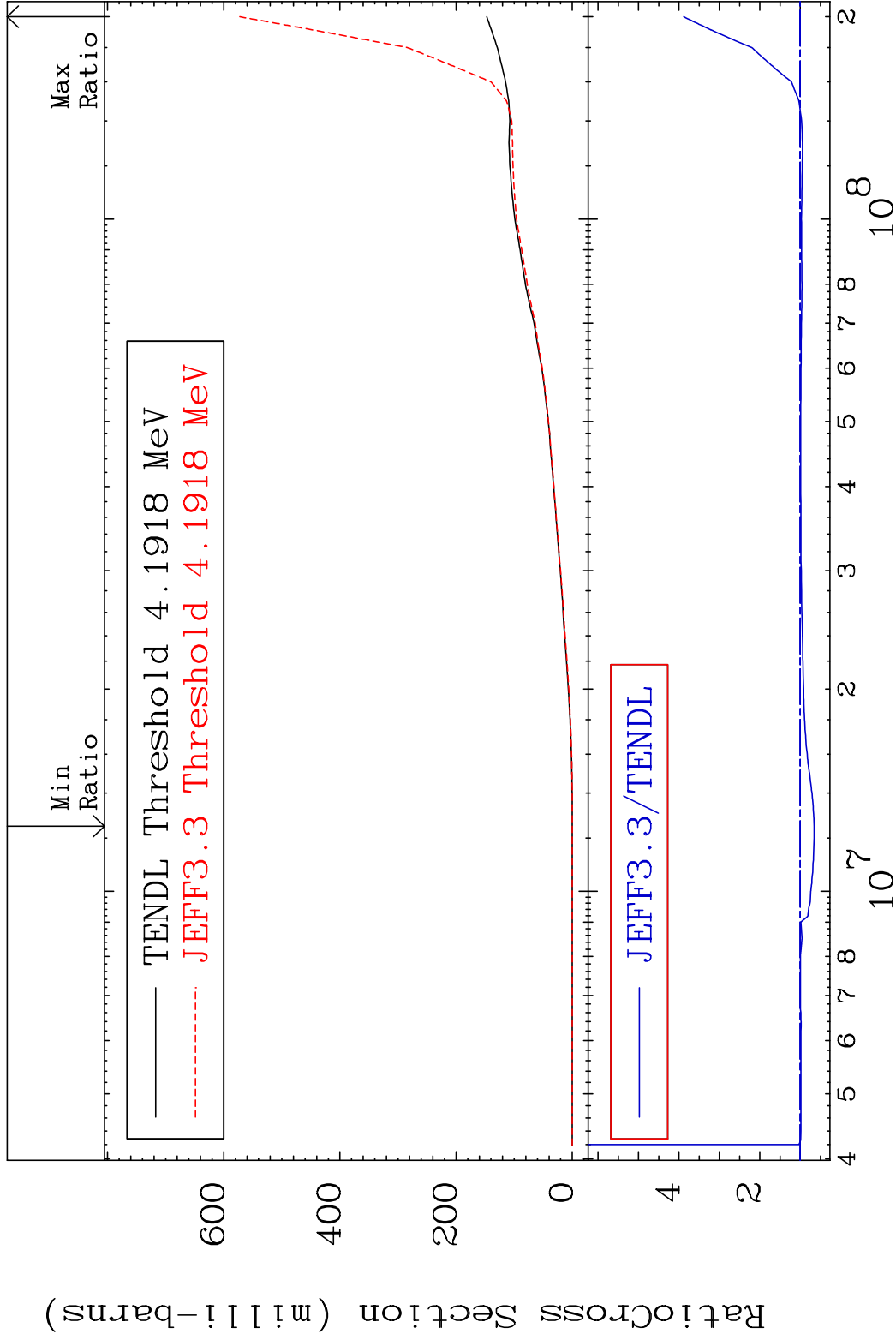
69-Tm-171

MAT 6931

Deuterium Production

69-Tm-171

Cross Section -34.06 To 288.4 %



58

Incident Energy (eV)

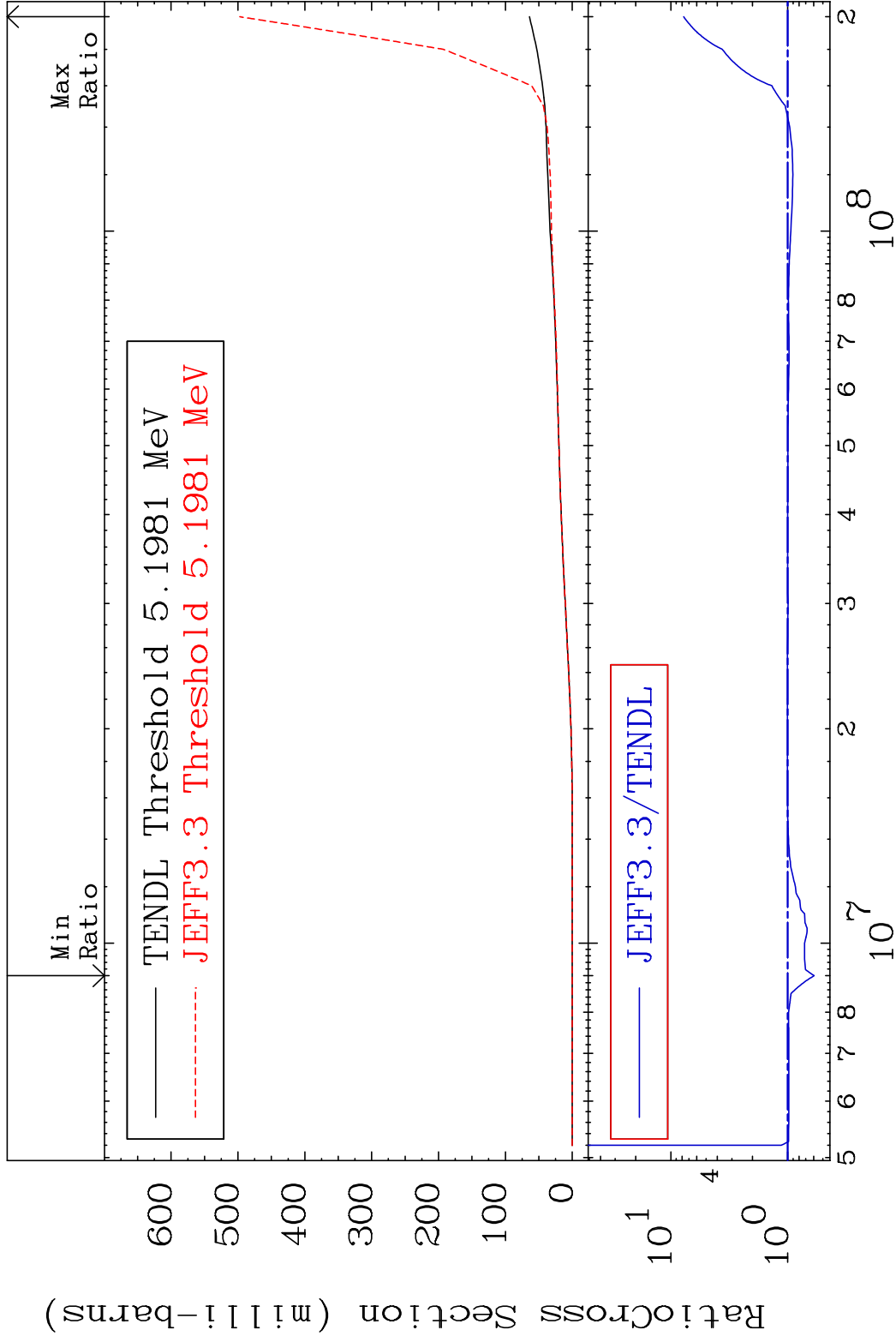
69-Tm-171

MAT 6931

Tritium Production

69-Tm-171

Cross Section -40.60 To 677.2 %



59

Incident Energy (eV)

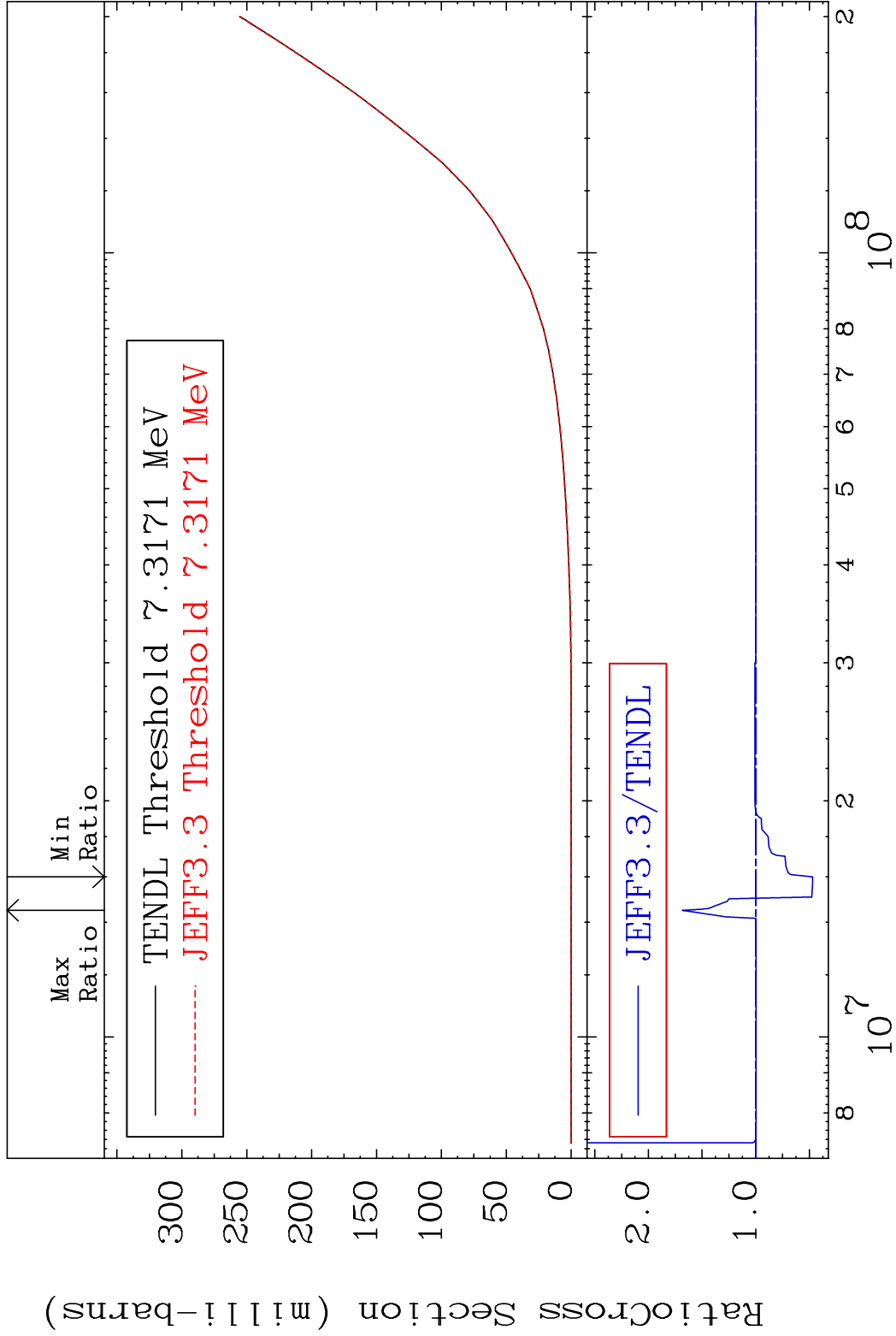
69-Tm-171

MAT 6931

He-3 Production

69-Tm-171

Cross Section -52.96 To 68.40 %



60

Incident Energy (eV)

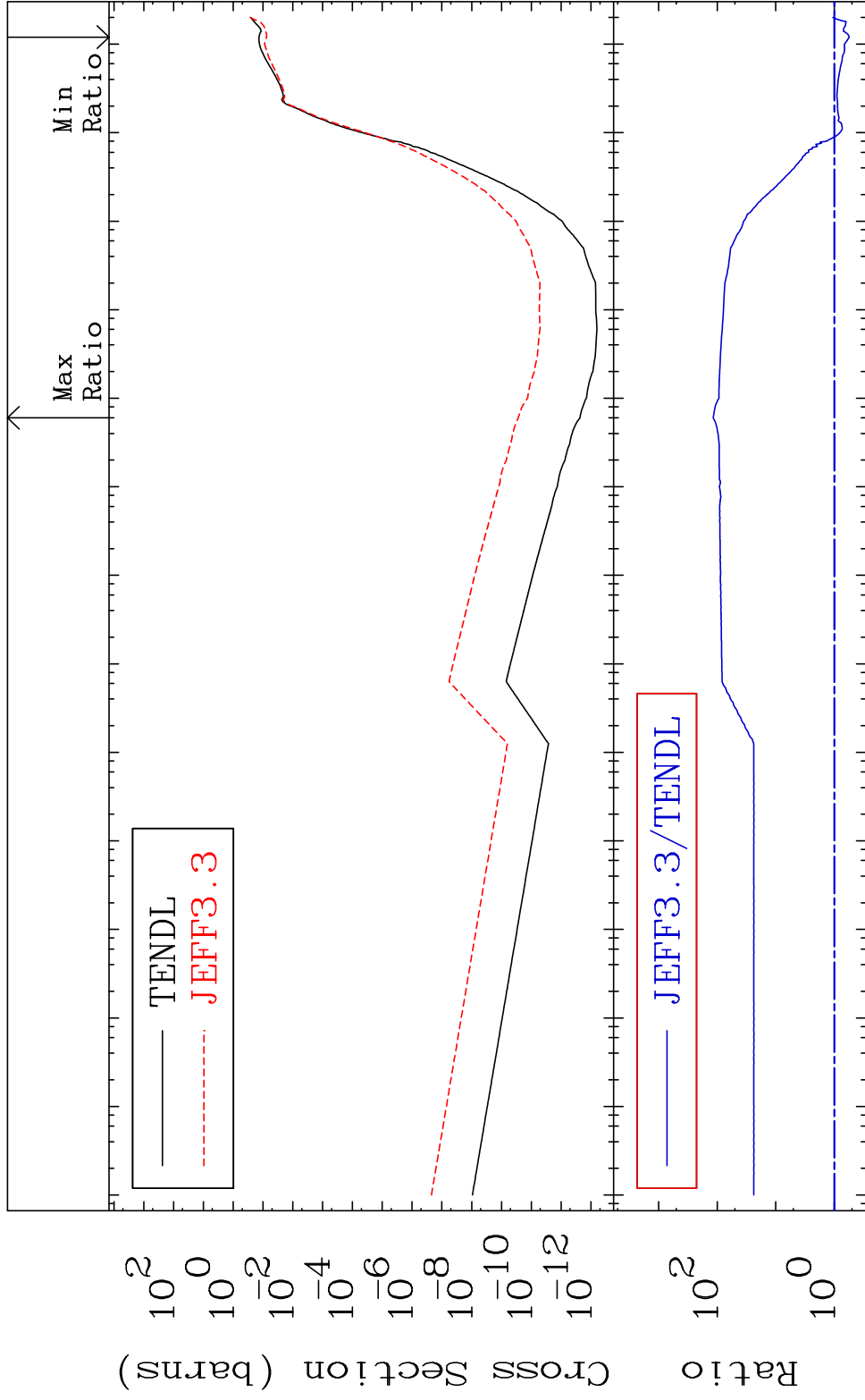
69-Tm-171

MAT 6931

He-4 Production

69-Tm-171

Cross Section -44.52 To 9999. %

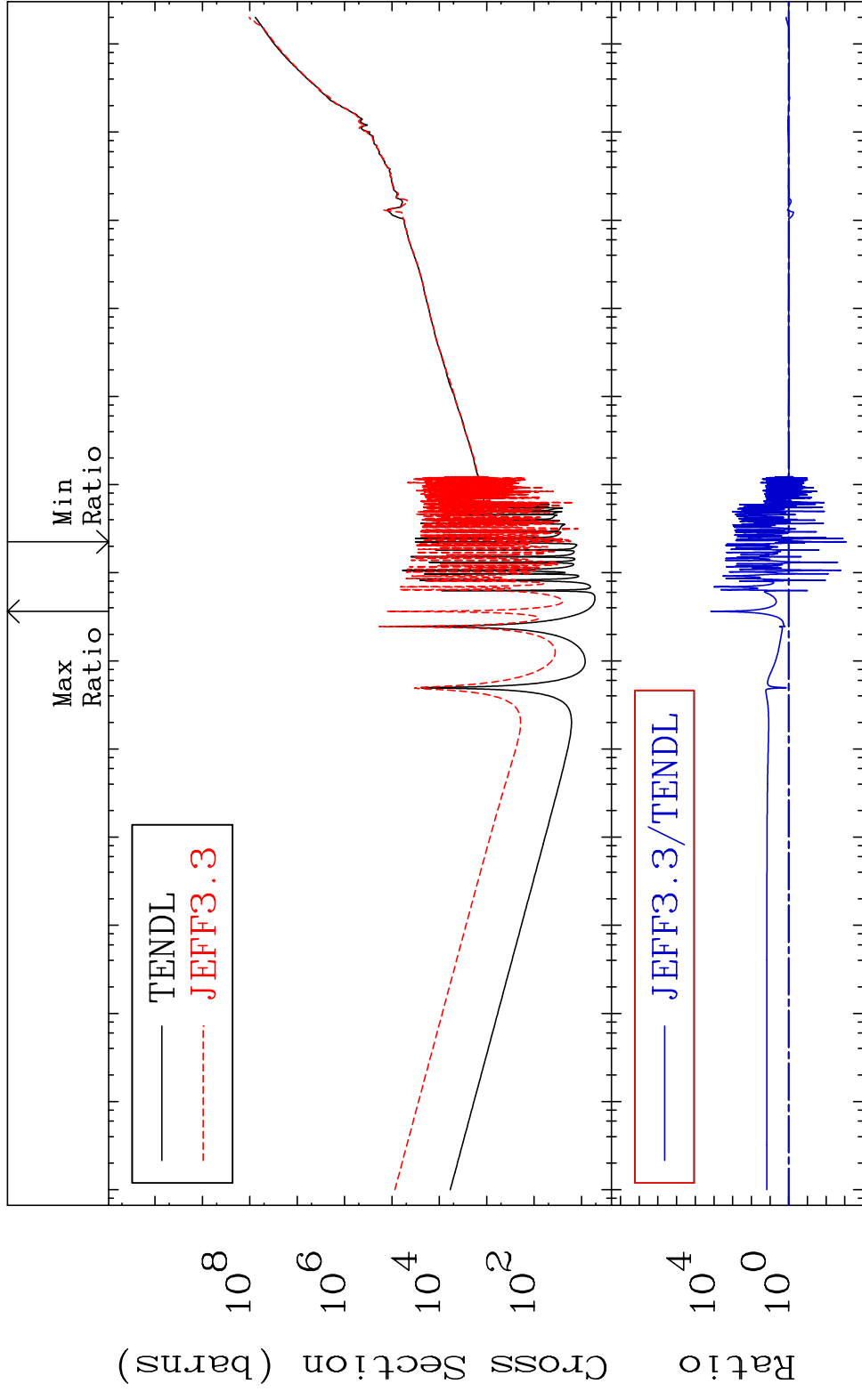


61

Incident Energy (eV)

69-Tm-171

MAT 6931 Kerma total (eV-barns) 69-Tm-171
 Cross Section -99.92 To 9999. %



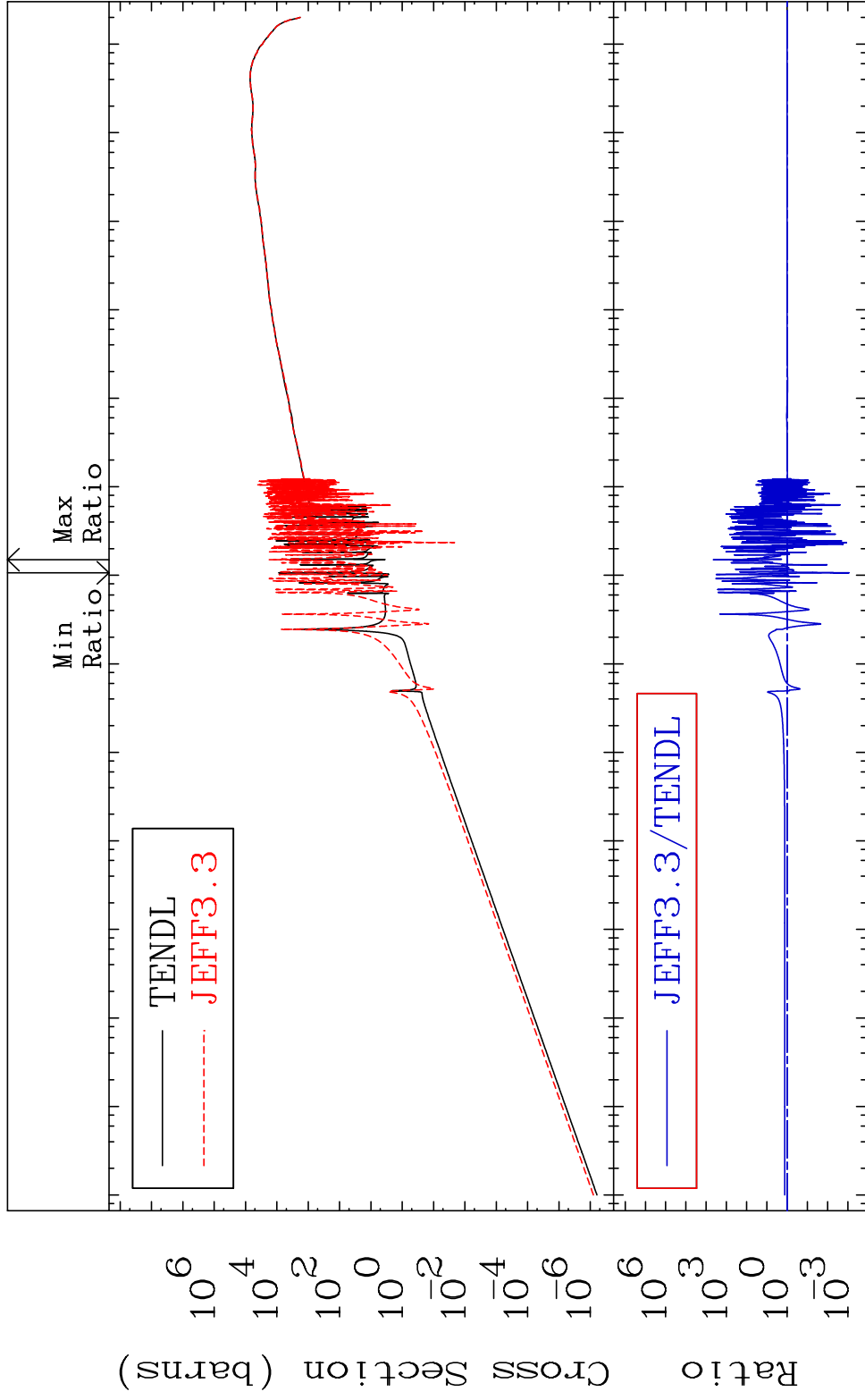
62 Incident Energy (eV) 69-Tm-171

MAT 6931

Kerma elastic

69-Tm-171

Cross Section -99.91 To 9999. %



Ratio

10⁶

10⁴

10²

10⁰

10⁻²

10⁻⁴

10⁻⁶

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

Ratio

10⁶

10³

10⁰

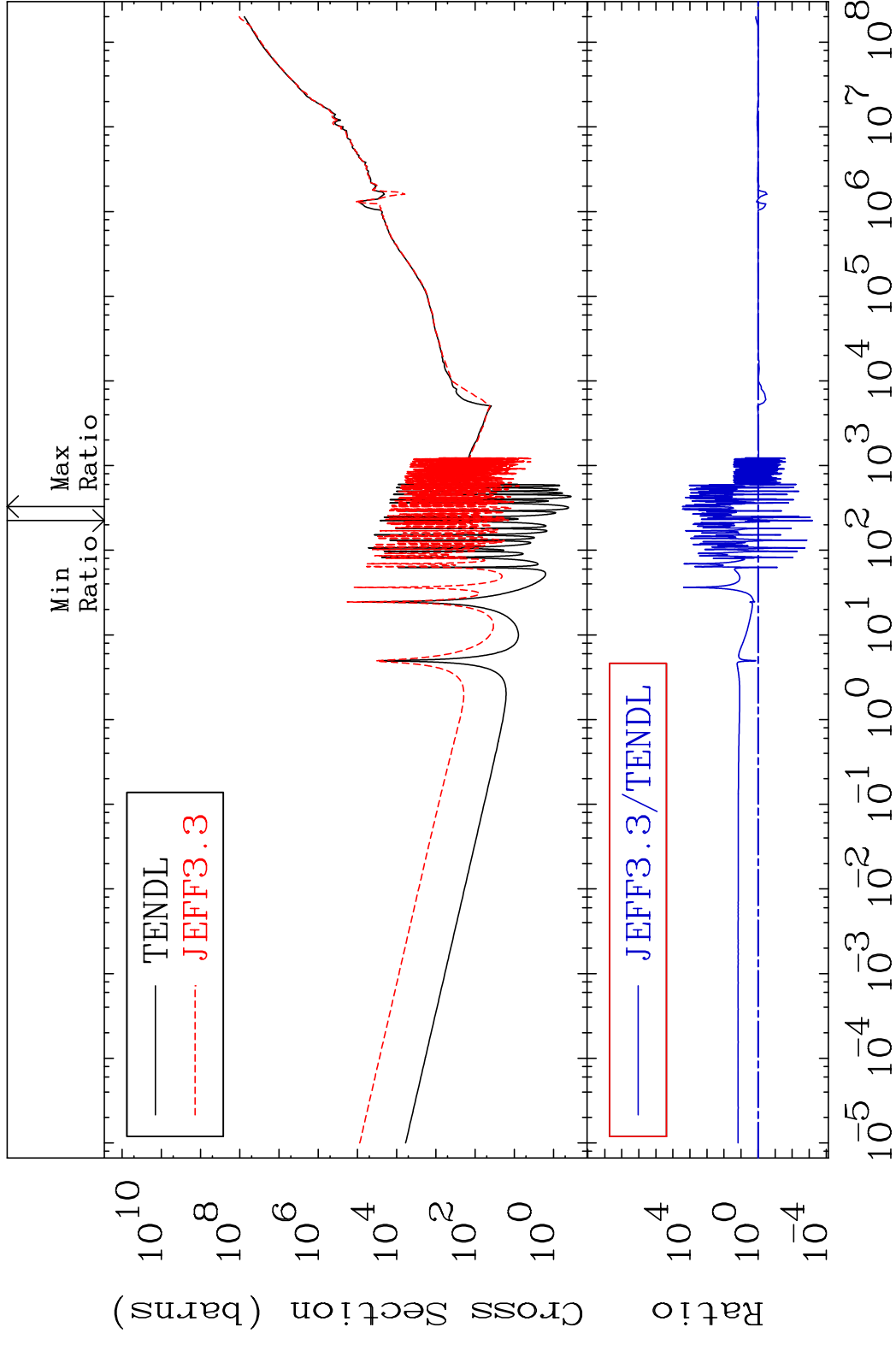
10⁻³

63

Incident Energy (eV)

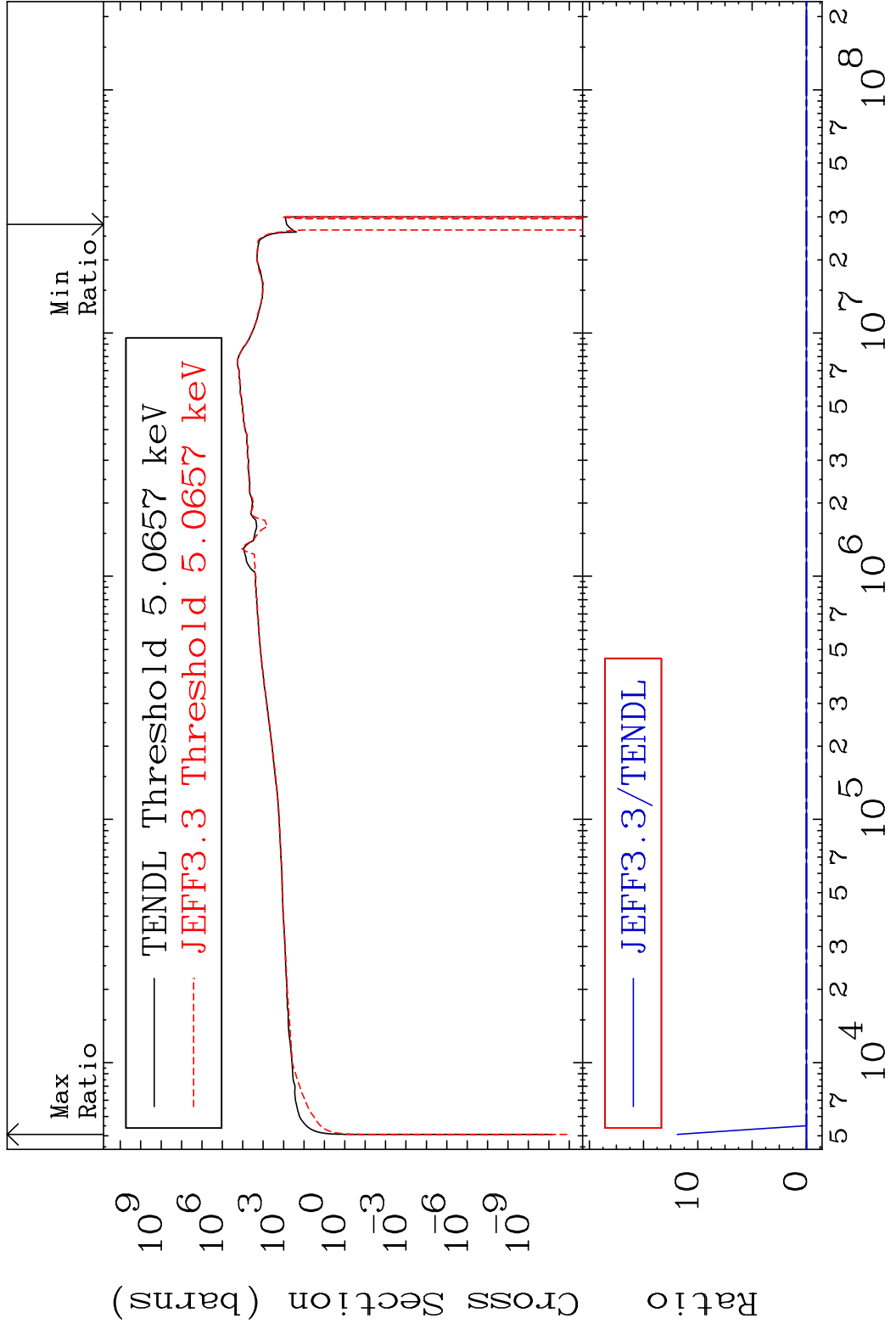
69-Tm-171

MAT 6931 Kerma non-elastic (all but mt2) 69-Tm-171
 Cross Section -99.94 To 9999. %

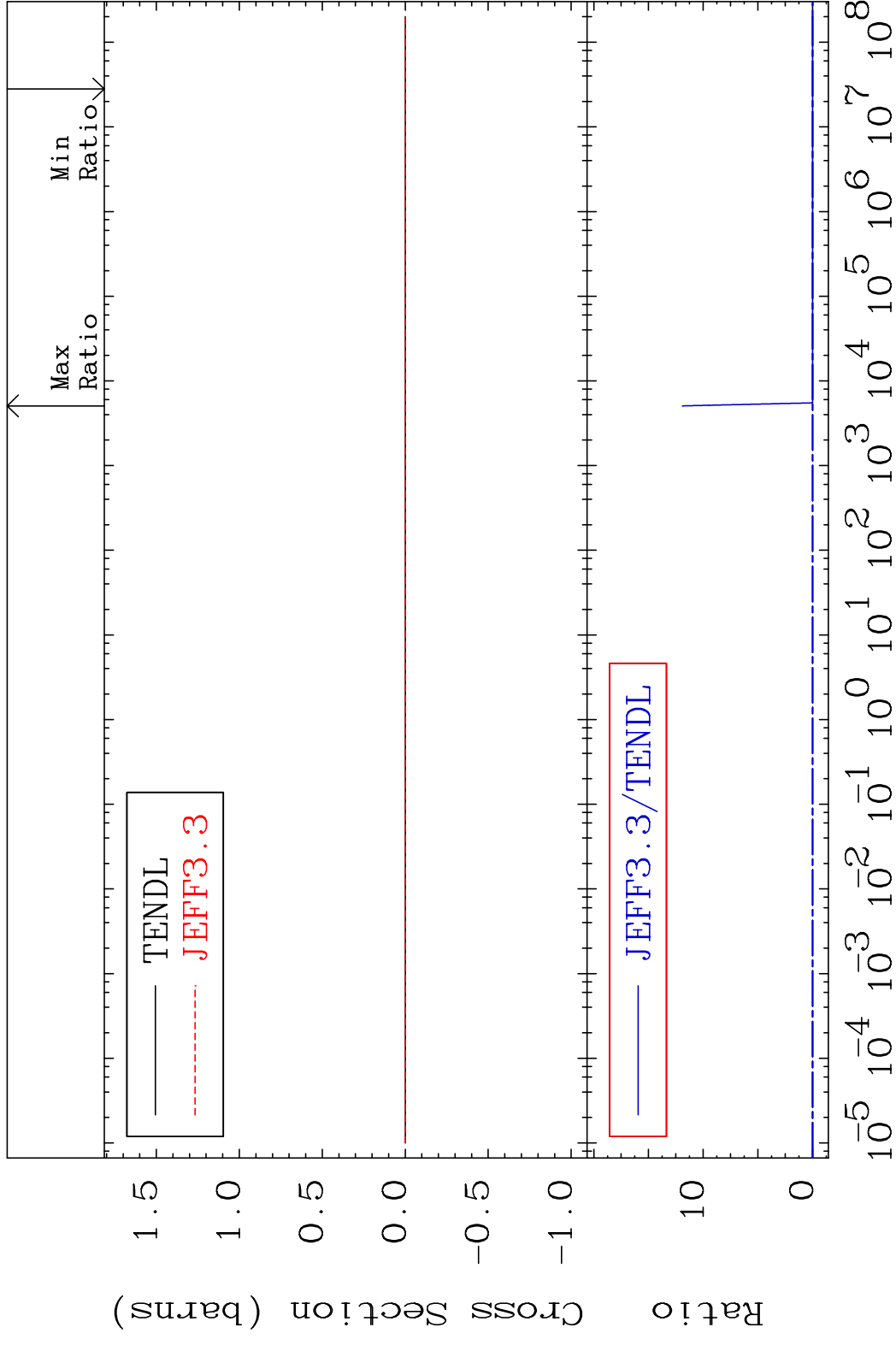


64 Incident Energy (eV) 69-Tm-171

MAT 6931 Kerma inelastic (mt51-91) 69-Tm-171
 Cross Section -596.9 To 9999. %

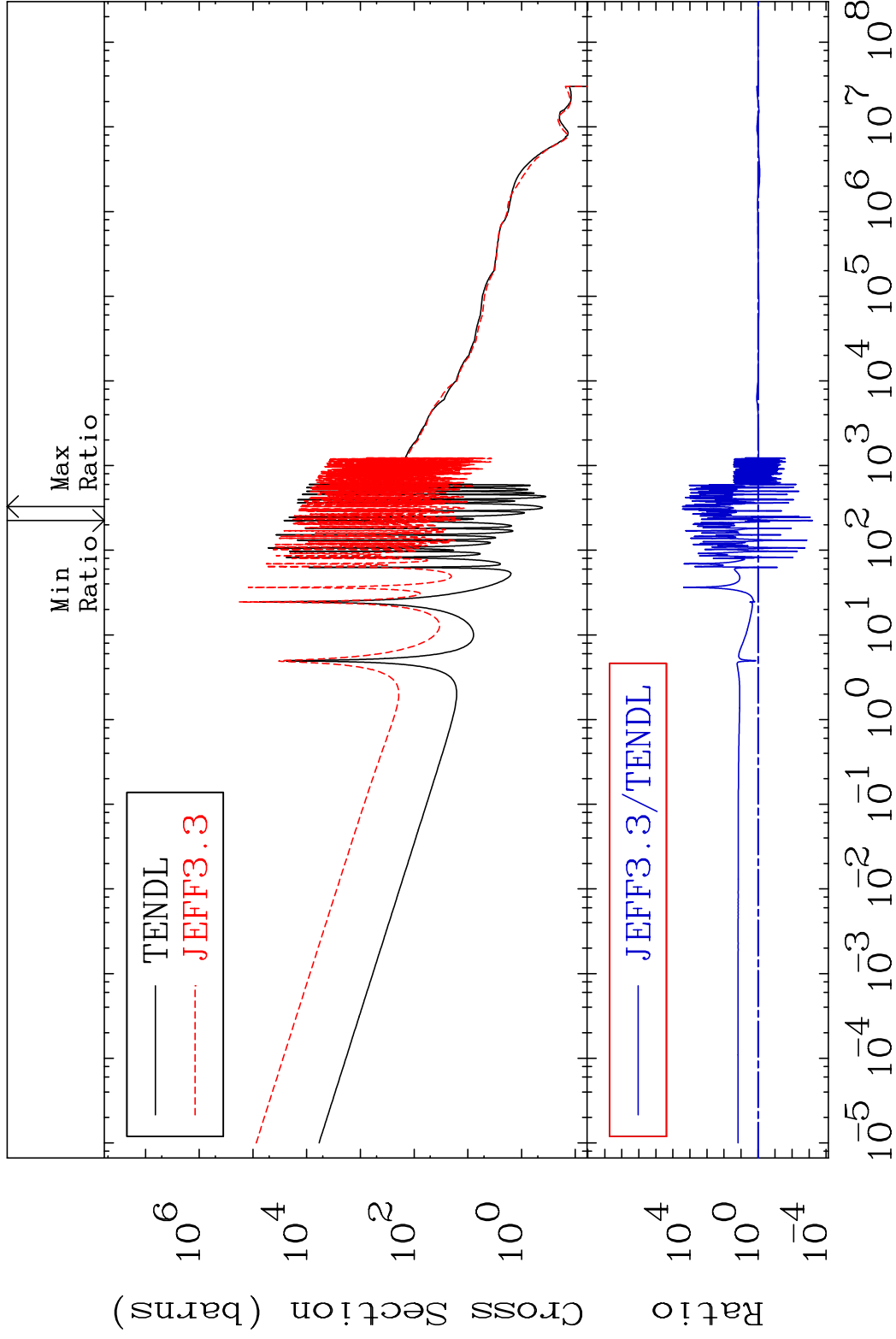


MAT 6931 Kerma fission (mt18 or mt19-20-21-38) 69-Tm-171
 Cross Section -596.9 To 9999. %



MAT 6931

Kerma capture (mt102) 69-Tm-171
Cross Section -99.94 To 9999. %

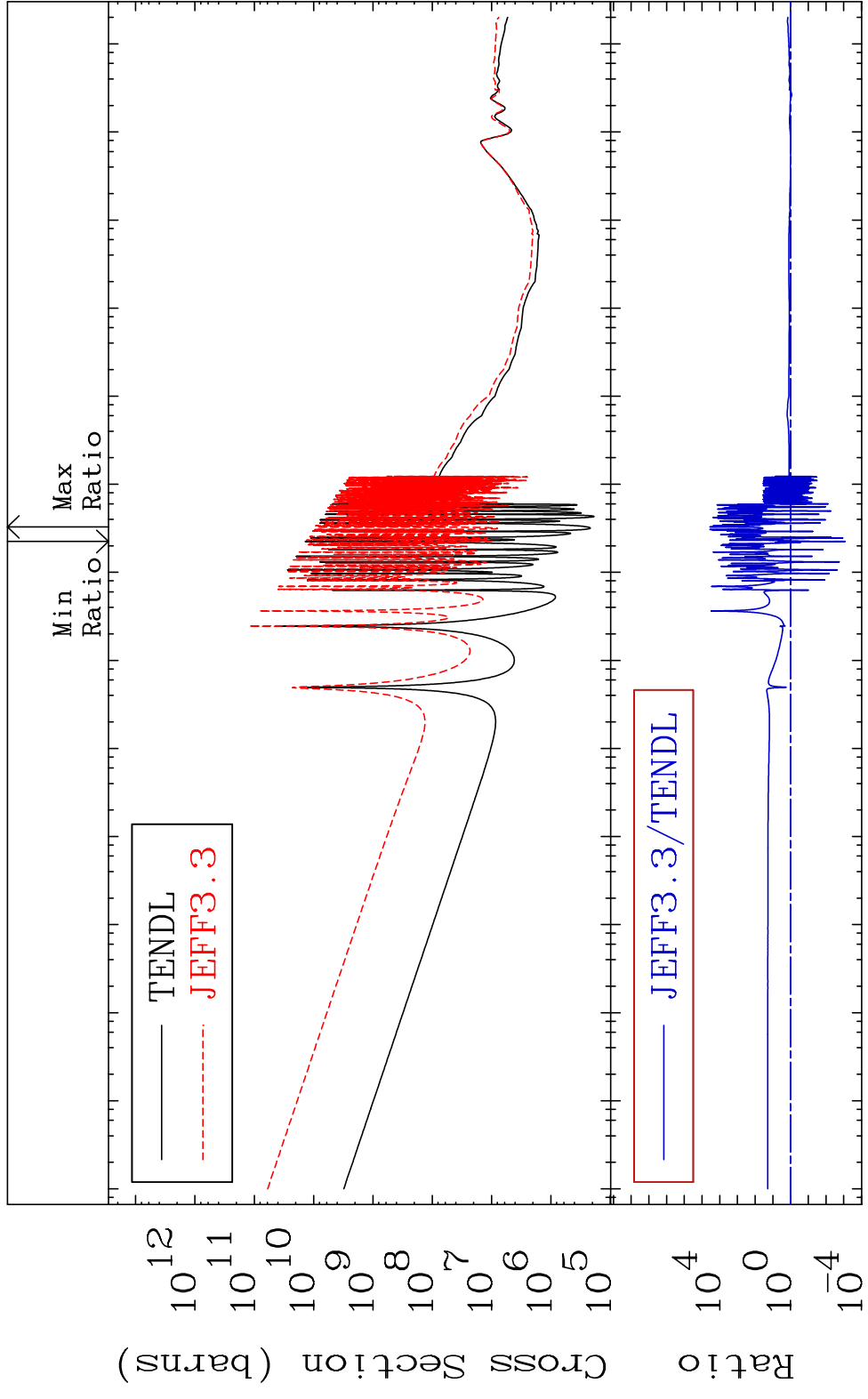


67

Incident Energy (eV)

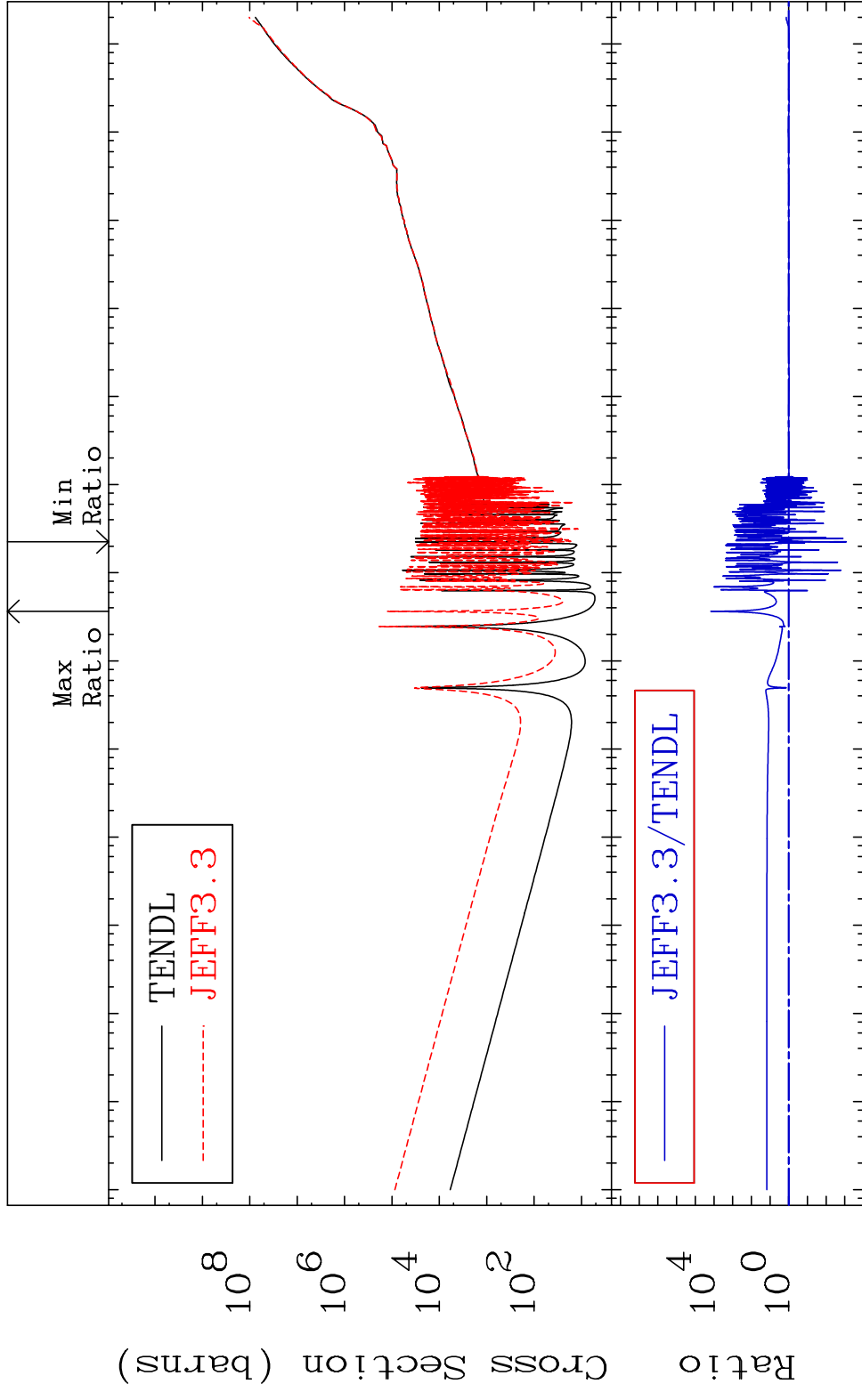
69-Tm-171

MAT 6931 Total photon (eV-barns) 69-Tm-171
 Cross Section -99.92 To 9999. %



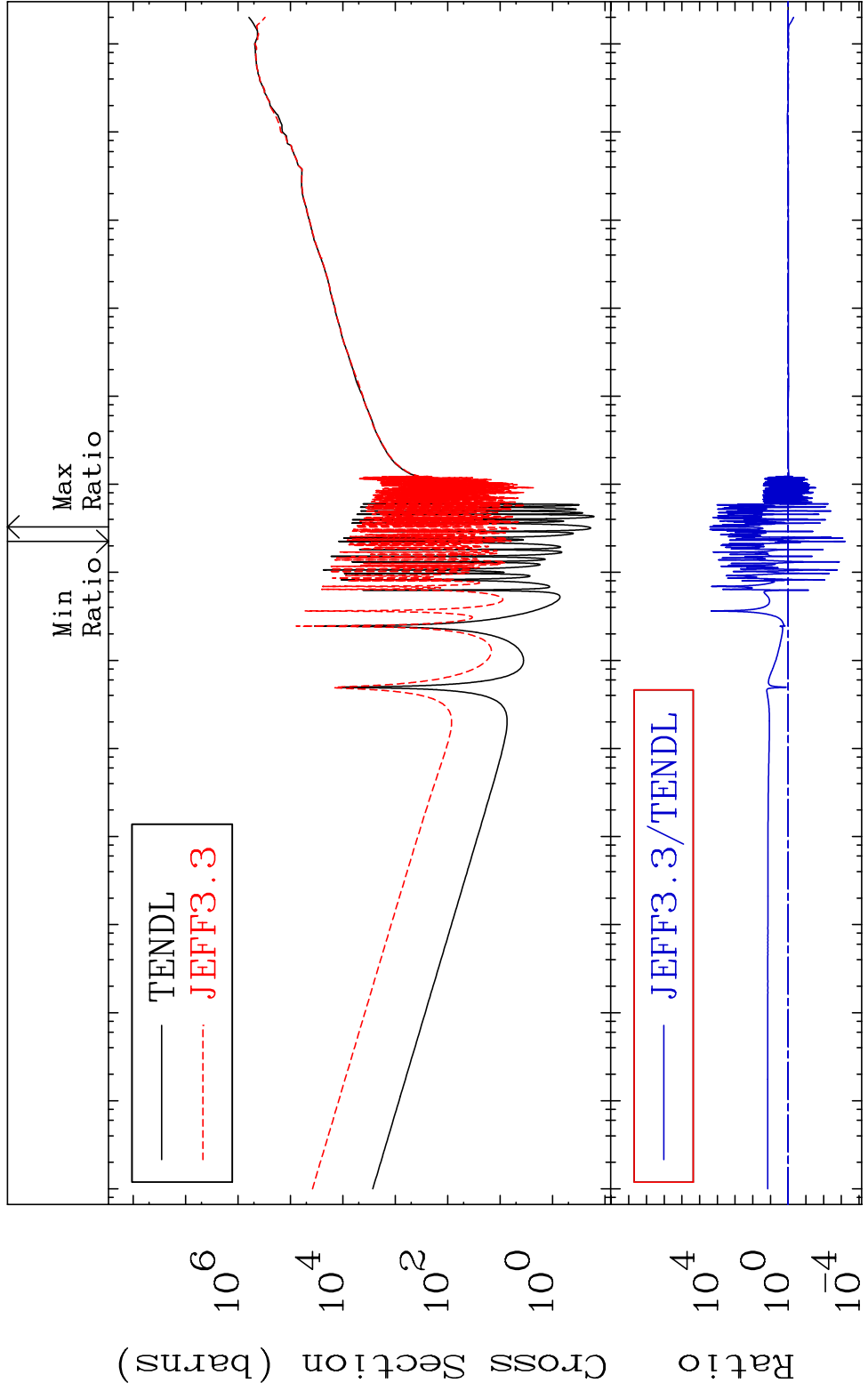
68 Incident Energy (eV) 69-Tm-171

MAT 6931 Total kinematic kerma (high limit) 69-Tm-171
 Cross Section -99.92 To 9999. %



69 Incident Energy (eV) 69-Tm-171

MAT 6931 Dpa total (eV-barns) 69-Tm-171
 Cross Section -99.94 To 9999. %



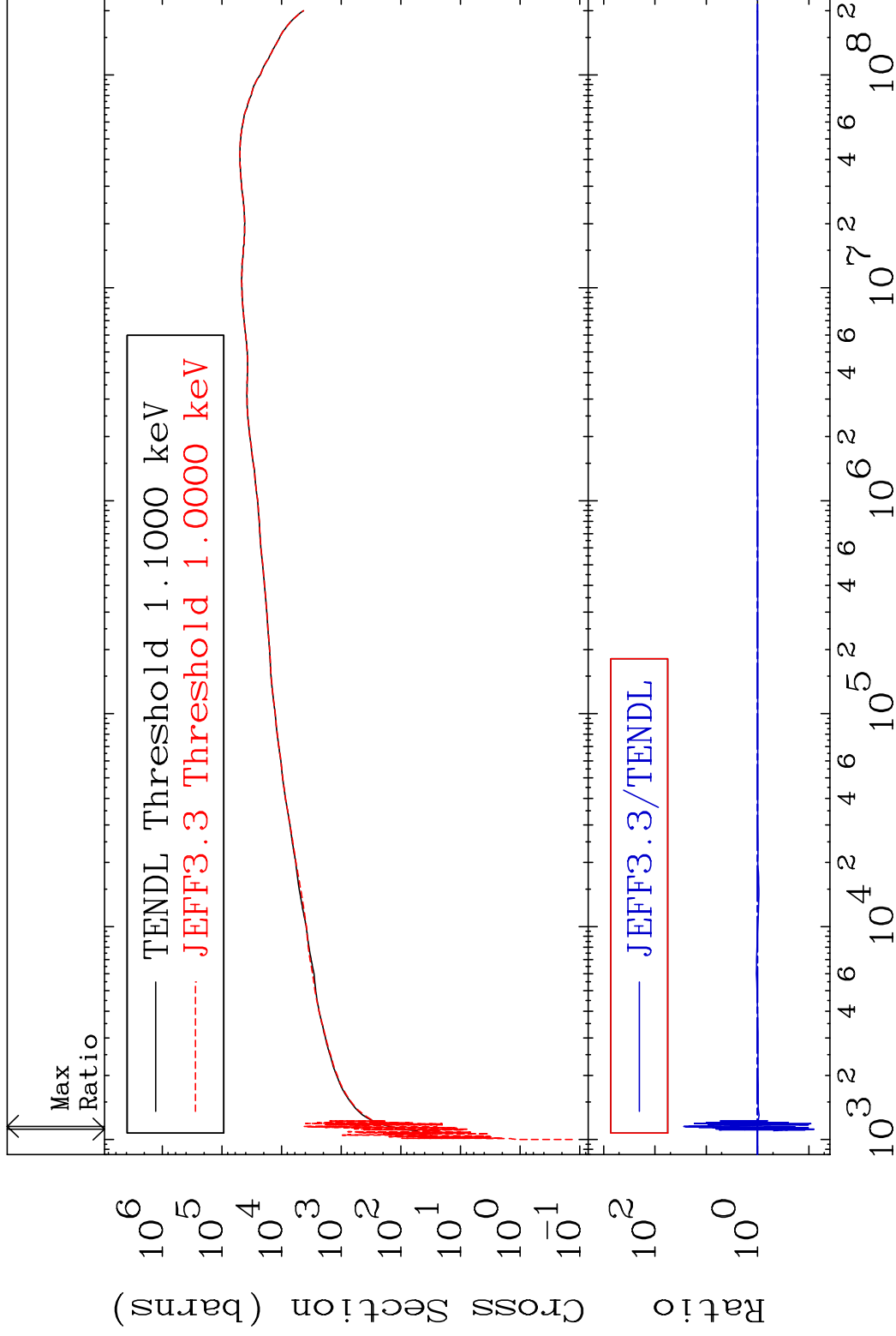
70 Incident Energy (eV) 69-Tm-171

MAT 6931

Dpa elastic (mt2)

69-Tm-171

Cross Section -92.10 To 2660. %

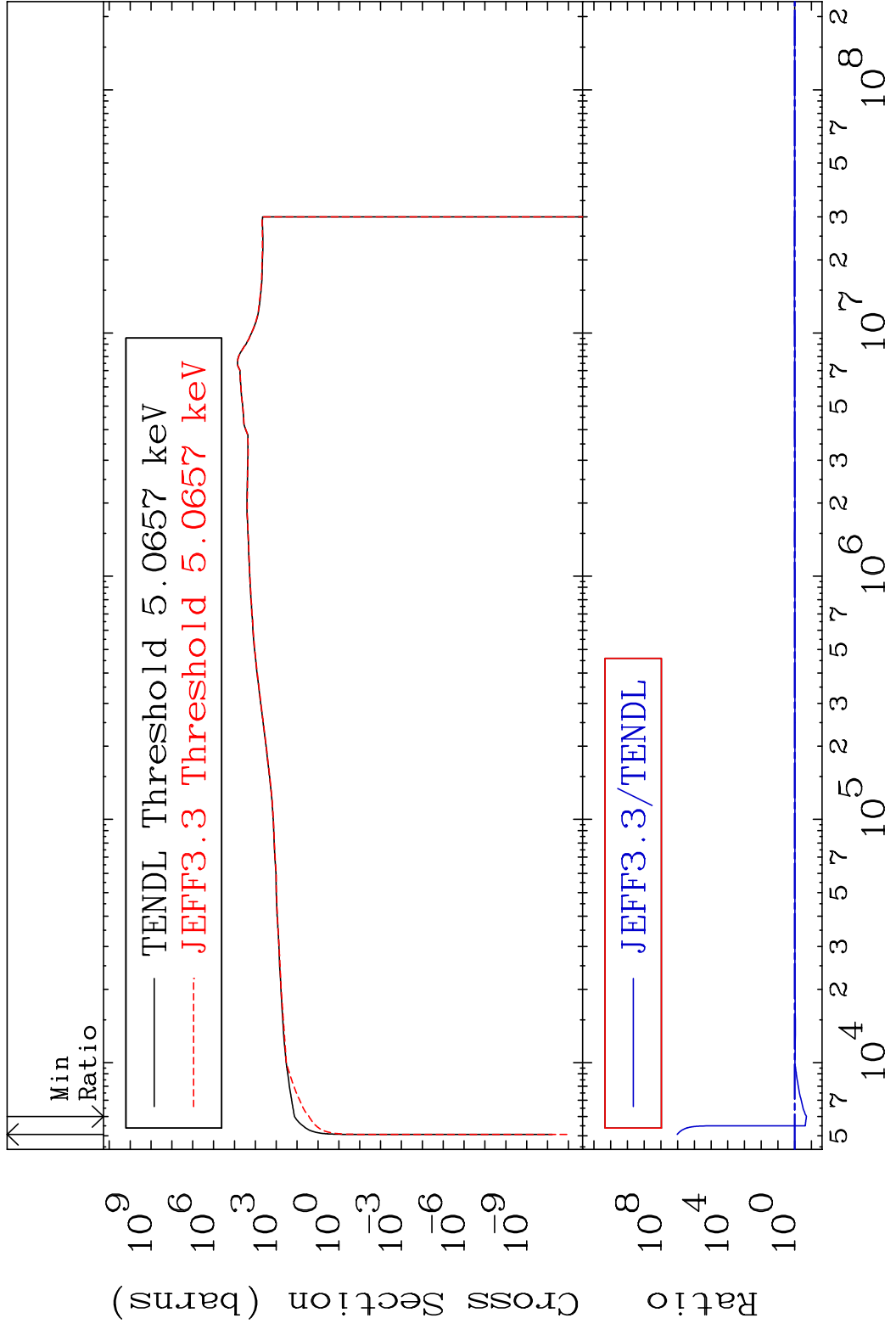


71

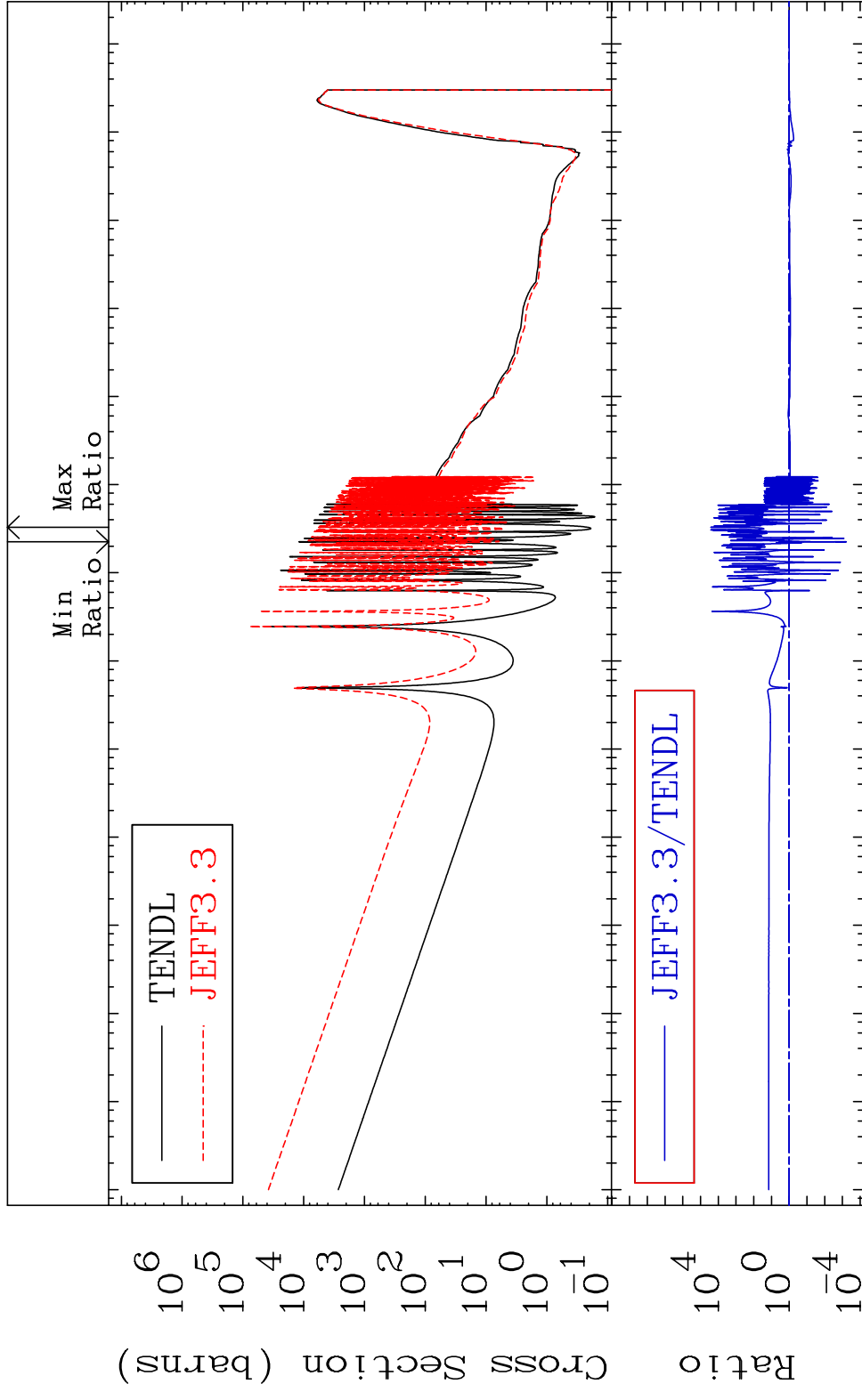
Incident Energy (eV)

69-Tm-171

MAT 6931 Dpa inelastic (mt51-91) 69-Tm-171
 Cross Section -79.96 To 9999. %

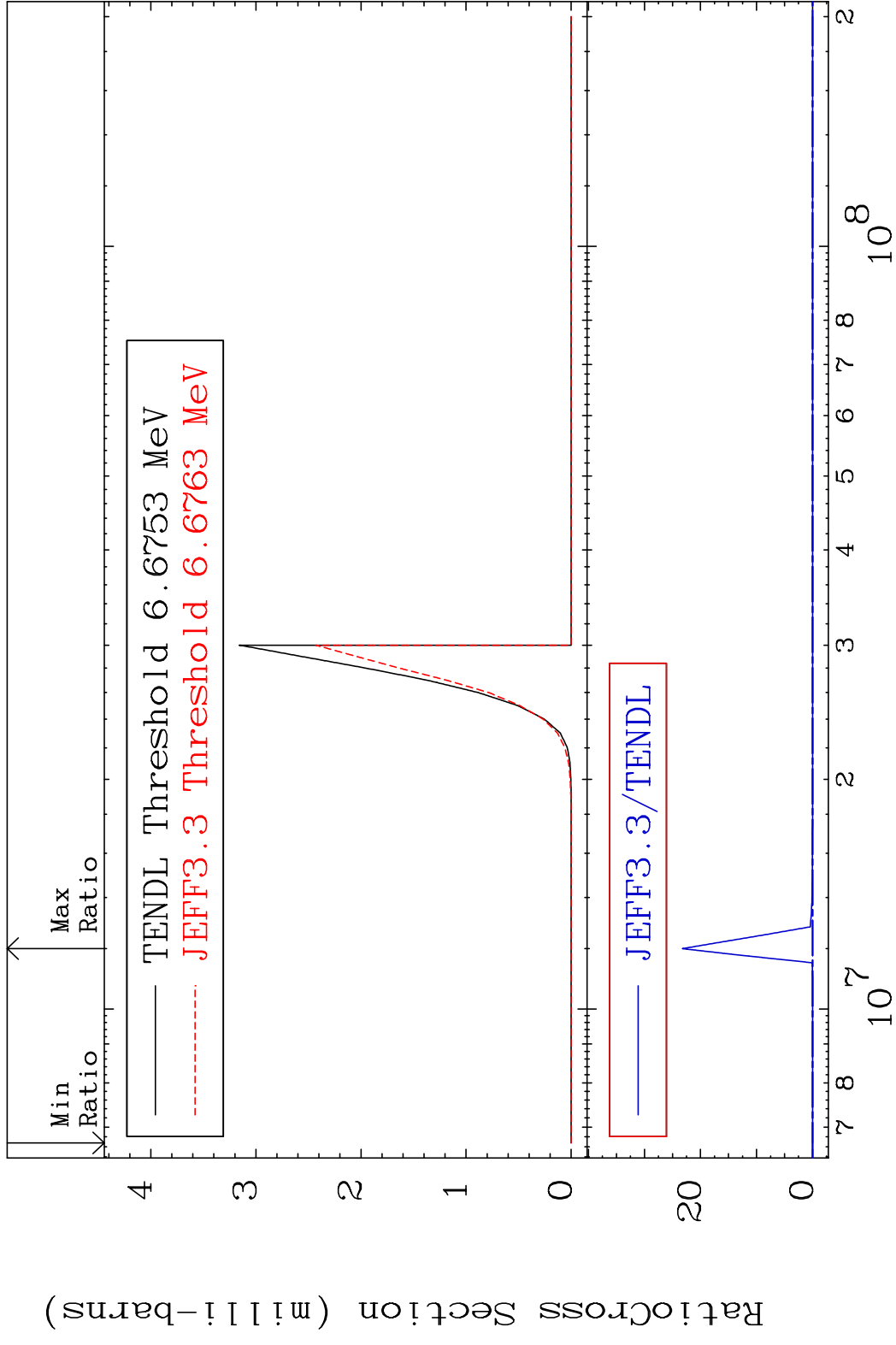


MAT 6931 Dpa disappearance (mt102 -120) 69-Tm-171
 Cross Section -99.94 To 9999. %

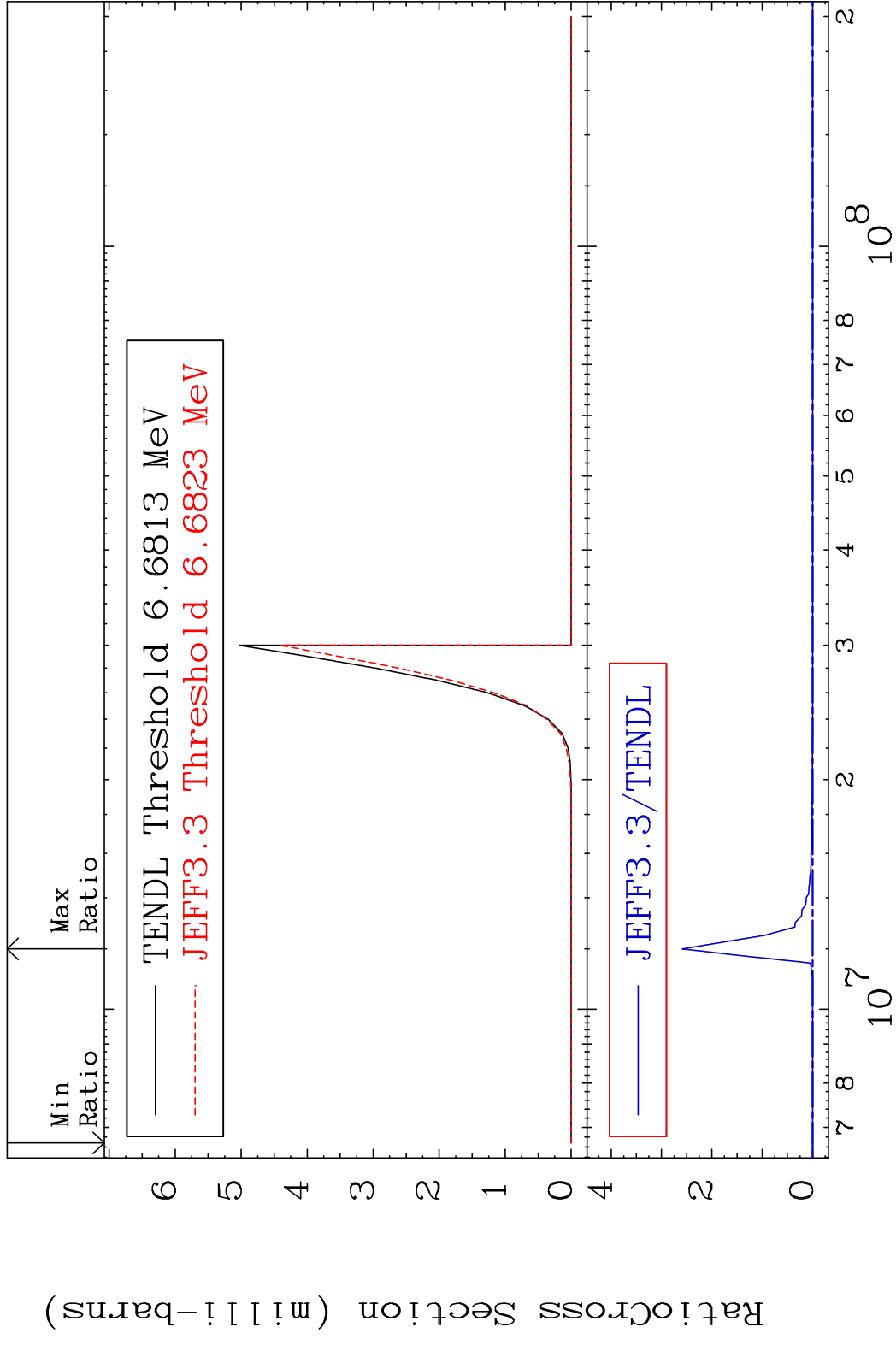


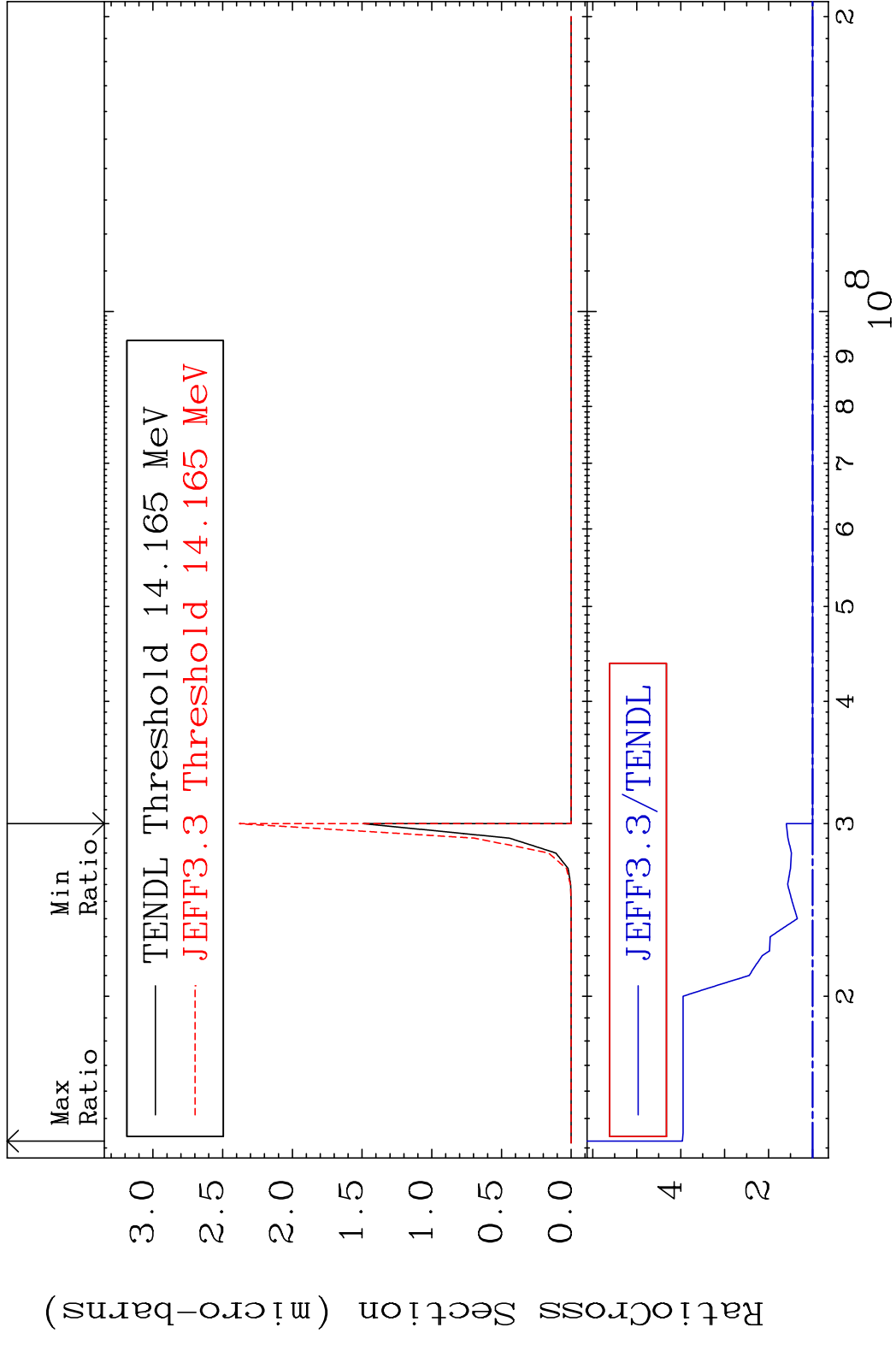
73 Incident Energy (eV) 69-Tm-171

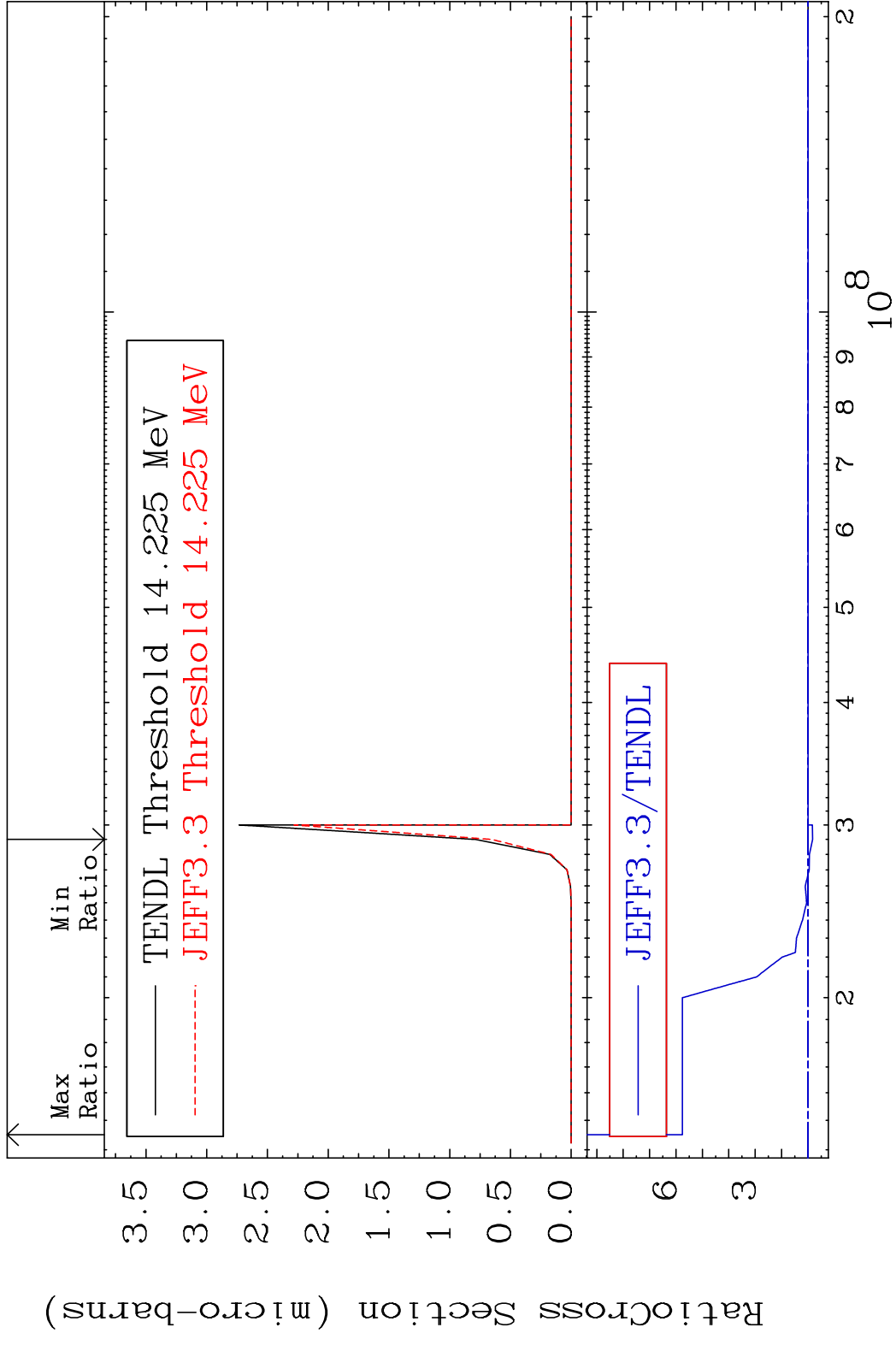
MAT 6931 (n,2n) α :67-Ho-166g 69-Tm-171
 Radionuclide Production Cross Section to 9999. %

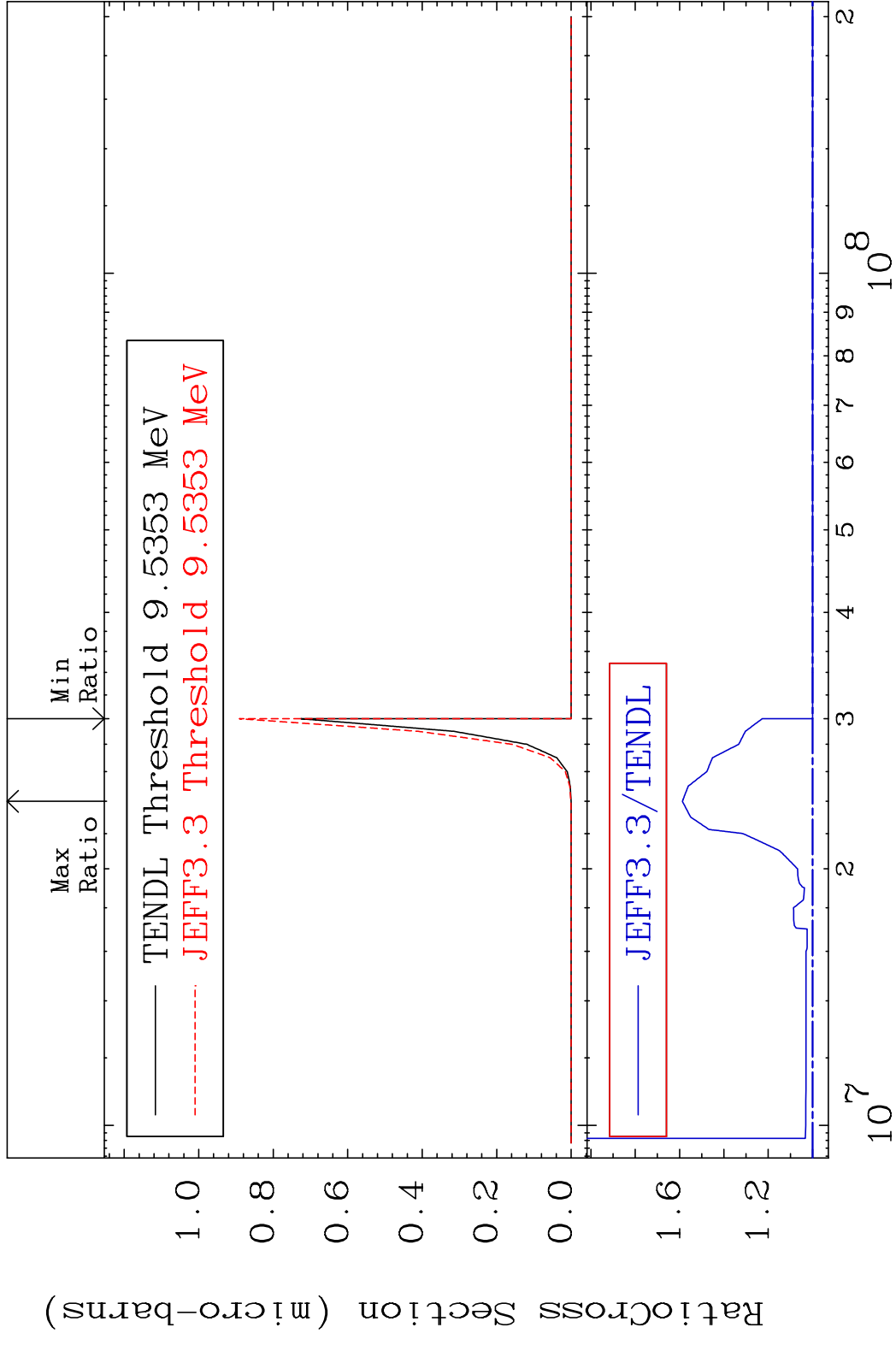


MAT 6931 (n,2n) α :67-Ho-166m1 69-Tm-171
 Radionuclide Production Cross Section 100.00 dth 9999. %

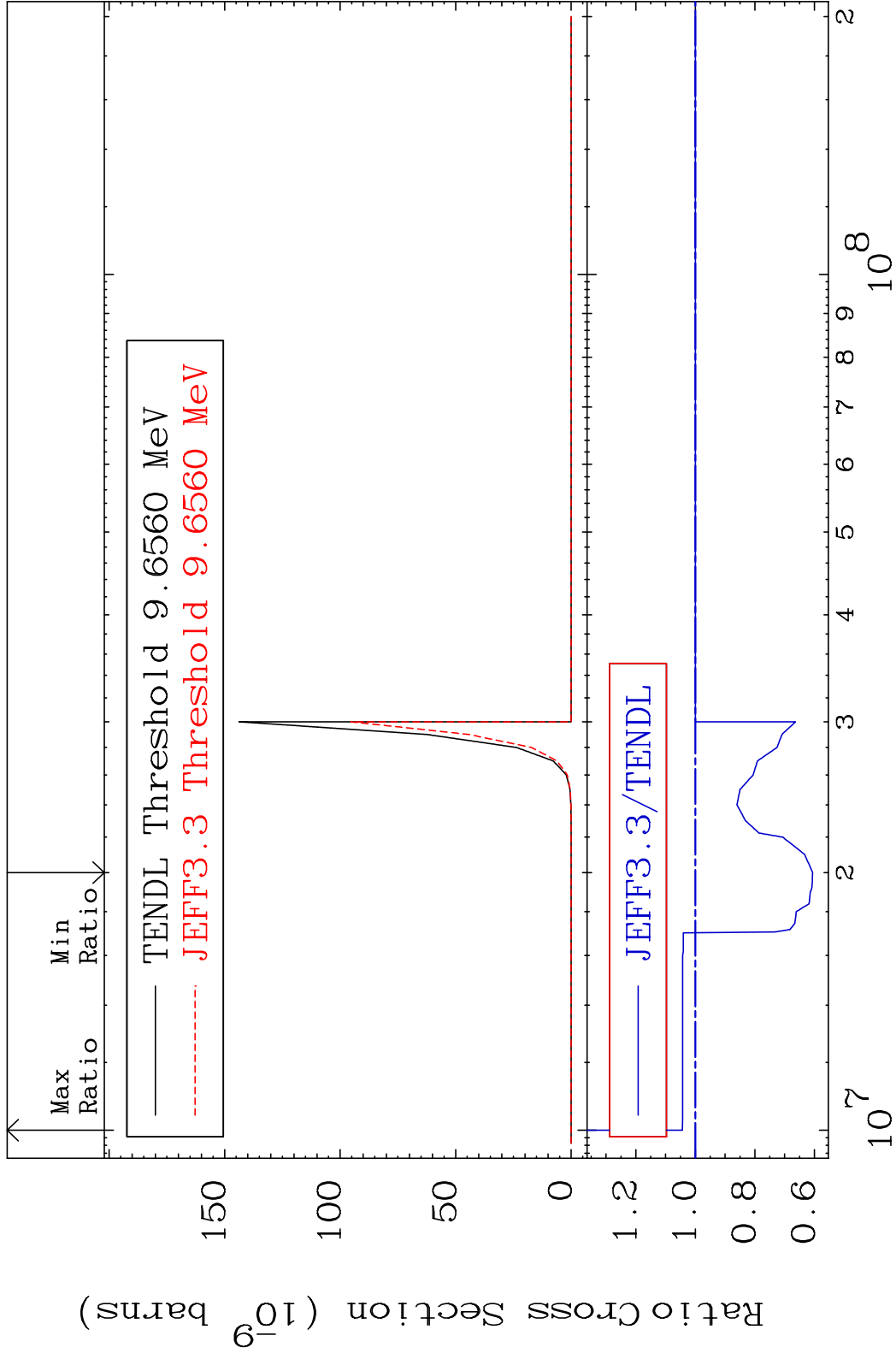








MAT 6931 (n, 2p):67-Ho-170m1 69-Tm-171
 Radionuclide Production Cross Section 39.671 d10 4.373 %



79 Incident Energy (eV) 69-Tm-171