Program EVALPLOT
(Version 2017-1)
by
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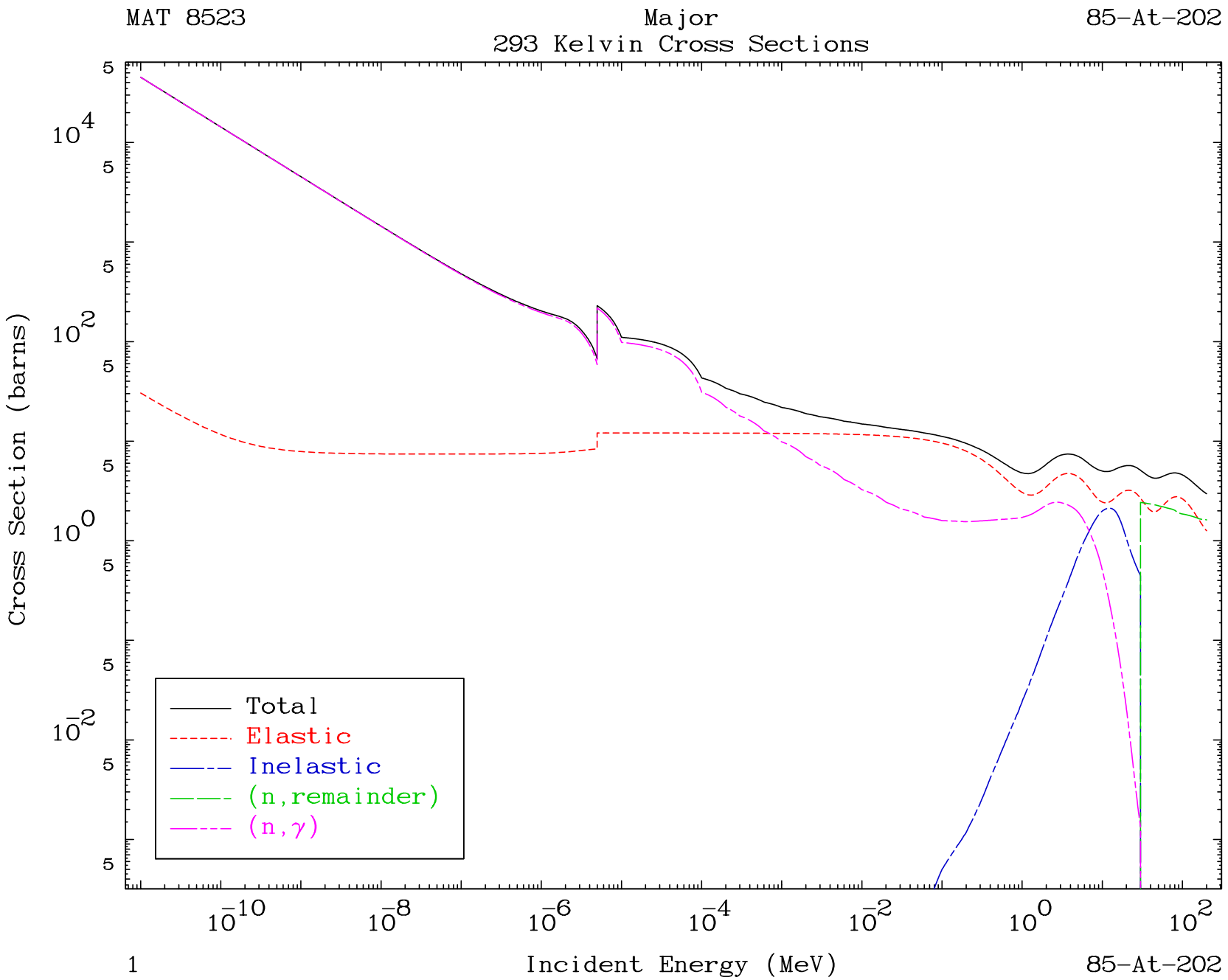
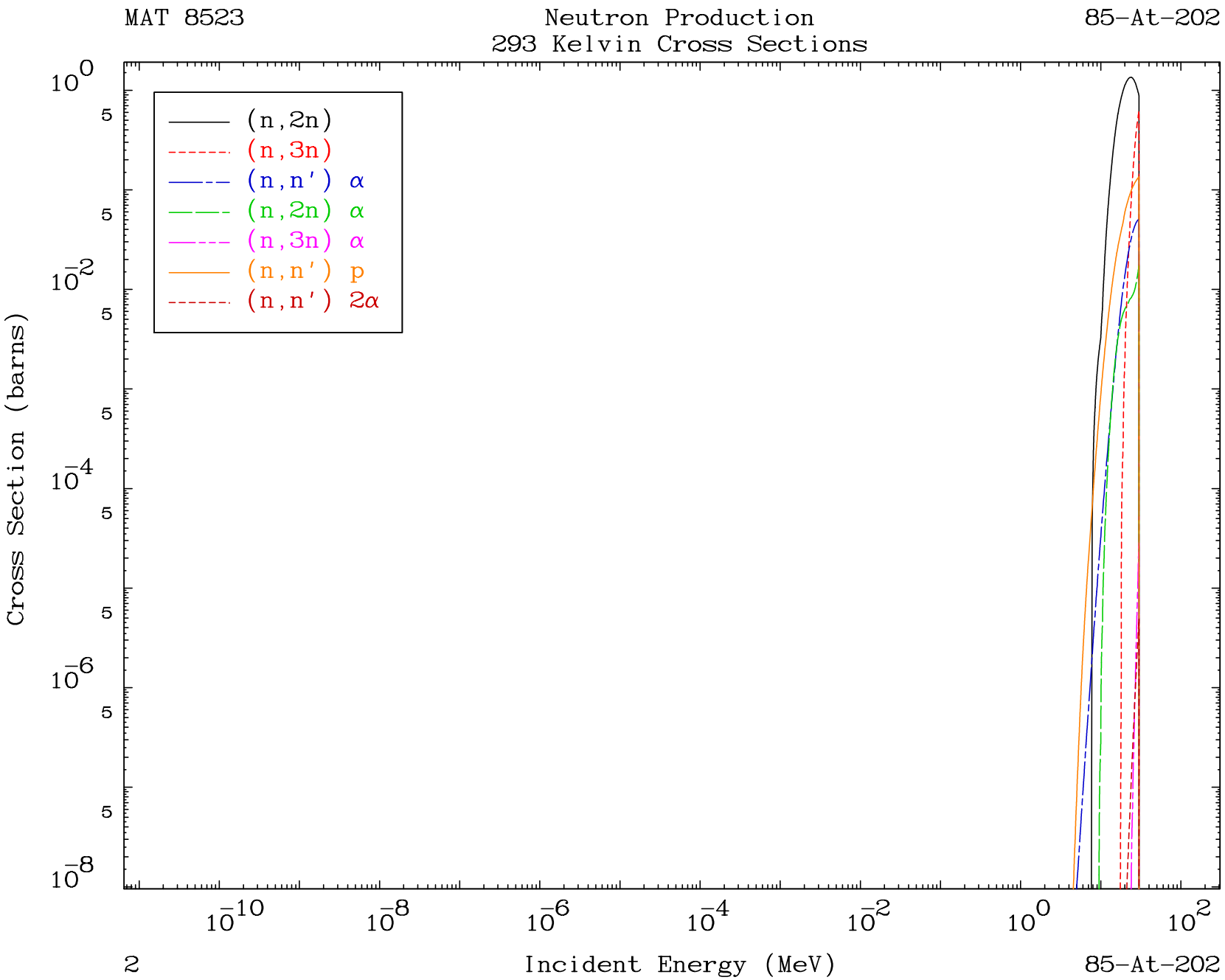
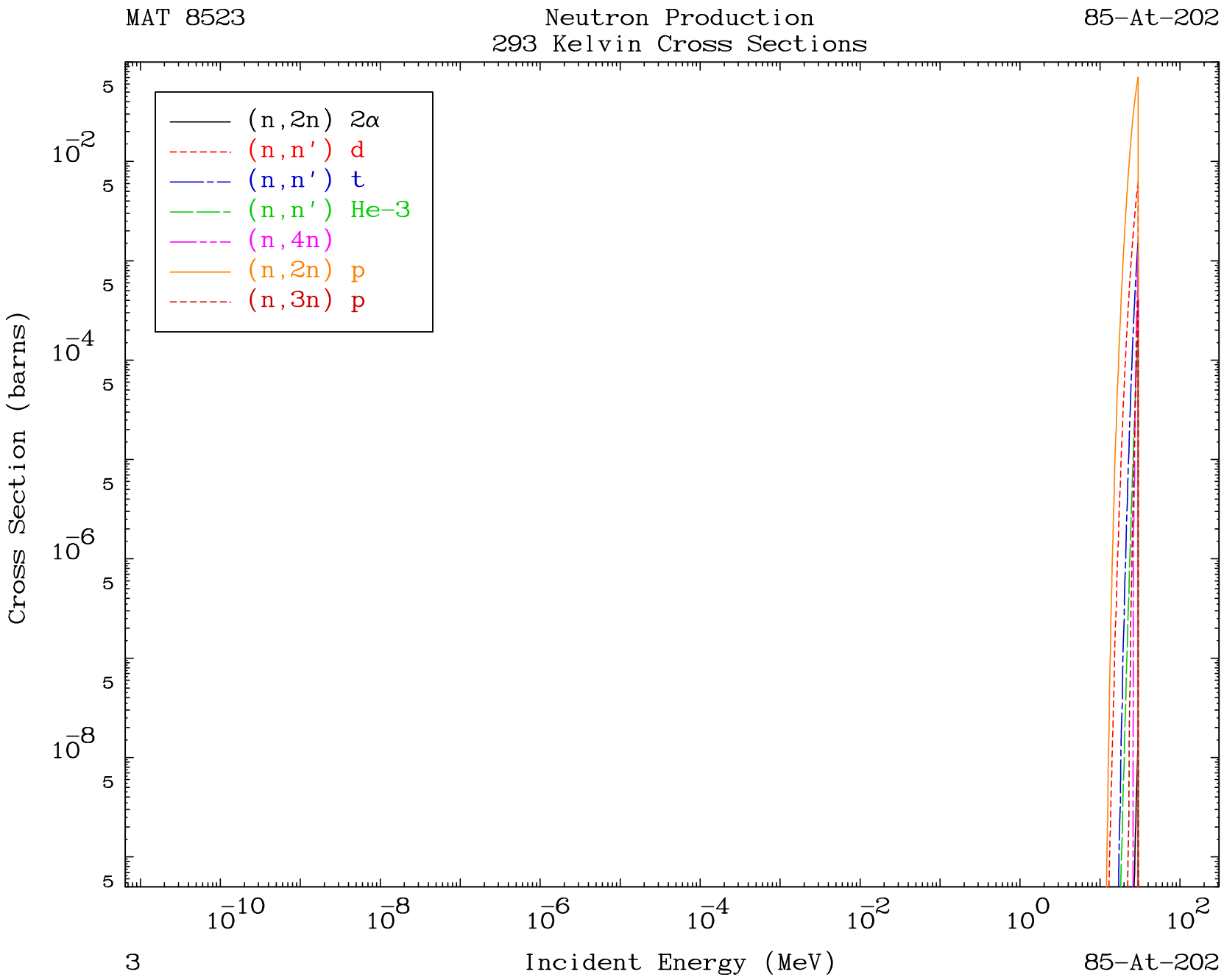
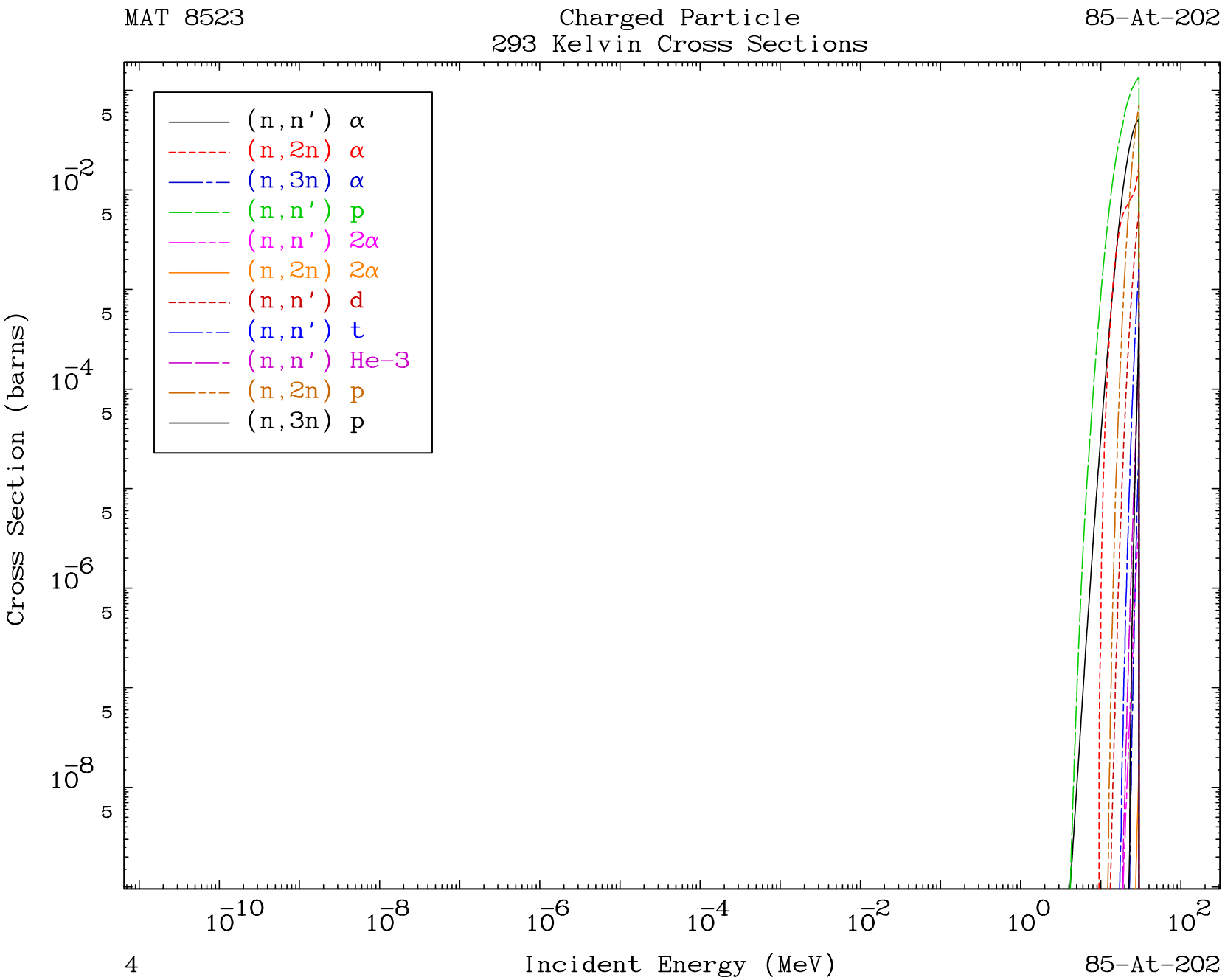
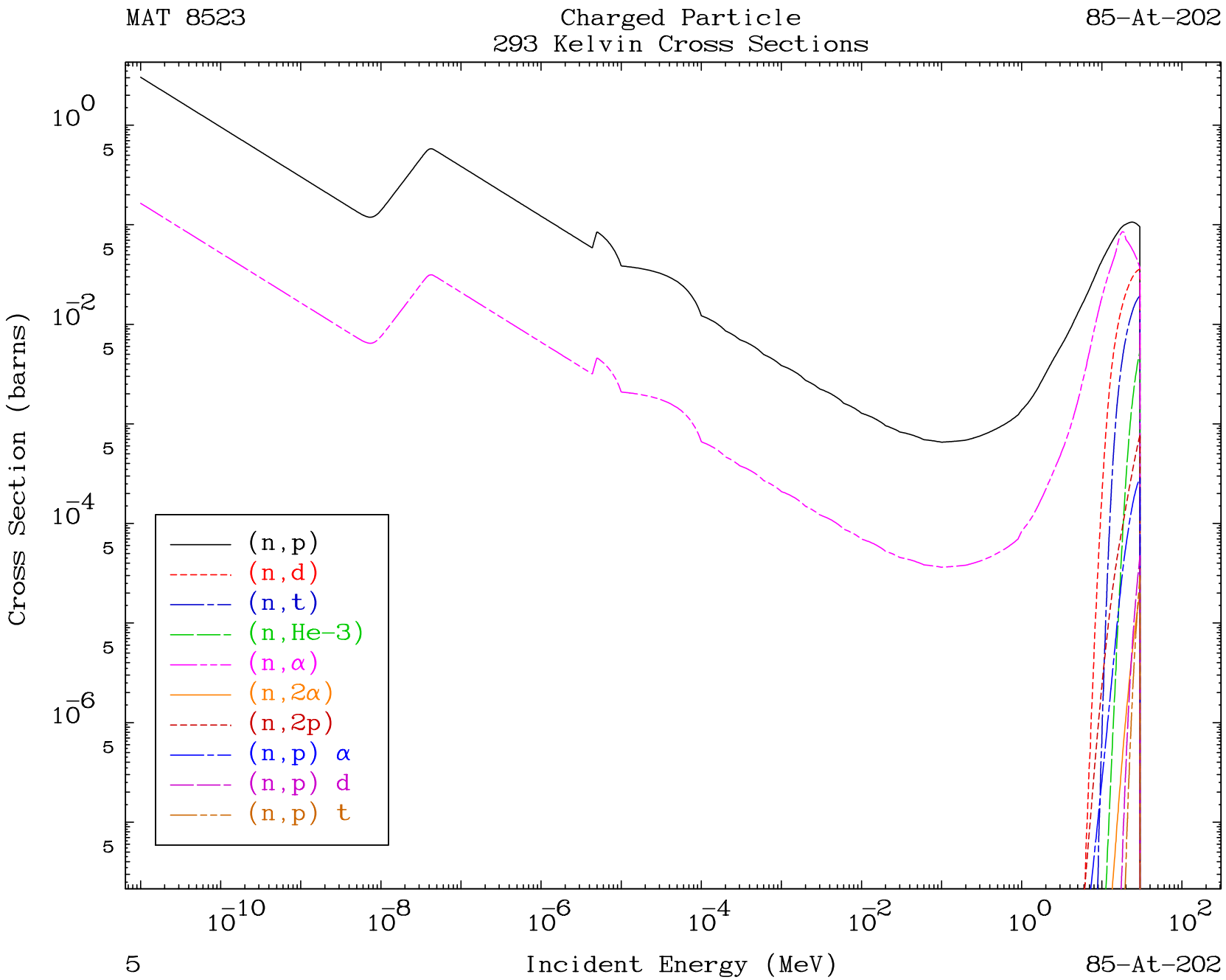
Press Mouse Button to Start

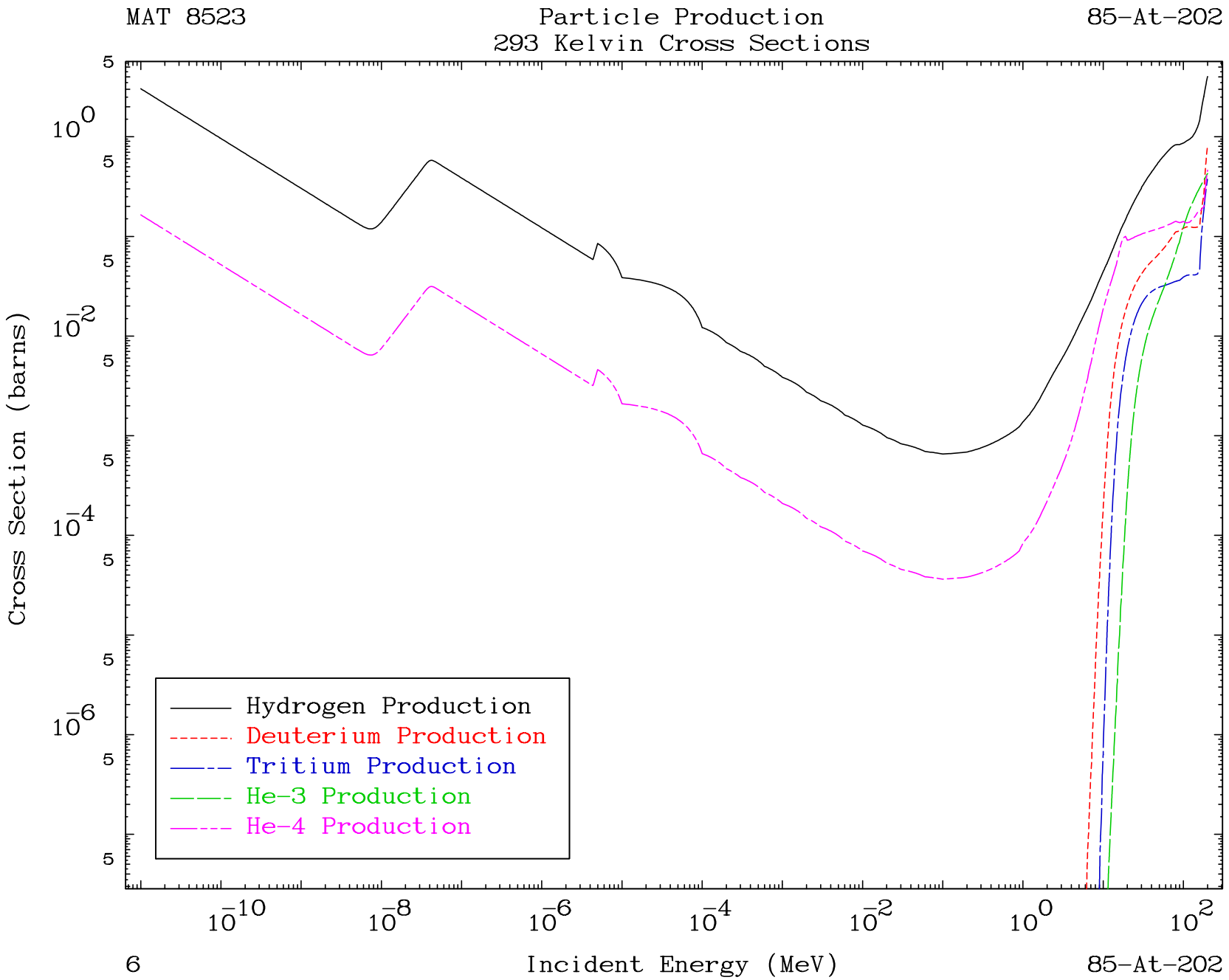

MAT 8523
Major
85-At-202
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
85-At-202

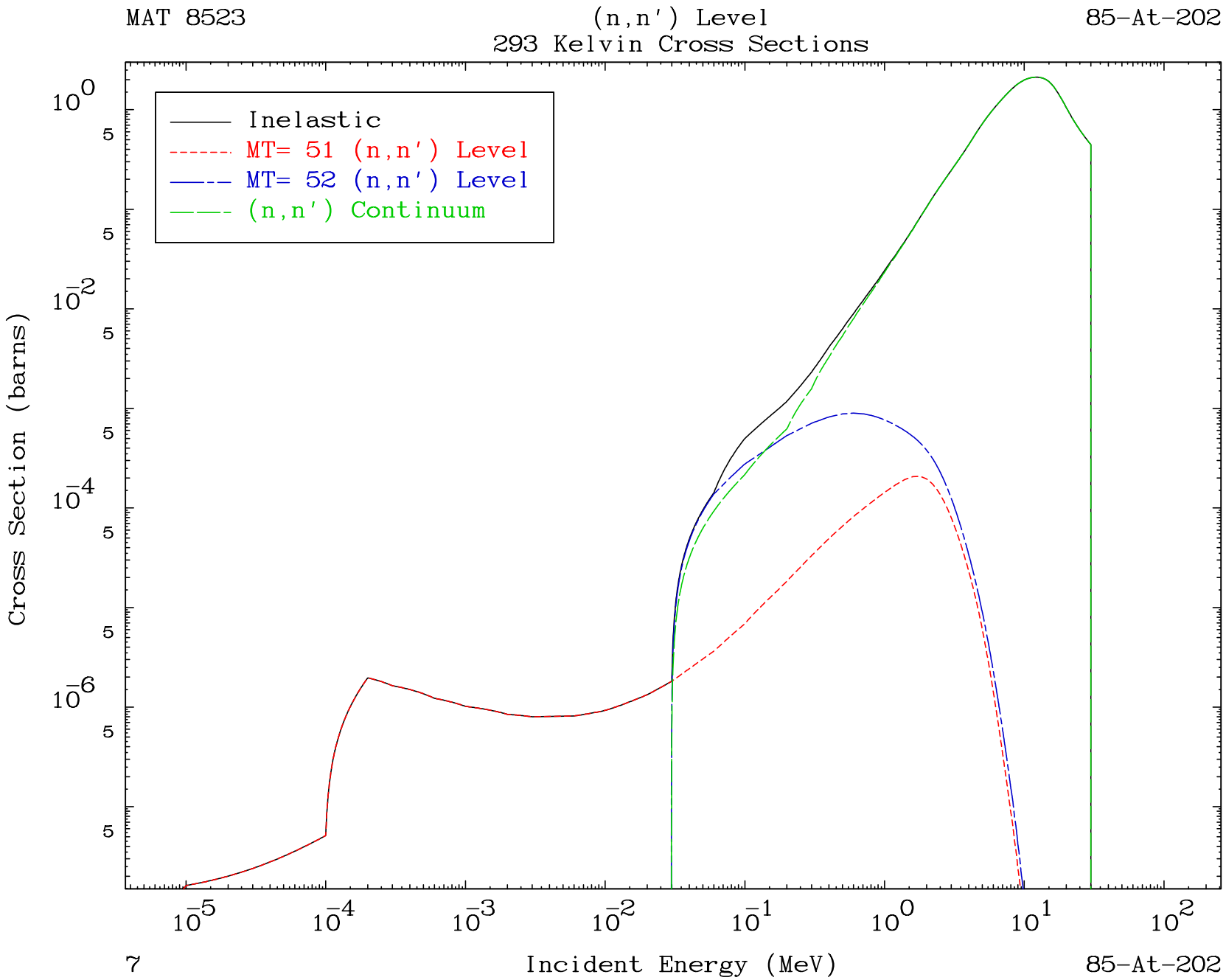

MAT 8523
Neutron Production
293 Kelvin Cross Sections
85-At-202
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
85-At-202

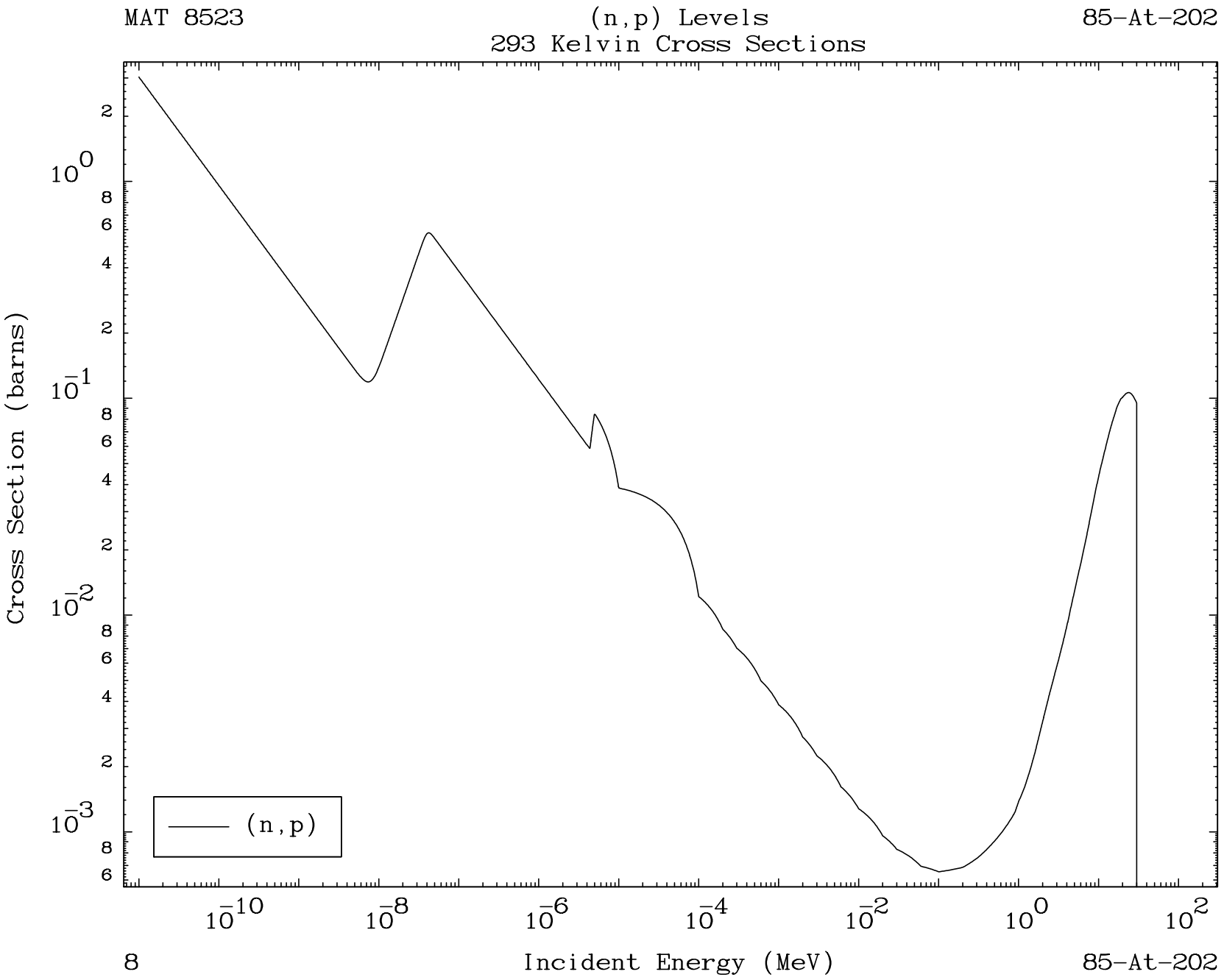

MAT 8523
Neutron Production
293 Kelvin Cross Sections
85-At-202
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
85-At-202

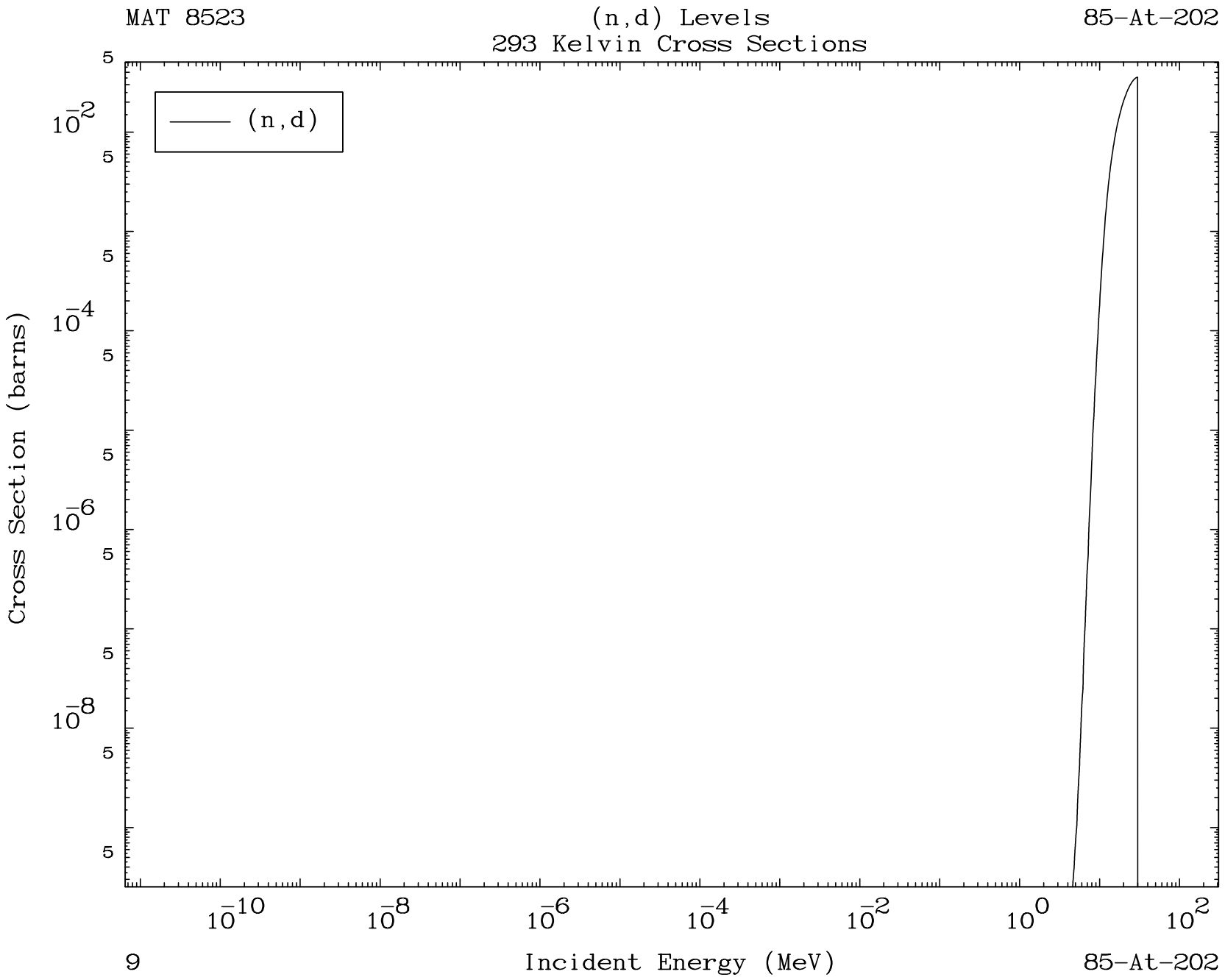

MAT 8523
Charged Particle
85-At-202
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
4
85-At-202

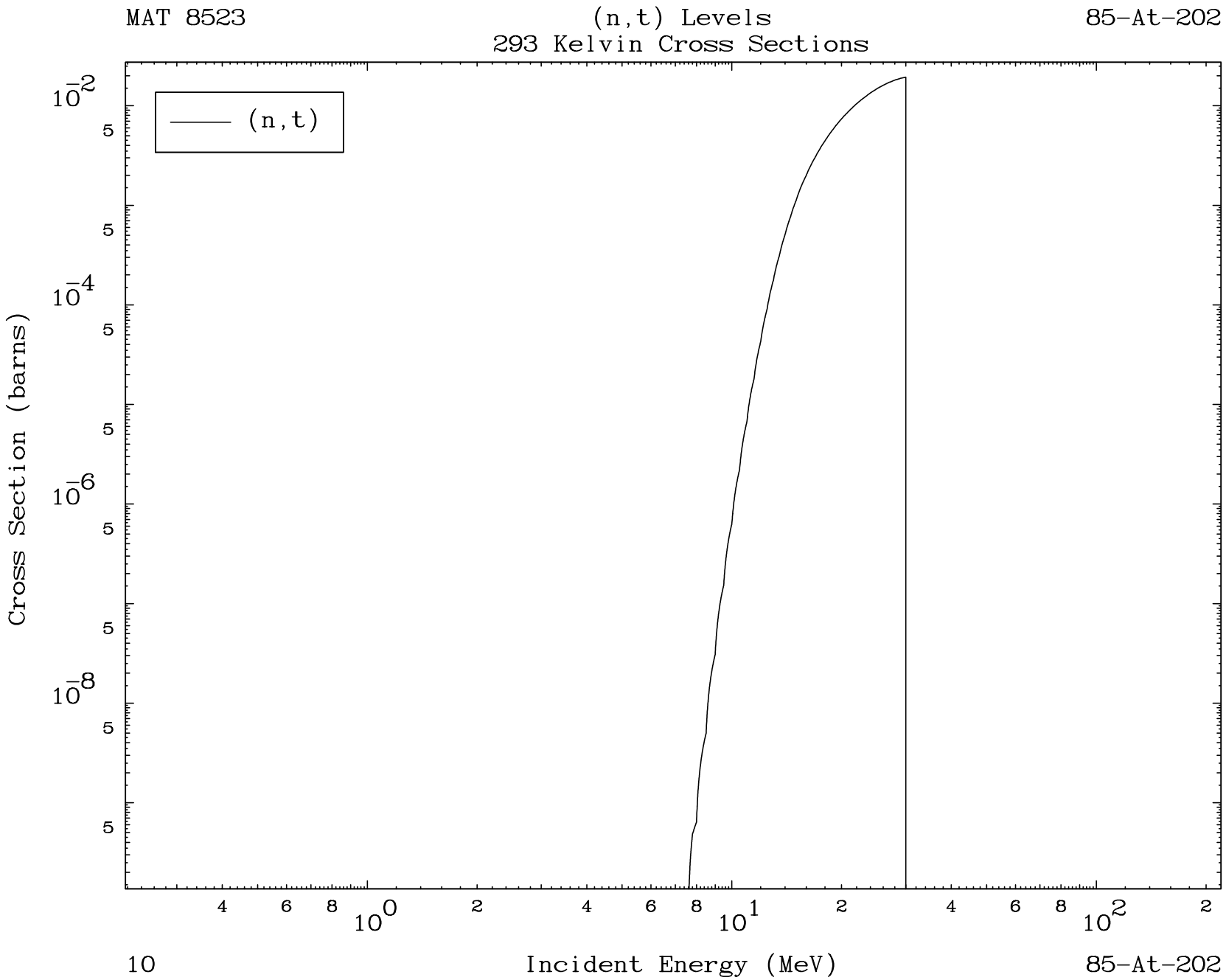

MAT 8523
Charged Particle
293 Kelvin Cross Sections
85-At-202
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

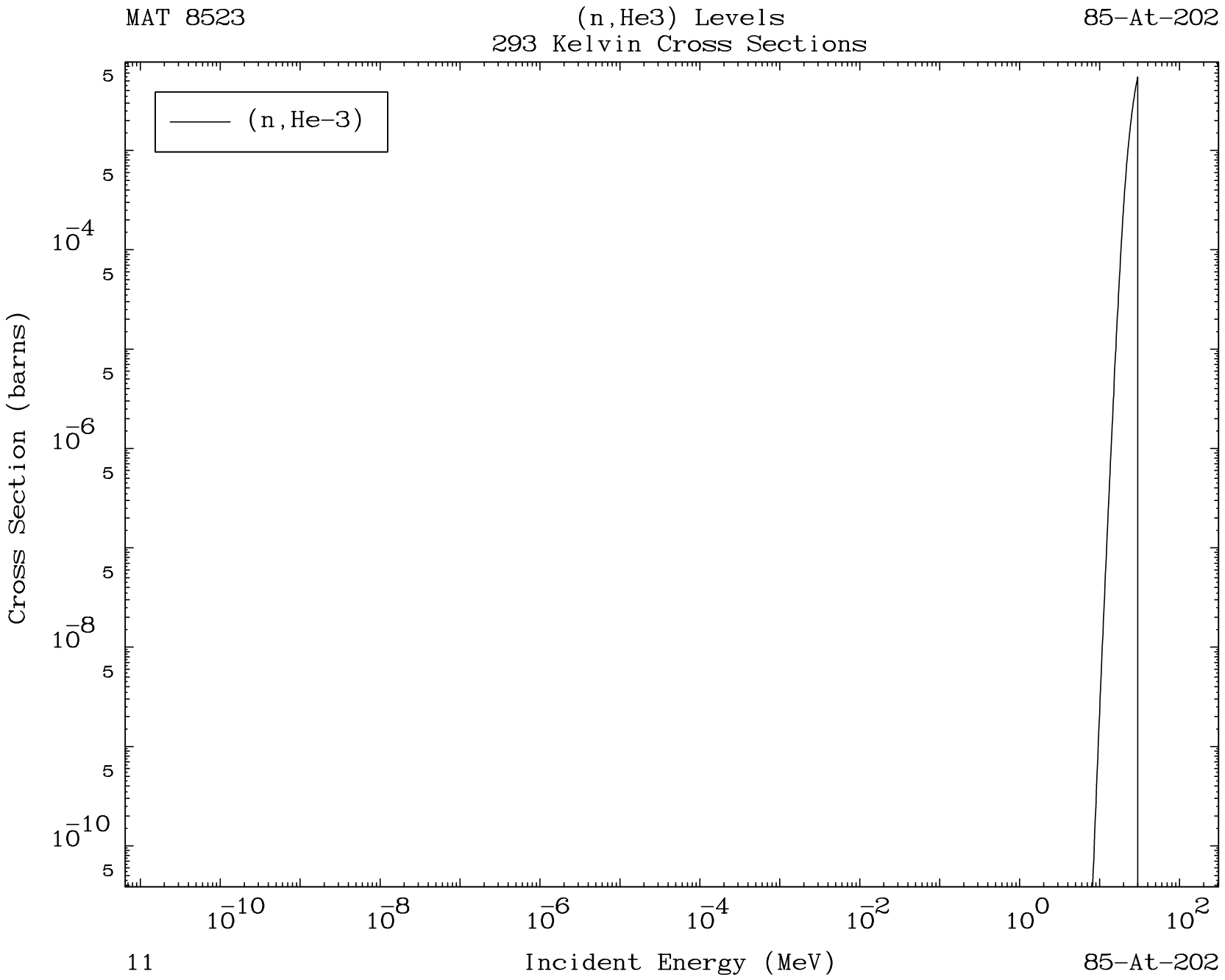

MAT 8523
Particle Production
293 Kelvin Cross Sections
85-At-202
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
6
85-At-202

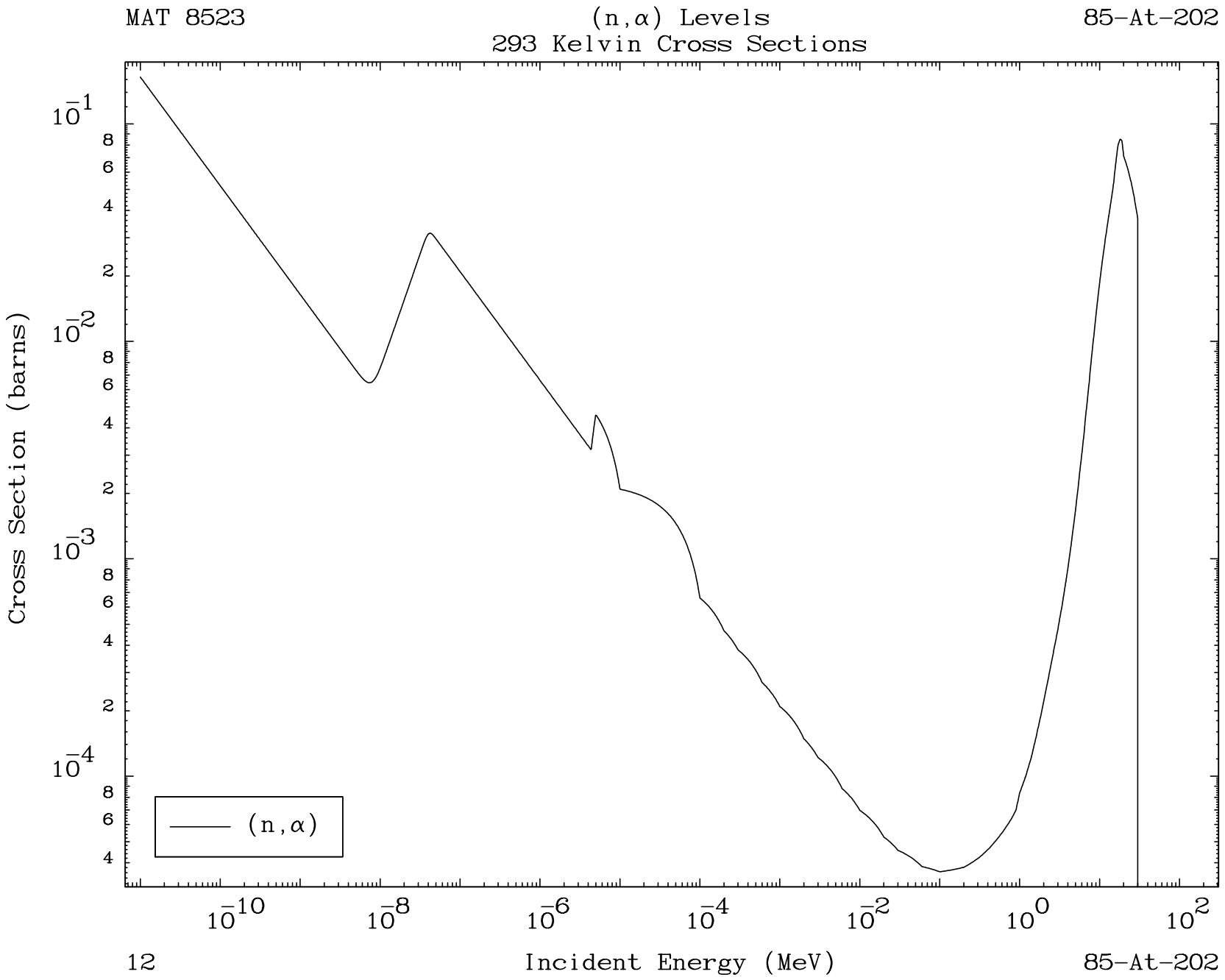

MAT 8523
(n,n') Level
85-At-202
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
7
85-At-202

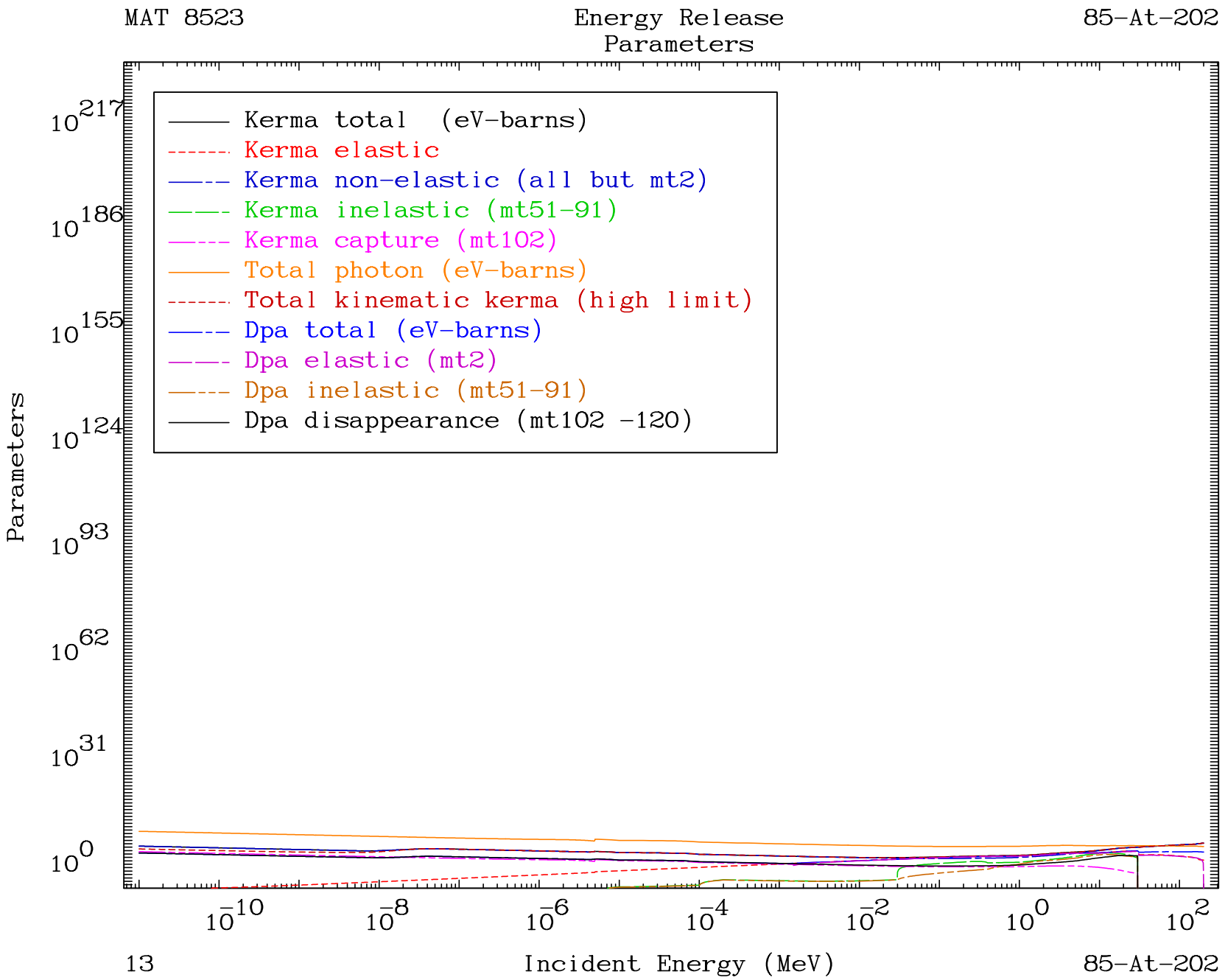

MAT 8523
(n,p) Levels
85-At-202
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
8
85-At-202

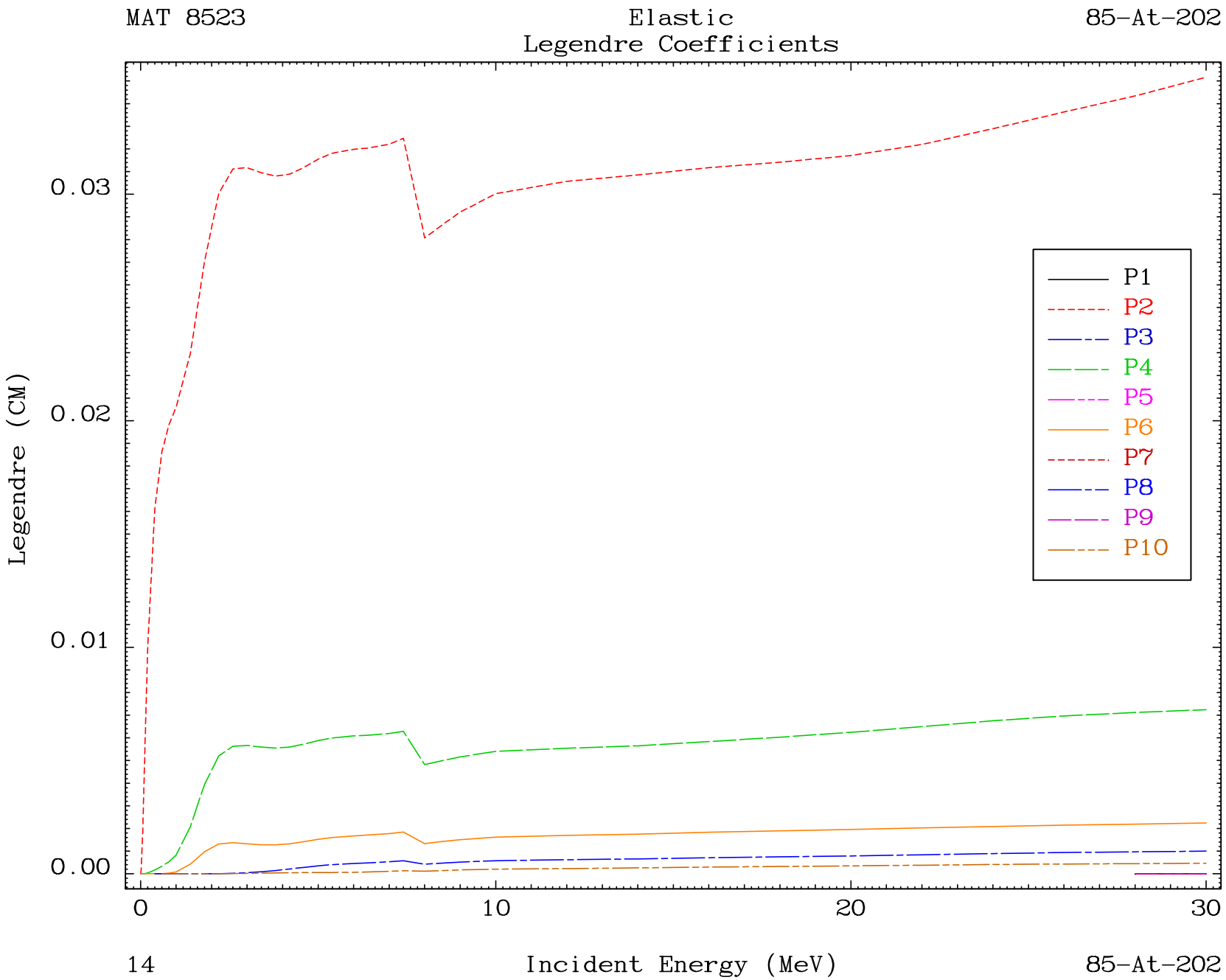

MAT 8523
(n,d) Levels
85-At-202
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
9
85-At-202

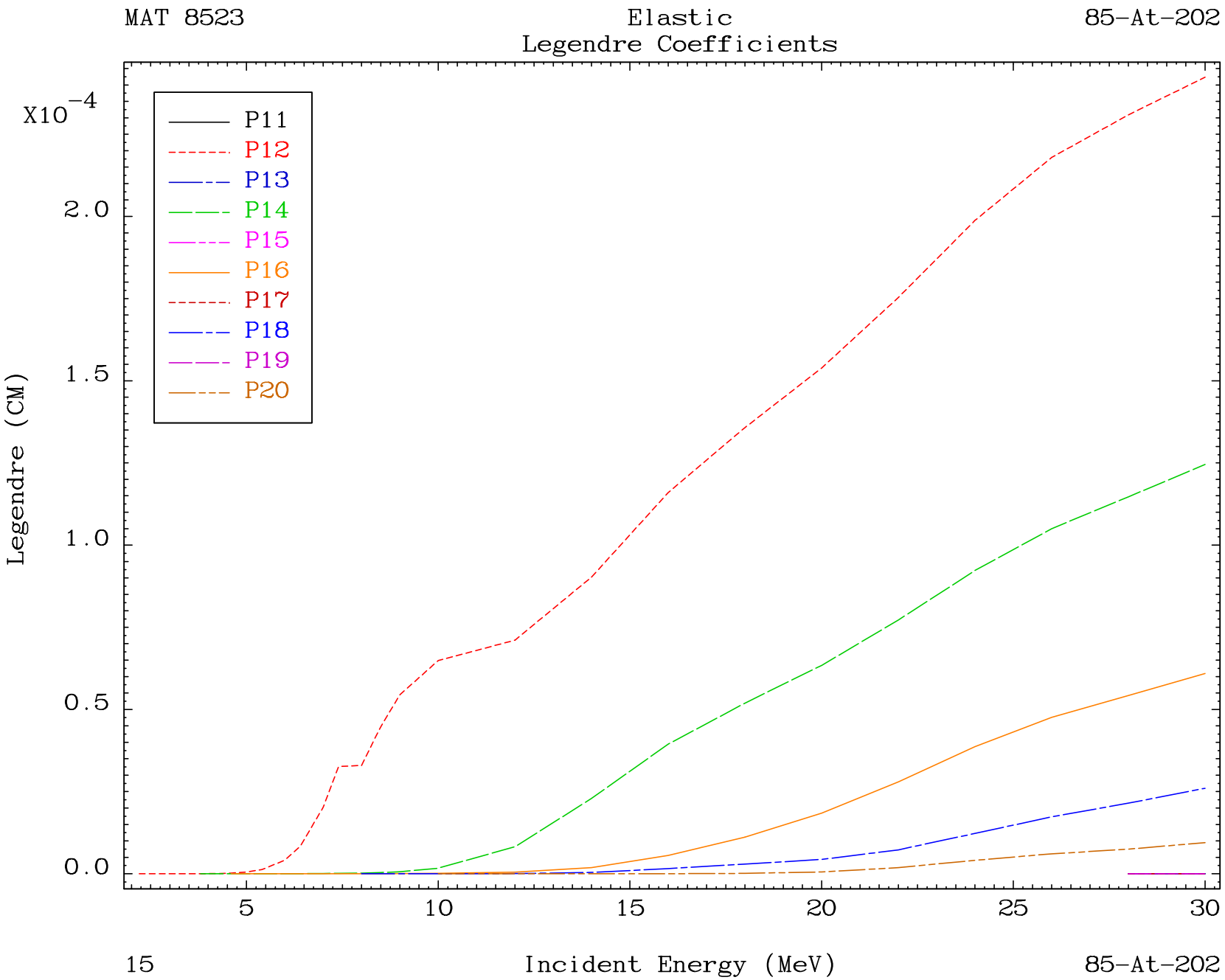

MAT 8523
(n,t) Levels
85-At-202
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10^0
10^1
10^2
2
4
6
8
10
Incident Energy (MeV)
85-At-202

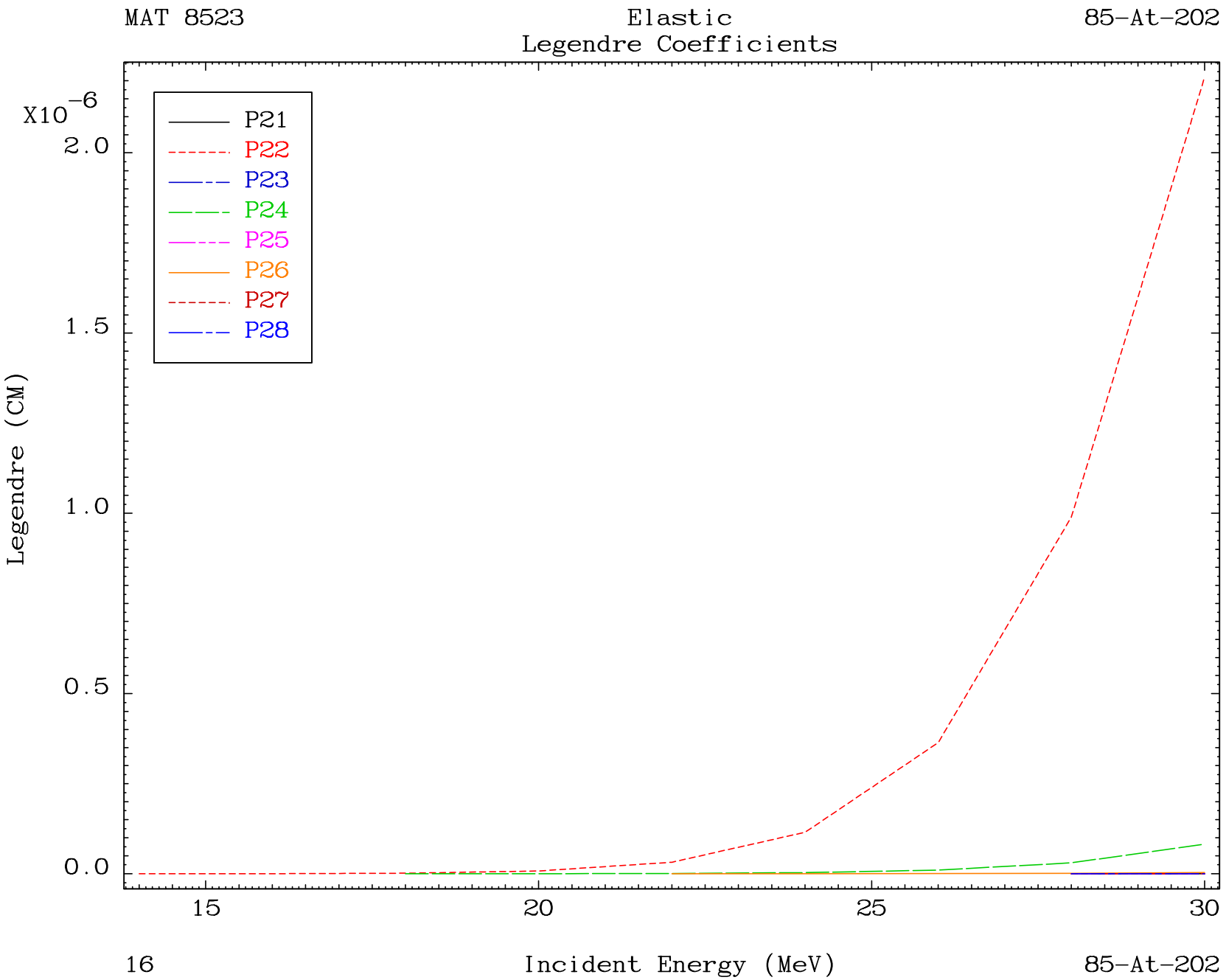

MAT 8523
(n,He3) Levels
85-At-202
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
11
85-At-202

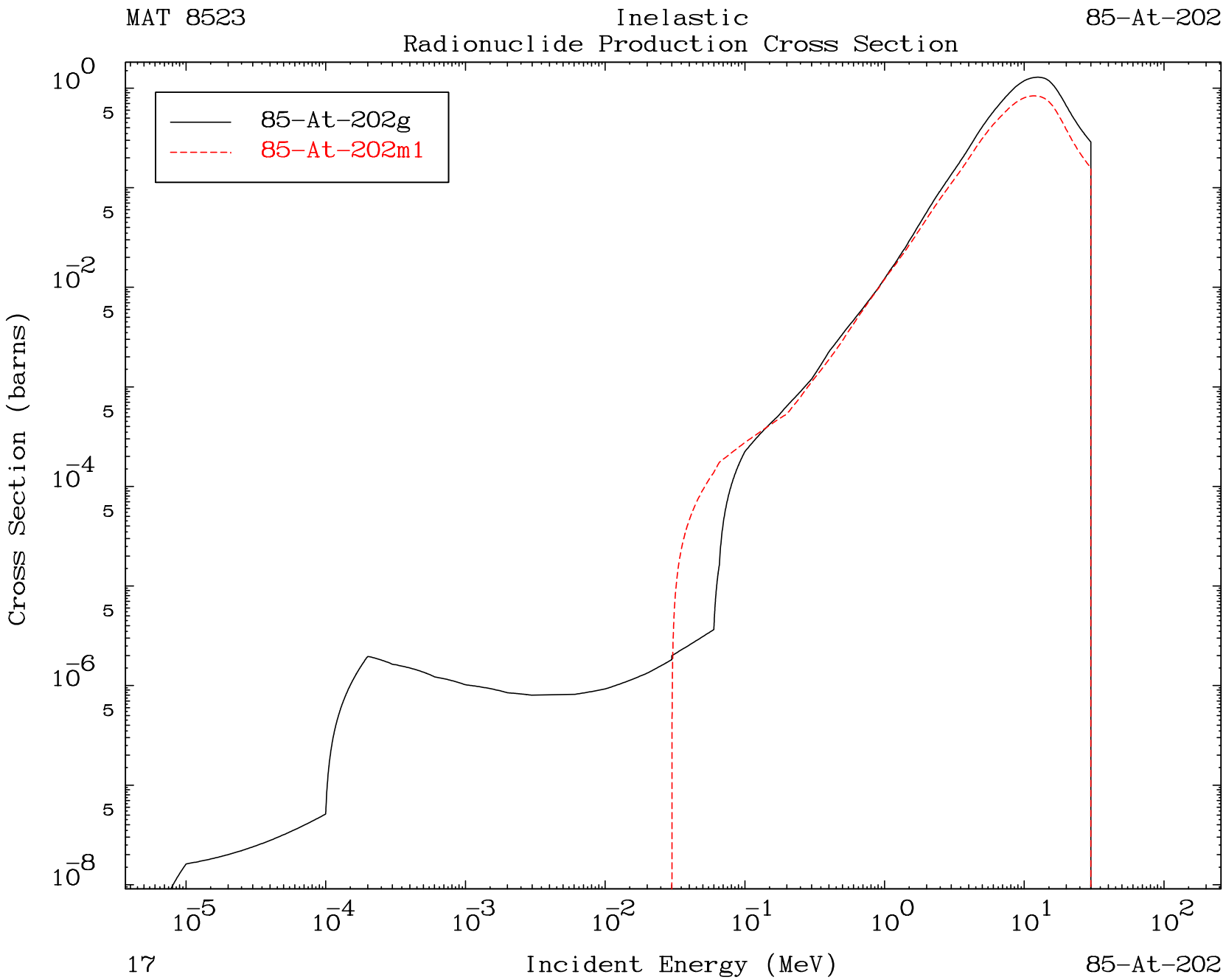

MAT 8523
(n,α) Levels
85-At-202
293 Kelvin Cross Sections
Cross Section (barns)
10-1
8
6
4
2
10-2
8
6
4
2
10-3
8
6
4
2
10-4
8
6
4
(n,α)
10-10
10-8
10-6
10-4
10-2
100
102
12
Incident Energy (MeV)
85-At-202

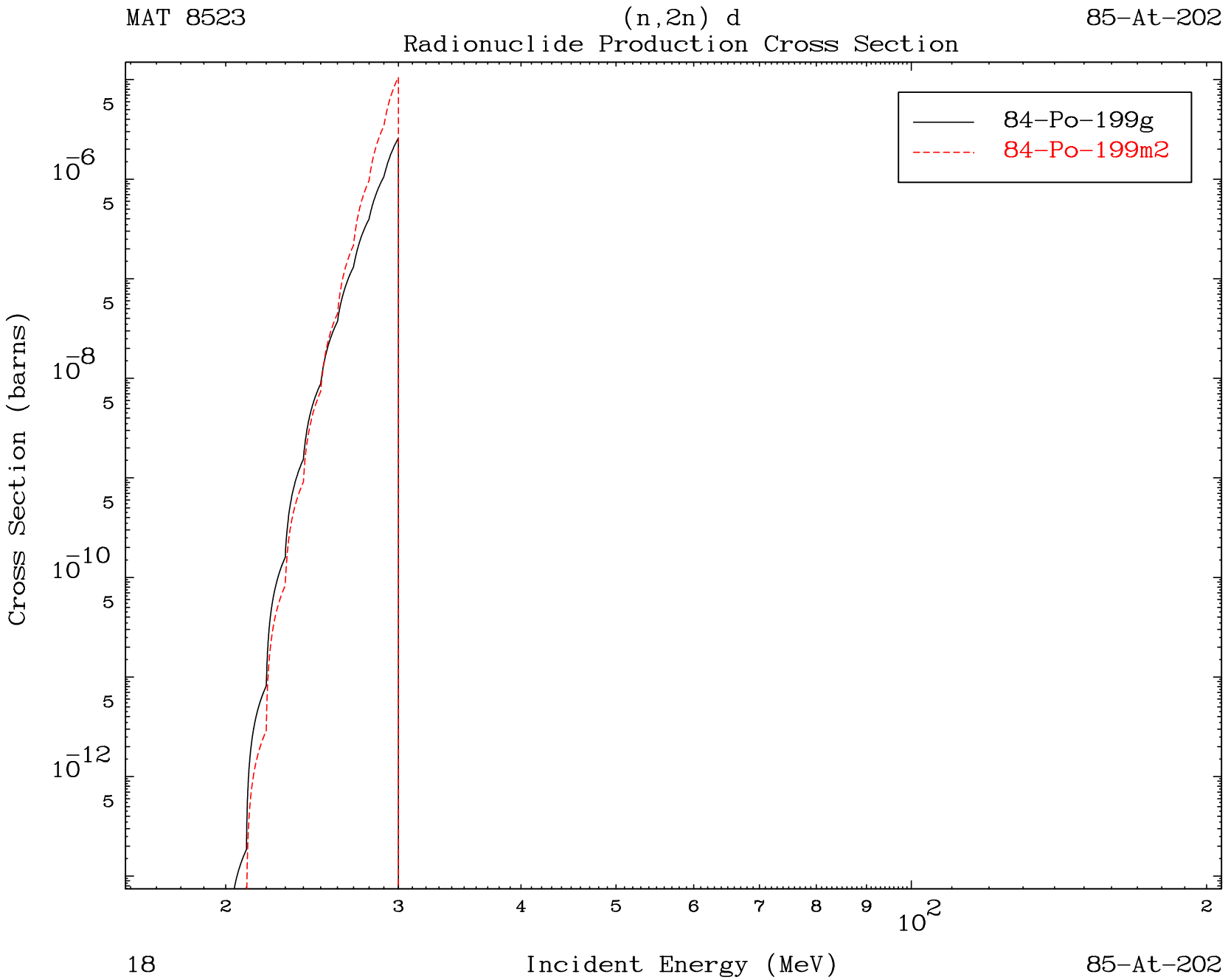

MAT 8523
Energy Release
Parameters
85-At-202
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^217
10^186
10^155
10^124
10^93
10^62
10^31
10^0
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
13
Incident Energy (MeV)
85-At-202

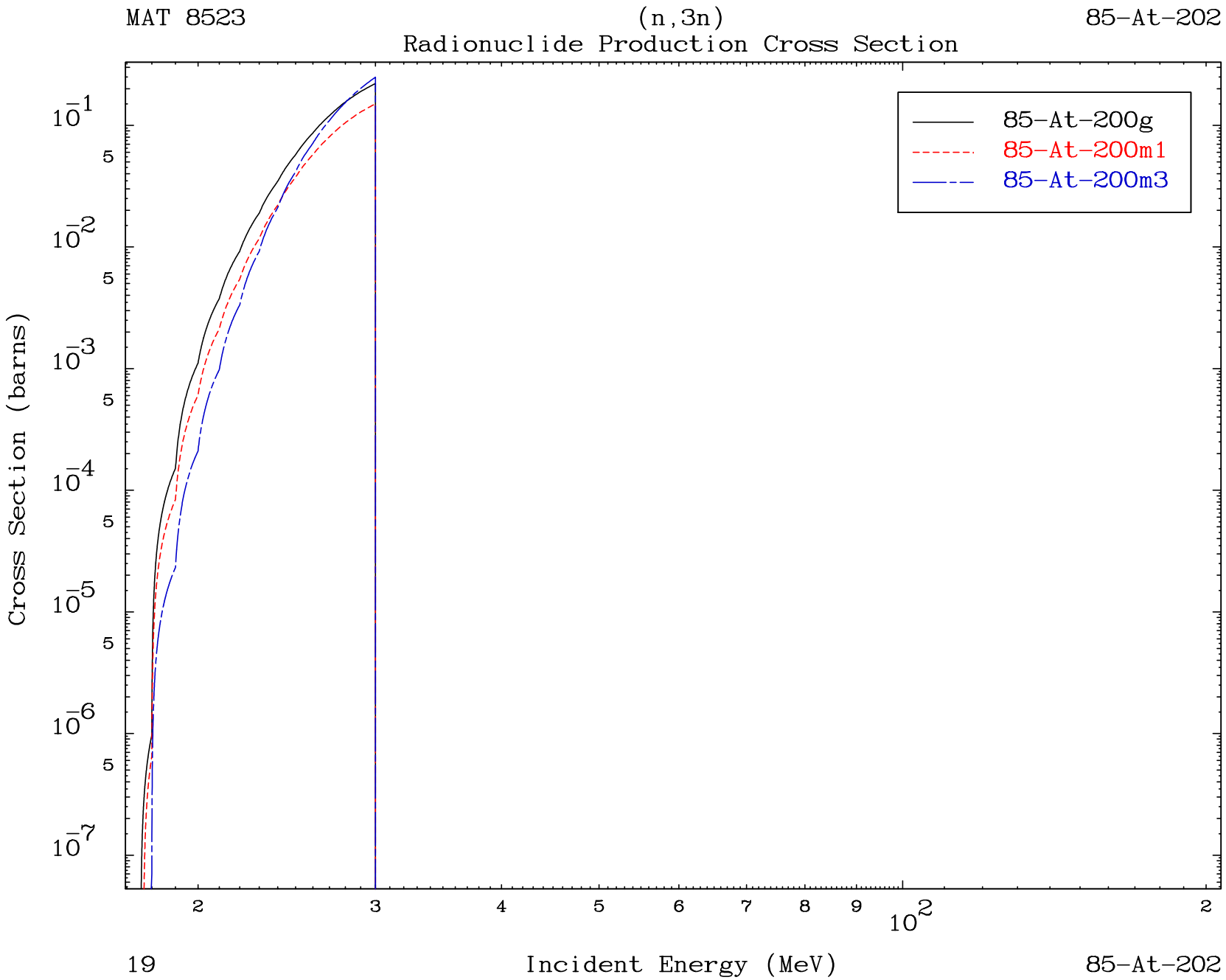

MAT 8523
Elastic
Legendre Coefficients
85-At-202
Legendre (CM)
0.03
0.02
0.01
0.00
0
10
20
30
14
Incident Energy (MeV)
85-At-202
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

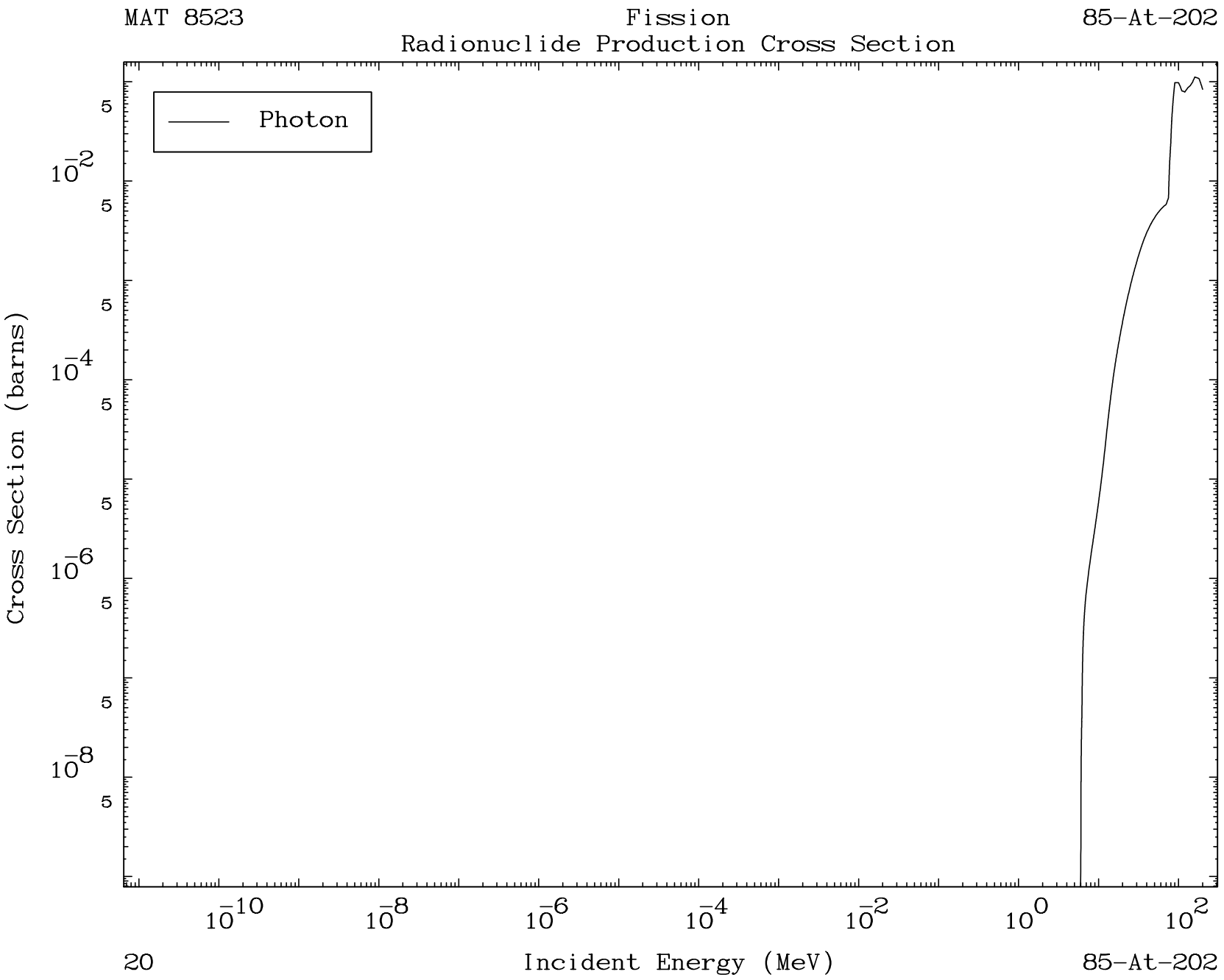

MAT 8523
Elastic
Legendre Coefficients
85-At-202
X10^{-4}
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
5
10
15
20
25
30
15
Incident Energy (MeV)
85-At-202

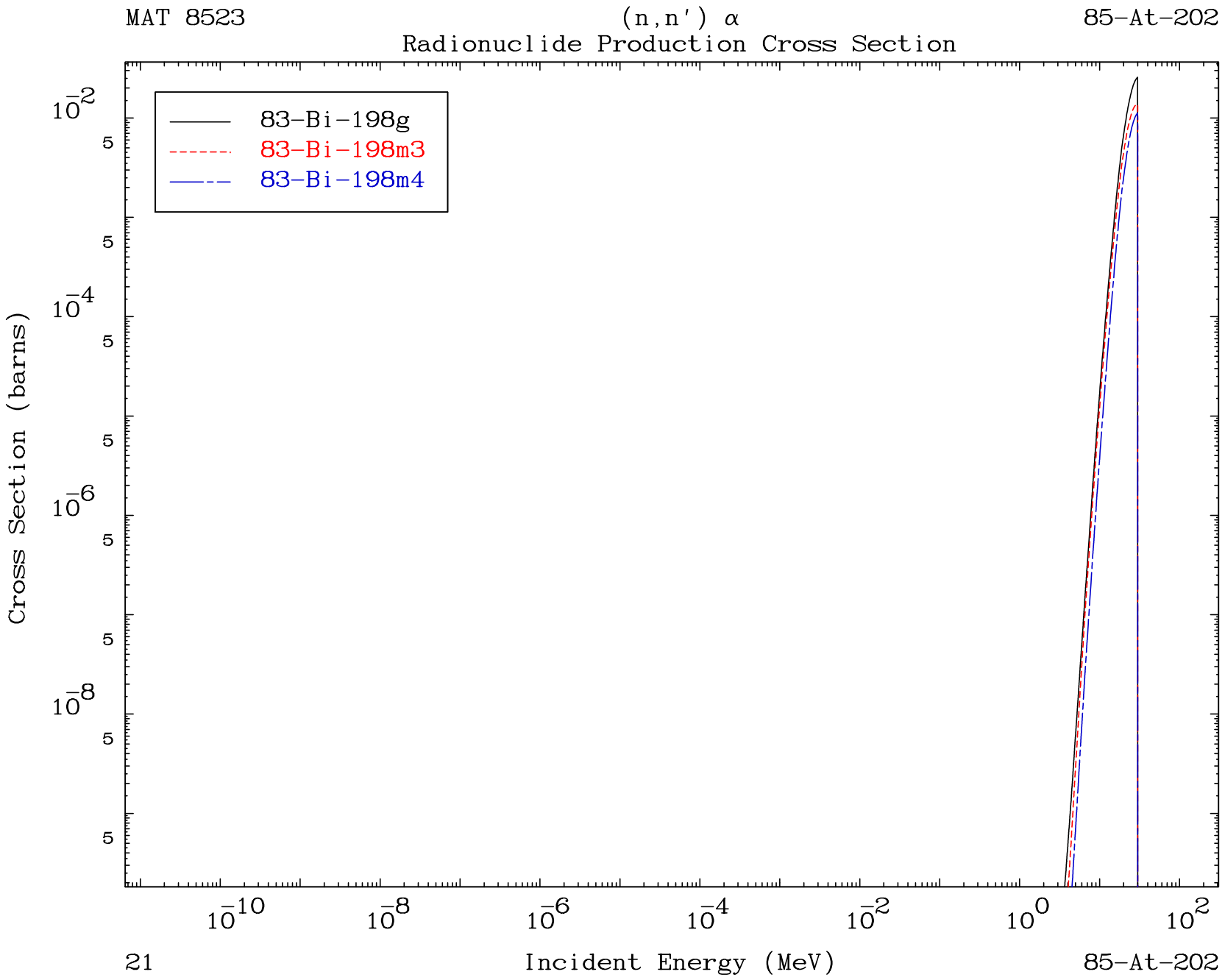

MAT 8523
Elastic
Legendre Coefficients
85-At-202
X10 -6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
15
20
25
30
16
Incident Energy (MeV)
85-At-202

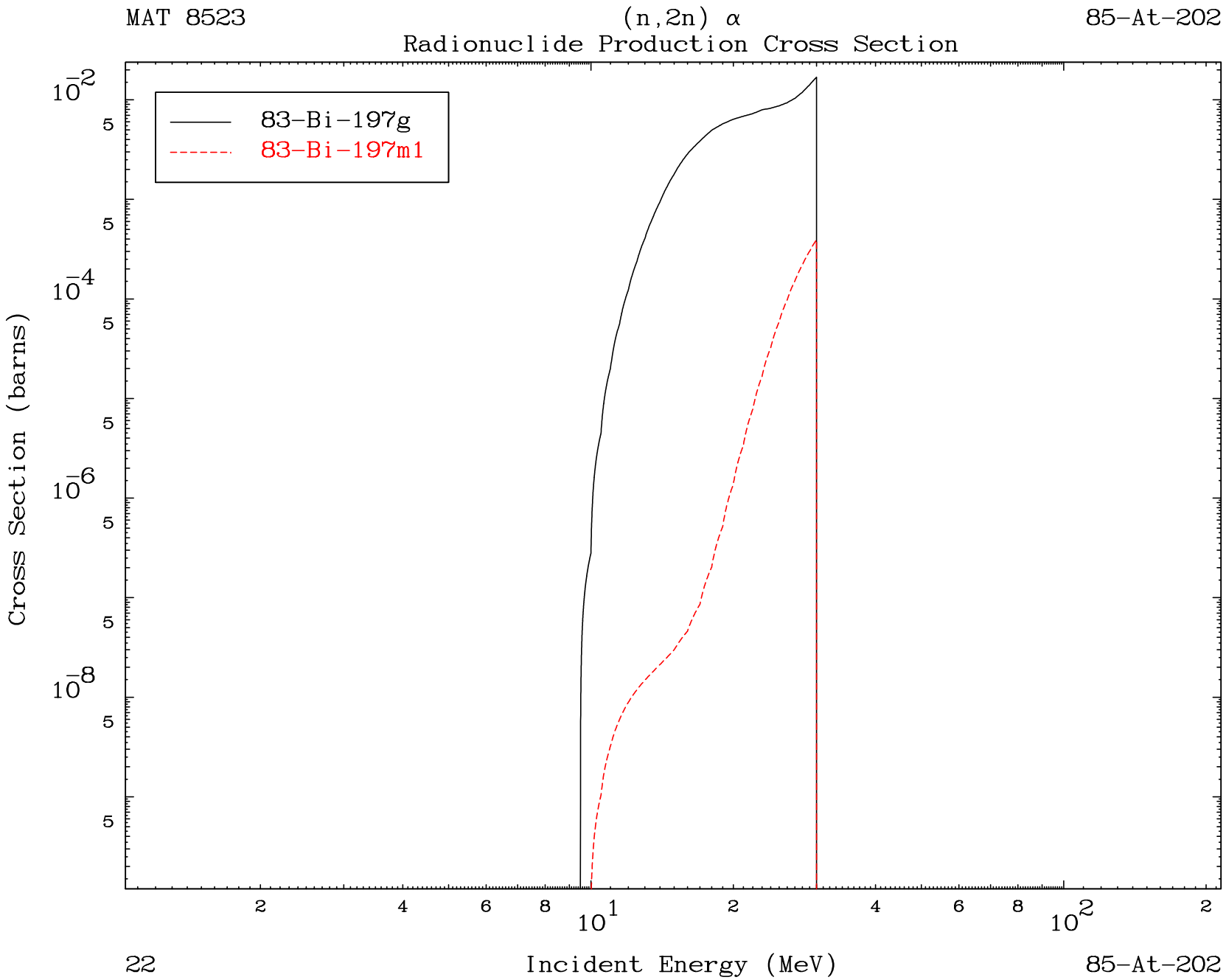

MAT 8523
Inelastic
85-At-202
Radionuclide Production Cross Section
85-At-202g
85-At-202m1
Cross Section (barns)
Incident Energy (MeV)
17
85-At-202

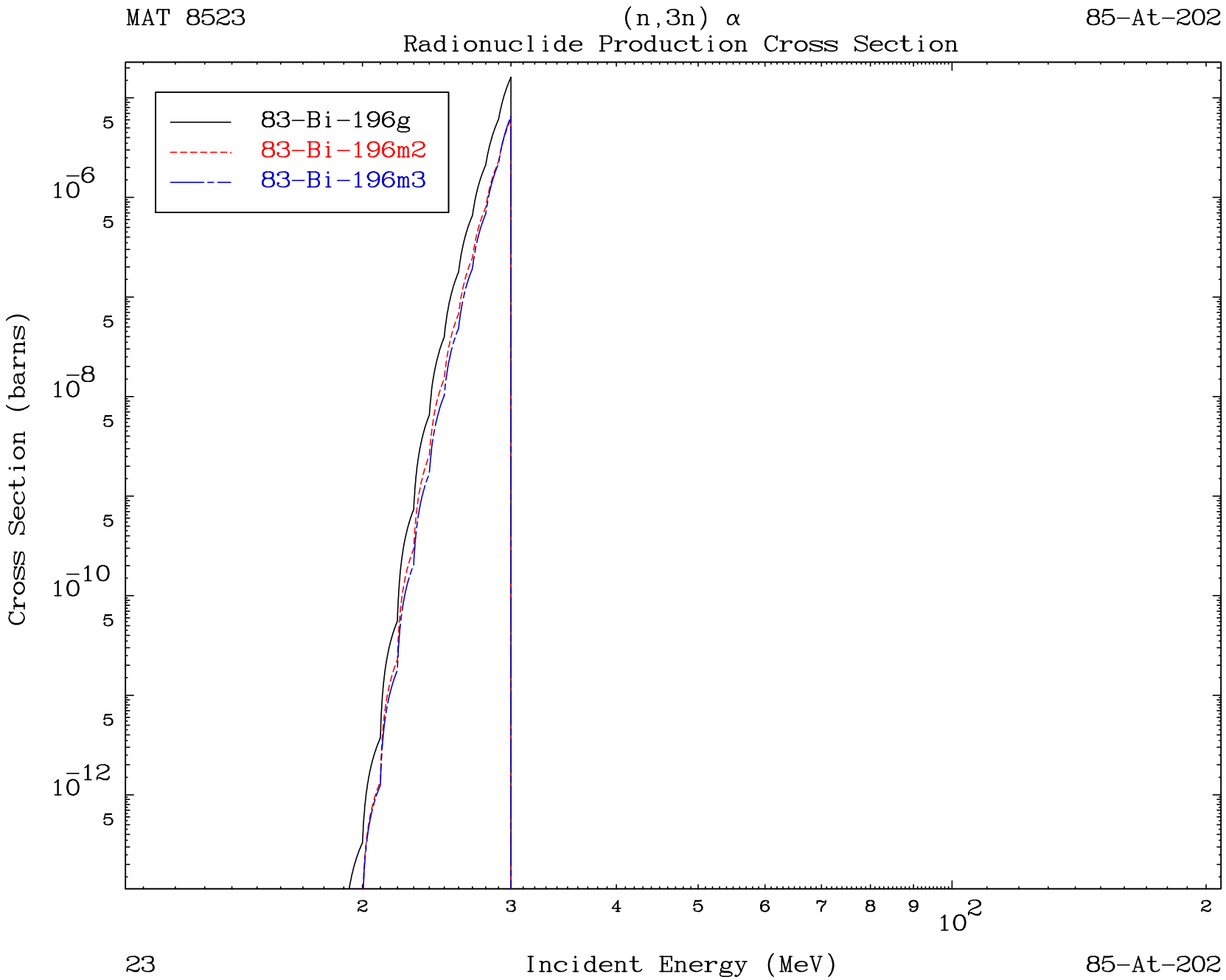

MAT 8523
(n,2n) d
85-At-202
Radionuclide Production Cross Section
84-Po-199g
84-Po-199m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
2
3
4
6
7
8
9
10^2
18
Incident Energy (MeV)
85-At-202

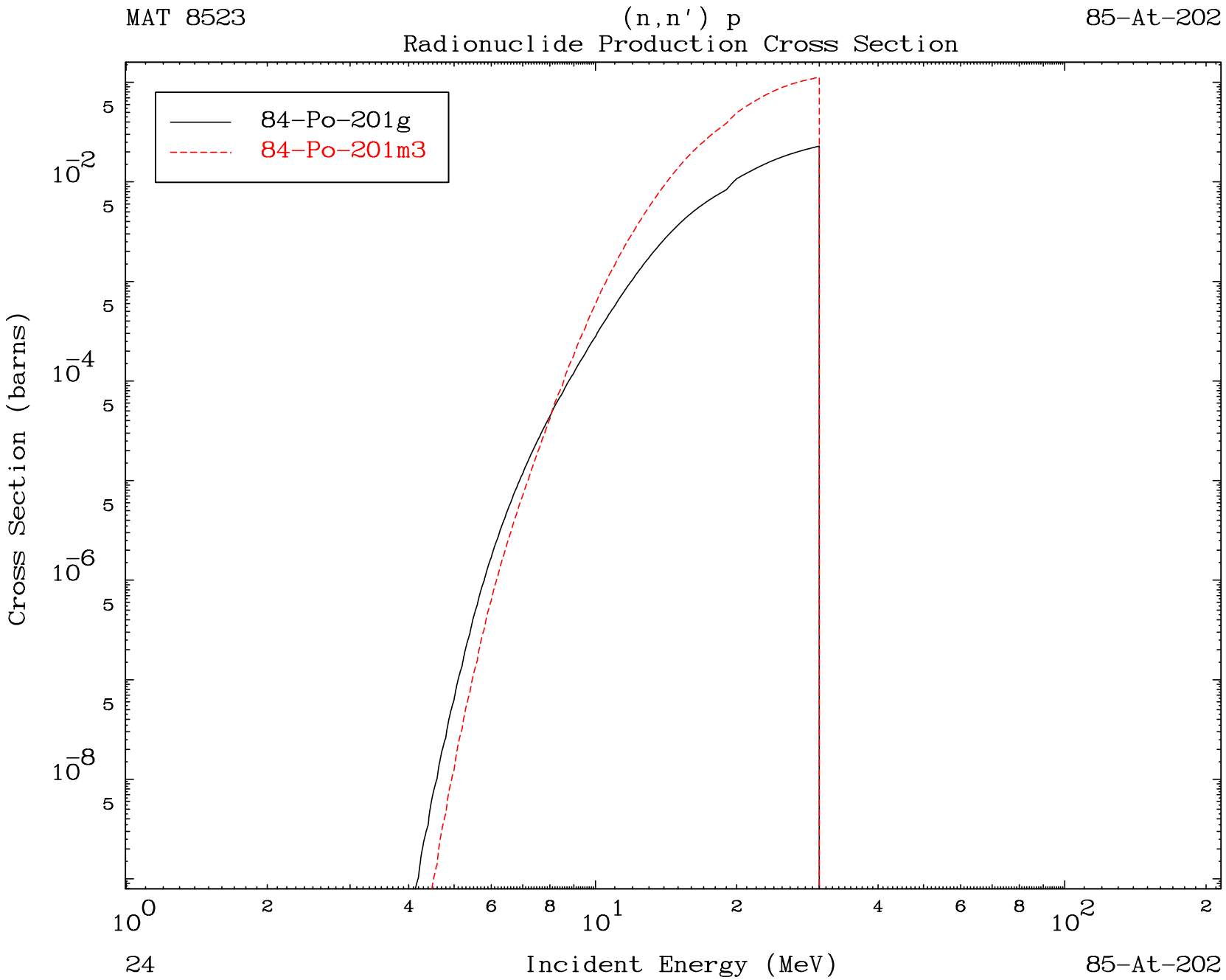

MAT 8523
(n,3n)
85-At-202
Radionuclide Production Cross Section
85-At-200g
85-At-200m1
85-At-200m3
Cross Section (barns)
Incident Energy (MeV)
19
85-At-202

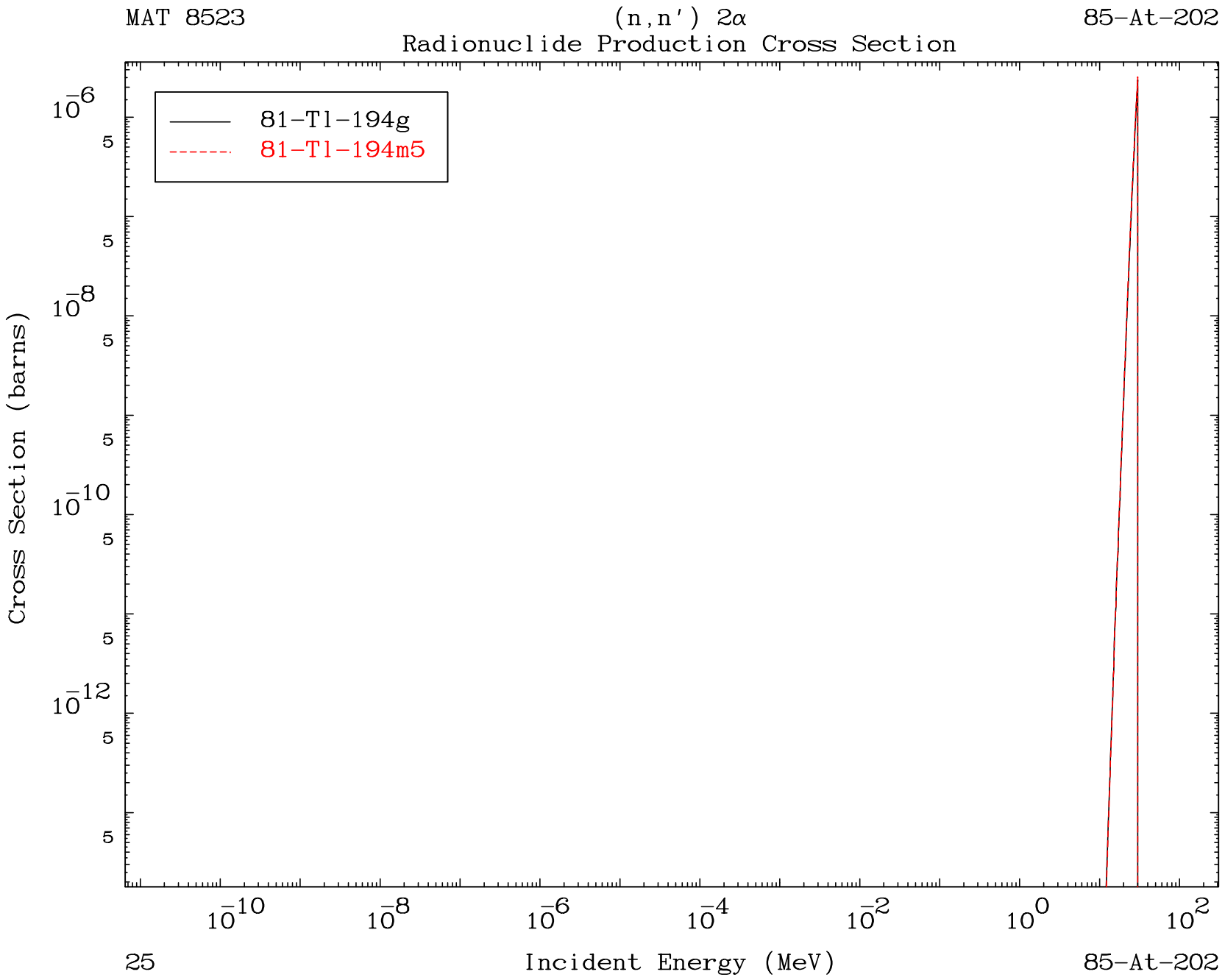

MAT 8523
Fission
85-At-202
Radionuclide Production Cross Section
Photon
Cross Section (barns)
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{0}
10^{2}
20
Incident Energy (MeV)
85-At-202

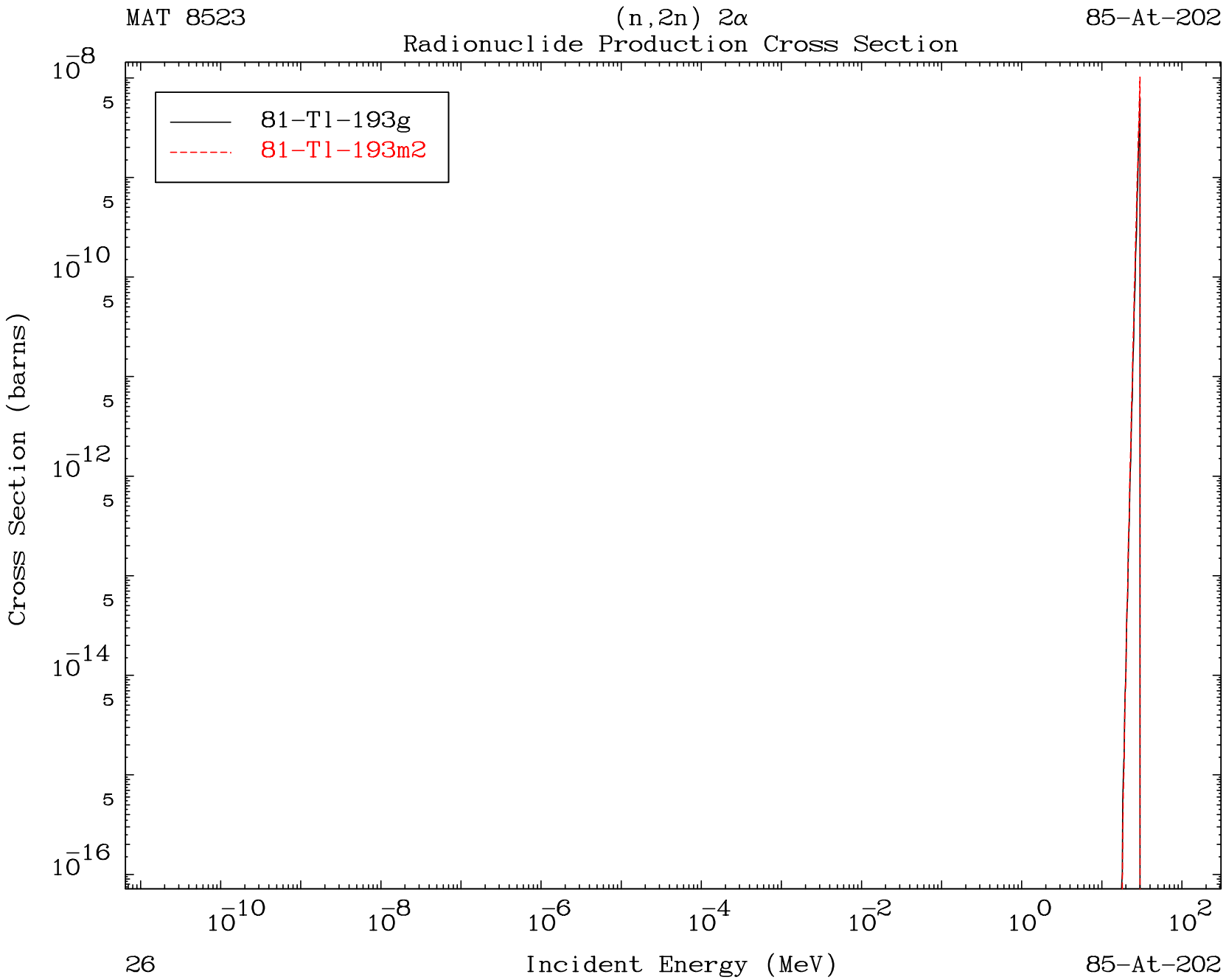

MAT 8523
(n,n') α
85-At-202
Radionuclide Production Cross Section
83-Bi-198g
83-Bi-198m3
83-Bi-198m4
Cross Section (barns)
Incident Energy (MeV)
21
85-At-202

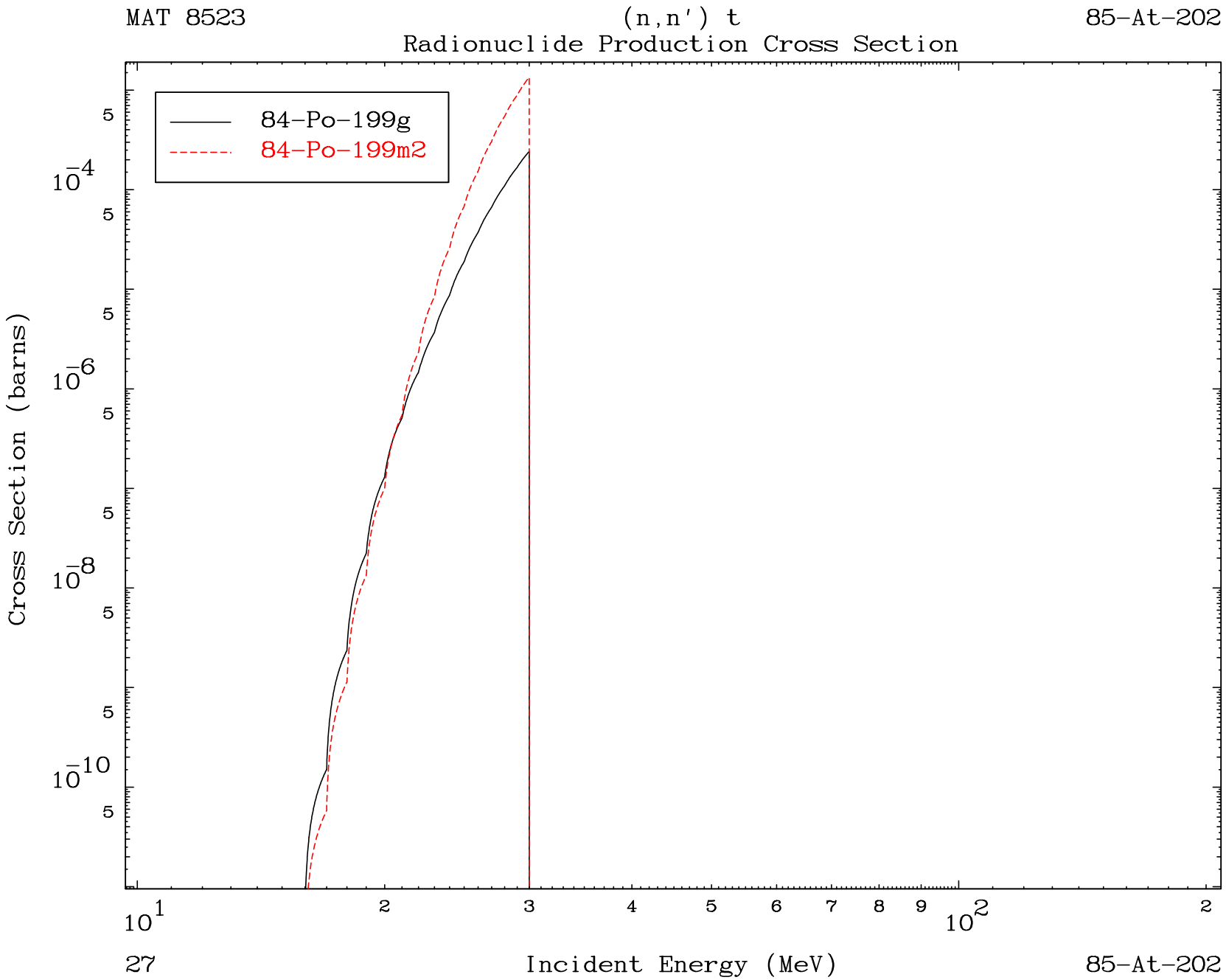

MAT 8523
(n,2n) α
85-At-202
Radionuclide Production Cross Section
83-Bi-197g
83-Bi-197m1
Cross Section (barns)
Incident Energy (MeV)
22
85-At-202

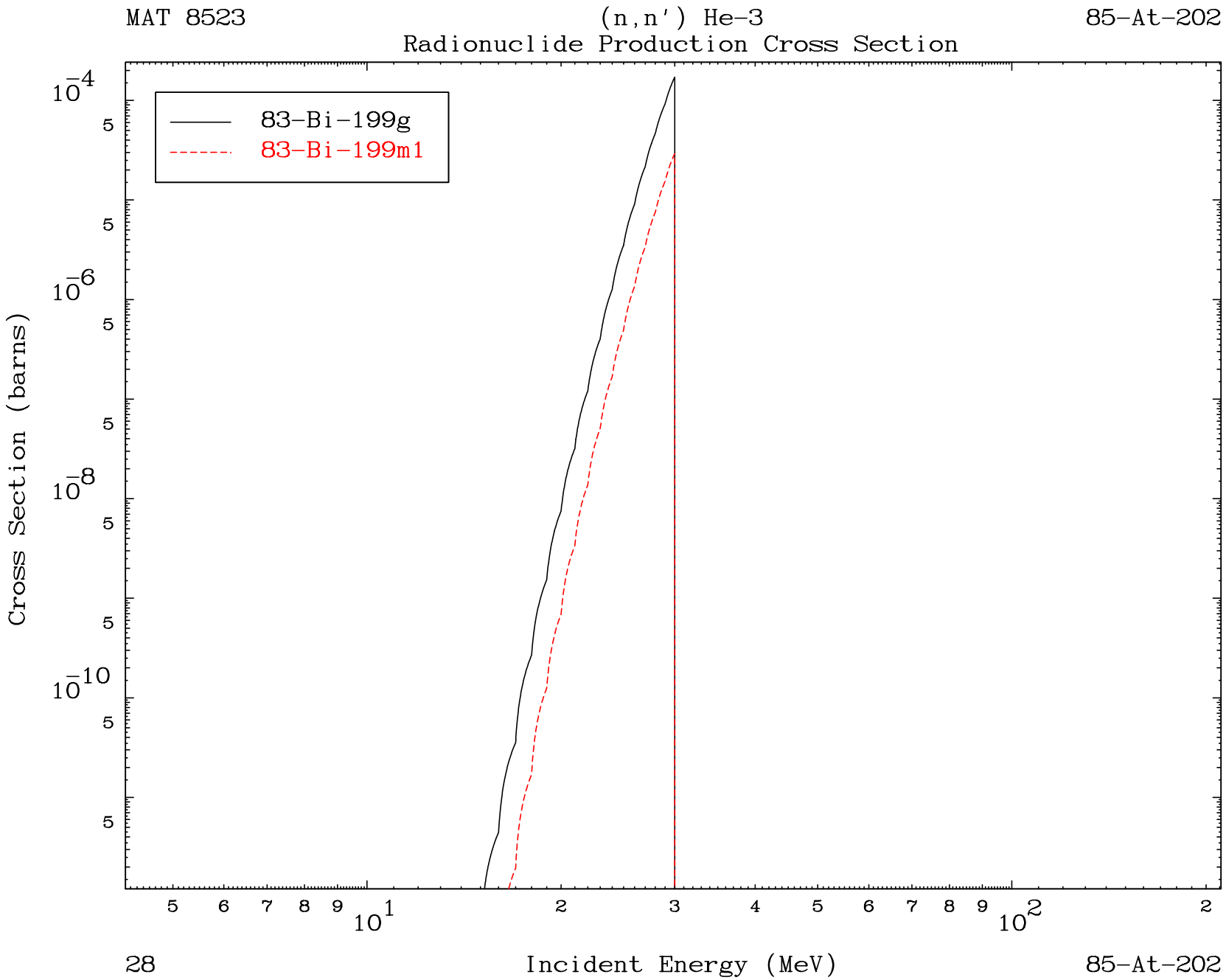

MAT 8523
(n,3n) α
85-At-202
Radionuclide Production Cross Section
83-Bi-196g
83-Bi-196m2
83-Bi-196m3
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
2
3
4
5
6
7
8
9
10^2
2
23
Incident Energy (MeV)
85-At-202

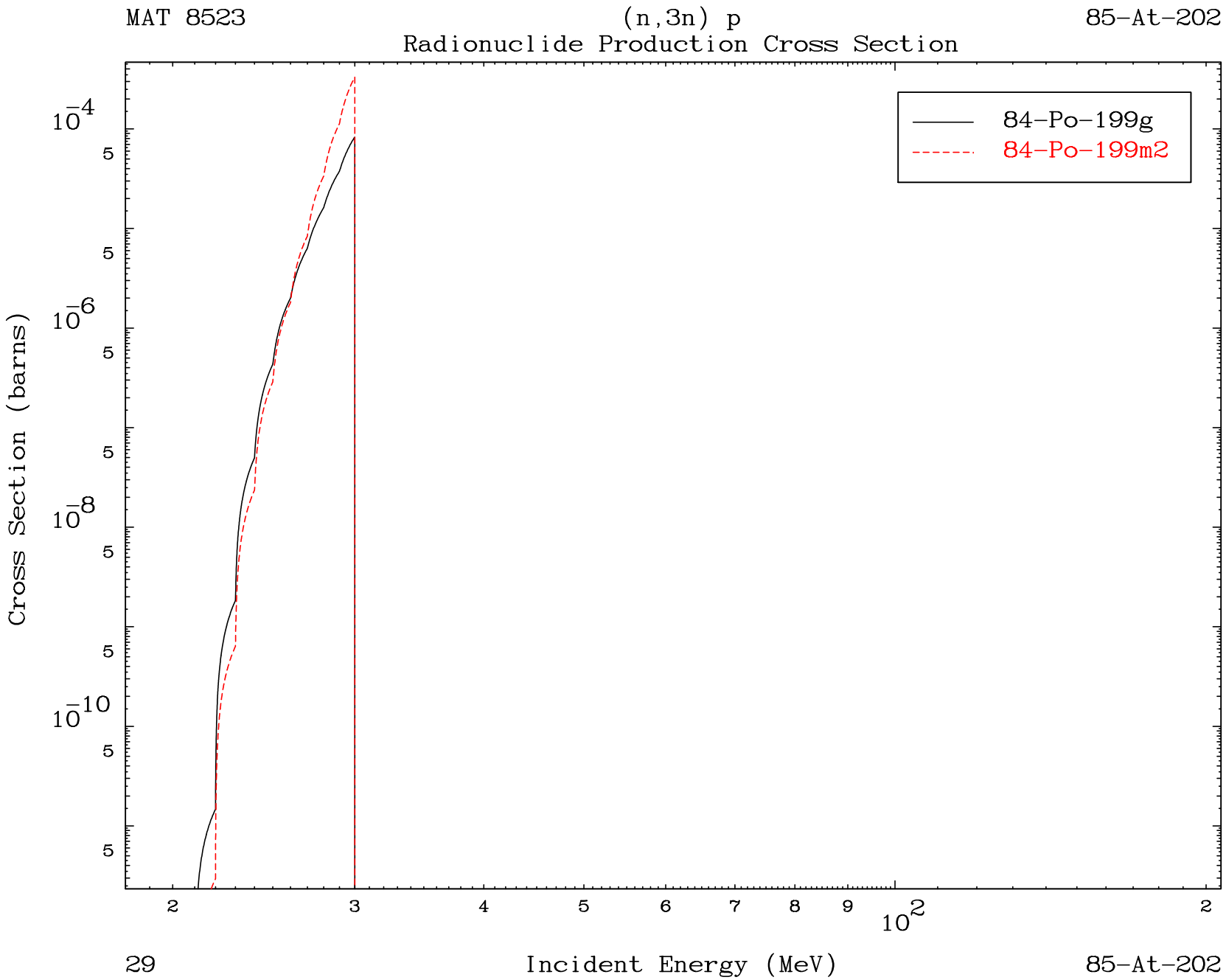

MAT 8523
(n,n') p
85-At-202
Radionuclide Production Cross Section
84-Po-201g
84-Po-201m3
Cross Section (barns)
Incident Energy (MeV)
24
85-At-202

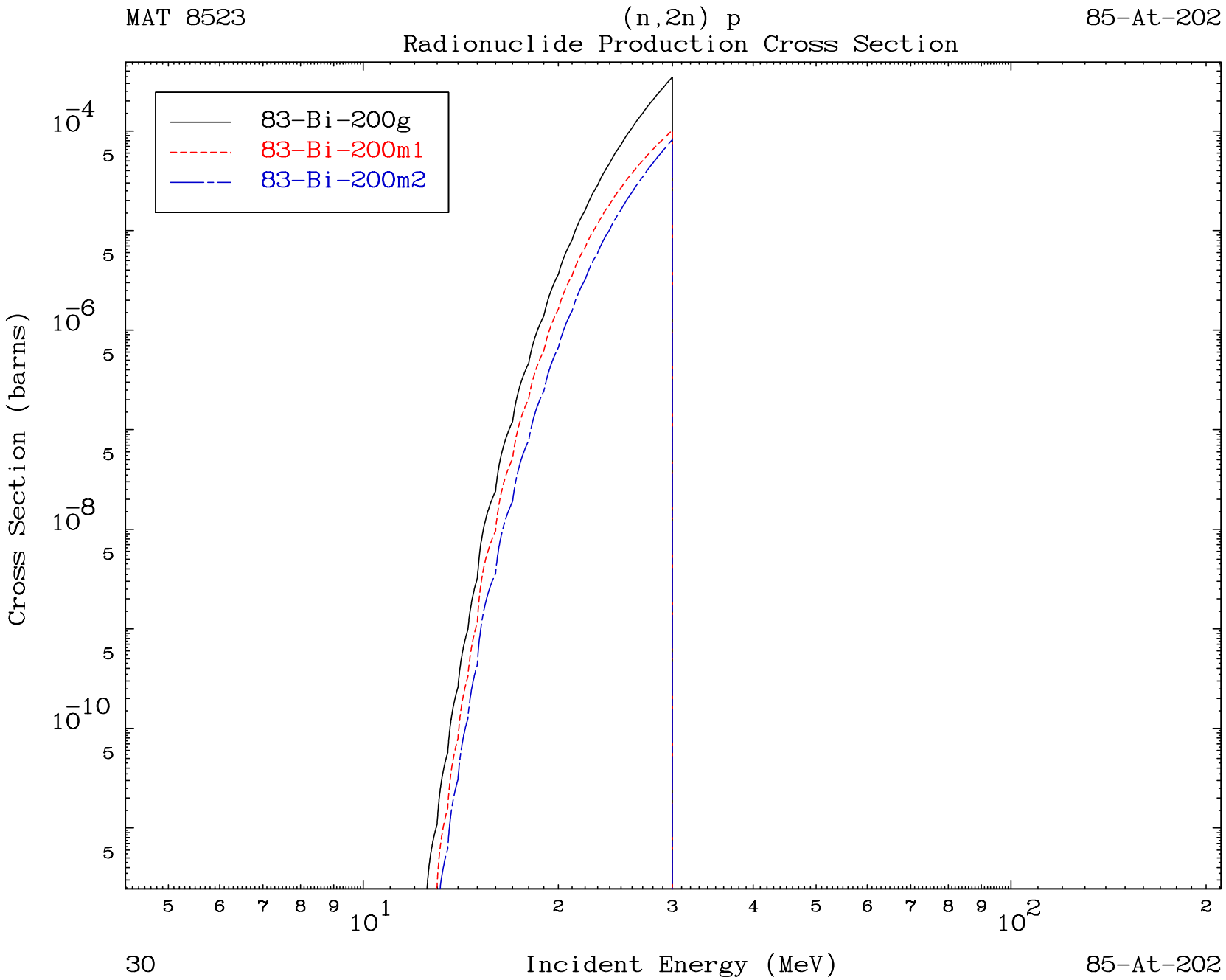

MAT 8523
(n,n') 2α
85-At-202
Radionuclide Production Cross Section
81-Tl-194g
81-Tl-194m5
Cross Section (barns)
Incident Energy (MeV)
25
85-At-202

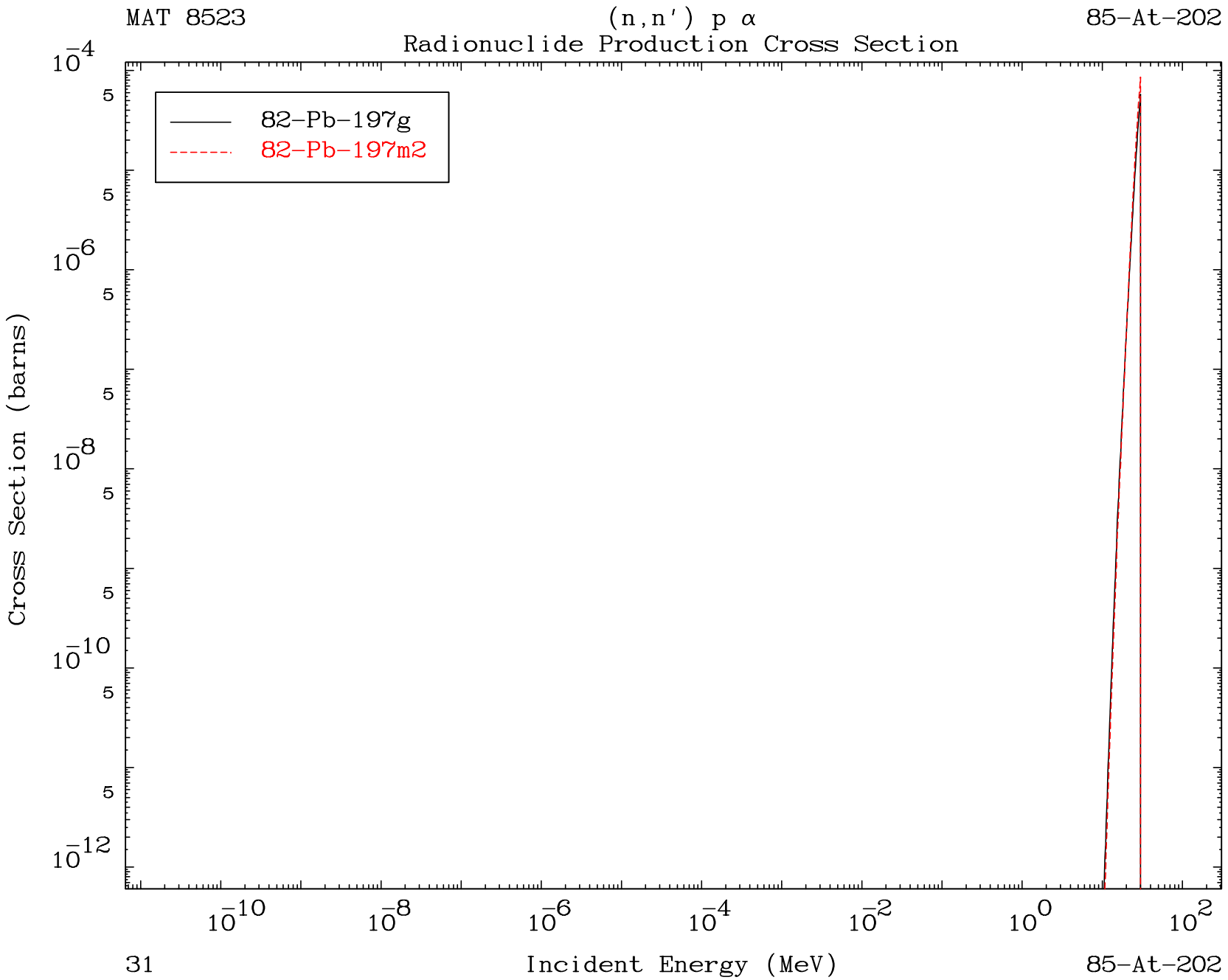

MAT 8523
(n,2n) 2α
85-At-202
Radionuclide Production Cross Section
81-Tl-193g
81-Tl-193m2
Cross Section (barns)
Incident Energy (MeV)
26
85-At-202

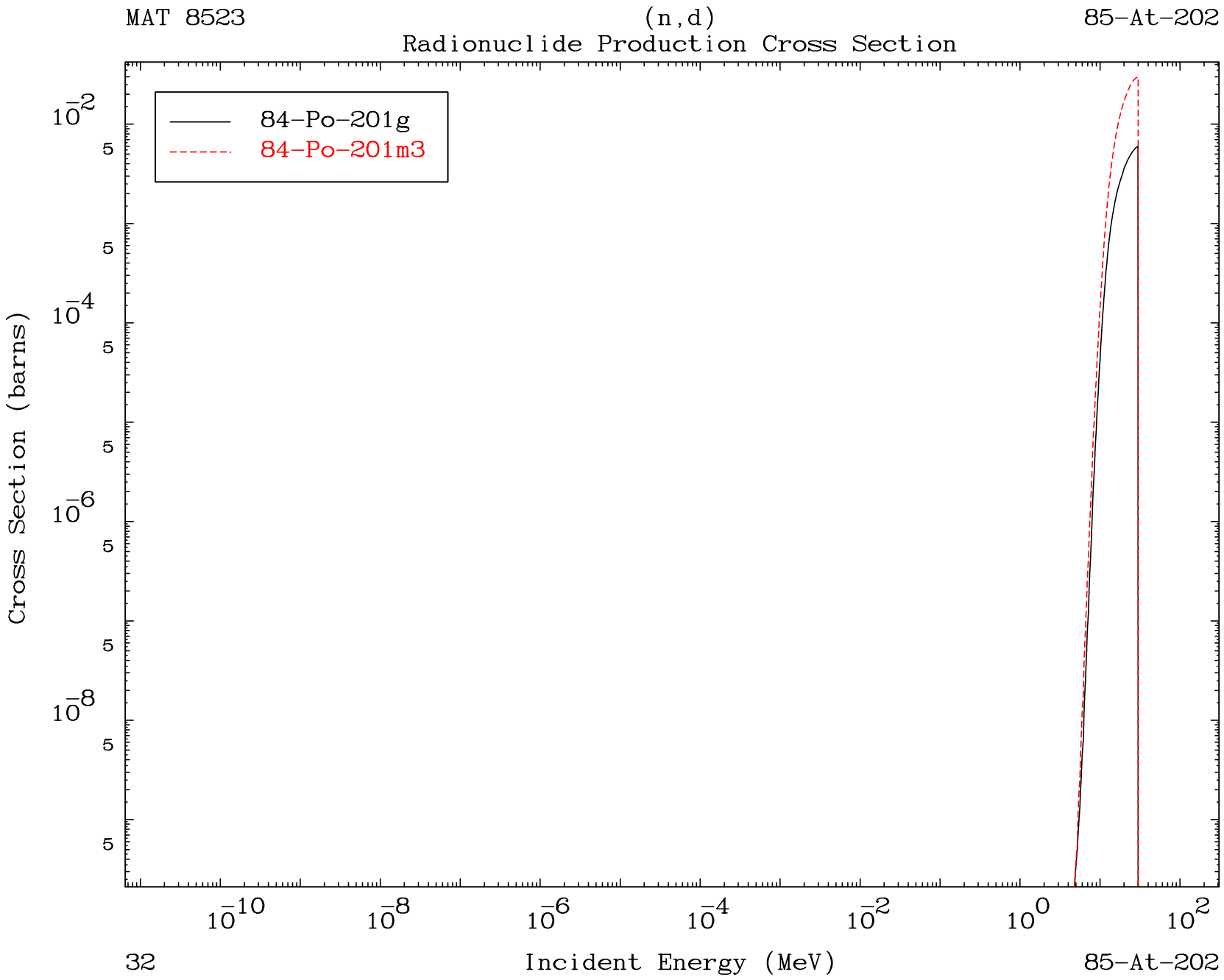

MAT 8523
(n,n') t
85-At-202
Radionuclide Production Cross Section
84-Po-199g
84-Po-199m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
27
85-At-202

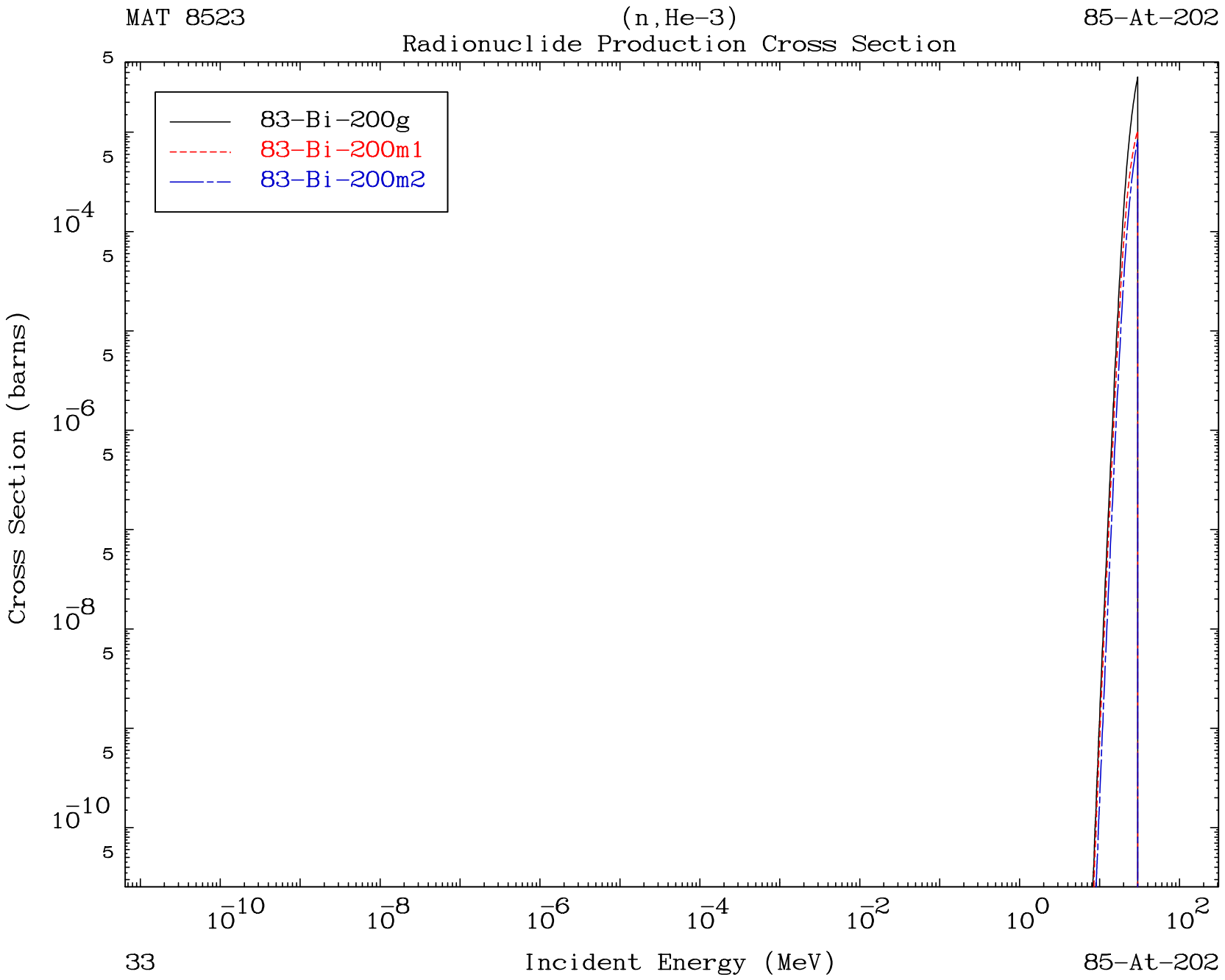

MAT 8523
(n,n') He-3
85-At-202
Radionuclide Production Cross Section
83-Bi-199g
83-Bi-199m1
Cross Section (barns)
Incident Energy (MeV)
28
85-At-202

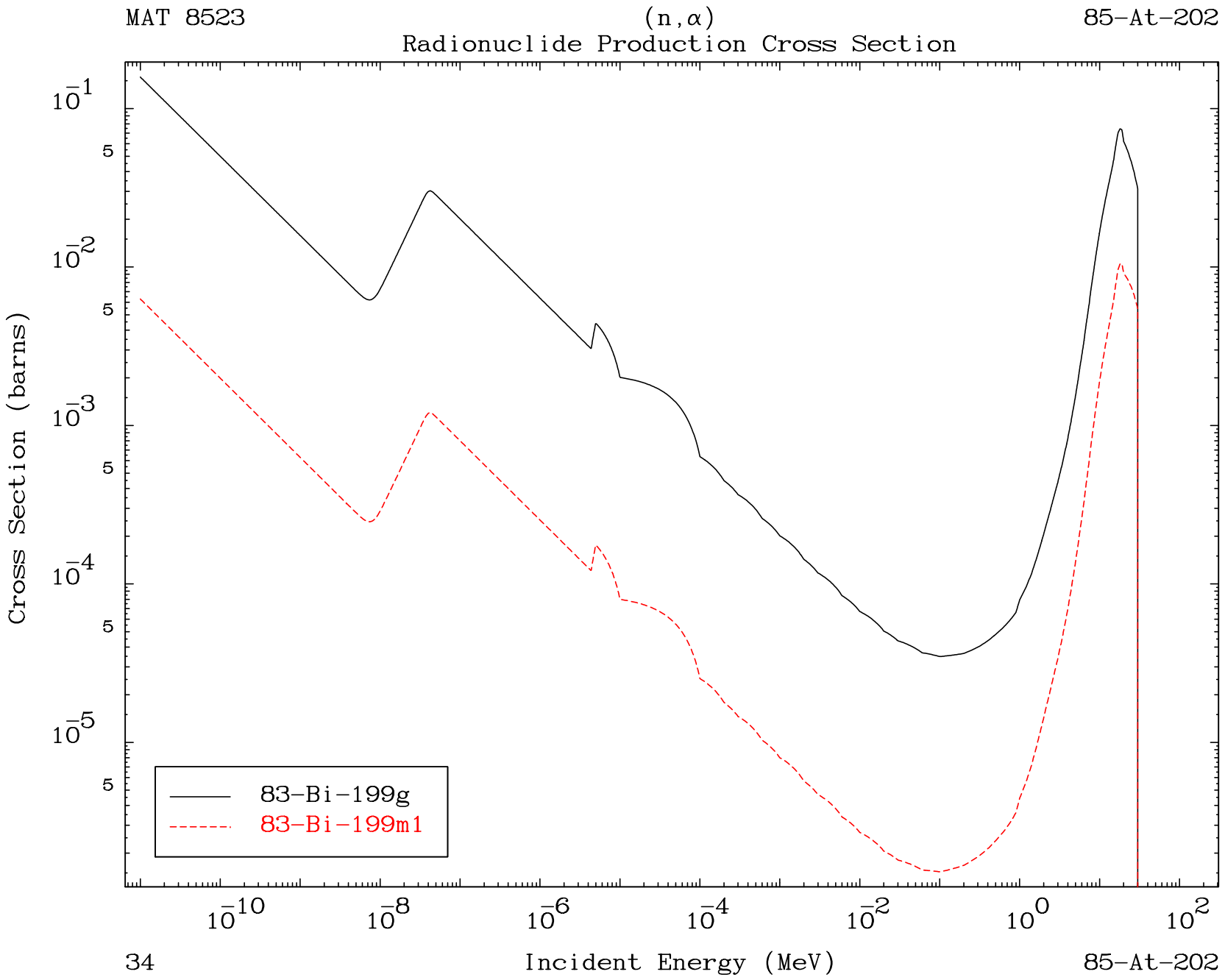

MAT 8523
(n,3n) p
85-At-202
Radionuclide Production Cross Section
84-Po-199g
84-Po-199m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
102
2
29
Incident Energy (MeV)
85-At-202

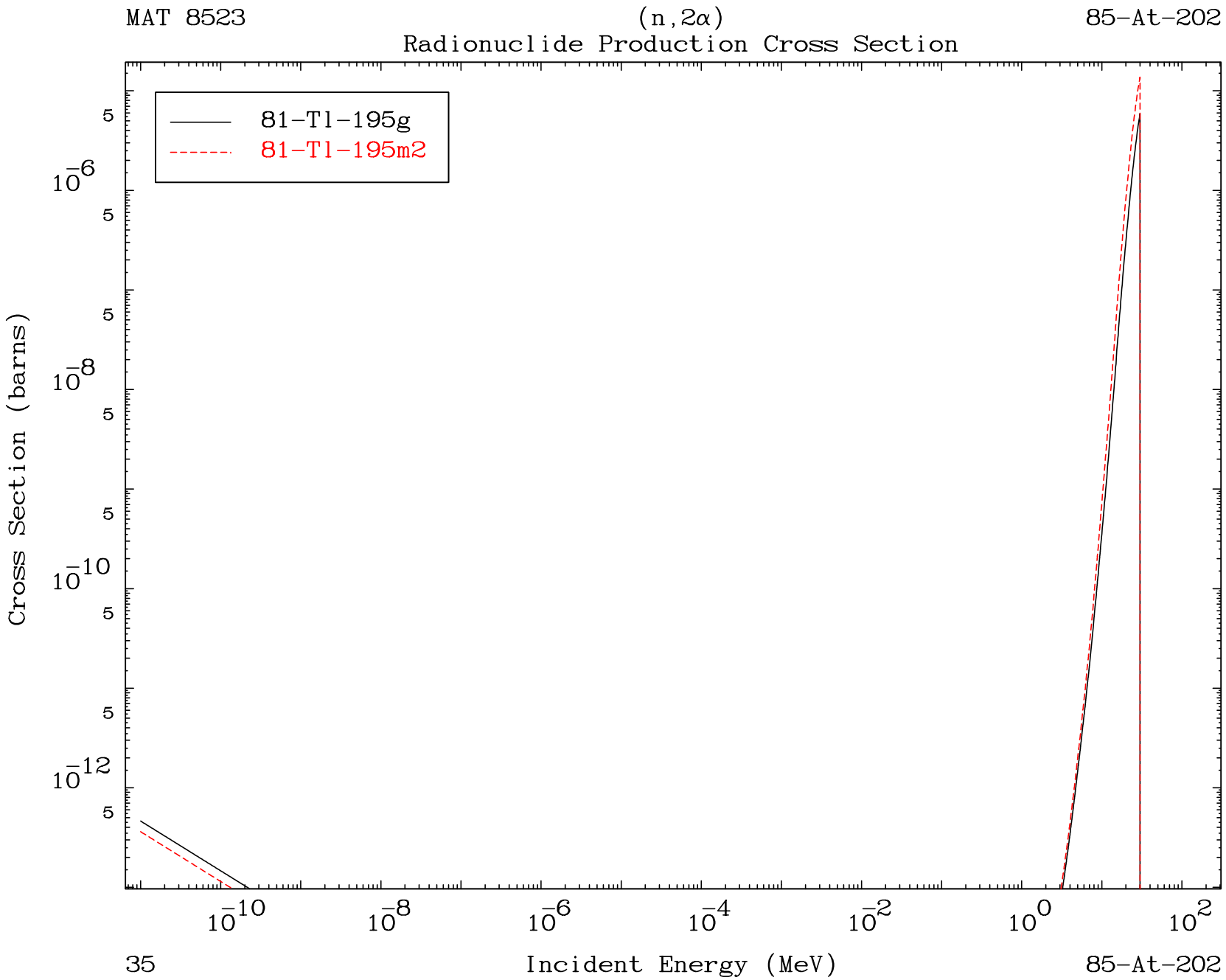

MAT 8523
(n,2n) p
85-At-202
Radionuclide Production Cross Section
83-Bi-200g
83-Bi-200m1
83-Bi-200m2
Cross Section (barns)
Incident Energy (MeV)
30
85-At-202

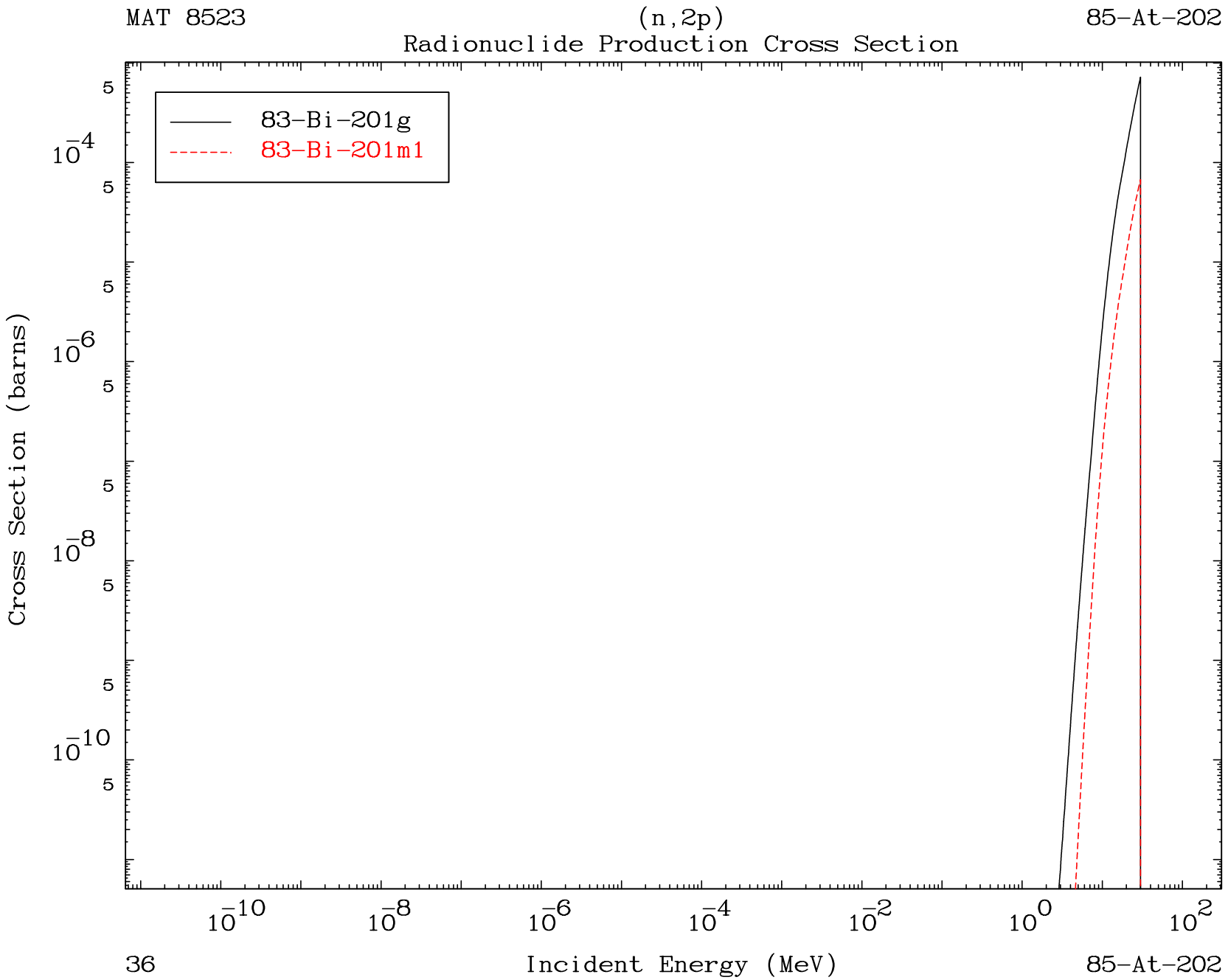

MAT 8523
(n,n') p α
85-At-202
Radionuclide Production Cross Section
82-Pb-197g
82-Pb-197m2
Cross Section (barns)
Incident Energy (MeV)
31
85-At-202

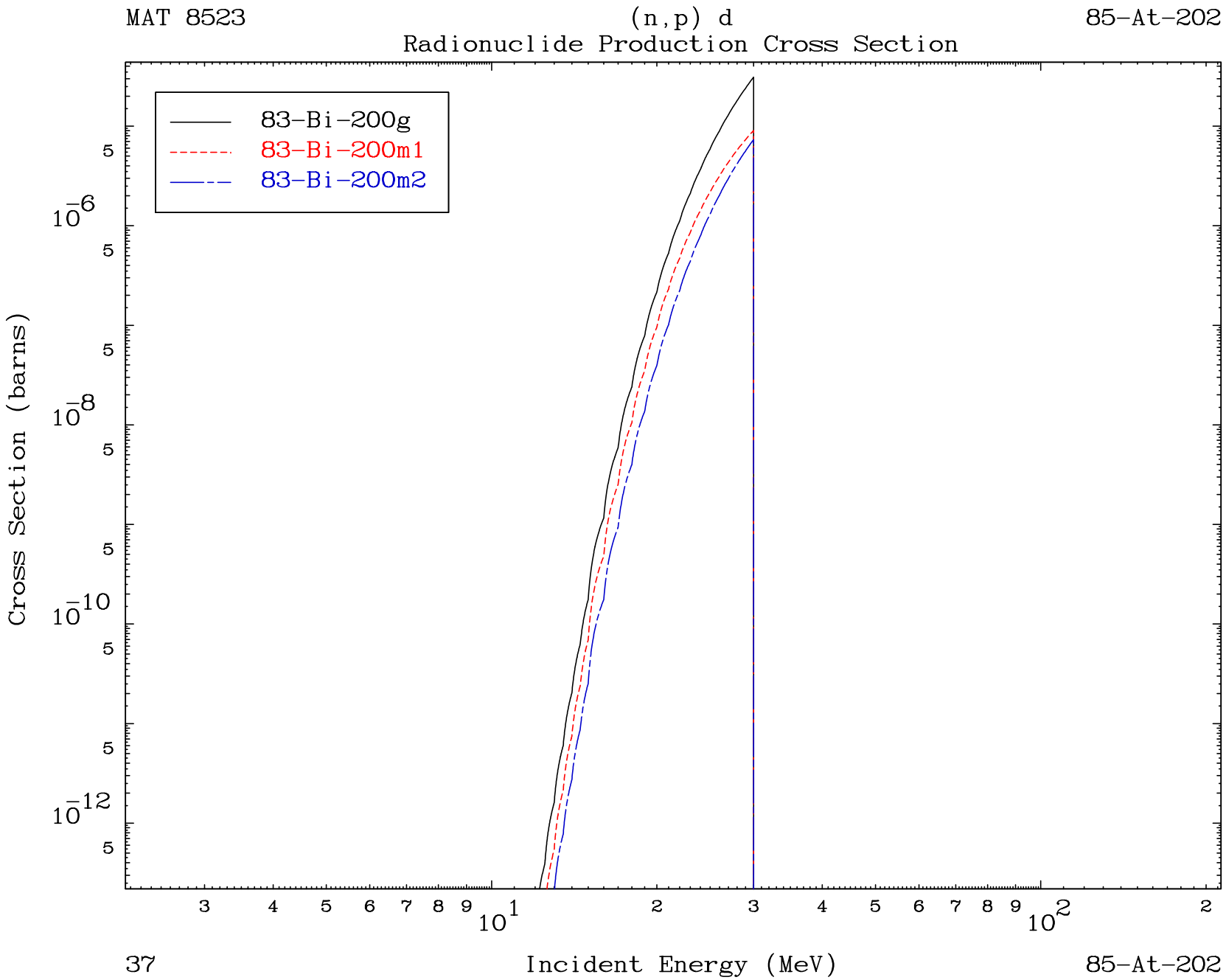

MAT 8523
(n,d)
85-At-202
Radionuclide Production Cross Section
84-Po-201g
84-Po-201m3
Cross Section (barns)
Incident Energy (MeV)
32
85-At-202

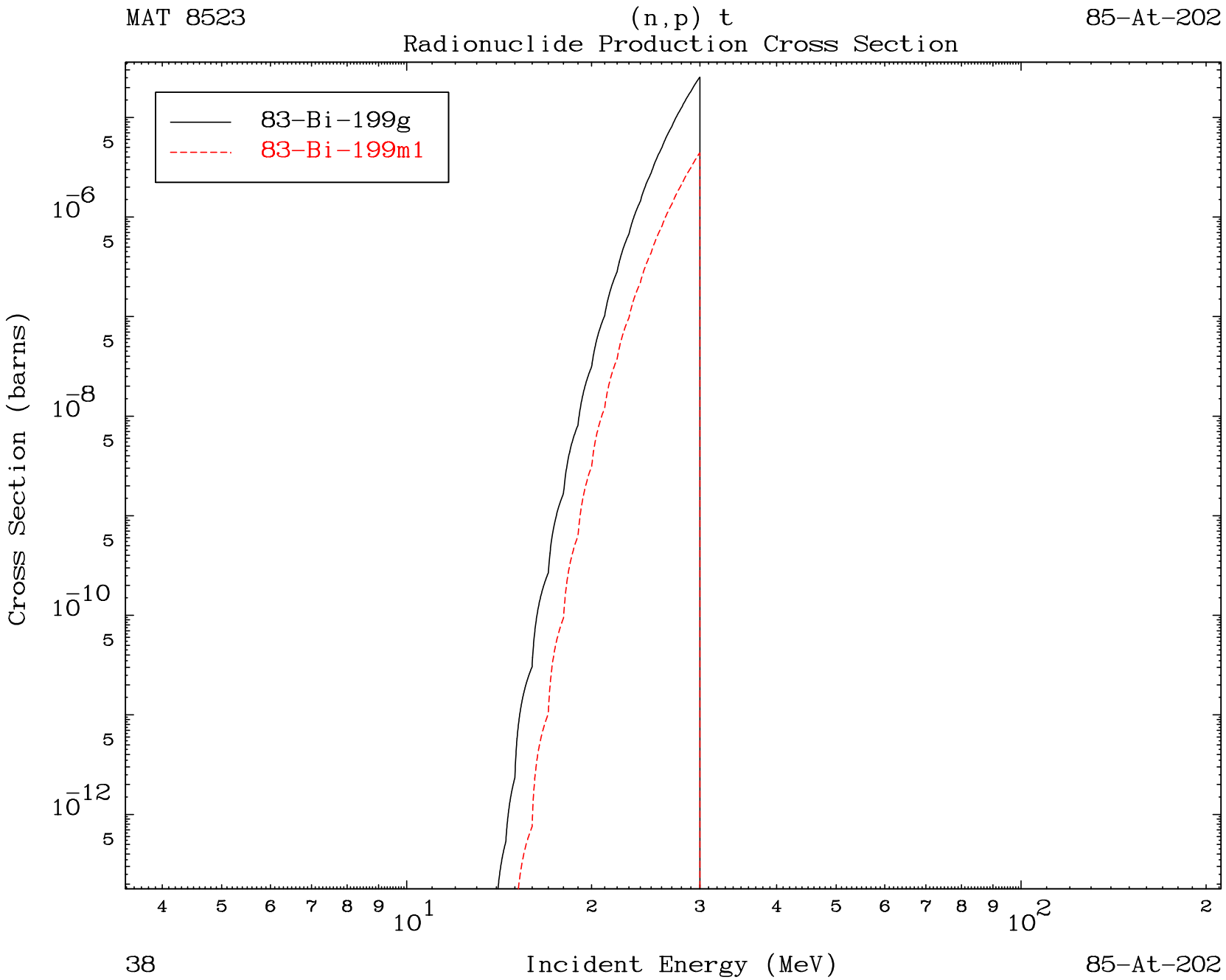

MAT 8523
(n,He-3)
85-At-202
Radionuclide Production Cross Section
83-Bi-200g
83-Bi-200m1
83-Bi-200m2
Cross Section (barns)
Incident Energy (MeV)
33
85-At-202

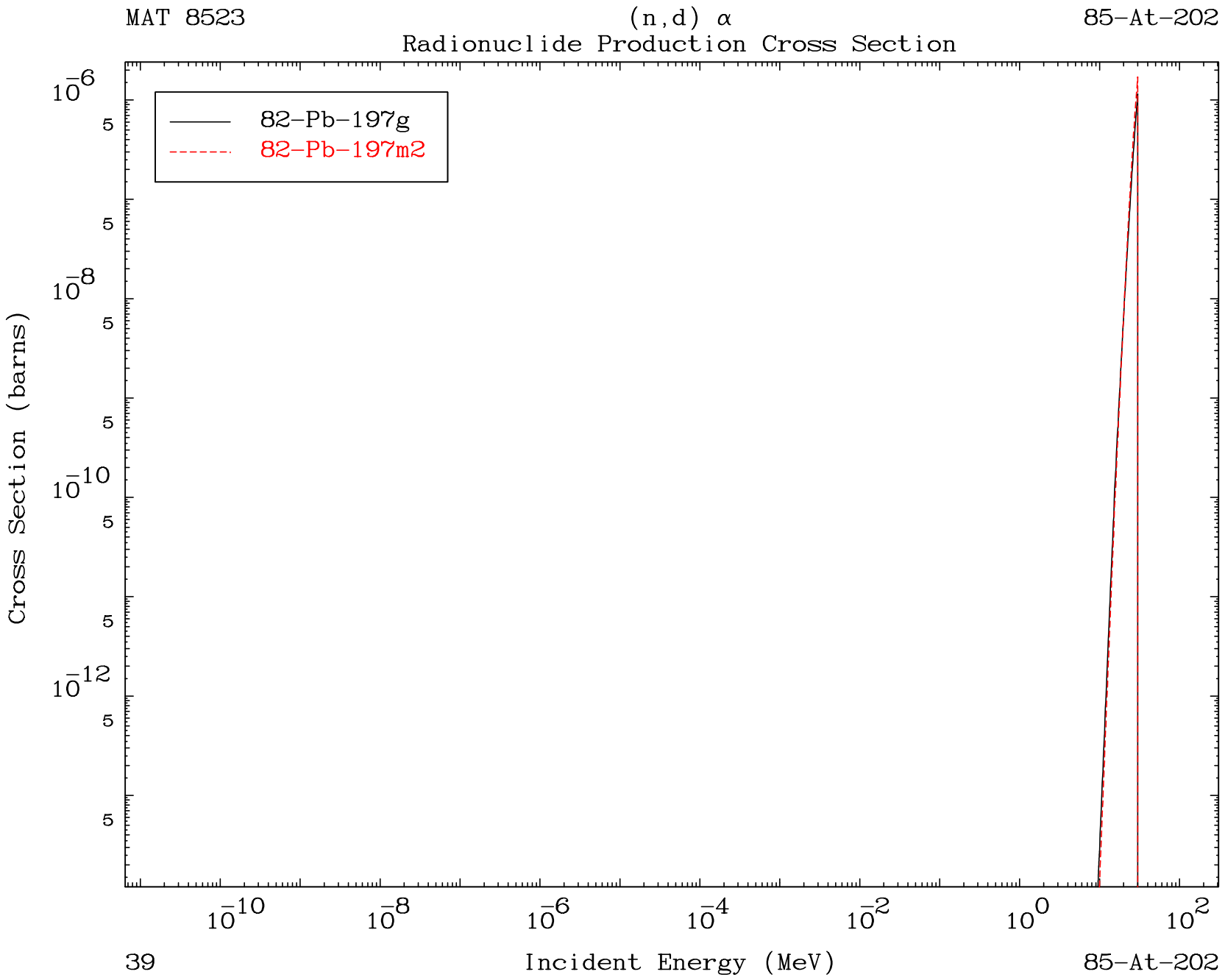

MAT 8523
(n,α)
85-At-202
Radionuclide Production Cross Section
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
10-5
5
83-Bi-199g
83-Bi-199m1
10-10
10-8
10-6
10-4
10-2
100
102
34
Incident Energy (MeV)
85-At-202


MAT 8523
(n,2α)
85-At-202
Radionuclide Production Cross Section
81-Tl-195g
81-Tl-195m2
Cross Section (barns)
Incident Energy (MeV)
35
85-At-202


MAT 8523
(n,2p)
85-At-202
Radionuclide Production Cross Section
83-Bi-201g
83-Bi-201m1
Cross Section (barns)
Incident Energy (MeV)
36
85-At-202


MAT 8523
(n,p) d
85-At-202
Radionuclide Production Cross Section
83-Bi-200g
83-Bi-200m1
83-Bi-200m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
3 4 5 6 7 8 9
10^1
2 3 4 5 6 7 8 9
10^2
2
37
Incident Energy (MeV)
85-At-202


MAT 8523
(n,p) t
85-At-202
Radionuclide Production Cross Section
83-Bi-199g
83-Bi-199m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
38
Incident Energy (MeV)
85-At-202


MAT 8523
(n,d) α
85-At-202
Radionuclide Production Cross Section
82-Pb-197g
82-Pb-197m2
Cross Section (barns)
Incident Energy (MeV)
39
85-At-202