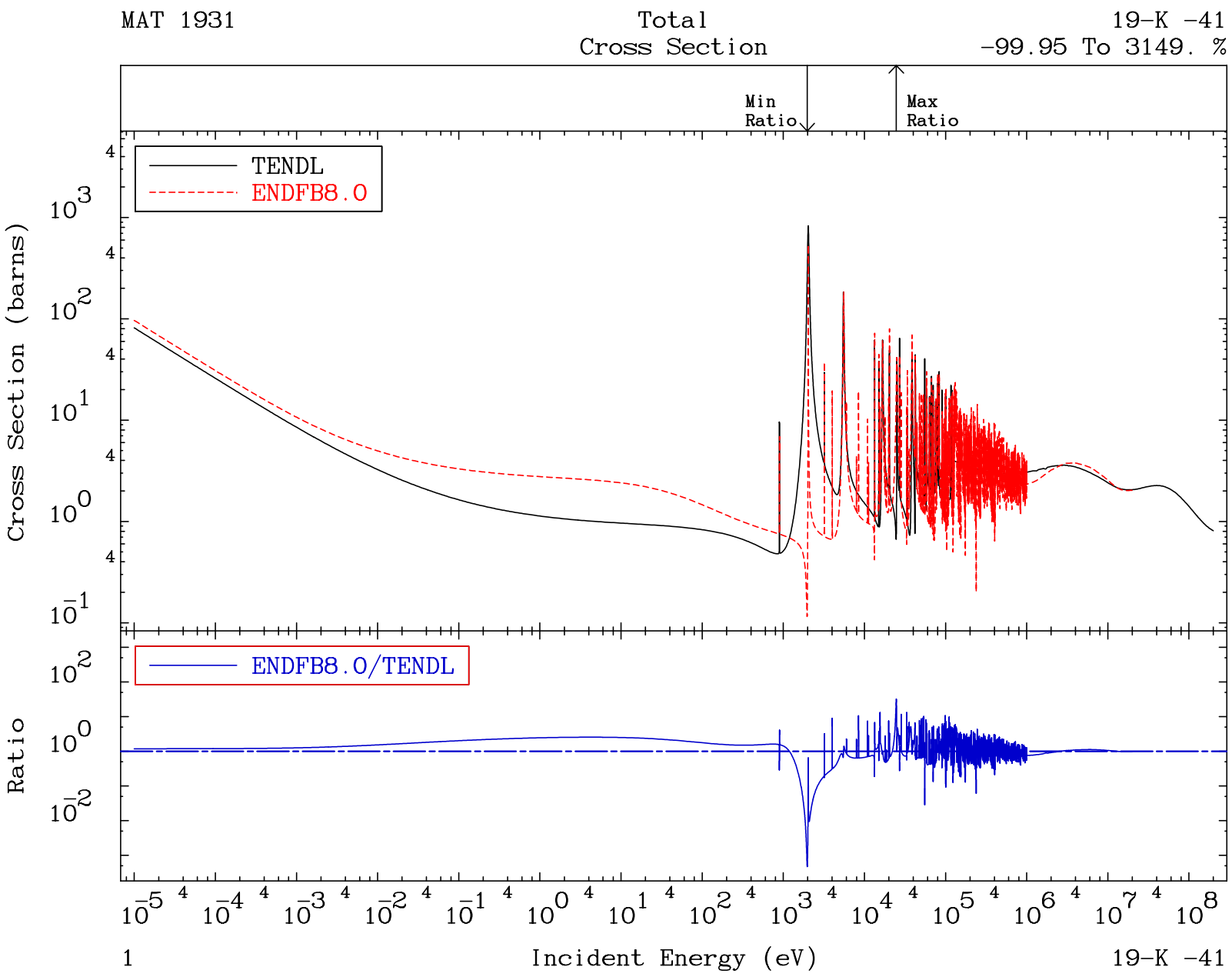
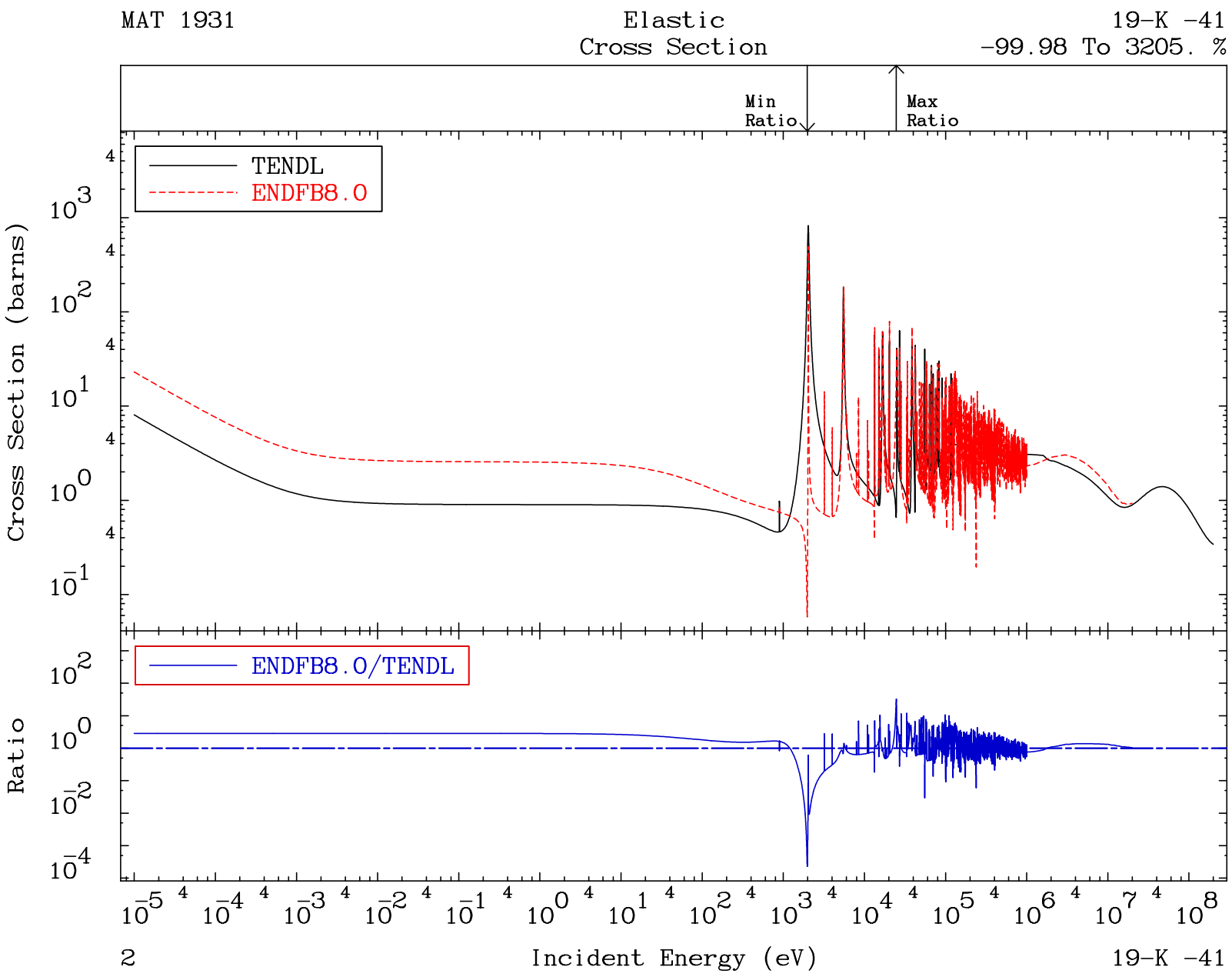
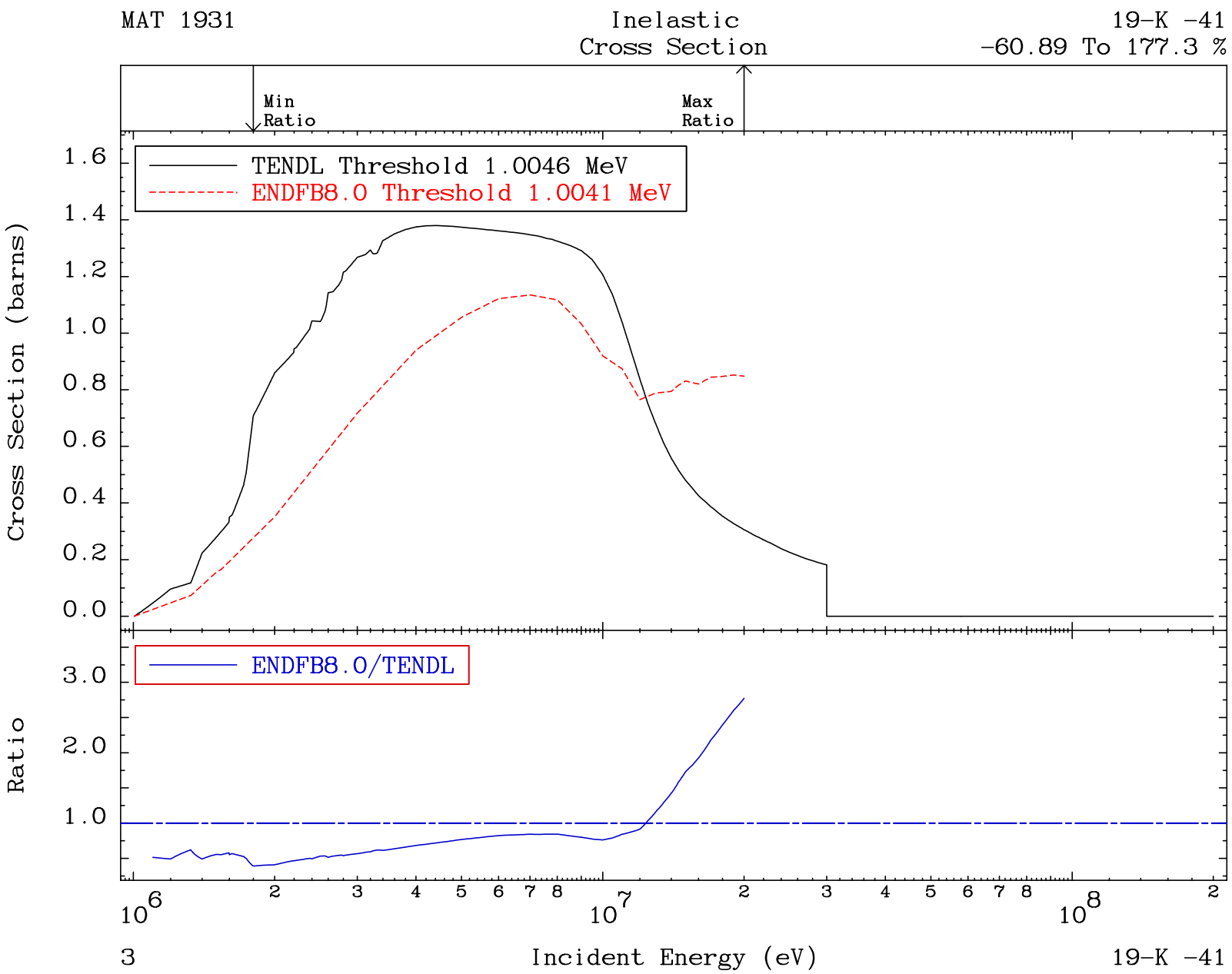
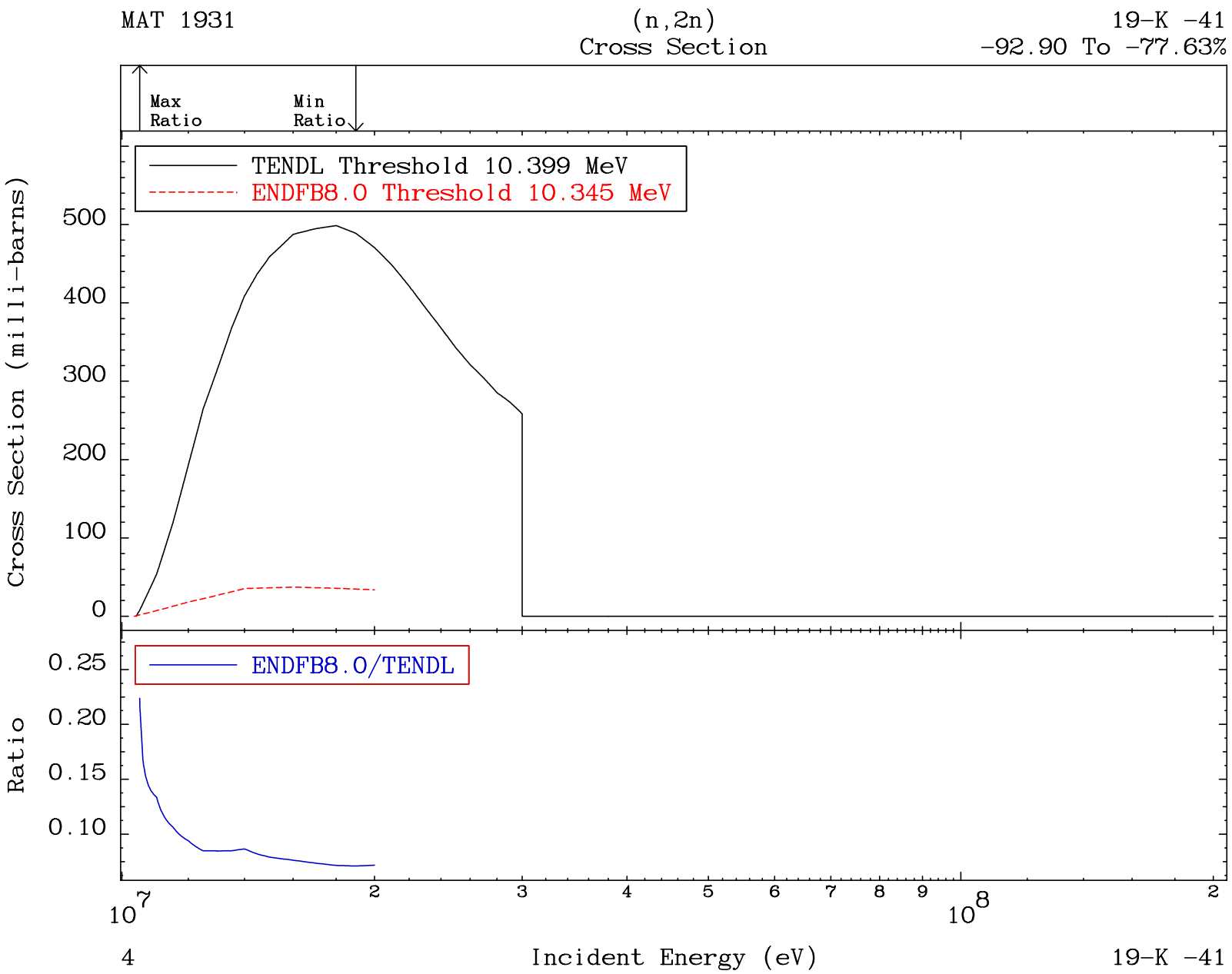
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

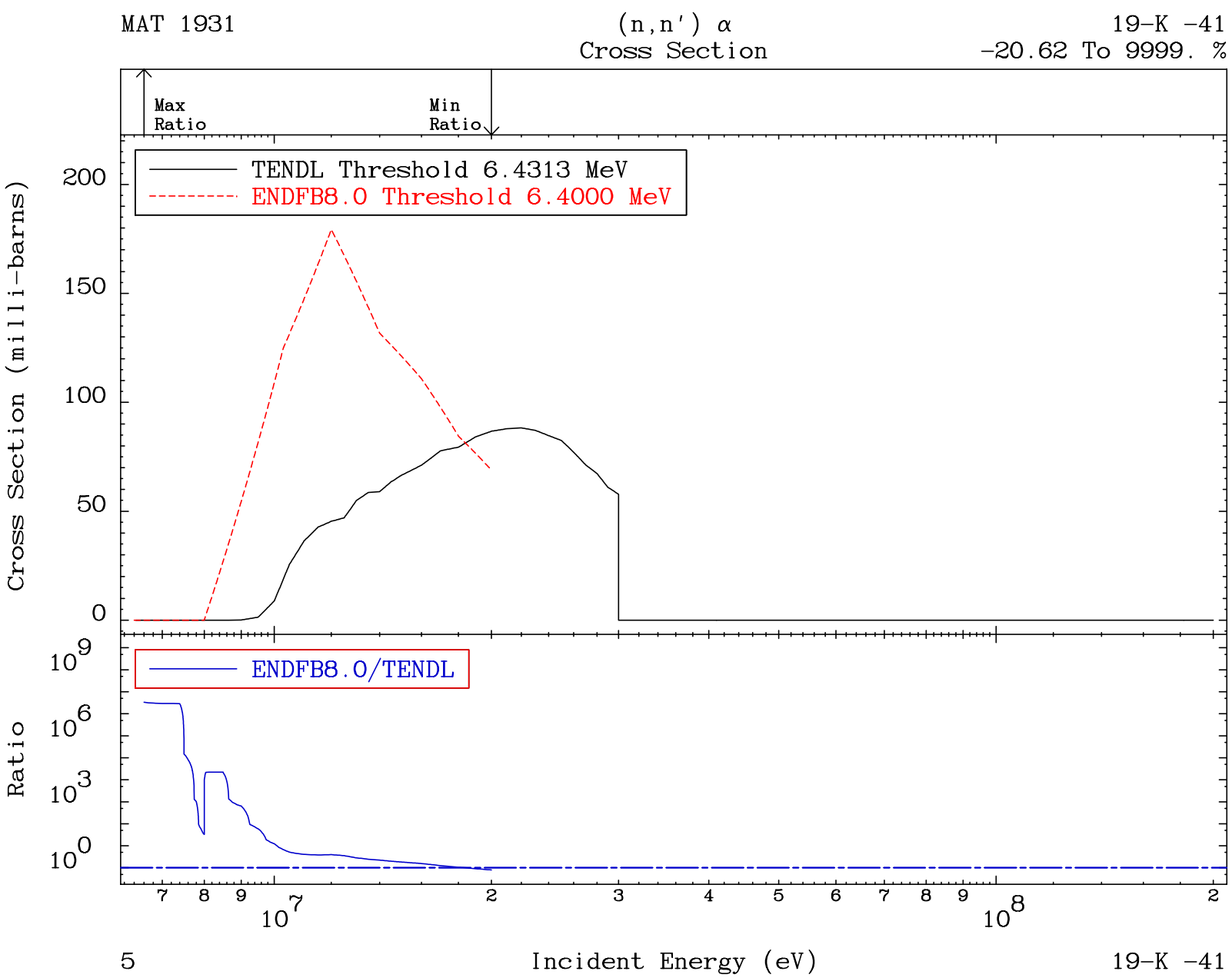
Press Mouse Button to Start

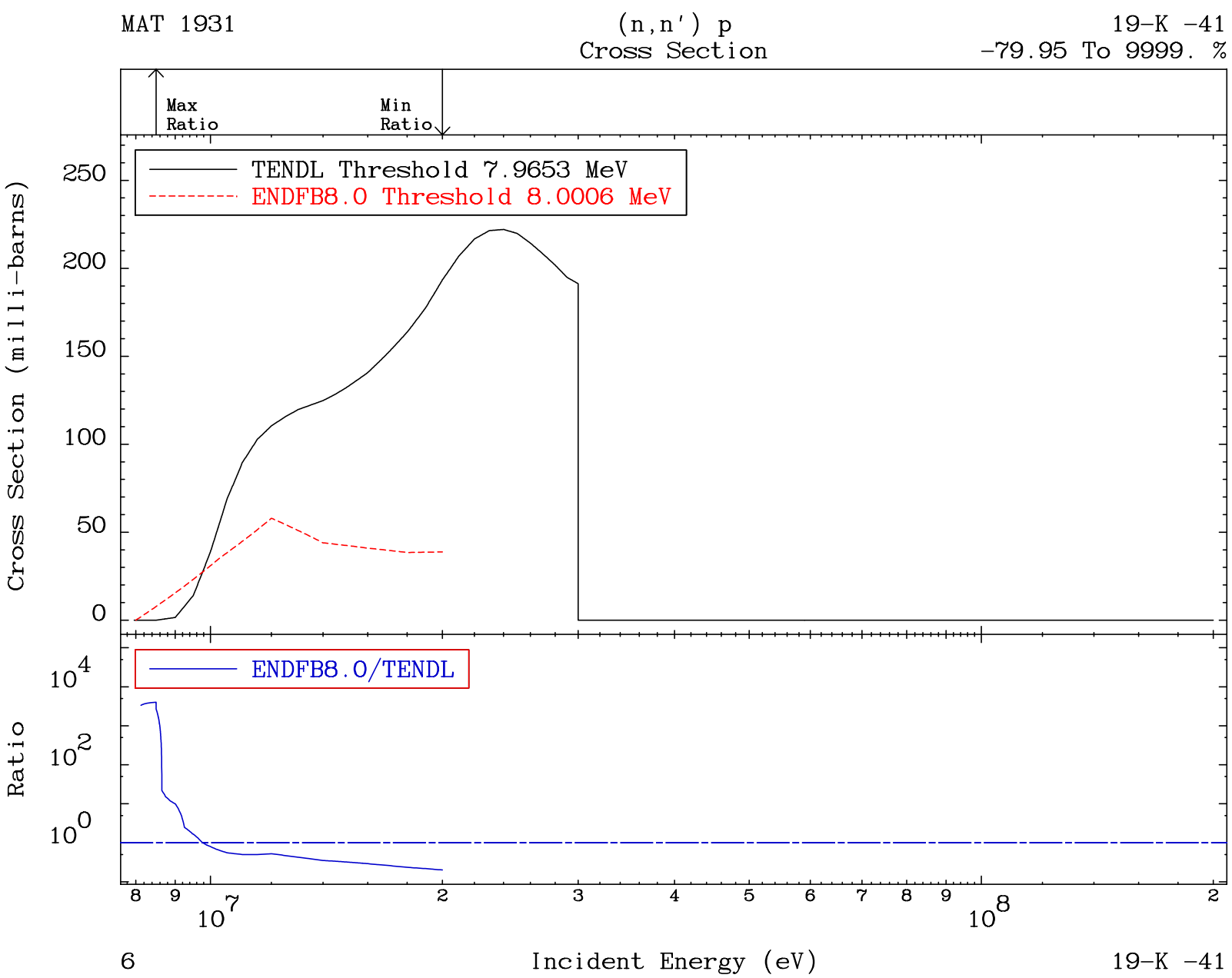

MAT 1931
Total
Cross Section
19-K -41
-99.95 To 3149. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
1
19-K -41

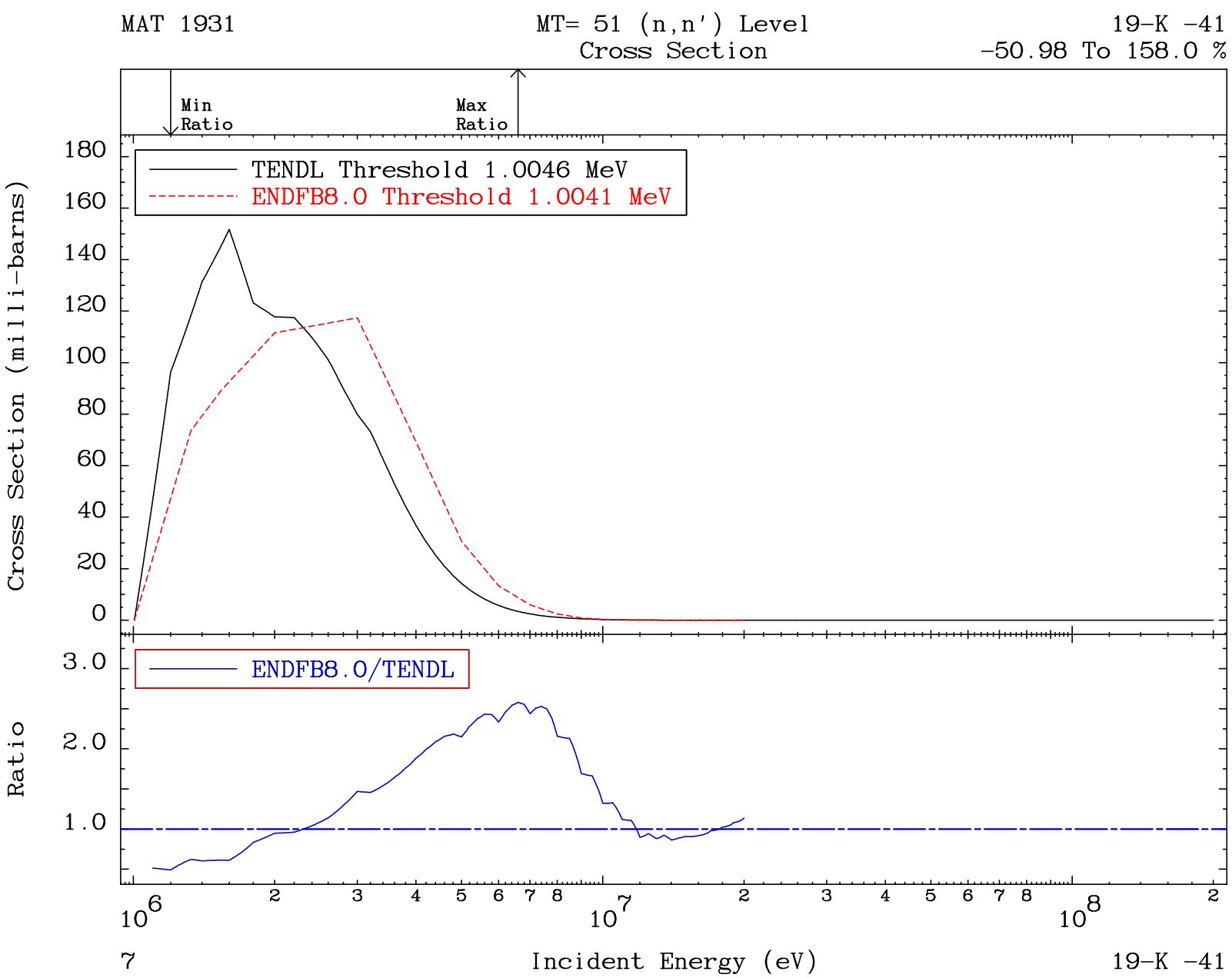

MAT 1931
Elastic
Cross Section
19-K -41
-99.98 To 3205. %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
2
19-K -41

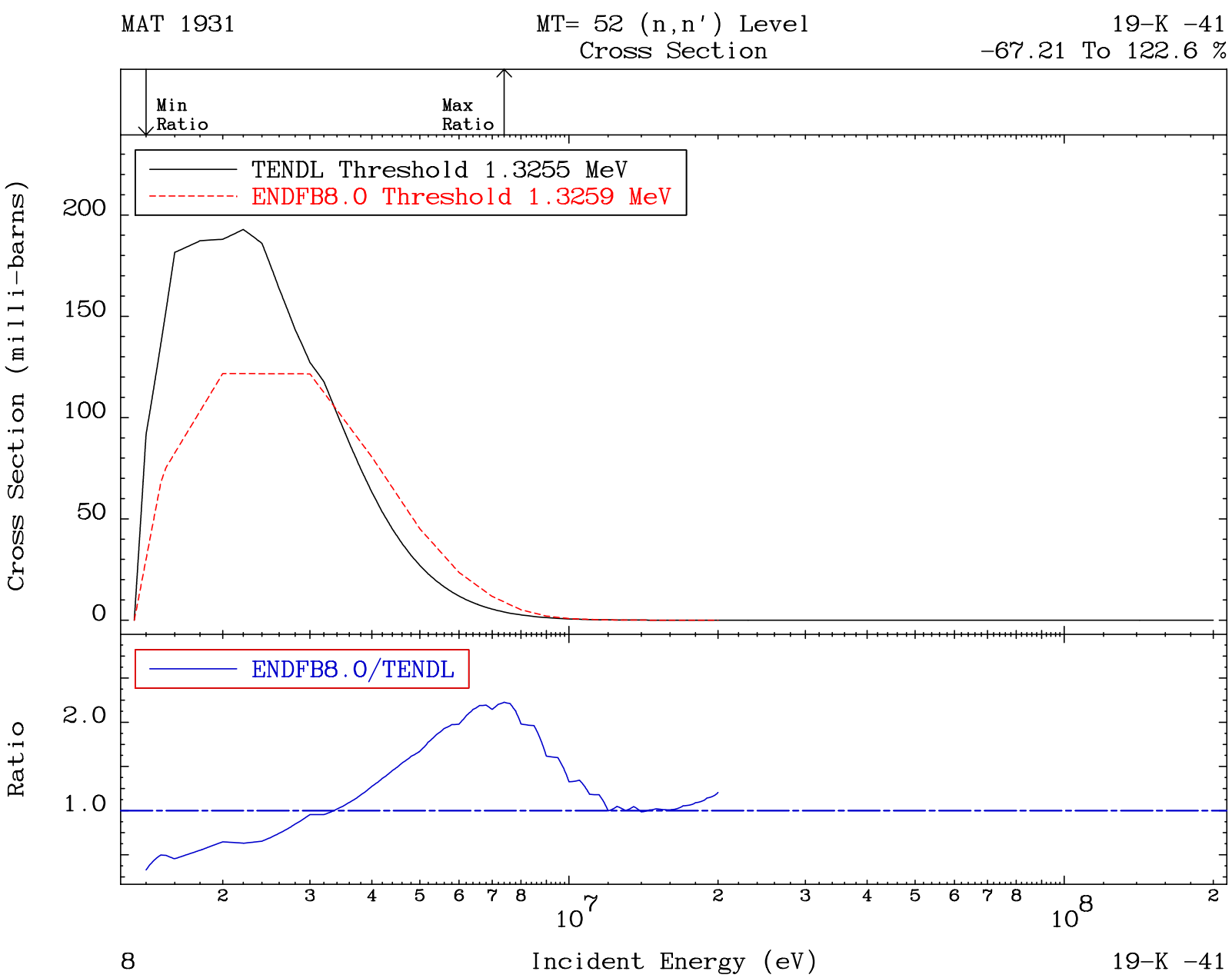

MAT 1931
Inelastic
Cross Section
19-K -41
-60.89 To 177.3 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0046 MeV
ENDFB8.0 Threshold 1.0041 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
3.0
2.0
1.0
10^6
10^7
10^8
Incident Energy (eV)
3
19-K -41

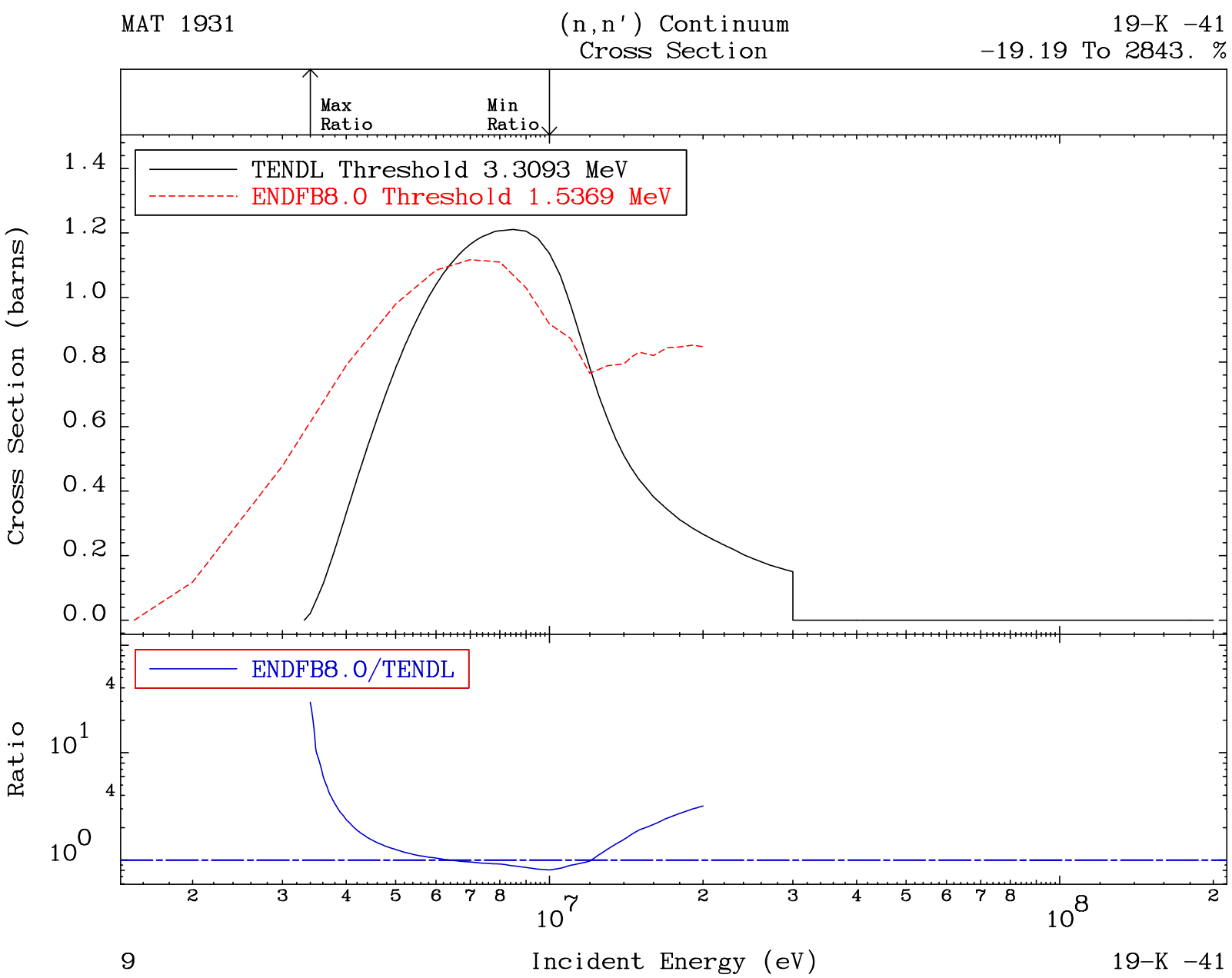

MAT 1931
(n,2n)
Cross Section
19-K -41
-92.90 To -77.63%
Max Ratio
Min Ratio
TENDL Threshold 10.399 MeV
ENDFB8.0 Threshold 10.345 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
ENDFB8.0/TENDL
Ratio
0.25
0.20
0.15
0.10
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
19-K -41

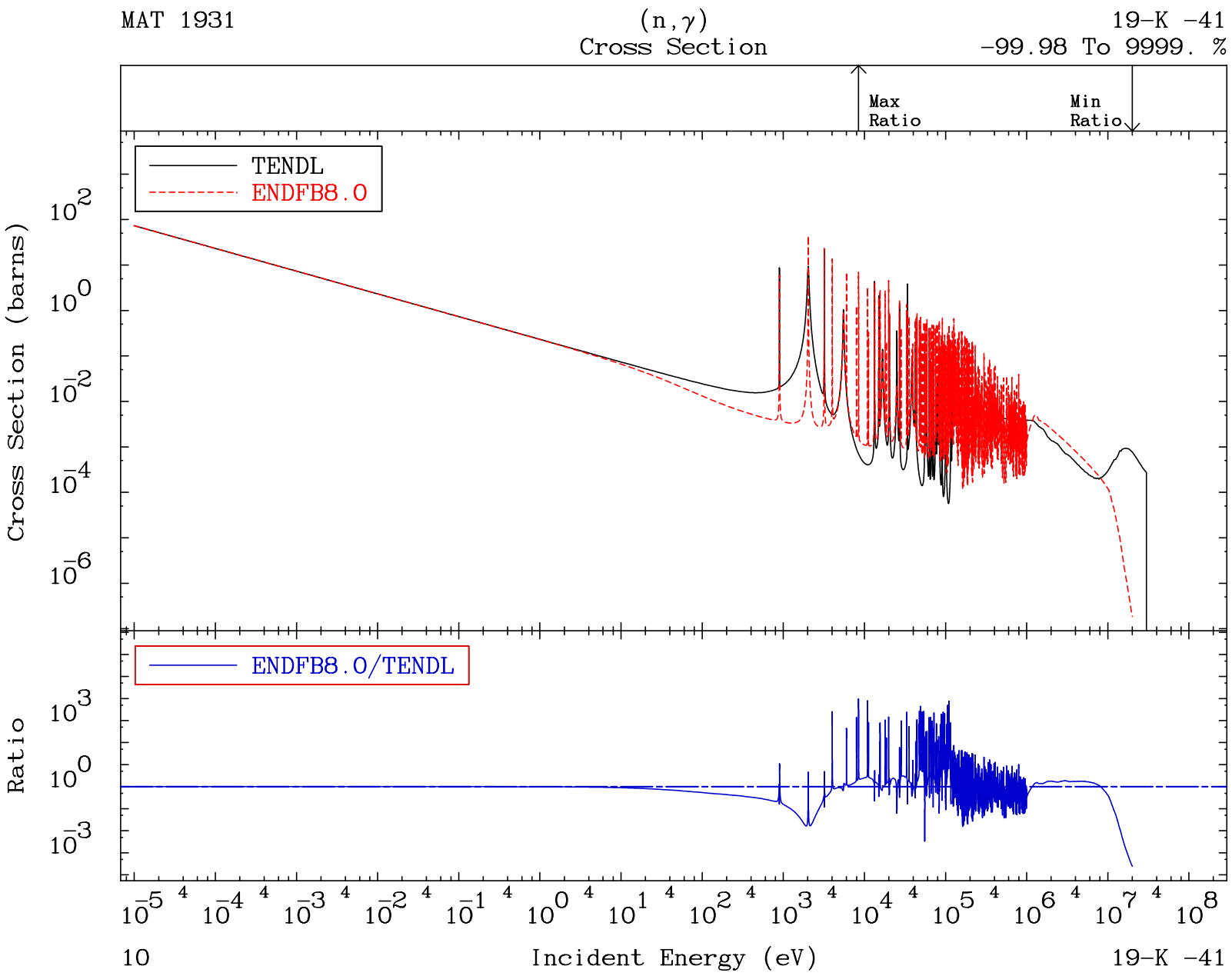

MAT 1931
(n,n') α
Cross Section
19-K -41
-20.62 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.4313 MeV
ENDFB8.0 Threshold 6.4000 MeV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
19-K -41

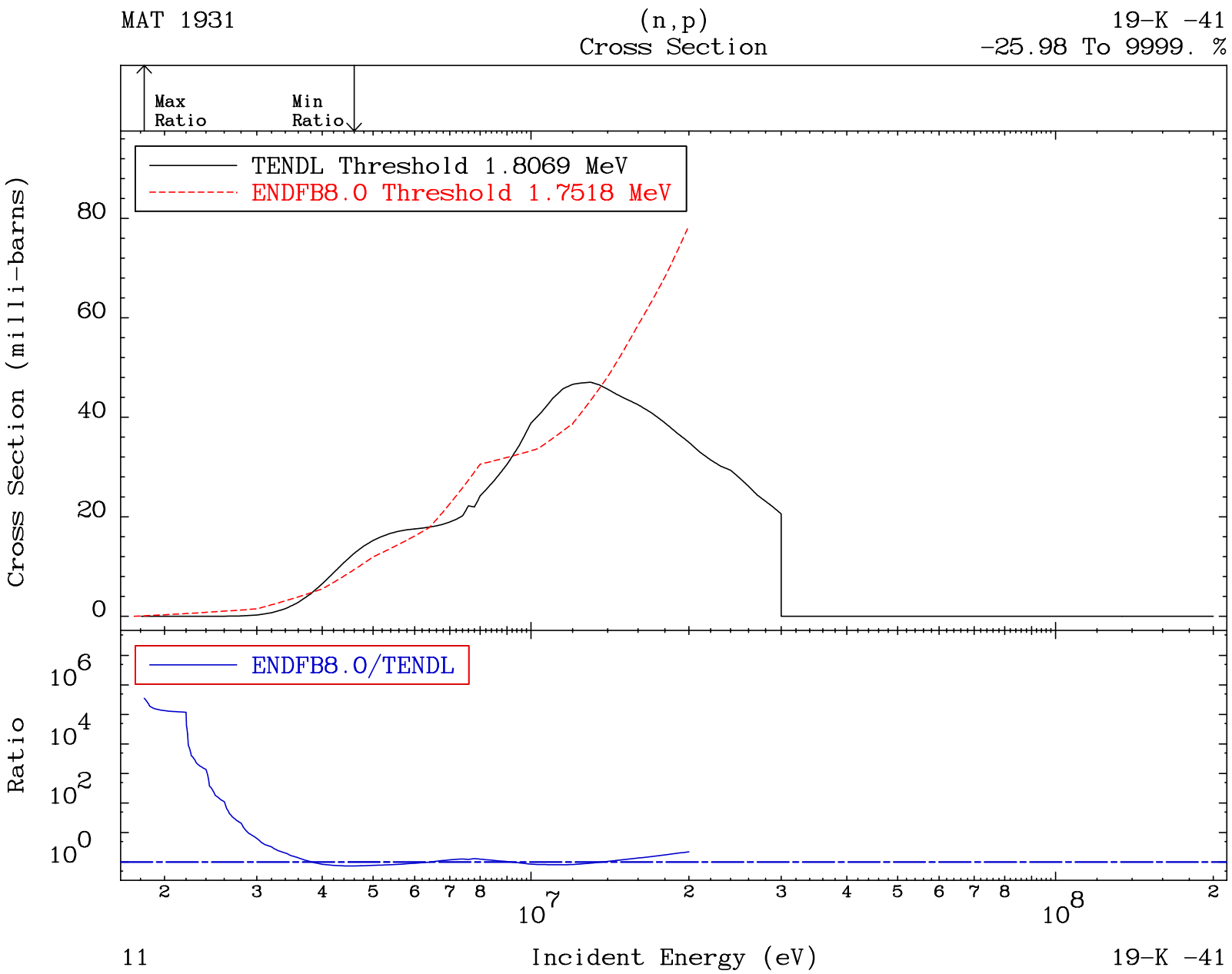

MAT 1931
(n,n') p
Cross Section
19-K -41
-79.95 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.9653 MeV
ENDFB8.0 Threshold 8.0006 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
19-K -41

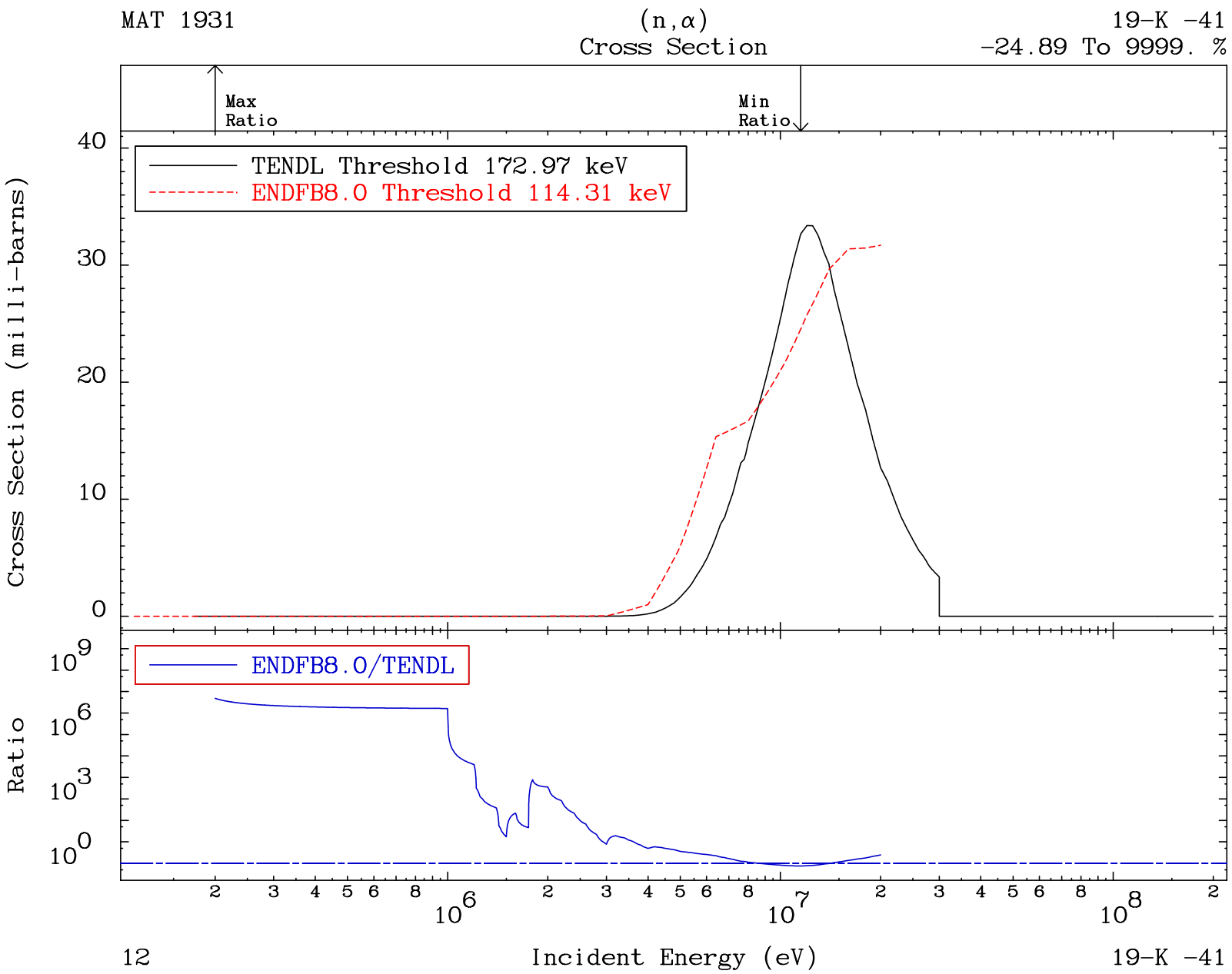

MAT 1931
MT= 51 (n,n') Level
Cross Section
19-K -41
-50.98 To 158.0 %
Min Ratio
Max Ratio
TENDL Threshold 1.0046 MeV
ENDFB8.0 Threshold 1.0041 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
3.0
2.0
1.0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
7
Incident Energy (eV)
19-K -41

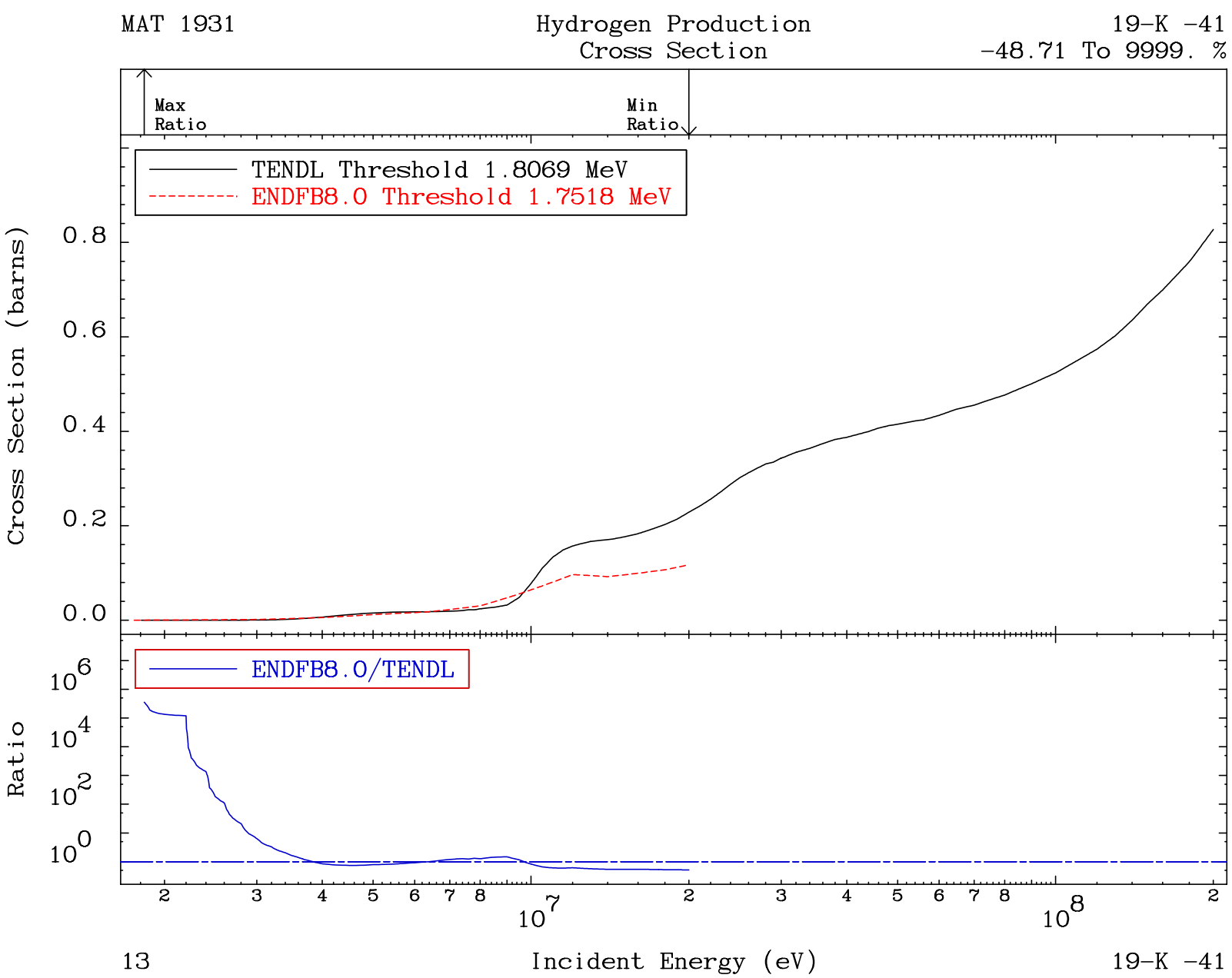

MAT 1931
MT= 52 (n,n') Level
Cross Section
19-K -41
-67.21 To 122.6 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3255 MeV
ENDFB8.0 Threshold 1.3259 MeV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
8
Incident Energy (eV)
19-K -41

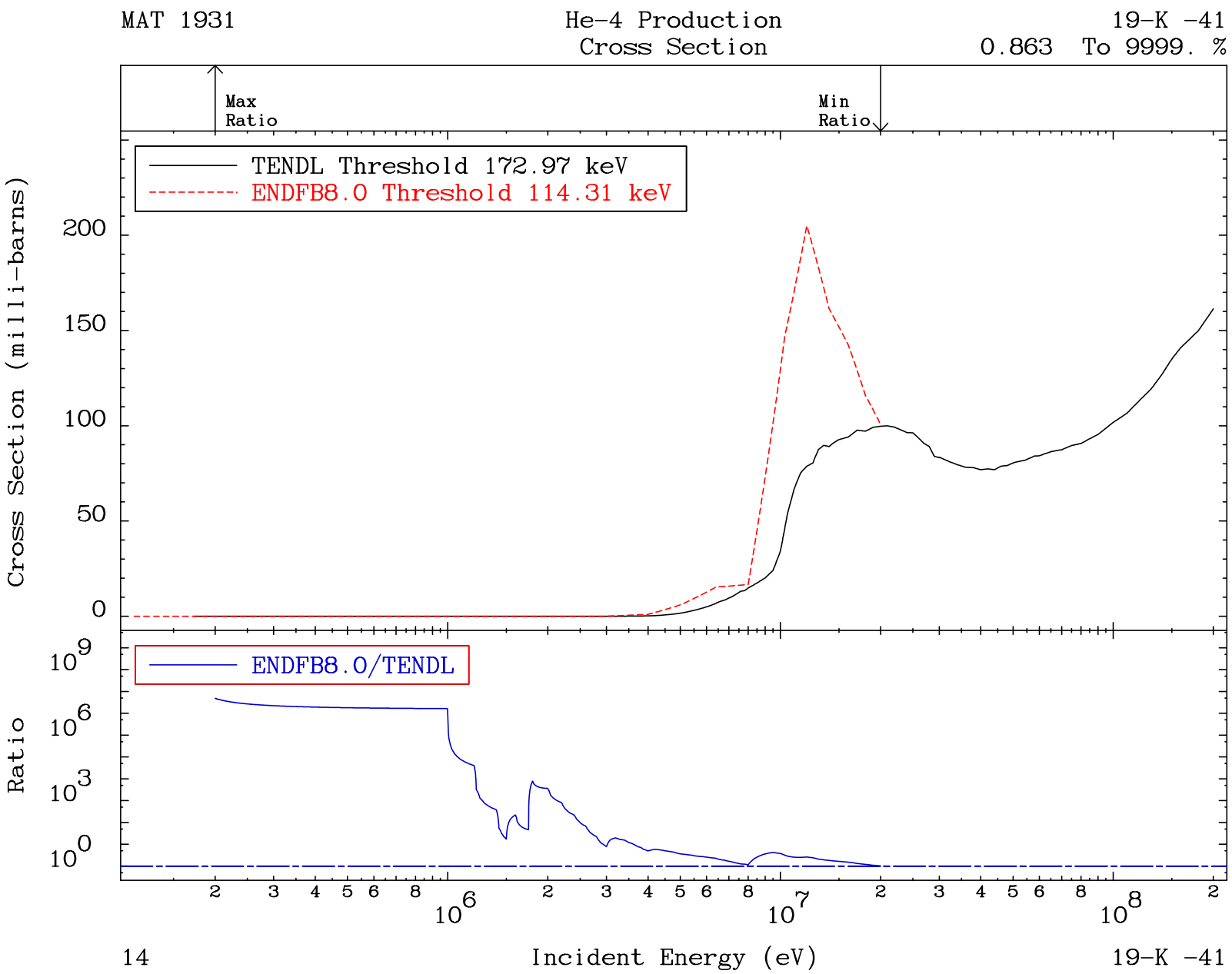

MAT 1931
(n,n') Continuum
Cross Section
19-K -41
-19.19 To 2843. %
Max Ratio
Min Ratio
TENDL Threshold 3.3093 MeV
ENDFB8.0 Threshold 1.5369 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
$10^1$
$10^0$
2 3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
9
Incident Energy (eV)
19-K -41

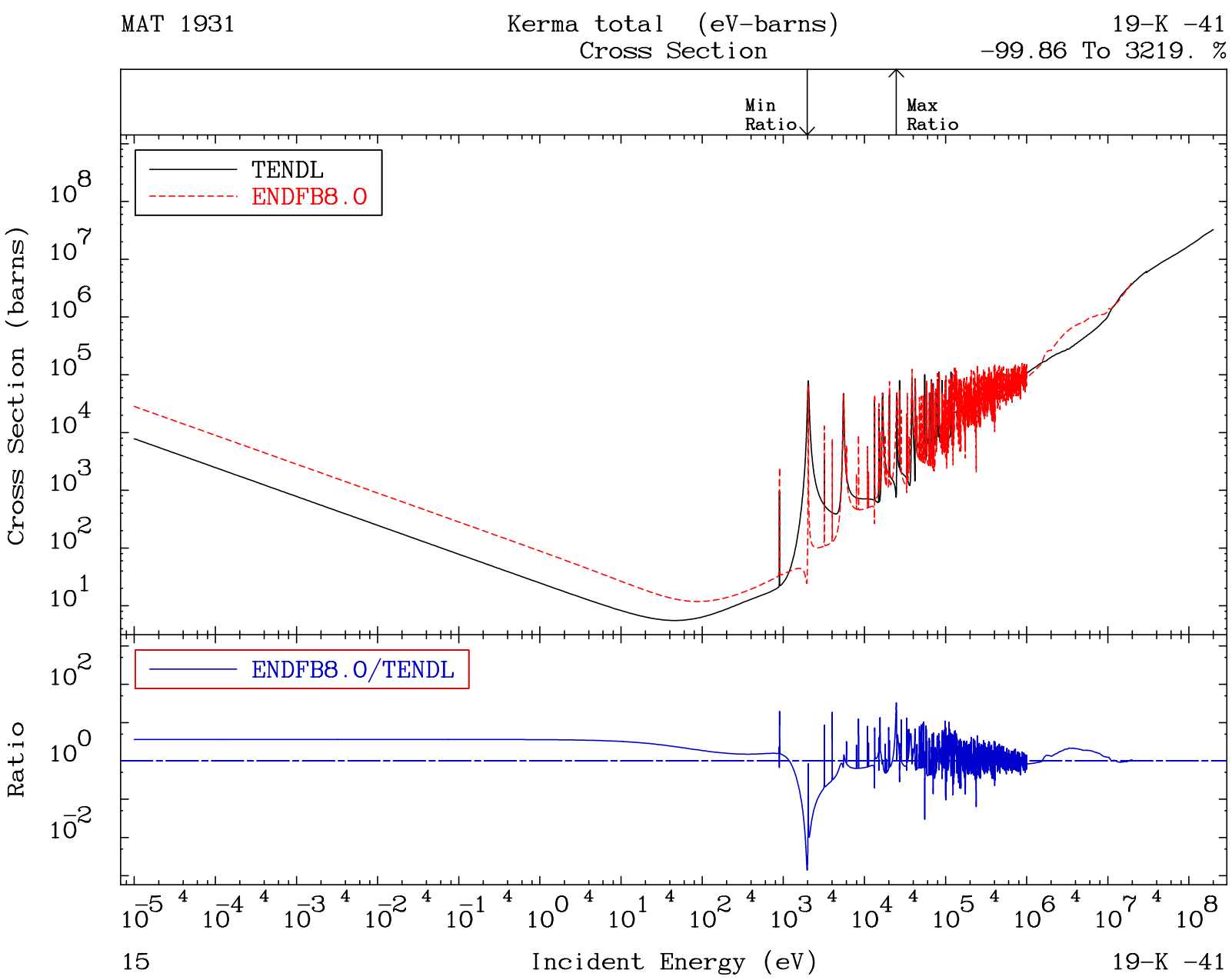

MAT 1931
(n,γ)
Cross Section
19-K -41
-99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
10
19-K -41

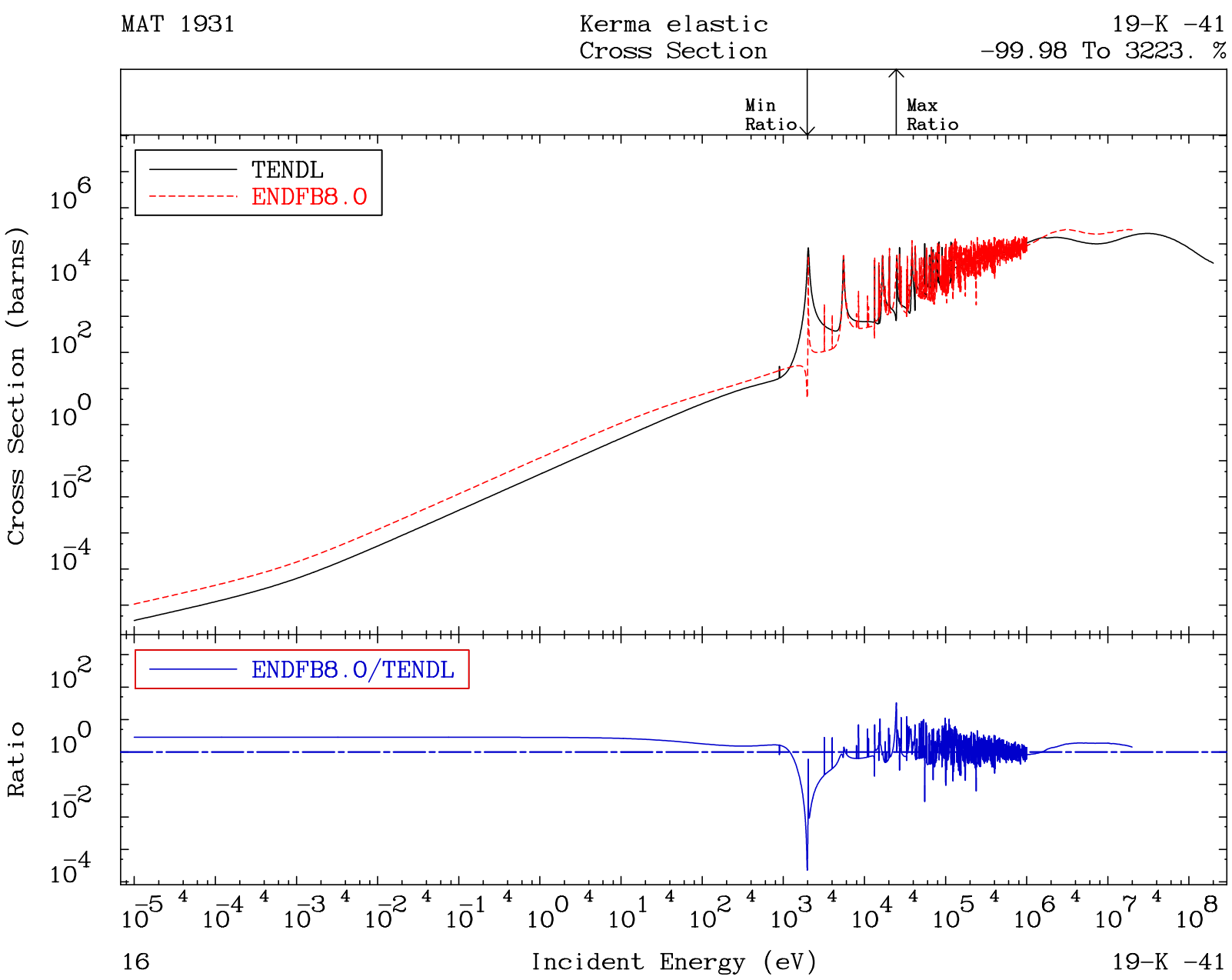

MAT 1931
(n,p)
Cross Section
19-K -41
-25.98 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8069 MeV
ENDFB8.0 Threshold 1.7518 MeV
Cross Section (milli-barns)
0
20
40
60
80
ENDFB8.0/TENDL
Ratio
$10^0$
$10^2$
$10^4$
$10^6$
2 3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
11
Incident Energy (eV)
19-K -41

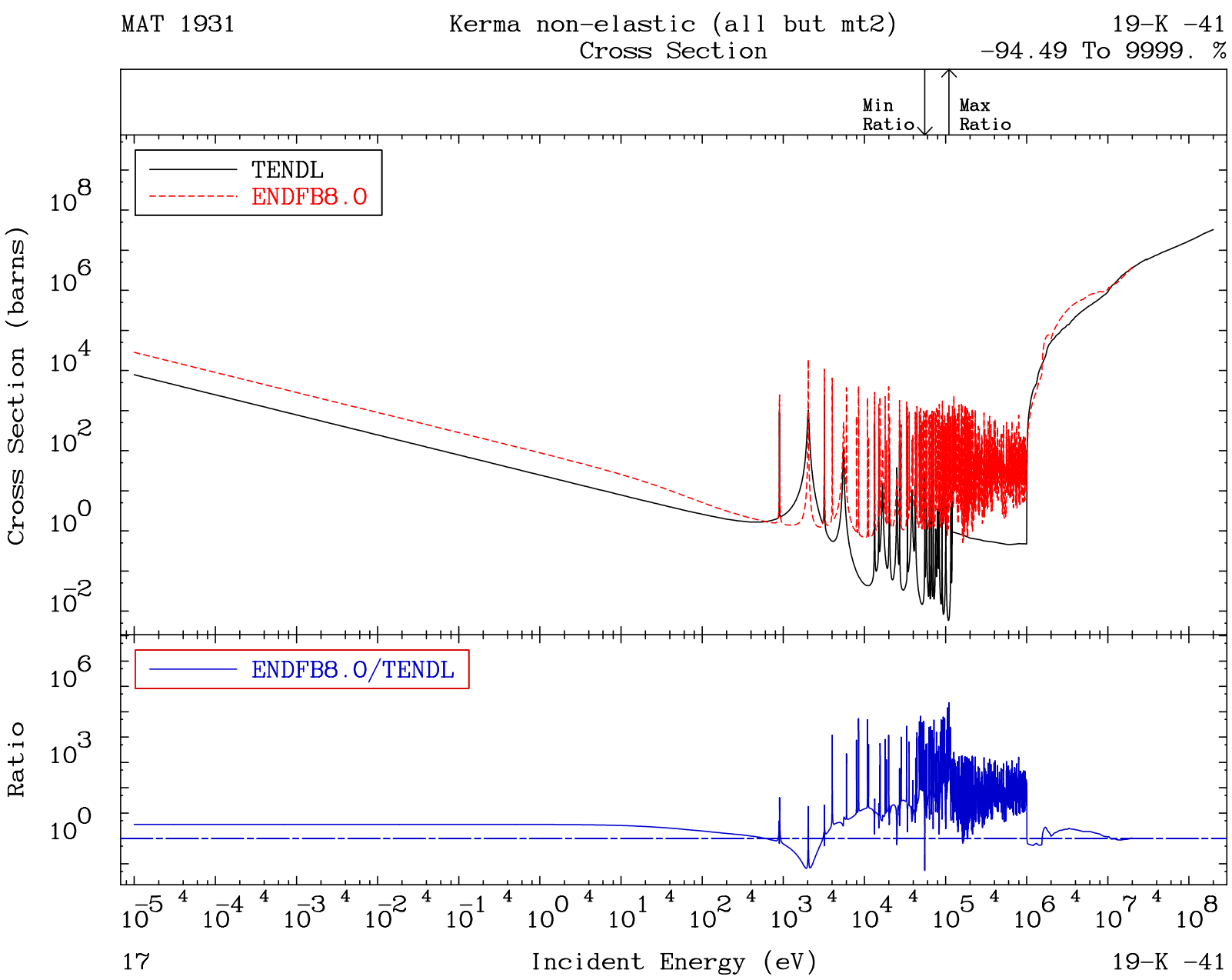

MAT 1931
(n,α)
Cross Section
19-K -41
-24.89 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 172.97 keV
ENDFB8.0 Threshold 114.31 keV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
19-K -41

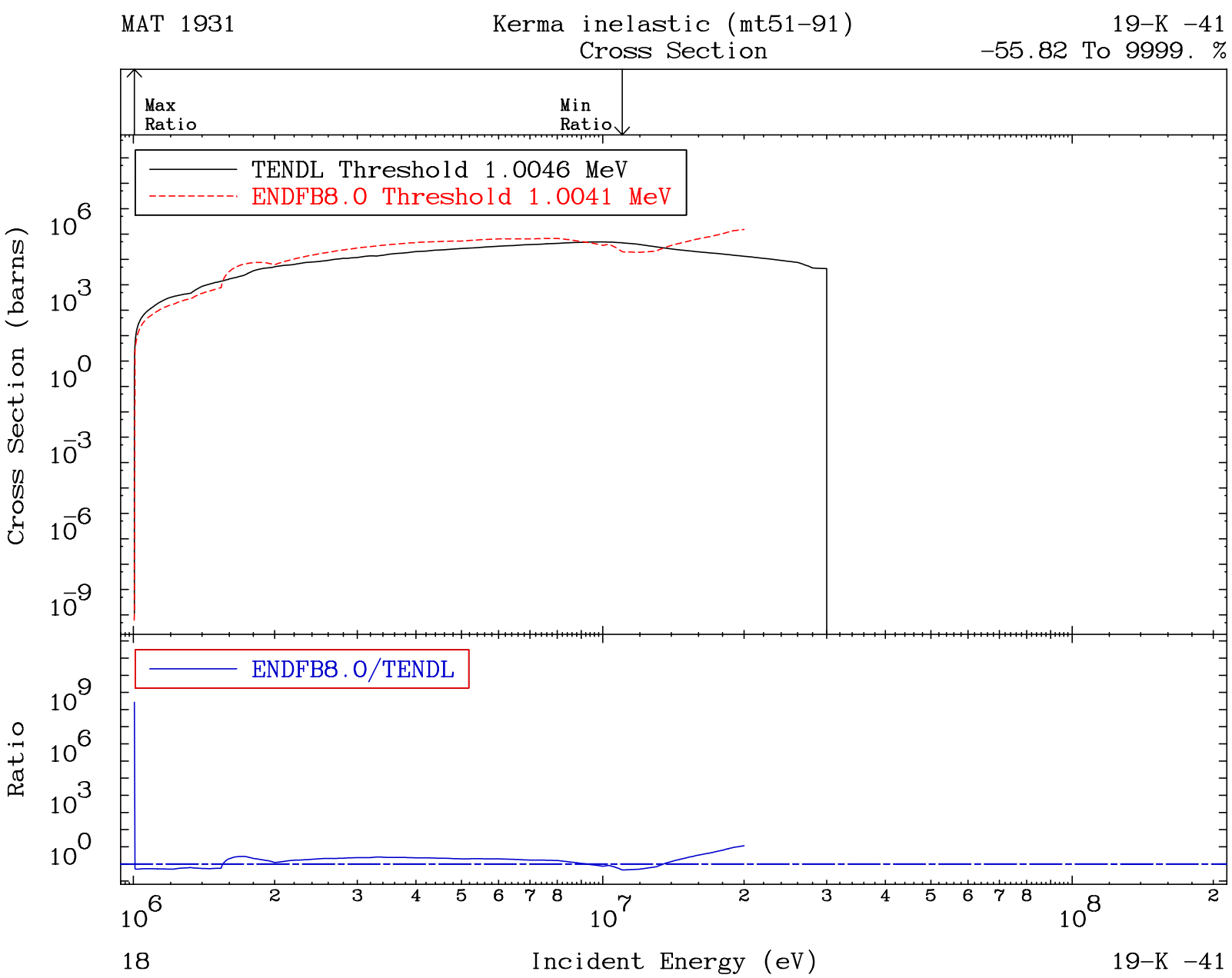

MAT 1931
Hydrogen Production
Cross Section
19-K -41
-48.71 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8069 MeV
ENDFB8.0 Threshold 1.7518 MeV
Cross Section (barns)
0.0
0.2
0.4
0.6
0.8
ENDFB8.0/TENDL
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
19-K -41

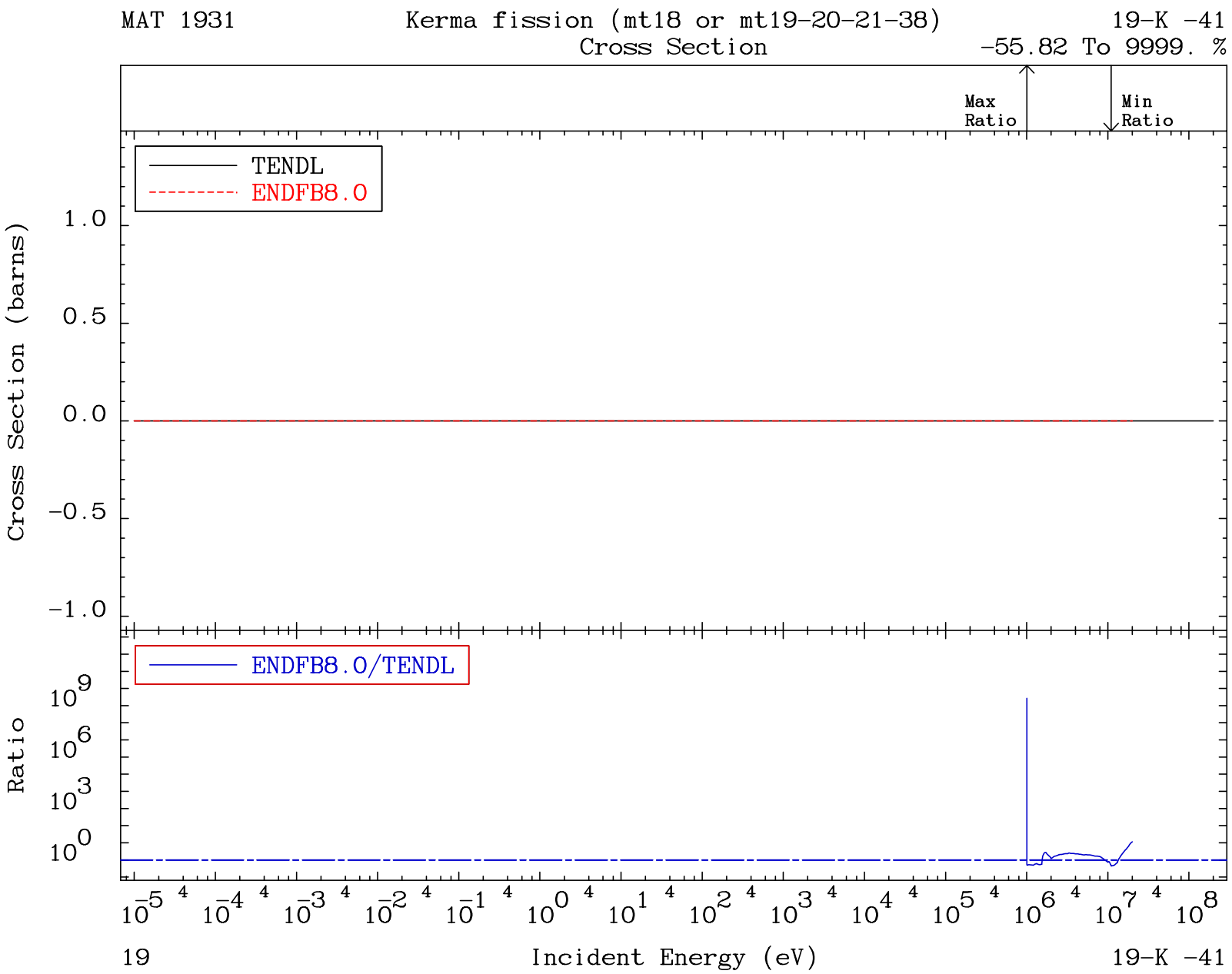

MAT 1931
He-4 Production
Cross Section
19-K -41
0.863 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 172.97 keV
ENDFB8.0 Threshold 114.31 keV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
19-K -41

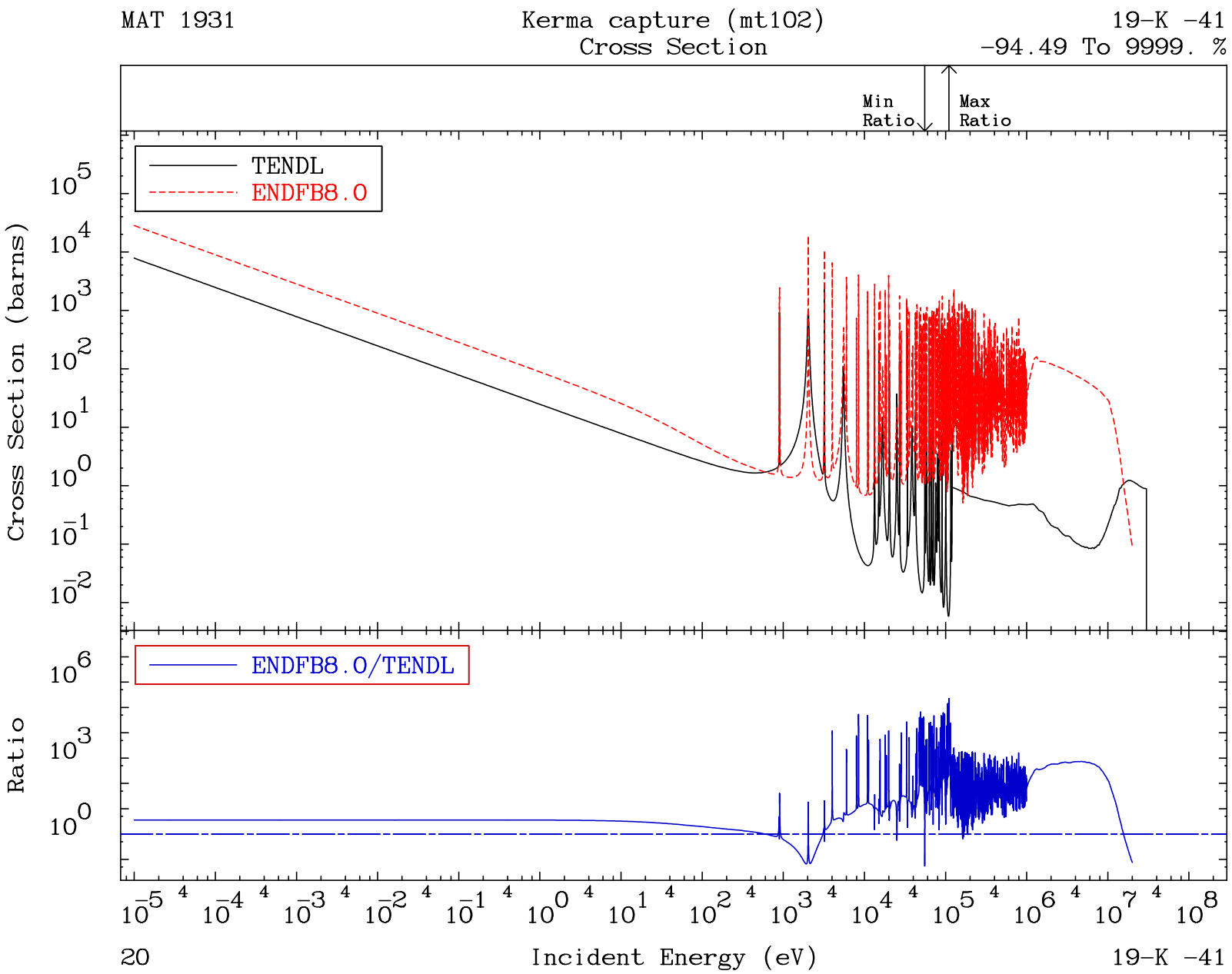

MAT 1931
Kerma total (eV-barns)
Cross Section
19-K -41
-99.86 To 3219. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
15
19-K -41

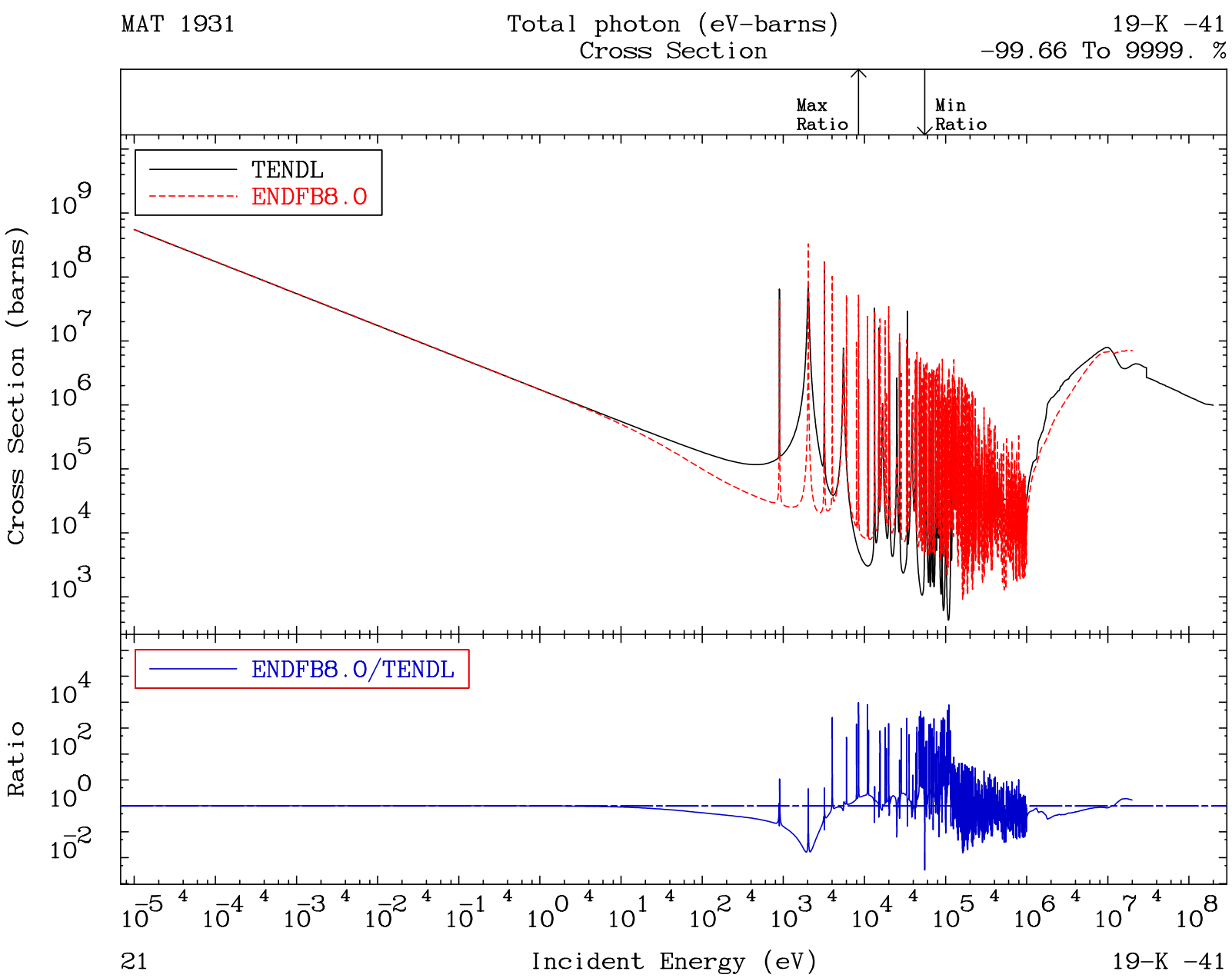

MAT 1931
Kerma elastic
Cross Section
19-K -41
-99.98 To 3223. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
16
19-K -41

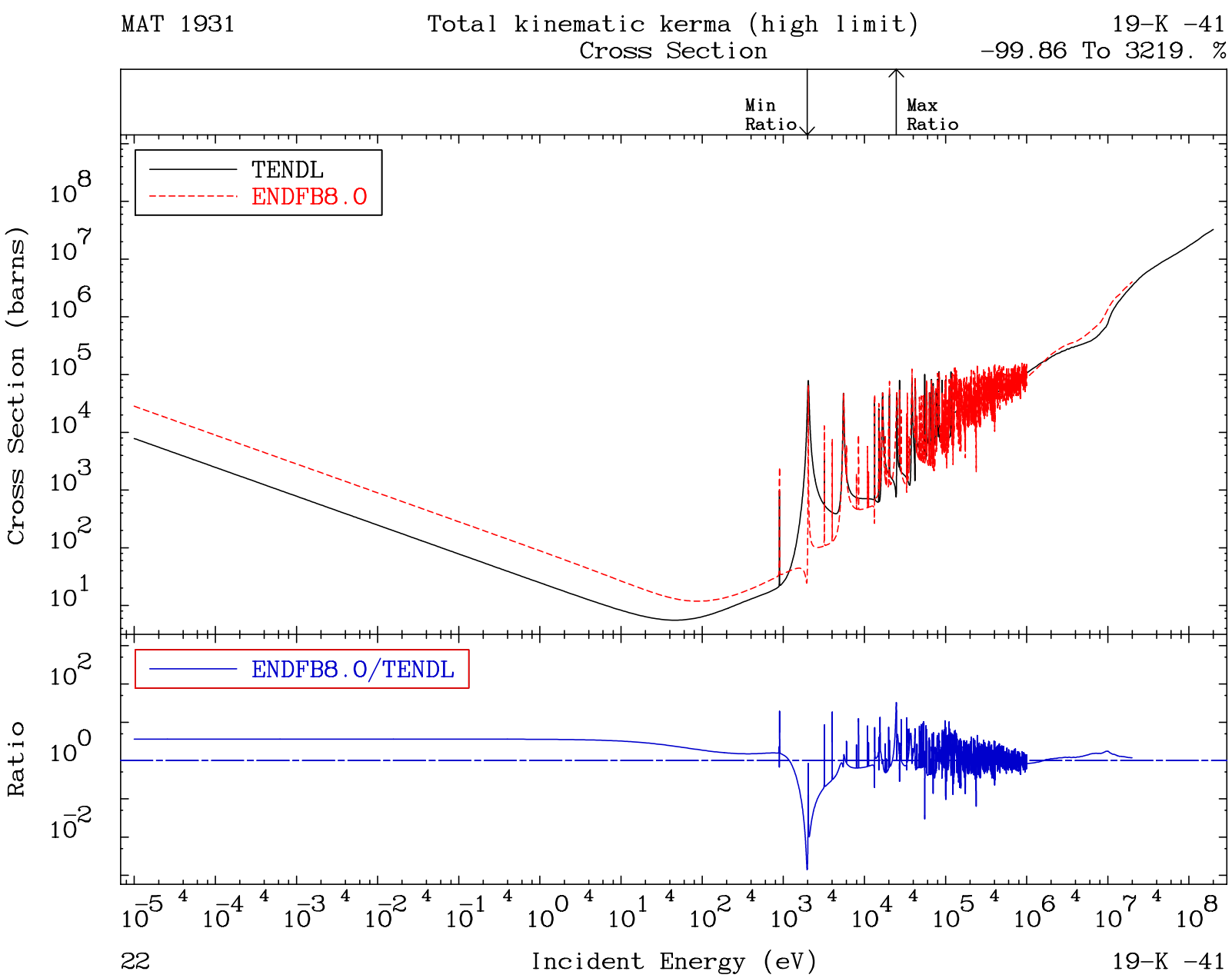

MAT 1931
Kerma non-elastic (all but mt2)
Cross Section
19-K -41
-94.49 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
17
19-K -41

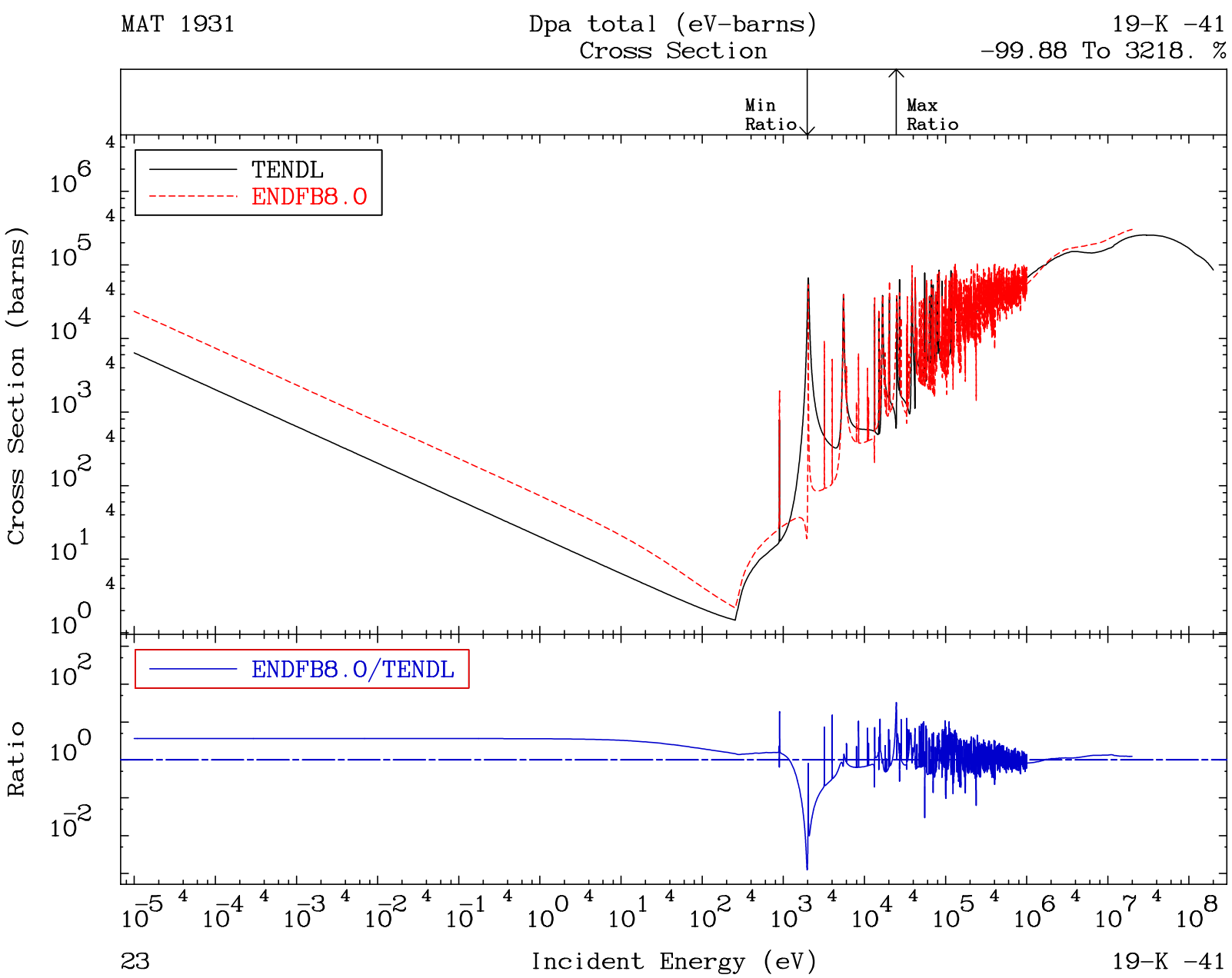

MAT 1931
Kerma inelastic (mt51-91)
Cross Section
19-K -41
-55.82 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.0046 MeV
ENDFB8.0 Threshold 1.0041 MeV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
18
19-K -41

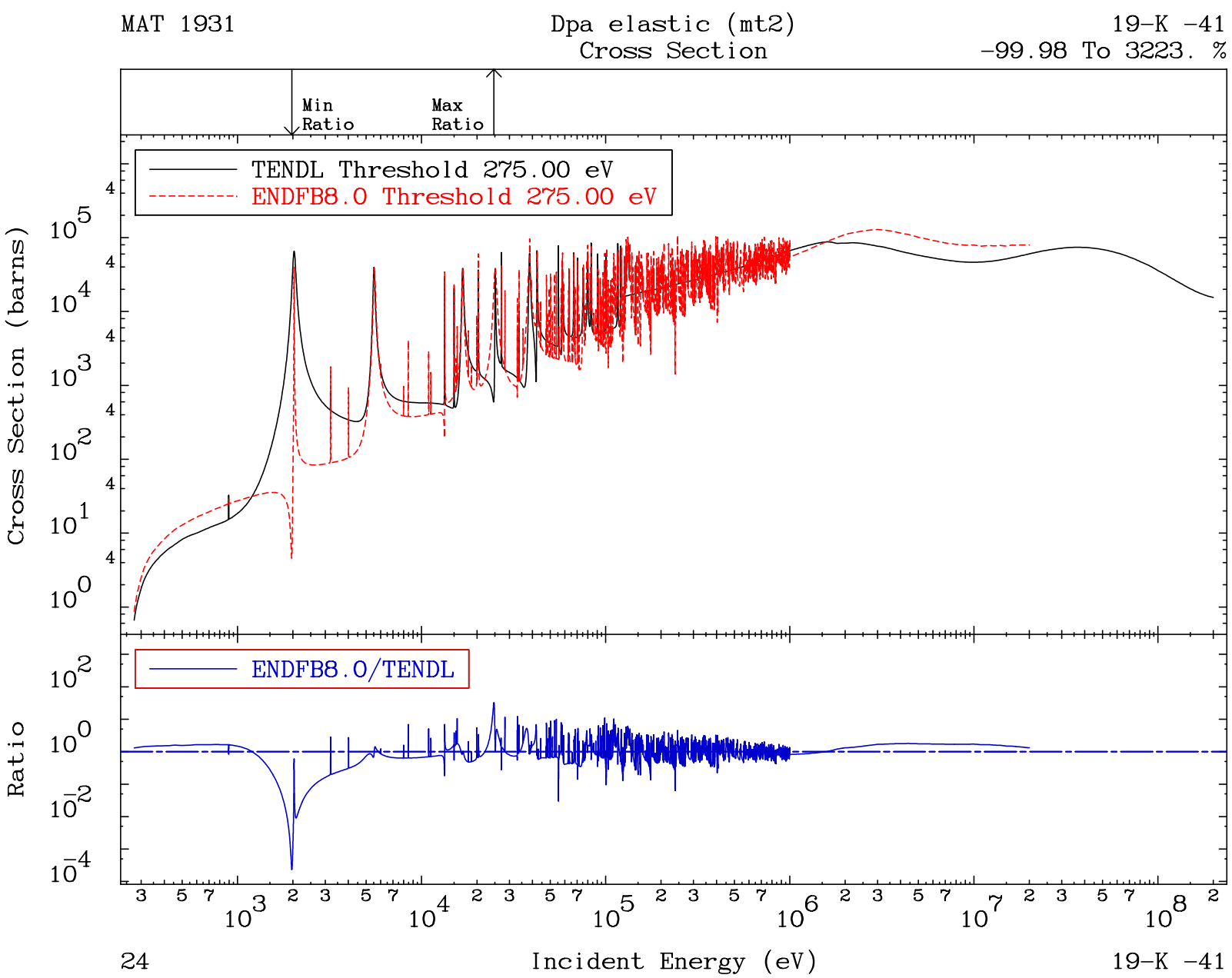

MAT 1931
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
19-K -41
-55.82 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
19
Incident Energy (eV)
19-K -41

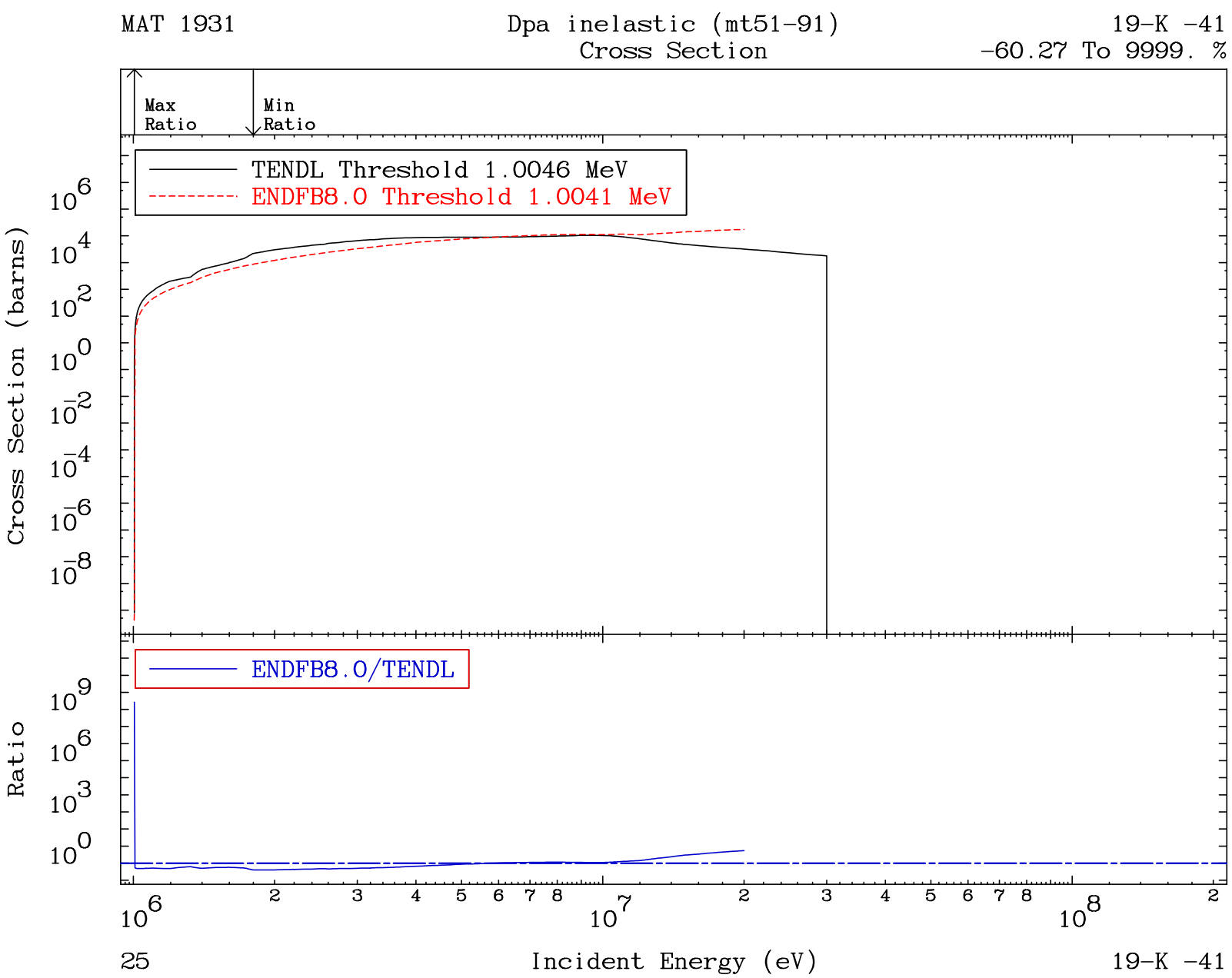

MAT 1931
Kerma capture (mt102)
Cross Section
19-K -41
-94.49 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
20
19-K -41

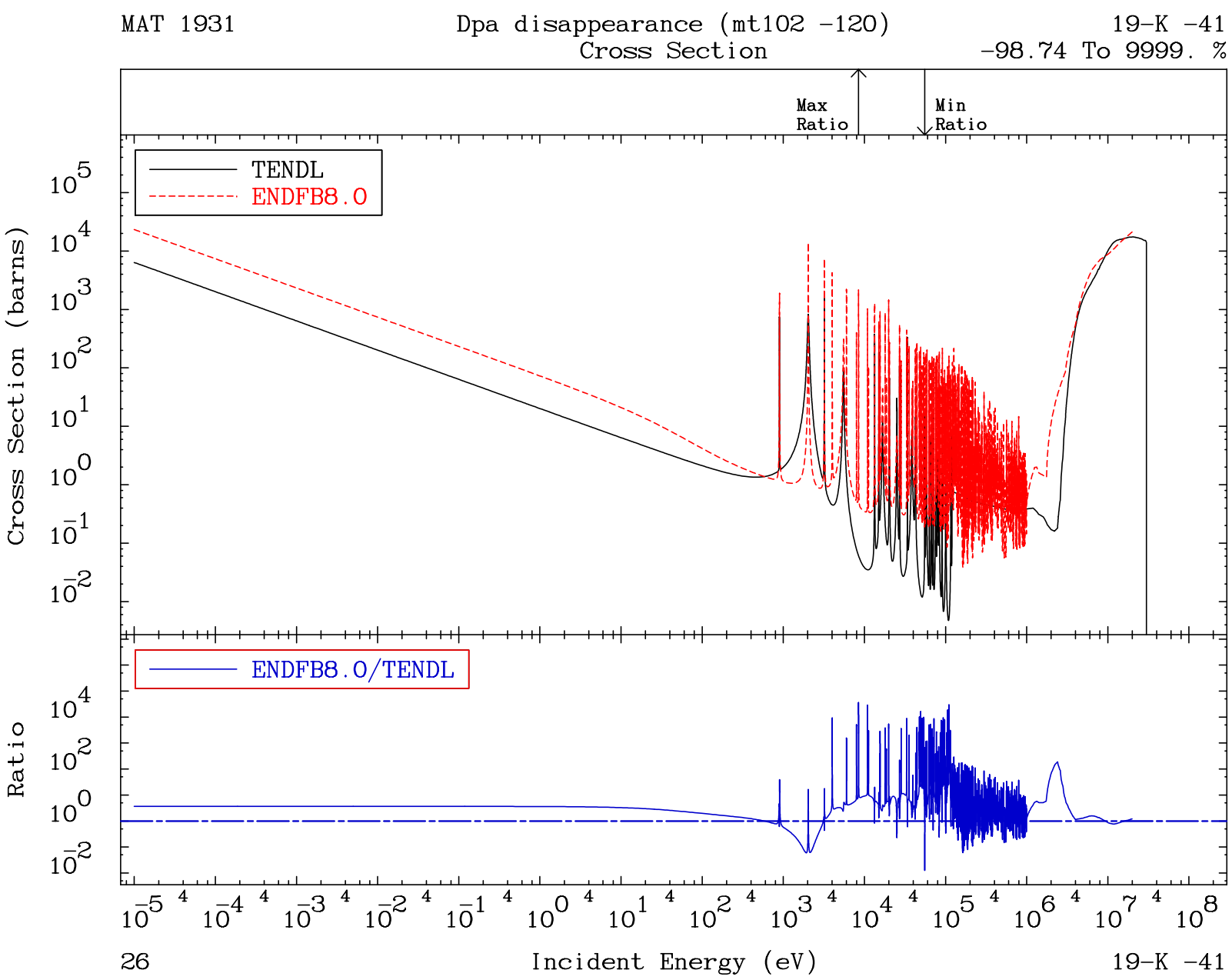

MAT 1931
Total photon (eV-barns)
Cross Section
19-K -41
-99.66 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
21
19-K -41


MAT 1931
Total kinematic kerma (high limit)
Cross Section
19-K -41
-99.86 To 3219. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
22
19-K -41


MAT 1931
Dpa total (eV-barns)
Cross Section
19-K -41
-99.88 To 3218. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
23
19-K -41


MAT 1931
Dpa elastic (mt2)
Cross Section
19-K -41
-99.98 To 3223. %
Min Ratio
Max Ratio
TENDL Threshold 275.00 eV
ENDFB8.0 Threshold 275.00 eV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
24
19-K -41


MAT 1931
Dpa inelastic (mt51-91)
Cross Section
19-K -41
-60.27 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.0046 MeV
ENDFB8.0 Threshold 1.0041 MeV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
25
19-K -41


MAT 1931
Dpa disappearance (mt102 -120)
Cross Section
19-K -41
-98.74 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
26
19-K -41