

Program Complot  
(Version 2018-1)

by

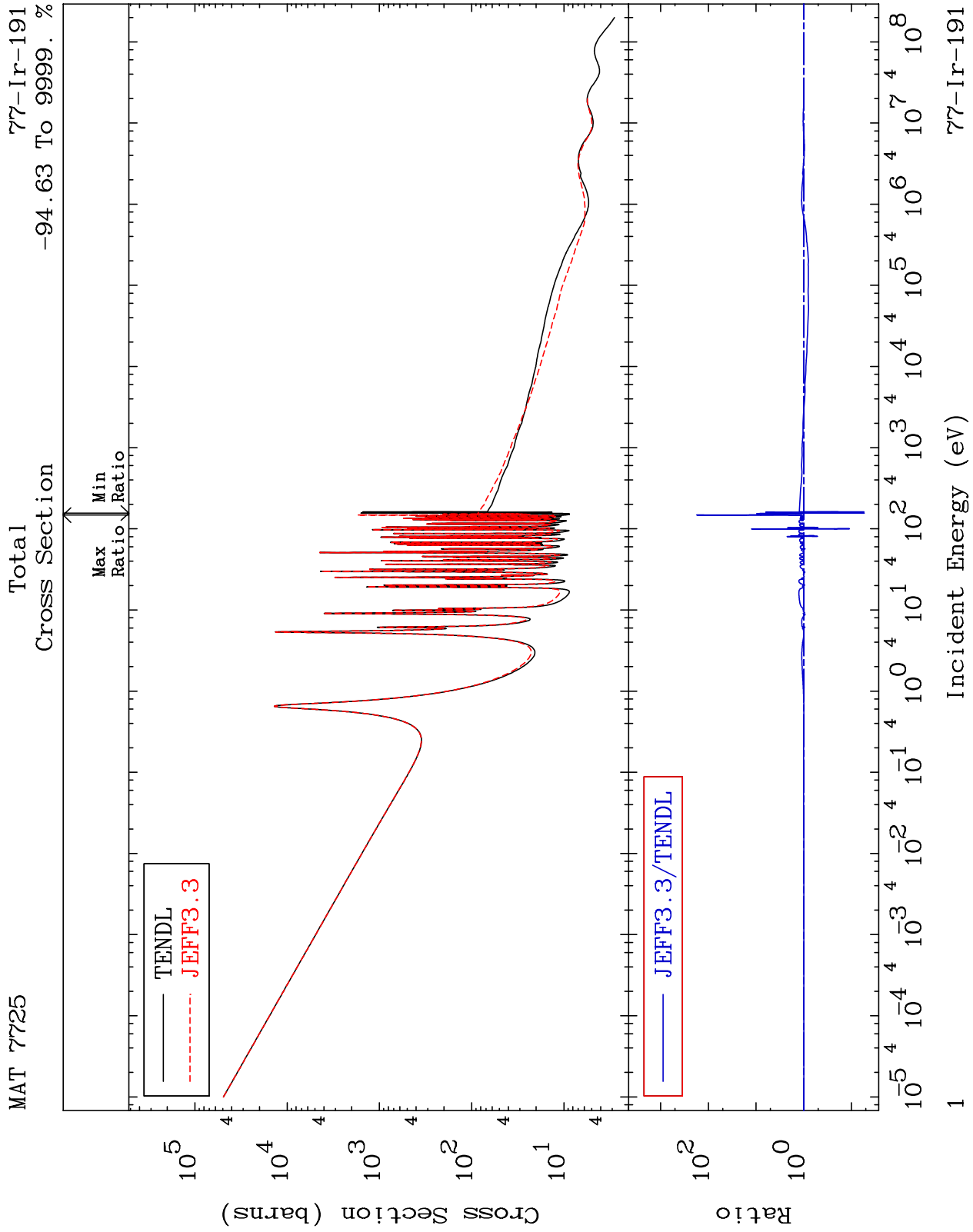
Dermott E. Cullen  
(Present Contact Information)

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

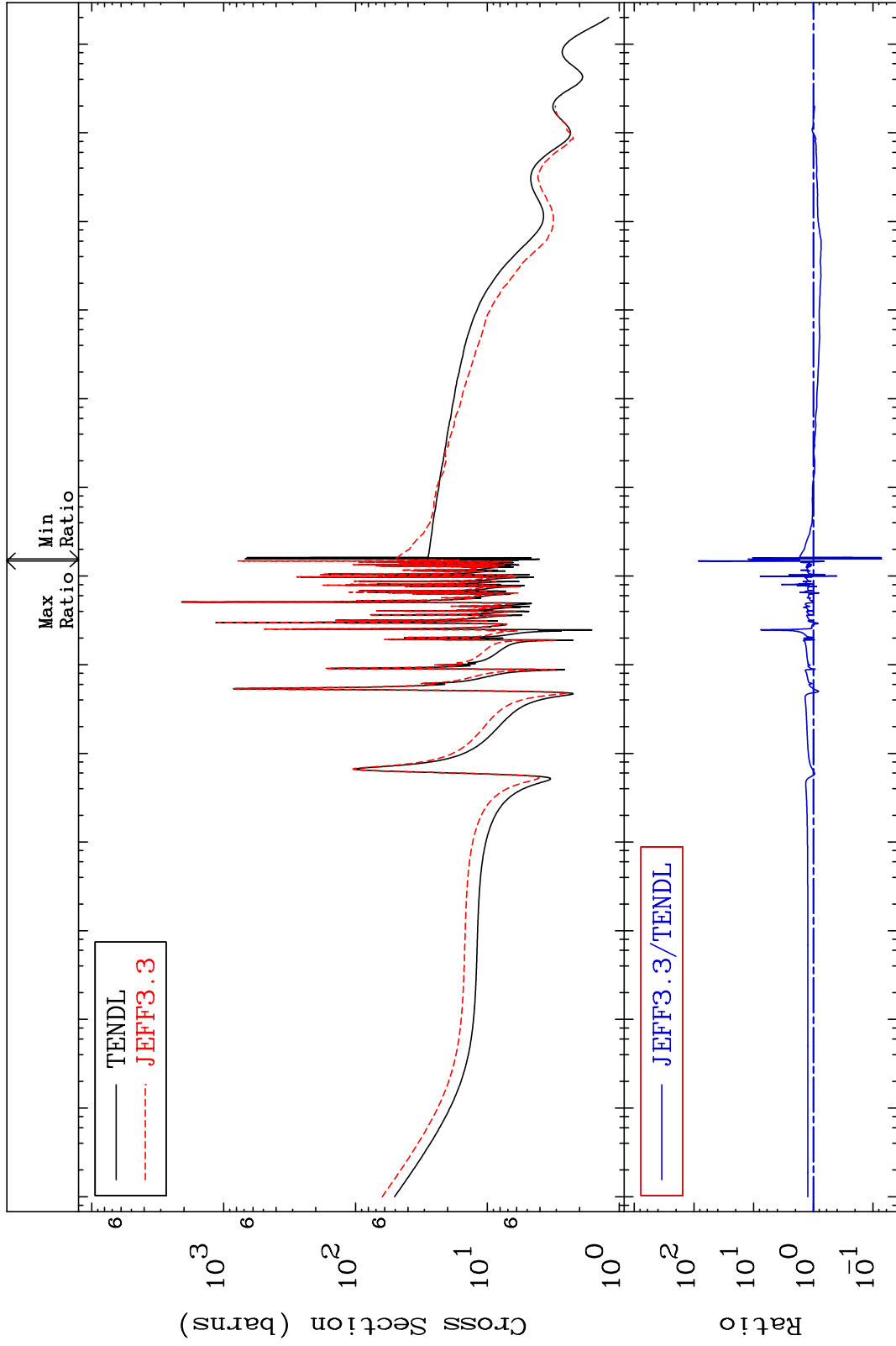
Press Mouse Button to Start



MAT 7725

Elastic  
Cross Section

<sup>77</sup>Ir-191  
-92.78 To 8349. %



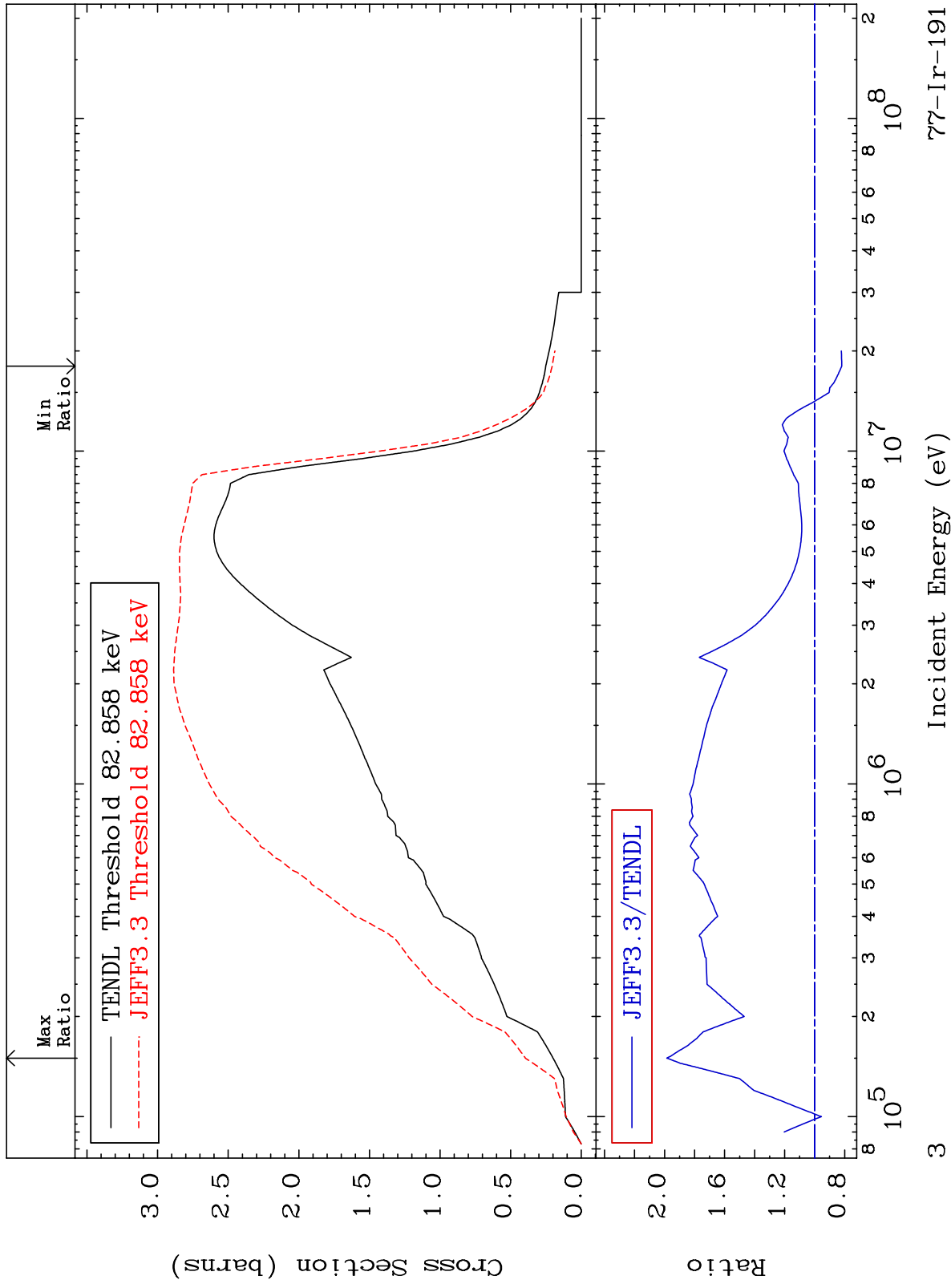
— TENDL  
- - - JEFF3.3

— JEFF3.3/TENDL

Incident Energy (eV)

<sup>77</sup>Ir-191

MAT 7725 Inelastic 77-Ir-191  
Cross Section -18.09 To 98.49 %



3 Incident Energy (eV) 77-Ir-191

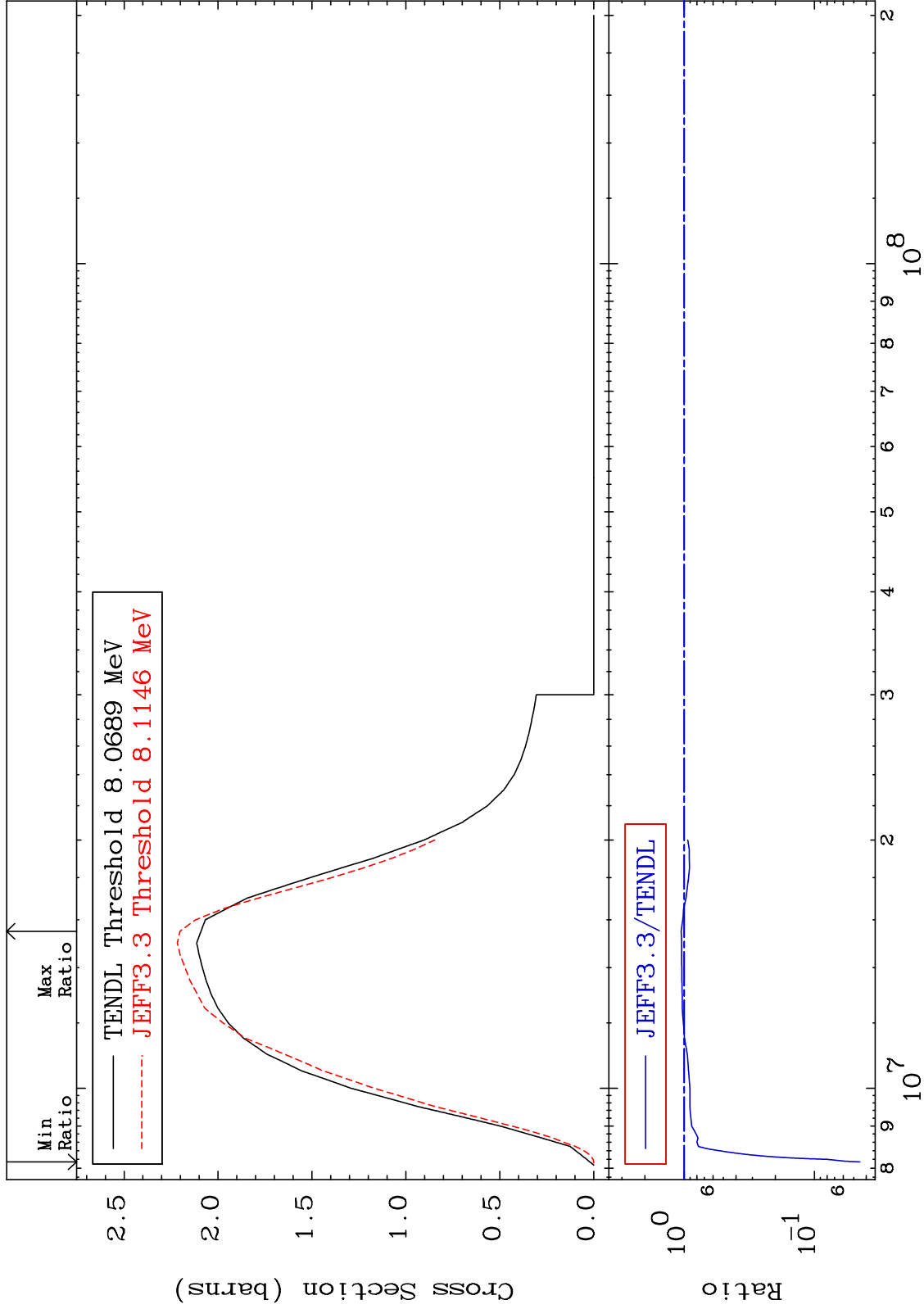
MAT 7725

(n, 2n)

<sup>77</sup>Ir-191

Cross Section

-95.52 To 5.352 %



4

Incident Energy (eV)

<sup>77</sup>Ir-191

MAT 7725

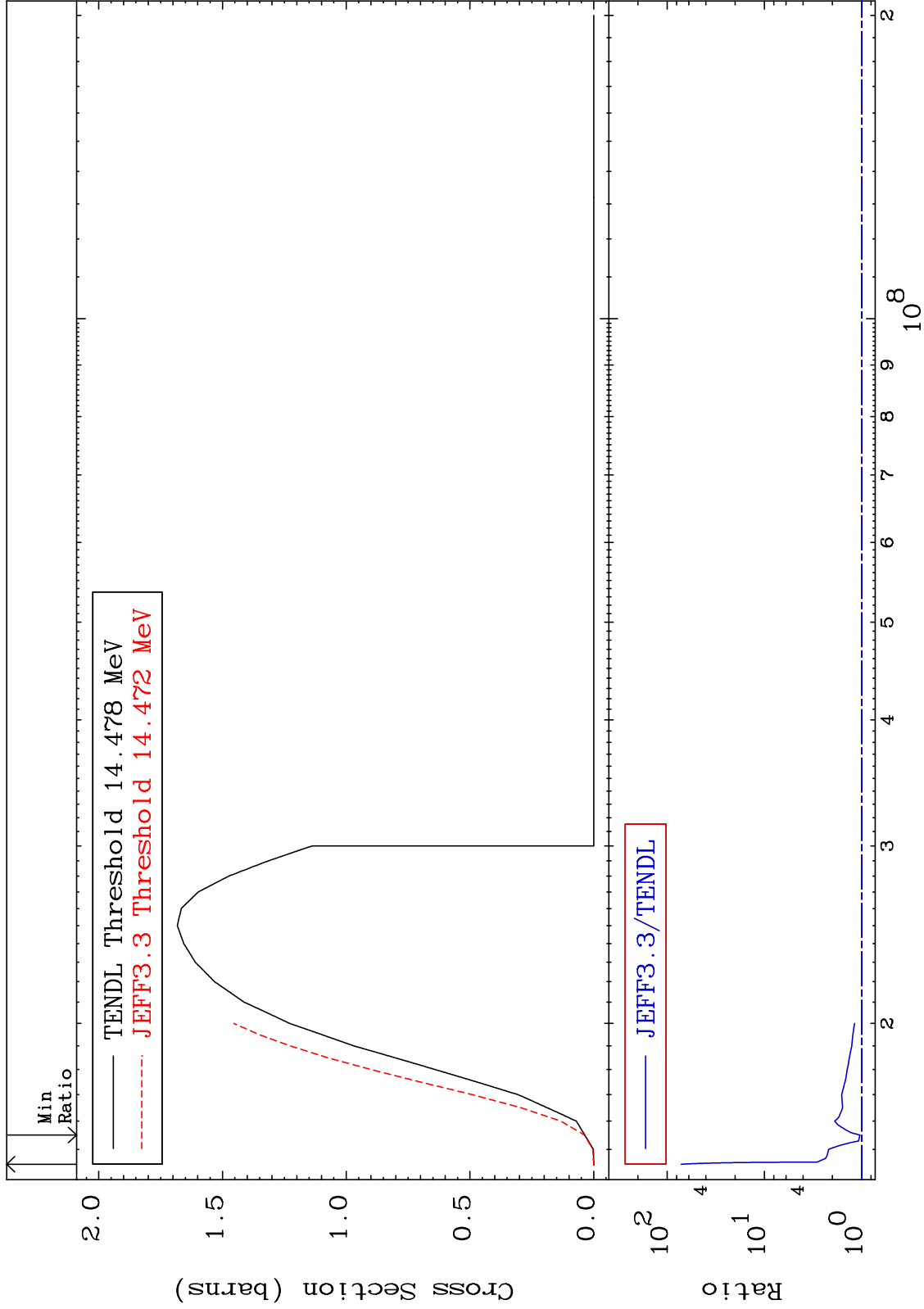
(n, 3n)

<sup>77</sup>Ir-191

Cross Section

4.121

To 7077. %



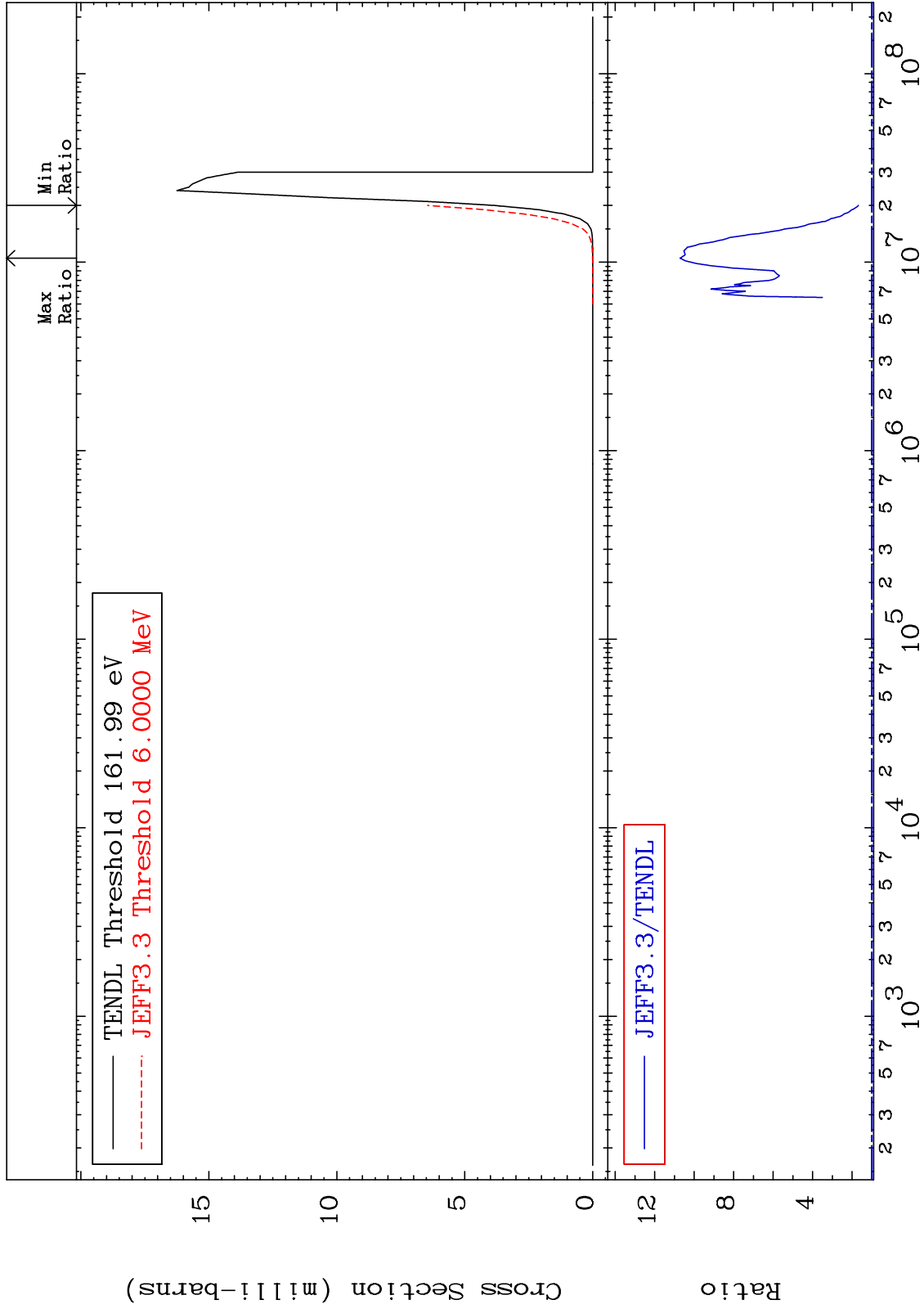
MAT 7725

(n, n')  $\alpha$

Cross Section

77-Ir-191

67.88 To 971.5 %



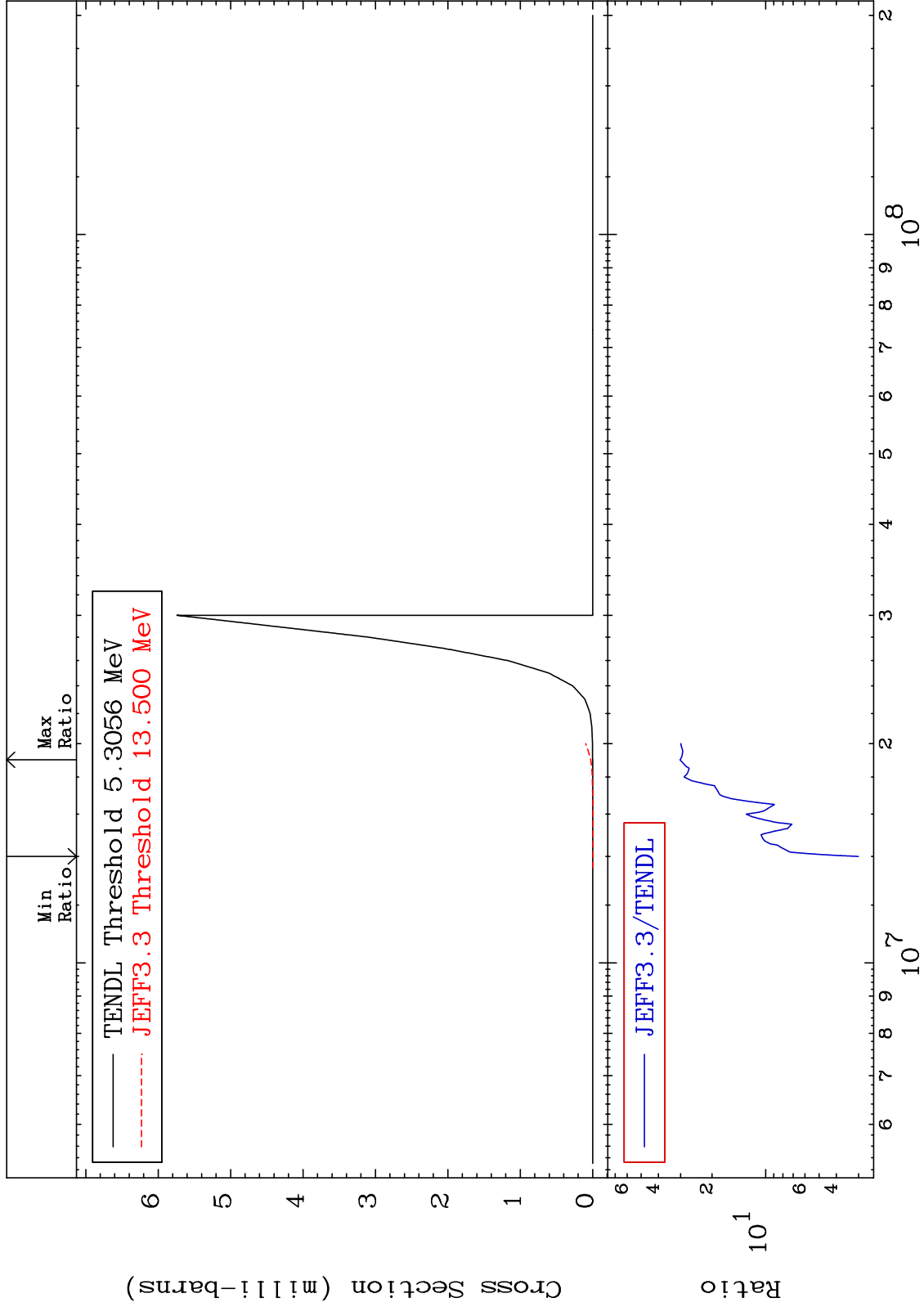
MAT 7725

(n,2n)  $\alpha$

77-Ir-191

Cross Section

200.7 To 2926. %





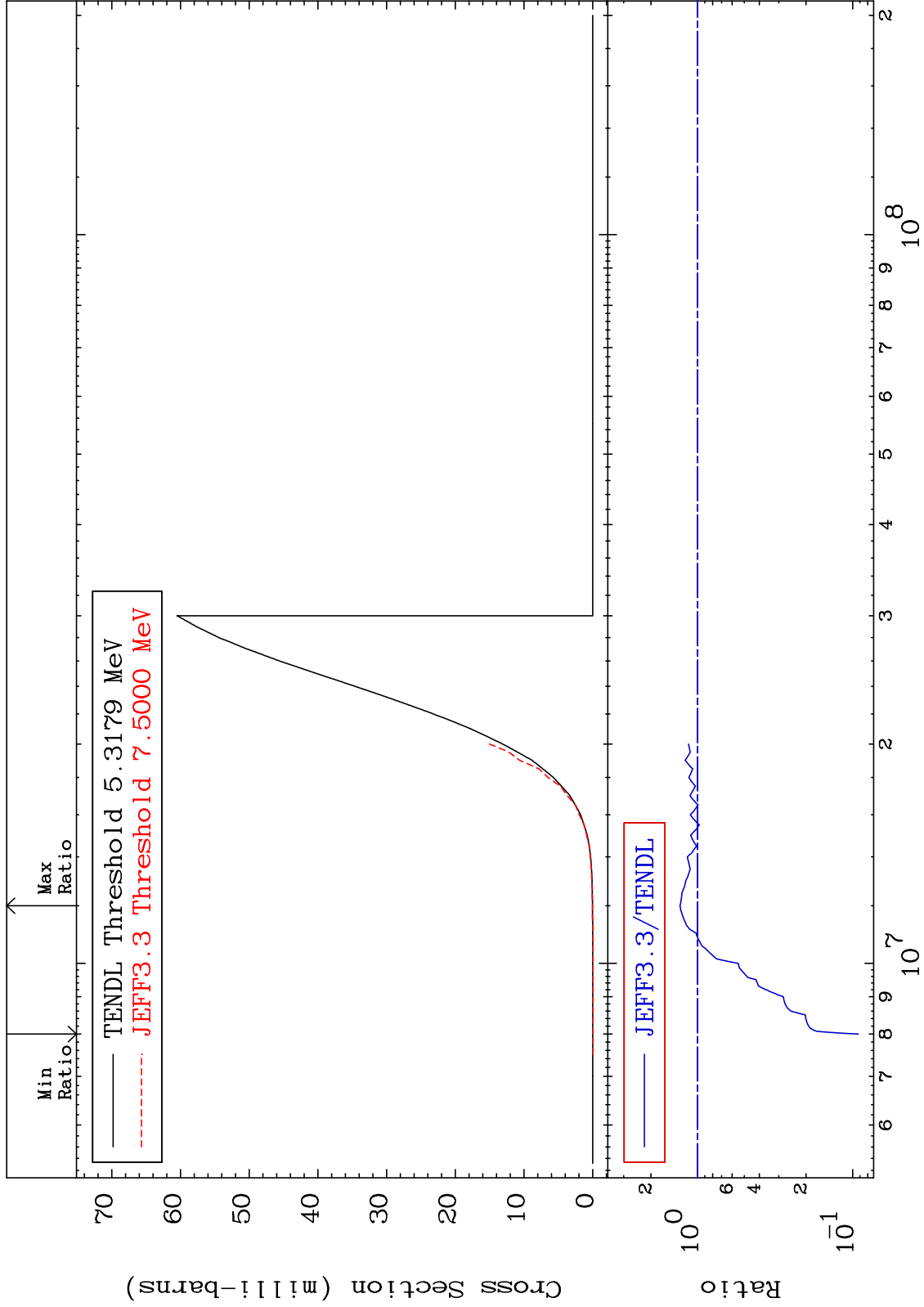
MAT 7725

(n,n') p

<sup>77</sup>Ir-191

Cross Section

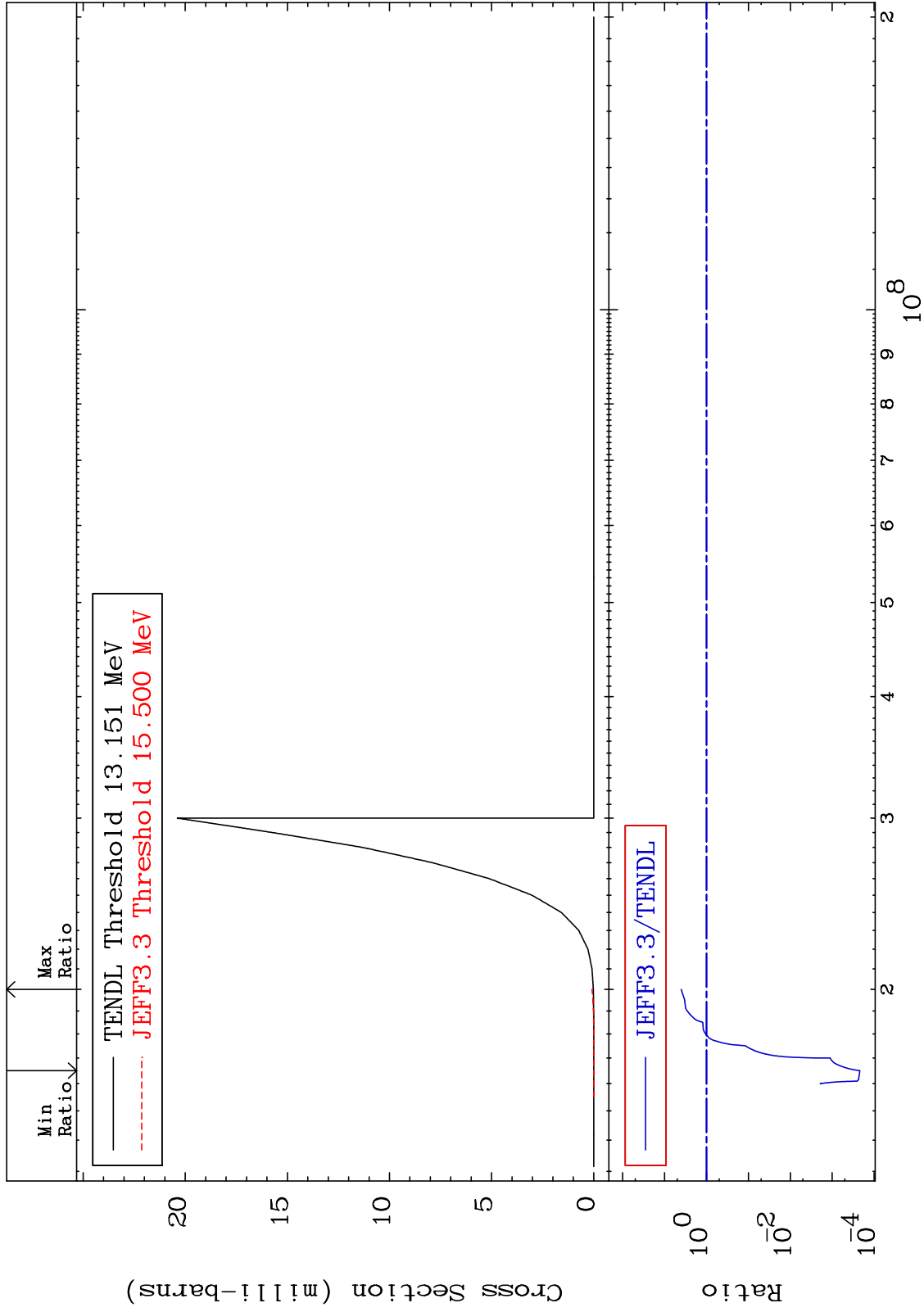
-90.81 To 29.93 %



MAT 7725

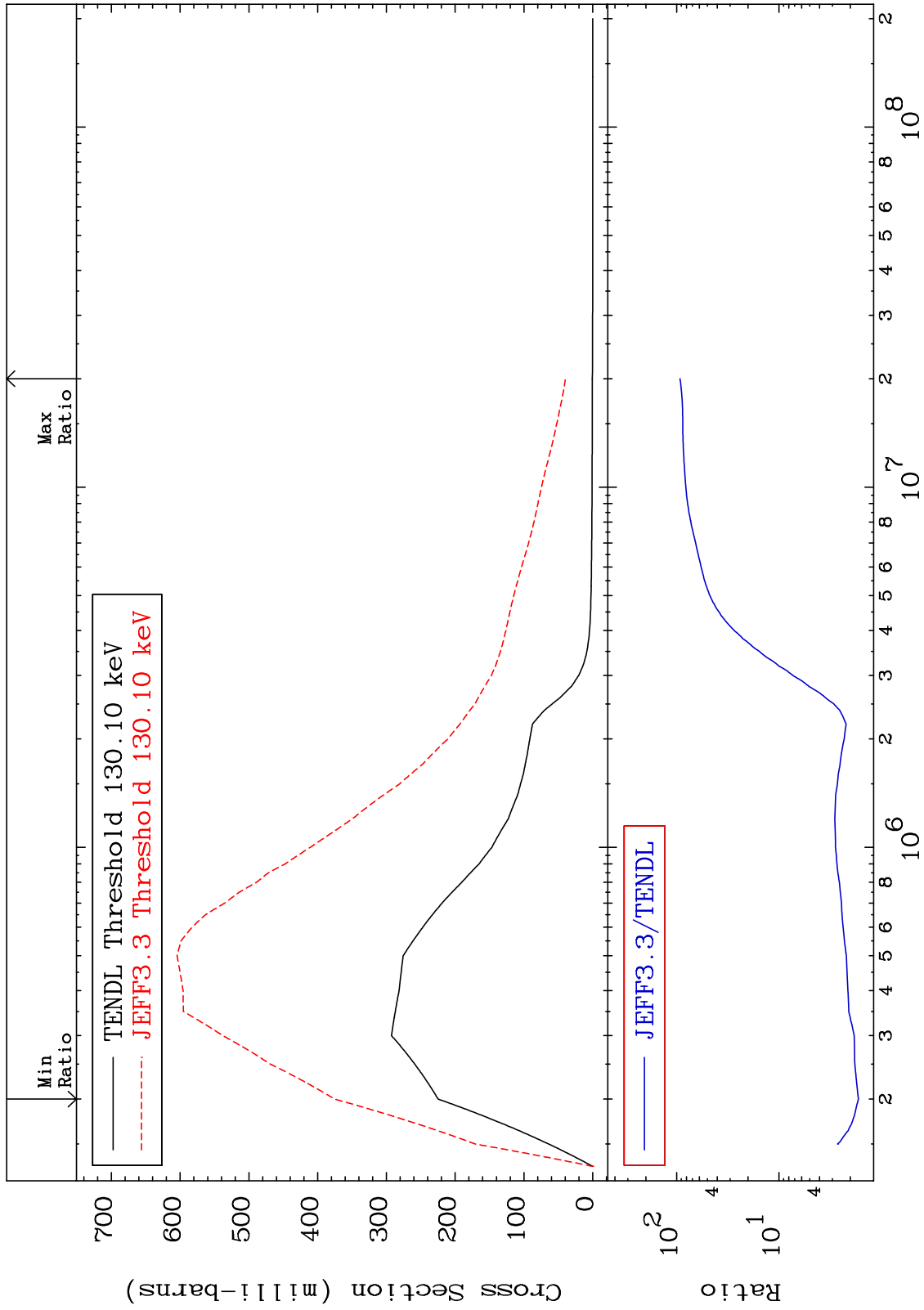
(n,2n) p  
Cross Section

<sup>77</sup>Ir-191  
-99.98 To 301.1 %

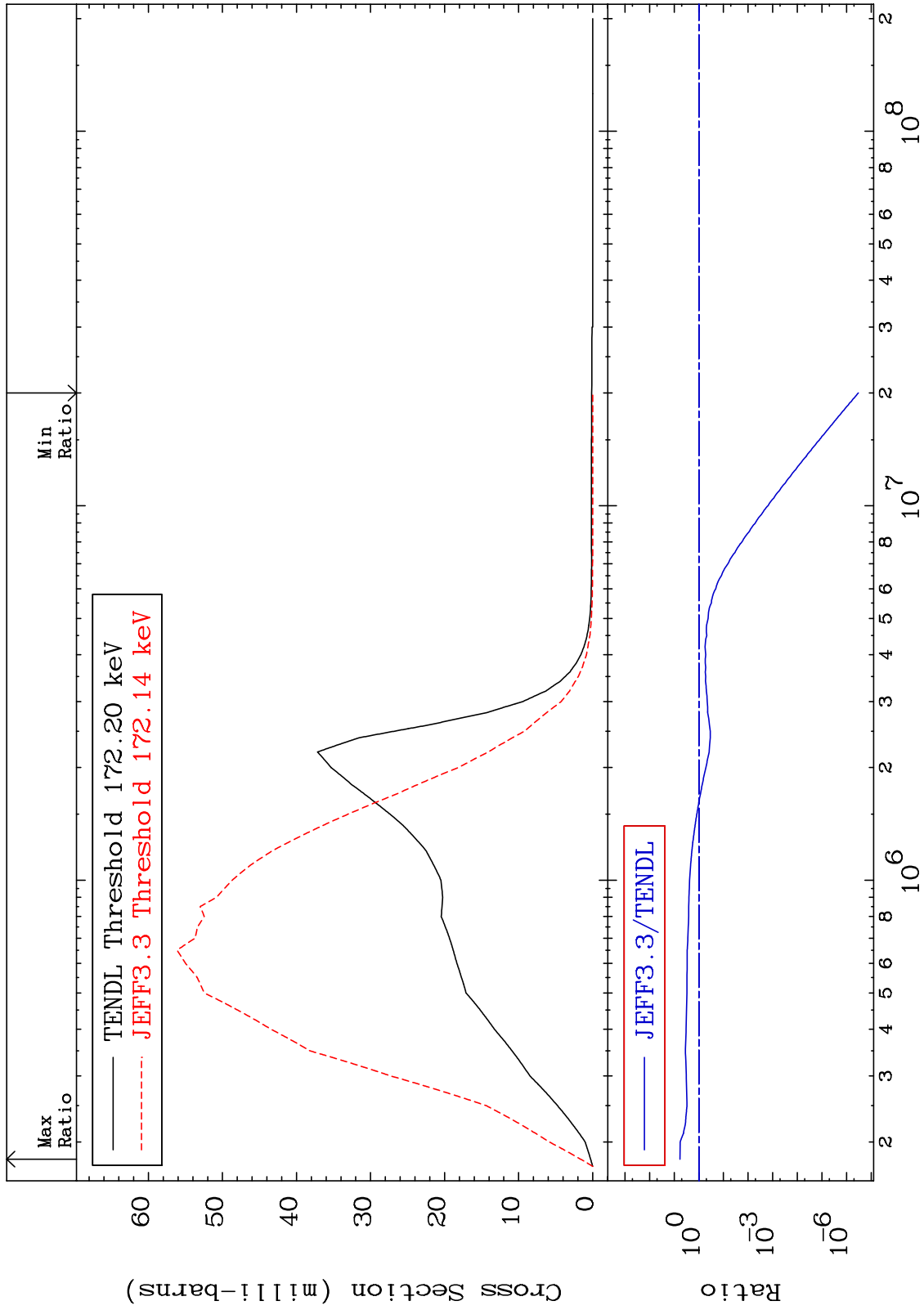




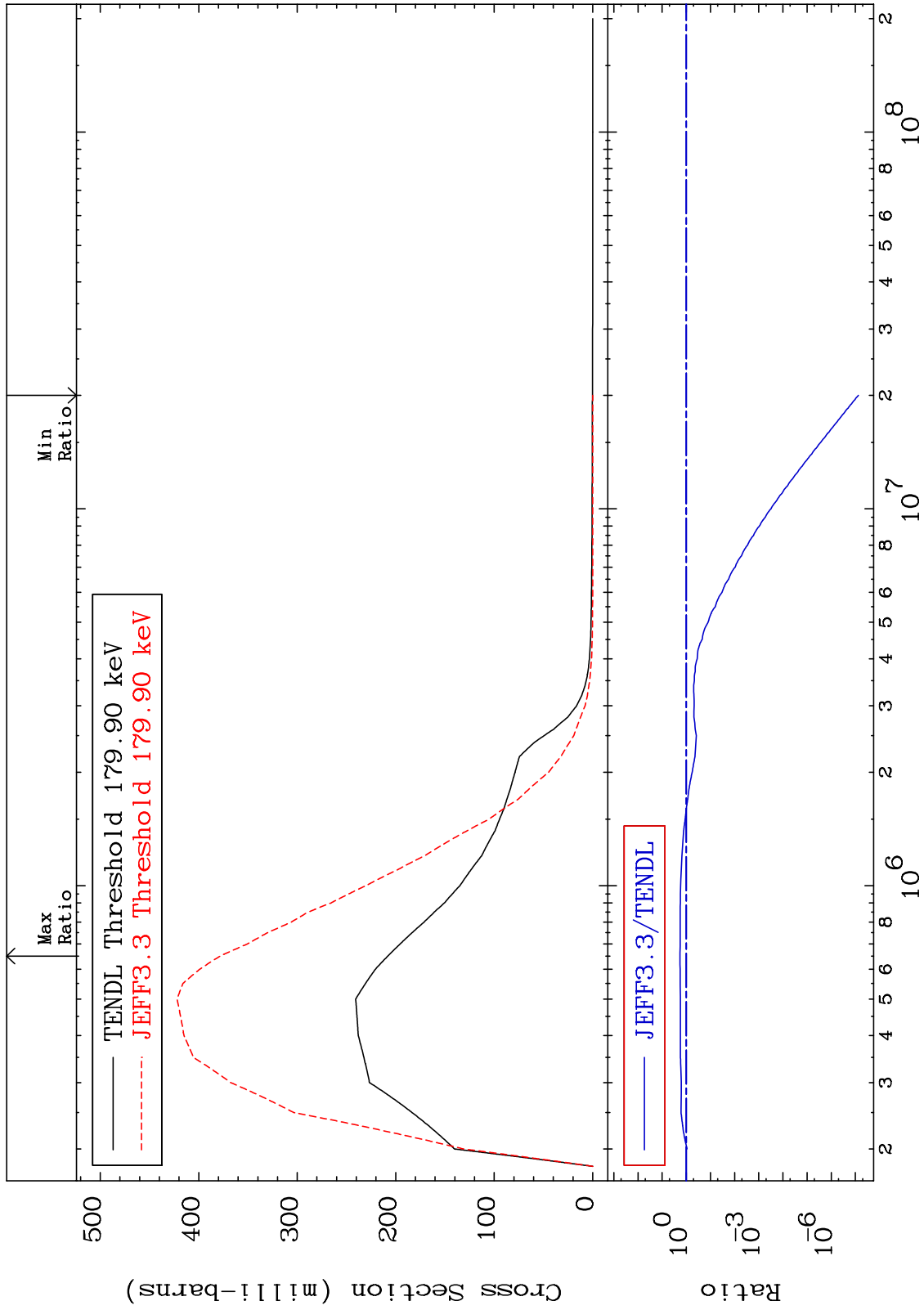
MAT 7725      MT= 52 (n,n') Level      77-Ir-191  
 Cross Section      66.98      To 9162. %

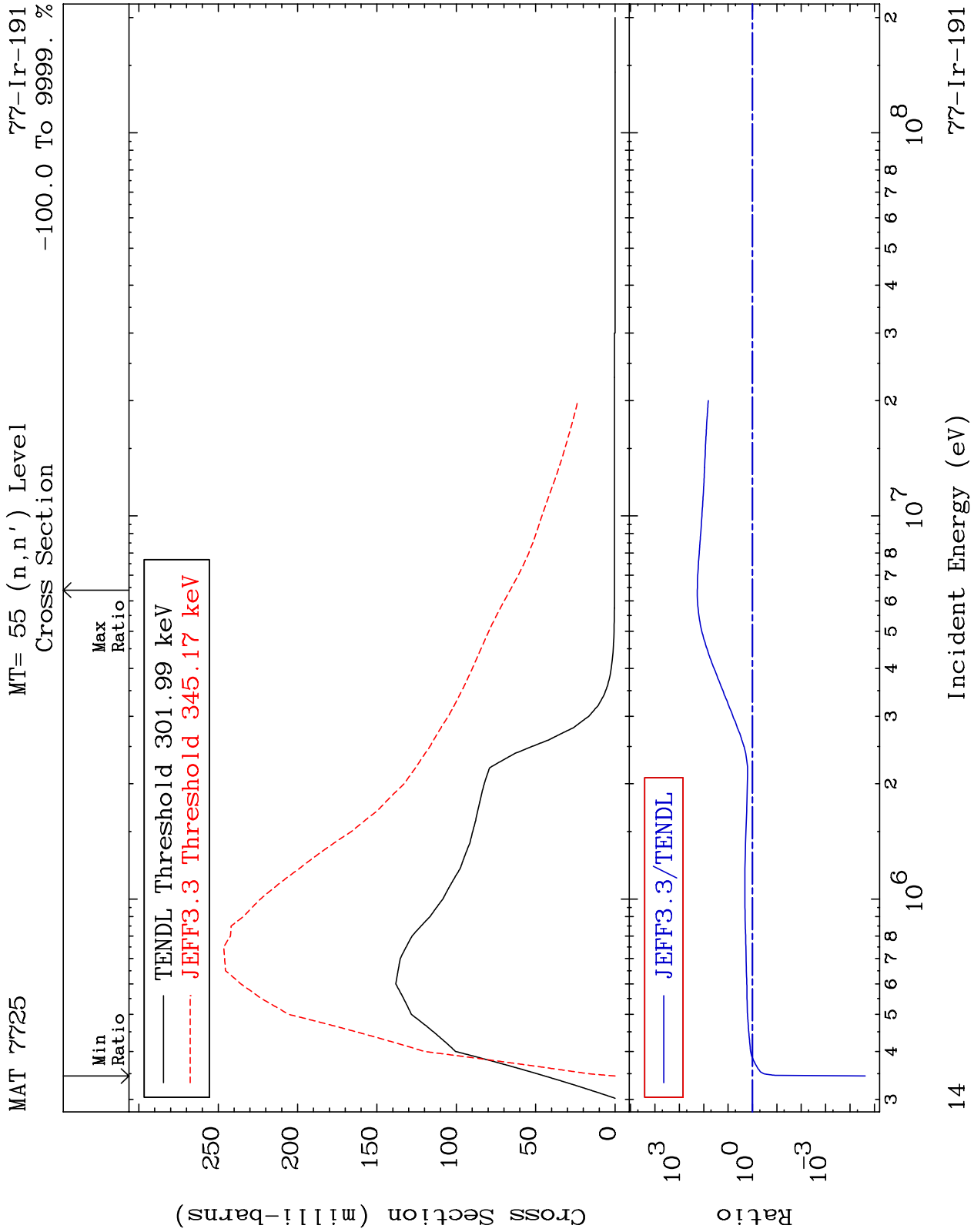


MAT 7725 MT= 53 (n,n') Level Cross Section -100.0 To 480.5 % 77-Ir-191

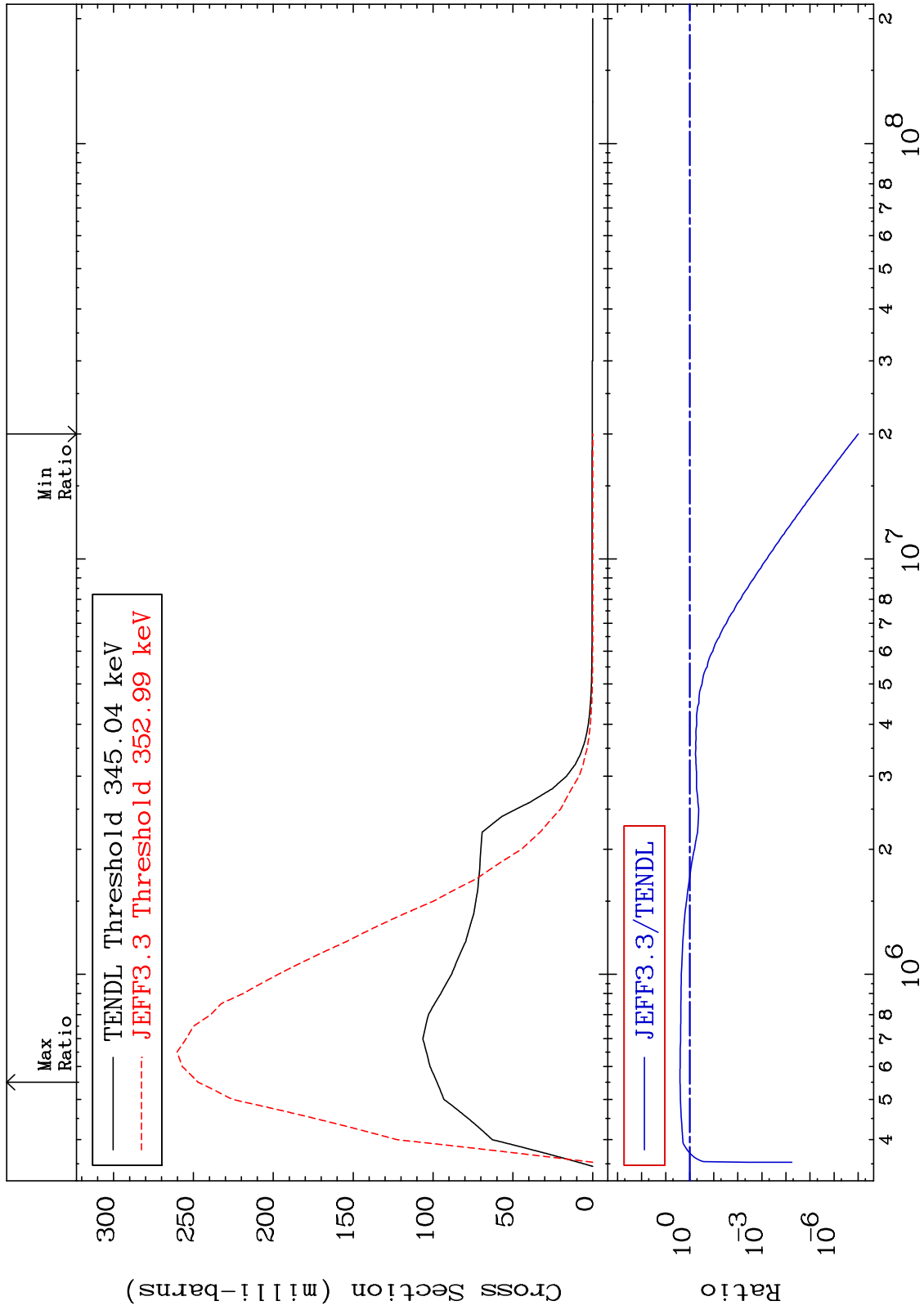


MAT 7725      MT= 54 (n,n') Level      77-Ir-191  
 Cross Section      -100.0 To 81.87 %





MAT 7725 MT= 56 (n,n') Level Cross Section -100.0 To 153.4 % 77-Ir-191

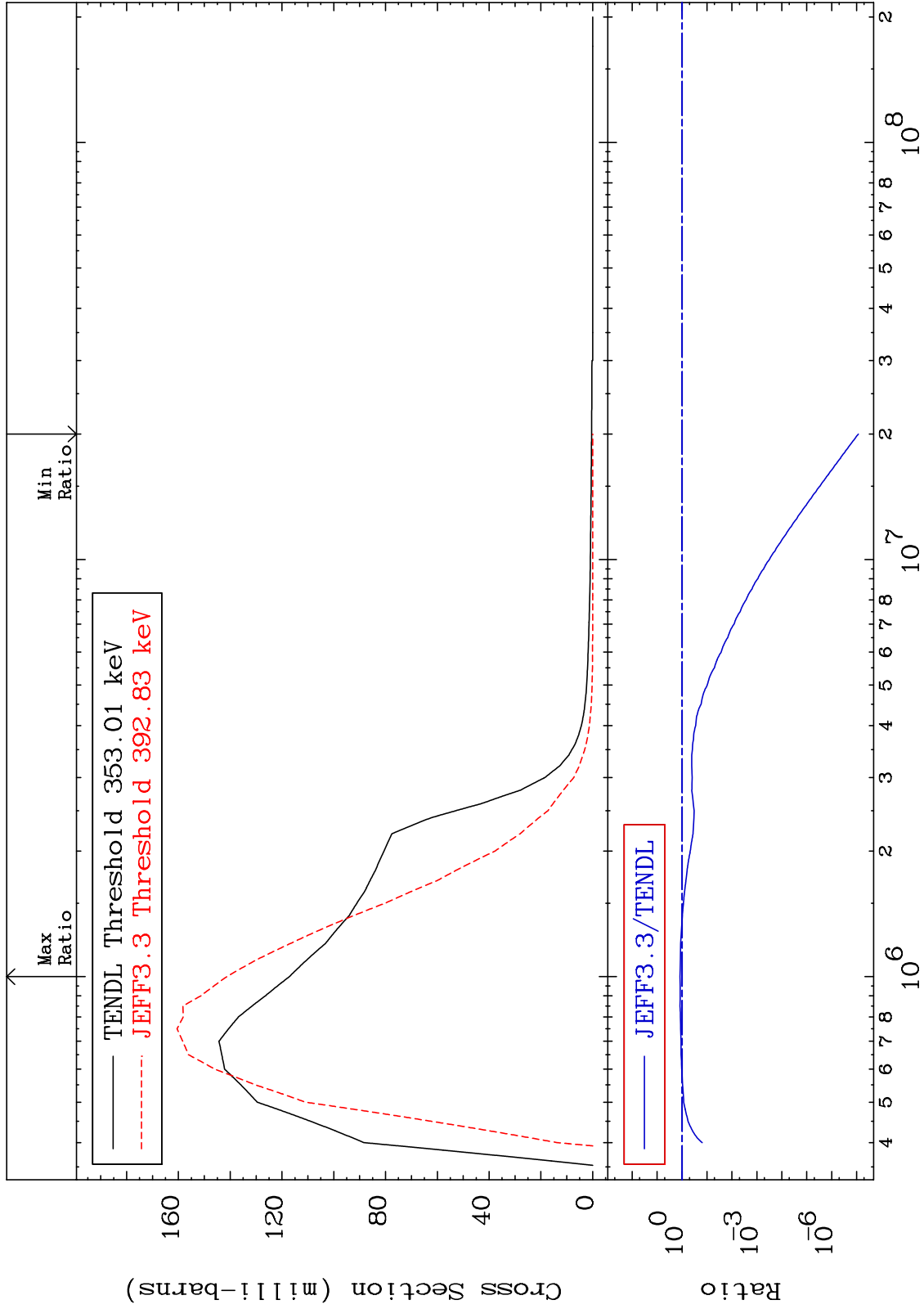




MAT 7725

MT= 57 (n,n') Level  
Cross Section

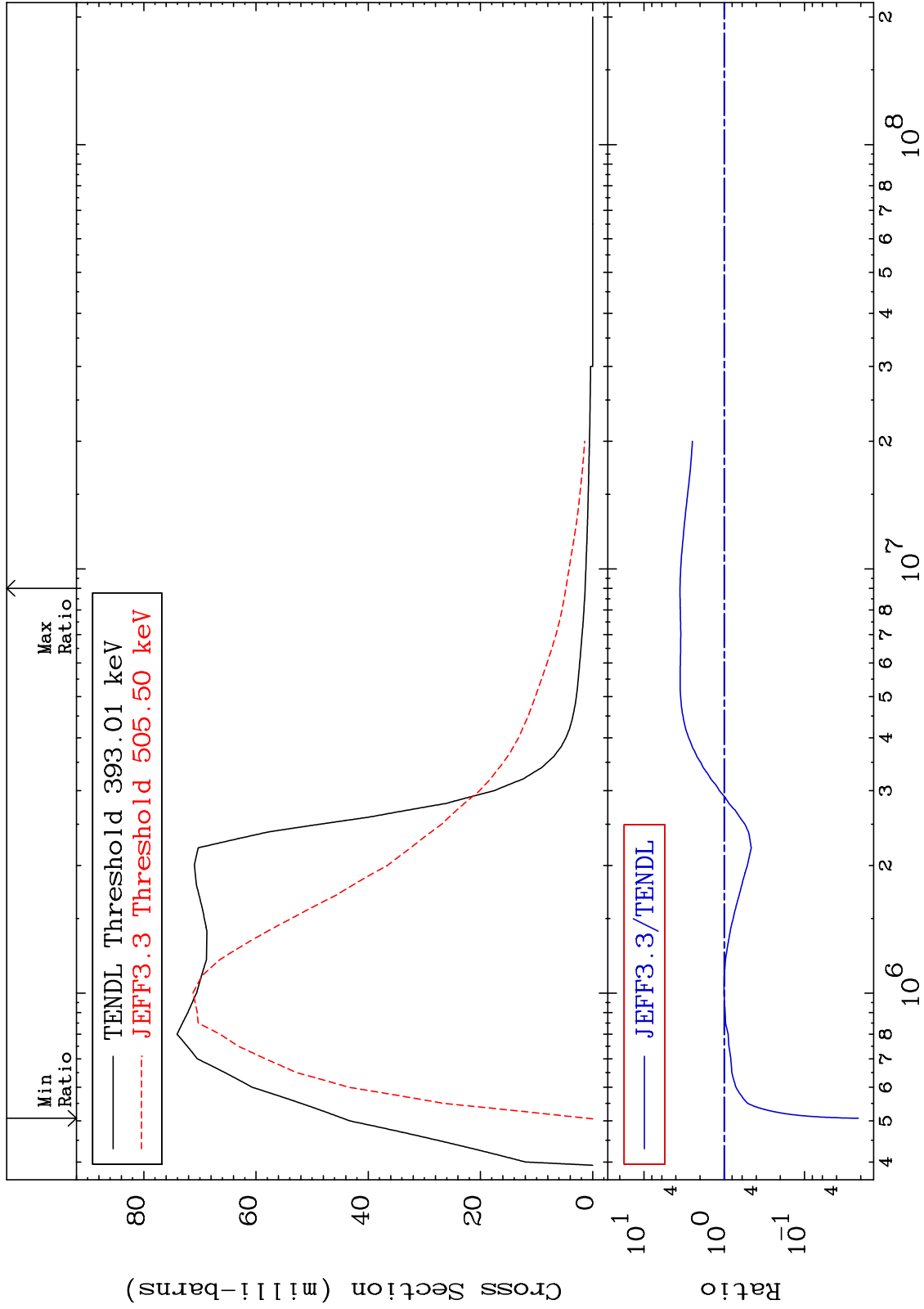
77-Ir-191  
-100.0 To 20.65 %



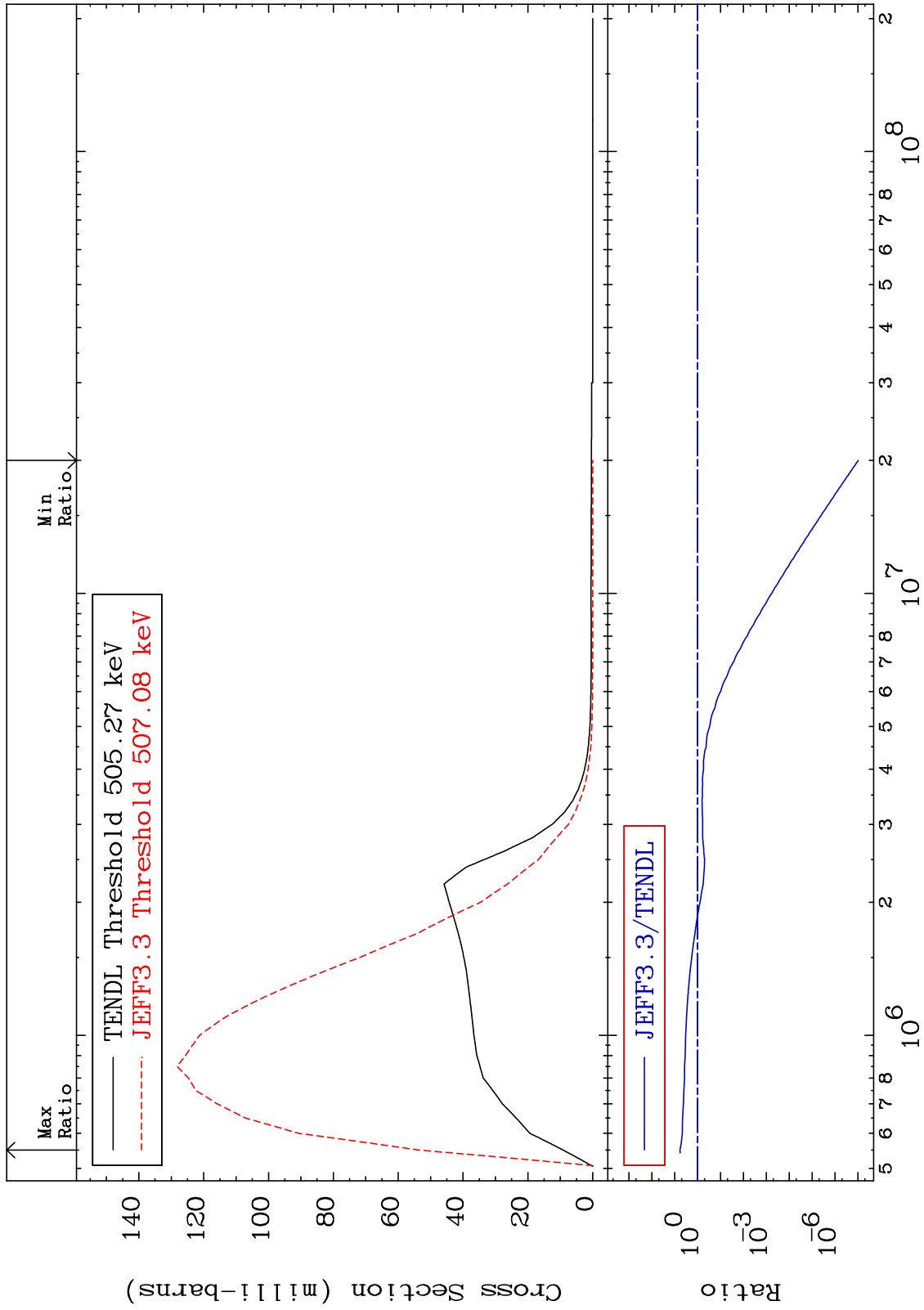
MAT 7725

MT= 58 (n,n') Level  
Cross Section

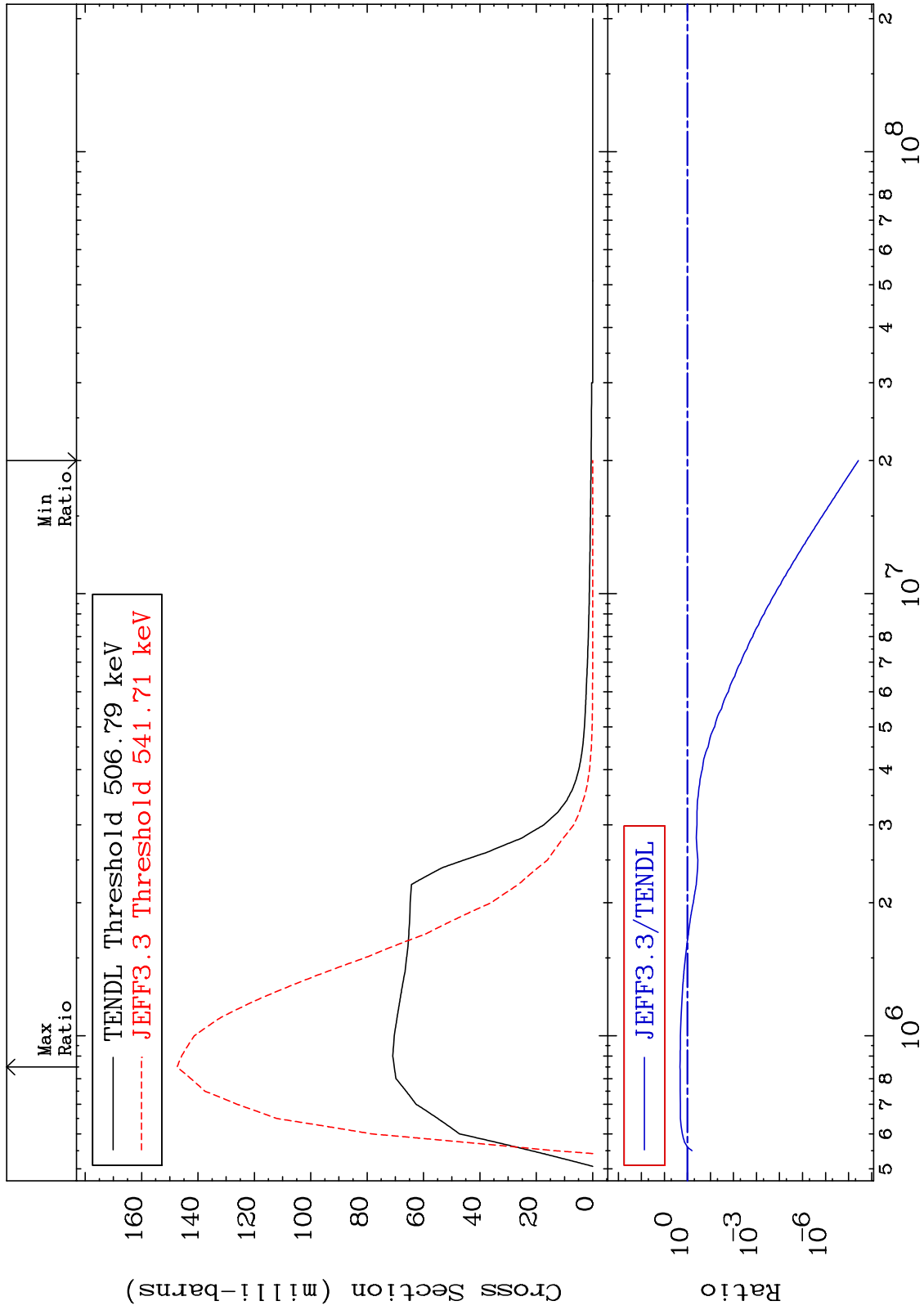
77-Ir-191  
-97.87 To 255.6 %



MAT 7725 MT= 59 (n,n') Level Cross Section -100.0 To 485.7 % 77-Ir-191



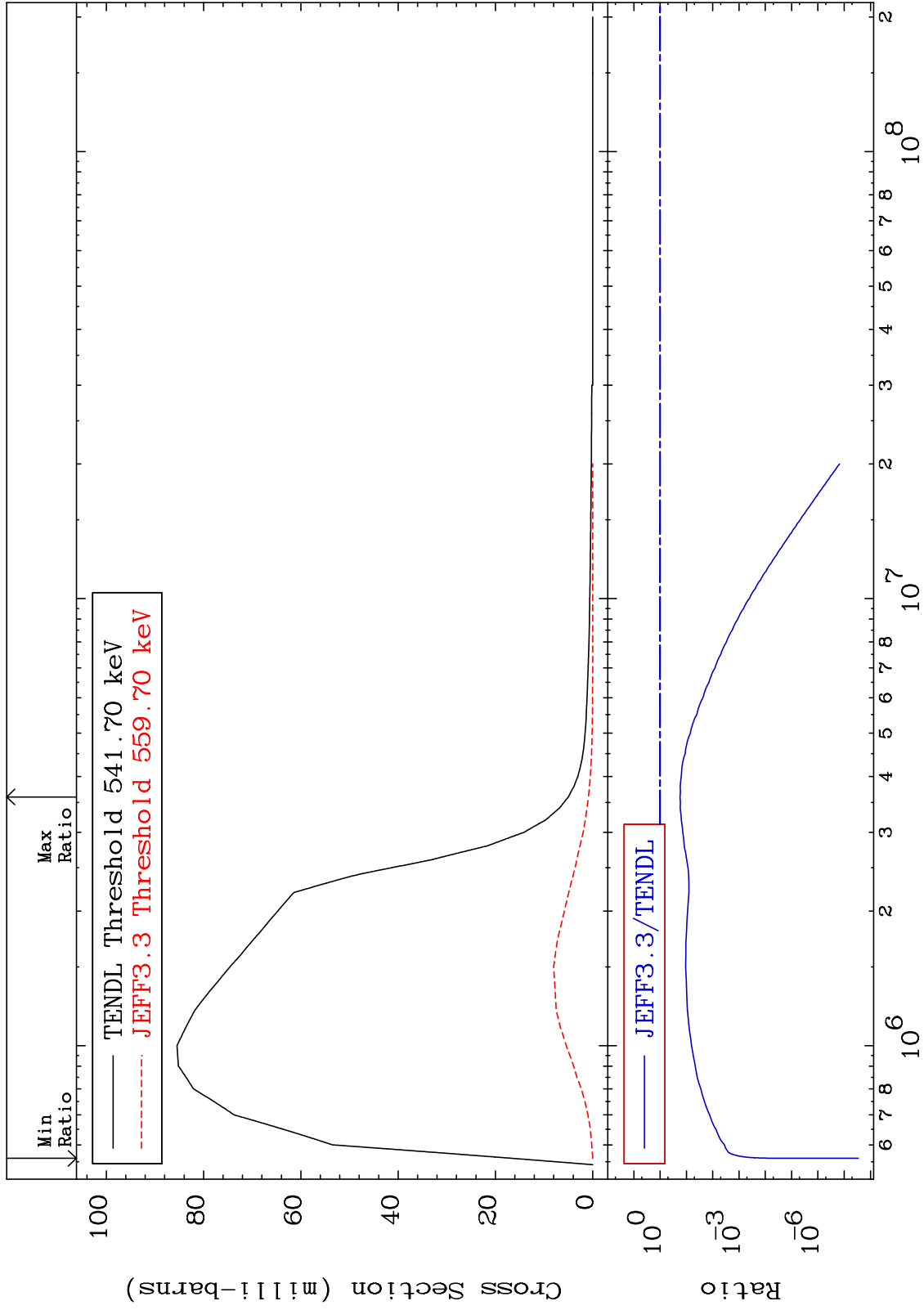
MAT 7725 MT= 60 (n,n') Level Cross Section -100.0 To 109.6 % 77-Ir-191



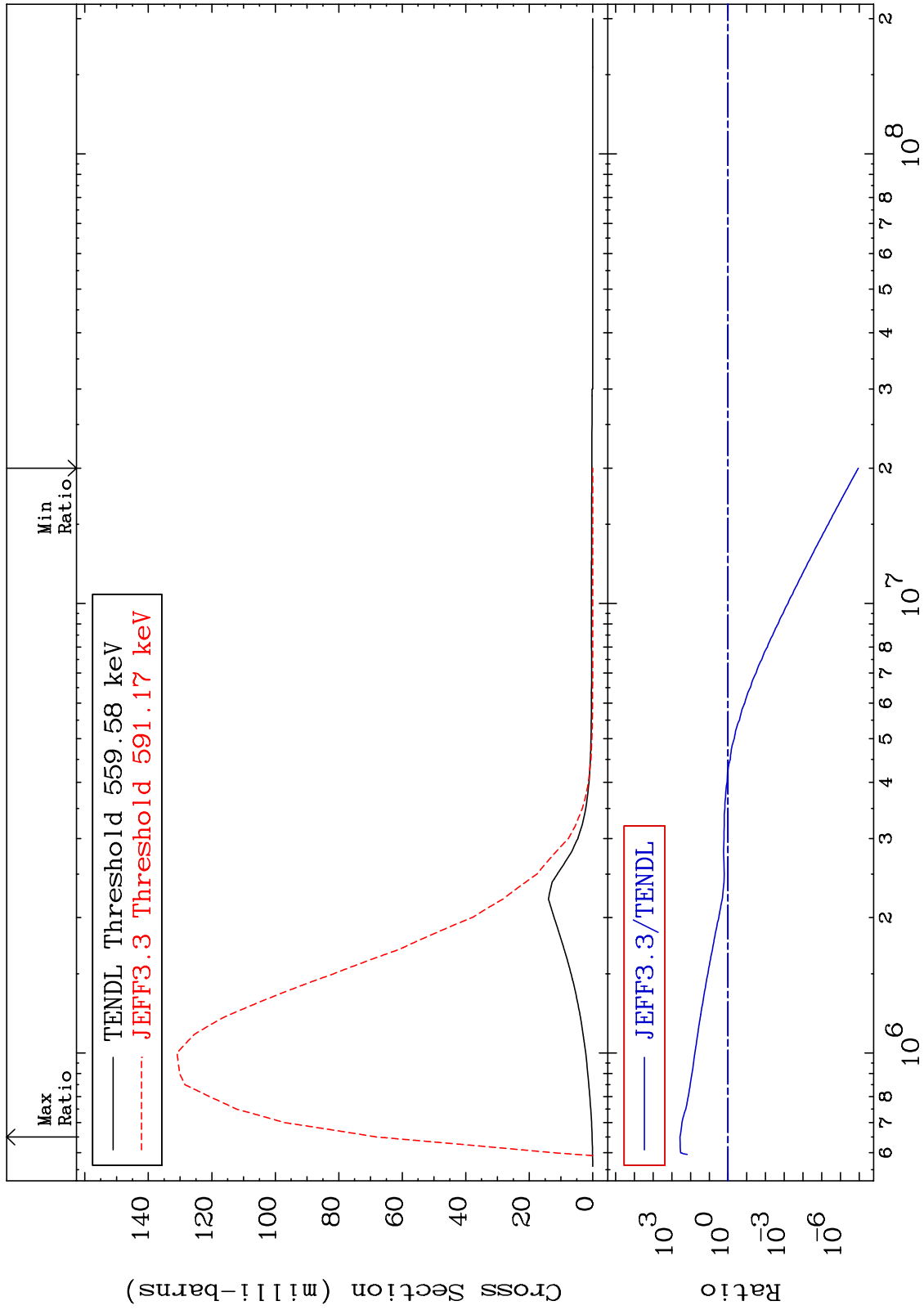
MAT 7725

MT= 61 (n,n') Level  
Cross Section

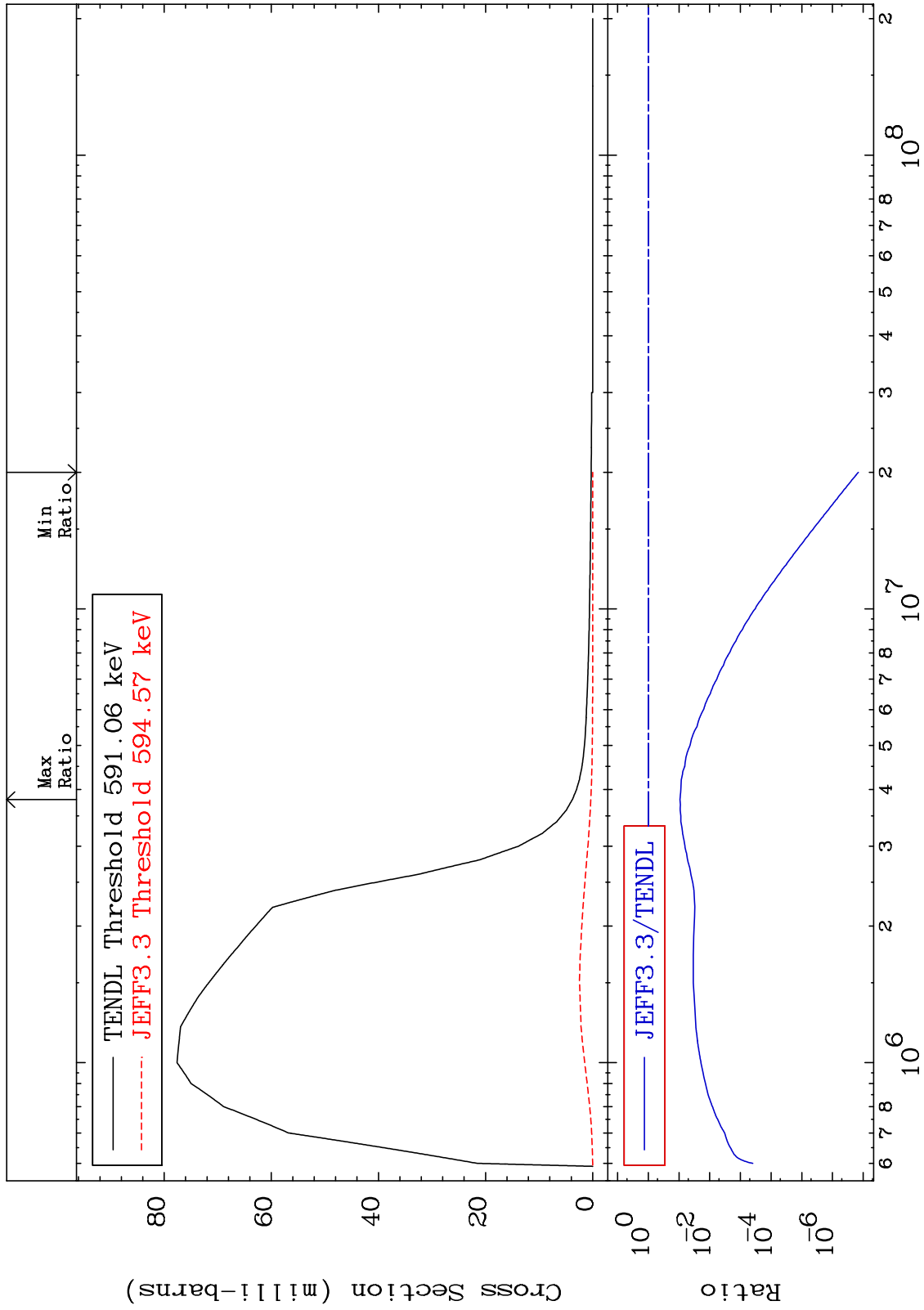
77-Ir-191  
-100.0 To -82.45%



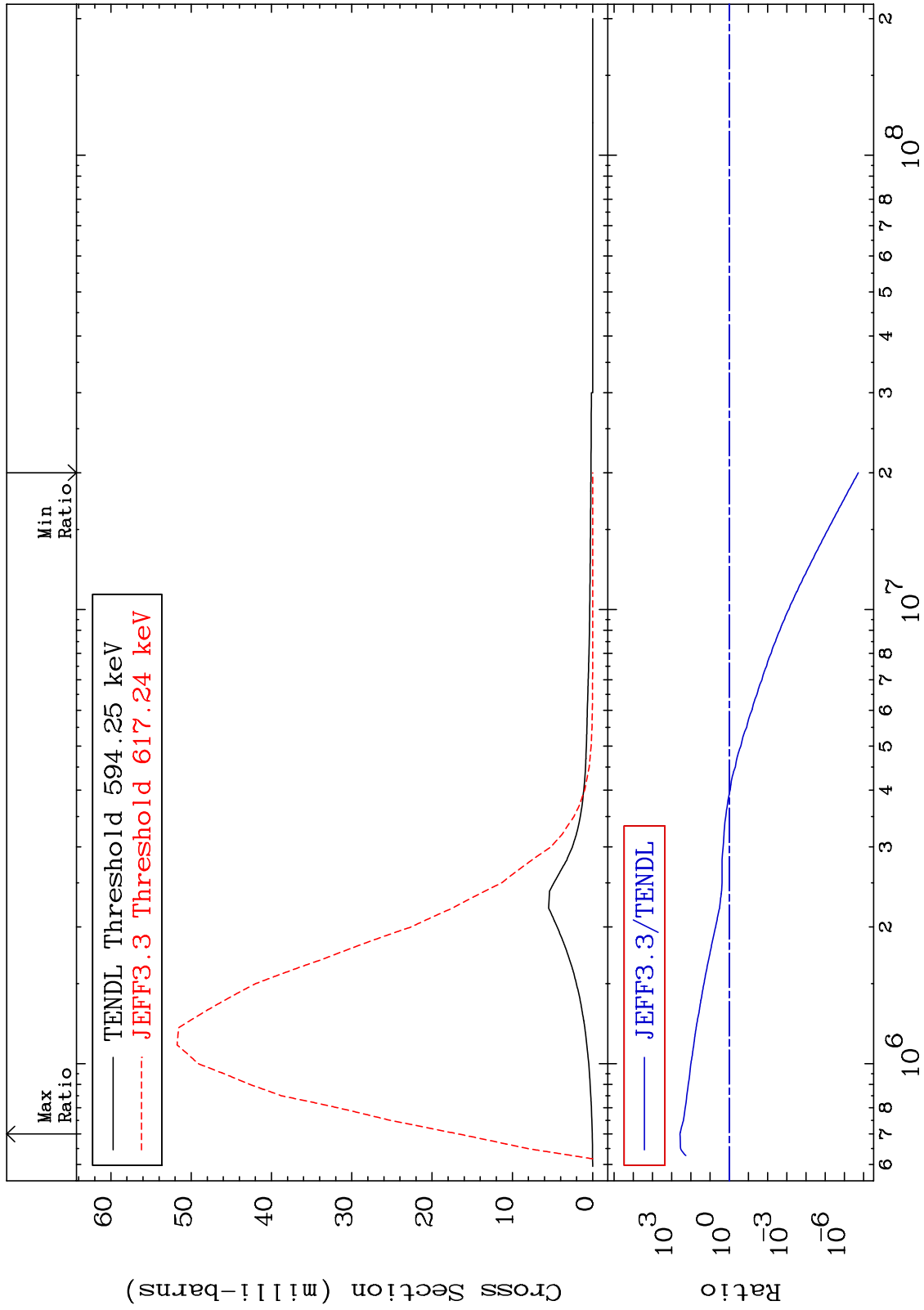
MAT 7725 MT= 62 (n,n') Level Cross Section -100.0 To 9999. % 77-Ir-191



MAT 7725 MT= 63 (n,n') Level Cross Section -100.0 To -90.72% 77-Ir-191

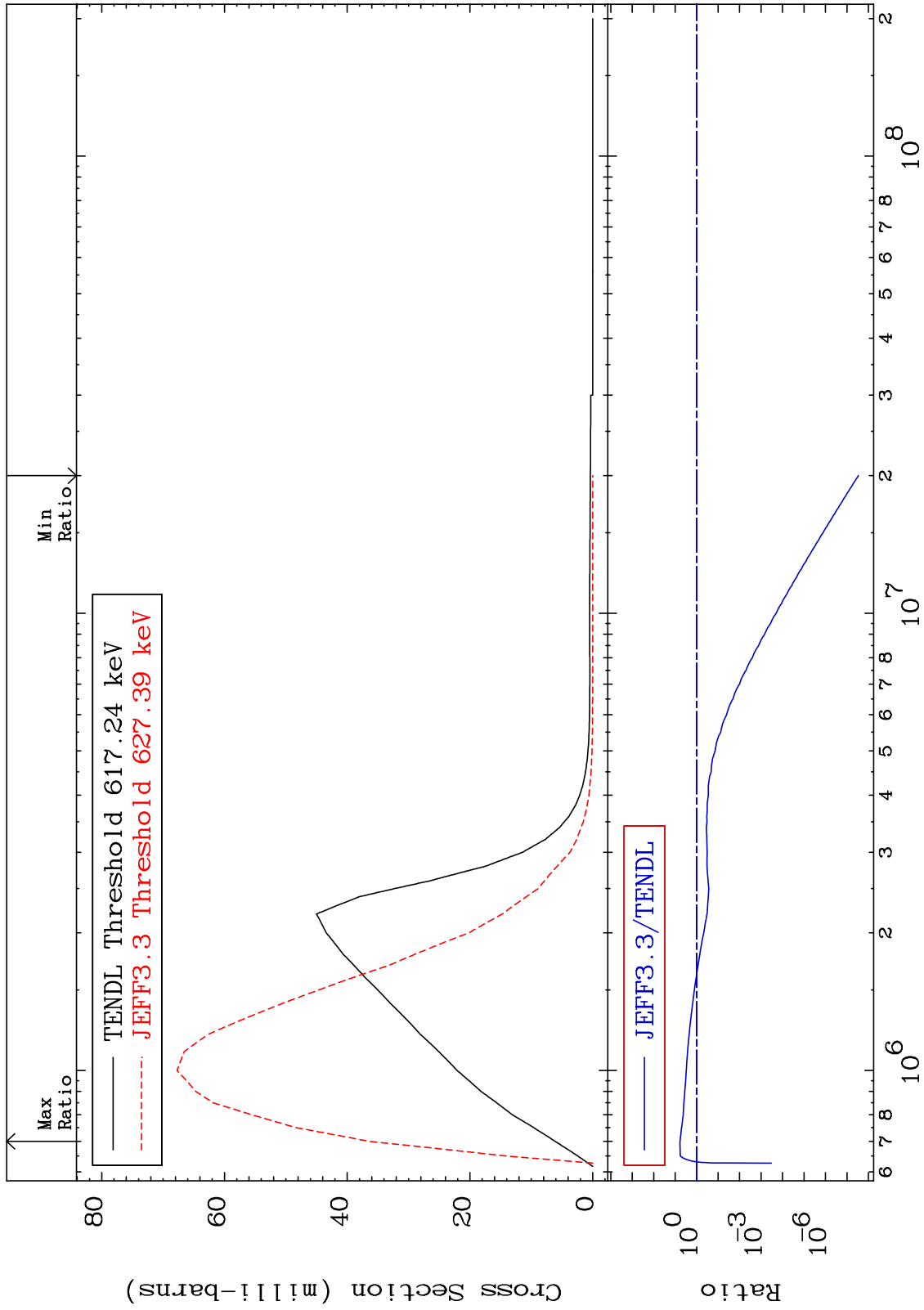


MAT 7725      MT= 64 (n,n') Level      77-Ir-191  
 Cross Section      -100.0 To 9999. %

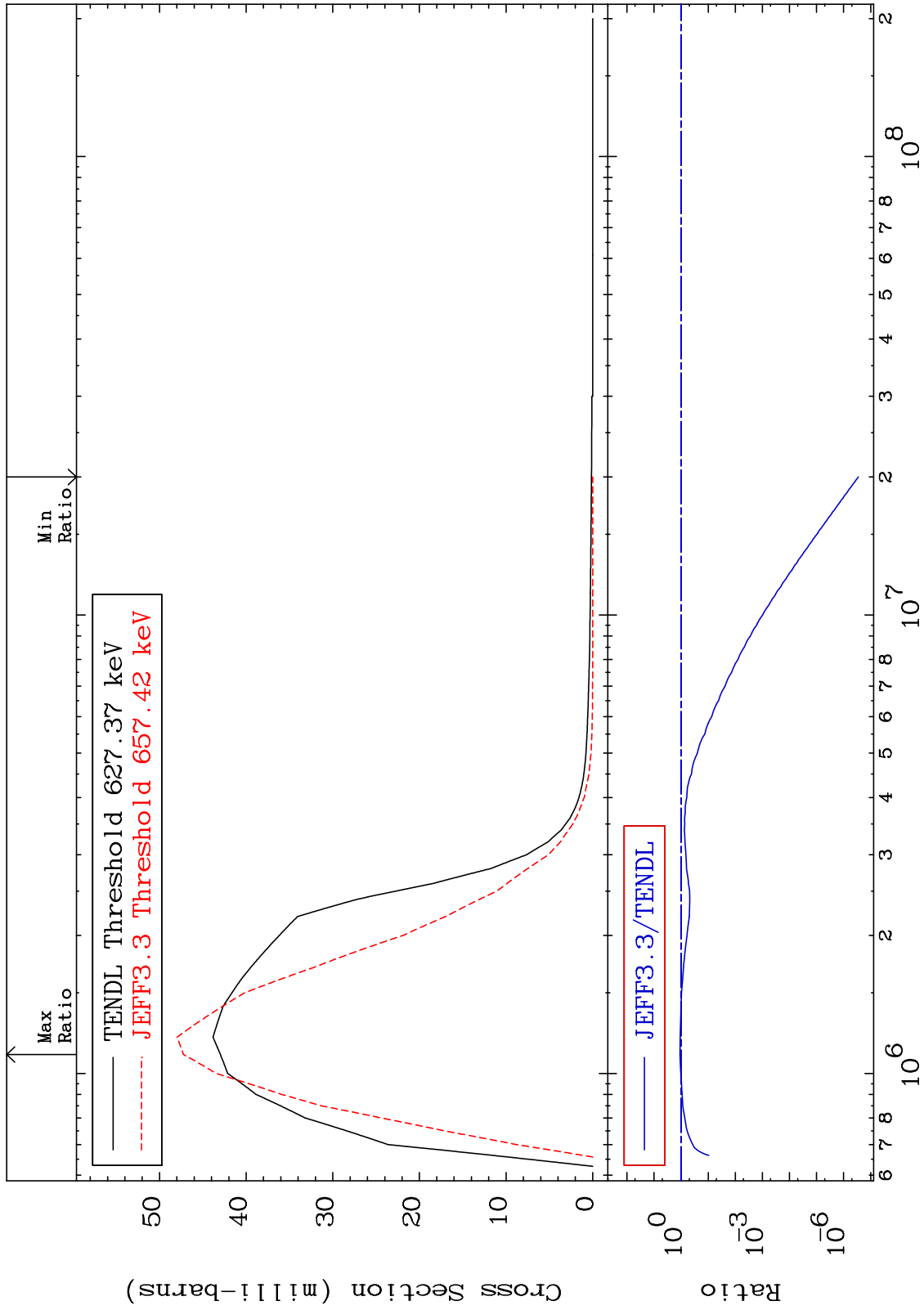




MAT 7725 MT= 65 (n,n') Level -100.0 To 494.3 % 77-Ir-191  
 Cross Section



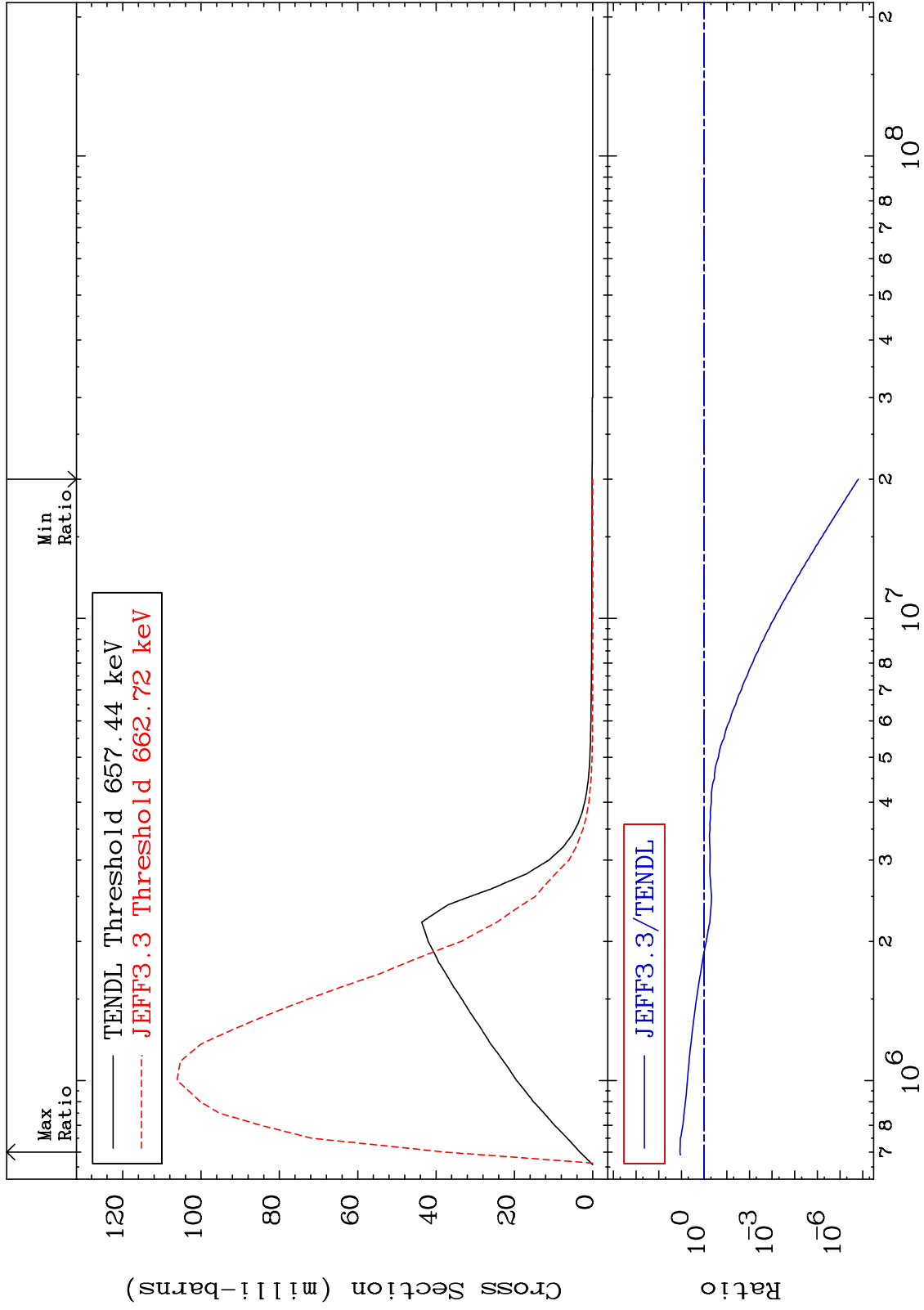
MAT 7725 MT= 66 (n,n') Level Cross Section -100.0 To 9.888 % 77-Ir-191



MAT 7725

MT= 67 (n,n') Level  
Cross Section

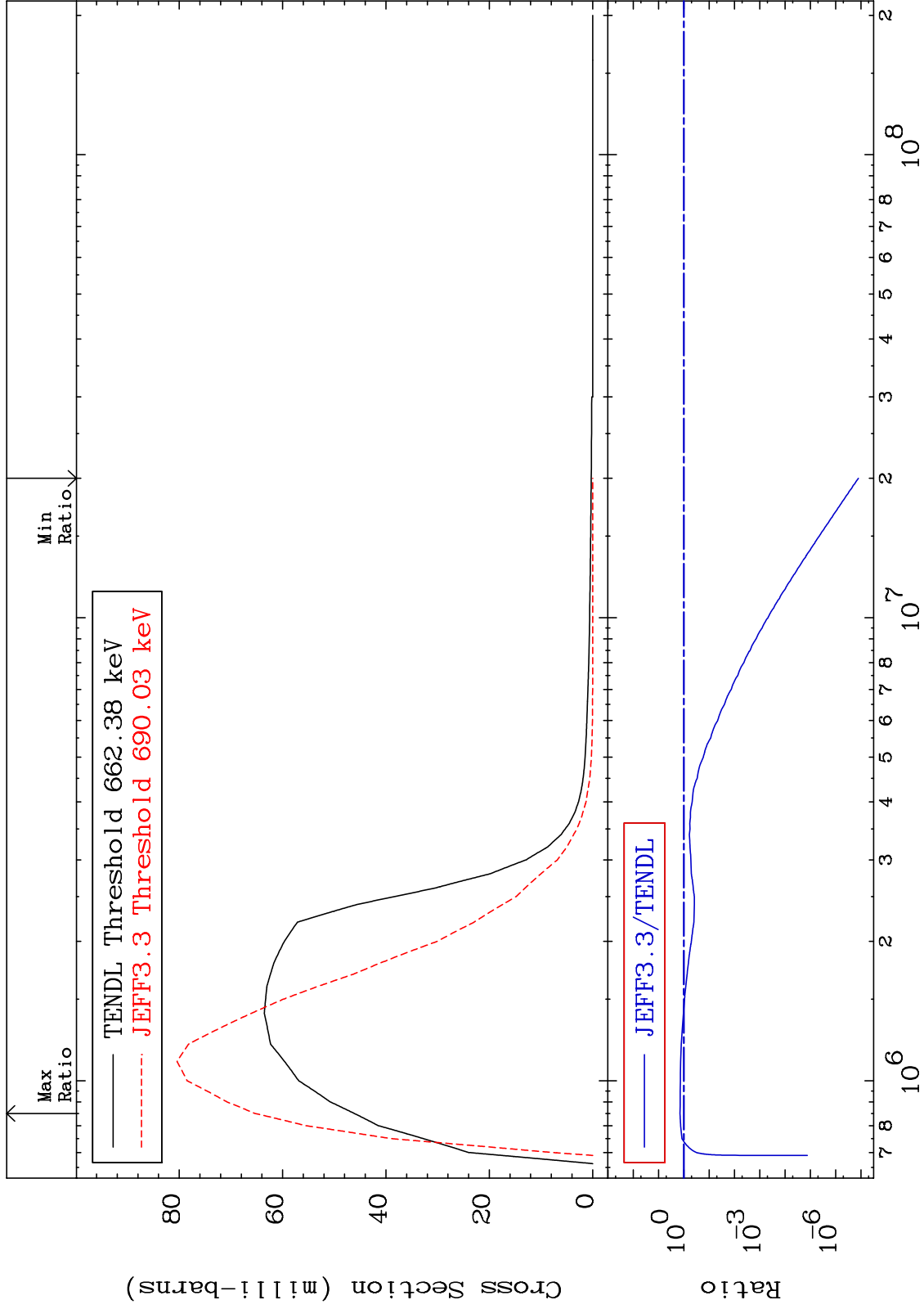
<sup>77</sup>Ir-191  
-100.0 To 1056. %



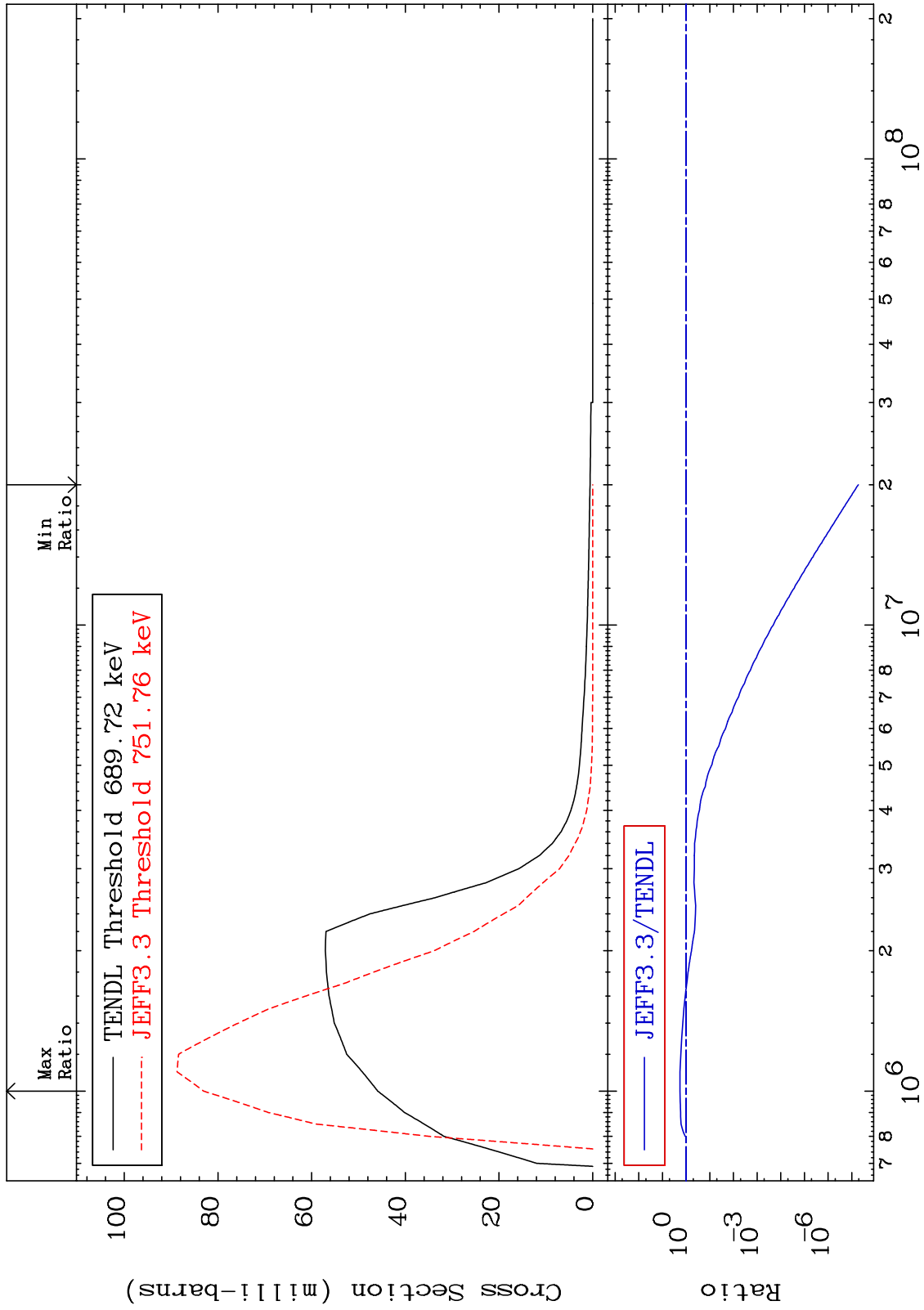
MAT 7725

MT= 68 (n,n') Level  
Cross Section

<sup>77</sup>Ir-191  
-100.0 To 41.63 %



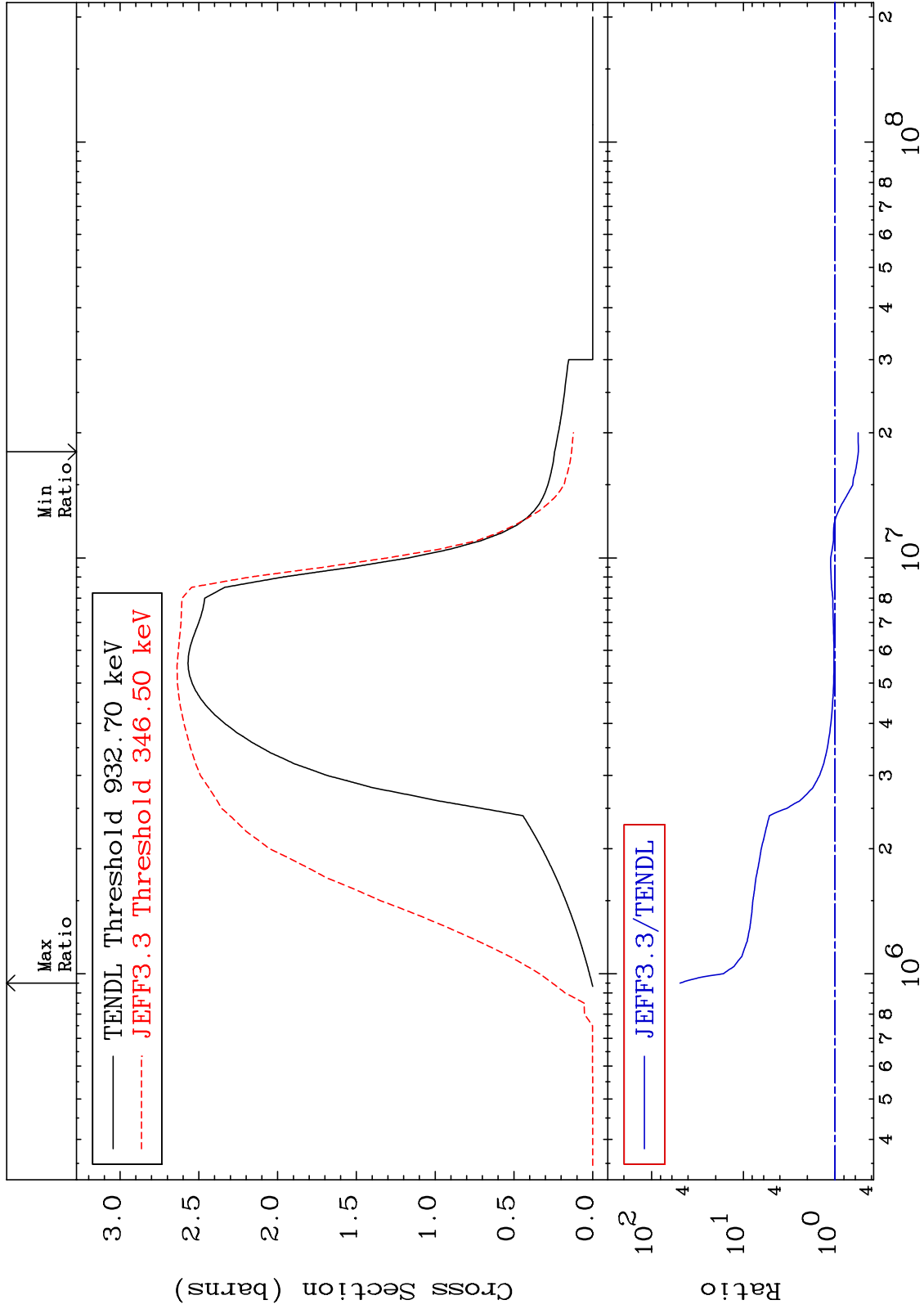
MAT 7725 MT= 69 (n,n') Level Cross Section -100.0 To 80.95 % 77-Ir-191



MAT 7725

(n, n') Continuum  
Cross Section

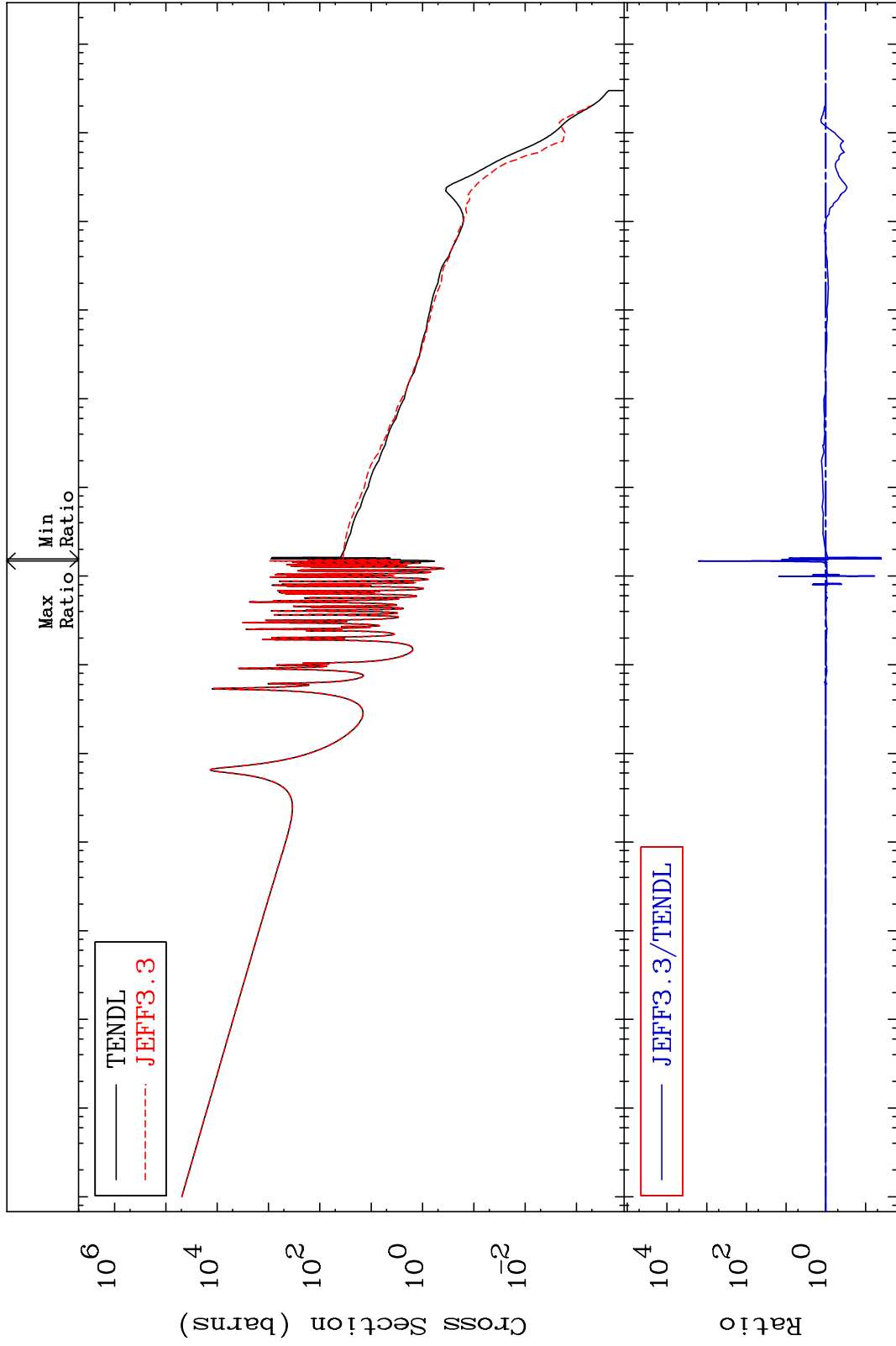
<sup>77</sup>Ir-191  
-44.38 To 4800. %



MAT 7725

(n,  $\gamma$ )  
Cross Section

<sup>77</sup>Ir-191  
-96.05 To 9999. %



Incident Energy (eV)

<sup>77</sup>Ir-191

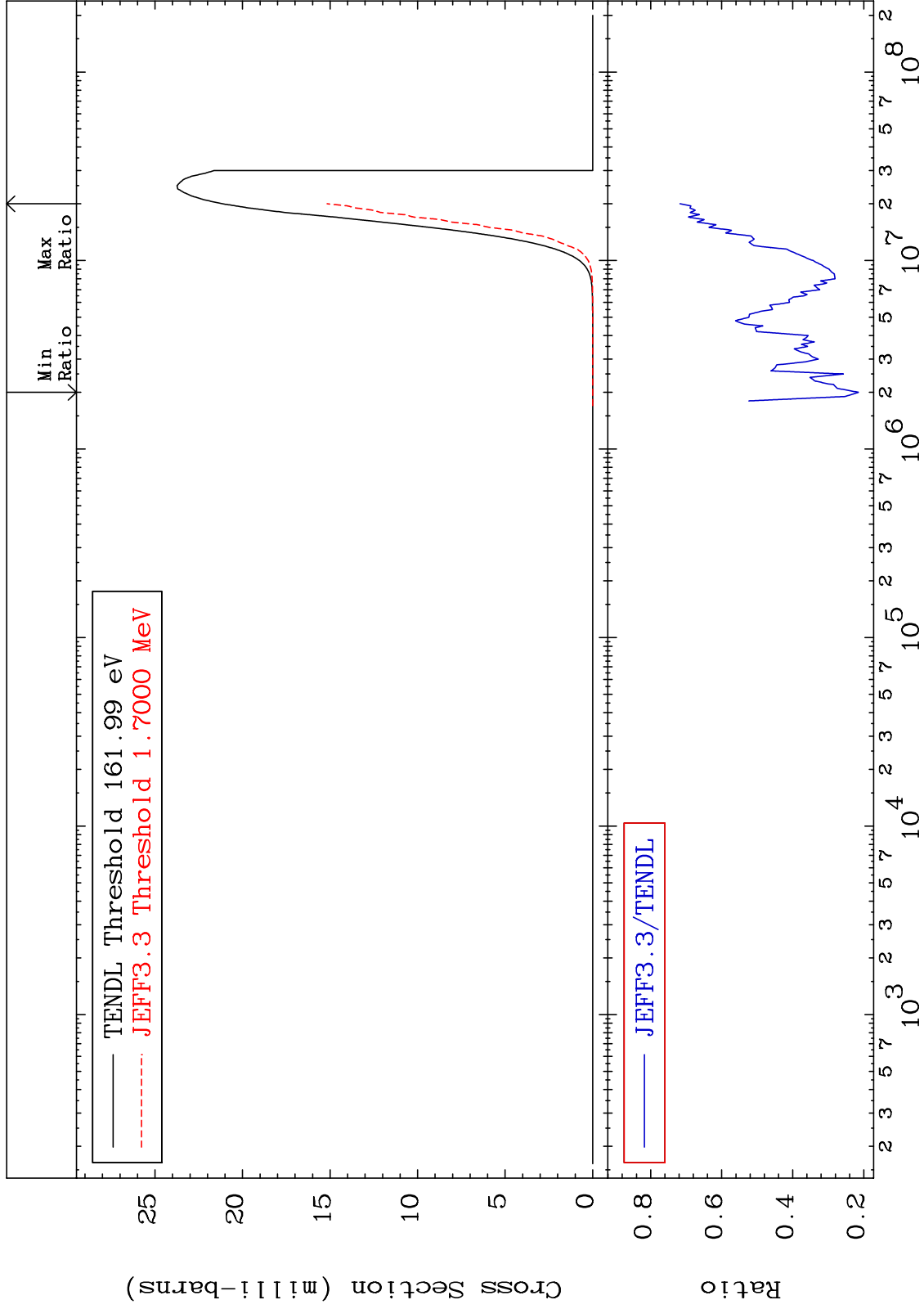
MAT 7725

(n, p)

77-Ir-191

Cross Section

-78.49 To -28.27%





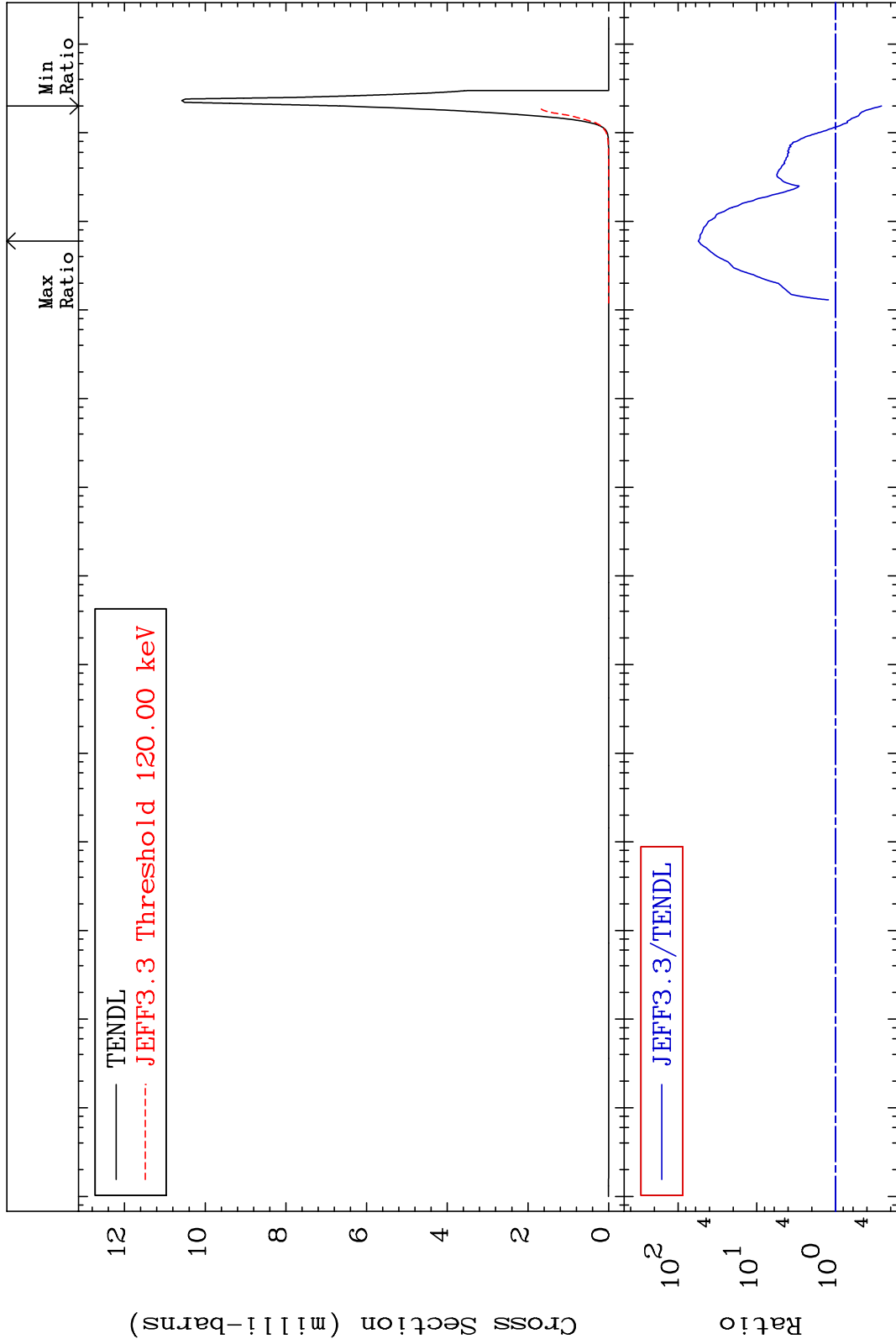
MAT 7725

(n,  $\alpha$ )

77-Ir-191

Cross Section

-73.91 To 5431. %



— TENDL  
- - - JEFF3.3 Threshold 120.00 keV

— JEFF3.3/TENDL

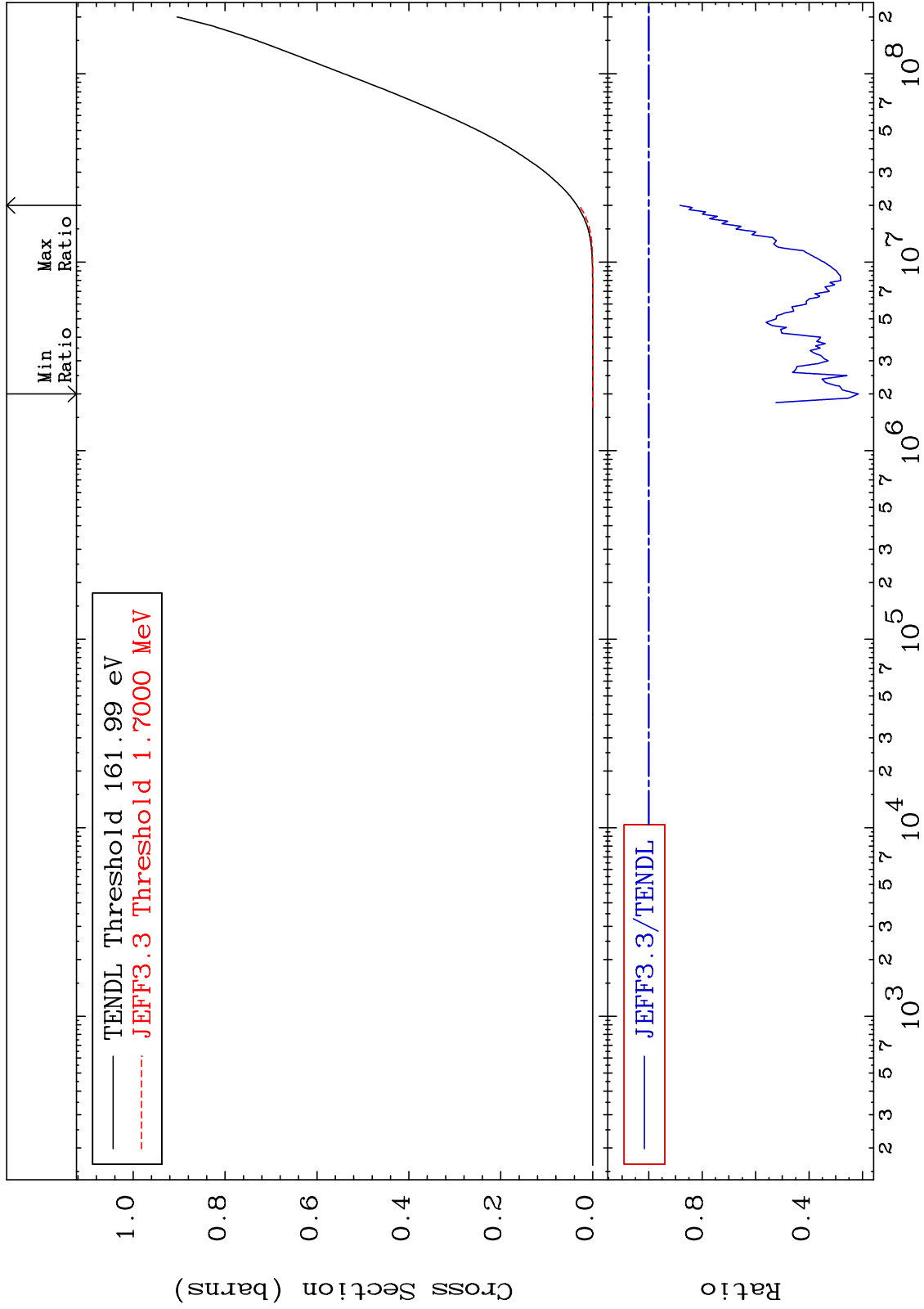
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

Incident Energy (eV)

MAT 7725

### Hydrogen Production Cross Section

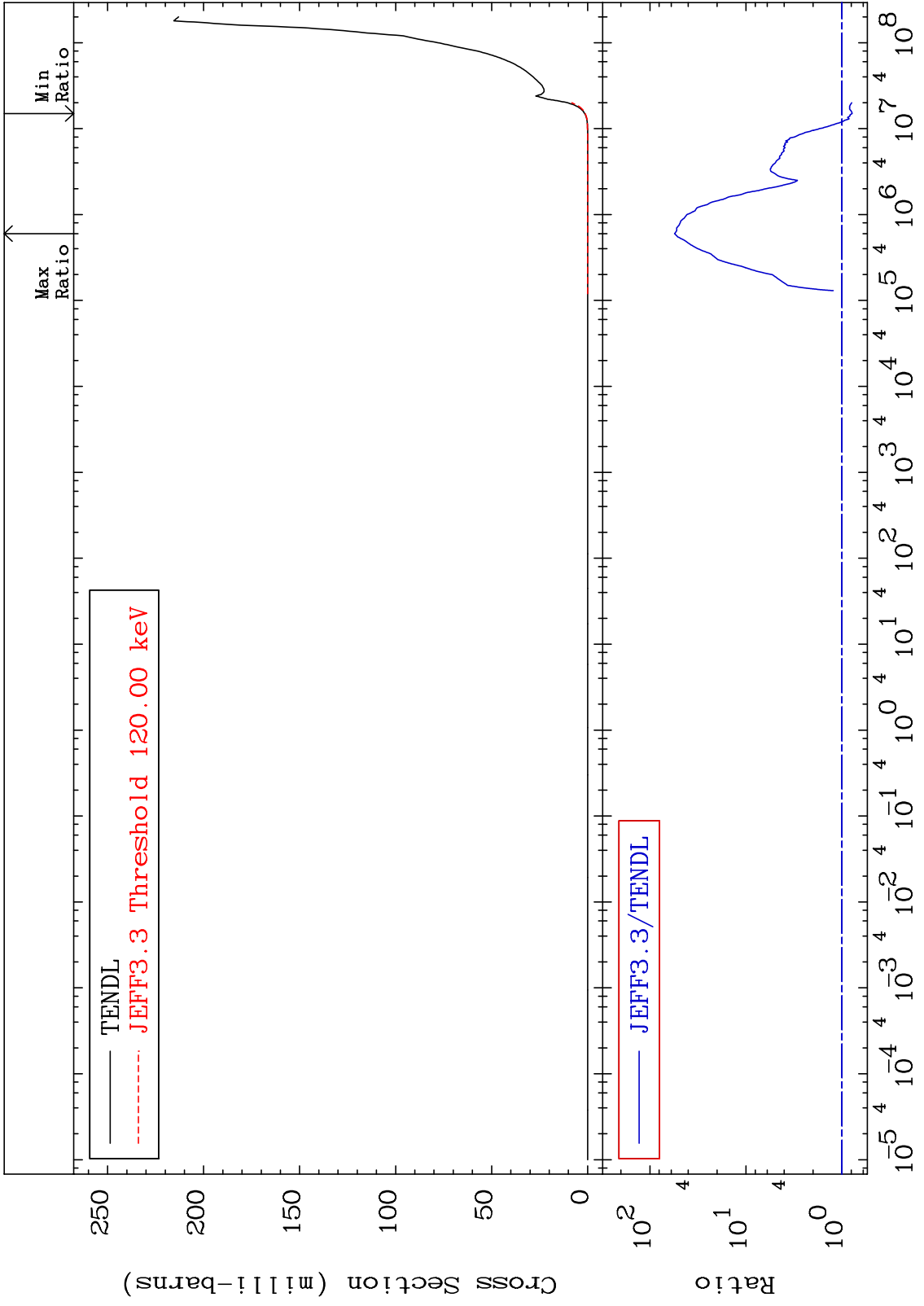
<sup>77</sup>Ir-191  
-78.49 To -11.70%



MAT 7725

He-4 Production  
Cross Section

77-Ir-191  
-21.80 To 5431. %



34

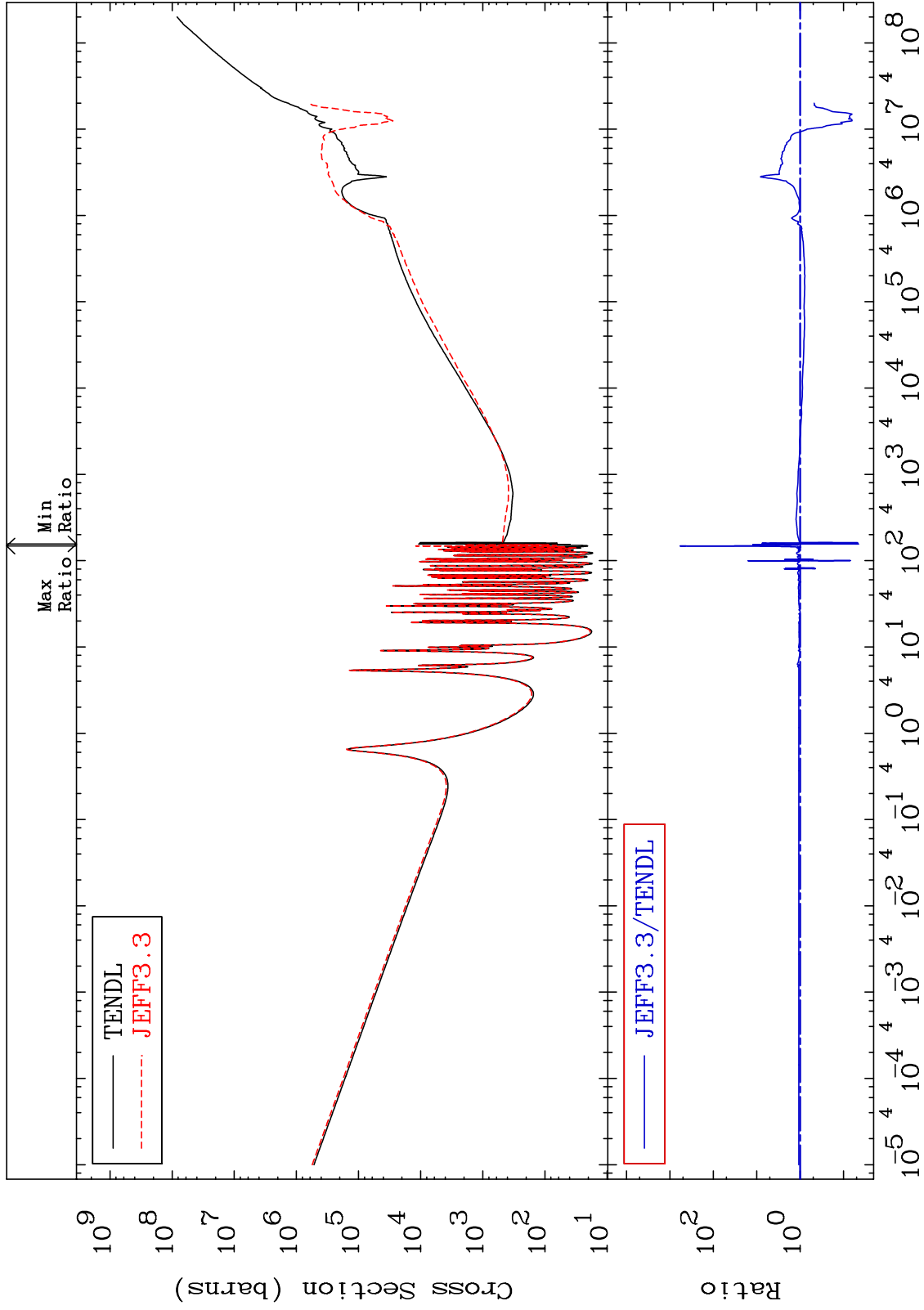
Incident Energy (eV)

77-Ir-191

MAT 7725

Kerma total (eV-barns)  
Cross Section

77-Ir-191  
-95.48 To 9999. %



35

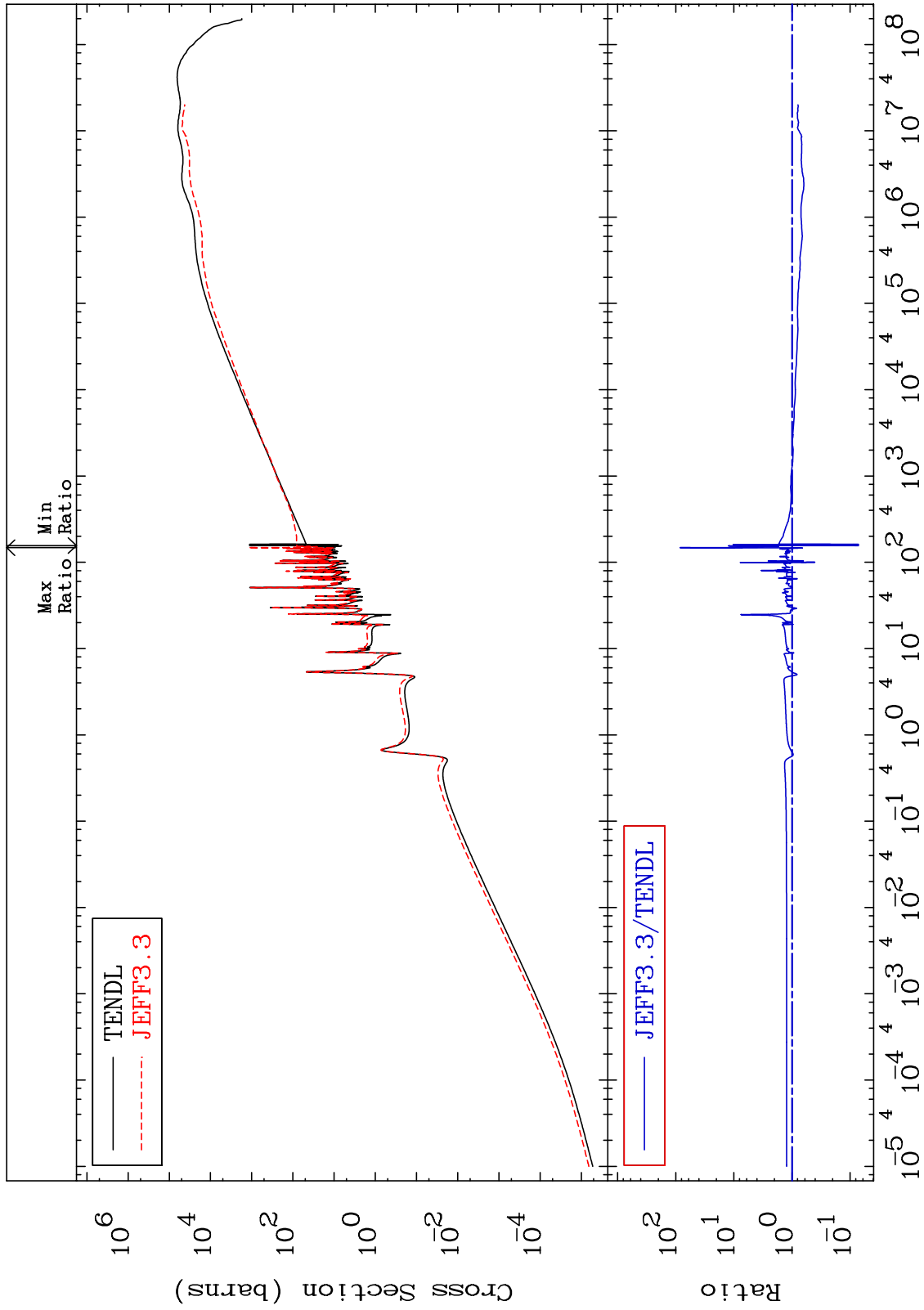
Incident Energy (eV)

77-Ir-191

MAT 7725

Kerma elastic  
Cross Section

<sup>77</sup>Ir-191  
-92.81 To 8350. %



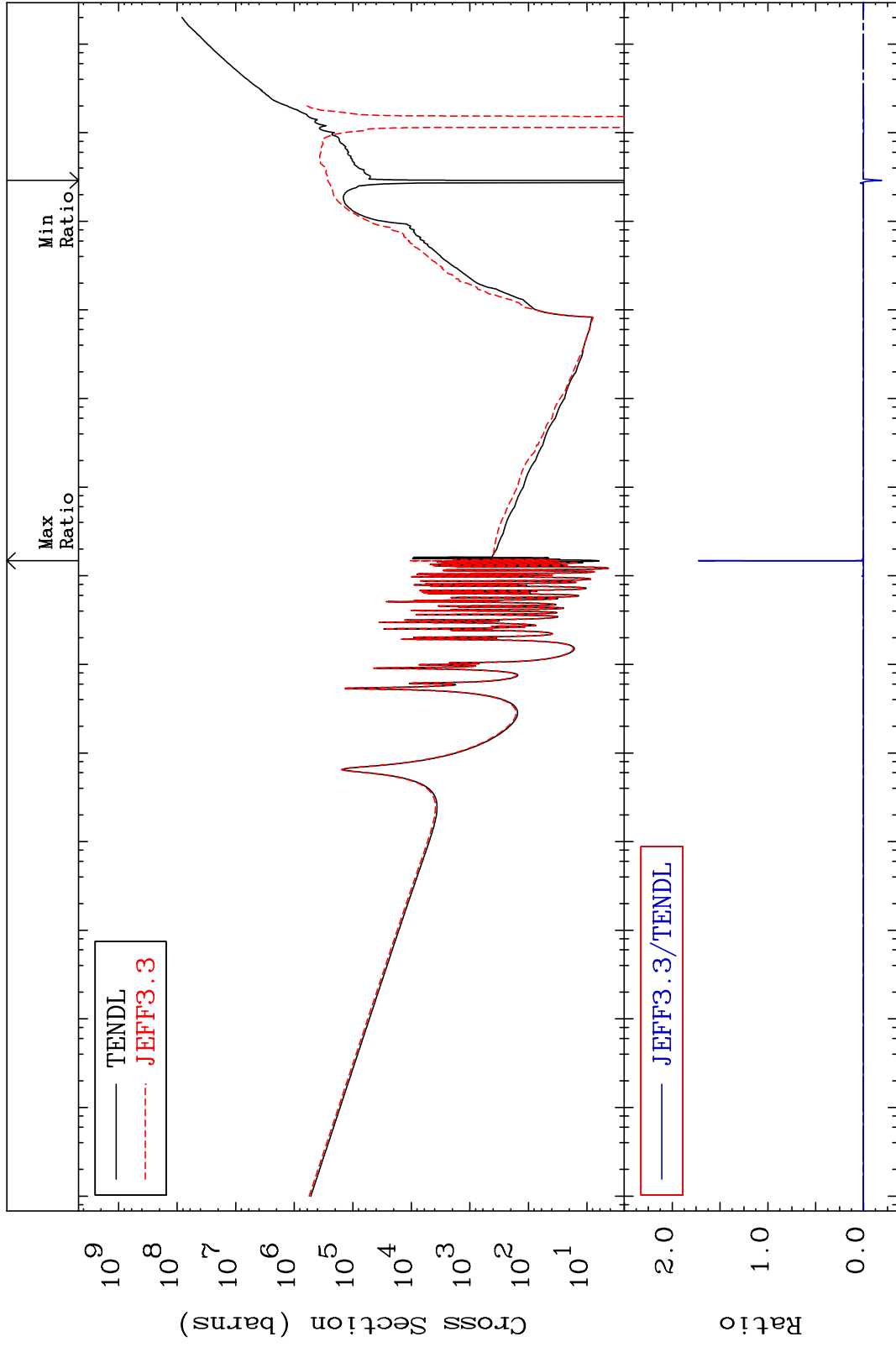
— TENDL  
- - - JEFF3.3

— JEFF3.3/TENDL

MAT 7725

Kerma non-elastic (all but mt2)  
Cross Section

77-Ir-191  
-9999. To 9999. %



37

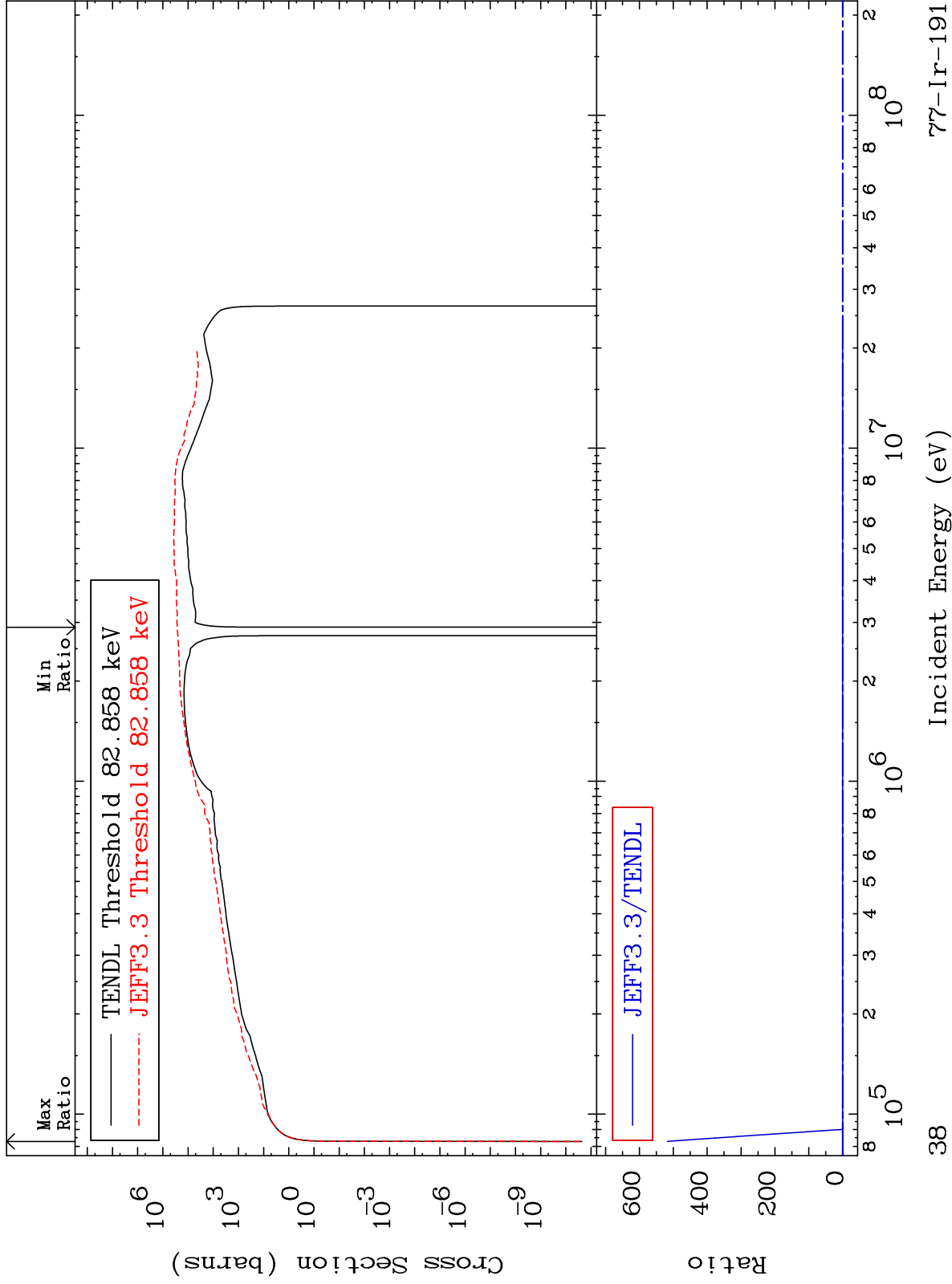
Incident Energy (eV)

77-Ir-191

MAT 7725

Kerma inelastic (mt51-91)  
Cross Section

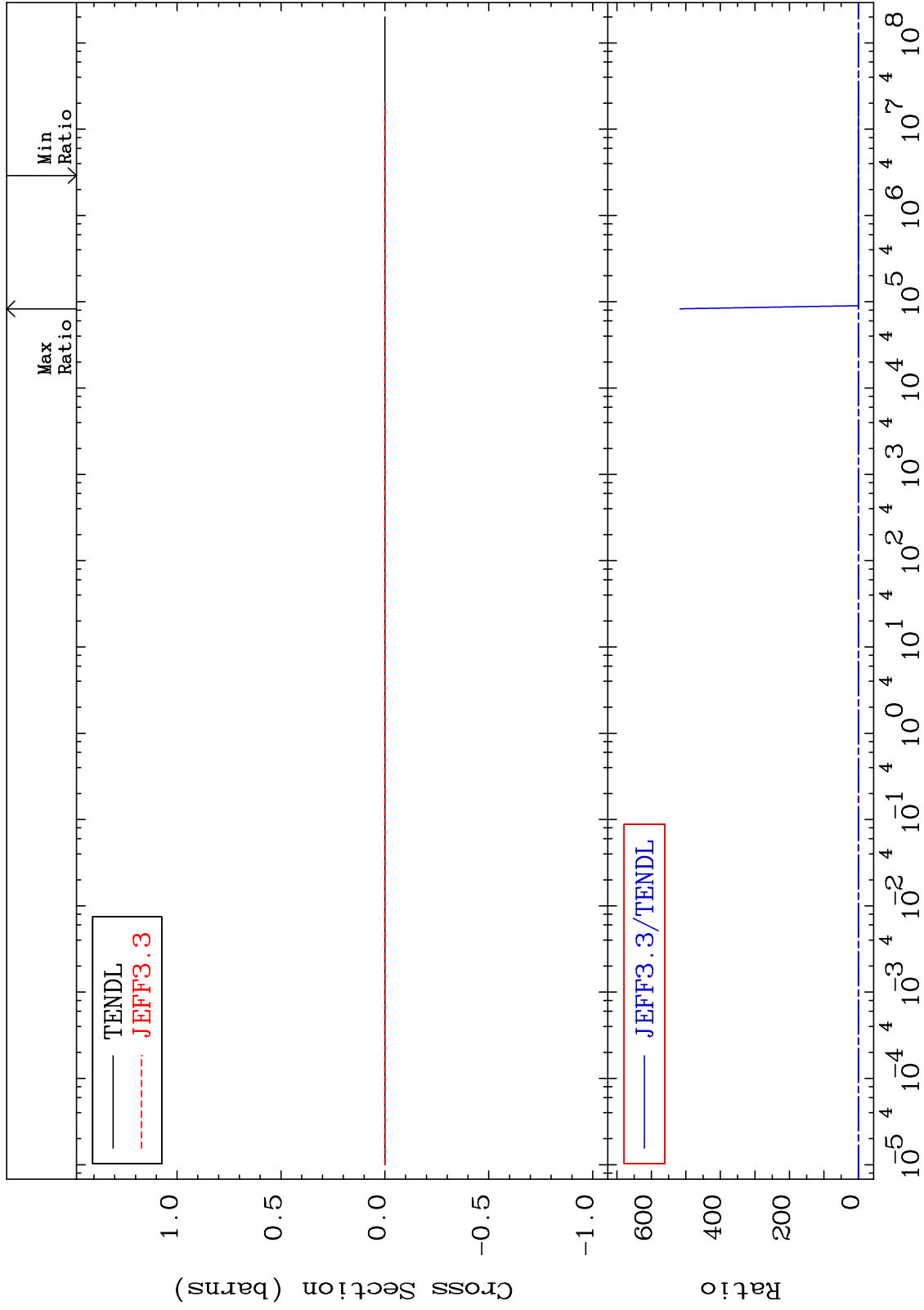
77-Ir-191  
-9999. To 9999. %



MAT 7725

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

77-Ir-191  
-9999. To 9999. %

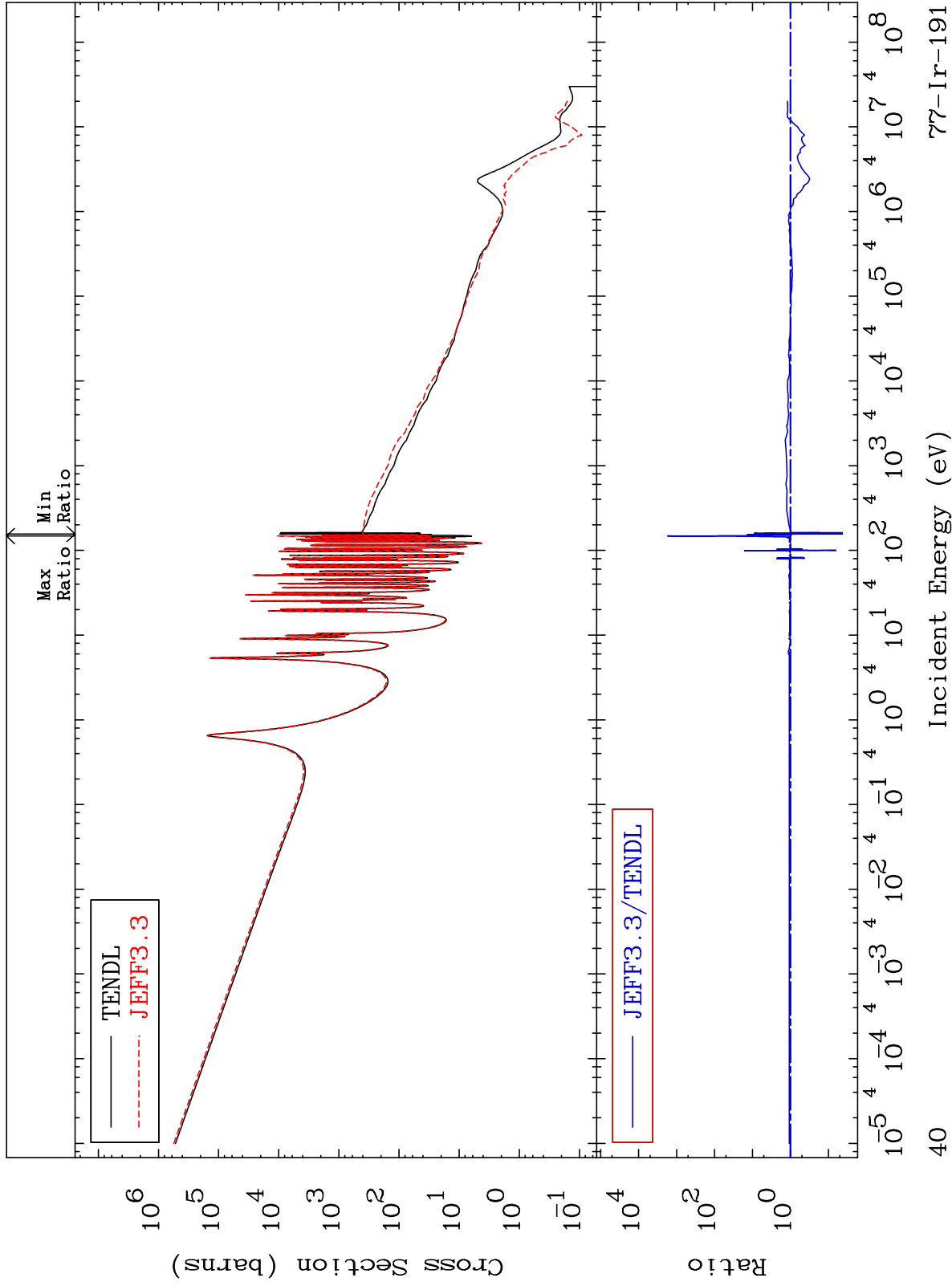




MAT 7725

Kerma capture (mt102)  
Cross Section

<sup>77</sup>Ir-191  
-95.79 To 9999. %



40

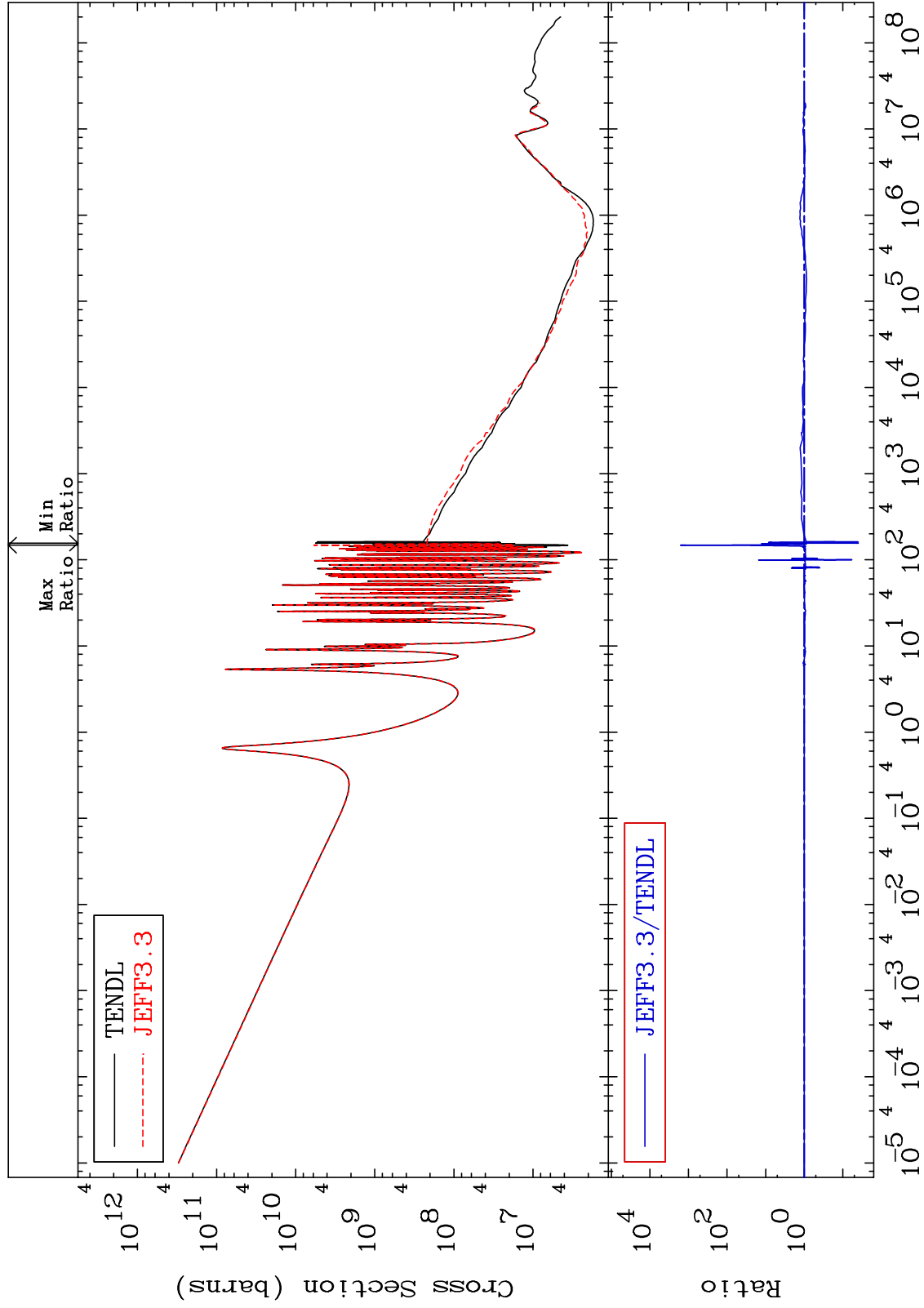
Incident Energy (eV)

<sup>77</sup>Ir-191

MAT 7725

Total photon (eV-barns)  
Cross Section

<sup>77</sup>Ir-191  
-96.08 To 9999. %



41

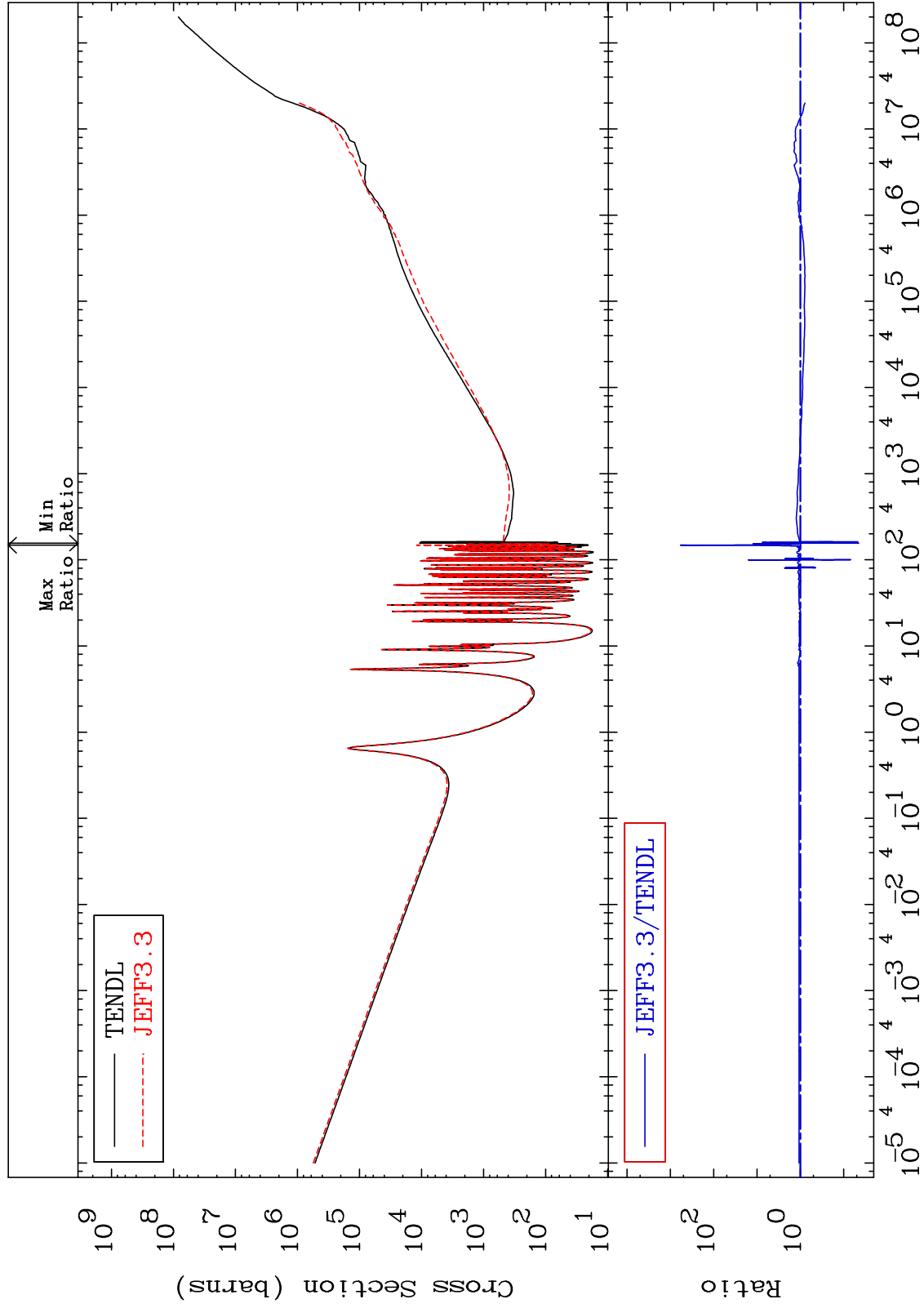
Incident Energy (eV)

<sup>77</sup>Ir-191

MAT 7725

Total kinematic kerma (high limit)  
Cross Section

77-Ir-191  
-95.48 To 9999. %



42

Incident Energy (eV)

77-Ir-191

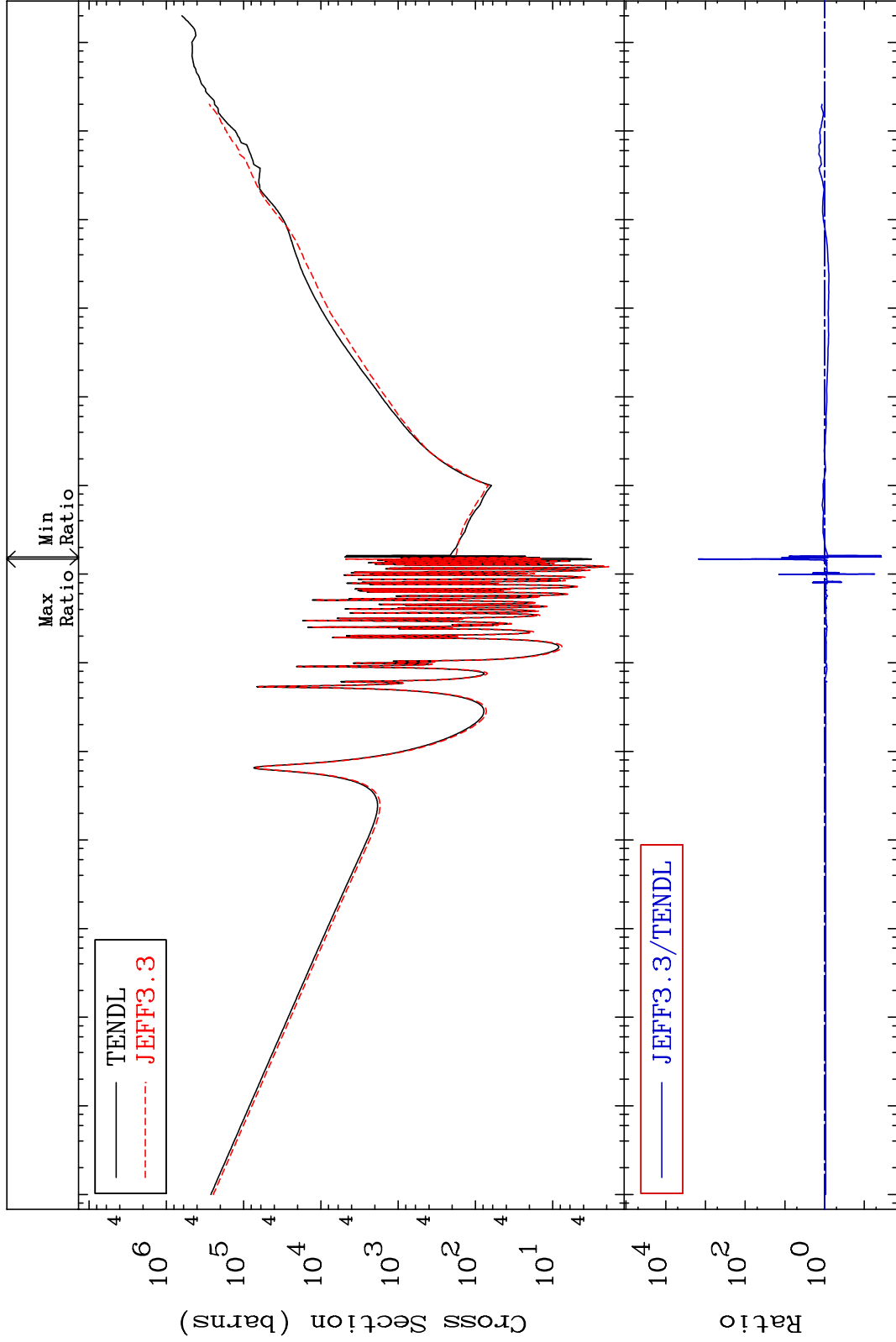
MAT 7725

Dpa total (eV-barns)

<sup>77</sup>Ir-191

-96.33 To 9999. %

Cross Section



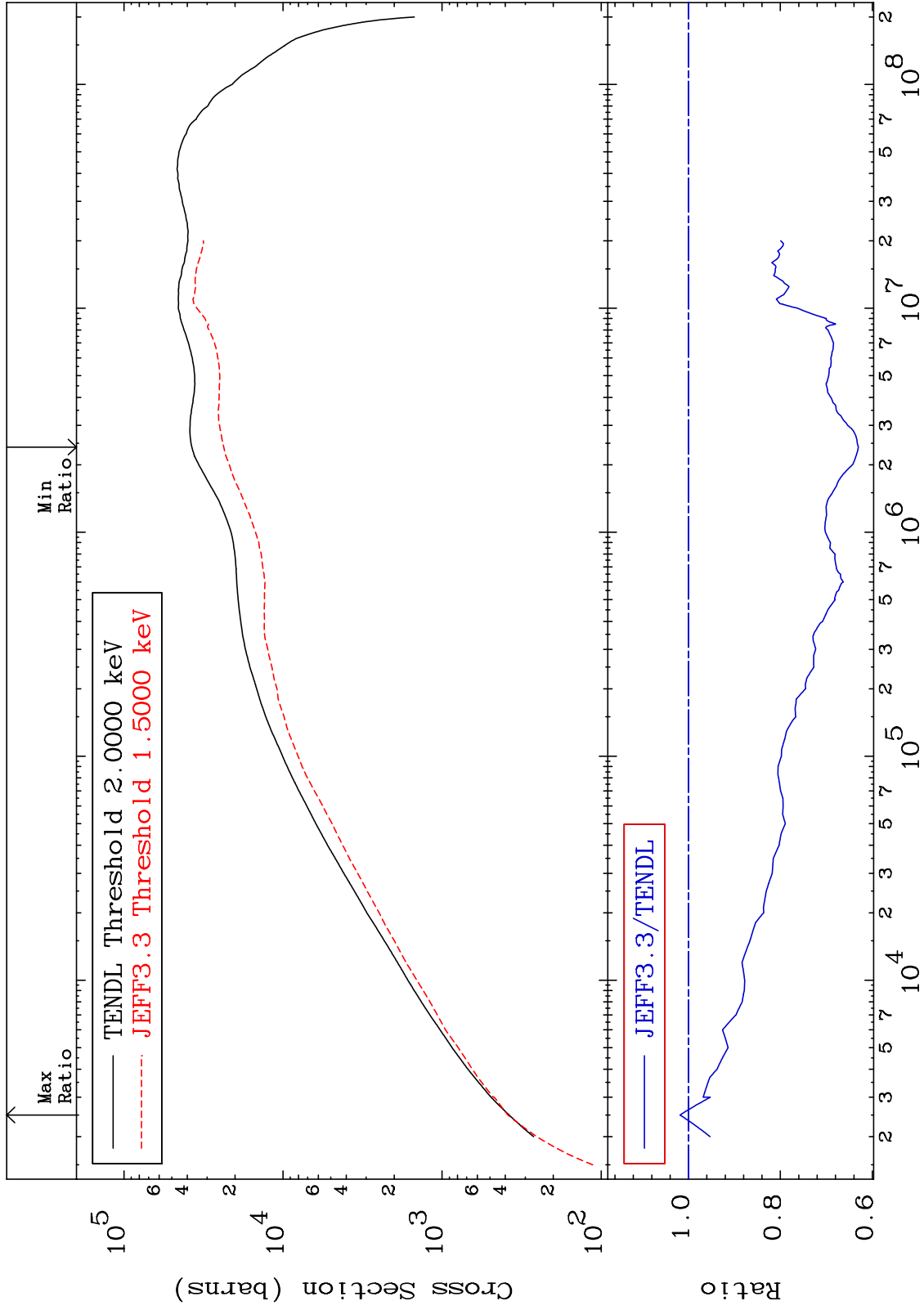
Incident Energy (eV)

<sup>77</sup>Ir-191

MAT 7725

Dpa elastic (mt2)  
Cross Section

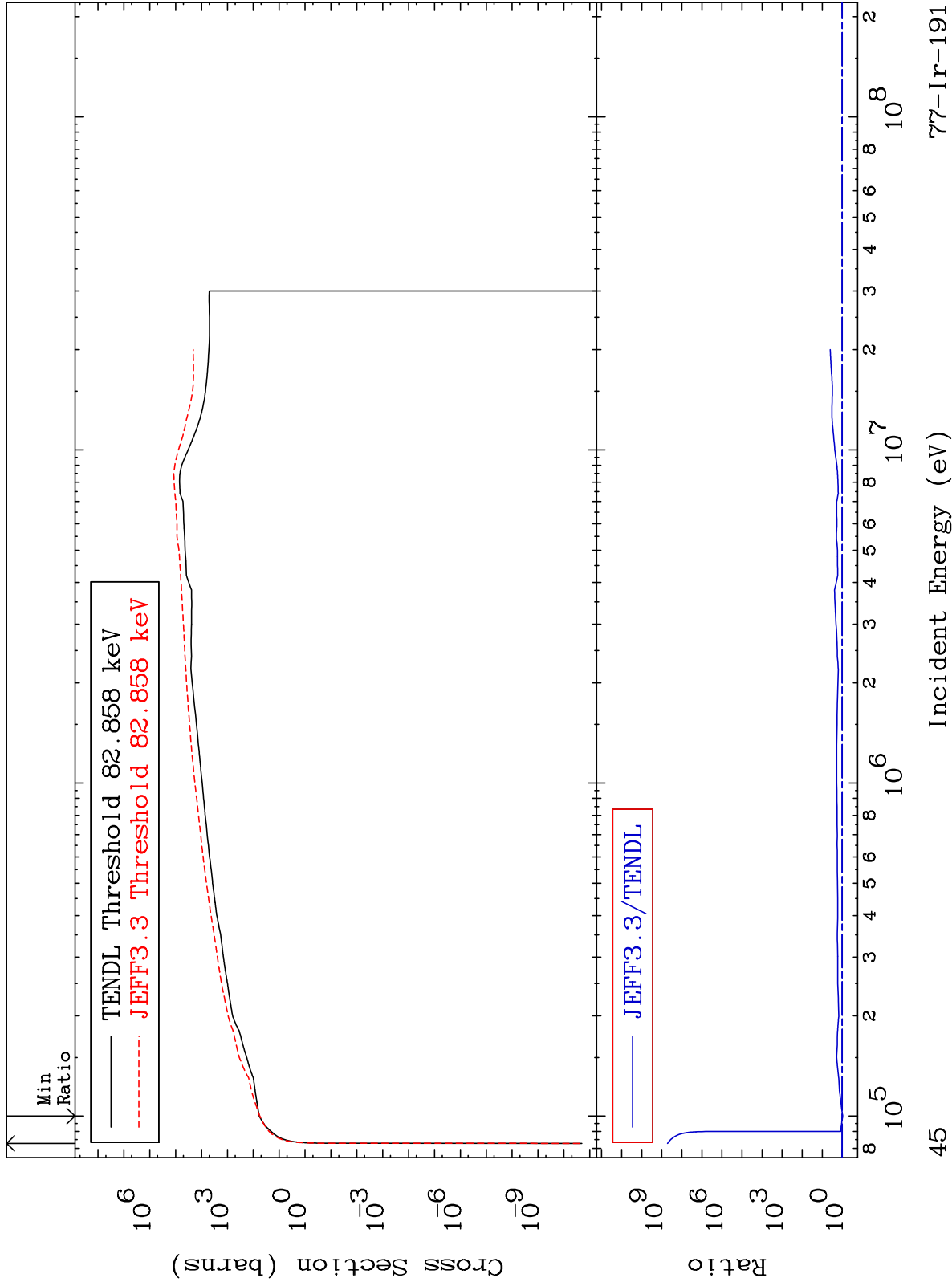
77-Ir-191  
-36.98 To 1.843 %



MAT 7725

Dpa inelastic (mt51-91)  
Cross Section

77-Ir-191  
-4.483 To 9999. %



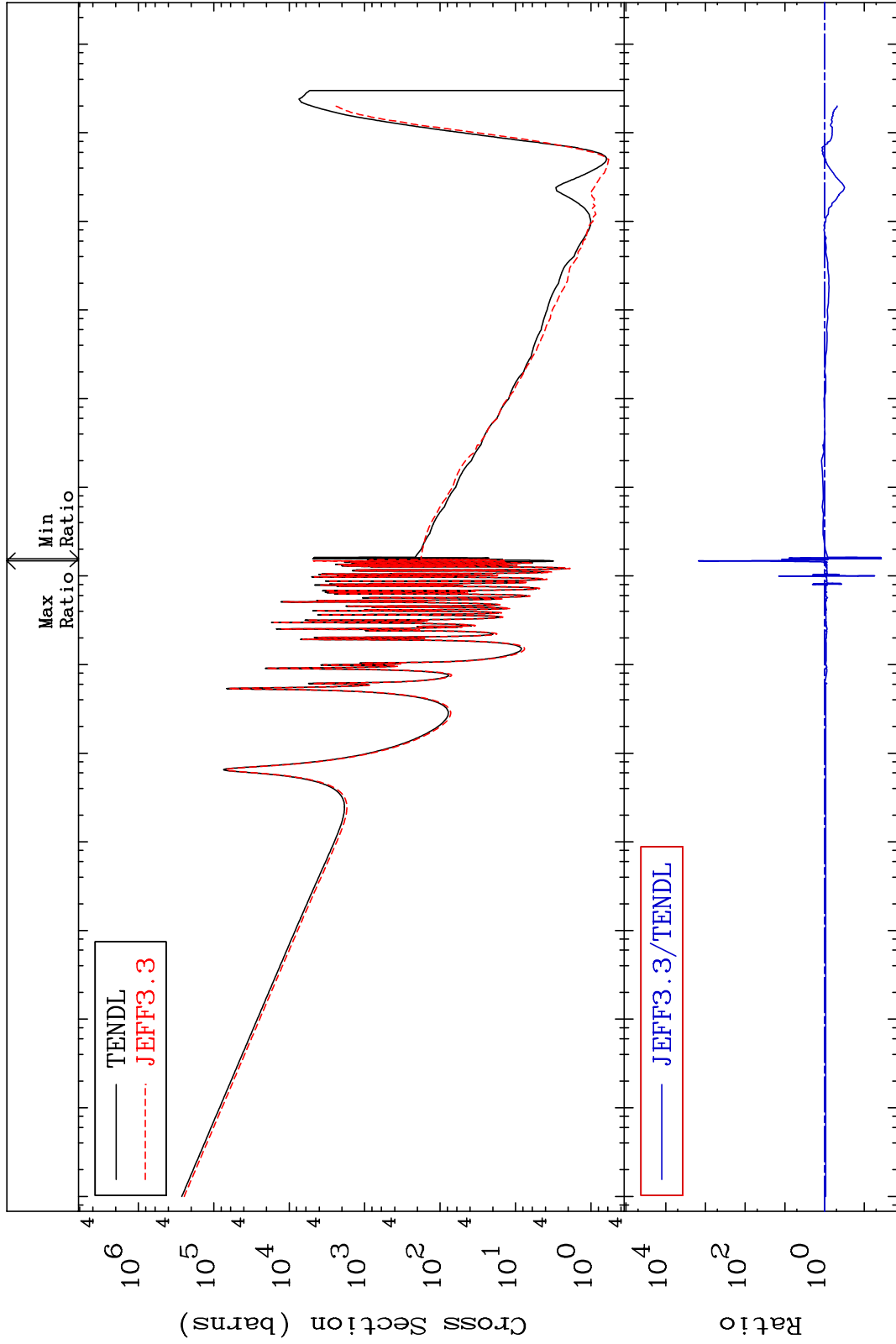
MAT 7725

Dpa disappearance (mt102 -120)

77-Ir-191

-96.33 To 9999. %

Cross Section



46

Incident Energy (eV)

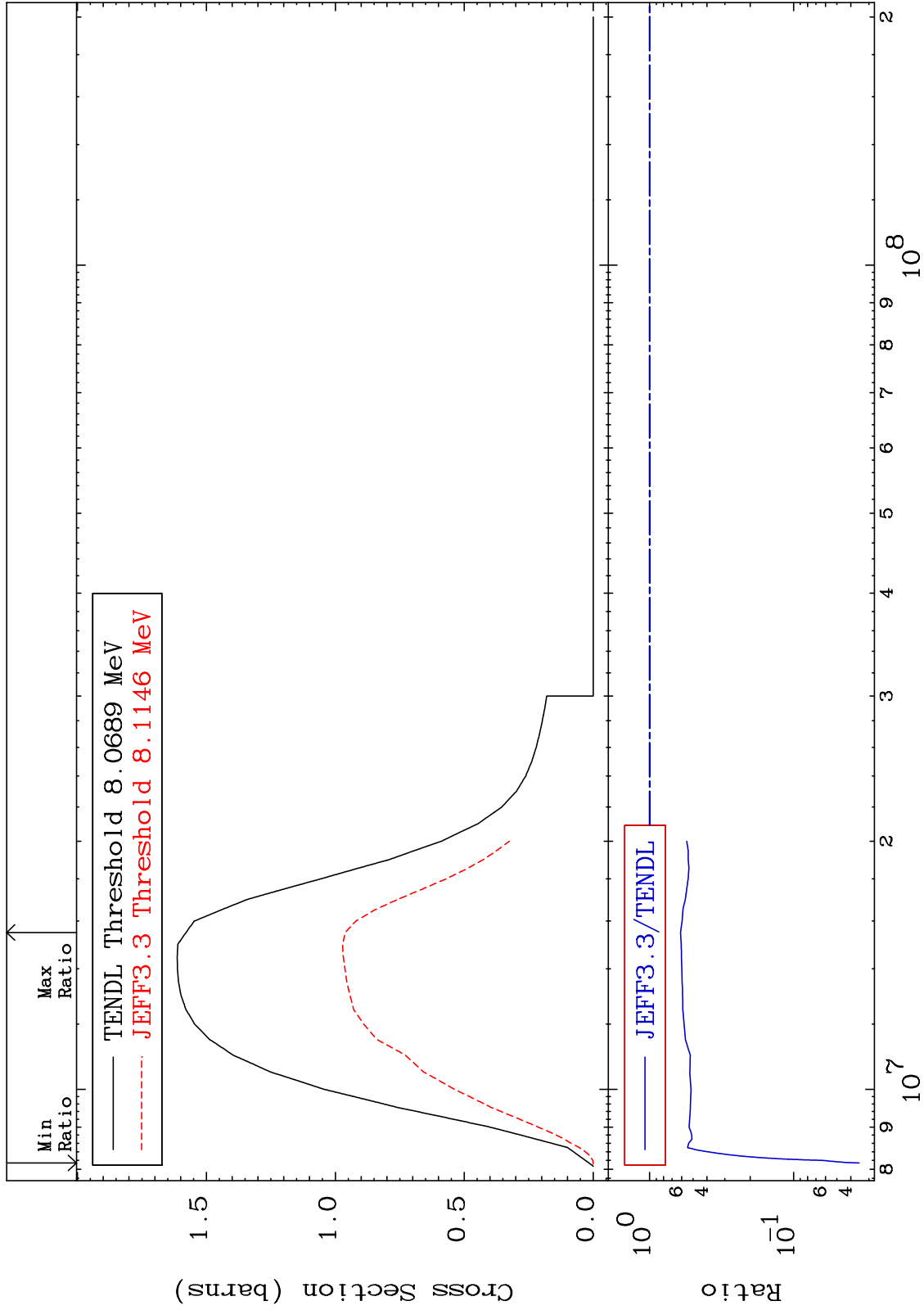
77-Ir-191

MAT 7725

(n,2n):77-Ir-190g

77-Ir-191

Radionuclide Production Cross Section -96.50 To -39.08%



47

Incident Energy (eV)

77-Ir-191

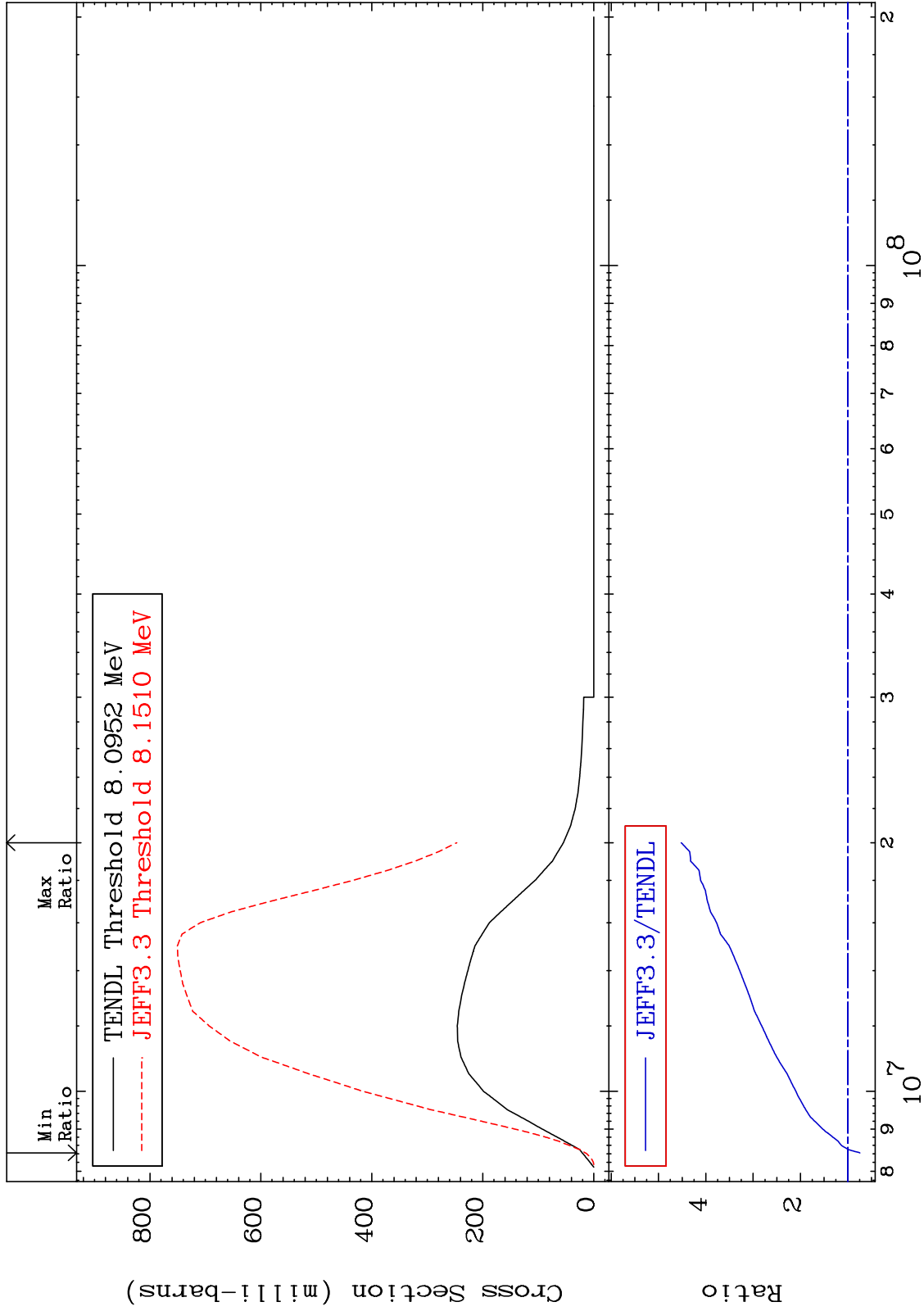


MAT 7725

(n,2n): 77-Ir-190m2

77-Ir-191

Radionuclide Production Cross Section -25.68 To 351.9 %



48

Incident Energy (eV)

77-Ir-191