

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

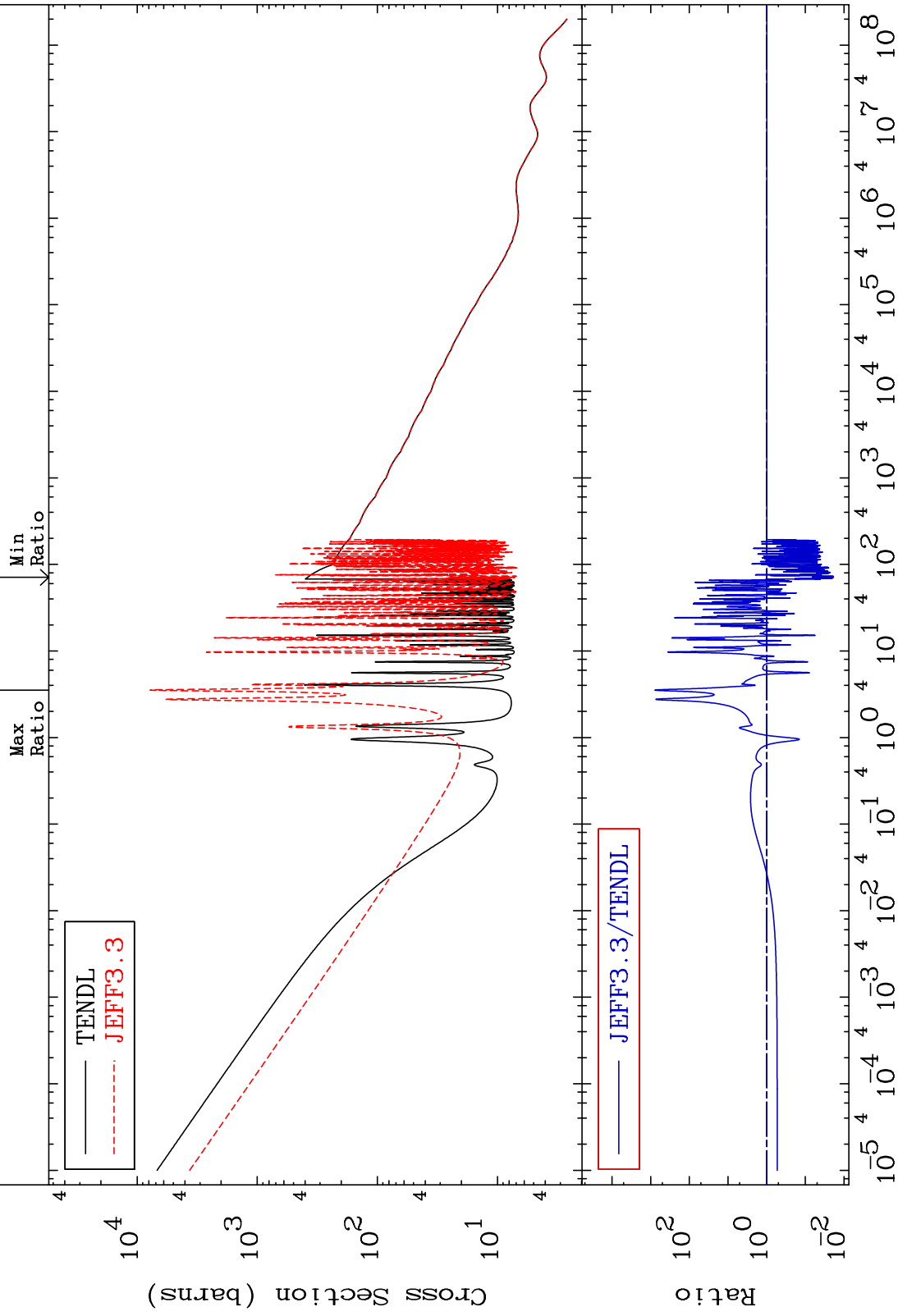
Press Mouse Button to Start

MAT 7122

71-Lu-174

-98.13 To 9999. %

Total
Cross Section



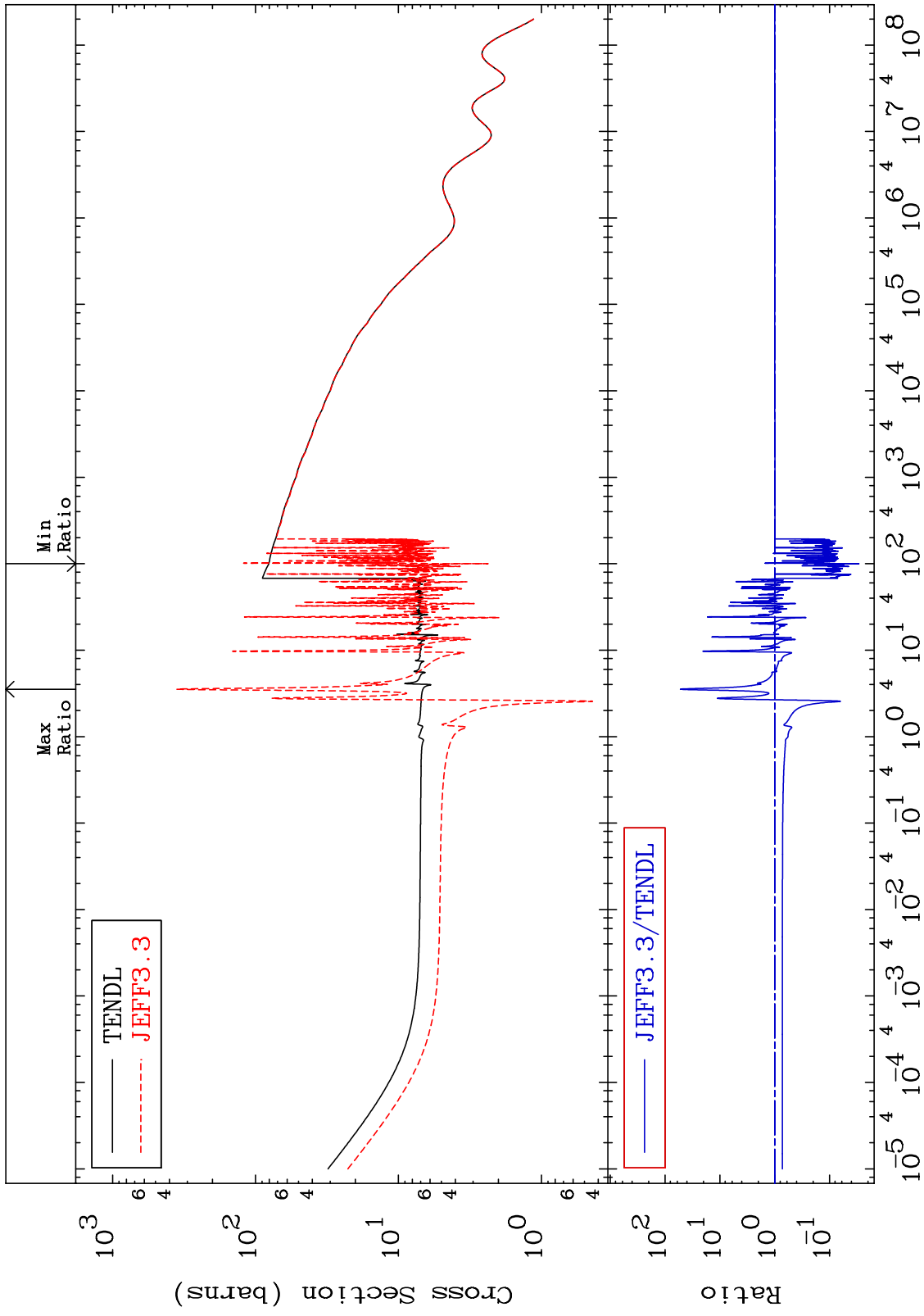
Incident Energy (eV)

71-Lu-174

MAT 7122

Elastic
Cross Section

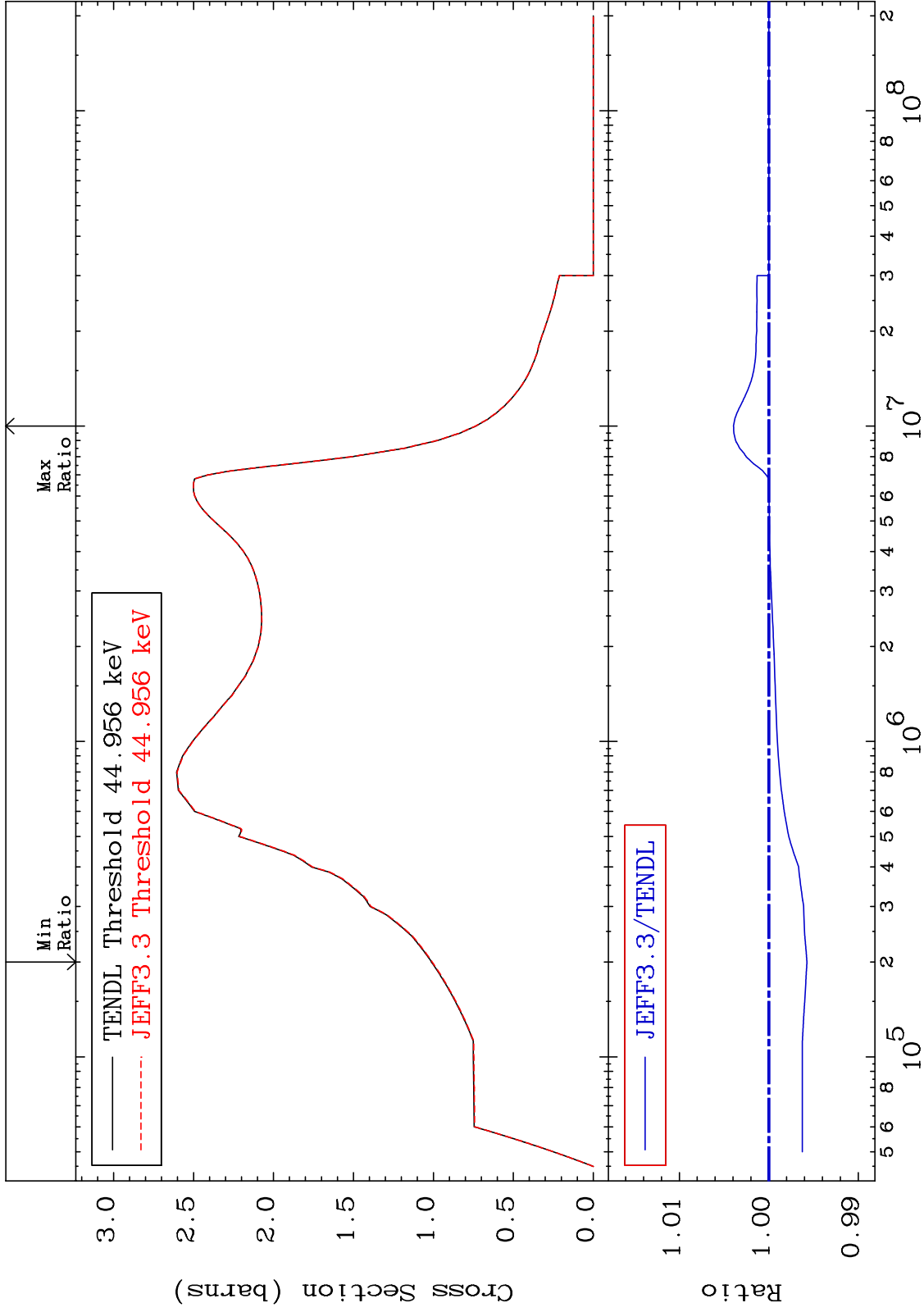
71-Lu-174
-97.07 To 5200. %



MAT 7122

Inelastic
Cross Section

71-Lu-174
-0.427 To 0.394 %

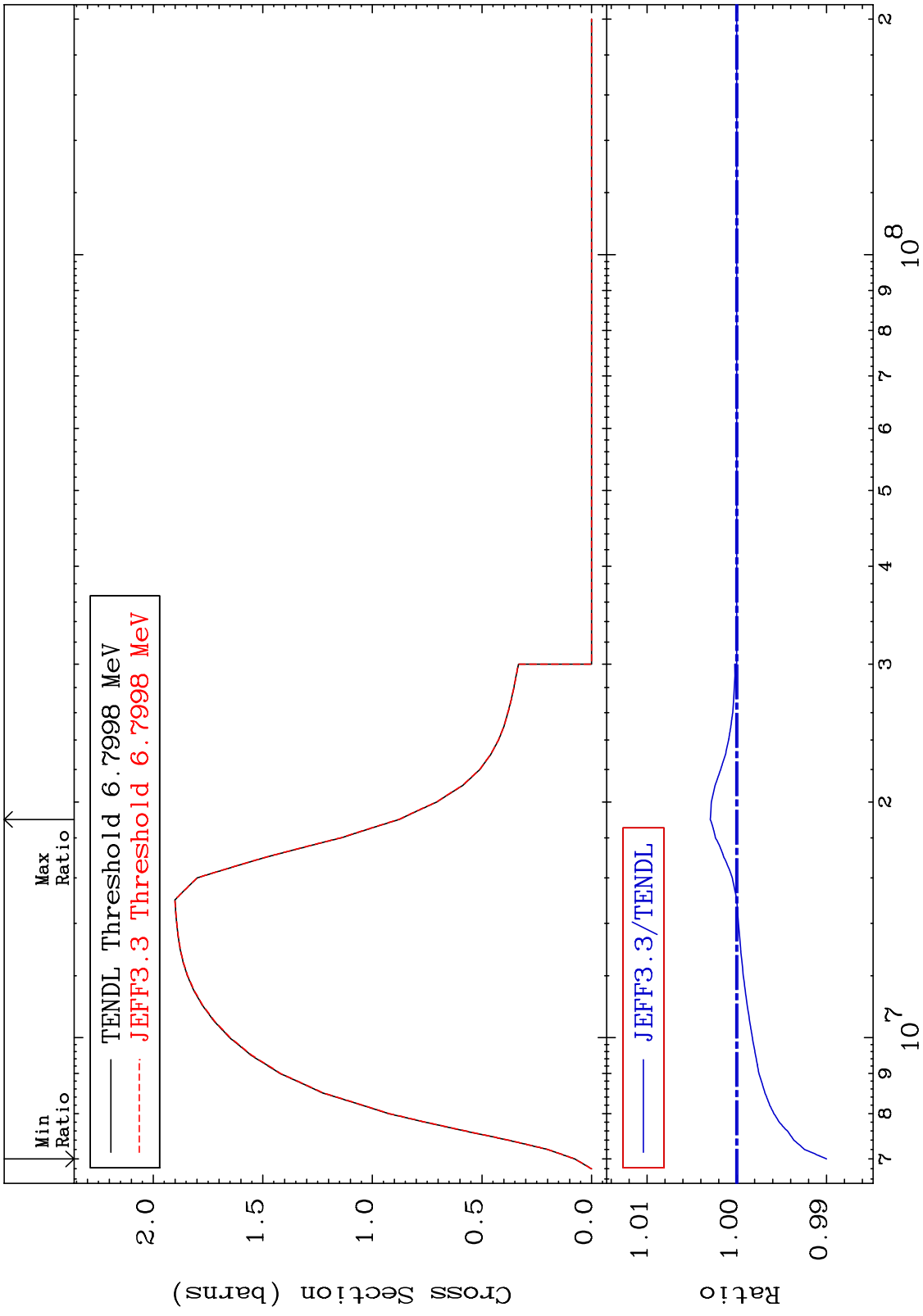


3

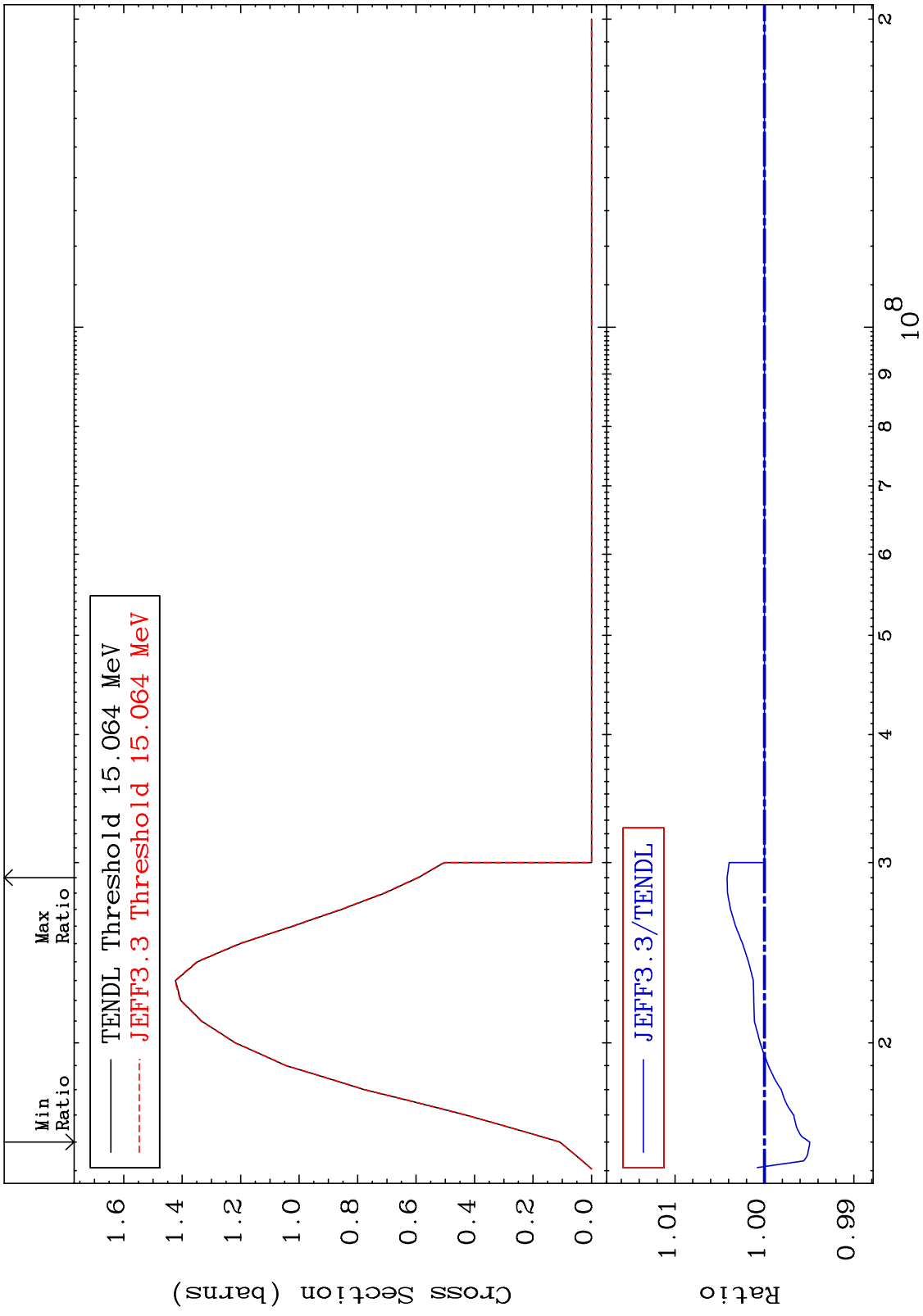
Incident Energy (eV)

71-Lu-174

MAT 7122 $(n, 2n)$ Cross Section $^{71}\text{Lu-174}$ -1.001 To 0.295 %



MAT 7122 (n,3n) 71-Lu-174
 Cross Section -0.508 To 0.417 %



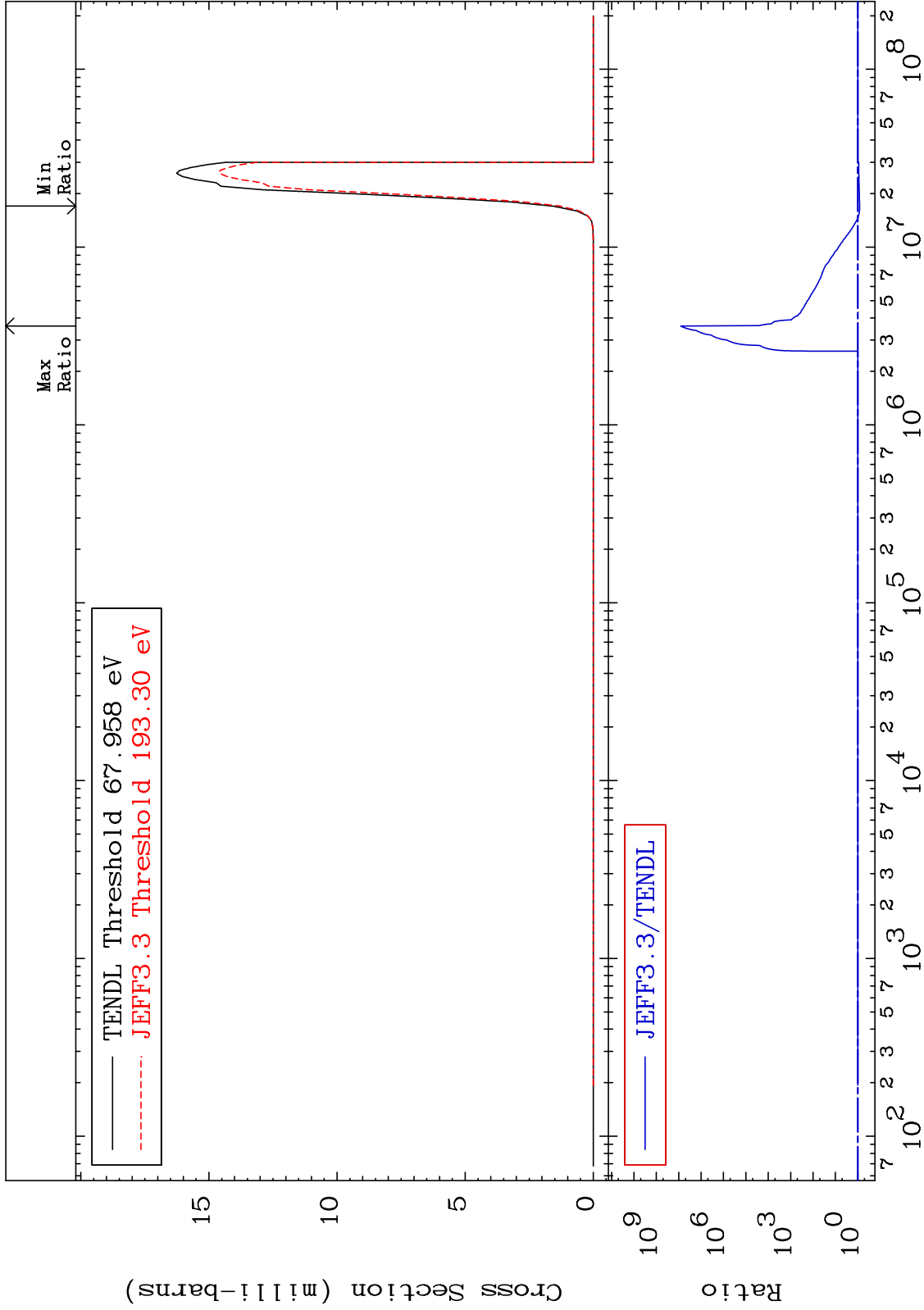
MAT 7122

(n, n') α

71-Lu-174

Cross Section

-17.55 To 9999. %



7

Incident Energy (eV)

71-Lu-174

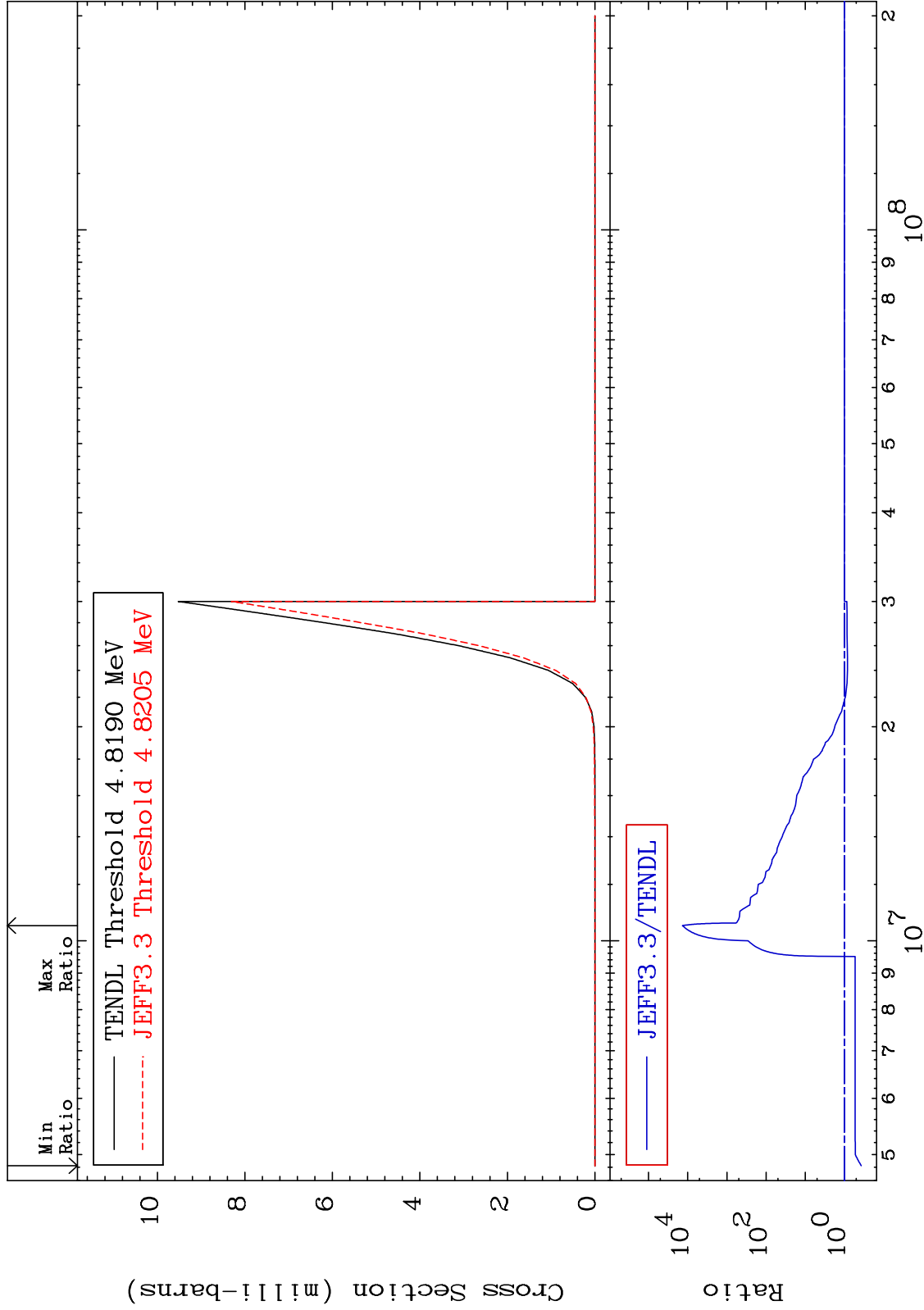
MAT 7122

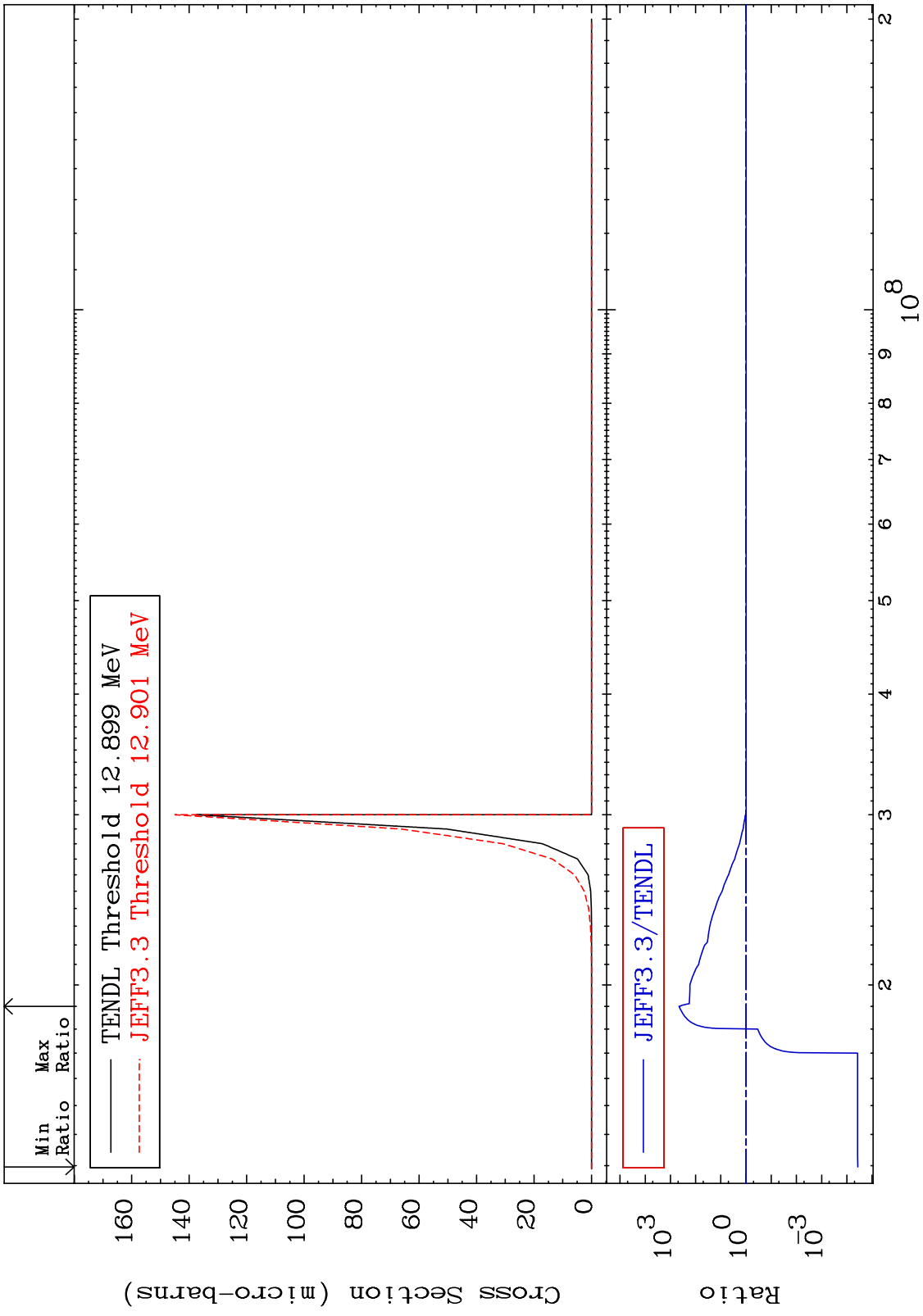
(n,2n) α

71-Lu-174

Cross Section

-62.70 To 9999. %





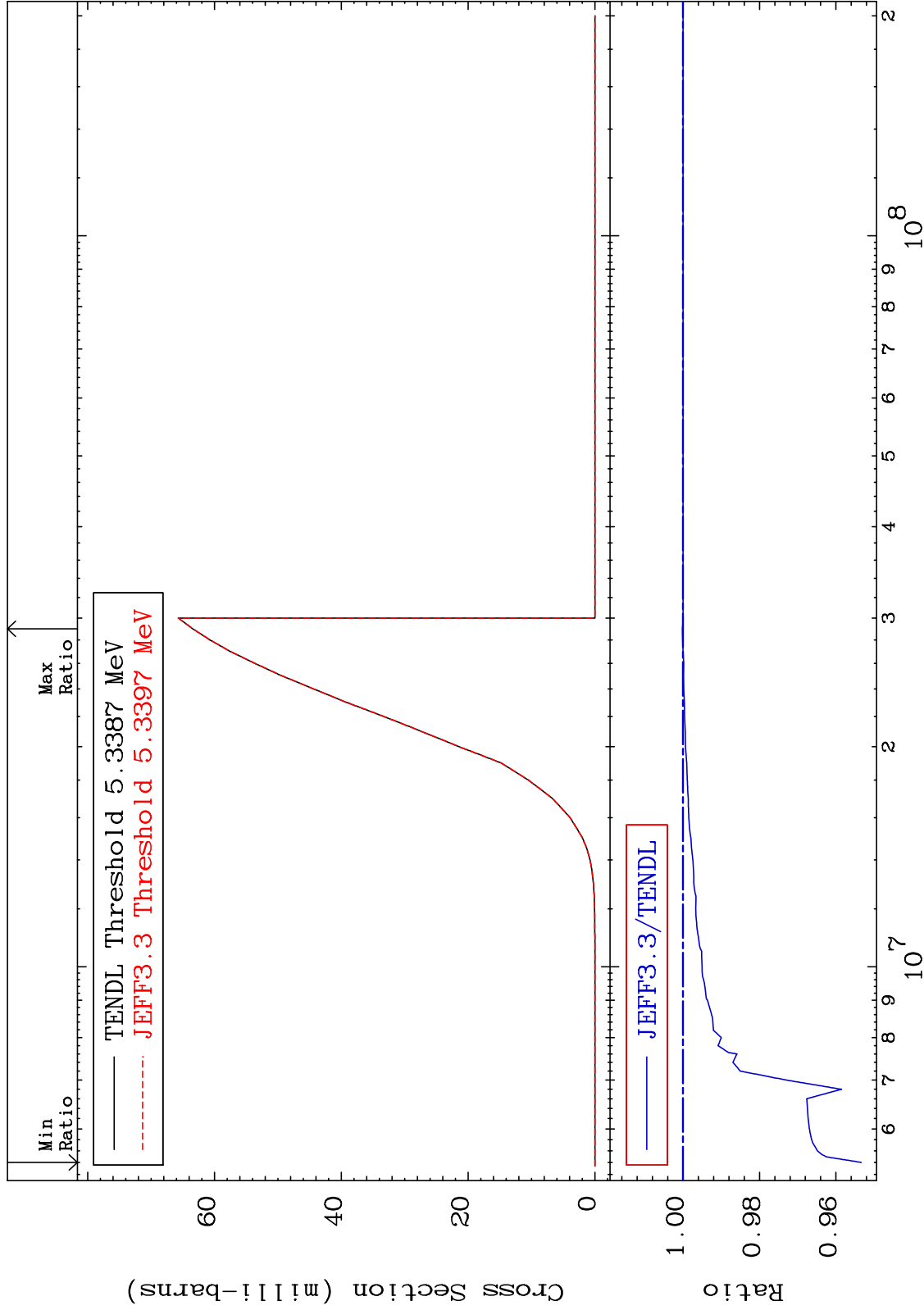
MAT 7122

(n, n') p

71-Lu-174

Cross Section

-4.662 To 0.013 %

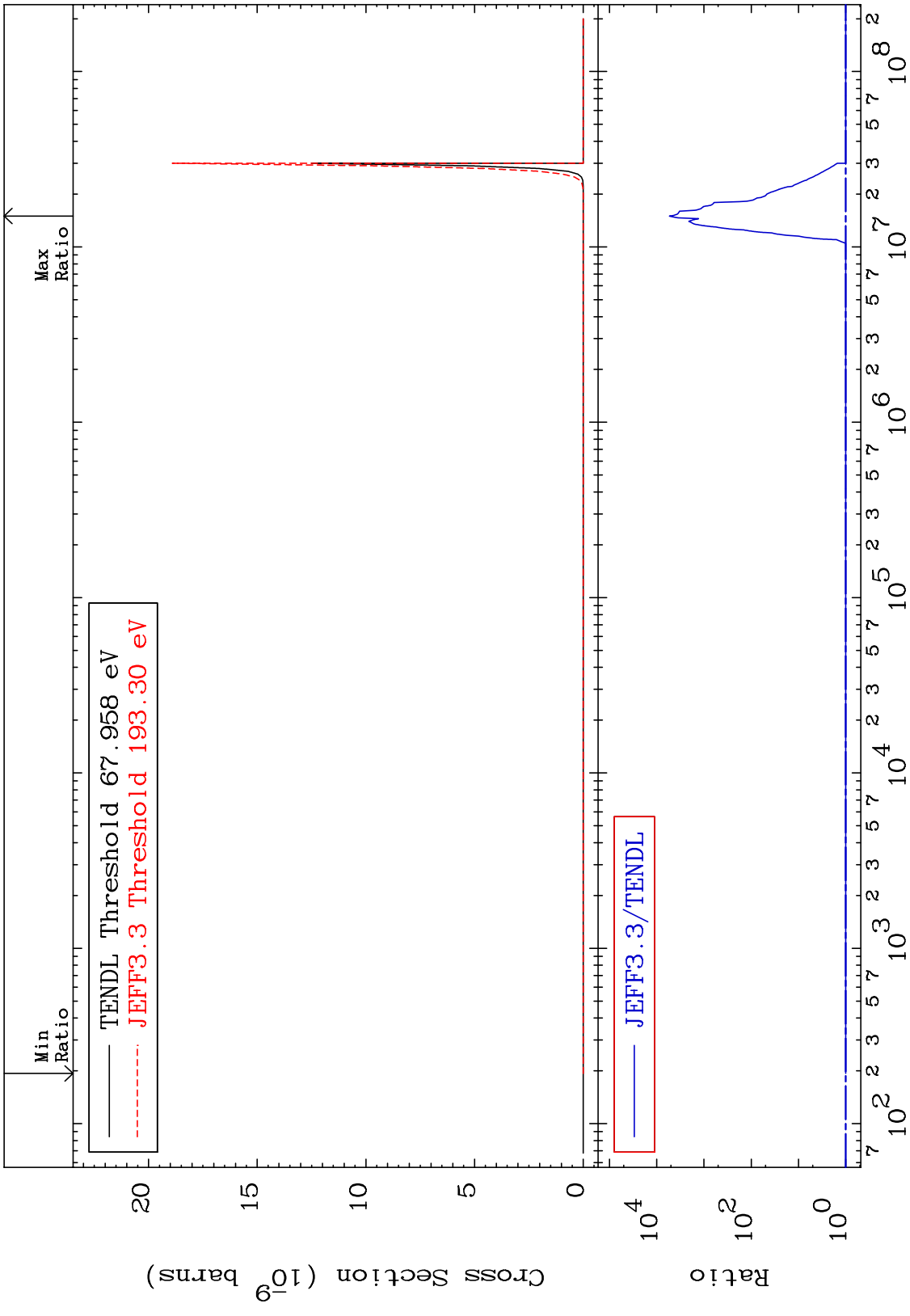


10

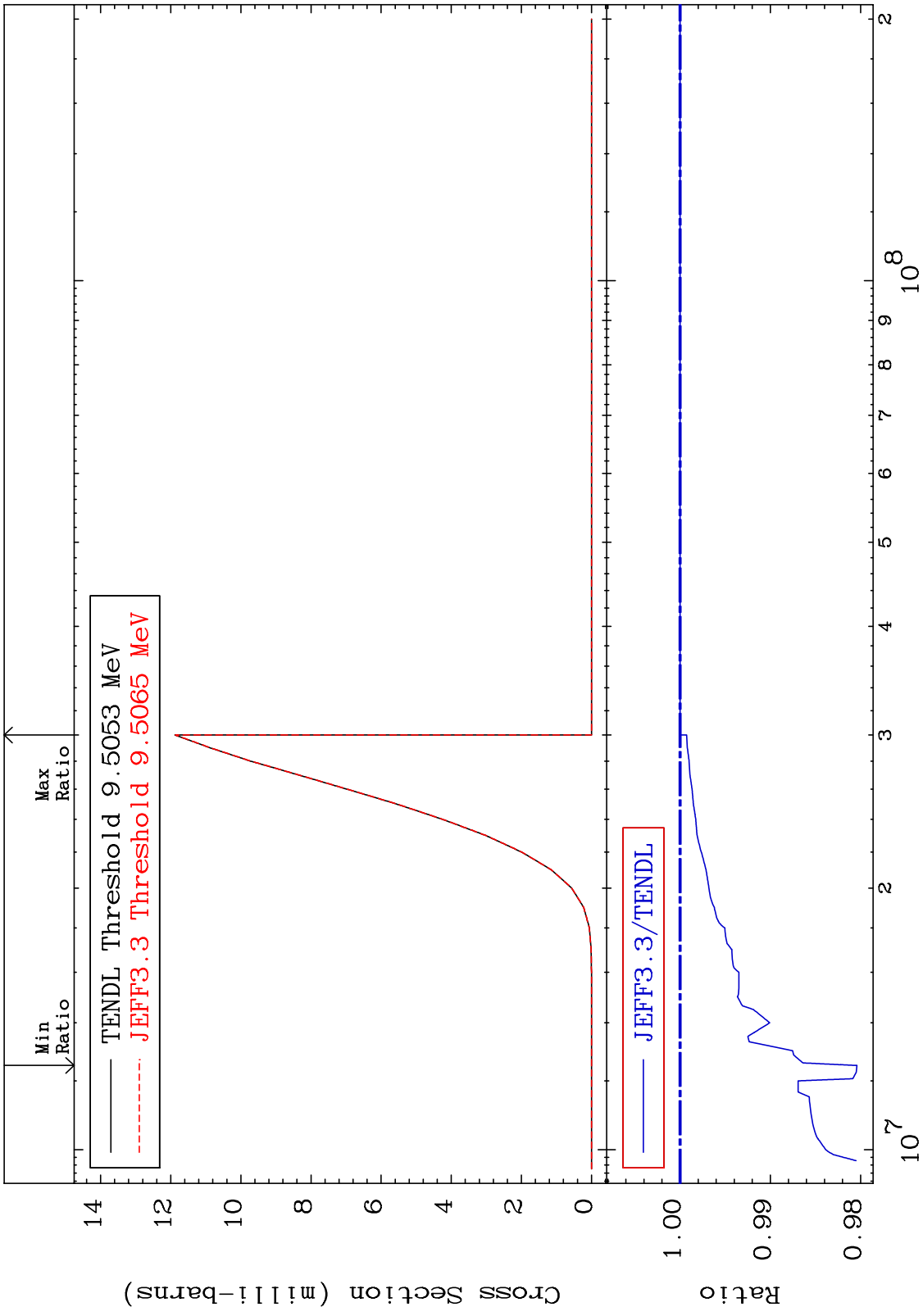
Incident Energy (eV)

71-Lu-174

MAT 7122 (n,n') 2α Cross Section 71-Lu-174 To 9999. %

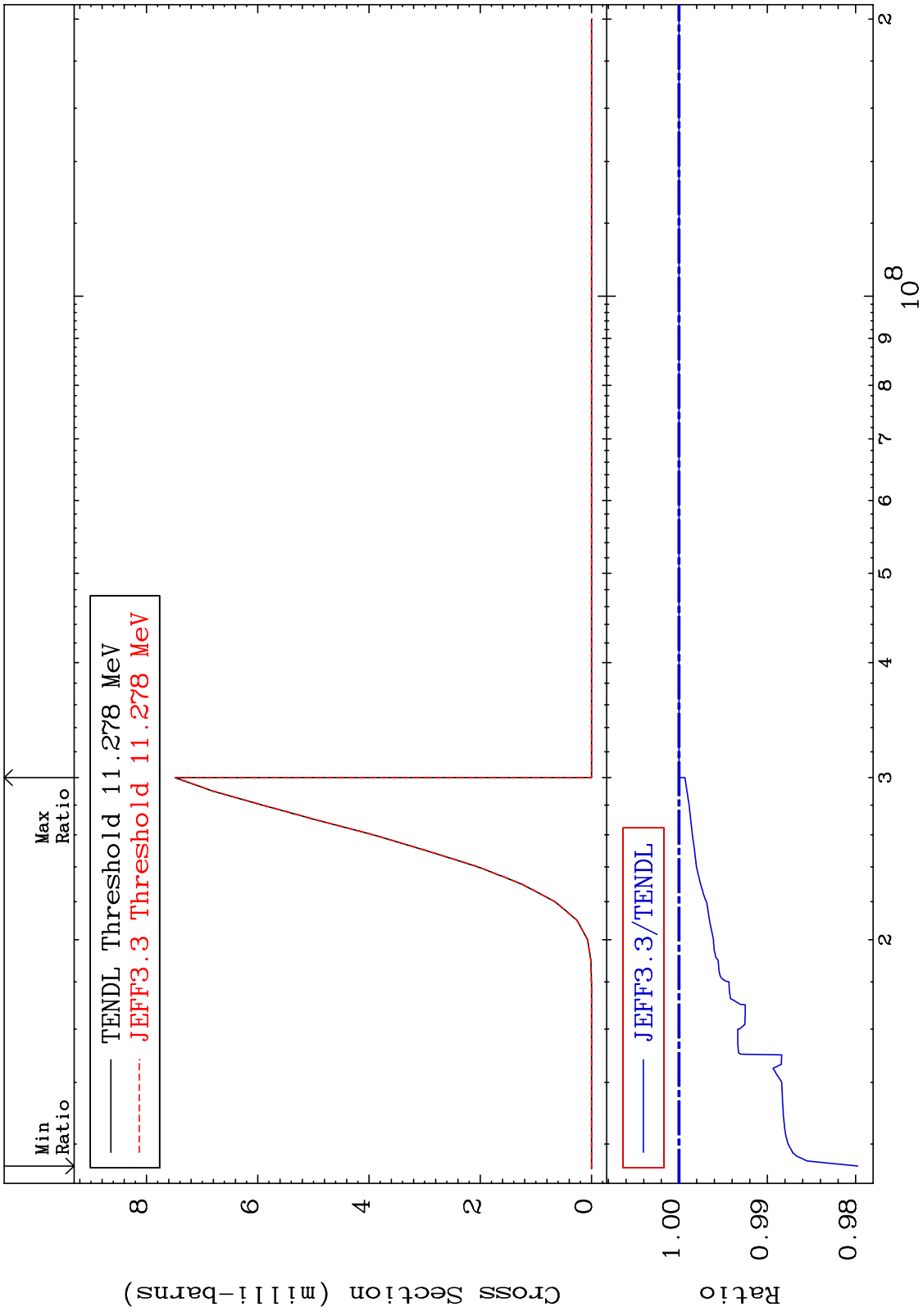


MAT 7122 (n, n') d $^{71}\text{Lu-174}$
Cross Section -1.958 To 0.000 %

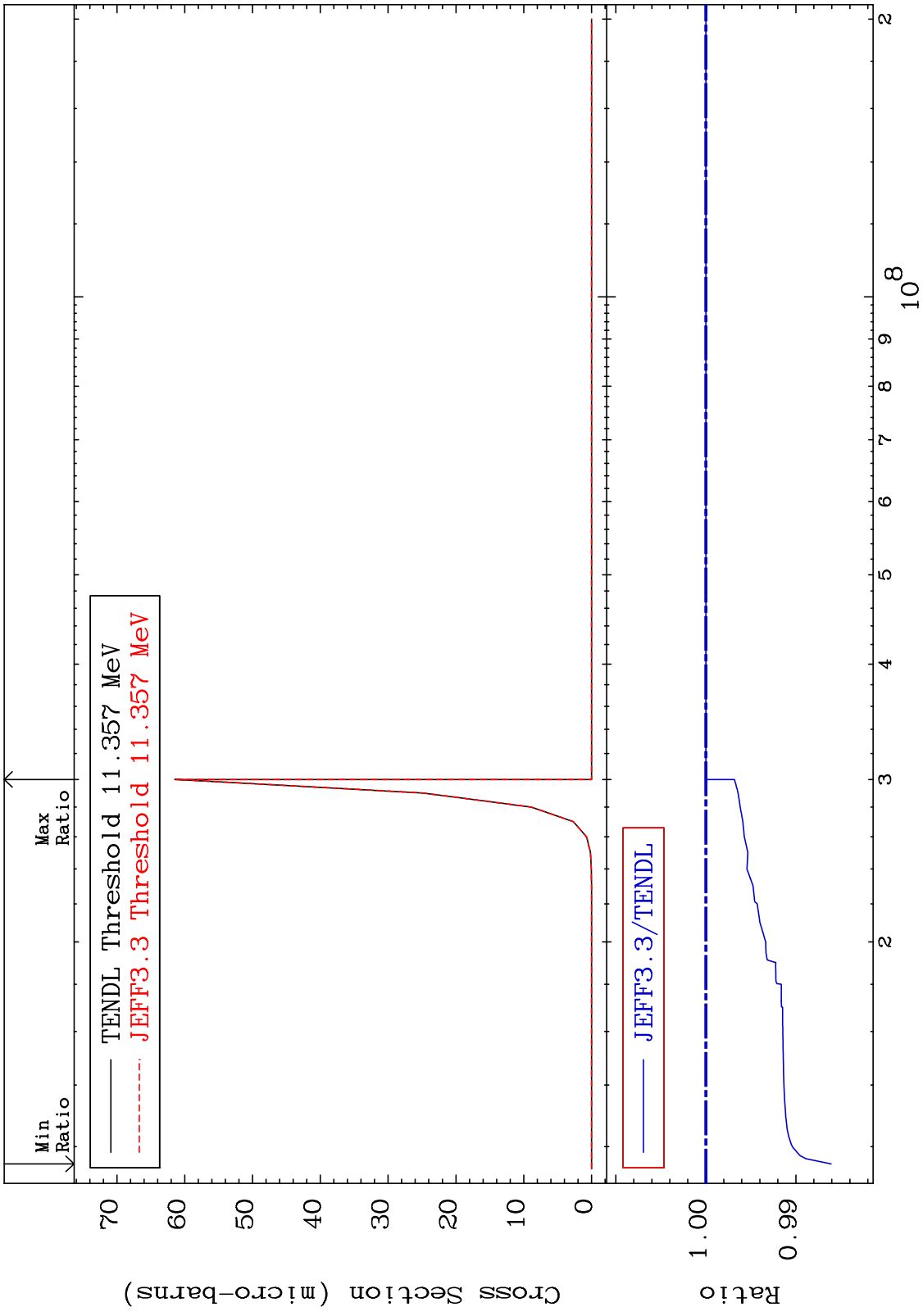


71-Lu-174

MAT 7122 (n,n') t 71-Lu-174
 Cross Section -2.024 To 0.000 %



MAT 7122 (n, n') He-3 $^{71}\text{-Lu-174}$
 Cross Section -1.391 To 0.000 %



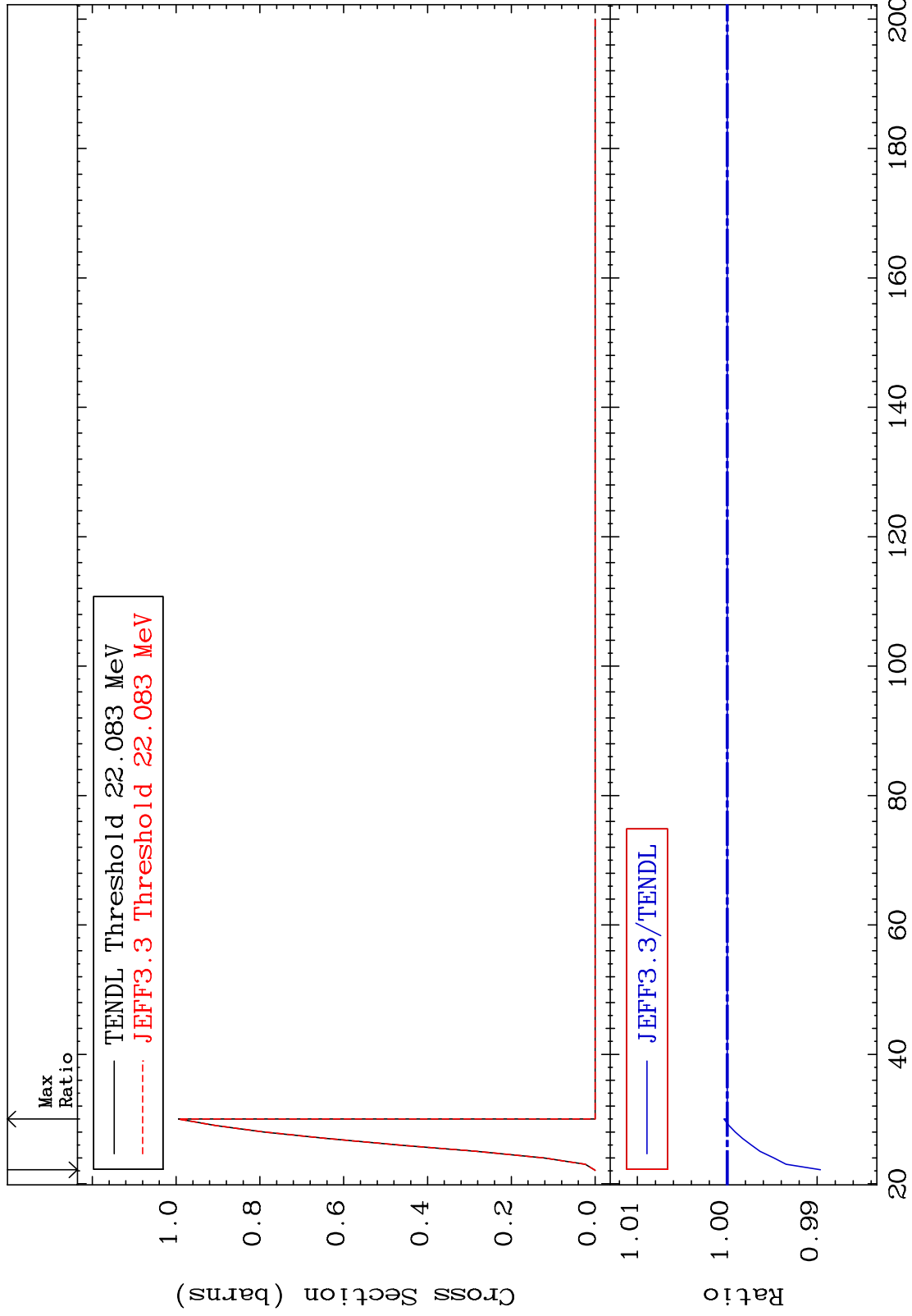
MAT 7122

(n,4n)

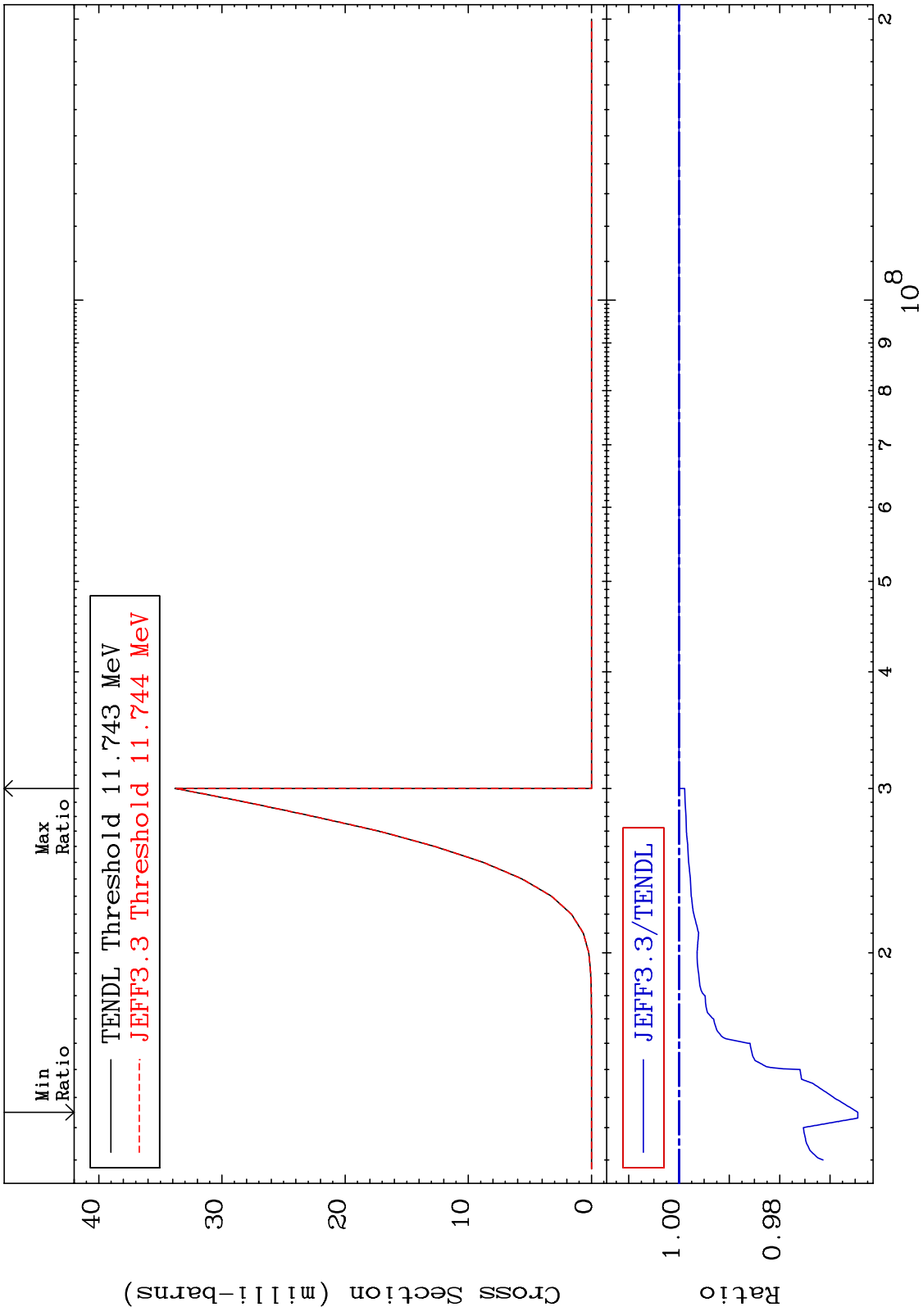
71-Lu-174

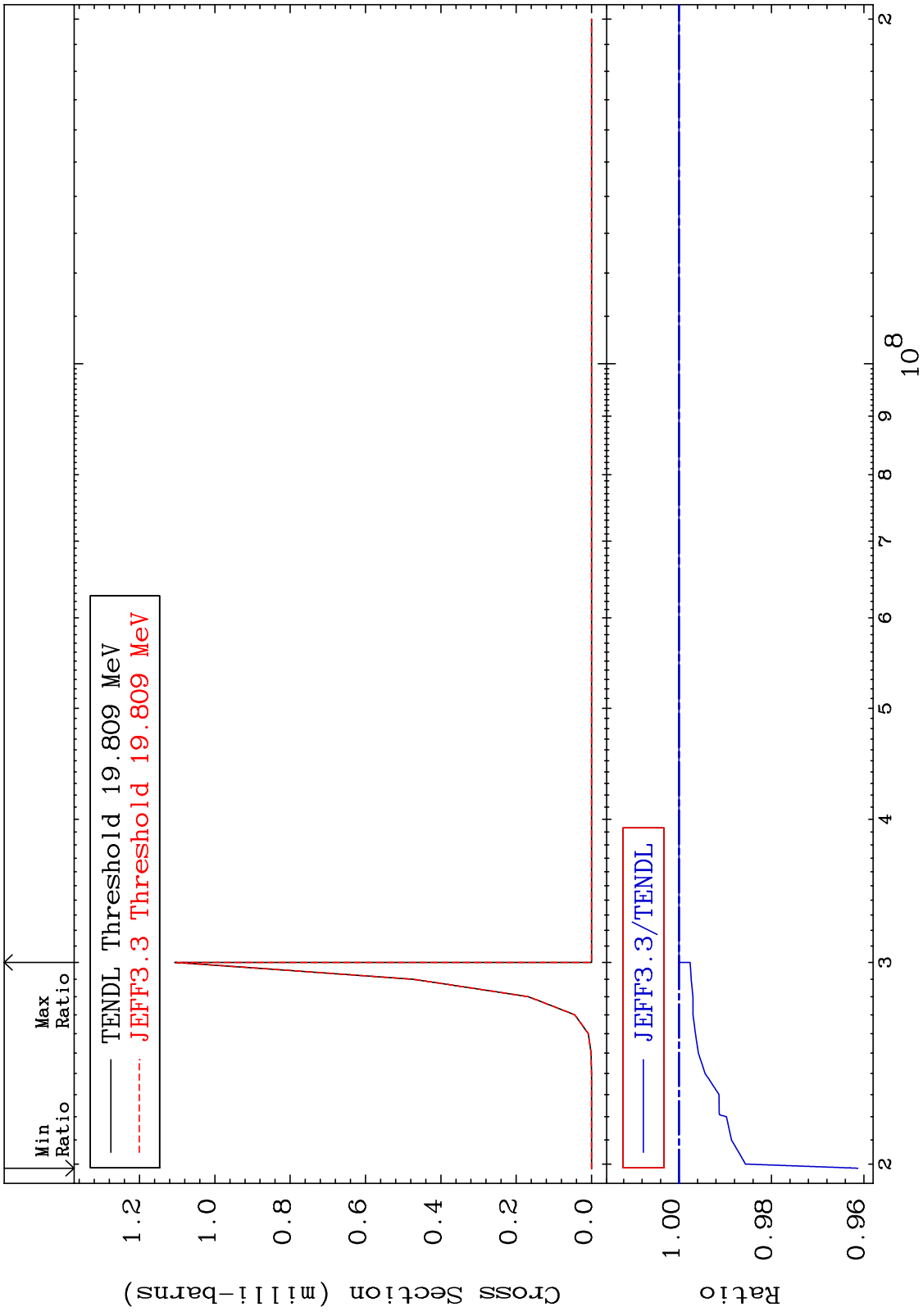
Cross Section

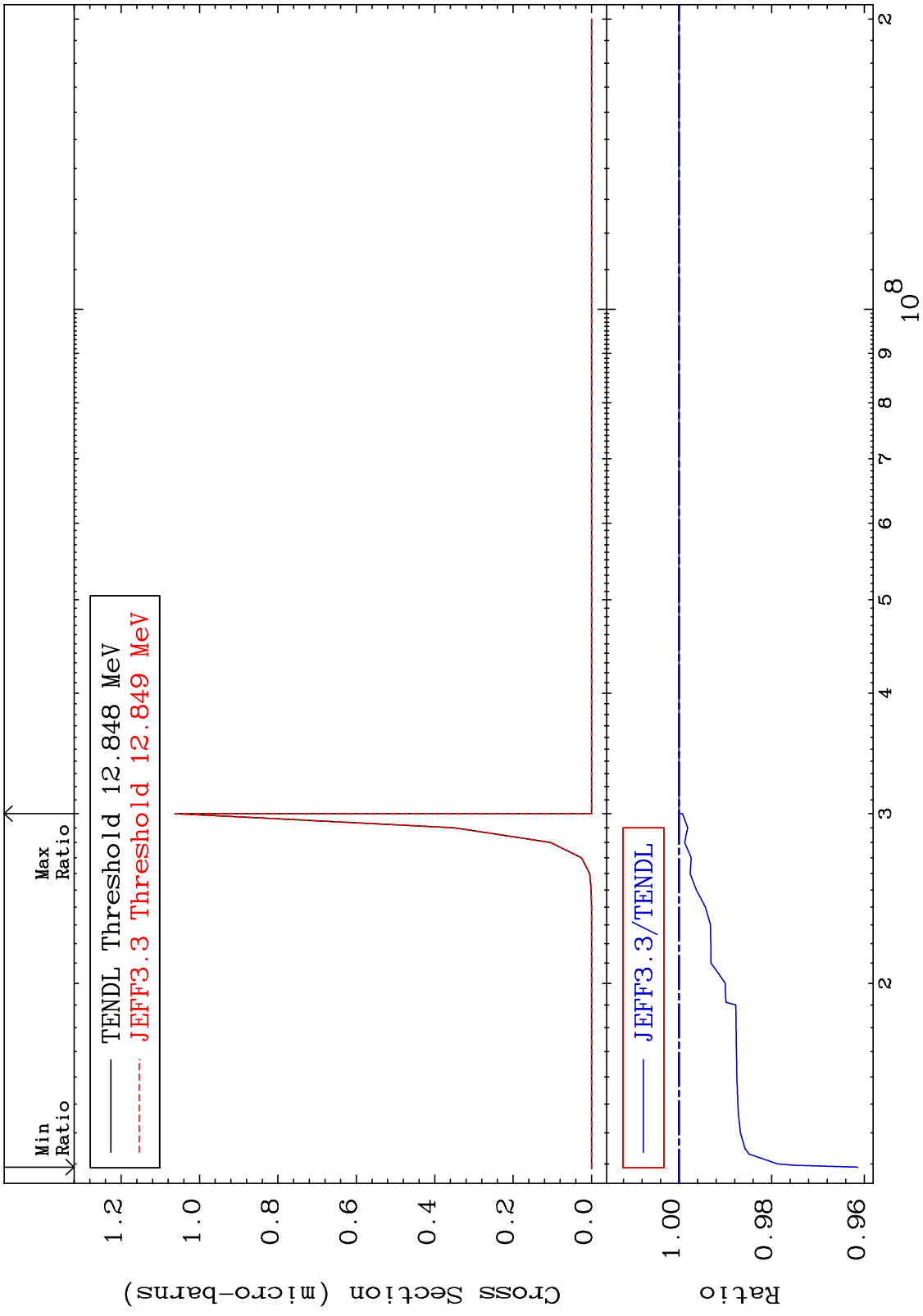
-1.035 To 0.038 %



MAT 7122 (n,2n) p 71-Lu-174
 Cross Section -3.554 To 0.000 %



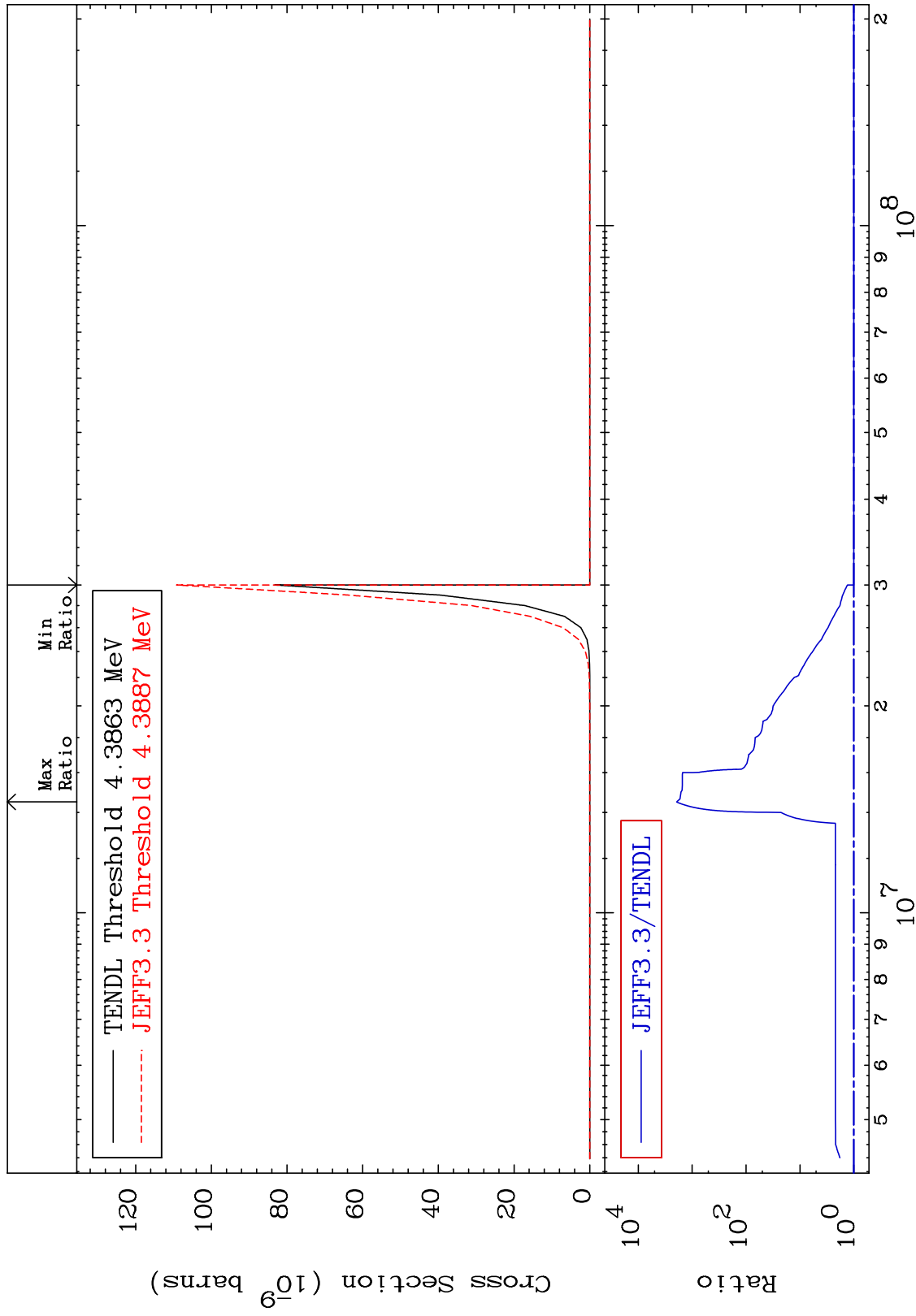




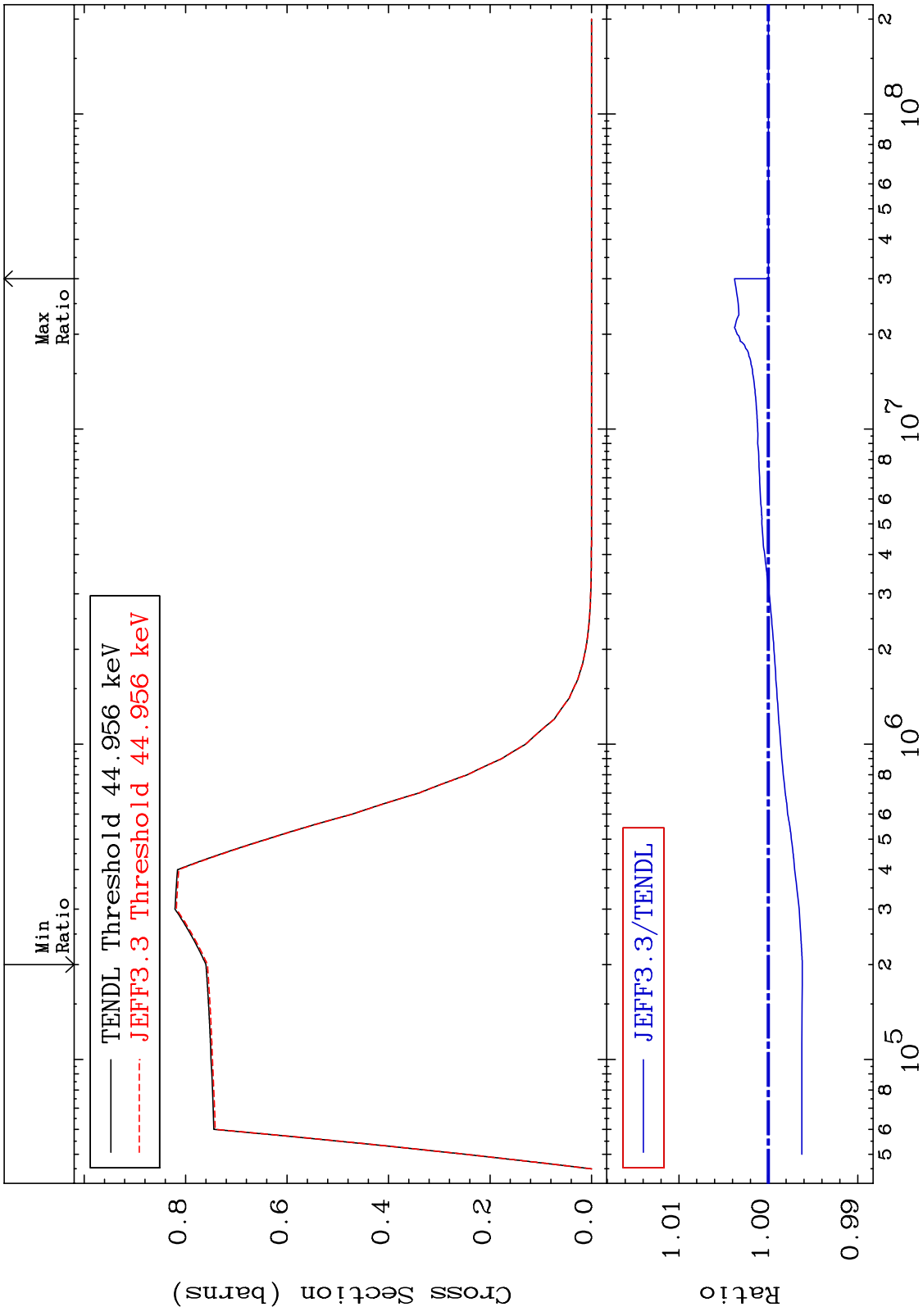
MAT 7122

(n,n') p α
Cross Section

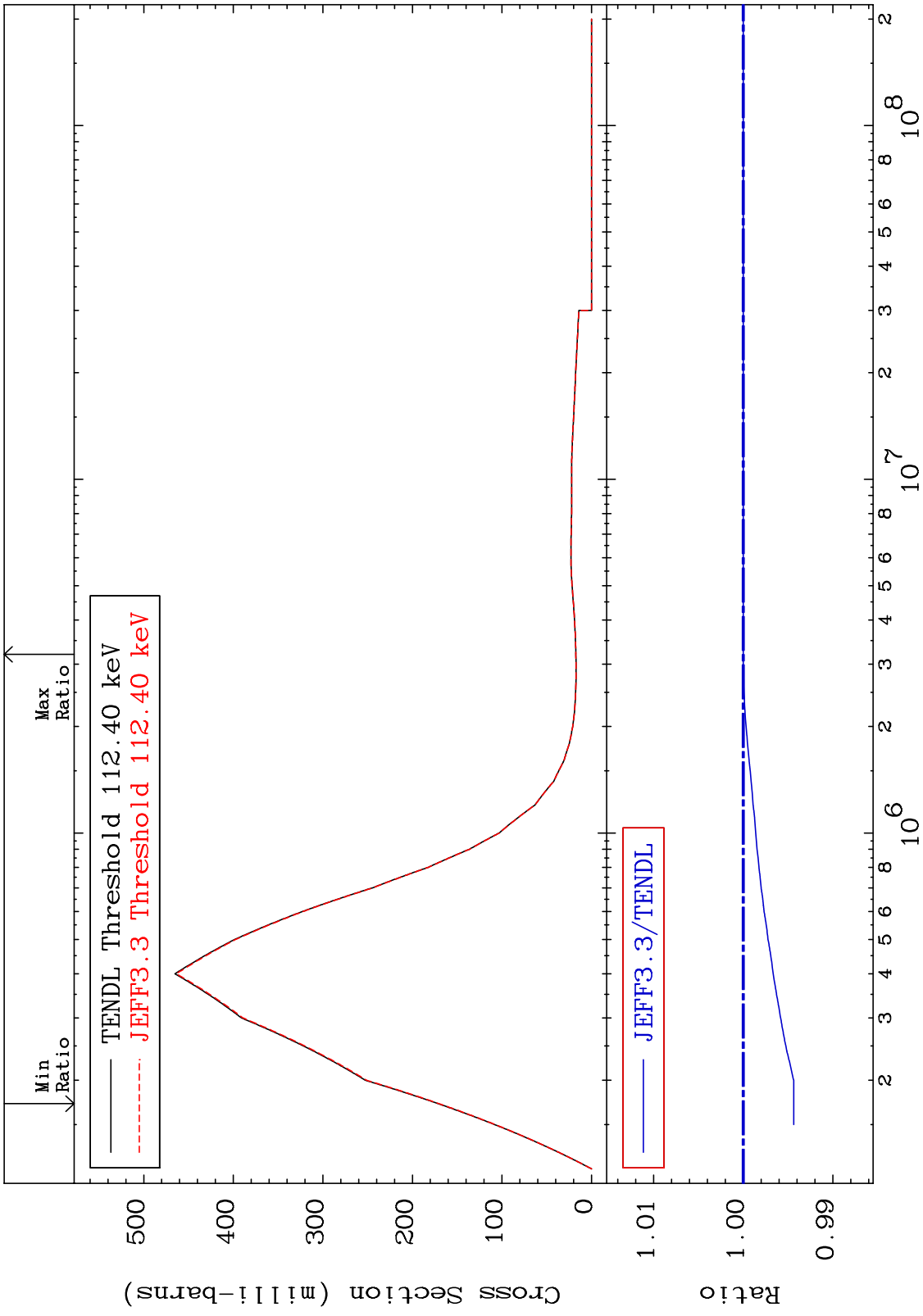
71-Lu-174
To 9999. %
0.000



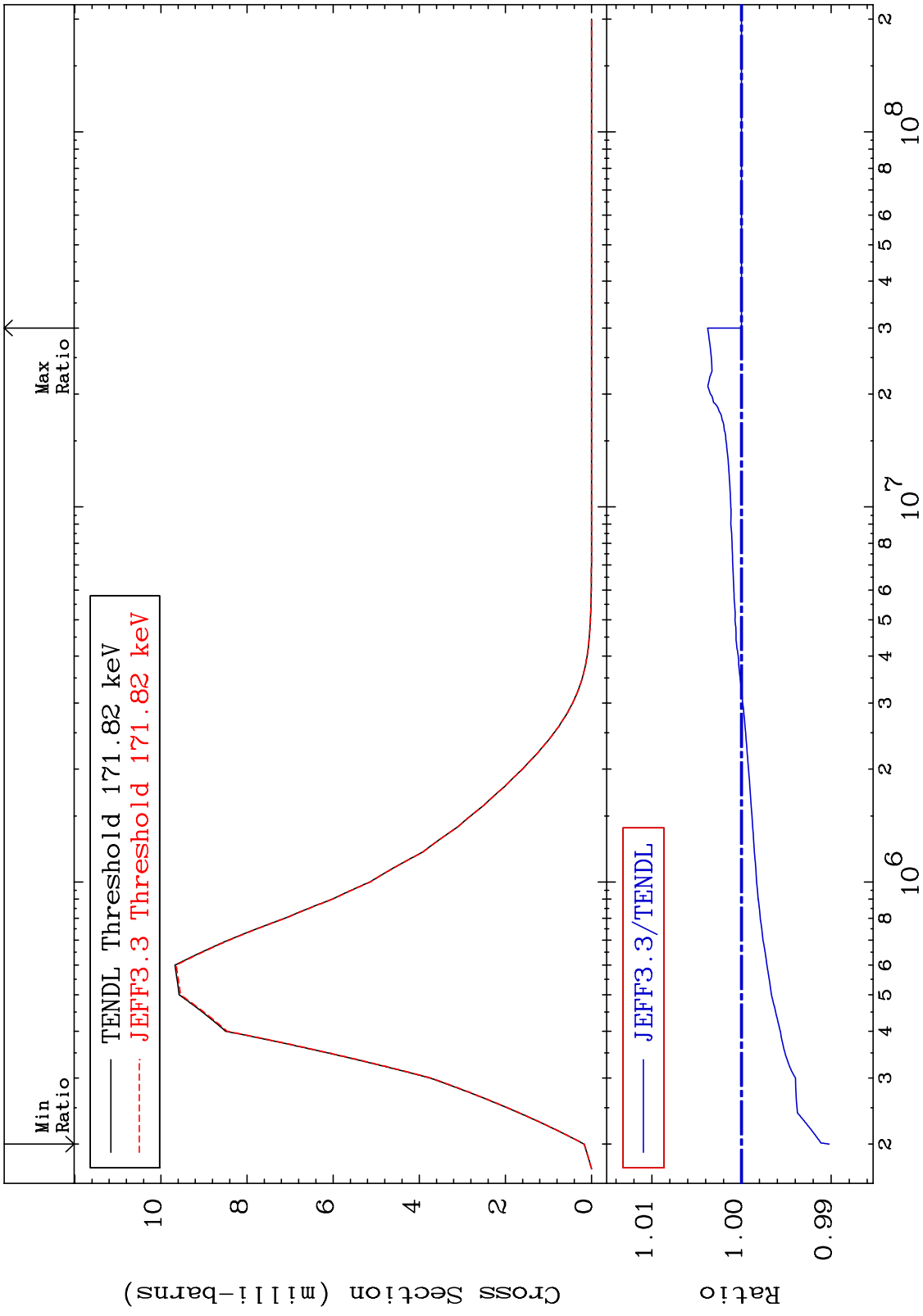
MAT 7122 MT= 51 (n,n') Level Cross Section 71-Lu-174 -0.381 To 0.378 %



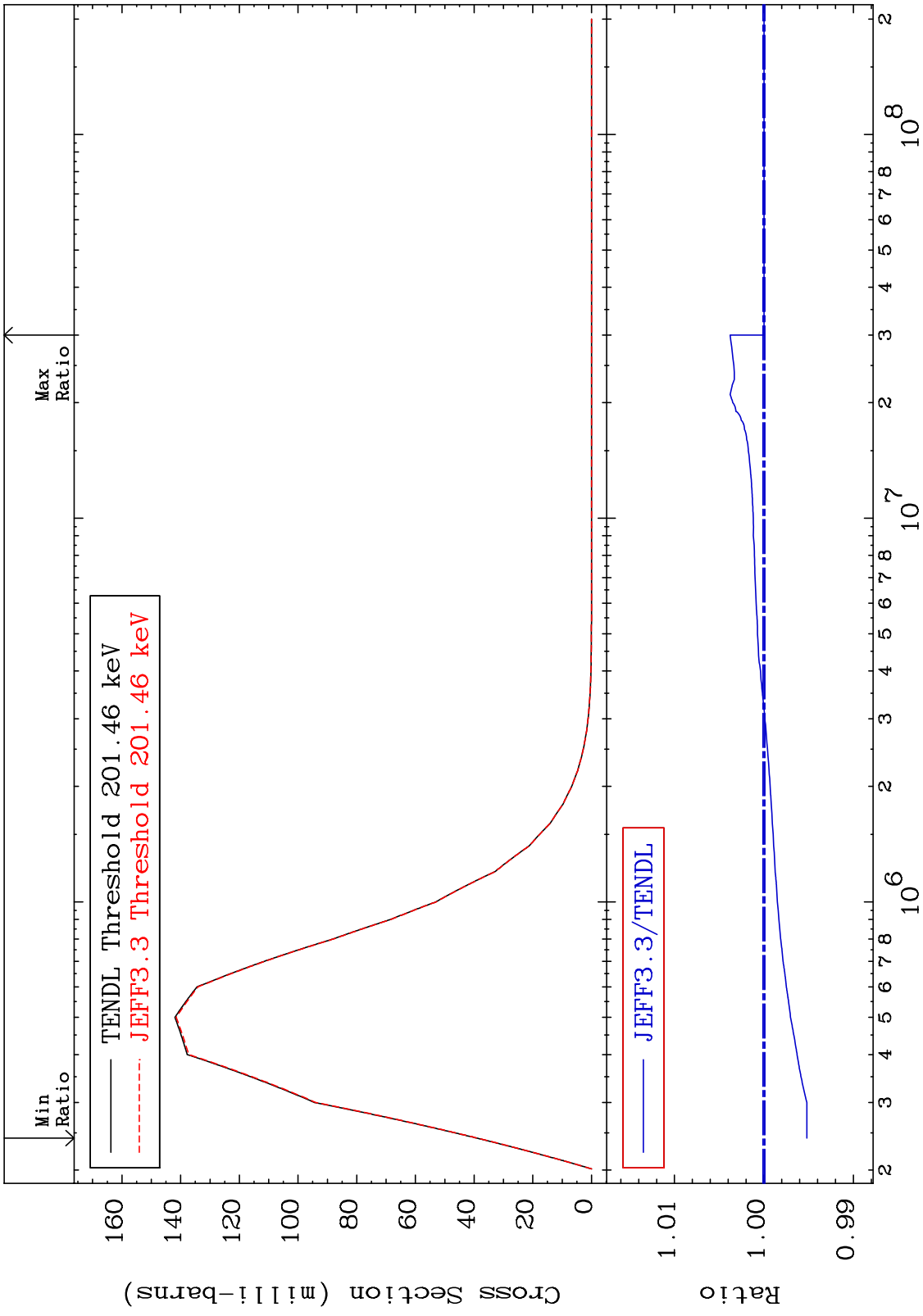
MAT 7122 MT= 52 (n,n') Level Cross Section 71-Lu-174
 -0.563 To 0.000 %



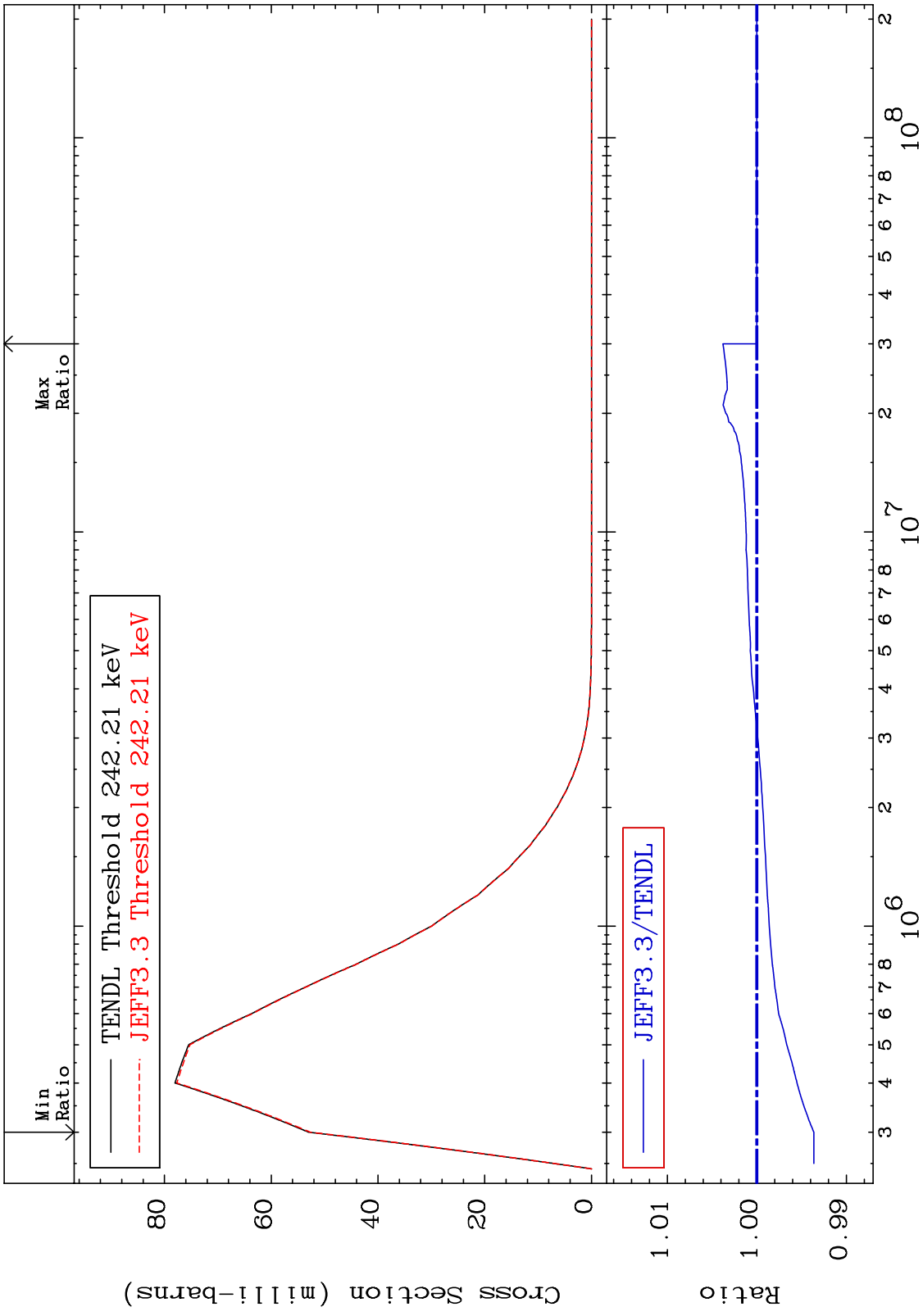
MAT 7122 MT= 53 (n,n') Level Cross Section 71-Lu-174 -0.977 To 0.378 %



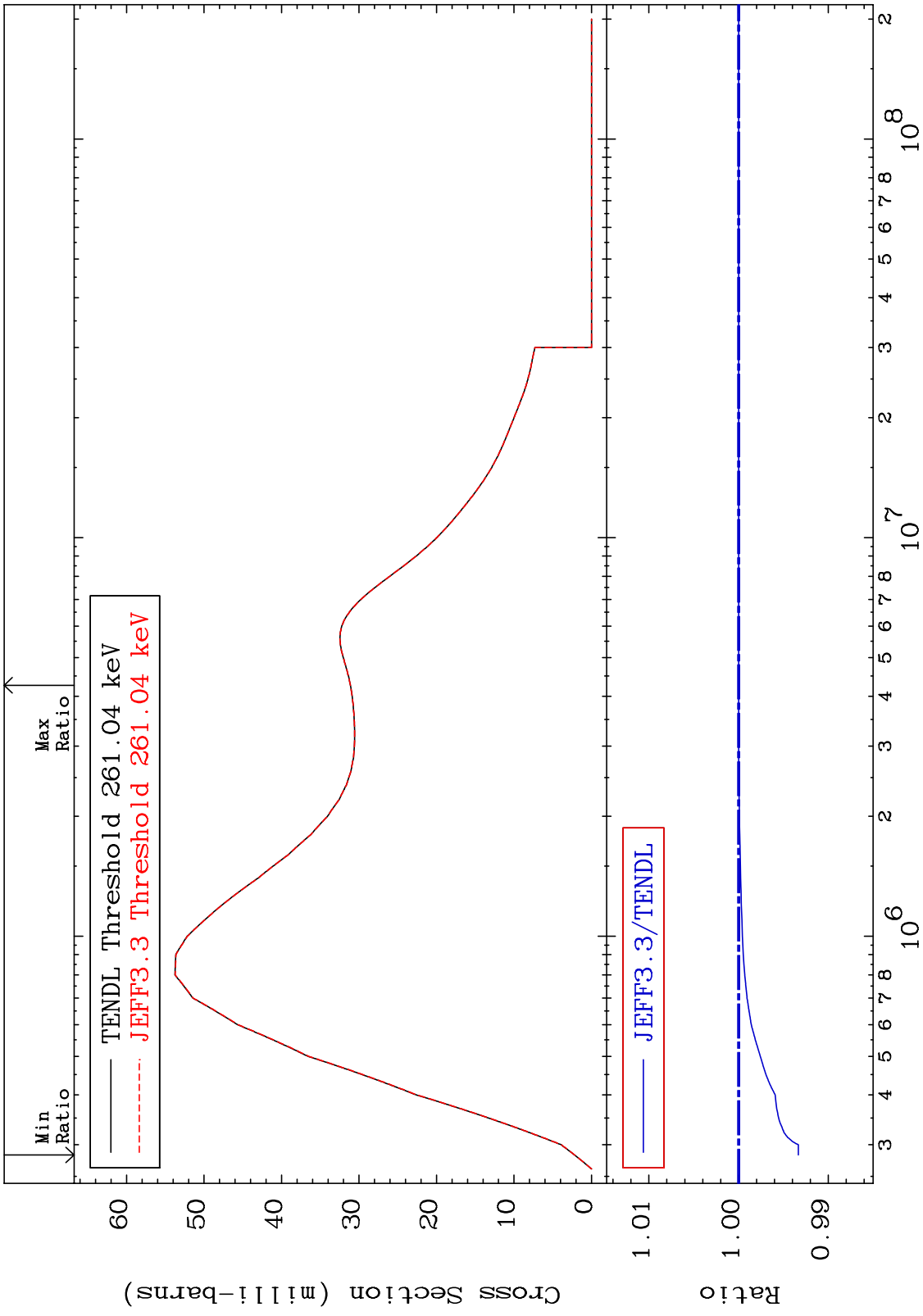
MAT 7122 MT= 54 (n,n') Level Cross Section 71-Lu-174 -0.479 To 0.378 %



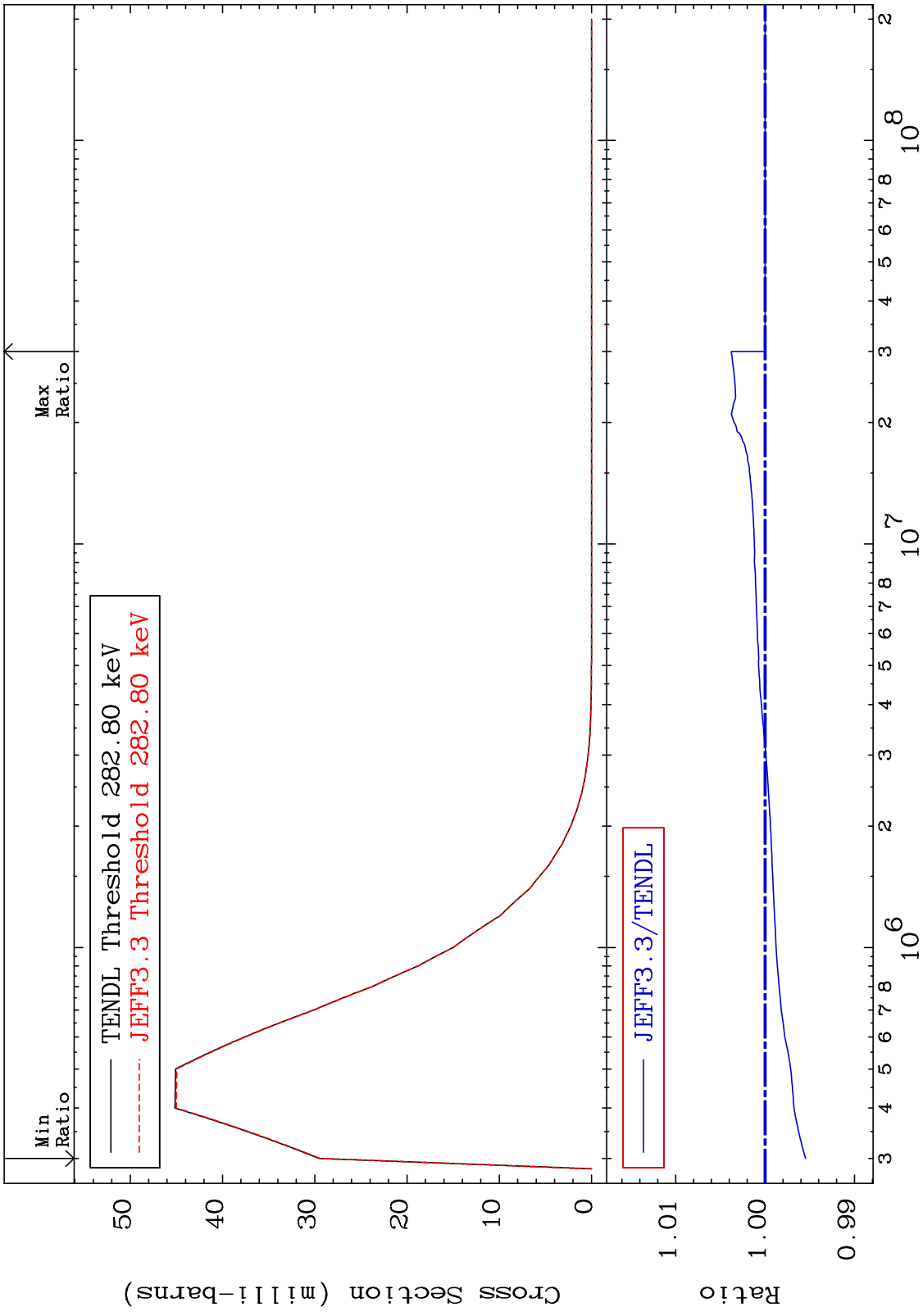
MAT 7122 MT= 55 (n,n') Level Cross Section 71-Lu-174 -0.637 To 0.378 %



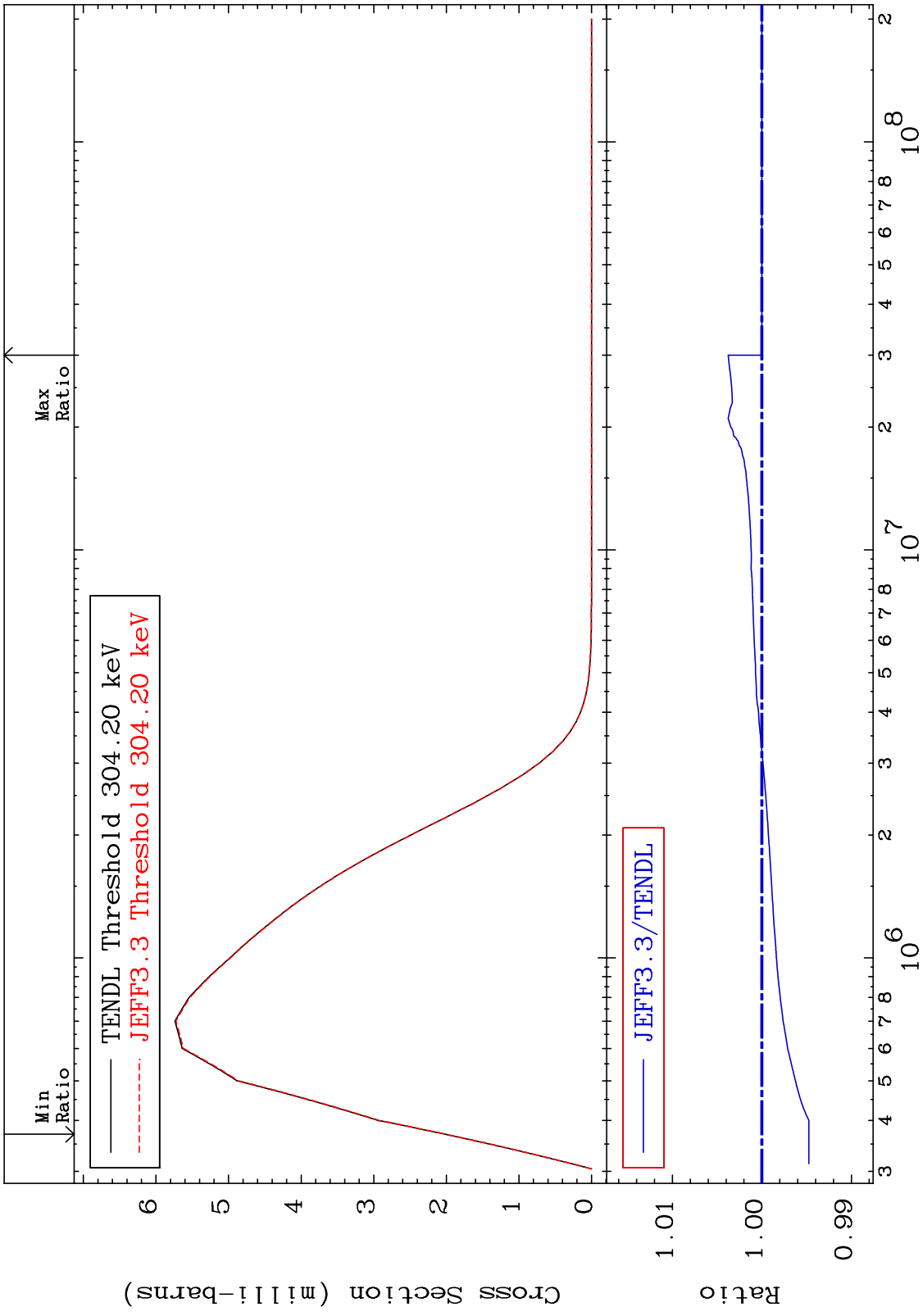
MAT 7122 MT= 56 (n,n') Level Cross Section 71-Lu-174 -0.666 To 0.000 %



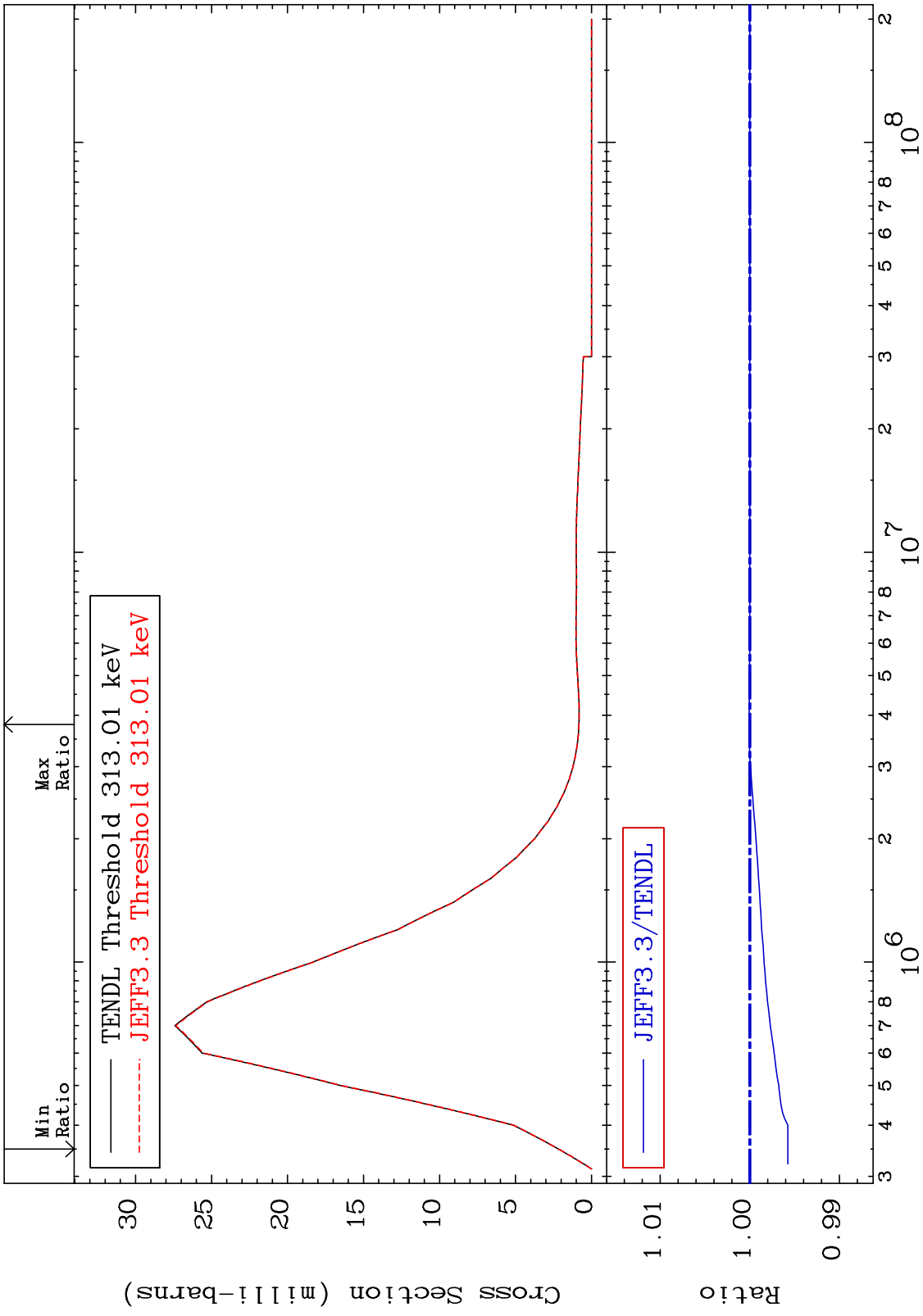
MAT 7122 MT= 57 (n,n') Level Cross Section 71-Lu-174 -0.453 To 0.378 %



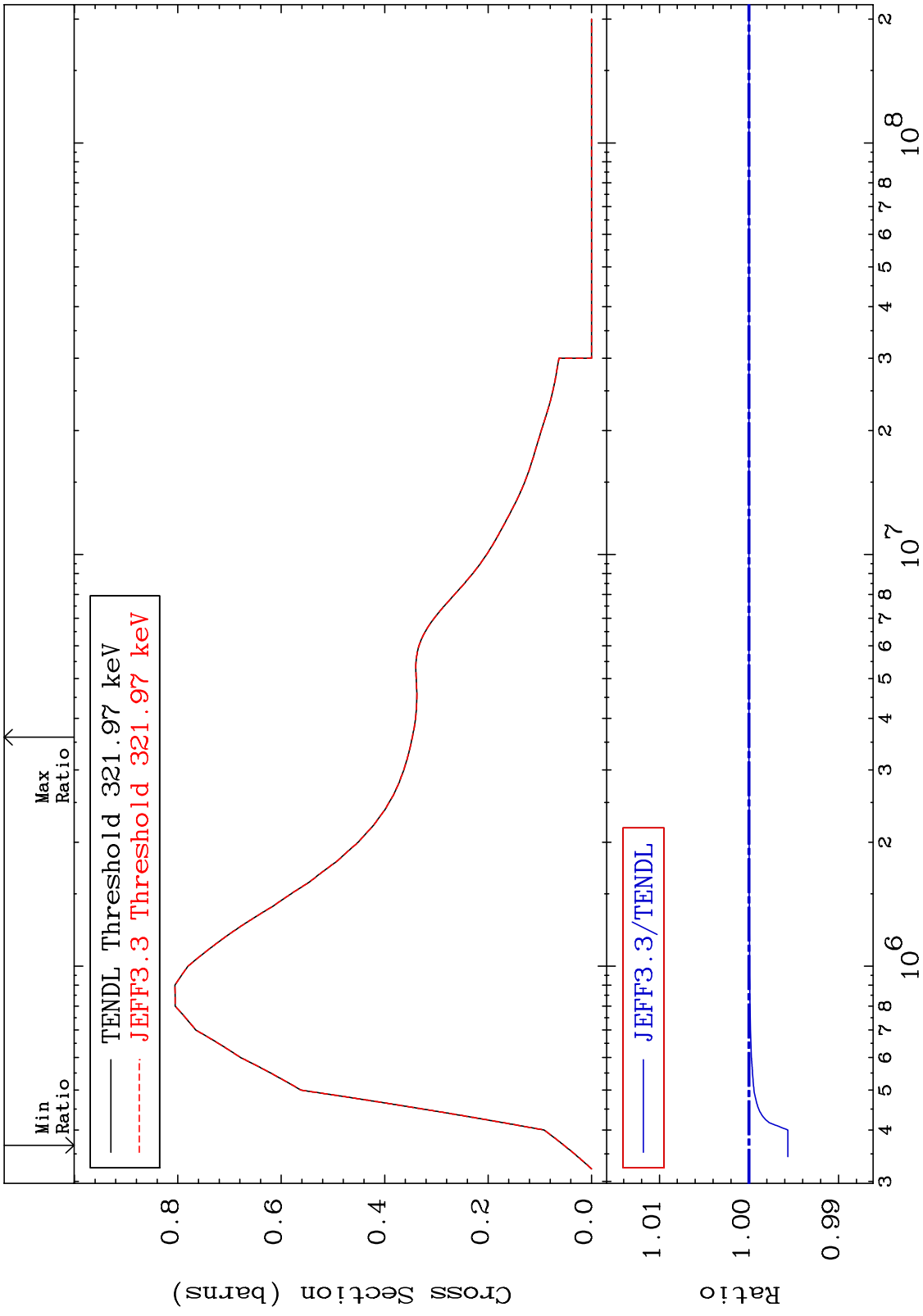
MAT 7122 MT= 58 (n,n') Level Cross Section 71-Lu-174 -0.524 To 0.378 %



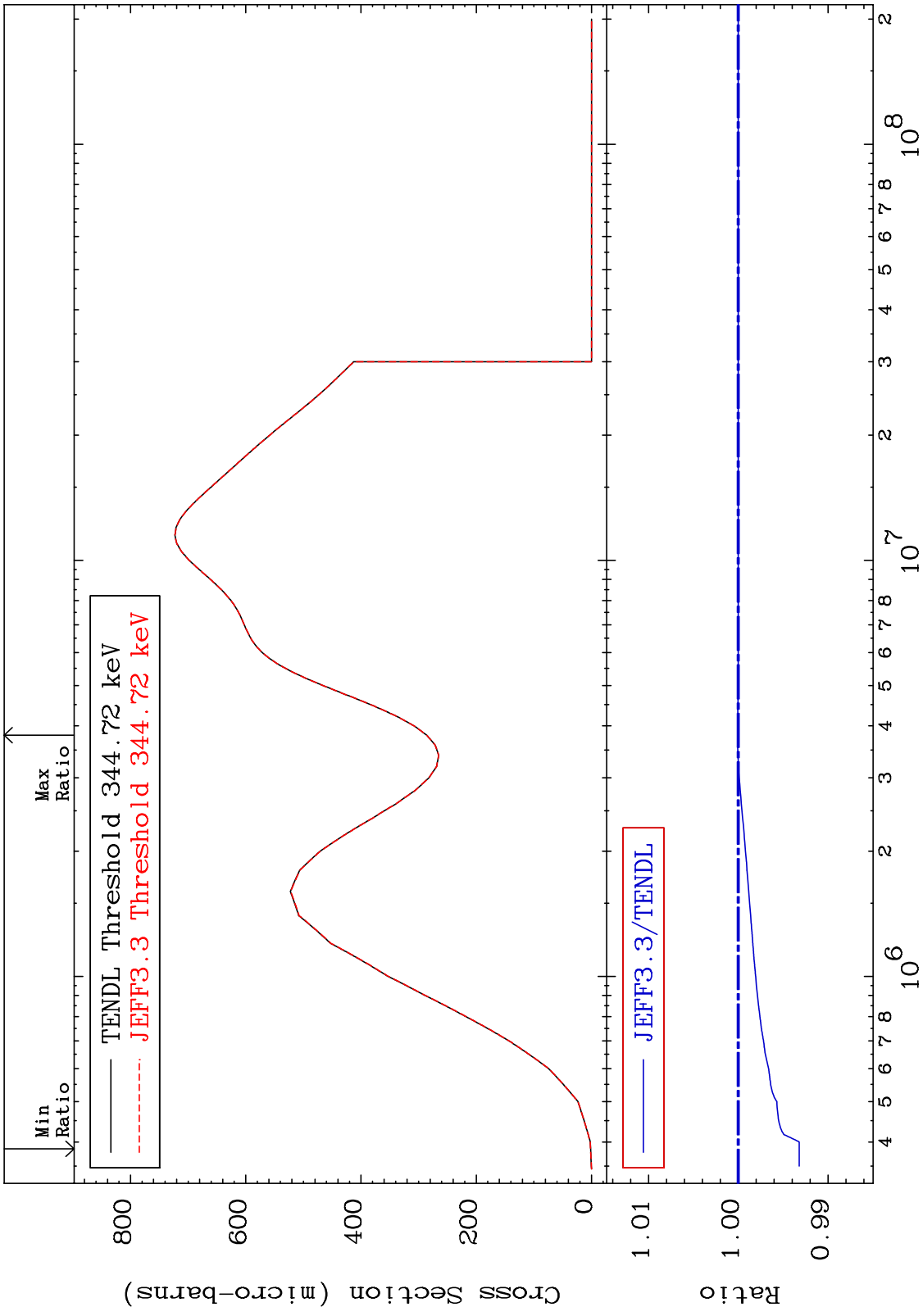
MAT 7122 MT= 59 (n,n') Level Cross Section 71-Lu-174 -0.424 To 0.008 %



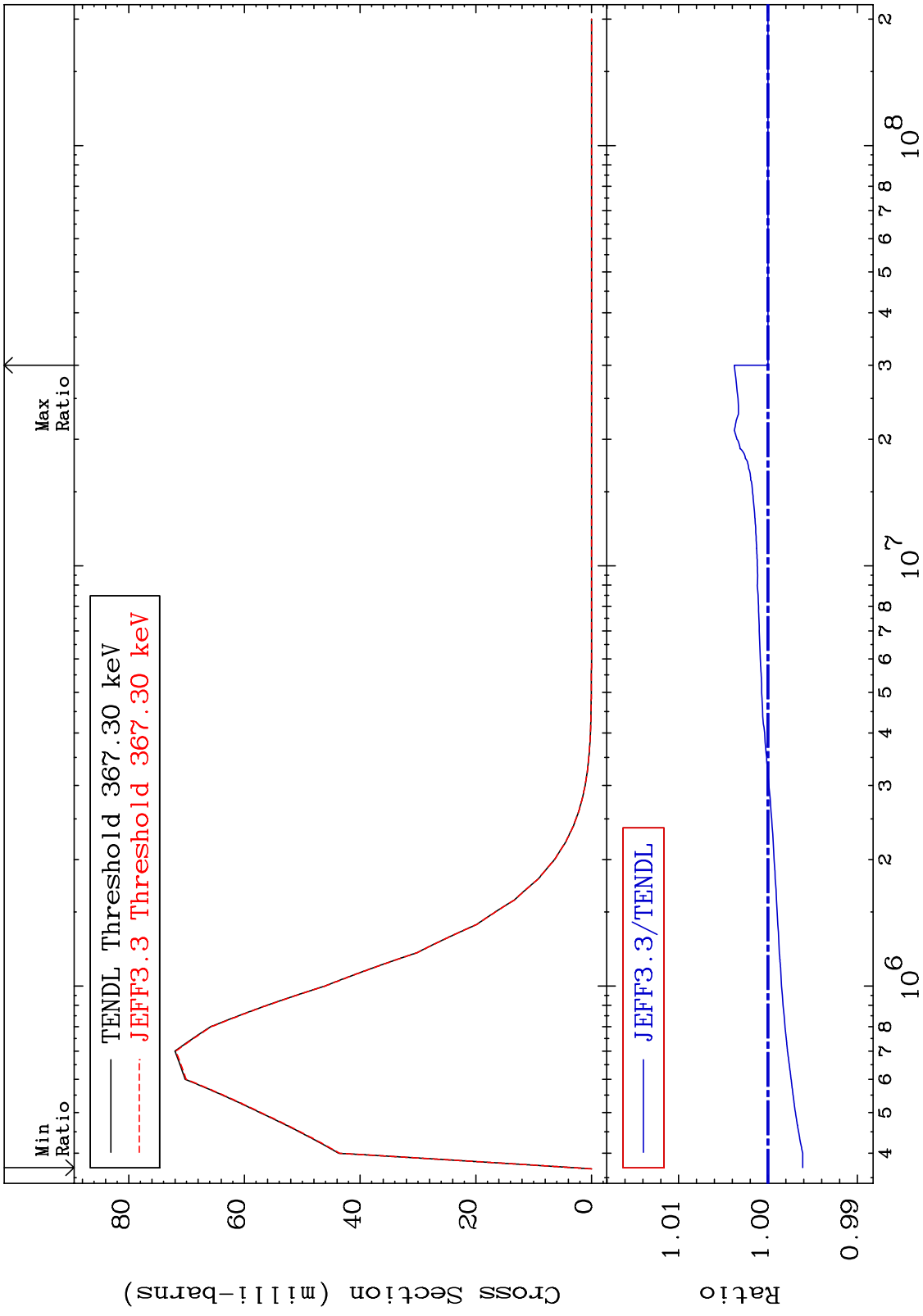
MAT 7122 MT= 60 (n,n') Level 71-Lu-174
 Cross Section -0.434 To 0.000 %



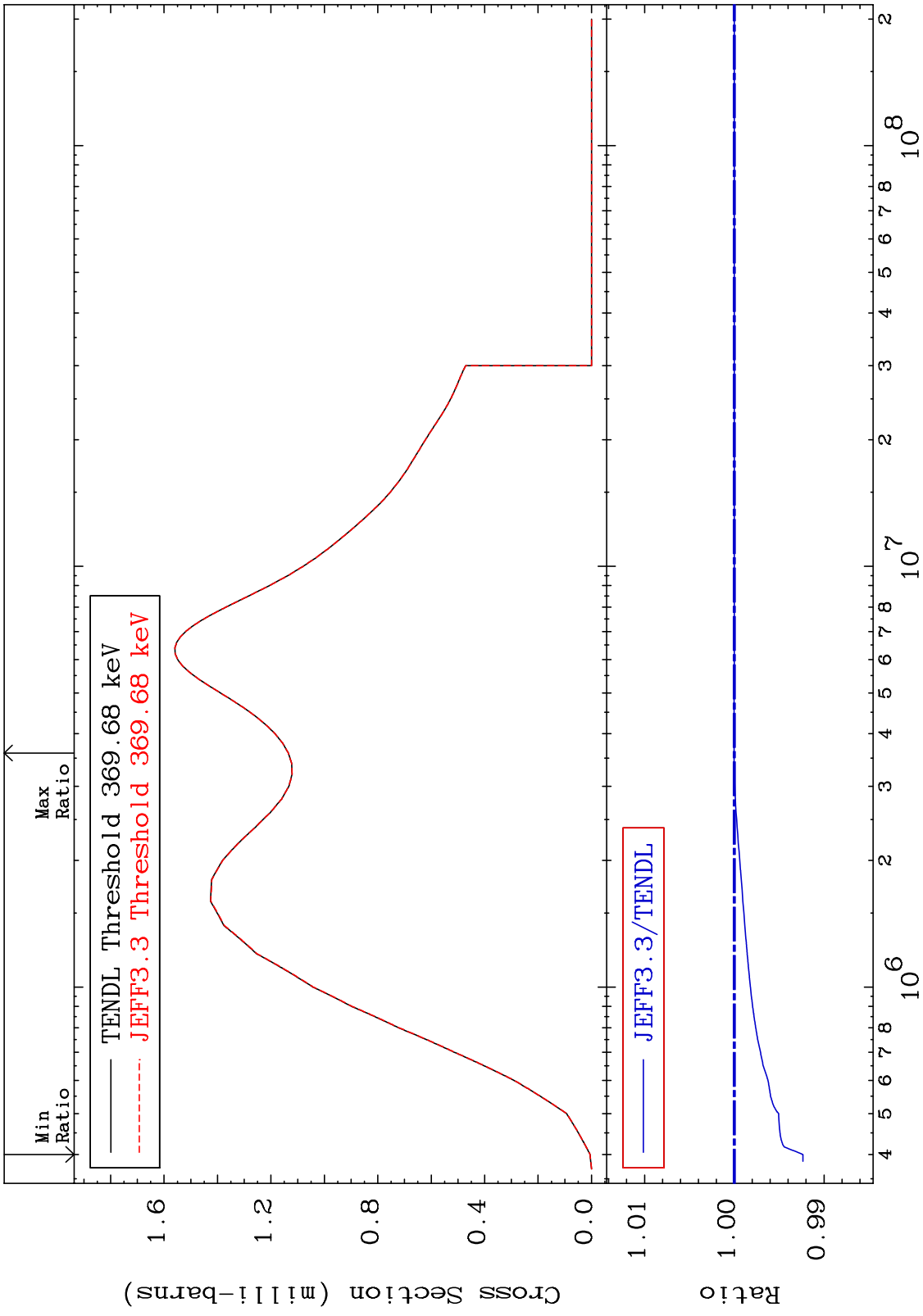
MAT 7122 MT= 61 (n,n') Level Cross Section 71-Lu-174 -0.680 To 0.008 %



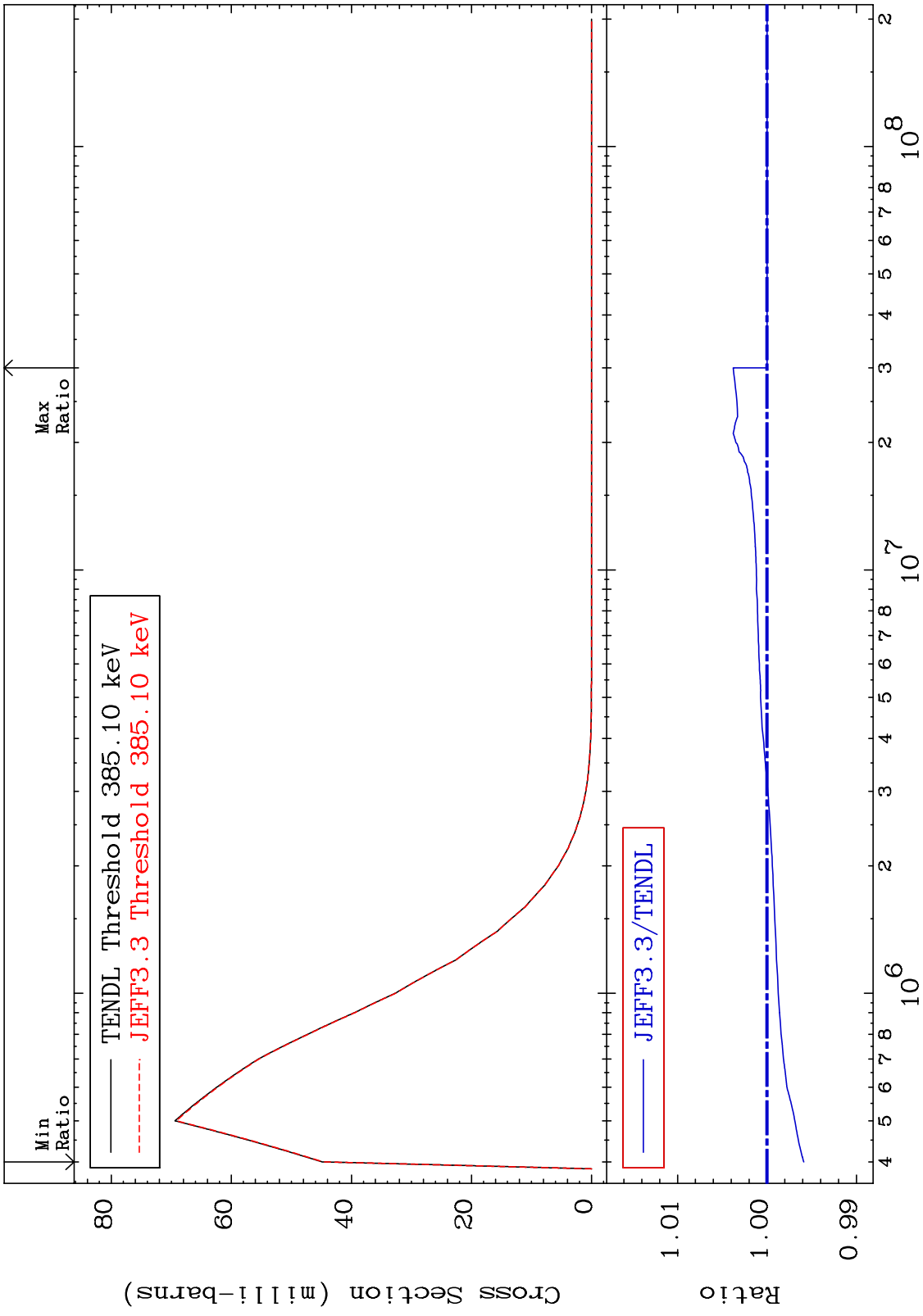
MAT 7122 MT= 62 (n,n') Level Cross Section 71-Lu-174 -0.387 To 0.378 %



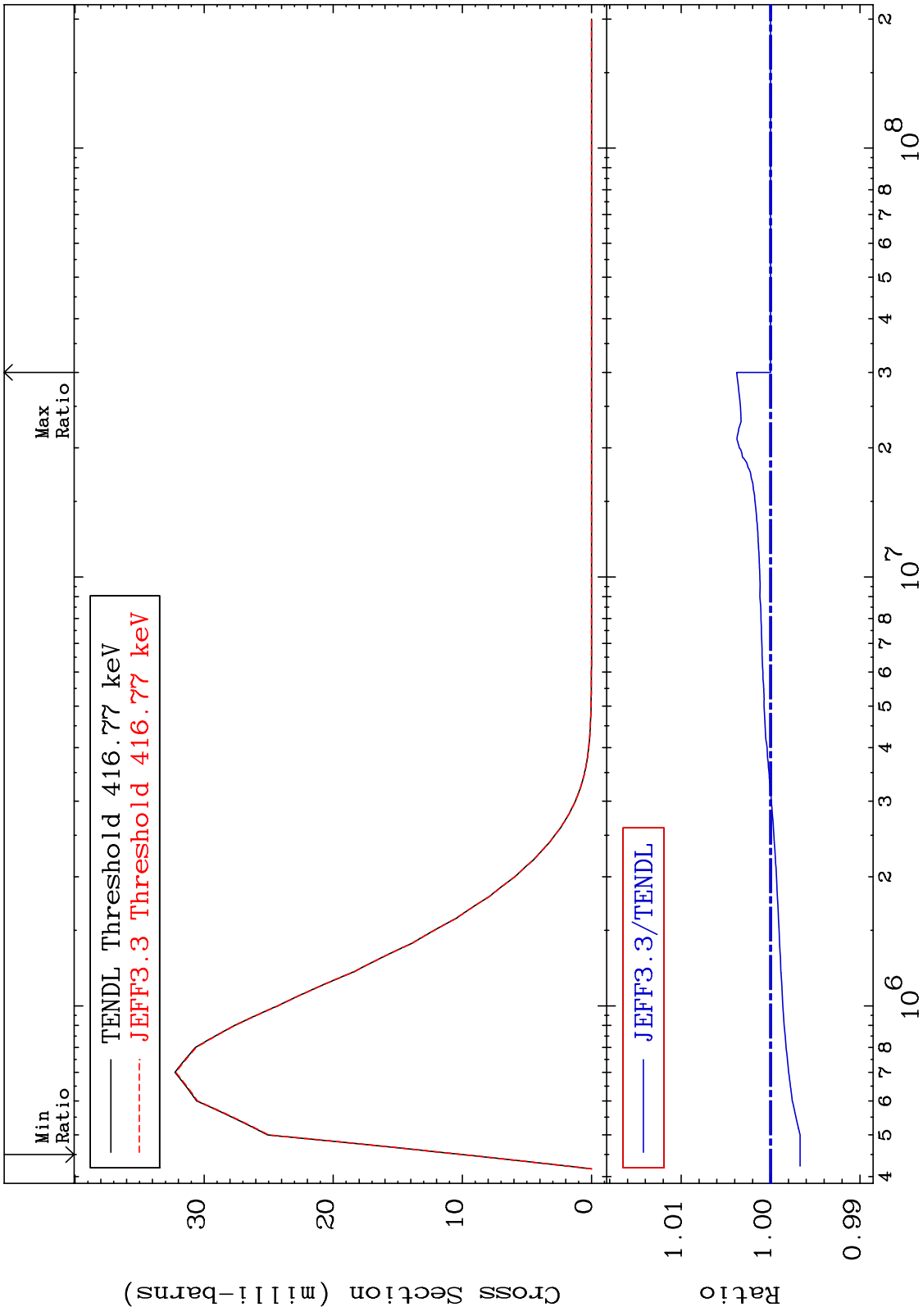
MAT 7122 MT= 63 (n,n') Level 71-Lu-174
 Cross Section -0.765 To 0.004 %



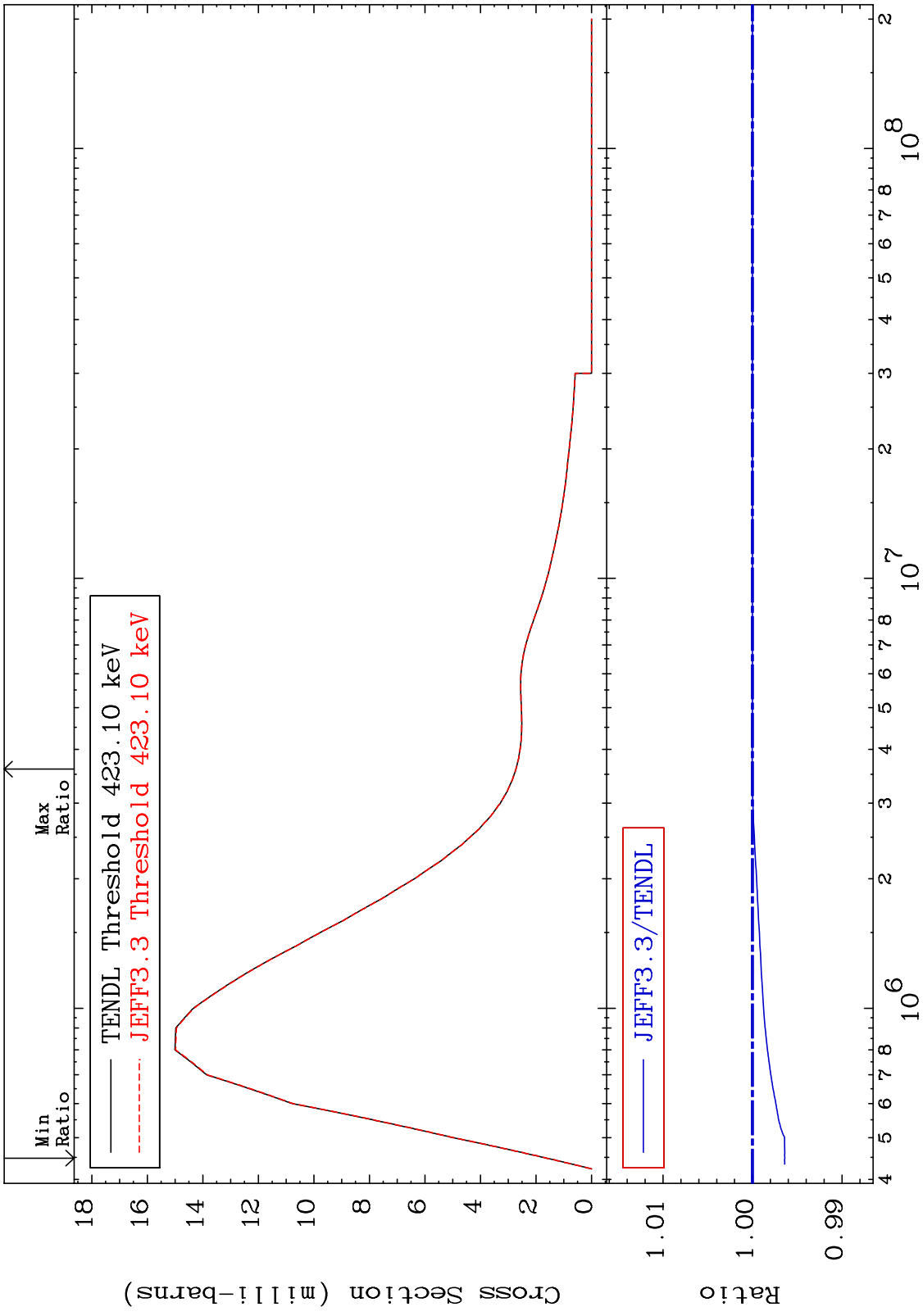
MAT 7122 MT= 64 (n,n') Level Cross Section 71-Lu-174 -0.411 To 0.378 %



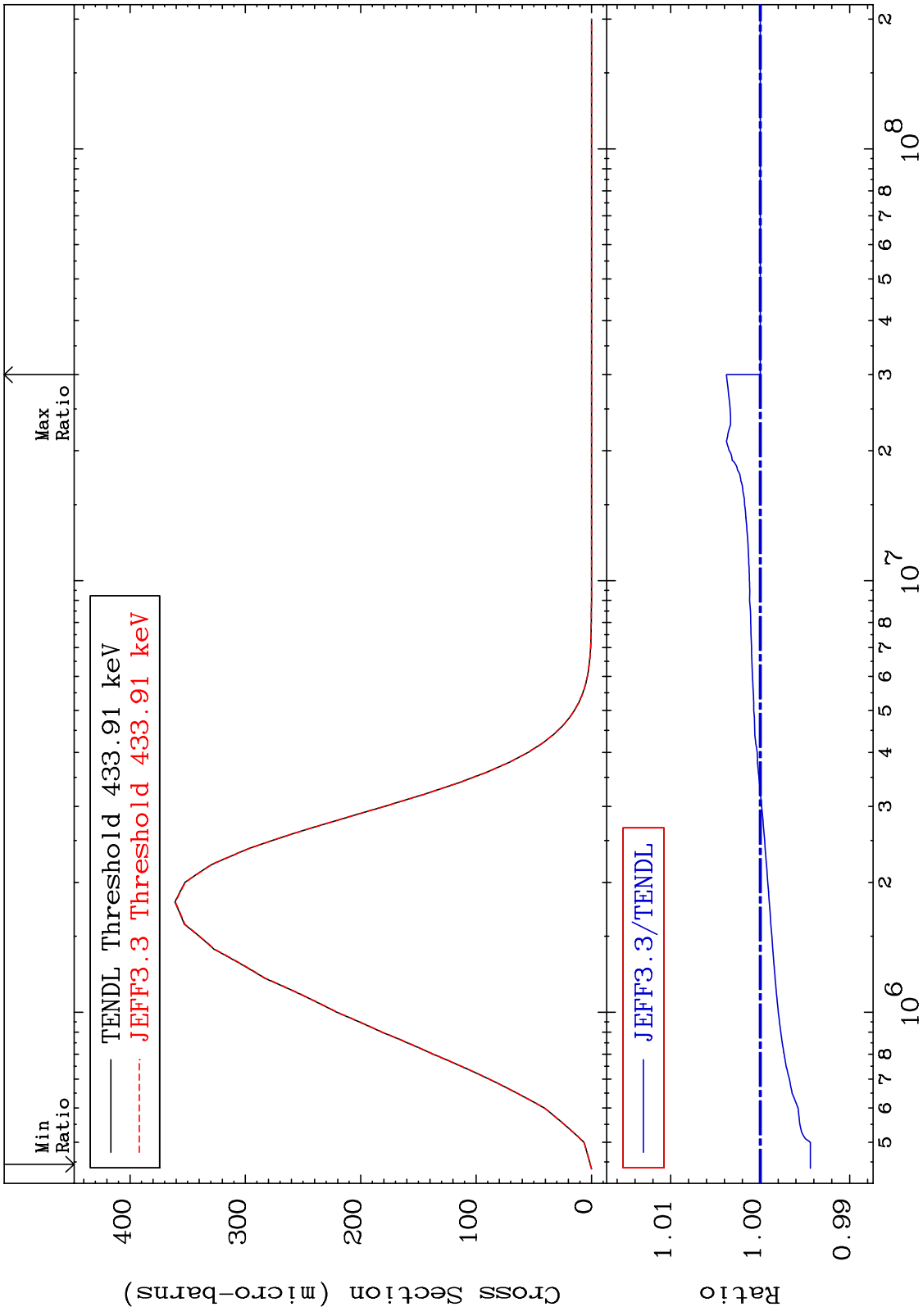
MAT 7122 MT= 65 (n,n') Level Cross Section 71-Lu-174 -0.331 To 0.378 %



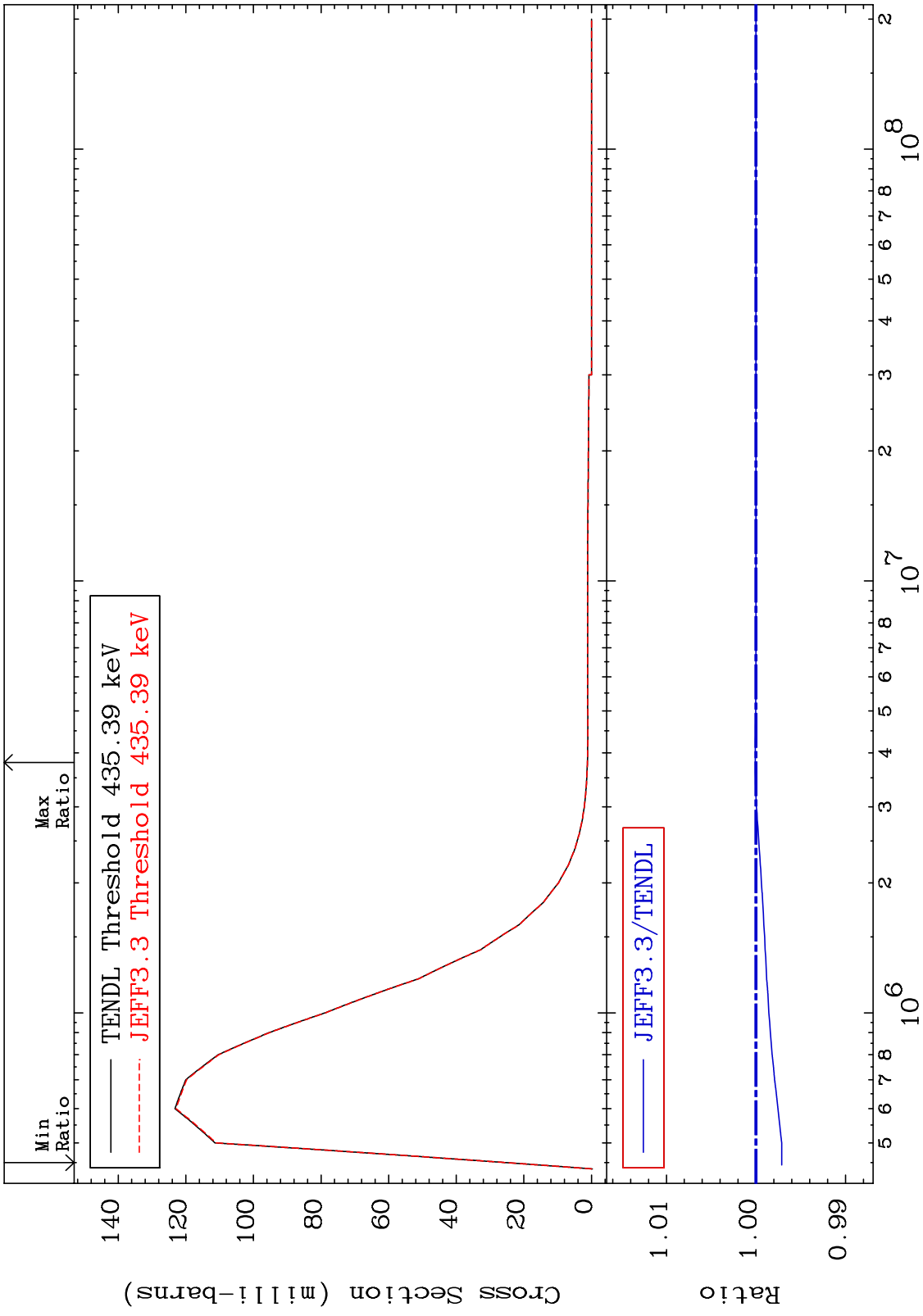
MAT 7122 MT= 66 (n,n') Level Cross Section 71-Lu-174 -0.359 To 0.003 %



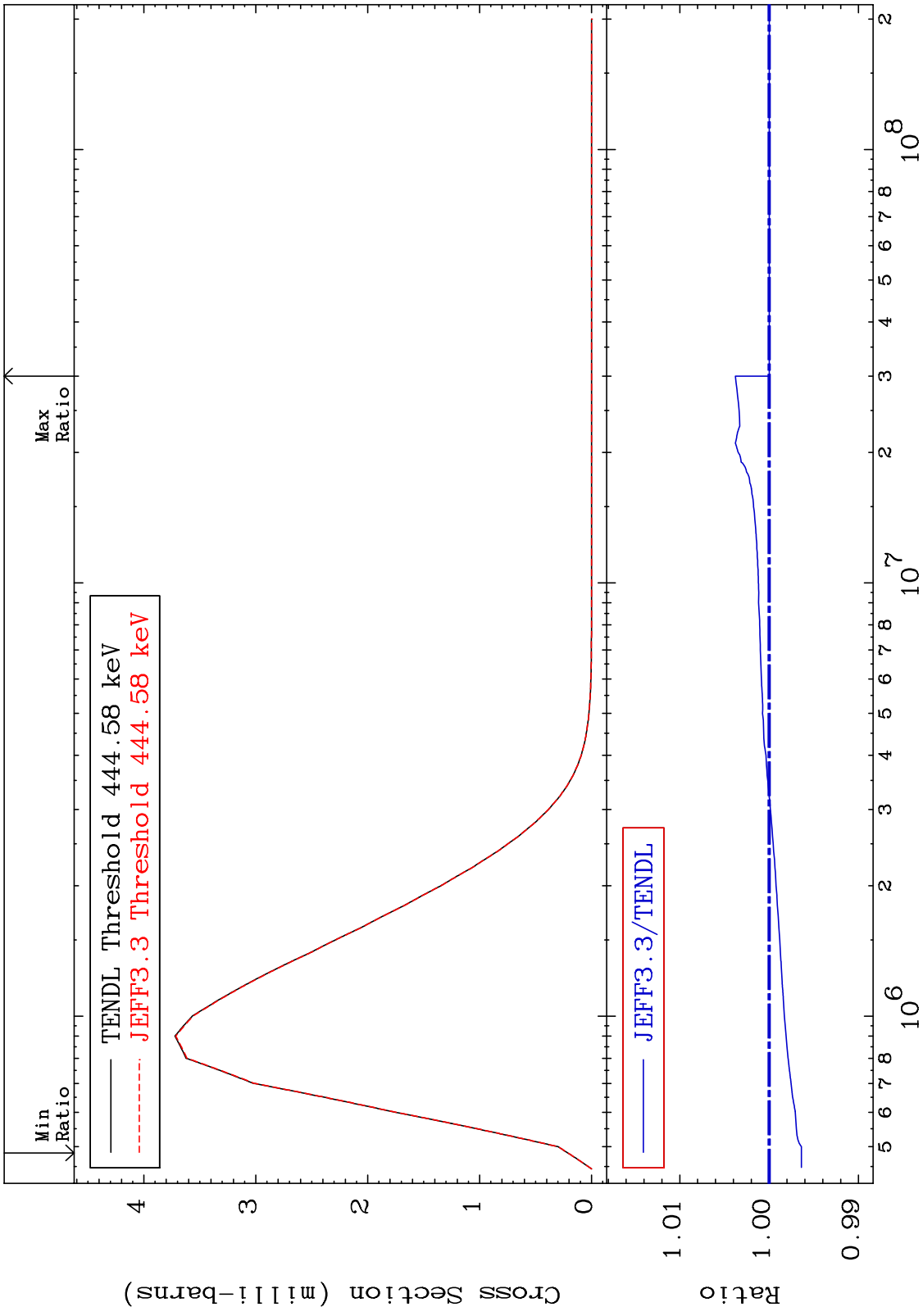
MAT 7122 MT= 67 (n,n') Level Cross Section 71-Lu-174 -0.561 To 0.378 %



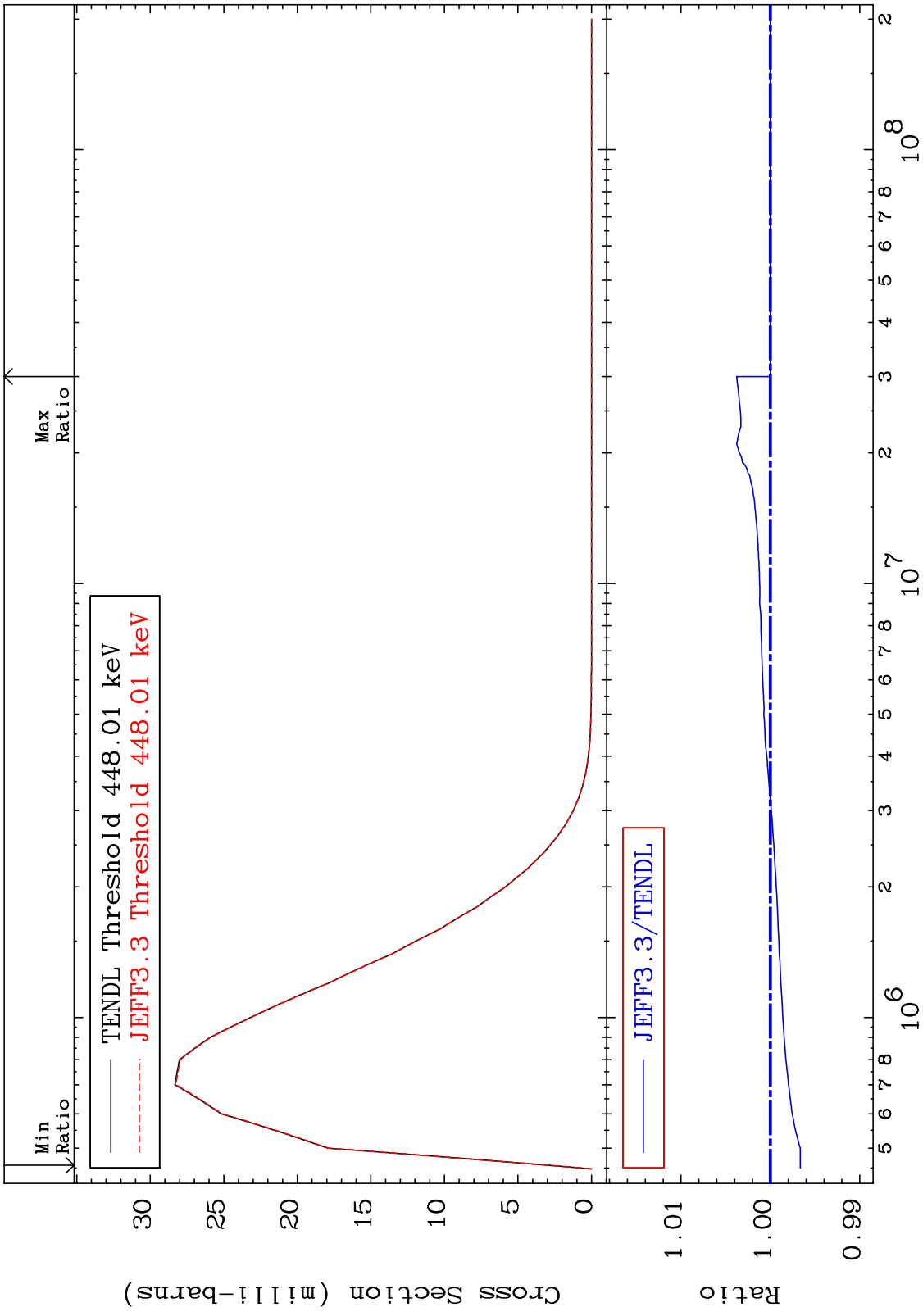
MAT 7122 MT= 68 (n,n') Level Cross Section 71-Lu-174 -0.287 To 0.008 %



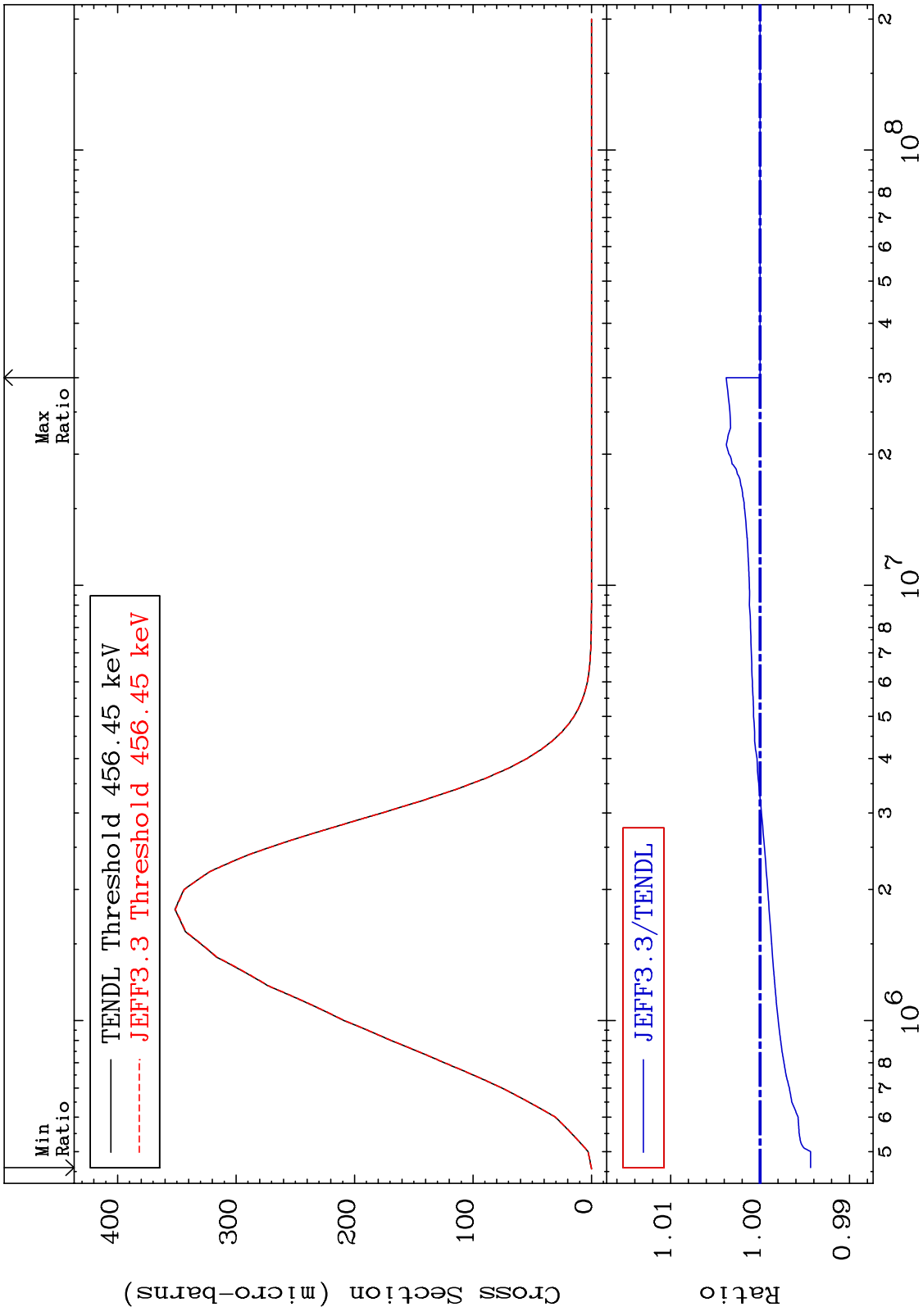
MAT 7122 MT= 69 (n,n') Level Cross Section 71-Lu-174 -0.362 To 0.378 %



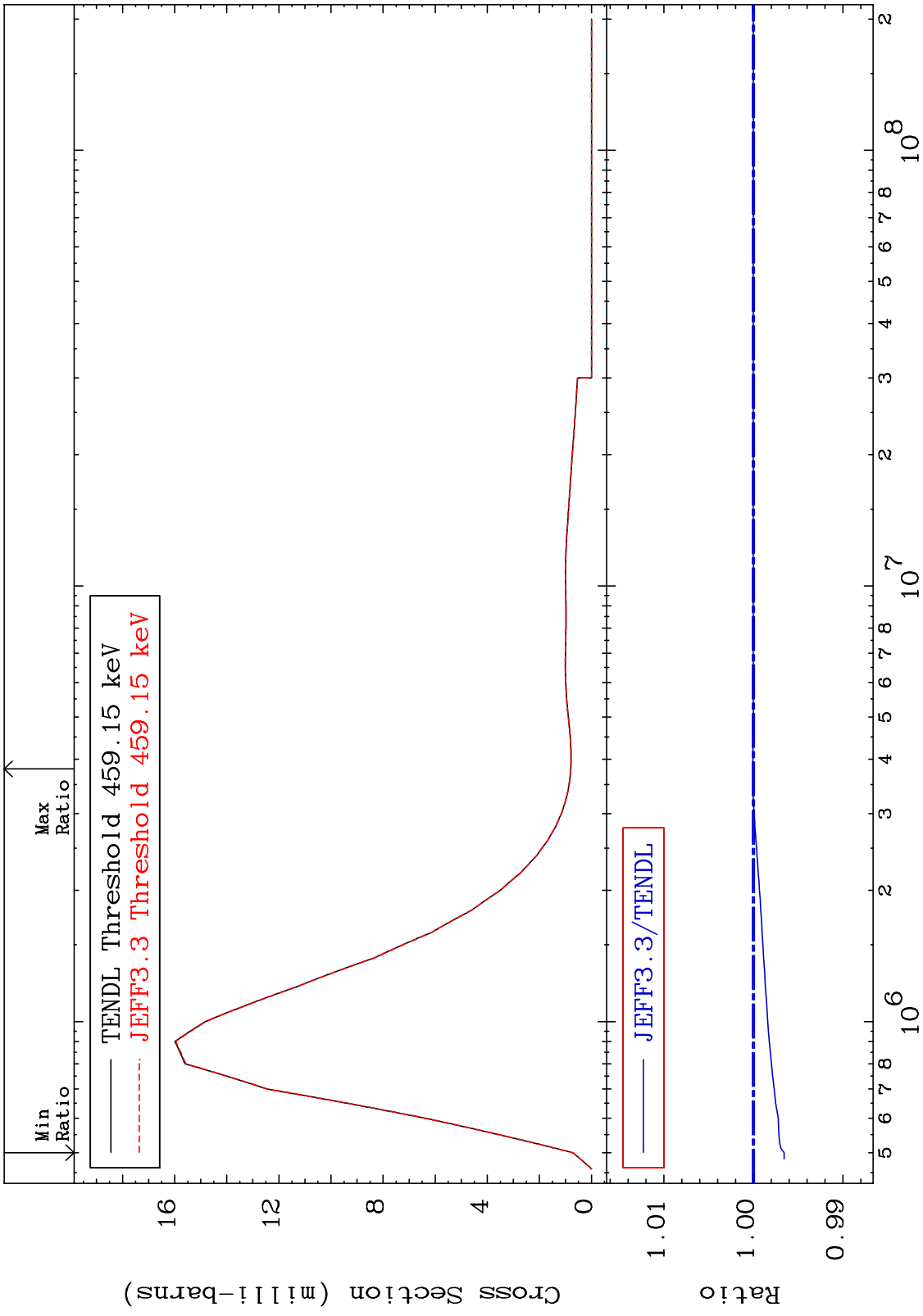
MAT 7122 MT= 70 (n,n') Level 71-Lu-174
 Cross Section -0.334 To 0.378 %



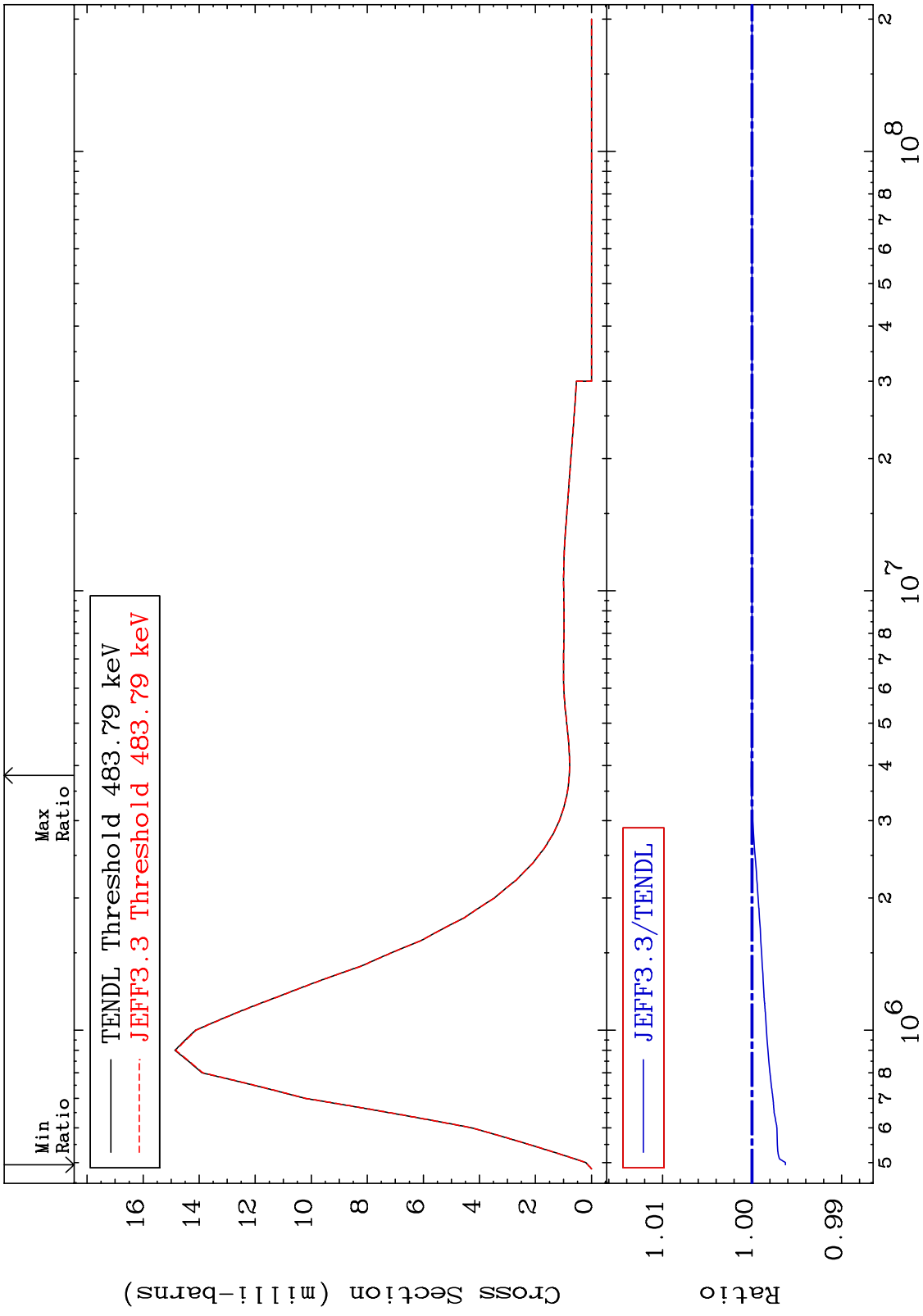
MAT 7122 MT= 71 (n,n') Level 71-Lu-174
 Cross Section -0.565 To 0.378 %



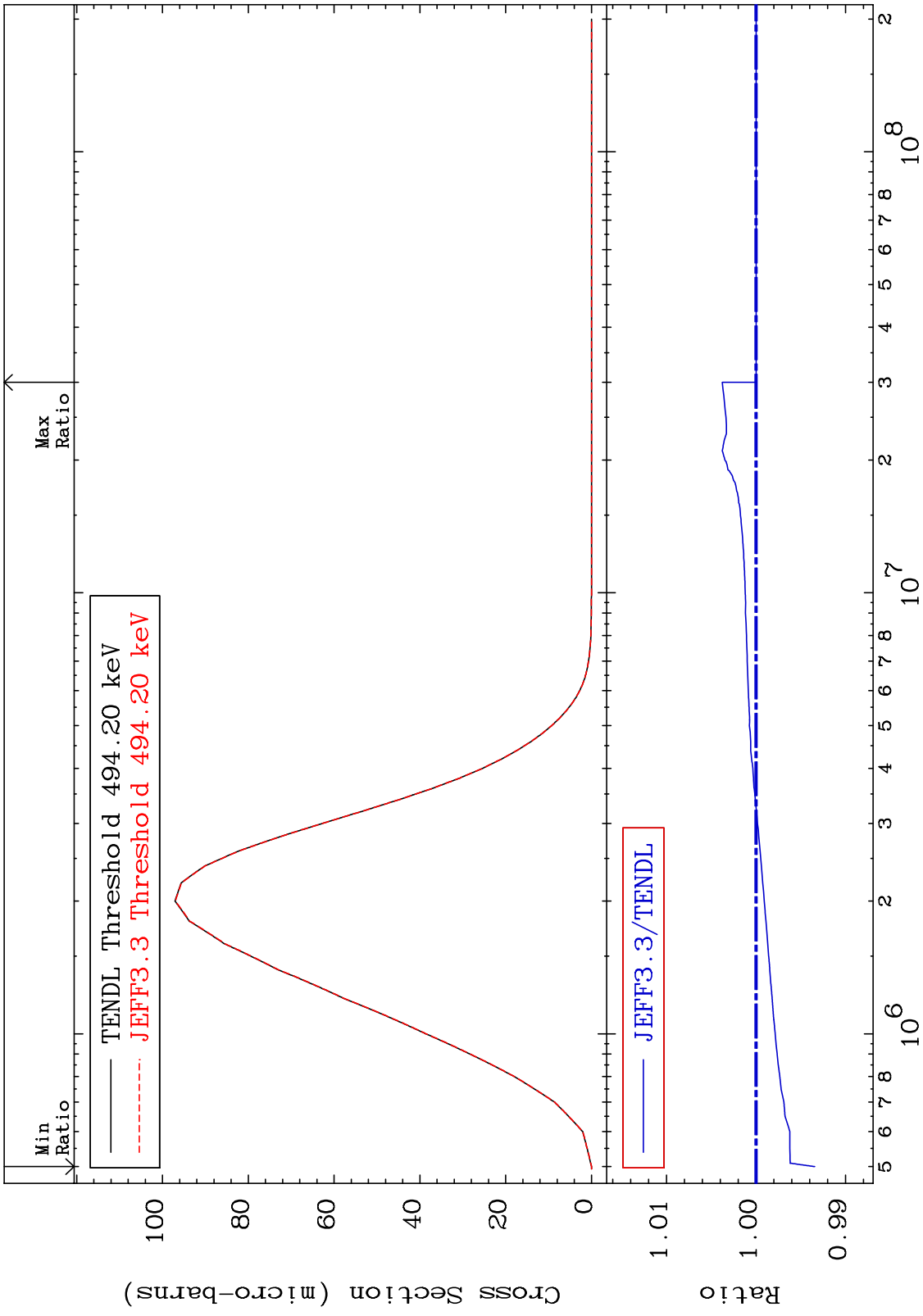
MAT 7122 MT= 72 (n,n') Level Cross Section 71-Lu-174 -0.343 To 0.008 %



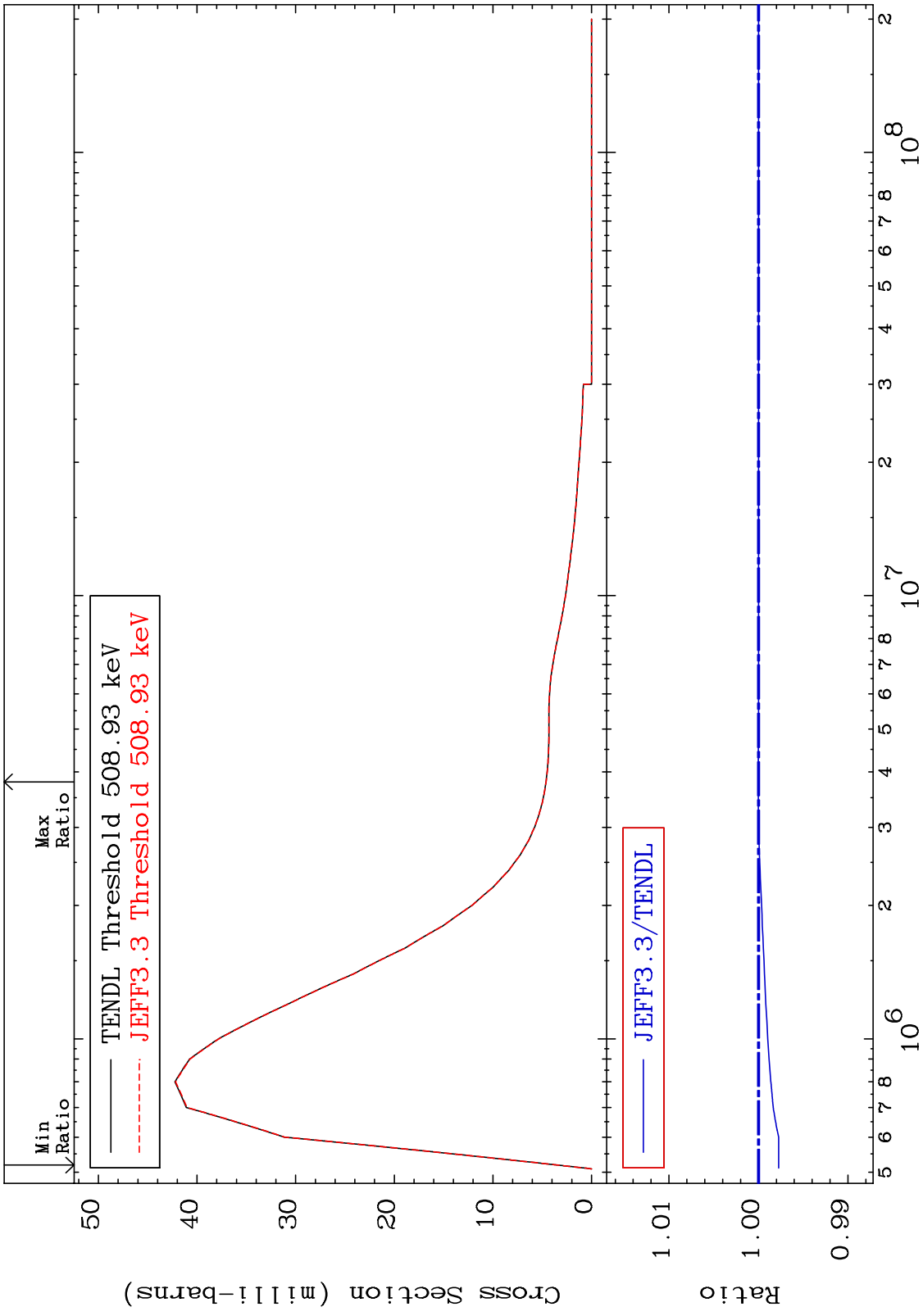
MAT 7122 MT= 73 (n,n') Level Cross Section 71-Lu-174 -0.374 To 0.008 %



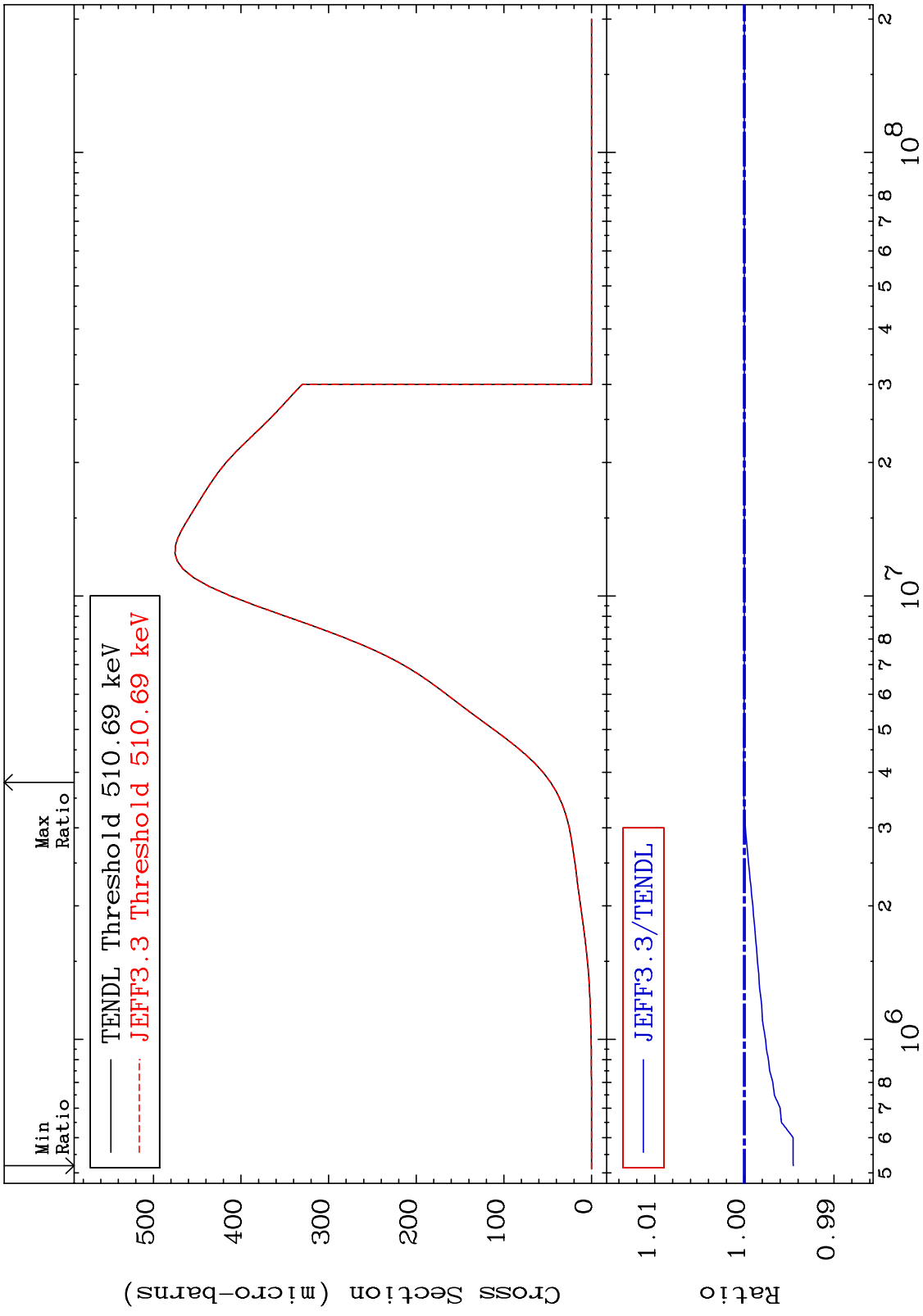
MAT 7122 MT= 74 (n,n') Level Cross Section 71-Lu-174
 -0.655 To 0.378 %



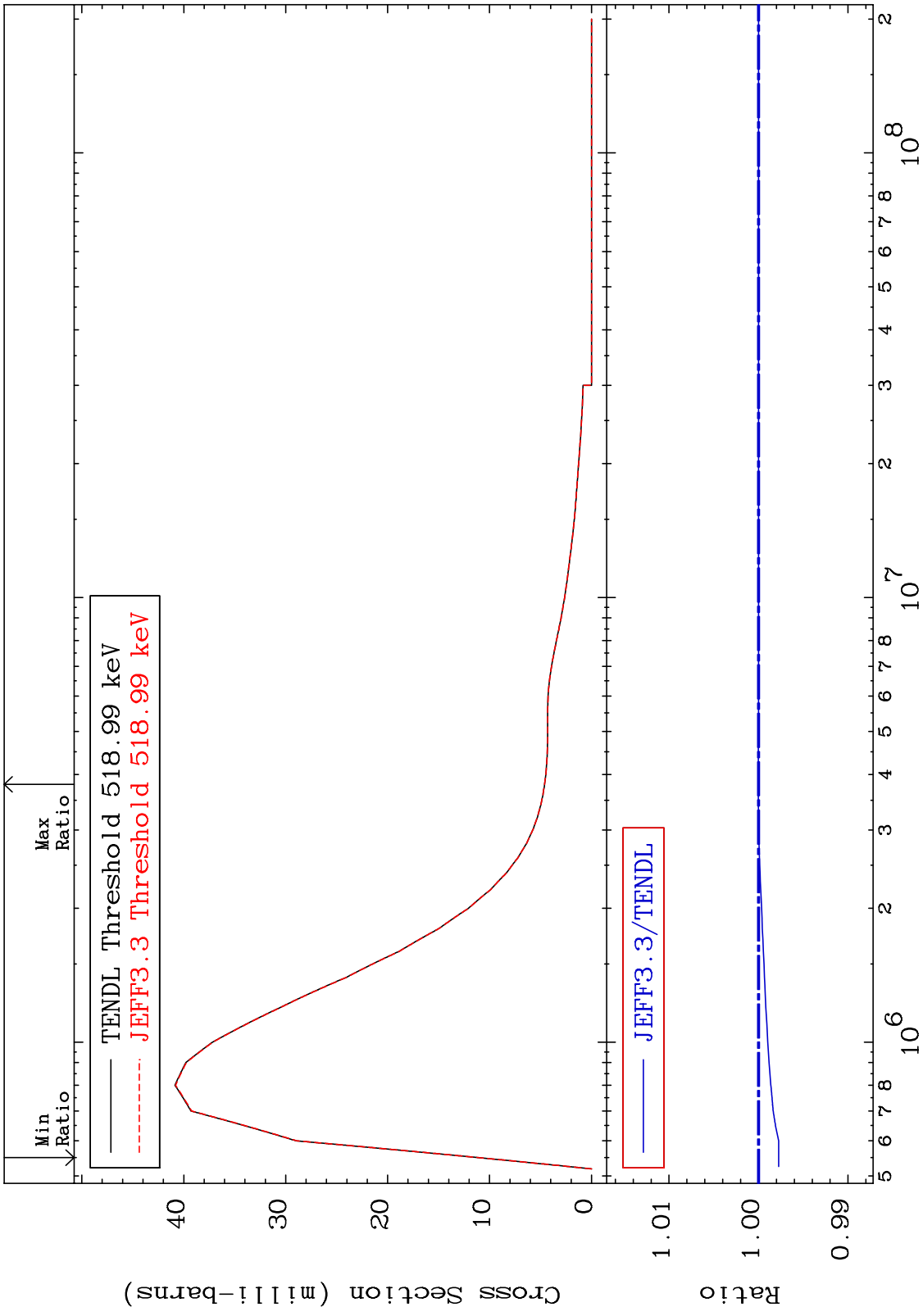
MAT 7122 MT= 75 (n,n') Level Cross Section 71-Lu-174 -0.225 To 0.002 %



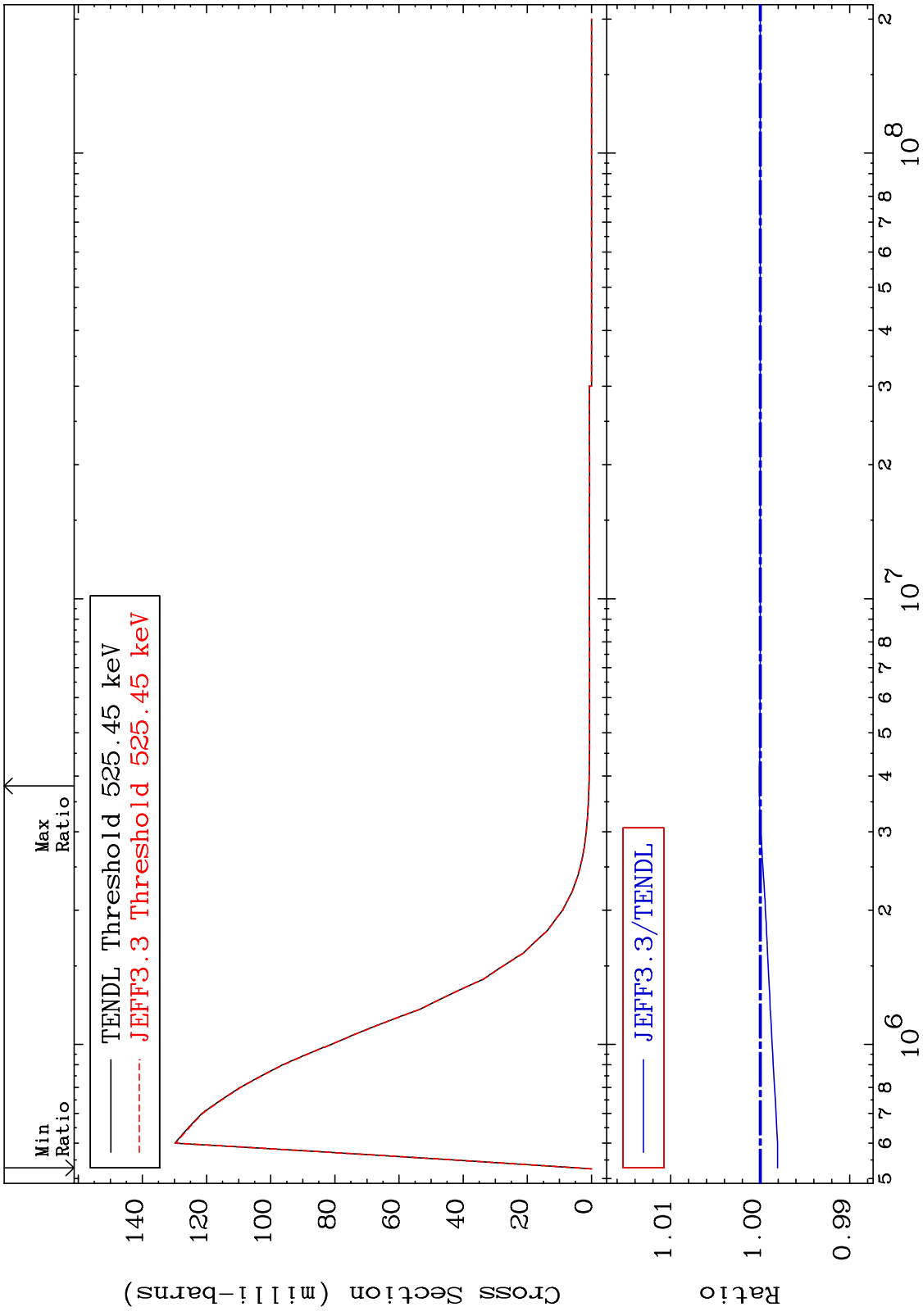
MAT 7122 MT= 76 (n,n') Level Cross Section 71-Lu-174 -0.545 To 0.007 %



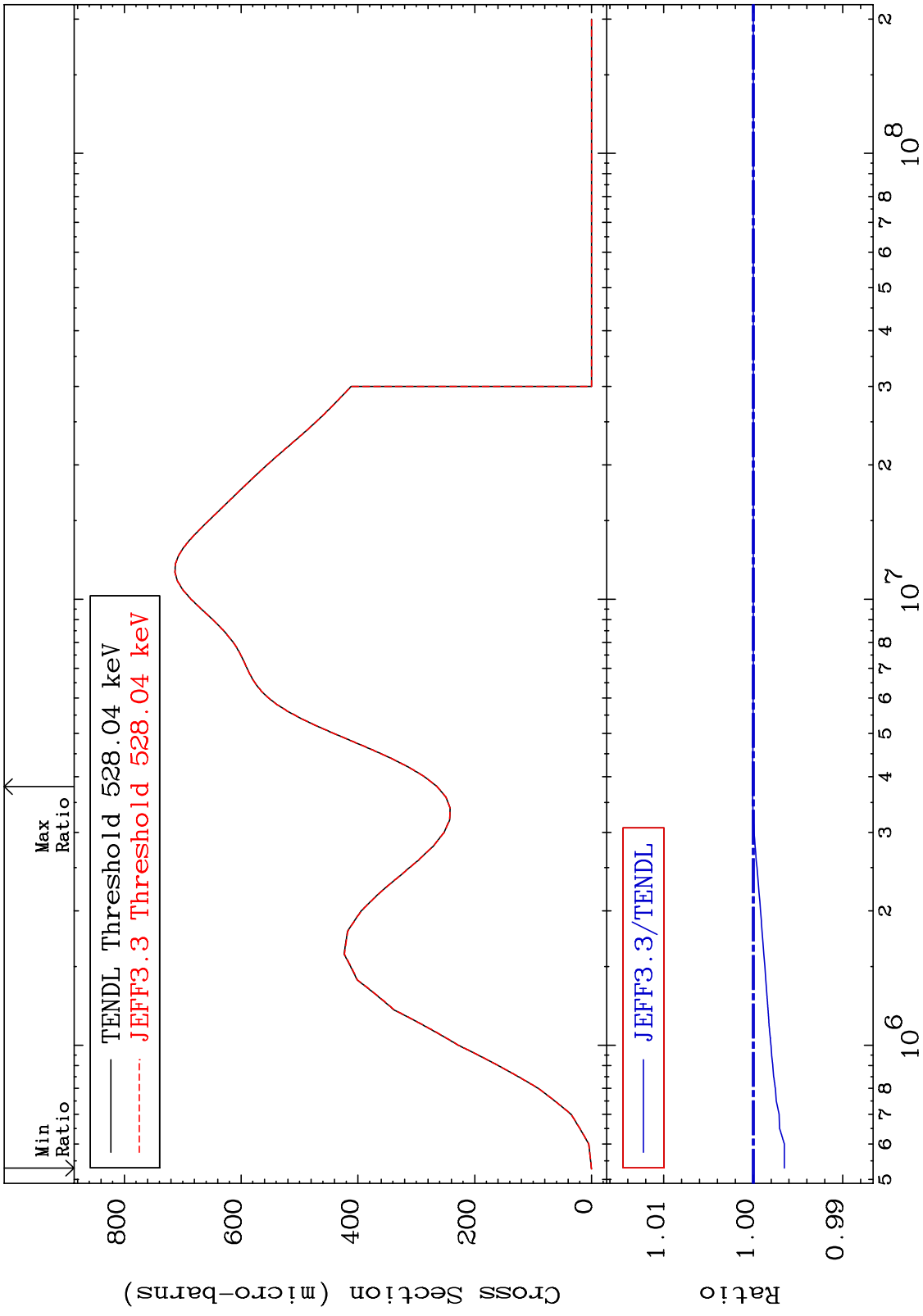
MAT 7122 MT= 77 (n,n') Level Cross Section 71-Lu-174 -0.224 To 0.002 %



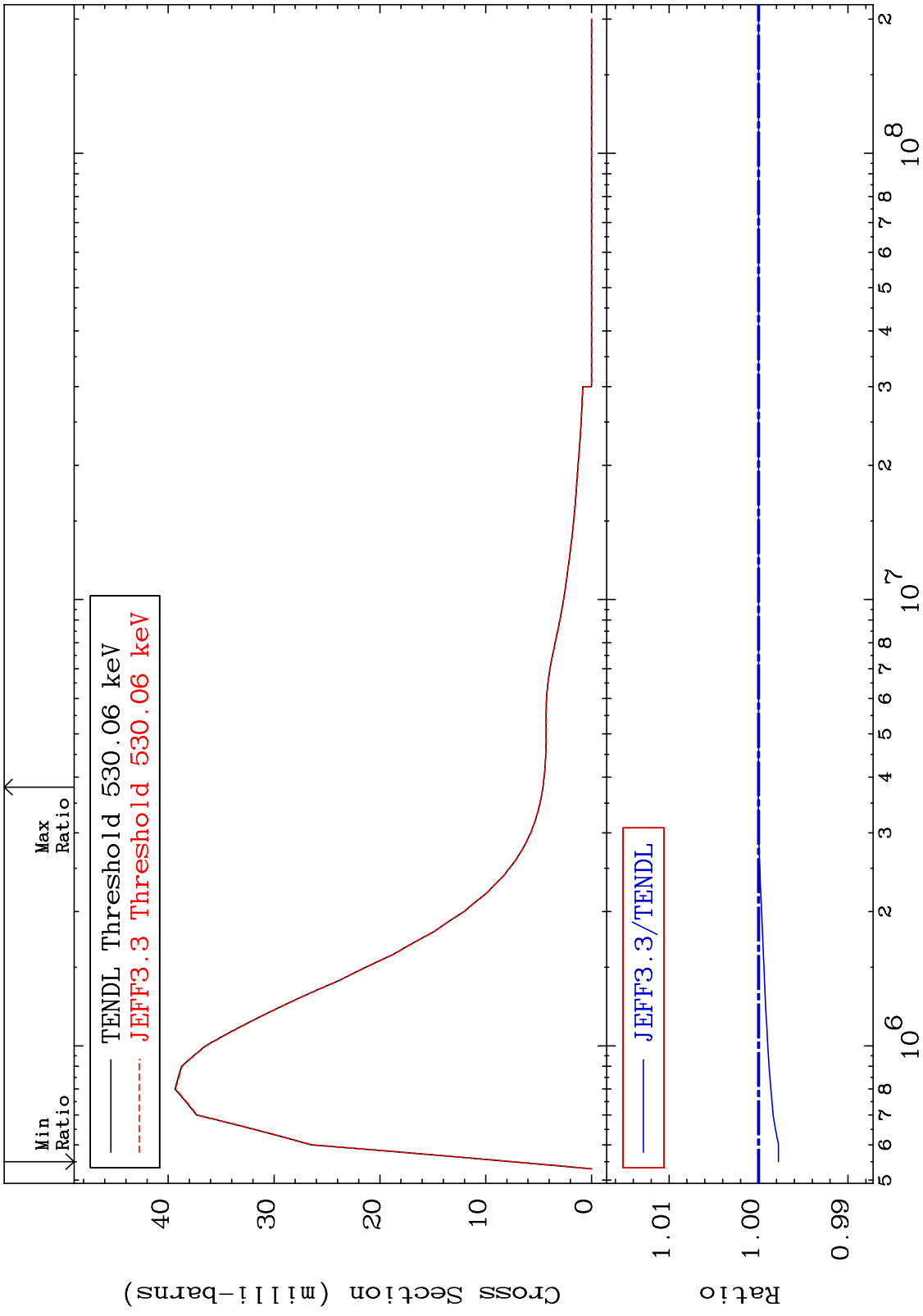
MAT 7122 MT= 78 (n,n') Level Cross Section 71-Lu-174 -0.193 To 0.009 %



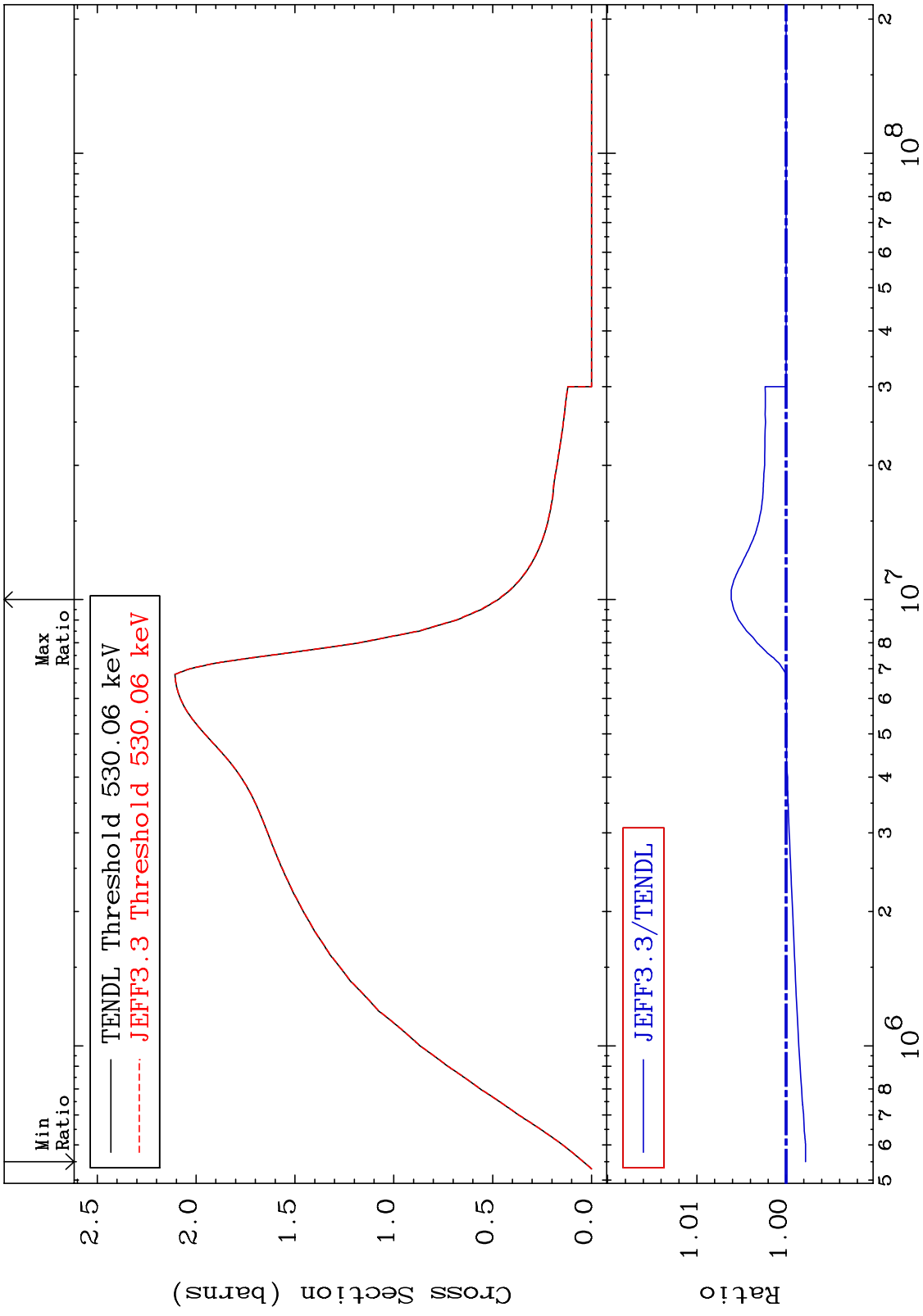
MAT 7122 MT= 79 (n,n') Level Cross Section 71-Lu-174
 -0.348 To 0.008 %



MAT 7122 MT= 80 (n,n') Level Cross Section 71-Lu-174 -0.223 To 0.002 %



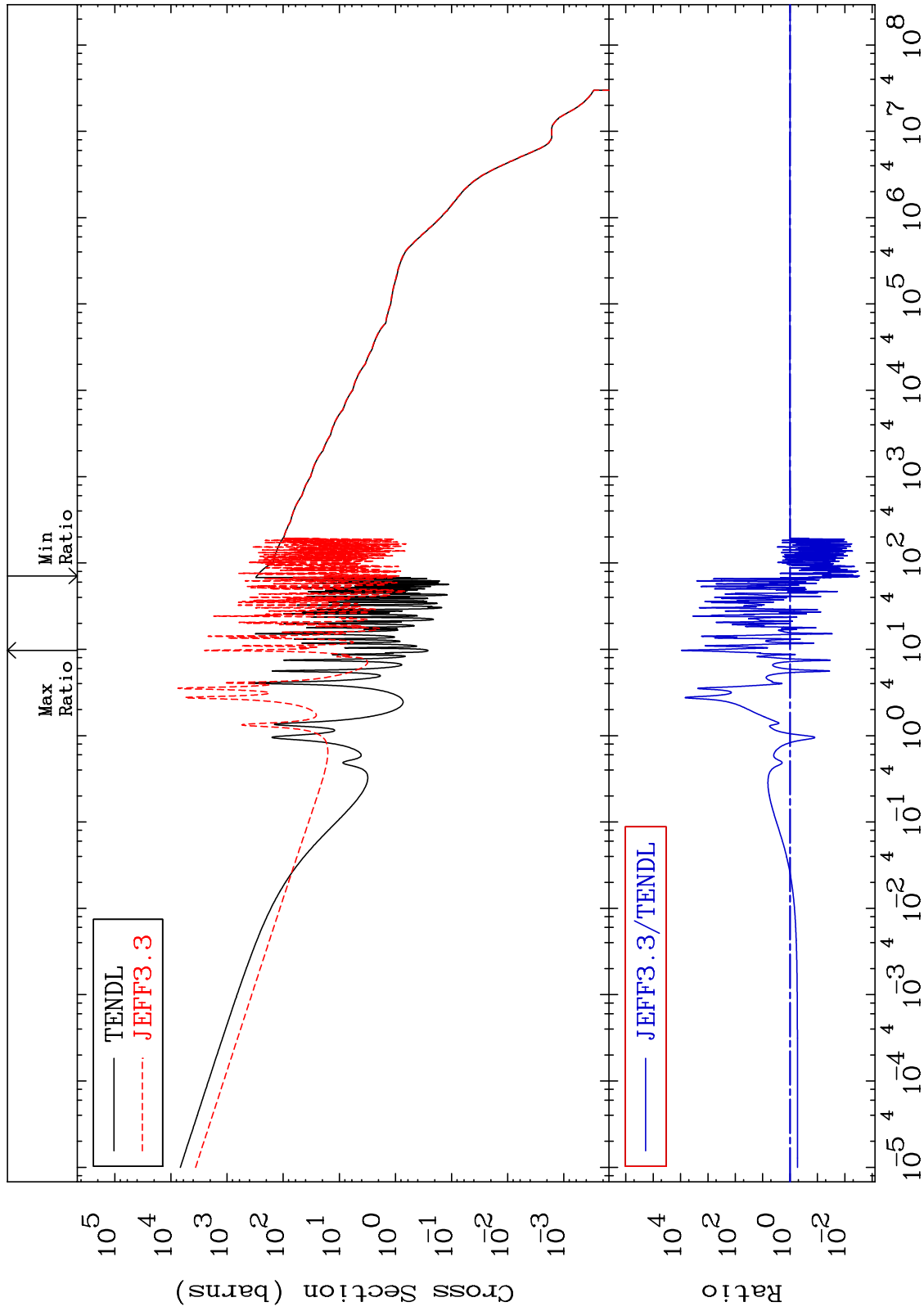
MAT 7122 71-Lu-174
-0.219 To 0.614 %
(n, n') Continuum
Cross Section



MAT 7122

71-Lu-174
-99.72 To 9999. %

(n, γ)
Cross Section



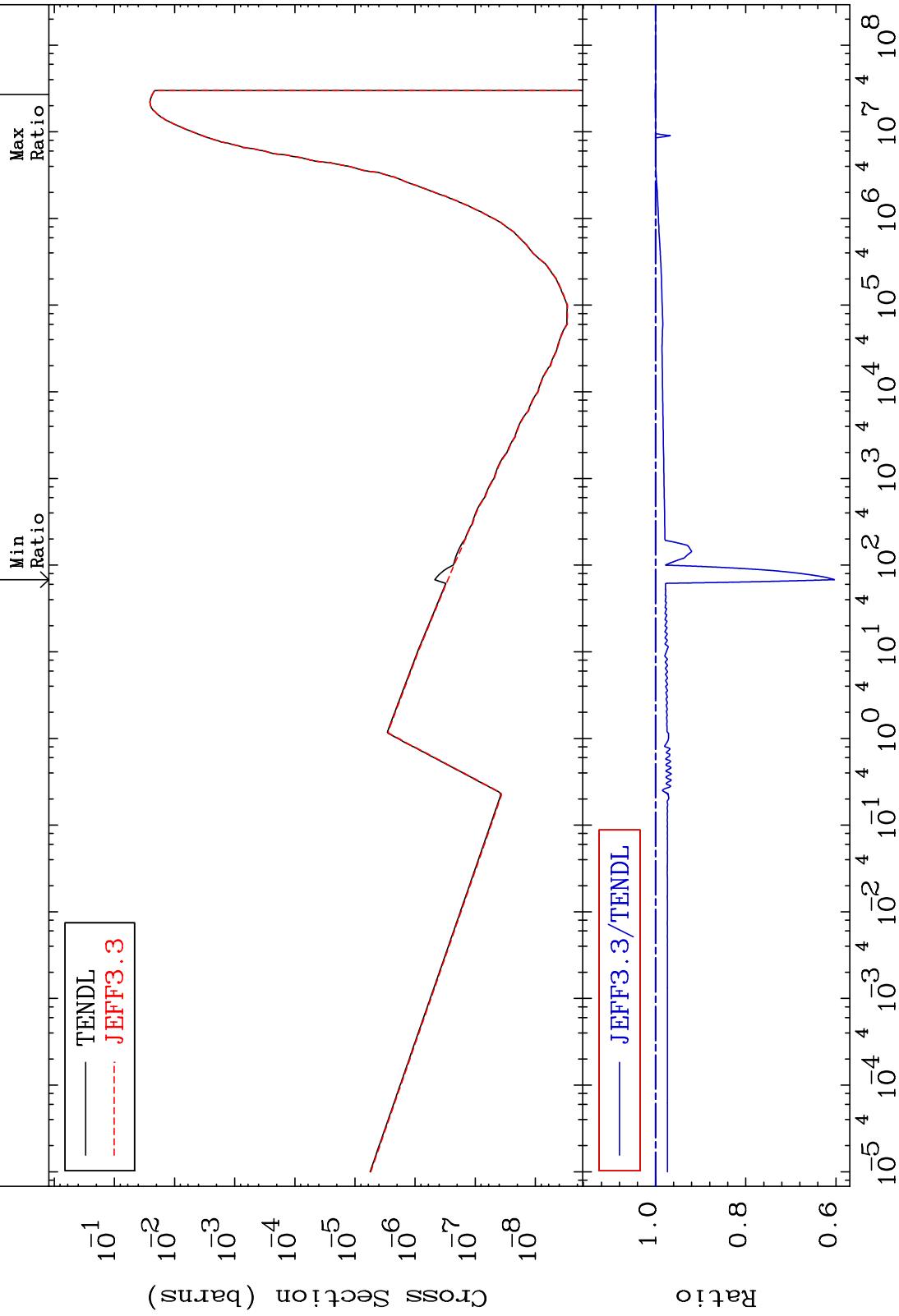
MAT 7122

(n,p)

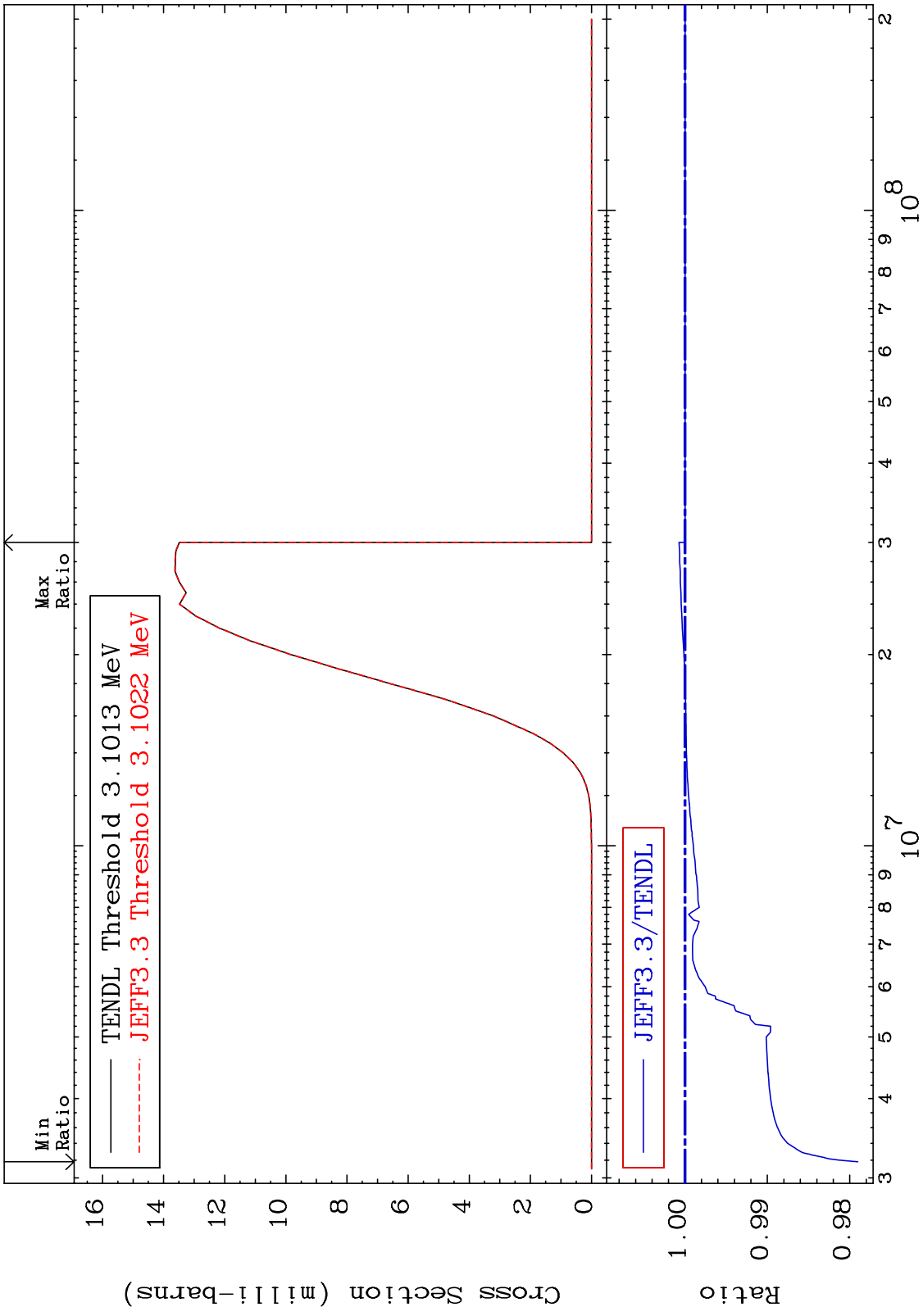
71-Lu-174

Cross Section

-39.68 To 0.063 %

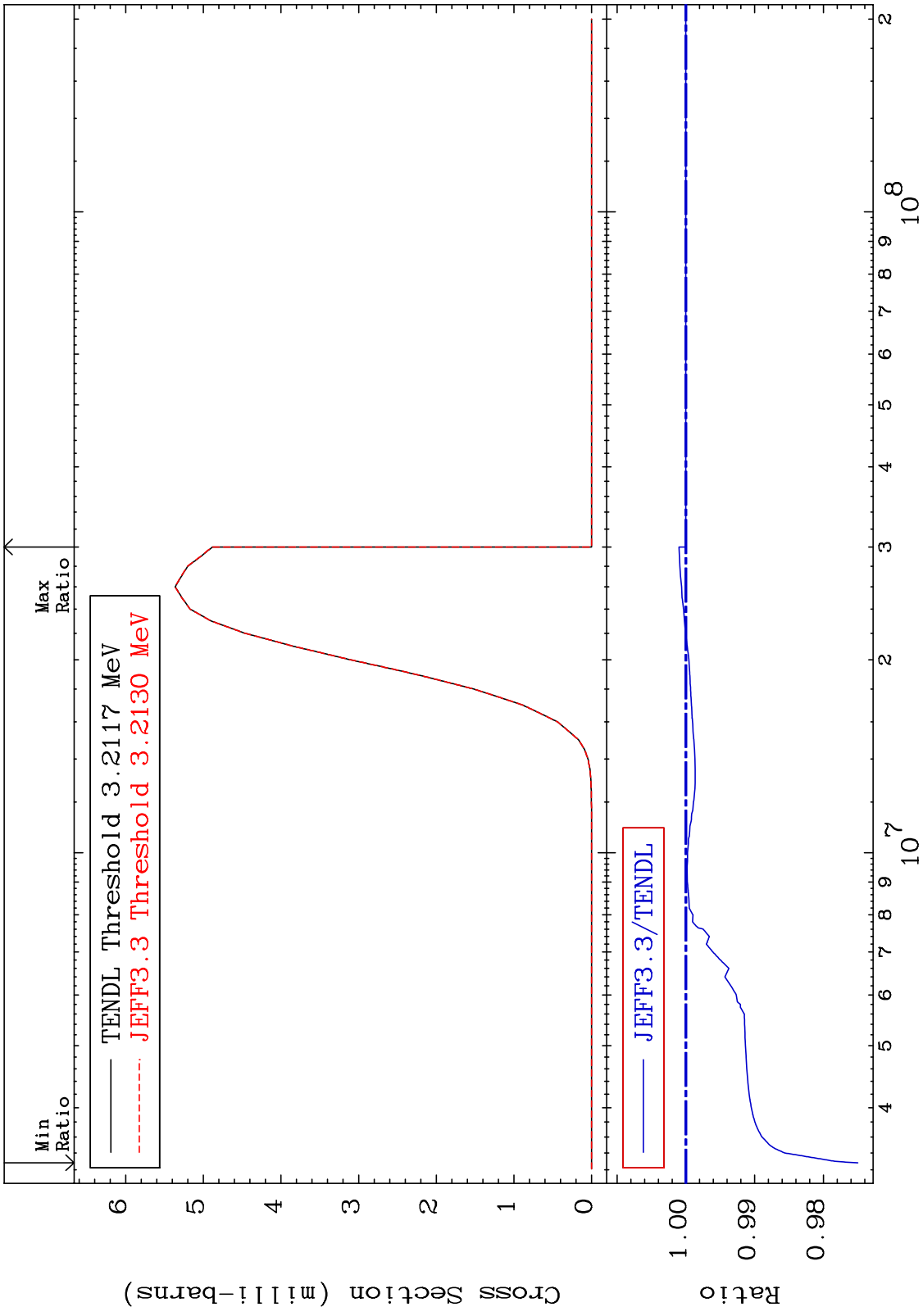


MAT 7122 (n,d) 71-Lu-174
 Cross Section -2.098 To 0.073 %

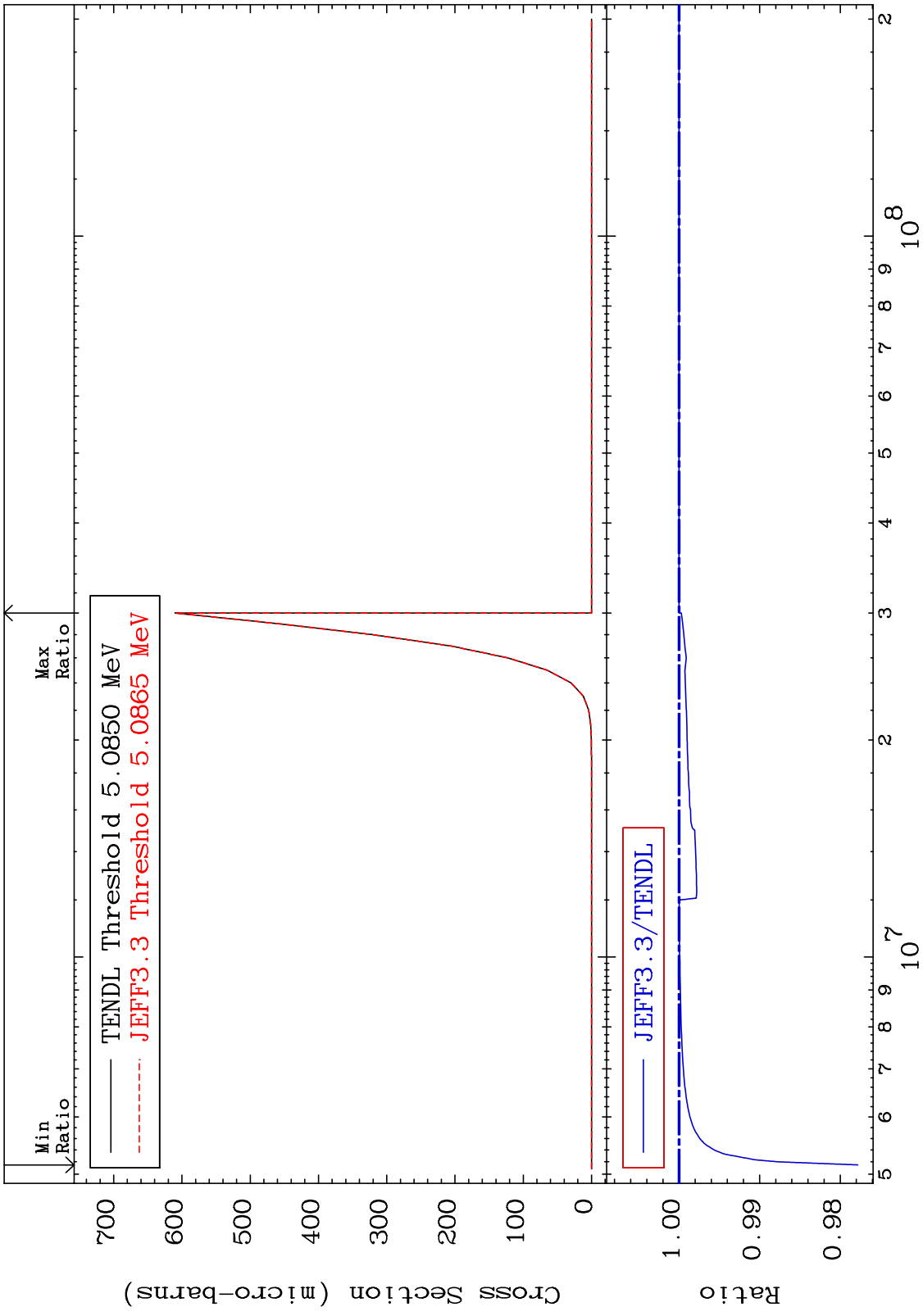


53 71-Lu-174

MAT 7122 71-Lu-174
-2.500 To 0.099 %
(n, t)
Cross Section



MAT 7122 (n, He-3) 71-Lu-174
 Cross Section -2.219 To 0.000 %



55 71-Lu-174 Incident Energy (eV)

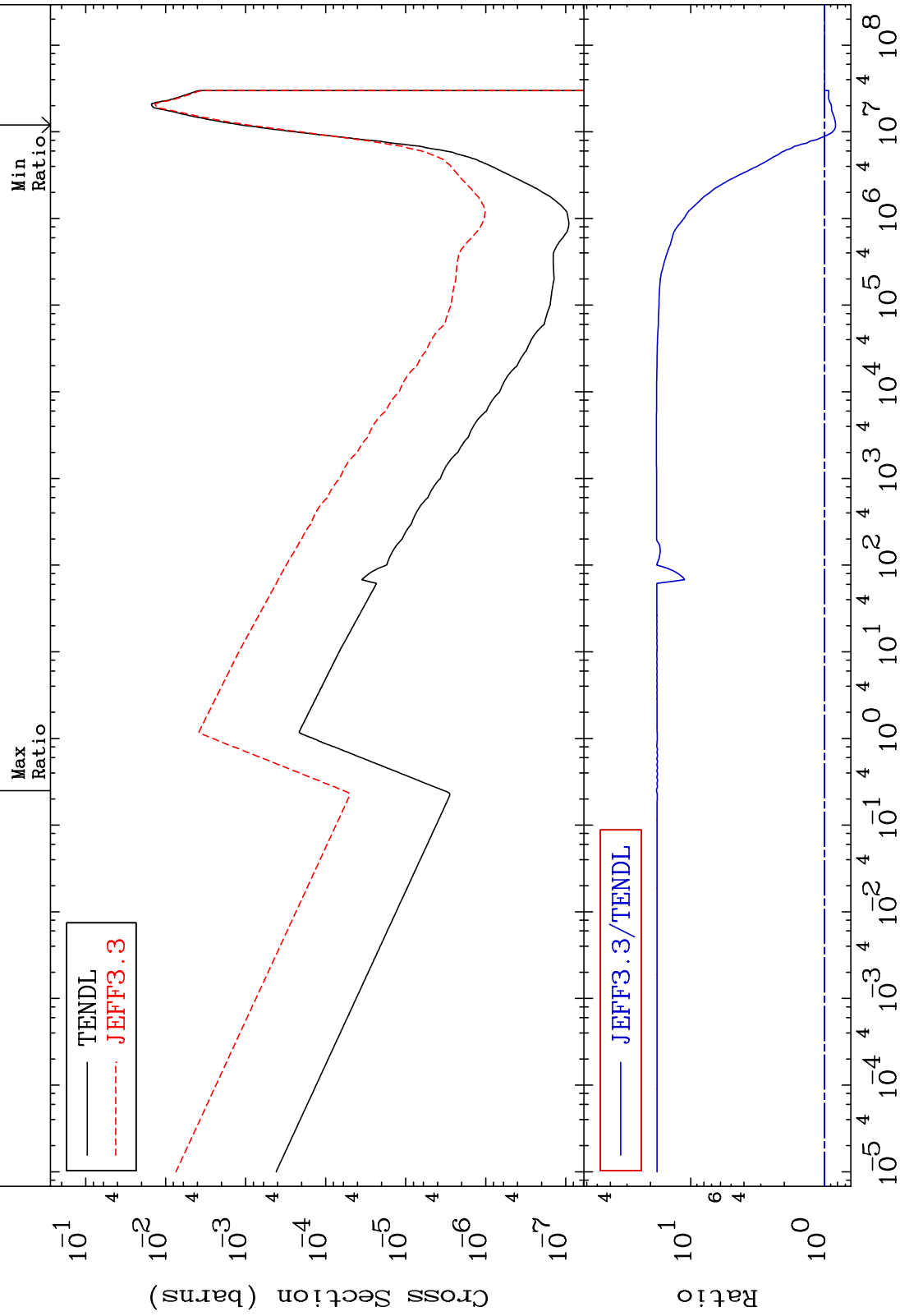
MAT 7122

(n, α)

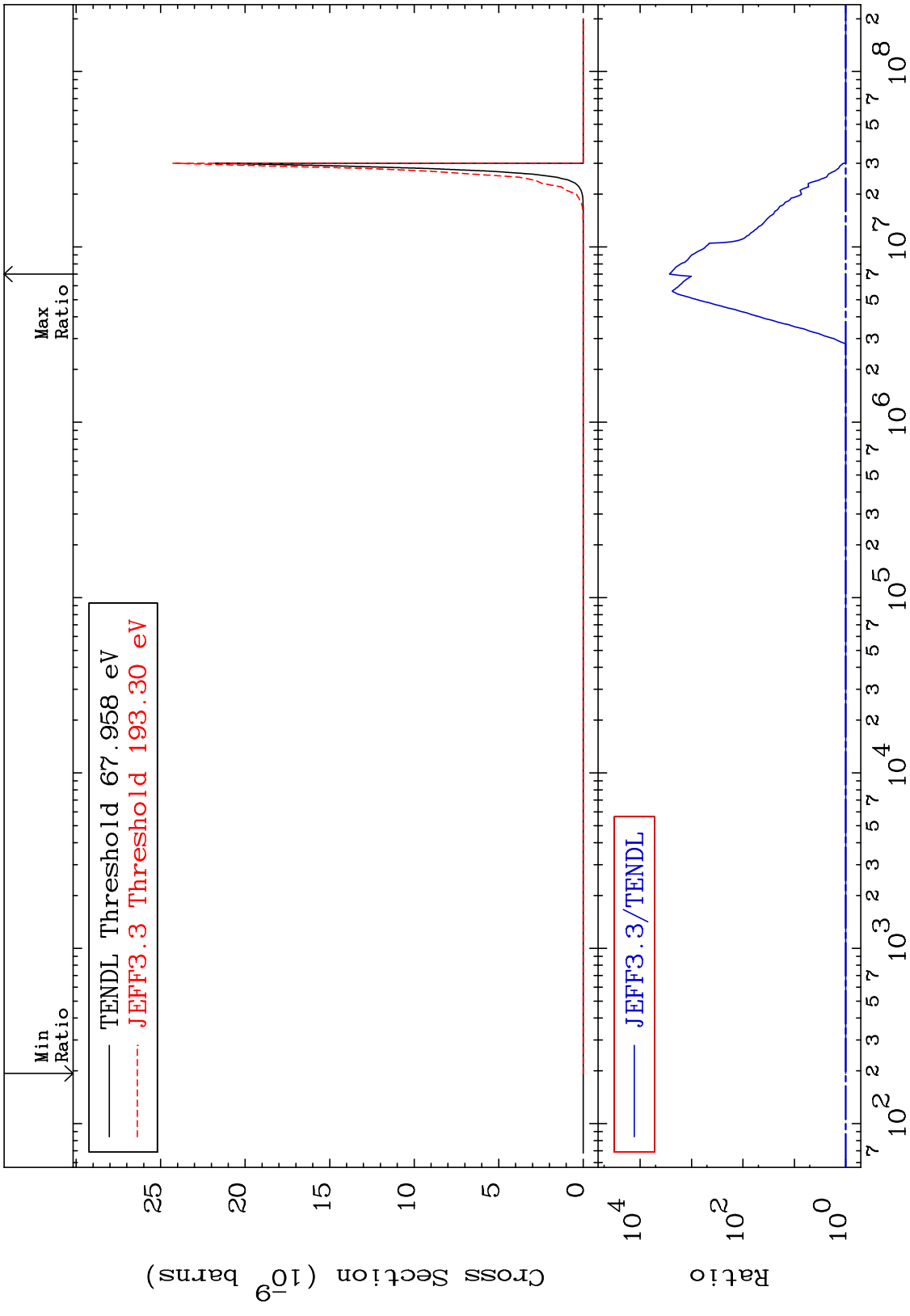
71-Lu-174

-17.19 To 1707. %

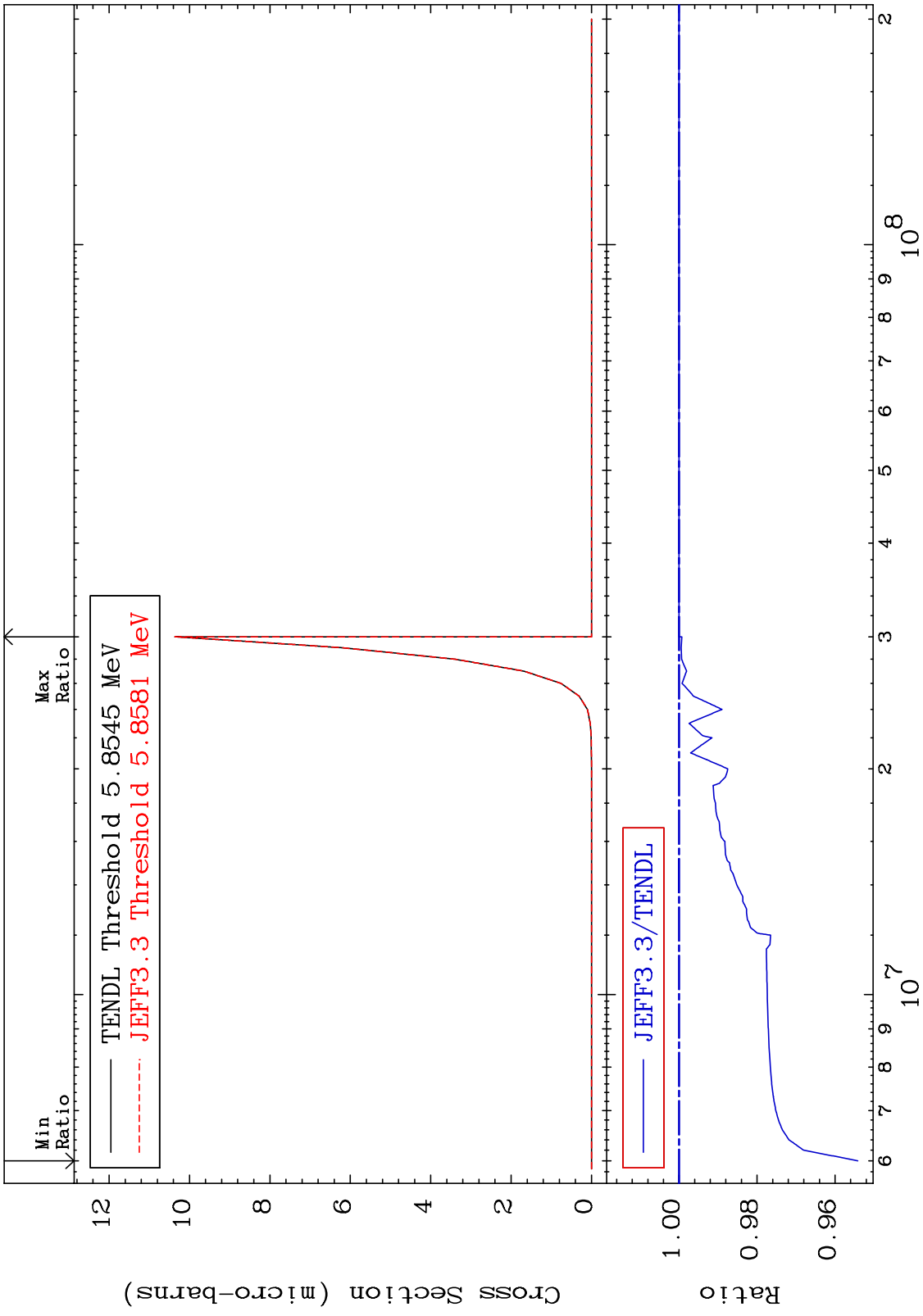
Cross Section



MAT 7122 $(n, 2\alpha)$ Cross Section 71-Lu-174 To 9999. %

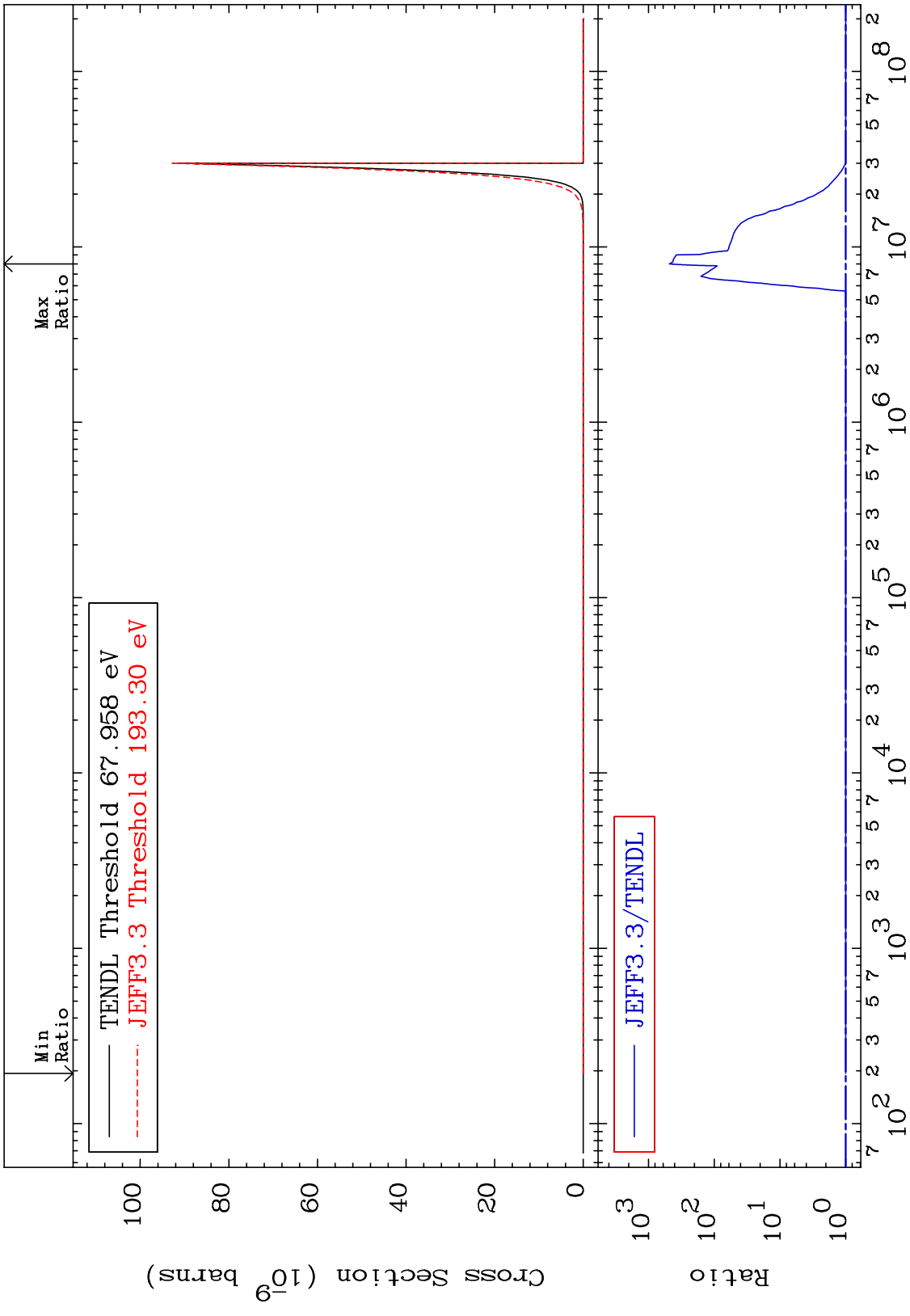


MAT 7122 $(n,2p)$ $^{71}\text{Lu-174}$
-4.584 To 0.000 %



58 $^{71}\text{Lu-174}$

MAT 7122 (n,p) α 71-Lu-174
Cross Section To 9999. %



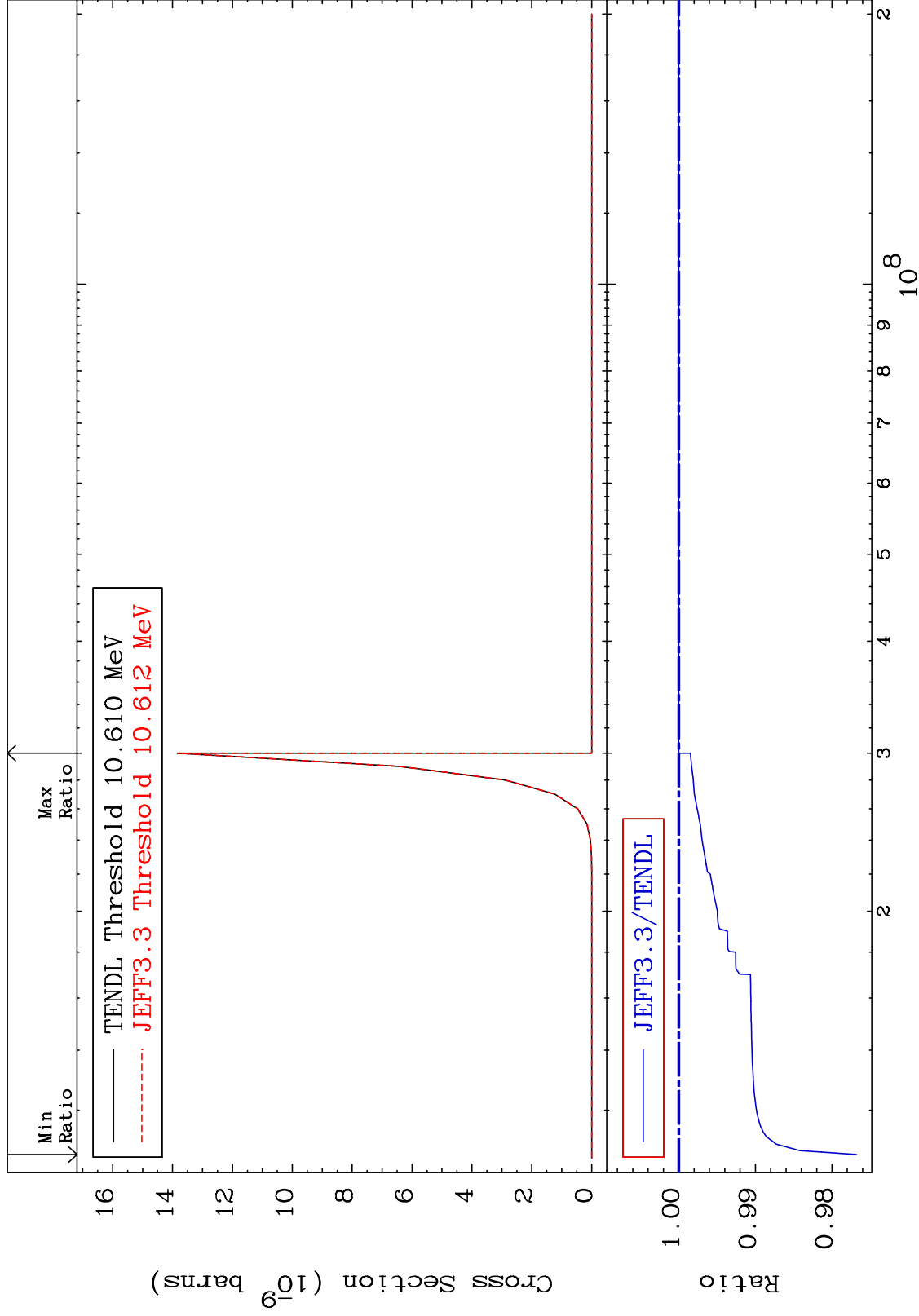
MAT 7122

(n,p) d

71-Lu-174

Cross Section

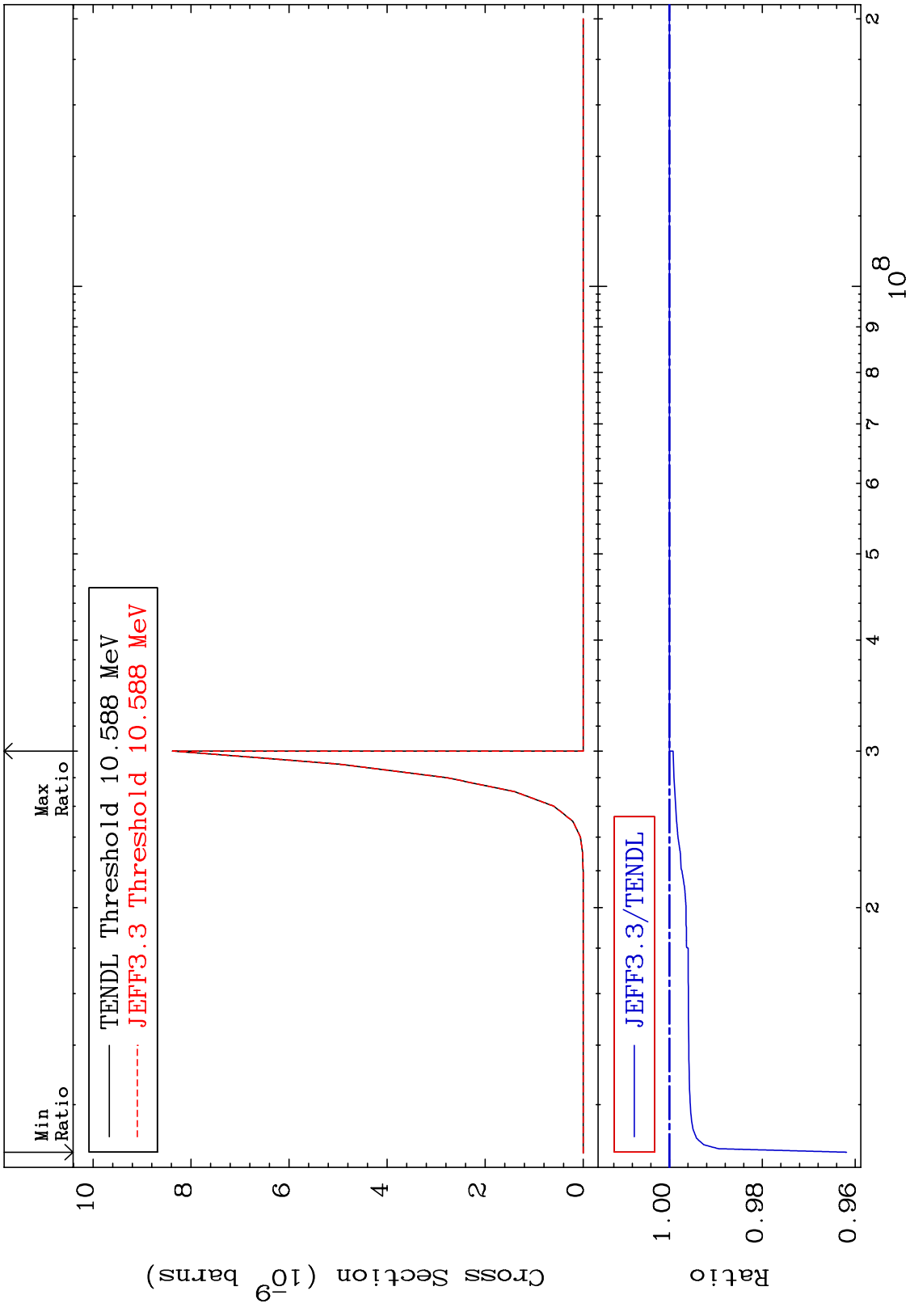
-2.321 To 0.000 %



60

Incident Energy (eV)

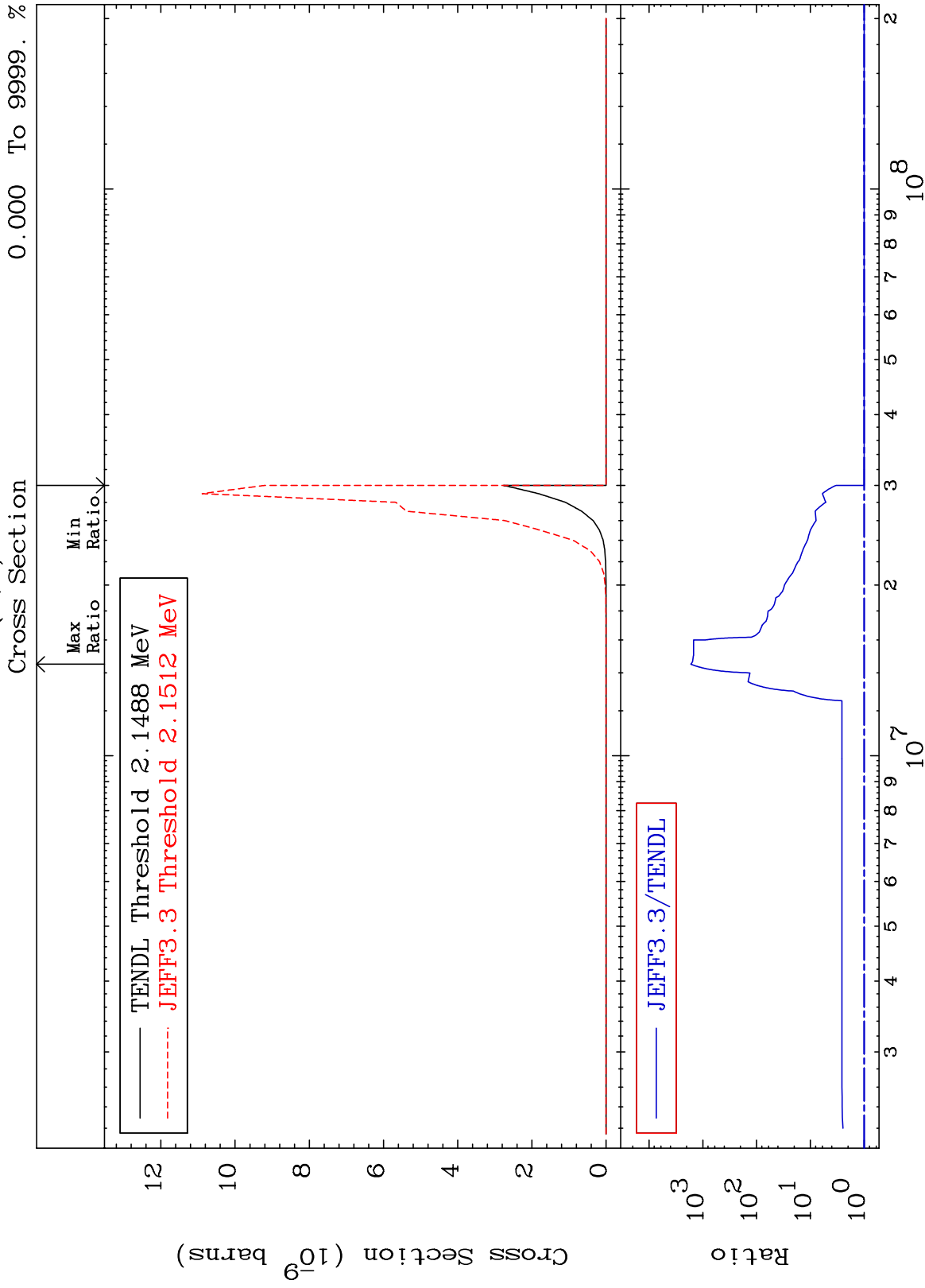
71-Lu-174



MAT 7122

(n,d) α

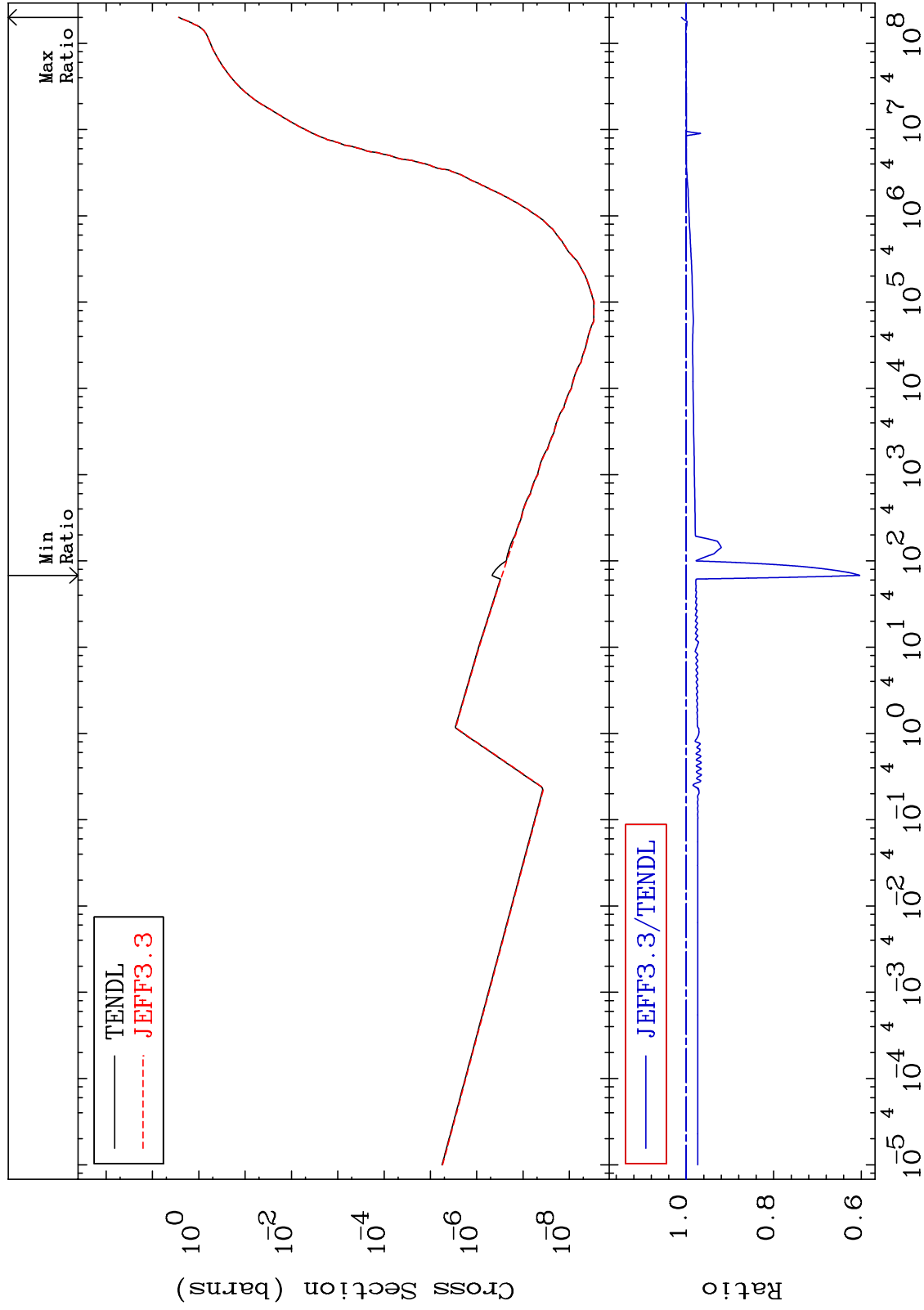
71-Lu-174
To 9999. %
0.000

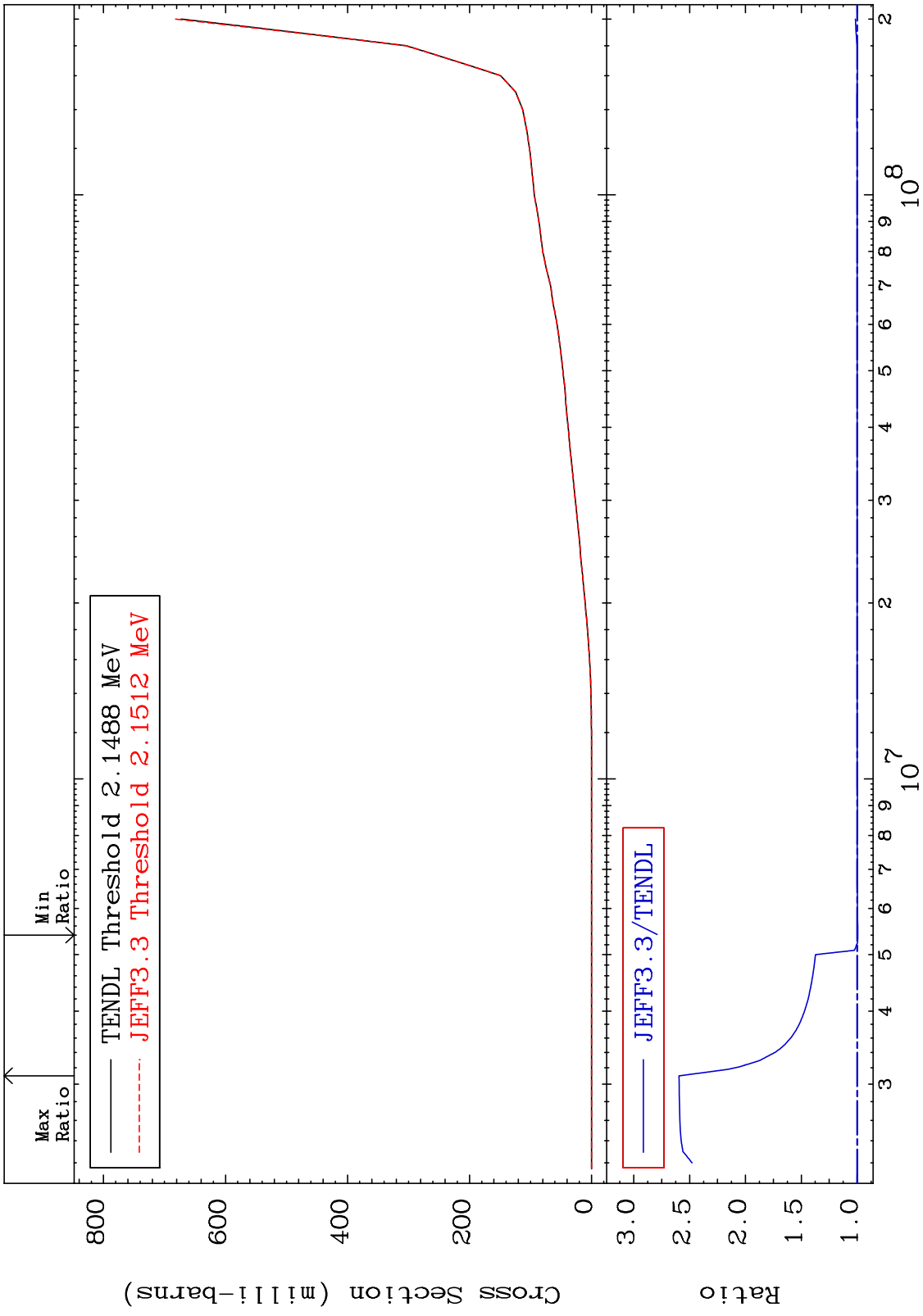


MAT 7122

Hydrogen Production
Cross Section

71-Lu-174
-39.68 To 1.095 %

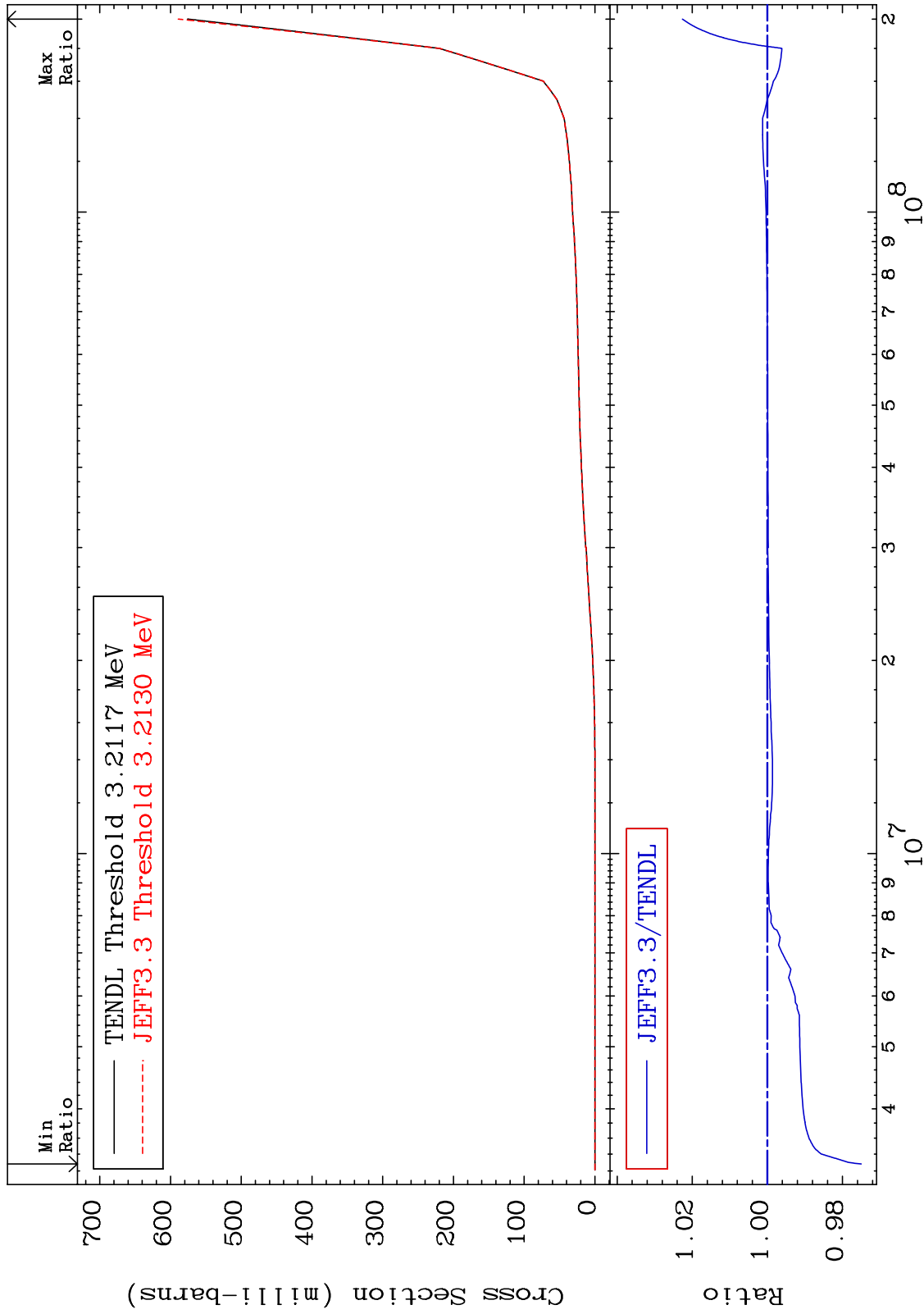




MAT 7122

Tritium Production
Cross Section

71-Lu-174
-2.500 To 2.261 %



65

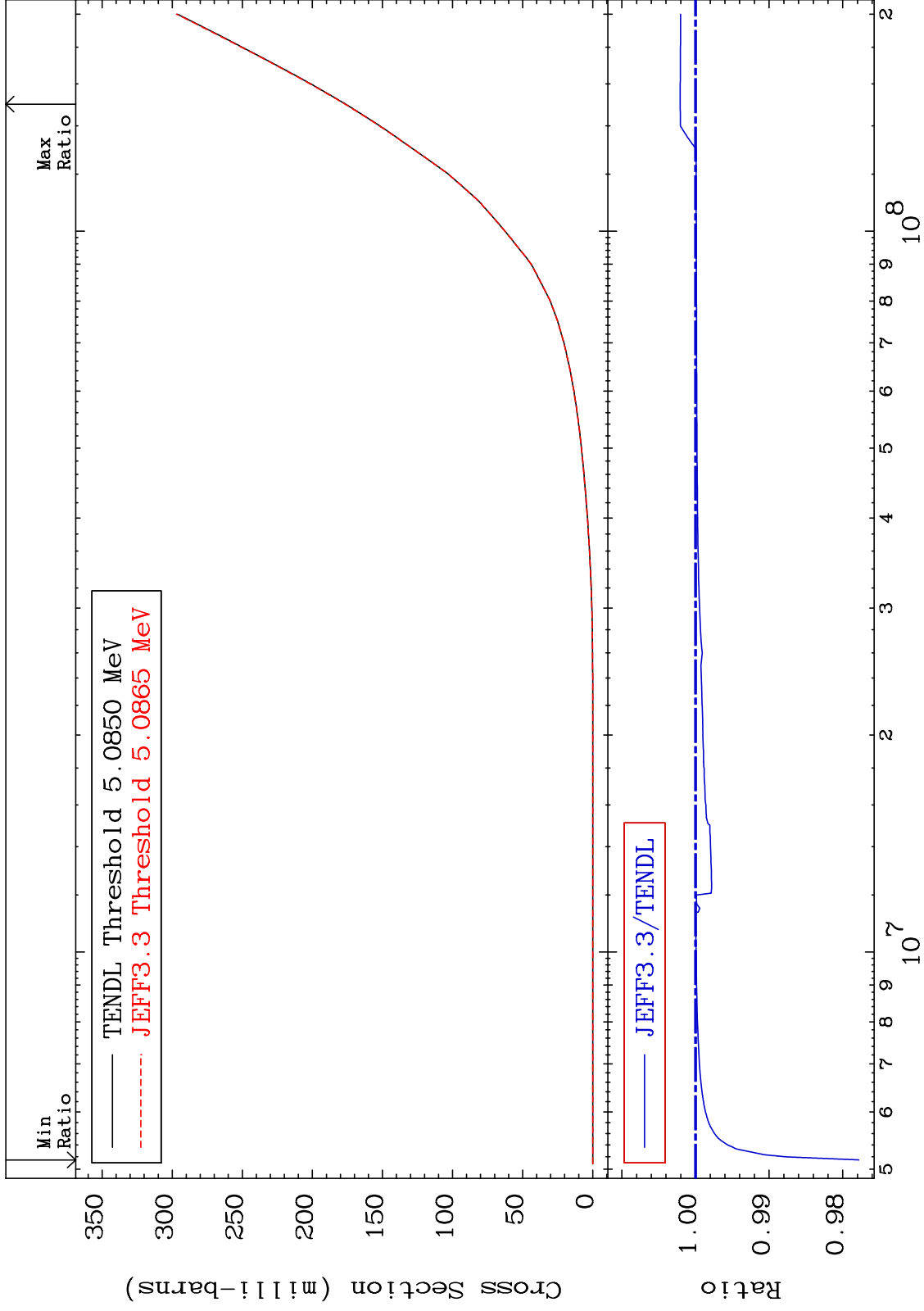
Incident Energy (eV)

71-Lu-174

MAT 7122

He-3 Production
Cross Section

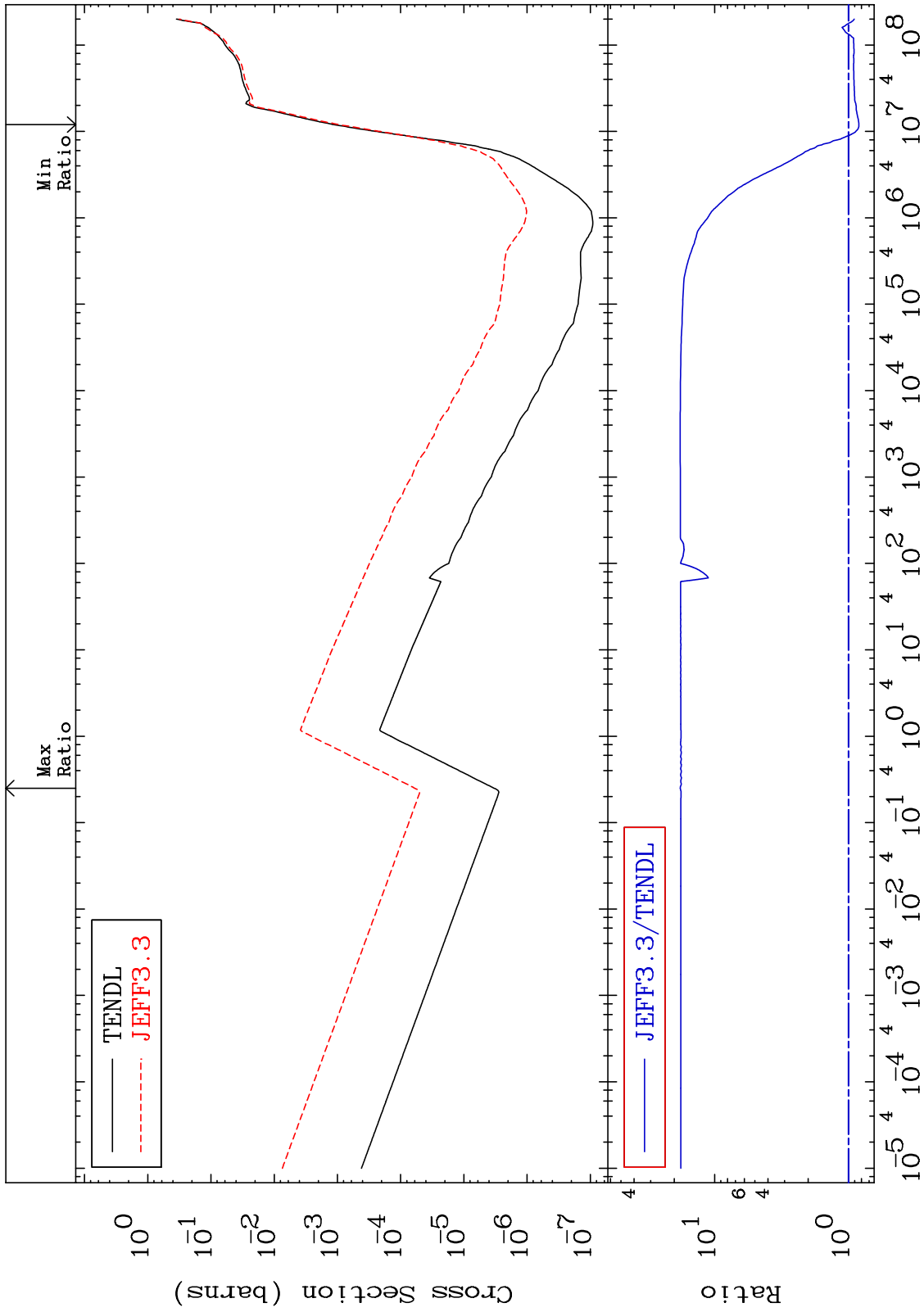
71-Lu-174
-2.219 To 0.207 %



MAT 7122

He-4 Production
Cross Section

71-Lu-174
-16.41 To 1707. %



67

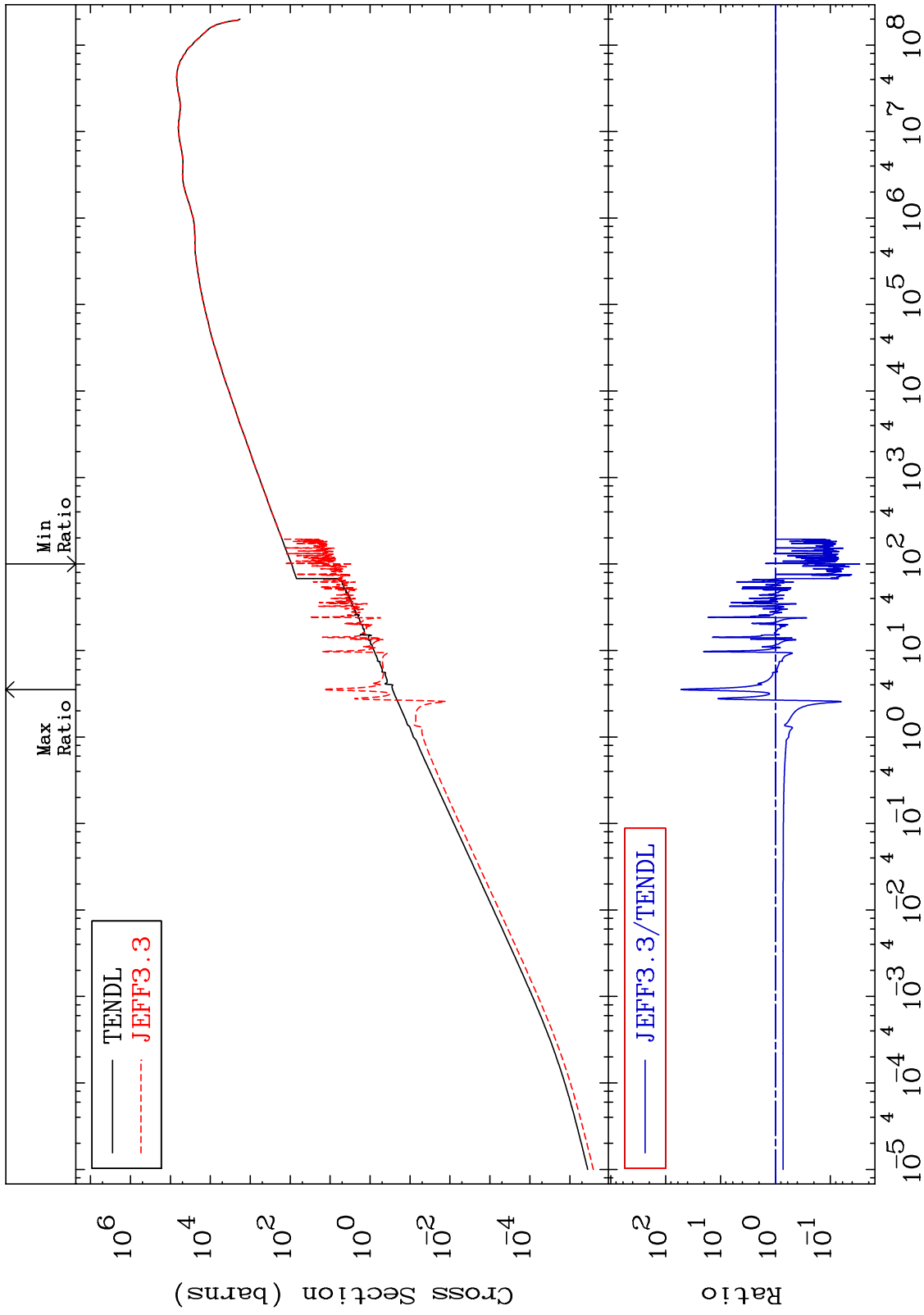
Incident Energy (eV)

71-Lu-174

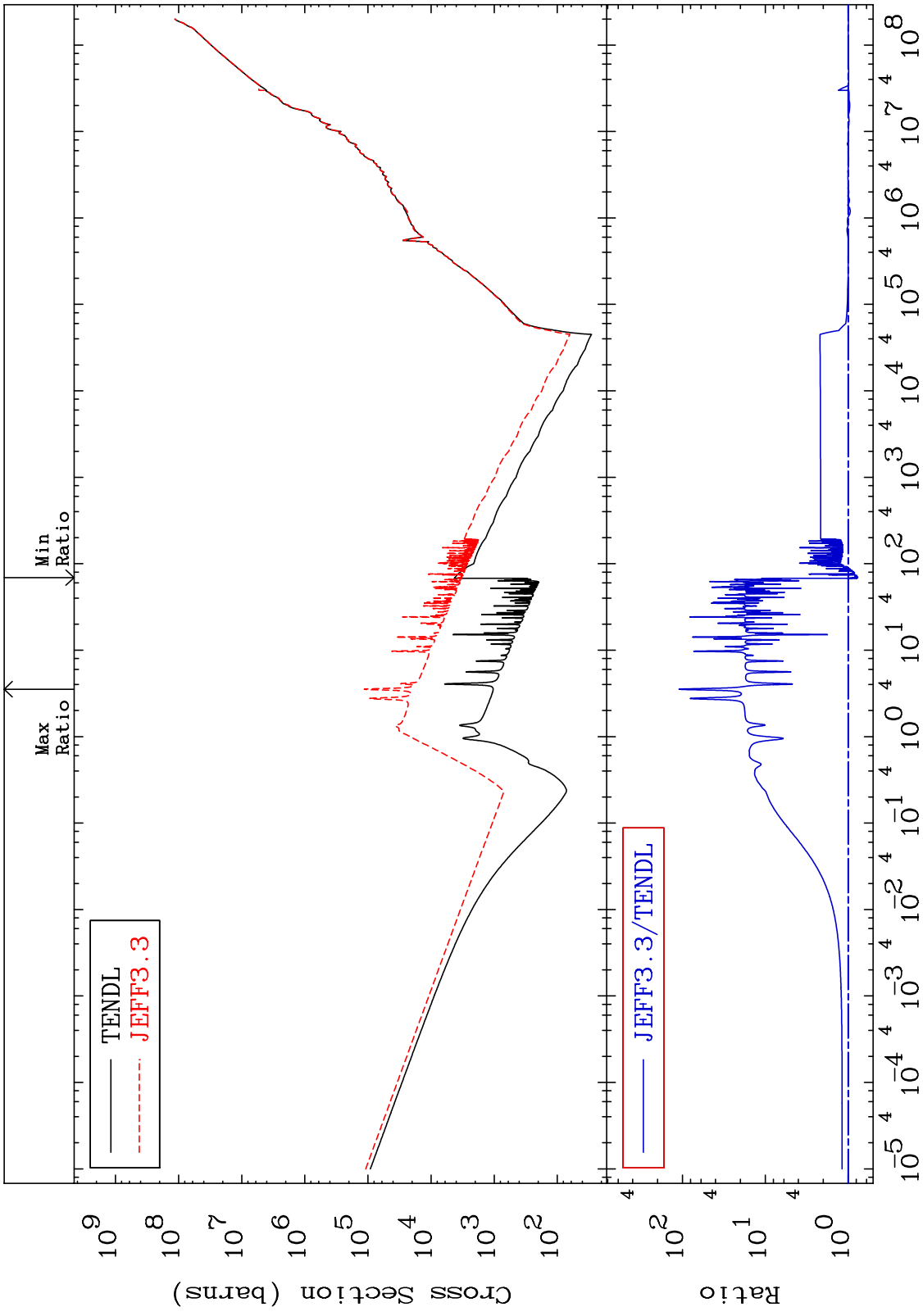
MAT 7122

Kerma elastic
Cross Section

71-Lu-174
-97.07 To 5200. %



MAT 7122 Kerma non-elastic (all but mt2) 71-Lu-174
 -23.37 To 9999. %
 Cross Section

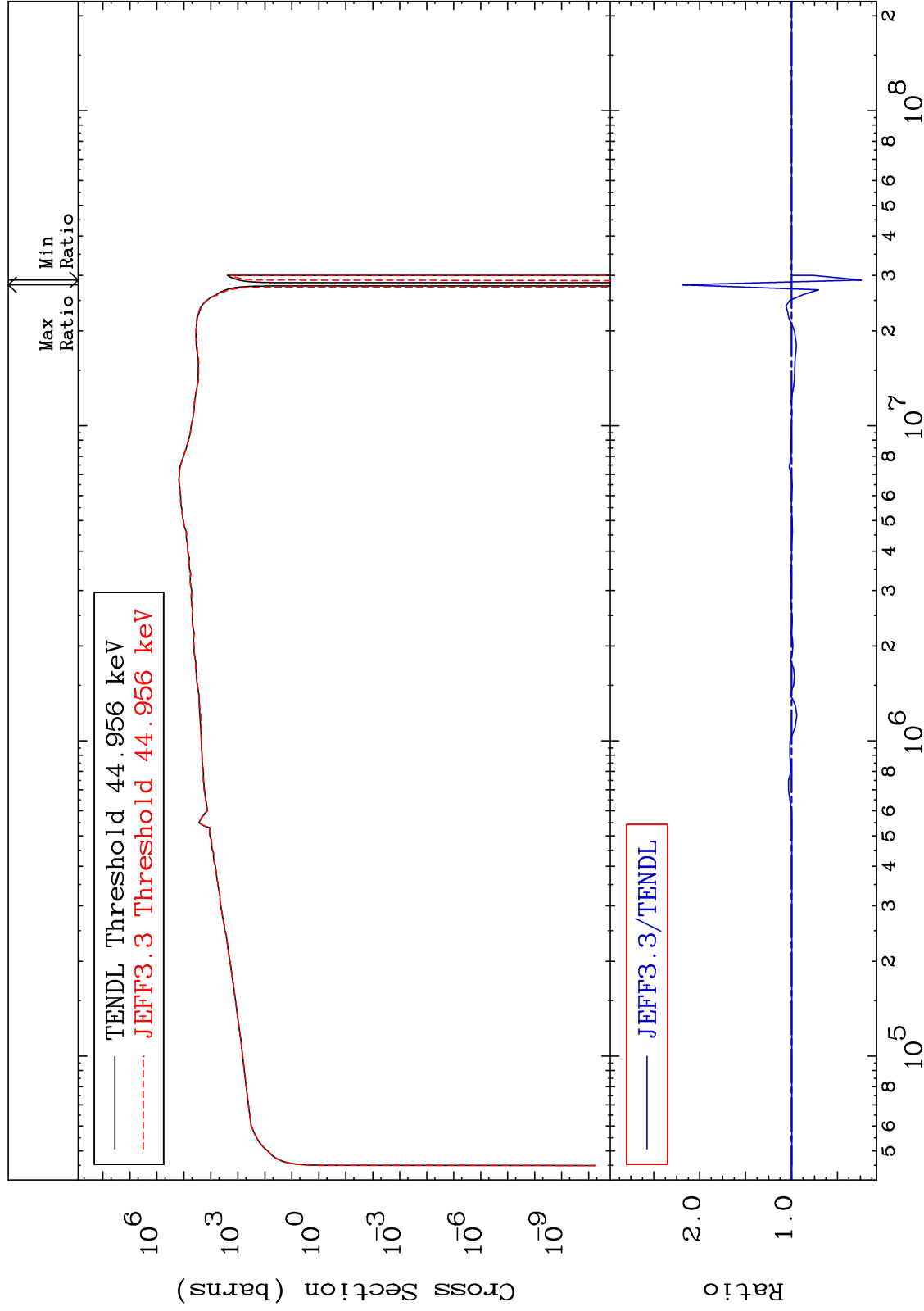


70 Incident Energy (eV) 71-Lu-174

MAT 7122

Kerma inelastic (mt51-91)
Cross Section

71-Lu-174
-76.04 To 118.6 %



71

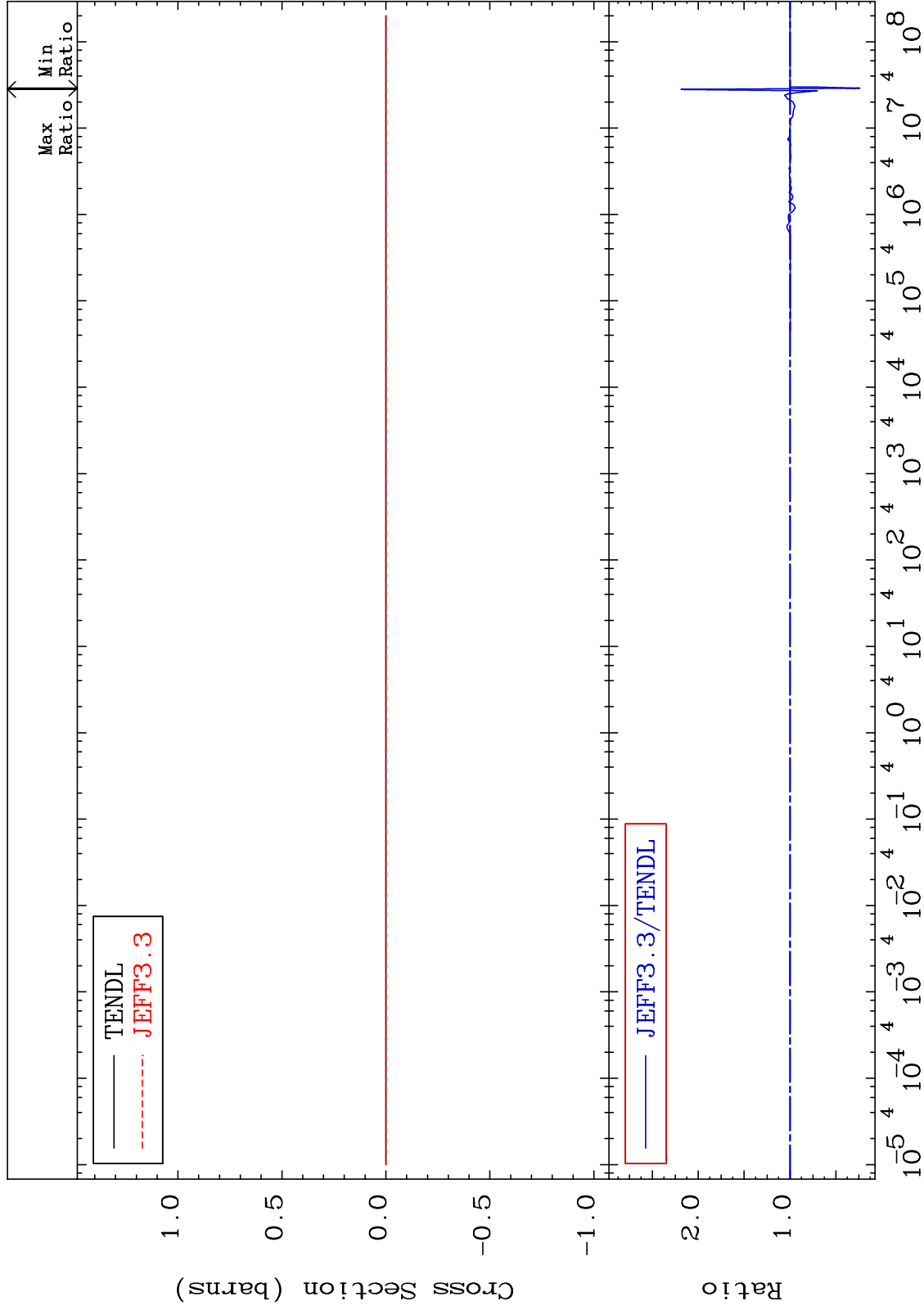
Incident Energy (eV)

71-Lu-174

MAT 7122

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

71-Lu-174
-76.04 To 118.6 %



72

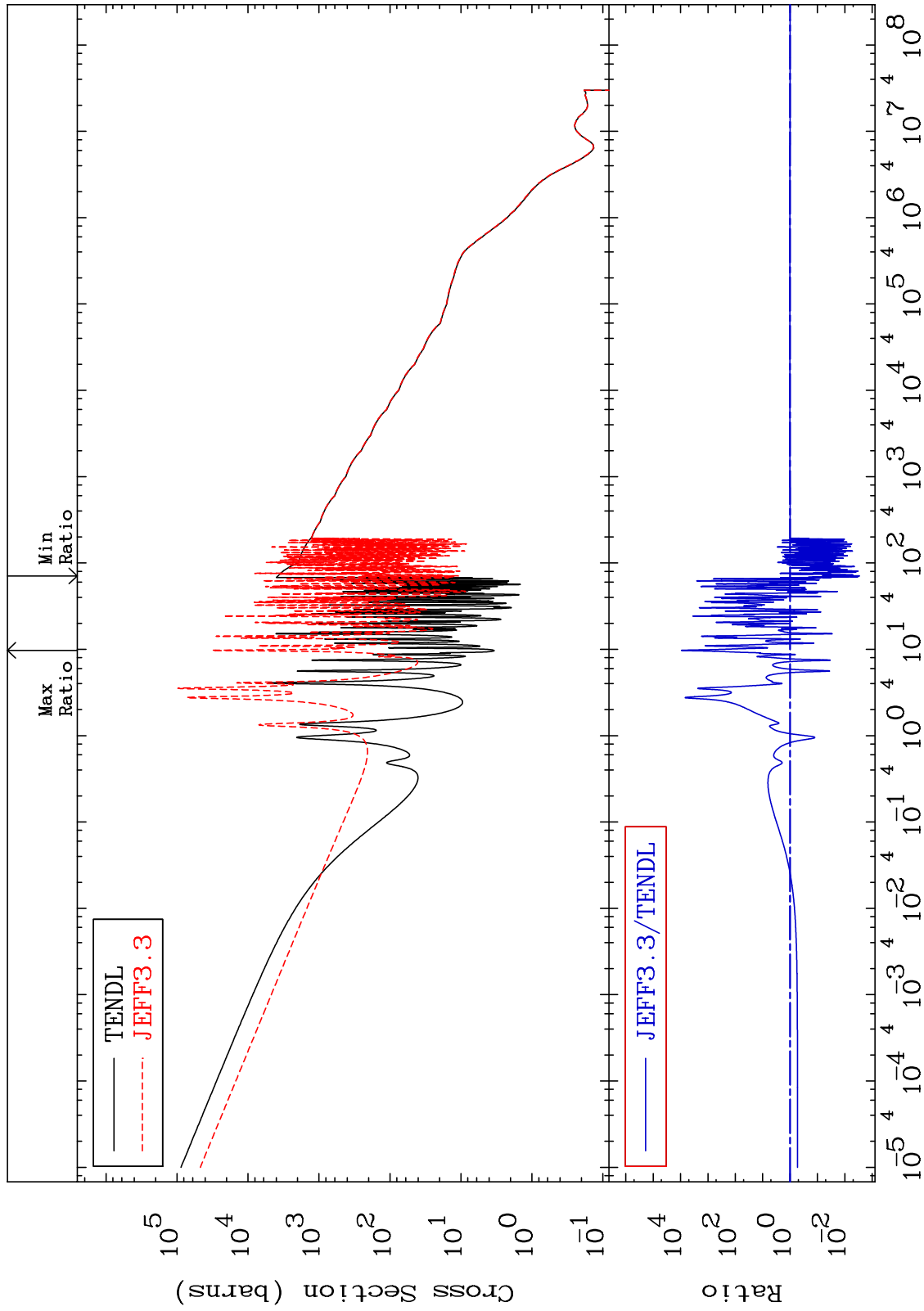
Incident Energy (eV)

71-Lu-174

MAT 7122

Kerma capture (mt102)
Cross Section

71-Lu-174
-99.72 To 9999. %



73

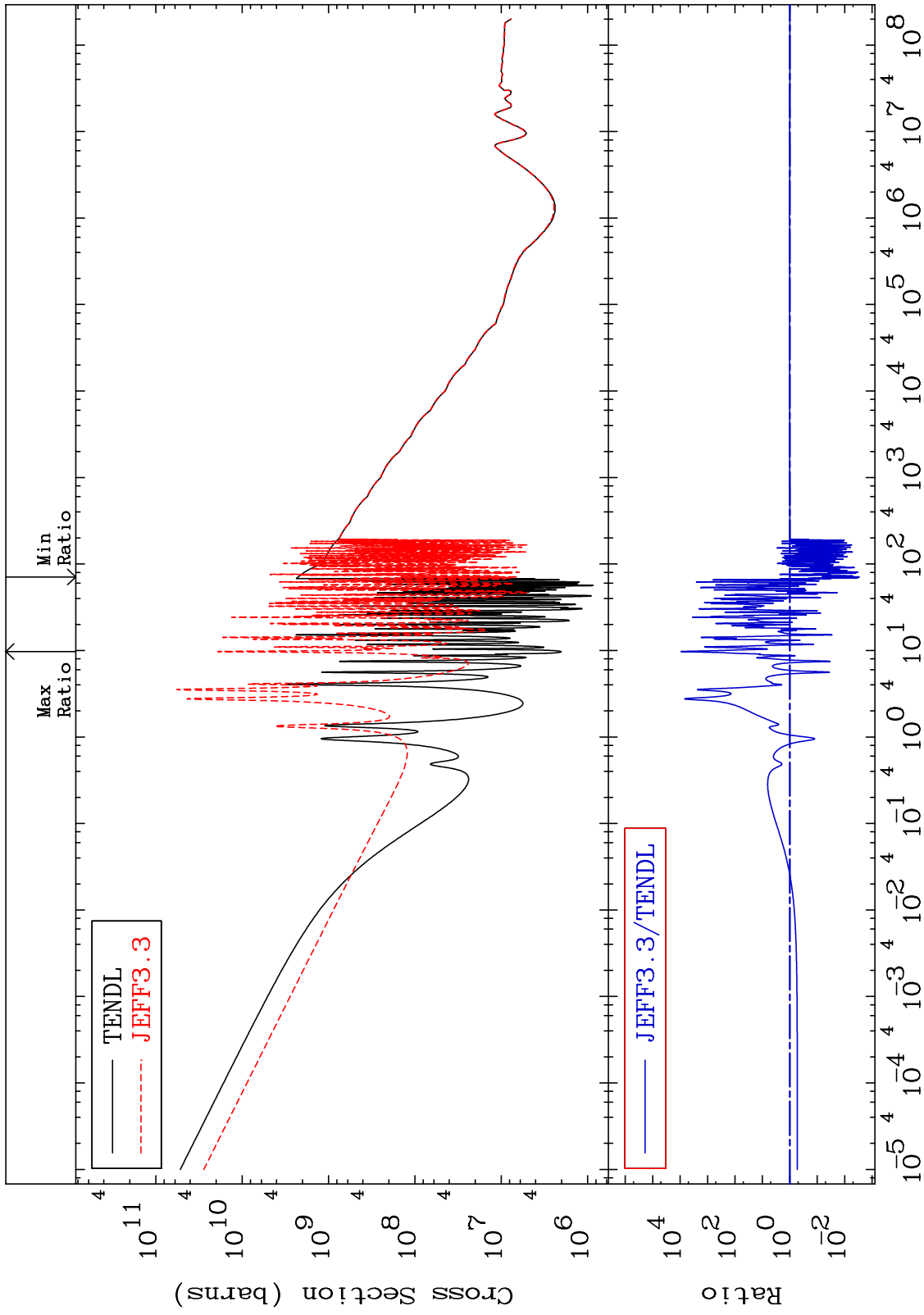
Incident Energy (eV)

71-Lu-174

MAT 7122

Total photon (eV-barns)
Cross Section

71-Lu-174
-99.72 To 9999. %

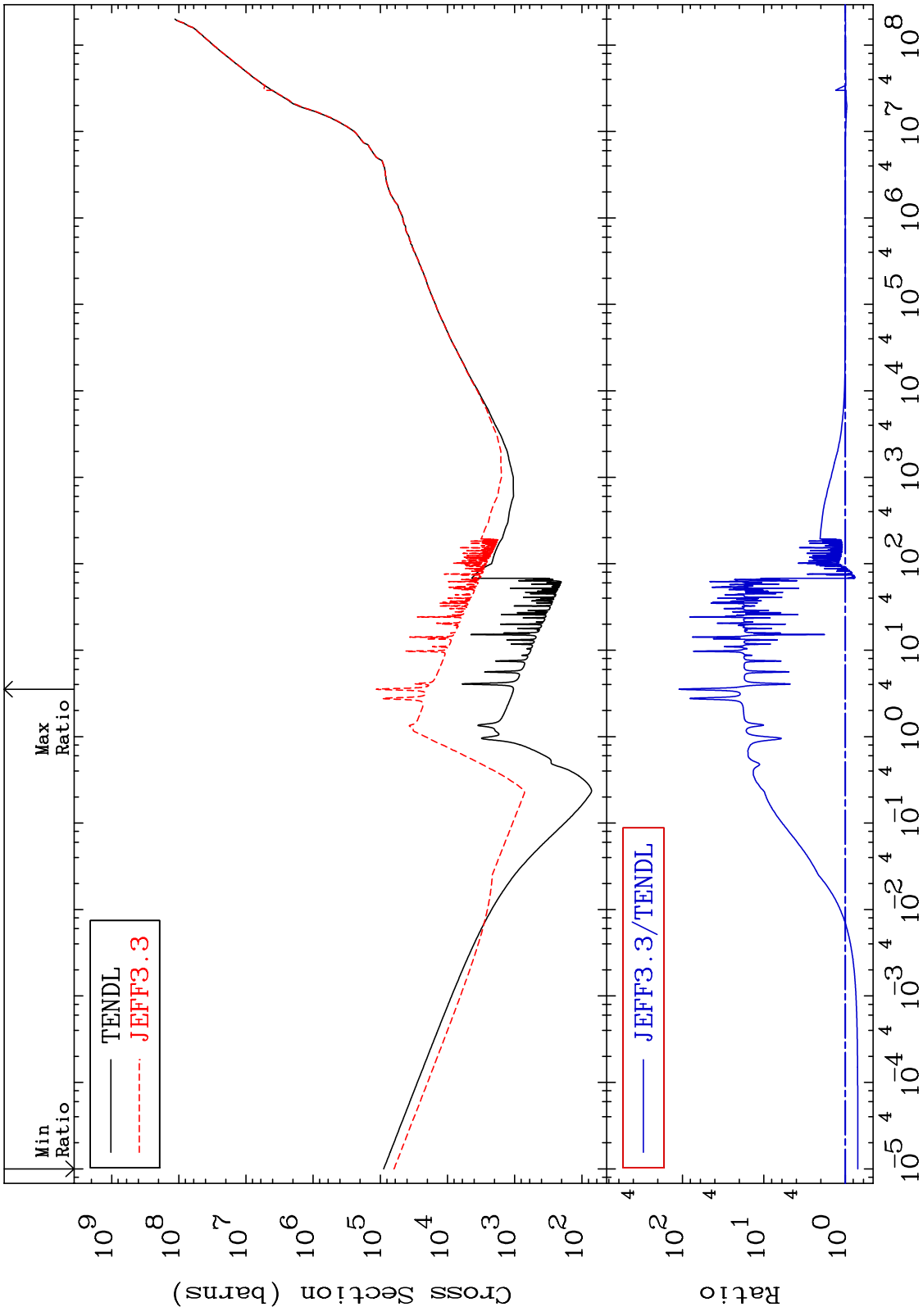


74

Incident Energy (eV)

71-Lu-174

MAT 7122 Total kinematic kerma (high limit) 71-Lu-174
 Cross Section -29.77 To 9999. %



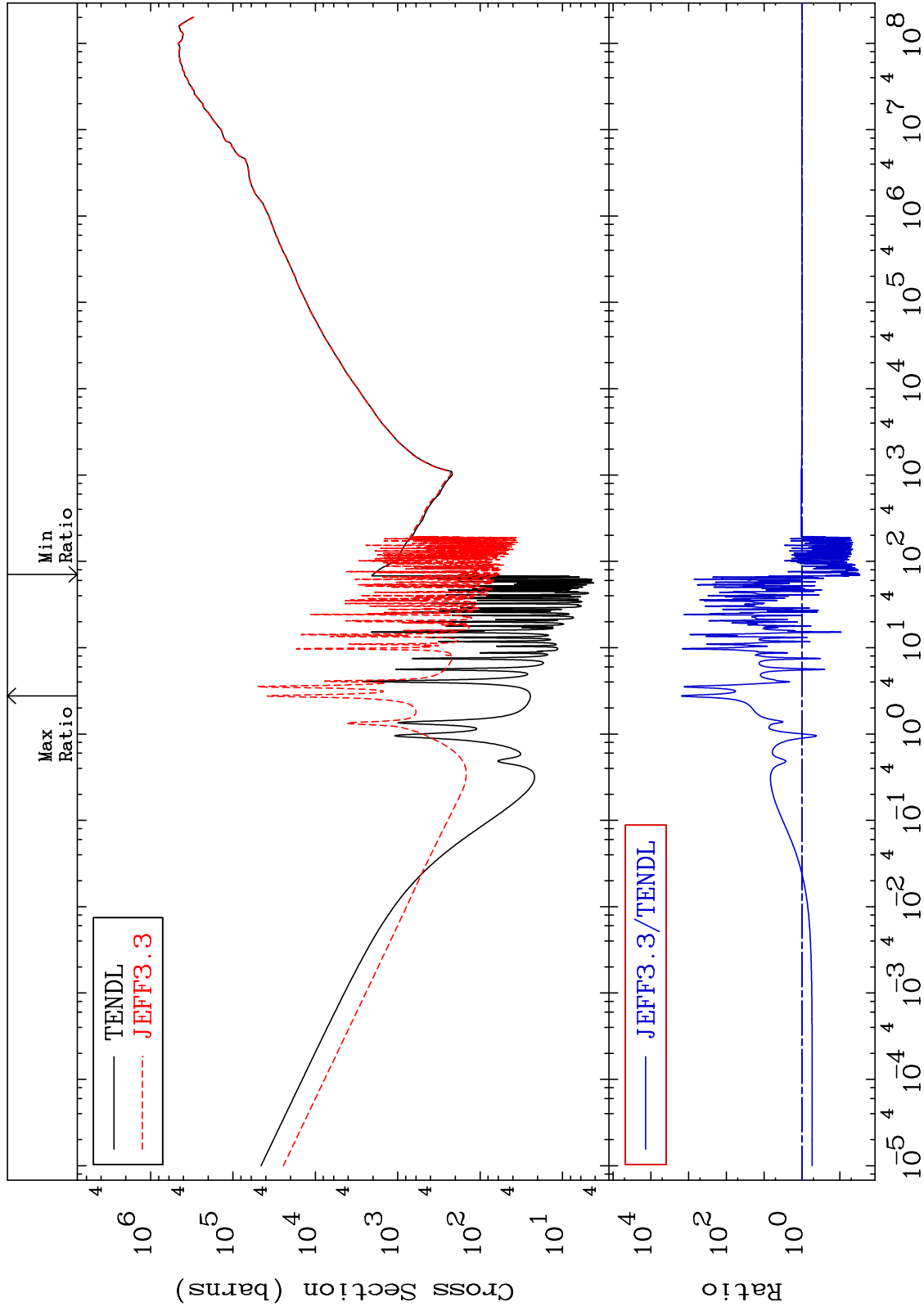
MAT 7122

Dpa total (eV-barns)

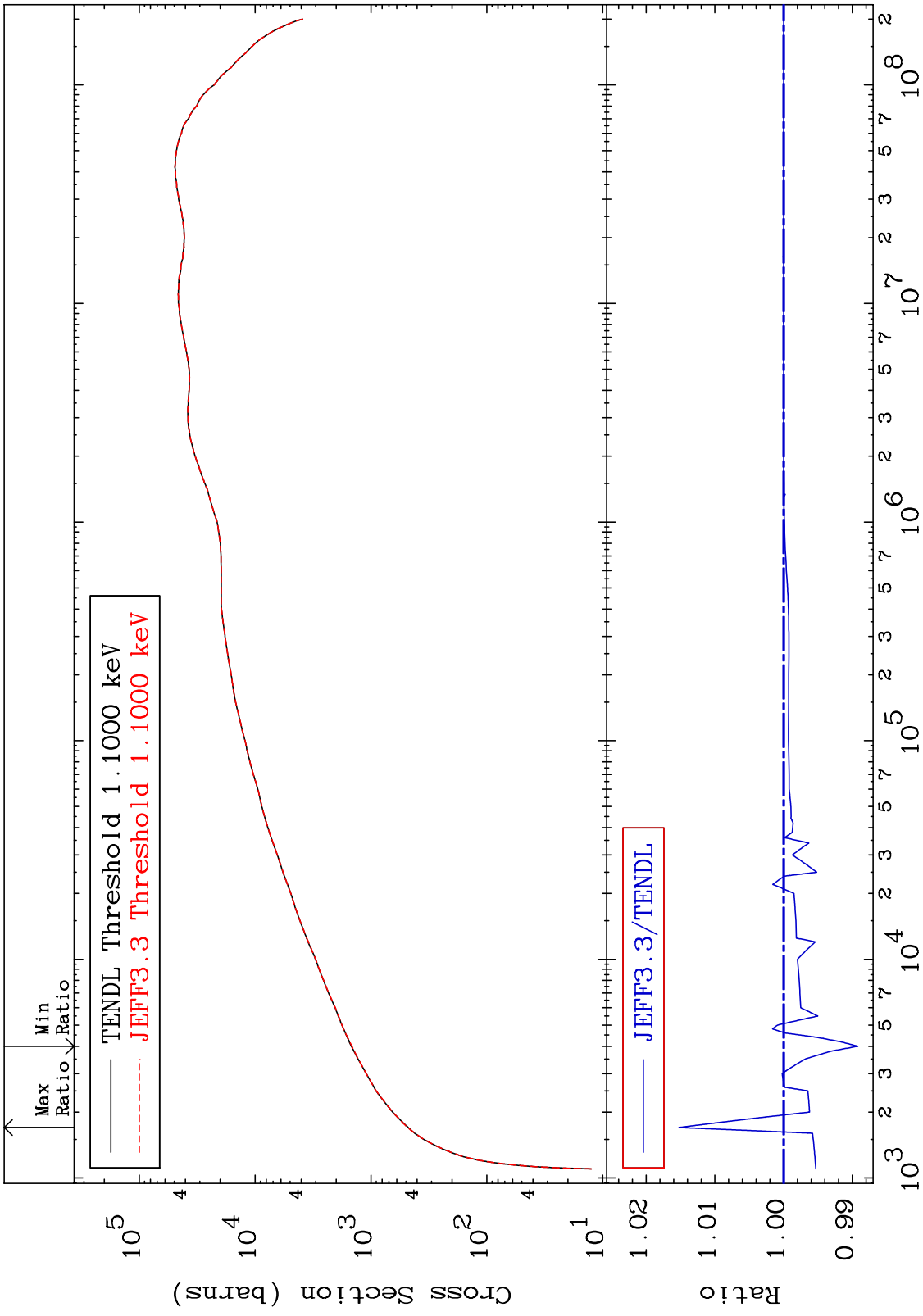
71-Lu-174

-97.04 To 9999. %

Cross Section



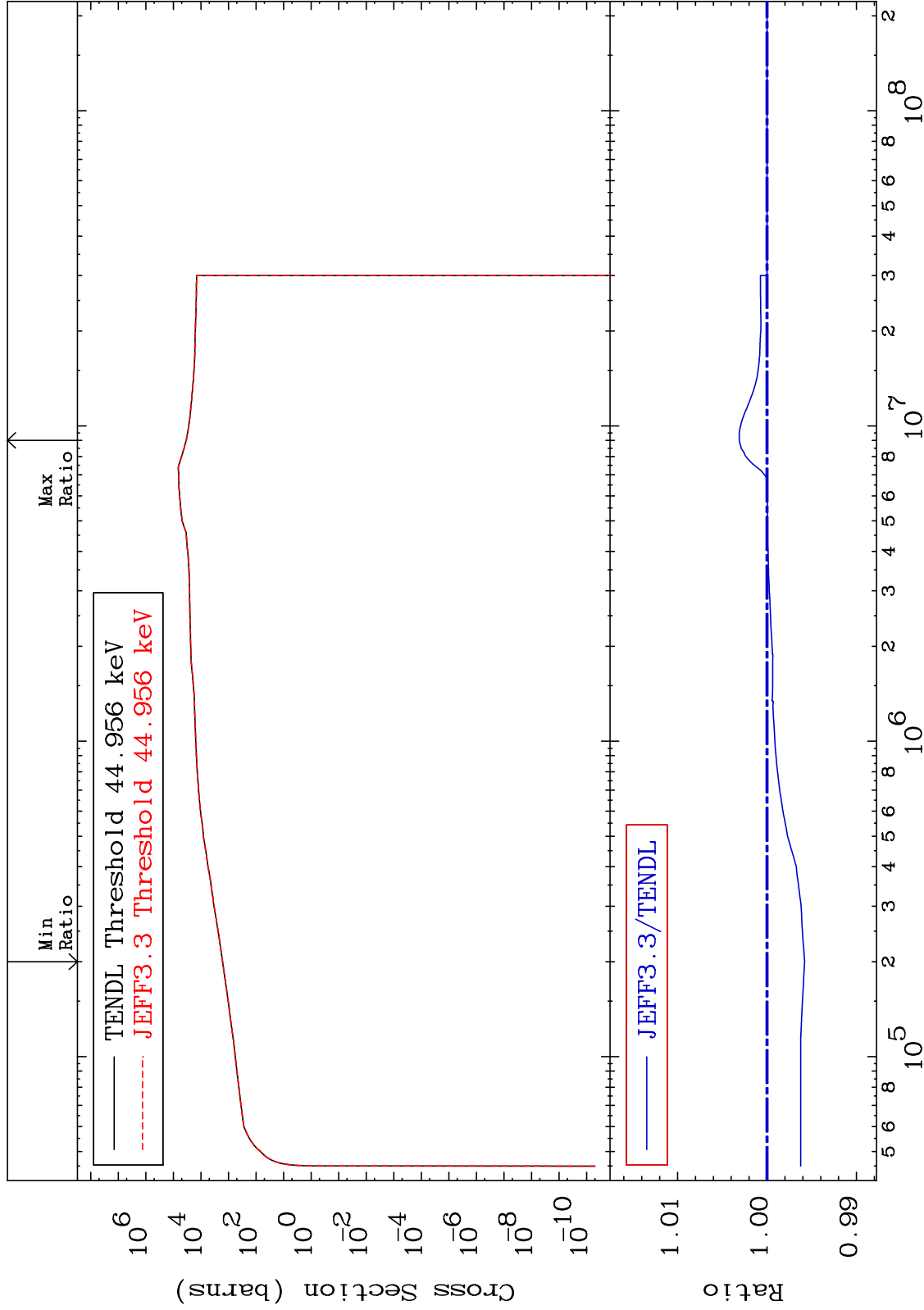
MAT 7122 Dpa elastic (mt2) 71-Lu-174
Cross Section -1.080 To 1.522 %



MAT 7122

Dpa inelastic (mt51-91)
Cross Section

71-Lu-174
-0.420 To 0.312 %



78

Incident Energy (eV)

71-Lu-174

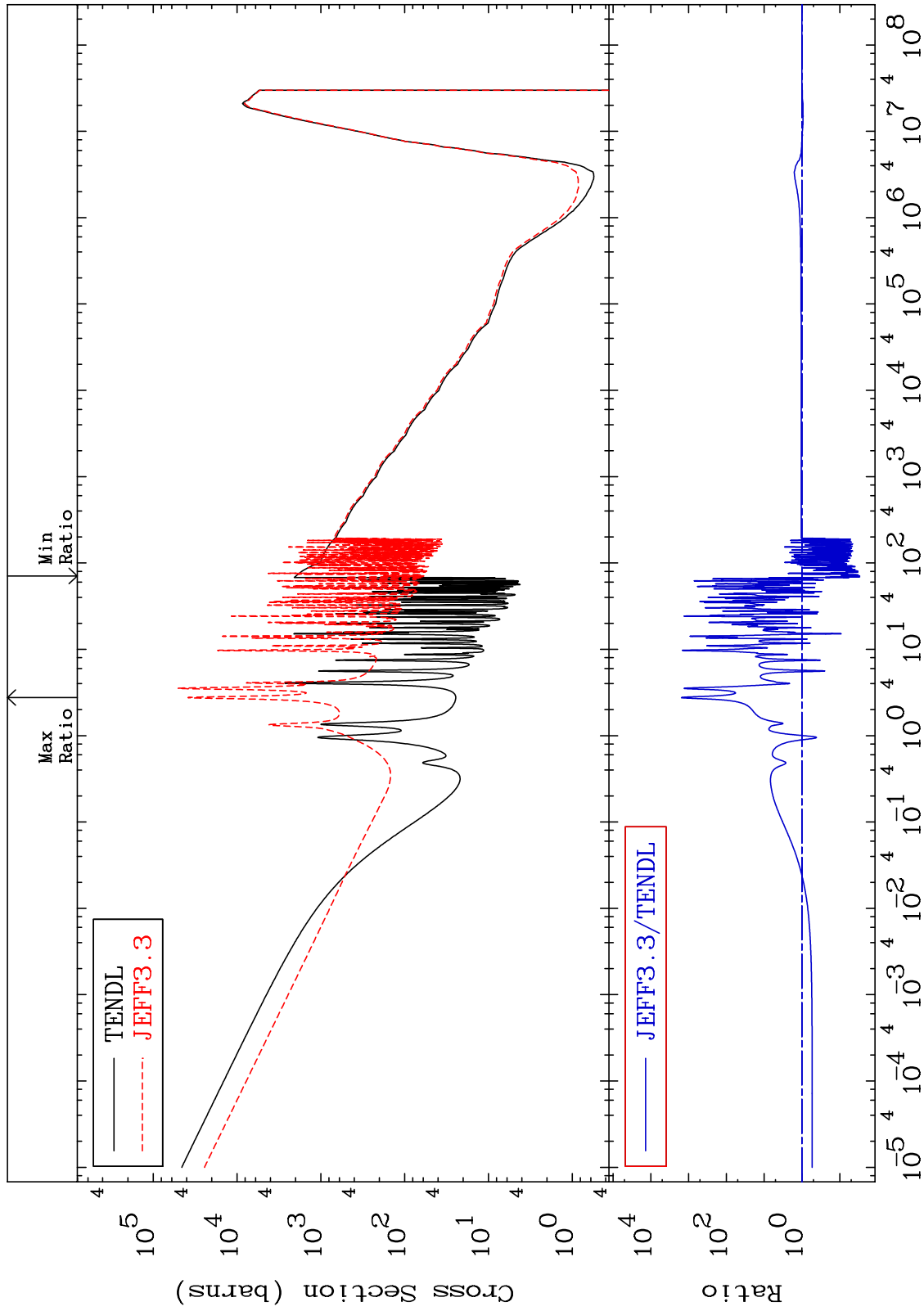
MAT 7122

Dpa disappearance (mt102 -120)

71-Lu-174

-97.04 To 9999. %

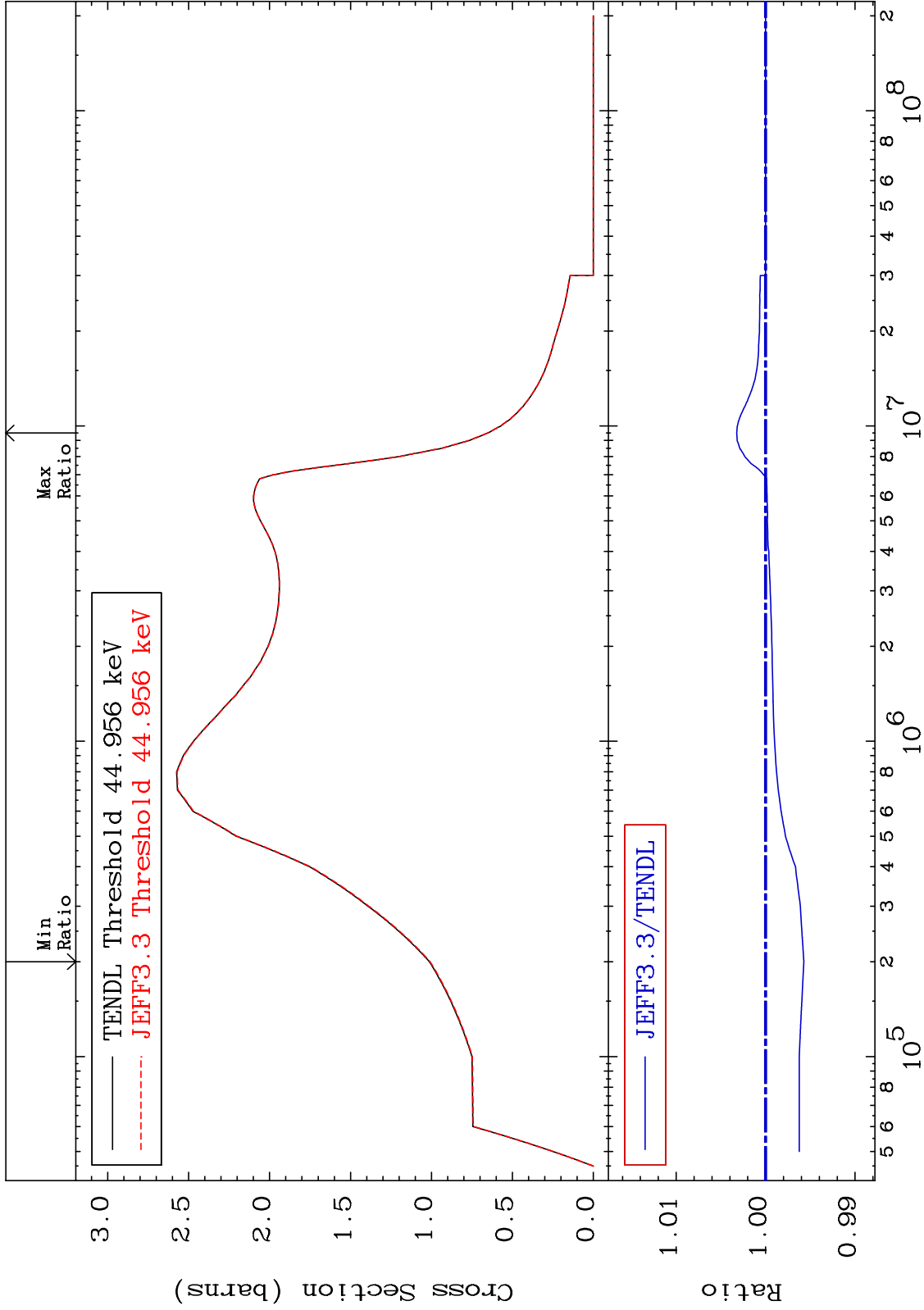
Cross Section



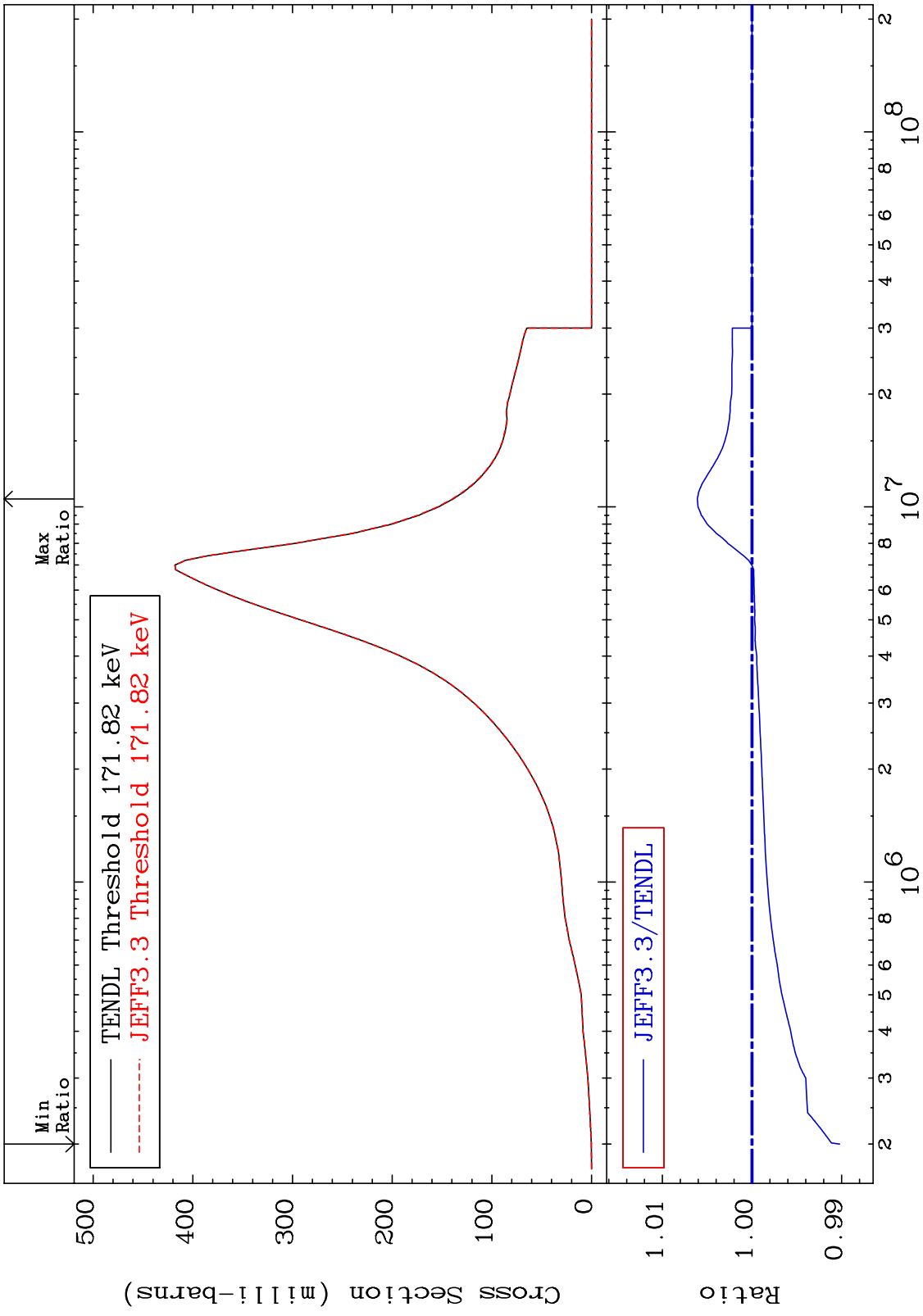
MAT 7122

Inelastic: 71-Lu-174g
Radionuclide Production Cross Section -0.427 To 0.324 %

71-Lu-174



MAT 7122 Inelastic: 71-Lu-174m3 71-Lu-174
 Radionuclide Production Cross Section -0.977 To 0.611 %

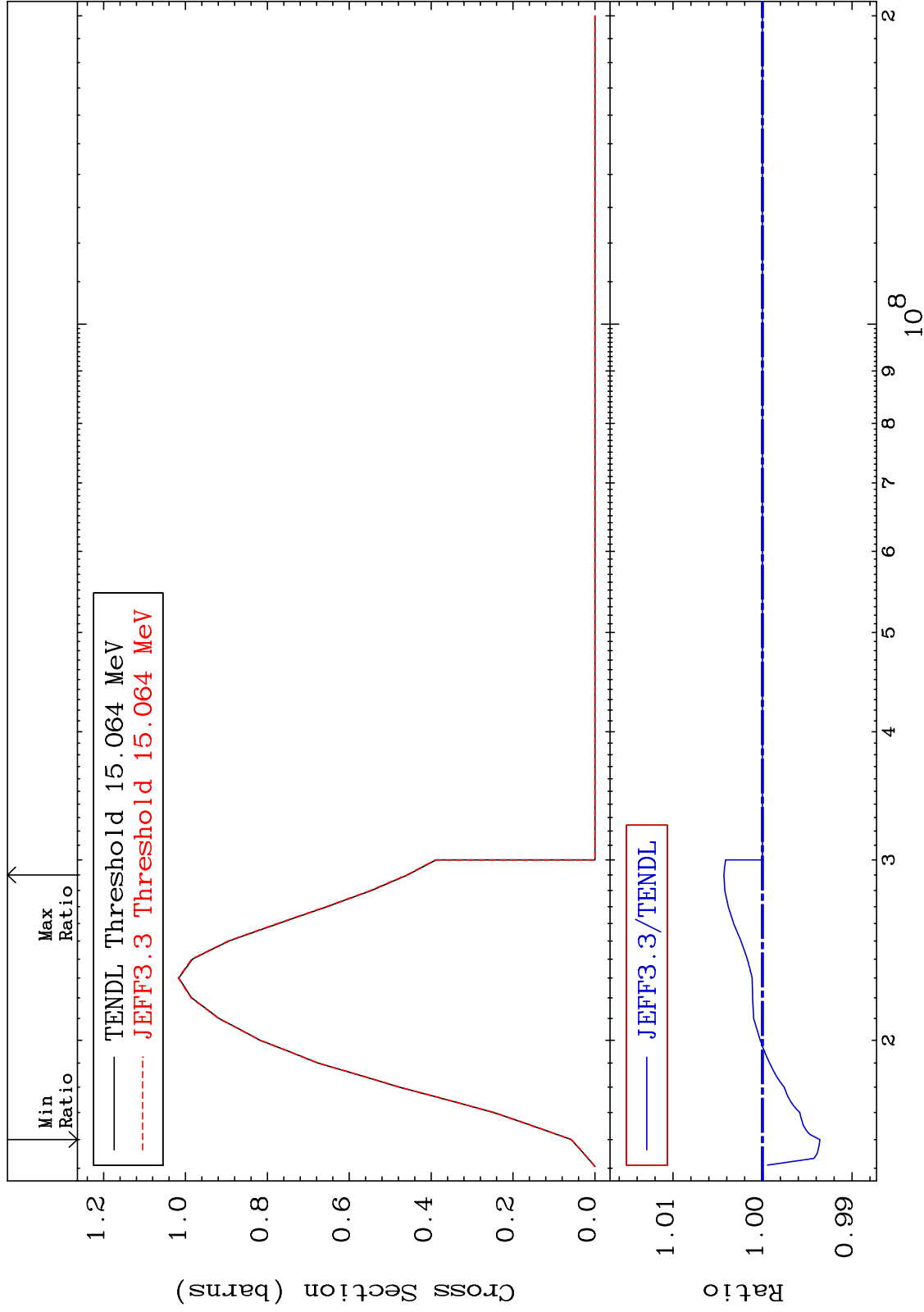


MAT 7122

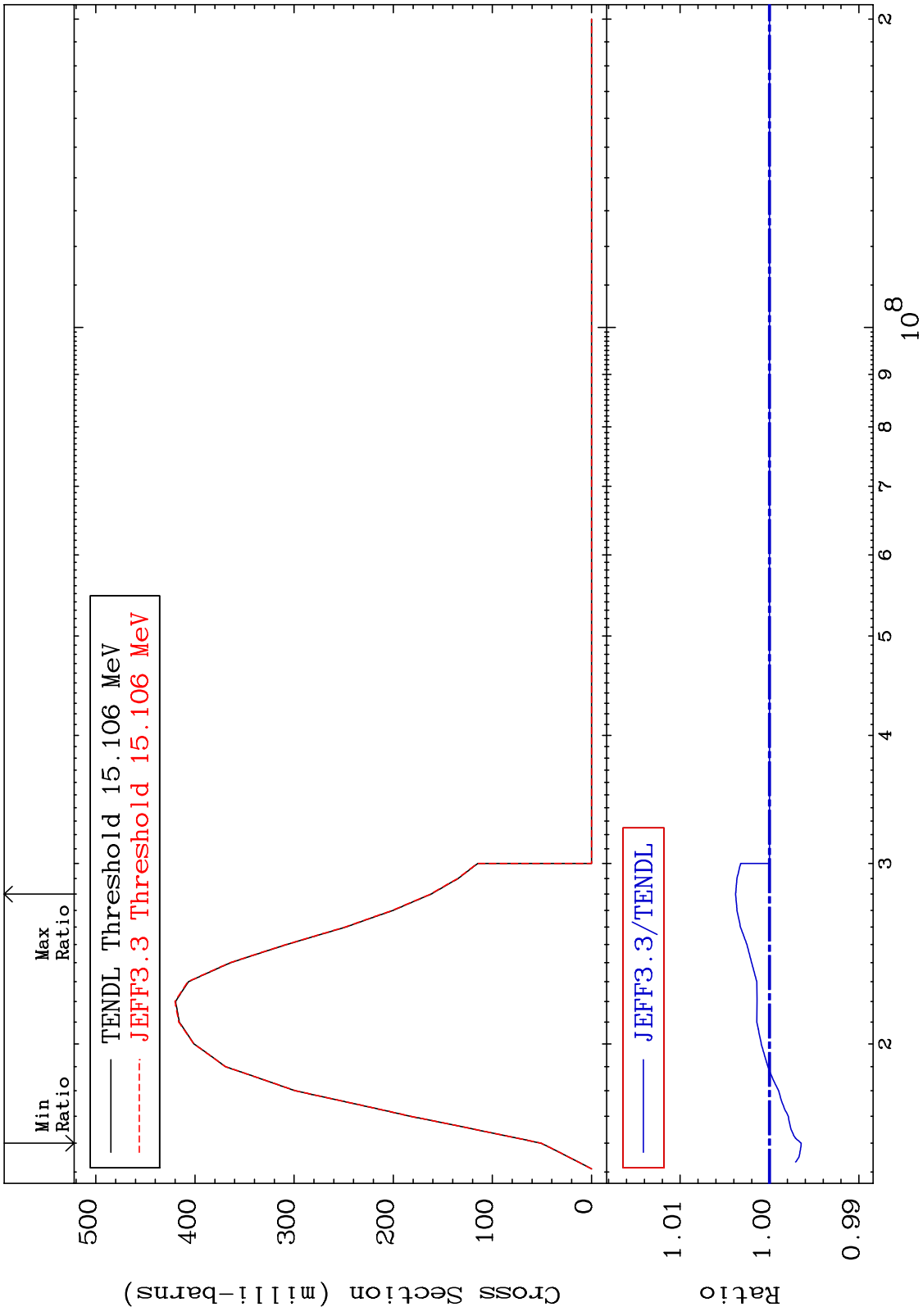
(n,3n):71-Lu-172g

71-Lu-174

Radionuclide Production Cross Section -0.641 To 0.432 %



MAT 7122 (n,3n):71-Lu-172m1 71-Lu-174
 Radionuclide Production Cross Section -0.355 To 0.380 %

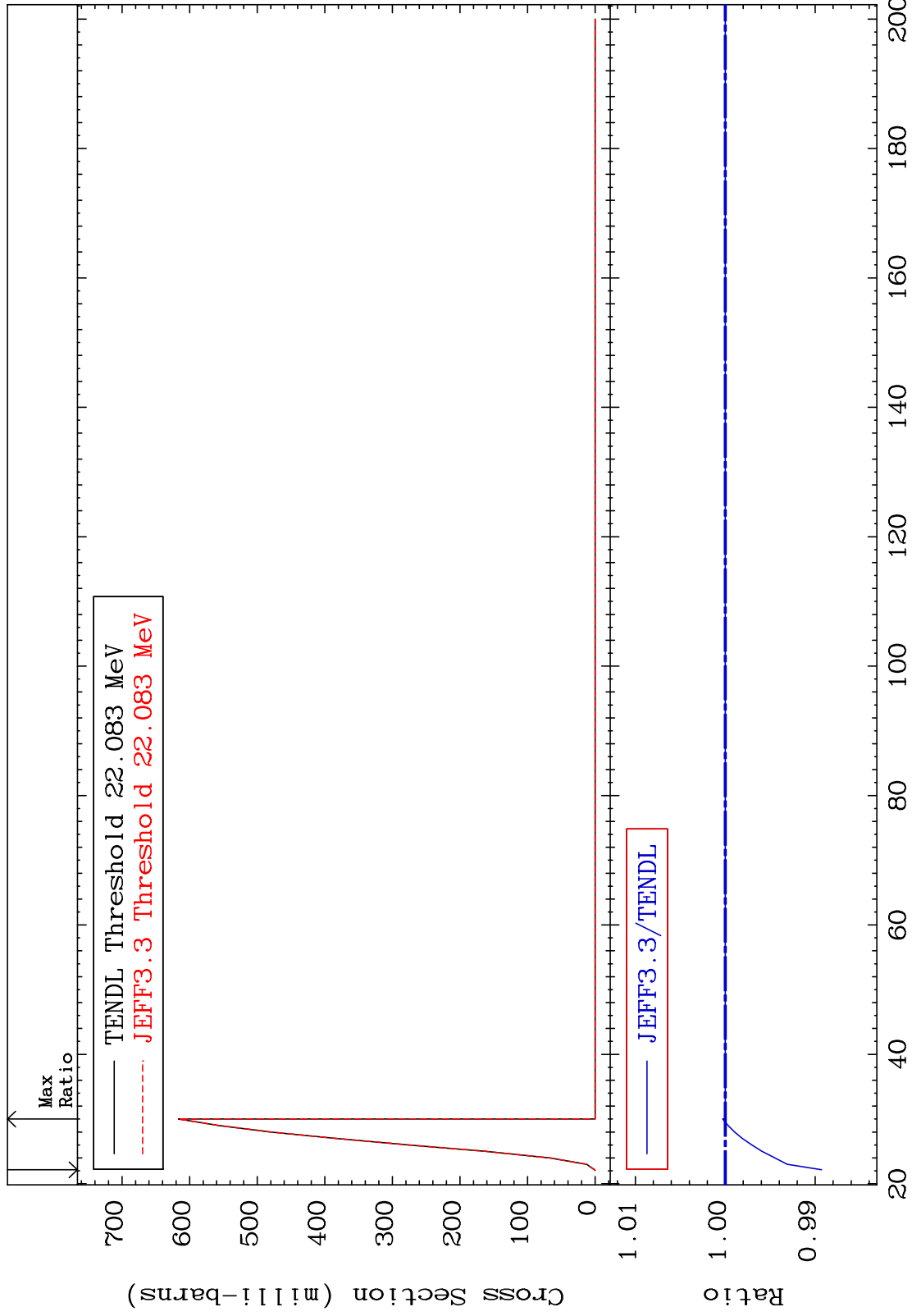


MAT 7122

(n, 4n) : 71-Lu-171g

71-Lu-174

Radionuclide Production Cross Section -1.070 To 0.028 %



MAT 7122

(n,4n):71-Lu-171m1

71-Lu-174

Radionuclide Production Cross Section -0.612 To 0.053 %

