

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

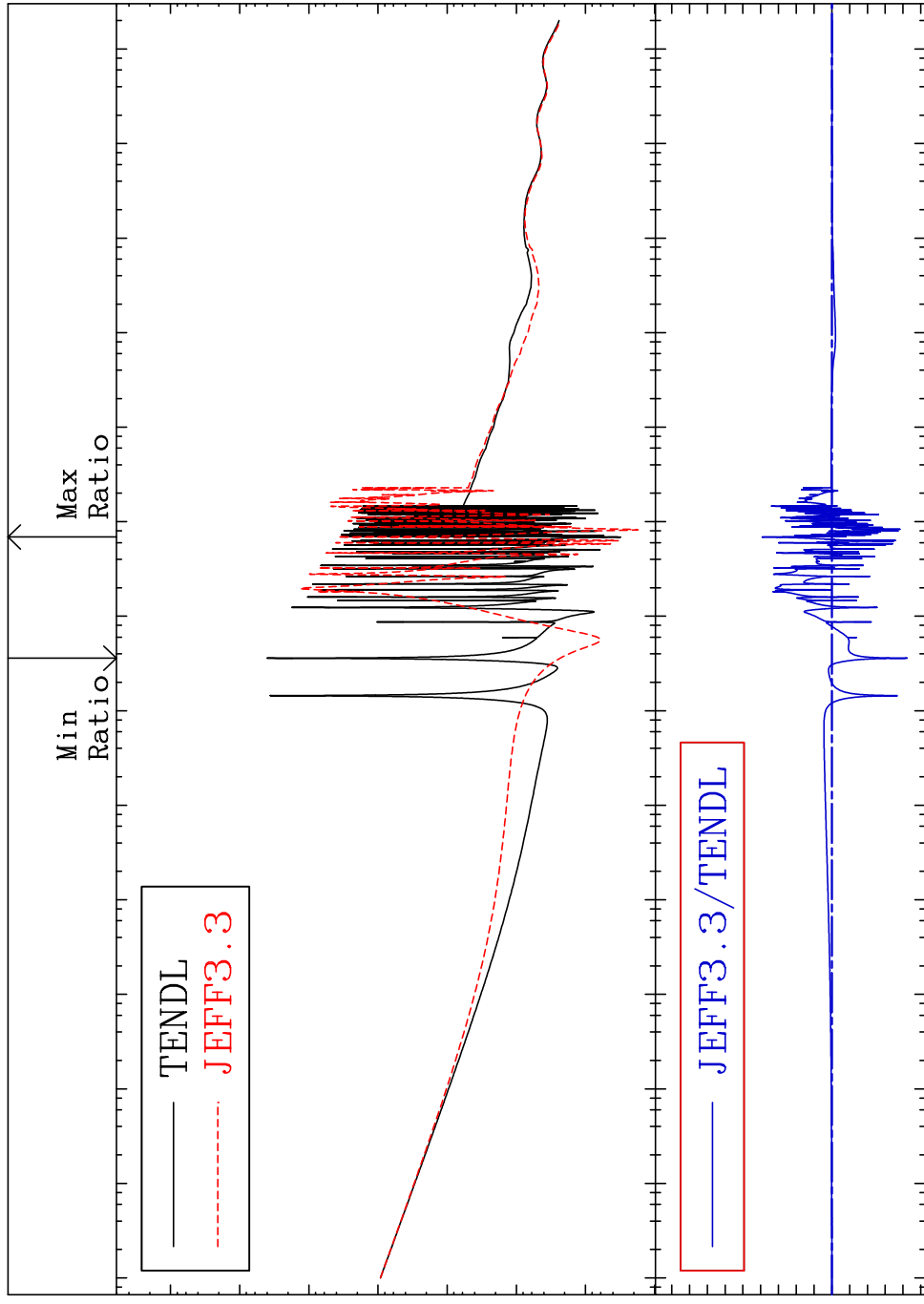
Press Mouse Button to Start

MAT 6231

Total

62-Sm-146

Cross Section -99.99 To 9999. %



1

Incident Energy (eV)

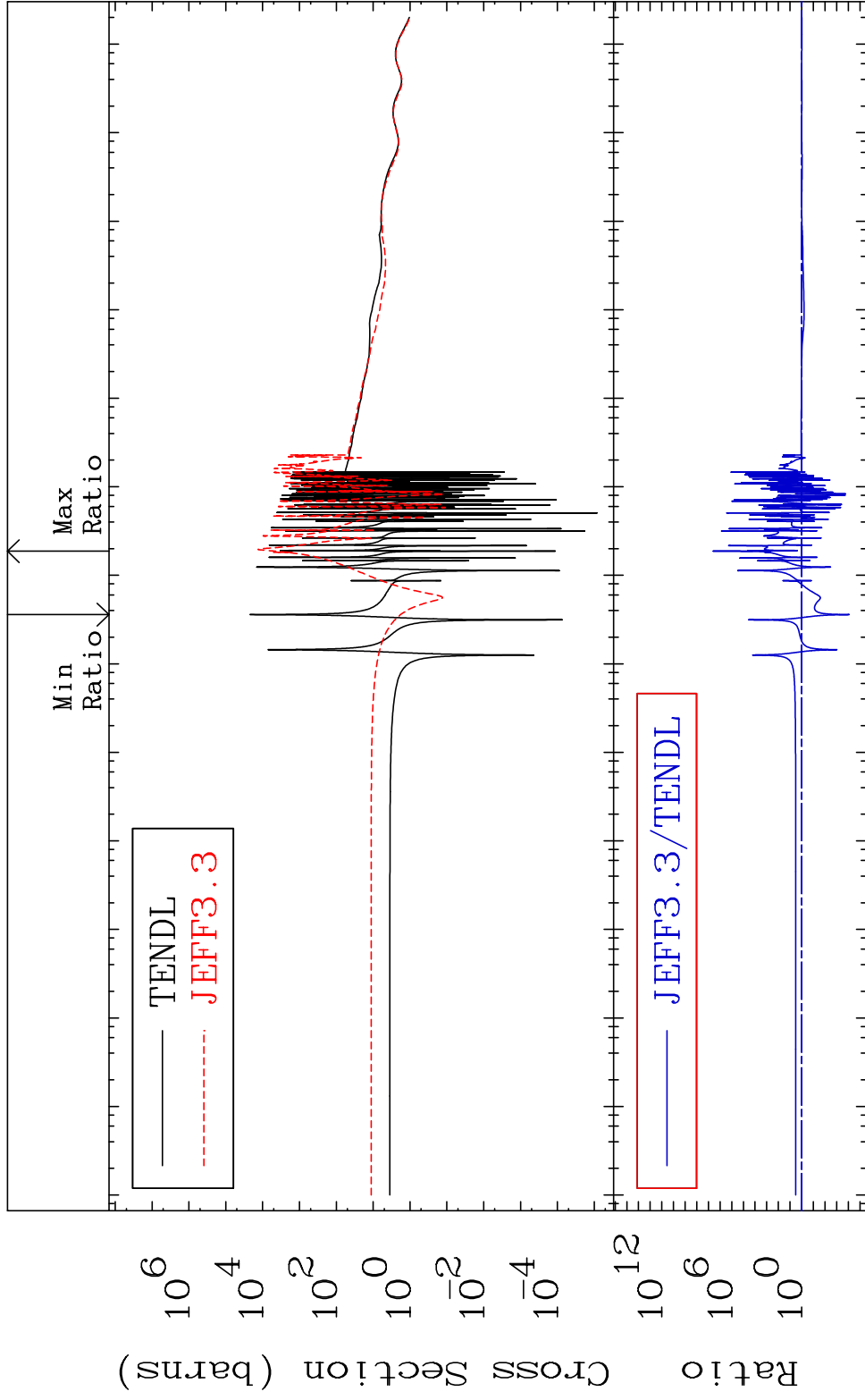
62-Sm-146

MAT 6231

Elastic

62-Sm-146

Cross Section -99.99 To 9999. %



2

Incident Energy (eV)

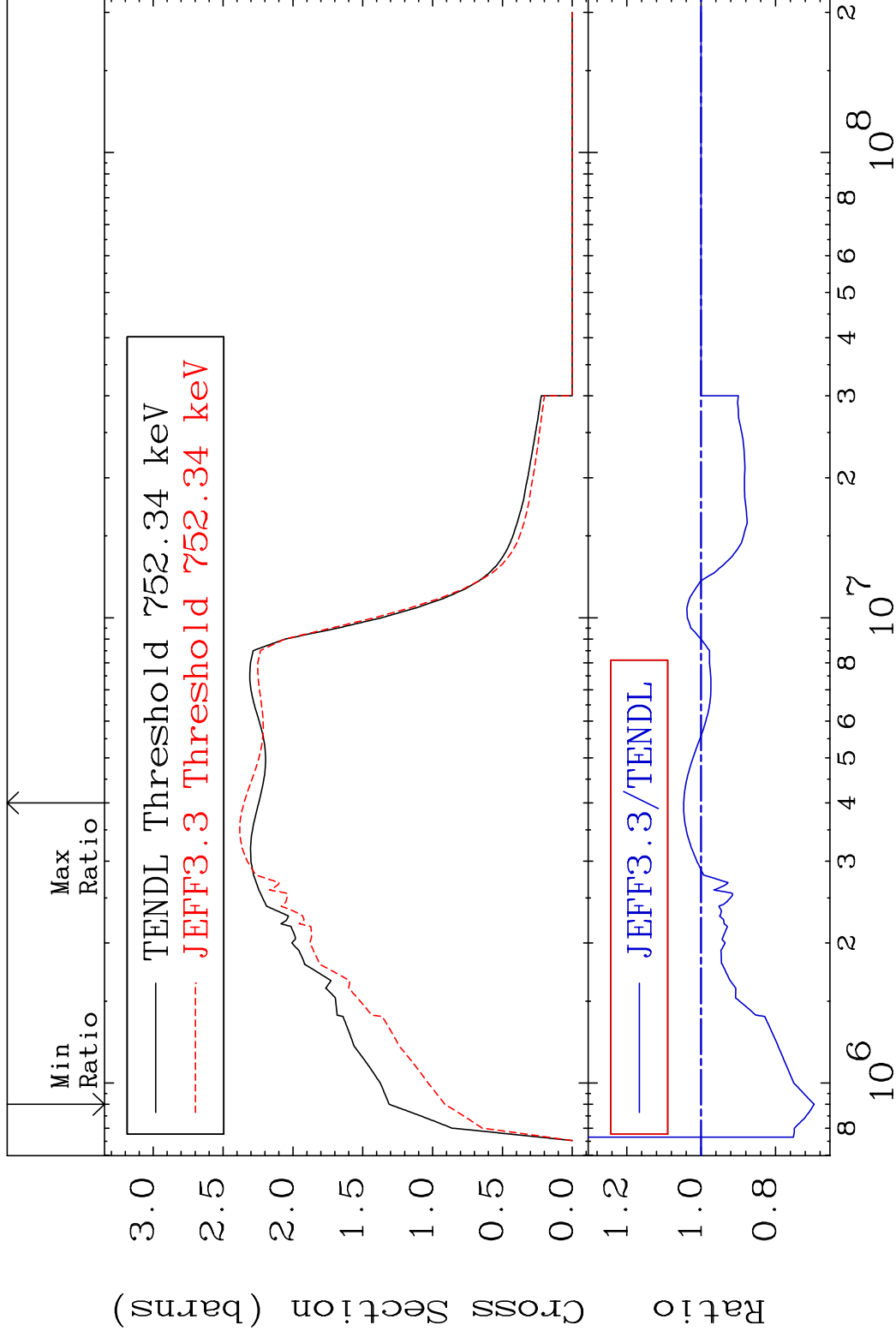
62-Sm-146

MAT 6231

Inelastic

62-Sm-146

Cross Section -30.39 To 4.695 %



3

Incident Energy (eV)

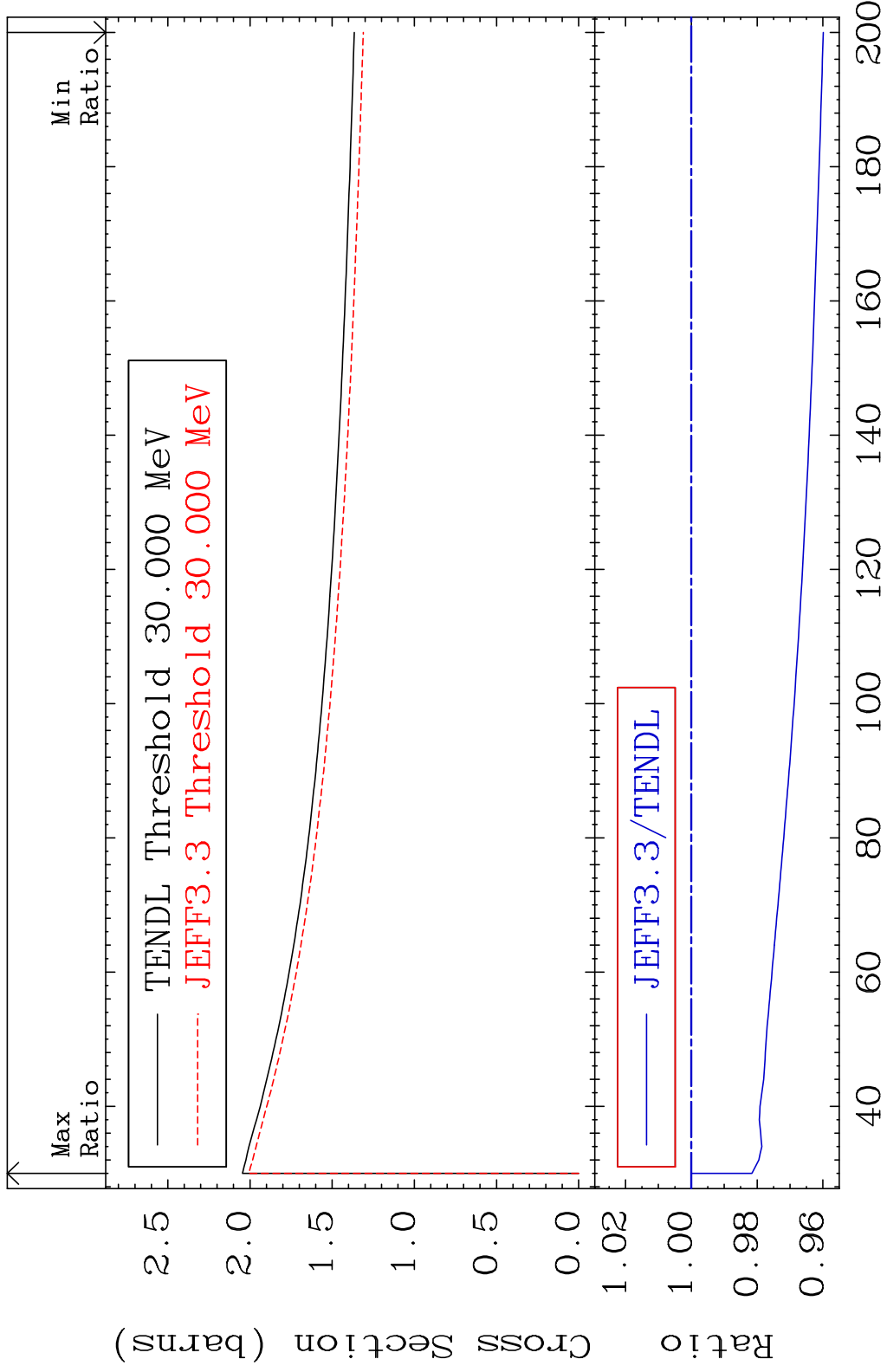
62-Sm-146

MAT 6231

(n, remainder)

62-Sm-146

Cross Section -4.009 To 0.000 %

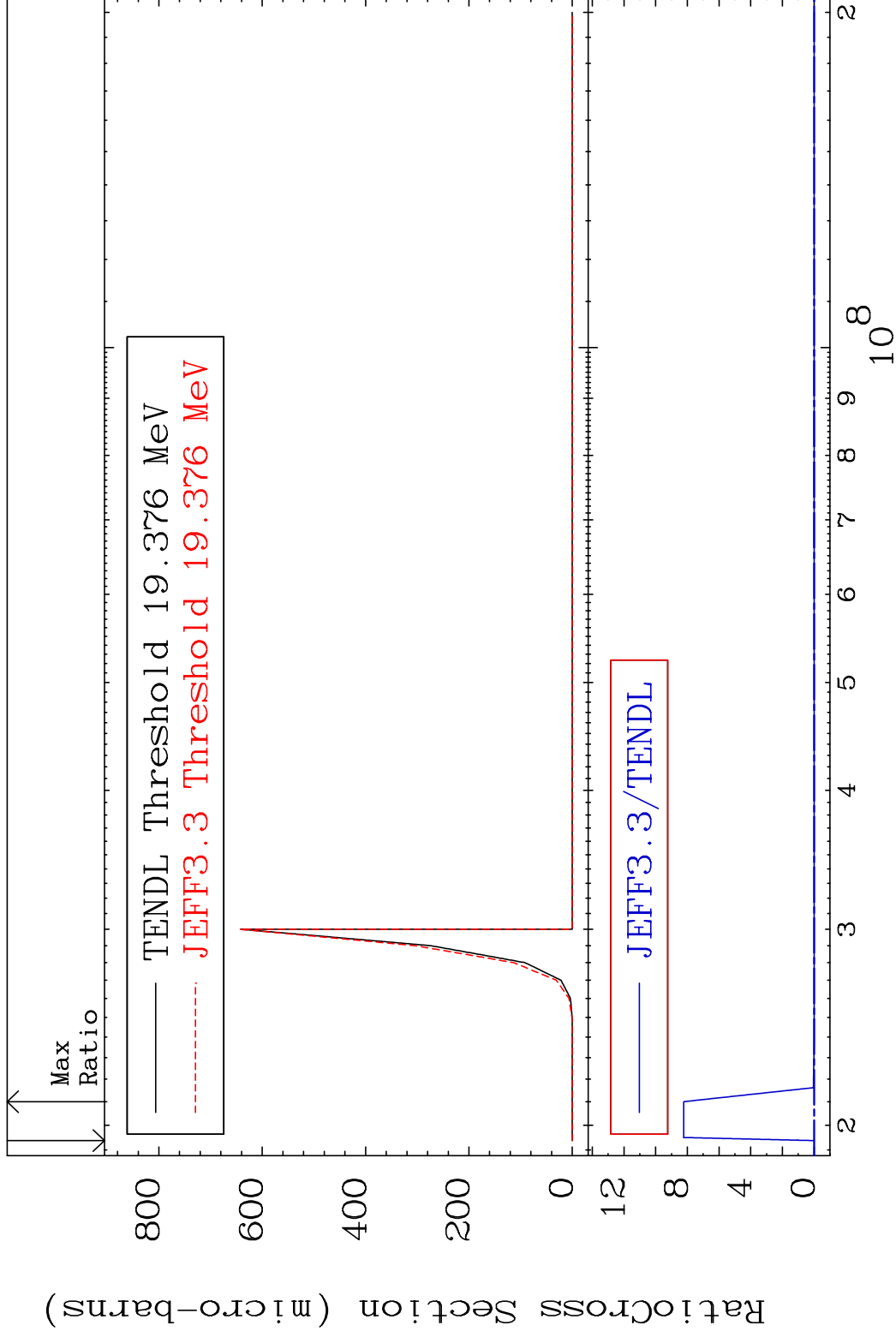


MAT 6231

(n,2n) d

62-Sm-146

Cross Section -100.0 To 9999. %



5

Incident Energy (eV)

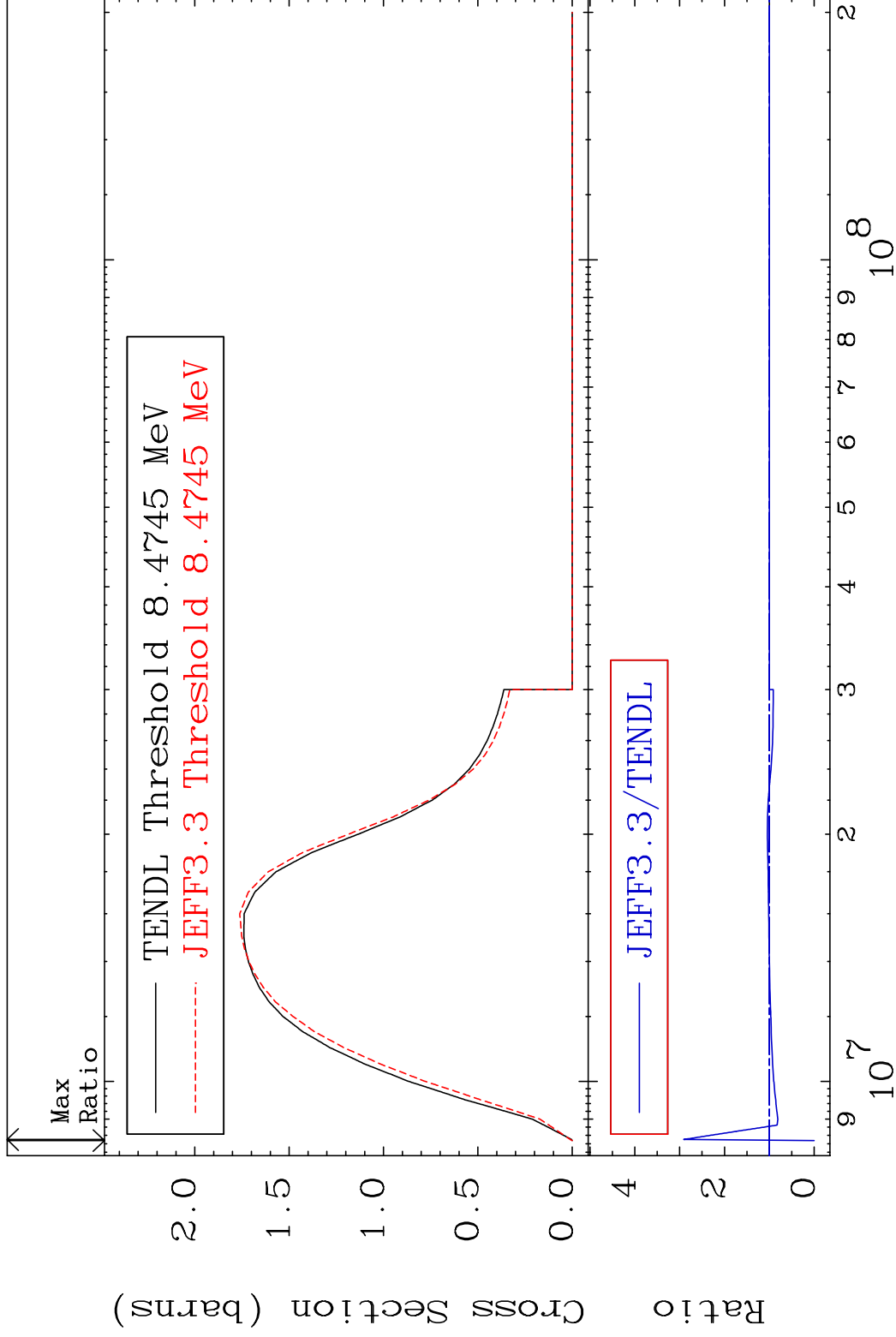
62-Sm-146

MAT 6231

(n,2n)

62-Sm-146

Cross Section -100.0 To 191.1 %



6

Incident Energy (eV)

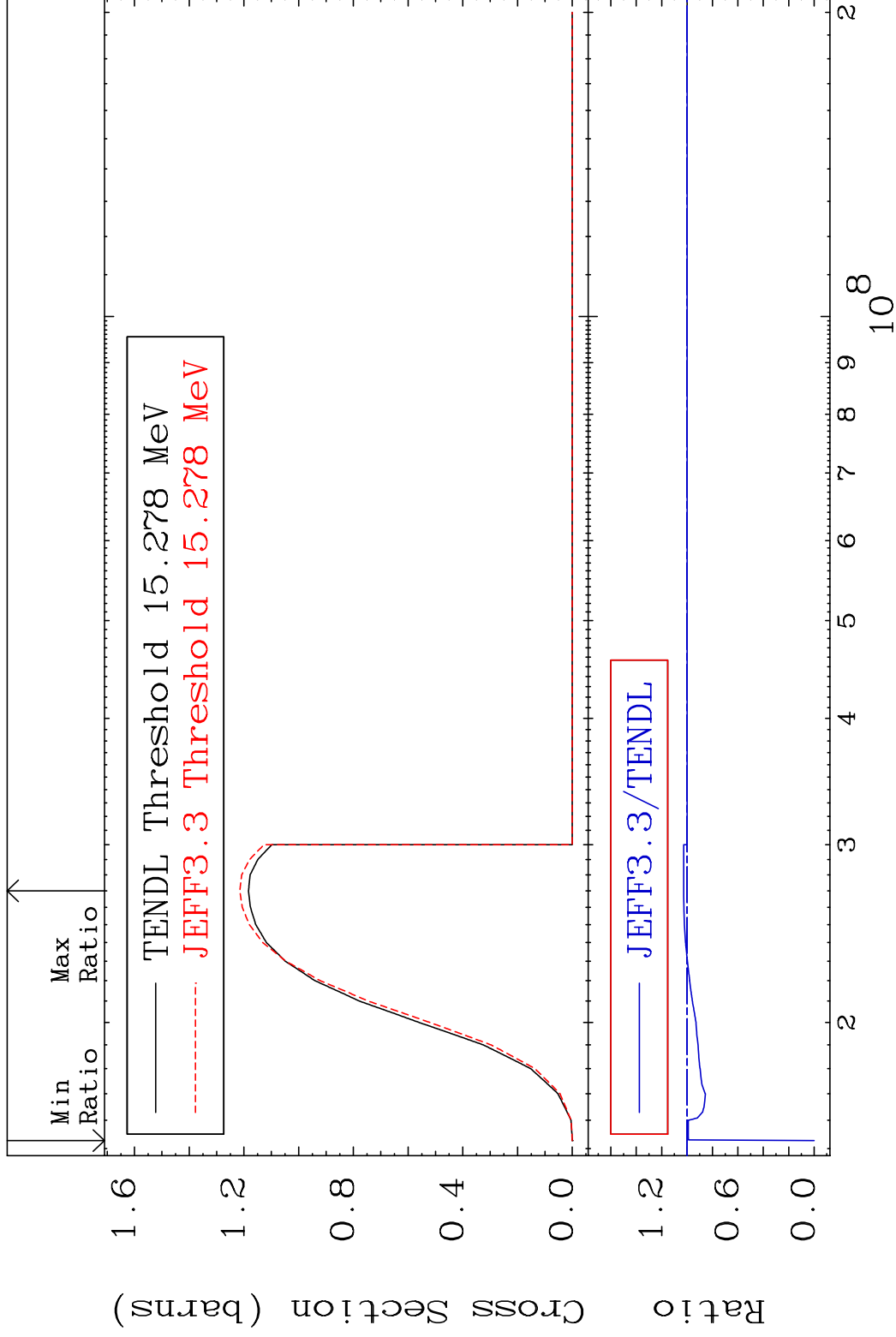
62-Sm-146

MAT 6231

(n,3n)

62-Sm-146

Cross Section -100.0 To 2.691 %



7

Incident Energy (eV)

62-Sm-146

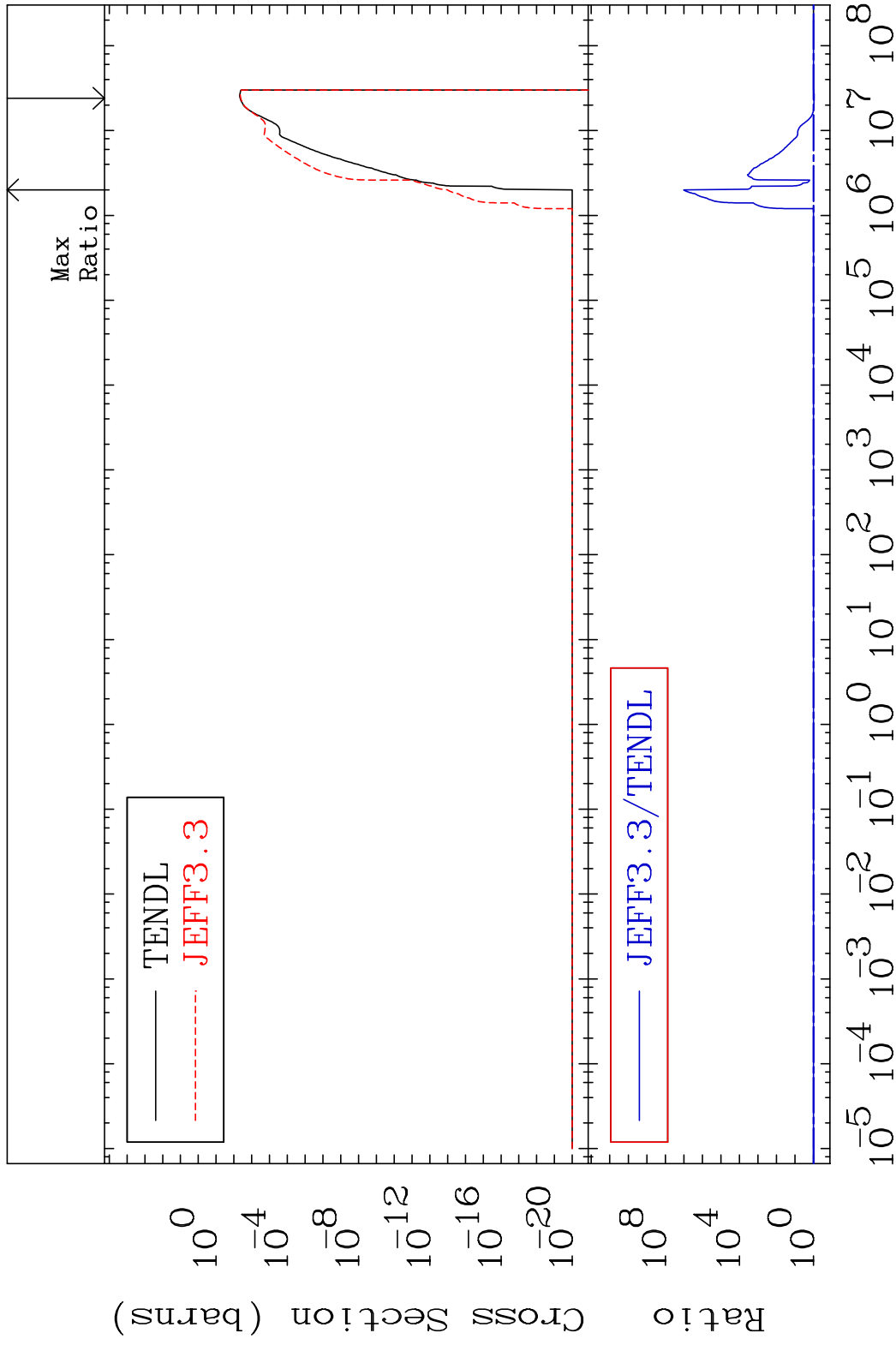


MAT 6231

(n, n')  $\alpha$

62-Sm-146

Cross Section -6.336 To 9999. %

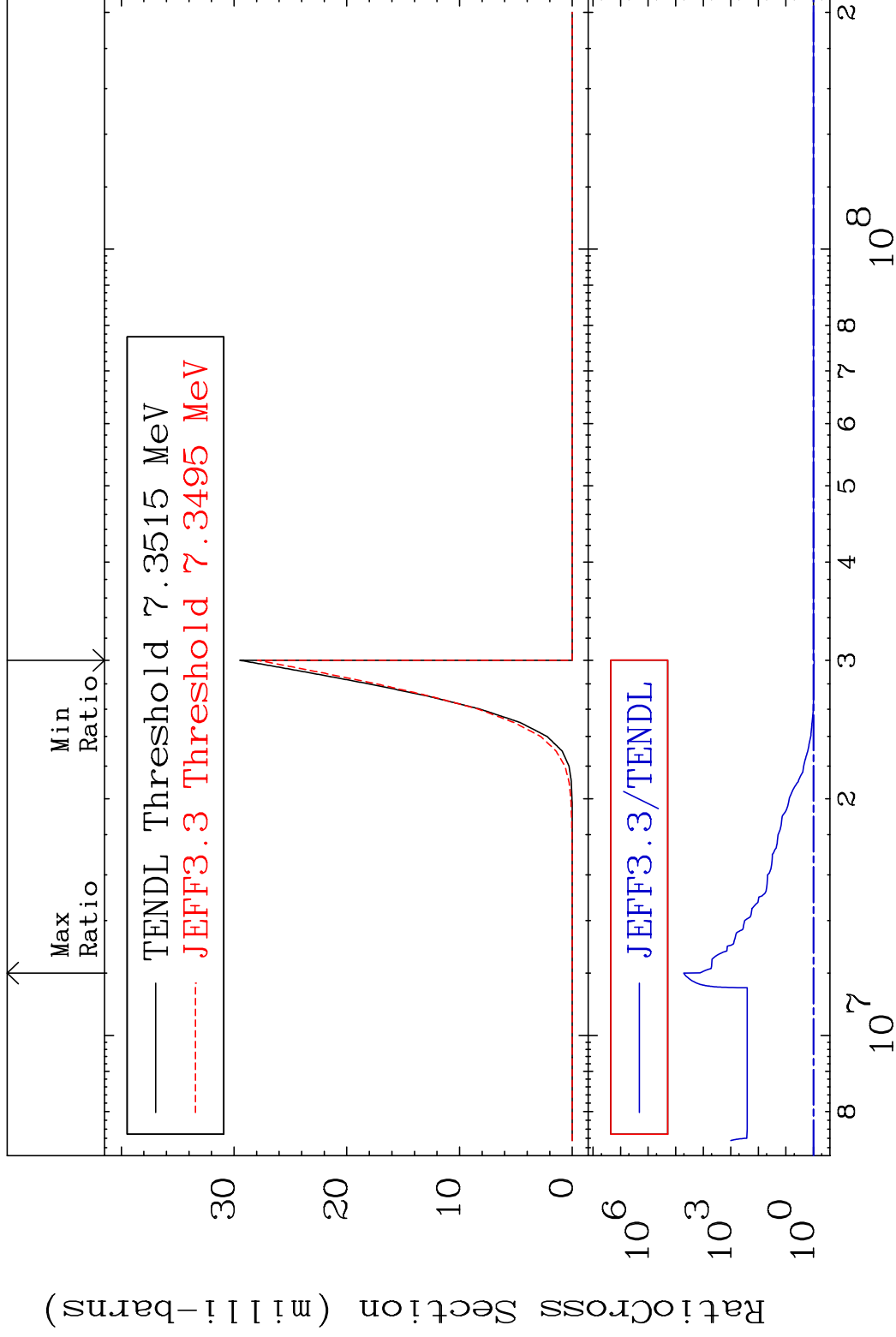


MAT 6231

(n,2n)  $\alpha$

62-Sm-146

Cross Section -5.384 To 9999. %



9

Incident Energy (eV)

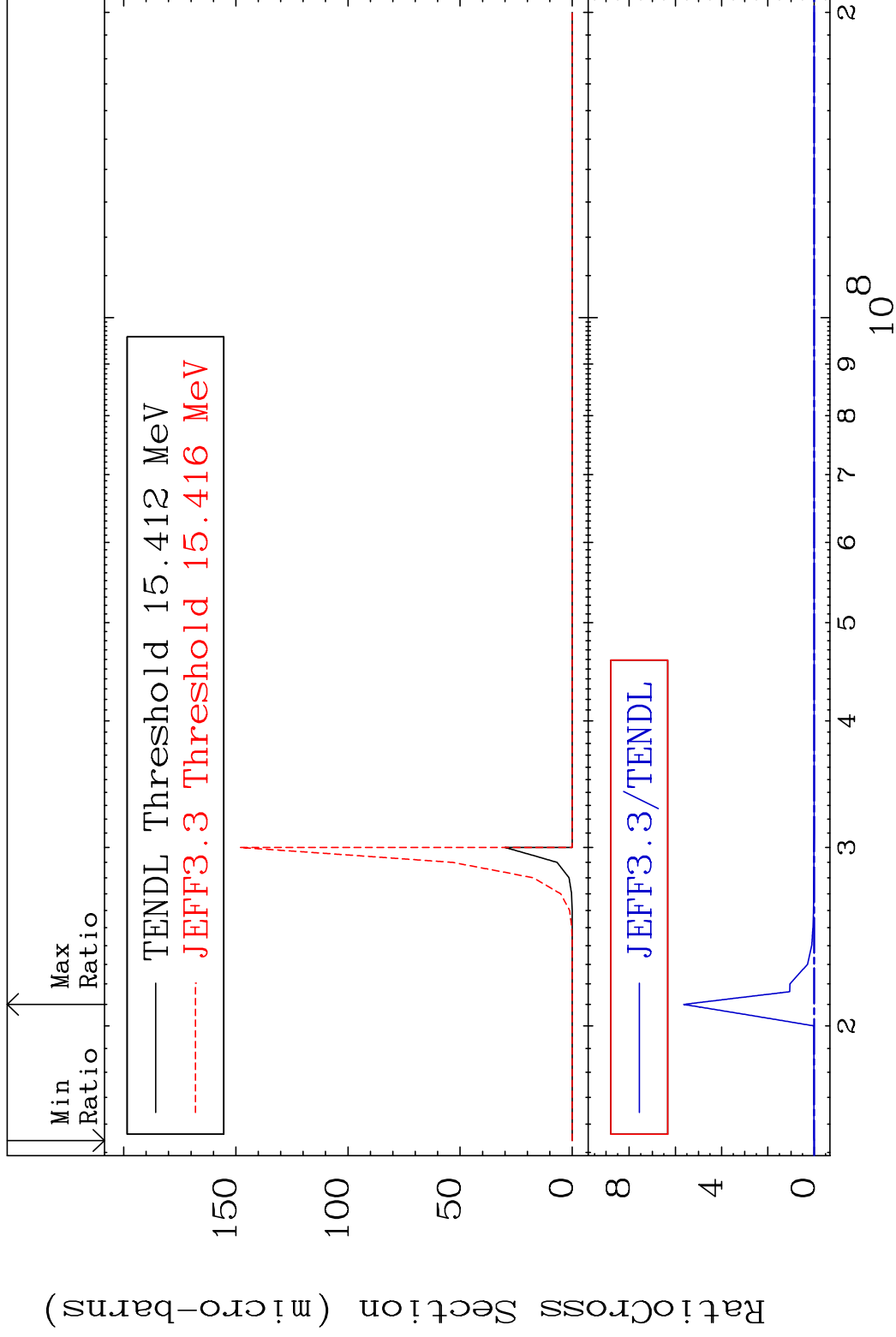
62-Sm-146

MAT 6231

(n,3n)  $\alpha$

62-Sm-146

Cross Section -100.0 To 9999. %



10

Incident Energy (eV)

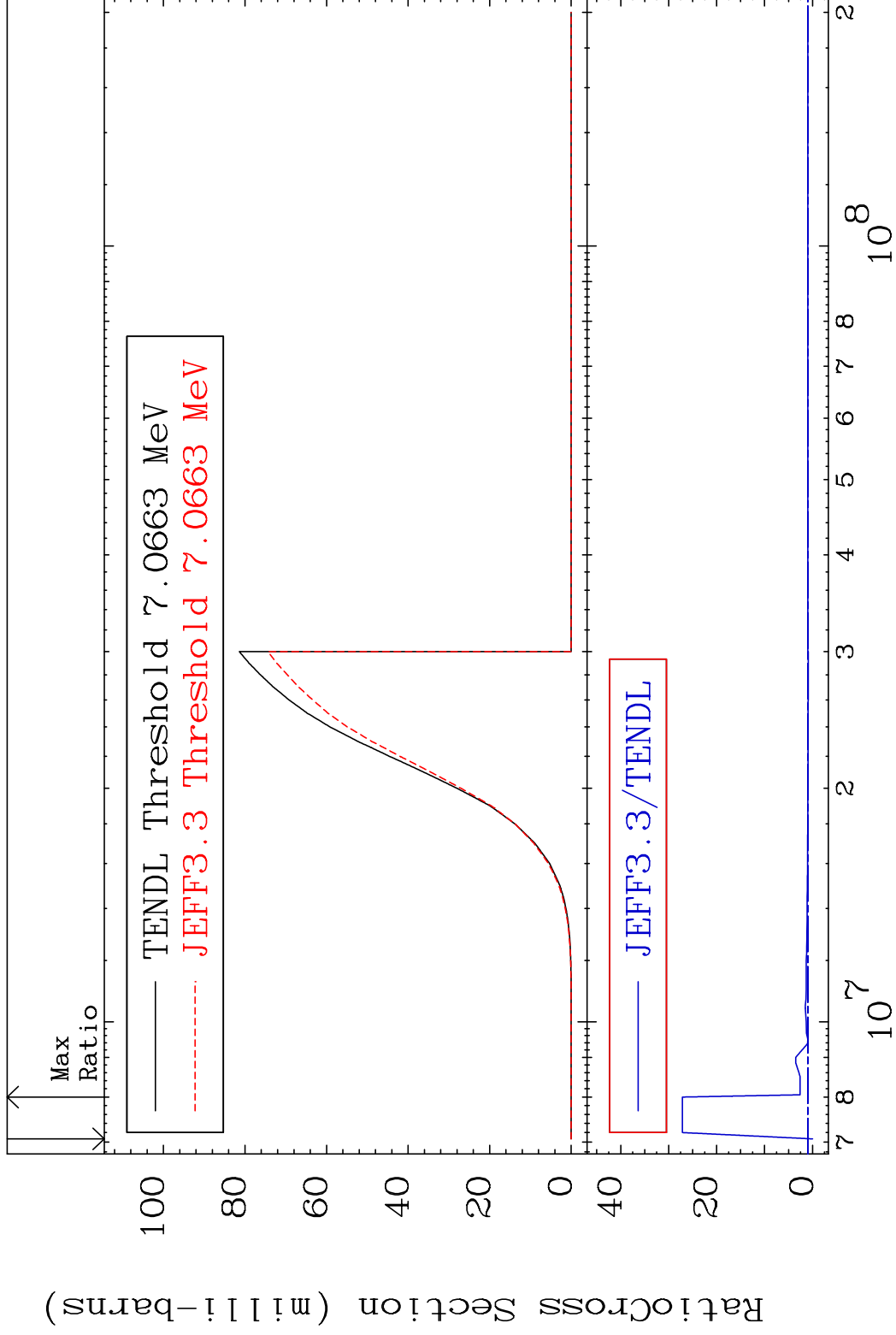
62-Sm-146

MAT 6231

(n, n') p

62-Sm-146

Cross Section -100.0 To 2615. %



11

Incident Energy (eV)

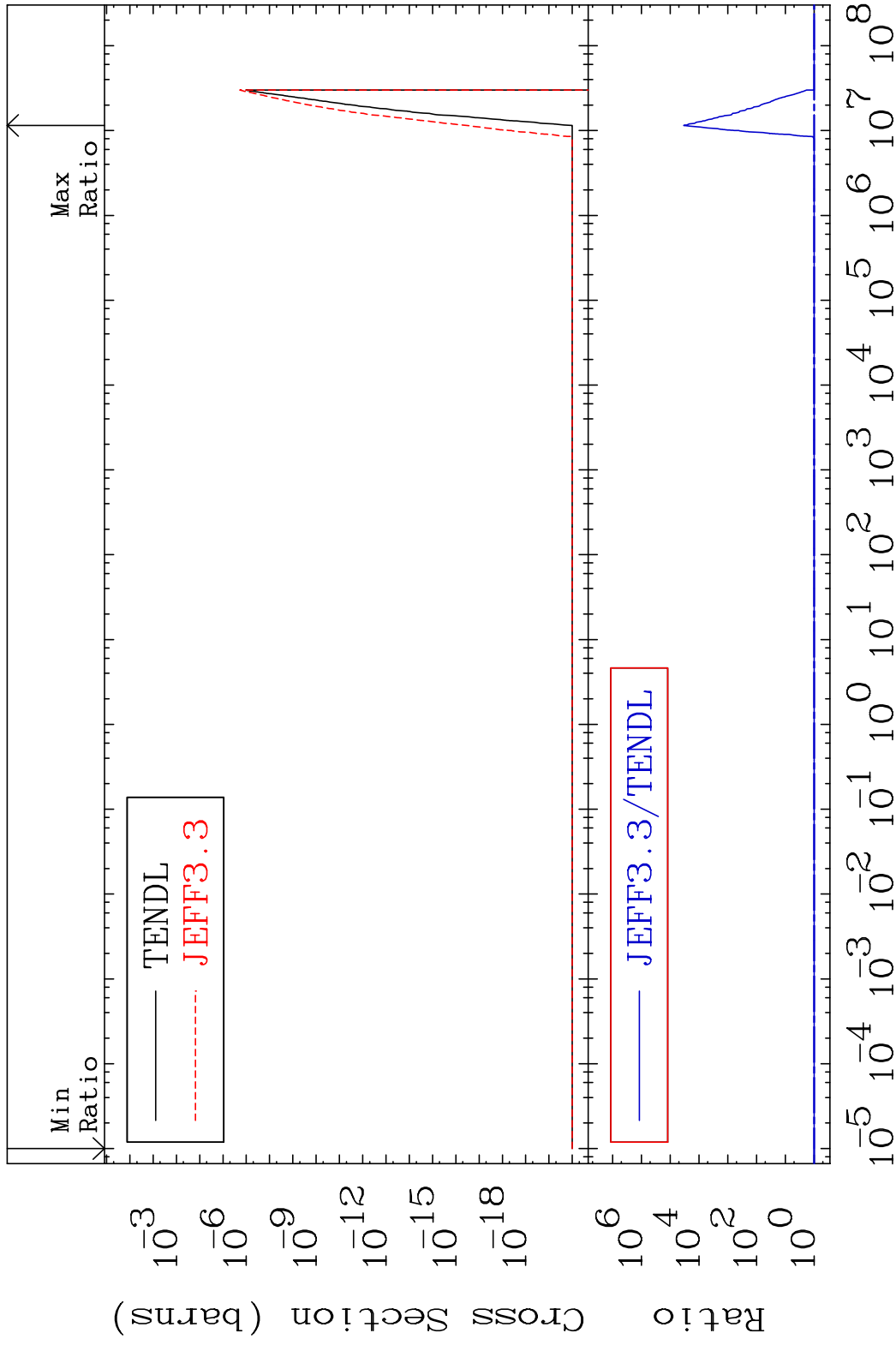
62-Sm-146

MAT 6231

(n, n') 2α

62-Sm-146

Cross Section 0.000 To 9999. %



12

Incident Energy (eV)

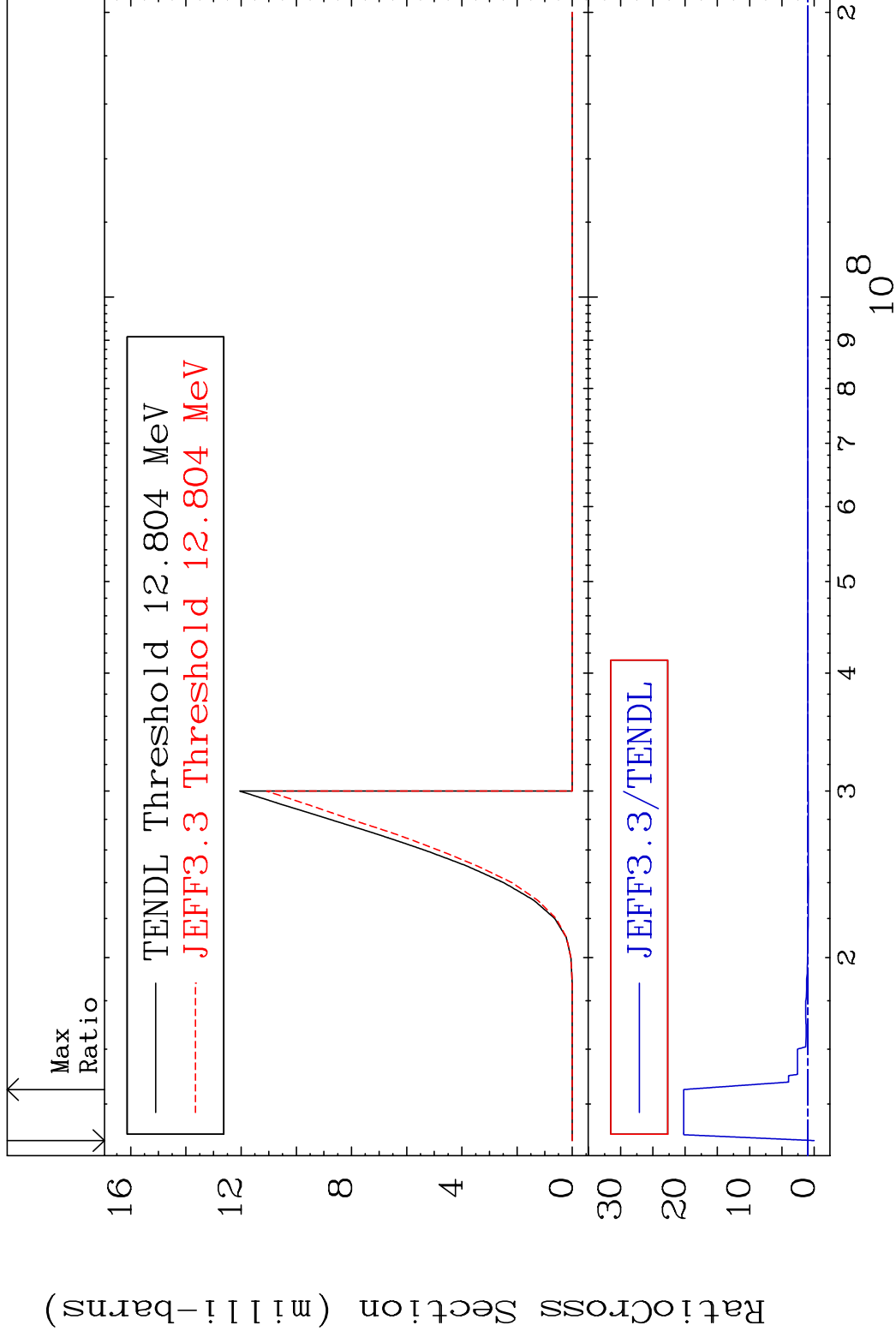
62-Sm-146

MAT 6231

(n, n') d

62-Sm-146

Cross Section -100.0 To 1923. %

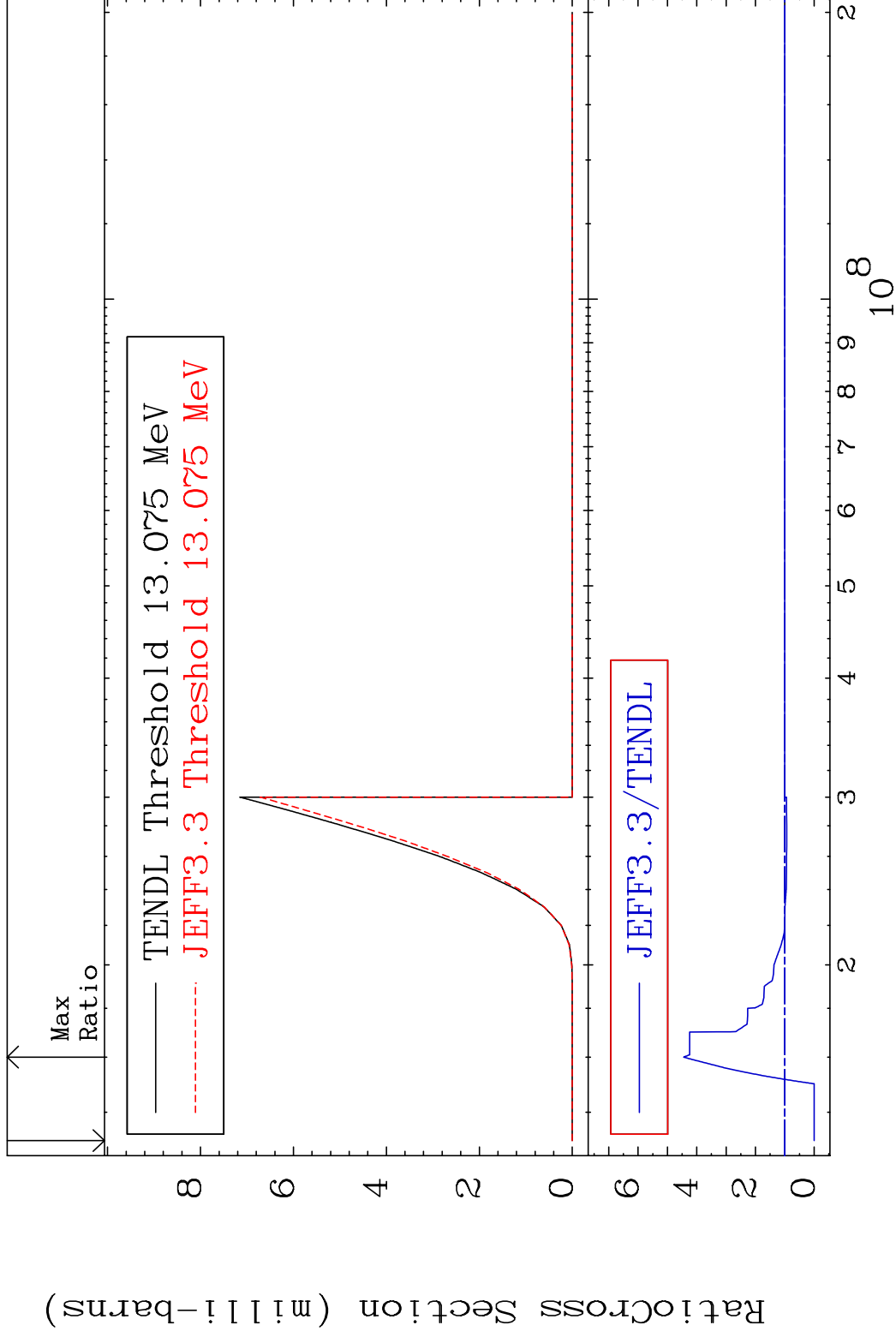


MAT 6231

(n, n') t

62-Sm-146

Cross Section -100.0 To 344.7 %



14

Incident Energy (eV)

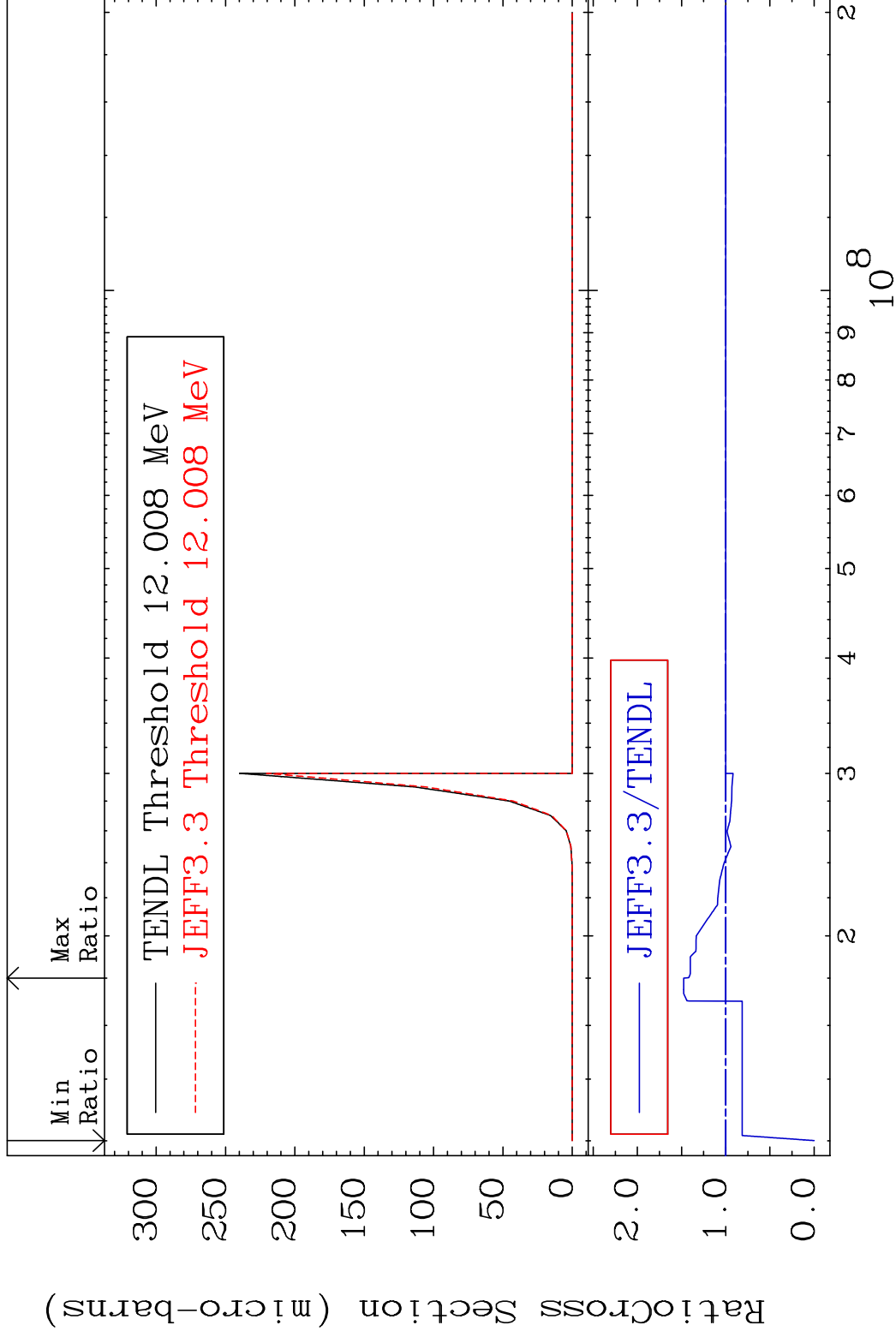
62-Sm-146

MAT 6231

(n,n') He-3

62-Sm-146

Cross Section -100.0 To 47.67 %



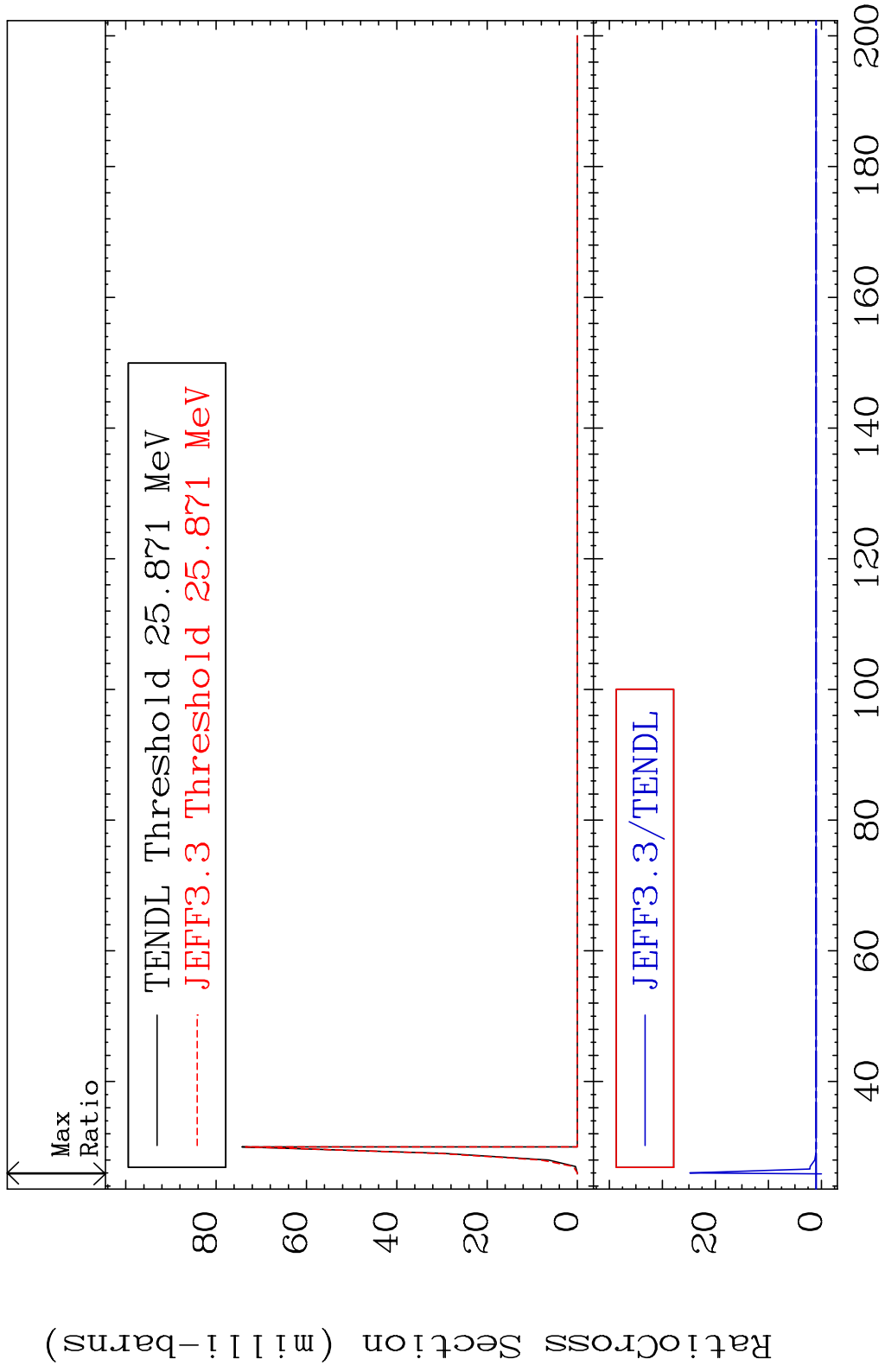


MAT 6231

(n,4n)

62-Sm-146

Cross Section -100.0 To 2383. %



16

Incident Energy (MeV)

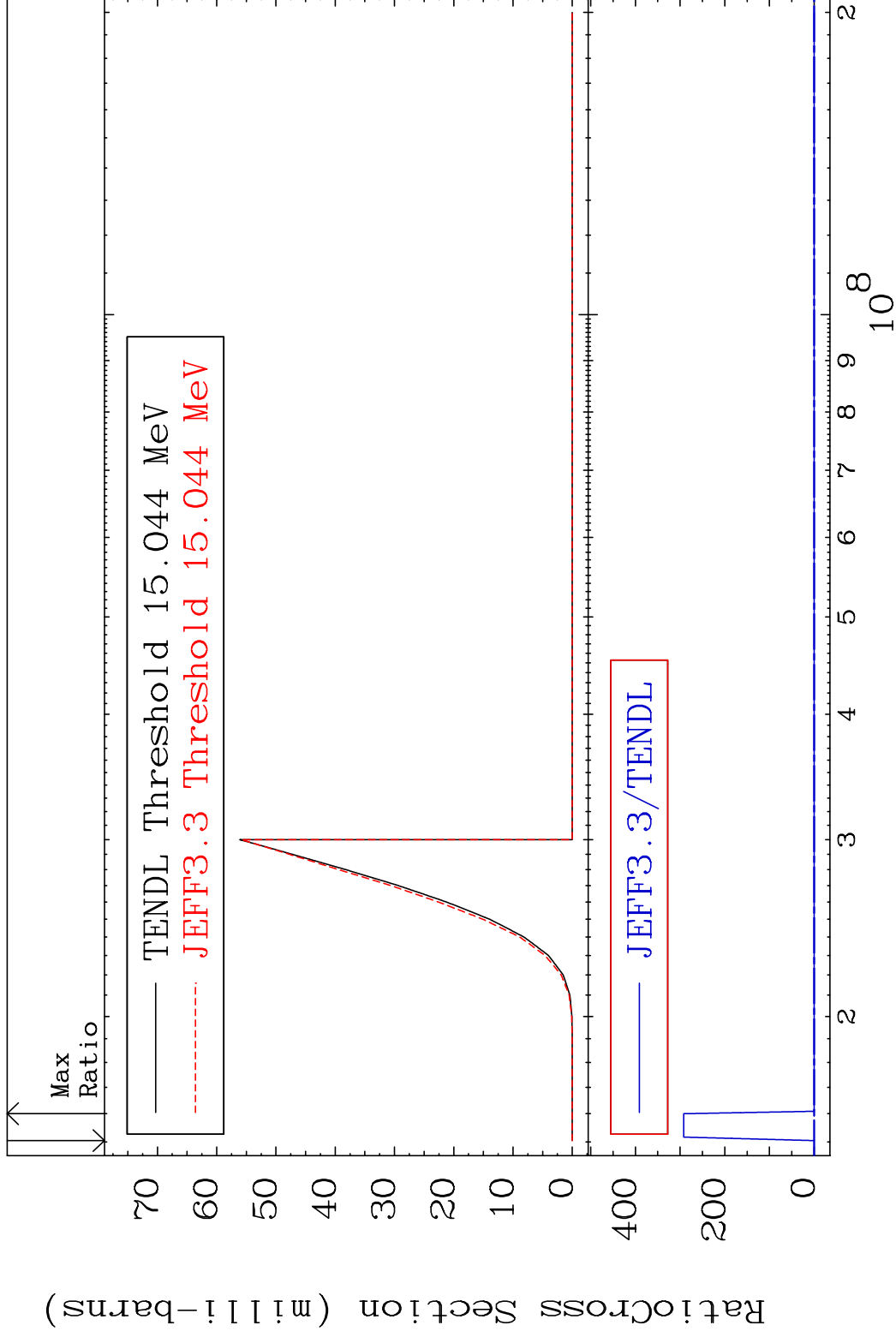
62-Sm-146

MAT 6231

(n,2n) p

62-Sm-146

Cross Section -100.0 To 9999. %

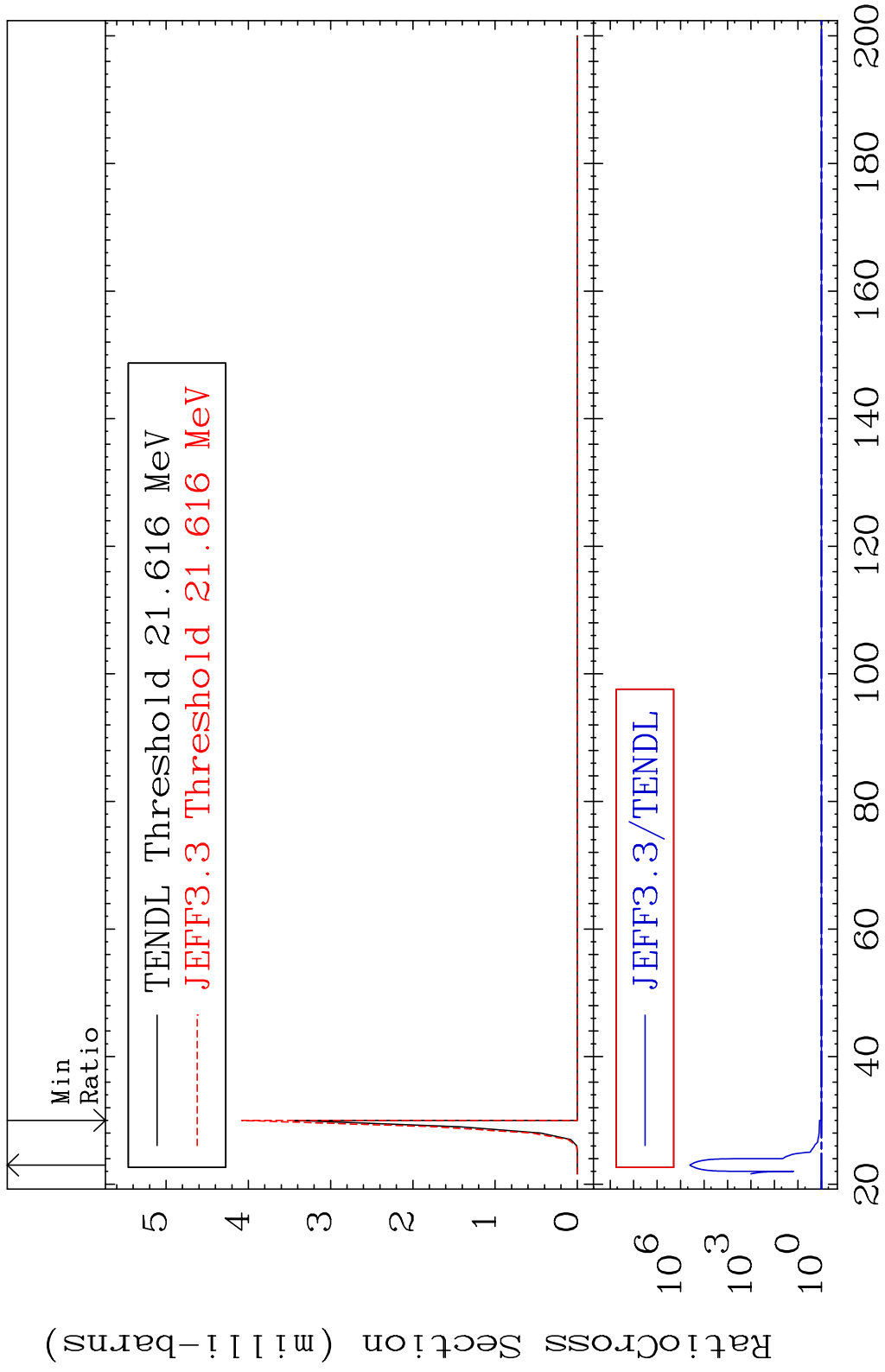


MAT 6231

(n,3n) p

62-Sm-146

Cross Section 0.000 To 9999. %



18

Incident Energy (MeV)

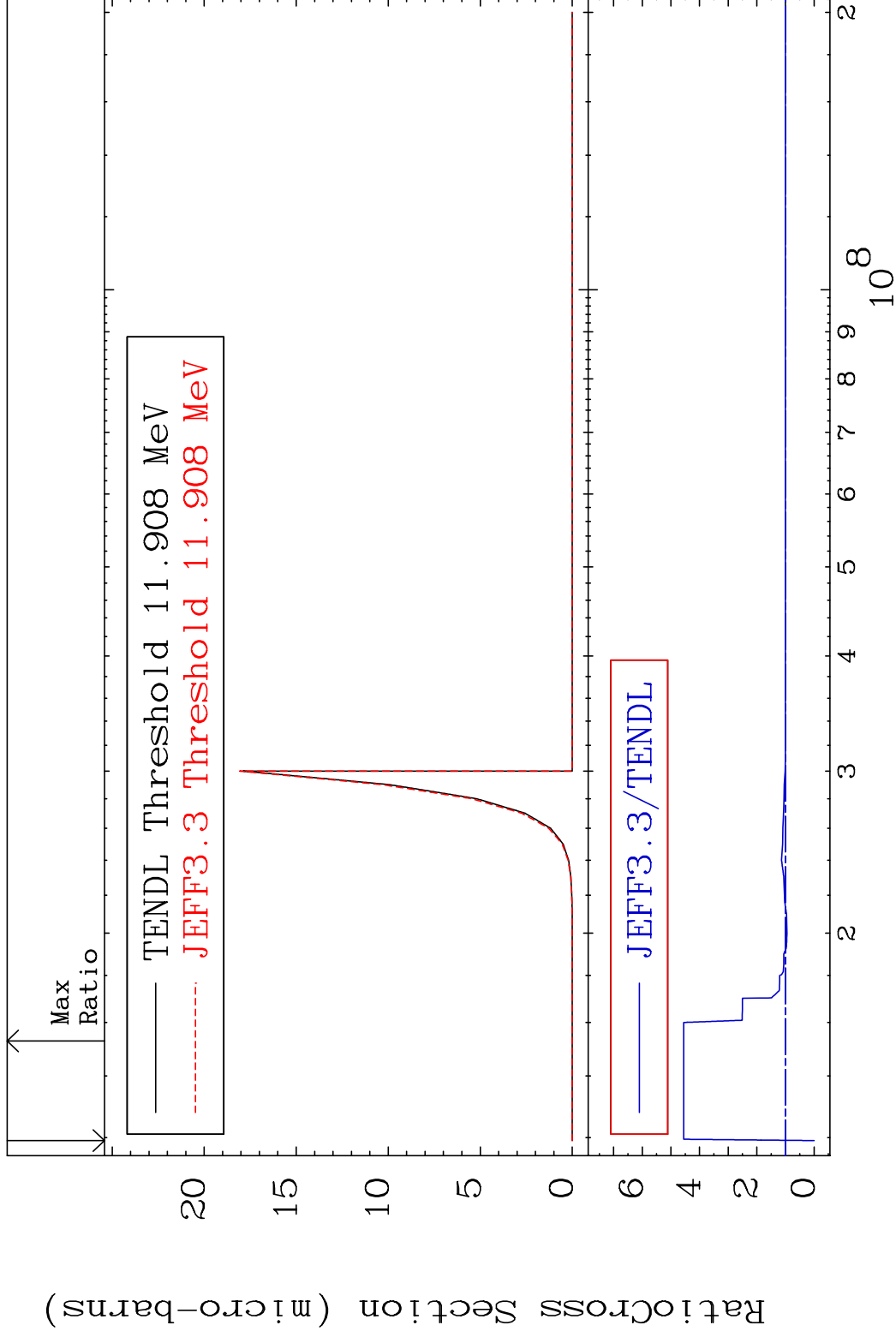
62-Sm-146

MAT 6231

(n,2n) p

62-Sm-146

Cross Section -100.0 To 355.5 %



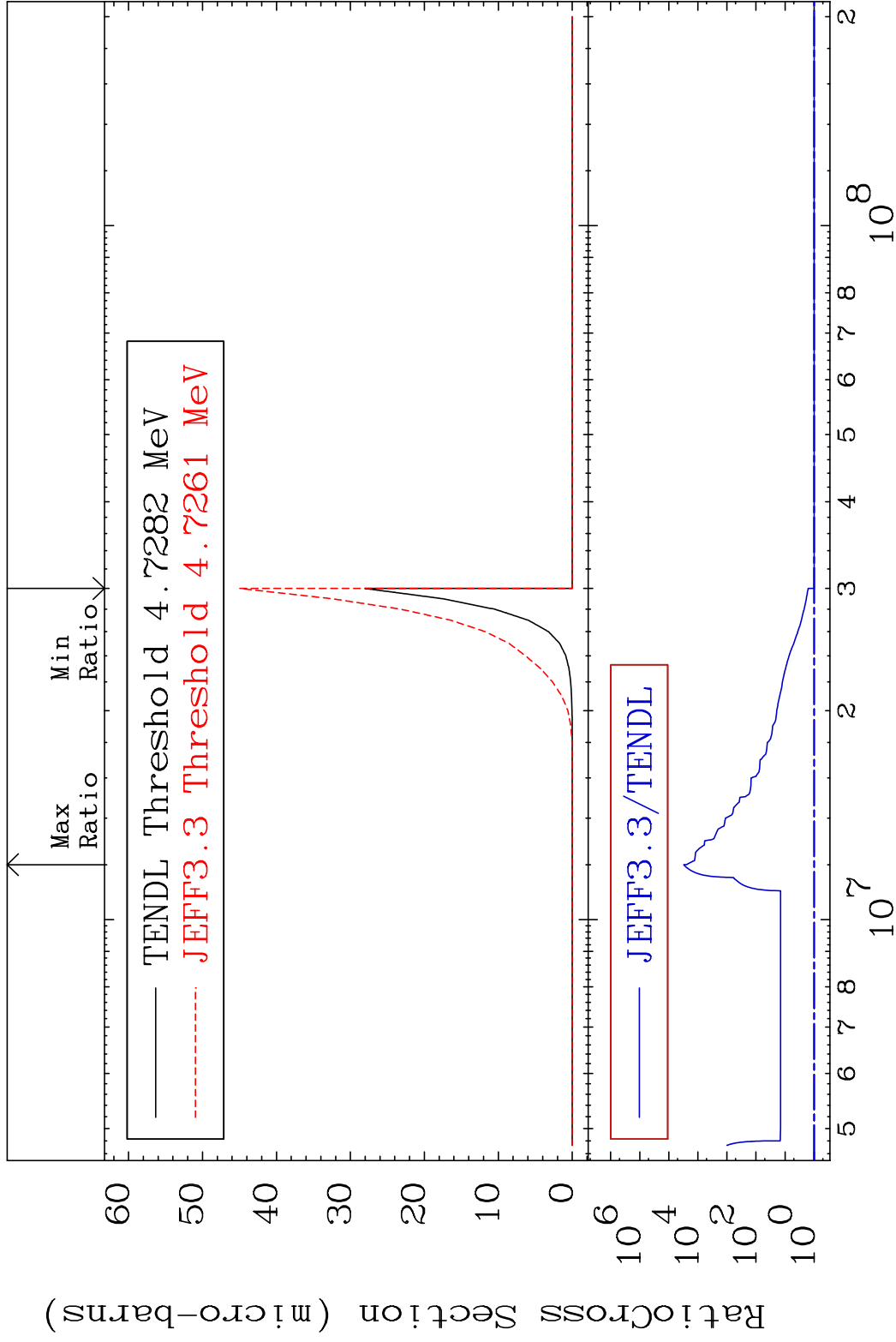
19

Incident Energy (eV)

62-Sm-146

MAT 6231

(n, n') p  $\alpha$  62-Sm-146  
Cross Section 0.000 To 9999. %

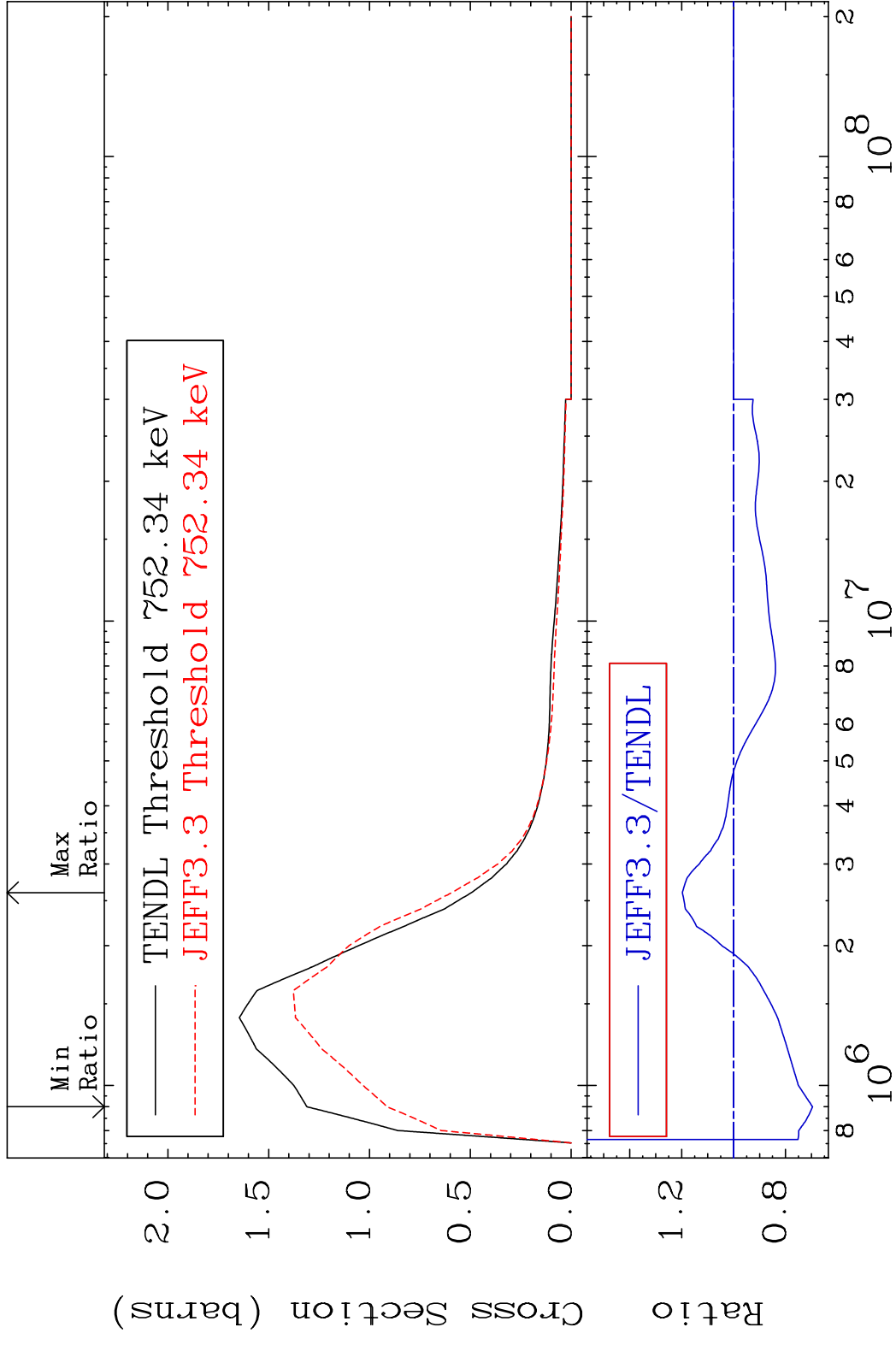


20

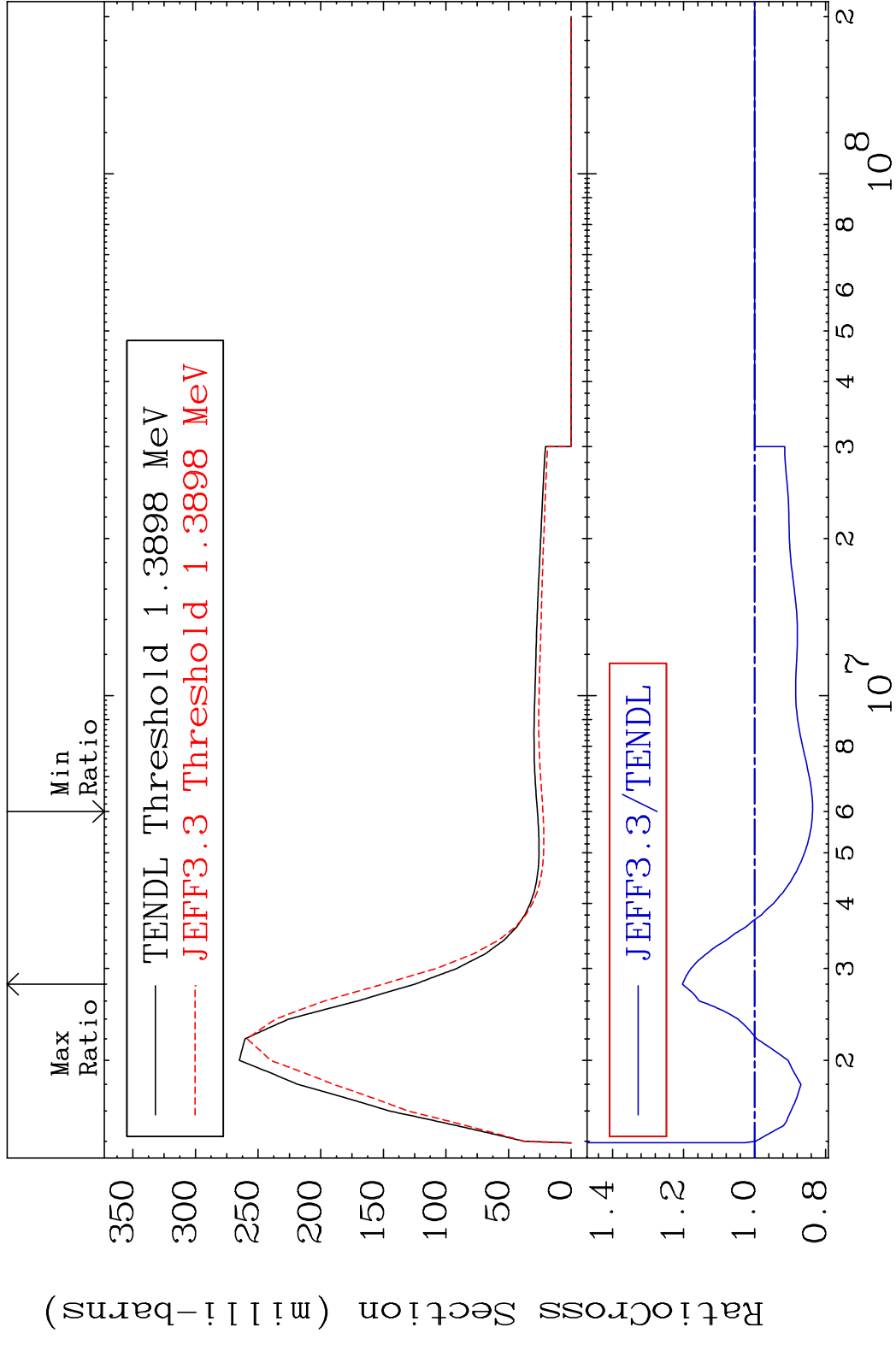
Incident Energy (eV)

62-Sm-146

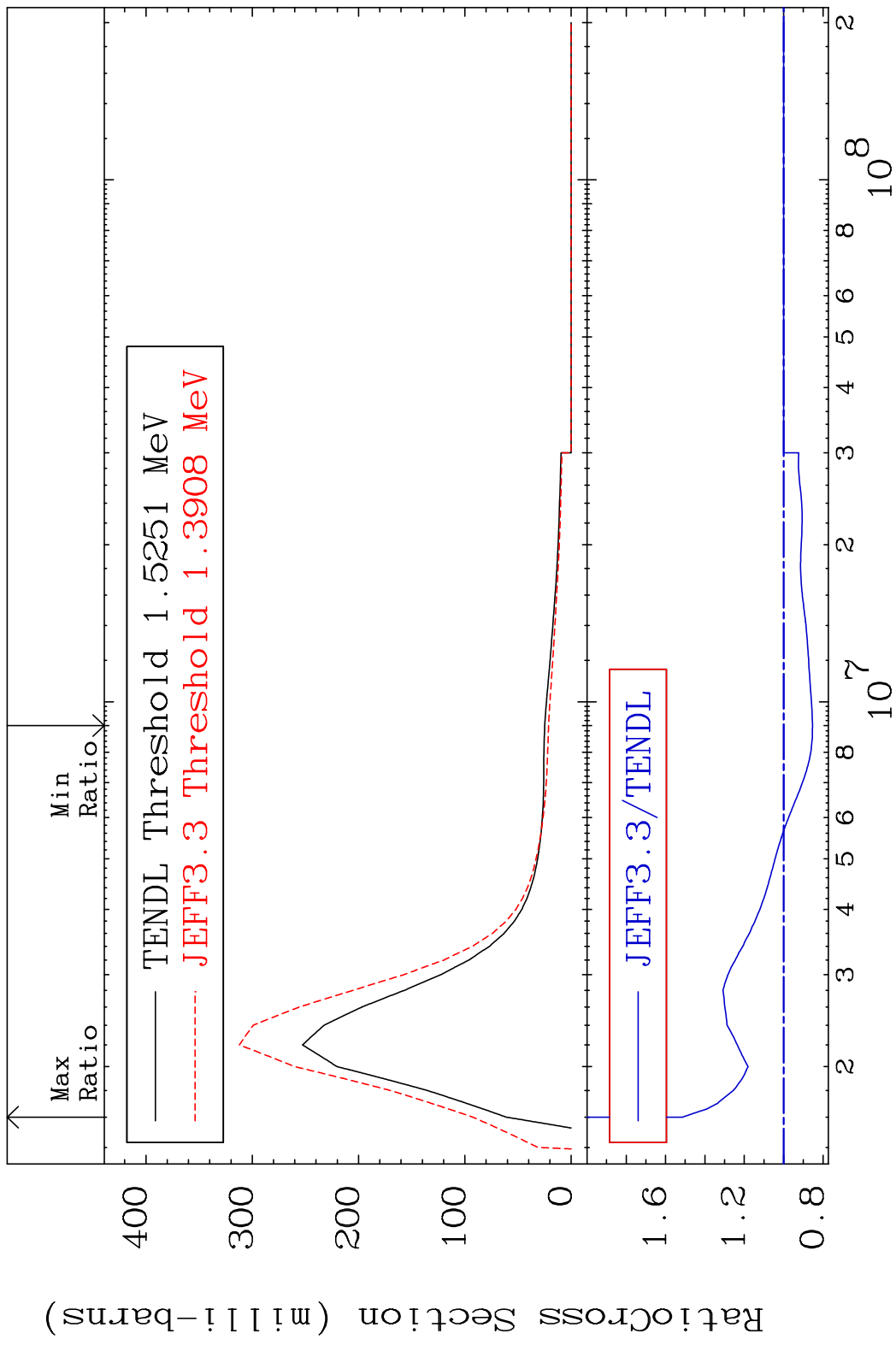
MAT 6231 MT= 51 (n, n') Level 62-Sm-146  
 Cross Section -30.39 To 19.73 %



MAT 6231 MT= 52 (n, n') Level 62-Sm-146  
 Cross Section -16.35 To 20.36 %

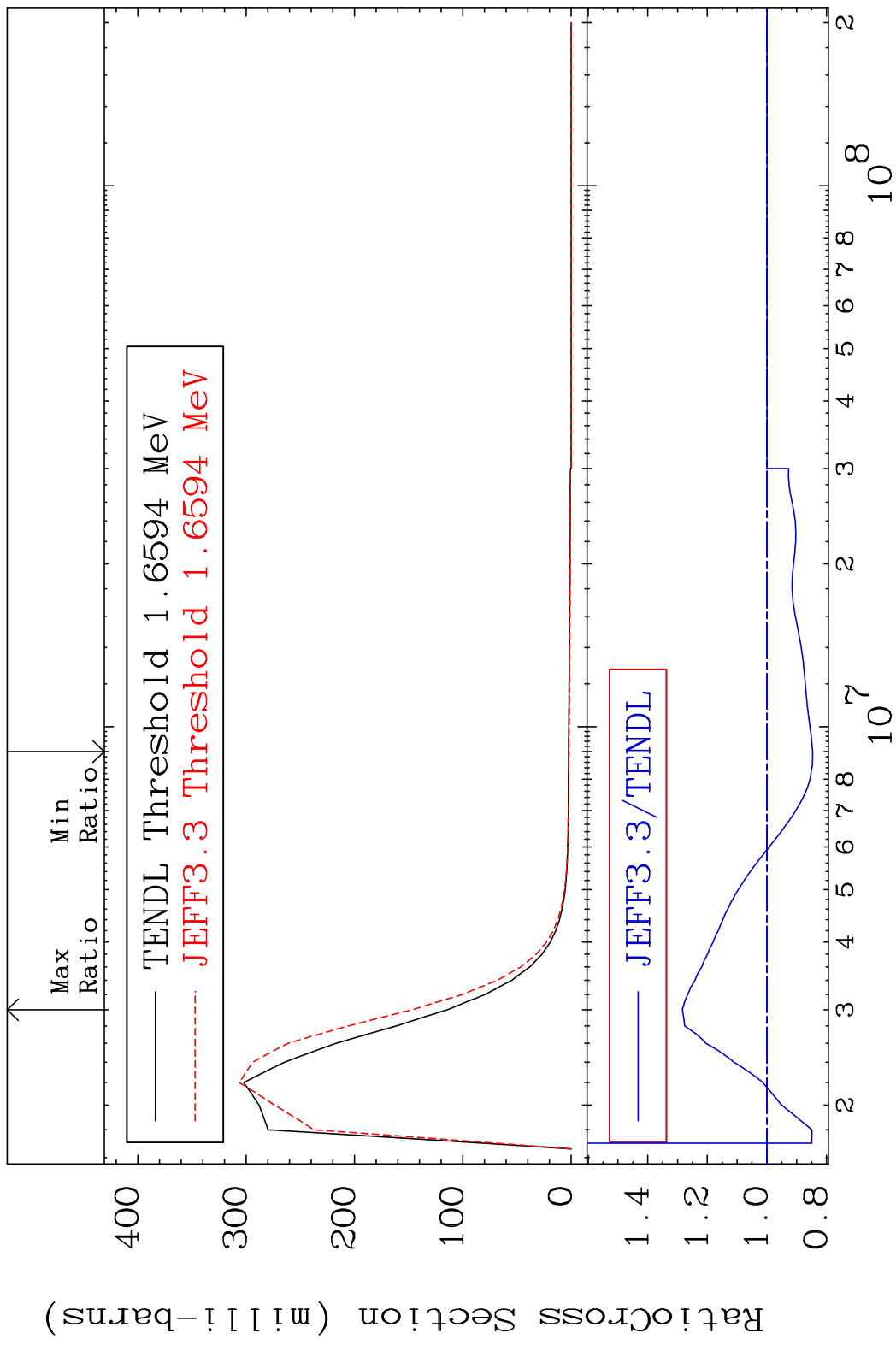


MAT 6231 MT= 53 (n, n') Level 62-Sm-146  
 Cross Section -14.70 To 51.46 %

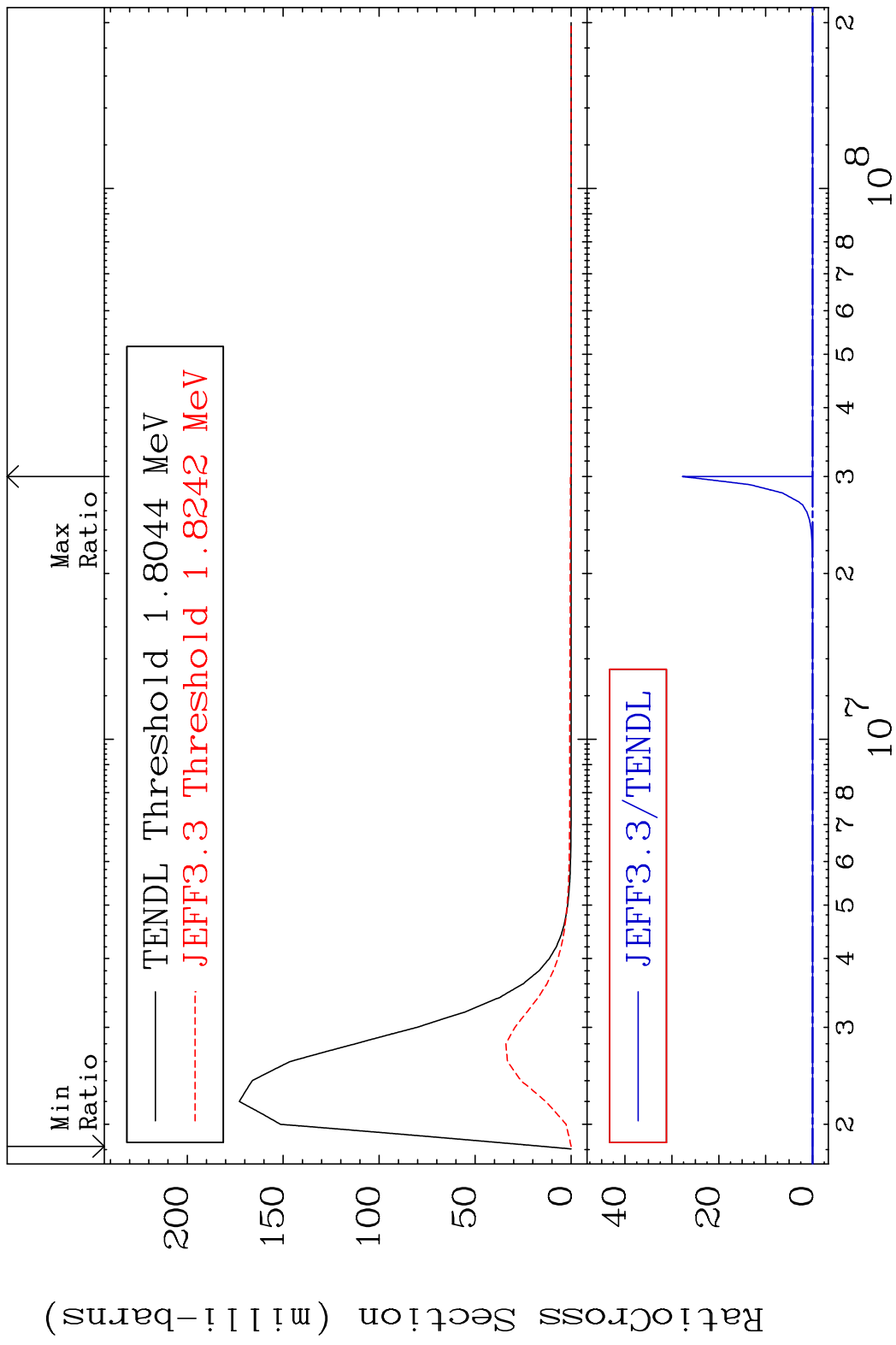




MAT 6231 MT= 54 (n,n') Level 62-Sm-146  
 Cross Section -15.31 To 28.39 %

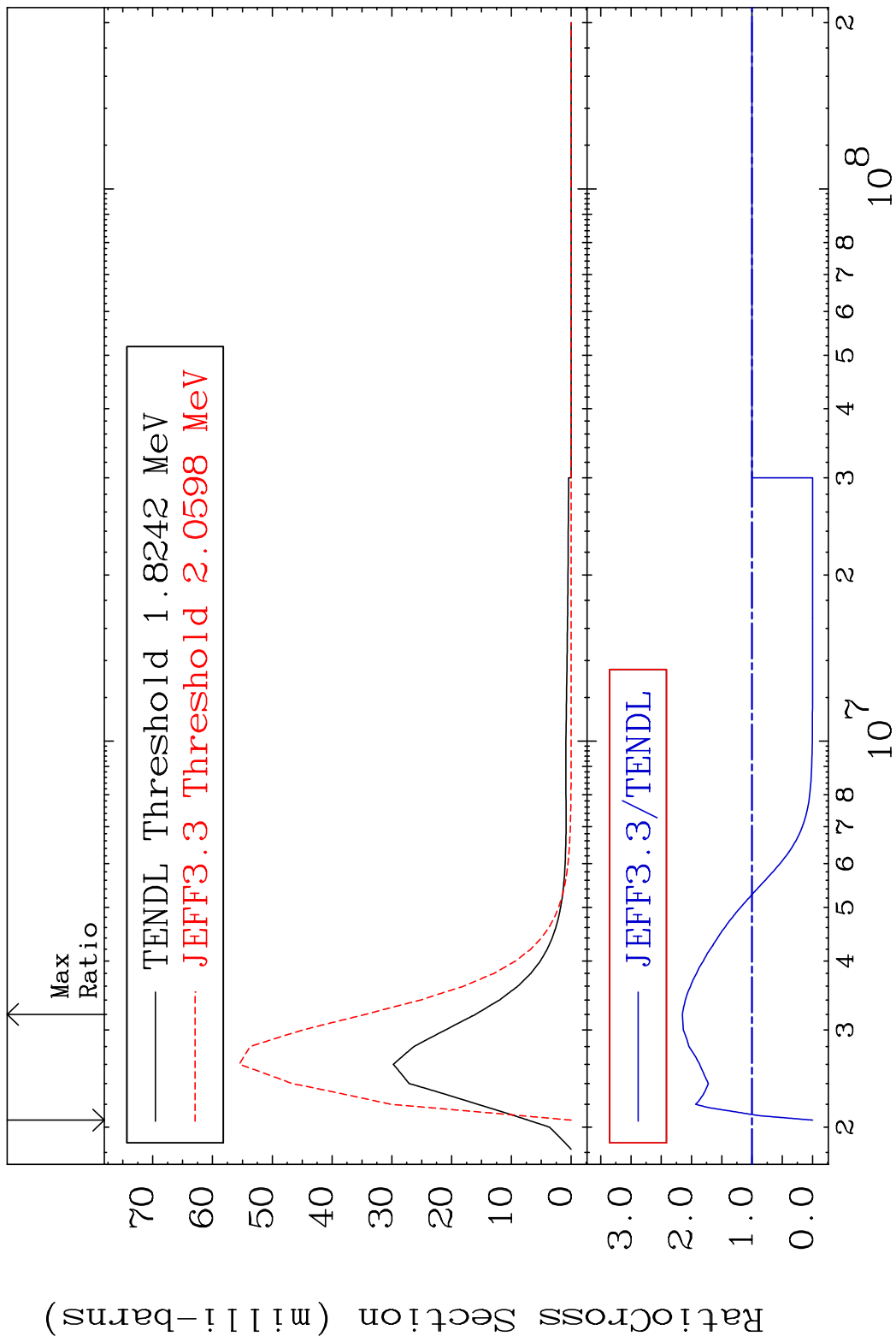


MAT 6231 MT= 55 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 9999. %

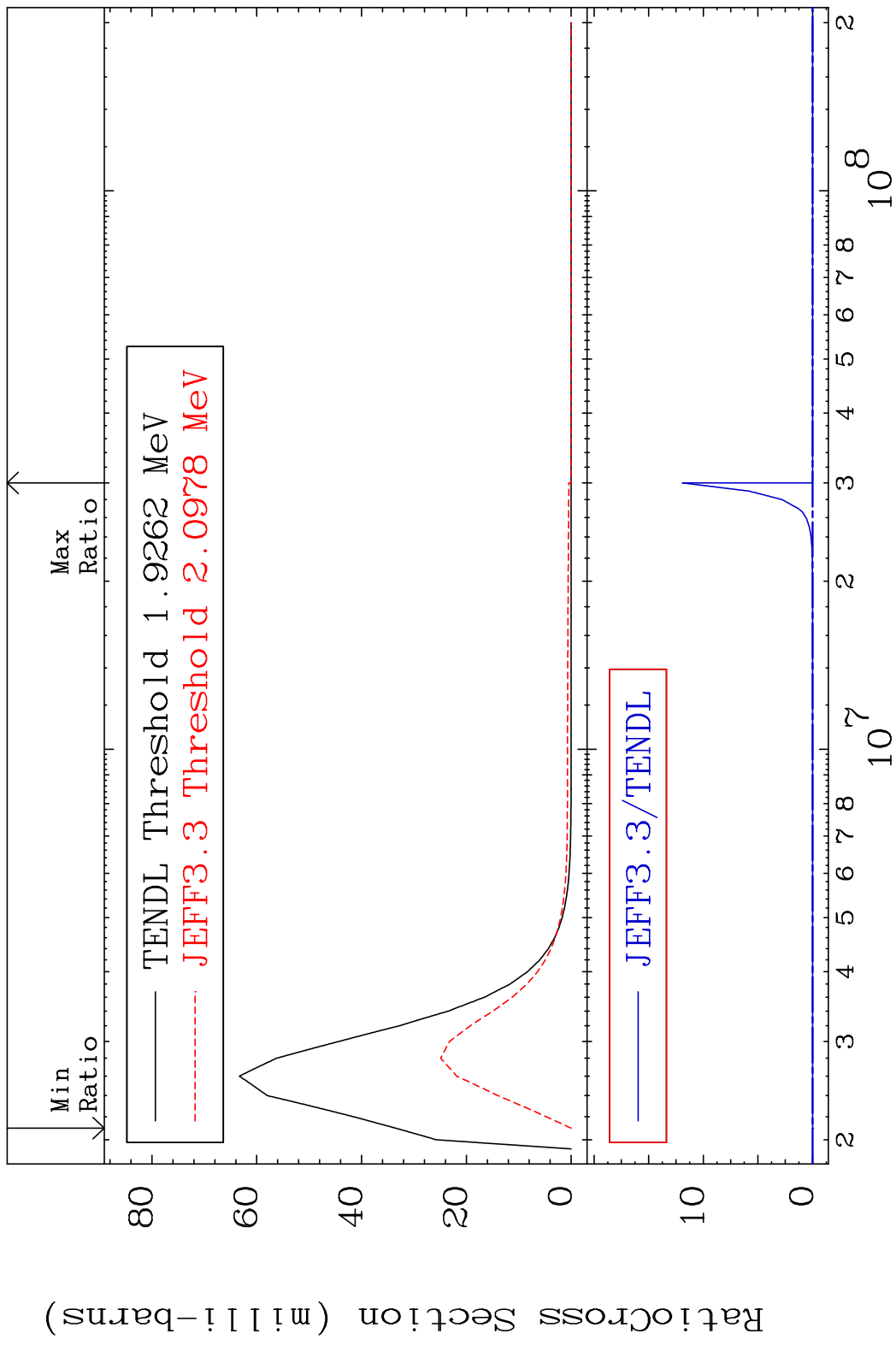


25 Incident Energy (eV) 62-Sm-146

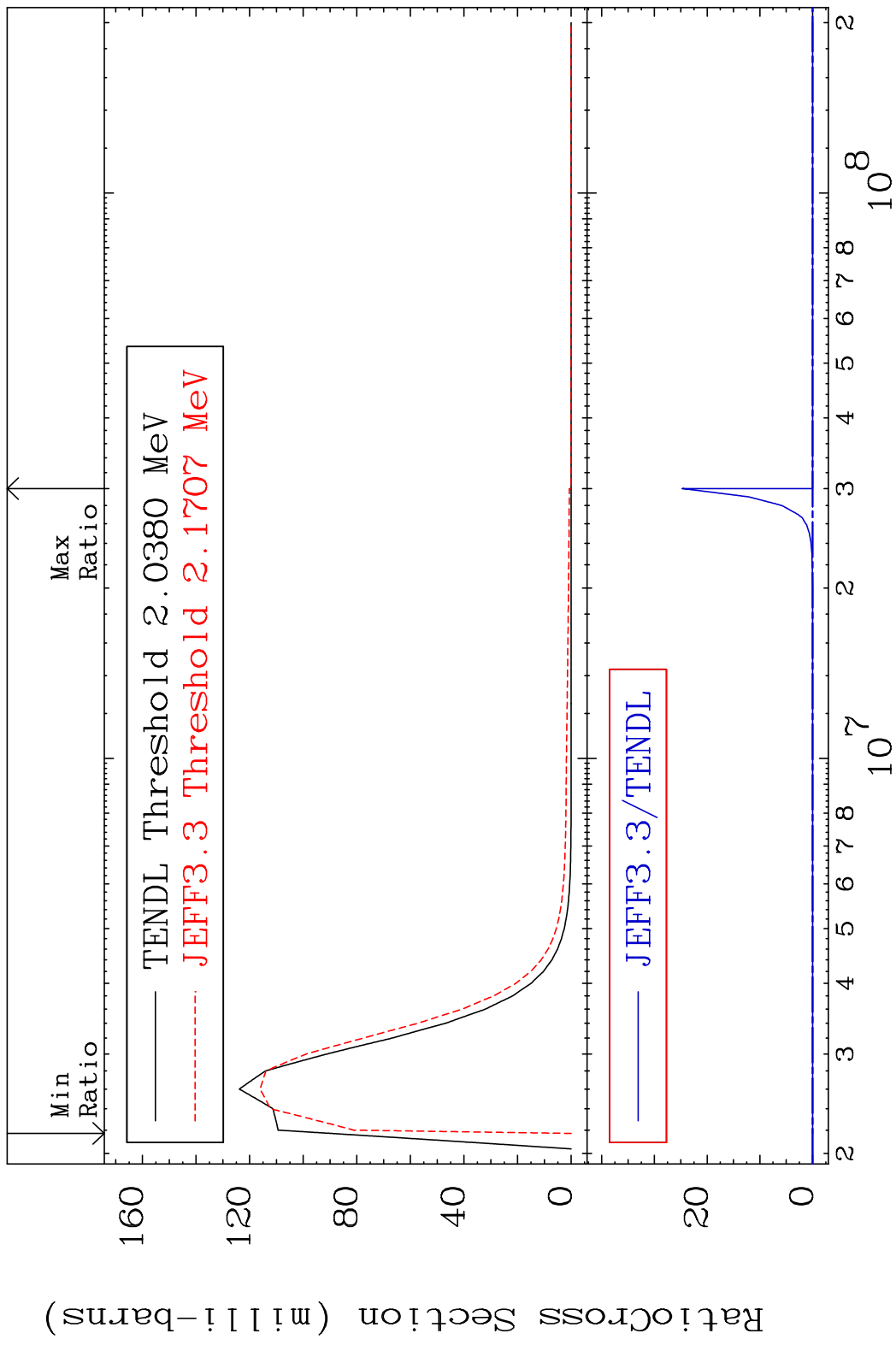
MAT 6231 MT= 56 (n,n') Level 62-Sm-146  
 Cross Section -100.0 To 115.1 %



MAT 6231 MT= 57 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 9999. %

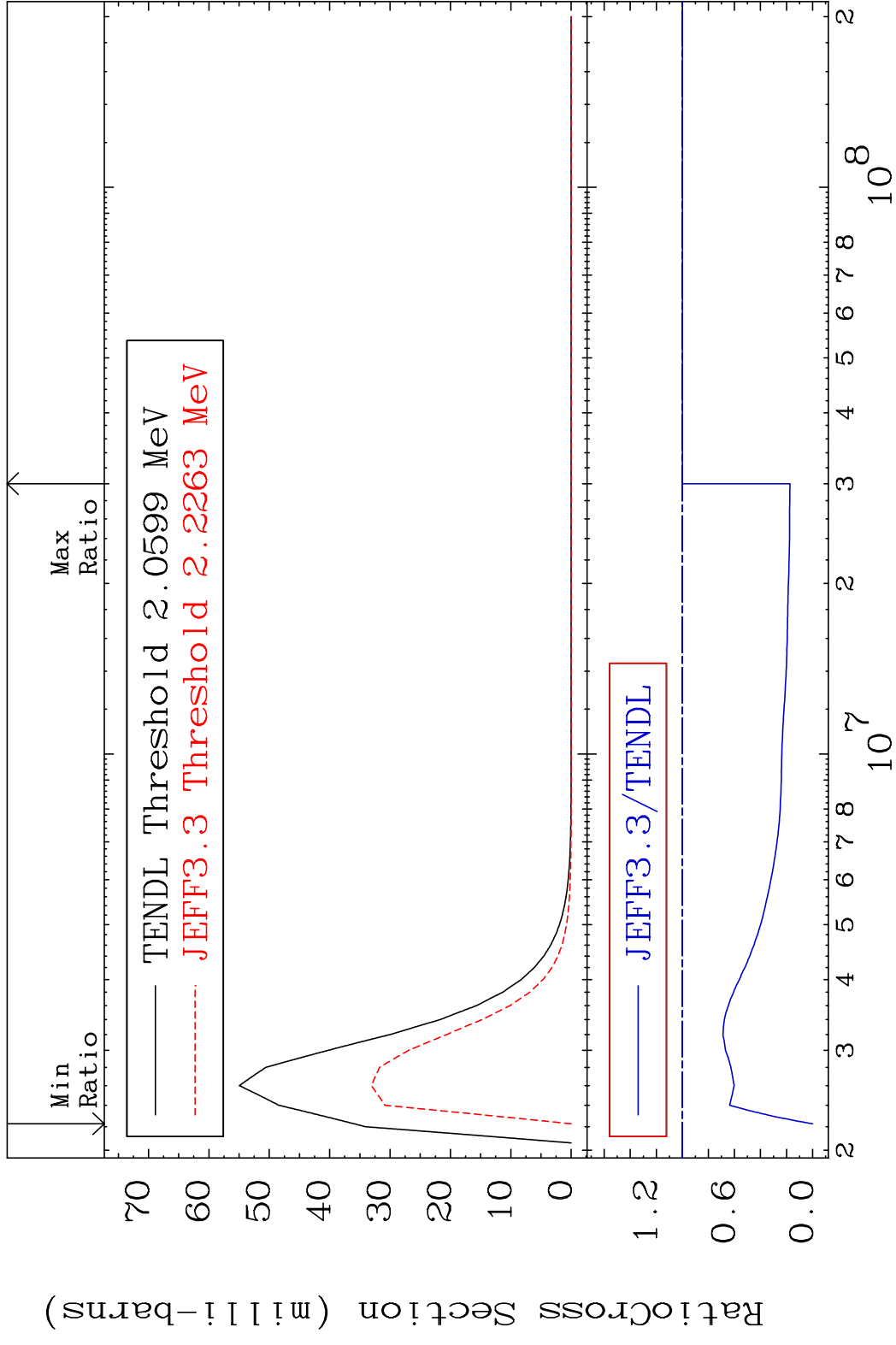


MAT 6231 MT= 58 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 9999. %

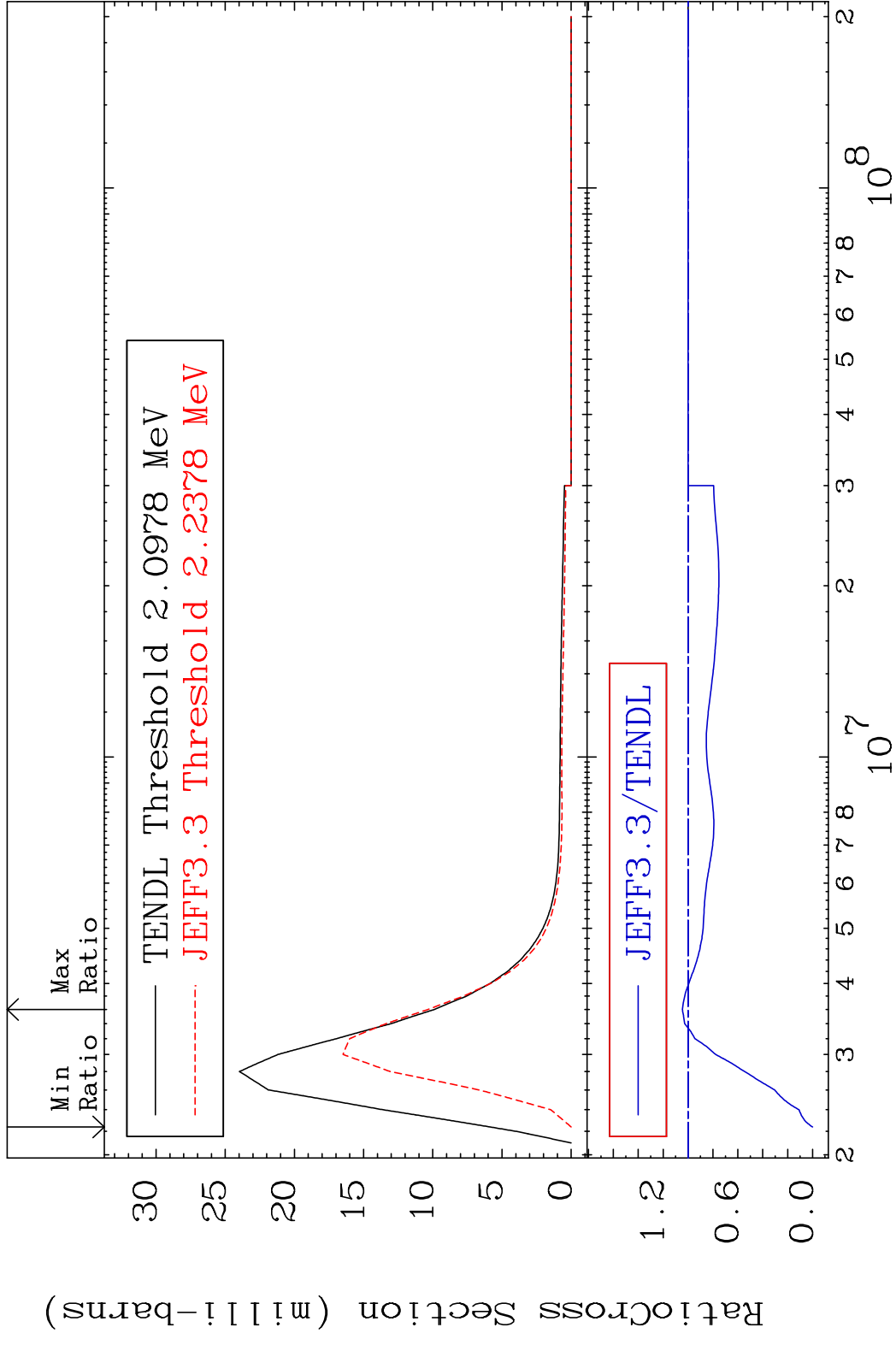


28 62-Sm-146

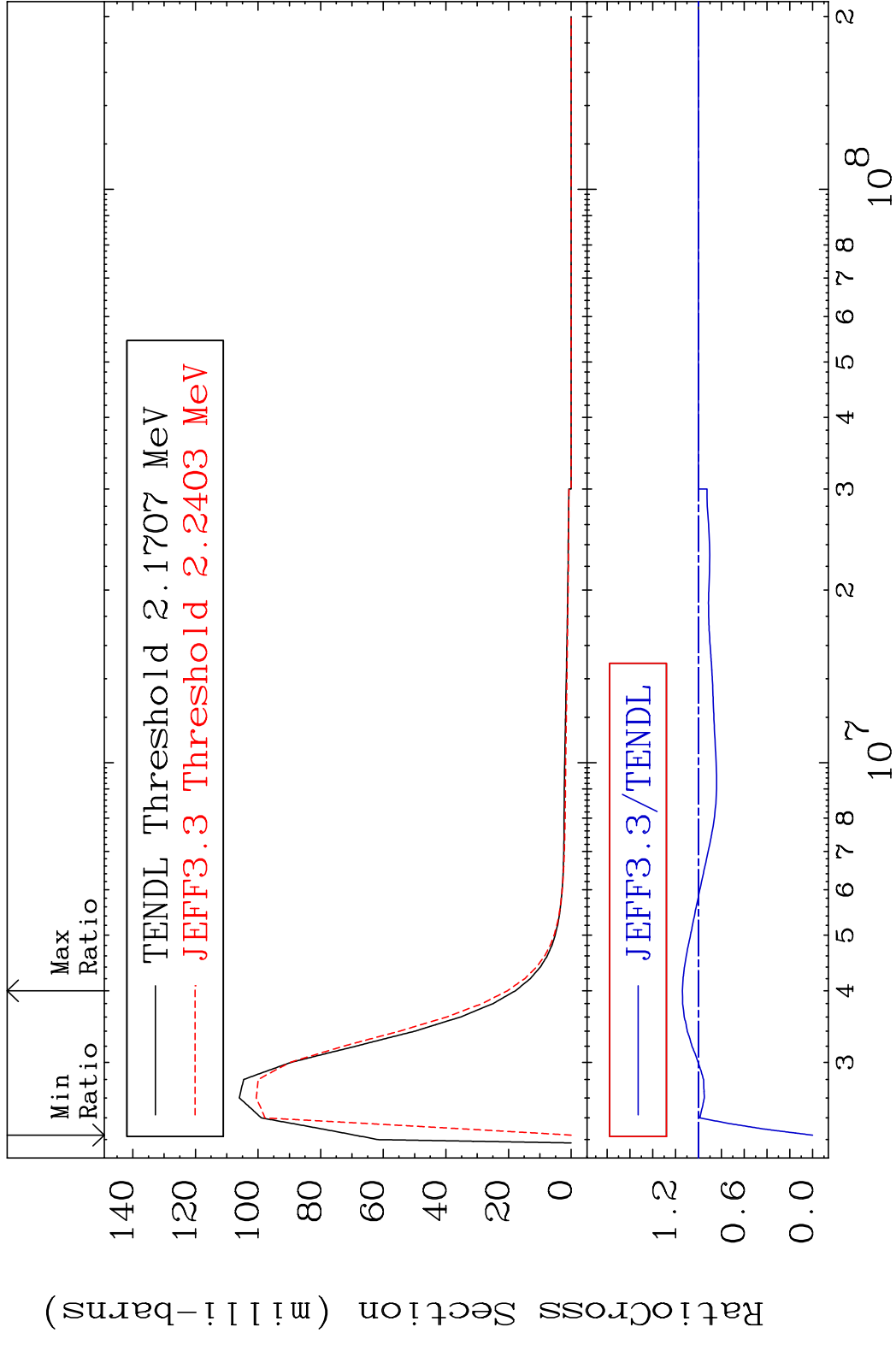
MAT 6231 MT= 59 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 0.000 %



MAT 6231 MT= 60 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 4.580 %

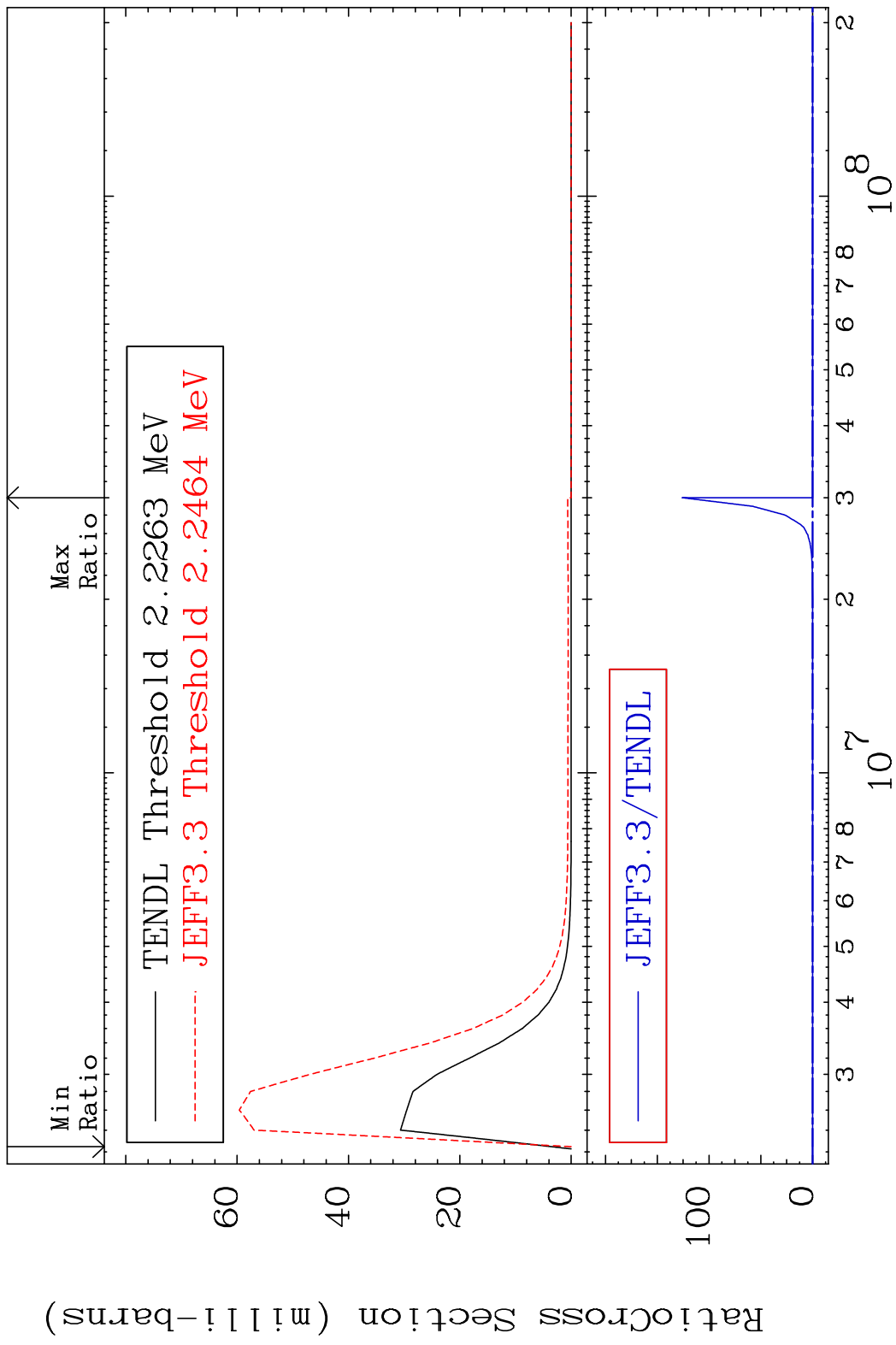


MAT 6231 MT= 61 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 14.12 %

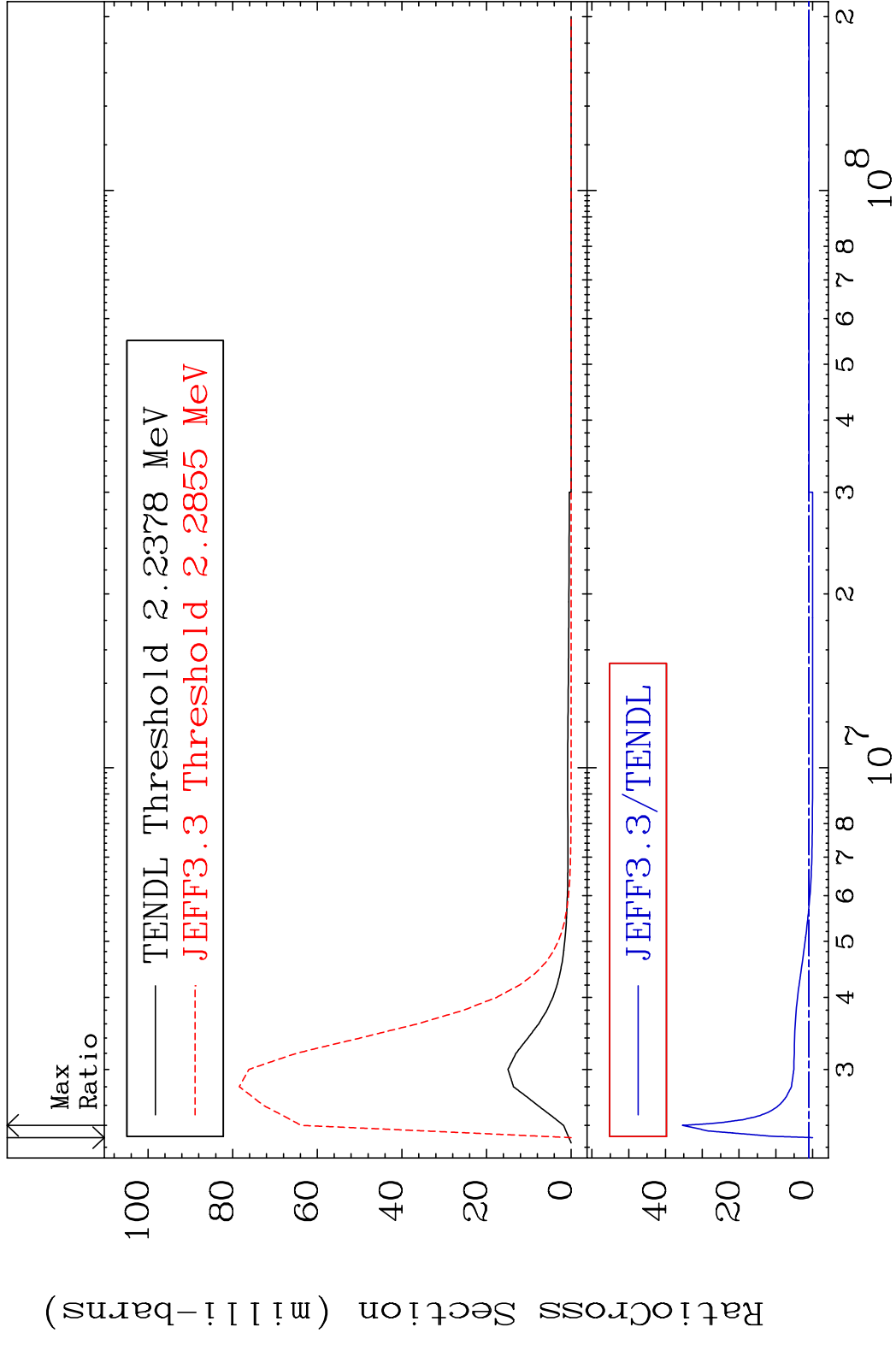




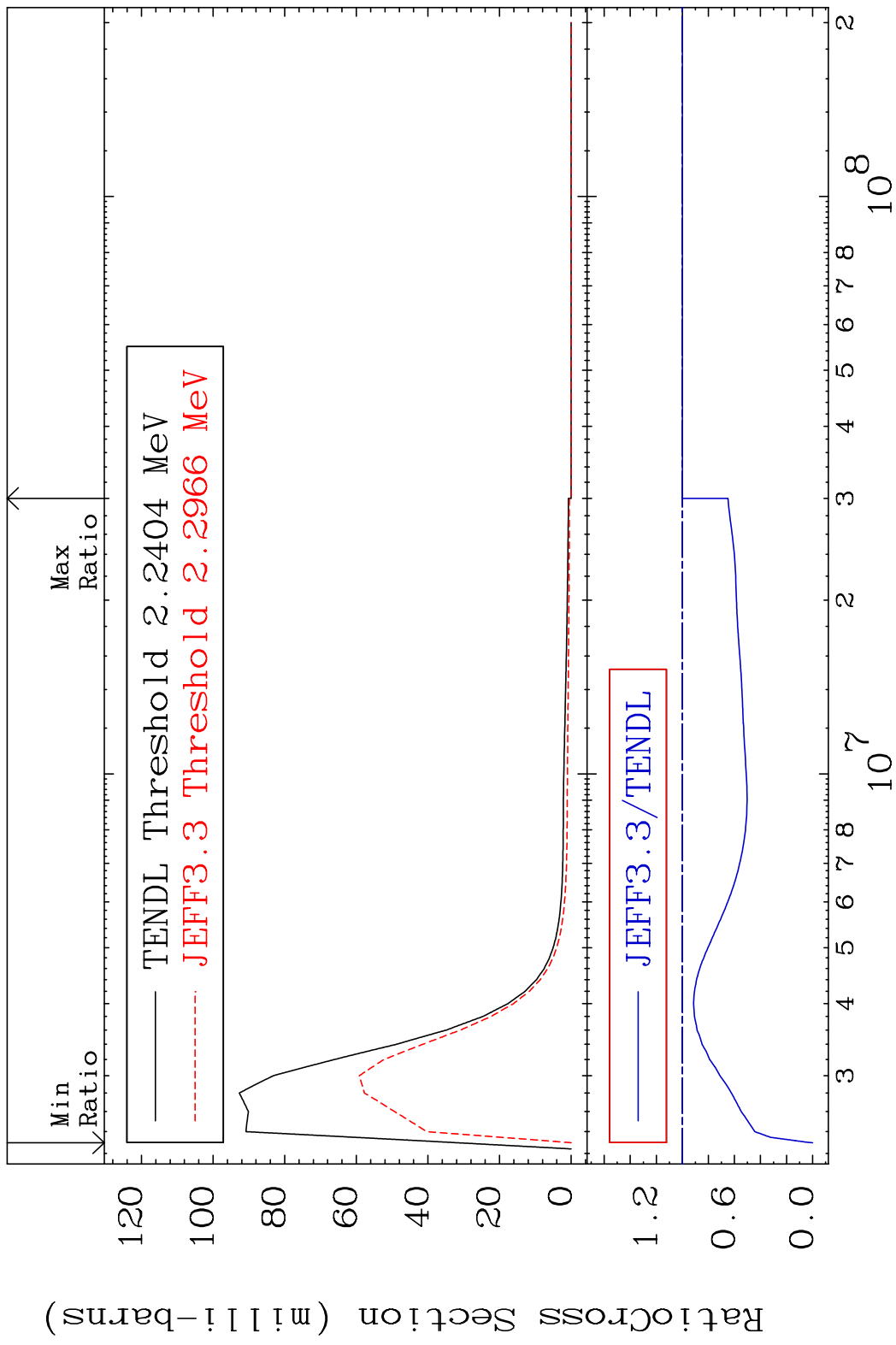
MAT 6231 MT= 62 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 9999. %



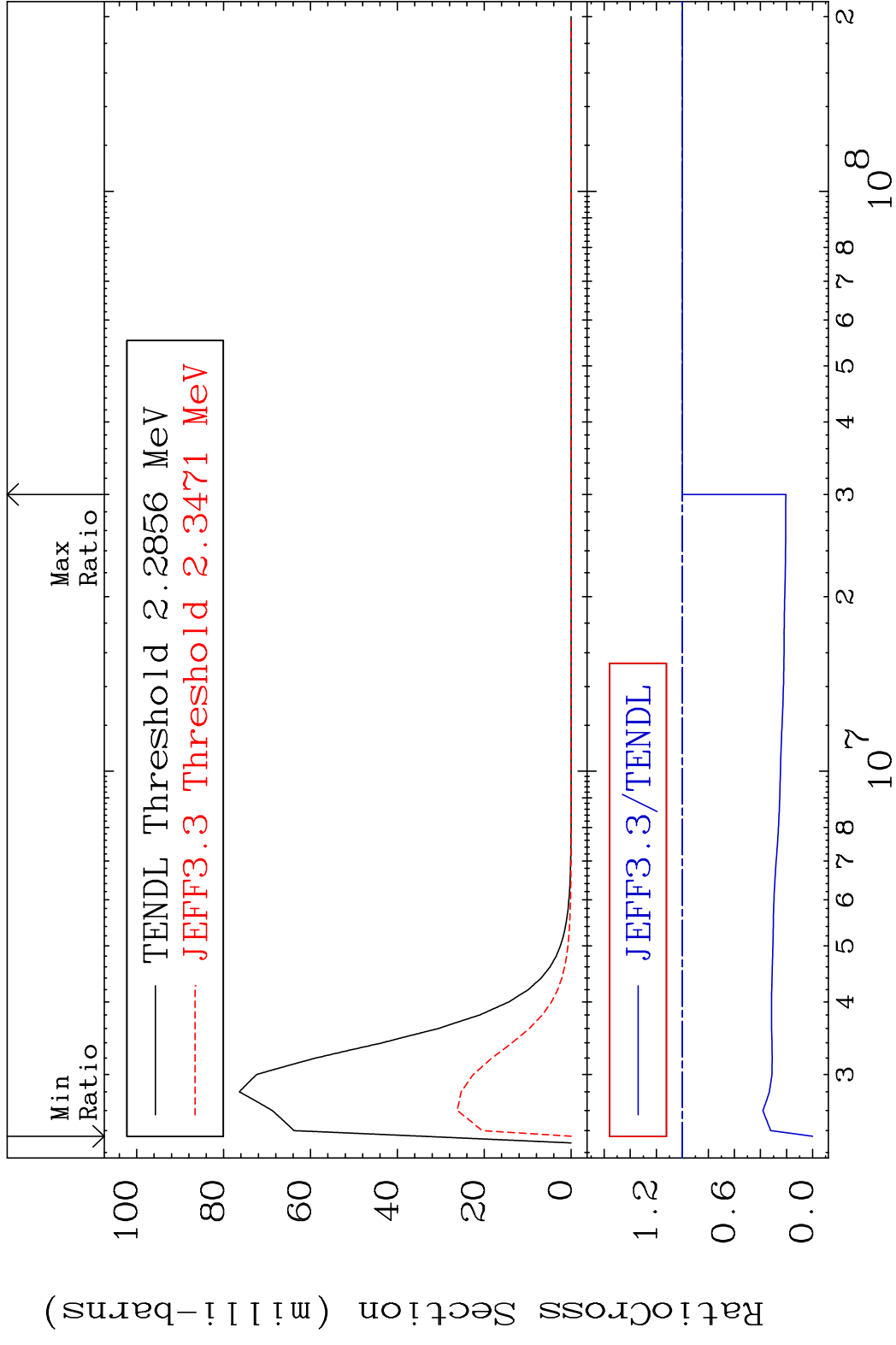
MAT 6231 MT= 63 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 3441. %



MAT 6231 MT= 64 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 0.000 %



MAT 6231 MT= 65 (n, n') Level 62-Sm-146  
 Cross Section -100.0 To 0.000 %

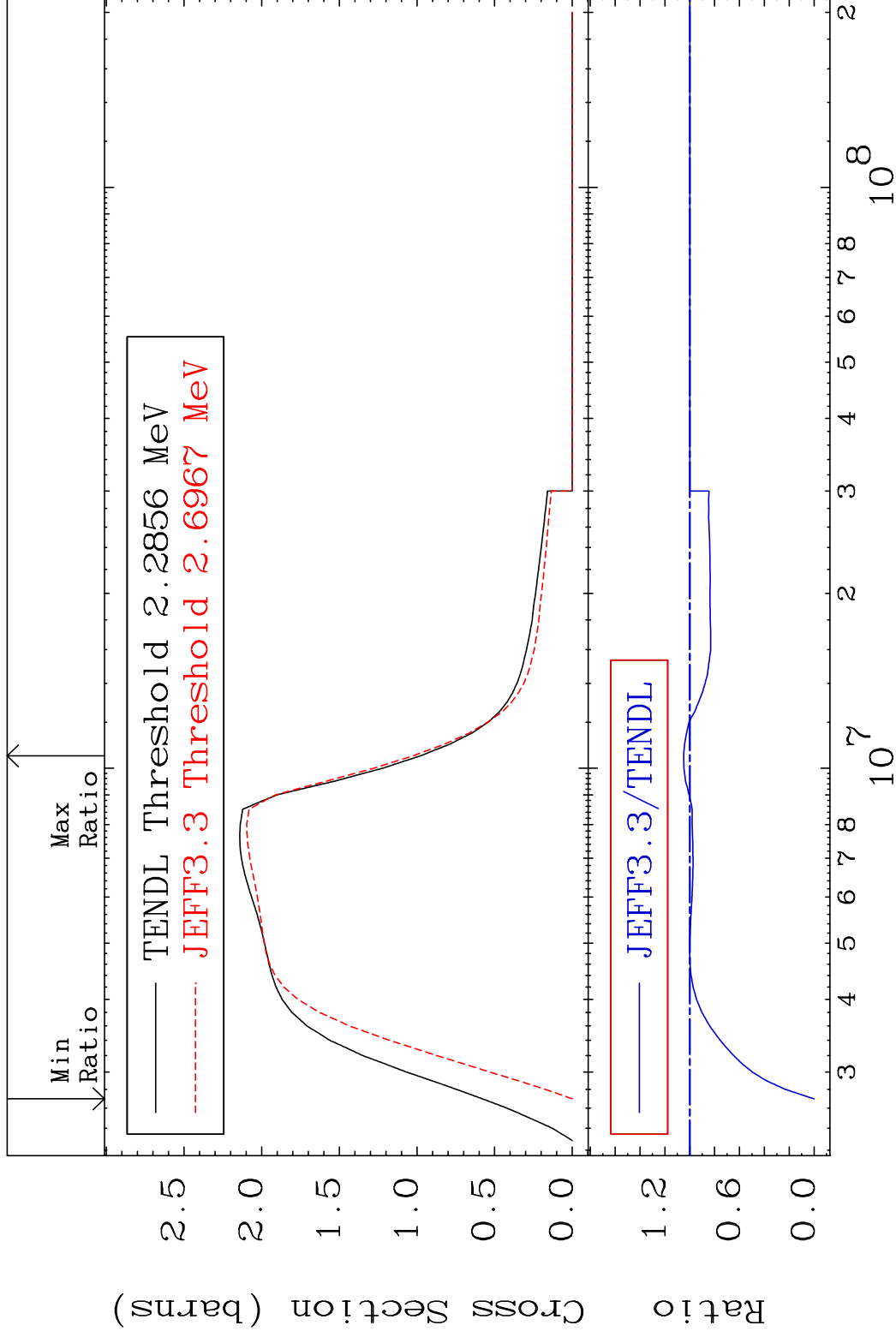


MAT 6231

(n, n') Continuum

62-Sm-146

Cross Section -100.0 To 4.931 %



36

Incident Energy (eV)

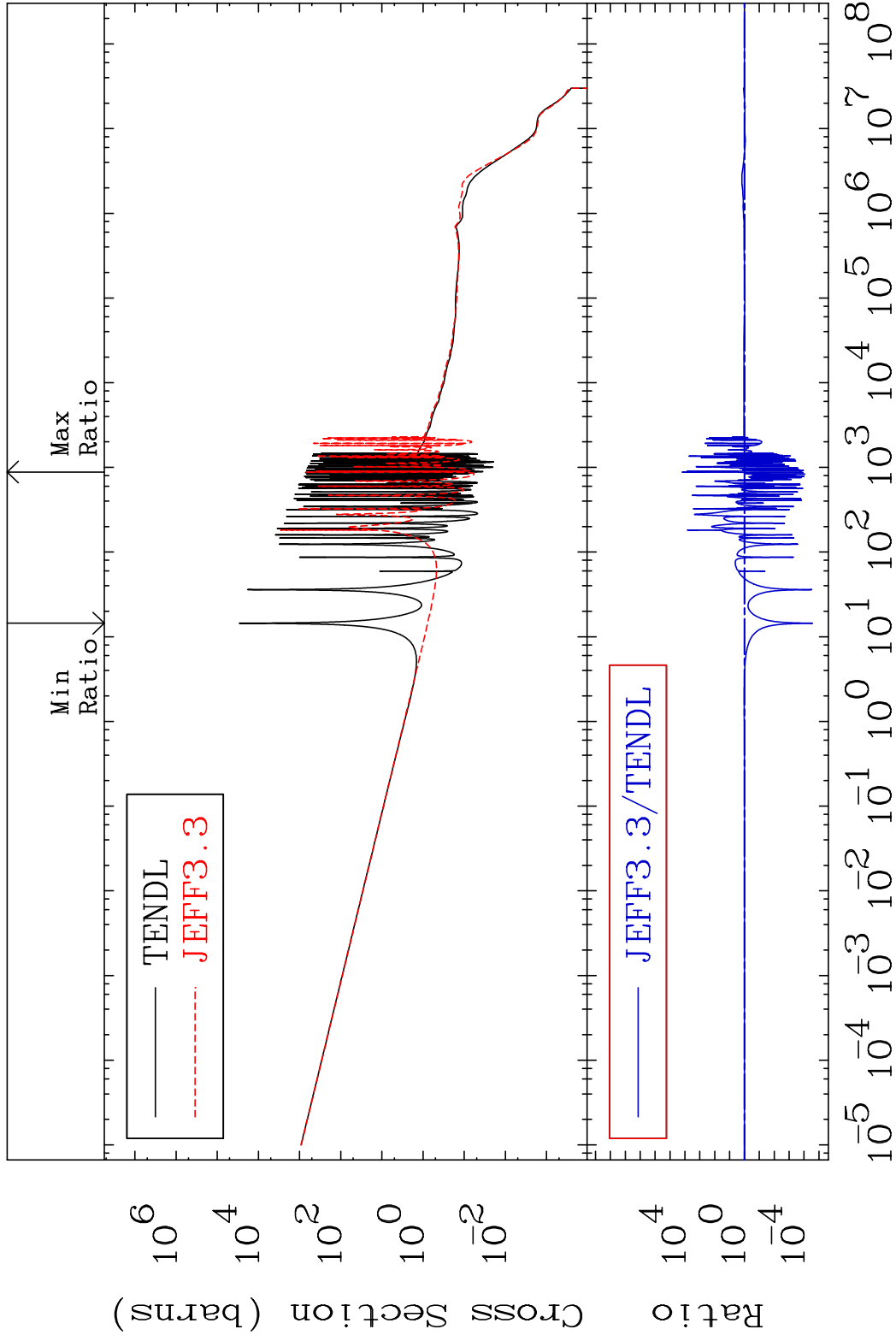
62-Sm-146

MAT 6231

(n,  $\gamma$ )

62-Sm-146

Cross Section -100.0 To 9999. %



37

Incident Energy (eV)

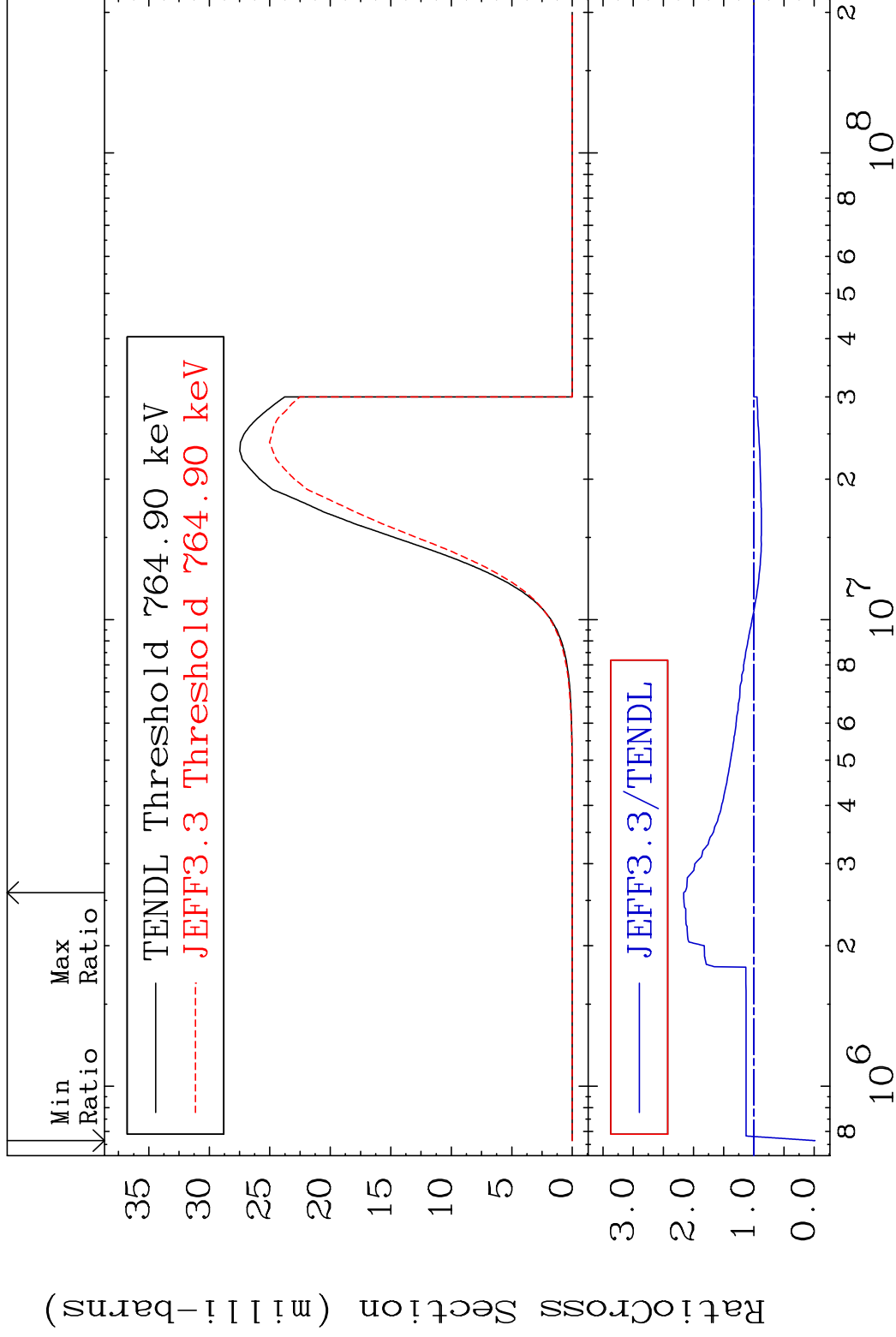
62-Sm-146

MAT 6231

(n,p)

62-Sm-146

Cross Section -100.0 To 116.3 %



38

Incident Energy (eV)

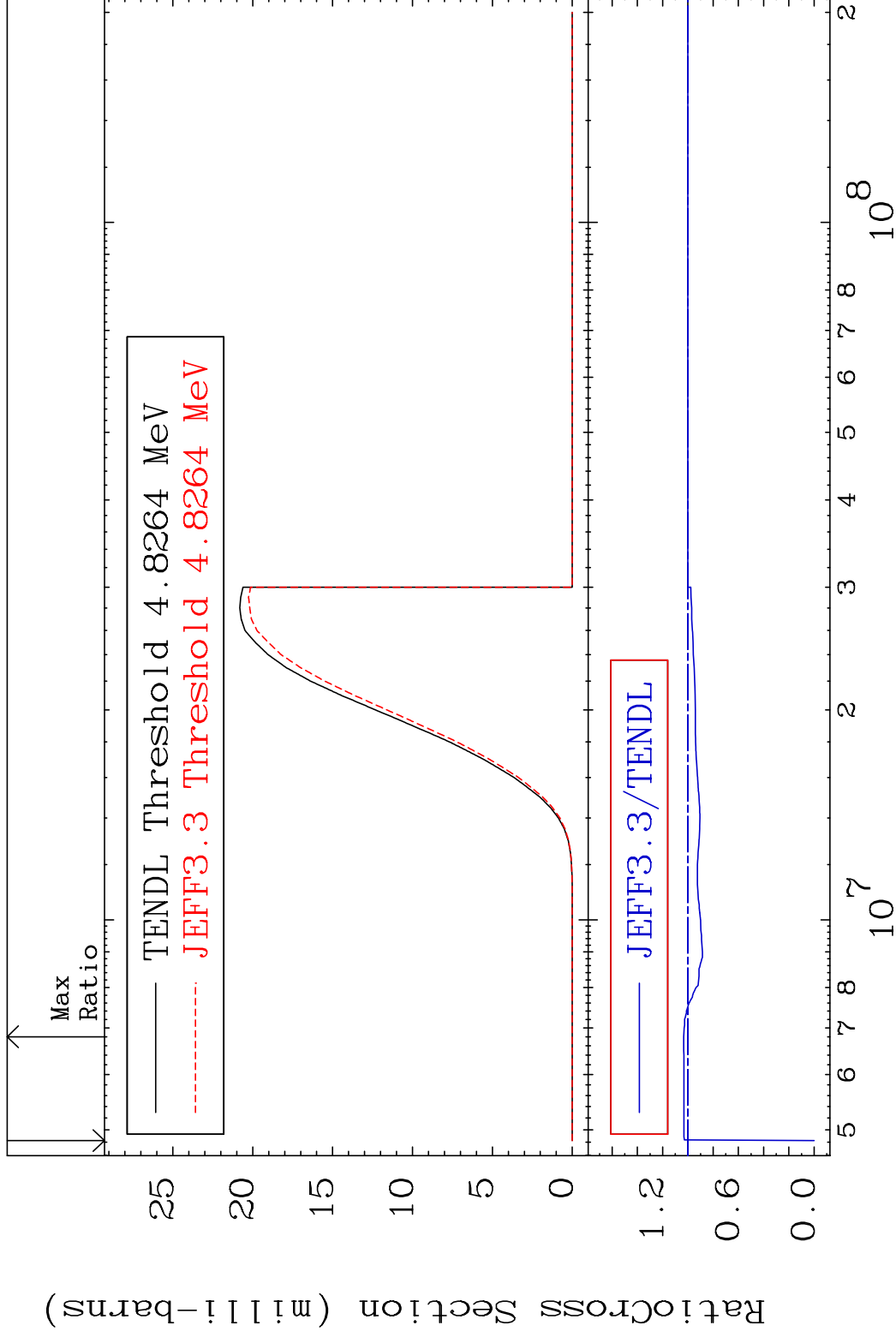
62-Sm-146

MAT 6231

(n, d)

62-Sm-146

Cross Section -100.0 To 3.337 %



39

Incident Energy (eV)

62-Sm-146

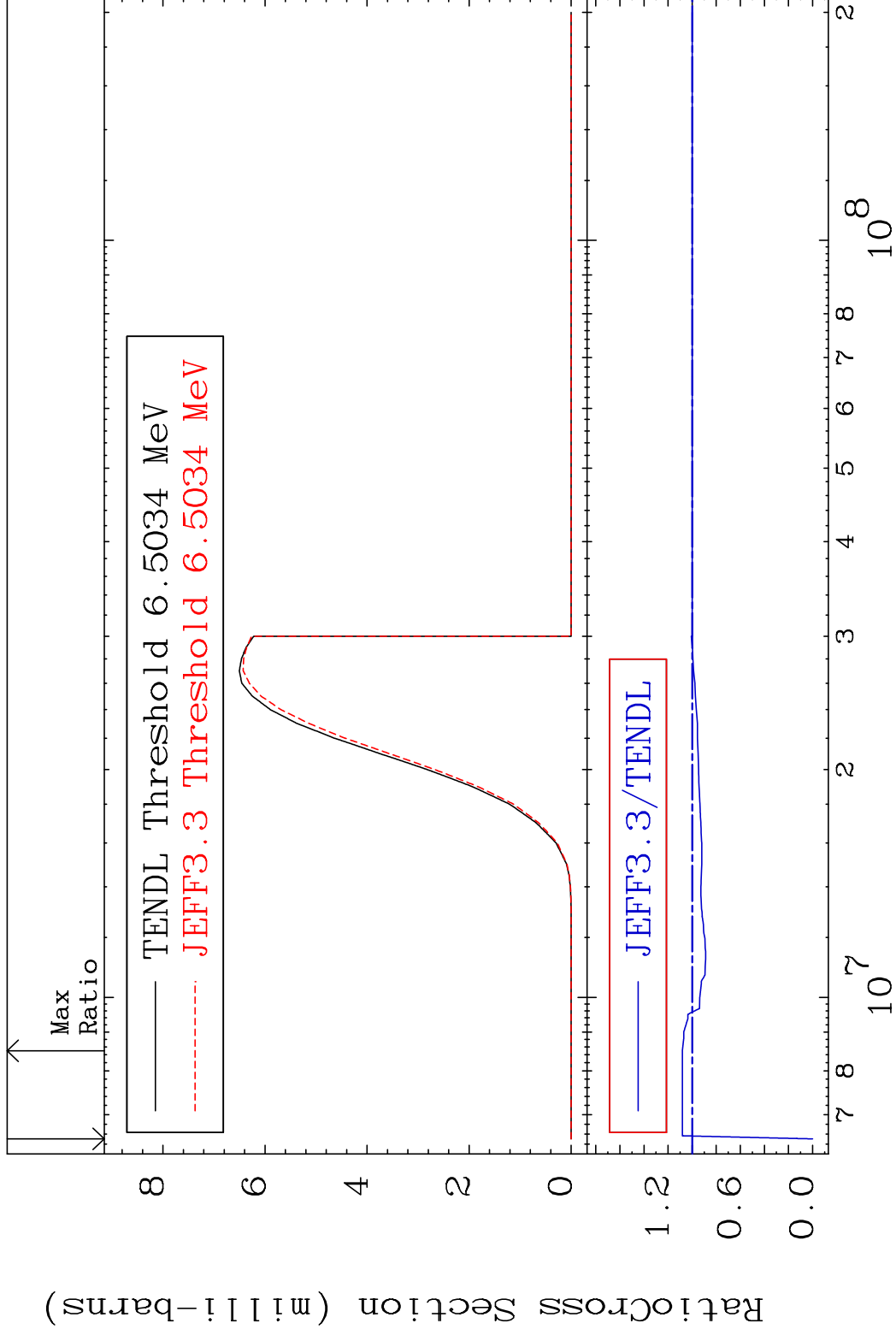


MAT 6231

(n, t)

62-Sm-146

Cross Section -100.0 To 8.141 %



40

Incident Energy (eV)

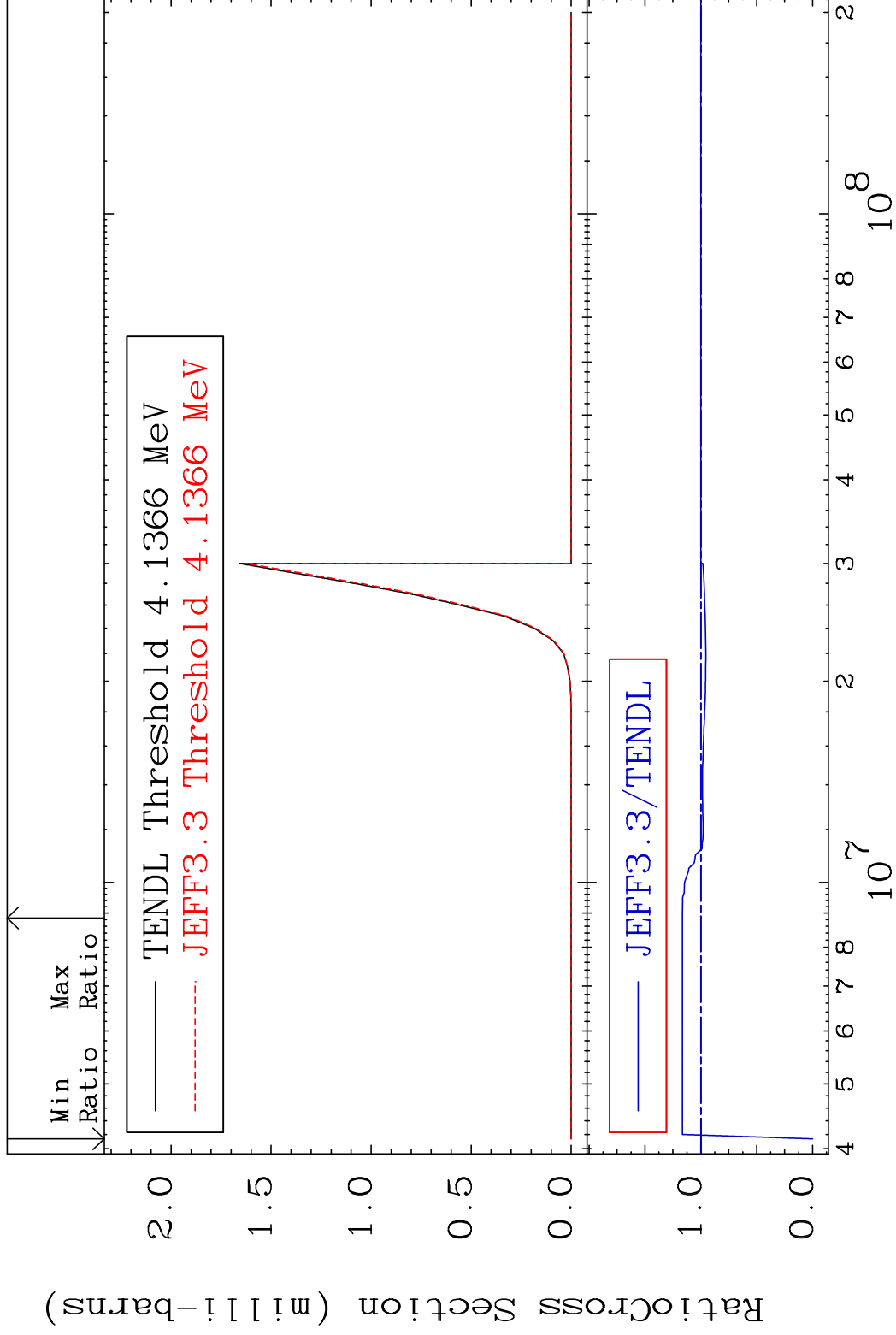
62-Sm-146

MAT 6231

(n, He-3)

62-Sm-146

Cross Section -100.0 To 16.52 %



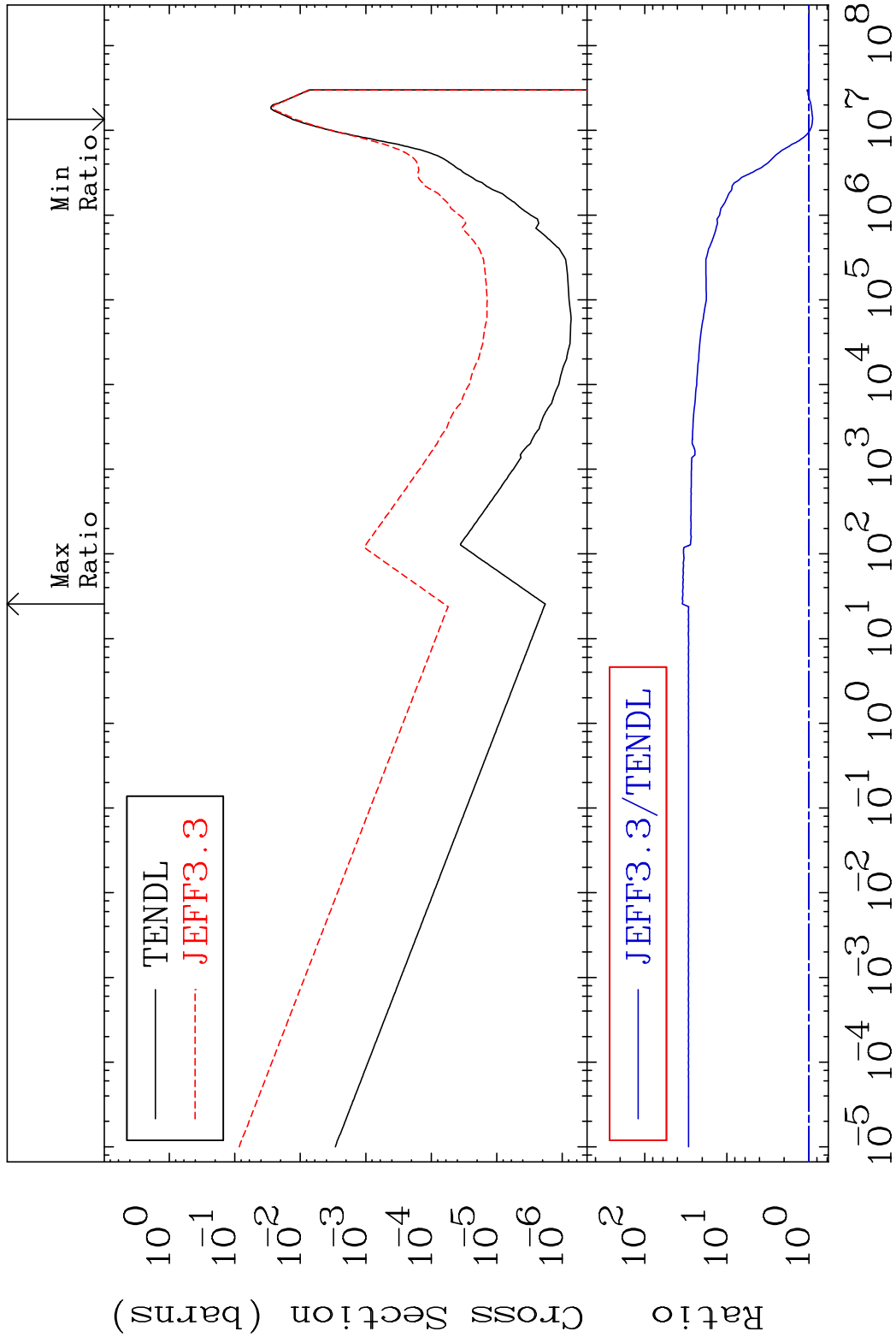
41

Incident Energy (eV)

62-Sm-146

MAT 6231

(n,  $\alpha$ )  
Cross Section -9.729 To 3388. %  
62-Sm-146



42

Incident Energy (eV)

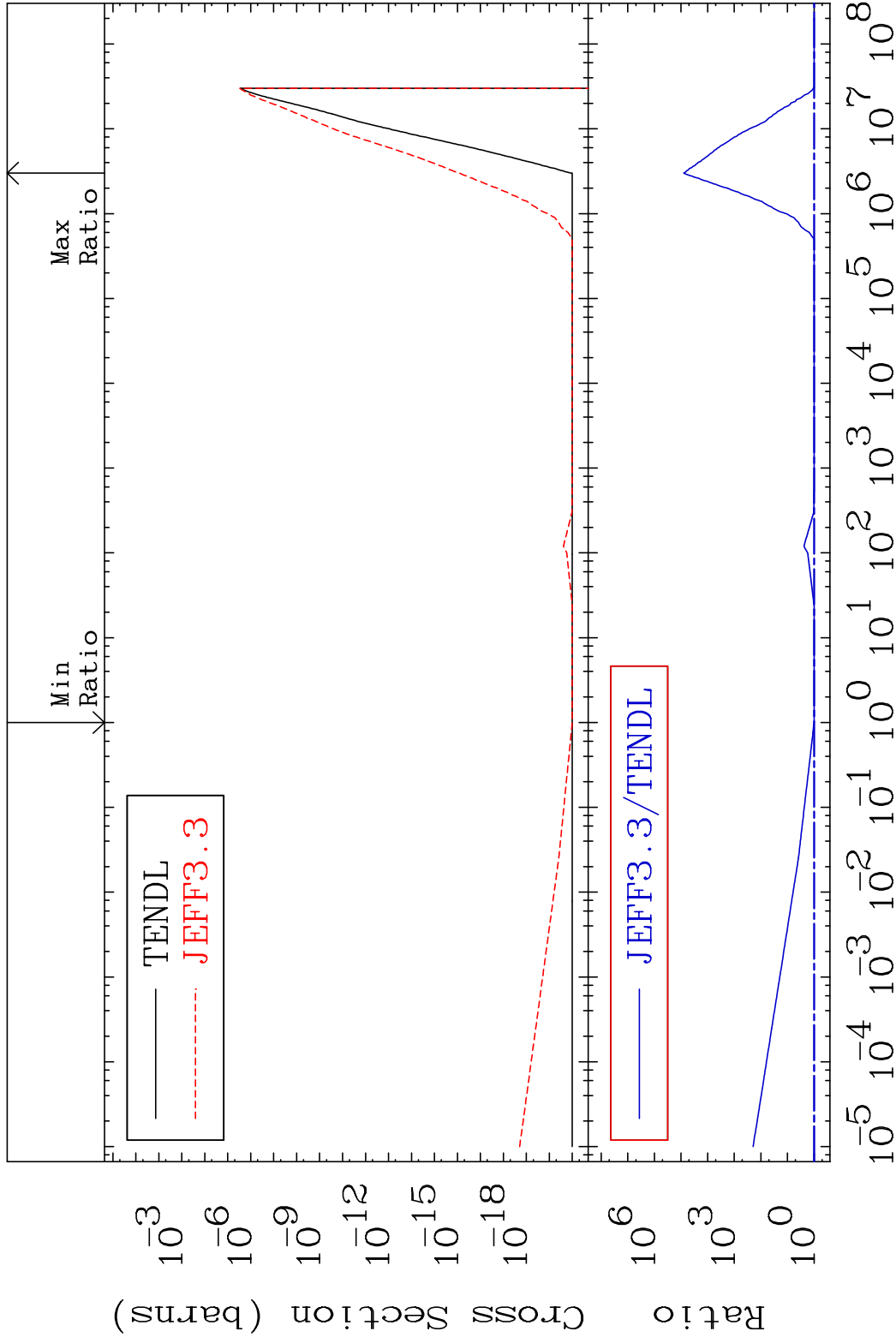
62-Sm-146

MAT 6231

(n, 2α)

62-Sm-146

Cross Section 0.000 To 9999. %



43

Incident Energy (eV)

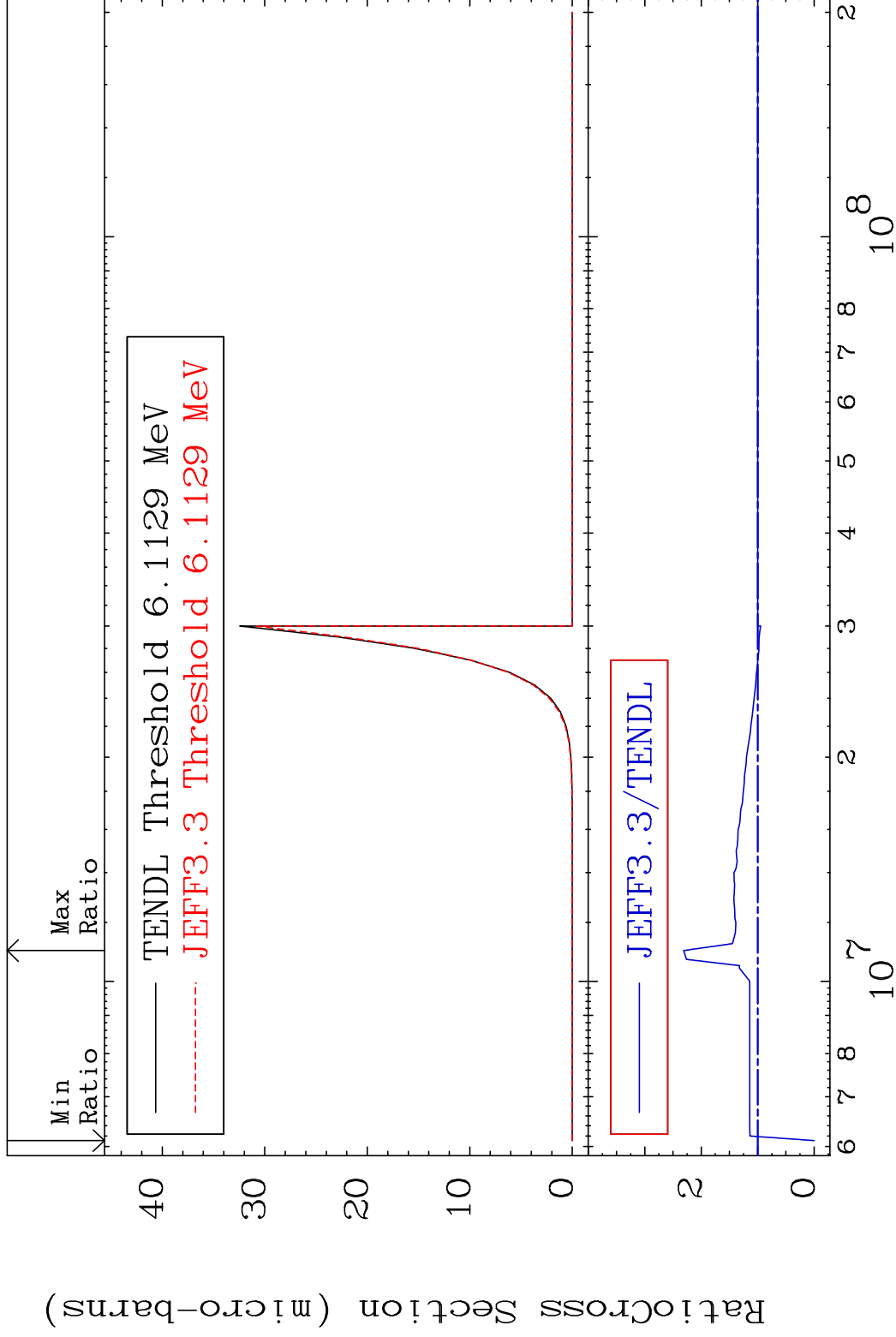
62-Sm-146

MAT 6231

(n,2p)

62-Sm-146

Cross Section -100.0 To 131.1 %



44

Incident Energy (eV)

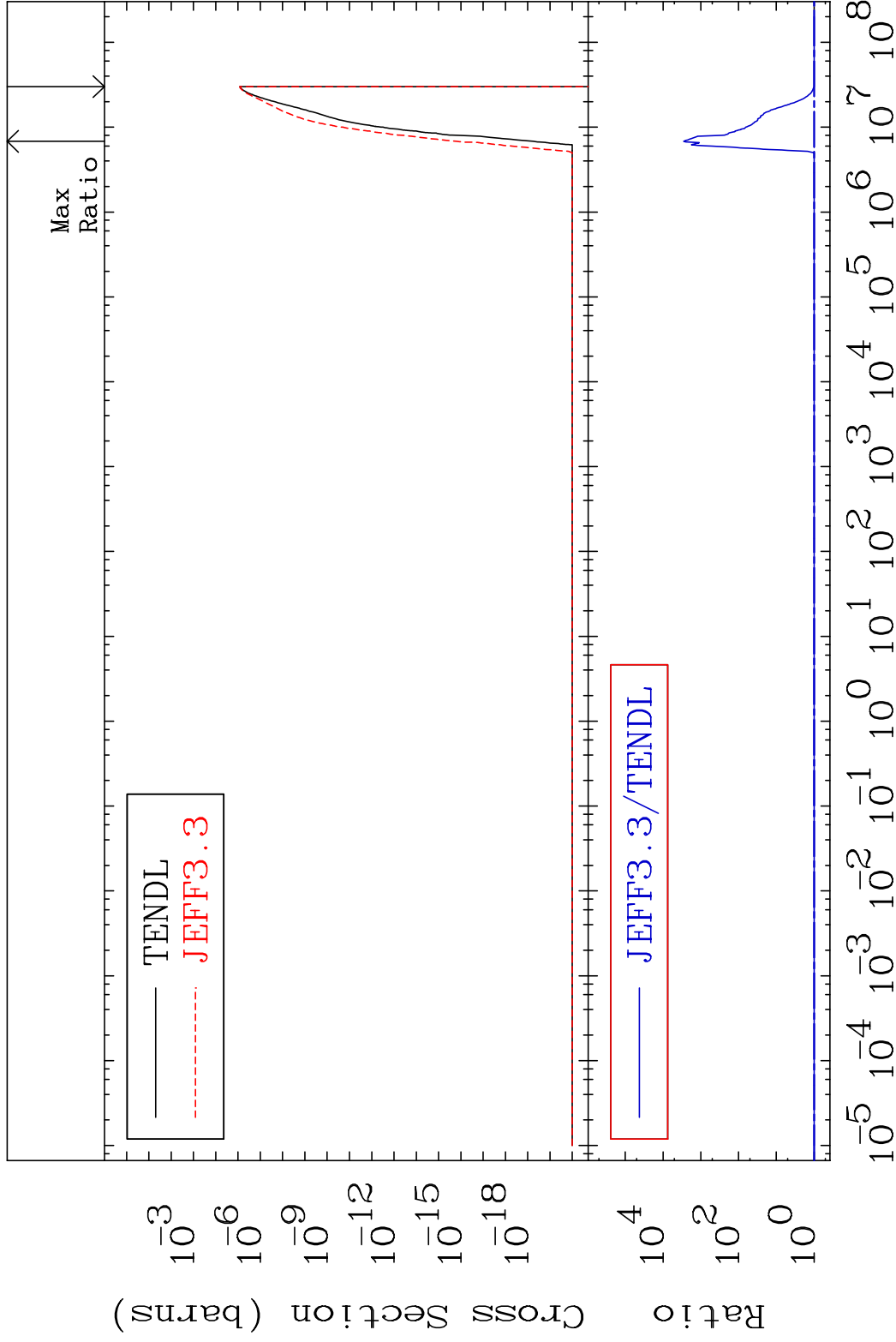
62-Sm-146

MAT 6231

(n,p)  $\alpha$

62-Sm-146

Cross Section -0.236 To 9999. %



45

Incident Energy (eV)

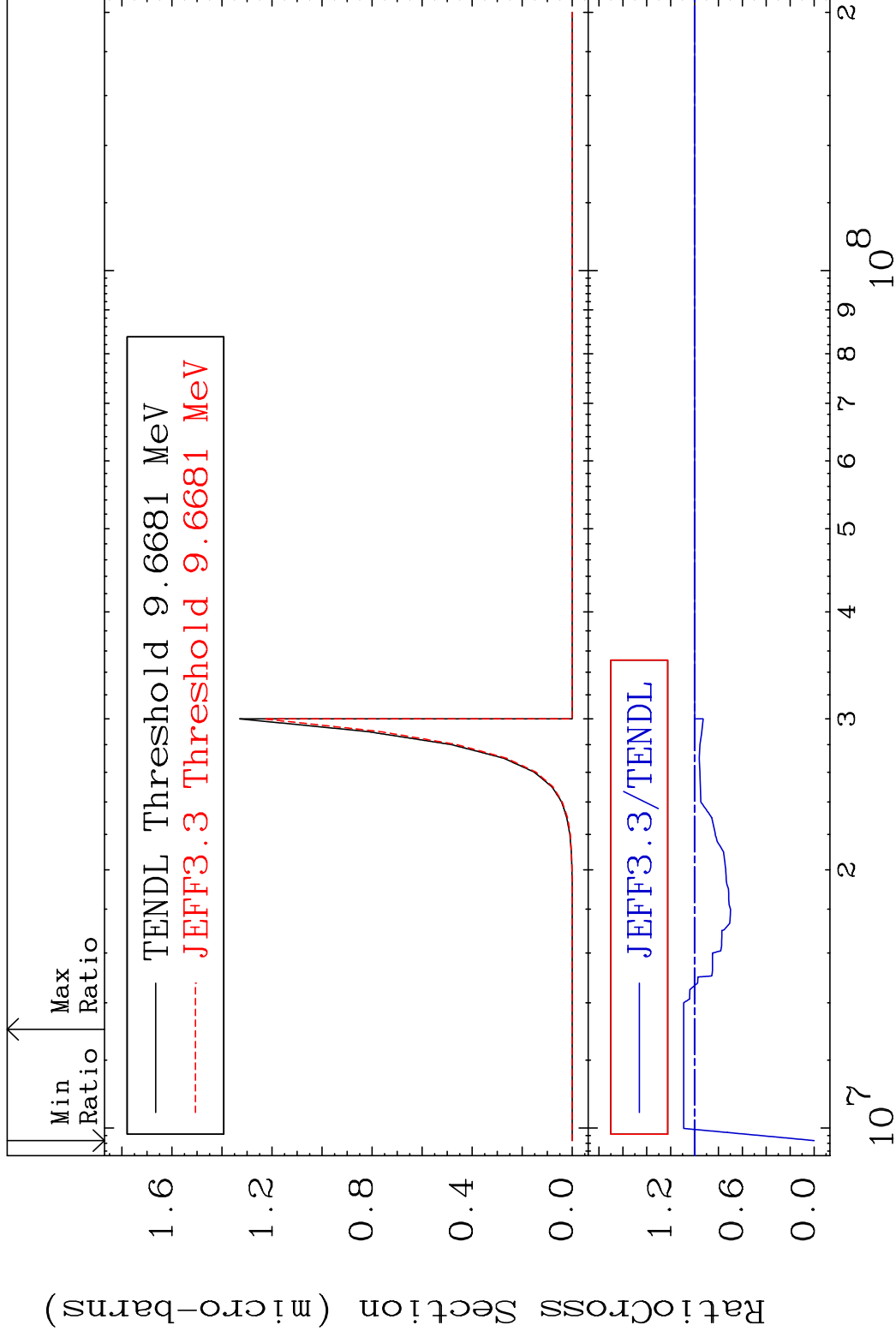
62-Sm-146

MAT 6231

(n,p) d

62-Sm-146

Cross Section -100.0 To 9.107 %



46

Incident Energy (eV)

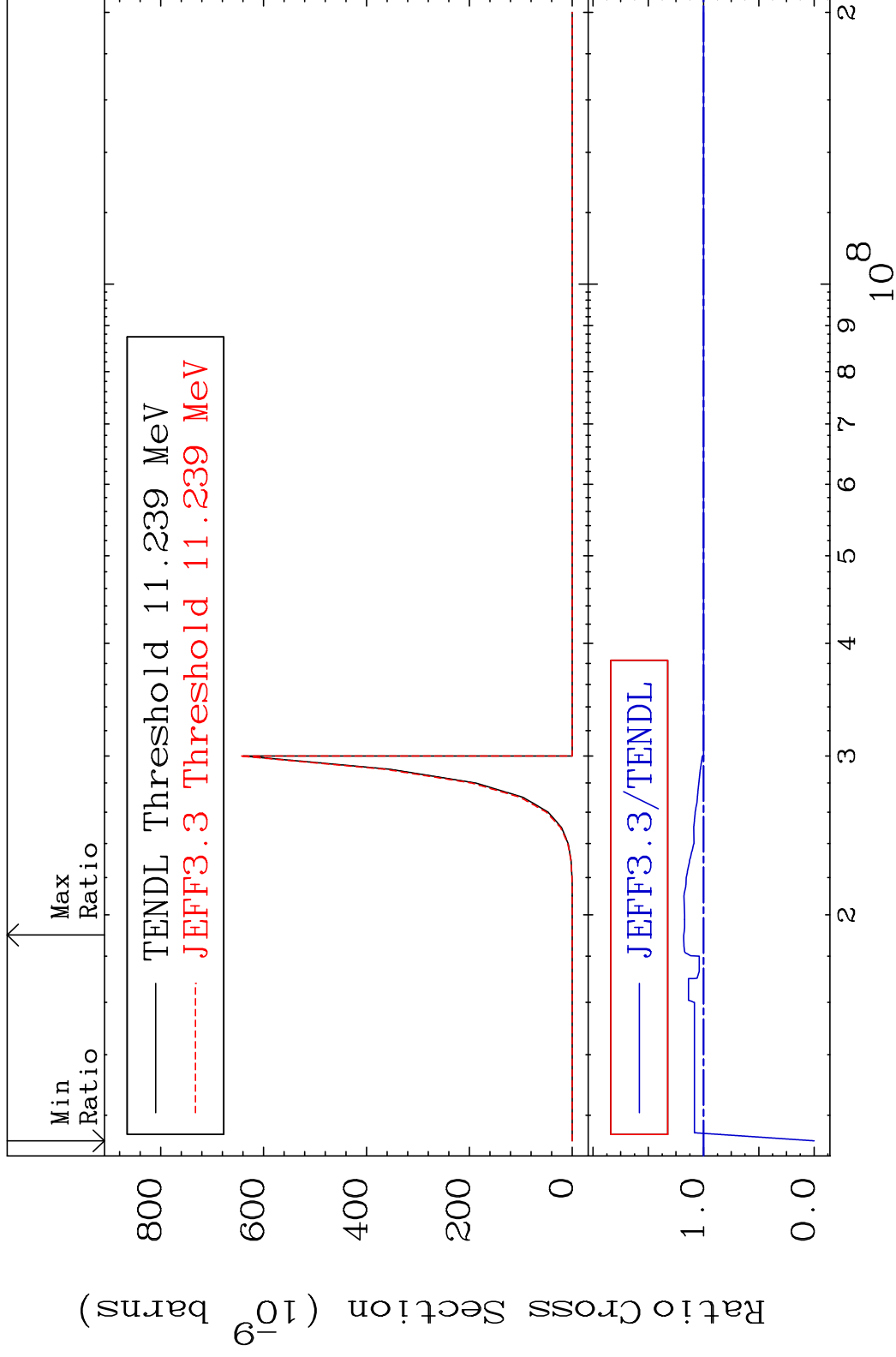
62-Sm-146

MAT 6231

(n,p) t

62-Sm-146

Cross Section -100.0 To 18.04 %



47

Incident Energy (eV)

62-Sm-146

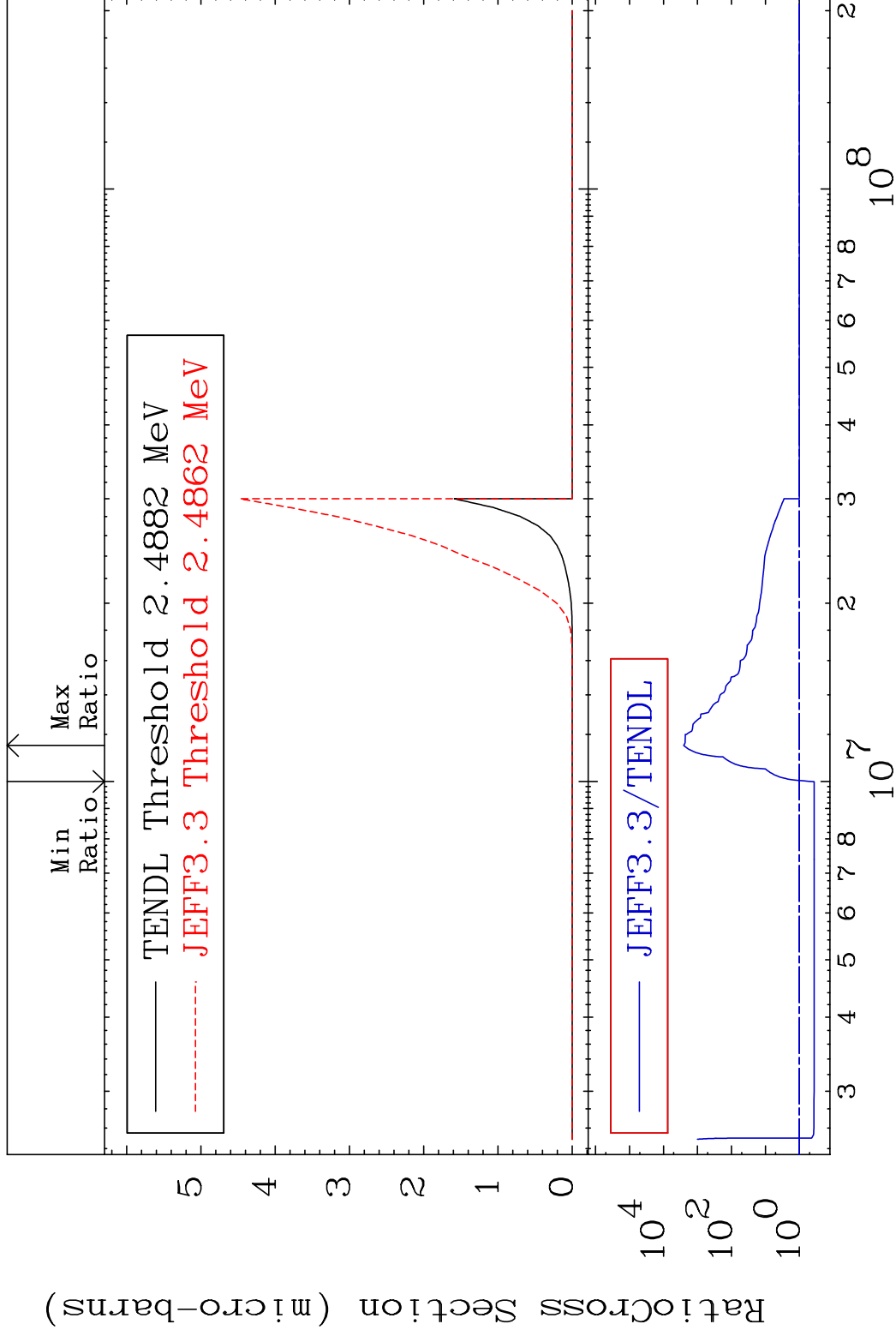


MAT 6231

(n, d)  $\alpha$

62-Sm-146

Cross Section -63.22 To 9999. %



48

Incident Energy (eV)

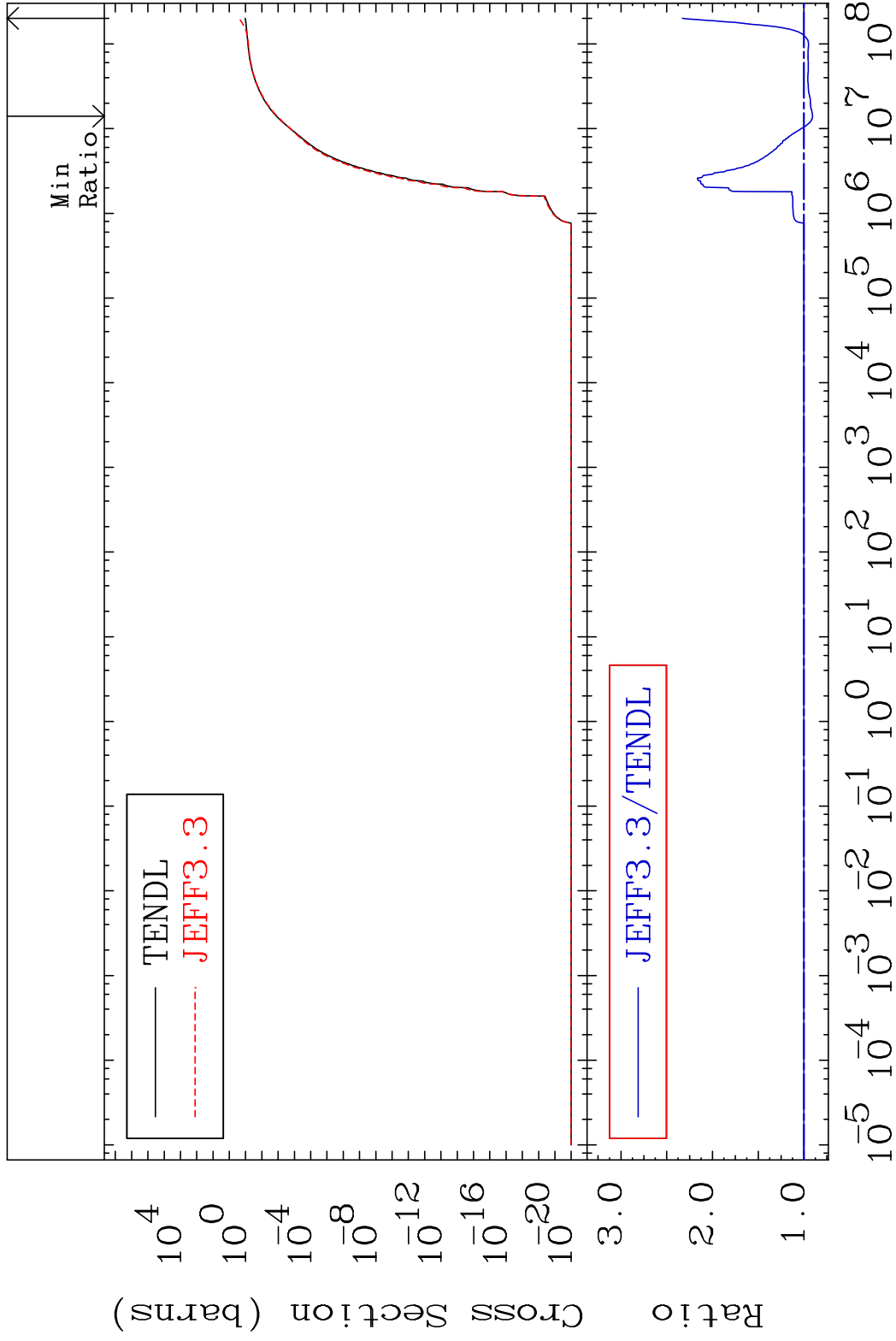
62-Sm-146

MAT 6231

Hydrogen Production

62-Sm-146

Cross Section -9.385 To 132.9 %

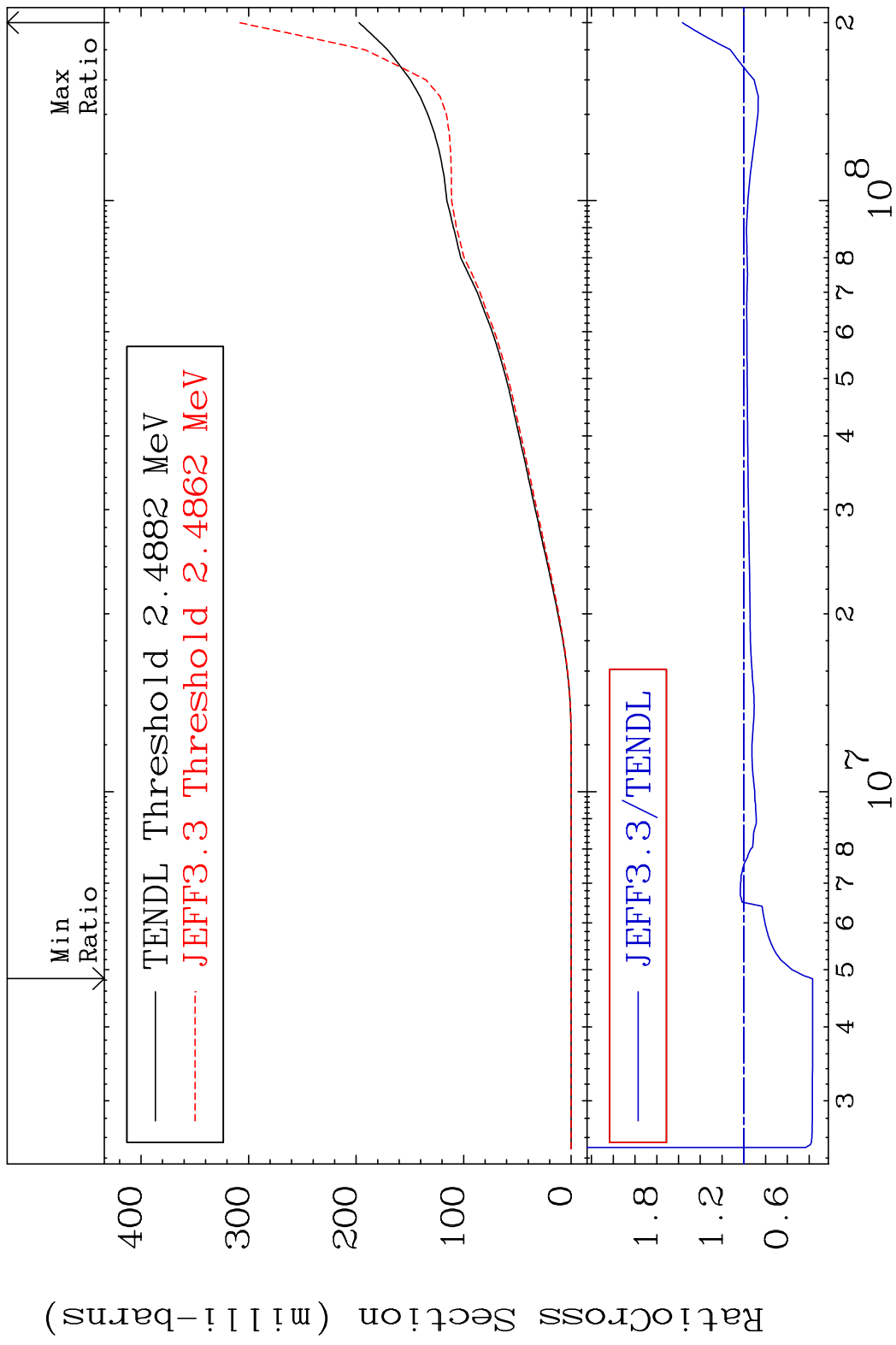


49

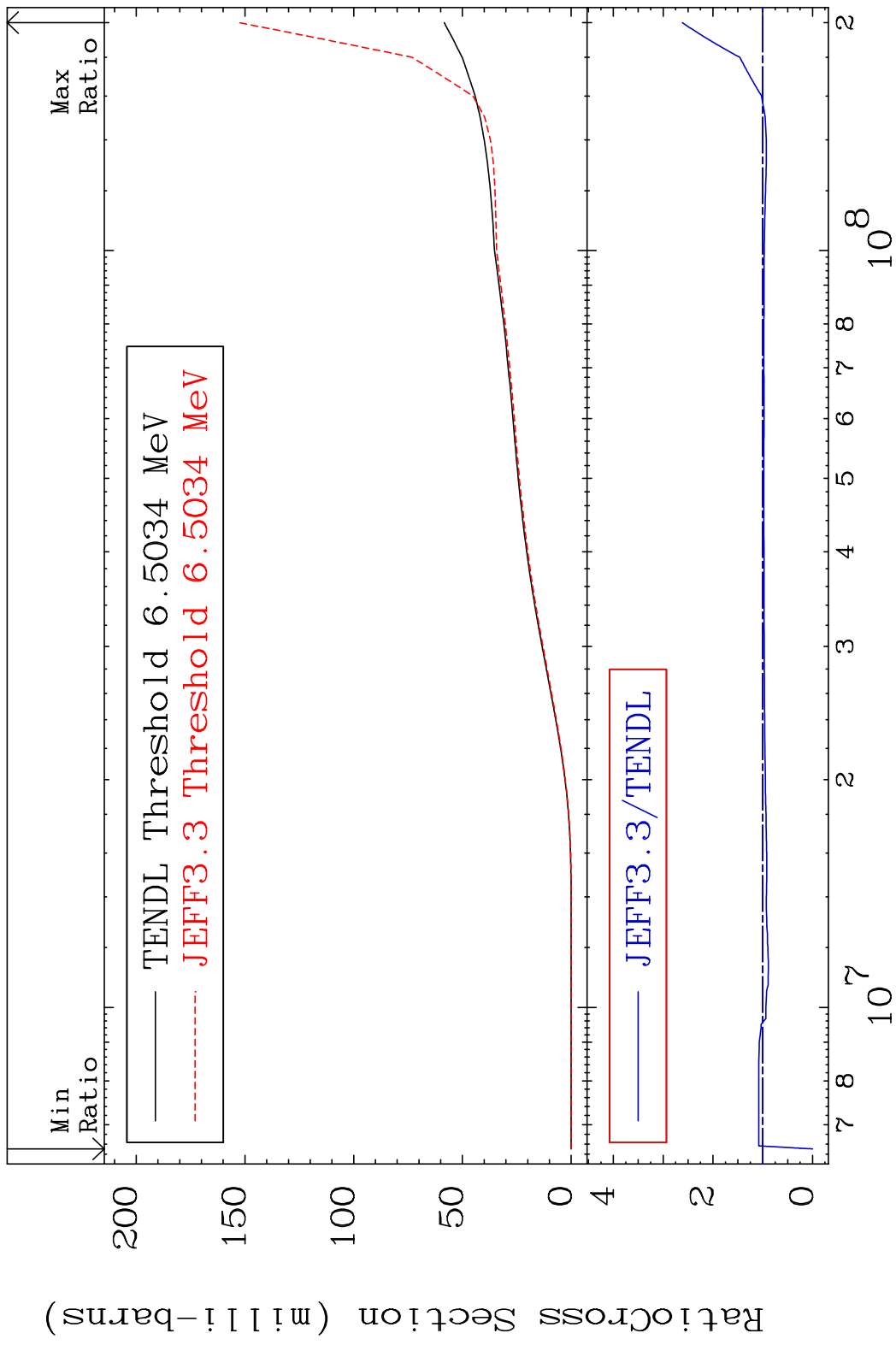
Incident Energy (eV)

62-Sm-146

MAT 6231 Deuterium Production 62-Sm-146  
 Cross Section -63.20 To 56.47 %



MAT 6231 Tritium Production 62-Sm-146  
 Cross Section -100.0 To 161.4 %



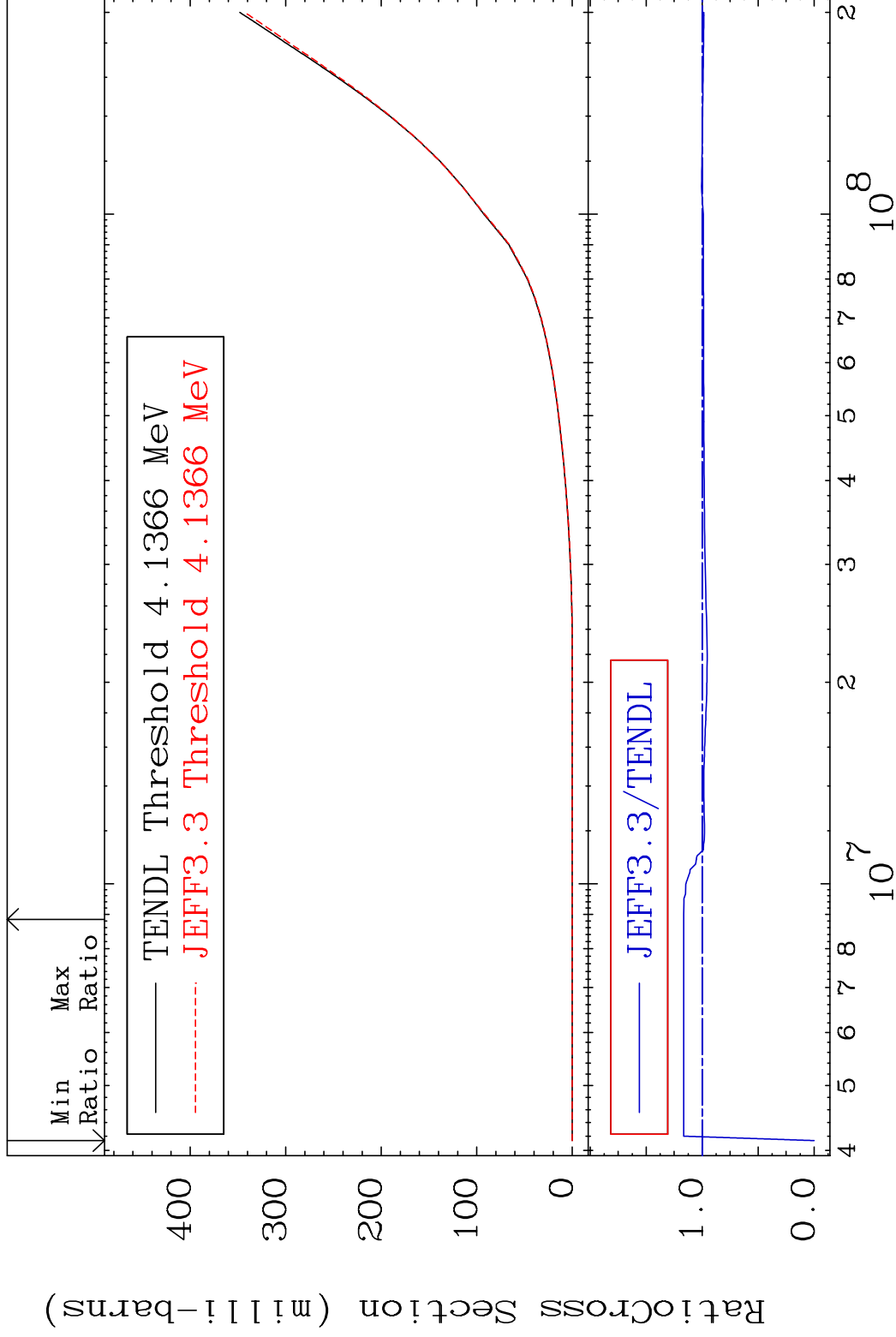
51 Incident Energy (eV) 62-Sm-146

MAT 6231

He-3 Production

62-Sm-146

Cross Section -100.0 To 16.52 %



52

Incident Energy (eV)

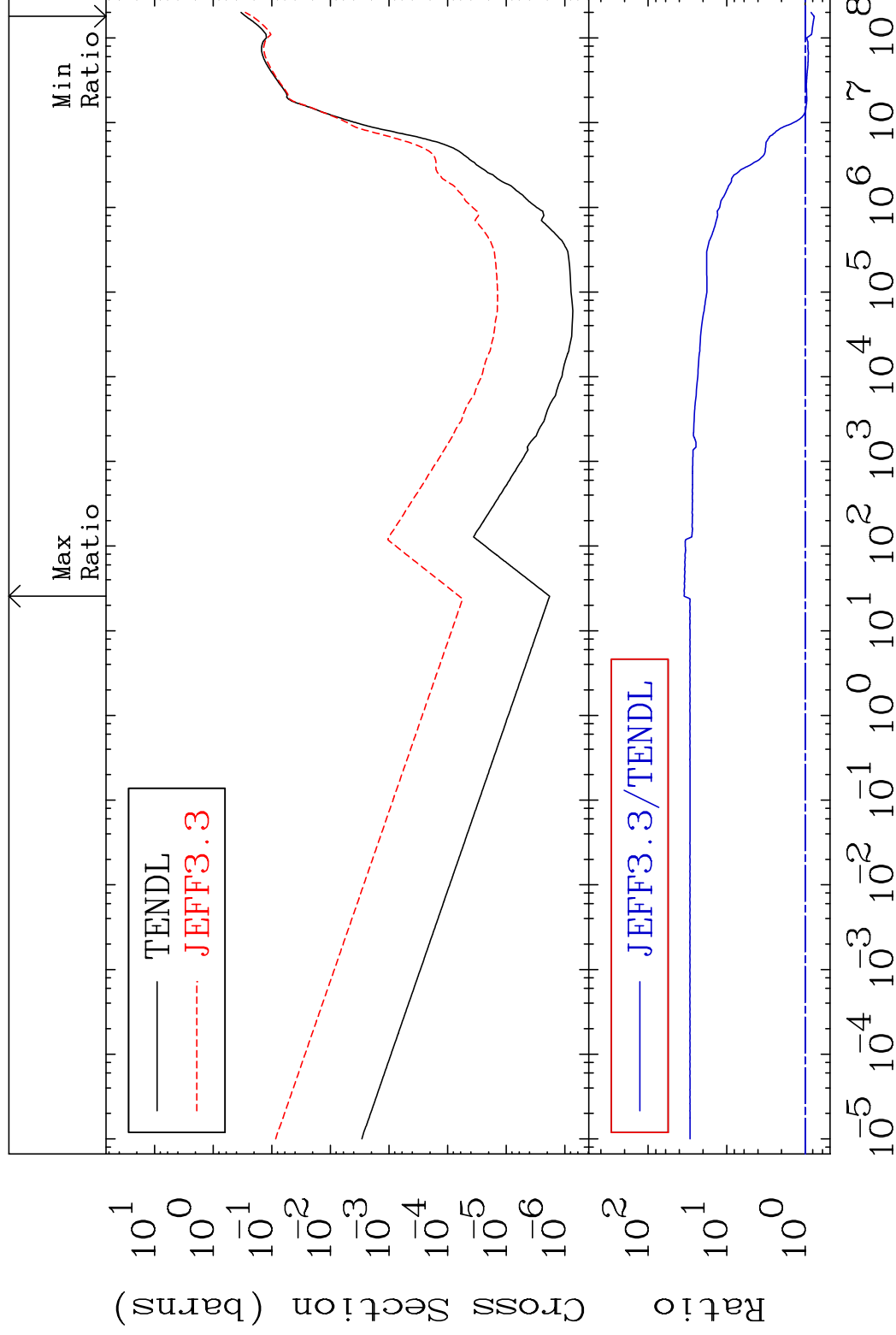
62-Sm-146

MAT 6231

He-4 Production

62-Sm-146

Cross Section -23.45 To 3388. %

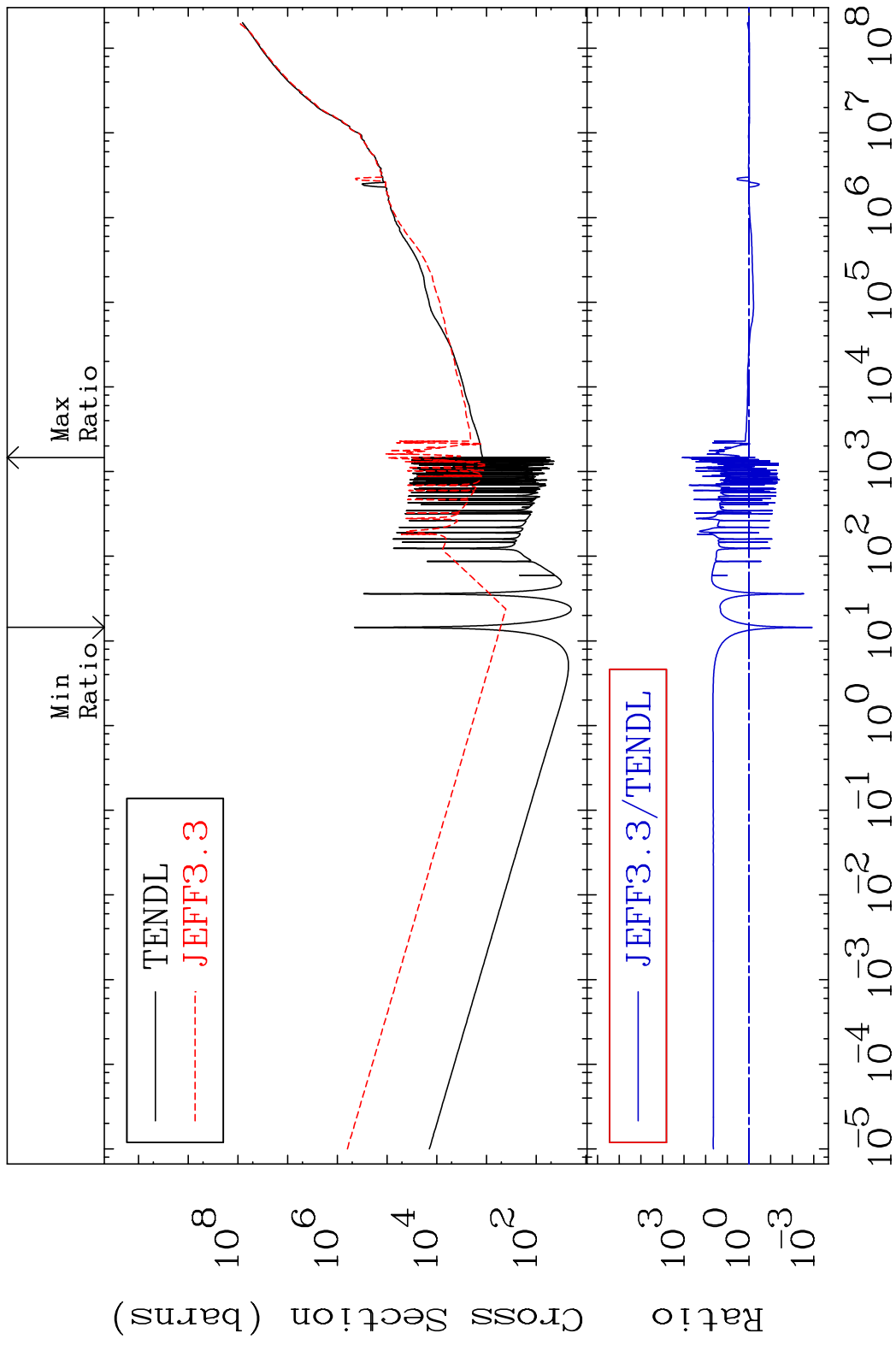


53

Incident Energy (eV)

62-Sm-146

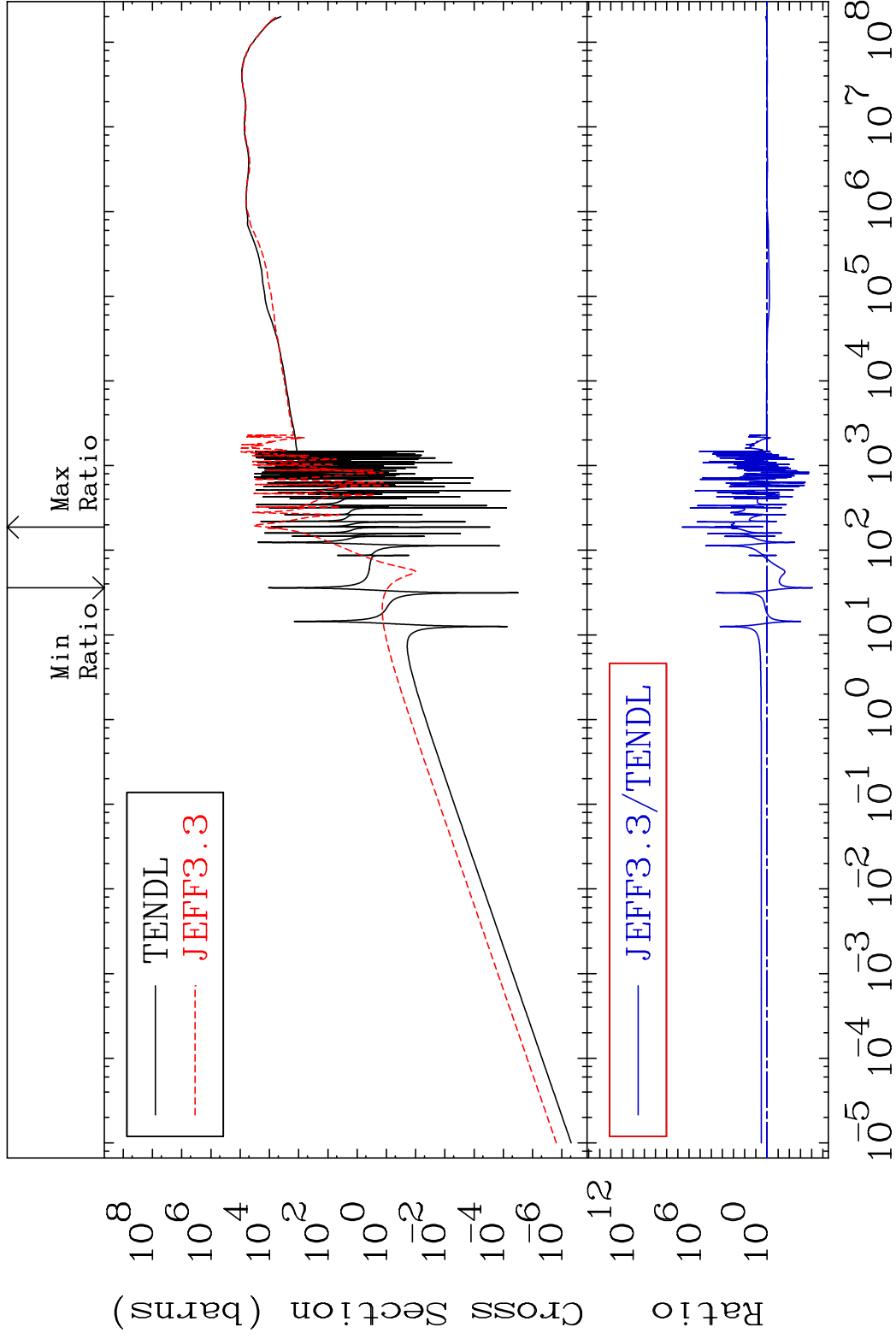
MAT 6231 Kerma total (eV-barns) 62-Sm-146  
 Cross Section -99.89 To 9999. %



MAT 6231

Kerma elastic  
Cross Section

62-Sm-146  
-99.99 To 9999. %



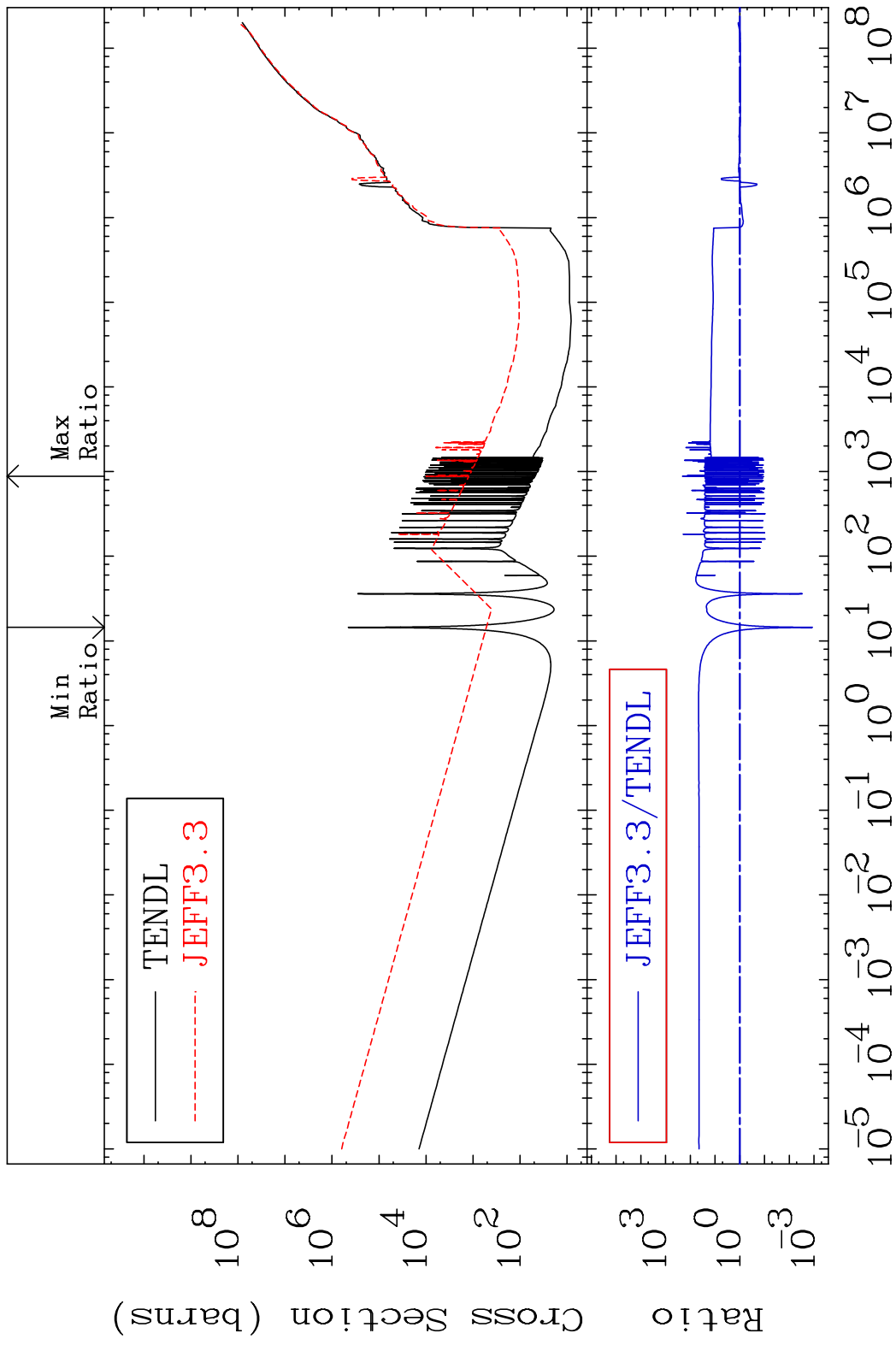
55

Incident Energy (eV)

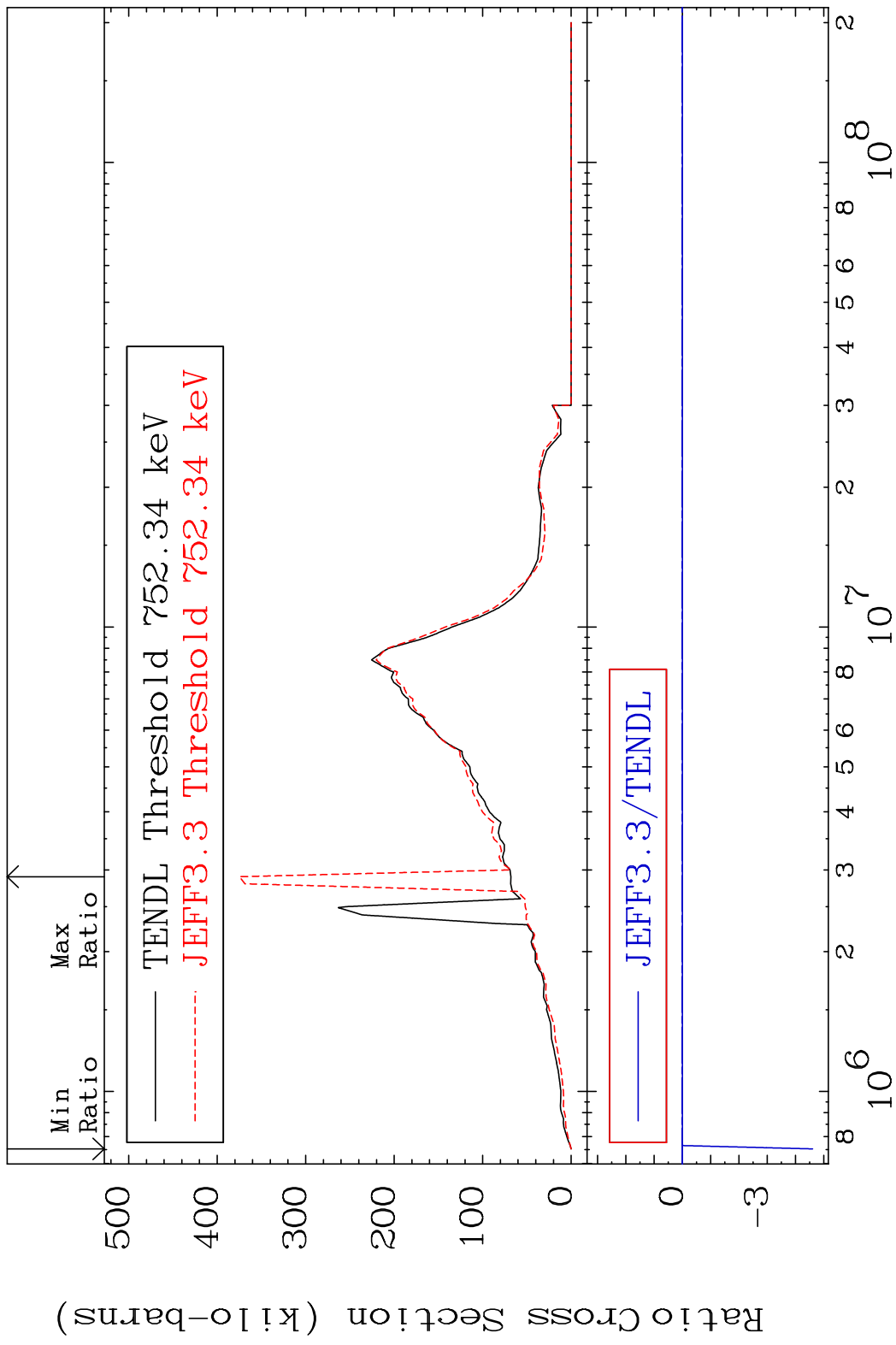
62-Sm-146



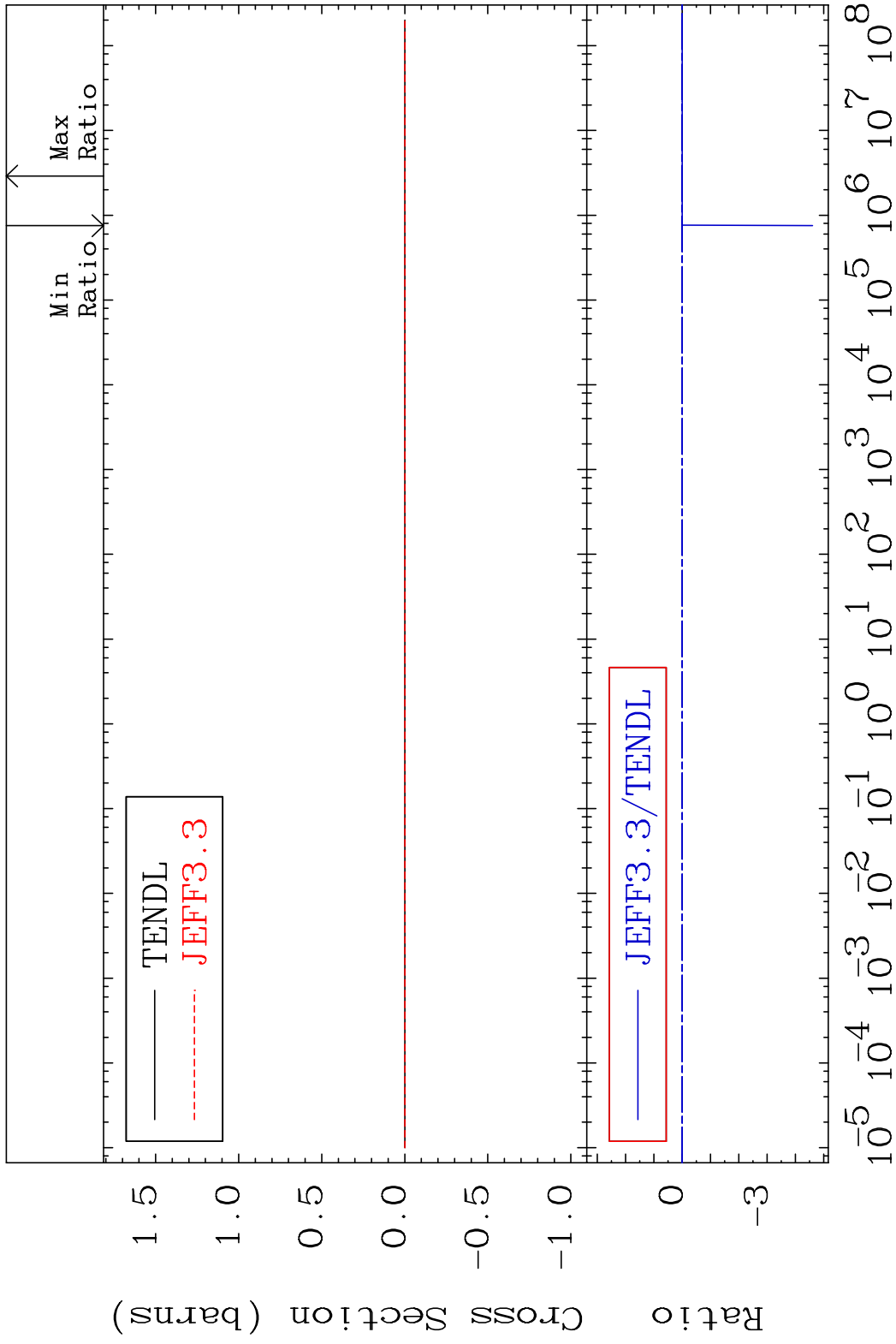
MAT 6231 Kerma non-elastic (all but mt2) 62-Sm-146  
 Cross Section -99.89 To 9999. %



MAT 6231 Kerma inelastic (mt51-91) 62-Sm-146  
 Cross Section -9999. To 450.4 %



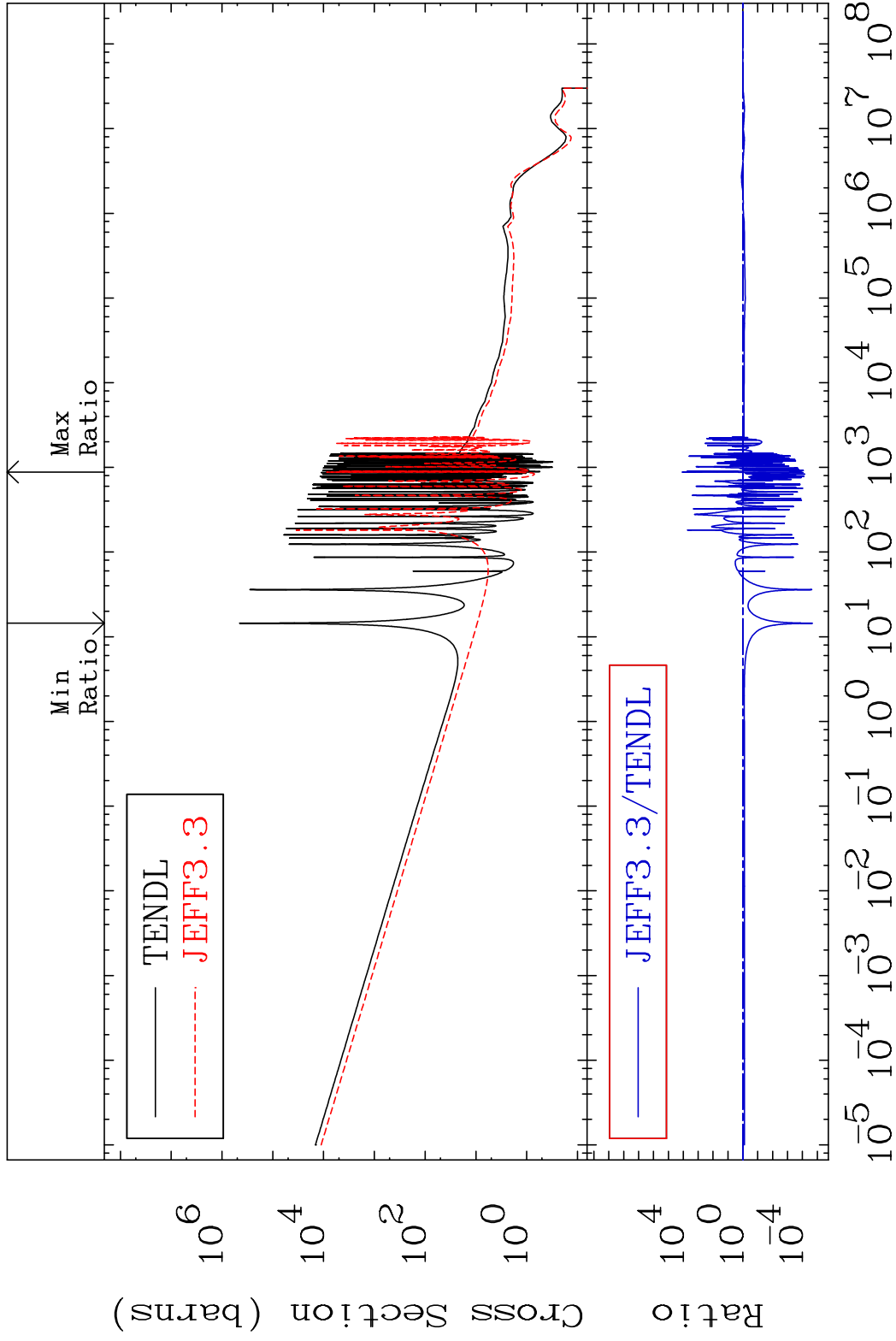
MAT 6231 Kerma fission (mt18 or mt19-20-21-38)  $^{62}\text{Sm}$ -146  
 Cross Section -9999. To 450.4 %



MAT 6231

Kerma capture (mt102) 62-Sm-146

Cross Section -100.0 To 9999. %

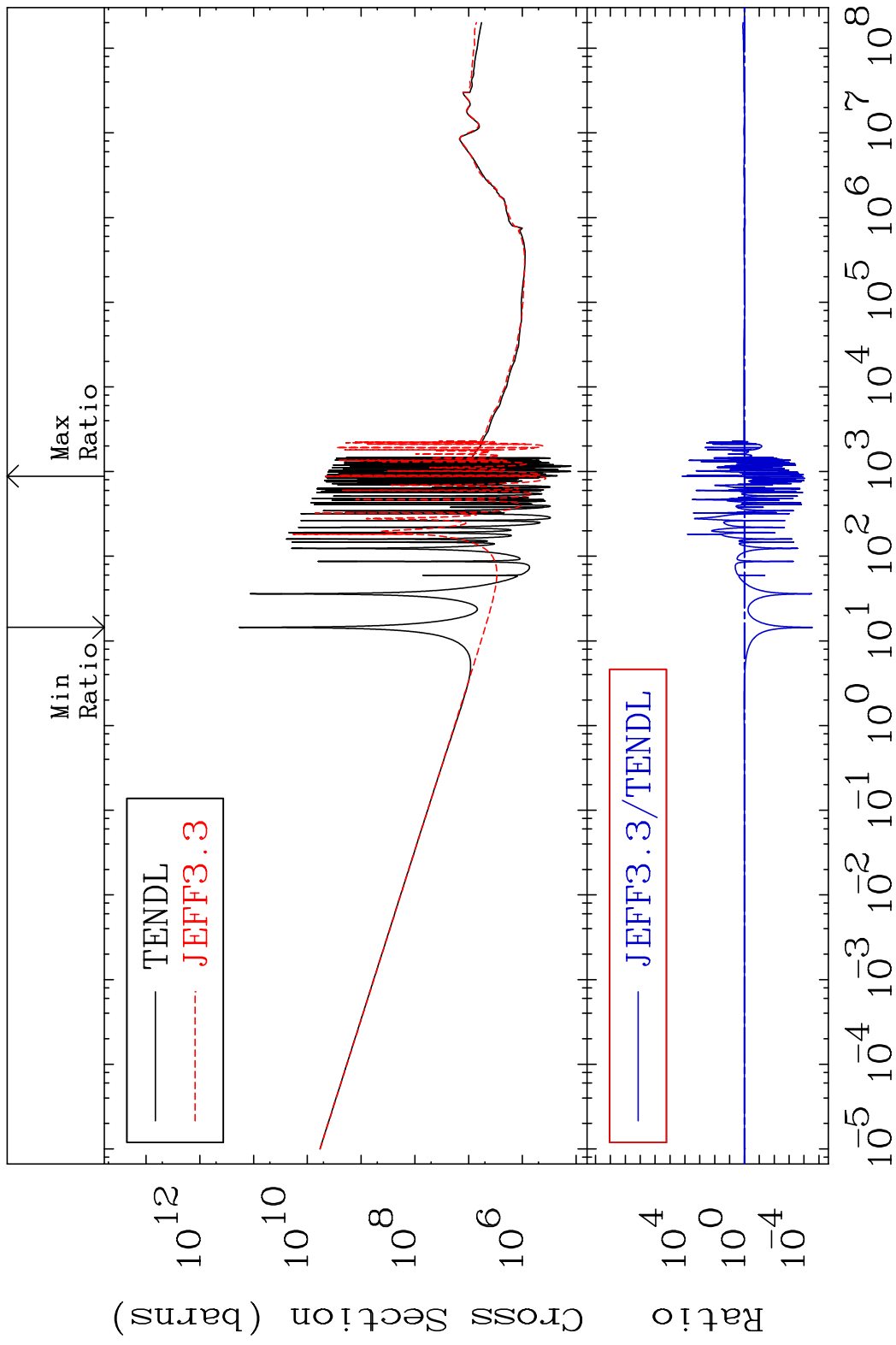


59

Incident Energy (eV)

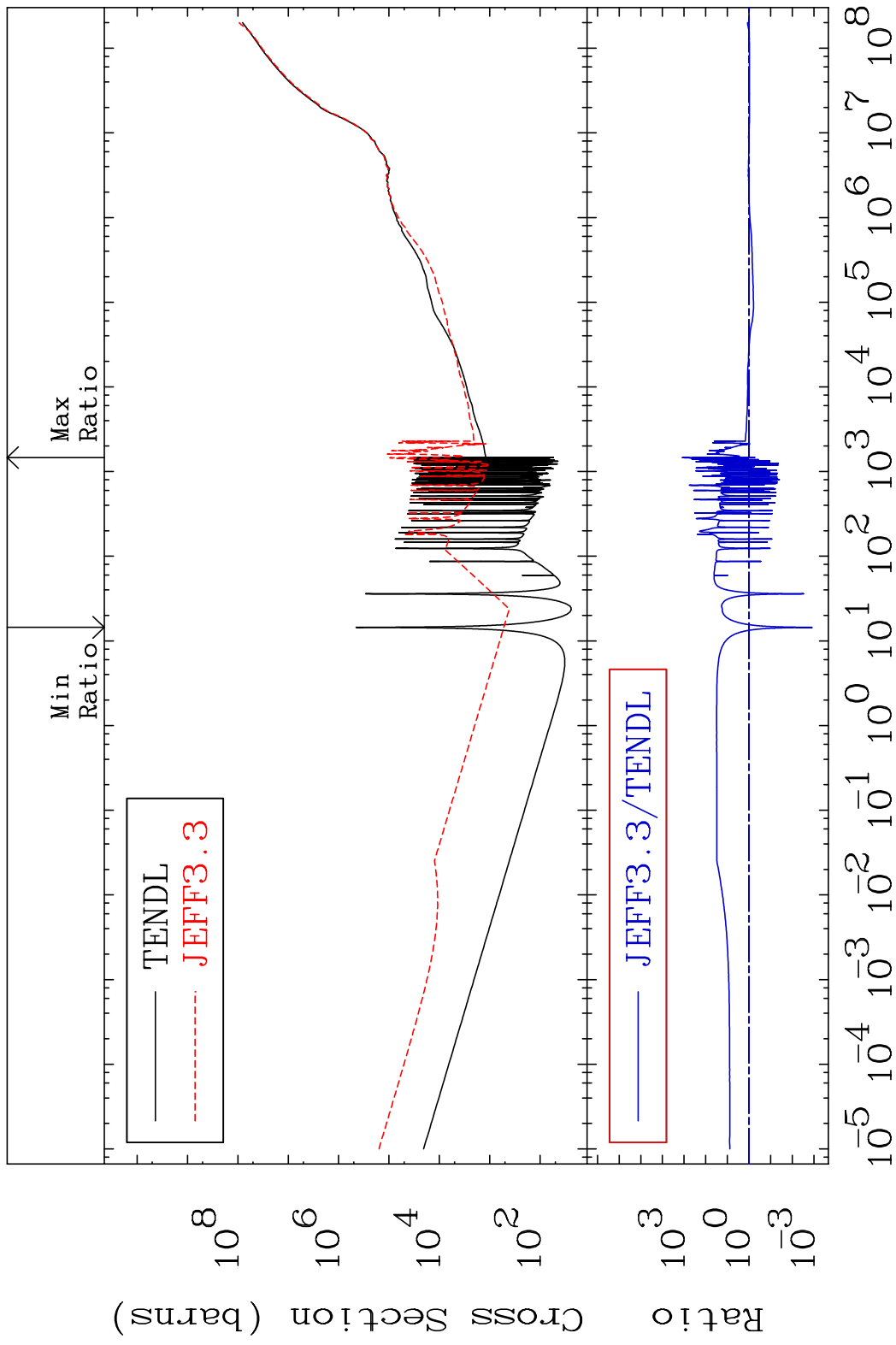
62-Sm-146

MAT 6231 Total photon (eV-barns) 62-Sm-146  
Cross Section -100.0 To 9999. %



60 Incident Energy (eV) 62-Sm-146

MAT 6231 Total kinematic kerma (high limit) 62-Sm-146  
 Cross Section -99.89 To 9999. %

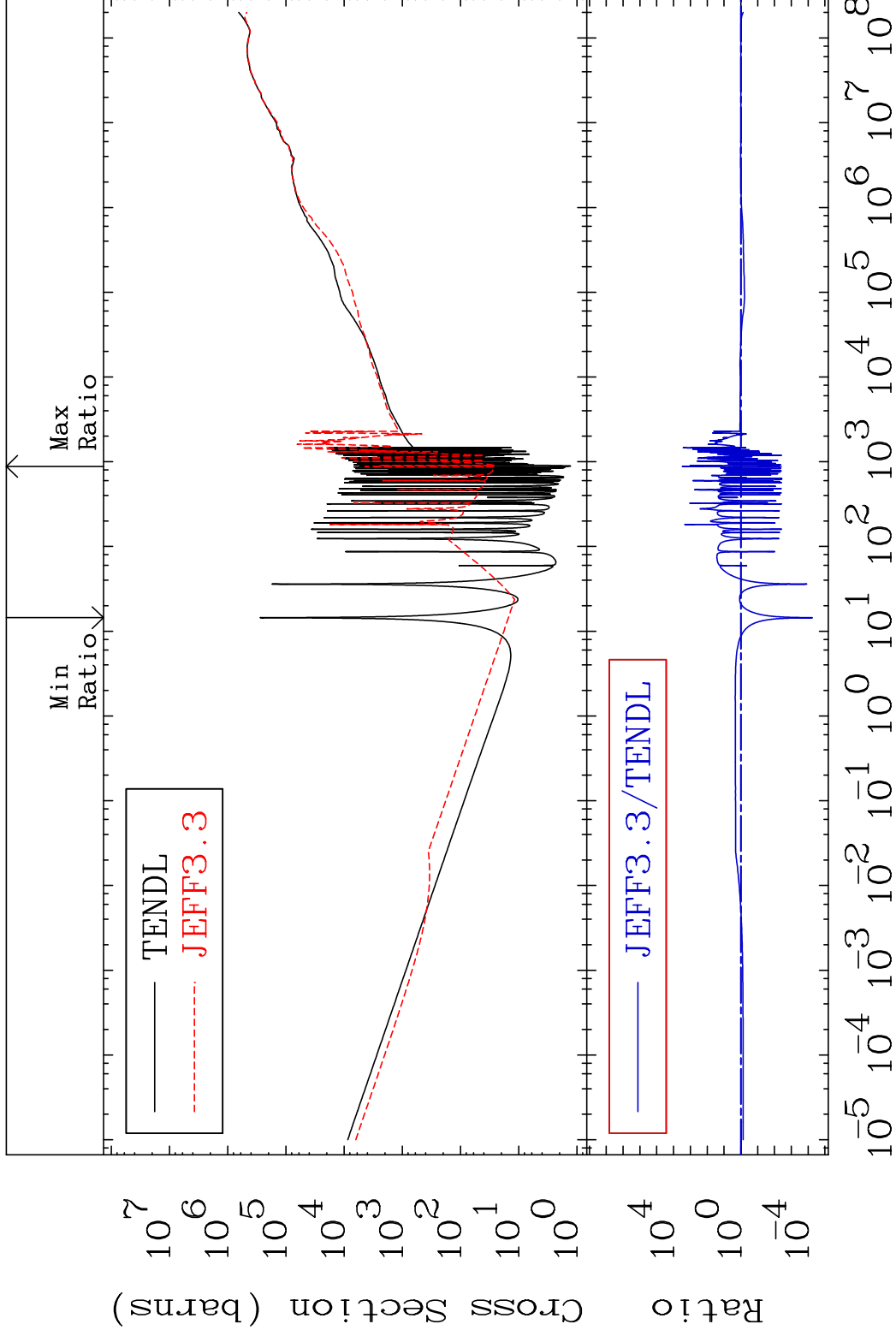


MAT 6231

Dpa total (eV-barns)

62-Sm-146

Cross Section -99.99 To 9999. %



62

Incident Energy (eV)

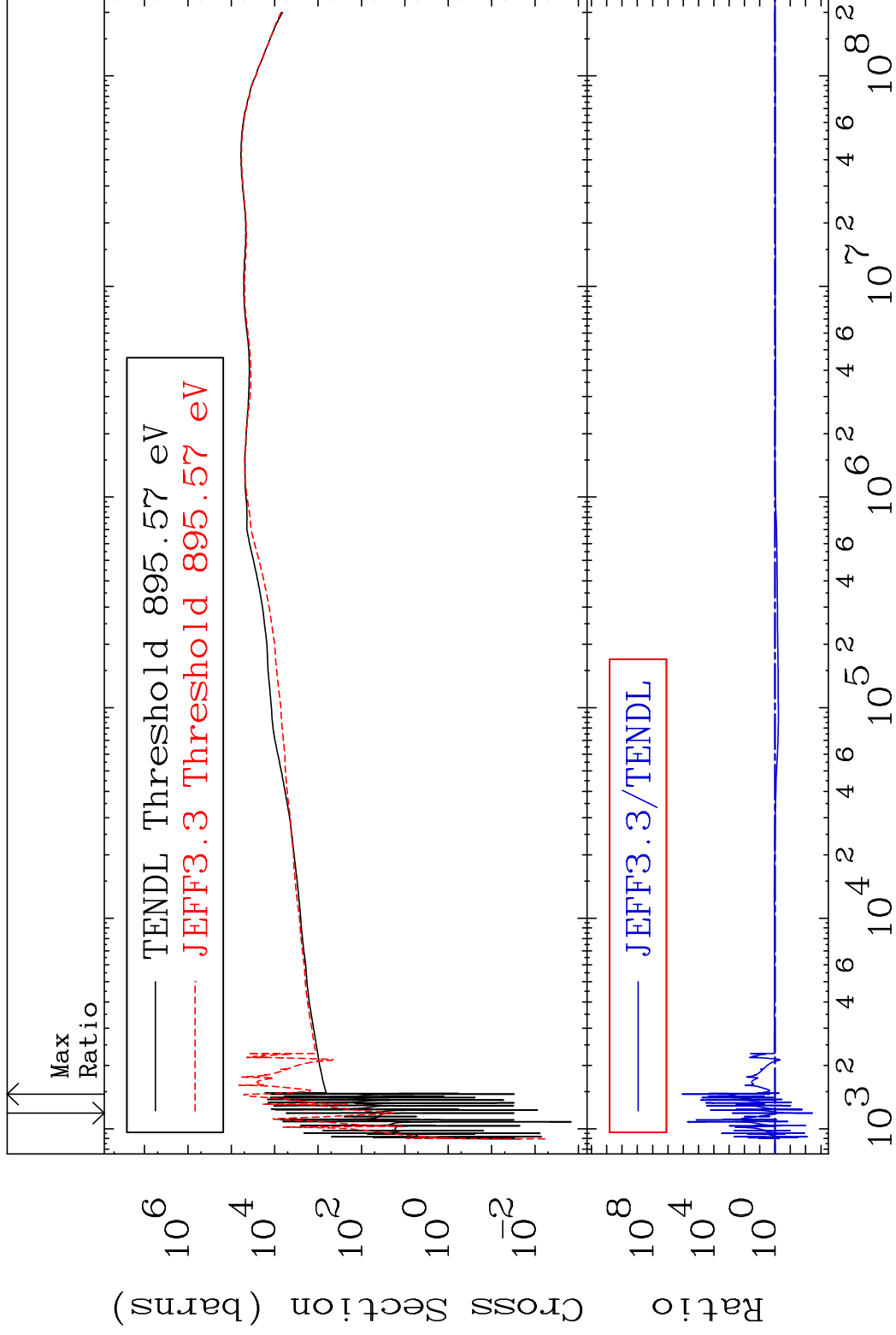
62-Sm-146

MAT 6231

Dpa elastic (mt2)

62-Sm-146

Cross Section -99.65 To 9999. %



63

Incident Energy (eV)

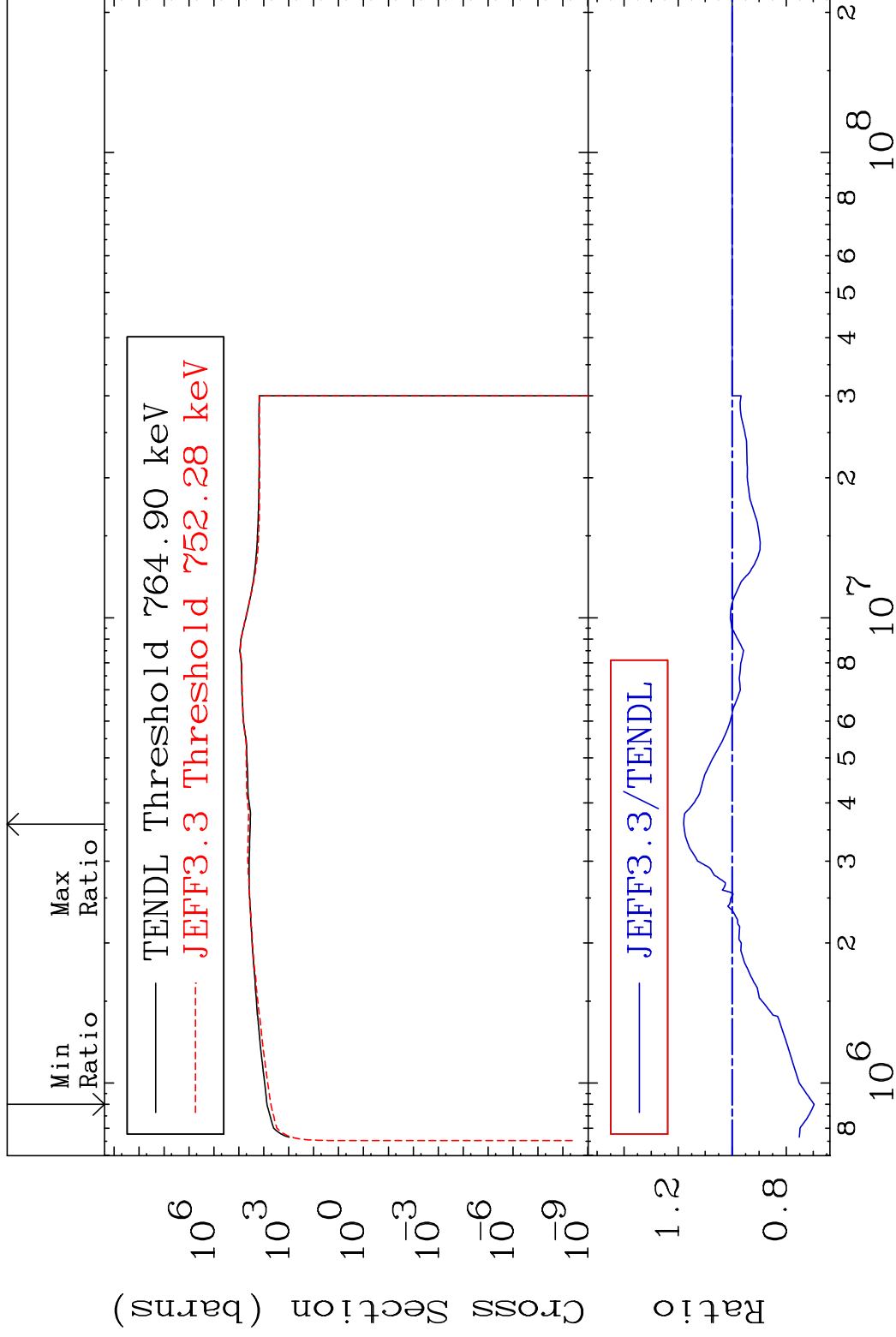
62-Sm-146



MAT 6231

Dpa inelastic (mt51-91) 62-Sm-146

Cross Section -30.34 To 17.96 %

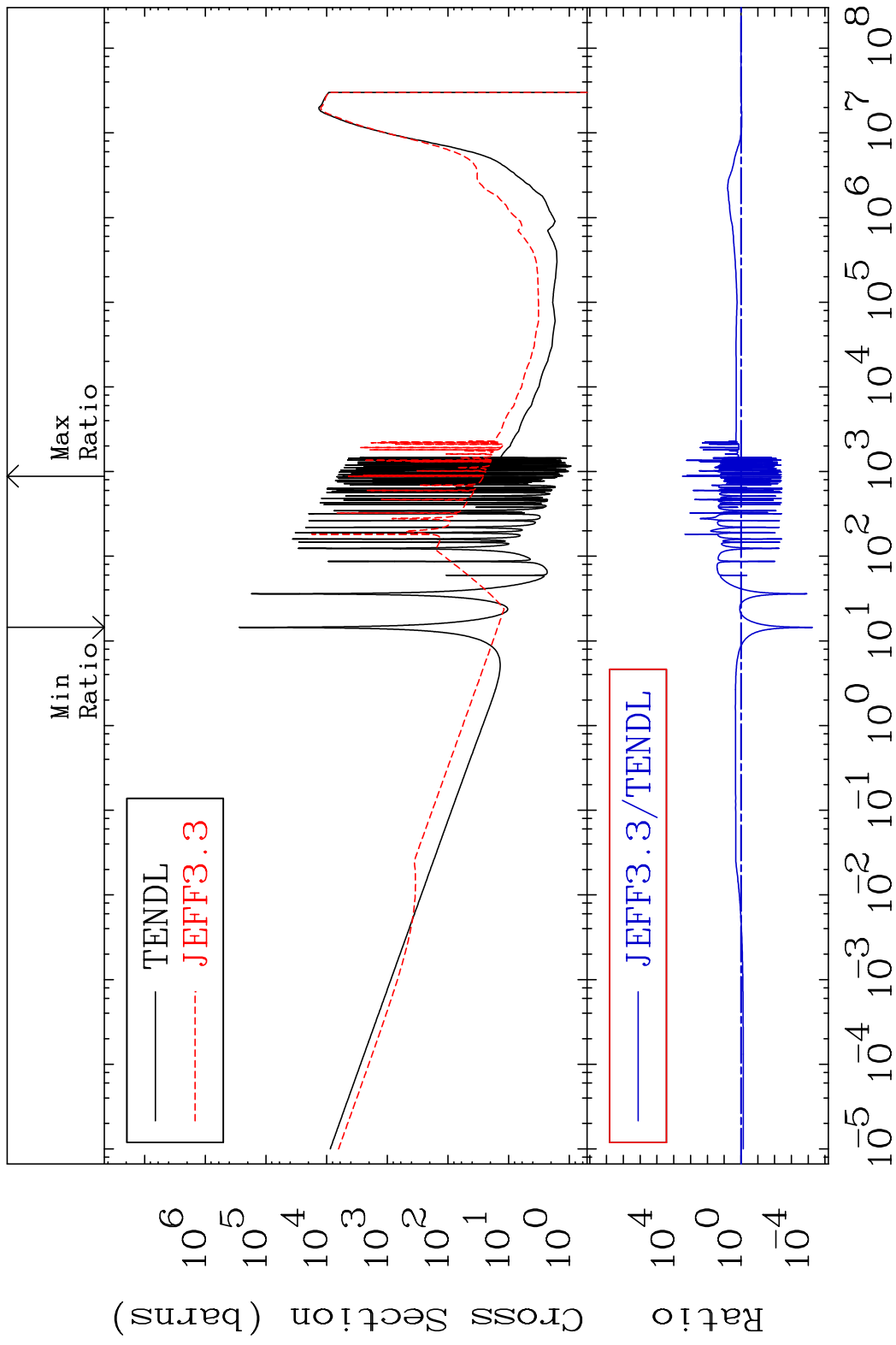


64

Incident Energy (eV)

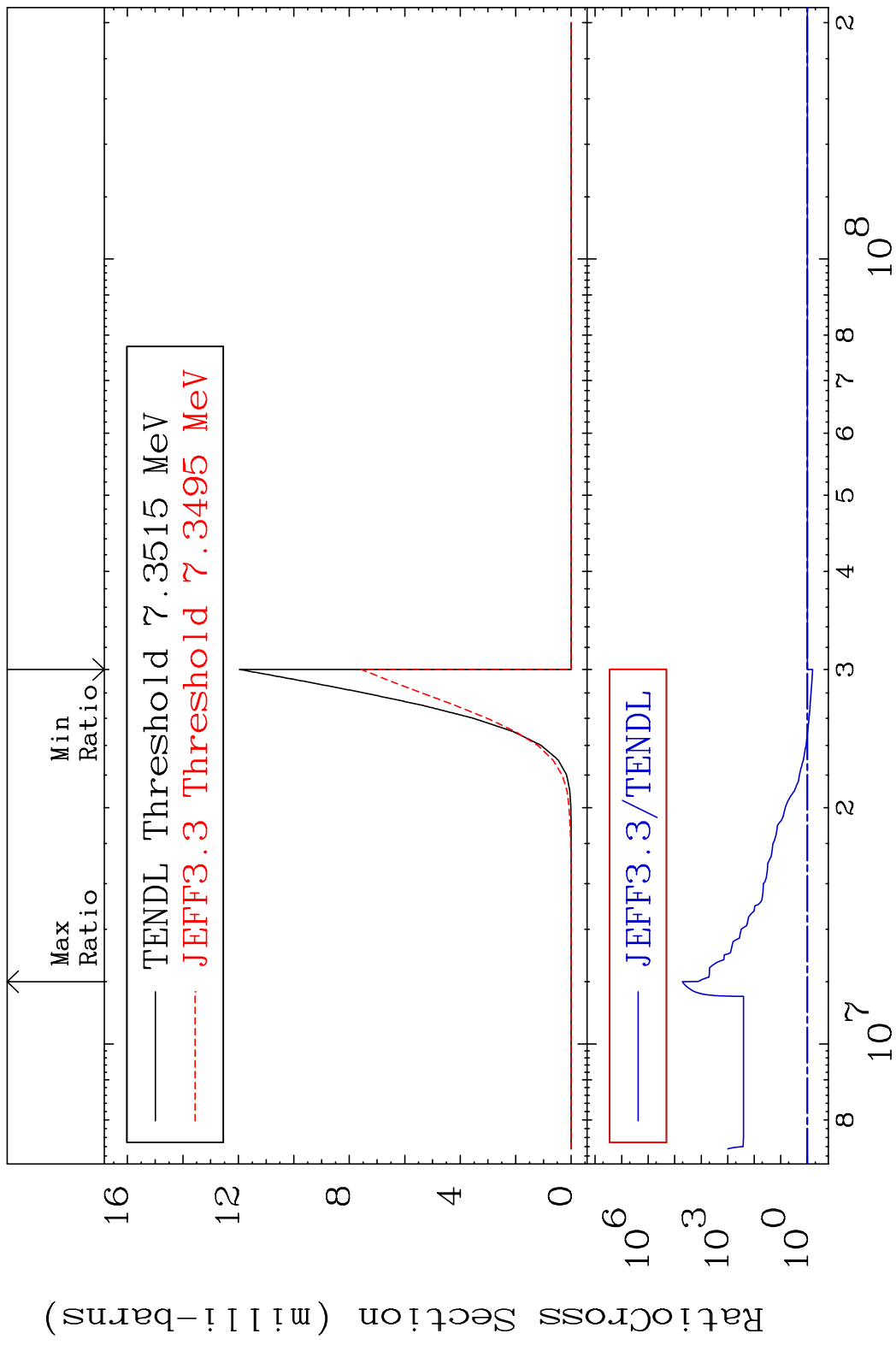
62-Sm-146

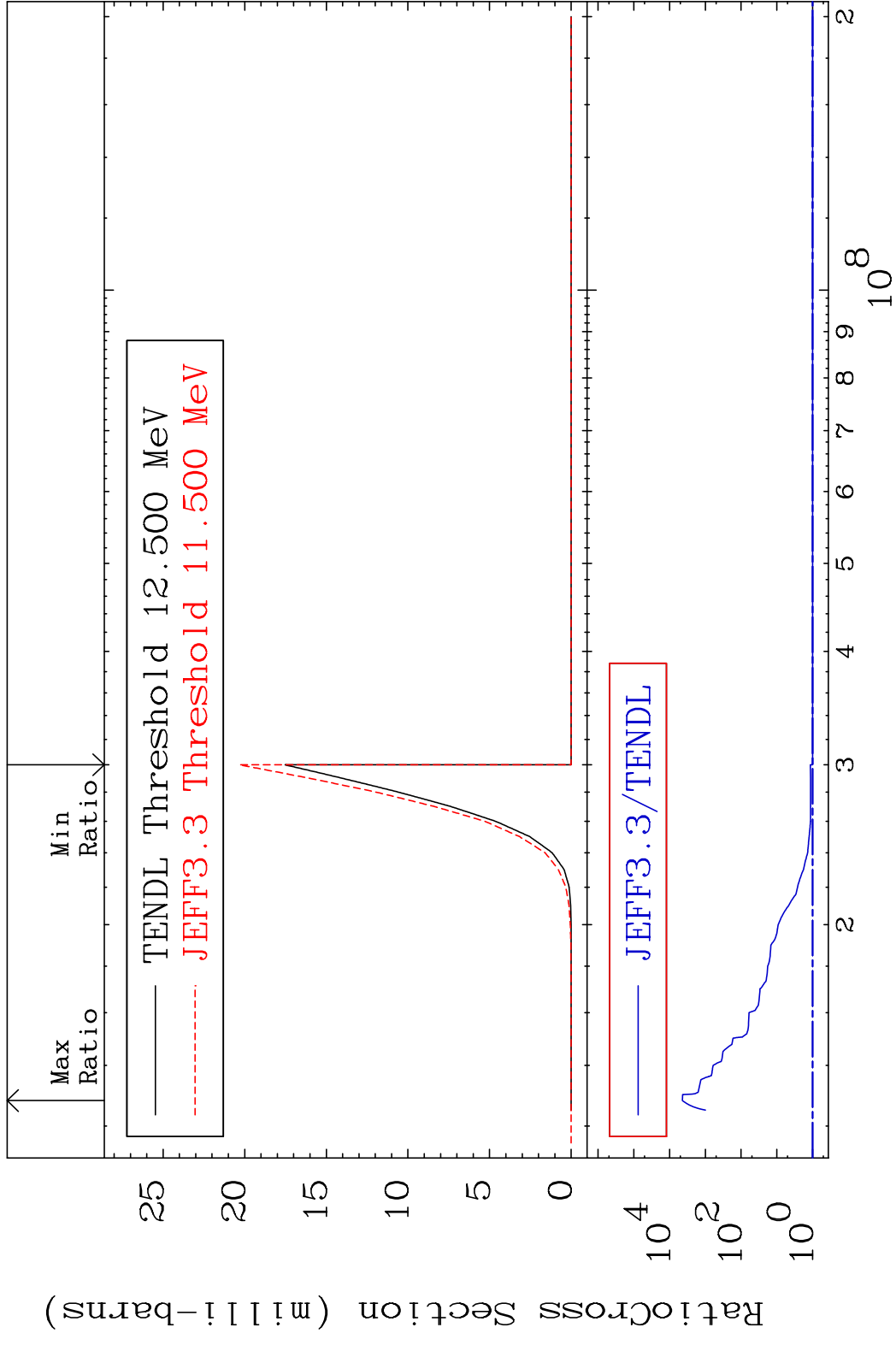
MAT 6231 Dpa disappearance (mt102 -120) 62-Sm-146  
 Cross Section -99.99 To 9999. %



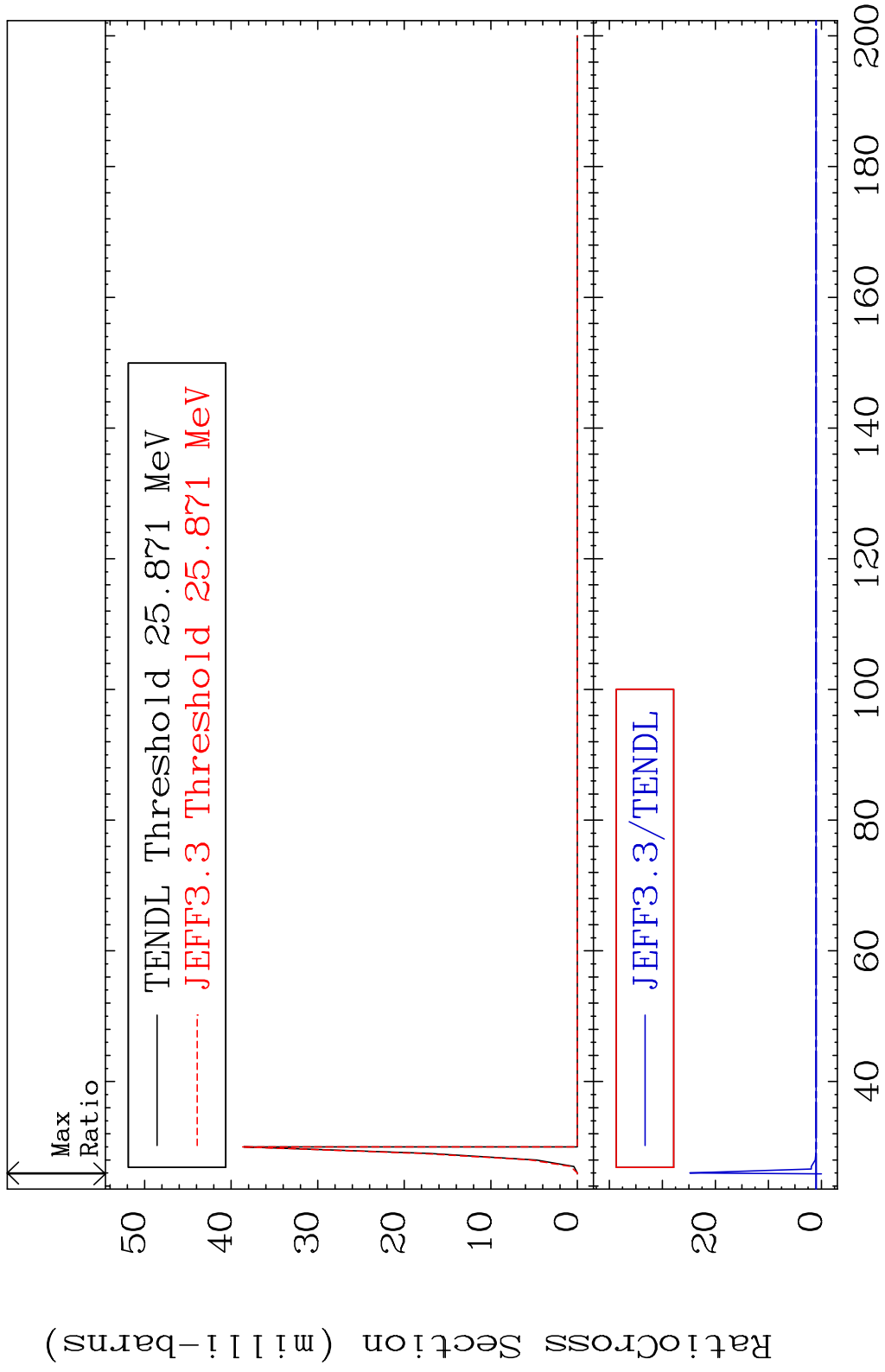
65 Incident Energy (eV) 62-Sm-146

MAT 6231 (n,2n)  $\alpha$ :60-Nd-141g 62-Sm-146  
 Radionuclide Production Cross Section 36668 dtd 9999. %





MAT 6231 (n,4n):62-Sm-143g 62-Sm-146  
 Radionuclide Production Cross Section Ratio 2383. %



MAT 6231 (n, 4n):62-Sm-143m2 62-Sm-146  
 Radionuclide Production Cross Section Ratio 912.8 %

