

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

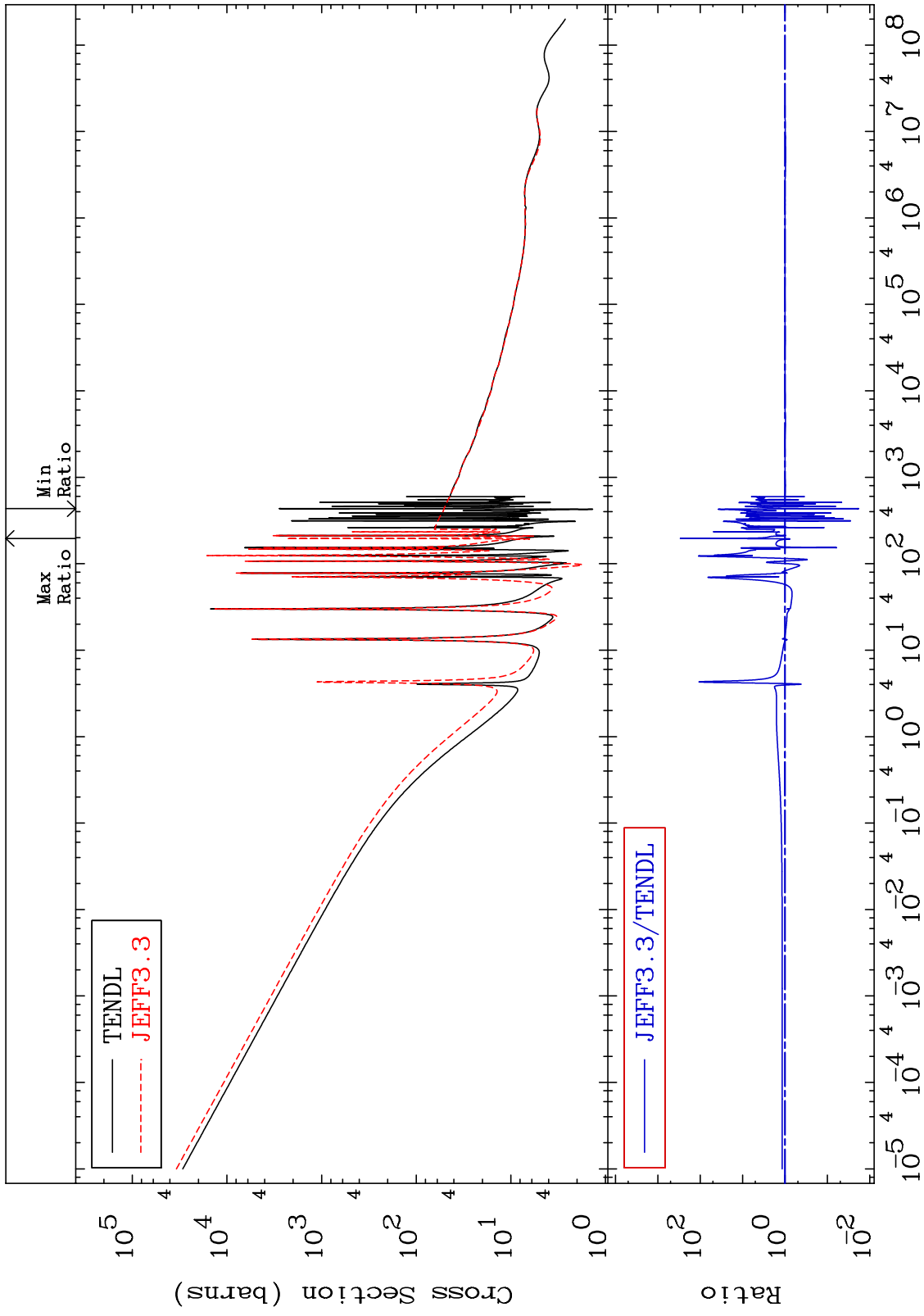
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 7225

Total
Cross Section

72-Hf-174
-98.19 To 9999. %



1

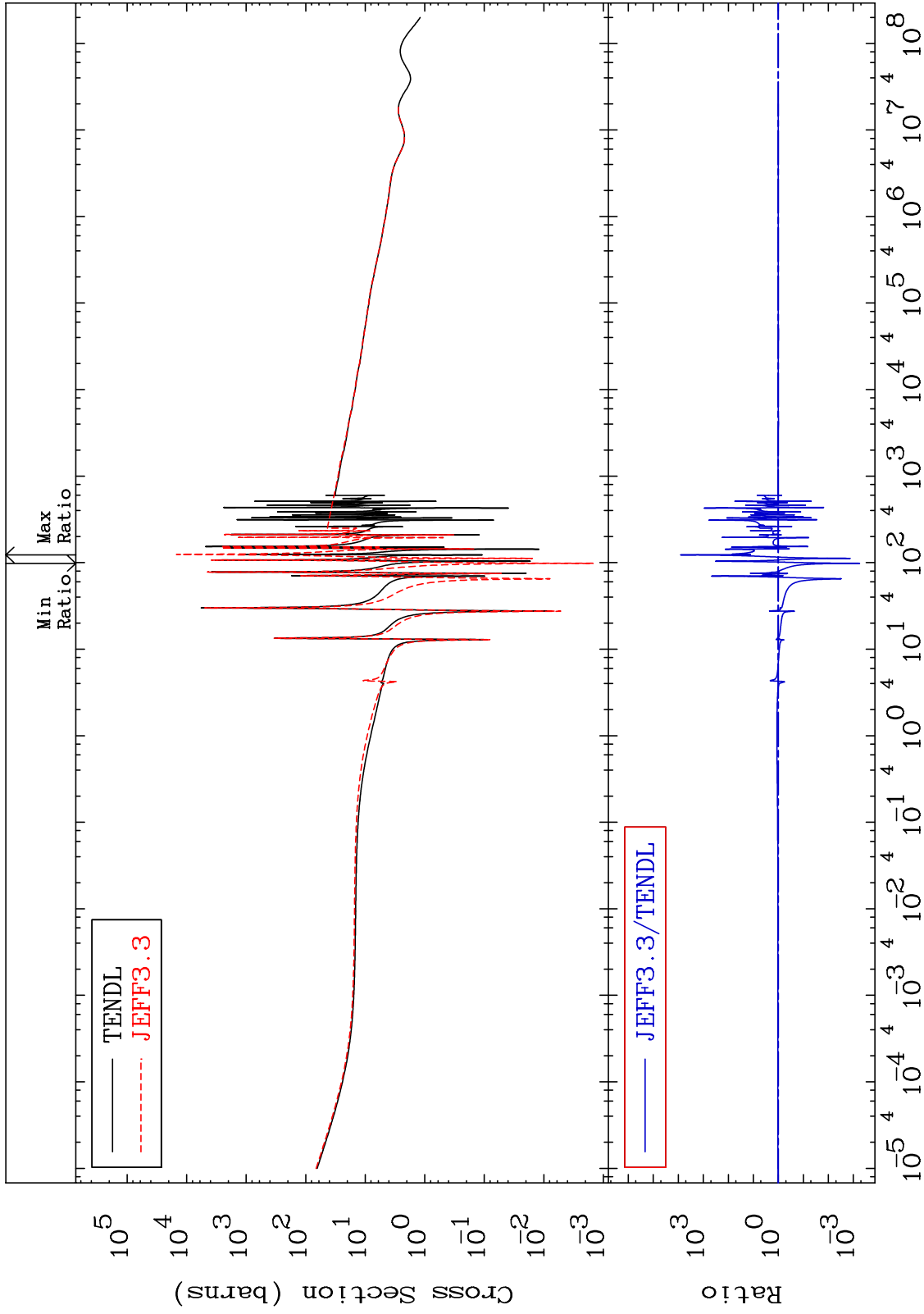
Incident Energy (eV)

72-Hf-174

MAT 7225

Elastic
Cross Section

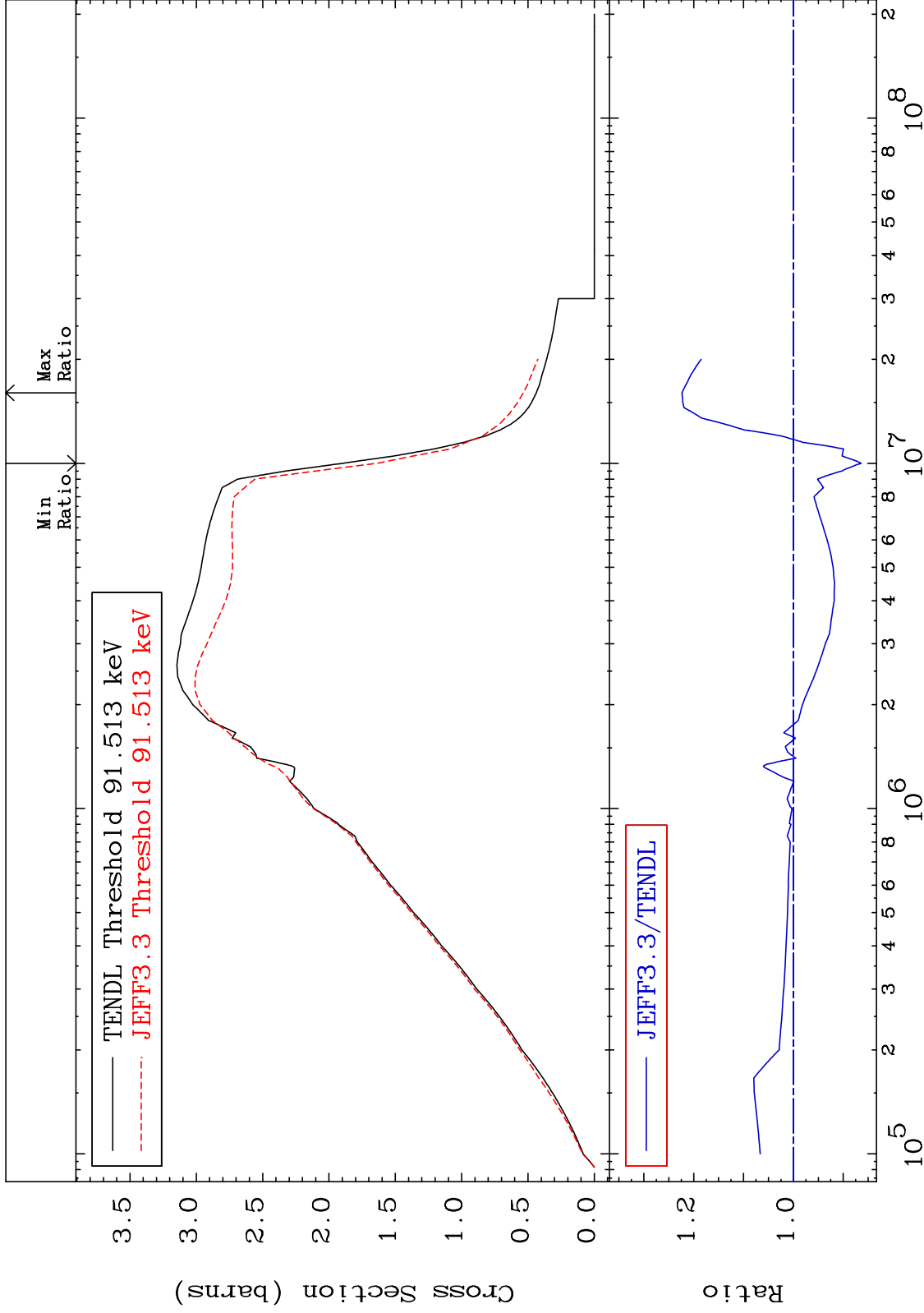
72-Hf-174
-99.94 To 9999. %



MAT 7225

Inelastic
Cross Section

72-Hf-174
-13.60 To 22.35 %

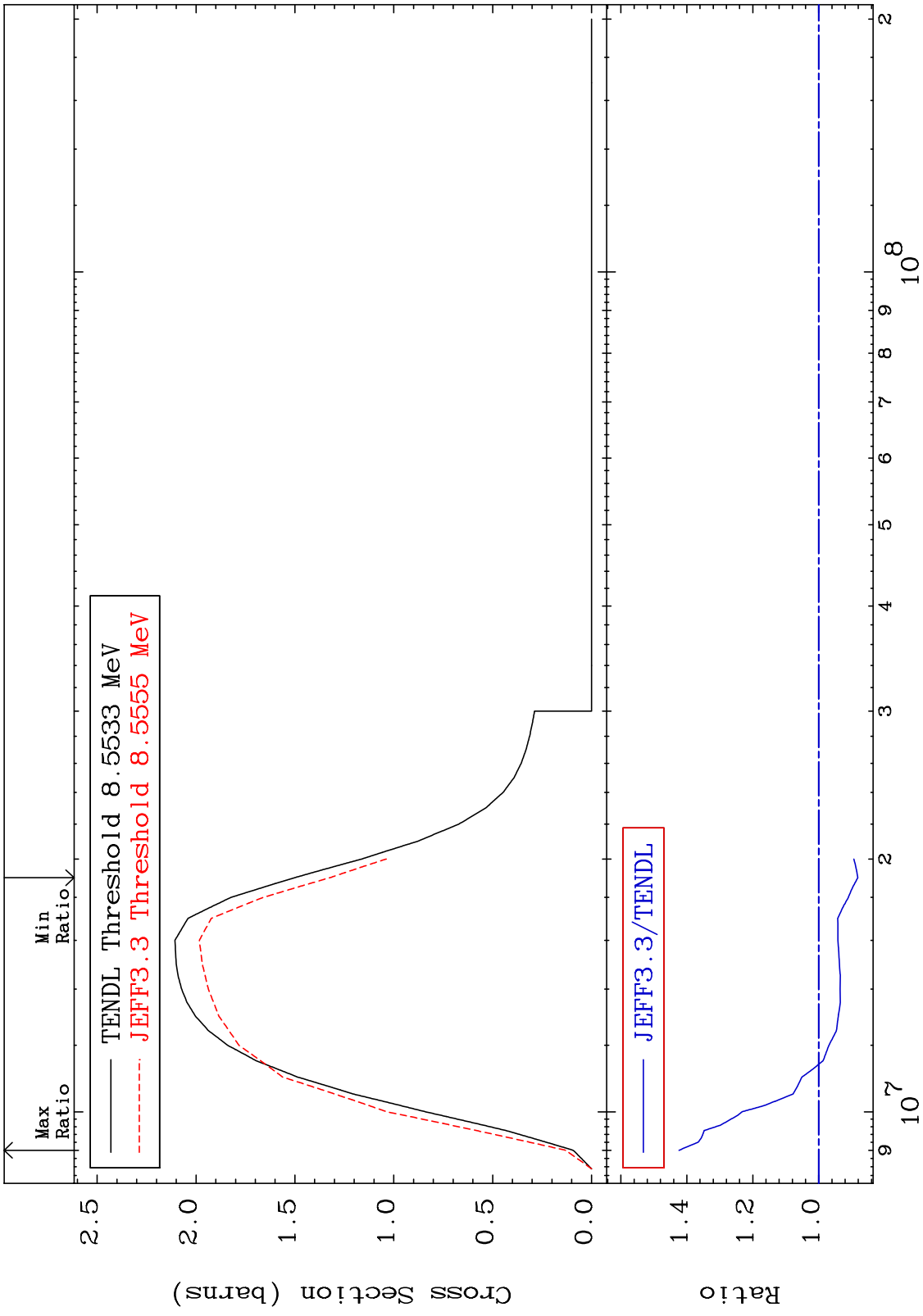


3

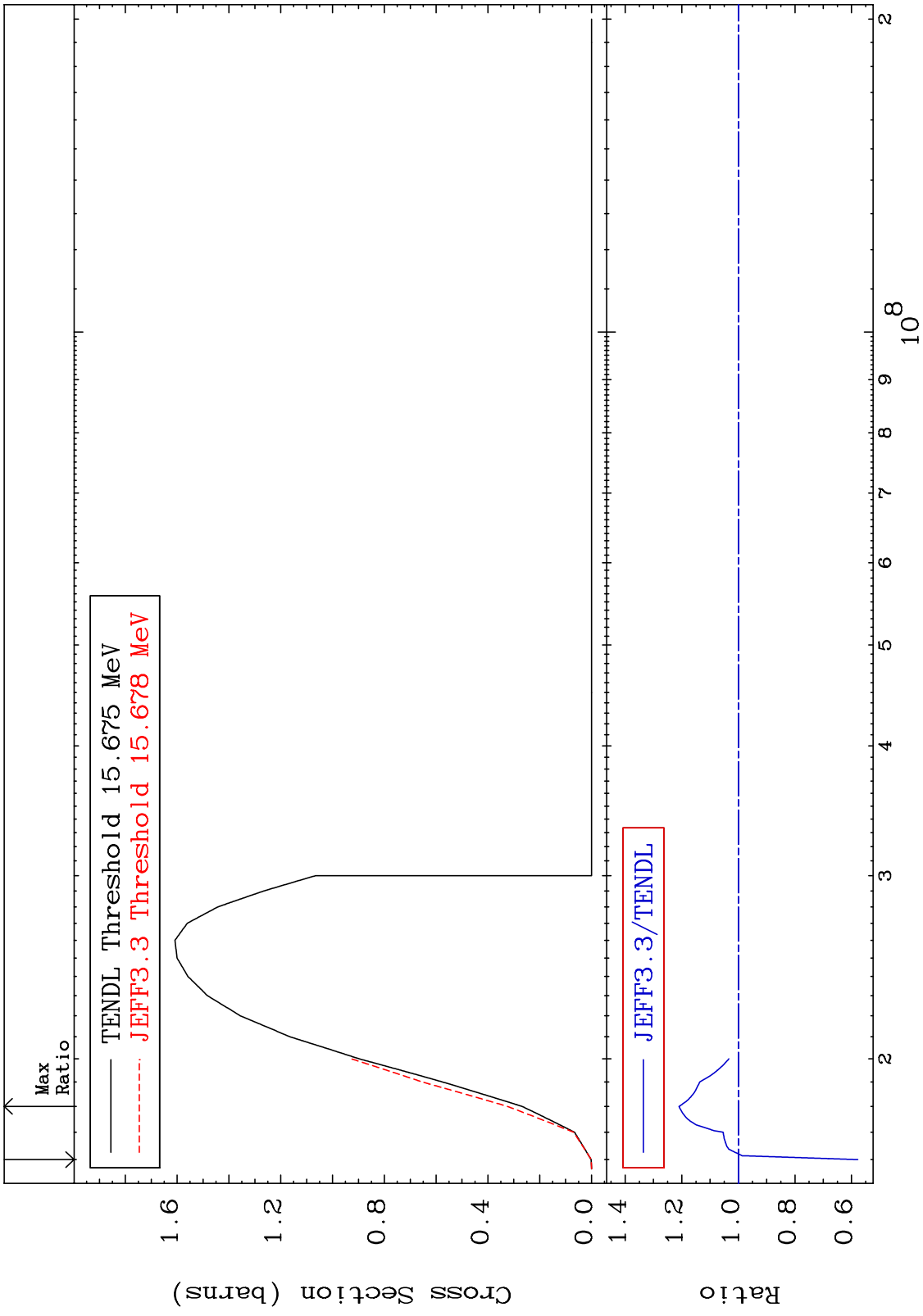
Incident Energy (eV)

72-Hf-174

MAT 7225 (n,2n) Cross Section 72-Hf-174 -11.87 To 42.36 %



MAT 7225 (n,3n) Cross Section 72-Hf-174 -42.23 To 20.97 %



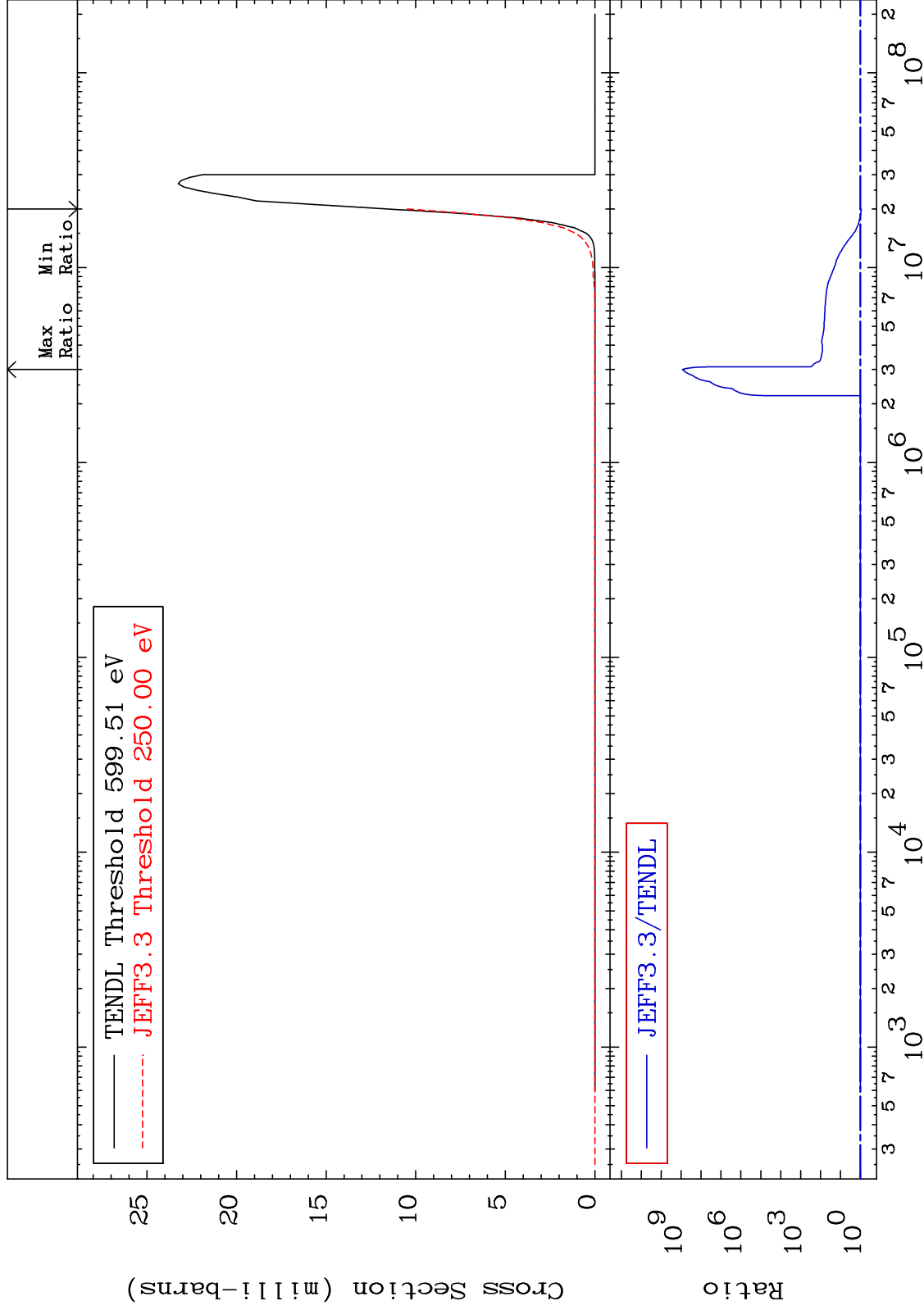
MAT 7225

(n, n') α

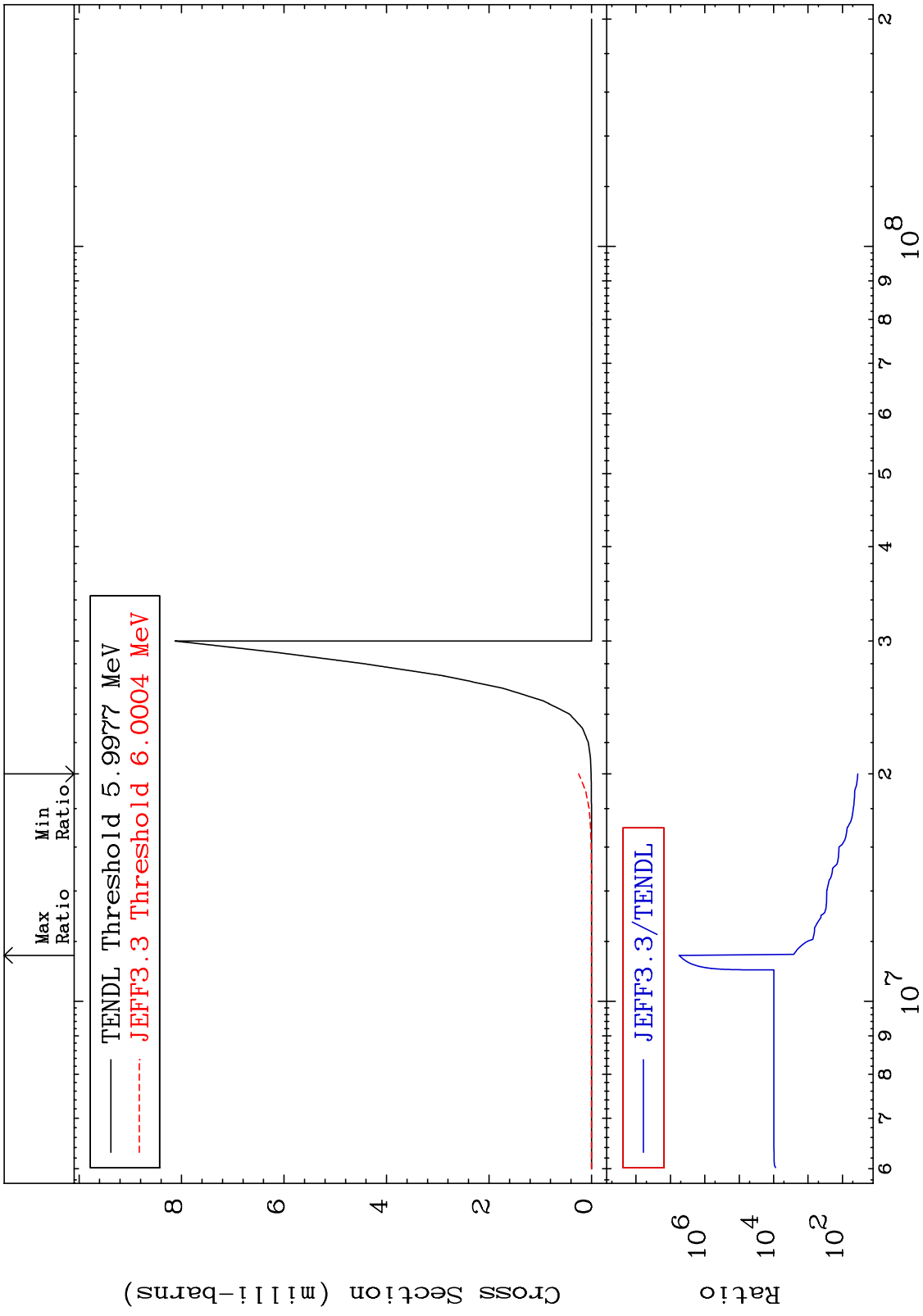
72-Hf-174

Cross Section

-9.322 To 9999. %

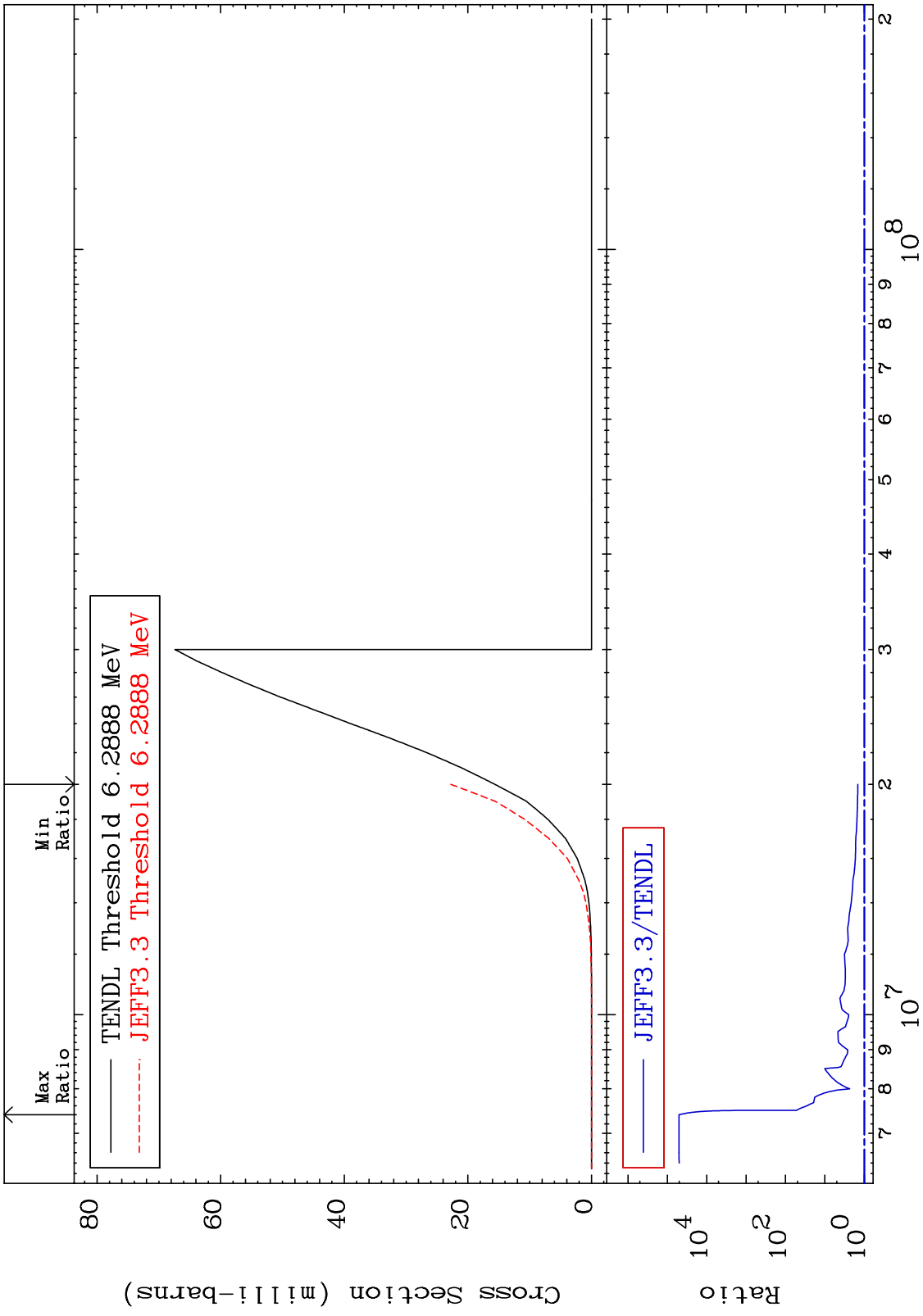


MAT 7225 $(n, 2n) \alpha$ 72-Hf-174
 Cross Section 3475. To 9999. %

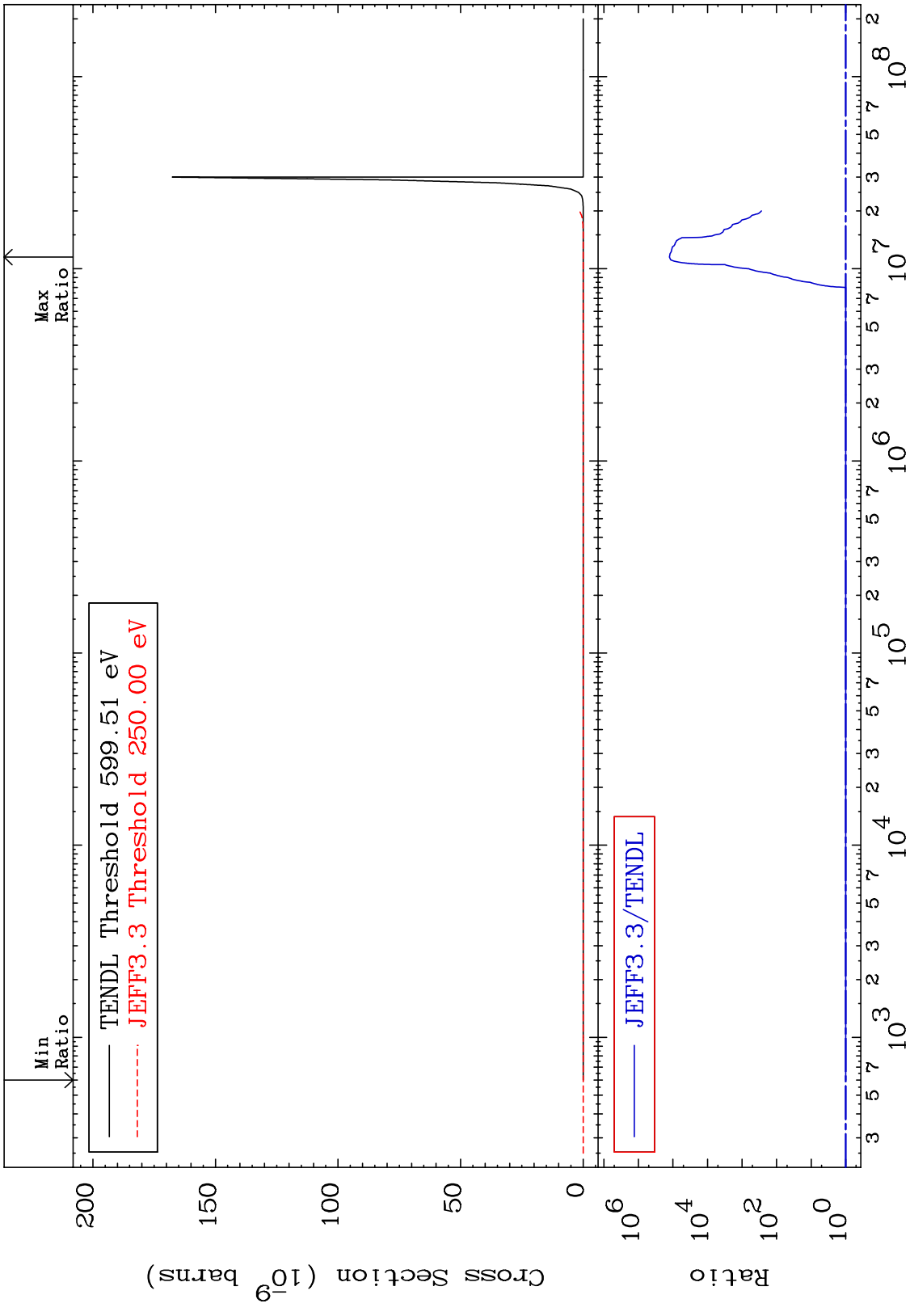


7 72-Hf-174

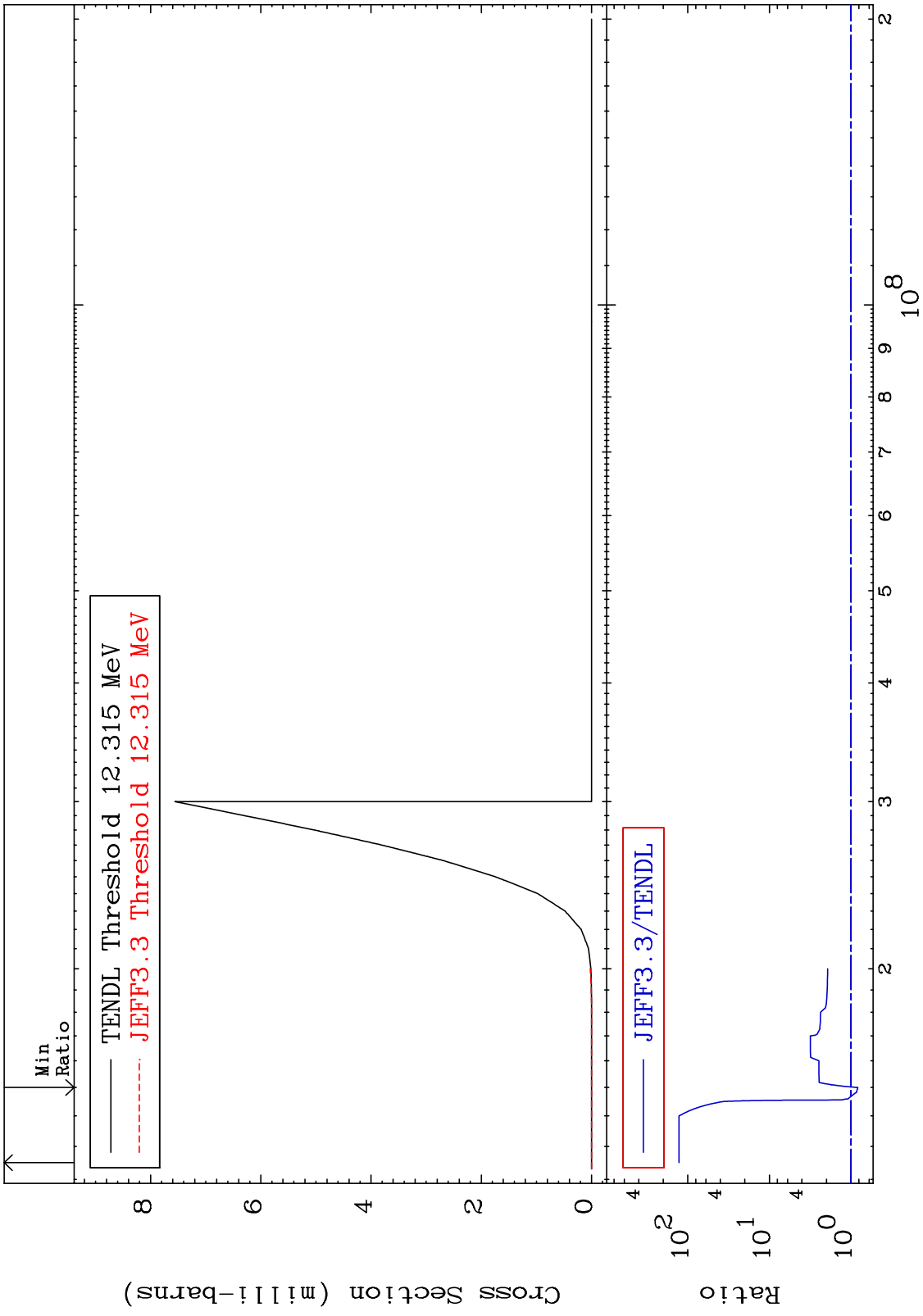
MAT 7225 (n, n') p 72-Hf-174
 Cross Section 45.45 To 9999. %



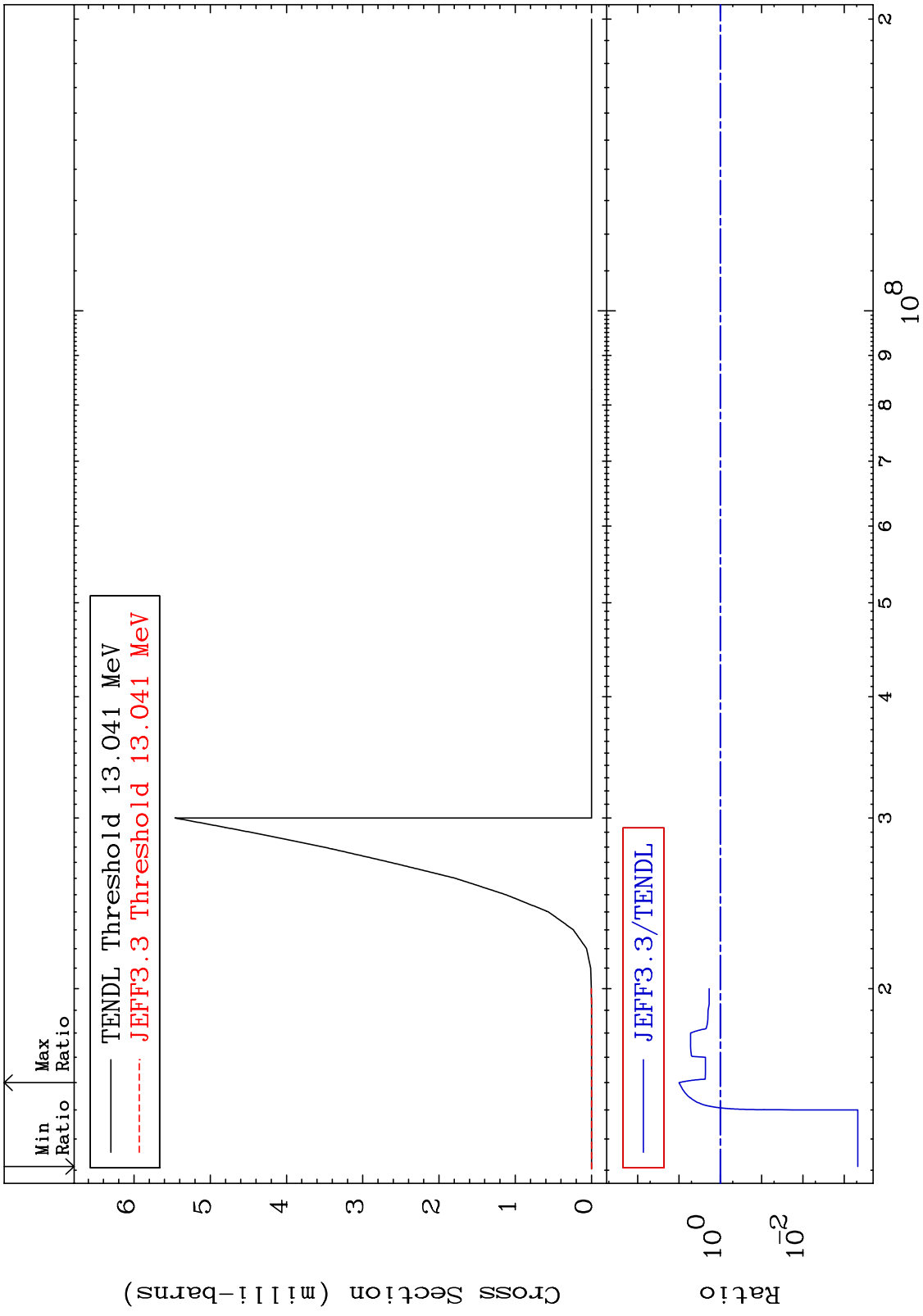
MAT 7225 (n,n') 2α Cross Section 72-Hf-174 To 9999. %

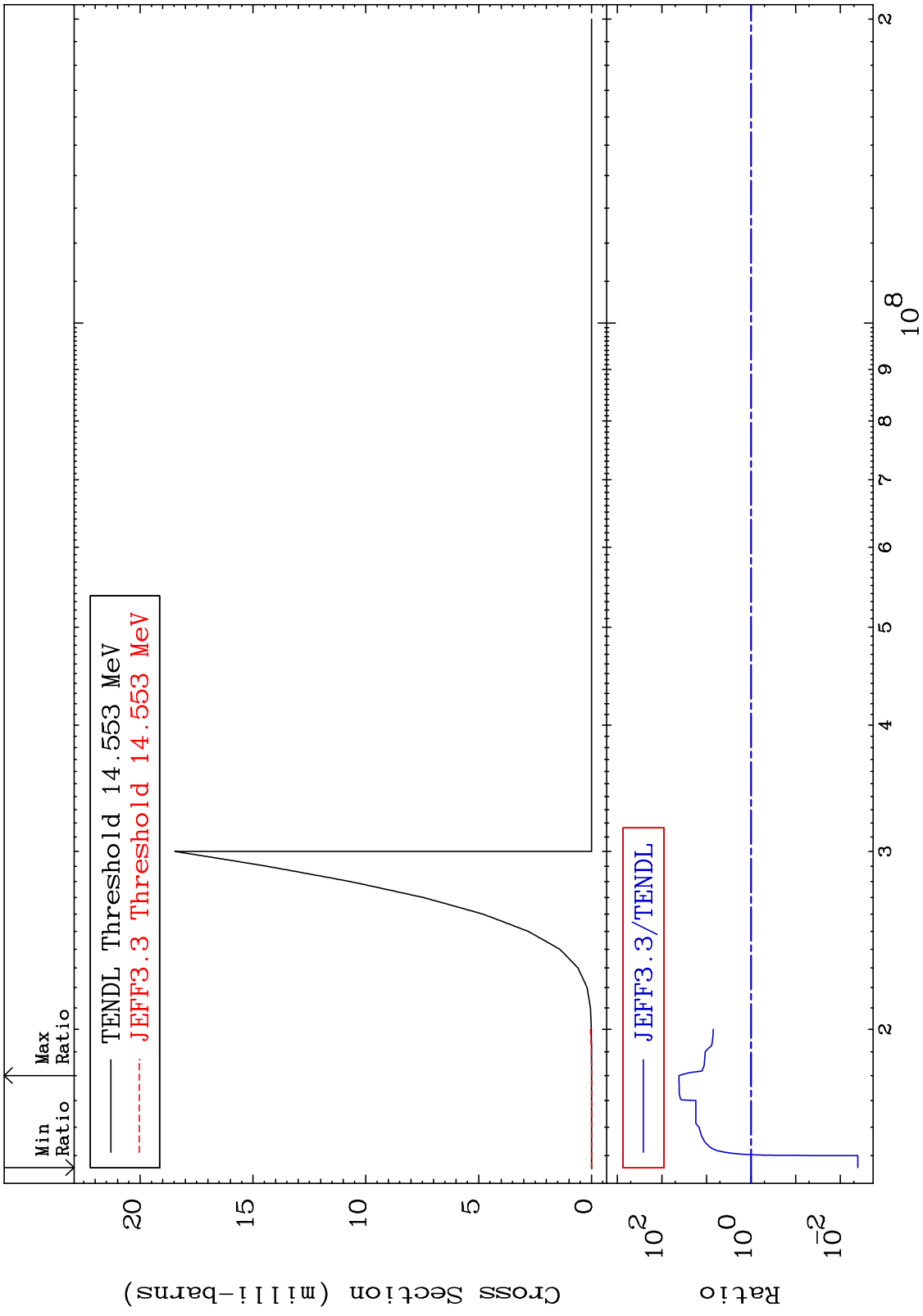


MAT 7225 (n,n') d 72-Hf-174
 Cross Section -17.37 To 9999. %

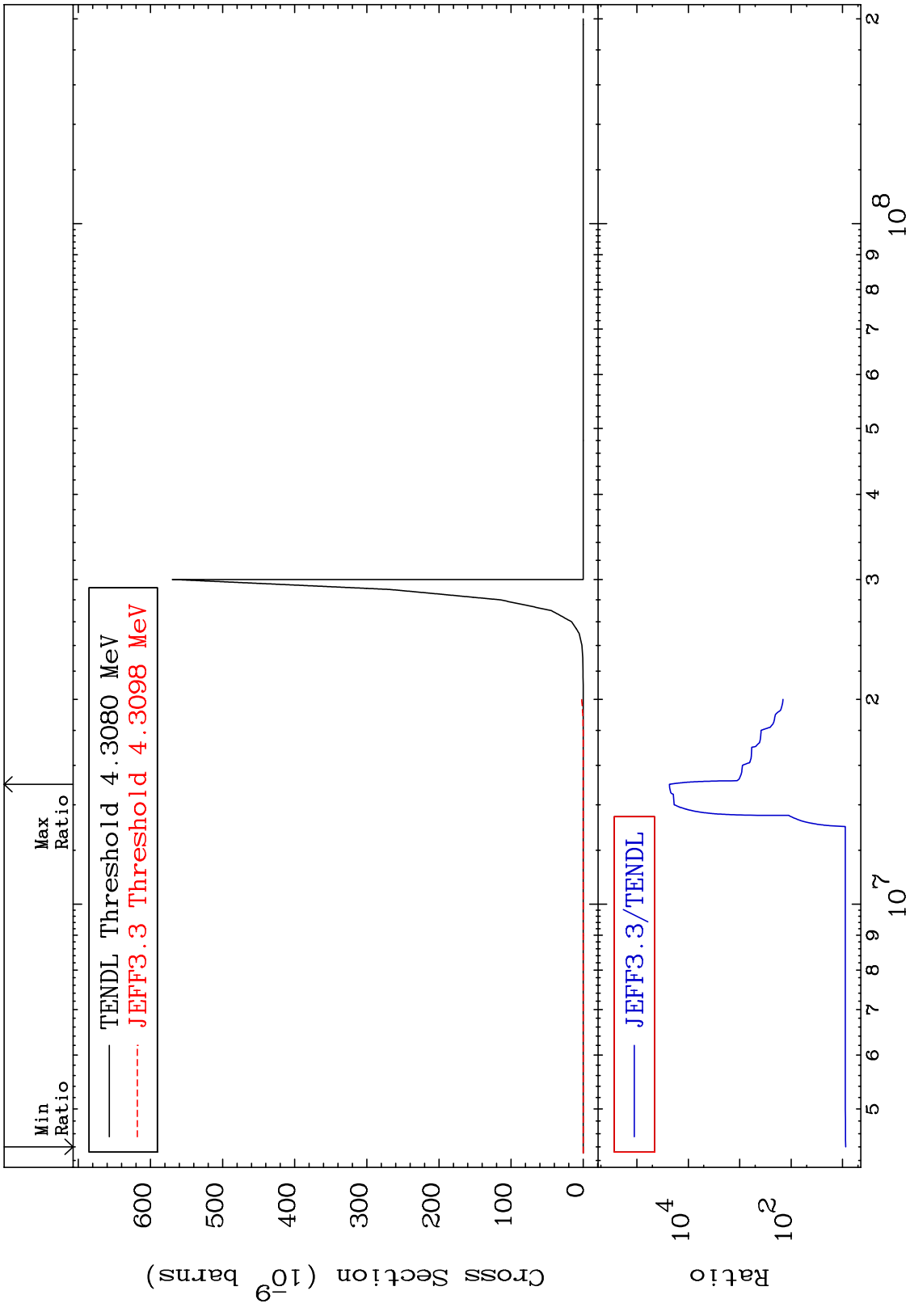


MAT 7225 (n,n') t 72-Hf-174
 Cross Section -99.95 To 894.0 %

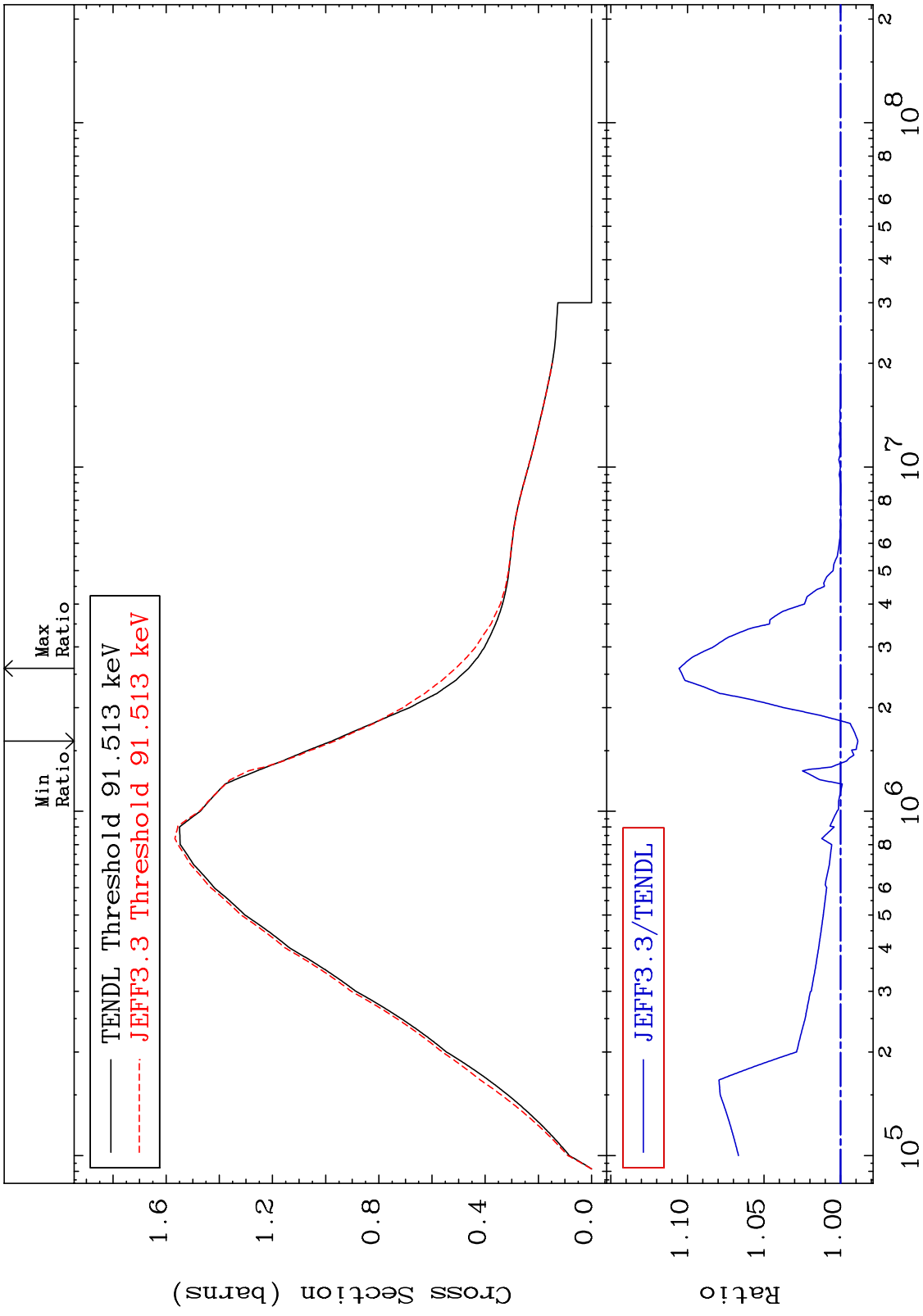




MAT 7225 (n,n') p α 72-Hf-174
 Cross Section 766.0 To 9999. %

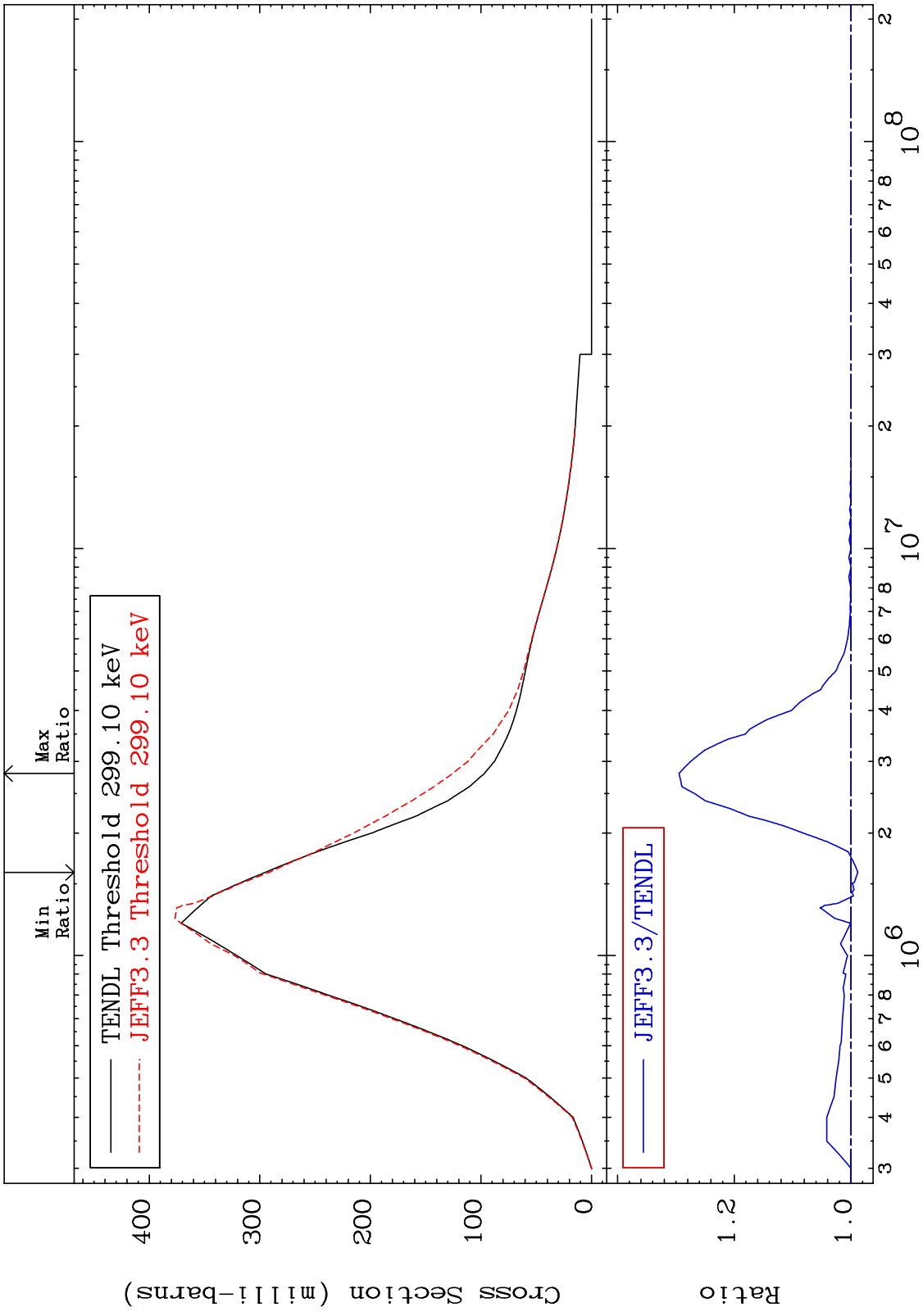


MAT 7225 MT= 51 (n,n') Level Cross Section -1.124 To 10.55 % 72-Hf-174

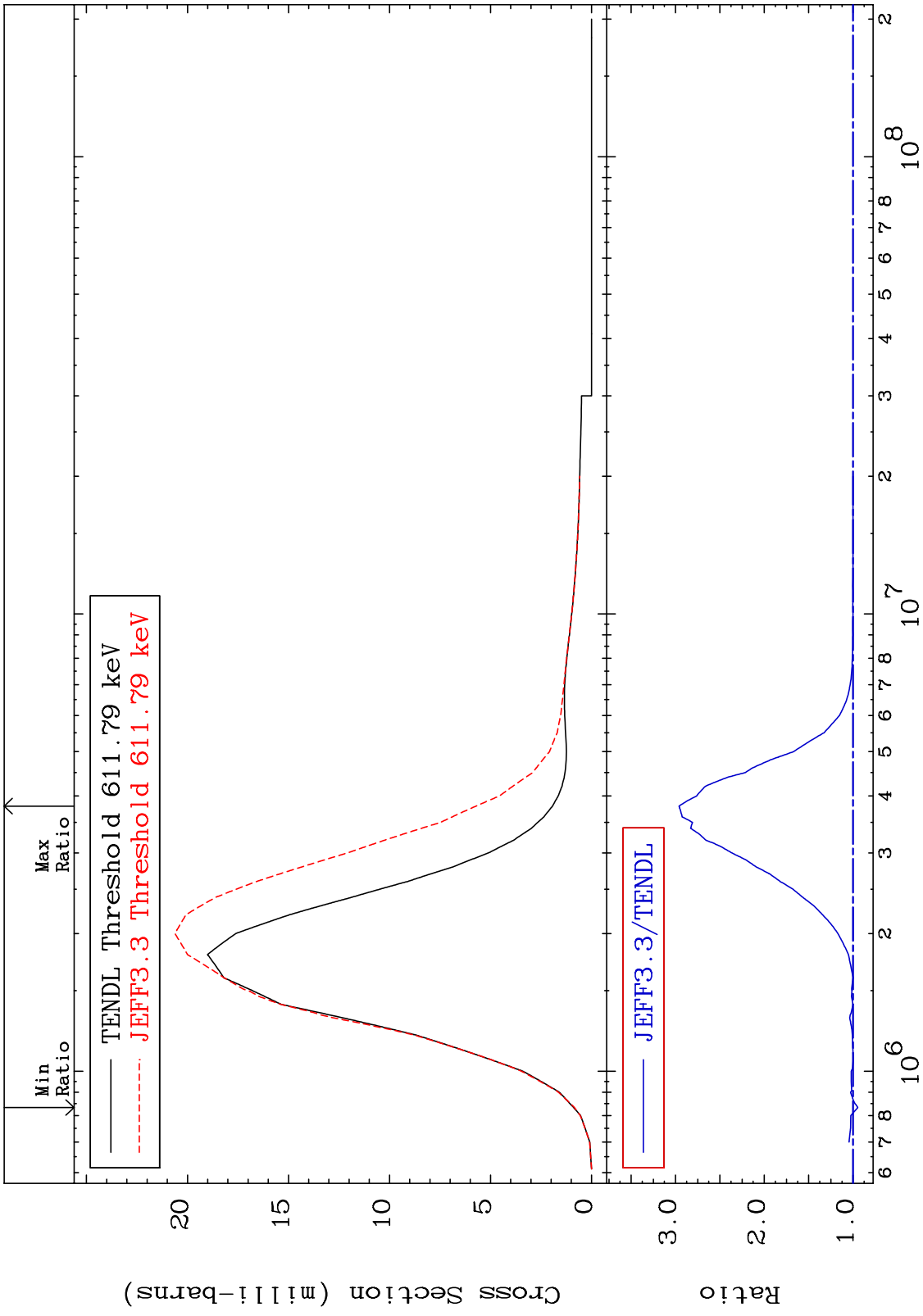


14 Incident Energy (eV) 72-Hf-174

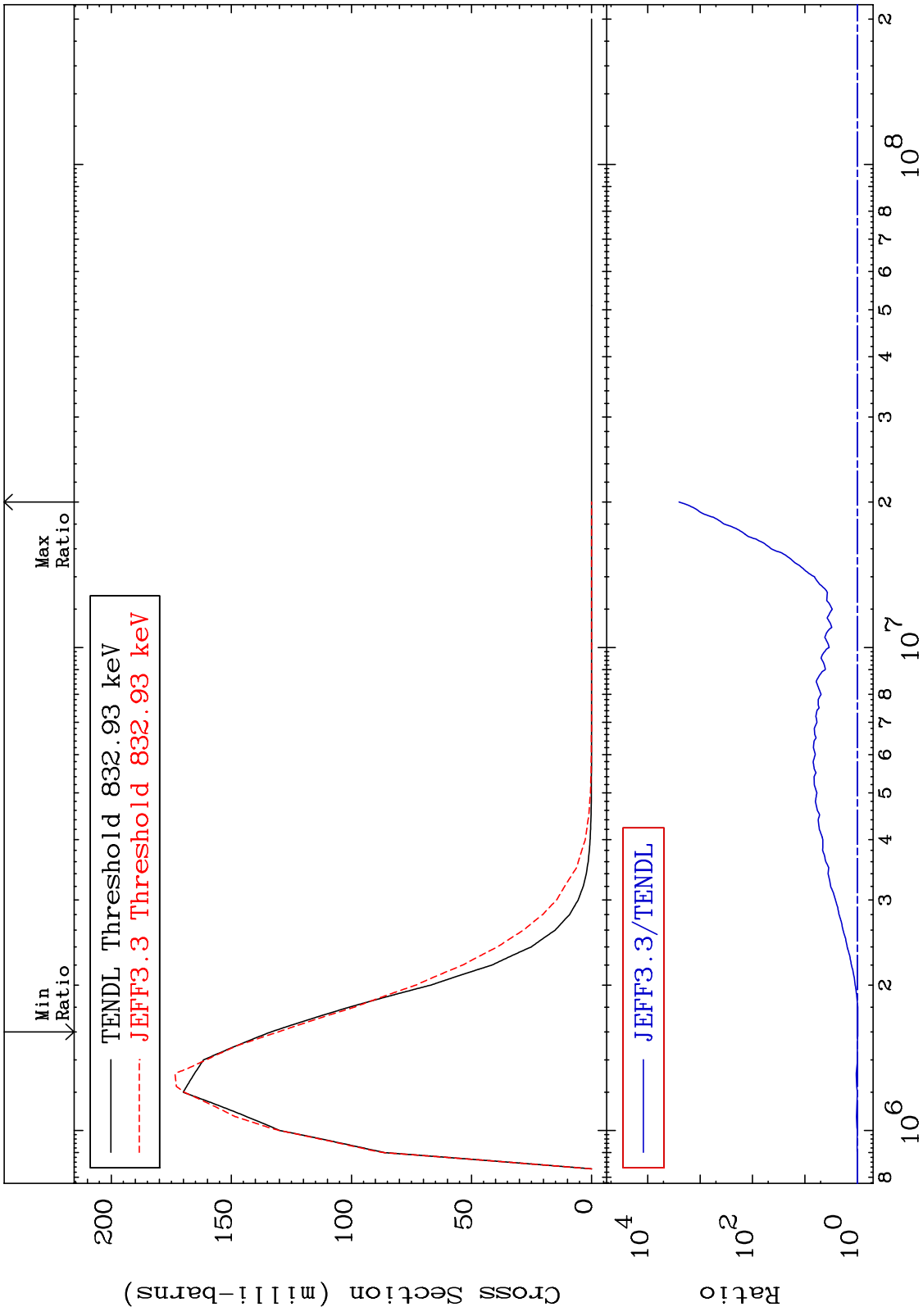
MAT 7225 MT= 52 (n,n') Level Cross Section -1.172 To 29.47 % 72-Hf-174



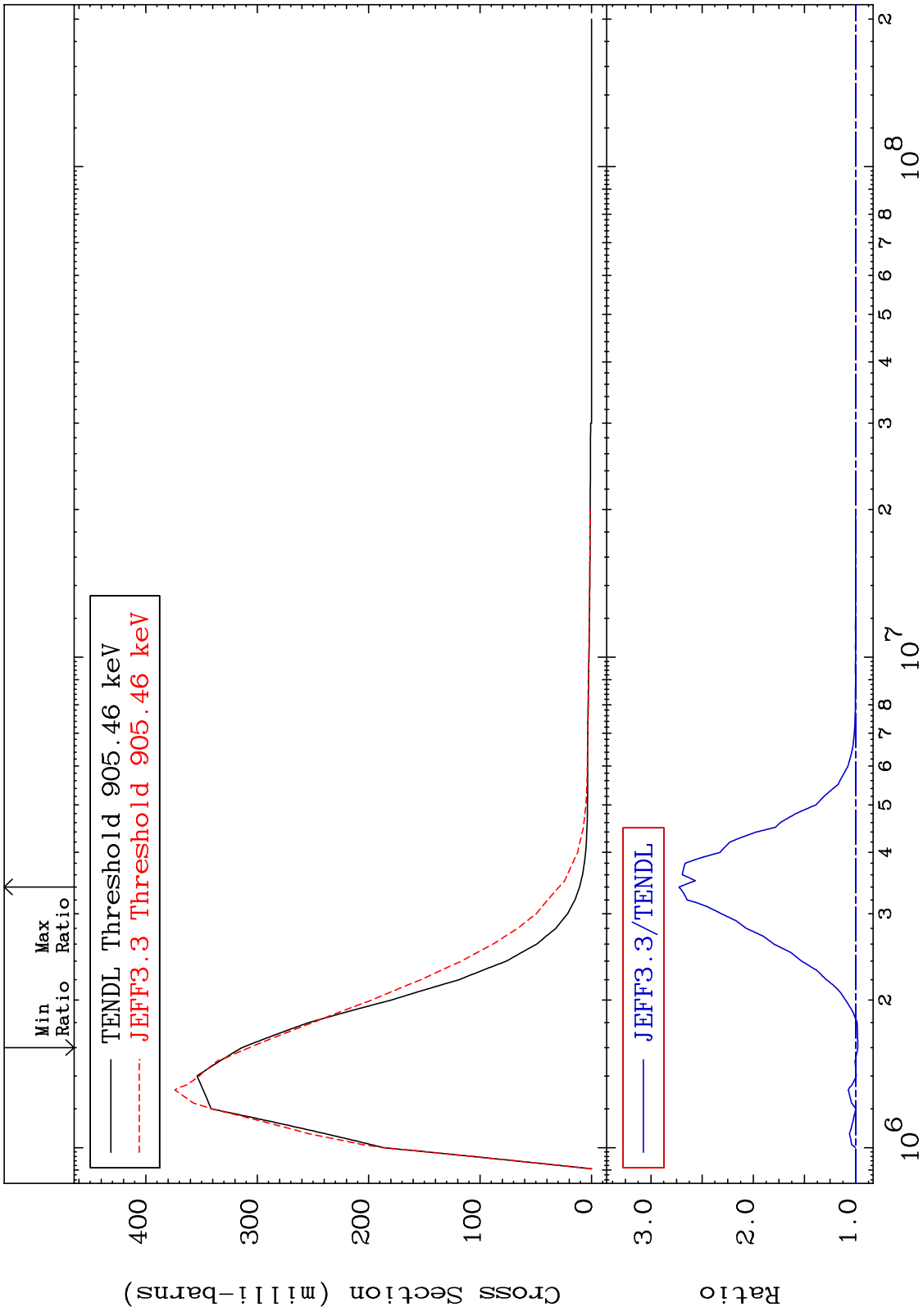
MAT 7225 MT= 53 (n,n') Level Cross Section 72-Hf-174
 -5.382 To 196.0 %



MAT 7225 MT= 54 (n,n') Level Cross Section 72-Hf-174 -2.270 To 9999. %

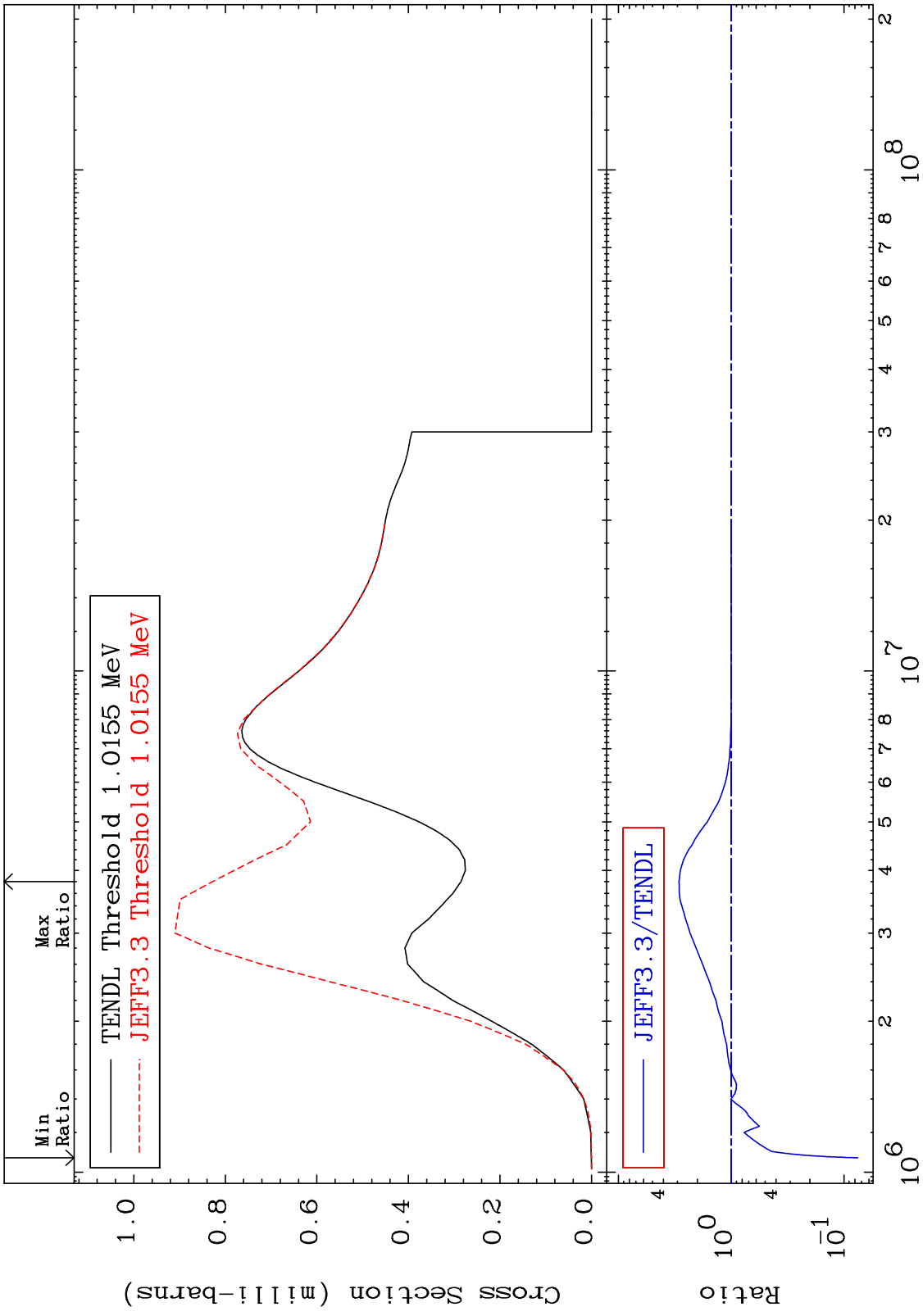


MAT 7225 MT= 55 (n,n') Level Cross Section 72-Hf-174 -2.077 To 172.5 %

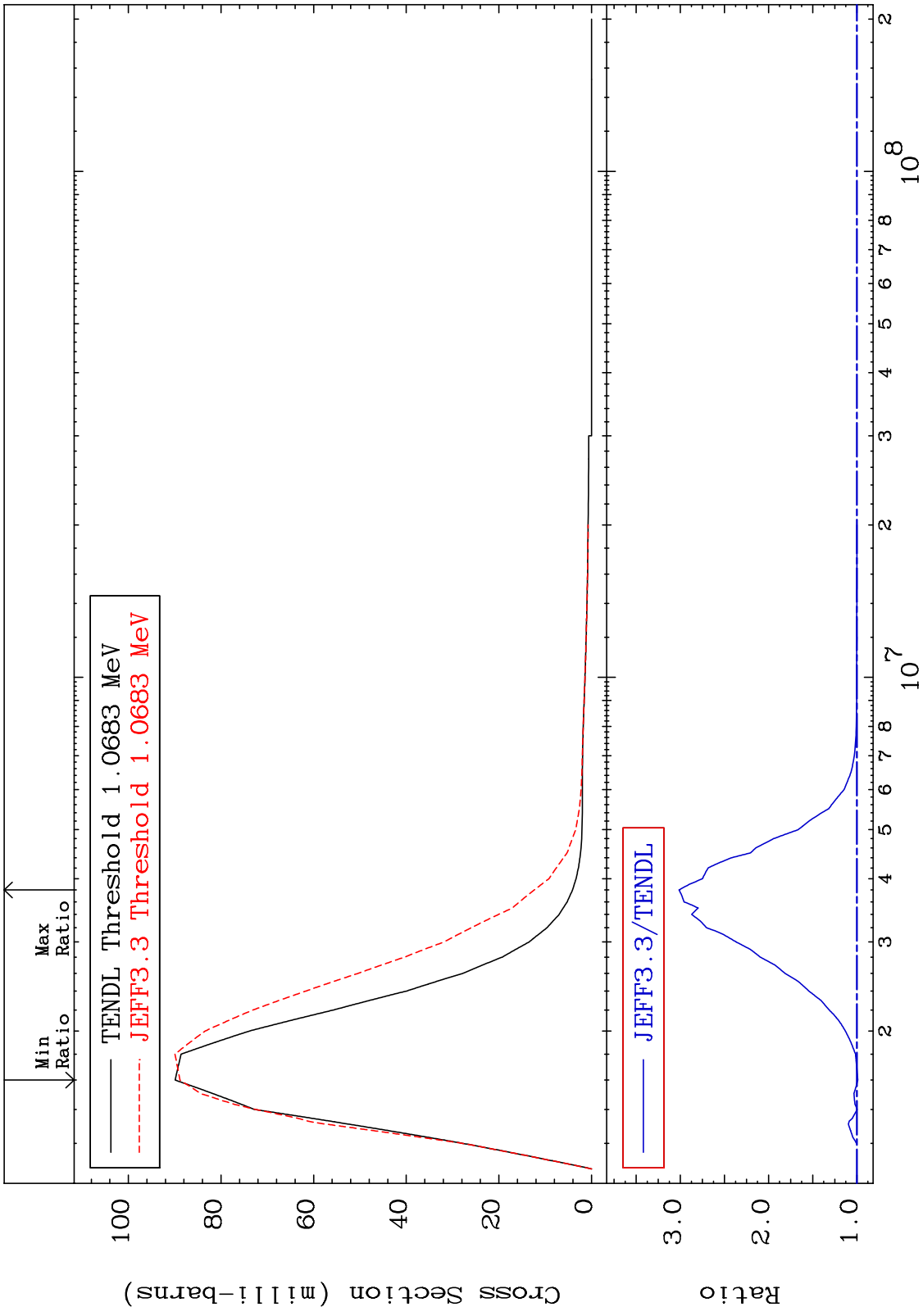


18 Incident Energy (eV) 72-Hf-174

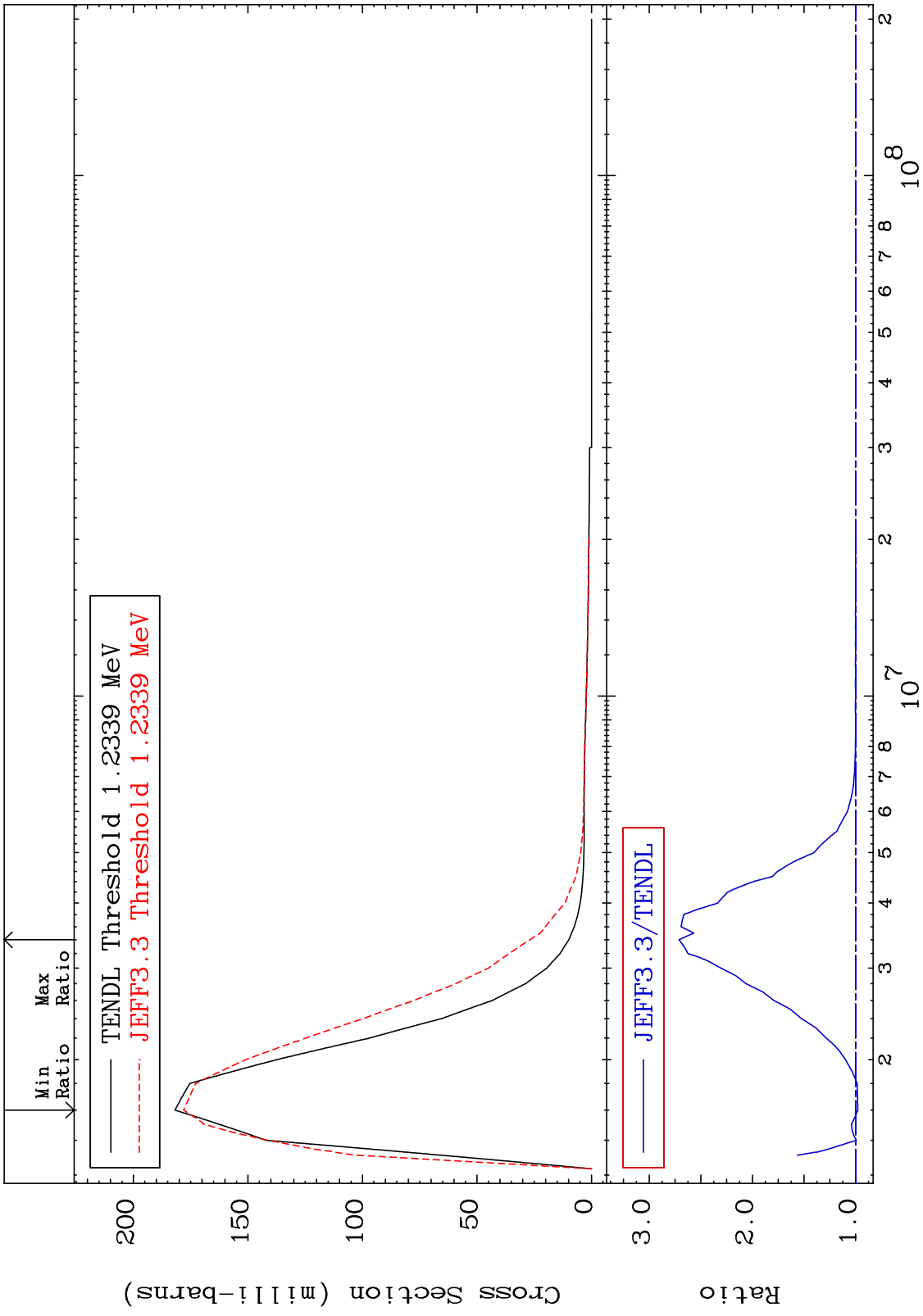
MAT 7225 MT= 56 (n,n') Level Cross Section 72-Hf-174 -92.47 To 190.5 %



MAT 7225 MT= 57 (n,n') Level Cross Section 72-Hf-174 -1.152 To 201.5 %



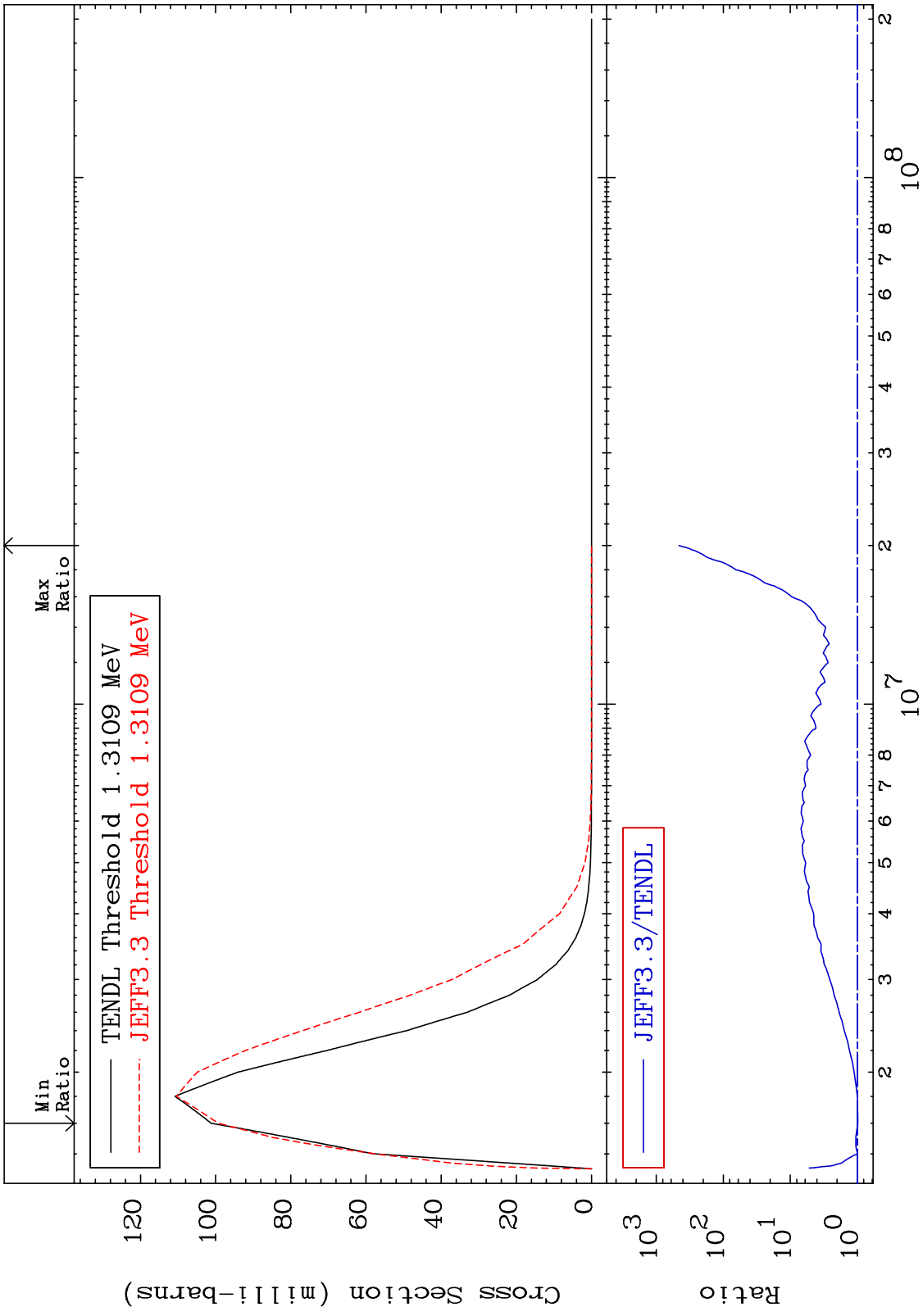
MAT 7225 MT= 58 (n,n') Level Cross Section 72-Hf-174
 -2.116 To 171.1 %



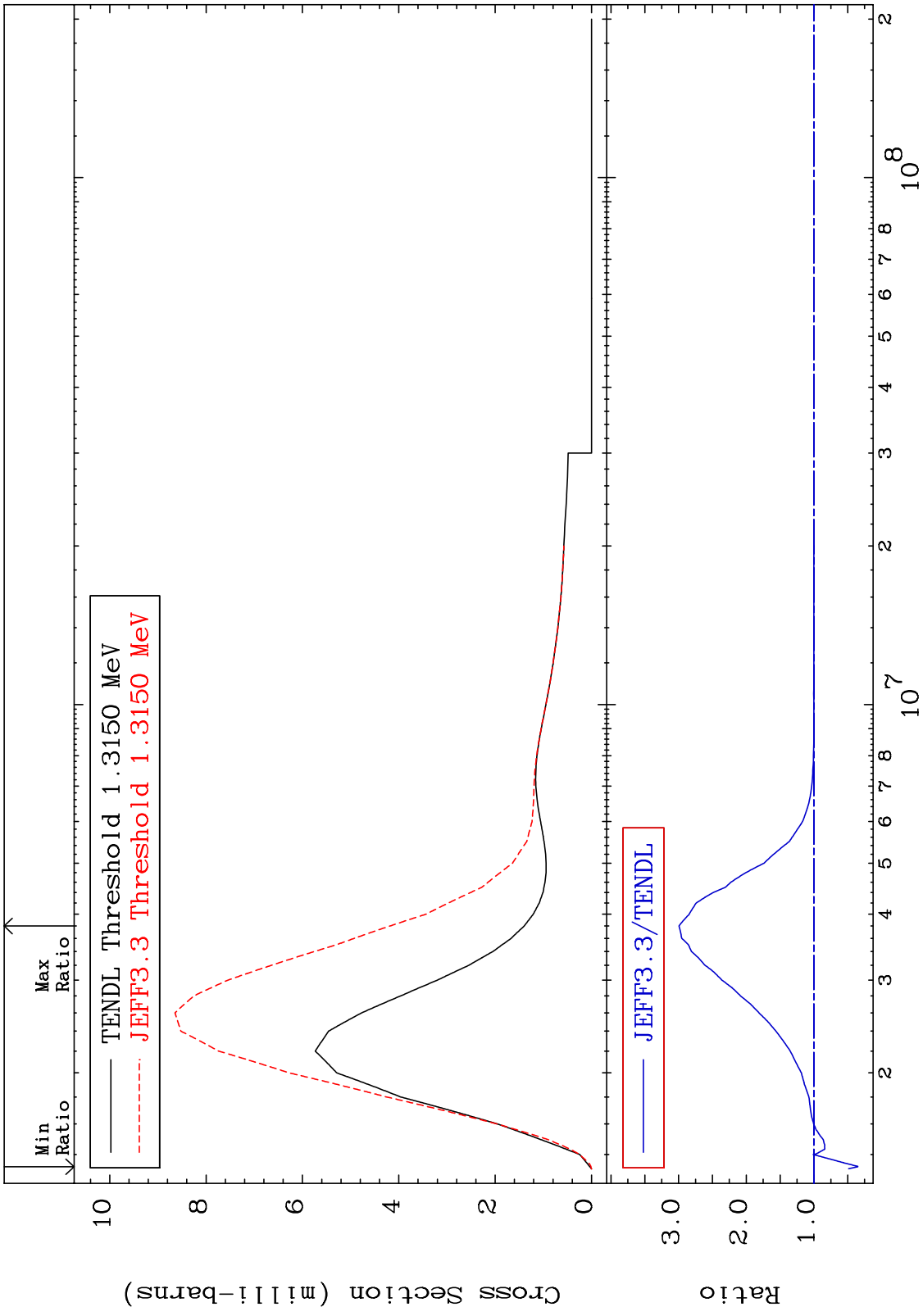
72-Hf-174

Incident Energy (eV)

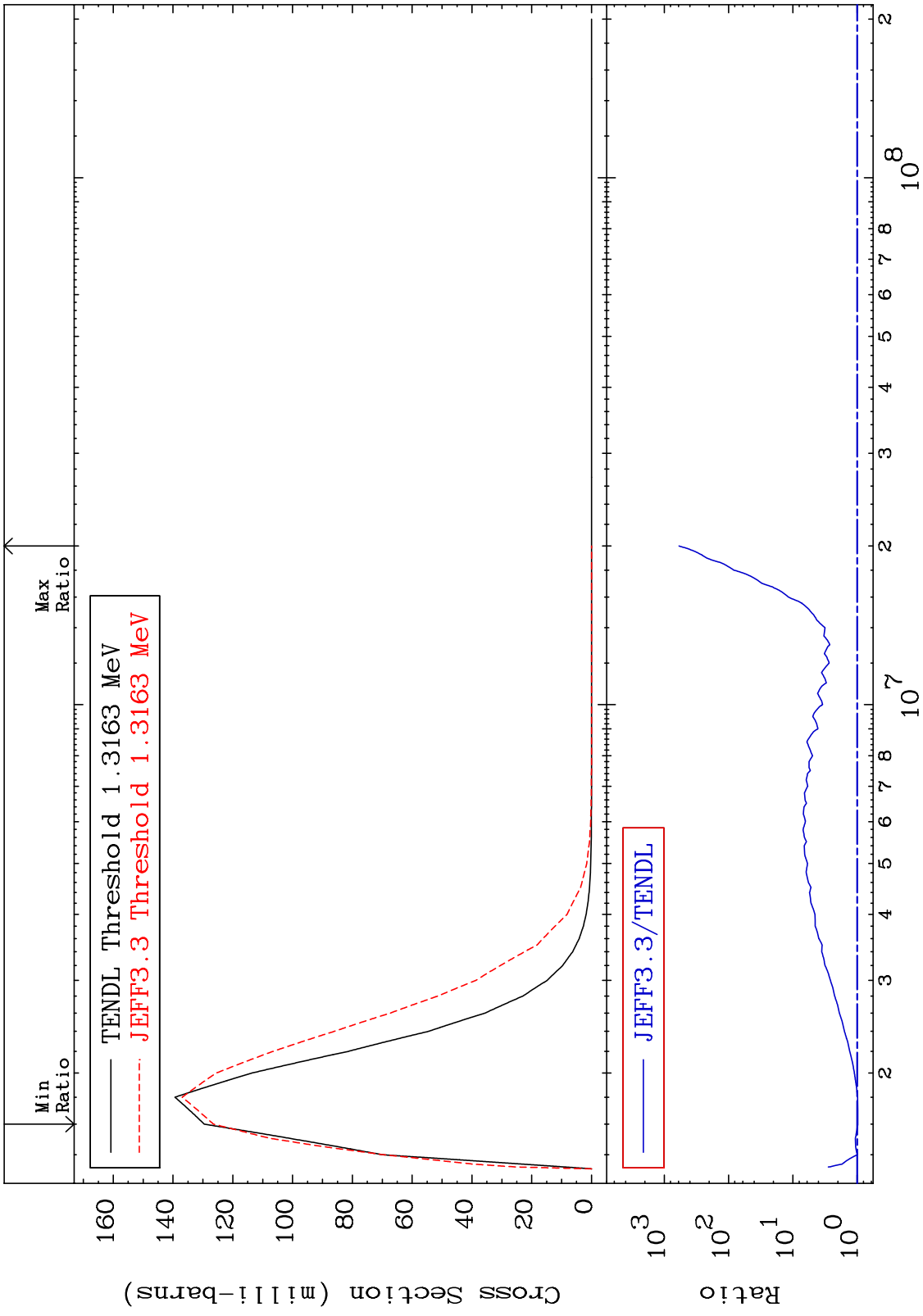
MAT 7225 MT= 59 (n,n') Level Cross Section -1.864 To 9999. % 72-Hf-174



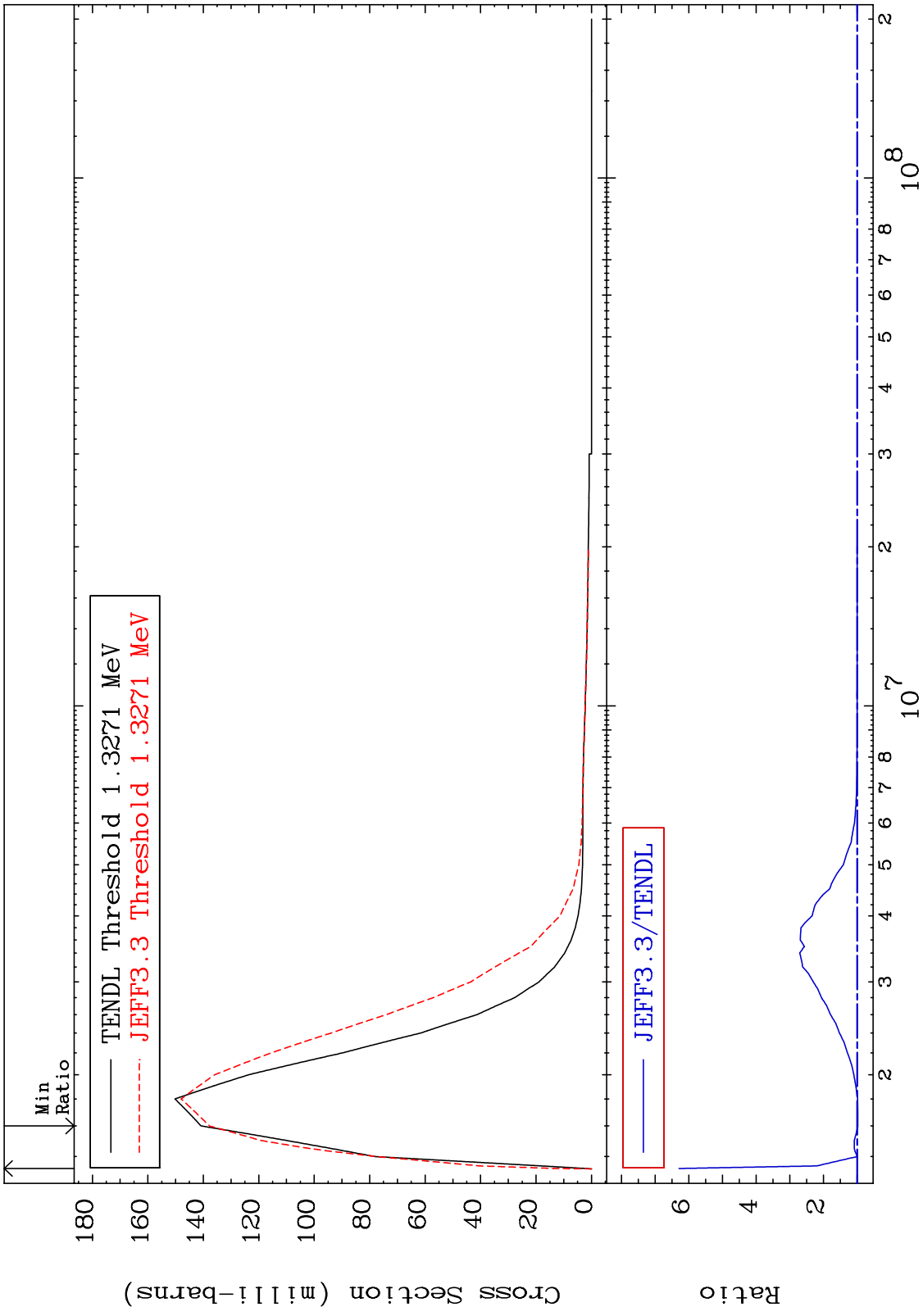
MAT 7225 MT= 60 (n,n') Level Cross Section 72-Hf-174
 -64.92 To 199.4 %



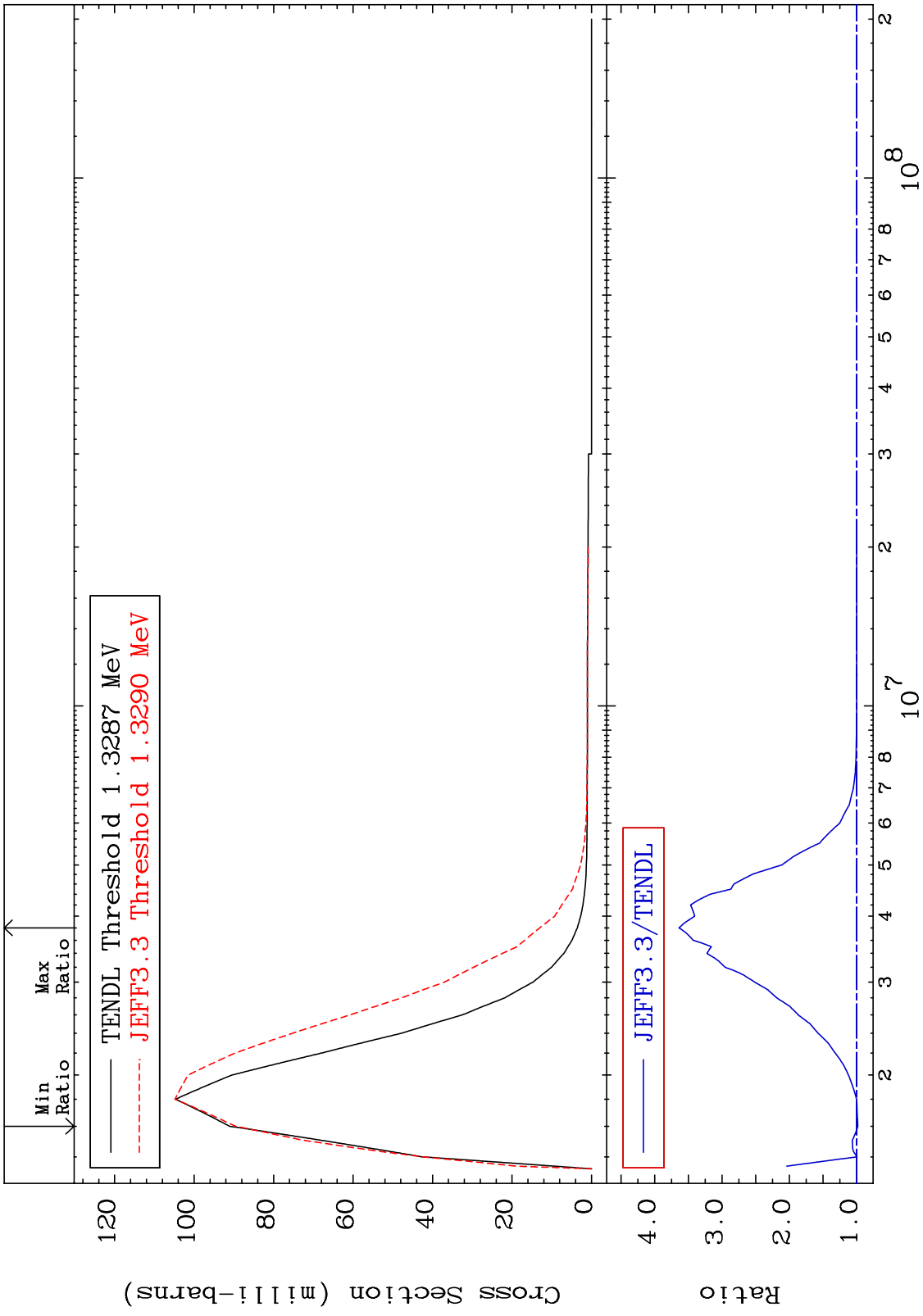
MAT 7225 MT= 61 (n,n') Level Cross Section 72-Hf-174
 -2.362 To 9999. %



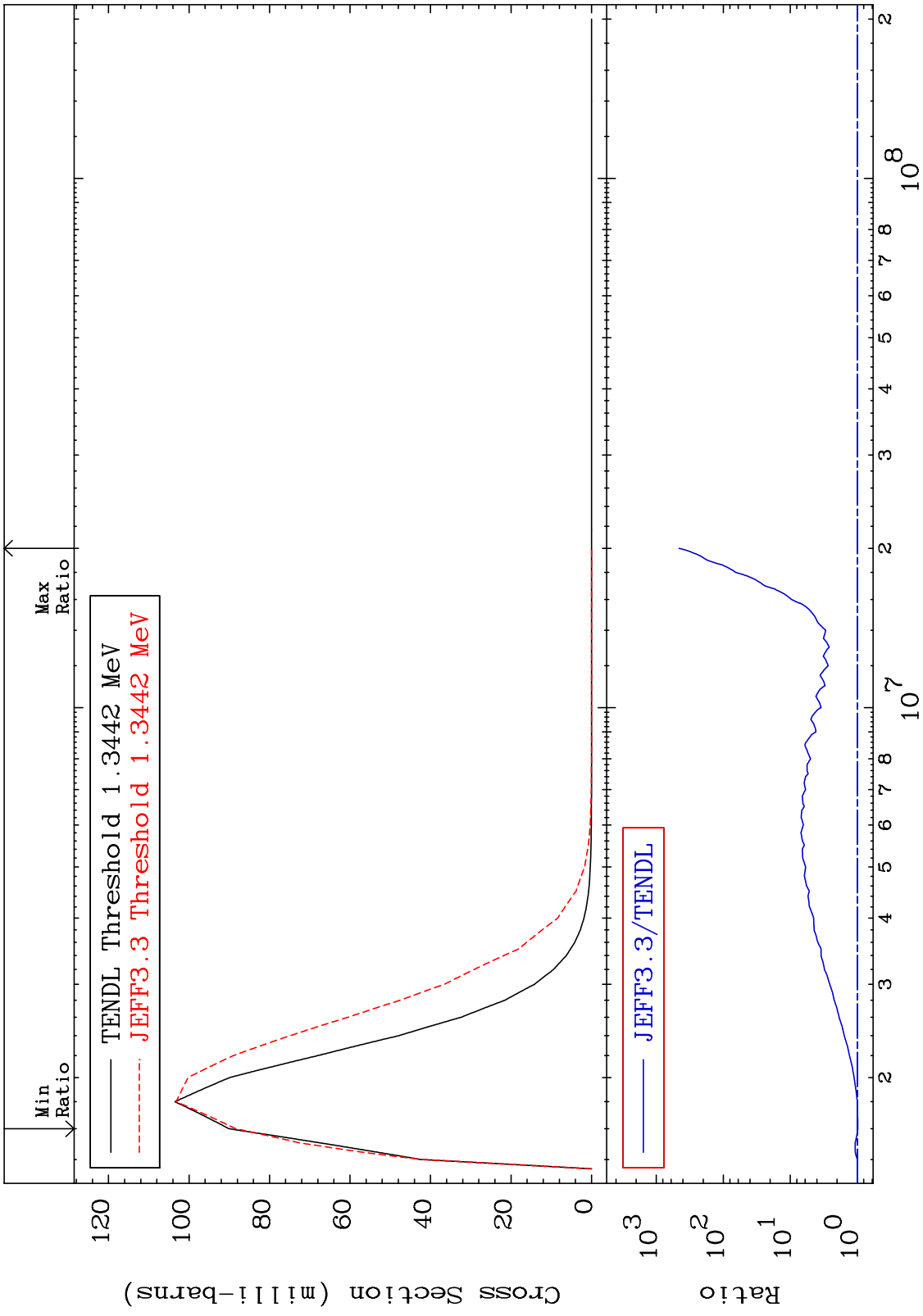
MAT 7225 MT= 62 (n,n') Level Cross Section 72-Hf-174 -2.126 To 528.9 %



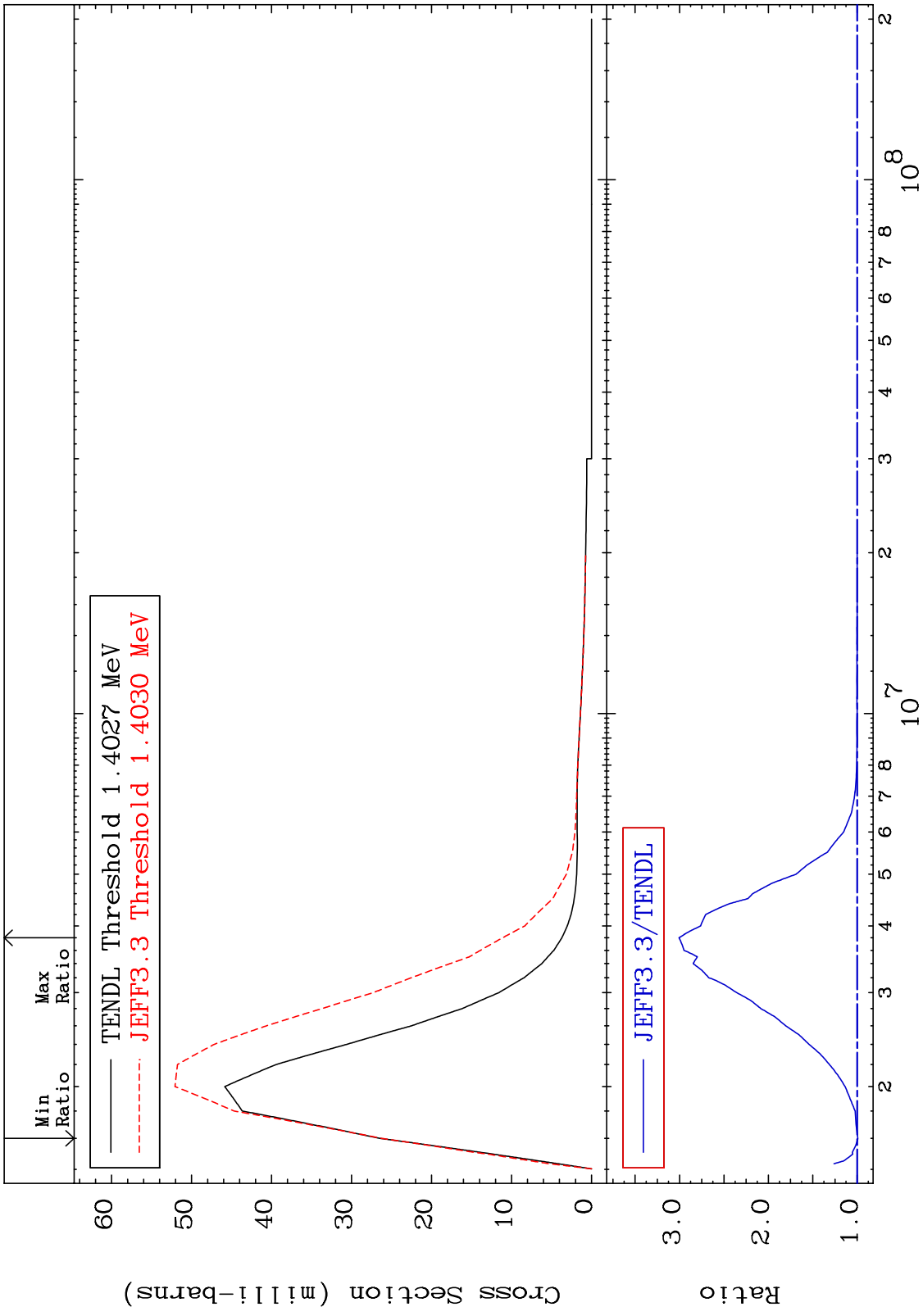
MAT 7225 MT= 63 (n,n') Level Cross Section -1.638 To 263.9 % 72-Hf-174



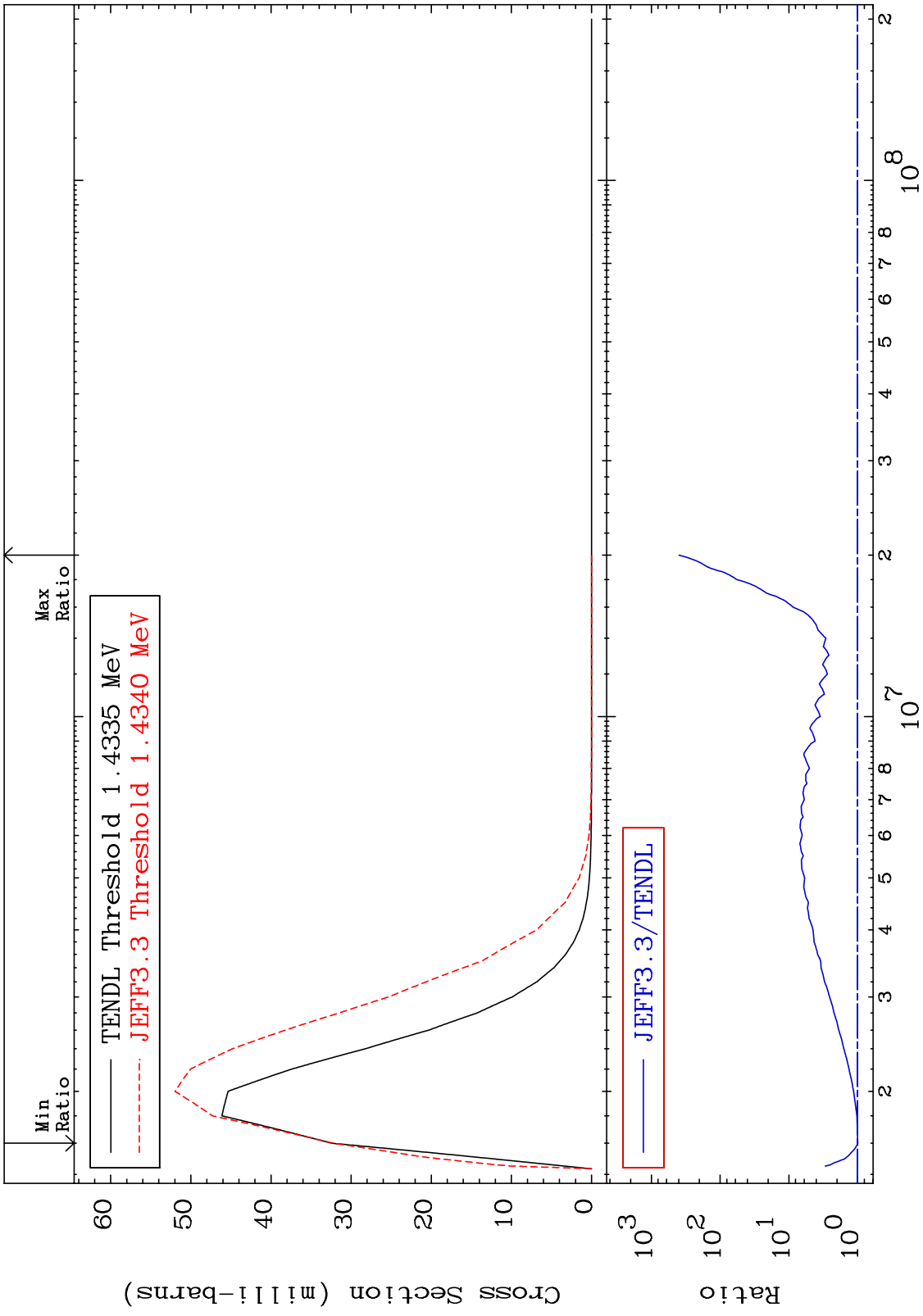
MAT 7225 MT= 64 (n,n') Level Cross Section -1.869 To 9999. % 72-Hf-174



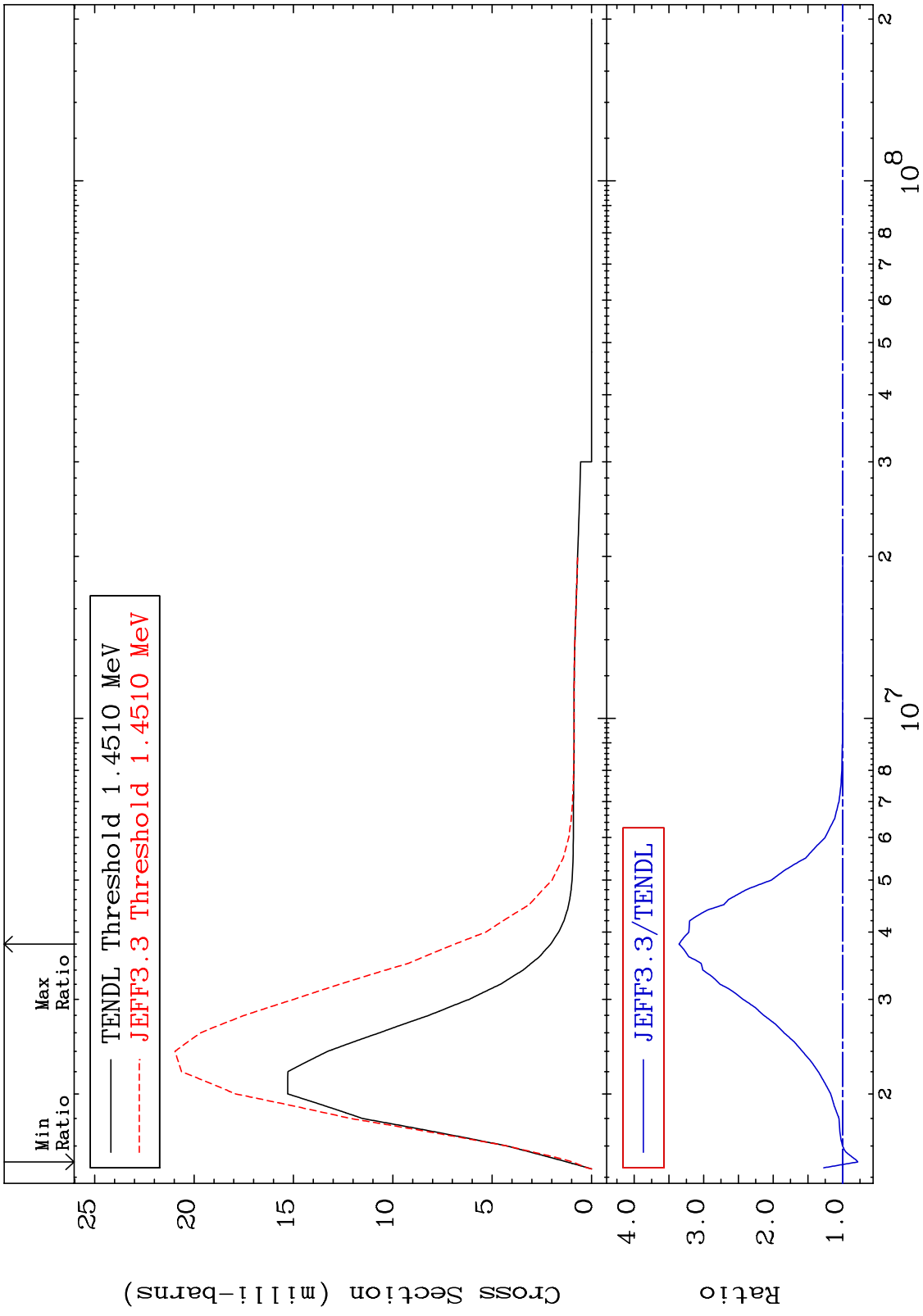
MAT 7225 MT= 65 (n,n') Level Cross Section 72-Hf-174 -0.764 To 200.6 %



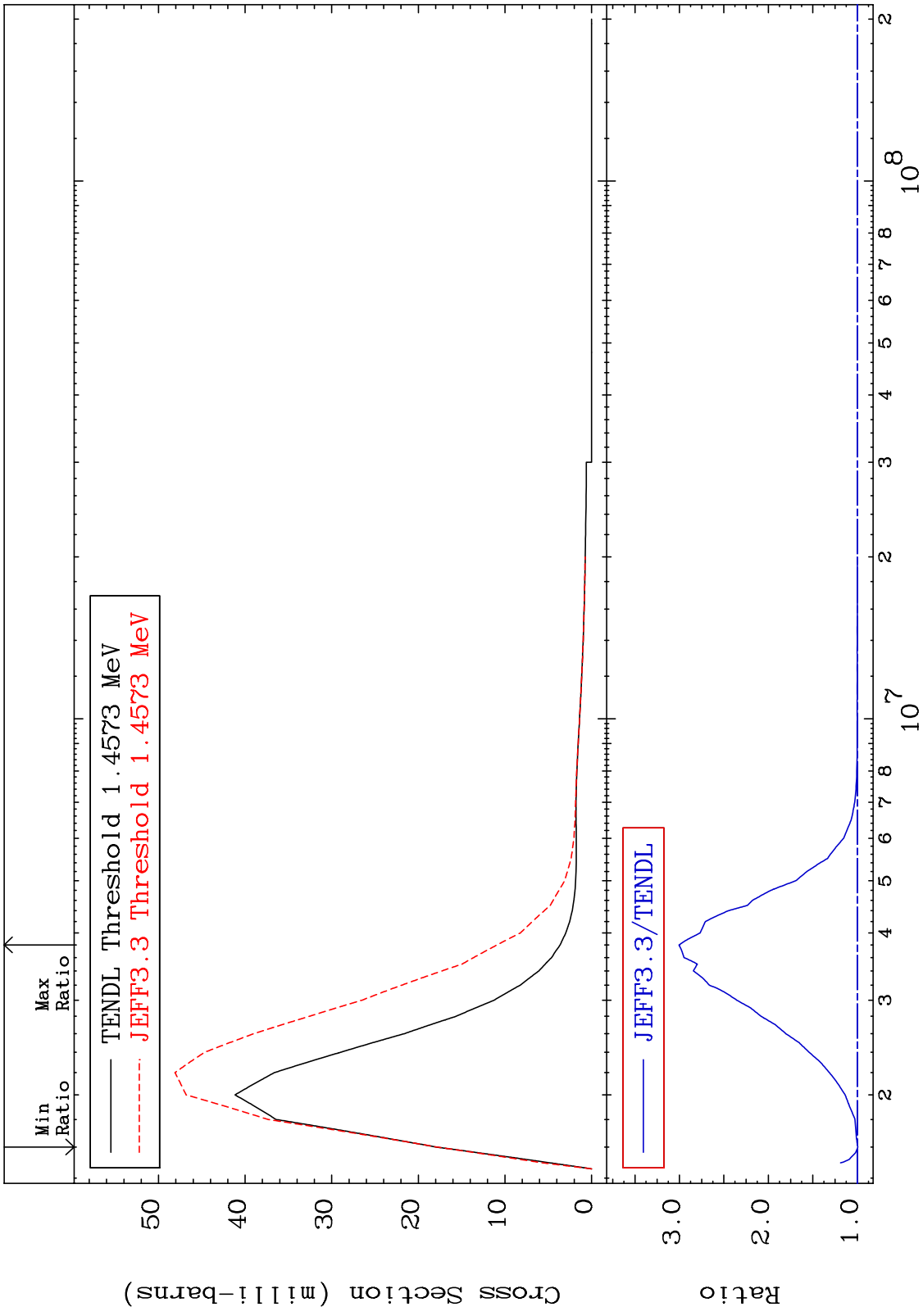
MAT 7225 MT= 66 (n,n') Level Cross Section 72-Hf-174
 -0.639 To 9999. %



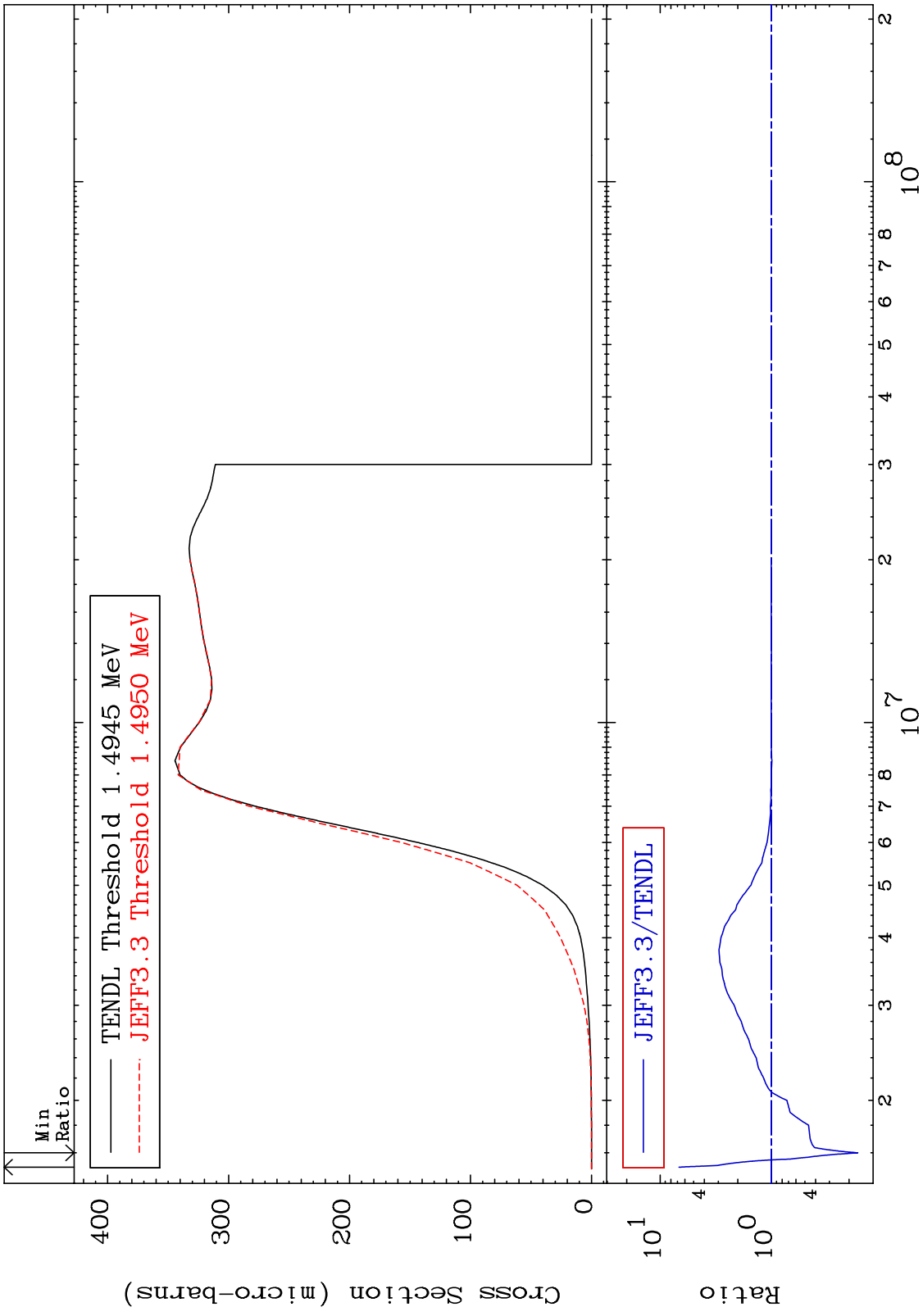
MAT 7225 MT= 67 (n,n') Level Cross Section 72-Hf-174 -21.94 To 235.4 %



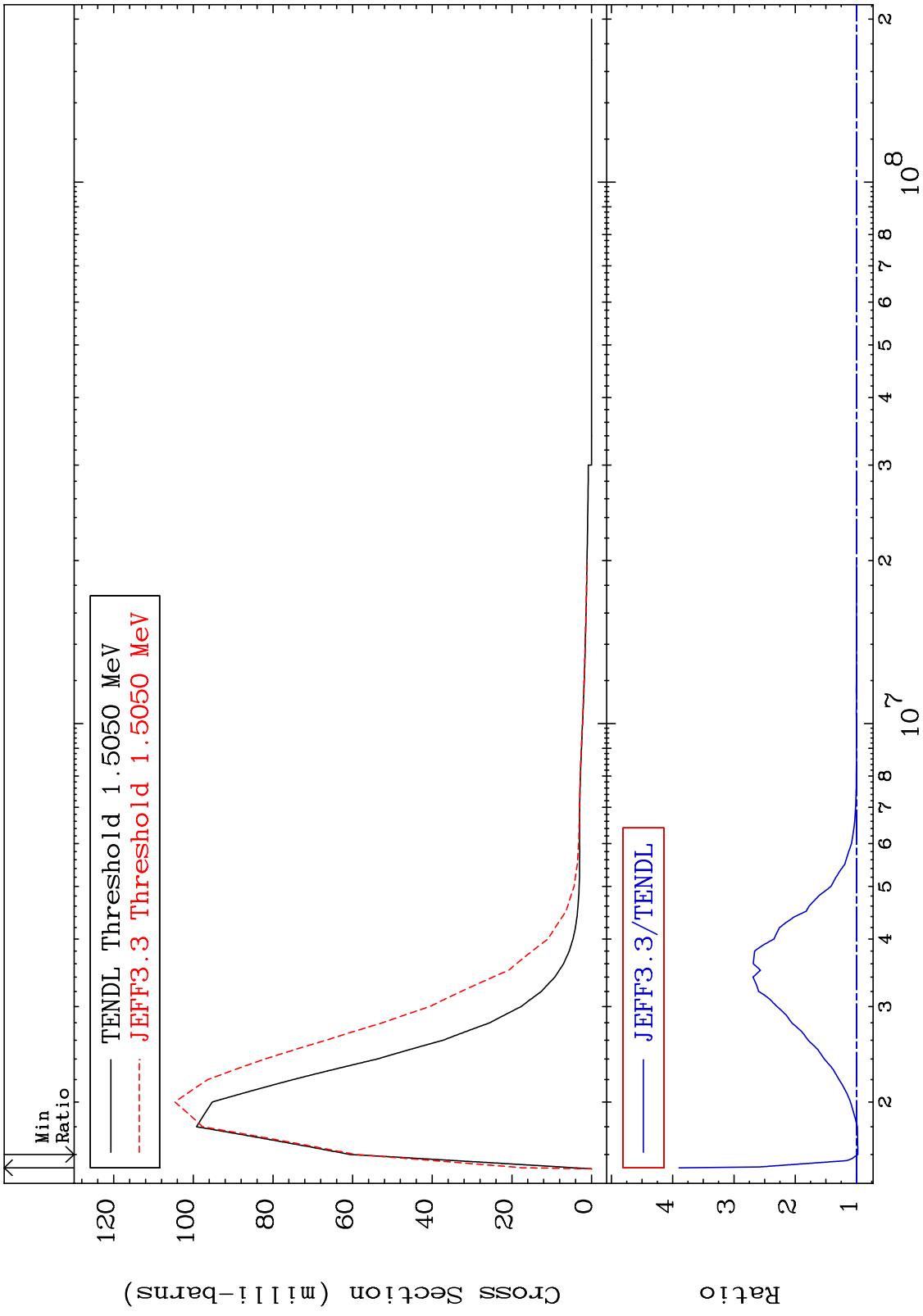
MAT 7225 MT= 68 (n,n') Level Cross Section 72-Hf-174 -0.624 To 200.4 %



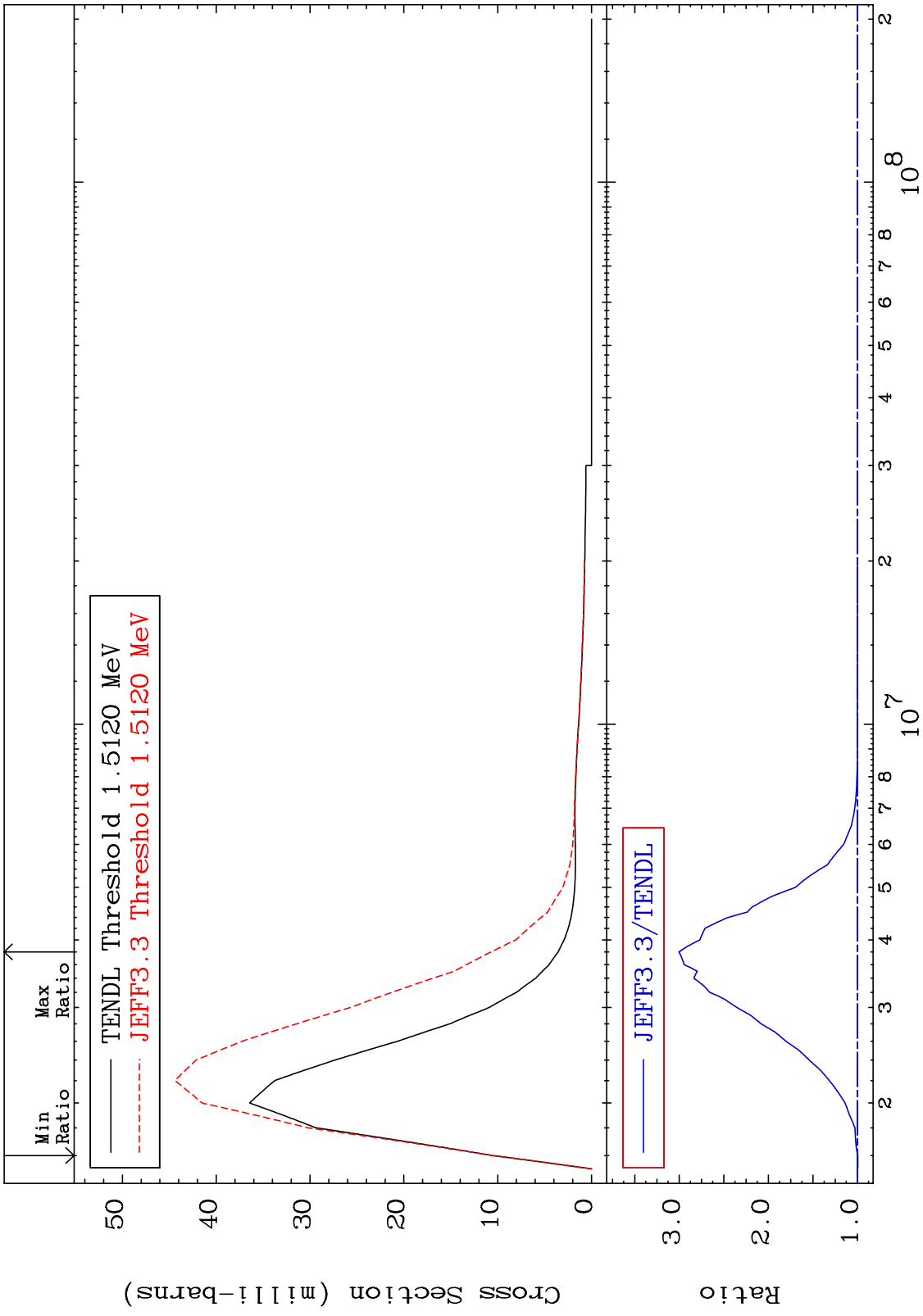
MAT 7225 MT= 69 (n,n') Level Cross Section 72-Hf-174 -83.35 To 576.9 %



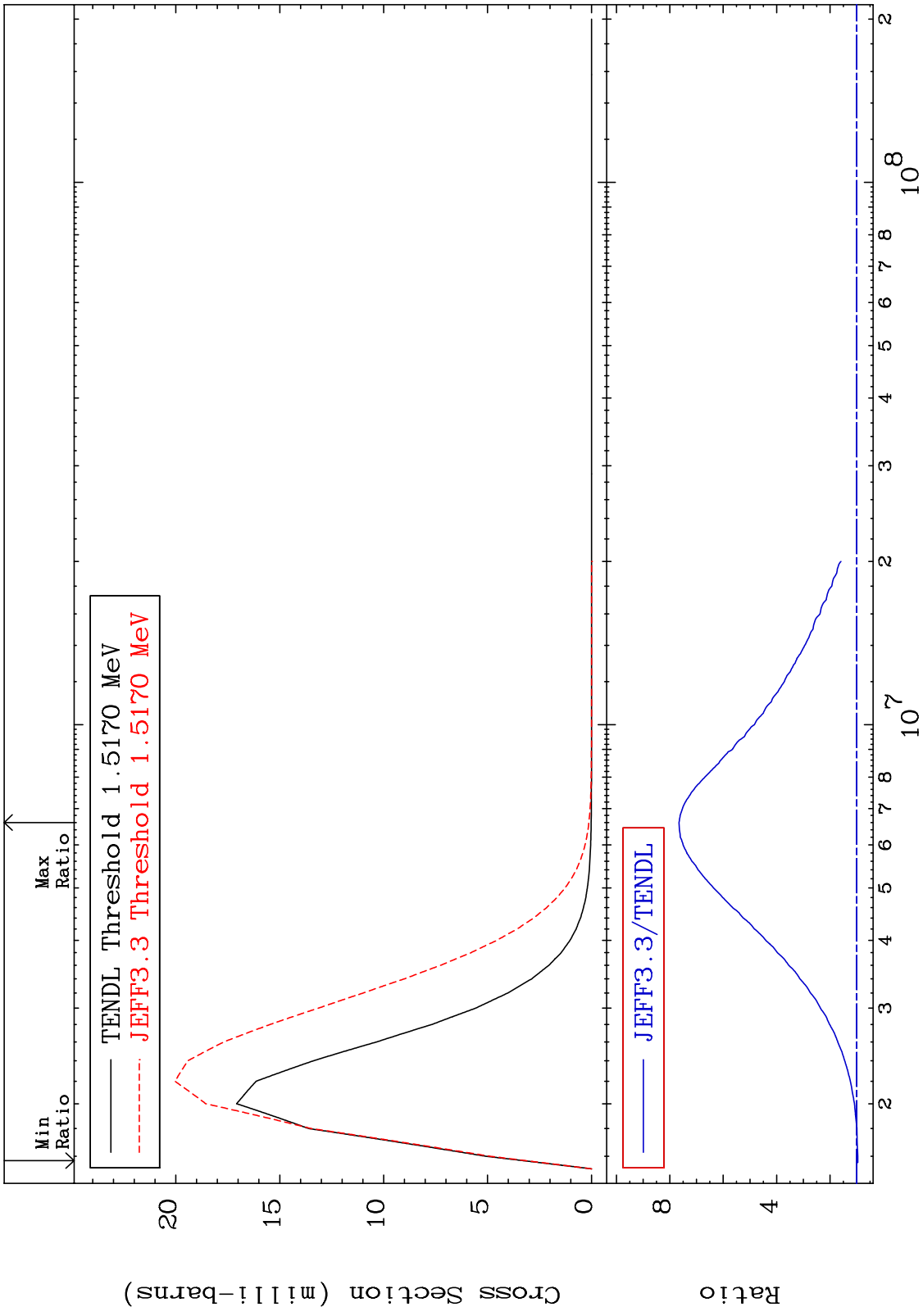
MAT 7225 MT= 70 (n,n') Level Cross Section 72-Hf-174 -2.167 To 289.6 %



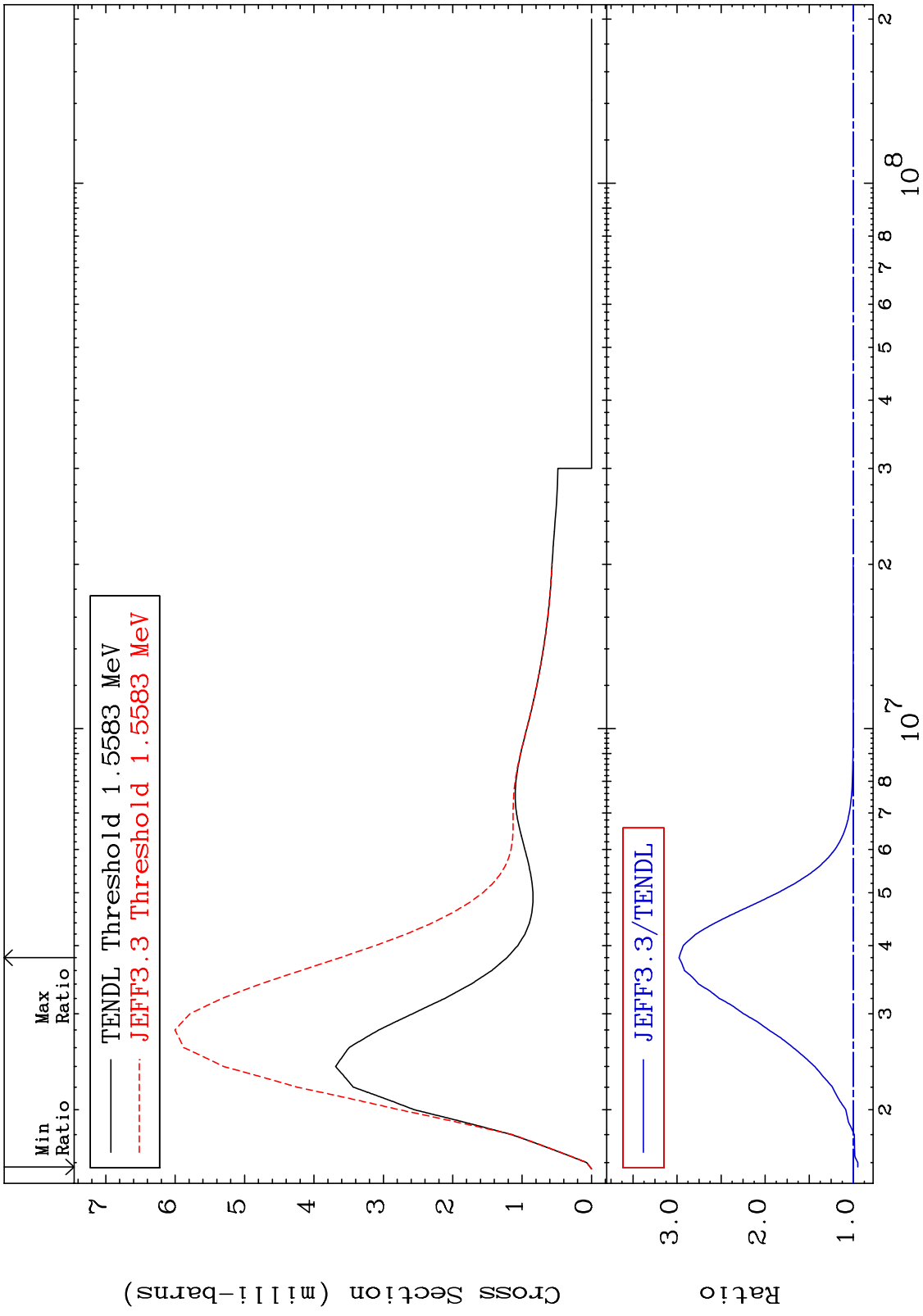
MAT 7225 MT= 71 (n,n') Level Cross Section 72-Hf-174 -0.443 To 200.2 %



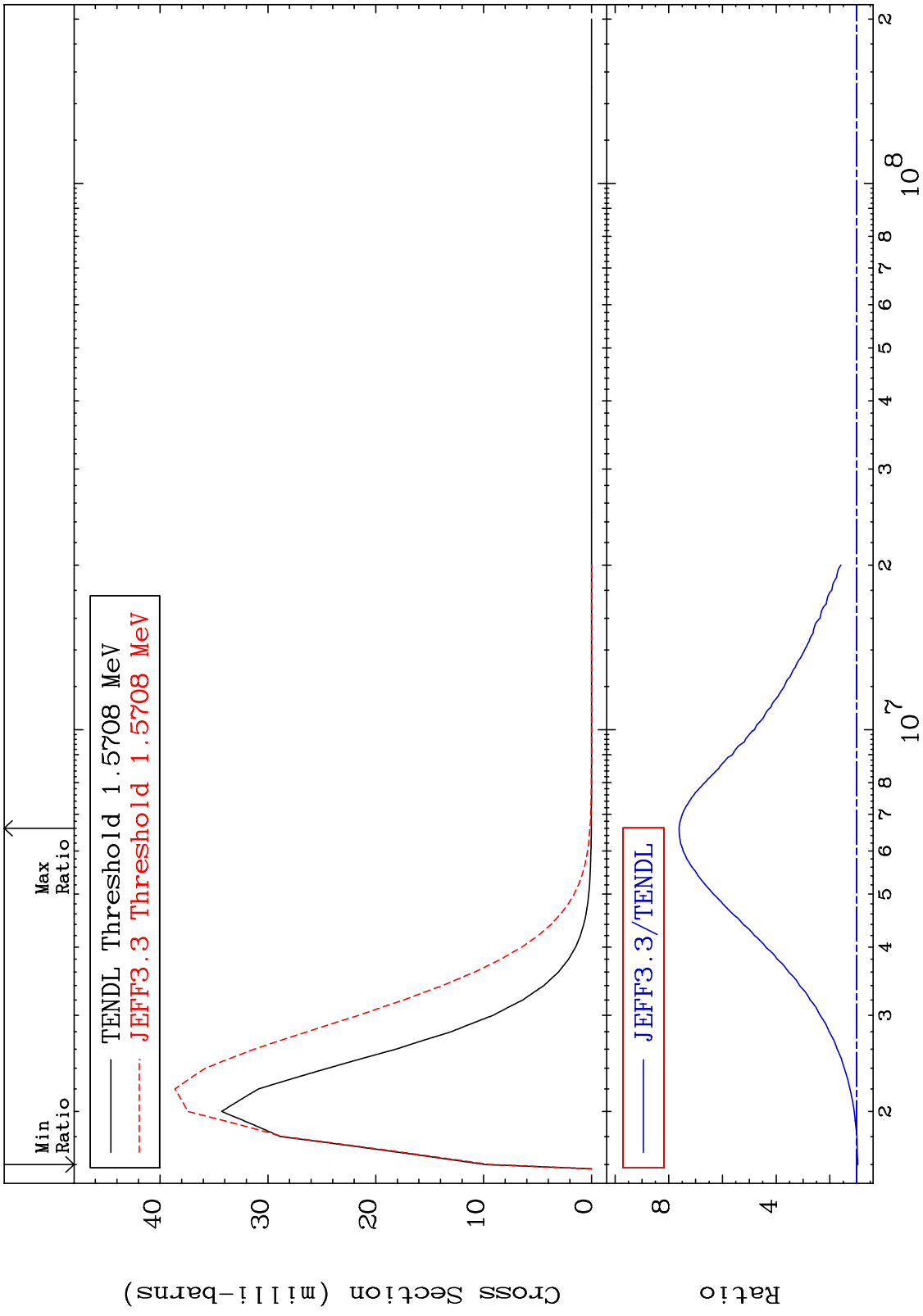
MAT 7225 MT= 72 (n,n') Level Cross Section 72-Hf-174 -4.022 To 665.3 %



MAT 7225 MT= 73 (n,n') Level Cross Section 72-Hf-174 -5.208 To 197.7 %

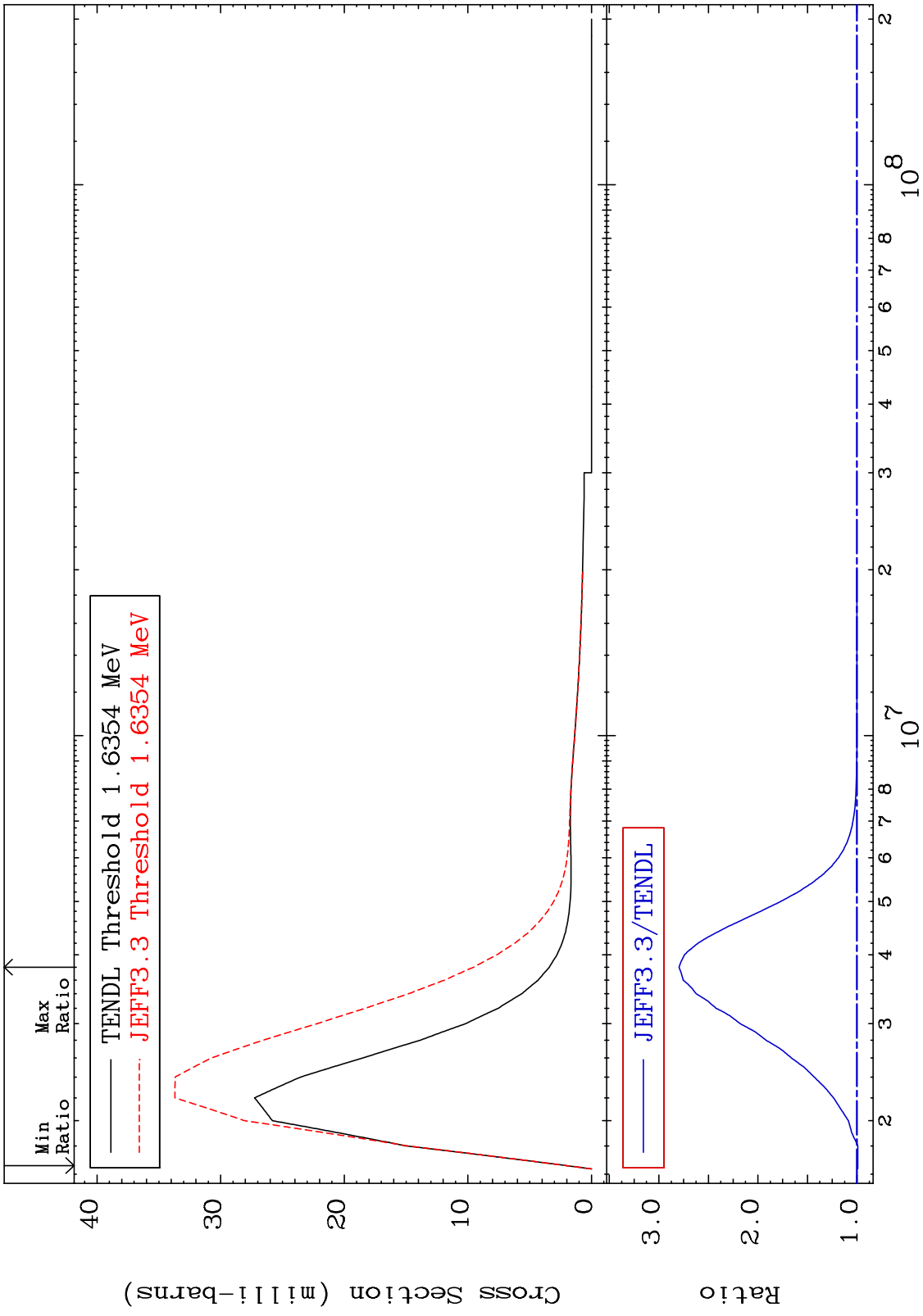


MAT 7225 MT= 74 (n,n') Level Cross Section 72-Hf-174 -4.103 To 661.8 %

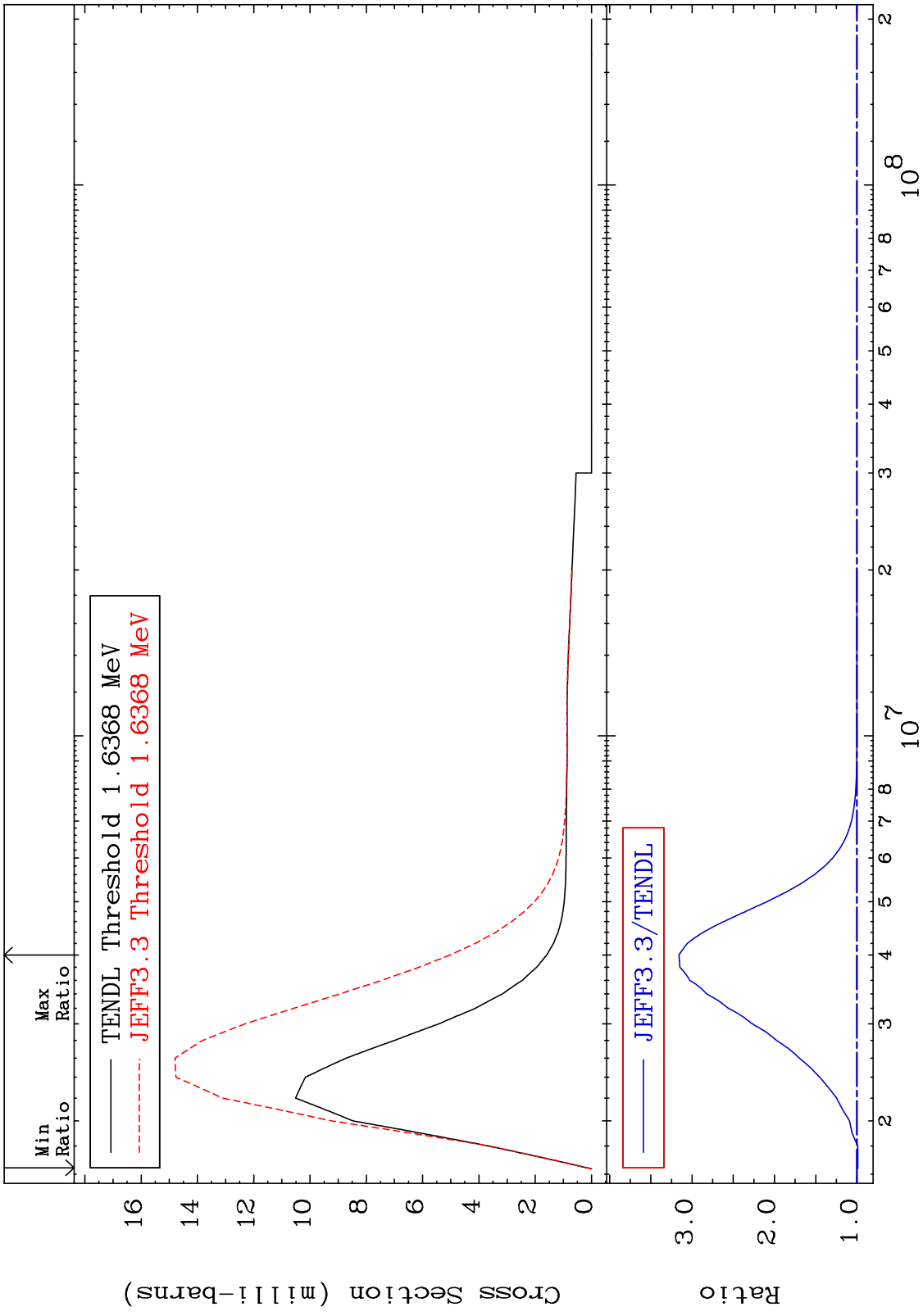


37 72-Hf-174

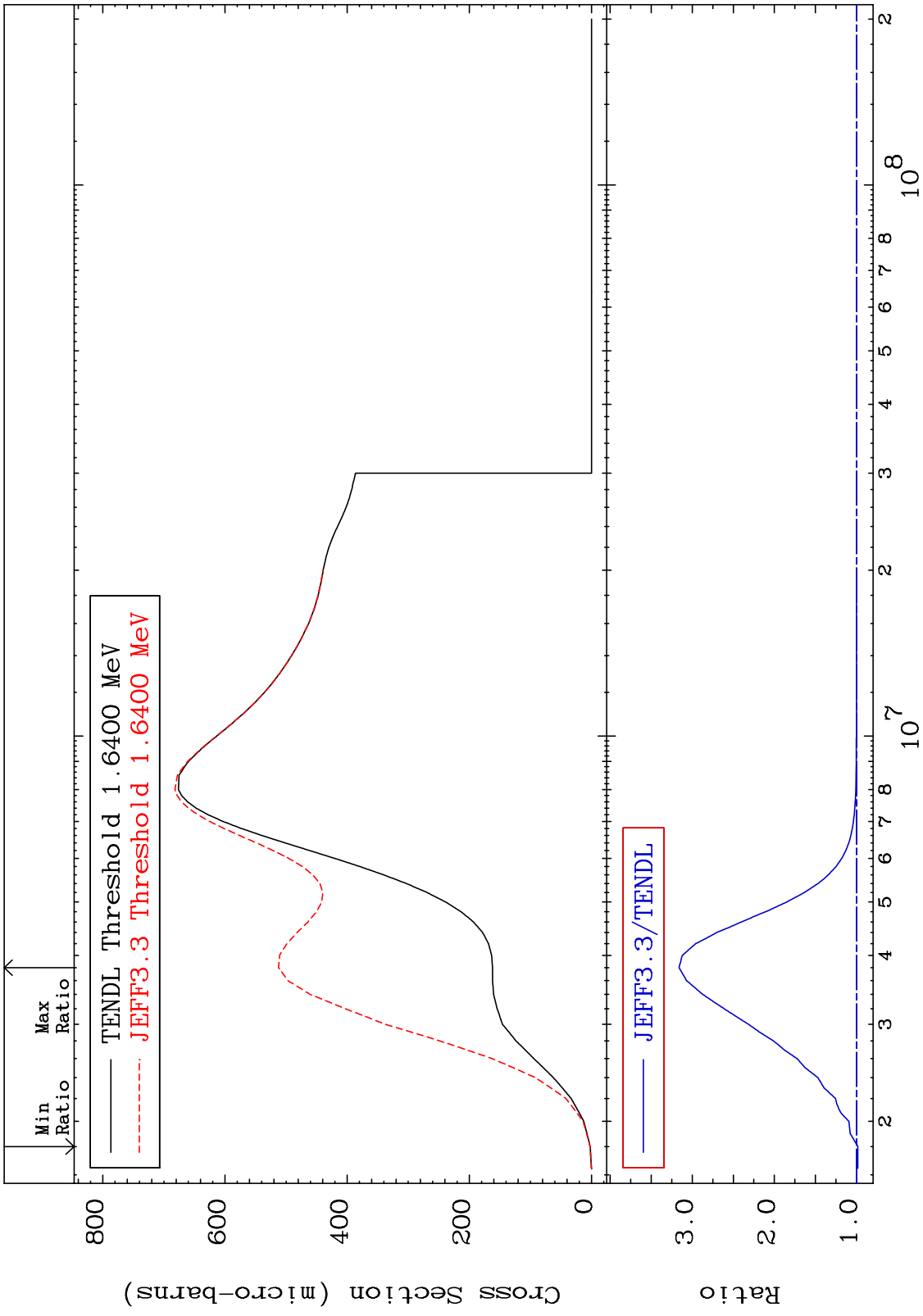
MAT 7225 MT= 75 (n,n') Level Cross Section 72-Hf-174
 -0.881 To 179.6 %



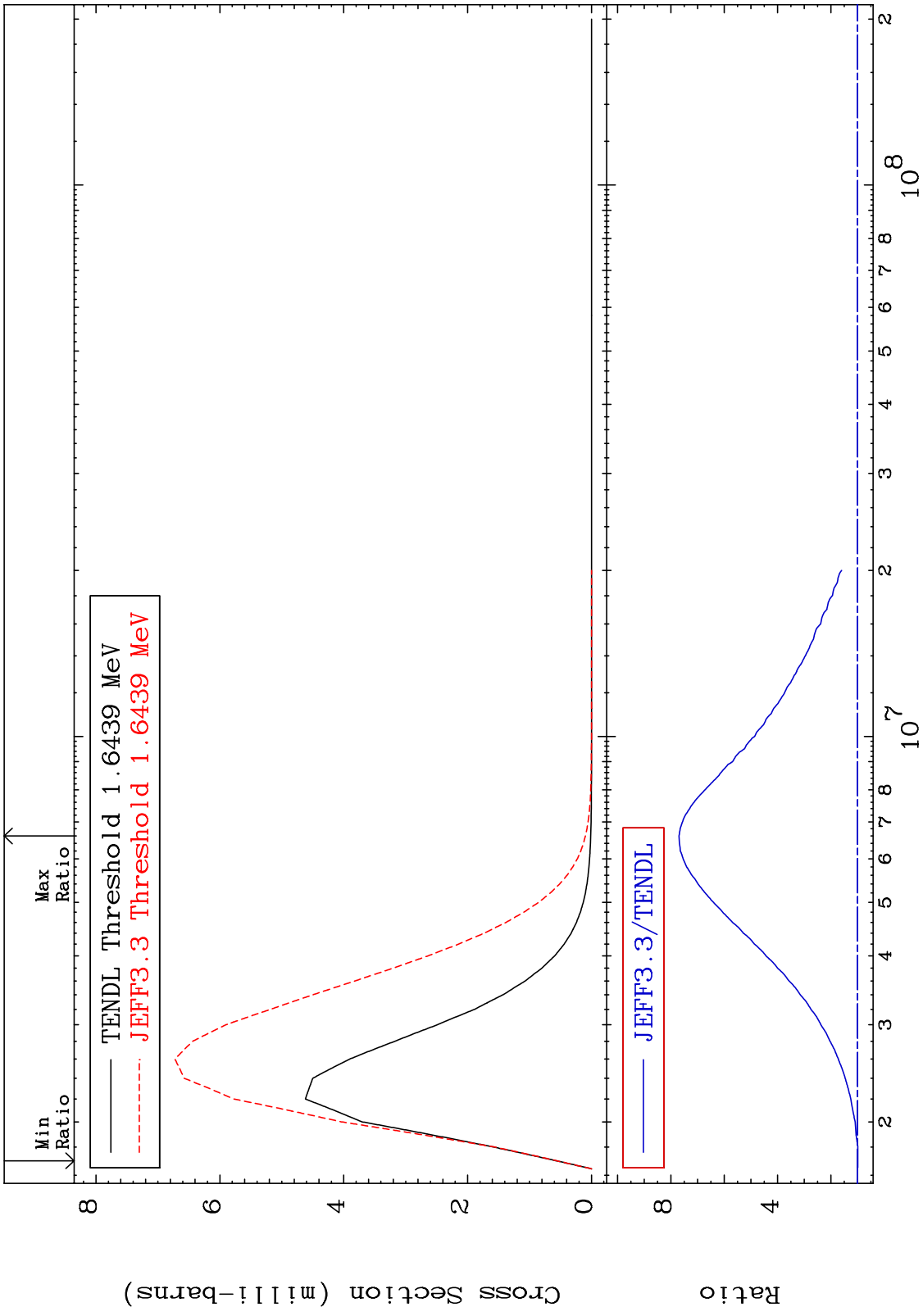
MAT 7225 MT= 76 (n,n') Level Cross Section 72-Hf-174 -1.055 To 215.8 %



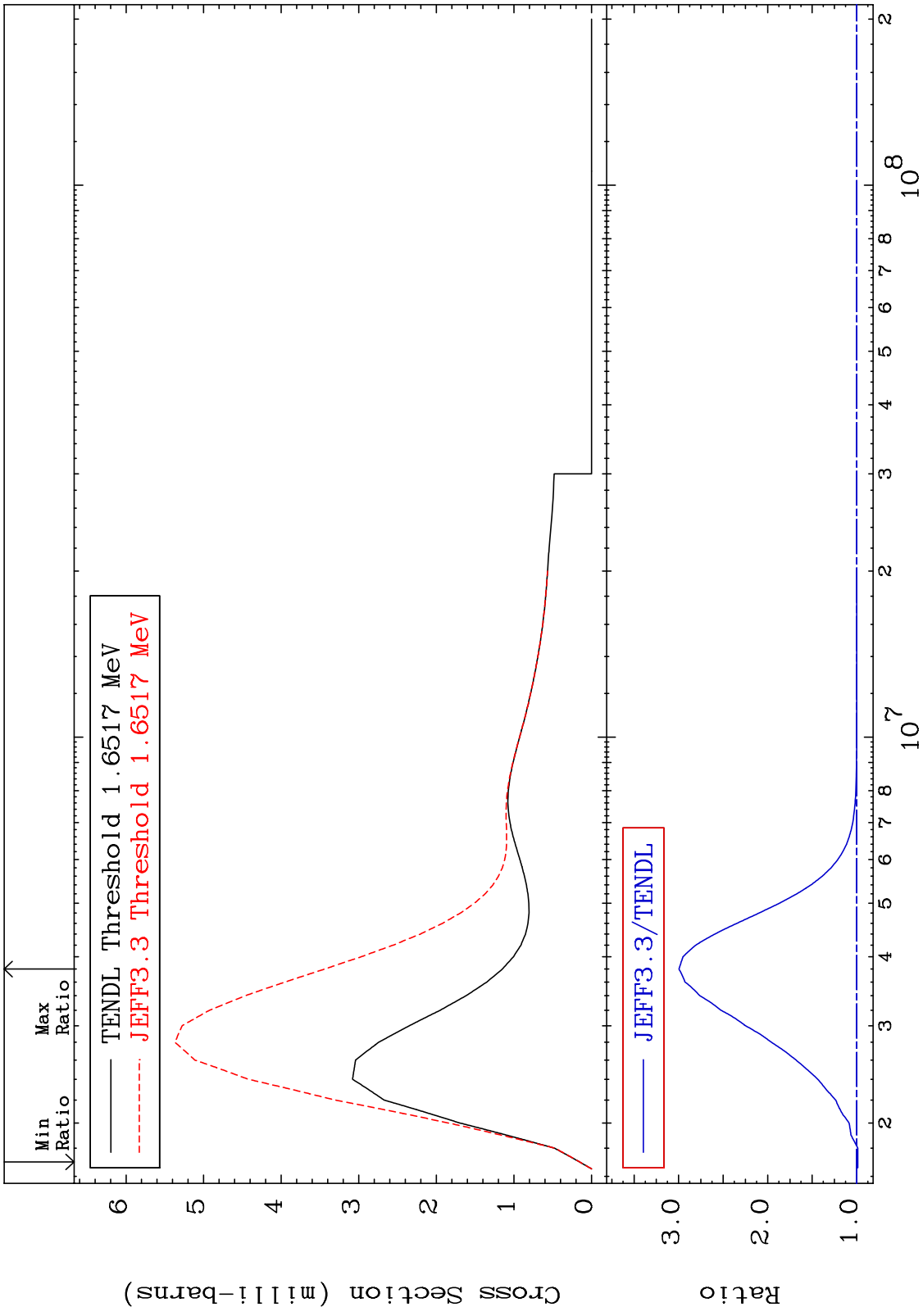
MAT 7225 MT= 77 (n,n') Level Cross Section -1.728 To 216.1 % 72-Hf-174



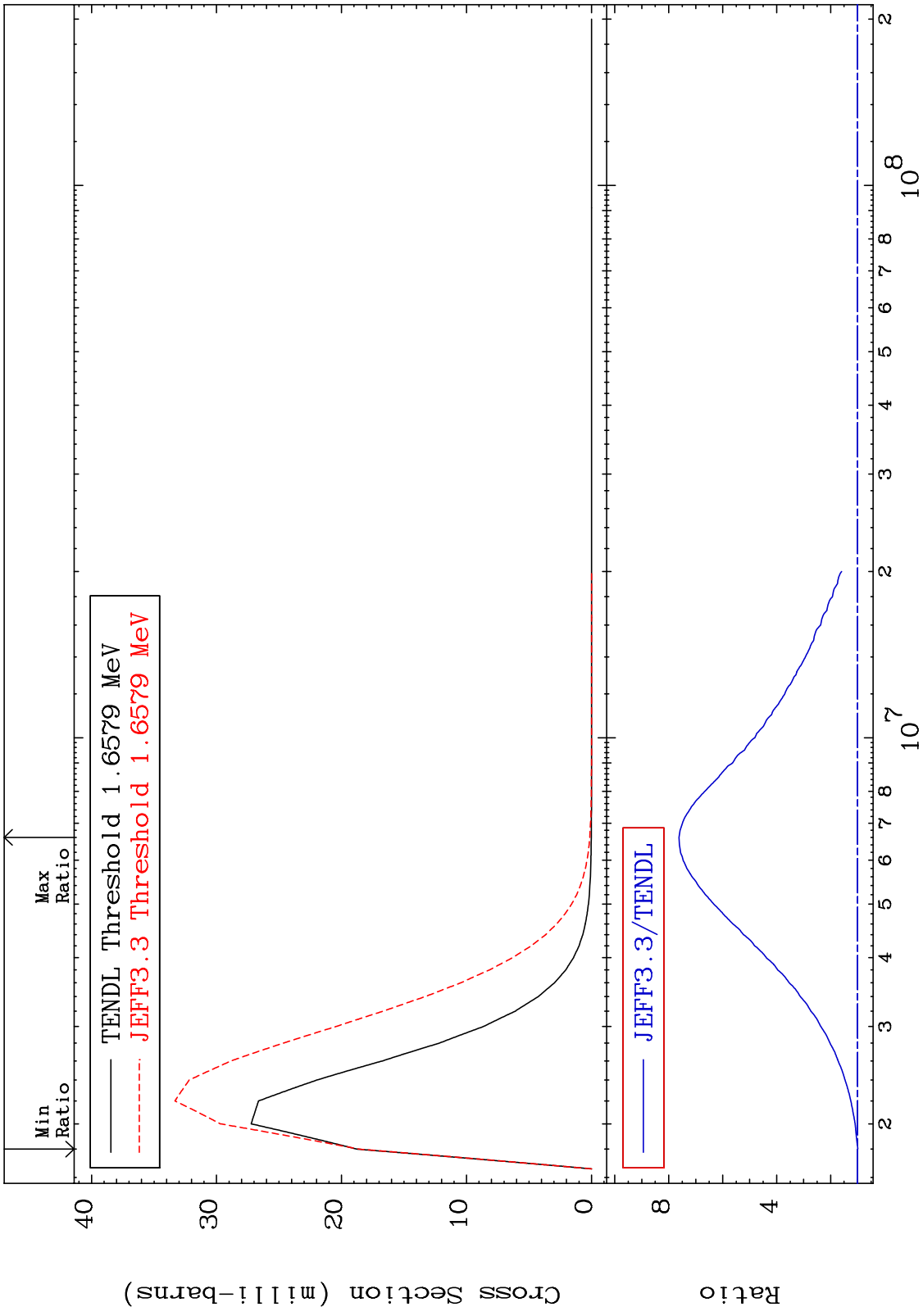
MAT 7225 MT= 78 (n,n') Level Cross Section 72-Hf-174 -1.180 To 669.1 %



MAT 7225 MT= 79 (n,n') Level Cross Section 72-Hf-174 -1.253 To 199.5 %



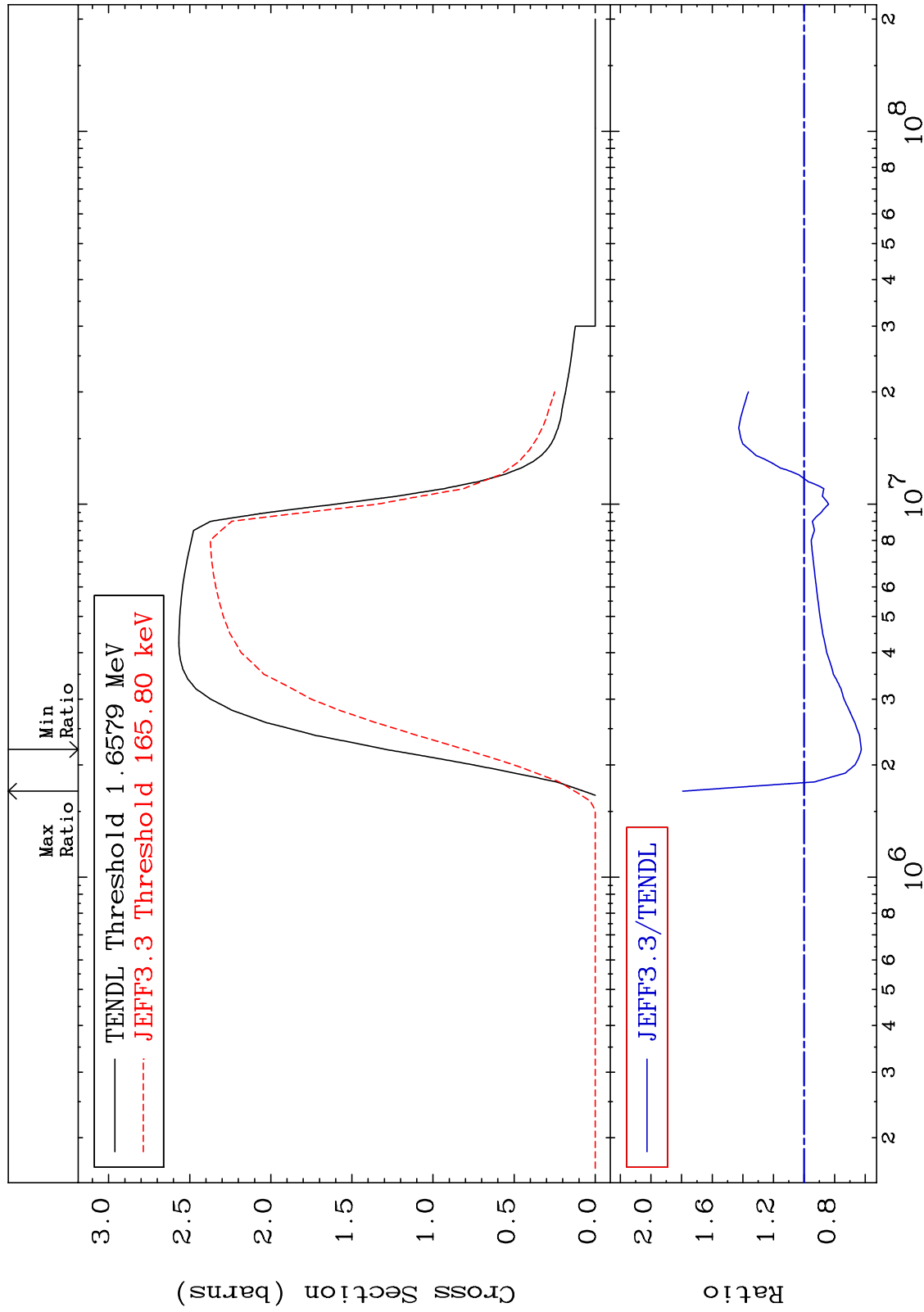
MAT 7225 MT= 80 (n,n') Level Cross Section 72-Hf-174
 -0.871 To 661.8 %



MAT 7225

(n, n') Continuum
Cross Section

72-Hf-174
-37.49 To 79.31 %



MAT 7225

(n, γ)

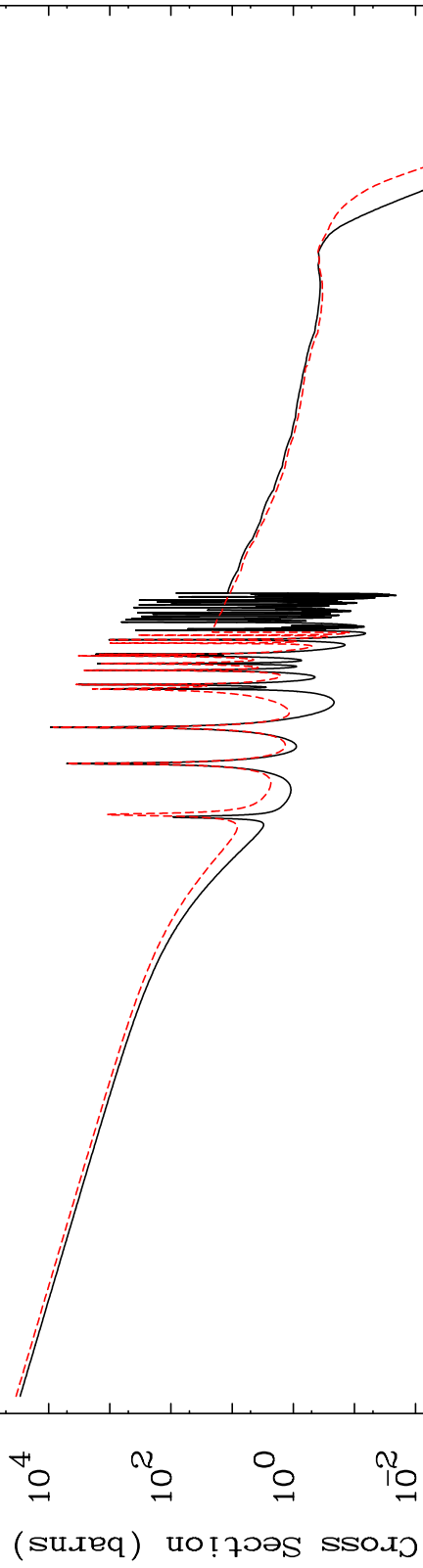
72-Hf-174

-97.18 To 9999. %

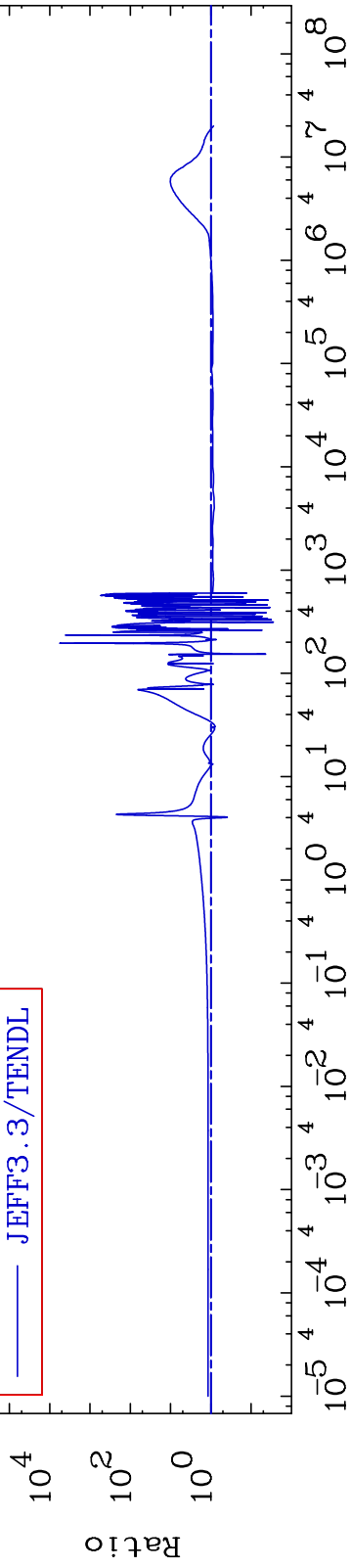
Cross Section

Max Ratio
Min Ratio

— TENDL
- - - JEFF3.3



— JEFF3.3/TENDL



Incident Energy (eV)

72-Hf-174

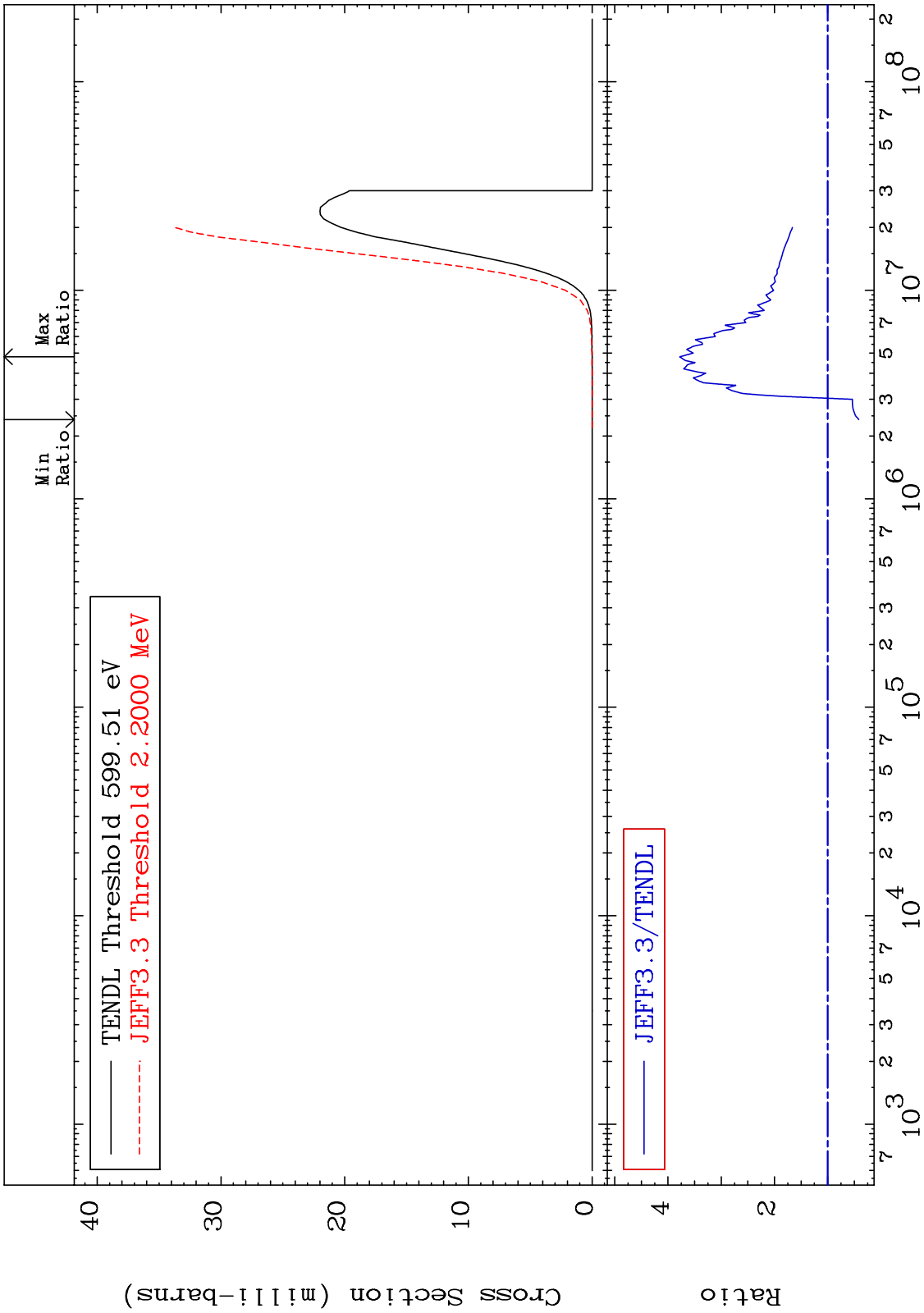
MAT 7225

(n,p)

72-Hf-174

Cross Section

-58.36 To 277.9 %

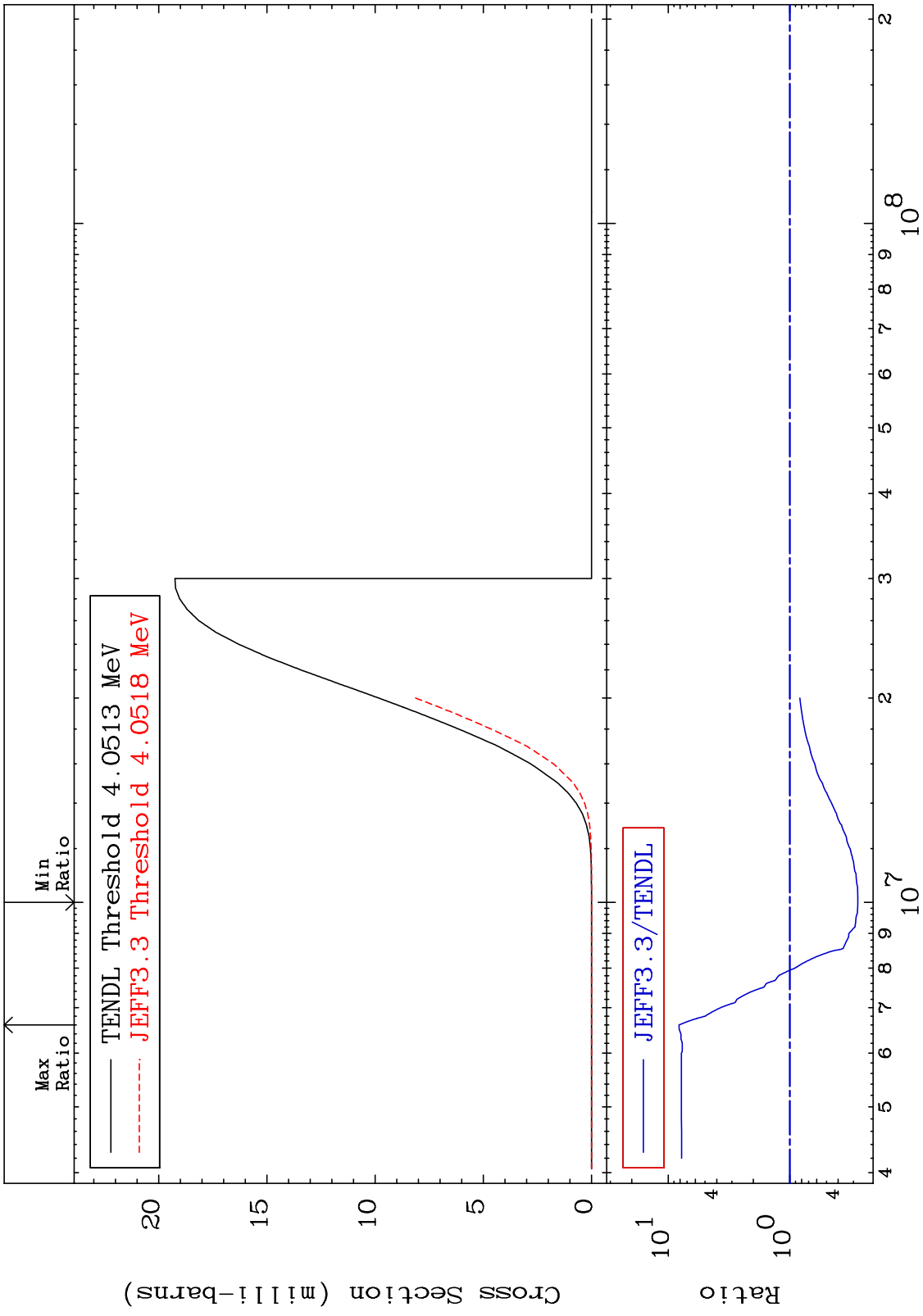


46

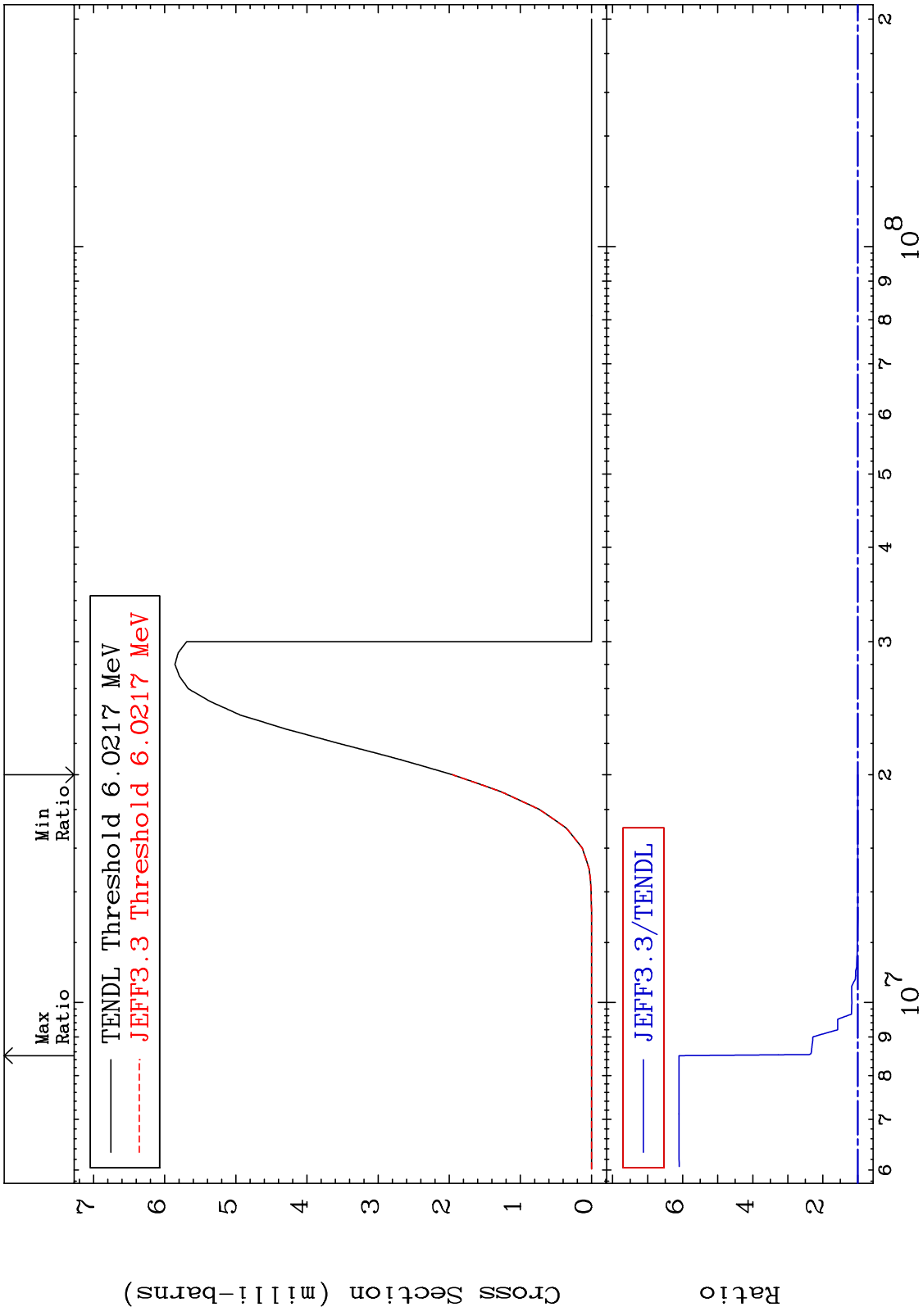
Incident Energy (eV)

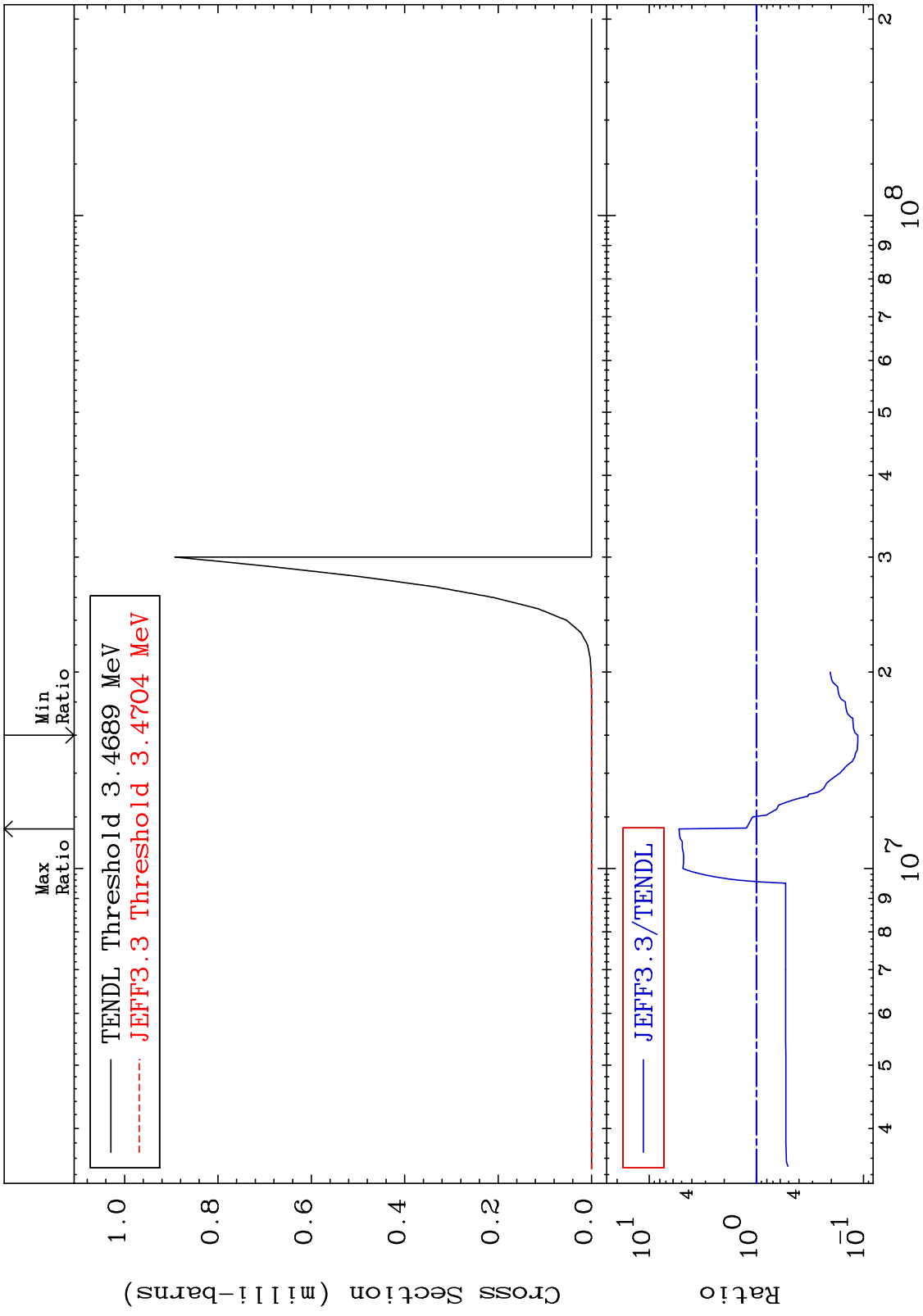
72-Hf-174

MAT 7225 (n,d) Cross Section 72-Hf-174
 -72.43 To 716.4 %

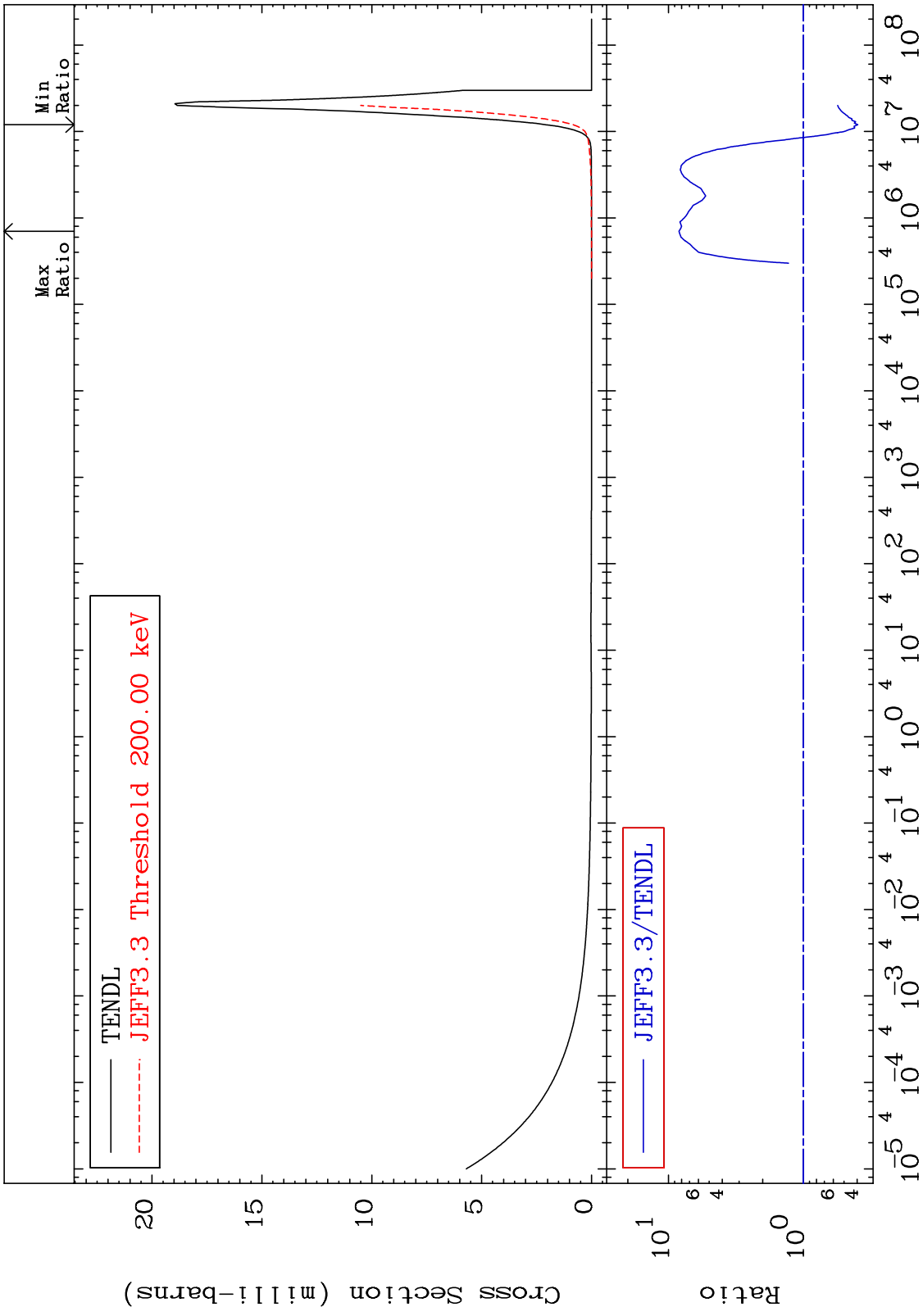


MAT 7225 (n,t) Cross Section 72-Hf-174 0.096 To 510.4 %

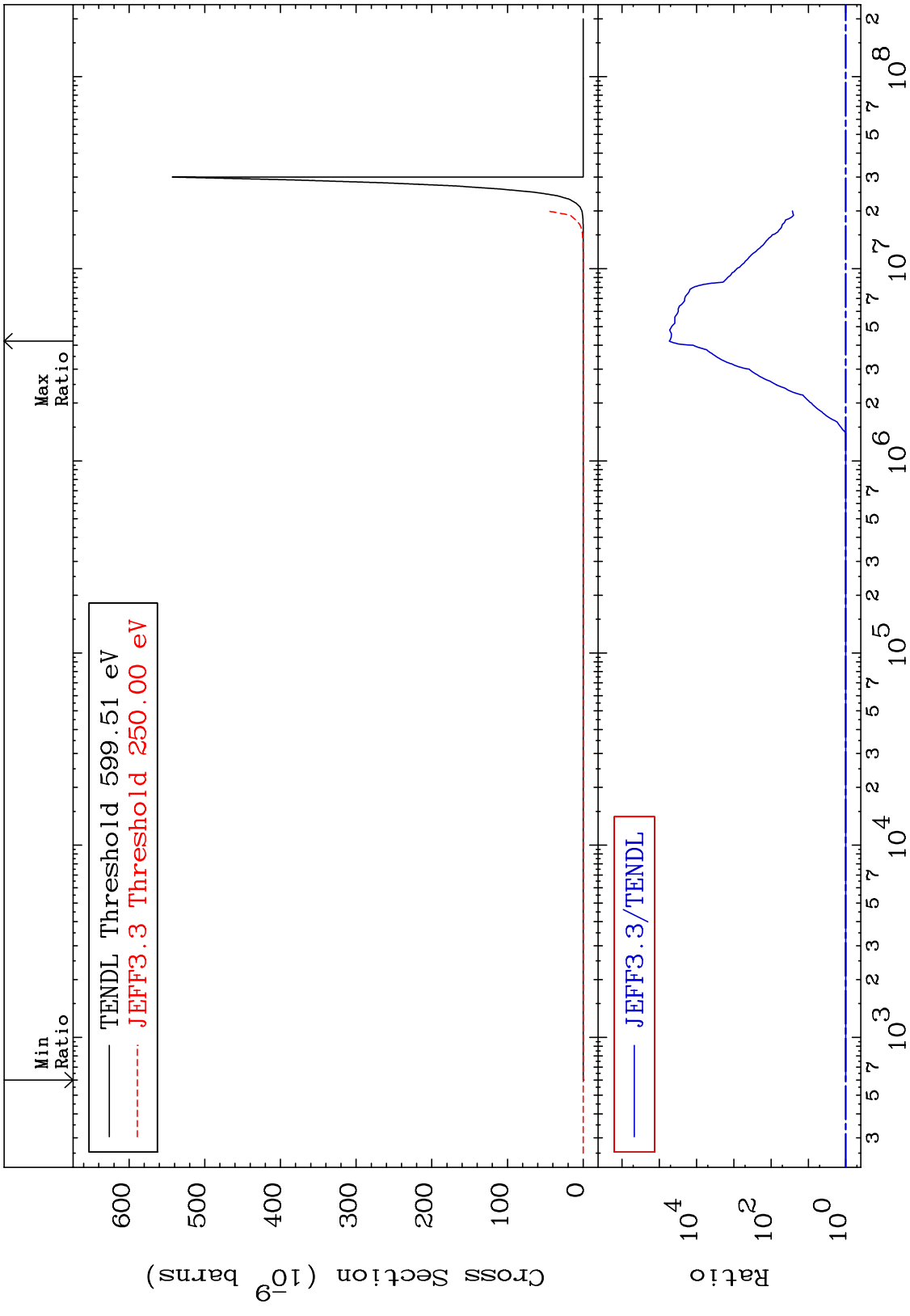




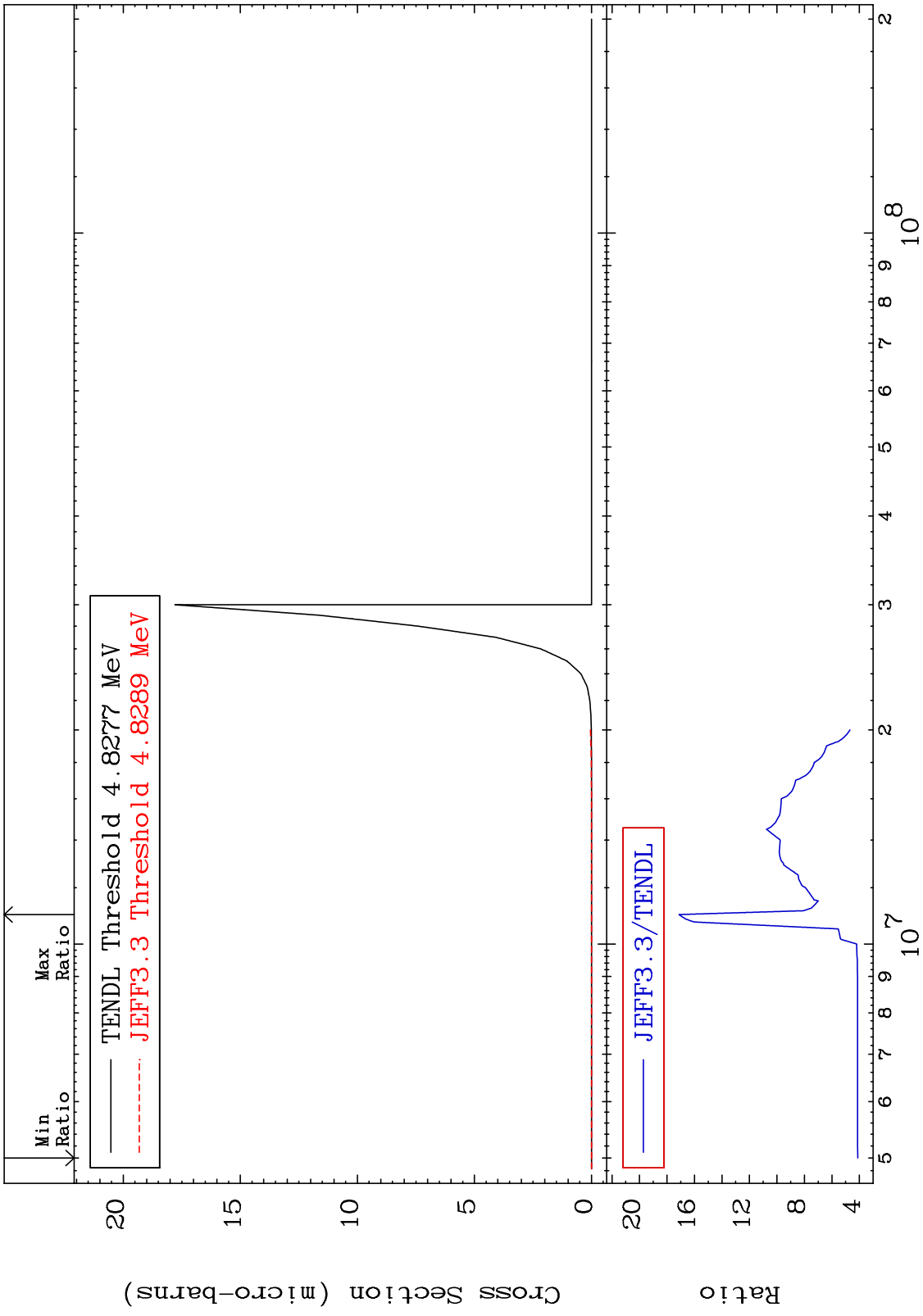
MAT 7225 (n,α) Cross Section 72-Hf-174
 -60.51 To 735.4 %



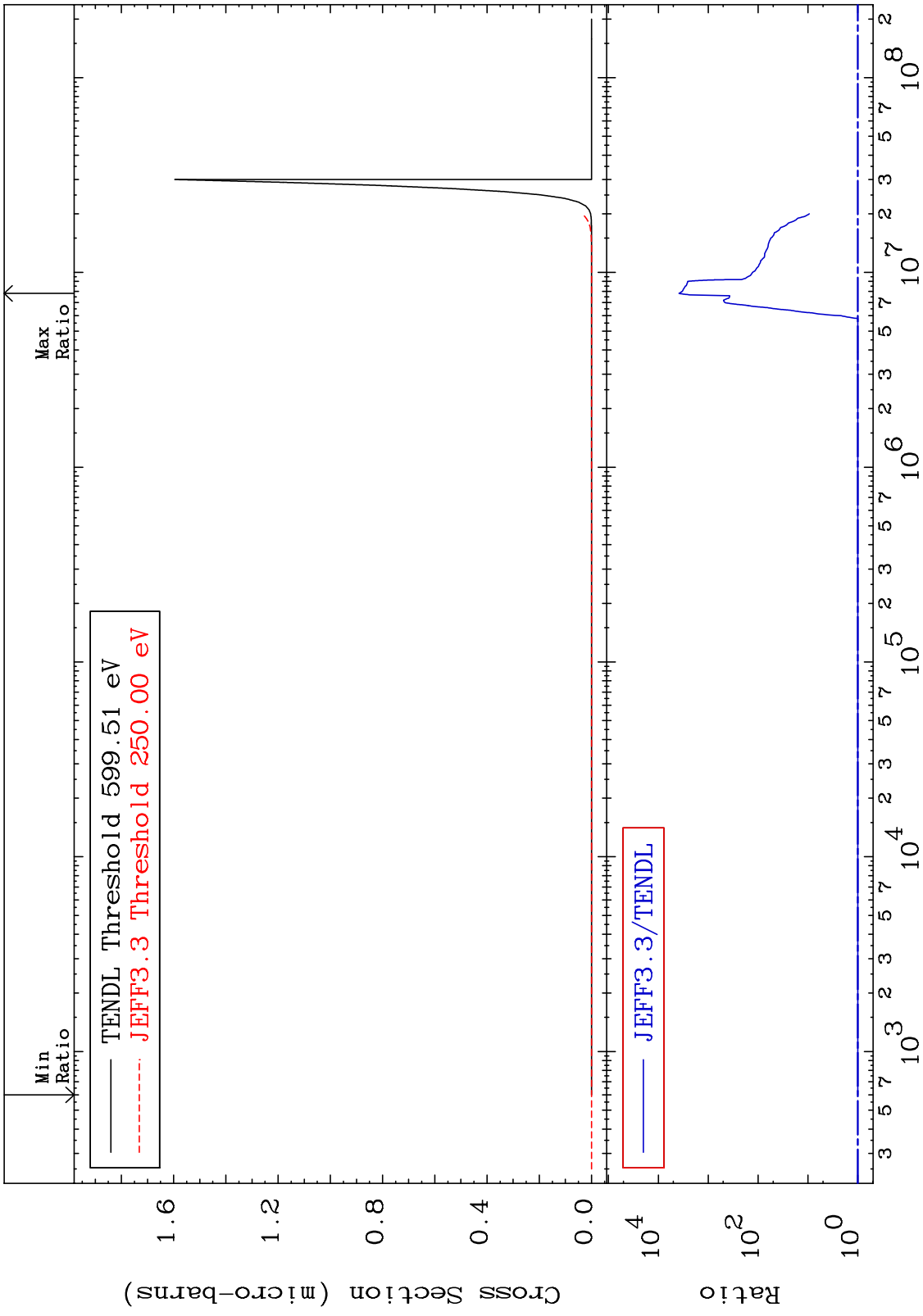
MAT 7225 (n,2α) Cross Section 72-Hf-174 To 9999. %

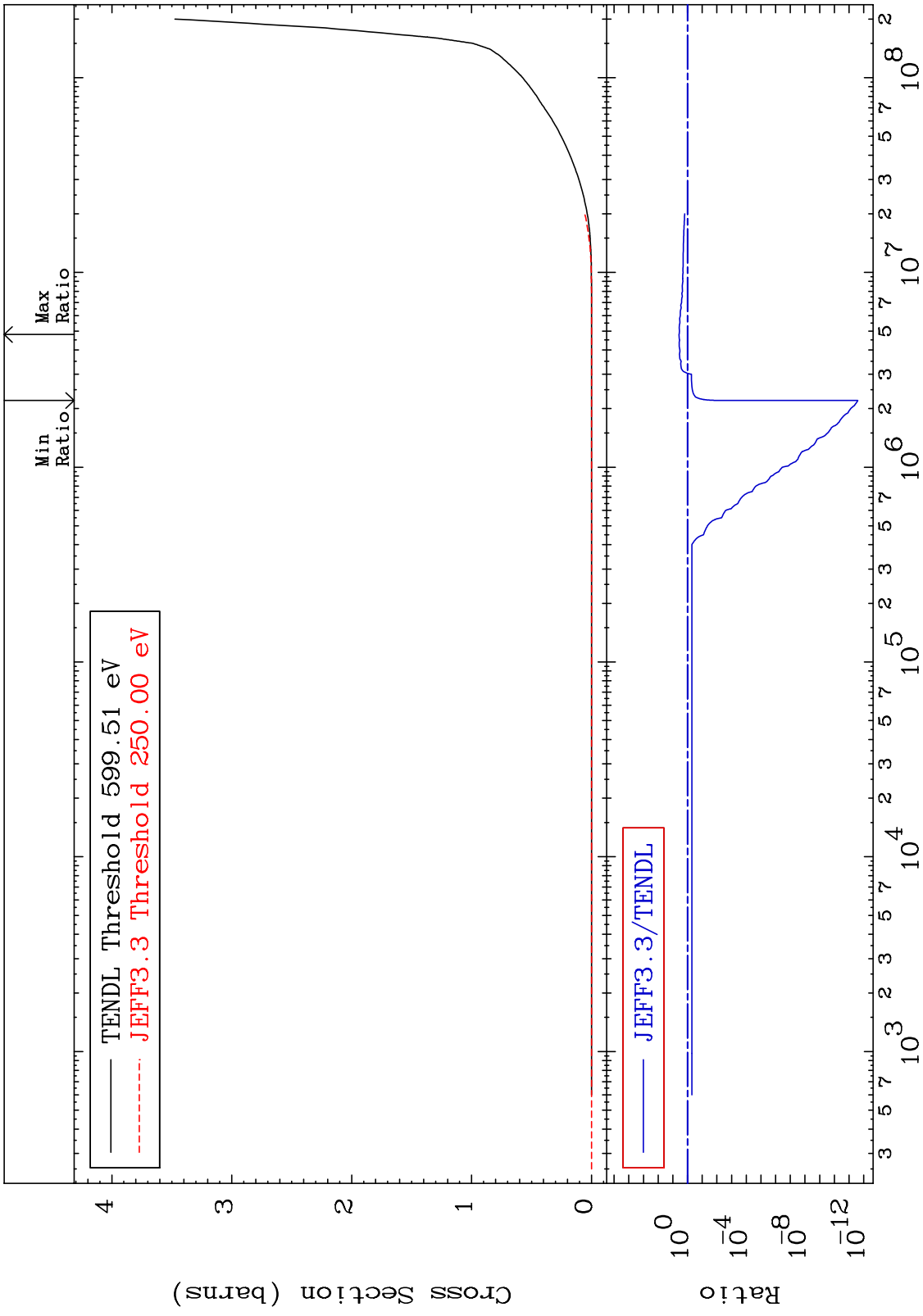


MAT 7225 (n,2p) Cross Section 72-Hf-174 311.3 To 1612. %



MAT 7225 (n,p) α 72-Hf-174
 Cross Section To 9999. %

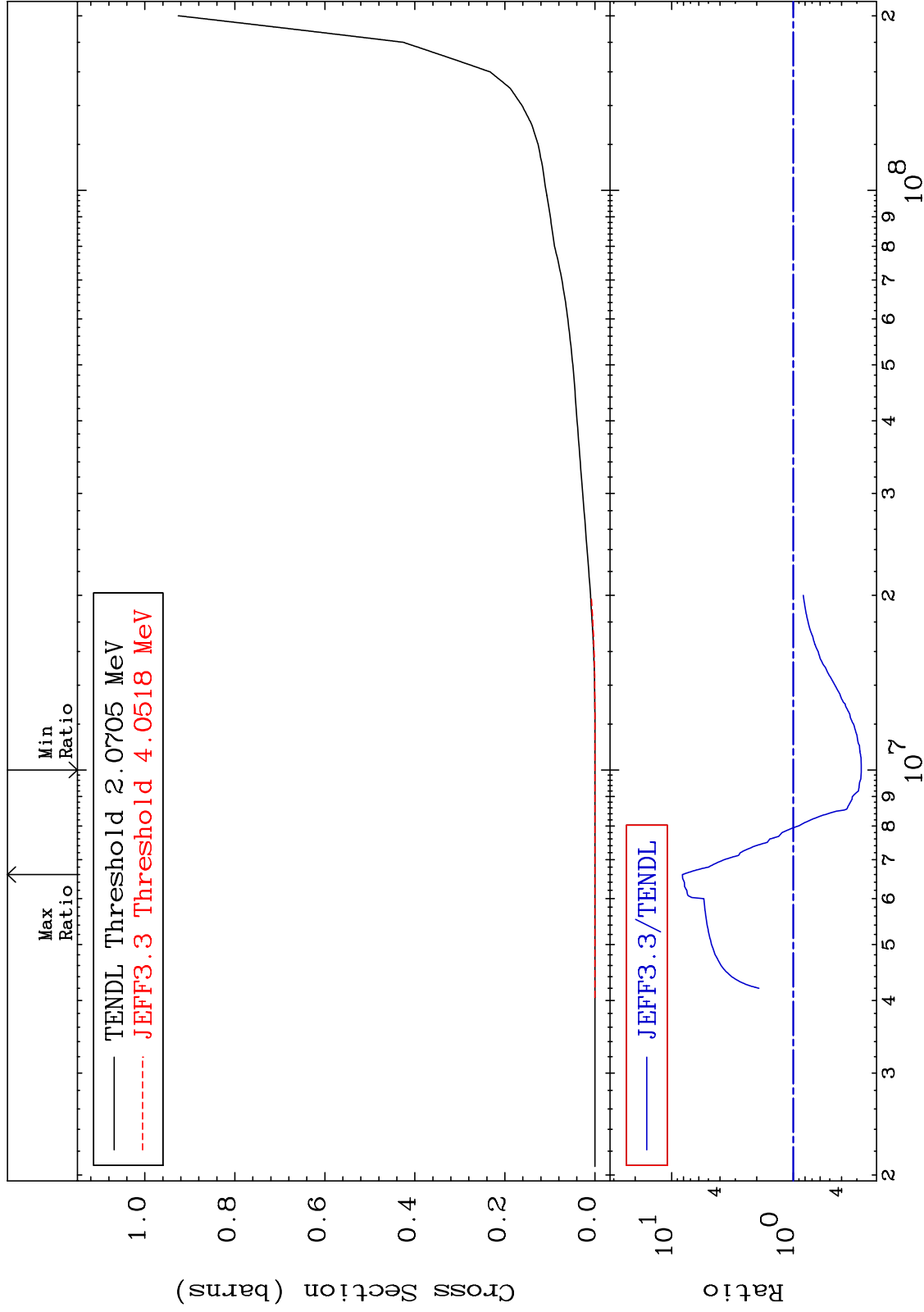




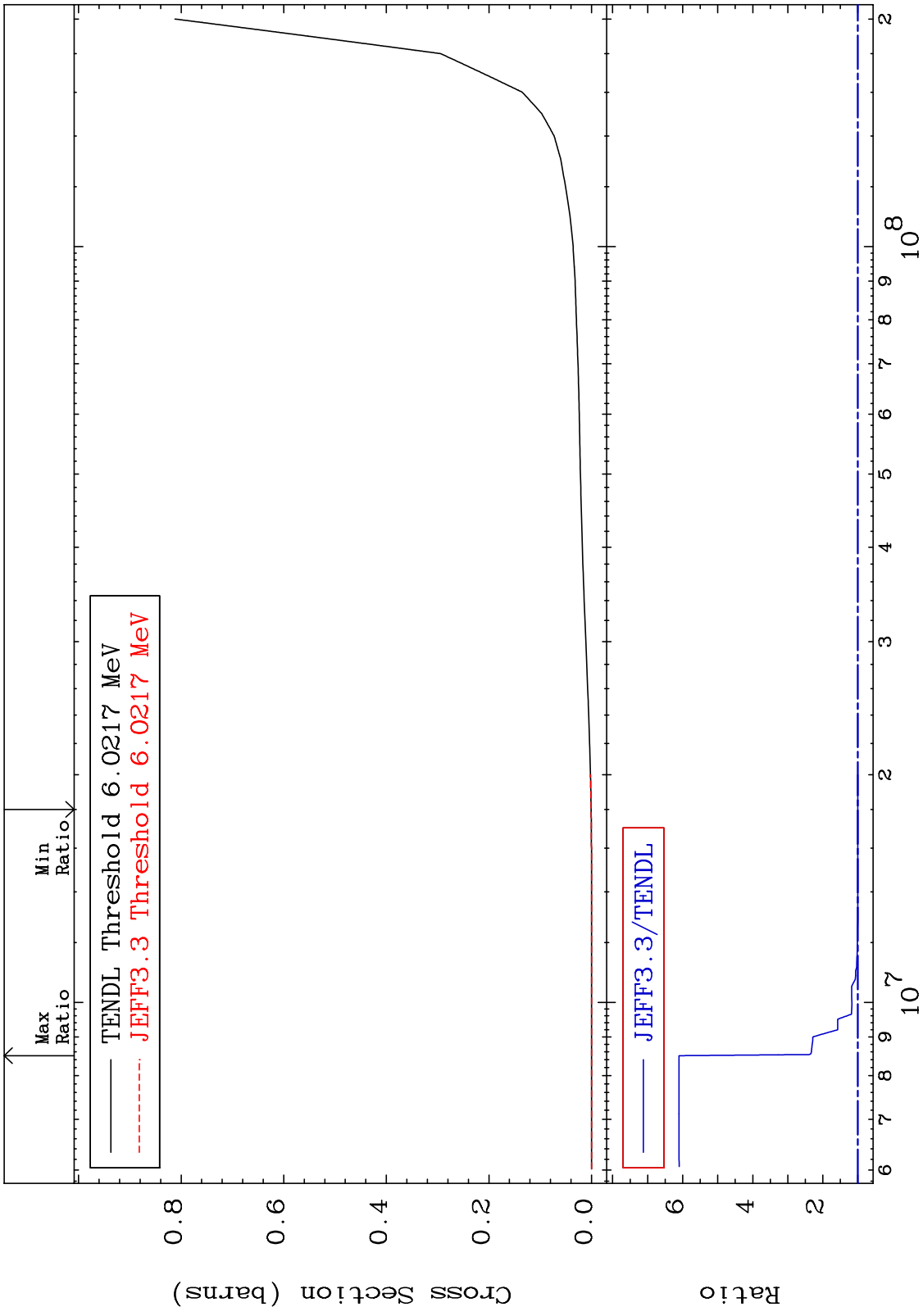
MAT 7225

Deuterium Production
Cross Section

72-Hf-174
-72.43 To 716.2 %



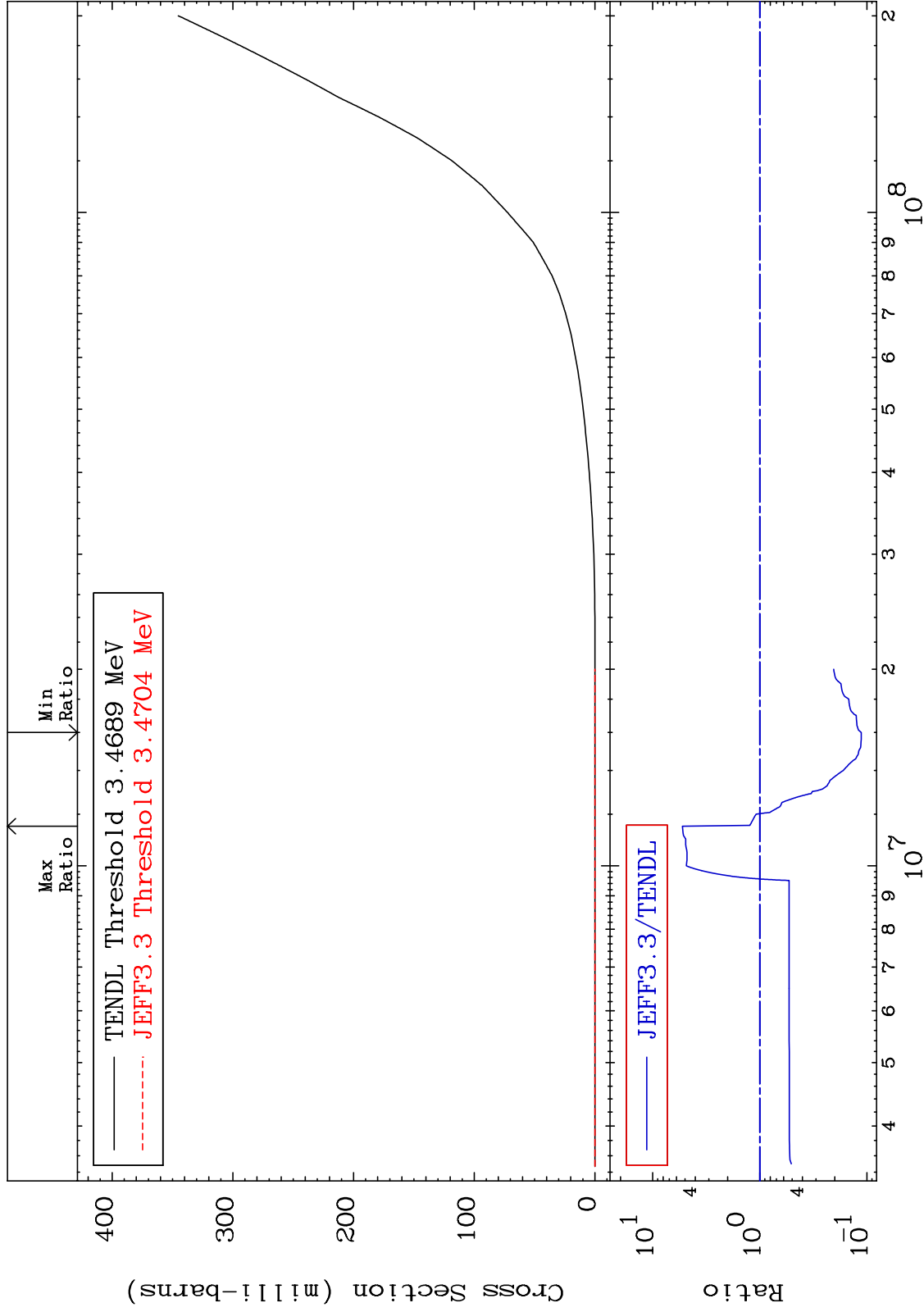
MAT 7225 Tritium Production Cross Section 72-Hf-174 To 510.4 %



MAT 7225

He-3 Production
Cross Section

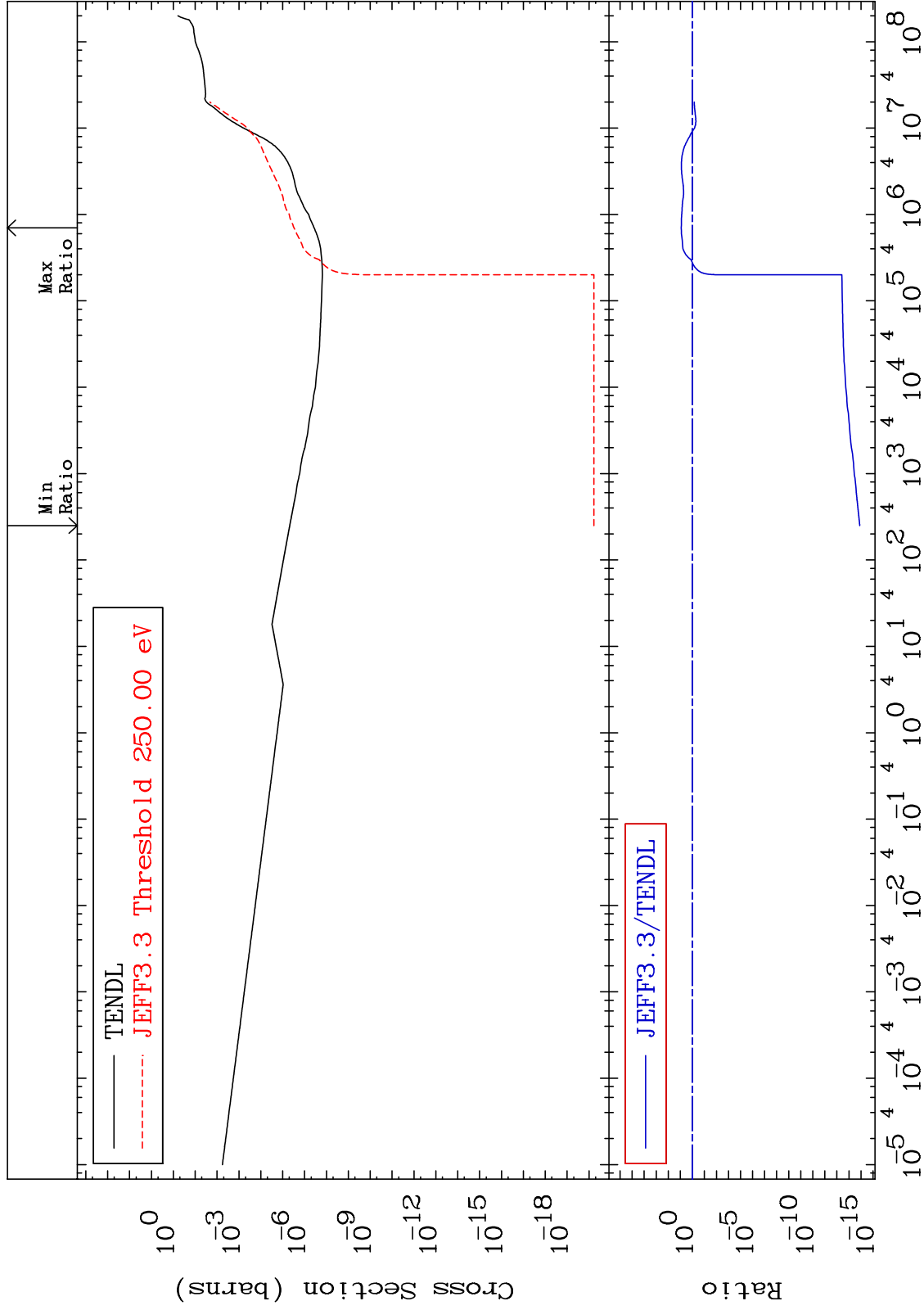
72-Hf-174
-88.70 To 428.0 %



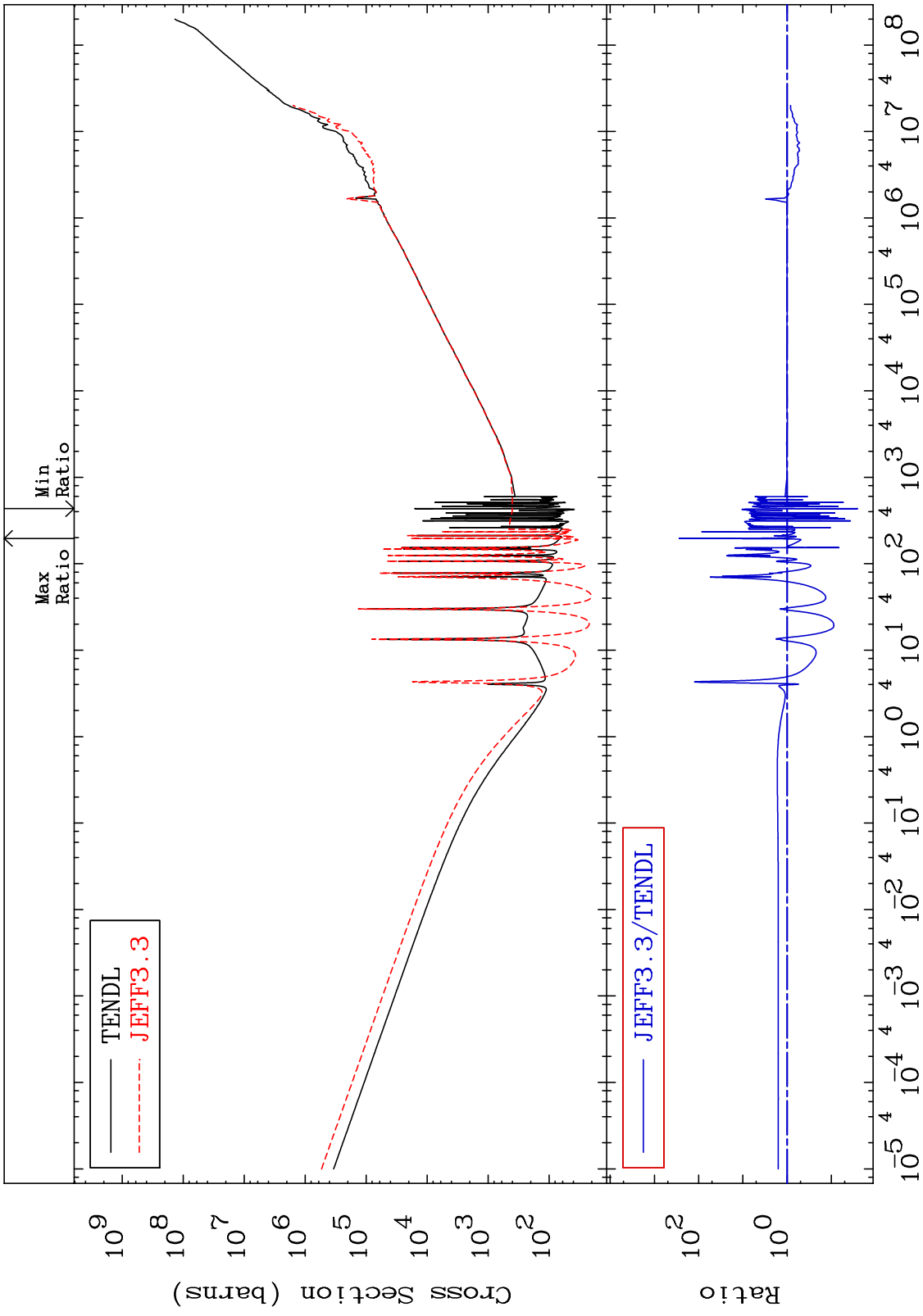
MAT 7225

He-4 Production
Cross Section

72-Hf-174
-100.0 To 735.4 %



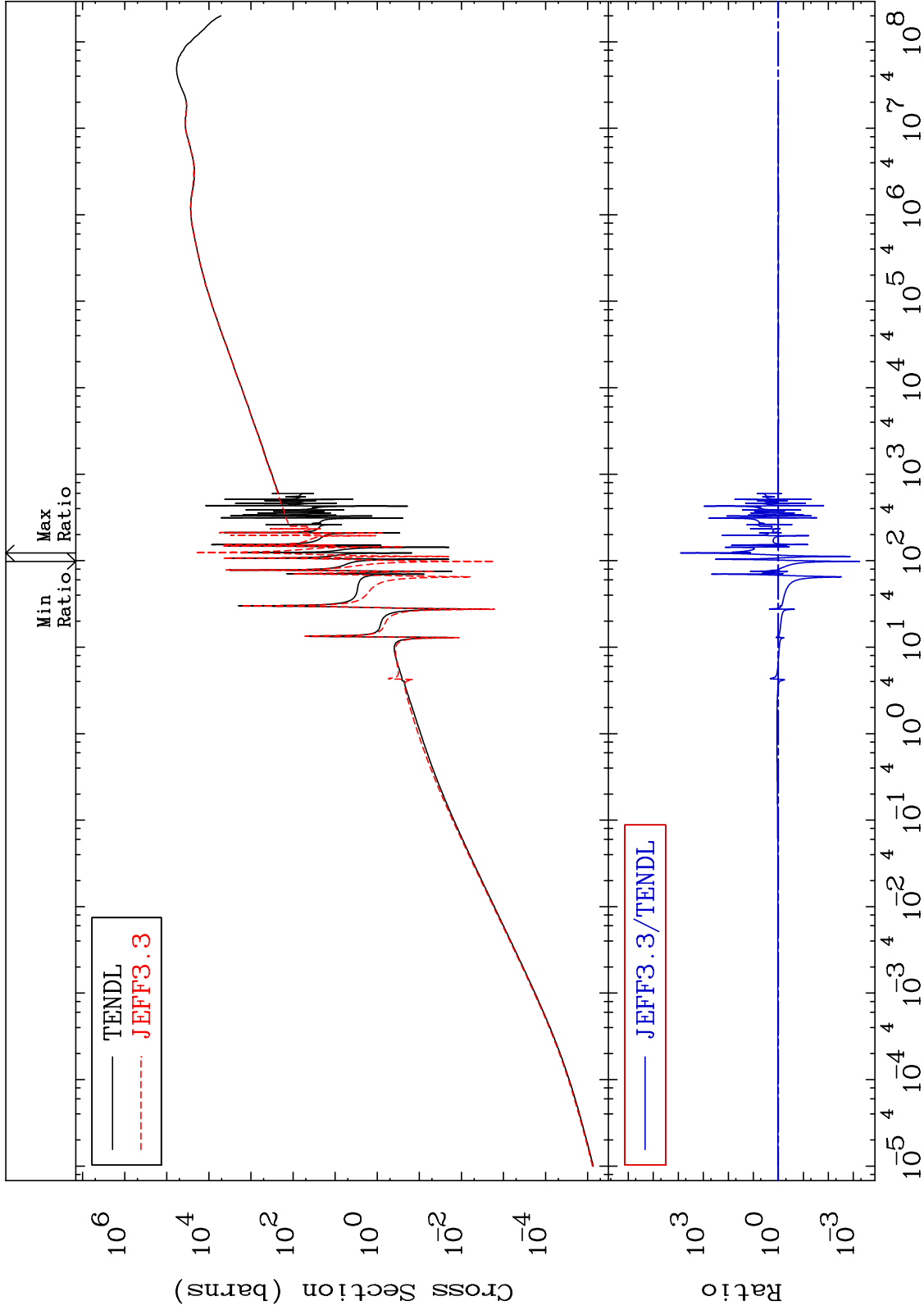
MAT 7225 Kerma total (eV-barns) 72-Hf-174
 Cross Section -97.48 To 9999. %



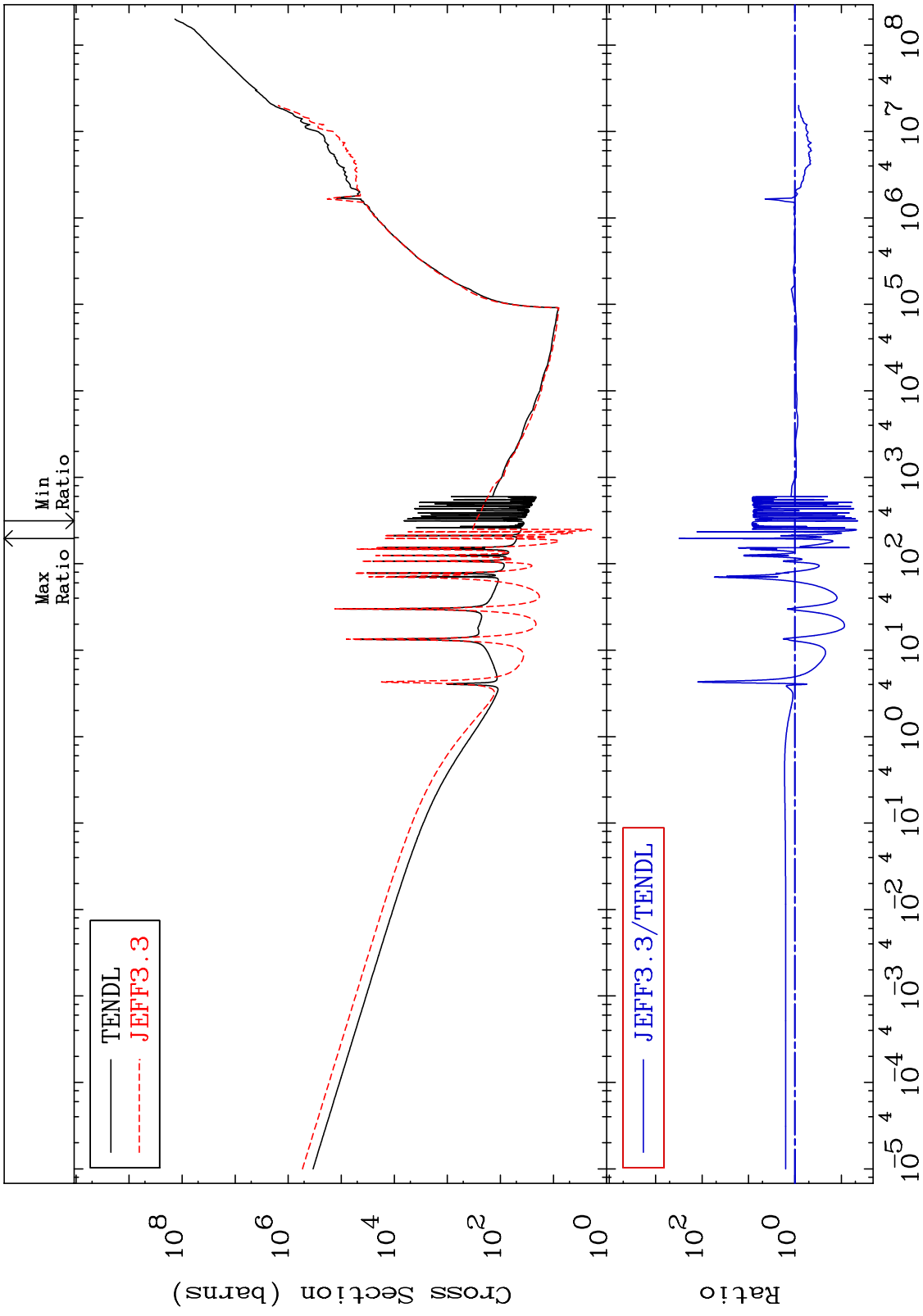
MAT 7225

Kerma elastic
Cross Section

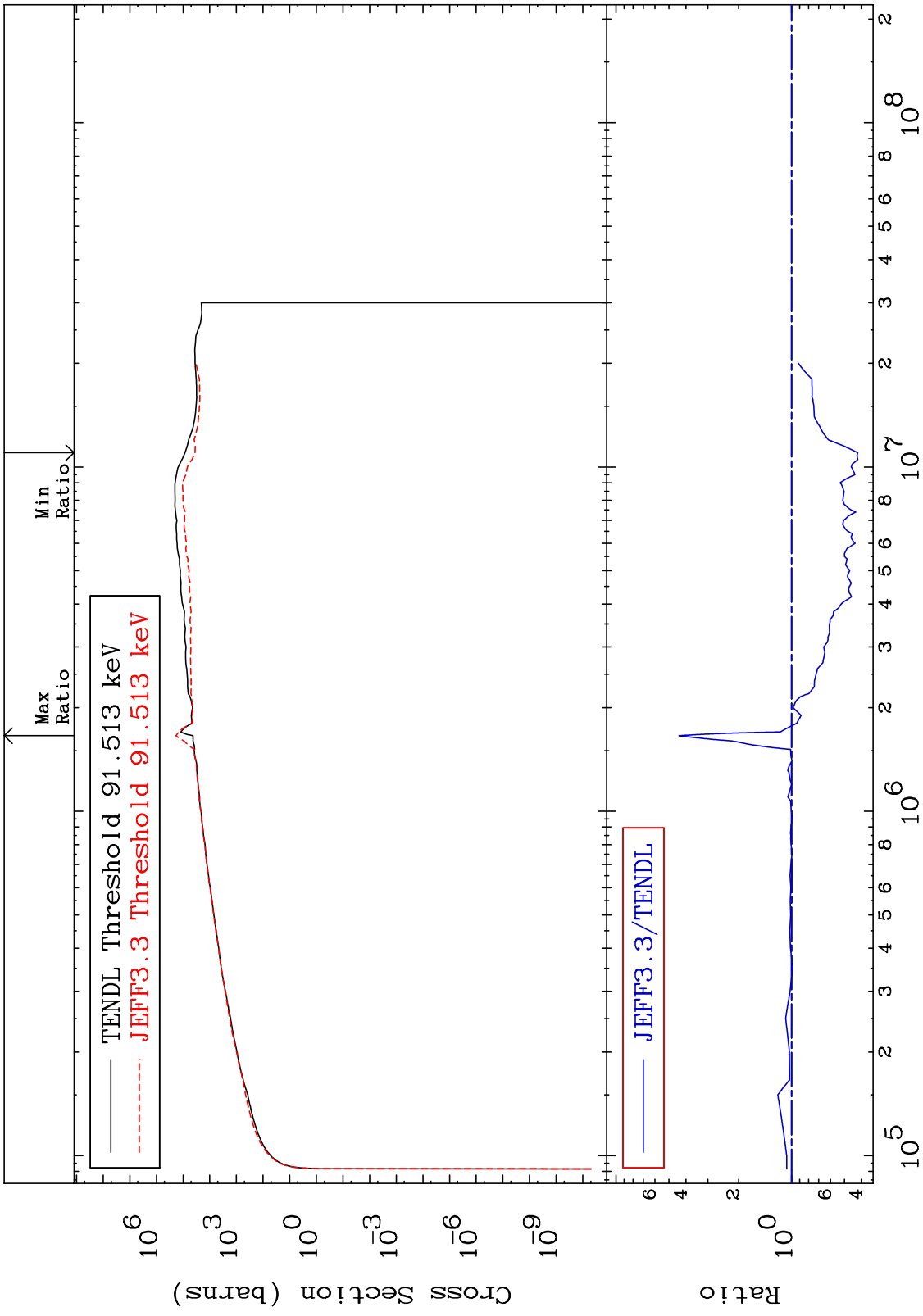
72-Hf-174
-99.94 To 9999. %



MAT 7225 Kerma non-elastic (all but mt2) 72-Hf-174
 -95.59 To 9999. %
 Cross Section



MAT 7225 Kerma inelastic (mt51-91) 72-Hf-174
Cross Section -58.09 To 337.8 %

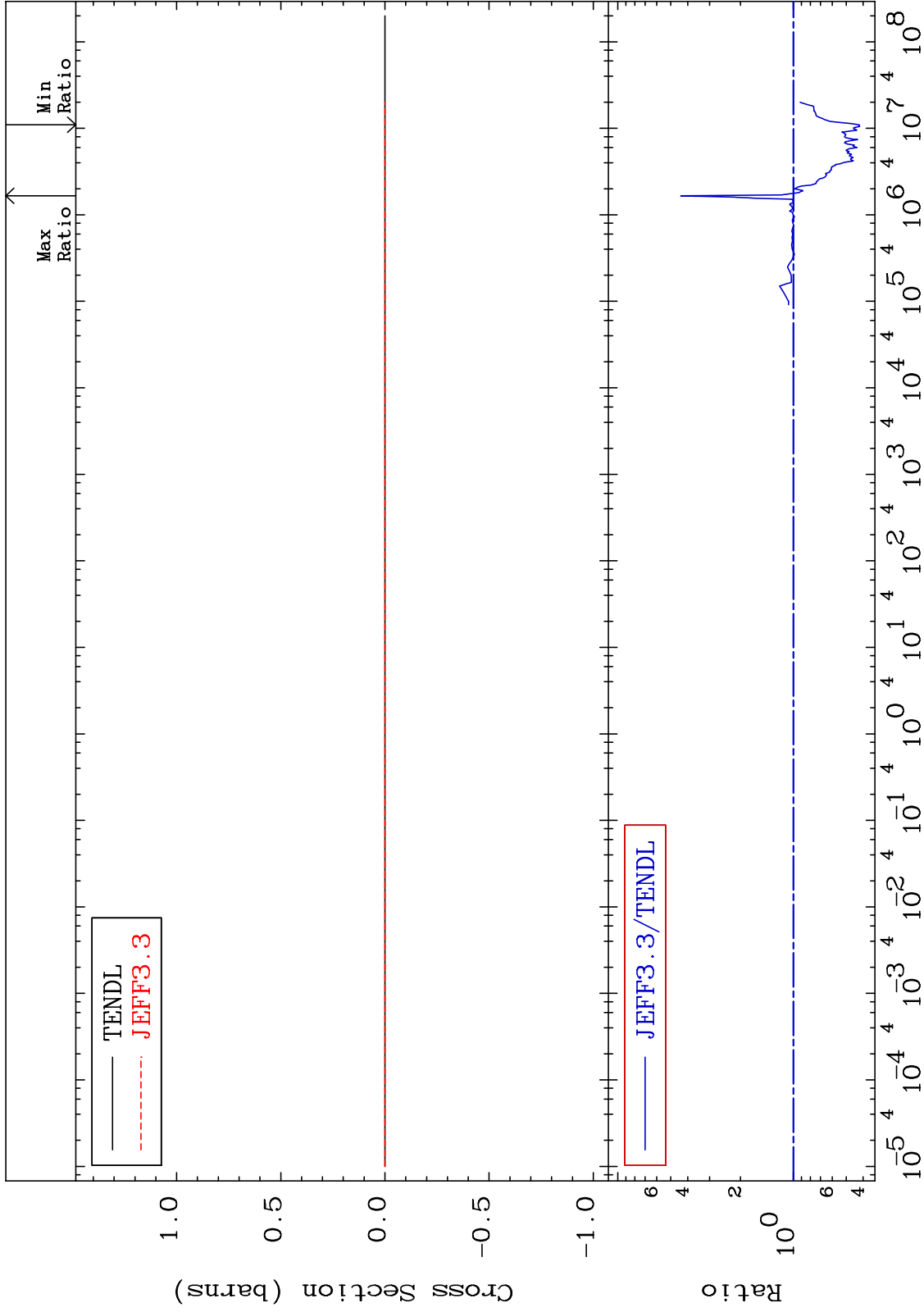


62 72-Hf-174

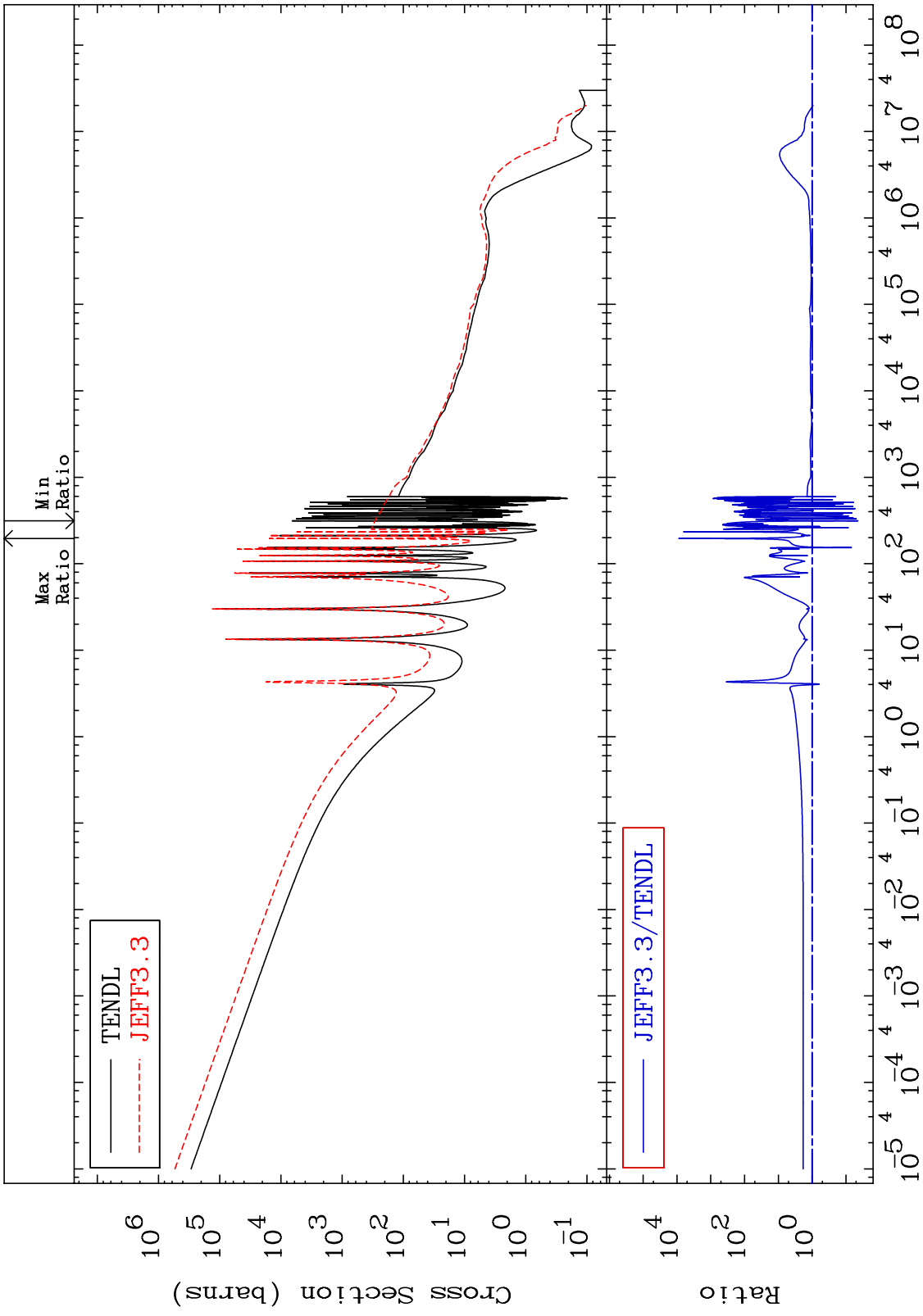
MAT 7225

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

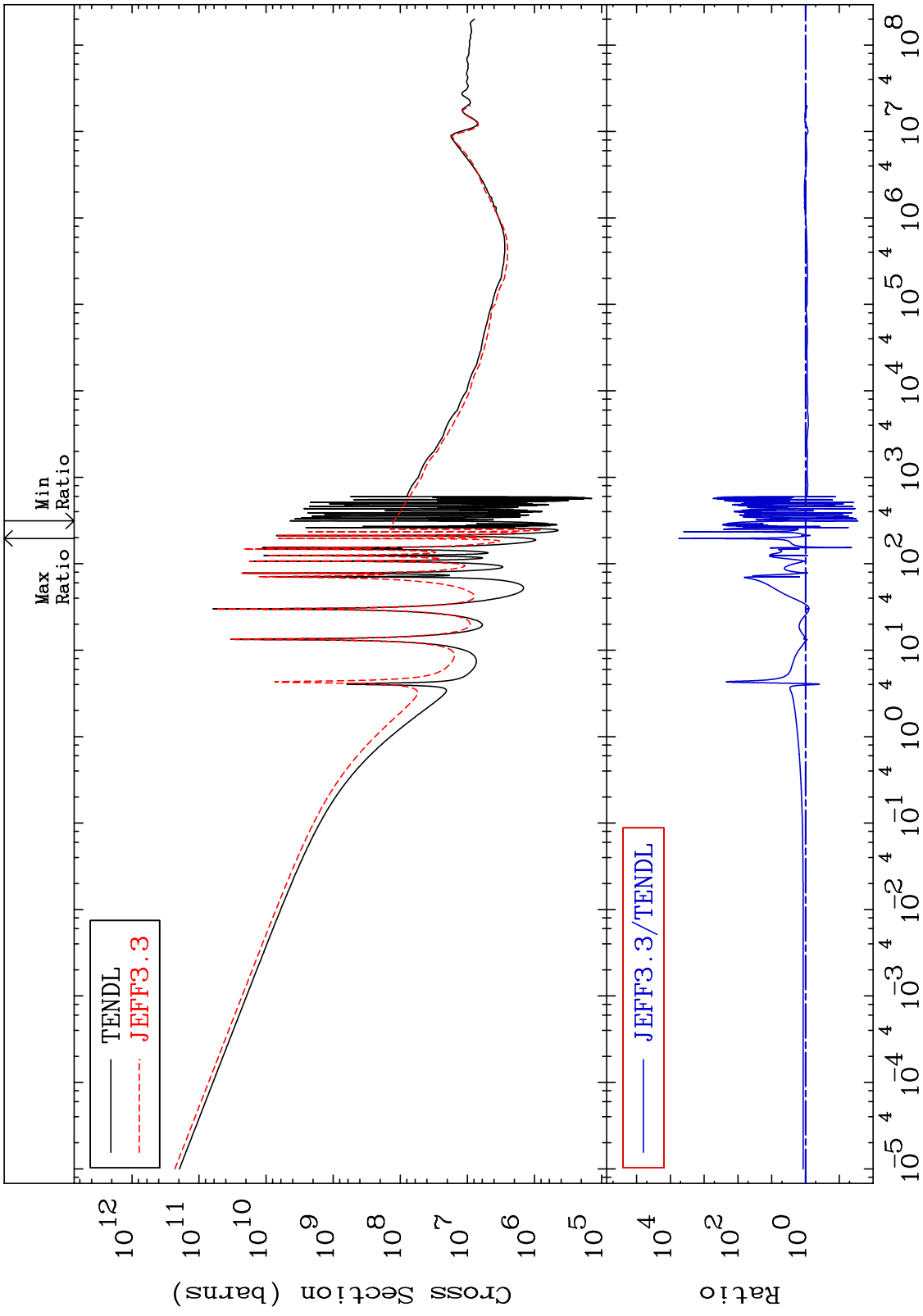
72-Hf-174
-58.09 To 337.8 %



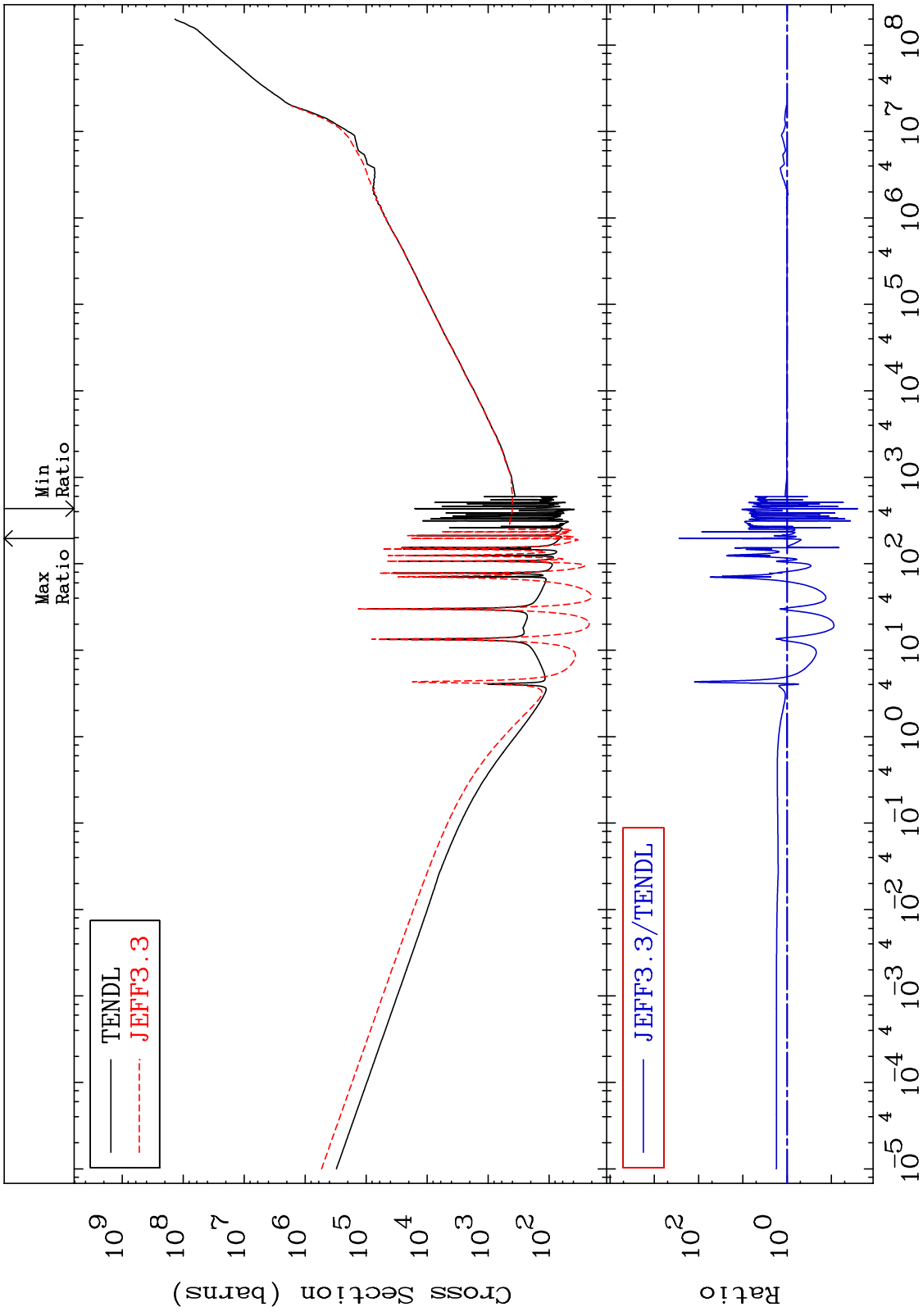
MAT 7225 Kerma capture (mt102) 72-Hf-174
 -95.56 To 9999. %
 Cross Section



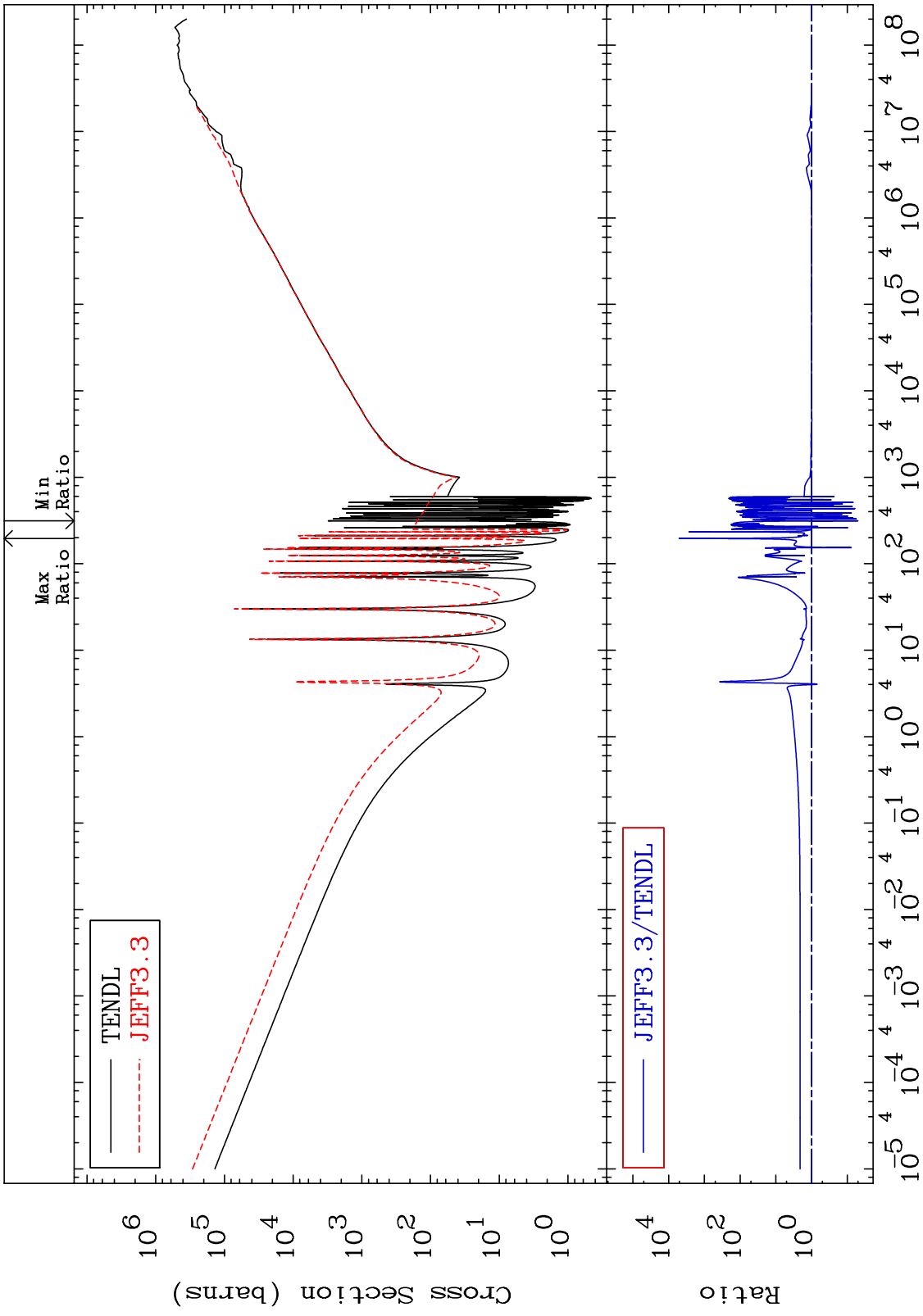
MAT 7225 Total photon (eV-barns) 72-Hf-174
 Cross Section -97.18 To 9999. %



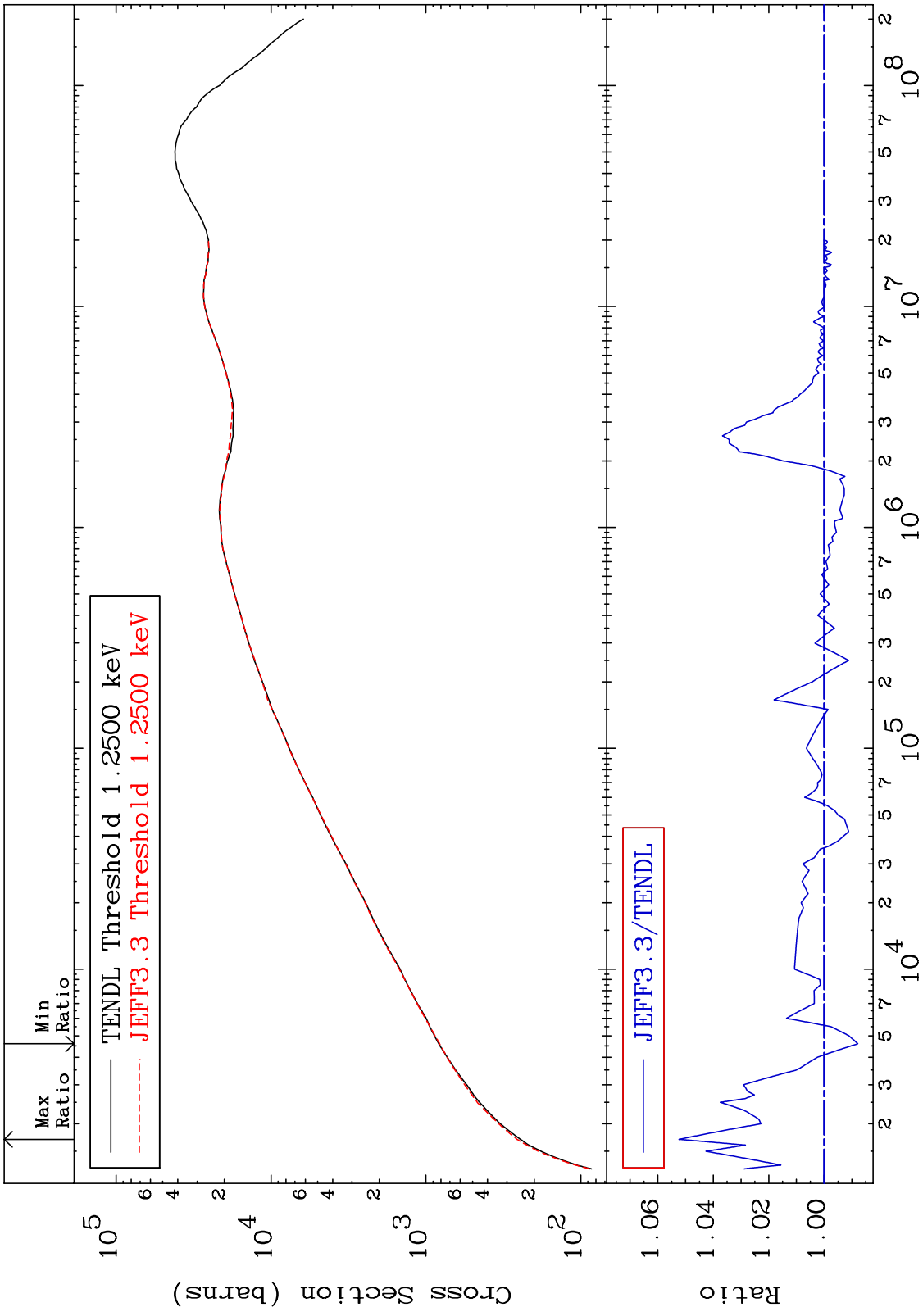
MAT 7225 Total kinematic kerma (high limit) 72-Hf-174
 Cross Section -97.48 To 9999. %



MAT 7225 Dpa total (eV-barns) 72-Hf-174
 -94.91 To 9999. %
 Cross Section



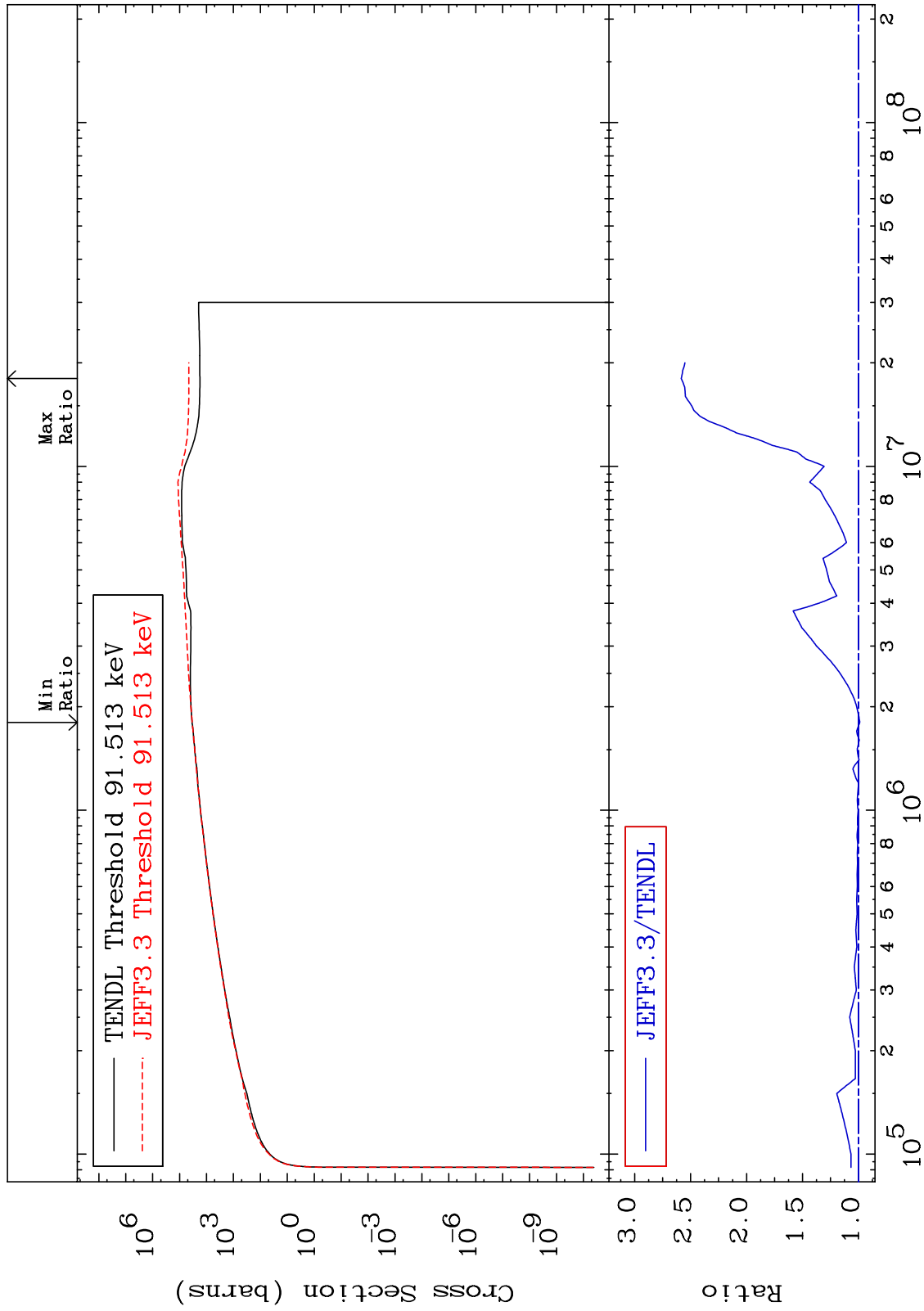
67 Incident Energy (eV) 72-Hf-174



MAT 7225

Dpa inelastic (mt51-91)
Cross Section

72-Hf-174
-1.189 To 158.4 %

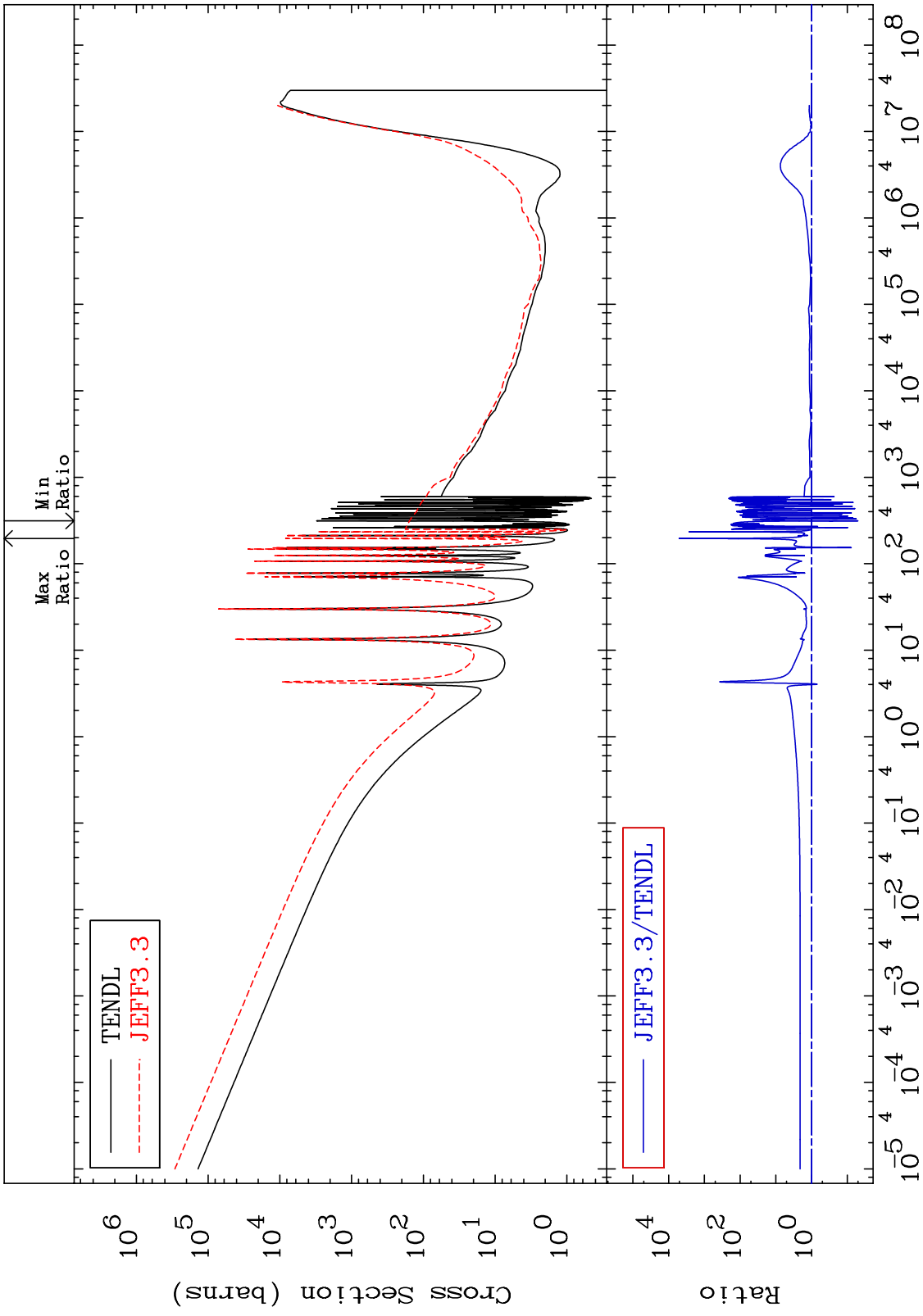


69

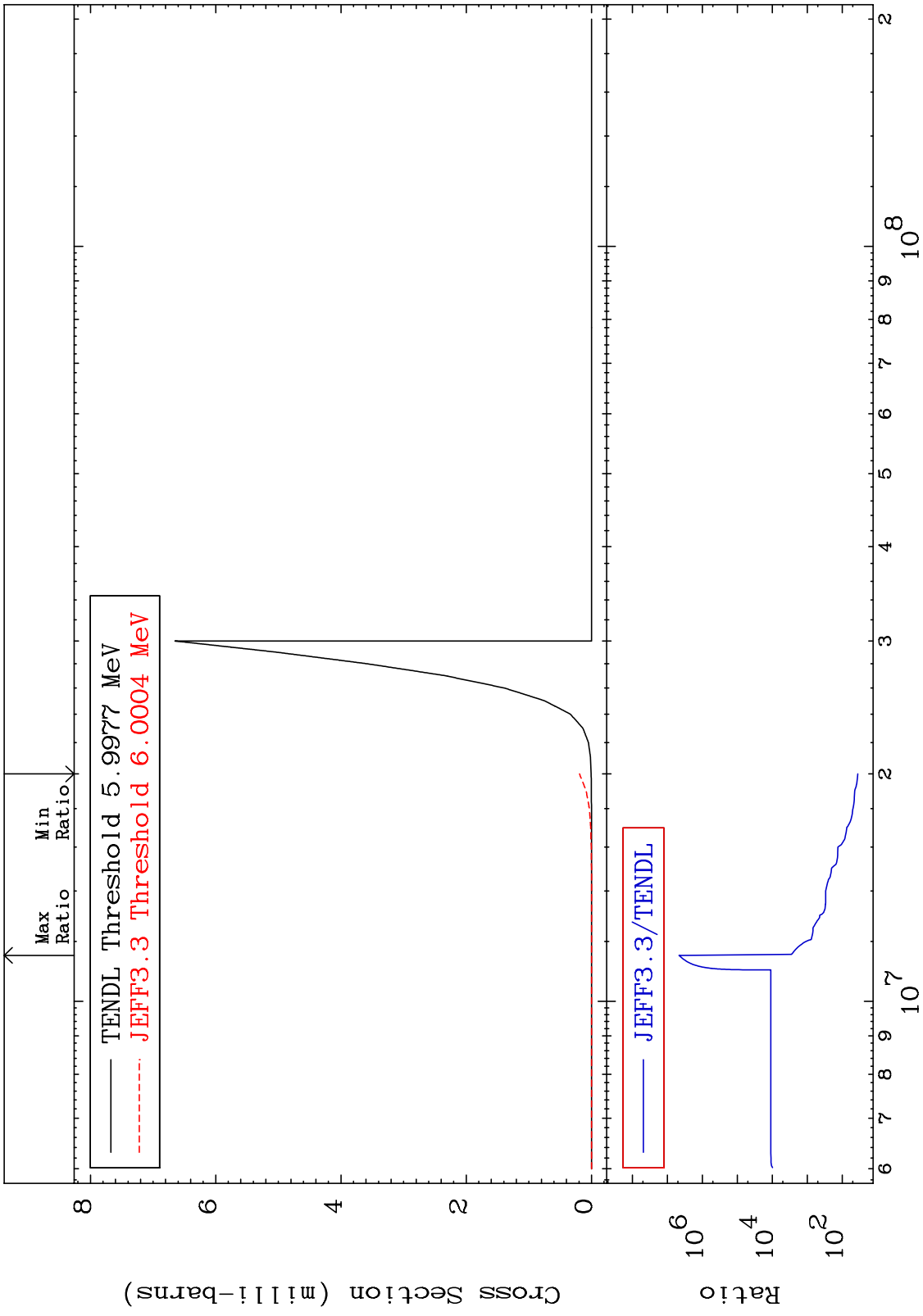
Incident Energy (eV)

72-Hf-174

MAT 7225 Dpa disappearance (mt102 -120) 72-Hf-174
 -94.91 To 9999. %
 Cross Section



70 Incident Energy (eV) 72-Hf-174

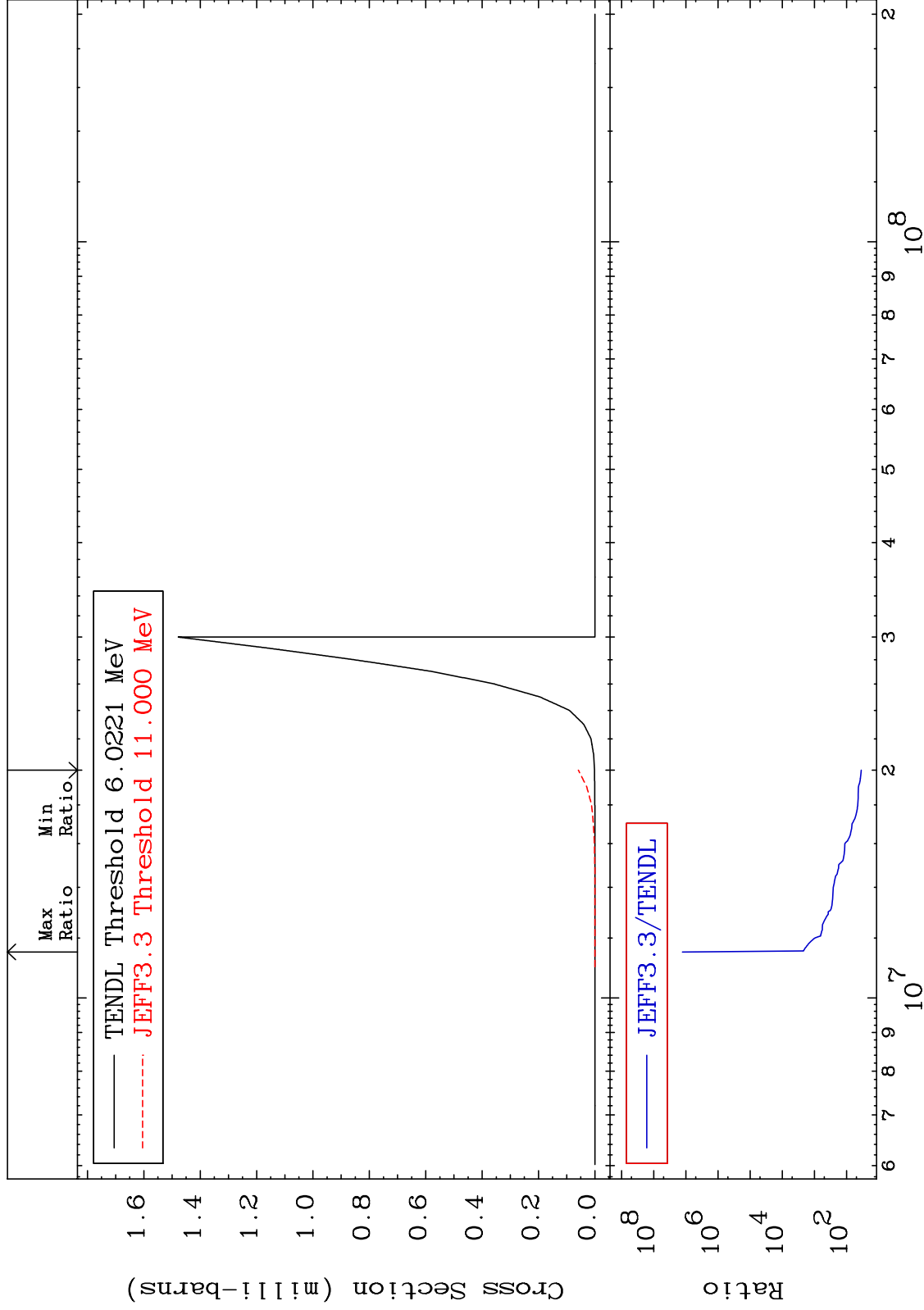


MAT 7225

(n,2n) α :70-Yb-169m1

72-Hf-174

Radionuclide Production Cross Section 3415. To 9999. %

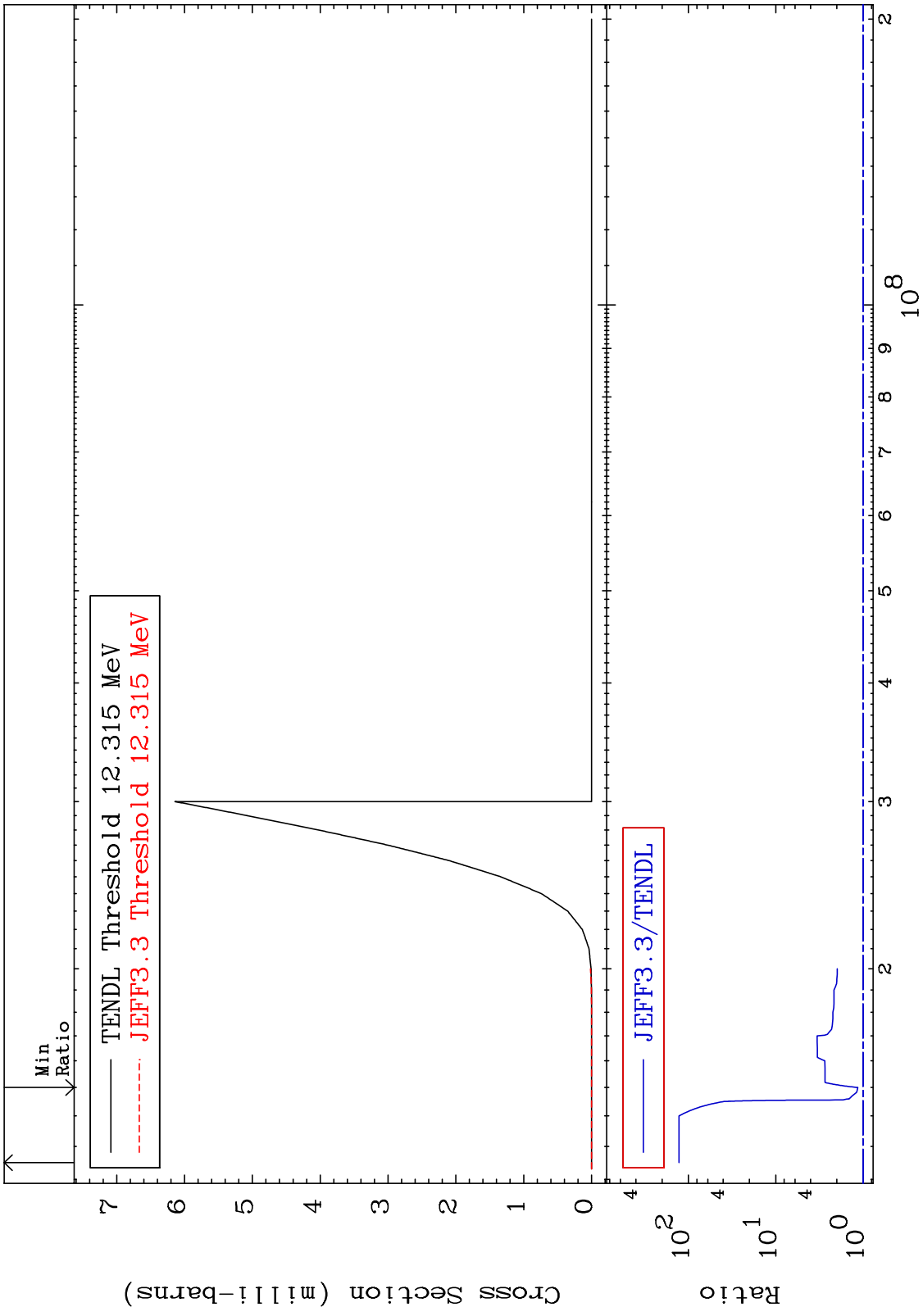


72

Incident Energy (eV)

72-Hf-174

MAT 7225 (n, n') d:71-Lu-172g 72-Hf-174
 Radionuclide Production Cross Section 14.74 To 9999. %

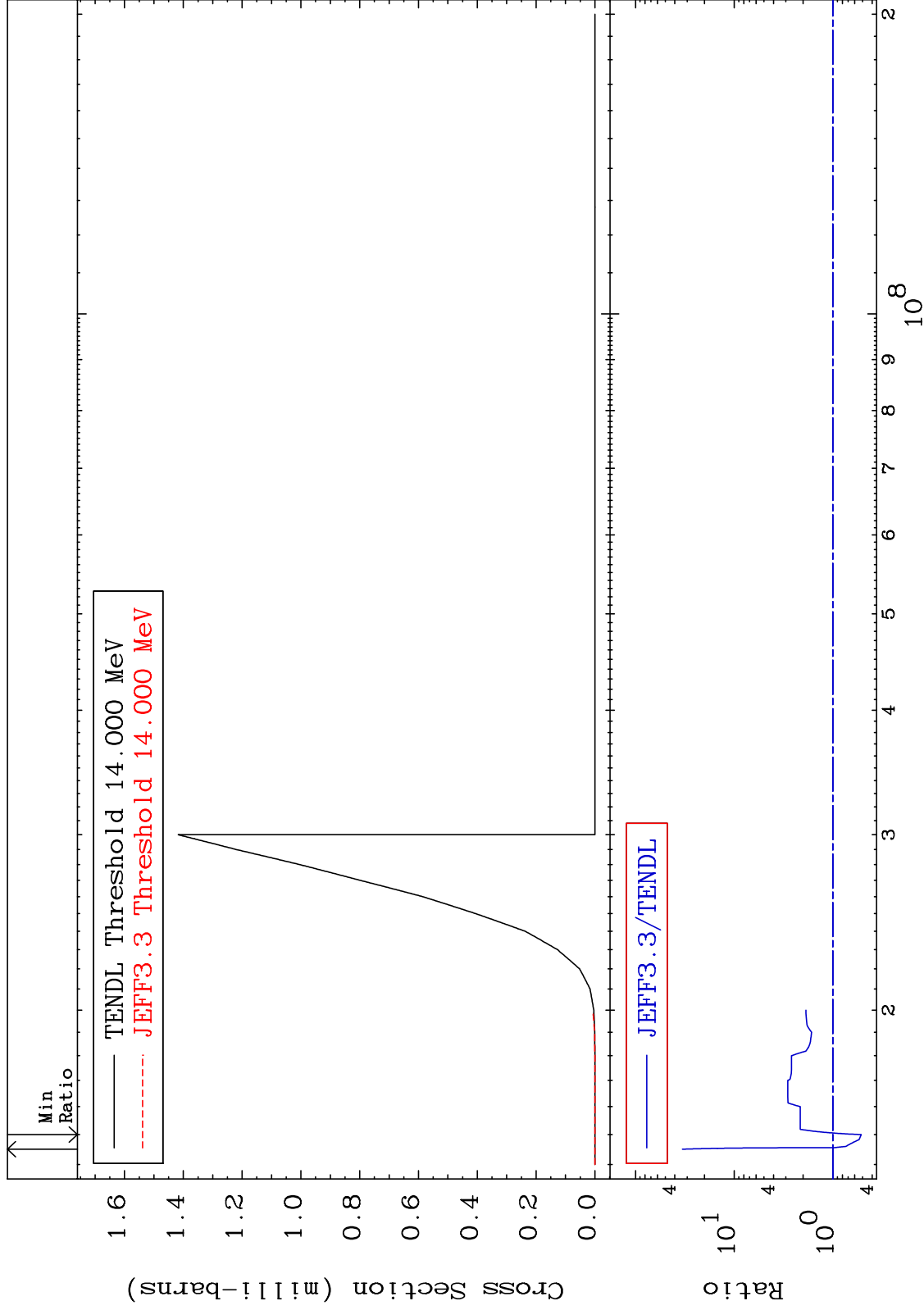


MAT 7225

(n, n') d: 71-Lu-172m1

72-Hf-174

Radionuclide Production Cross Section -48.47 To 3245. %



74

Incident Energy (eV)

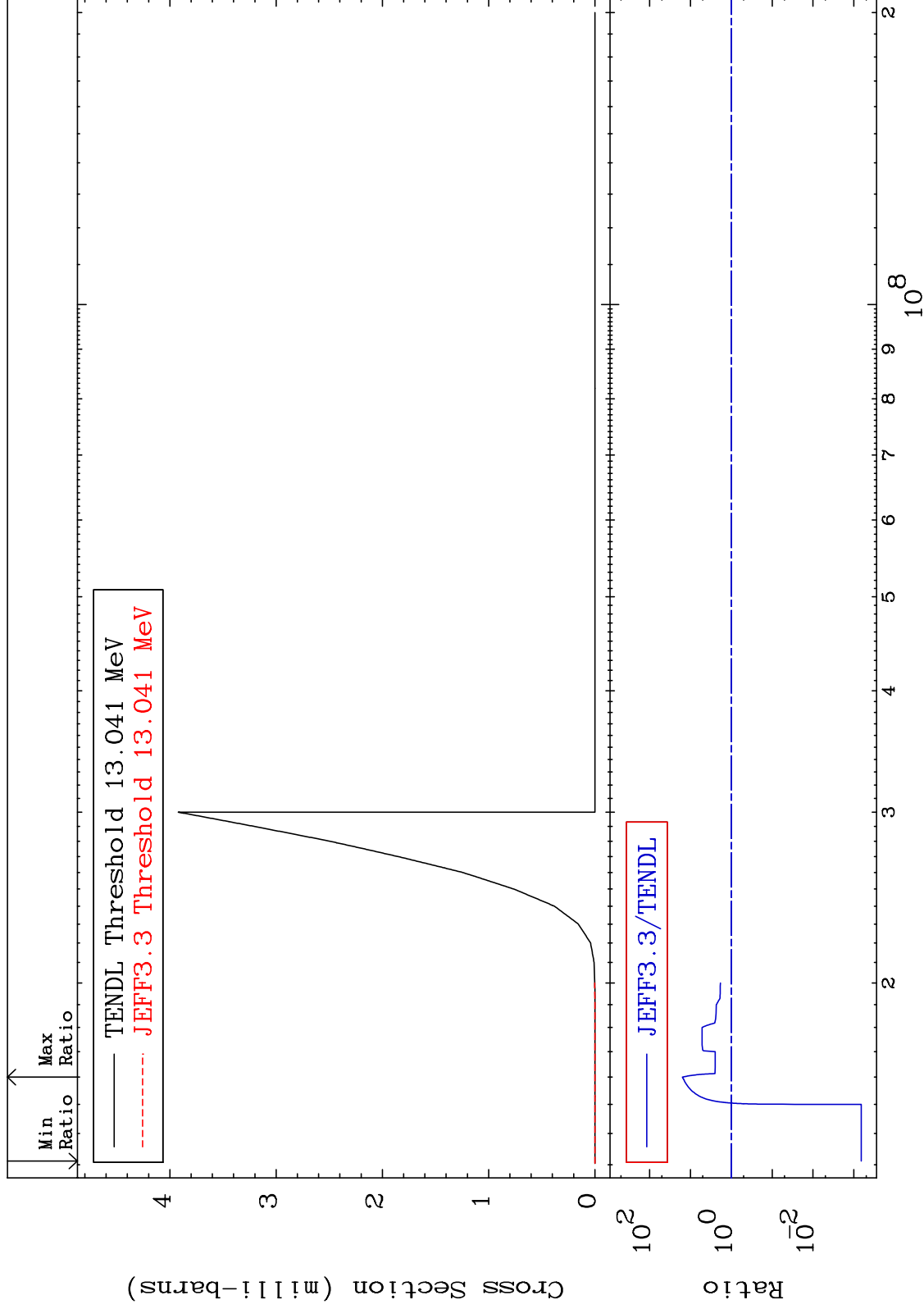
72-Hf-174

MAT 7225

(n, n') t:71-Lu-171g

72-Hf-174

Radionuclide Production Cross Section -99.93 To 1469. %



75

Incident Energy (eV)

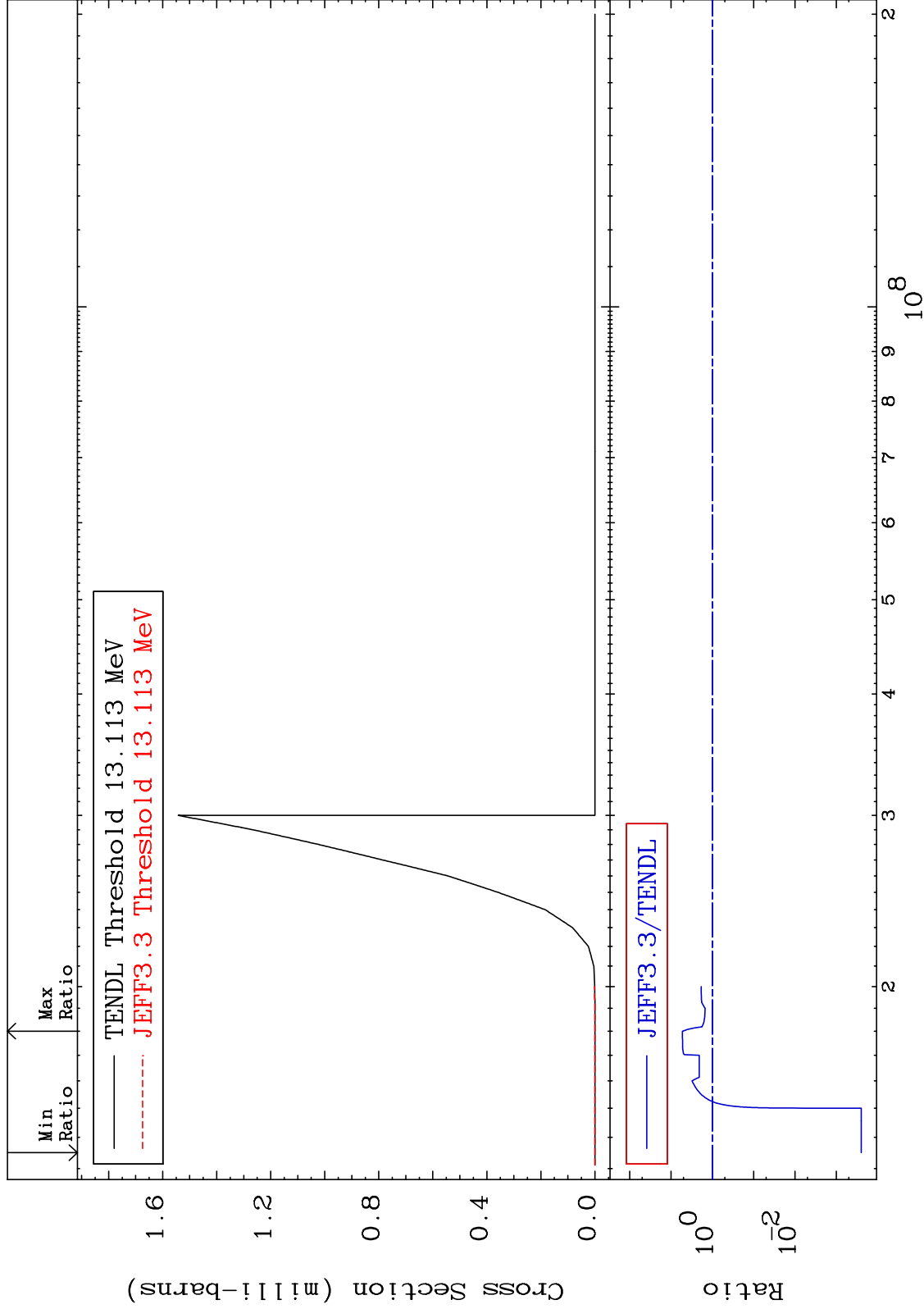
72-Hf-174

MAT 7225

(n,n') t:71-Lu-171m1

72-Hf-174

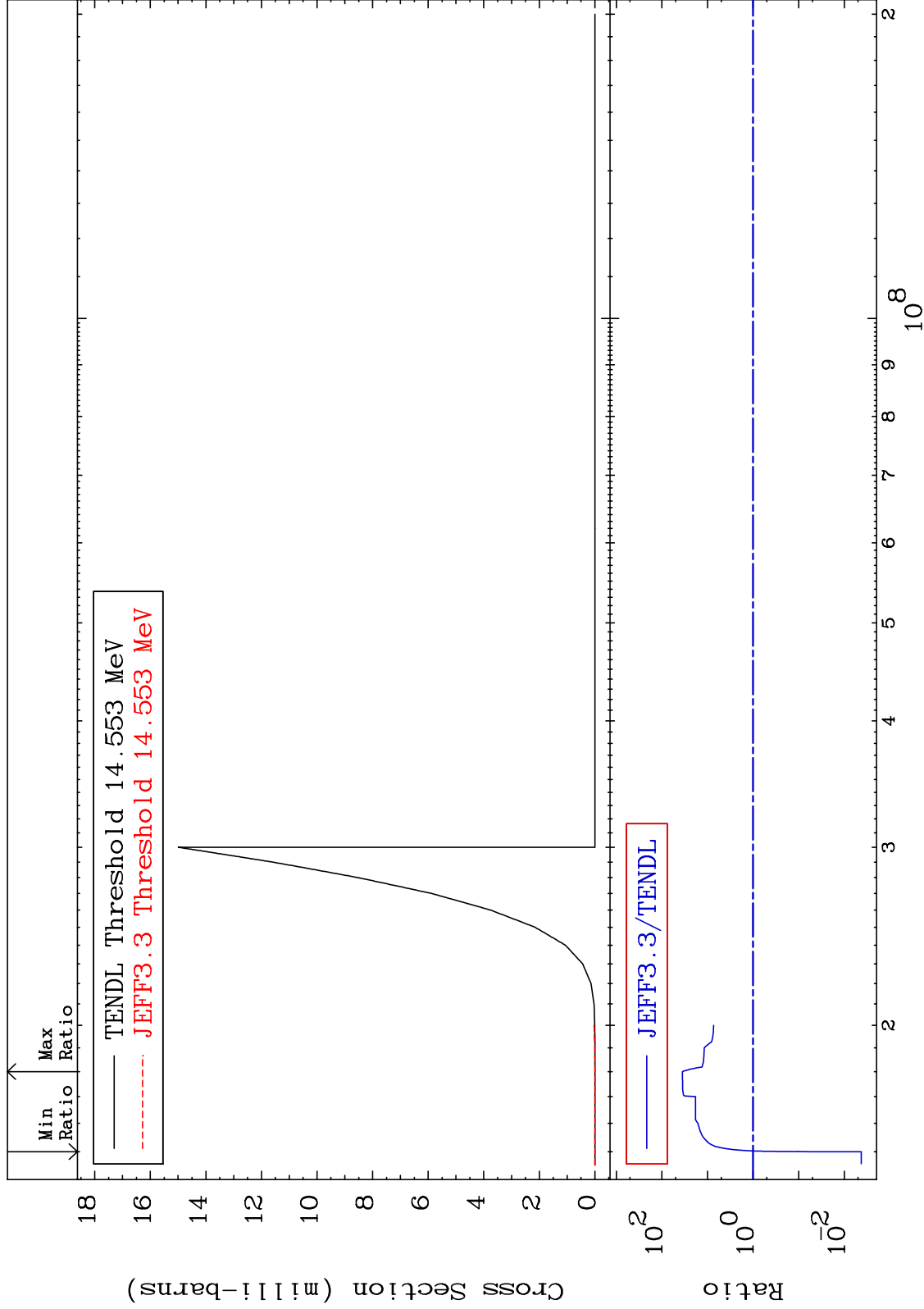
Radionuclide Production Cross Section -99.98 To 428.5 %



76

Incident Energy (eV)

72-Hf-174

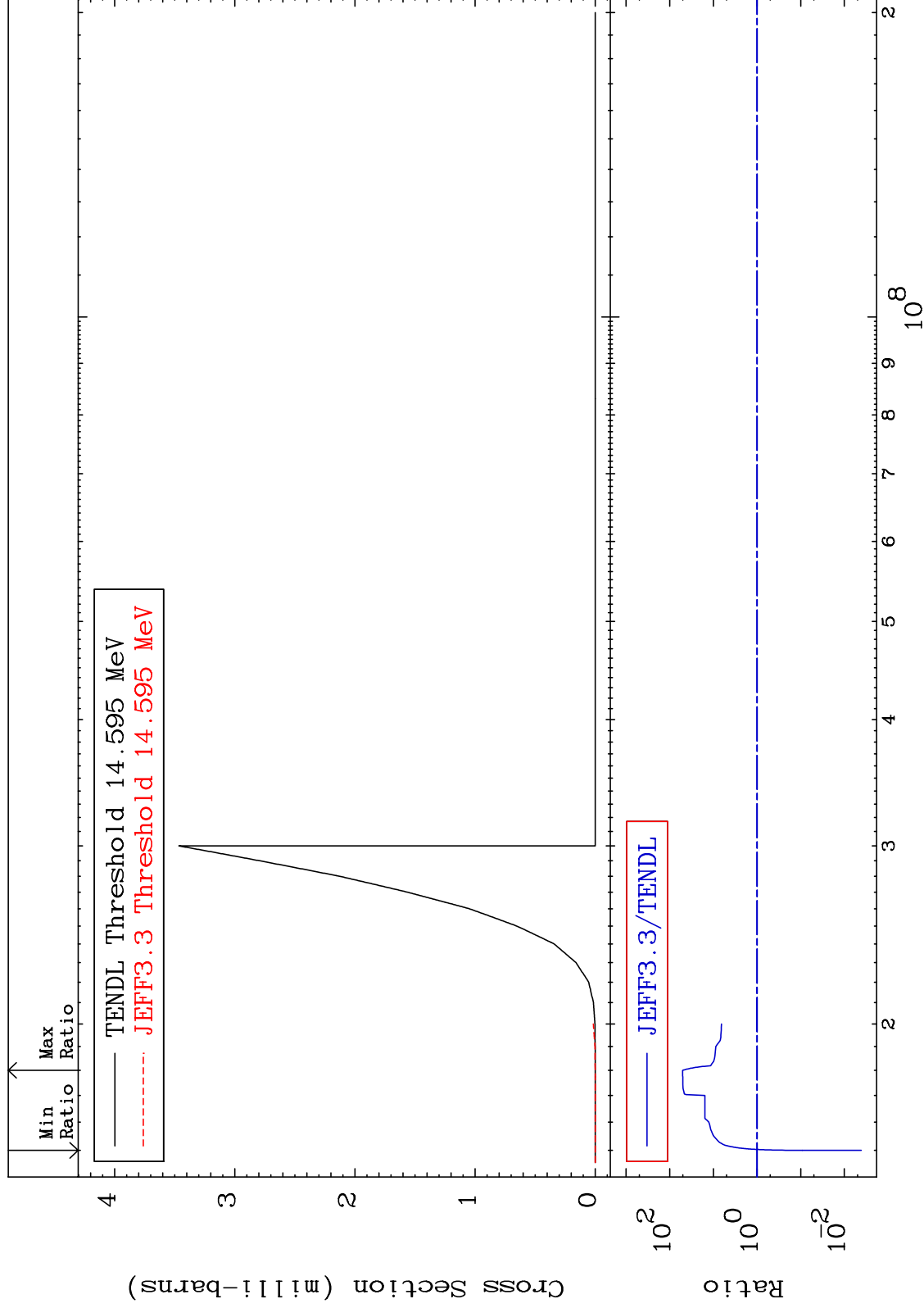


MAT 7225

(n,2n) p:71-Lu-172m1

72-Hf-174

Radionuclide Production Cross Section -99.59 To 4961. %

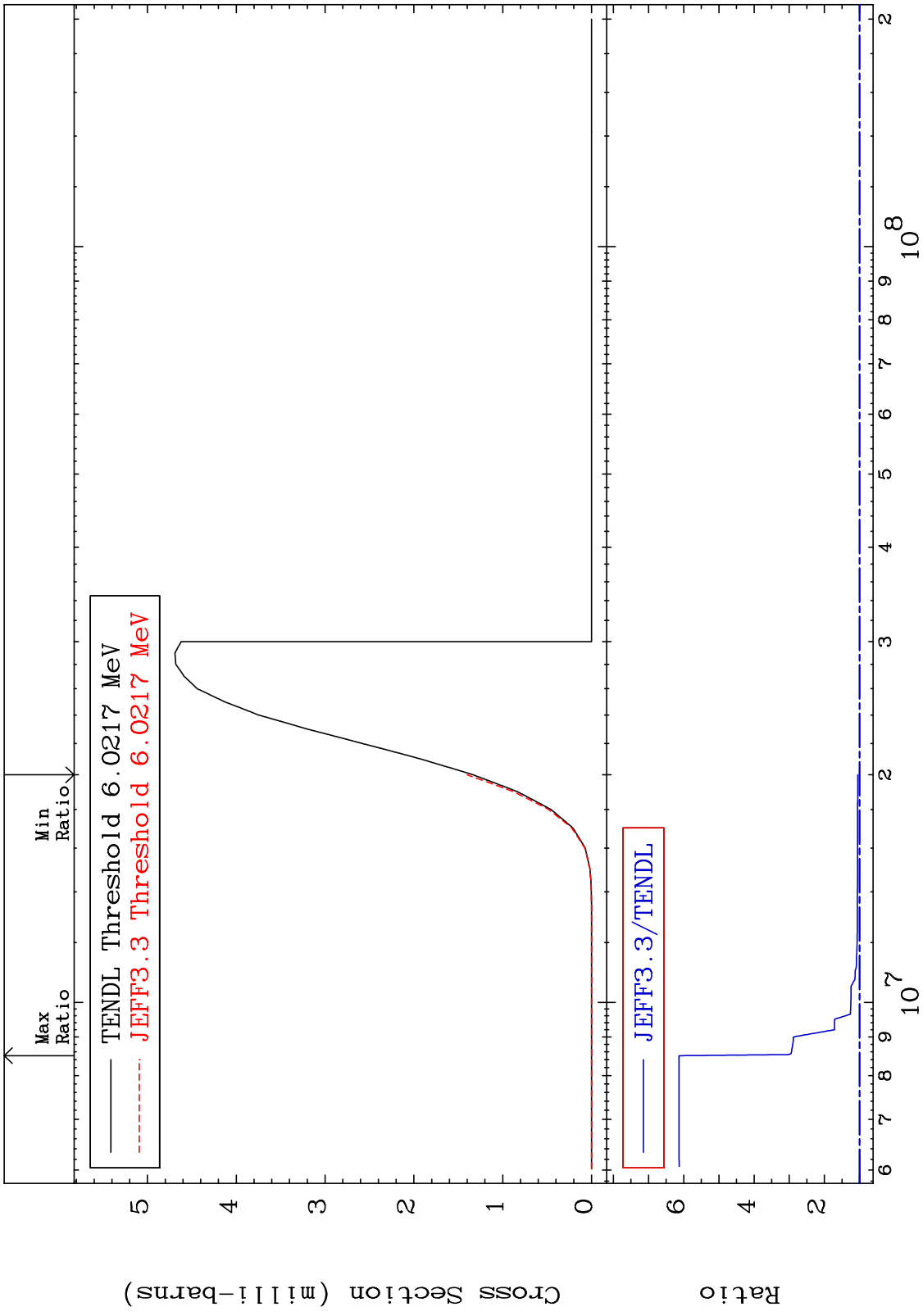


78

Incident Energy (eV)

72-Hf-174

MAT 7225 (n,t):71-Lu-172g 72-Hf-174
 Radionuclide Production Cross Section 4.988 To 513.3 %



79 72-Hf-174

MAT 7225 (n, t): 71-Lu-172m1 72-Hf-174
 Radionuclide Production Cross Section -10.46 To 82.21 %

