

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

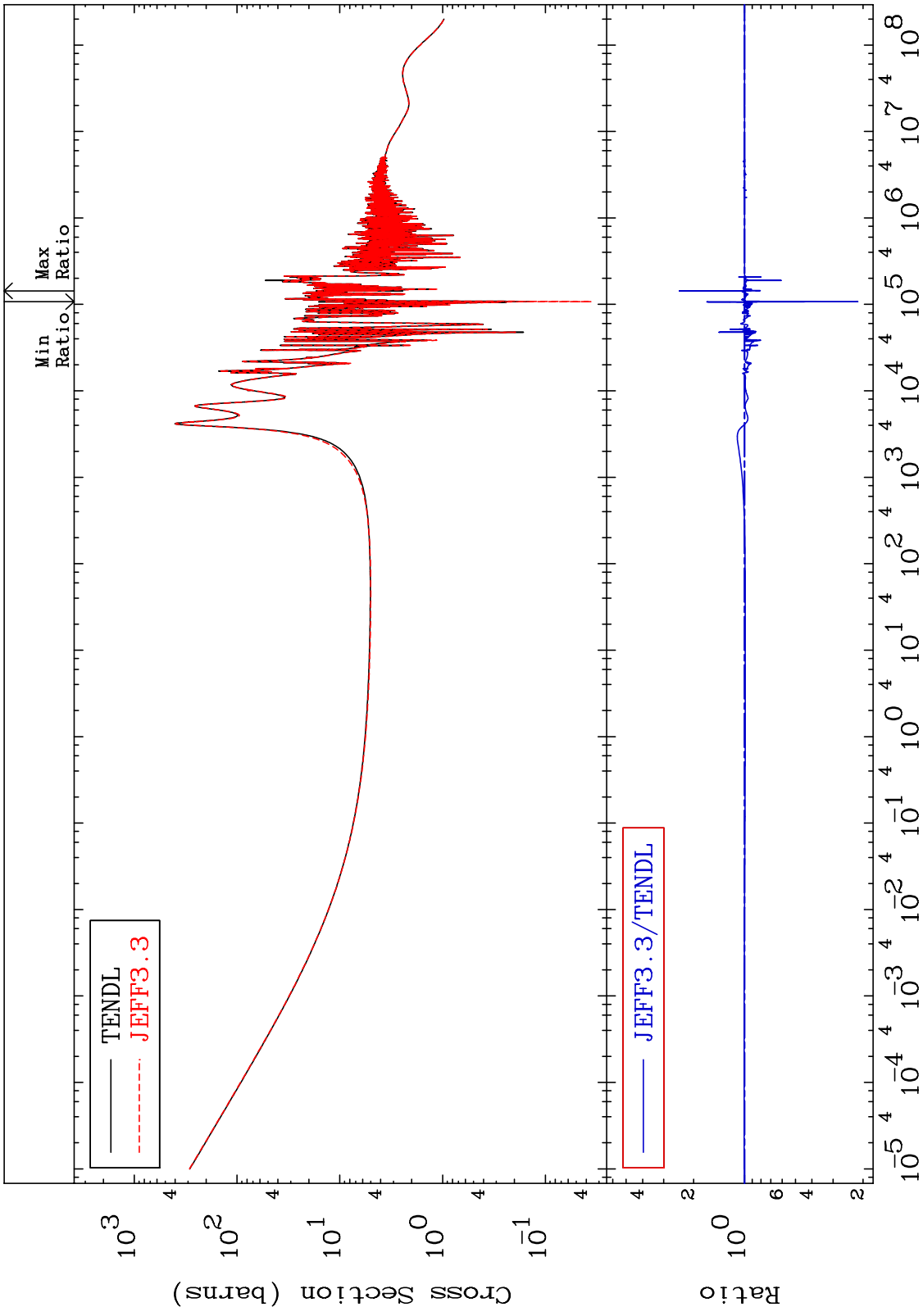
U.S.A.

Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 2328 Total Cross Section 23-V -51
-78.56 To 143.7 %

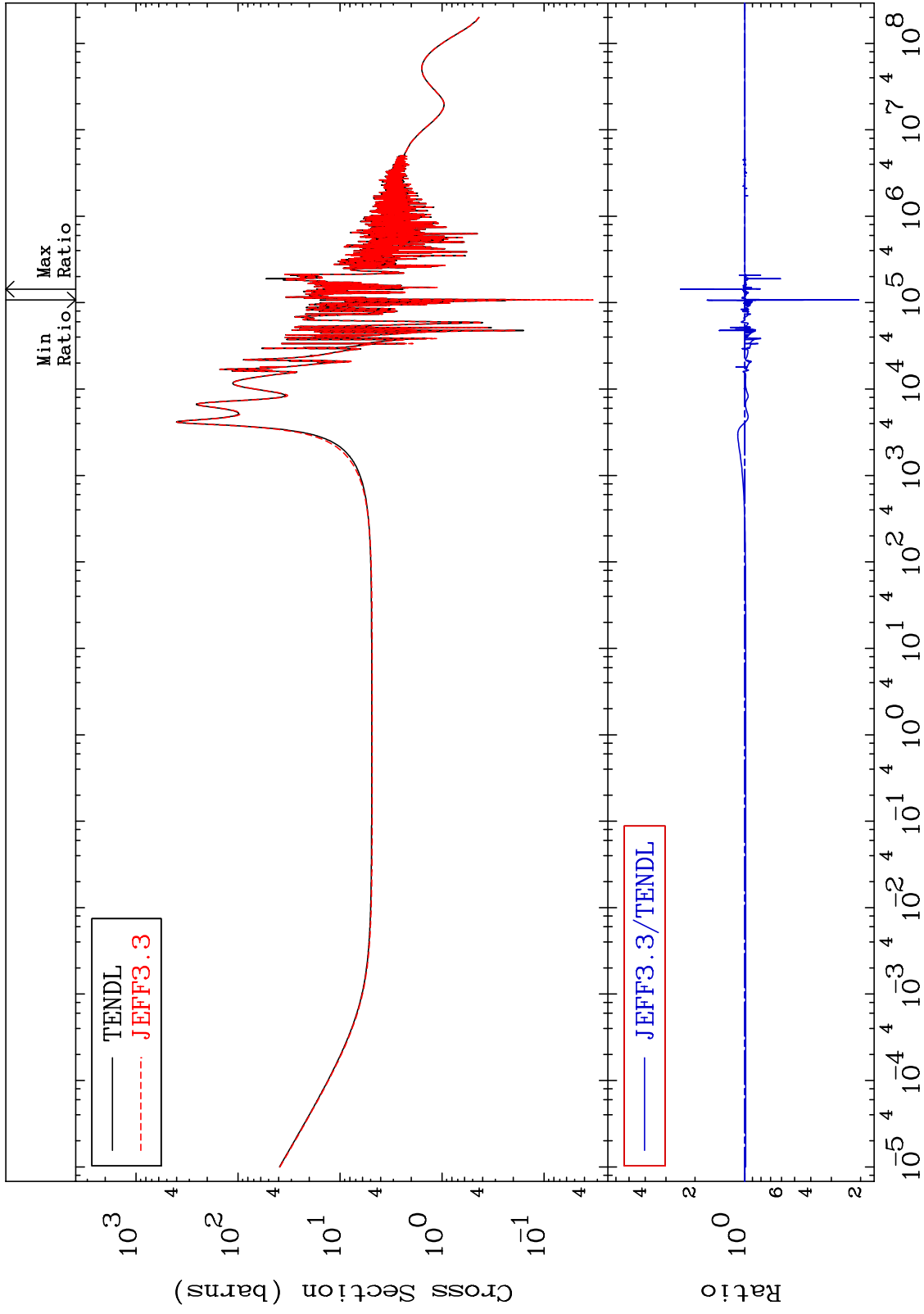


1 Incident Energy (eV) 23-V -51

MAT 2328

Elastic
Cross Section

23-V -51
-79.53 To 145.7 %



2

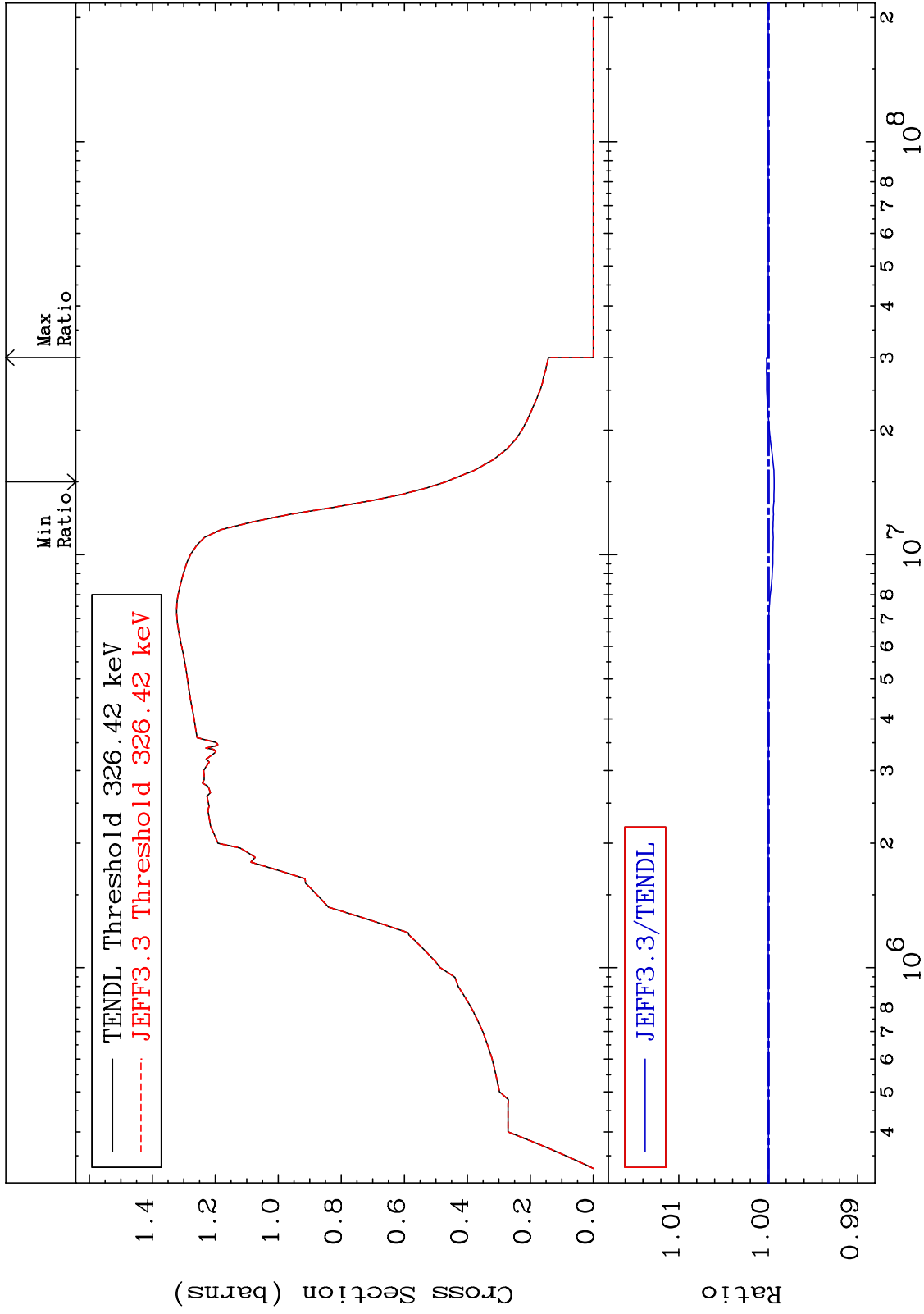
Incident Energy (eV)

23-V -51

MAT 2328

Inelastic
Cross Section

23-V -51
-0.066 To 0.021 %

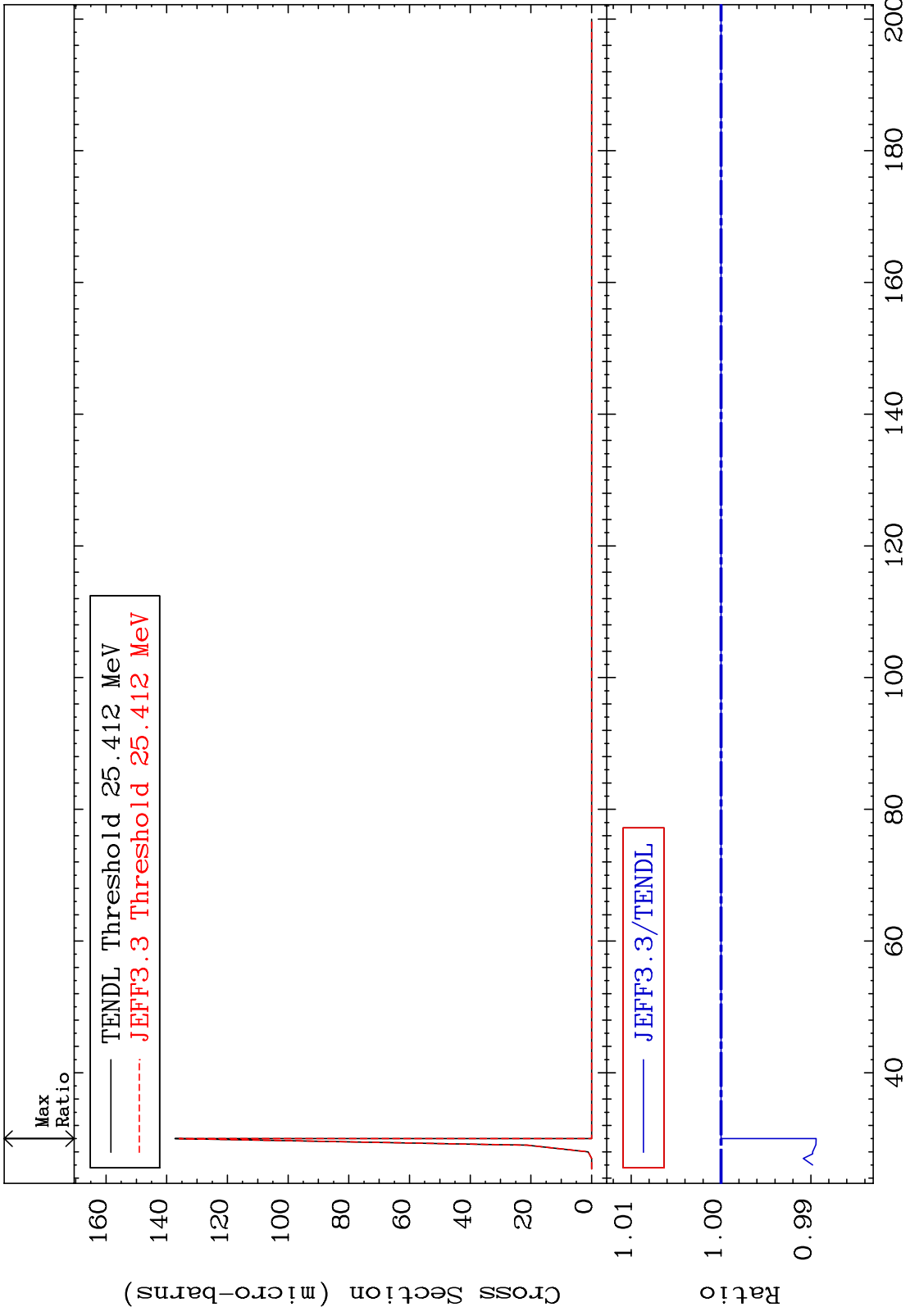


3

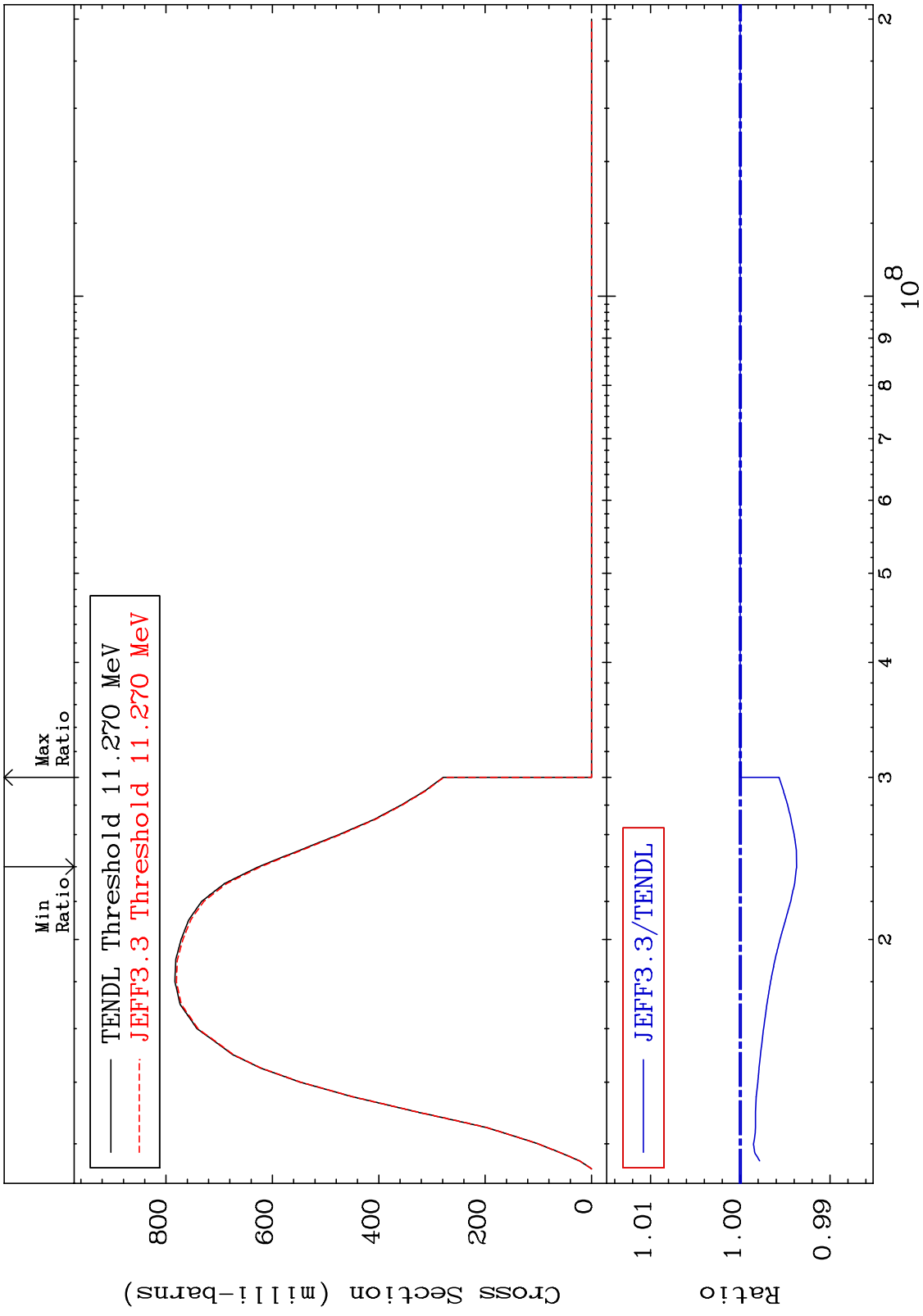
Incident Energy (eV)

23-V -51

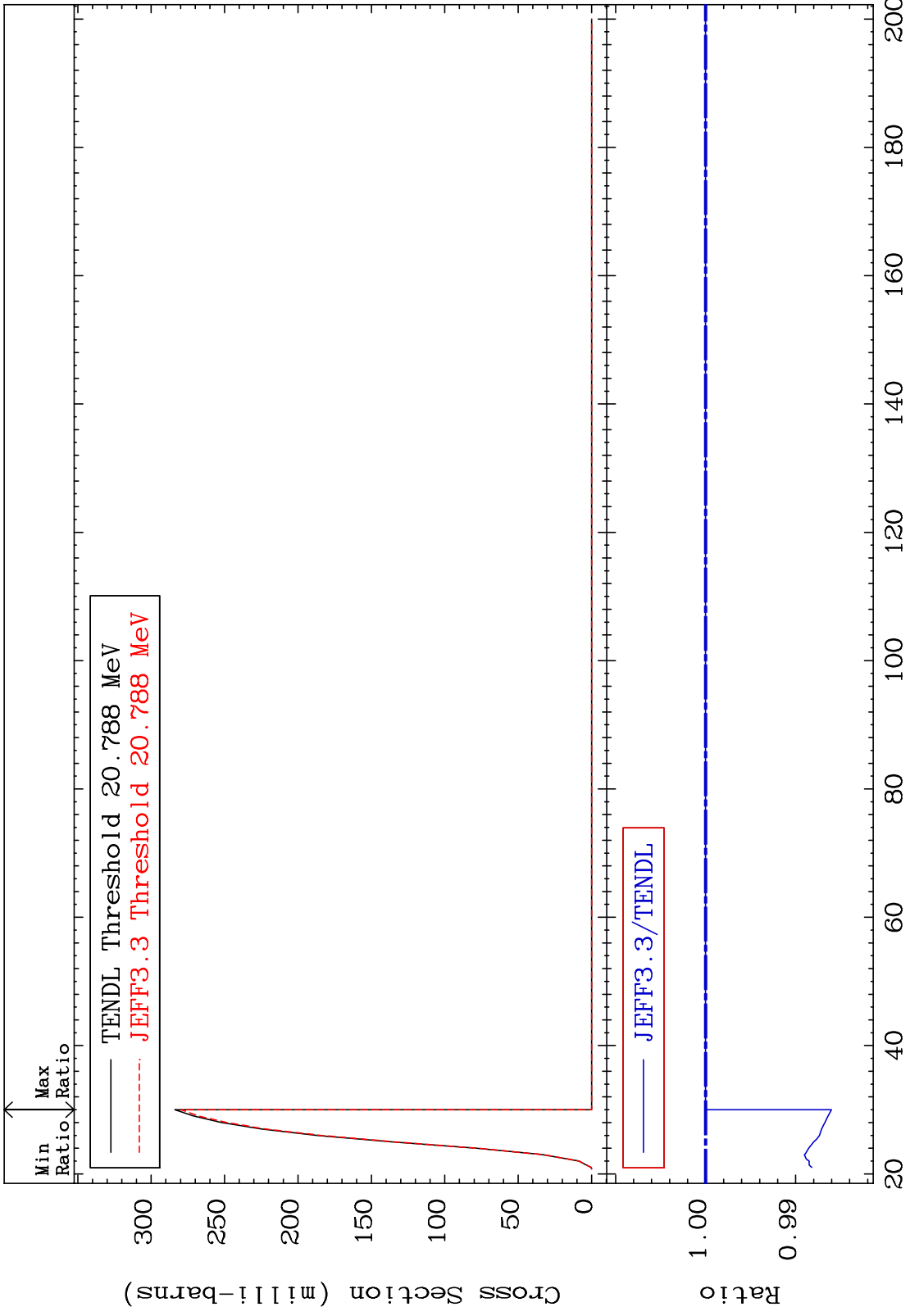
MAT 2328 (n,2n) d 23-V -51
Cross Section -1.058 To 0.000 %



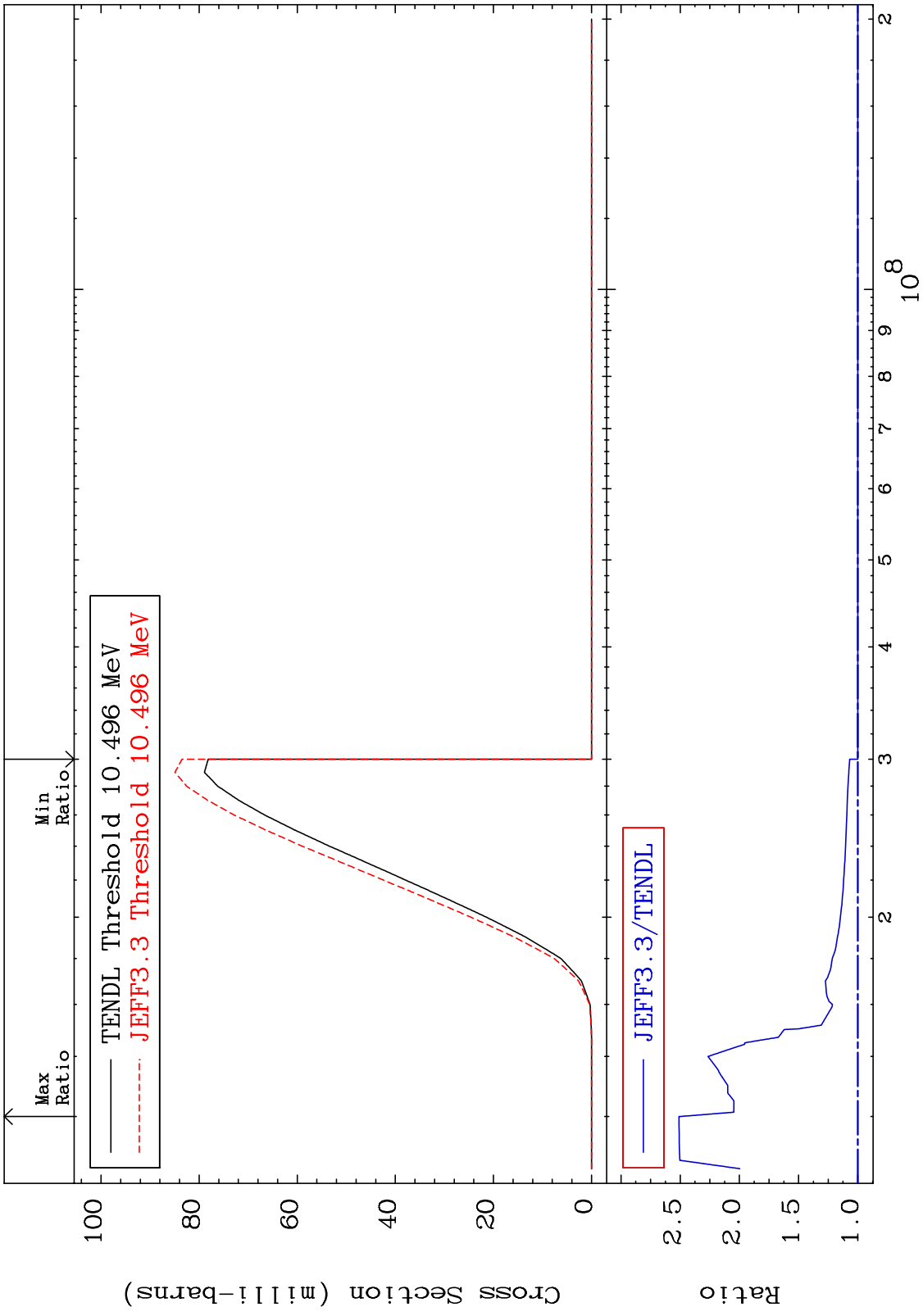
MAT 2328 (n,2n) Cross Section 23-V -51
 -0.628 To 0.000 %



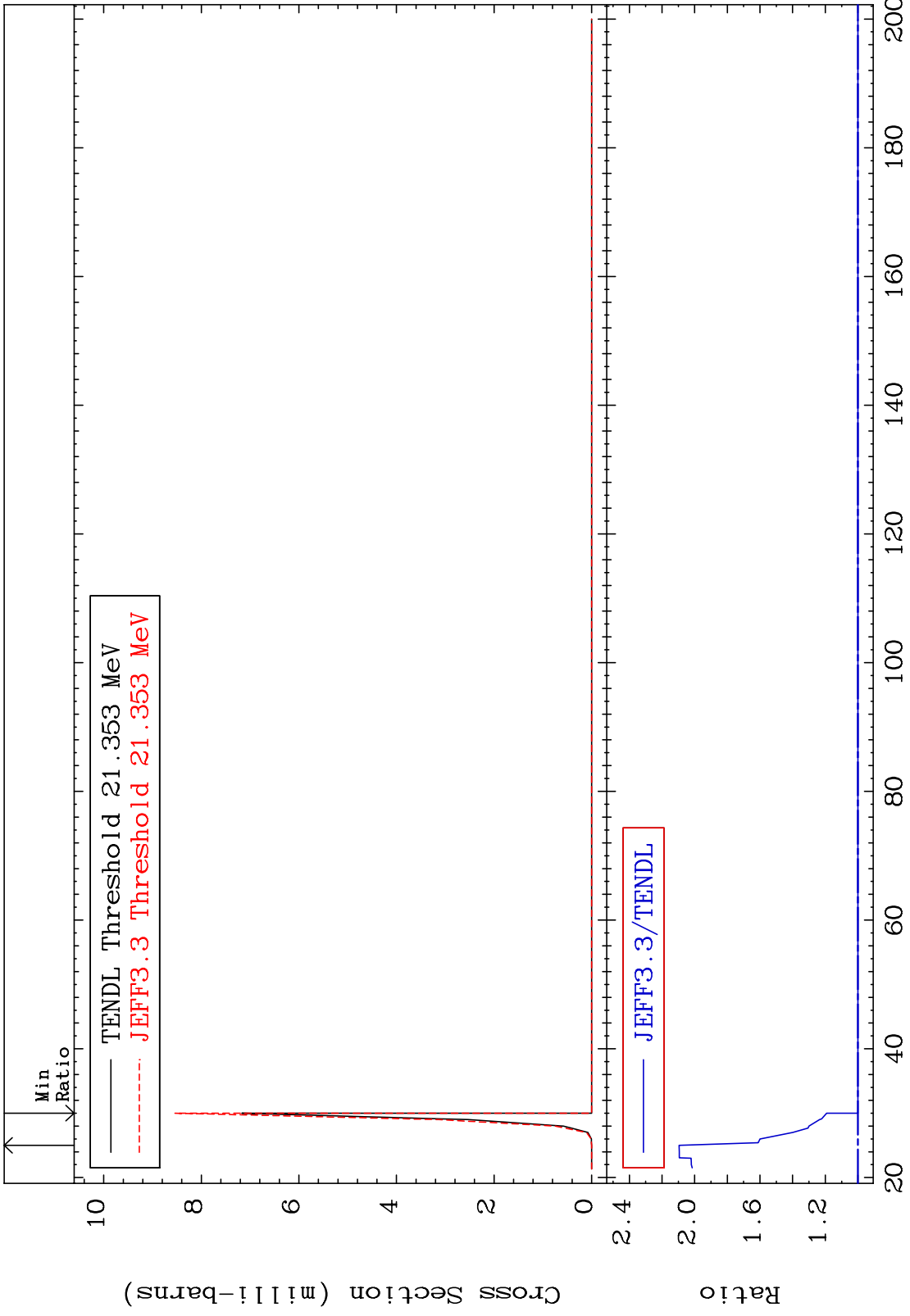
MAT 2328 (n,3n) 23-V -51
 Cross Section -1.398 To 0.000 %



MAT 2328 (n,n') α 23-V -51
 Cross Section 0.000 To 151.0 %



MAT 2328 (n,2n) α 23-V -51
Cross Section 0.000 To 109.5 %



23-V -51

Incident Energy (MeV)

8

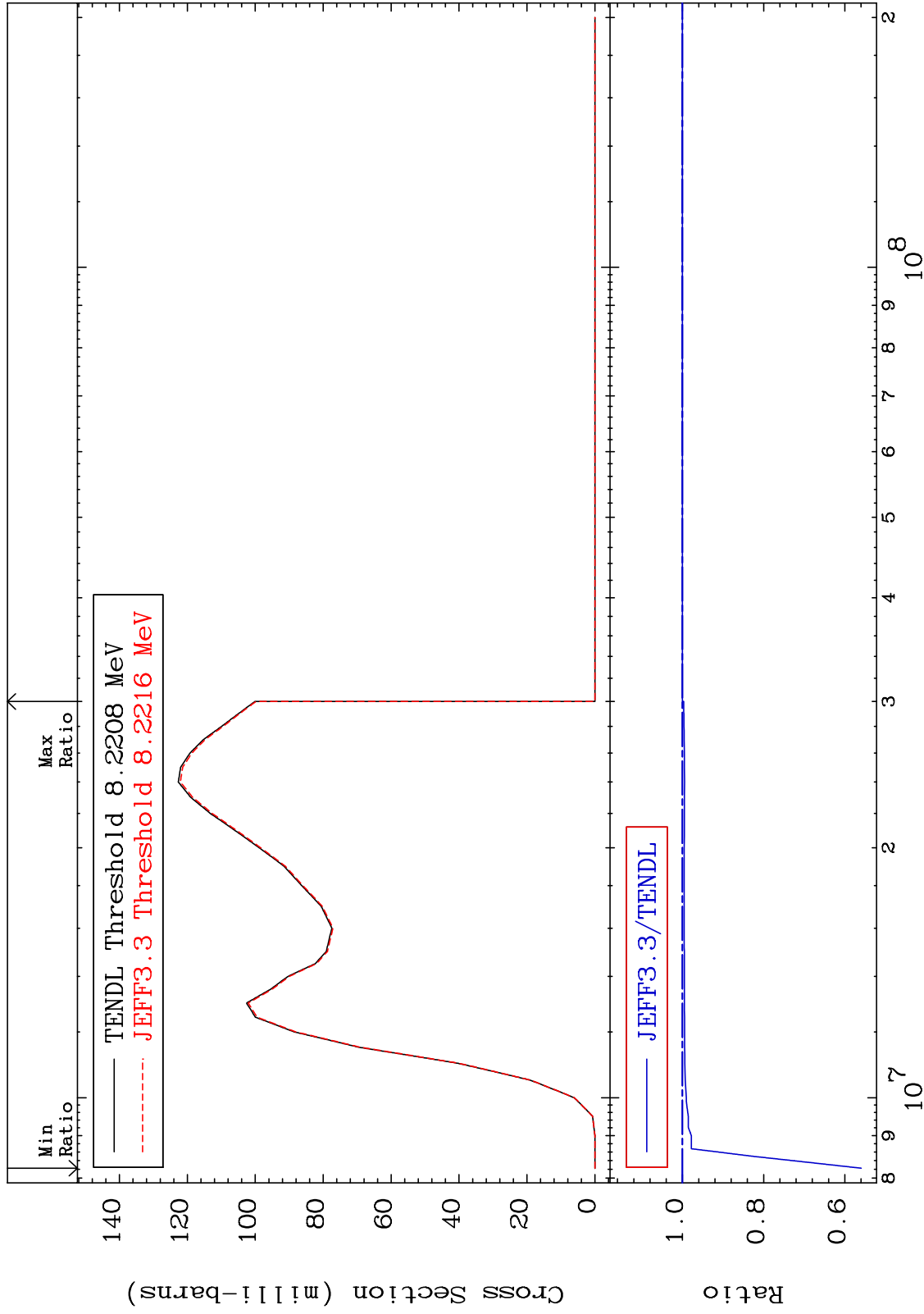
MAT 2328

(n,n') p

23-V -51

Cross Section

-44.05 To 0.000 %

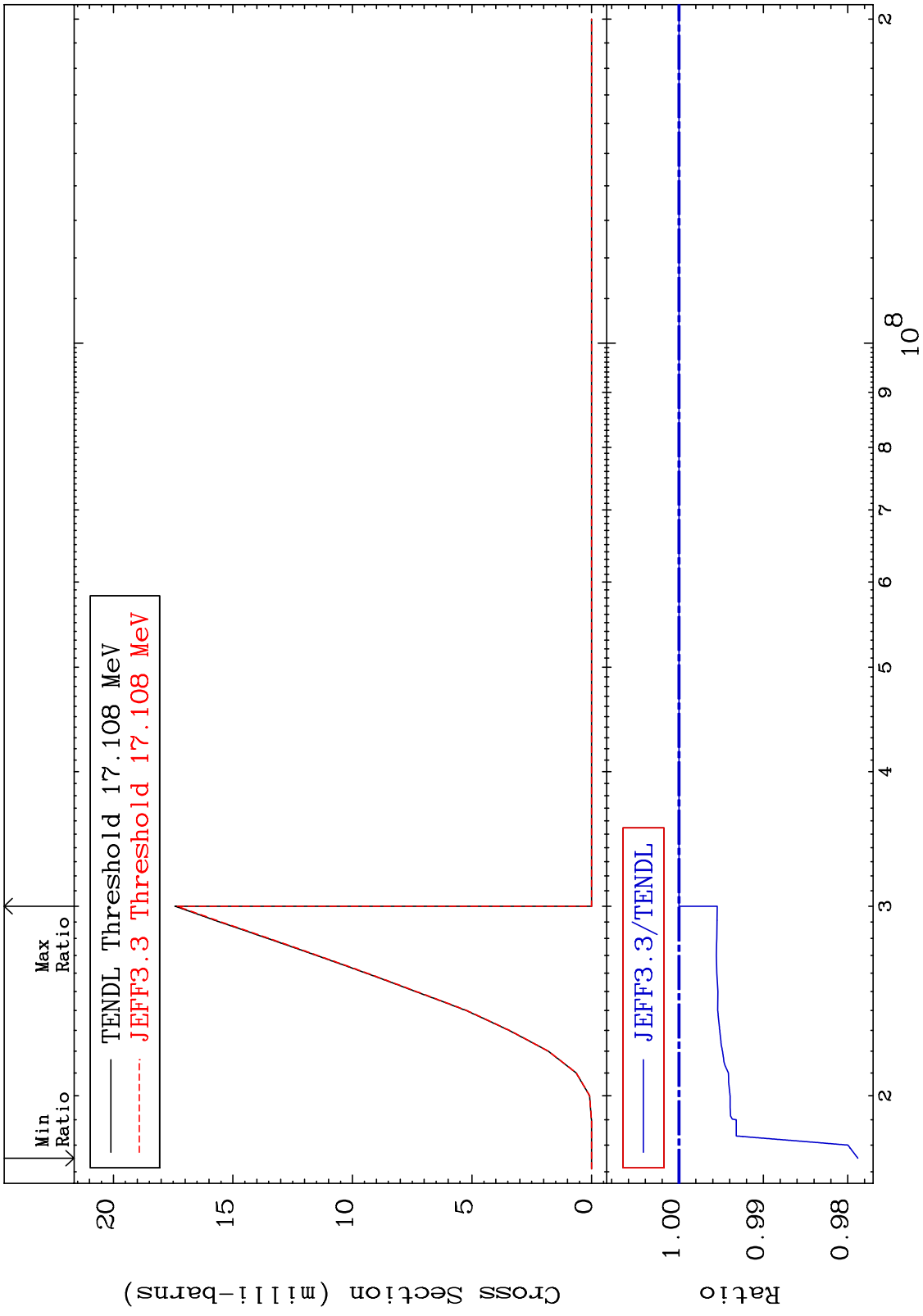


9

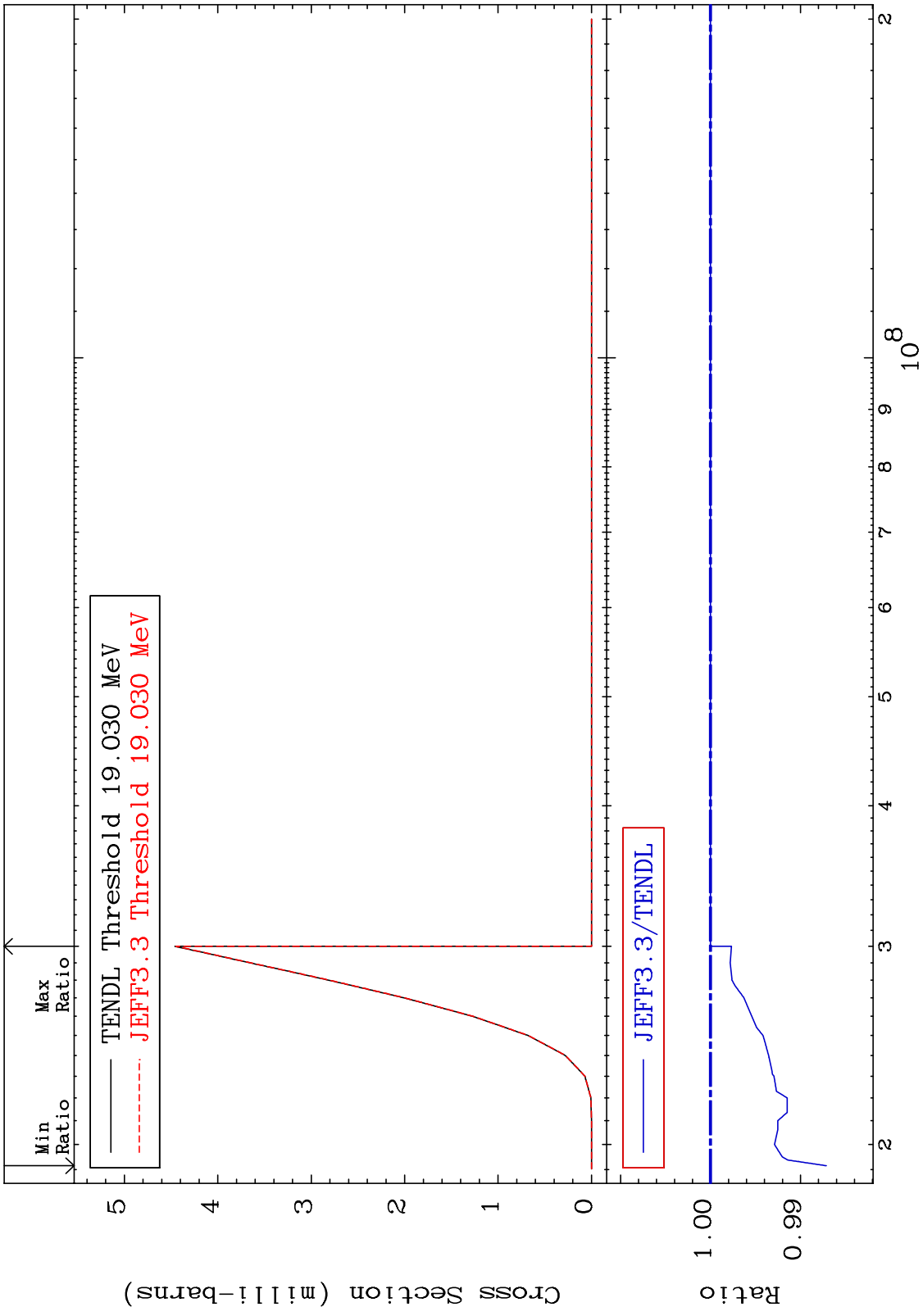
Incident Energy (eV)

23-V -51

MAT 2328 (n,n') d 23-V -51
 Cross Section -2.120 To 0.000 %



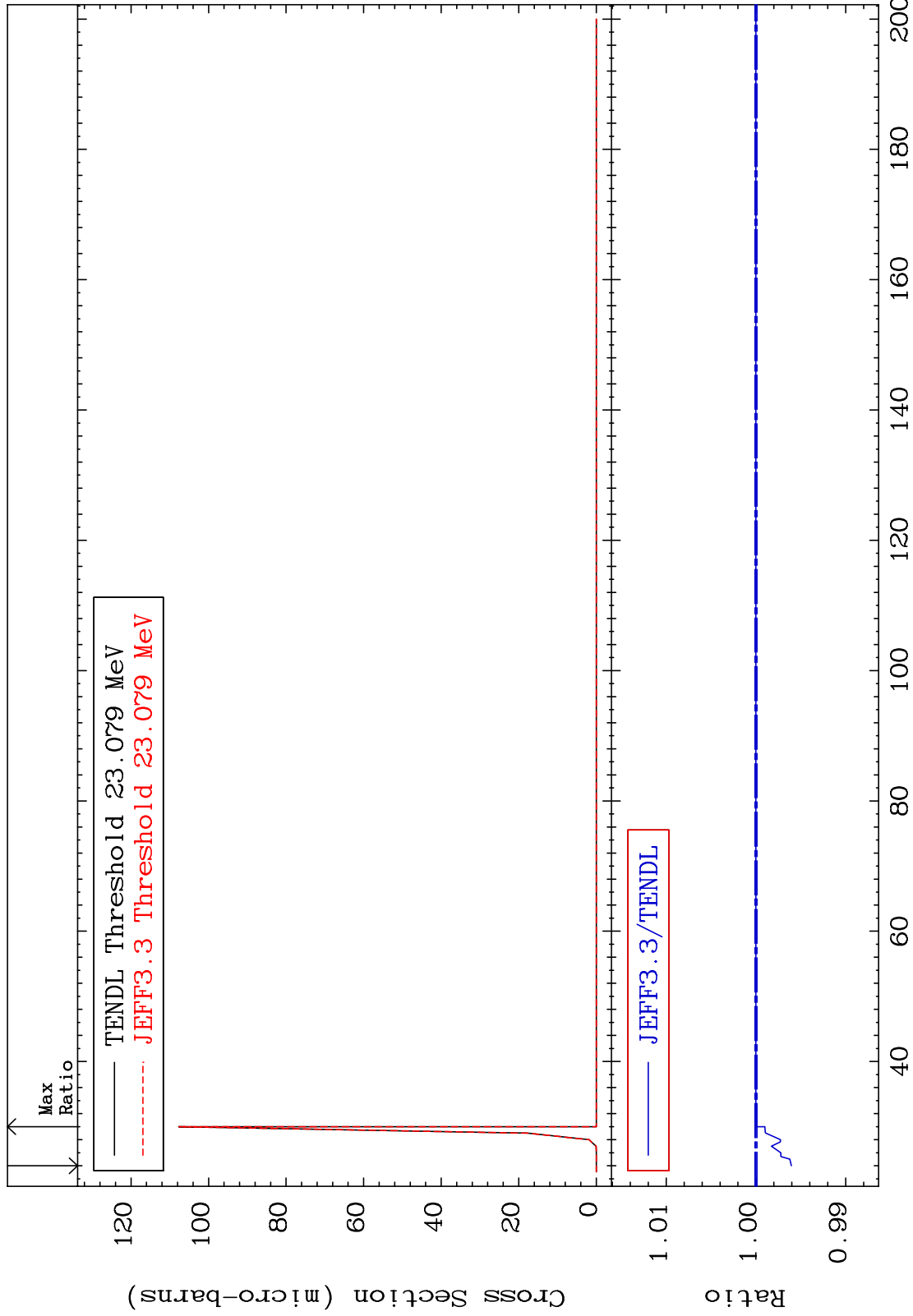
10 Incident Energy (eV) 23-V -51



MAT 2328

(n, n') He-3
Cross Section

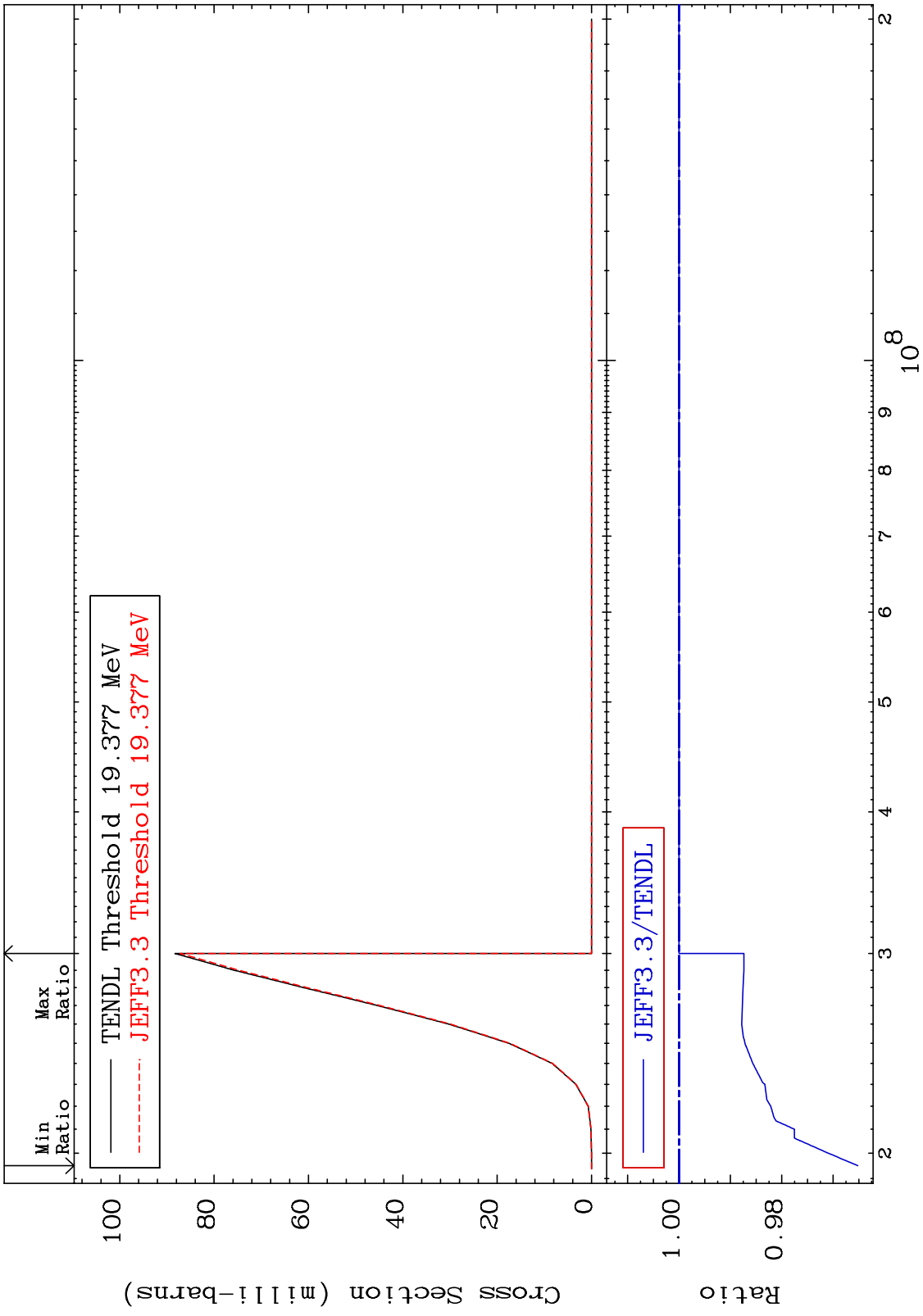
23-V -51
-0.395 To 0.000 %



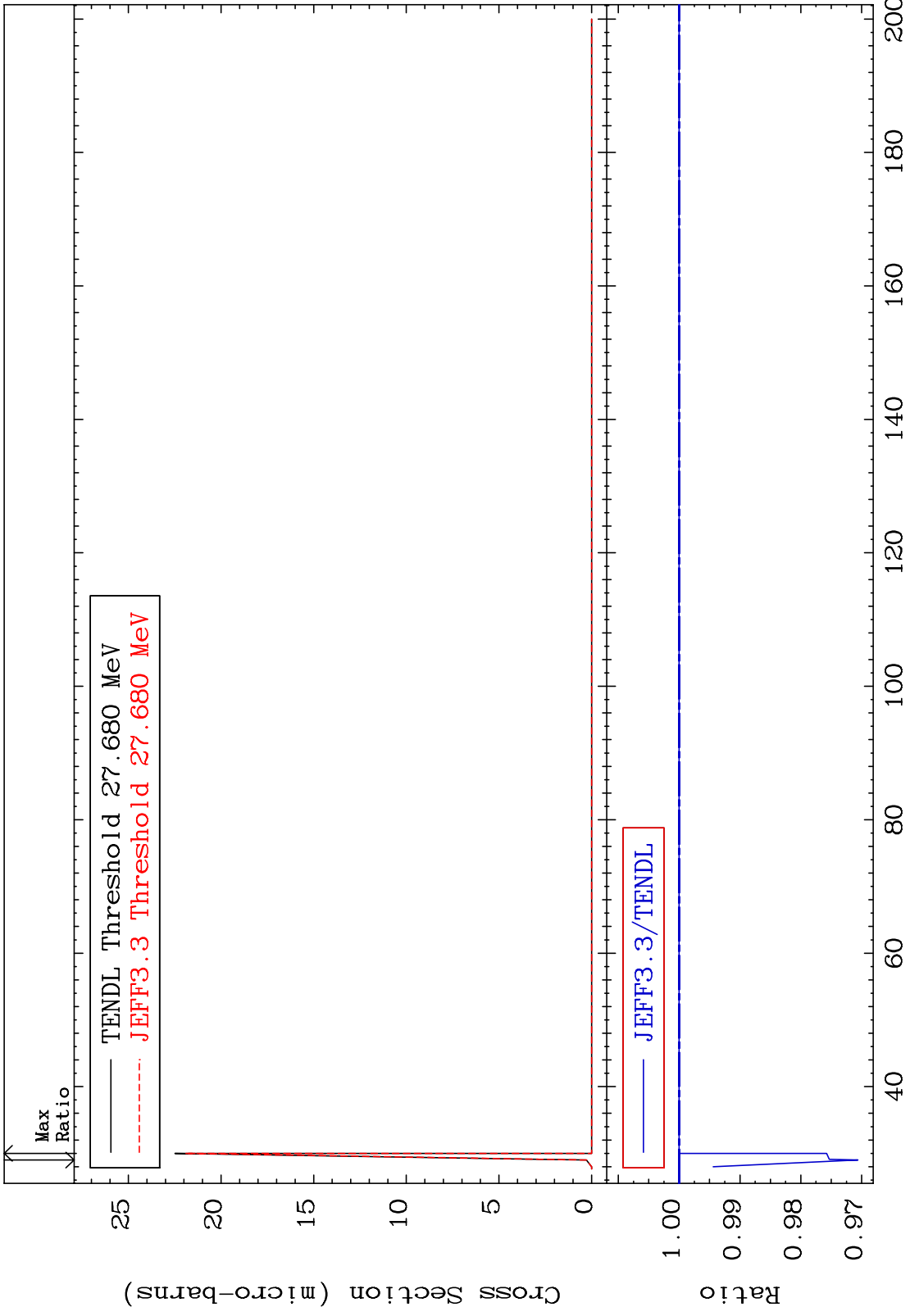
12

Incident Energy (MeV)

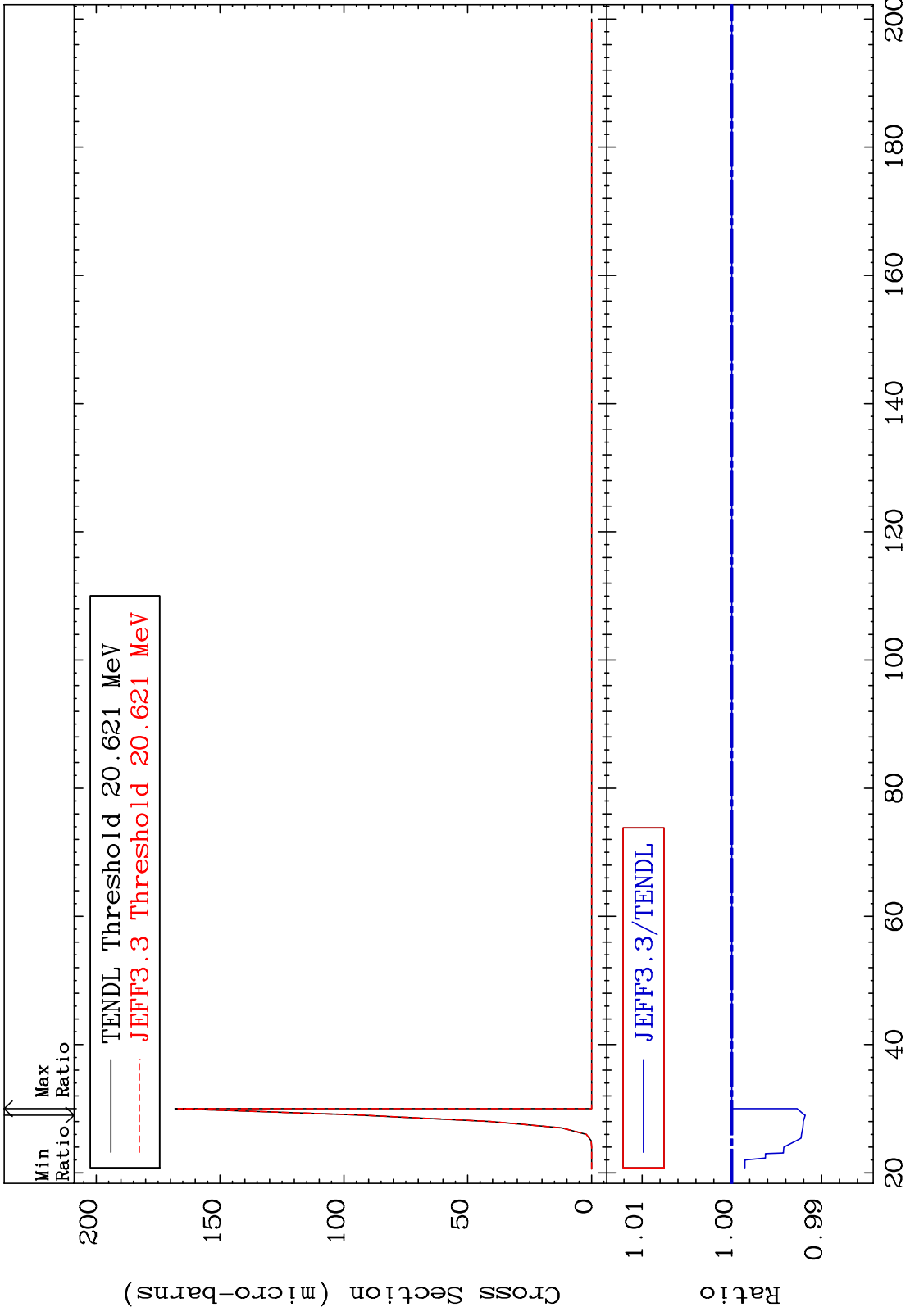
23-V -51



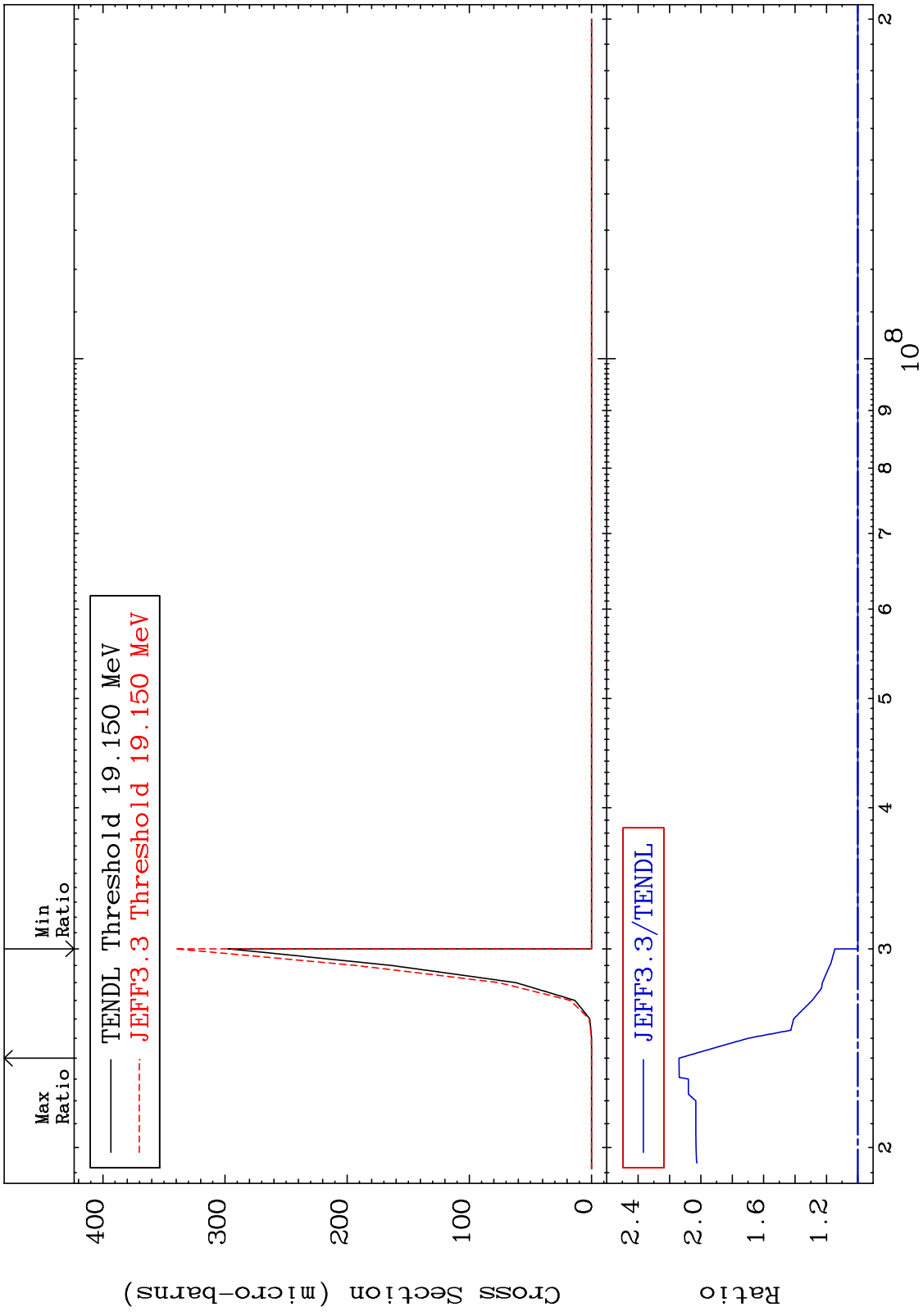
MAT 2328 (n,3n) p 23-V -51
Cross Section -2.939 To 0.000 %



MAT 2328 (n,2n) p 23-V -51
 Cross Section -0.819 To 0.000 %

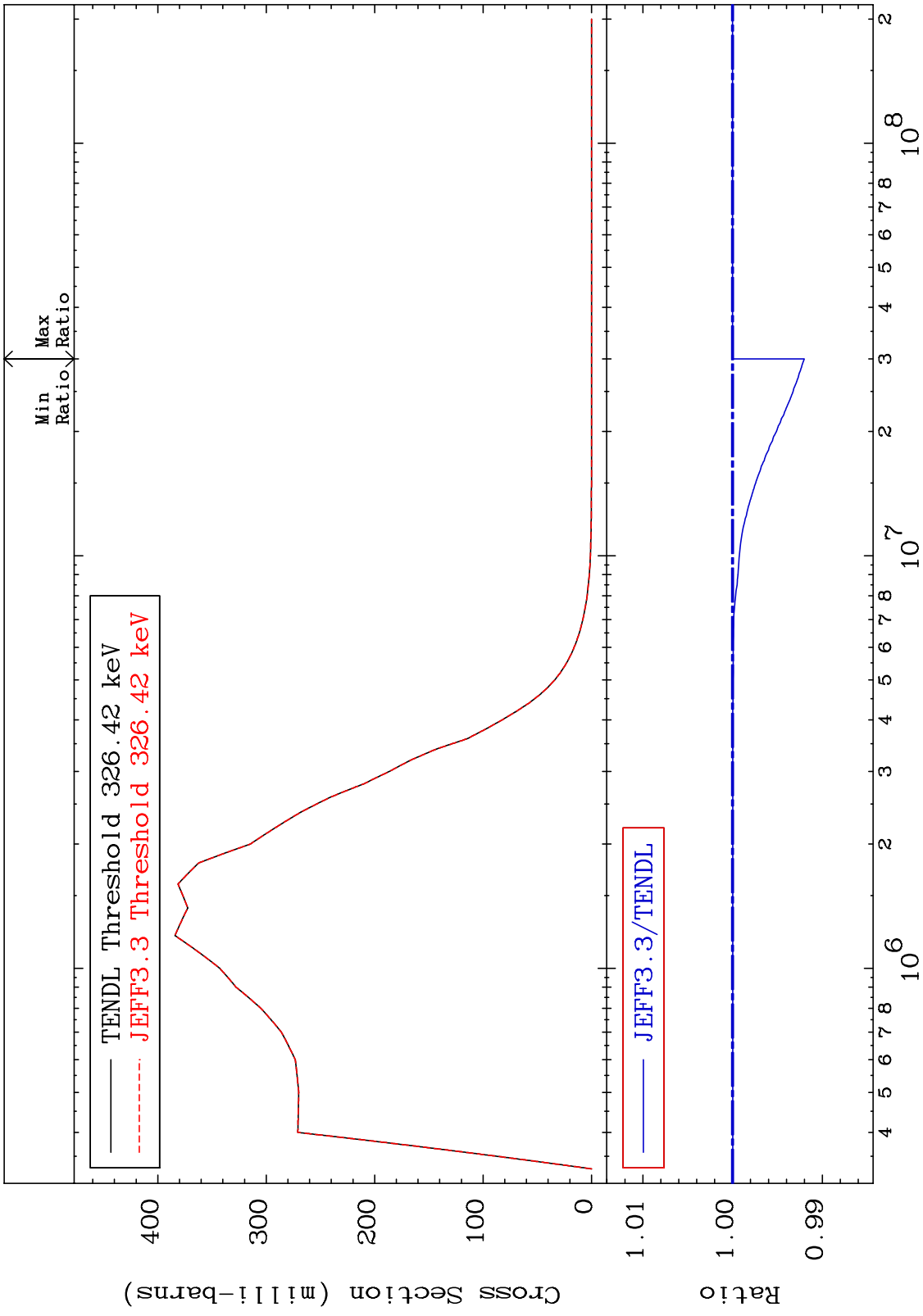


MAT 2328 (n,n') p α 23-V -51
 Cross Section 0.000 To 113.9 %

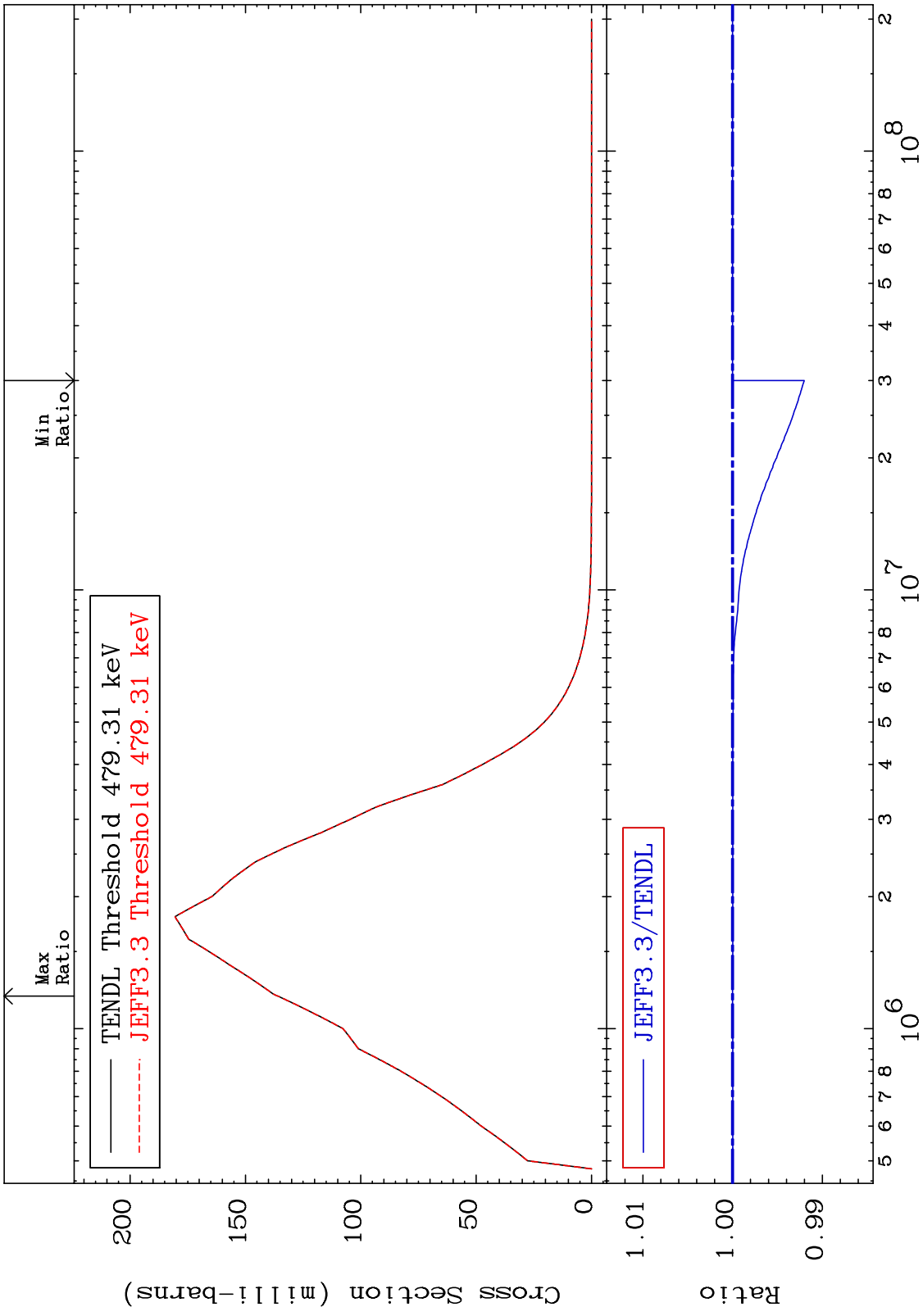


23-V -51

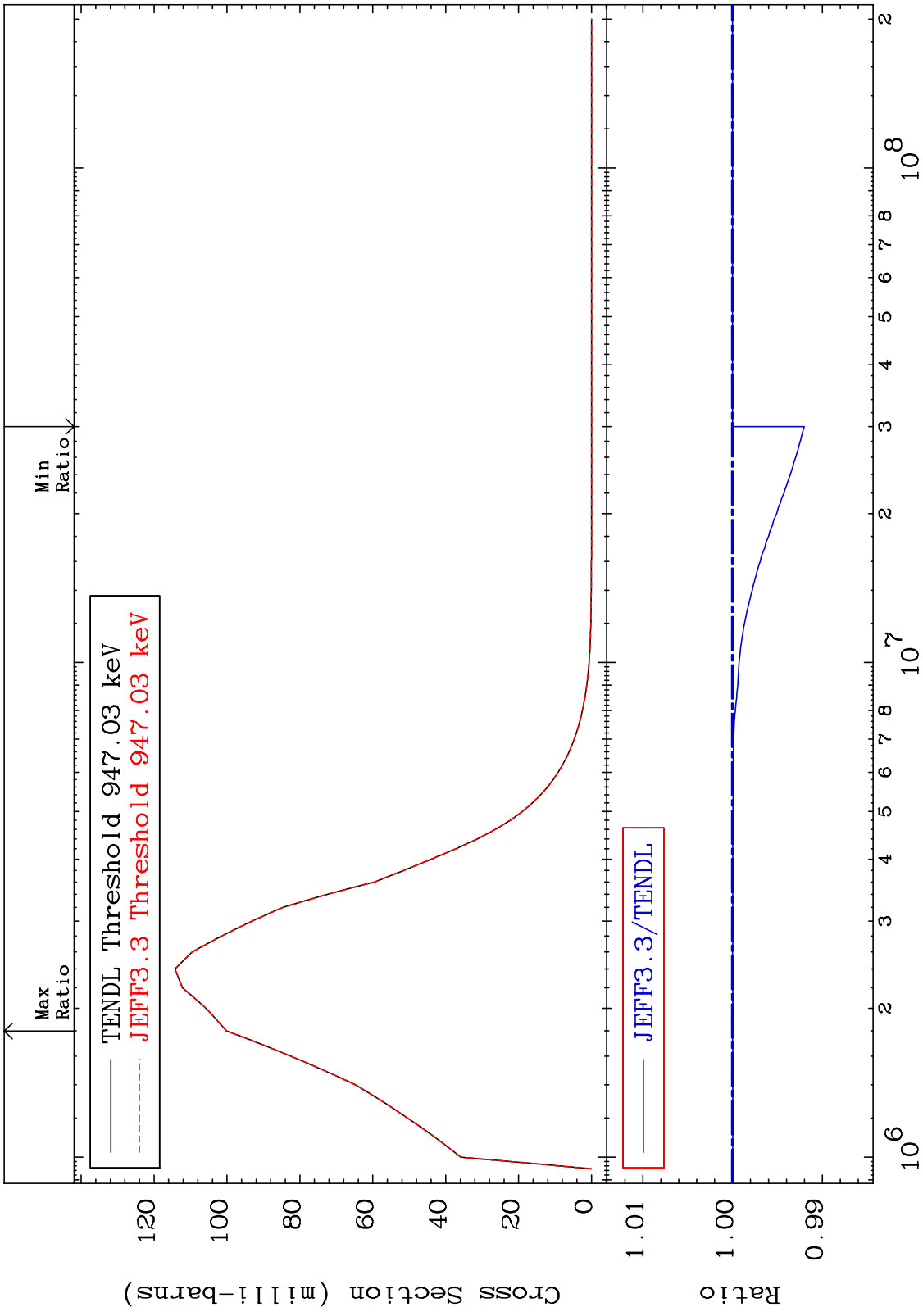
MAT 2328 MT= 51 (n,n') Level 23-V -51
 Cross Section -0.799 To 0.000 %



MAT 2328 MT= 52 (n,n') Level Cross Section 23-V -51
 -0.799 To 0.000 %

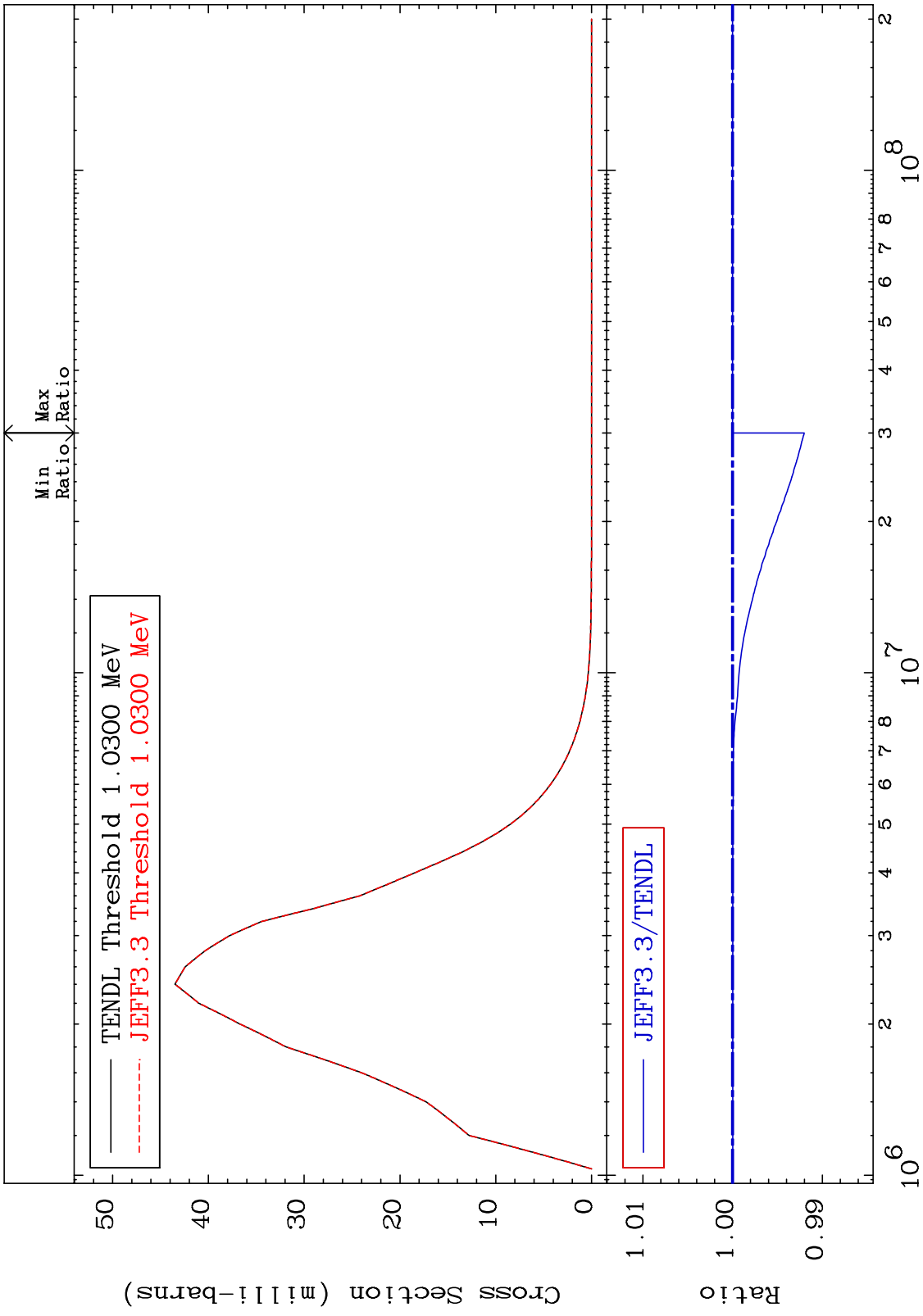


MAT 2328 MT= 53 (n,n') Level Cross Section 23-V -51
-0.799 To 0.000 %



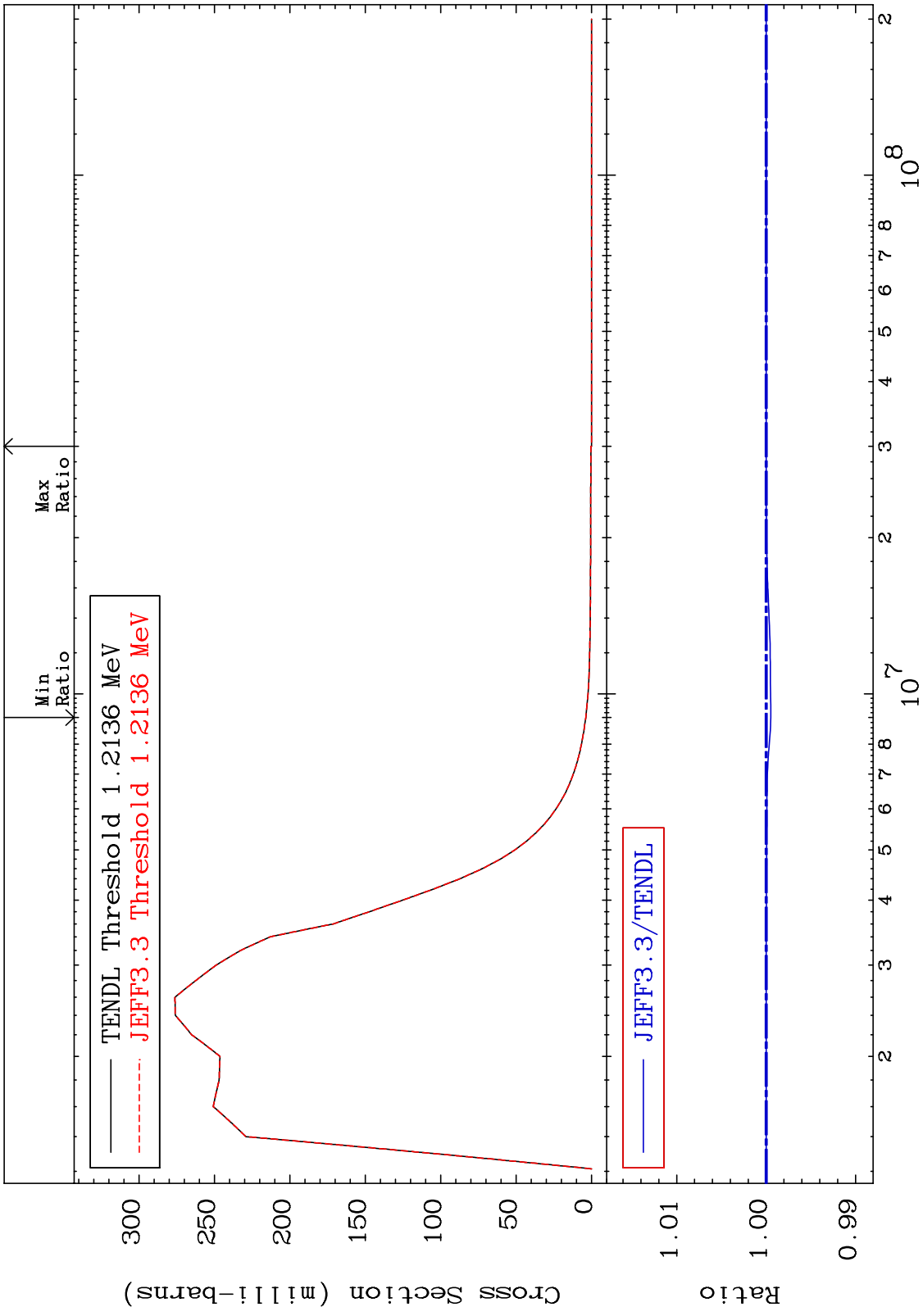
19 Incident Energy (eV) 23-V -51

MAT 2328 MT= 54 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %

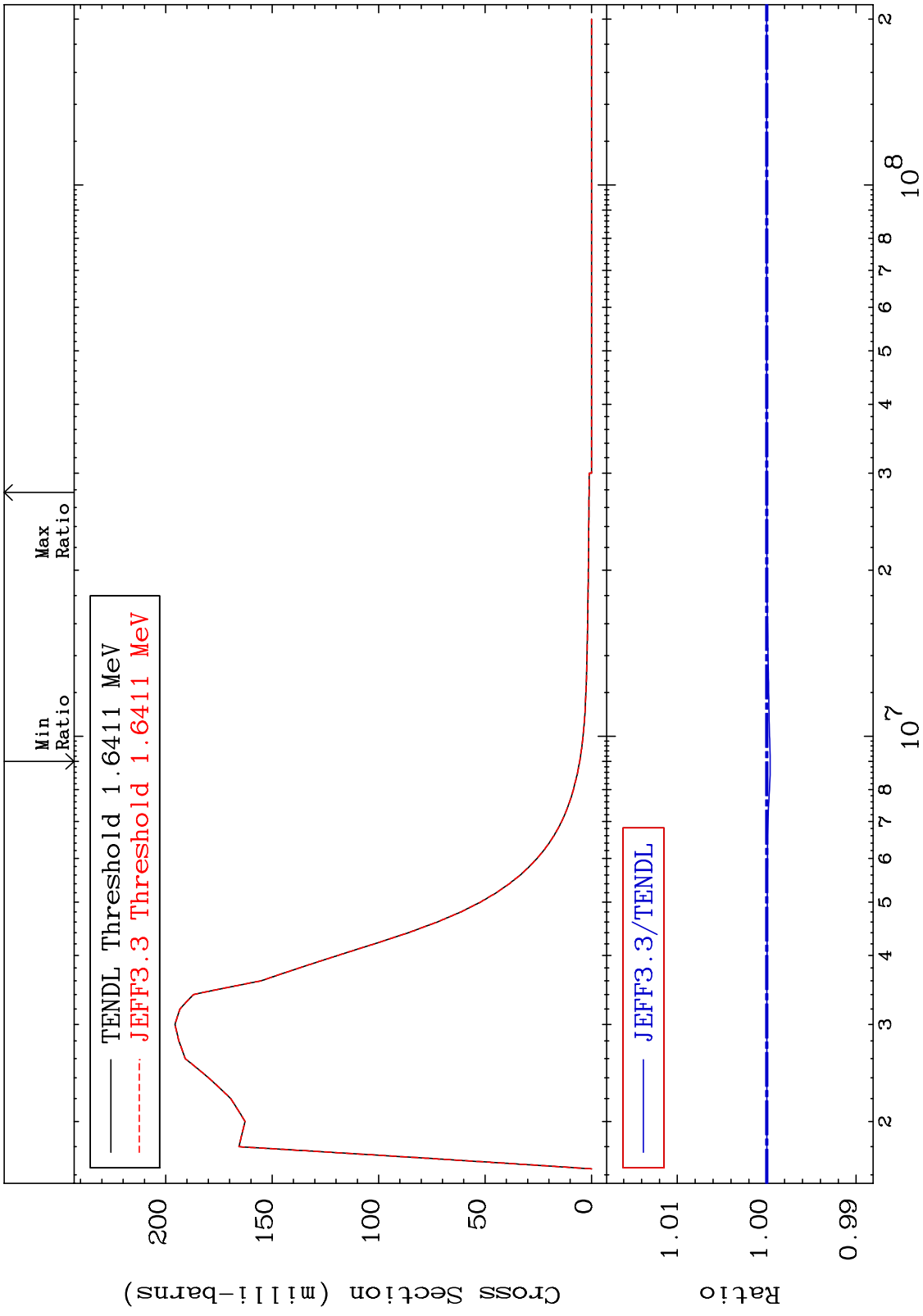


20 Incident Energy (eV) 23-V -51

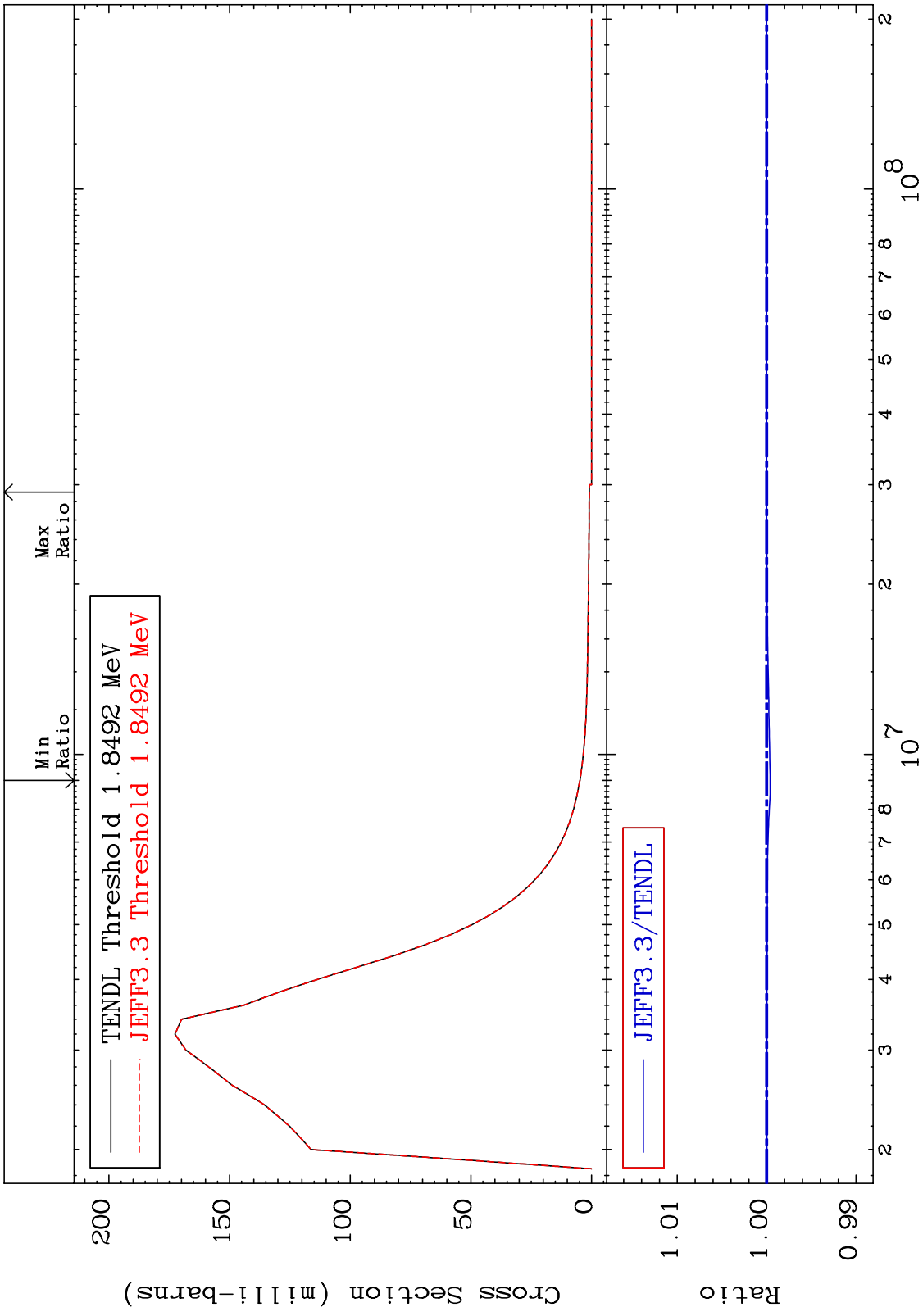
MAT 2328 MT= 55 (n,n') Level Cross Section -0.052 To 0.000 % 23-V -51



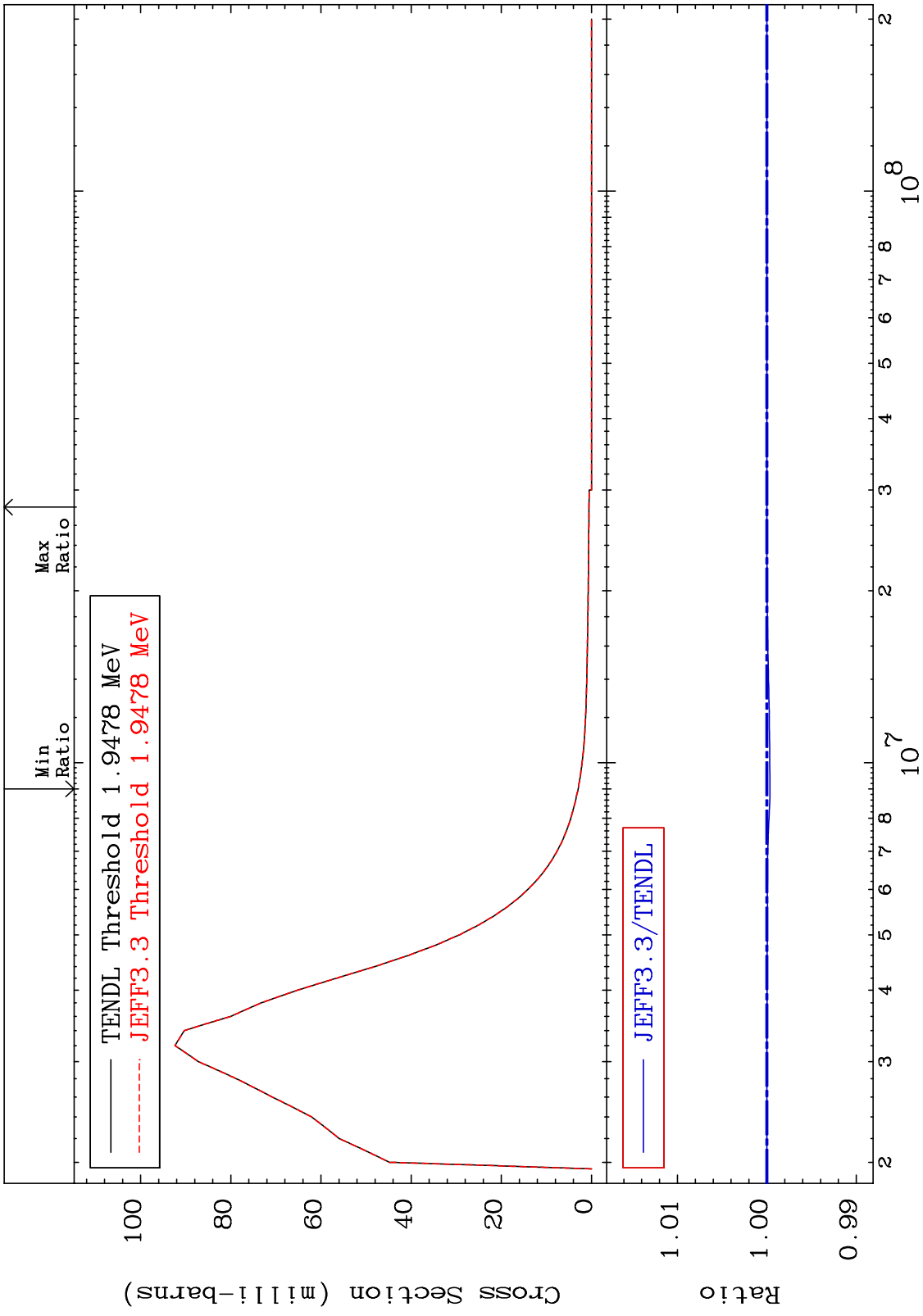
MAT 2328 MT= 56 (n,n') Level Cross Section 23-V -51
 -0.038 To 0.000 %



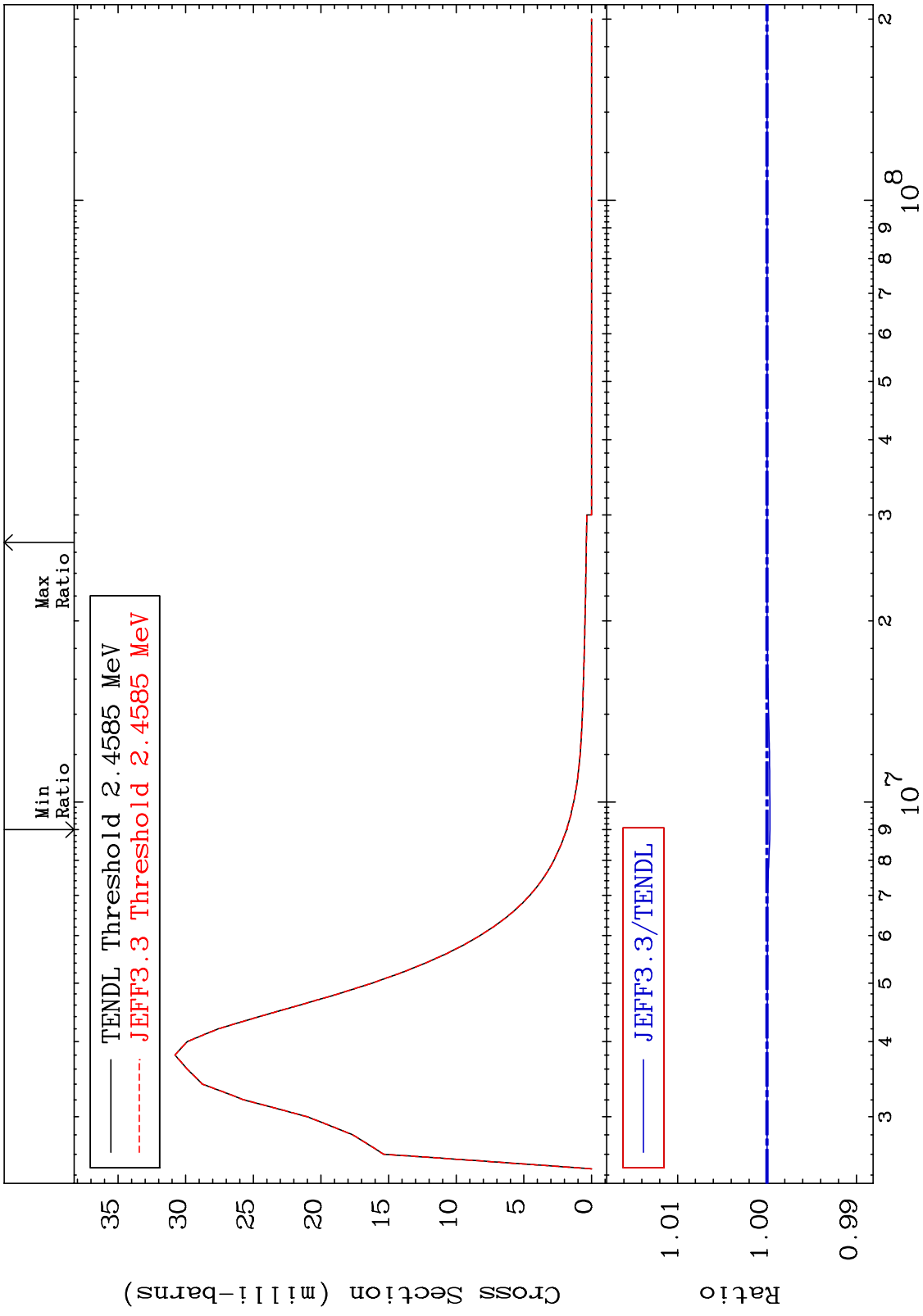
MAT 2328 MT= 57 (n,n') Level Cross Section 23-V -51
 -0.038 To 0.000 %



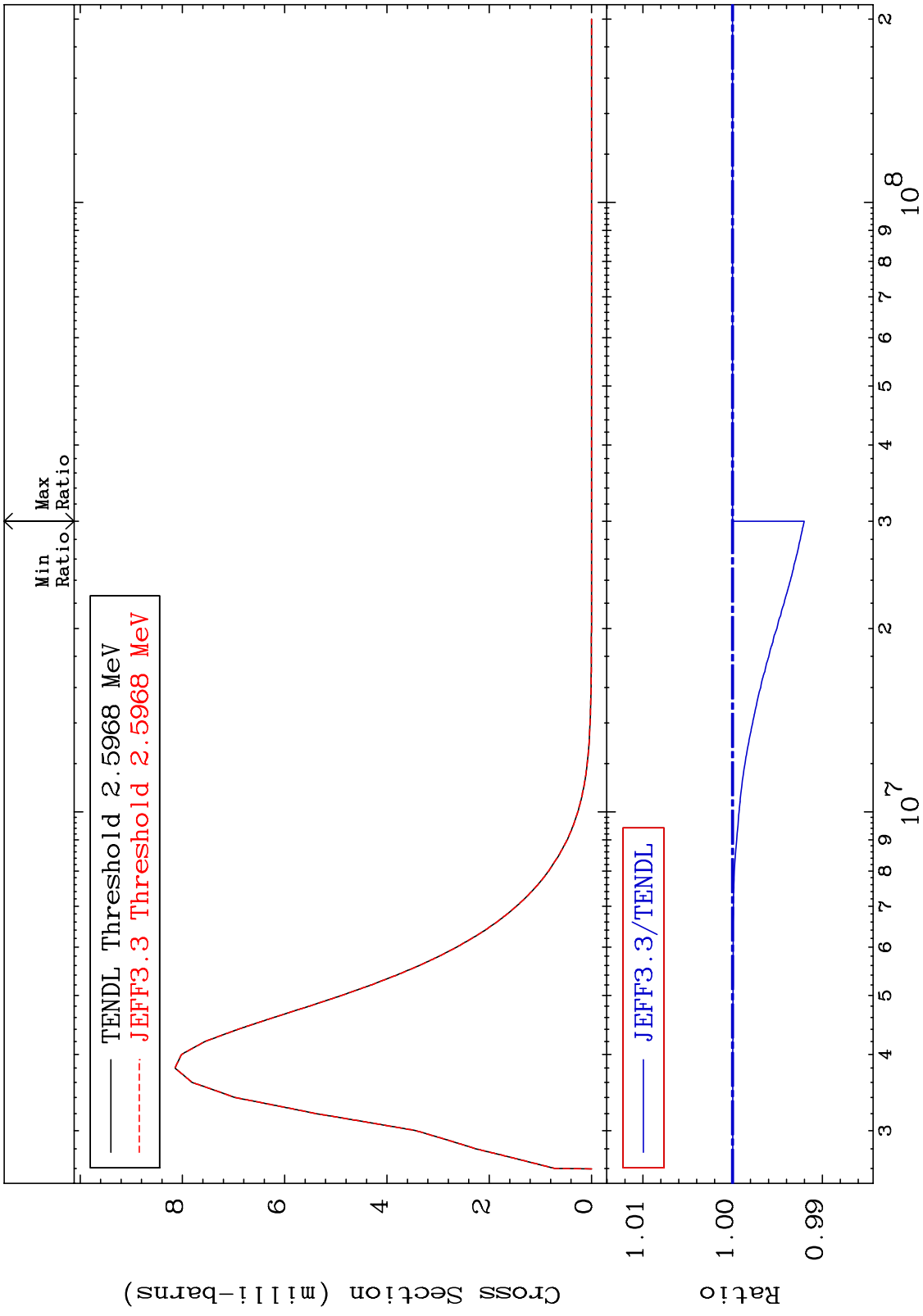
MAT 2328 MT= 58 (n,n') Level Cross Section 23-V -51
 -0.035 To 0.000 %



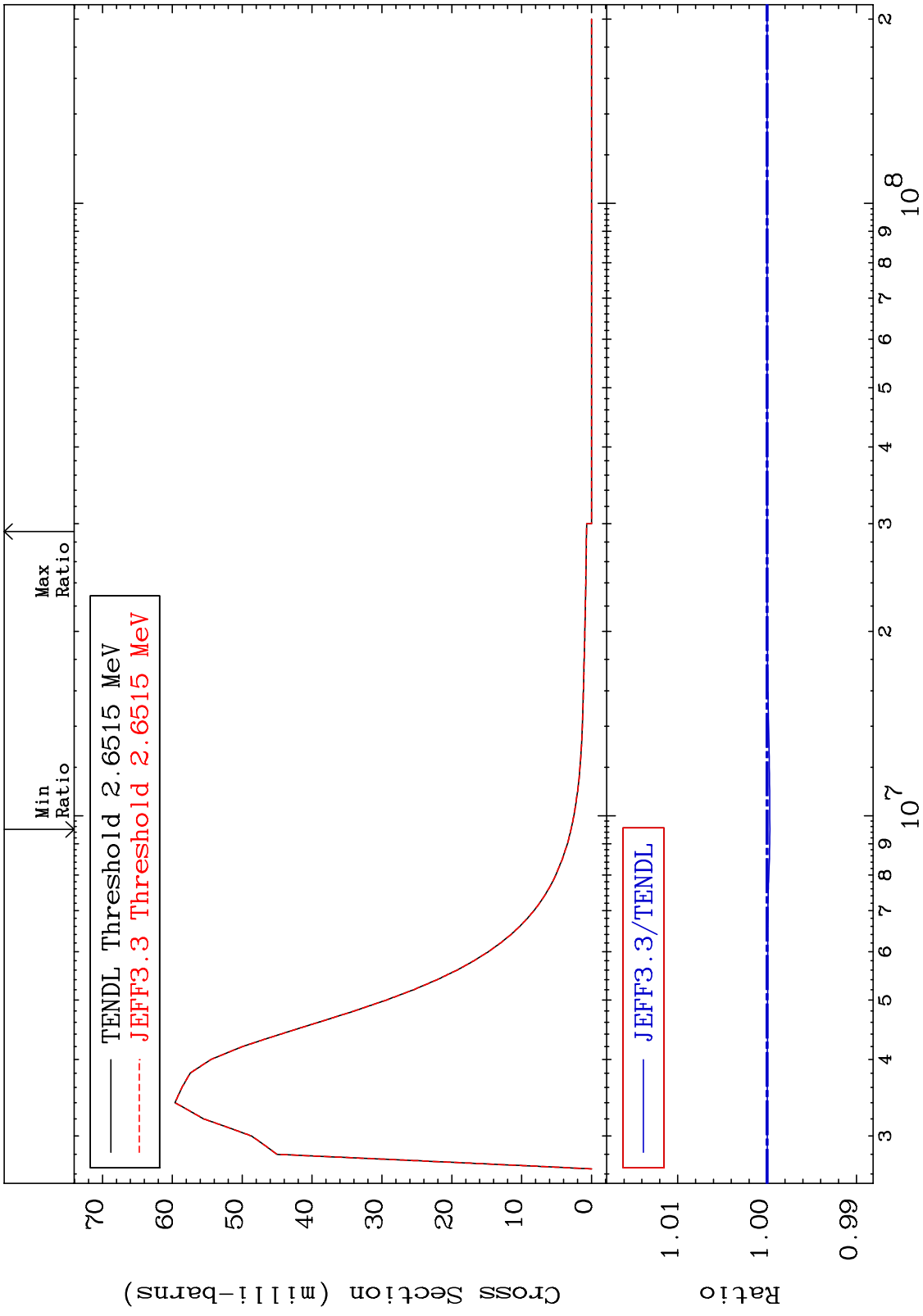
MAT 2328 MT= 59 (n,n') Level Cross Section 23-V -51
 -0.033 To 0.000 %



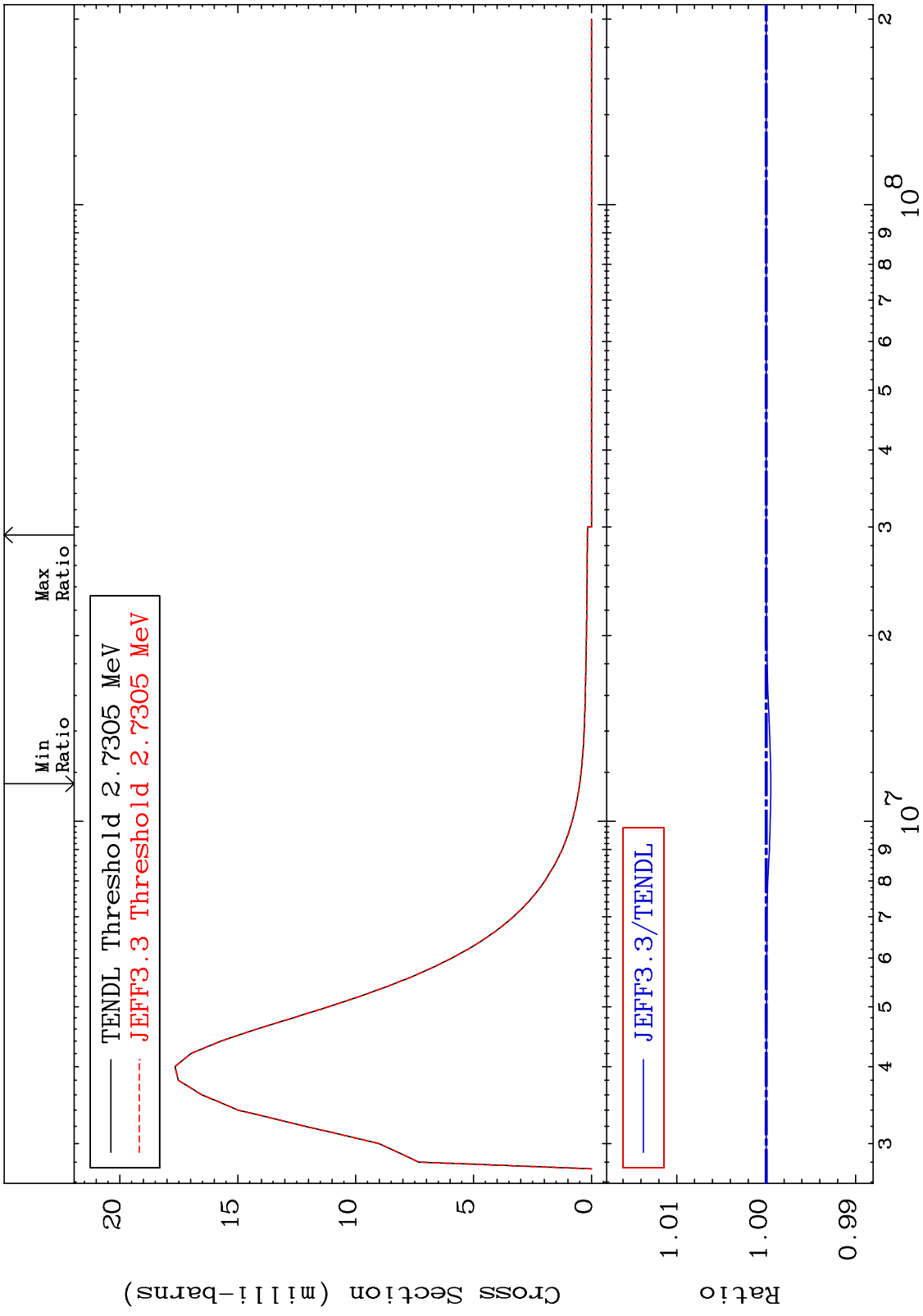
MAT 2328 MT= 60 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



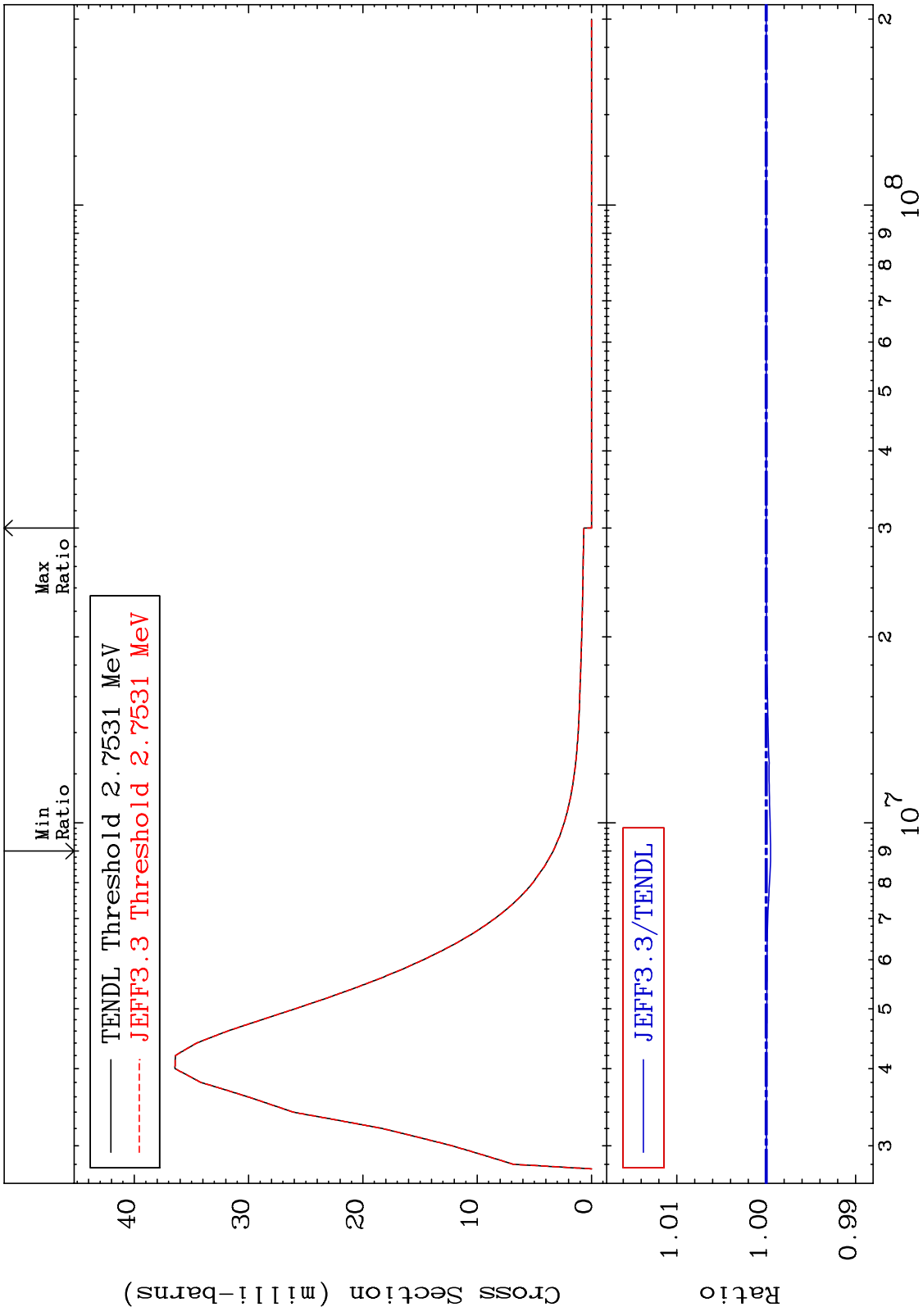
MAT 2328 MT= 61 (n,n') Level Cross Section -0.031 To 0.000 % 23-V -51



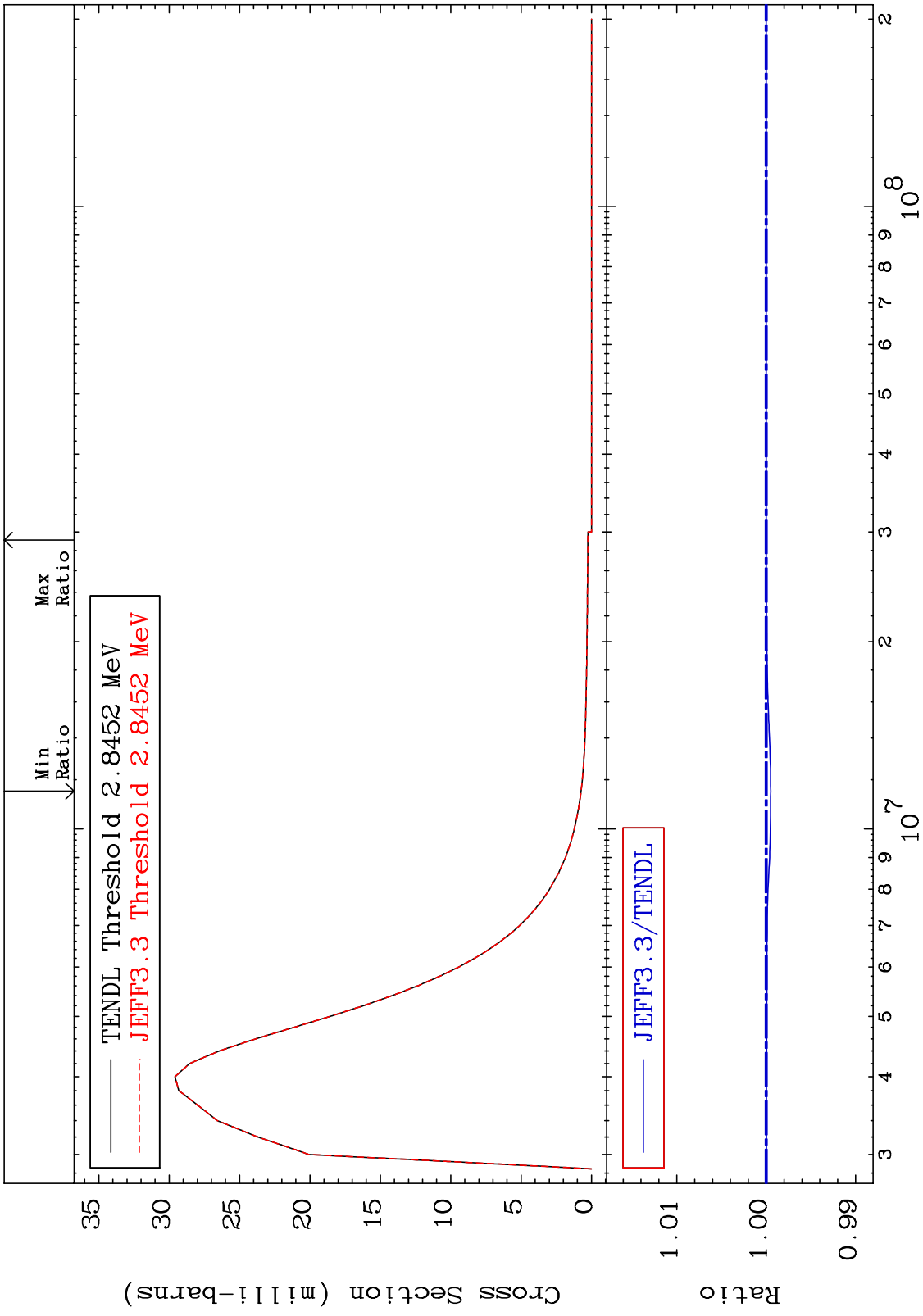
MAT 2328 MT= 62 (n,n') Level Cross Section 23-V -51
 -0.051 To 0.000 %



MAT 2328 MT= 63 (n,n') Level Cross Section 23-V -51
 -0.049 To 0.000 %

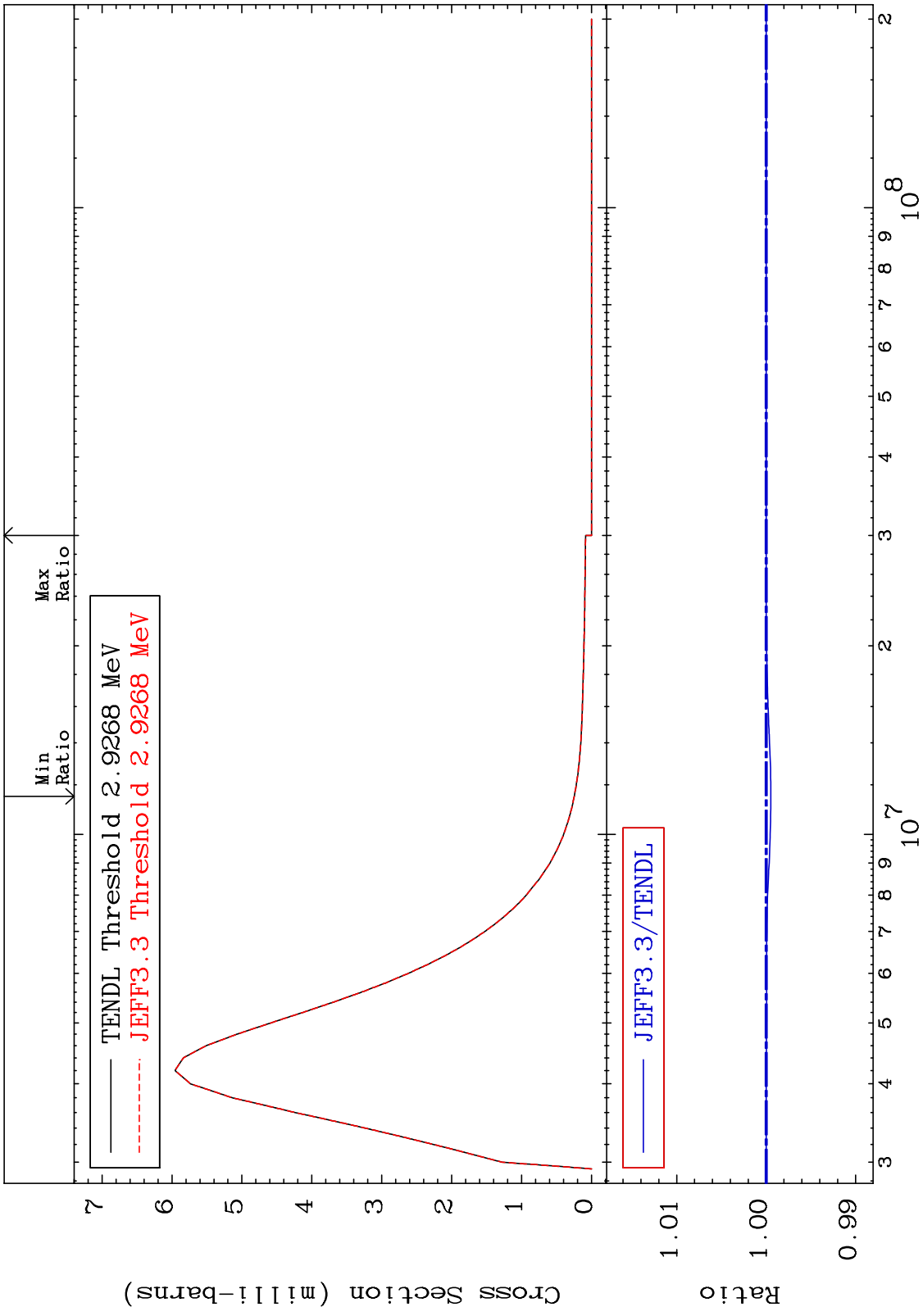


MAT 2328 MT= 64 (n,n') Level Cross Section 23-V -51
 -0.050 To 0.000 %

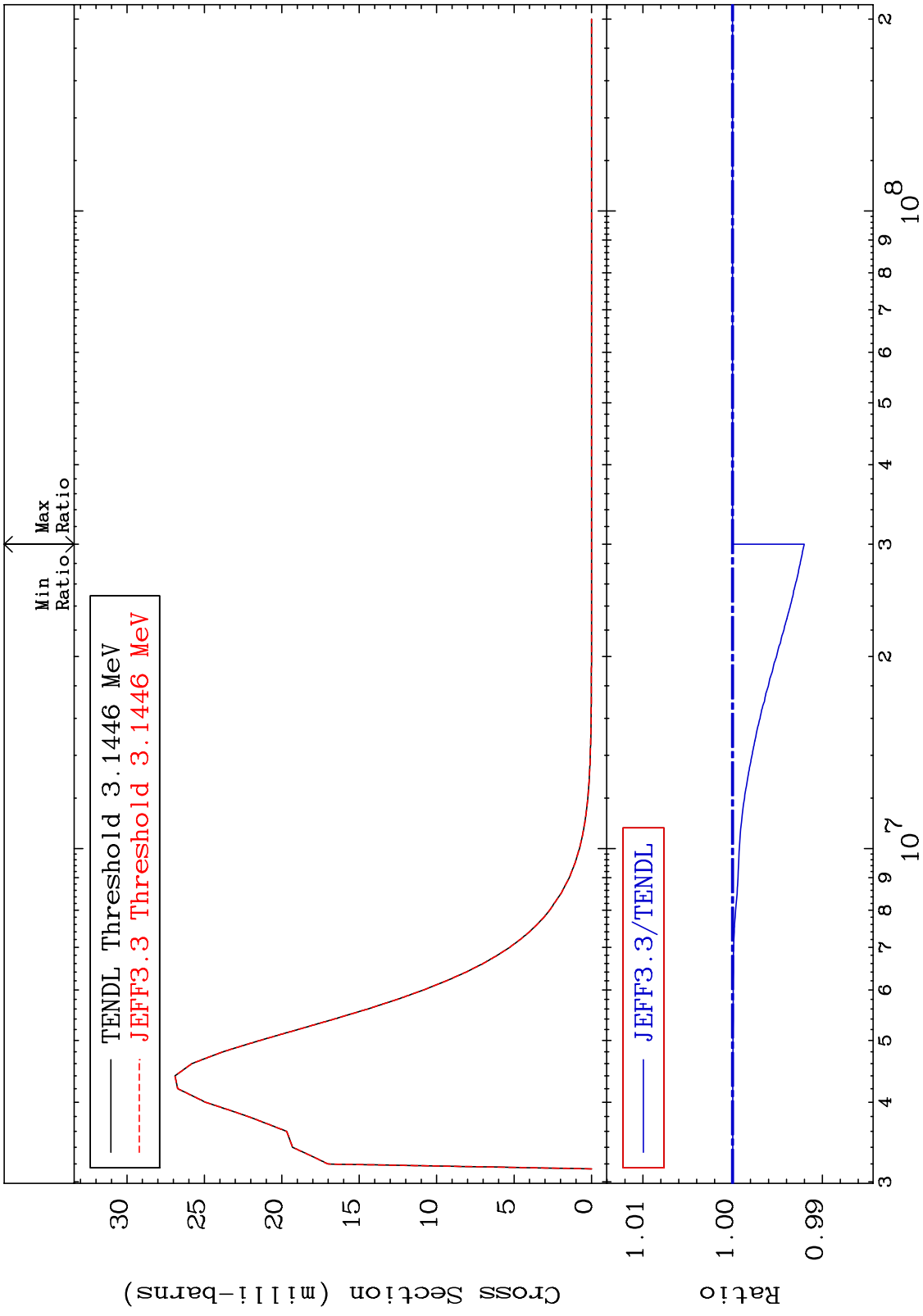


30 Incident Energy (eV) 23-V -51

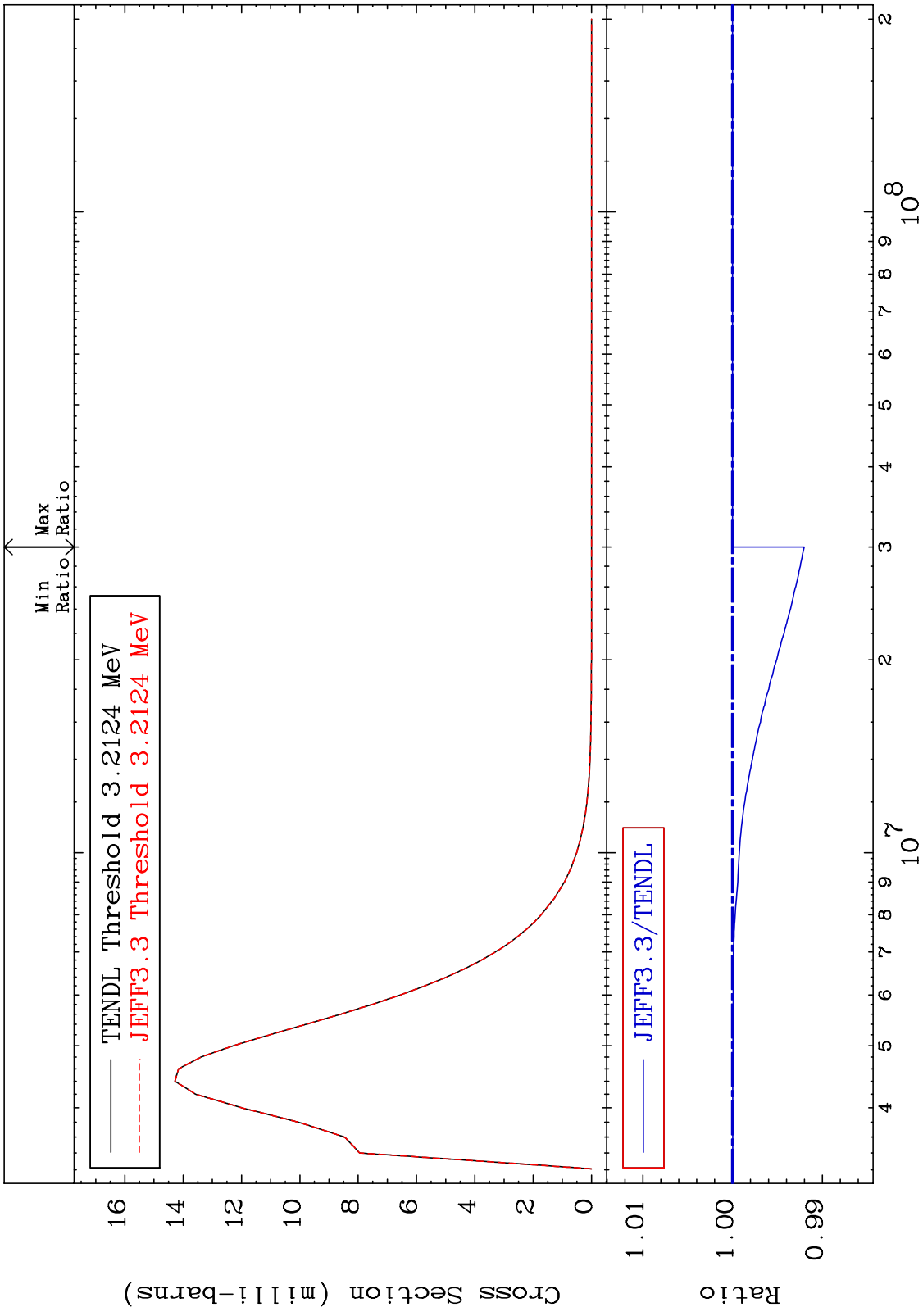
MAT 2328 MT= 65 (n,n') Level Cross Section 23-V -51
 -0.052 To 0.000 %



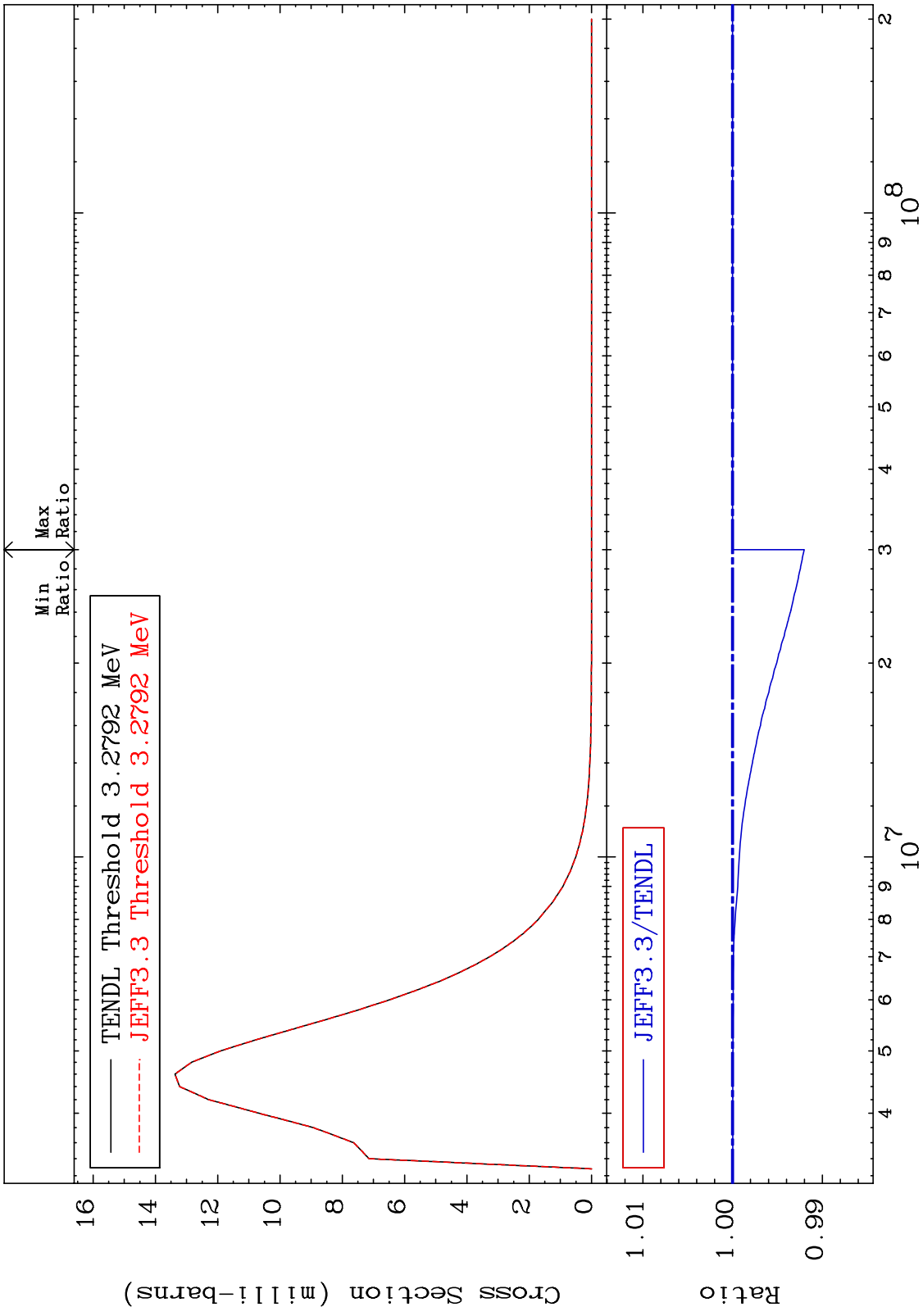
MAT 2328 MT= 66 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



MAT 2328 MT= 67 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %

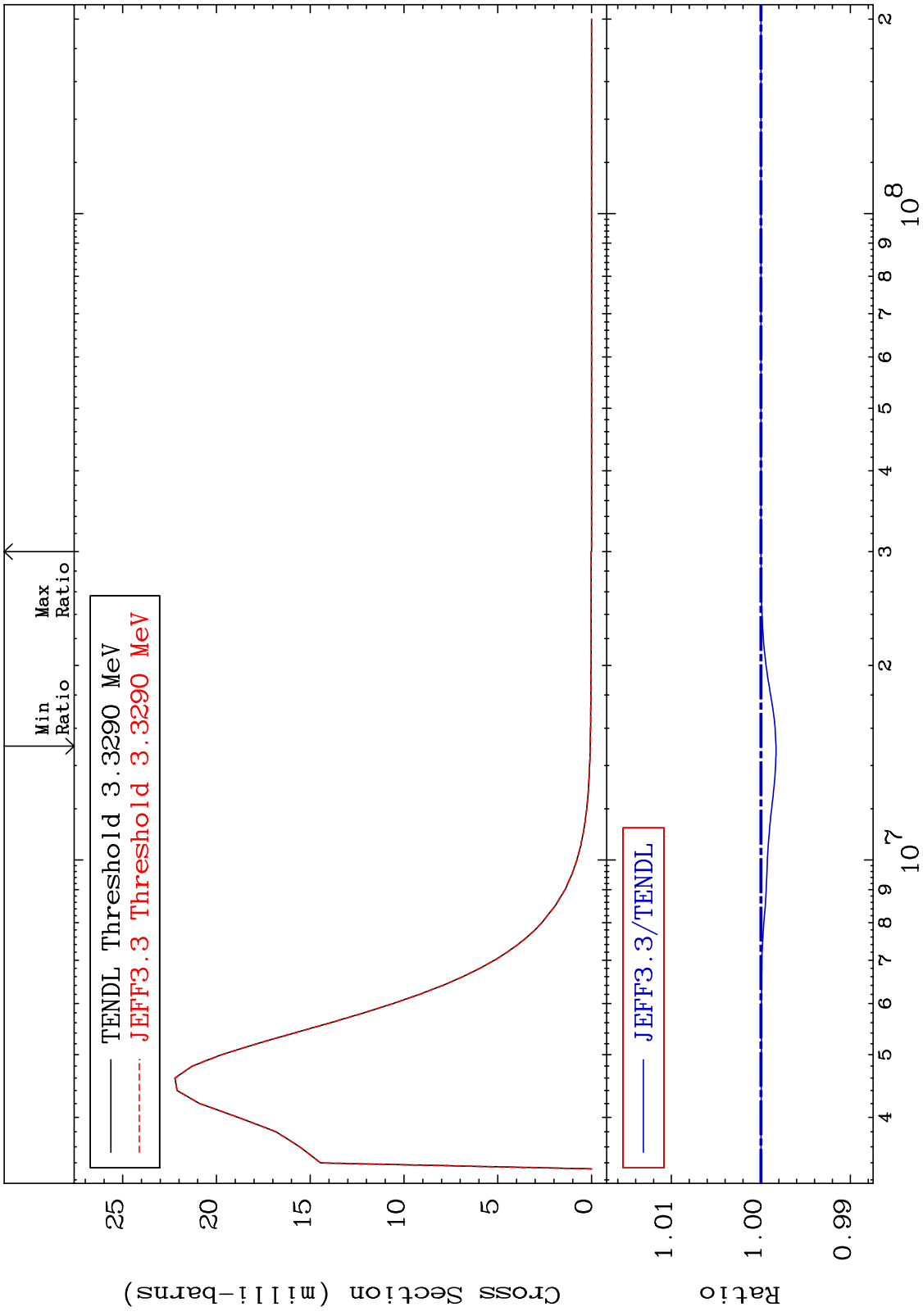


MAT 2328 MT= 68 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %

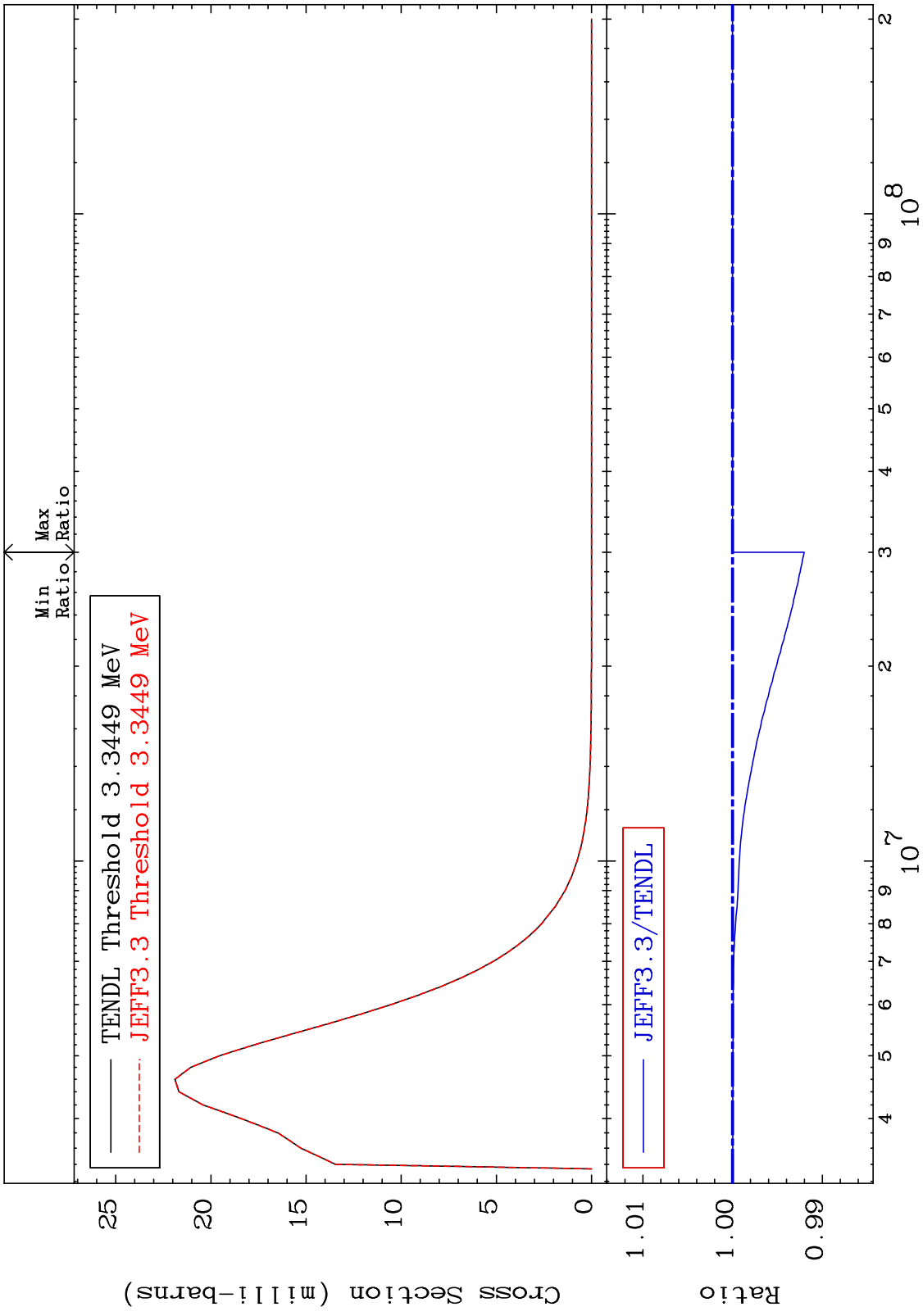


34 23-V -51

MAT 2328 MT= 69 (n,n') Level Cross Section 23-V -51
 -0.169 To 0.000 %



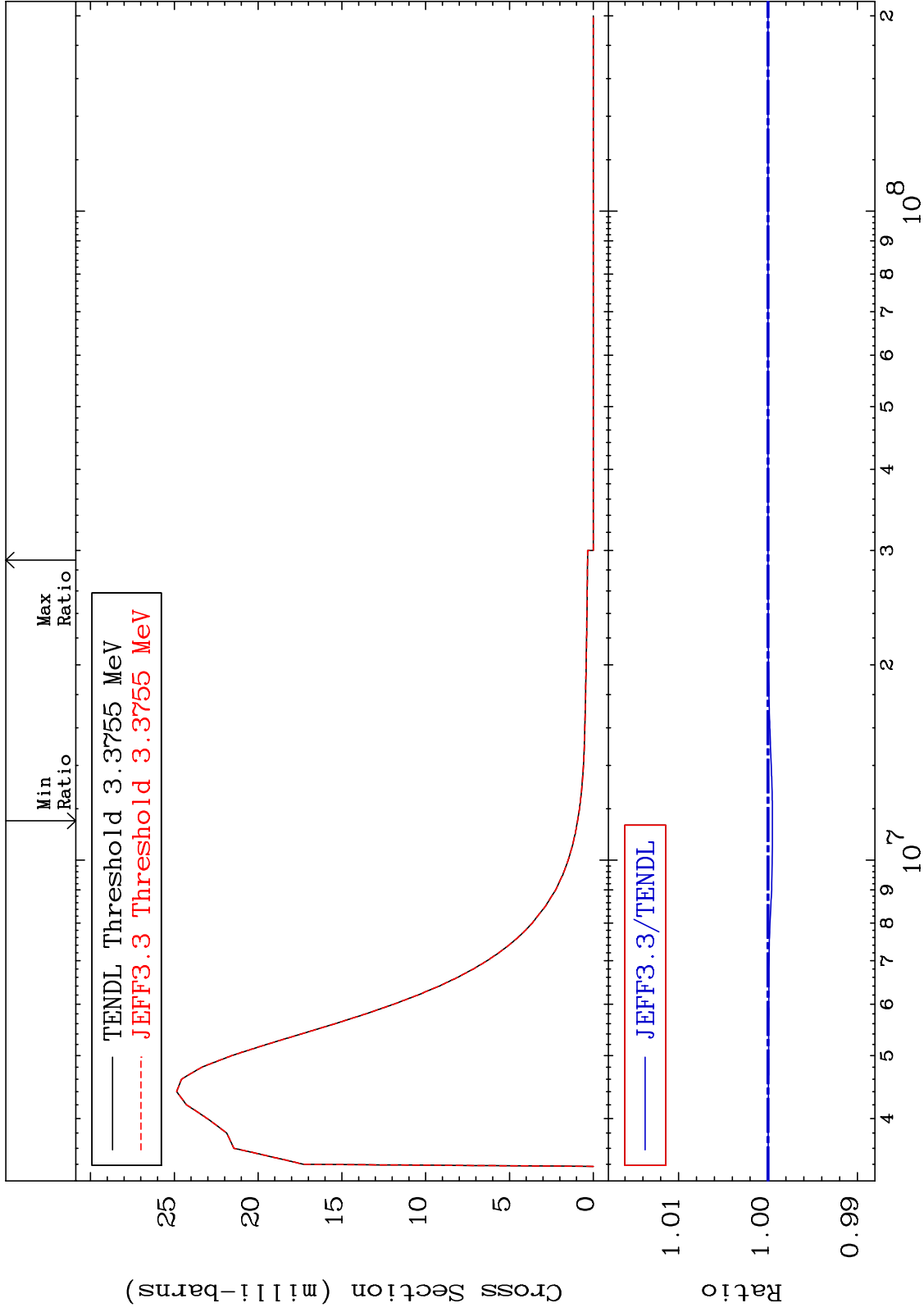
MAT 2328 MT= 70 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



MAT 2328

MT= 71 (n,n') Level
Cross Section

23-V -51
-0.049 To 0.000 %

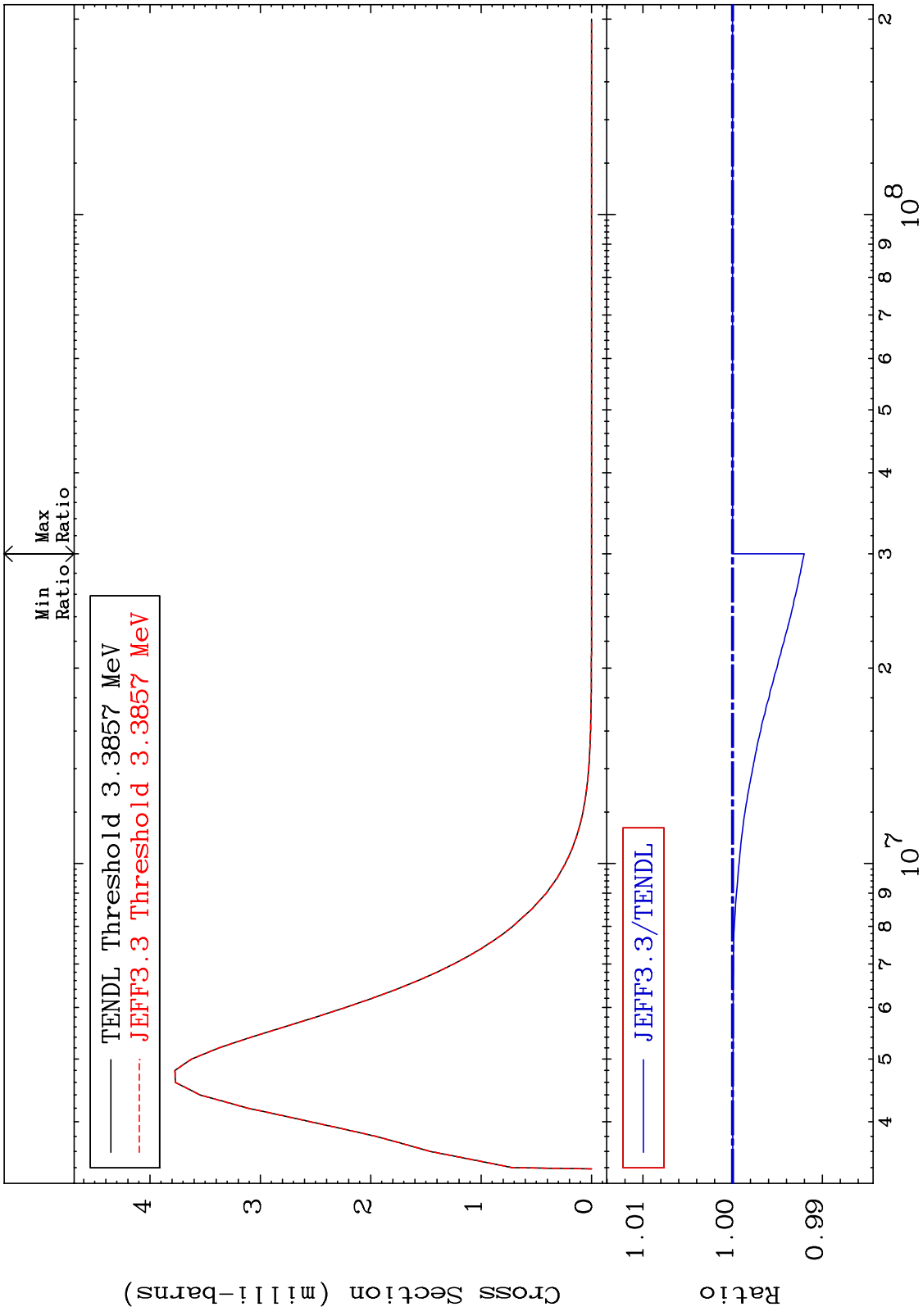


37

Incident Energy (eV)

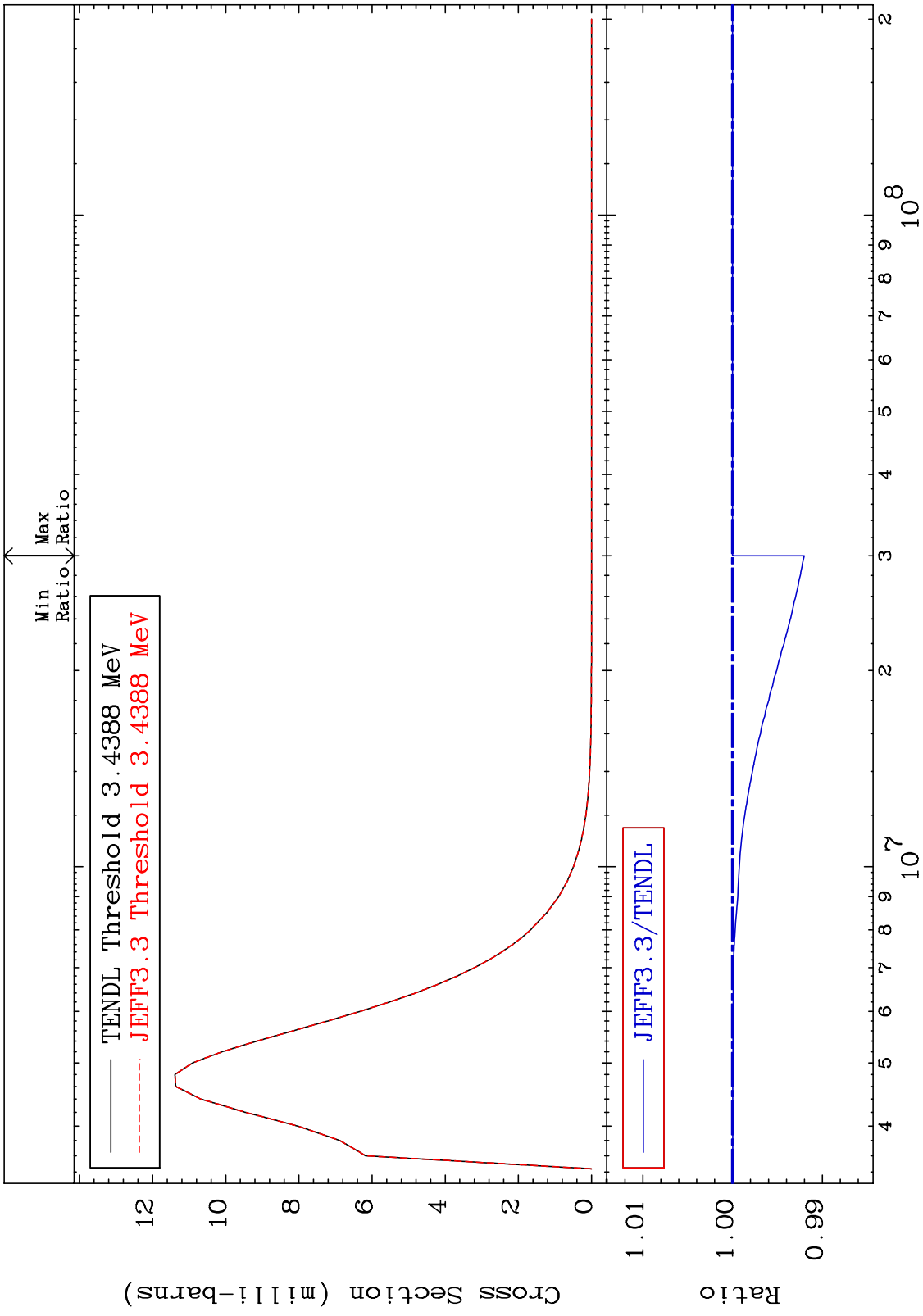
23-V -51

MAT 2328 MT= 72 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



38 Incident Energy (eV) 23-V -51

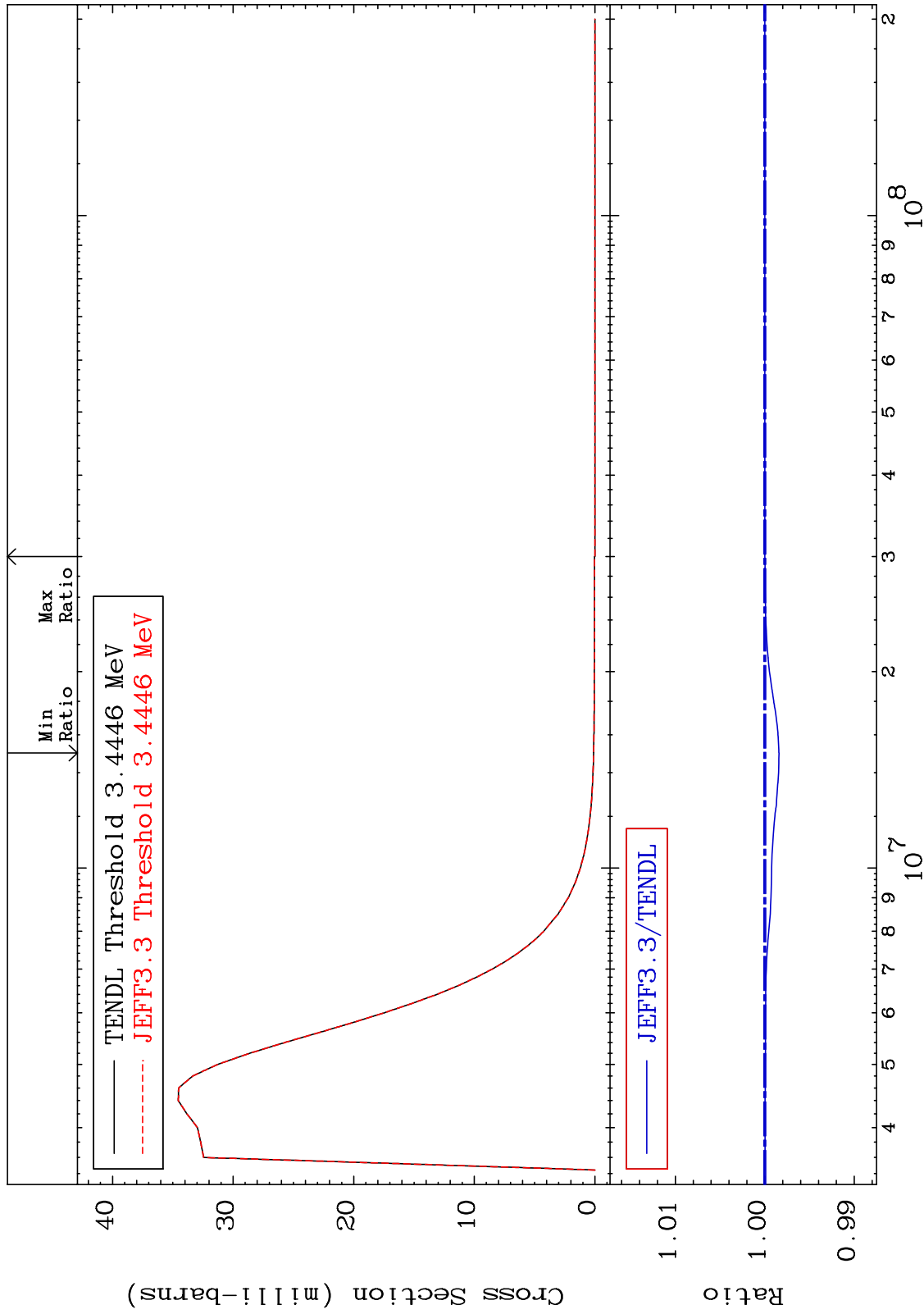
MAT 2328 MT= 73 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



MAT 2328

MT= 74 (n,n') Level
Cross Section

23-V -51
-0.158 To 0.000 %

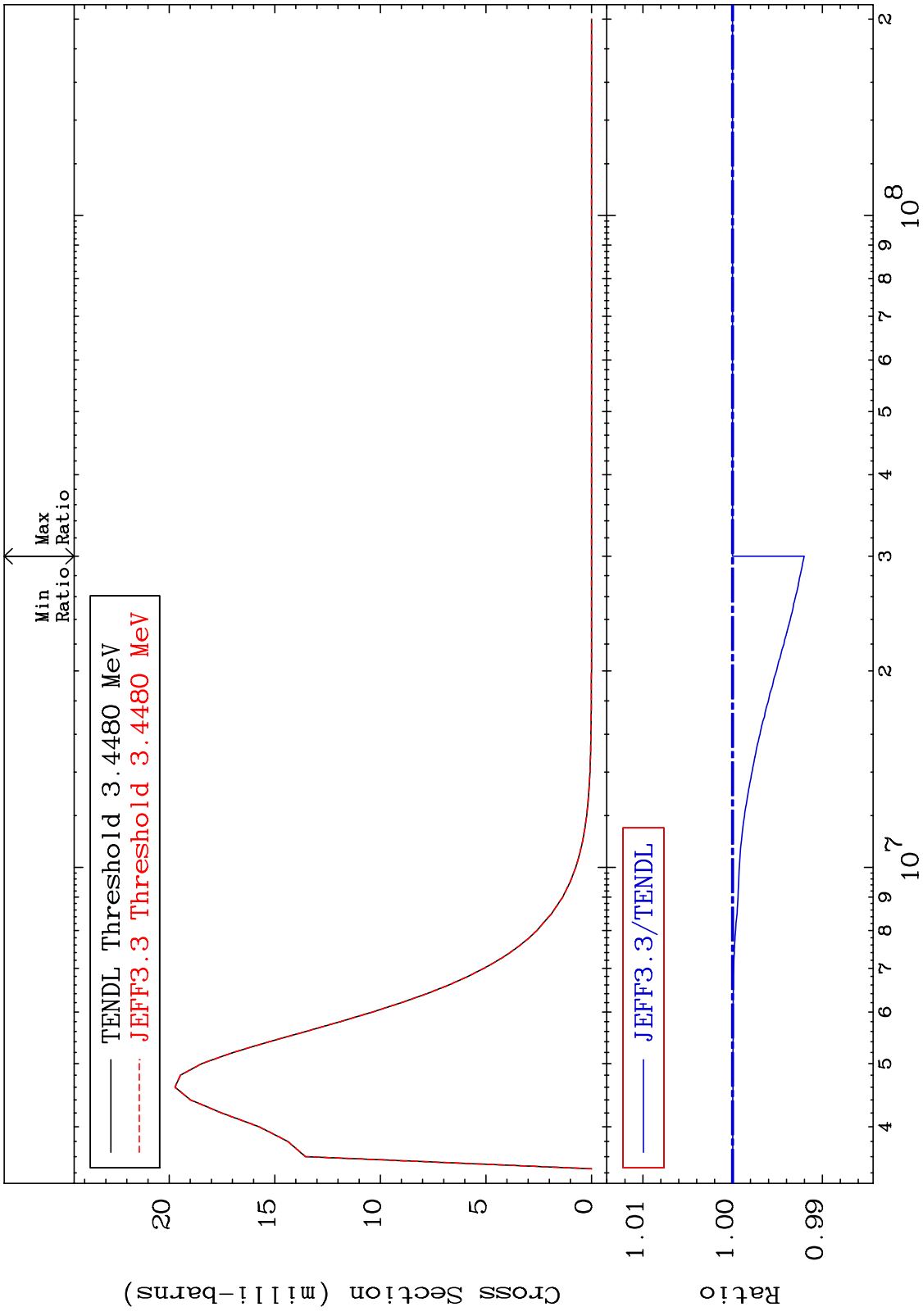


40

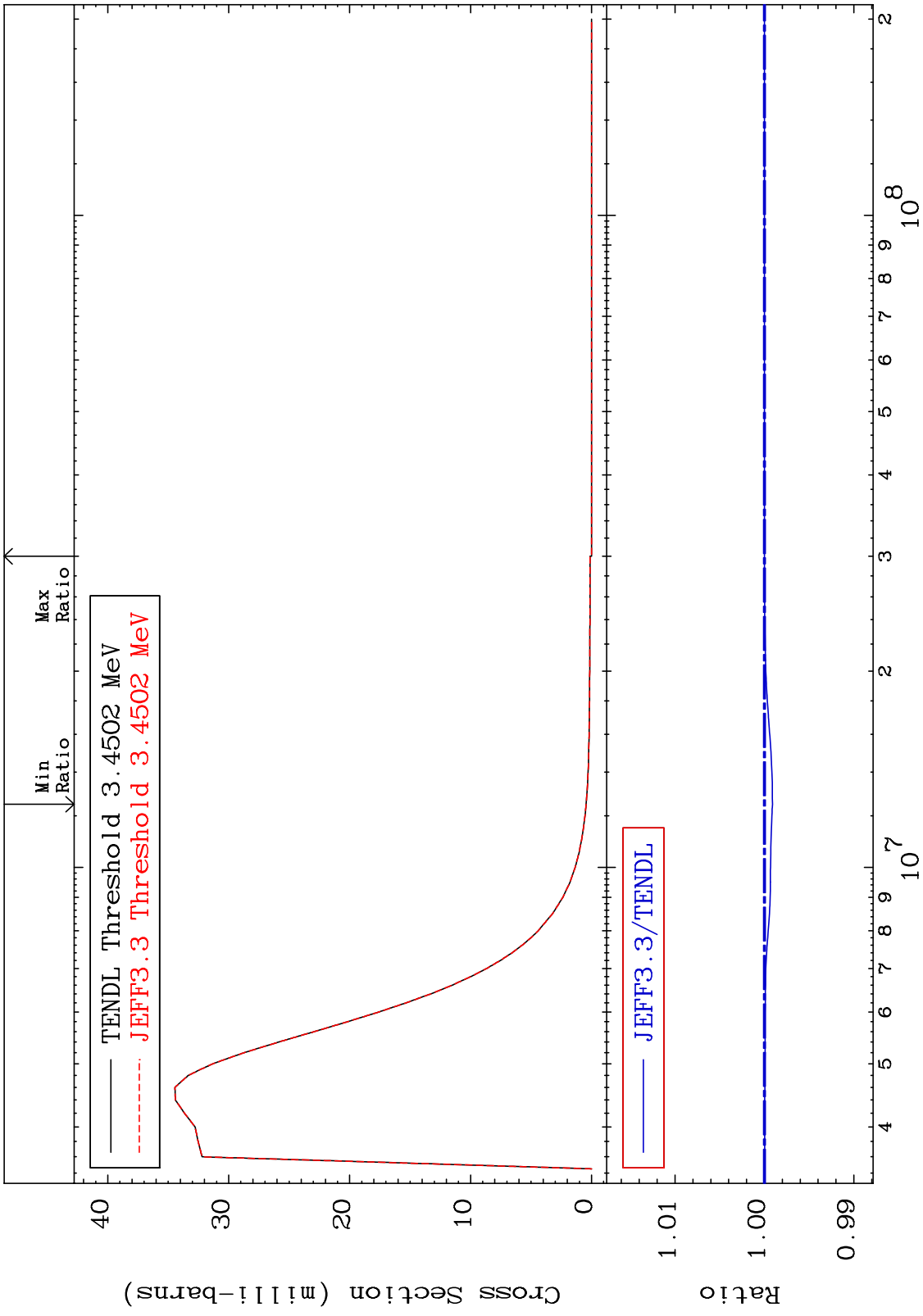
Incident Energy (eV)

23-V -51

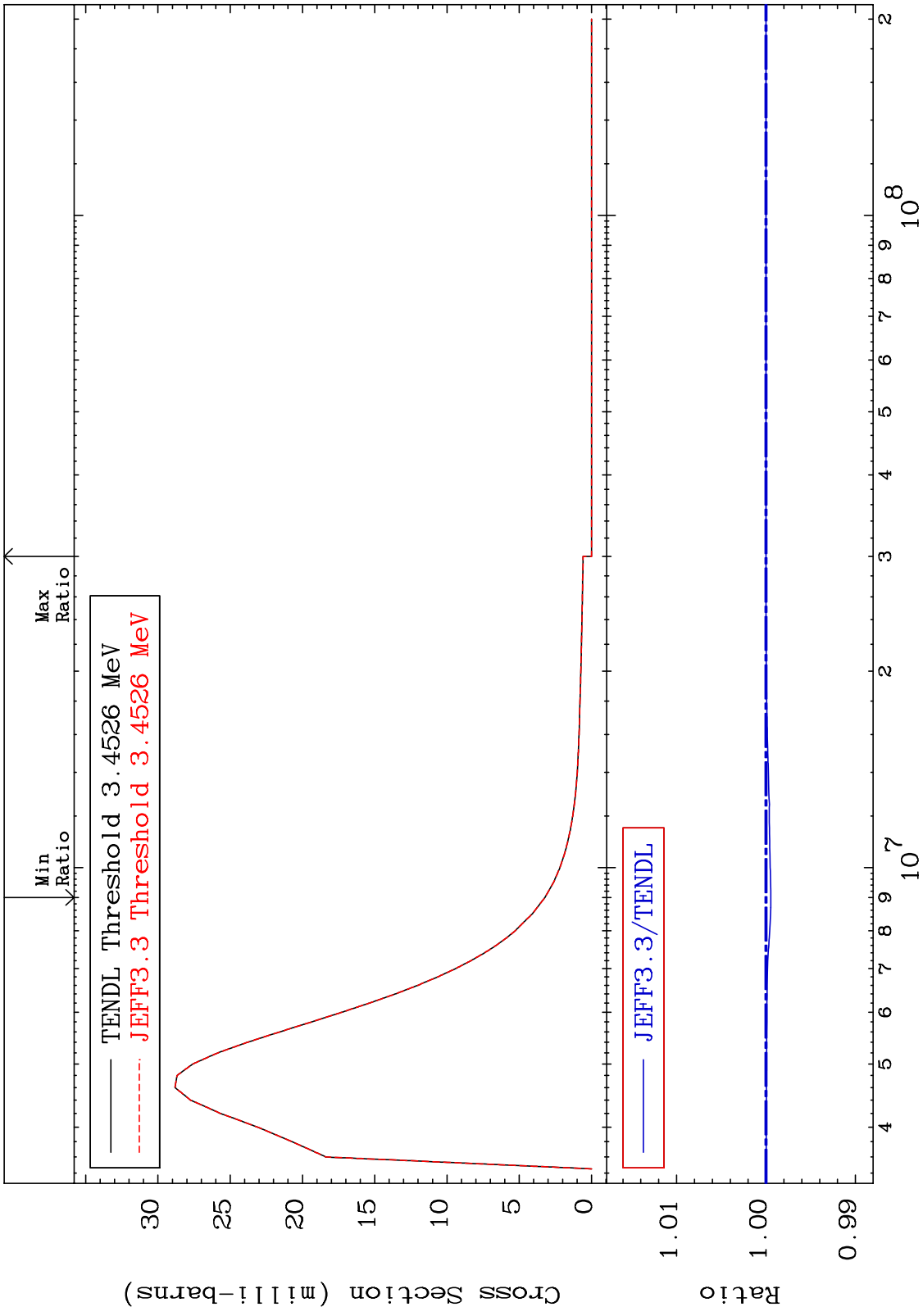
MAT 2328 MT= 75 (n,n') Level Cross Section 23-V -51
 -0.799 To 0.000 %



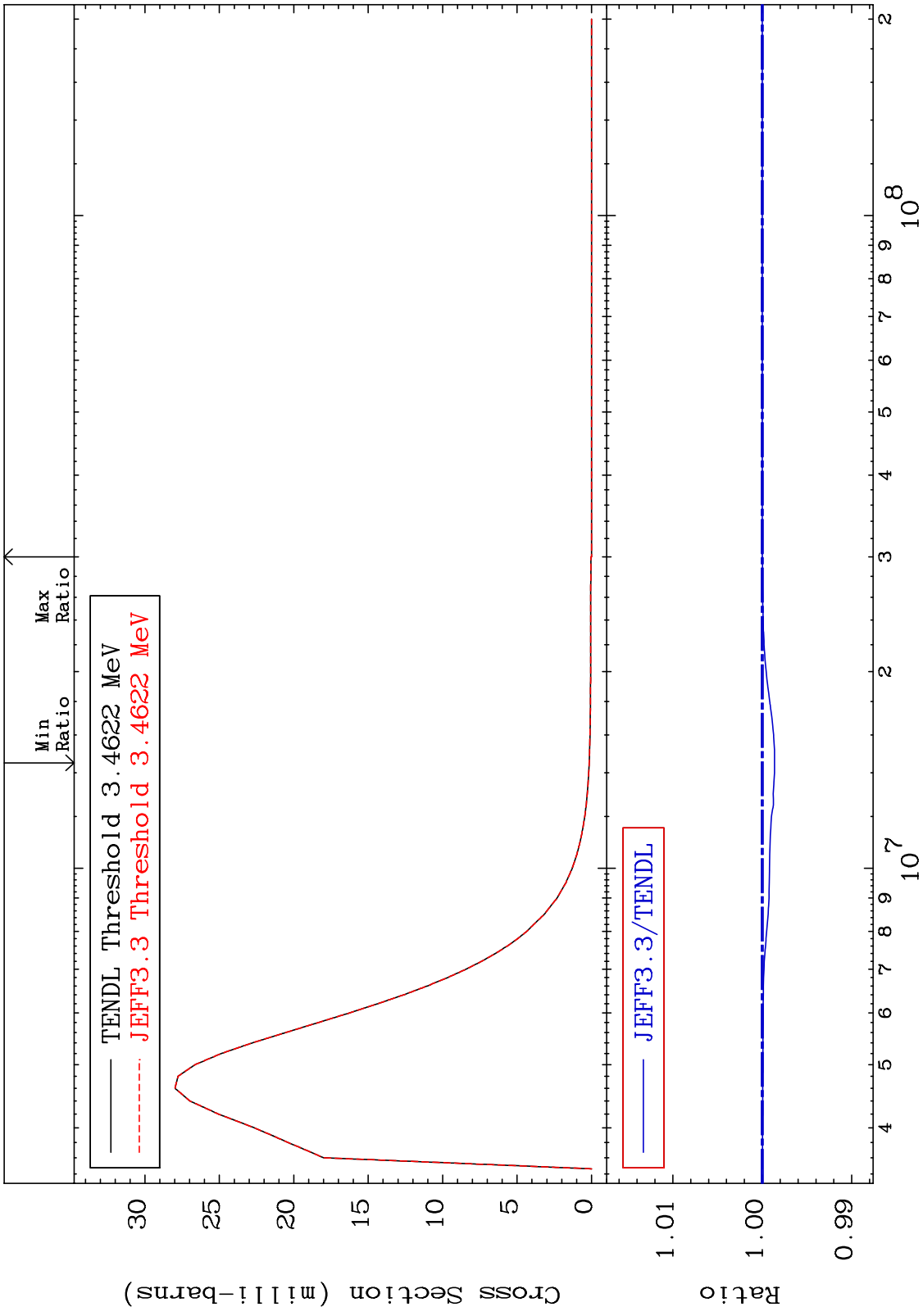
MAT 2328 MT= 76 (n,n') Level Cross Section 23-V -51
 -0.089 To 0.000 %



MAT 2328 MT= 77 (n,n') Level Cross Section 23-V -51
 -0.054 To 0.000 %



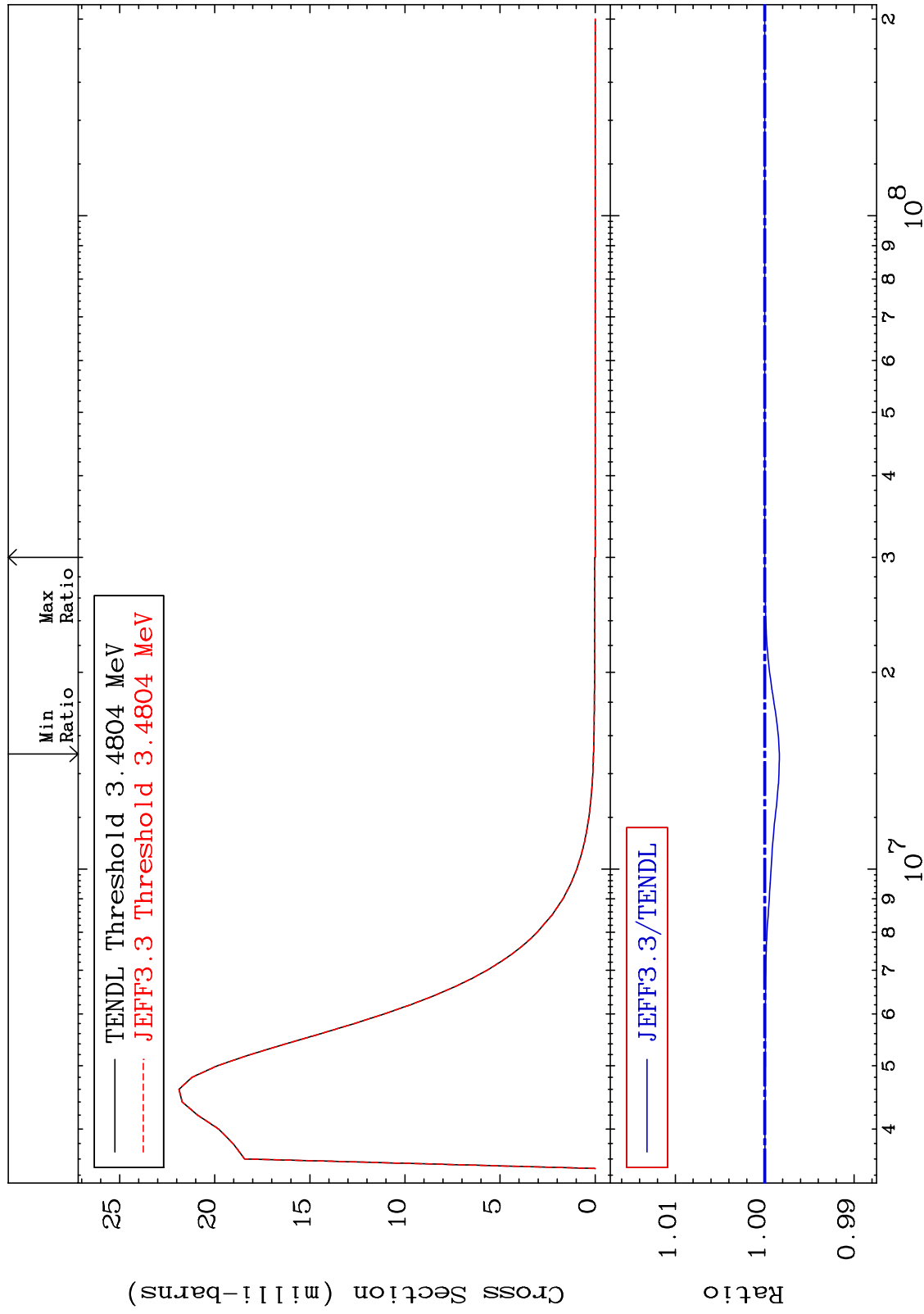
MAT 2328 MT= 78 (n,n') Level Cross Section 23-V -51
 -0.138 To 0.000 %



MAT 2328

MT= 79 (n,n') Level
Cross Section

23-V -51
-0.163 To 0.000 %

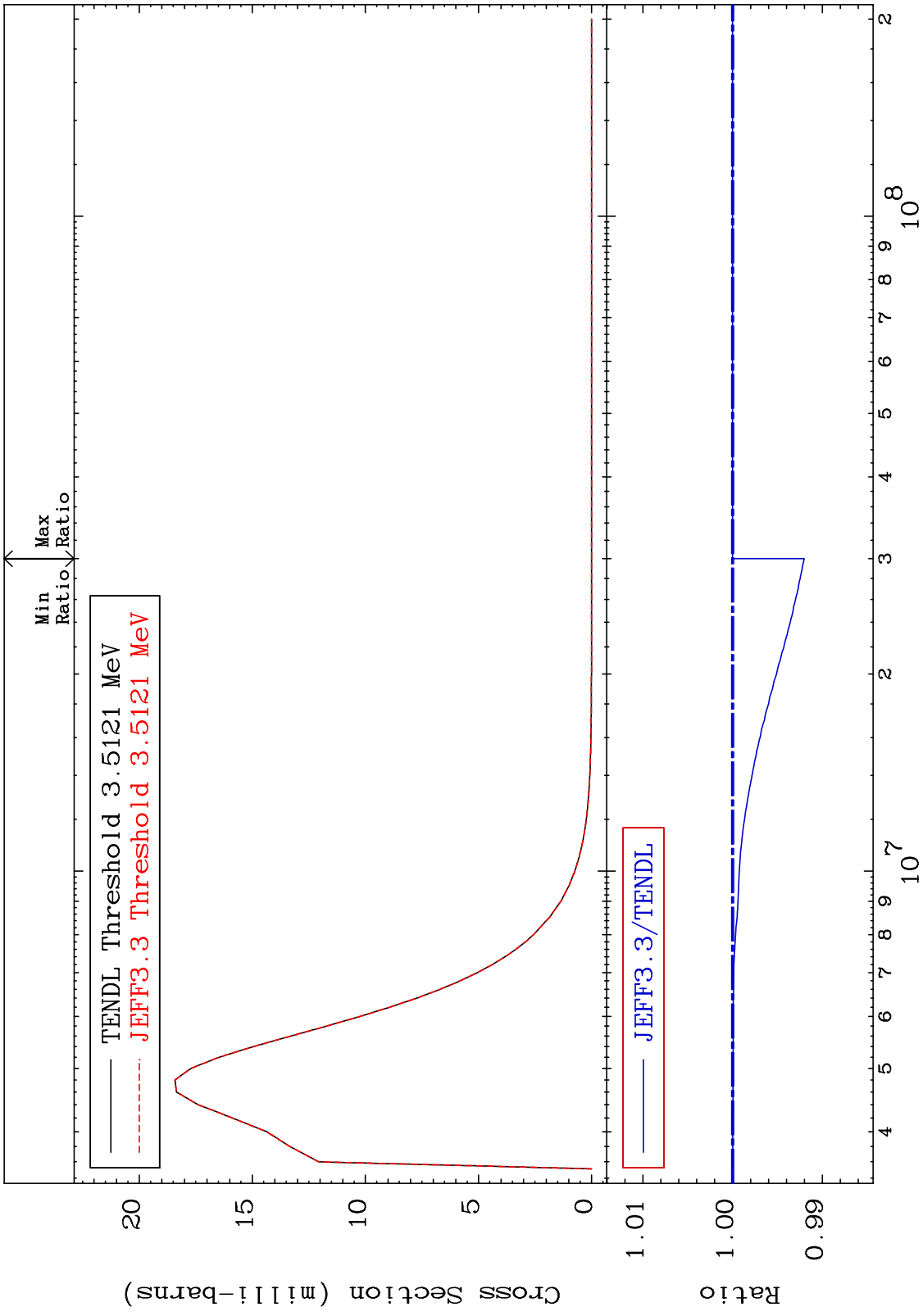


45

Incident Energy (eV)

23-V -51

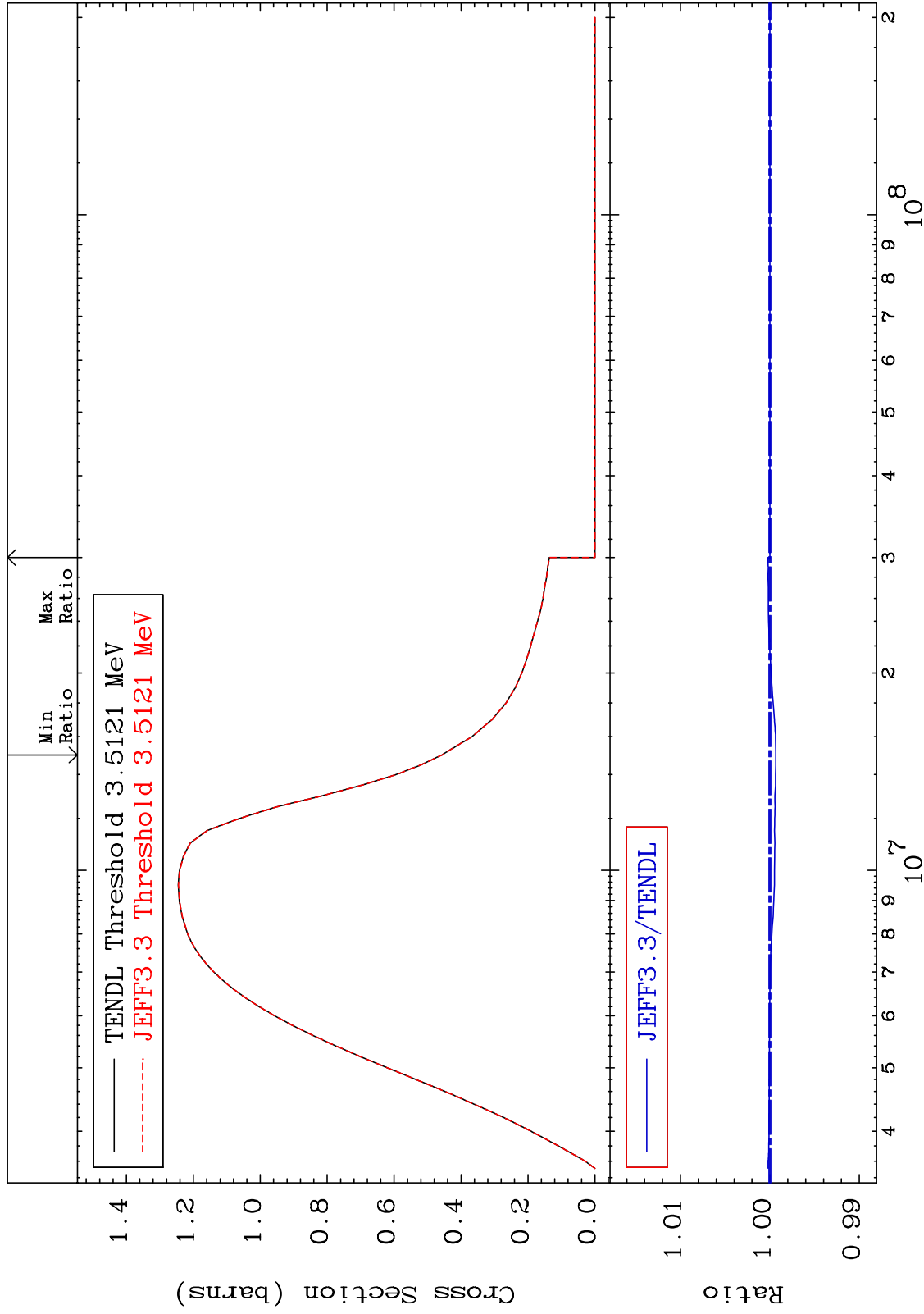
MAT 2328 MT= 80 (n,n') Level Cross Section 23-V -51
 -0.798 To 0.000 %



MAT 2328

(n, n') Continuum
Cross Section

23-V -51
-0.067 To 0.022 %



47

Incident Energy (eV)

23-V -51

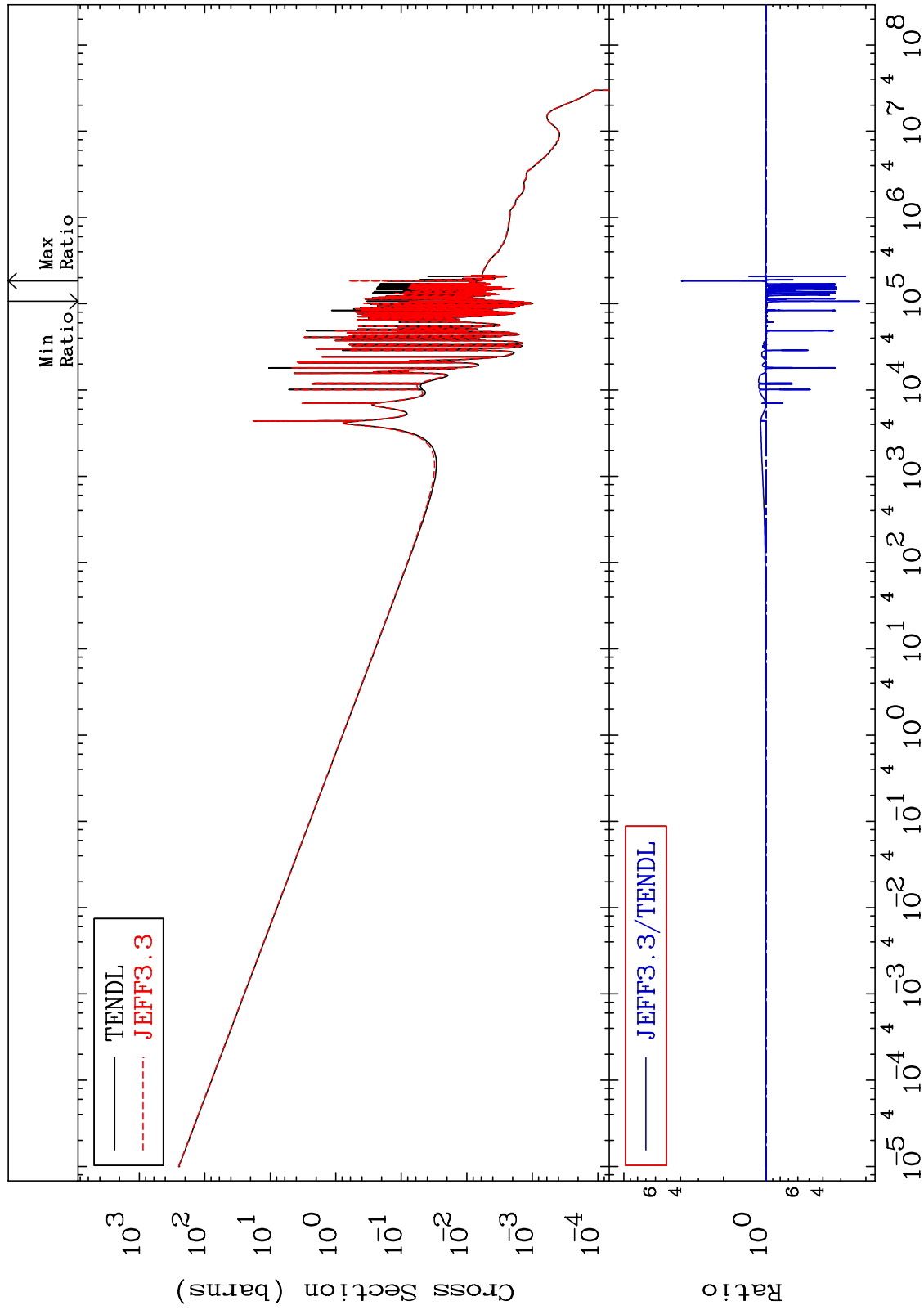
MAT 2328

(n, γ)

23-V -51

Cross Section

-77.94 To 294.0 %



MAT 2328

(n,p)

23-V -51

-82.63 To 0.031 %

Cross Section

Min Ratio

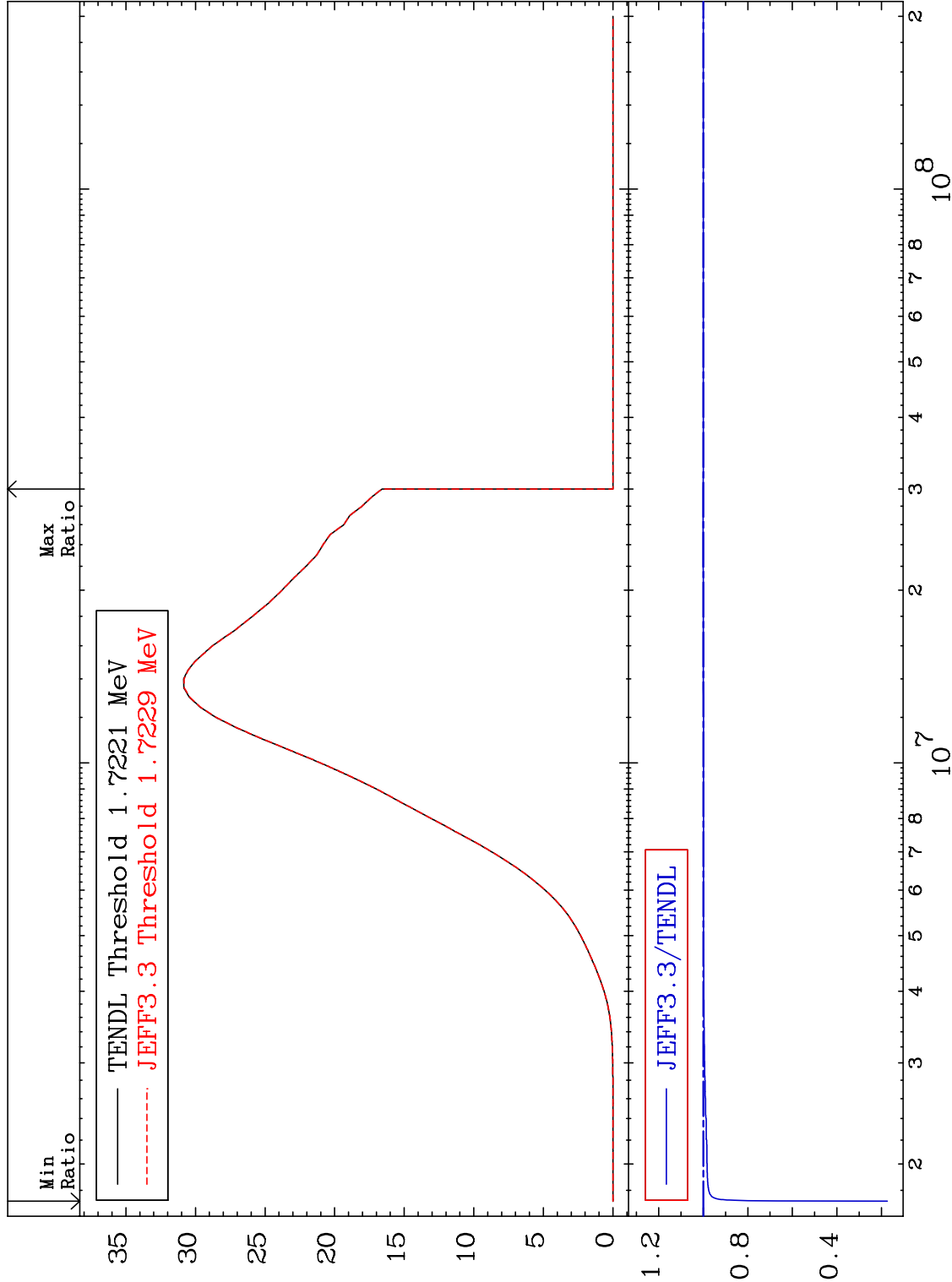
Max Ratio

TENDL Threshold 1.7221 MeV
JEFF3.3 Threshold 1.7229 MeV

JEFF3.3/TENDL

Cross Section (milli-barns)

Ratio



MAT 2328

23-V -51

(n,d) -34.02 To 0.000 %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 5.9521 MeV
JEFF3.3 Threshold 5.9530 MeV

Cross Section (milli-barns)

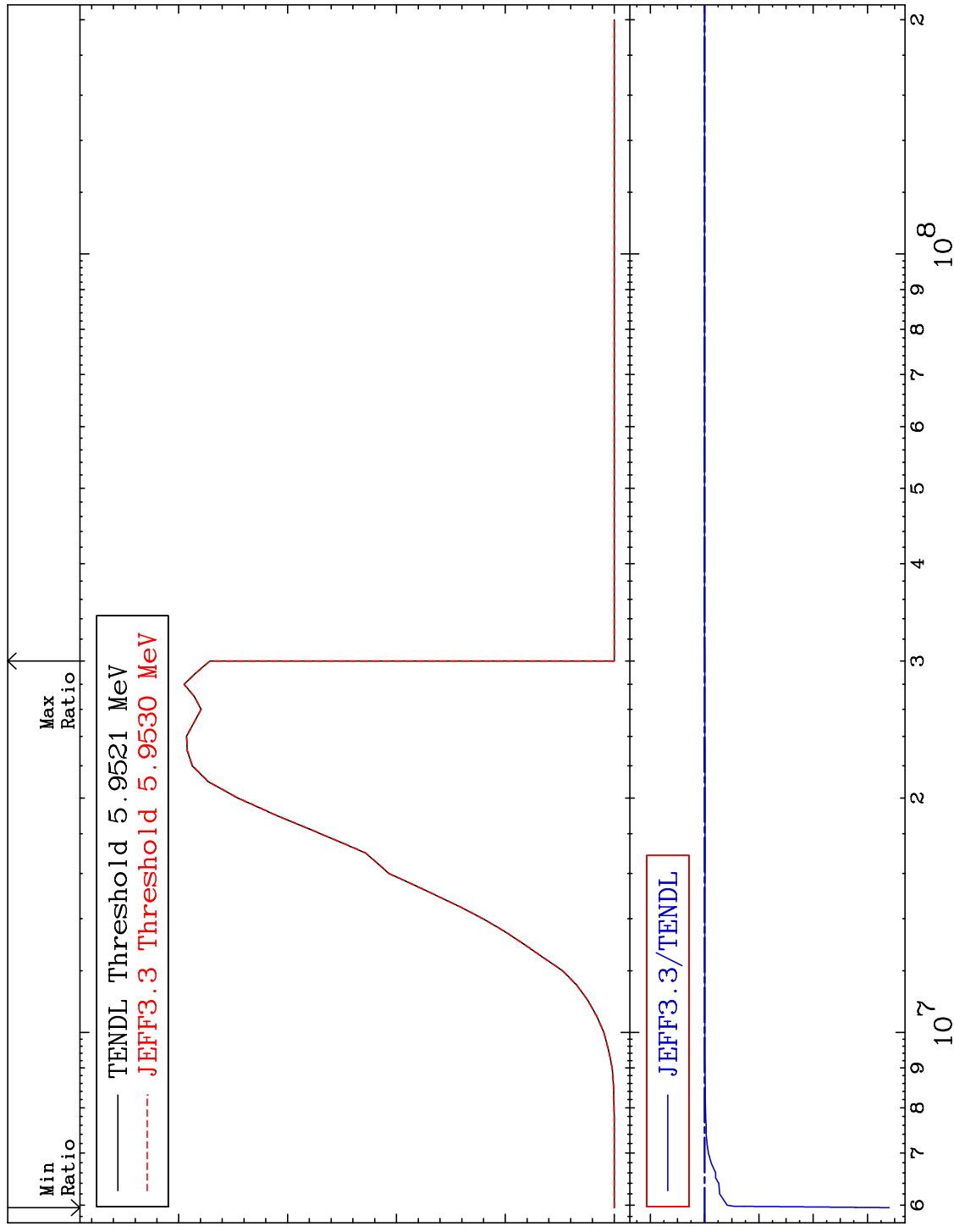
JEFF3.3/TENDL

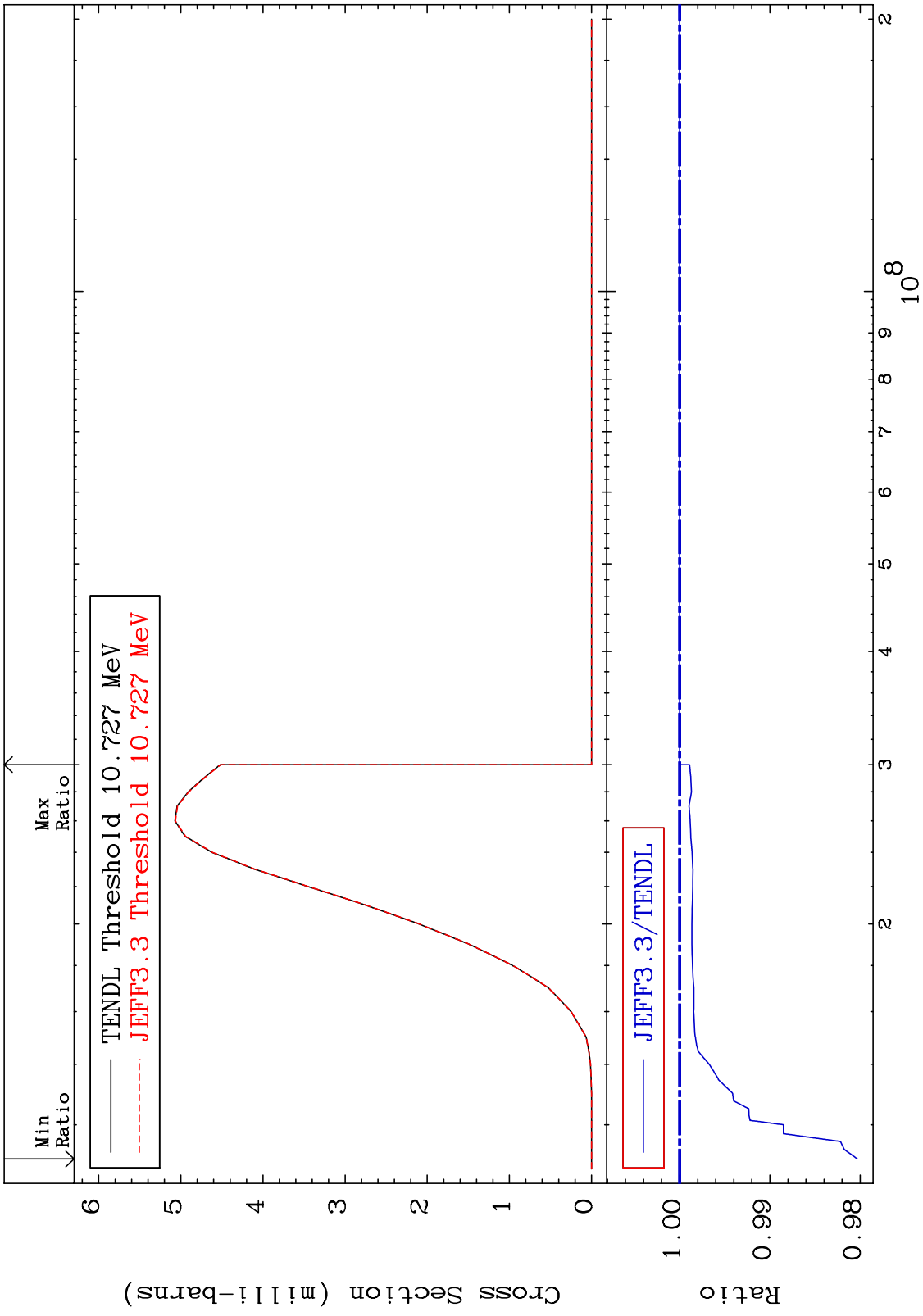
Ratio

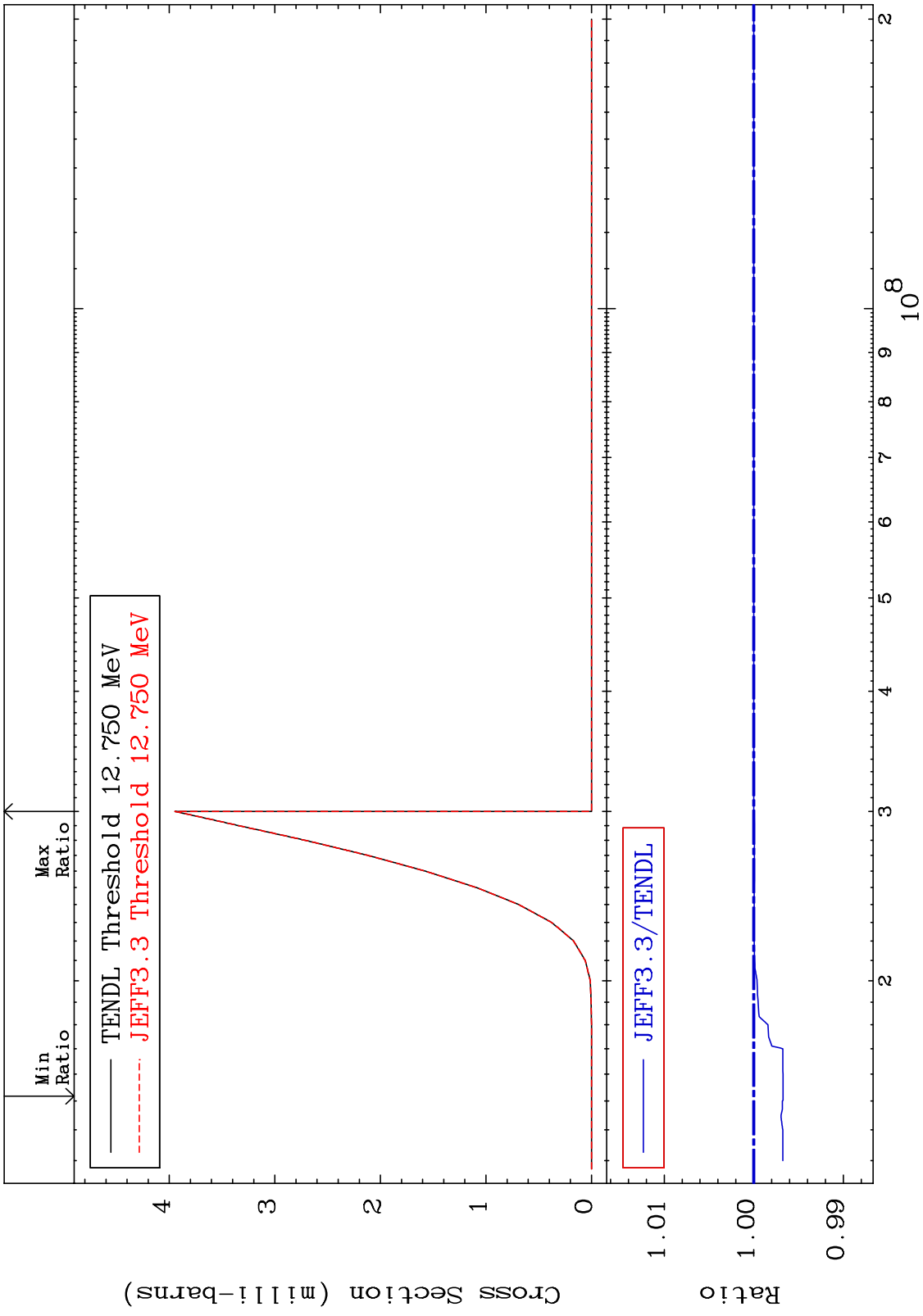
50

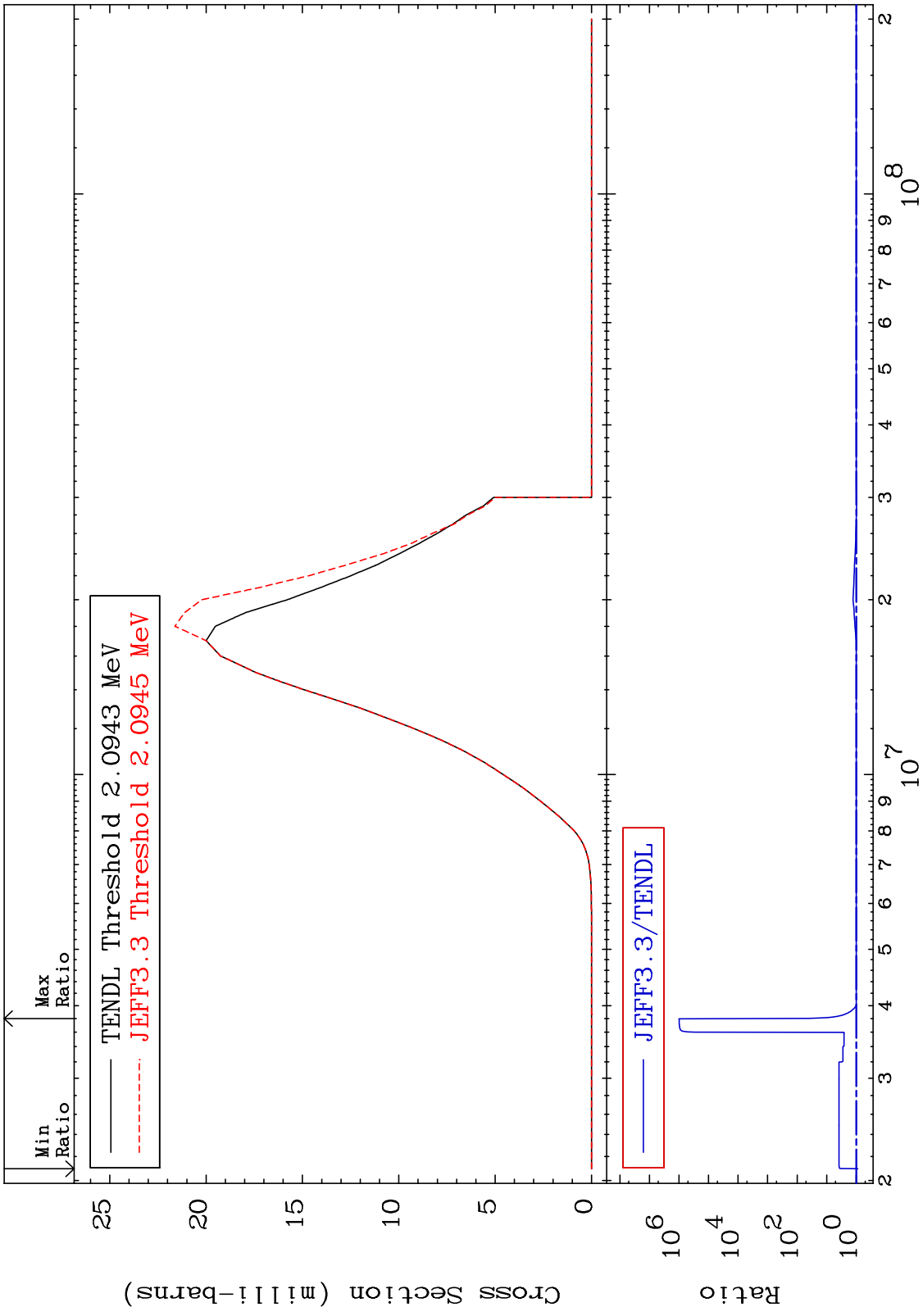
Incident Energy (eV)

23-V -51

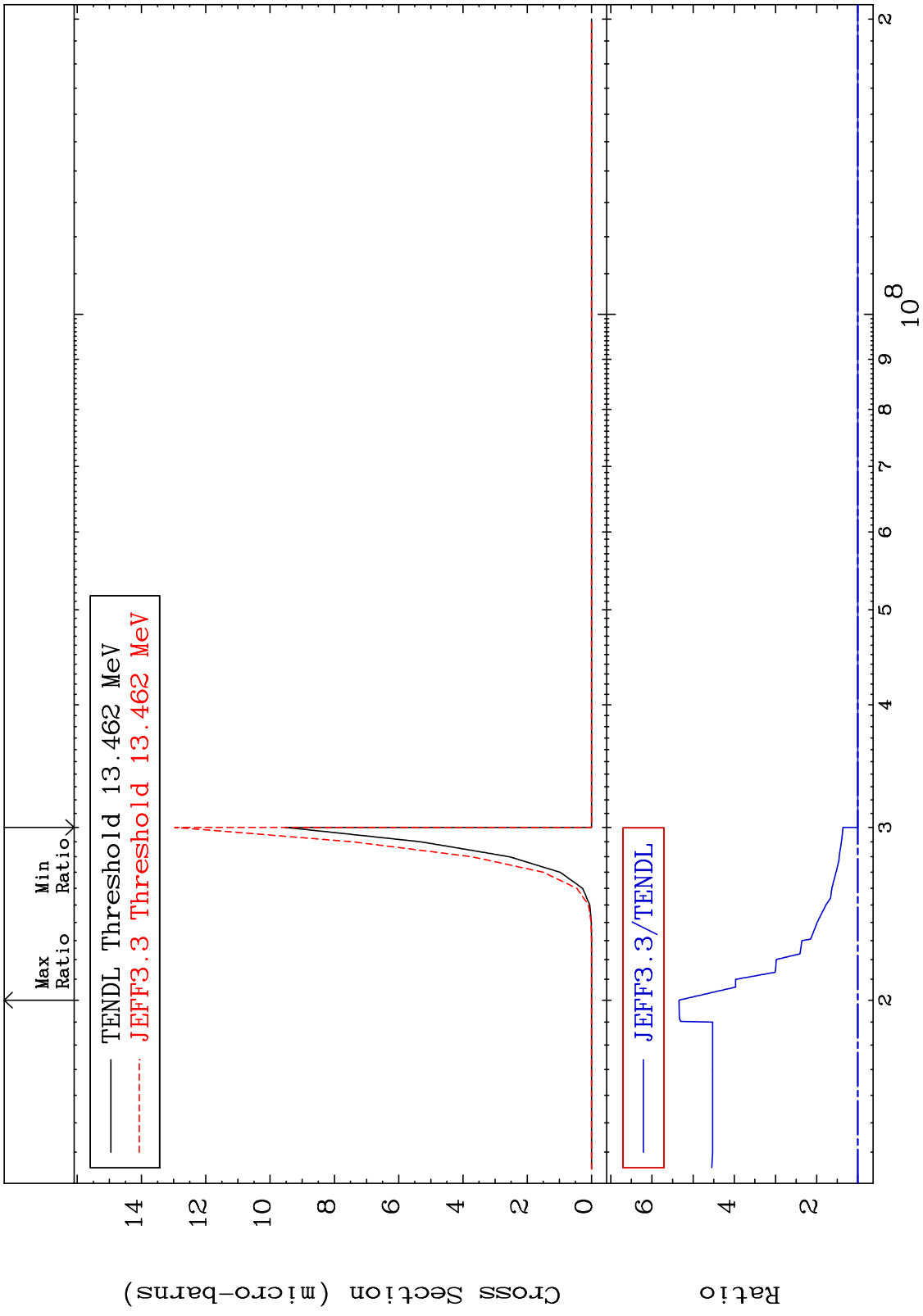




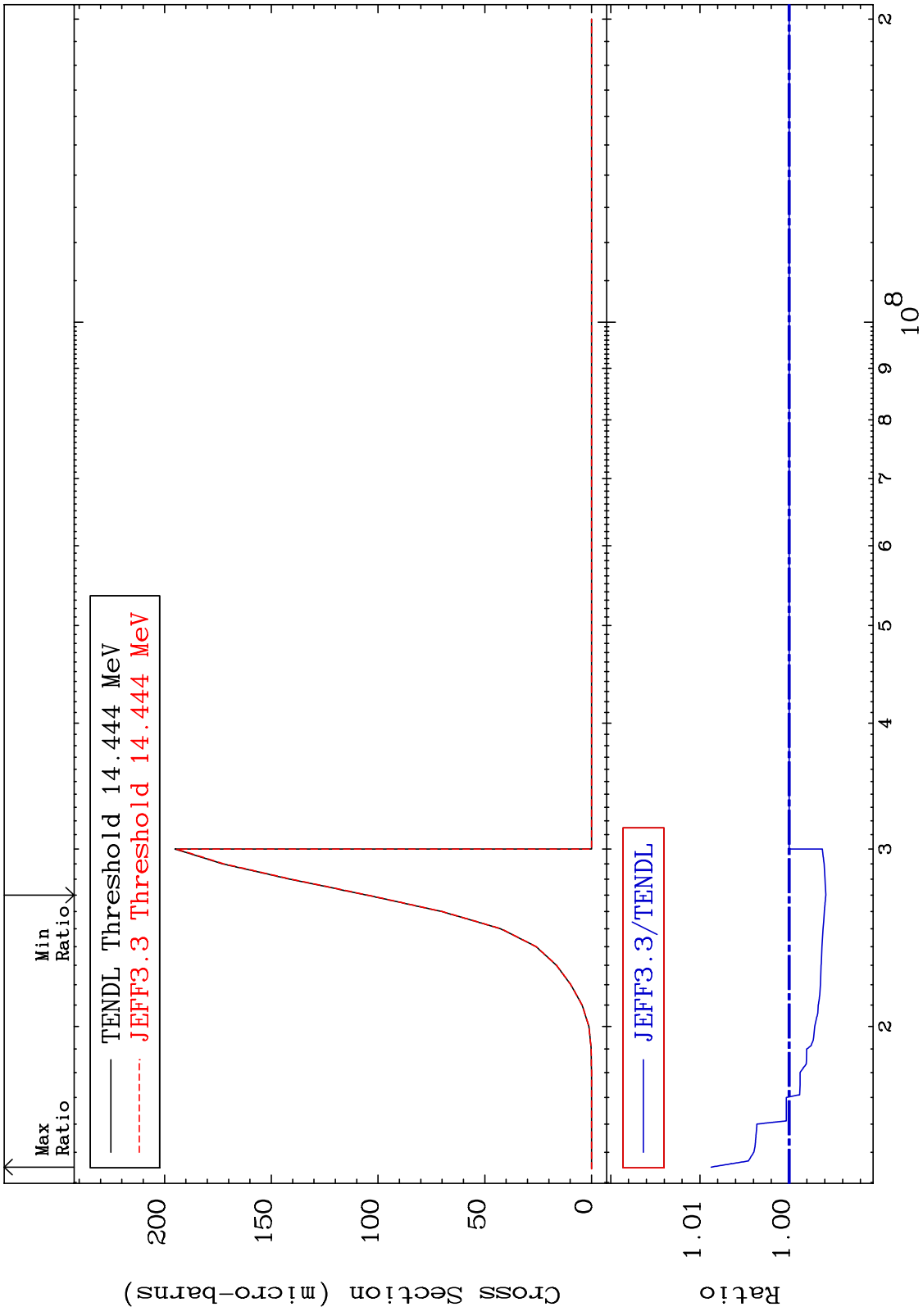




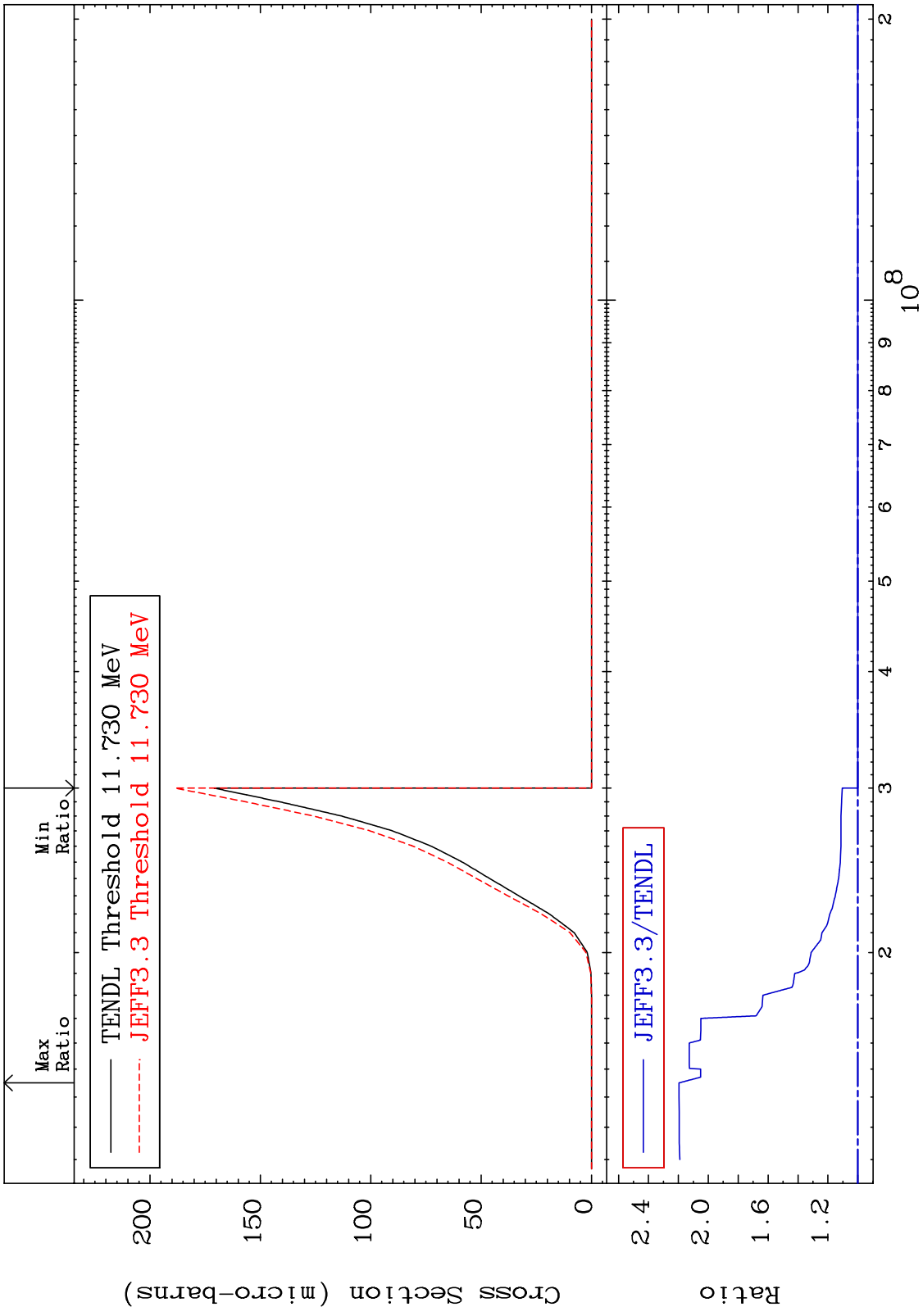
MAT 2328 (n,2α) Cross Section 23-V -51 To 434.2 %



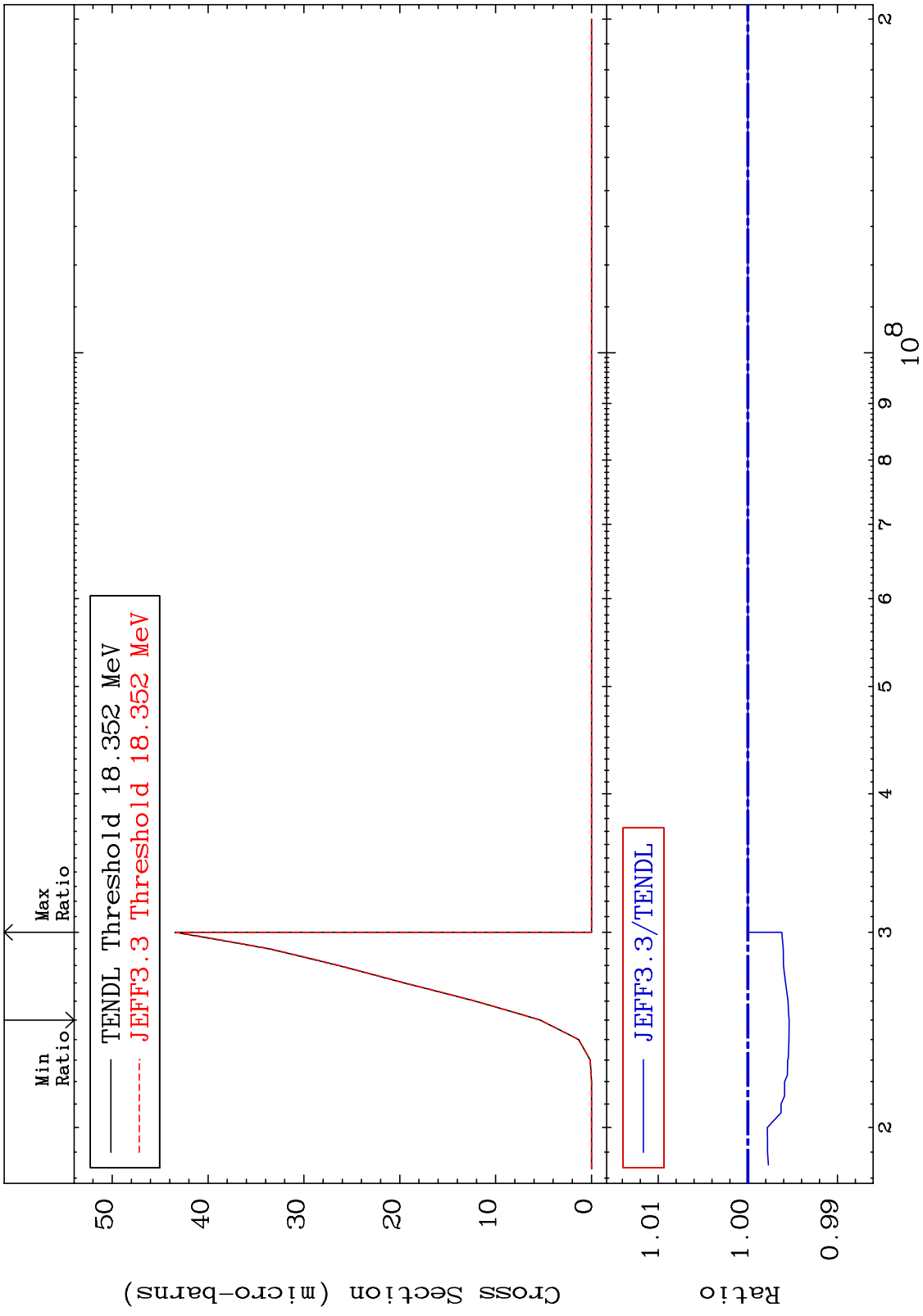
MAT 2328 (n,2p) 23-V -51
 Cross Section -0.411 To 0.875 %



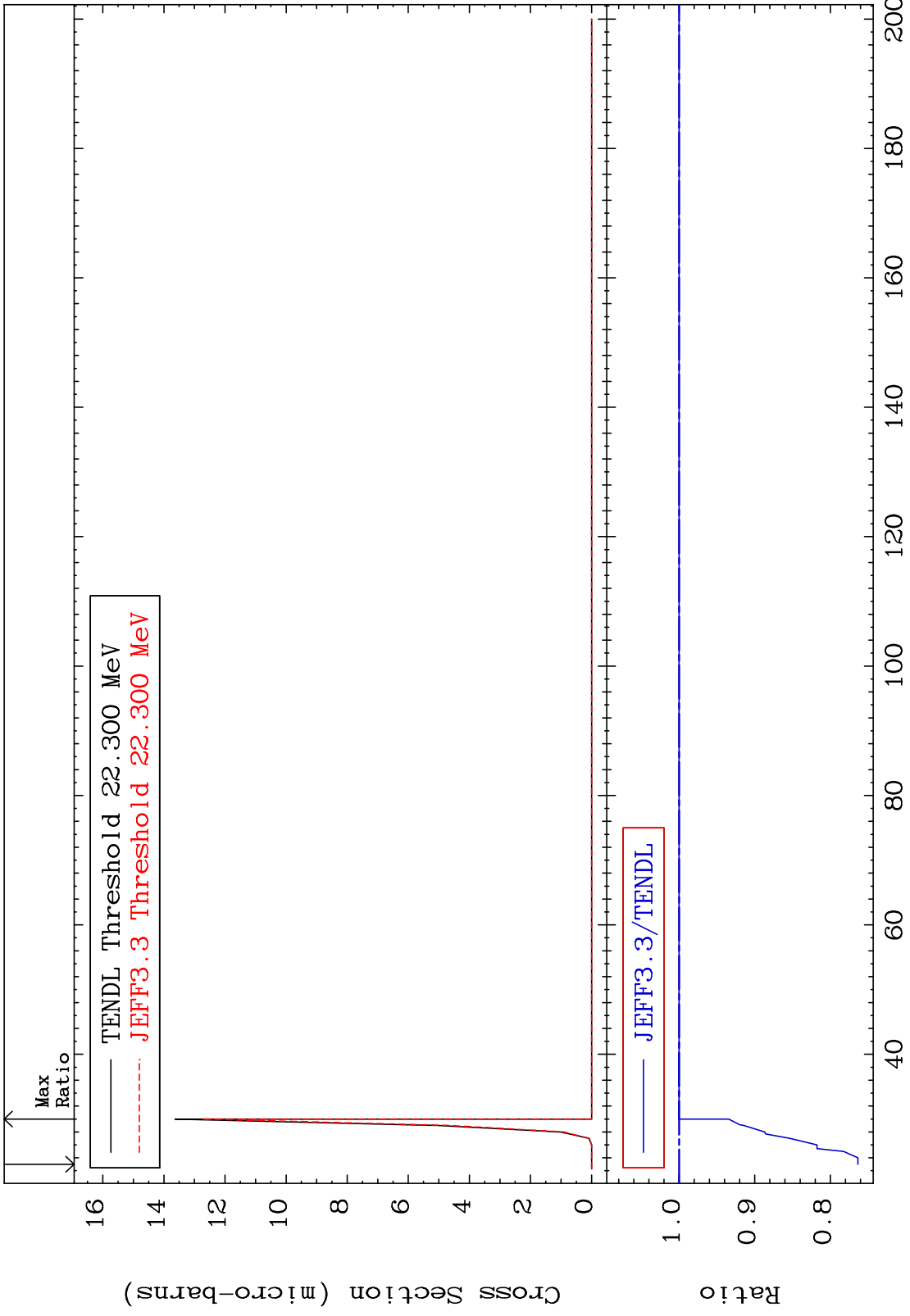
MAT 2328 (n,p) α 23-V -51
 Cross Section 0.000 To 119.6 %



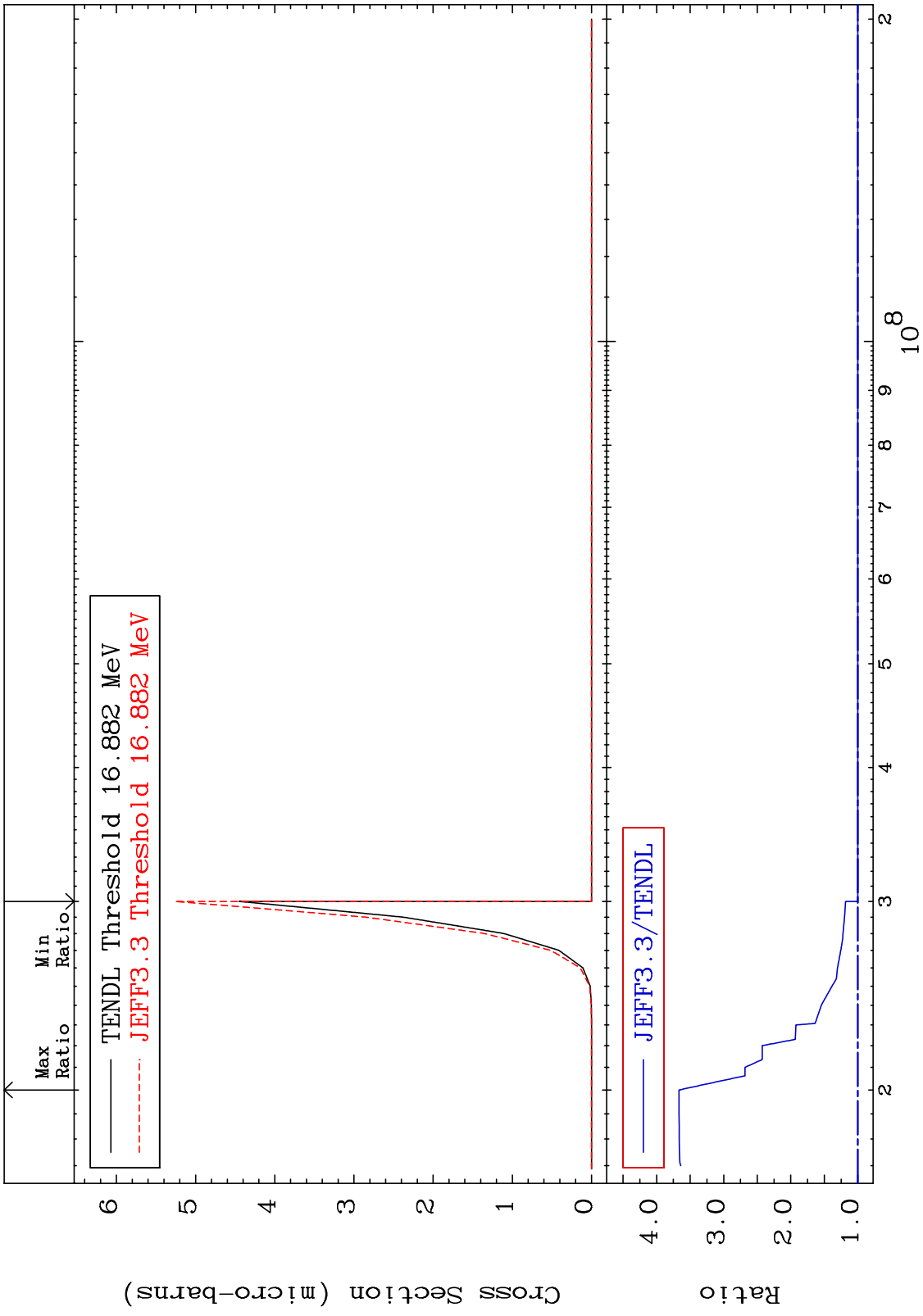
MAT 2328 (n,p) d 23-V -51
 Cross Section -0.461 To 0.000 %



57 23-V -51



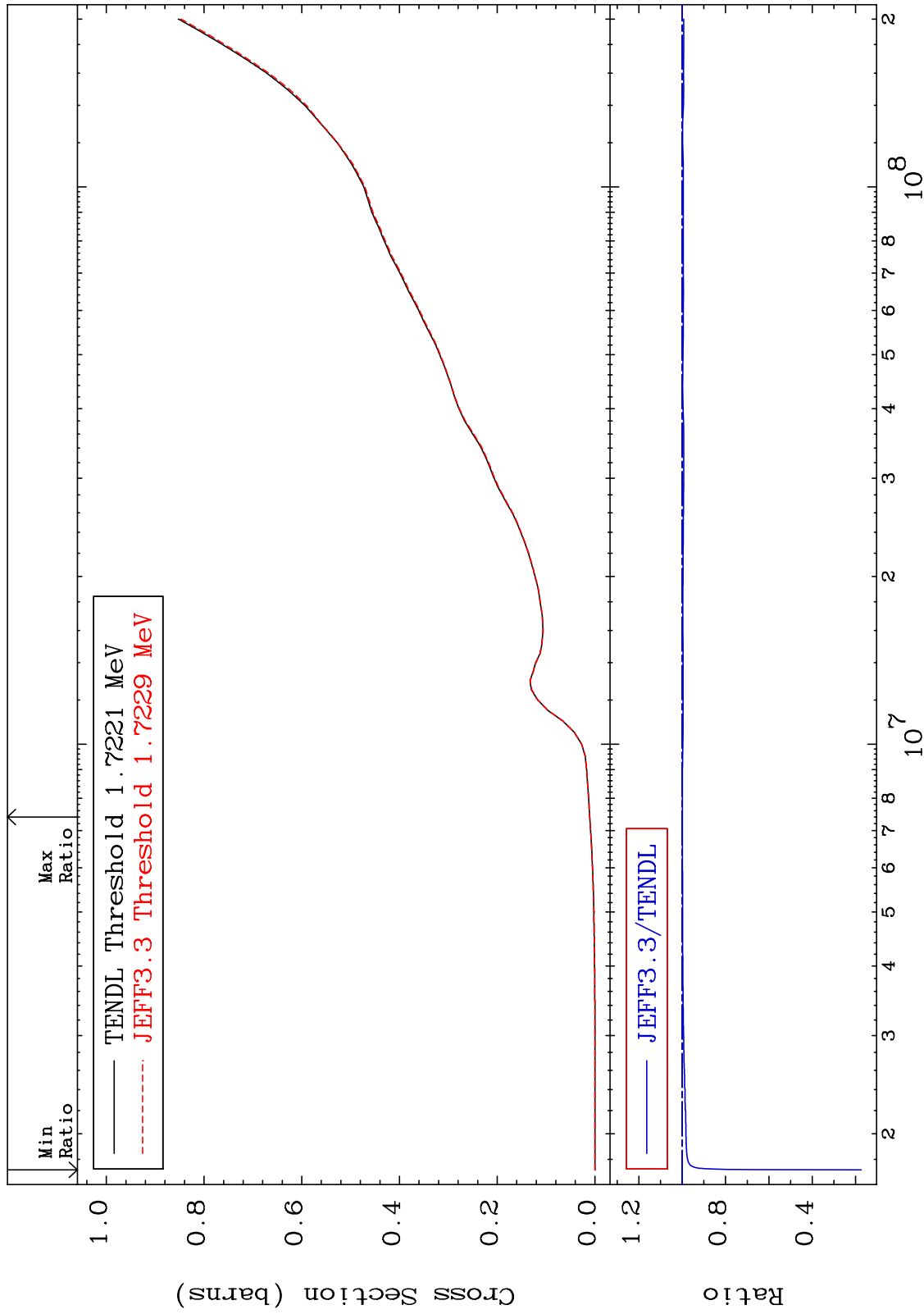
MAT 2328 (n,d) α 23-V -51
 Cross Section 0.000 To 266.5 %



MAT 2328

Hydrogen Production
Cross Section

23-V -51
-82.63 To -0.110%



60

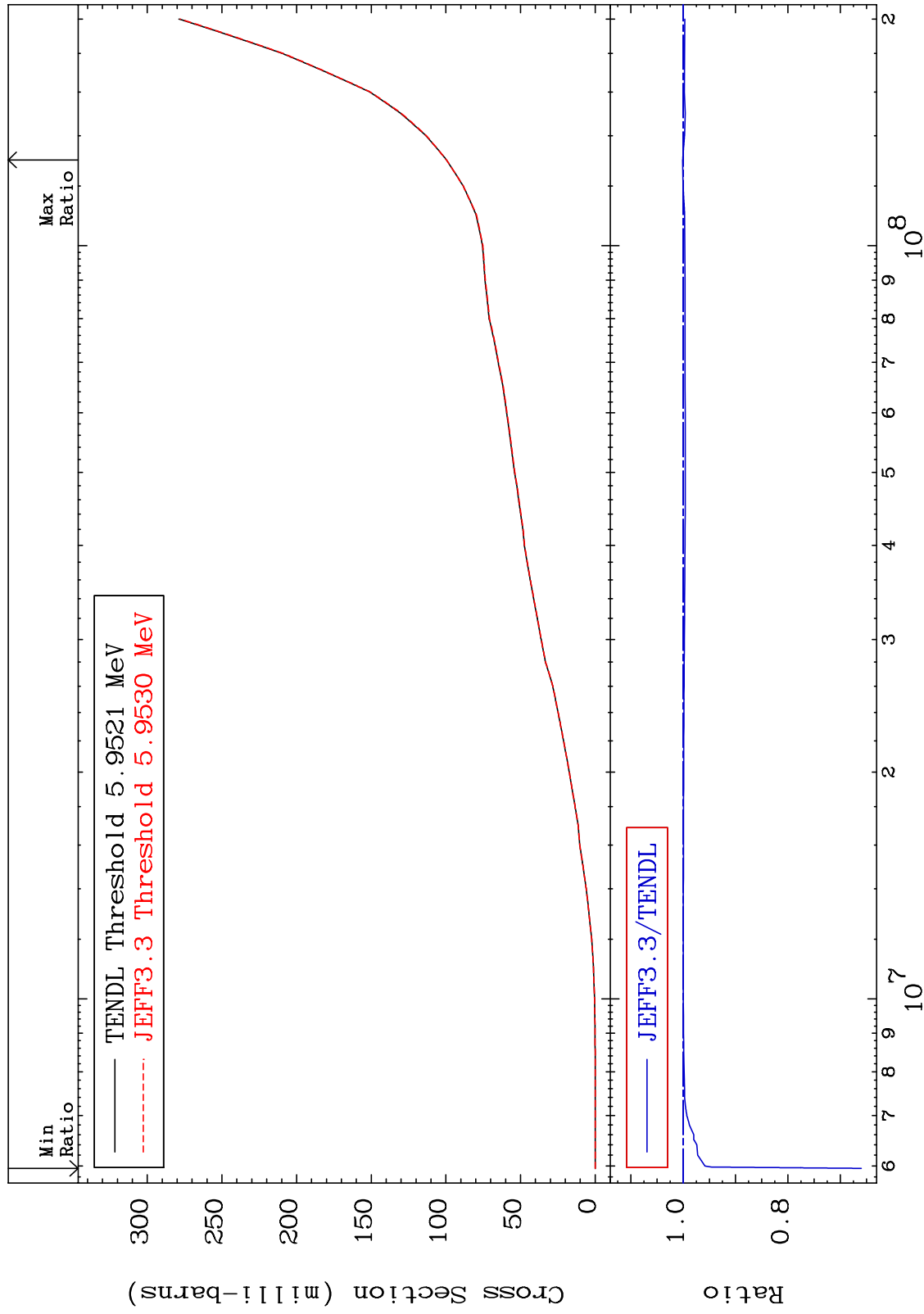
Incident Energy (eV)

23-V -51

MAT 2328

Deuterium Production
Cross Section

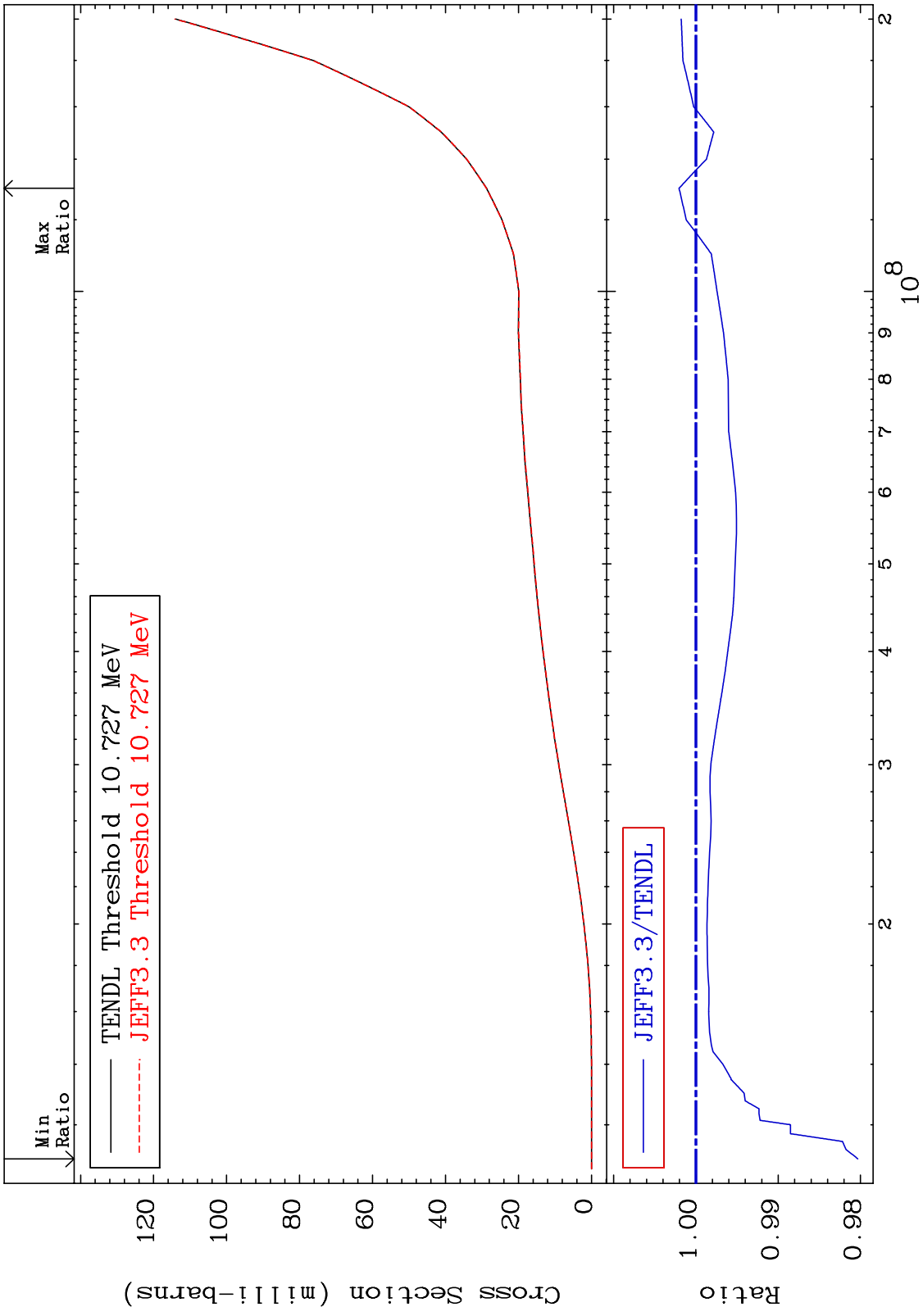
23-V -51
-34.02 To 0.098 %

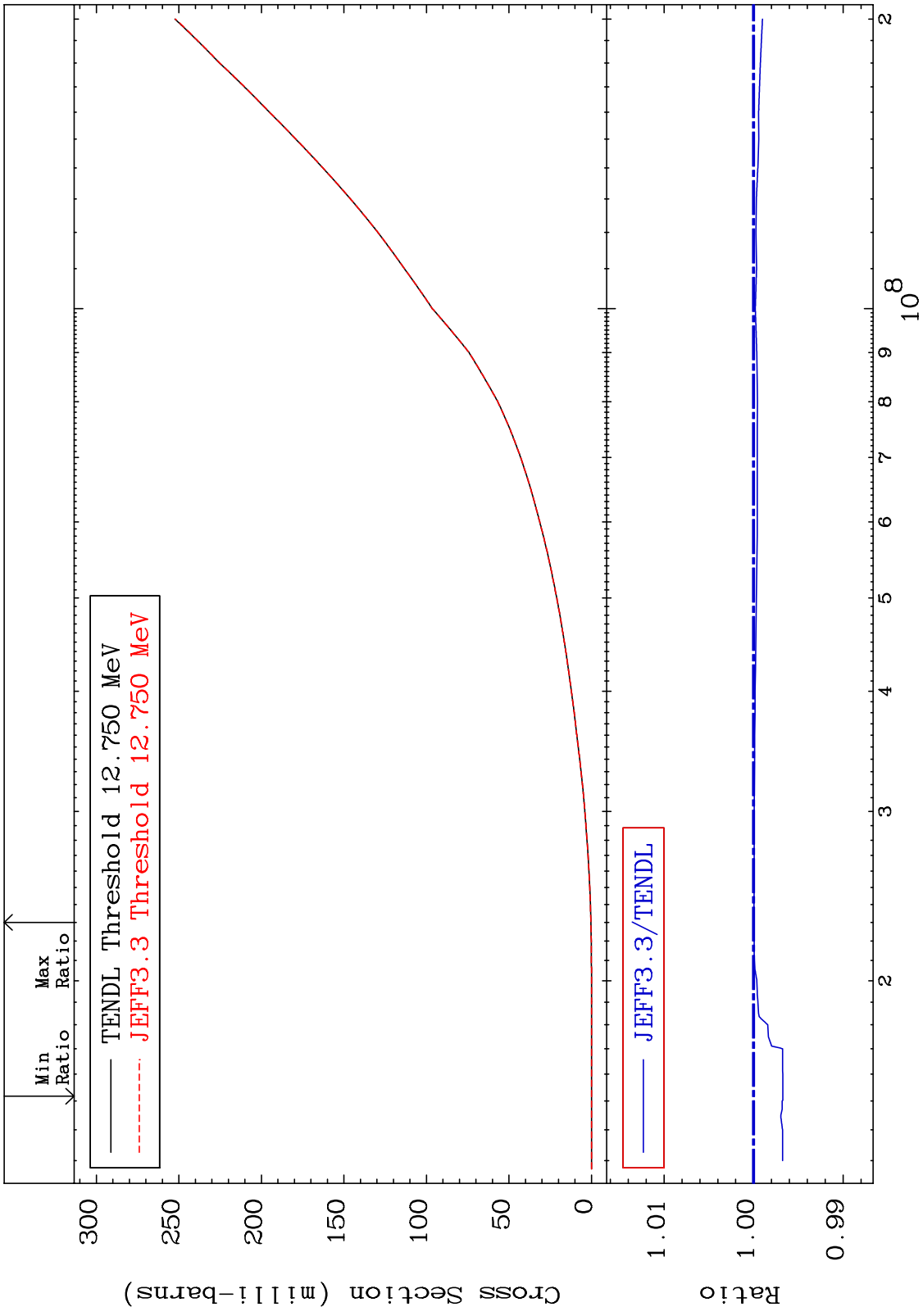


61

Incident Energy (eV)

23-V -51

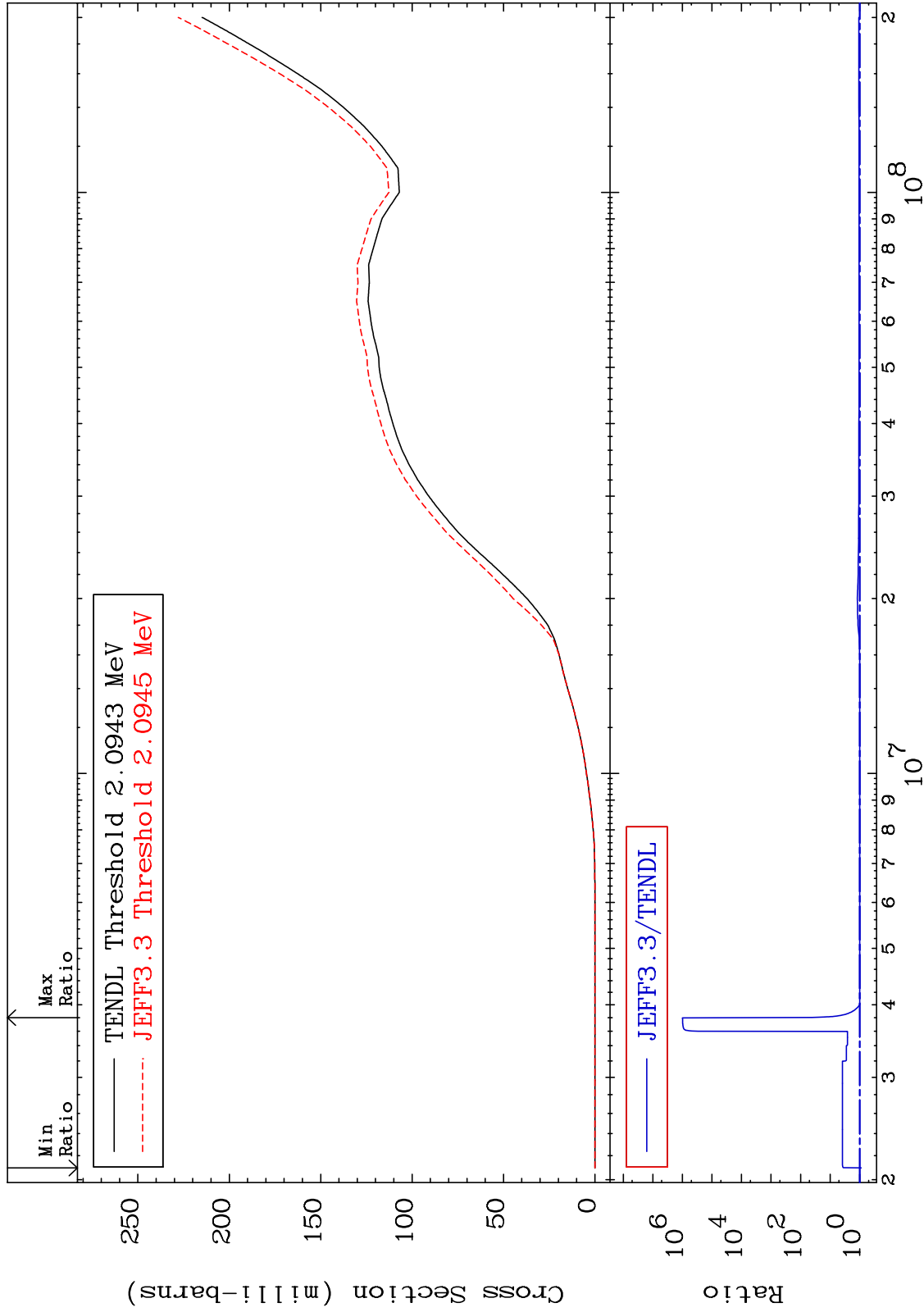




MAT 2328

He-4 Production
Cross Section

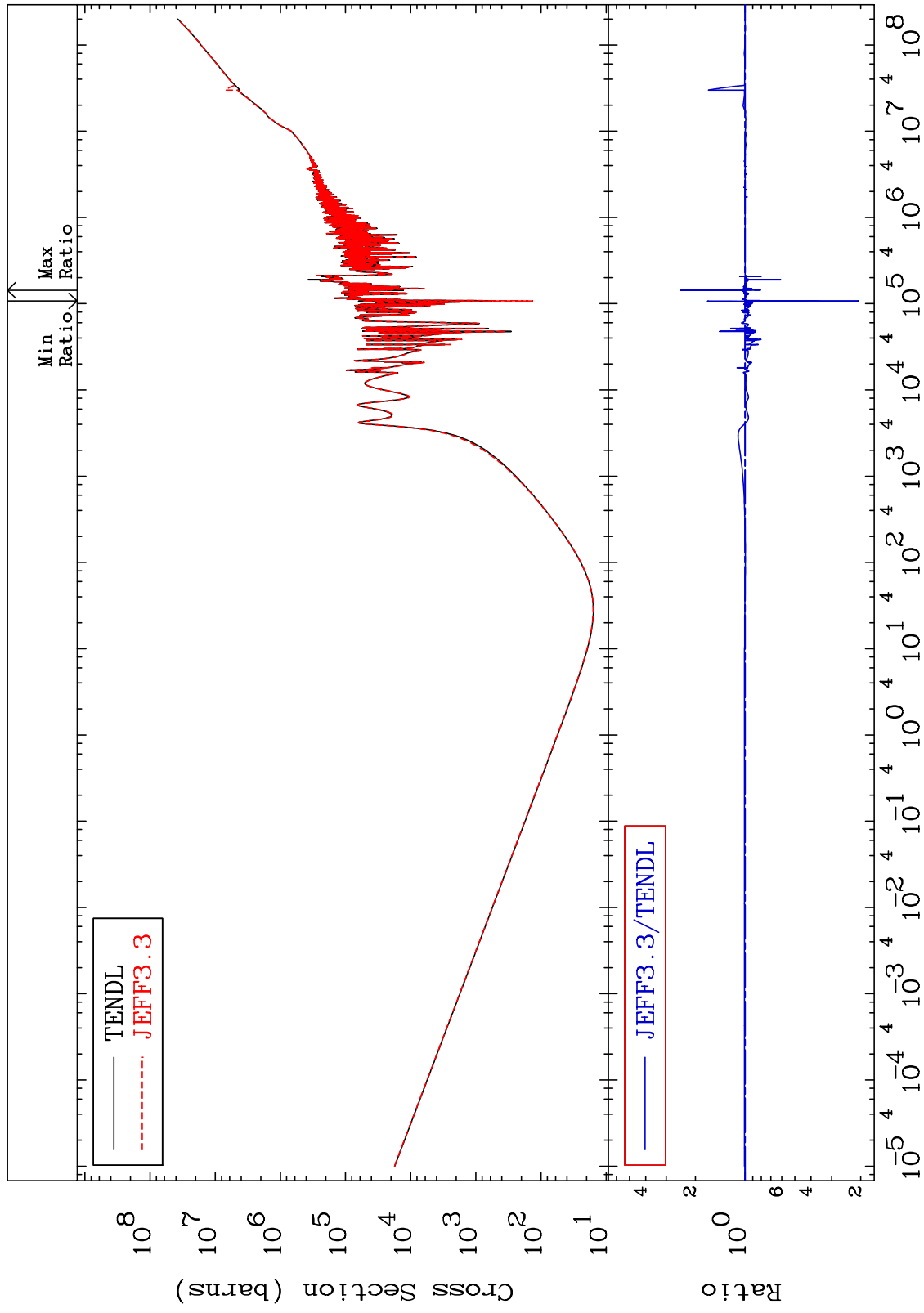
23-V -51
-11.82 To 9999. %



MAT 2328

Kerma total (eV-barns)
Cross Section

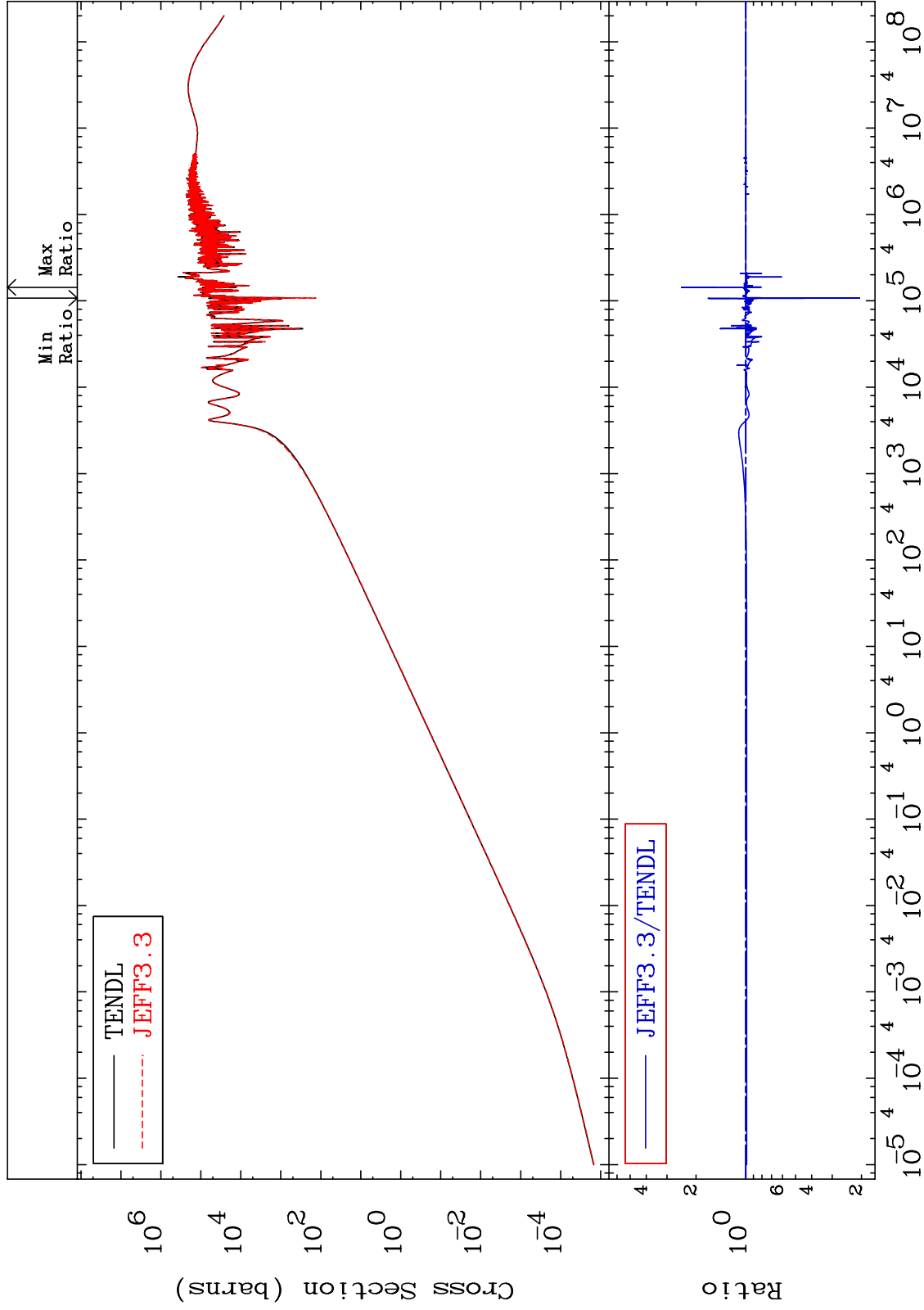
23-V -51
-79.51 To 145.6 %



MAT 2328

Kerma elastic
Cross Section

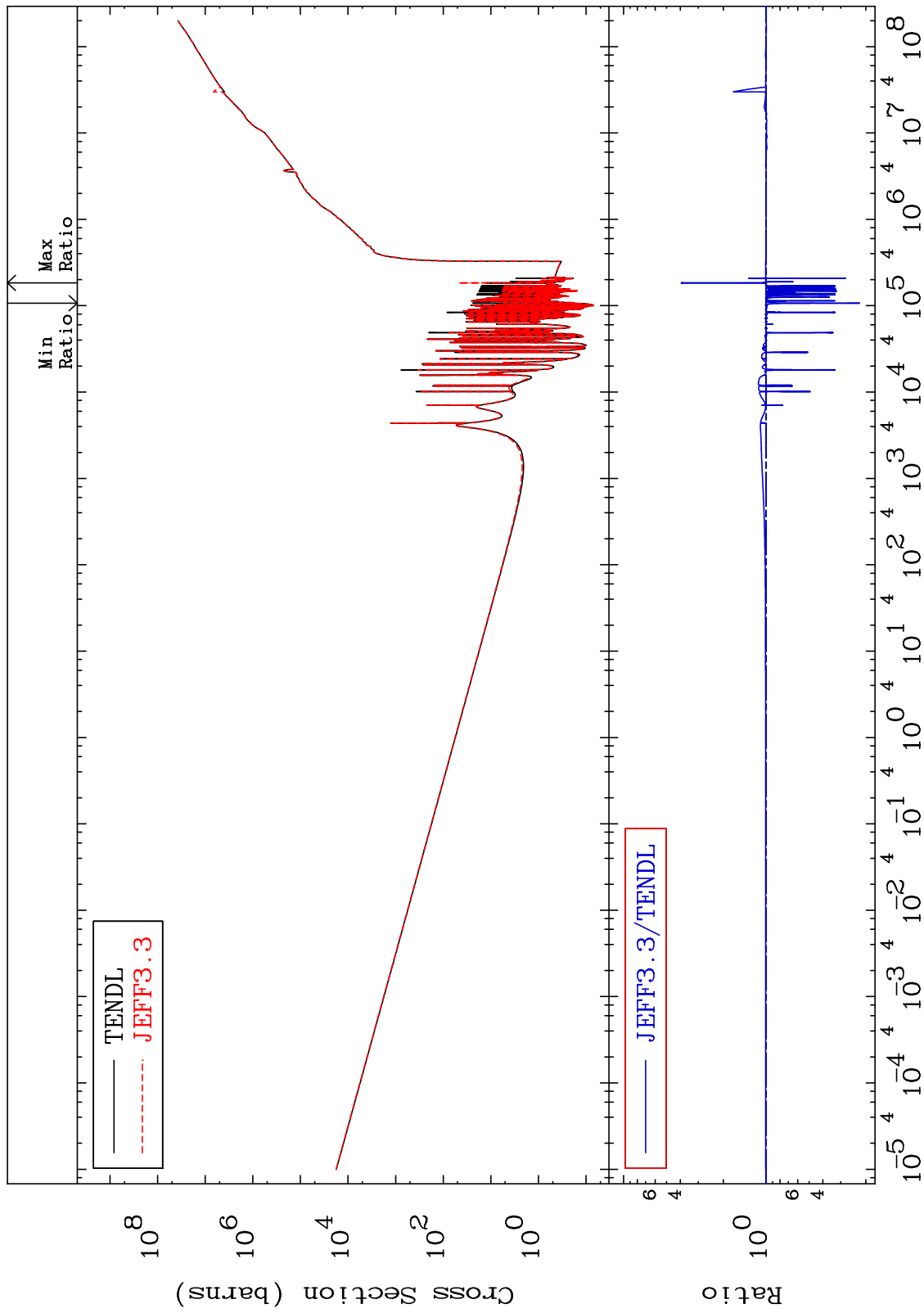
23-V -51
-79.53 To 145.7 %



MAT 2328

Kerma non-elastic (all but mt2)
Cross Section

23-V -51
-77.94 To 294.0 %

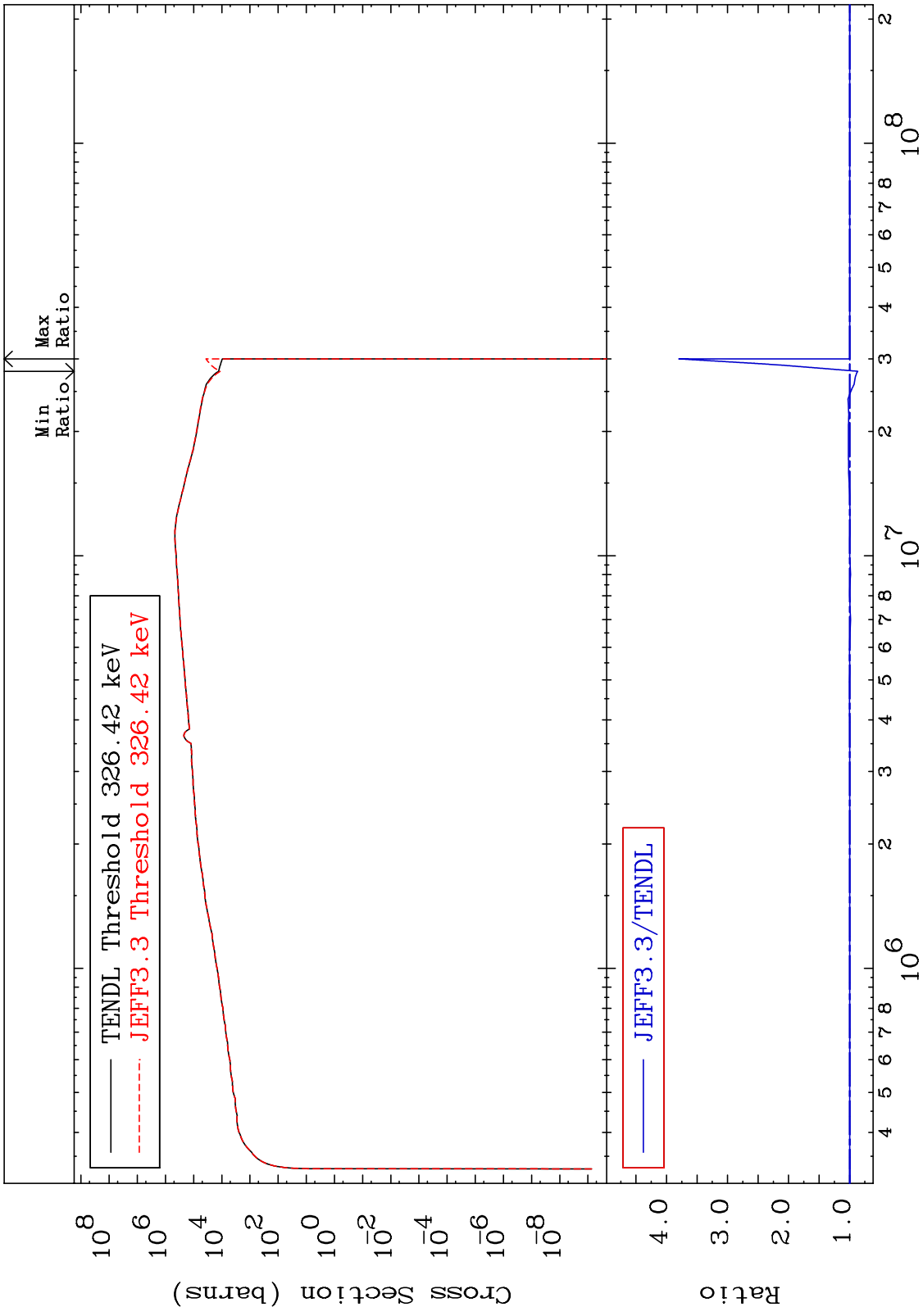


67

Incident Energy (eV)

23-V -51

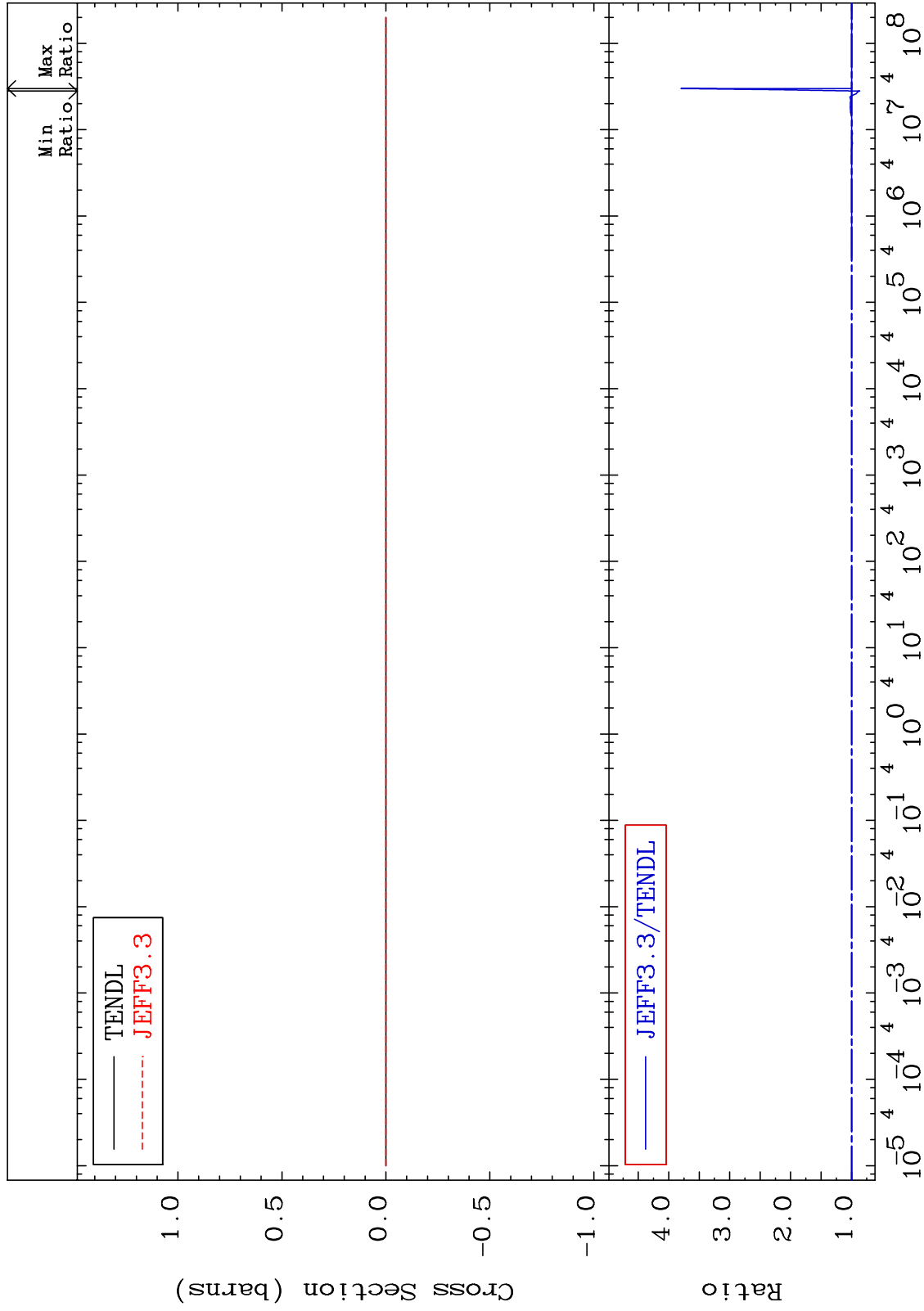
MAT 2328 Kerma inelastic (mt51-91) 23-V -51
 -13.47 To 279.5 %



MAT 2328

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

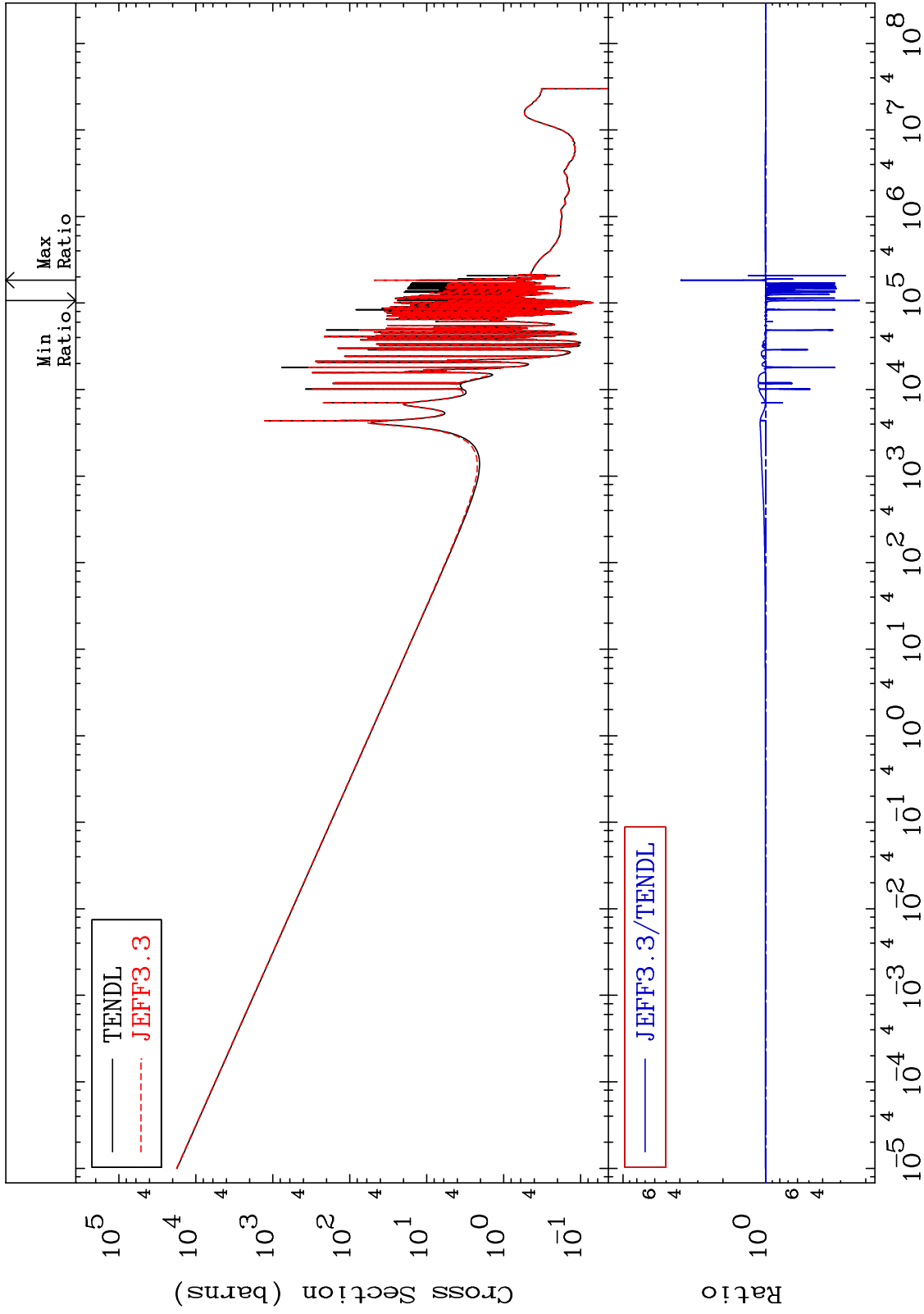
23-V -51
-13.47 To 279.5 %



MAT 2328

Kerma capture (mt102)
Cross Section

23-V -51
-77.94 To 294.0 %



70

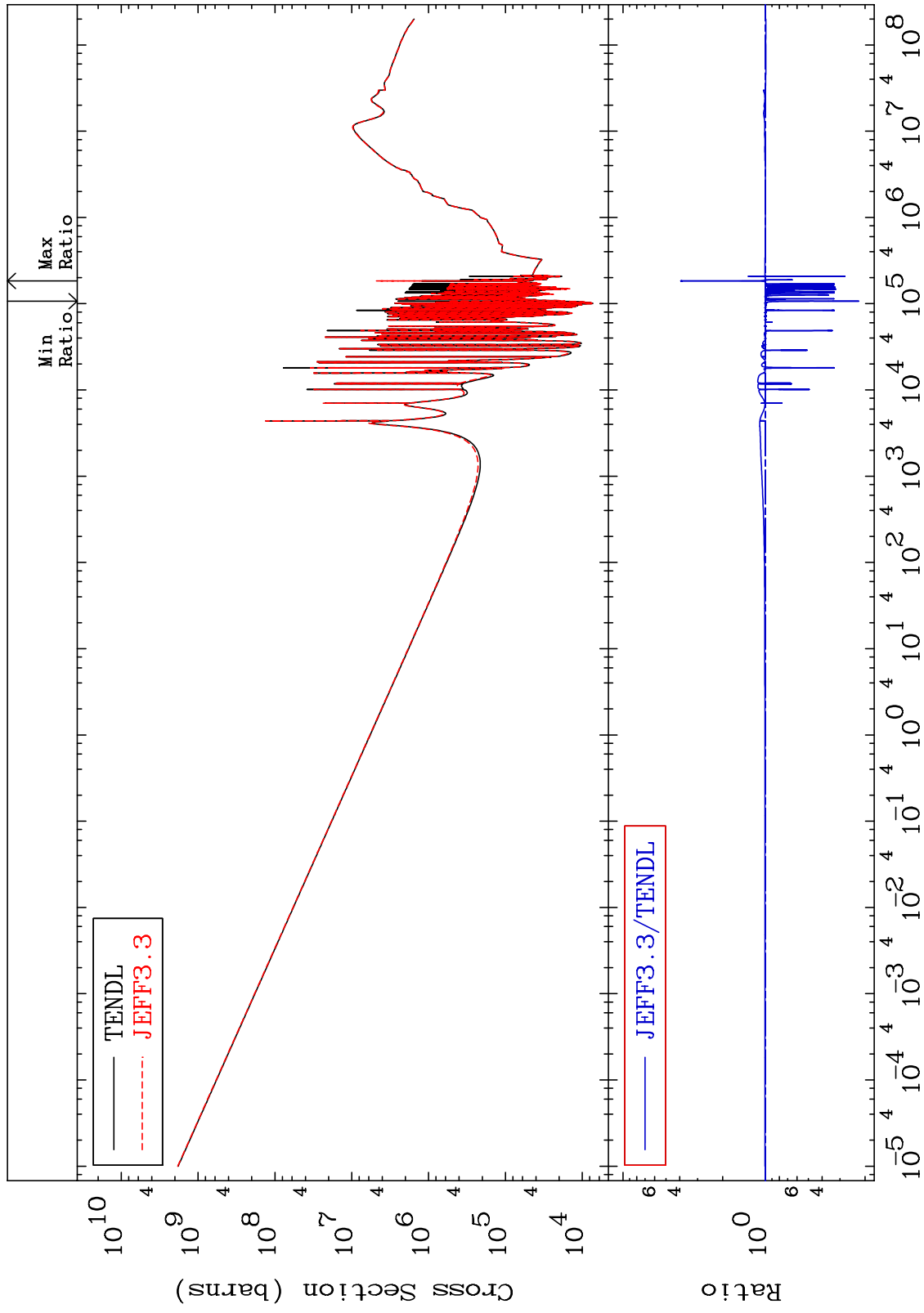
Incident Energy (eV)

23-V -51

MAT 2328

Total photon (eV-barns)
Cross Section

23-V -51
-77.94 To 294.0 %



71

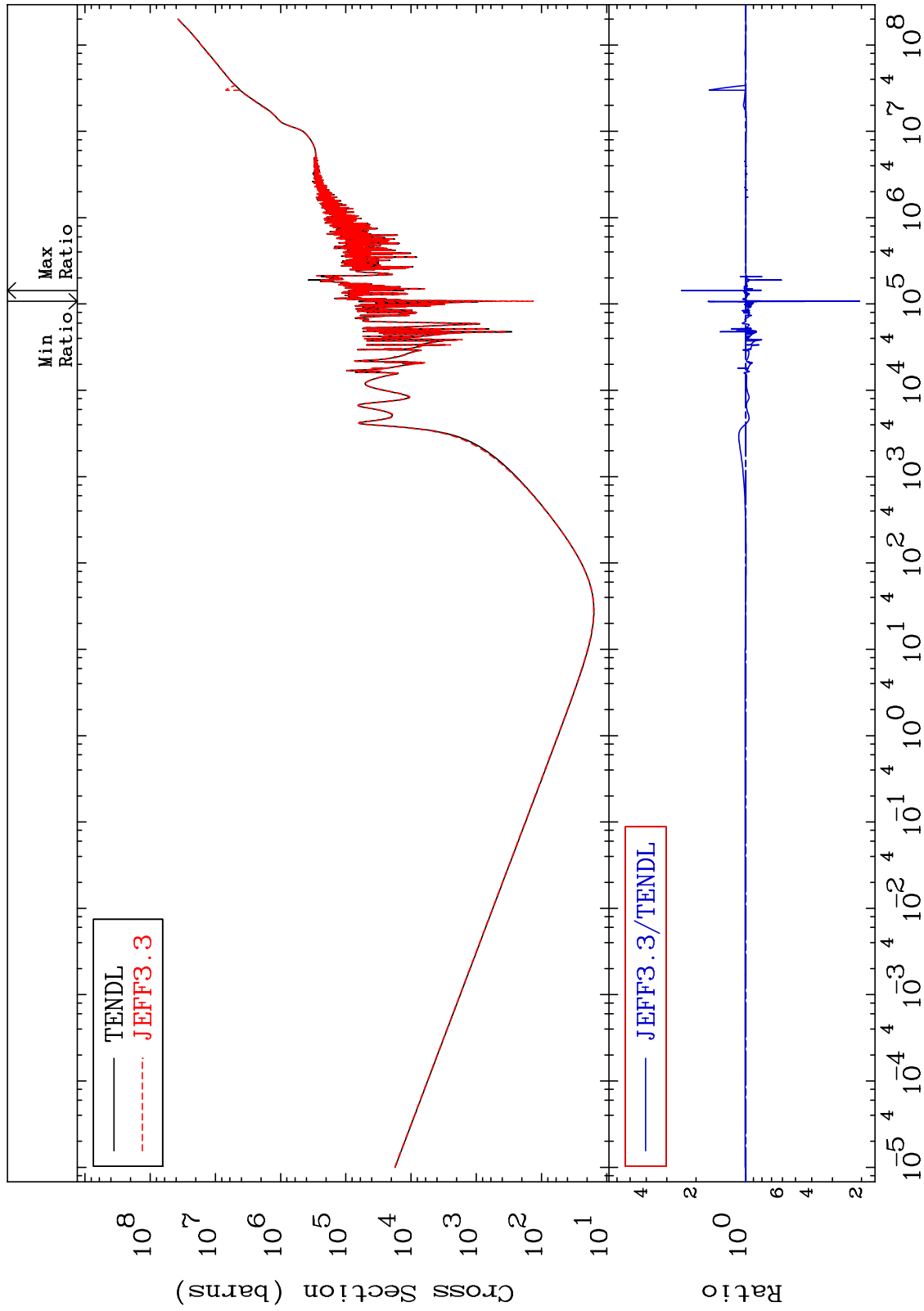
Incident Energy (eV)

23-V -51

MAT 2328

Total kinematic kerma (high limit)
Cross Section

23-V -51
-79.51 To 145.6 %



72

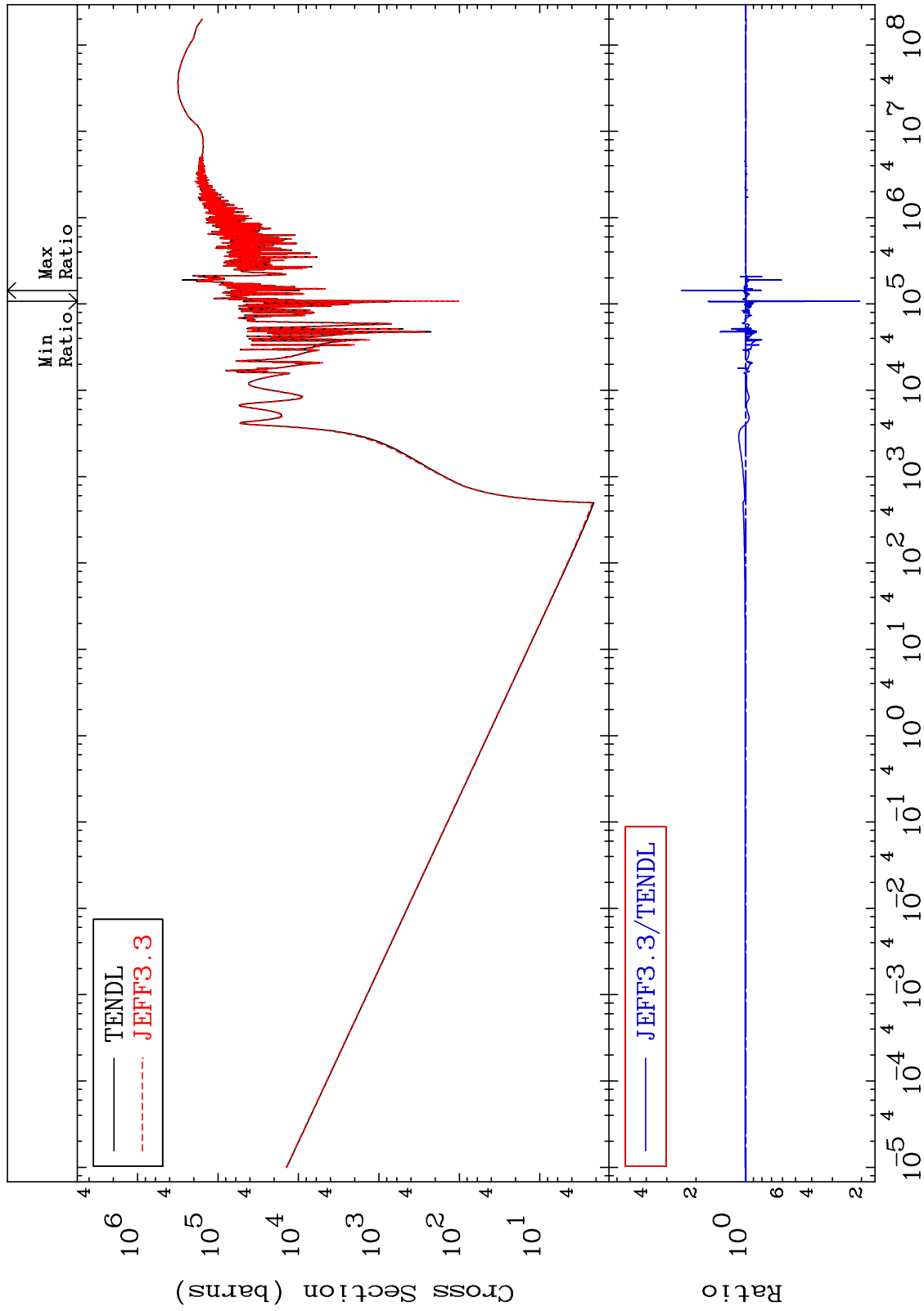
Incident Energy (eV)

23-V -51

MAT 2328

Dpa total (eV-barns)
Cross Section

23-V -51
-79.51 To 145.6 %

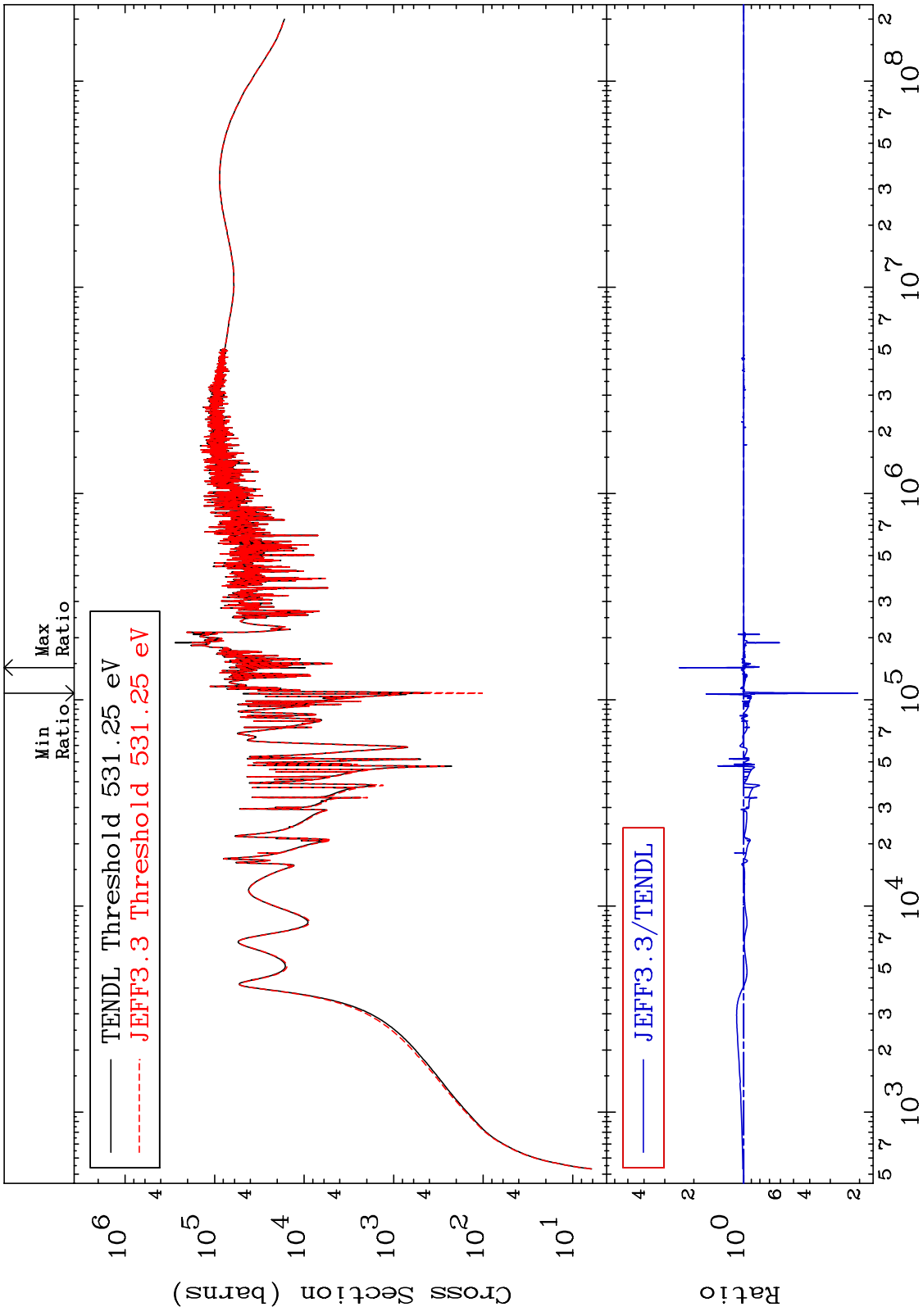


73

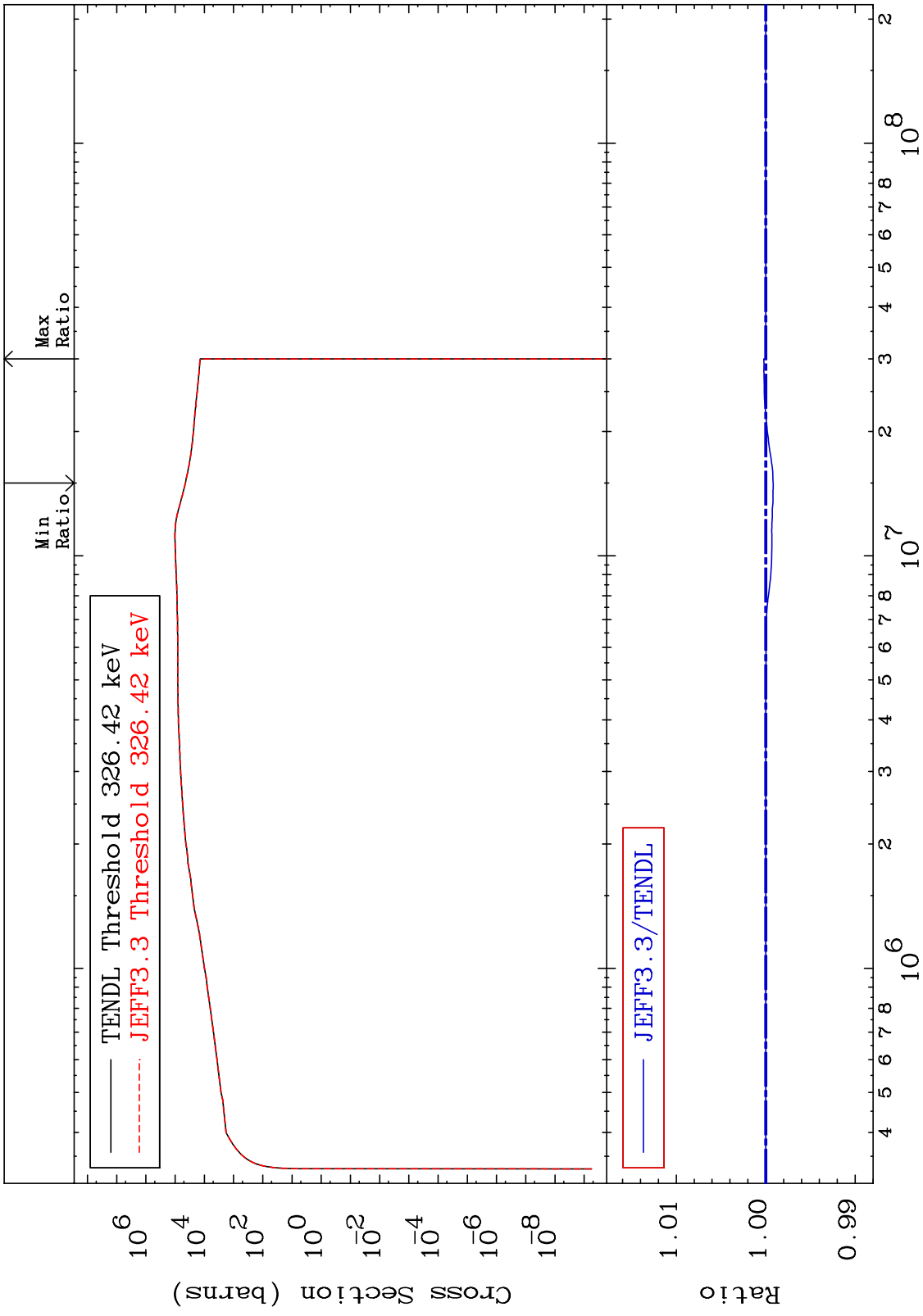
Incident Energy (eV)

23-V -51

MAT 2328 Dpa elastic (mt2) 23-V -51
 Cross Section -79.53 To 145.7 %



MAT 2328 Dpa inelastic (mt51-91) 23-V -51
 Cross Section -0.083 To 0.022 %

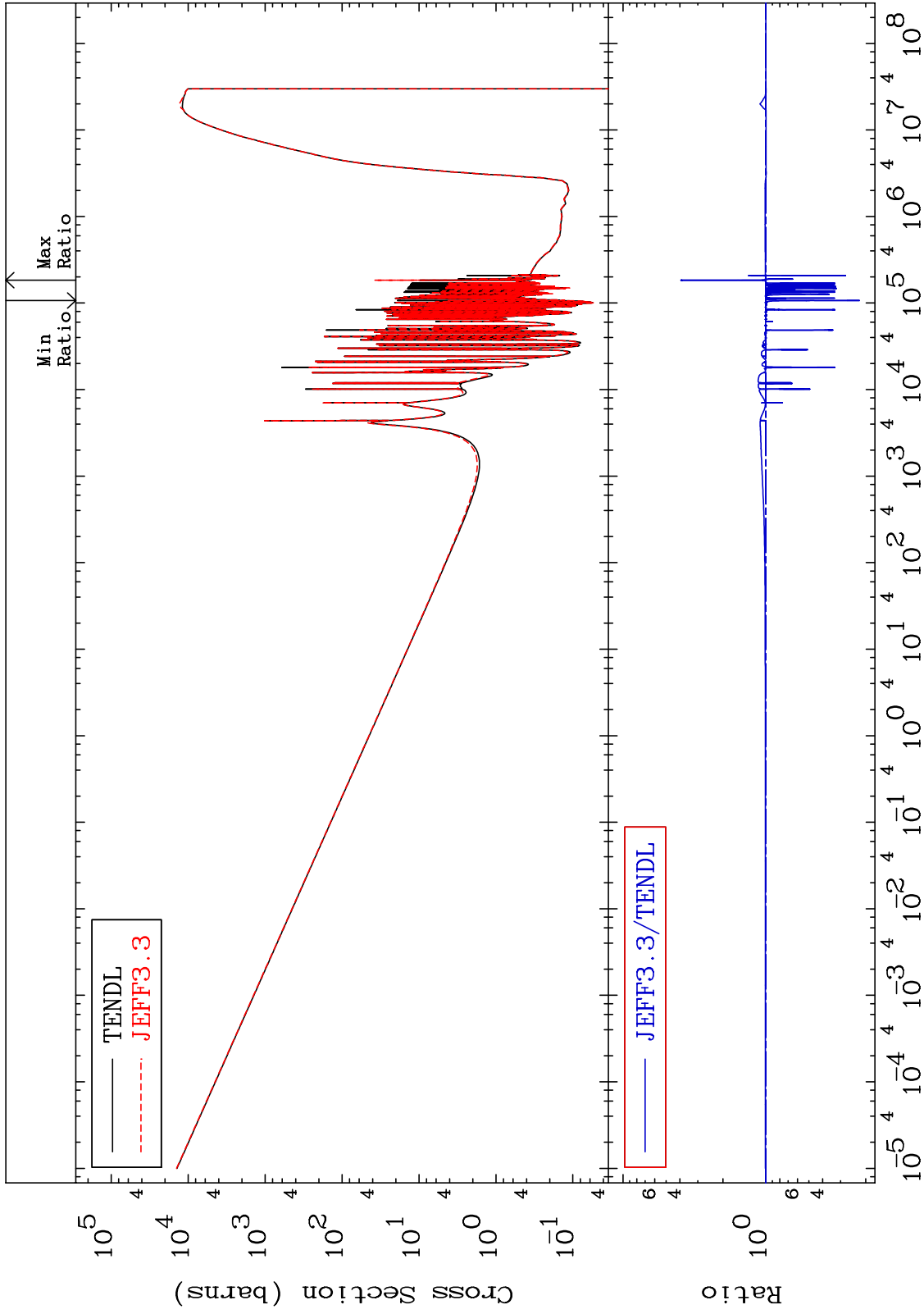


75 Incident Energy (eV) 23-V -51

MAT 2328

Dpa disappearance (mt102 -120)
Cross Section

23-V -51
-77.94 To 294.0 %

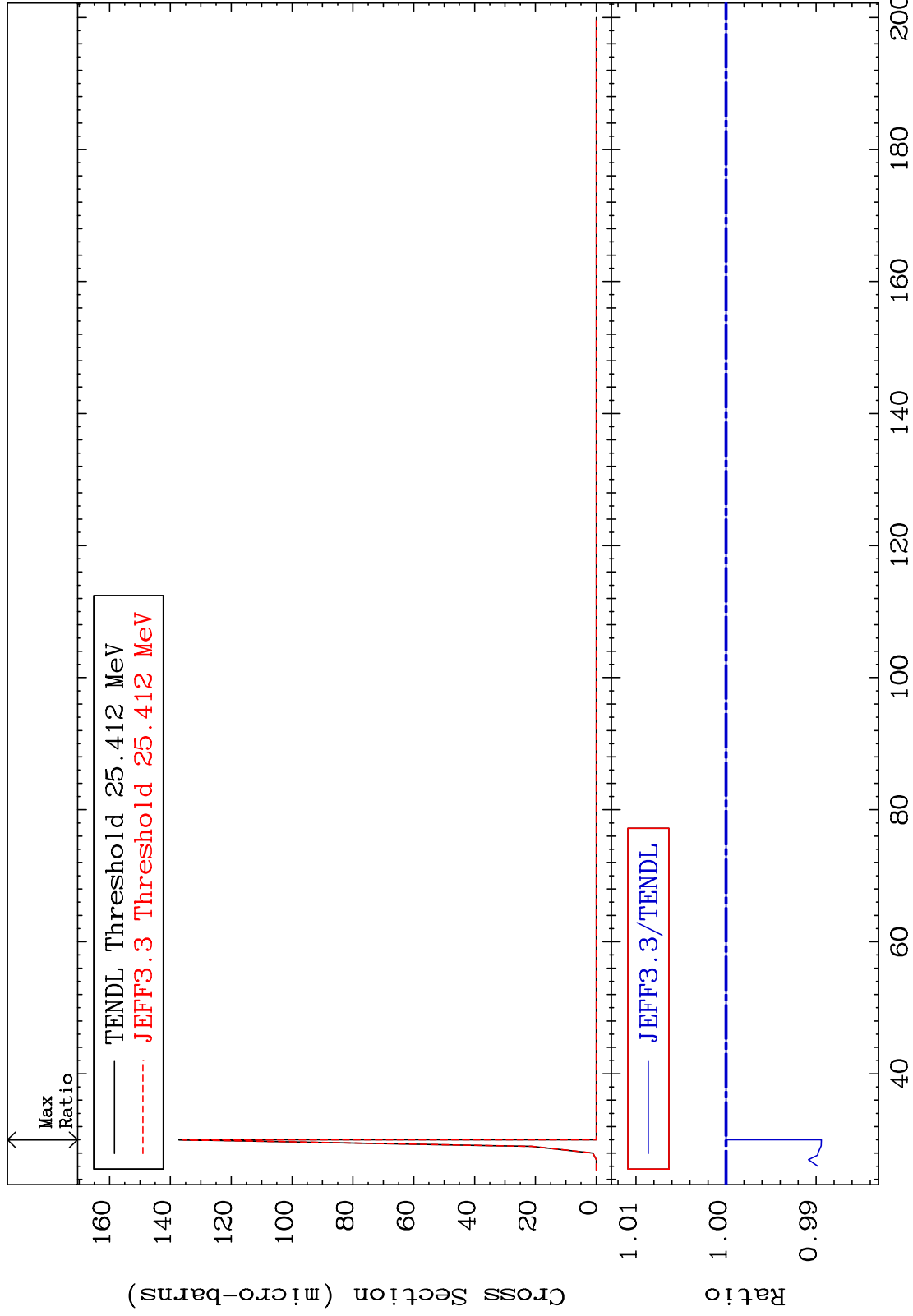


MAT 2328

(n,2n) d:22-Ti-48g

23-V -51

Radionuclide Production Cross Section -1.058 To 0.000 %



77

Incident Energy (MeV)

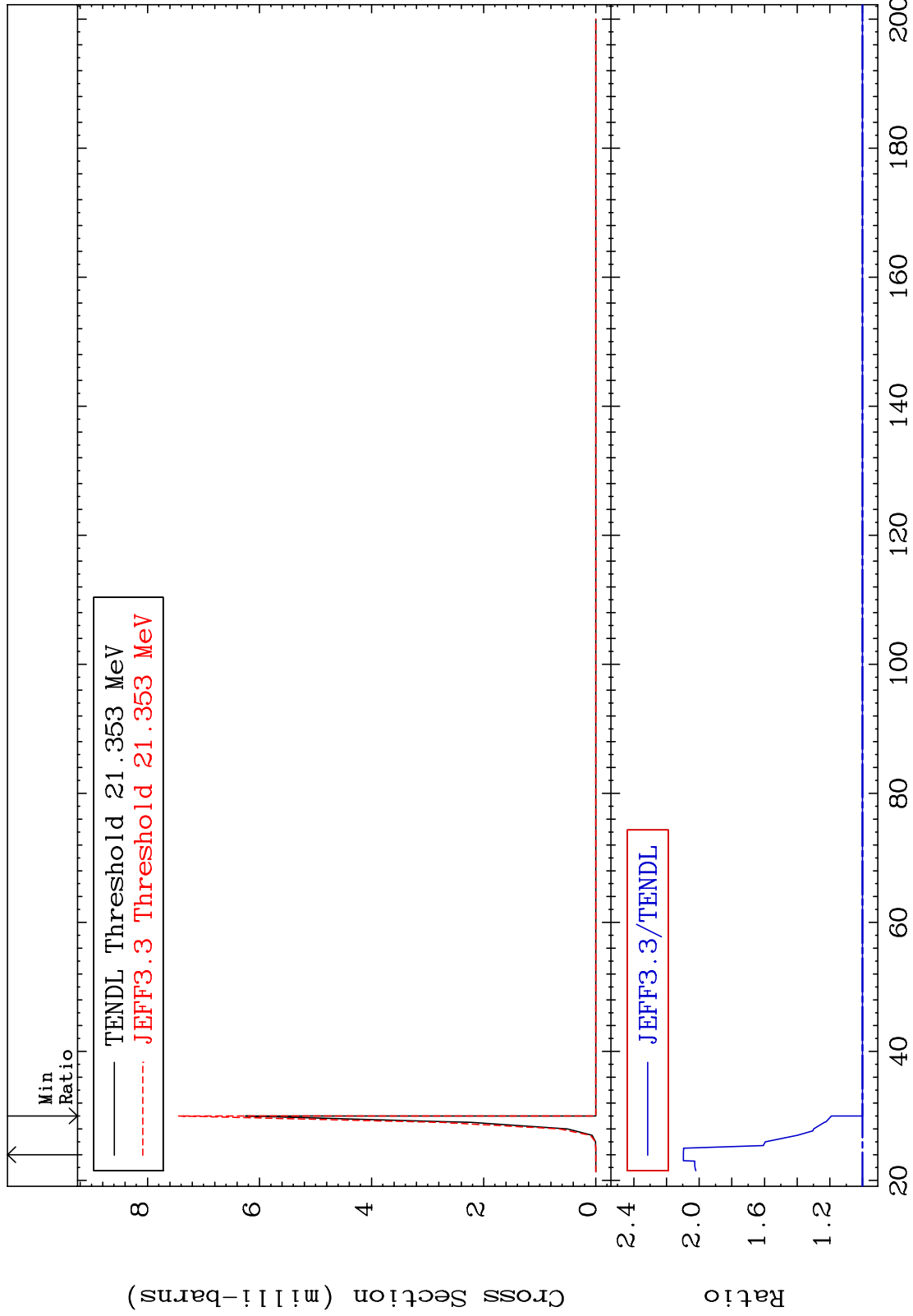
23-V -51

MAT 2328

(n,2n) α :21-Sc-46g

23-V -51

Radionuclide Production Cross Section 0.000 To 109.6 %



78

Incident Energy (MeV)

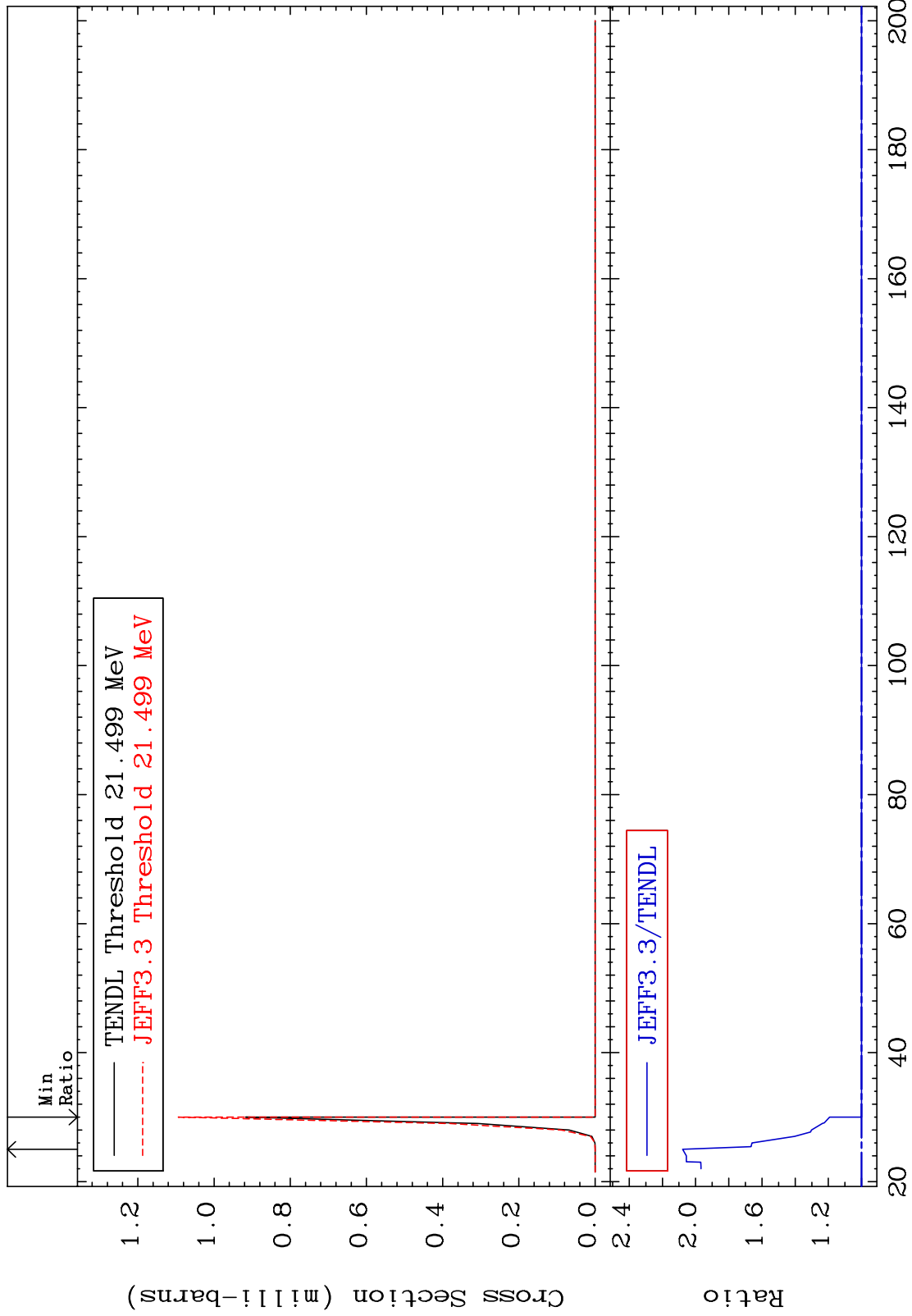
23-V -51

MAT 2328

(n,2n) α :21-Sc-46m2

23-V -51

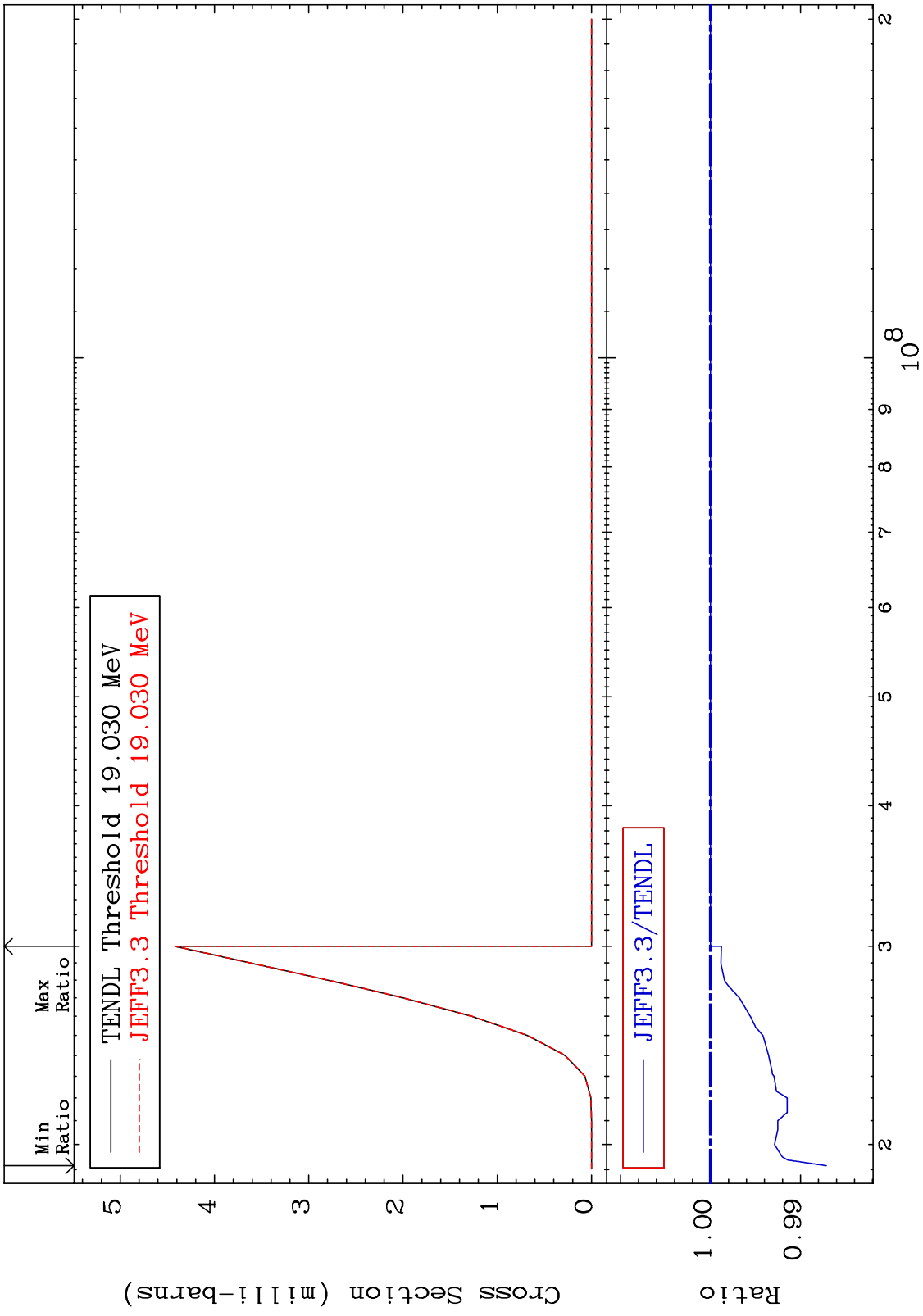
Radionuclide Production Cross Section 0.000 To 107.8 %

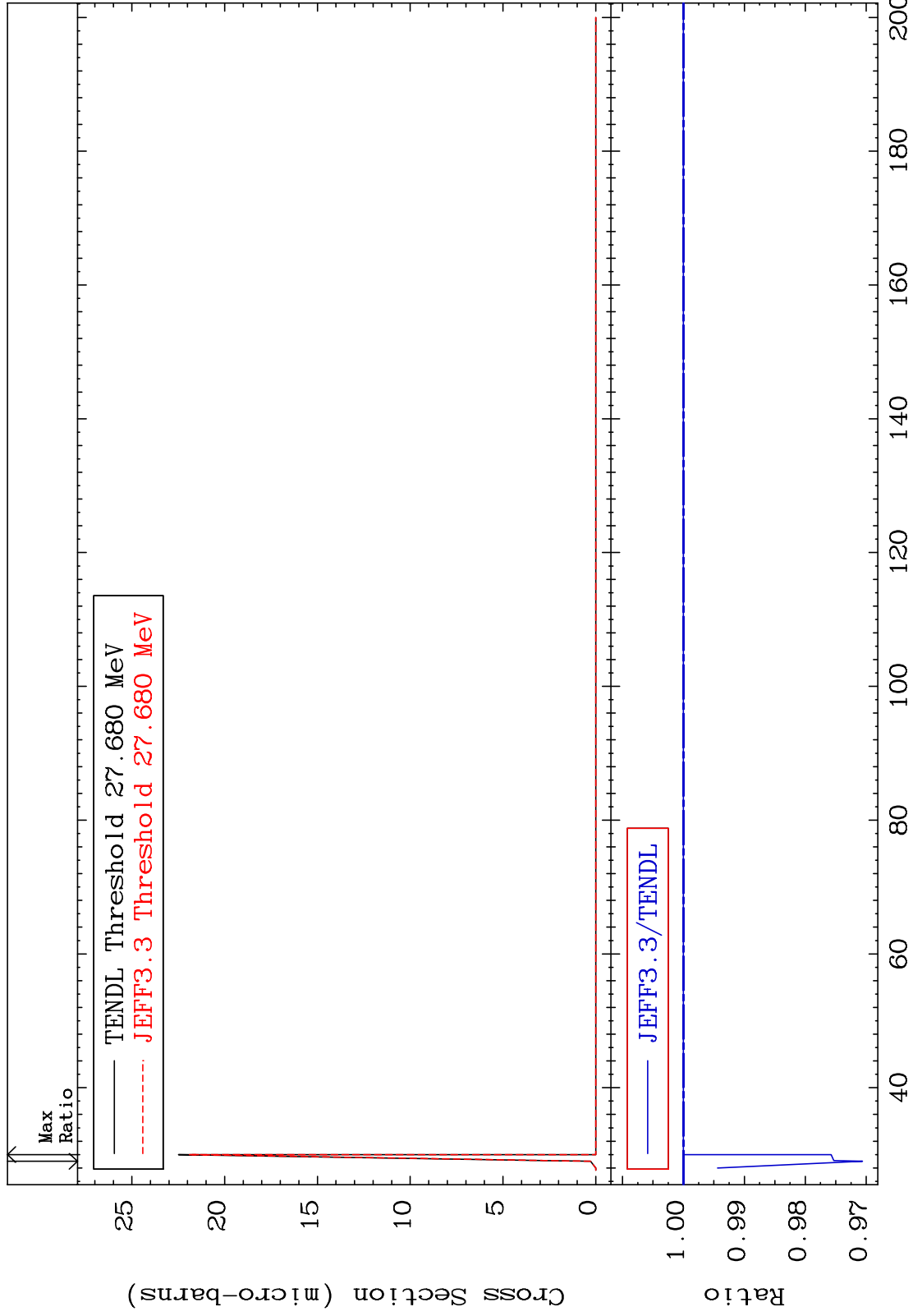


79

Incident Energy (MeV)

23-V -51



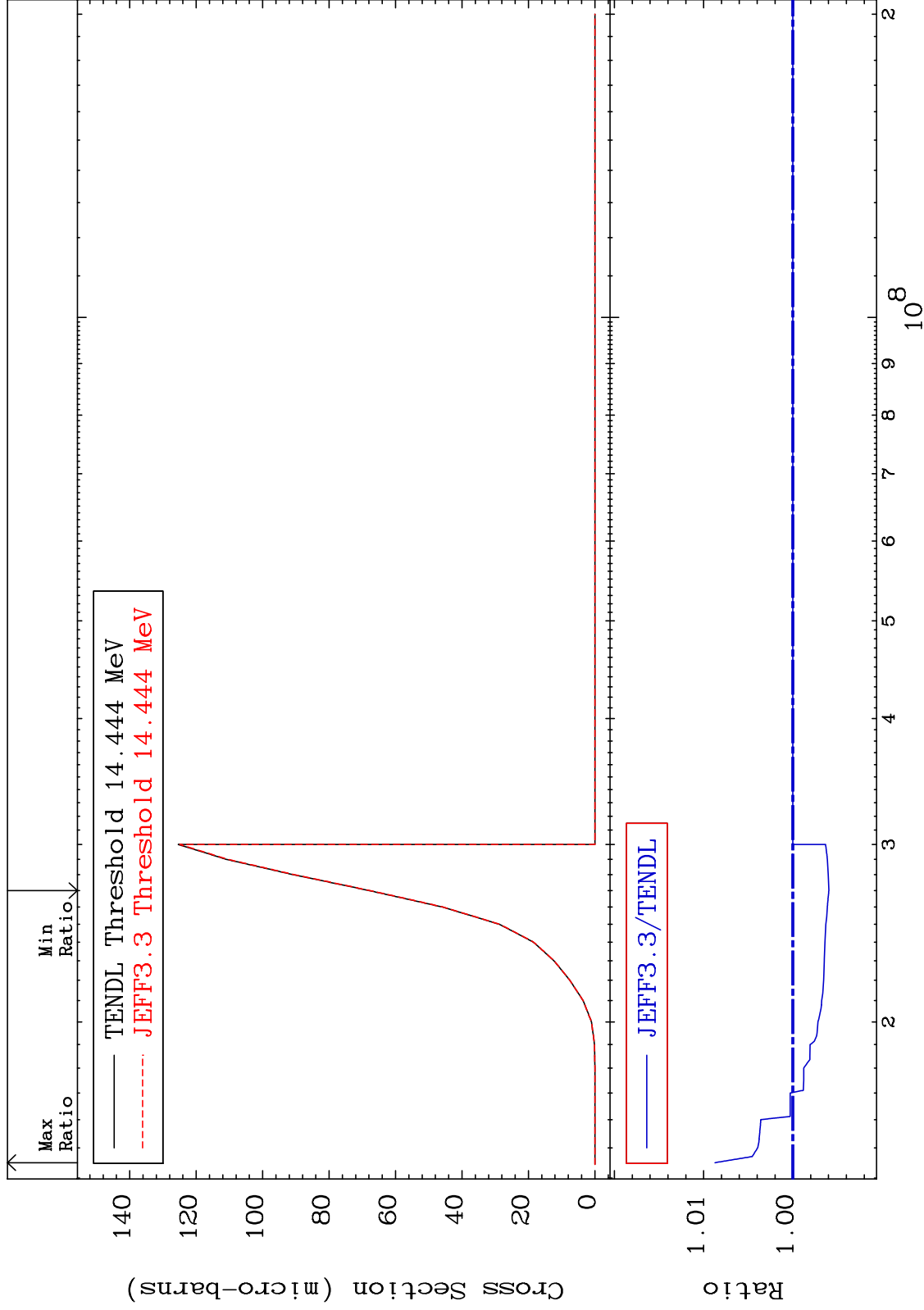


MAT 2328

(n,2p):21-Sc-50g

23-V -51

Radionuclide Production Cross Section -0.403 To 0.874 %



MAT 2328

(n,2p):21-Sc-50m1

23-V -51

Radionuclide Production Cross Section -0.426 To 0.461 %

