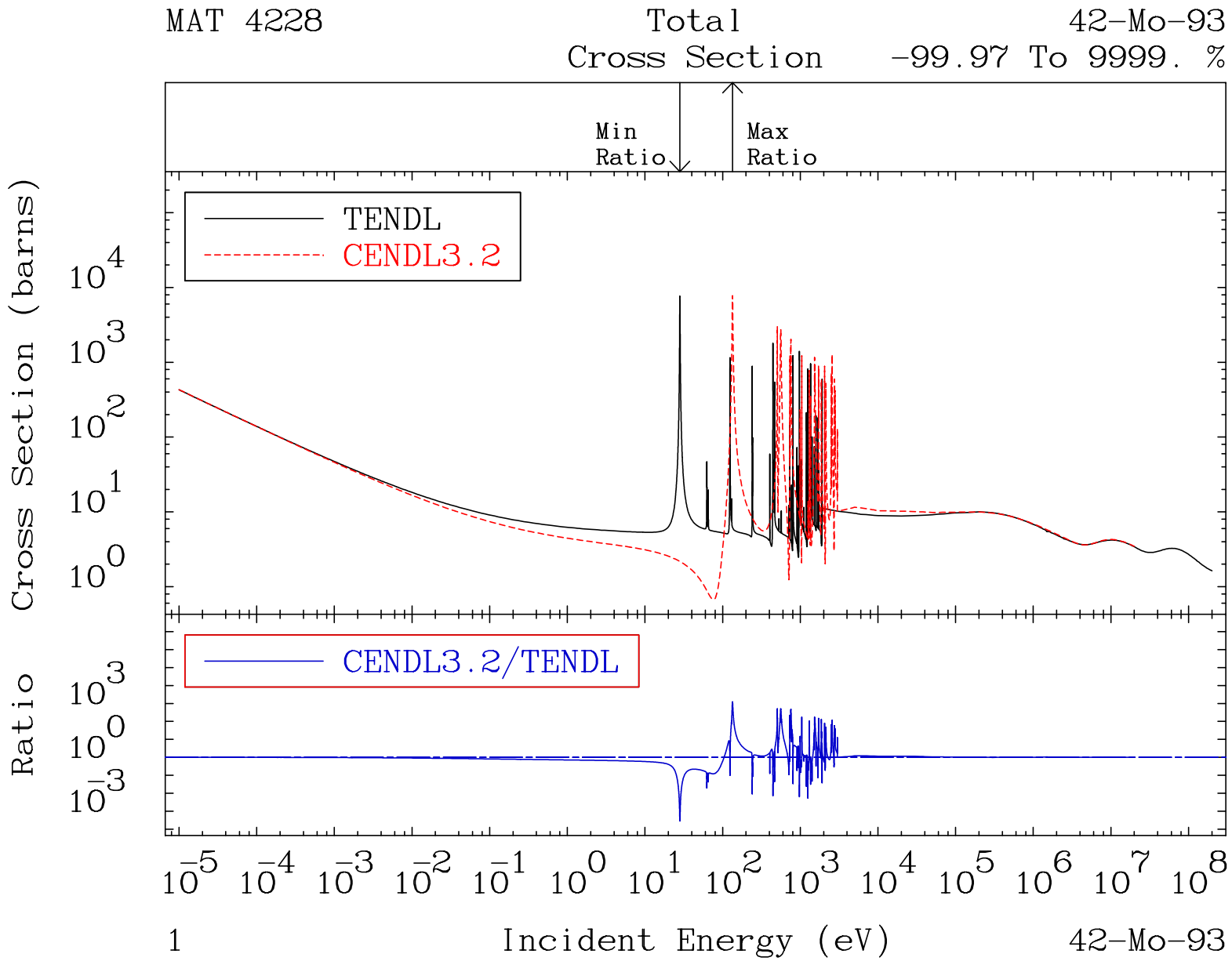
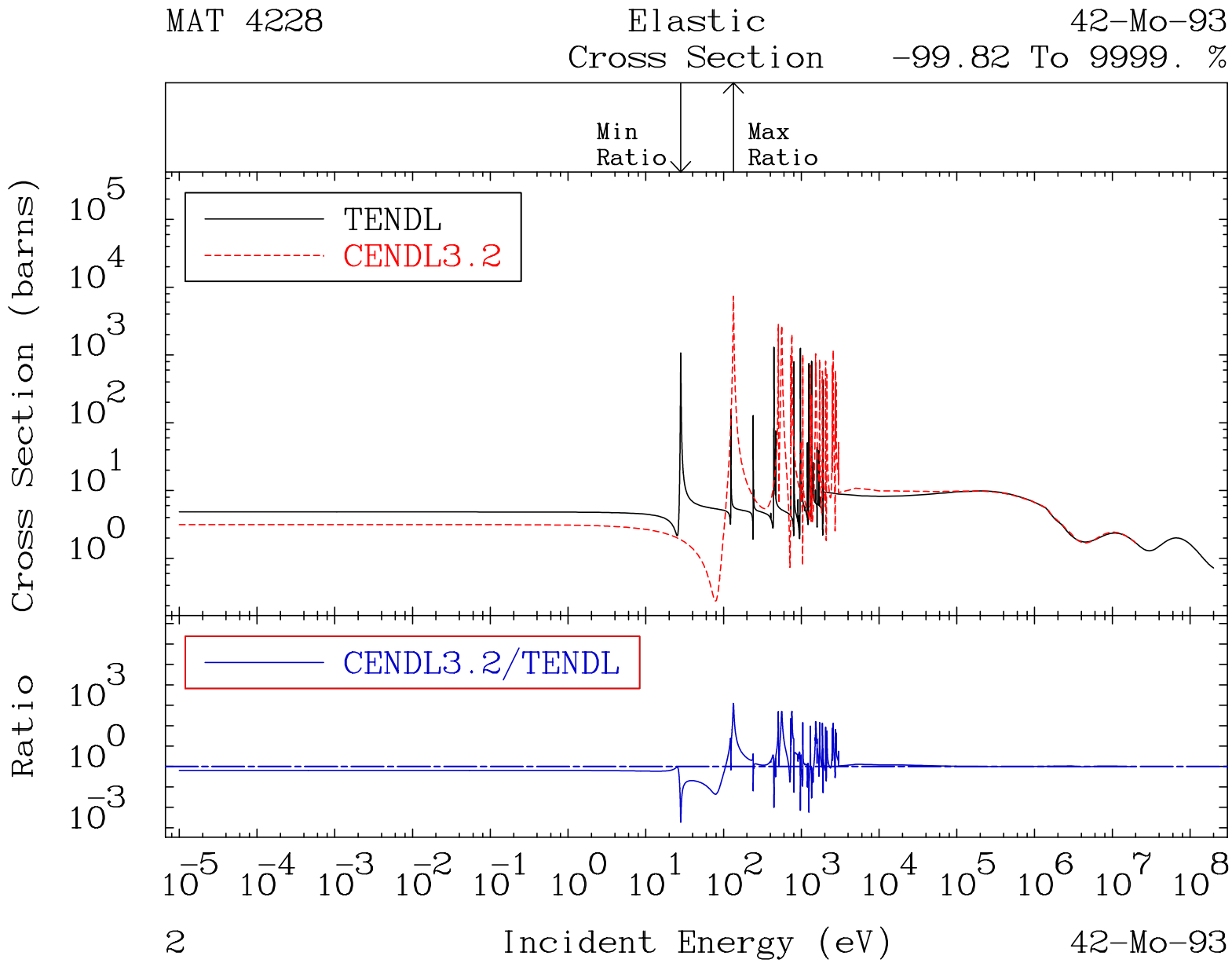
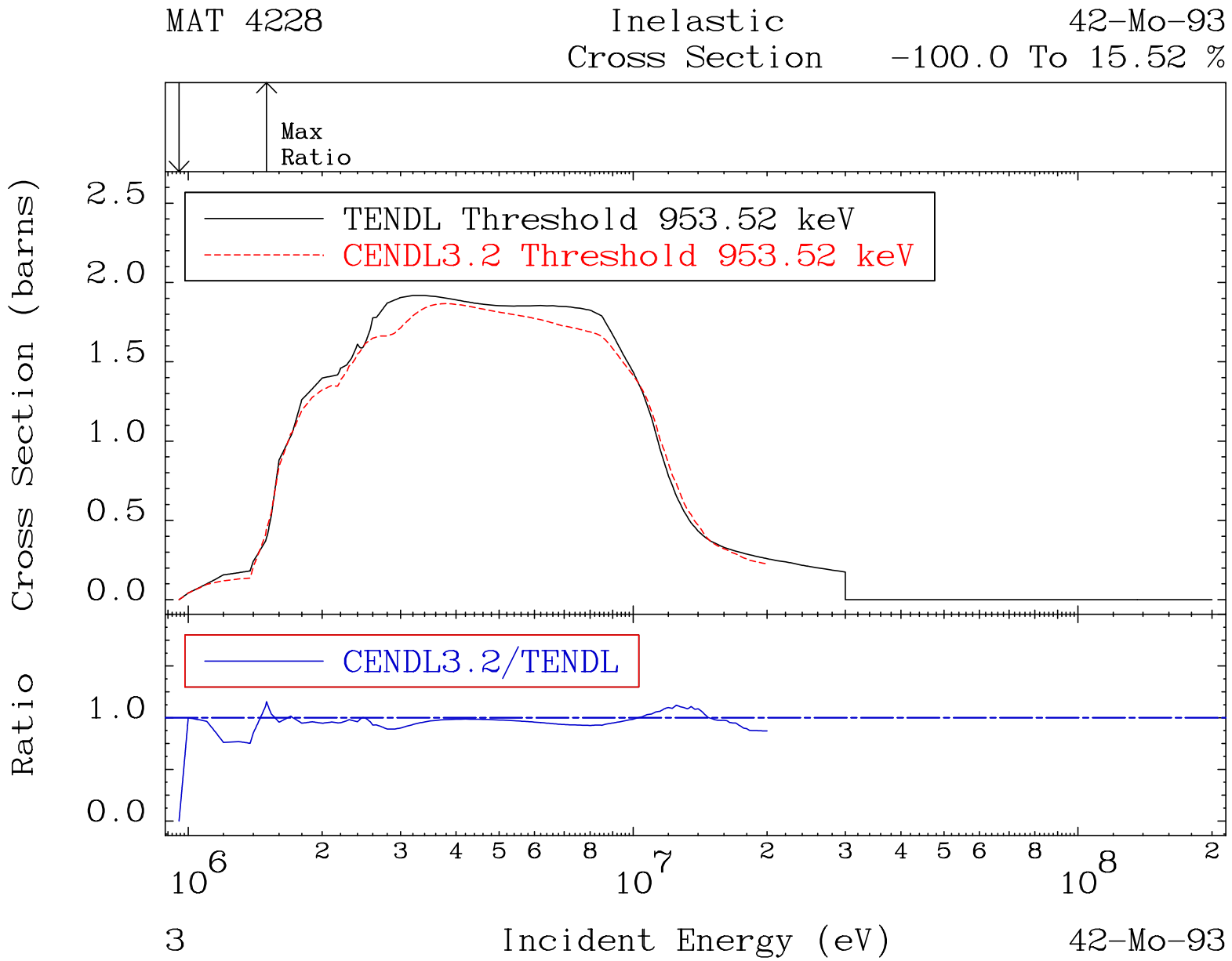
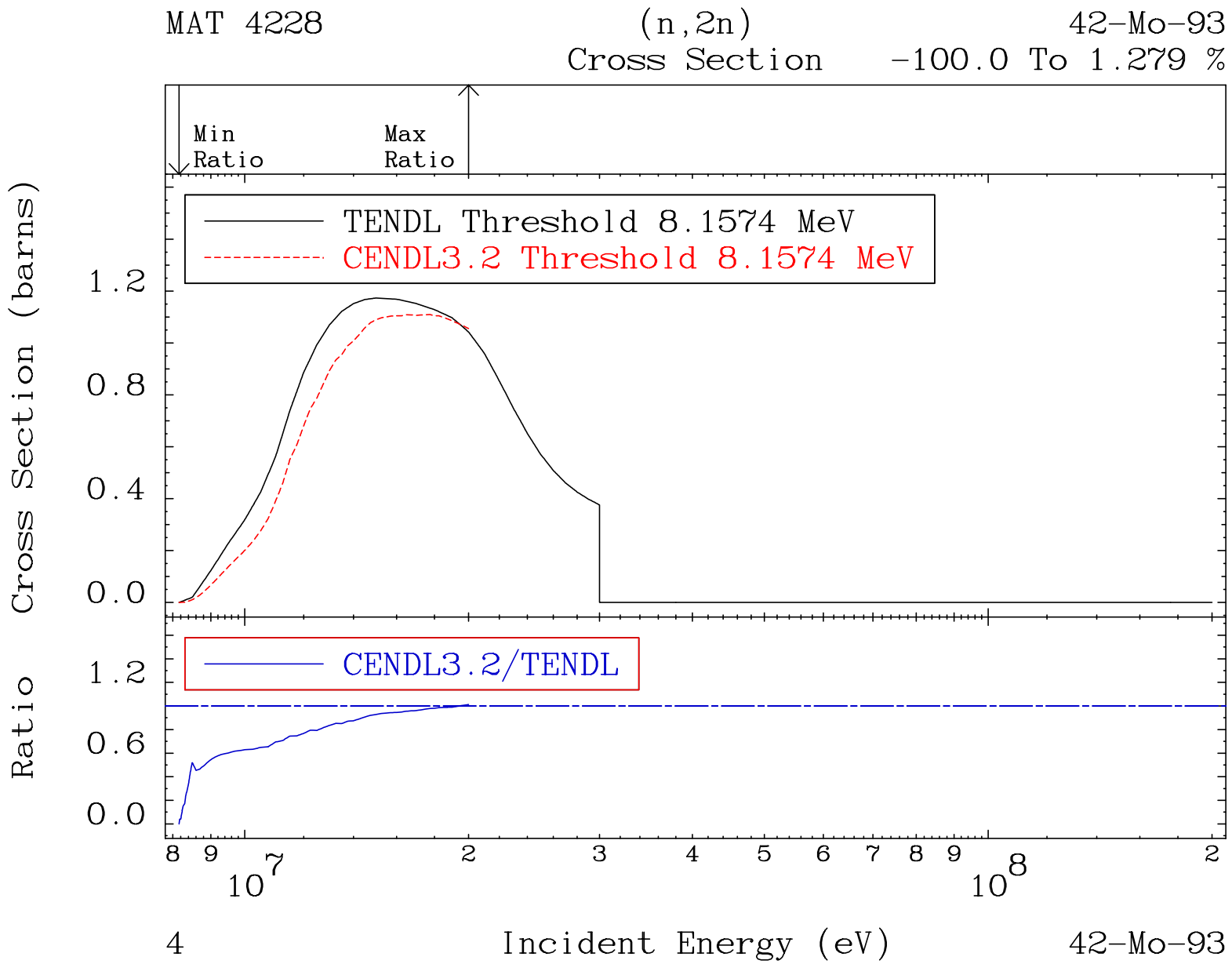
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

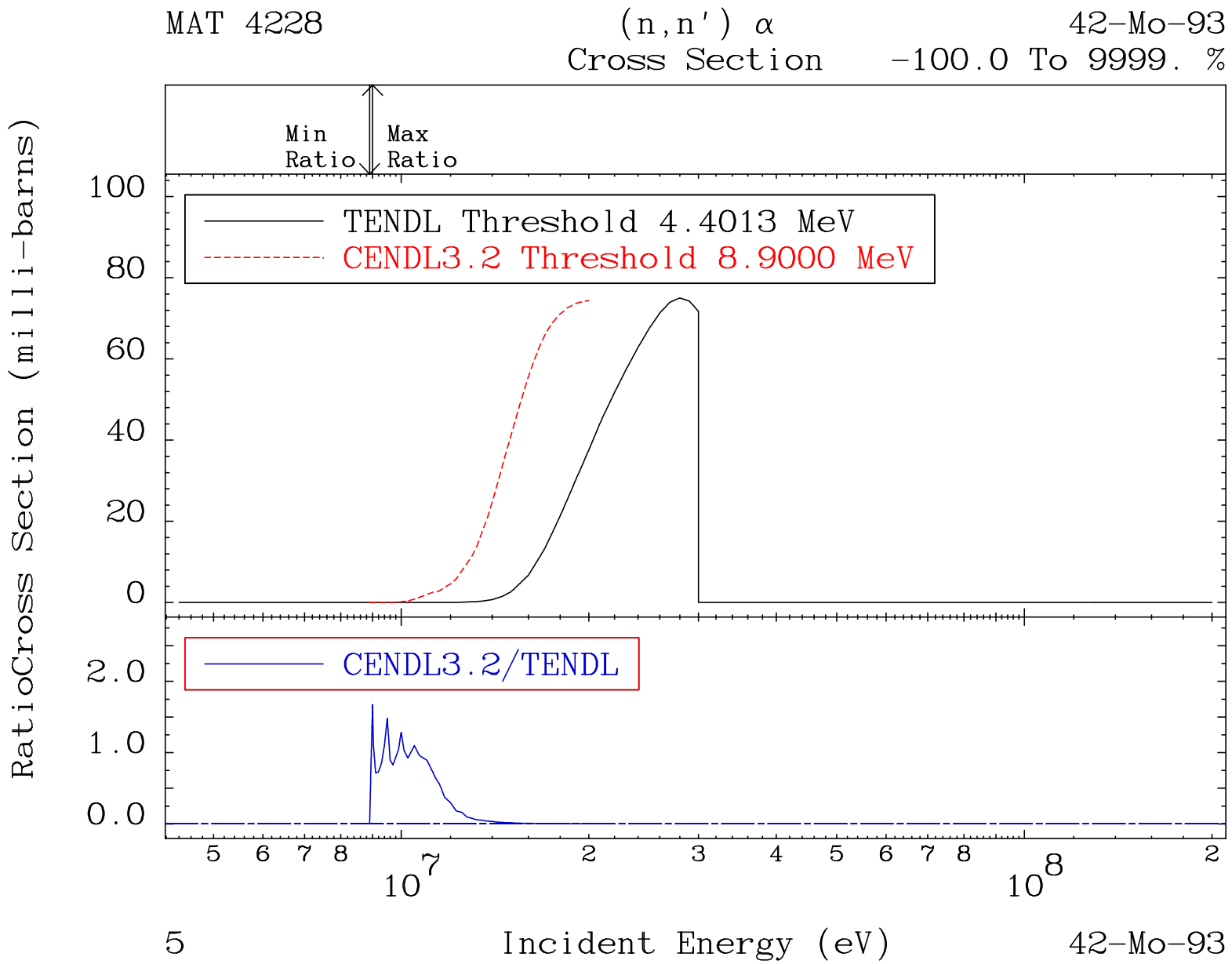
Press Mouse Button to Start

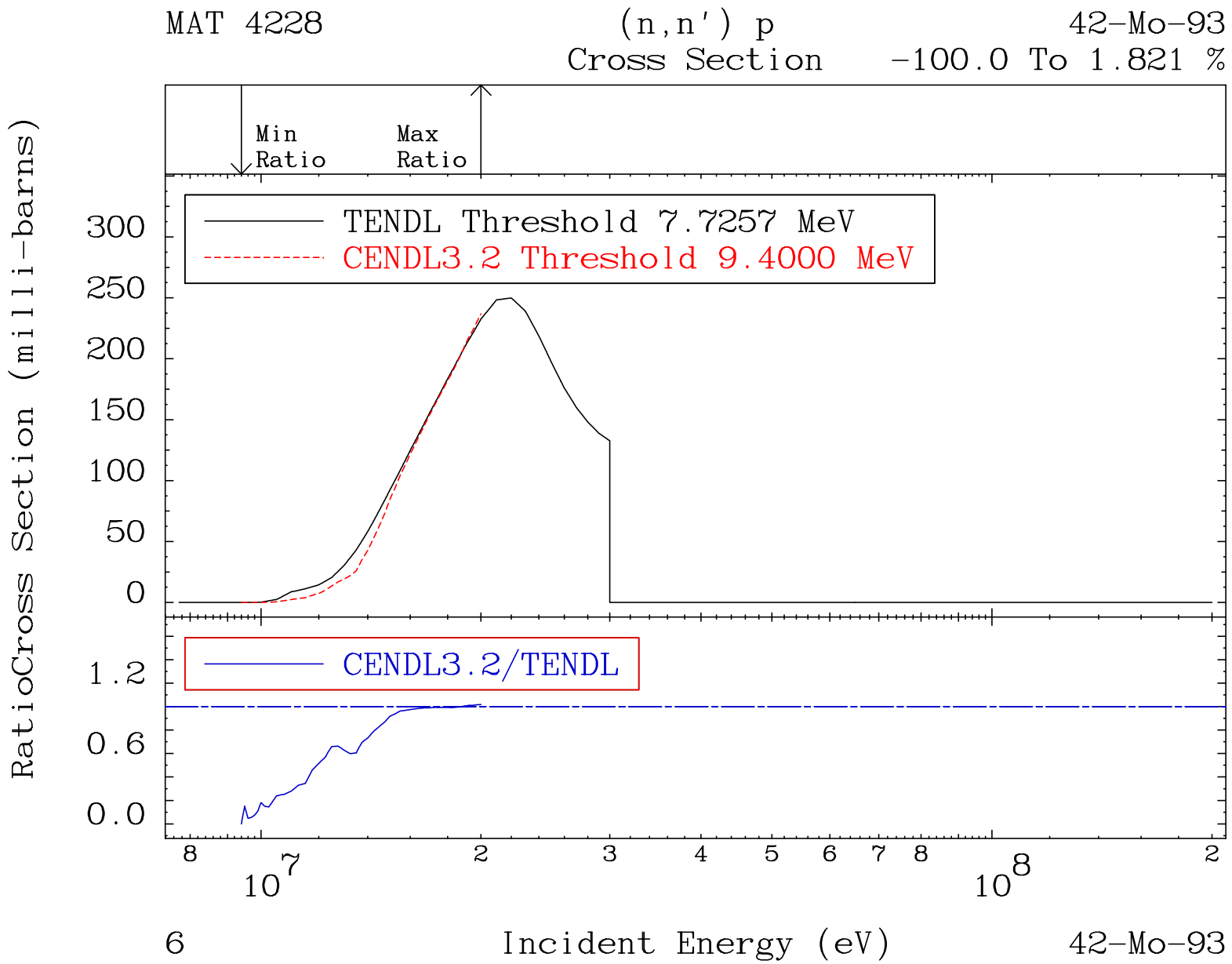

MAT 4228
Total
Cross Section
42-Mo-93
-99.97 To 9999. %
Min
Ratio
Max
Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
1
42-Mo-93

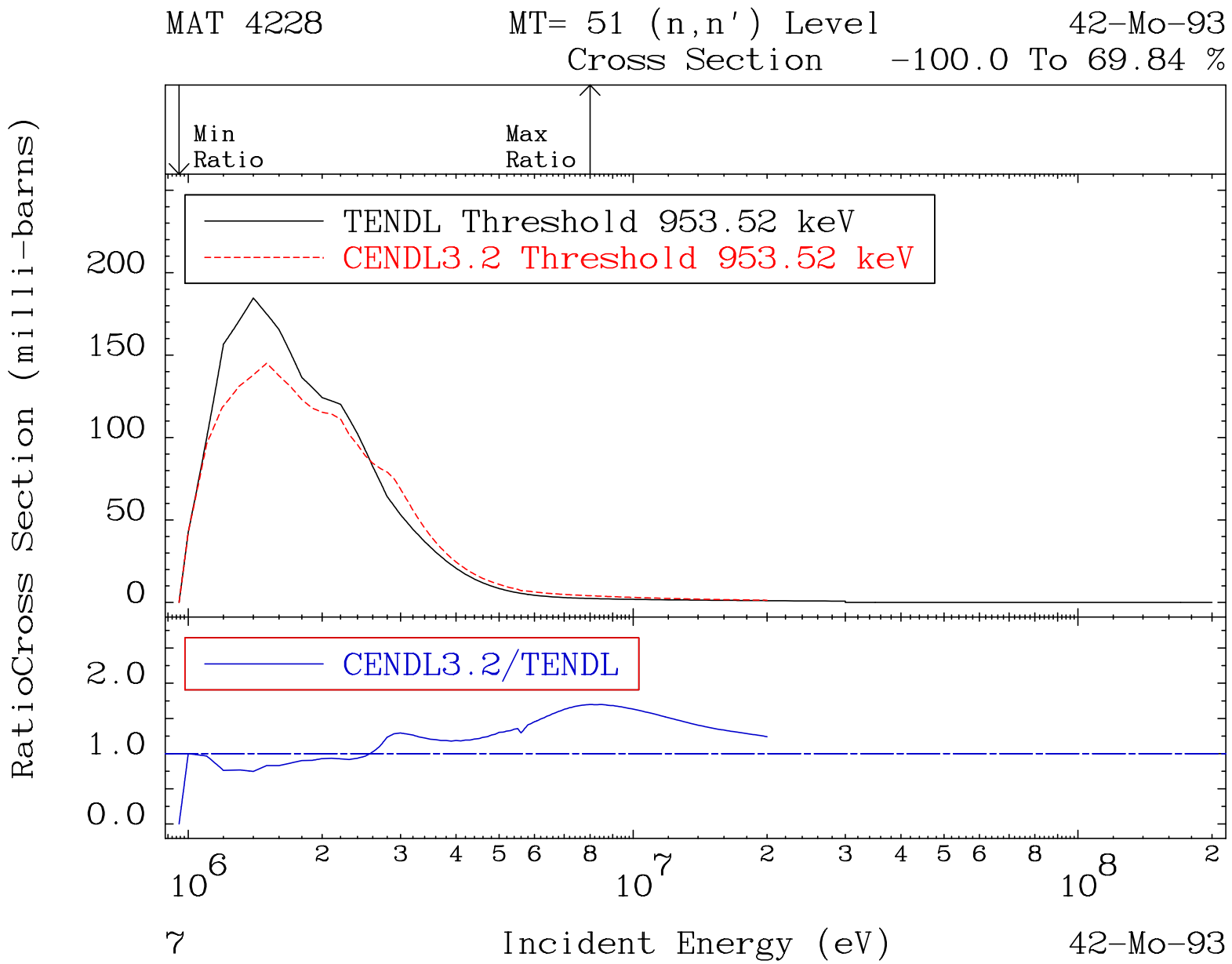

MAT 4228
Elastic
Cross Section
42-Mo-93
-99.82 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
2
42-Mo-93

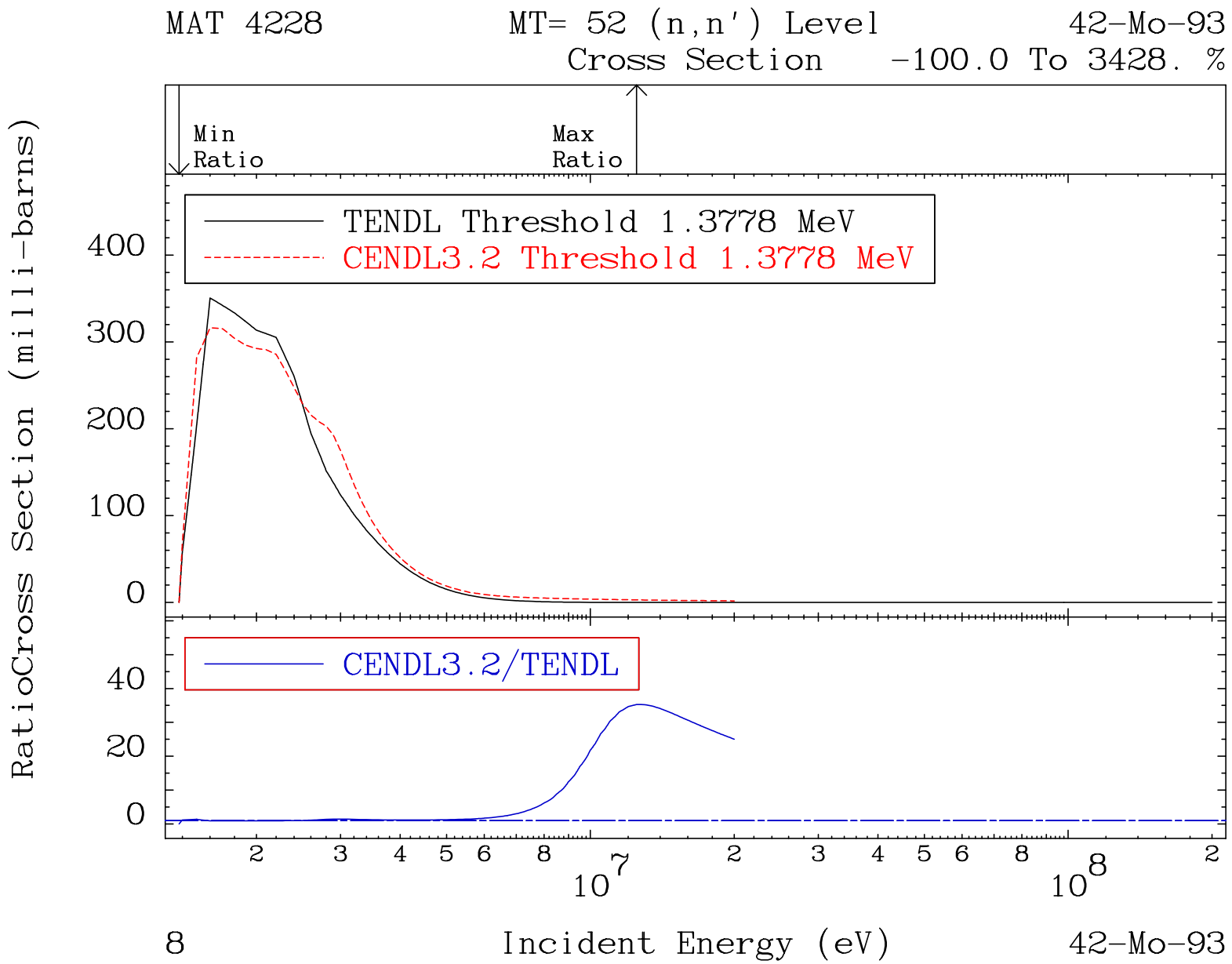

MAT 4228
Inelastic
Cross Section
42-Mo-93
-100.0 To 15.52 %
Max
Ratio
TENDL Threshold 953.52 keV
CENDL3.2 Threshold 953.52 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.0
0.0
10^6
10^7
10^8
Incident Energy (eV)
3
42-Mo-93

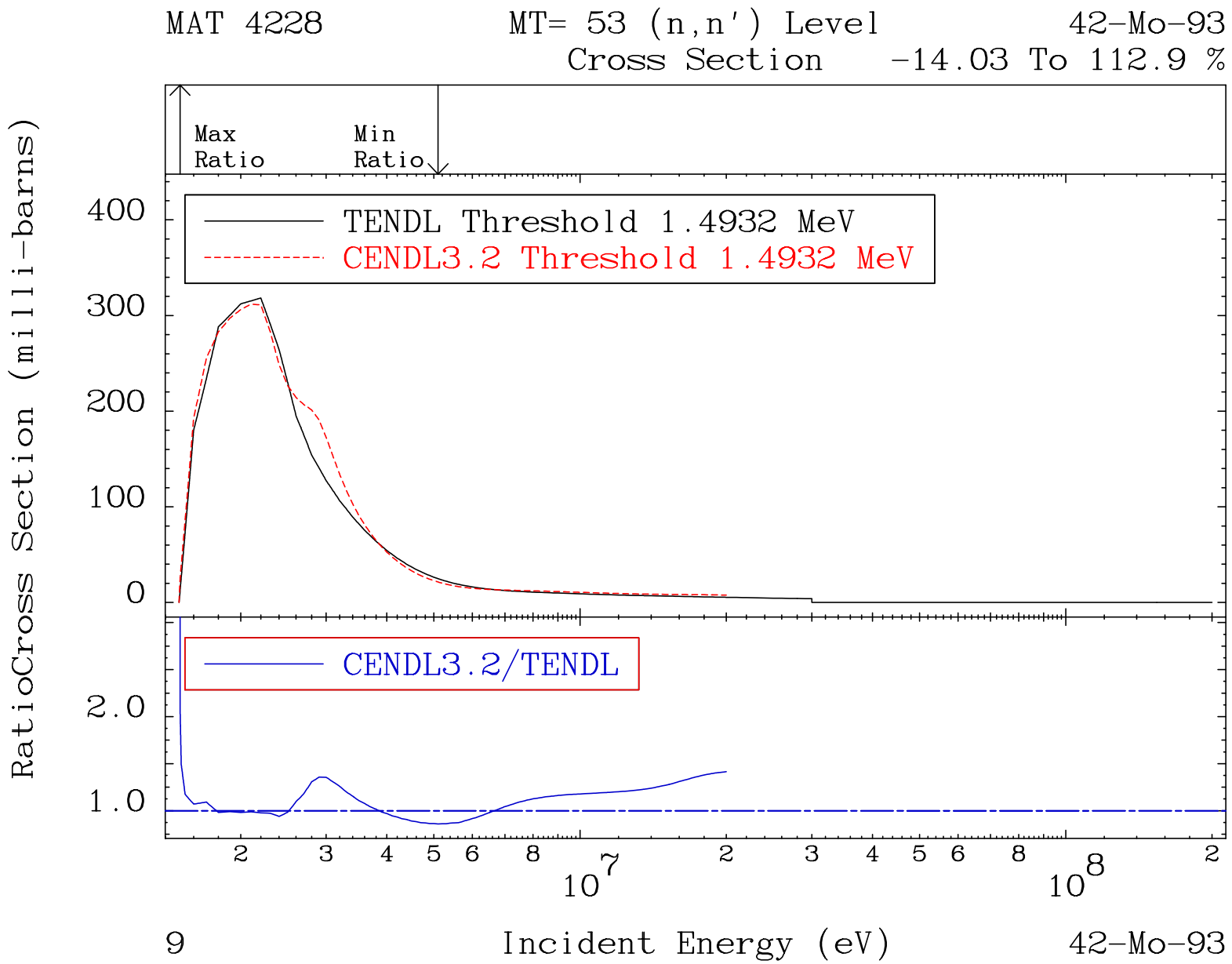

MAT 4228
(n,2n)
Cross Section
42-Mo-93
-100.0 To 1.279 %
Min Ratio
Max Ratio
TENDL Threshold 8.1574 MeV
CENDL3.2 Threshold 8.1574 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.2
0.8
0.4
0.0
1.2
0.6
0.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
42-Mo-93

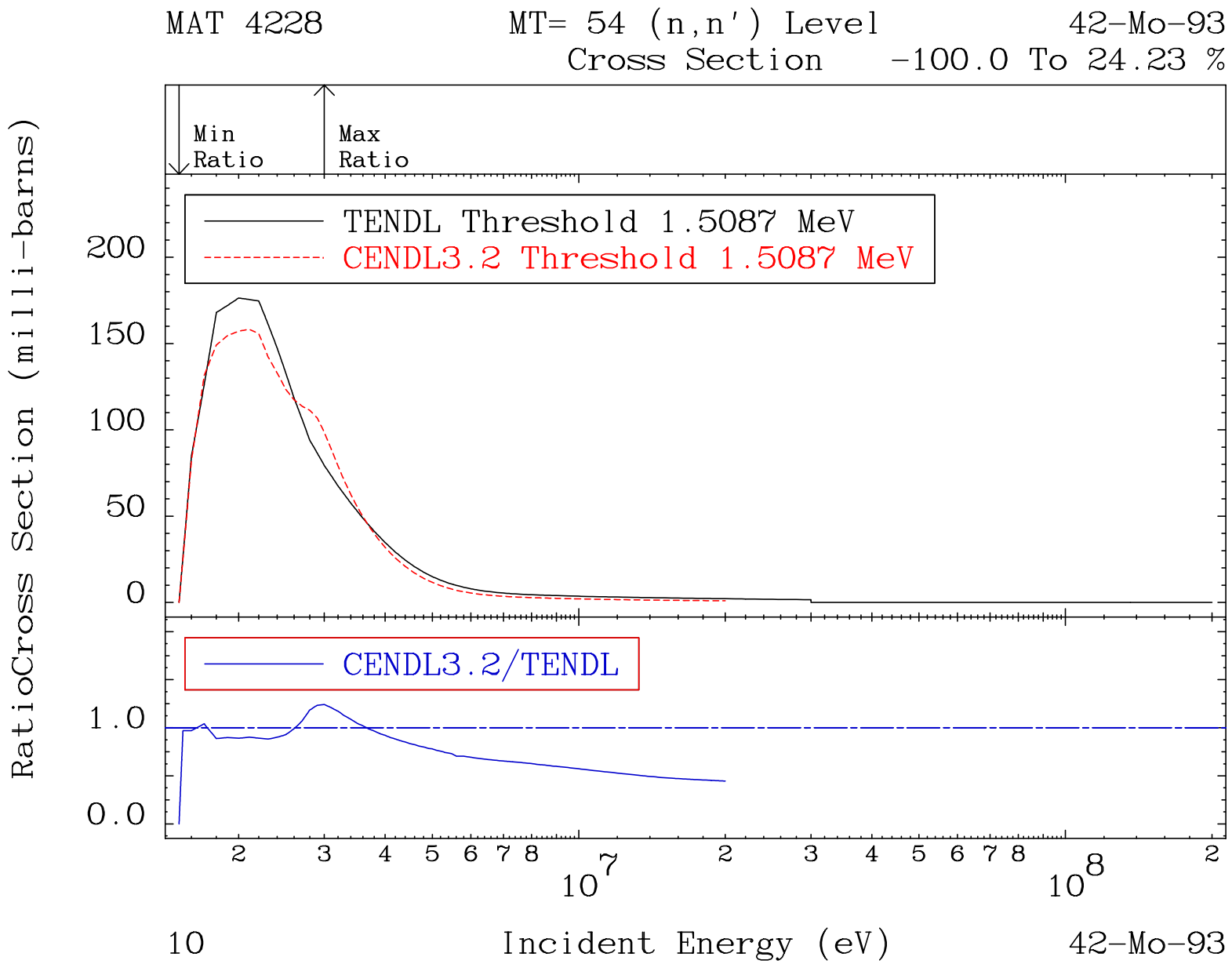

MAT 4228
(n,n') α
Cross Section
42-Mo-93
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4013 MeV
CENDL3.2 Threshold 8.9000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
5
42-Mo-93

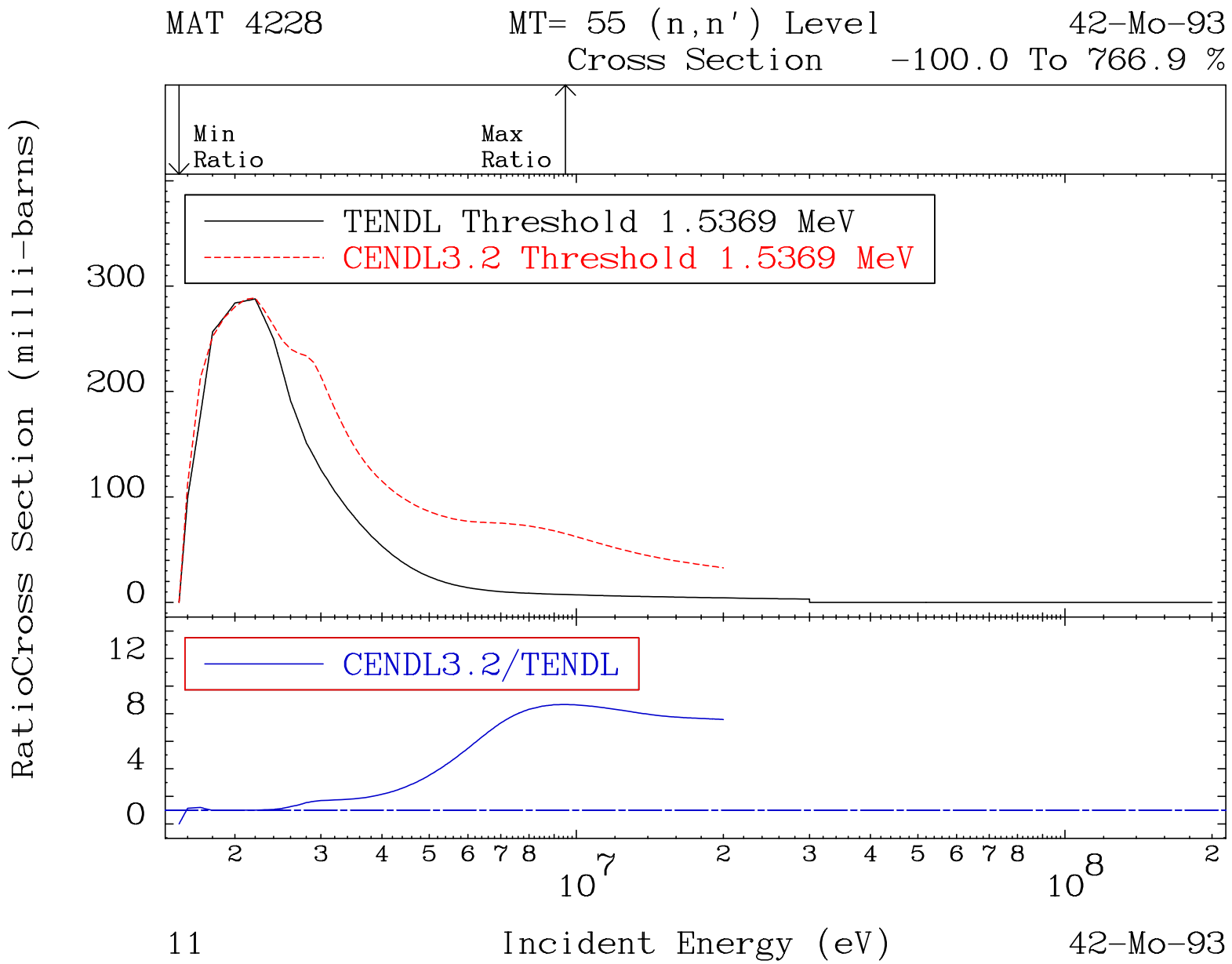

MAT 4228
(n,n') p
Cross Section
42-Mo-93
-100.0 To 1.821 %
Min Ratio
Max Ratio
TENDL Threshold 7.7257 MeV
CENDL3.2 Threshold 9.4000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
0.6
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
6
Incident Energy (eV)
42-Mo-93

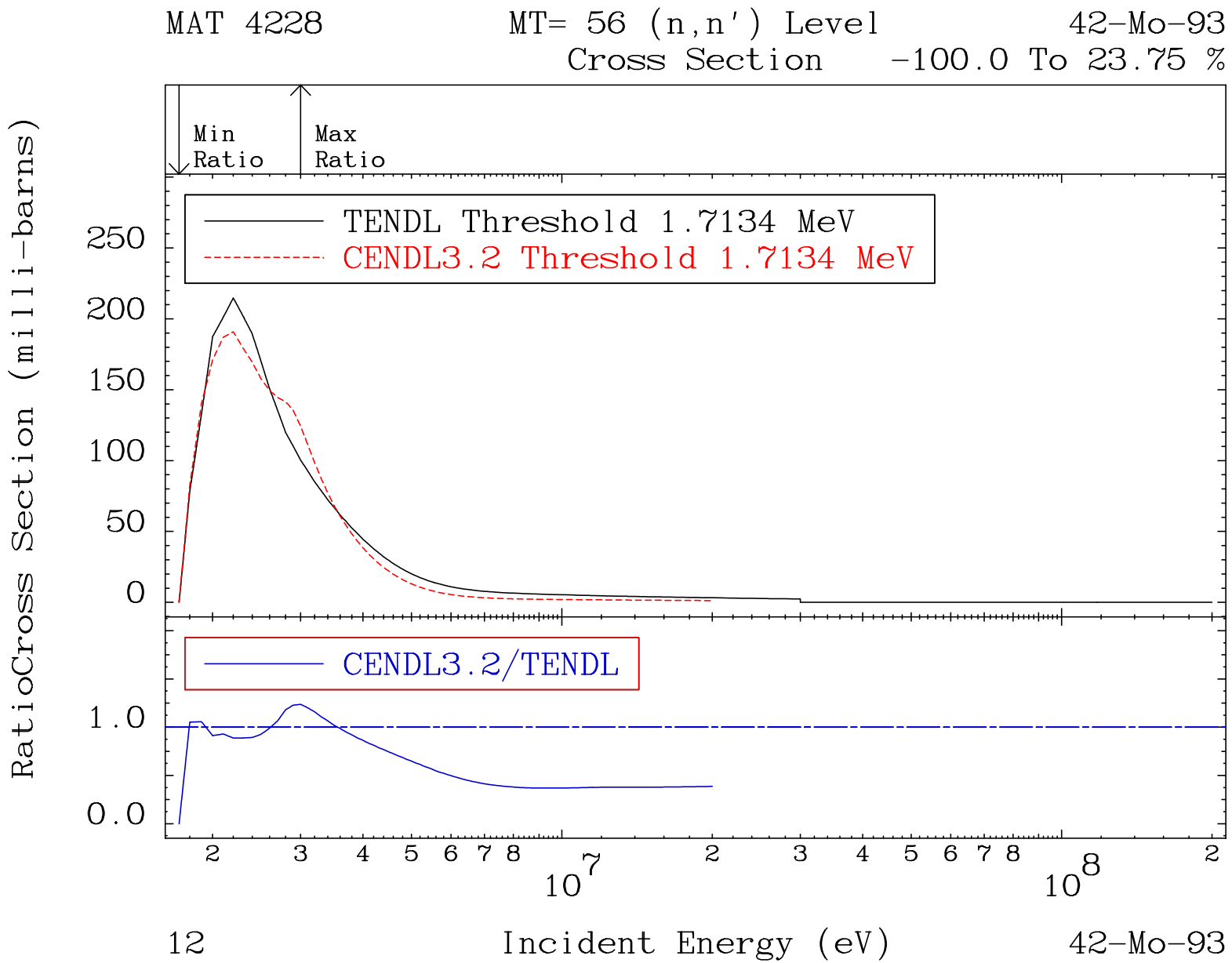

MAT 4228
MT= 51 (n,n') Level
42-Mo-93
Cross Section -100.0 To 69.84 %
Min Ratio
Max Ratio
TENDL Threshold 953.52 keV
CENDL3.2 Threshold 953.52 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
7
Incident Energy (eV)
42-Mo-93

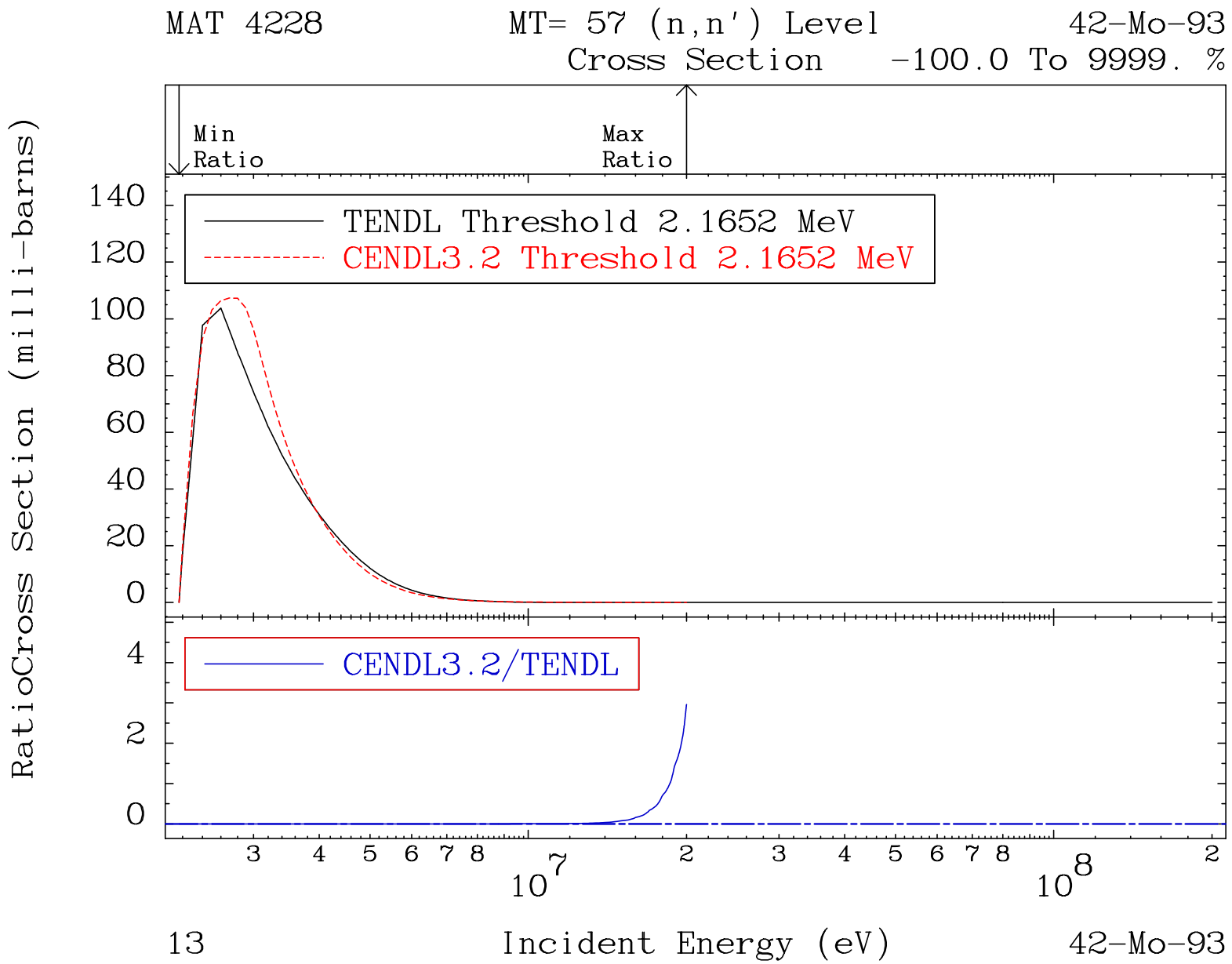

MAT 4228
MT= 52 (n,n') Level
42-Mo-93
Cross Section -100.0 To 3428. %
Min Ratio
Max Ratio
TENDL Threshold 1.3778 MeV
CENDL3.2 Threshold 1.3778 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
40
20
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
8
42-Mo-93

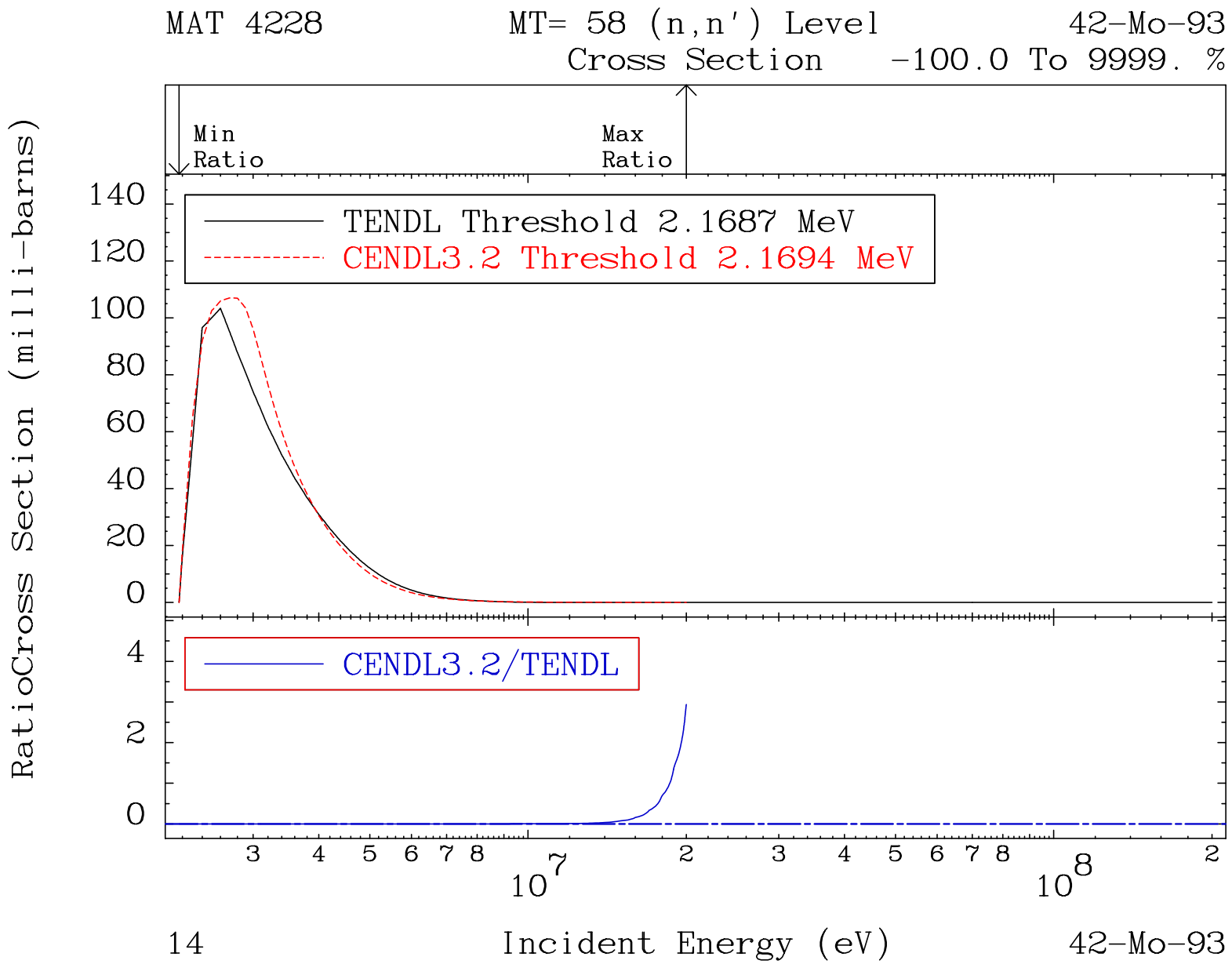

MAT 4228
MT= 53 (n,n') Level
42-Mo-93
Cross Section -14.03 To 112.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.4932 MeV
CENDL3.2 Threshold 1.4932 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
42-Mo-93

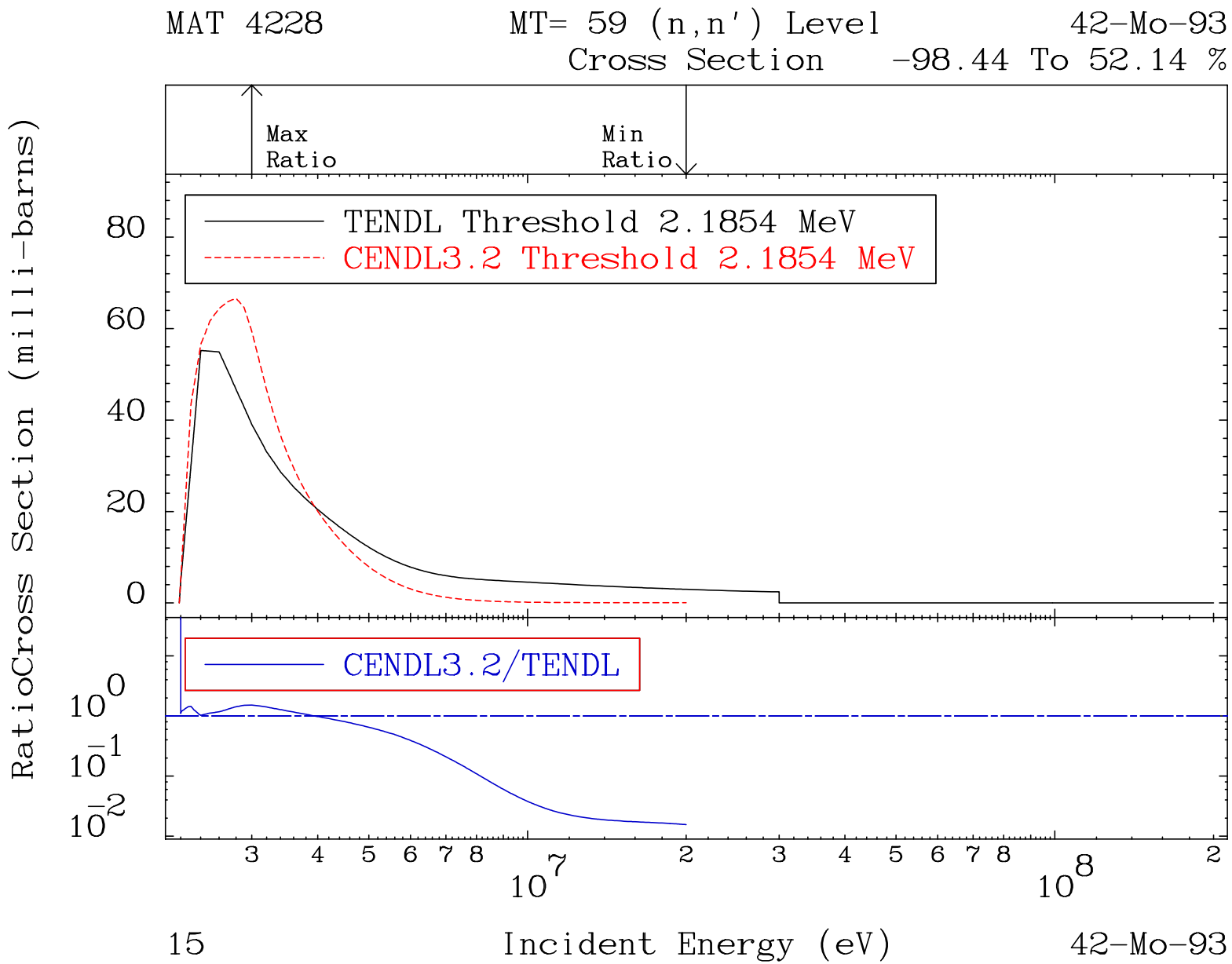

MAT 4228
MT= 54 (n,n') Level
42-Mo-93
Cross Section
-100.0 To 24.23 %
Min Ratio
Max Ratio
TENDL Threshold 1.5087 MeV
CENDL3.2 Threshold 1.5087 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
42-Mo-93

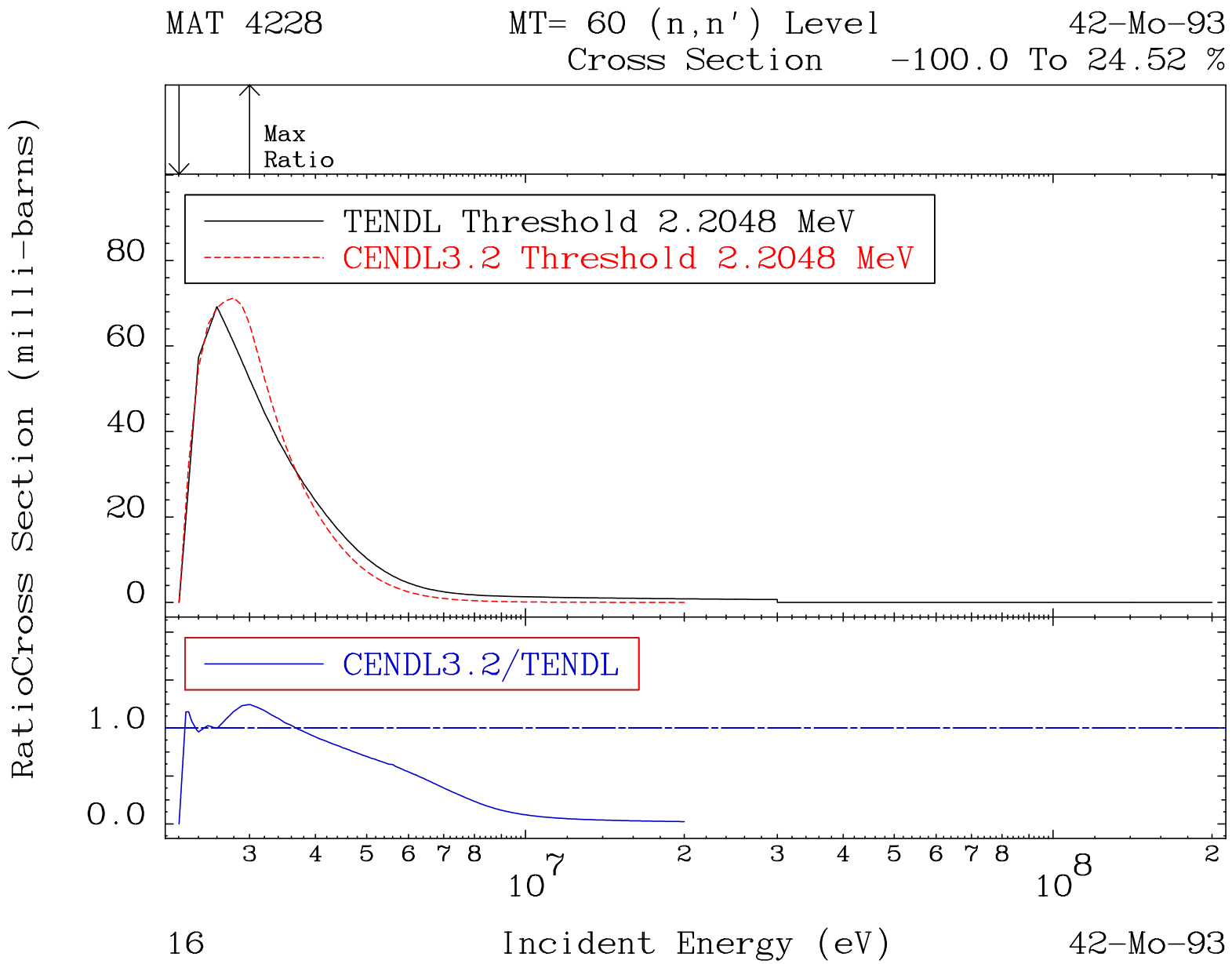

MAT 4228
MT= 55 (n,n') Level
42-Mo-93
Cross Section
-100.0 To 766.9 %
Min Ratio
Max Ratio
TENDL Threshold 1.5369 MeV
CENDL3.2 Threshold 1.5369 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
200
100
0
12
8
4
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
42-Mo-93

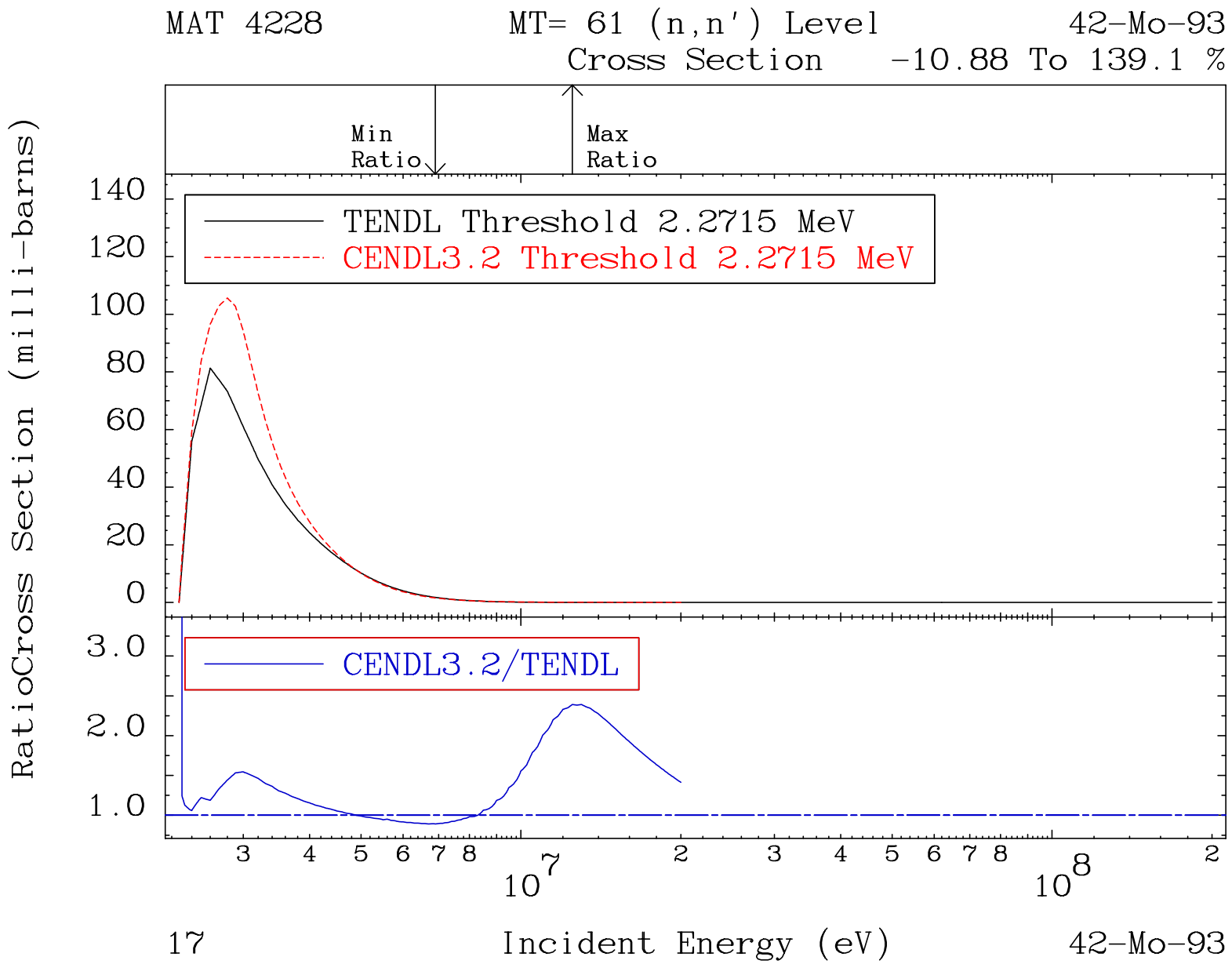

MAT 4228
MT= 56 (n,n') Level
42-Mo-93
Cross Section -100.0 To 23.75 %
Min Ratio
Max Ratio
TENDL Threshold 1.7134 MeV
CENDL3.2 Threshold 1.7134 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
42-Mo-93

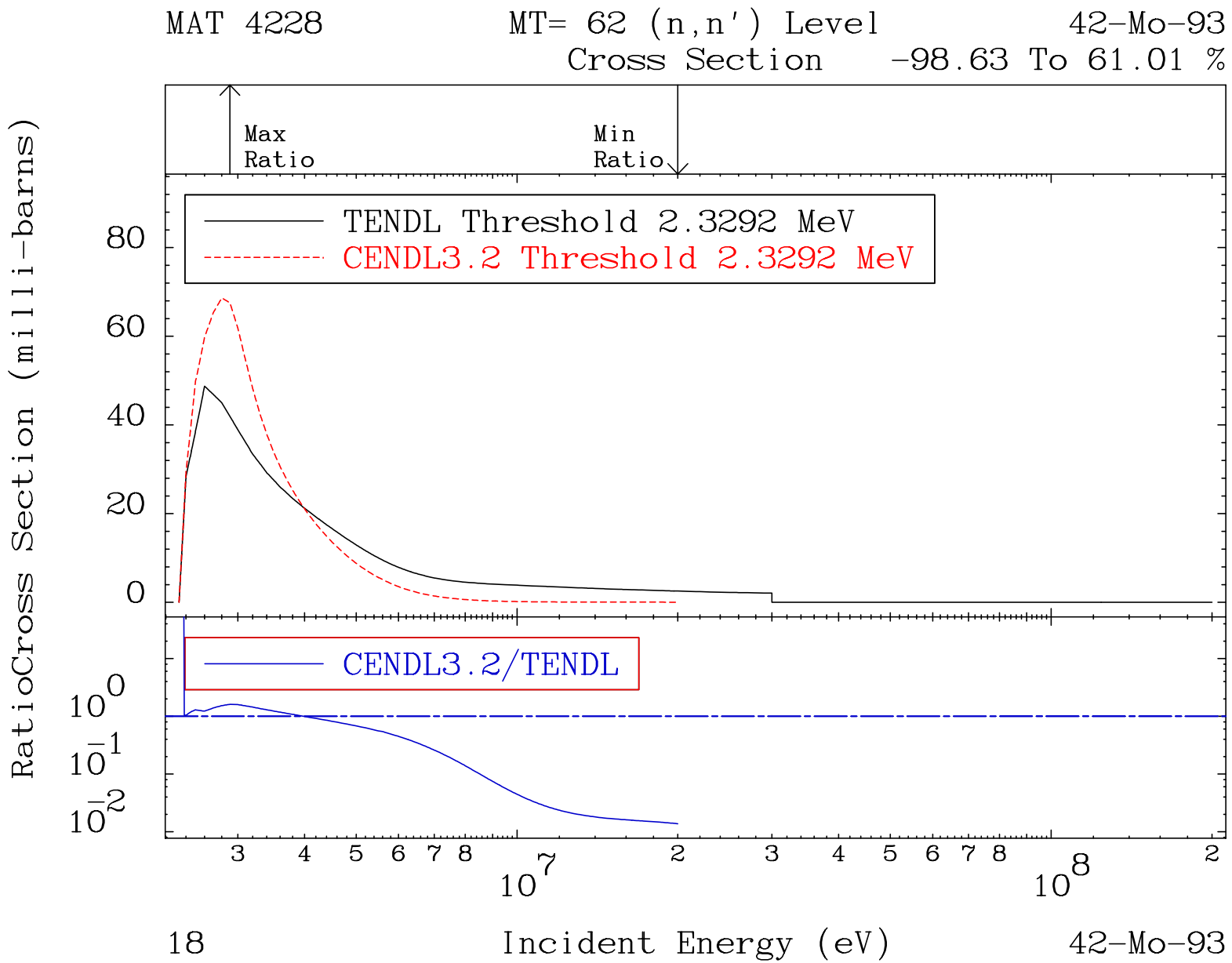

MAT 4228
MT= 57 (n,n') Level
42-Mo-93
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.1652 MeV
CENDL3.2 Threshold 2.1652 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
42-Mo-93

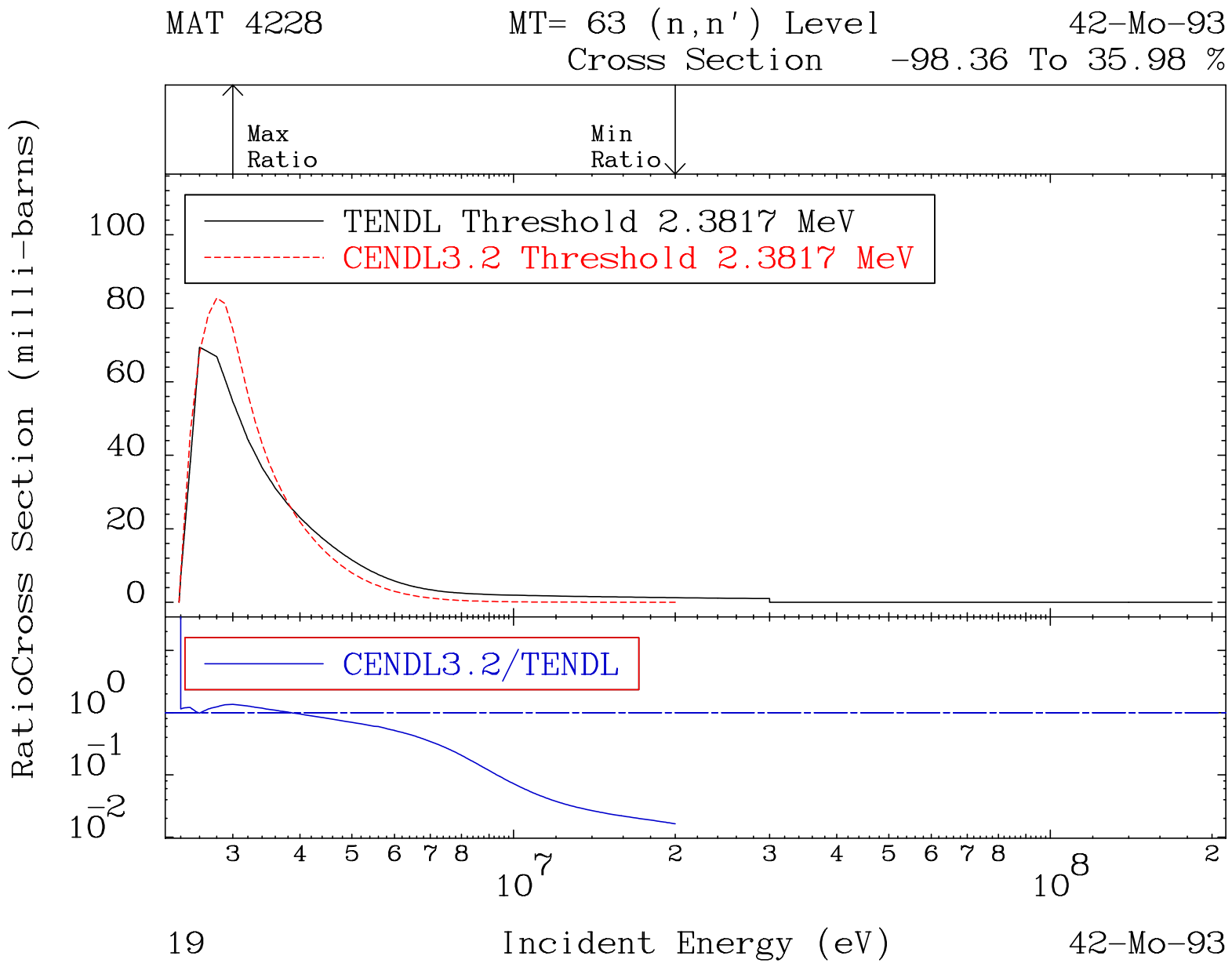

MAT 4228
MT= 58 (n,n') Level
42-Mo-93
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.1687 MeV
CENDL3.2 Threshold 2.1694 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
4
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
42-Mo-93

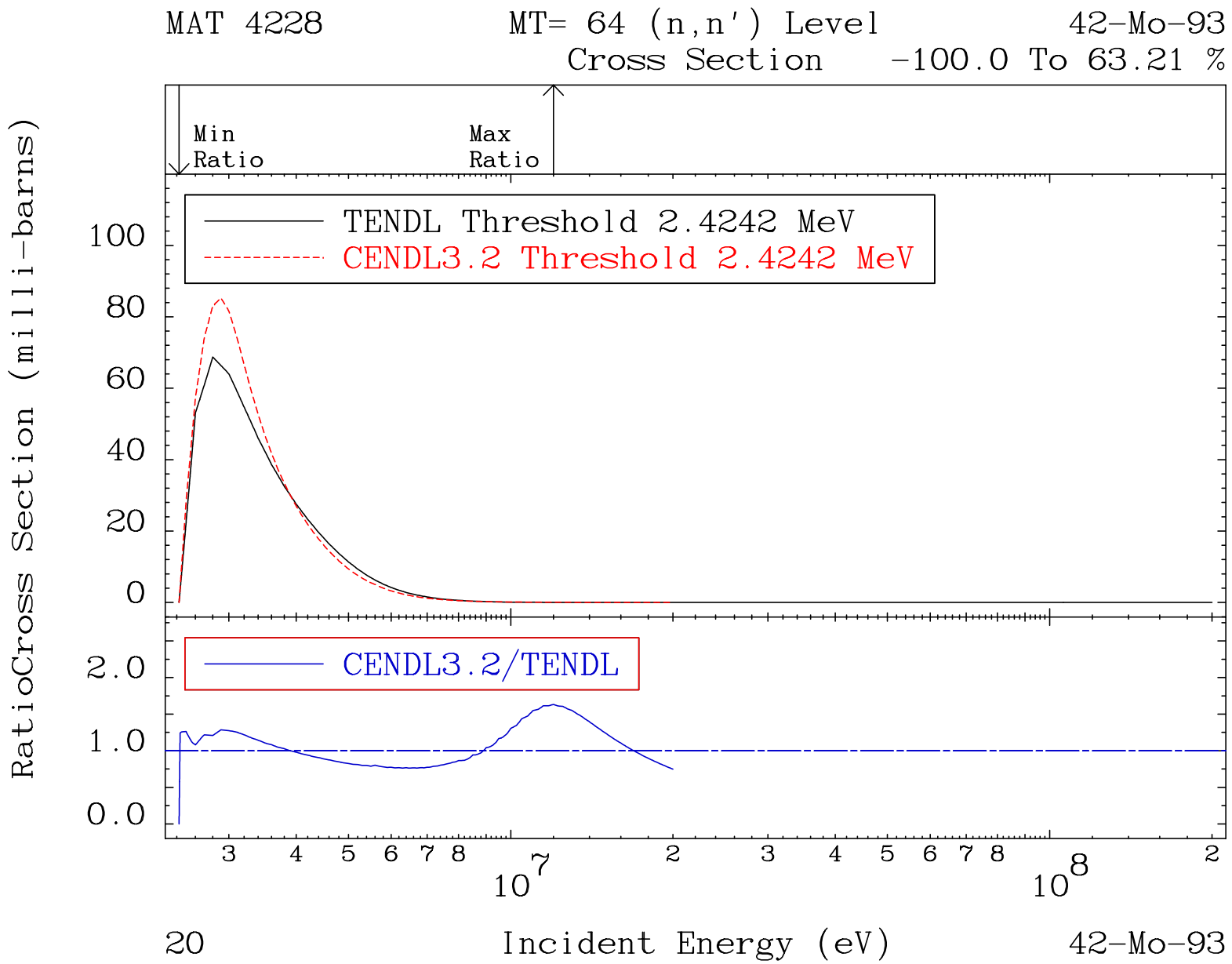

MAT 4228
MT= 59 (n,n') Level
Cross Section
42-Mo-93
-98.44 To 52.14 %
Max Ratio
Min Ratio
TENDL Threshold 2.1854 MeV
CENDL3.2 Threshold 2.1854 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^0
10^-1
10^-2
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
42-Mo-93

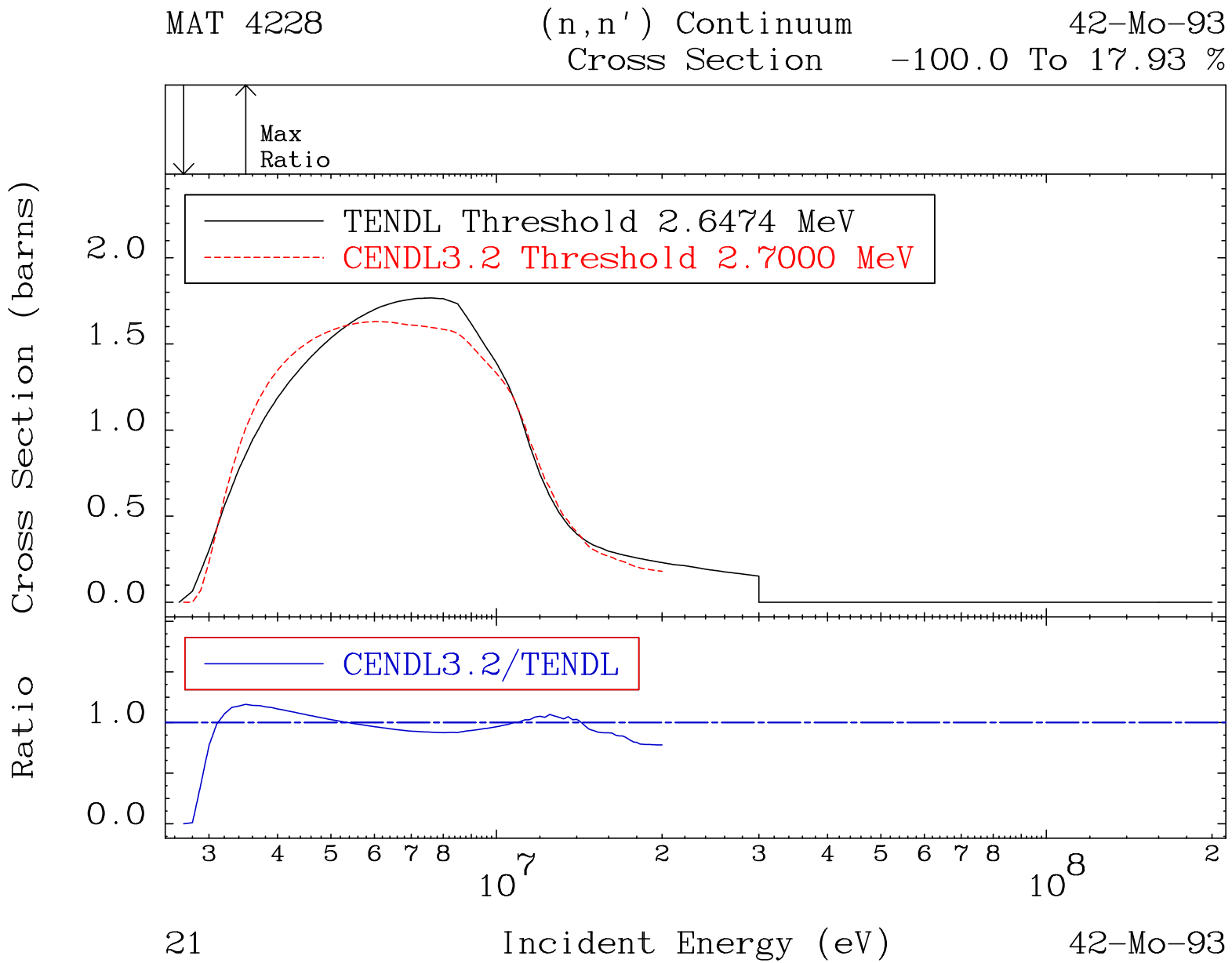

MAT 4228
MT= 60 (n,n') Level
42-Mo-93
Cross Section -100.0 To 24.52 %
Max
Ratio
TENDL Threshold 2.2048 MeV
CENDL3.2 Threshold 2.2048 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
42-Mo-93

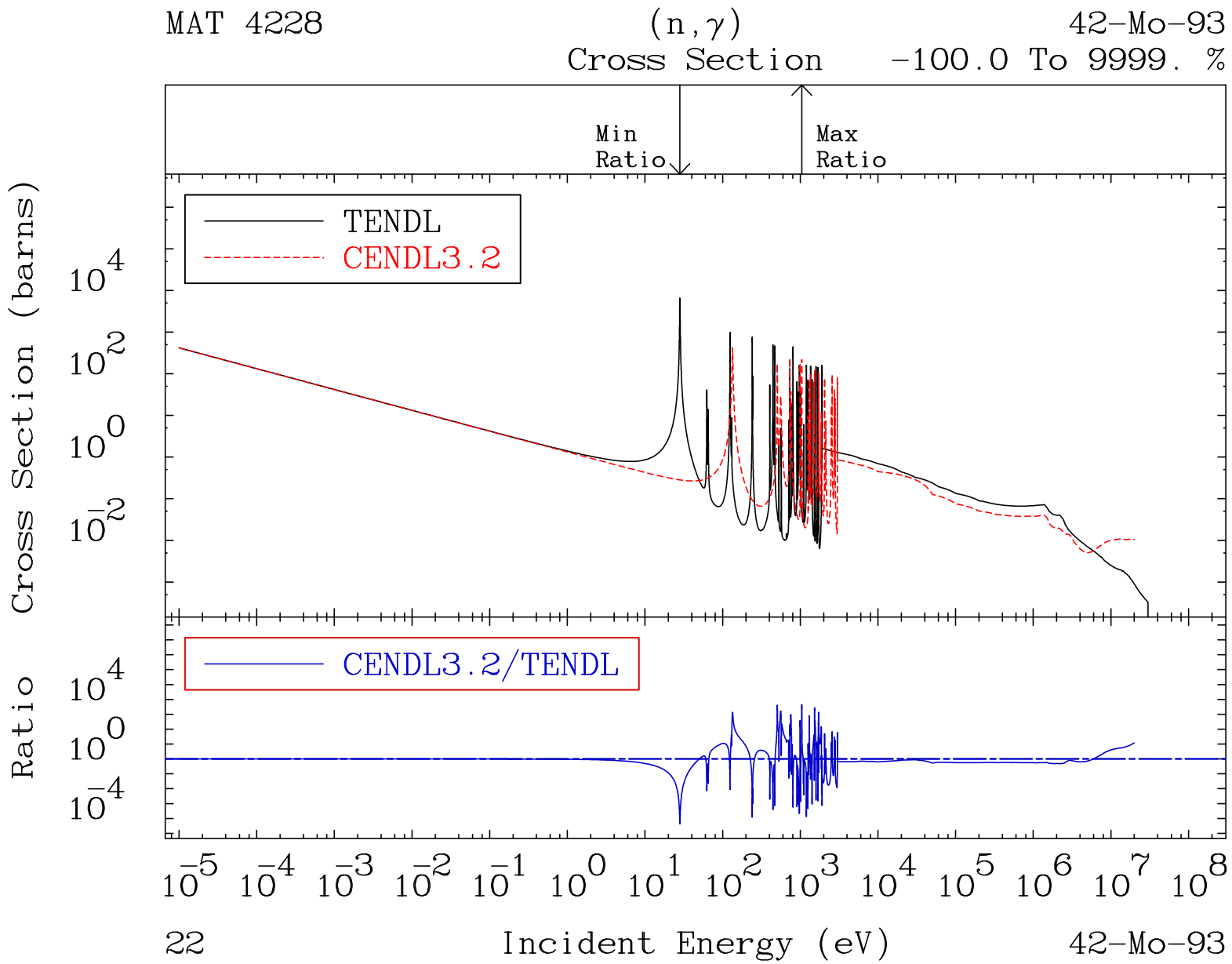

MAT 4228
MT= 61 (n,n') Level
42-Mo-93
Cross Section -10.88 To 139.1 %
Min Ratio
Max Ratio
TENDL Threshold 2.2715 MeV
CENDL3.2 Threshold 2.2715 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
3.0
2.0
1.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
42-Mo-93

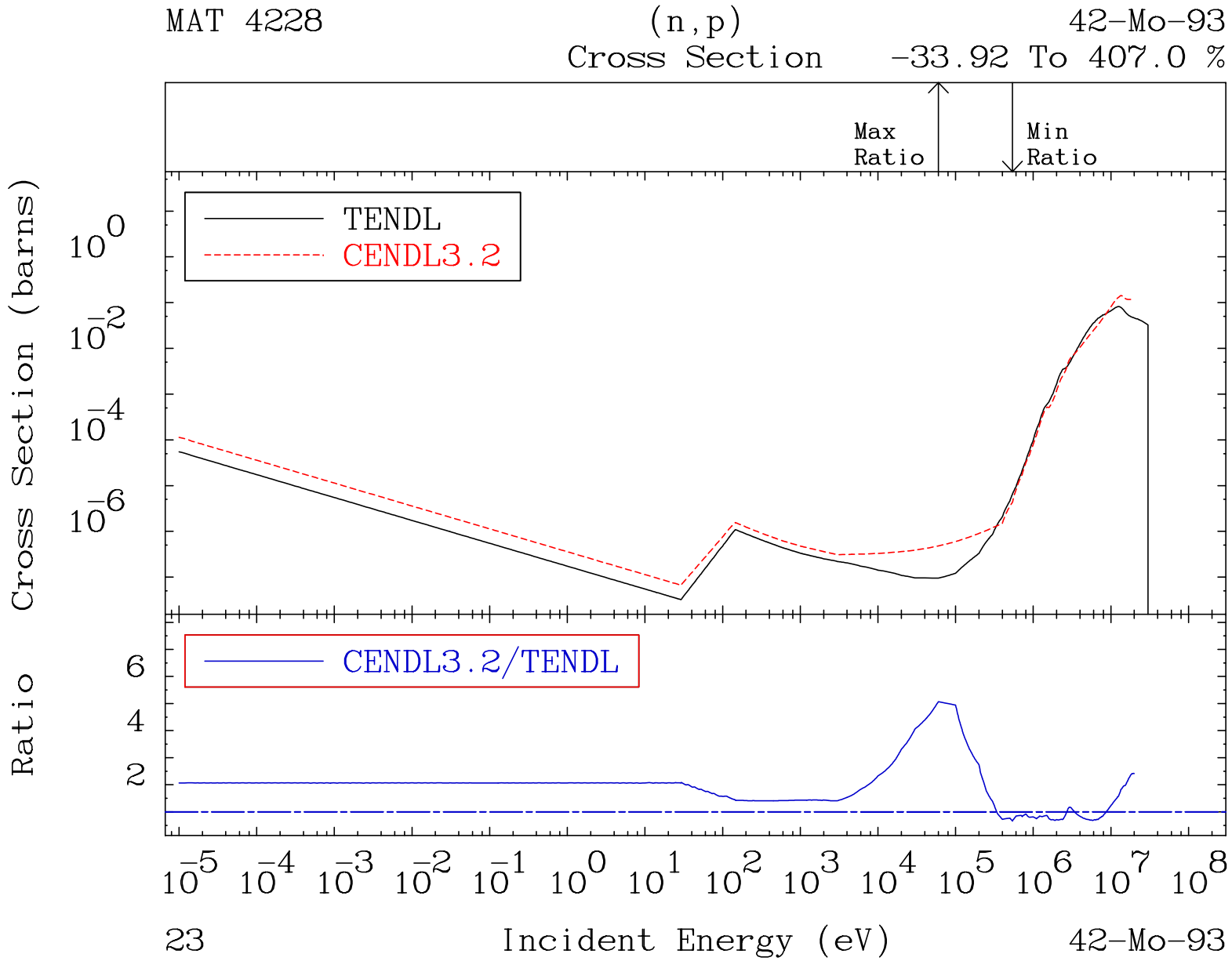

MAT 4228
MT= 62 (n,n') Level
42-Mo-93
Cross Section
-98.63 To 61.01 %
Max Ratio
Min Ratio
TENDL Threshold 2.3292 MeV
CENDL3.2 Threshold 2.3292 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^0
10^-1
10^-2
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
42-Mo-93

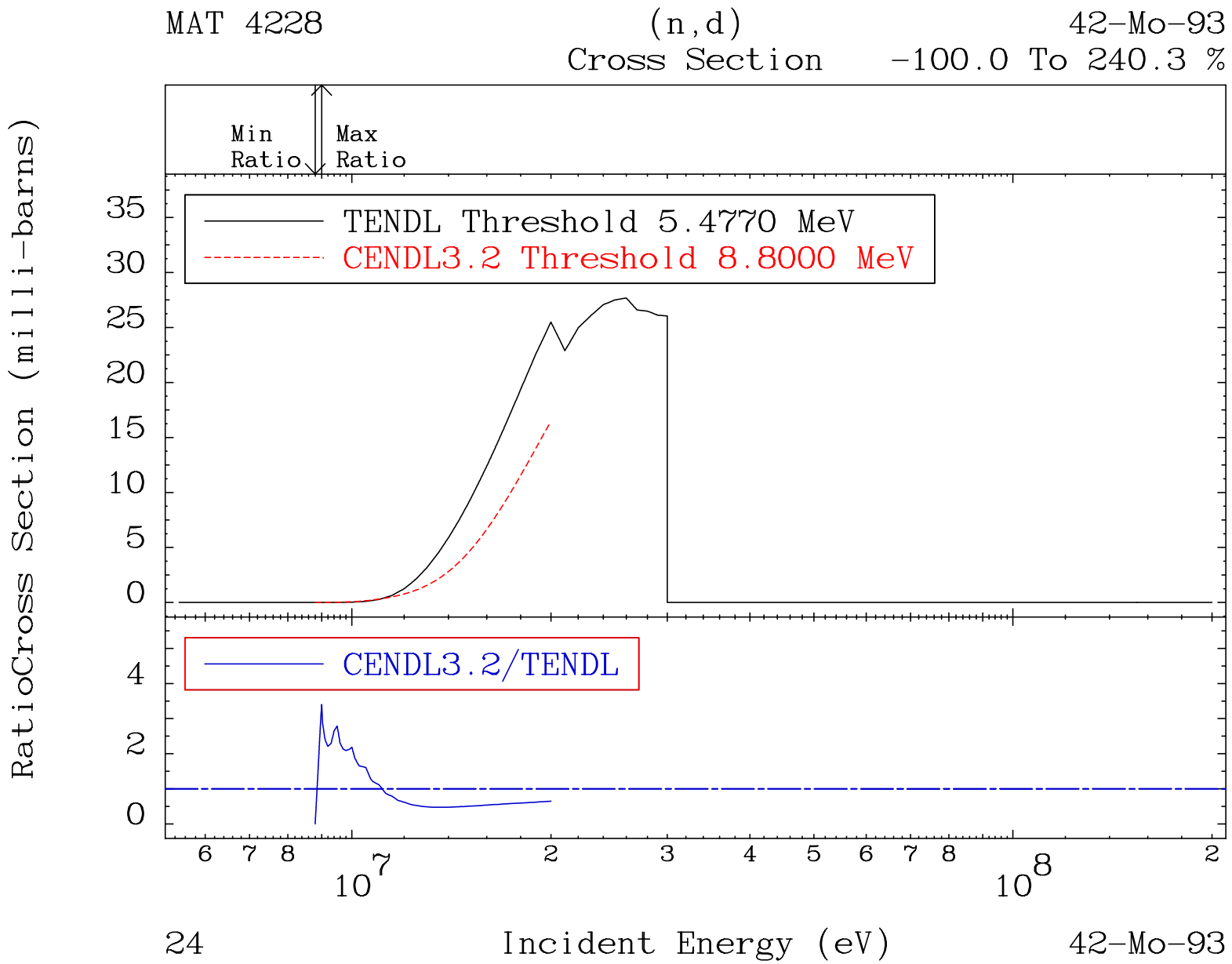

MAT 4228
MT= 63 (n,n') Level
42-Mo-93
Cross Section
-98.36 To 35.98 %
Max Ratio
Min Ratio
TENDL Threshold 2.3817 MeV
CENDL3.2 Threshold 2.3817 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^0
10^-1
10^-2
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
42-Mo-93

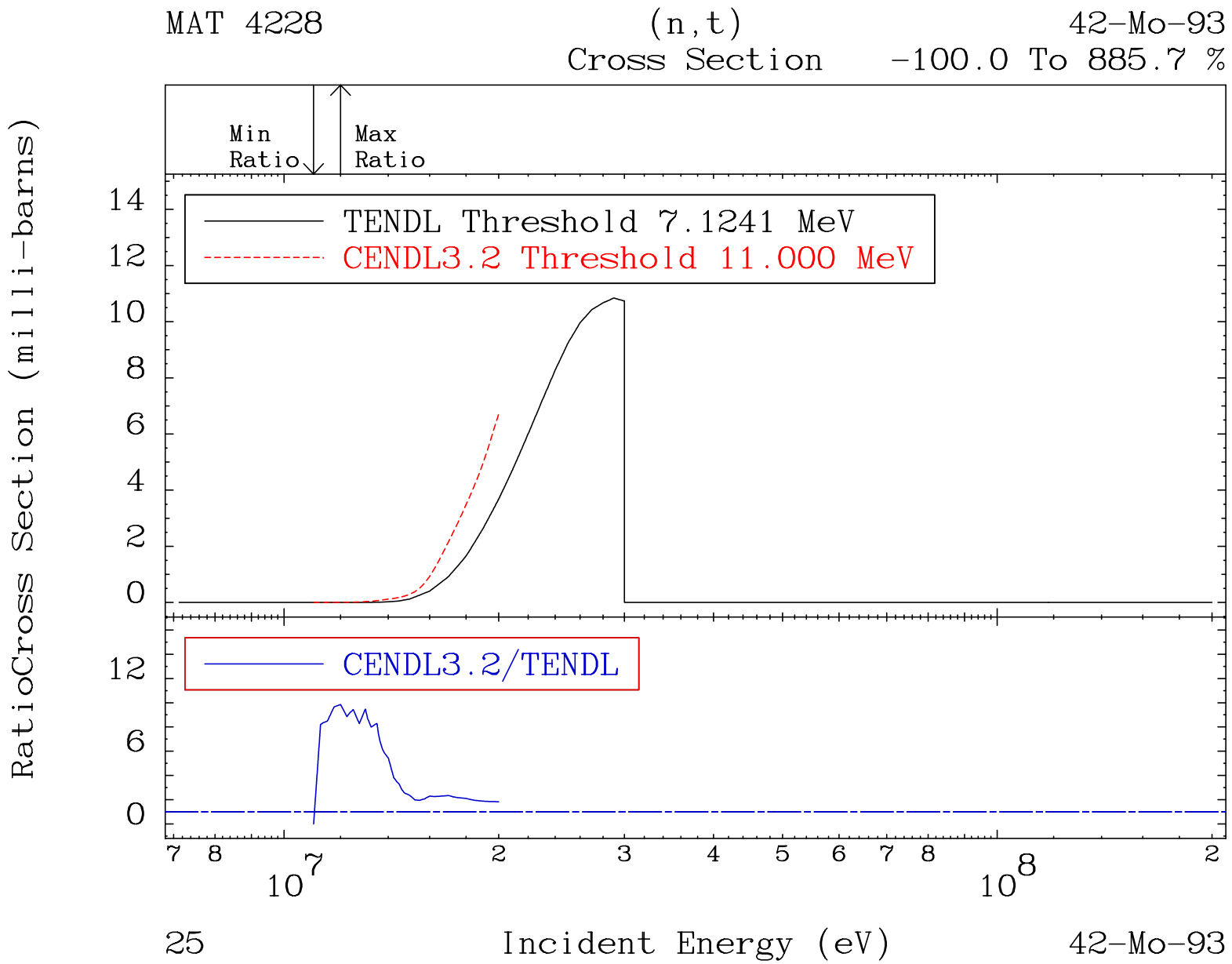

MAT 4228
MT= 64 (n,n') Level
42-Mo-93
Cross Section
-100.0 To 63.21 %
Min Ratio
Max Ratio
TENDL Threshold 2.4242 MeV
CENDL3.2 Threshold 2.4242 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
42-Mo-93

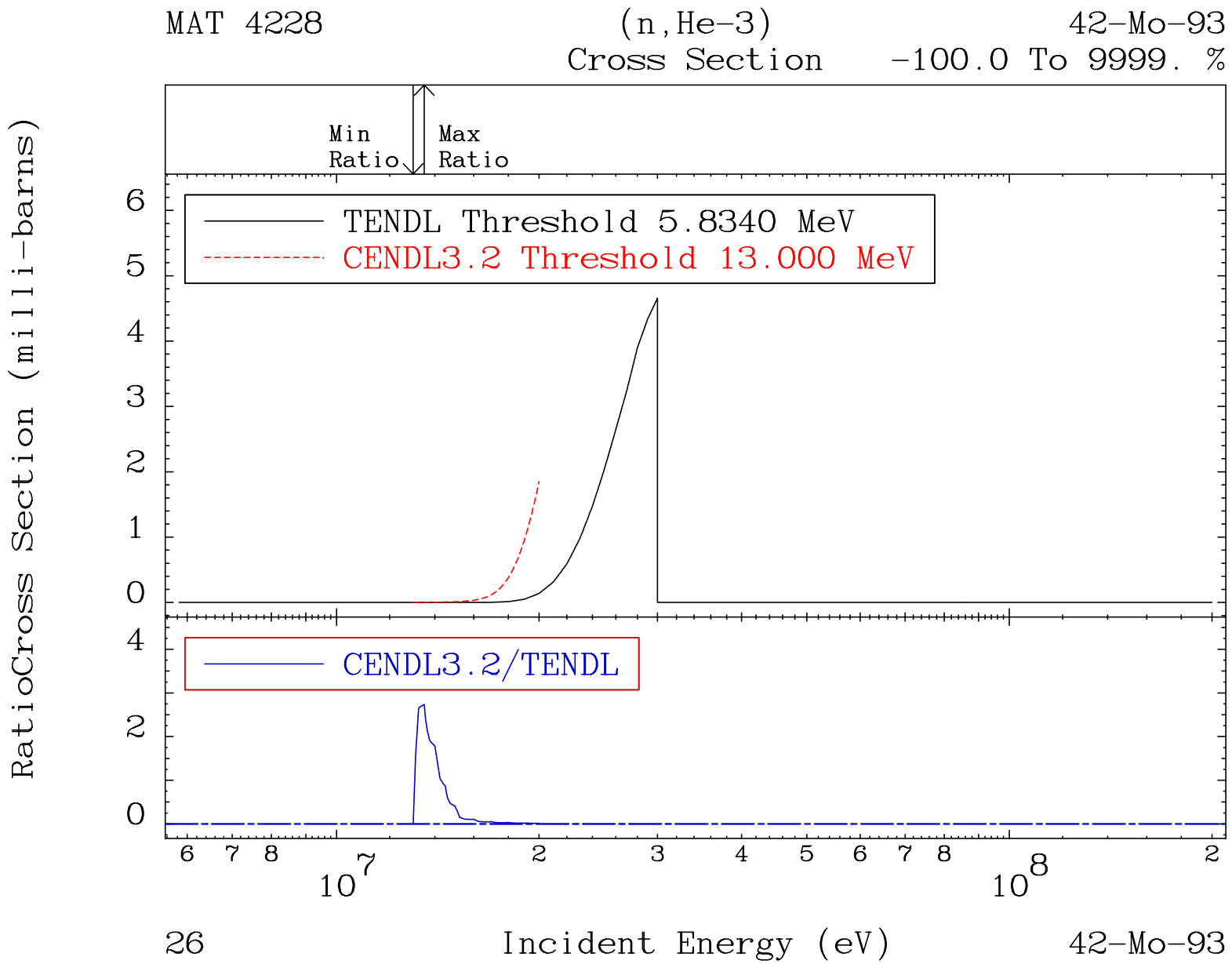

MAT 4228
(n,n') Continuum
Cross Section
42-Mo-93
-100.0 To 17.93 %
Max
Ratio
TENDL Threshold 2.6474 MeV
CENDL3.2 Threshold 2.7000 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
21
42-Mo-93

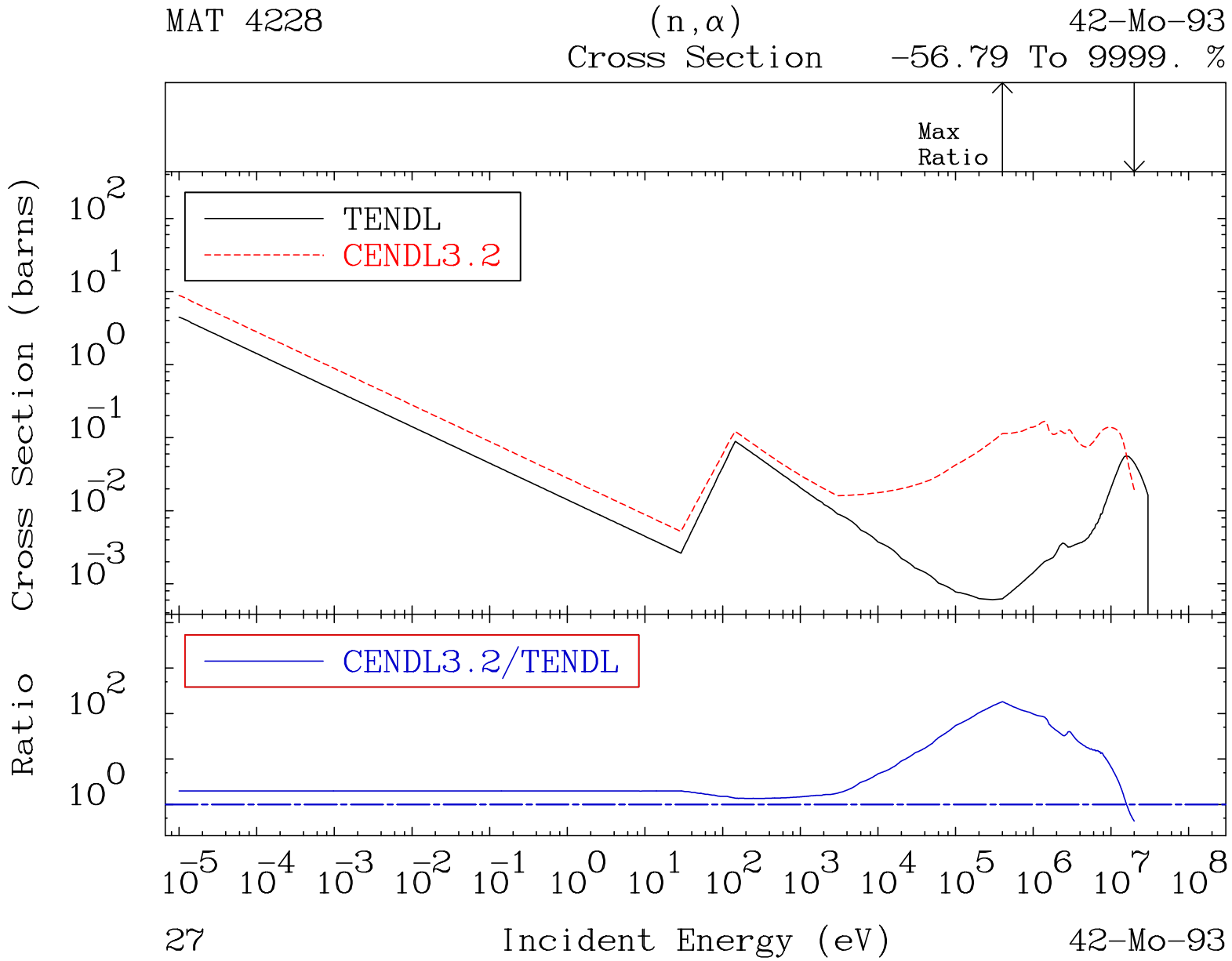

MAT 4228
(n,γ)
Cross Section
42-Mo-93
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22
42-Mo-93

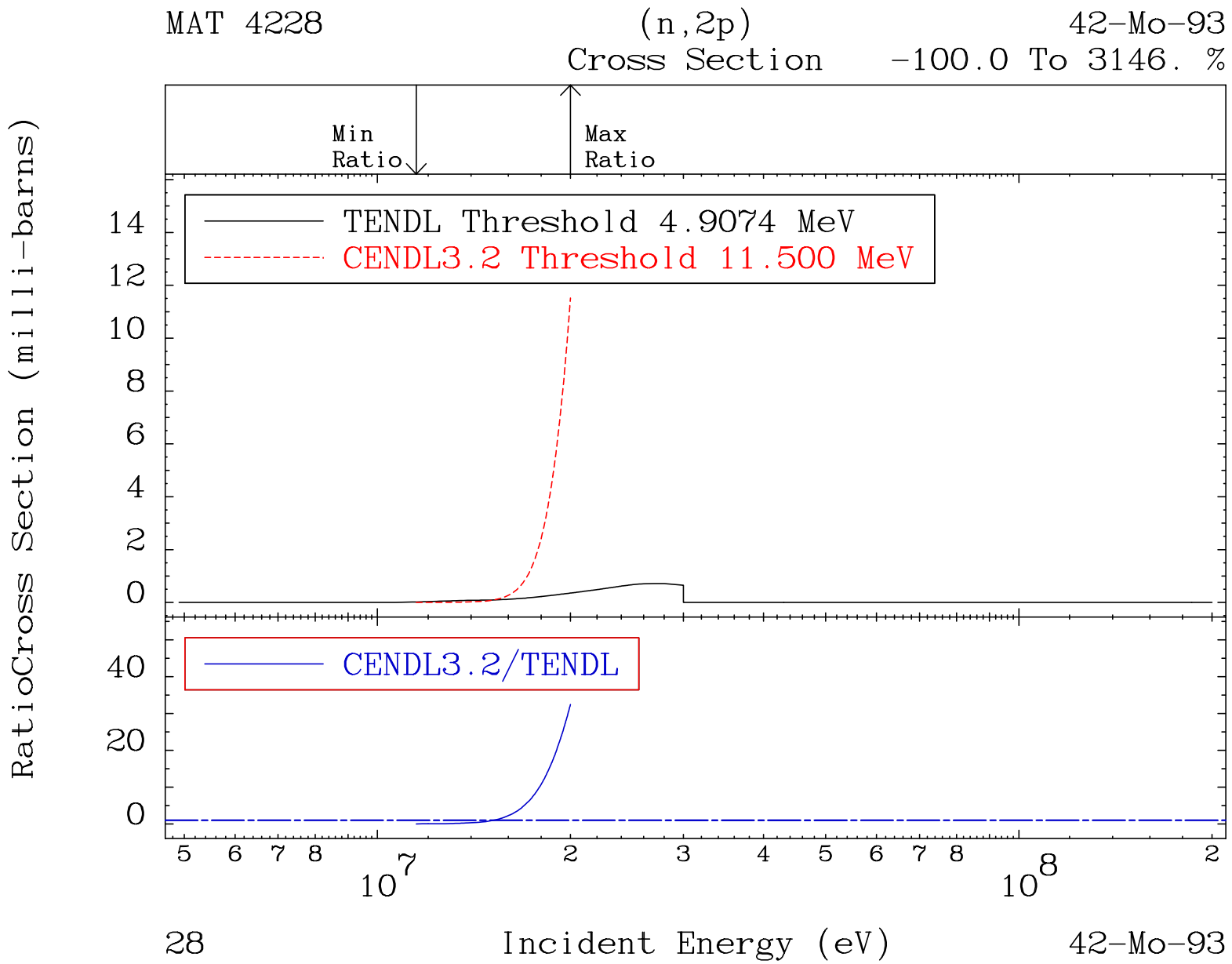

MAT 4228
(n,p)
Cross Section
42-Mo-93
-33.92 To 407.0 %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
CENDL3.2/TENDL
Ratio
6
4
2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
23
Incident Energy (eV)
42-Mo-93

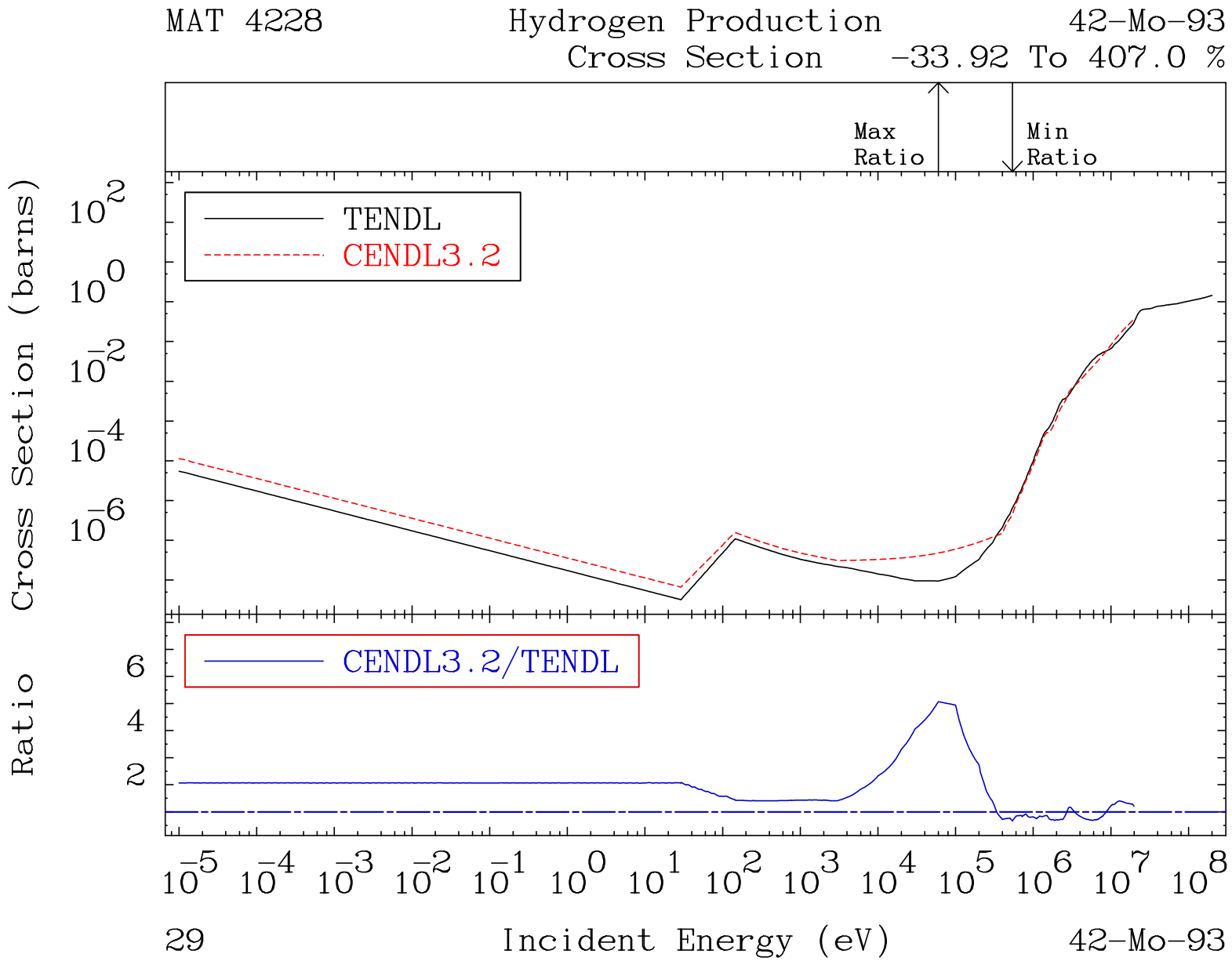

MAT 4228
(n,d)
Cross Section
42-Mo-93
-100.0 To 240.3 %
Min Ratio
Max Ratio
TENDL Threshold 5.4770 MeV
CENDL3.2 Threshold 8.8000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
42-Mo-93

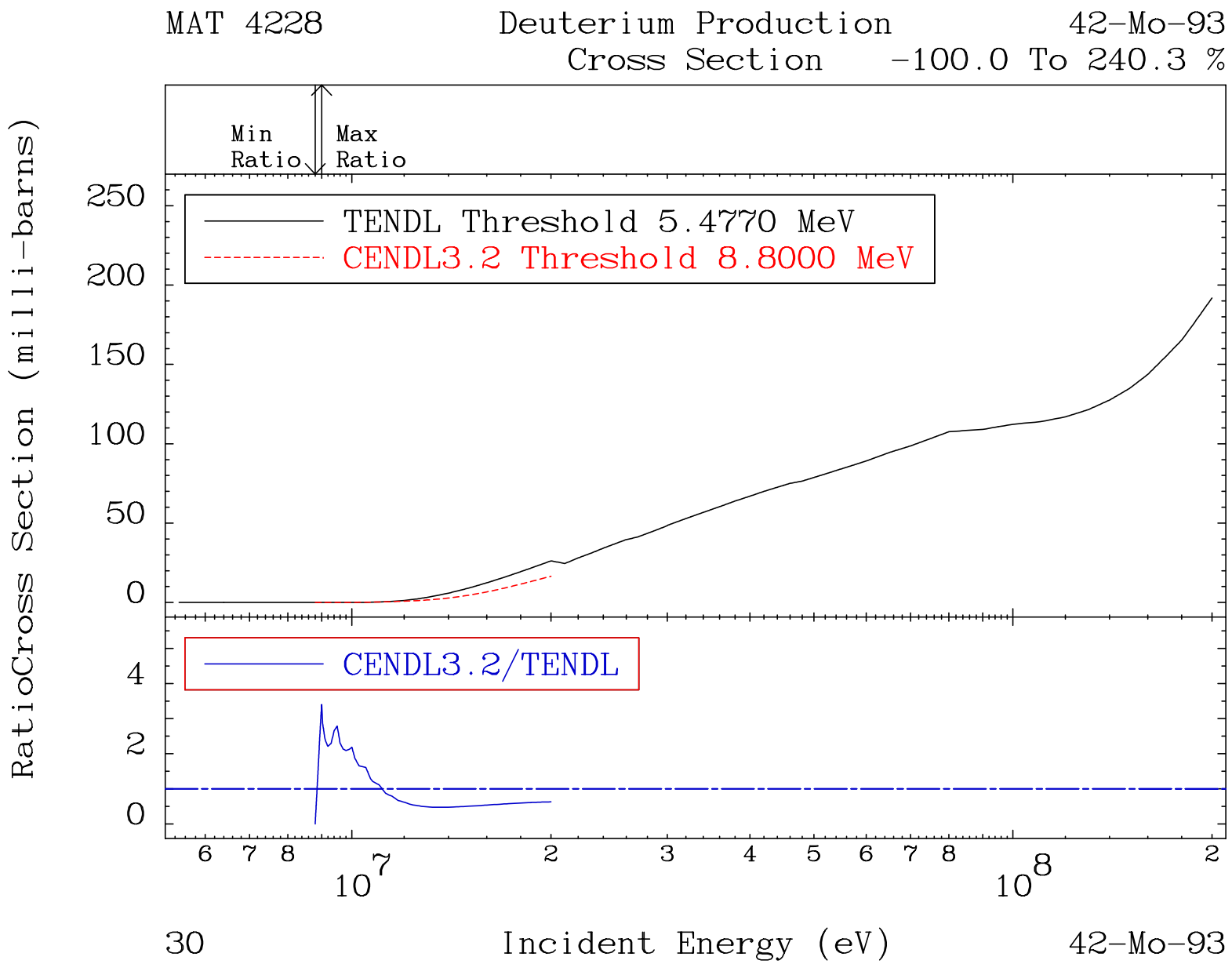

MAT 4228
(n,t)
Cross Section
42-Mo-93
-100.0 To 885.7 %
Min Ratio
Max Ratio
TENDL Threshold 7.1241 MeV
CENDL3.2 Threshold 11.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
12
6
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
42-Mo-93

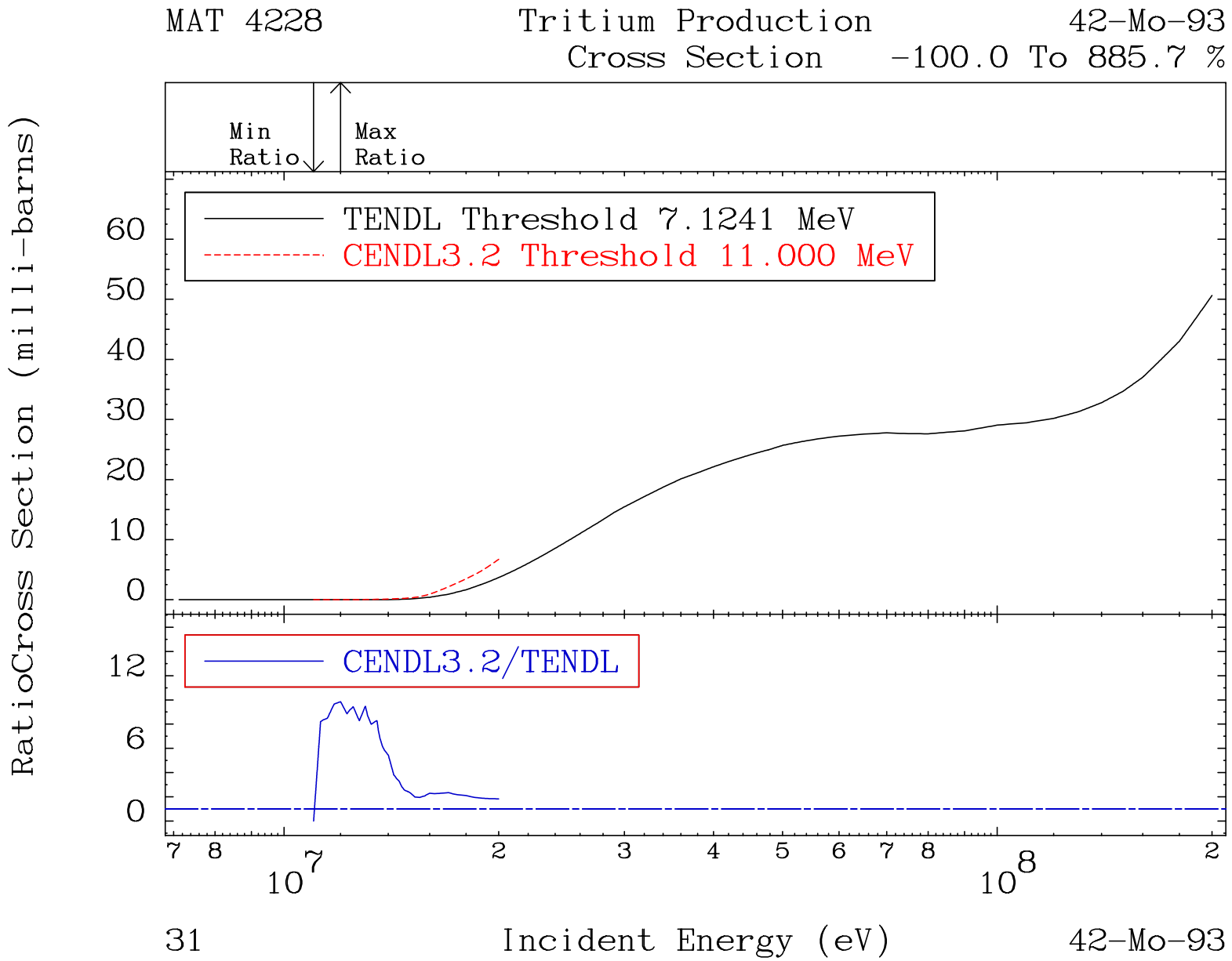

MAT 4228
(n,He-3)
Cross Section
42-Mo-93
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.8340 MeV
CENDL3.2 Threshold 13.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
26
42-Mo-93

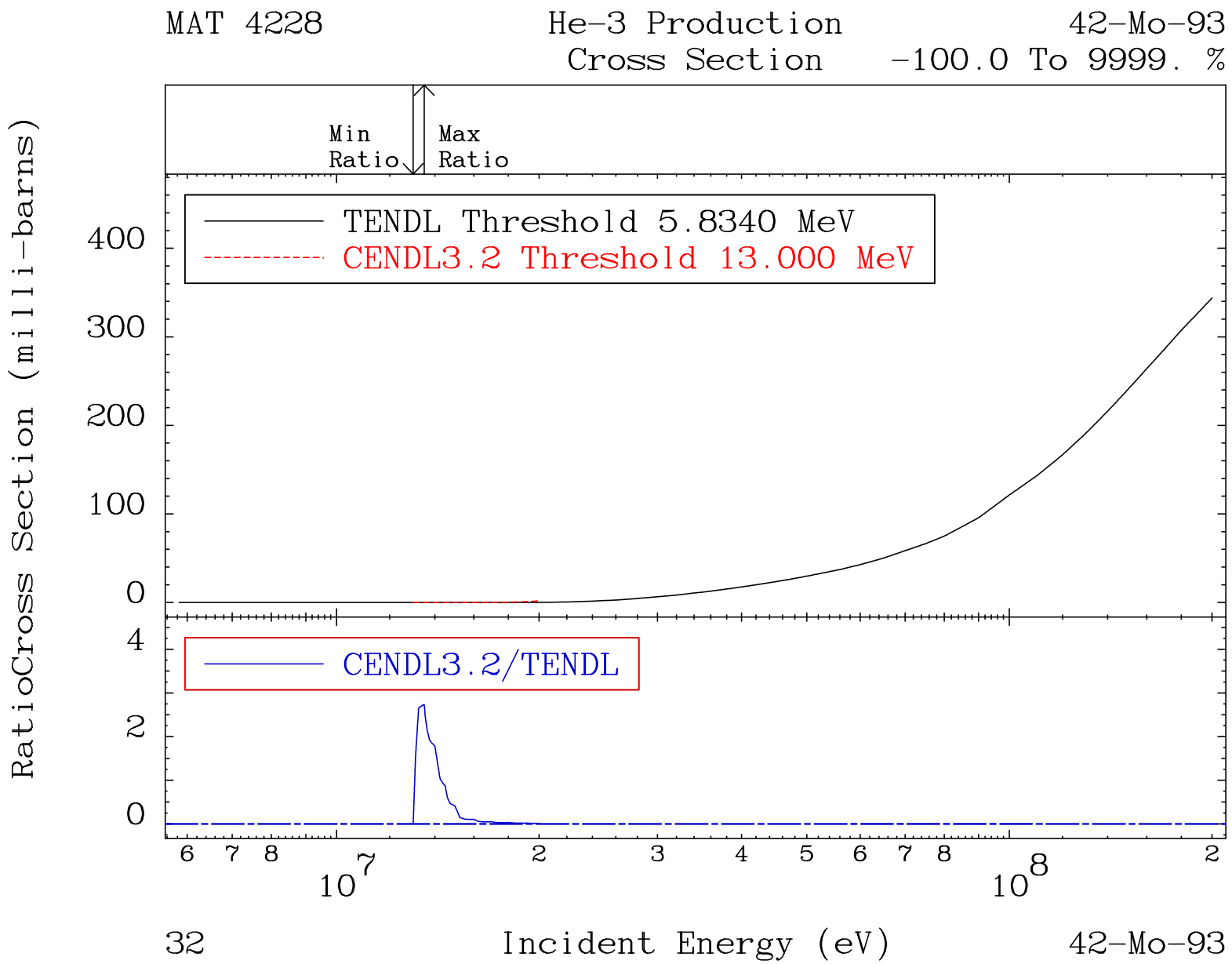

MAT 4228
(n,α)
Cross Section
42-Mo-93
-56.79 To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
27
42-Mo-93

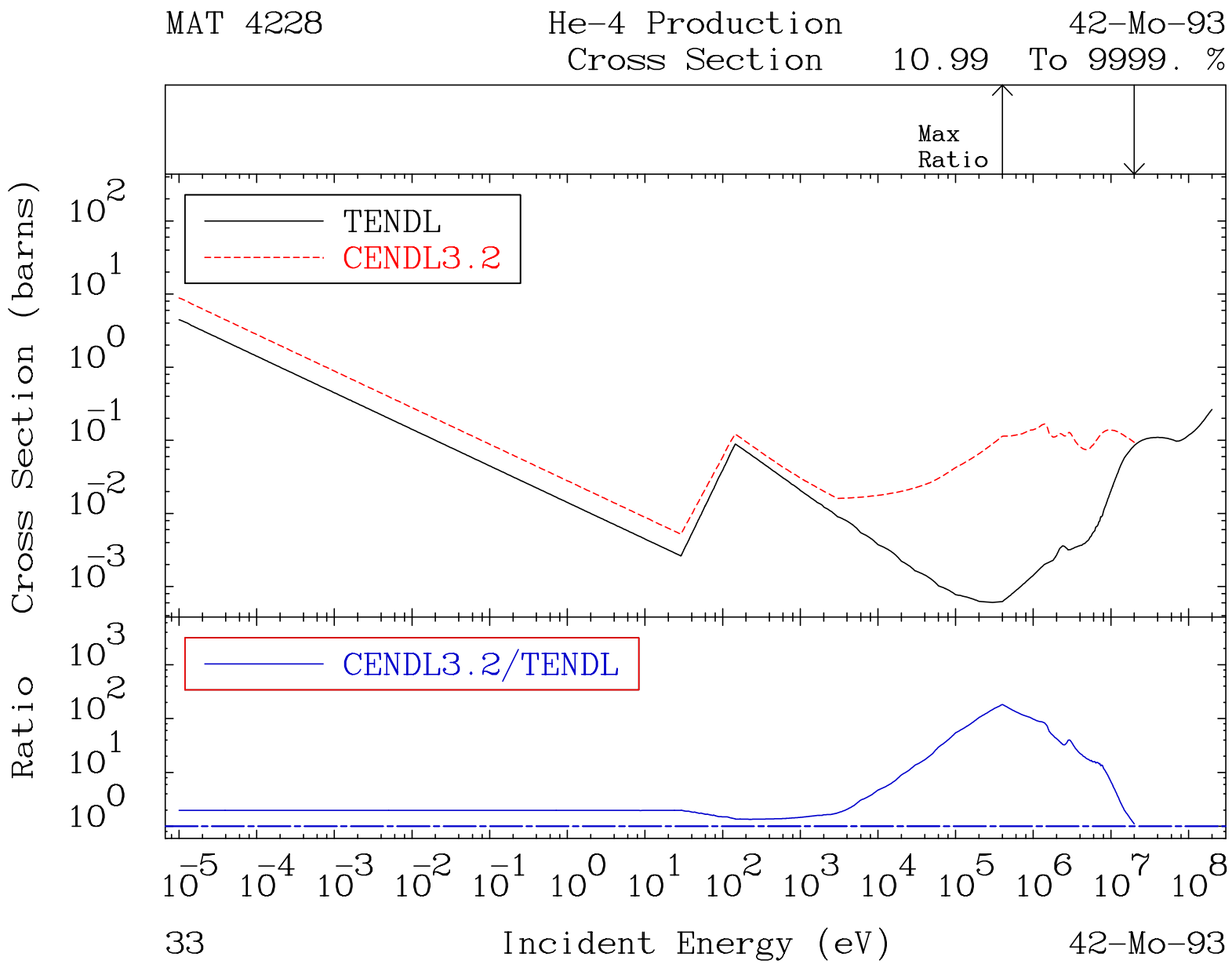

MAT 4228
(n,2p)
Cross Section
42-Mo-93
-100.0 To 3146. %
Min Ratio
Max Ratio
TENDL Threshold 4.9074 MeV
CENDL3.2 Threshold 11.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
40
20
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
42-Mo-93

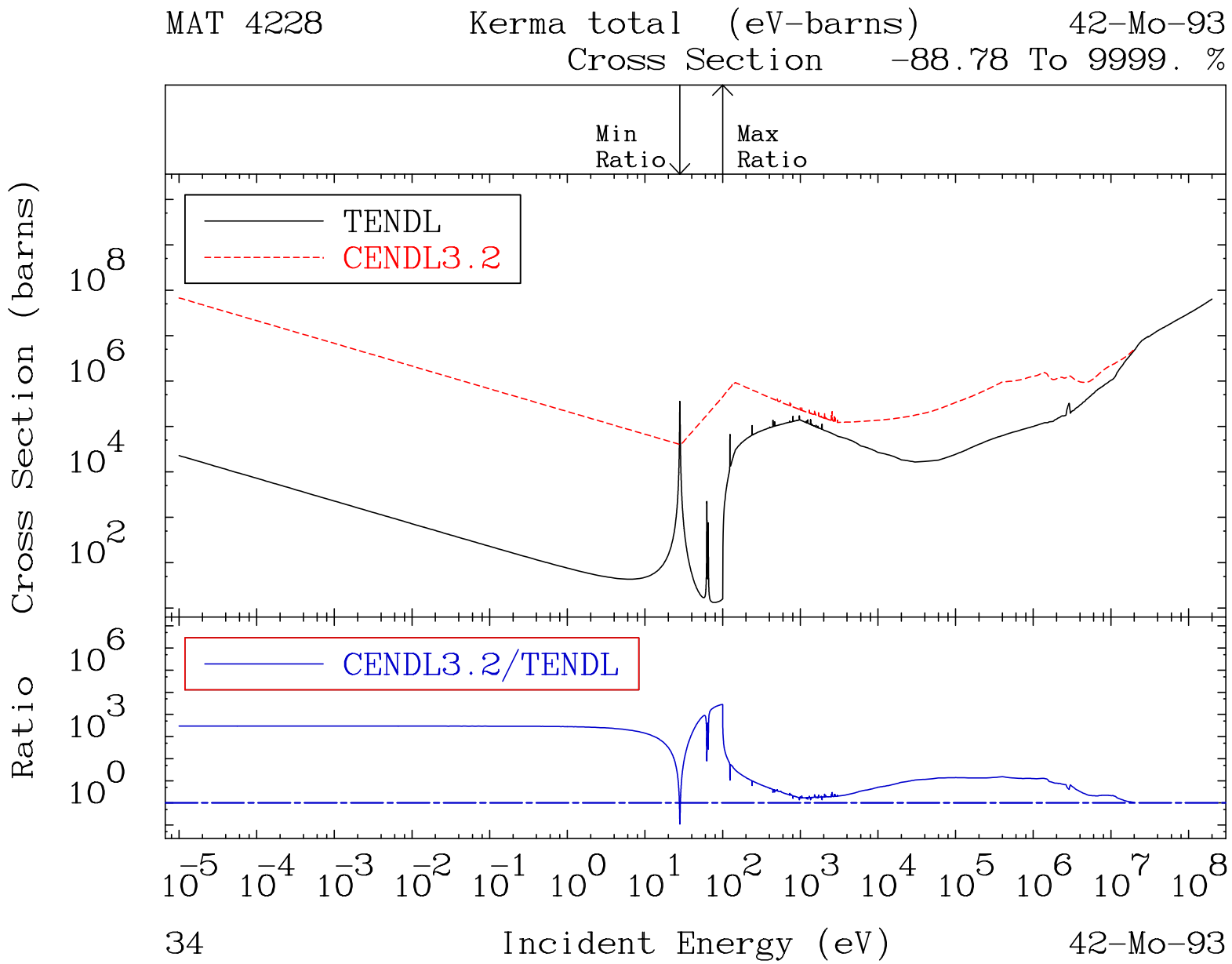

MAT 4228
Hydrogen Production
Cross Section
42-Mo-93
-33.92 To 407.0 %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
Ratio
CENDL3.2/TENDL
Incident Energy (eV)
29
42-Mo-93

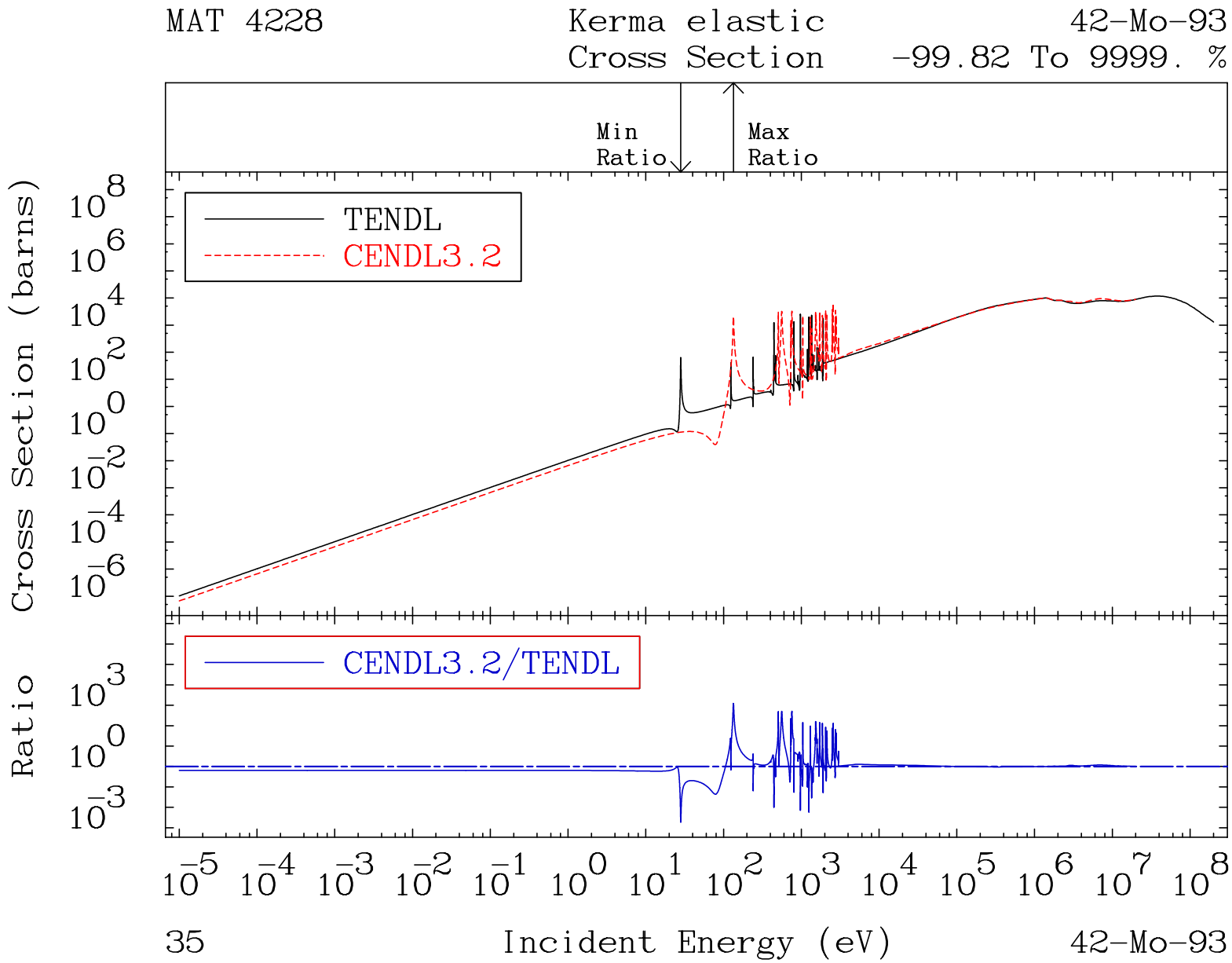

MAT 4228
Deuterium Production
42-Mo-93
Cross Section -100.0 To 240.3 %
Min Ratio
Max Ratio
TENDL Threshold 5.4770 MeV
CENDL3.2 Threshold 8.8000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
42-Mo-93

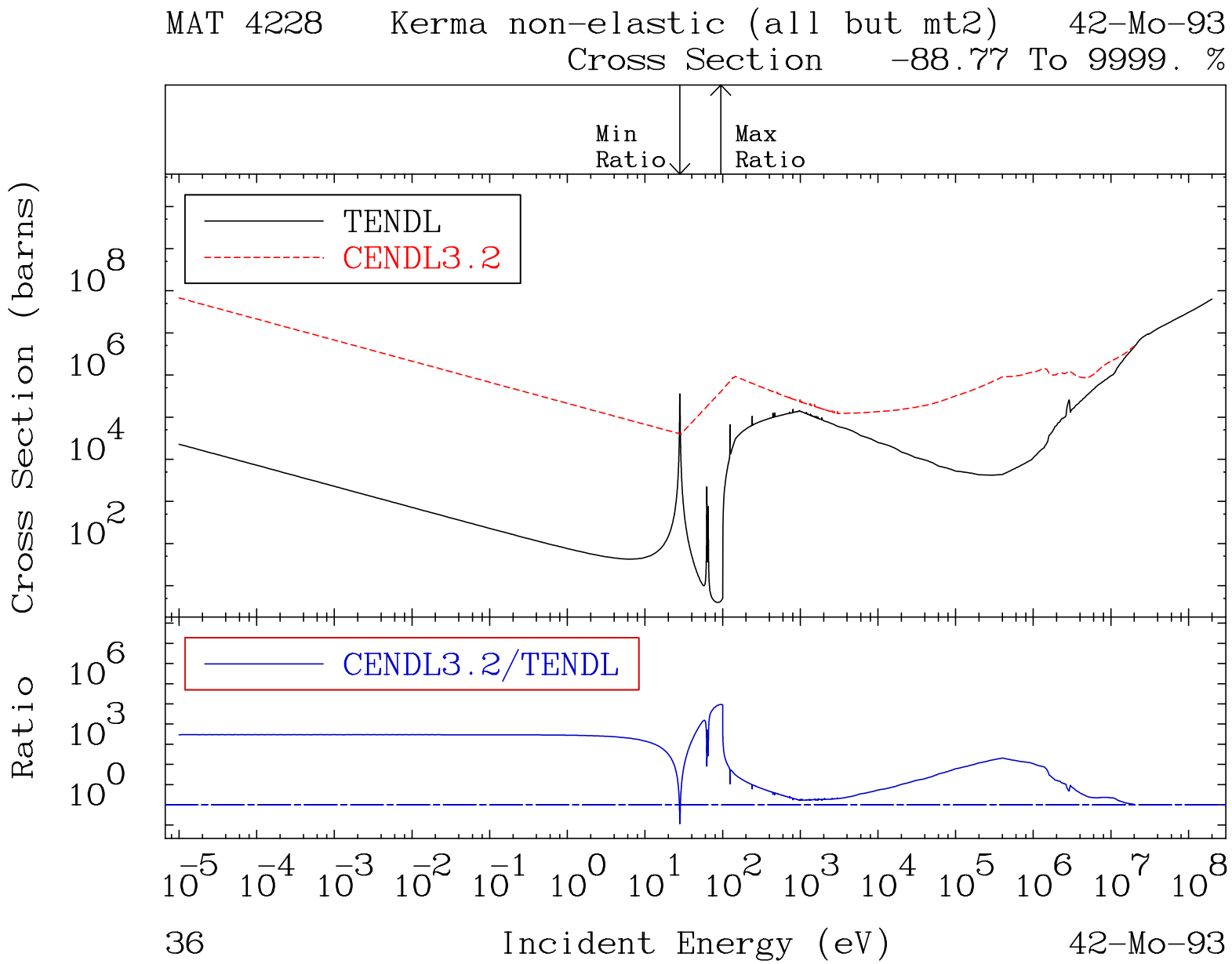

MAT 4228
Tritium Production
42-Mo-93
Cross Section
-100.0 To 885.7 %
Min Ratio
Max Ratio
TENDL Threshold 7.1241 MeV
CENDL3.2 Threshold 11.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
12
6
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
42-Mo-93

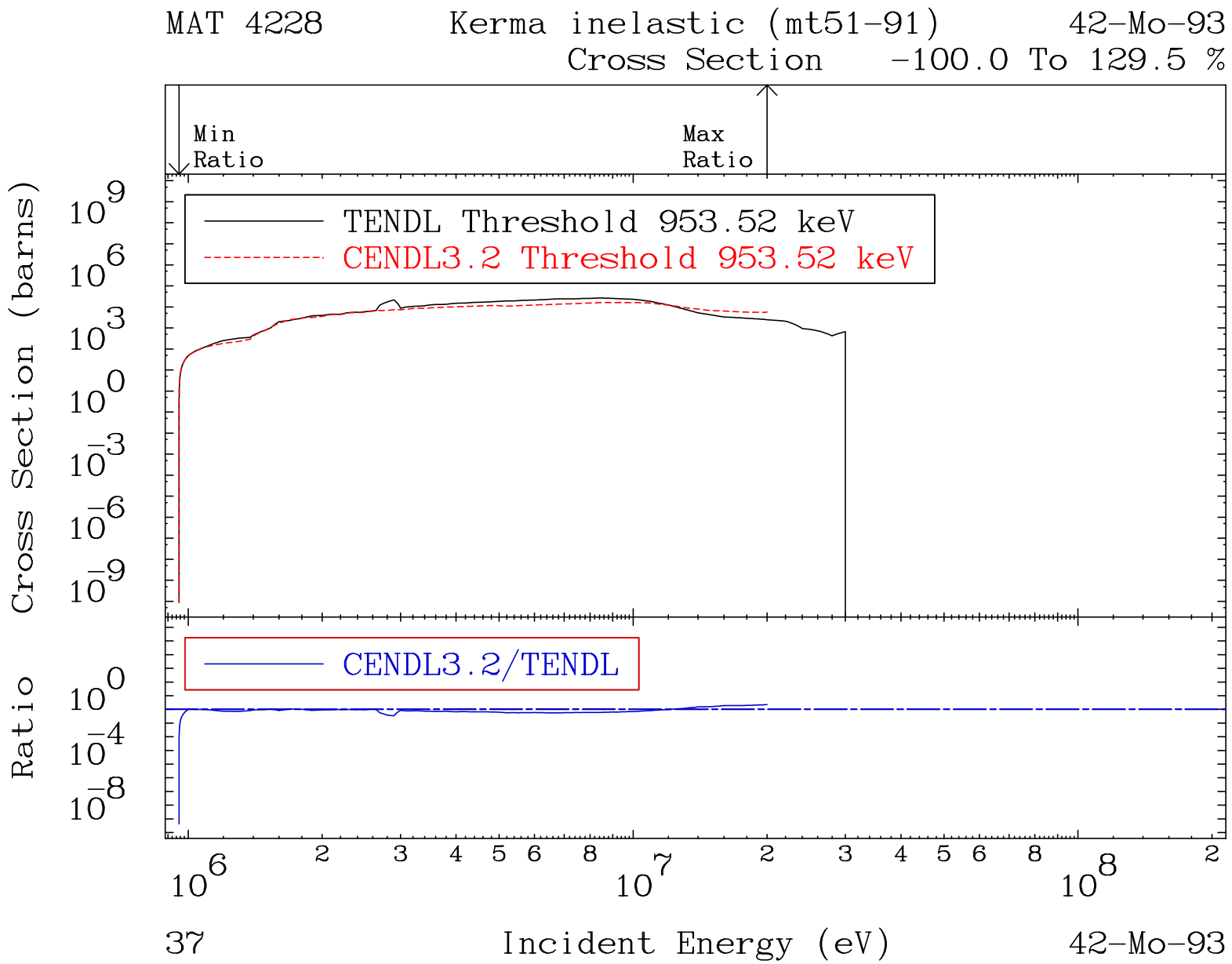

MAT 4228
He-3 Production
Cross Section
42-Mo-93
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.8340 MeV
CENDL3.2 Threshold 13.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
4
2
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
42-Mo-93

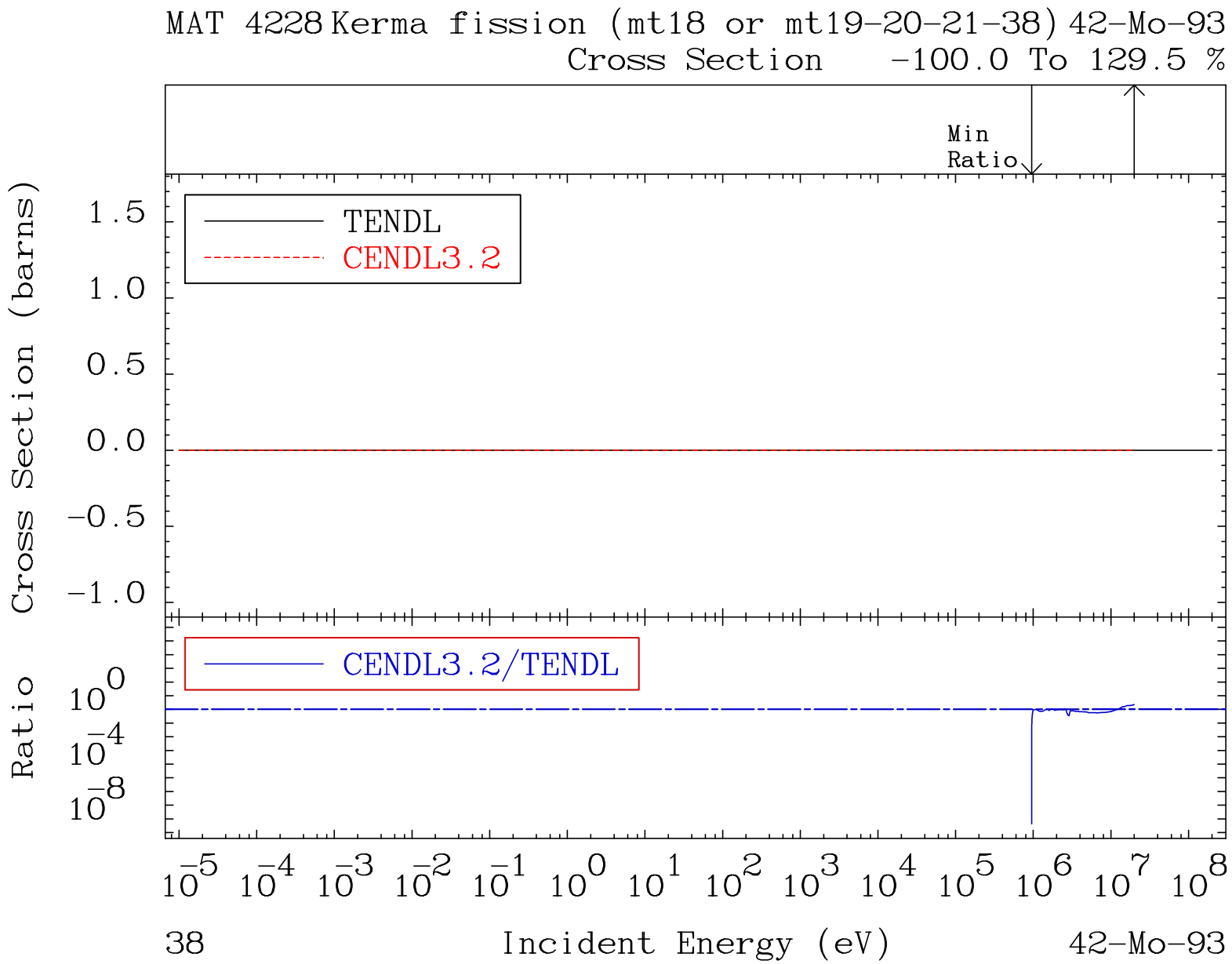

MAT 4228
He-4 Production
Cross Section
42-Mo-93
10.99 To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
42-Mo-93

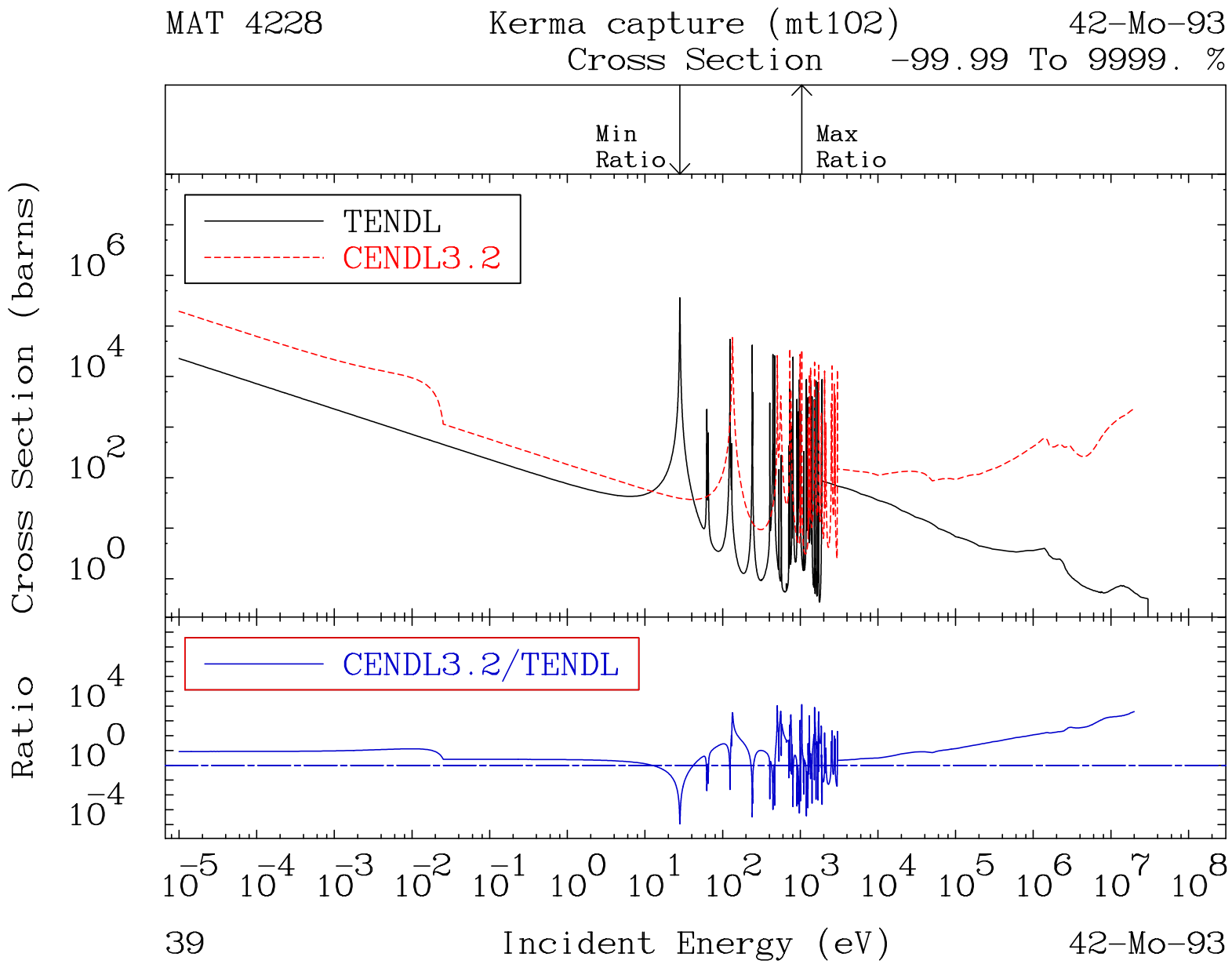

MAT 4228
Kerma total (eV-barns)
42-Mo-93
Cross Section -88.78 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
34
42-Mo-93

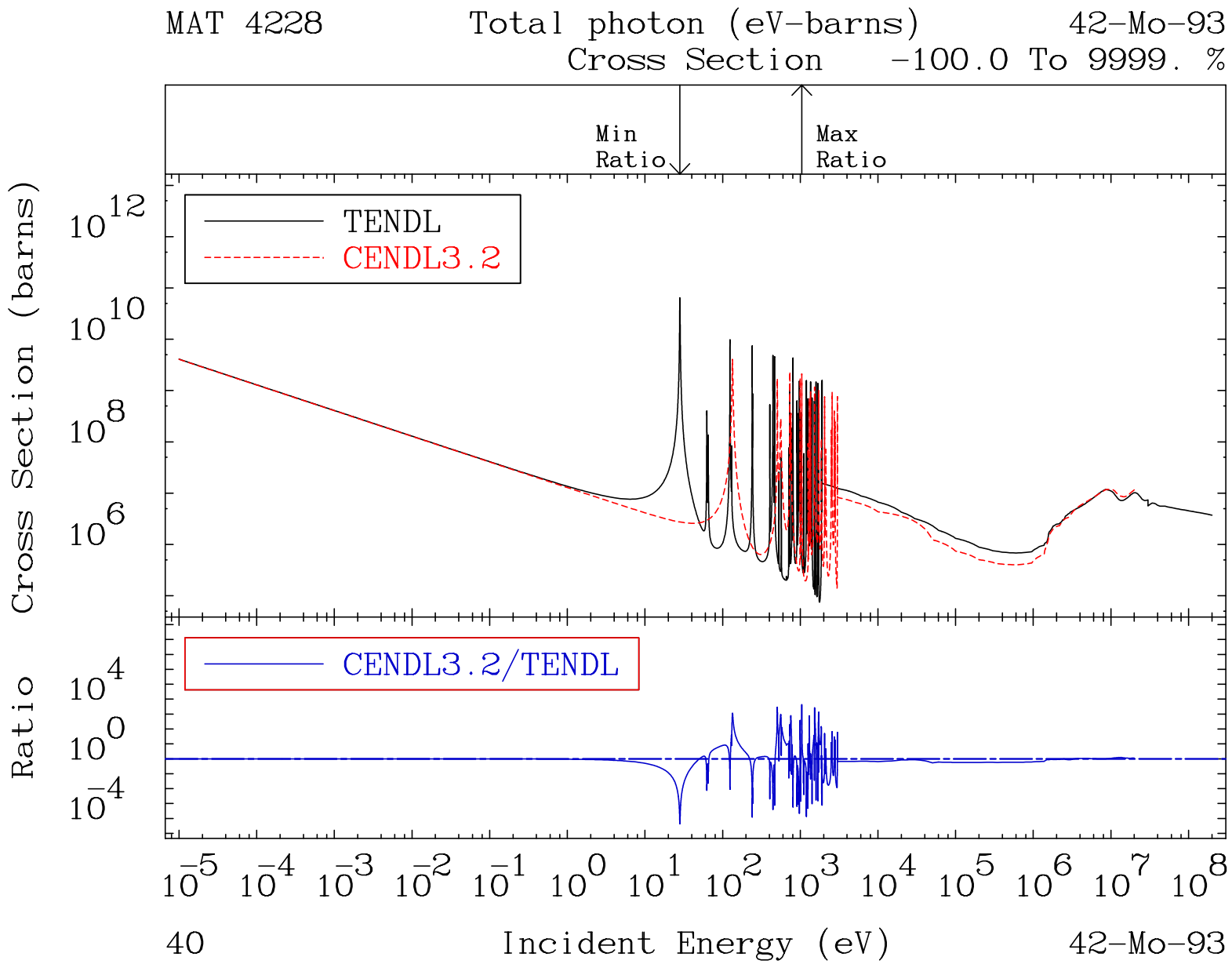

MAT 4228
Kerma elastic
Cross Section
42-Mo-93
-99.82 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
42-Mo-93

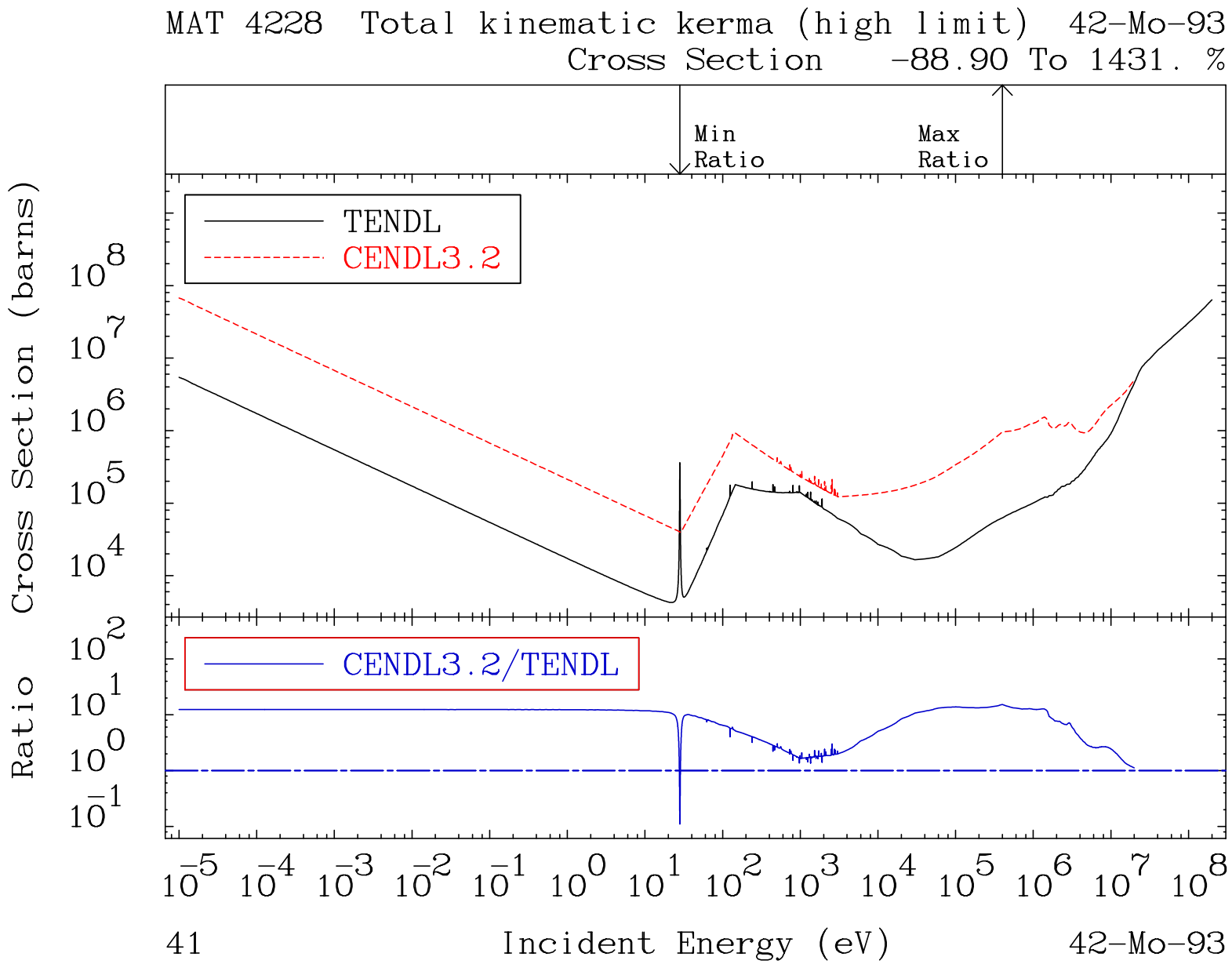

MAT 4228 Kerma non-elastic (all but mt2) 42-Mo-93
Cross Section -88.77 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^8
10^6
10^4
10^2
CENDL3.2/TENDL
Ratio
10^6
10^3
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
42-Mo-93

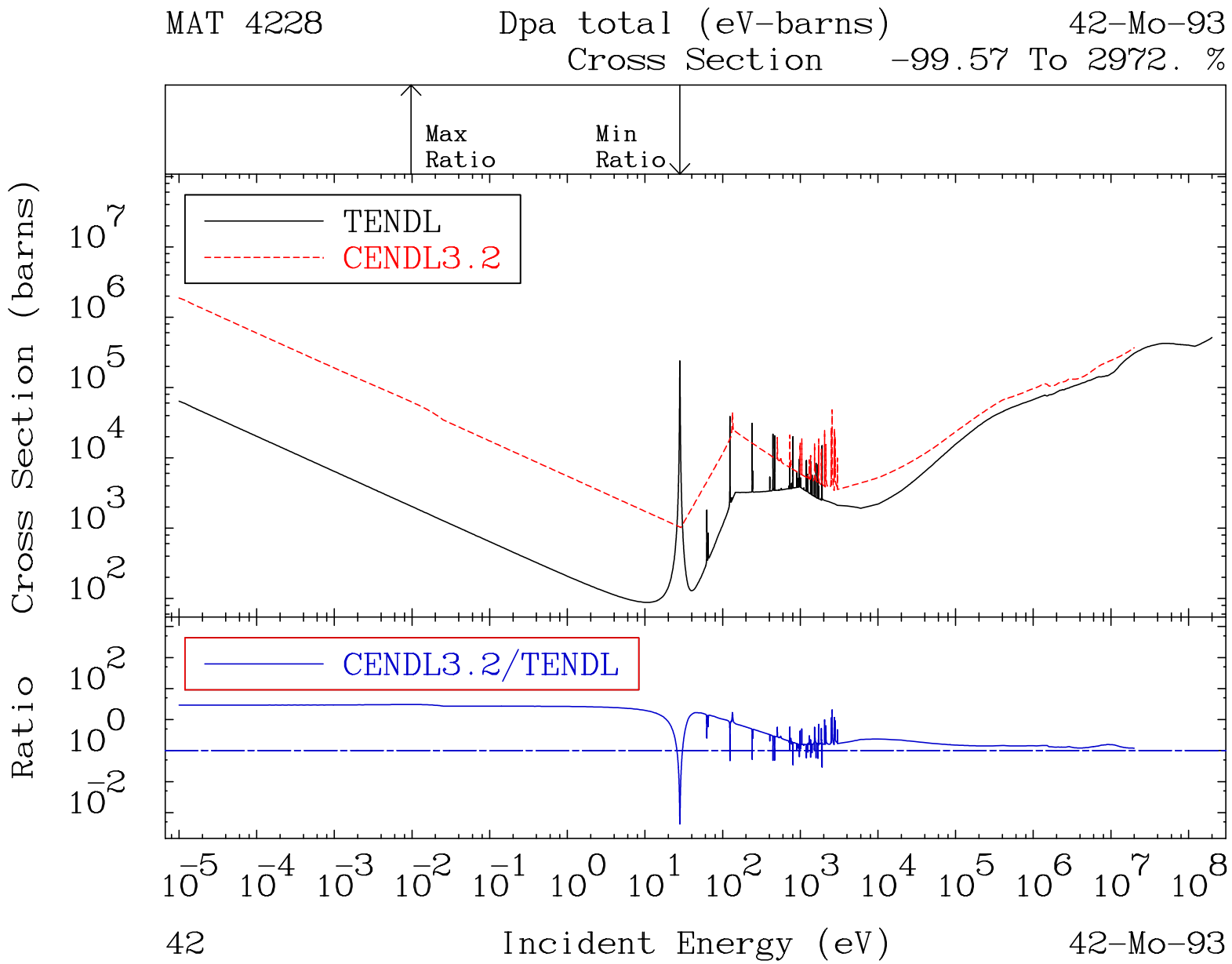

MAT 4228
Kerma inelastic (mt51-91)
42-Mo-93
Cross Section -100.0 To 129.5 %
Min Ratio
Max Ratio
TENDL Threshold 953.52 keV
CENDL3.2 Threshold 953.52 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
42-Mo-93

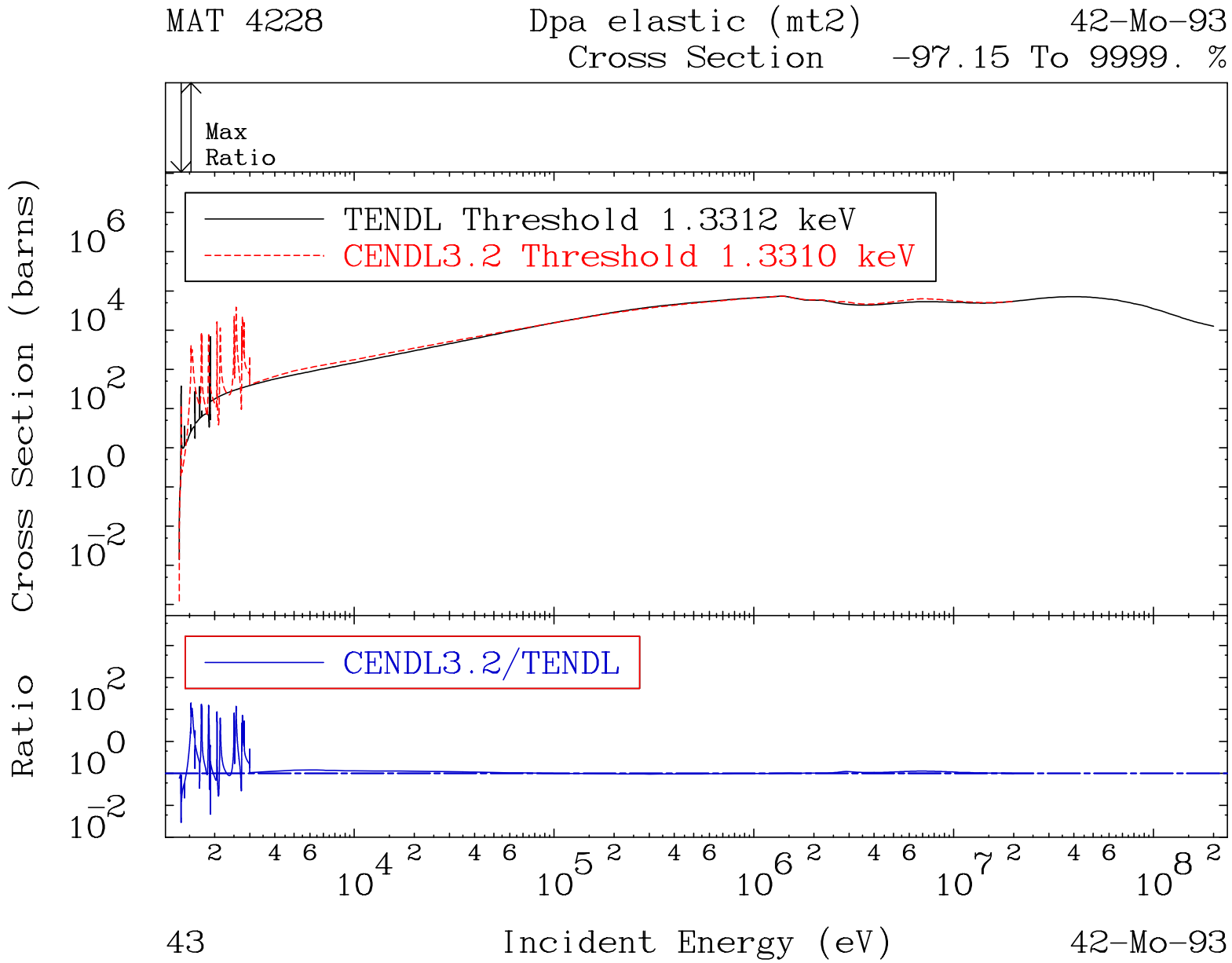

MAT 4228 Kerma fission (mt18 or mt19-20-21-38) 42-Mo-93
Cross Section -100.0 To 129.5 %
Min
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-4}
10^{-8}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
38
Incident Energy (eV)
42-Mo-93

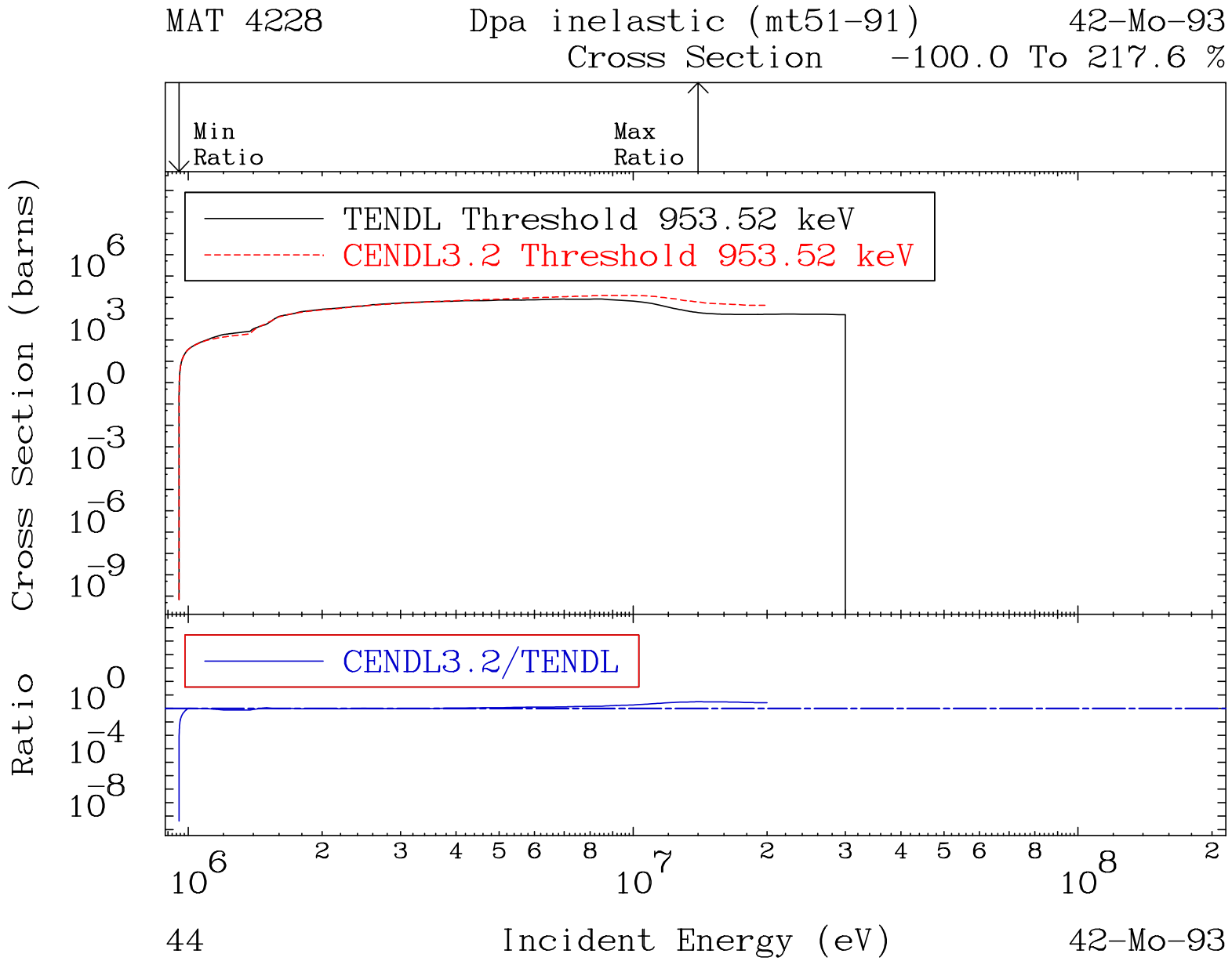

MAT 4228
Kerma capture (mt102)
42-Mo-93
Cross Section
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
39
42-Mo-93

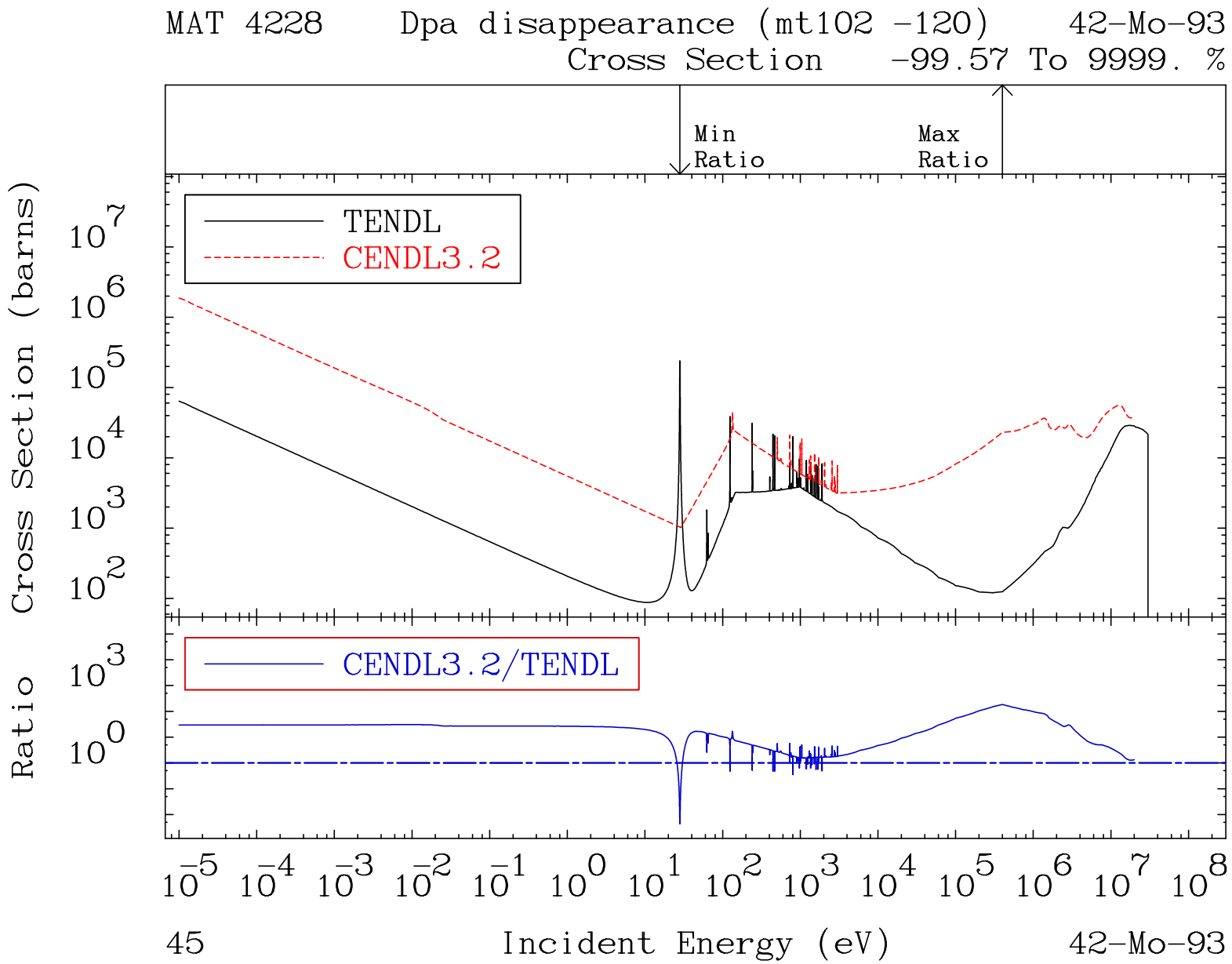

MAT 4228
Total photon (eV-barns)
42-Mo-93
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
42-Mo-93

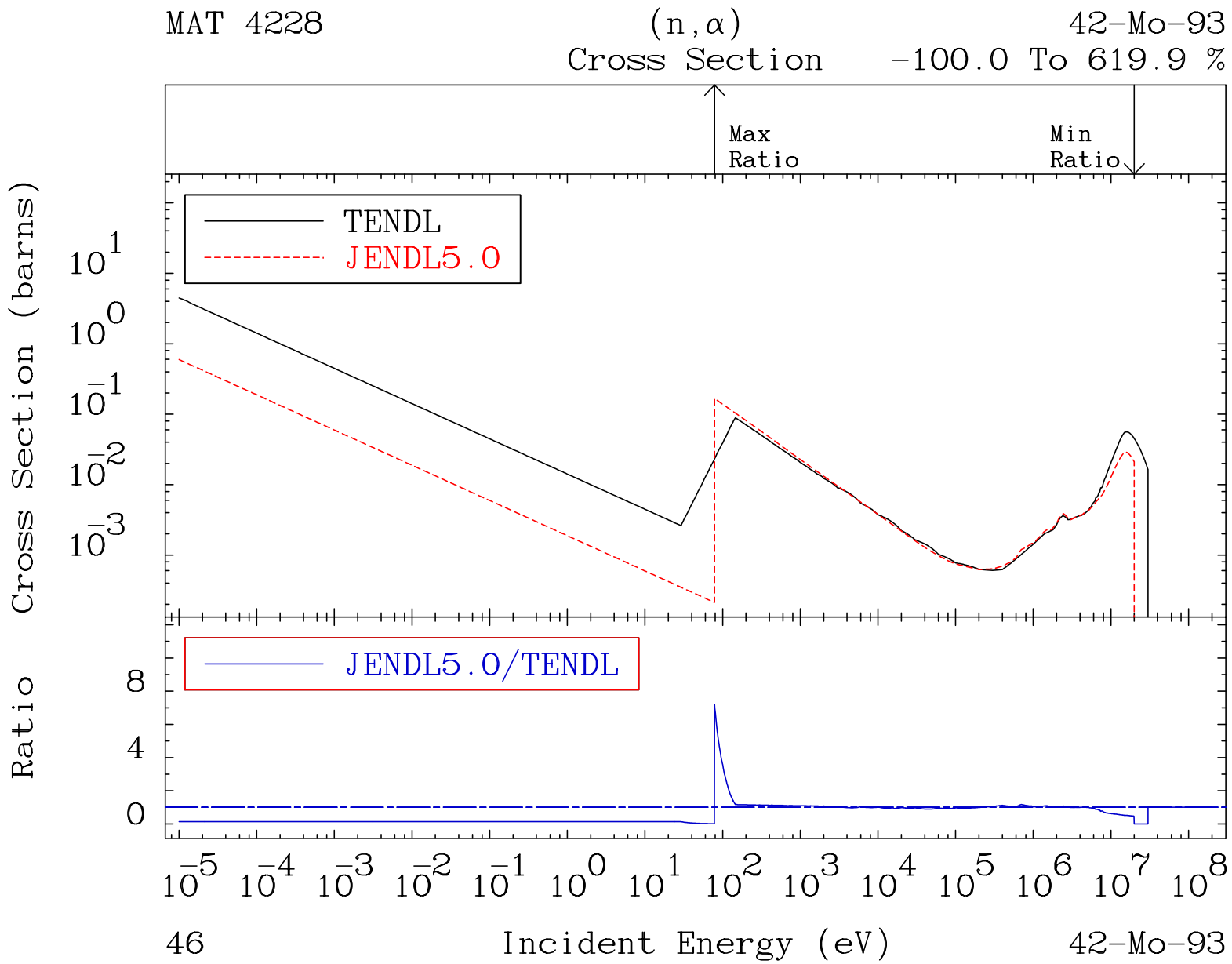

MAT 4228 Total kinematic kerma (high limit) 42-Mo-93
Cross Section -88.90 To 1431. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
42-Mo-93

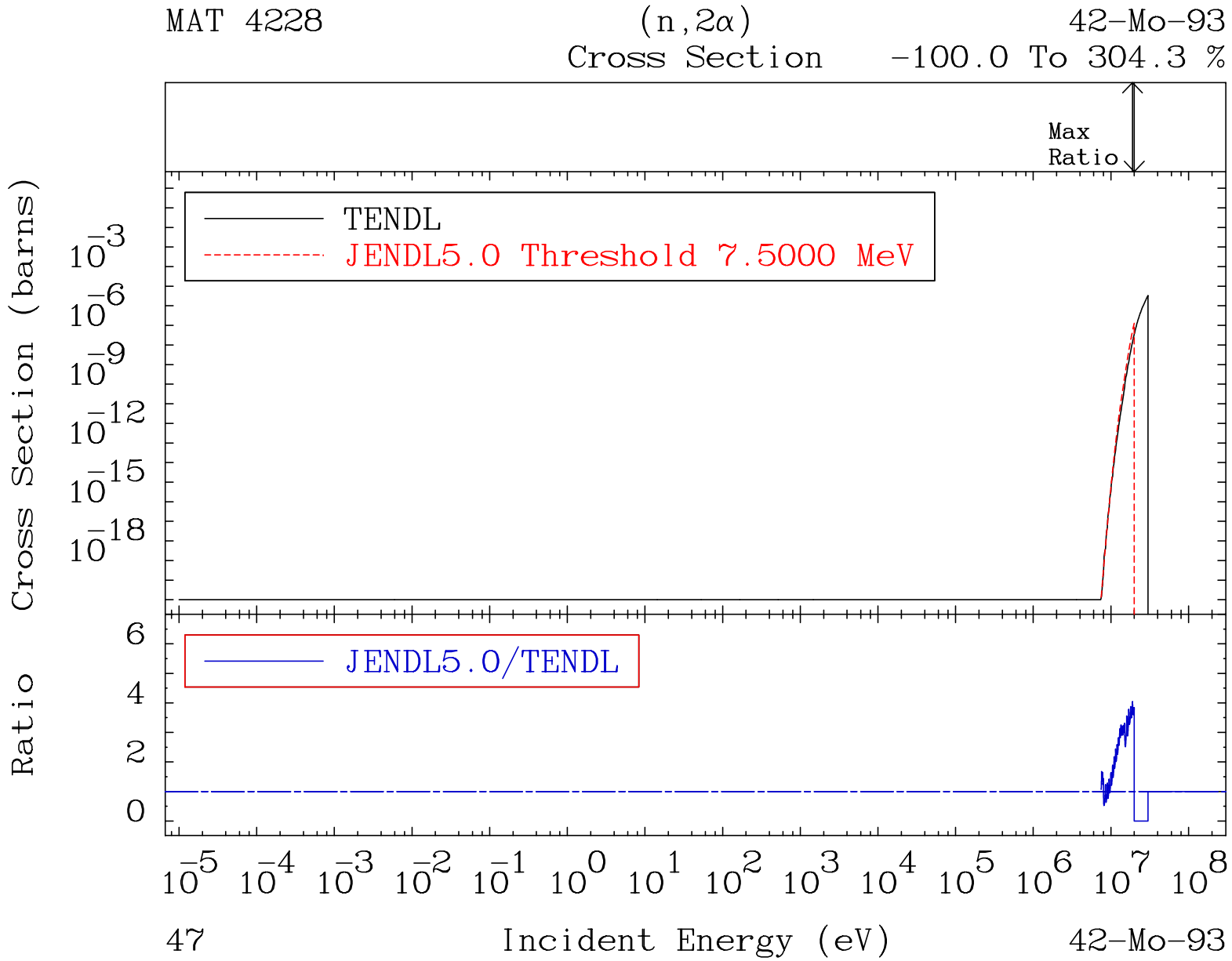

MAT 4228
Dpa total (eV-barns)
42-Mo-93
Cross Section
-99.57 To 2972. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
42-Mo-93

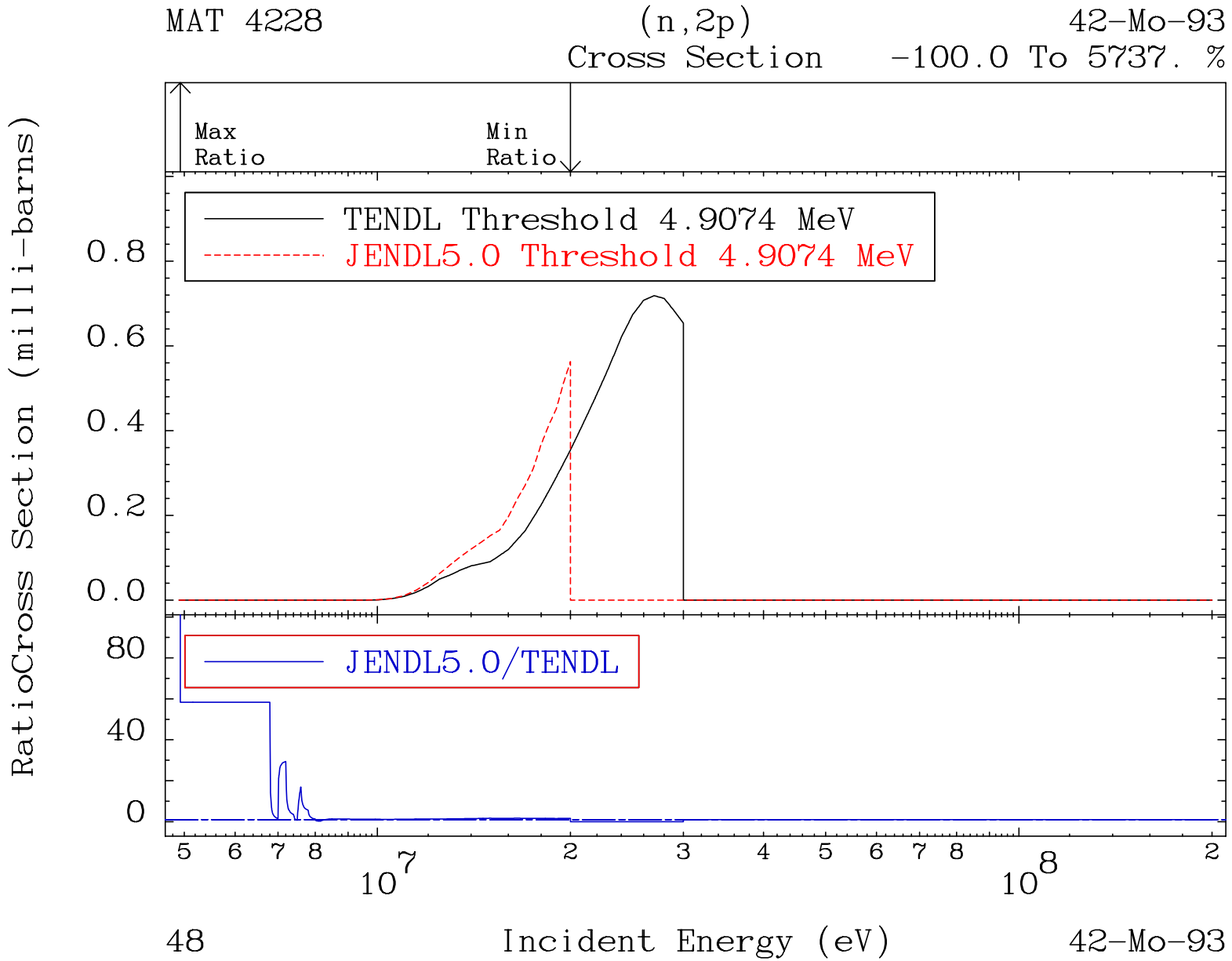

MAT 4228
Dpa elastic (mt2)
Cross Section
42-Mo-93
-97.15 To 9999. %
Max
Ratio
TENDL Threshold 1.3312 keV
CENDL3.2 Threshold 1.3310 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
42-Mo-93

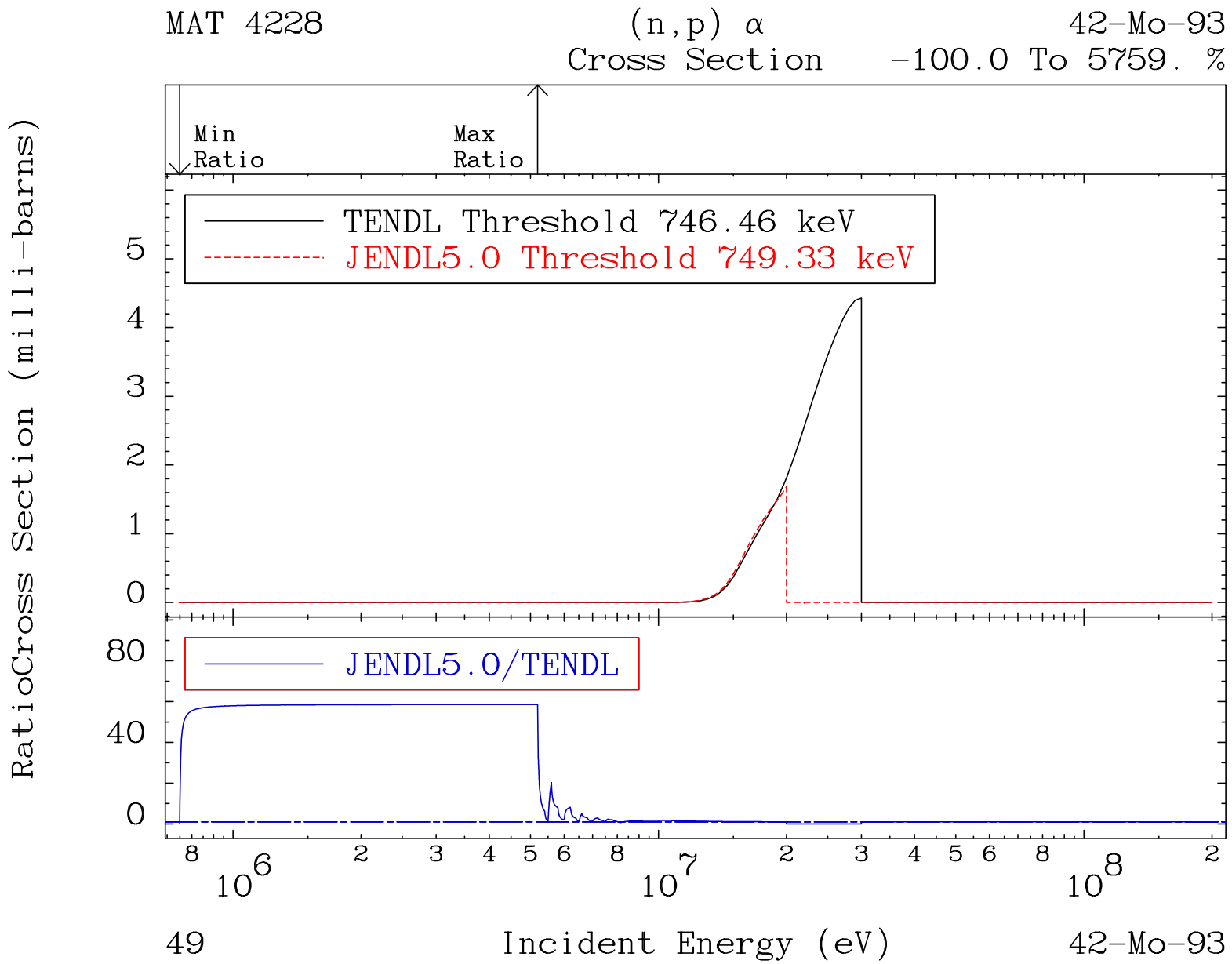

MAT 4228
Dpa inelastic (mt51-91)
42-Mo-93
Cross Section -100.0 To 217.6 %
Min Ratio
Max Ratio
TENDL Threshold 953.52 keV
CENDL3.2 Threshold 953.52 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
42-Mo-93

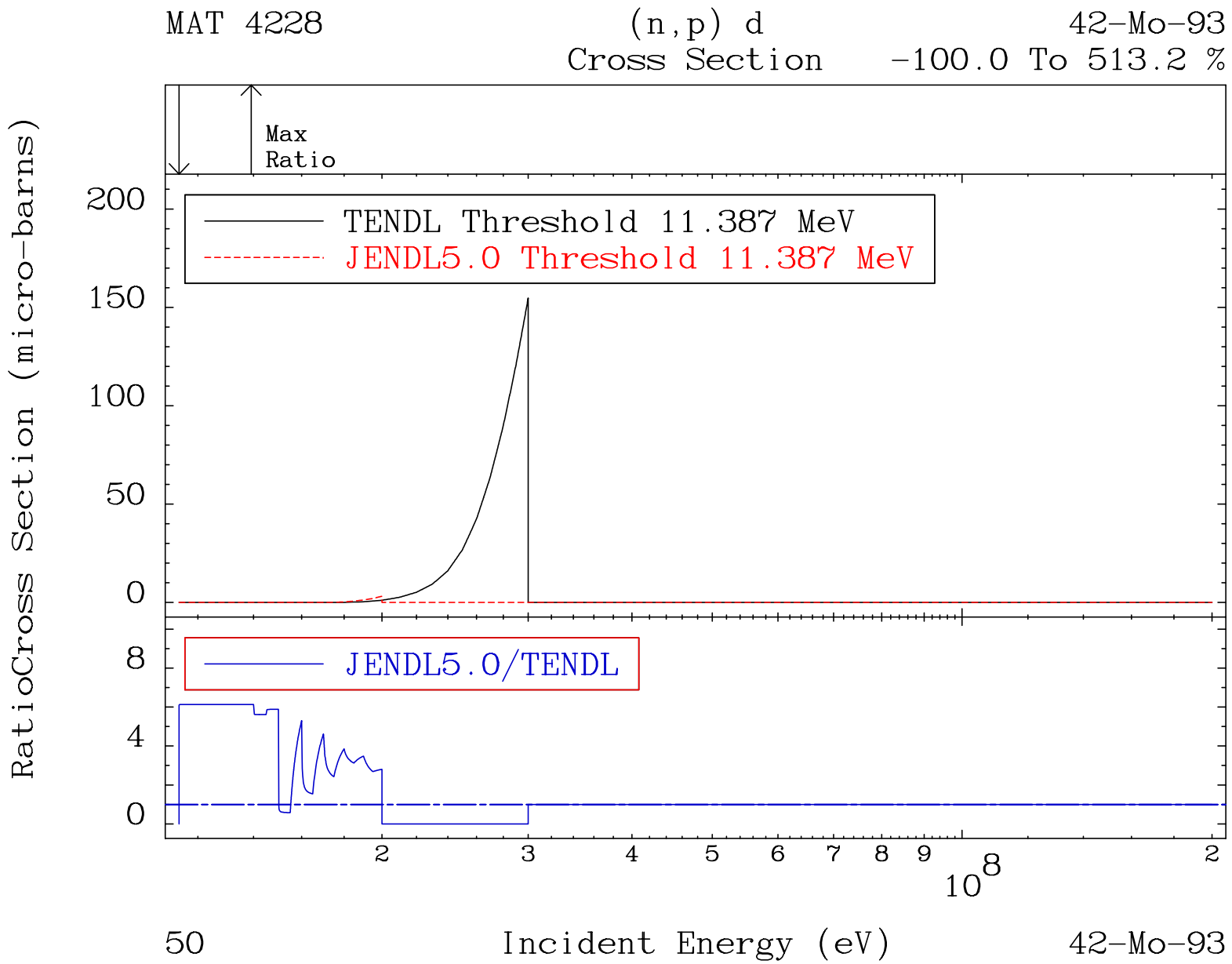

MAT 4228 Dpa disappearance (mt102 -120) 42-Mo-93
Cross Section -99.57 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
45
42-Mo-93

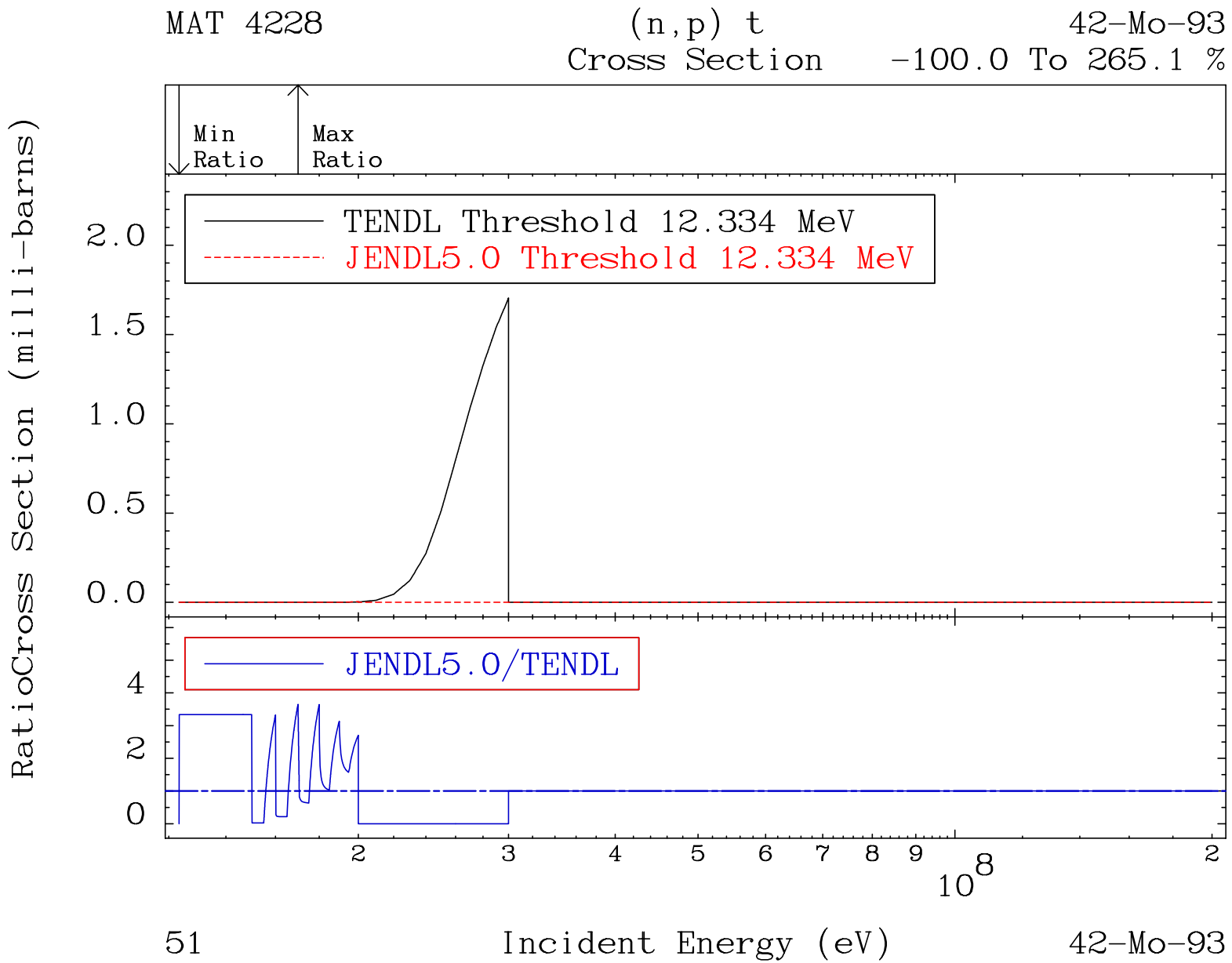

MAT 4228
(n,α)
Cross Section
42-Mo-93
-100.0 To 619.9 %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
46
42-Mo-93

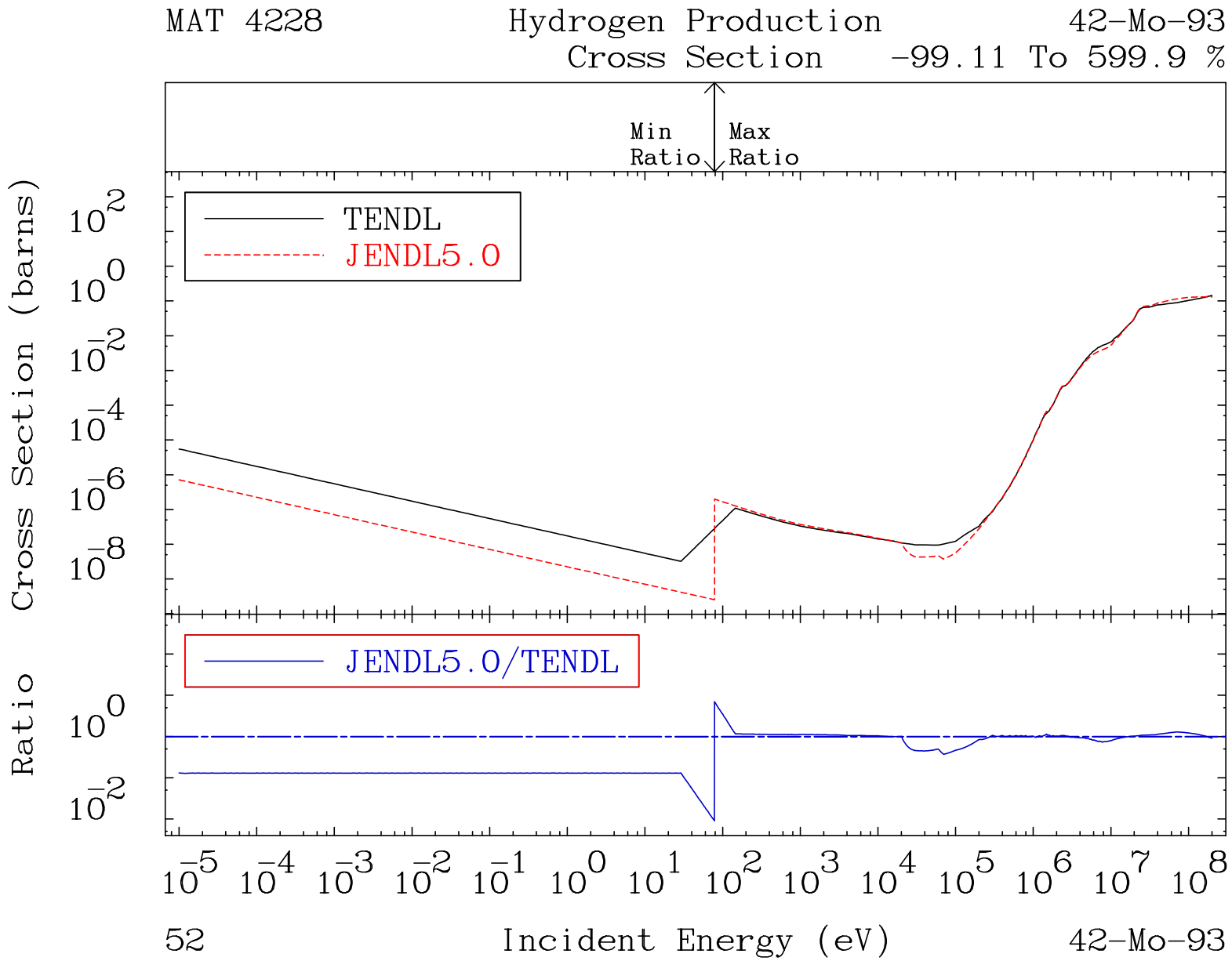

MAT 4228
(n,2α)
Cross Section
42-Mo-93
-100.0 To 304.3 %
Max
Ratio
TENDL
JENDL5.0 Threshold 7.5000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
42-Mo-93

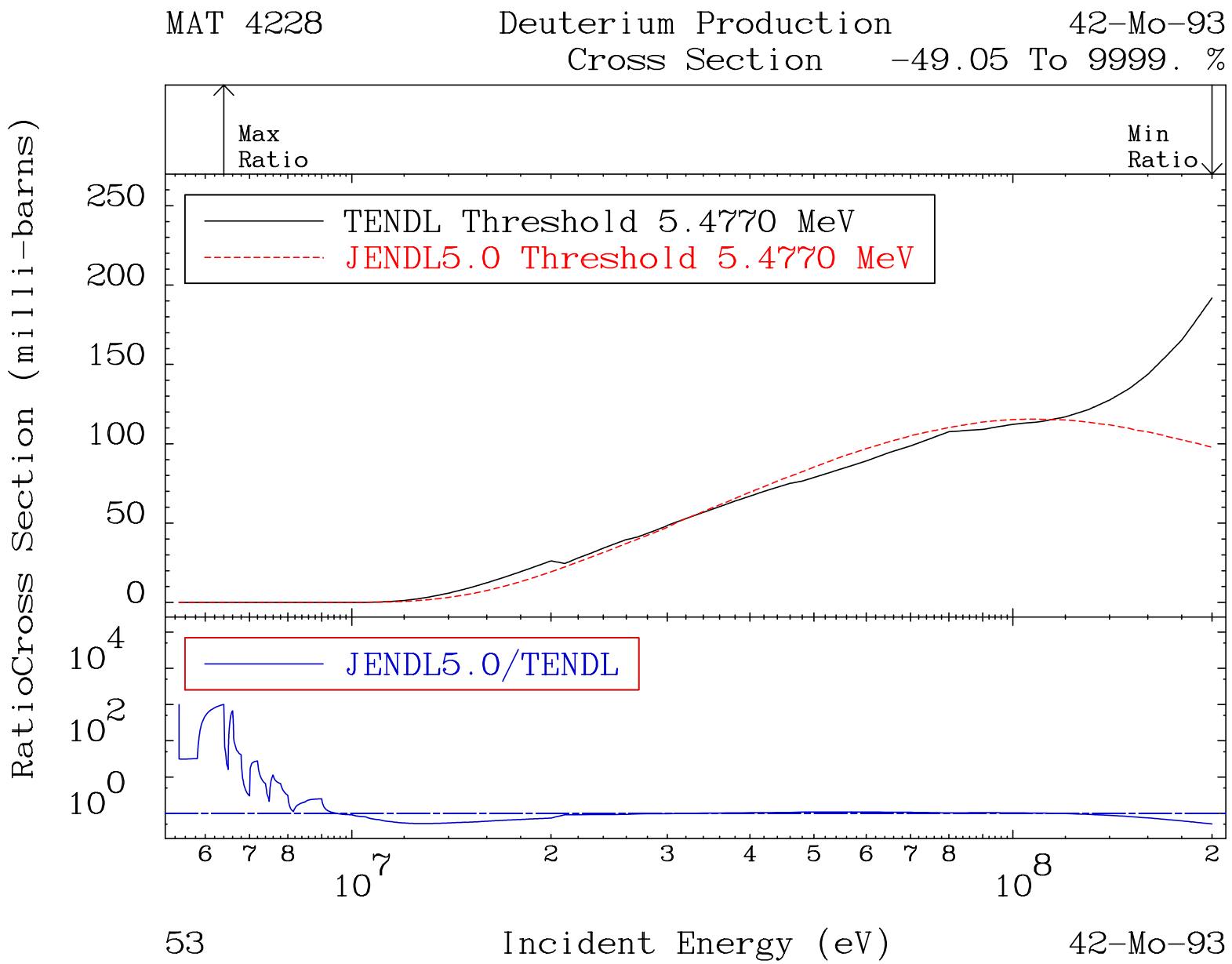

MAT 4228
(n,2p)
Cross Section
42-Mo-93
-100.0 To 5737. %
Max Ratio
Min Ratio
TENDL Threshold 4.9074 MeV
JENDL5.0 Threshold 4.9074 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
0.8
0.6
0.4
0.2
0.0
80
40
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
42-Mo-93

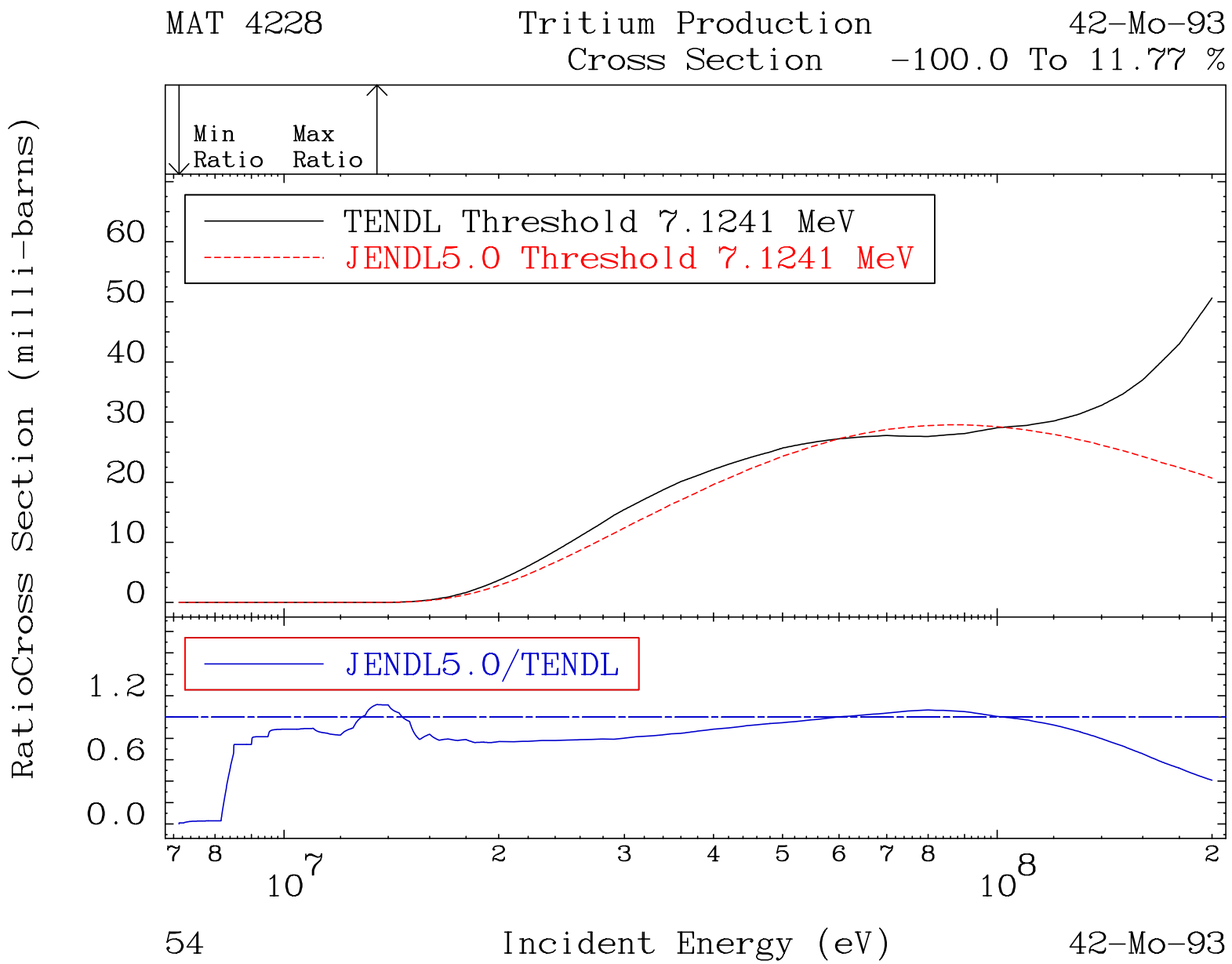

MAT 4228
(n,p) α
Cross Section
42-Mo-93
-100.0 To 5759. %
Min Ratio
Max Ratio
TENDL Threshold 746.46 keV
JENDL5.0 Threshold 749.33 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
49
42-Mo-93

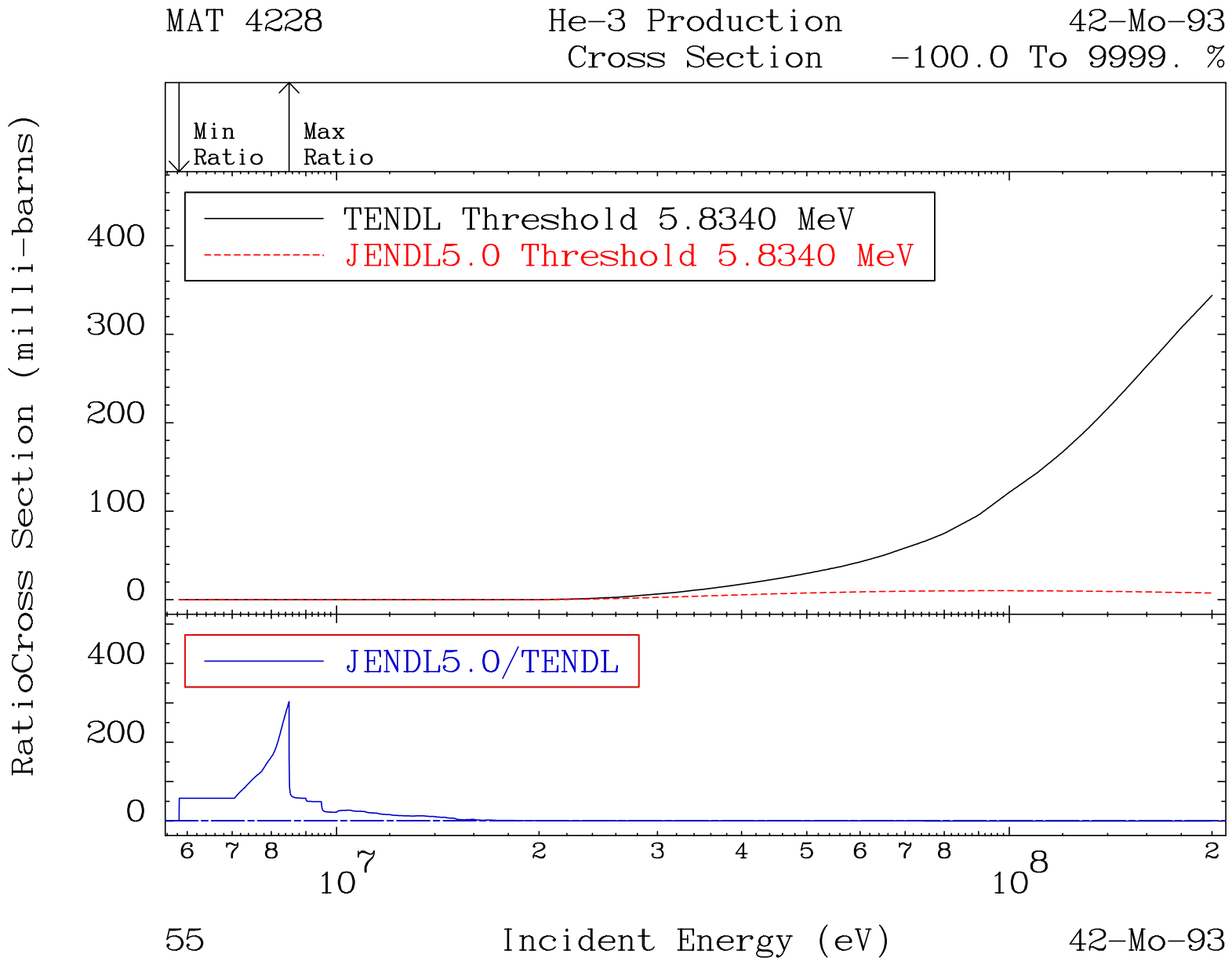

MAT 4228
(n,p) d
Cross Section
42-Mo-93
-100.0 To 513.2 %
Max
Ratio
TENDL Threshold 11.387 MeV
JENDL5.0 Threshold 11.387 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
8
4
0
2
3
4
5
6
7
8
9
2
10^8
50
Incident Energy (eV)
42-Mo-93

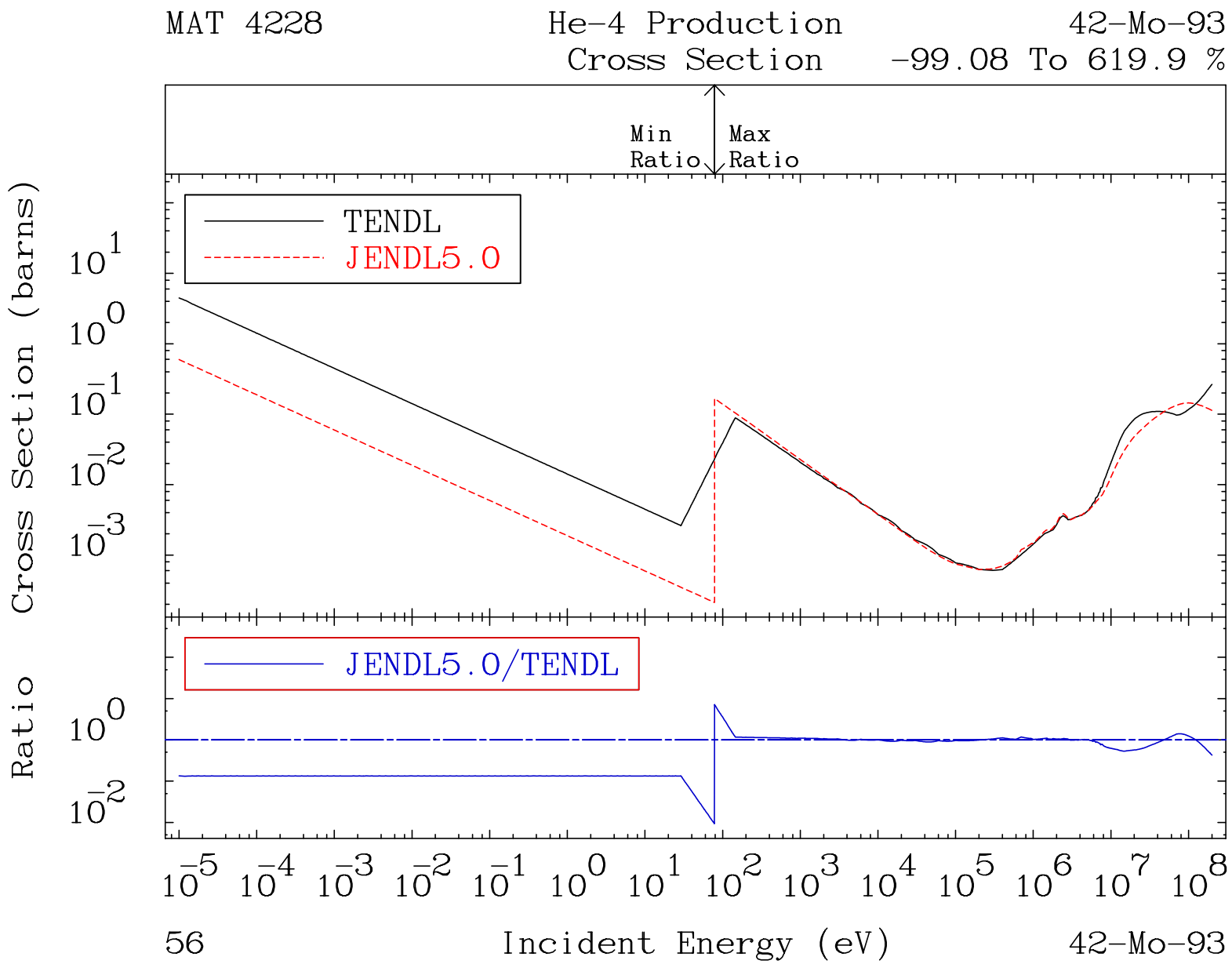

MAT 4228
(n,p) t
Cross Section
42-Mo-93
-100.0 To 265.1 %
Min Ratio
Max Ratio
TENDL Threshold 12.334 MeV
JENDL5.0 Threshold 12.334 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
42-Mo-93

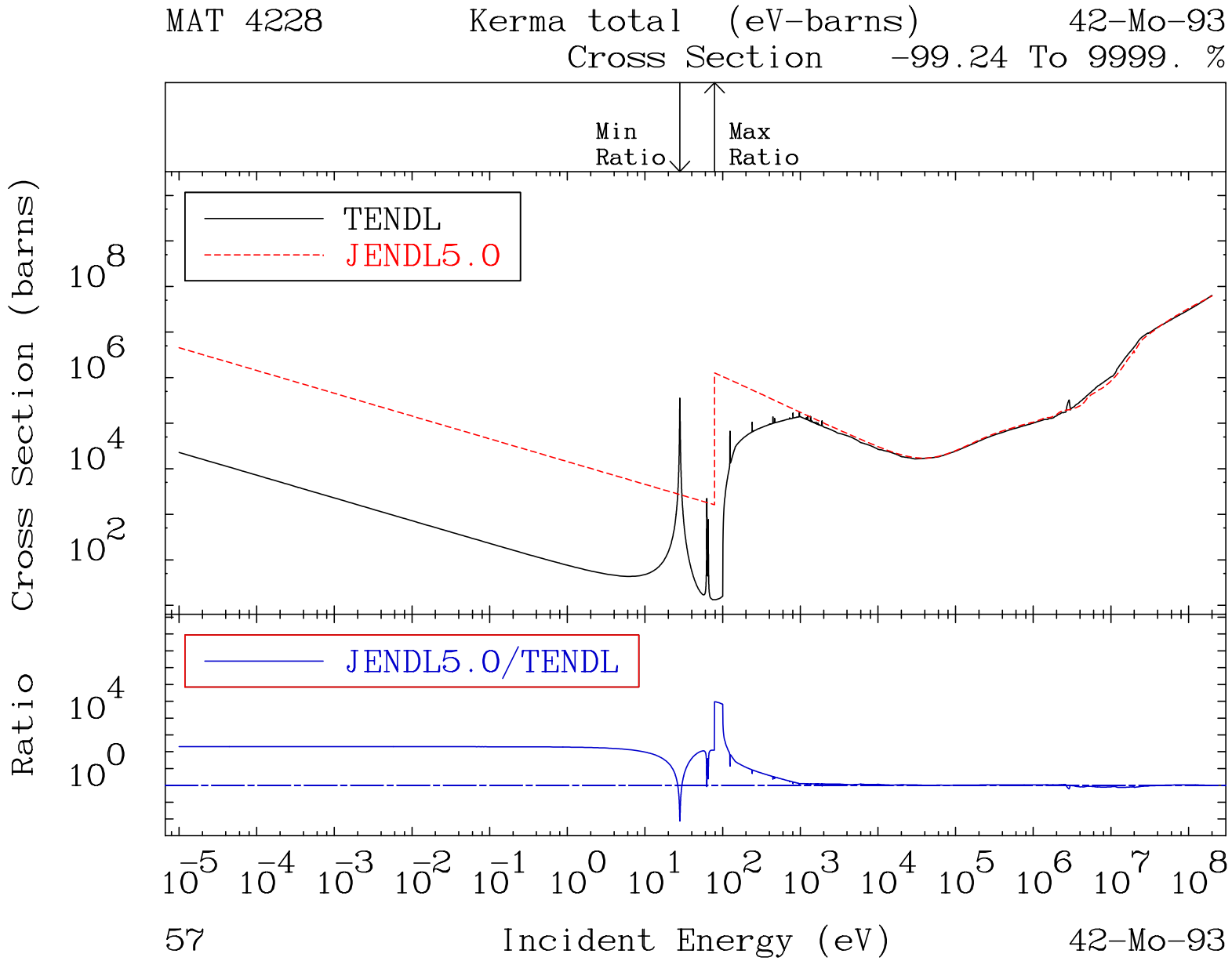

MAT 4228
Hydrogen Production
42-Mo-93
Cross Section
-99.11 To 599.9 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
42-Mo-93

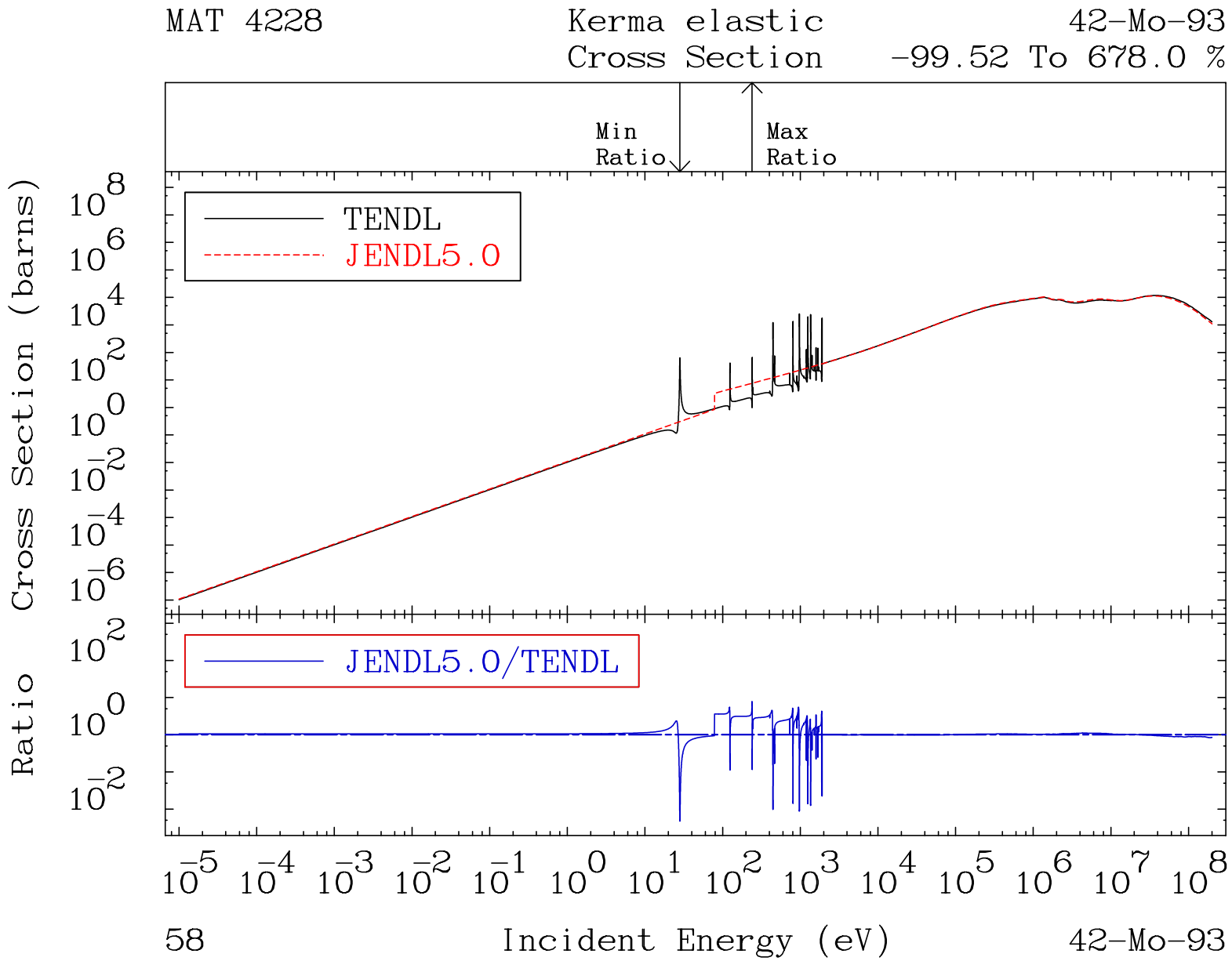

MAT 4228
Deuterium Production
42-Mo-93
Cross Section
-49.05 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.4770 MeV
JENDL5.0 Threshold 5.4770 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^4
10^2
10^0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
53
Incident Energy (eV)
42-Mo-93

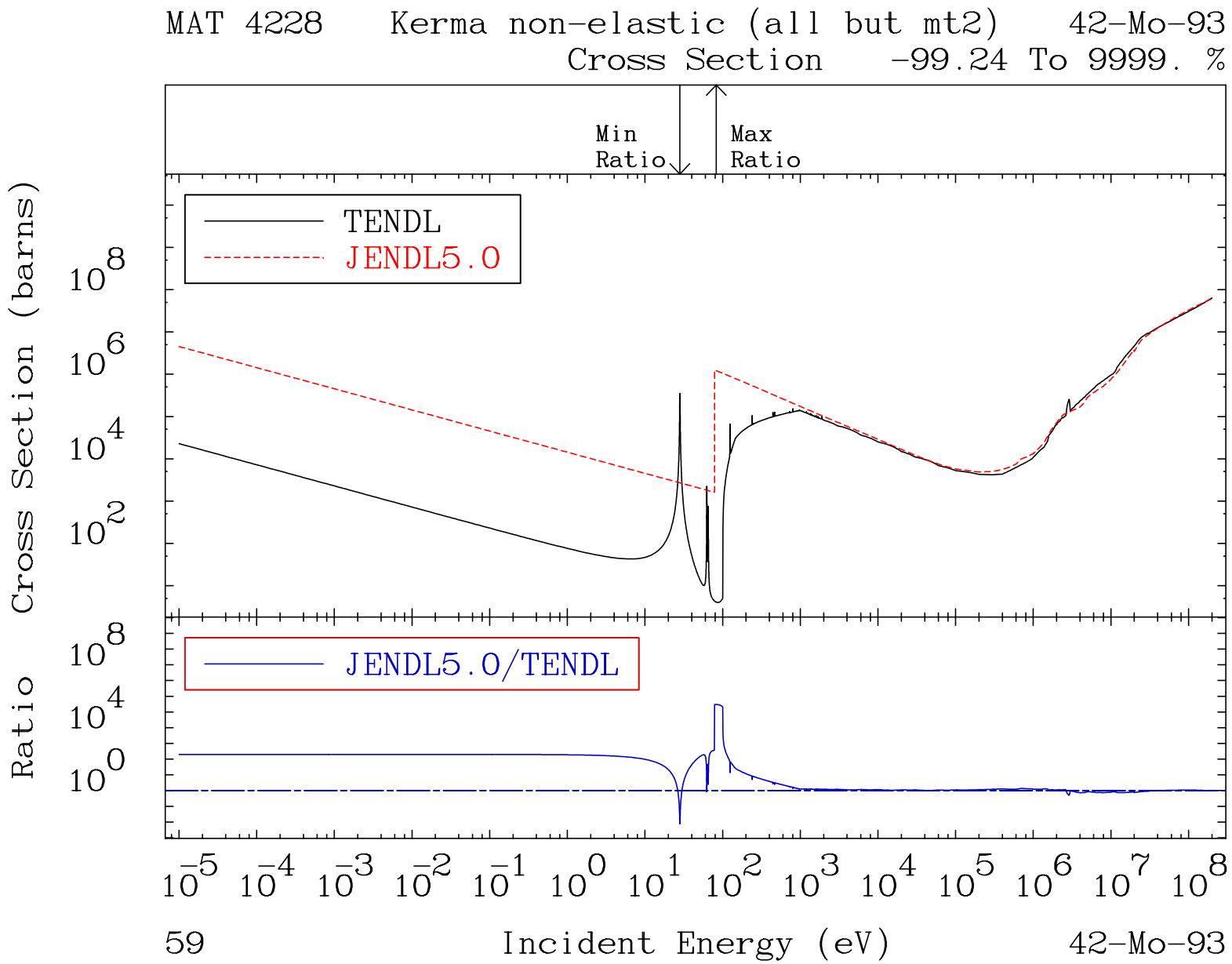

MAT 4228
Tritium Production
42-Mo-93
Cross Section
-100.0 To 11.77 %
Min Ratio
Max Ratio
TENDL Threshold 7.1241 MeV
JENDL5.0 Threshold 7.1241 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
54
Incident Energy (eV)
42-Mo-93

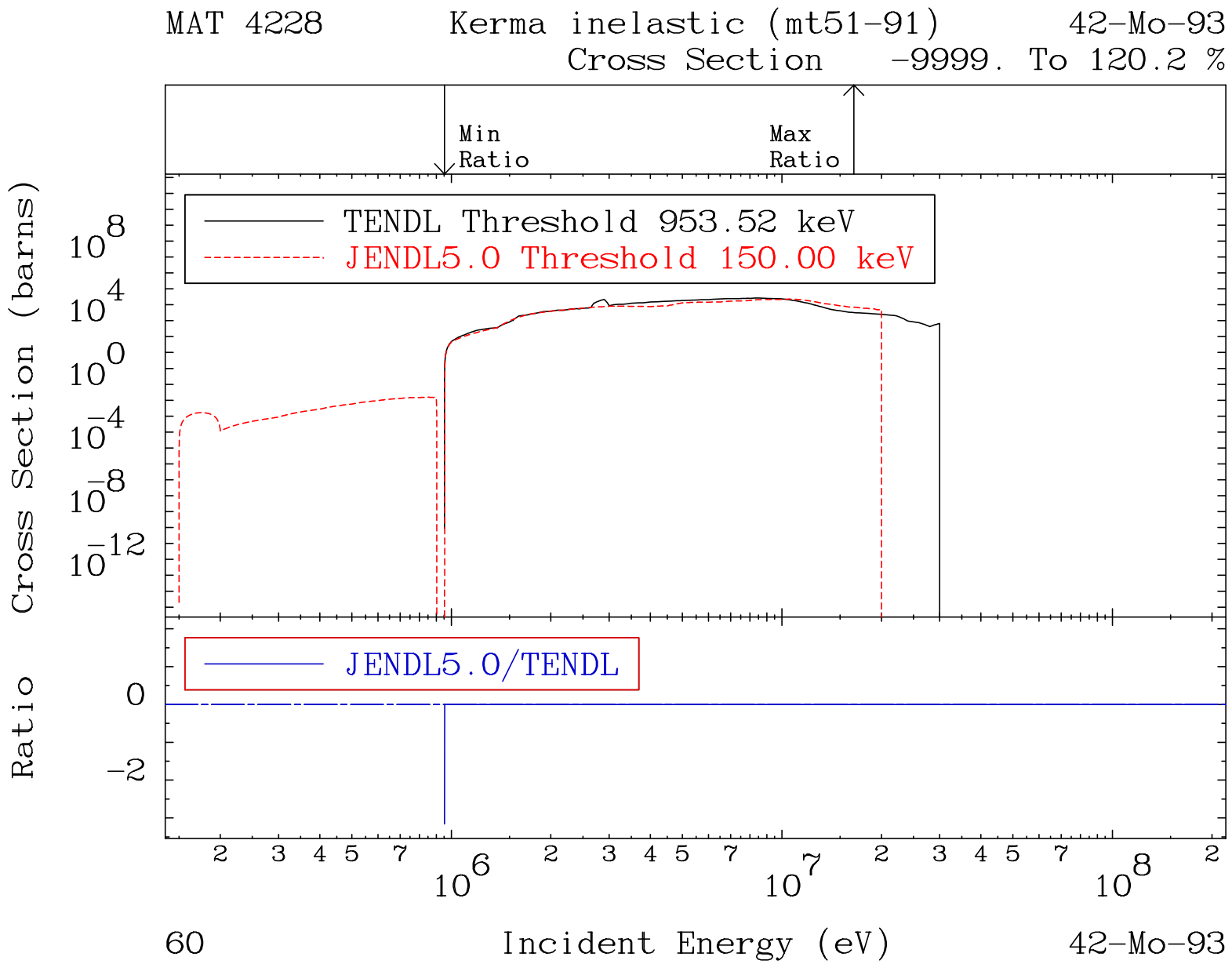

MAT 4228
He-3 Production
Cross Section
42-Mo-93
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.8340 MeV
JENDL5.0 Threshold 5.8340 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
400
200
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
55
Incident Energy (eV)
42-Mo-93

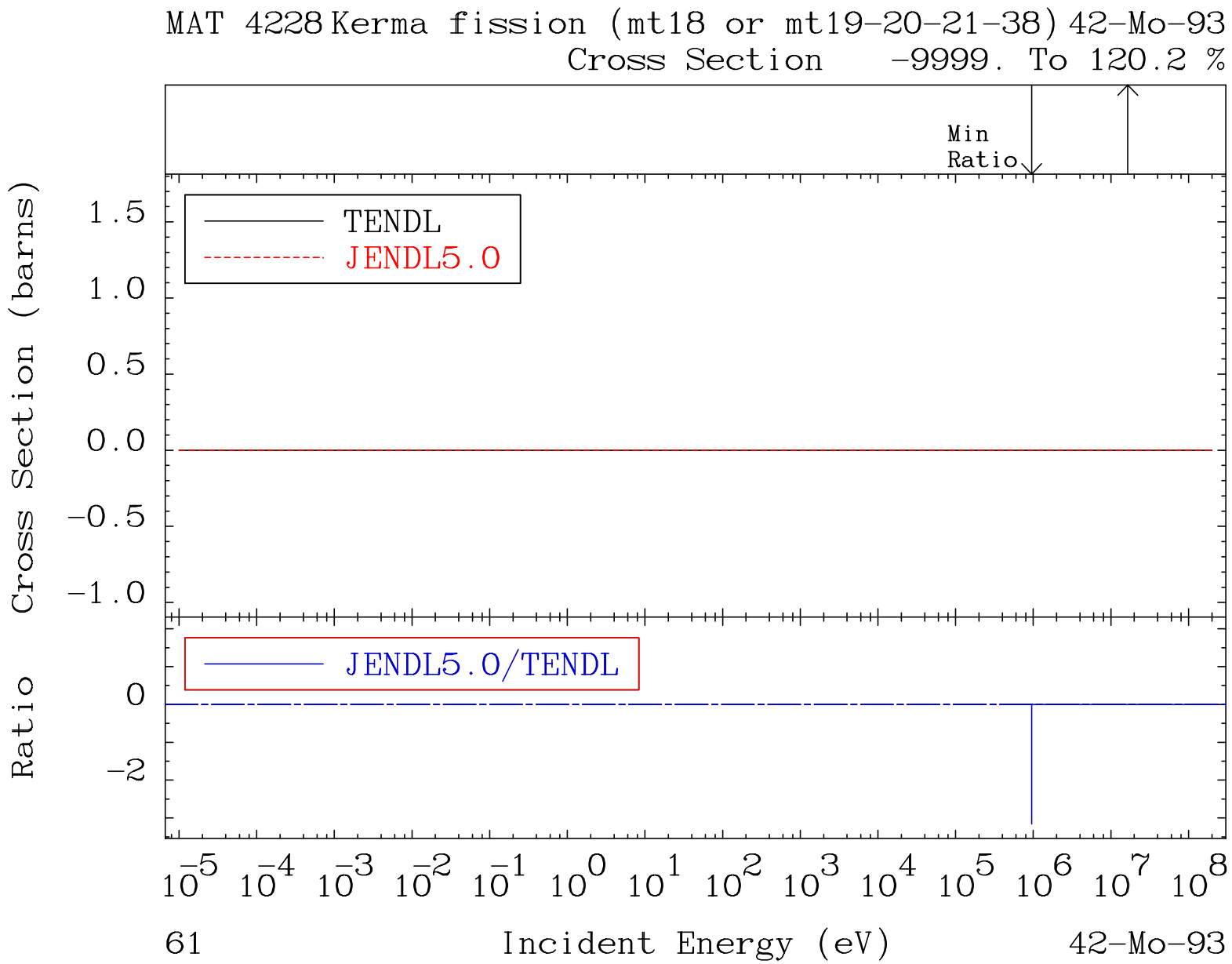

MAT 4228
He-4 Production
Cross Section
42-Mo-93
-99.08 To 619.9 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
42-Mo-93

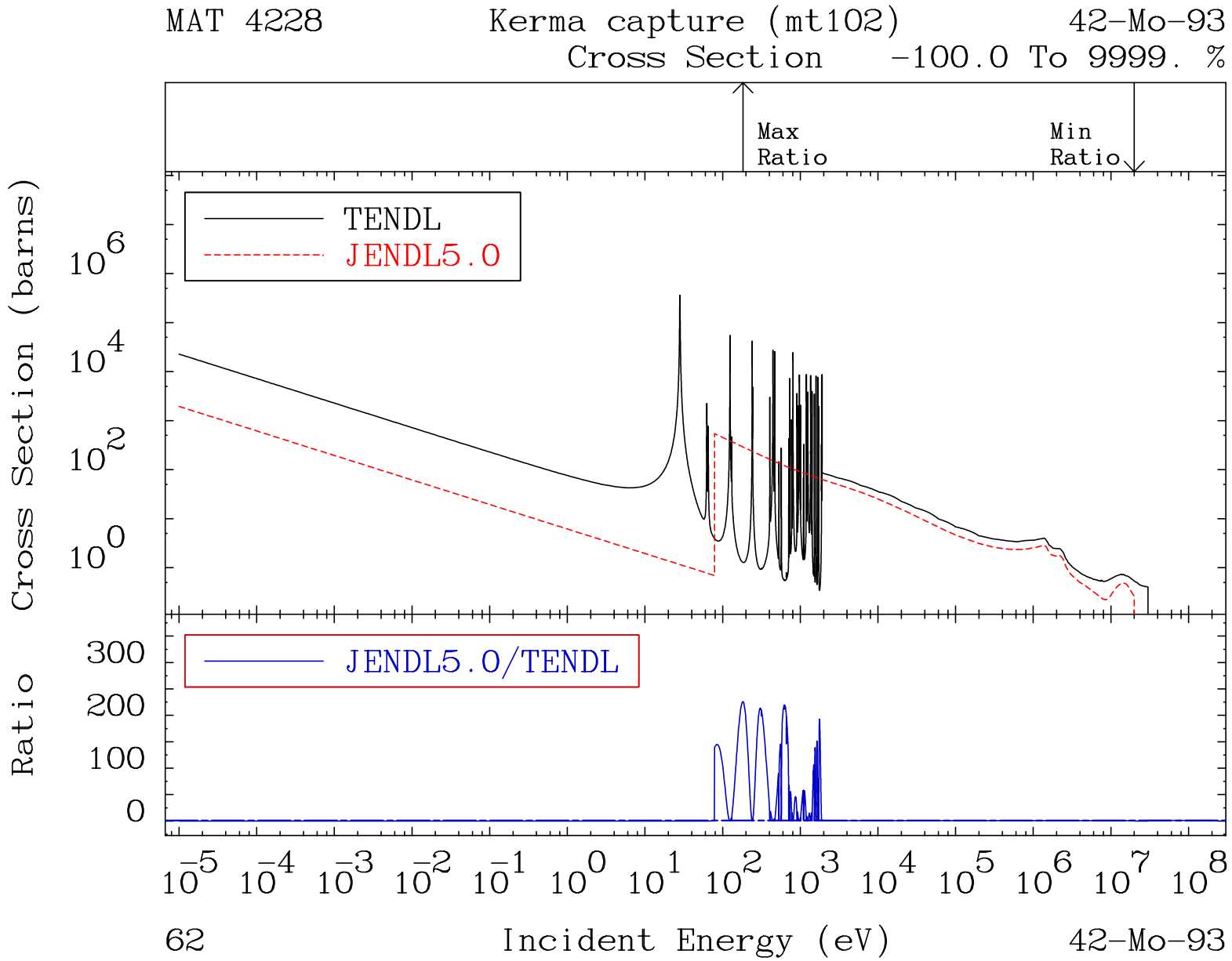

MAT 4228
Kerma total (eV-barns)
42-Mo-93
Cross Section -99.24 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
57
42-Mo-93

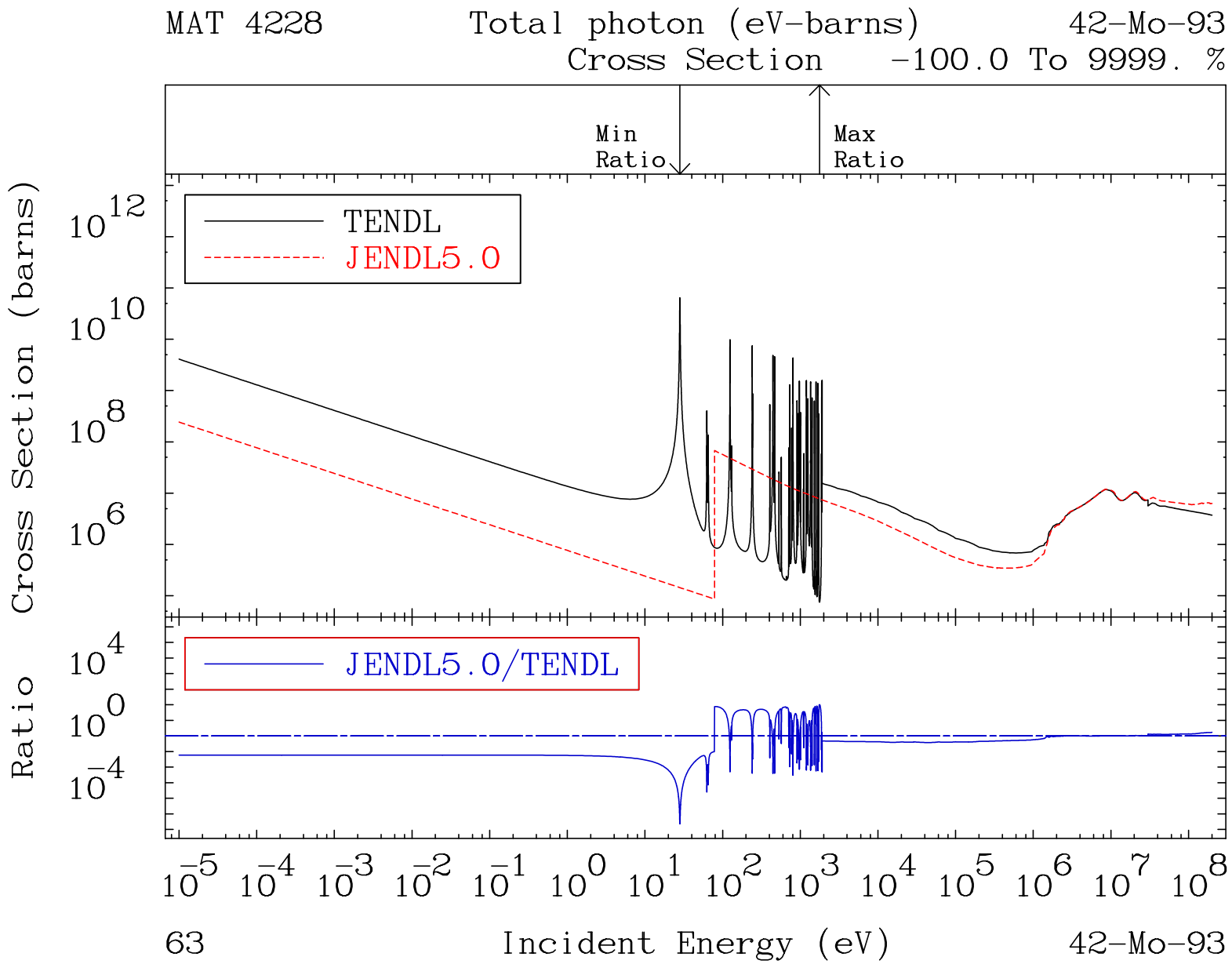

MAT 4228
Kerma elastic
Cross Section
42-Mo-93
-99.52 To 678.0 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
42-Mo-93

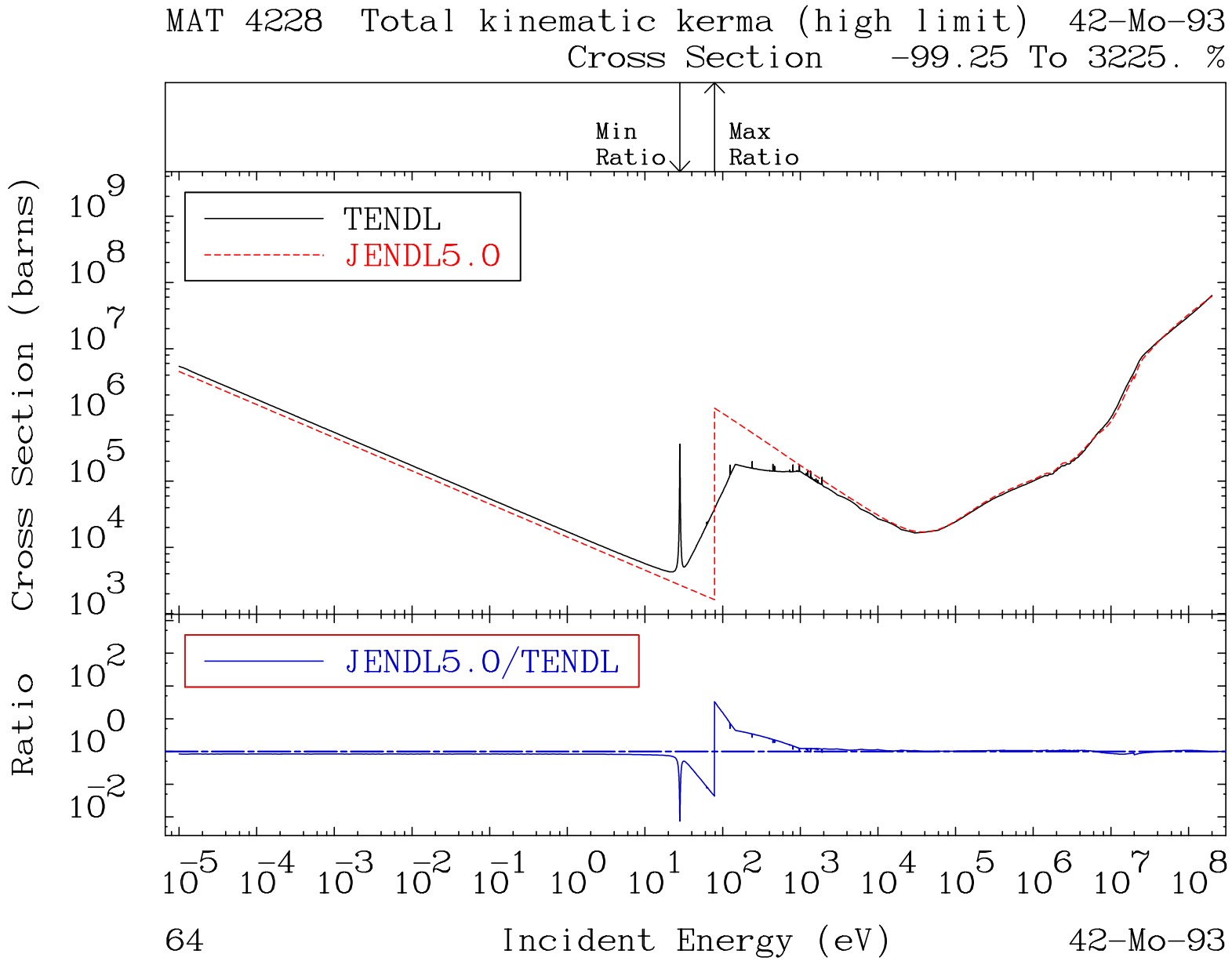

MAT 4228 Kerma non-elastic (all but mt2) 42-Mo-93
Cross Section -99.24 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
59
42-Mo-93

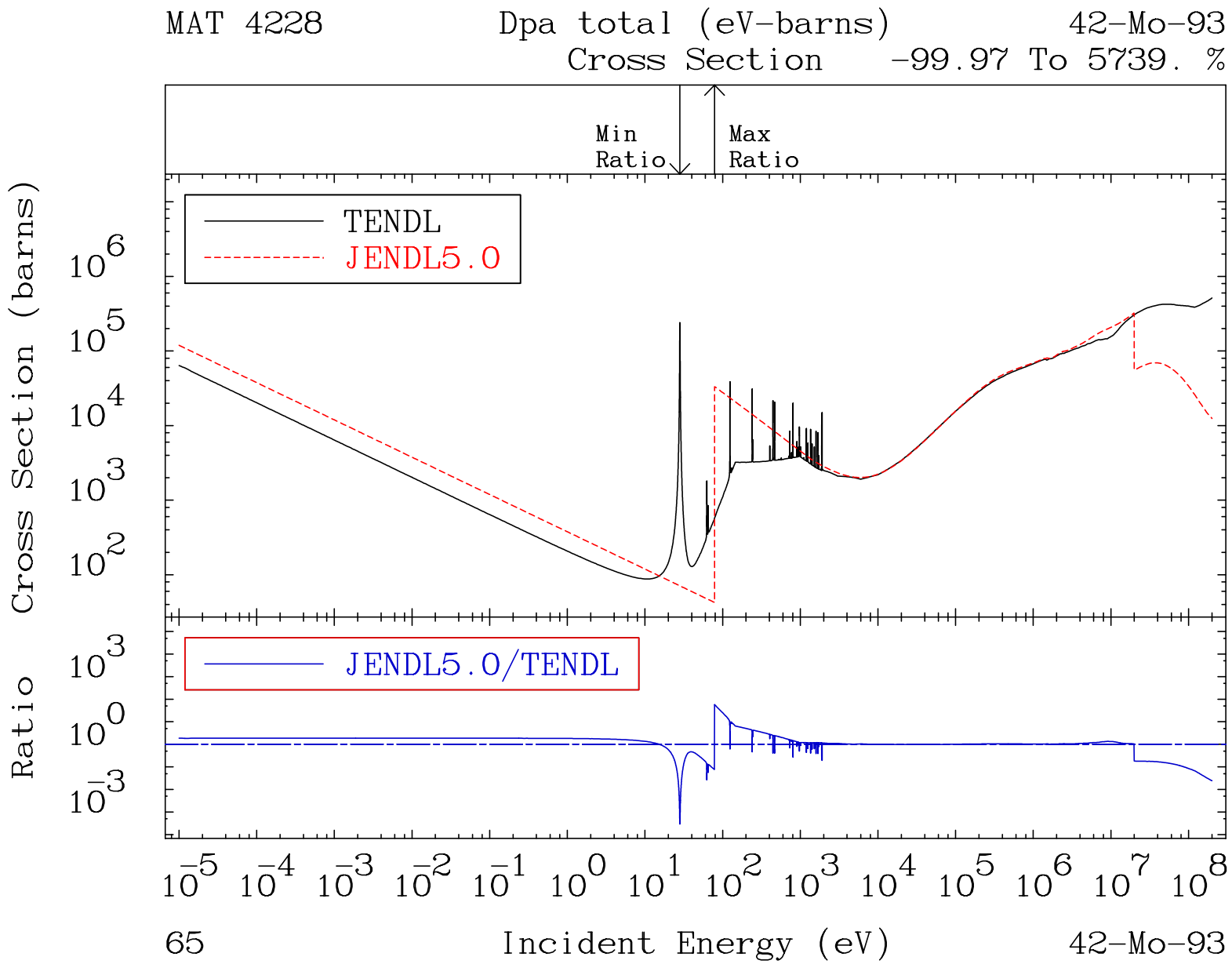

MAT 4228
Kerma inelastic (mt51-91)
42-Mo-93
Cross Section -9999. To 120.2 %
Min Ratio
Max Ratio
TENDL Threshold 953.52 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
60
42-Mo-93

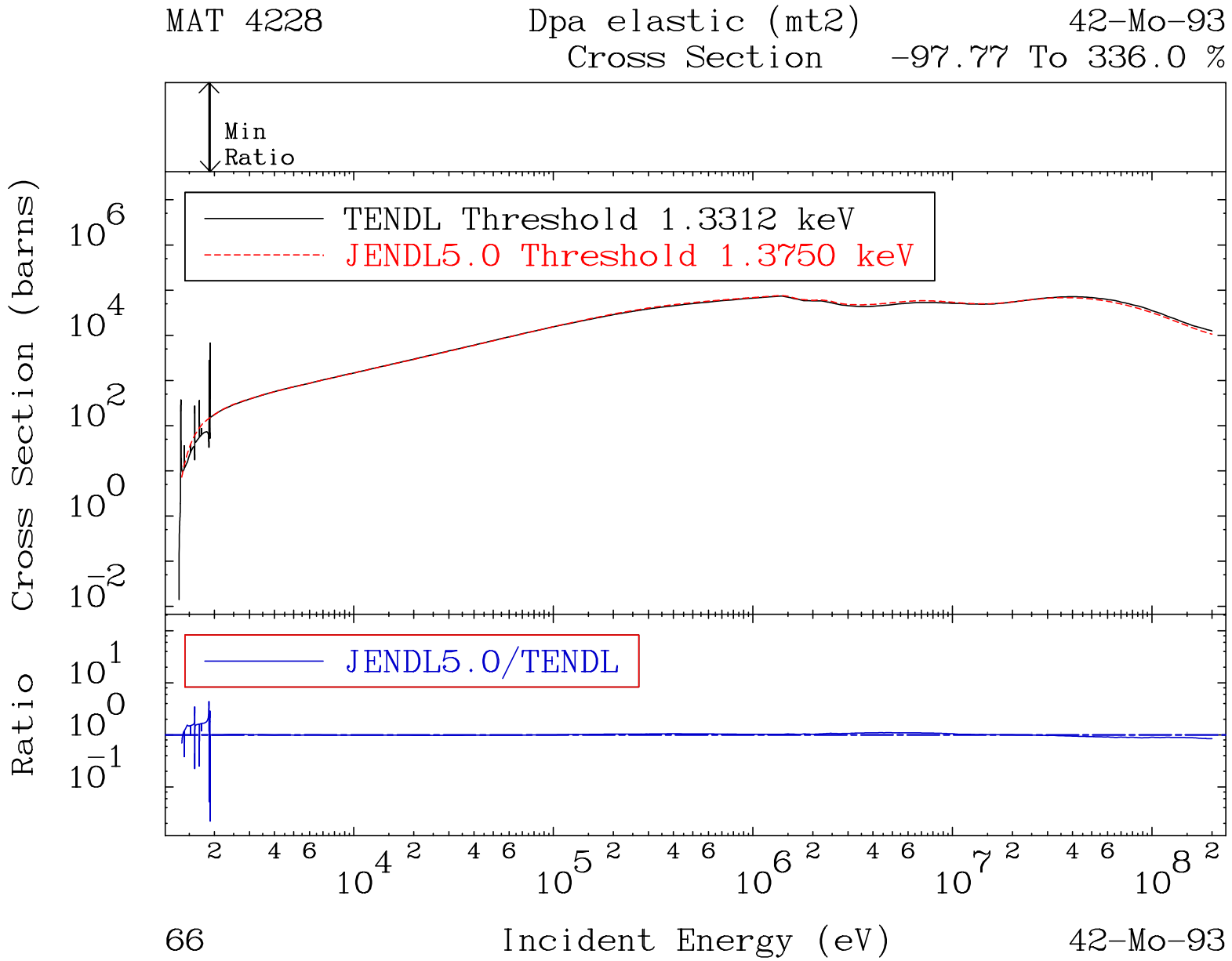

MAT 4228 Kerma fission (mt18 or mt19-20-21-38) 42-Mo-93
Cross Section -9999. To 120.2 %
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-2
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
61
Incident Energy (eV)
42-Mo-93

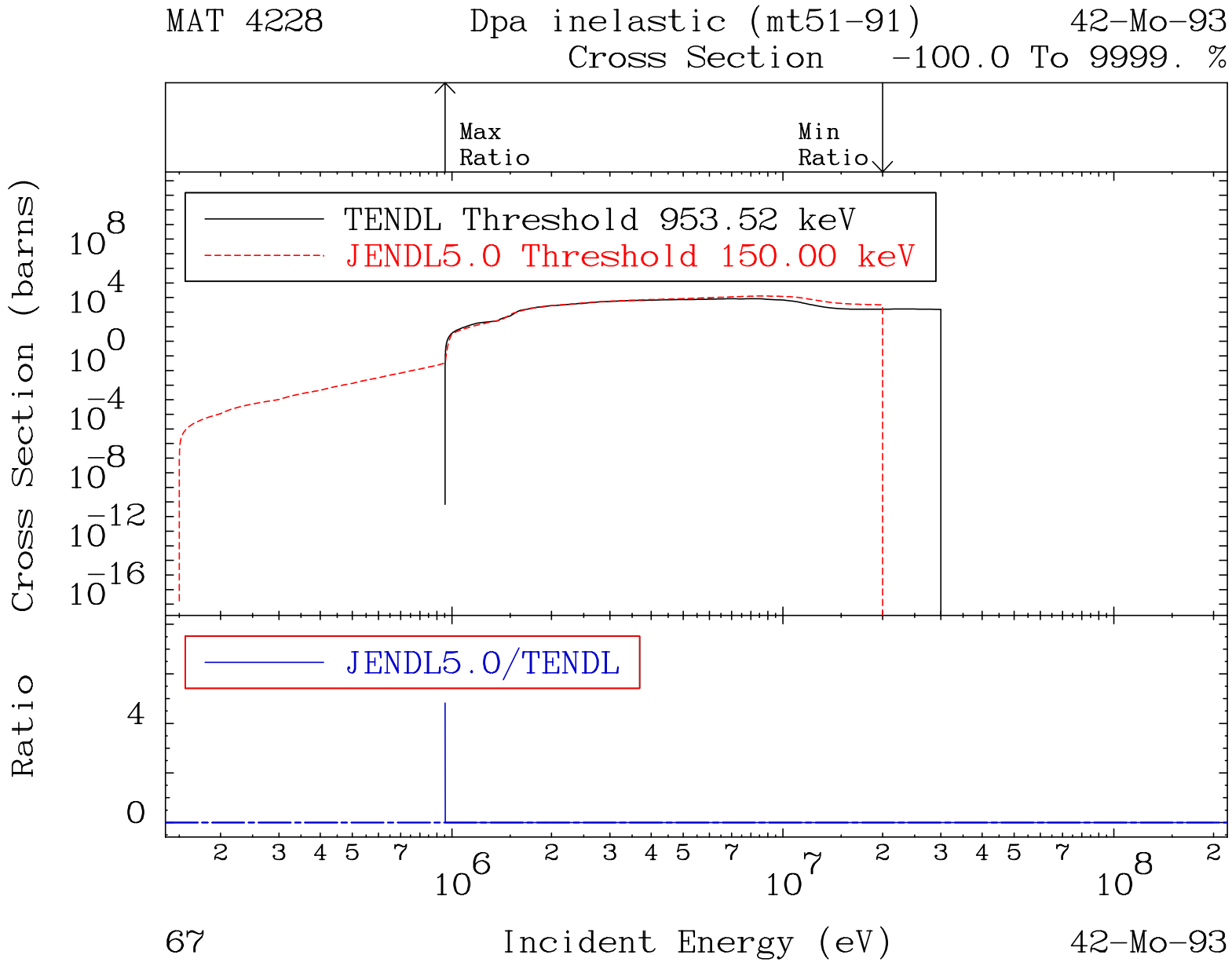

MAT 4228
Kerma capture (mt102)
42-Mo-93
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
42-Mo-93

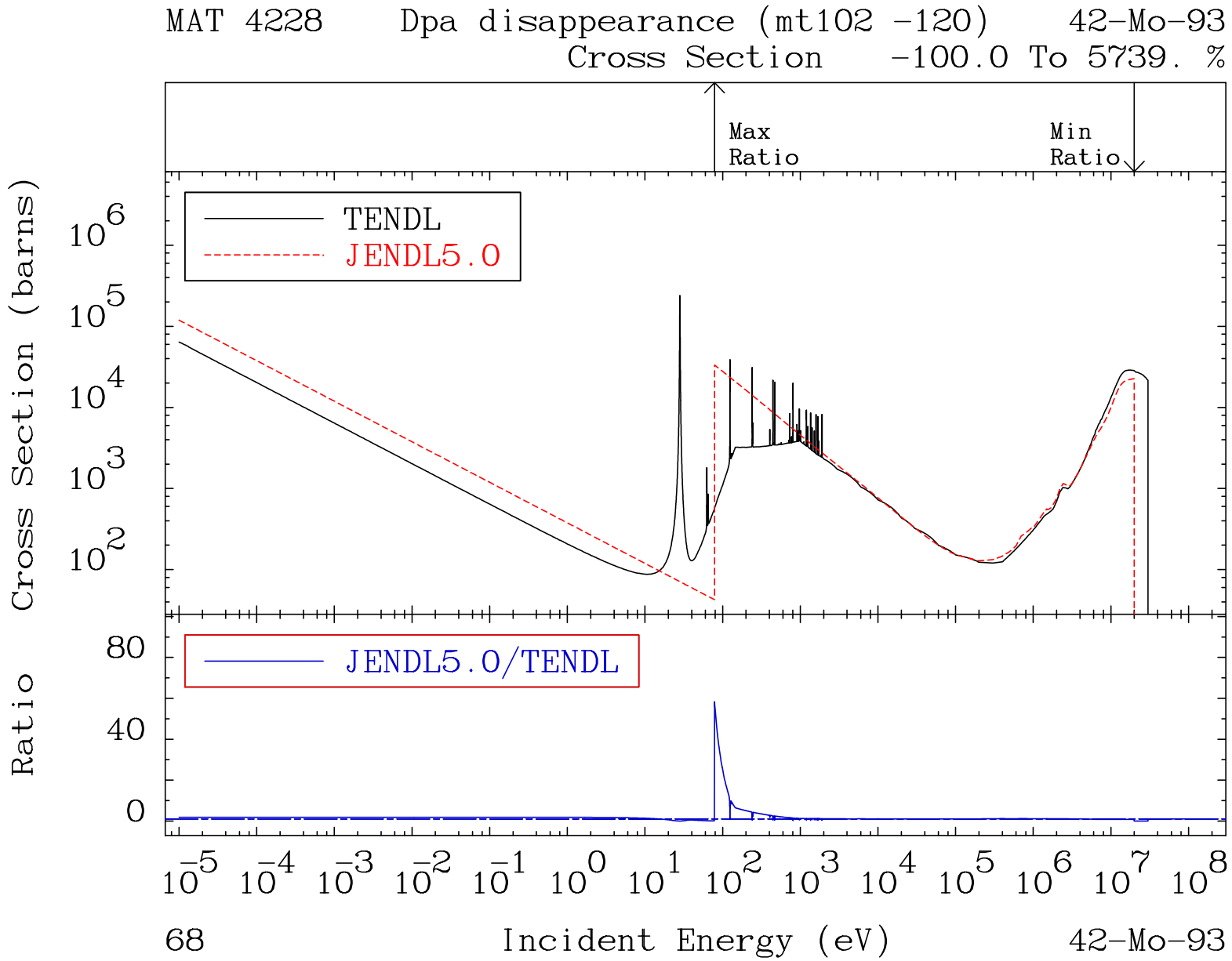

MAT 4228
Total photon (eV-barns)
42-Mo-93
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
42-Mo-93

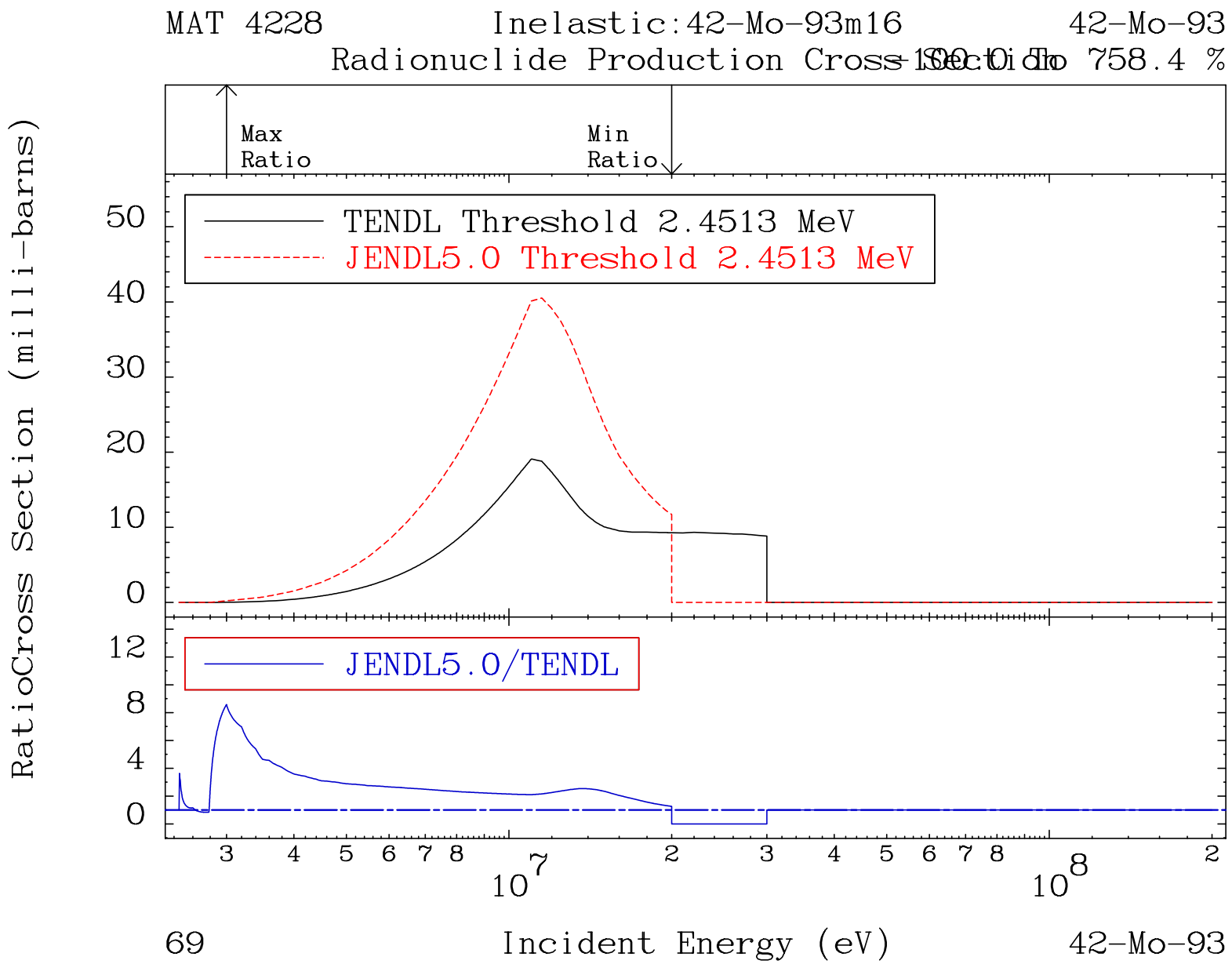

MAT 4228 Total kinematic kerma (high limit) 42-Mo-93
Cross Section -99.25 To 3225. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
42-Mo-93

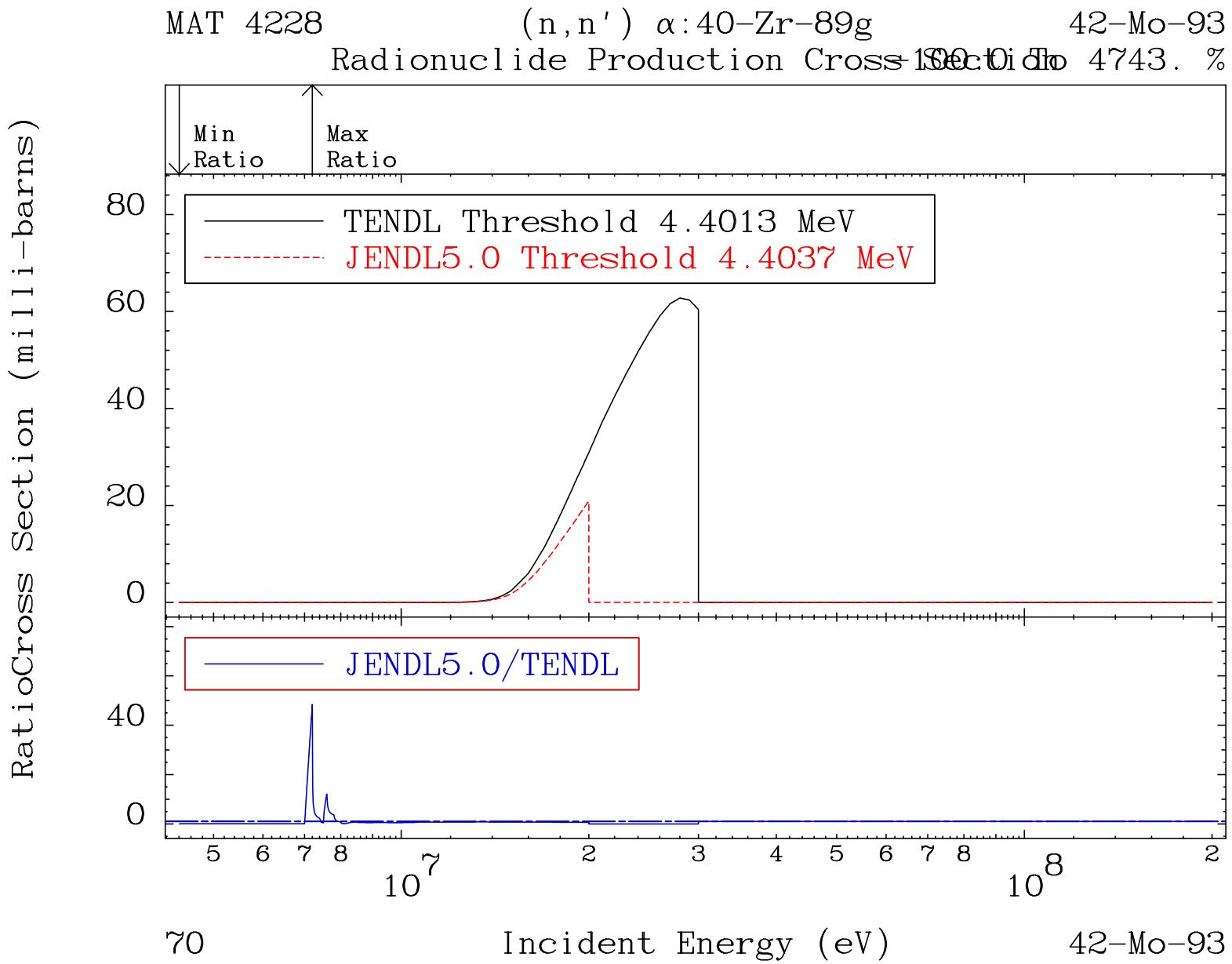

MAT 4228
Dpa total (eV-barns)
42-Mo-93
Cross Section -99.97 To 5739. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
42-Mo-93

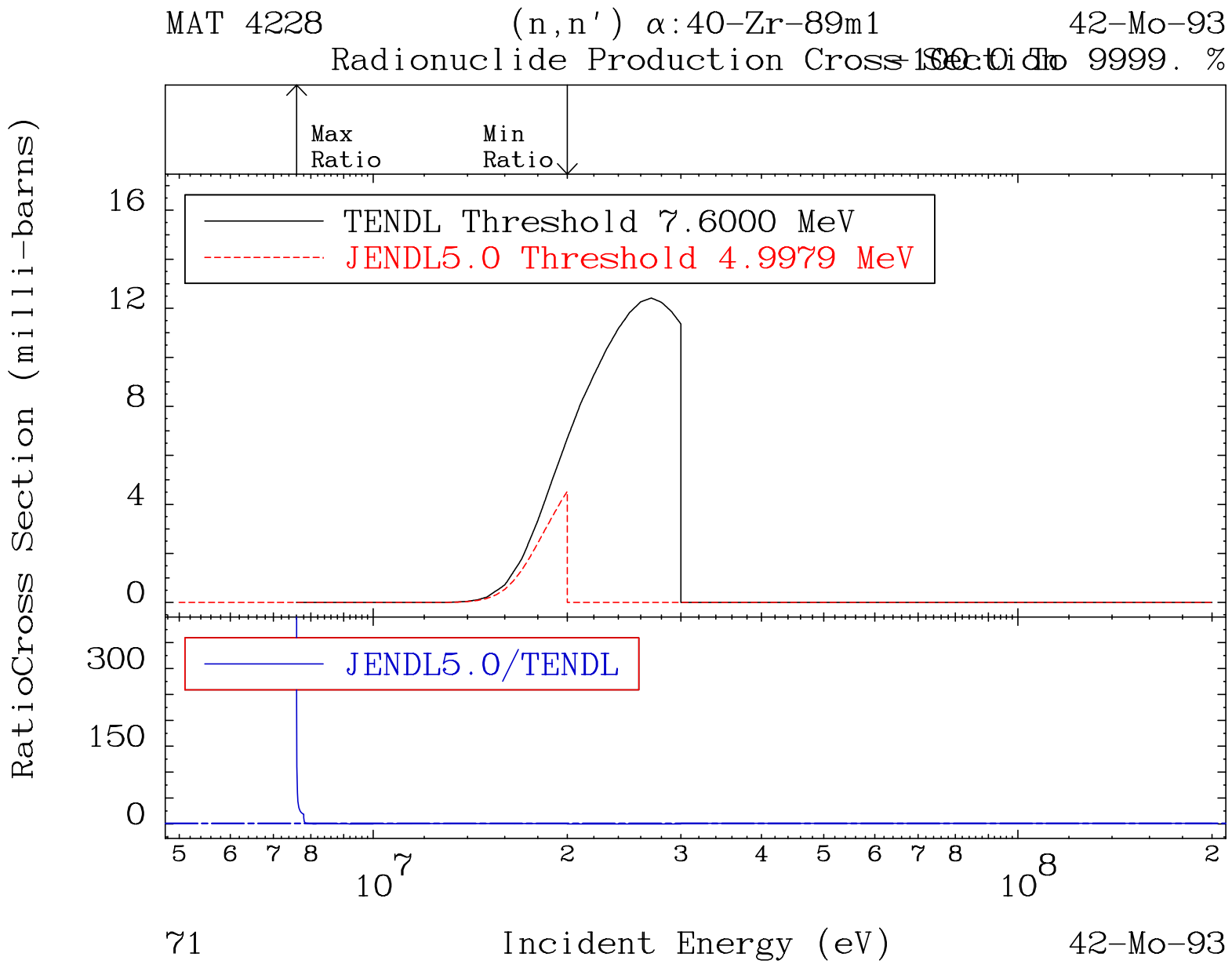

MAT 4228
Dpa elastic (mt2)
Cross Section
42-Mo-93
-97.77 To 336.0 %
Min
Ratio
TENDL Threshold 1.3312 keV
JENDL5.0 Threshold 1.3750 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
42-Mo-93

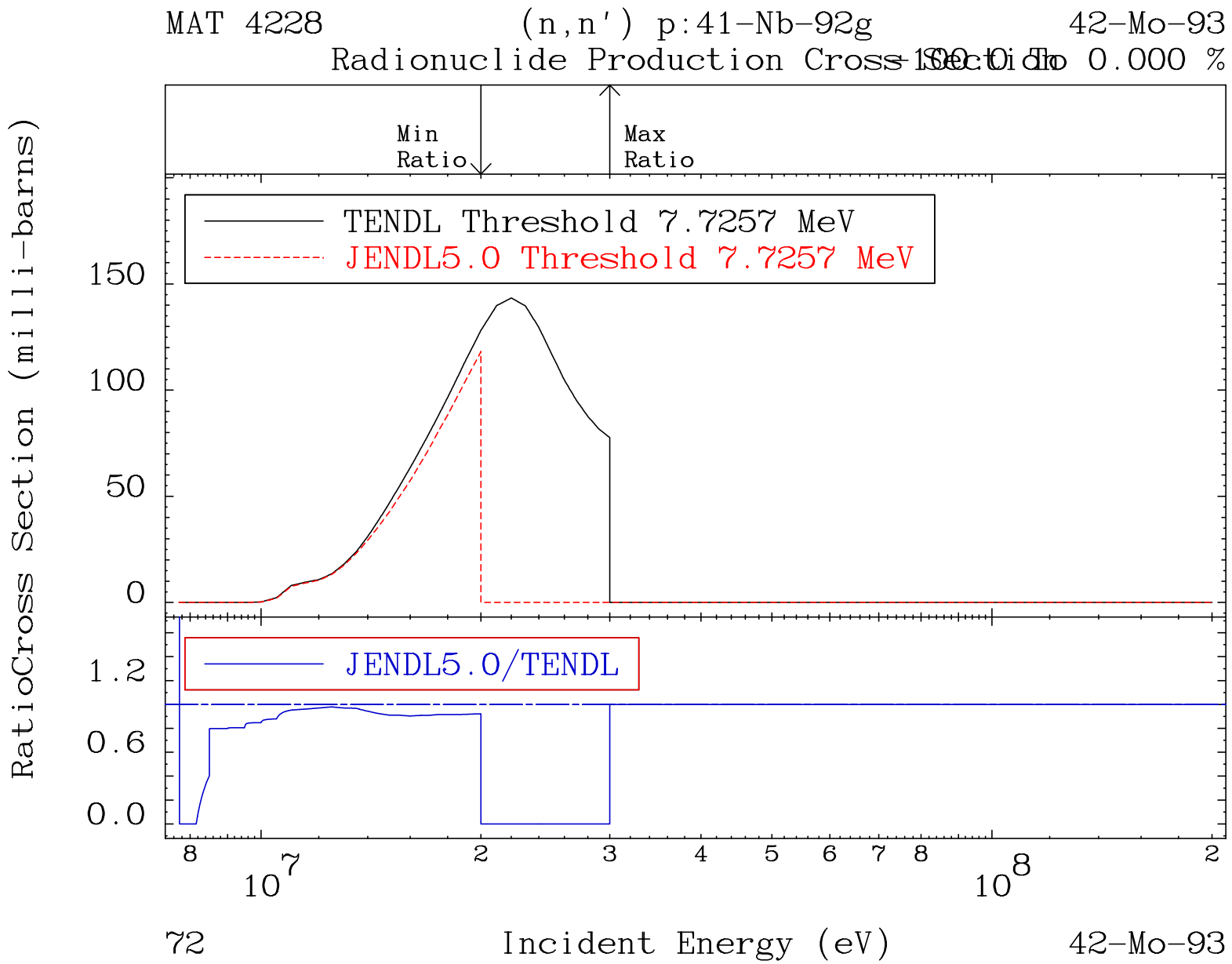

MAT 4228
Dpa inelastic (mt51-91)
42-Mo-93
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 953.52 keV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
67
42-Mo-93

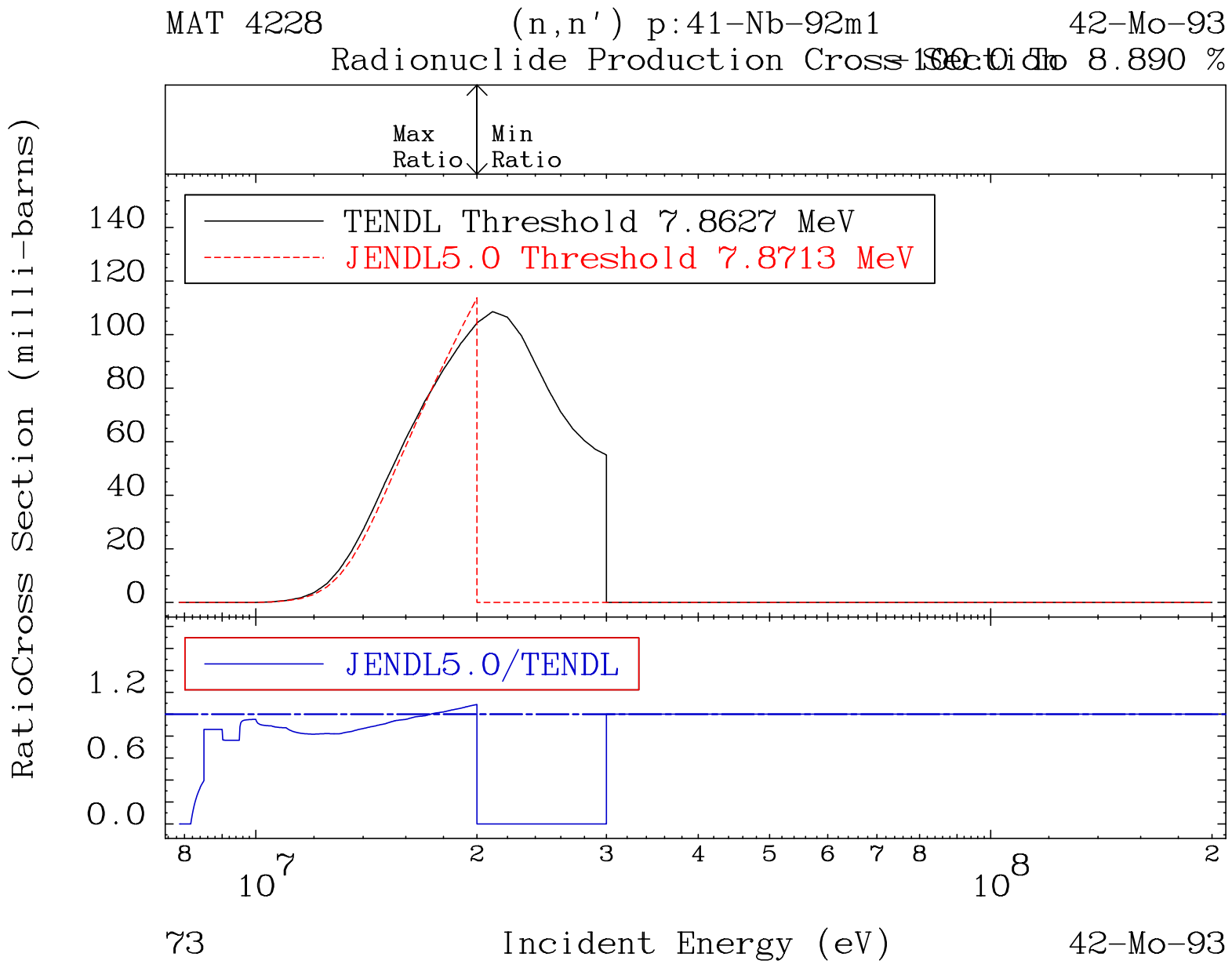

MAT 4228 Dpa disappearance (mt102 -120) 42-Mo-93
Cross Section -100.0 To 5739. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
68
42-Mo-93

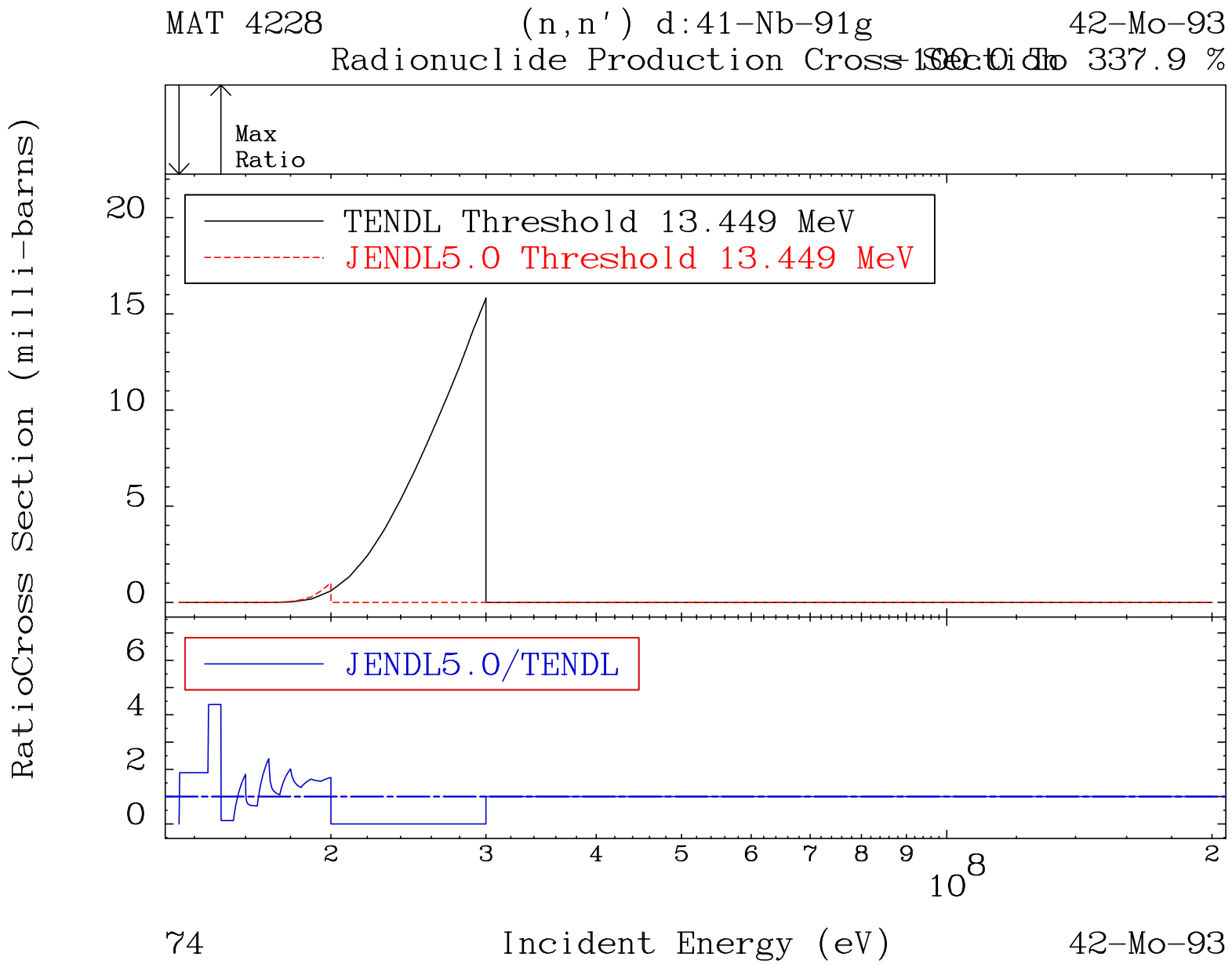

MAT 4228
Inelastic:42-Mo-93m16
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 2.4513 MeV
JENDL5.0 Threshold 2.4513 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
69
42-Mo-93

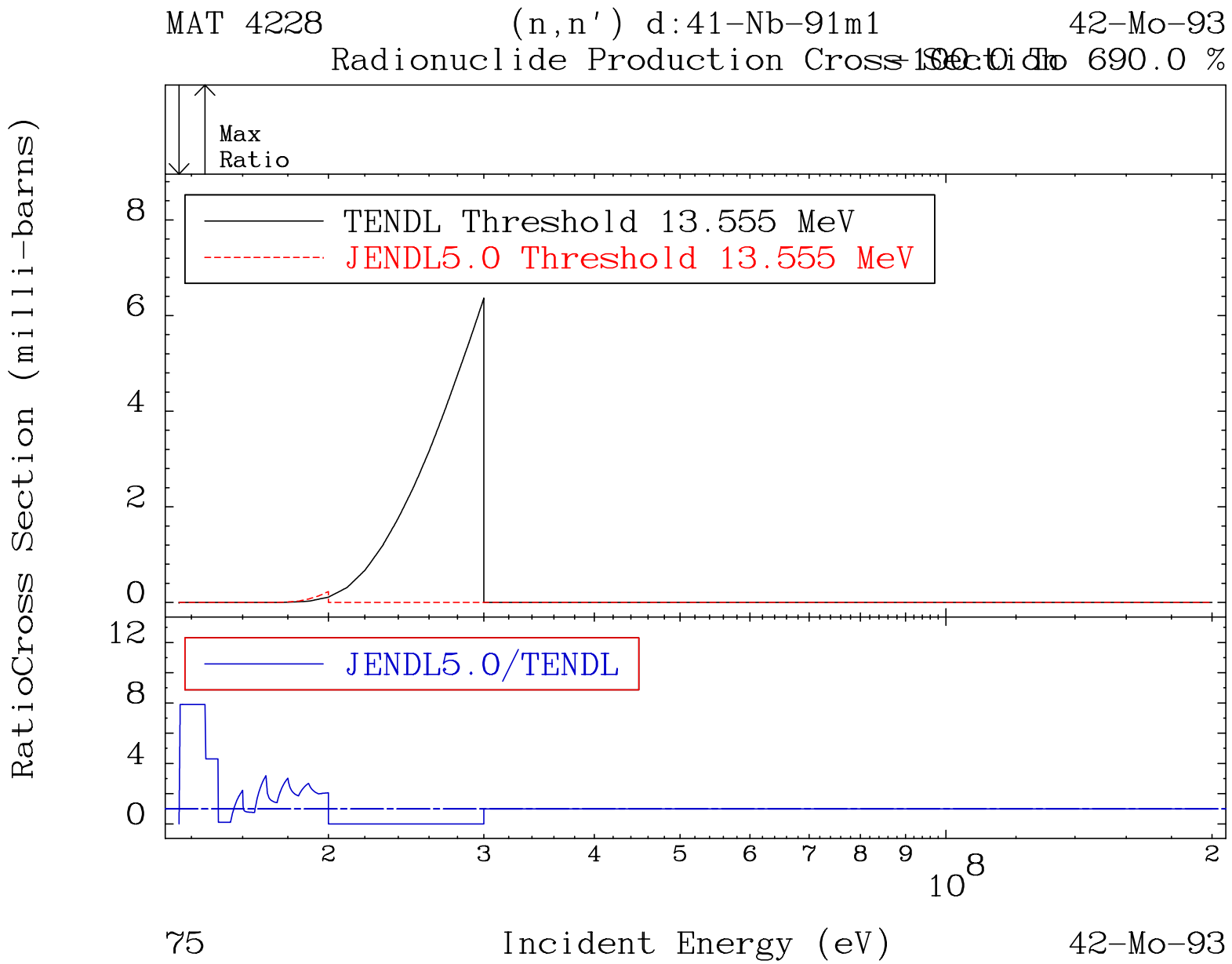

MAT 4228
(n,n') α:40-Zr-89g
42-Mo-93
Radionuclide Production Cross Section To 4743. %
Min Ratio
Max Ratio
TENDL Threshold 4.4013 MeV
JENDL5.0 Threshold 4.4037 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
40
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
70
Incident Energy (eV)
42-Mo-93

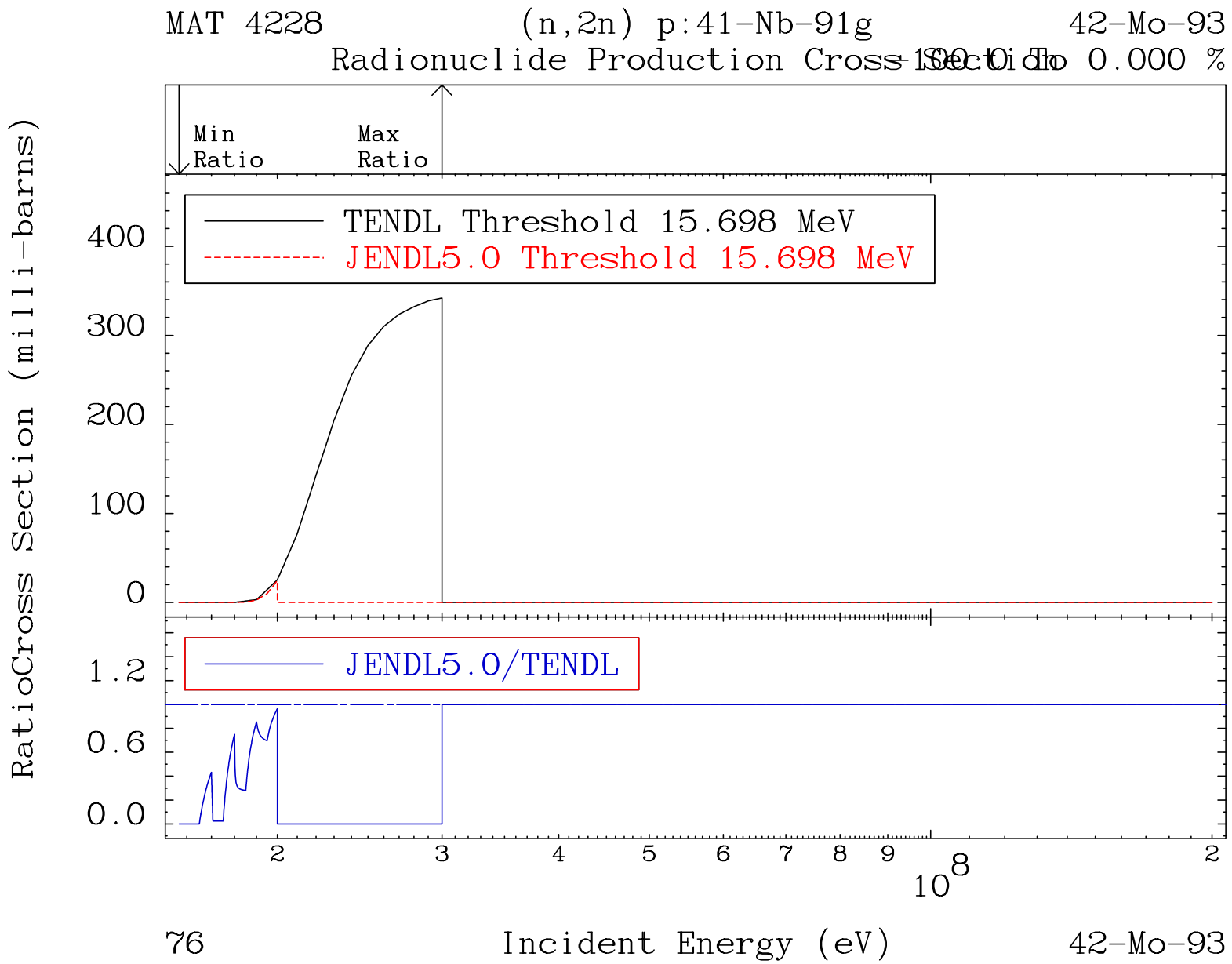

MAT 4228
(n,n') α:40-Zr-89m1
42-Mo-93
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.6000 MeV
JENDL5.0 Threshold 4.9979 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
300
150
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
71
Incident Energy (eV)
42-Mo-93

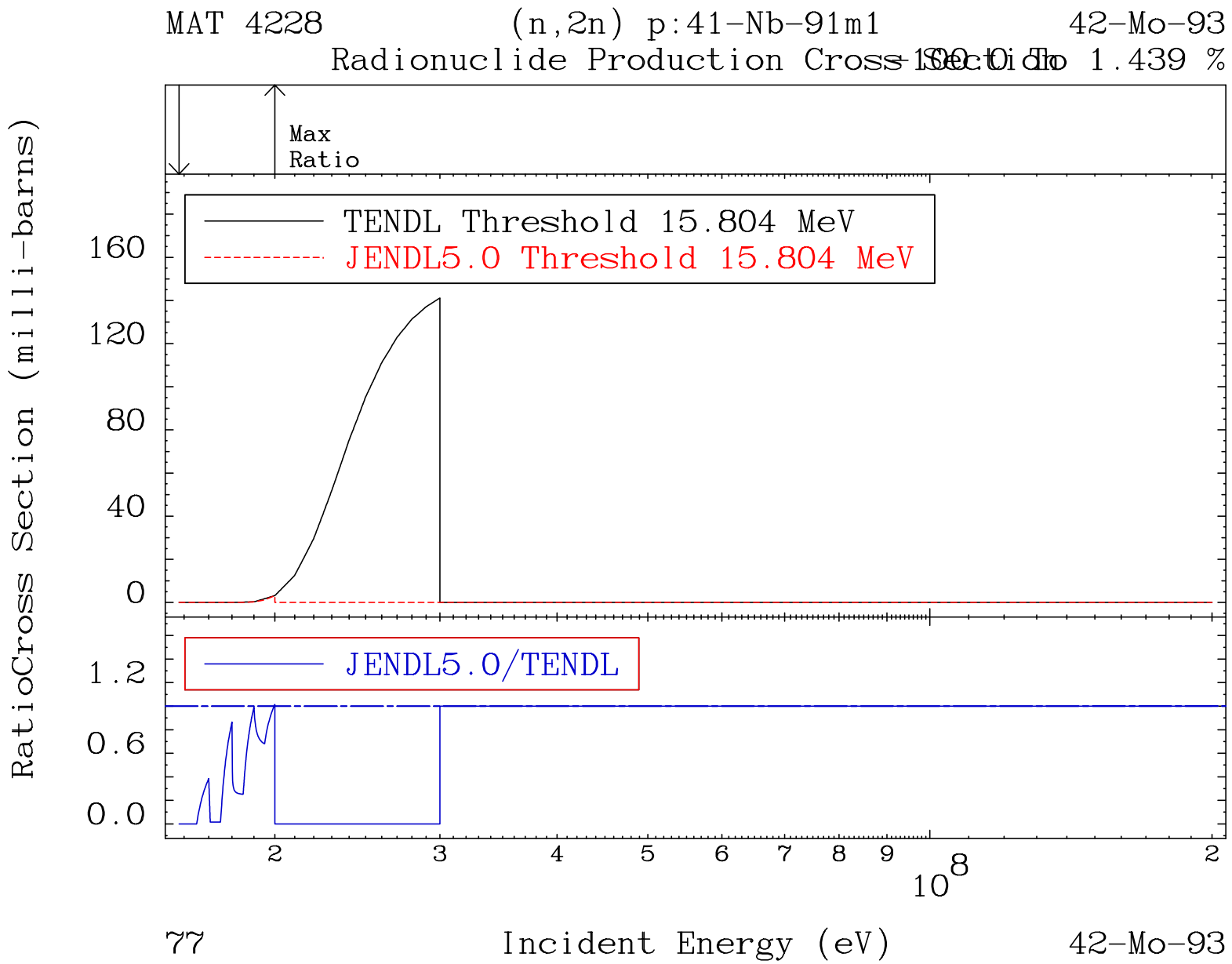

MAT 4228
(n,n') p:41-Nb-92g
42-Mo-93
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 7.7257 MeV
JENDL5.0 Threshold 7.7257 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
1.2
0.6
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
72
Incident Energy (eV)
42-Mo-93

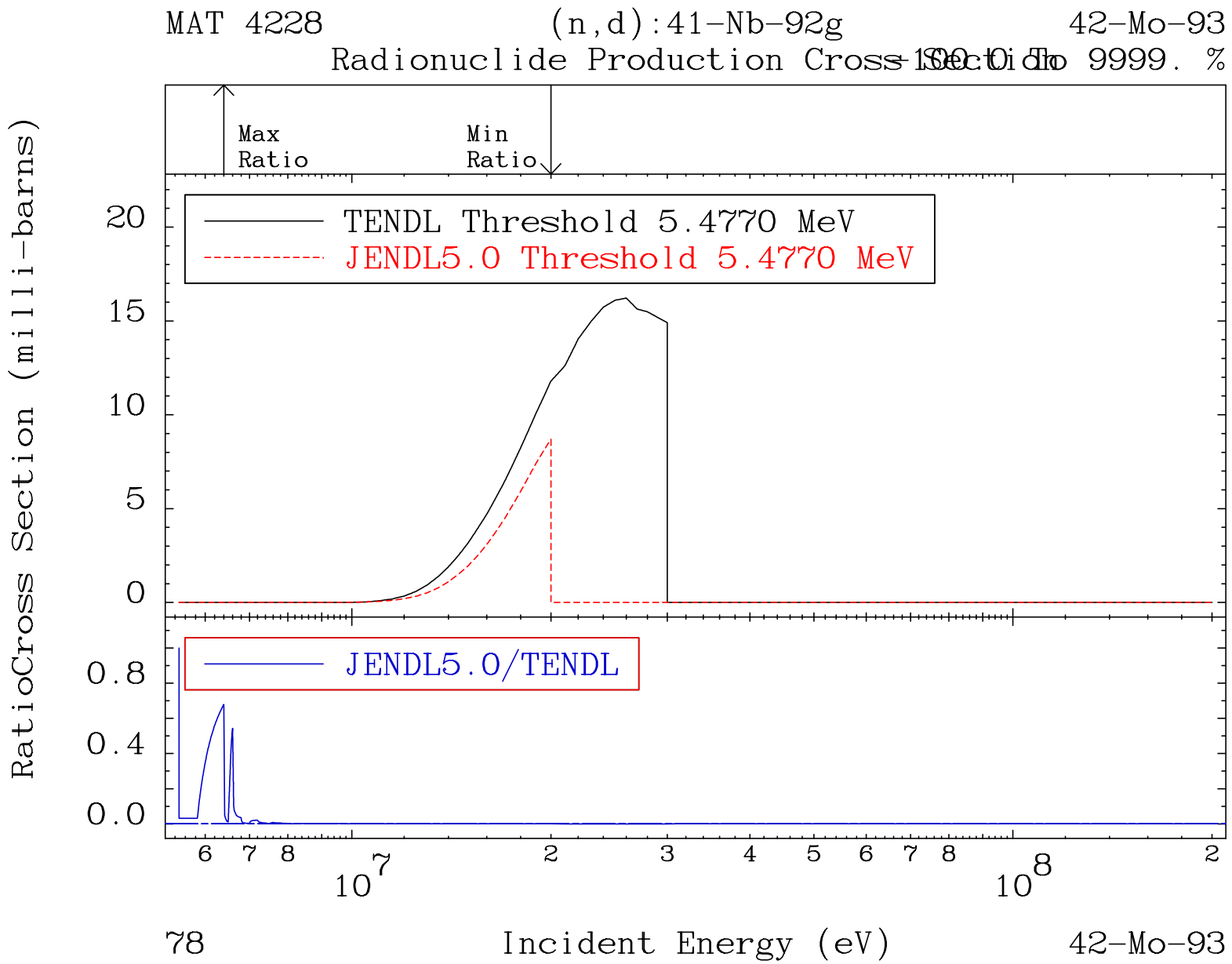

MAT 4228
(n,n') p:41-Nb-92m1
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.8627 MeV
JENDL5.0 Threshold 7.8713 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
73
42-Mo-93

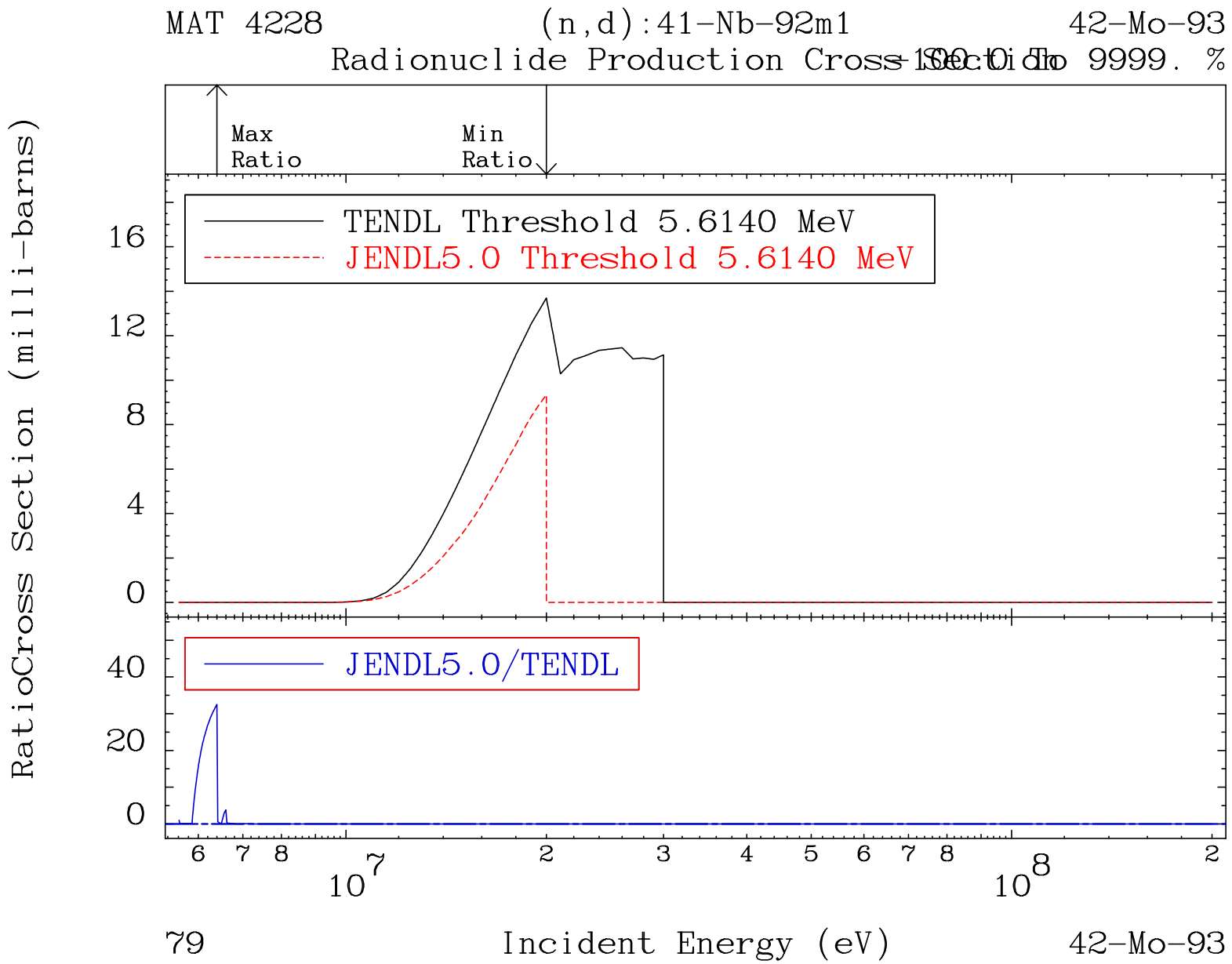

MAT 4228
(n,n') d:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section To 337.9 %
Max
Ratio
TENDL Threshold 13.449 MeV
JENDL5.0 Threshold 13.449 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
42-Mo-93

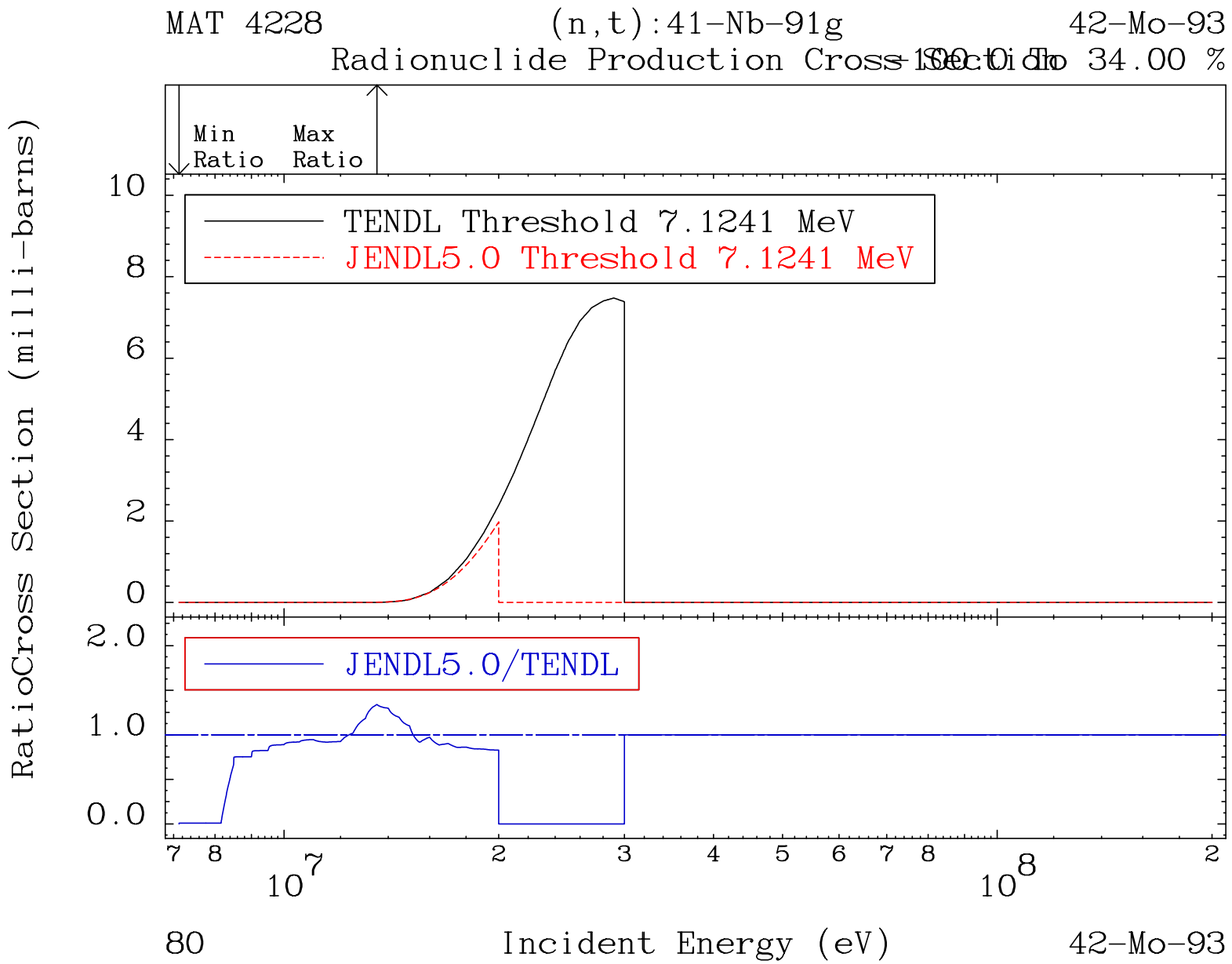

MAT 4228
(n,n') d:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section To 690.0 %
Max
Ratio
TENDL Threshold 13.555 MeV
JENDL5.0 Threshold 13.555 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
75
42-Mo-93

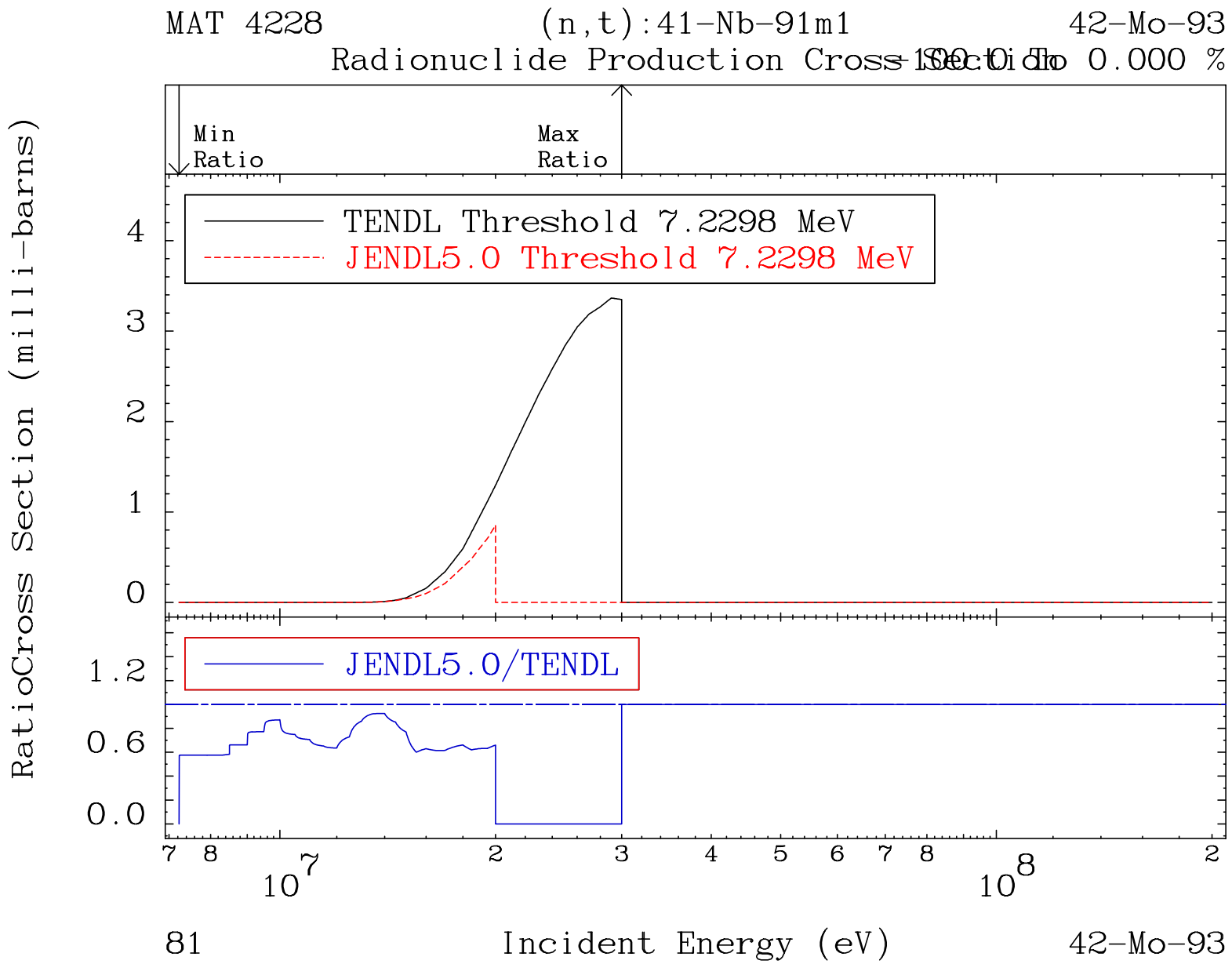

MAT 4228
(n,2n) p:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 15.698 MeV
JENDL5.0 Threshold 15.698 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
42-Mo-93

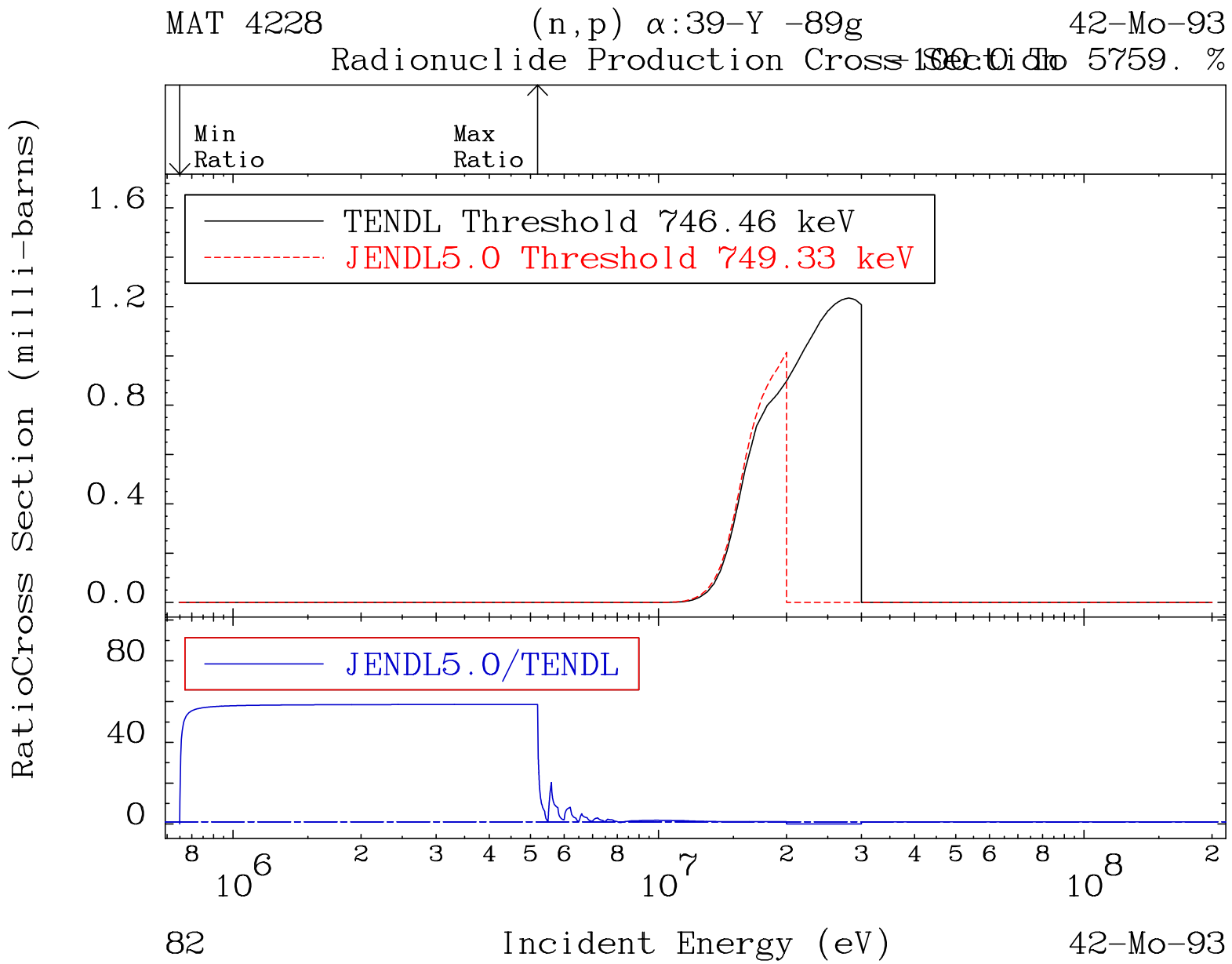

MAT 4228
(n,2n) p:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 15.804 MeV
JENDL5.0 Threshold 15.804 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
77
Incident Energy (eV)
42-Mo-93

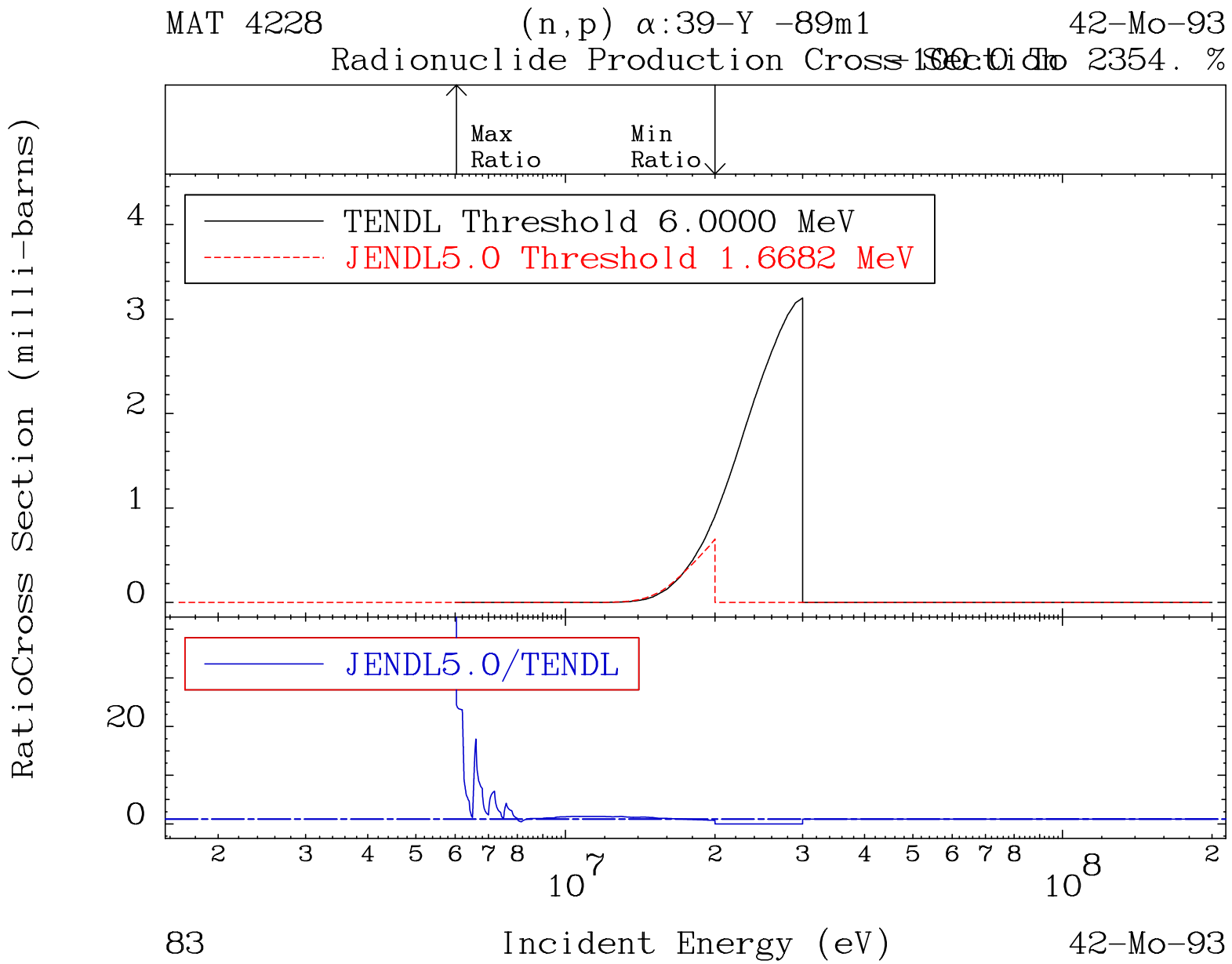

MAT 4228
(n,d):41-Nb-92g
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 5.4770 MeV
JENDL5.0 Threshold 5.4770 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
78
42-Mo-93

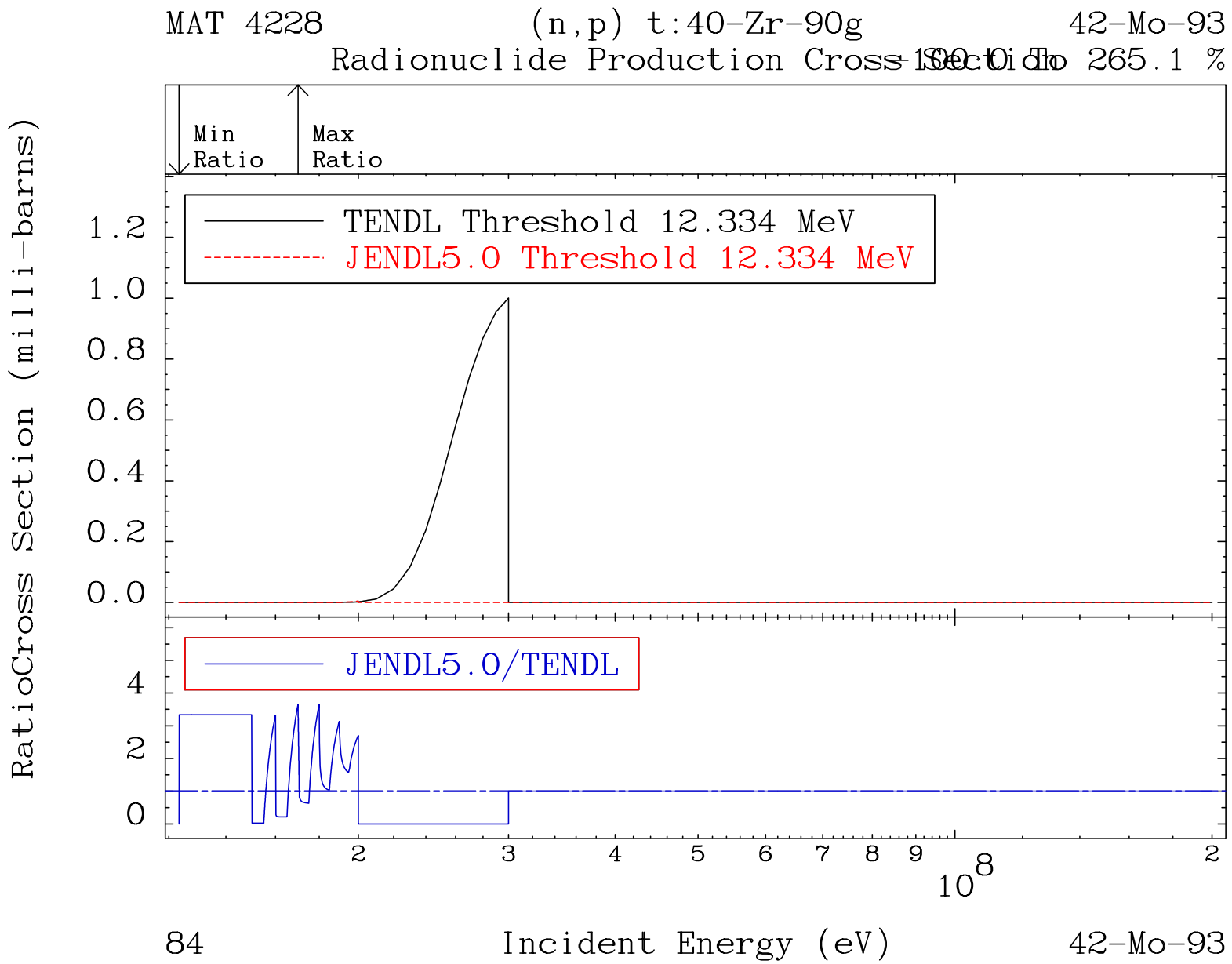

MAT 4228
(n,d):41-Nb-92m1
42-Mo-93
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.6140 MeV
JENDL5.0 Threshold 5.6140 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
40
20
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
79
Incident Energy (eV)
42-Mo-93

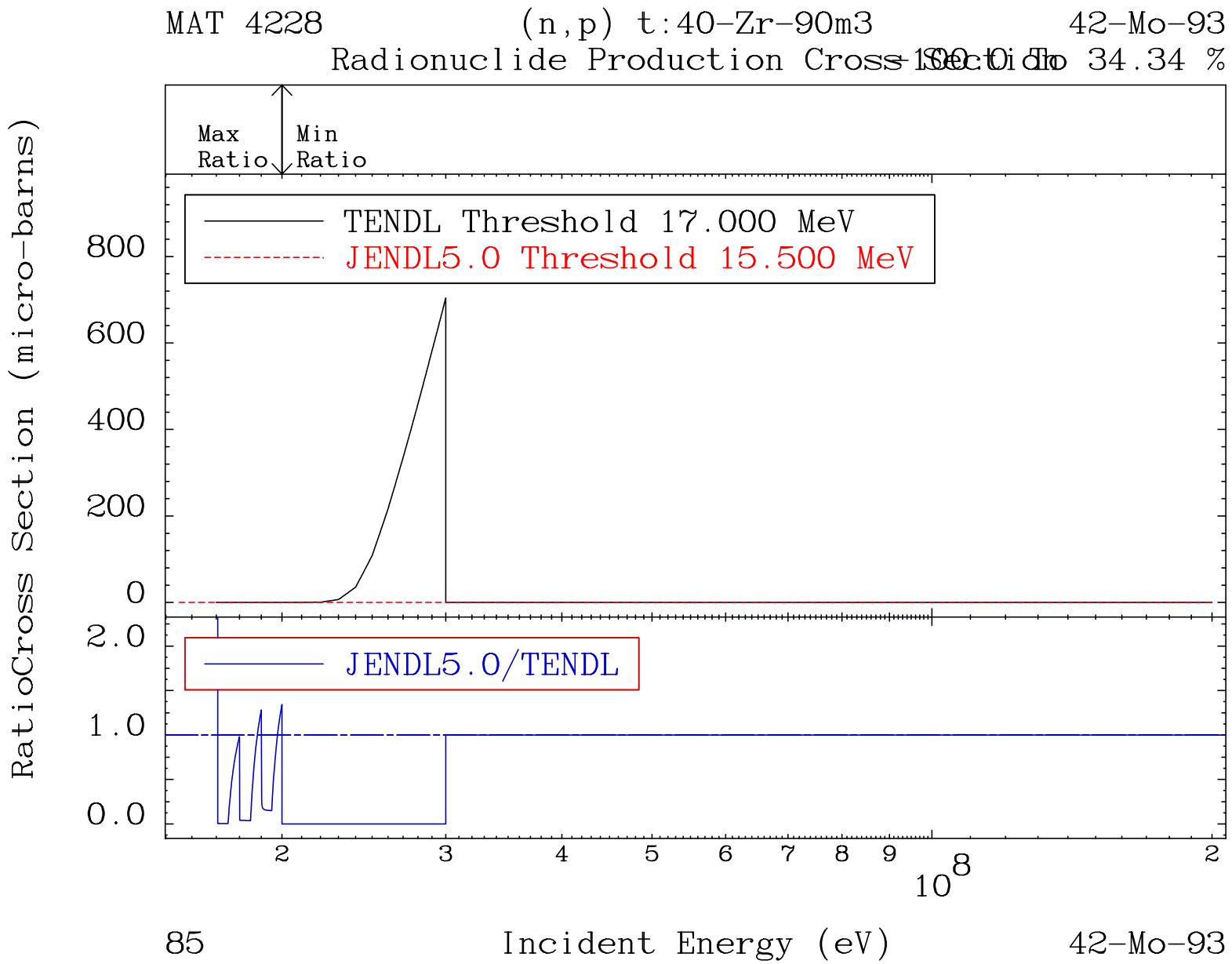

MAT 4228
(n,t):41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 7.1241 MeV
JENDL5.0 Threshold 7.1241 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
80
42-Mo-93

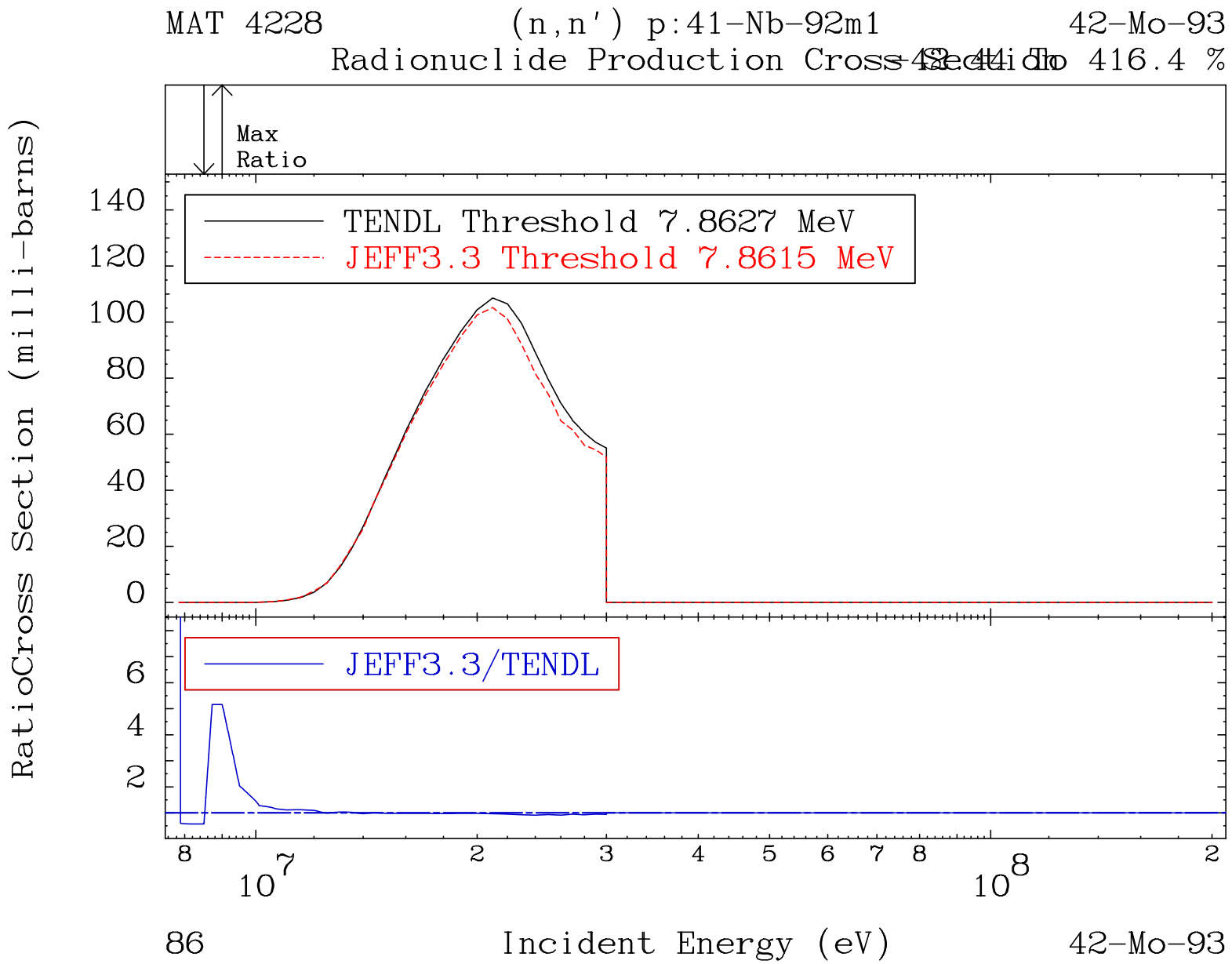

MAT 4228
(n,t):41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 7.2298 MeV
JENDL5.0 Threshold 7.2298 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
81
42-Mo-93

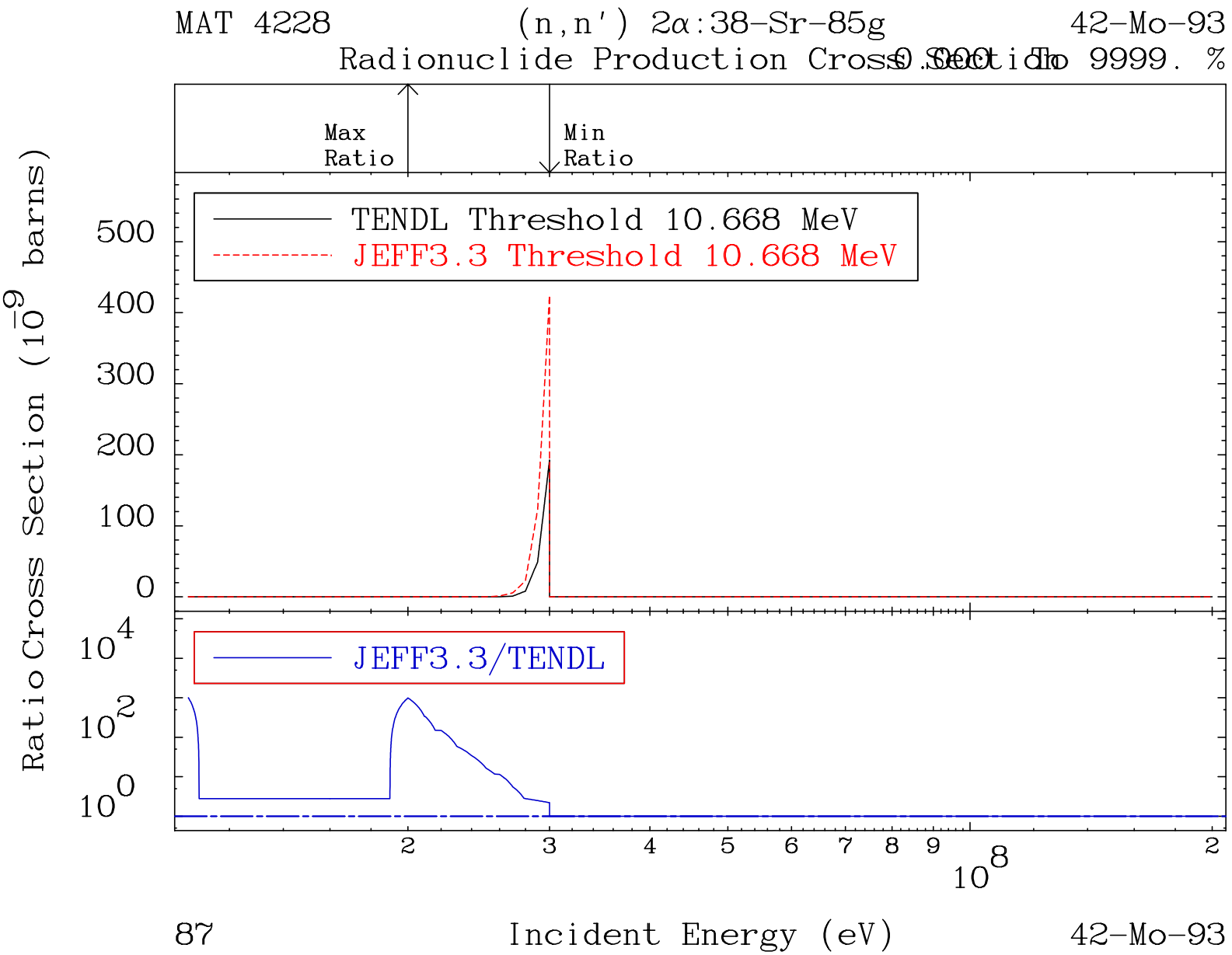

MAT 4228
(n,p) α:39-Y -89g
42-Mo-93
Radionuclide Production Cross Section To 5759. %
Min Ratio
Max Ratio
TENDL Threshold 746.46 keV
JENDL5.0 Threshold 749.33 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
80
40
0
8
2
3
4
5
6
8
10^6
10^7
10^8
82
Incident Energy (eV)
42-Mo-93

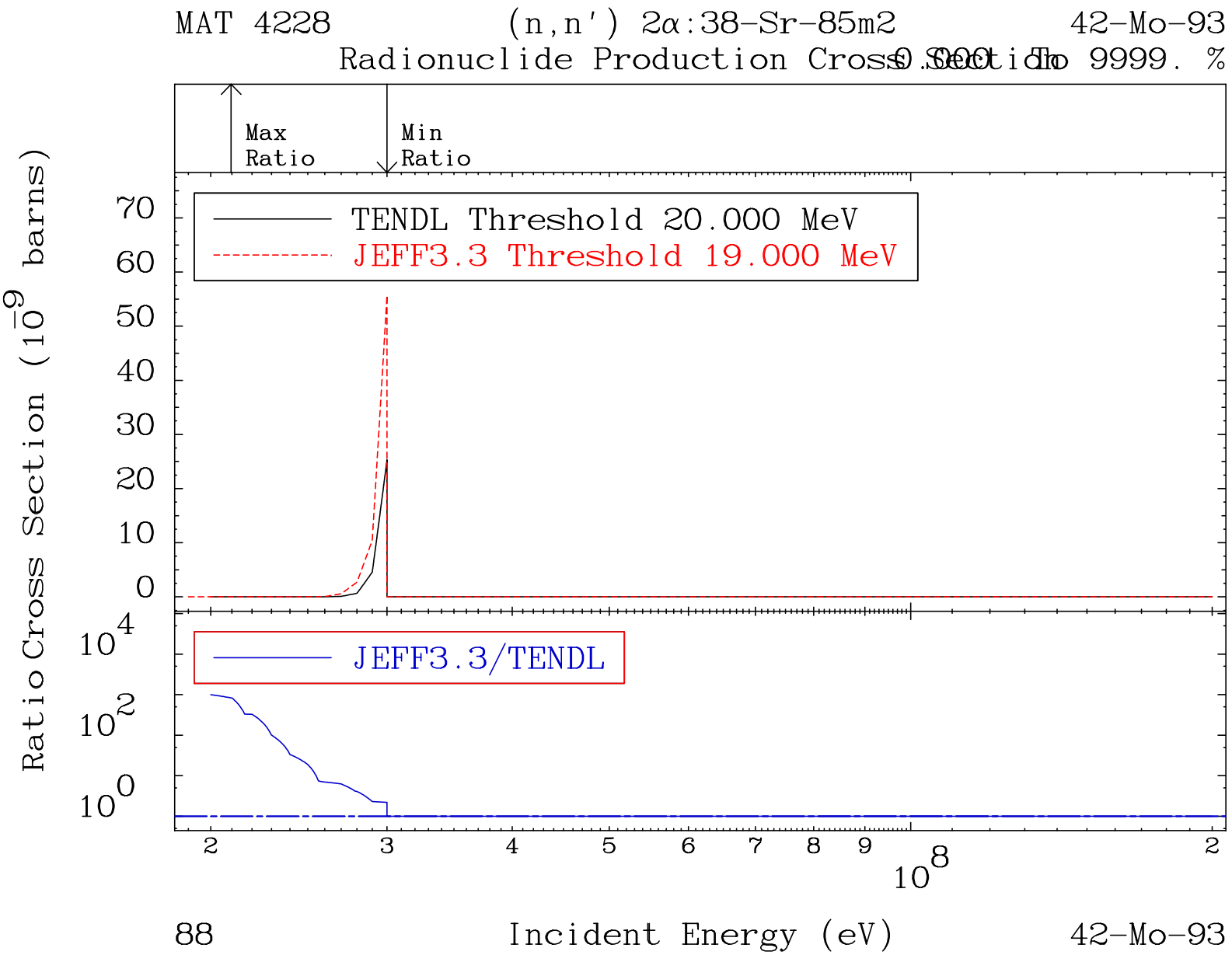

MAT 4228
(n,p) α:39-Y -89m1
42-Mo-93
Radionuclide Production Cross Section To 2354. %
Max Ratio
Min Ratio
TENDL Threshold 6.0000 MeV
JENDL5.0 Threshold 1.6682 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
83
42-Mo-93

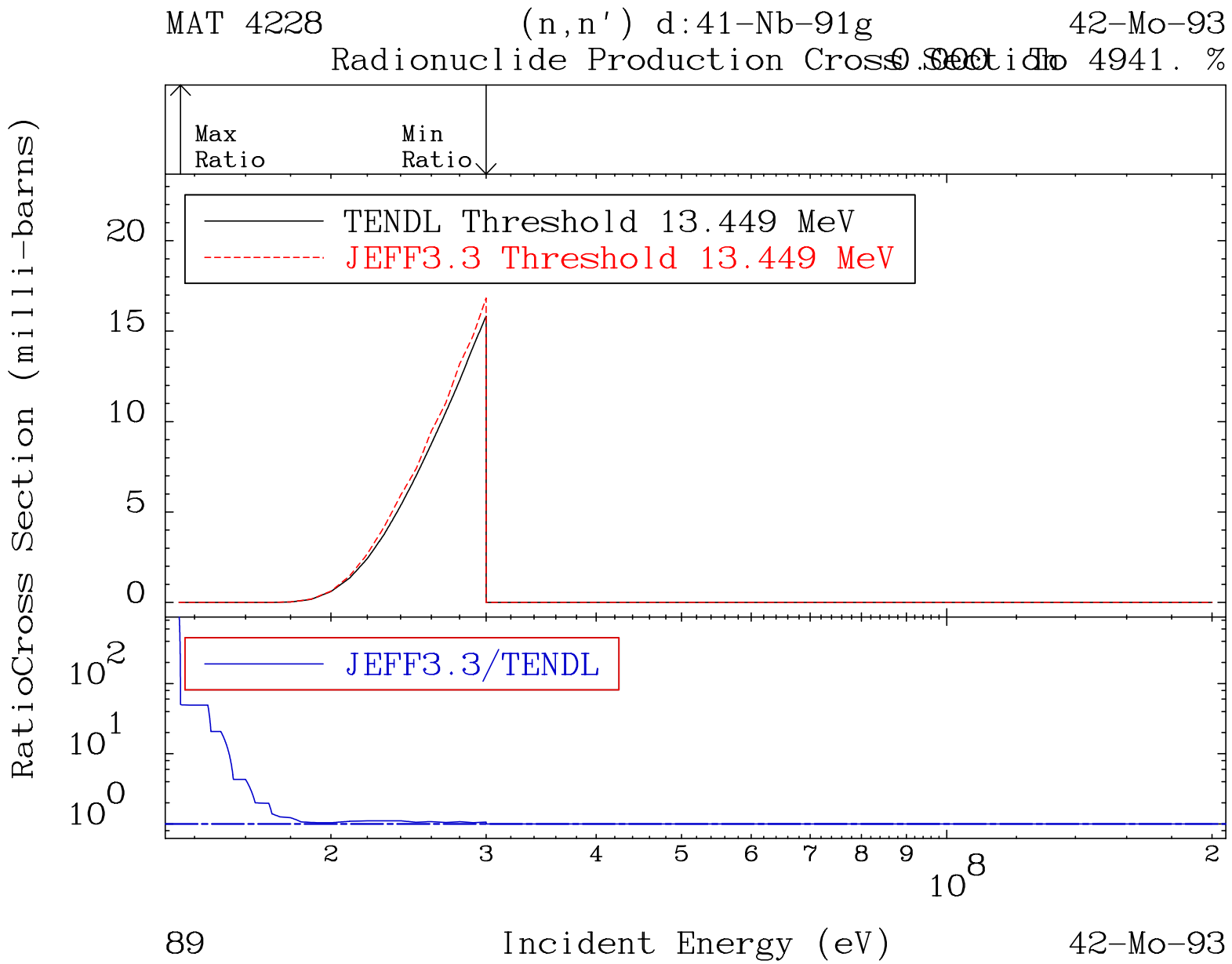

MAT 4228
(n,p) t:40-Zr-90g
42-Mo-93
Radionuclide Production Cross Section To 265.1 %
Min Ratio
Max Ratio
TENDL Threshold 12.334 MeV
JENDL5.0 Threshold 12.334 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
42-Mo-93

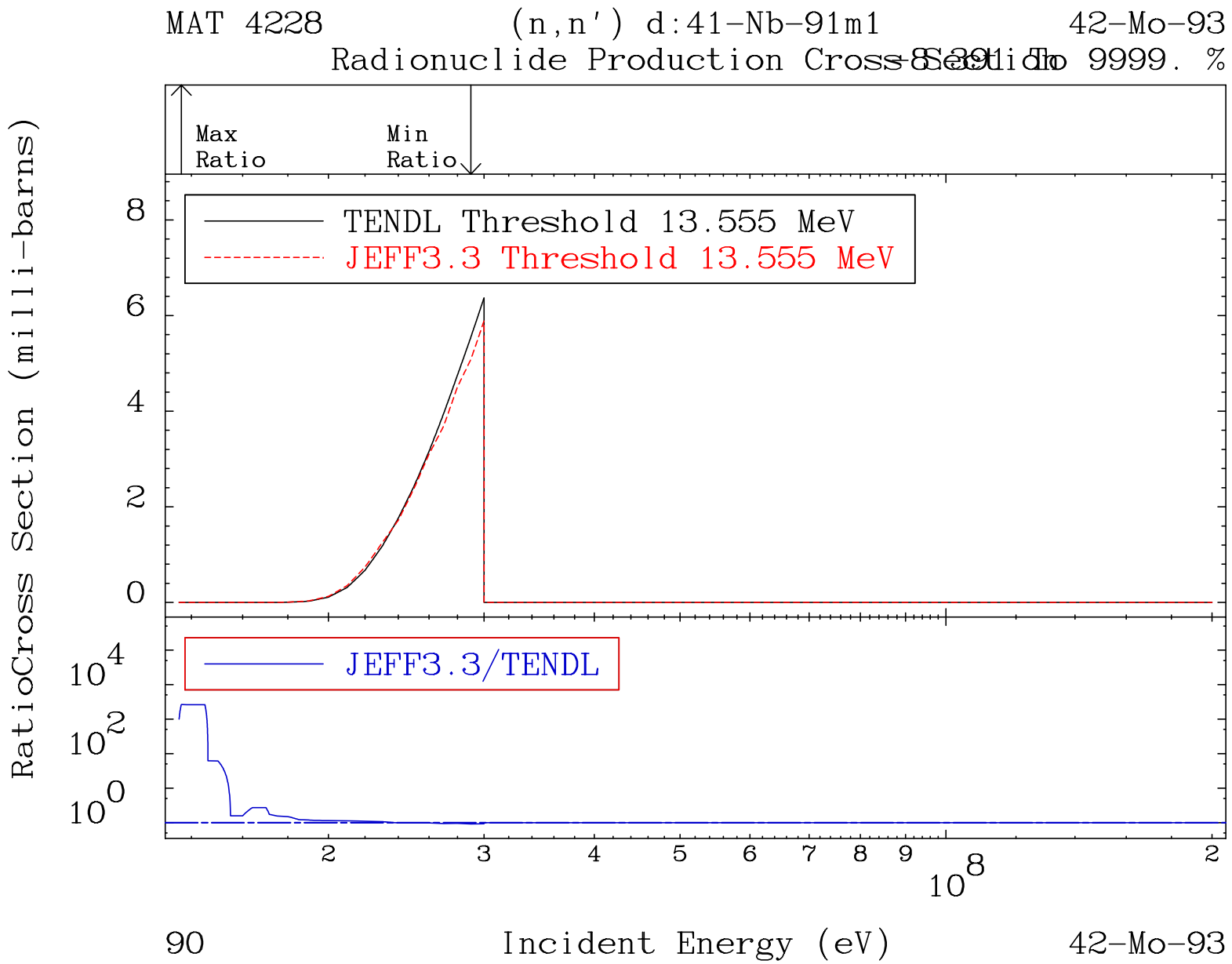

MAT 4228
(n,p) t:40-Zr-90m3
42-Mo-93
Radionuclide Production Cross Section To 34.34 %
Max Ratio
Min Ratio
TENDL Threshold 17.000 MeV
JENDL5.0 Threshold 15.500 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
800
600
400
200
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
42-Mo-93

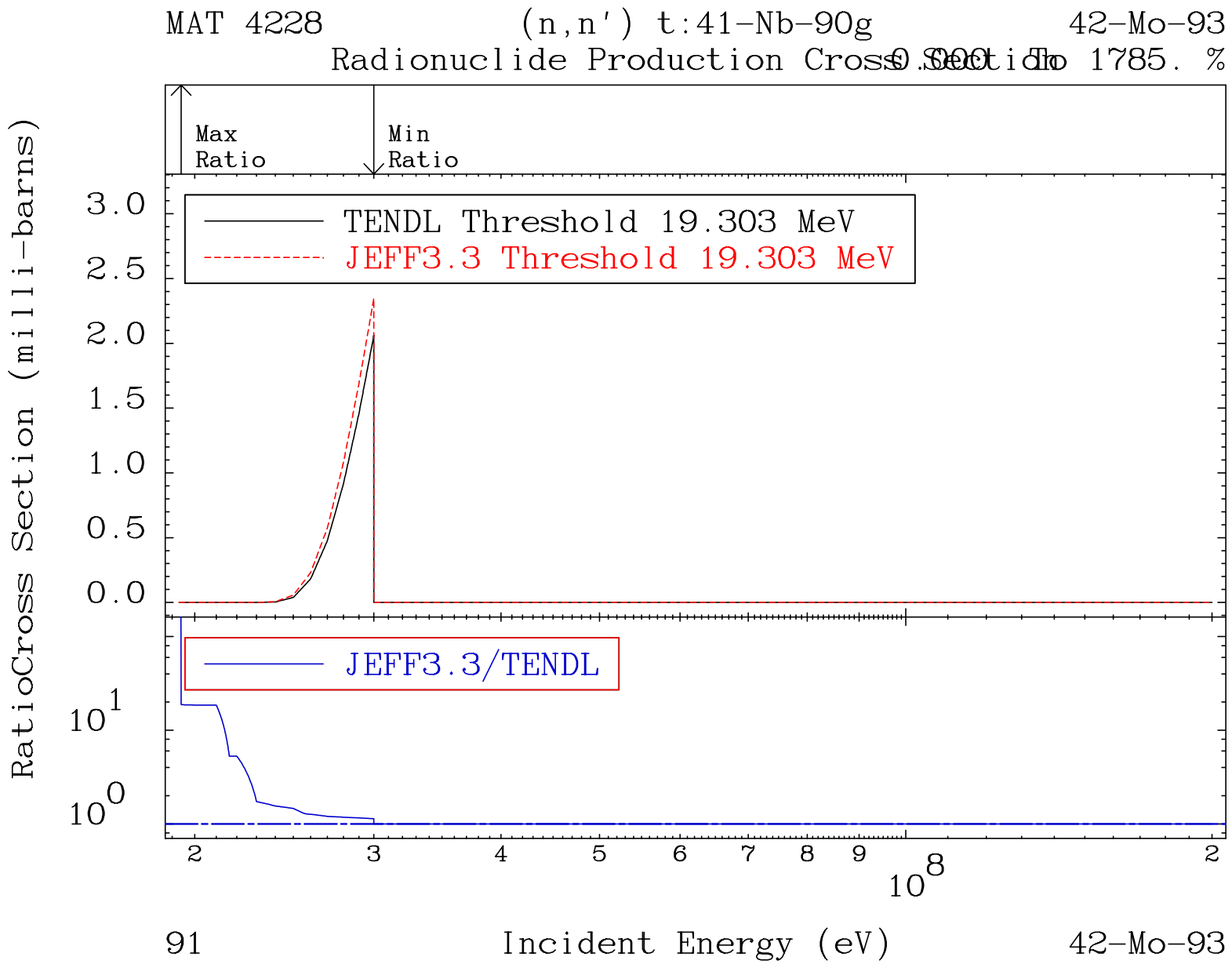

MAT 4228
(n,n') p:41-Nb-92m1
42-Mo-93
Radionuclide Production Cross Section To 416.4 %
Max
Ratio
TENDL Threshold 7.8627 MeV
JEFF3.3 Threshold 7.8615 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
6
4
2
8
10^7
2
3
4
5
6
7
8
10^8
2
86
Incident Energy (eV)
42-Mo-93

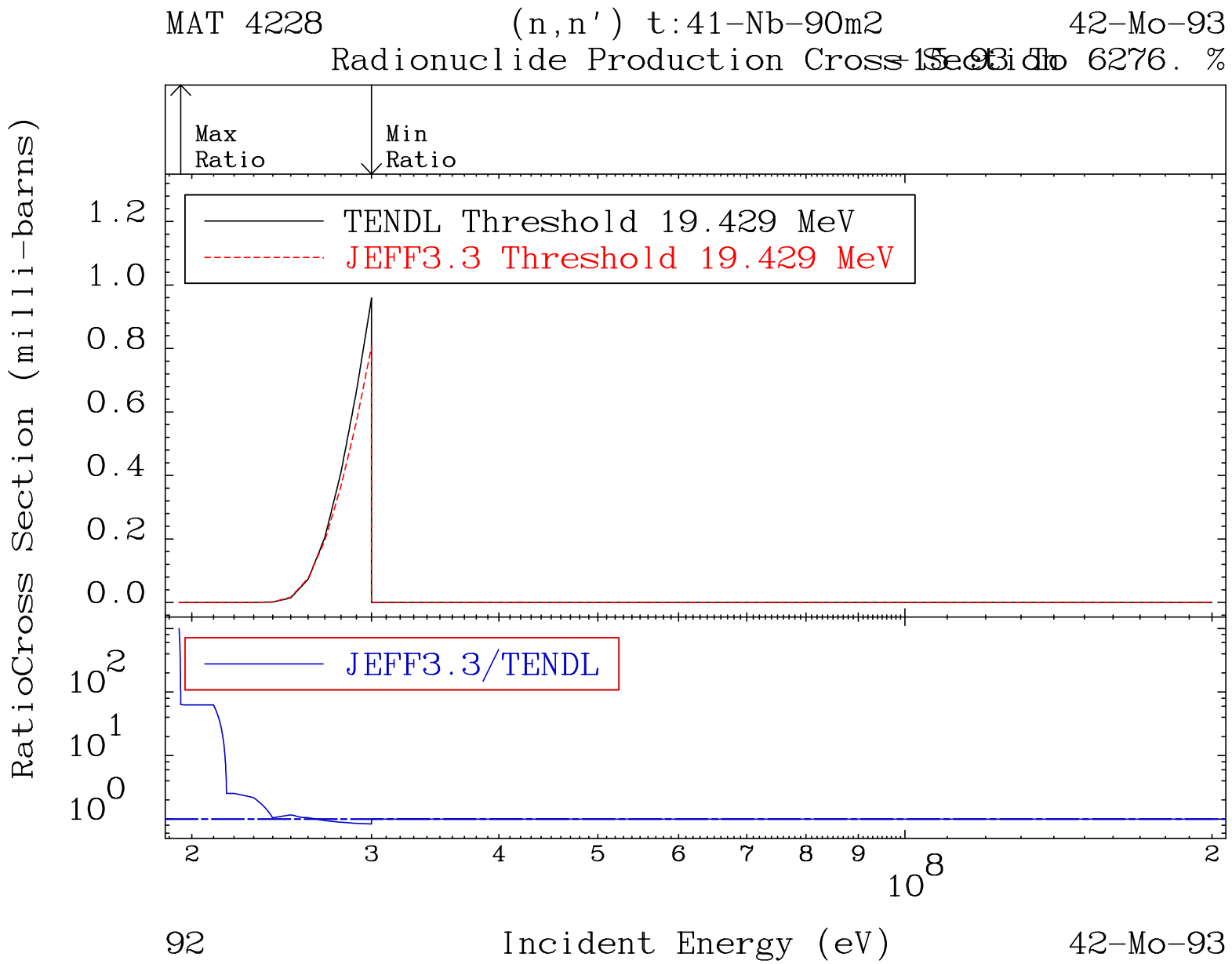

MAT 4228
(n,n') 2α:38-Sr-85g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.668 MeV
JEFF3.3 Threshold 10.668 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
500
400
300
200
100
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
42-Mo-93

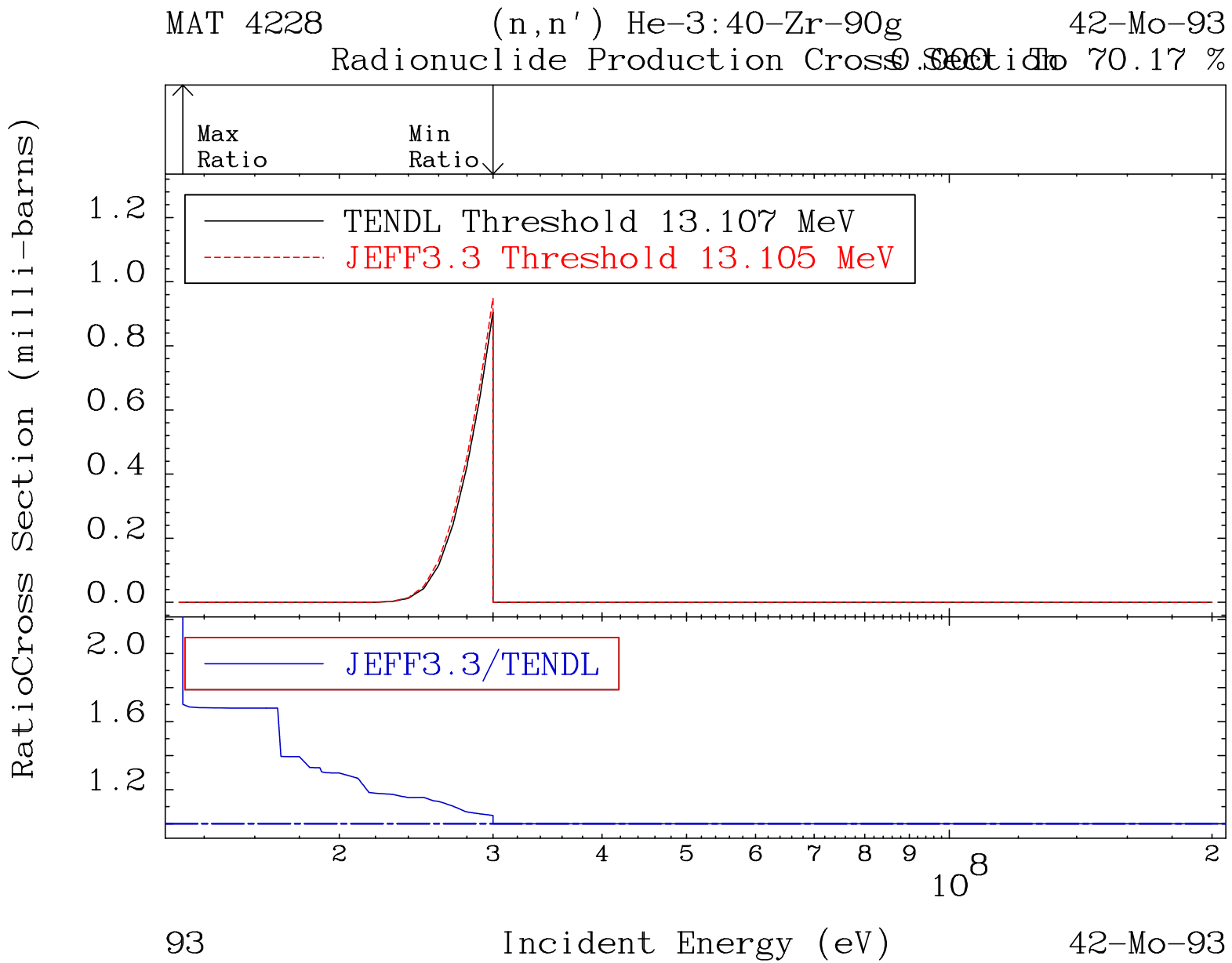

MAT 4228
(n,n') 2α:38-Sr-85m2
42-Mo-93
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 19.000 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
70
60
50
40
30
20
10
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
42-Mo-93

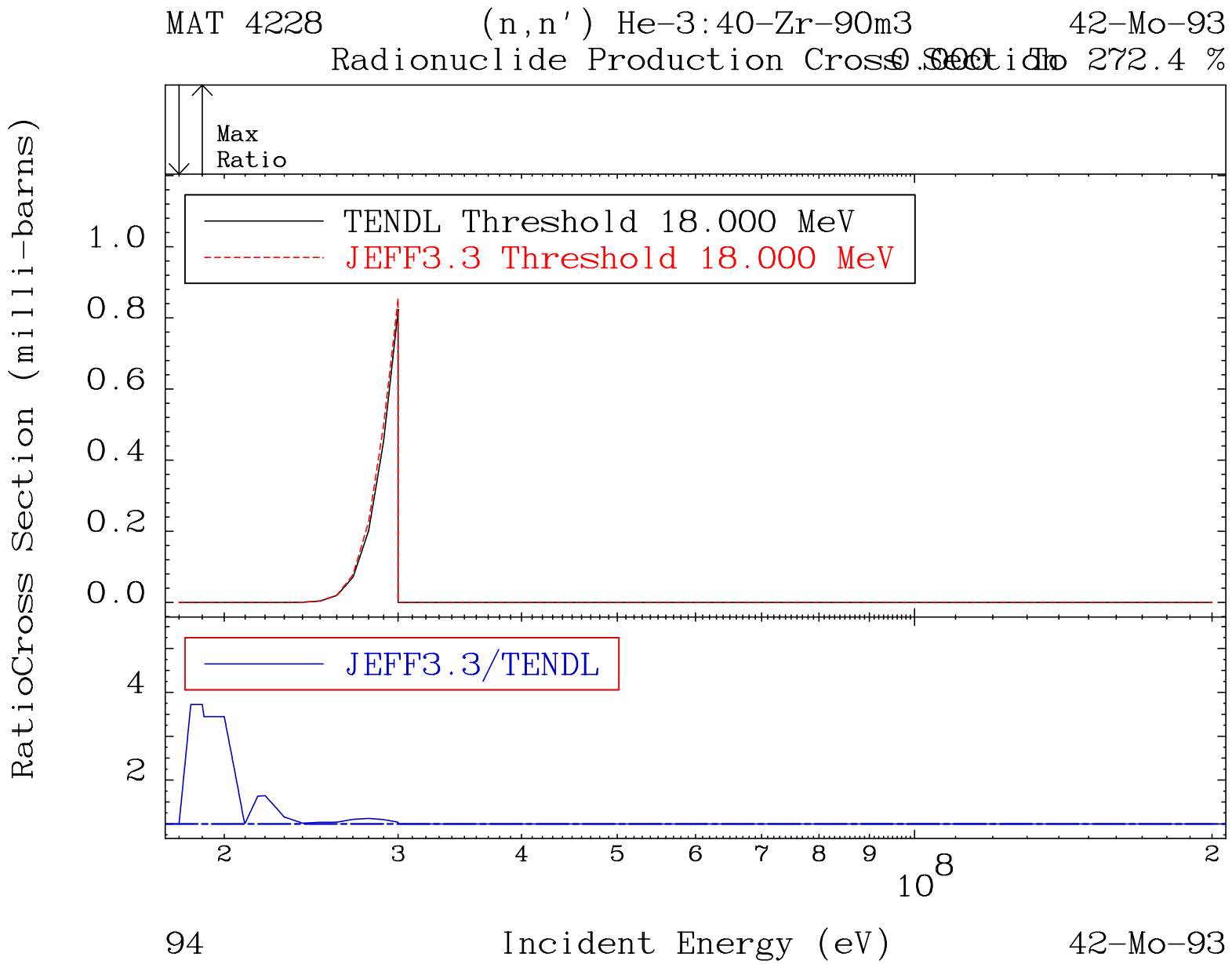

MAT 4228
(n,n') d:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 4941. %
Max Ratio
Min Ratio
TENDL Threshold 13.449 MeV
JEFF3.3 Threshold 13.449 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
42-Mo-93

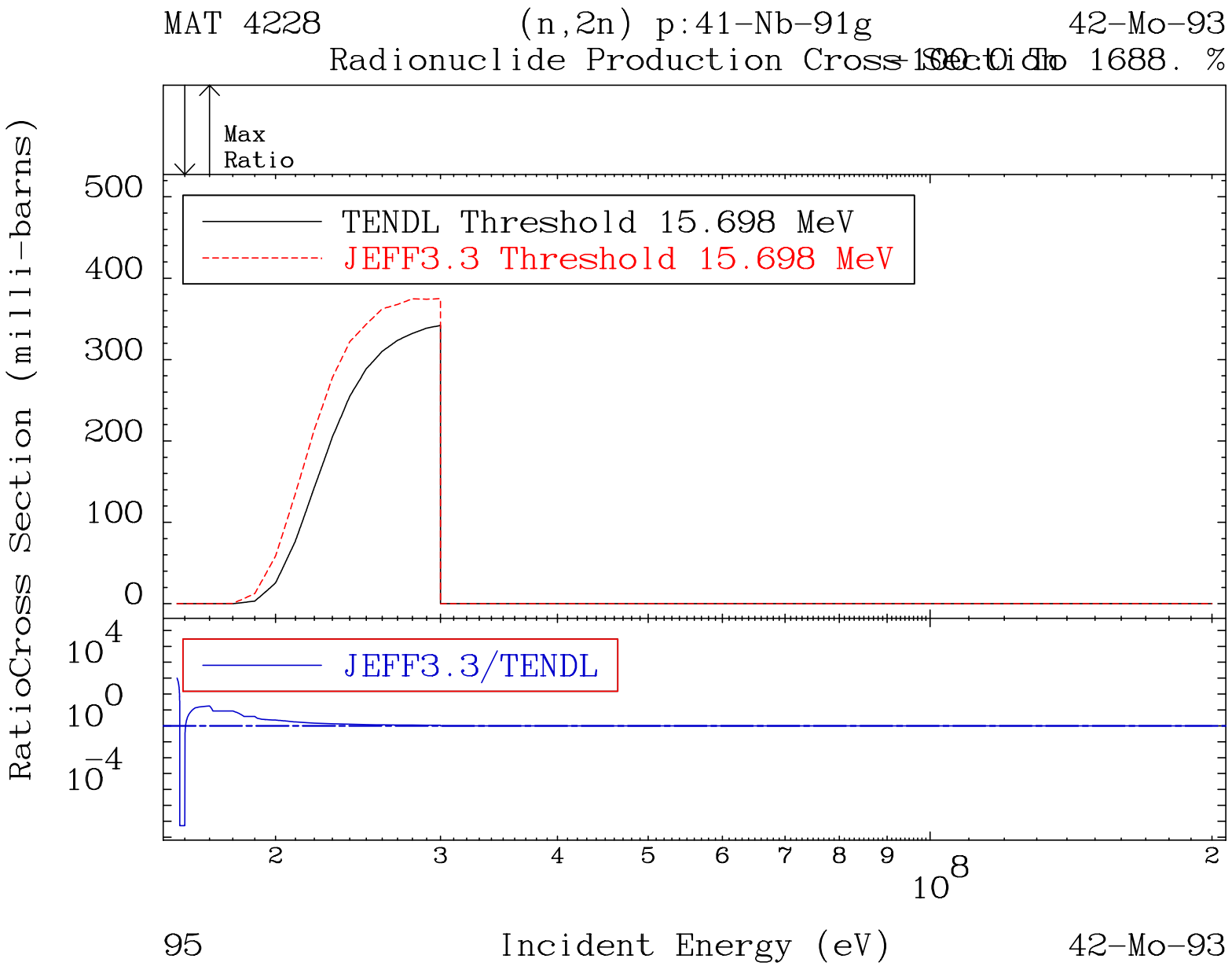

MAT 4228
(n,n') d:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 13.555 MeV
JEFF3.3 Threshold 13.555 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
90
42-Mo-93

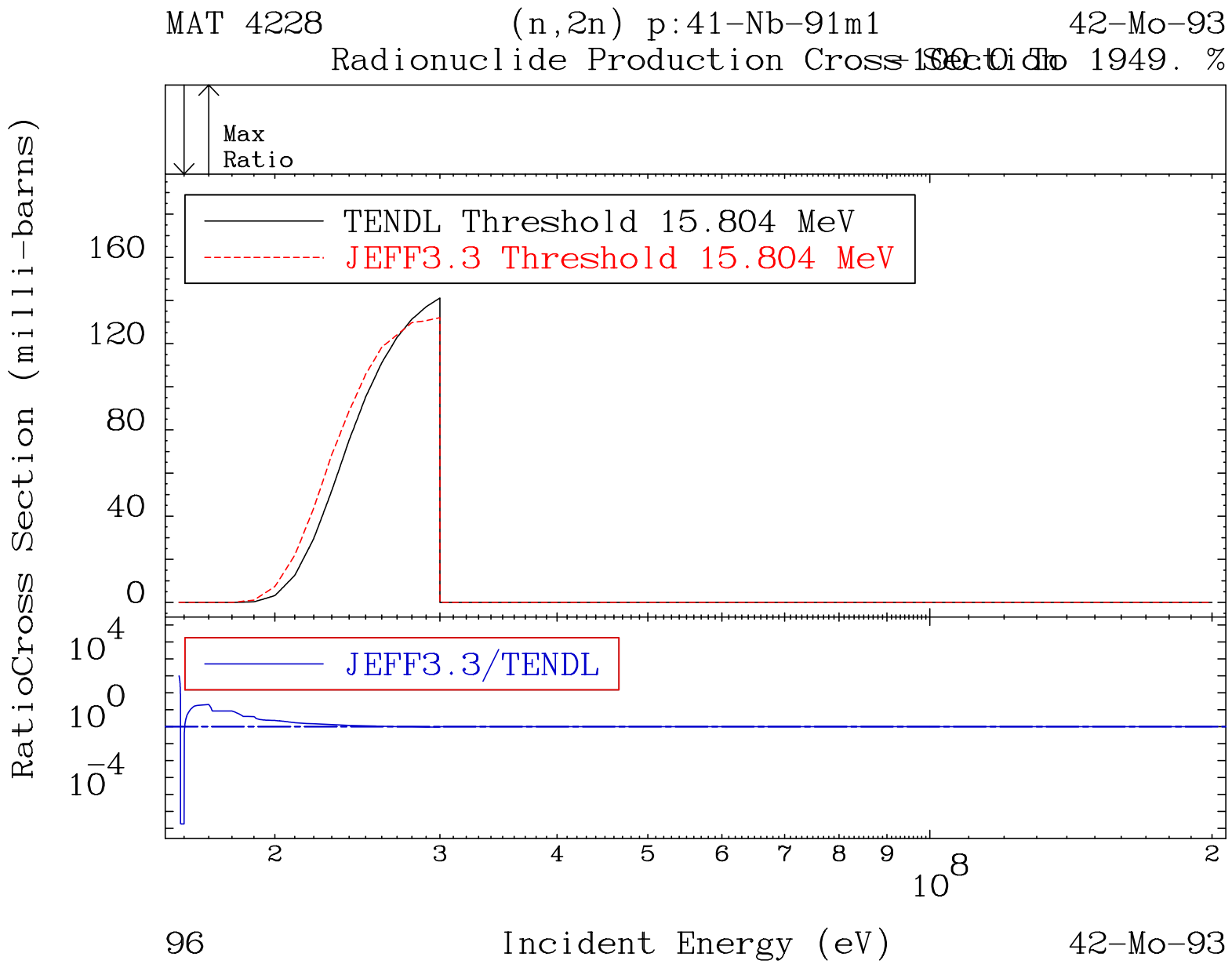

MAT 4228
(n,n') t:41-Nb-90g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 1785. %
Max Ratio
Min Ratio
TENDL Threshold 19.303 MeV
JEFF3.3 Threshold 19.303 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
42-Mo-93

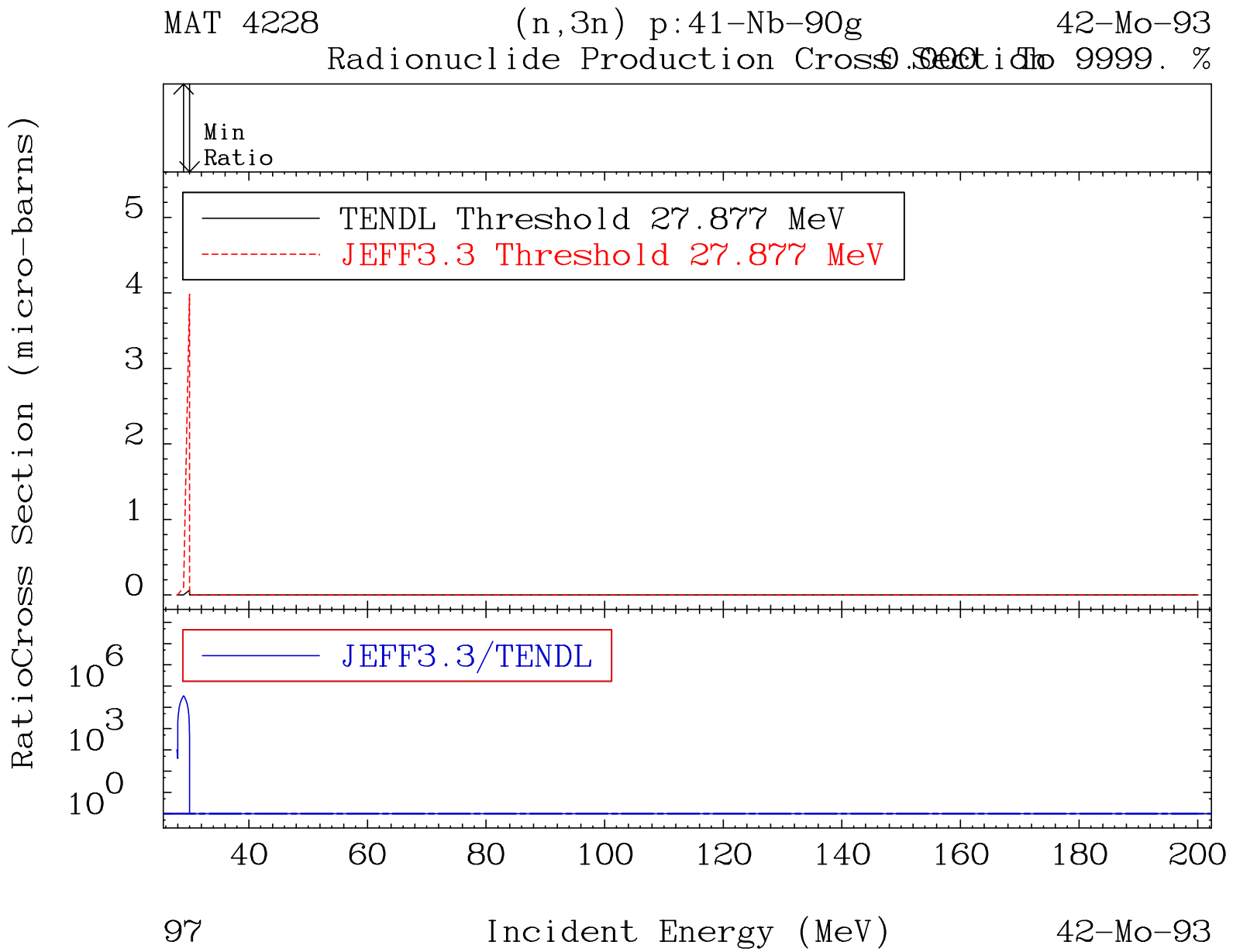

MAT 4228
(n,n') t:41-Nb-90m2
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 19.429 MeV
JEFF3.3 Threshold 19.429 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
92
42-Mo-93

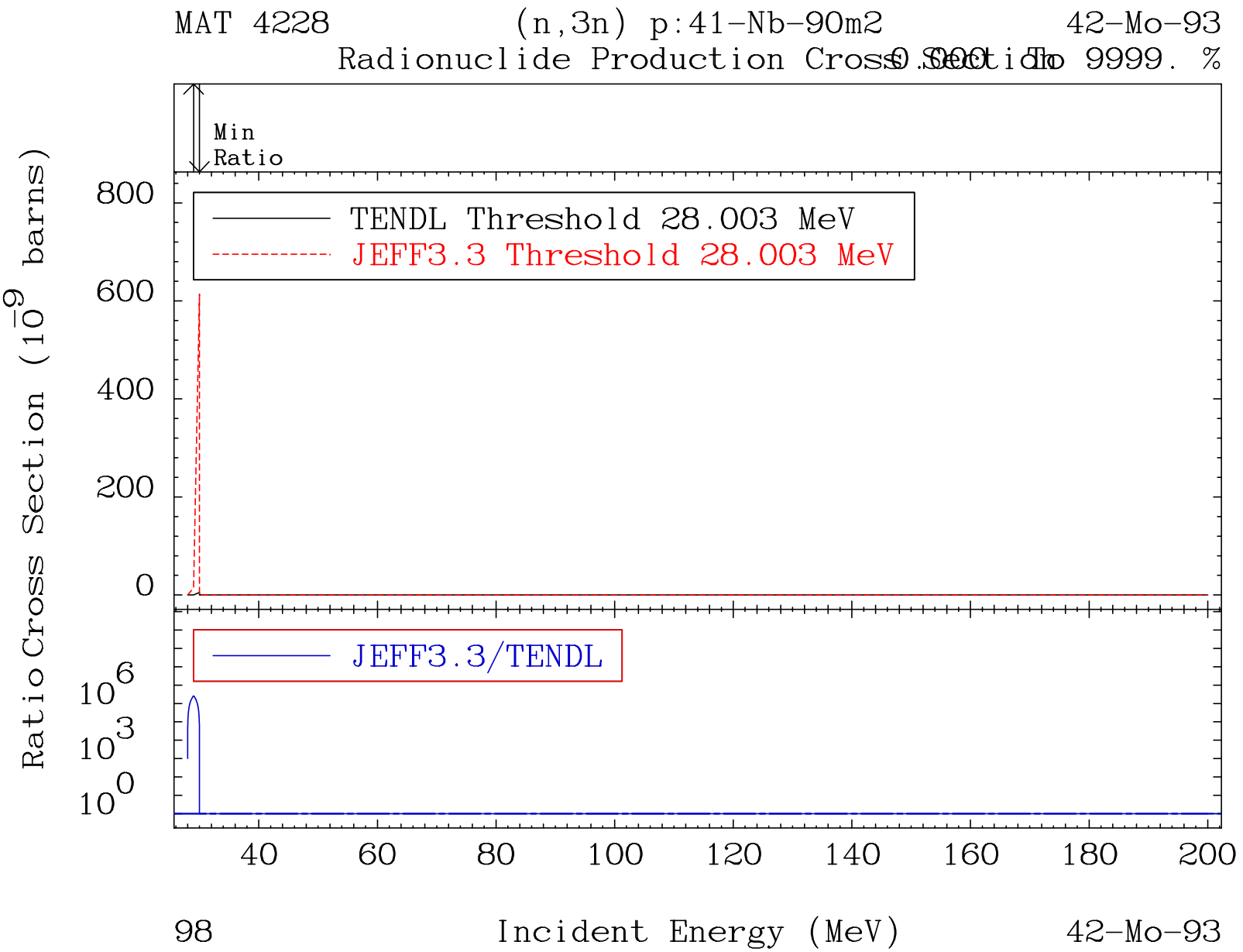

MAT 4228 (n,n') He-3:40-Zr-90g 42-Mo-93
Radionuclide Production Cross Section To 70.17 %
Max Ratio
Min Ratio
TENDL Threshold 13.107 MeV
JEFF3.3 Threshold 13.105 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
42-Mo-93

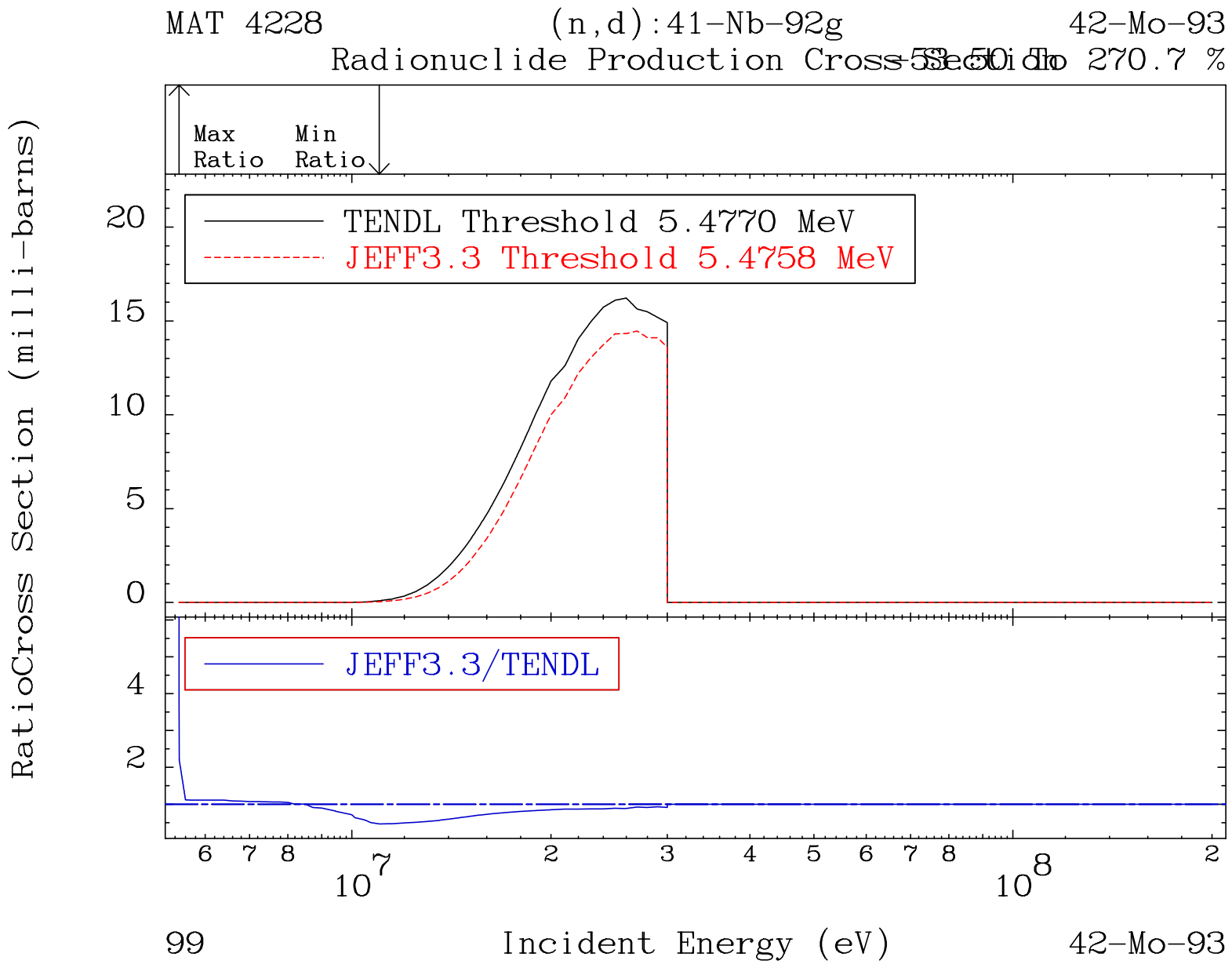

MAT 4228 (n,n') He-3:40-Zr-90m3 42-Mo-93
Radionuclide Production Cross Section To 272.4 %
Max
Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 18.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
4
2
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
42-Mo-93

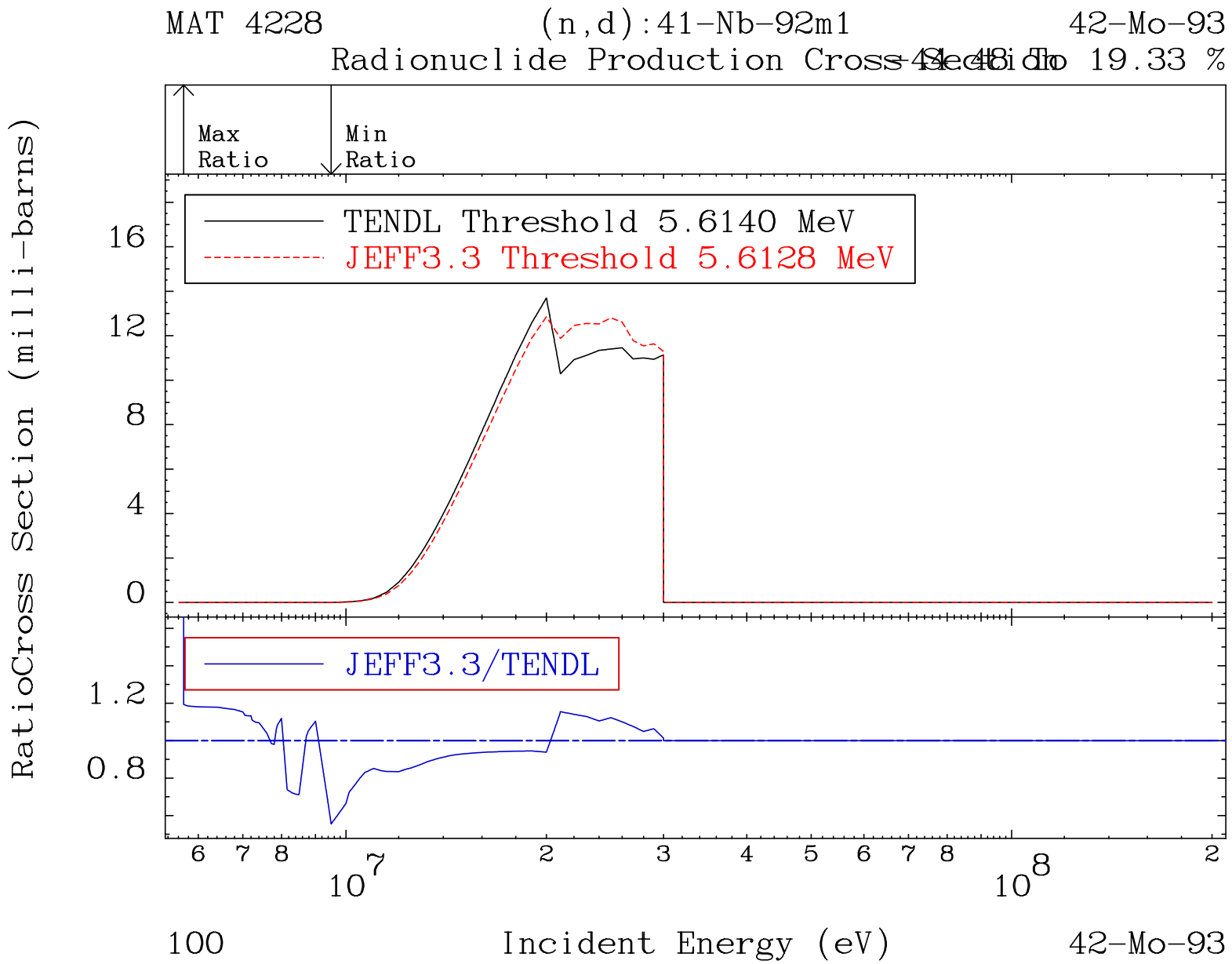

MAT 4228
(n,2n) p:41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section To 1688. %
Max
Ratio
500
400
300
200
100
0
TENDL Threshold 15.698 MeV
JEFF3.3 Threshold 15.698 MeV
10^{4}
10^{0}
10^{-4}
JEFF3.3/TENDL
2
3
4
5
6
7
8
9
10^{8}
2
RatioCross Section (milli-barns)
95
Incident Energy (eV)
42-Mo-93

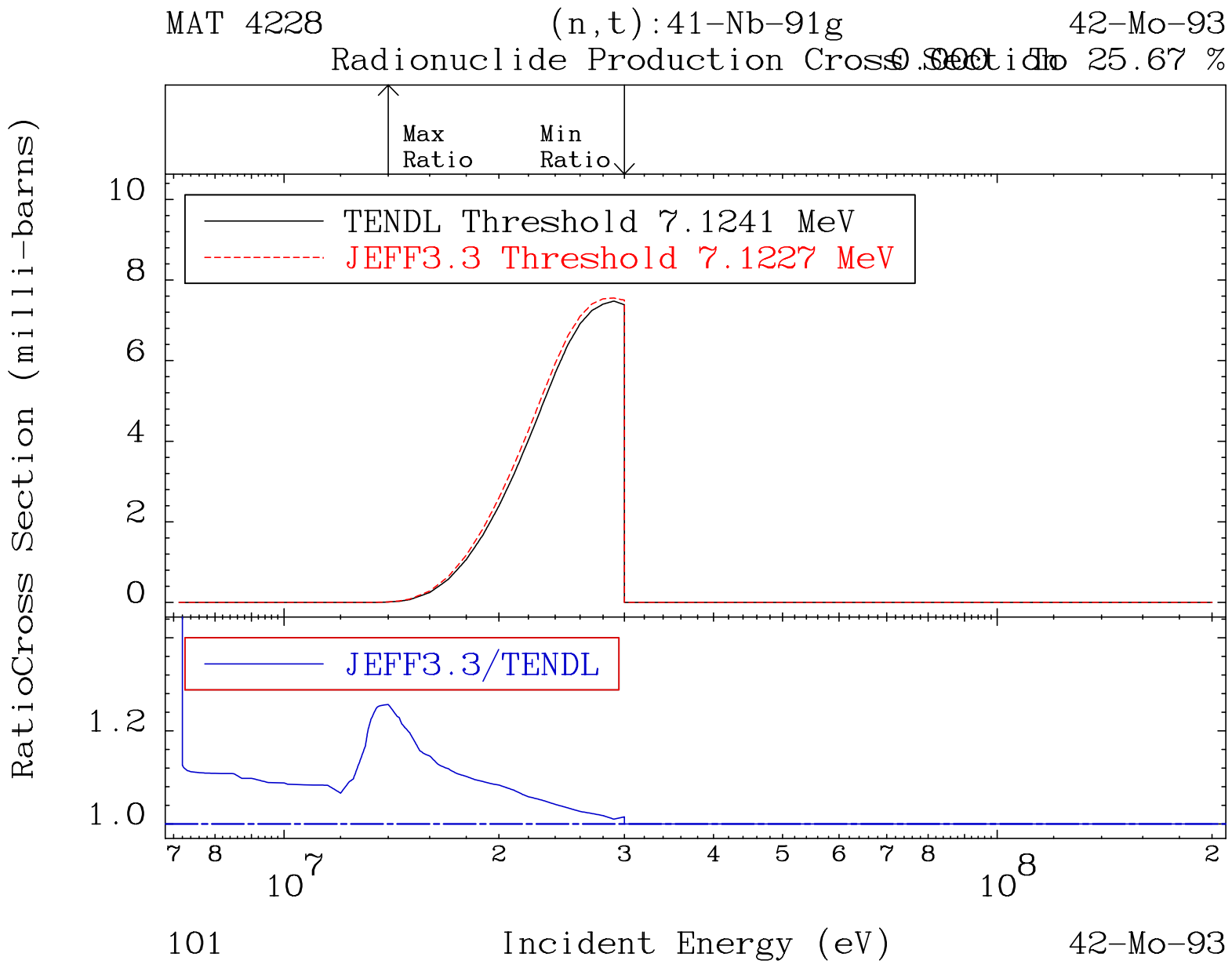

MAT 4228
(n,2n) p:41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section To 1949. %
Max
Ratio
TENDL Threshold 15.804 MeV
JEFF3.3 Threshold 15.804 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^4
10^0
10^-4
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
42-Mo-93

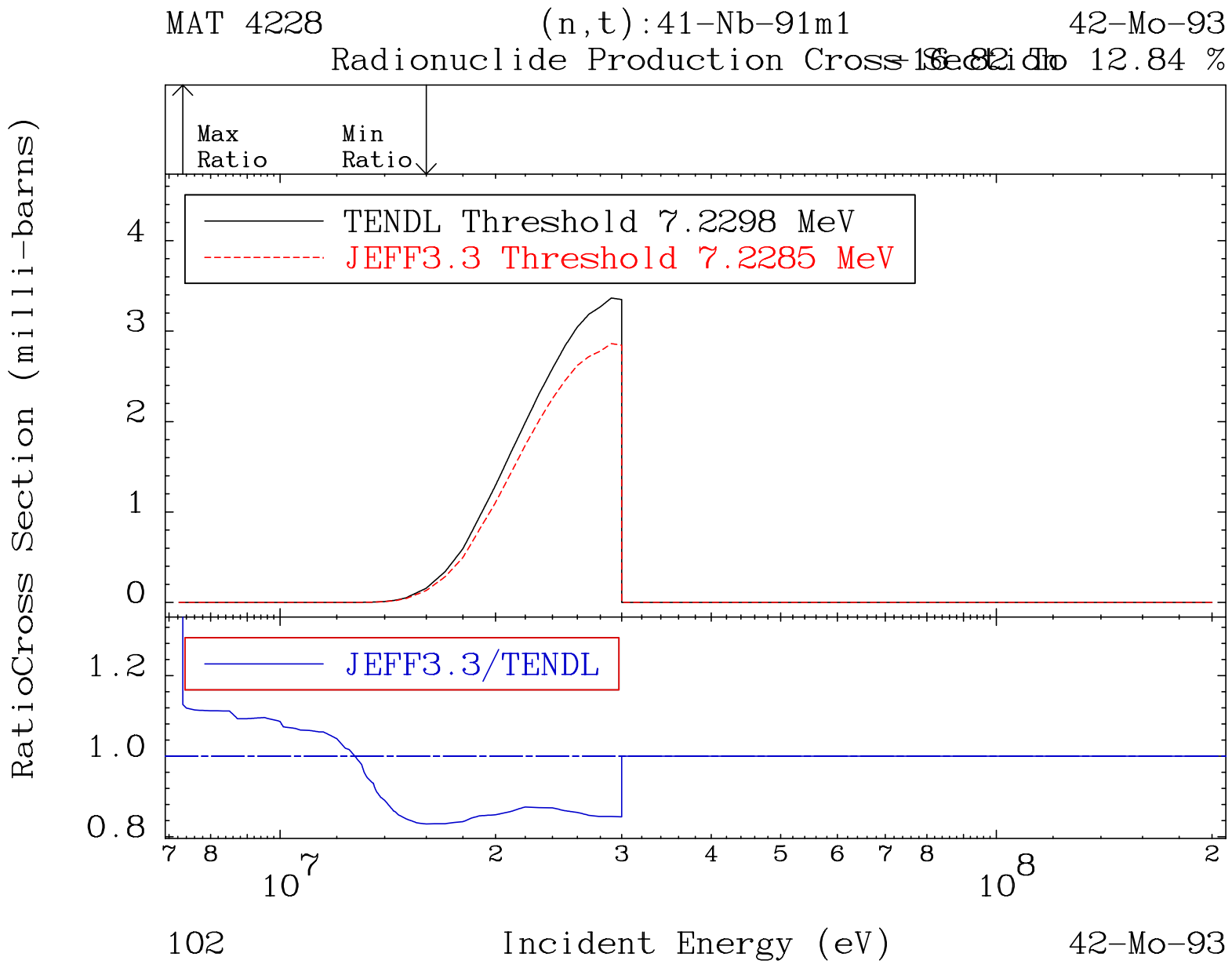

MAT 4228
(n,3n) p:41-Nb-90g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
TENDL Threshold 27.877 MeV
JEFF3.3 Threshold 27.877 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
0
1
2
3
4
5
10^6
10^3
10^0
40
60
80
100
120
140
160
180
200
97
Incident Energy (MeV)
42-Mo-93

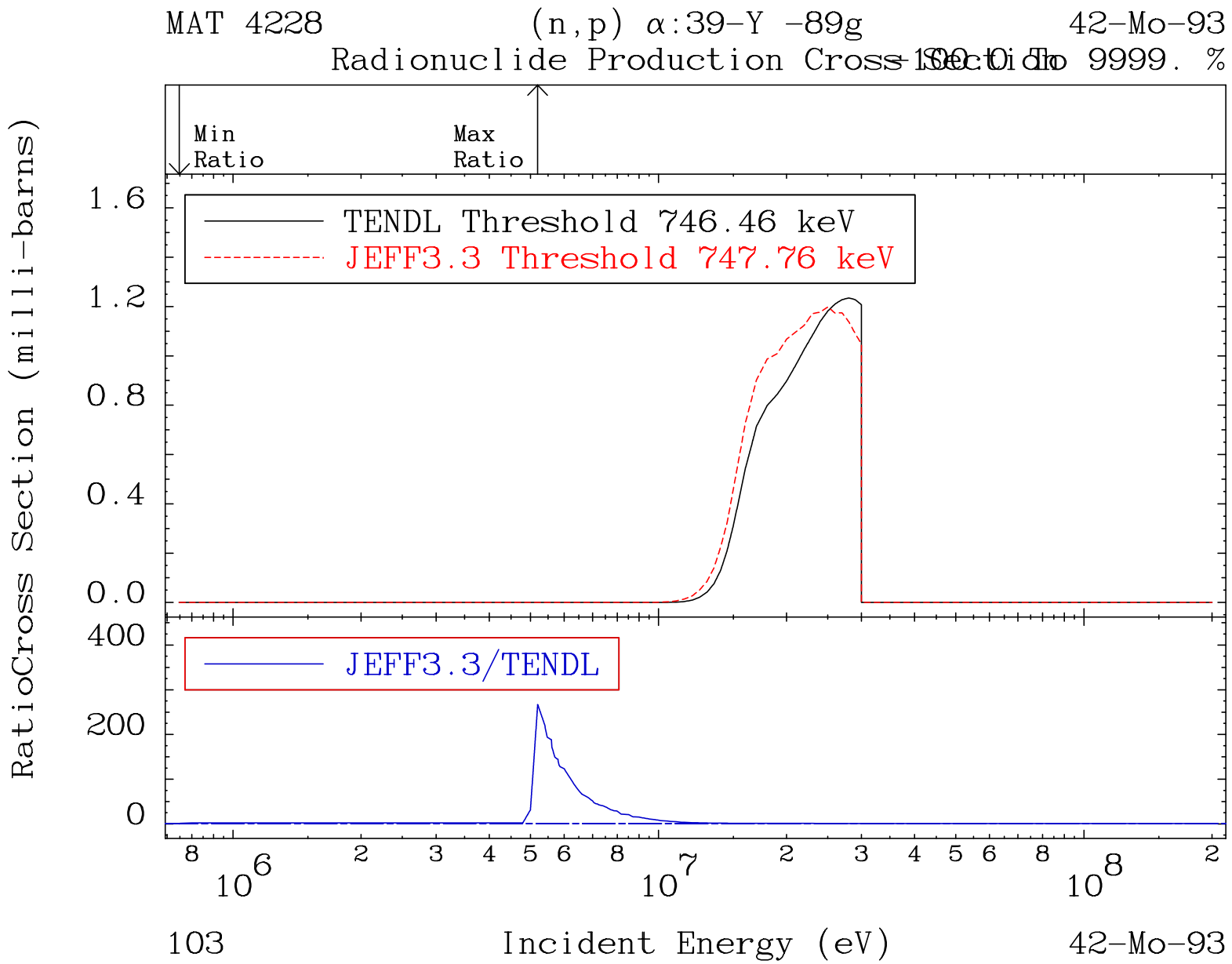

MAT 4228
(n,3n) p:41-Nb-90m2
42-Mo-93
Radionuclide Production Cross Section
0.000 To 9999. %
Min
Ratio
800
600
400
200
0
TENDL Threshold 28.003 MeV
JEFF3.3 Threshold 28.003 MeV
Ratio Cross Section (10^{-9} barns)
JEFF3.3/TENDL
10^{6}
10^{3}
10^{0}
40
60
80
100
120
140
160
180
200
98
Incident Energy (MeV)
42-Mo-93

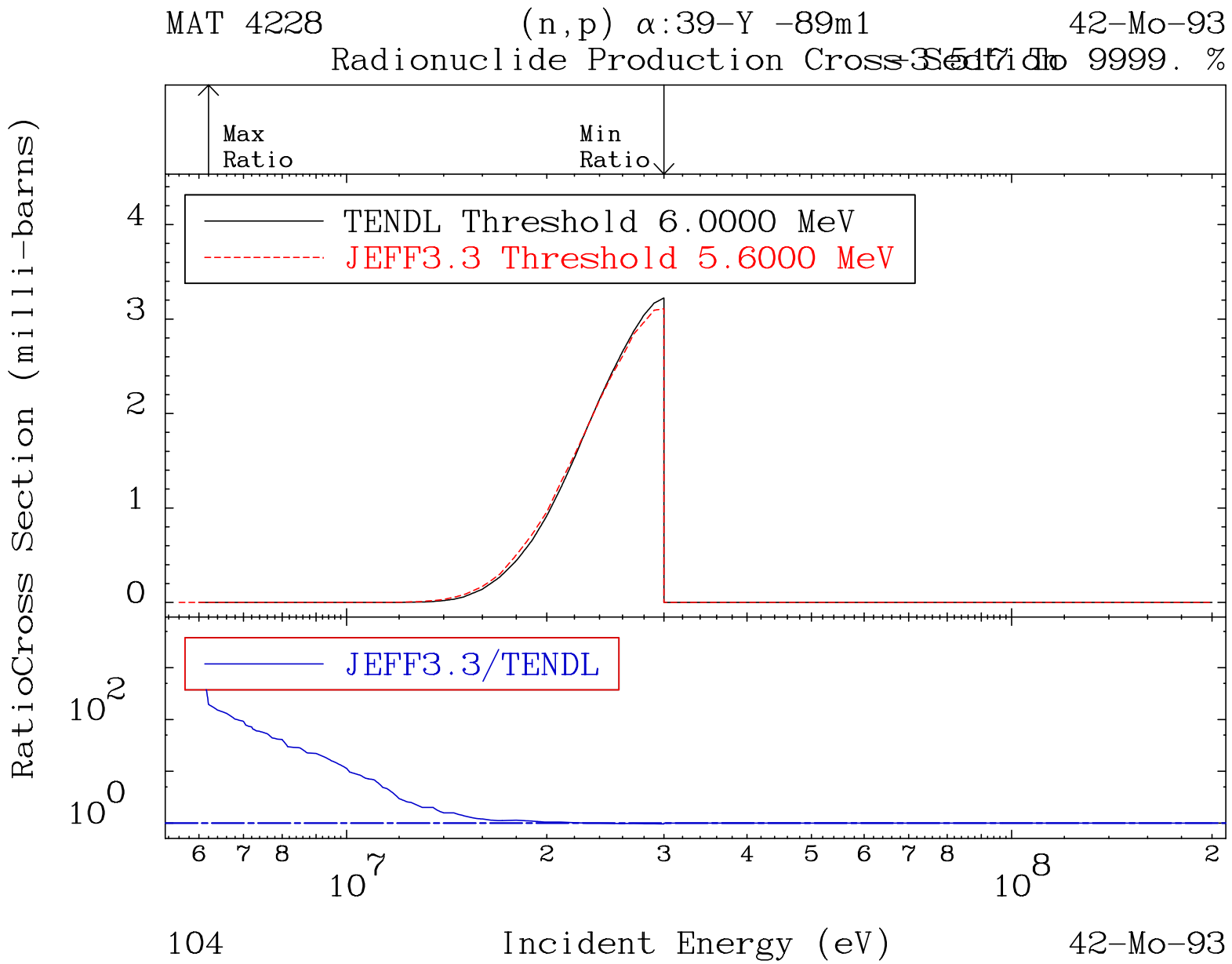

MAT 4228
(n,d):41-Nb-92g
42-Mo-93
Radionuclide Production Cross Section To 270.7 %
Max Ratio
Min Ratio
TENDL Threshold 5.4770 MeV
JEFF3.3 Threshold 5.4758 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
4
2
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
99
Incident Energy (eV)
42-Mo-93

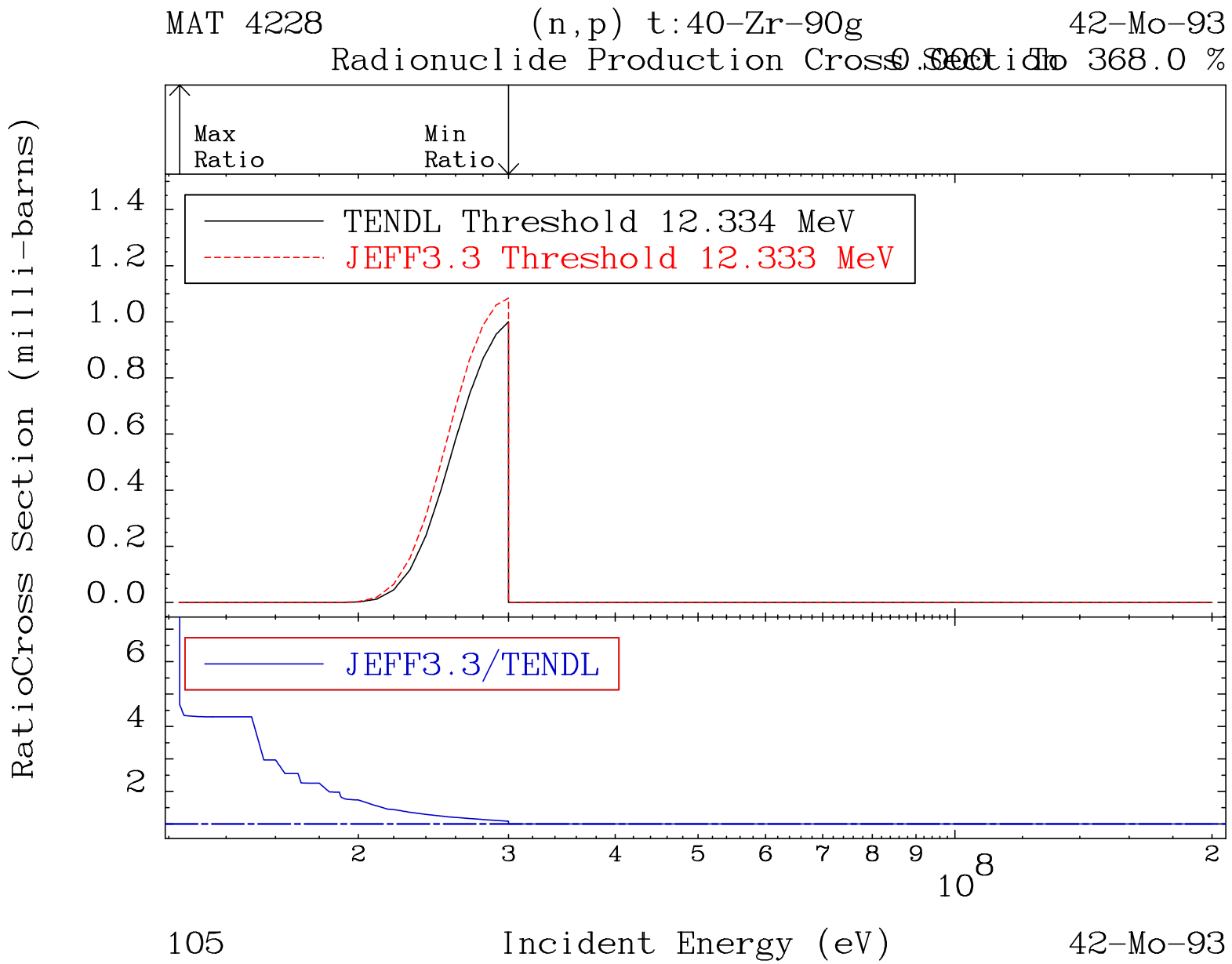

MAT 4228
(n,d):41-Nb-92m1
42-Mo-93
Radionuclide Production Cross-Section
Max Ratio
Min Ratio
TENDL Threshold 5.6140 MeV
JEFF3.3 Threshold 5.6128 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
100
42-Mo-93

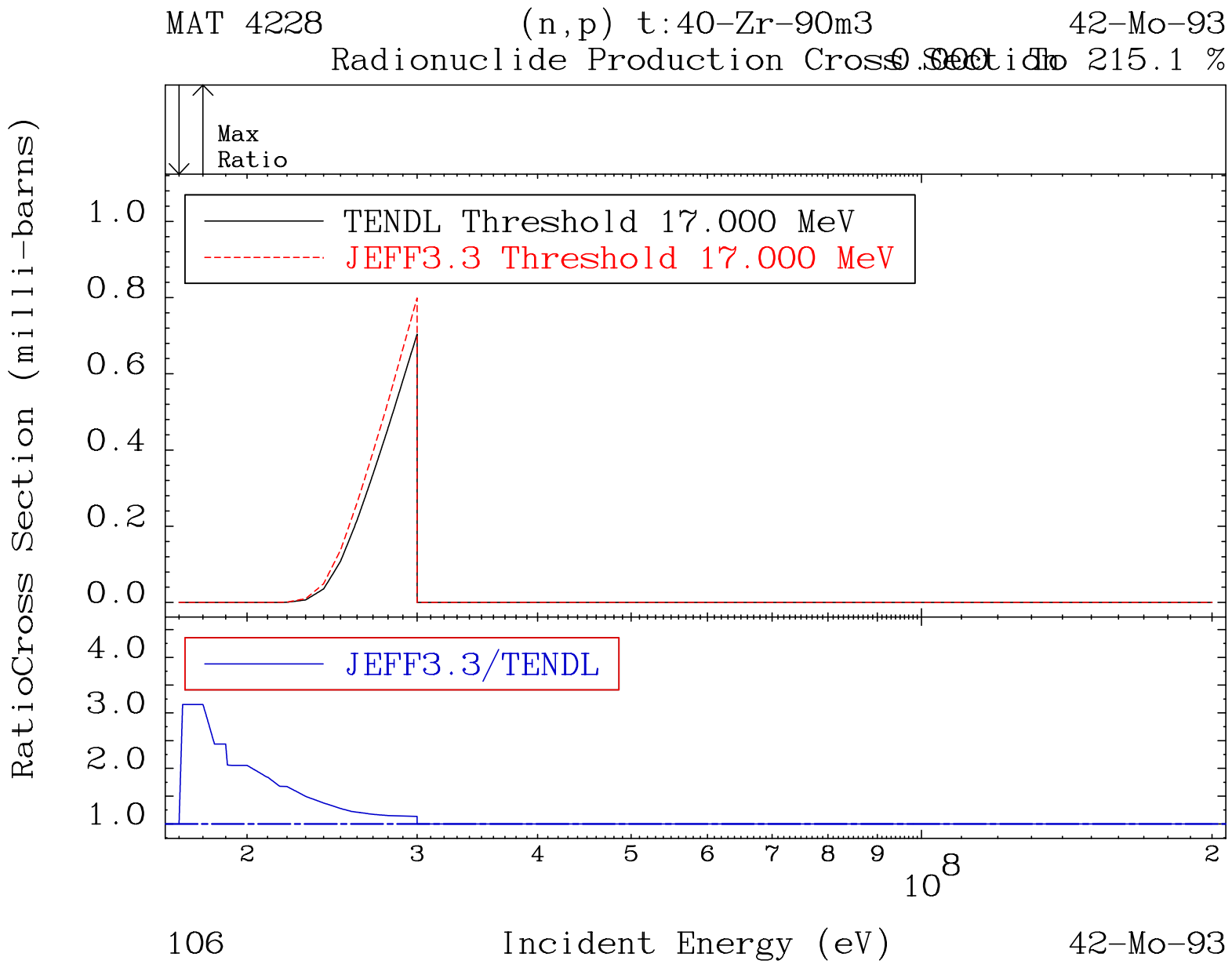

MAT 4228
(n,t):41-Nb-91g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 25.67 %
Max Ratio
Min Ratio
TENDL Threshold 7.1241 MeV
JEFF3.3 Threshold 7.1227 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
101
42-Mo-93


MAT 4228
(n,t):41-Nb-91m1
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 7.2298 MeV
JEFF3.3 Threshold 7.2285 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
102
42-Mo-93


MAT 4228
(n,p) α:39-Y -89g
42-Mo-93
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 746.46 keV
JEFF3.3 Threshold 747.76 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
103
42-Mo-93


MAT 4228
(n,p) α:39-Y -89m1
42-Mo-93
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 6.0000 MeV
JEFF3.3 Threshold 5.6000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
104
42-Mo-93


MAT 4228
(n,p) t:40-Zr-90g
42-Mo-93
Radionuclide Production Cross Section
0.000 To 368.0 %
Max Ratio
Min Ratio
TENDL Threshold 12.334 MeV
JEFF3.3 Threshold 12.333 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6
4
2
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
42-Mo-93


MAT 4228
(n,p) t:40-Zr-90m3
42-Mo-93
Radionuclide Production Cross Section
0.000 To 215.1 %
Max
Ratio
TENDL Threshold 17.000 MeV
JEFF3.3 Threshold 17.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
106
Incident Energy (eV)
42-Mo-93