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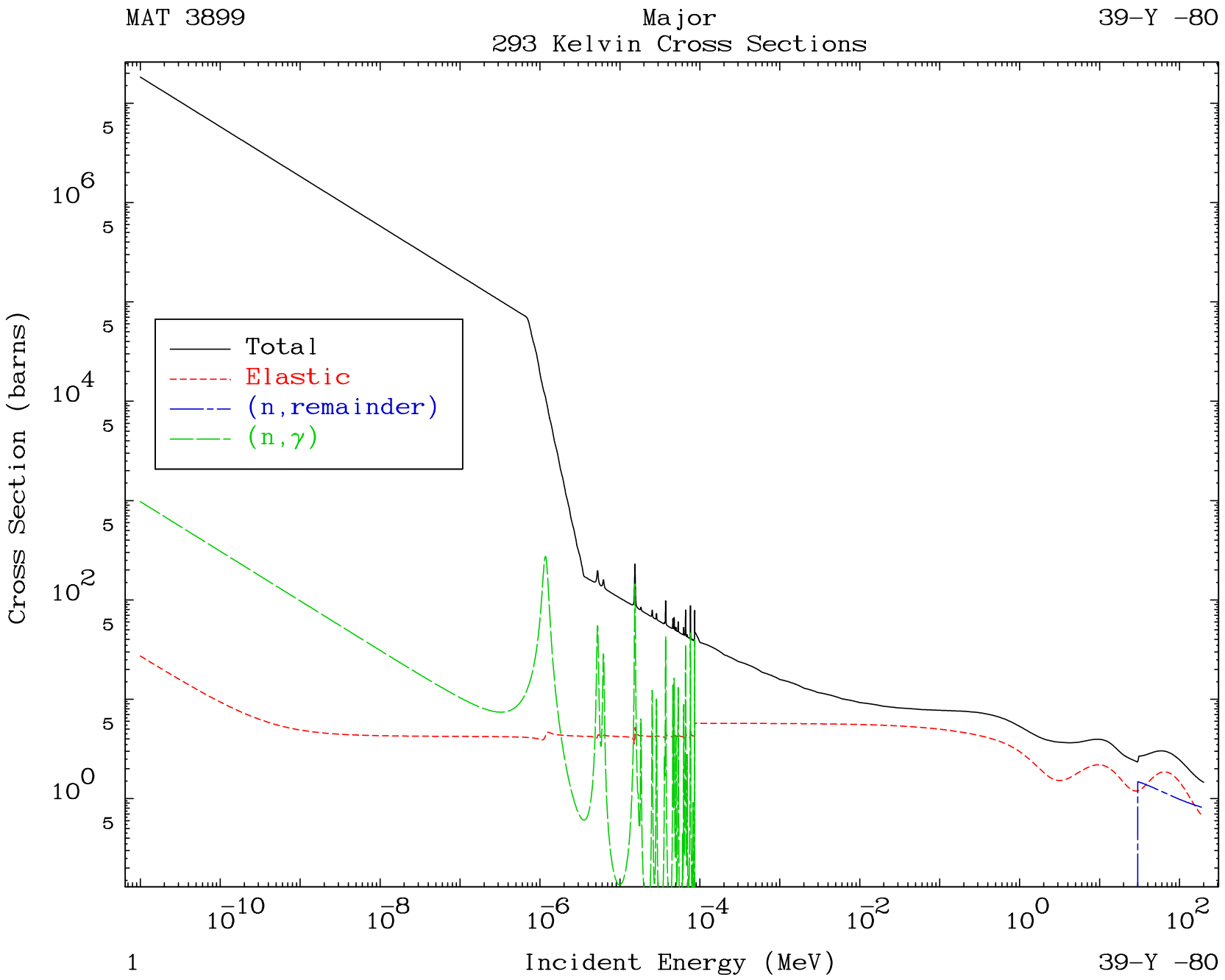
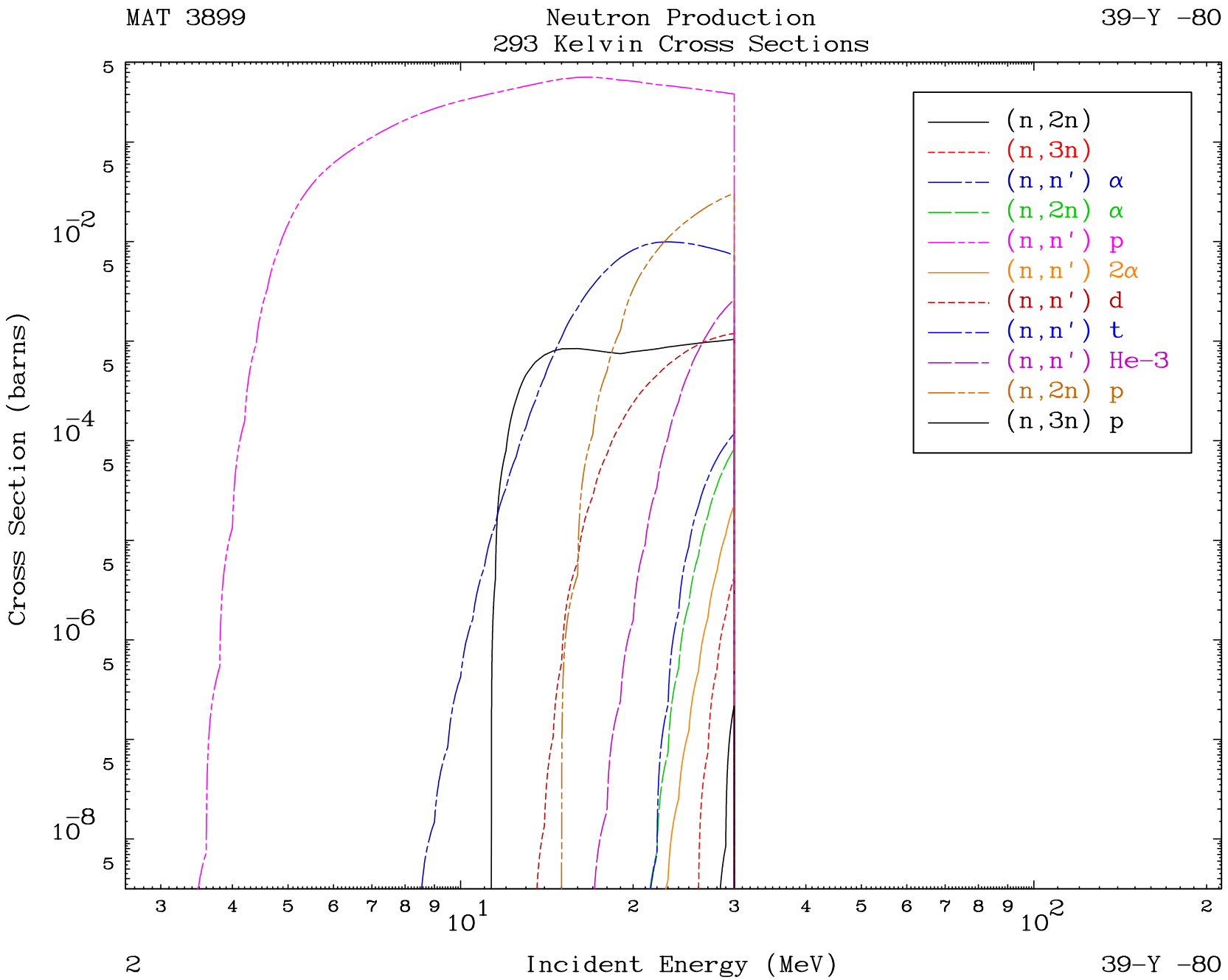
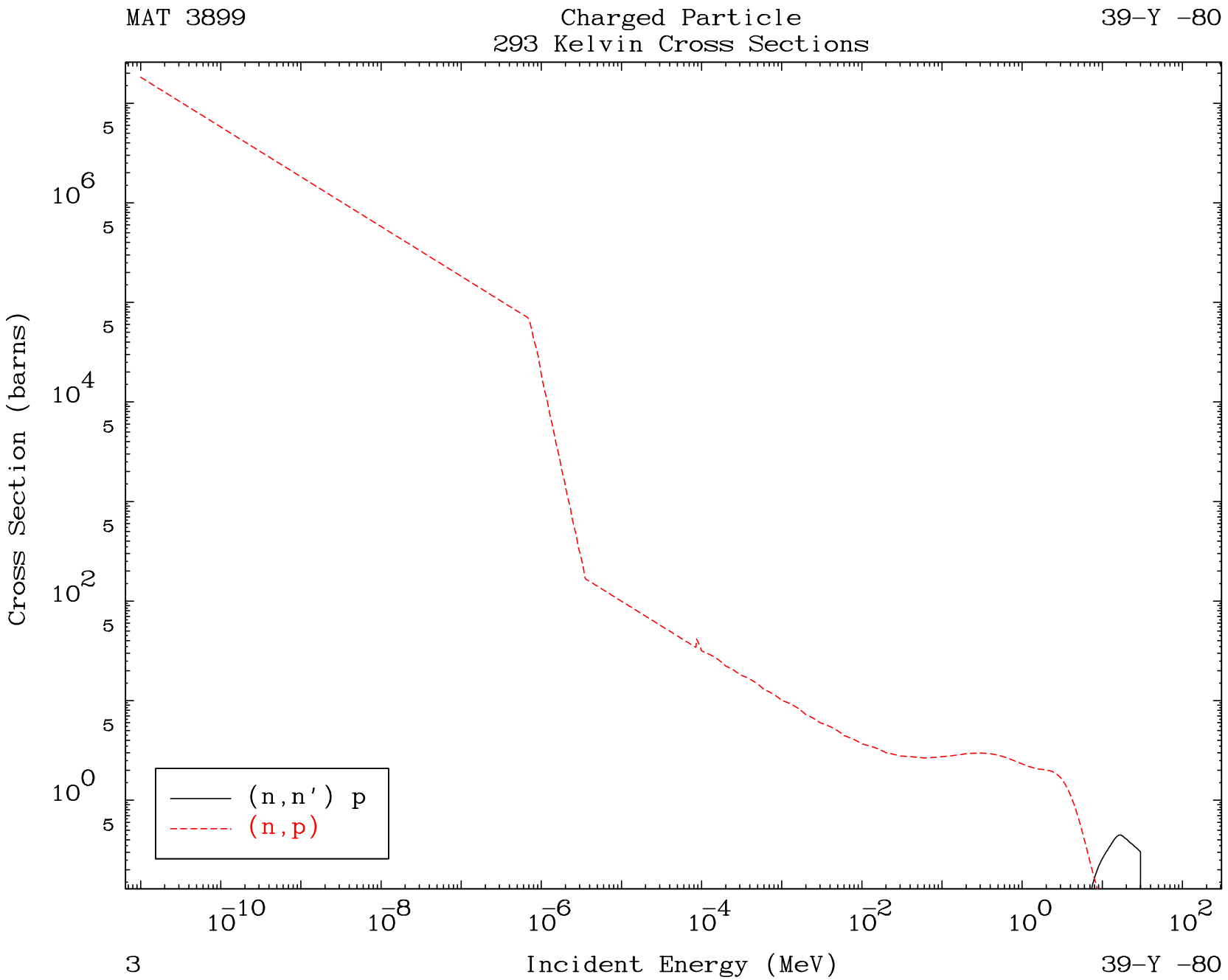
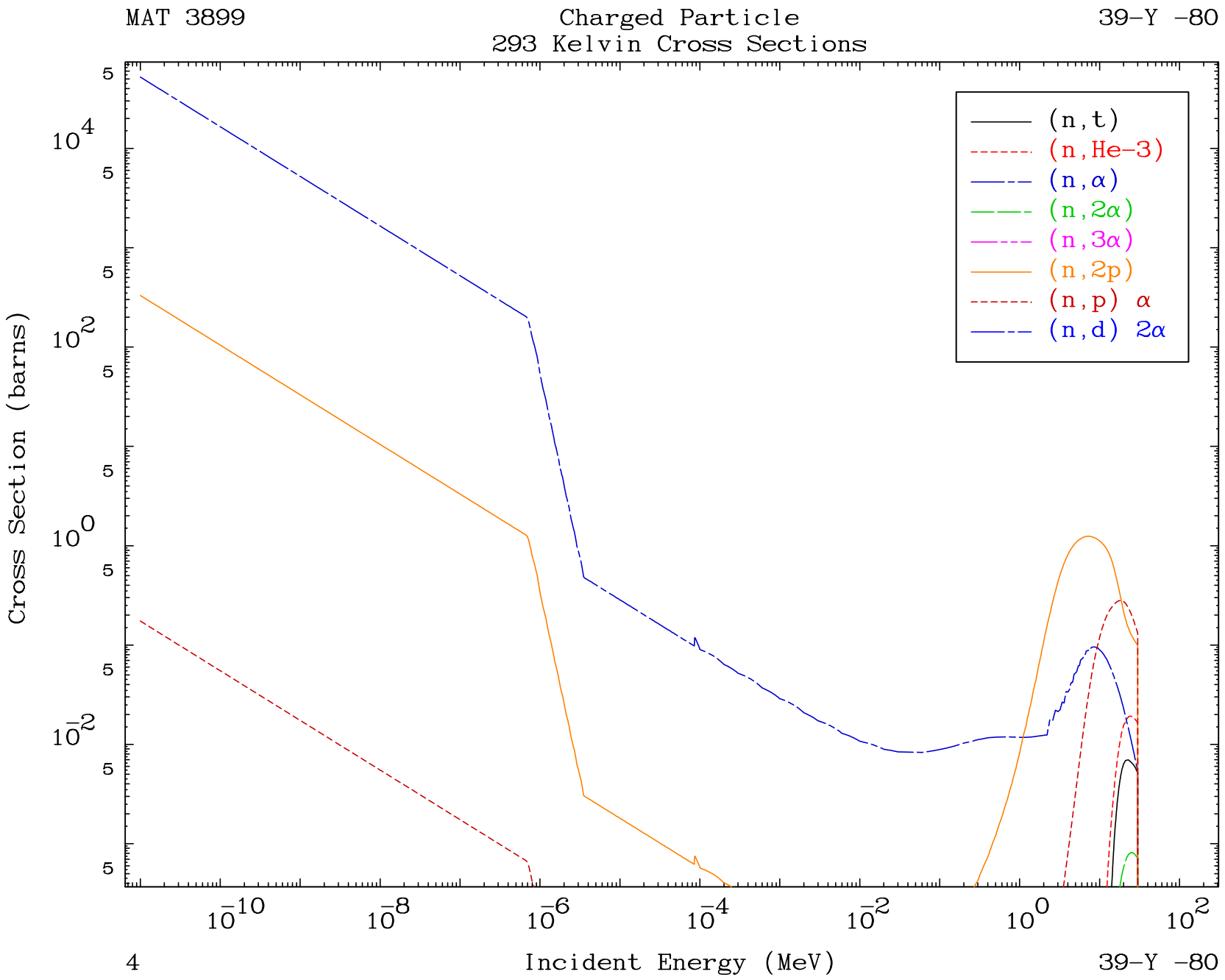
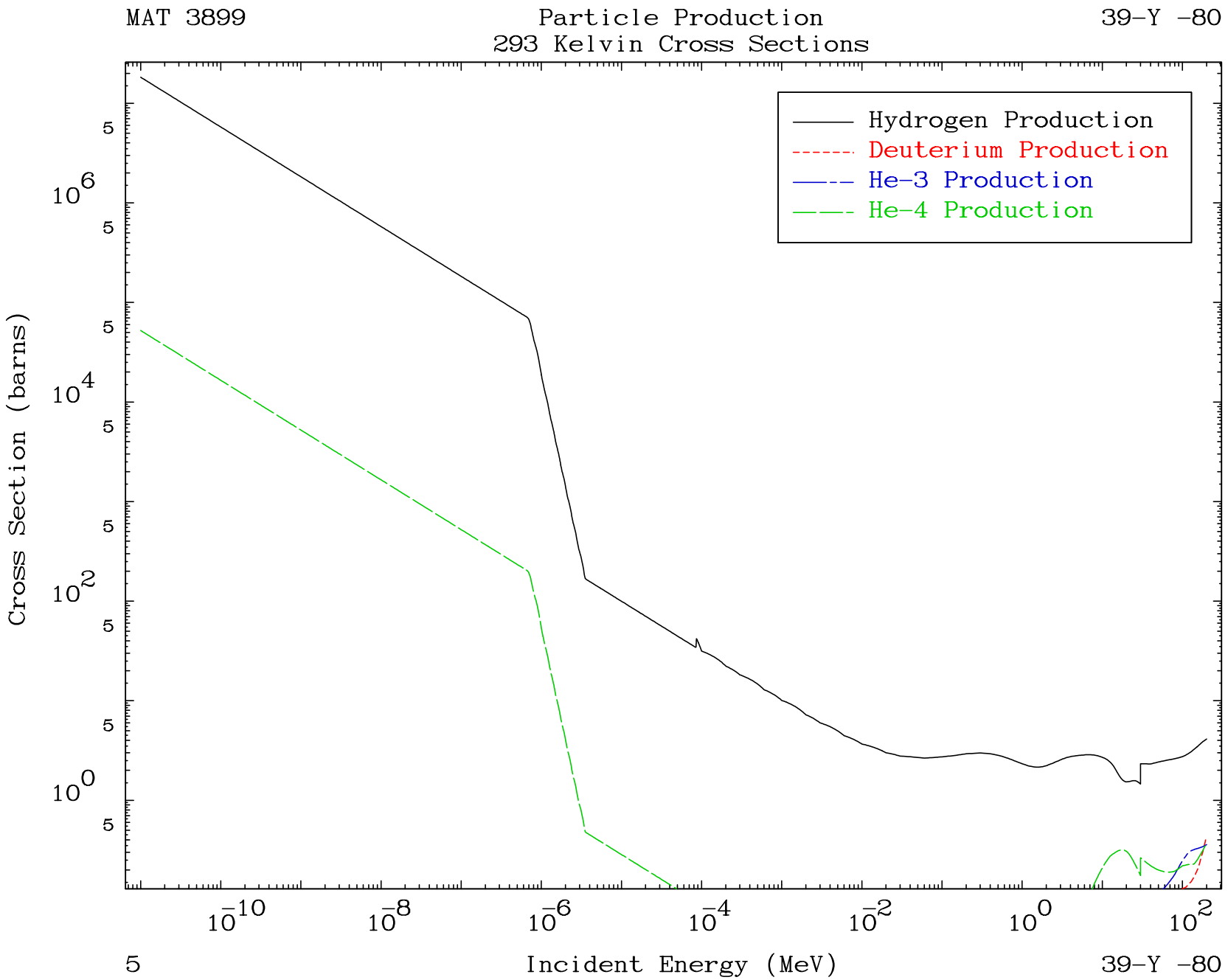
Press Mouse Button to Start

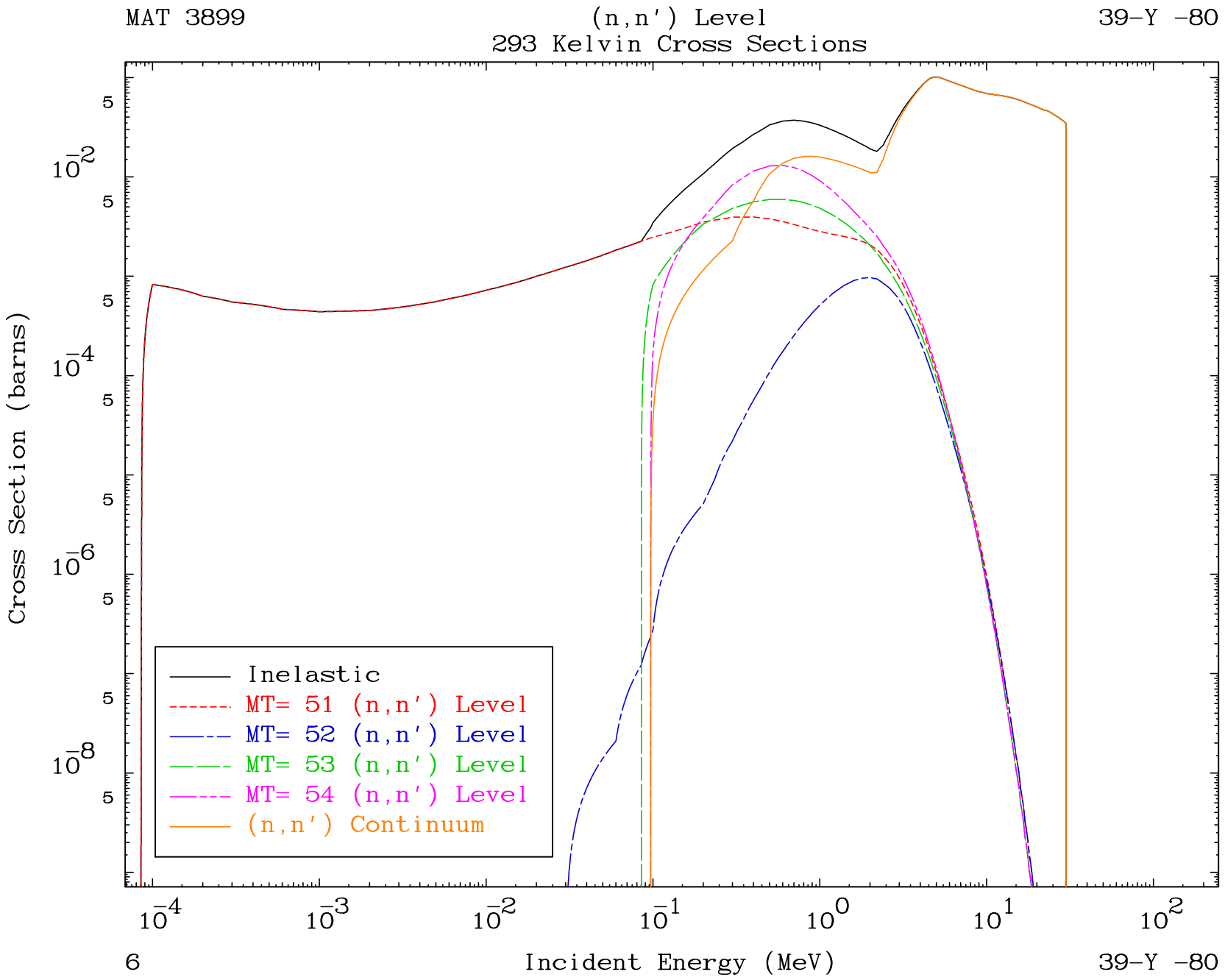

MAT 3899
Major
39-Y -80
293 Kelvin Cross Sections
Cross Section (barns)
Total
Elastic
(n,remainder)
(n,γ)
Incident Energy (MeV)
1
39-Y -80

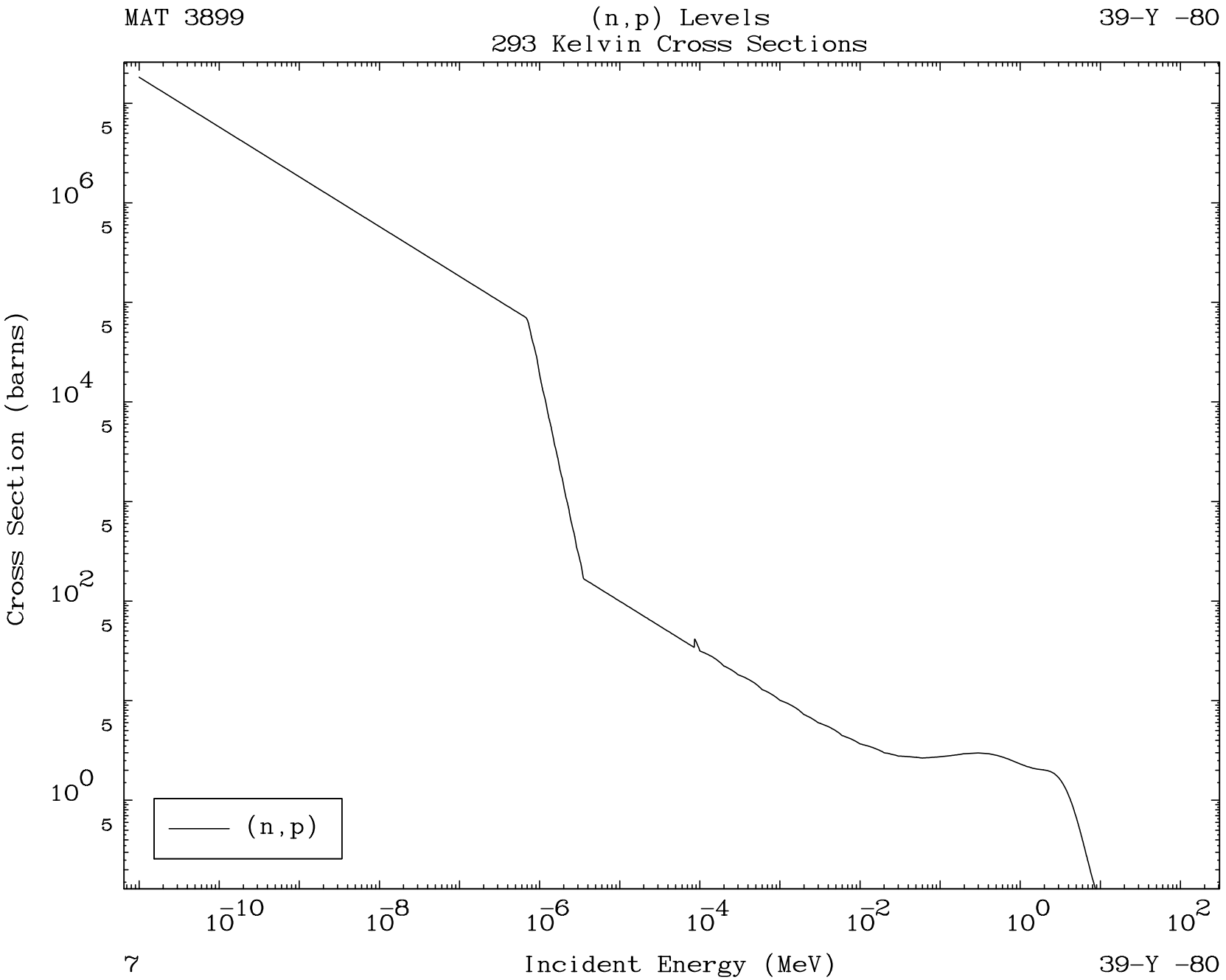

MAT 3899
Neutron Production
293 Kelvin Cross Sections
39-Y -80
Cross Section (barns)
Incident Energy (MeV)
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p

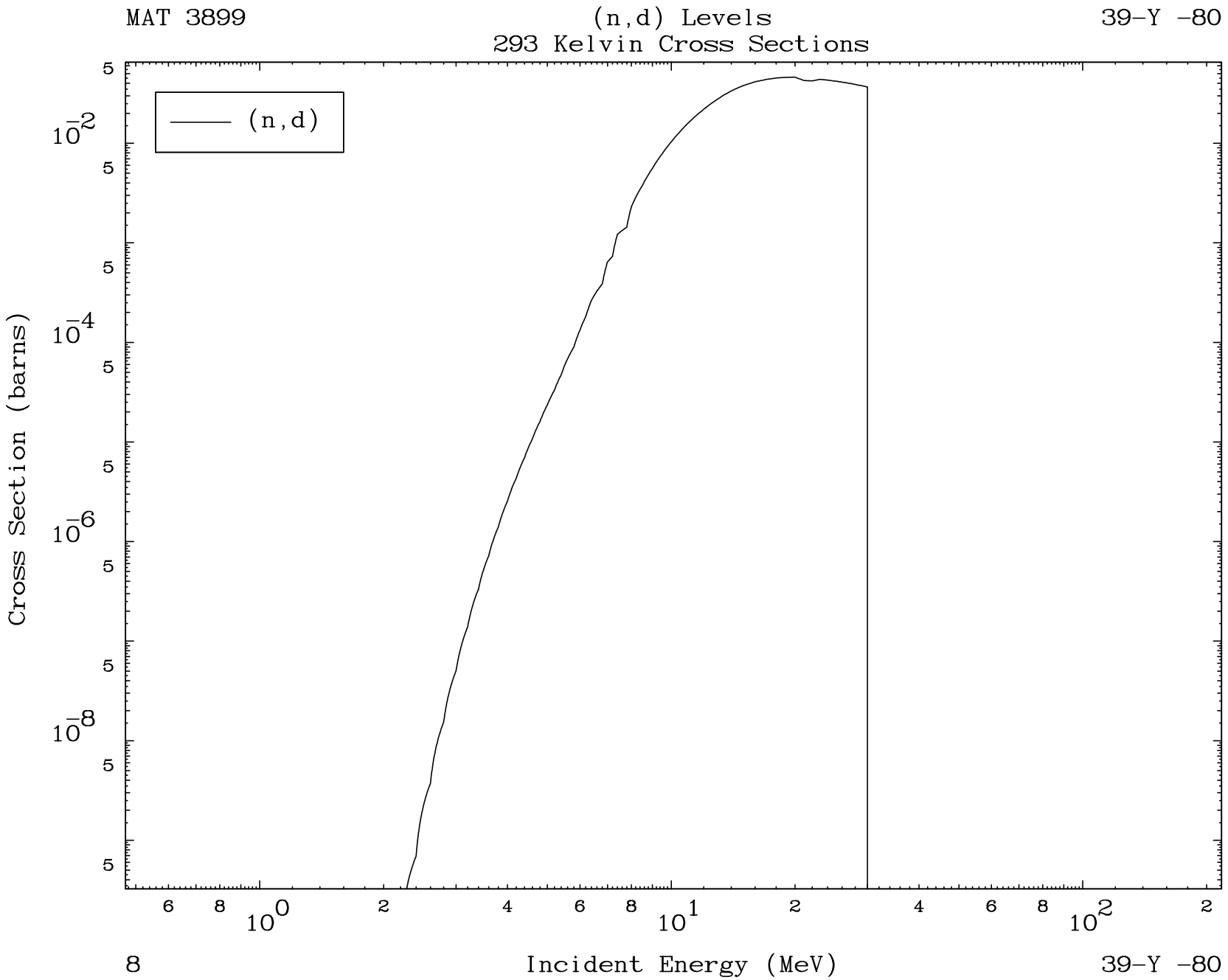

MAT 3899
Charged Particle
39-Y -80
293 Kelvin Cross Sections
Cross Section (barns)
10^6
10^4
10^2
10^0
(n,n') p
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
3
Incident Energy (MeV)
39-Y -80

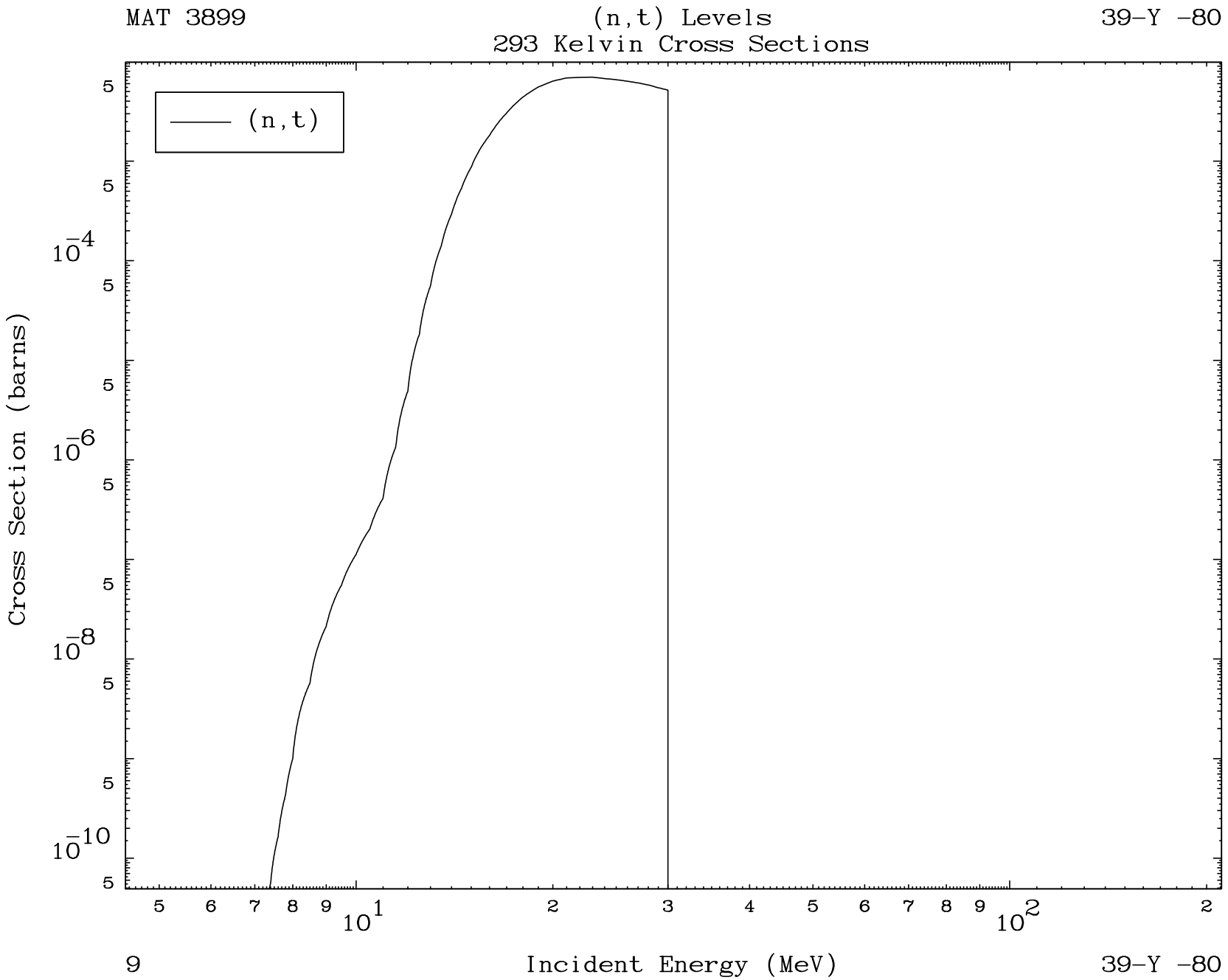

MAT 3899
Charged Particle
293 Kelvin Cross Sections
39-Y -80
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,d) 2α
Cross Section (barns)
Incident Energy (MeV)
4
39-Y -80

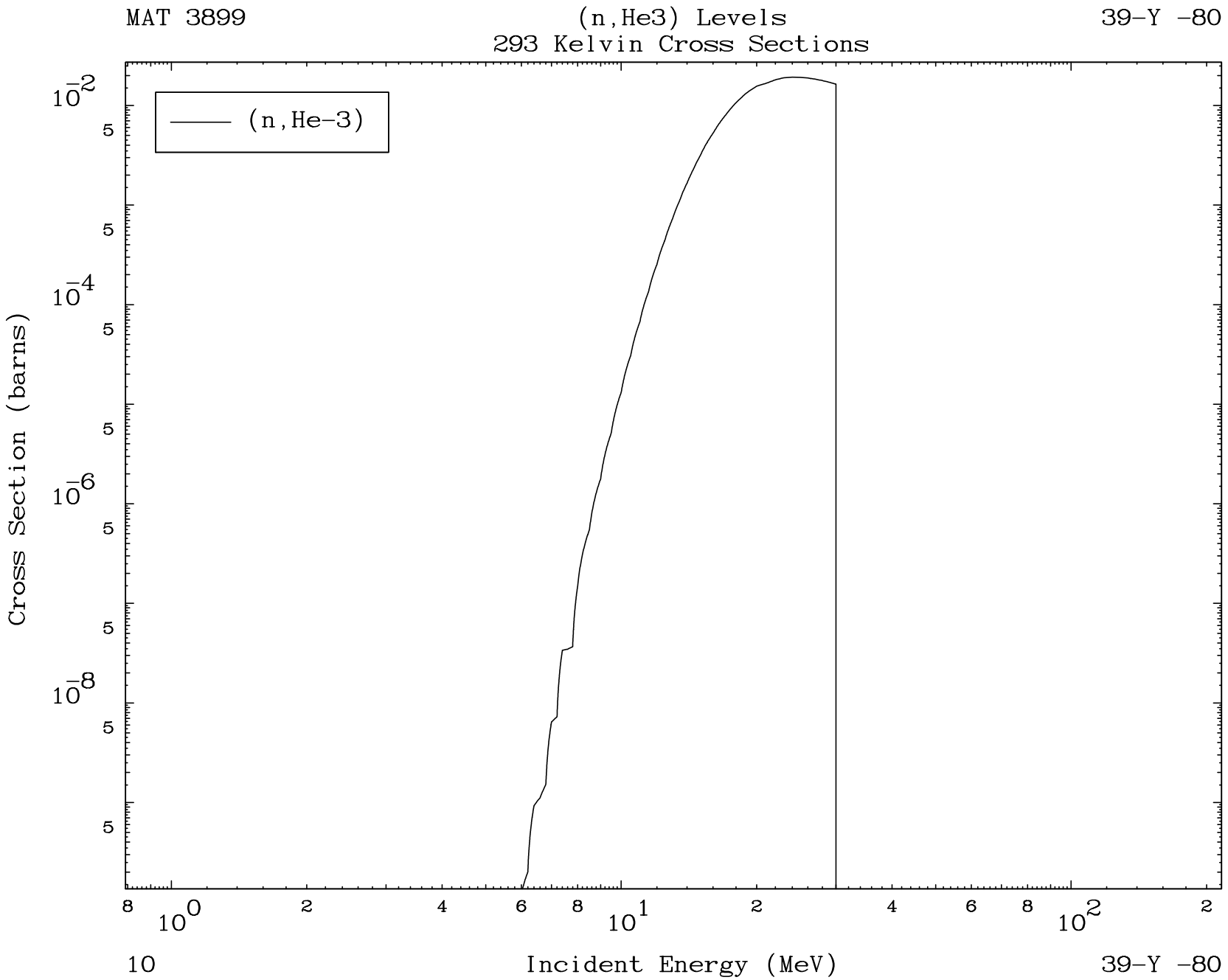

MAT 3899
Particle Production
293 Kelvin Cross Sections
39-Y -80
Hydrogen Production
Deuterium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
39-Y -80

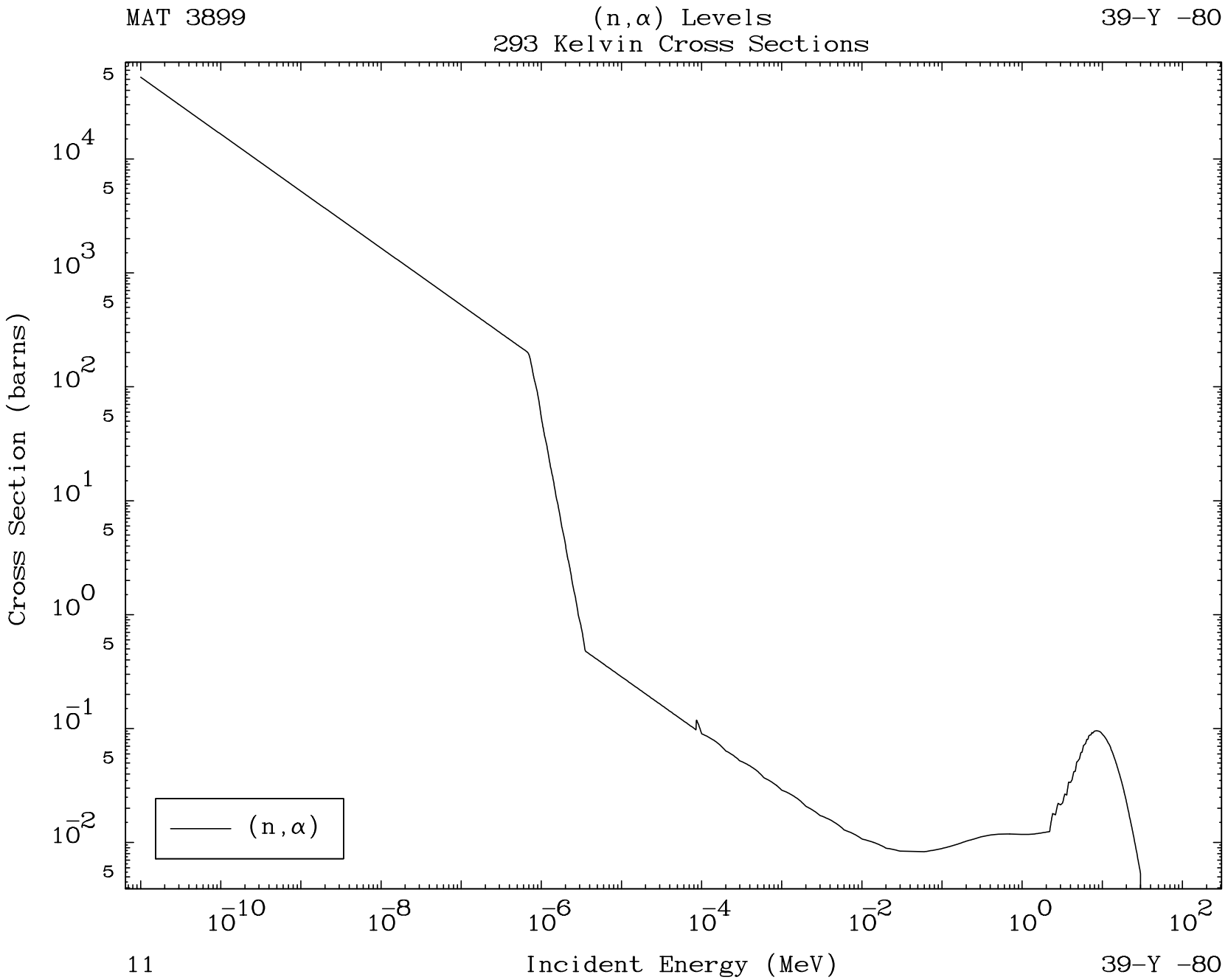

MAT 3899
(n,n') Level
293 Kelvin Cross Sections
39-Y -80
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
(n,n') Continuum
6
39-Y -80

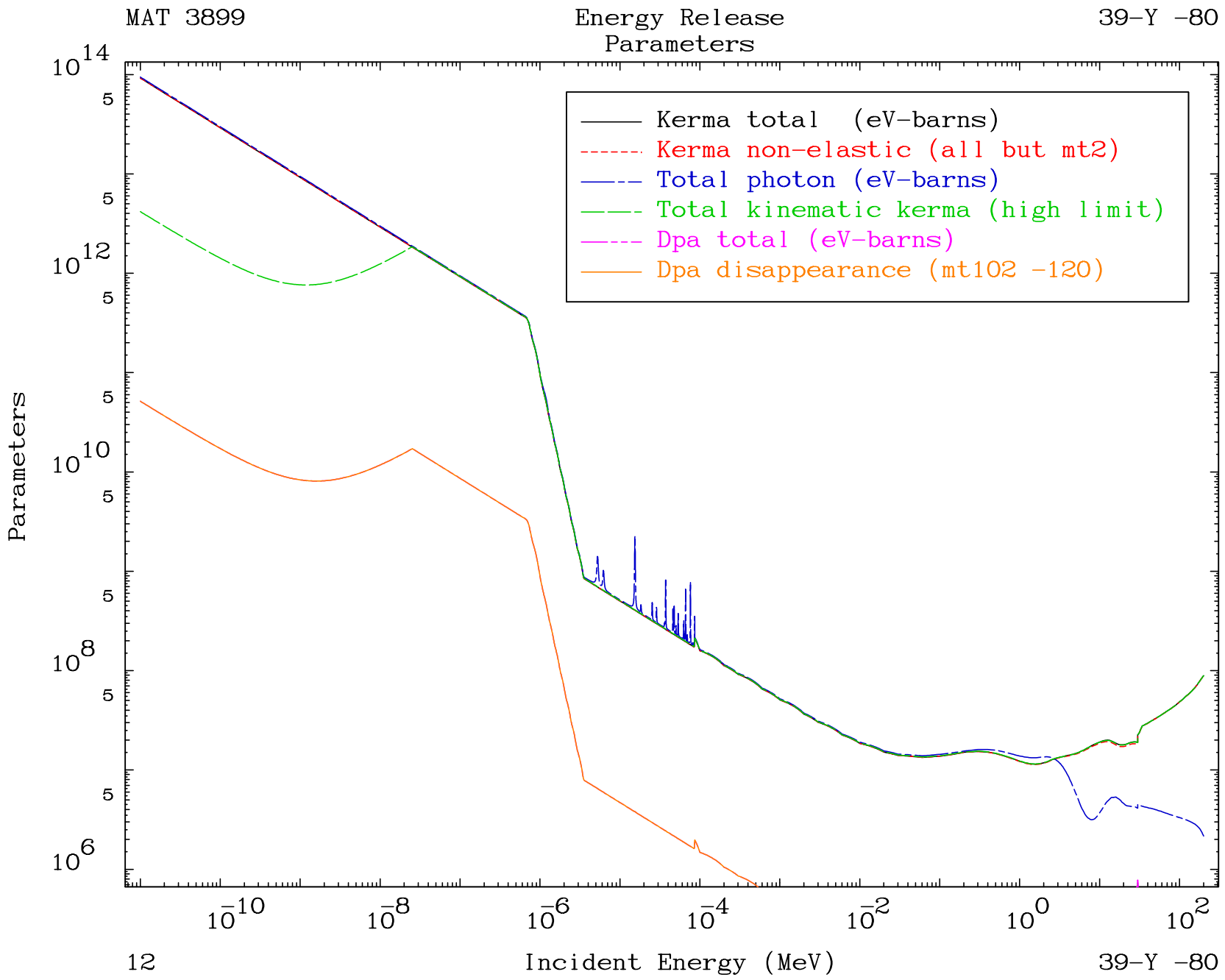

MAT 3899
(n,p) Levels
293 Kelvin Cross Sections
39-Y -80
Cross Section (barns)
10^6
10^4
10^2
10^0
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
7
39-Y -80

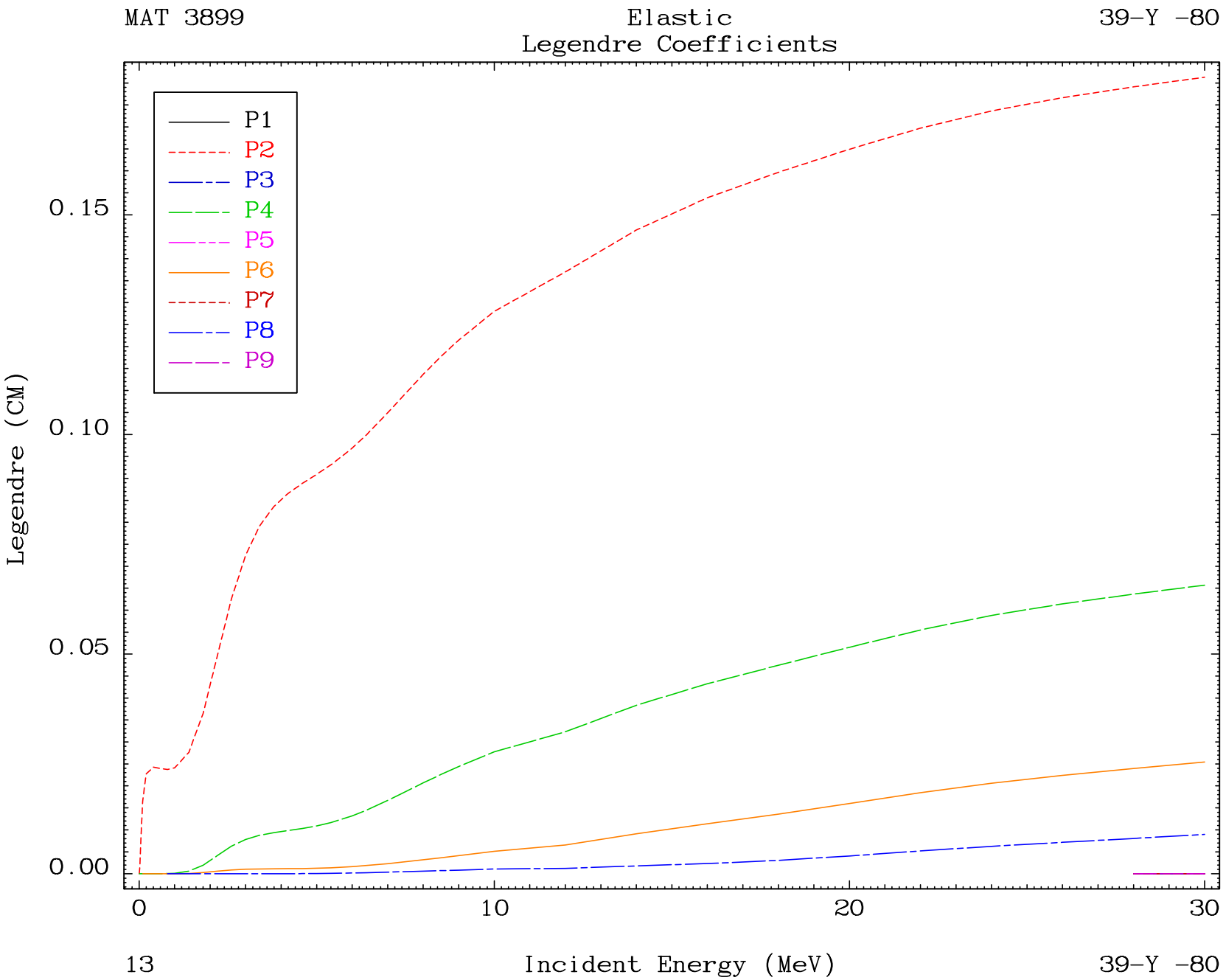

MAT 3899
(n,d) Levels
293 Kelvin Cross Sections
39-Y -80
(n,d)
Cross Section (barns)
Incident Energy (MeV)
8
39-Y -80

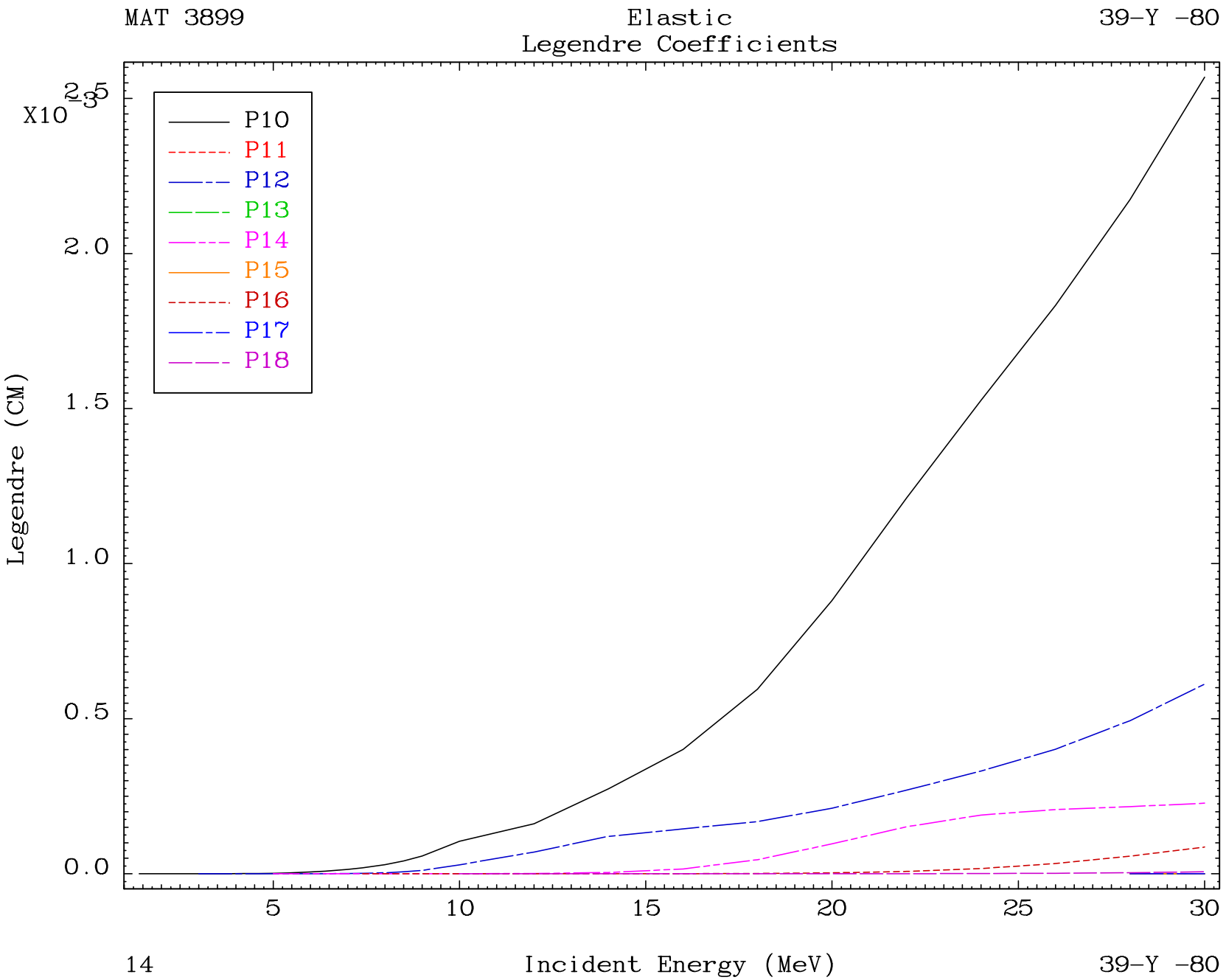

MAT 3899
(n,t) Levels
39-Y -80
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
9
39-Y -80

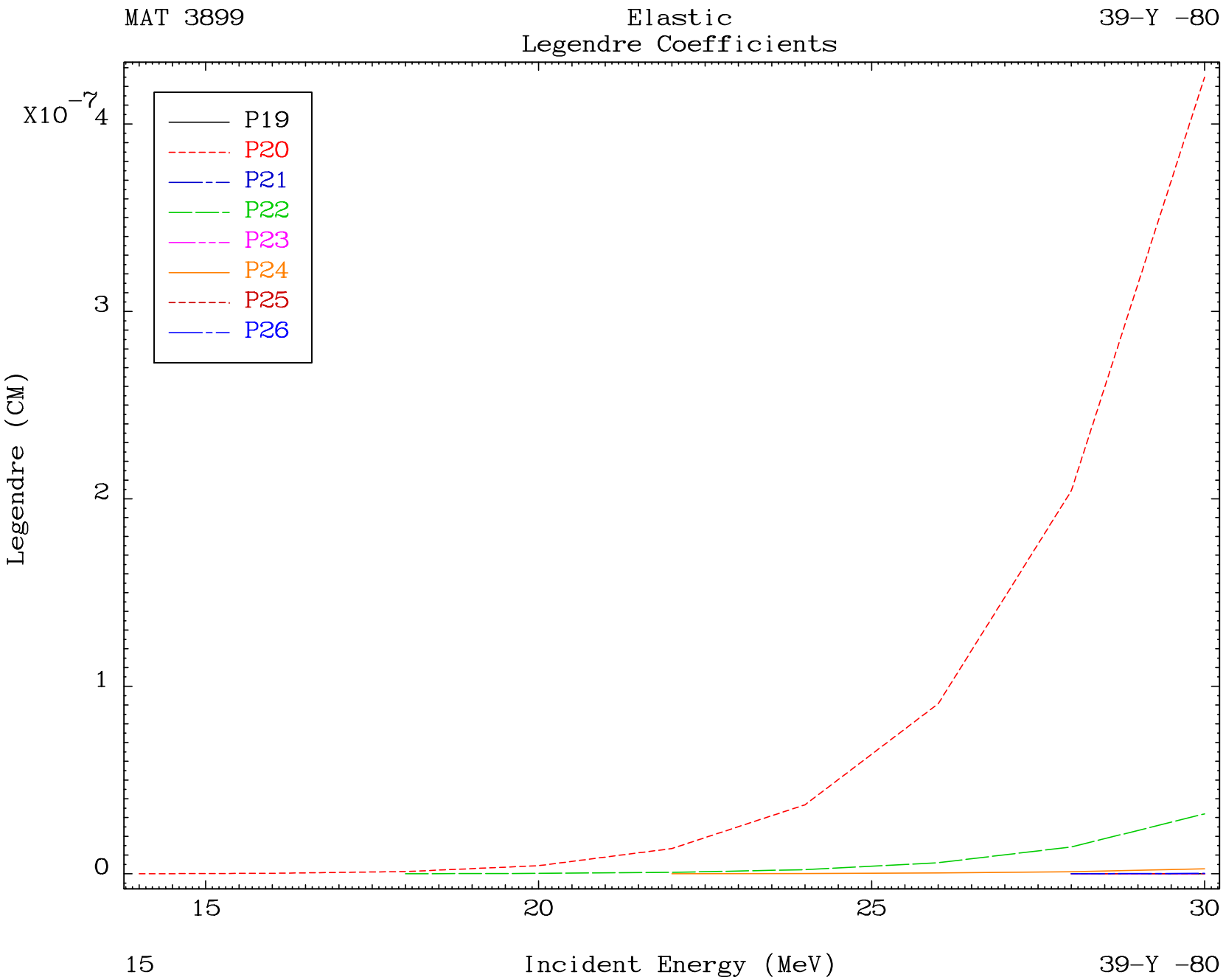

MAT 3899
(n,He3) Levels
293 Kelvin Cross Sections
39-Y -80
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
39-Y -80

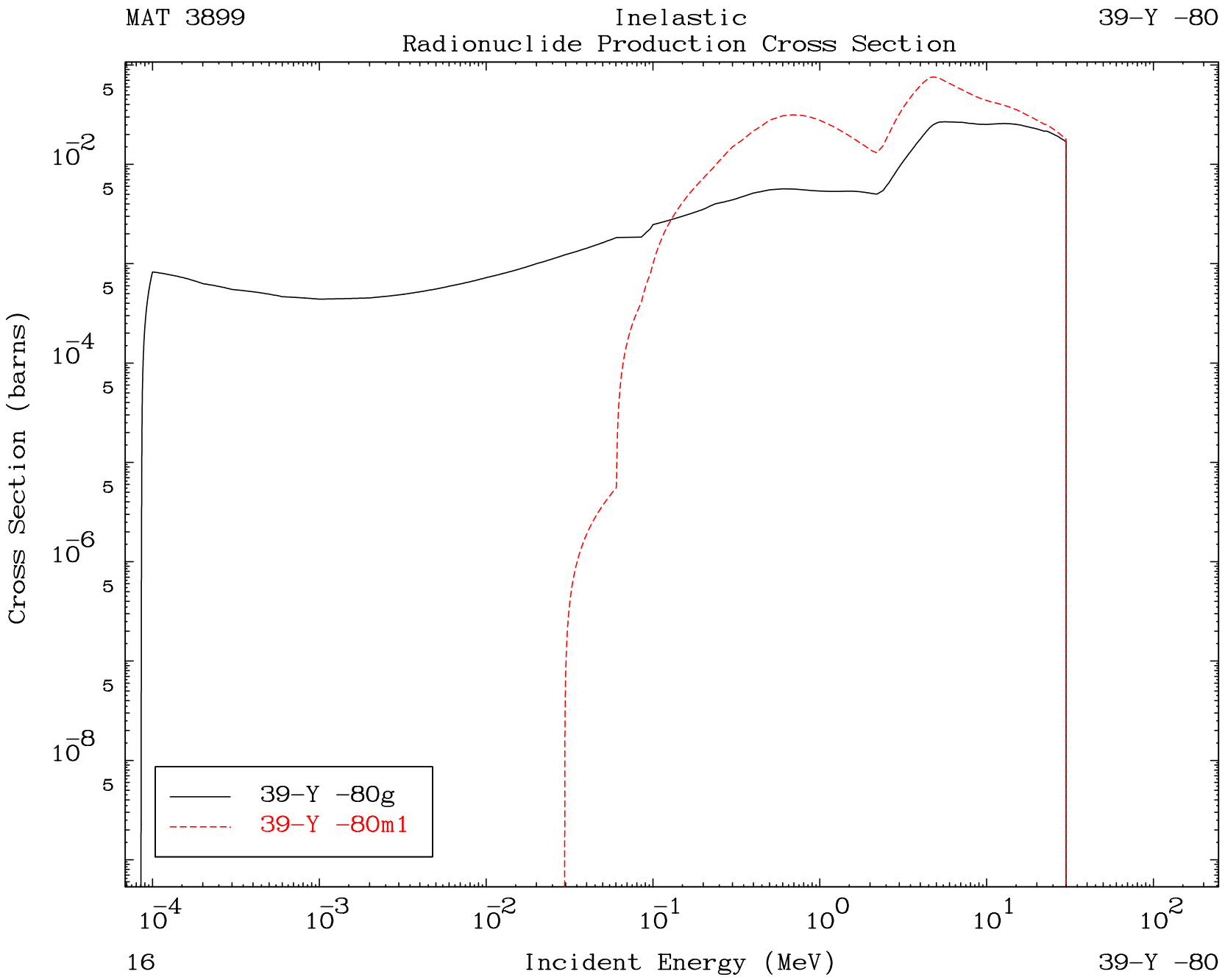

MAT 3899
(n,α) Levels
39-Y -80
293 Kelvin Cross Sections
Cross Section (barns)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
(n,α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
11
39-Y -80

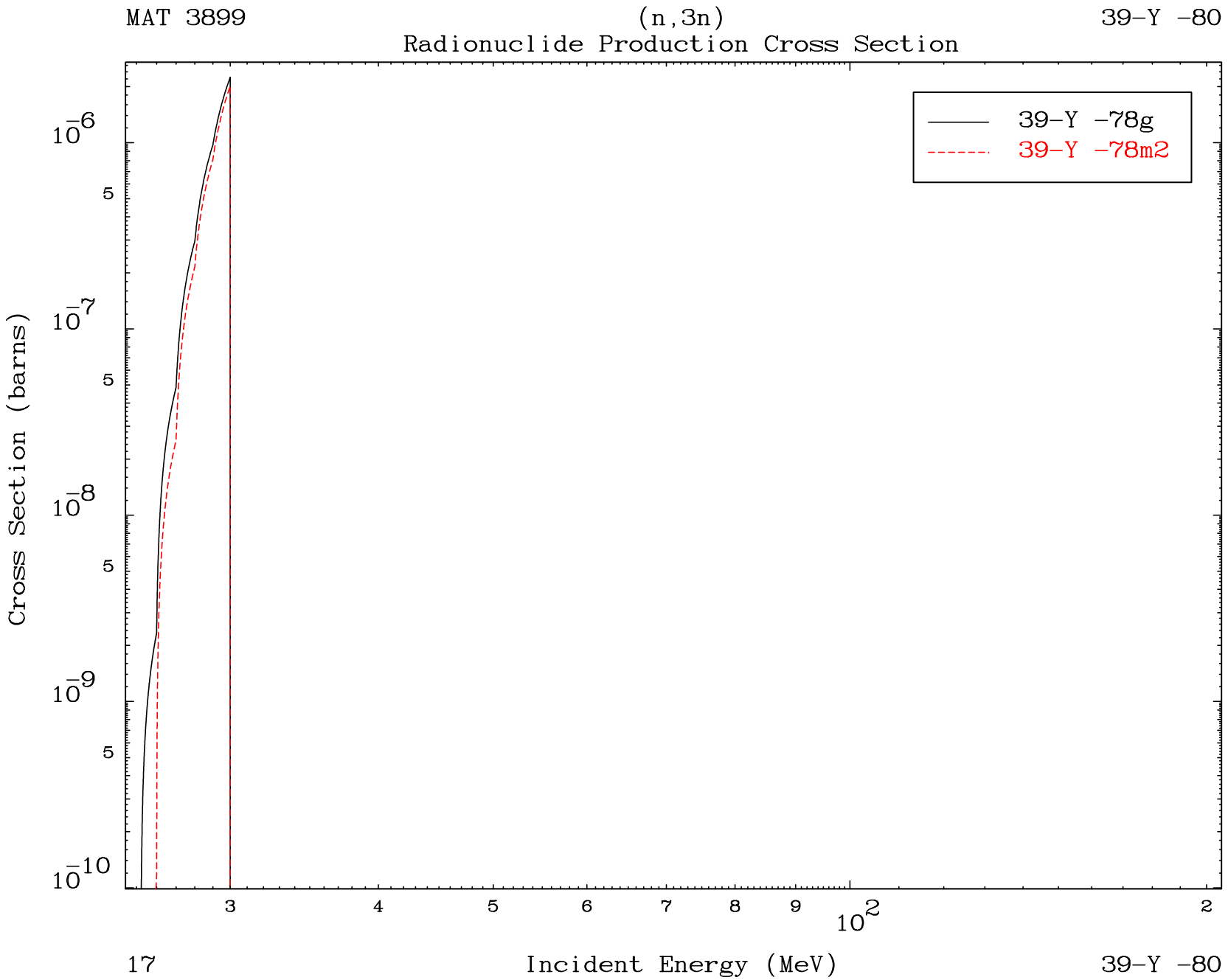

MAT 3899
Energy Release
Parameters
39-Y -80
Kerma total (eV-barns)
Kerma non-elastic (all but mt2)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa disappearance (mt102 -120)
Parameters
Incident Energy (MeV)
12
39-Y -80

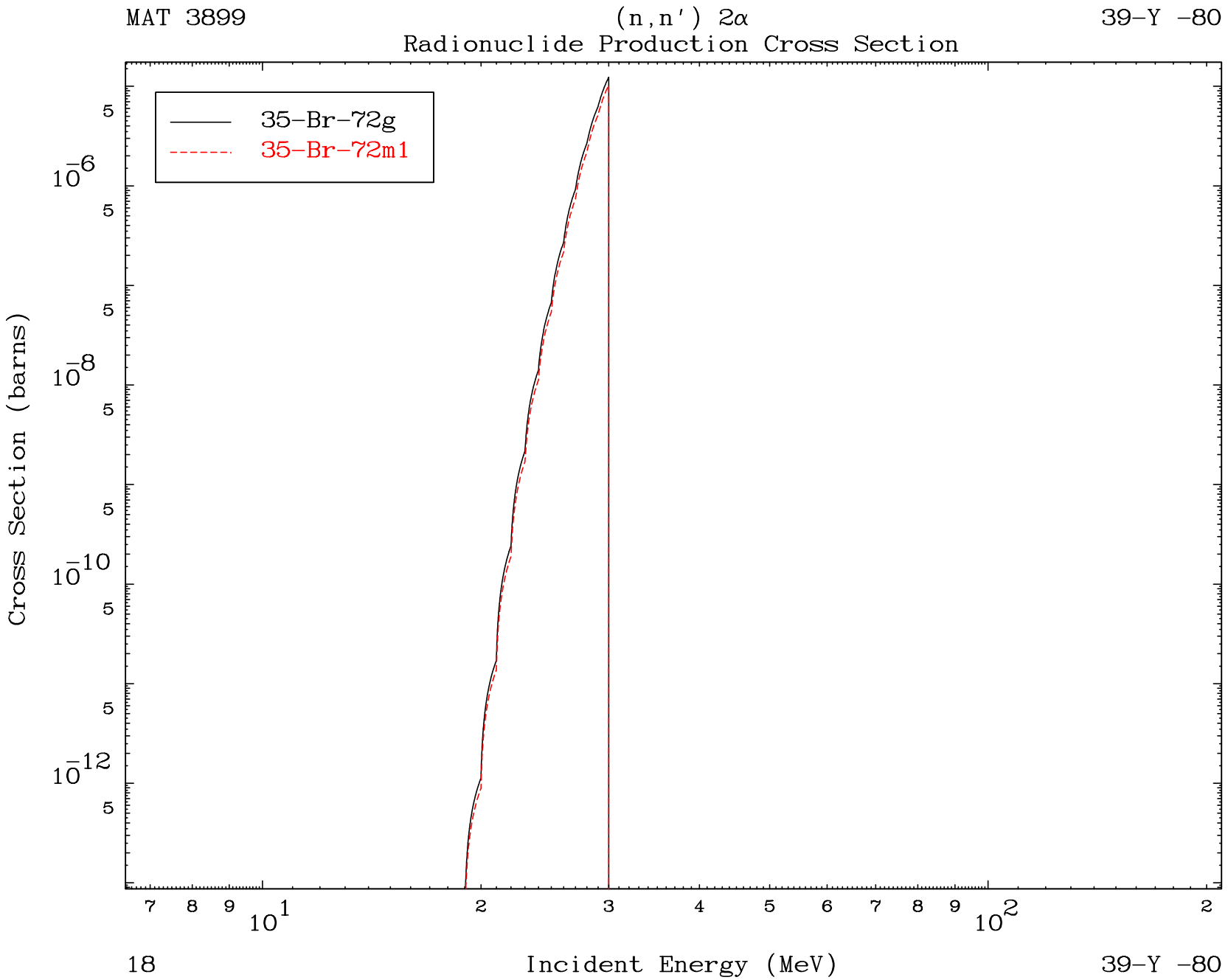

MAT 3899
Elastic
Legendre Coefficients
39-Y -80
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.15
0.10
0.05
0.00
Legendre (CM)
0
10
20
30
13
Incident Energy (MeV)
39-Y -80

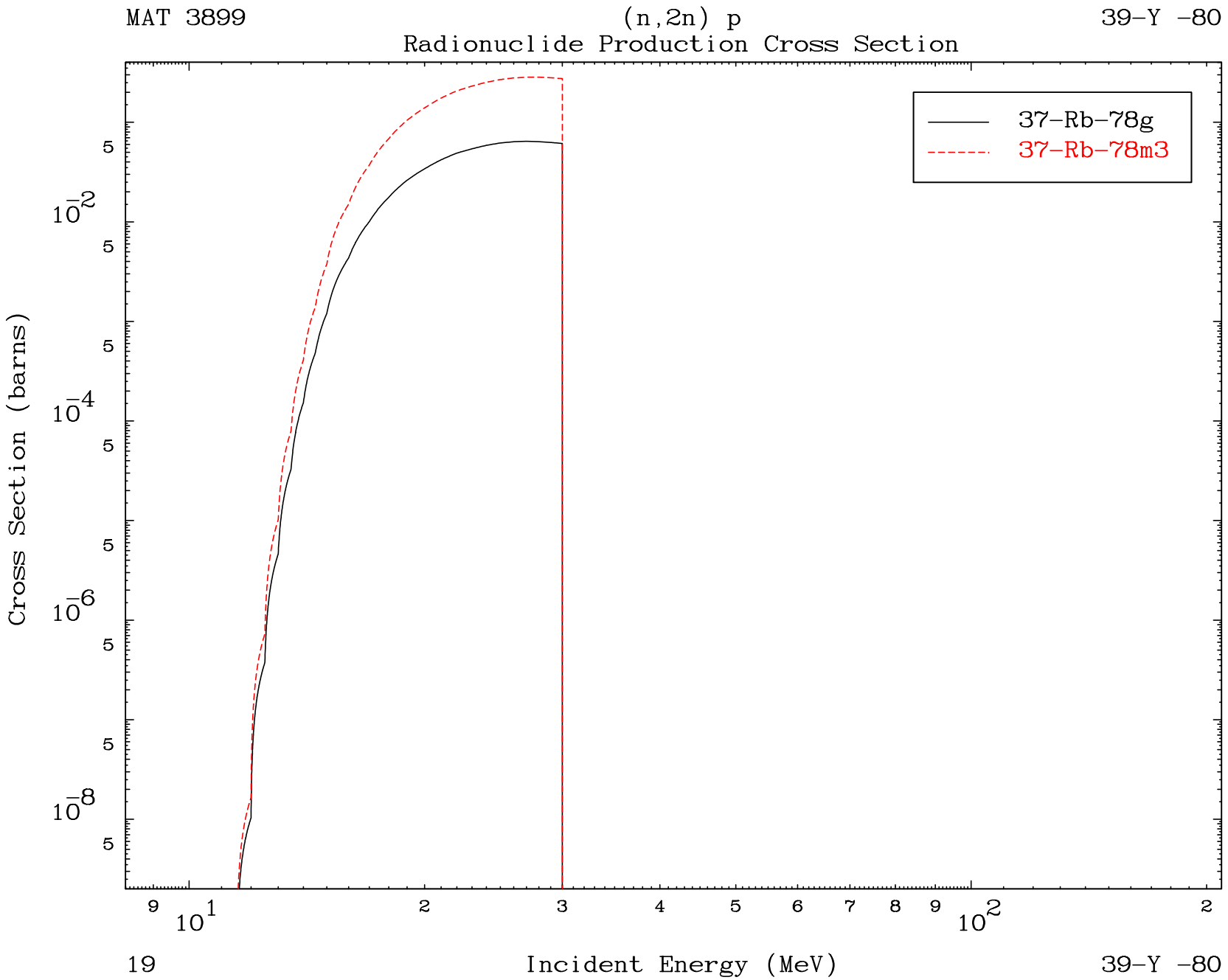

MAT 3899
Elastic
Legendre Coefficients
39-Y -80
X10 3
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
5
10
15
20
25
30
14
Incident Energy (MeV)
39-Y -80

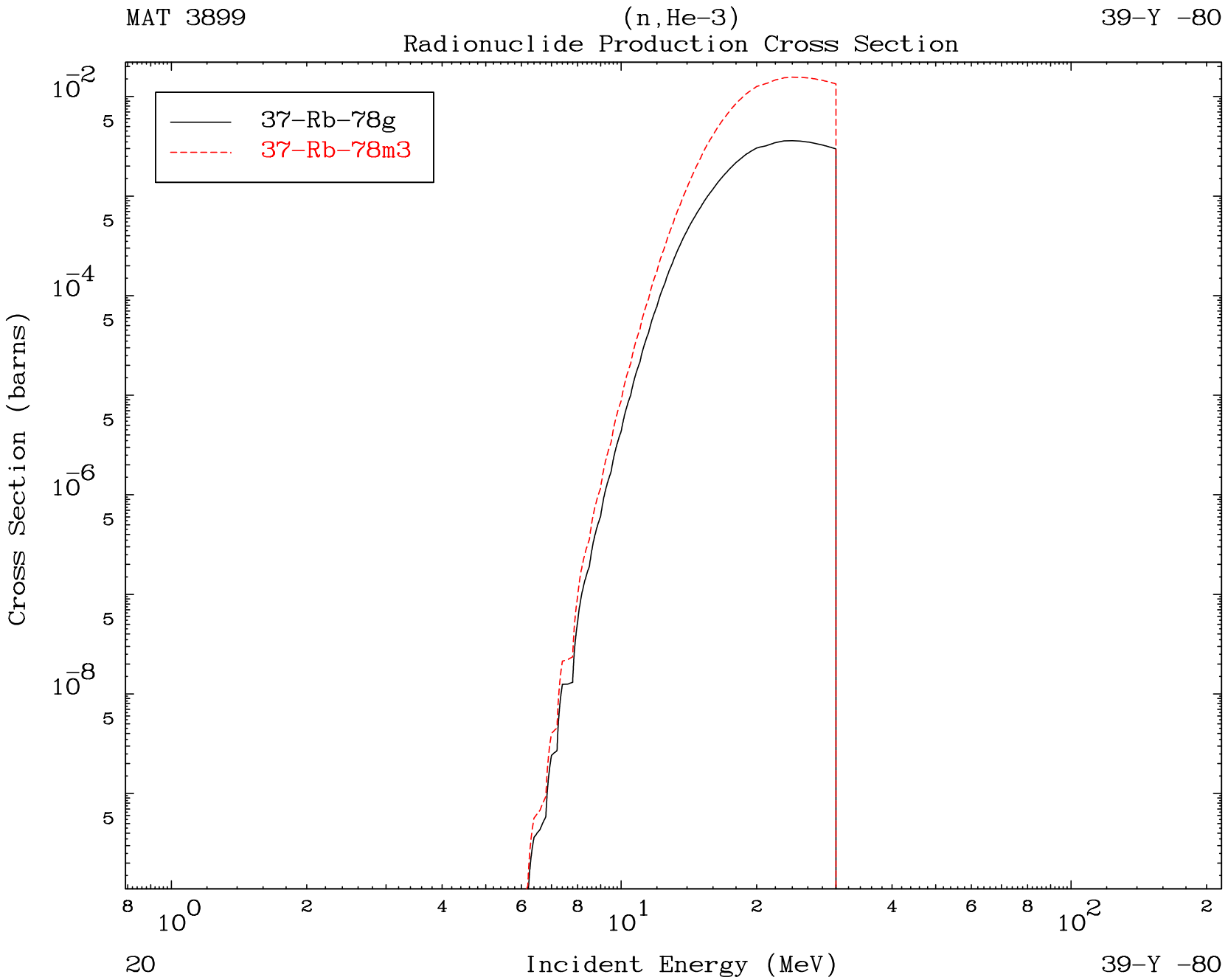

MAT 3899
Elastic
Legendre Coefficients
39-Y -80
X10^-7
4
3
2
1
0
P19
P20
P21
P22
P23
P24
P25
P26
Legendre (CM)
15
20
25
30
15
Incident Energy (MeV)
39-Y -80

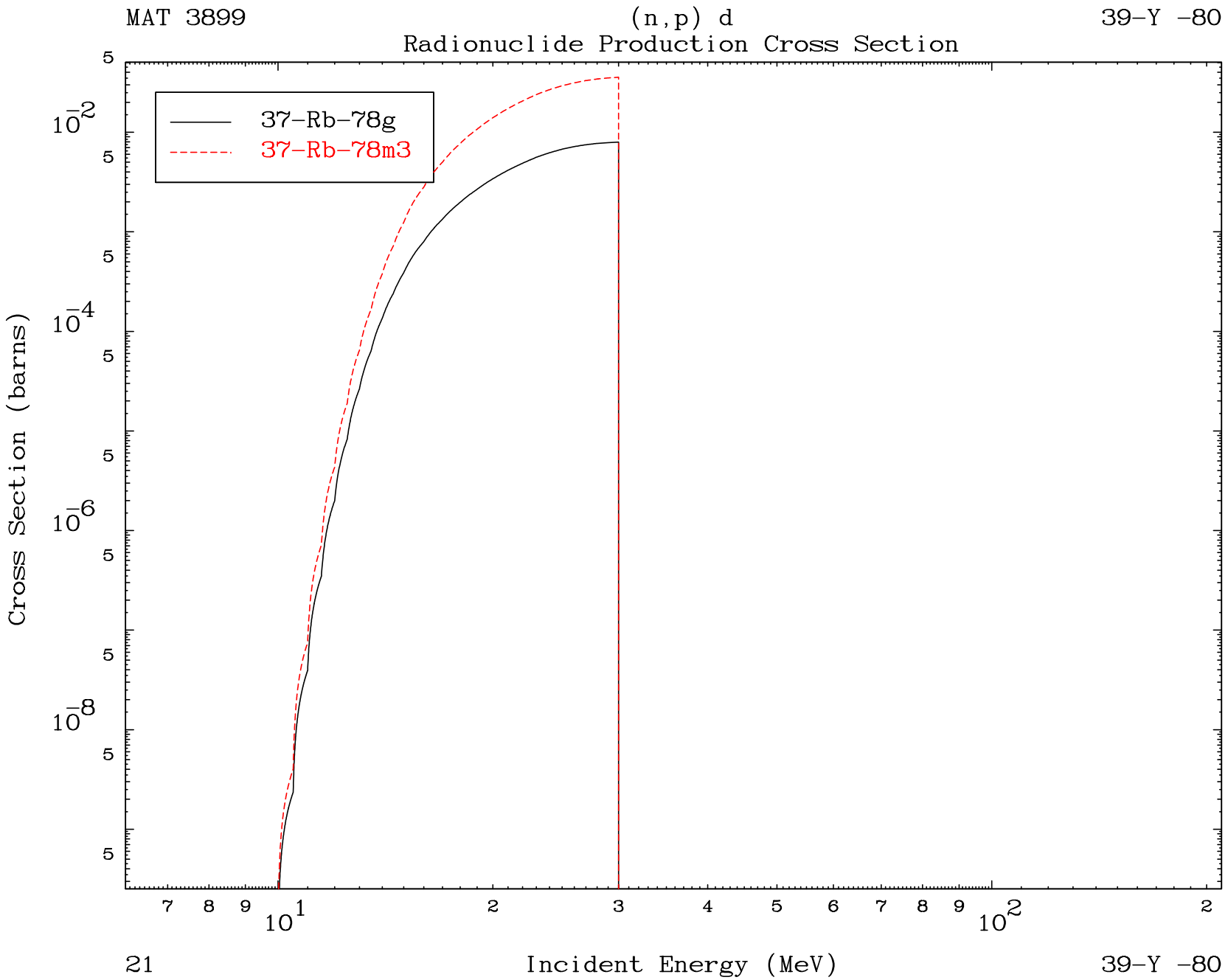

MAT 3899
Inelastic
39-Y -80
Radionuclide Production Cross Section
Cross Section (barns)
10^{-2}
10^{-4}
10^{-6}
10^{-8}
5
39-Y -80g
39-Y -80m1
10^{-4}
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}
10^{2}
Incident Energy (MeV)
16
39-Y -80


MAT 3899
(n,3n)
39-Y -80
Radionuclide Production Cross Section
39-Y -78g
39-Y -78m2
Cross Section (barns)
10-6
5
10-7
5
10-8
5
10-9
5
10-10
3
4
5
6
7
8
9
10 2
2
17
Incident Energy (MeV)
39-Y -80


MAT 3899
(n,n') 2α
39-Y -80
Radionuclide Production Cross Section
35-Br-72g
35-Br-72m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
18
39-Y -80


MAT 3899
(n,2n) p
39-Y -80
Radionuclide Production Cross Section
37-Rb-78g
37-Rb-78m3
Cross Section (barns)
10-2
10-4
10-6
10-8
5
9
10 1
2
3
4
5
6
7
8
9
10 2
2
19
Incident Energy (MeV)
39-Y -80


MAT 3899
(n,He-3)
39-Y -80
Radionuclide Production Cross Section
37-Rb-78g
37-Rb-78m3
Cross Section (barns)
Incident Energy (MeV)
20
39-Y -80


MAT 3899
(n,p) d
39-Y -80
Radionuclide Production Cross Section
37-Rb-78g
37-Rb-78m3
Cross Section (barns)
Incident Energy (MeV)
21
39-Y -80