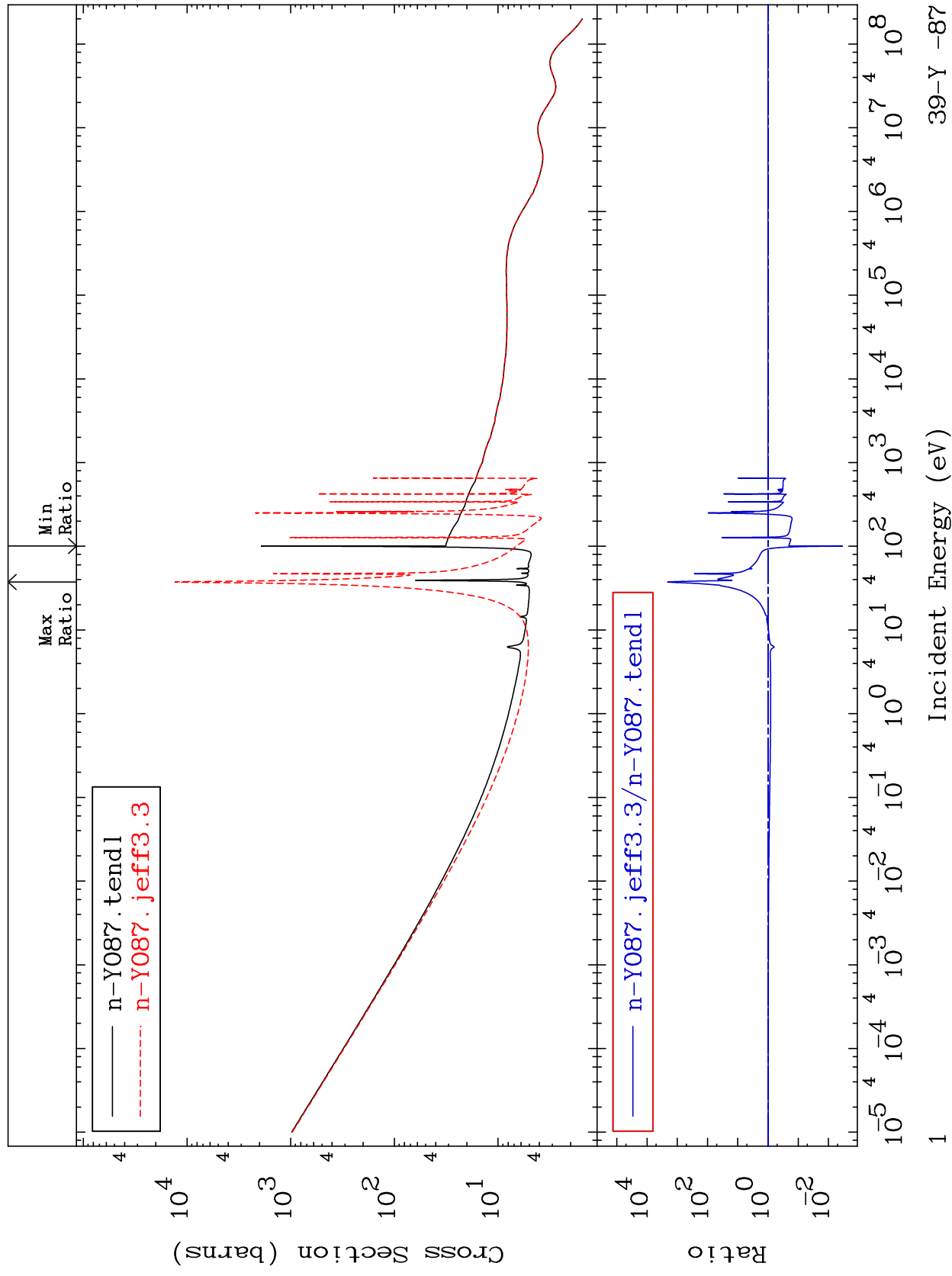


39-Y-87

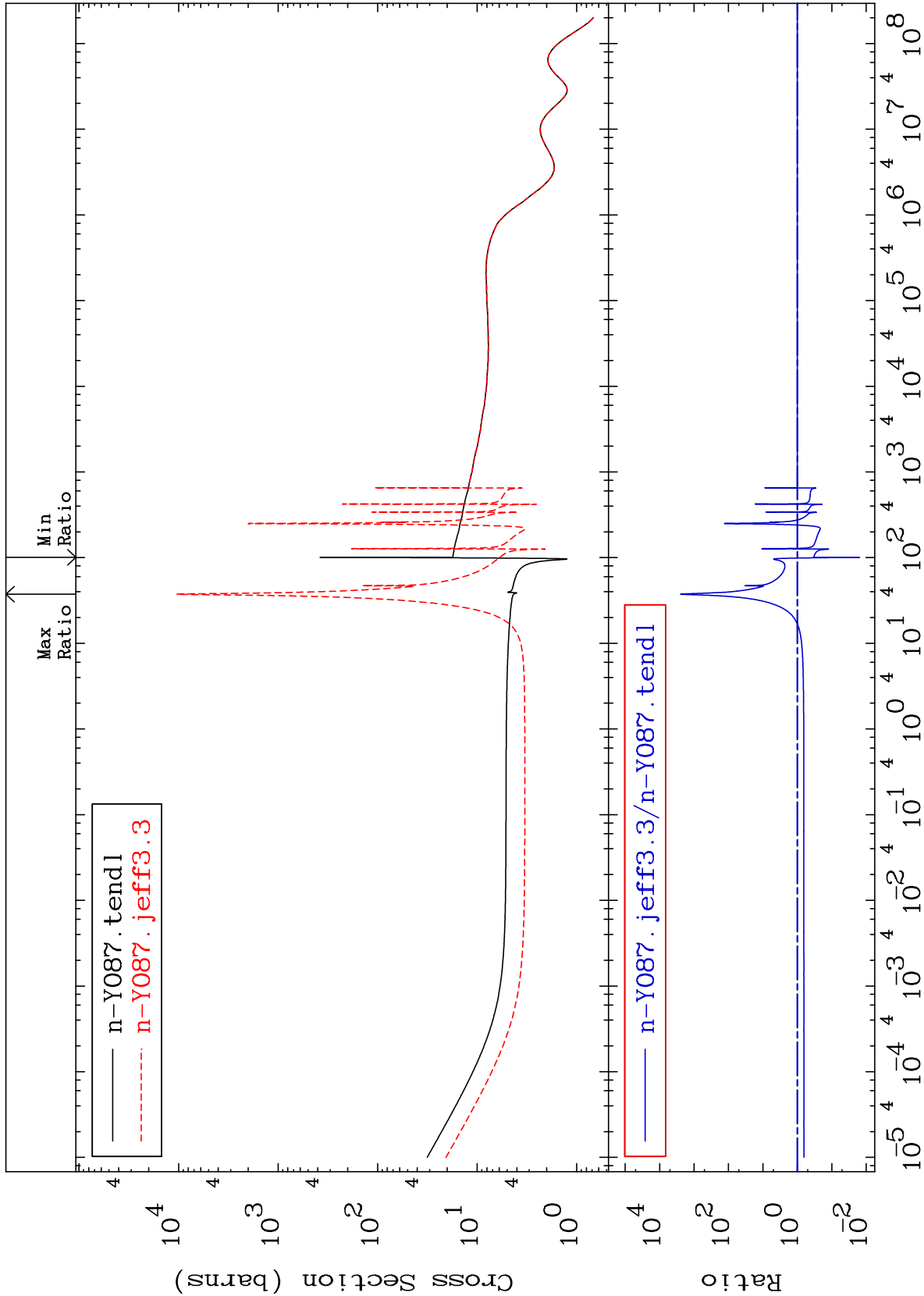
39-Y -87

Cross Section



MAT 3919

Elastic
Cross Section
39-Y -87
-98.44 To 9999. %

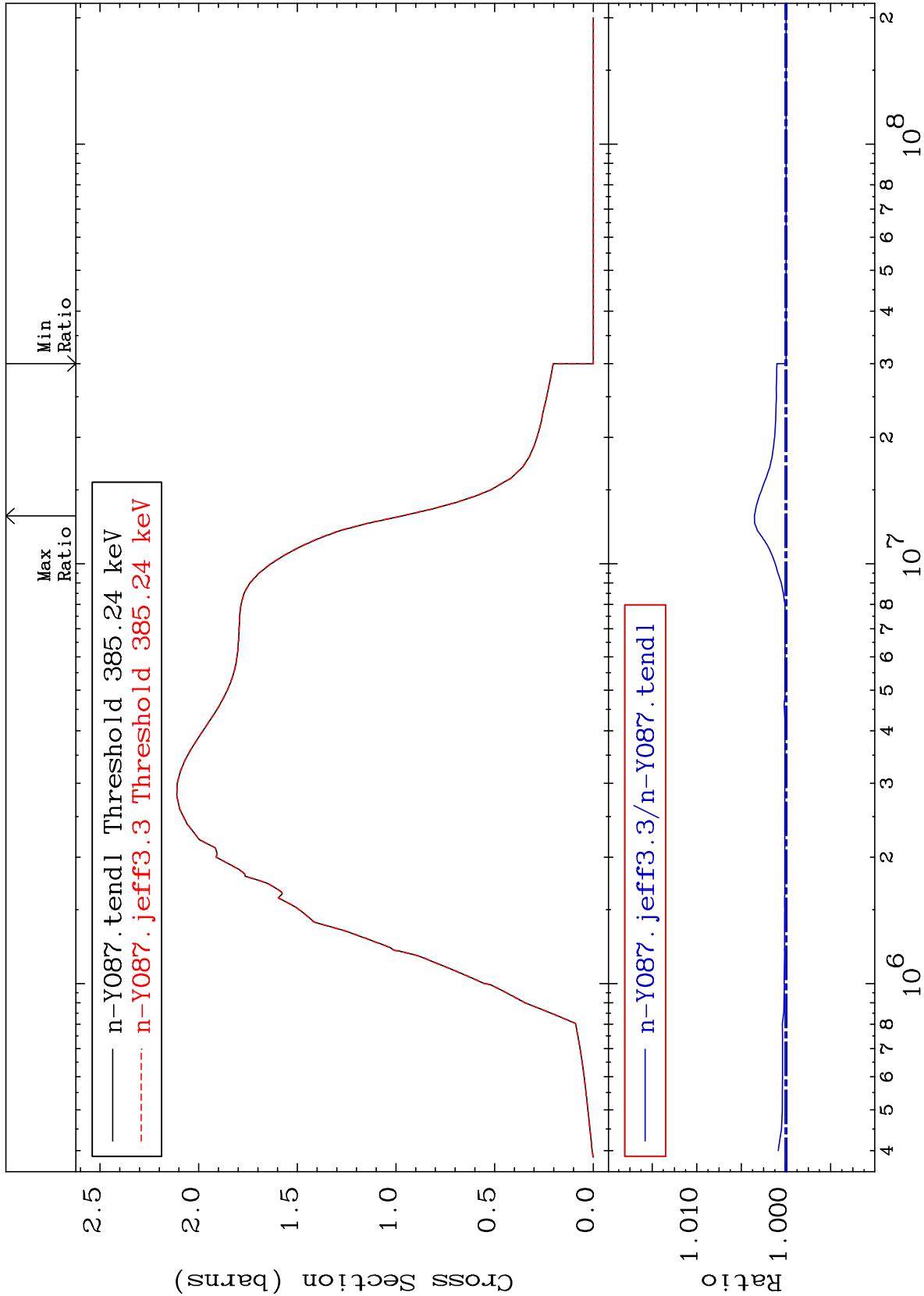


MAT 3919

39-Y -87

Inelastic
Cross Section

0.000 To 0.355 %



3

Incident Energy (eV)

39-Y -87

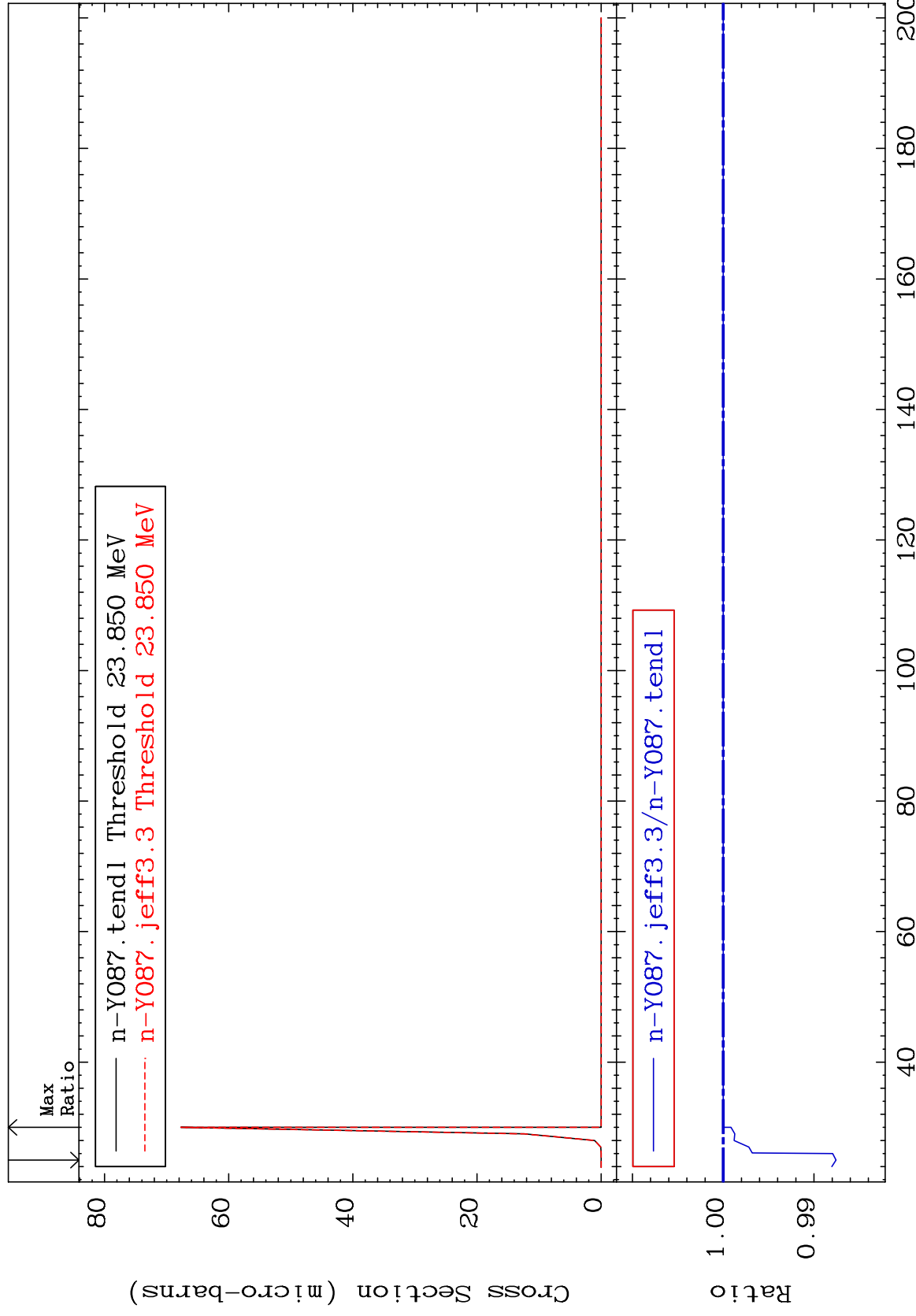
MAT 3919

(n,2n) d

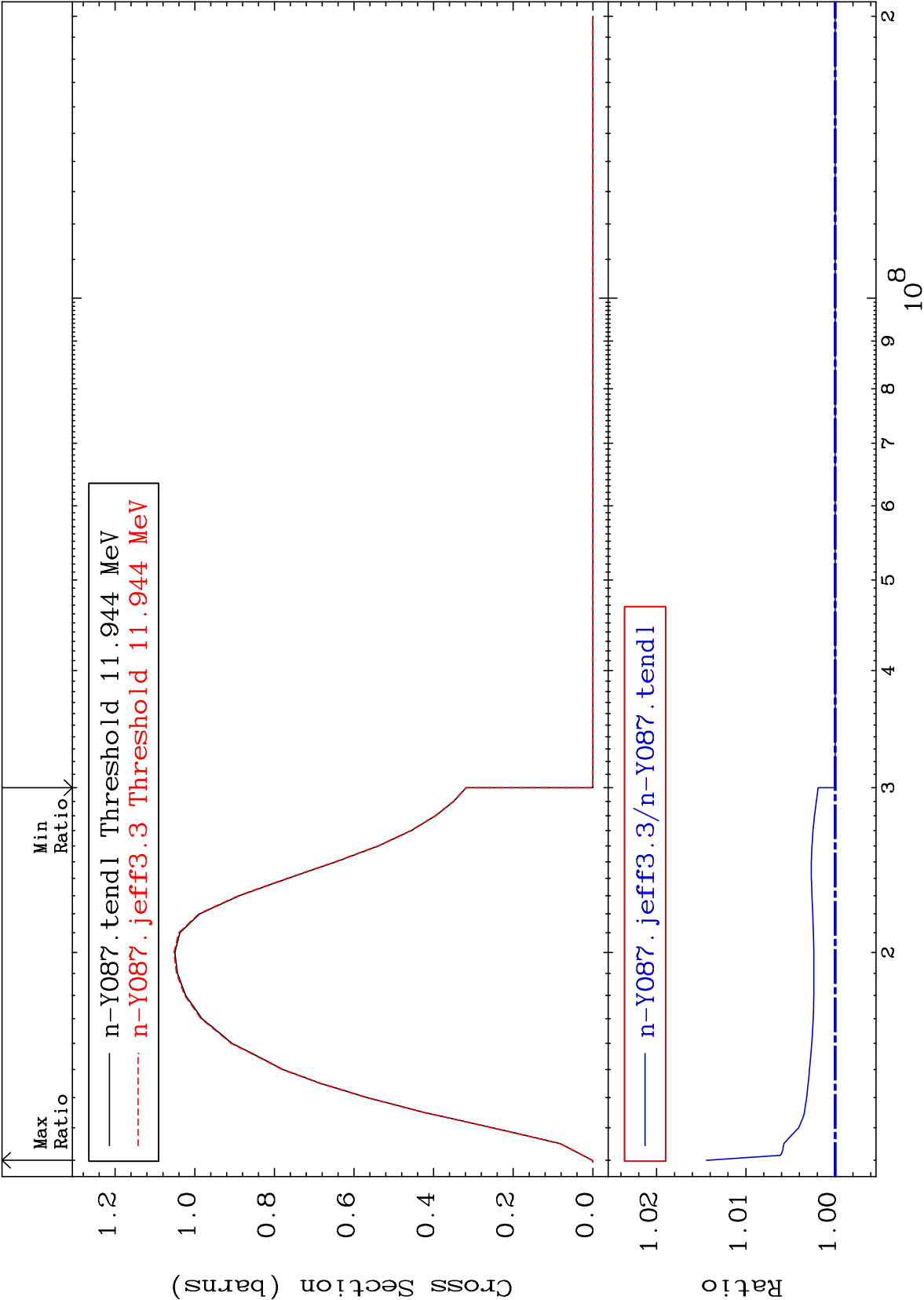
39-Y -87

Cross Section

-1.243 To 0.000 %



Cross Section



MAT 3919

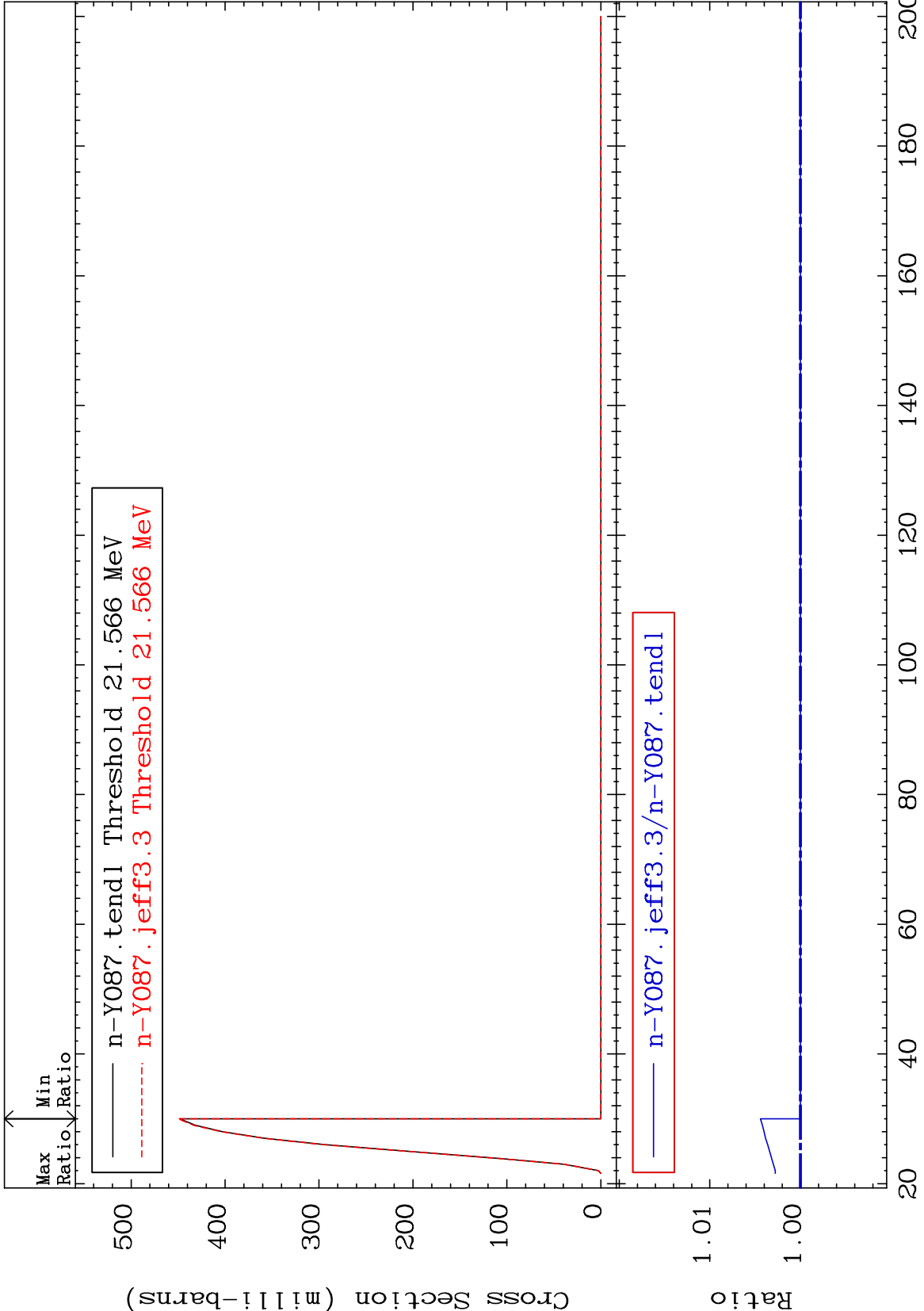
(n,3n)

39-Y -87

Cross Section

0.000

To 0.440 %



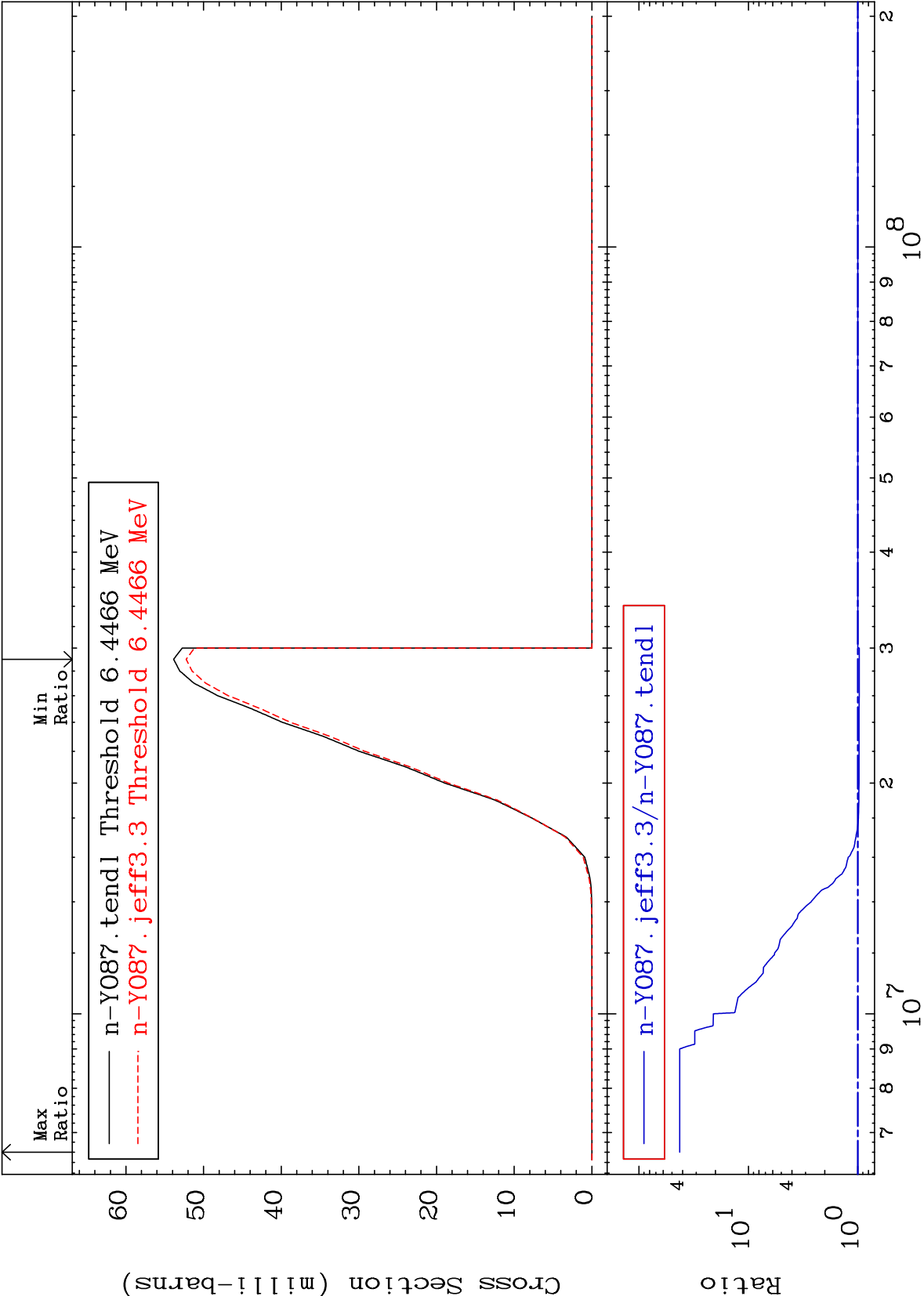
Incident Energy (MeV)

39-Y -87

MAT 3919

$(n, n') \alpha$
Cross Section

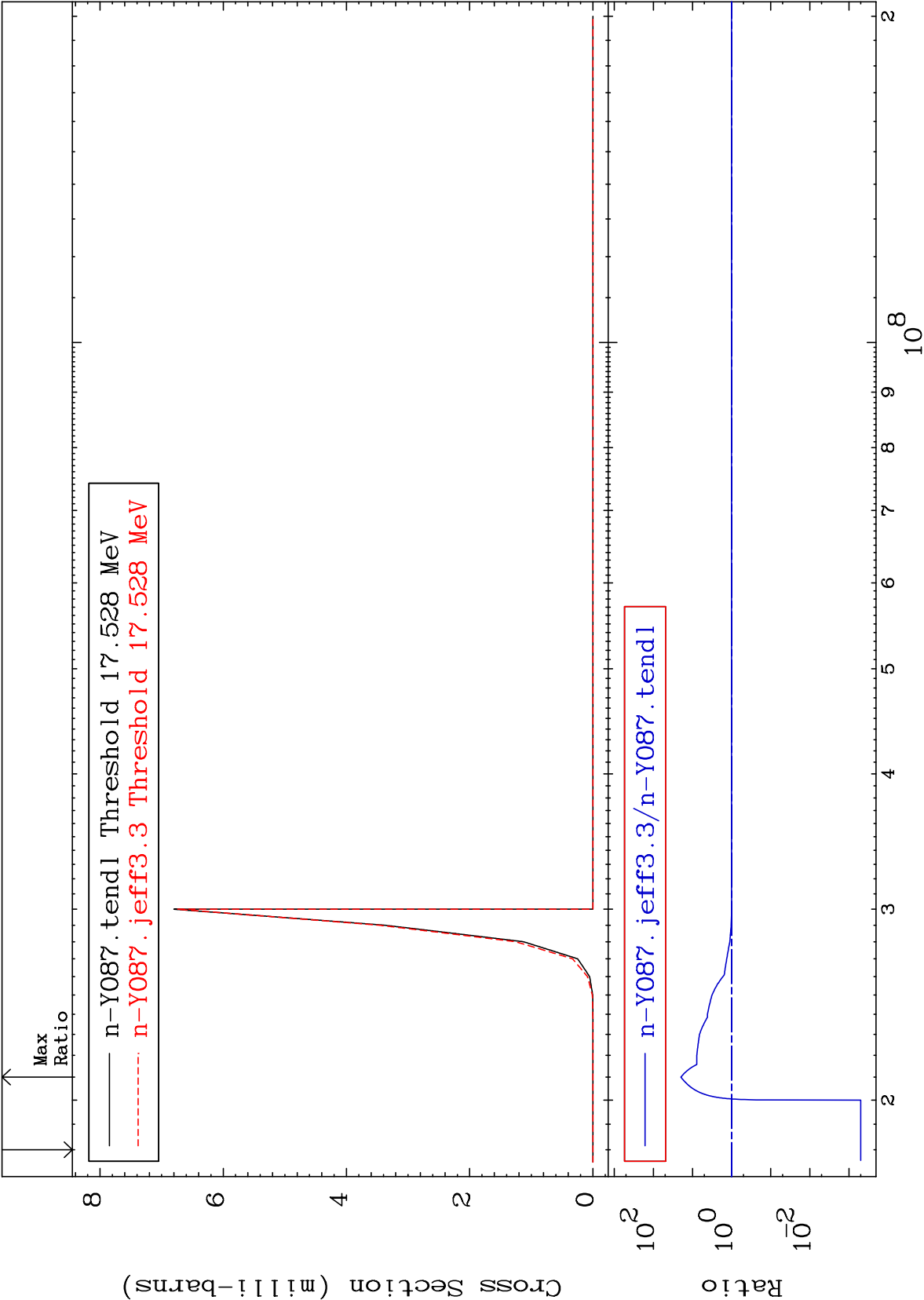
39-Y -87
-3.014 To 4141. %



MAT 3919

(n,2n) α
Cross Section

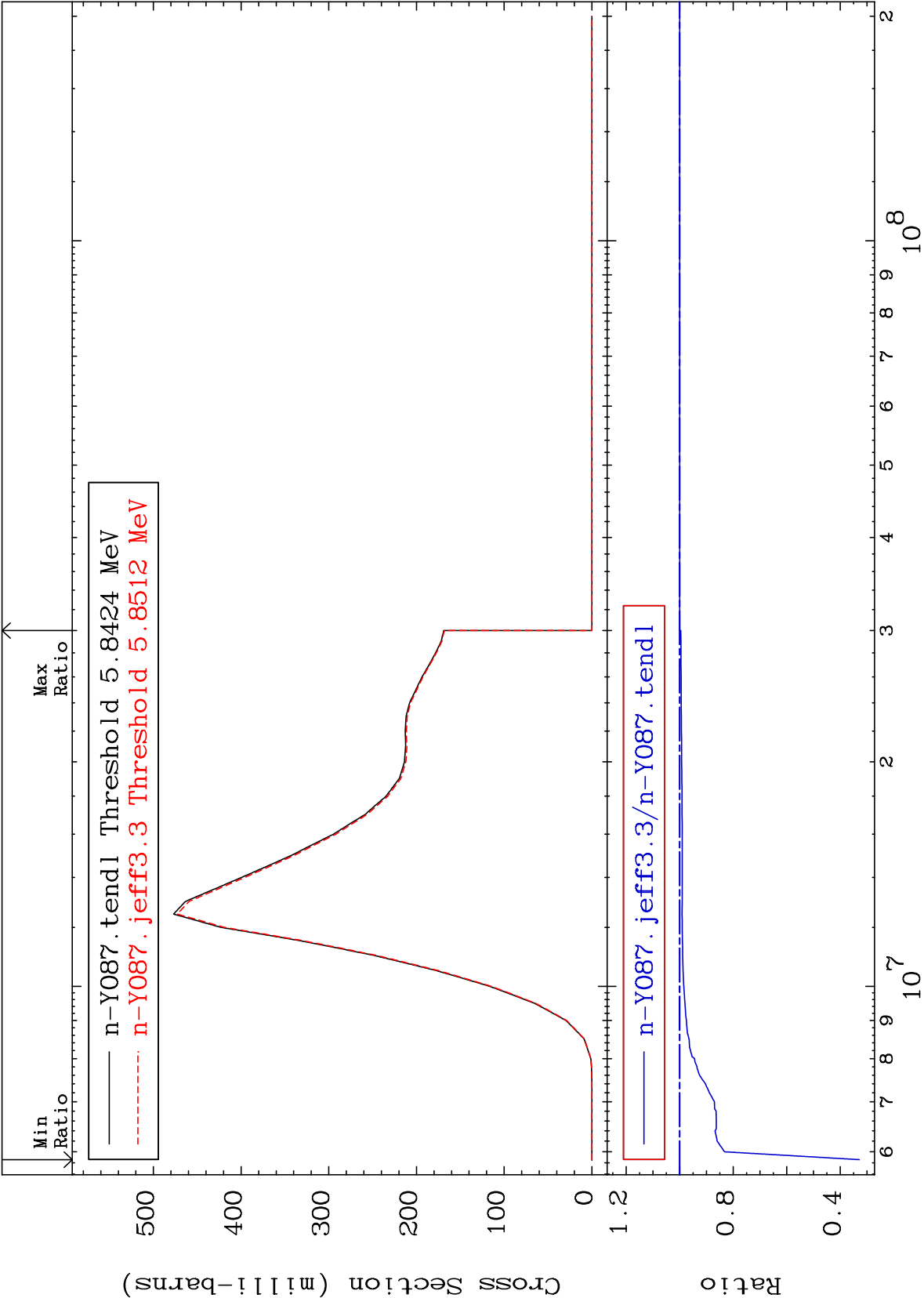
39-Y -87
-99.95 To 1882. %



MAT 3919

(n,n') p
Cross Section

39-Y -87
-67.13 To 0.000 %



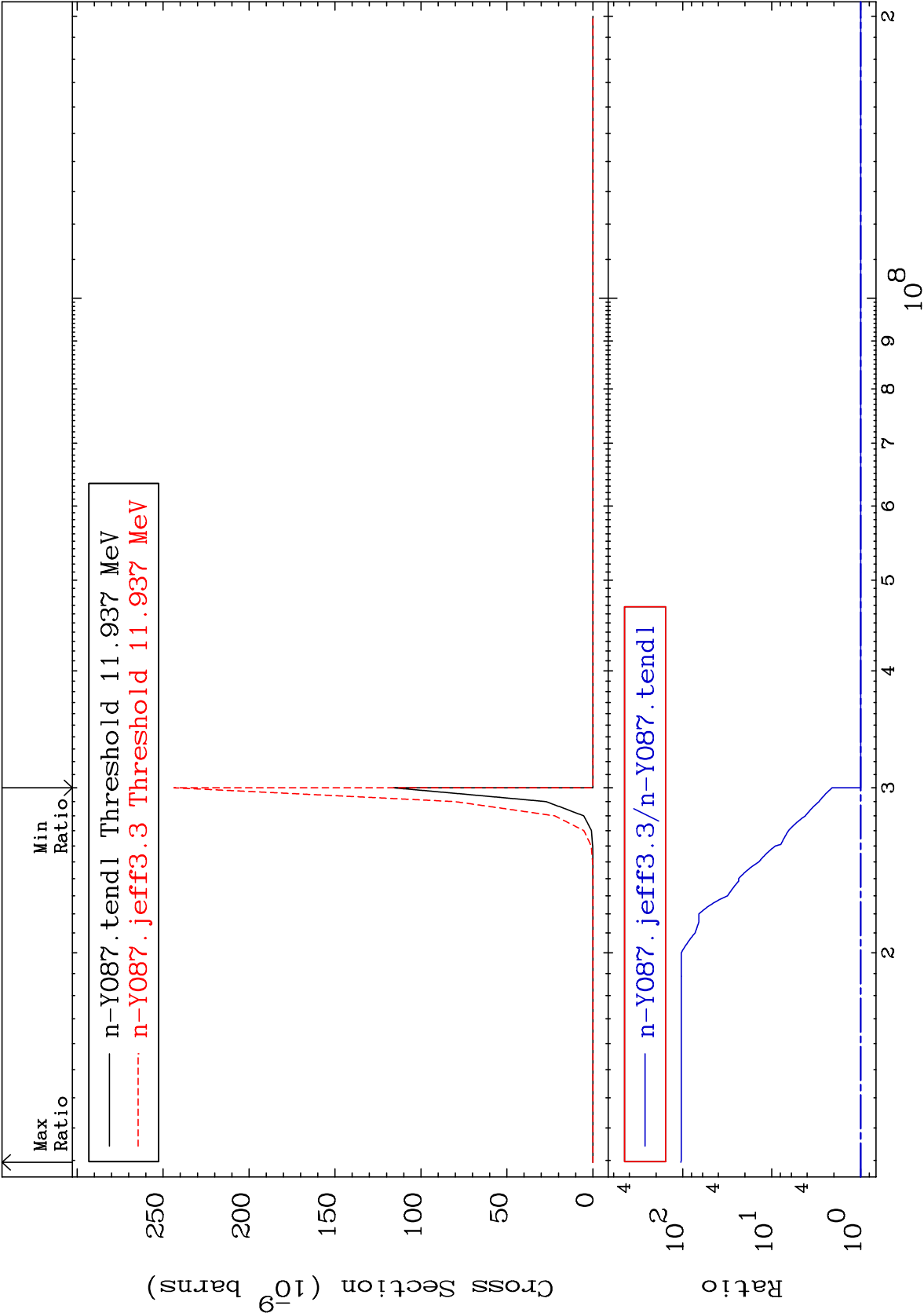
MAT 3919

(n,n') 2 α

Cross Section

39-Y -87

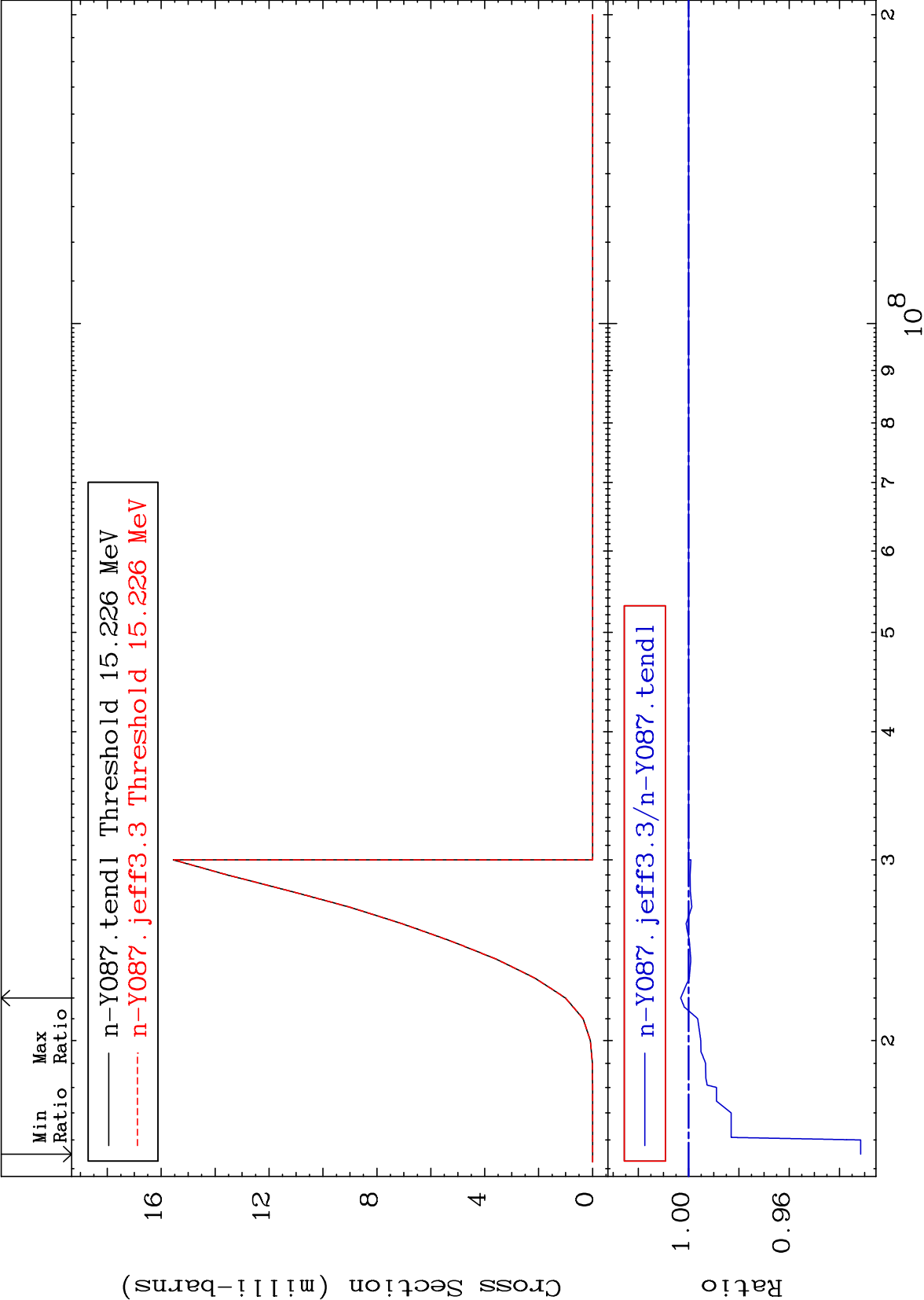
0.000 To 9999. %



10

Incident Energy (eV)

39-Y -87



MAT 3919

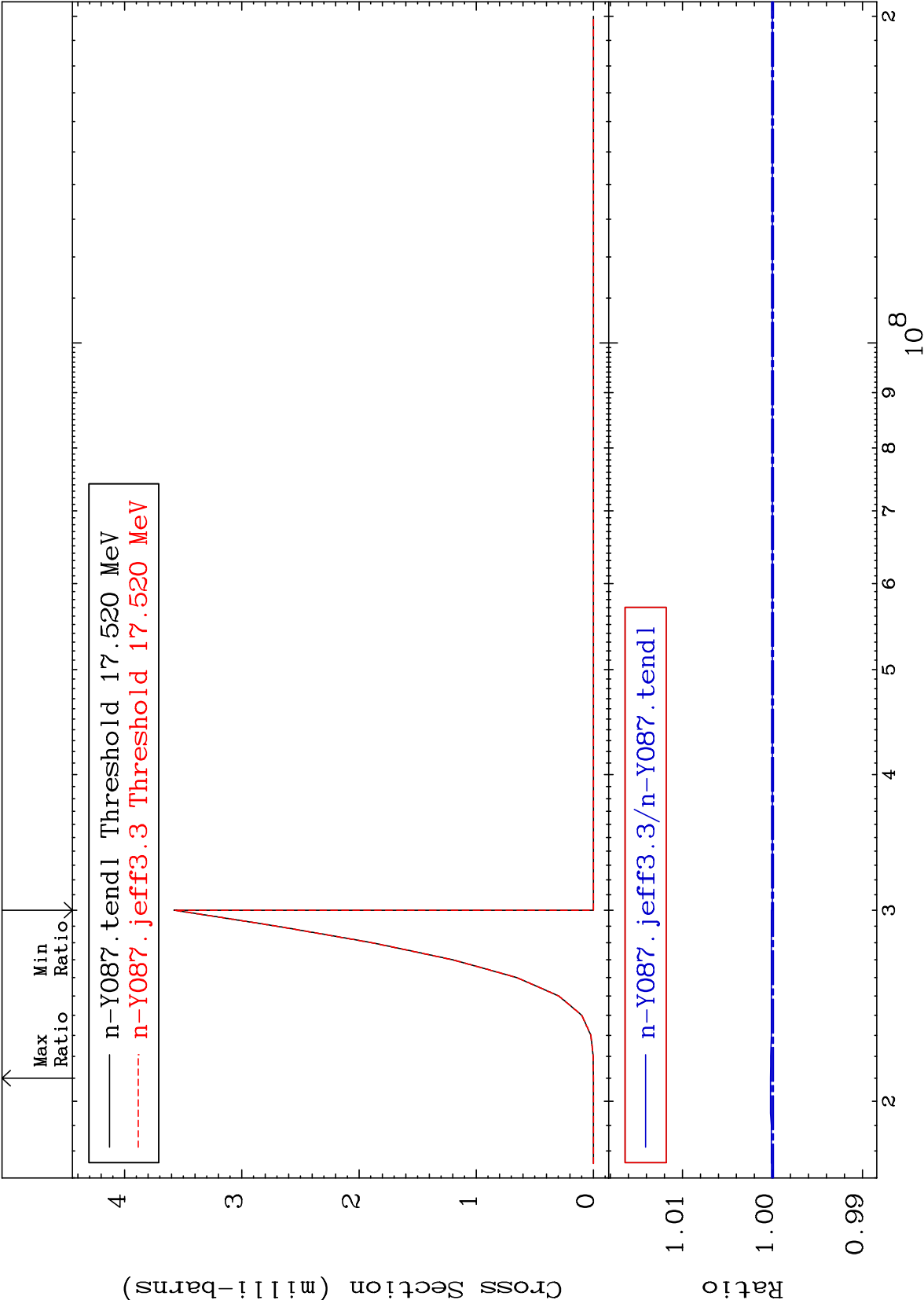
(n,n') t

39-Y -87

Cross Section

0.000

To 0.021 %



12

Incident Energy (eV)

39-Y -87

MAT 3919

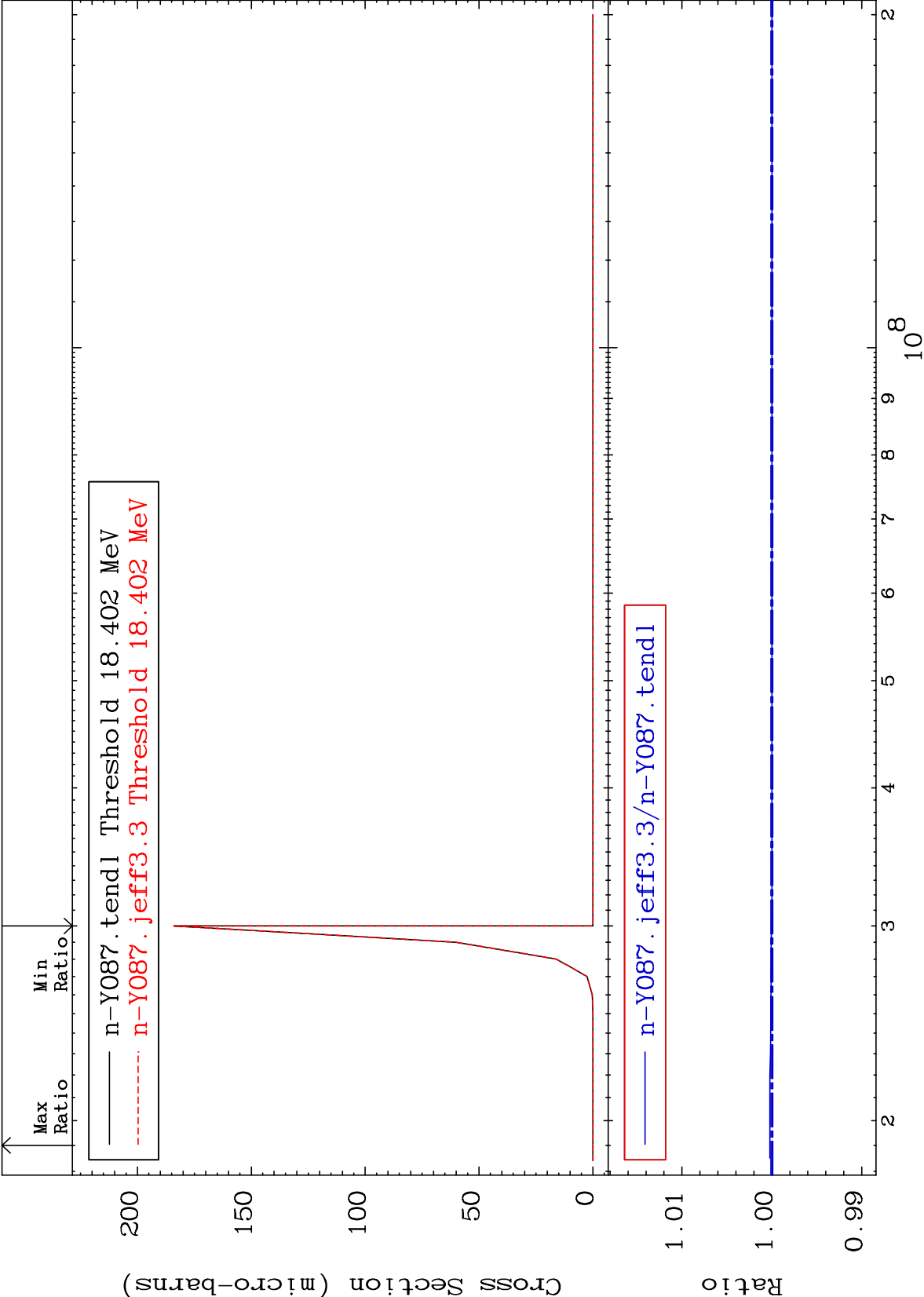
(n,n') He-3

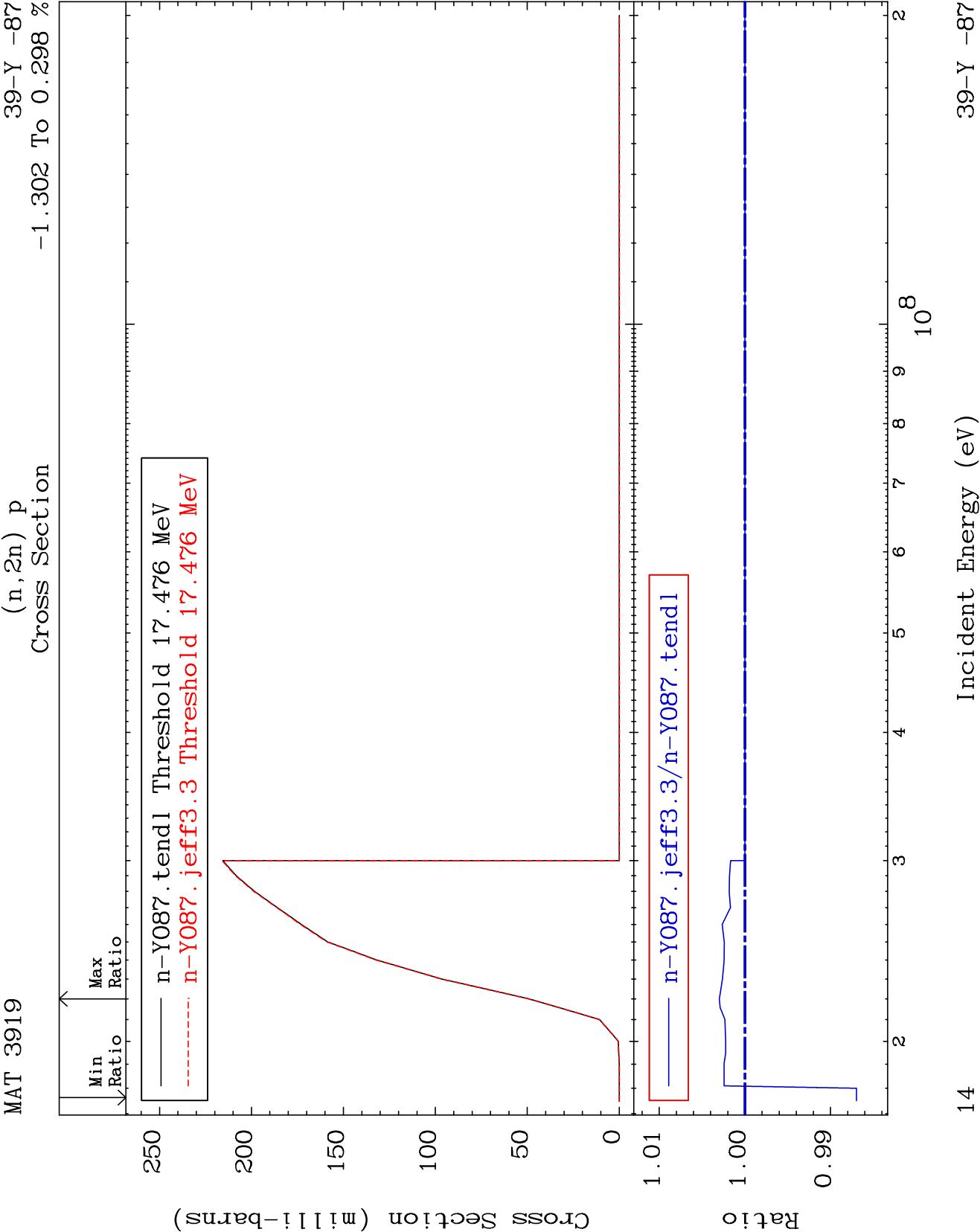
39-Y -87

Cross Section

0.000

To 0.024 %

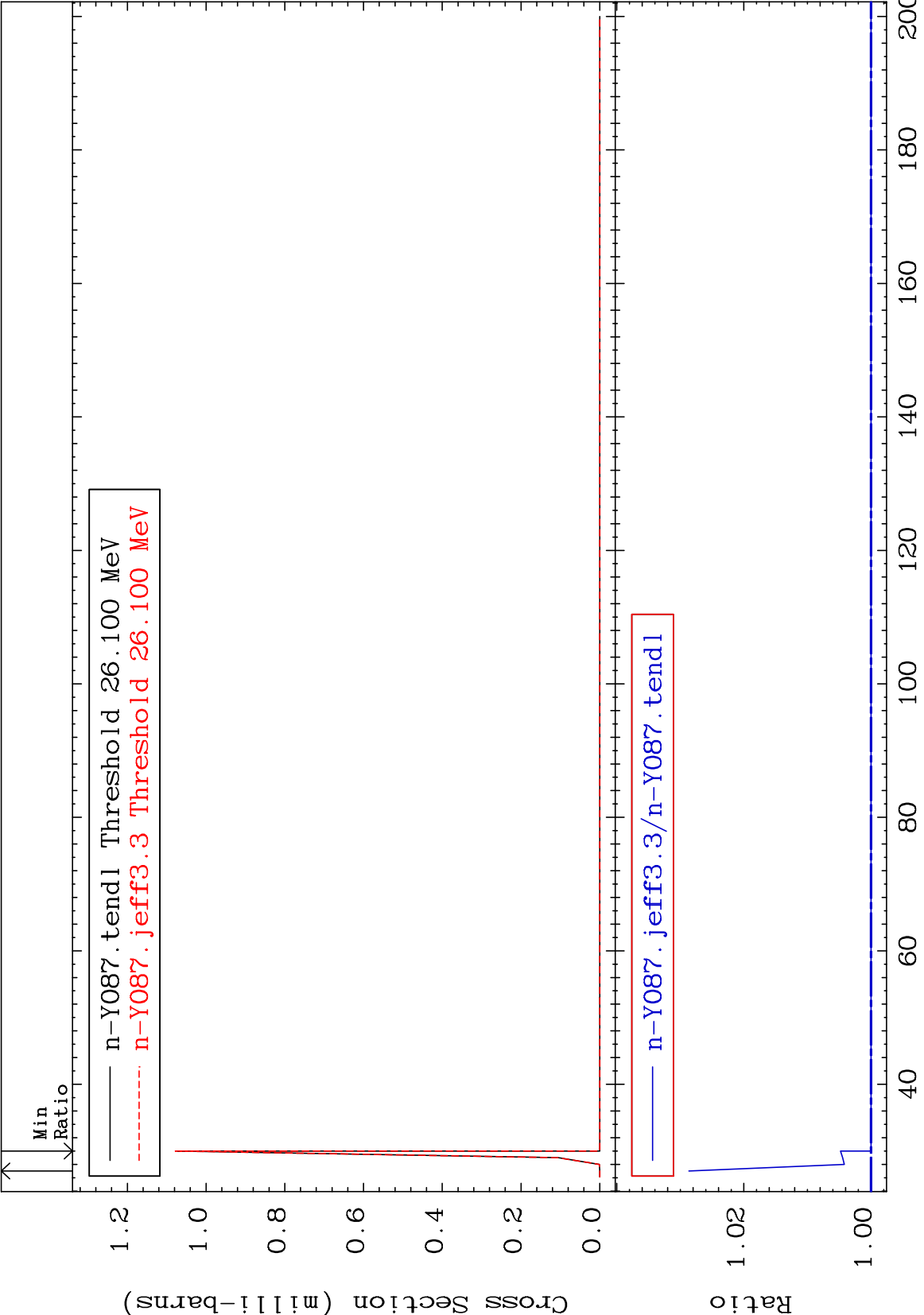


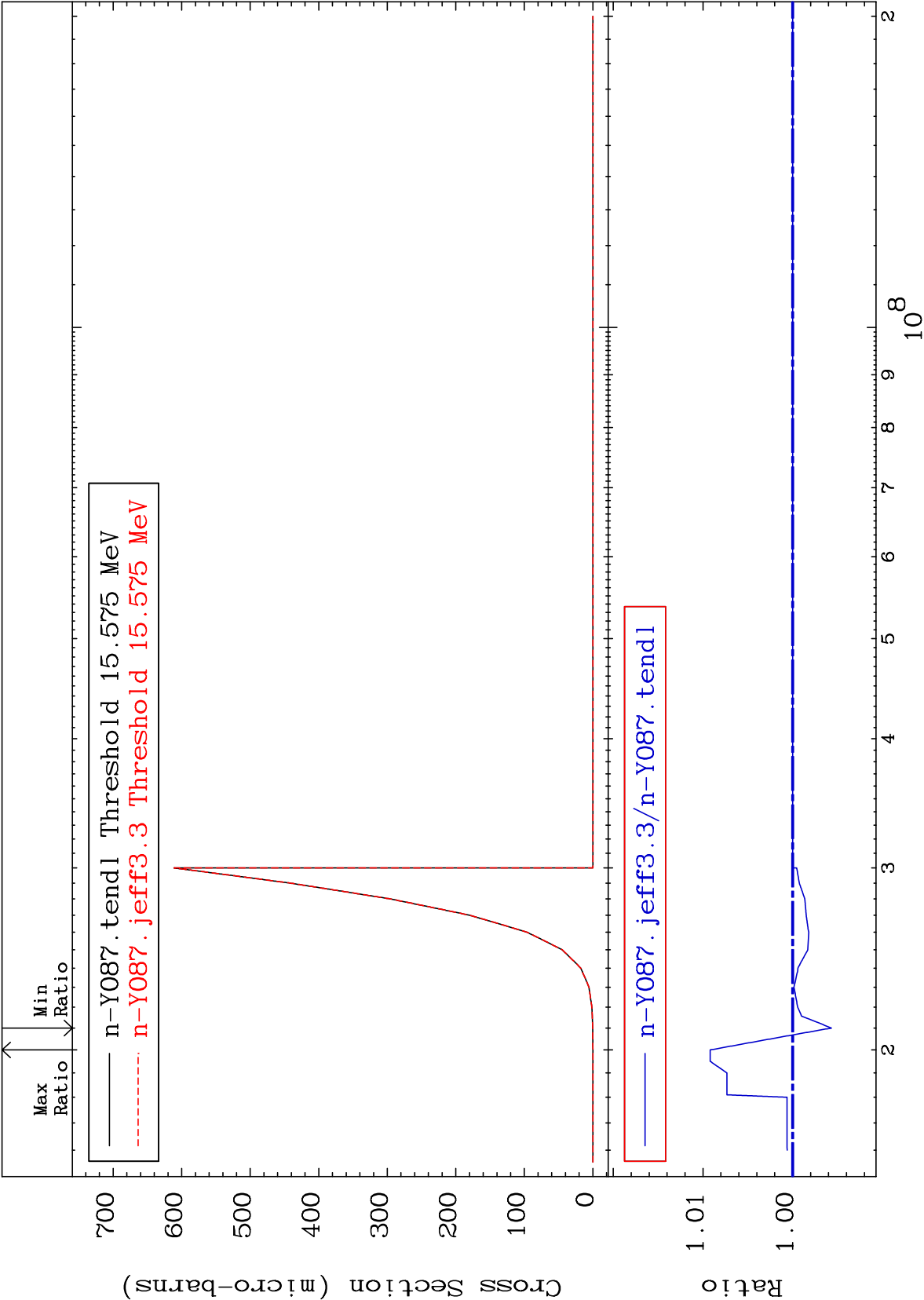


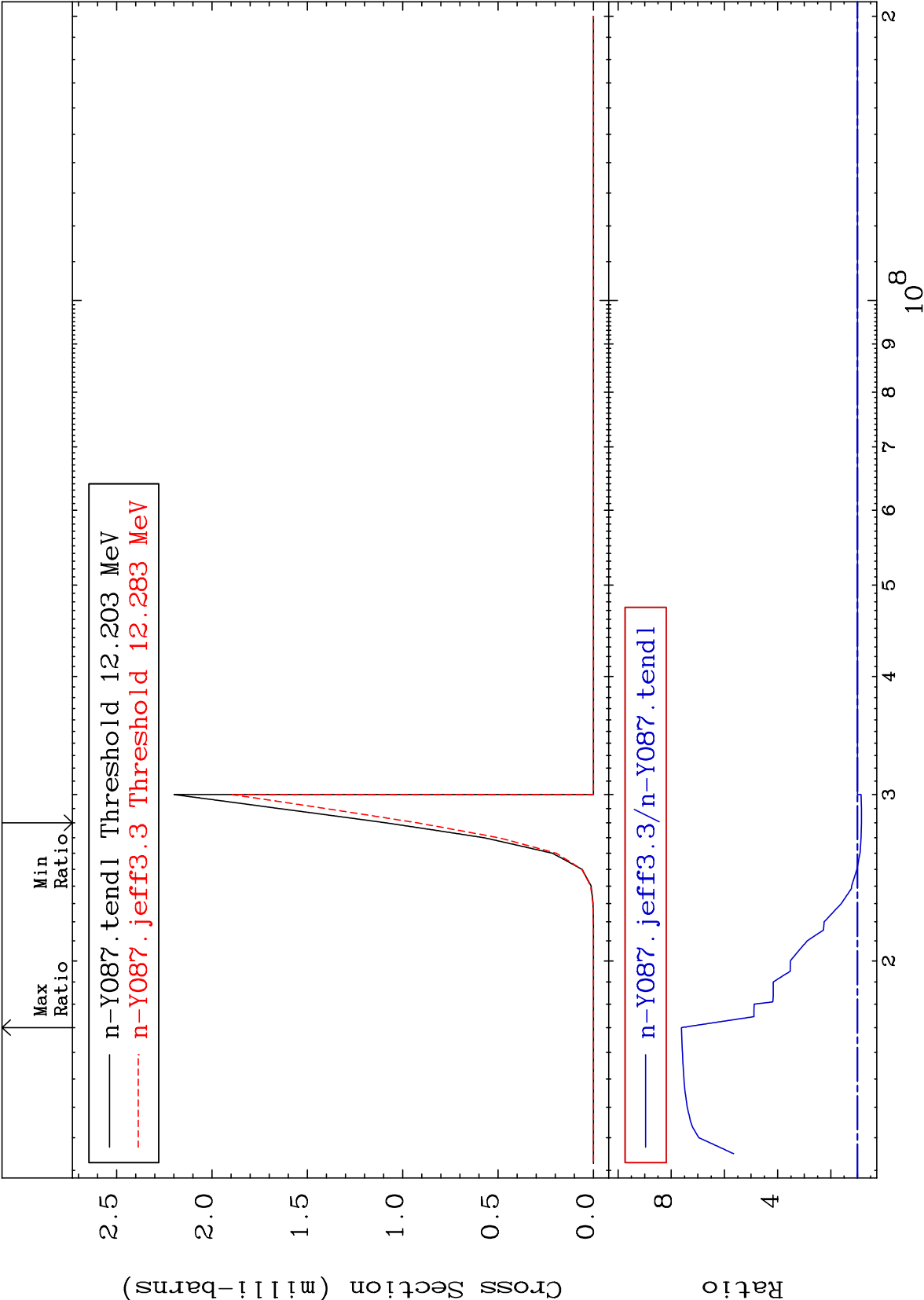
MAT 3919

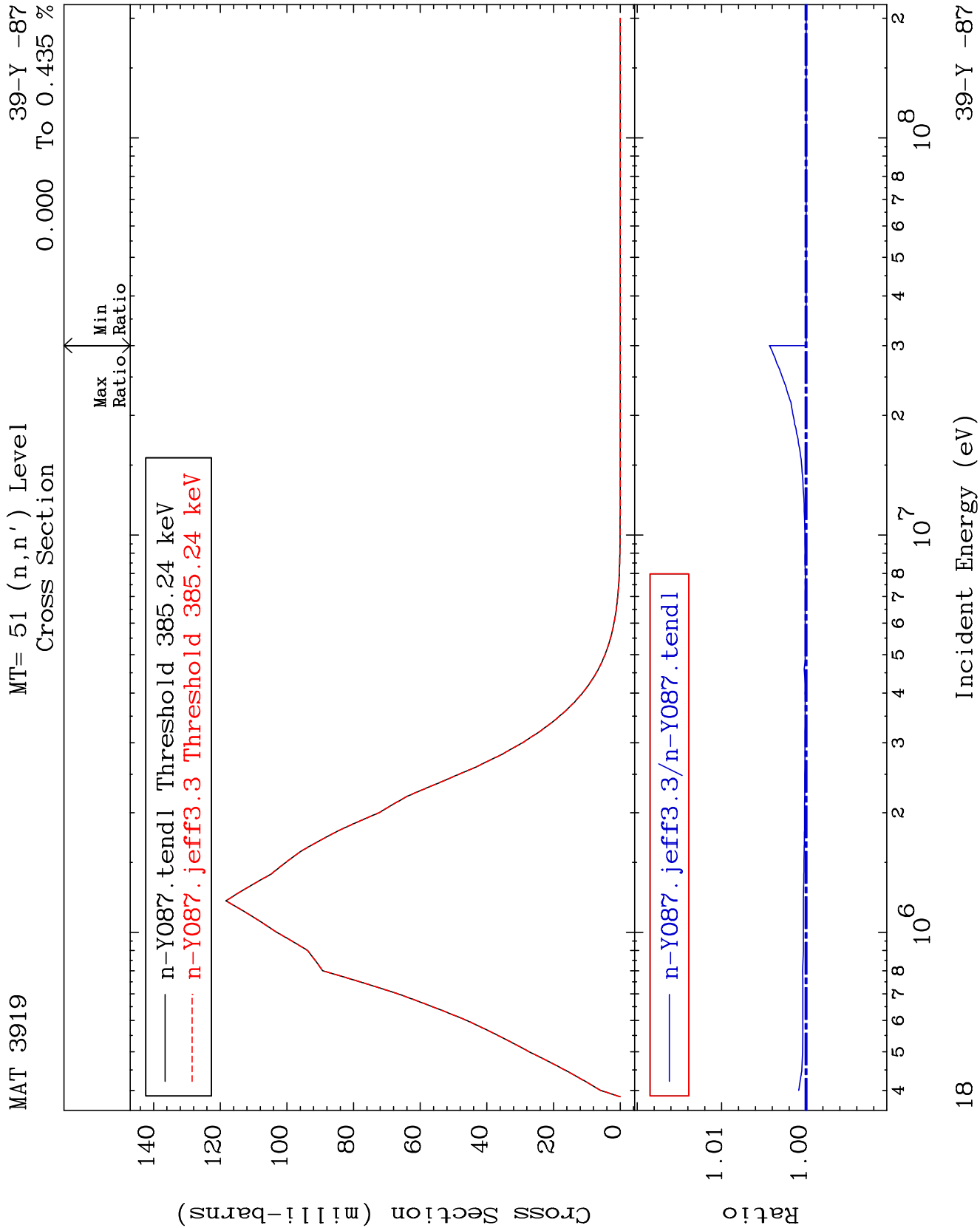
(n,3n) p
Cross Section

39-Y -87
0.000 To 2.865 %









MAT 3919

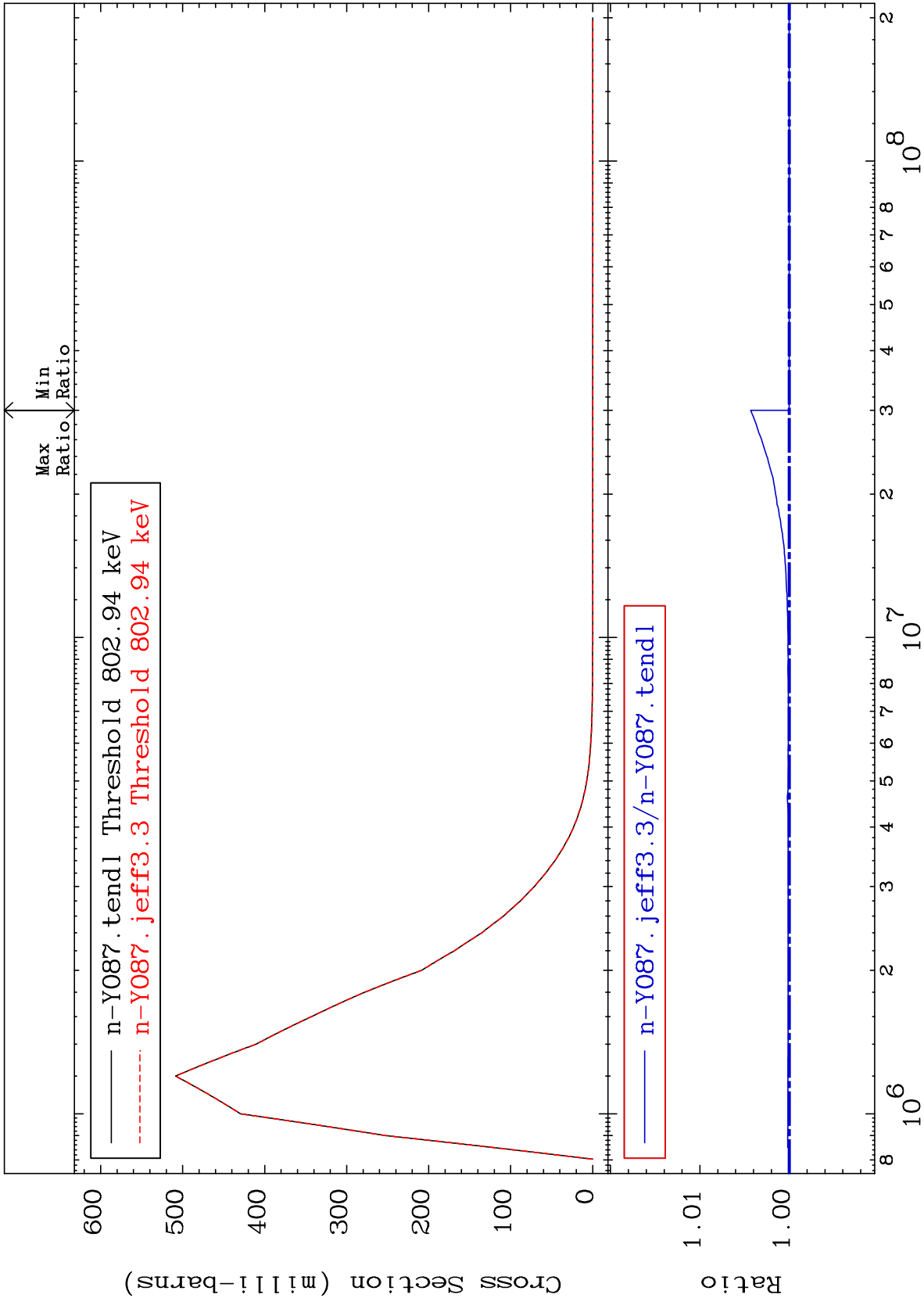
MT= 52 (n,n') Level

39-Y -87

Cross Section

0.000

To 0.433 %



19

Incident Energy (eV)

39-Y -87

MAT 3919

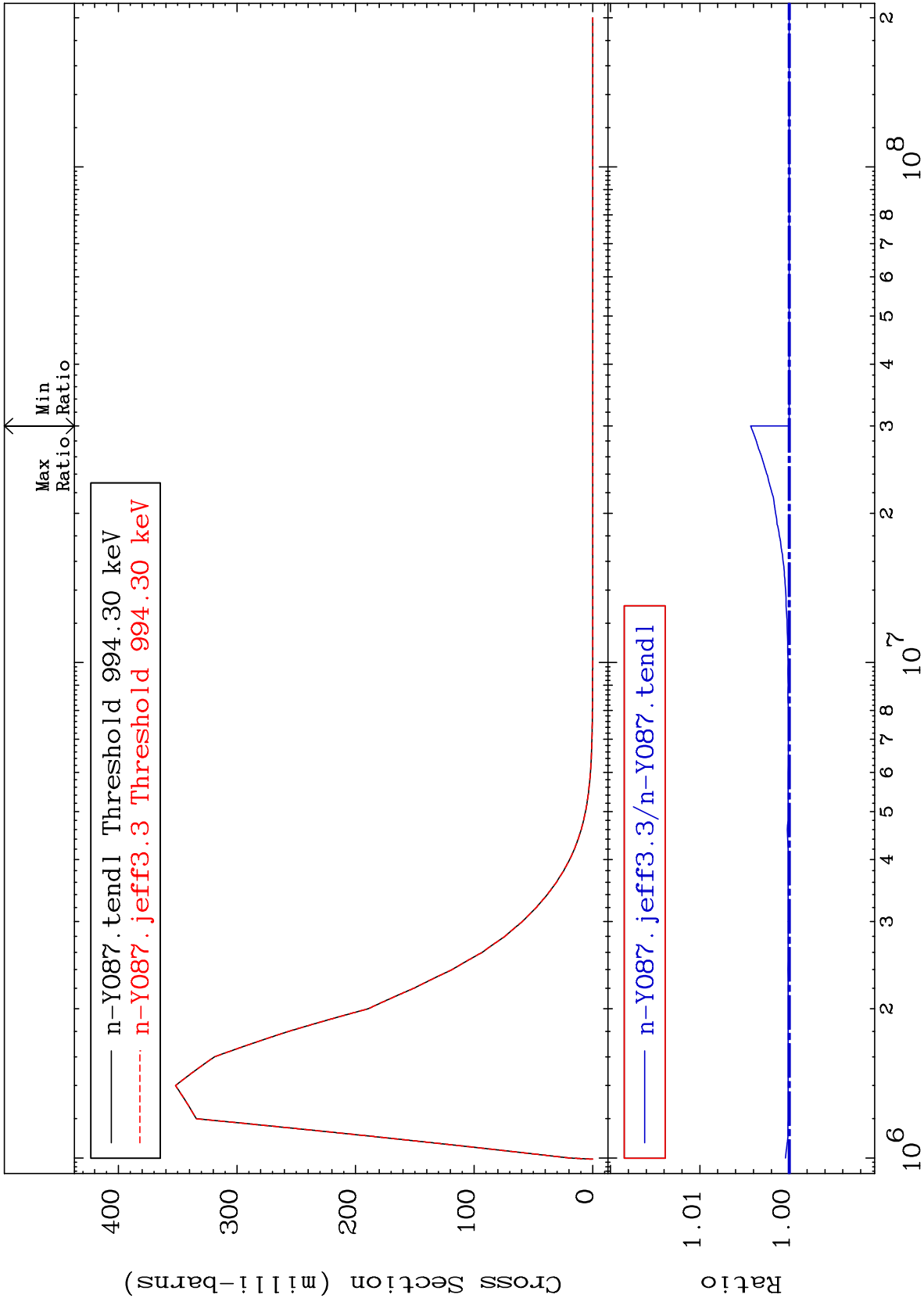
MT= 53 (n,n') Level

39-Y -87

Cross Section

0.000

To 0.432 %



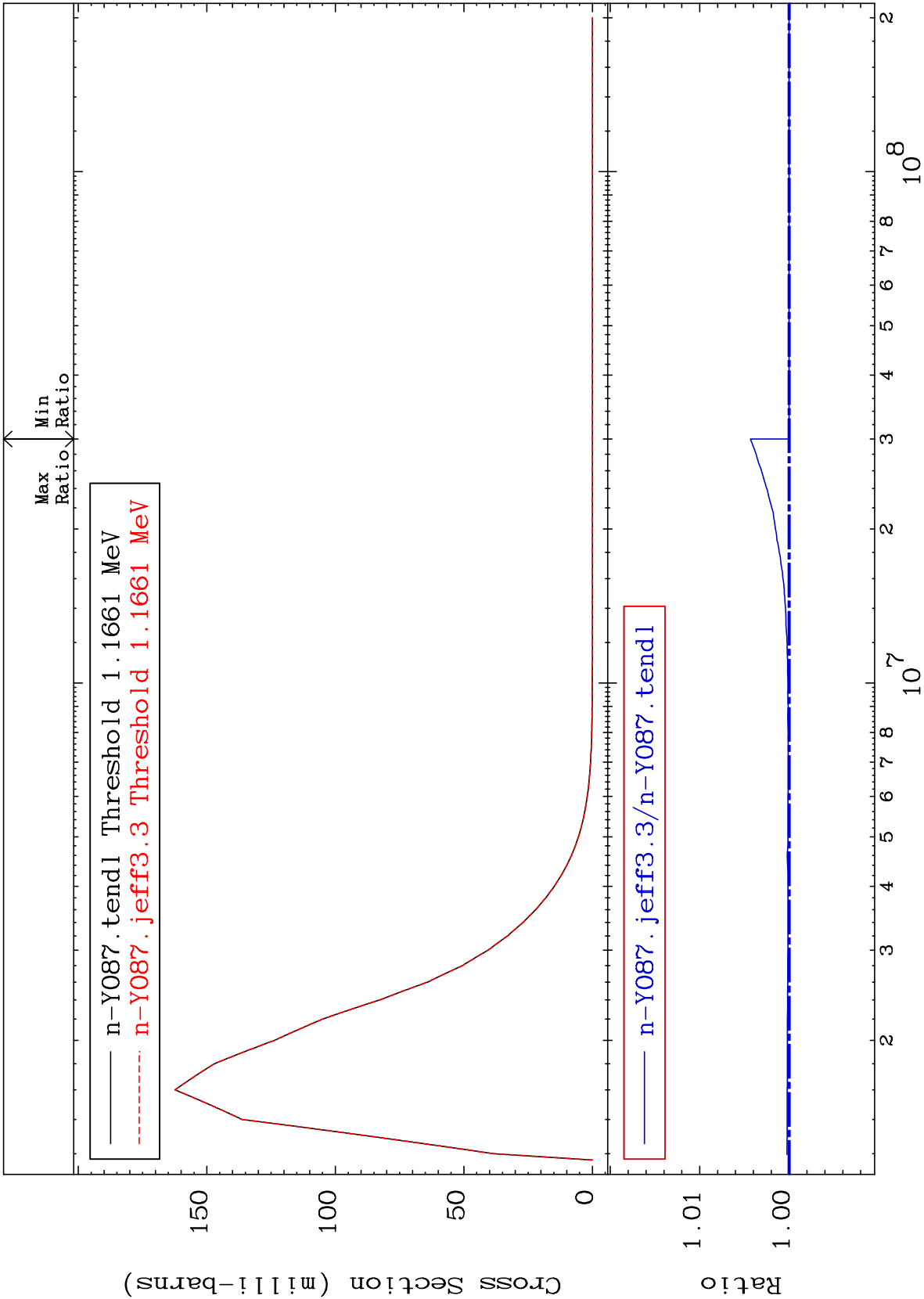
Incident Energy (eV)

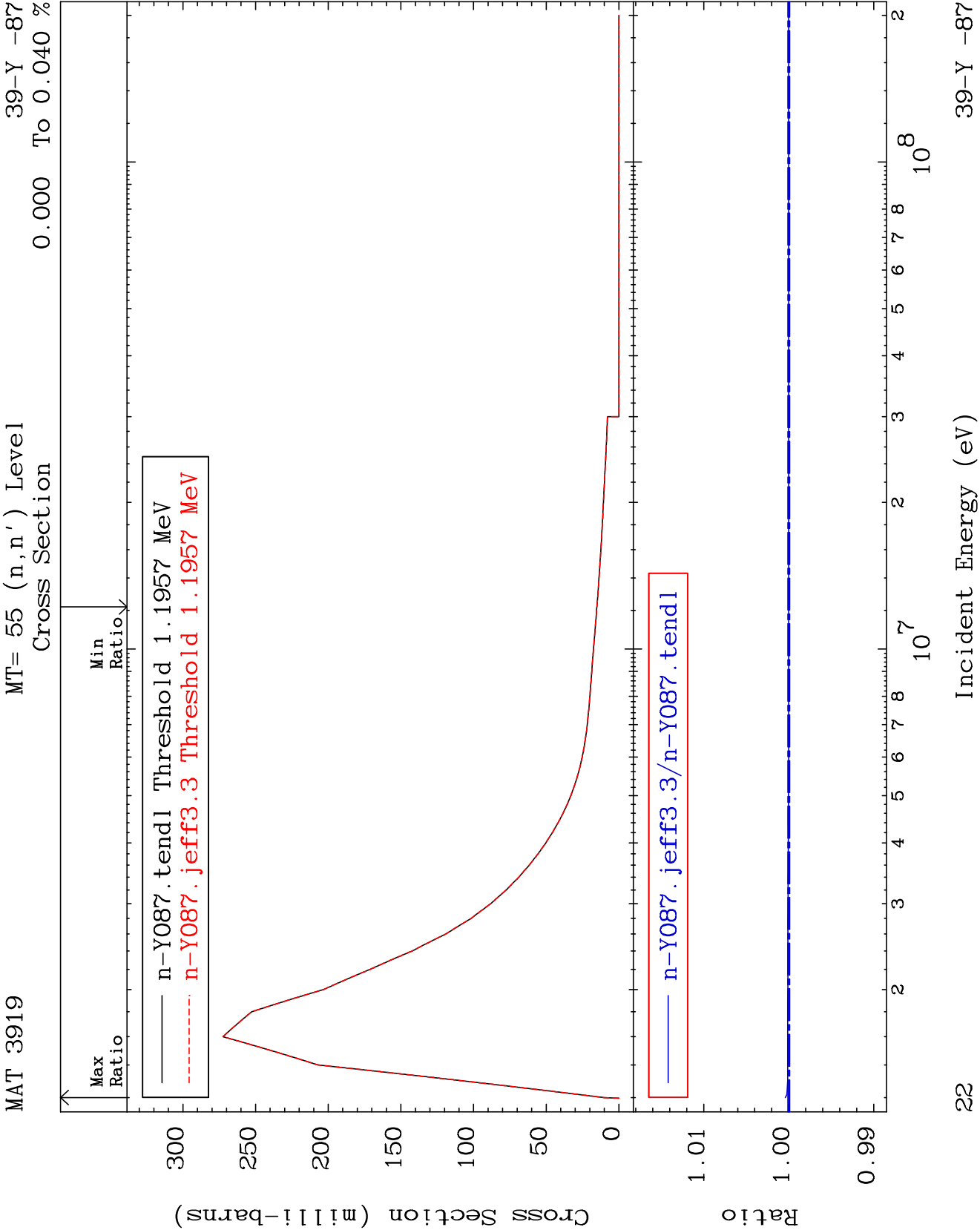
39-Y -87

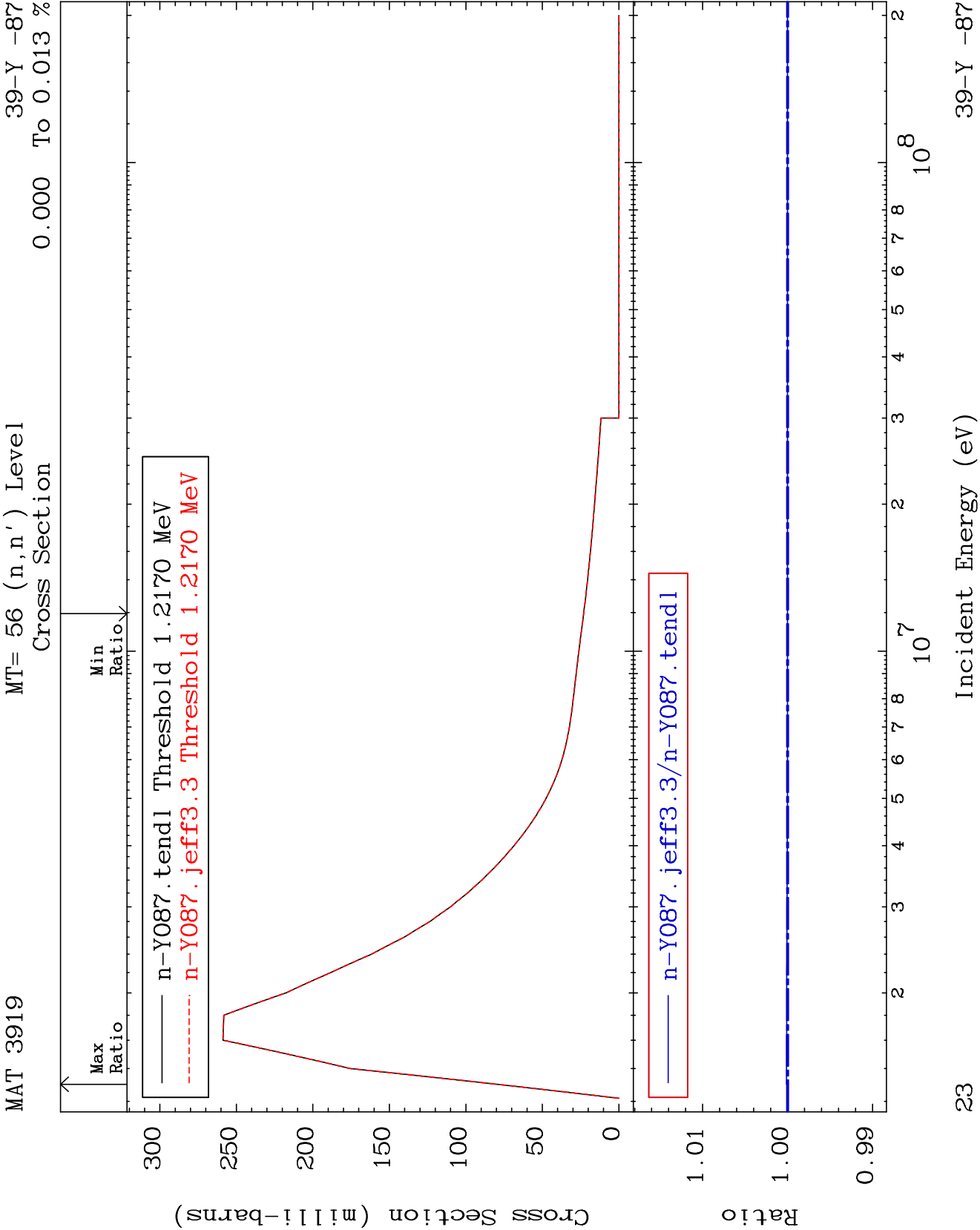
MAT 3919

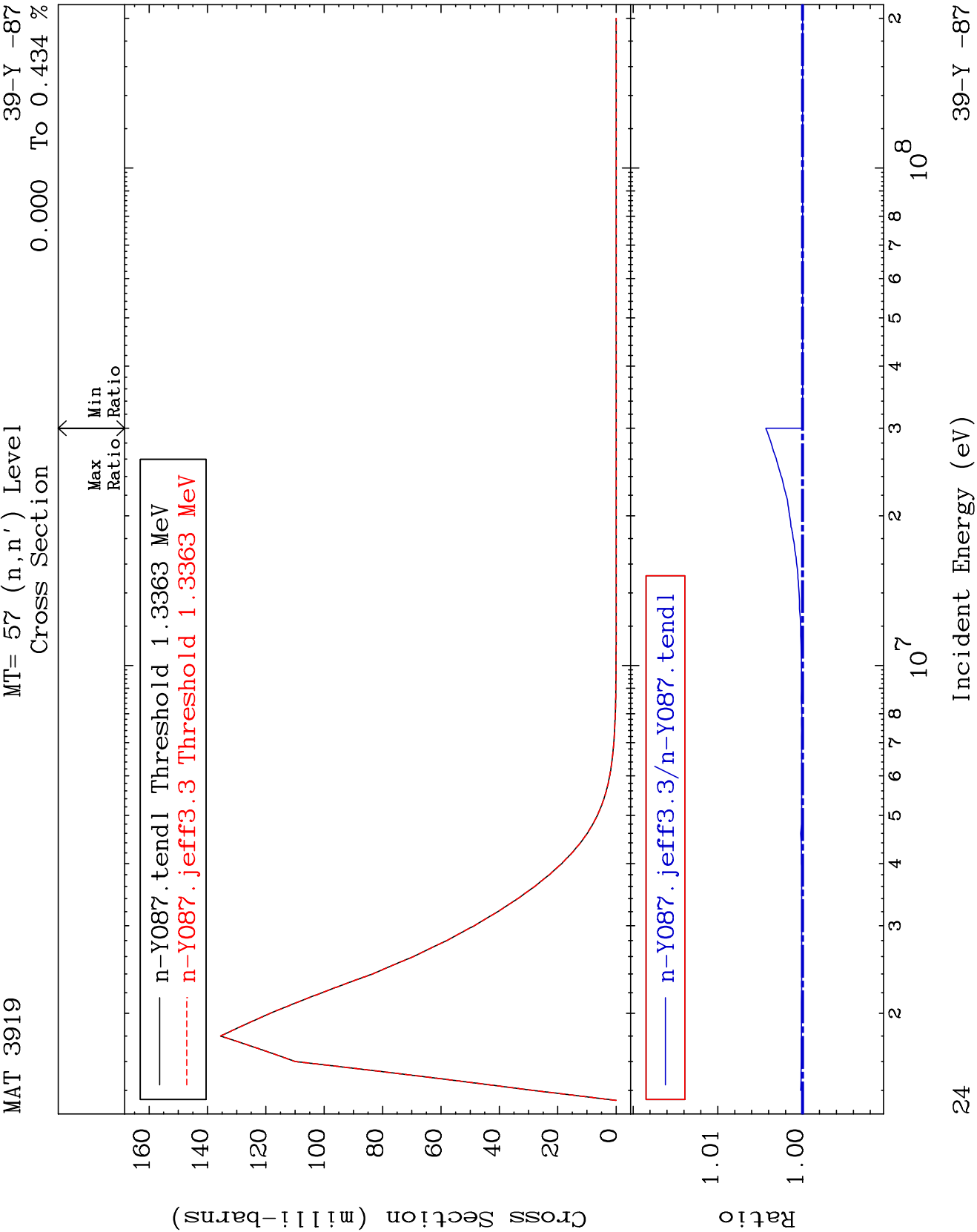
MT= 54 (n,n') Level
Cross Section

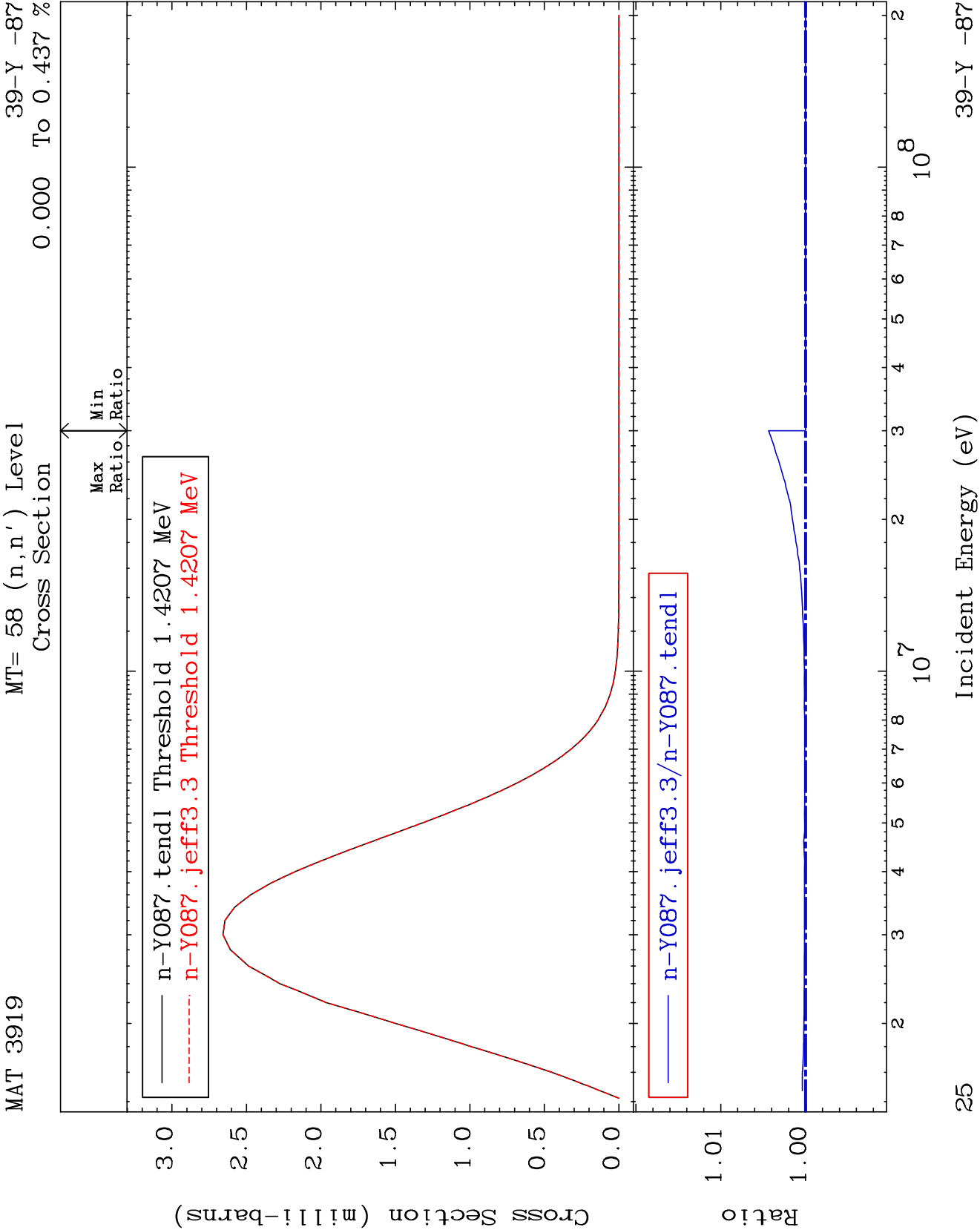
39-Y -87
0.000 To 0.433 %

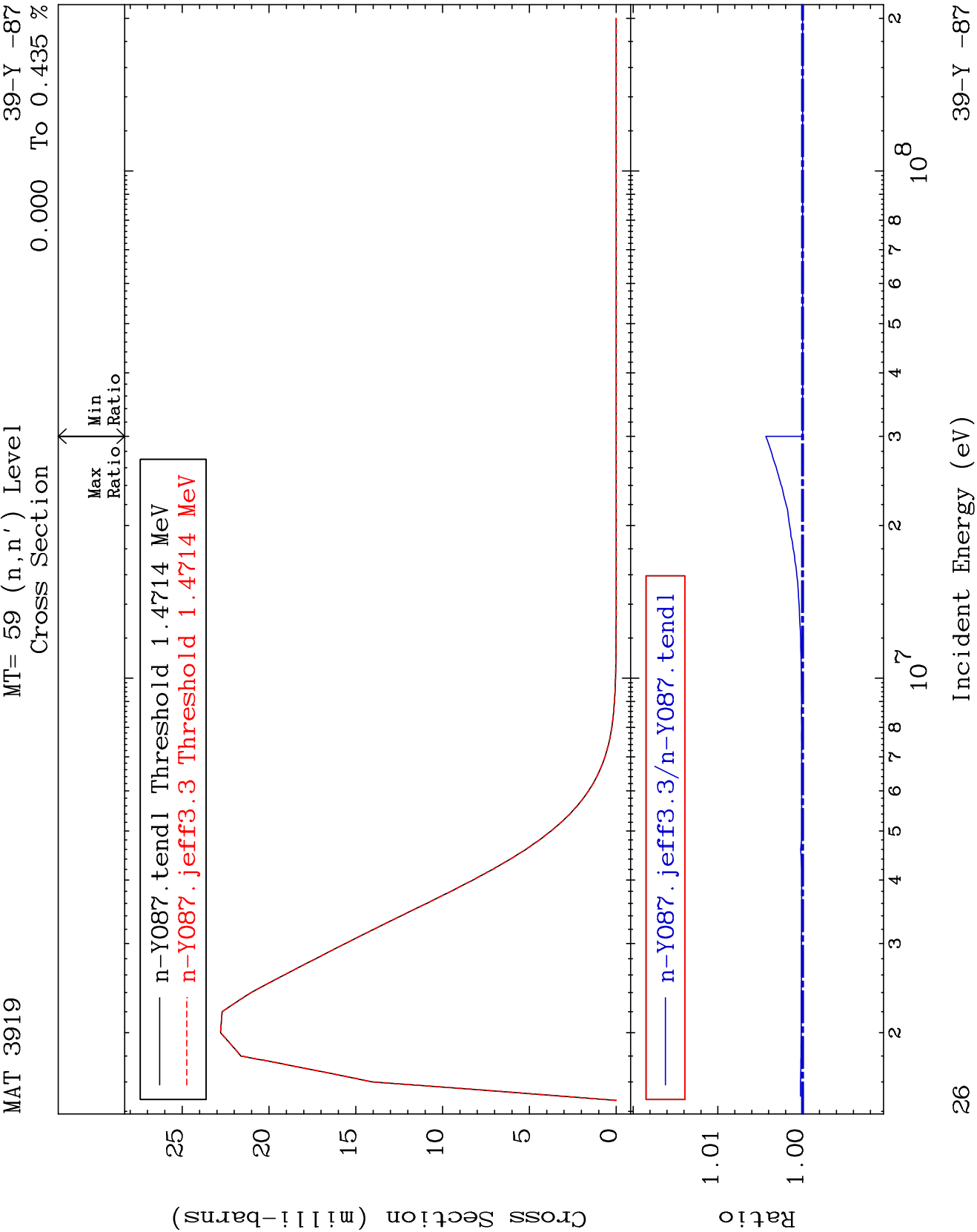












MAT 3919

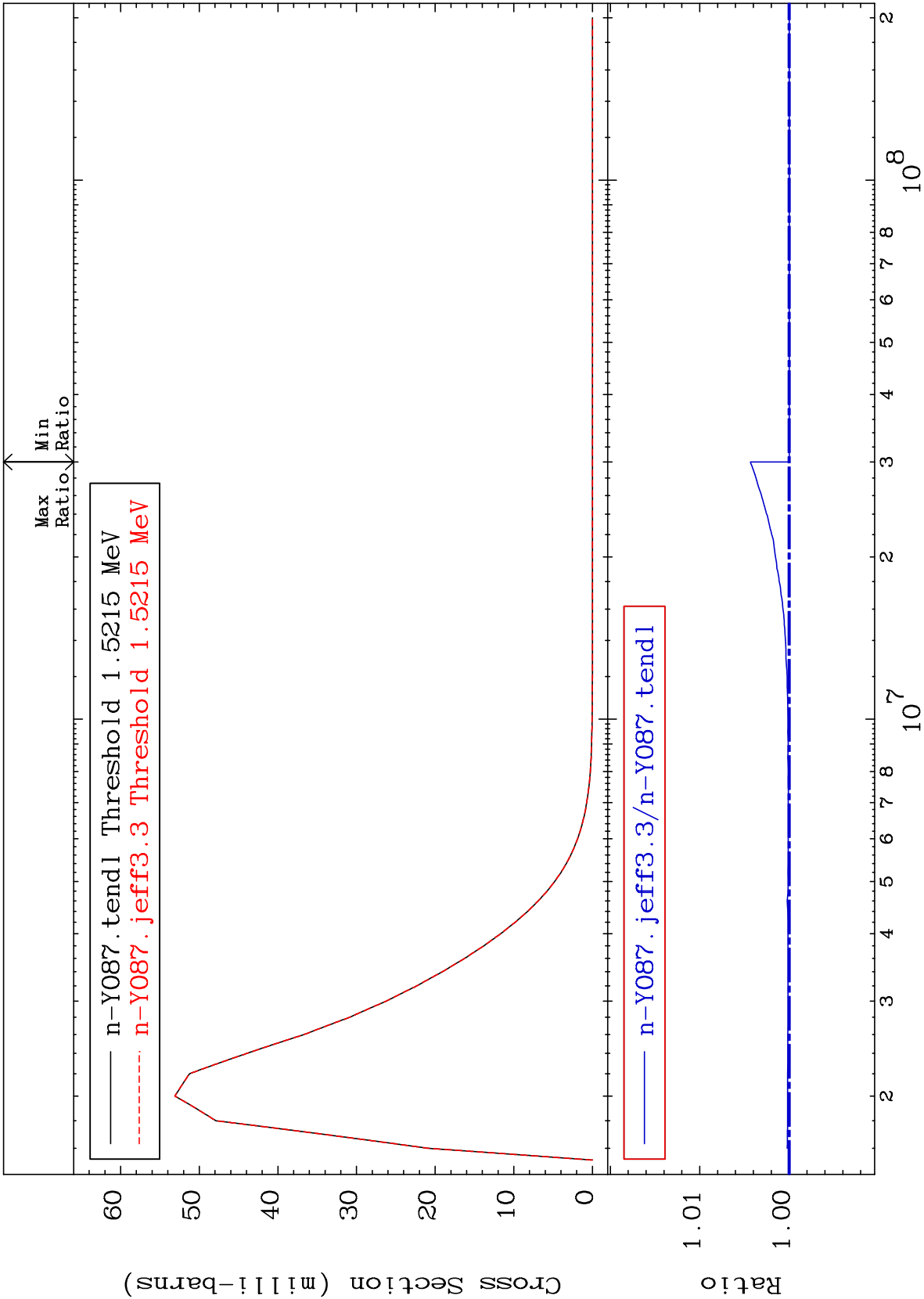
MT= 60 (n,n') Level

39-Y -87

Cross Section

0.000

To 0.434 %



27

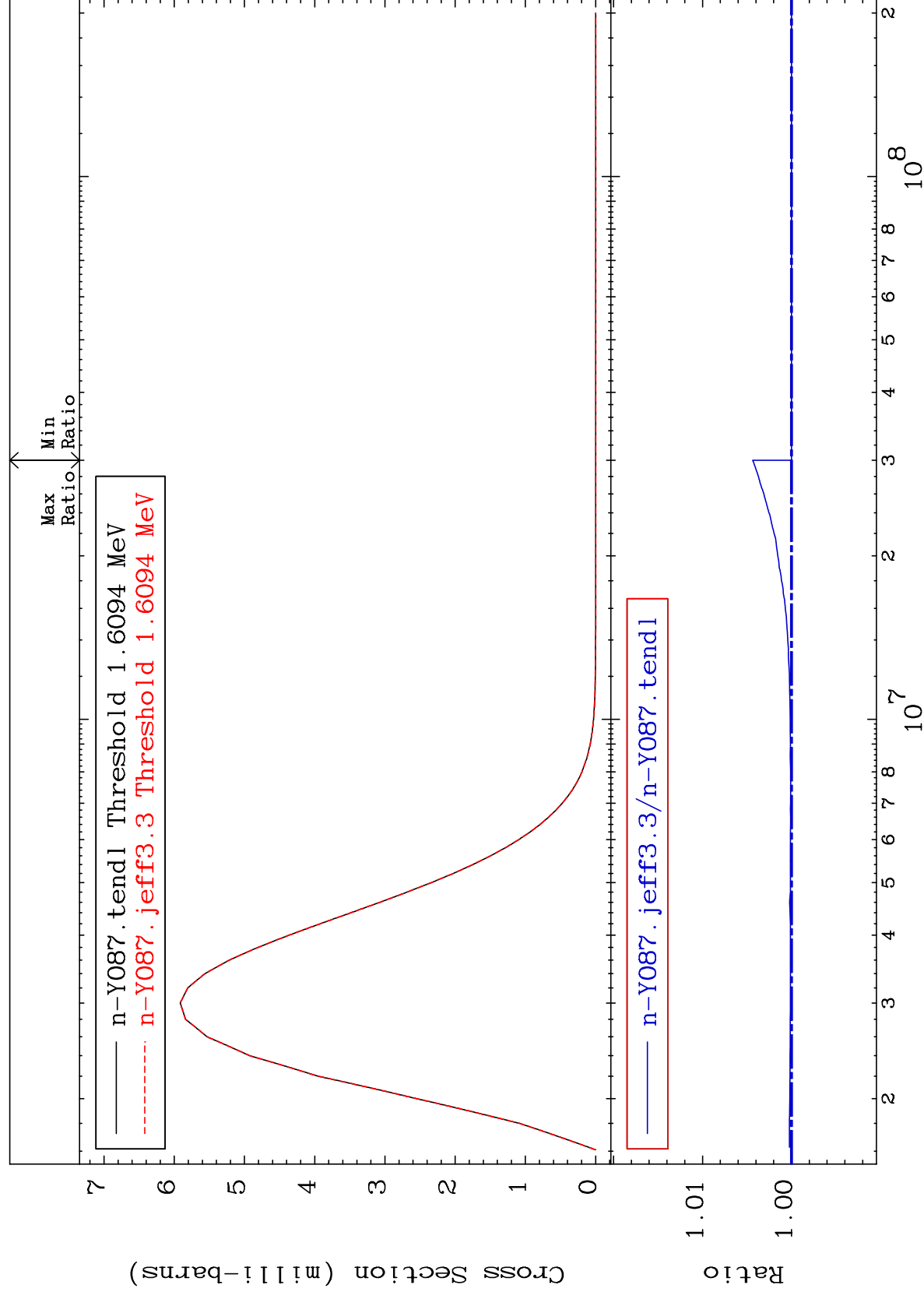
Incident Energy (eV)

39-Y -87

MAT 3919

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

0.000 To 0.436 % 39-Y -87



82

Incident Energy (eV)

39-Y -87

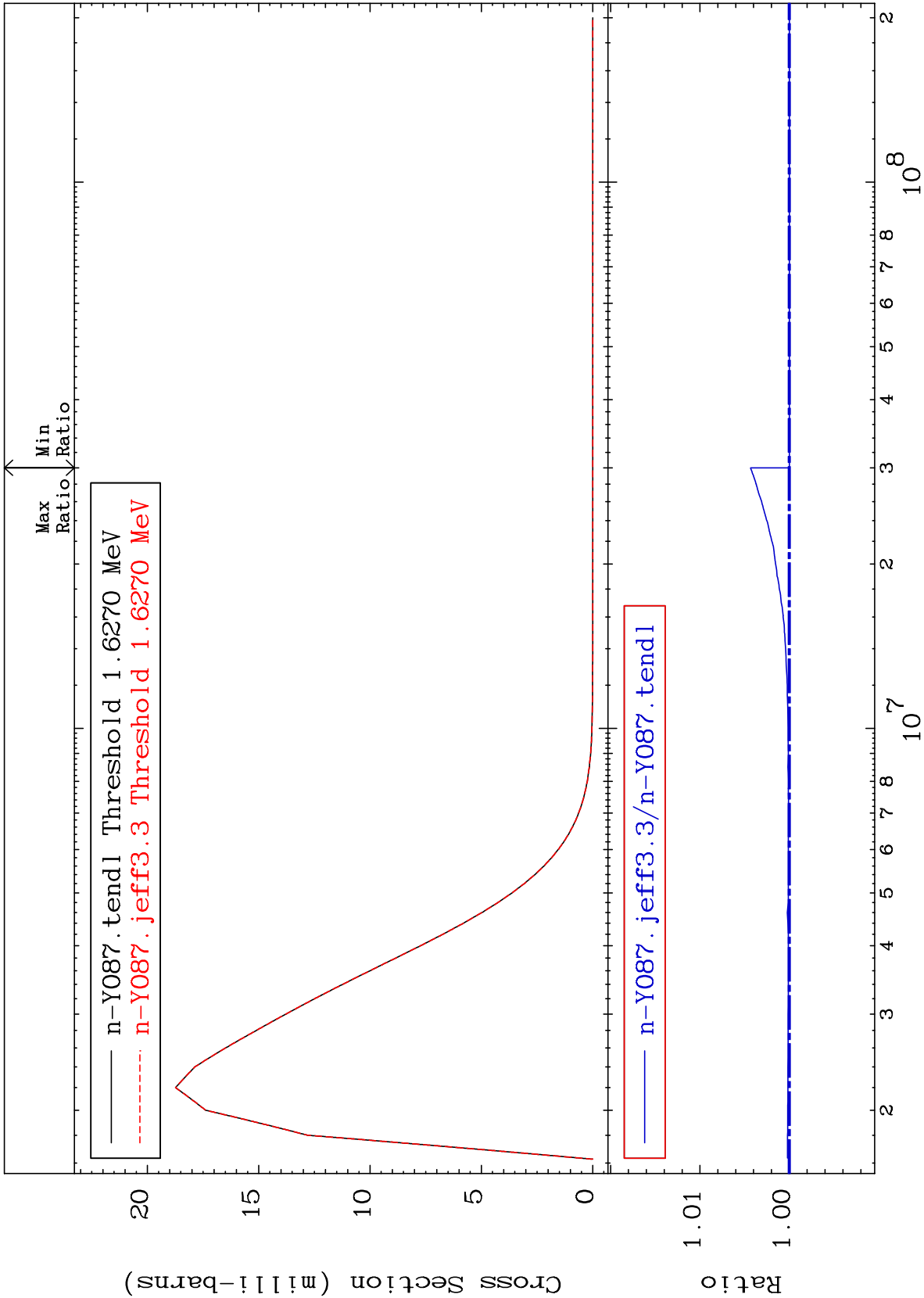
MAT 3919

MT= 62 (n,n') Level

39-Y -87

Cross Section

0.000 To 0.435 %



29

Incident Energy (eV)

39-Y -87

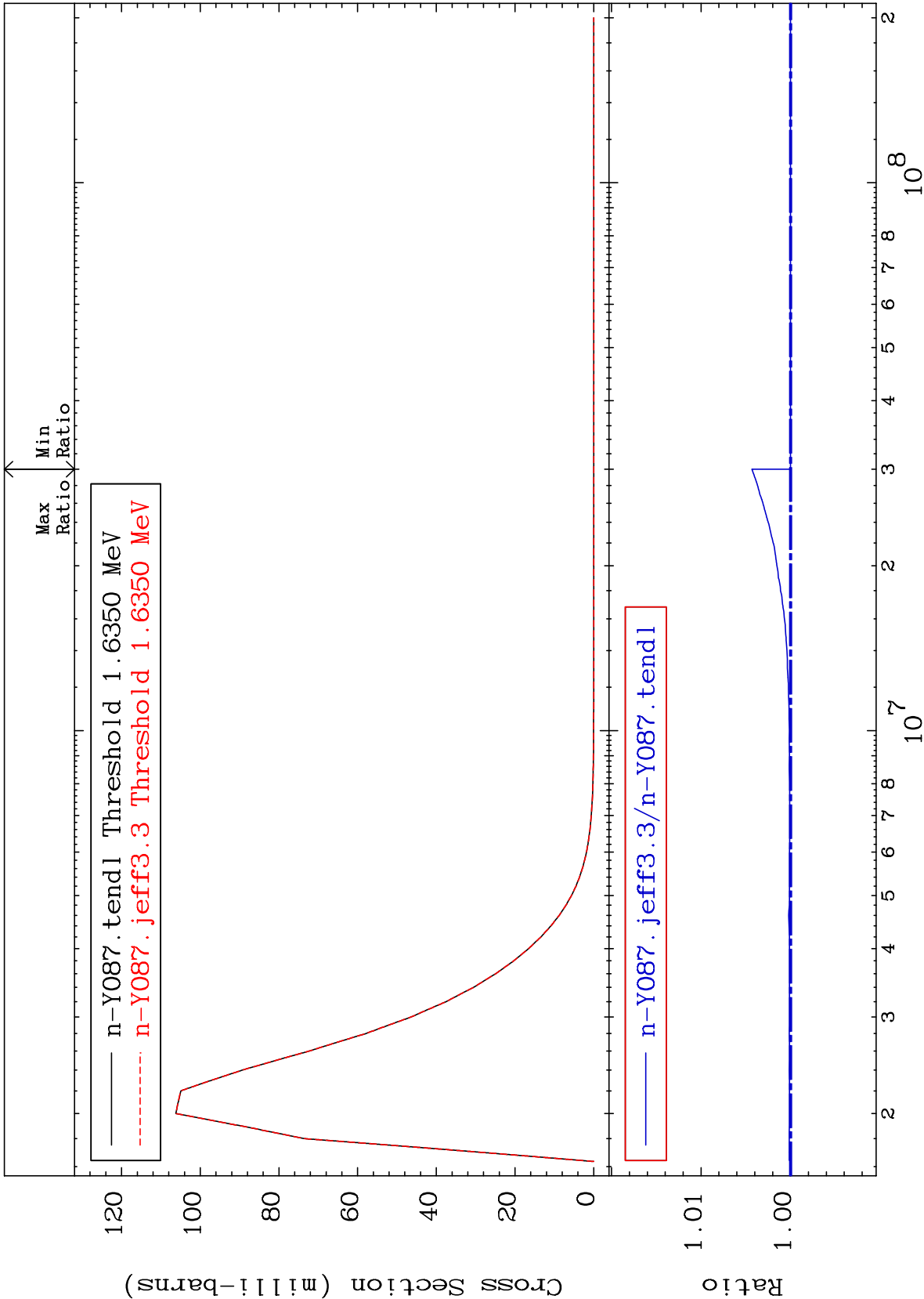
MAT 3919

MT= 63 (n,n') Level

39-Y -87

Cross Section

0.000 To 0.432 %



30

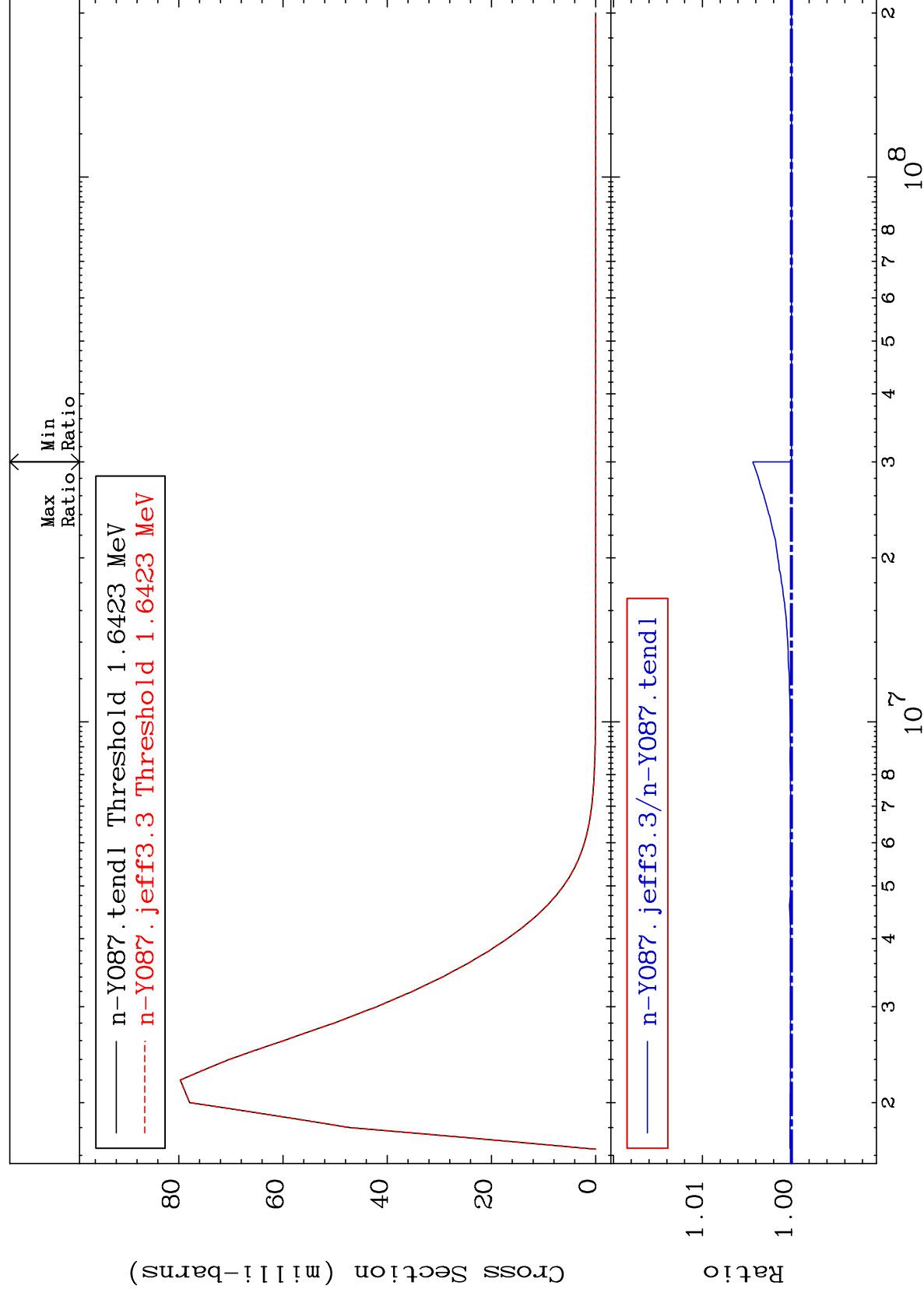
Incident Energy (eV)

39-Y -87

MAT 3919

MT= 64 (n, n') Level
Cross Section

0.000 To 0.434 % 39-Y -87



31

Incident Energy (eV)

39-Y -87

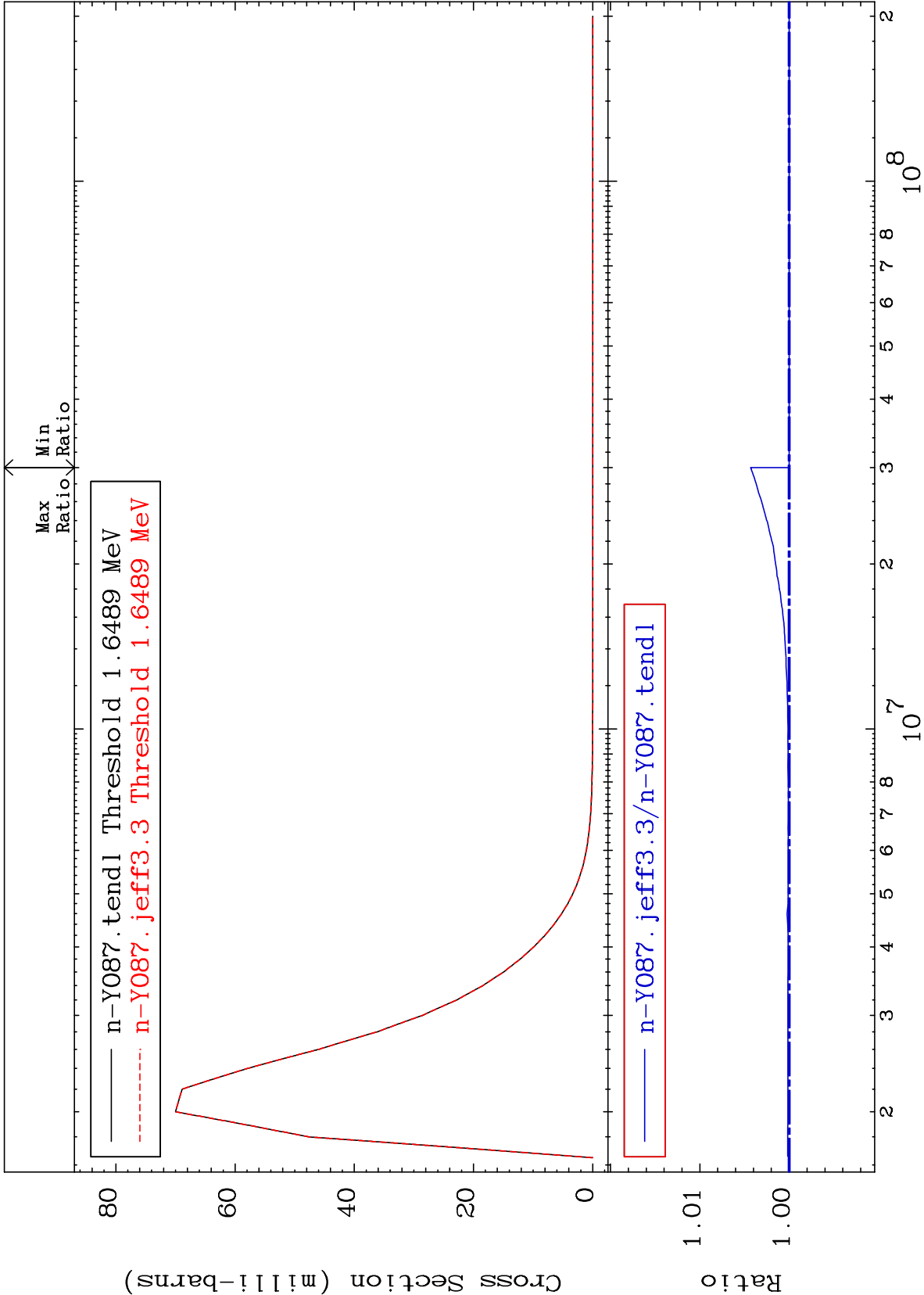
MAT 3919

MT= 65 (n,n') Level

39-Y -87

0.000 To 0.432 %

Cross Section



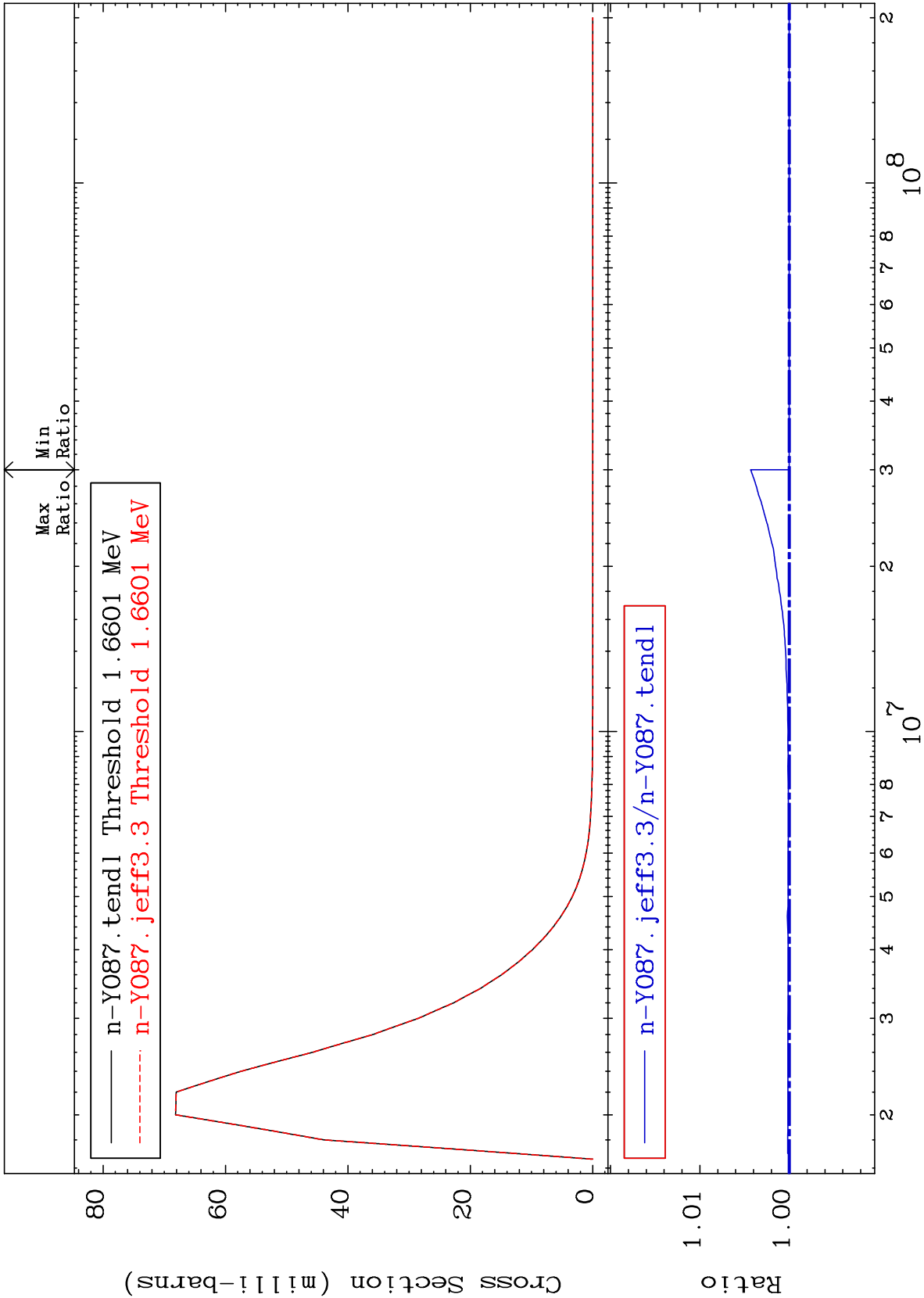
MAT 3919

MT= 66 (n,n') Level

39-Y -87

0.000 To 0.433 %

Cross Section



33

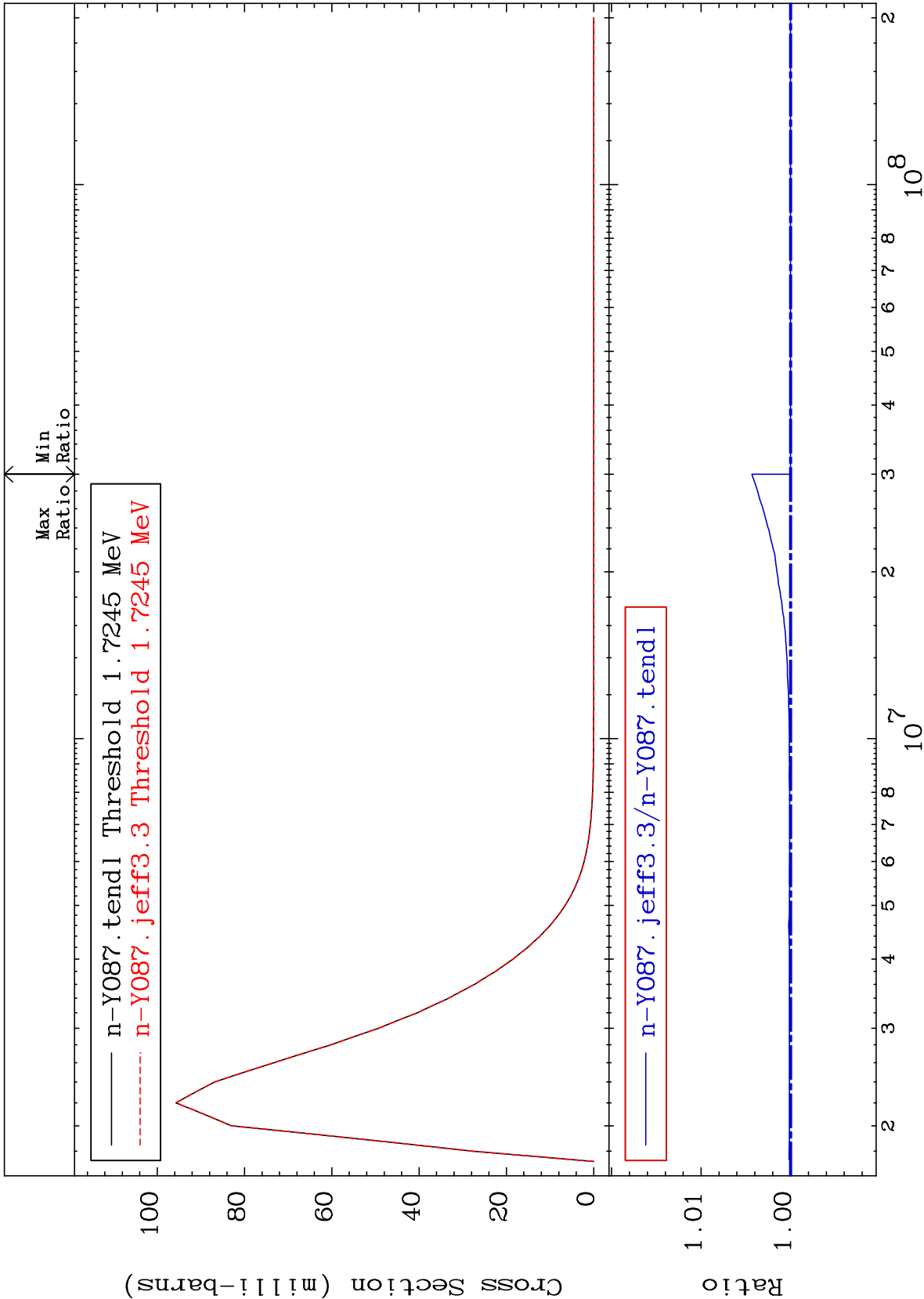
Incident Energy (eV)

39-Y -87

MAT 3919

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

39-Y -87
0.000 To 0.433 %



34

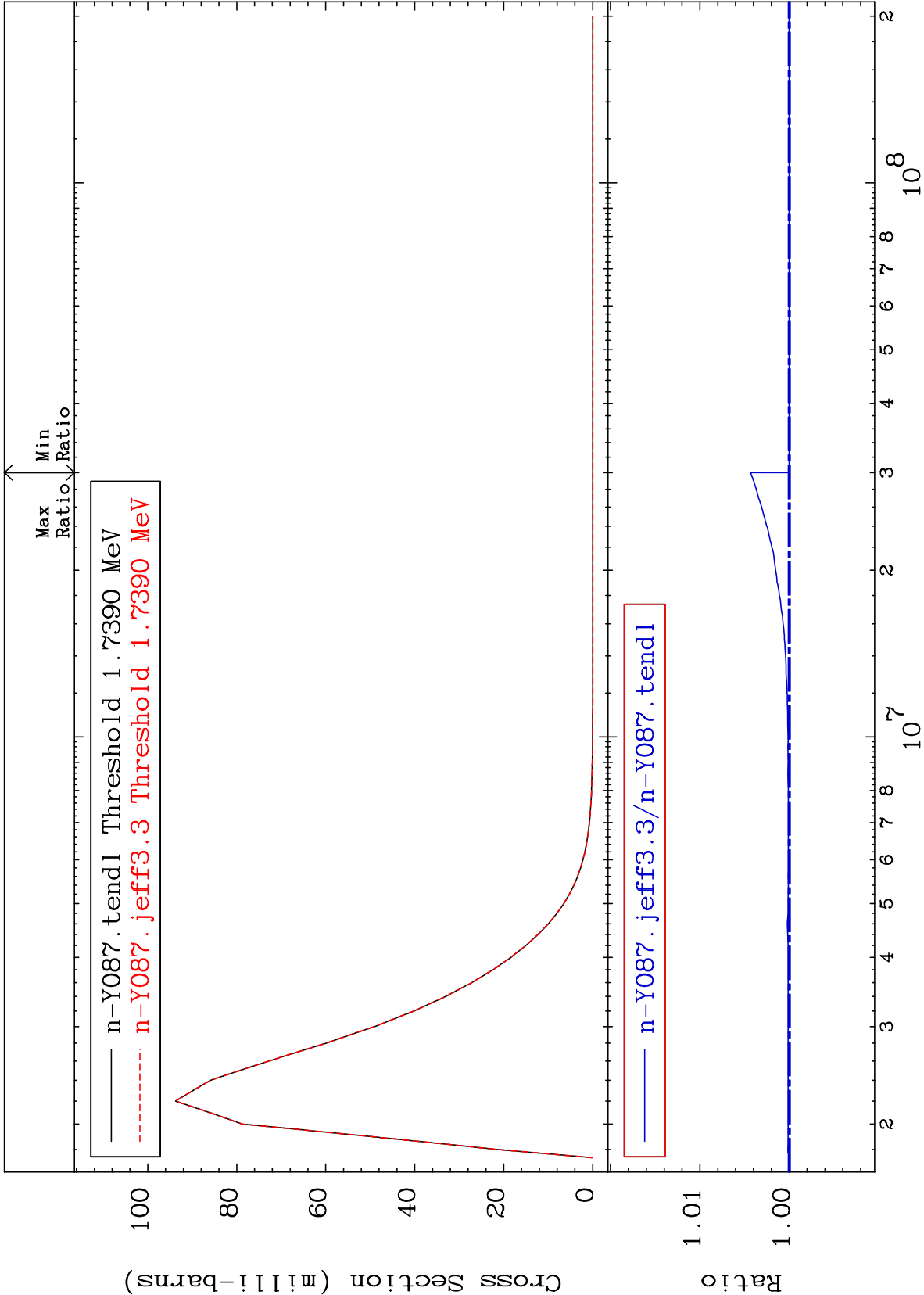
Incident Energy (eV)

39-Y -87

MAT 3919

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

39-Y -87
0.000 To 0.433 %



35

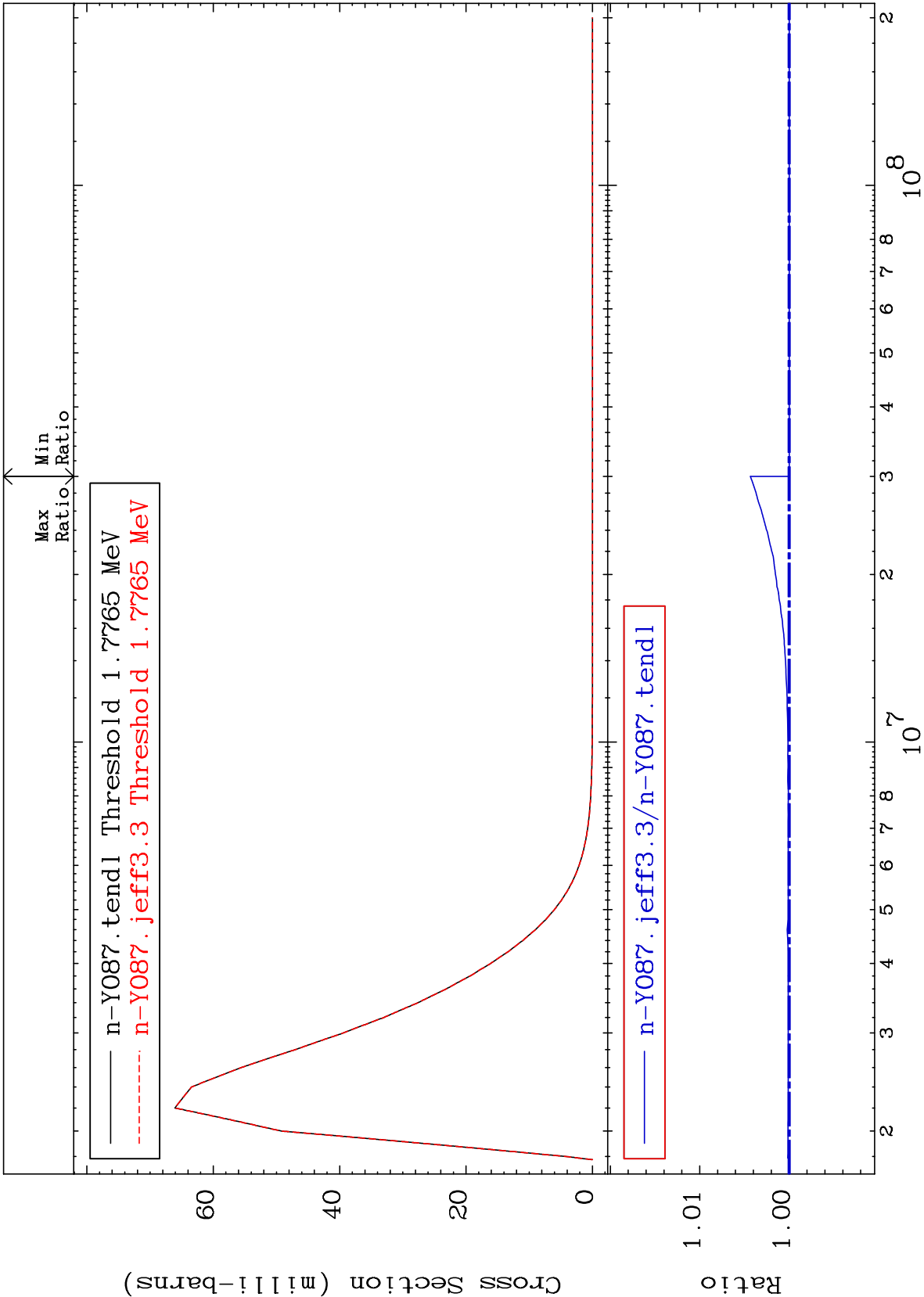
Incident Energy (eV)

39-Y -87

MAT 3919

MT= 69 (n,n') Level
Cross Section

39-Y -87
0.000 To 0.434 %



36

Incident Energy (eV)

39-Y -87

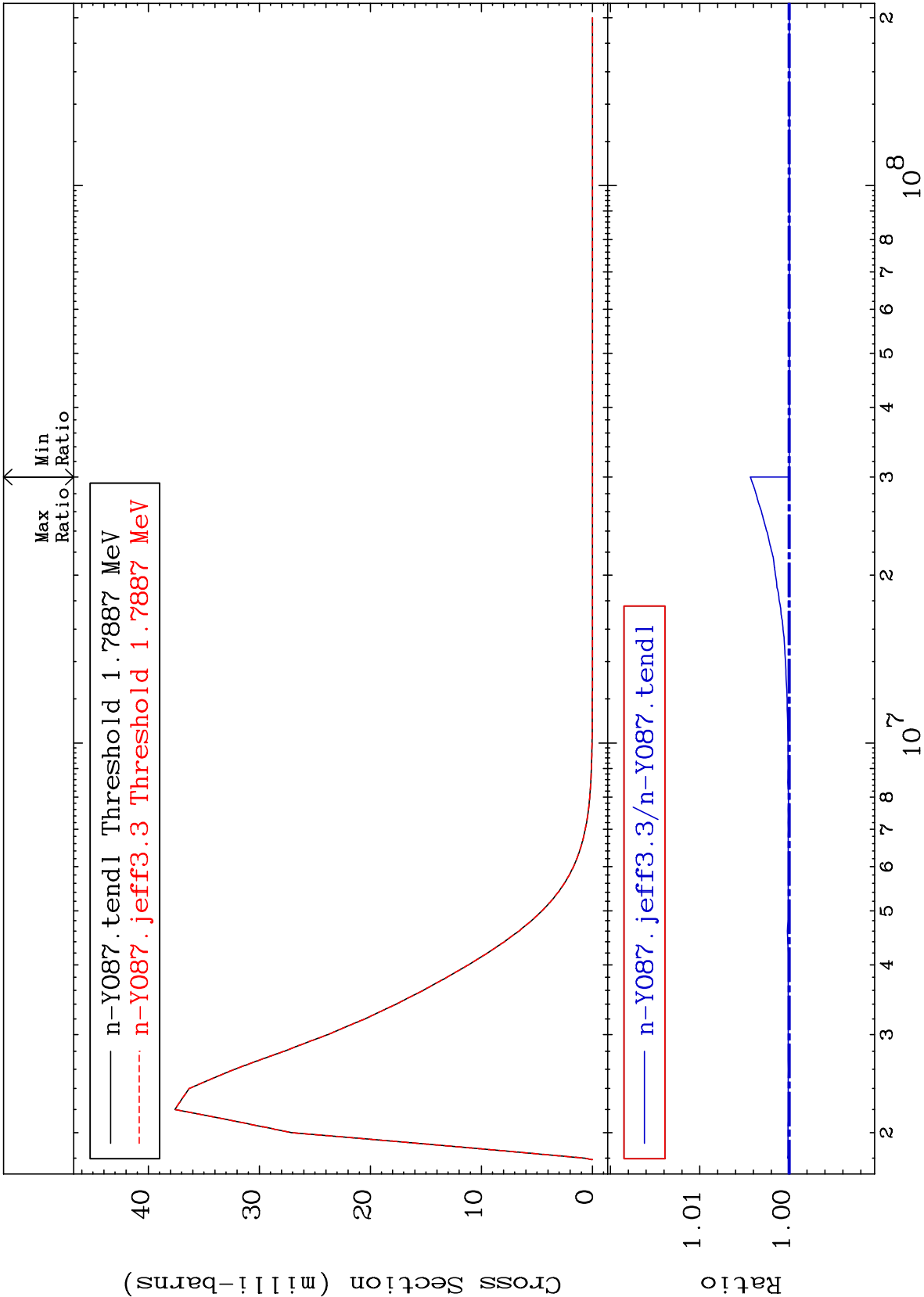
MAT 3919

MT= 70 (n,n') Level

39-Y -87

0.000 To 0.435 %

Cross Section



37

Incident Energy (eV)

39-Y -87

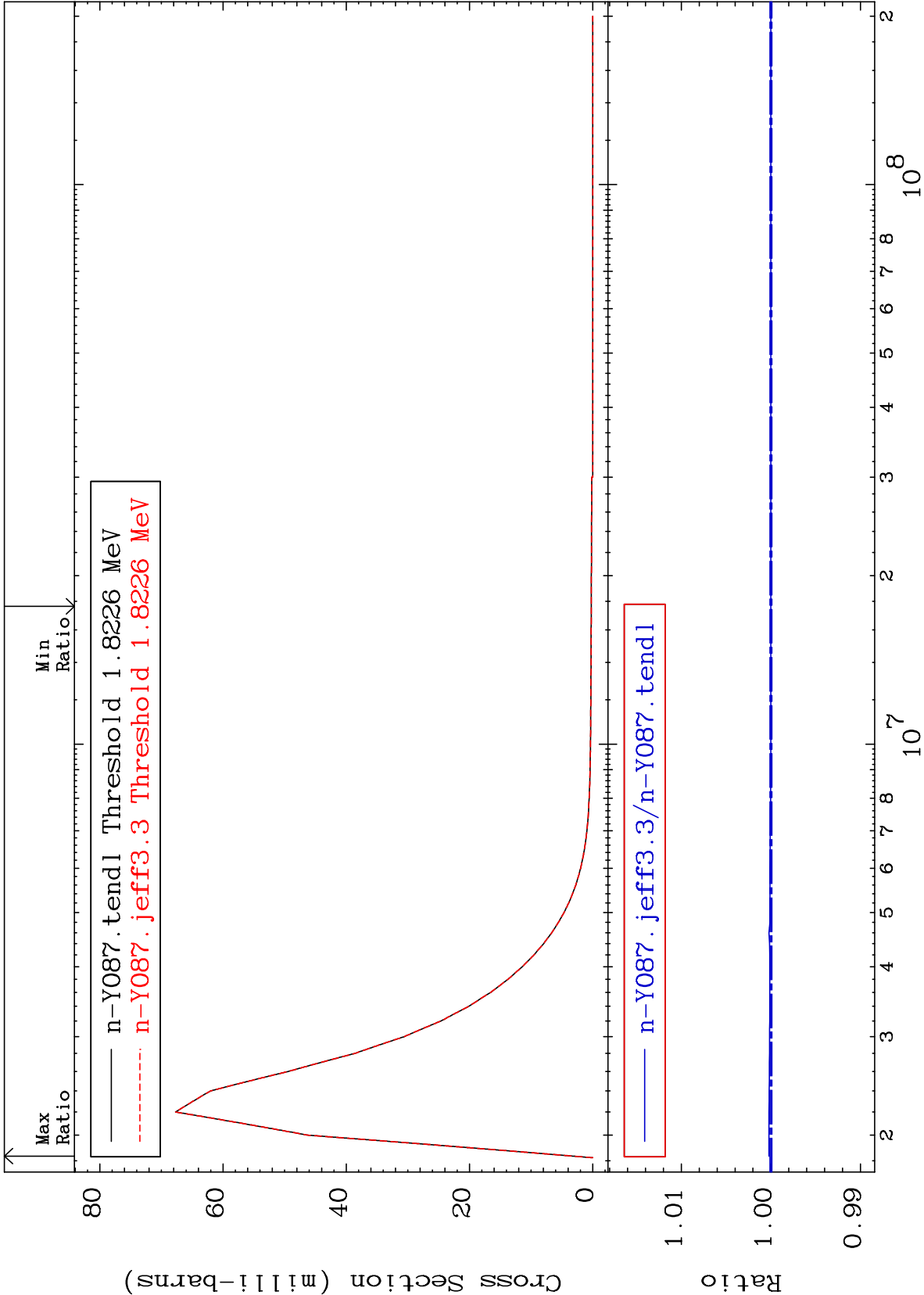
MAT 3919

MT= 71 (n,n') Level

39-Y -87

0.000 To 0.022 %

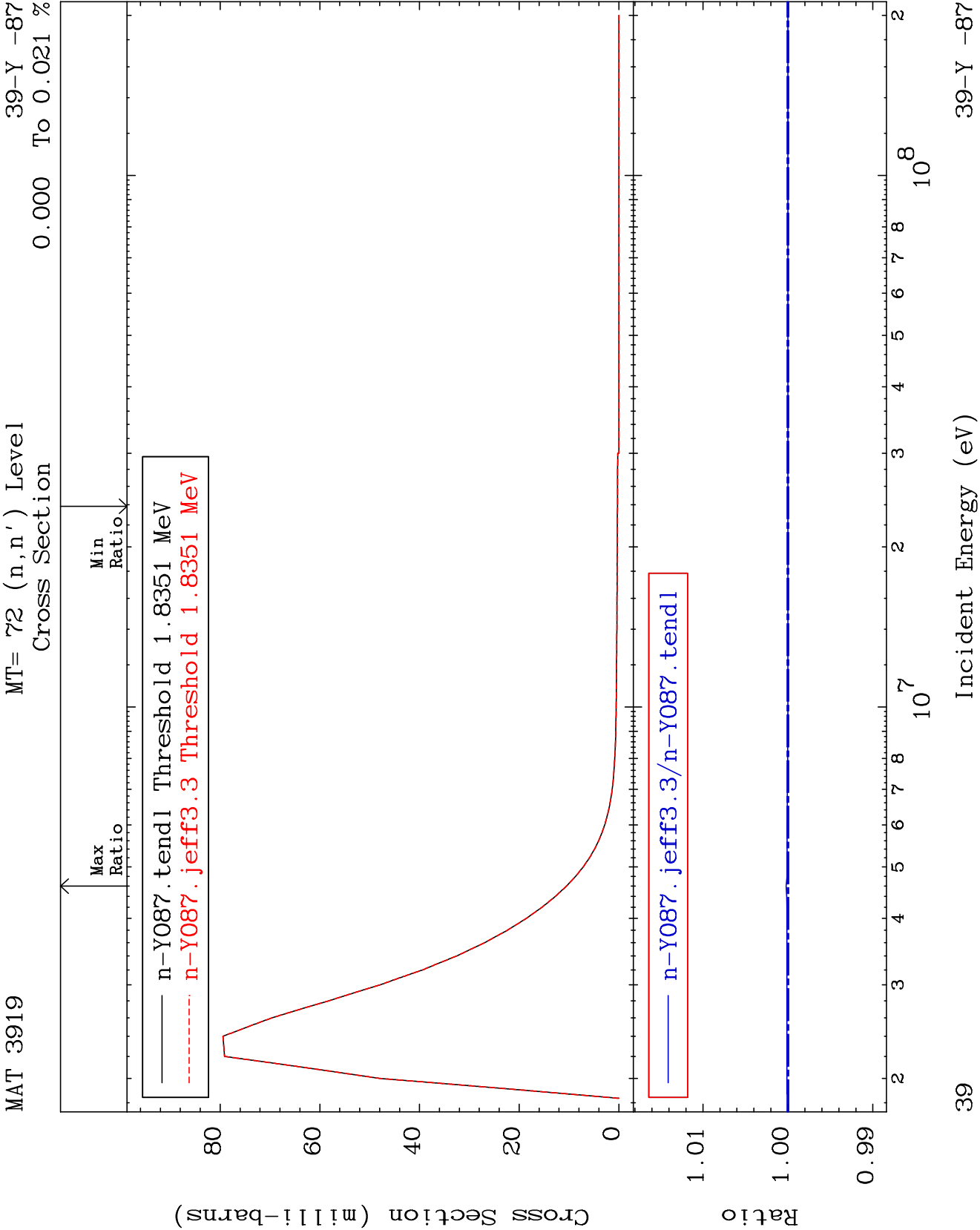
Cross Section



38

Incident Energy (eV)

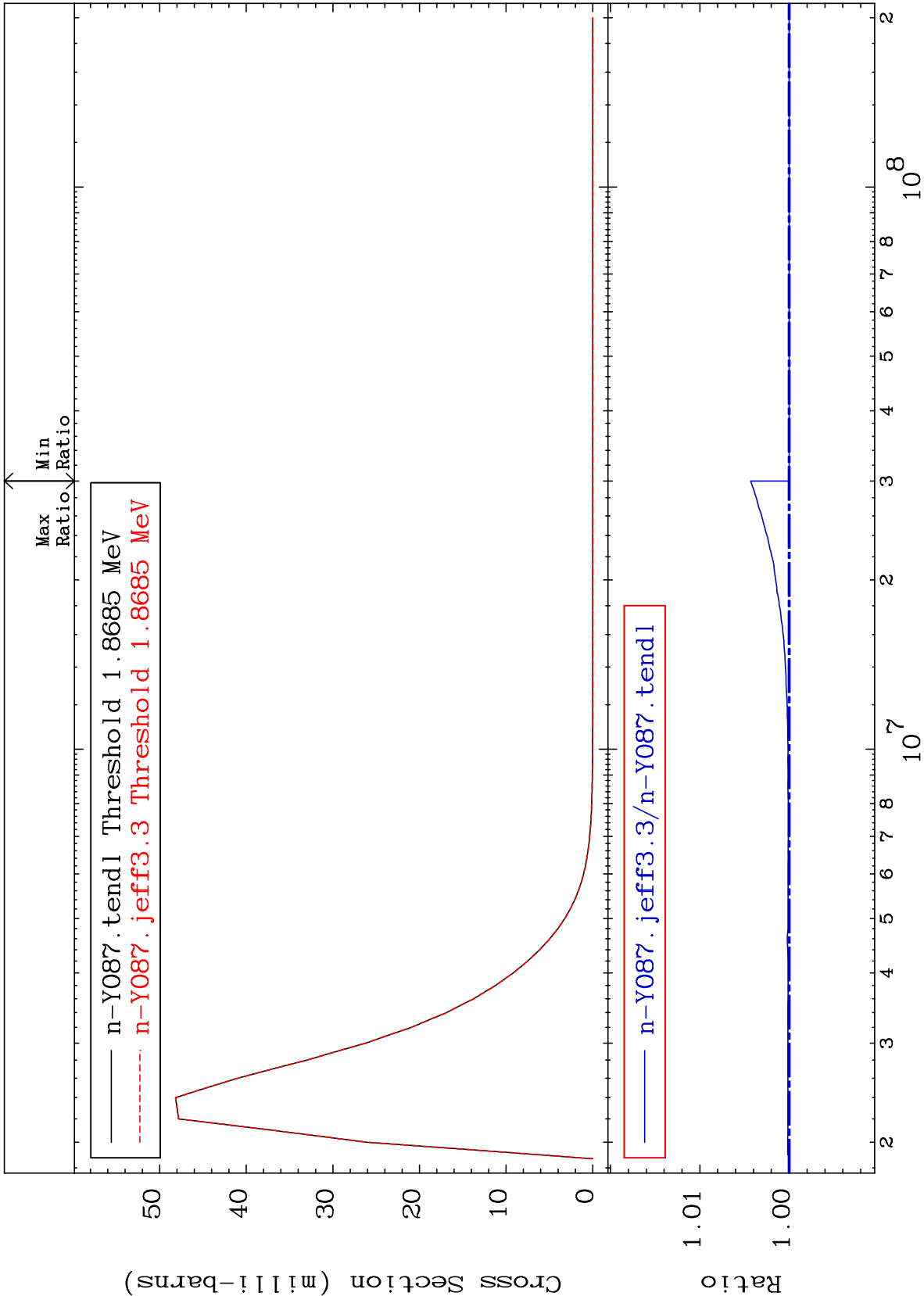
39-Y -87



MAT 3919

MT= 73 (n,n') Level
Cross Section

39-Y -87
0.000 To 0.432 %



40

Incident Energy (eV)

39-Y -87

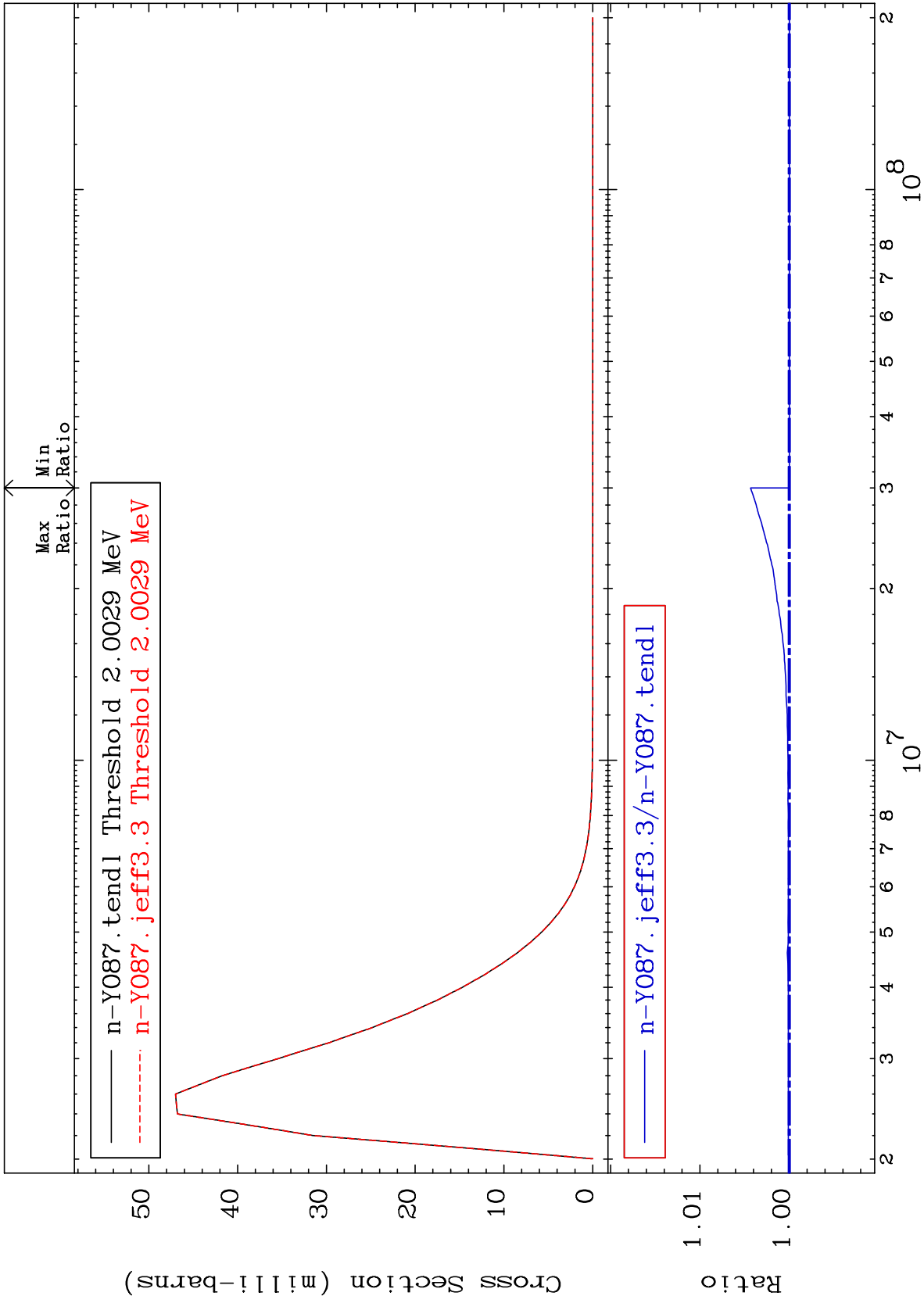
MAT 3919

MT= 74 (n,n') Level

39-Y -87

0.000 To 0.434 %

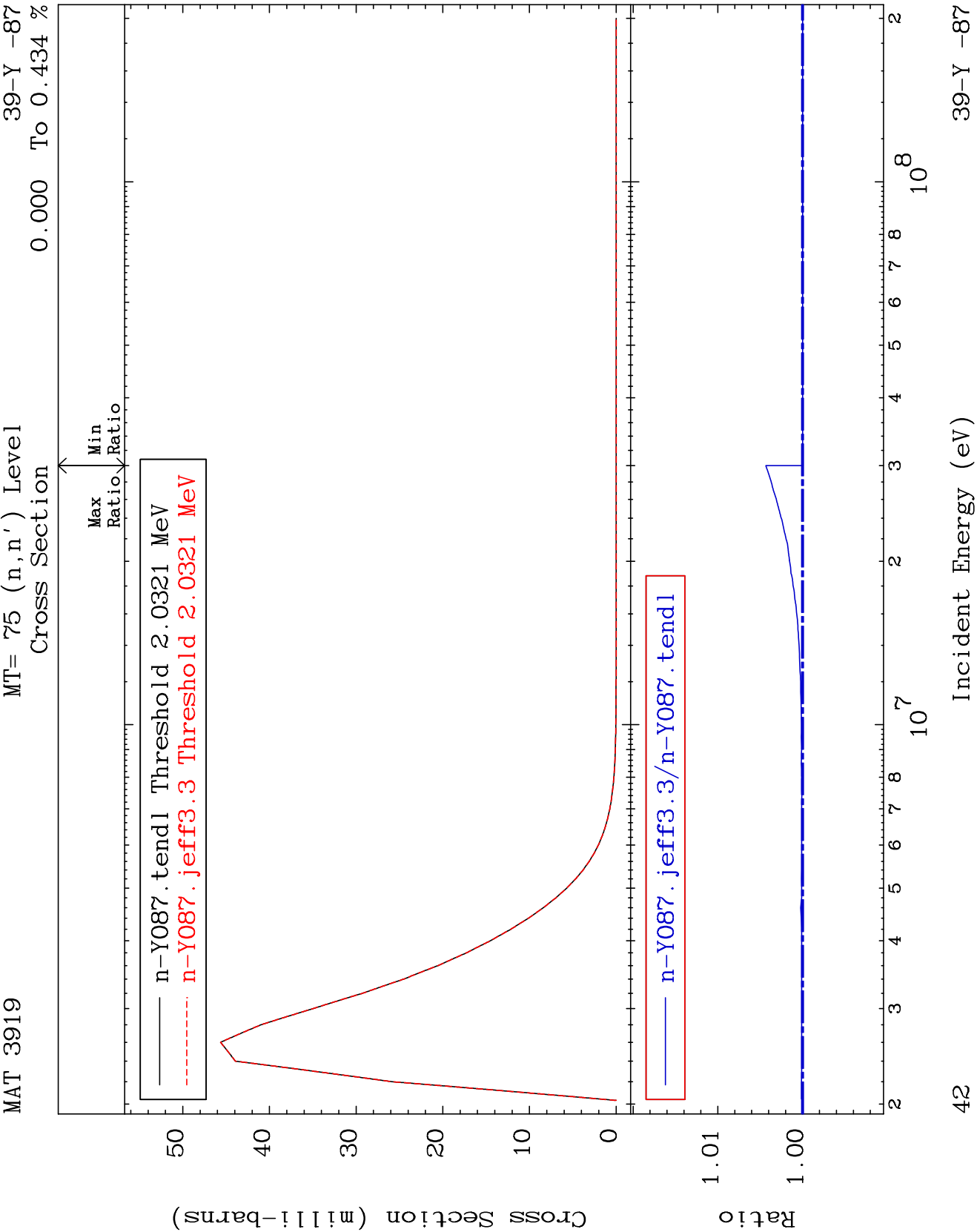
Cross Section



41

Incident Energy (eV)

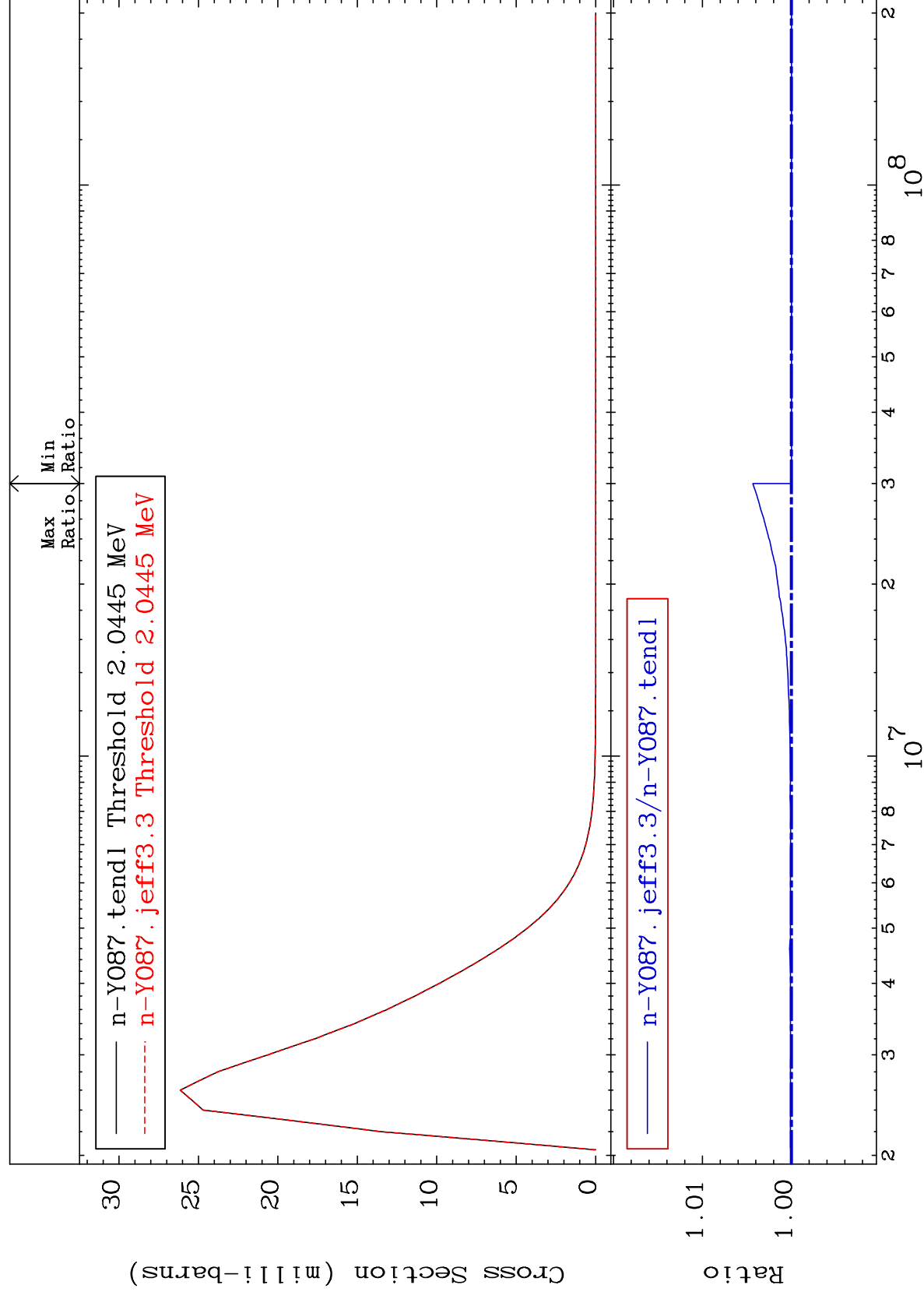
39-Y -87



MAT 3919

MT= 76 (n, n') Level
Cross Section

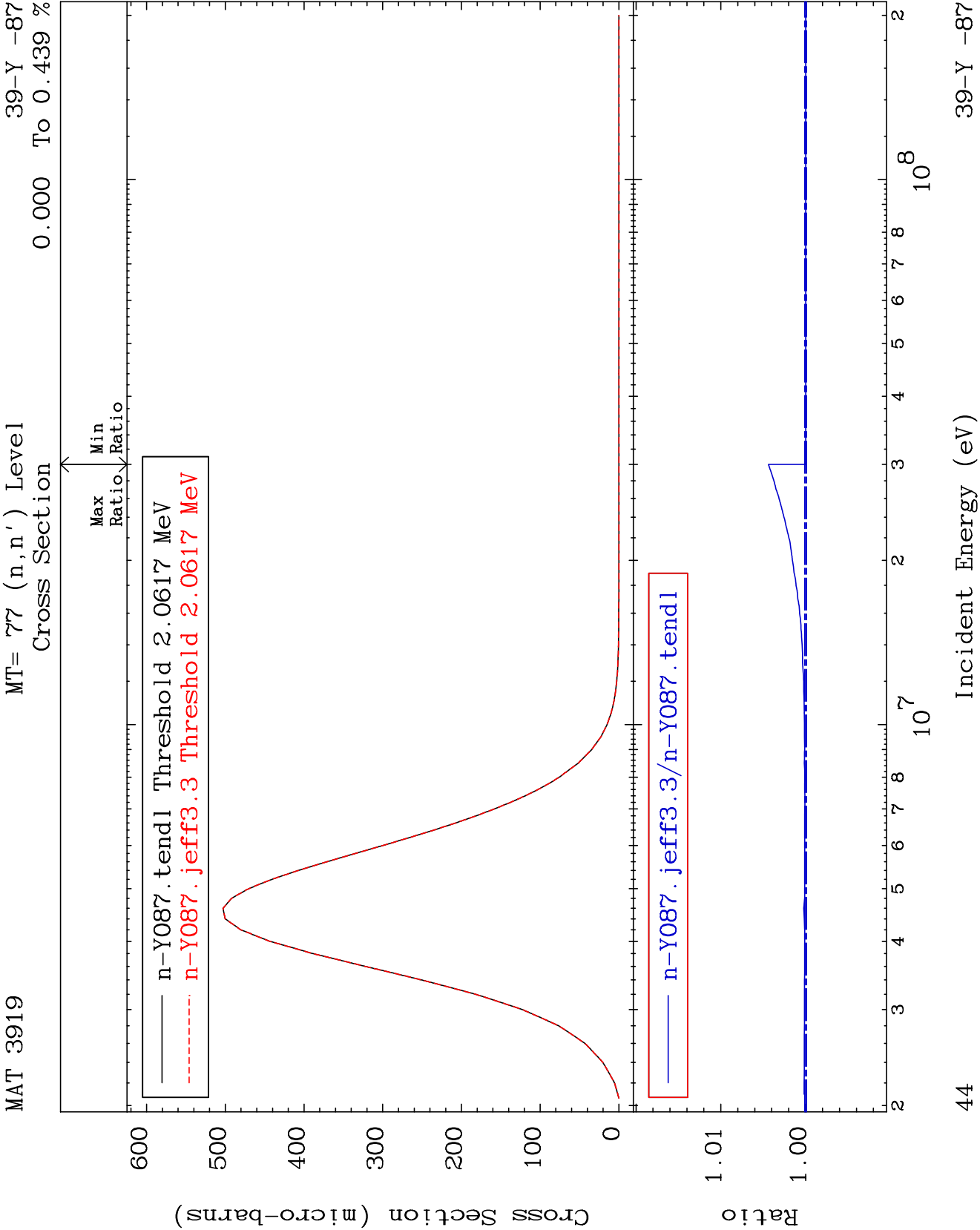
0.000 To 0.435 % 39-Y -87



43

Incident Energy (eV)

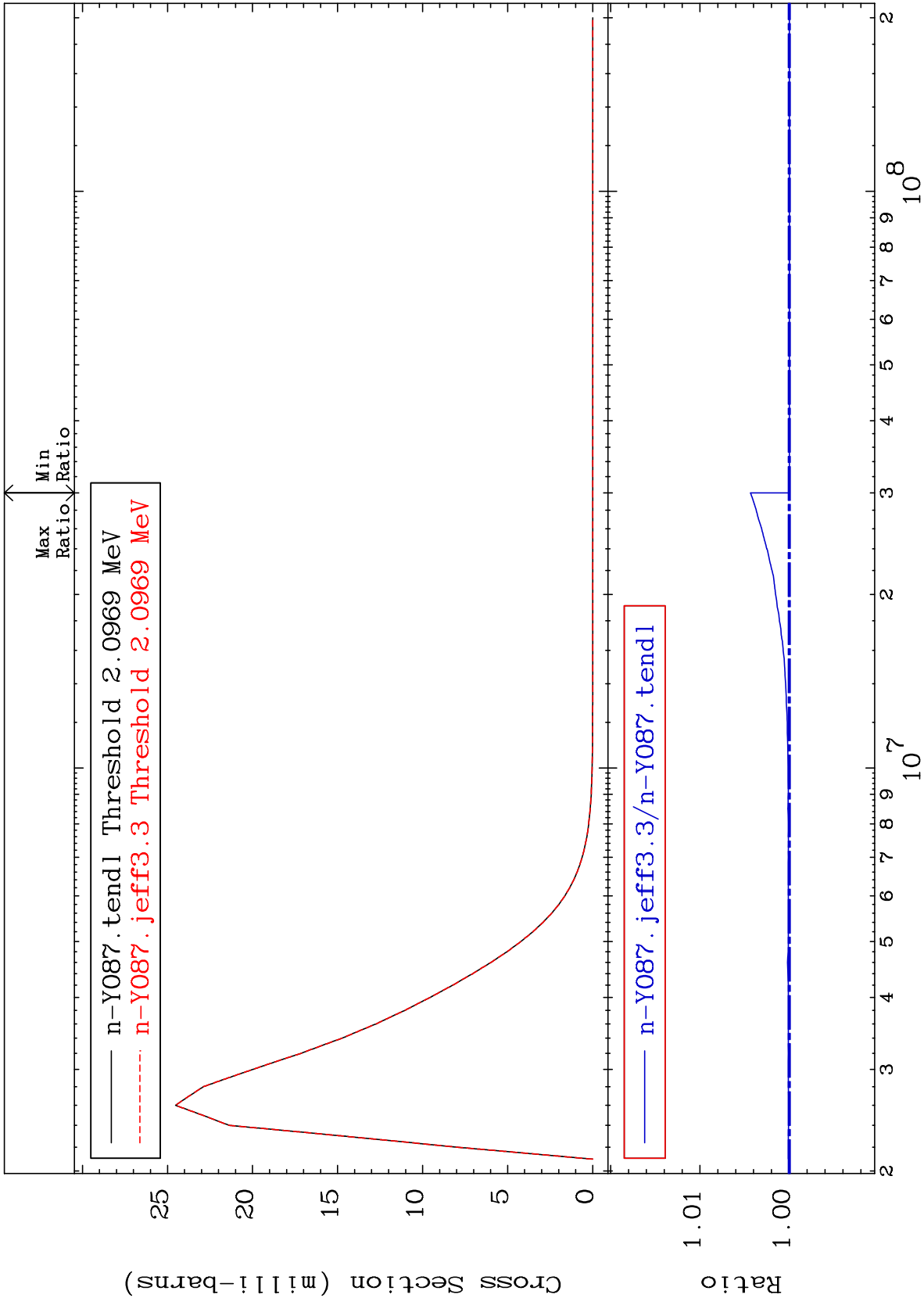
39-Y -87



MAT 3919

MT= 78 (n,n') Level
Cross Section

39-Y -87
0.000 To 0.435 %



45

Incident Energy (eV)

39-Y -87

MAT 3919

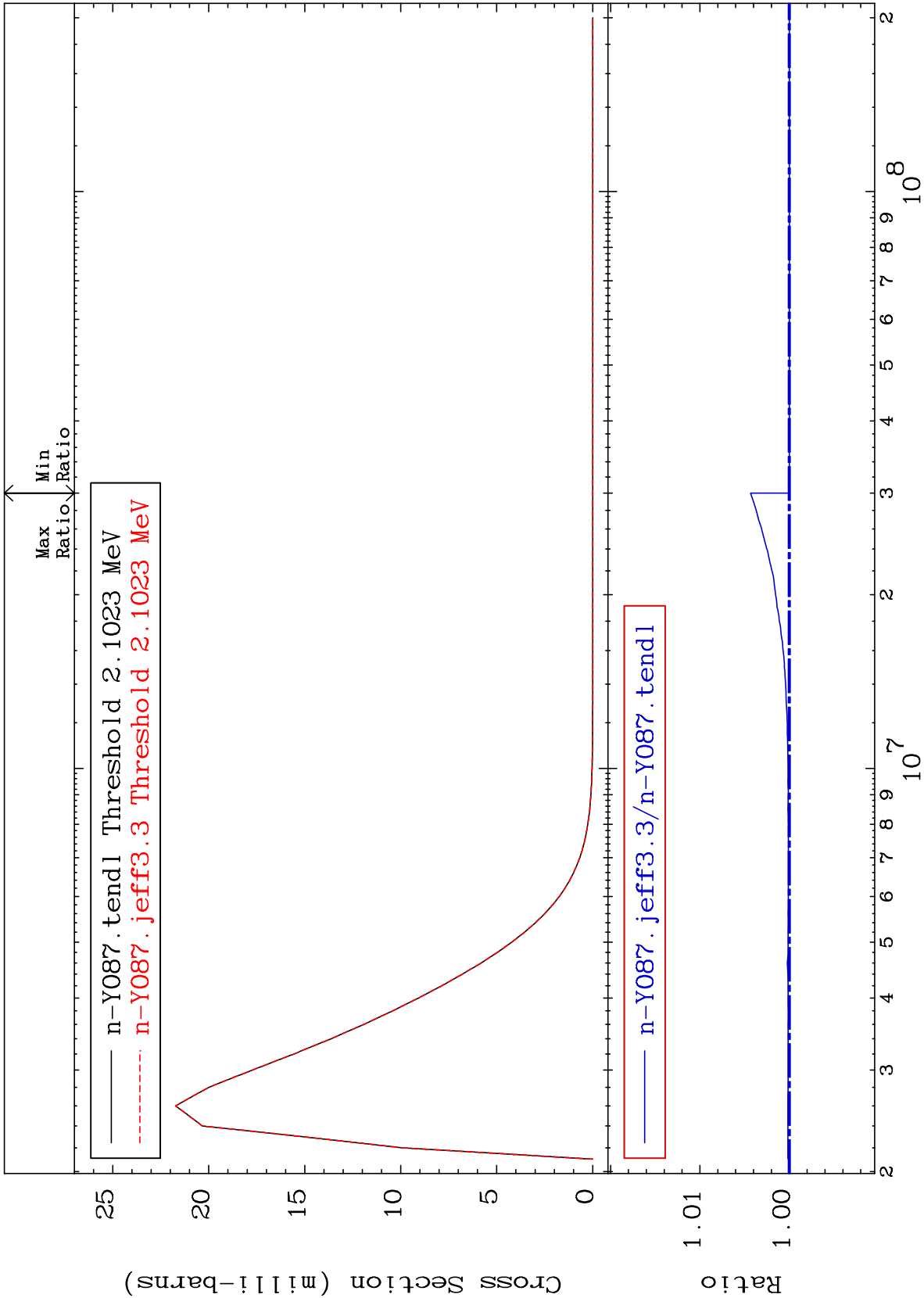
MT= 79 (n,n') Level

39-Y -87

Cross Section

0.000

To 0.434 %



46

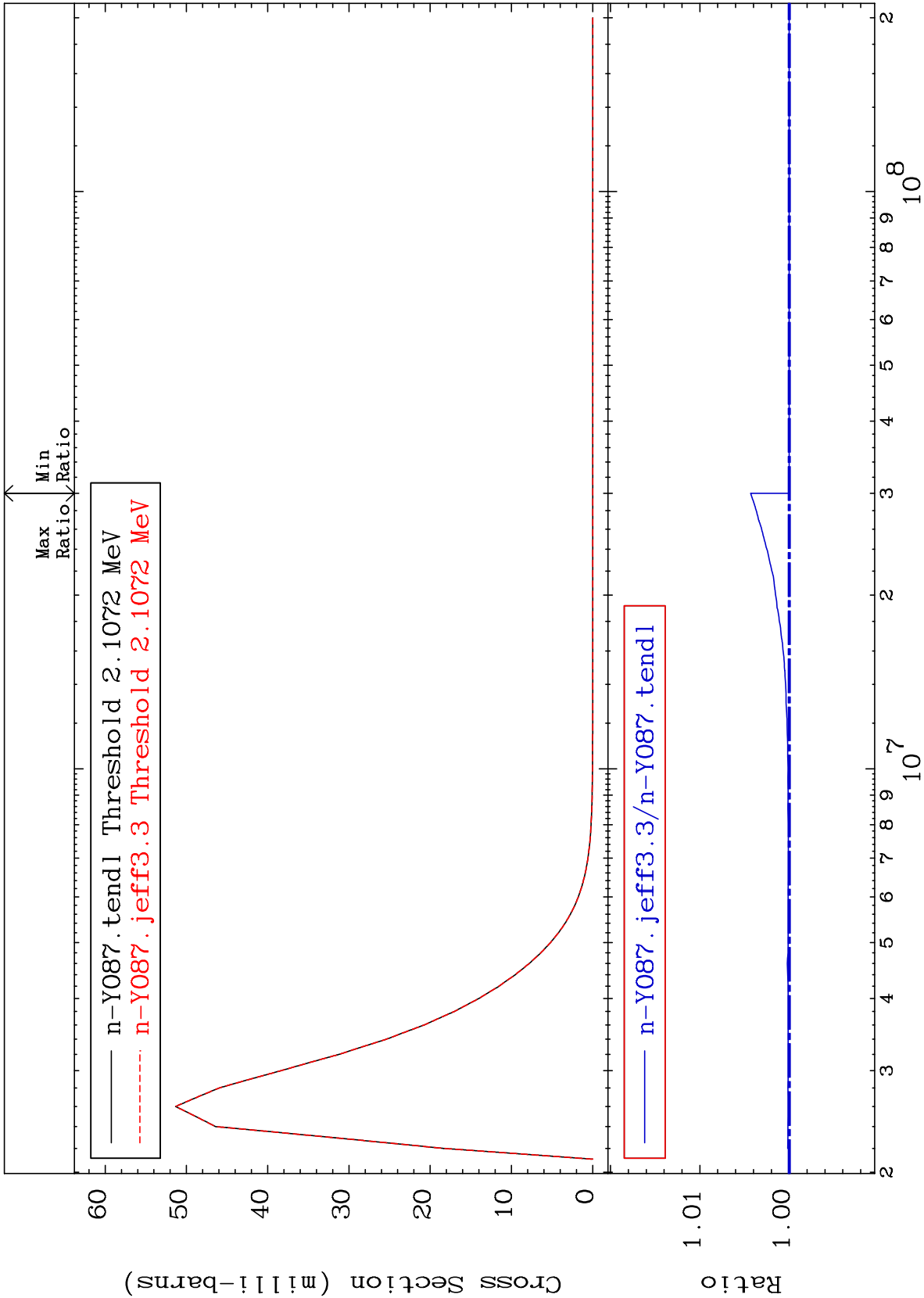
Incident Energy (eV)

39-Y -87

MAT 3919

MT= 80 (n,n') Level
Cross Section

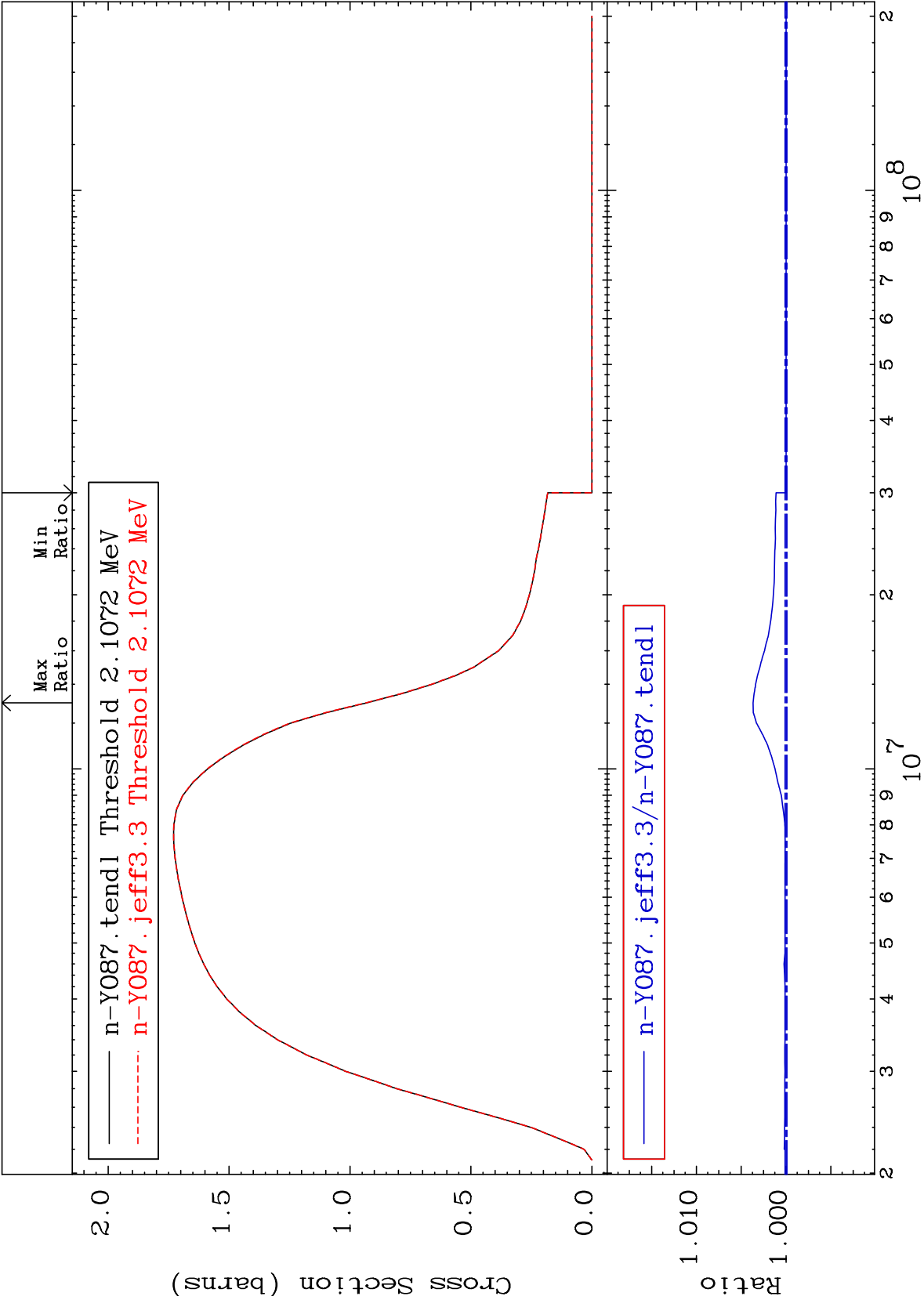
39-Y -87
0.000 To 0.432 %

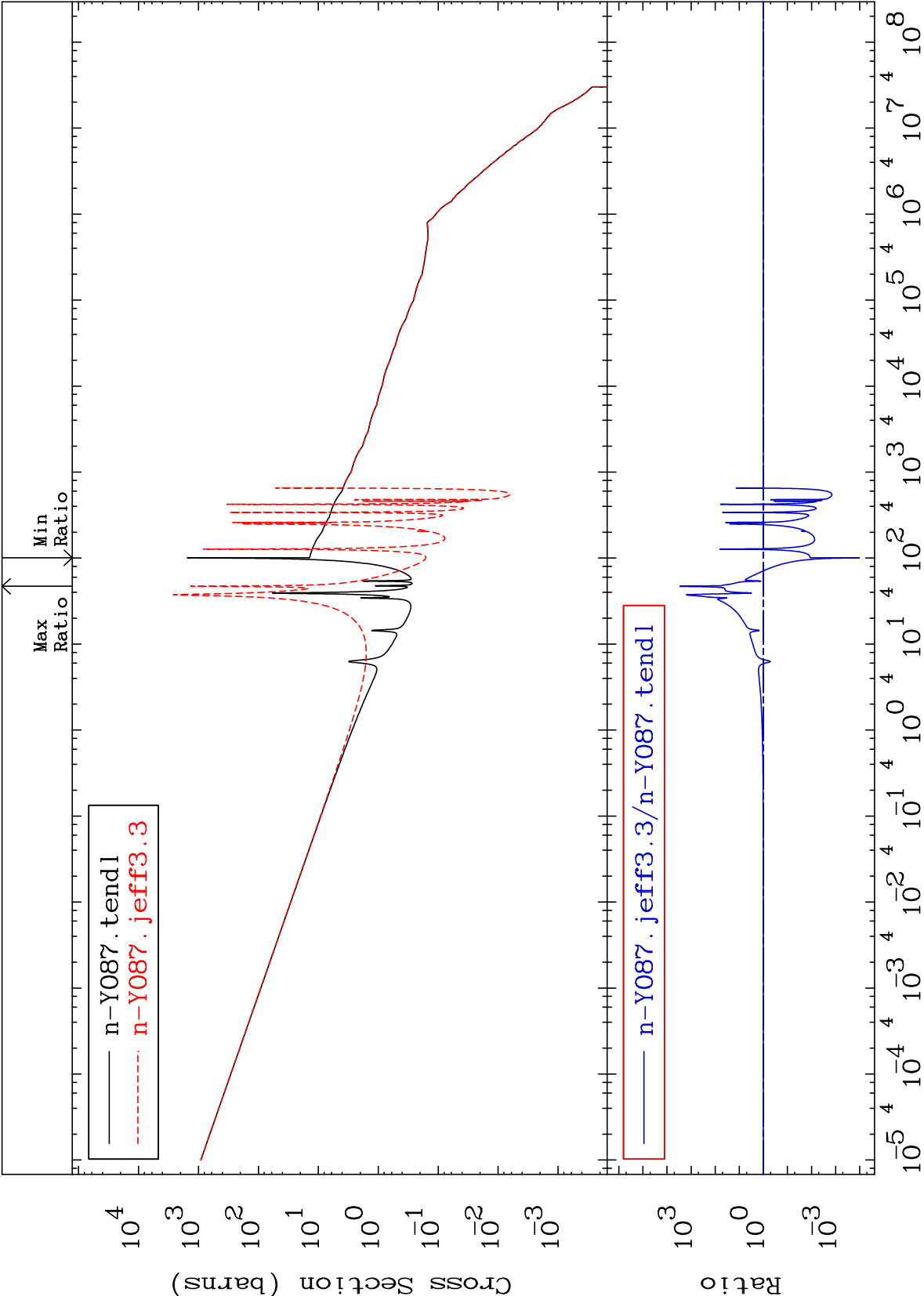


47

Incident Energy (eV)

39-Y -87





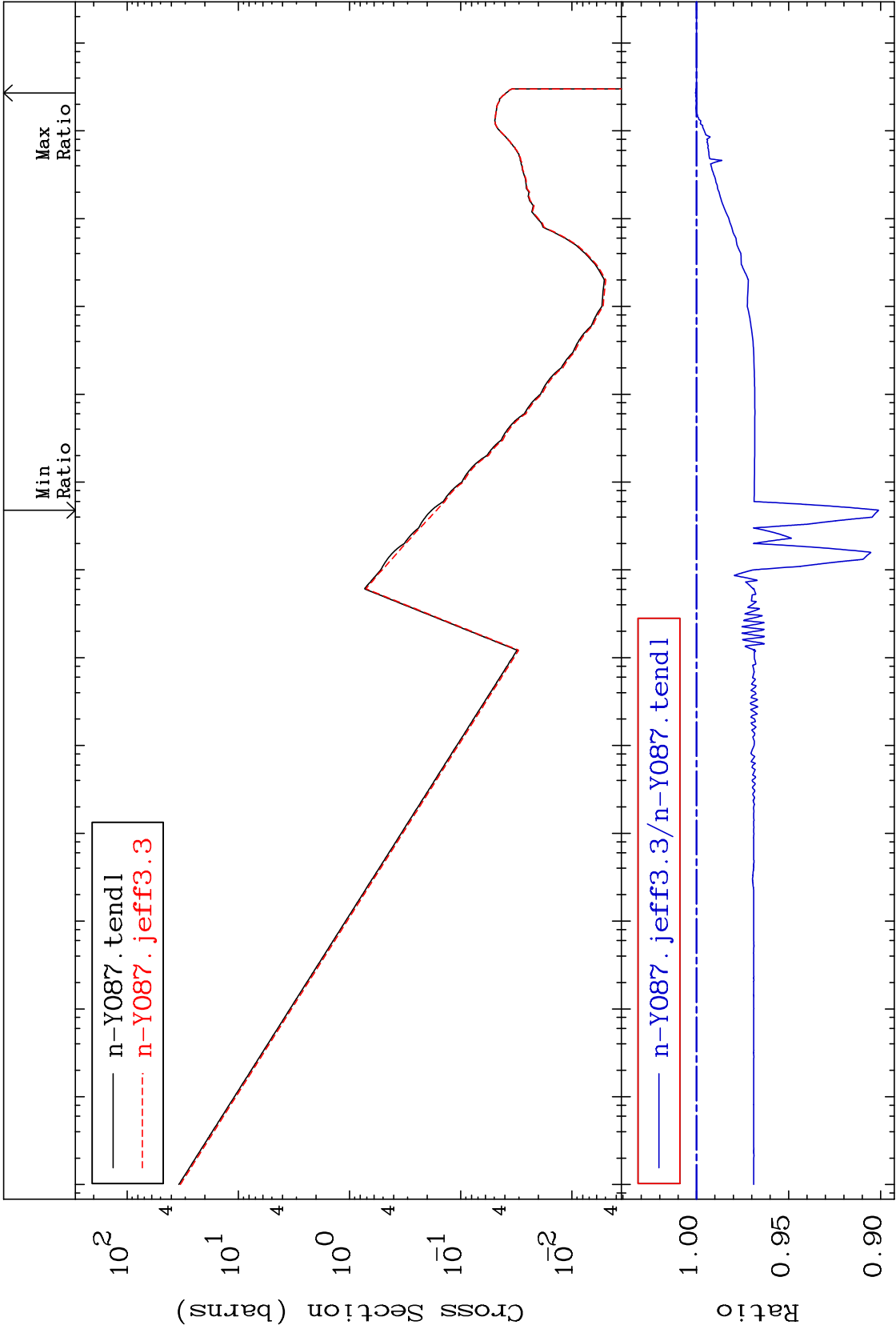
MAT 3919

(n,p)

39-Y -87

Cross Section

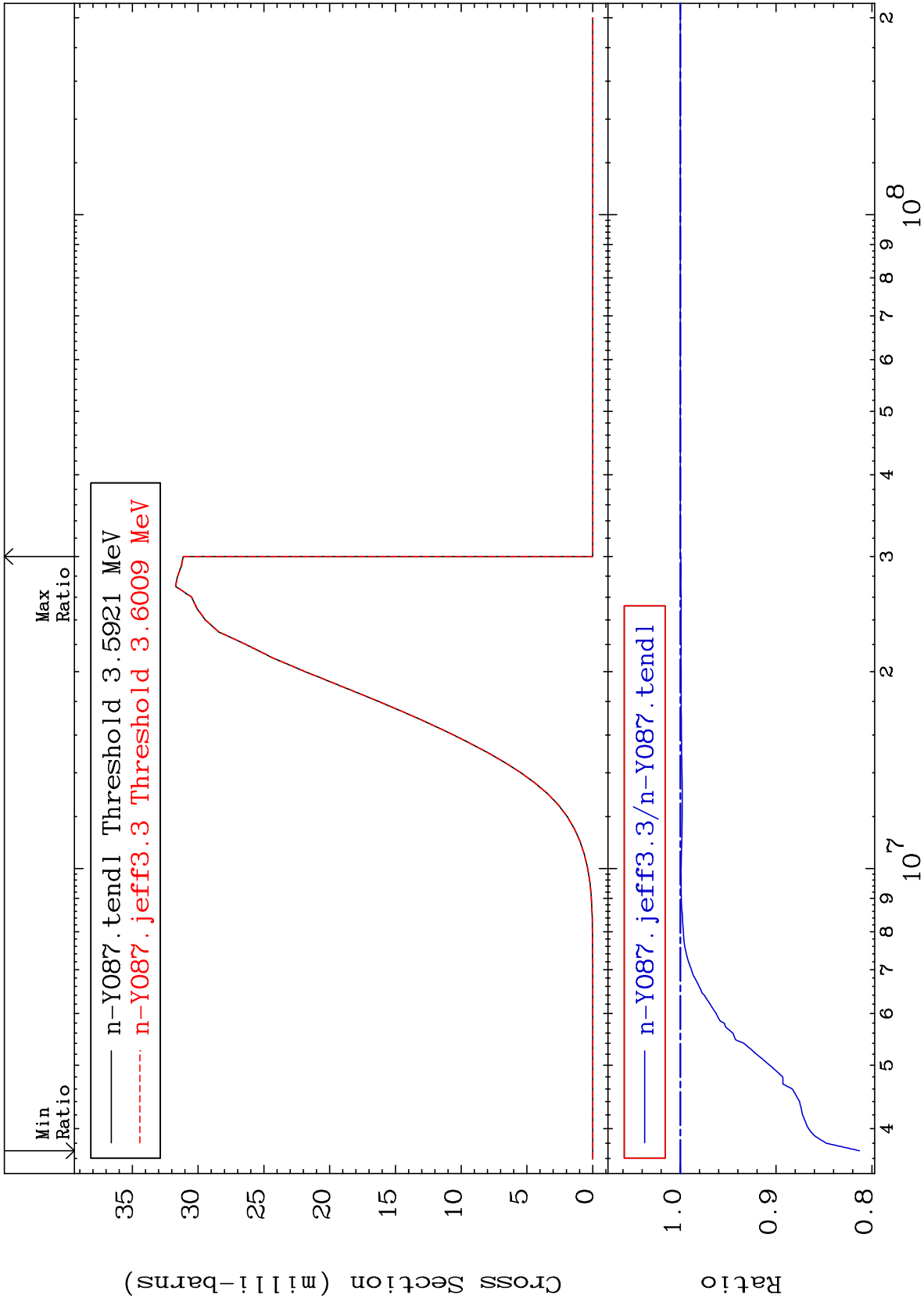
-9.892 To 0.057 %



50

Incident Energy (eV)

39-Y -87



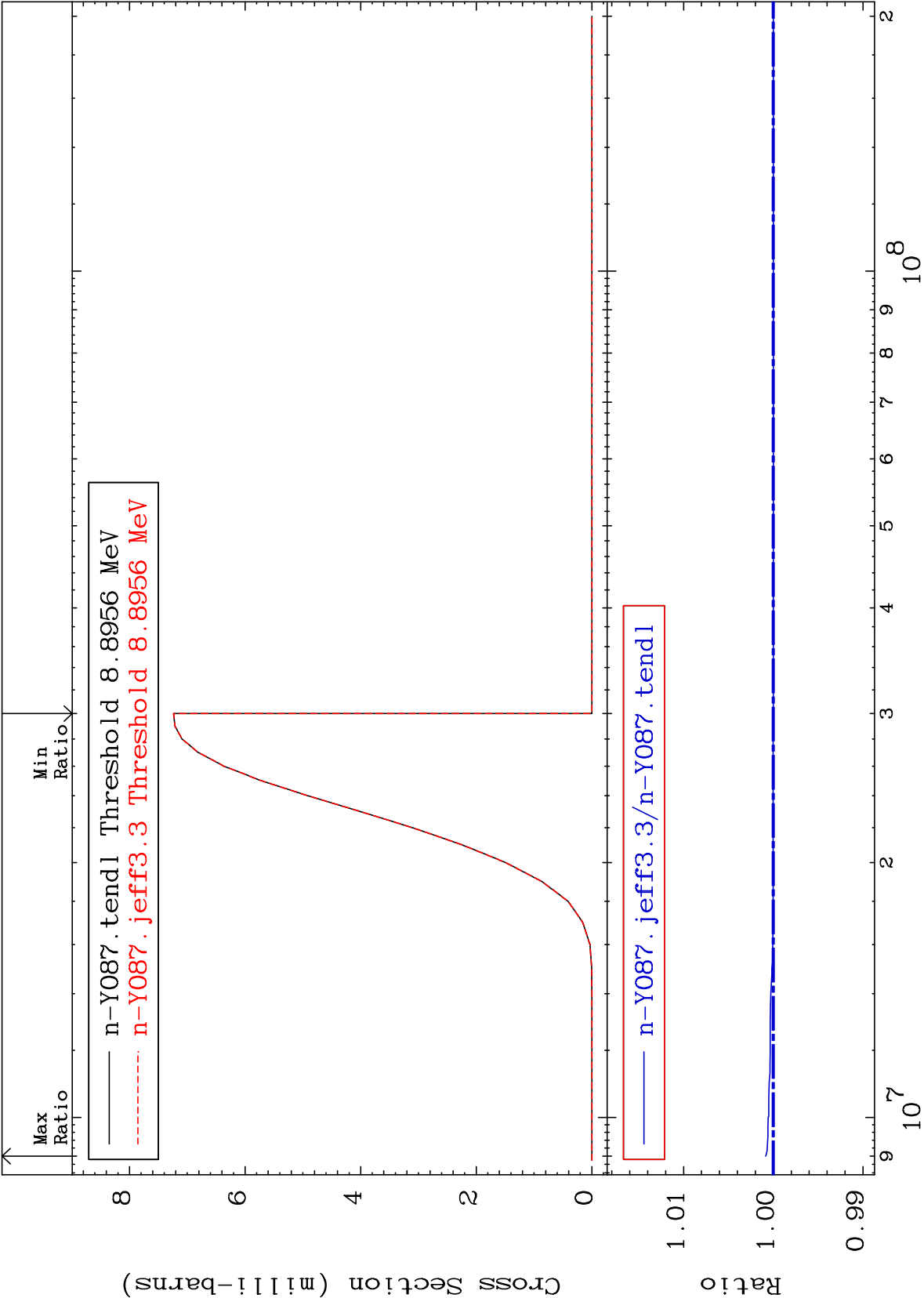
MAT 3919

(n,t)

39-Y -87

Cross Section

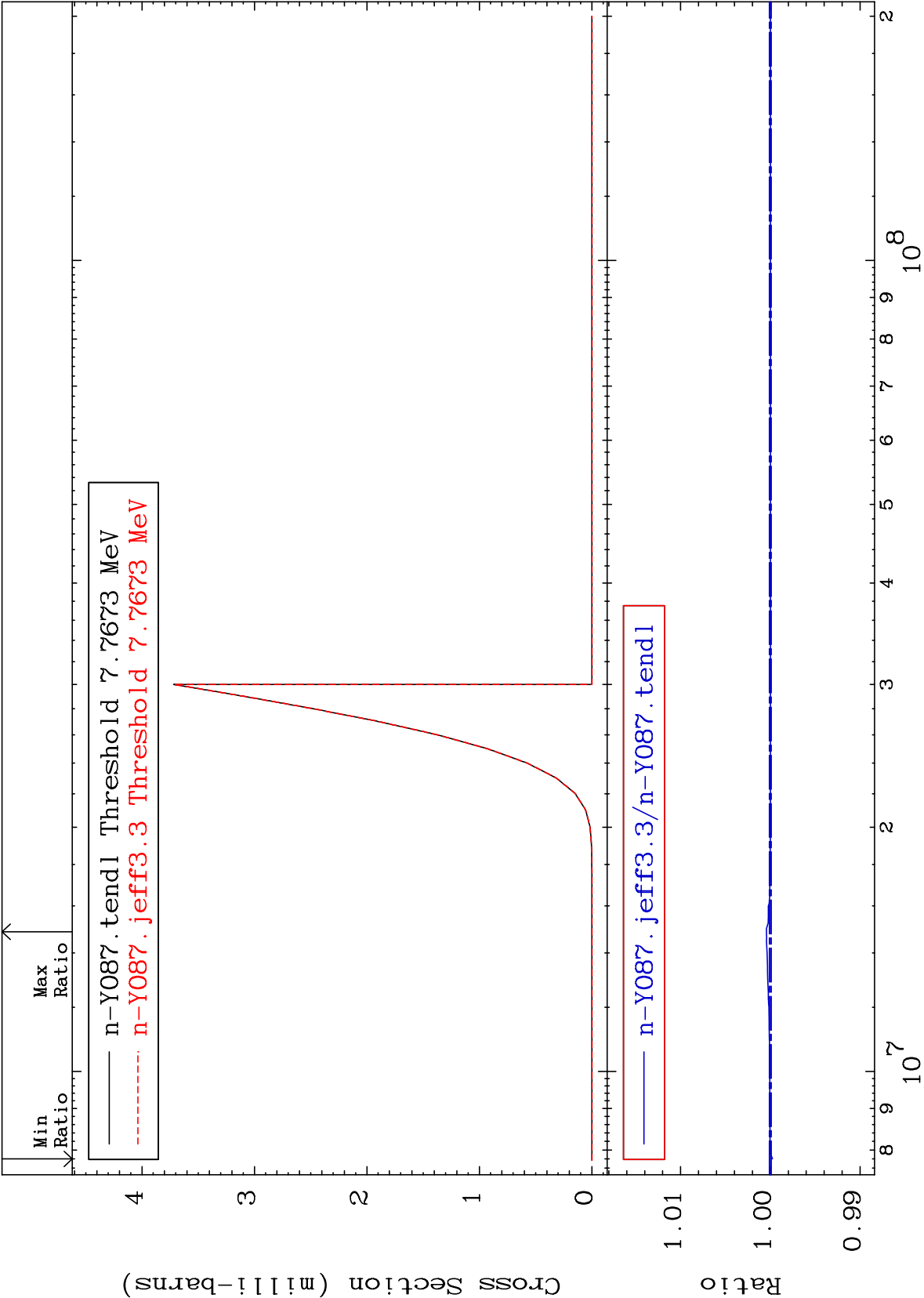
0.000 To 0.085 %



52

Cross Section

-0.024 To 0.043 %



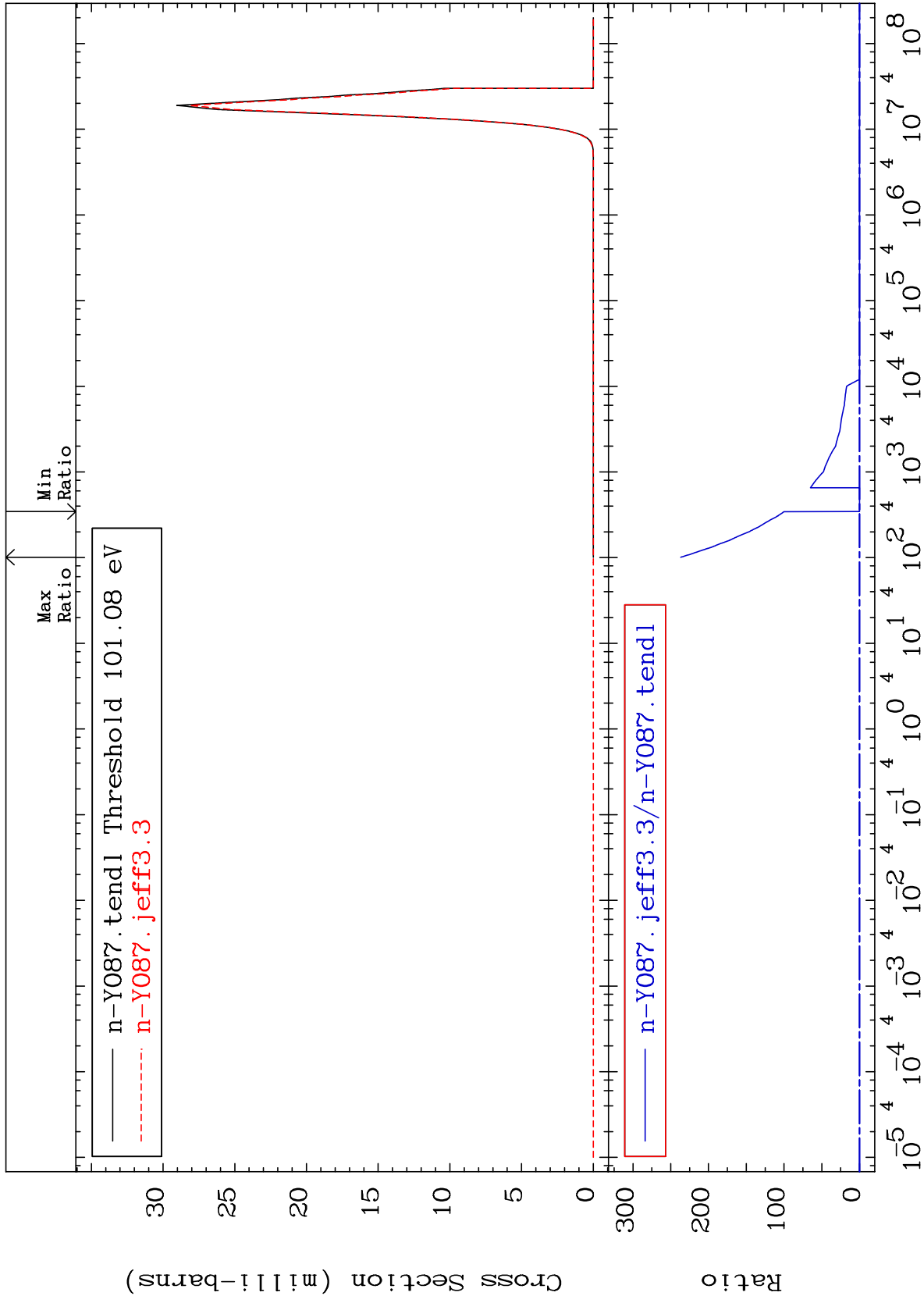
MAT 3919

(n, α)

39-Y -87

Cross Section

-100.0 To 9999. %



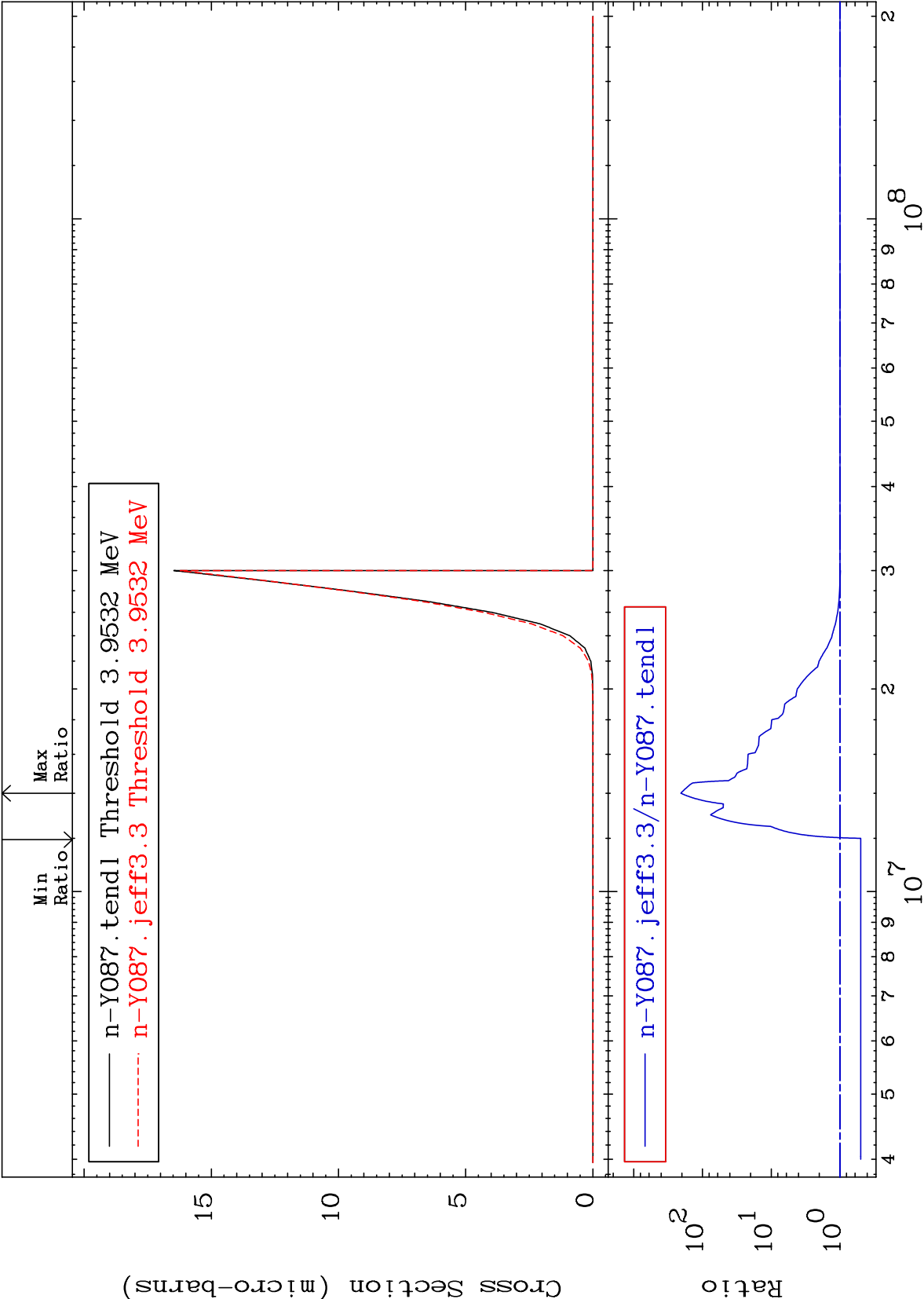
54

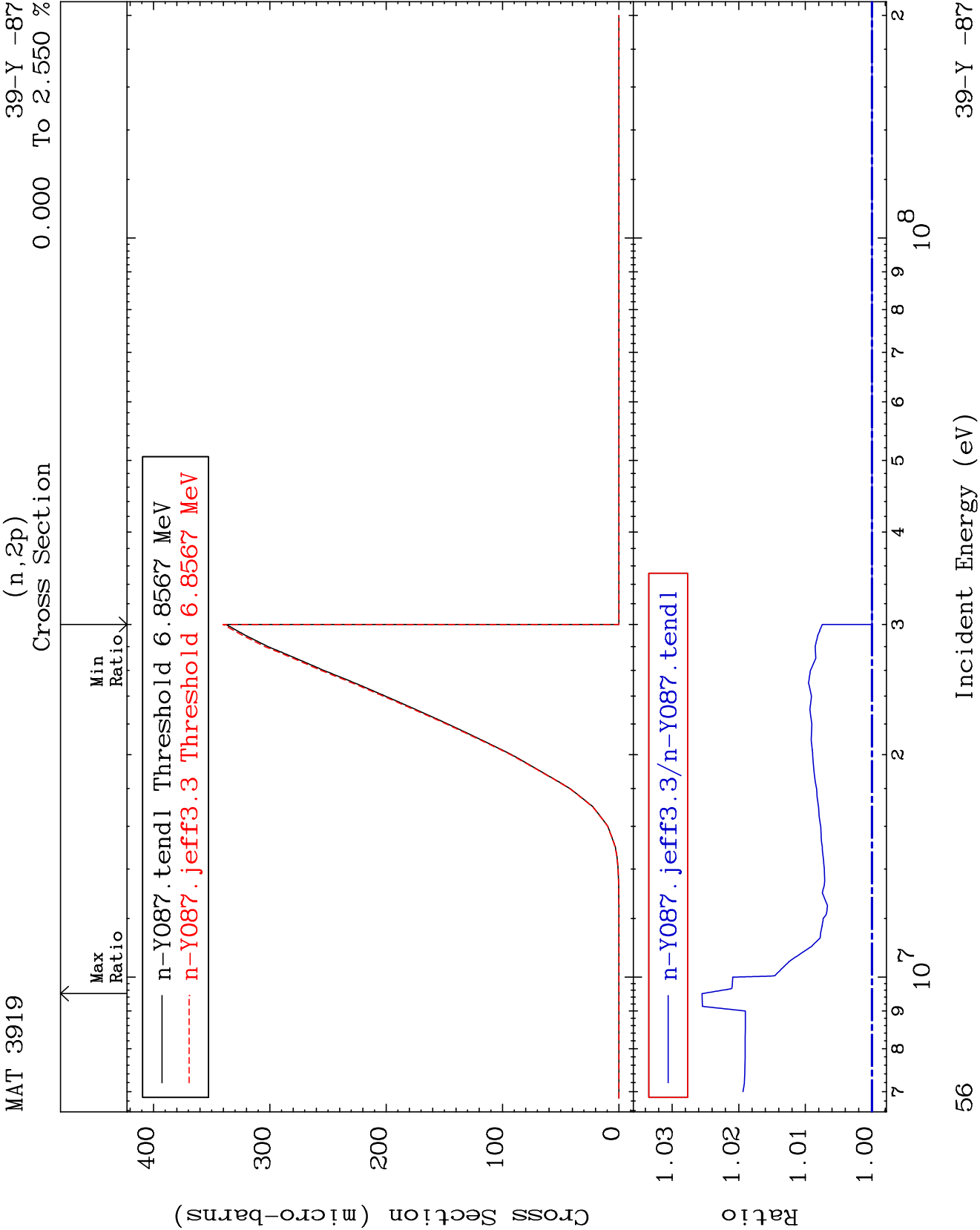
Incident Energy (eV)

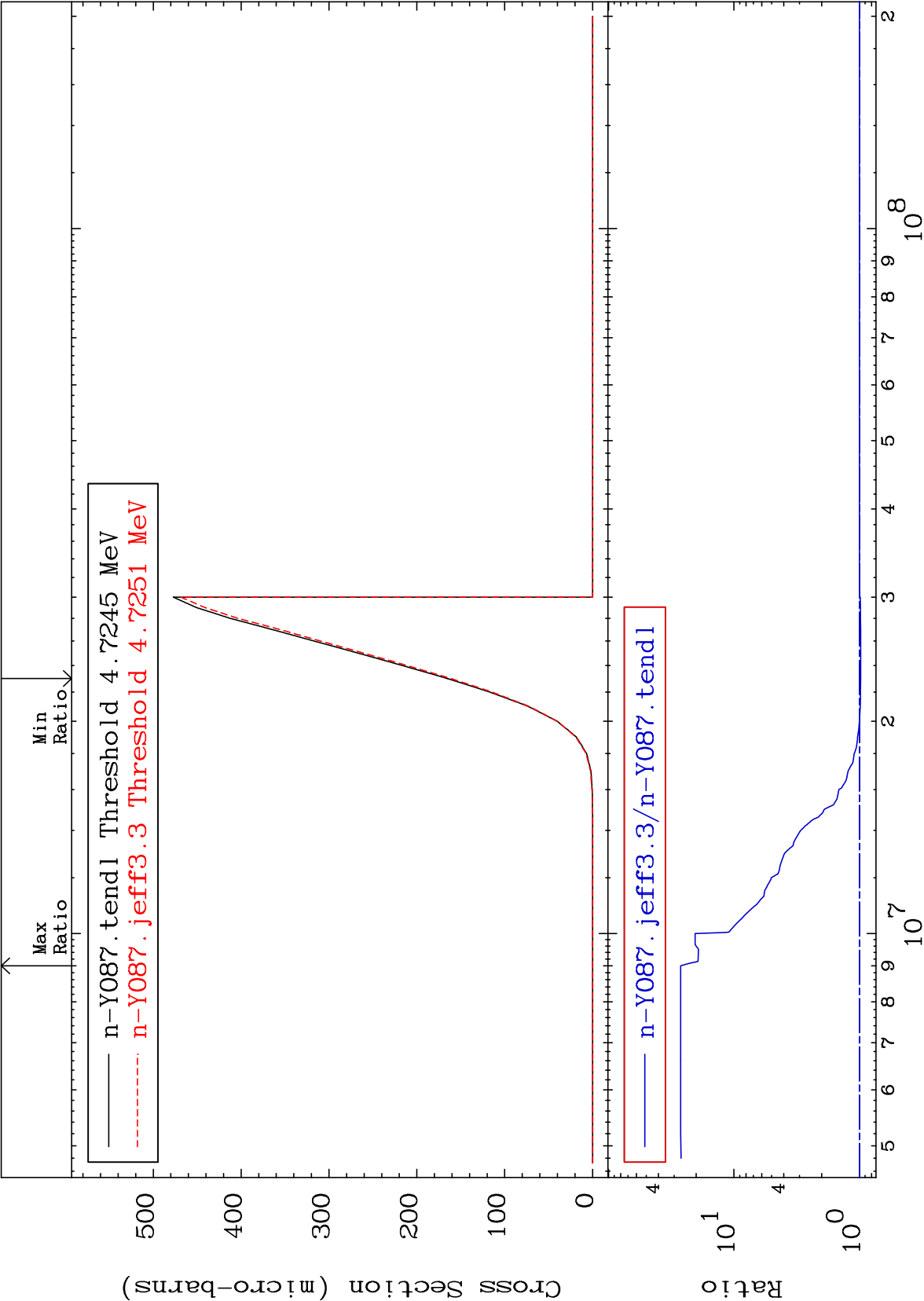
39-Y -87

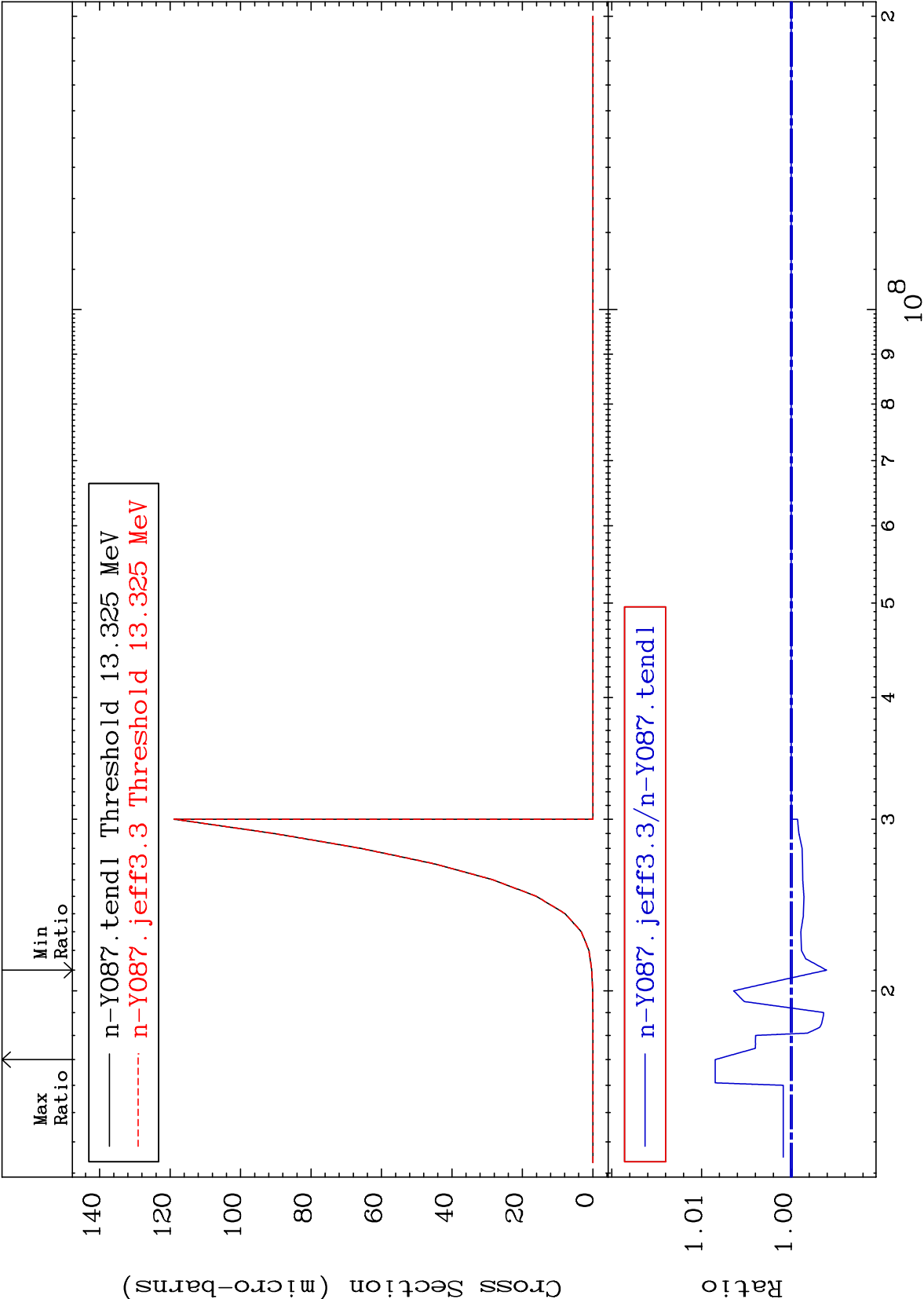
Cross Section

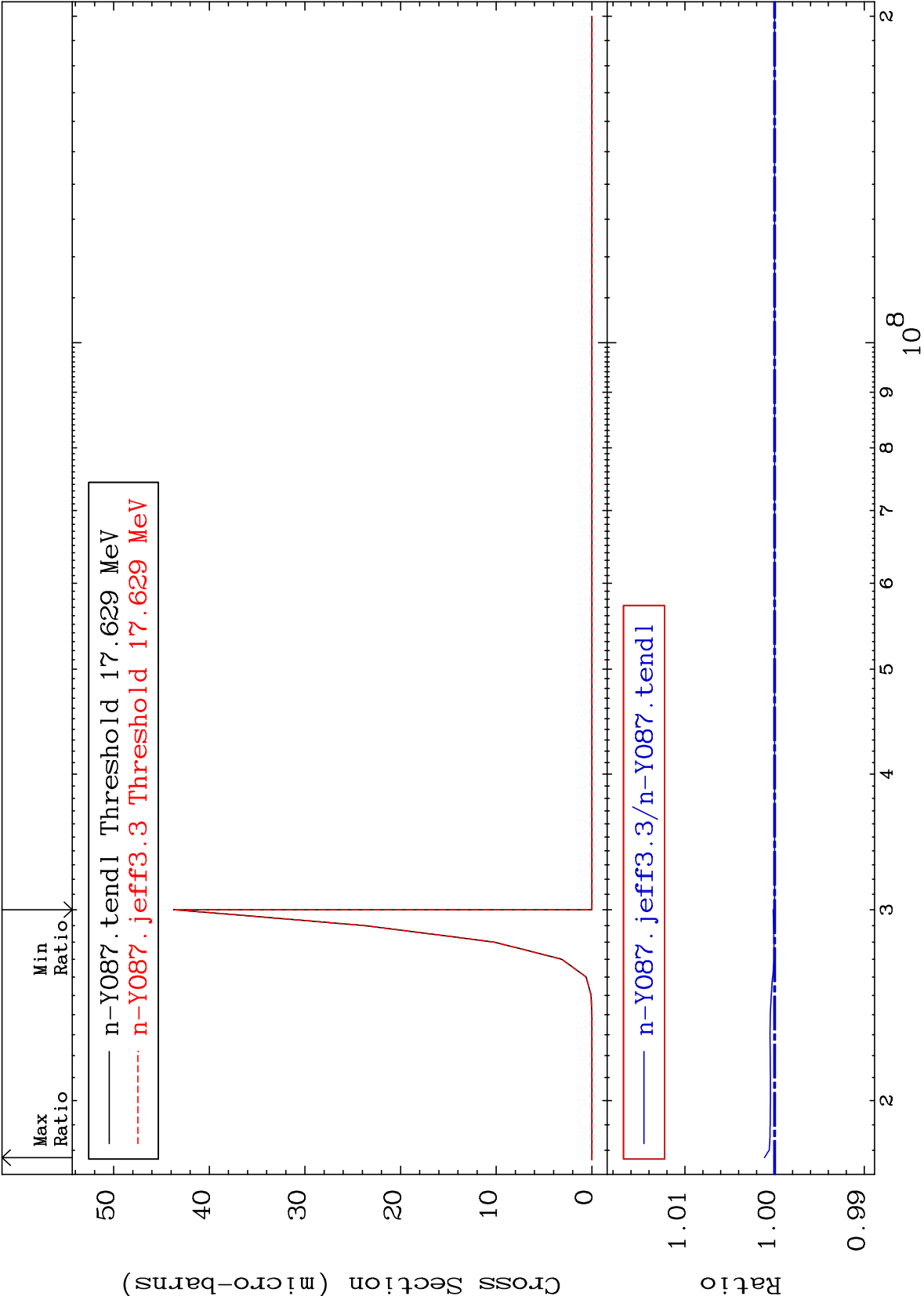
-50.20 To 9999. %







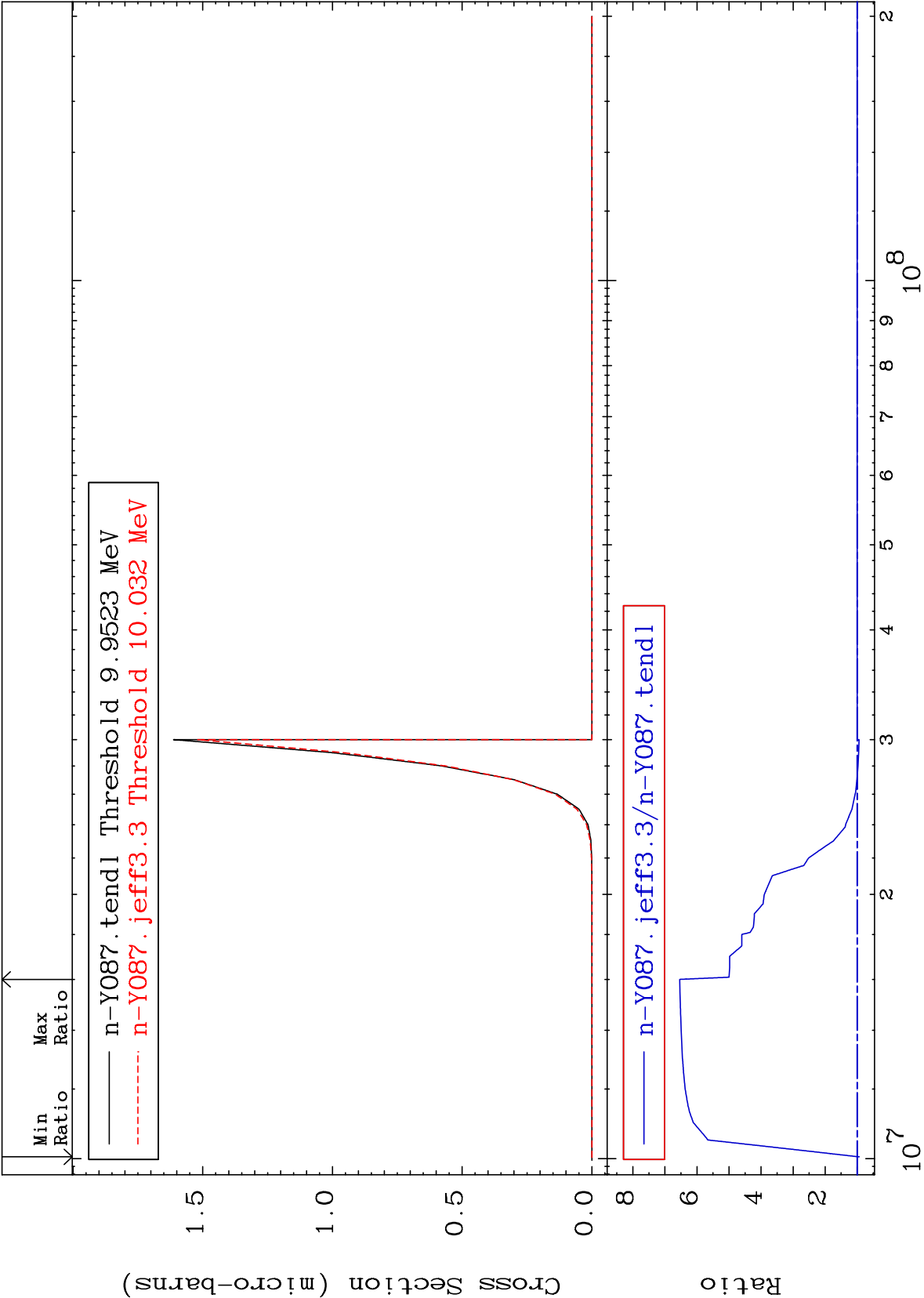




MAT 3919

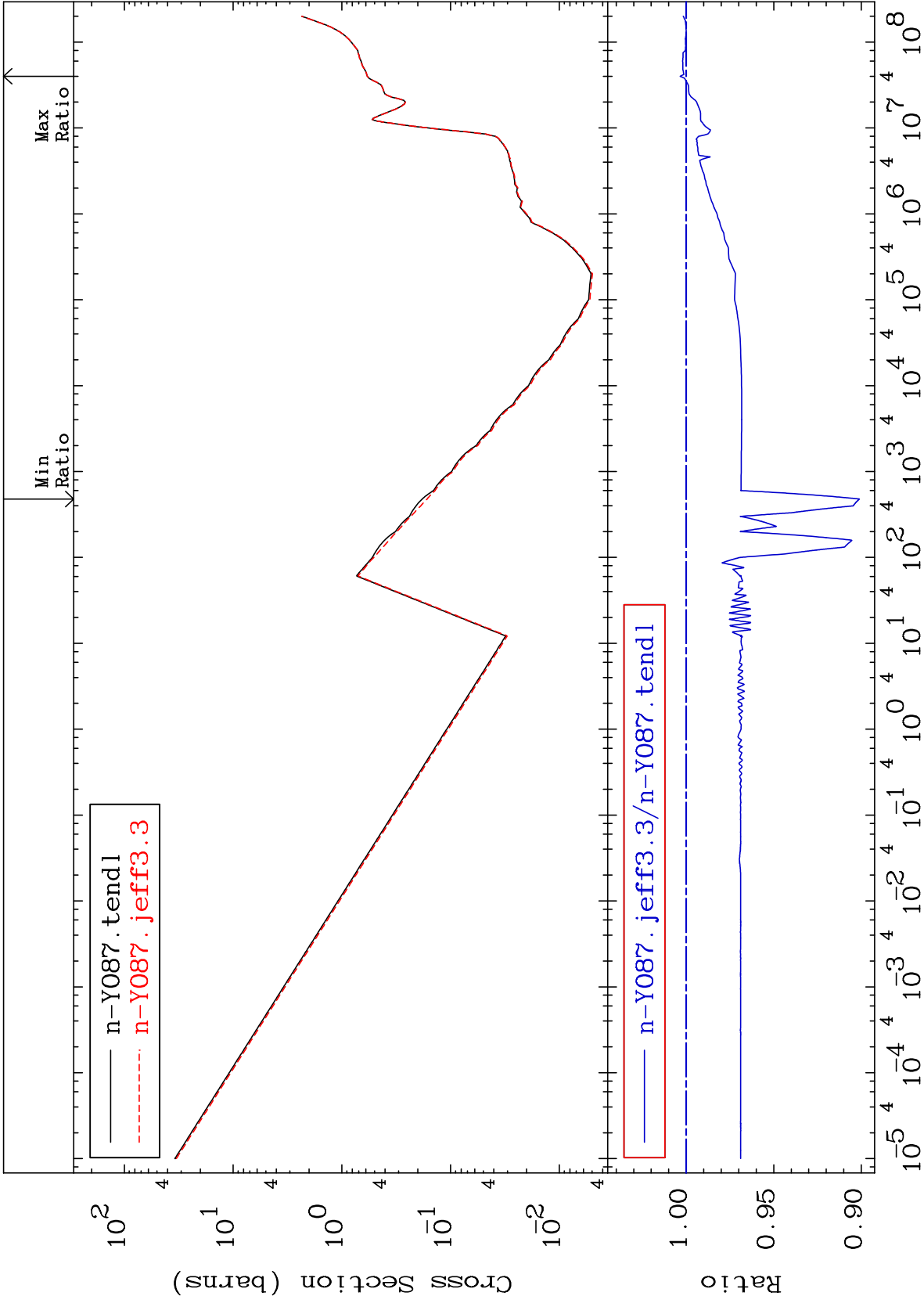
(n,d) α
Cross Section

39-Y -87
-6.494 To 553.8 %

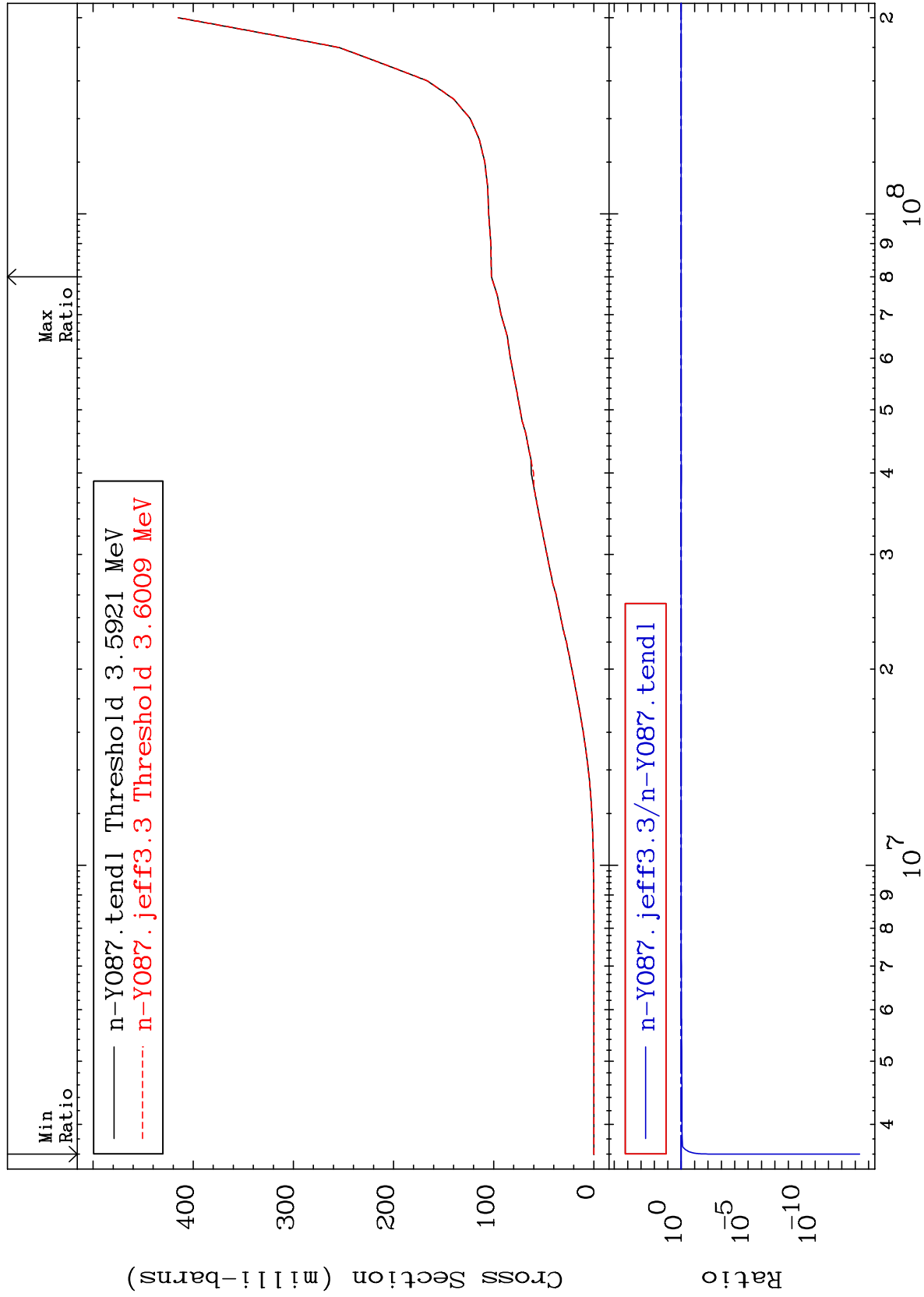


Incident Energy (eV)

39-Y -87



-100.0 To 0.116 %



MAT 3919

Tritium Production
Cross Section

39-Y -87
-0.314 To 0.153 %

— n-Y087.tendl Threshold 8.8956 MeV
- - - n-Y087.jeff3.3 Threshold 8.8956 MeV

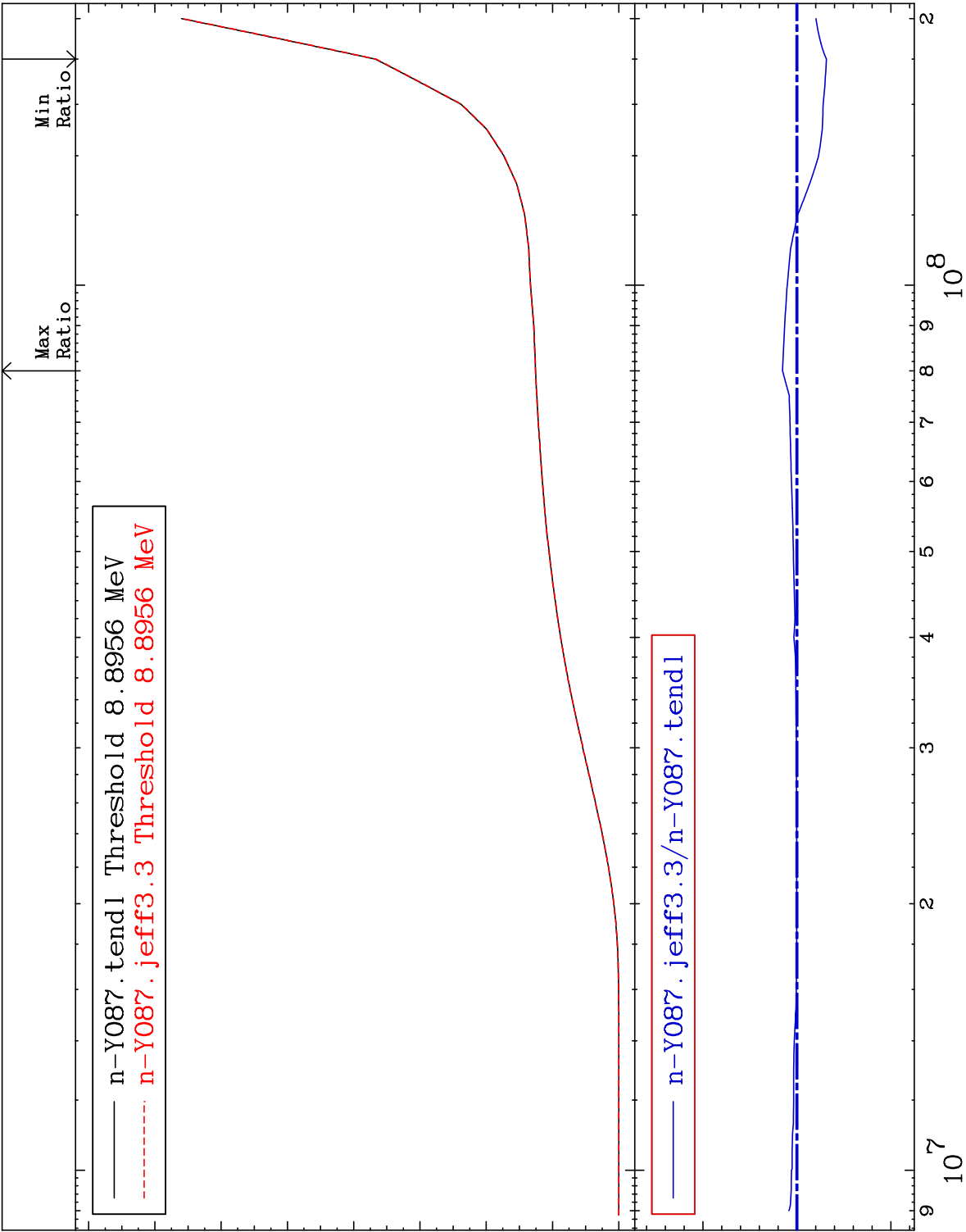
— n-Y087.jeff3.3/n-Y087.tendl

Cross Section (milli-barns)

Ratio

Incident Energy (eV)

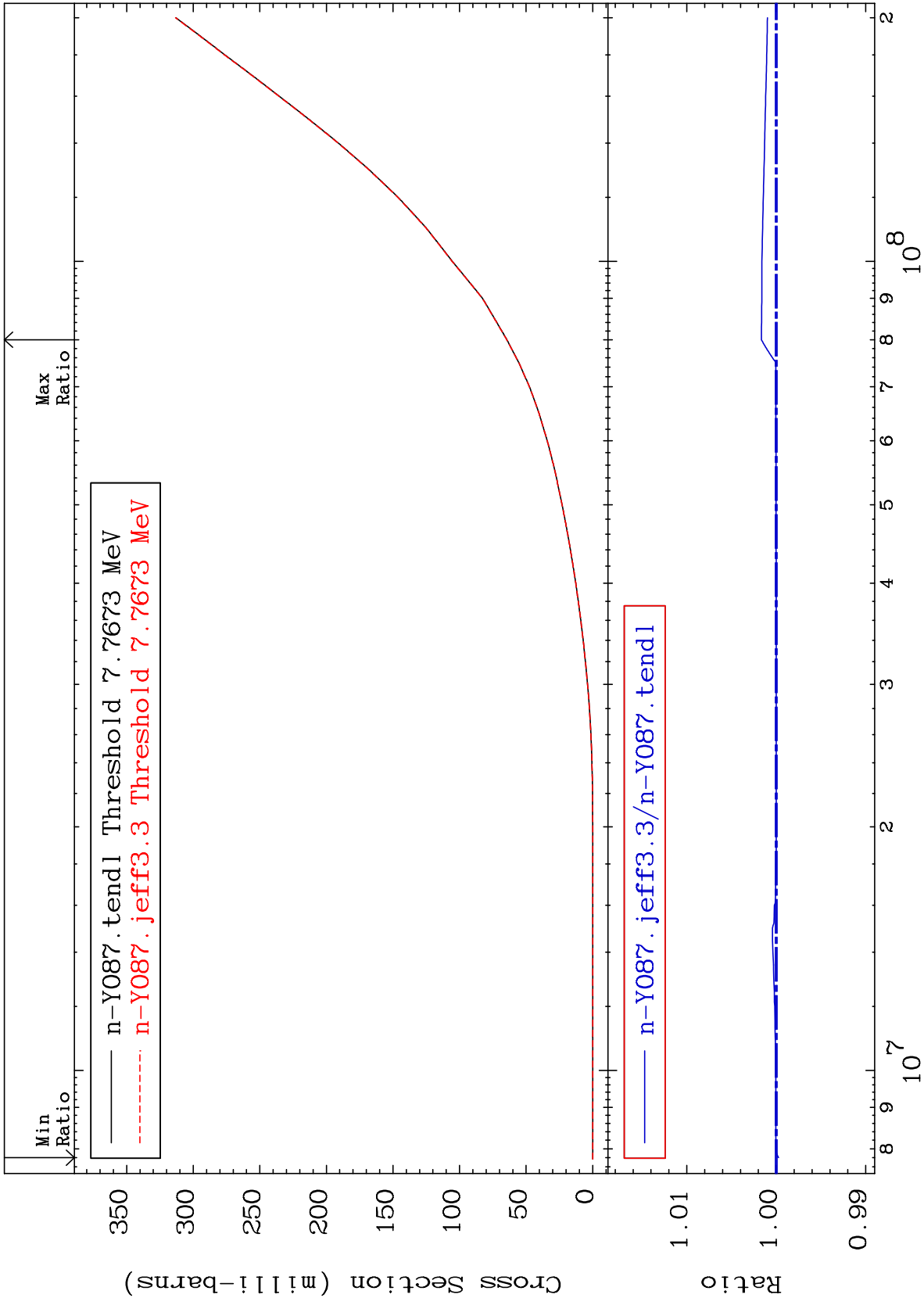
39-Y -87



MAT 3919

He-3 Production
Cross Section

39-Y -87
-0.024 To 0.167 %



64

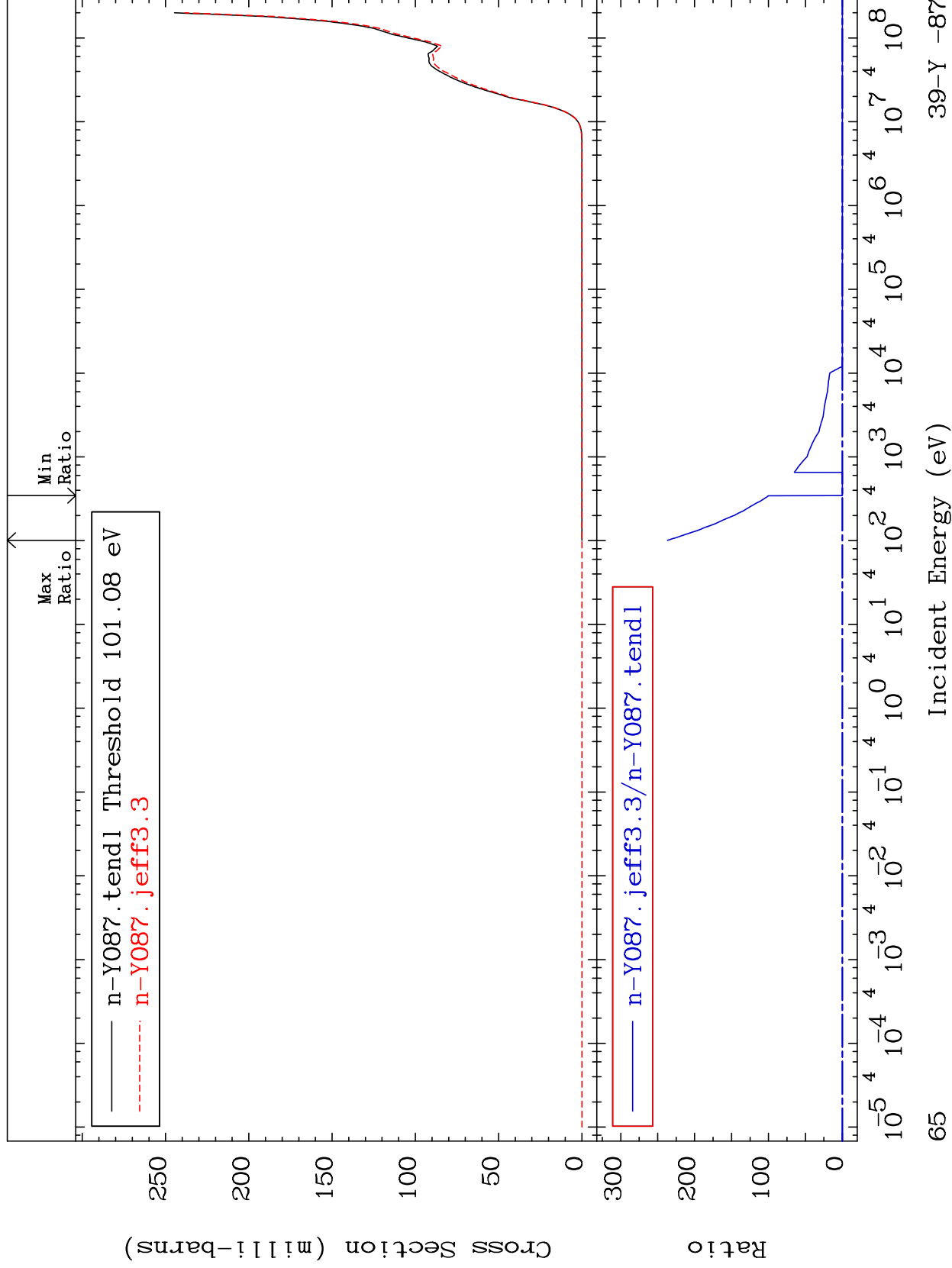
Incident Energy (eV)

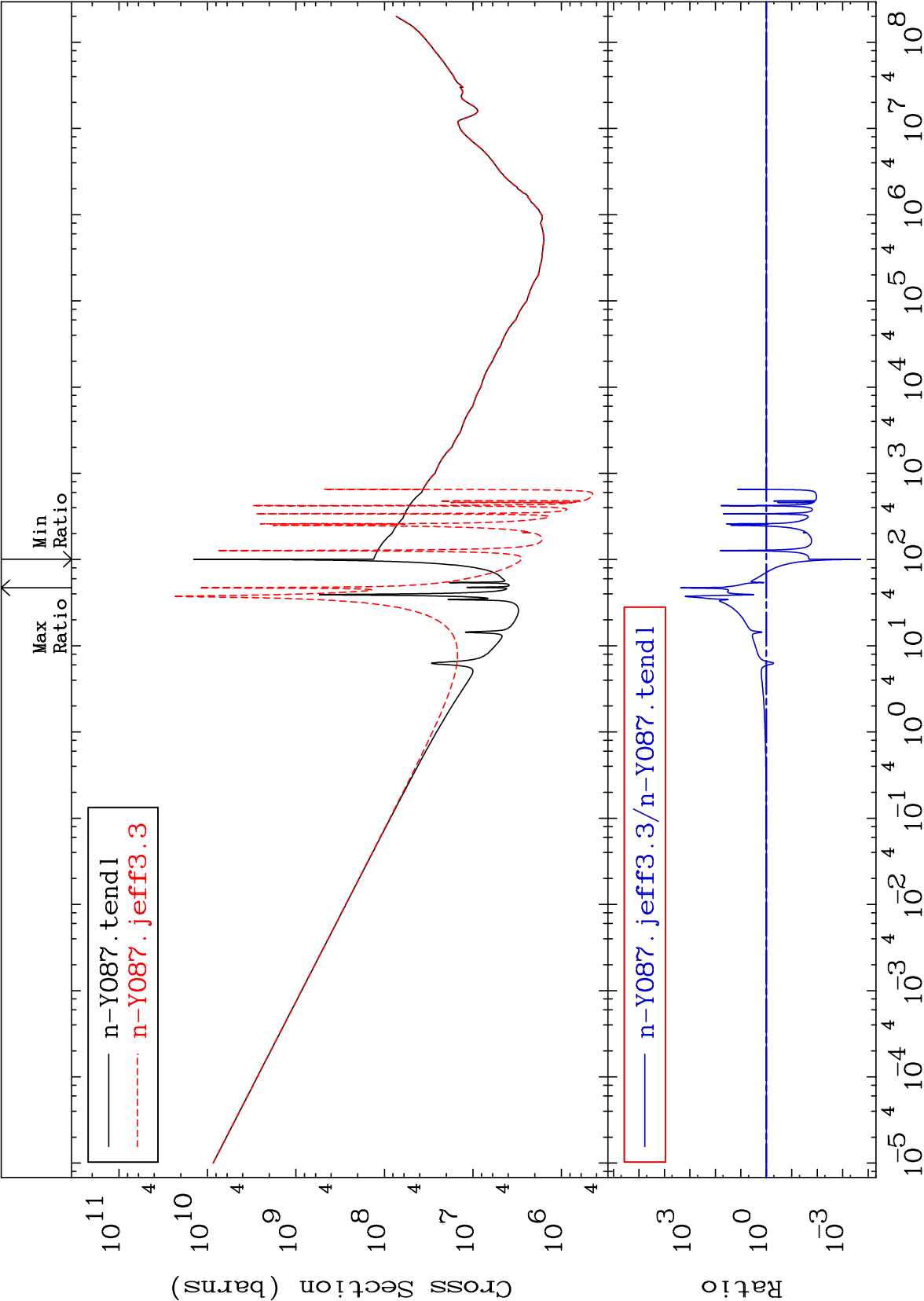
39-Y -87

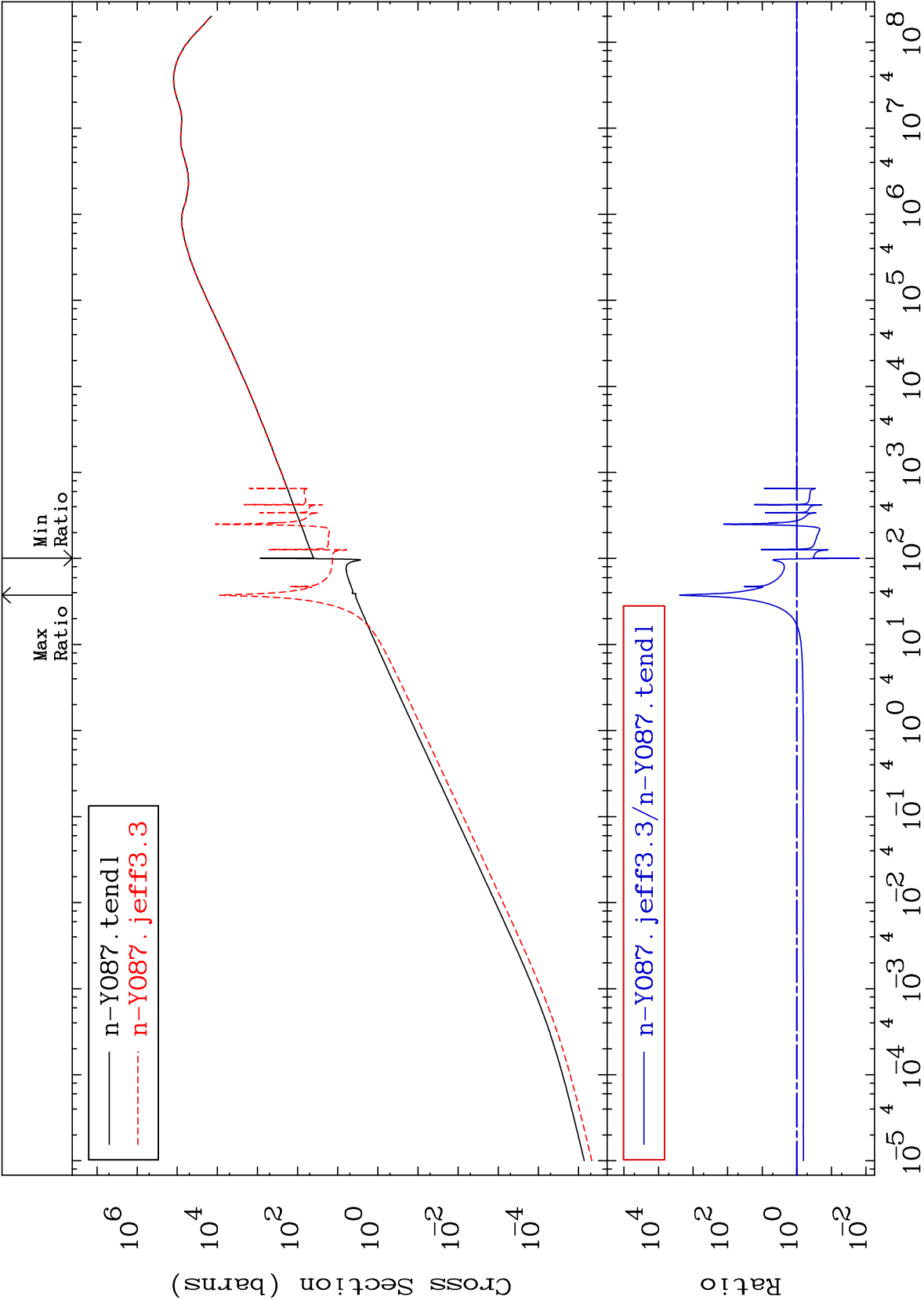
MAT 3919

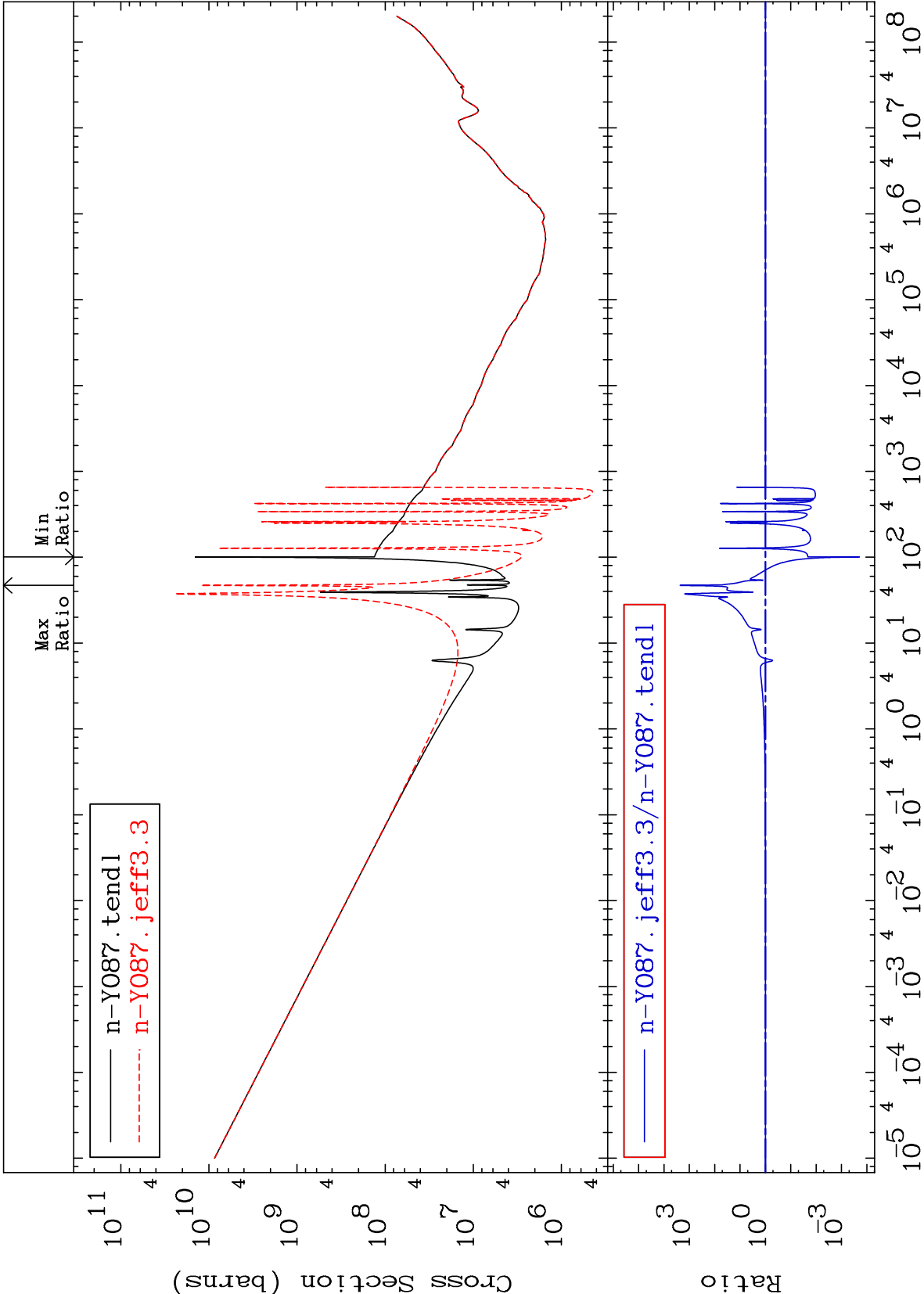
He-4 Production
Cross Section

39-Y -87
-100.0 To 9999. %





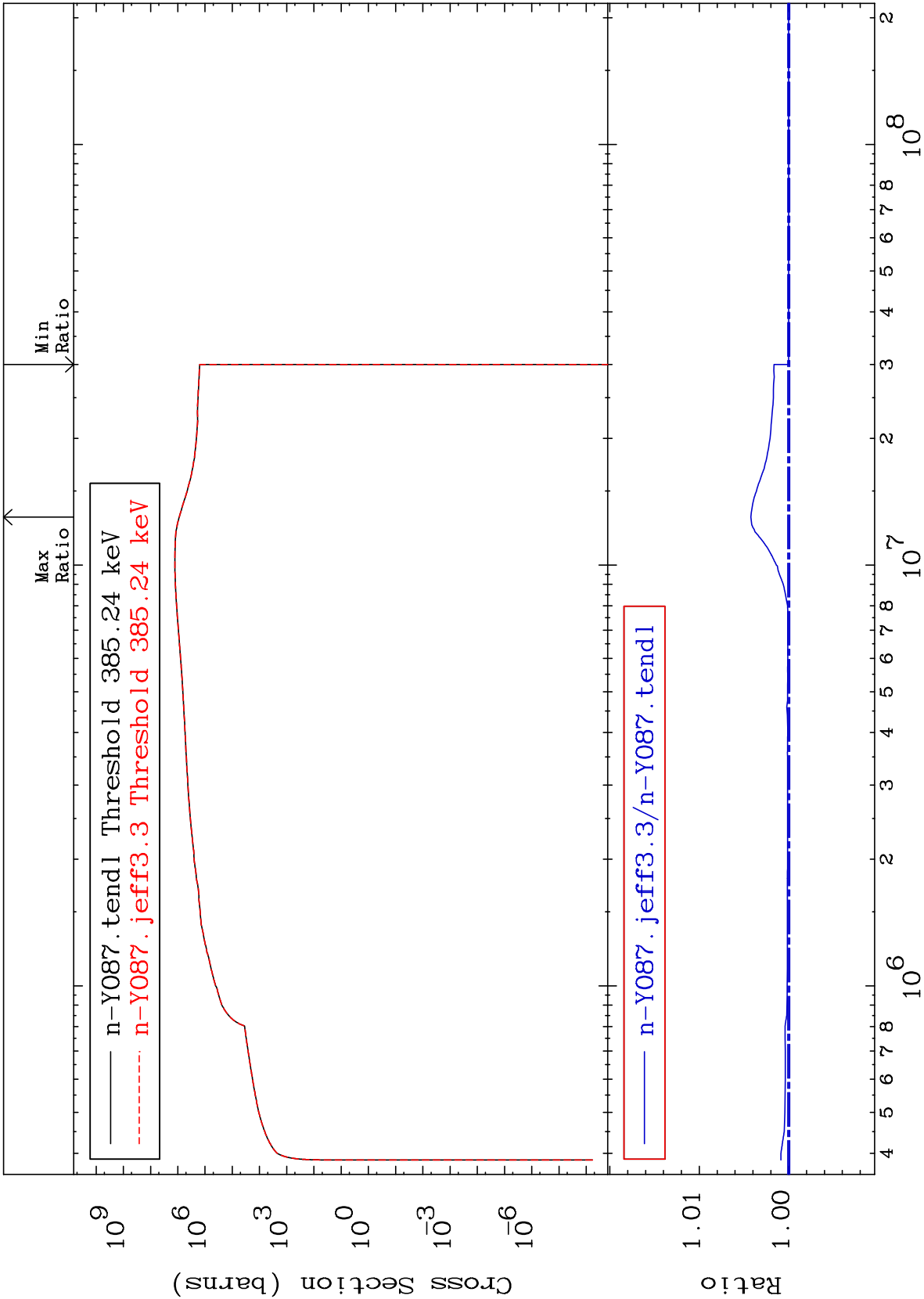


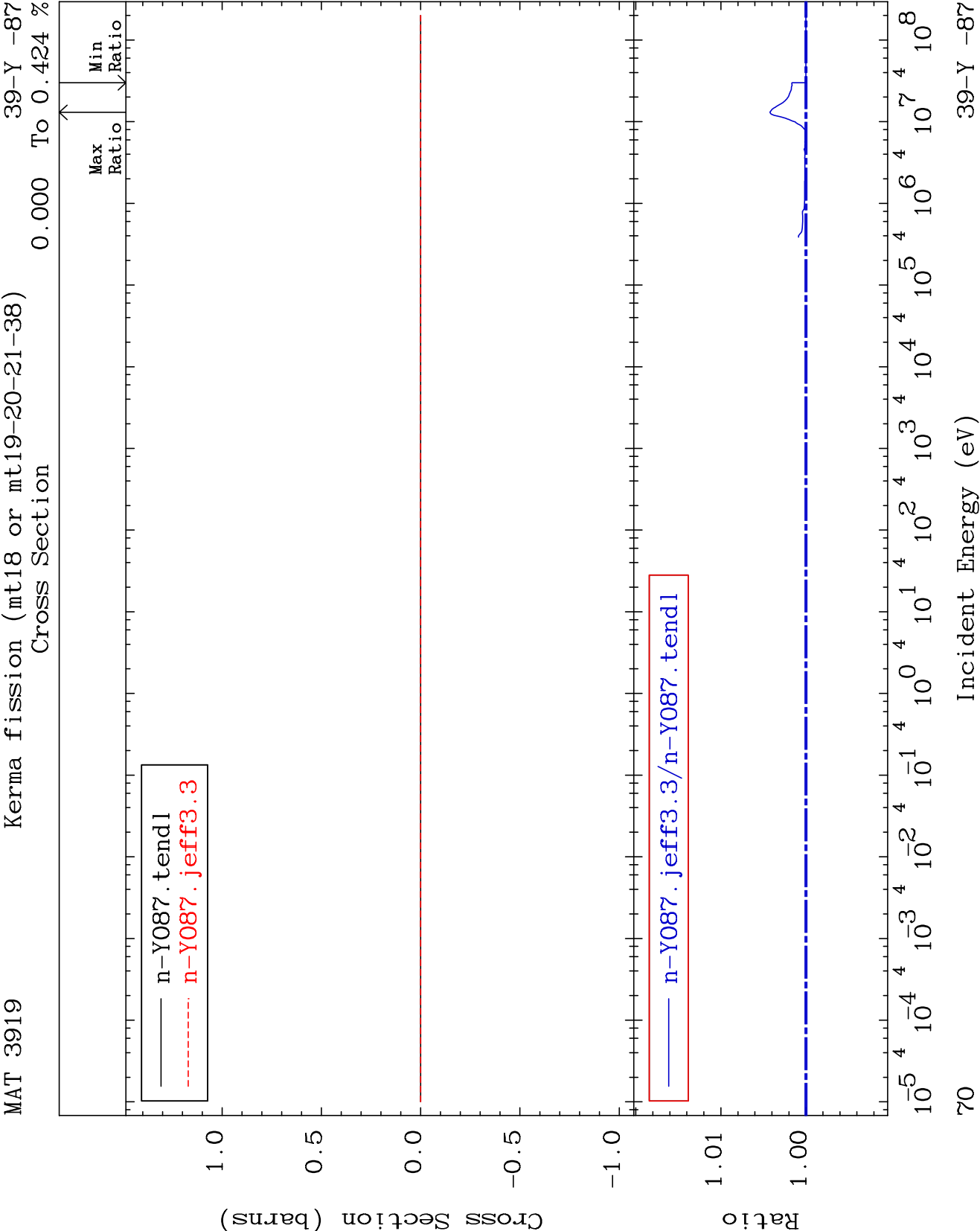


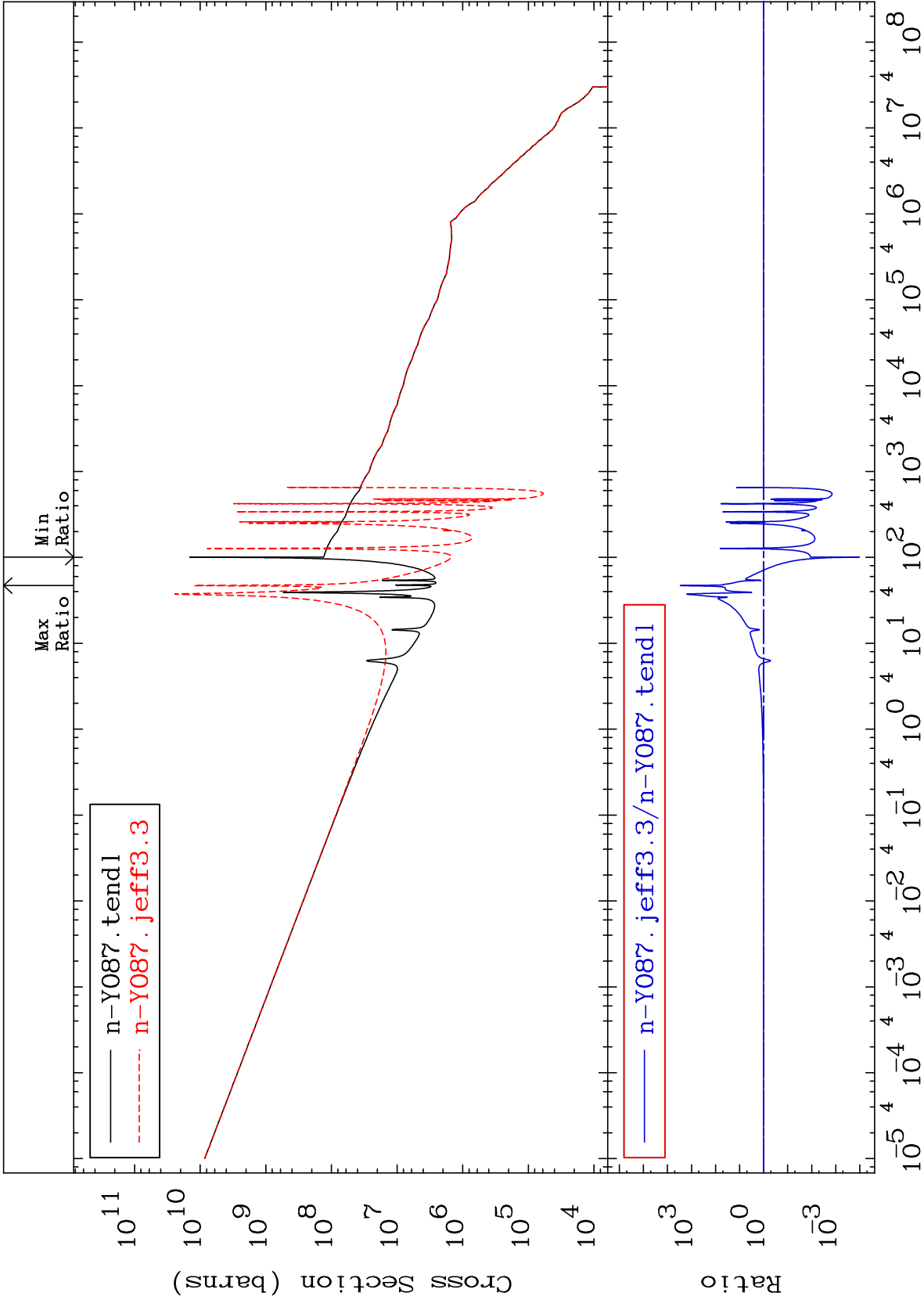
Cross Section

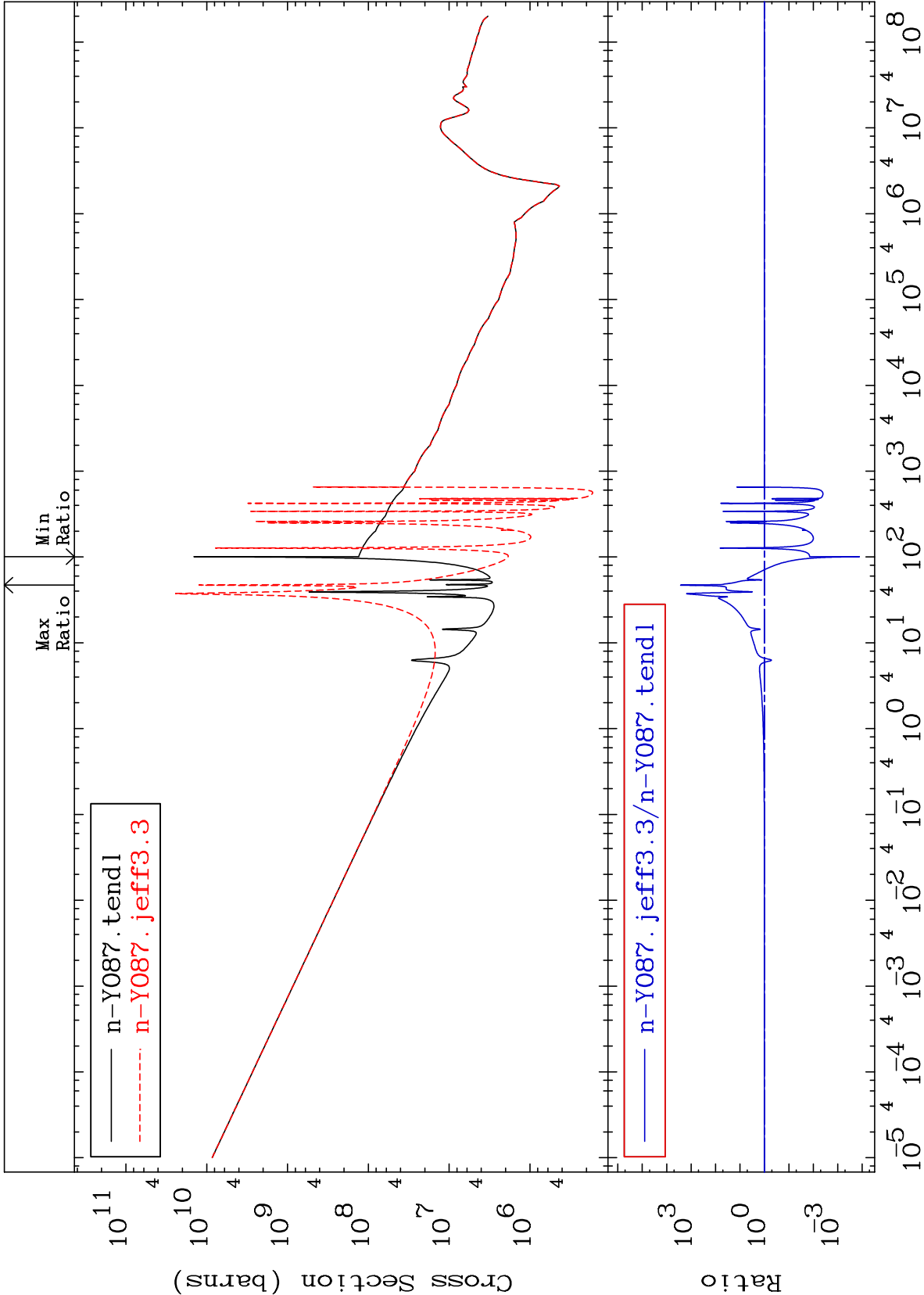
0.000

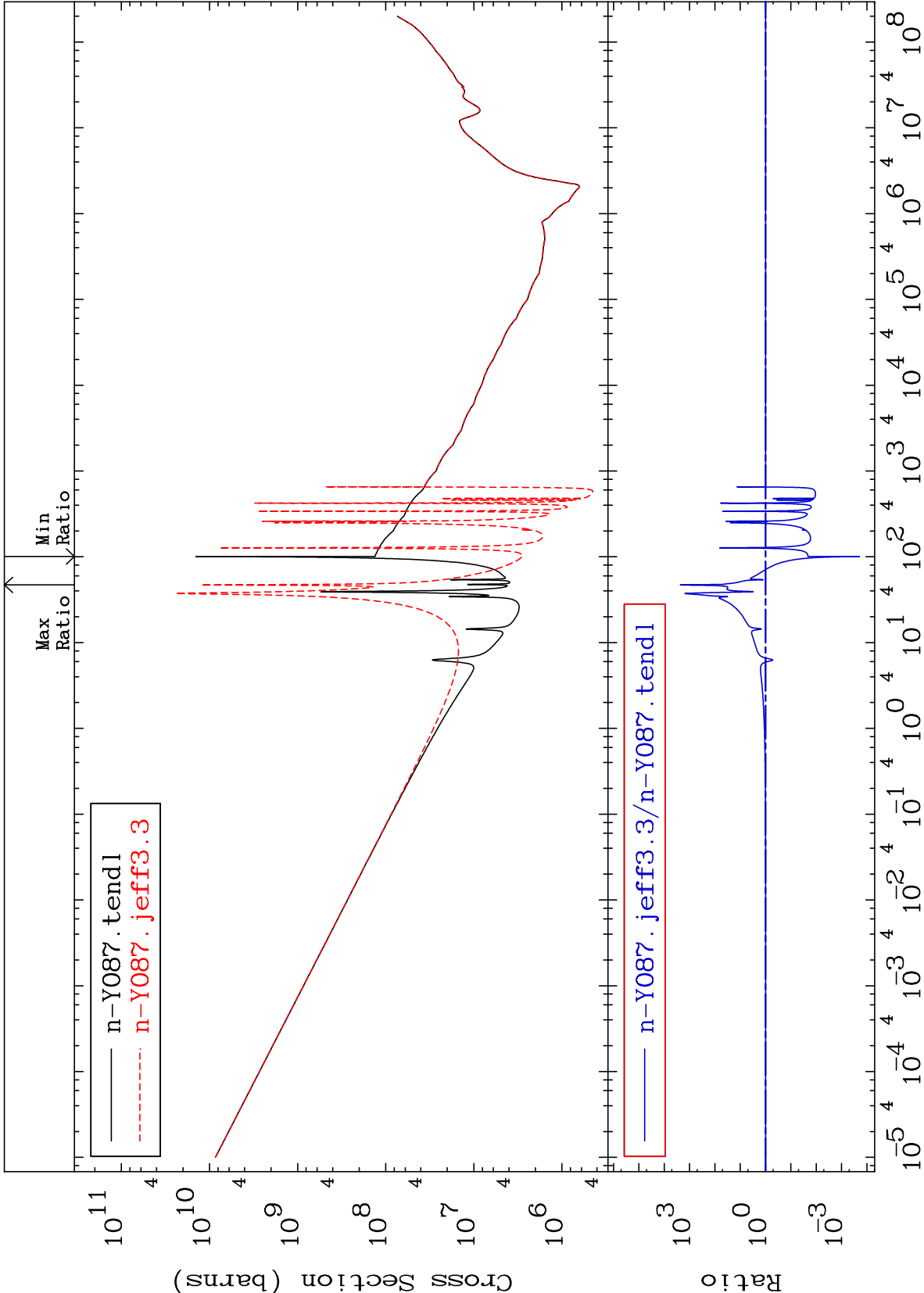
To 0.424 %

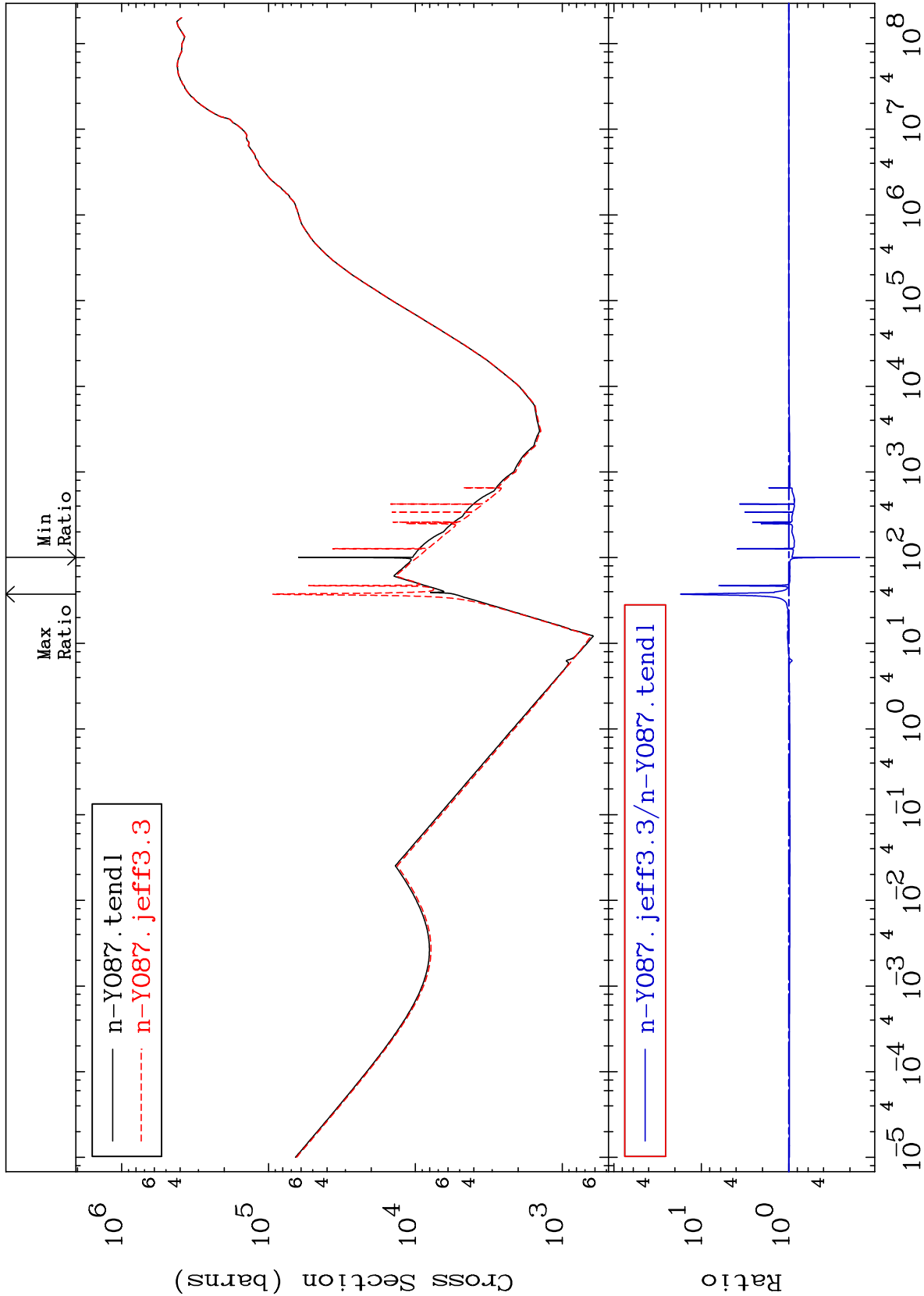


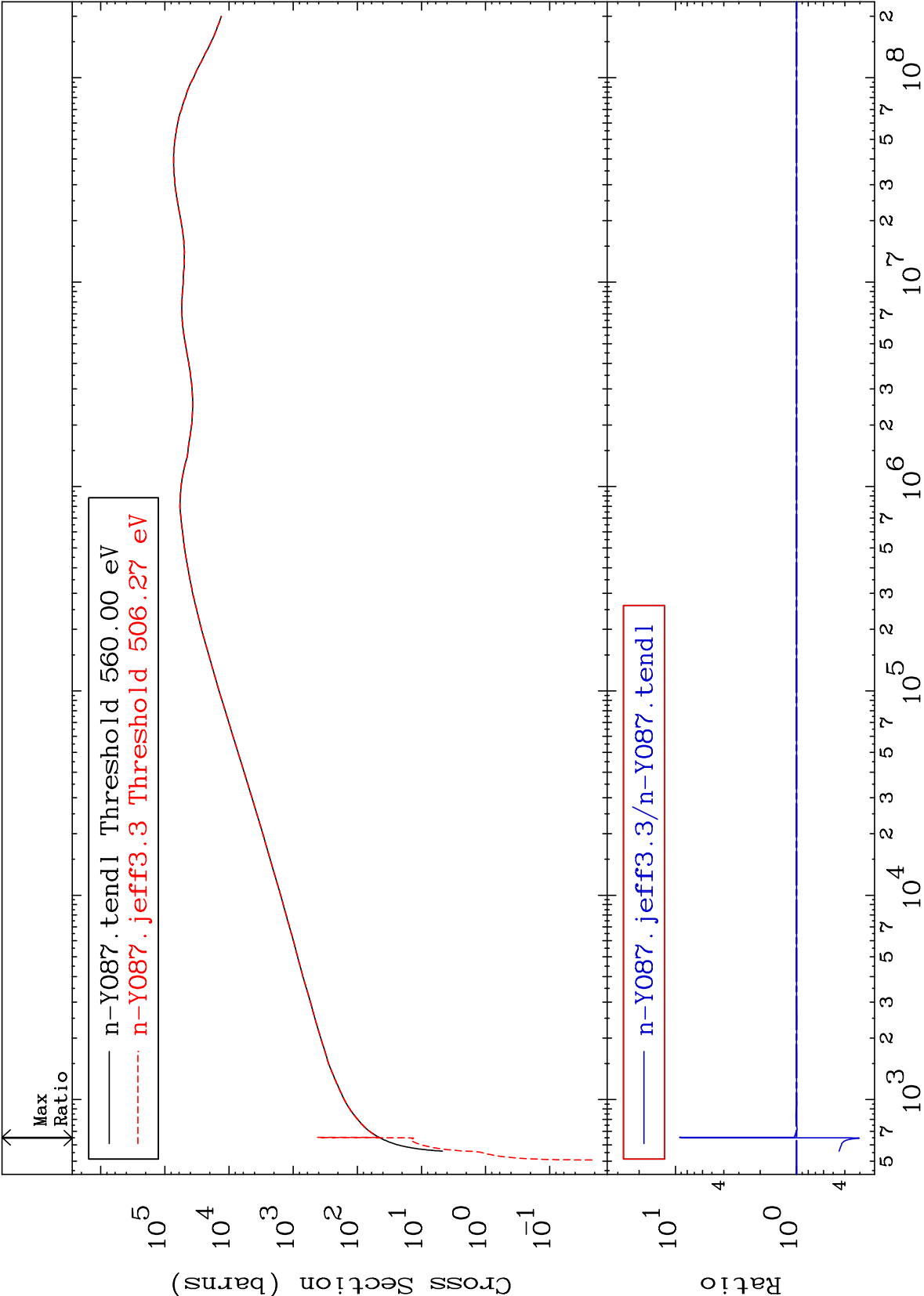




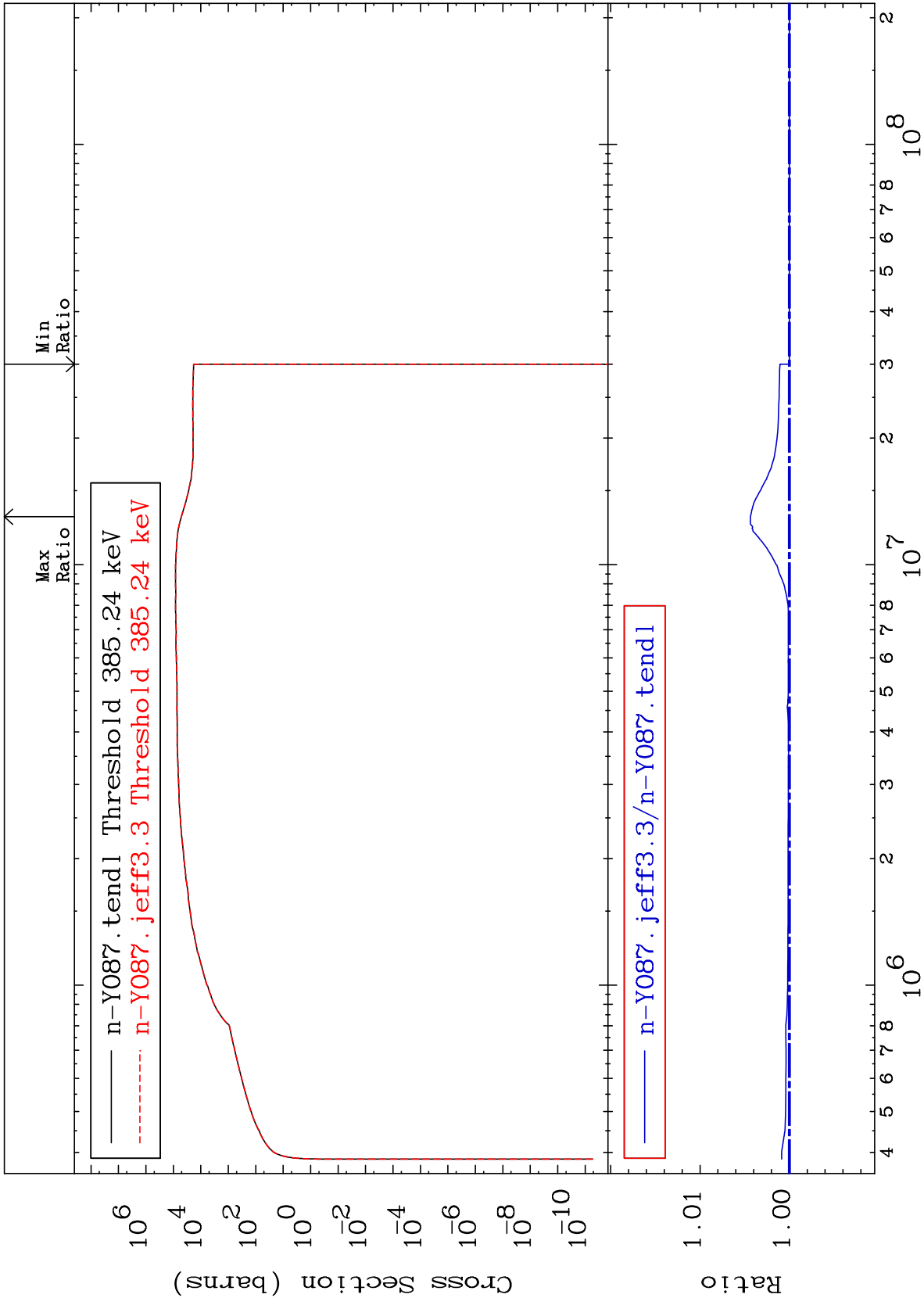


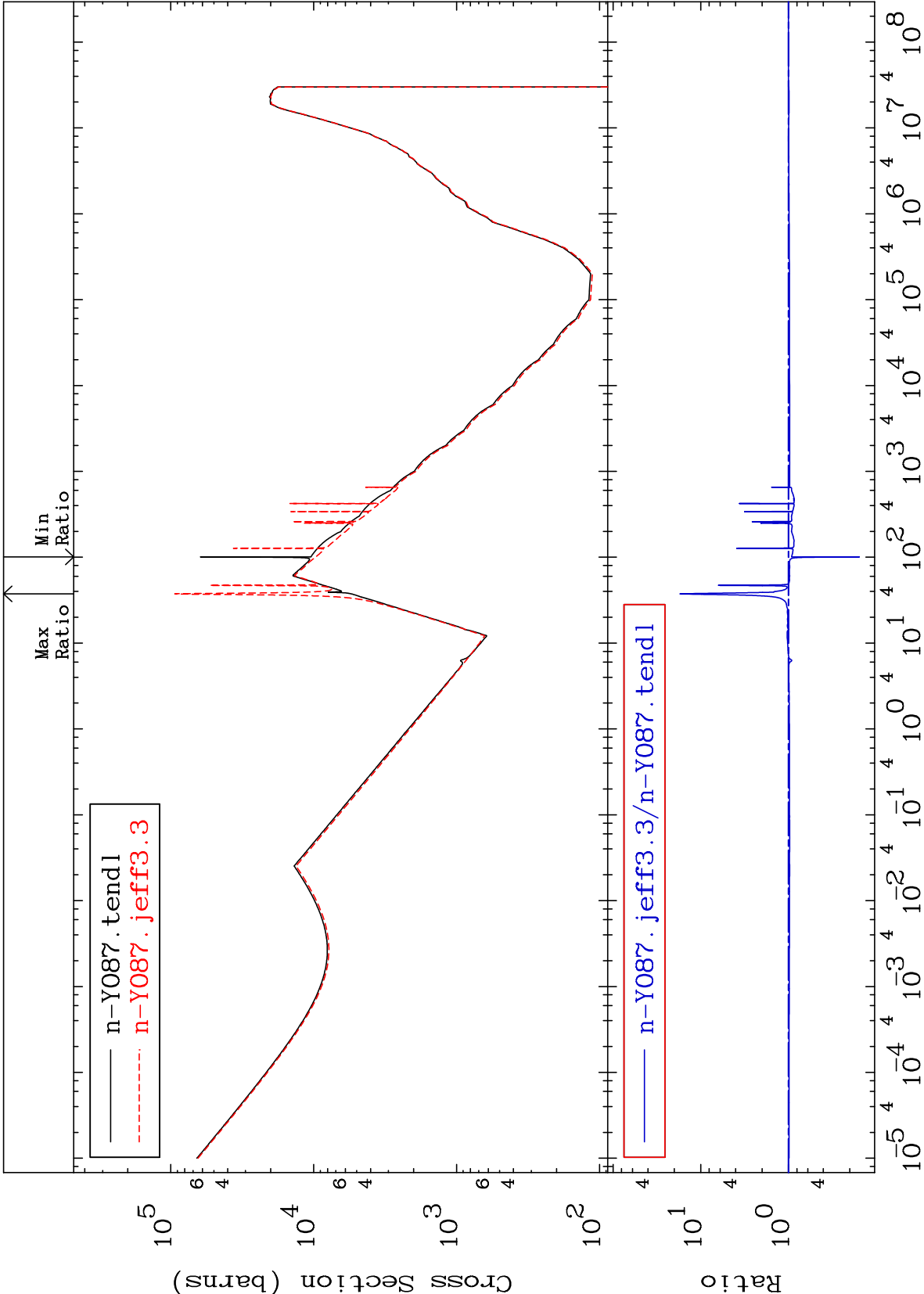






0.000 To 0.436 %



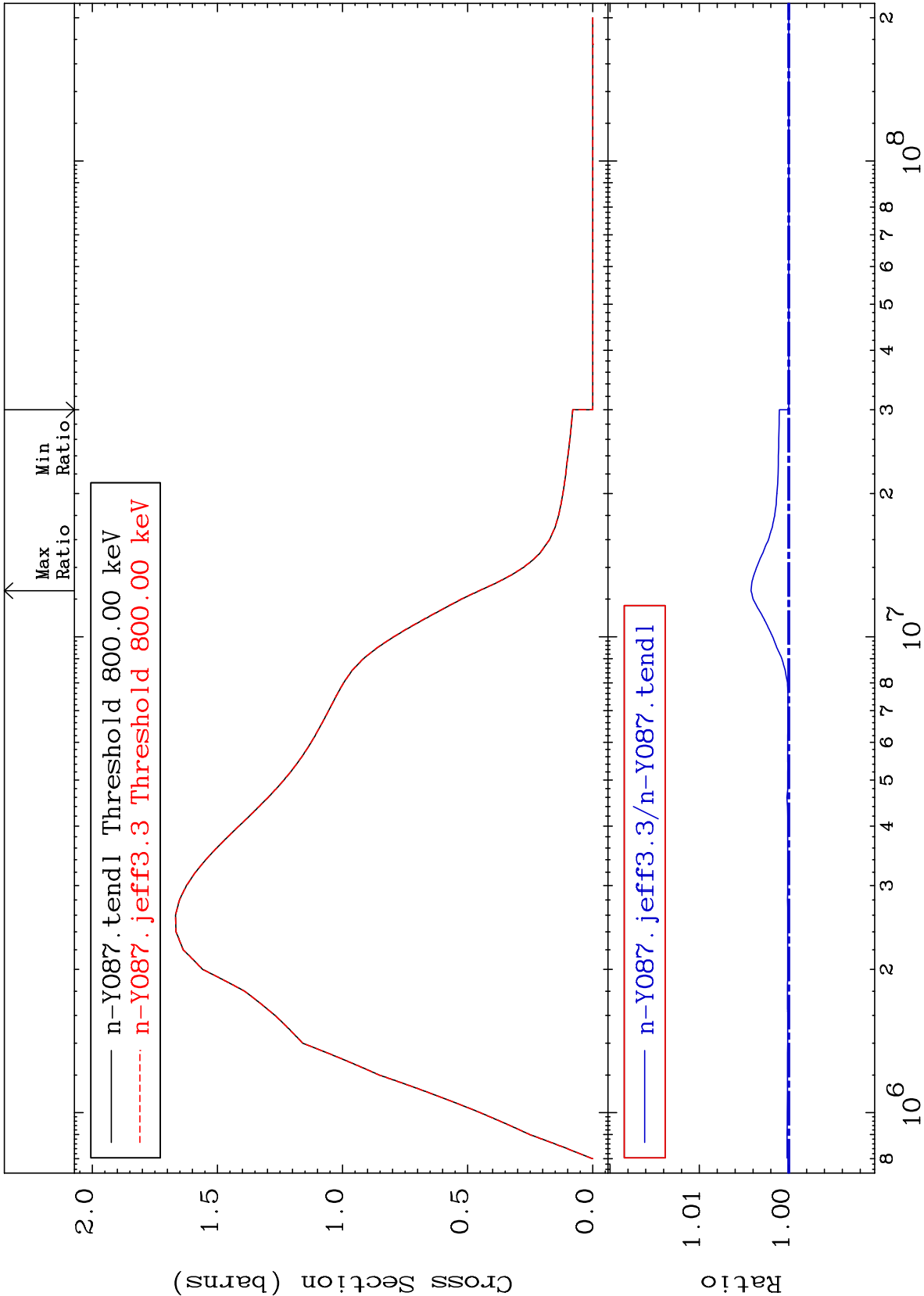


MAT 3919

Inelastic:39-Y -87g

39-Y -87

Radionuclide Production Cross Section 0.000 To 0.422 %

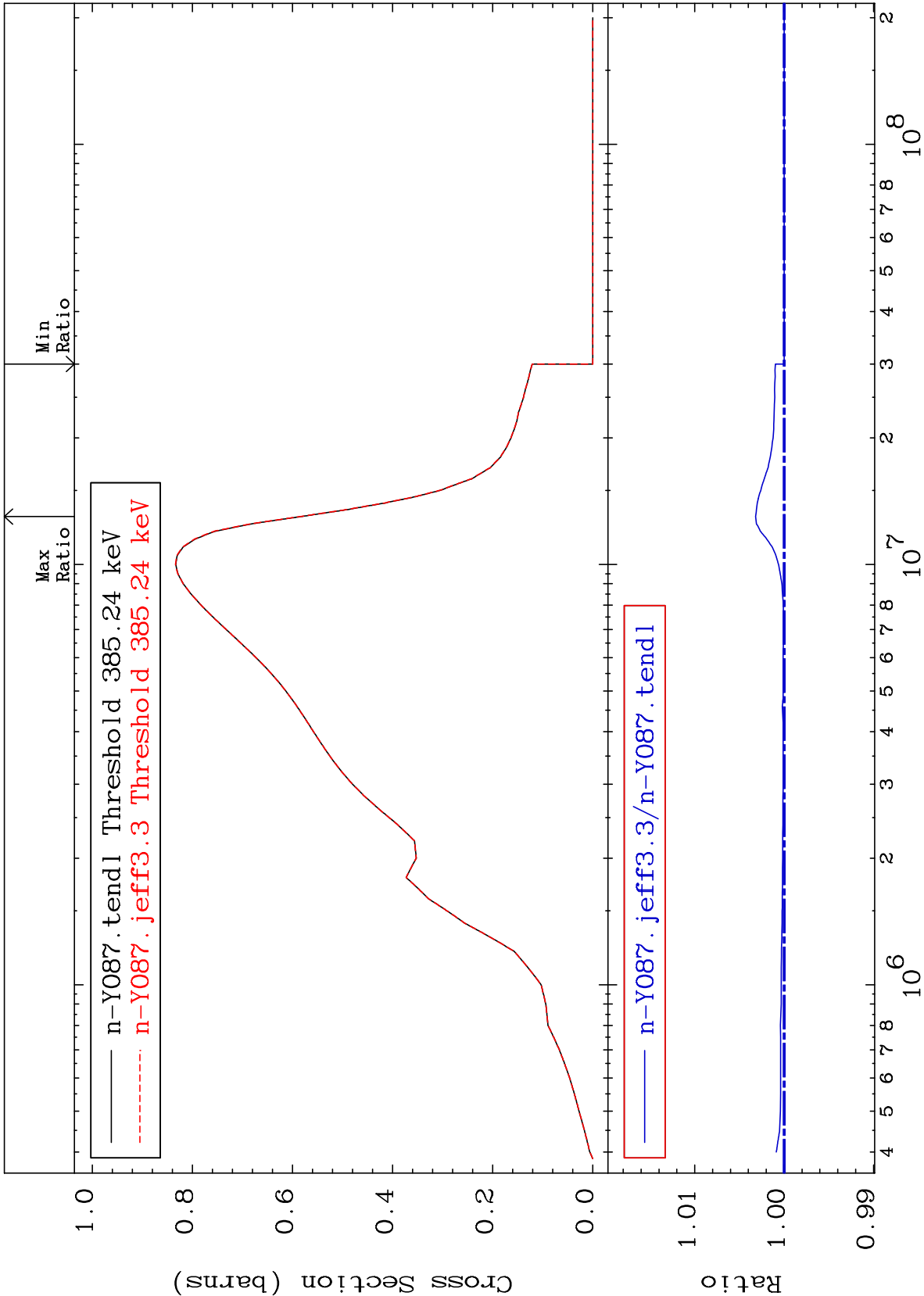


MAT 3919

Inelastic:39-Y -87m1

39-Y -87

Radionuclide Production Cross Section 0.000 To 0.318 %



79

Incident Energy (eV)

39-Y -87

MAT 3919

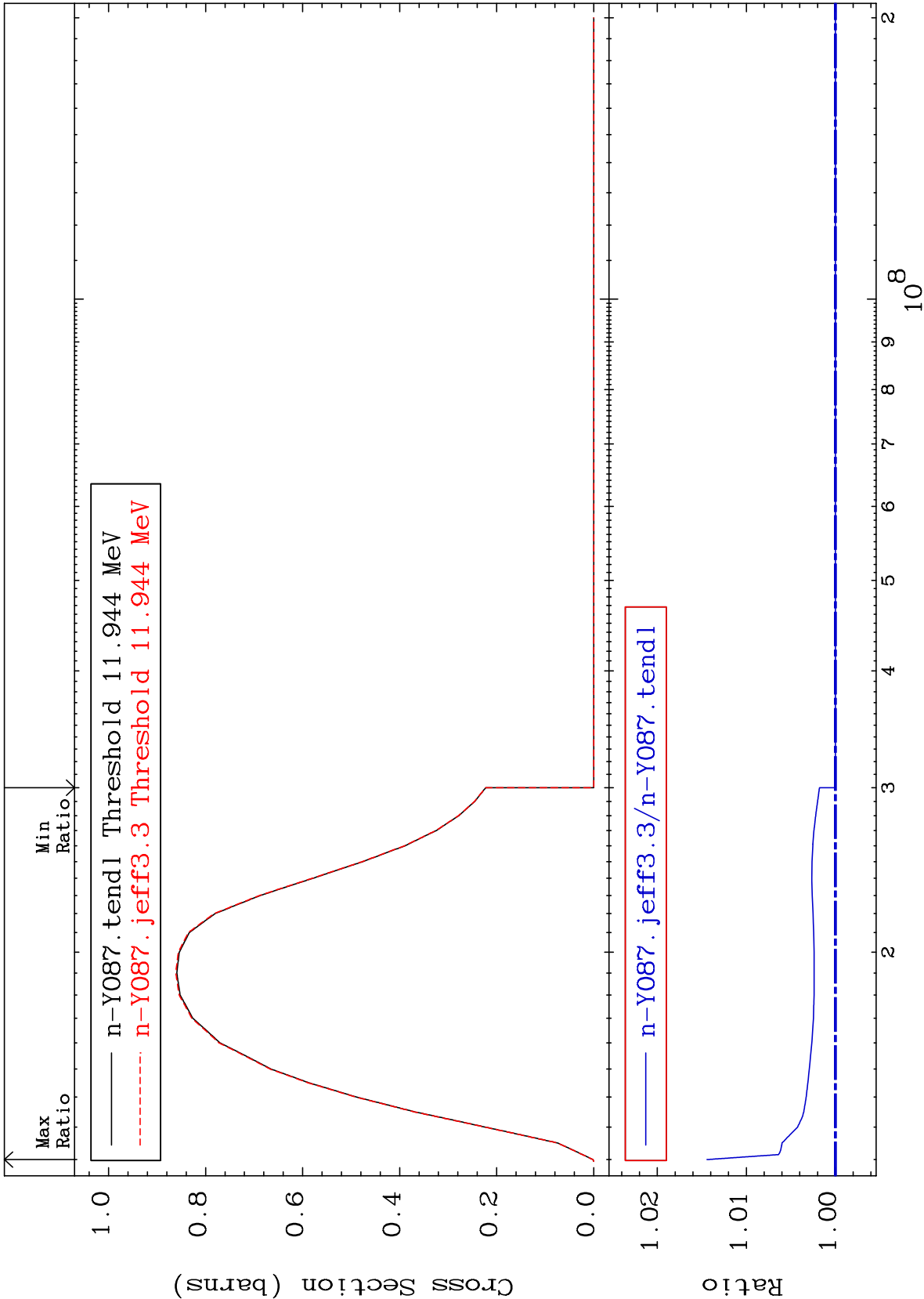
(n,2n):39-Y -86g

39-Y -87

Radionuclide Production Cross Section

0.000

To 1.442 %



80

Incident Energy (eV)

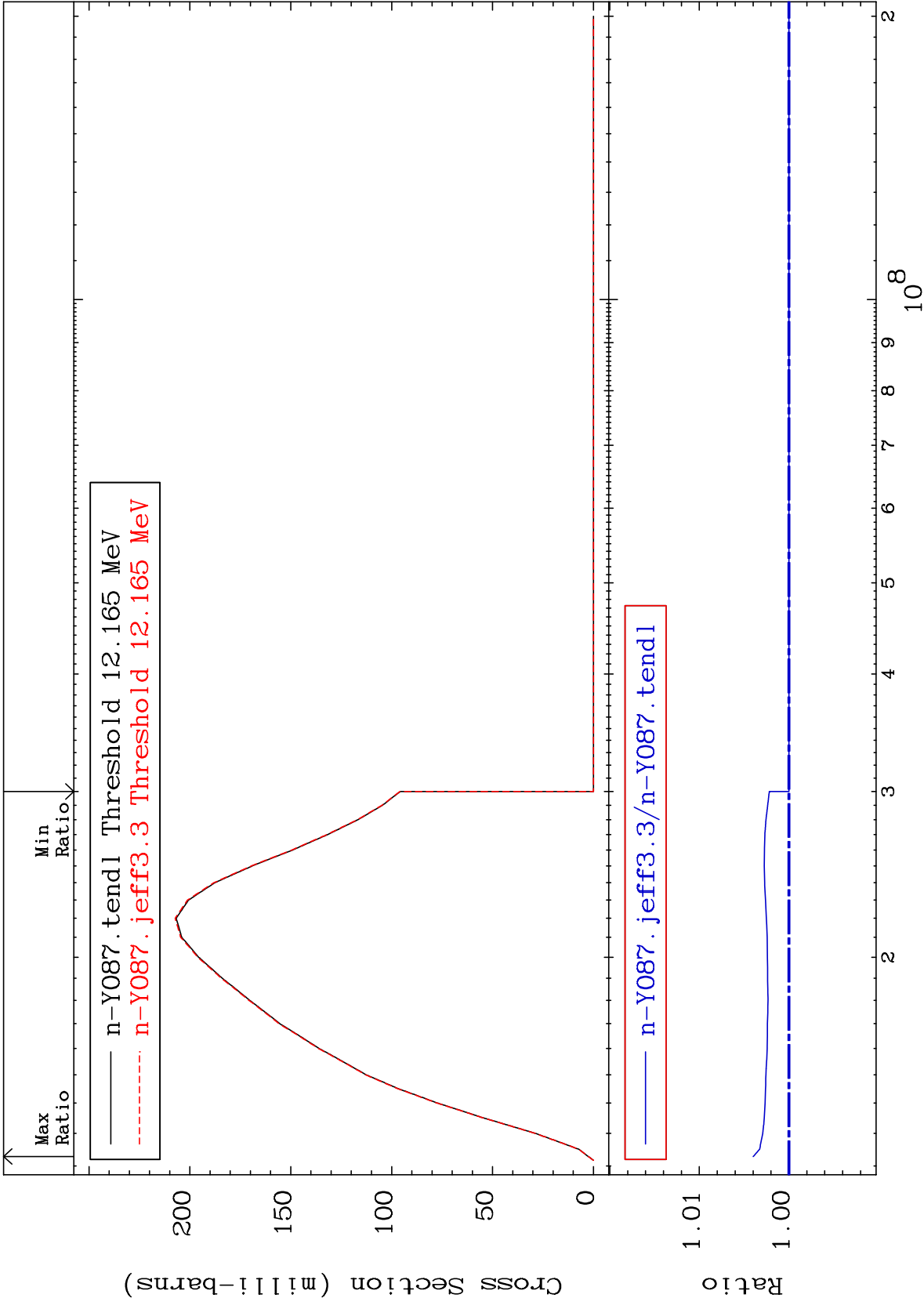
39-Y -87

MAT 3919

(n,2n):39-Y -86m2

39-Y -87

Radionuclide Production Cross Section 0.000 To 0.398 %



MAT 3919

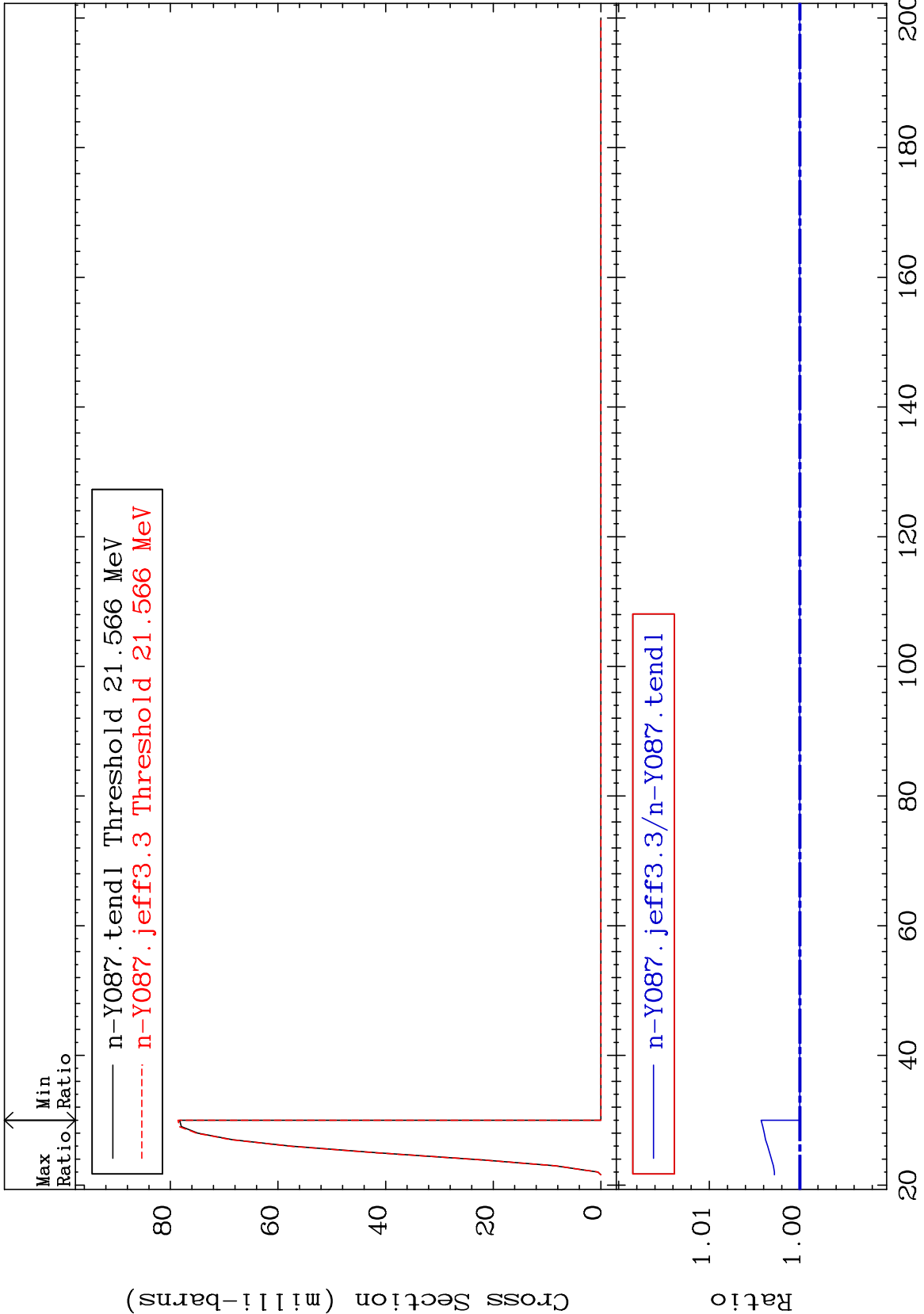
(n,3n):39-Y -85g

39-Y -87

Radionuclide Production Cross Section

0.000

To 0.428 %

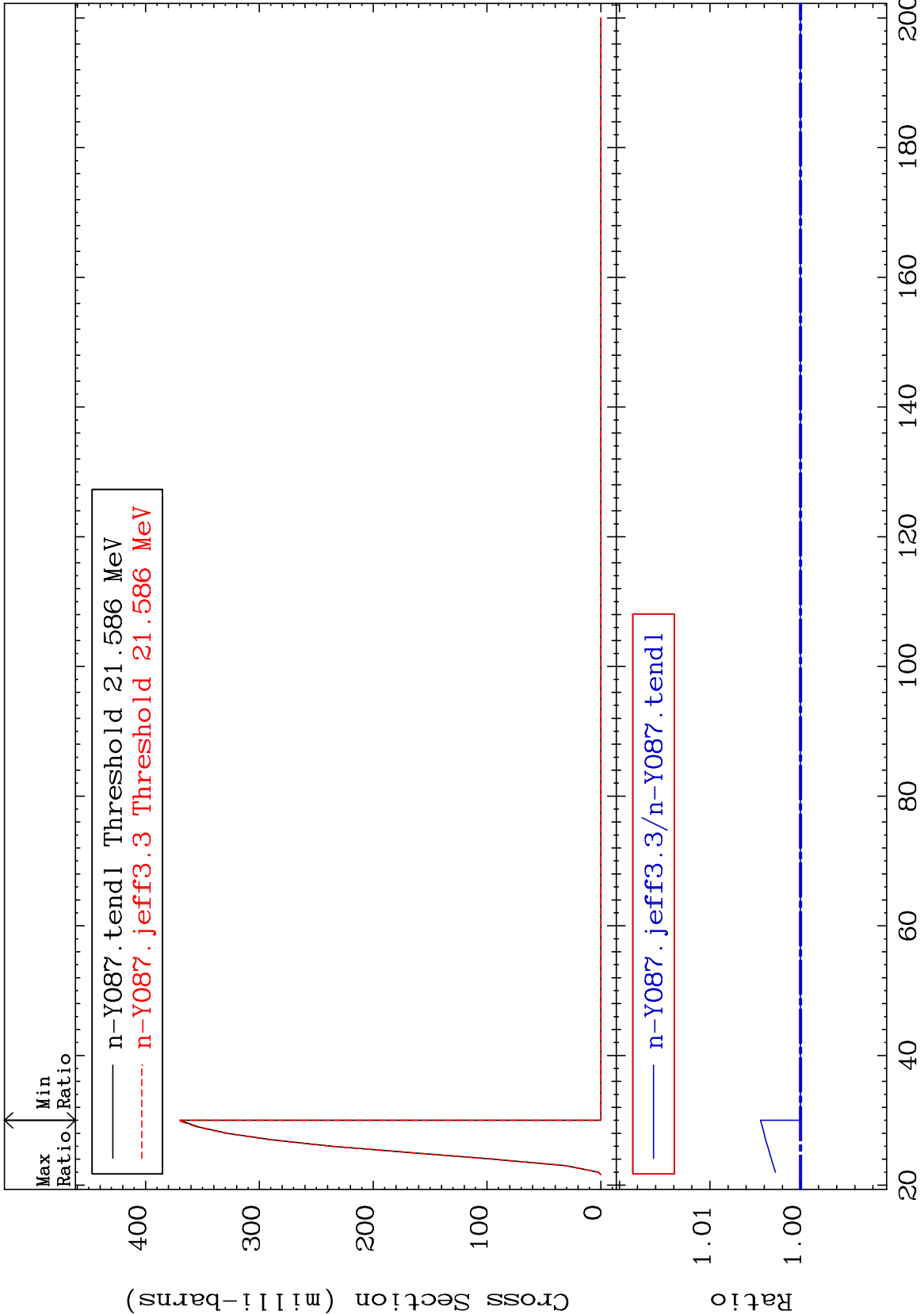


MAT 3919

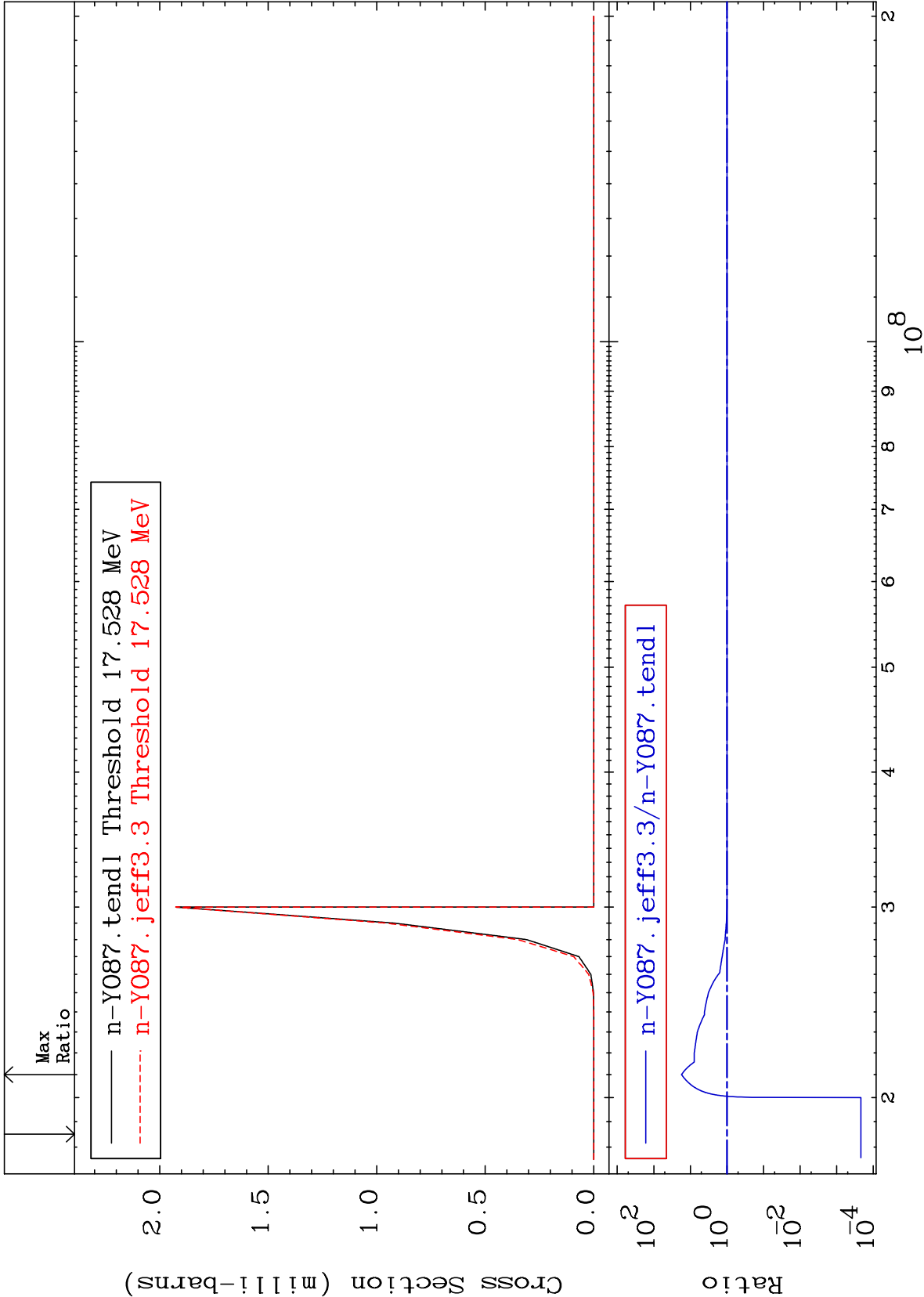
(n,3n):39-Y -85m1

39-Y -87

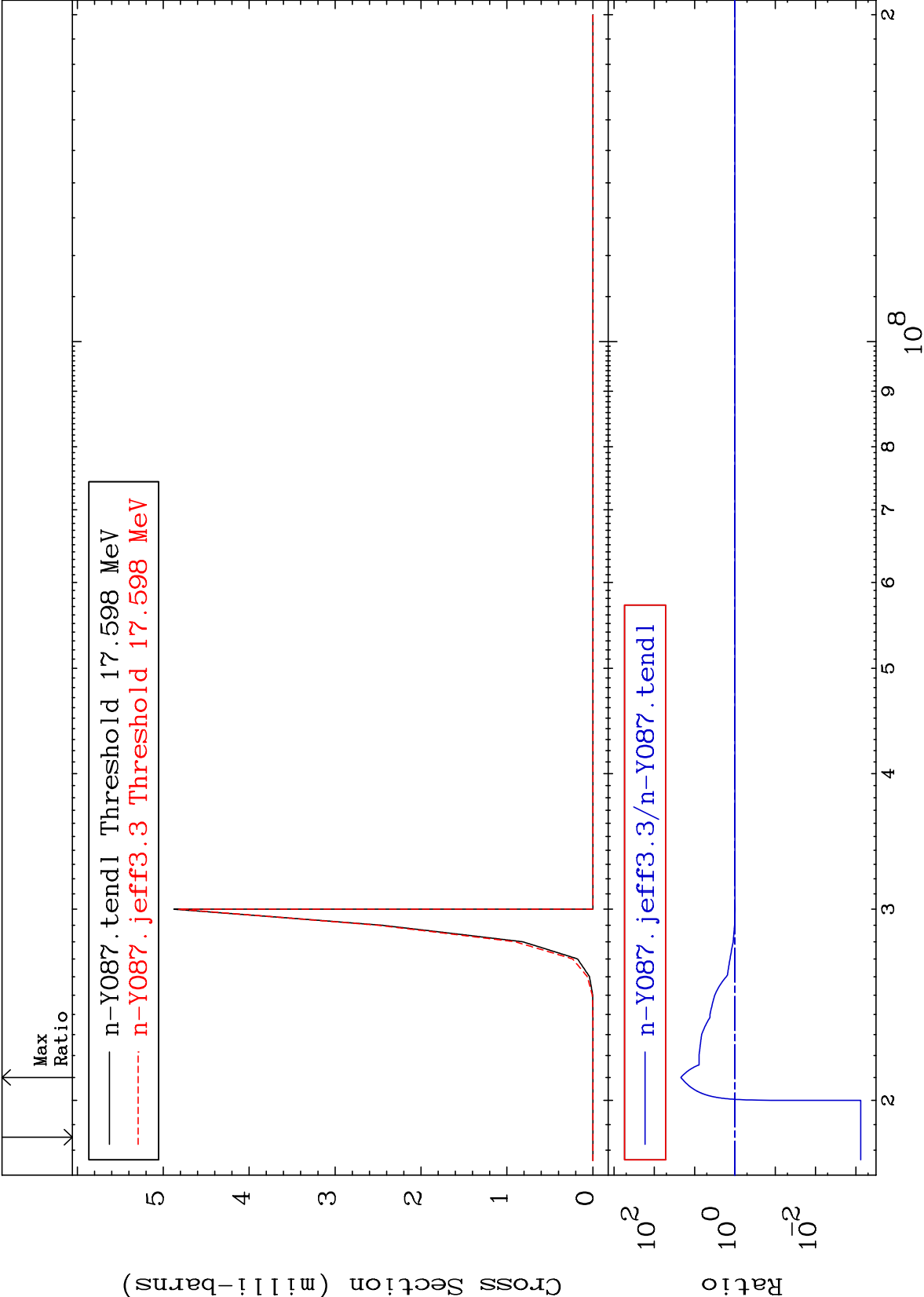
Radionuclide Production Cross Section 0.000 To 0.443 %

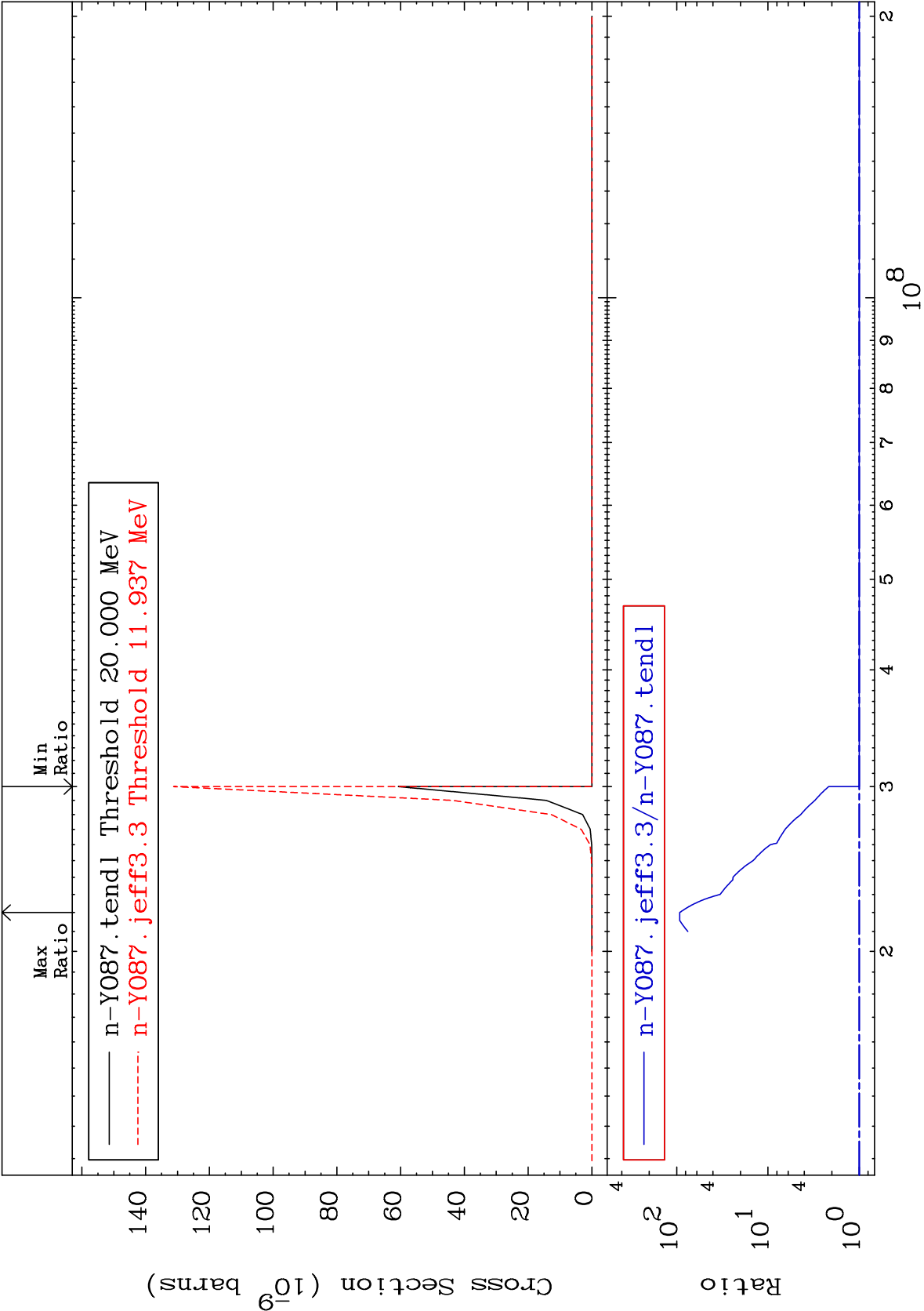


Radionuclide Production Cross Section -99.98 To 1649. %



Radionuclide Production Cross Section -99.92 To 2089. %





MAT 3919

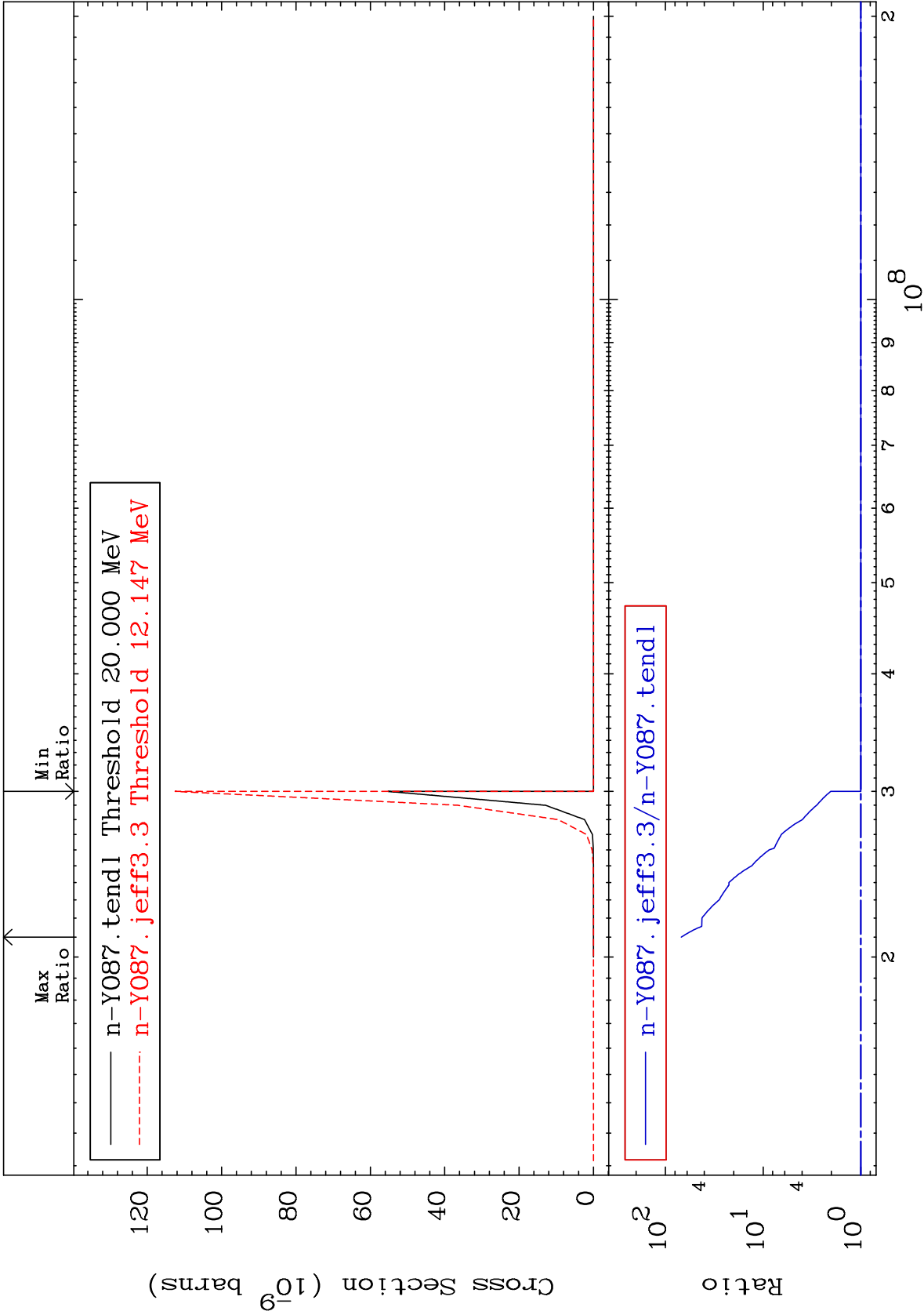
(n,n') 2α:35-Br-79m1

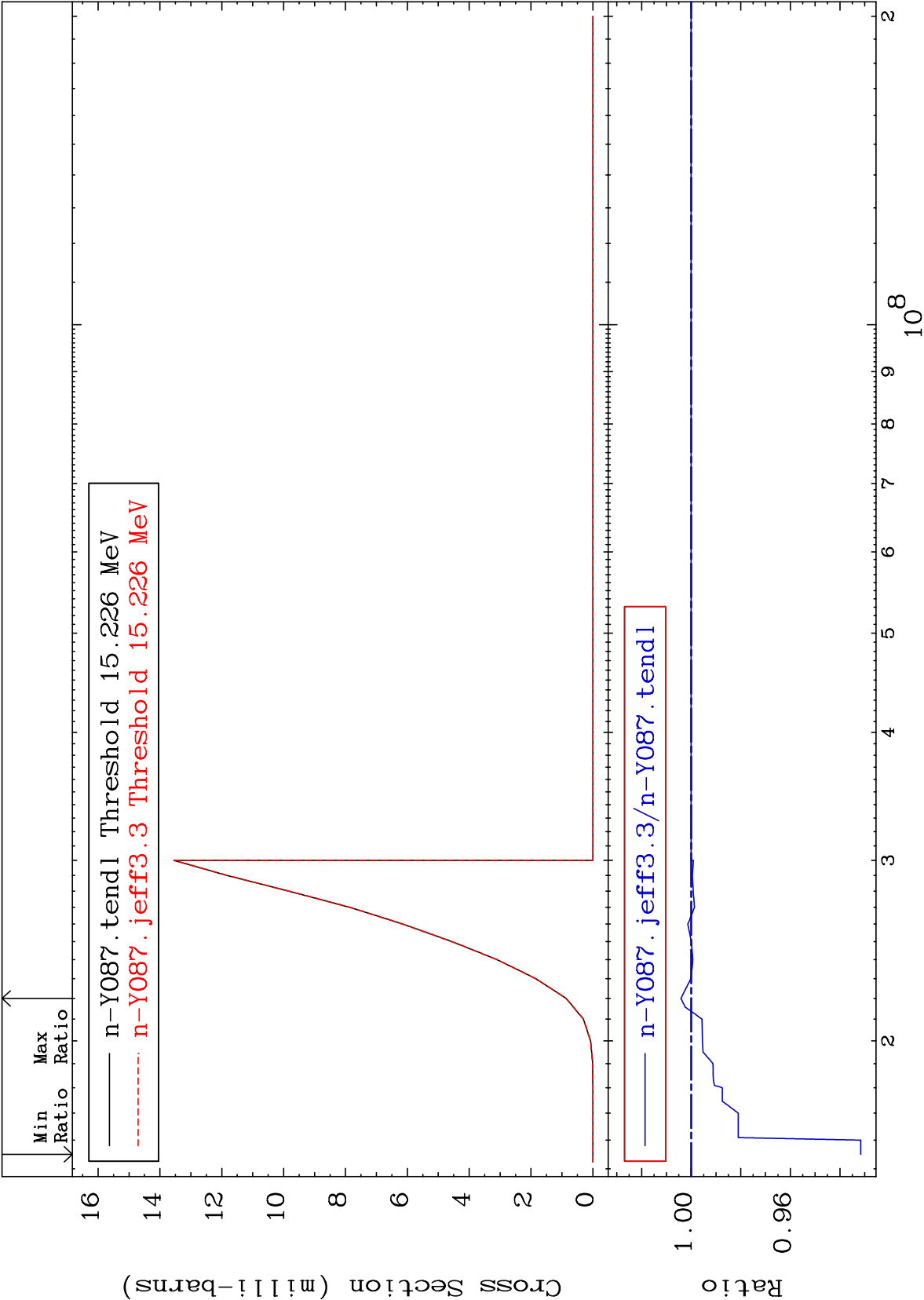
39-Y -87

Radionuclide Production Cross Section

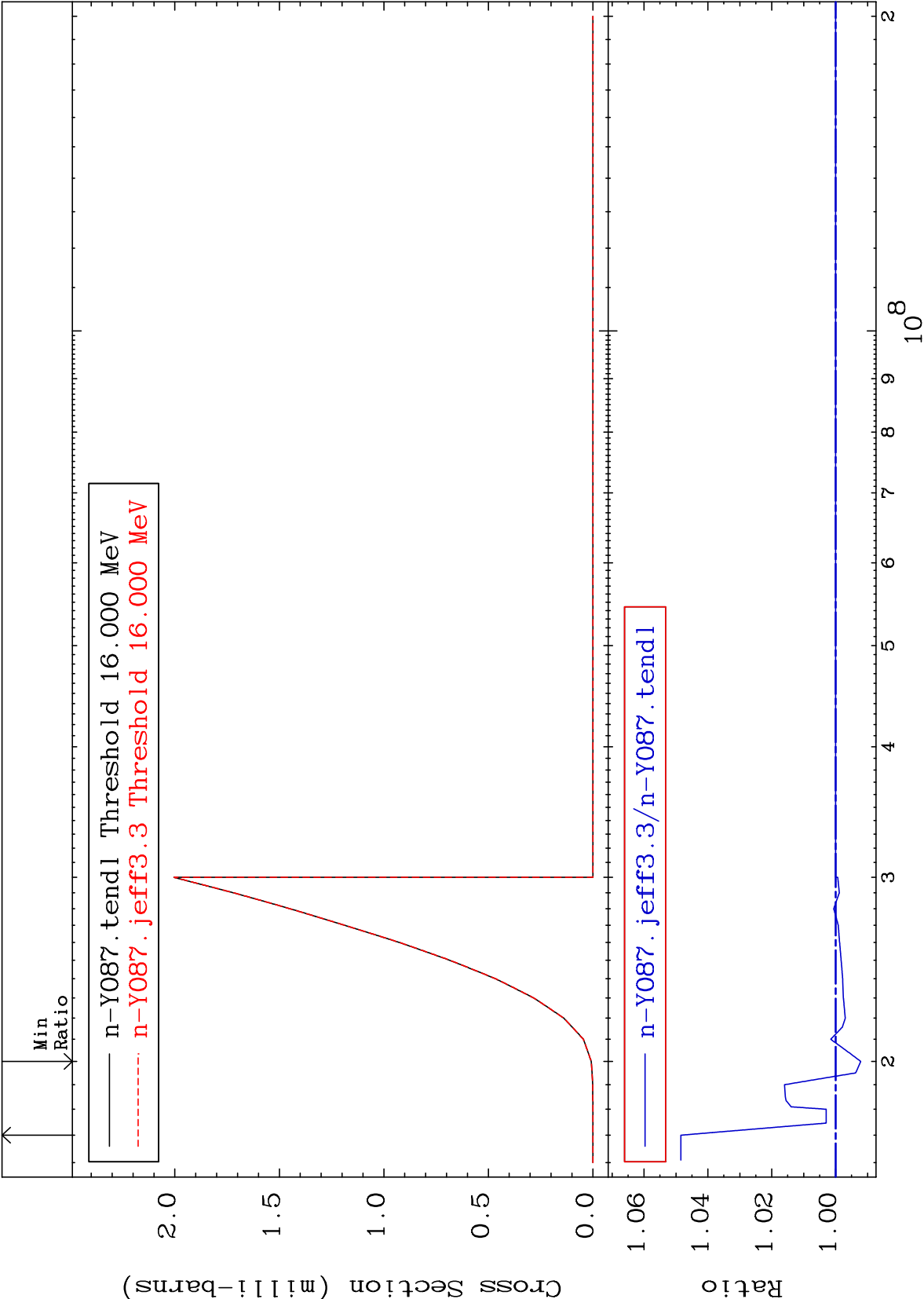
0.000

To 6781. %





Radionuclide Production Cross Section -0.786 To 4.846 %



MAT 3919

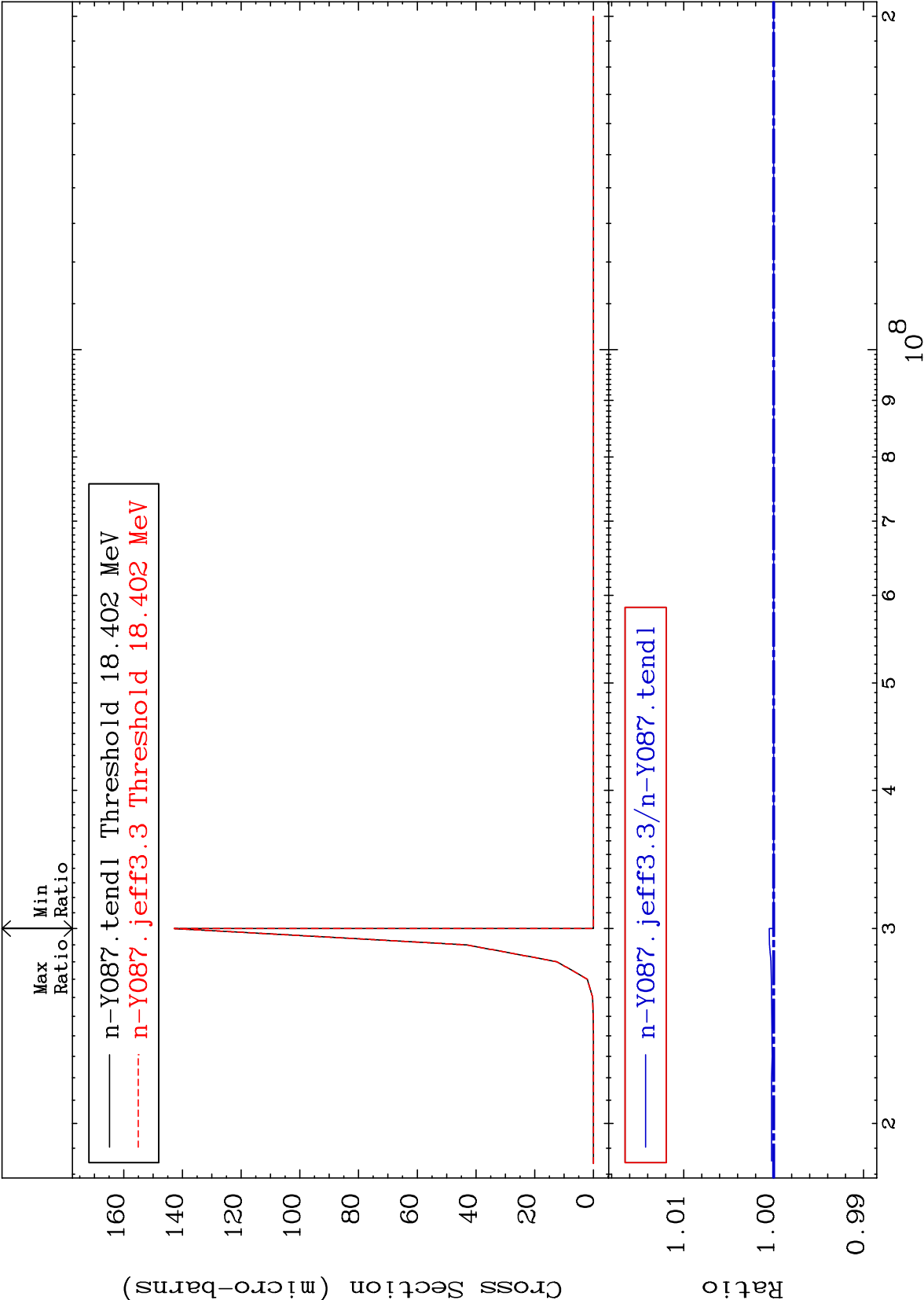
(n,n') He-3:37-Rb-84g

39-Y -87

Radionuclide Production Cross Section

0.000

To 0.048 %

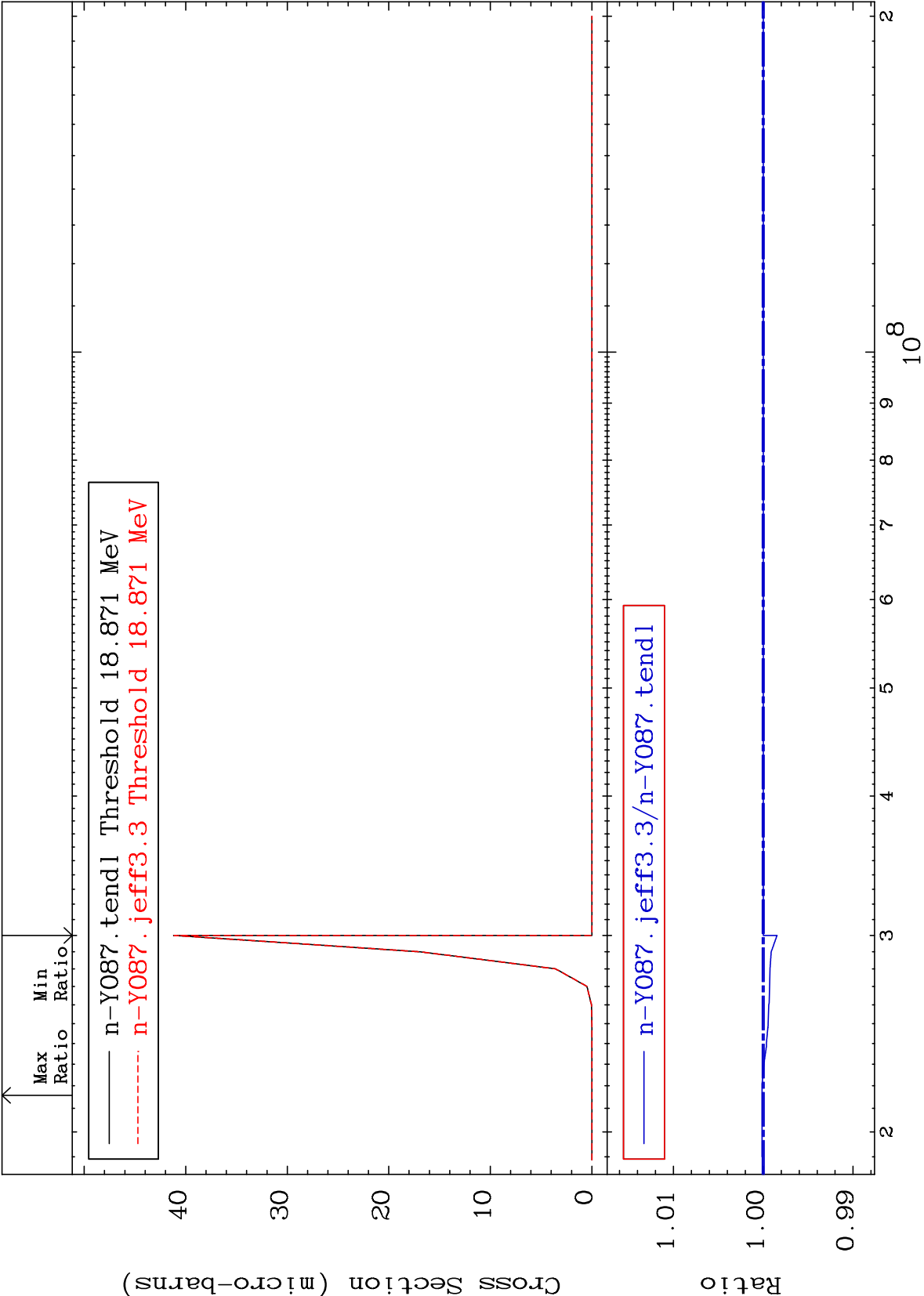


90

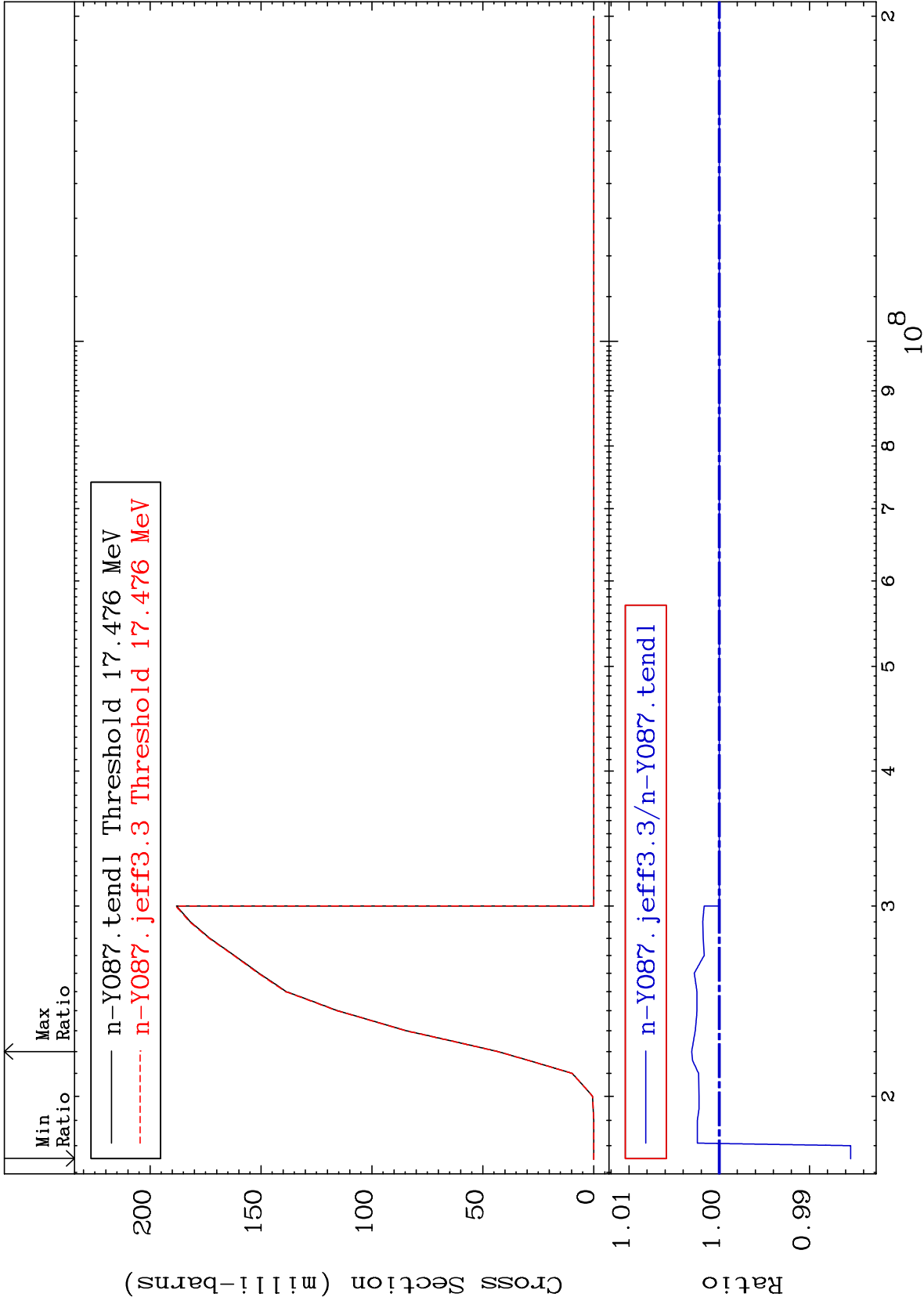
Incident Energy (eV)

39-Y -87

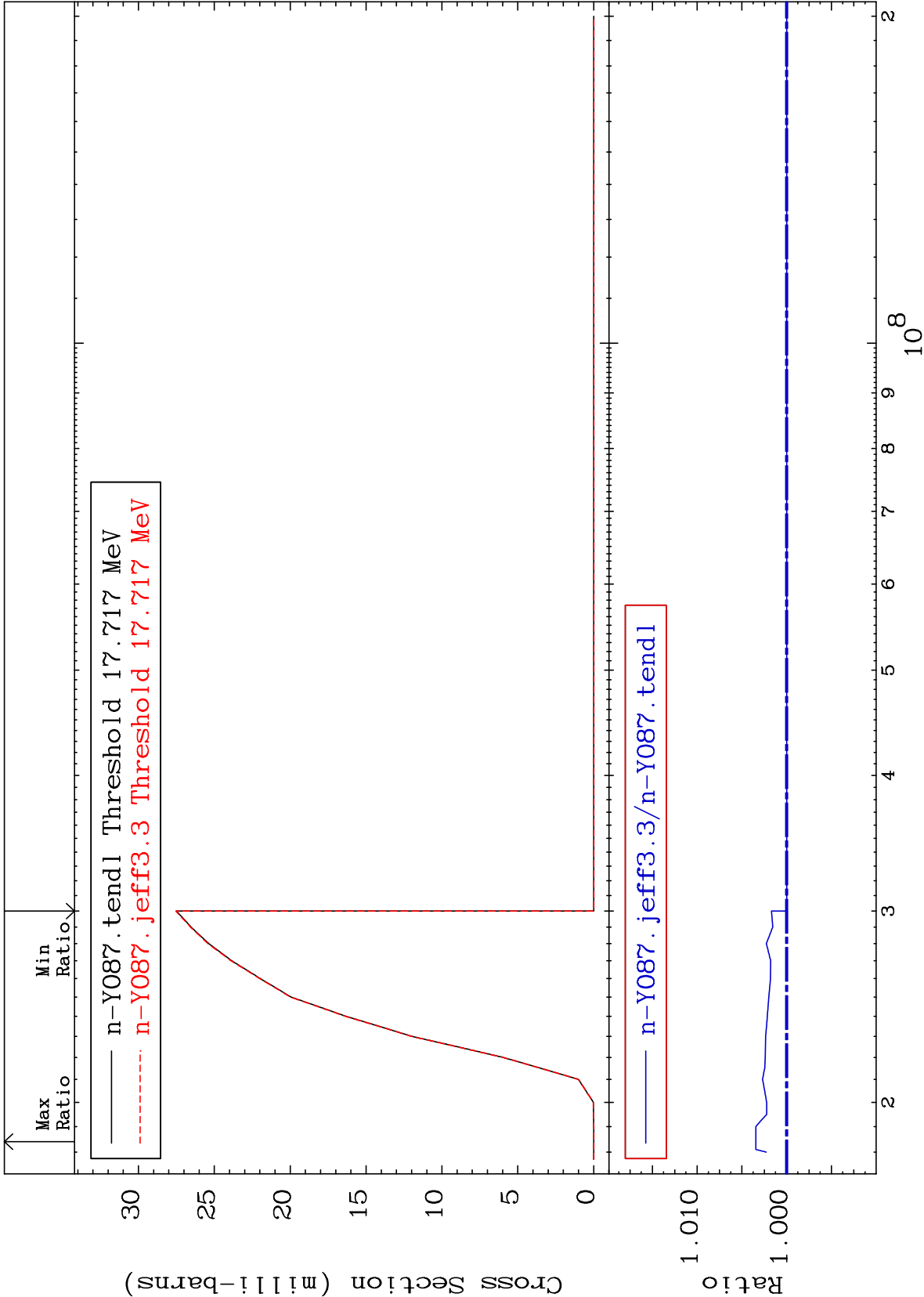
Radionuclide Production Cross Section -0.154 To 0.014 %



Radionuclide Production Cross Section -1.457 To 0.306 %



Radionuclide Production Cross Section 0.000 To 0.346 %



MAT 3919

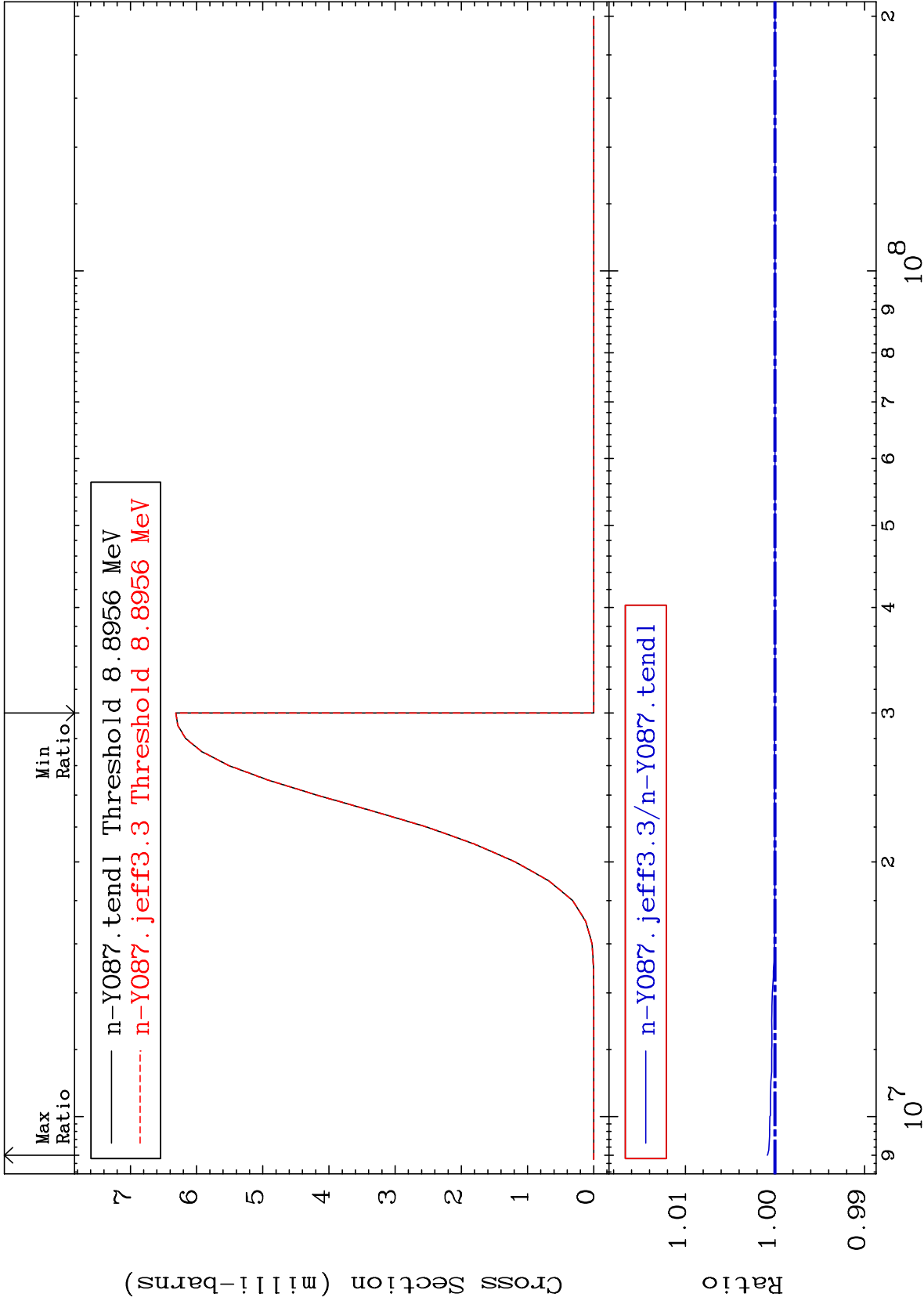
(n,t):38-Sr-85g

39-Y -87

Radionuclide Production Cross Section

0.000

To 0.084 %



94

Incident Energy (eV)

39-Y -87

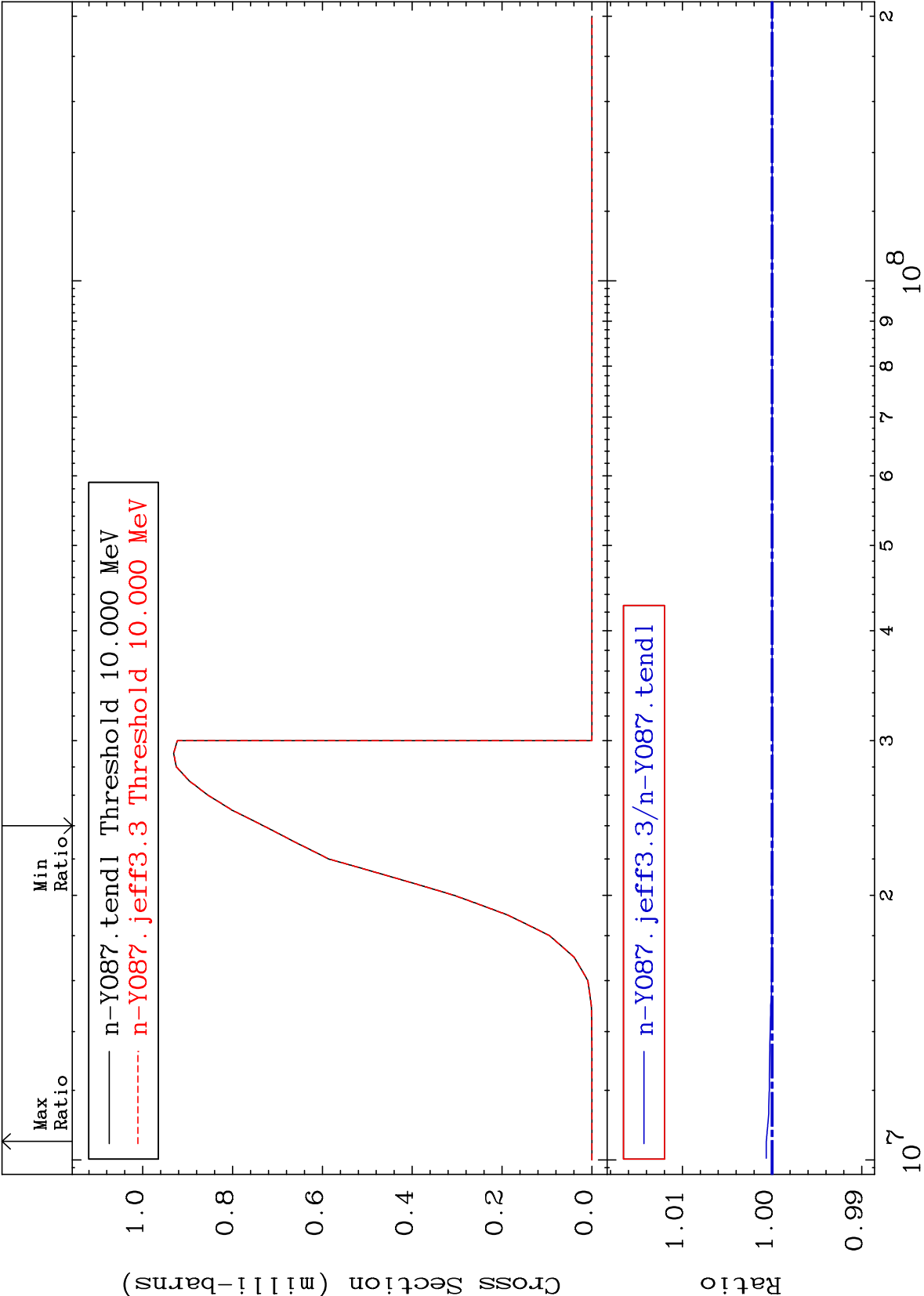
MAT 3919

(n,t):38-Sr-85m2

39-Y -87

Radionuclide Production Cross Section

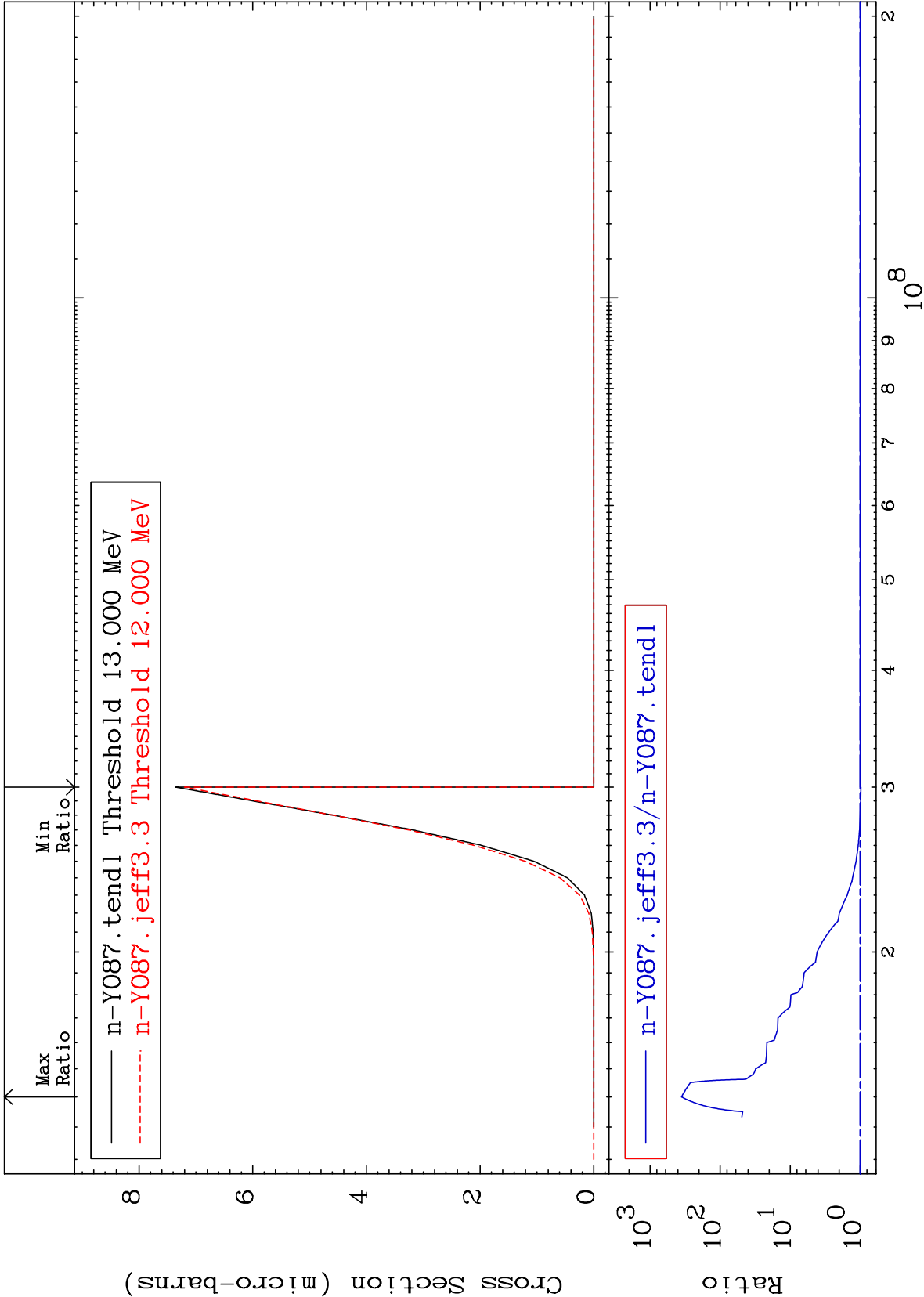
-0.007 To 0.065 %



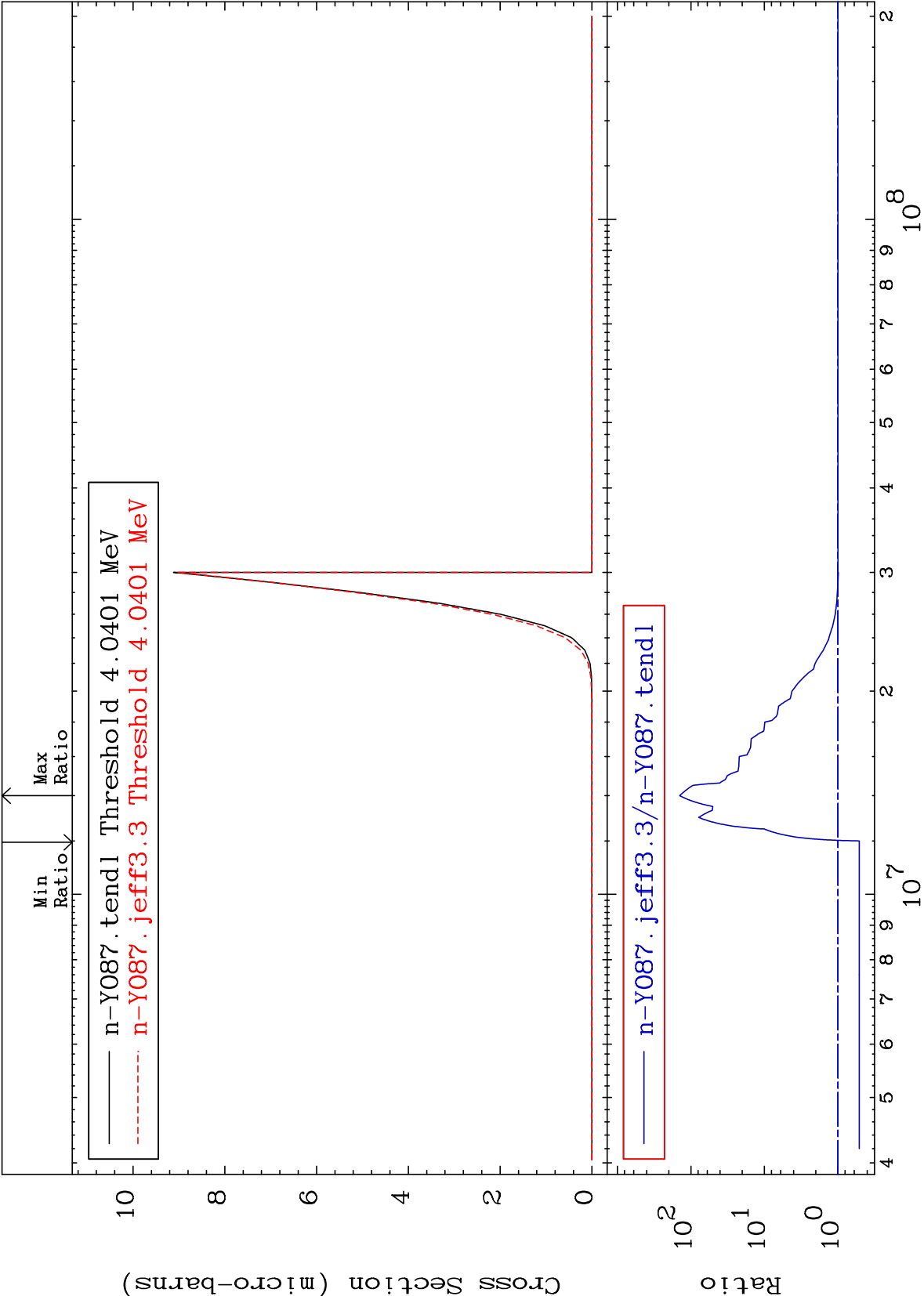
Incident Energy (eV)

39-Y -87

Radionuclide Production Cross Section -2.126 To 9999. %



Radionuclide Production Cross Section -48.69 To 9999. %



MAT 3919

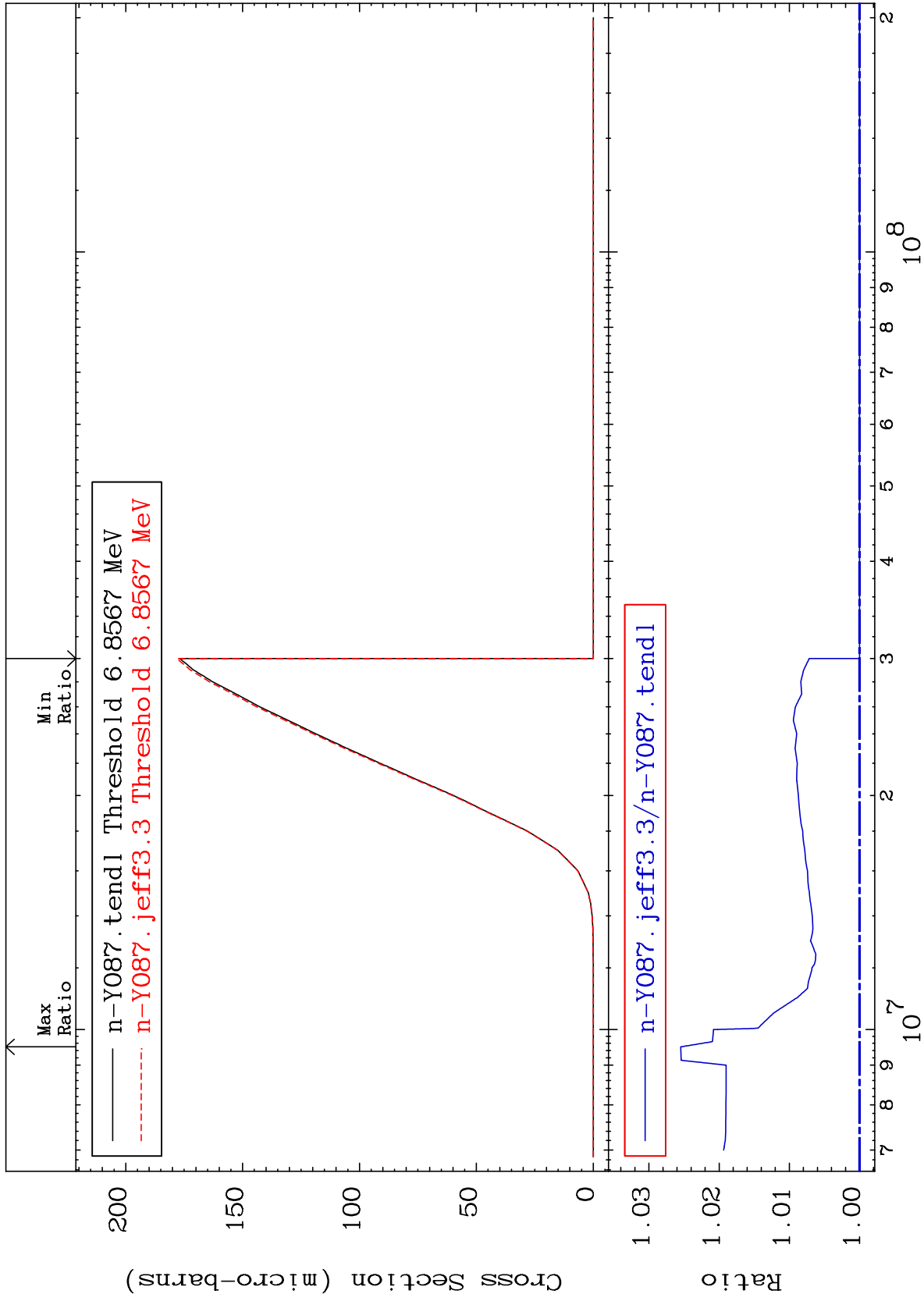
(n,2p):37-Rb-86g

39-Y -87

Radionuclide Production Cross Section

0.000

To 2.547 %



98

Incident Energy (eV)

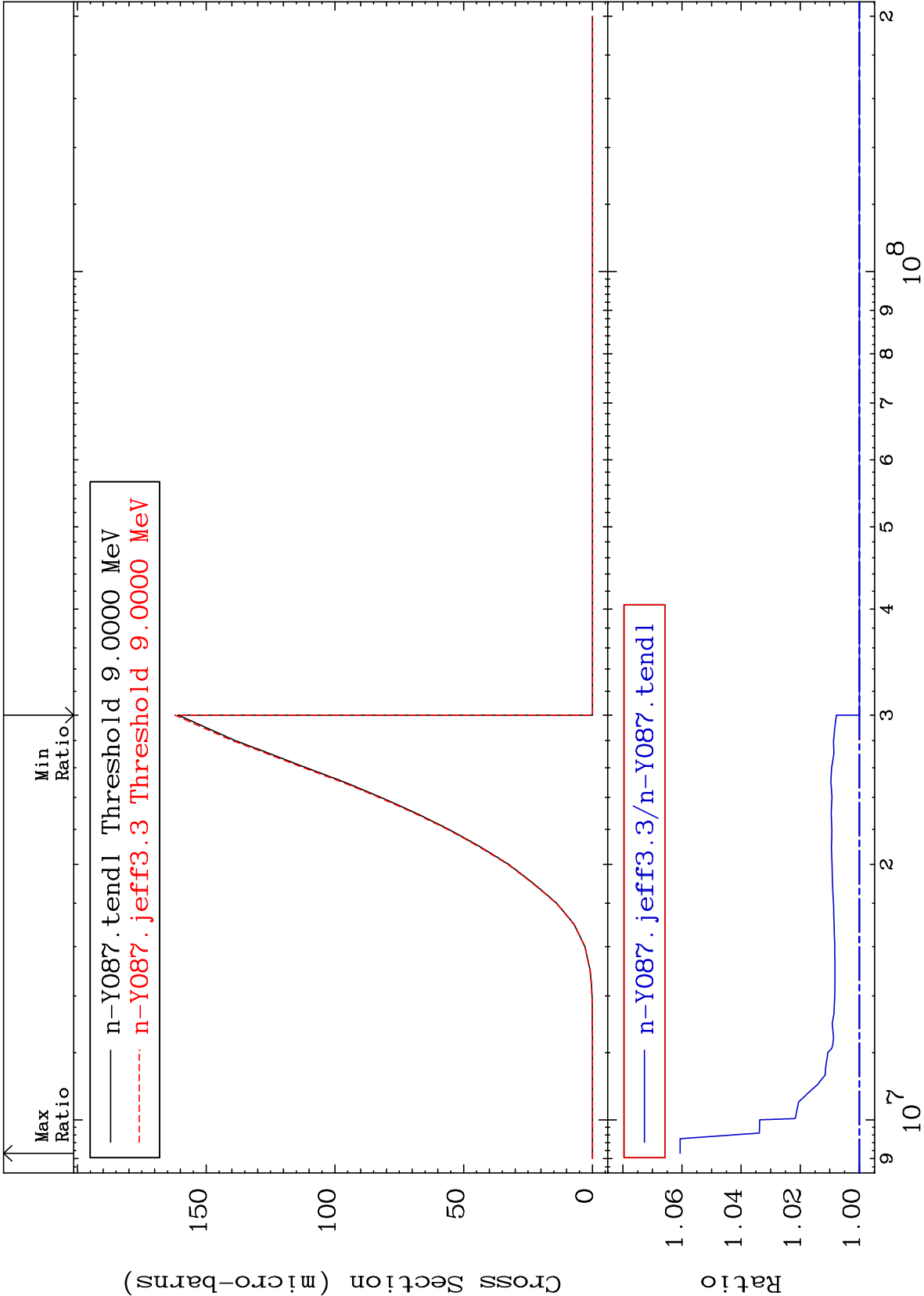
39-Y -87

MAT 3919

(n,2p):37-Rb-86m2

39-Y -87

Radionuclide Production Cross Section 0.000 To 6.062 %



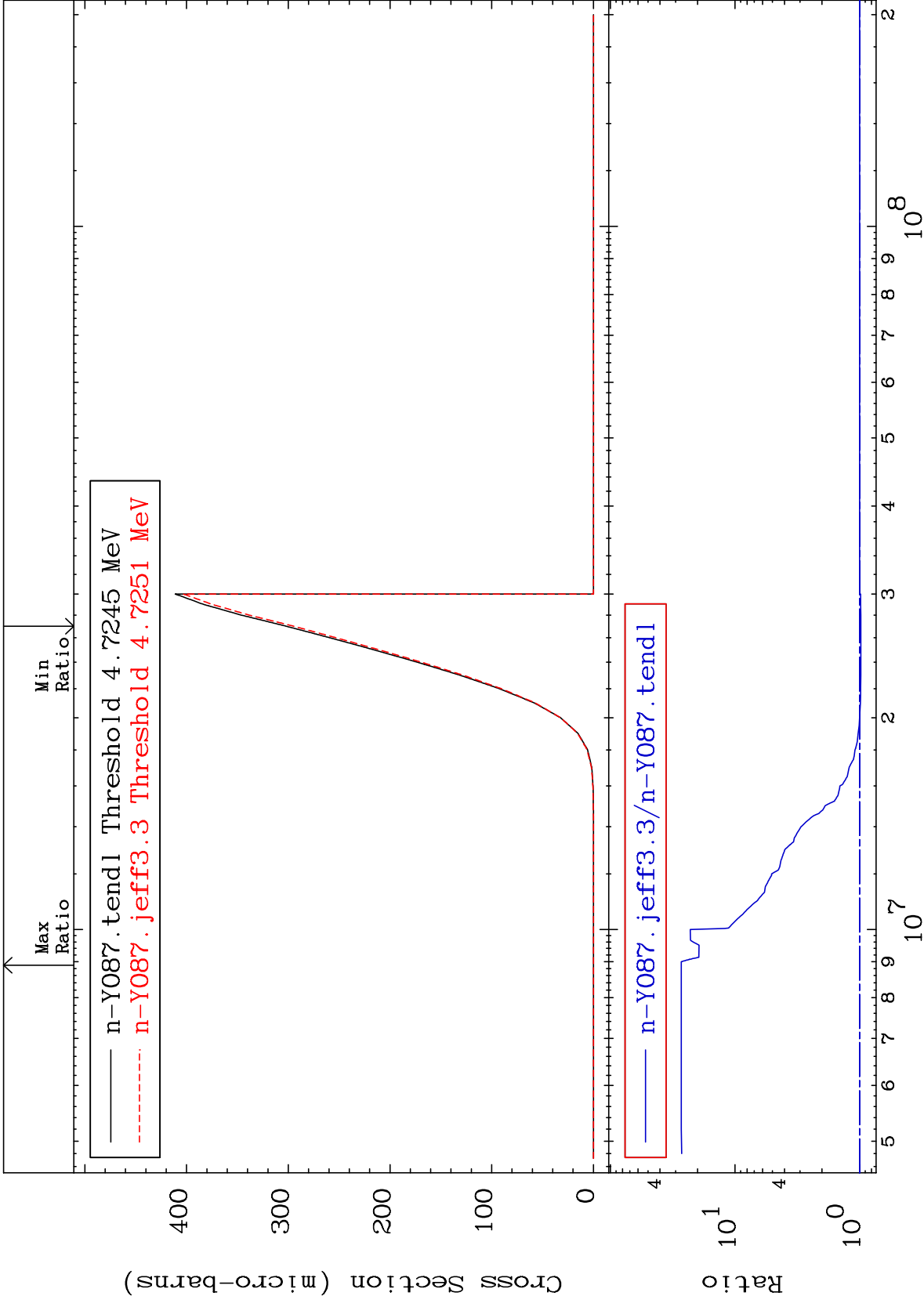
MAT 3919

(n,p) α :36-Kr-83g

39-Y -87

Radionuclide Production Cross Section

-2.442 To 2597. %

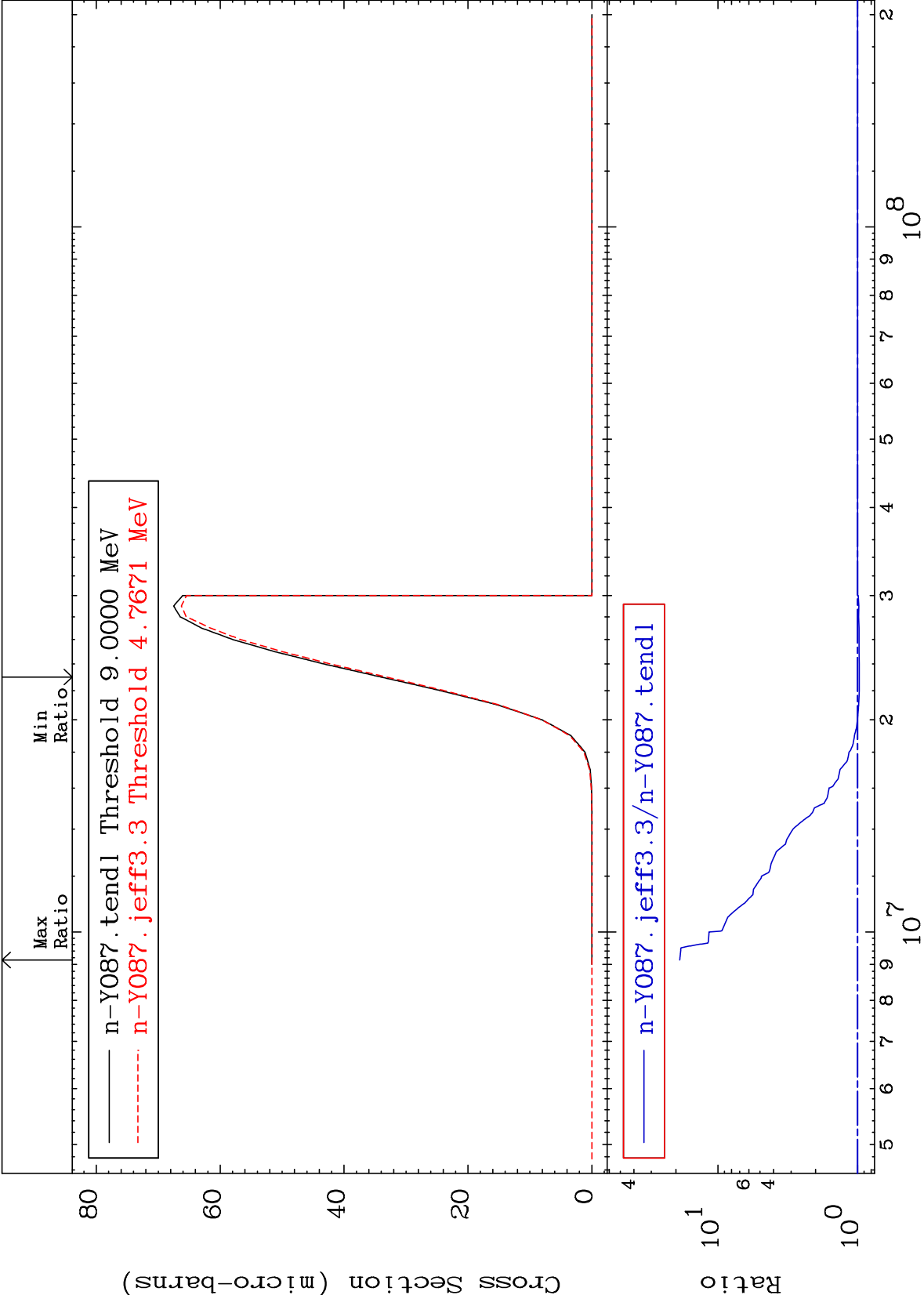


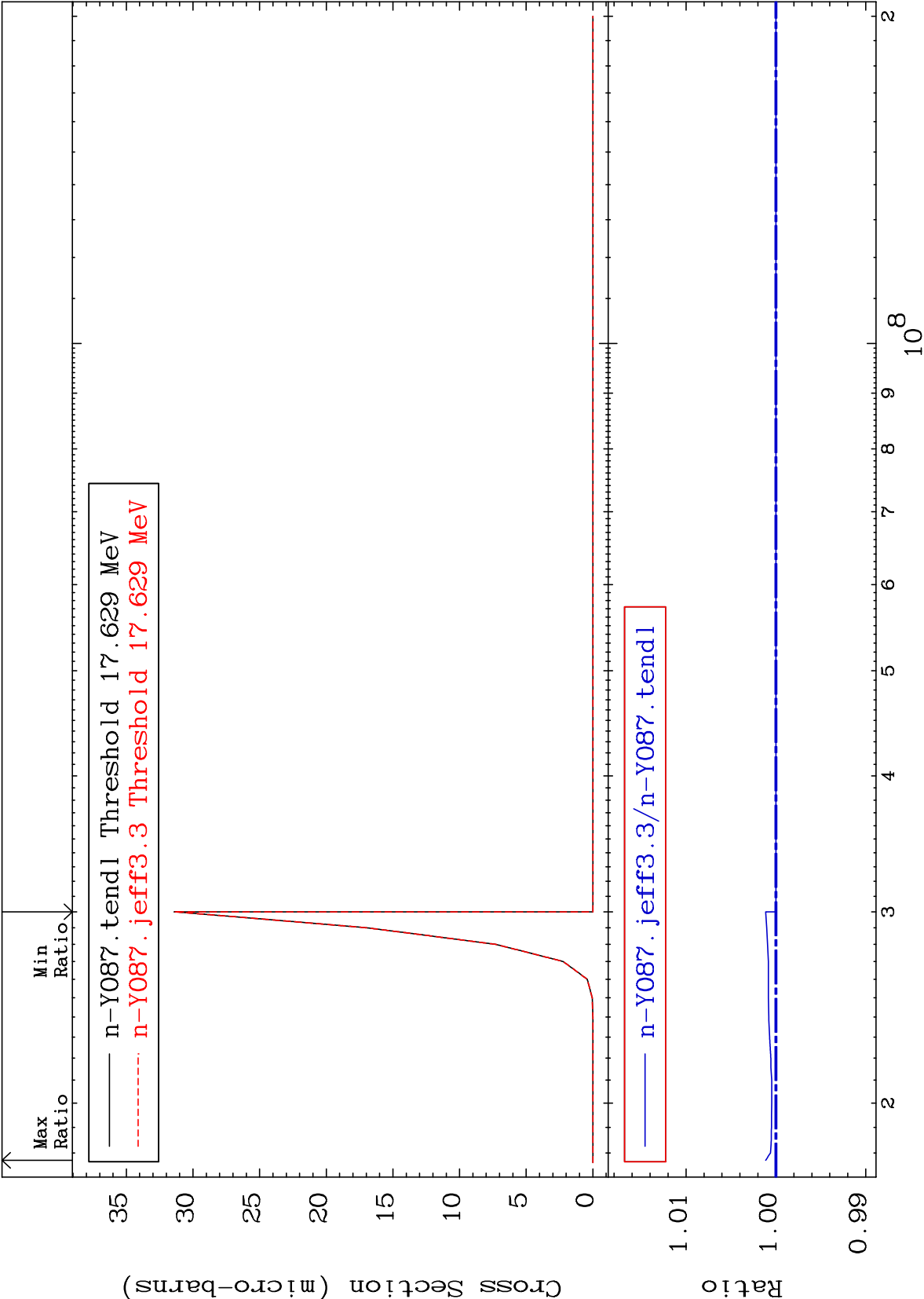
MAT 3919

(n,p) α :36-Kr-83m2

39-Y -87

Radionuclide Production Cross Section -2.576 To 1778. %





Radionuclide Production Cross Section

-0.229 To 0.066 %

