

Program Complot  
(Version 2021-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

U.S.A.

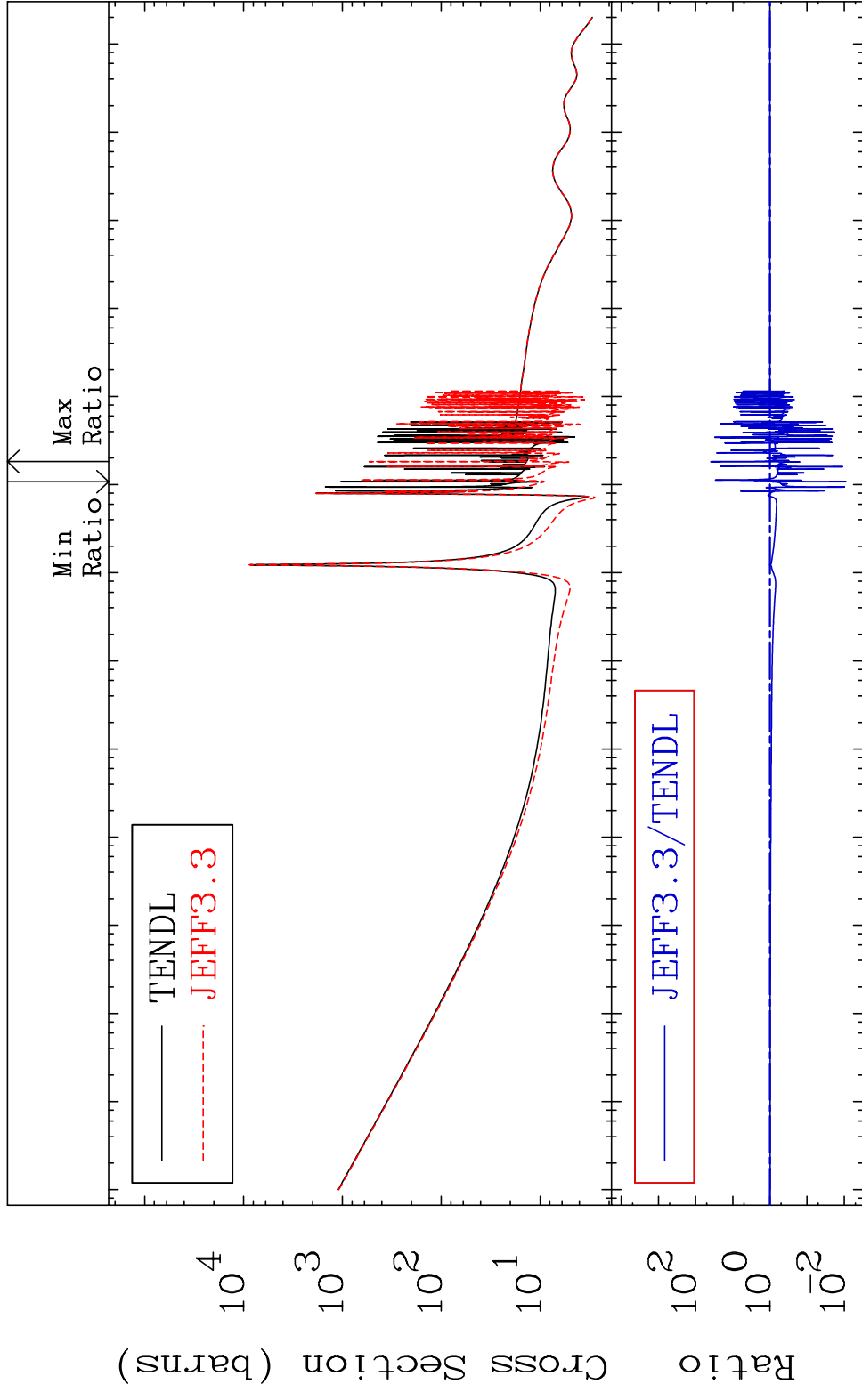
Tele: 925-443-1911

E.Mail:redcullen1@comcast.net  
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 8128

Total Cross Section -99.13 To 3816. %  
81-Tl-204



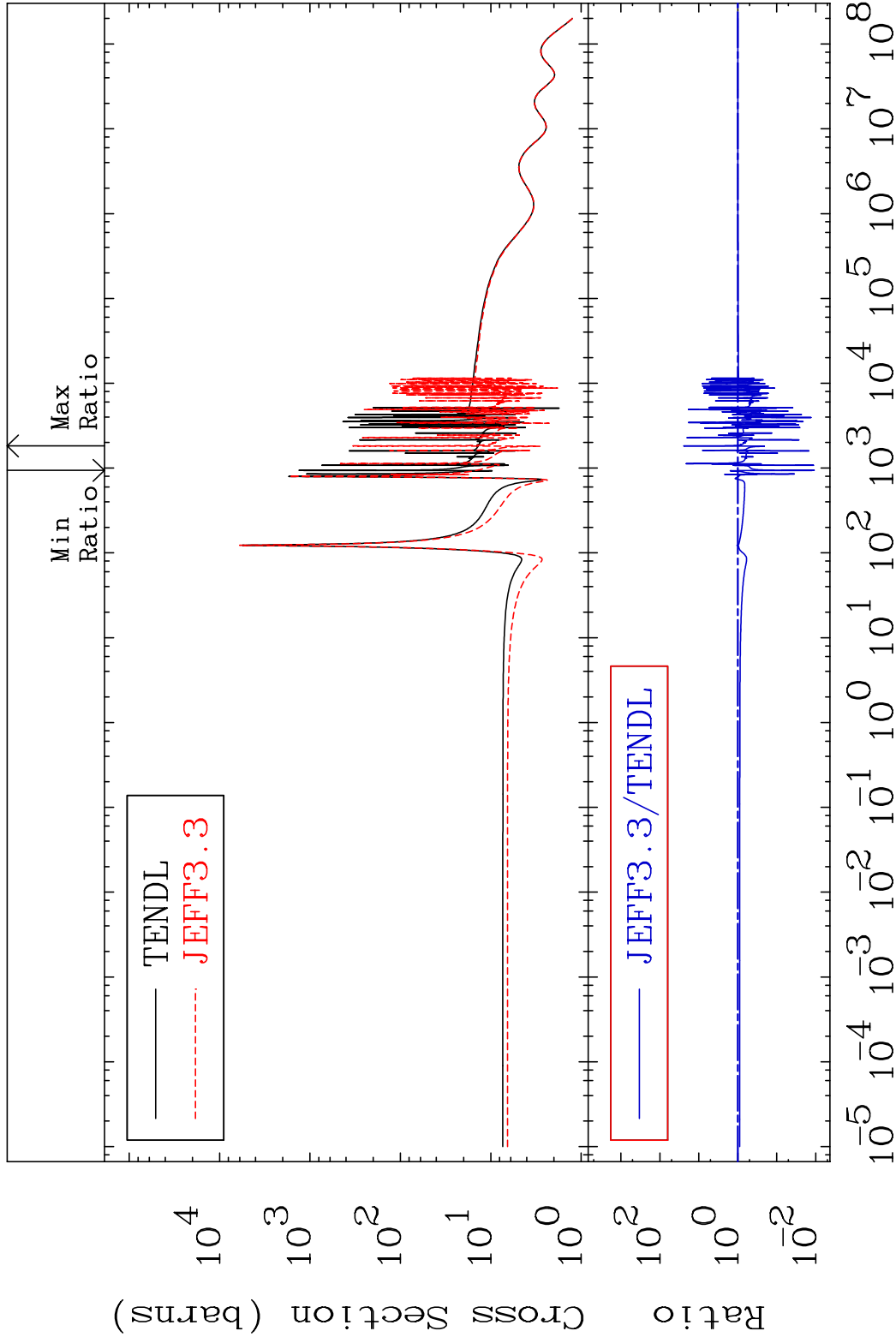
1 Incident Energy (eV) 81-Tl-204

MAT 8128

Elastic

81-T1-204

Cross Section -98.90 To 2346. %



2

Incident Energy (eV)

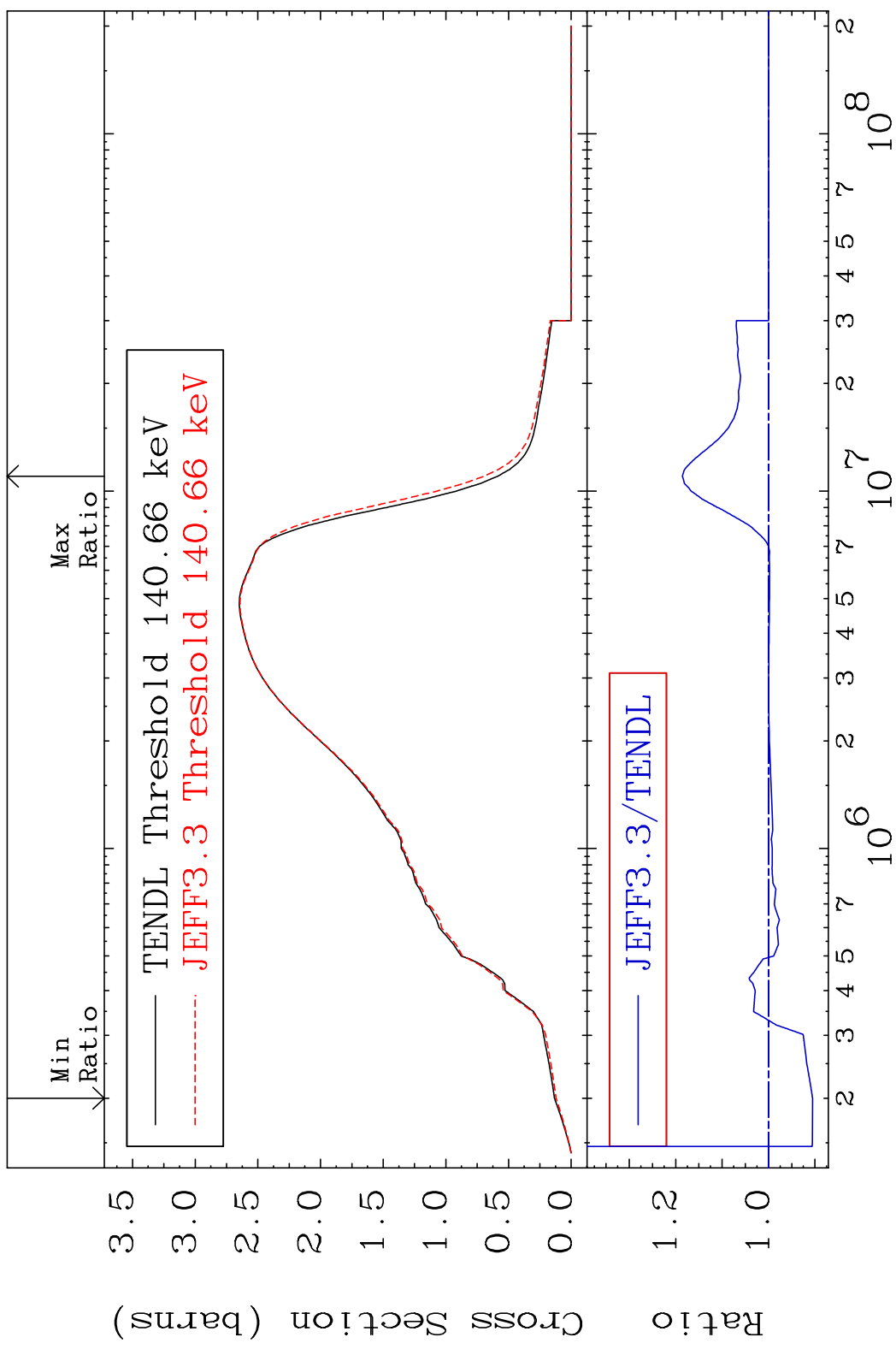
81-T1-204

MAT 8128

Inelastic

81-Tl-204

Cross Section -9.479 To 18.57 %

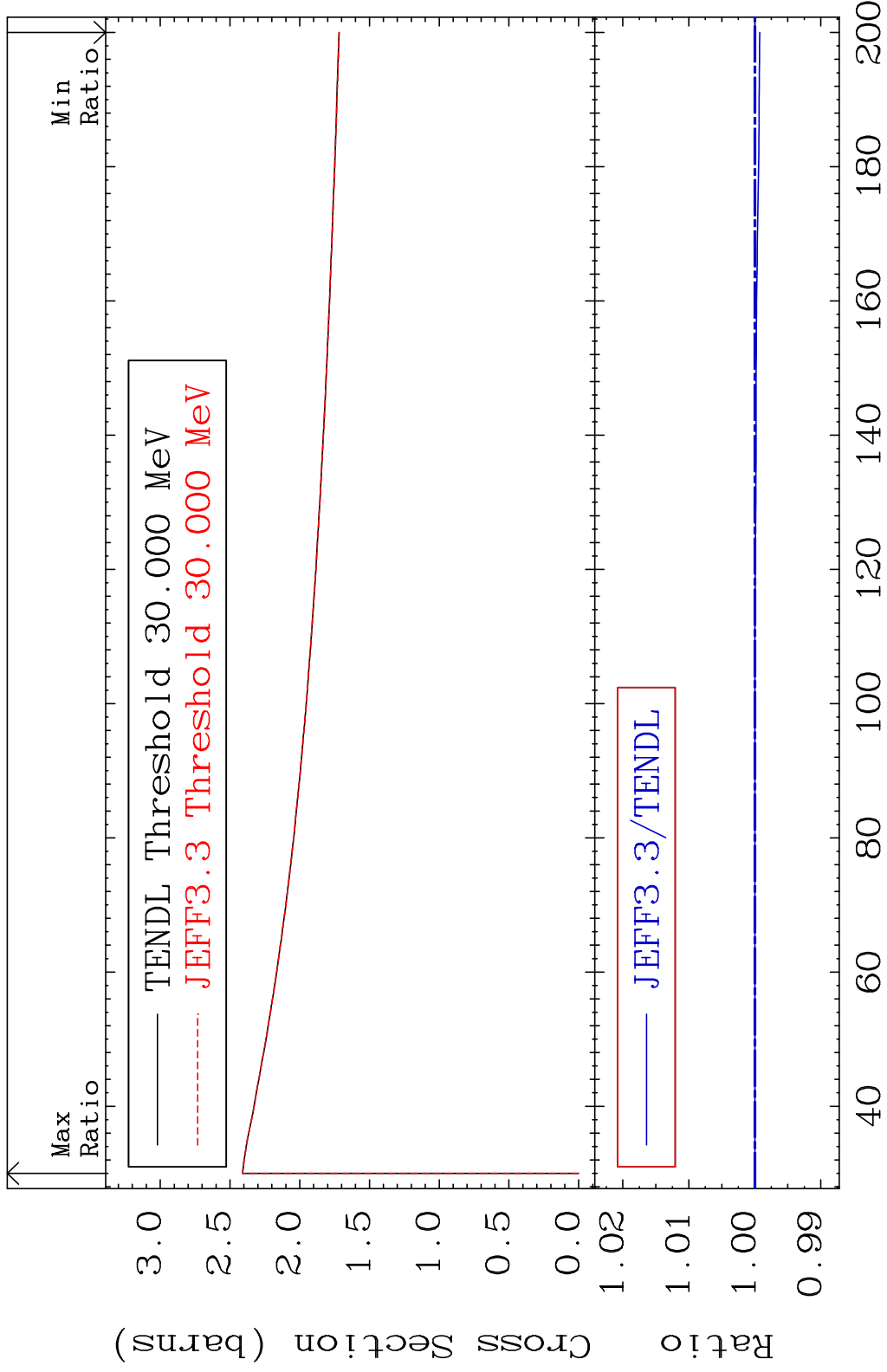


MAT 8128

(n, remainder)

81-Tl-204

Cross Section -0.075 To 0.000 %

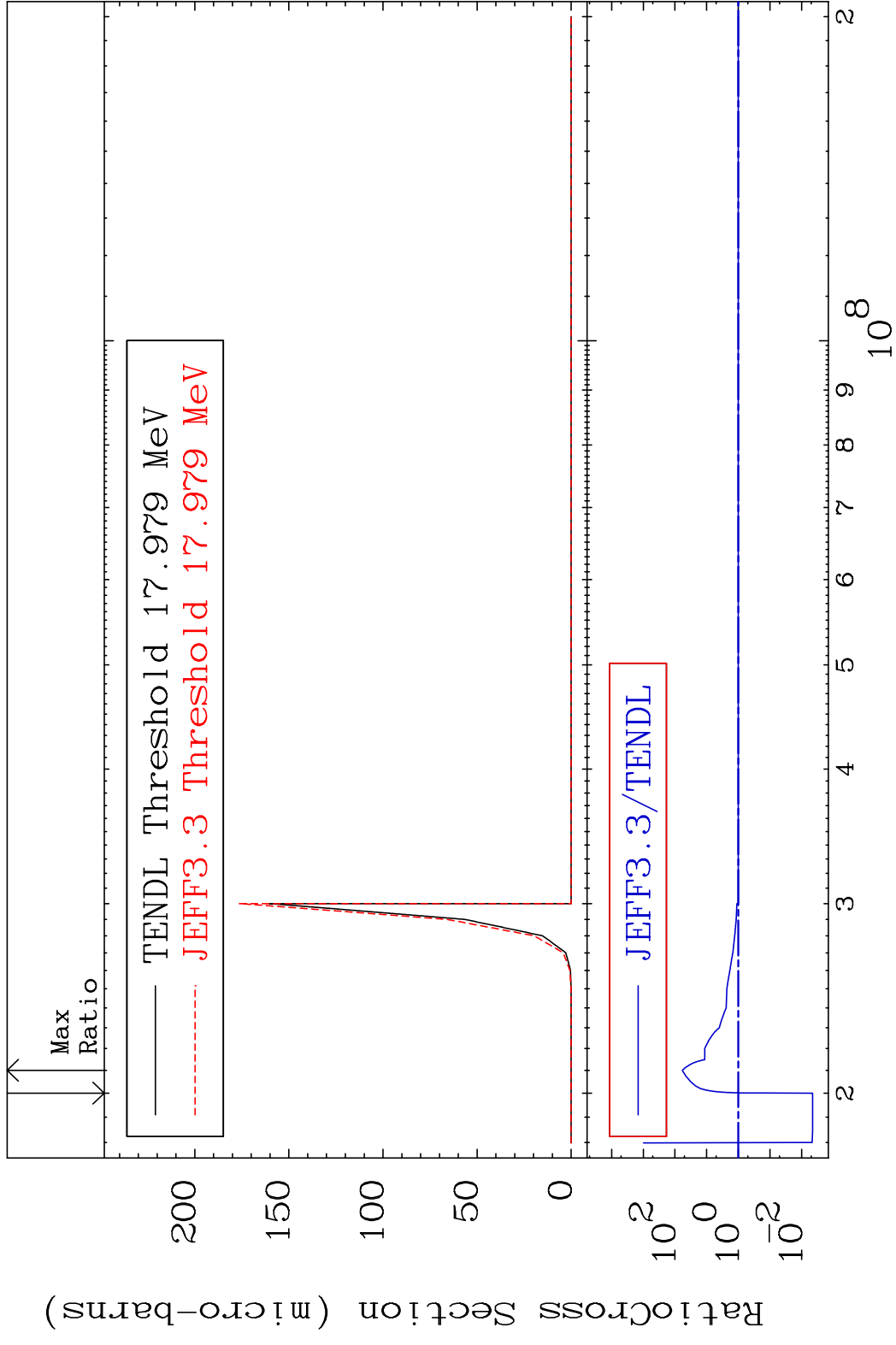


MAT 8128

(n,2n) d

81-Tl-204

Cross Section -99.55 To 5742. %

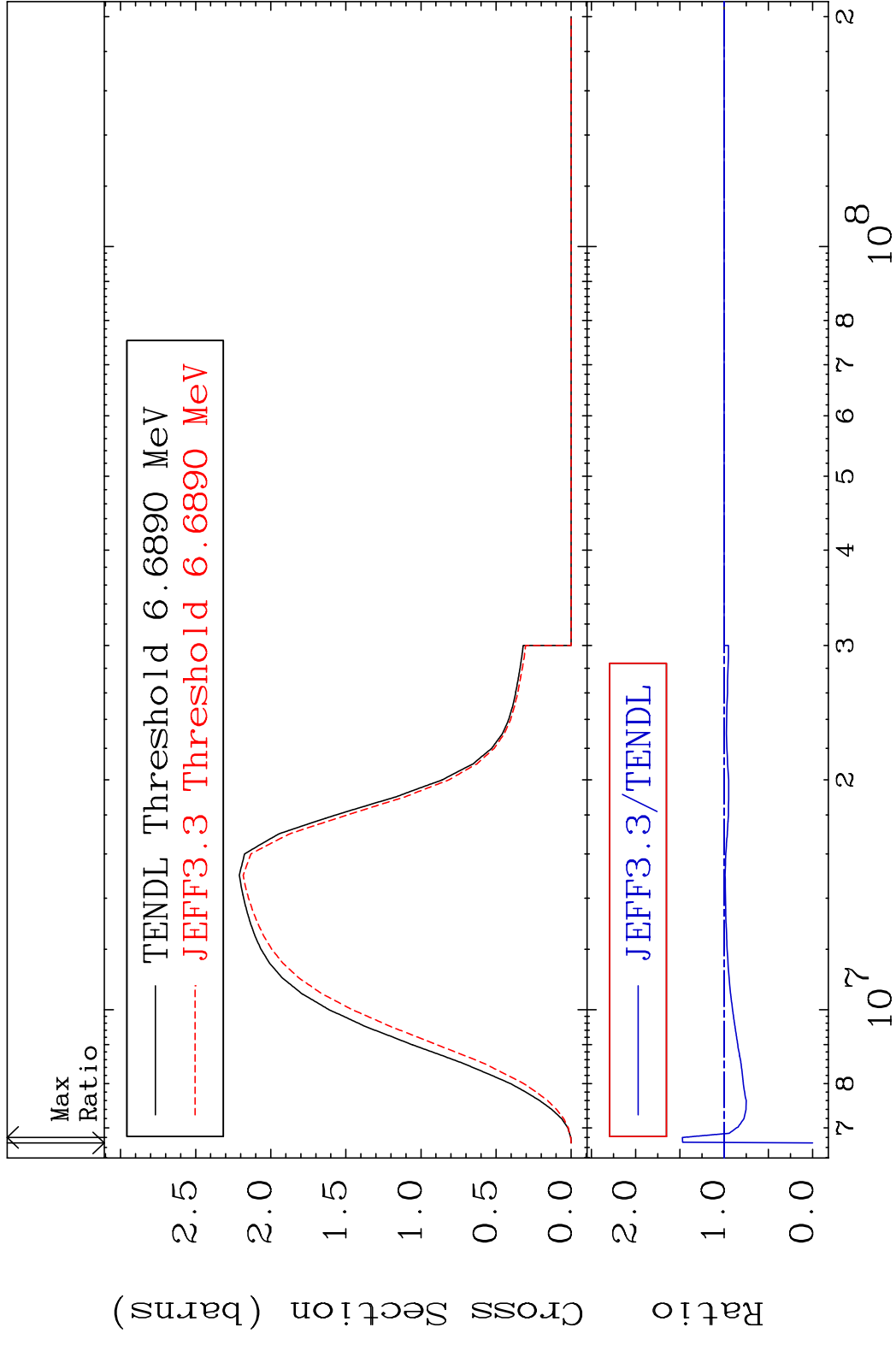


MAT 8128

(n,2n)

81-Tl-204

Cross Section -100.0 To 47.16 %



6

Incident Energy (eV)

81-Tl-204

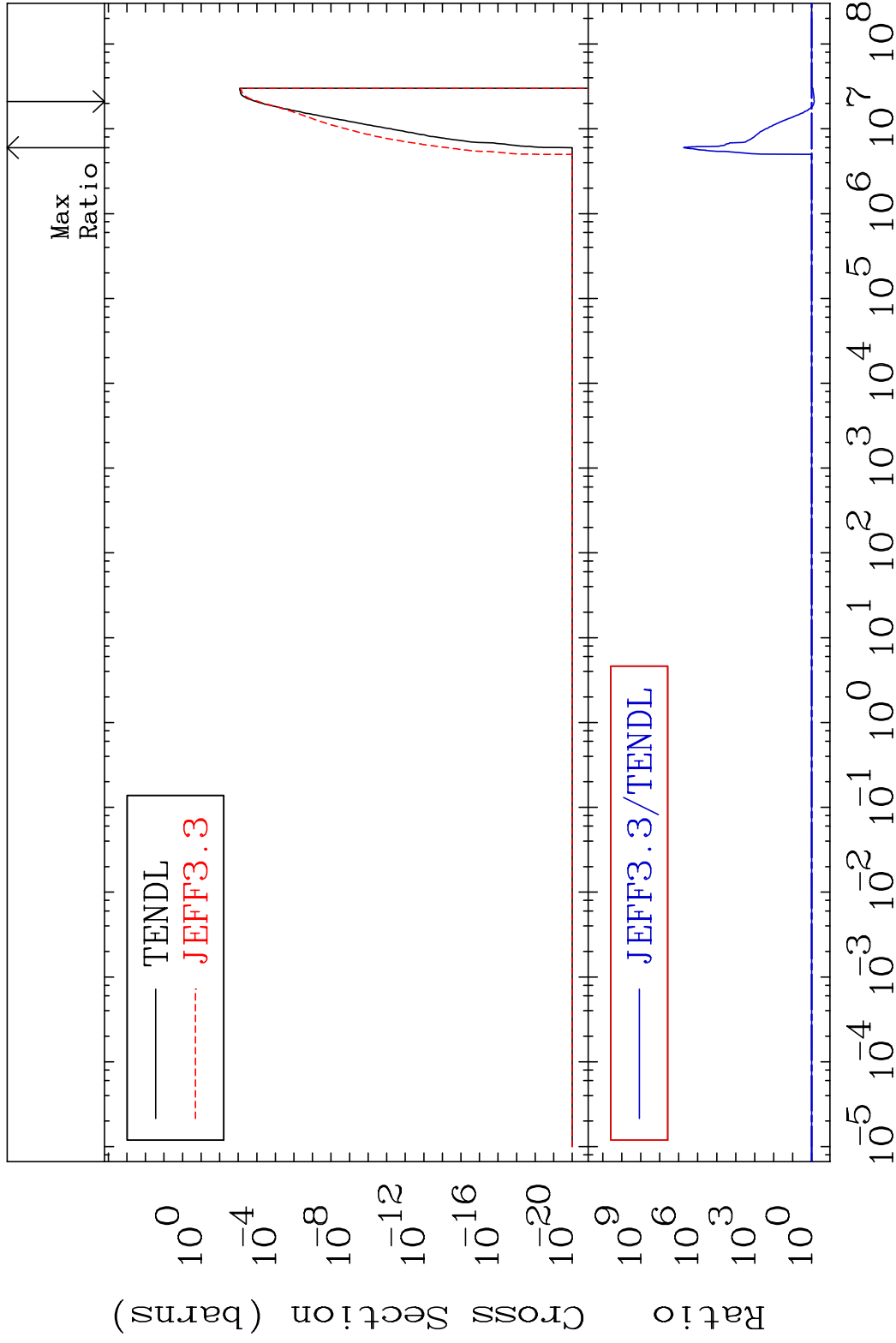


MAT 8128

(n, n')  $\alpha$

81-T1-204

Cross Section -26.09 To 9999. %

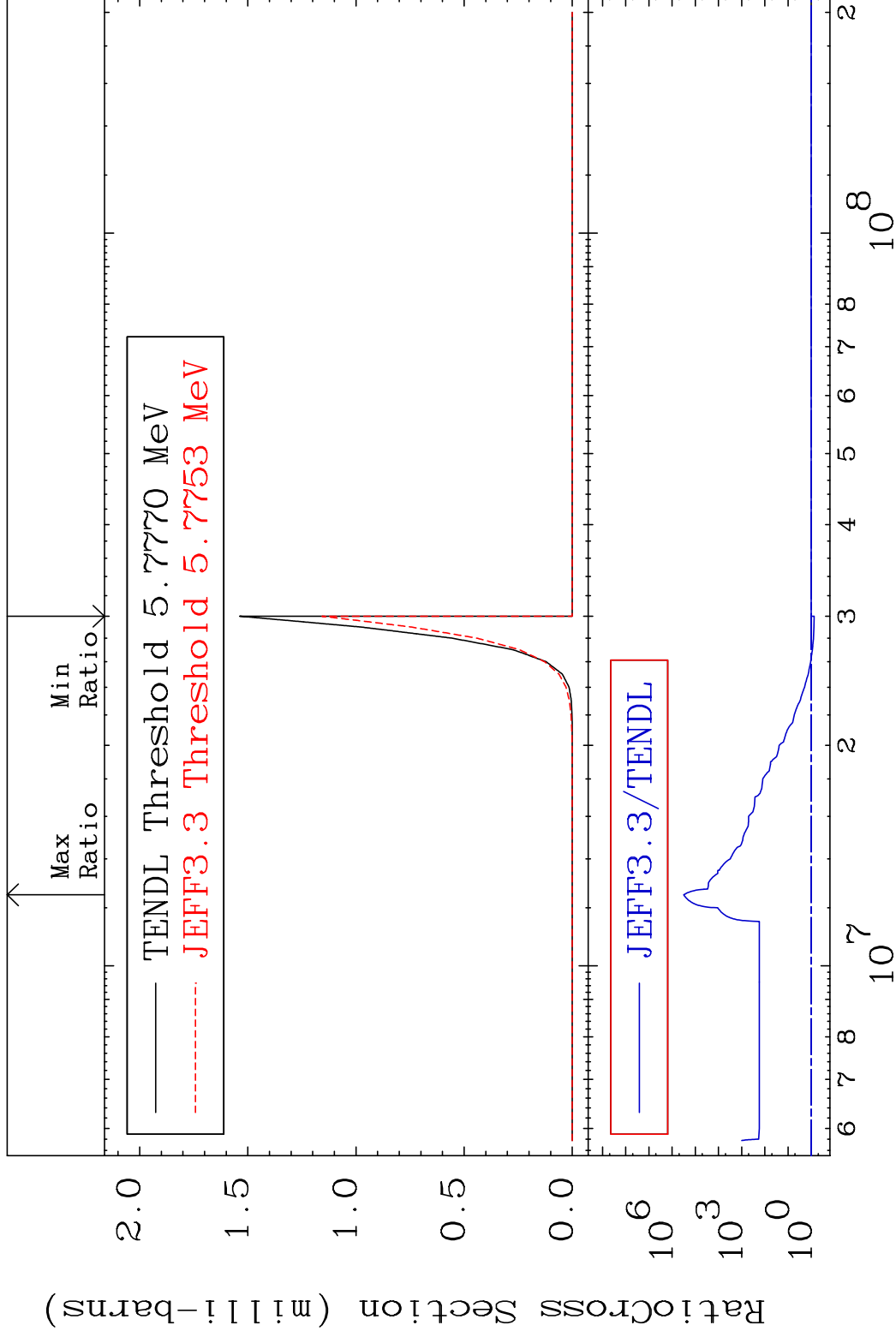


MAT 8128

(n,2n)  $\alpha$

81-Tl-204

Cross Section -24.76 To 9999. %



9

Incident Energy (eV)

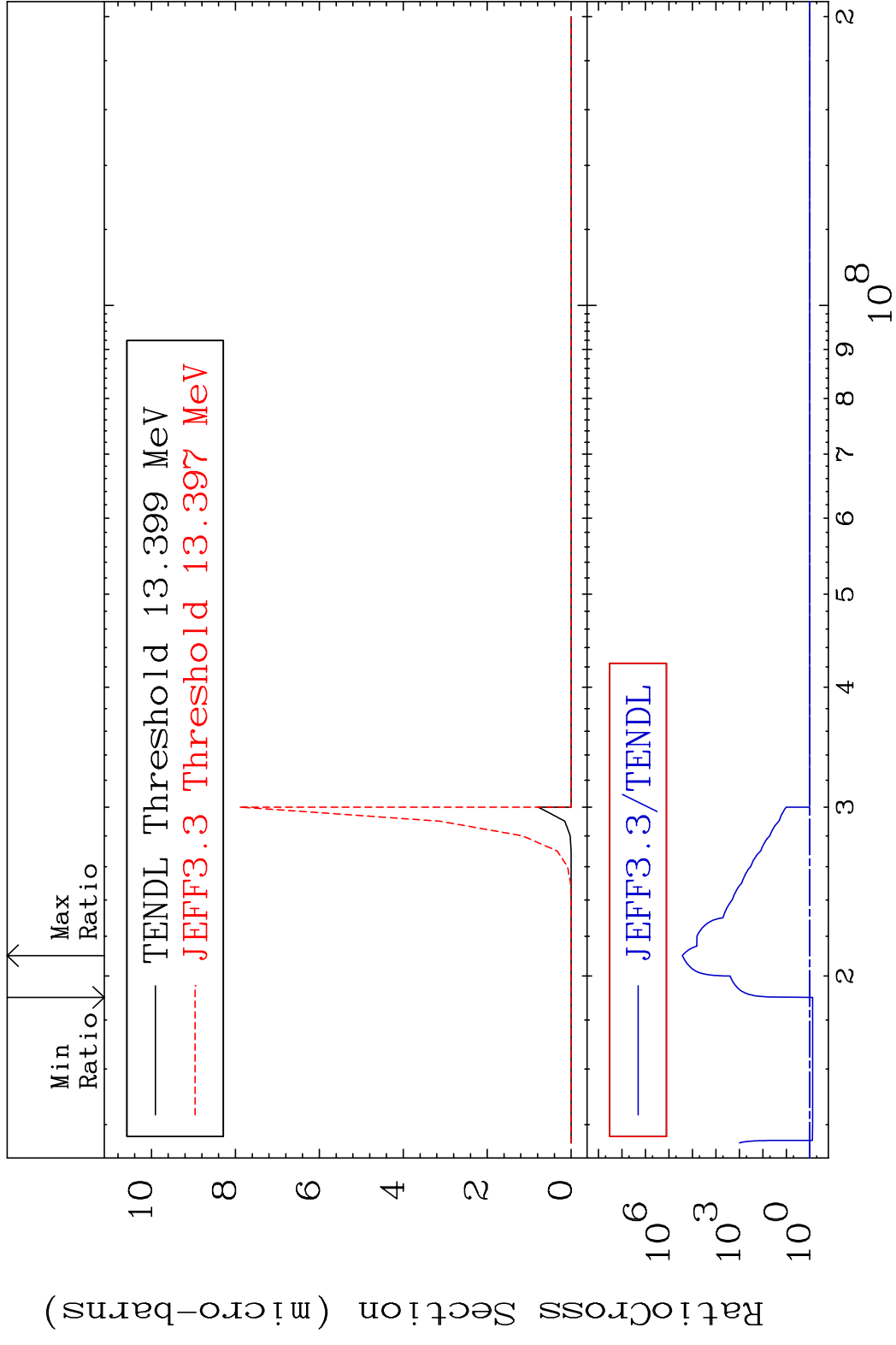
81-Tl-204

MAT 8128

(n,3n)  $\alpha$

81-Tl-204

Cross Section -24.08 To 9999. %



10

Incident Energy (eV)

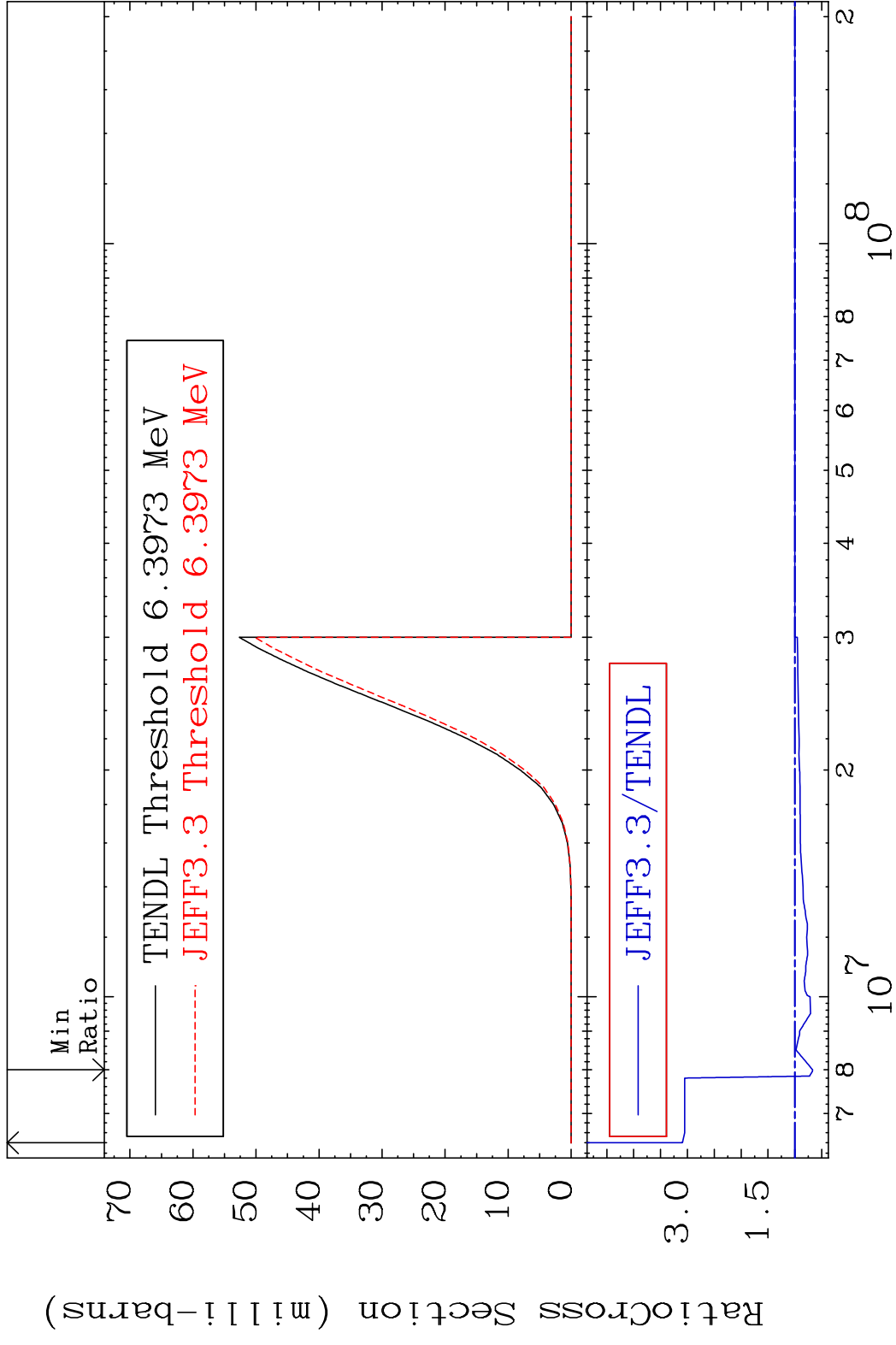
81-Tl-204

MAT 8128

(n, n') p

81-Tl-204

Cross Section -32.89 To 209.4 %

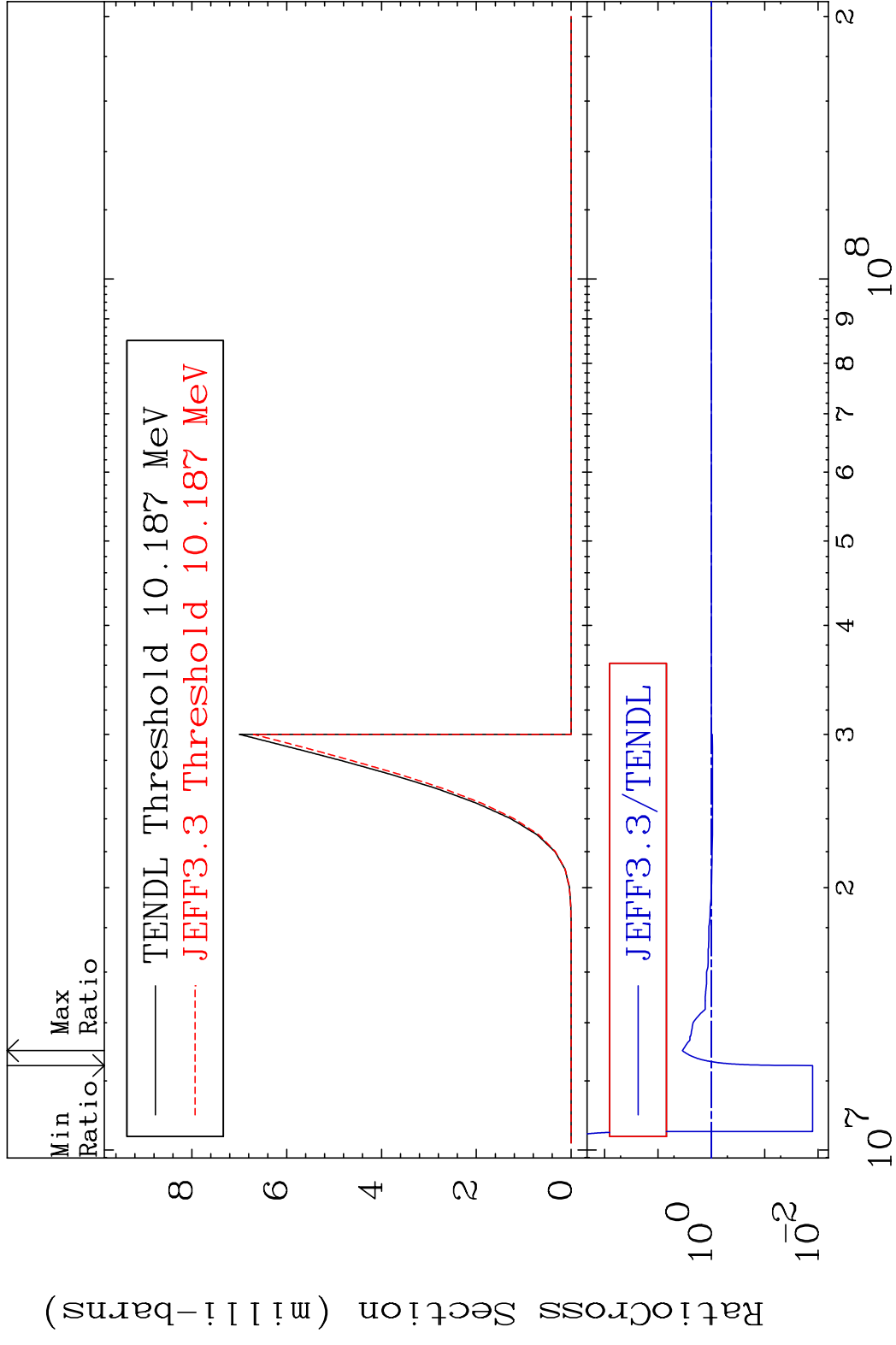


MAT 8128

(n, n') d

81-Tl-204

Cross Section -98.73 To 248.9 %



12

Incident Energy (eV)

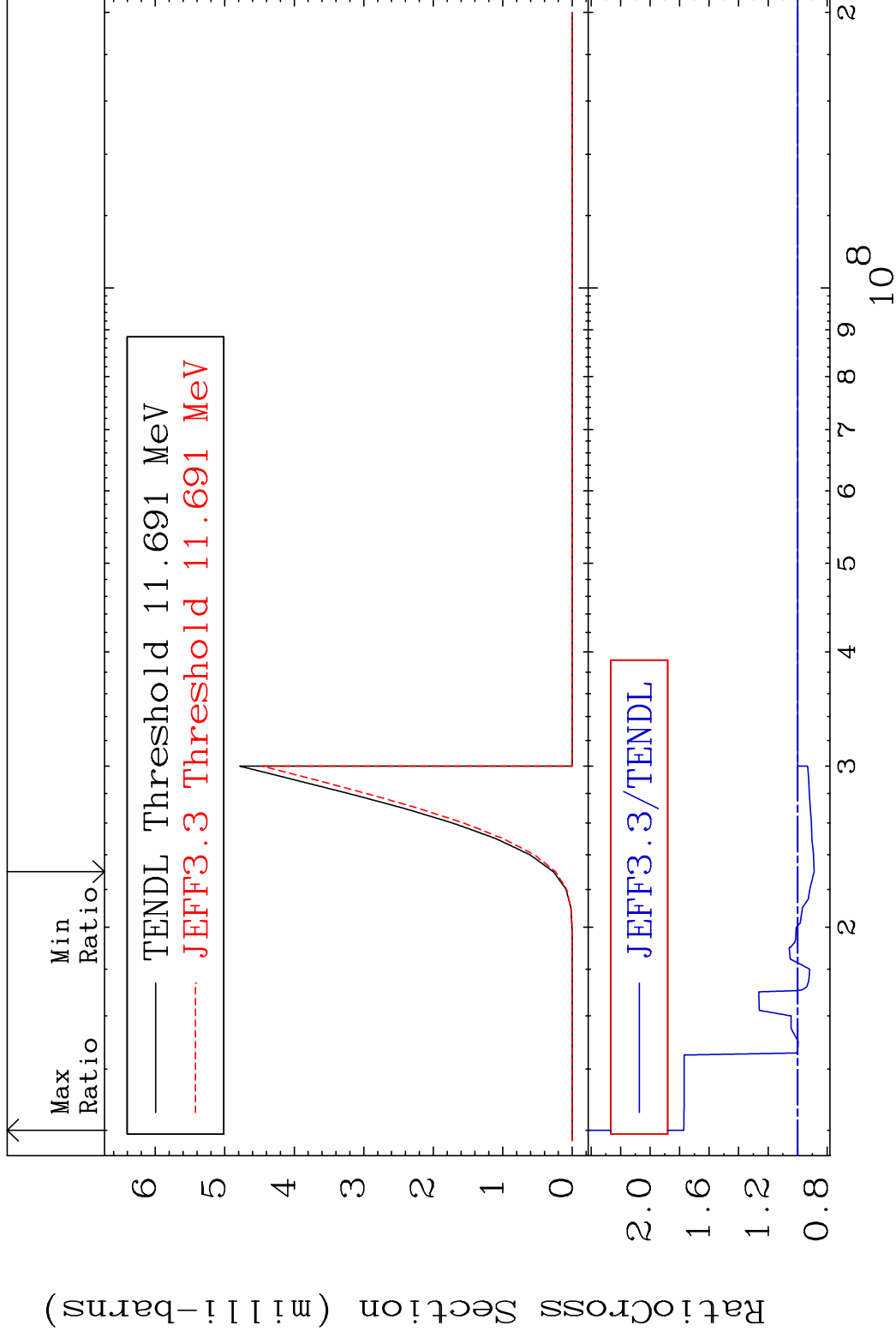
81-Tl-204

MAT 8128

(n, n') t

81-Tl-204

Cross Section -11.16 To 77.24 %



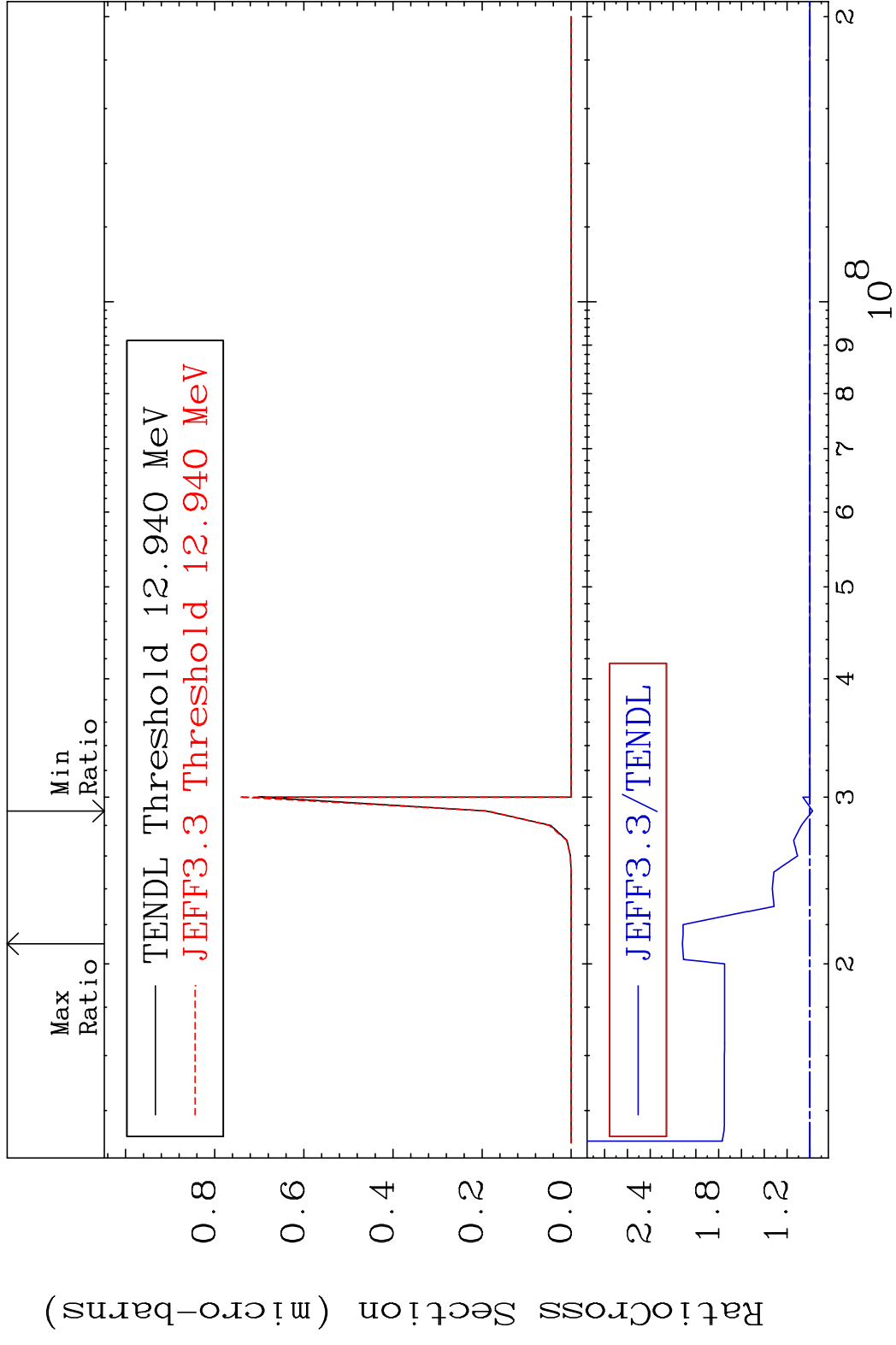
MAT 8128

(n,n') He-3

81-T1-204

Cross Section

-2.376 To 111.8 %

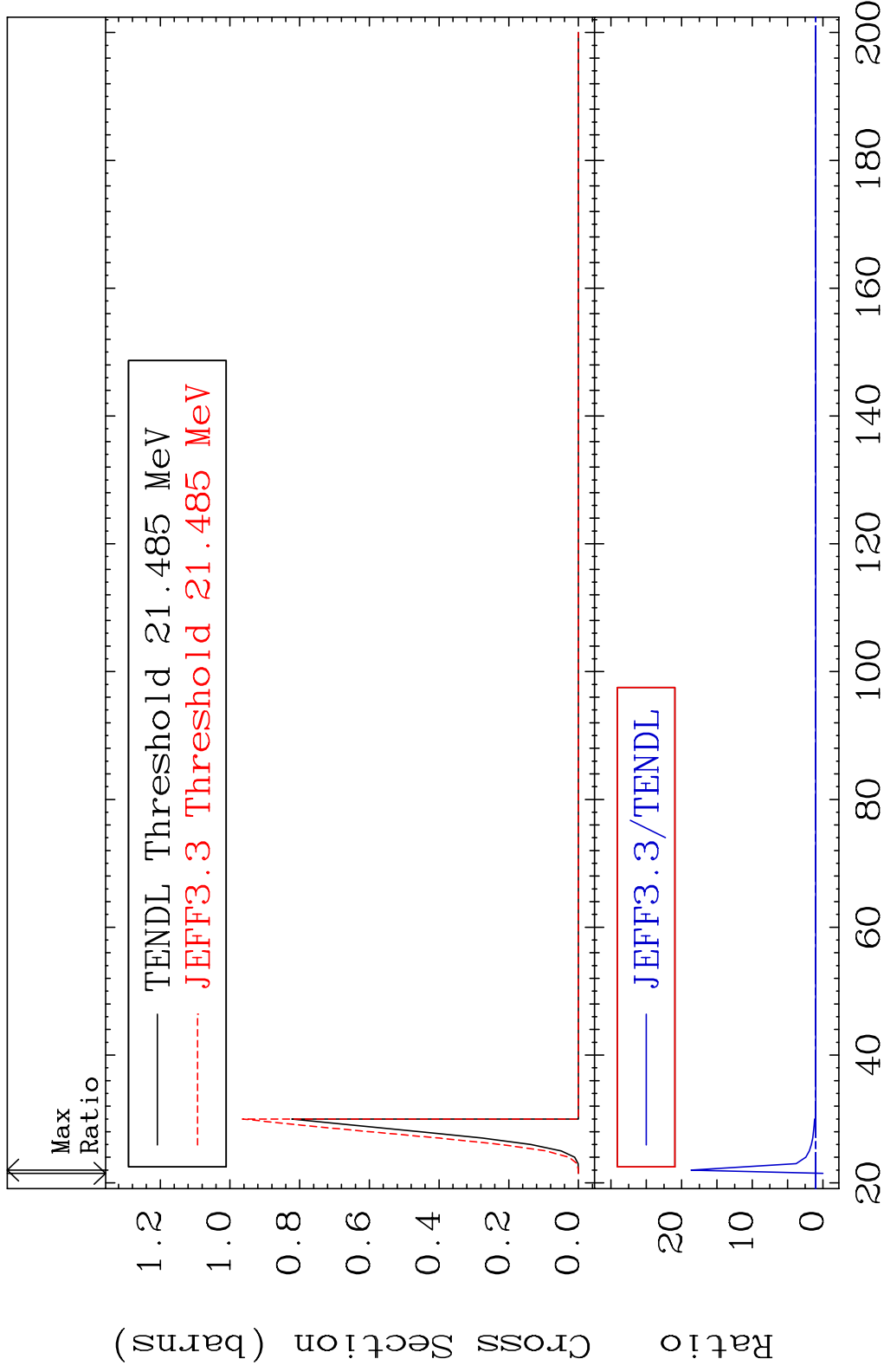


MAT 8128

(n,4n)

81-Tl-204

Cross Section -100.0 To 1767. %



15

Incident Energy (MeV)

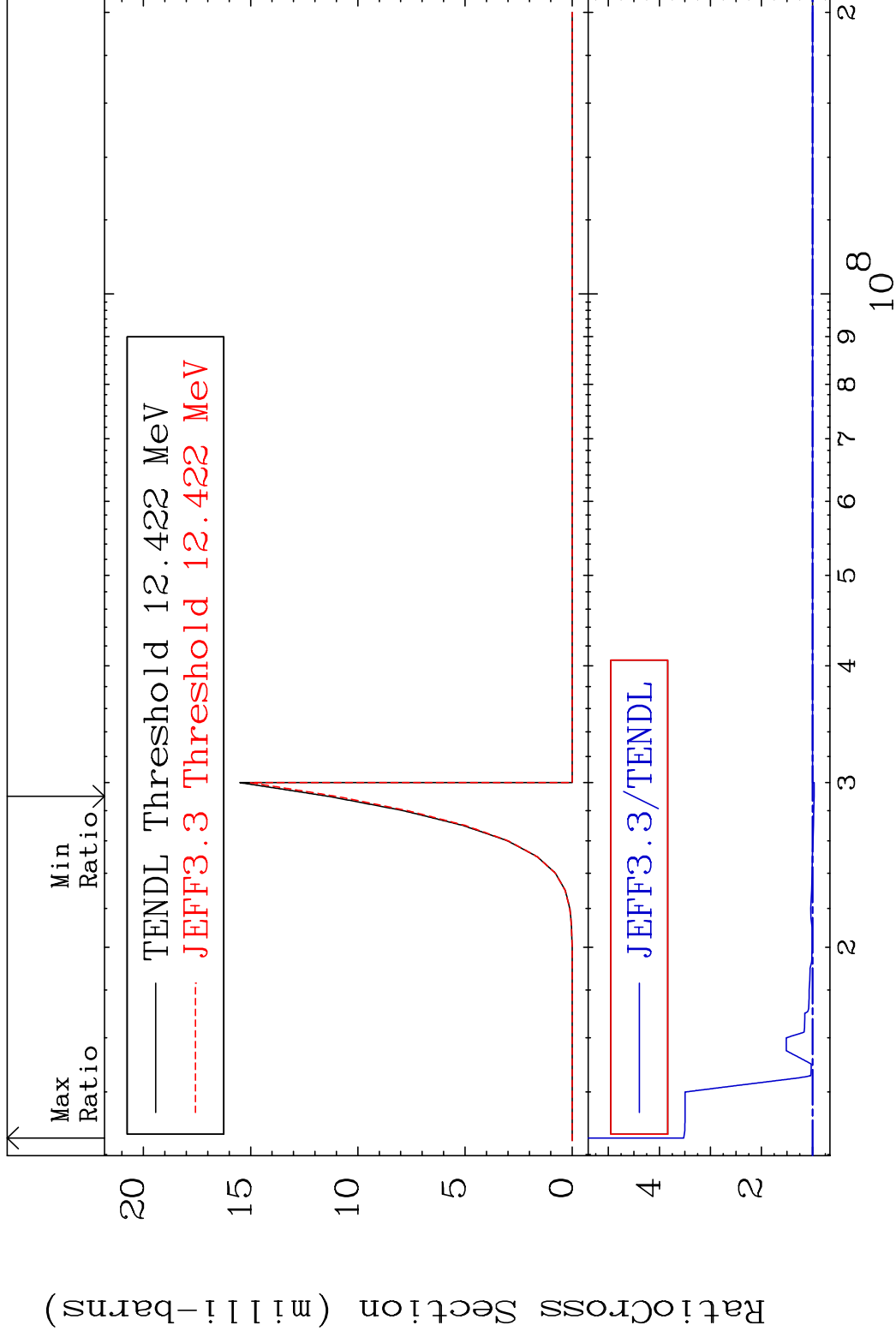
81-Tl-204

MAT 8128

(n,2n) p

81-Tl-204

Cross Section -3.170 To 252.5 %



16

Incident Energy (eV)

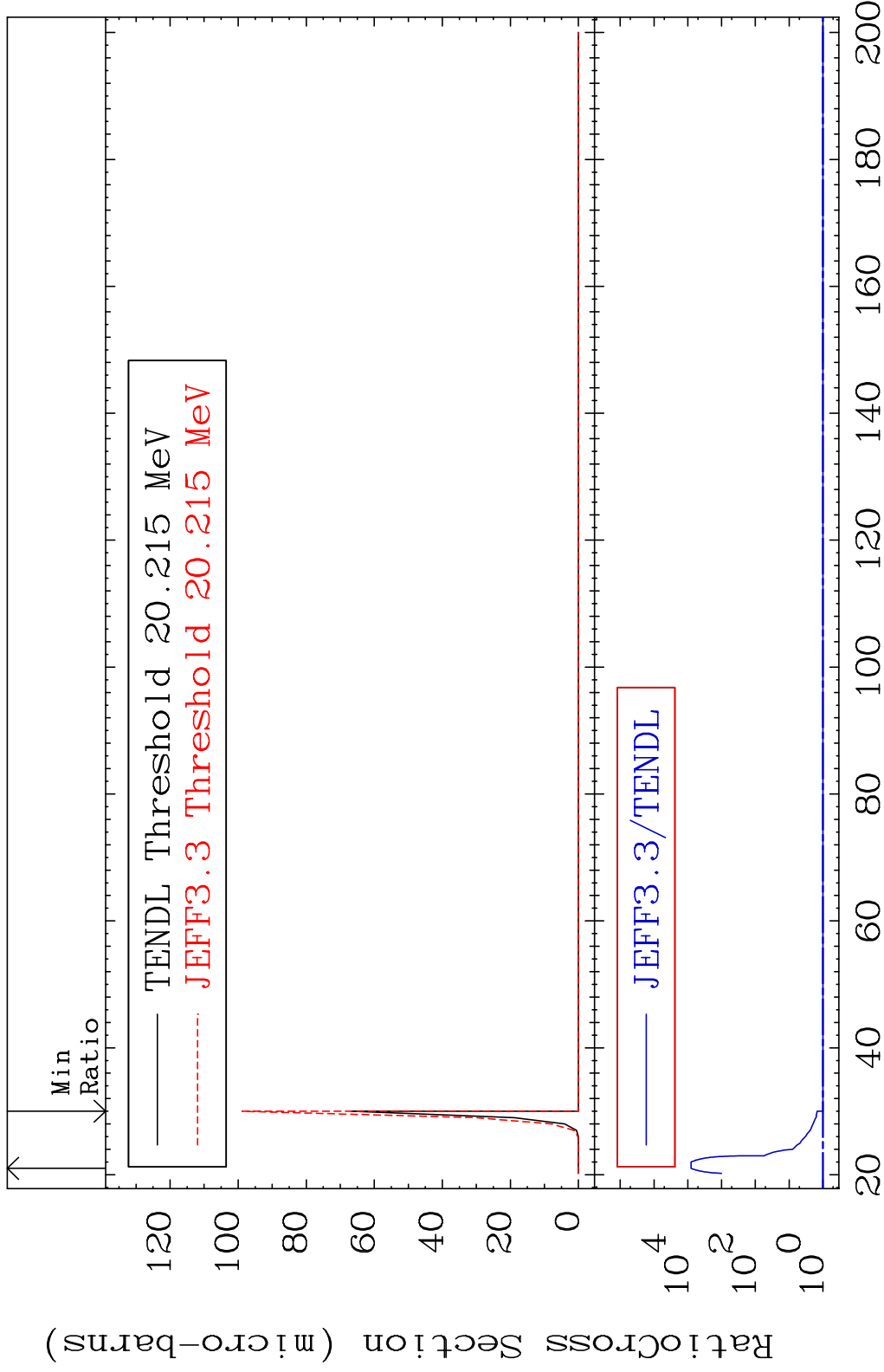
81-Tl-204

MAT 8128

(n,3n) p

81-Tl-204

Cross Section 0.000 To 9999. %



17

Incident Energy (MeV)

81-Tl-204

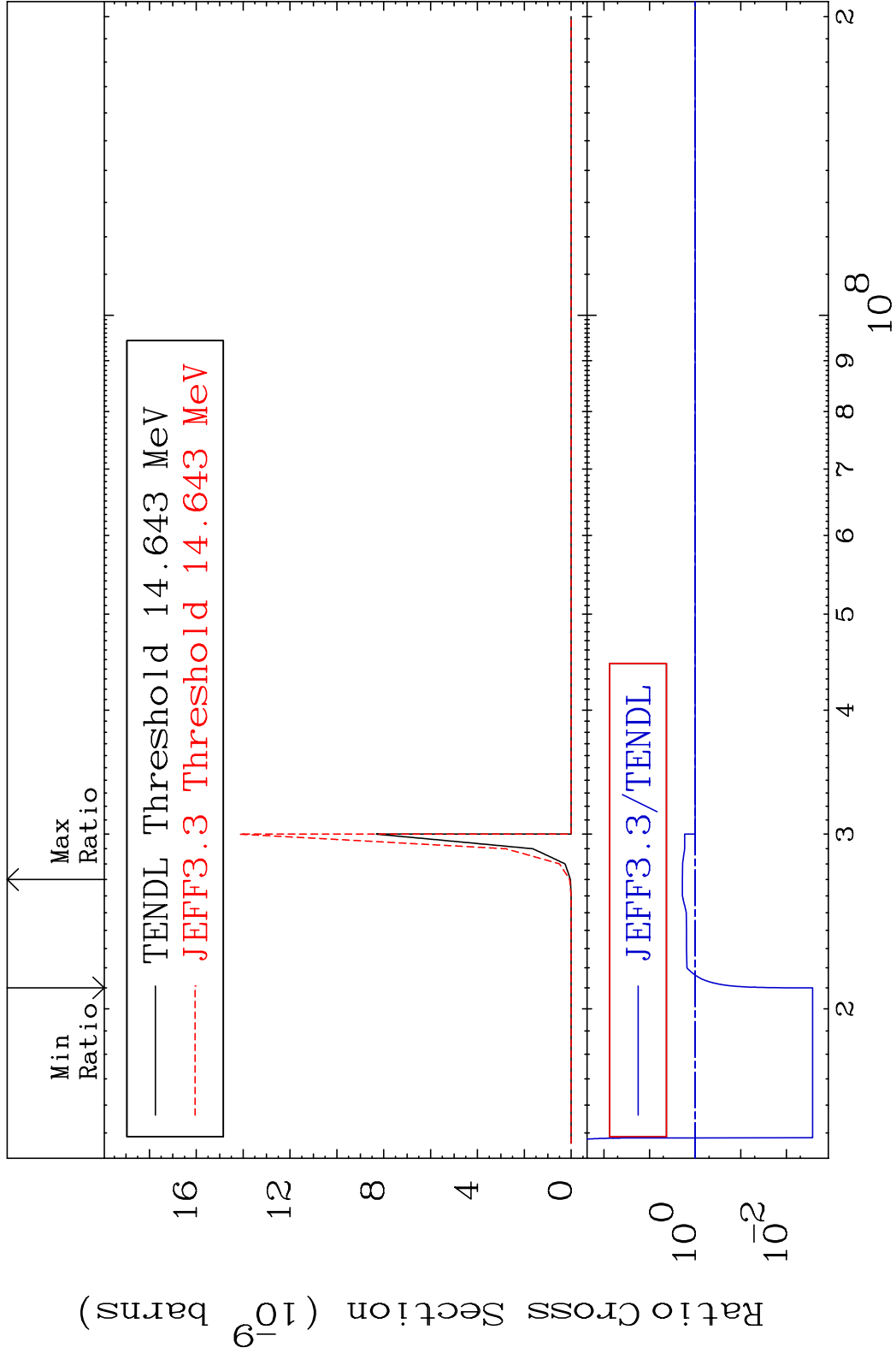
MAT 8128

(n,2n) p

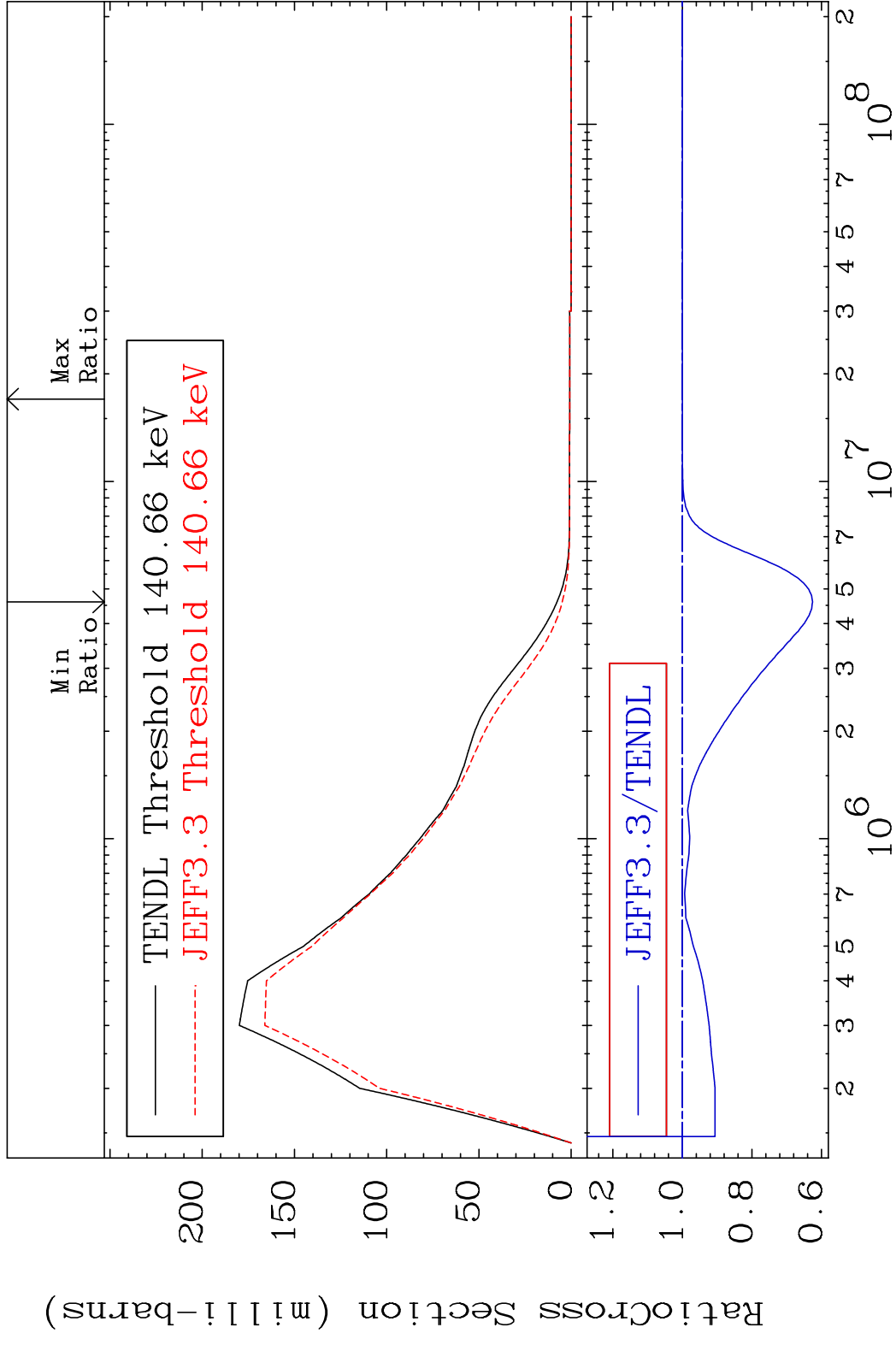
81-Tl-204

Cross Section

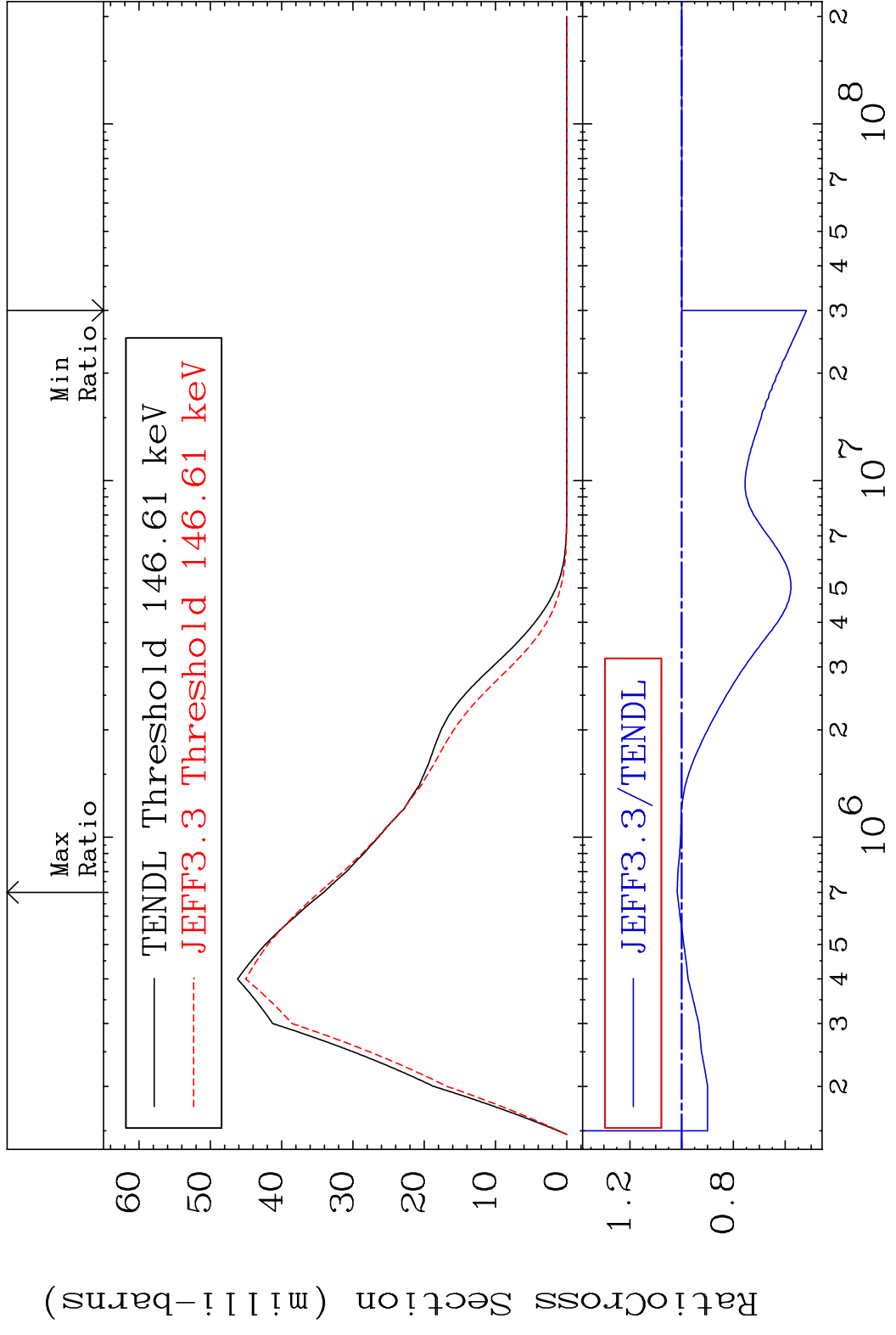
-99.73 To 91.52 %



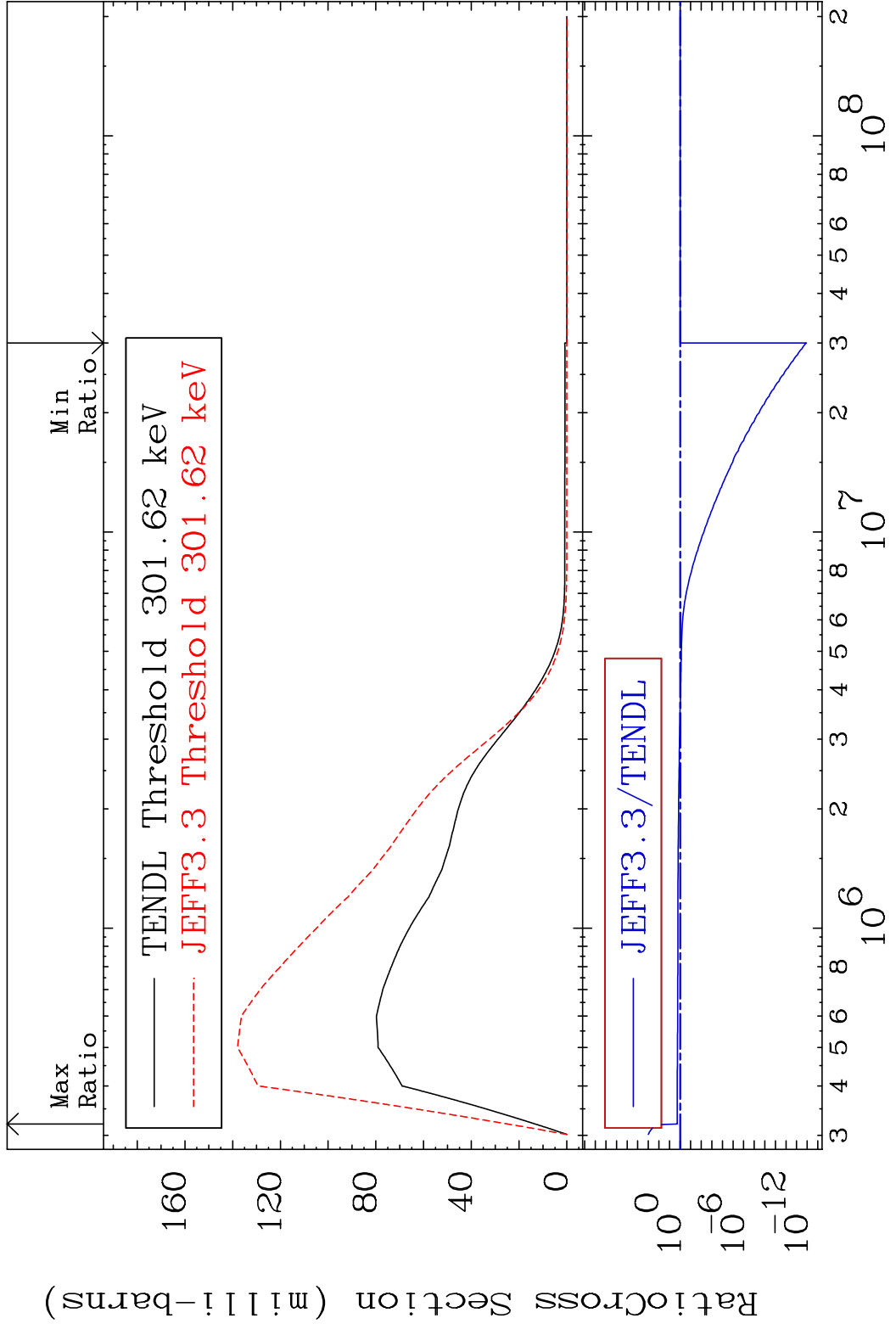
MAT 8128 MT= 51 (n, n') Level 81-Tl-204  
 Cross Section -37.40 To 0.000 %



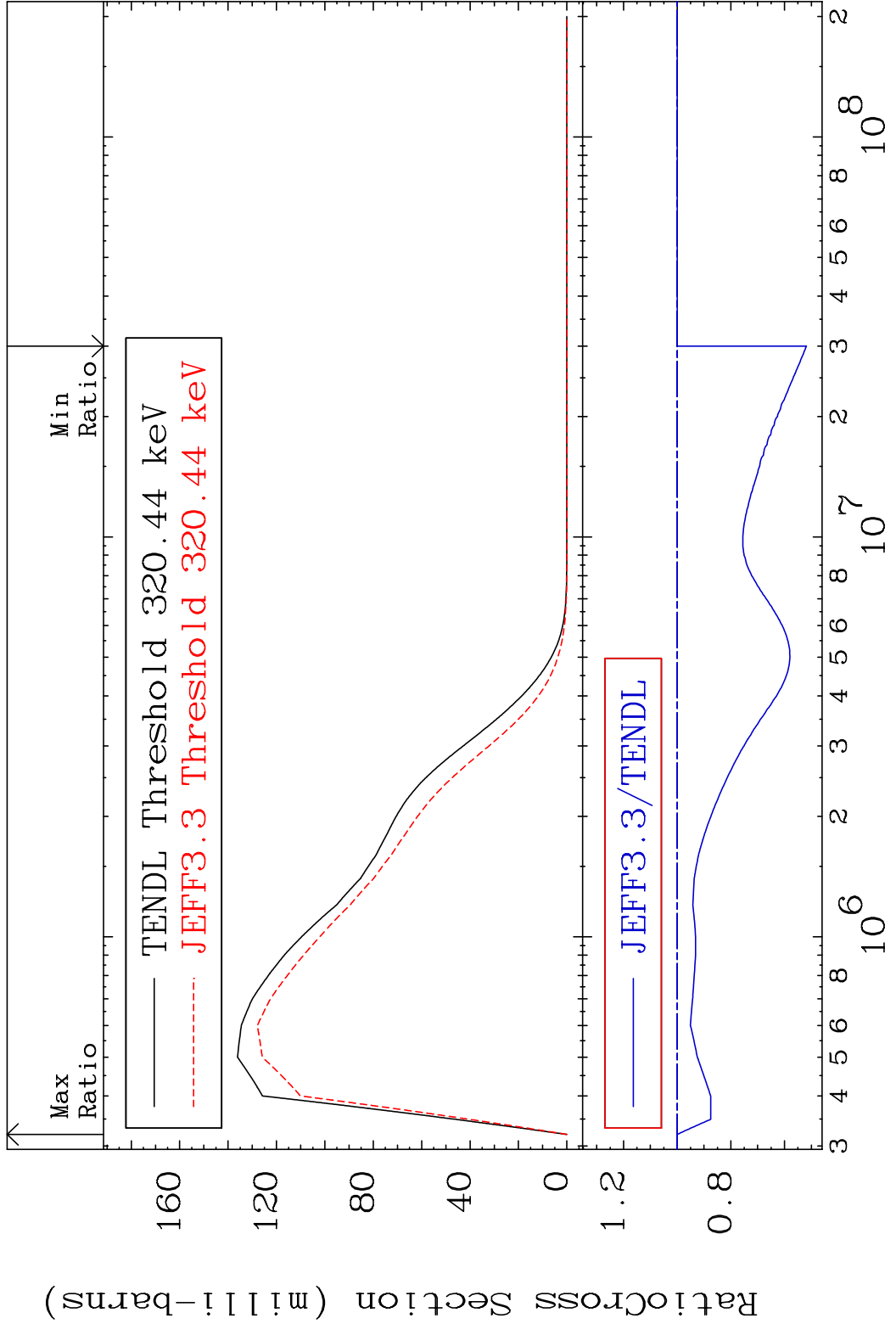
MAT 8128 MT= 52 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 1.722 %



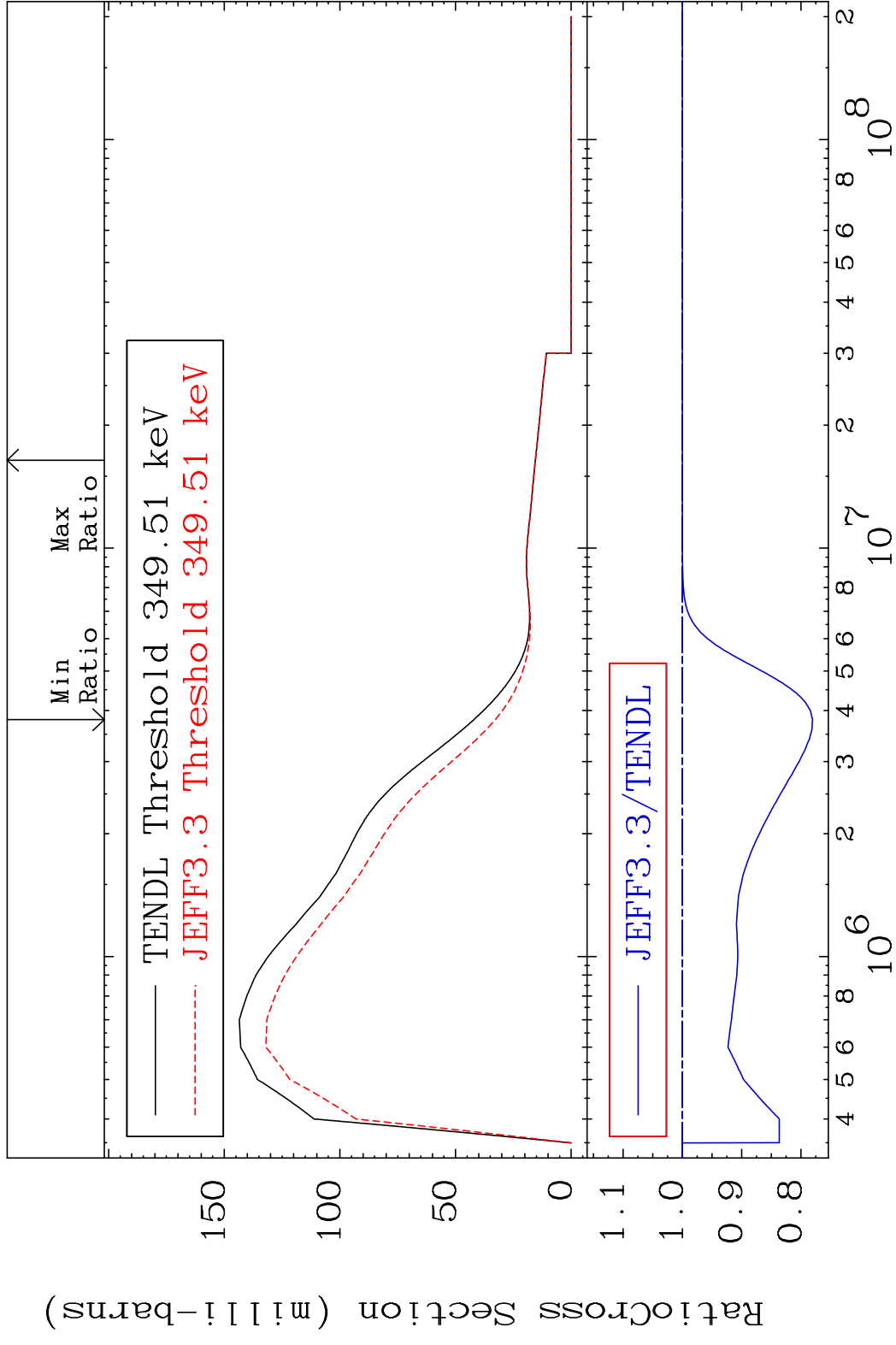
MAT 8128 MT= 53 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 87.51 %



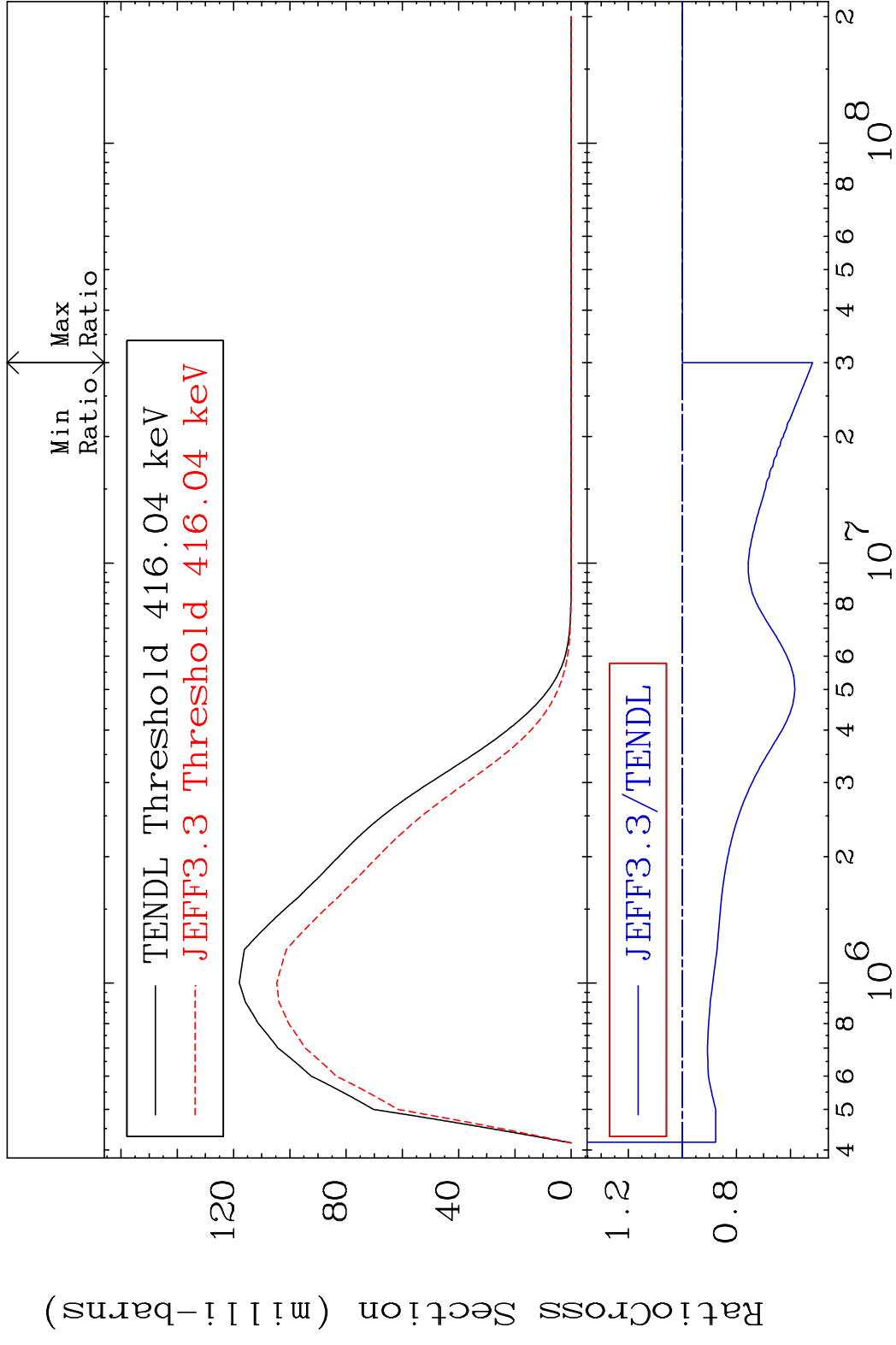
MAT 8128 MT= 54 (n,n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %



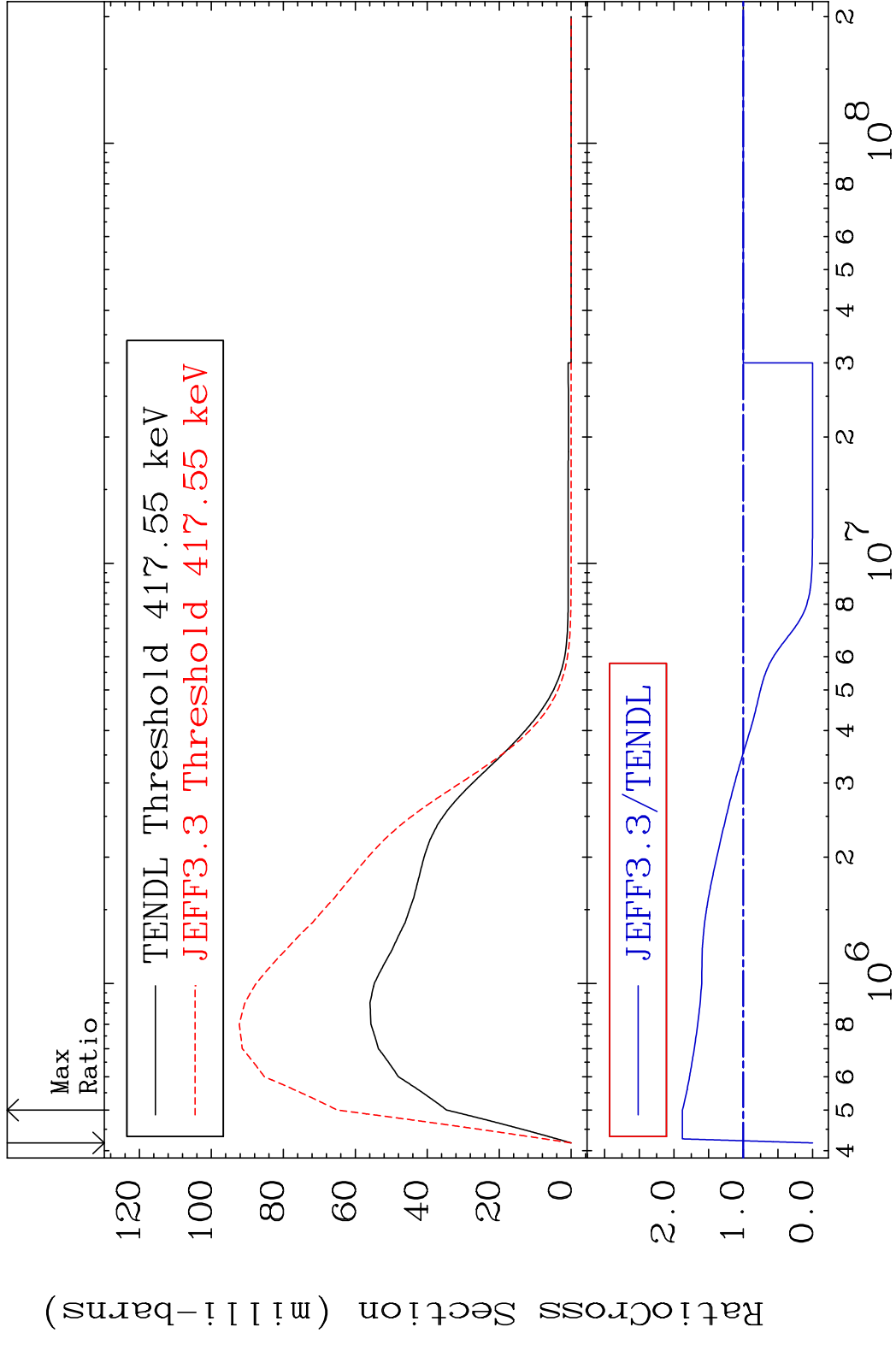
MAT 8128 MT= 55 (n, n') Level 81-Tl-204  
 Cross Section -21.95 To 0.000 %



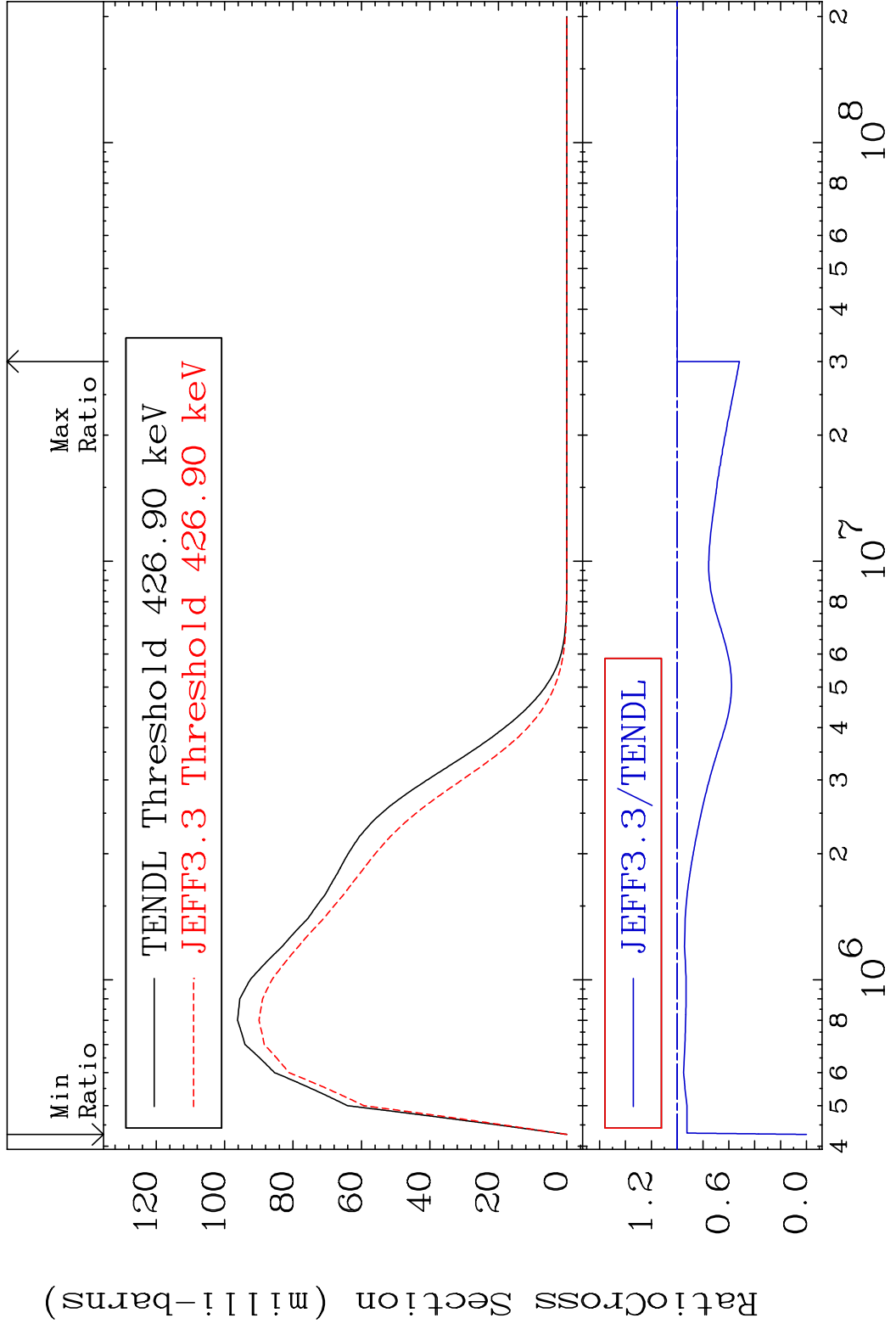
MAT 8128 MT= 56 (n,n') Level 81-Tl-204  
 Cross Section -48.16 To 0.000 %



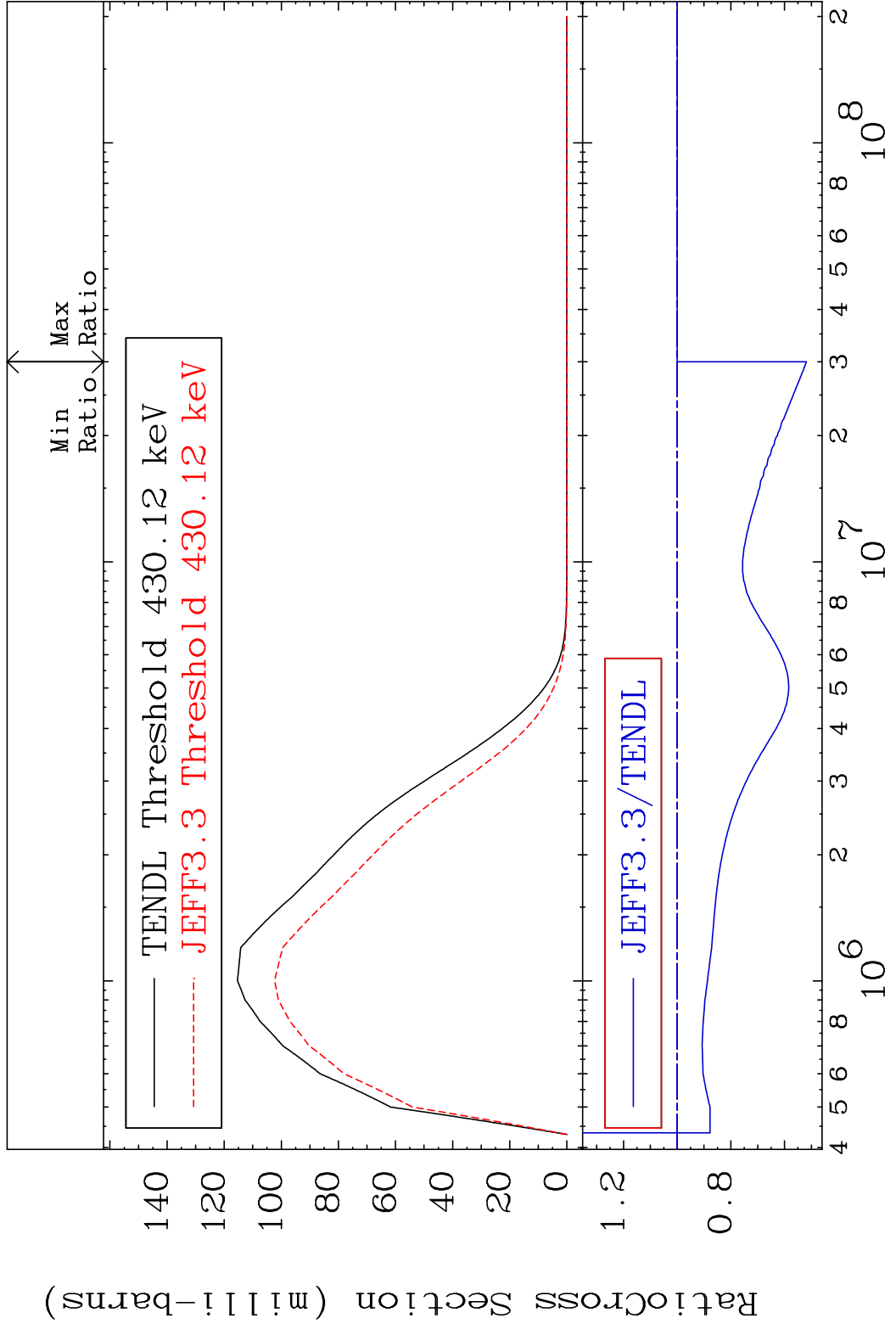
MAT 8128 MT= 57 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 87.93 %



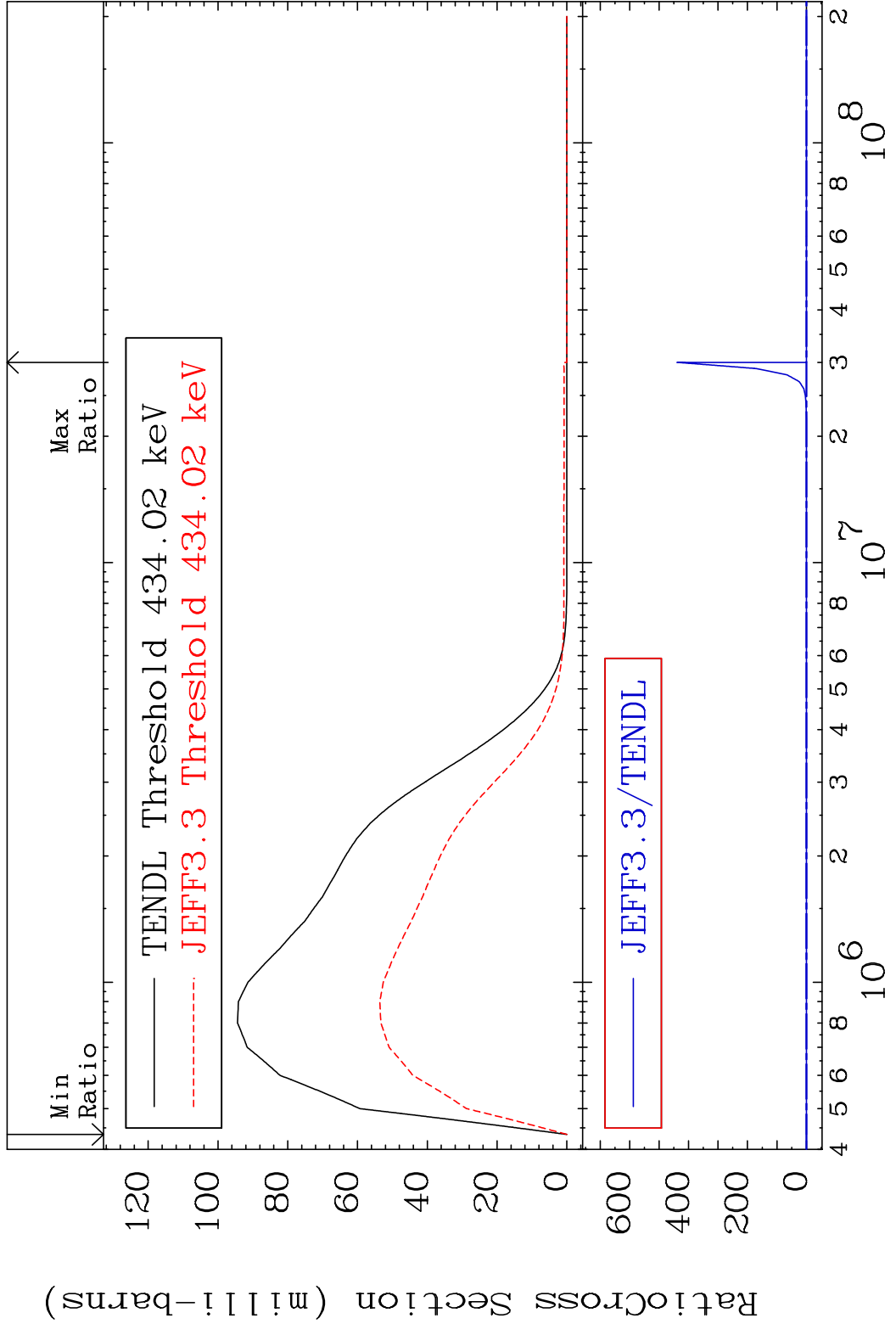
MAT 8128 MT= 58 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %



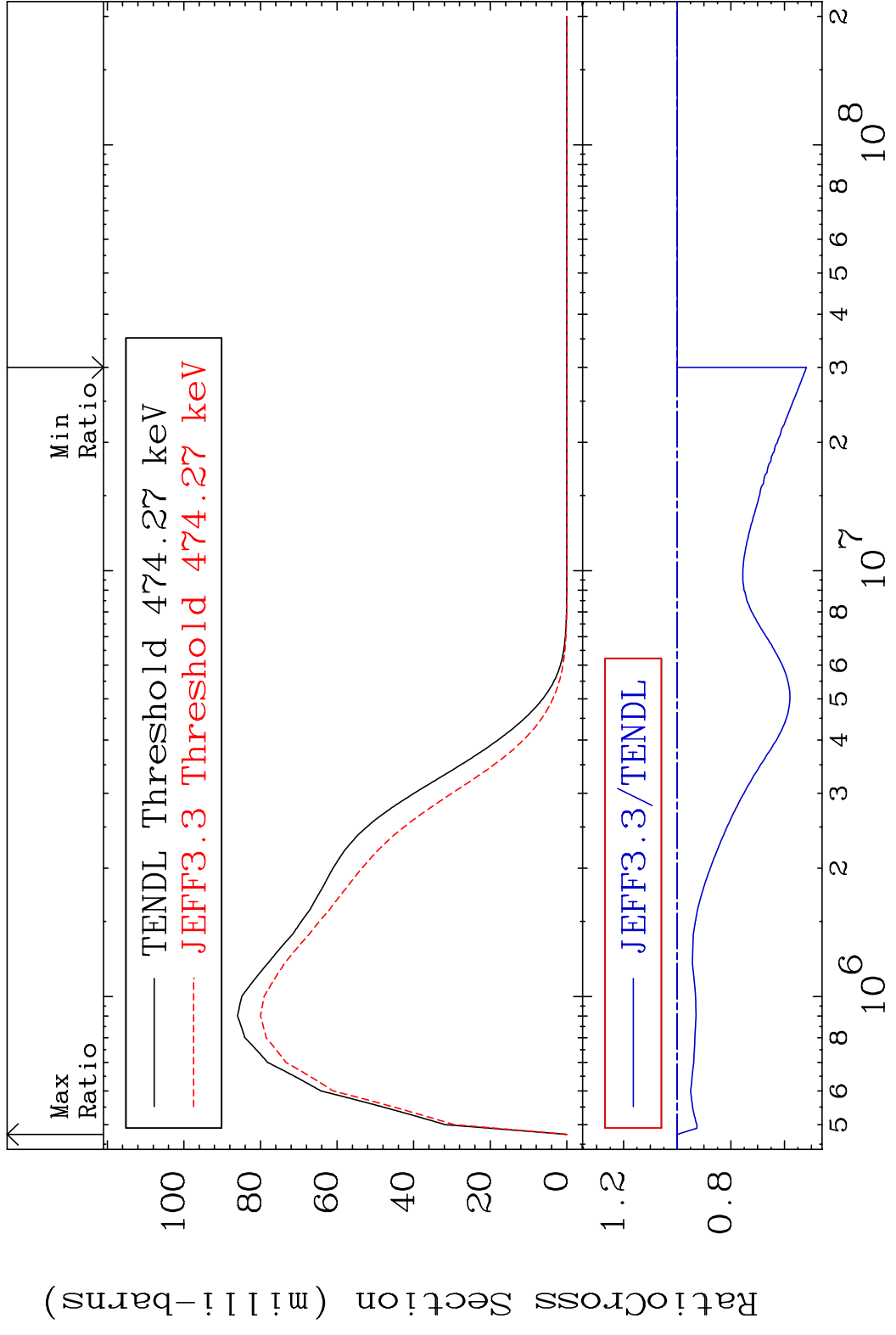
MAT 8128 MT= 59 (n, n') Level 81-Tl-204  
 Cross Section -48.16 To 0.000 %



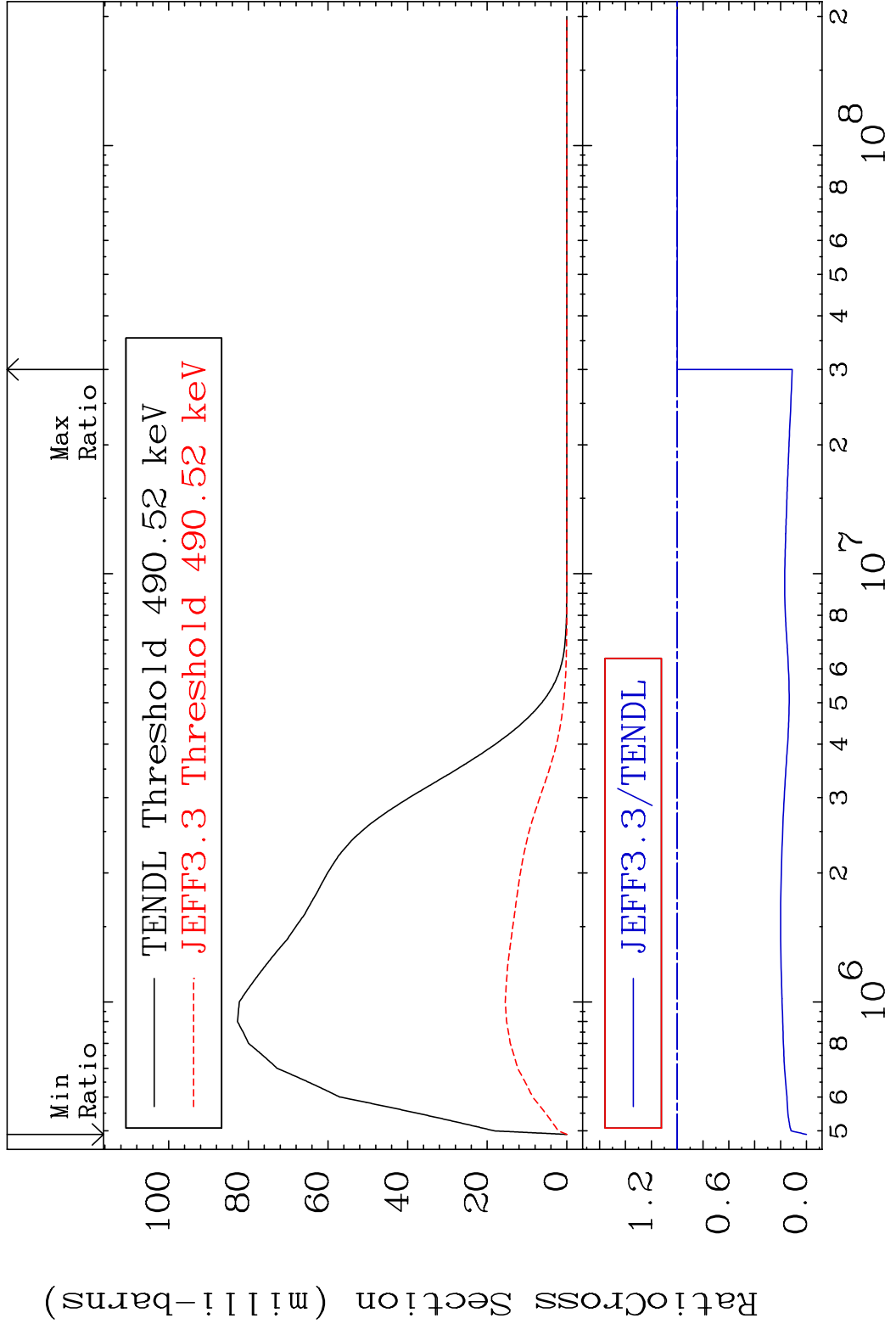
MAT 8128 MT= 60 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 9999. %



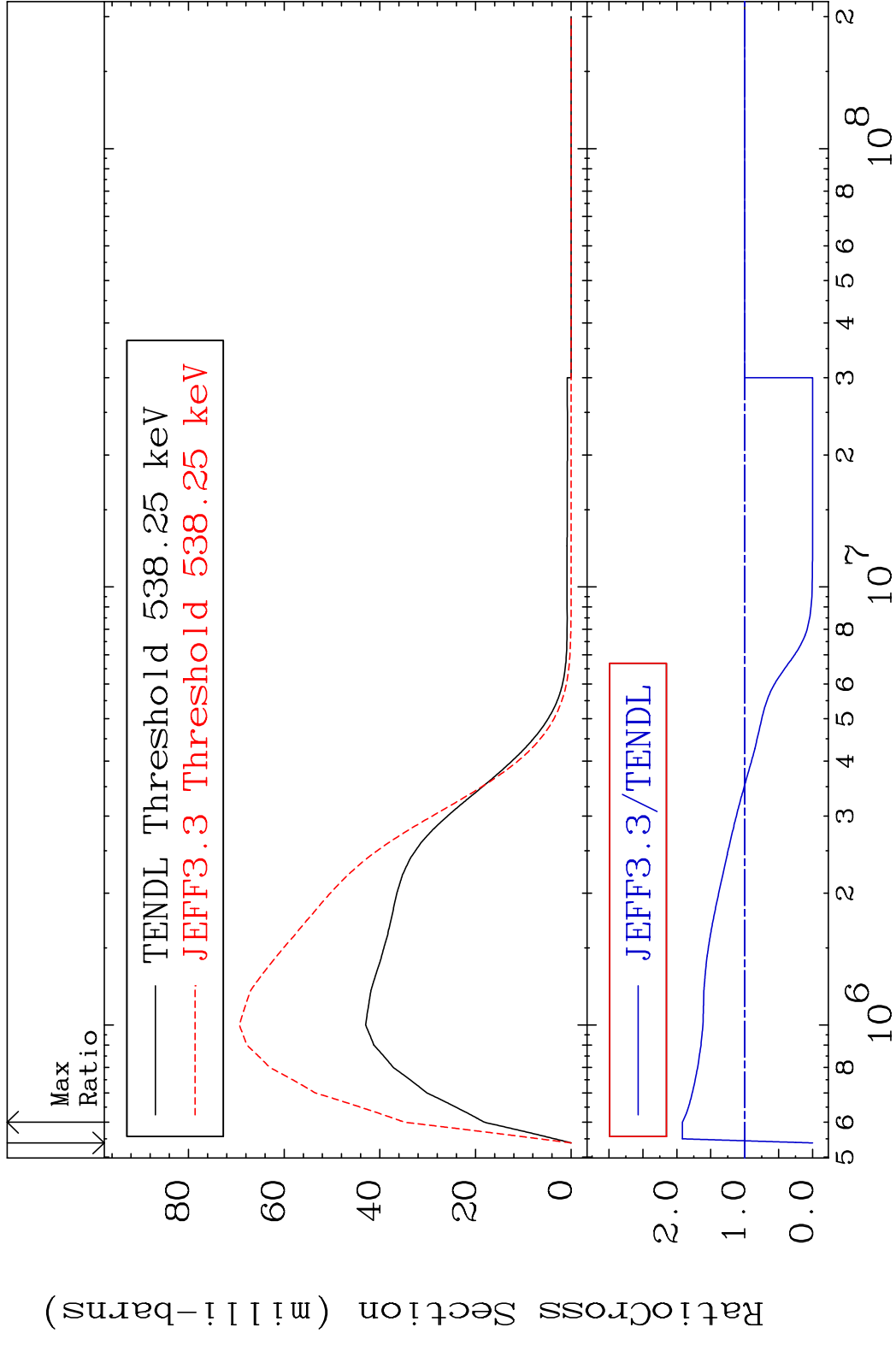
MAT 8128 MT= 61 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %



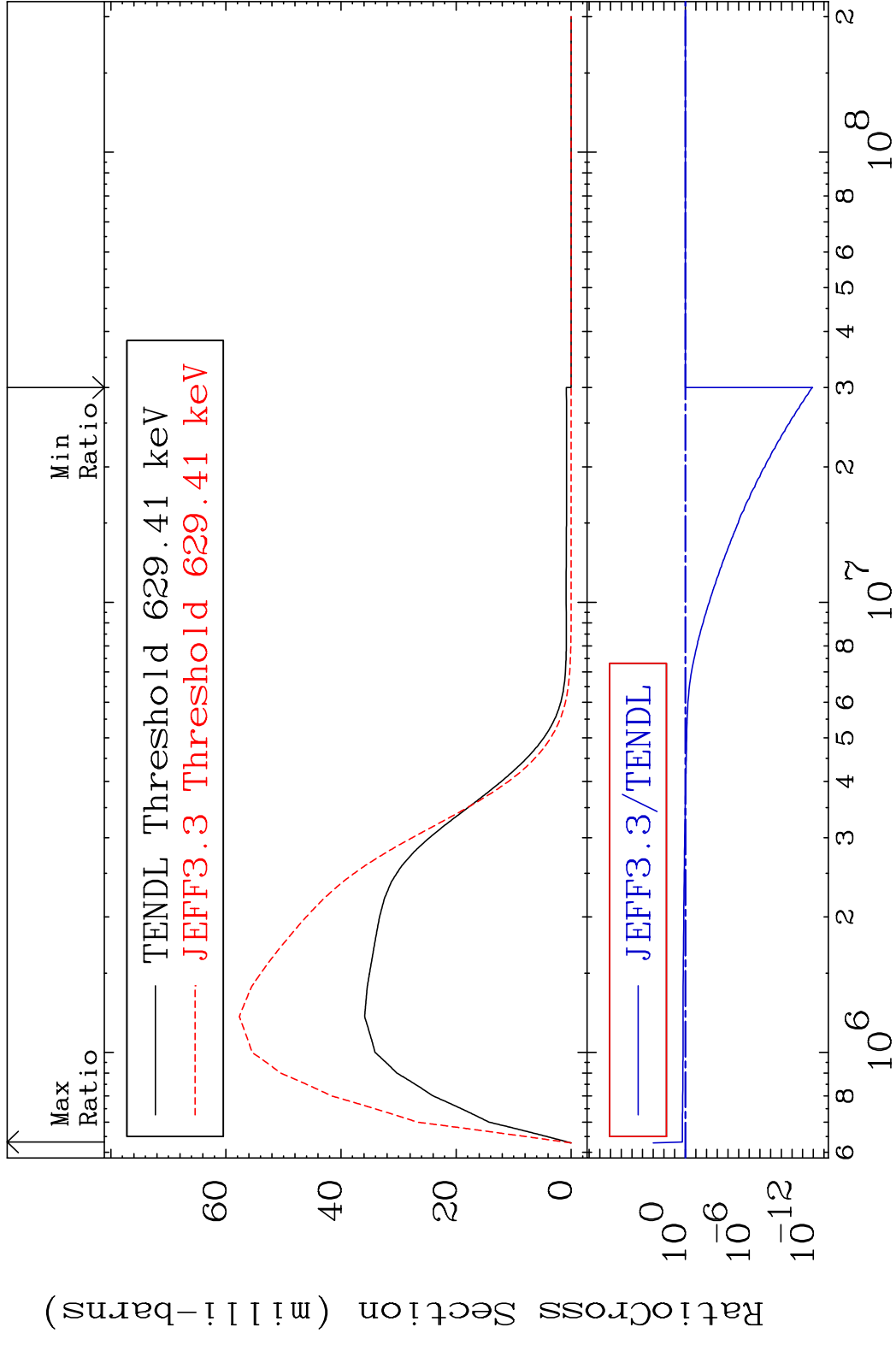
MAT 8128 MT= 62 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %



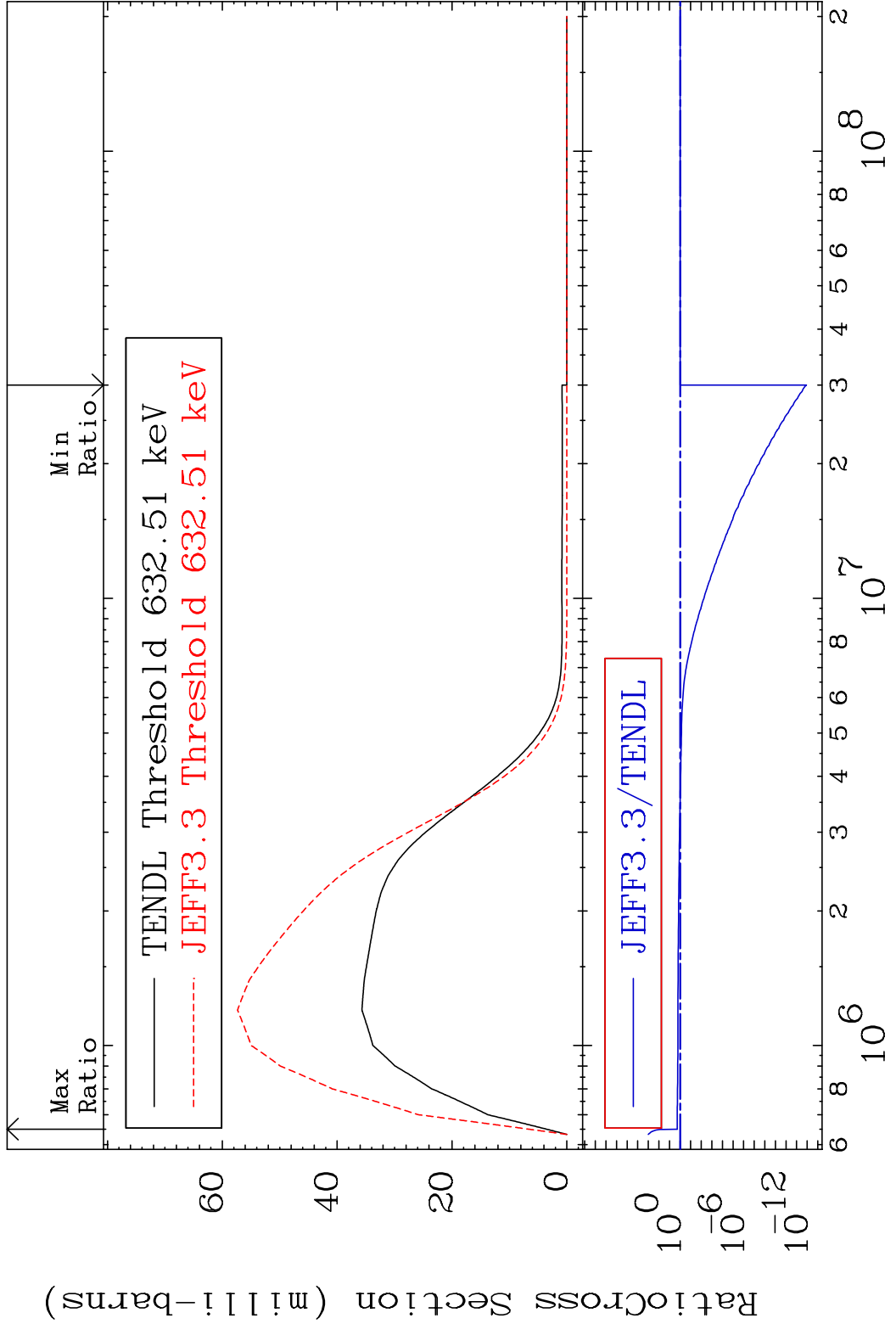
MAT 8128 MT= 63 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 91.84 %



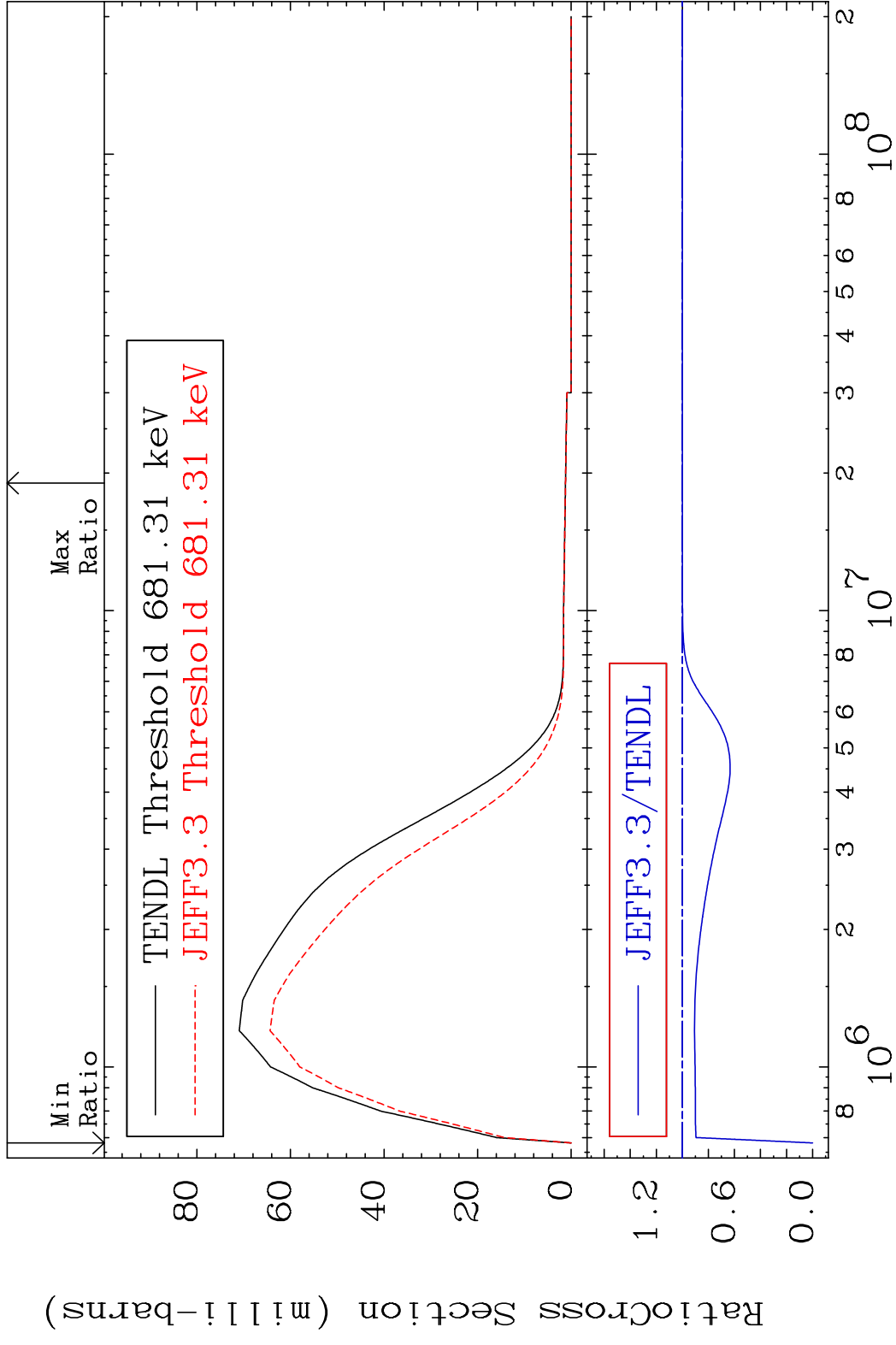
MAT 8128 MT= 64 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 87.35 %



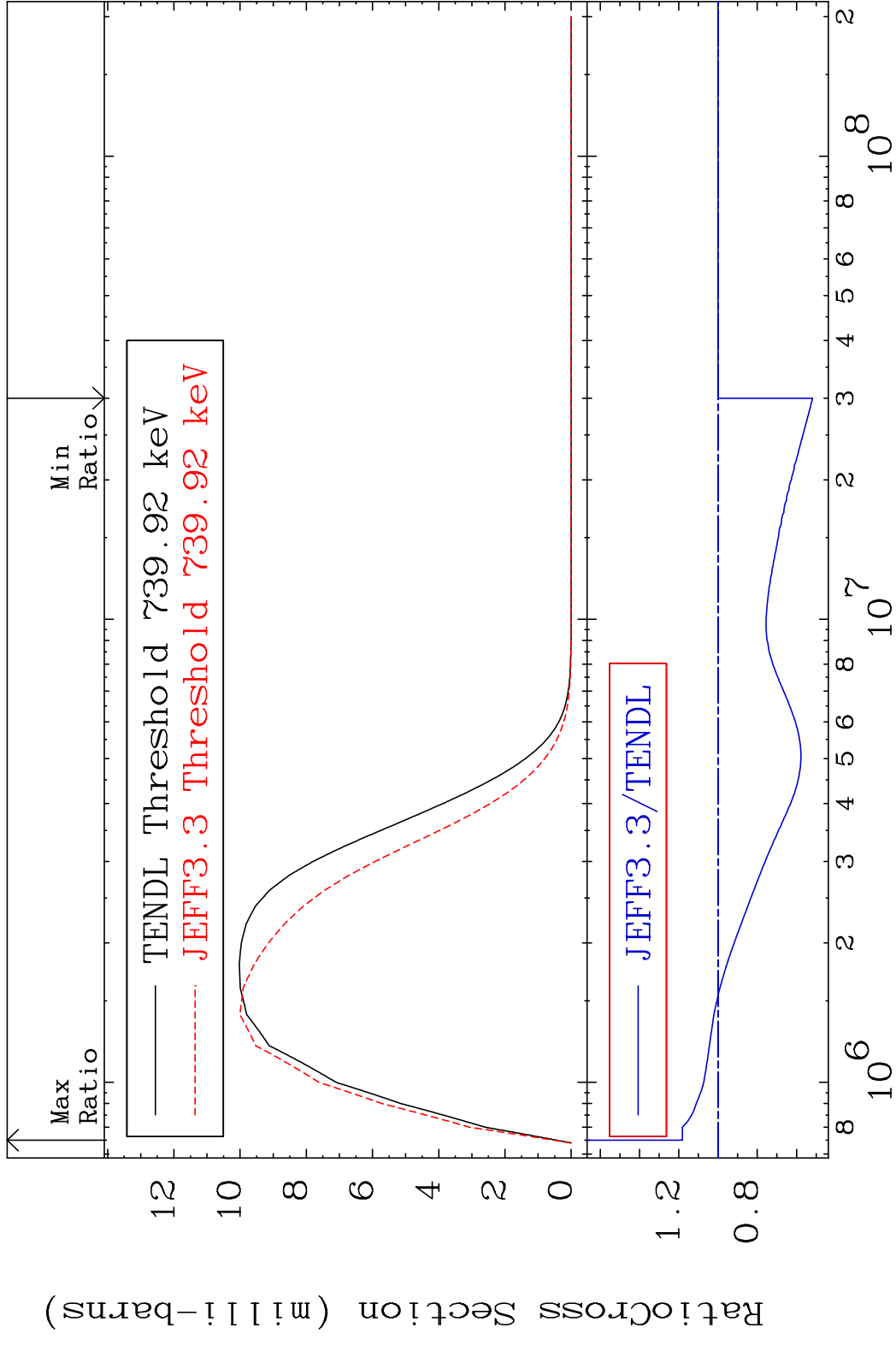
MAT 8128 MT= 65 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 87.73 %



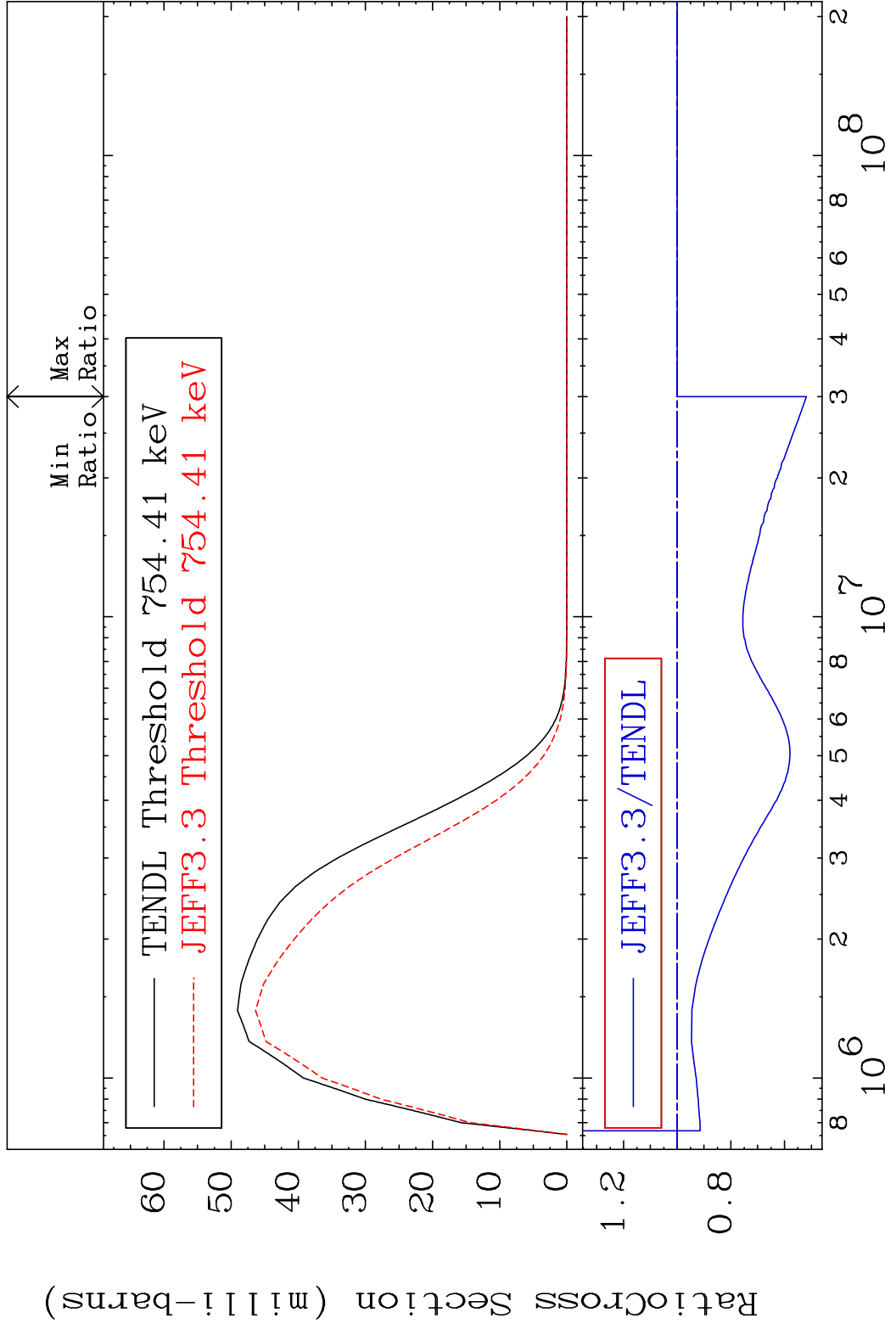
MAT 8128 MT= 66 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %



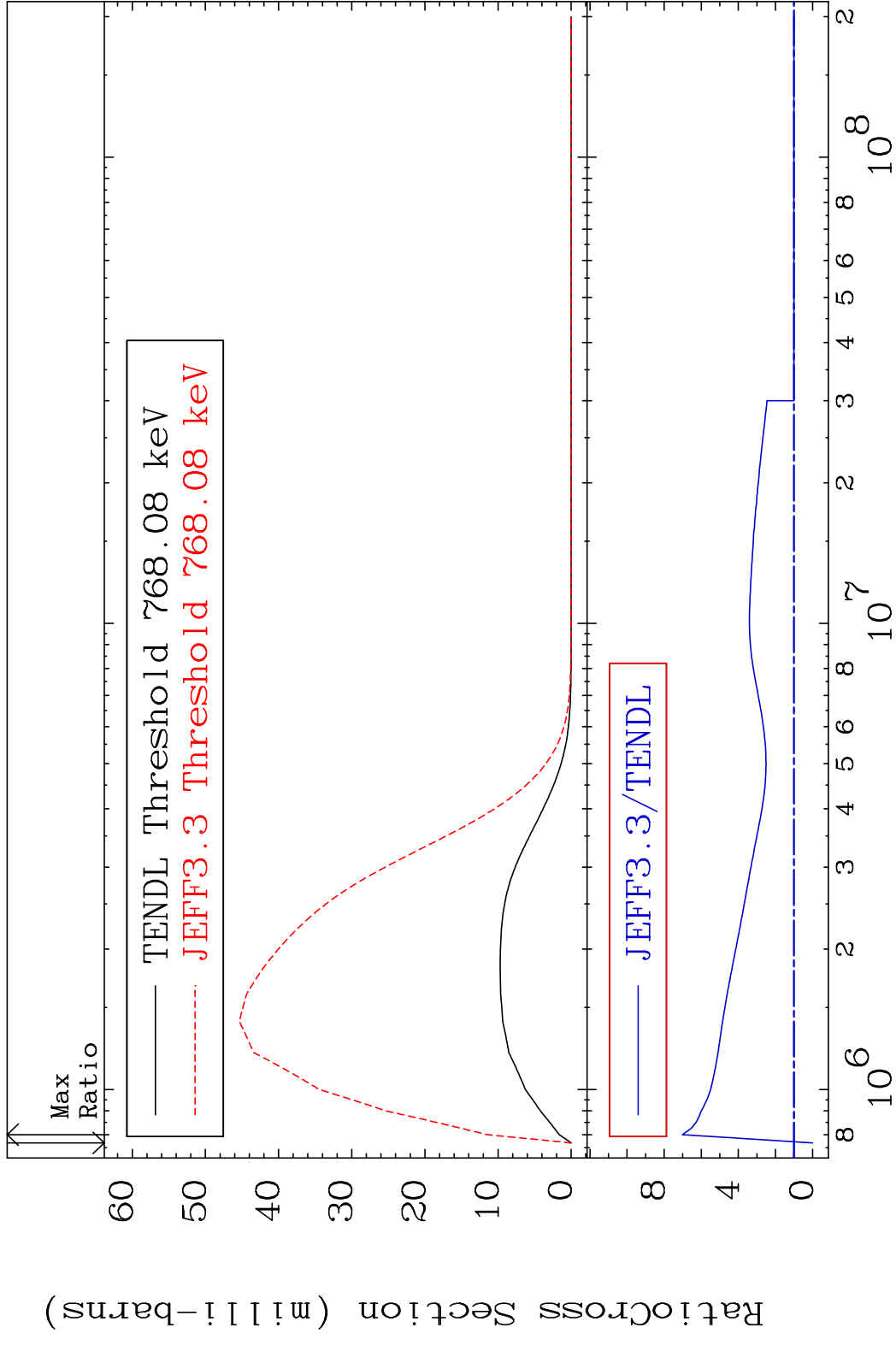
MAT 8128 MT= 67 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 18.21 %



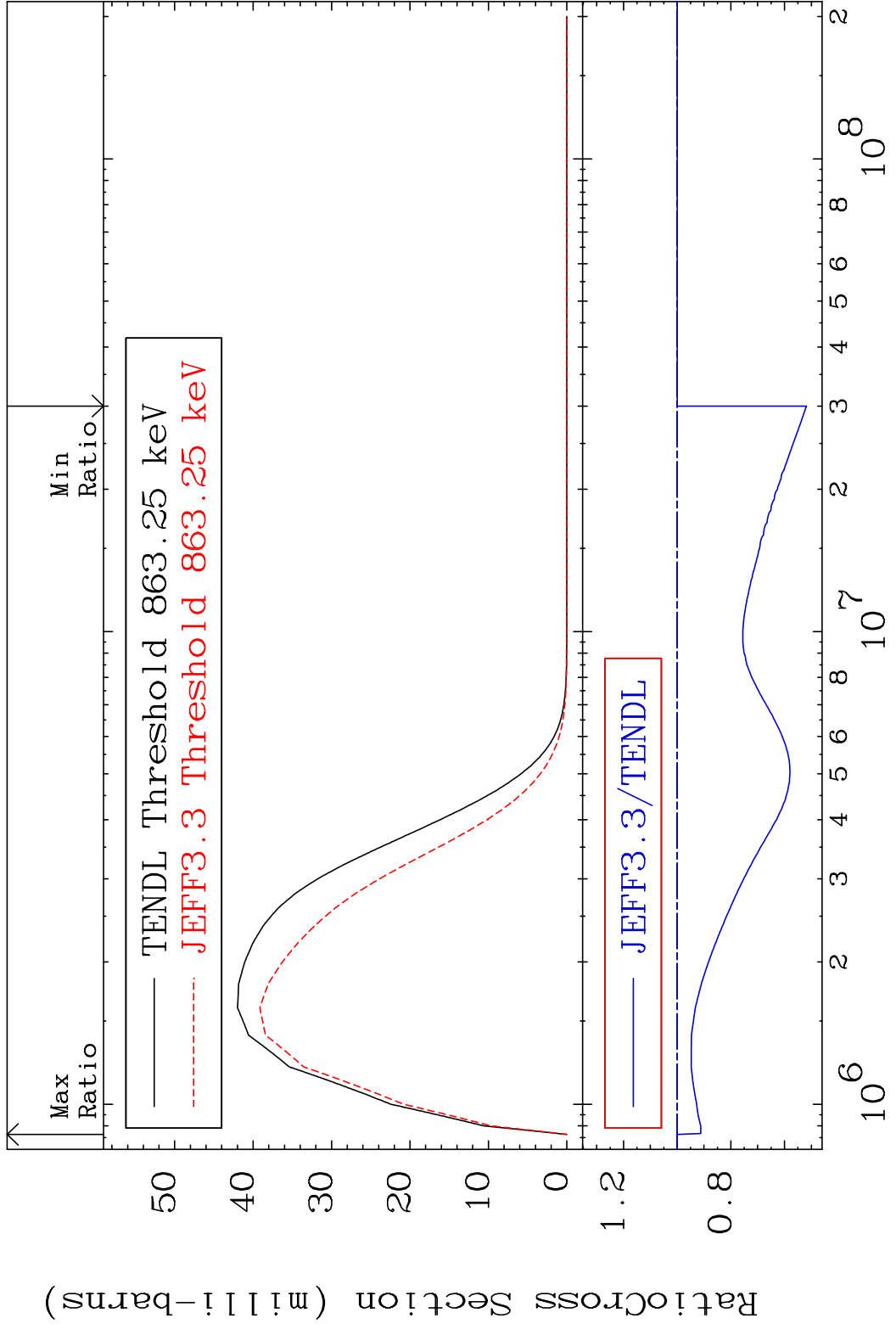
MAT 8128 MT= 68 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %



MAT 8128 MT= 69 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 602.0 %

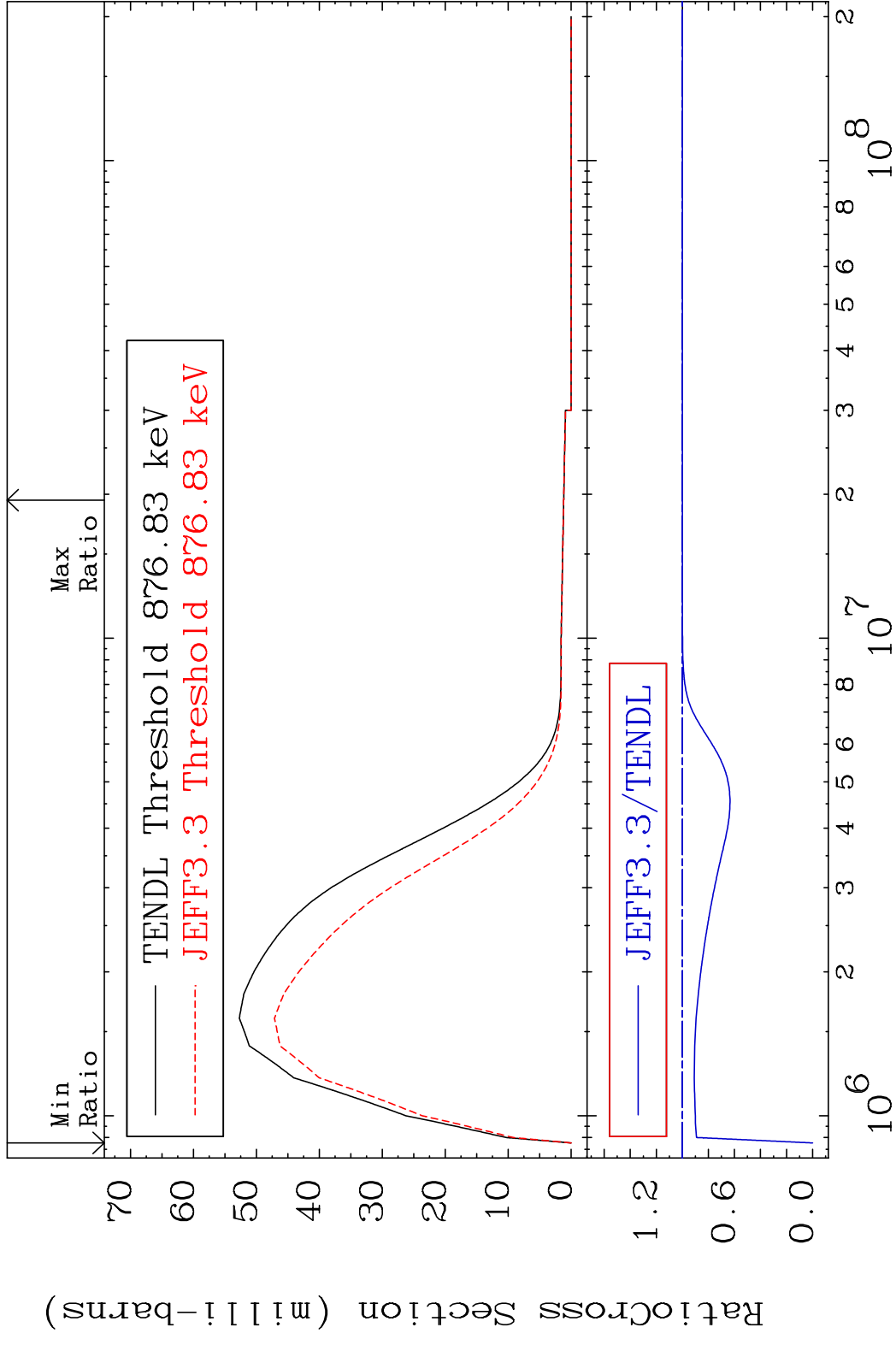


MAT 8128 MT= 70 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %

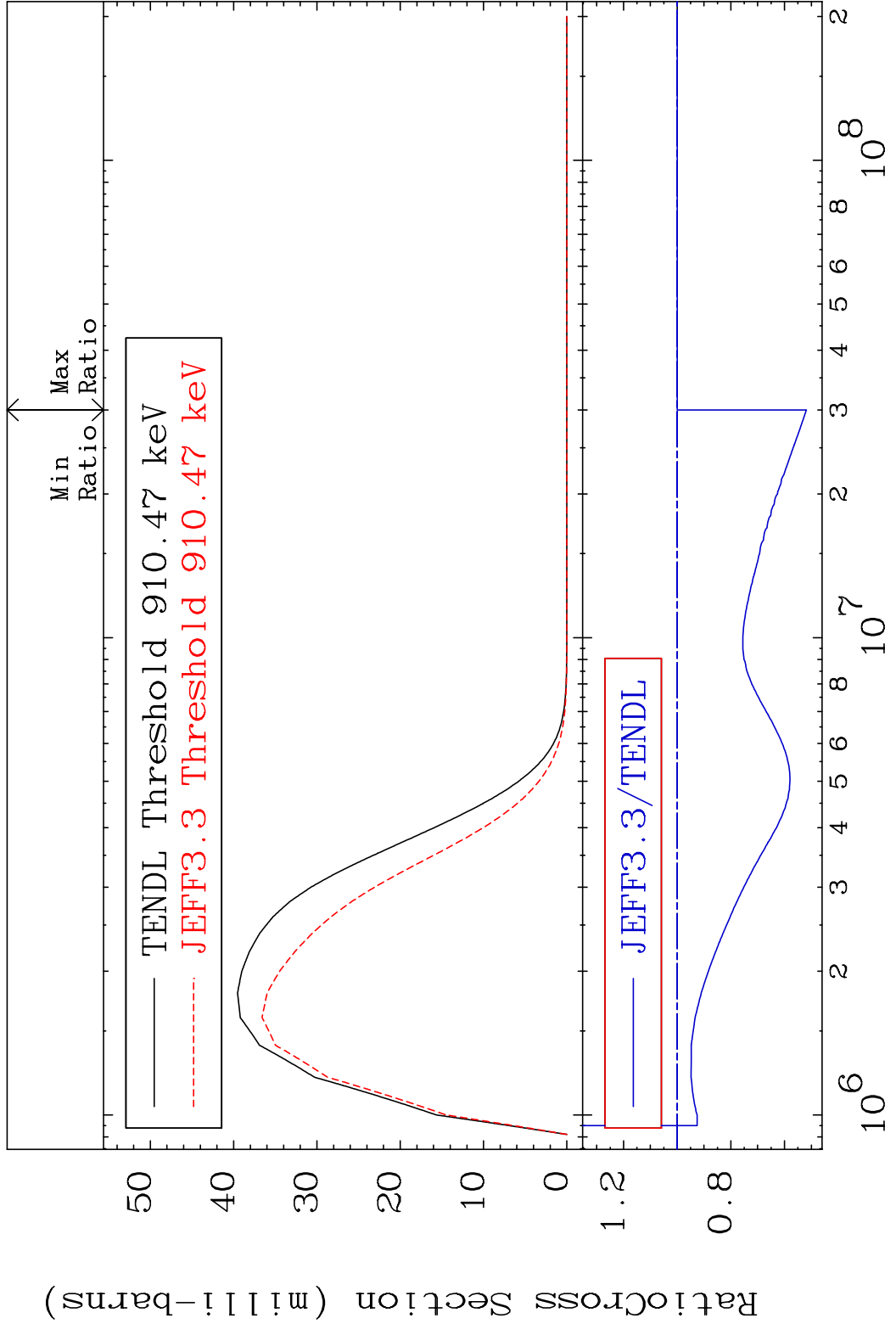


38 Incident Energy (eV) 81-Tl-204

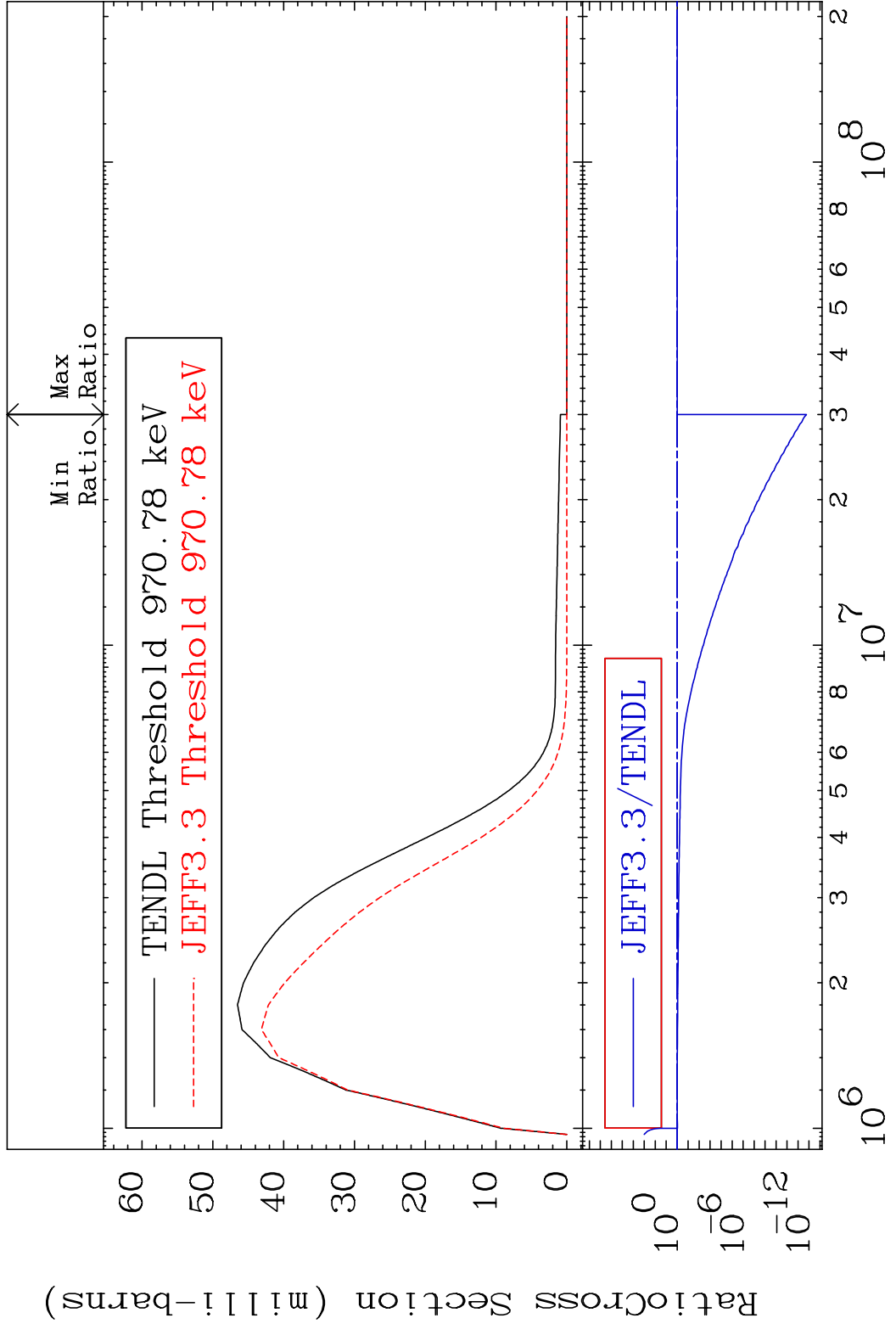
MAT 8128 MT= 71 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %



MAT 8128 MT= 72 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %

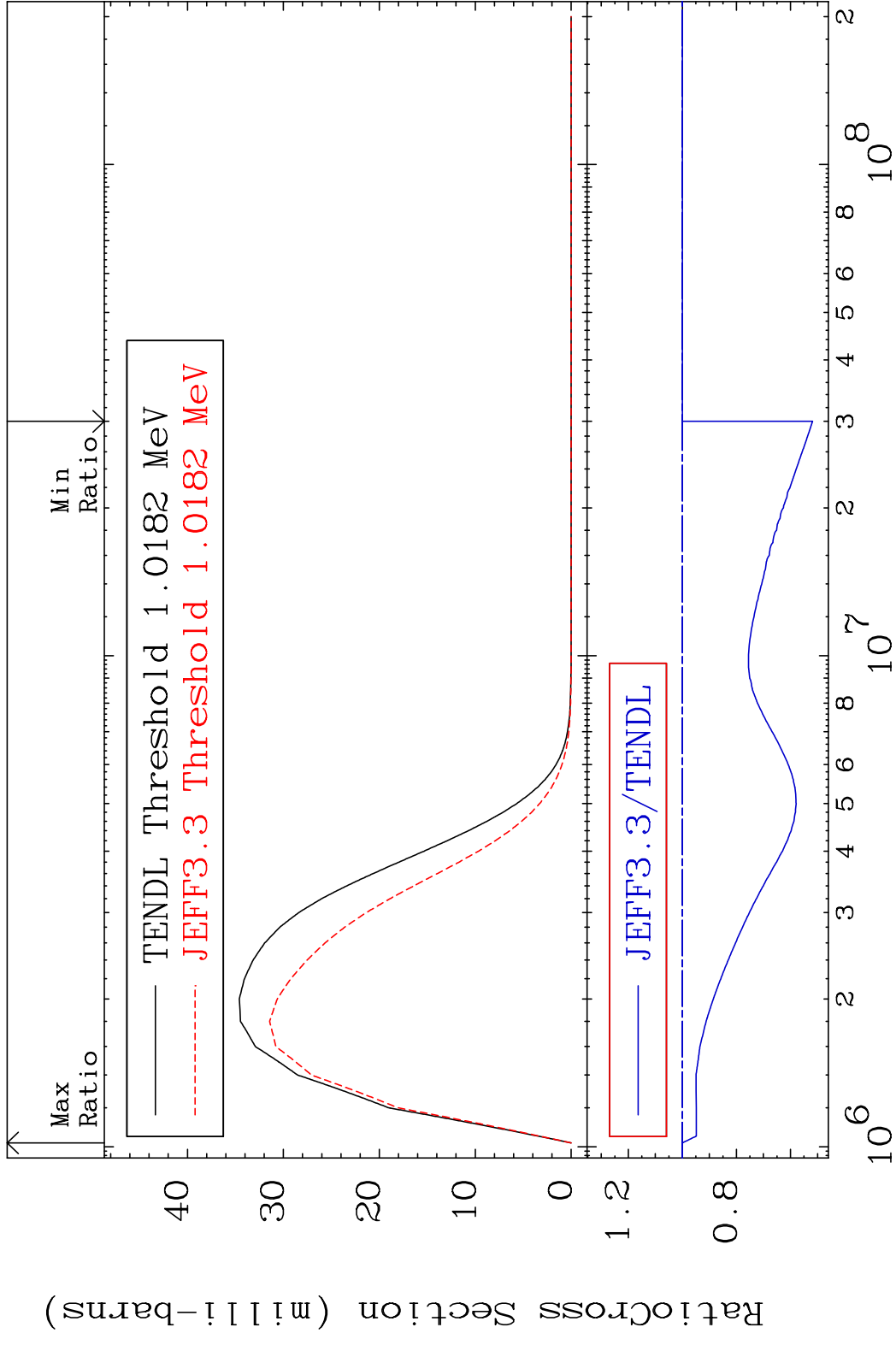


MAT 8128 MT= 73 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %



41 Incident Energy (eV) 81-Tl-204

MAT 8128 MT= 74 (n, n') Level 81-Tl-204  
 Cross Section -48.17 To 0.000 %



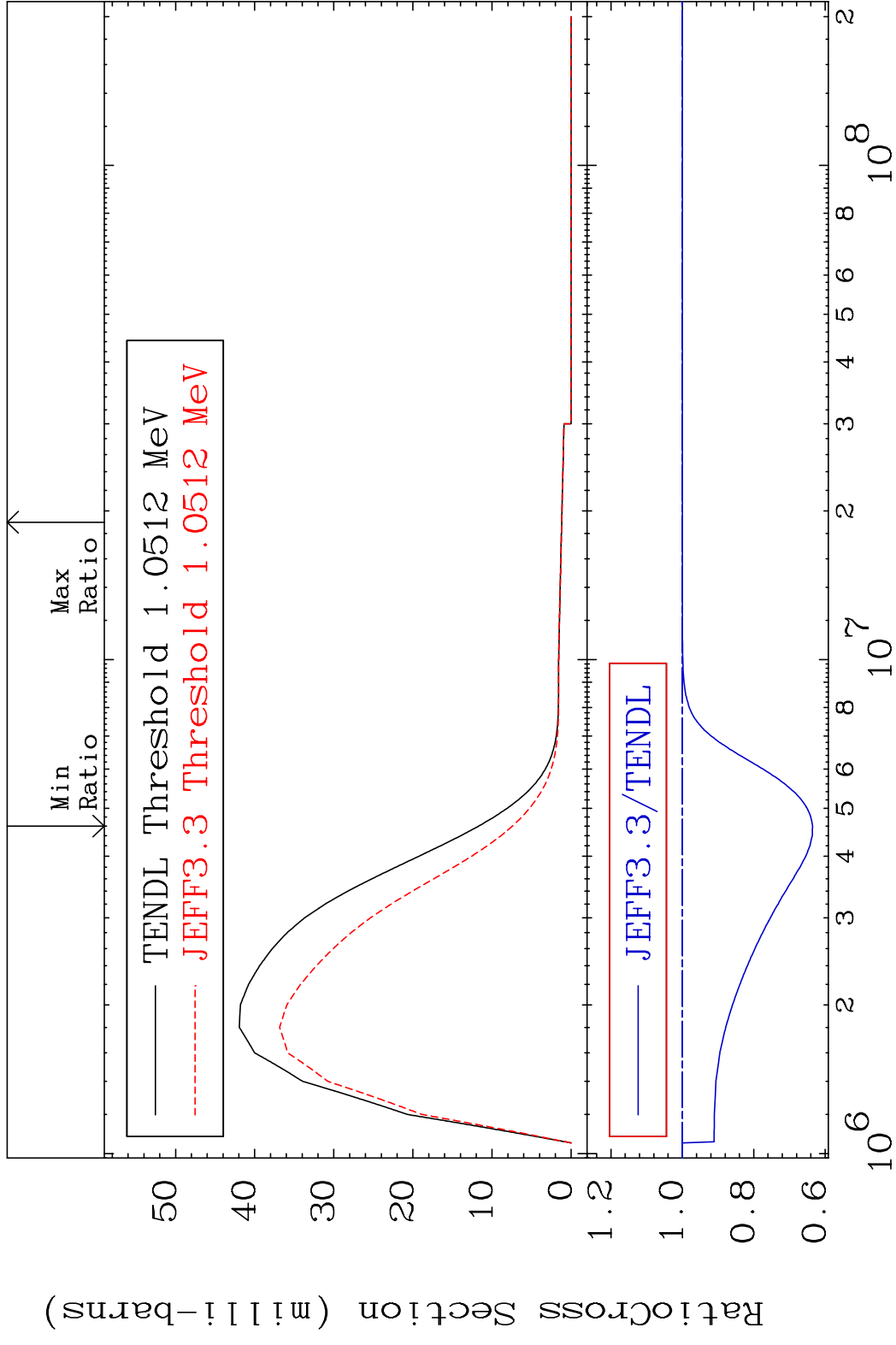
42 Incident Energy (eV) 81-Tl-204

MAT 8128

MT= 75 (n, n') Level

81-Tl-204

Cross Section -36.48 To 0.000 %

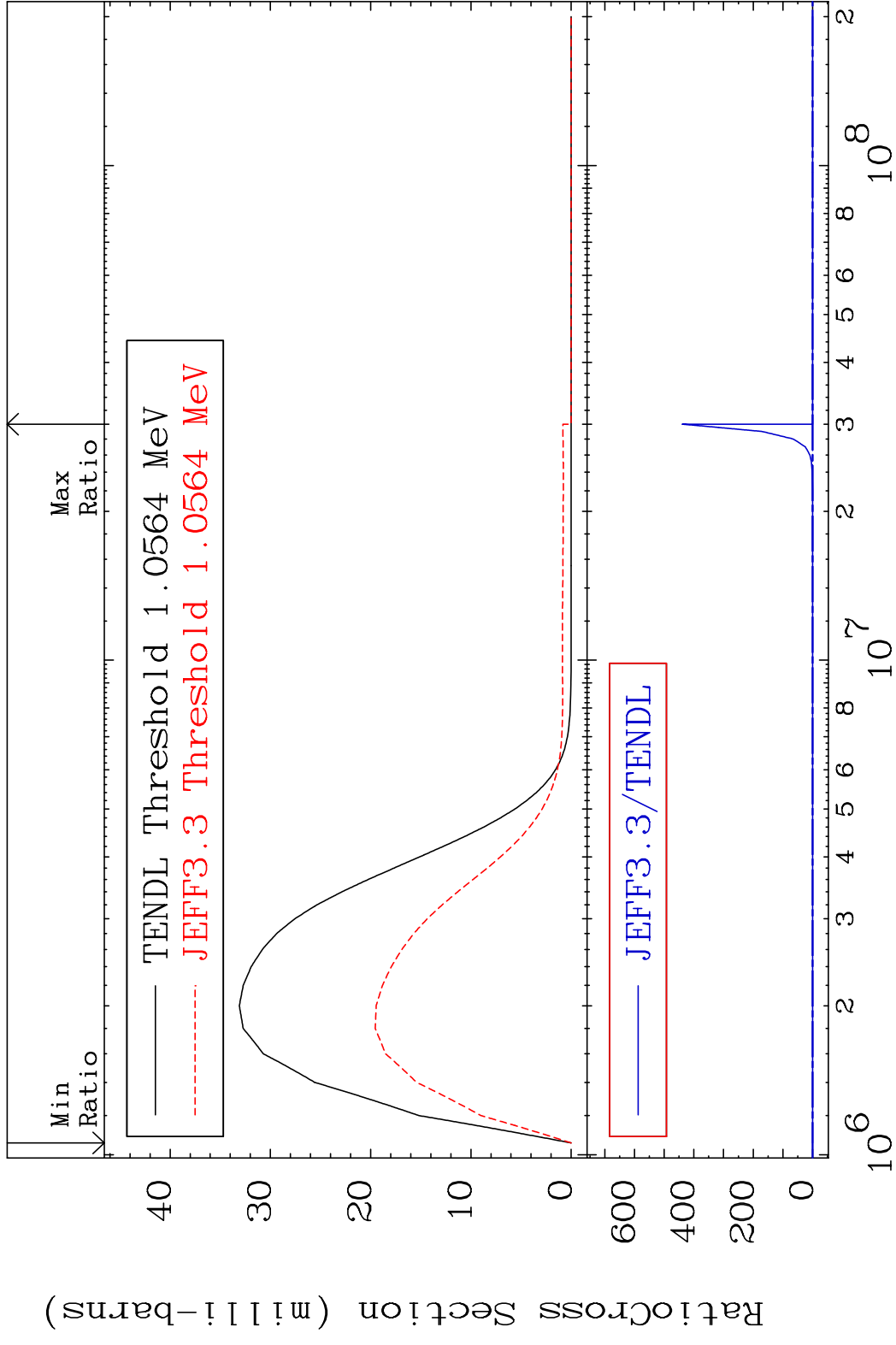


43

Incident Energy (eV)

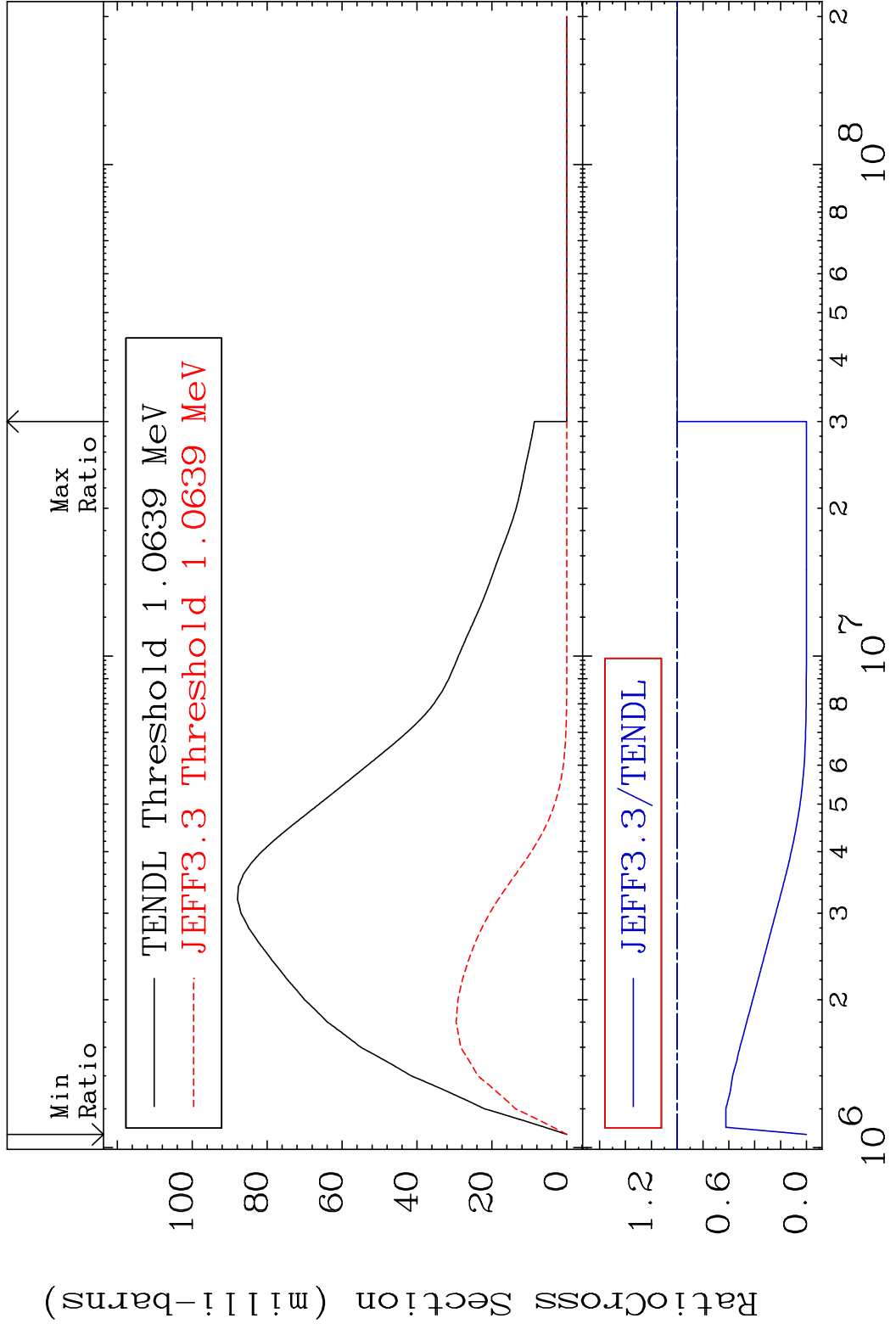
81-Tl-204

MAT 8128 MT= 76 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 9999. %



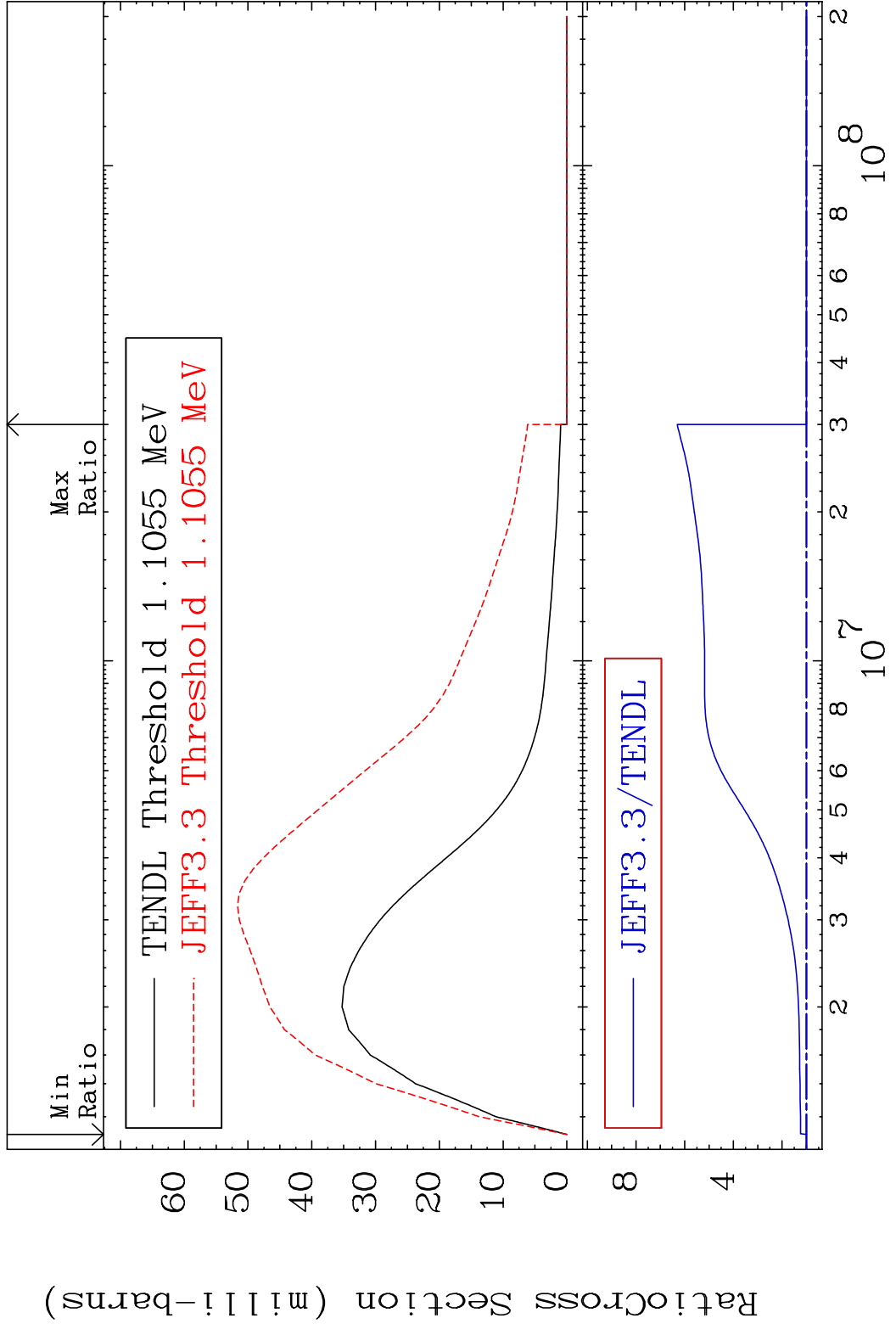
44 Incident Energy (eV) 81-Tl-204

MAT 8128 MT= 77 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %

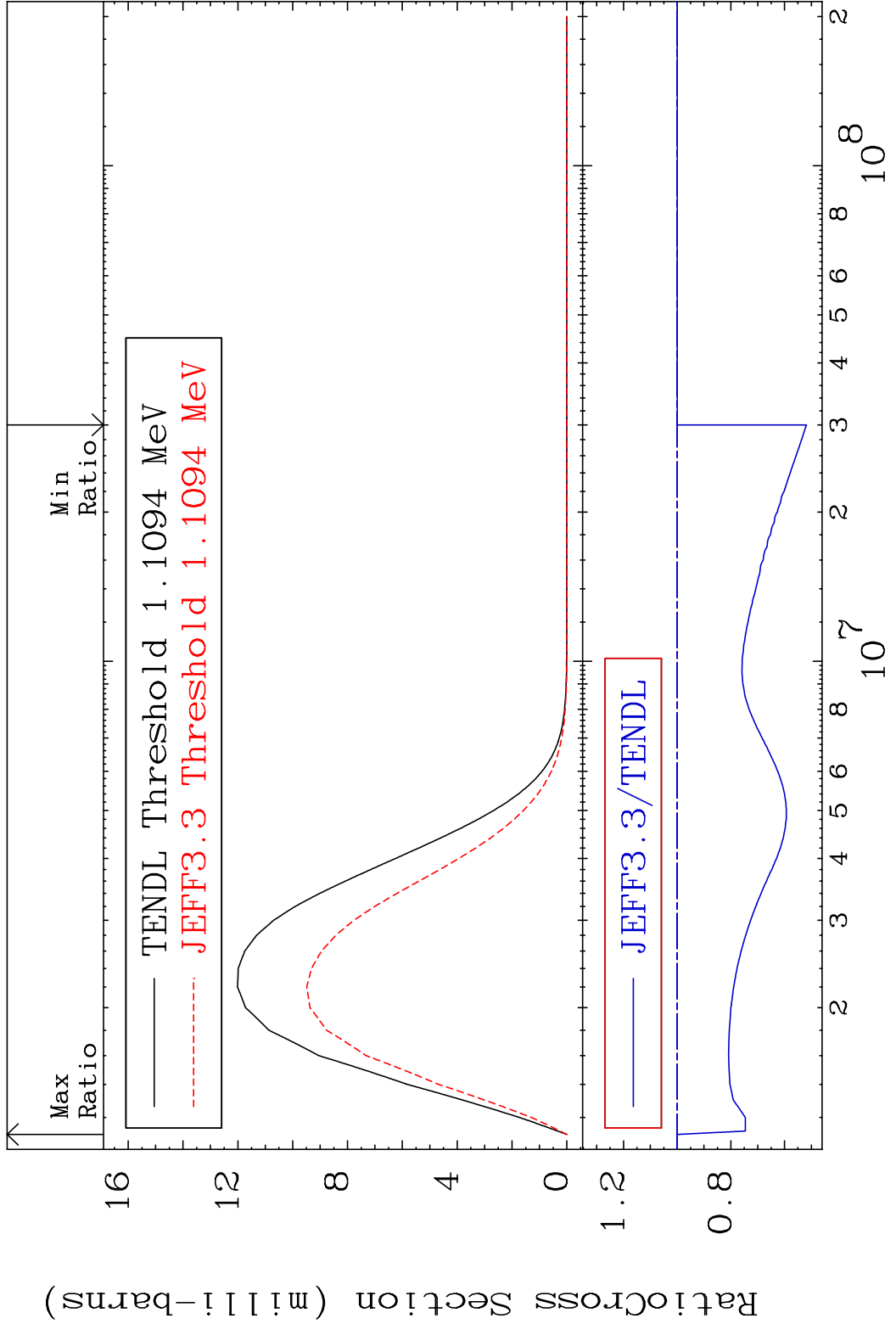


45 Incident Energy (eV) 81-Tl-204

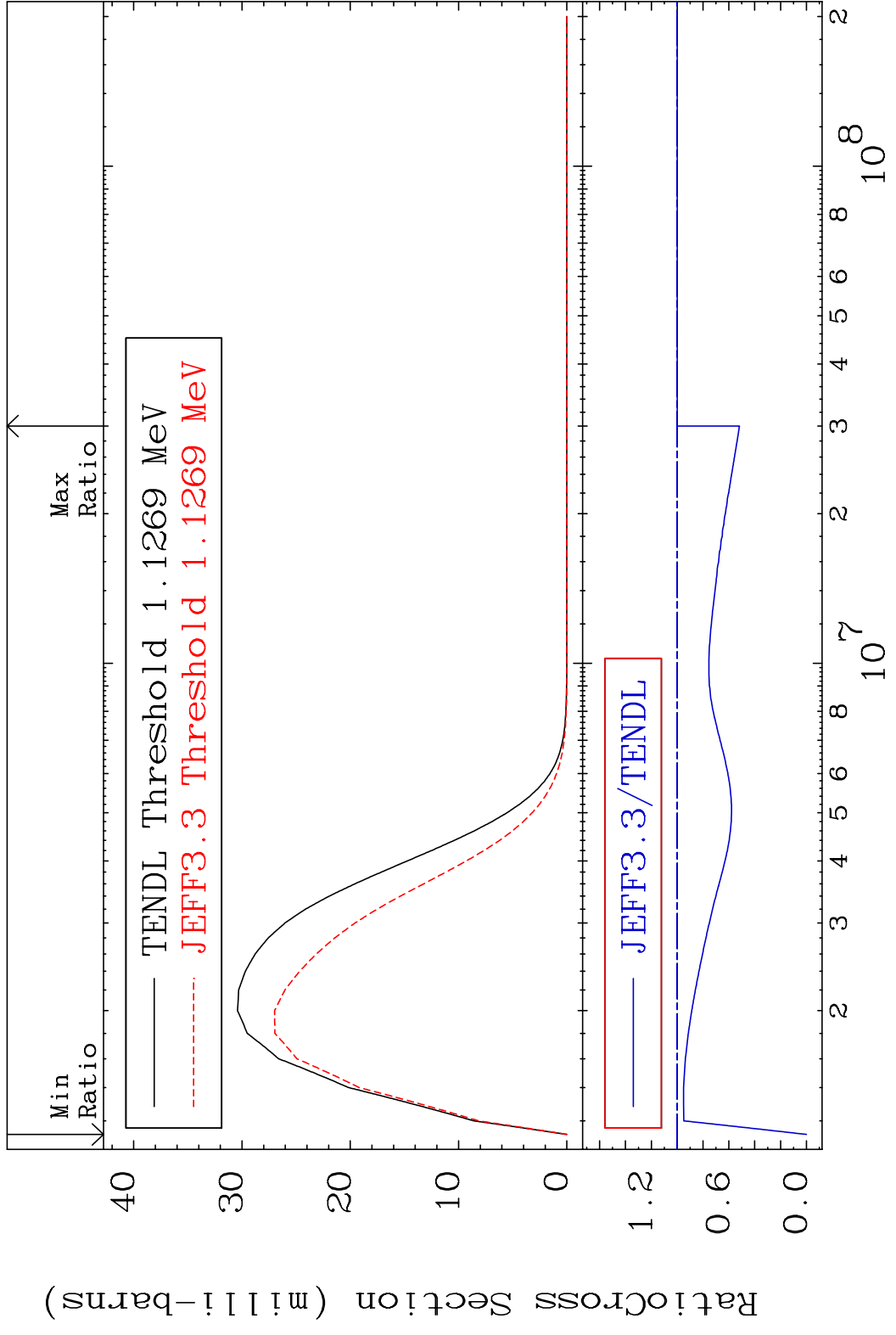
MAT 8128 MT= 78 (n, n') Level 81-Tl-204  
 Cross Section 0.000 To 530.9 %



MAT 8128 MT= 79 (n, n') Level 81-Tl-204  
 Cross Section -48.14 To 0.000 %



MAT 8128 MT= 80 (n, n') Level 81-Tl-204  
 Cross Section -100.0 To 0.000 %

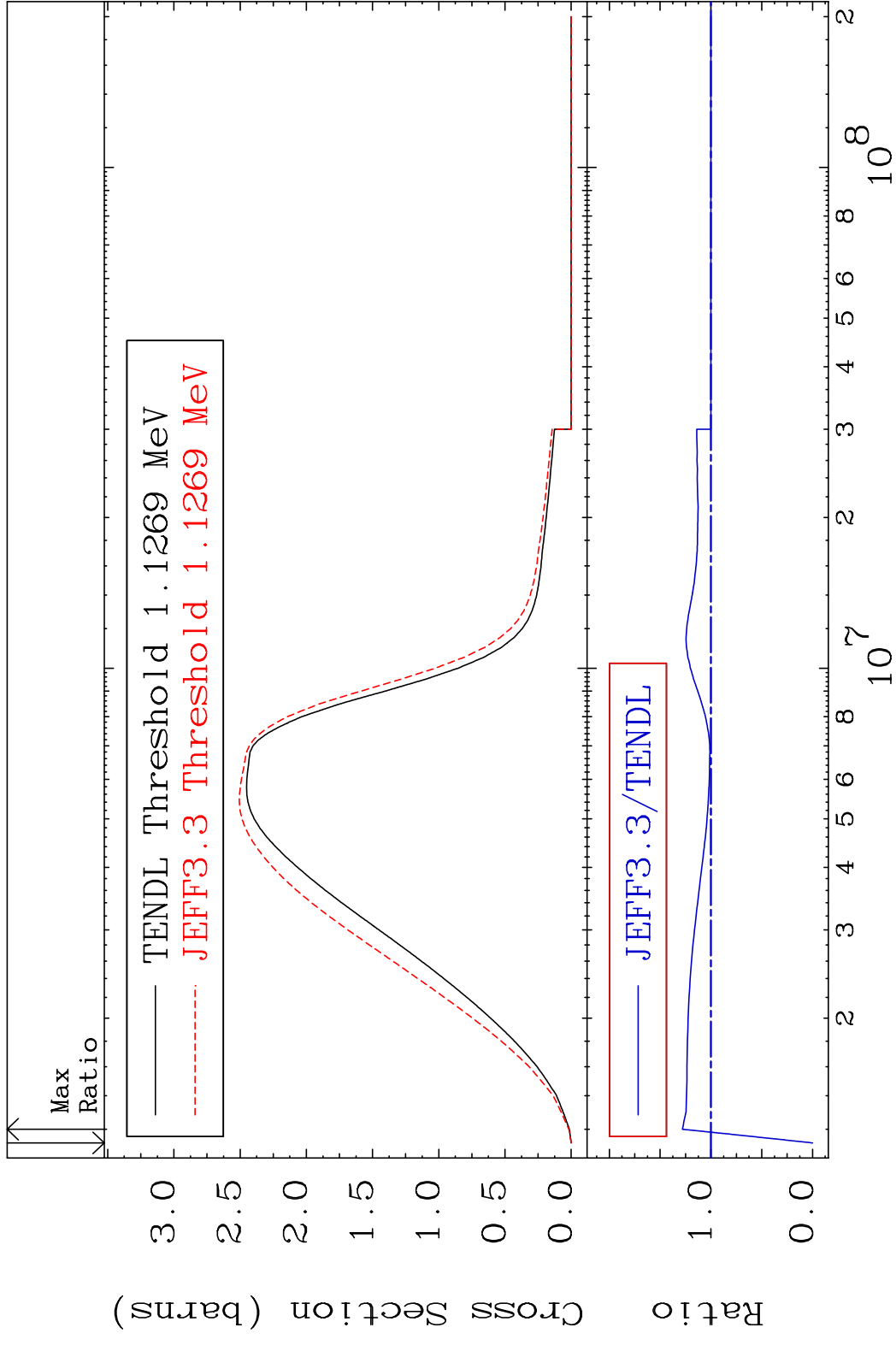


MAT 8128

(n, n') Continuum

81-Tl-204

Cross Section -100.0 To 28.13 %

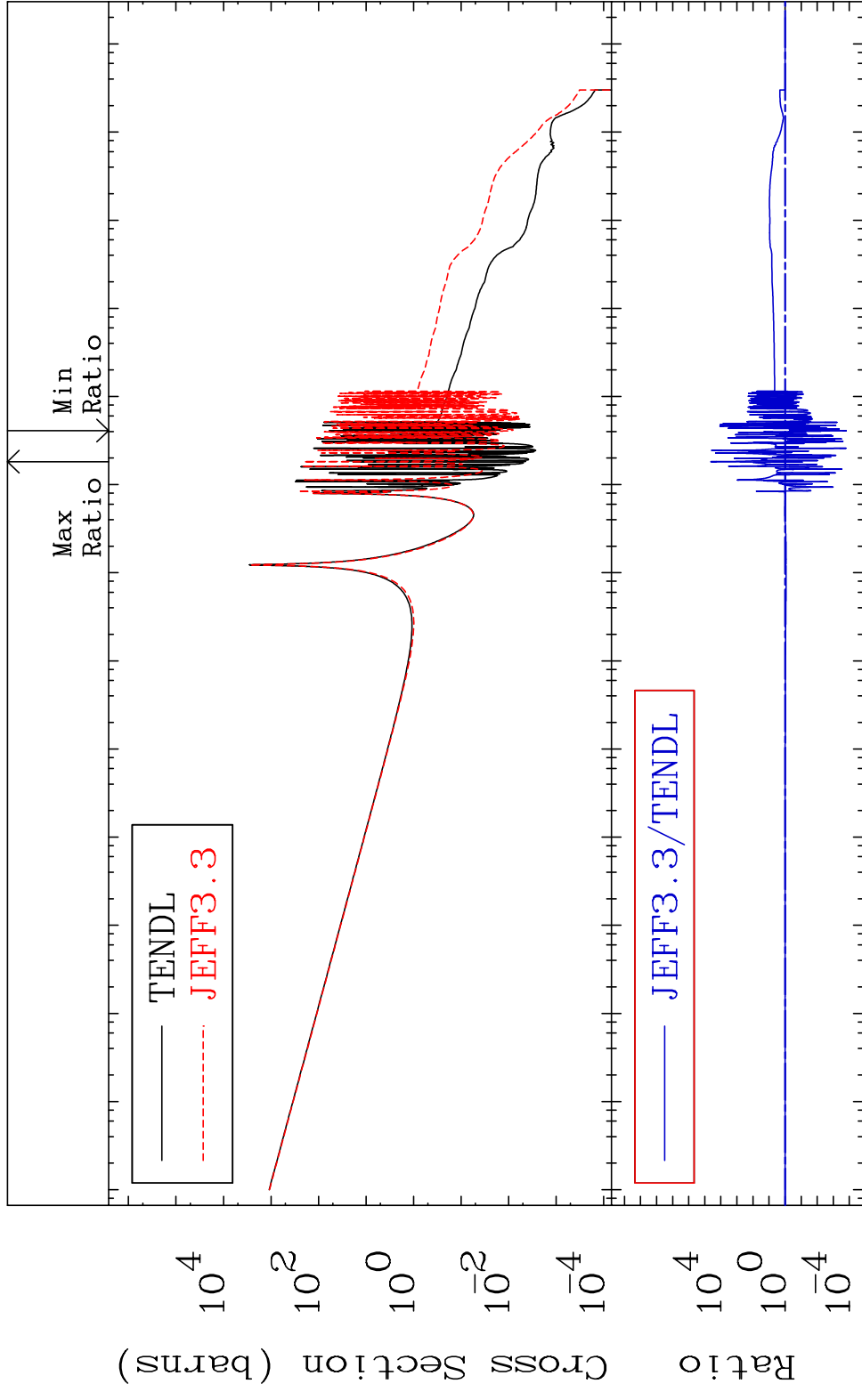


MAT 8128

81-T1-204

(n,  $\gamma$ )

Cross Section -99.98 To 9999. %

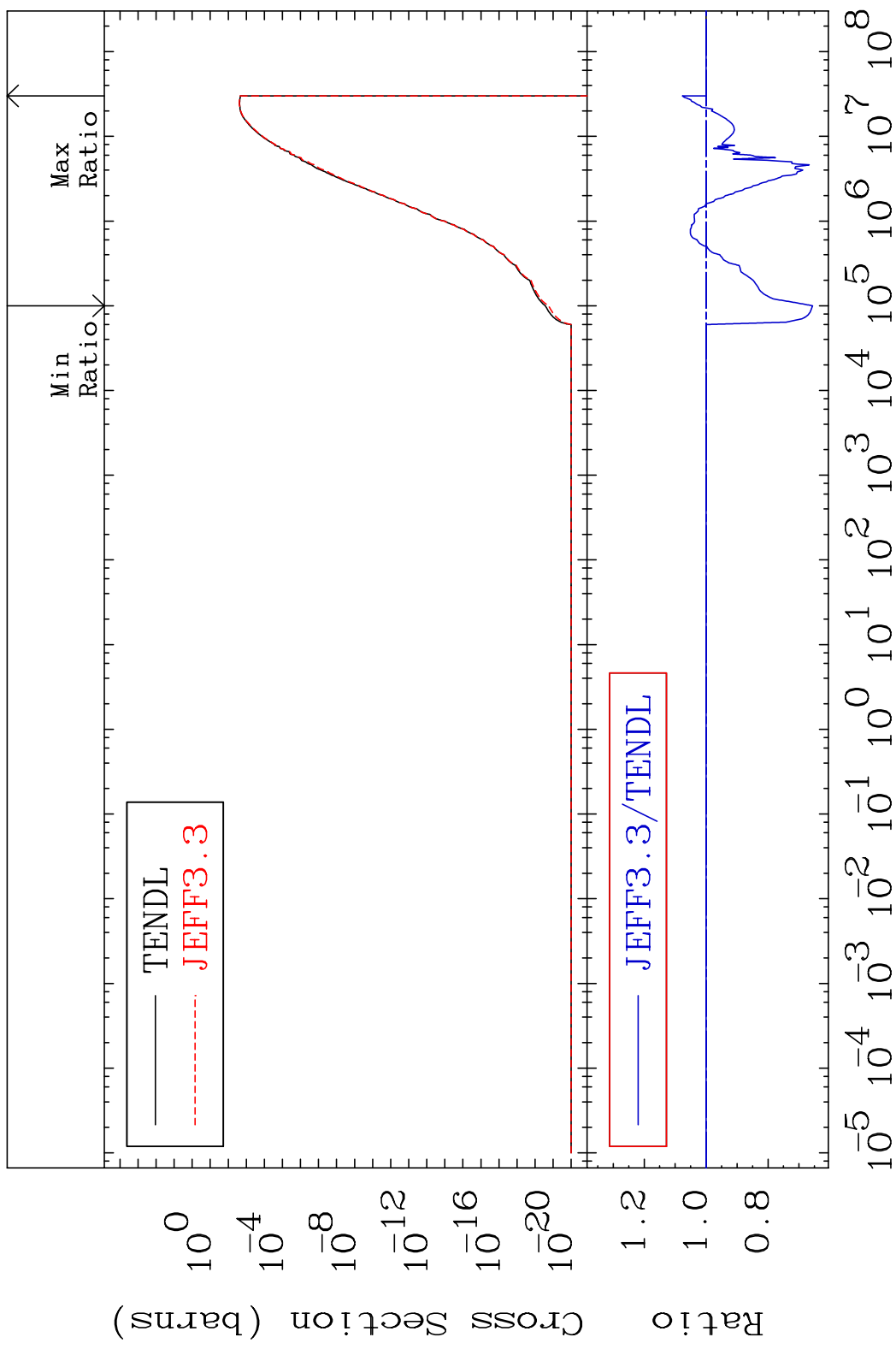


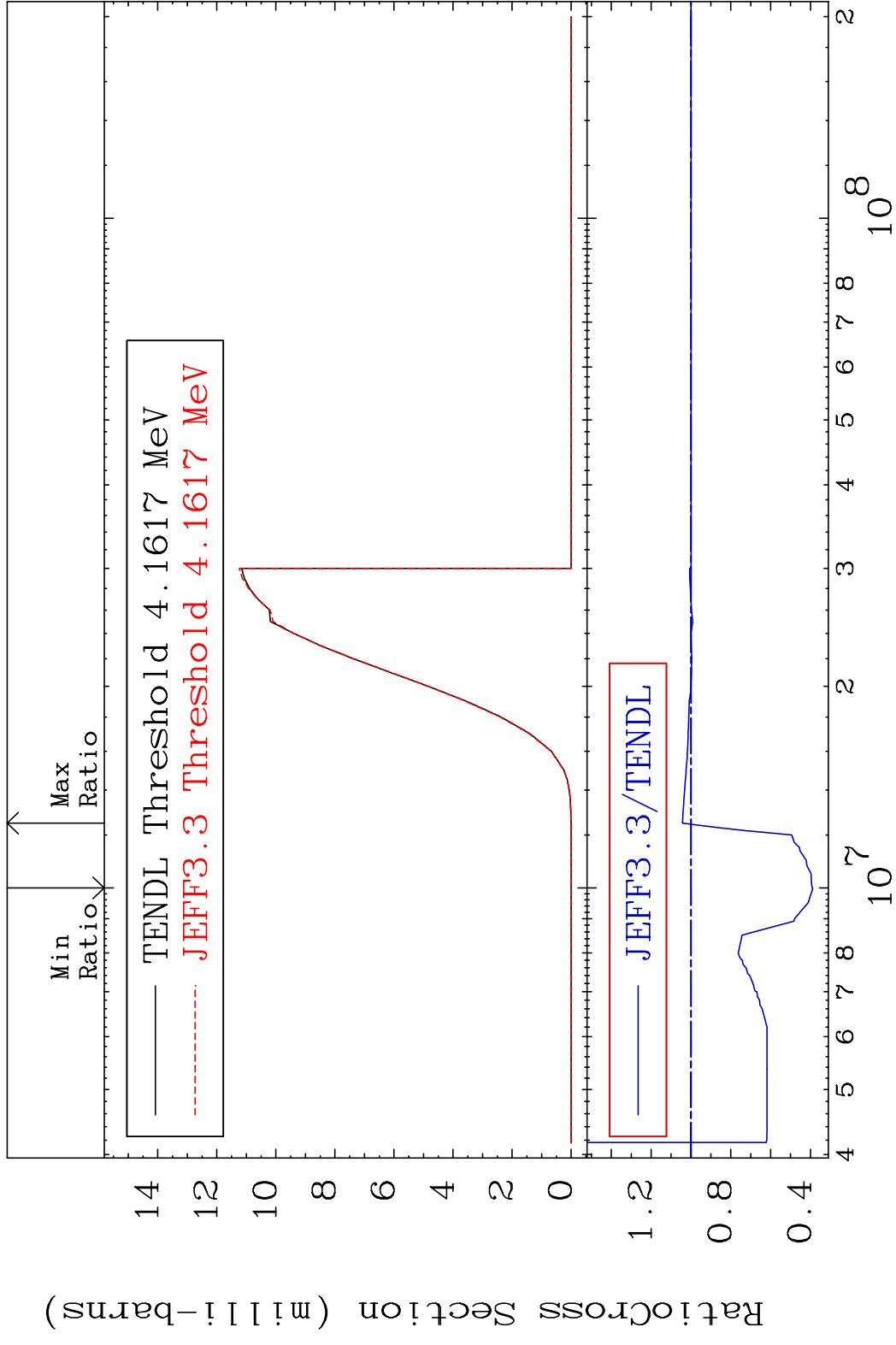
50

Incident Energy (eV)

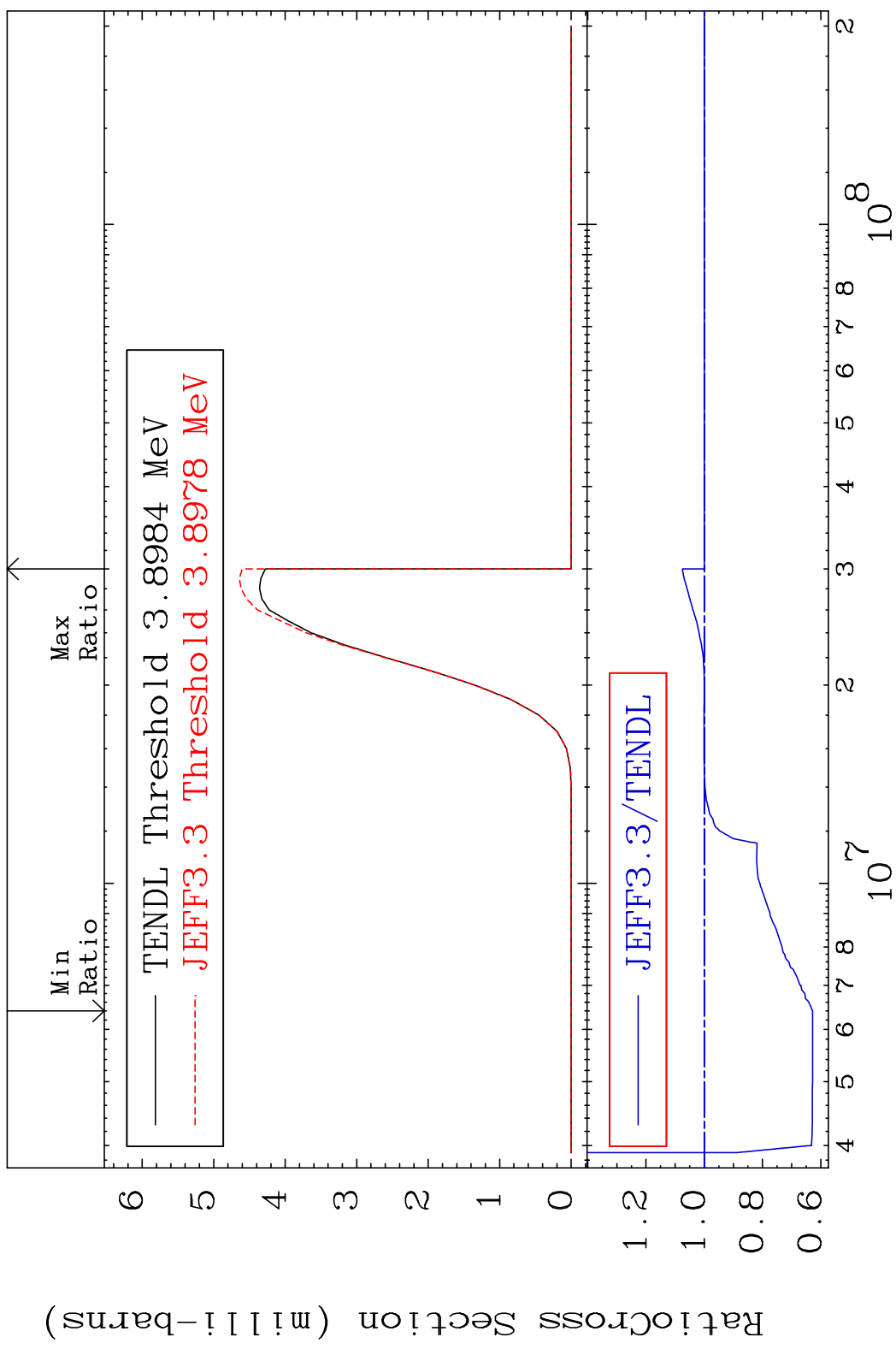
81-T1-204

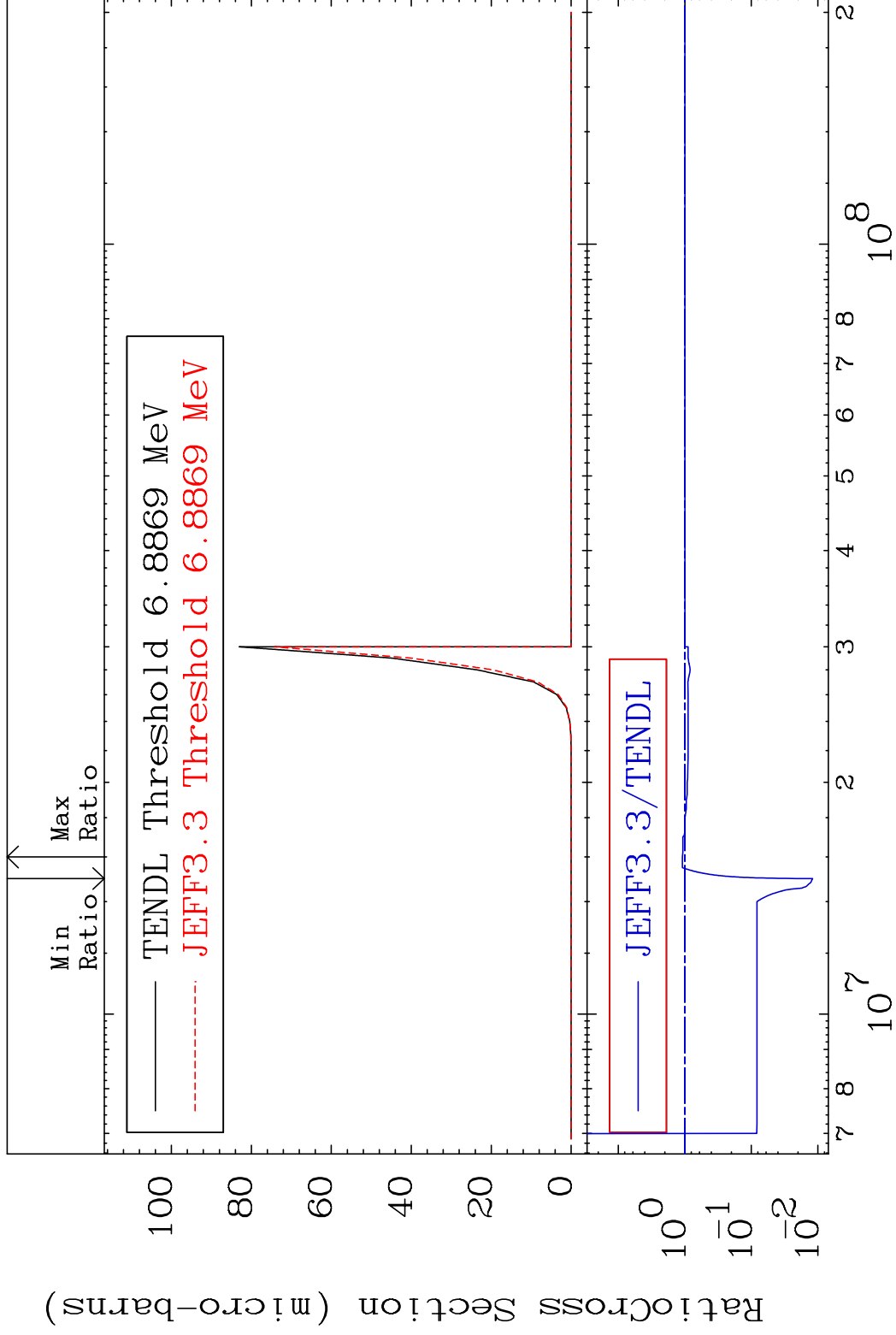
Cross Section -34.39 To 7.678 %





Cross Section -37.18 To 7.522 %



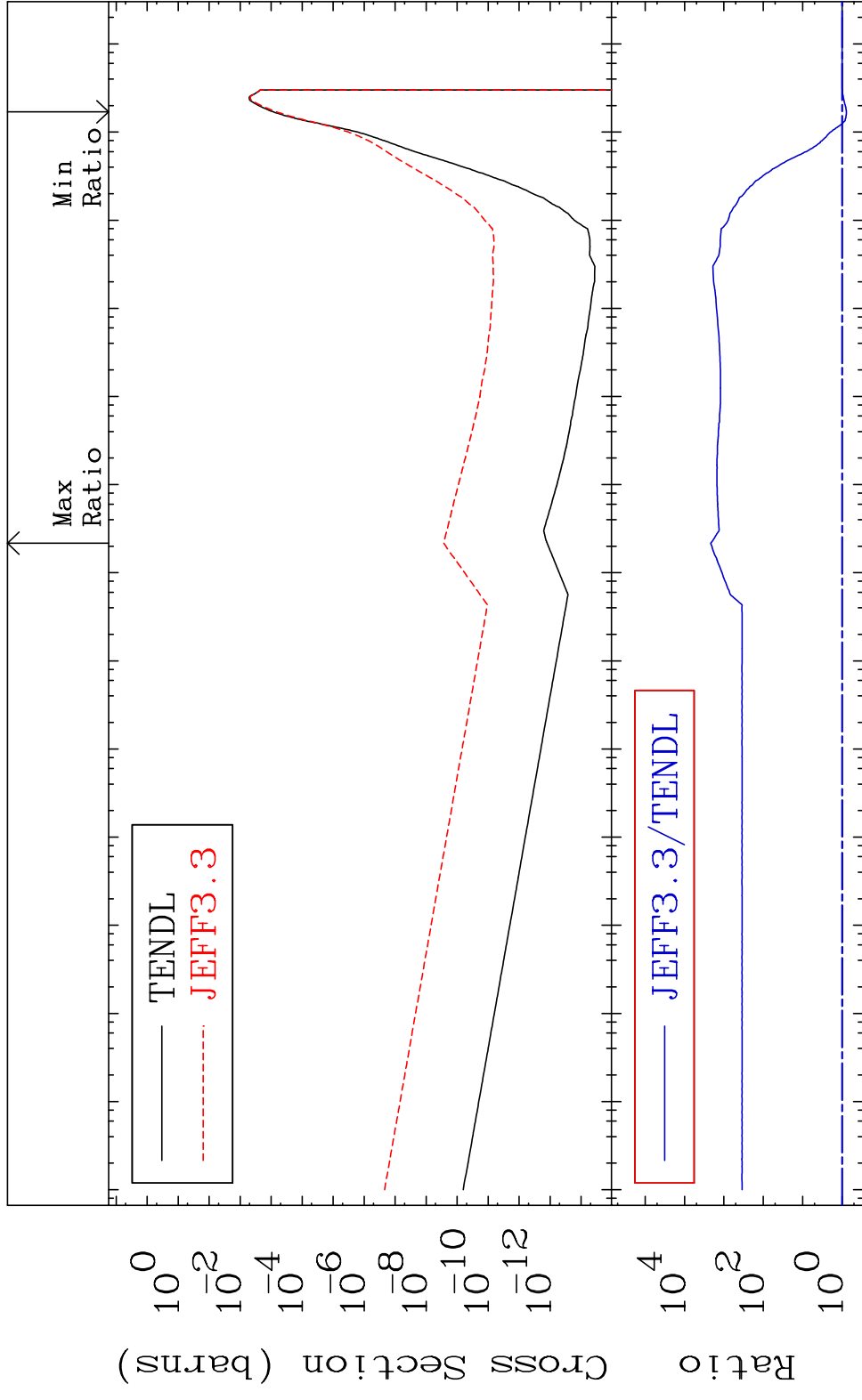


MAT 8128

81-Tl-204

(n,  $\alpha$ )

Cross Section -21.64 To 9999. %



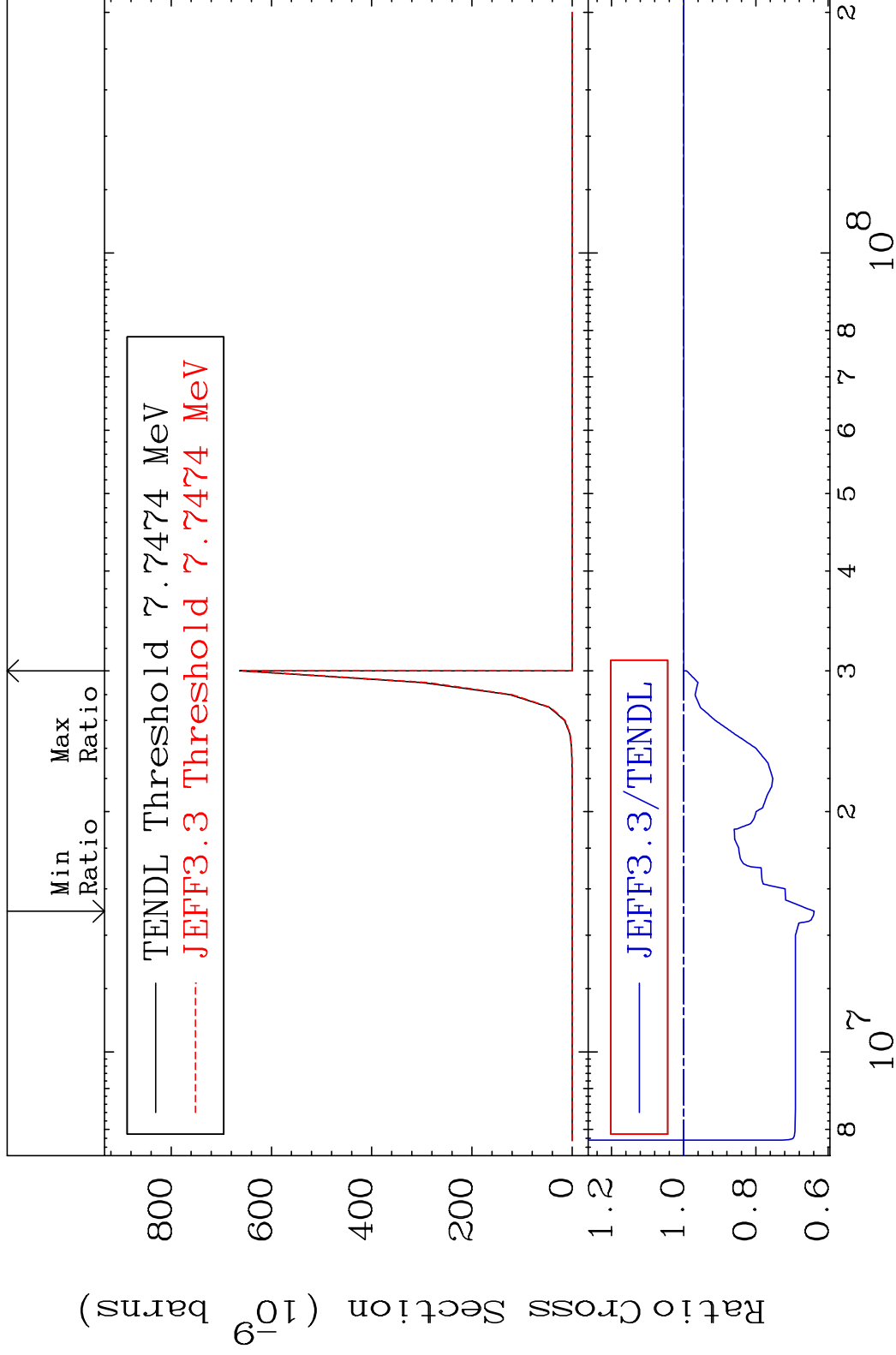
Incident Energy (eV)

MAT 8128

(n,2p)

81-Tl-204

Cross Section -36.13 To 0.000 %



56

Incident Energy (eV)

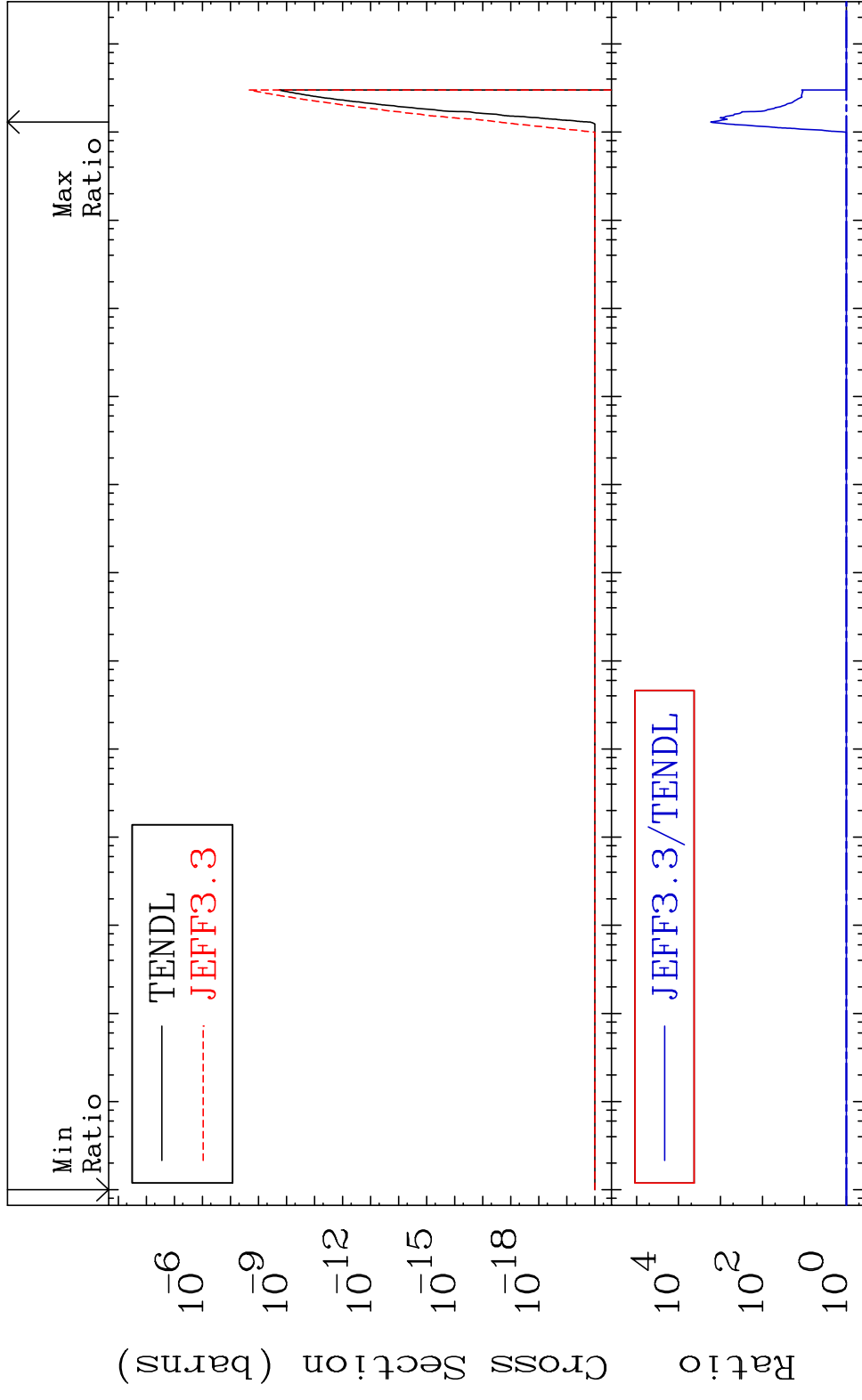
81-Tl-204

MAT 8128

(n,p)  $\alpha$

81-Tl-204

Cross Section 0.000 To 9999. %

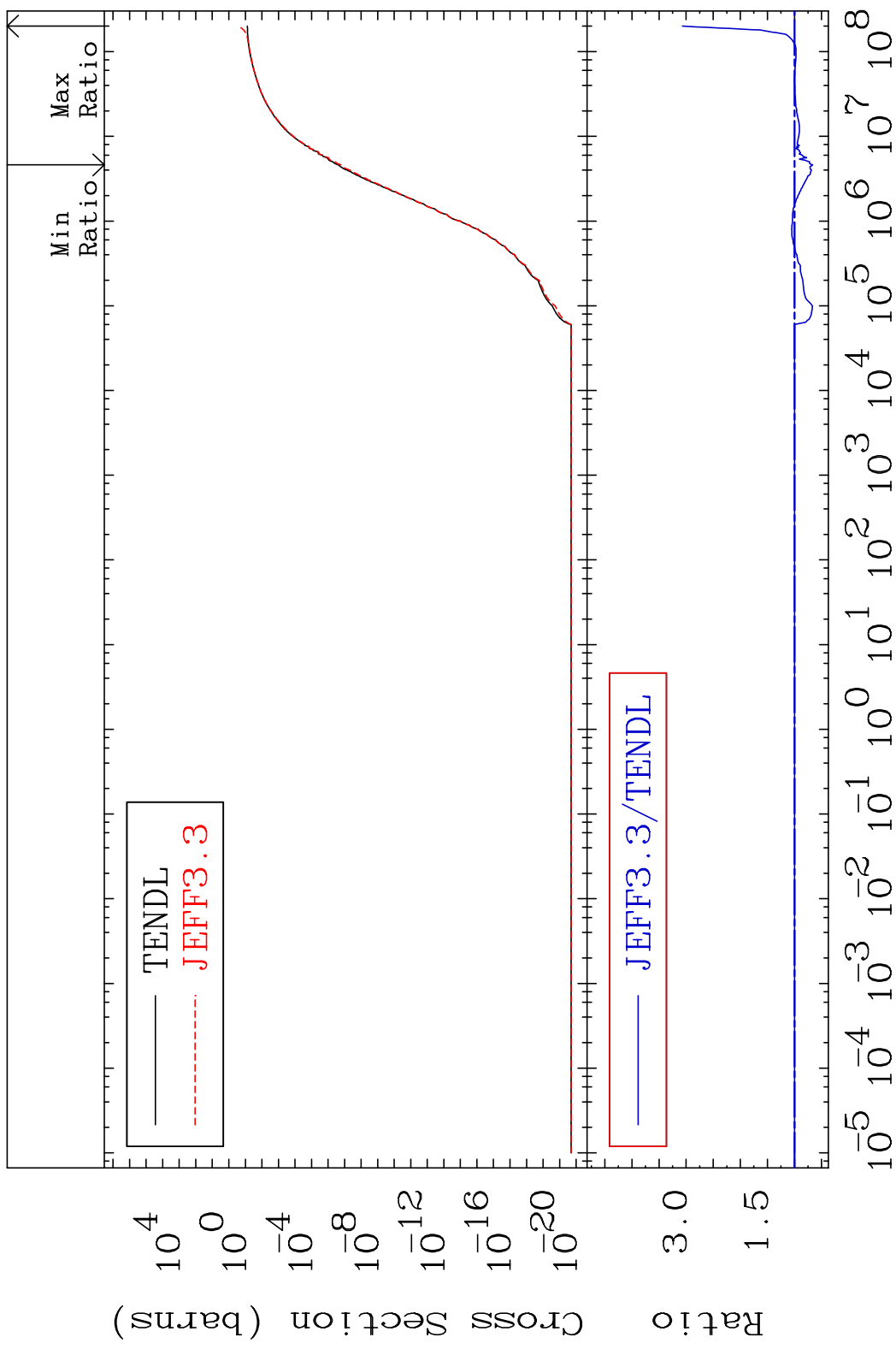


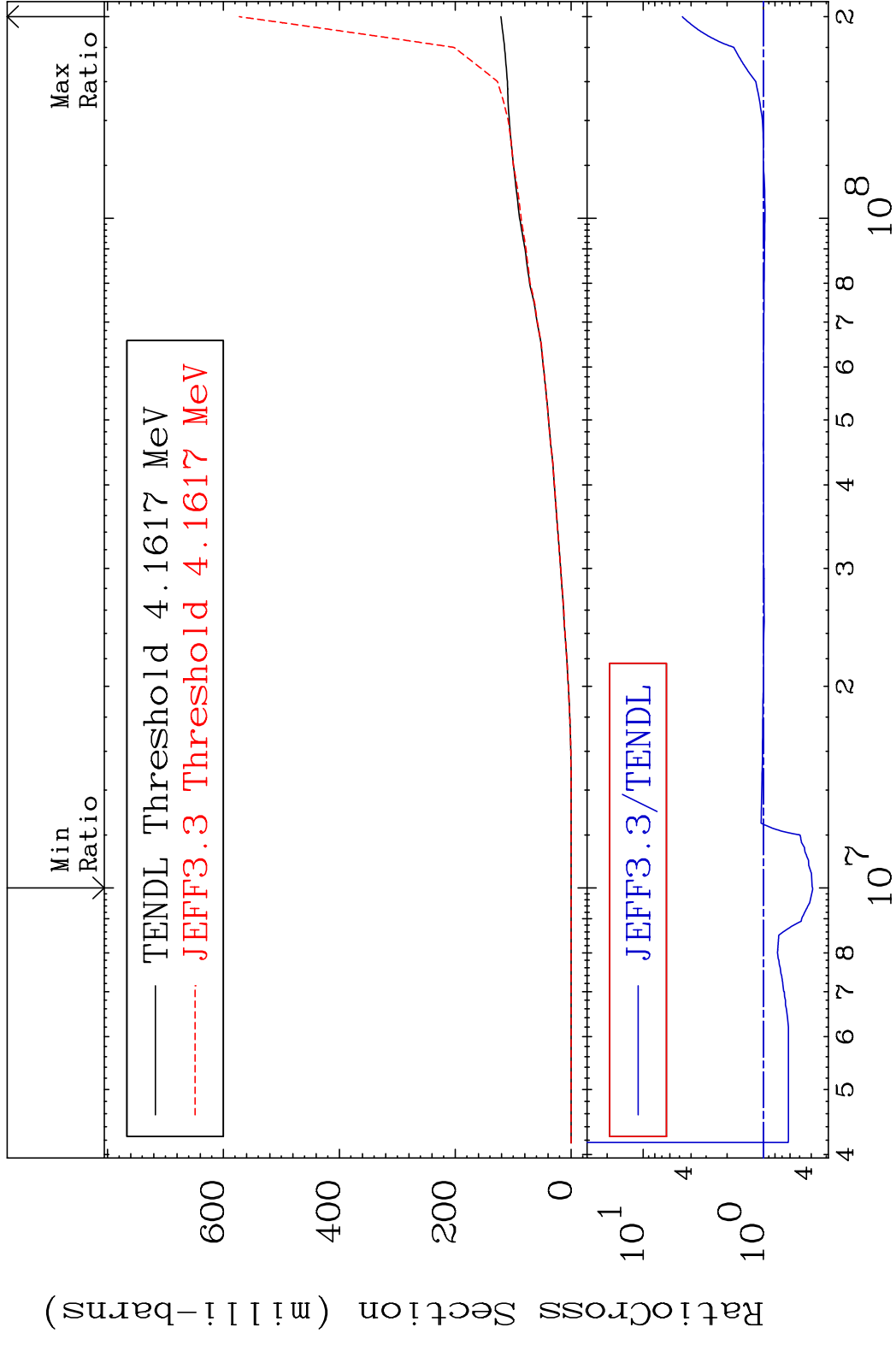
MAT 8128

Hydrogen Production

81-T1-204

Cross Section -33.29 To 207.0 %



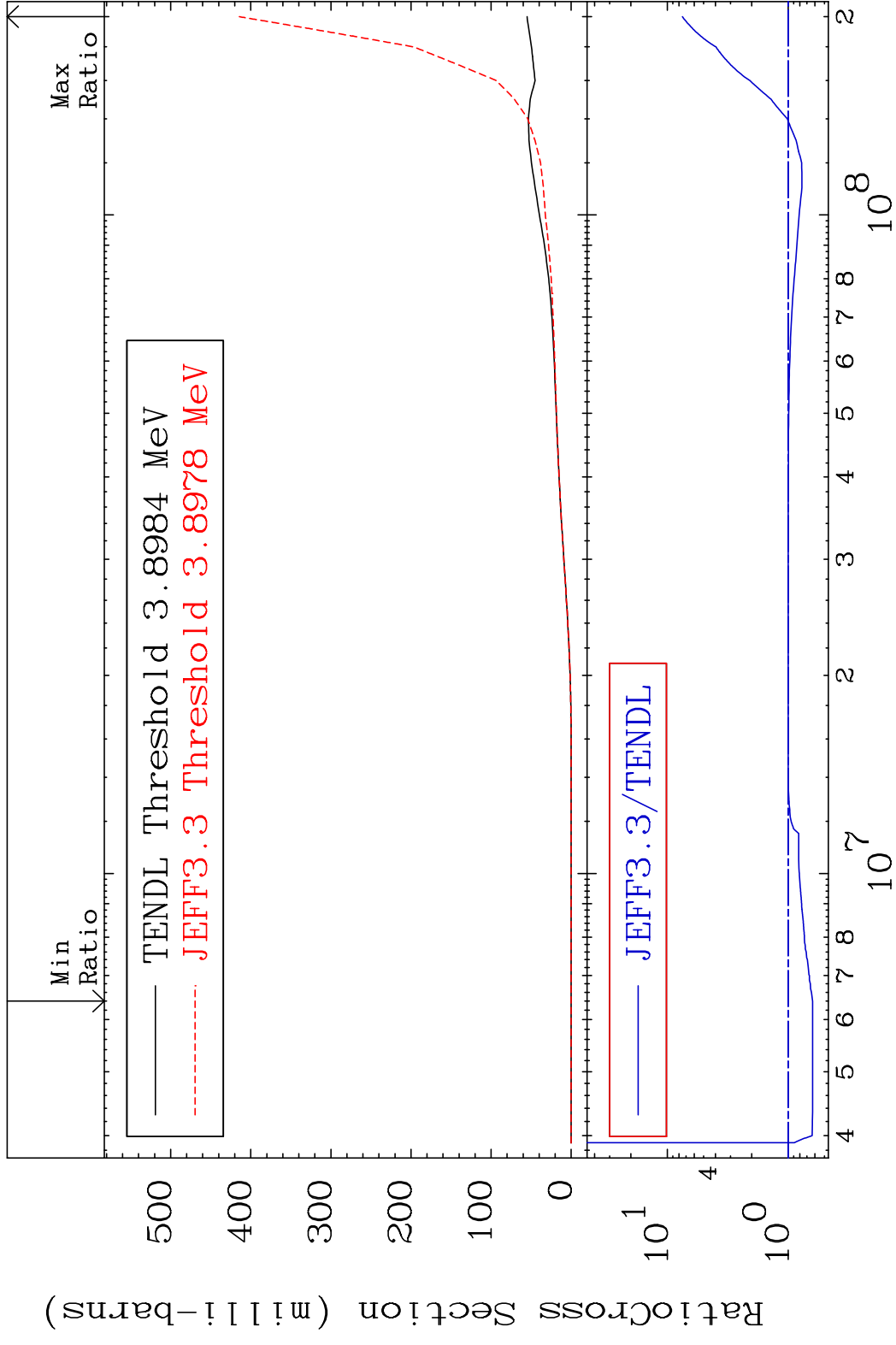


MAT 8128

Tritium Production

81-Tl-204

Cross Section -37.18 To 651.0 %



60

Incident Energy (eV)

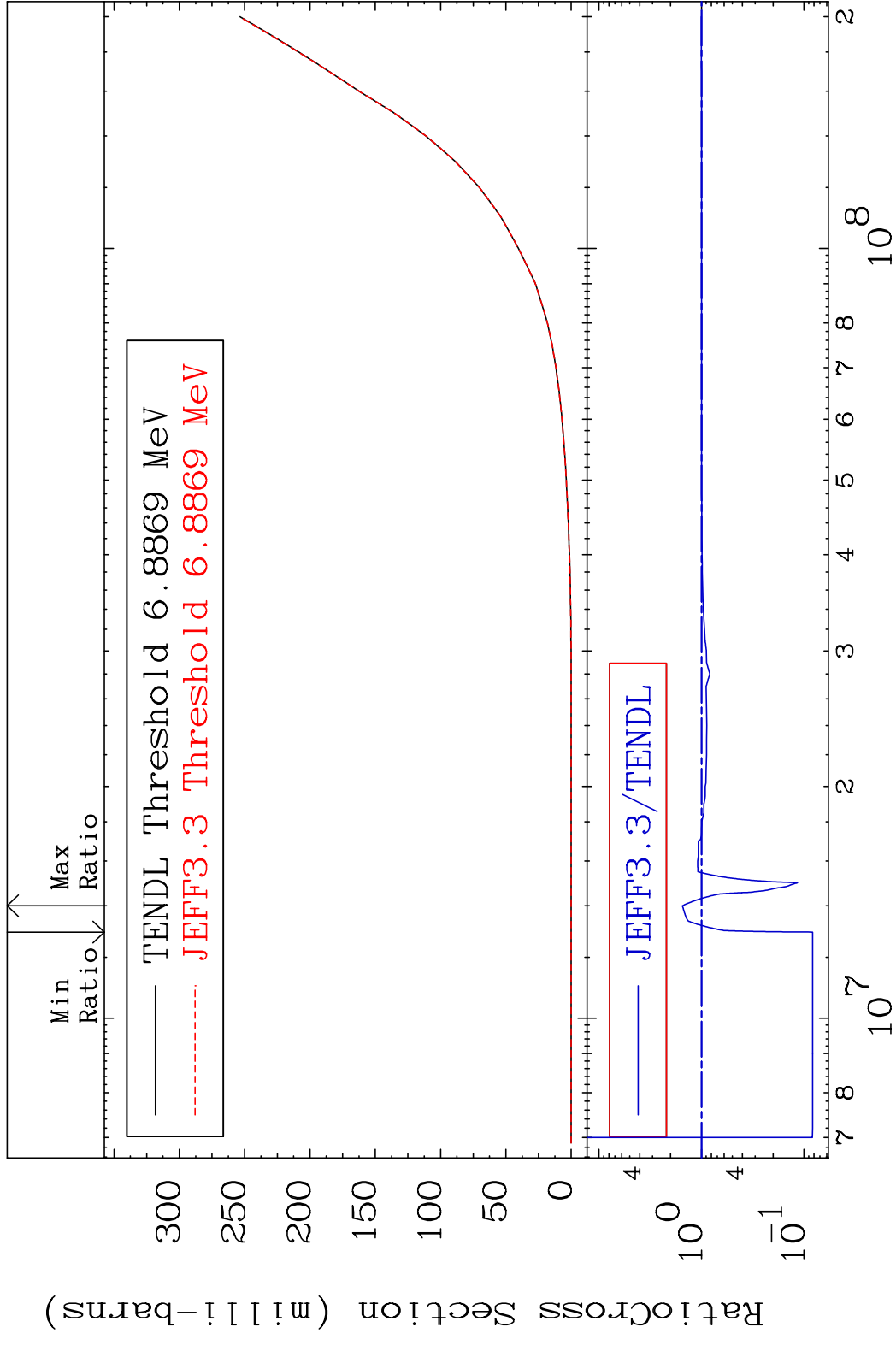
81-Tl-204

MAT 8128

He-3 Production

81-T1-204

Cross Section -91.75 To 53.64 %



61

Incident Energy (eV)

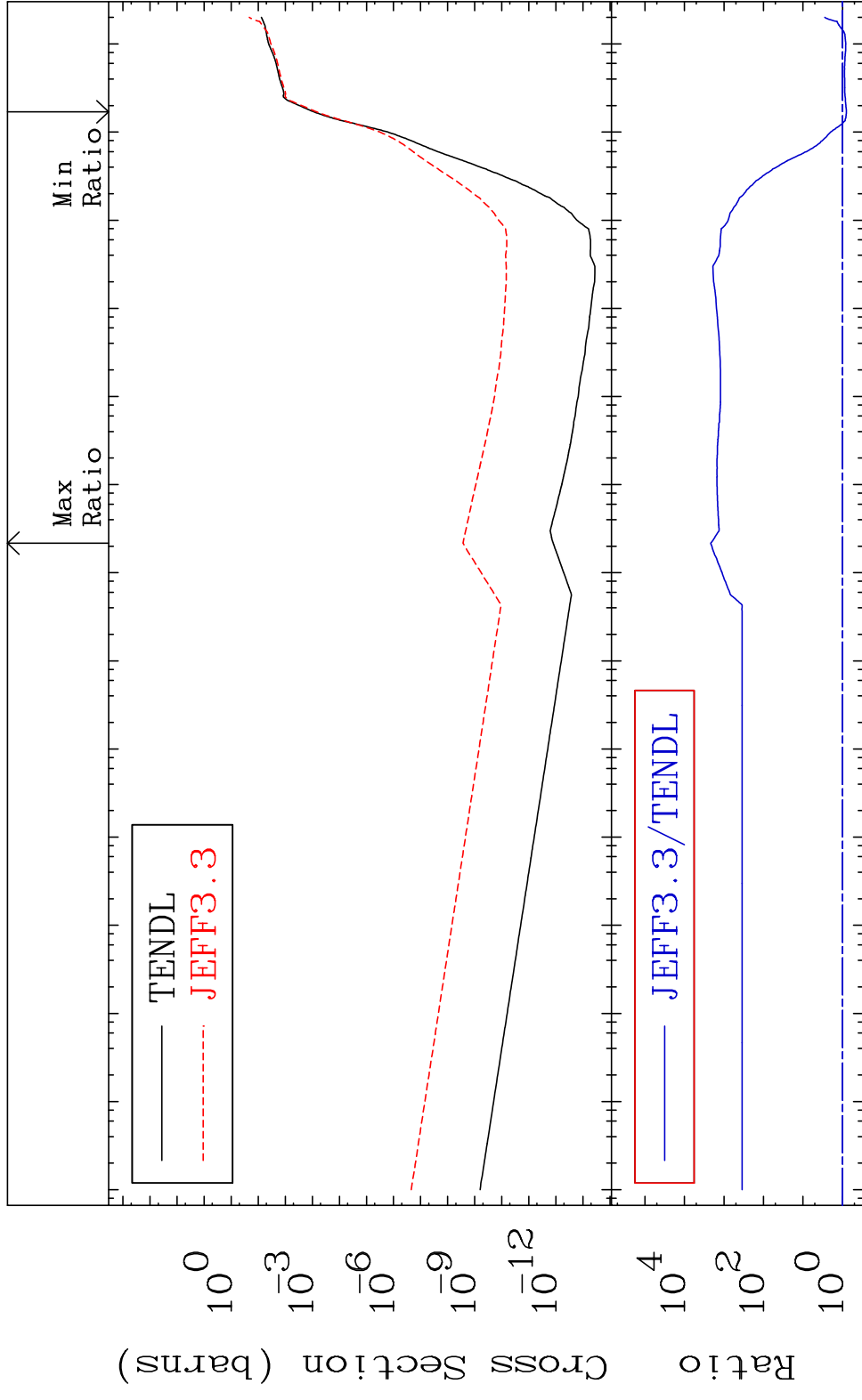
81-T1-204

MAT 8128

He-4 Production

81-T1-204

Cross Section -20.13 To 9999. %

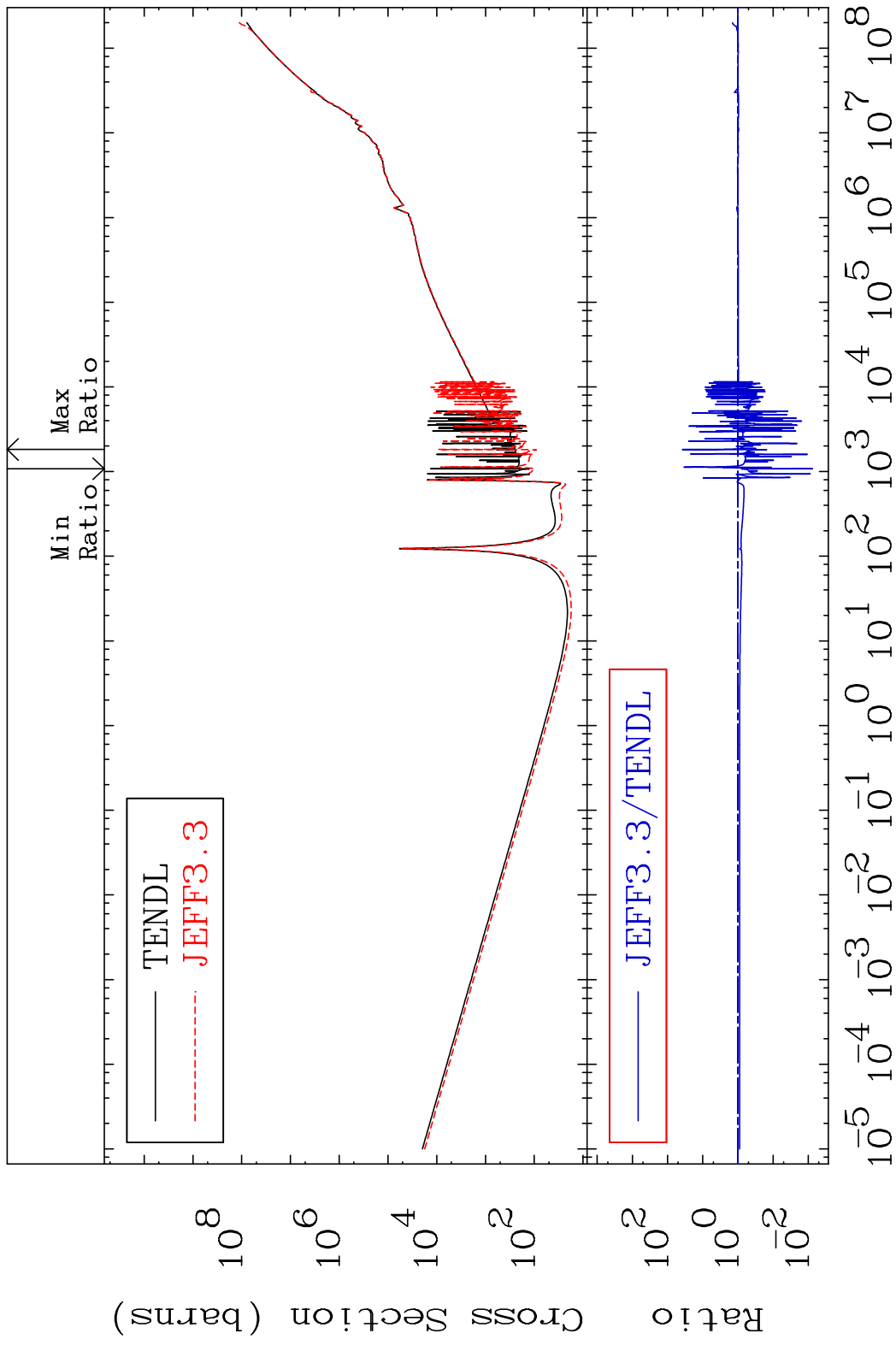


62

Incident Energy (eV)

81-T1-204

MAT 8128 Kerma total (eV-barns) 81-Tl-204  
 Cross Section -99.24 To 3694. %

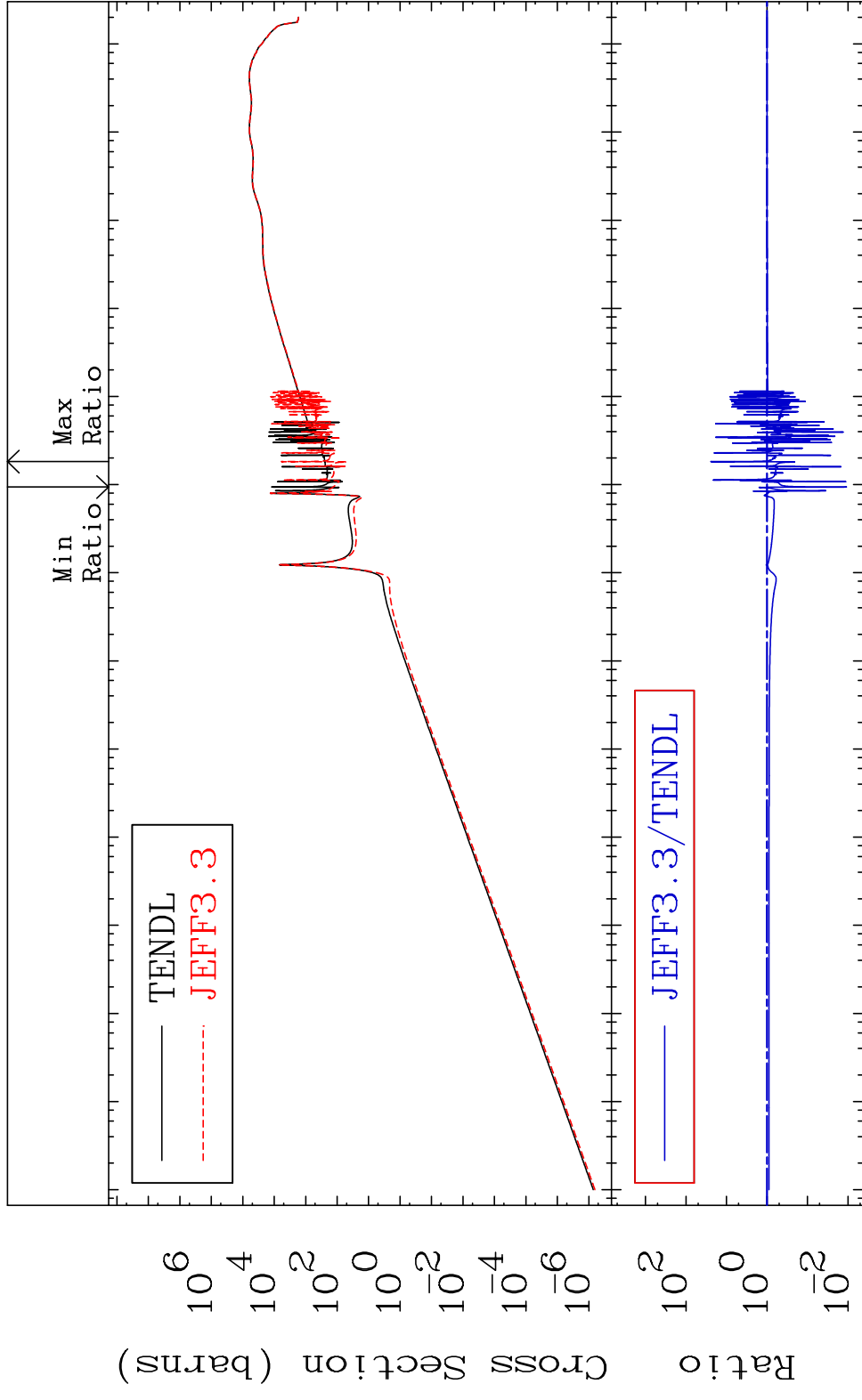


63 Incident Energy (eV) 81-Tl-204

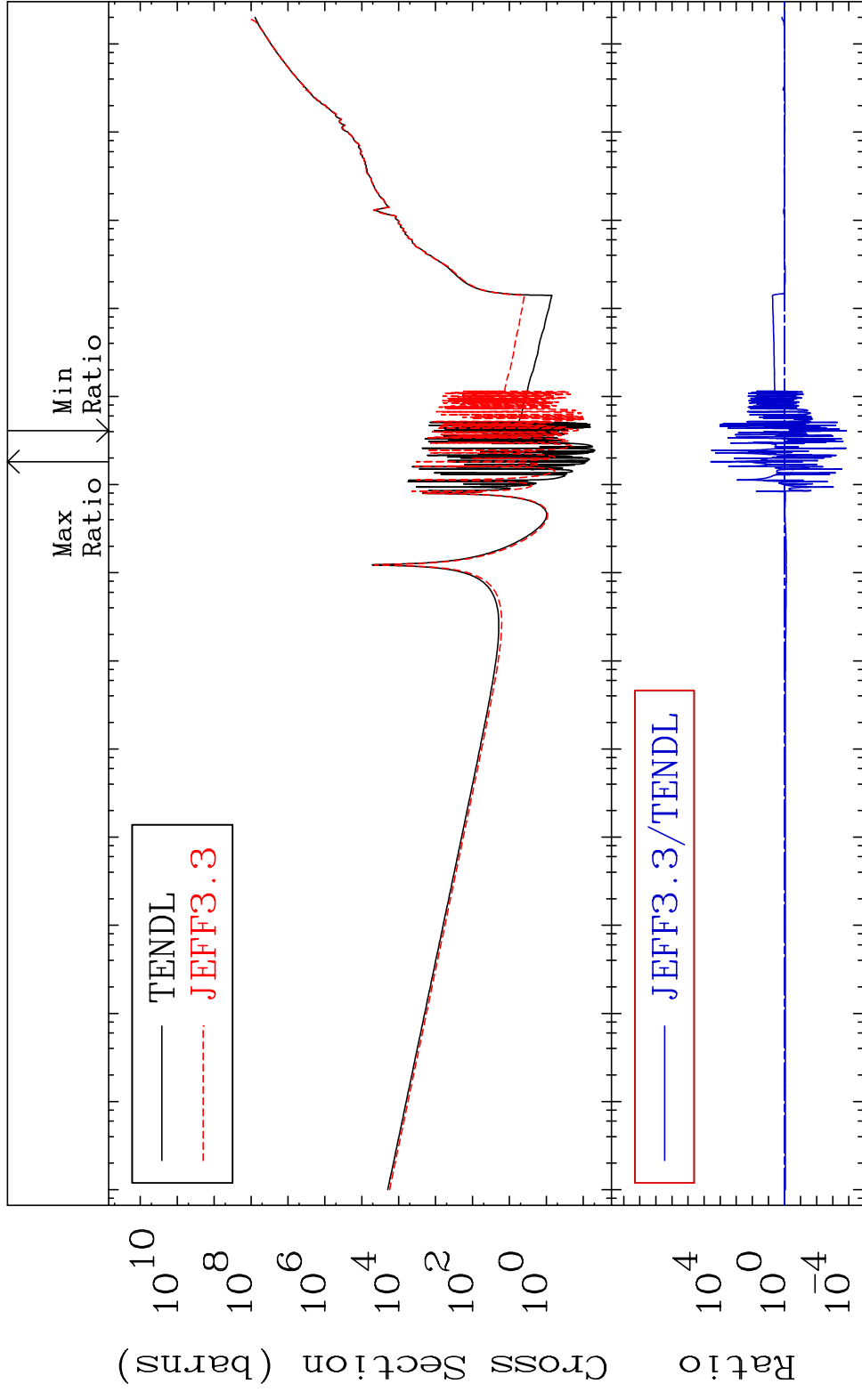
MAT 8128

Kerma elastic  
Cross Section -98.90 To 2346. %

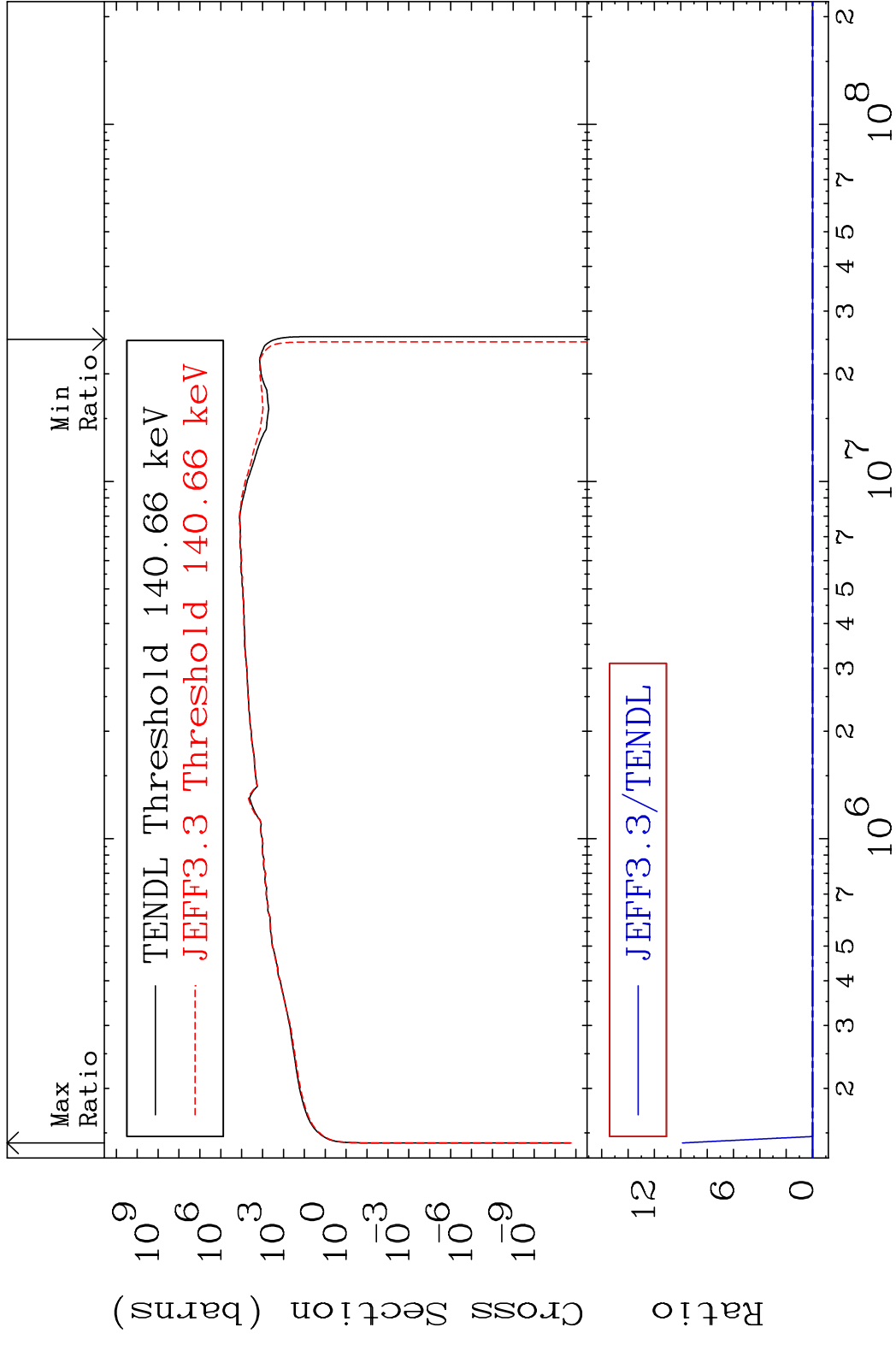
81-Tl-204



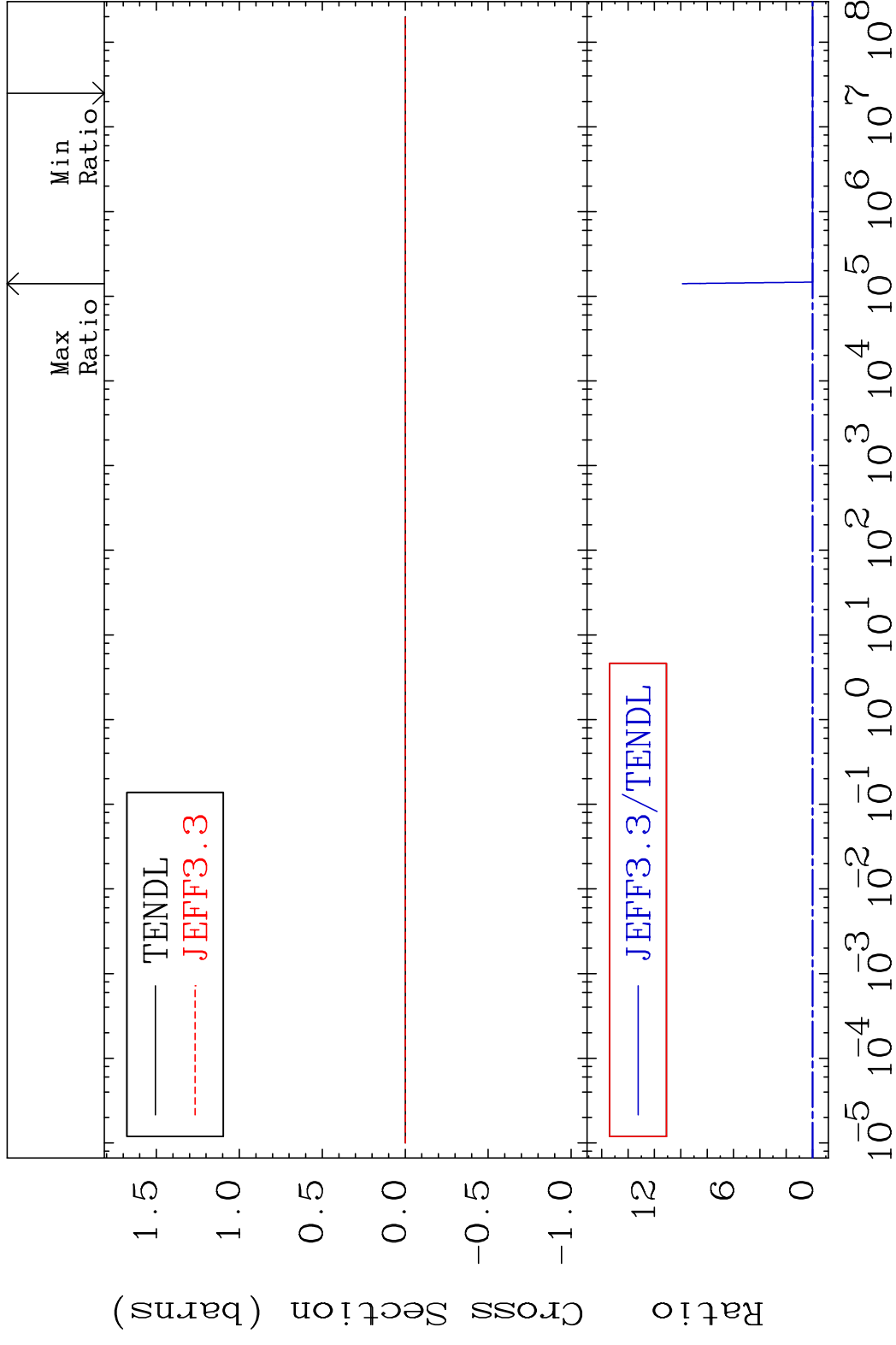
MAT 8128 Kerma non-elastic (all but mt2) 81-Tl-204  
 Cross Section -99.99 To 9999. %

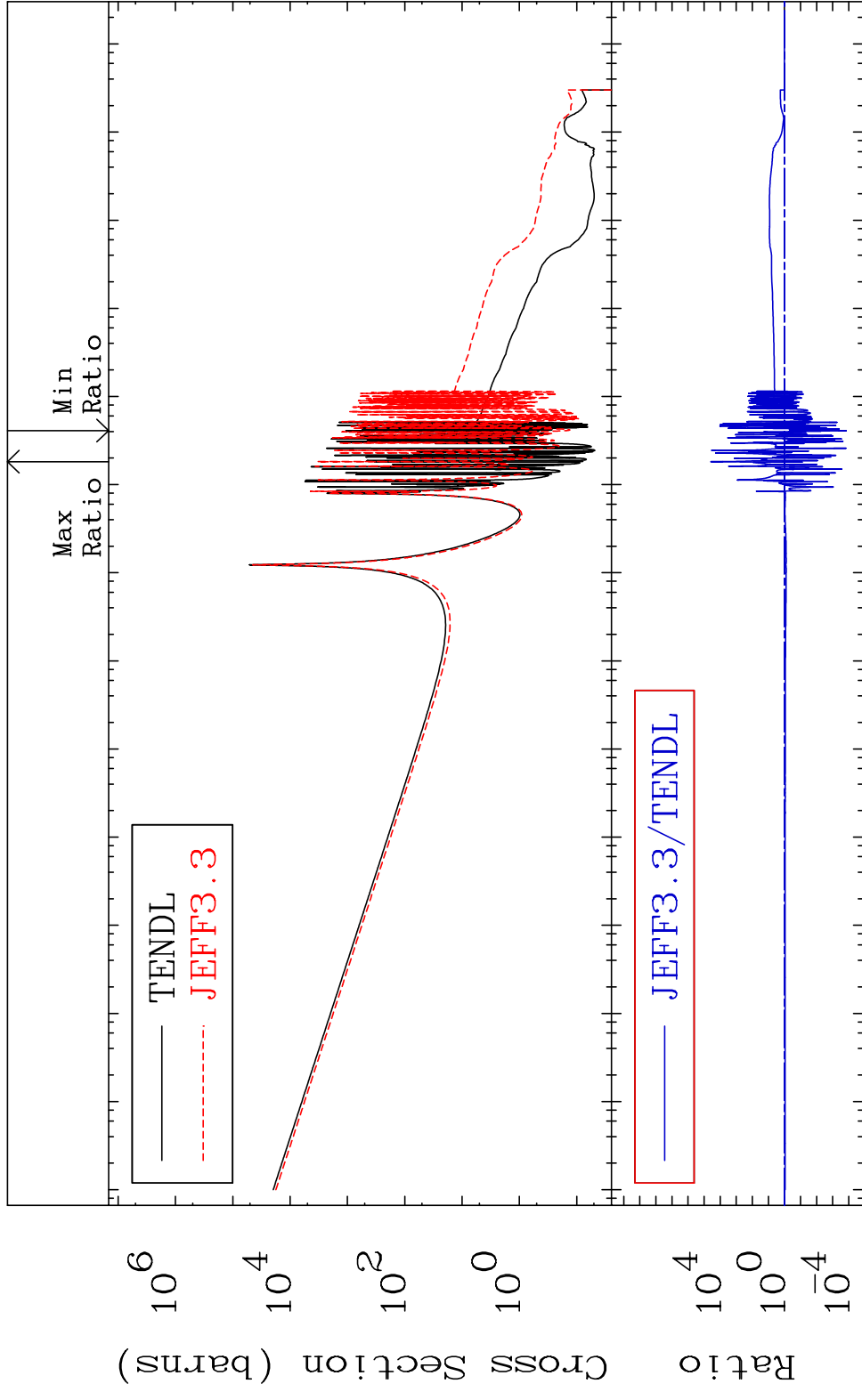


MAT 8128 Kerma inelastic (mt51-91) 81-Tl-204  
 Cross Section -221.3 To 9999. %



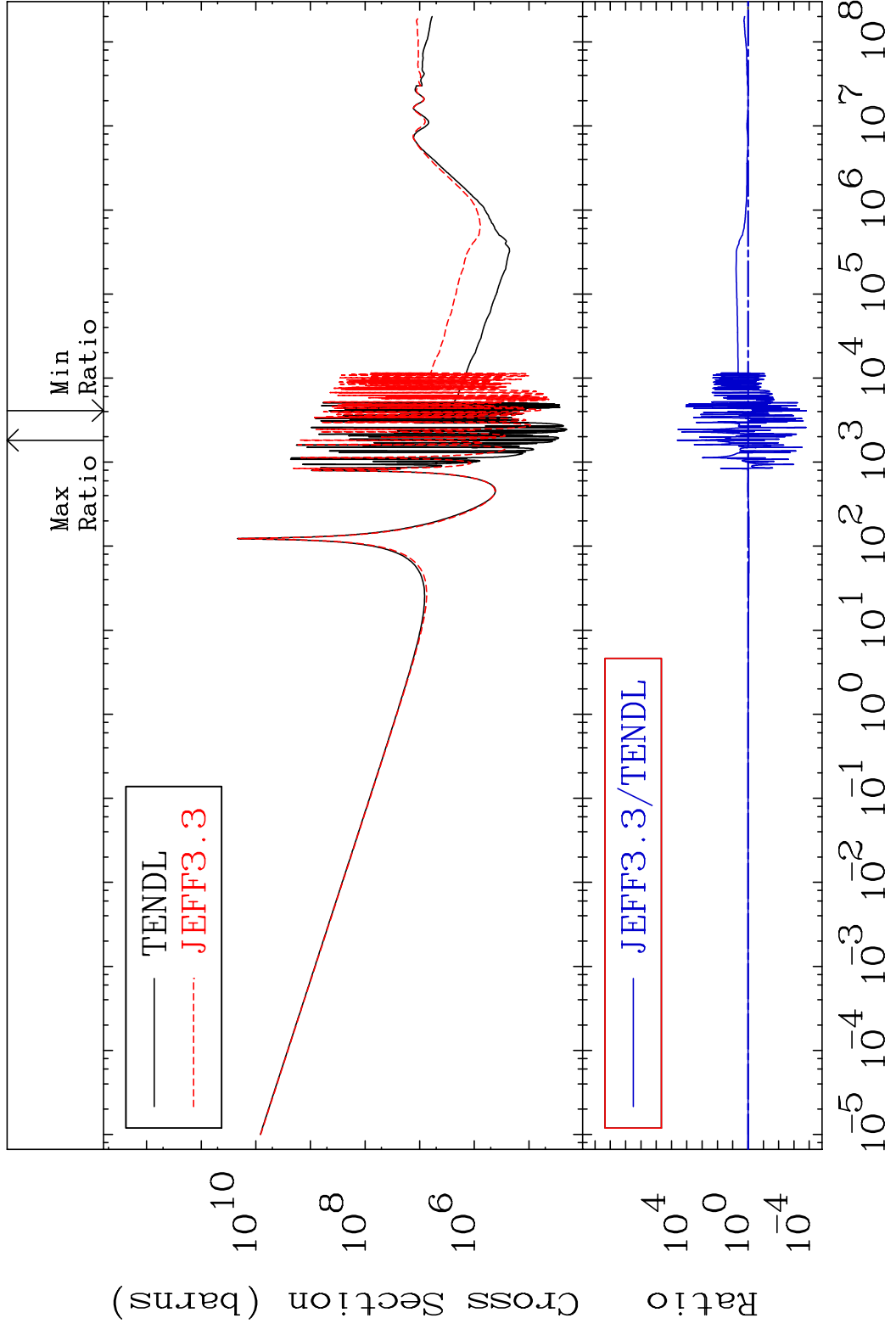
MAT 8128 Kerma fission (mt18 or mt19-20-21-38) 81-Tl-204  
 Cross Section -221.3 To 9999. %



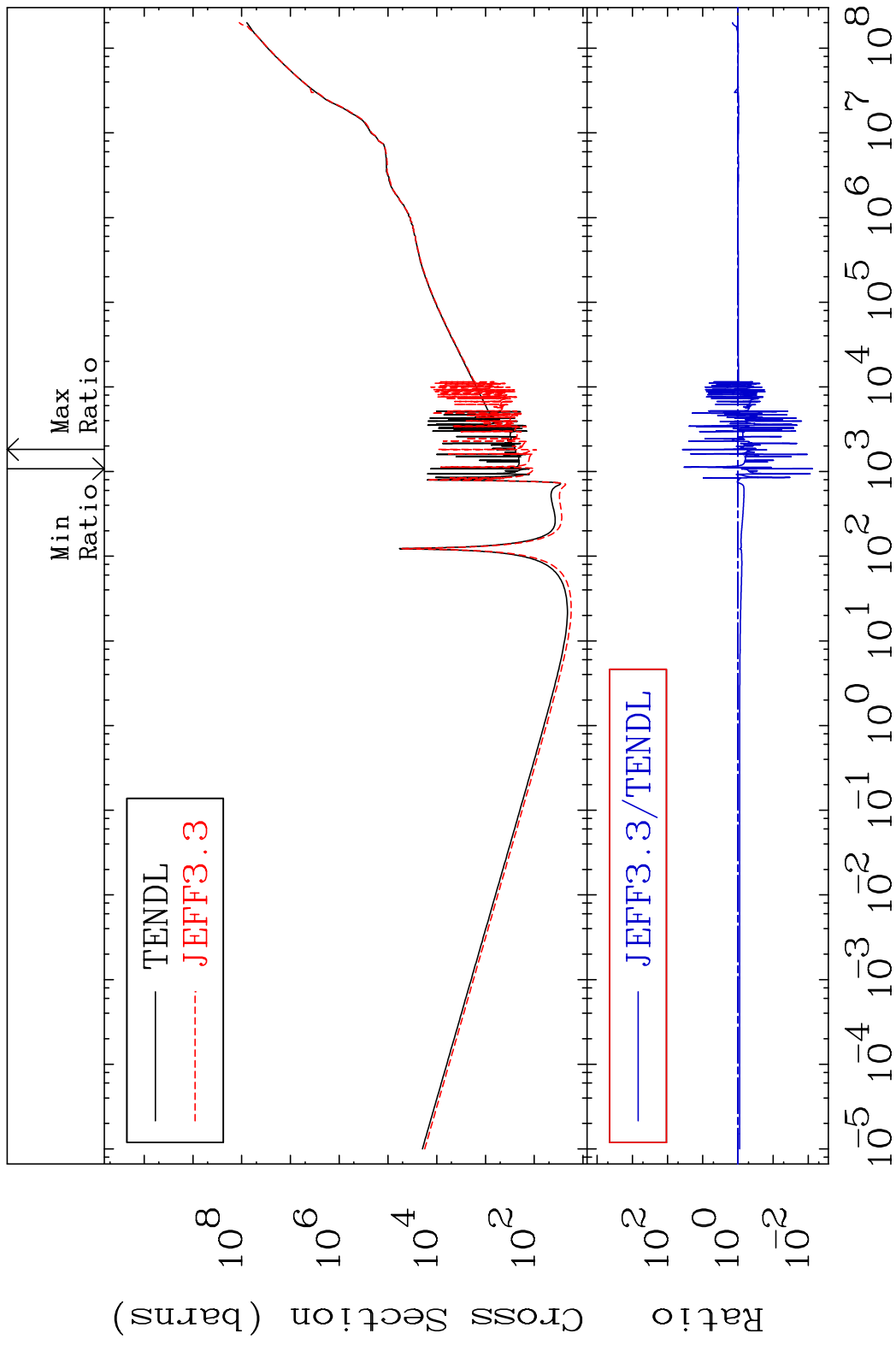


MAT 8128

Total photon (eV-barns) 81-T1-204  
Cross Section -99.98 To 9999. %



MAT 8128 Total kinematic kerma (high limit) 81-Tl-204  
Cross Section -99.24 To 3694. %

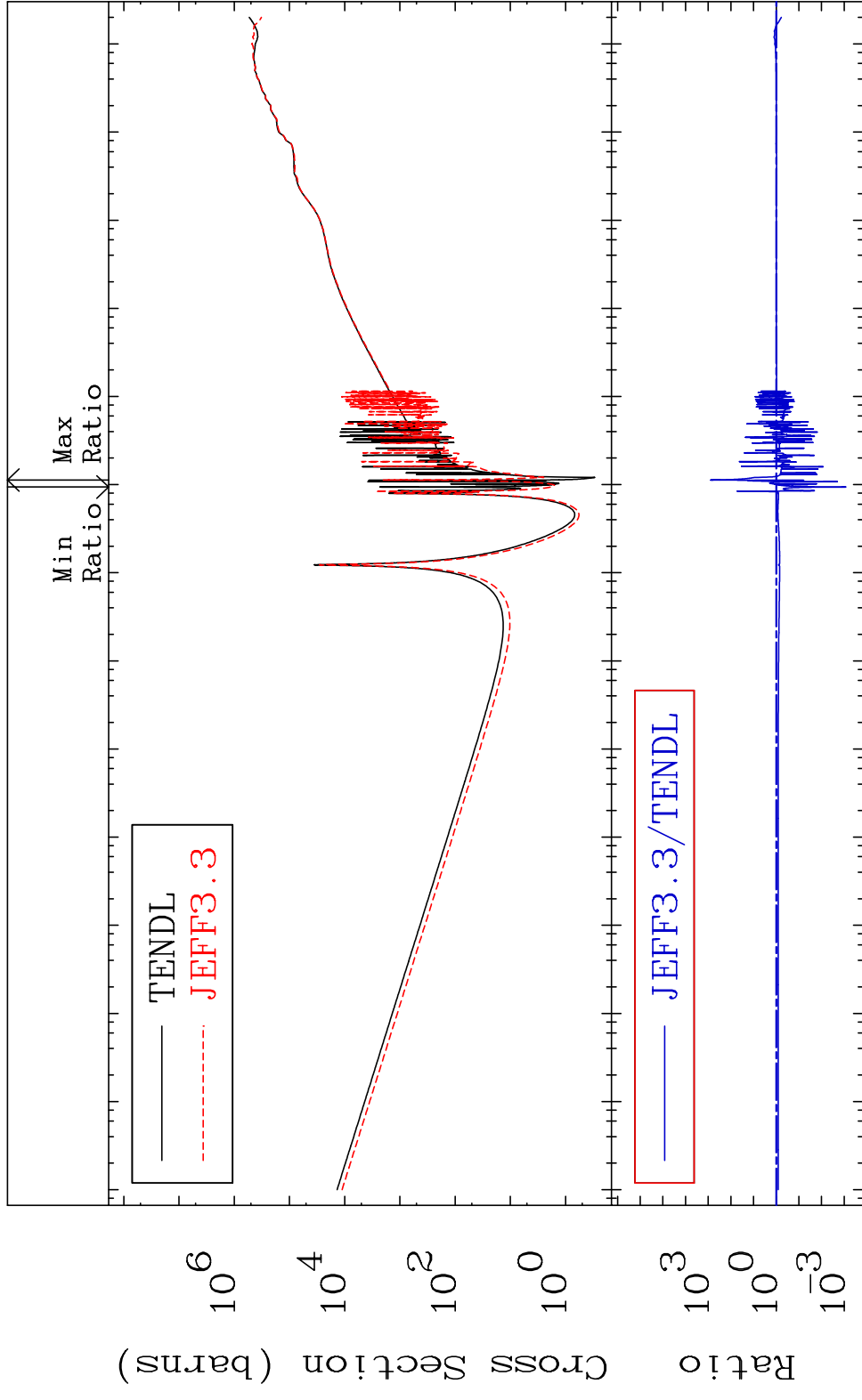


MAT 8128

Dpa total (eV-barns)

81-T1-204

Cross Section -99.92 To 9999. %



71

Incident Energy (eV)

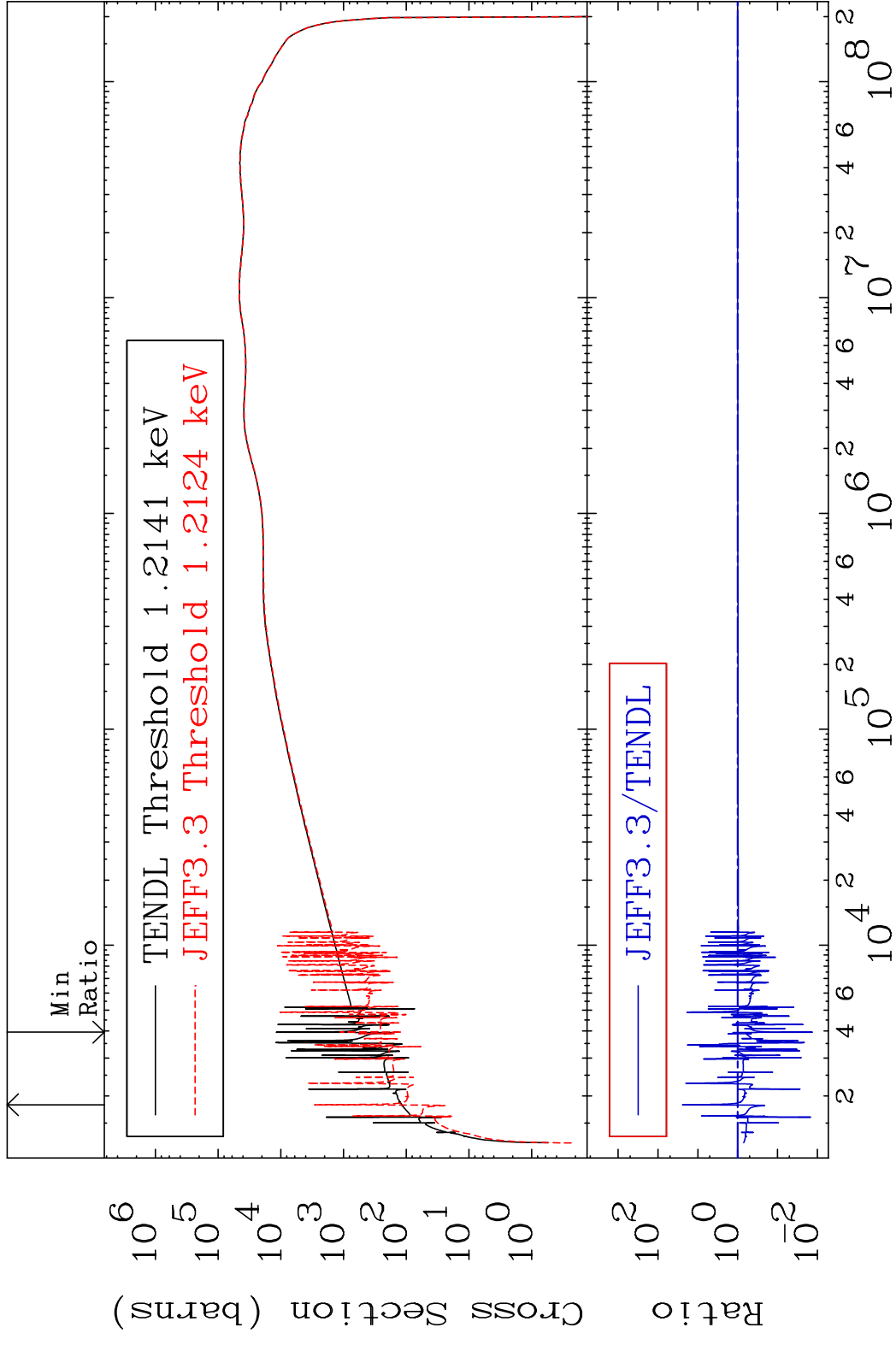
81-T1-204

MAT 8128

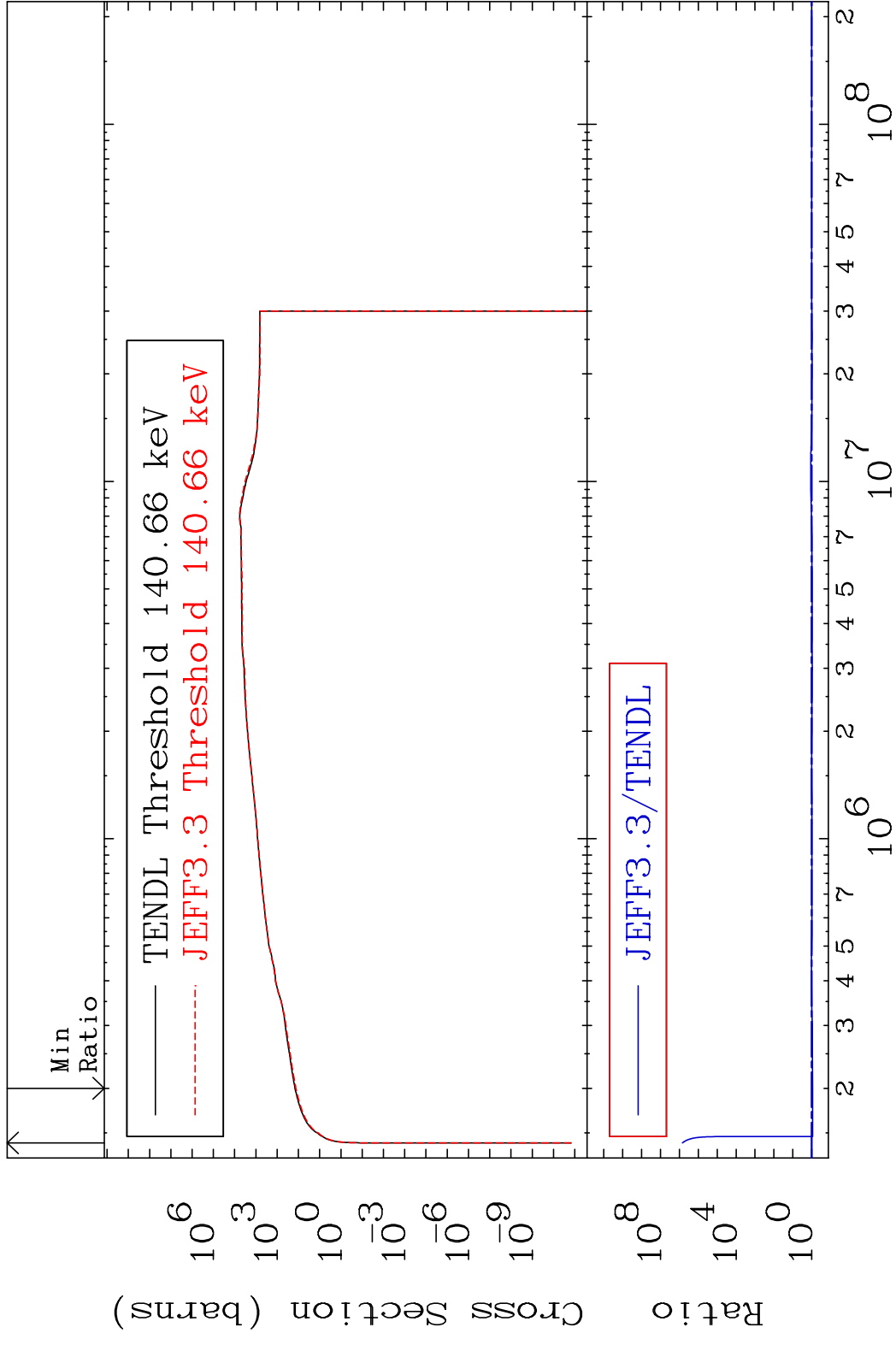
Dpa elastic (mt2)

81-Tl-204

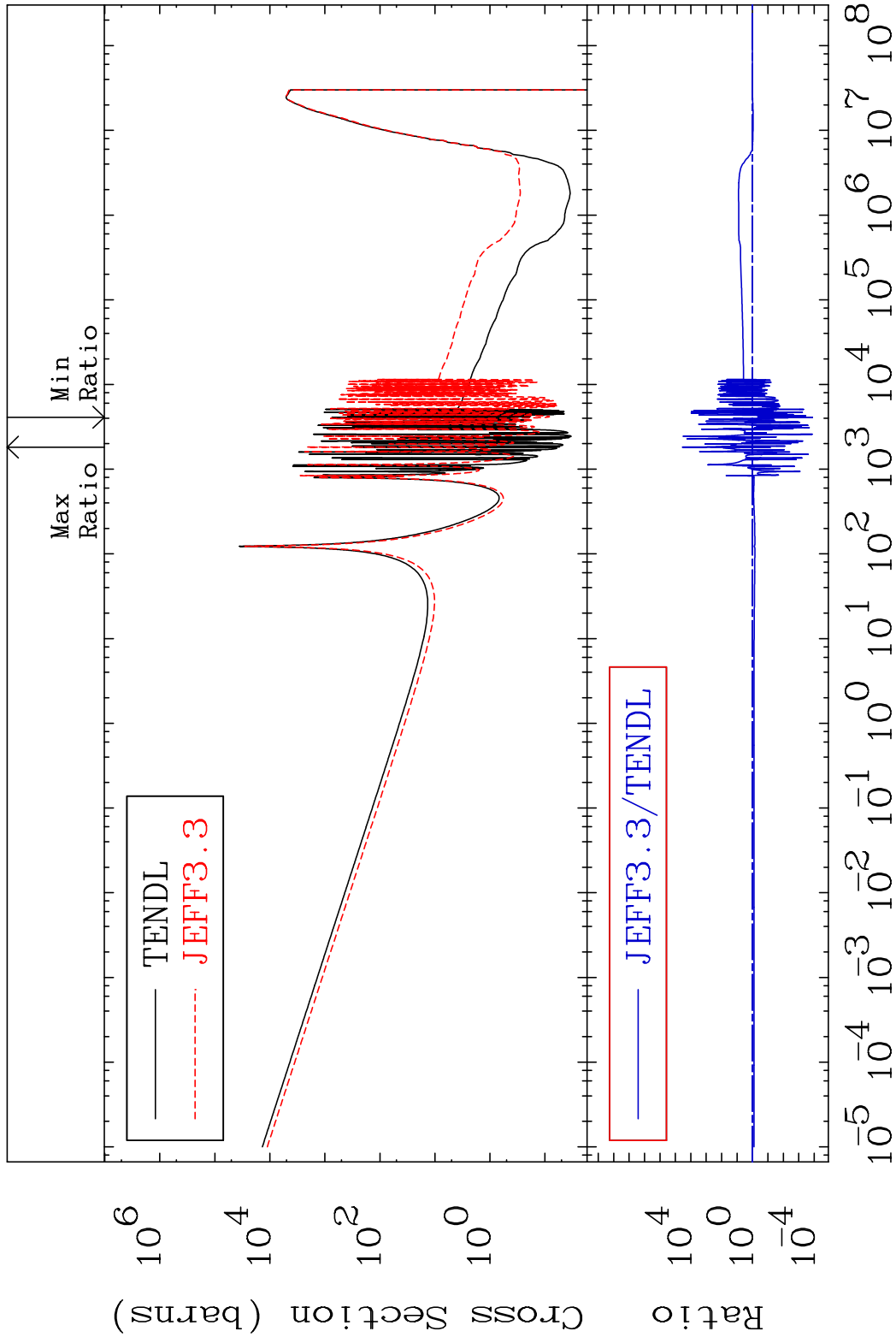
Cross Section -98.69 To 2345. %



MAT 8128      Dpa inelastic (mt51-91)      81-Tl-204  
 Cross Section    -9.477 To 9999. %



MAT 8128 Dpa disappearance (mt102 -120) 81-T1-204  
 Cross Section -99.99 To 9999. %



MAT 8128 Fission:0-??-Nat 81-Tl-204  
 Radionuclide Production Cross Section 0.000 %

