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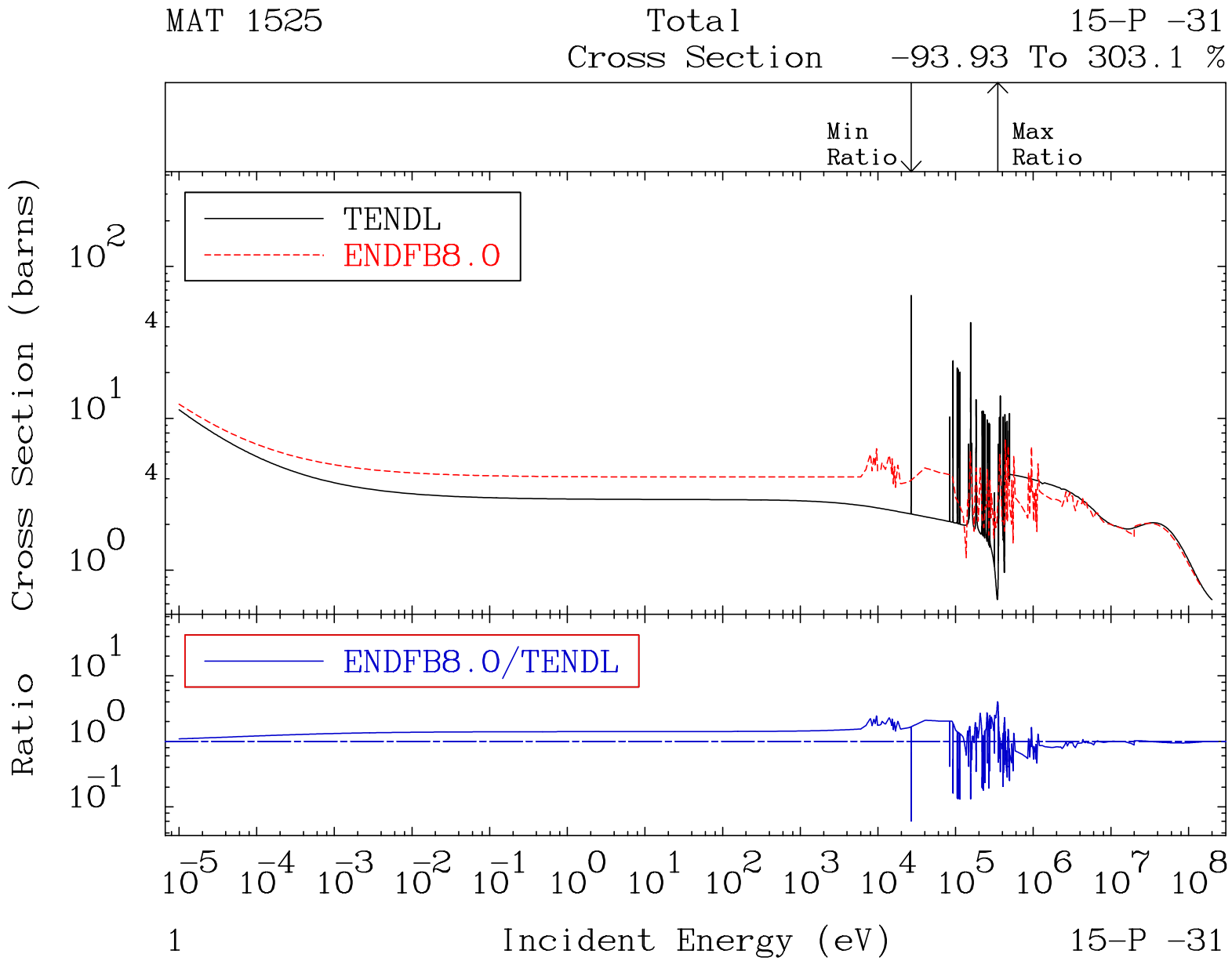
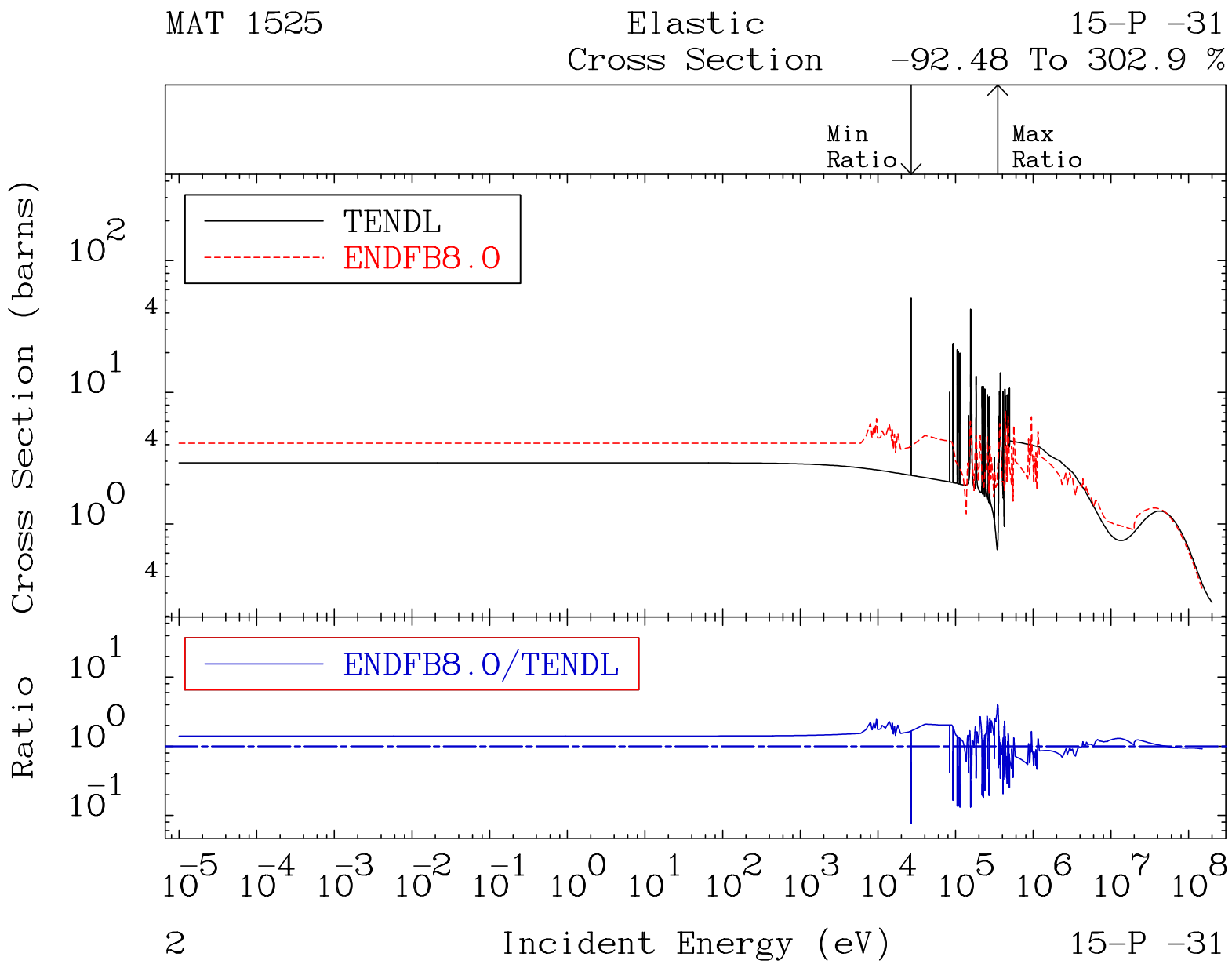
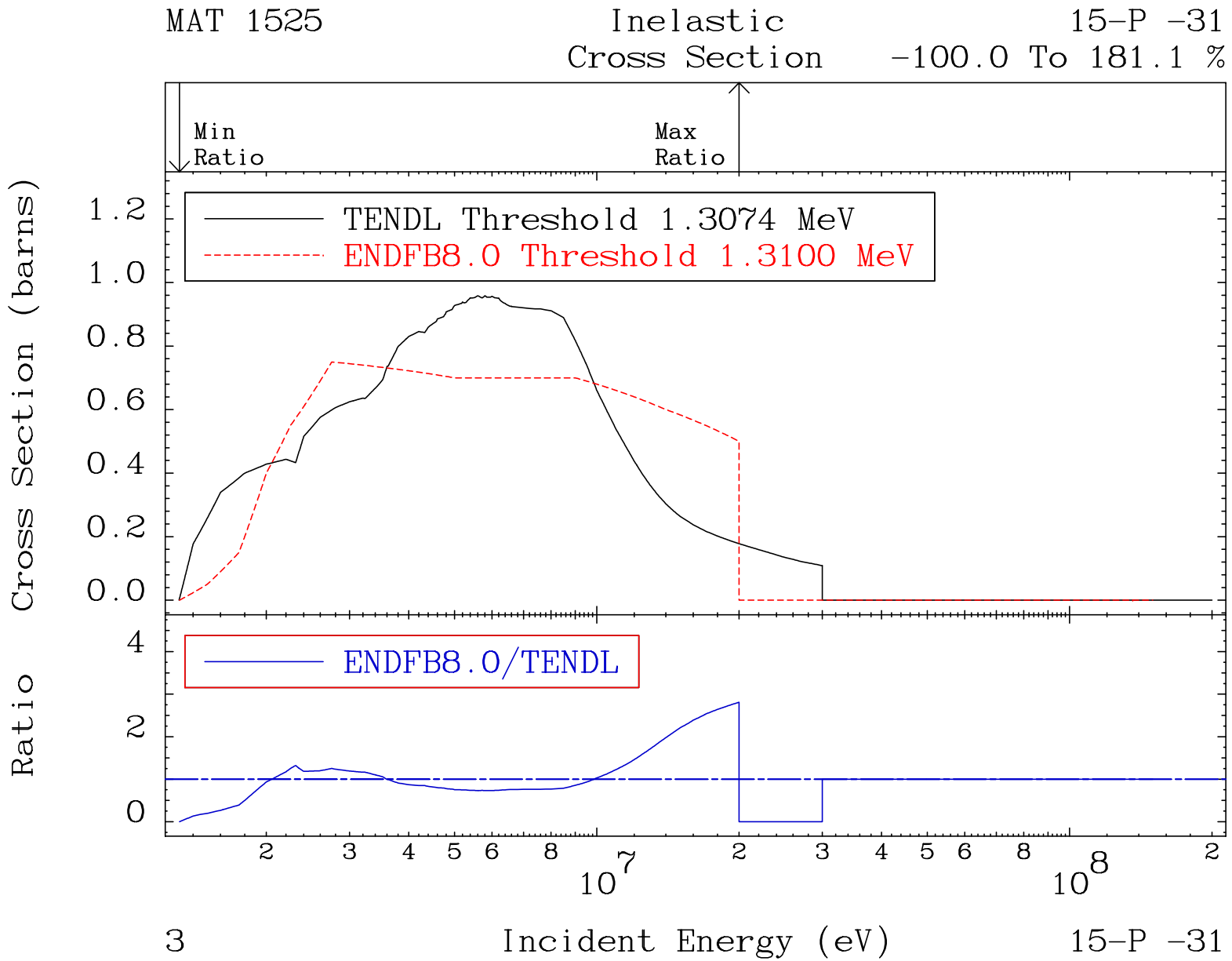
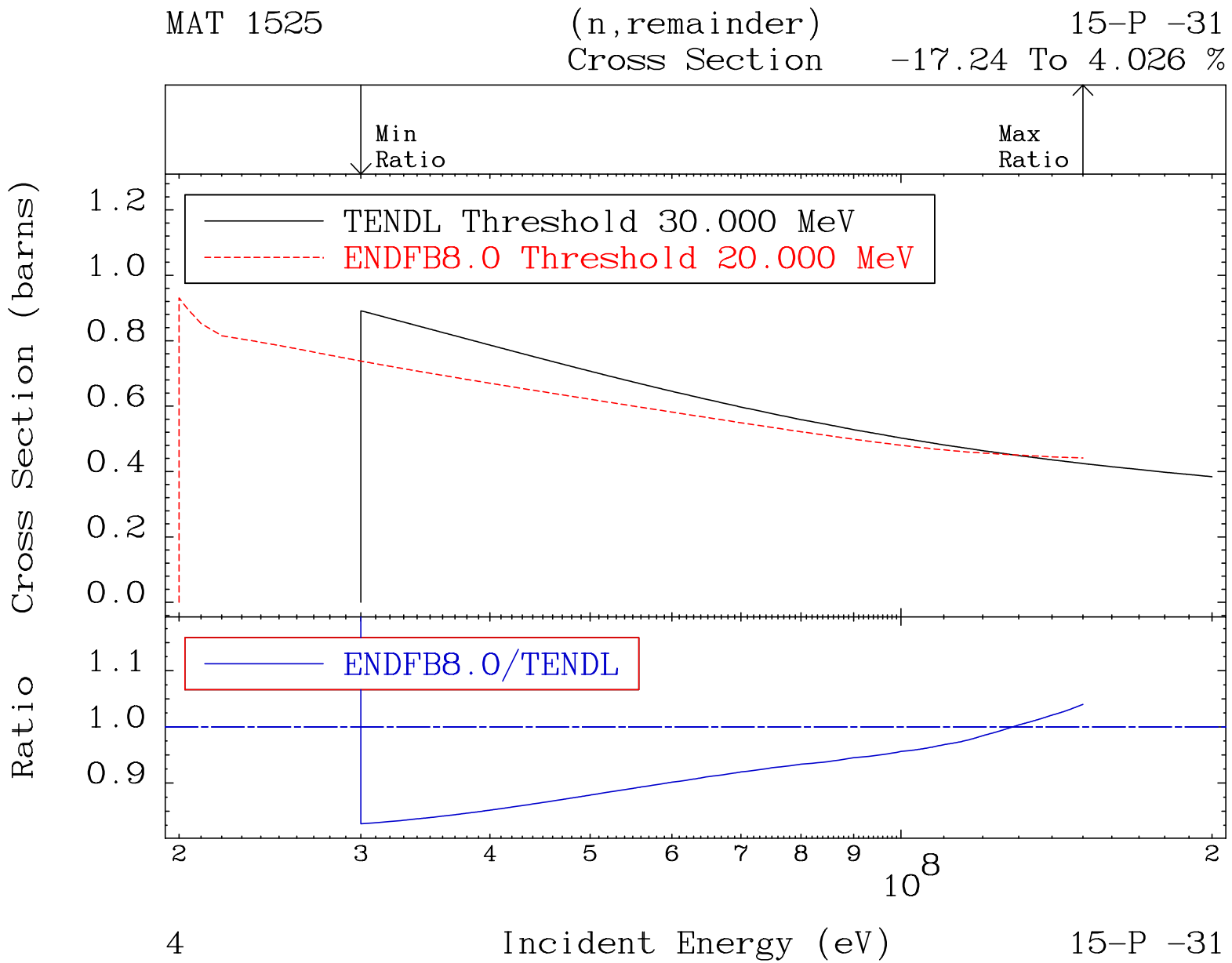
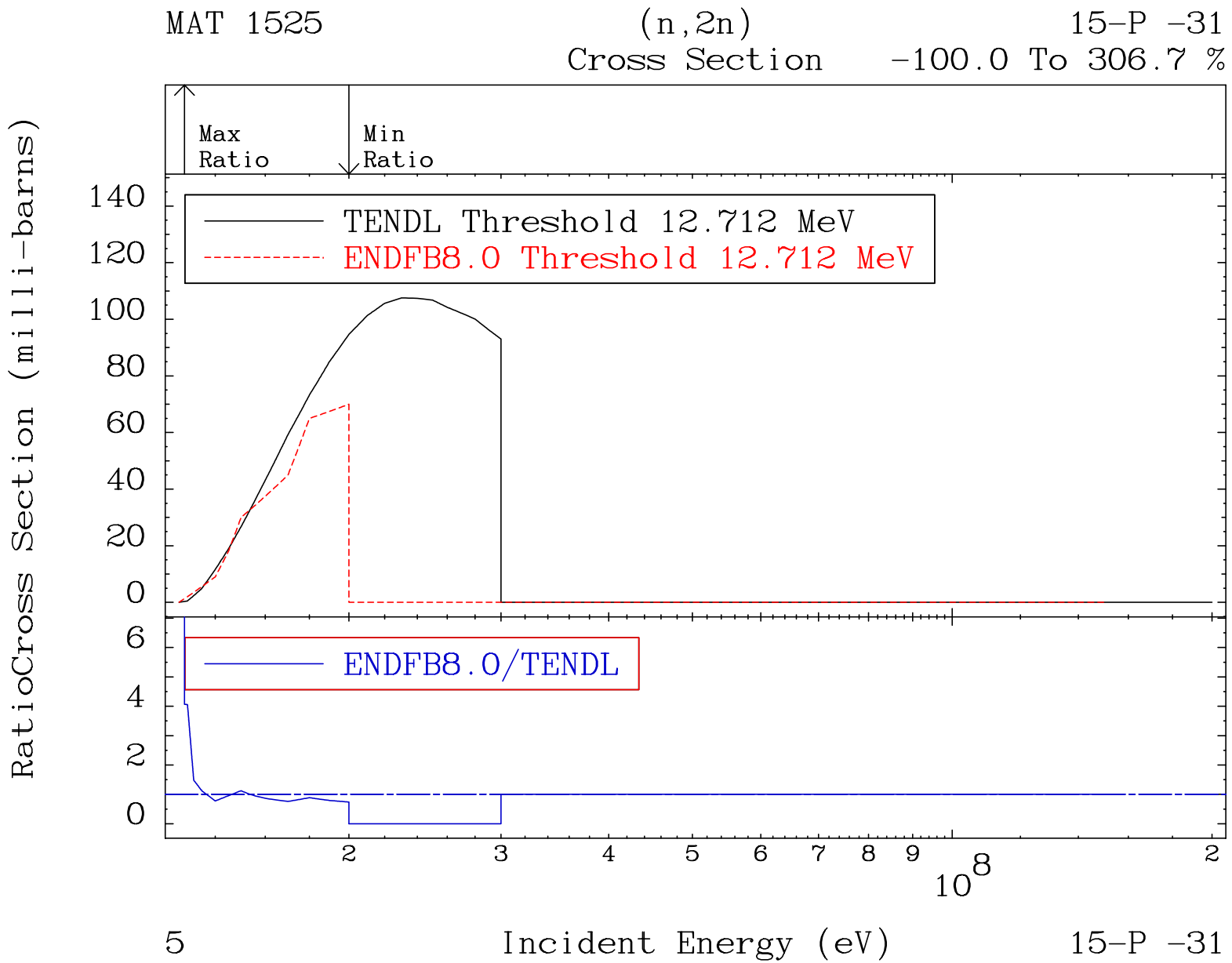
Press Mouse Button to Start

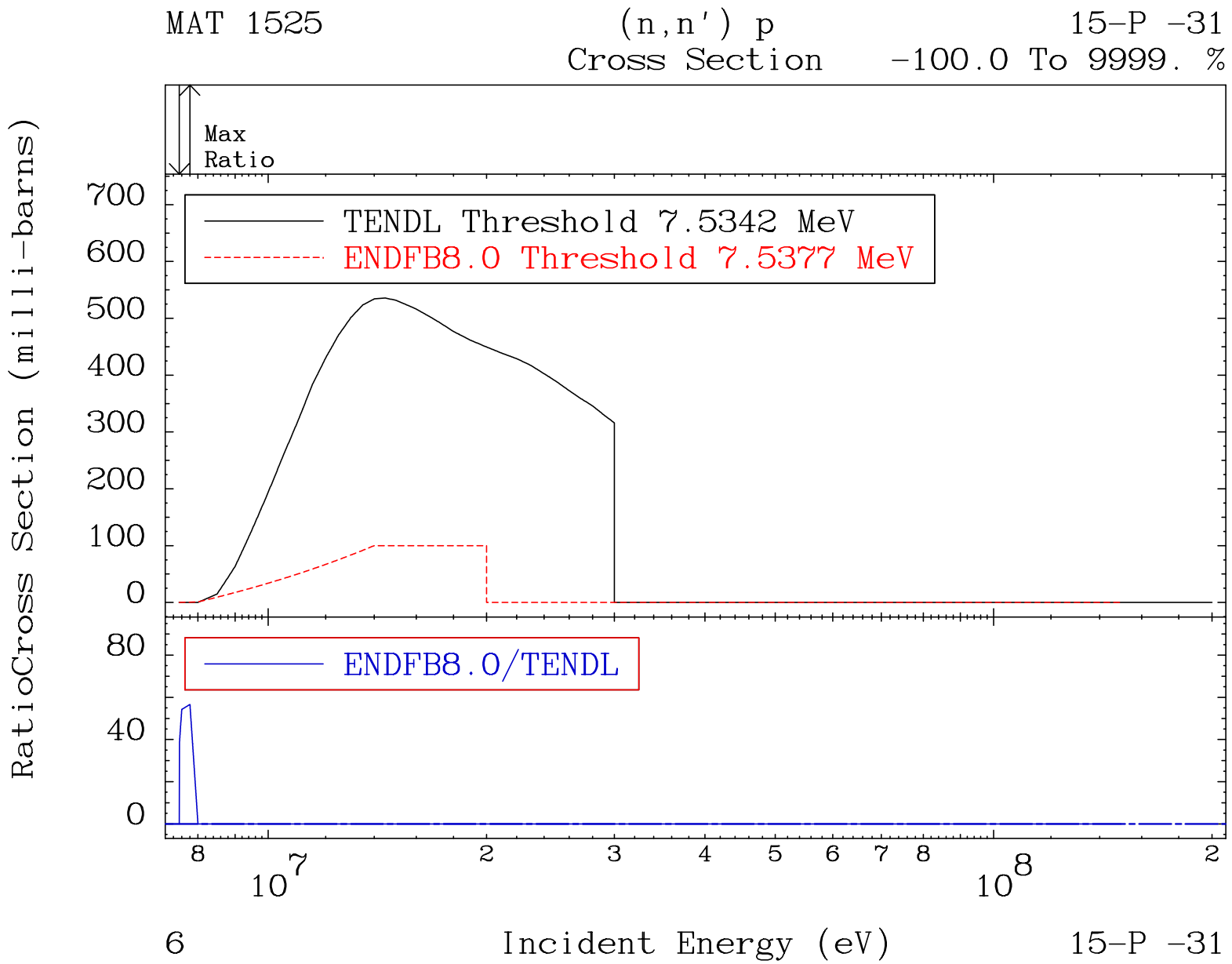

MAT 1525
Total
Cross Section
15-P -31
-93.93 To 303.1 %
Min
Ratio
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
15-P -31

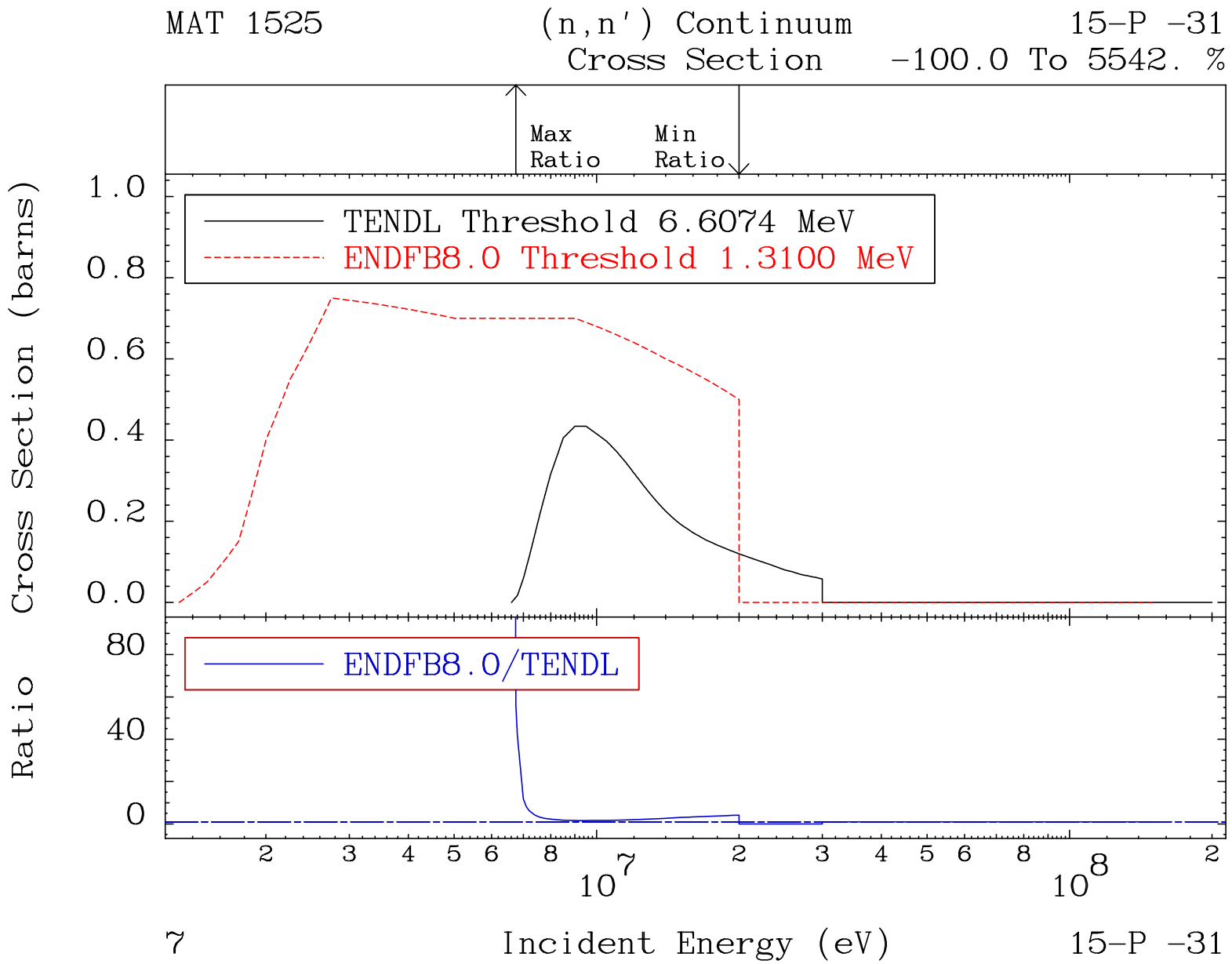

MAT 1525
Elastic
Cross Section
15-P -31
-92.48 To 302.9 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
15-P -31

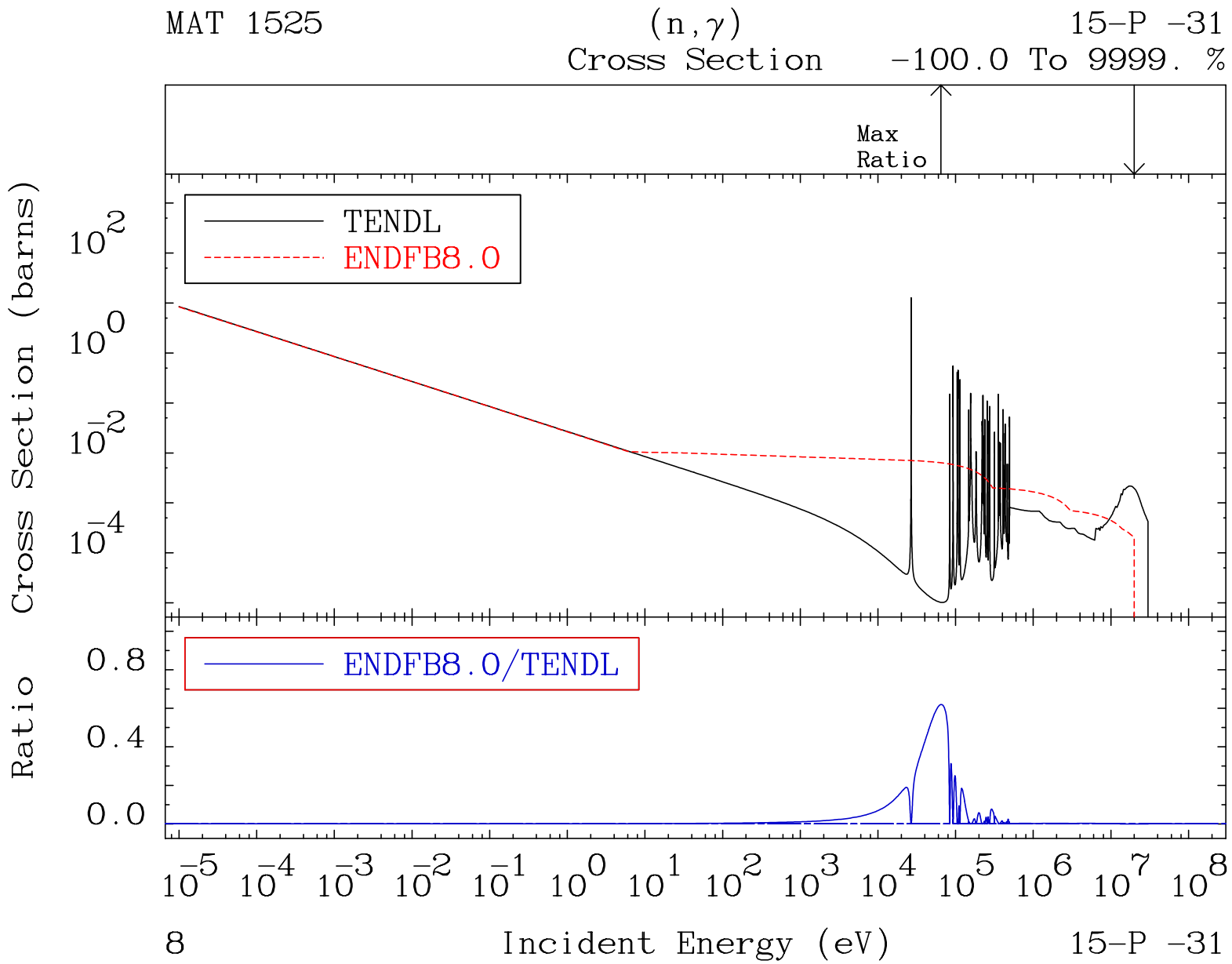

MAT 1525
Inelastic
Cross Section
15-P -31
-100.0 To 181.1 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.3074 MeV
ENDFB8.0 Threshold 1.3100 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
15-P -31

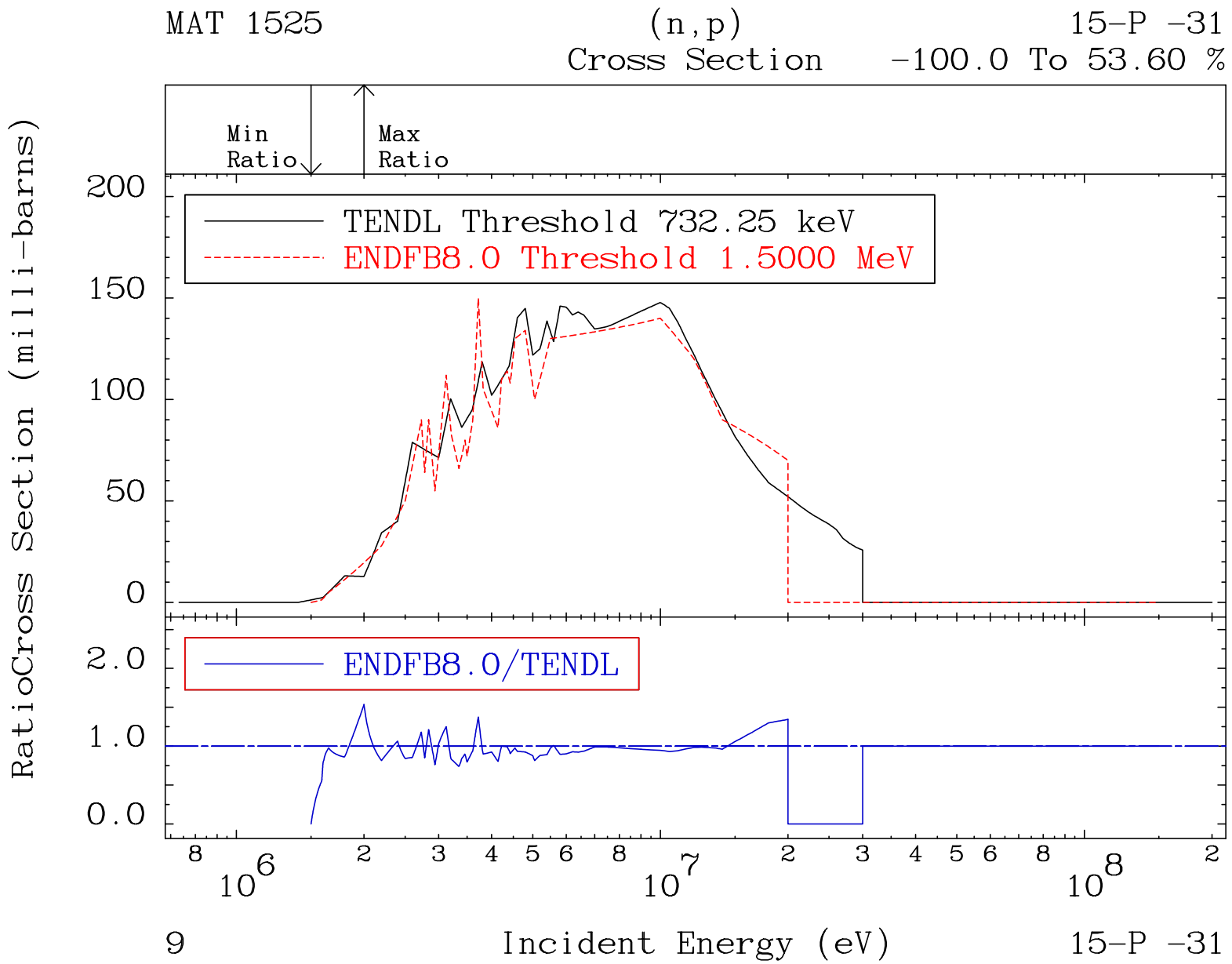

MAT 1525
(n,remainder)
Cross Section
15-P -31
-17.24 To 4.026 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
ENDFB8.0 Threshold 20.000 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.1
1.0
0.9
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
15-P -31

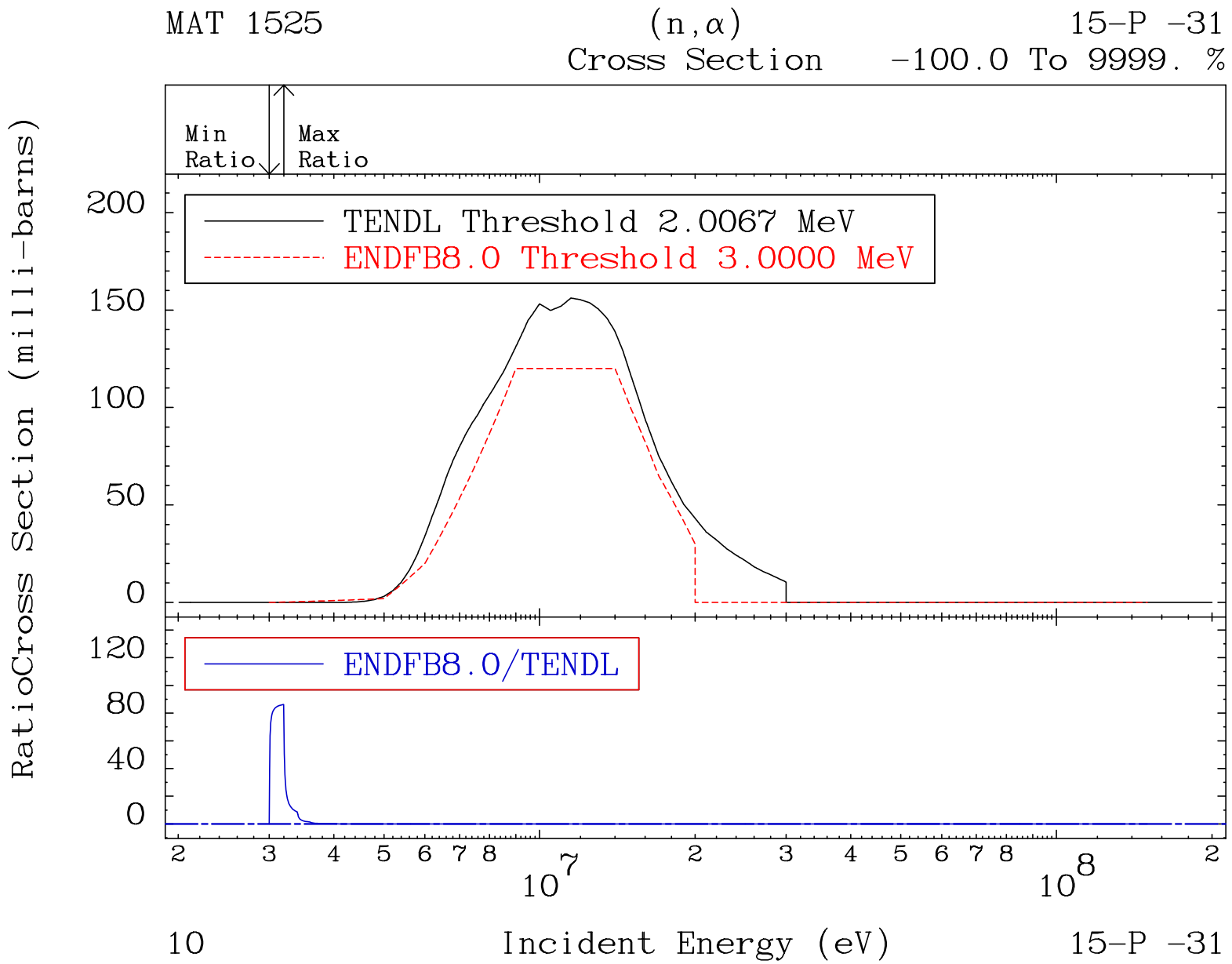

MAT 1525
(n,2n)
Cross Section
15-P -31
-100.0 To 306.7 %
Max Ratio
Min Ratio
TENDL Threshold 12.712 MeV
ENDFB8.0 Threshold 12.712 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
6
4
2
0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
15-P -31

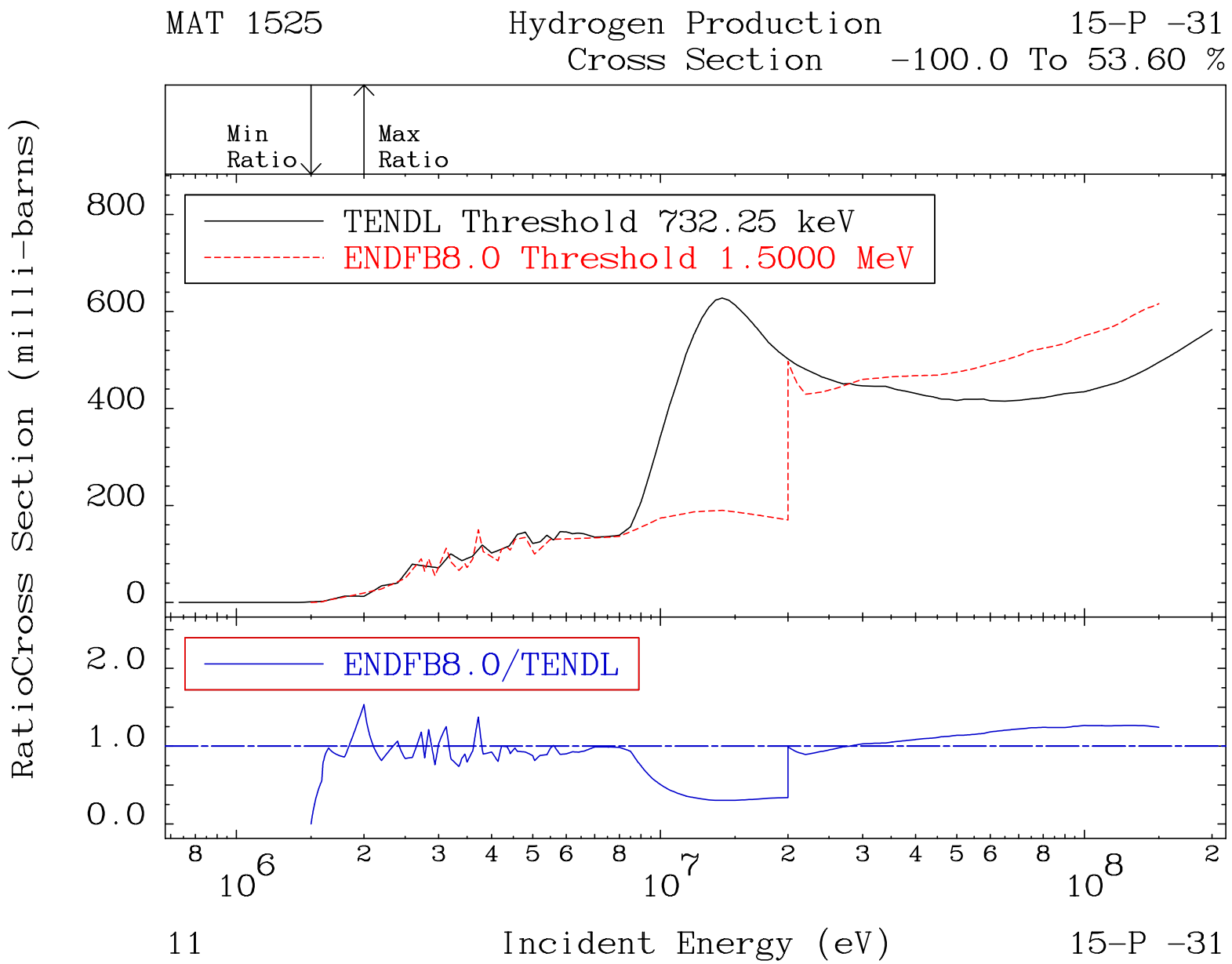

MAT 1525
(n,n') p
Cross Section
15-P -31
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 7.5342 MeV
ENDFB8.0 Threshold 7.5377 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
80
40
0
8
2
3
4
5
6
7
8
2
10^7
10^8
Incident Energy (eV)
6
15-P -31

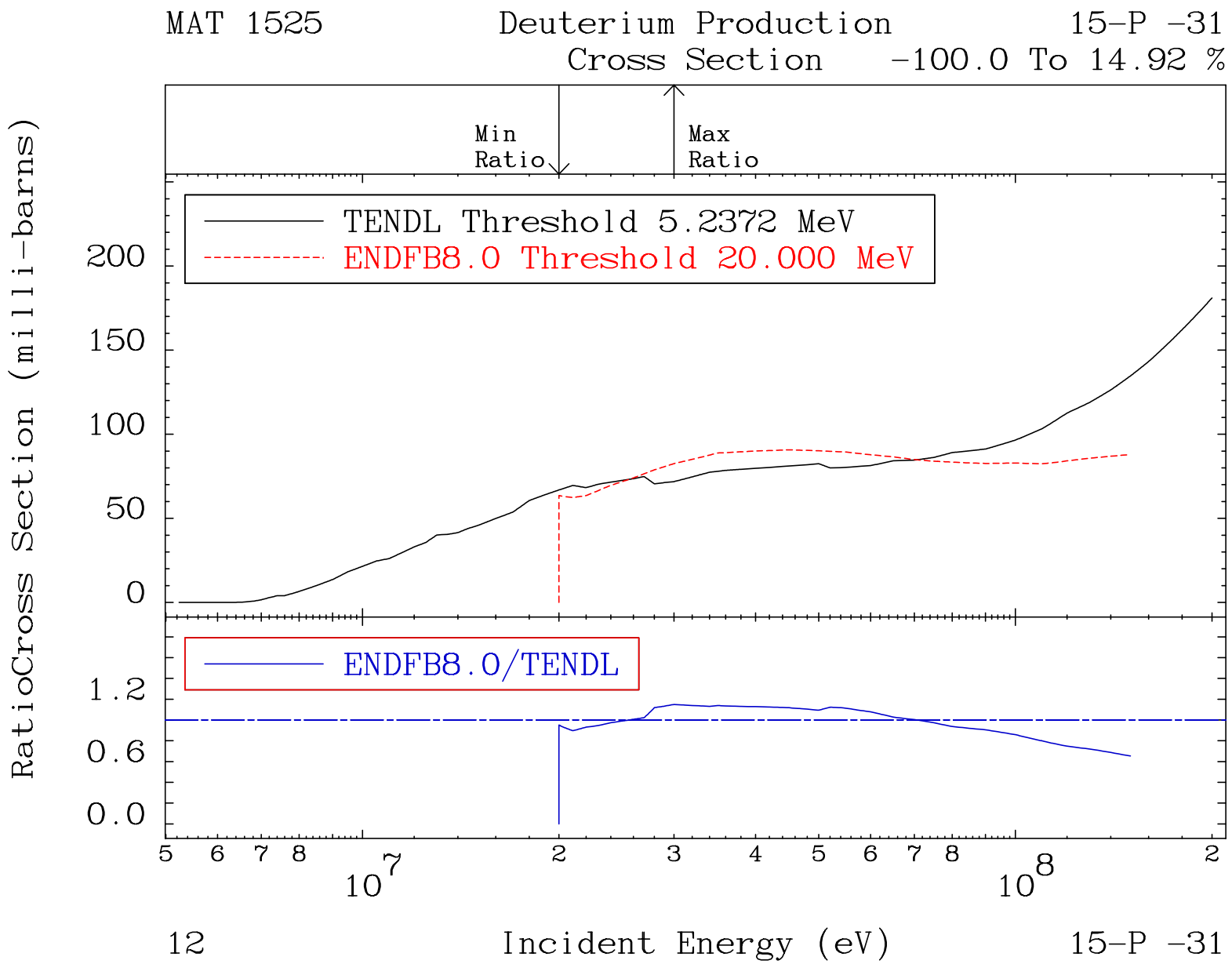

MAT 1525
(n,n') Continuum
15-P -31
Cross Section
-100.0 To 5542. %
Max Ratio
Min Ratio
TENDL Threshold 6.6074 MeV
ENDFB8.0 Threshold 1.3100 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
80
40
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
7
Incident Energy (eV)
15-P -31

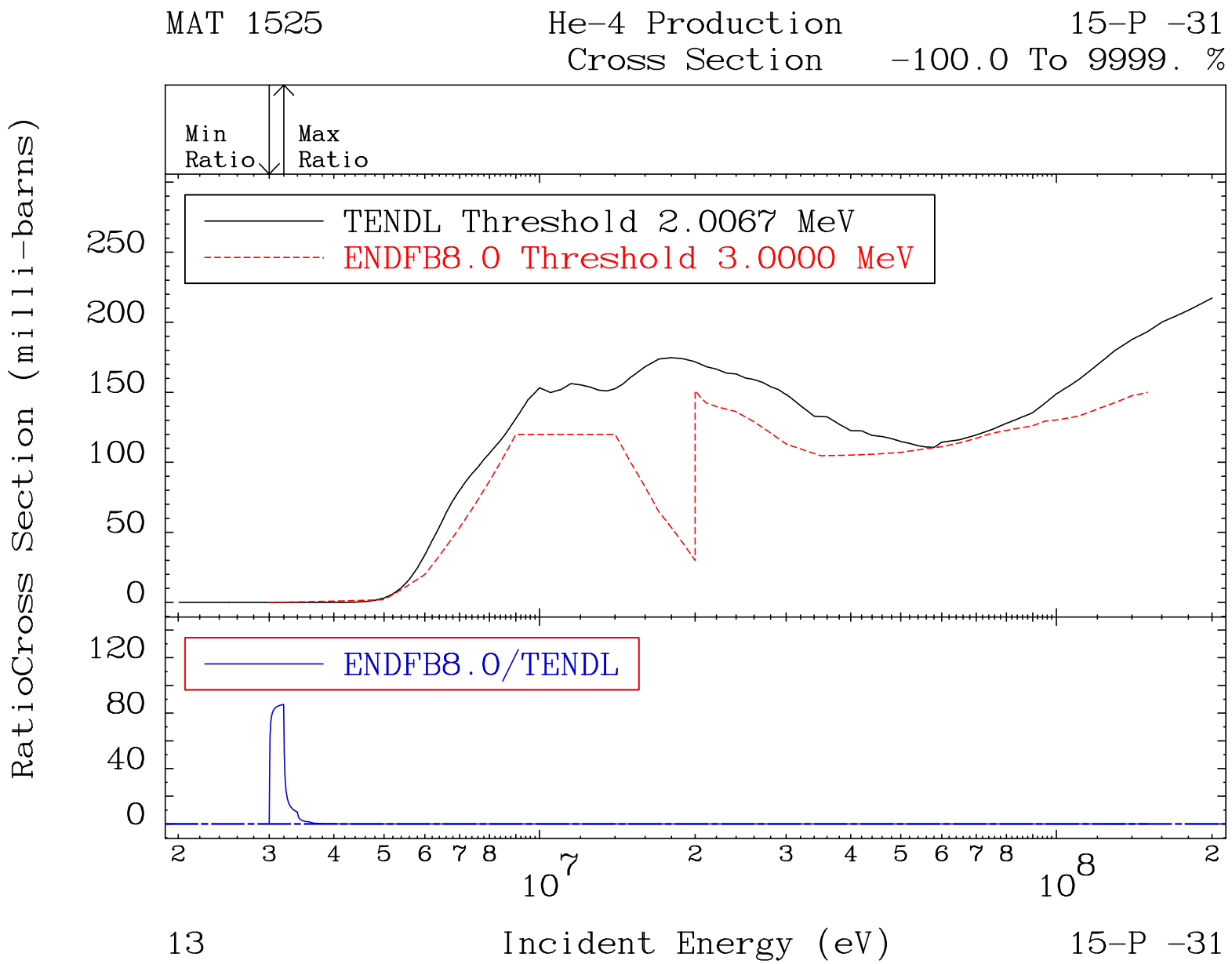

MAT 1525
(n,γ)
Cross Section
15-P -31
-100.0 To 9999. %
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
8
15-P -31

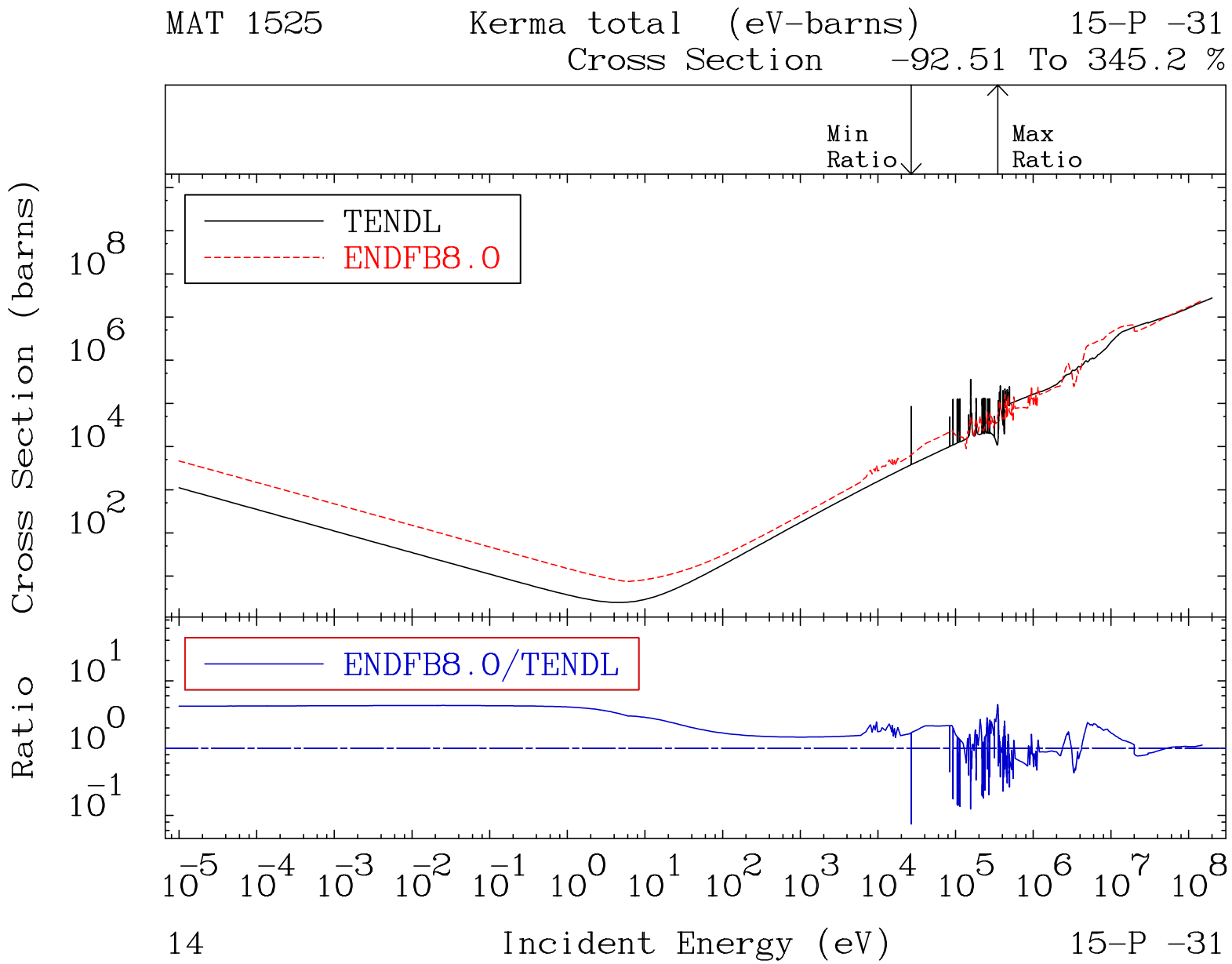

MAT 1525
(n,p)
15-P -31
Cross Section
-100.0 To 53.60 %
Min Ratio
Max Ratio
TENDL Threshold 732.25 keV
ENDFB8.0 Threshold 1.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
8
2
3
4
5
6
8
10^6
10^7
10^8
9
Incident Energy (eV)
15-P -31

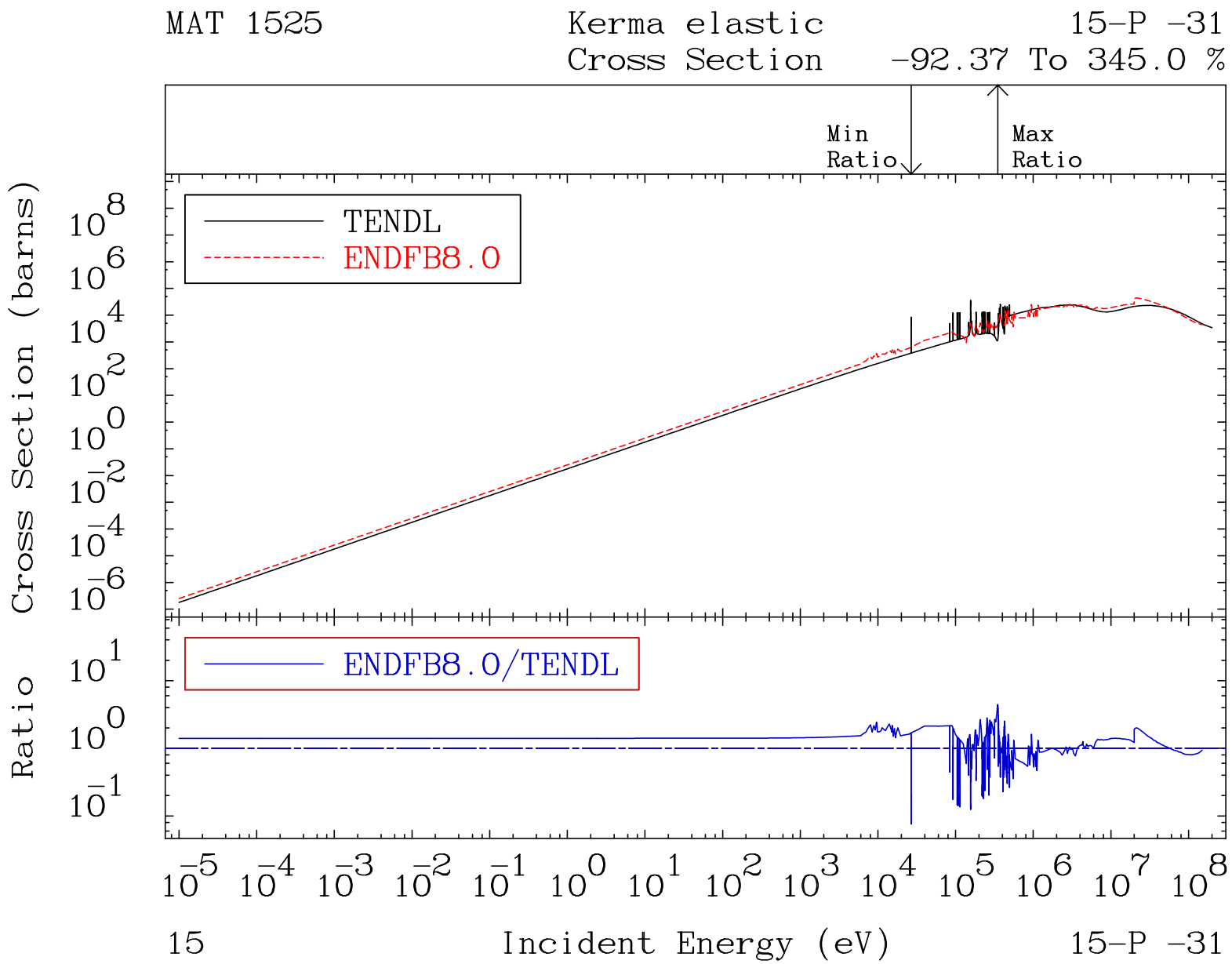

MAT 1525
(n,α)
15-P -31
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0067 MeV
ENDFB8.0 Threshold 3.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
120
80
40
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
15-P -31

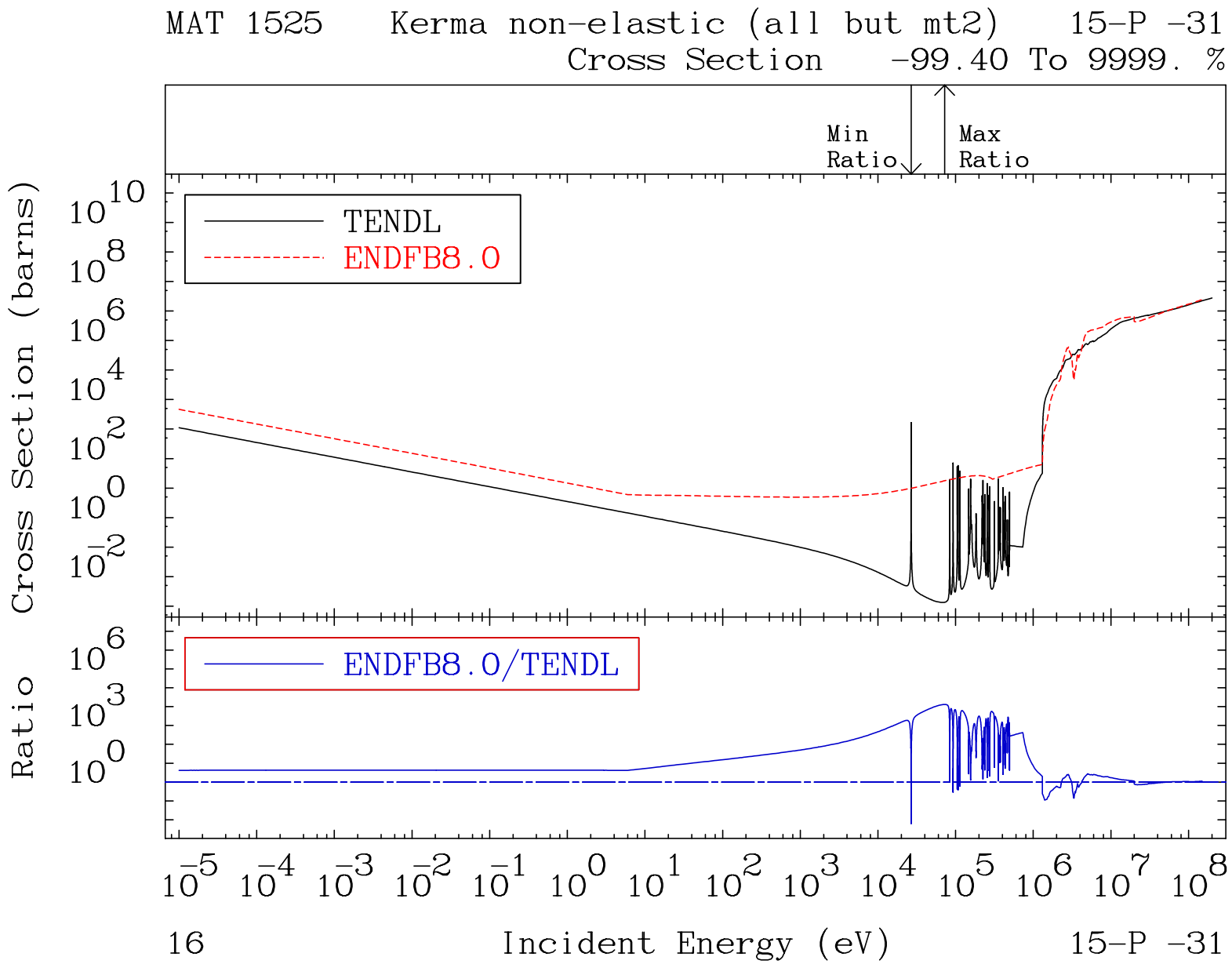

MAT 1525
Hydrogen Production
15-P -31
Cross Section
-100.0 To 53.60 %
Min Ratio
Max Ratio
TENDL Threshold 732.25 keV
ENDFB8.0 Threshold 1.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
2.0
1.0
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
15-P -31

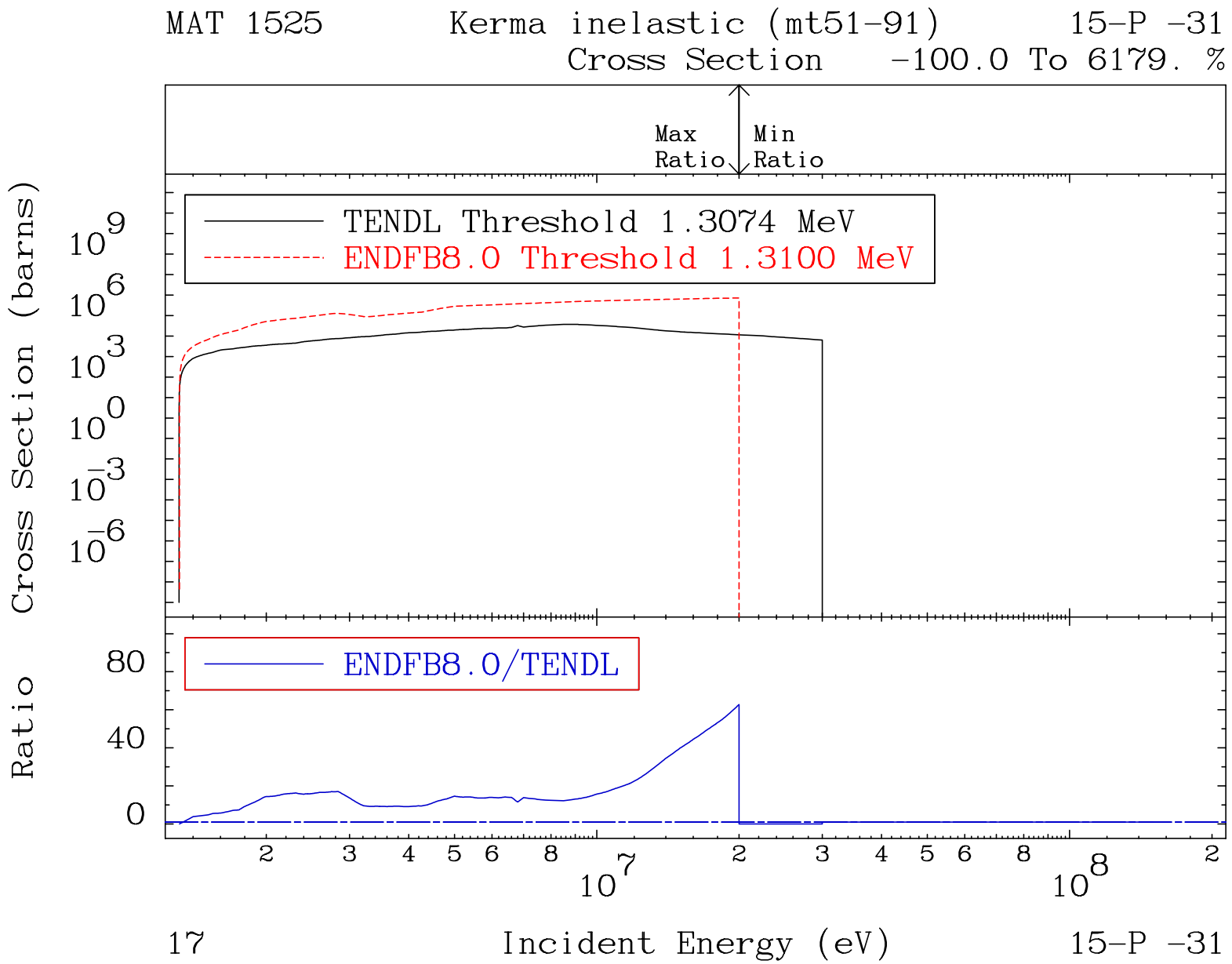

MAT 1525
Deuterium Production
15-P -31
Cross Section -100.0 To 14.92 %
Min Ratio
Max Ratio
TENDL Threshold 5.2372 MeV
ENDFB8.0 Threshold 20.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
15-P -31

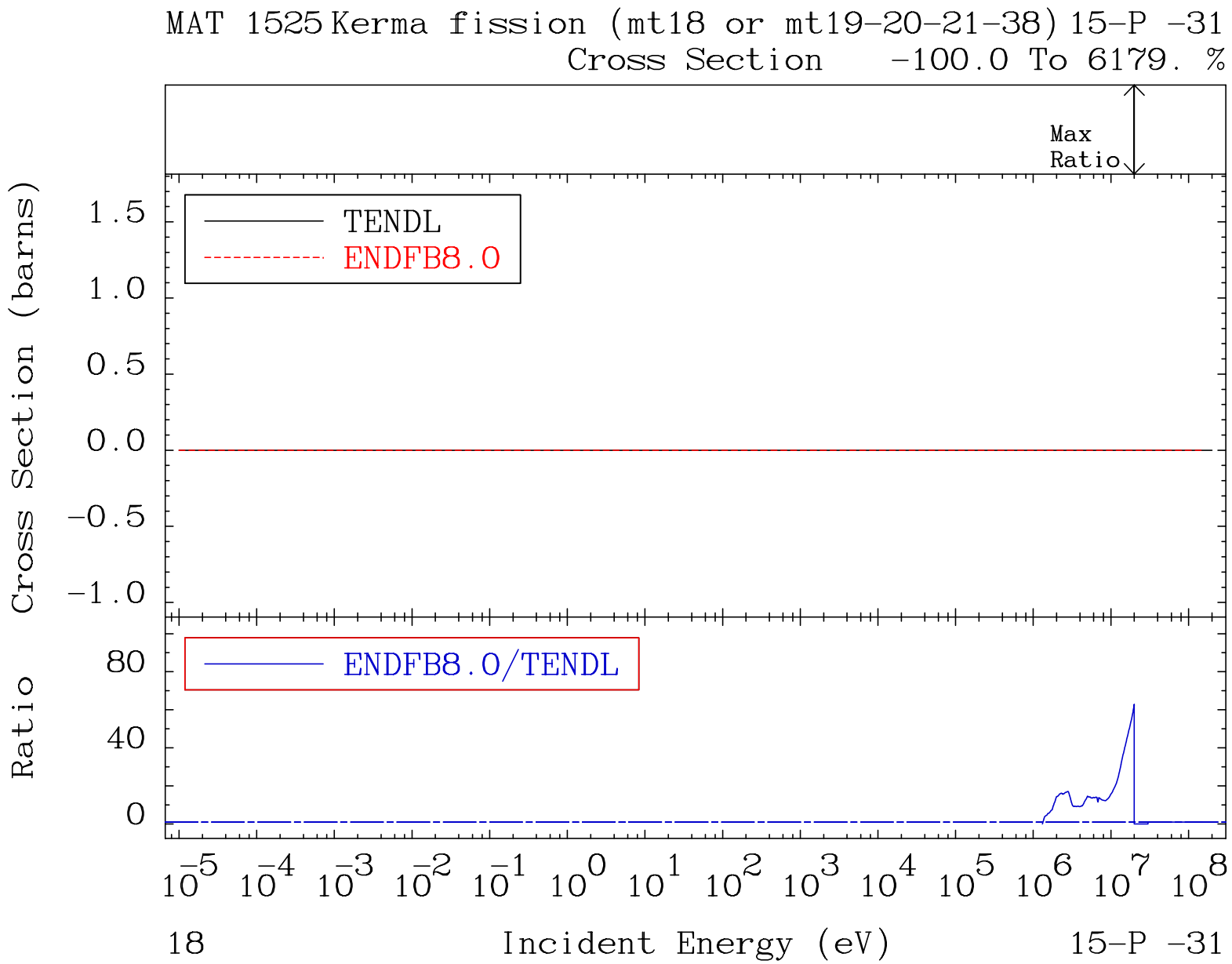

MAT 1525
He-4 Production
Cross Section
15-P -31
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.0067 MeV
ENDFB8.0 Threshold 3.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
120
80
40
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
15-P -31

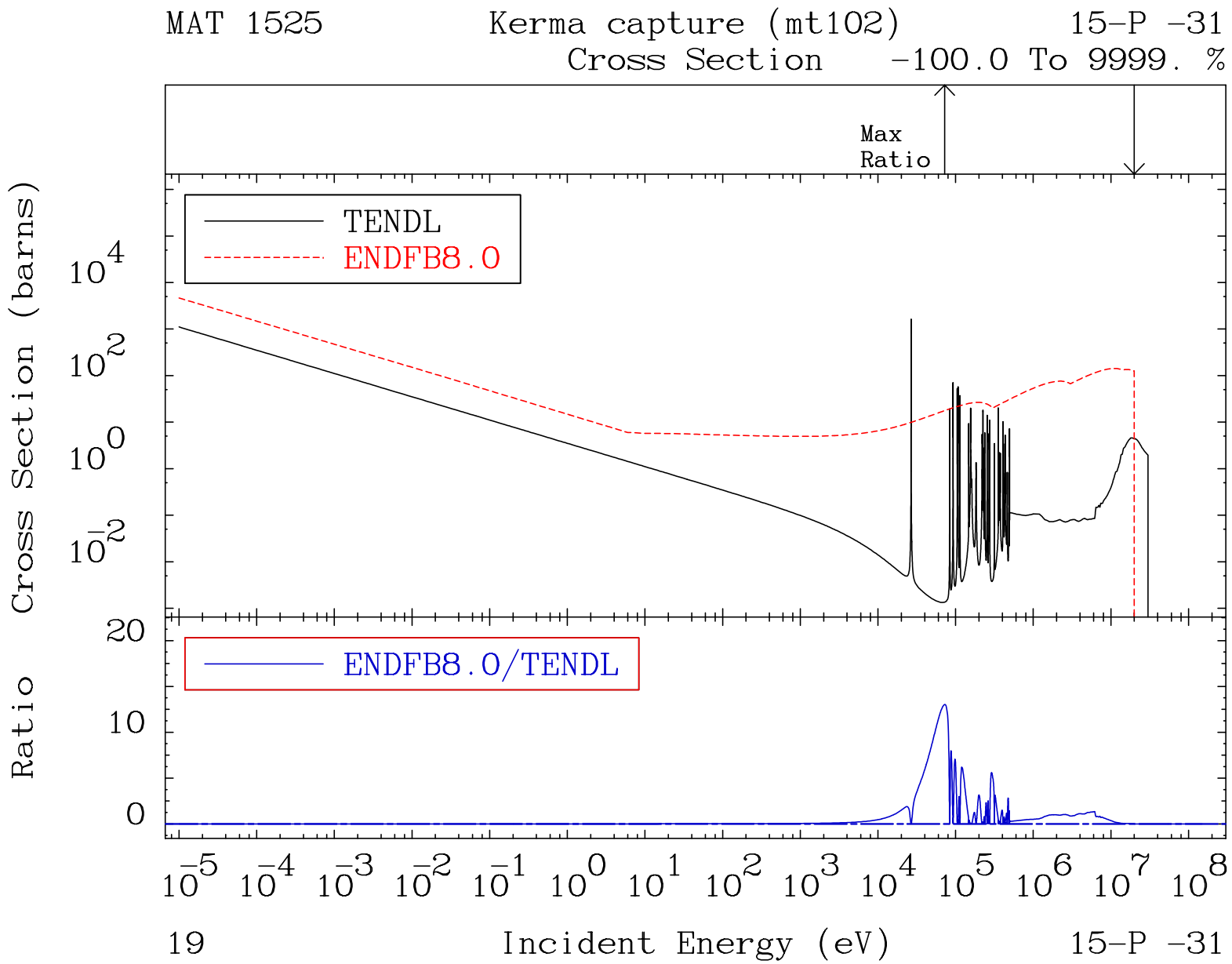

MAT 1525
Kerma total (eV-barns)
15-P -31
Cross Section -92.51 To 345.2 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
14
15-P -31

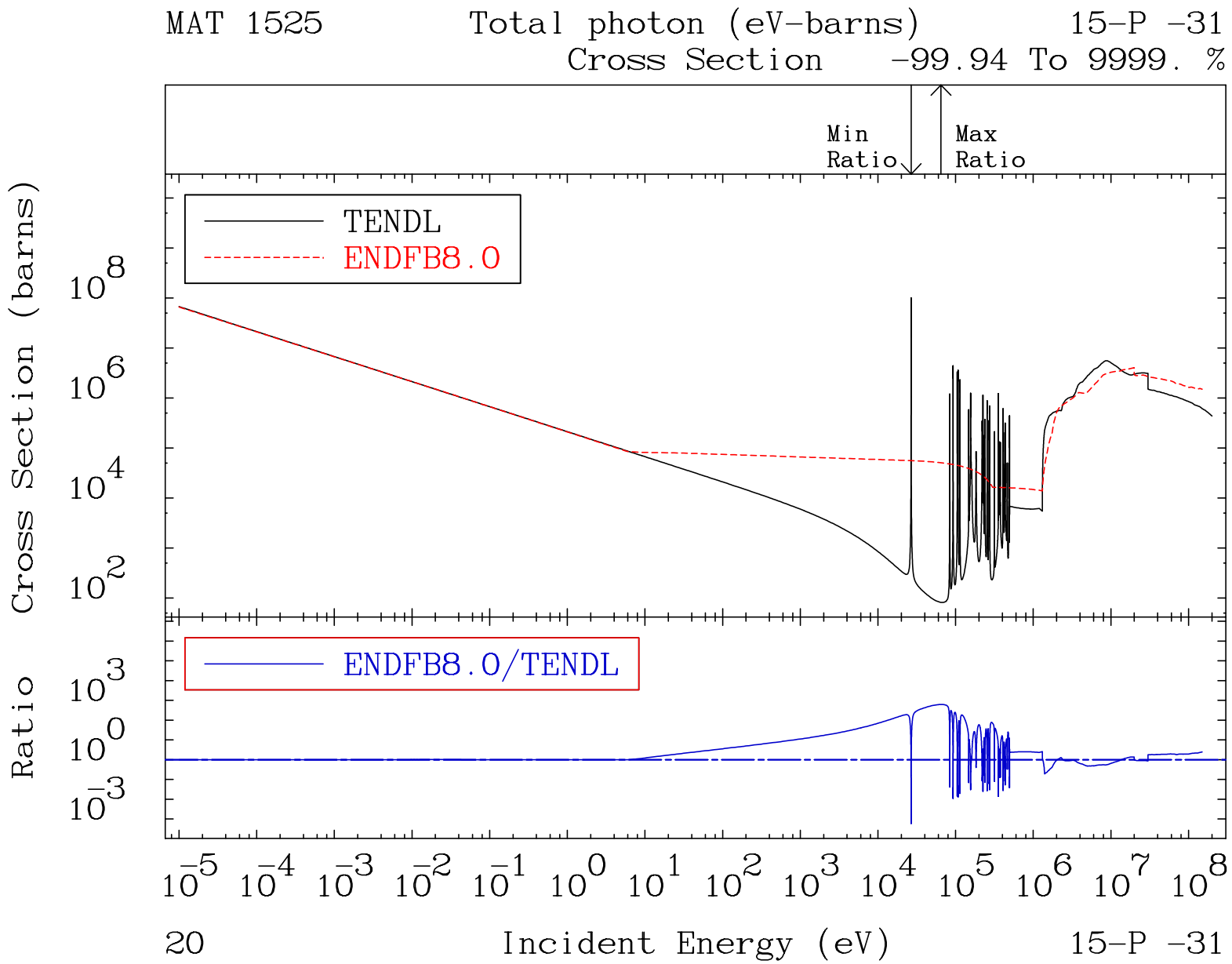

MAT 1525
Kerma elastic
Cross Section
15-P -31
-92.37 To 345.0 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
15
15-P -31

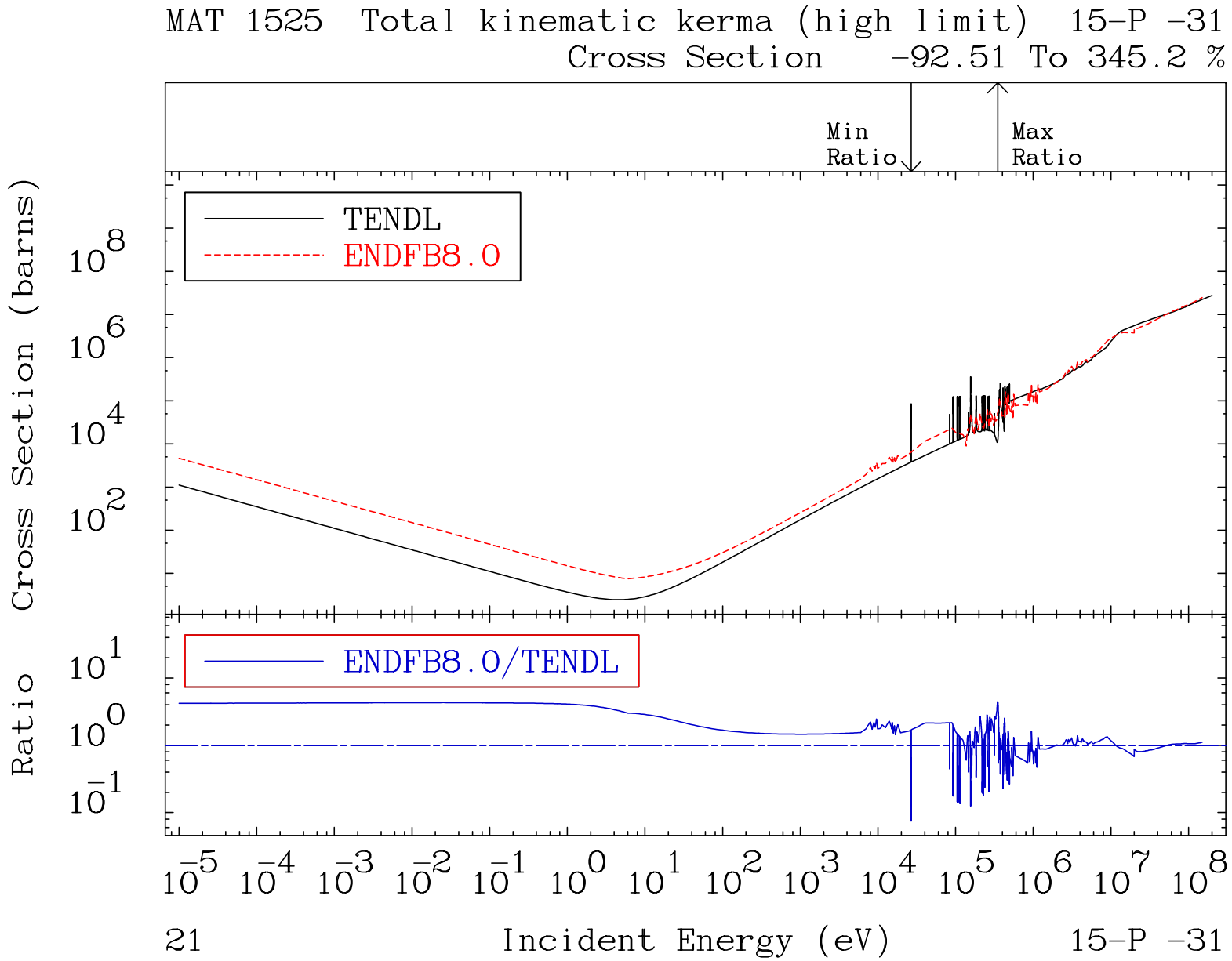

MAT 1525 Kerma non-elastic (all but mt2) 15-P -31
Cross Section -99.40 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
16
15-P -31

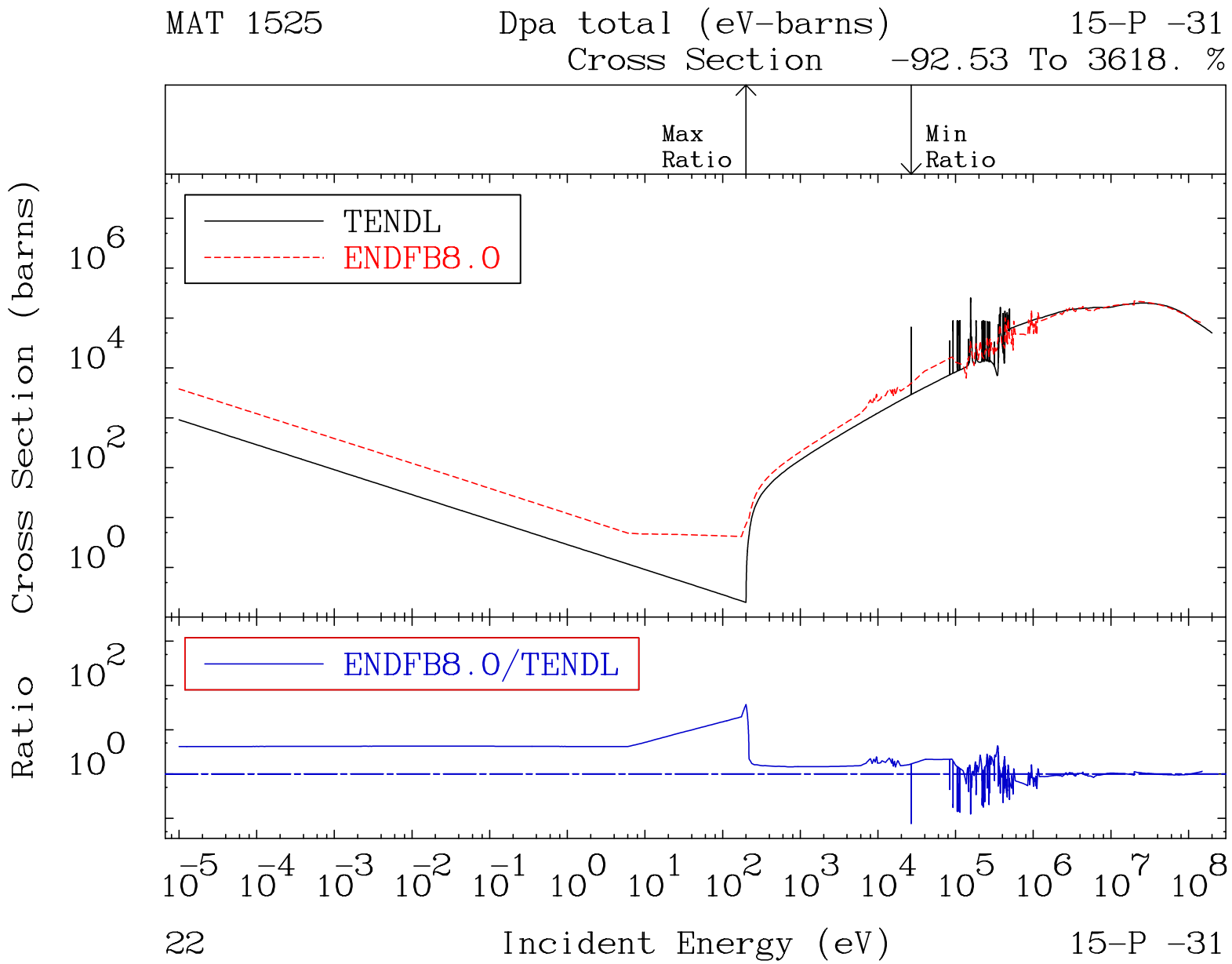

MAT 1525
Kerma inelastic (mt51-91)
15-P -31
Cross Section -100.0 To 6179. %
Max Ratio
Min Ratio
TENDL Threshold 1.3074 MeV
ENDFB8.0 Threshold 1.3100 MeV
Cross Section (barns)
10^9
10^6
10^3
10^0
10^-3
10^-6
ENDFB8.0/TENDL
Ratio
80
40
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
15-P -31

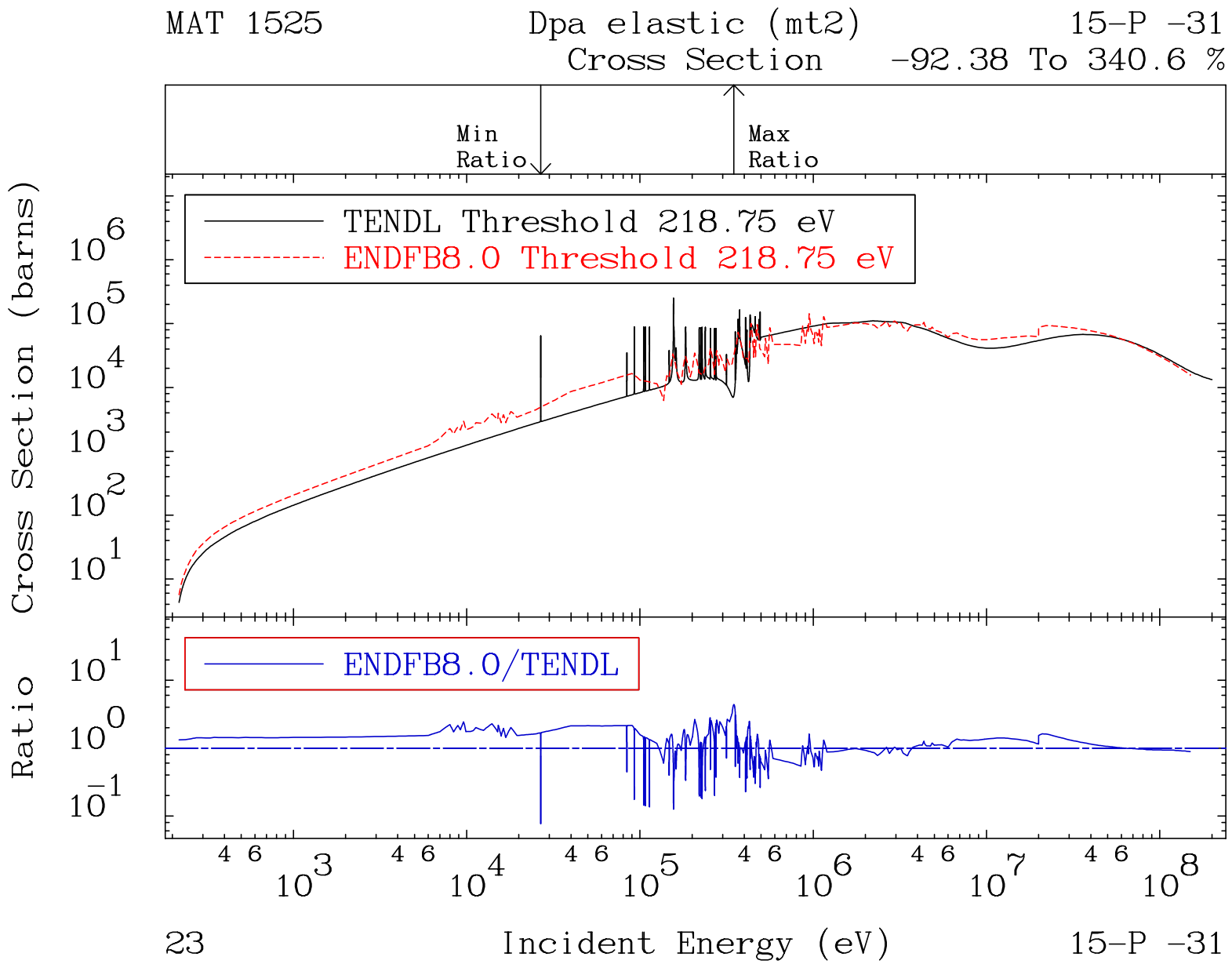

MAT 1525 Kerma fission (mt18 or mt19-20-21-38) 15-P -31
Cross Section -100.0 To 6179. %
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
18
Incident Energy (eV)
15-P -31

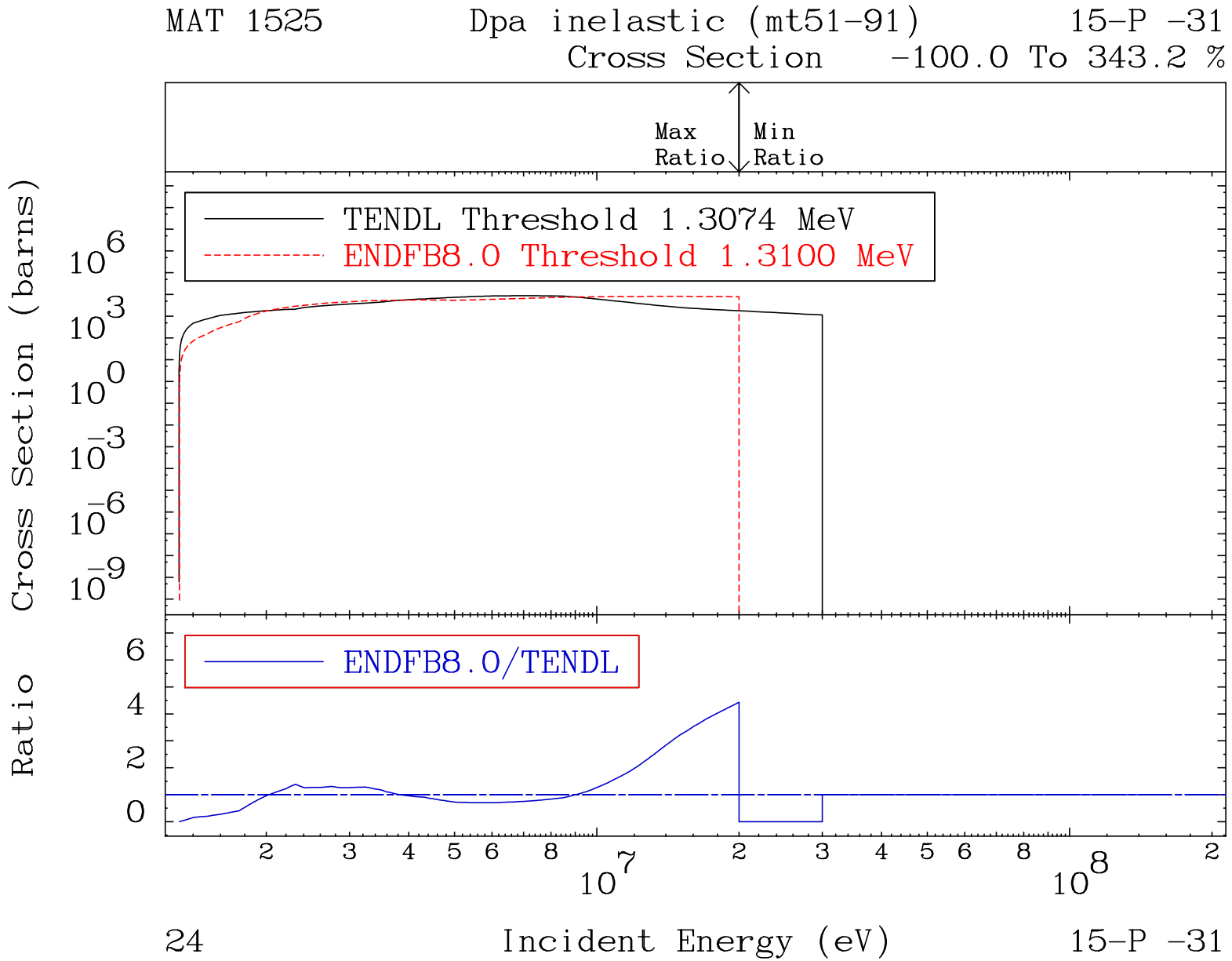

MAT 1525
Kerma capture (mt102)
15-P -31
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
19
15-P -31

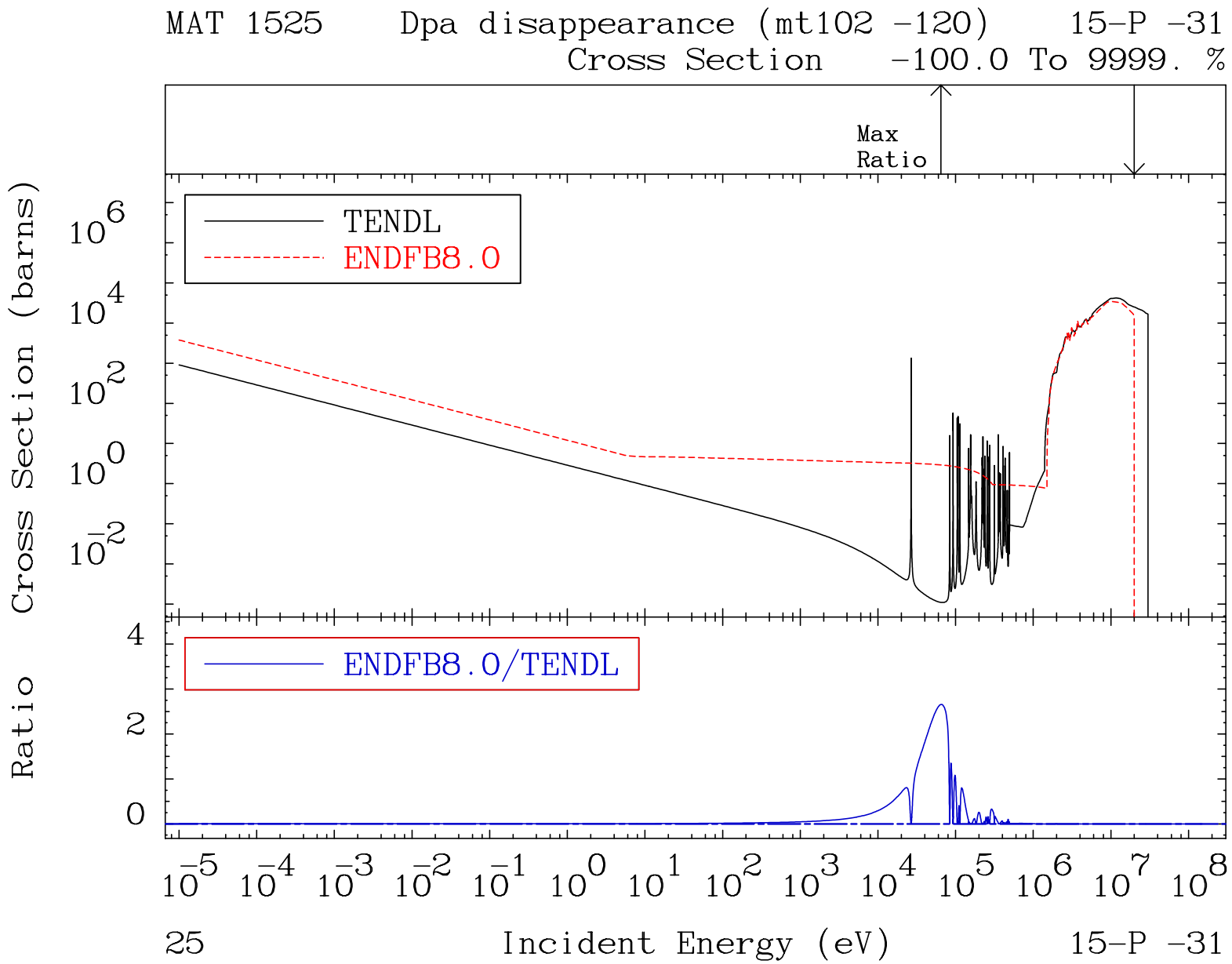

MAT 1525
Total photon (eV-barns)
15-P -31
Cross Section -99.94 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
20
15-P -31


MAT 1525 Total kinematic kerma (high limit) 15-P -31
Cross Section -92.51 To 345.2 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
21
15-P -31


MAT 1525
Dpa total (eV-barns)
15-P -31
Cross Section -92.53 To 3618. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22
15-P -31


MAT 1525
Dpa elastic (mt2)
Cross Section
15-P -31
-92.38 To 340.6 %
Min Ratio
Max Ratio
TENDL Threshold 218.75 eV
ENDFB8.0 Threshold 218.75 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
15-P -31


MAT 1525
Dpa inelastic (mt51-91)
15-P -31
Cross Section -100.0 To 343.2 %
Max Ratio
Min Ratio
TENDL Threshold 1.3074 MeV
ENDFB8.0 Threshold 1.3100 MeV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
24
15-P -31


MAT 1525 Dpa disappearance (mt102 -120) 15-P -31
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
25
15-P -31