

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

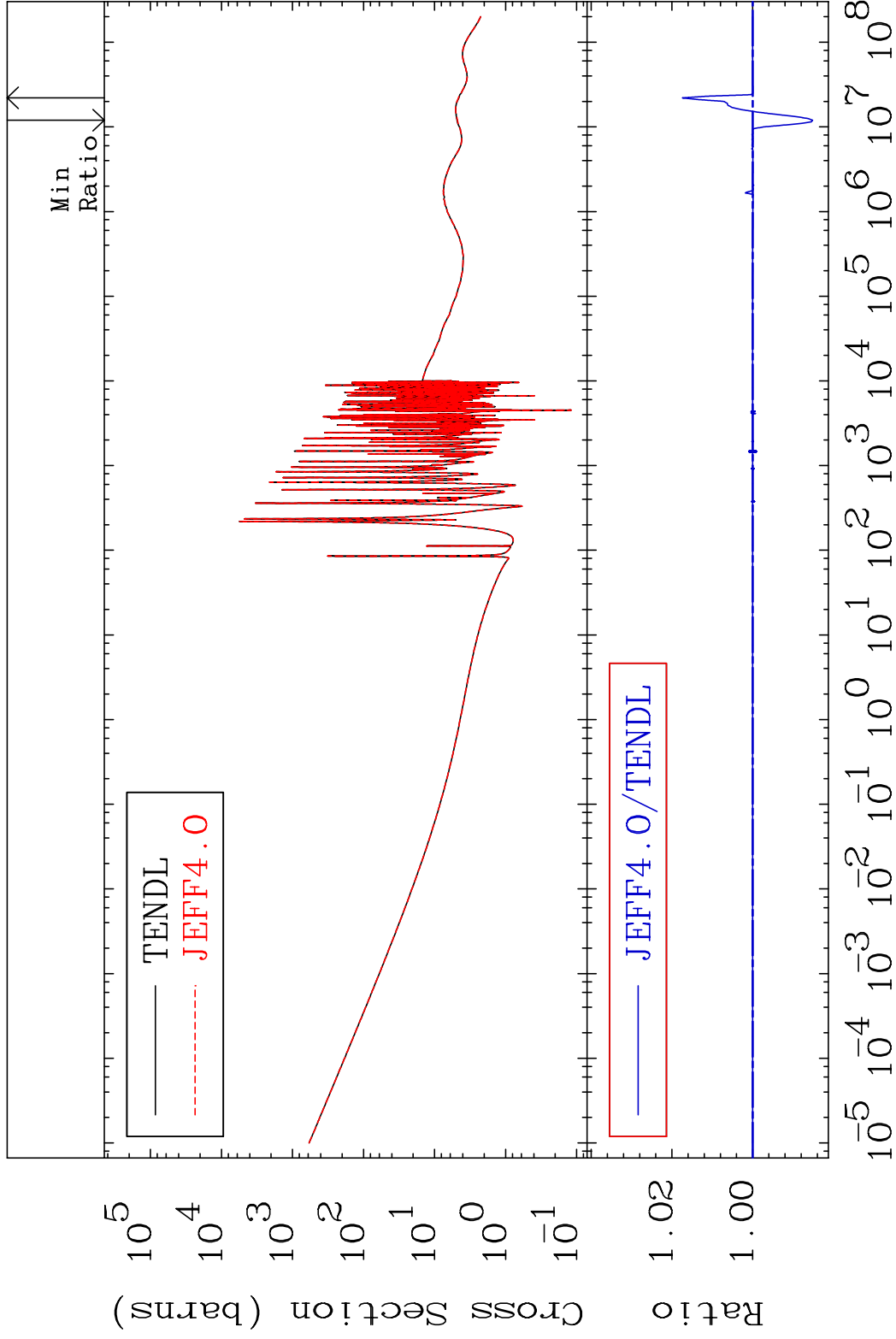
MAT 5925

Total

59-Pr-141

Cross Section

-1.482 To 1.742 %



1

Incident Energy (eV)

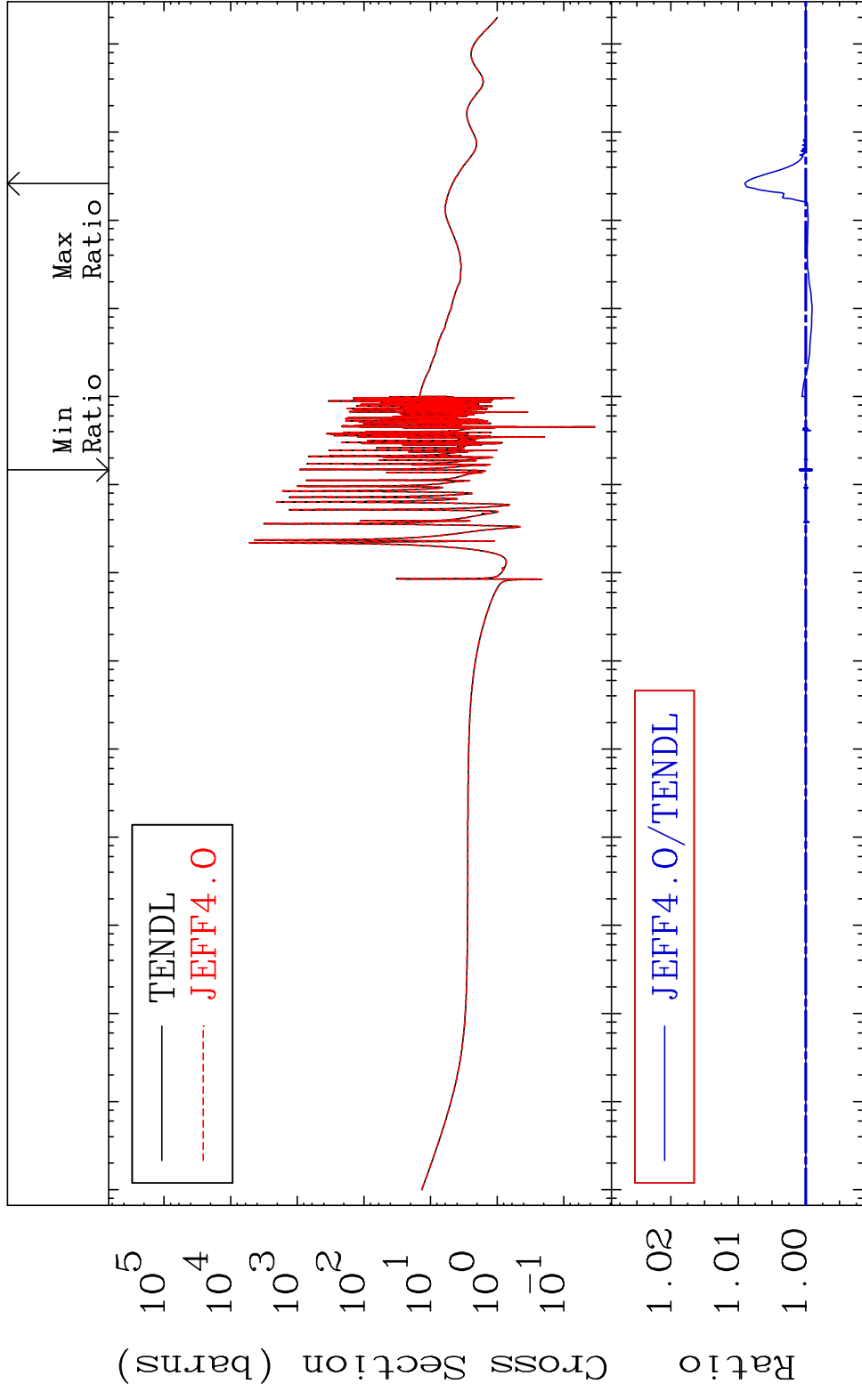
59-Pr-141

MAT 5925

Elastic

59-Pr-141

Cross Section -0.098 To 0.906 %



2

Incident Energy (eV)

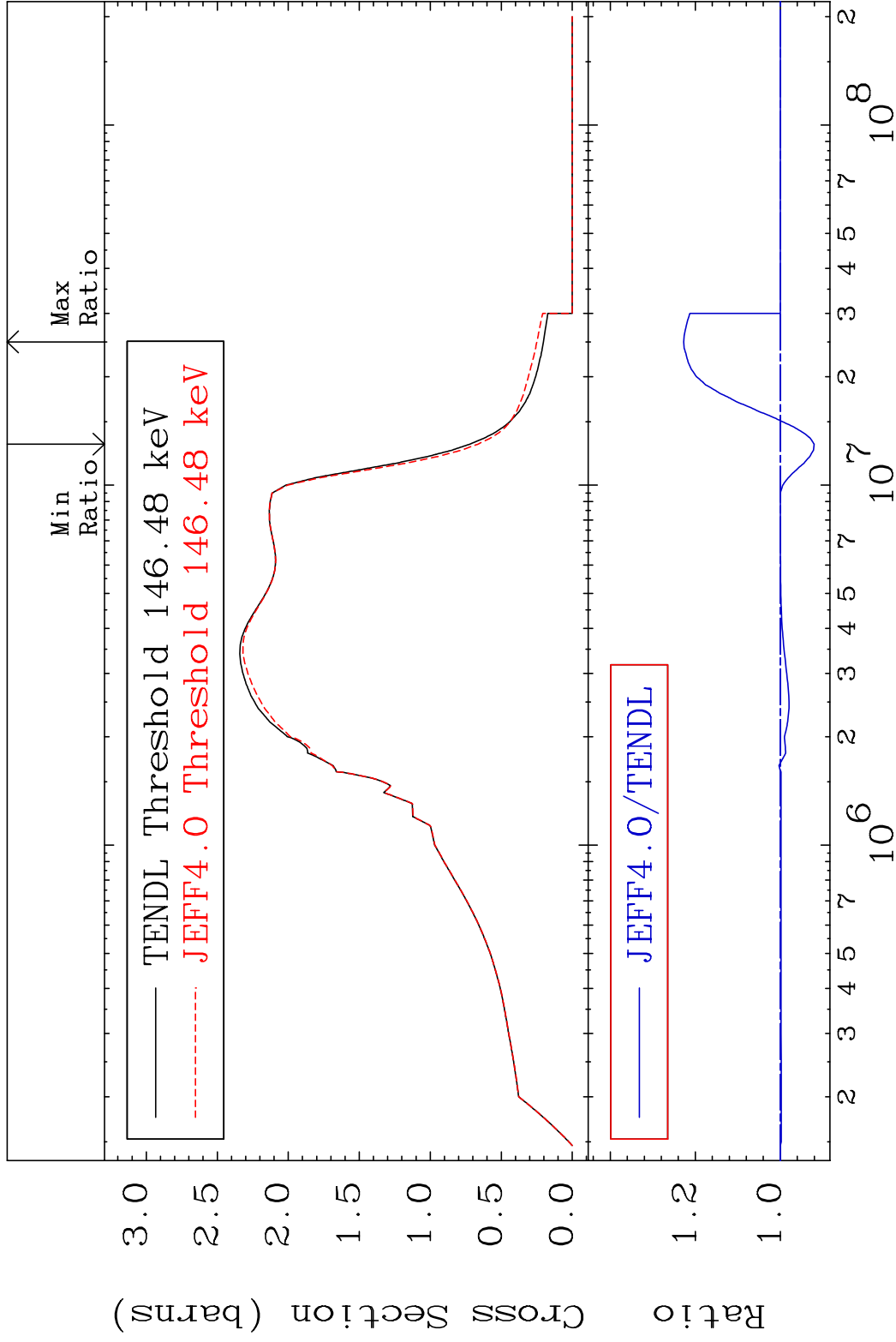
59-Pr-141

MAT 5925

Inelastic

59-Pr-141

Cross Section -7.951 To 22.74 %



3

Incident Energy (eV)

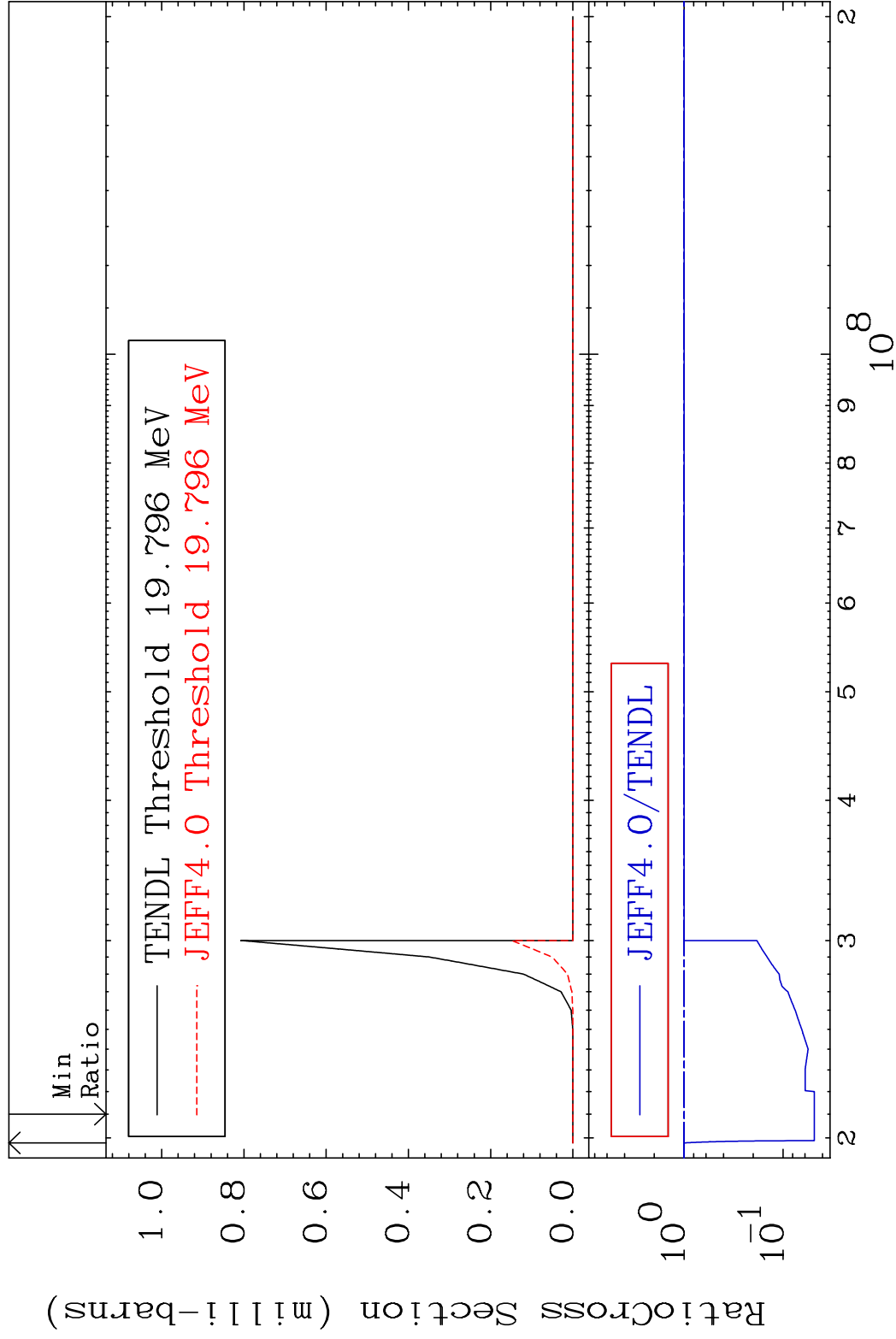
59-Pr-141

MAT 5925

(n,2n) d

59-Pr-141

Cross Section -95.16 To 0.000 %



4

Incident Energy (eV)

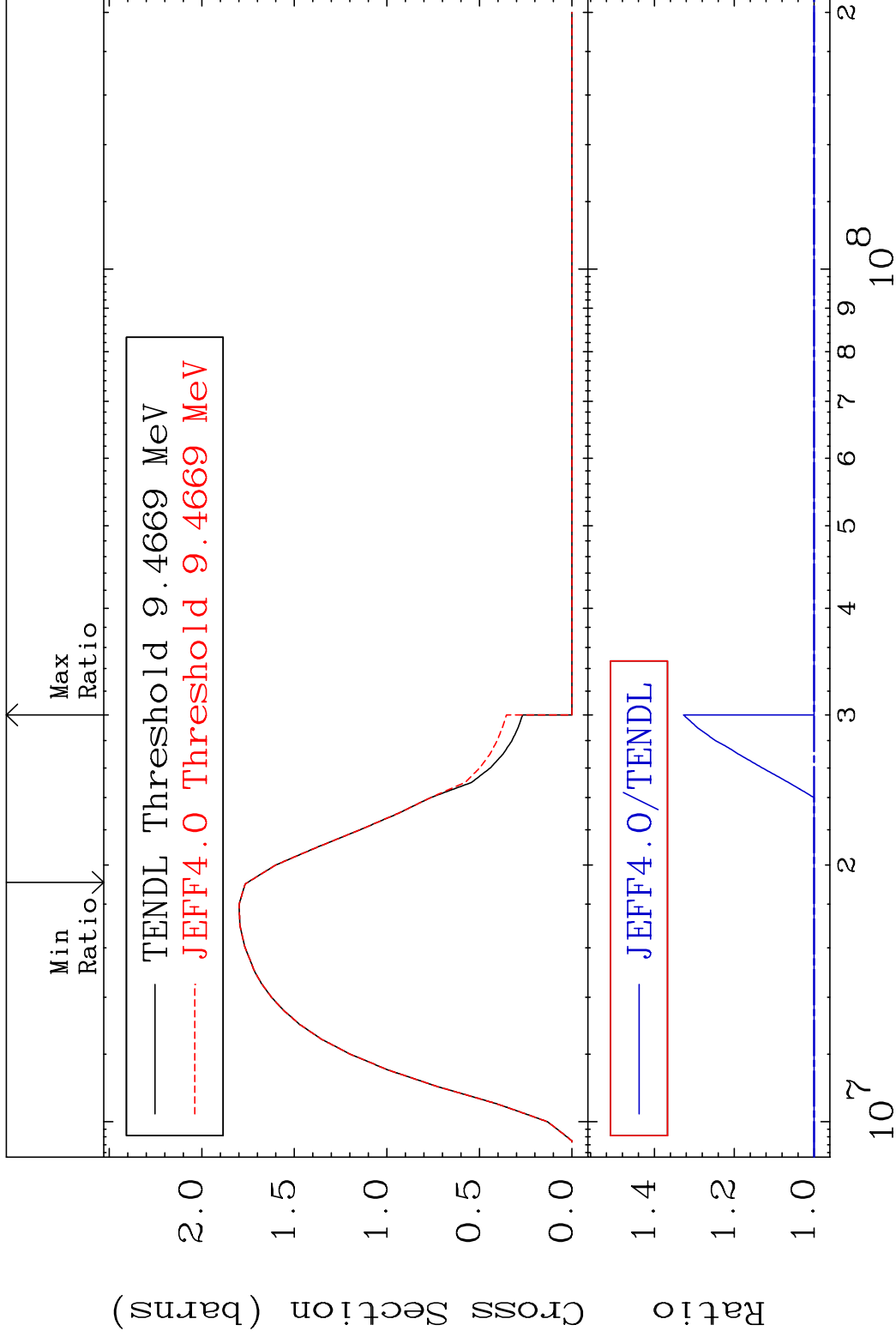
59-Pr-141

MAT 5925

(n,2n)

59-Pr-141

Cross Section 0.000 To 32.72 %



5

Incident Energy (eV)

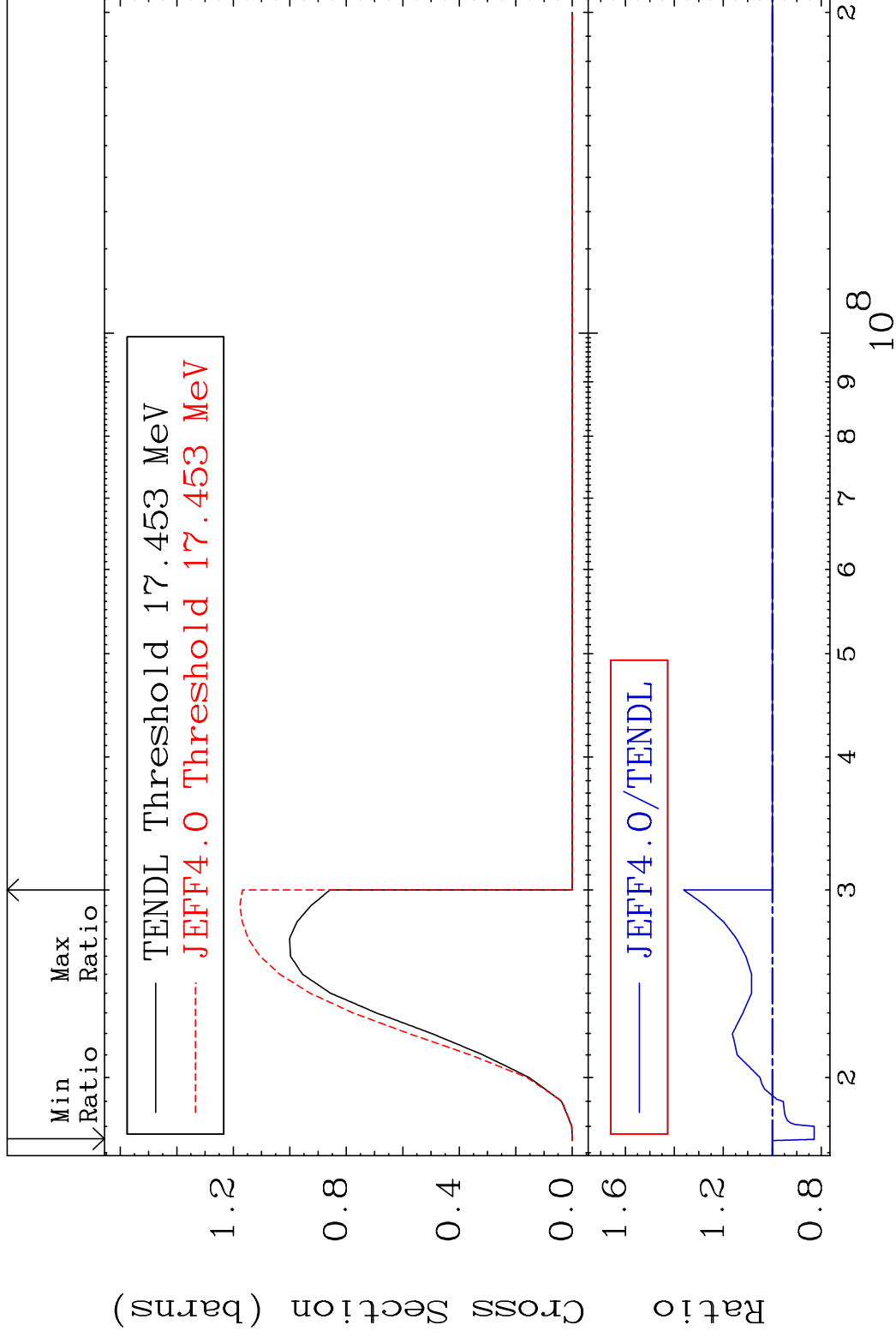
59-Pr-141

MAT 5925

(n,3n)

59-Pr-141

Cross Section -17.09 To 36.18 %



6

Incident Energy (eV)

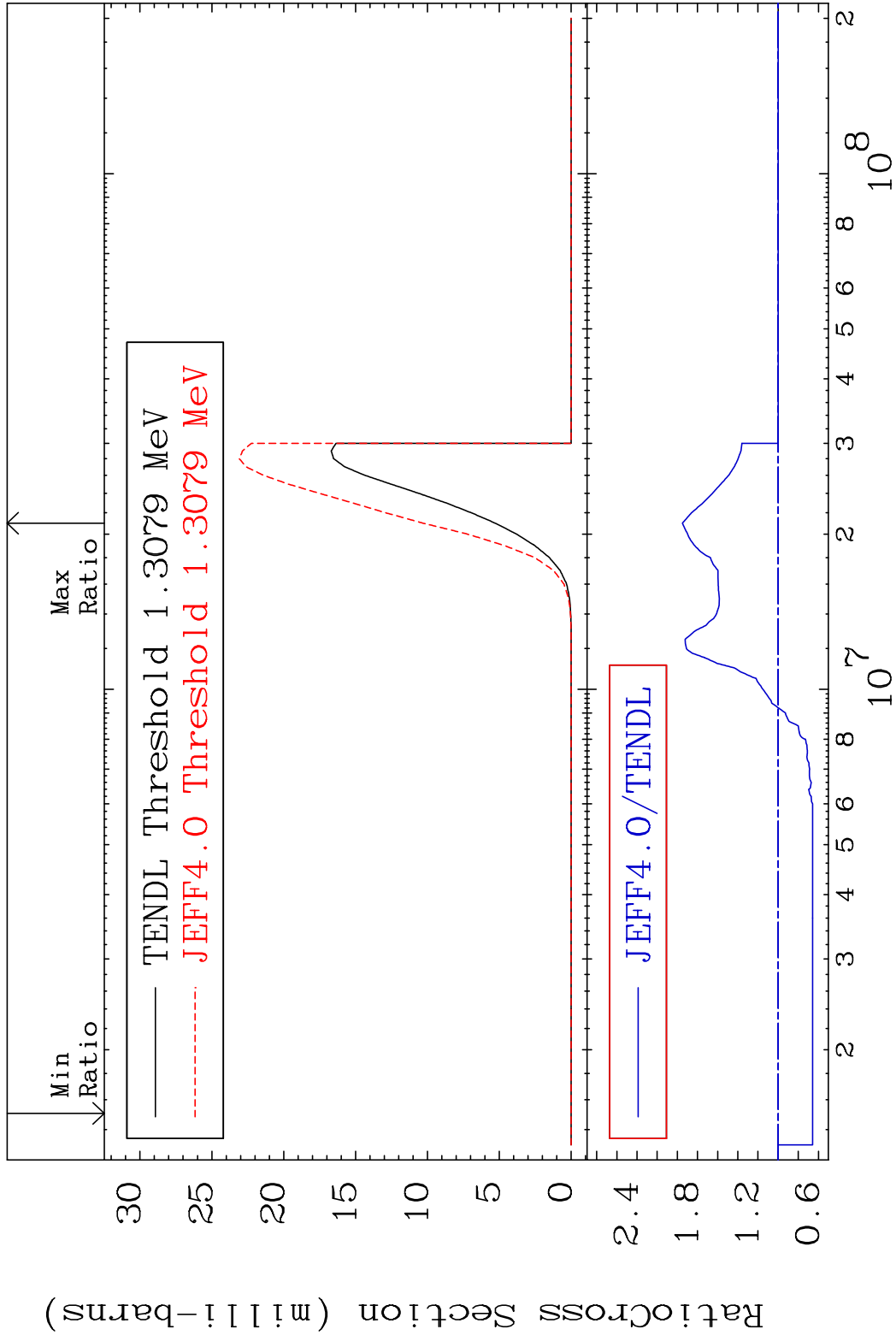
59-Pr-141

MAT 5925

(n, n') α

59-Pr-141

Cross Section -34.12 To 95.01 %



7

Incident Energy (eV)

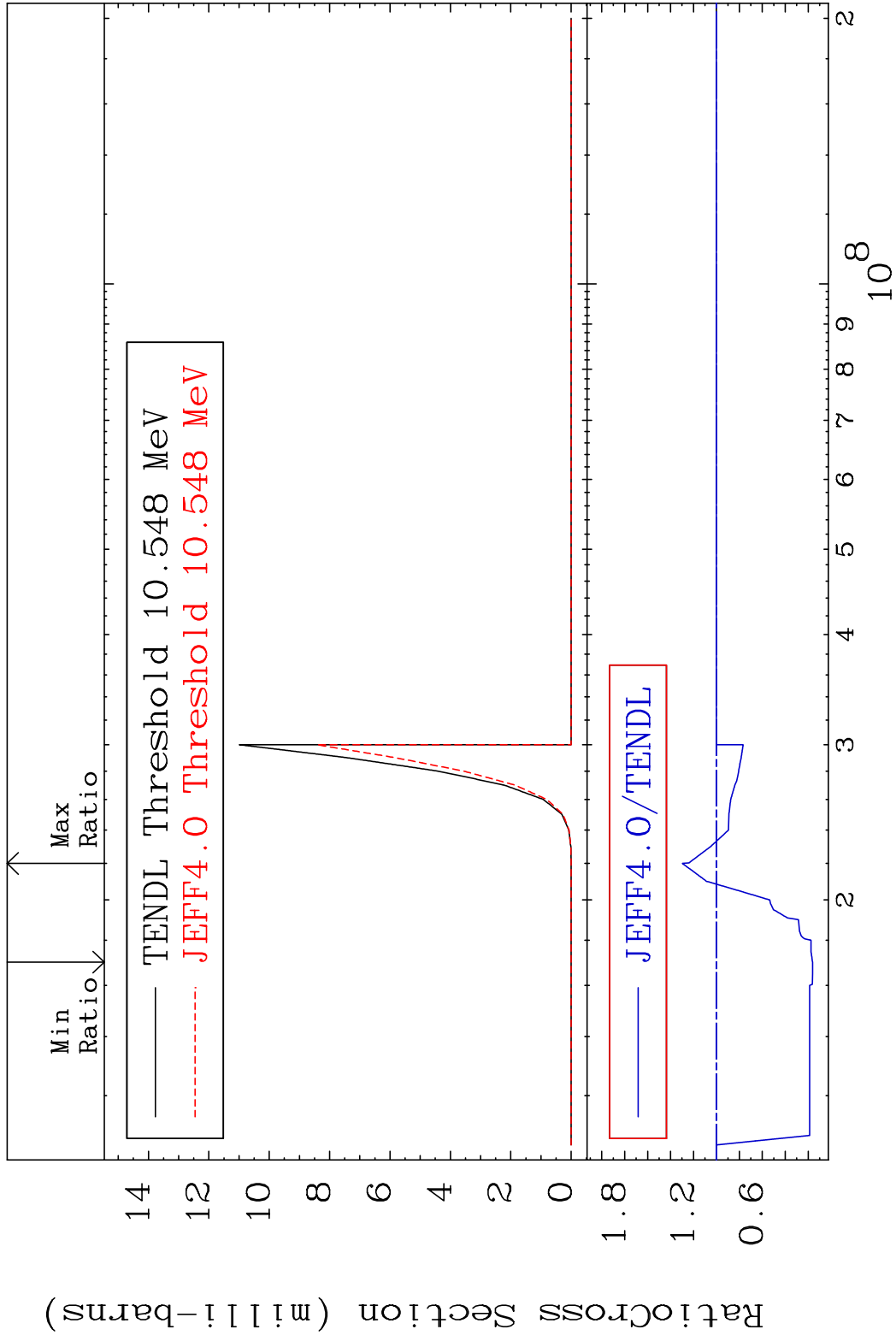
59-Pr-141

MAT 5925

(n,2n) α

59-Pr-141

Cross Section -83.82 To 29.73 %

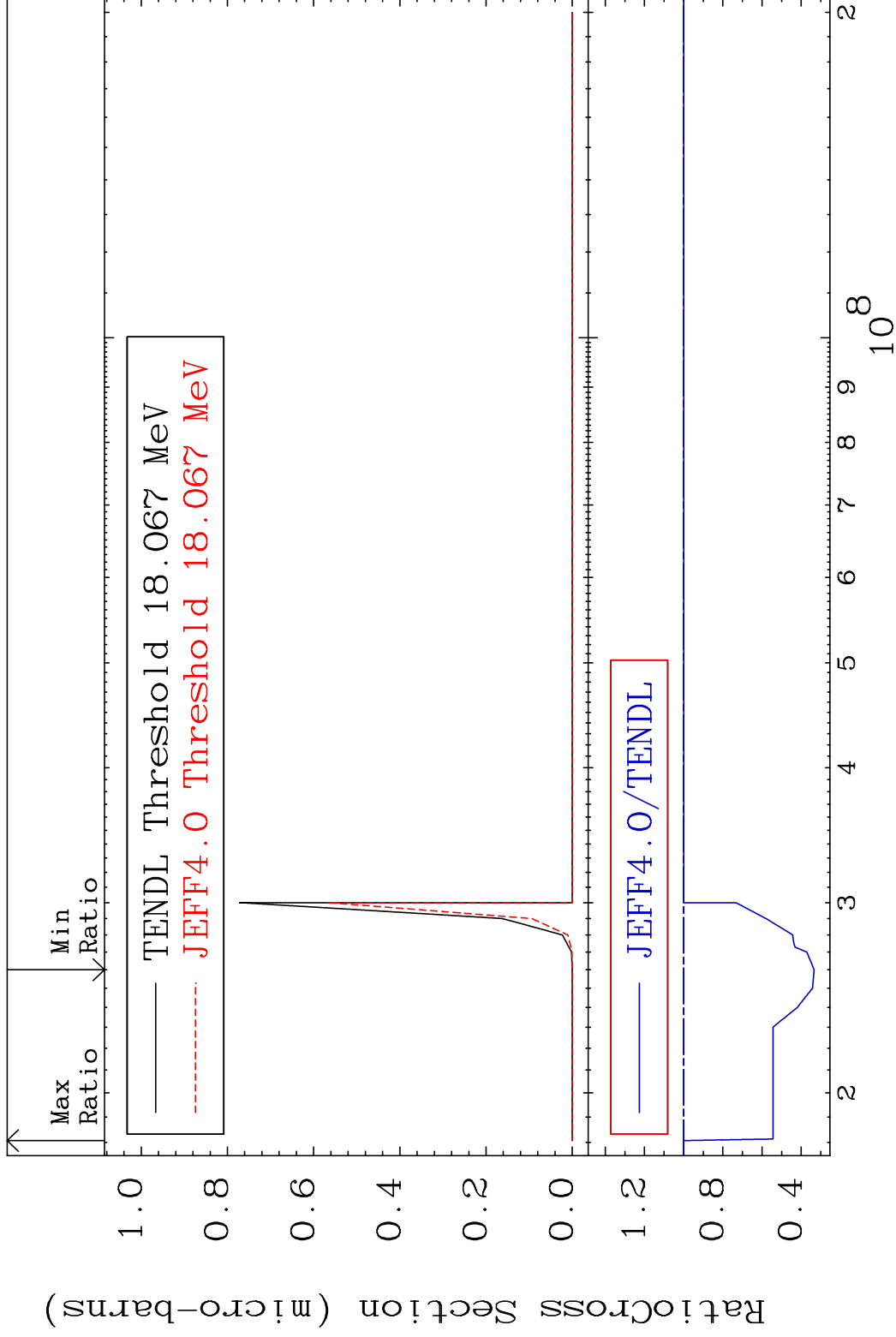


MAT 5925

(n,3n) α

59-Pr-141

Cross Section -66.59 To 0.000 %

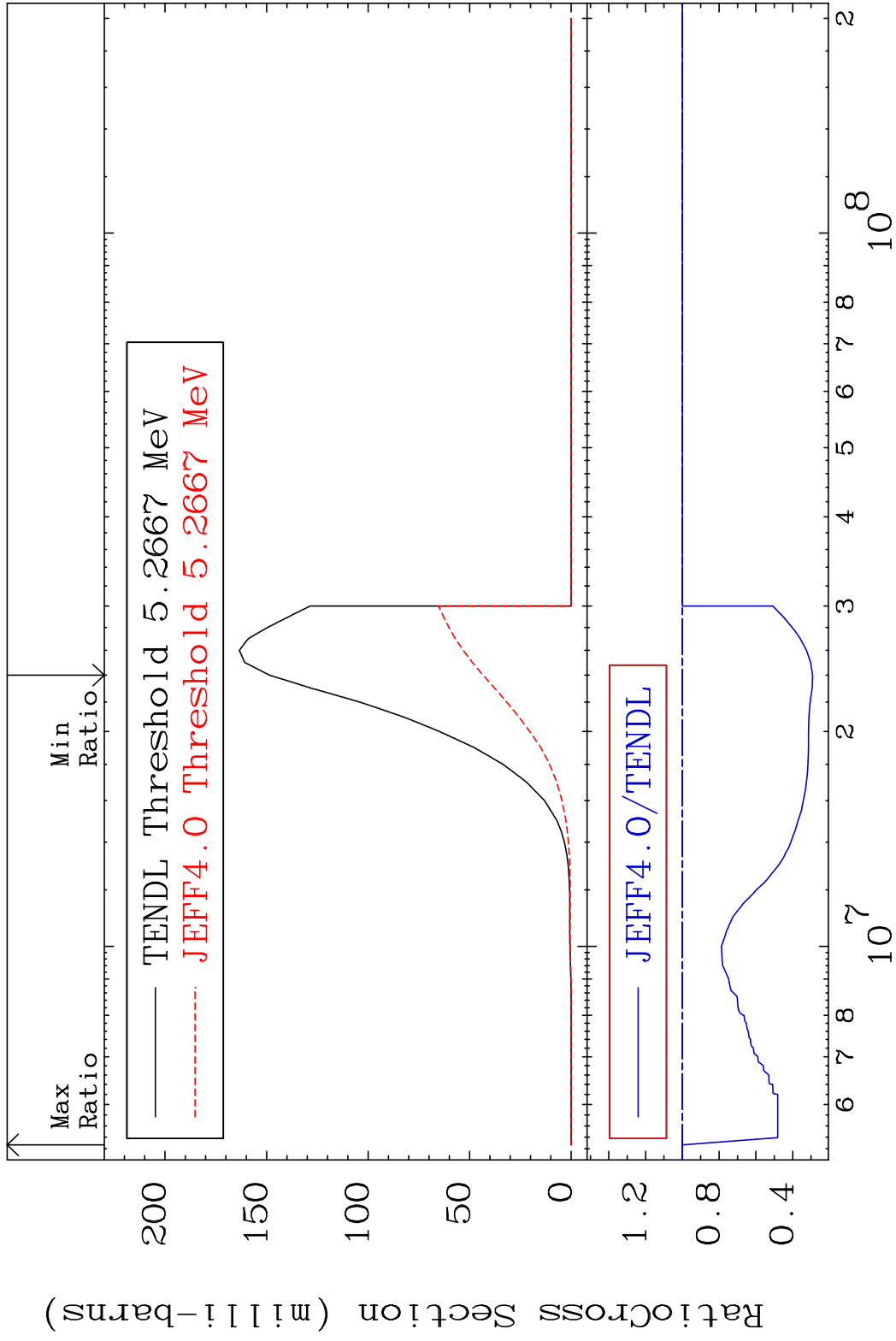


MAT 5925

(n, n') p

59-Pr-141

Cross Section -70.80 To 0.000 %



10

Incident Energy (eV)

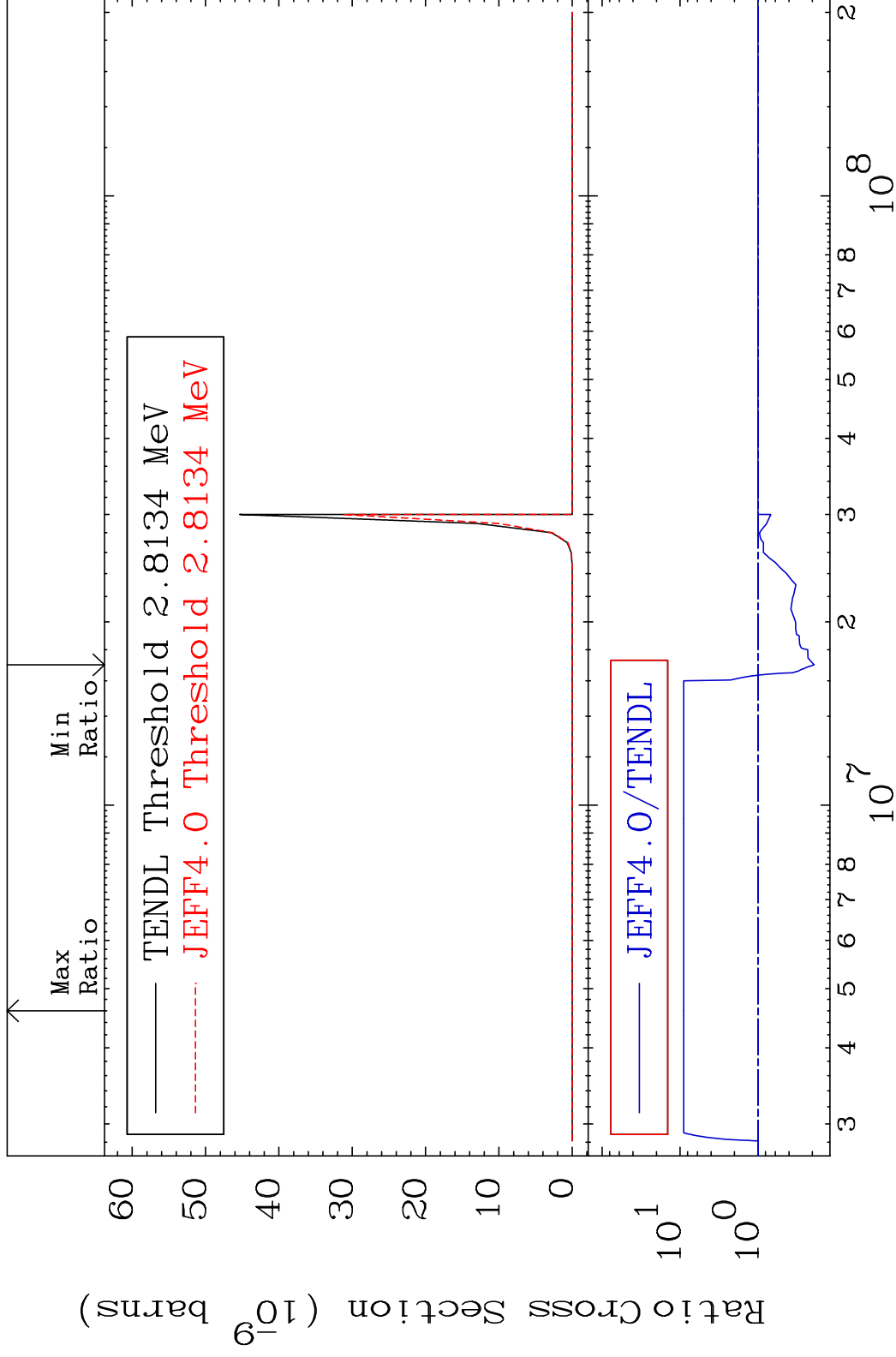
59-Pr-141

MAT 5925

(n, n') 2α

59-Pr-141

Cross Section -80.97 To 797.7 %

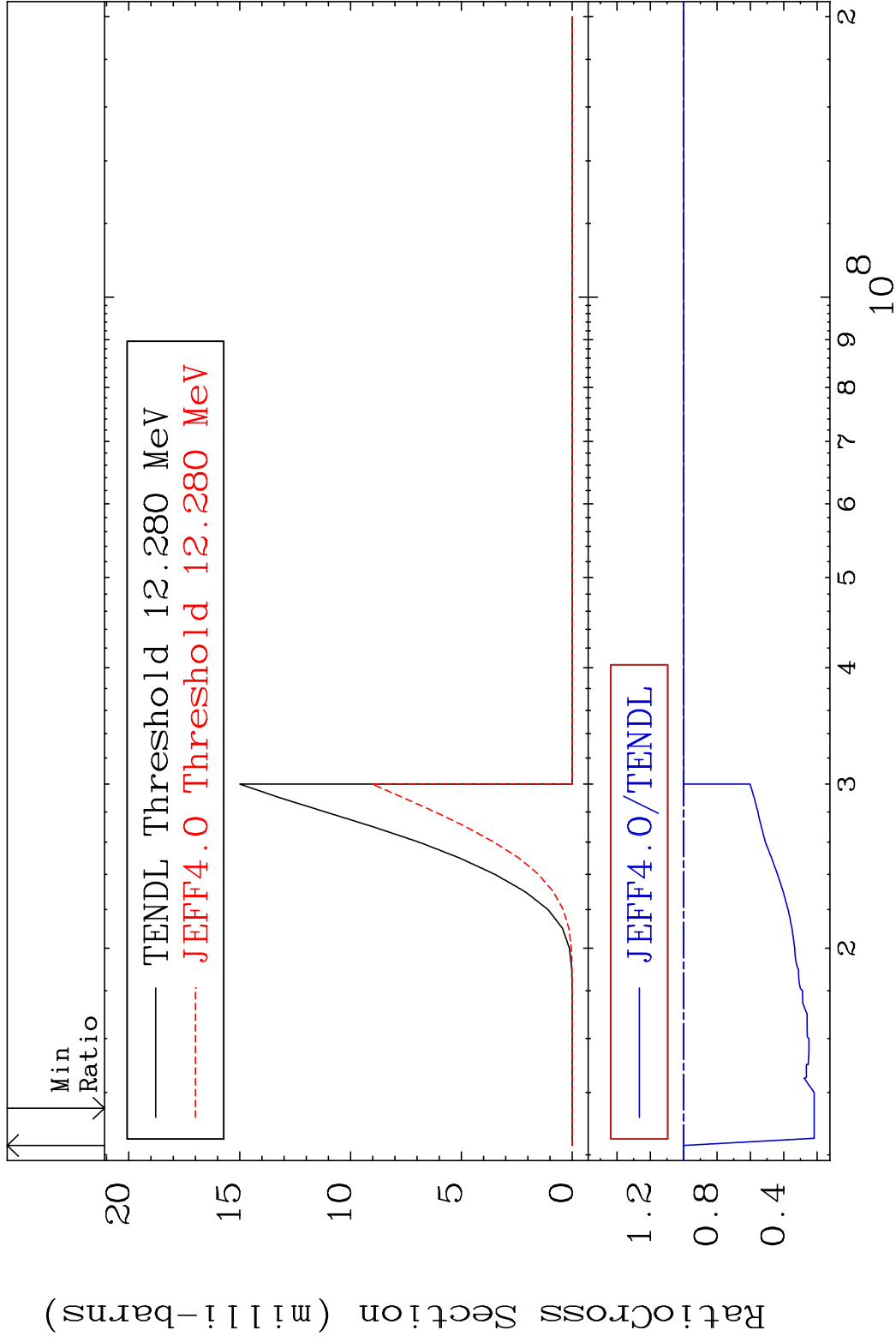


MAT 5925

(n, n') d

59-Pr-141

Cross Section -78.16 To 0.000 %



12

Incident Energy (eV)

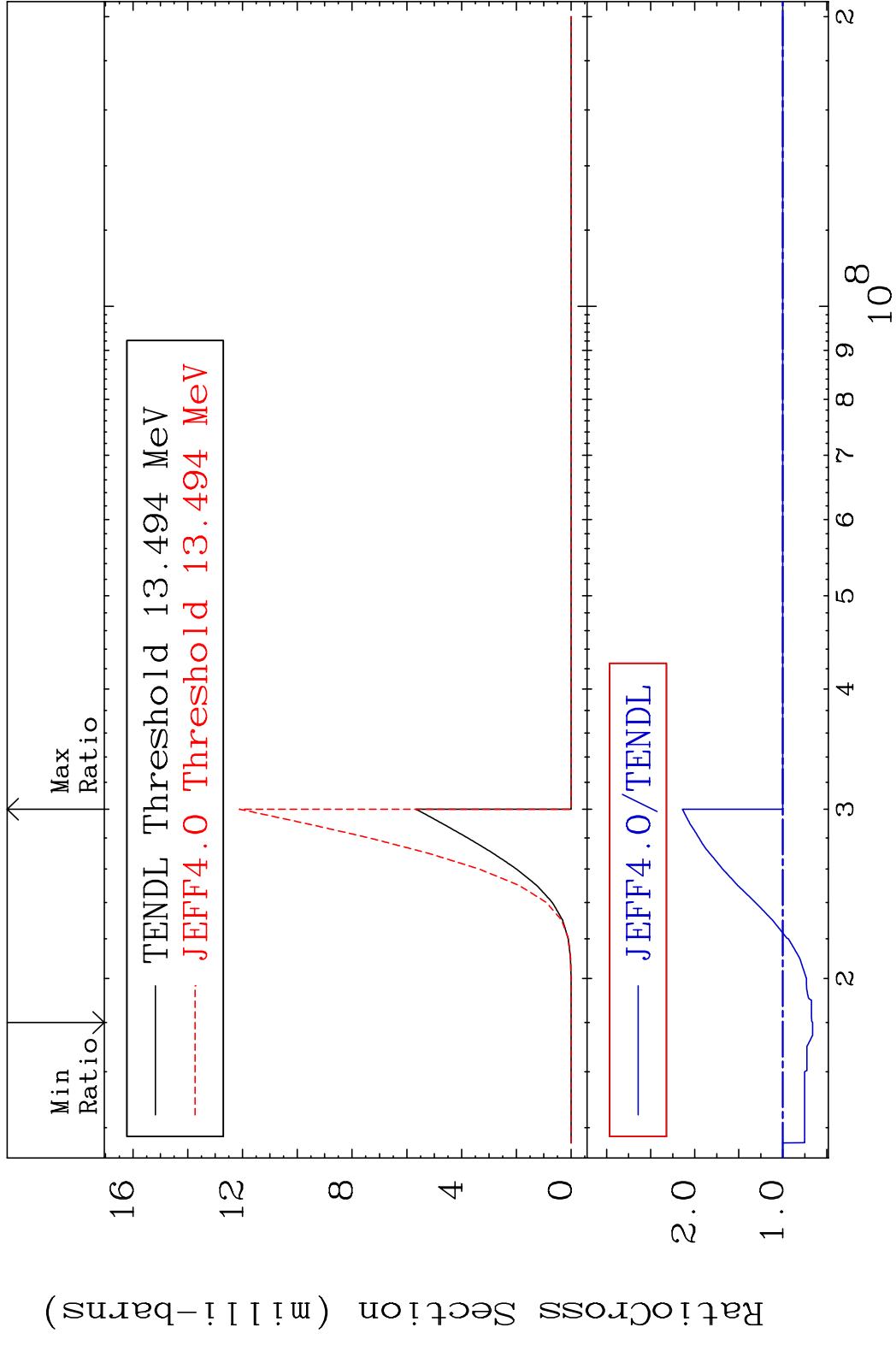
59-Pr-141

MAT 5925

(n, n') t

59-Pr-141

Cross Section -33.80 To 114.0 %

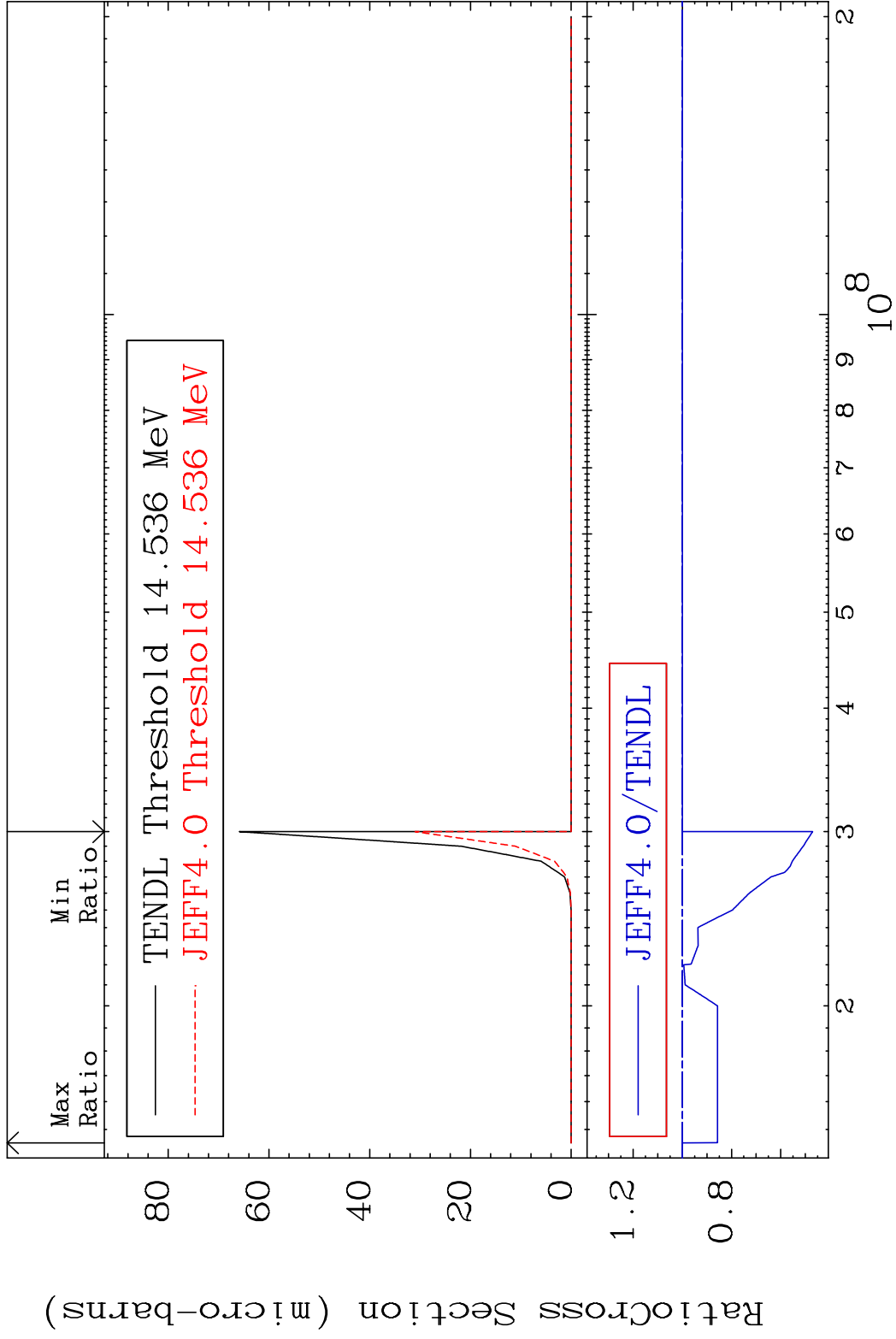


MAT 5925

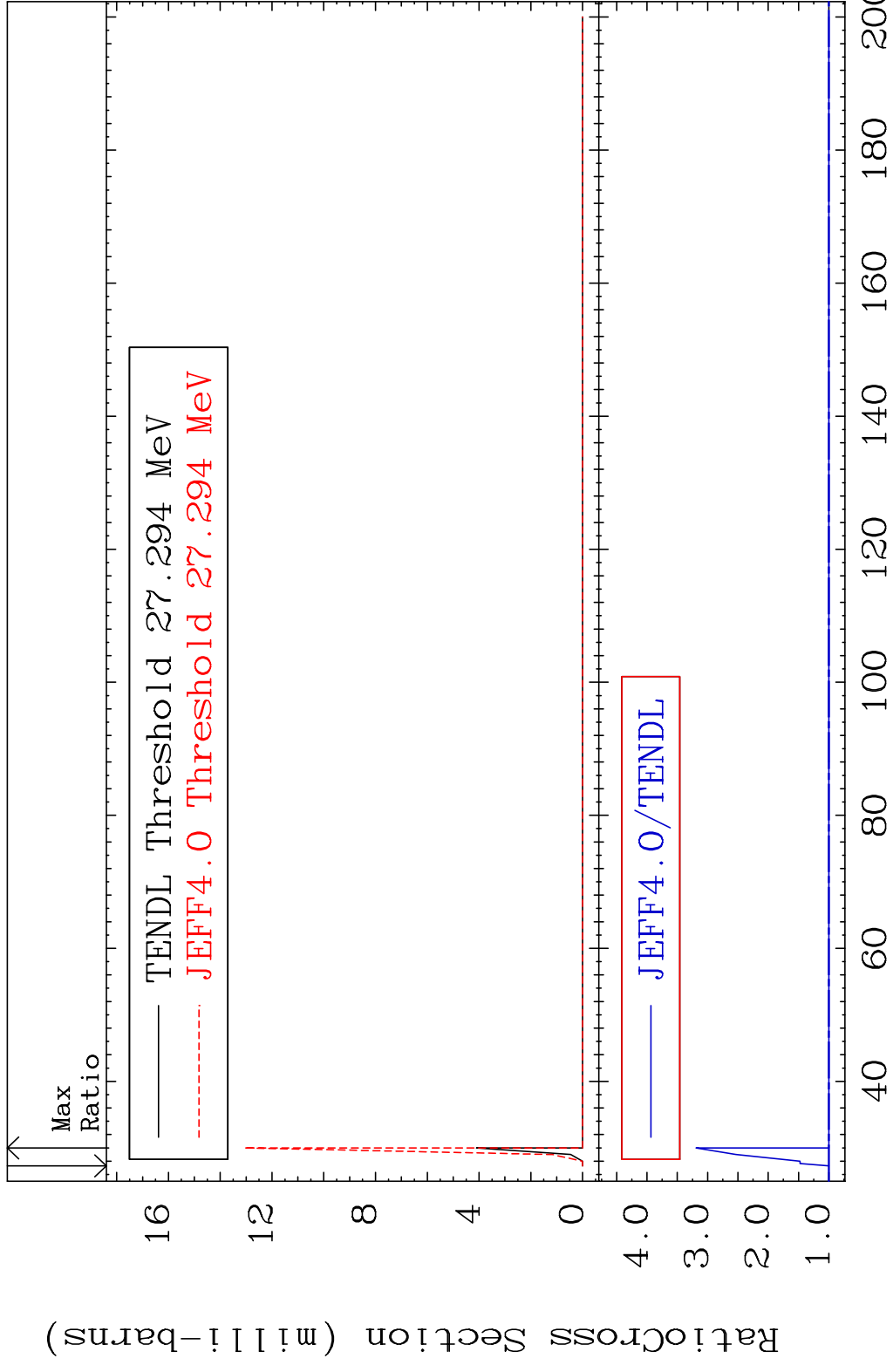
(n,n') He-3

59-Pr-141

Cross Section -52.94 To 0.000 %



MAT 5925 (n,4n) 59-Pr-141
 Cross Section 0.000 To 219.1 %

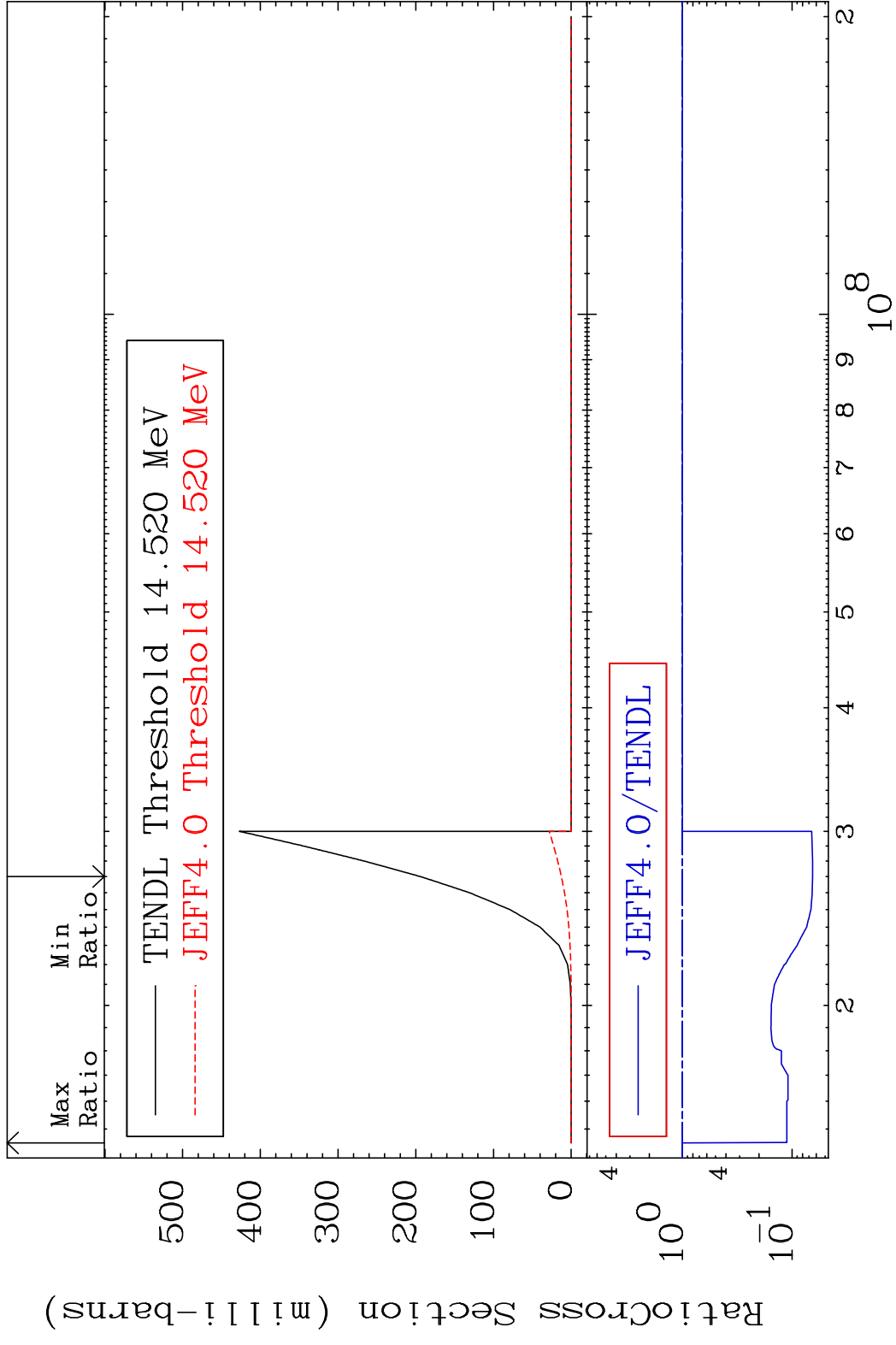


MAT 5925

(n,2n) p

59-Pr-141

Cross Section -93.50 To 0.000 %

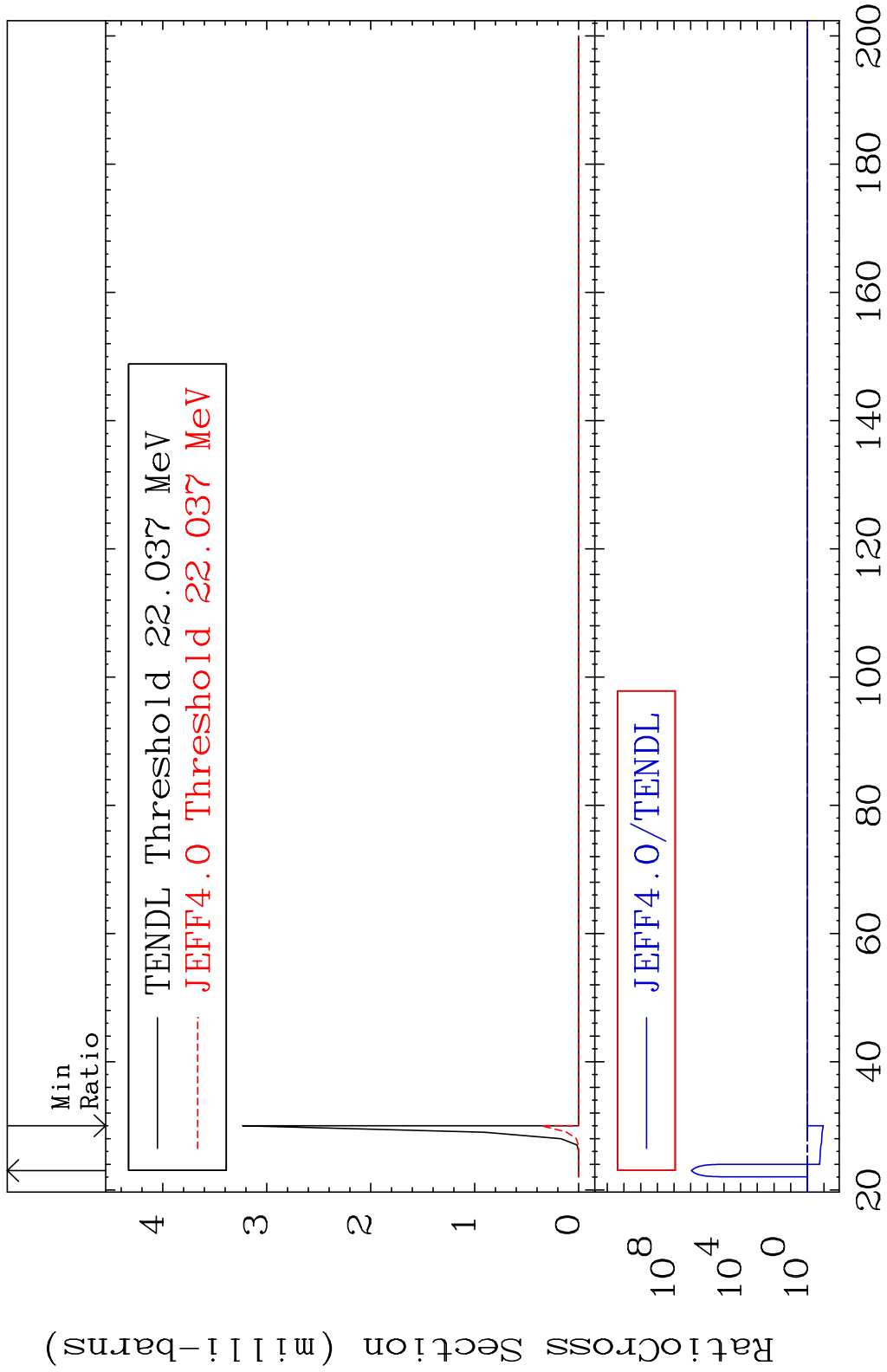


MAT 5925

(n,3n) p

59-Pr-141

Cross Section -88.94 To 9999. %

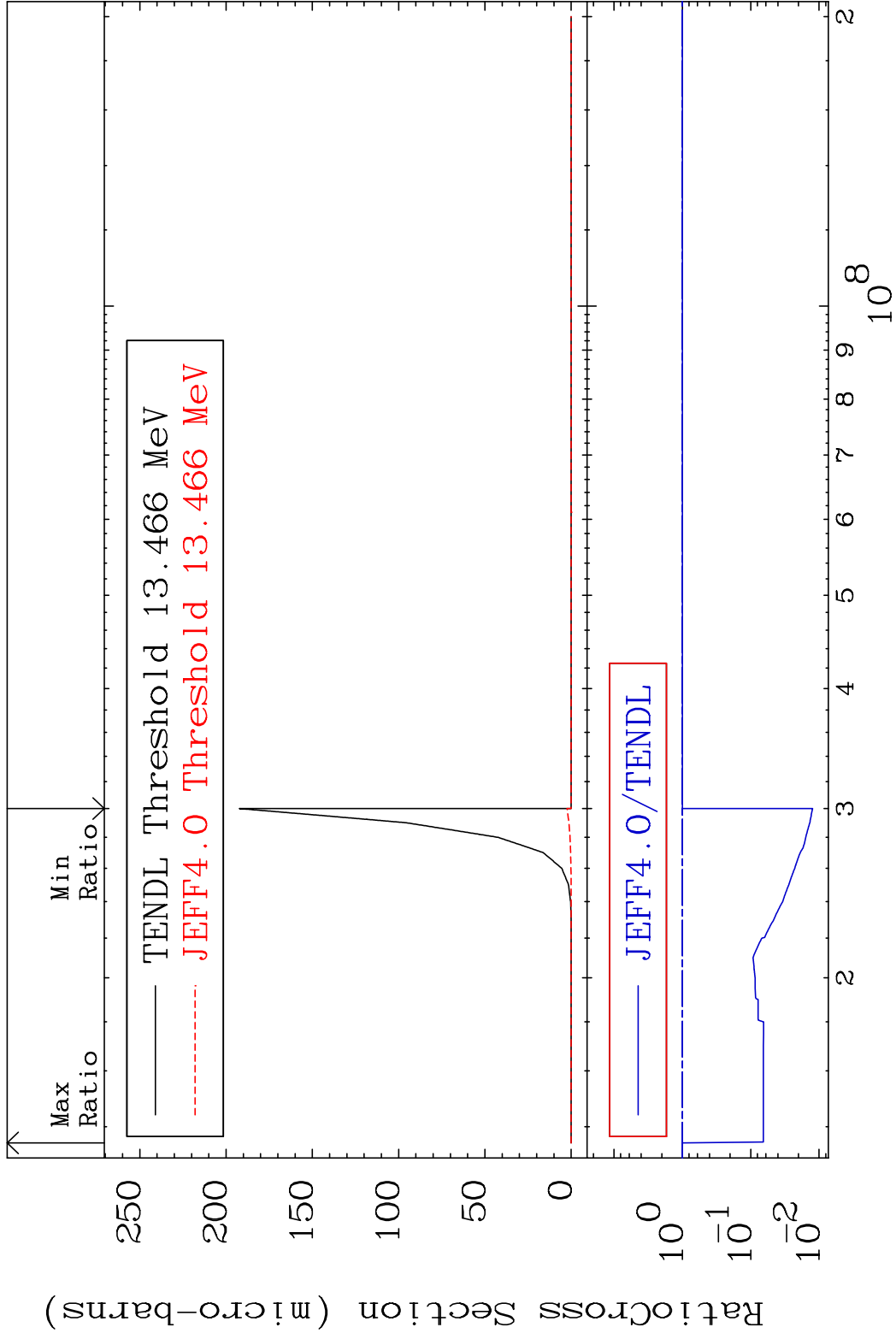


MAT 5925

(n,2n) p

59-Pr-141

Cross Section -98.75 To 0.000 %

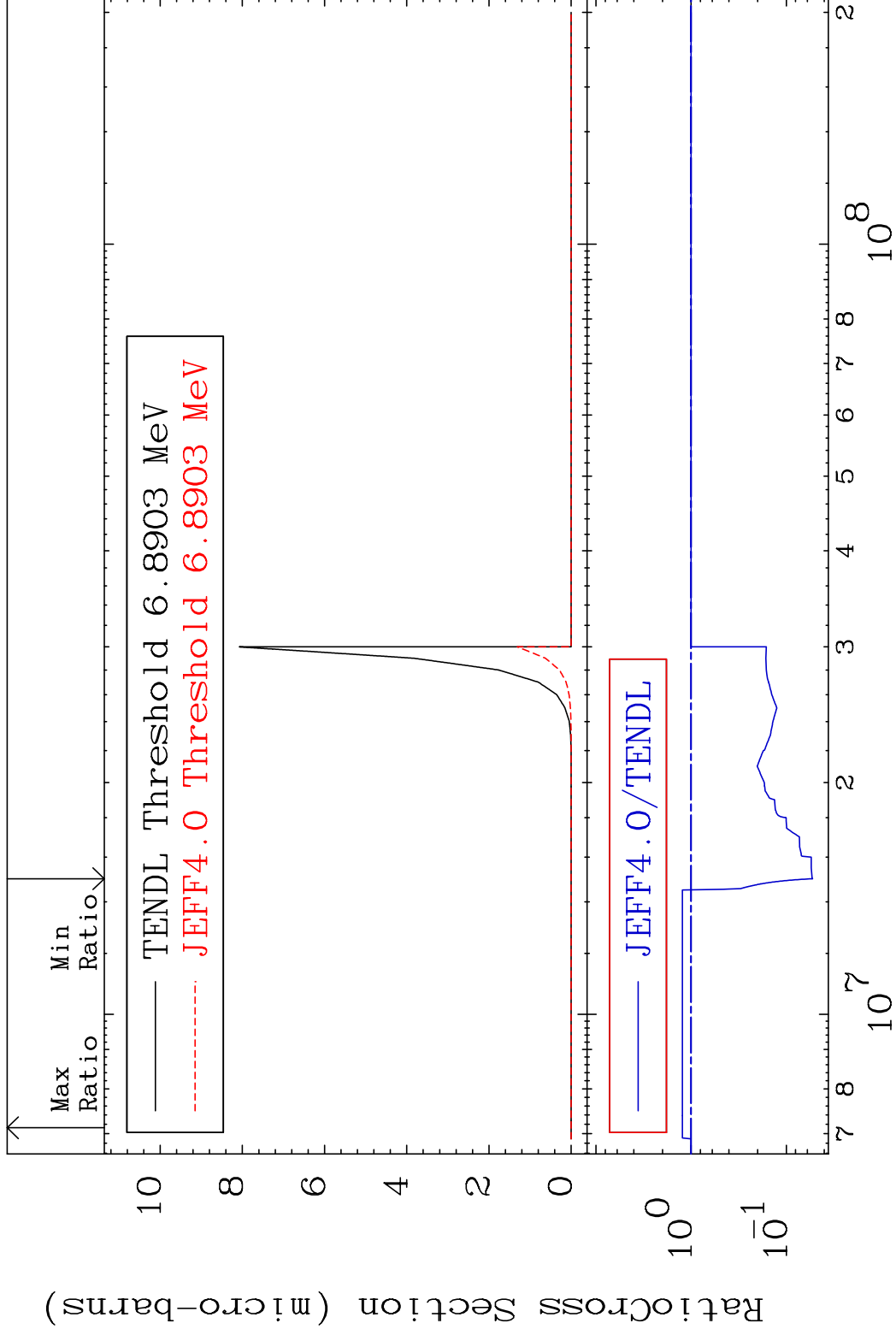


MAT 5925

(n, n') p α

59-Pr-141

Cross Section -94.70 To 23.73 %

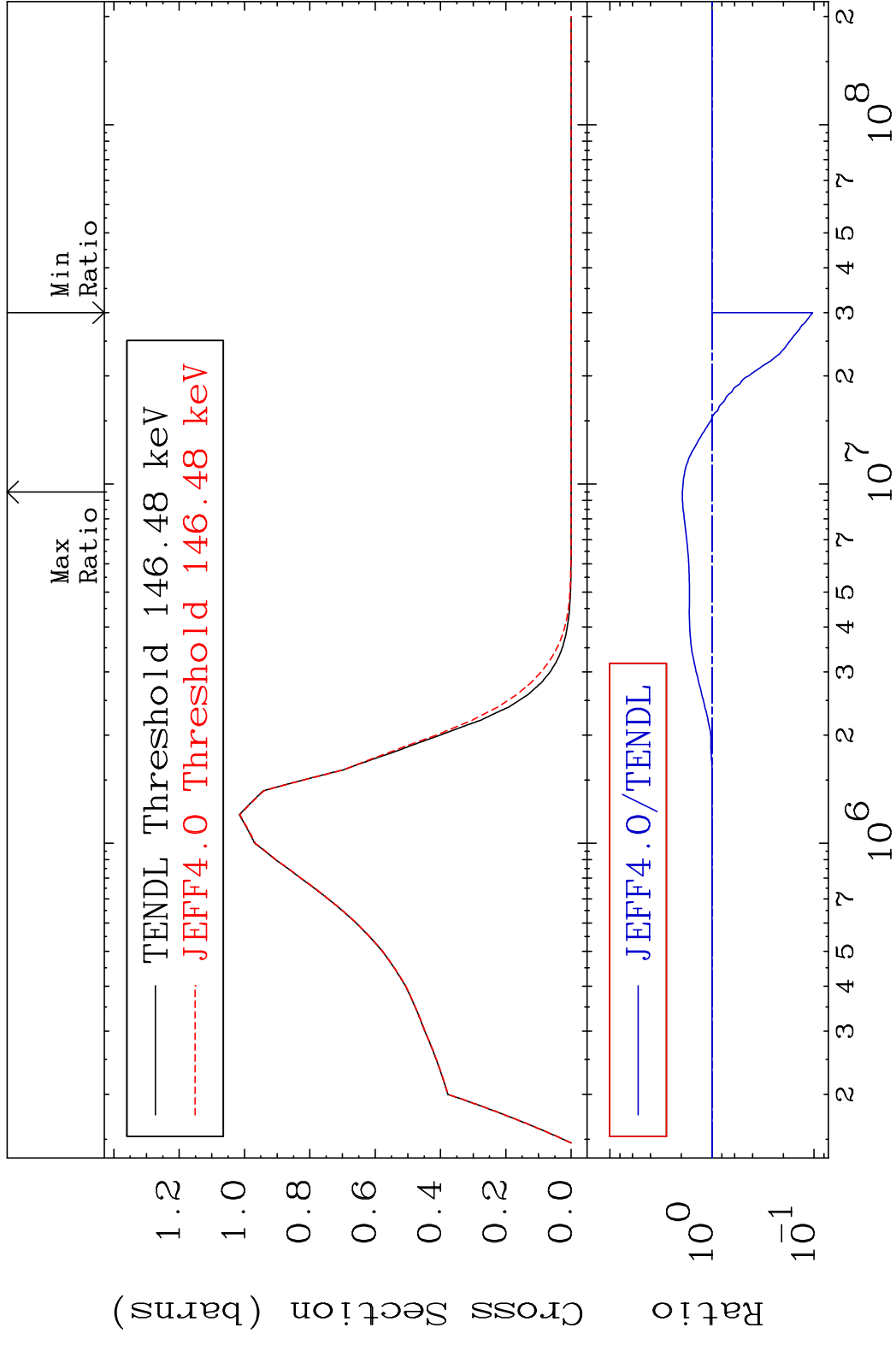


19

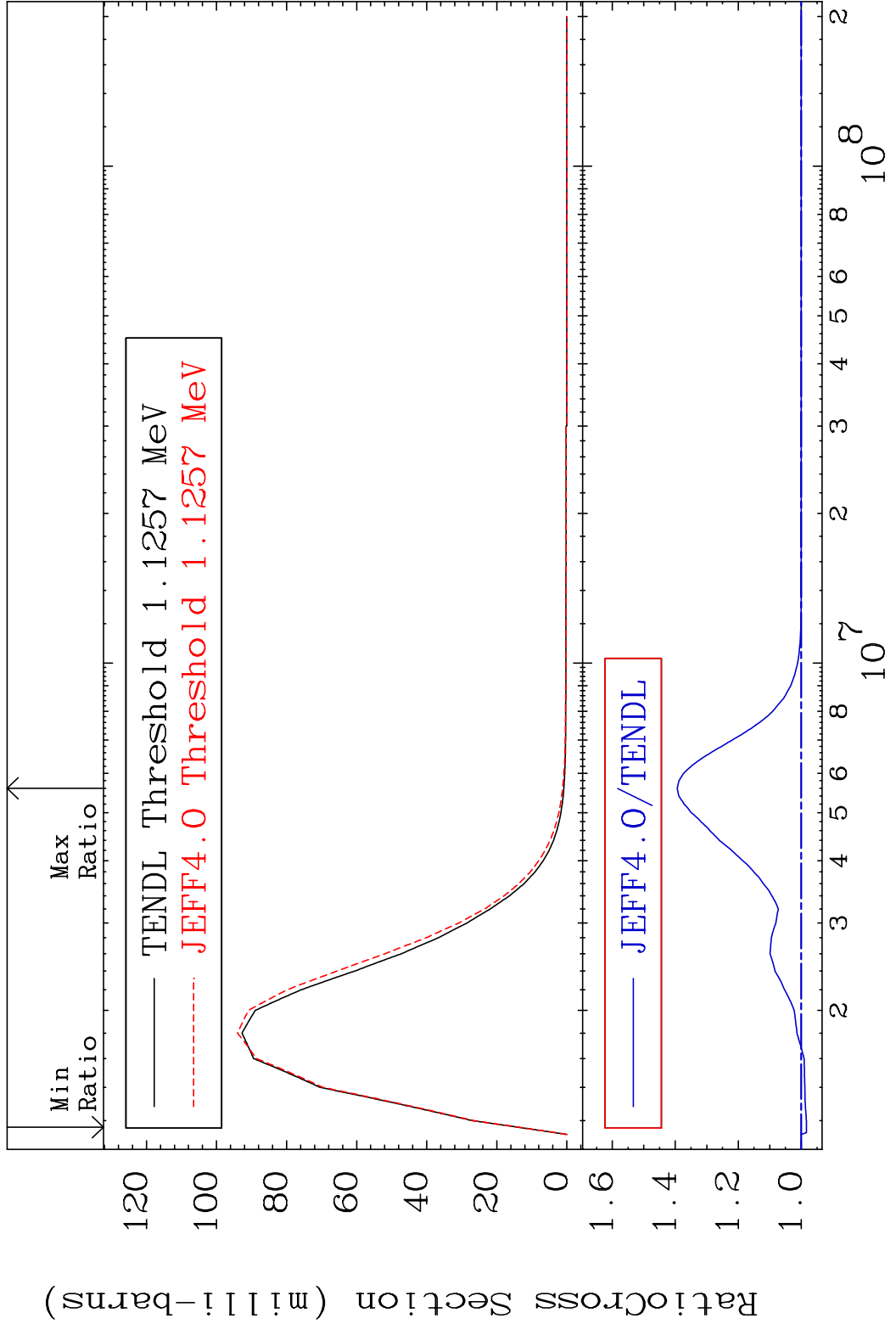
Incident Energy (eV)

59-Pr-141

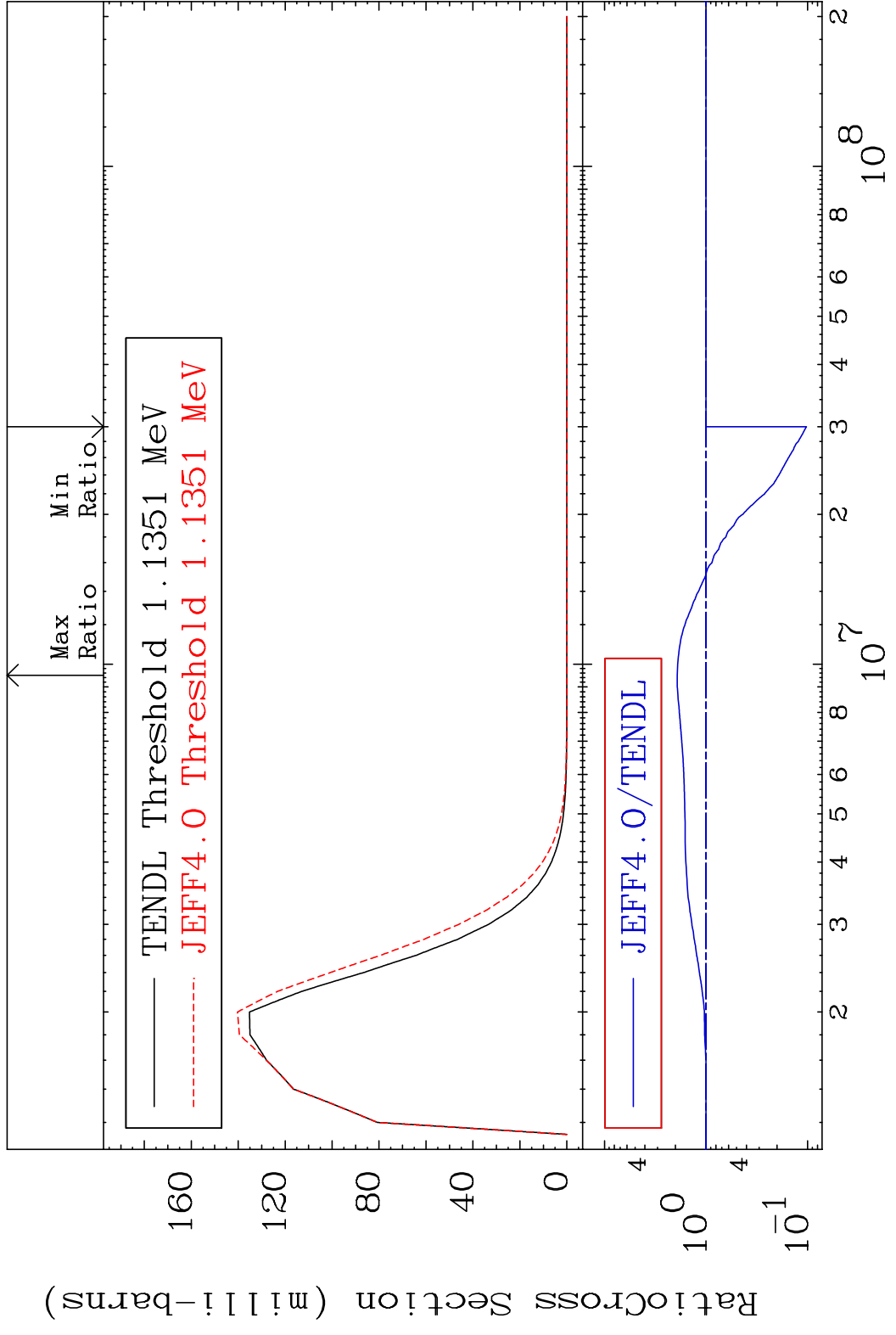
MAT 5925 MT= 51 (n, n') Level 59-Pr-141
 Cross Section -89.66 To 95.06 %



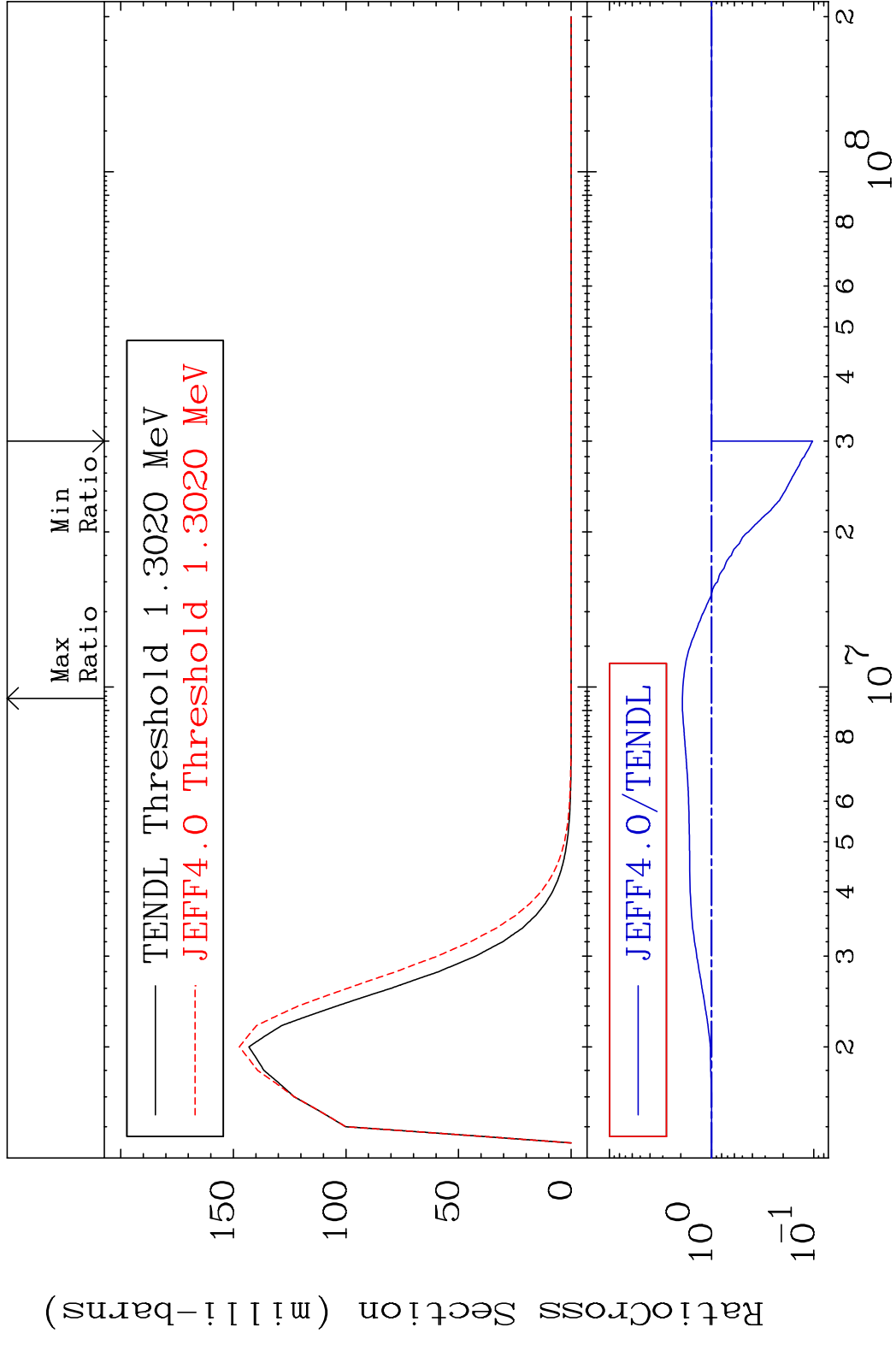
MAT 5925 MT= 52 (n, n') Level 59-Pr-141
 Cross Section -1.635 To 39.40 %



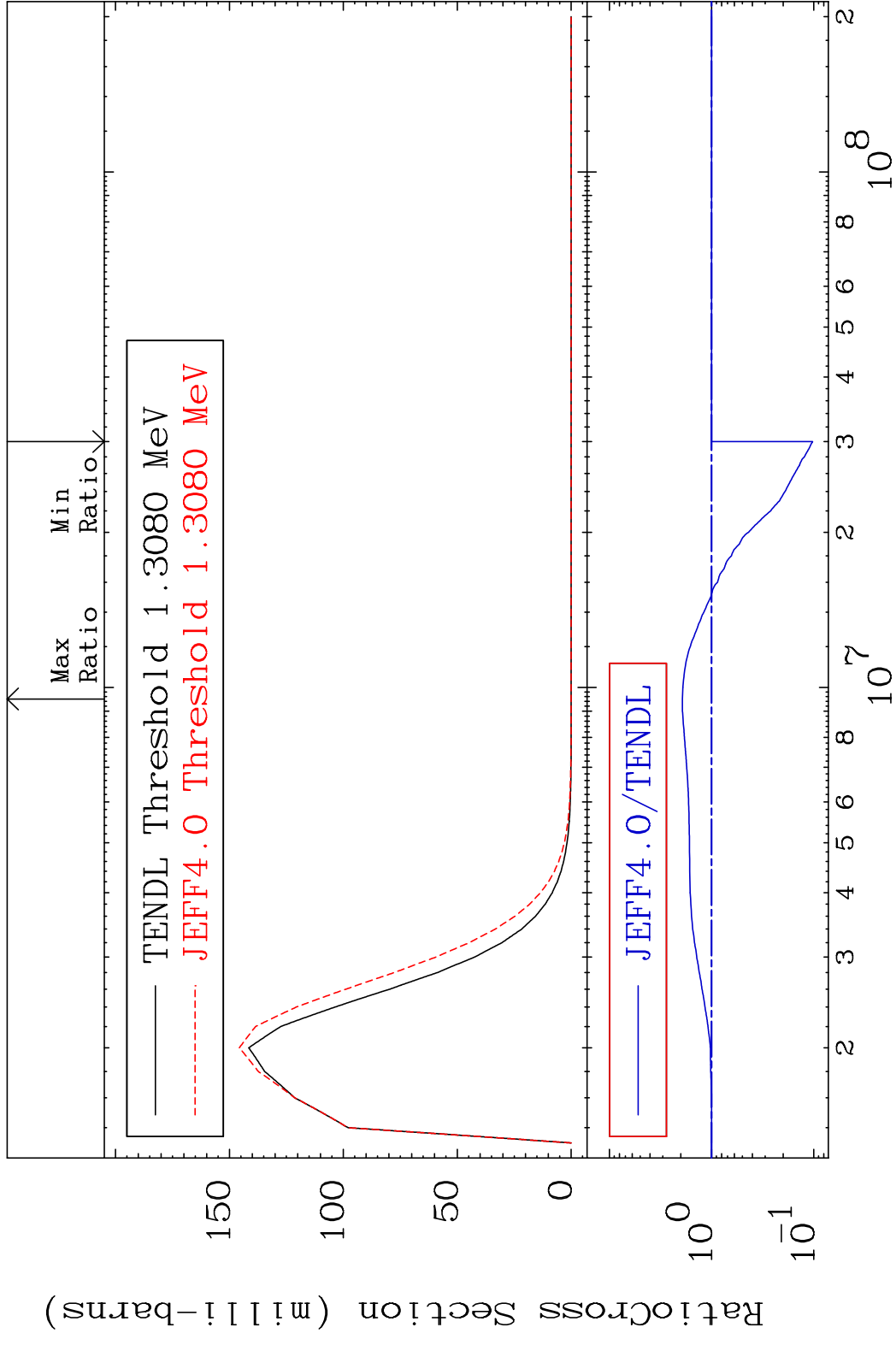
MAT 5925 MT= 53 (n, n') Level 59-Pr-141
 Cross Section -89.73 To 92.41 %



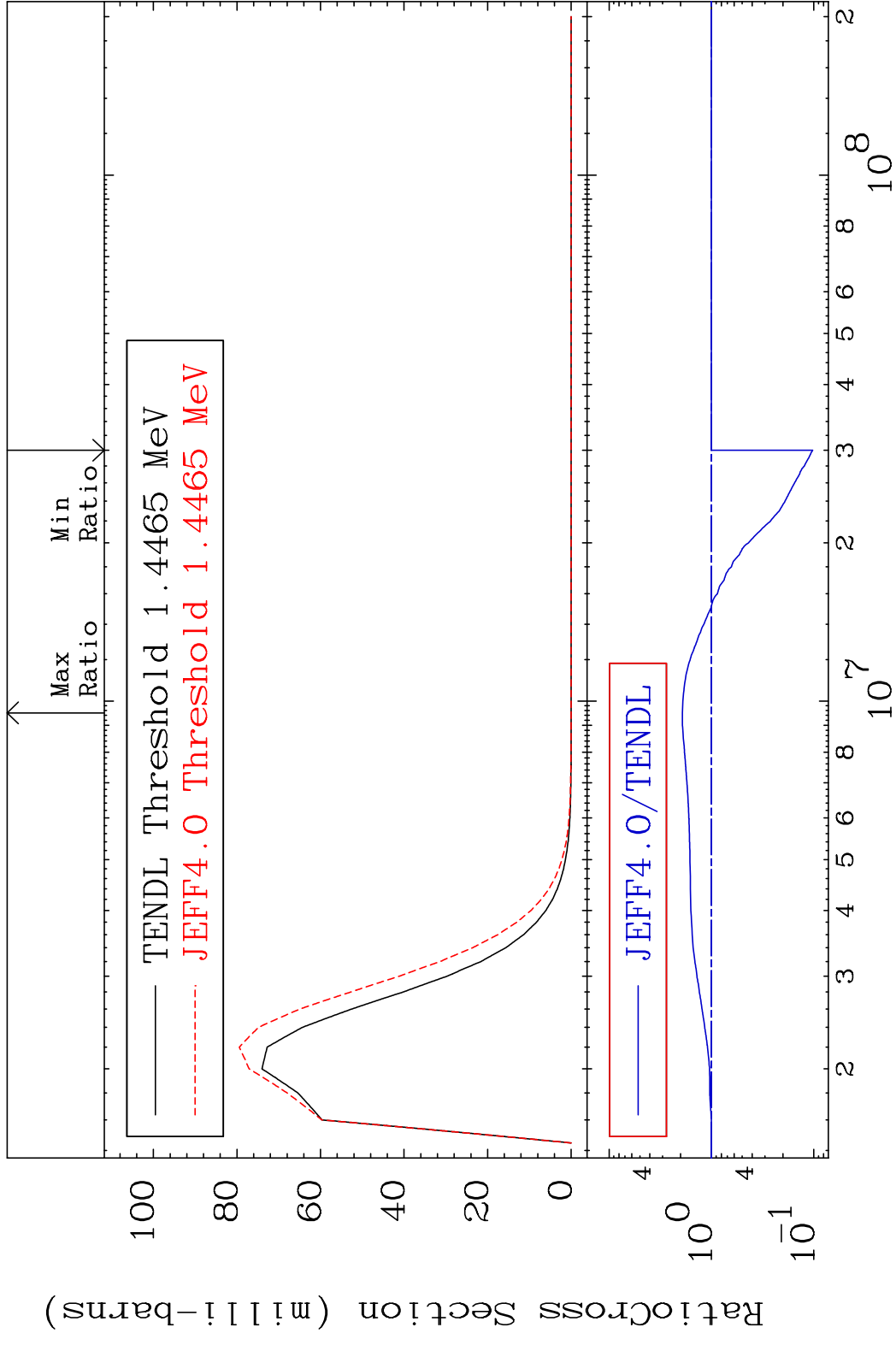
MAT 5925 MT= 54 (n, n') Level 59-Pr-141
 Cross Section -89.70 To 93.48 %



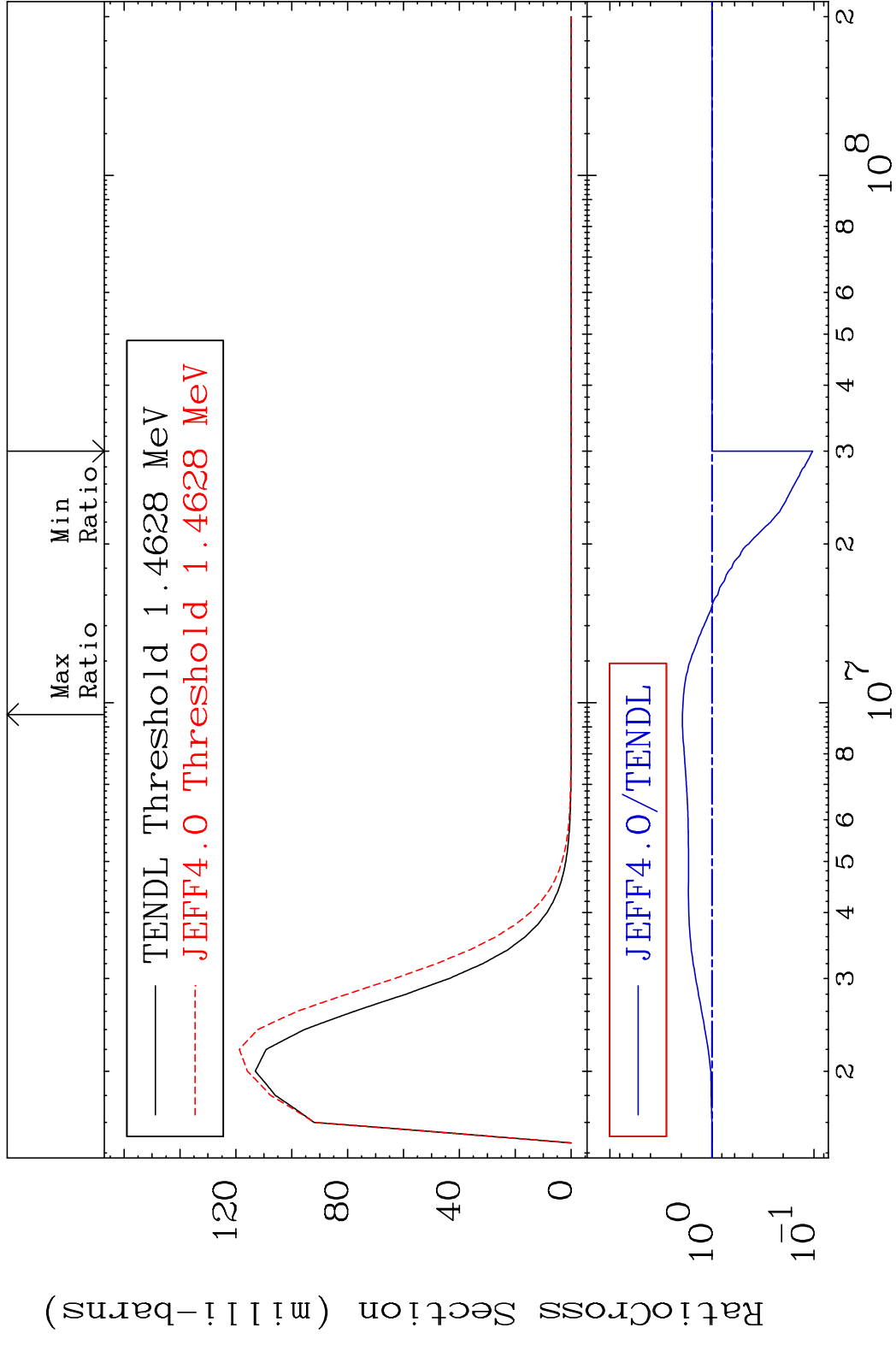
MAT 5925 MT= 55 (n, n') Level 59-Pr-141
 Cross Section -89.70 To 93.48 %



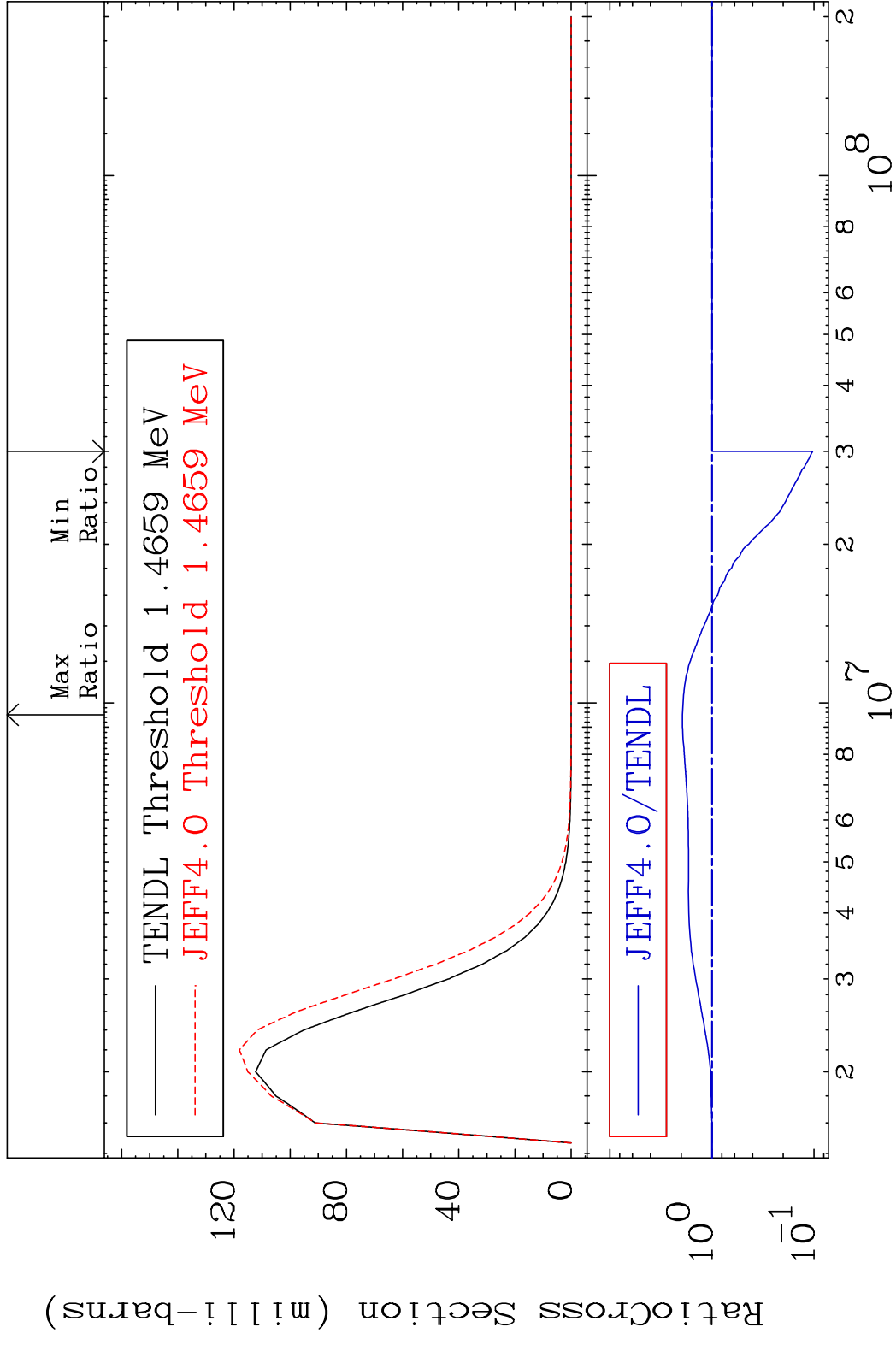
MAT 5925 MT= 56 (n,n') Level 59-Pr-141
 Cross Section -89.73 To 92.28 %



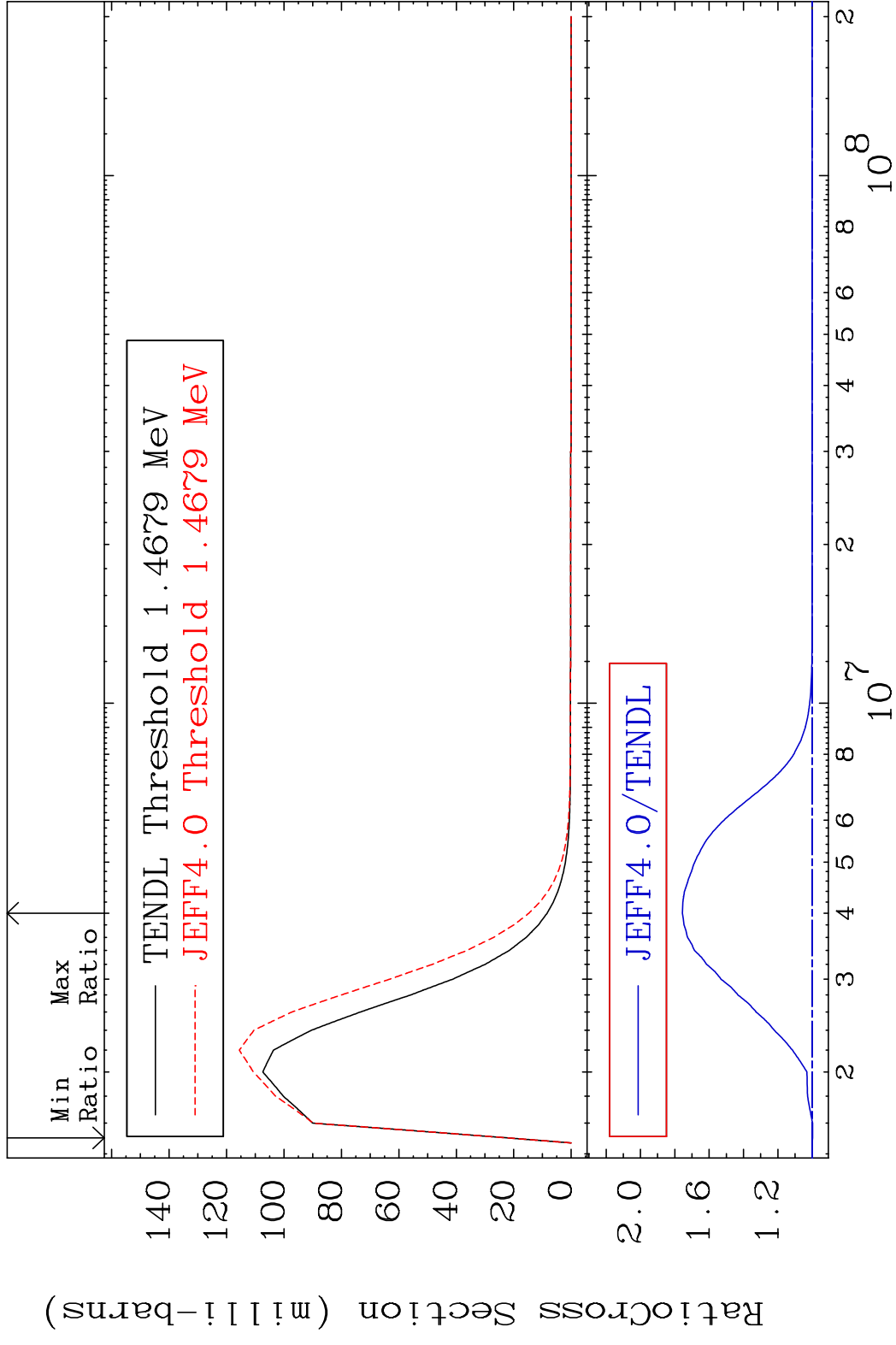
MAT 5925 MT= 57 (n,n') Level 59-Pr-141
 Cross Section -89.67 To 94.85 %



MAT 5925 MT= 58 (n,n') Level 59-Pr-141
 Cross Section -89.67 To 94.85 %



MAT 5925 MT= 59 (n, n') Level 59-Pr-141
 Cross Section -0.225 To 75.61 %

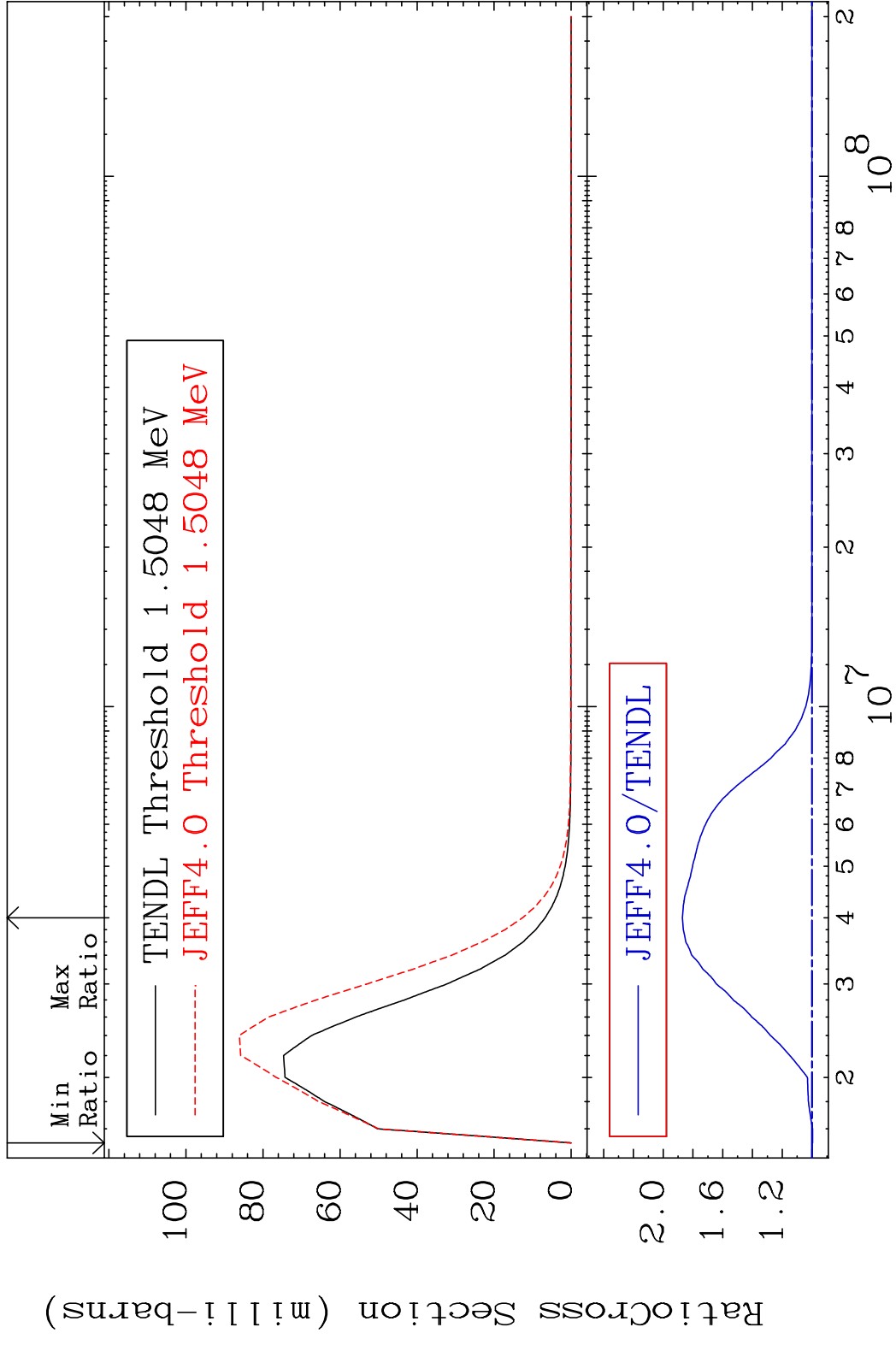


MAT 5925

MT= 60 (n,n') Level

59-Pr-141

Cross Section -0.369 To 87.12 %

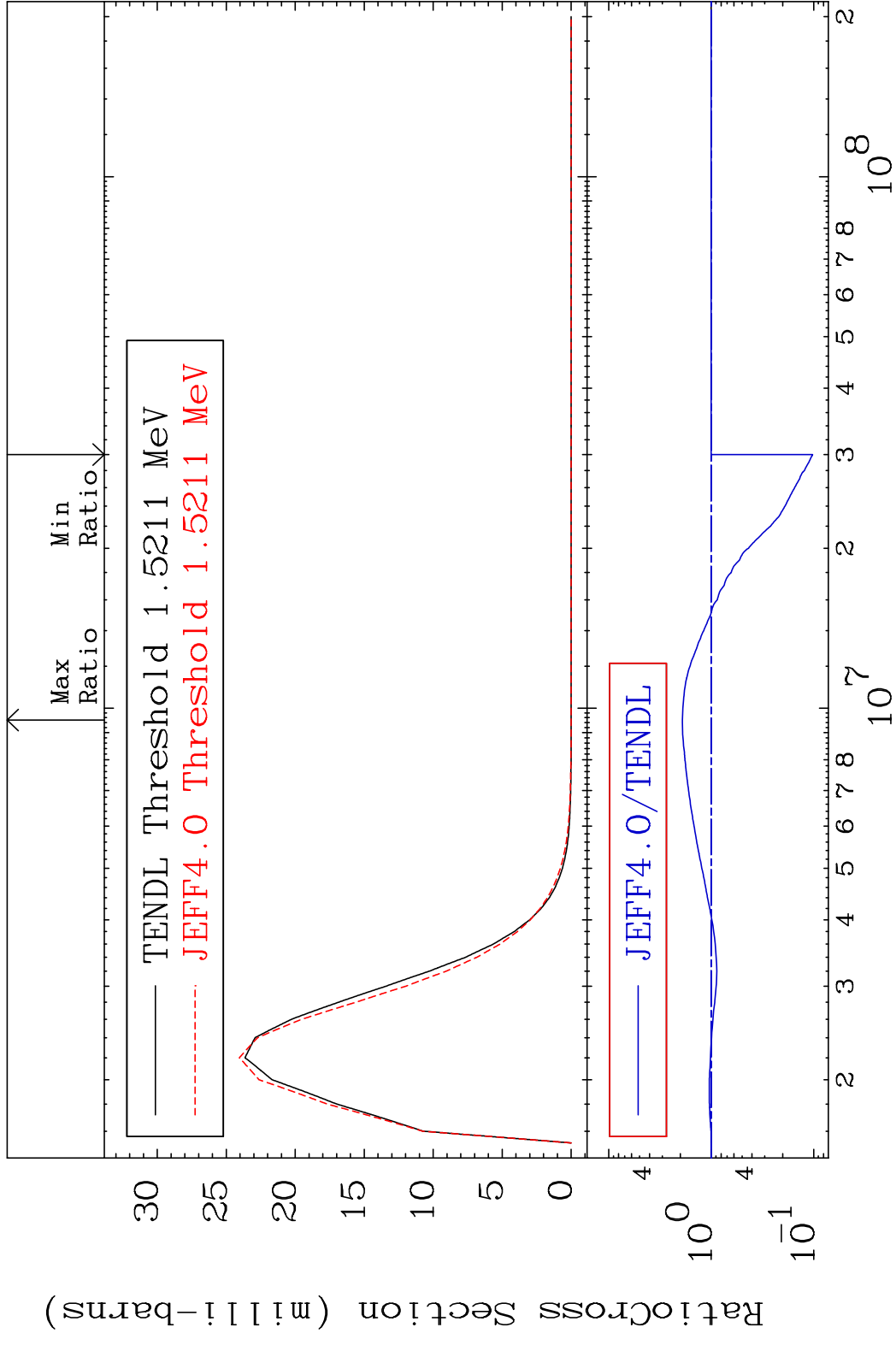


MAT 5925

MT= 61 (n, n') Level

59-Pr-141

Cross Section -89.75 To 91.16 %

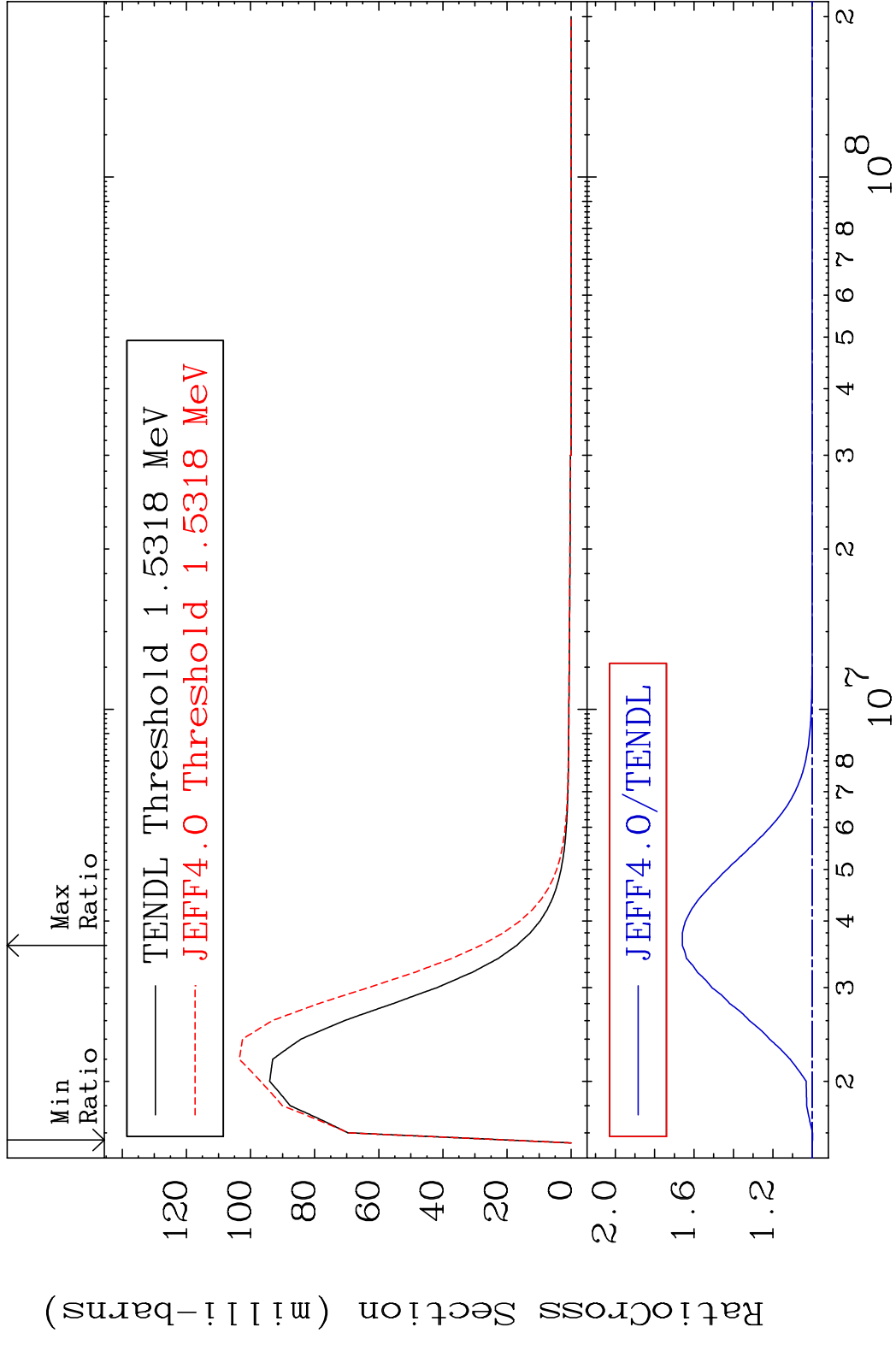


30

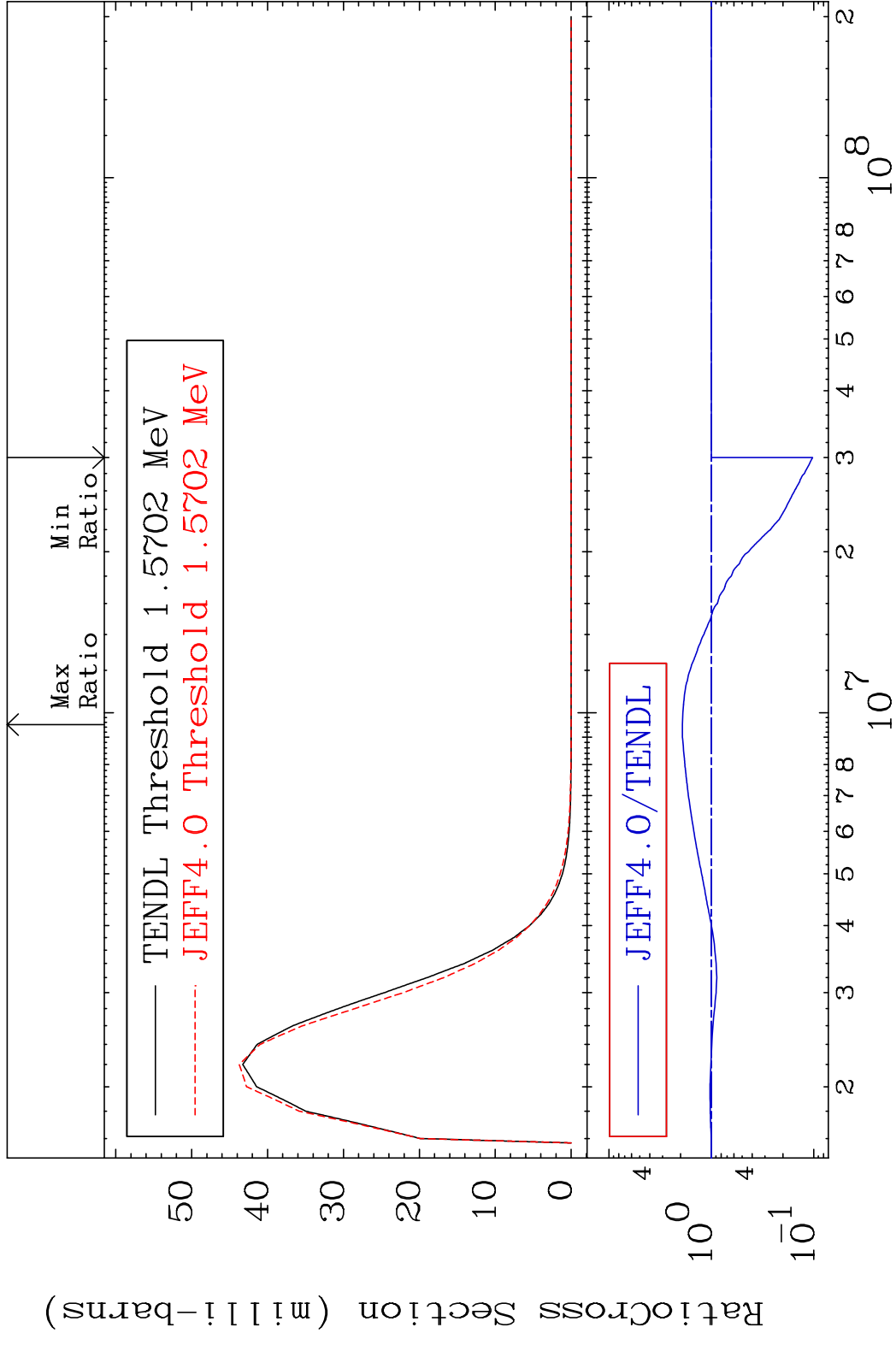
Incident Energy (eV)

59-Pr-141

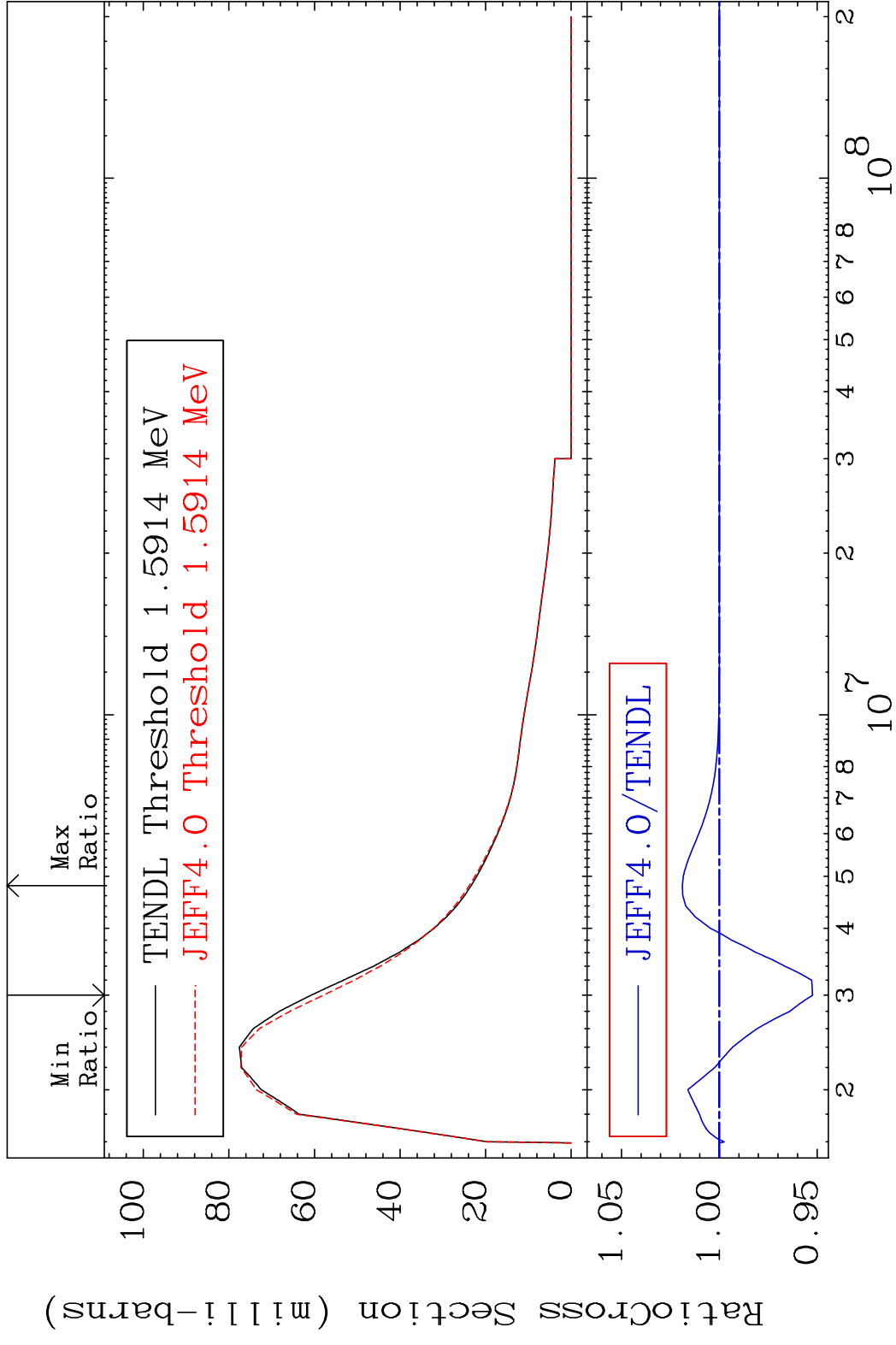
MAT 5925 MT= 62 (n,n') Level 59-Pr-141
 Cross Section -0.177 To 65.93 %



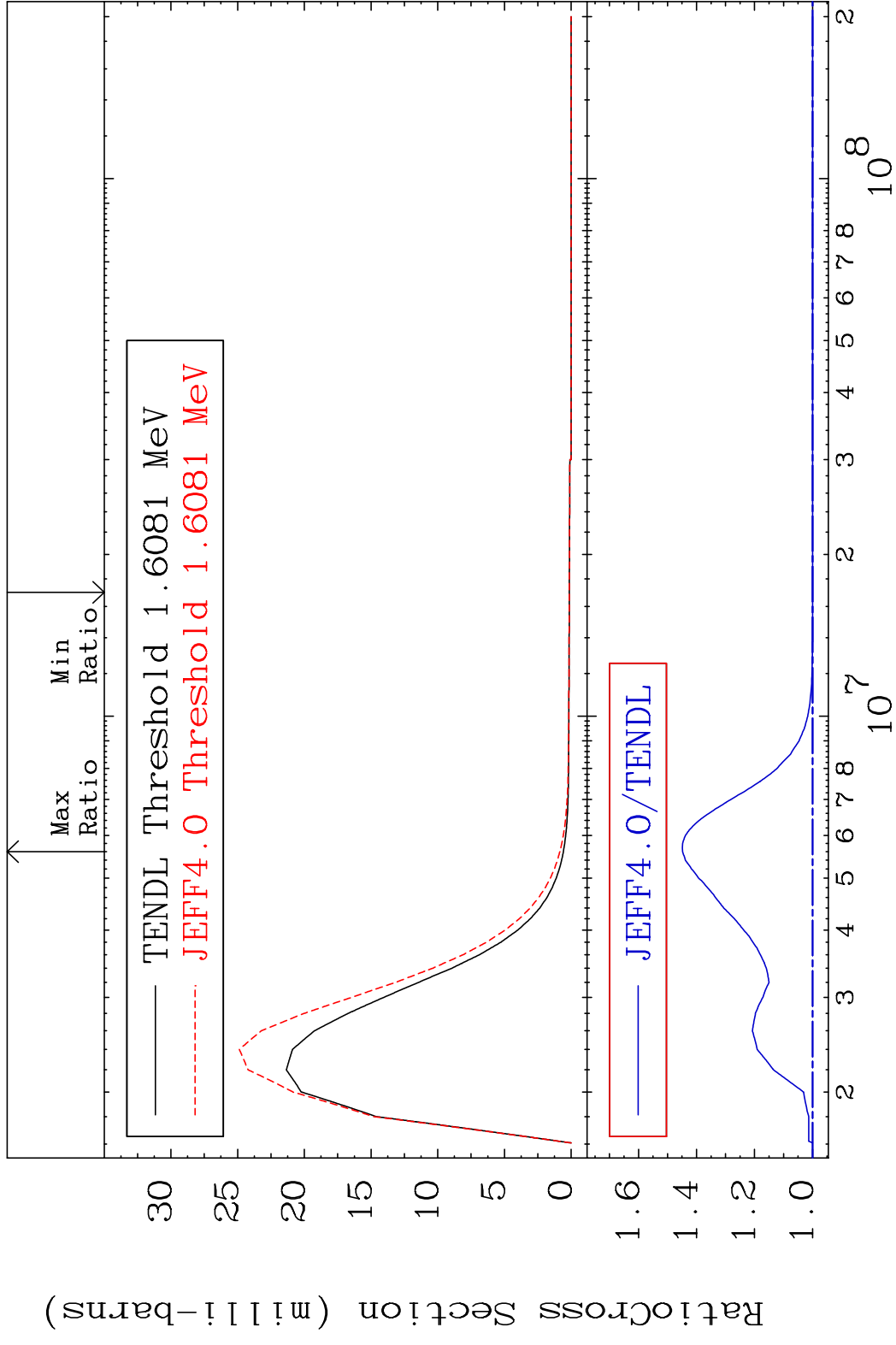
MAT 5925 MT= 63 (n,n') Level 59-Pr-141
 Cross Section -89.73 To 91.82 %



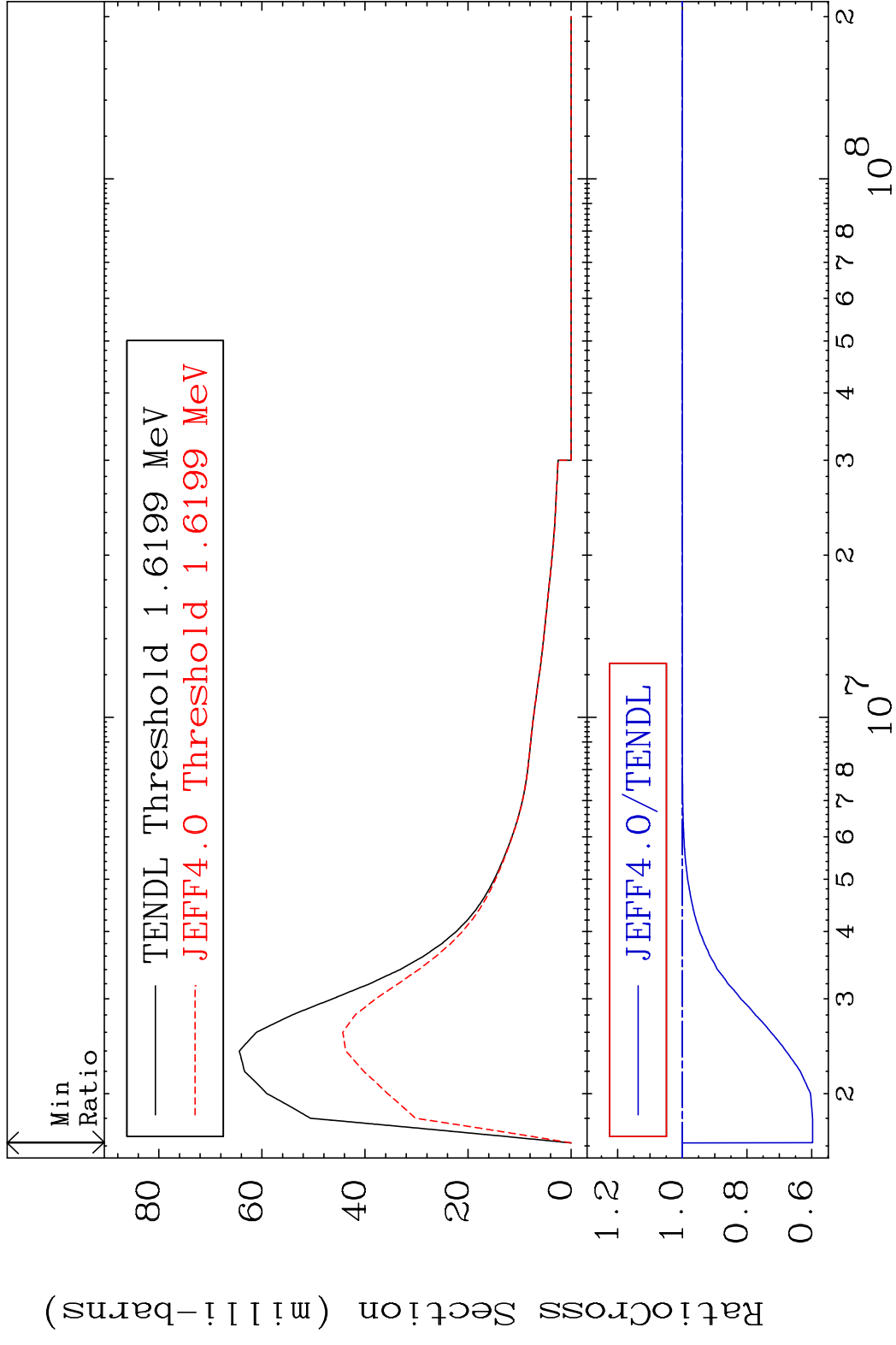
MAT 5925 MT= 64 (n,n') Level 59-Pr-141
 Cross Section -4.767 To 1.887 %



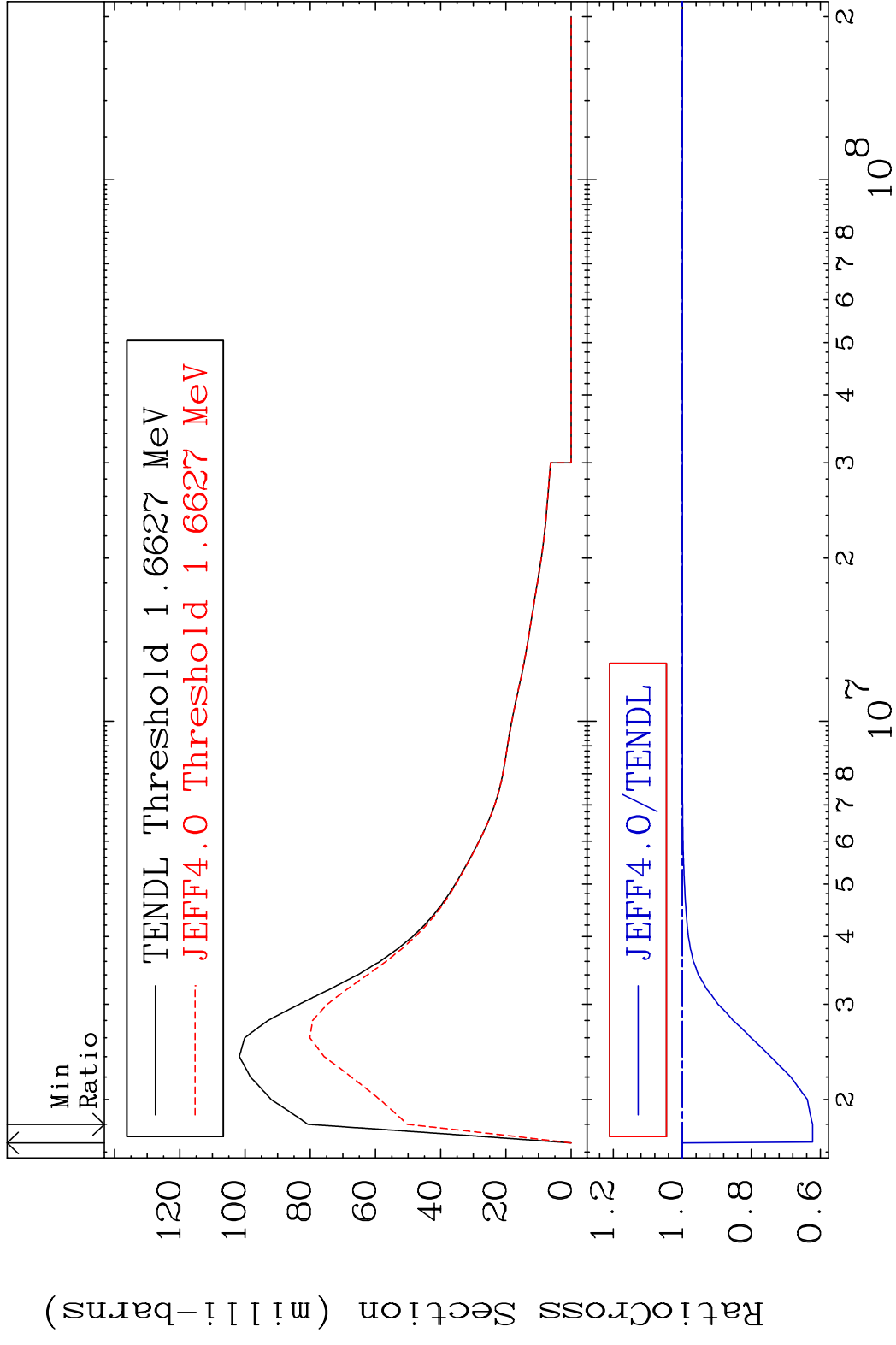
MAT 5925 MT= 65 (n,n') Level 59-Pr-141
 Cross Section -0.002 To 44.88 %



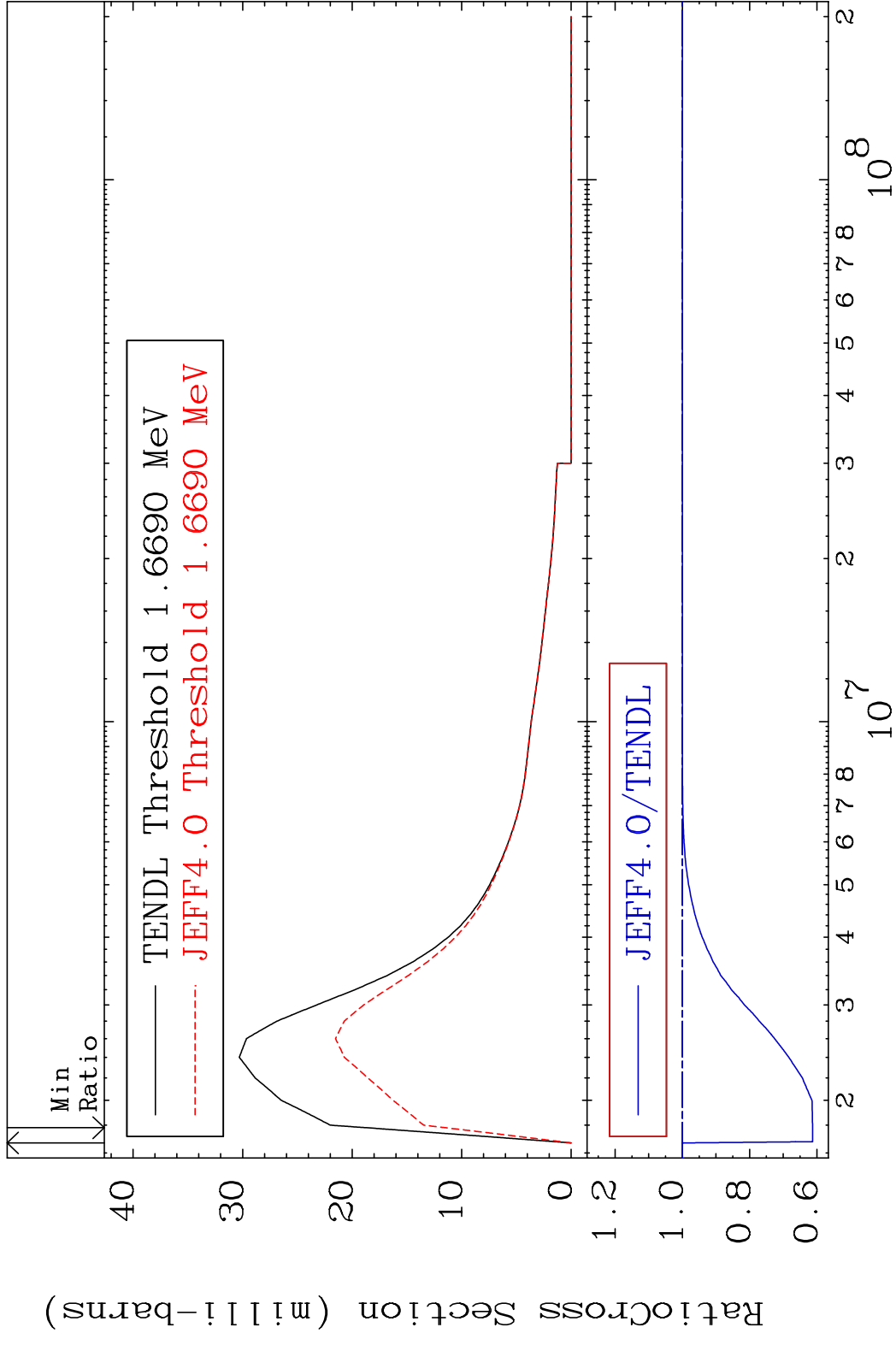
MAT 5925 MT= 66 (n,n') Level 59-Pr-141
 Cross Section -40.27 To 0.000 %



MAT 5925 MT= 67 (n,n') Level 59-Pr-141
 Cross Section -37.73 To 0.000 %



MAT 5925 MT= 68 (n,n') Level 59-Pr-141
 Cross Section -38.72 To 0.000 %

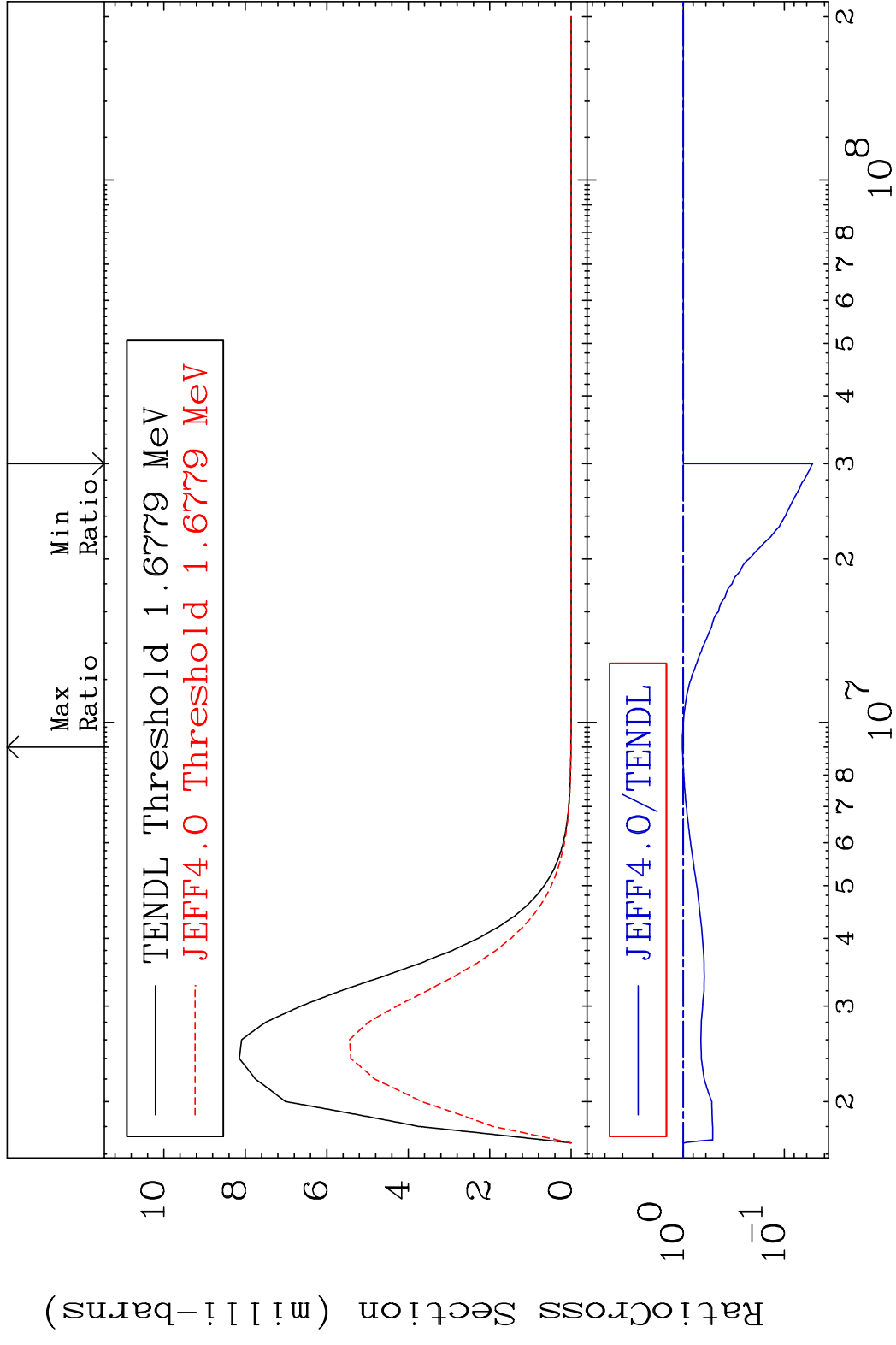


MAT 5925

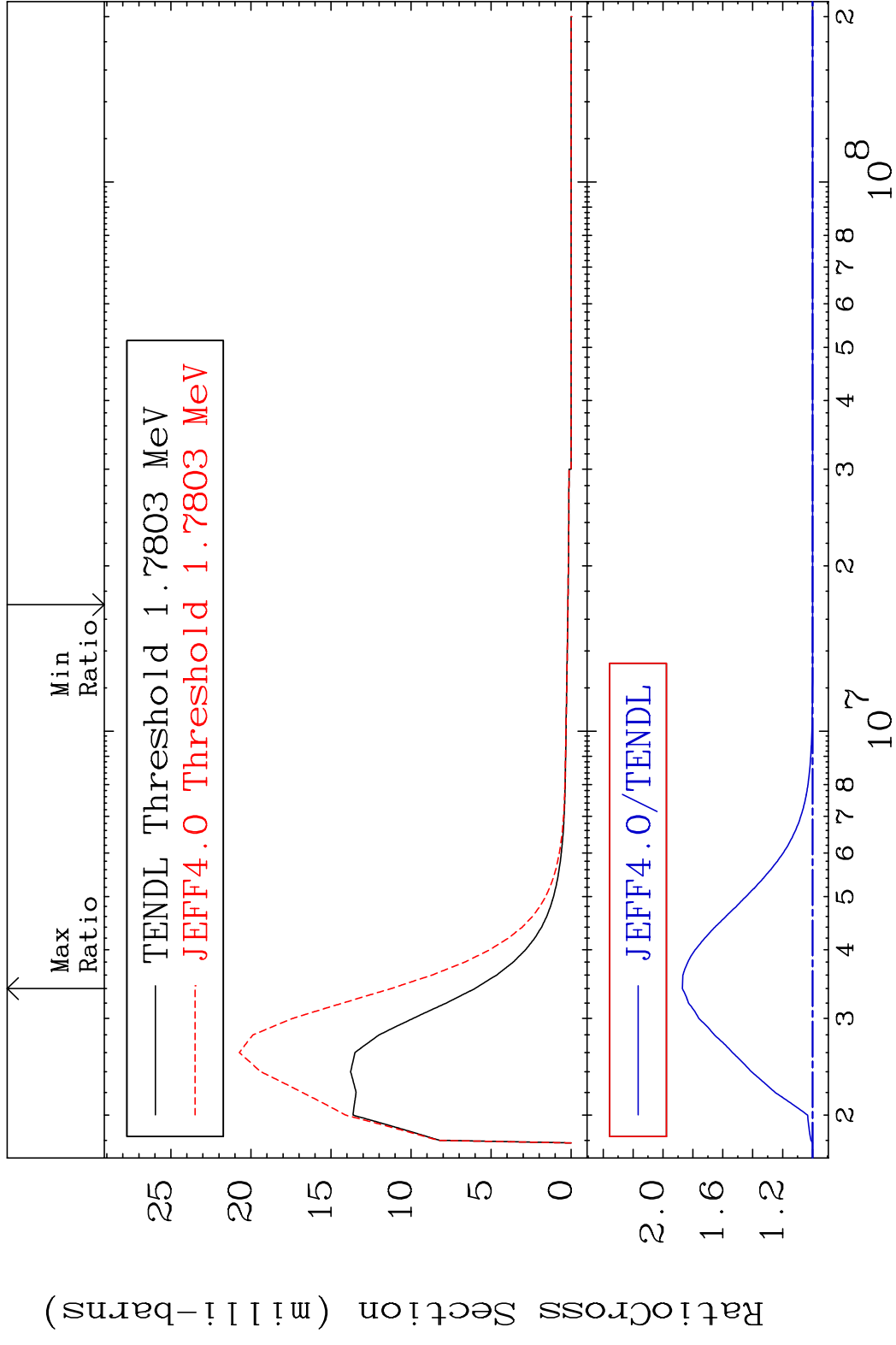
MT= 69 (n,n') Level

59-Pr-141

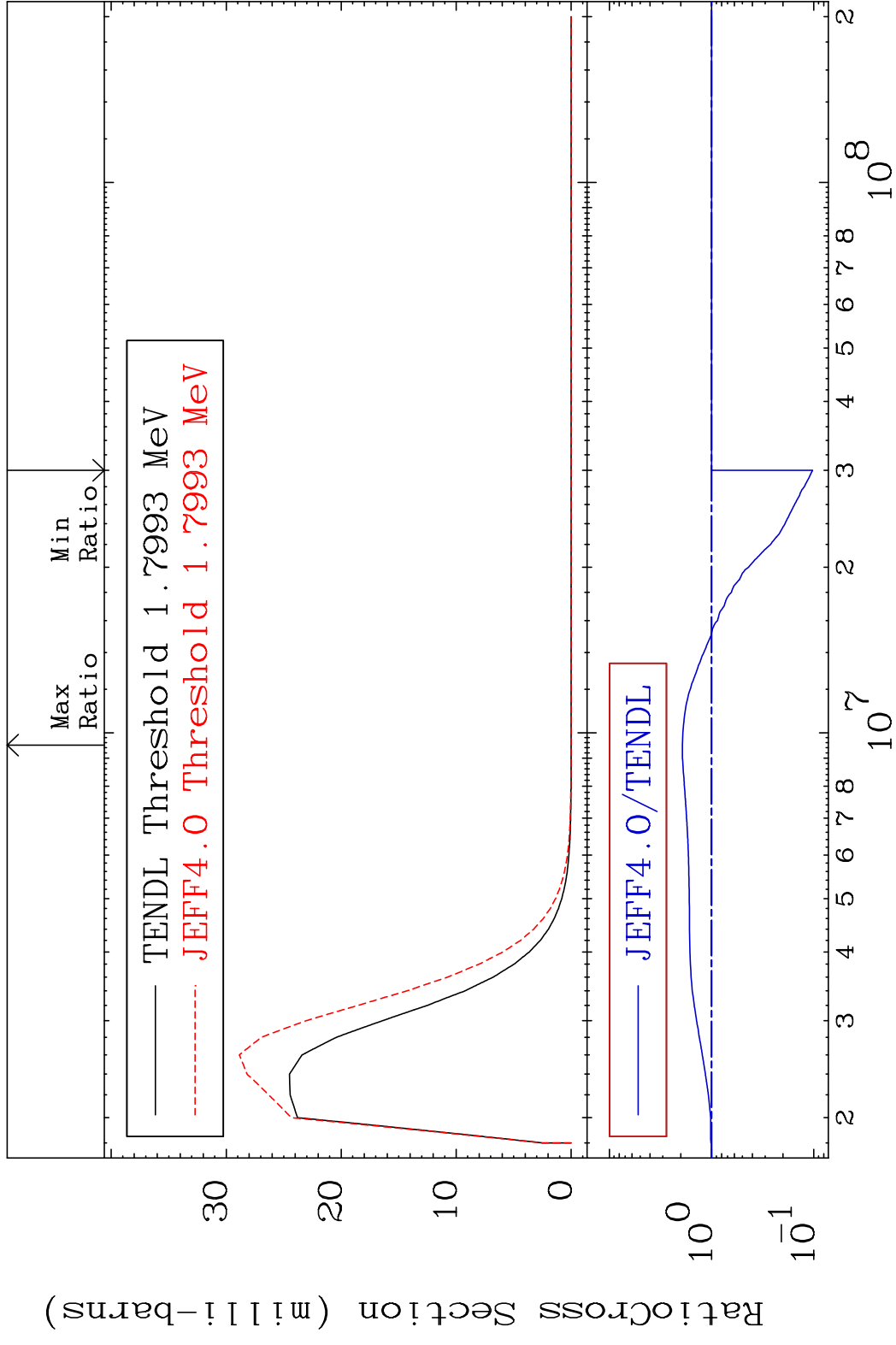
Cross Section -94.74 To 2.404 %



MAT 5925 MT= 70 (n,n') Level 59-Pr-141
 Cross Section 0.000 To 87.05 %

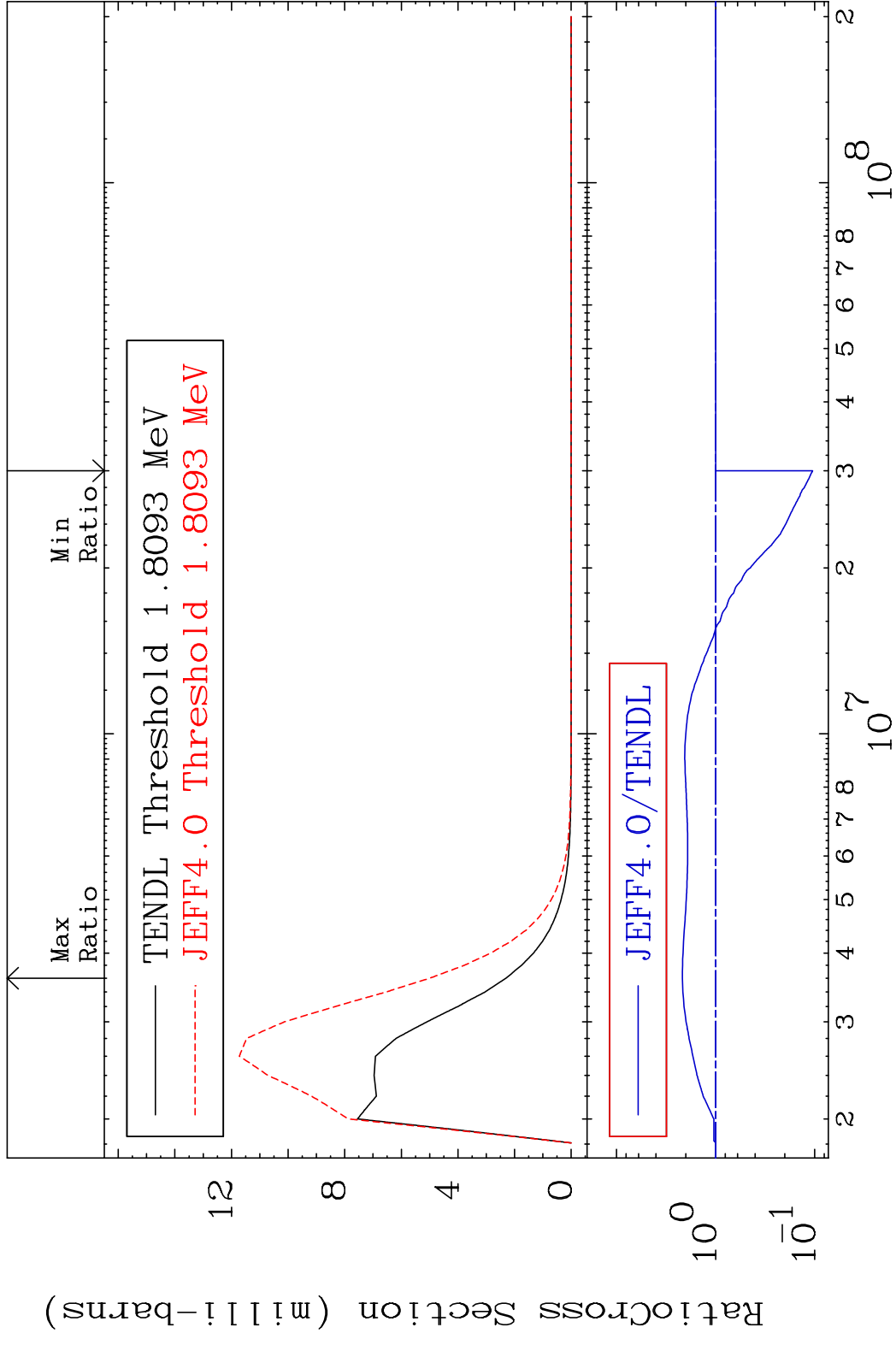


MAT 5925 MT= 71 (n, n') Level 59-Pr-141
 Cross Section -89.71 To 93.32 %



40 Incident Energy (eV) 59-Pr-141

MAT 5925 MT= 72 (n, n') Level 59-Pr-141
 Cross Section -89.49 To 116.6 %

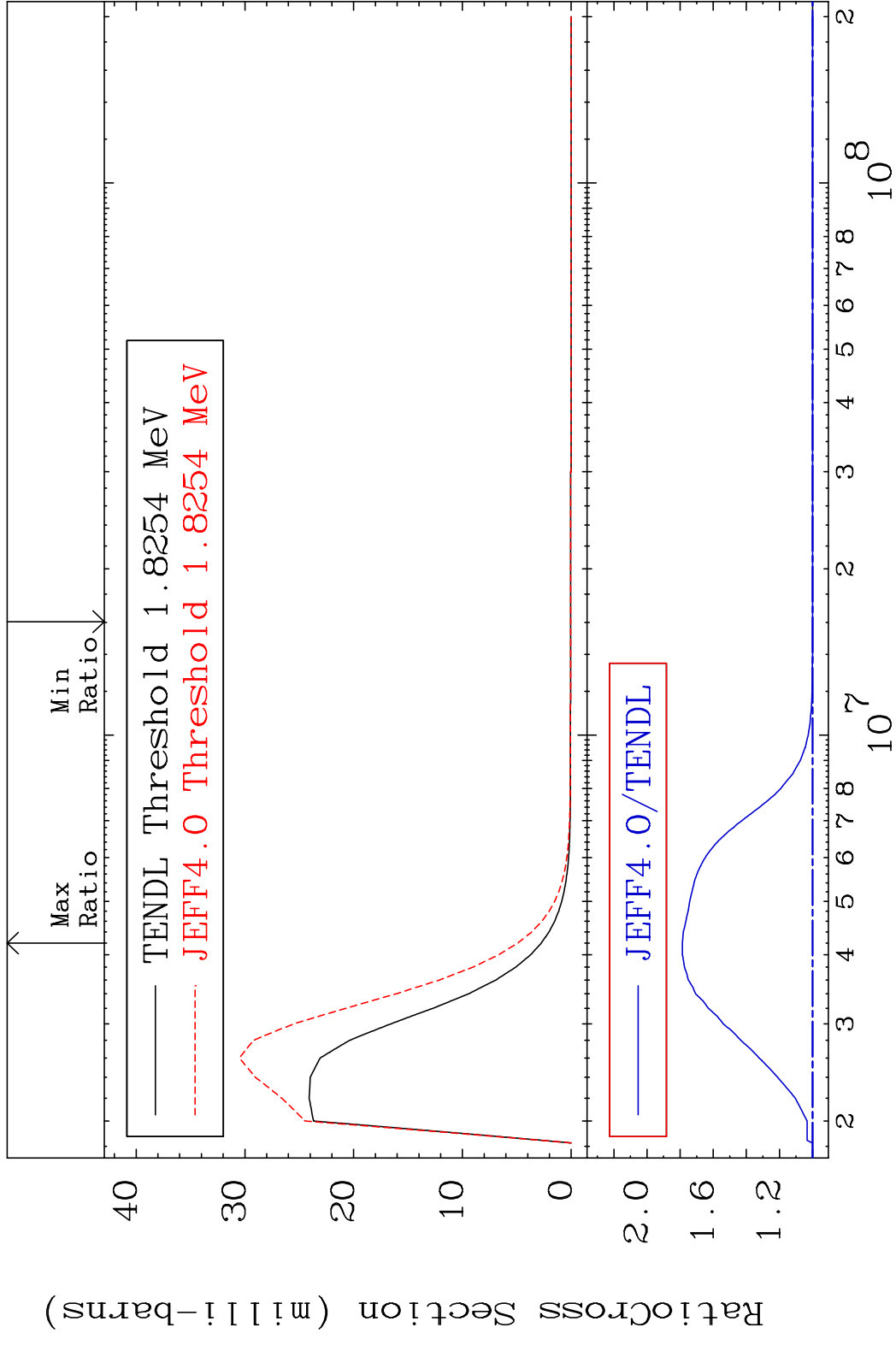


MAT 5925

MT= 73 (n,n') Level

59-Pr-141

Cross Section -0.002 To 78.65 %

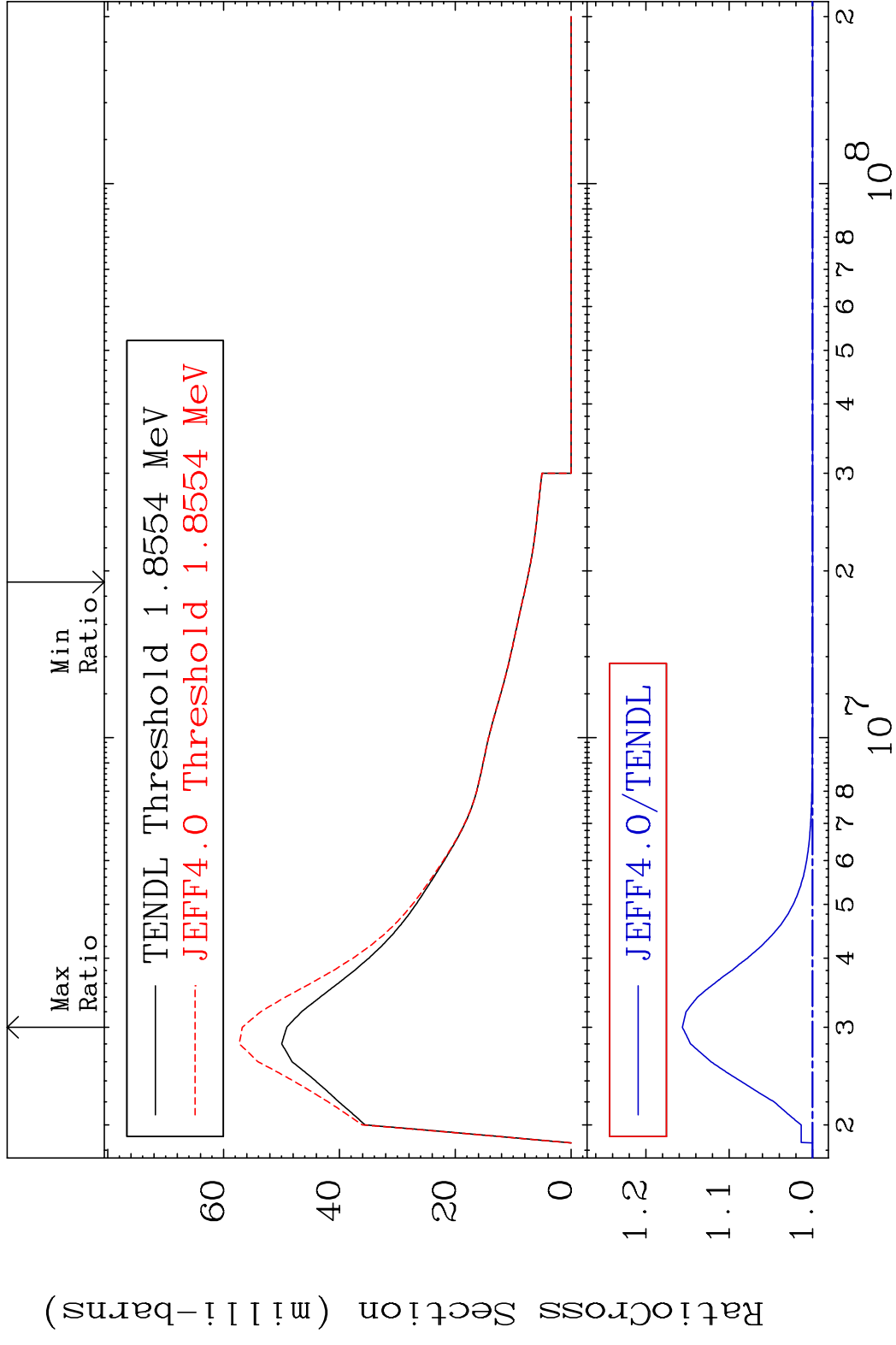


42

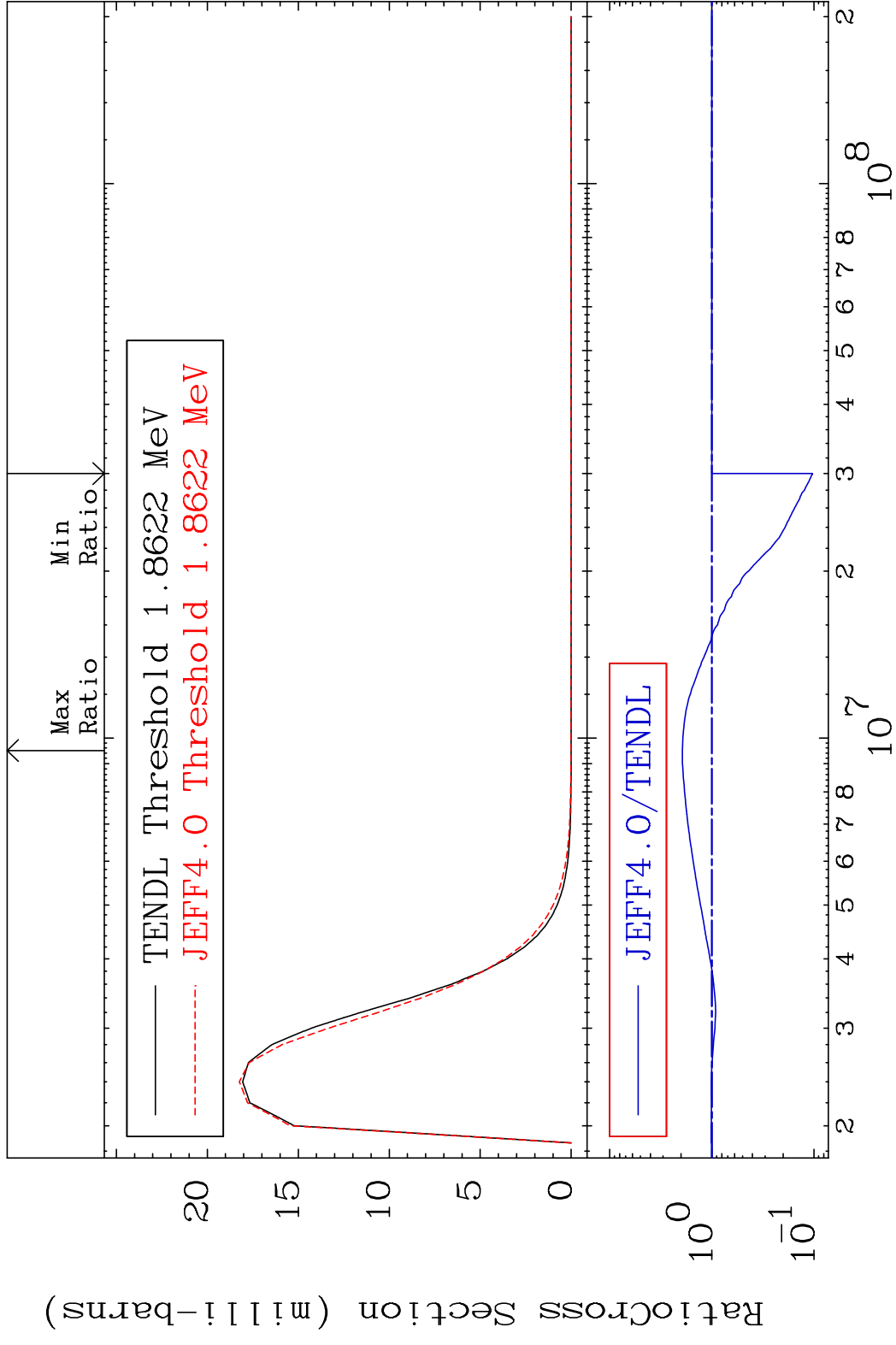
Incident Energy (eV)

59-Pr-141

MAT 5925 MT= 74 (n,n') Level 59-Pr-141
 Cross Section 0.000 To 15.62 %

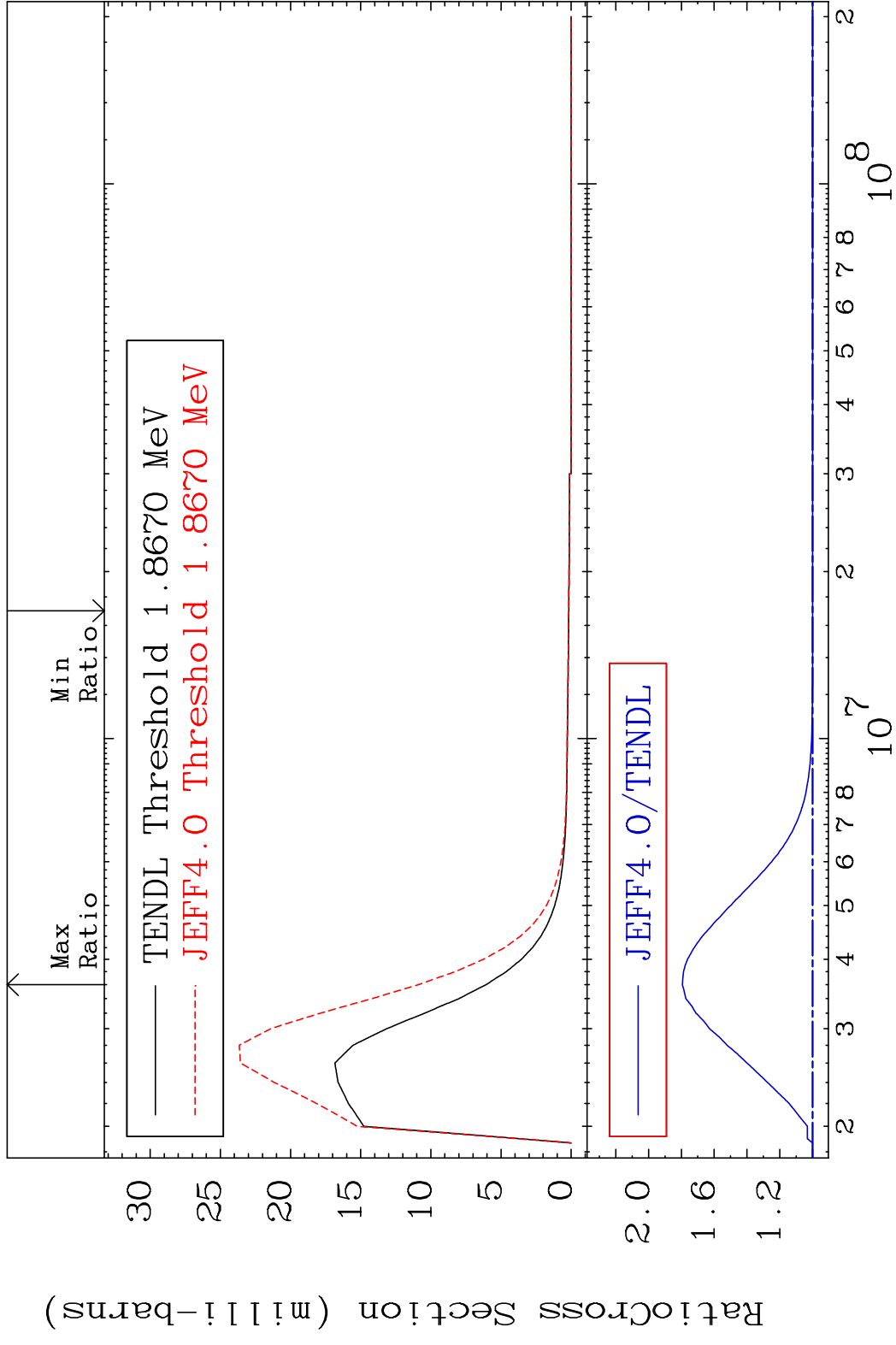


MAT 5925 MT= 75 (n, n') Level 59-Pr-141
 Cross Section -89.68 To 94.42 %



44 Incident Energy (eV) 59-Pr-141

MAT 5925 MT= 76 (n,n') Level 59-Pr-141
 Cross Section 0.000 To 79.40 %

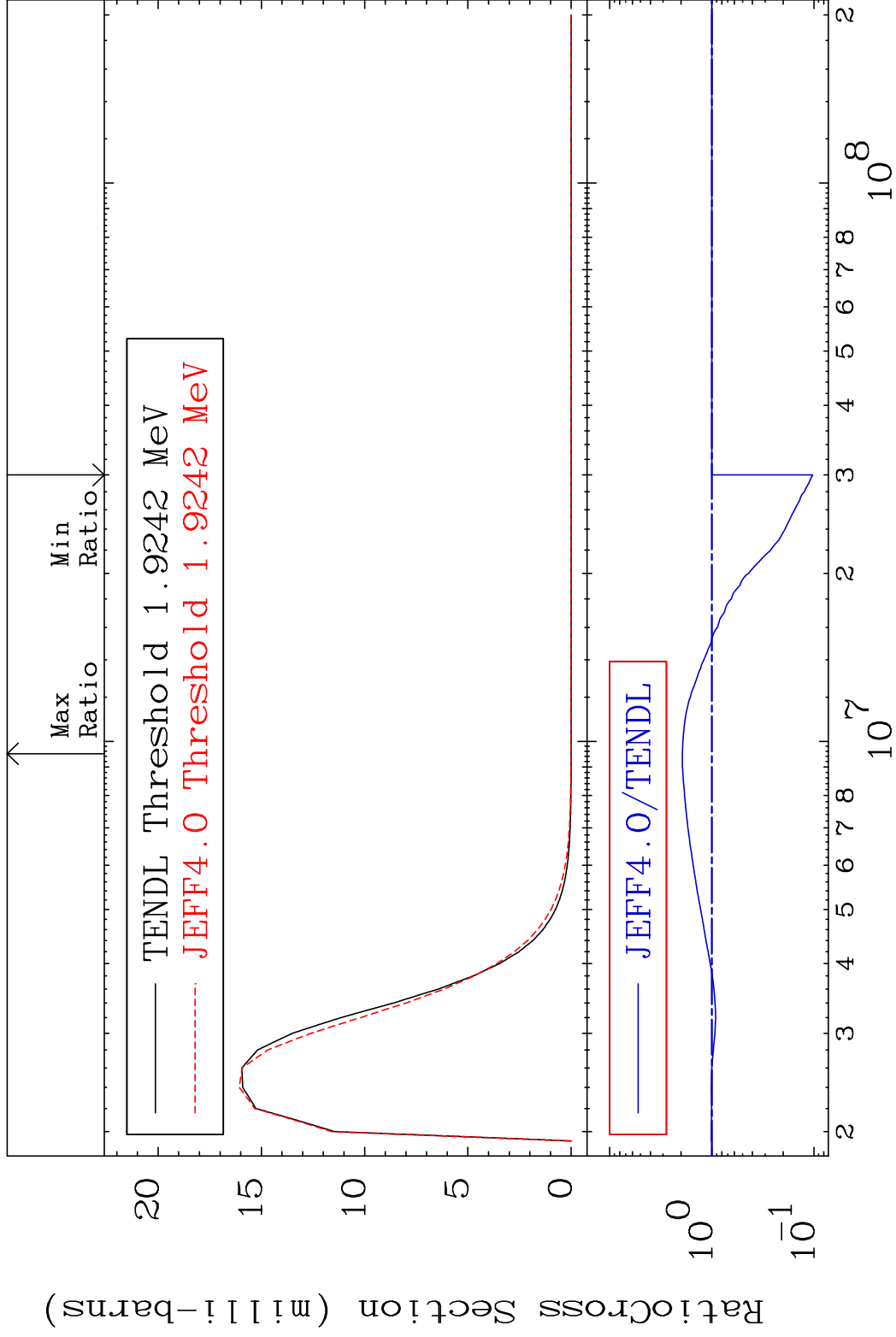


MAT 5925

MT= 77 (n, n') Level

59-Pr-141

Cross Section -89.68 To 94.39 %

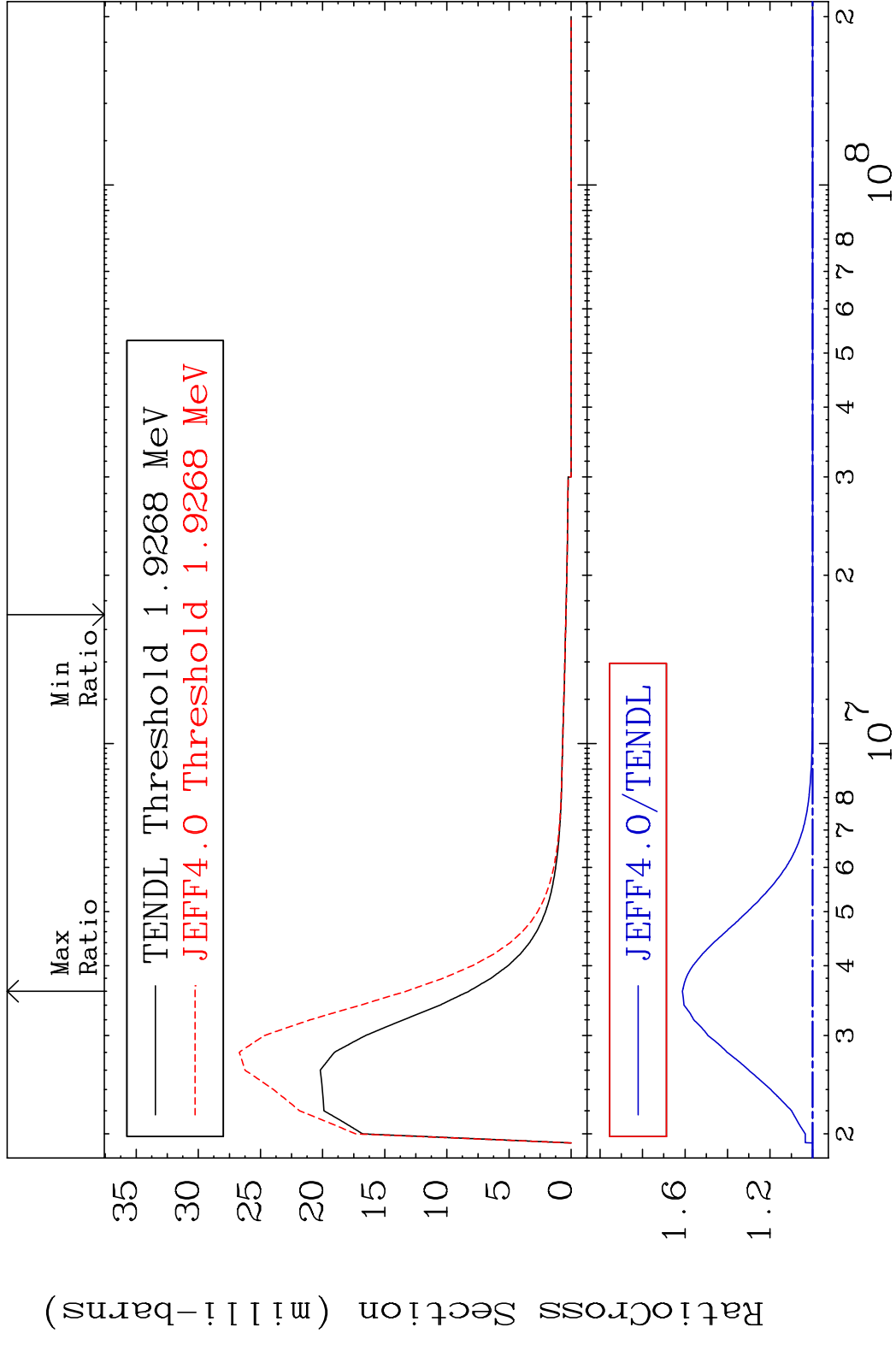


46

Incident Energy (eV)

59-Pr-141

MAT 5925 MT= 78 (n,n') Level 59-Pr-141
 Cross Section 0.000 To 61.27 %

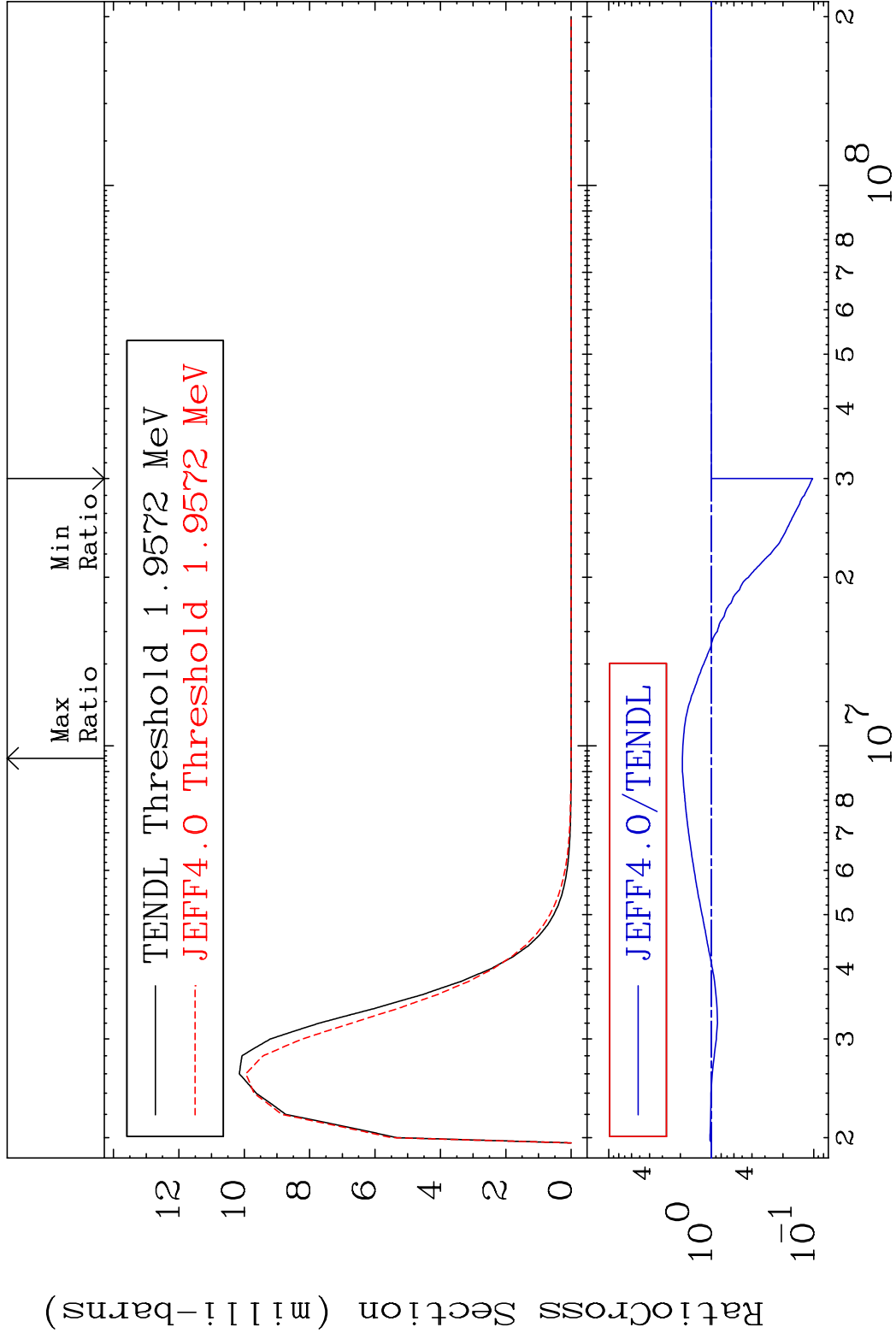


MAT 5925

MT= 79 (n, n') Level

59-Pr-141

Cross Section -89.74 To 91.54 %



48

Incident Energy (eV)

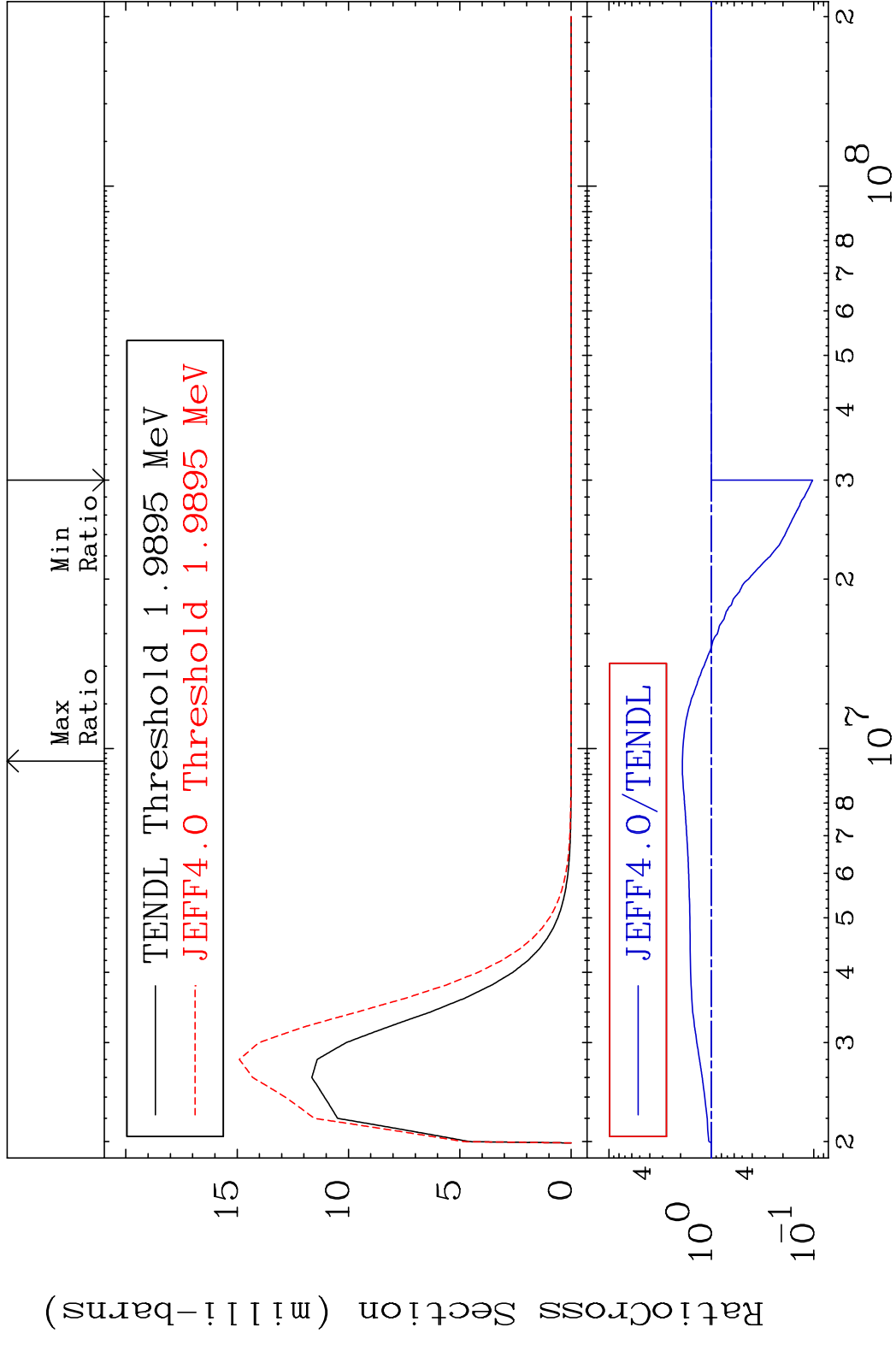
59-Pr-141

MAT 5925

MT= 80 (n, n') Level

59-Pr-141

Cross Section -89.74 To 92.05 %



49

Incident Energy (eV)

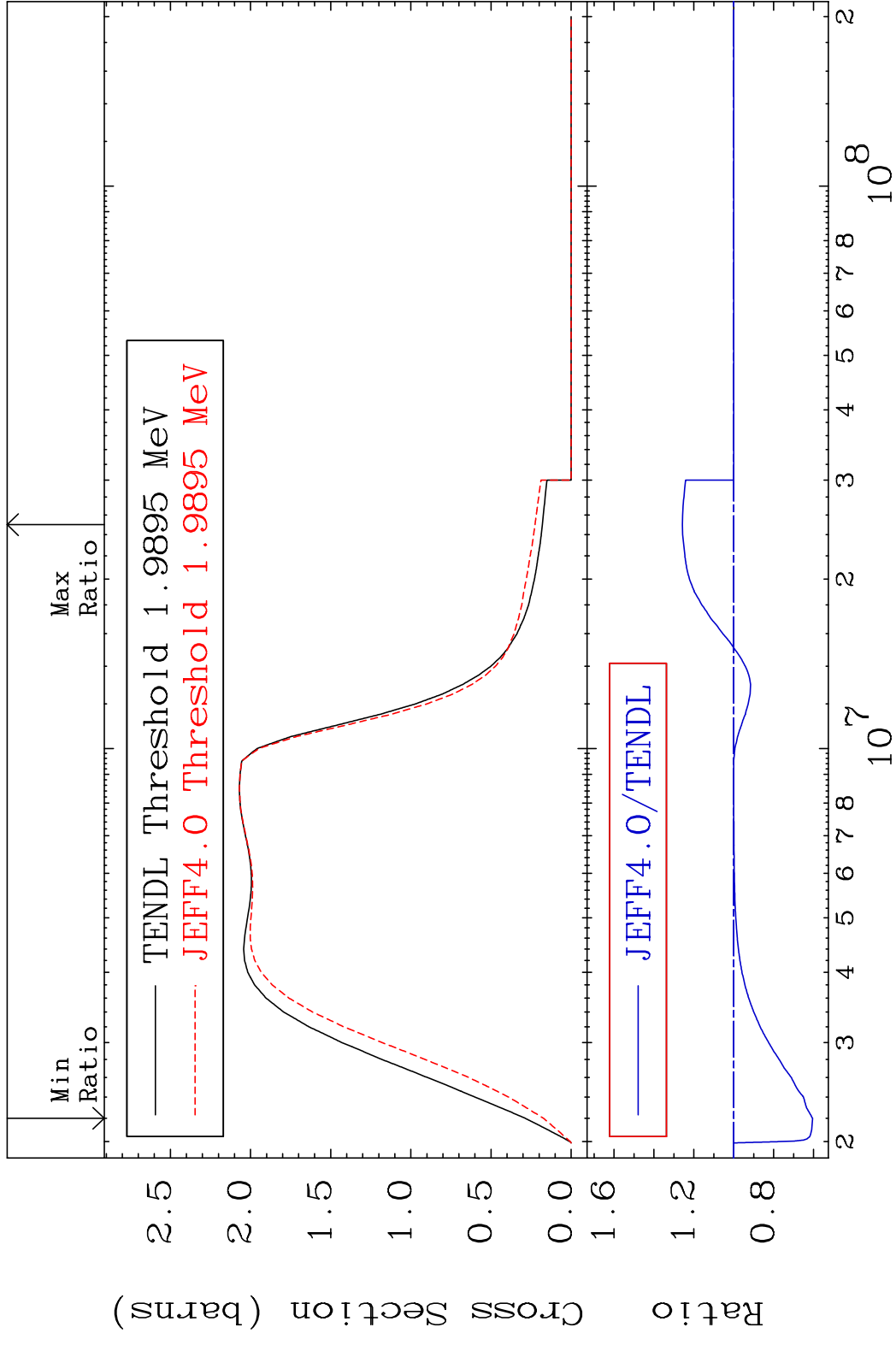
59-Pr-141

MAT 5925

(n, n') Continuum

59-Pr-141

Cross Section -39.52 To 25.73 %



50

Incident Energy (eV)

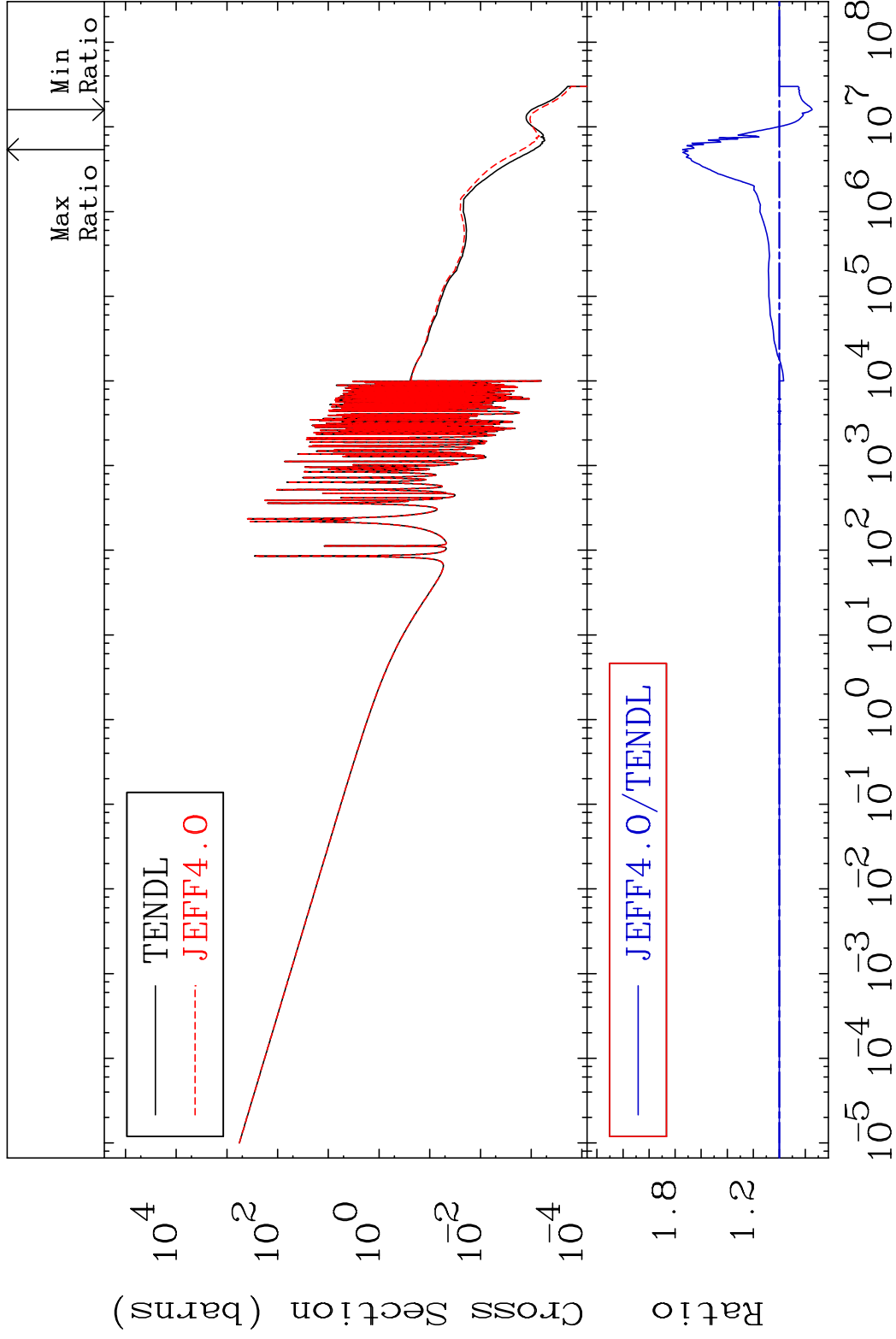
59-Pr-141

MAT 5925

(n, γ)

59-Pr-141

Cross Section -25.50 To 74.44 %



51

Incident Energy (eV)

59-Pr-141

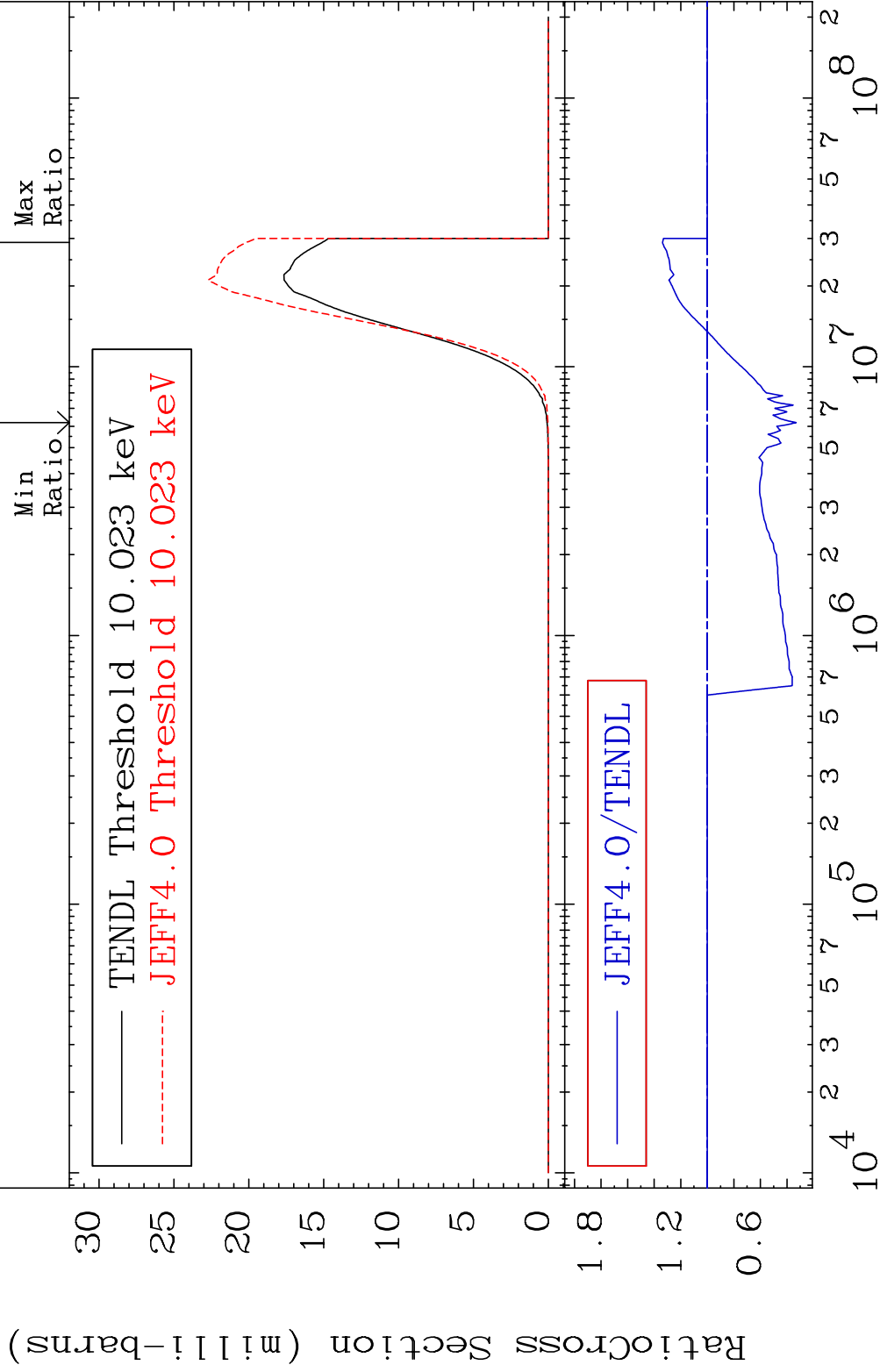
MAT 5925

(n, p)

59-Pr-141

Cross Section

-66.92 To 33.71 %



52

Incident Energy (eV)

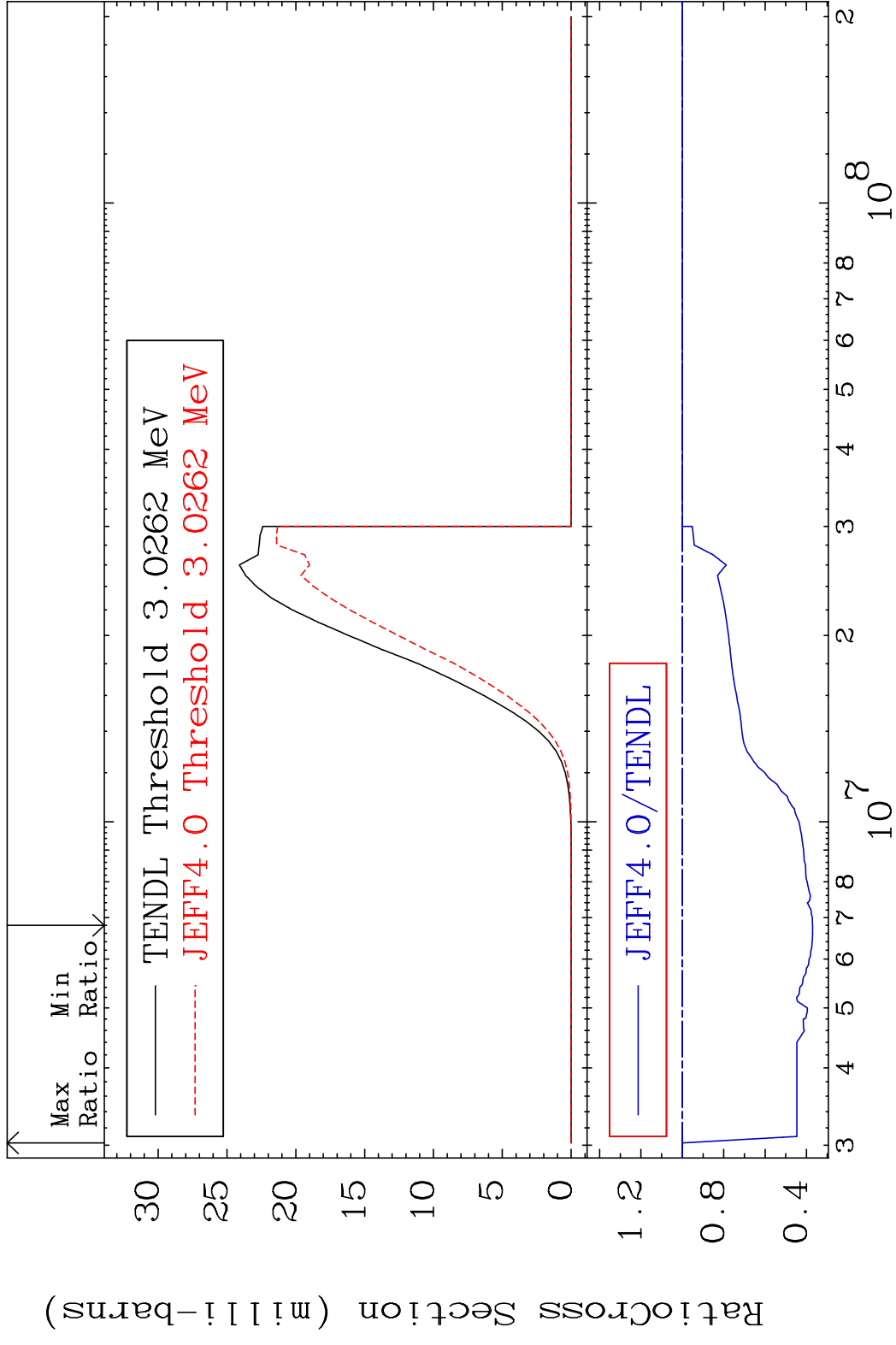
59-Pr-141

MAT 5925

(n,d)

59-Pr-141

Cross Section -62.93 To 0.000 %



53

Incident Energy (eV)

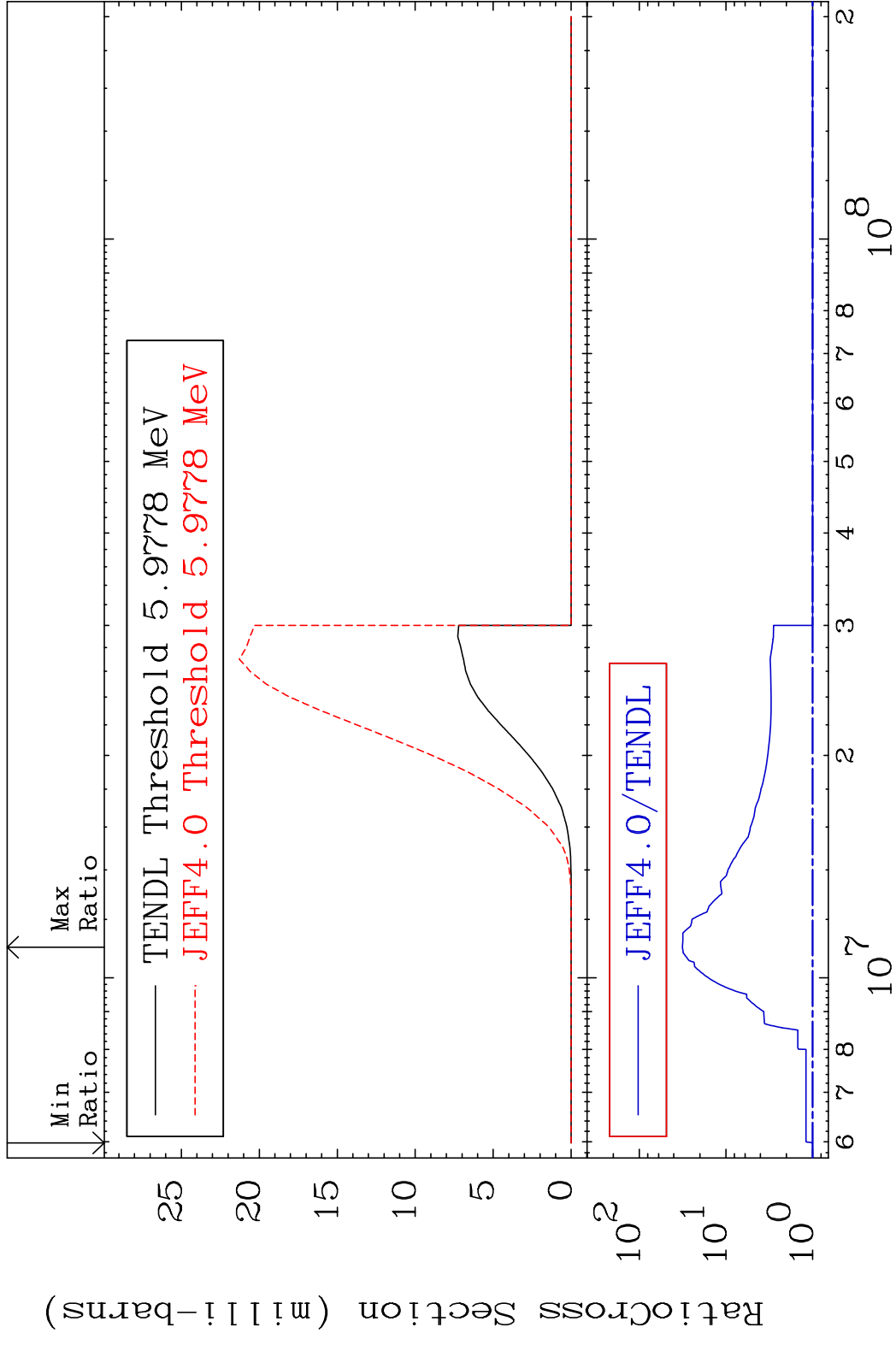
59-Pr-141

MAT 5925

(n, t)

59-Pr-141

Cross Section 0.000 To 3087. %

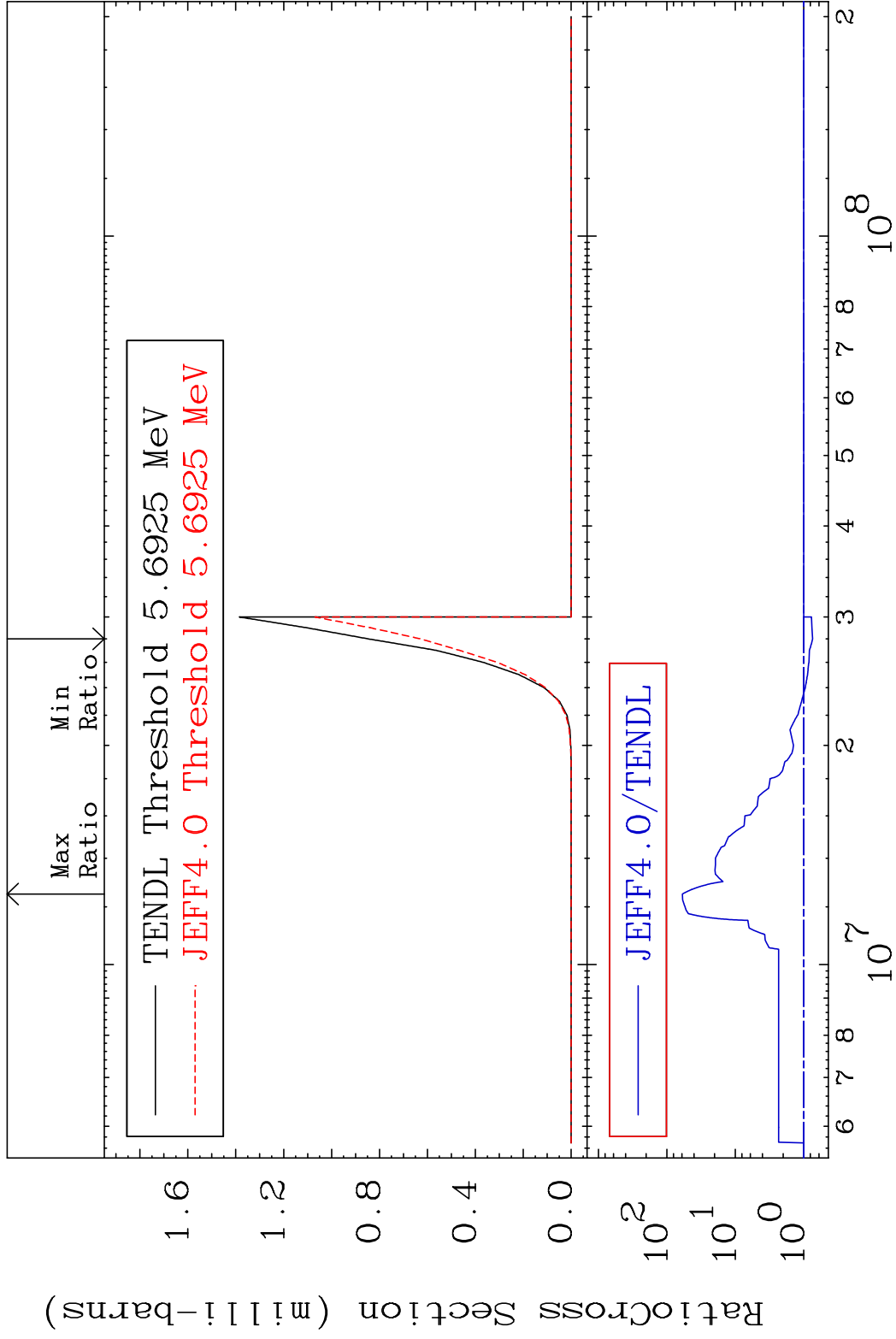


MAT 5925

(n, He-3)

59-Pr-141

Cross Section -25.77 To 5827. %



55

Incident Energy (eV)

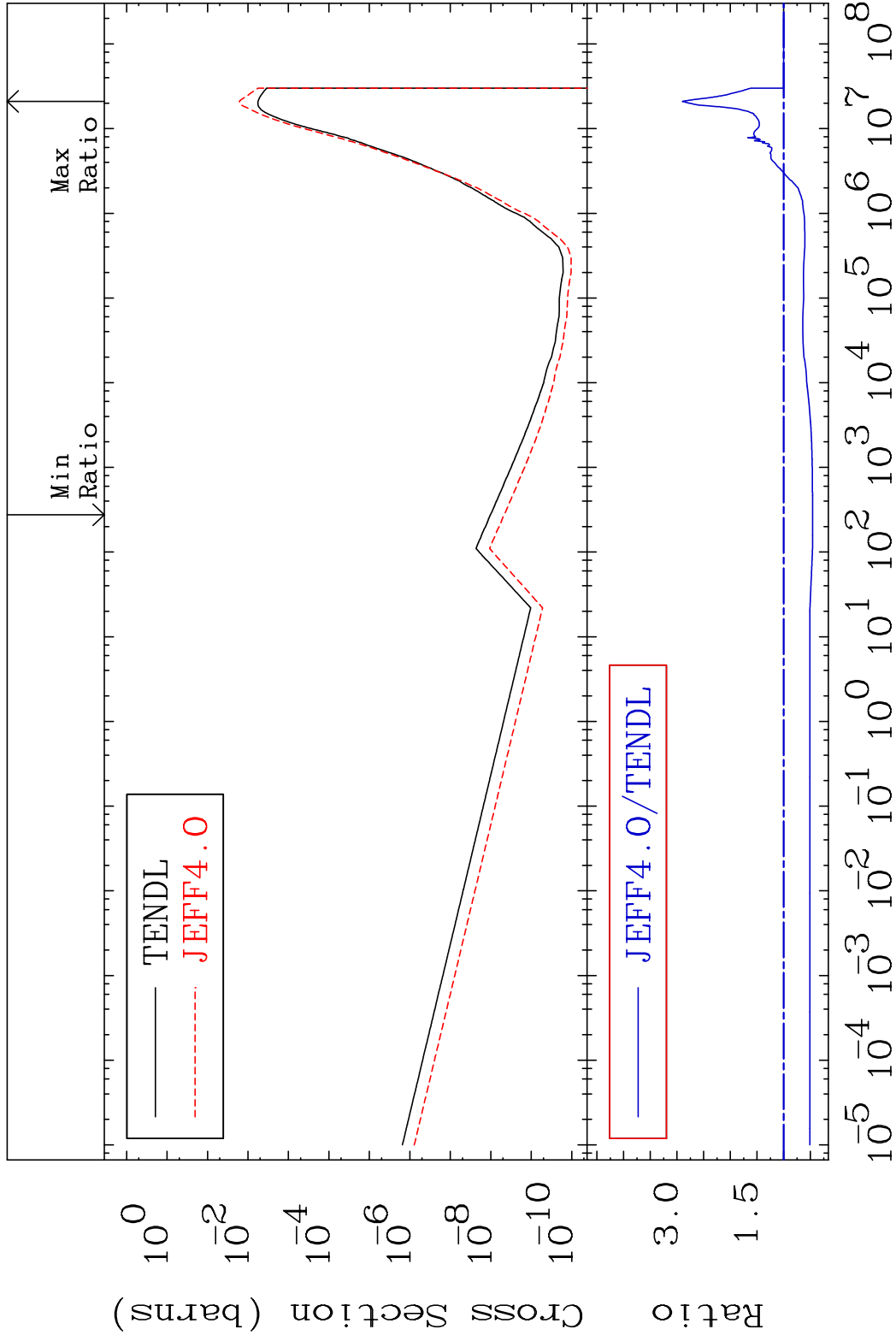
59-Pr-141

MAT 5925

(n, α)

59-Pr-141

Cross Section -54.06 To 190.0 %



56

Incident Energy (eV)

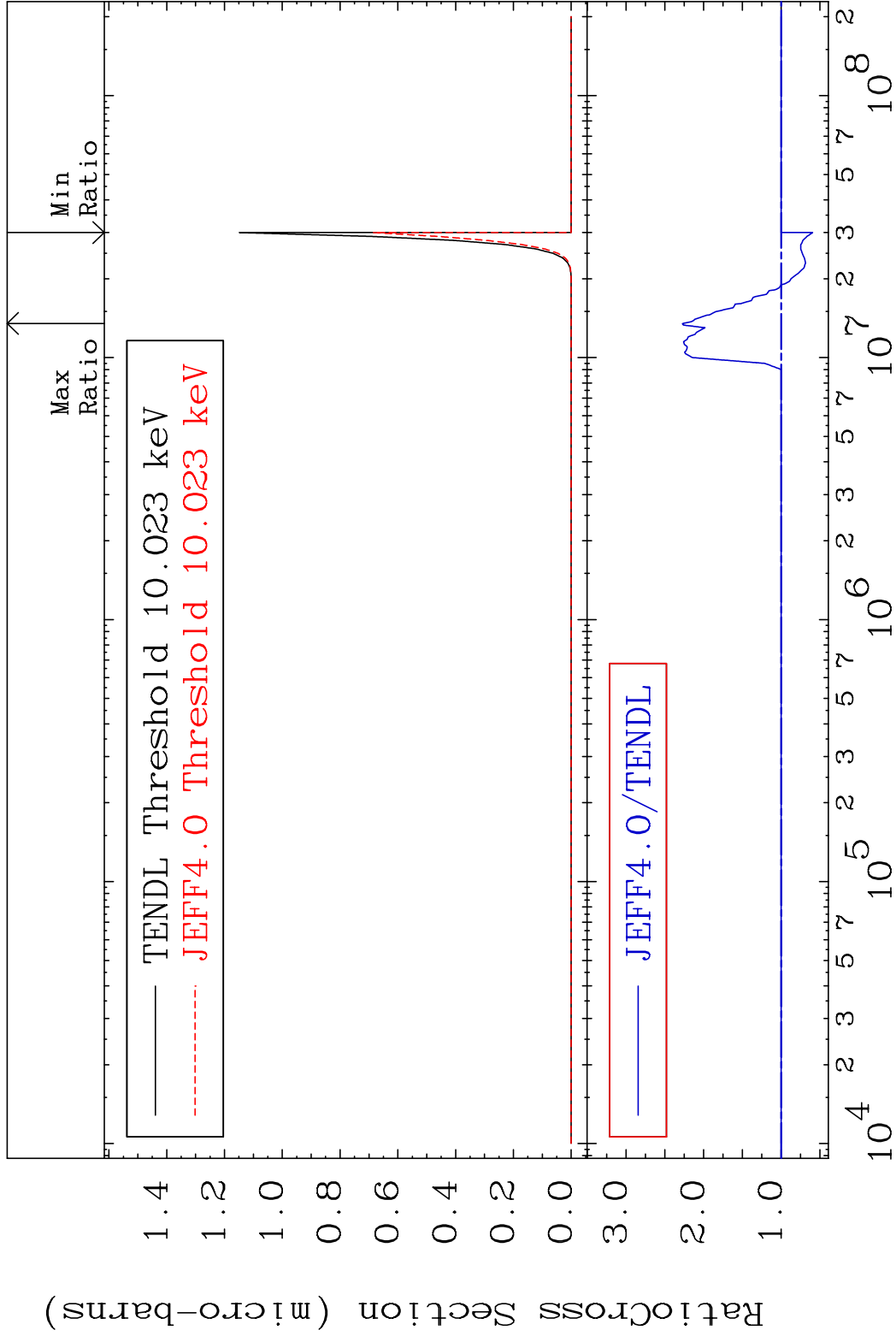
59-Pr-141

MAT 5925

(n, 2α)

59-Pr-141

Cross Section -40.38 To 127.5 %



57

Incident Energy (eV)

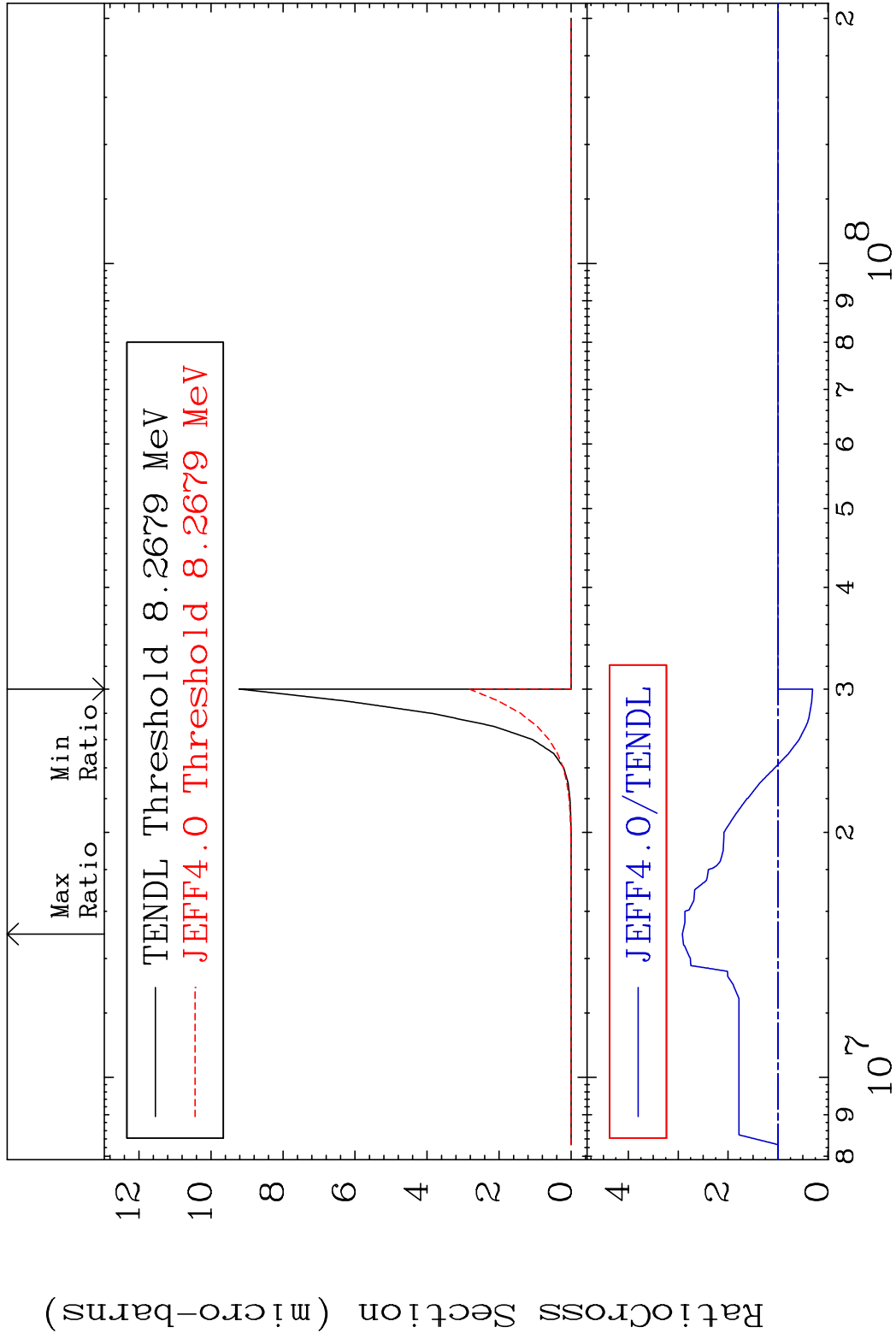
59-Pr-141

MAT 5925

(n,2p)

59-Pr-141

Cross Section -69.34 To 191.7 %



58

Incident Energy (eV)

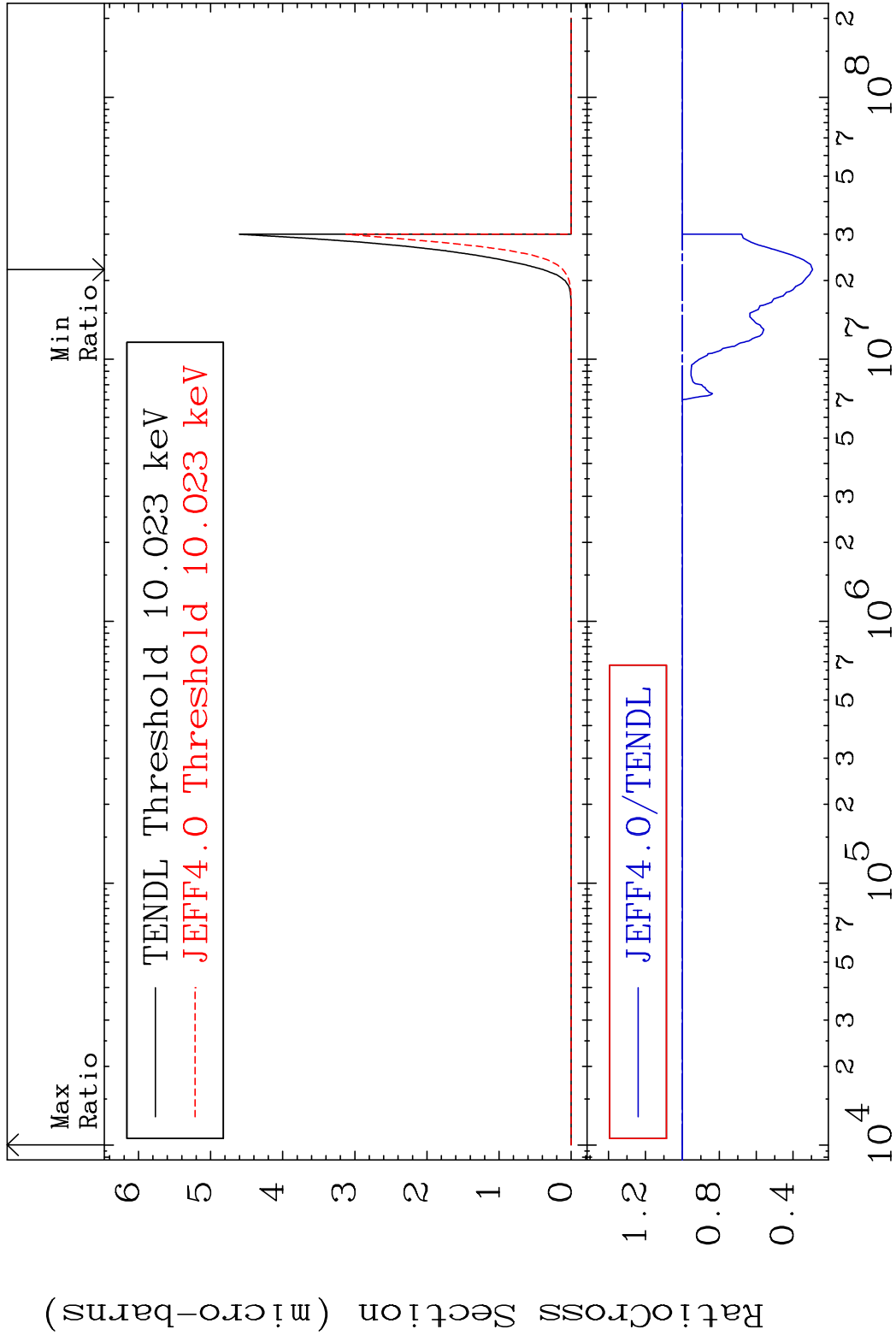
59-Pr-141

MAT 5925

(n,p) α

59-Pr-141

Cross Section -70.54 To 0.000 %



59

Incident Energy (eV)

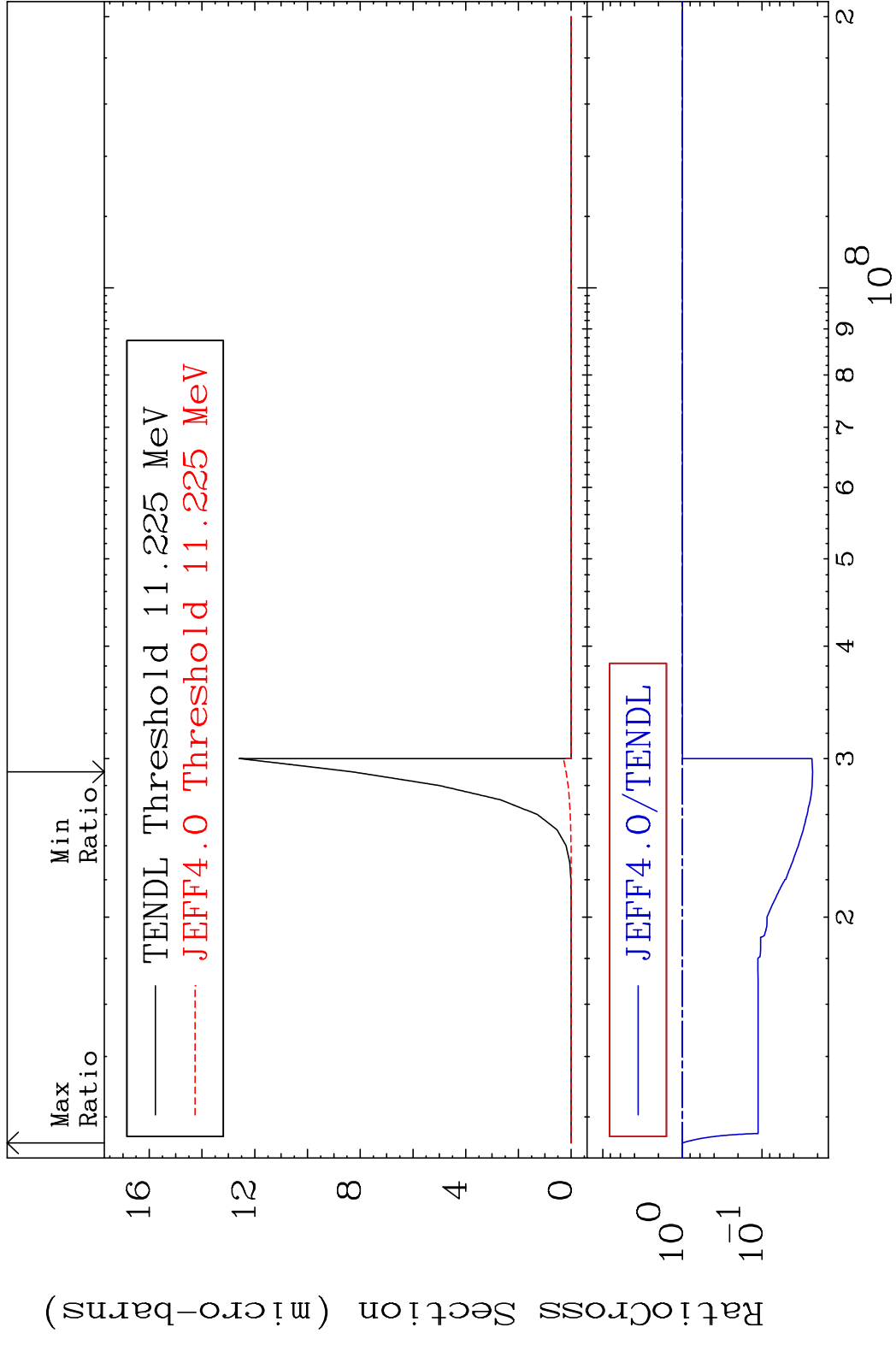
59-Pr-141

MAT 5925

(n,p) d

59-Pr-141

Cross Section -97.68 To 0.000 %

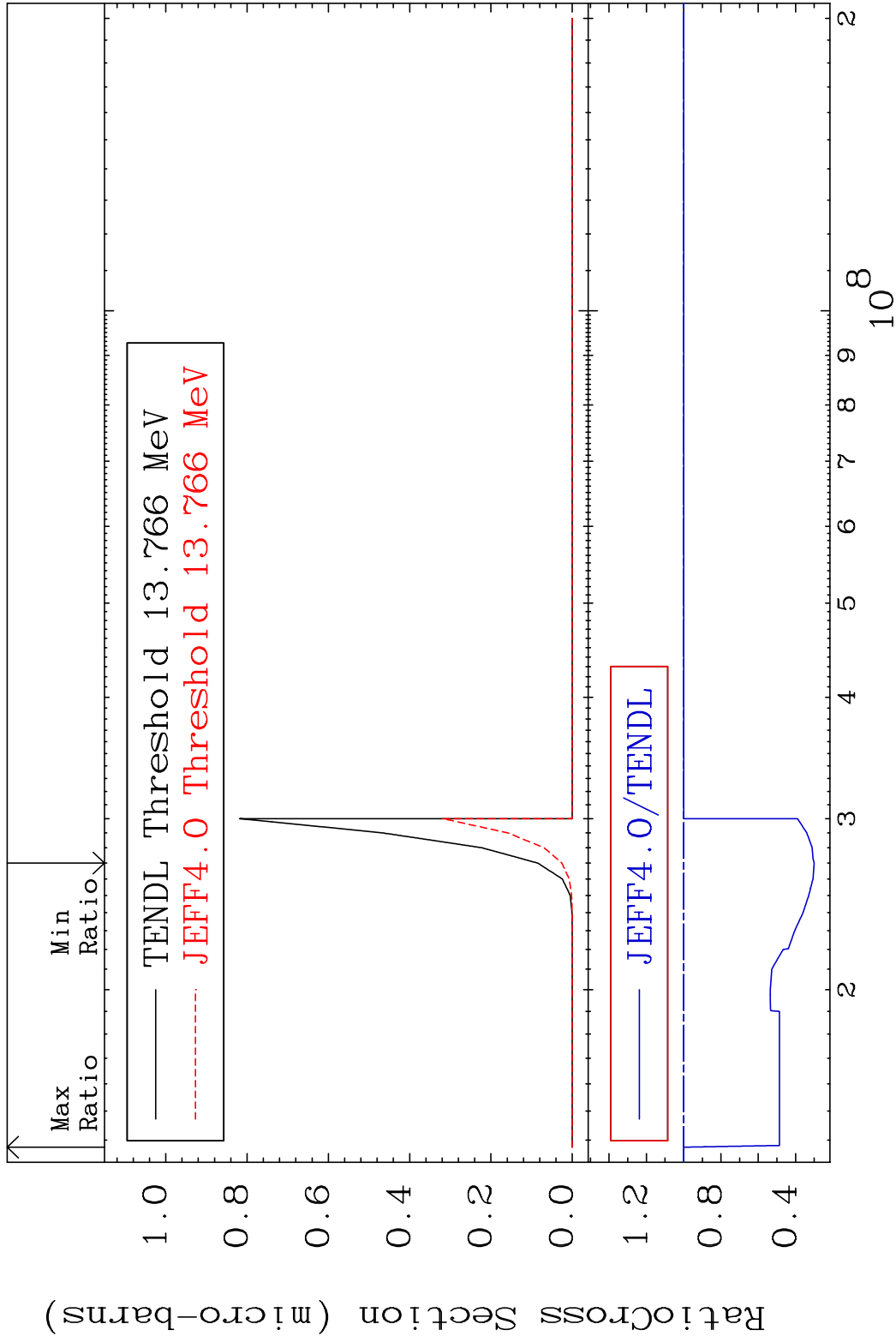


MAT 5925

(n,p) t

59-Pr-141

Cross Section -69.92 To 0.000 %

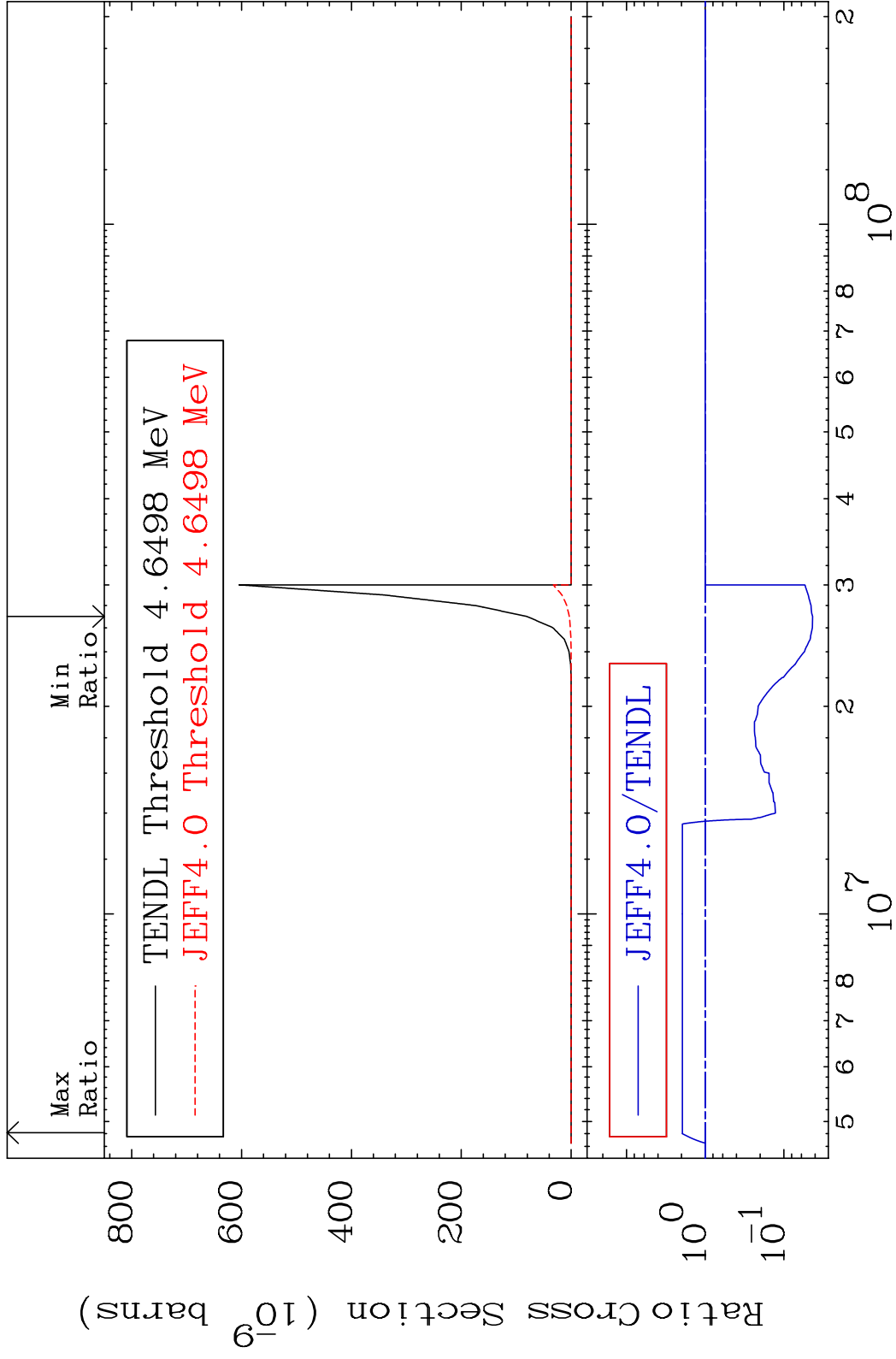


MAT 5925

(n,d) α

59-Pr-141

Cross Section -95.68 To 95.39 %



62

Incident Energy (eV)

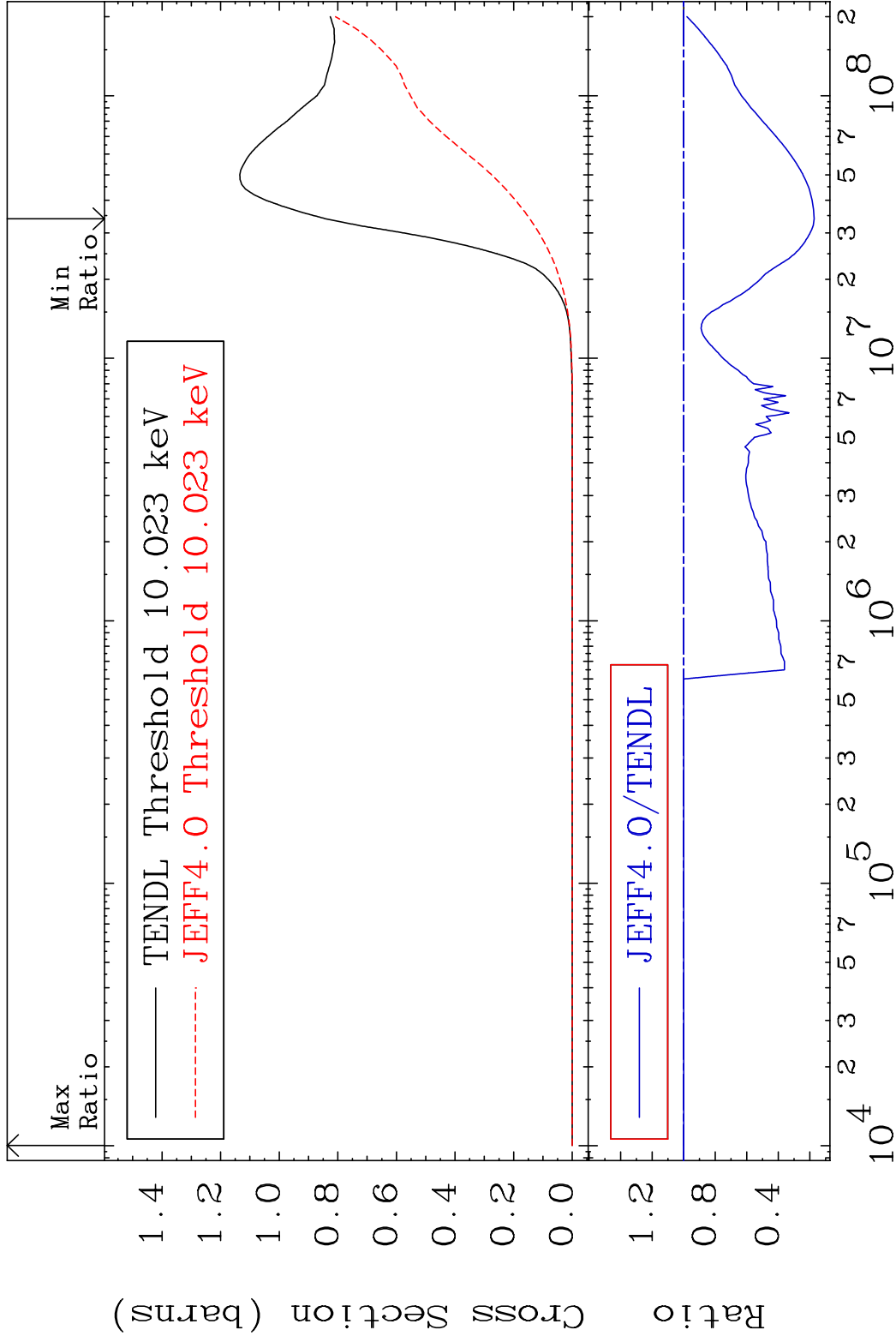
59-Pr-141

MAT 5925

Hydrogen Production

59-Pr-141

Cross Section -82.77 To 0.000 %



63

Incident Energy (eV)

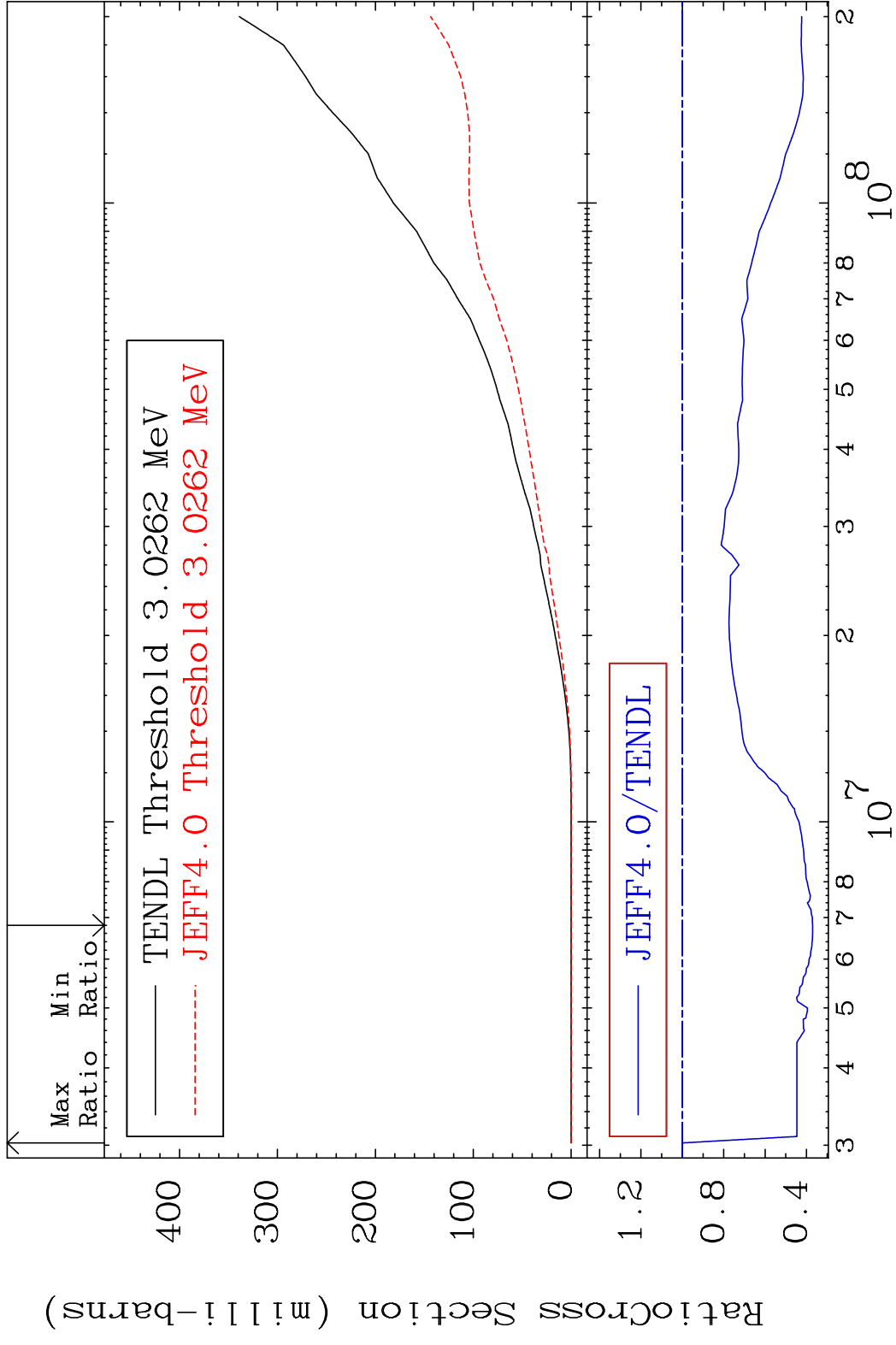
59-Pr-141

MAT 5925

Deuterium Production

59-Pr-141

Cross Section -62.93 To 0.000 %



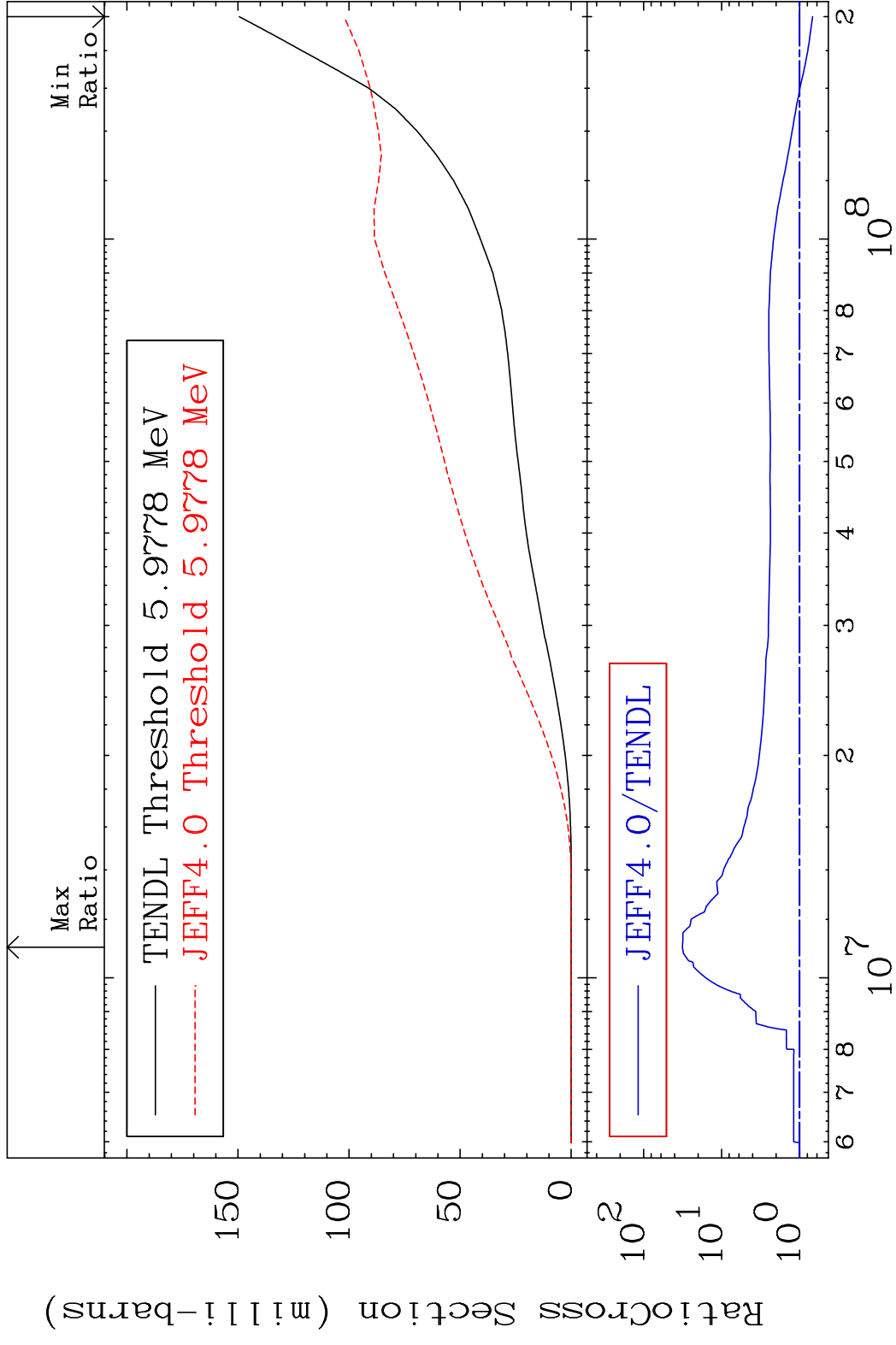
64

Incident Energy (eV)

59-Pr-141

MAT 5925

Tritium Production 59-Pr-141
Cross Section -31.55 To 3087. %



65

Incident Energy (eV)

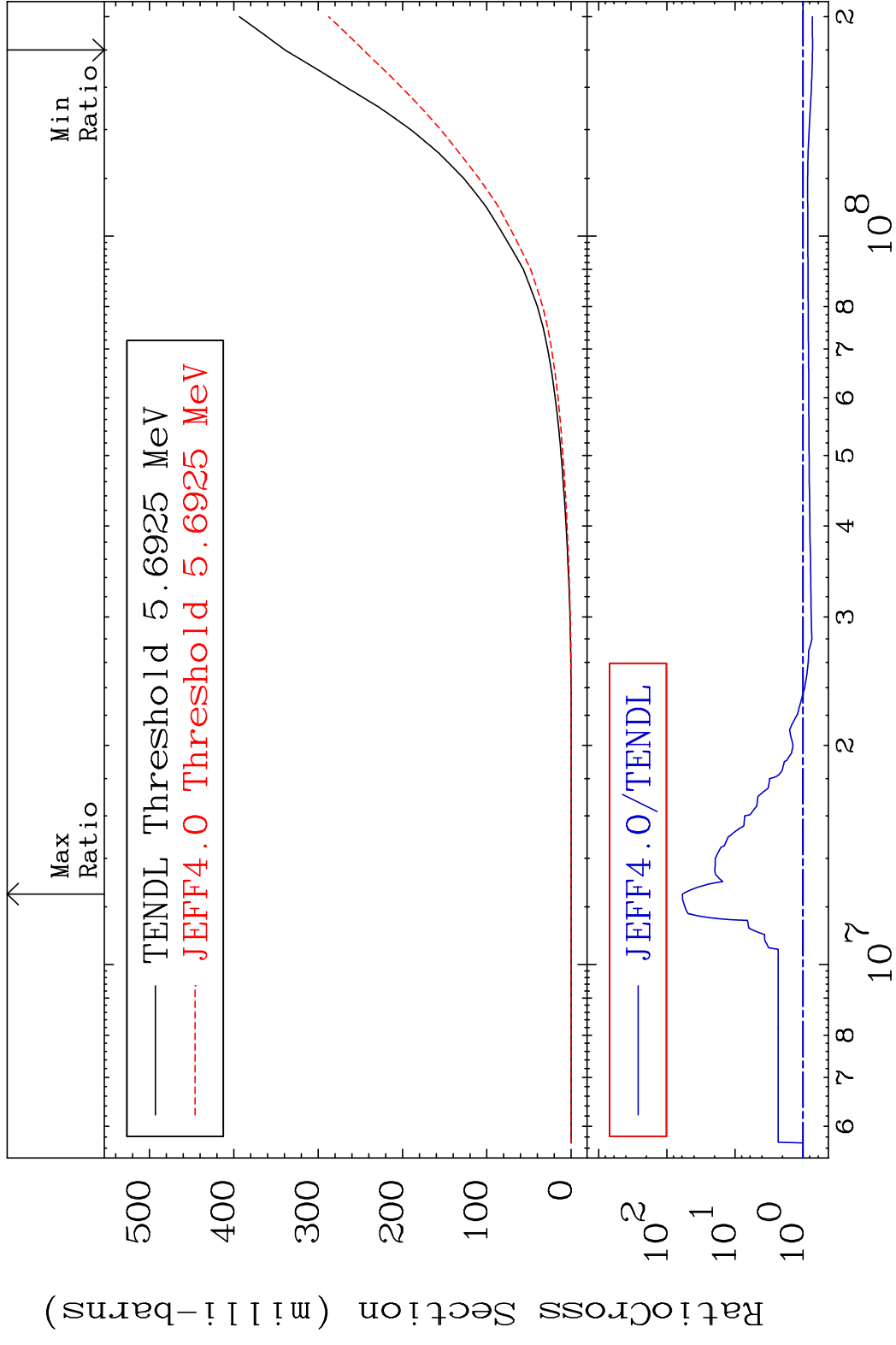
59-Pr-141

MAT 5925

He-3 Production

59-Pr-141

Cross Section -27.40 To 5827. %



66

Incident Energy (eV)

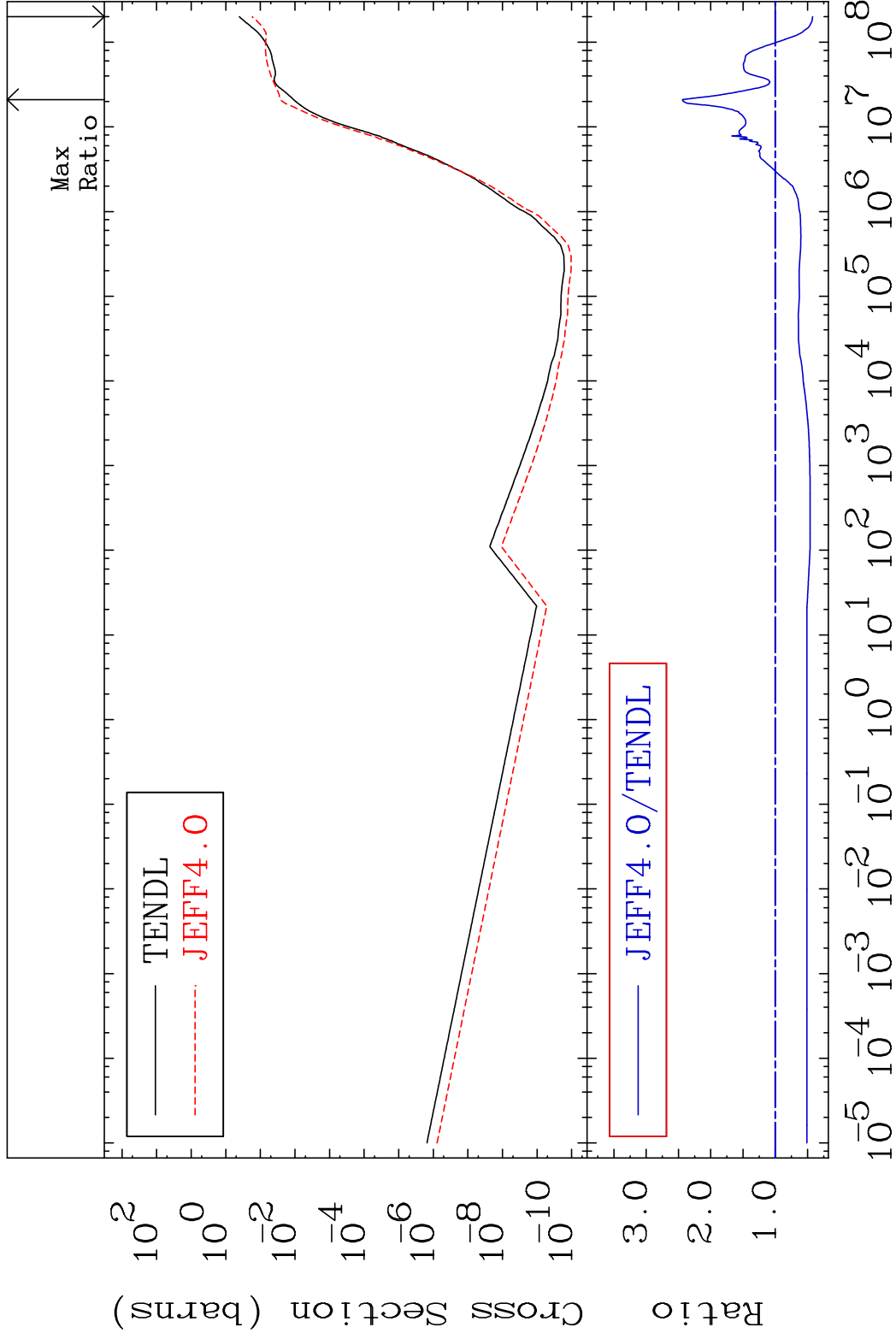
59-Pr-141

MAT 5925

He-4 Production

59-Pr-141

Cross Section -57.72 To 144.0 %

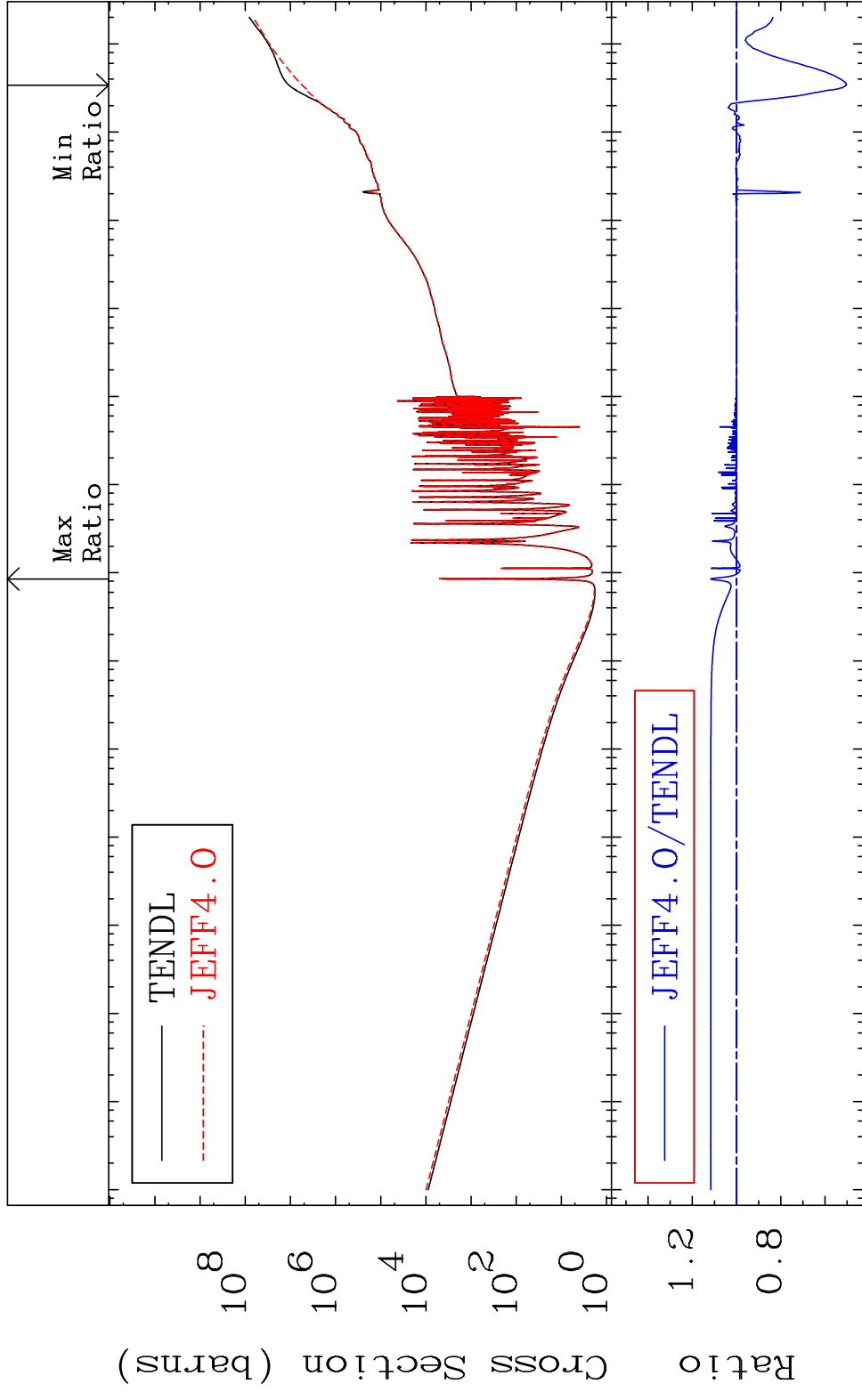


67

Incident Energy (eV)

59-Pr-141

MAT 5925 Kerma total (eV-barns) 59-Pr-141
 Cross Section -49.61 To 11.68 %



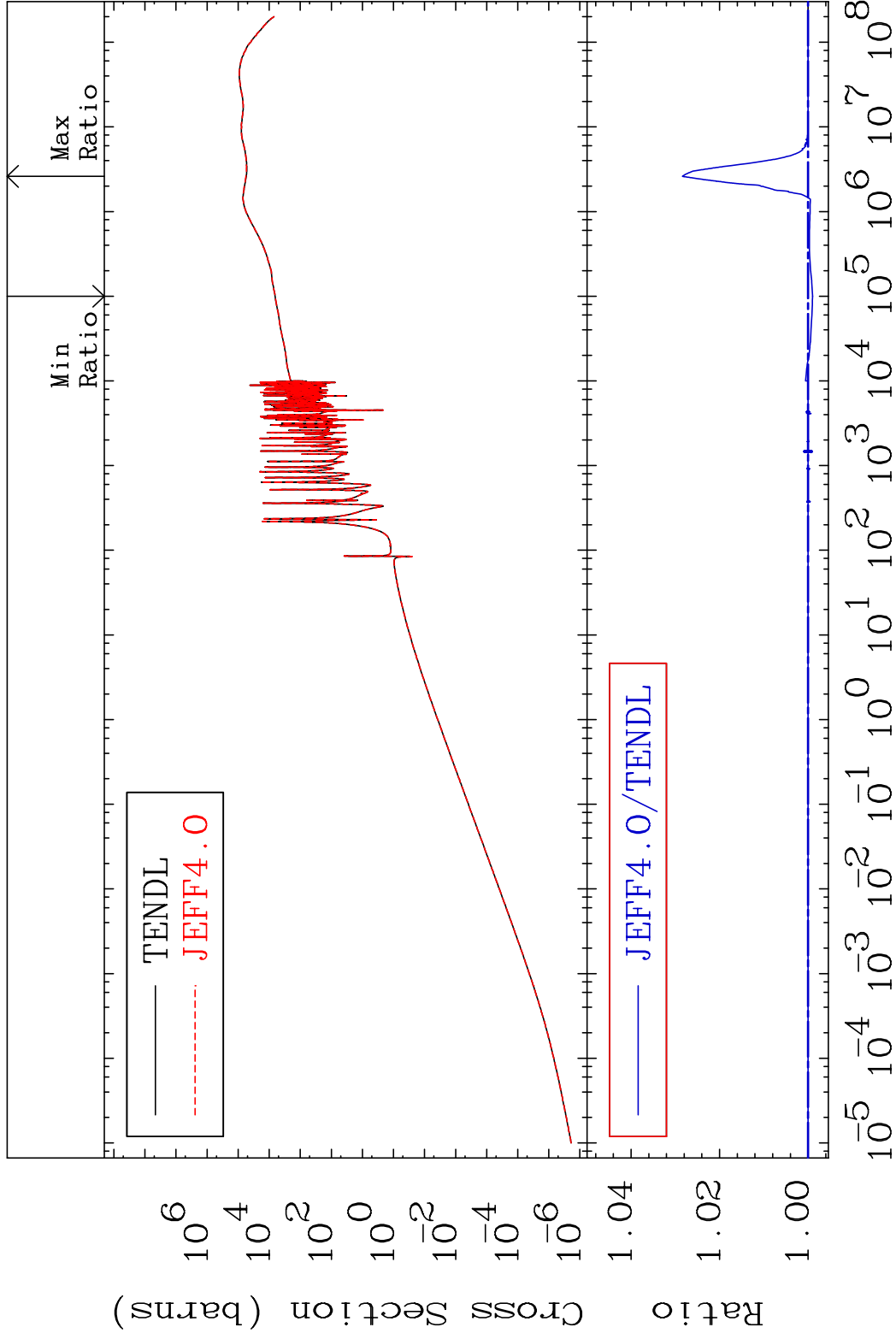
68 Incident Energy (eV) 59-Pr-141

MAT 5925

Kerma elastic

59-Pr-141

Cross Section -0.101 To 2.841 %

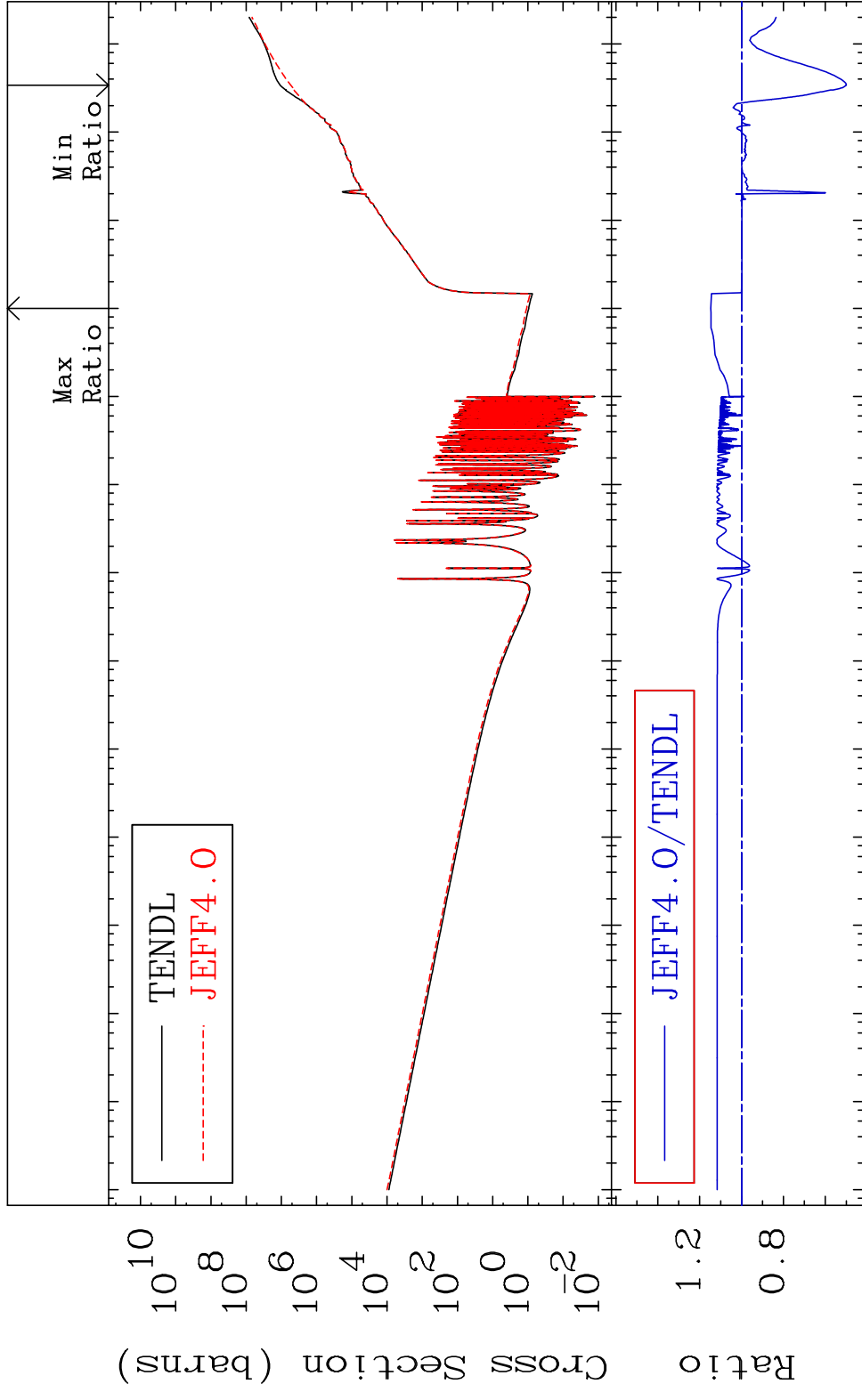


69

Incident Energy (eV)

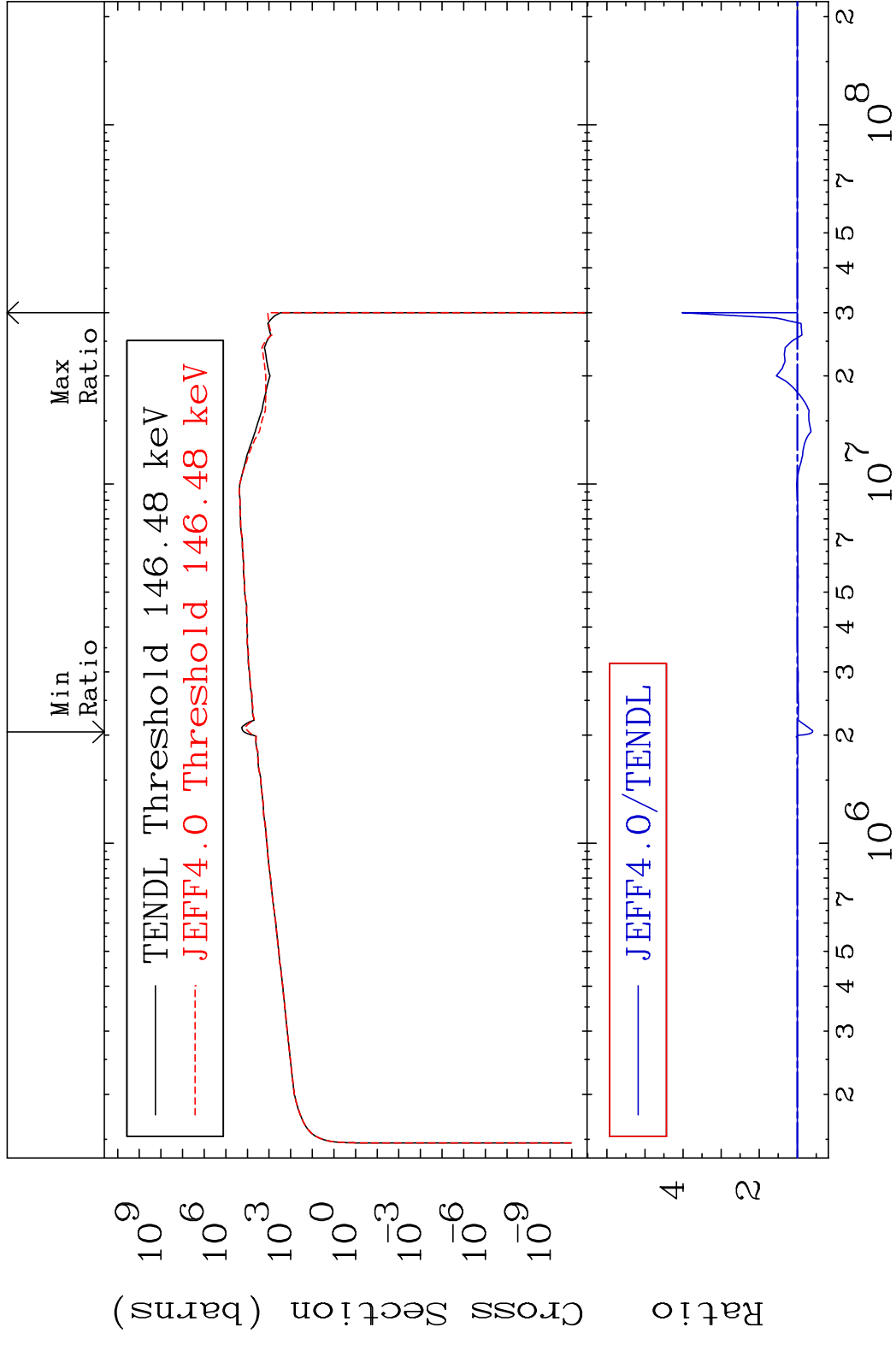
59-Pr-141

MAT 5925 Kerma non-elastic (all but mt2) 59-Pr-141
 Cross Section -50.02 To 14.74 %

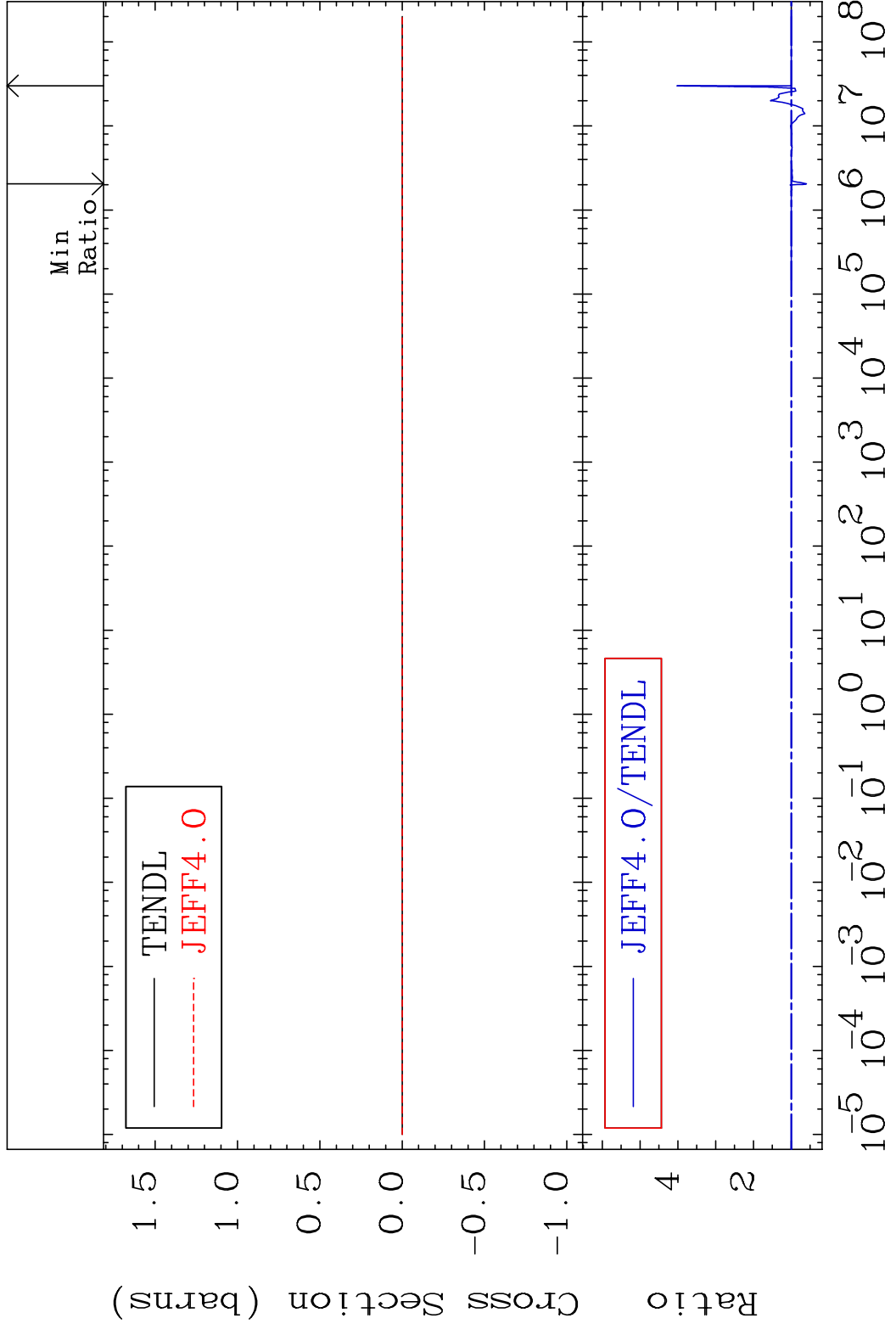


70 Incident Energy (eV) 59-Pr-141

MAT 5925 Kerma inelastic (mt51-91) 59-Pr-141
 Cross Section -40.11 To 301.8 %

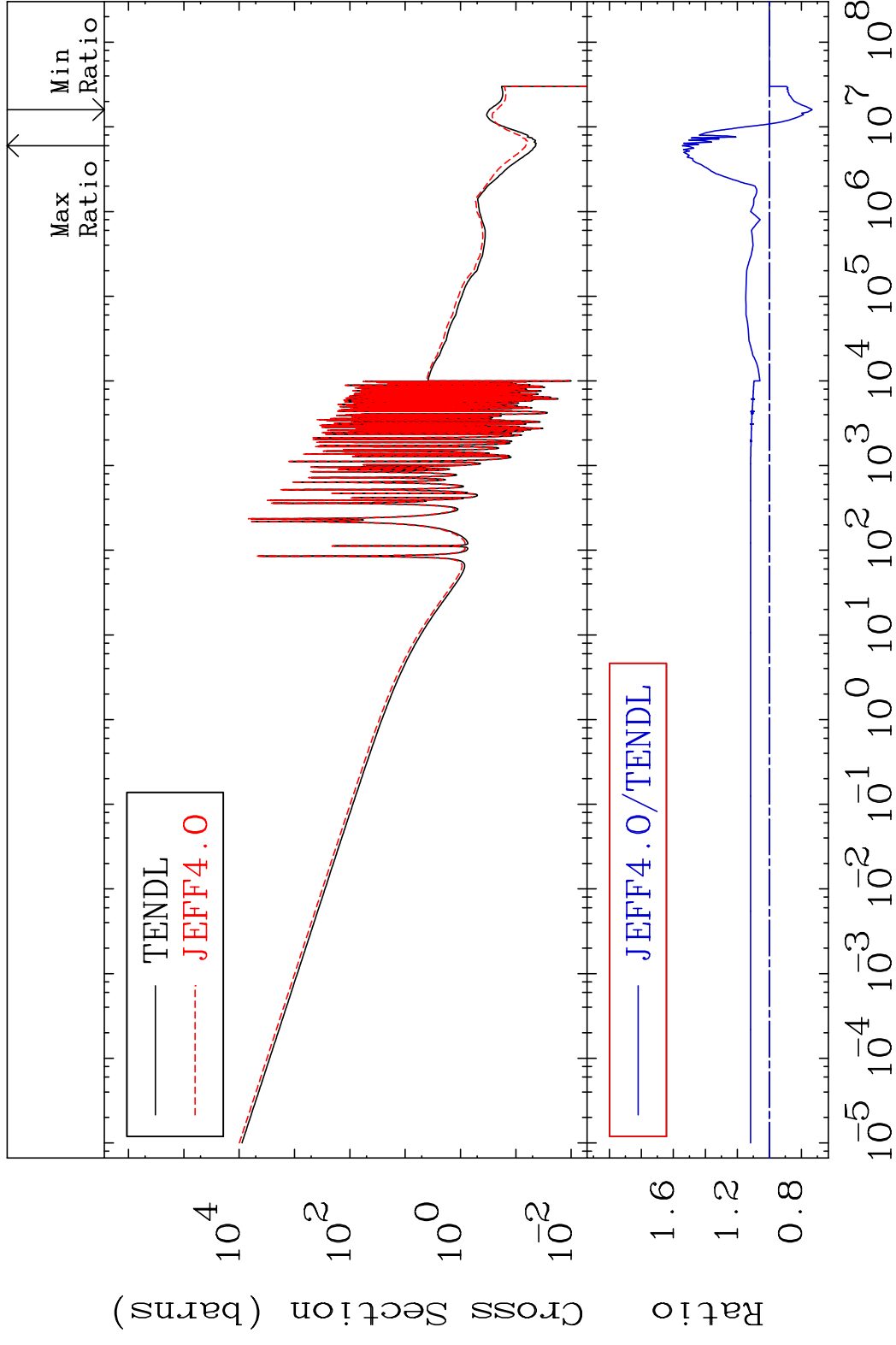


MAT 5925 Kerma fission (mt18 or mt19-20-21-38) 59-Pr-141
 Cross Section -40.11 To 301.8 %



MAT 5925

Kerma capture (mt102) 59-Pr-141
Cross Section -27.02 To 54.38 %



73

Incident Energy (eV)

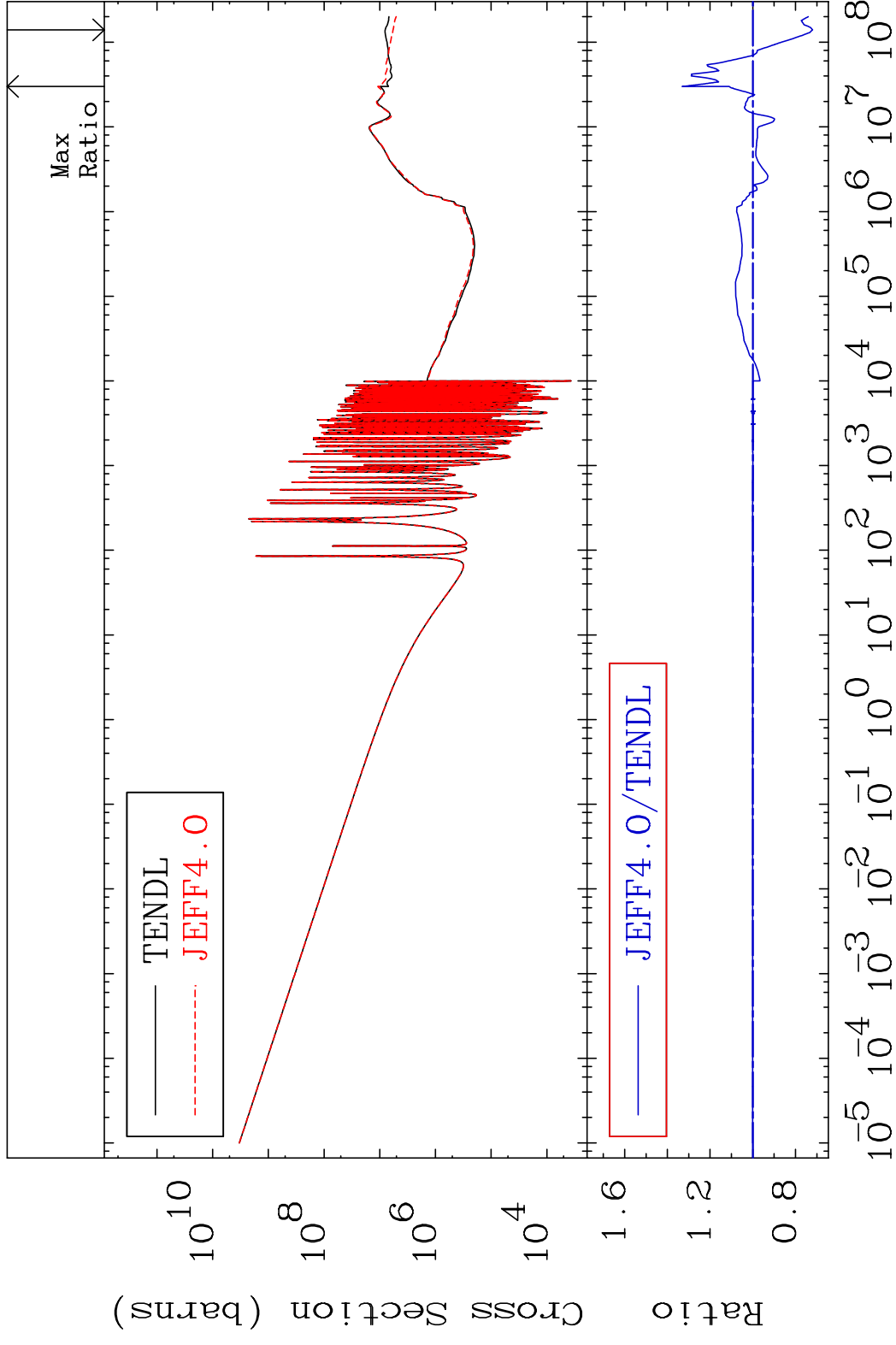
59-Pr-141

MAT 5925

Total photon (eV-barns)

59-Pr-141

Cross Section -28.00 To 32.99 %

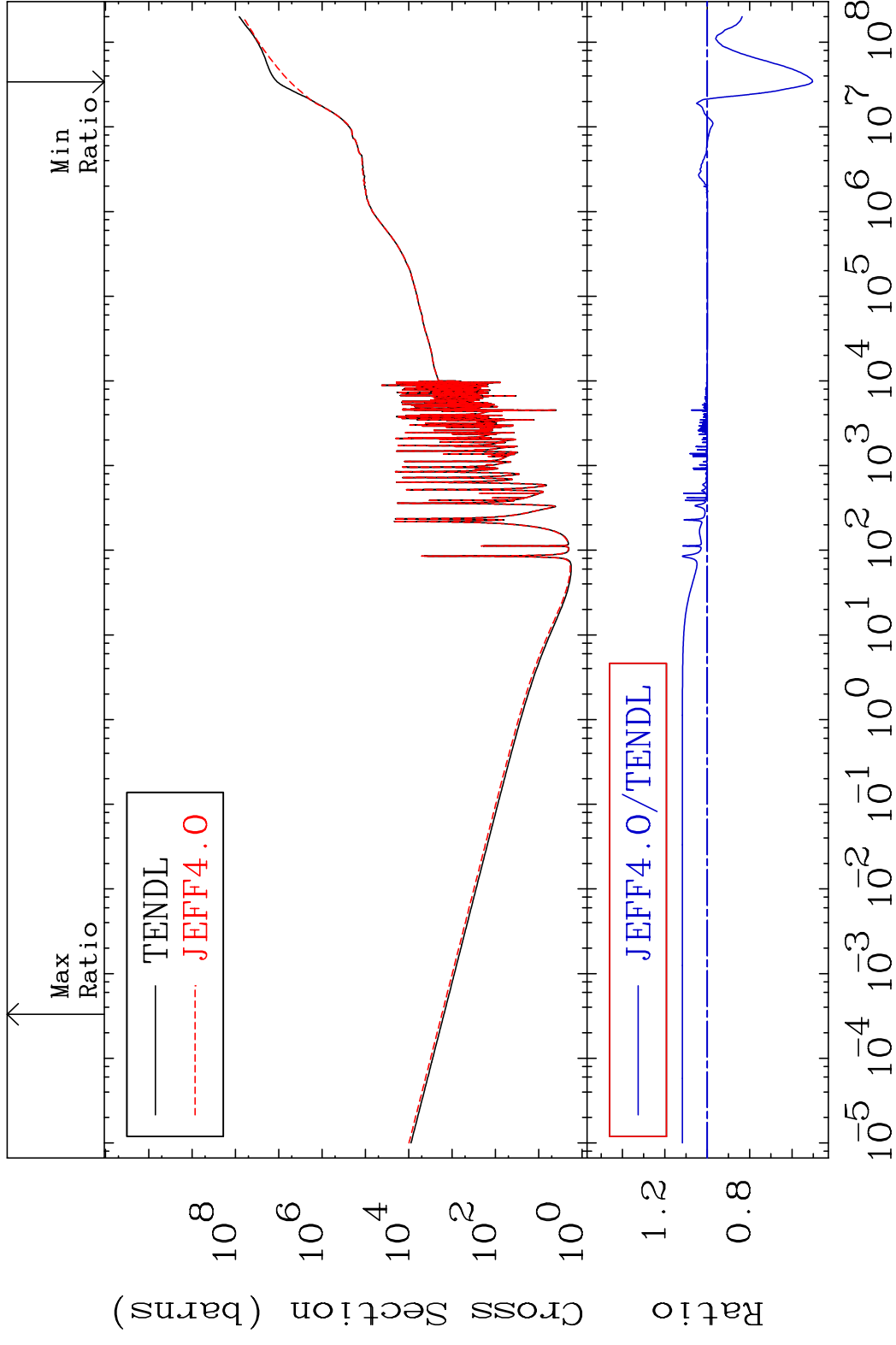


74

Incident Energy (eV)

59-Pr-141

MAT 5925 Total kinematic kerma (high limit) 59-Pr-141
 Cross Section -49.61 To 11.74 %

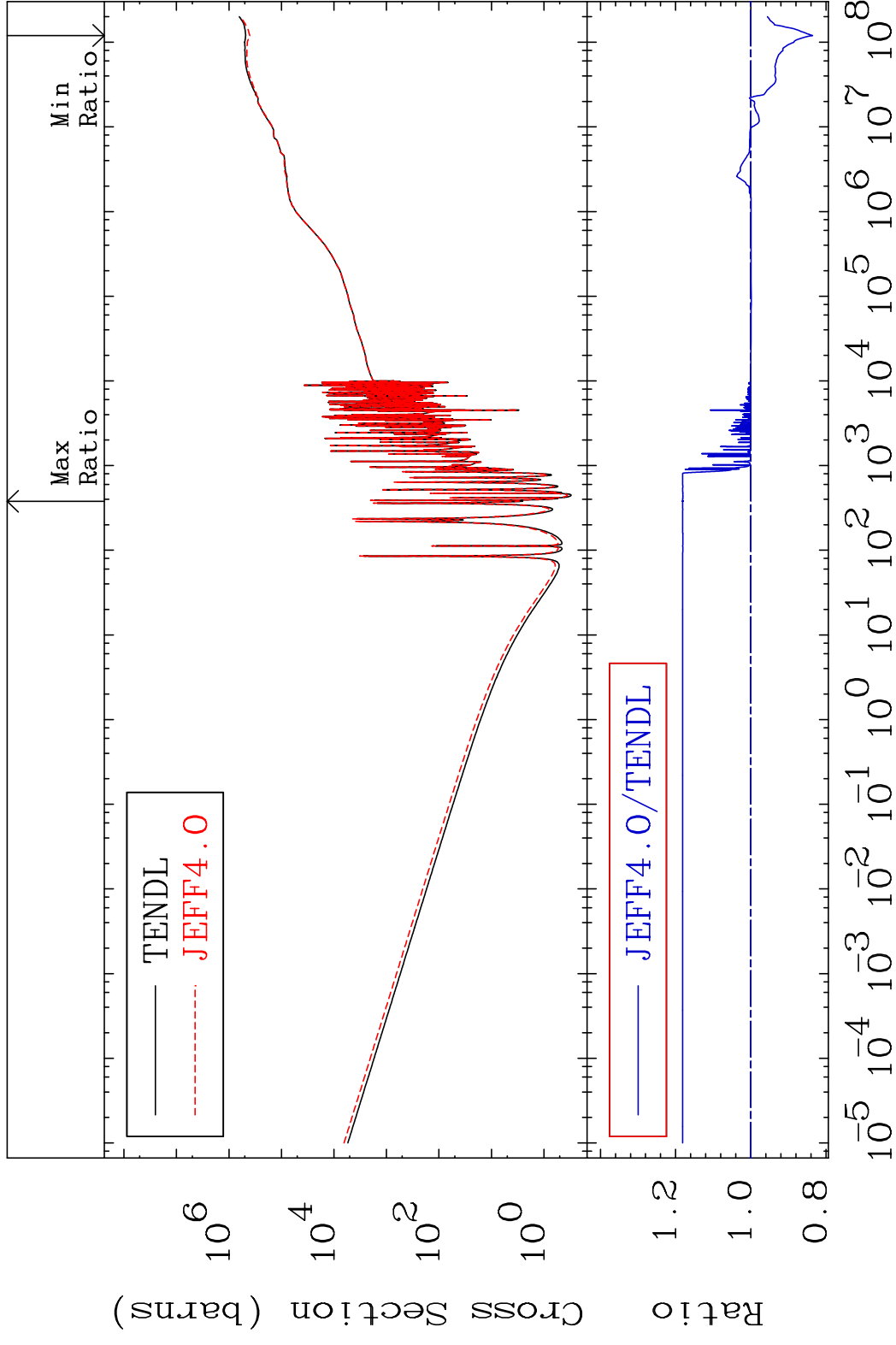


MAT 5925

Dpa total (eV-barns)

59-Pr-141

Cross Section -16.42 To 18.21 %



76

Incident Energy (eV)

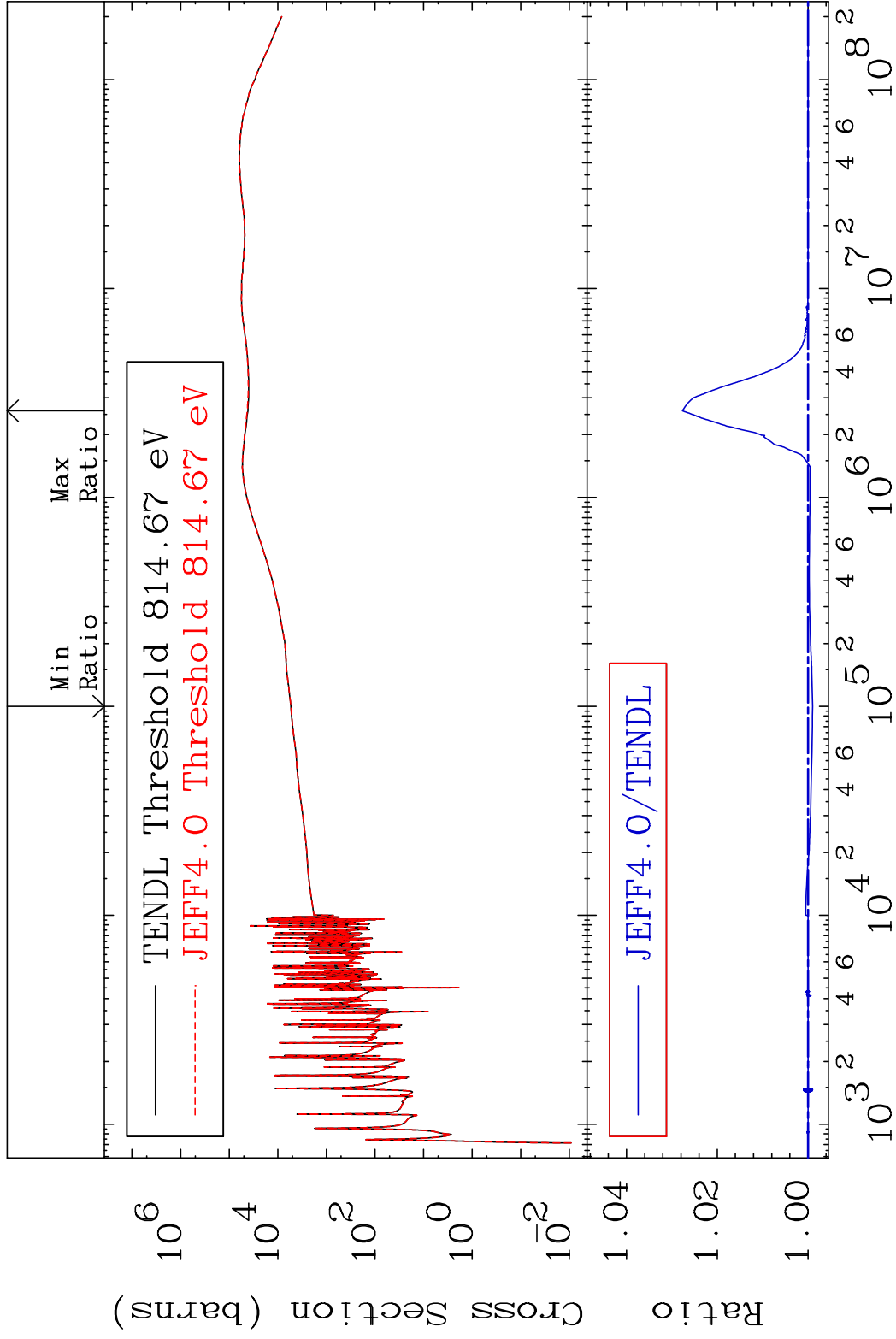
59-Pr-141

MAT 5925

Dpa elastic (mt2)

59-Pr-141

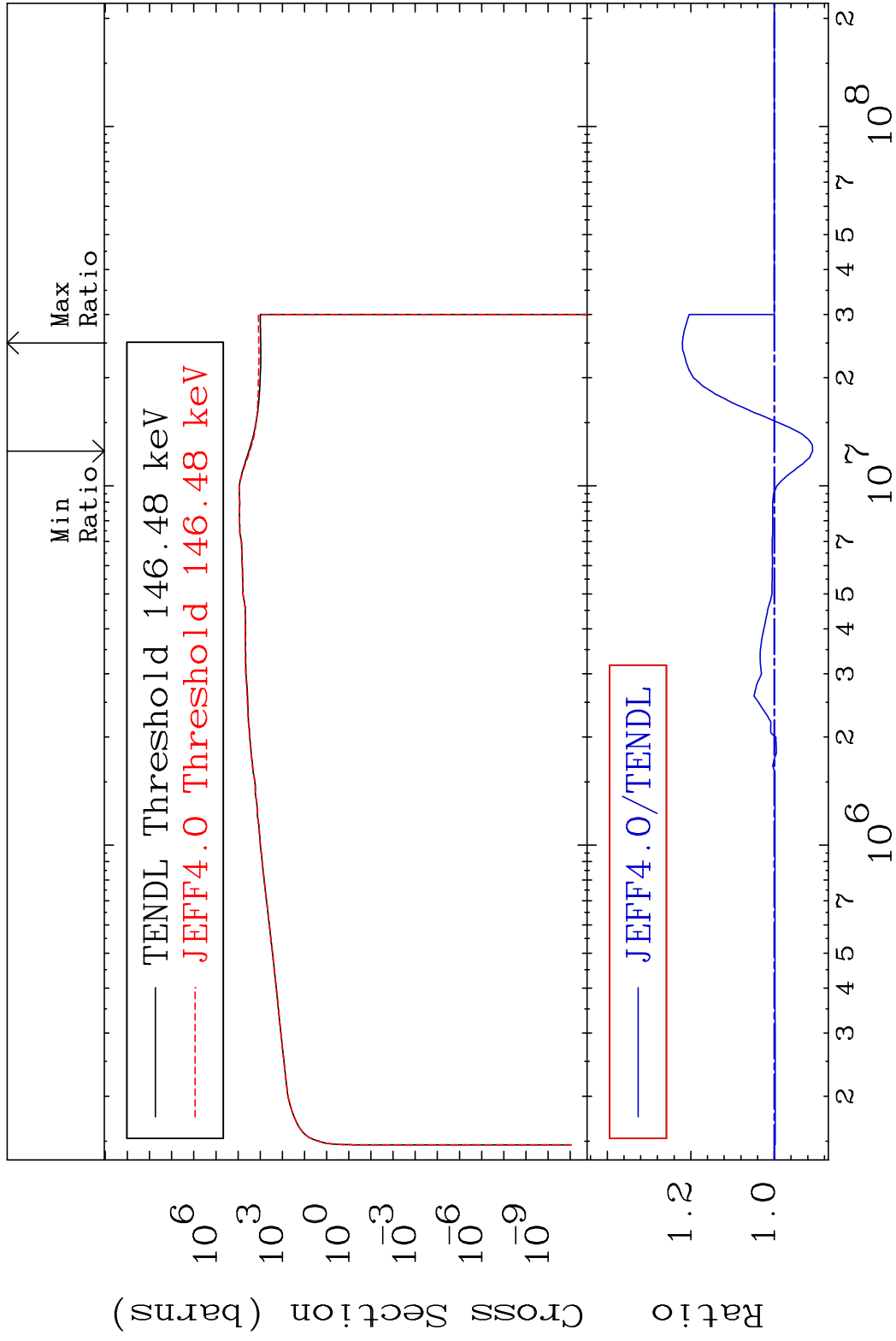
Cross Section -0.100 To 2.769 %



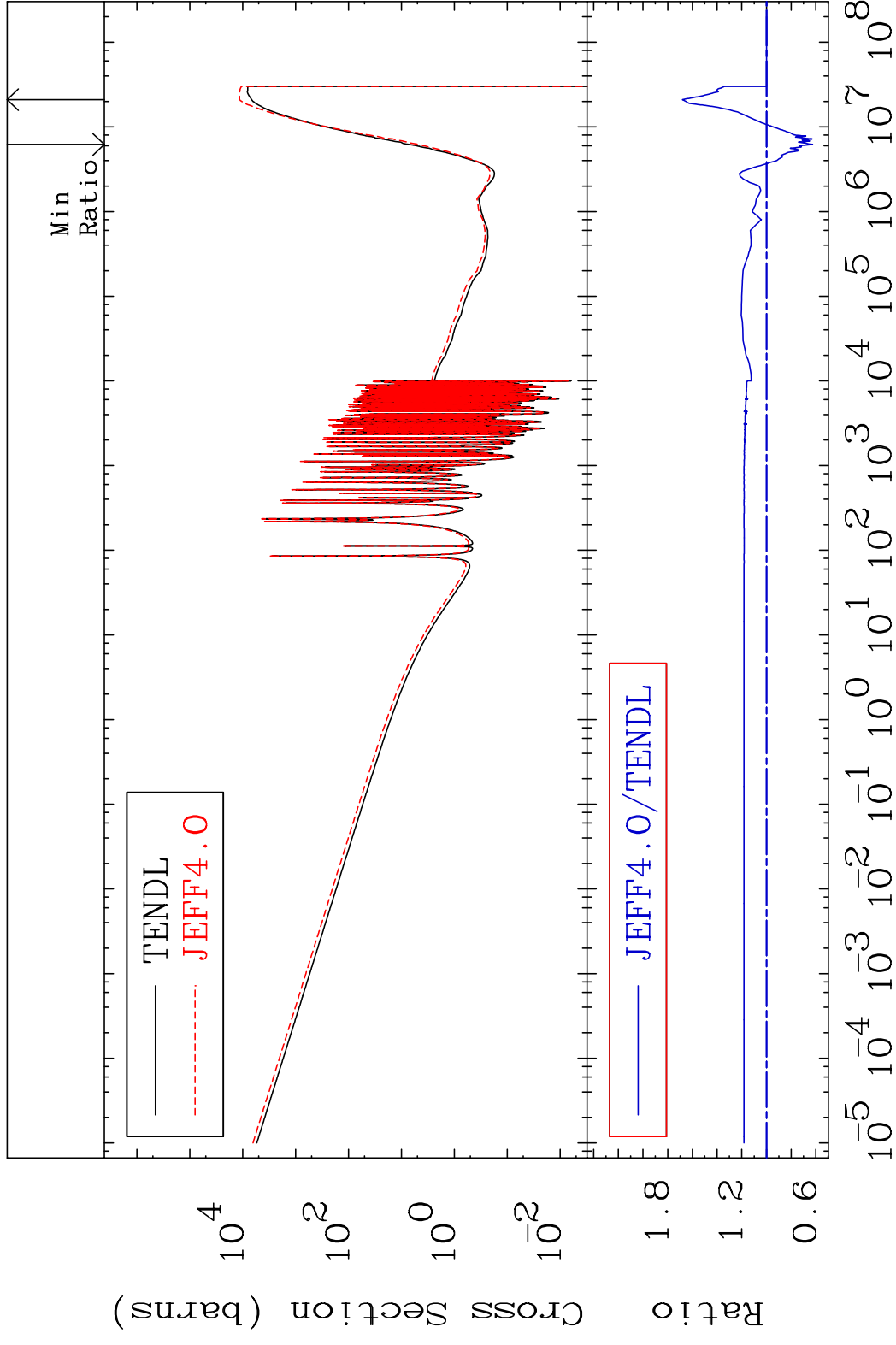
77

Incident Energy (eV)

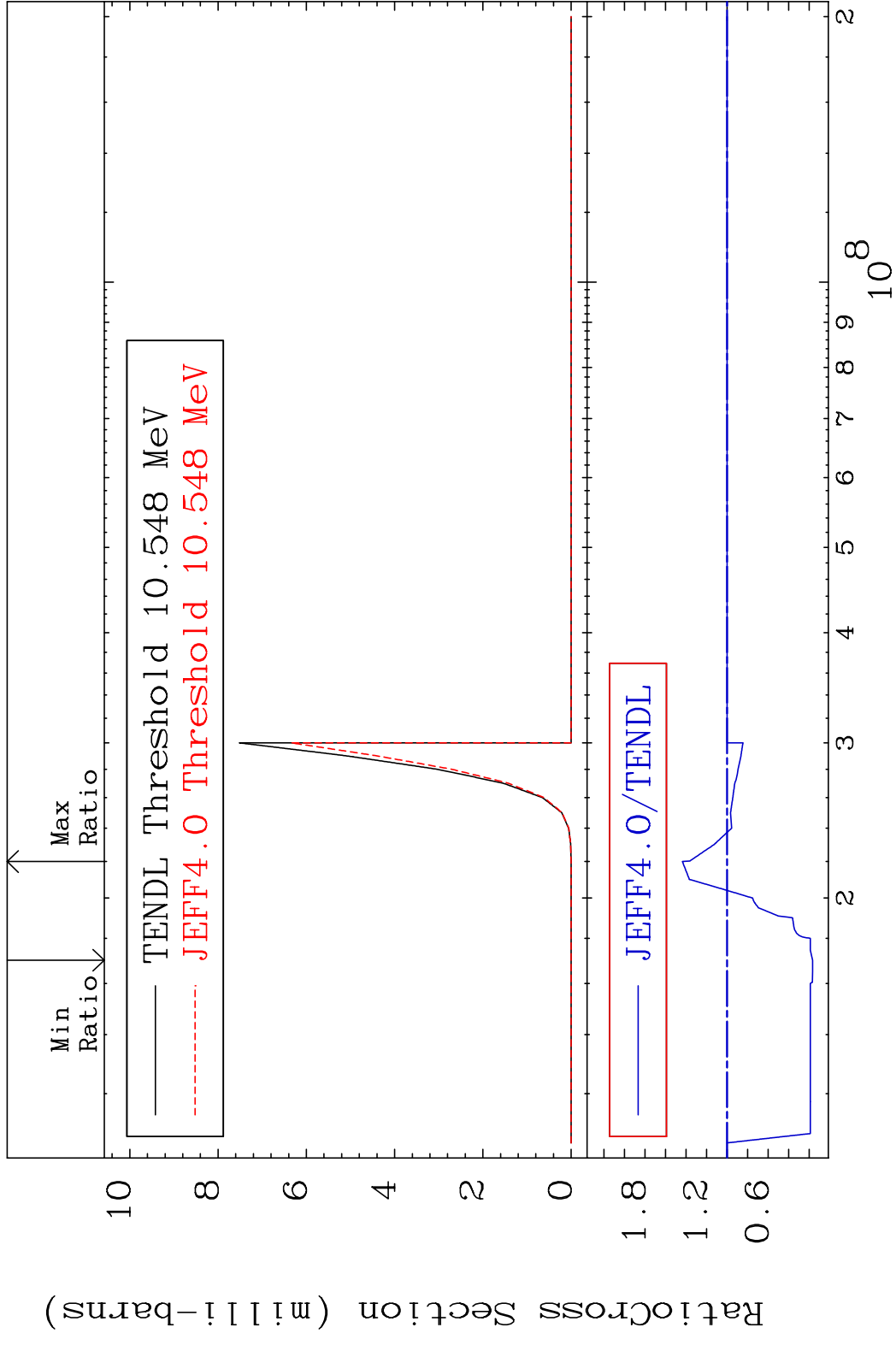
59-Pr-141

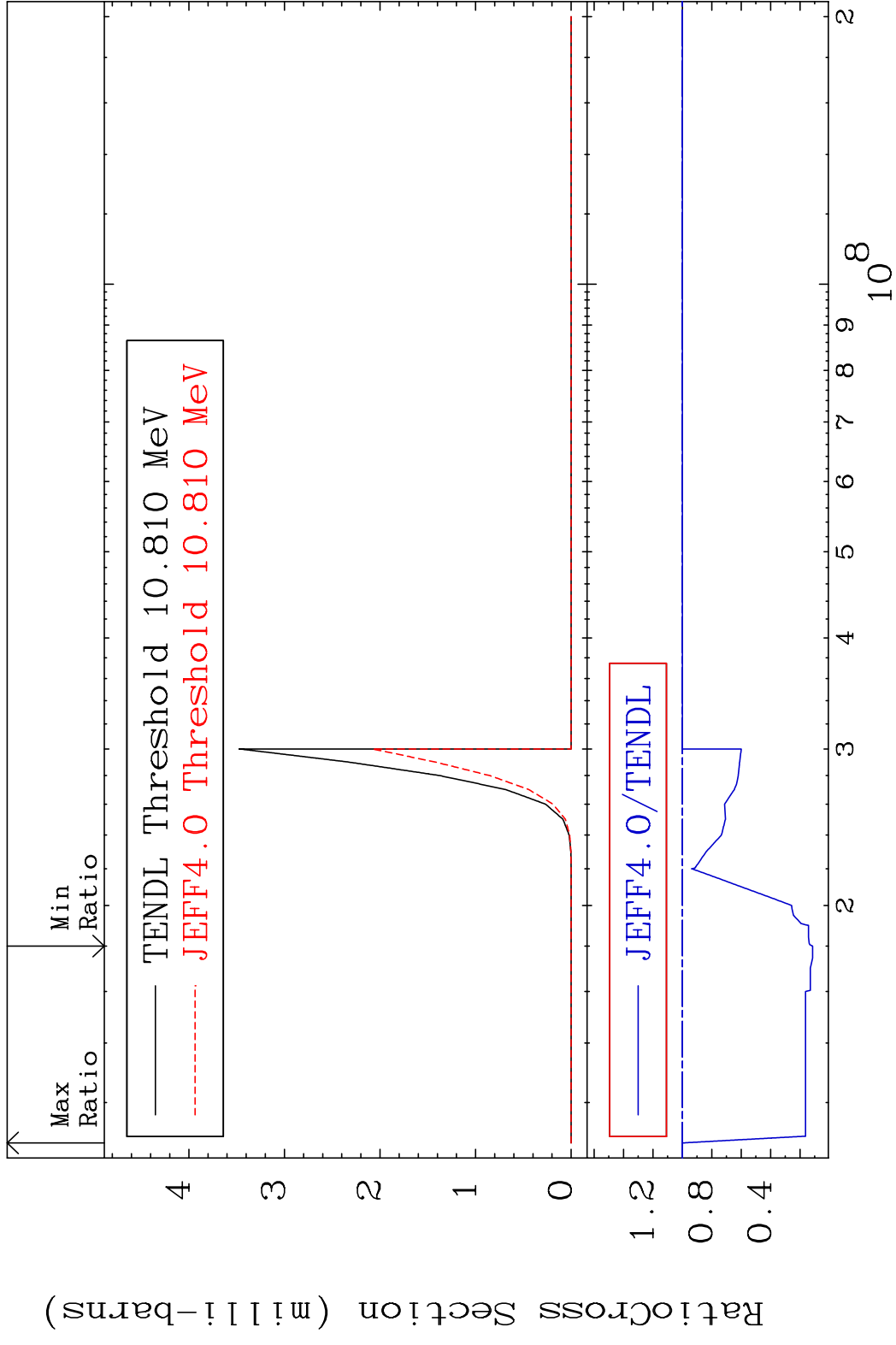


MAT 5925 Dpa disappearance (mt102 -120) 59-Pr-141
 Cross Section -37.34 To 68.12 %

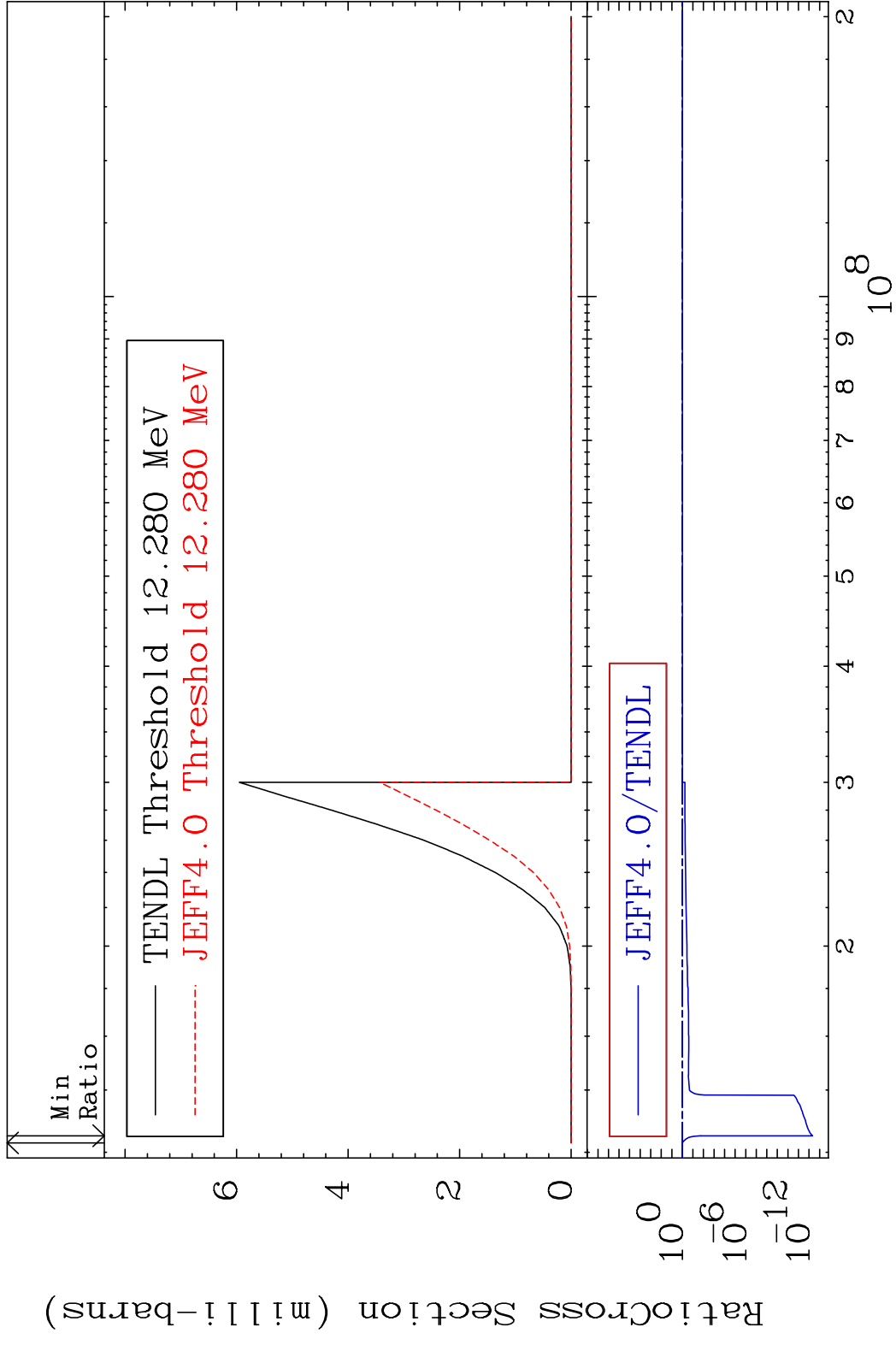


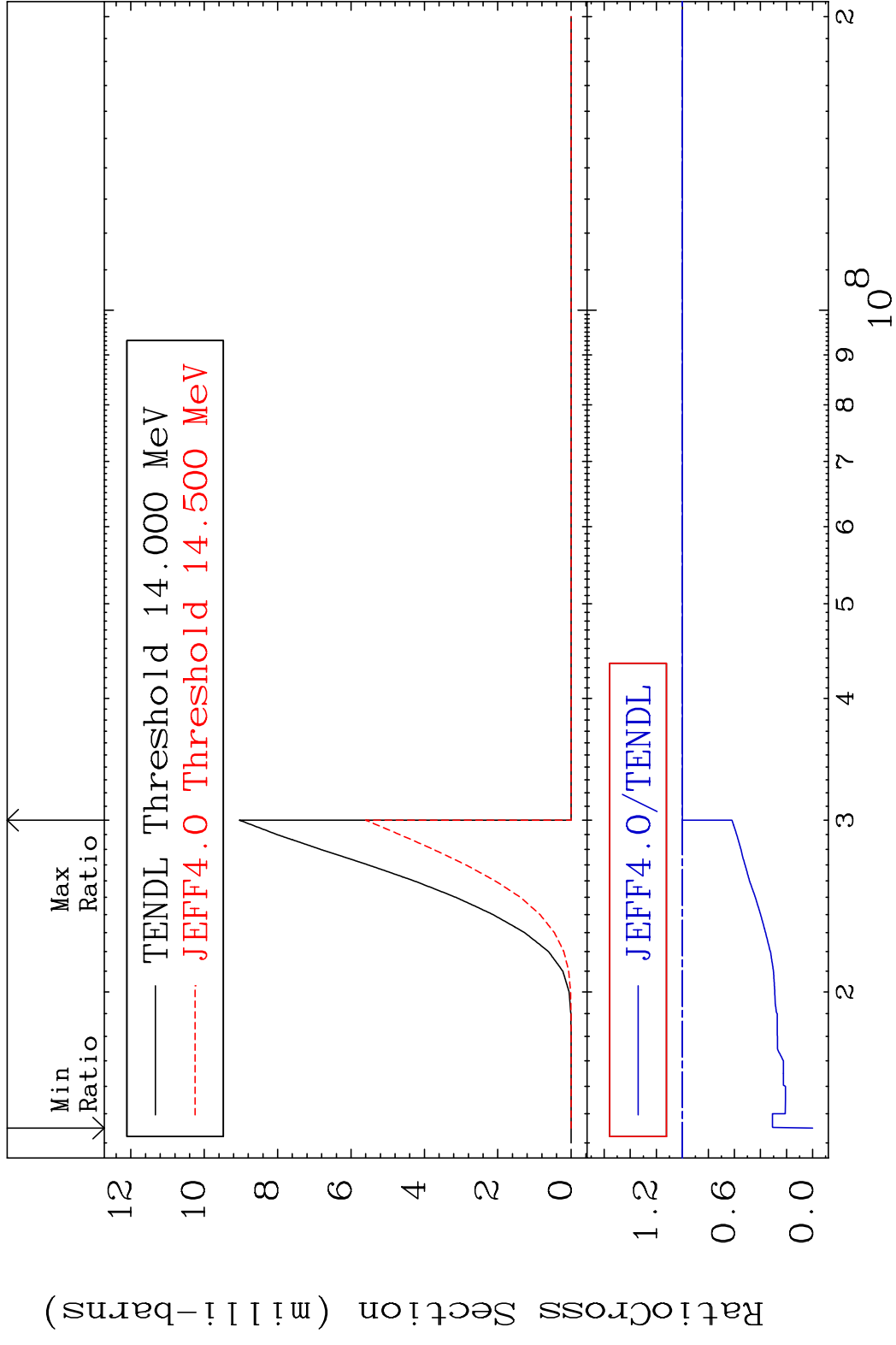
MAT 5925 (n,2n) α :57-La-136g 59-Pr-141
 Radionuclide Production Cross Section 43.50 %



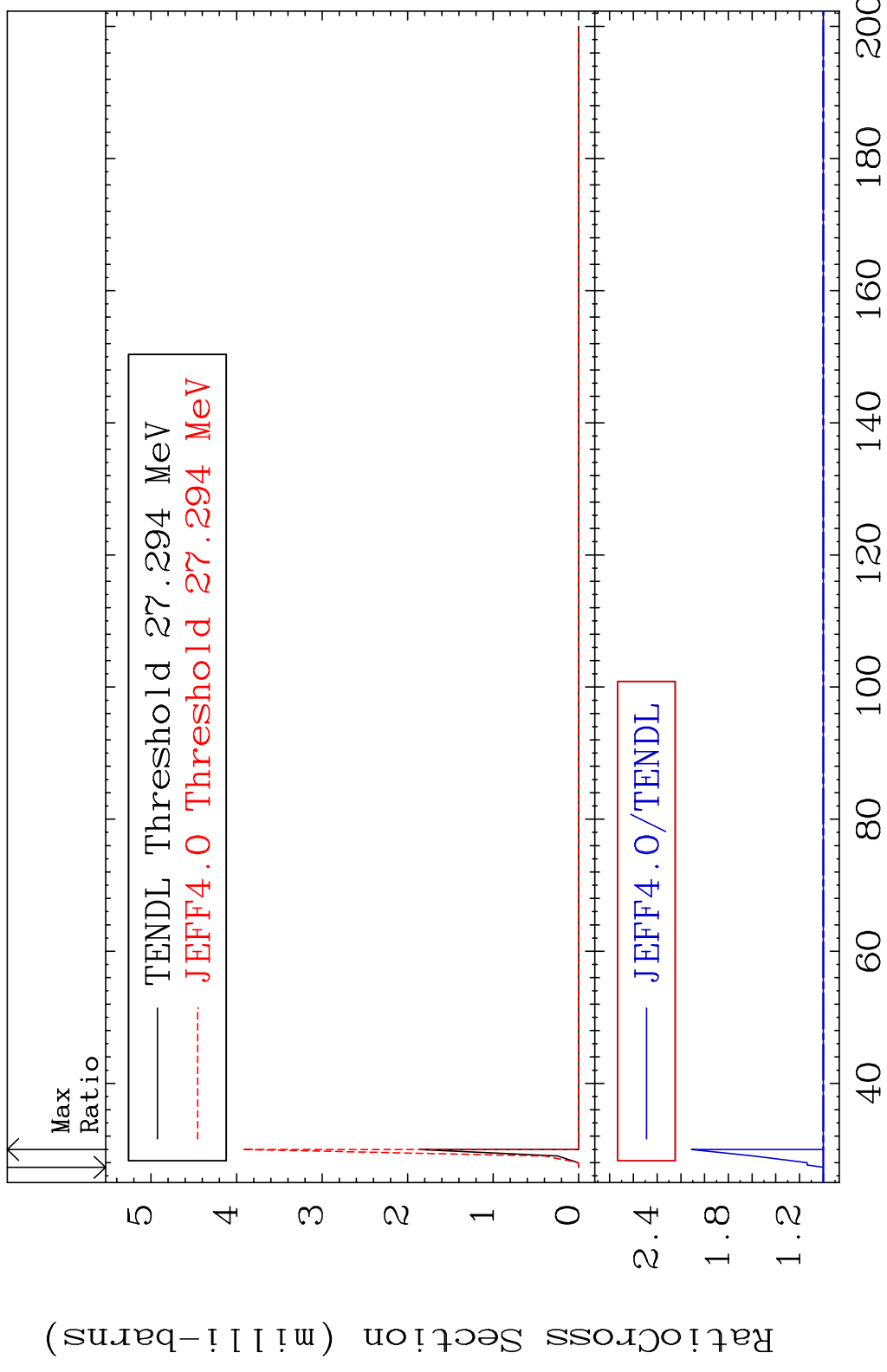


MAT 5925 (n, n') d:58-Ce-139g 59-Pr-141
 Radionuclide Production Cross Section 180.0 dth 0.000 %

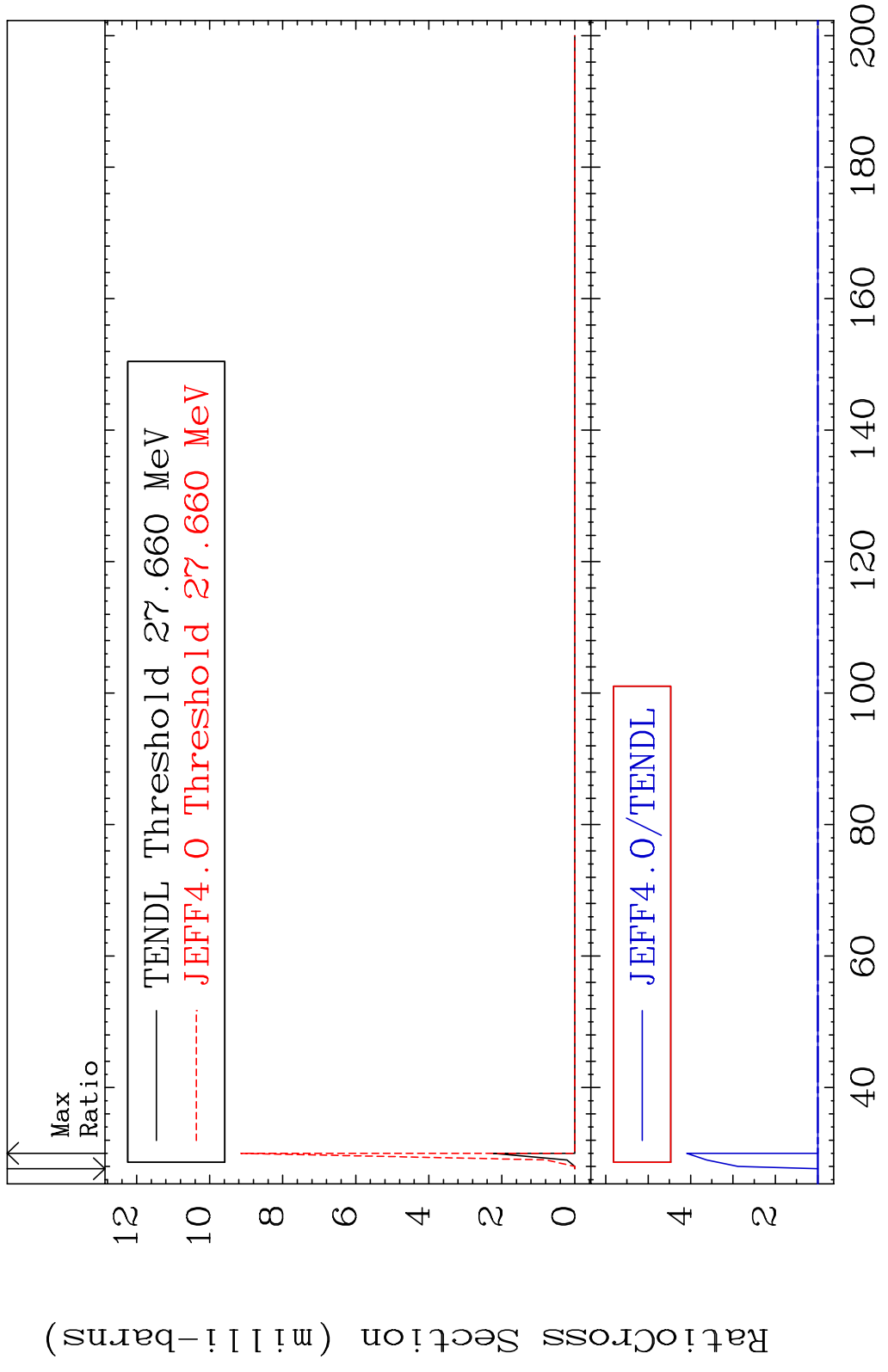


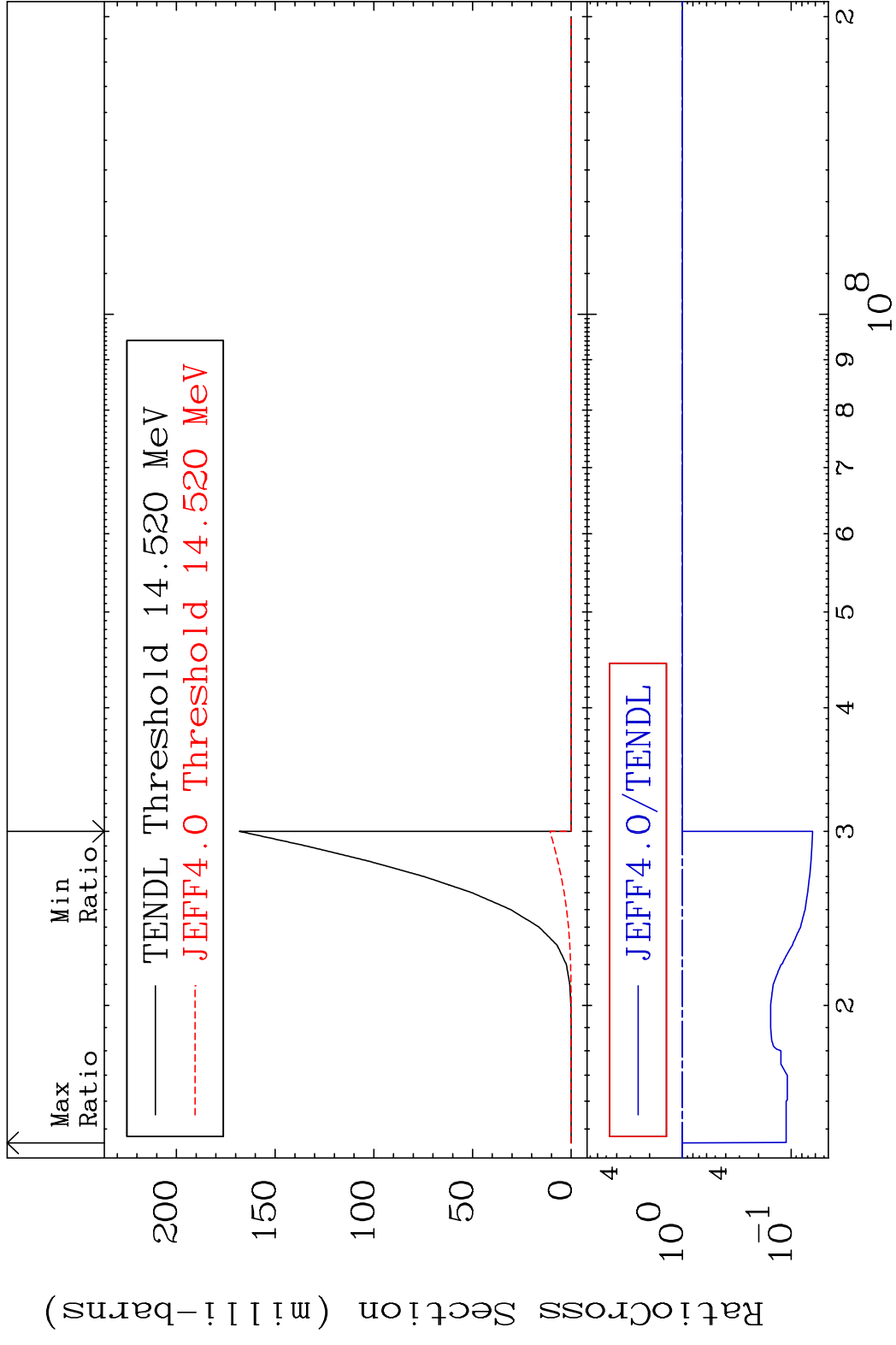


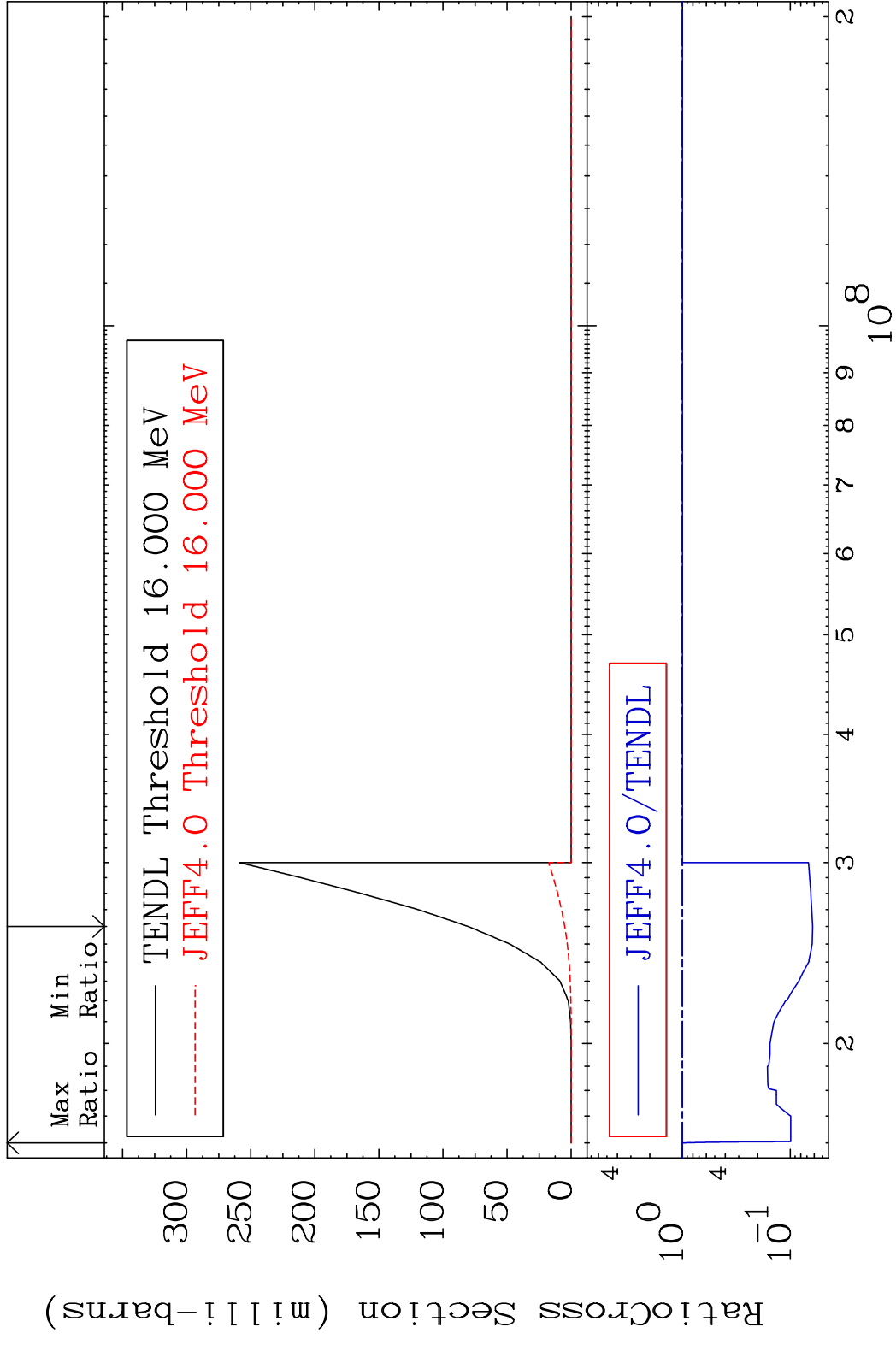
MAT 5925 (n,4n):59-Pr-138g 59-Pr-141
 Radionuclide Production Cross Section 111.2 %

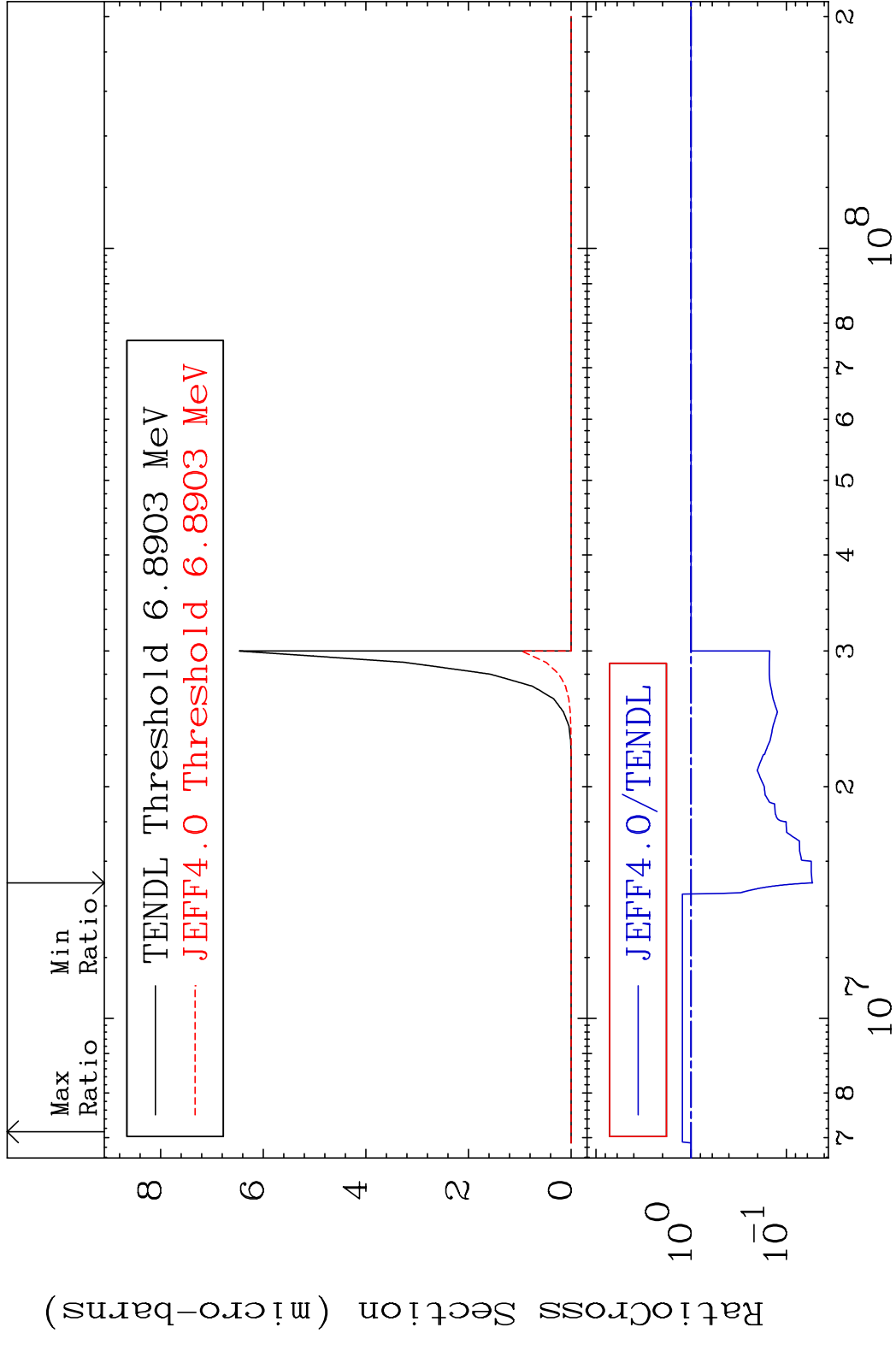


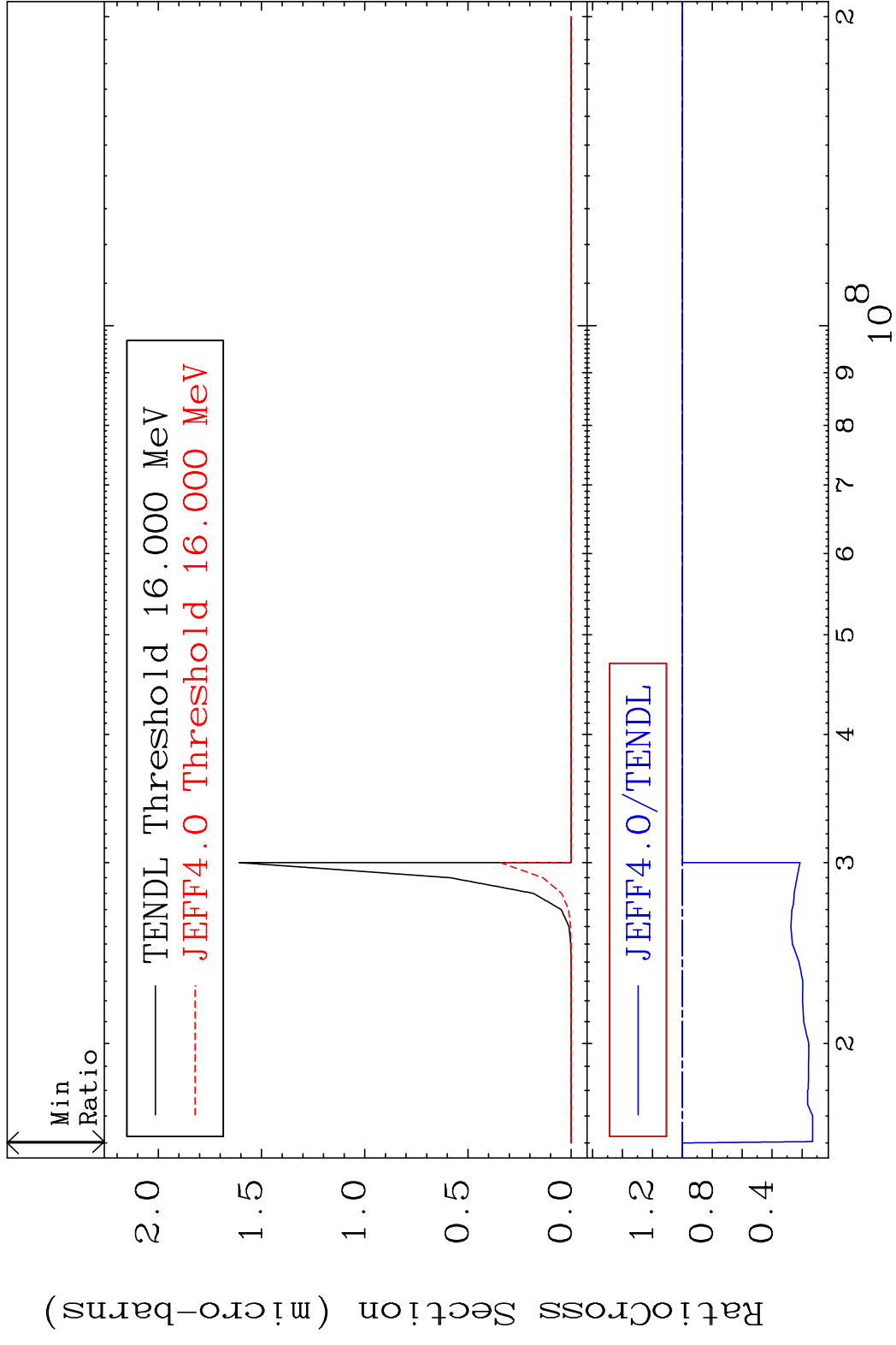
MAT 5925 (n, 4n):59-Pr-138m5 59-Pr-141
 Radionuclide Production Cross Section 309.0 %

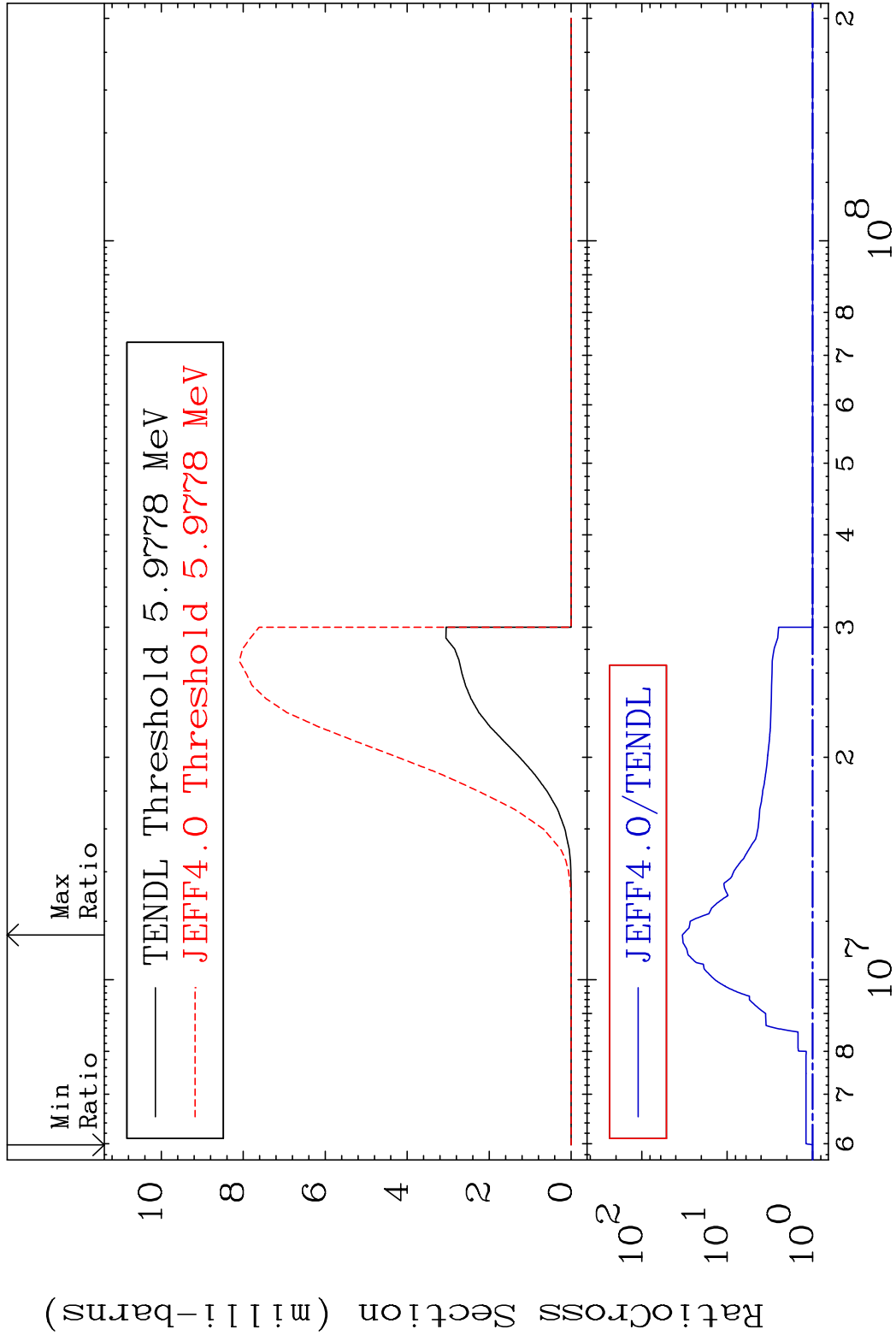


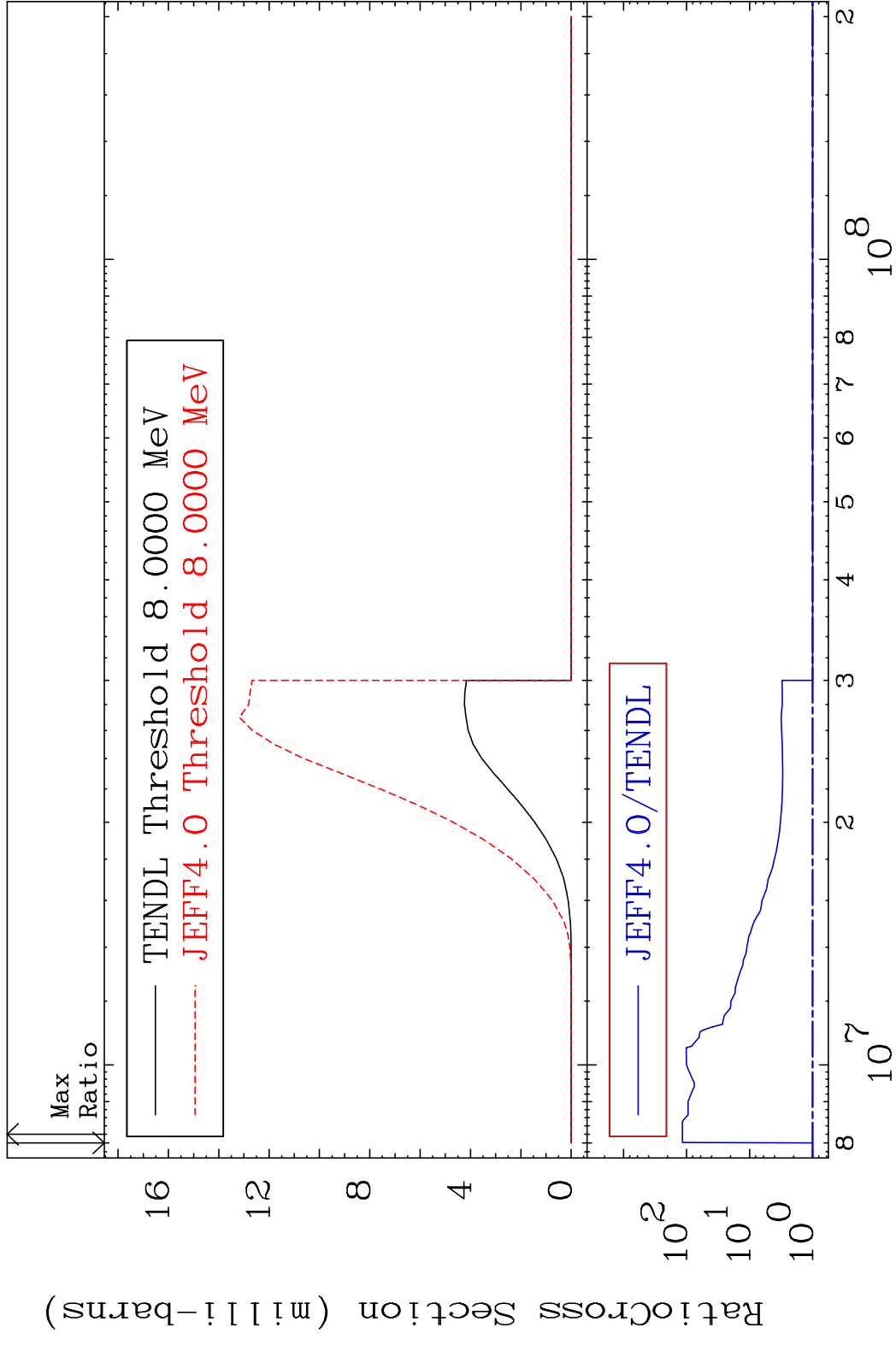


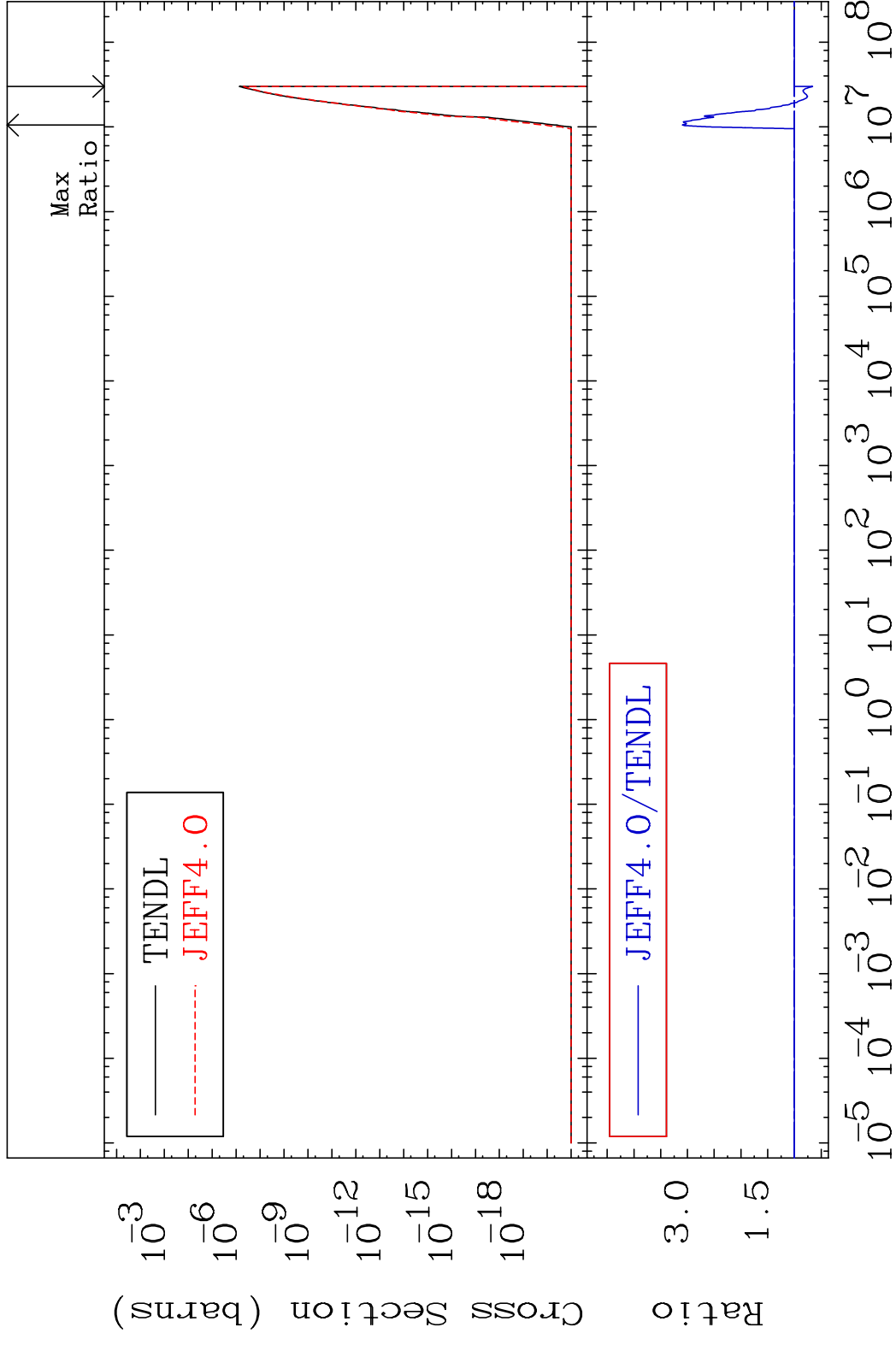










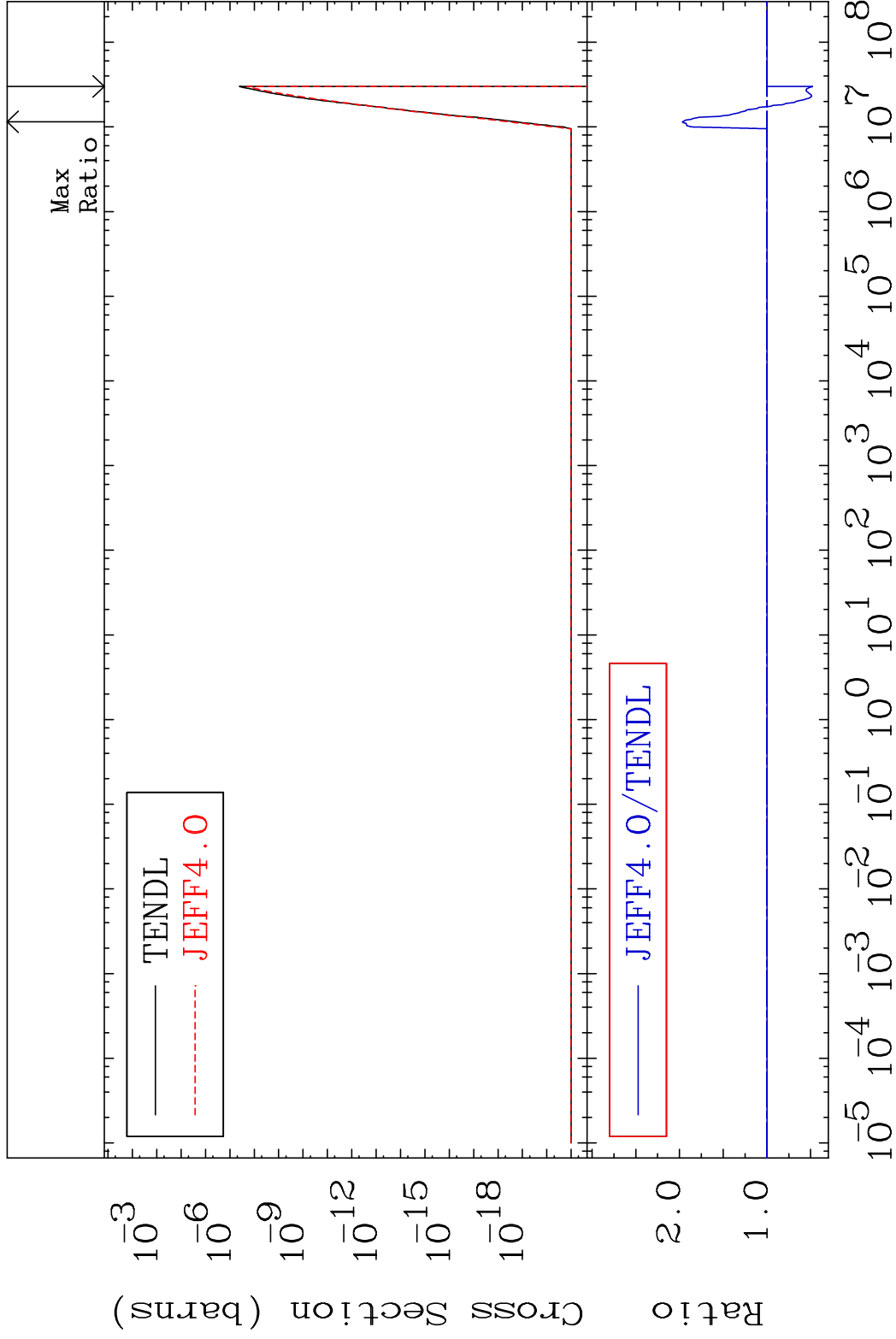


MAT 5925

(n, 2α):55-Cs-134m3

59-Pr-141

Radionuclide Production Cross Section Ratio 96.71 %



93

Incident Energy (eV)

59-Pr-141

MAT 5925 (n,p) α :56-Ba-137g 59-Pr-141
 Radionuclide Production Cross Section 0.000 %

