Program Complot
(Version 2021-1)
by
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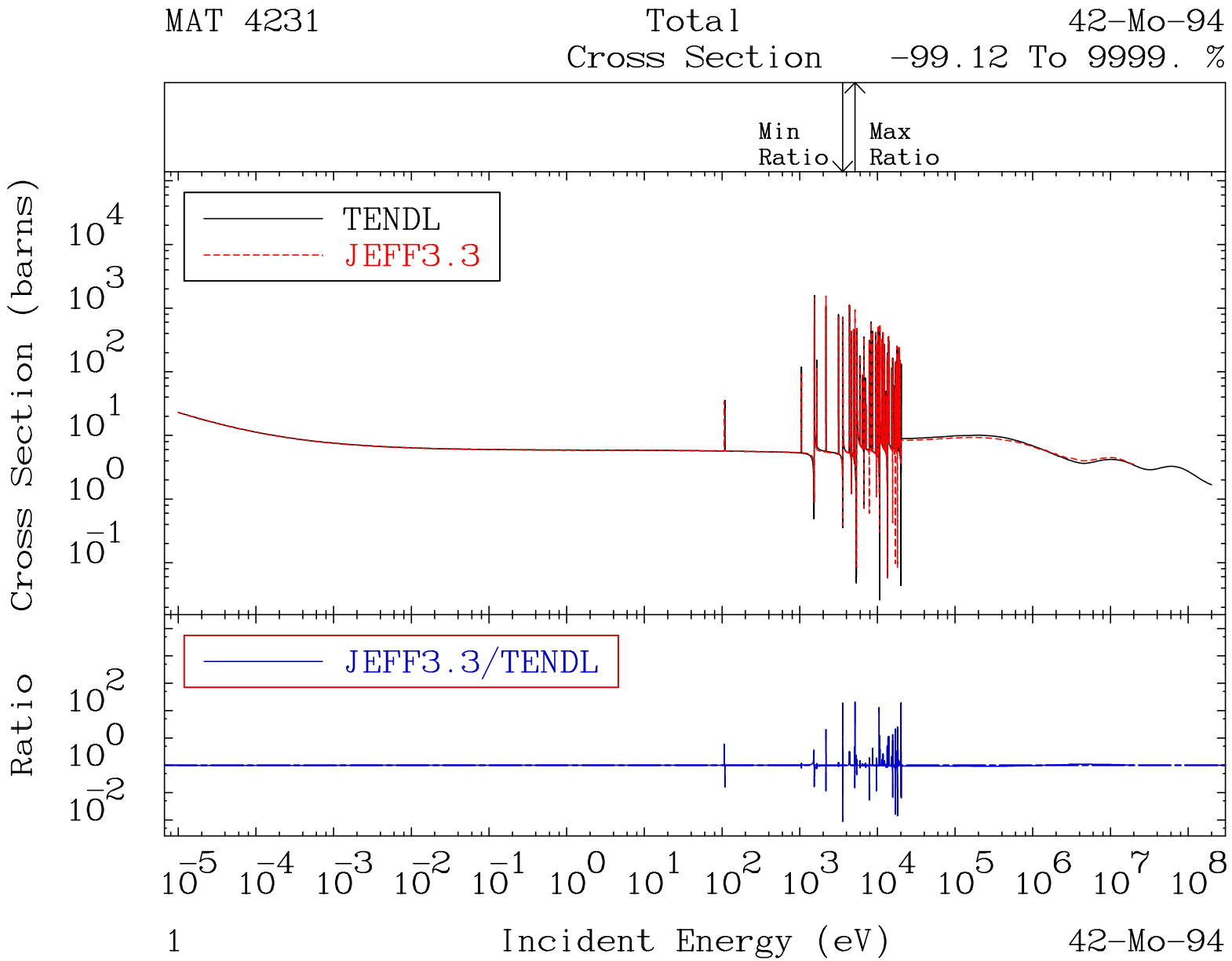
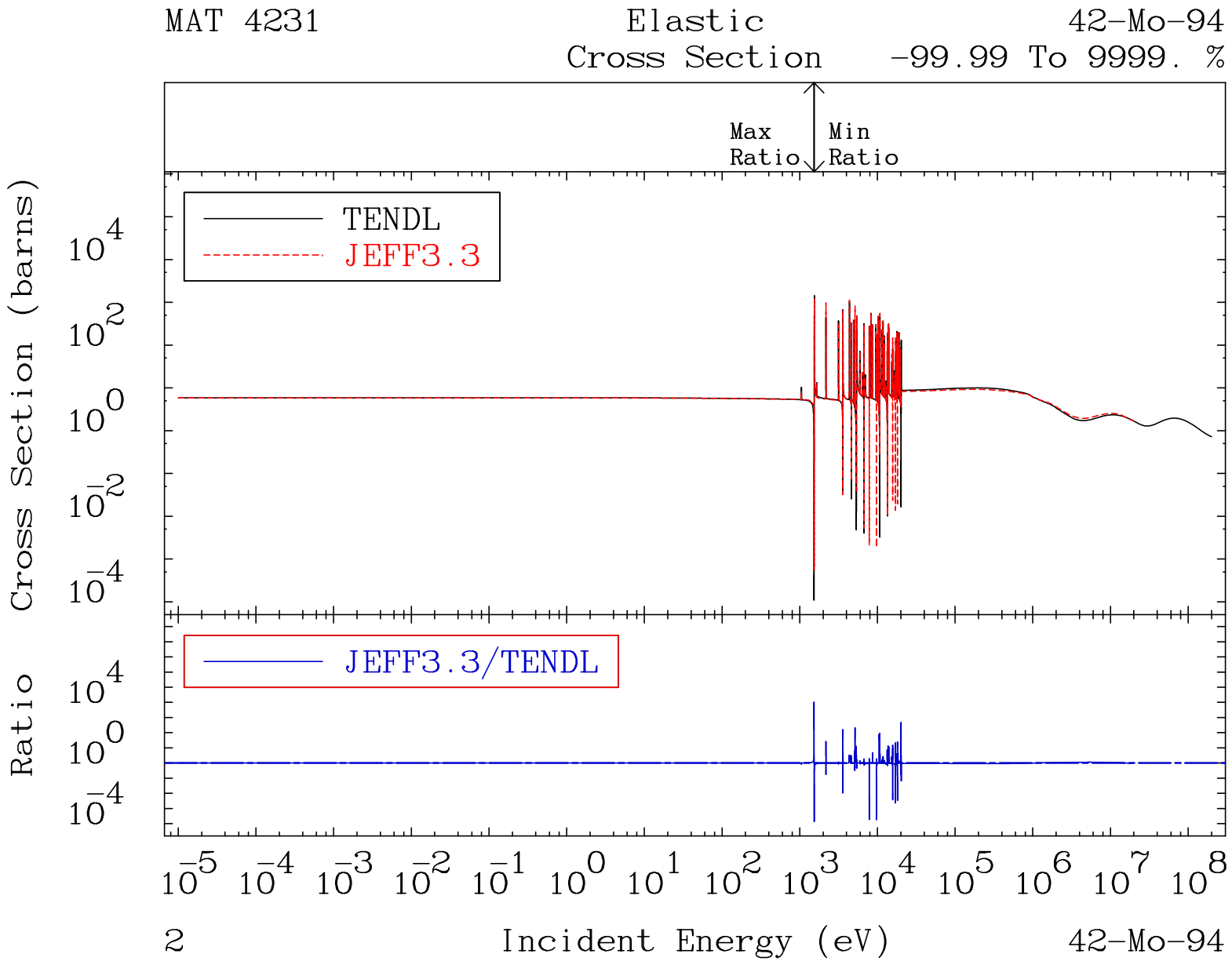
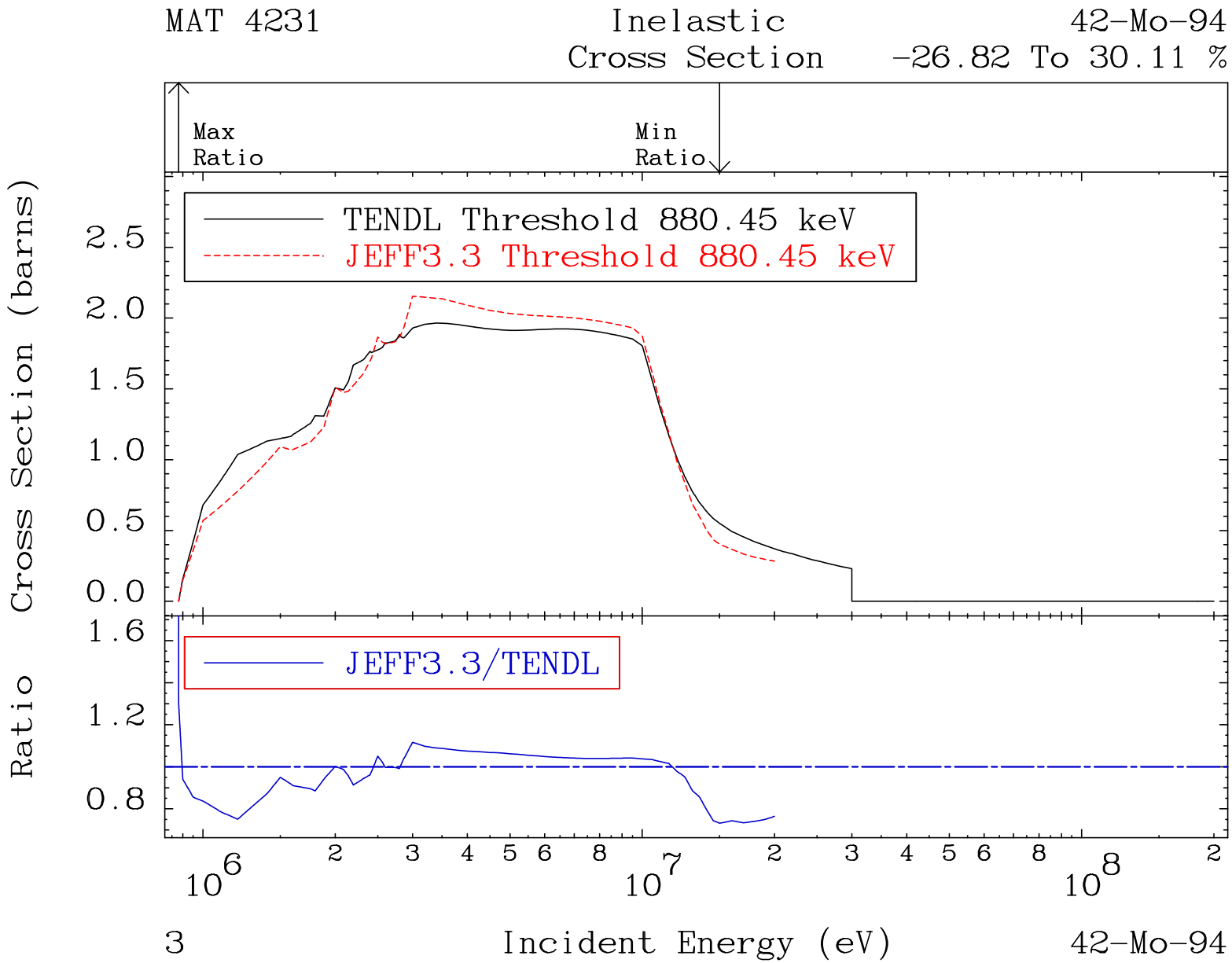
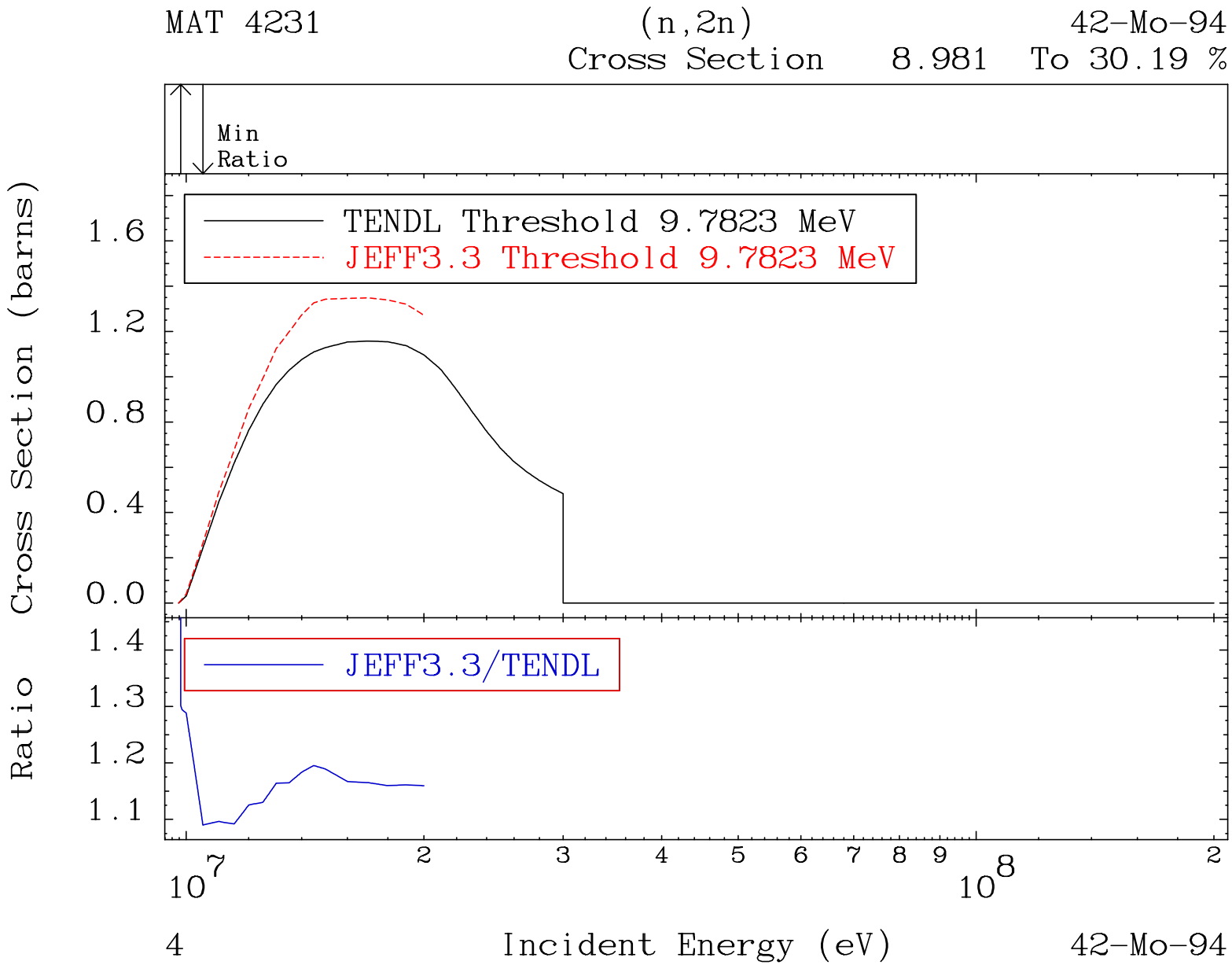
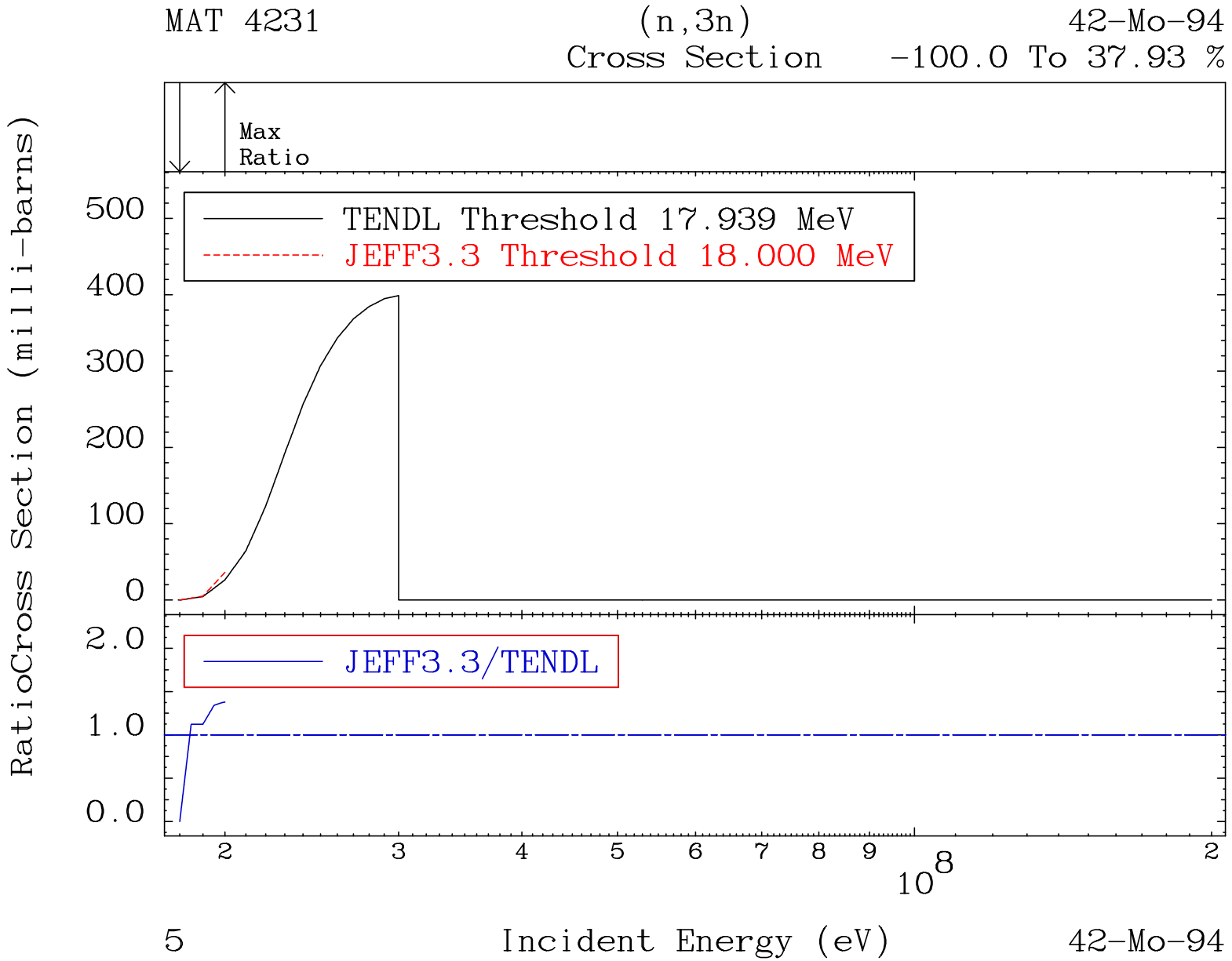
Press Mouse Button to Start

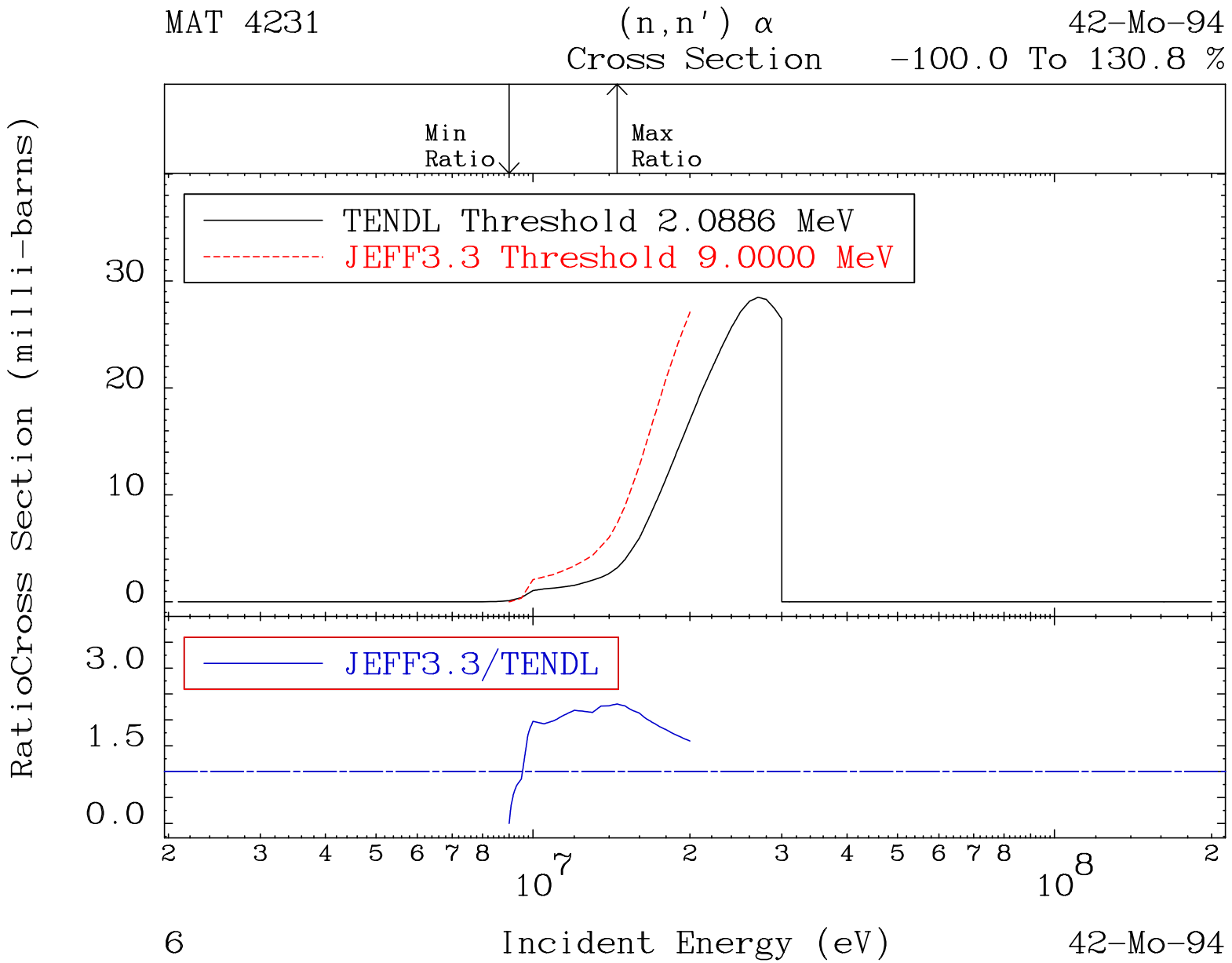

MAT 4231
Total
Cross Section
42-Mo-94
-99.12 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
42-Mo-94

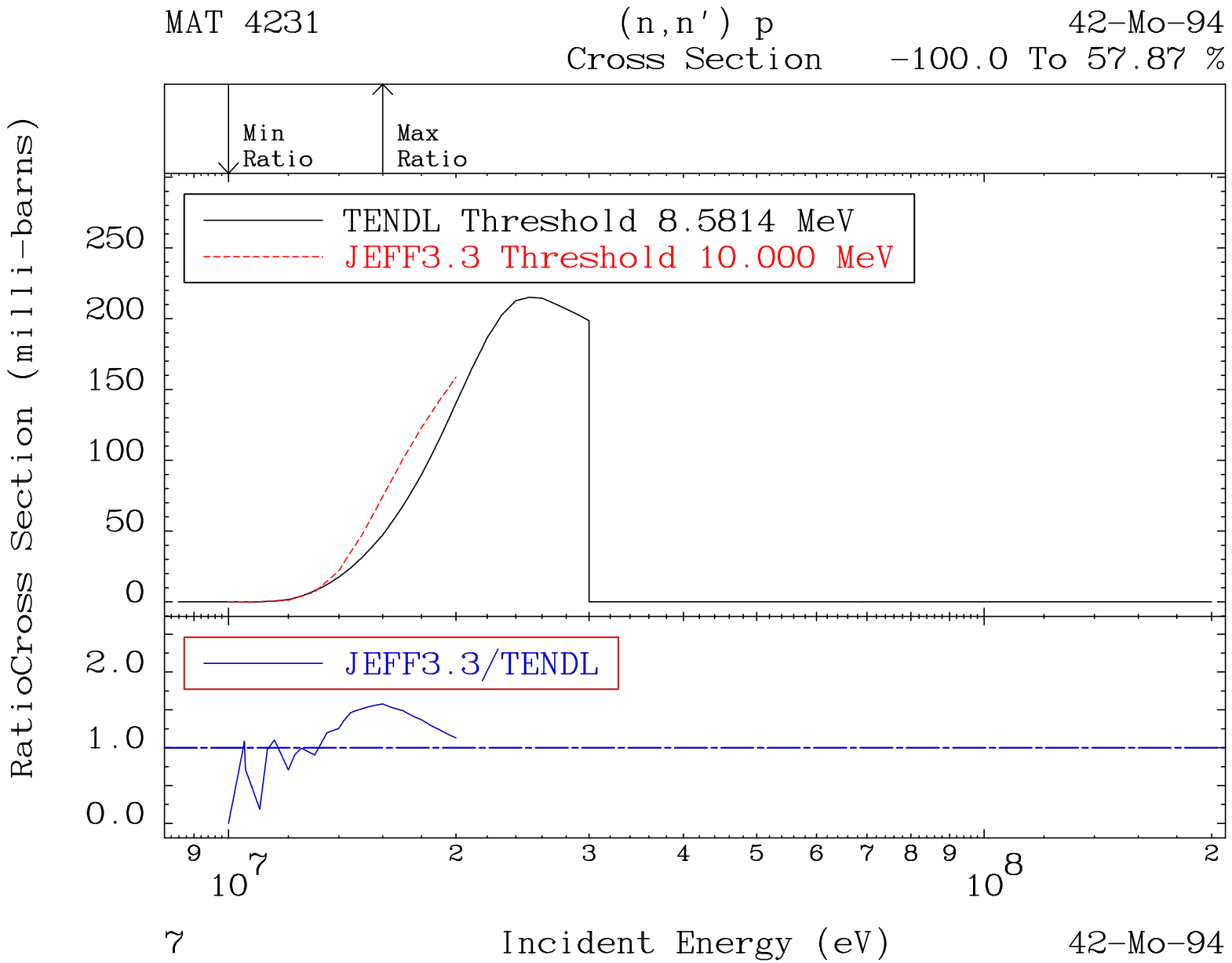

MAT 4231
Elastic
Cross Section
42-Mo-94
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
42-Mo-94

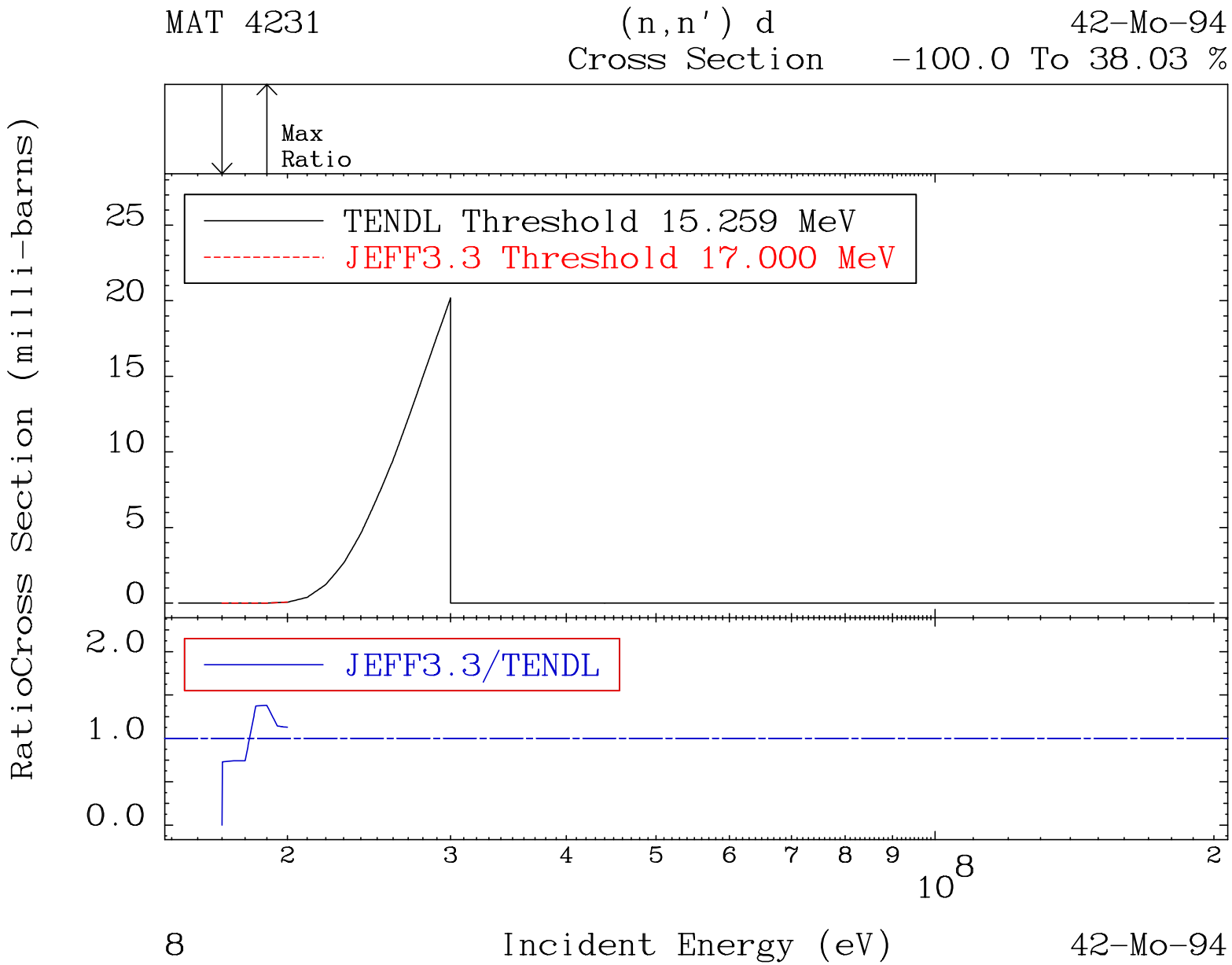

MAT 4231
Inelastic
Cross Section
42-Mo-94
-26.82 To 30.11 %
Max
Ratio
Min
Ratio
TENDL Threshold 880.45 keV
JEFF3.3 Threshold 880.45 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
42-Mo-94

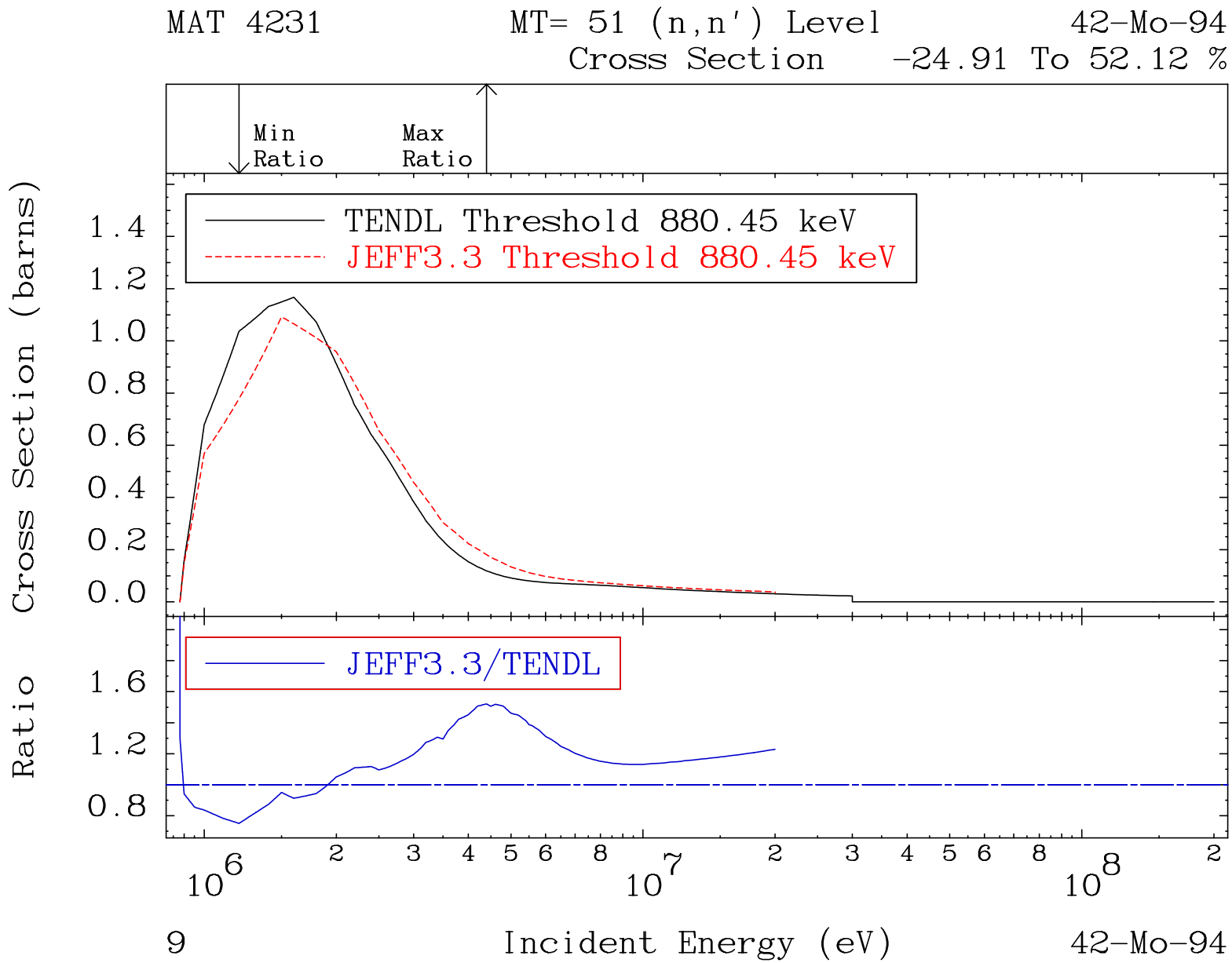

MAT 4231
(n,2n)
Cross Section
42-Mo-94
8.981 To 30.19 %
Min
Ratio
TENDL Threshold 9.7823 MeV
JEFF3.3 Threshold 9.7823 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.4
1.3
1.2
1.1
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
4
42-Mo-94

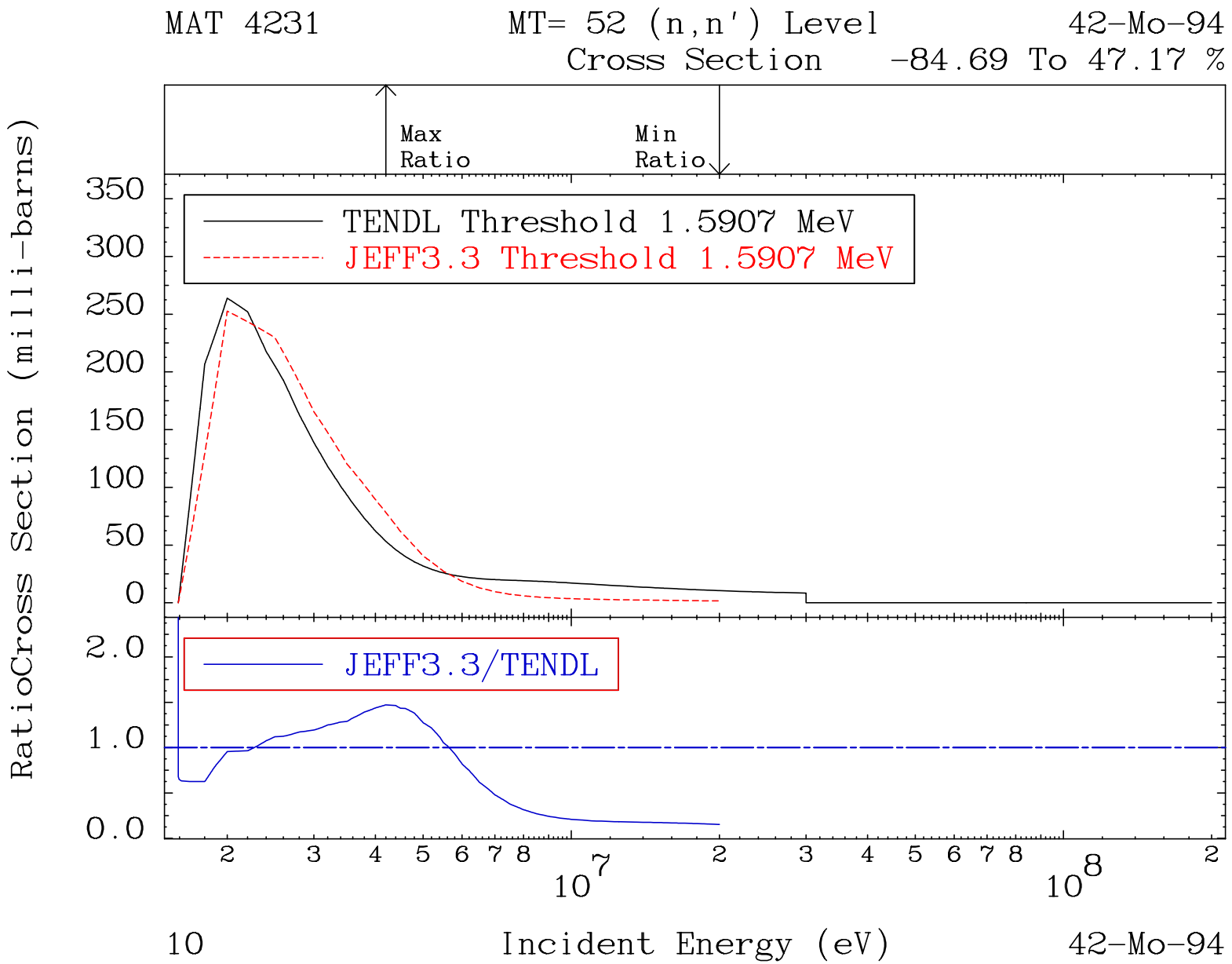

MAT 4231
(n,3n)
Cross Section
42-Mo-94
-100.0 To 37.93 %
Max
Ratio
TENDL Threshold 17.939 MeV
JEFF3.3 Threshold 18.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
5
Incident Energy (eV)
42-Mo-94

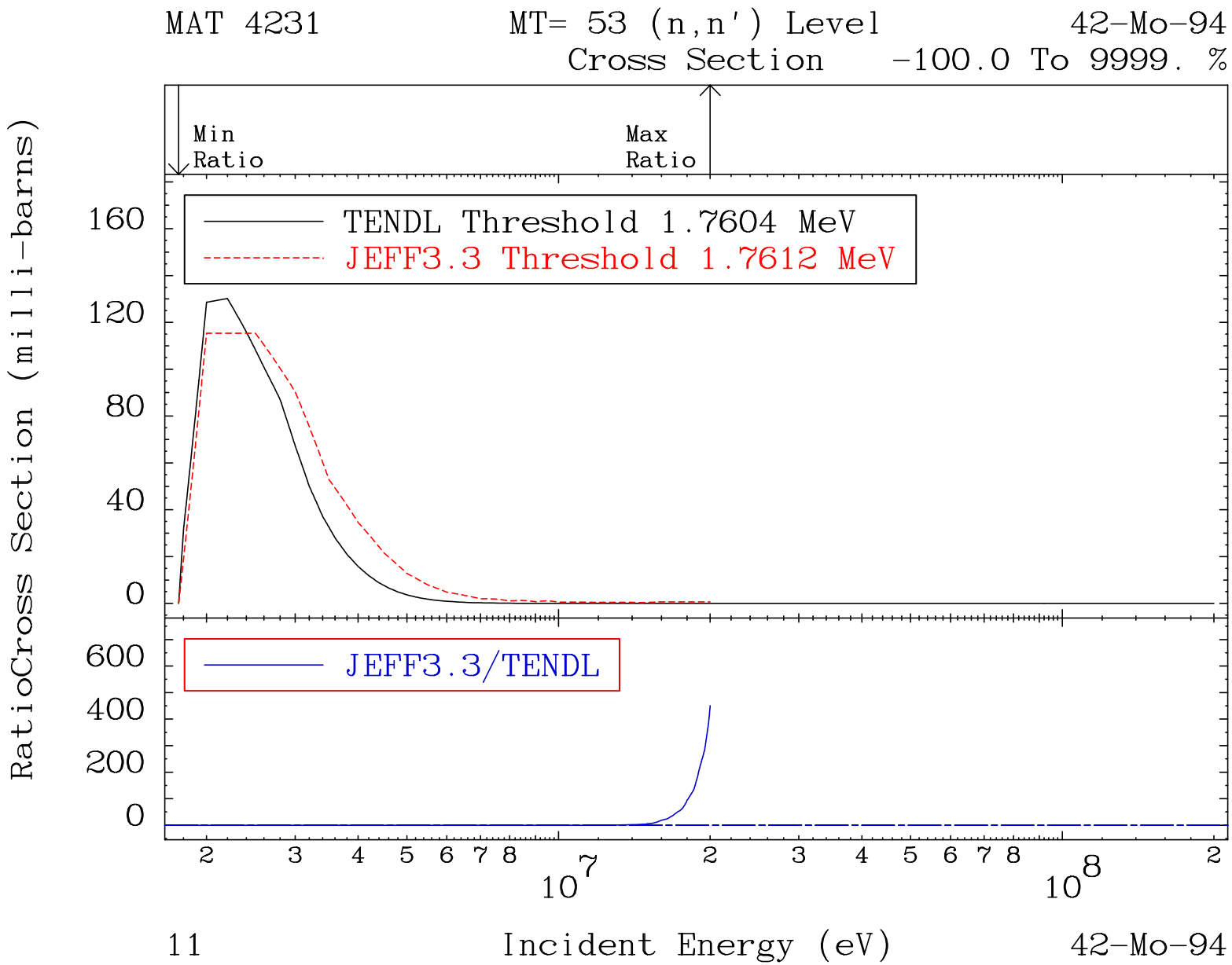

MAT 4231
(n,n') α
Cross Section
42-Mo-94
-100.0 To 130.8 %
Min Ratio
Max Ratio
TENDL Threshold 2.0886 MeV
JEFF3.3 Threshold 9.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
20
10
0
3.0
1.5
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
42-Mo-94

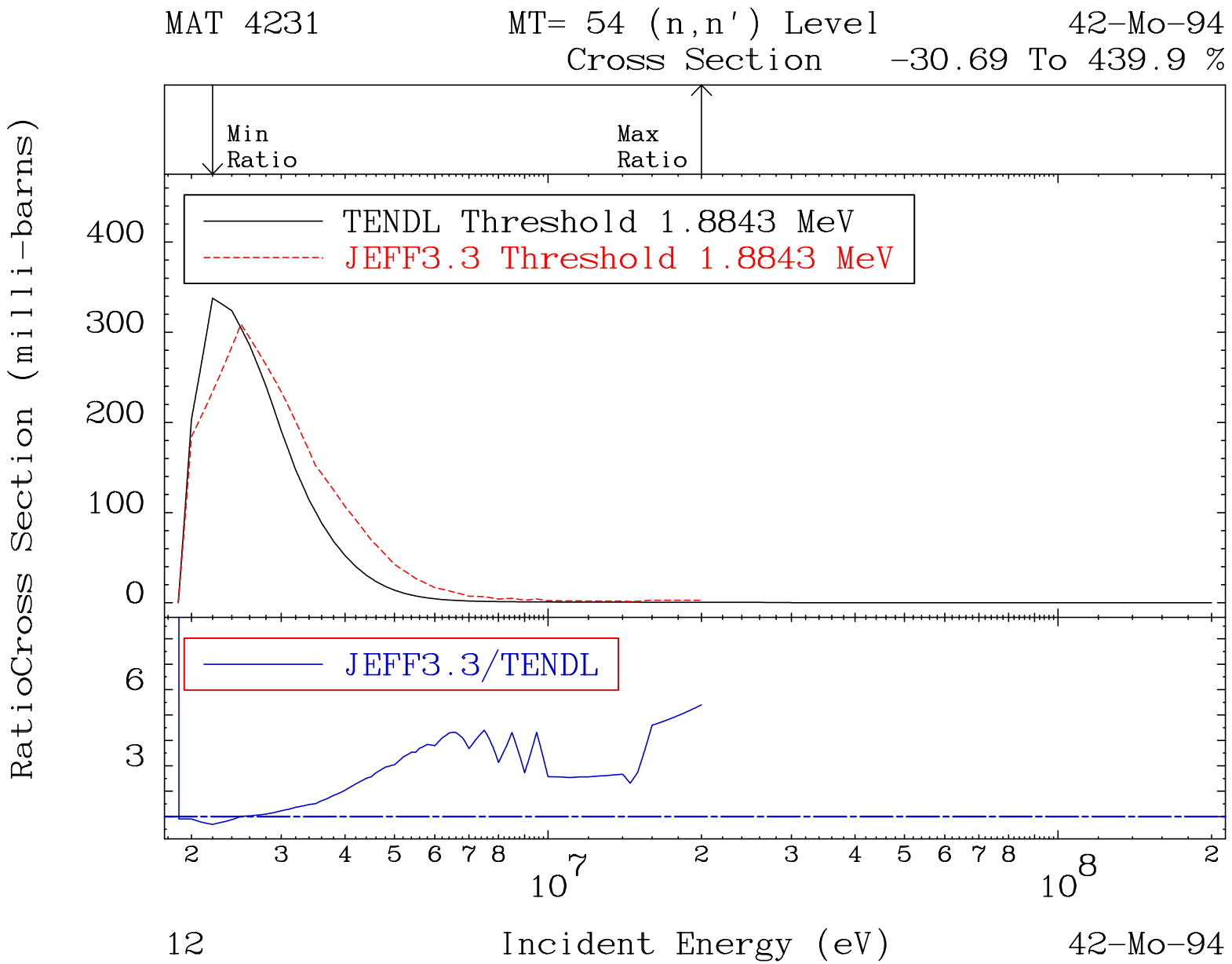

MAT 4231
(n,n') p
Cross Section
42-Mo-94
-100.0 To 57.87 %
Min Ratio
Max Ratio
TENDL Threshold 8.5814 MeV
JEFF3.3 Threshold 10.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
42-Mo-94

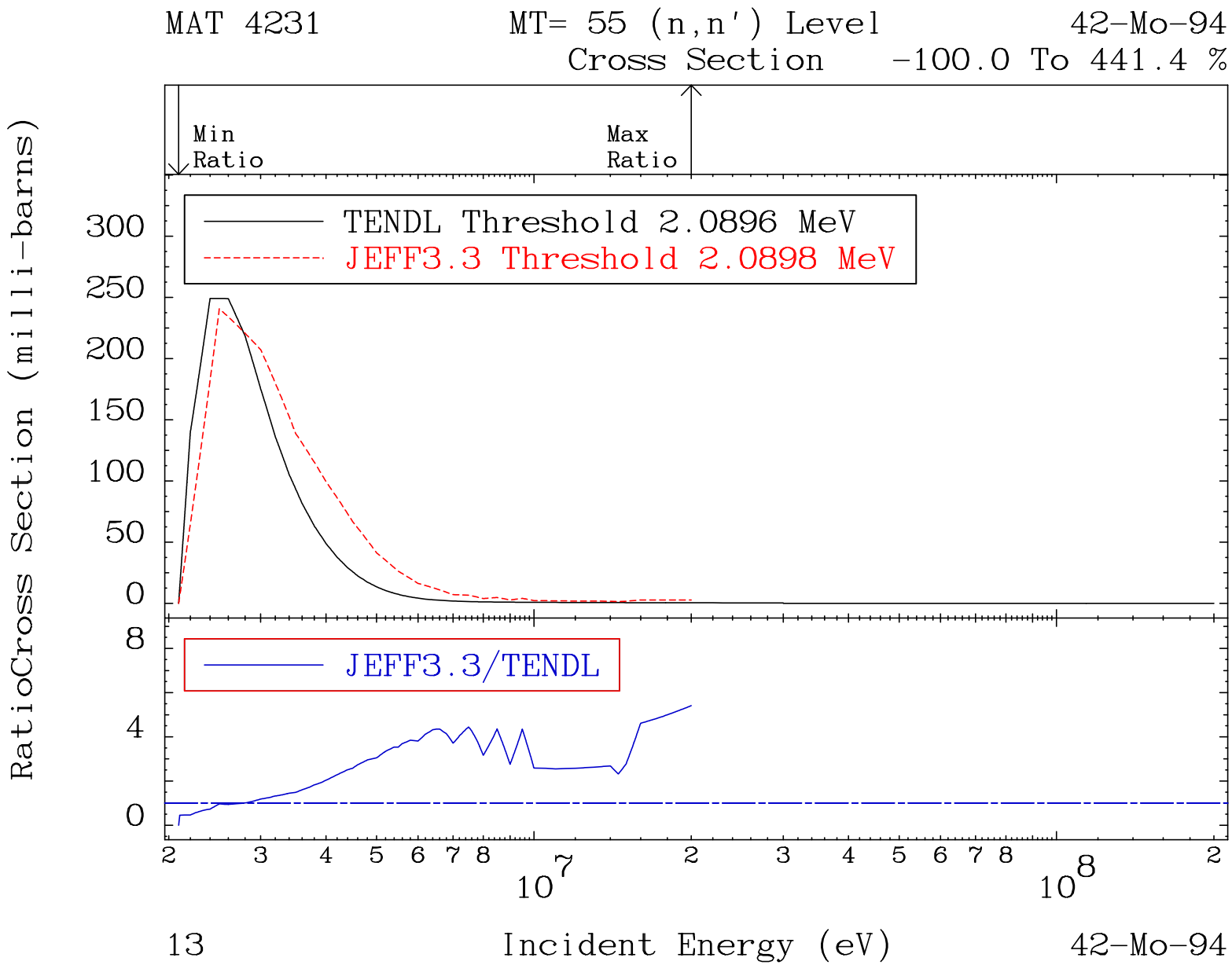

MAT 4231
(n,n') d
Cross Section
42-Mo-94
-100.0 To 38.03 %
Max
Ratio
TENDL Threshold 15.259 MeV
JEFF3.3 Threshold 17.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
42-Mo-94

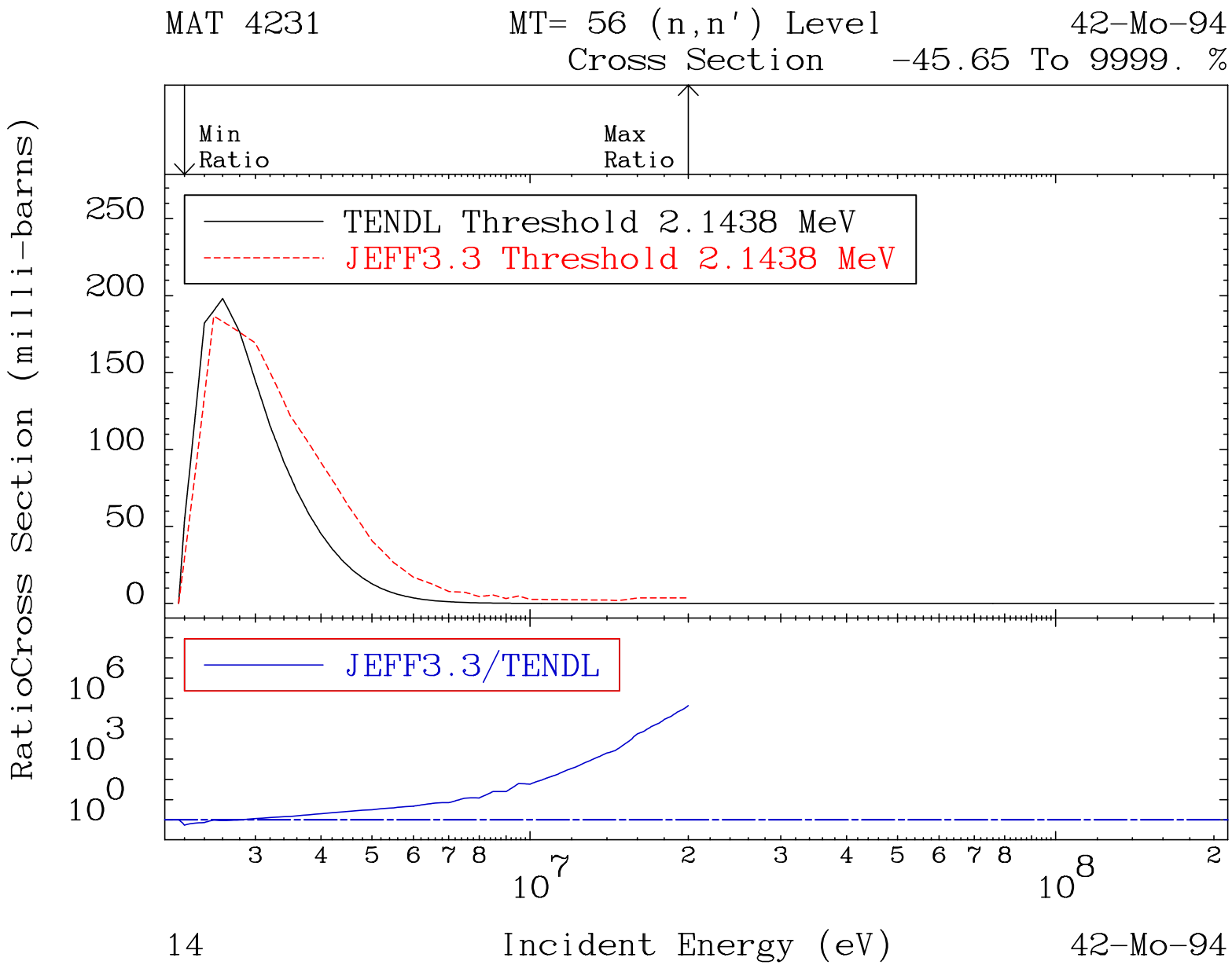

MAT 4231
MT= 51 (n,n') Level
42-Mo-94
Cross Section -24.91 To 52.12 %
Min Ratio
Max Ratio
TENDL Threshold 880.45 keV
JEFF3.3 Threshold 880.45 keV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
9
Incident Energy (eV)
42-Mo-94

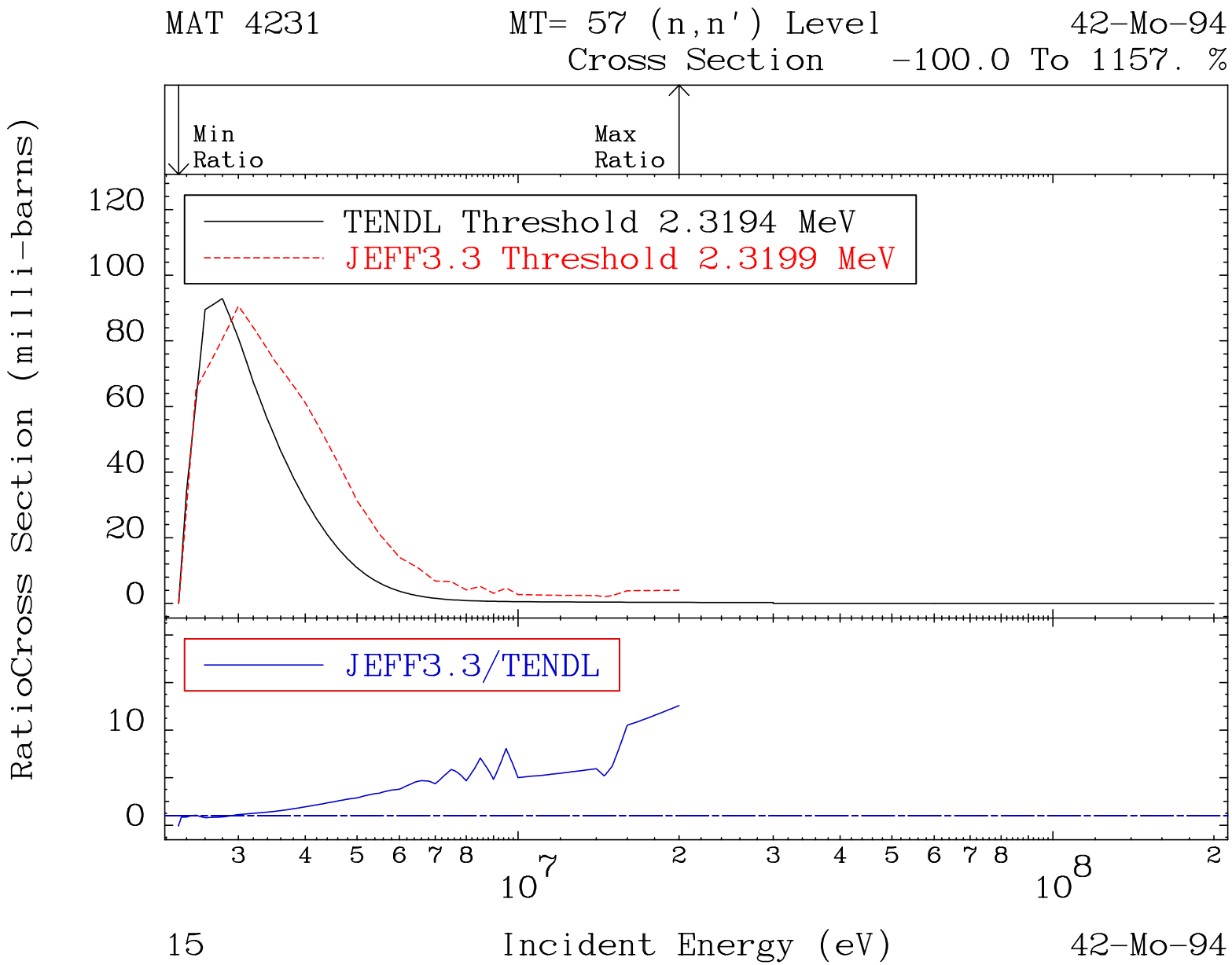

MAT 4231
MT= 52 (n,n') Level
Cross Section
42-Mo-94
-84.69 To 47.17 %
Max Ratio
Min Ratio
TENDL Threshold 1.5907 MeV
JEFF3.3 Threshold 1.5907 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
42-Mo-94

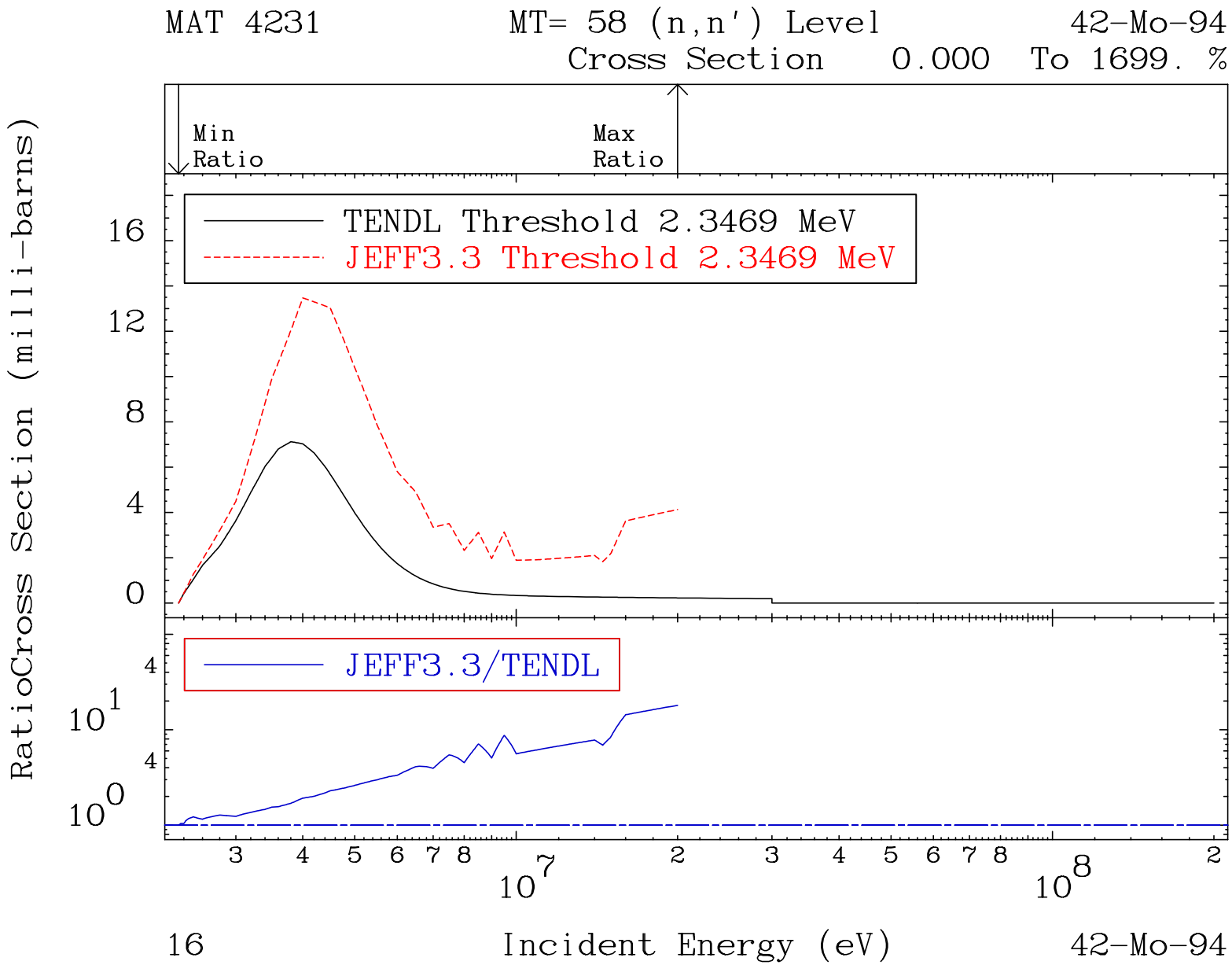

MAT 4231
MT= 53 (n,n') Level
Cross Section
42-Mo-94
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.7604 MeV
JEFF3.3 Threshold 1.7612 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
600
400
200
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
42-Mo-94

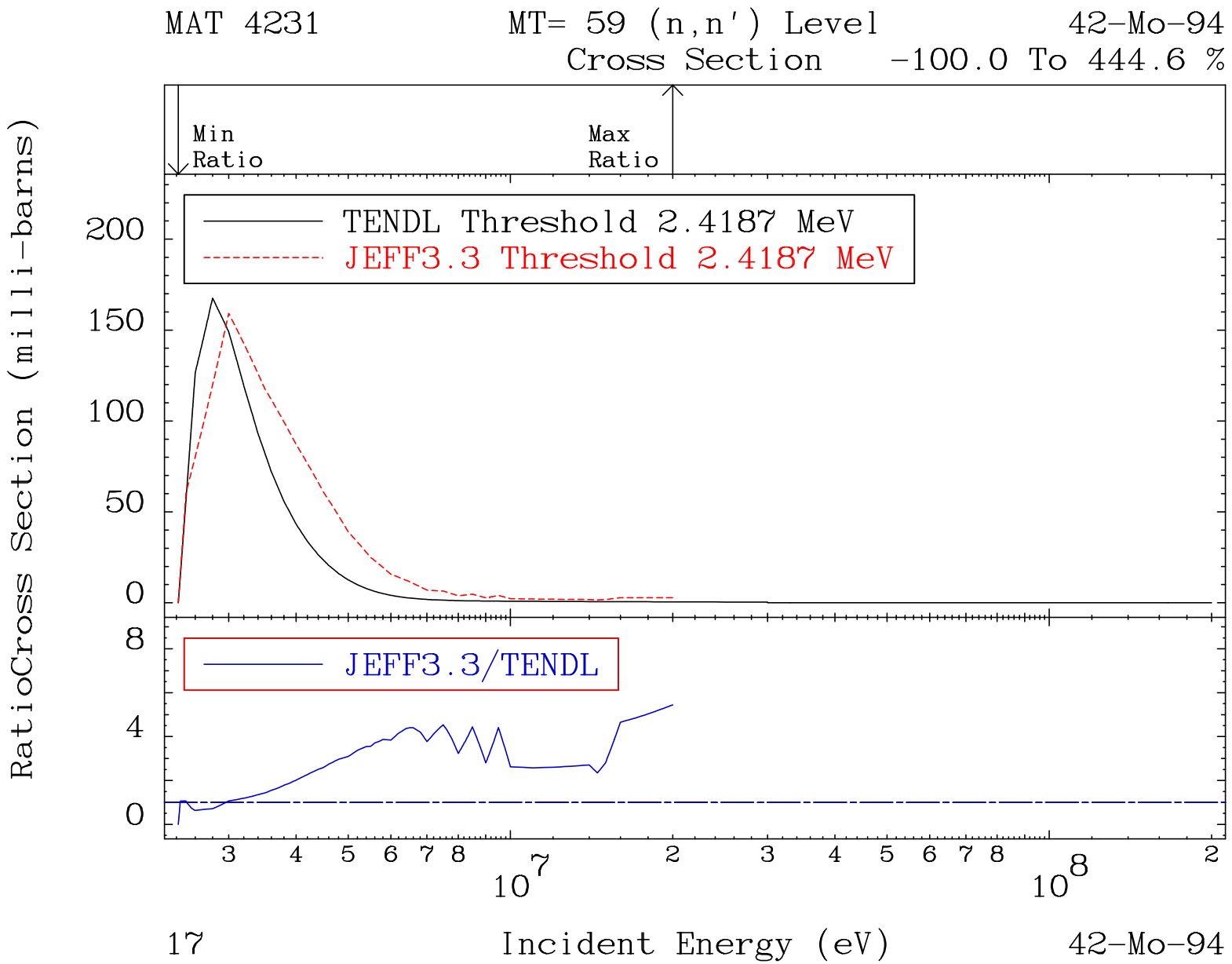

MAT 4231
MT= 54 (n,n') Level
42-Mo-94
Cross Section
-30.69 To 439.9 %
Min Ratio
Max Ratio
TENDL Threshold 1.8843 MeV
JEFF3.3 Threshold 1.8843 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
6
3
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
42-Mo-94

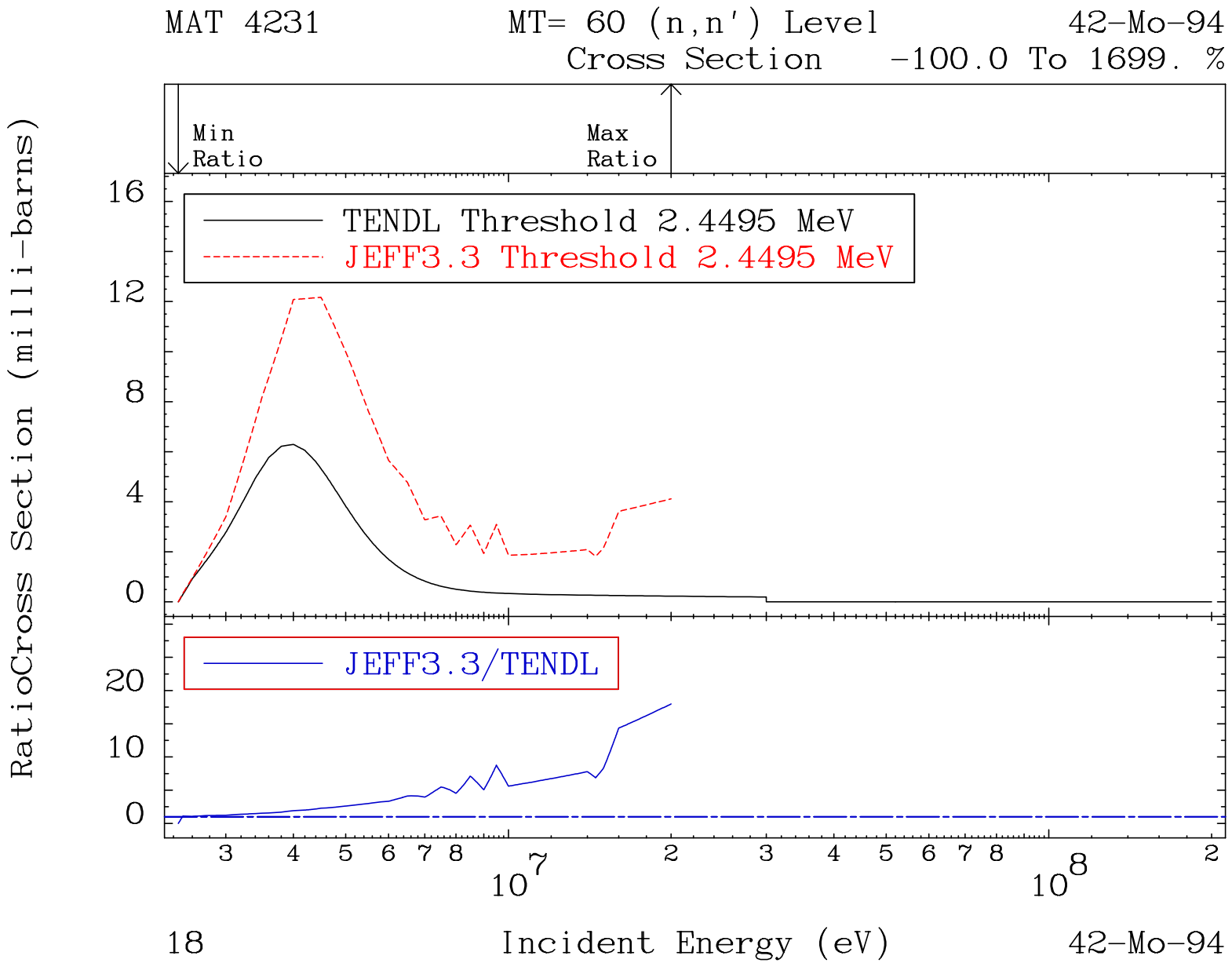

MAT 4231
MT= 55 (n,n') Level
42-Mo-94
Cross Section
-100.0 To 441.4 %
Min Ratio
Max Ratio
TENDL Threshold 2.0896 MeV
JEFF3.3 Threshold 2.0898 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
8
4
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
42-Mo-94

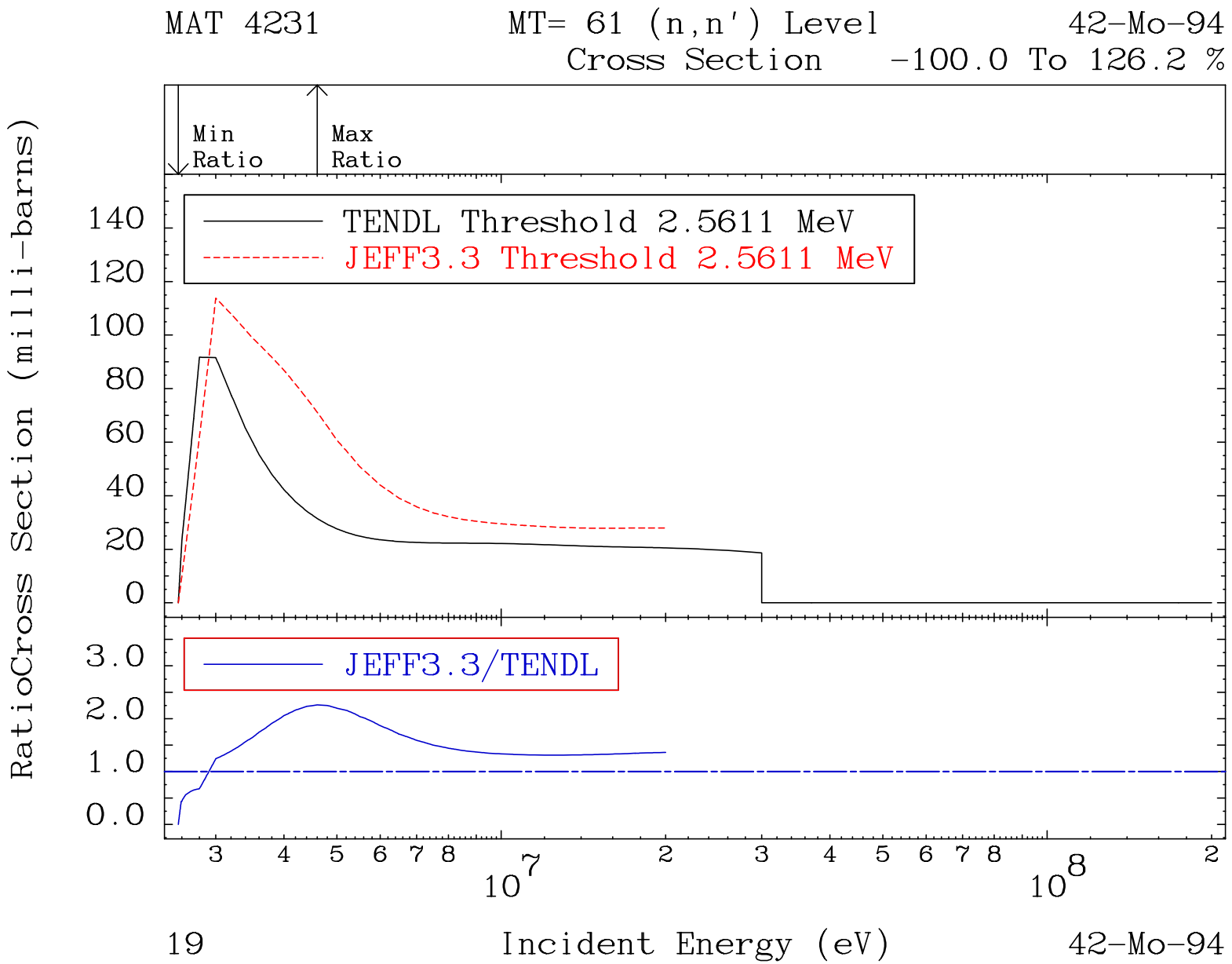

MAT 4231
MT= 56 (n,n') Level
42-Mo-94
Cross Section -45.65 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.1438 MeV
JEFF3.3 Threshold 2.1438 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
42-Mo-94

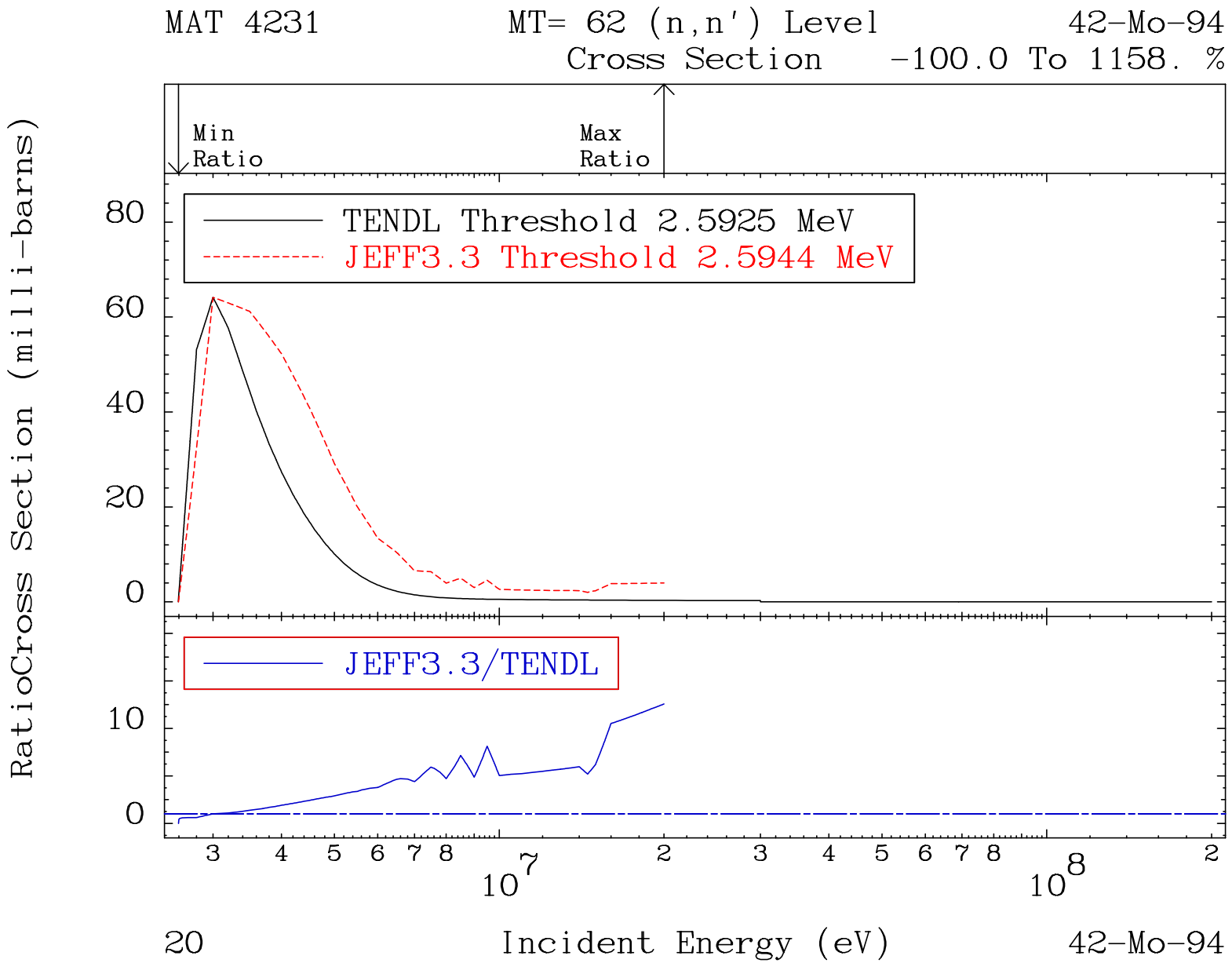

MAT 4231
MT= 57 (n,n') Level
42-Mo-94
Cross Section -100.0 To 1157. %
Min Ratio
Max Ratio
TENDL Threshold 2.3194 MeV
JEFF3.3 Threshold 2.3199 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
42-Mo-94

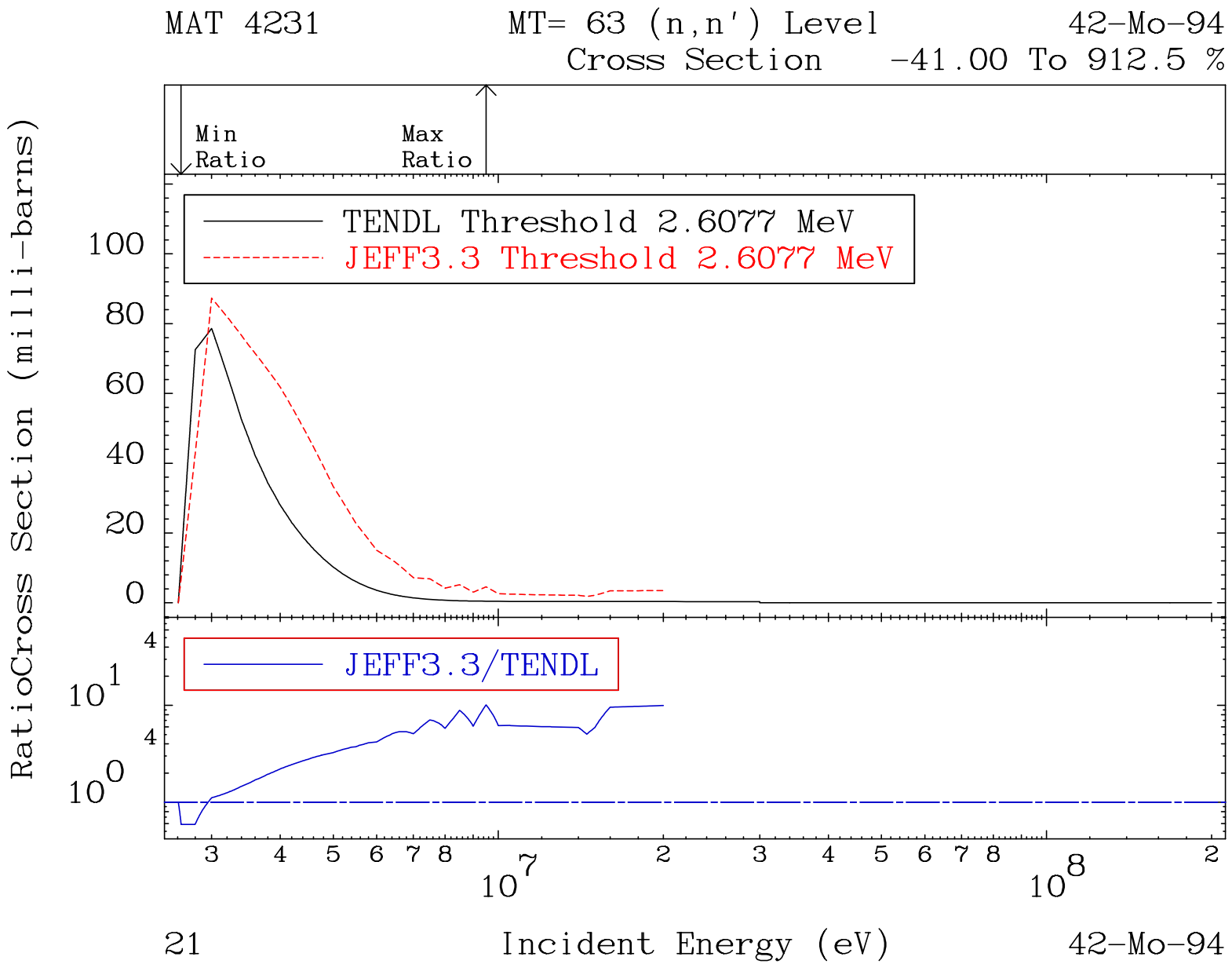

MAT 4231
MT= 58 (n,n') Level
42-Mo-94
Cross Section 0.000 To 1699. %
Min Ratio
Max Ratio
TENDL Threshold 2.3469 MeV
JEFF3.3 Threshold 2.3469 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
16
42-Mo-94

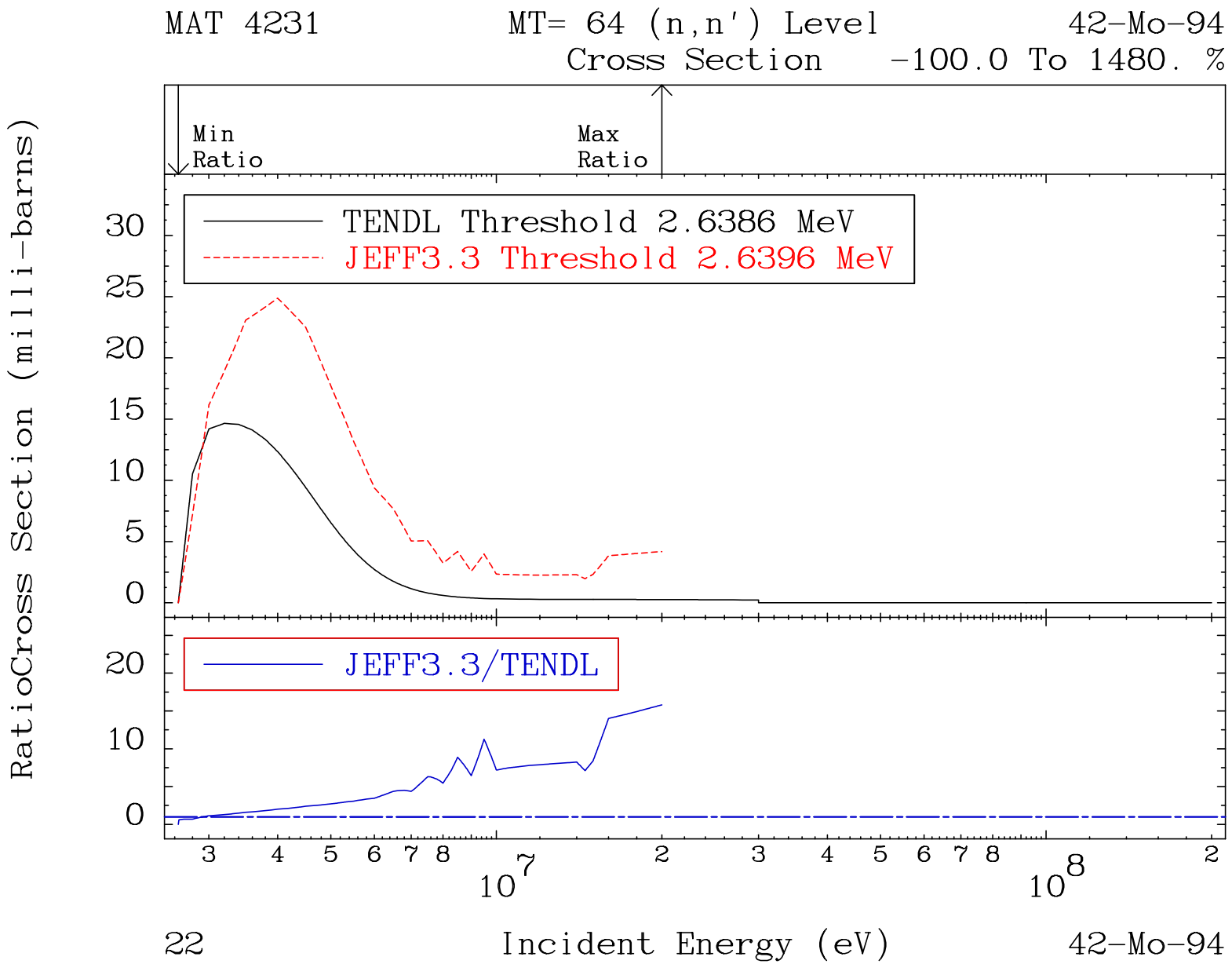

MAT 4231
MT= 59 (n,n') Level
Cross Section
42-Mo-94
-100.0 To 444.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.4187 MeV
JEFF3.3 Threshold 2.4187 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
42-Mo-94

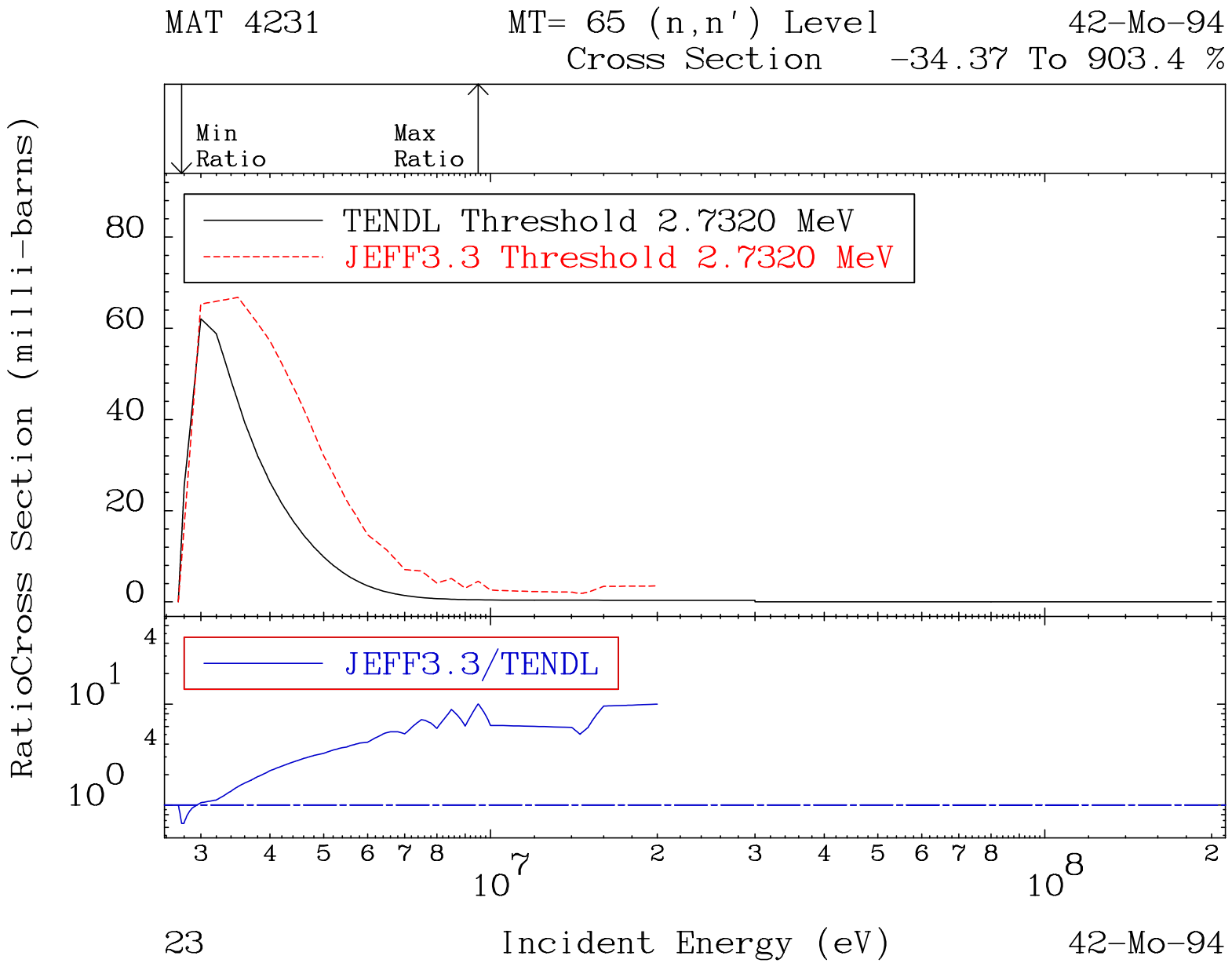

MAT 4231
MT= 60 (n,n') Level
42-Mo-94
Cross Section -100.0 To 1699. %
Min Ratio
Max Ratio
TENDL Threshold 2.4495 MeV
JEFF3.3 Threshold 2.4495 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
42-Mo-94

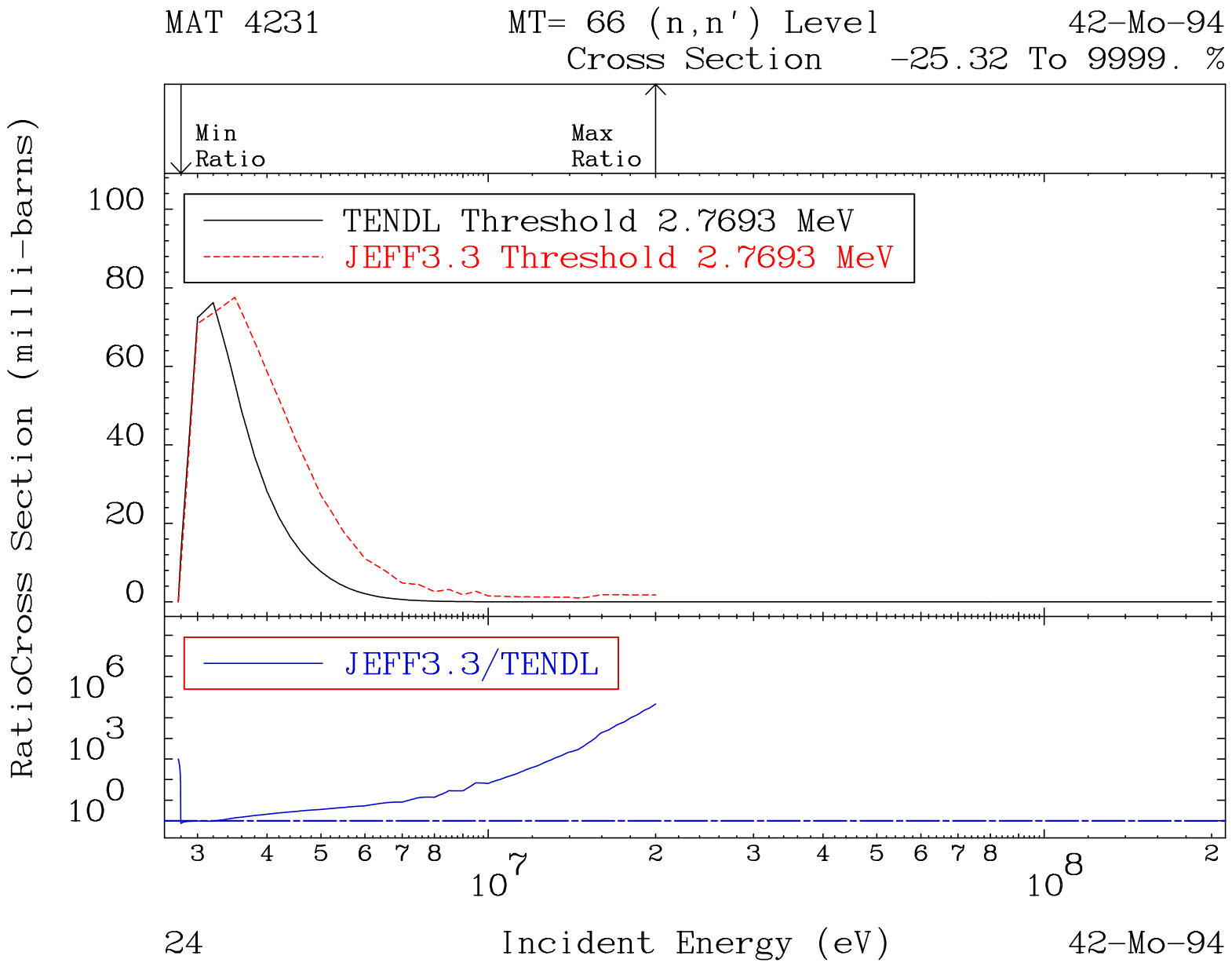

MAT 4231
MT= 61 (n,n') Level
42-Mo-94
Cross Section -100.0 To 126.2 %
Min Ratio
Max Ratio
TENDL Threshold 2.5611 MeV
JEFF3.3 Threshold 2.5611 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
42-Mo-94

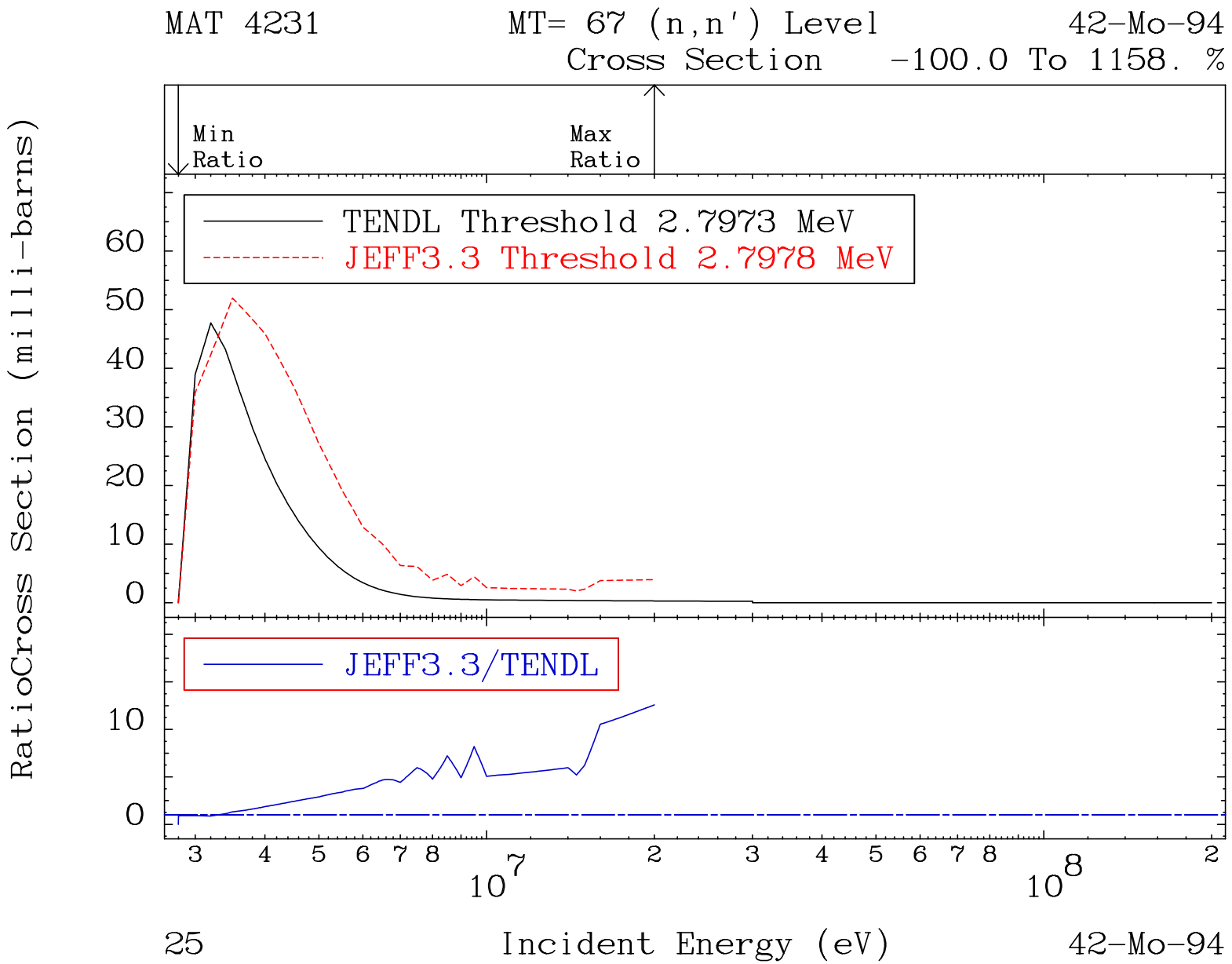

MAT 4231
MT= 62 (n,n') Level
42-Mo-94
Cross Section -100.0 To 1158. %
Min Ratio
Max Ratio
TENDL Threshold 2.5925 MeV
JEFF3.3 Threshold 2.5944 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
42-Mo-94

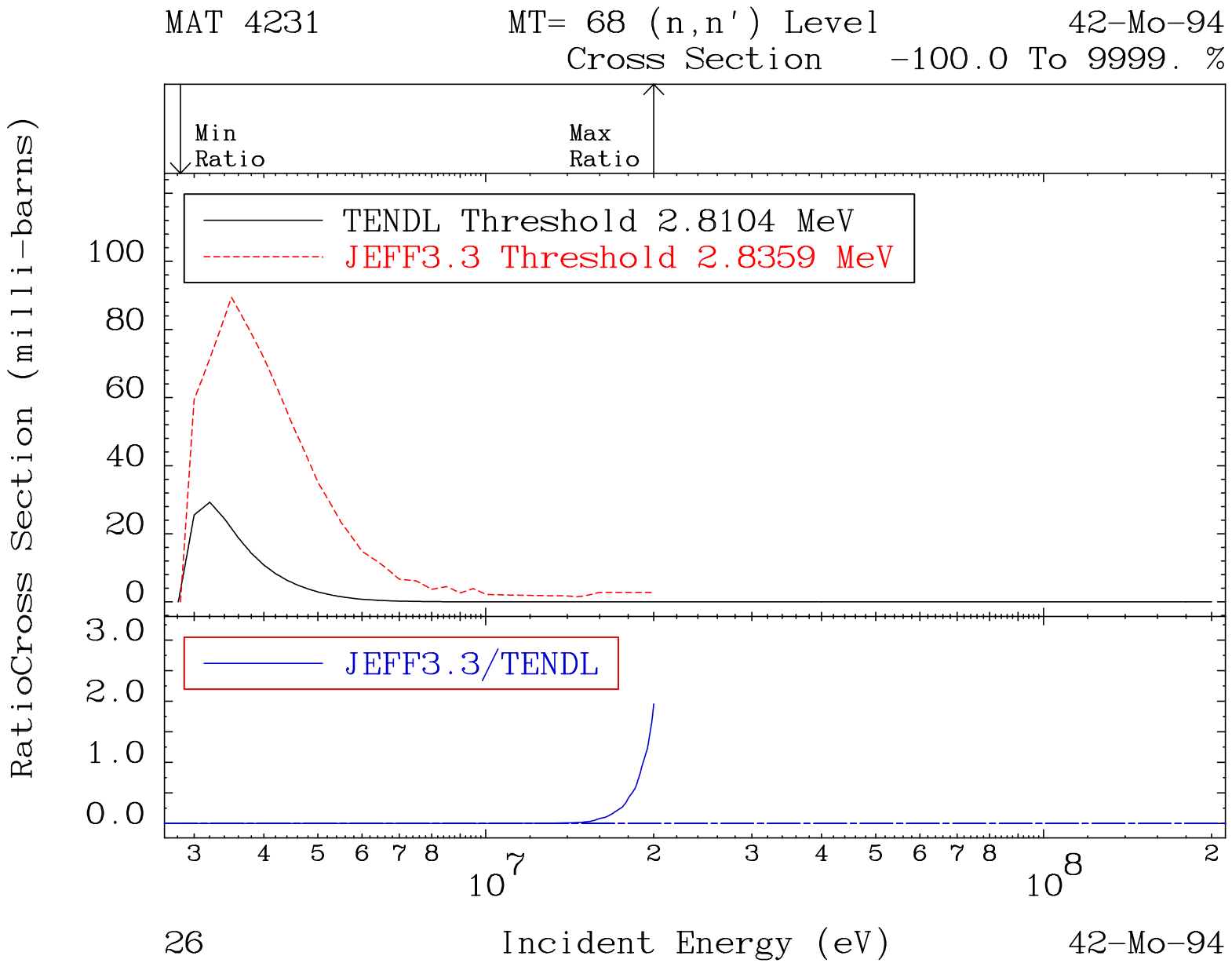

MAT 4231
MT= 63 (n,n') Level
Cross Section
42-Mo-94
-41.00 To 912.5 %
Min Ratio
Max Ratio
TENDL Threshold 2.6077 MeV
JEFF3.3 Threshold 2.6077 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
$10^1$
$10^0$
4
4
3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
21
Incident Energy (eV)
42-Mo-94

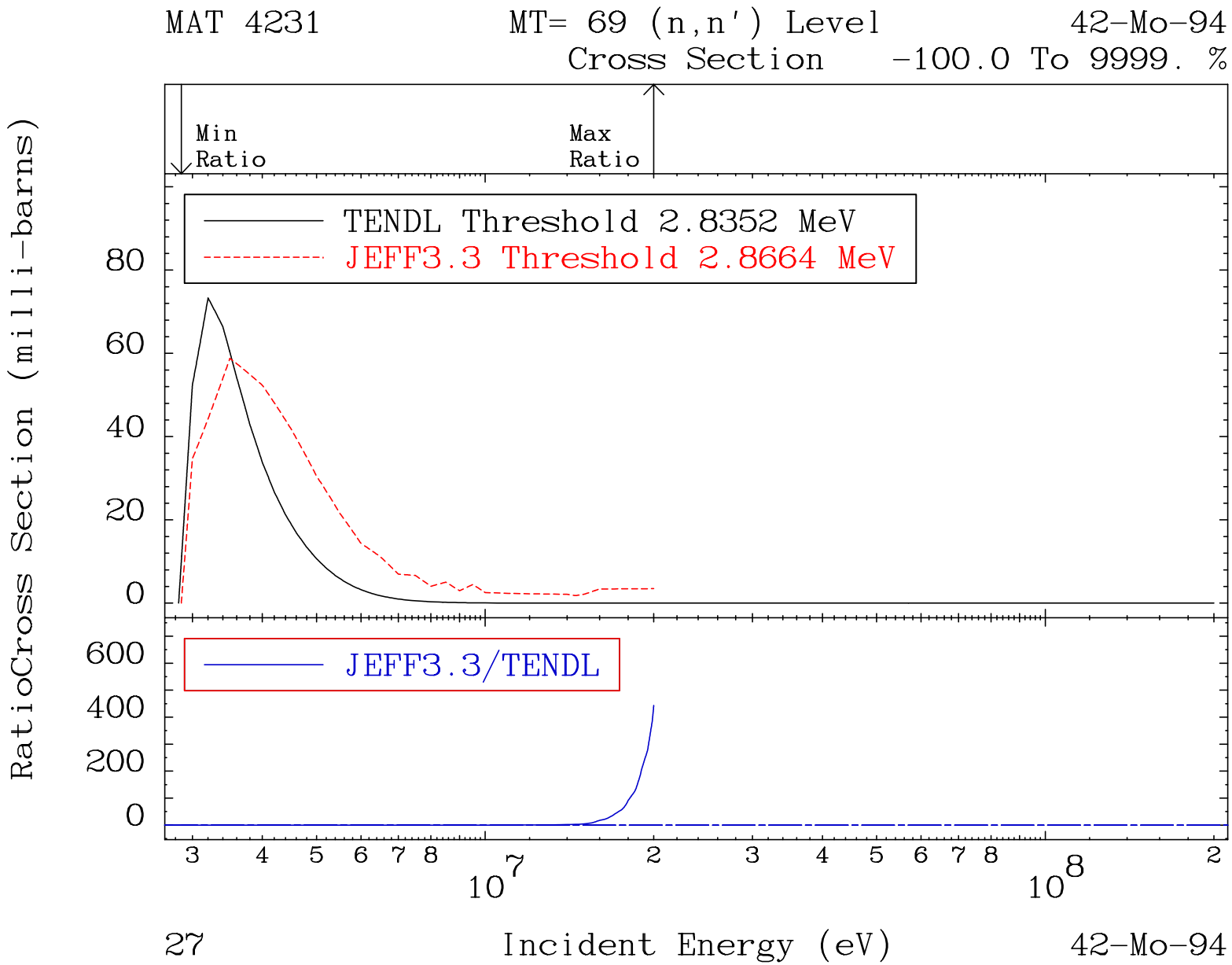

MAT 4231
MT= 64 (n,n') Level
42-Mo-94
Cross Section -100.0 To 1480. %
Min Ratio
Max Ratio
TENDL Threshold 2.6386 MeV
JEFF3.3 Threshold 2.6396 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
22
42-Mo-94

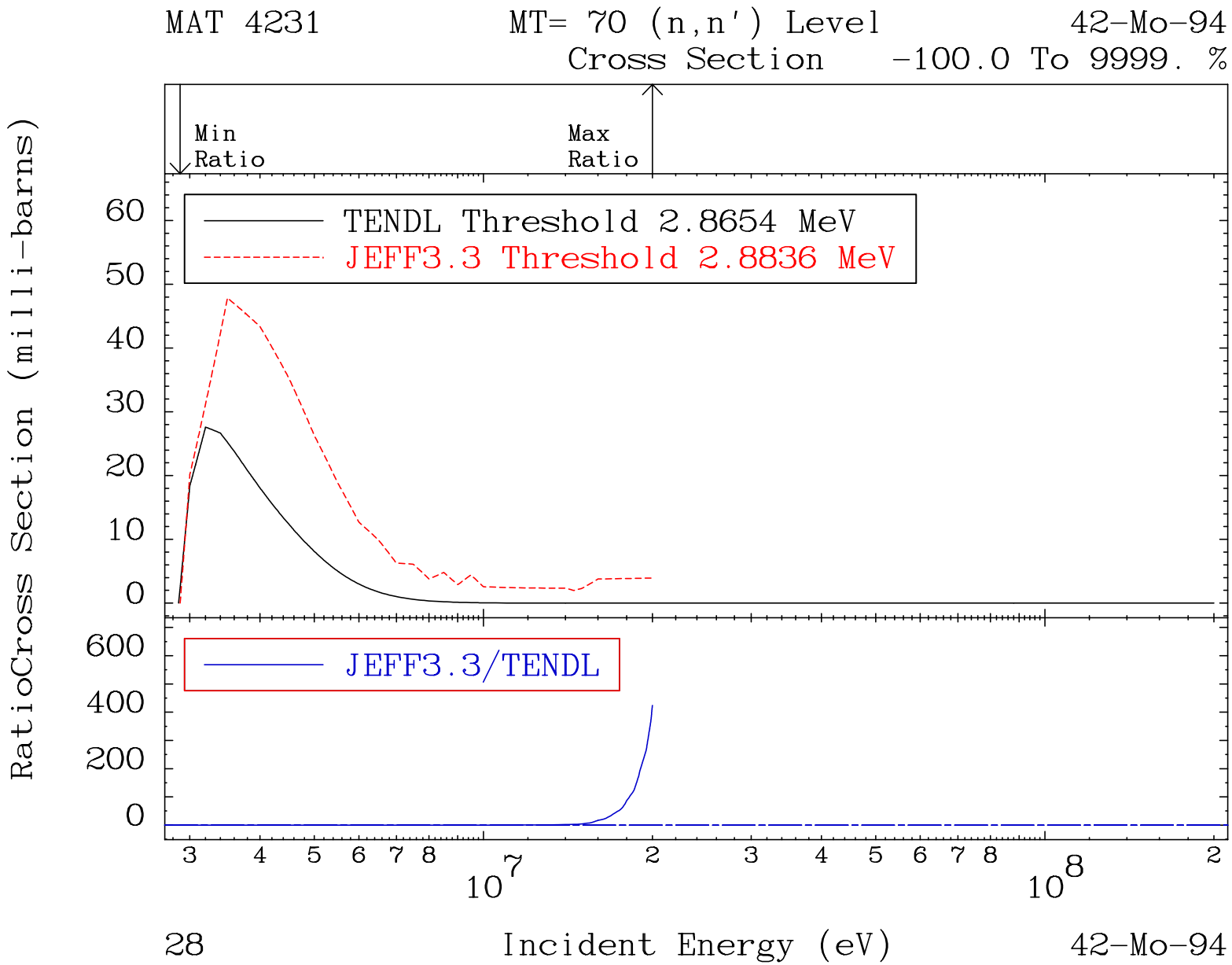

MAT 4231
MT= 65 (n,n') Level
42-Mo-94
Cross Section
-34.37 To 903.4 %
Min Ratio
Max Ratio
TENDL Threshold 2.7320 MeV
JEFF3.3 Threshold 2.7320 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
42-Mo-94

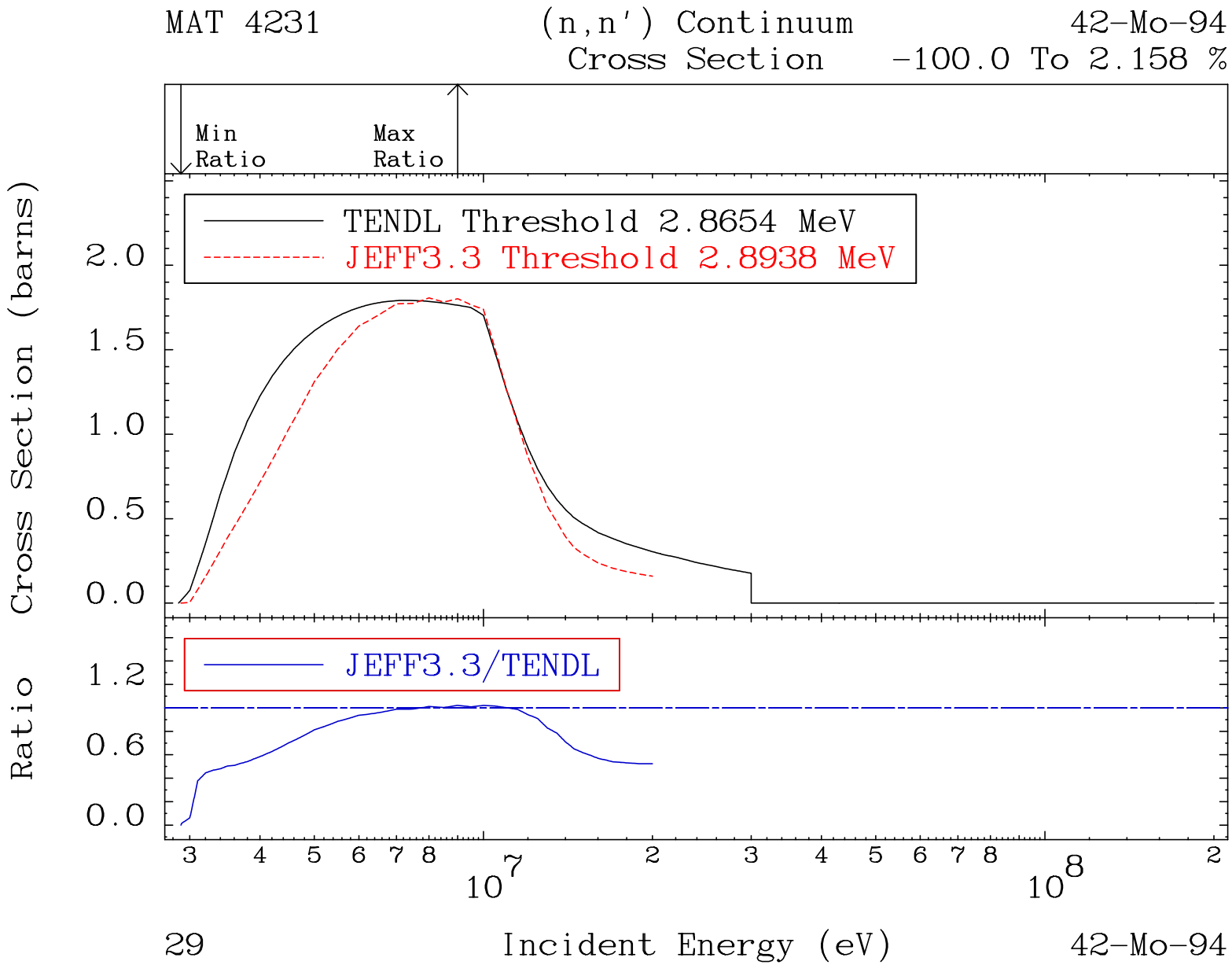

MAT 4231
MT= 66 (n,n') Level
42-Mo-94
Cross Section -25.32 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.7693 MeV
JEFF3.3 Threshold 2.7693 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^6
10^3
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
42-Mo-94

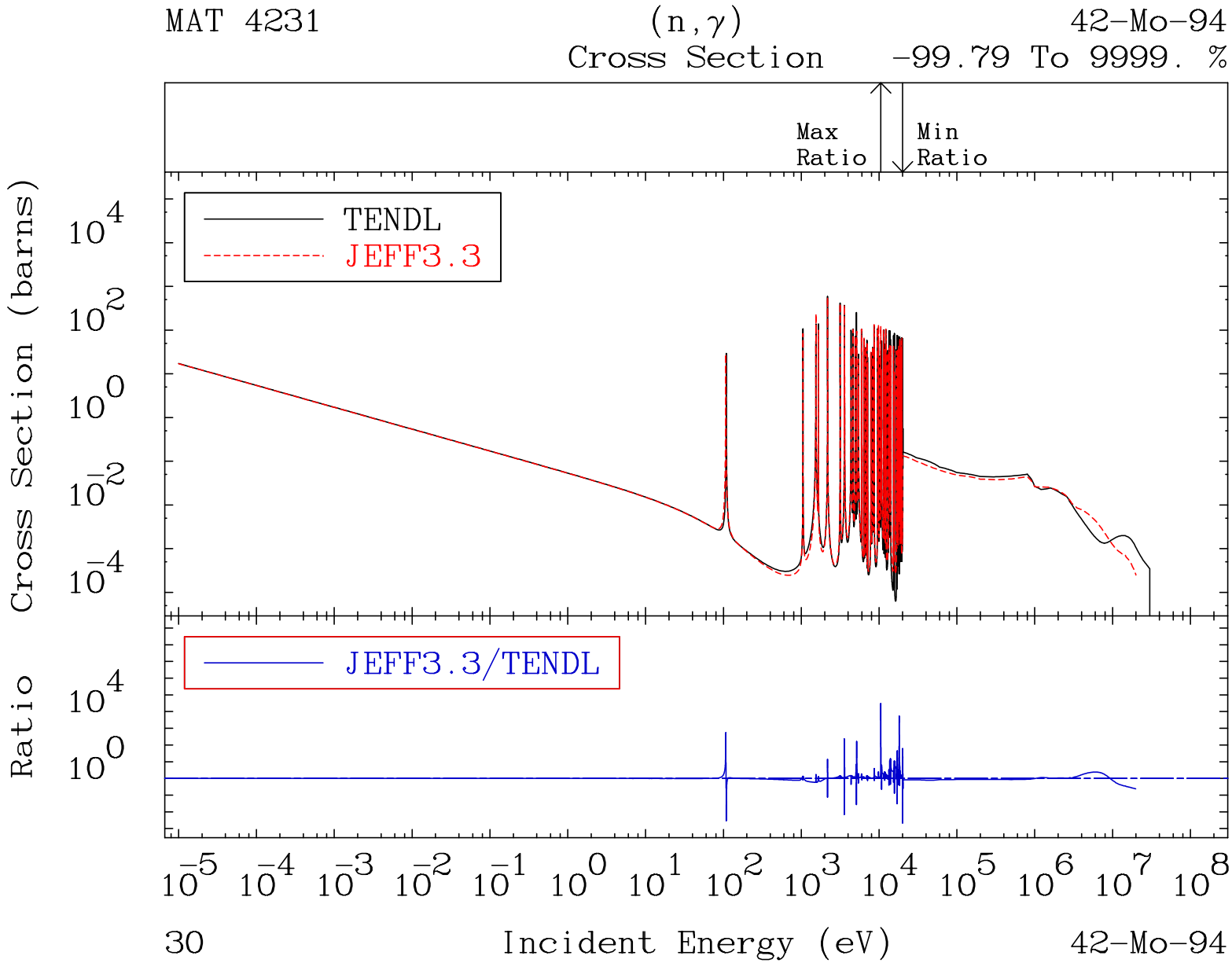

MAT 4231
MT= 67 (n,n') Level
42-Mo-94
Cross Section -100.0 To 1158. %
Min Ratio
Max Ratio
TENDL Threshold 2.7973 MeV
JEFF3.3 Threshold 2.7978 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
42-Mo-94

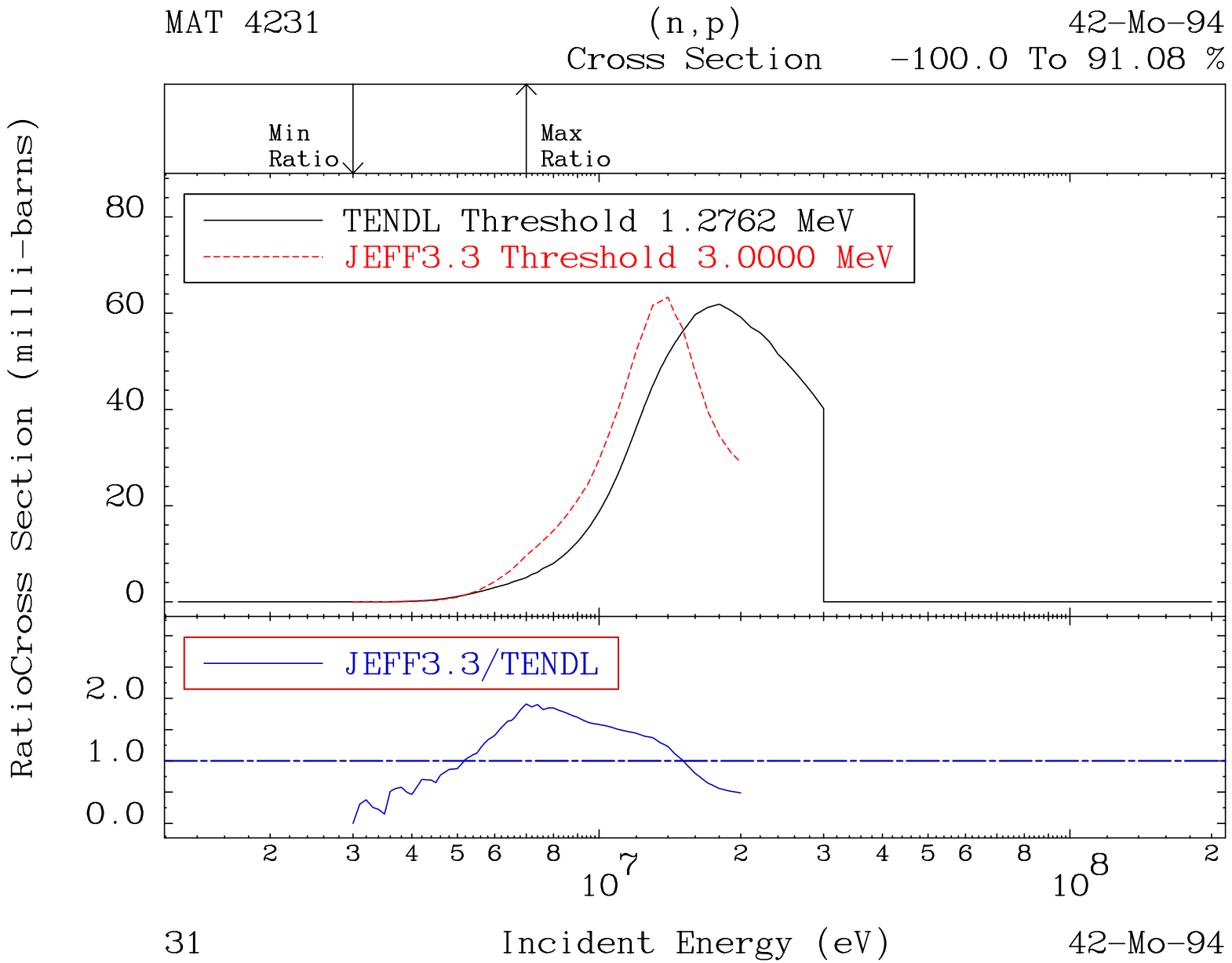

MAT 4231
MT= 68 (n,n') Level
42-Mo-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8104 MeV
JEFF3.3 Threshold 2.8359 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
42-Mo-94

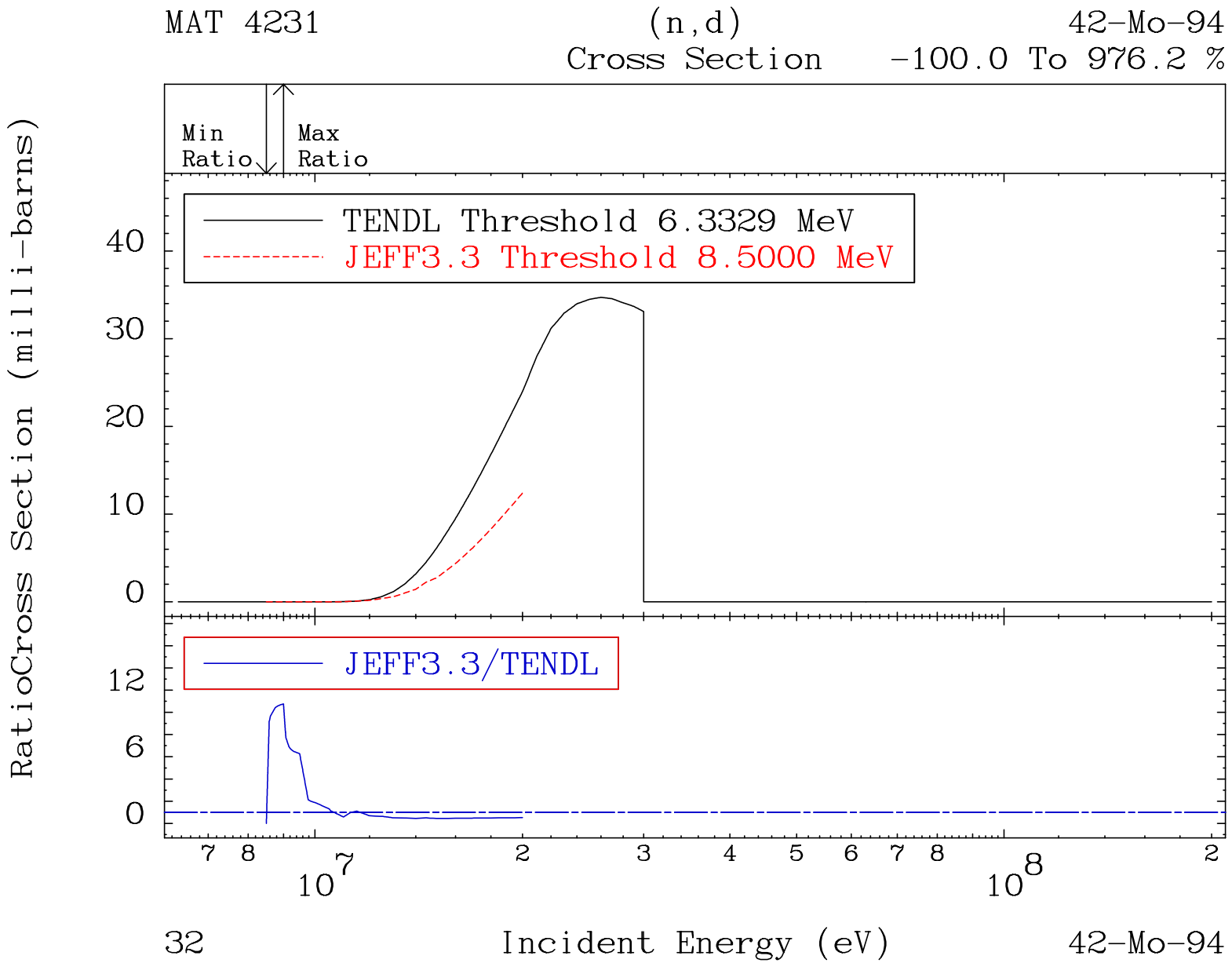

MAT 4231
MT= 69 (n,n') Level
42-Mo-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8352 MeV
JEFF3.3 Threshold 2.8664 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
600
400
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
42-Mo-94

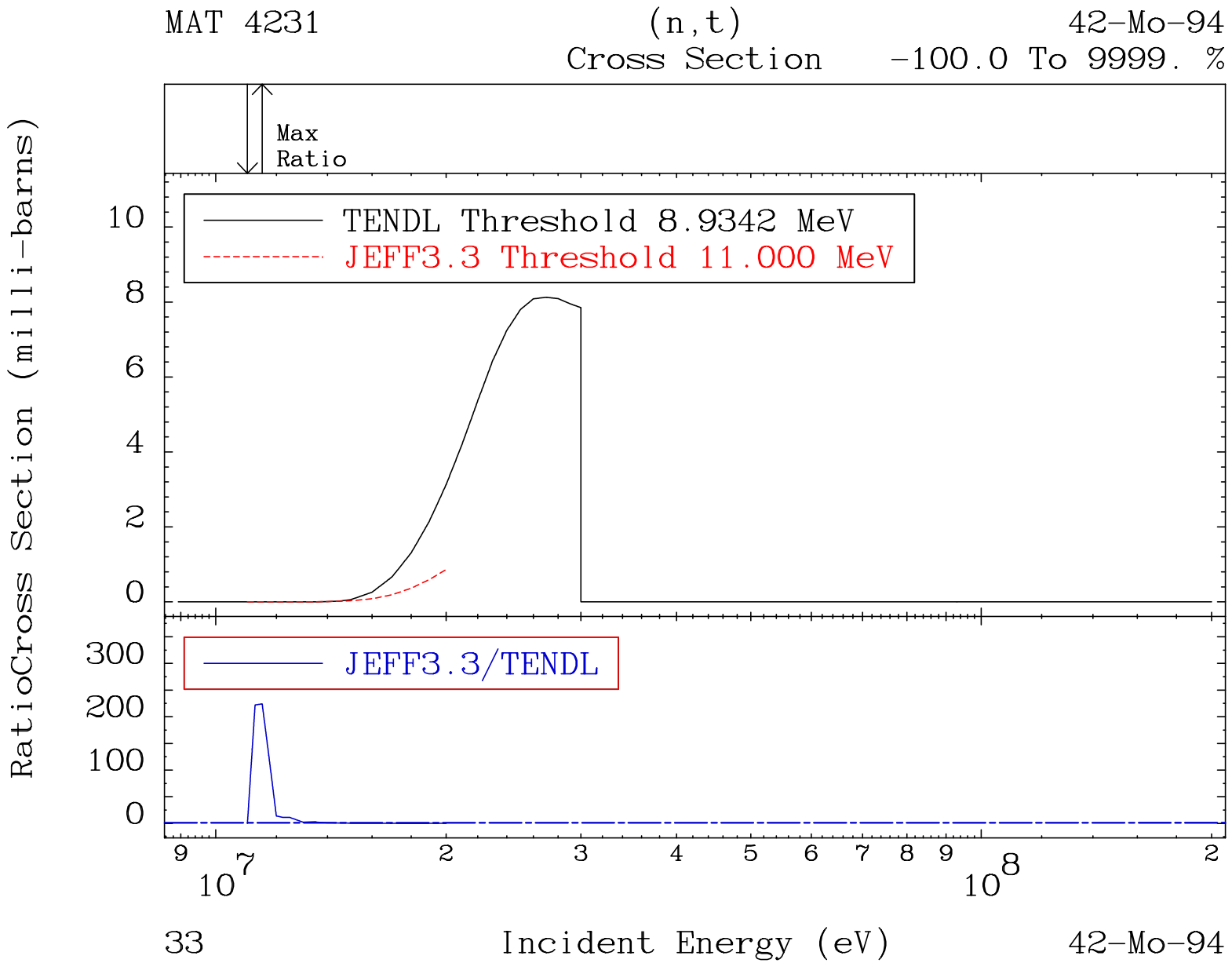

MAT 4231
MT= 70 (n,n') Level
42-Mo-94
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8654 MeV
JEFF3.3 Threshold 2.8836 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
600
400
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
42-Mo-94

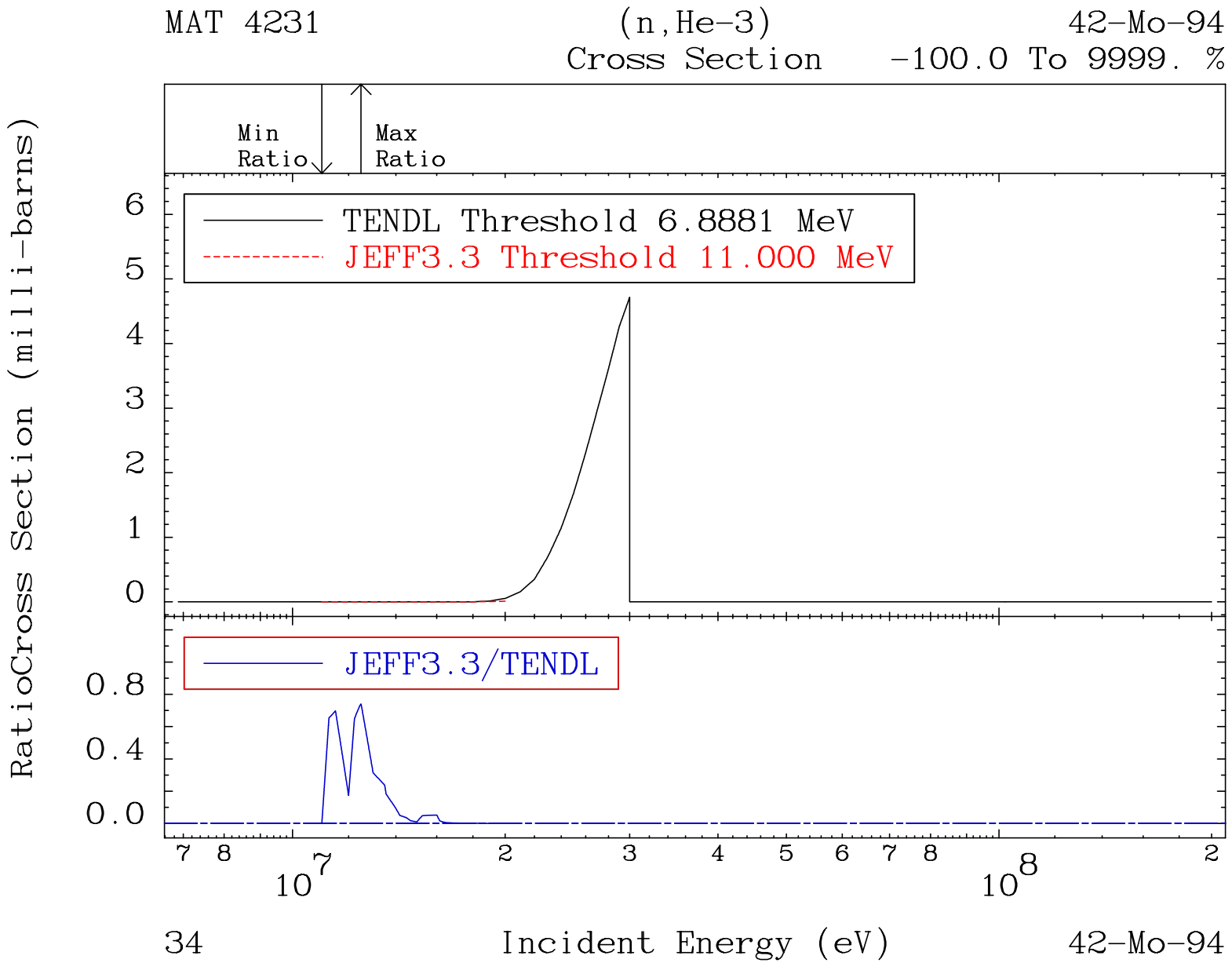

MAT 4231
(n,n') Continuum
Cross Section
42-Mo-94
-100.0 To 2.158 %
Min Ratio
Max Ratio
TENDL Threshold 2.8654 MeV
JEFF3.3 Threshold 2.8938 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
42-Mo-94

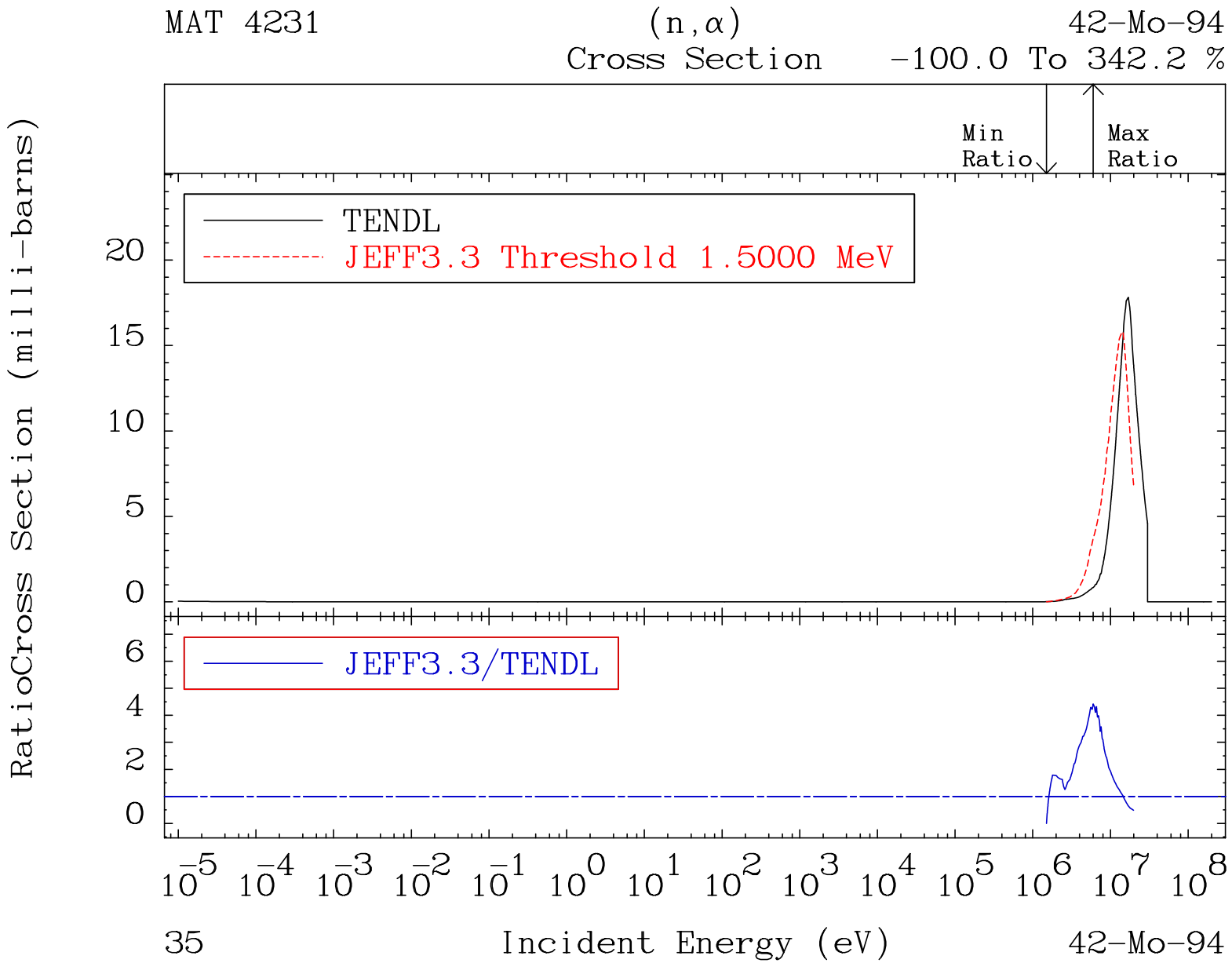

MAT 4231
(n,γ)
Cross Section
42-Mo-94
-99.79 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
42-Mo-94

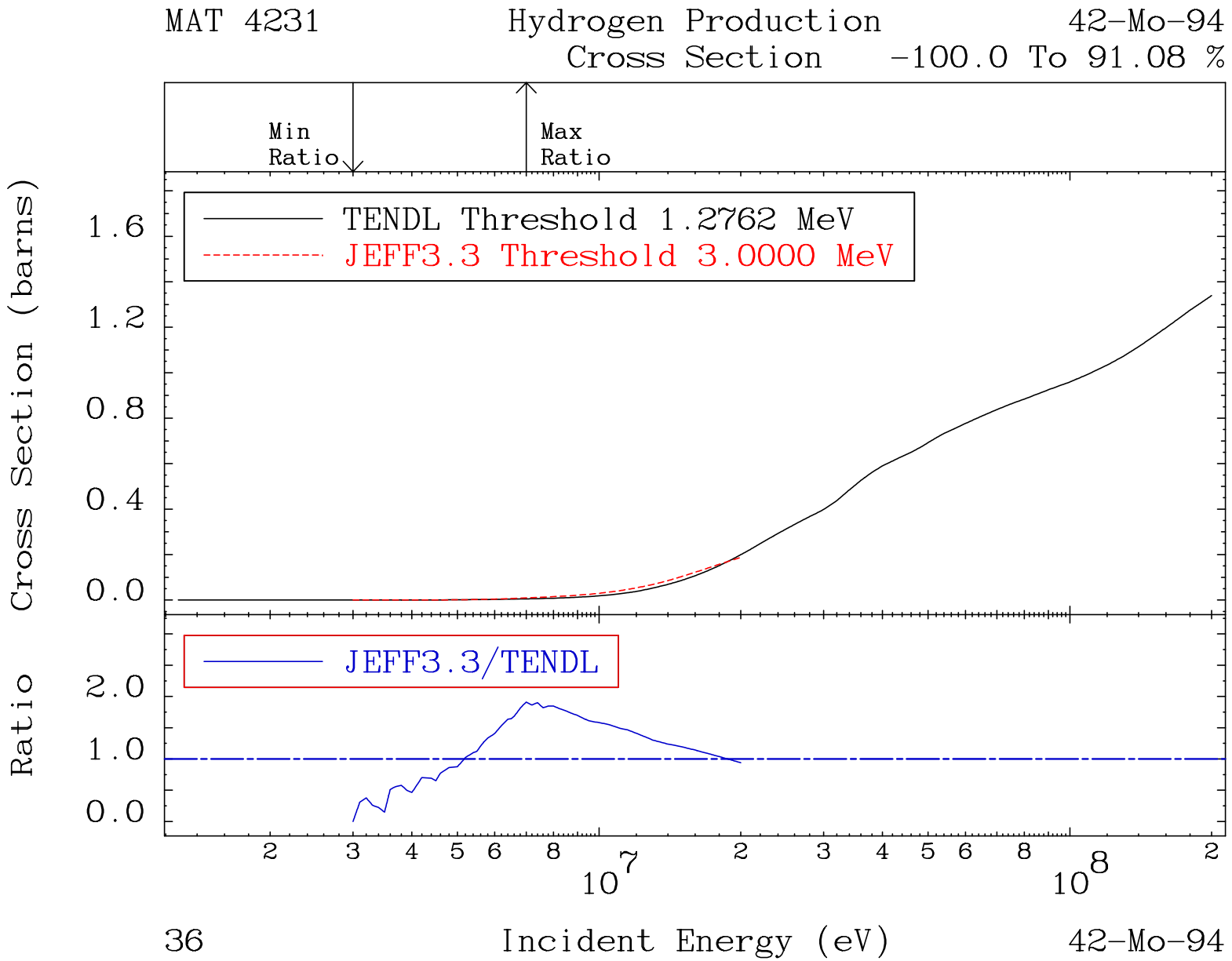

MAT 4231
(n,p)
Cross Section
42-Mo-94
-100.0 To 91.08 %
Min Ratio
Max Ratio
TENDL Threshold 1.2762 MeV
JEFF3.3 Threshold 3.0000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
31
Incident Energy (eV)
42-Mo-94

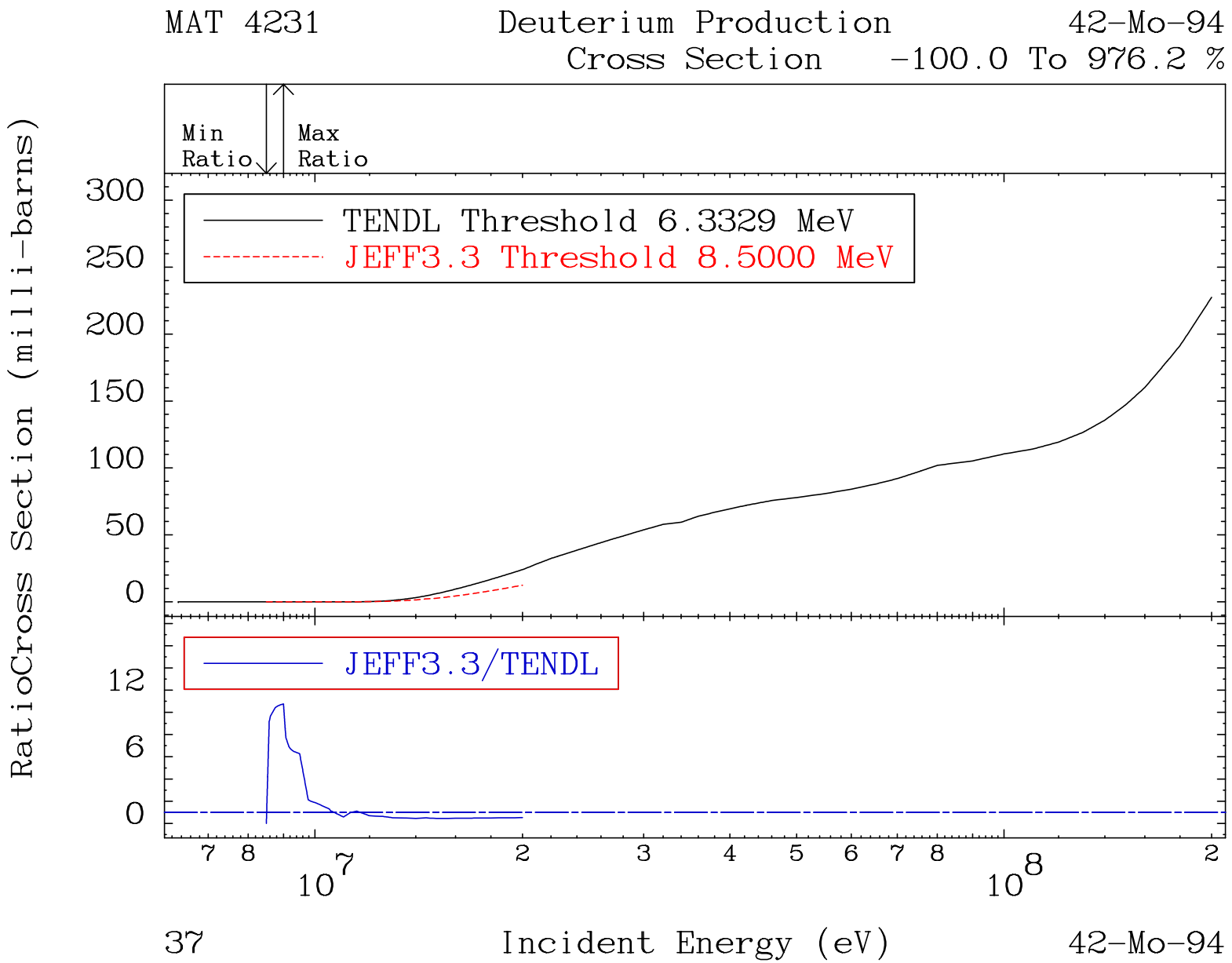

MAT 4231
(n,d)
Cross Section
42-Mo-94
-100.0 To 976.2 %
Min Ratio
Max Ratio
TENDL Threshold 6.3329 MeV
JEFF3.3 Threshold 8.5000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
12
6
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
42-Mo-94

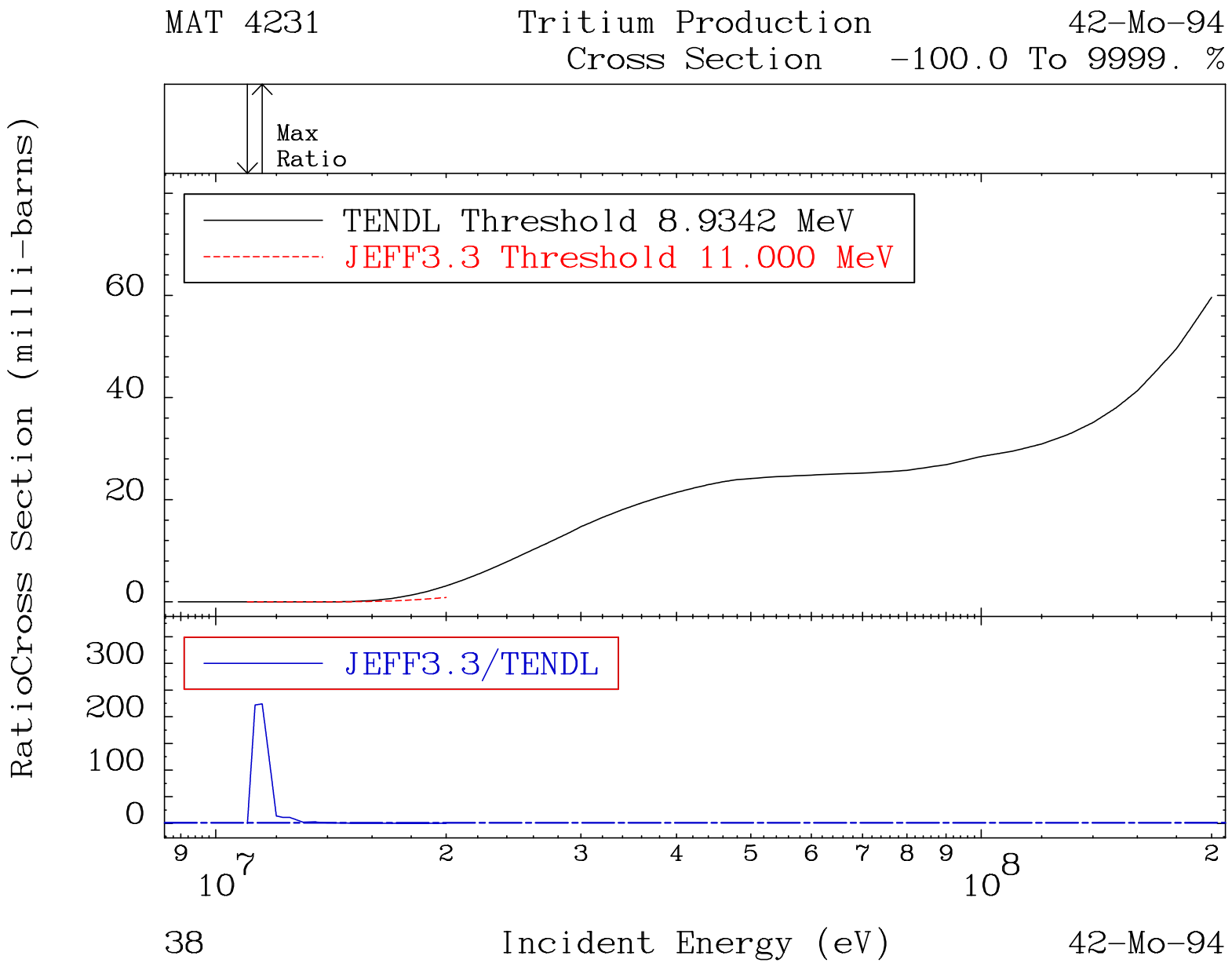

MAT 4231
(n,t)
Cross Section
42-Mo-94
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.9342 MeV
JEFF3.3 Threshold 11.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
300
200
100
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
42-Mo-94

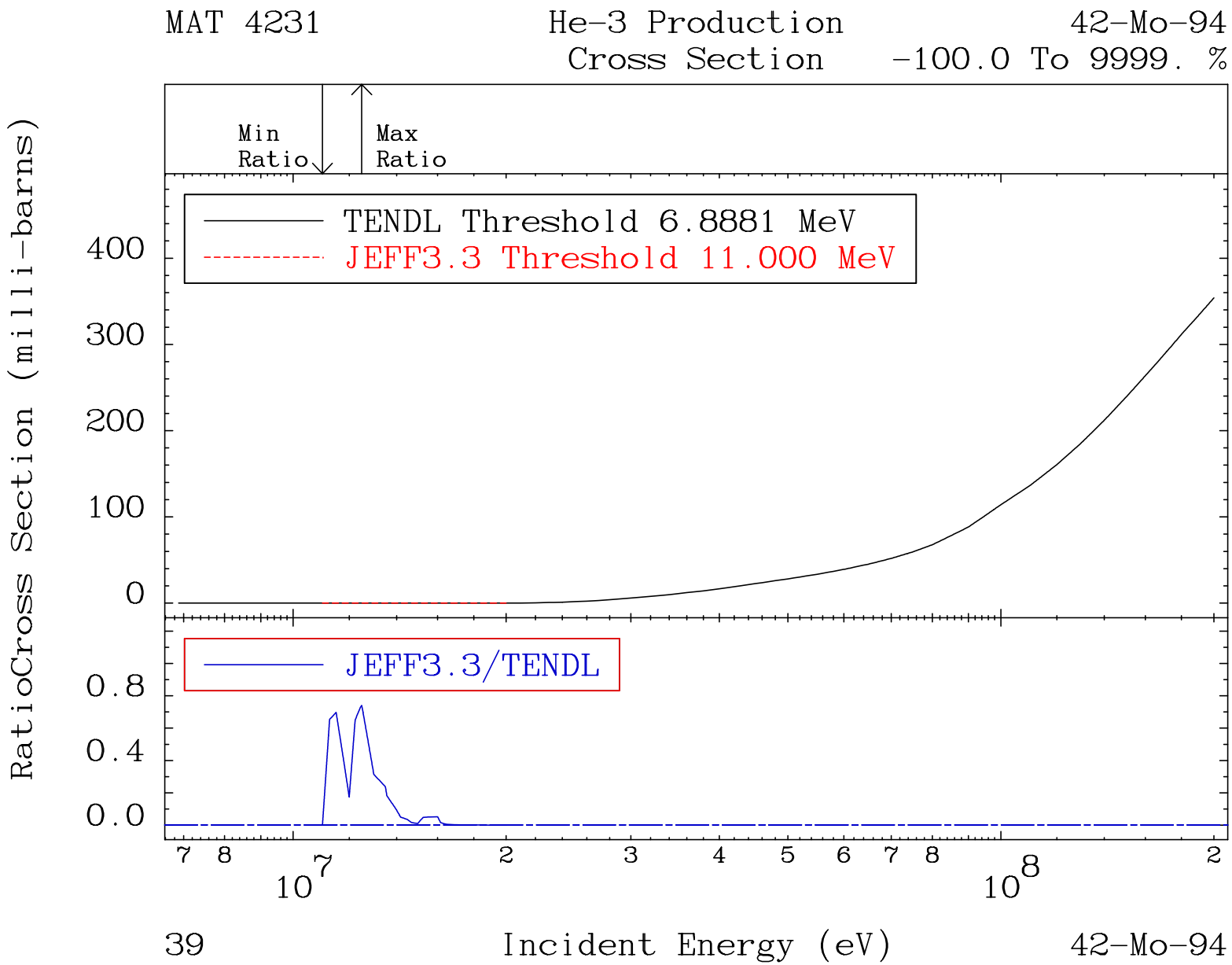

MAT 4231
(n,He-3)
Cross Section
42-Mo-94
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.8881 MeV
JEFF3.3 Threshold 11.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
34
42-Mo-94

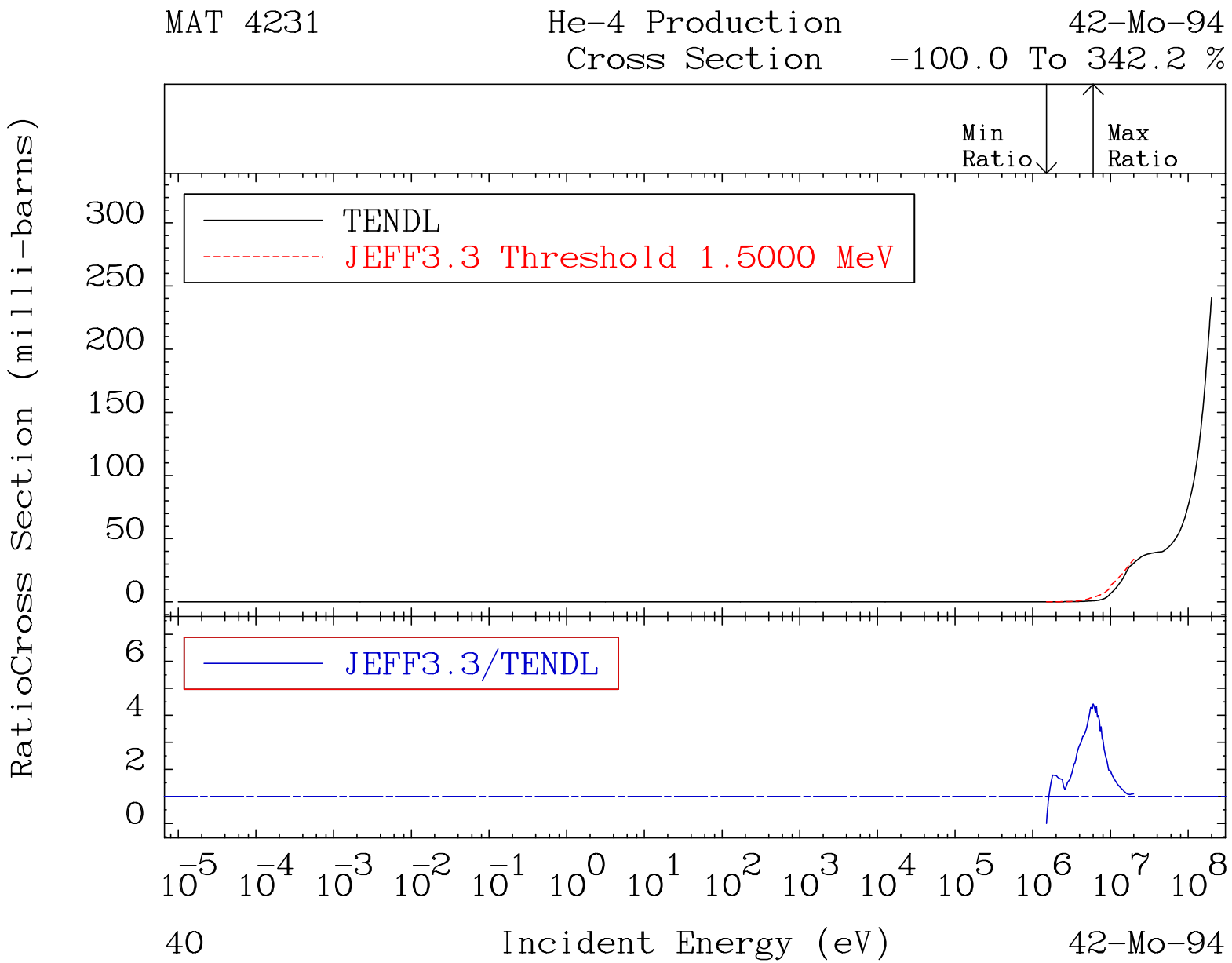

MAT 4231
(n,α)
Cross Section
42-Mo-94
-100.0 To 342.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3 Threshold 1.5000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
6
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
42-Mo-94

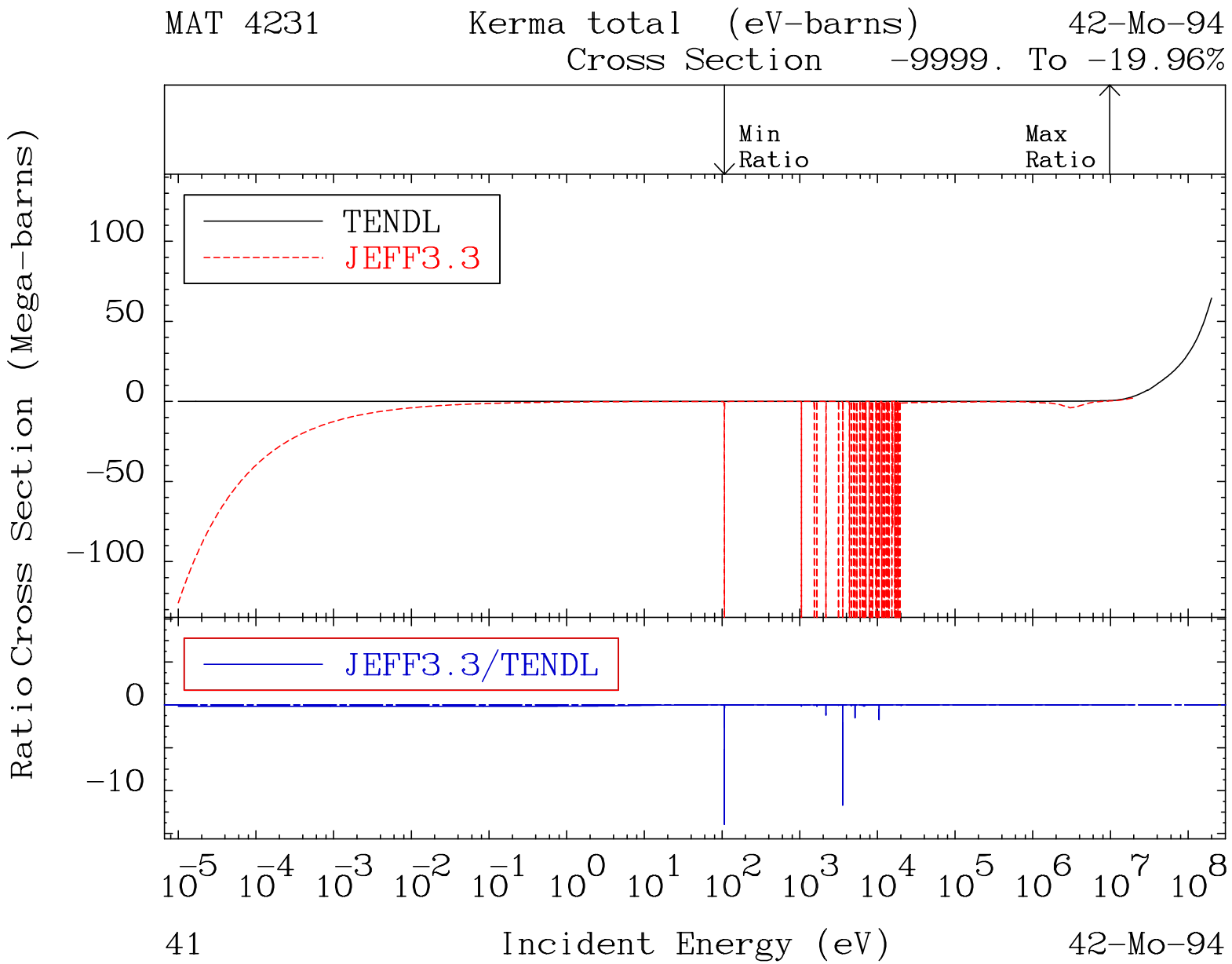

MAT 4231
Hydrogen Production
42-Mo-94
Cross Section -100.0 To 91.08 %
Min Ratio
Max Ratio
TENDL Threshold 1.2762 MeV
JEFF3.3 Threshold 3.0000 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
JEFF3.3/TENDL
Ratio
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
36
Incident Energy (eV)
42-Mo-94

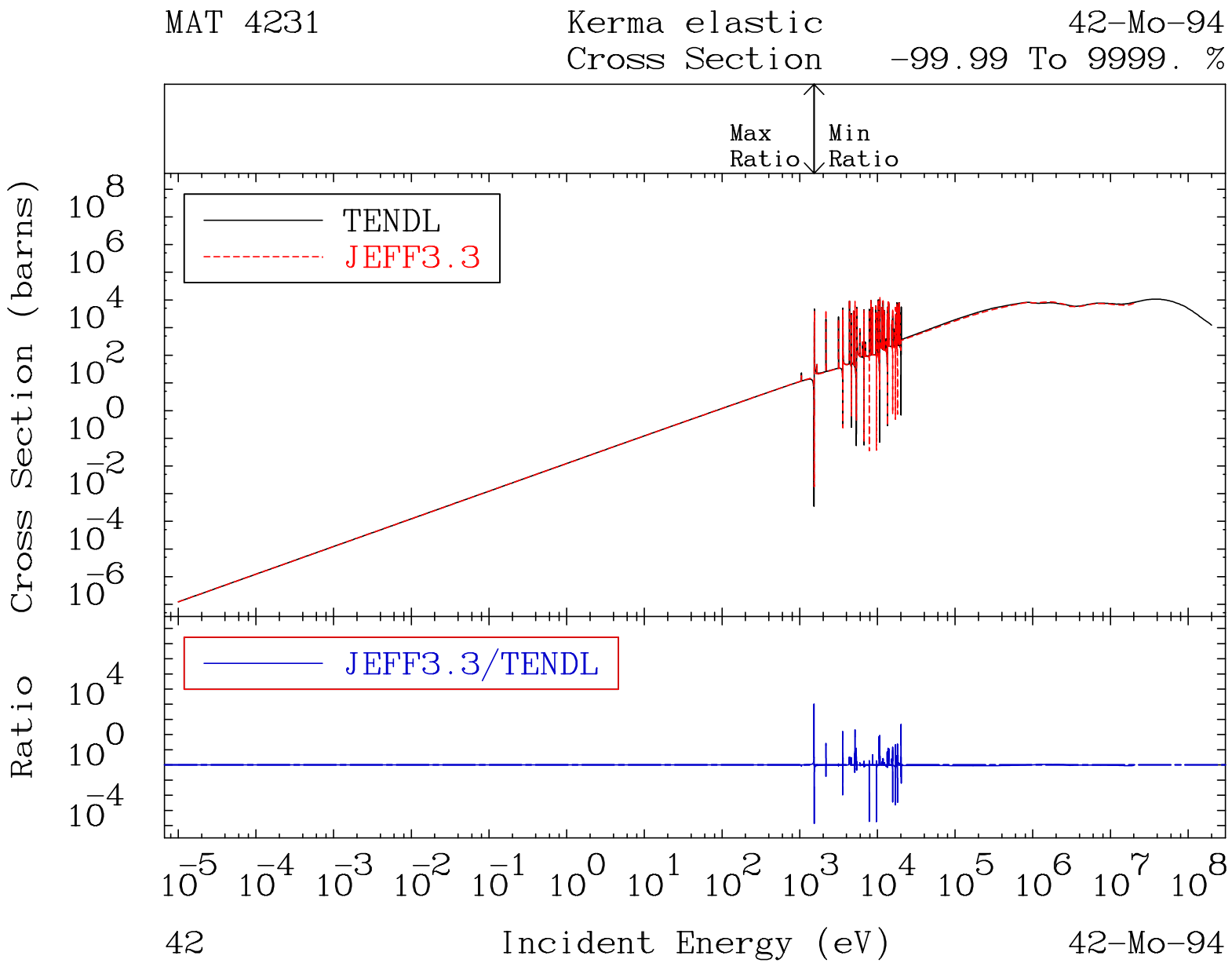

MAT 4231
Deuterium Production
42-Mo-94
Cross Section -100.0 To 976.2 %
Min Ratio
Max Ratio
TENDL Threshold 6.3329 MeV
JEFF3.3 Threshold 8.5000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
12
6
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
42-Mo-94

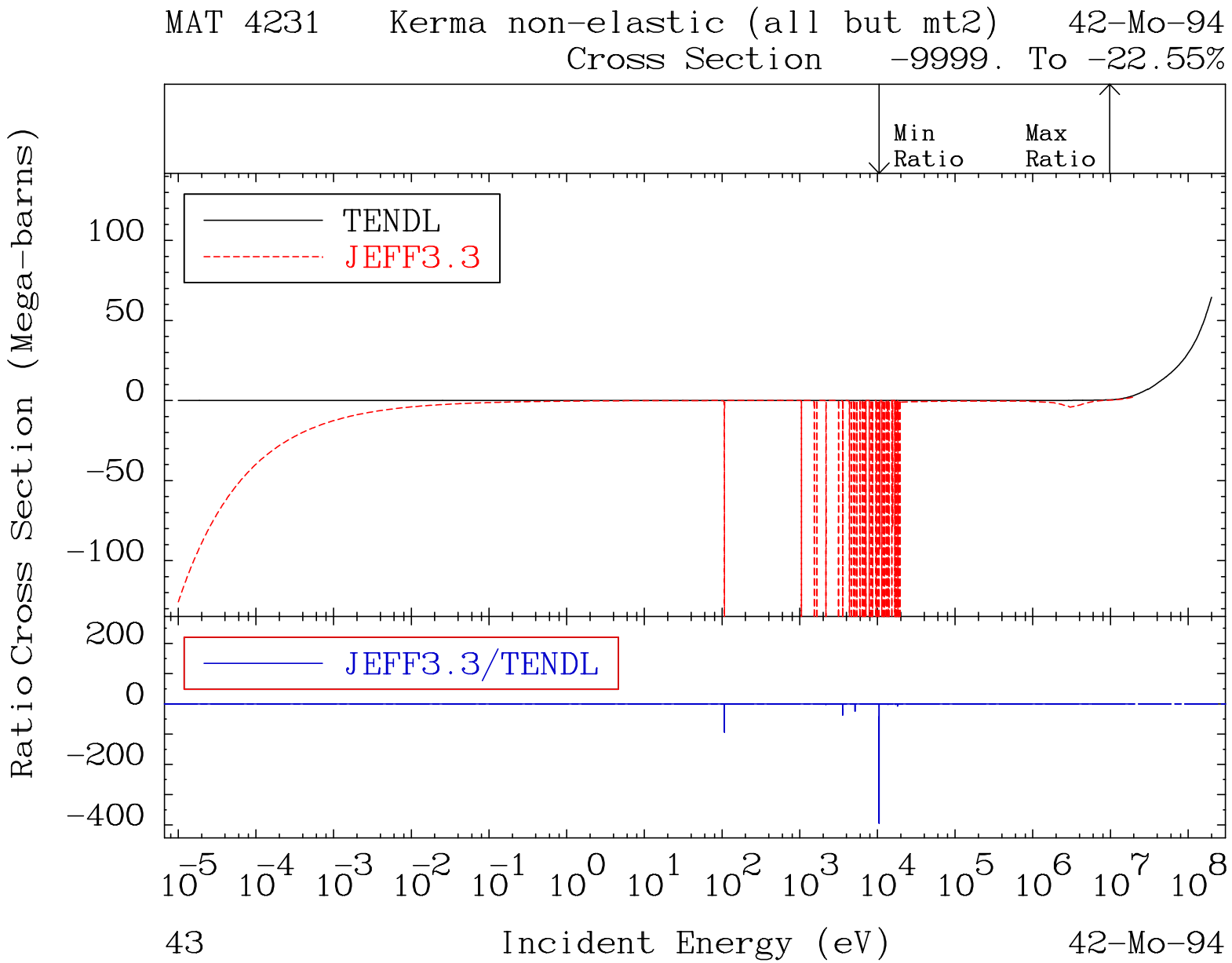

MAT 4231
Tritium Production
42-Mo-94
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.9342 MeV
JEFF3.3 Threshold 11.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
40
20
0
300
200
100
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
38
Incident Energy (eV)
42-Mo-94

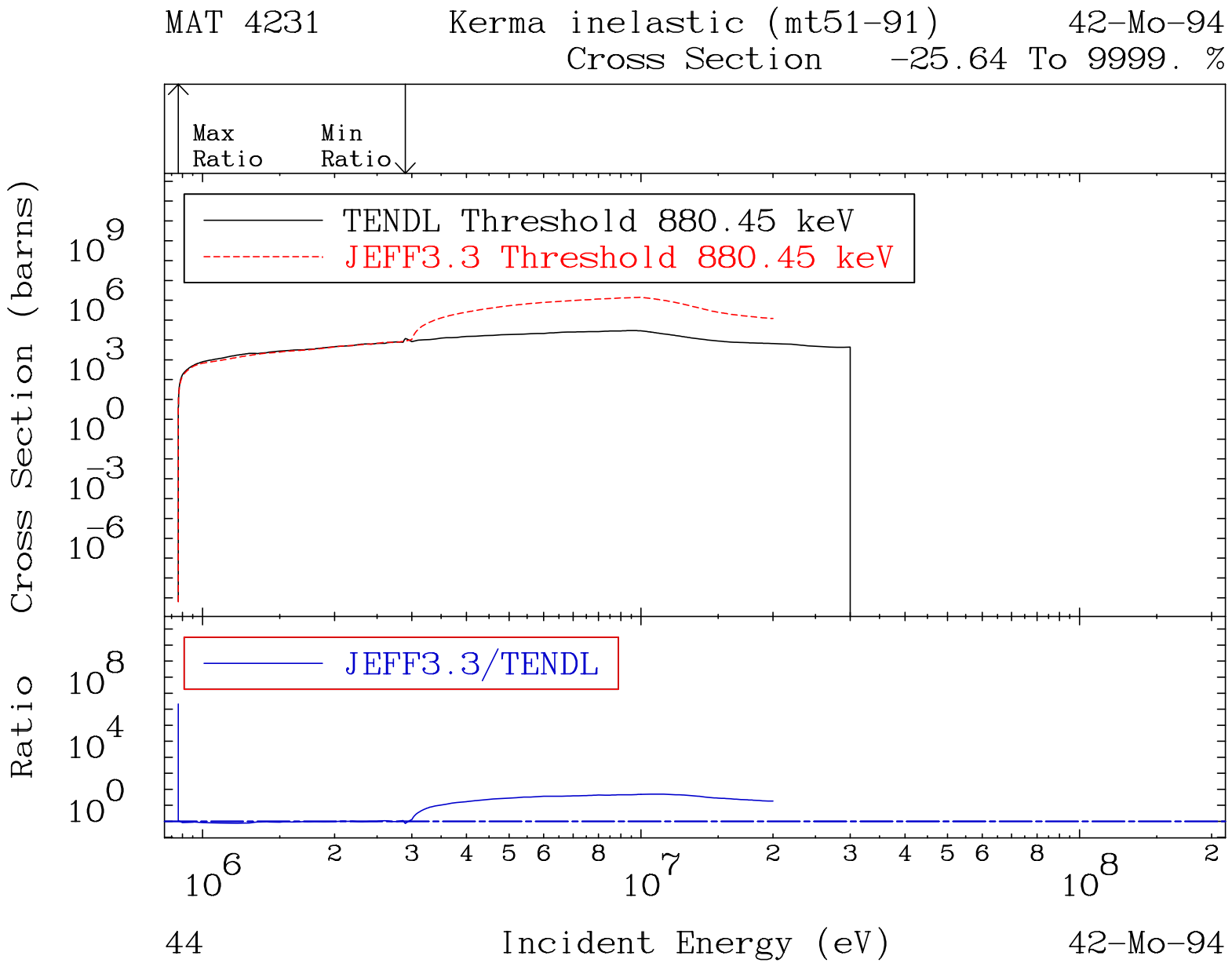

MAT 4231
He-3 Production
Cross Section
42-Mo-94
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.8881 MeV
JEFF3.3 Threshold 11.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
0.8
0.4
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
42-Mo-94

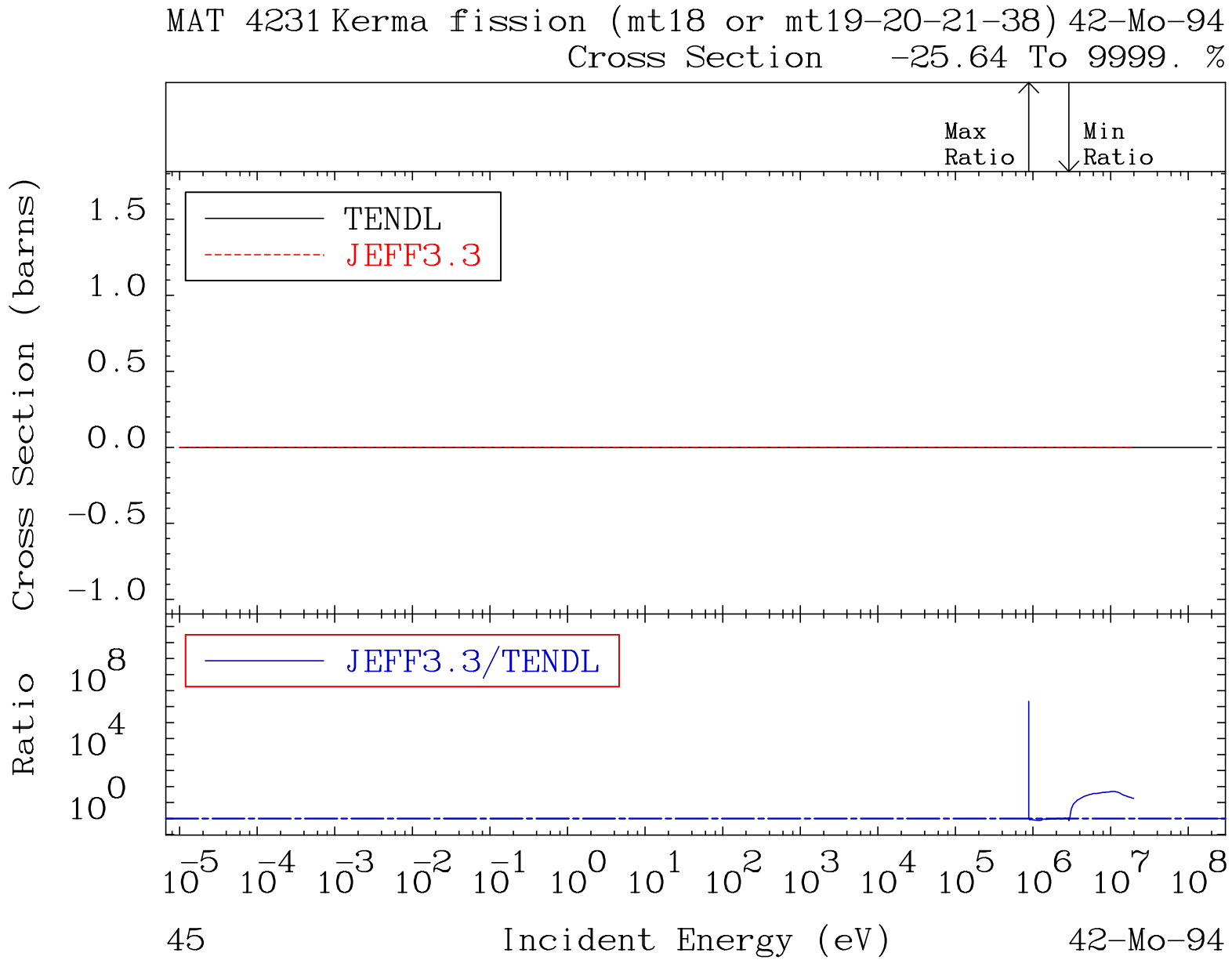

MAT 4231
He-4 Production
Cross Section
42-Mo-94
-100.0 To 342.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3 Threshold 1.5000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
6
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
40
Incident Energy (eV)
42-Mo-94

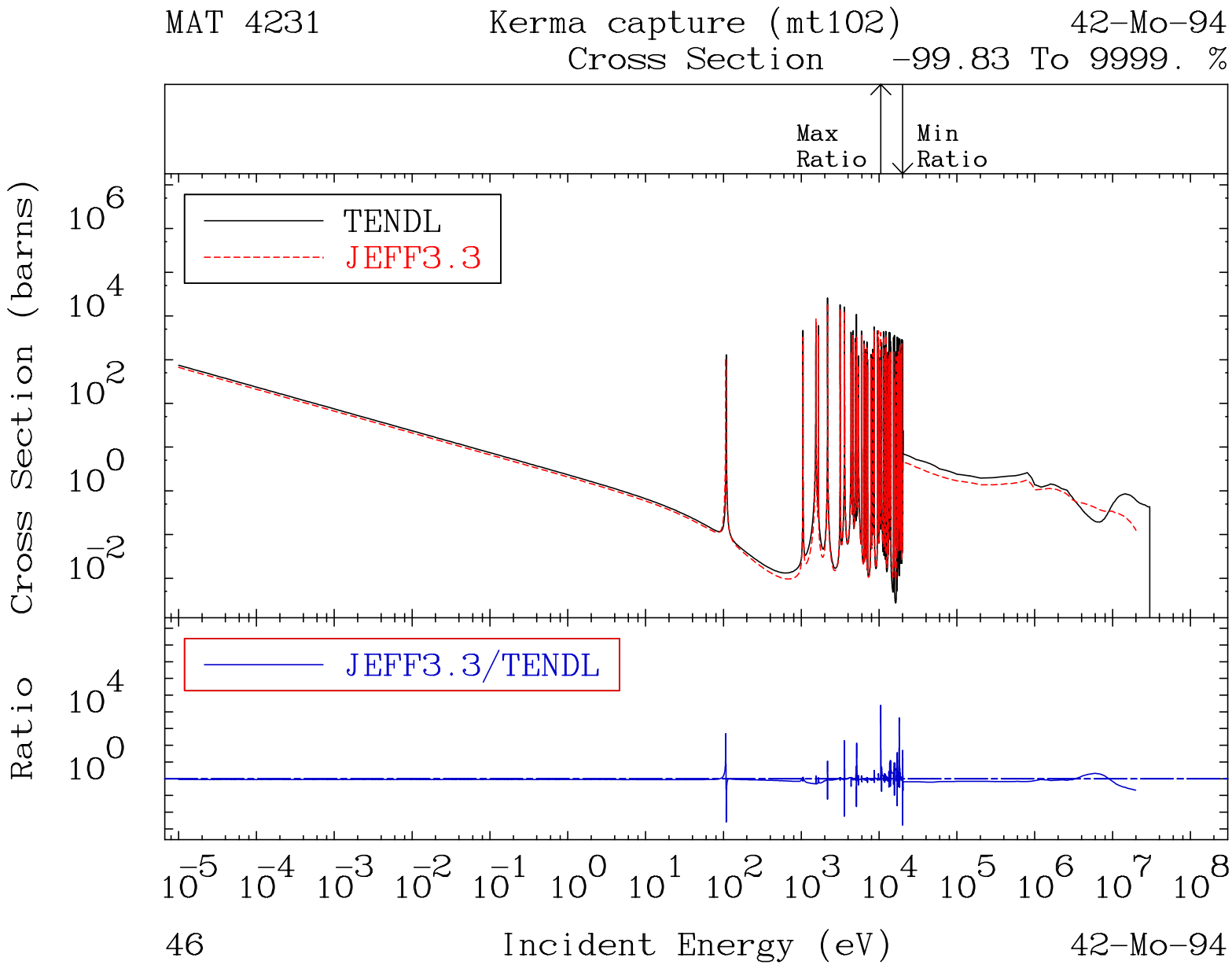

MAT 4231
Kerma total (eV-barns)
42-Mo-94
Cross Section -9999. To -19.96%
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Ratio Cross Section (Mega-barns)
100
50
0
-50
-100
0
-10
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
42-Mo-94

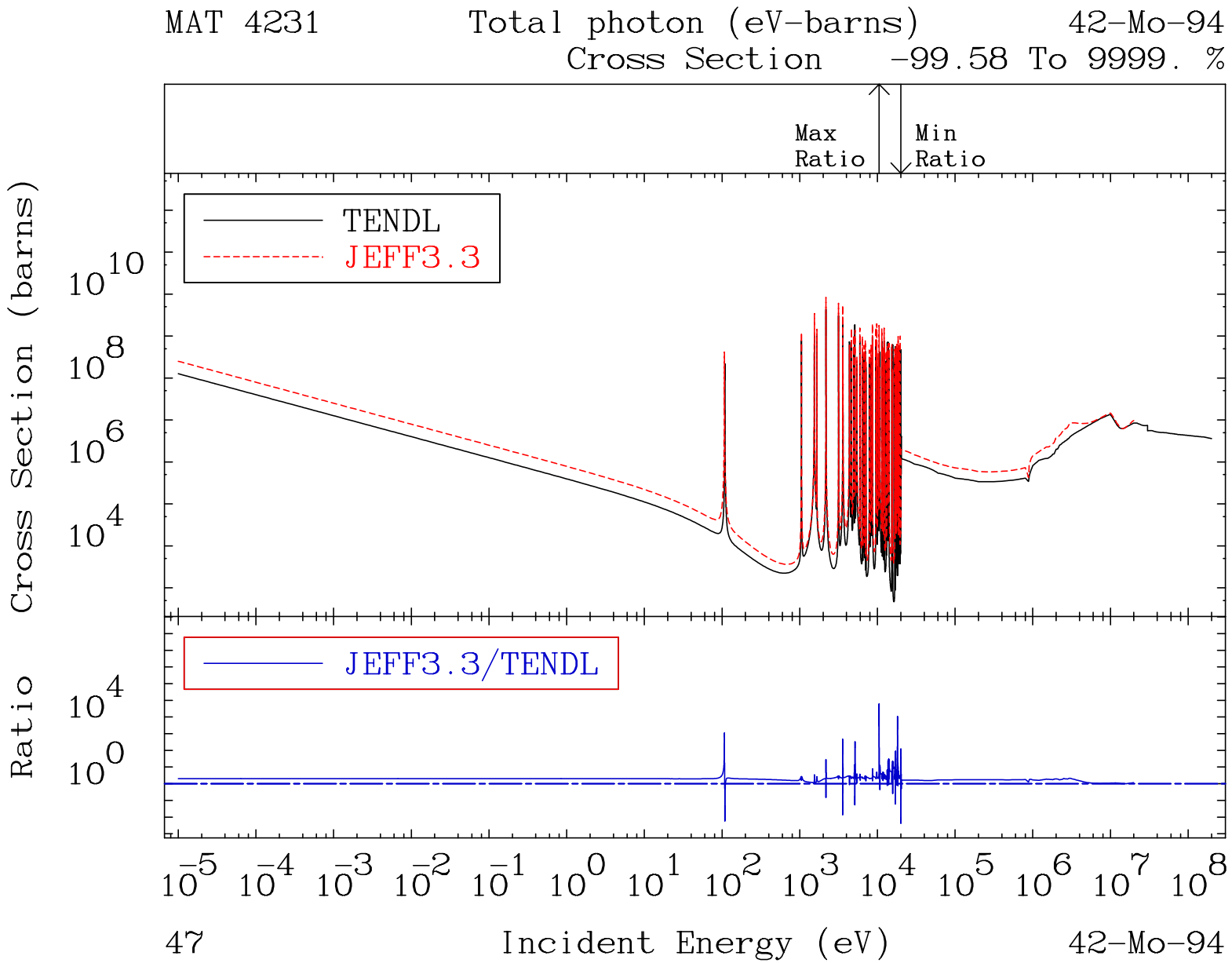

MAT 4231
Kerma elastic
Cross Section
42-Mo-94
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
42-Mo-94

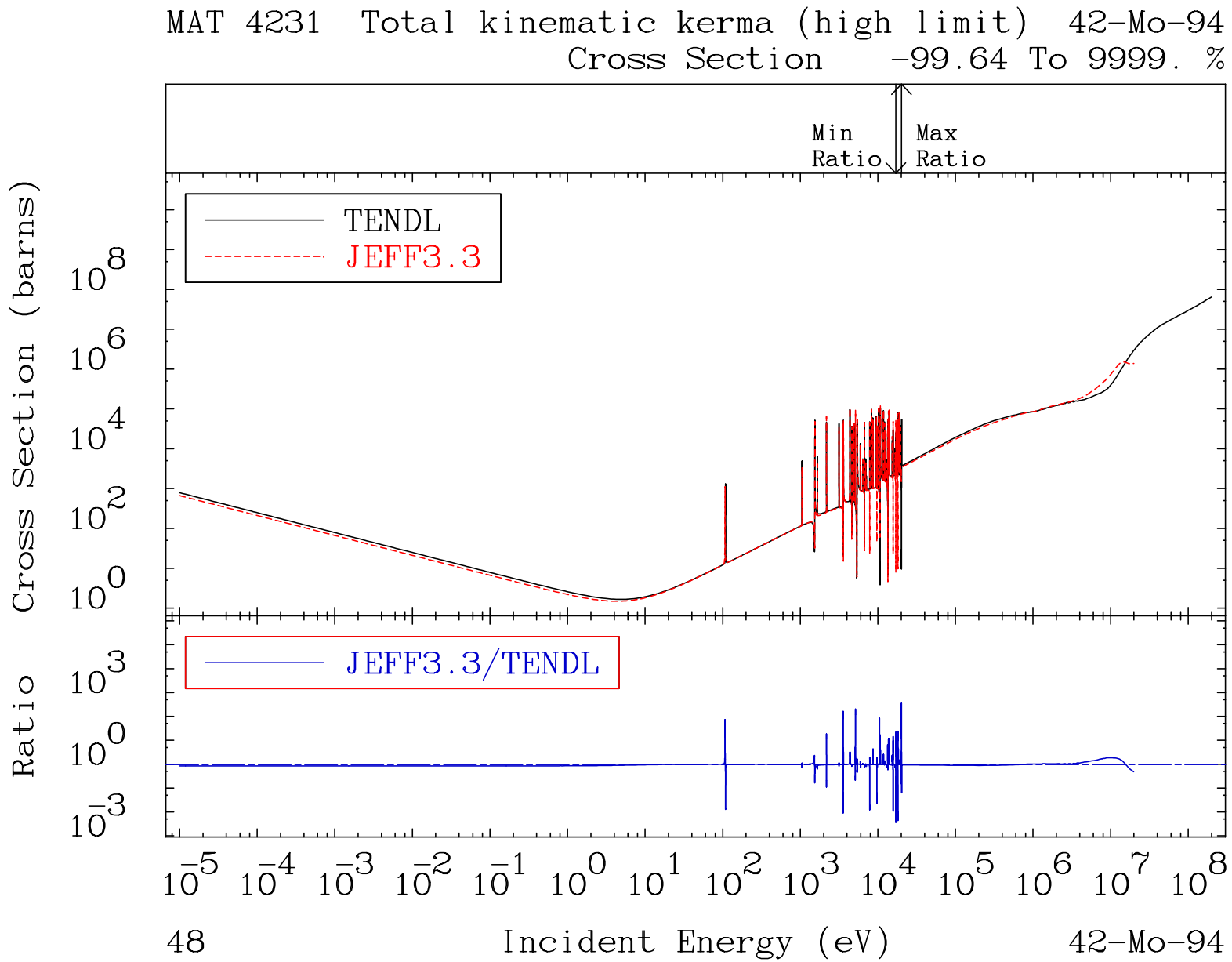

MAT 4231 Kerma non-elastic (all but mt2) 42-Mo-94
Cross Section -9999. To -22.55%
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Ratio Cross Section (Mega-barns)
100
50
0
-50
-100
200
0
-200
-400
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
43
Incident Energy (eV)
42-Mo-94

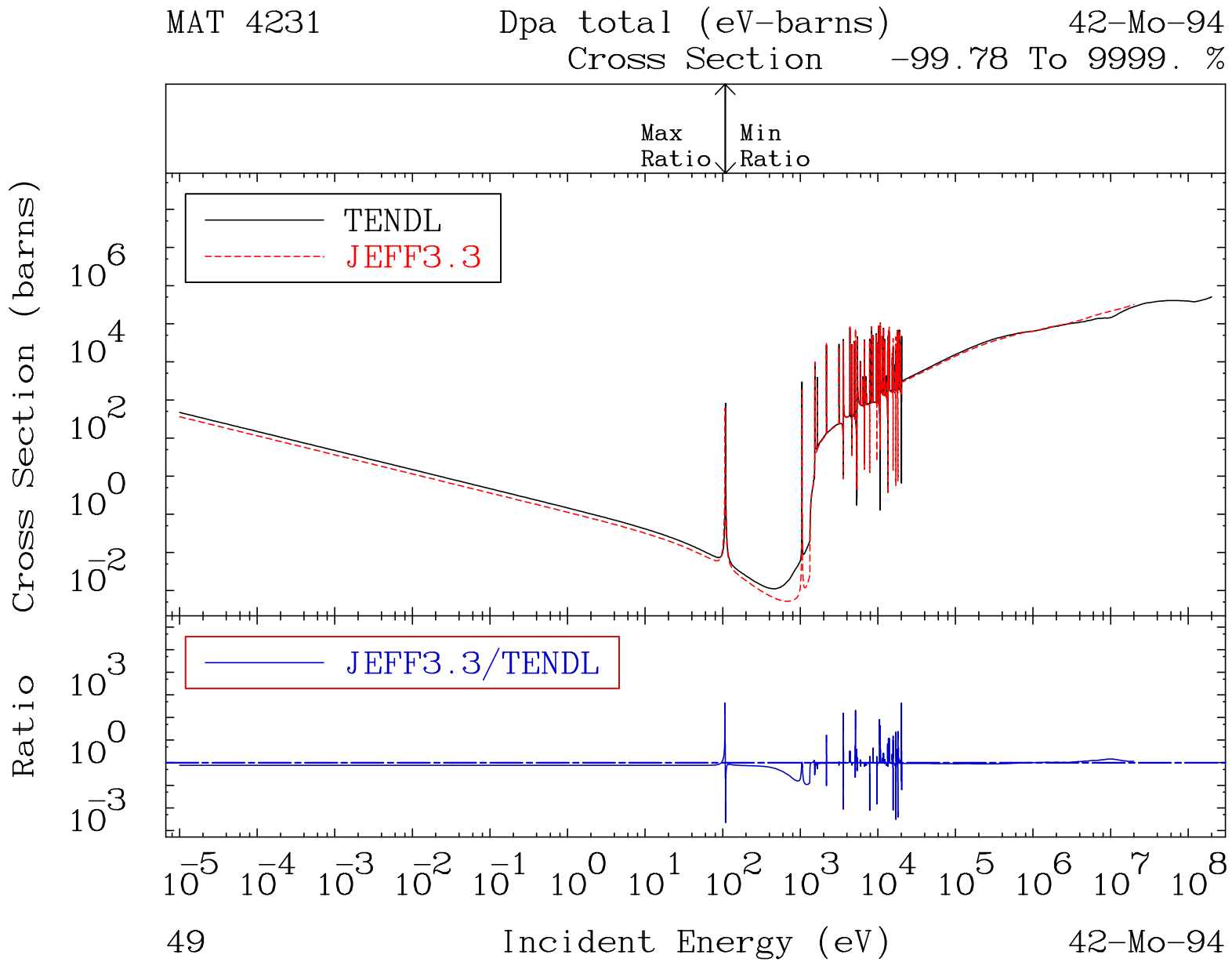

MAT 4231
Kerma inelastic (mt51-91)
42-Mo-94
Cross Section -25.64 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 880.45 keV
JEFF3.3 Threshold 880.45 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
42-Mo-94

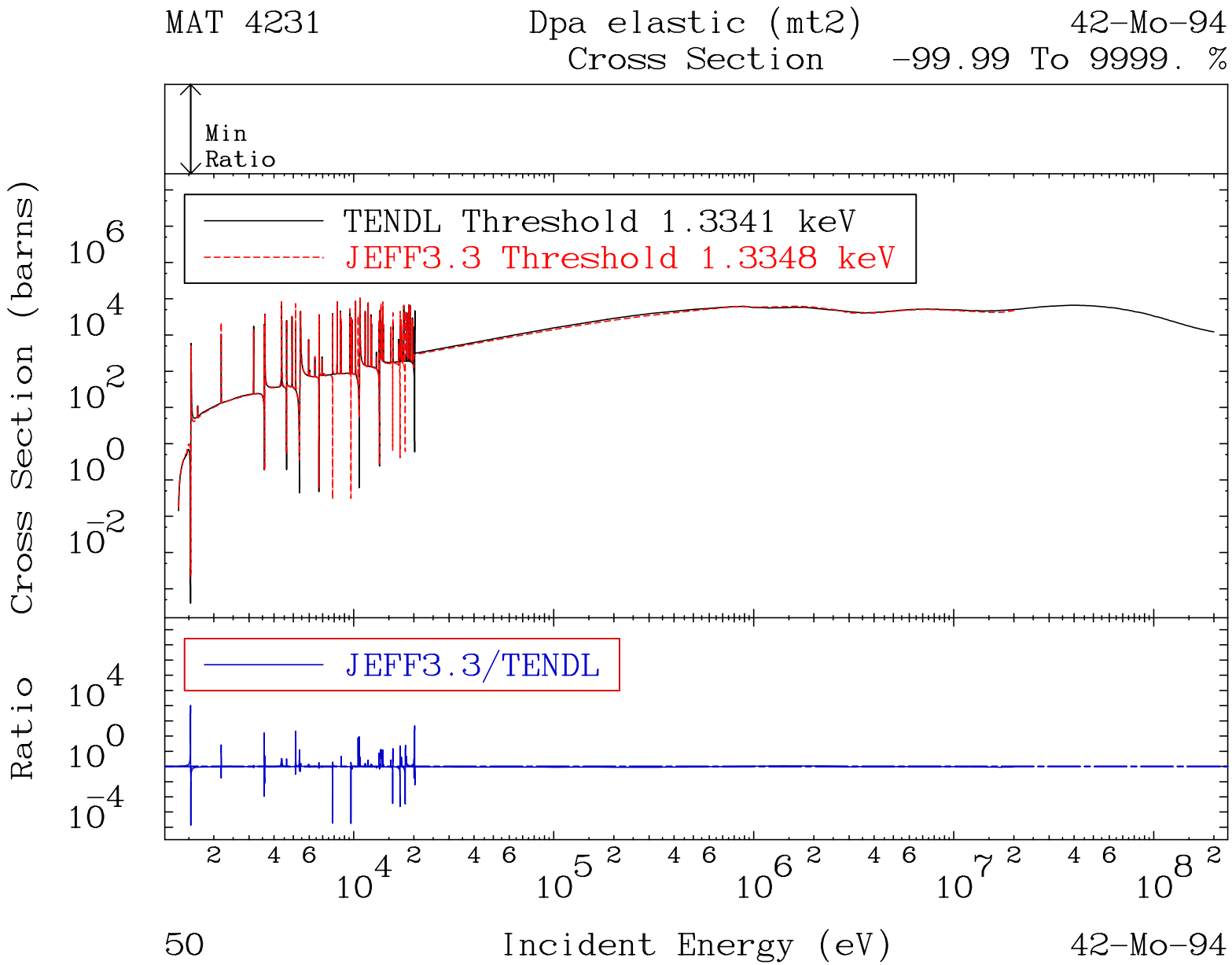

MAT 4231 Kerma fission (mt18 or mt19-20-21-38) 42-Mo-94
Cross Section -25.64 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
$10^{8}$
$10^{4}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
45
Incident Energy (eV)
42-Mo-94

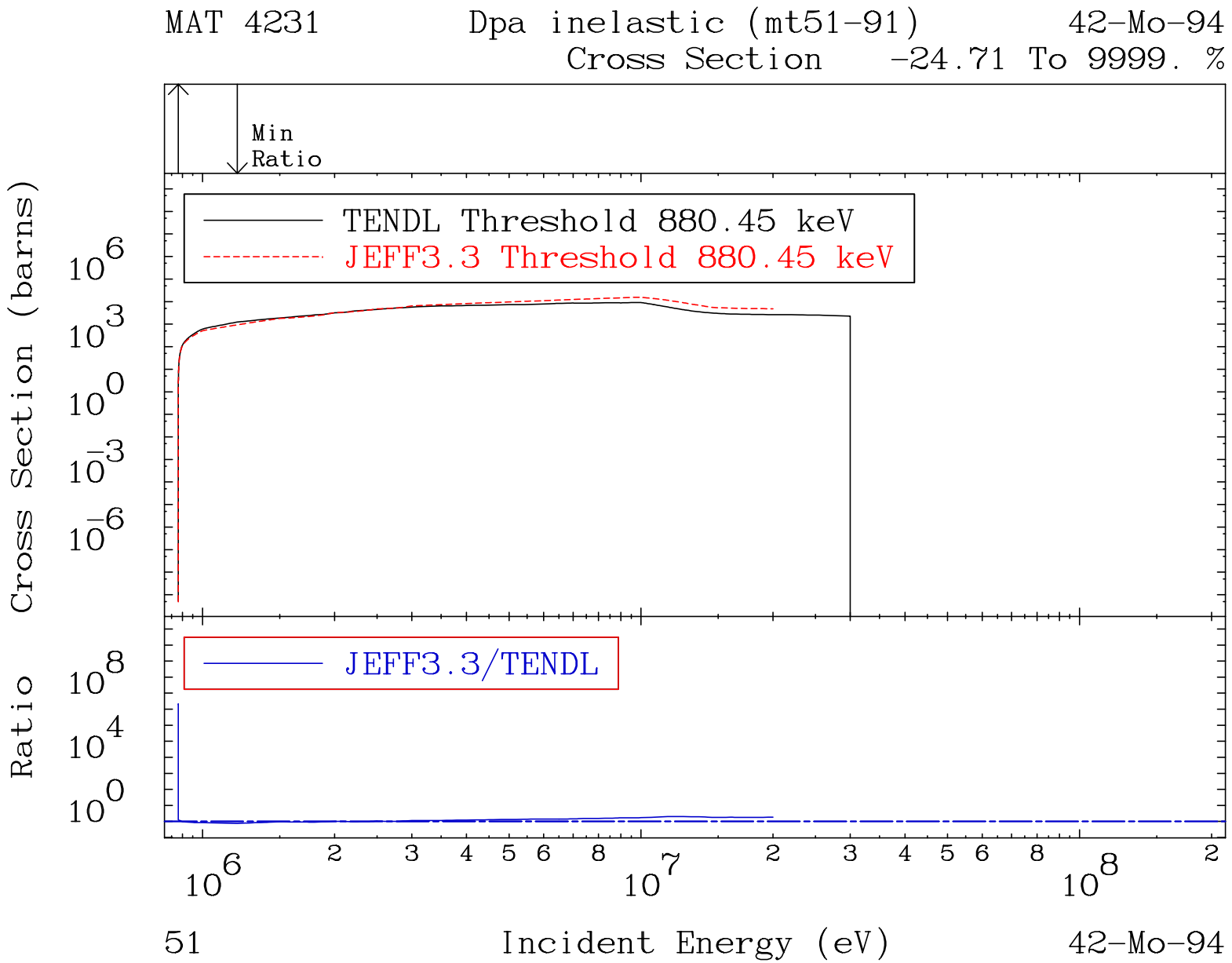

MAT 4231
Kerma capture (mt102)
42-Mo-94
Cross Section -99.83 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
42-Mo-94

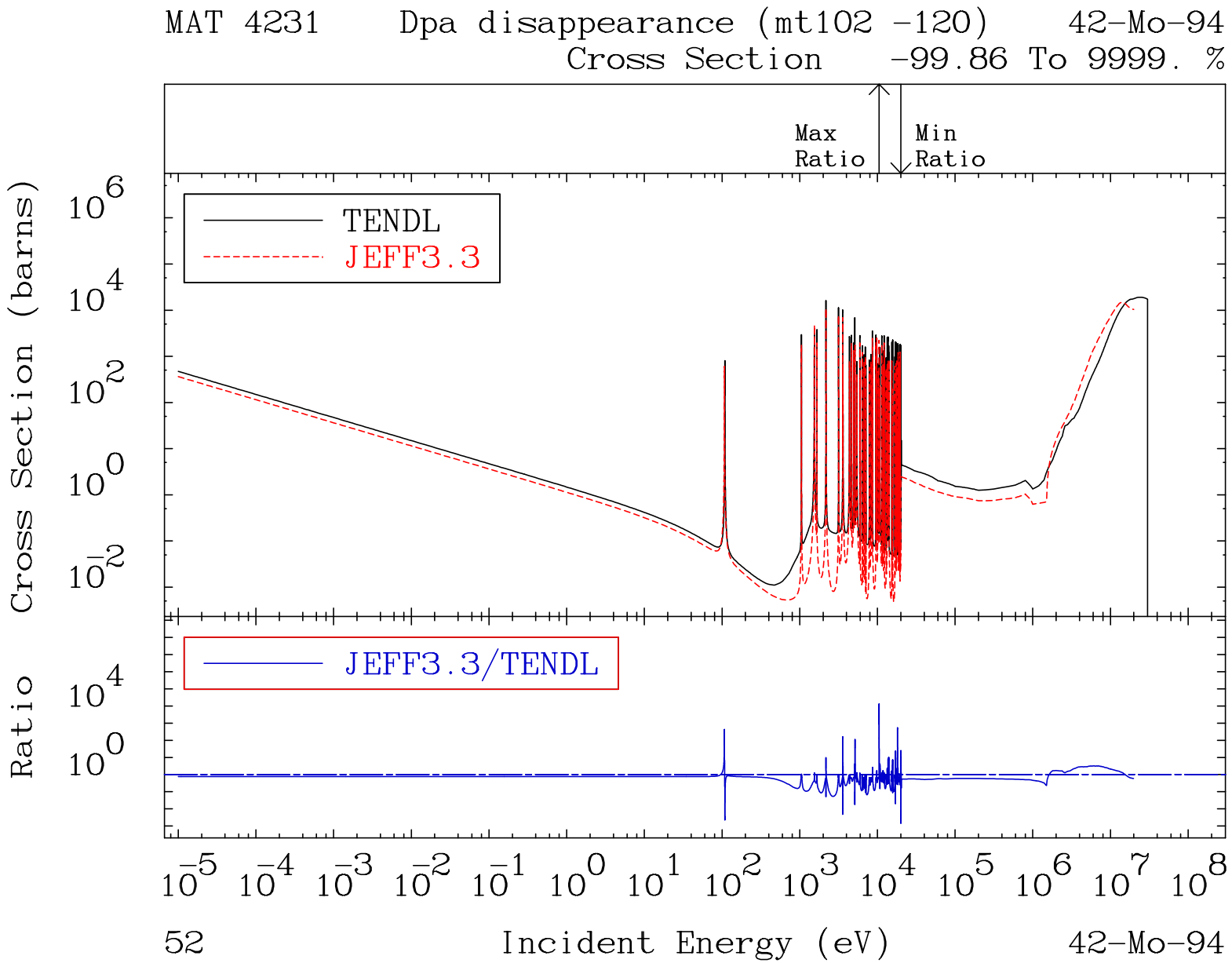

MAT 4231
Total photon (eV-barns)
42-Mo-94
Cross Section -99.58 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
$10^{10}$
$10^{8}$
$10^{6}$
$10^{4}$
JEFF3.3/TENDL
Ratio
$10^{4}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
47
Incident Energy (eV)
42-Mo-94


MAT 4231 Total kinematic kerma (high limit) 42-Mo-94
Cross Section -99.64 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
42-Mo-94


MAT 4231
Dpa total (eV-barns)
42-Mo-94
Cross Section
-99.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
42-Mo-94


MAT 4231
Dpa elastic (mt2)
Cross Section
42-Mo-94
-99.99 To 9999. %
Min
Ratio
TENDL Threshold 1.3341 keV
JEFF3.3 Threshold 1.3348 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
42-Mo-94


MAT 4231
Dpa inelastic (mt51-91)
42-Mo-94
Cross Section -24.71 To 9999. %
Min
Ratio
TENDL Threshold 880.45 keV
JEFF3.3 Threshold 880.45 keV
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
2 3 4 5 6 8
10^6
10^7
10^8
51
Incident Energy (eV)
42-Mo-94


MAT 4231 Dpa disappearance (mt102 -120) 42-Mo-94
Cross Section -99.86 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
42-Mo-94