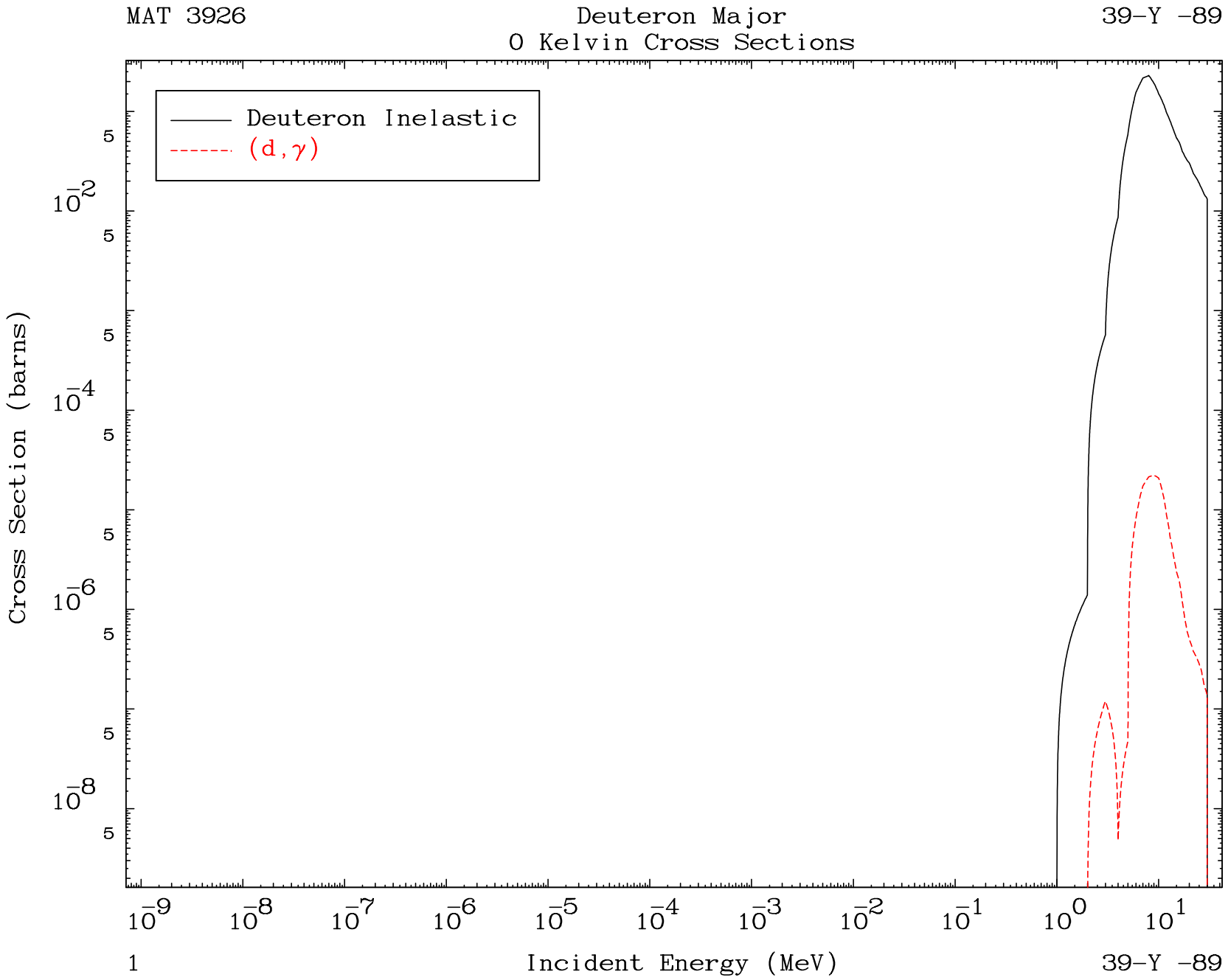
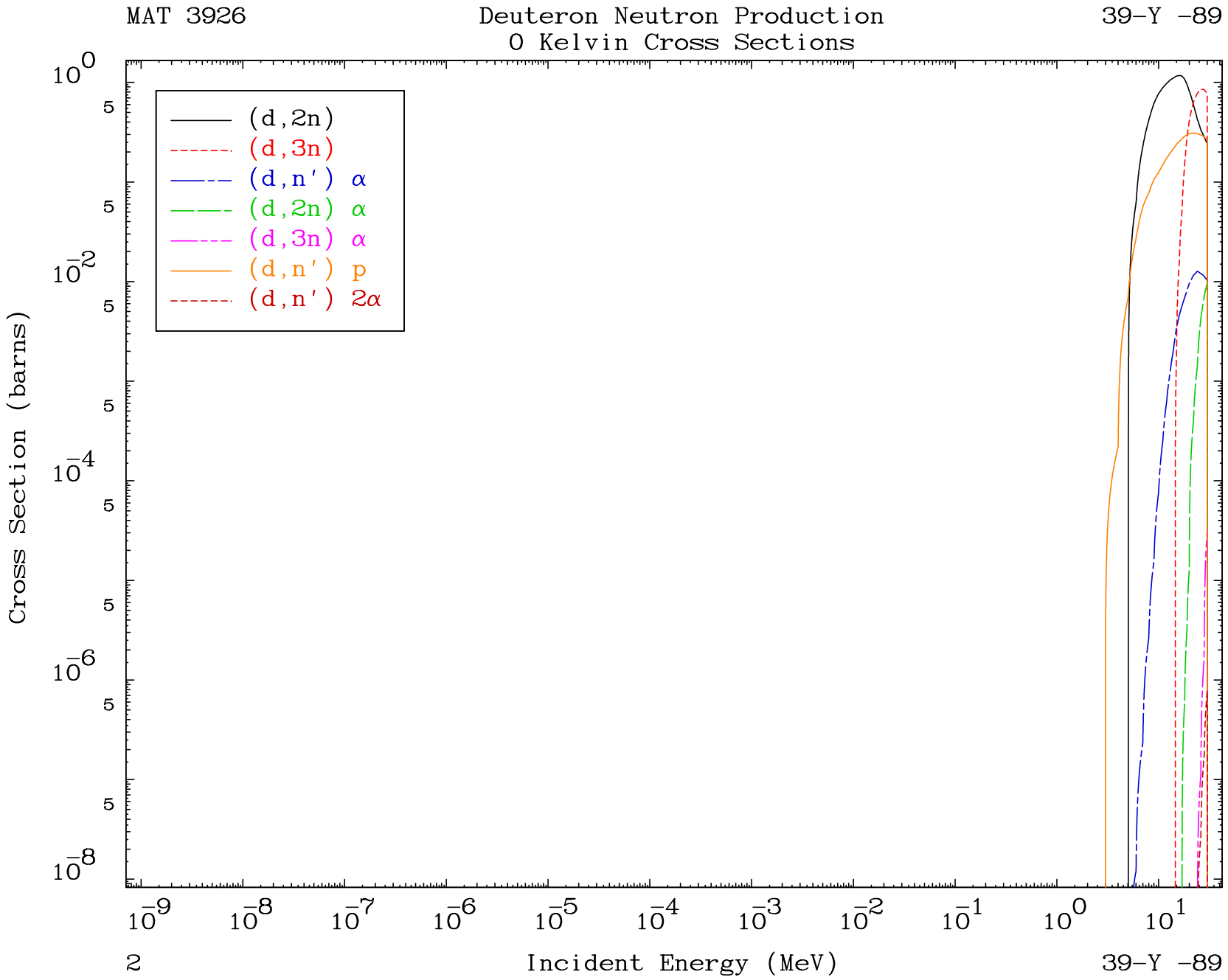
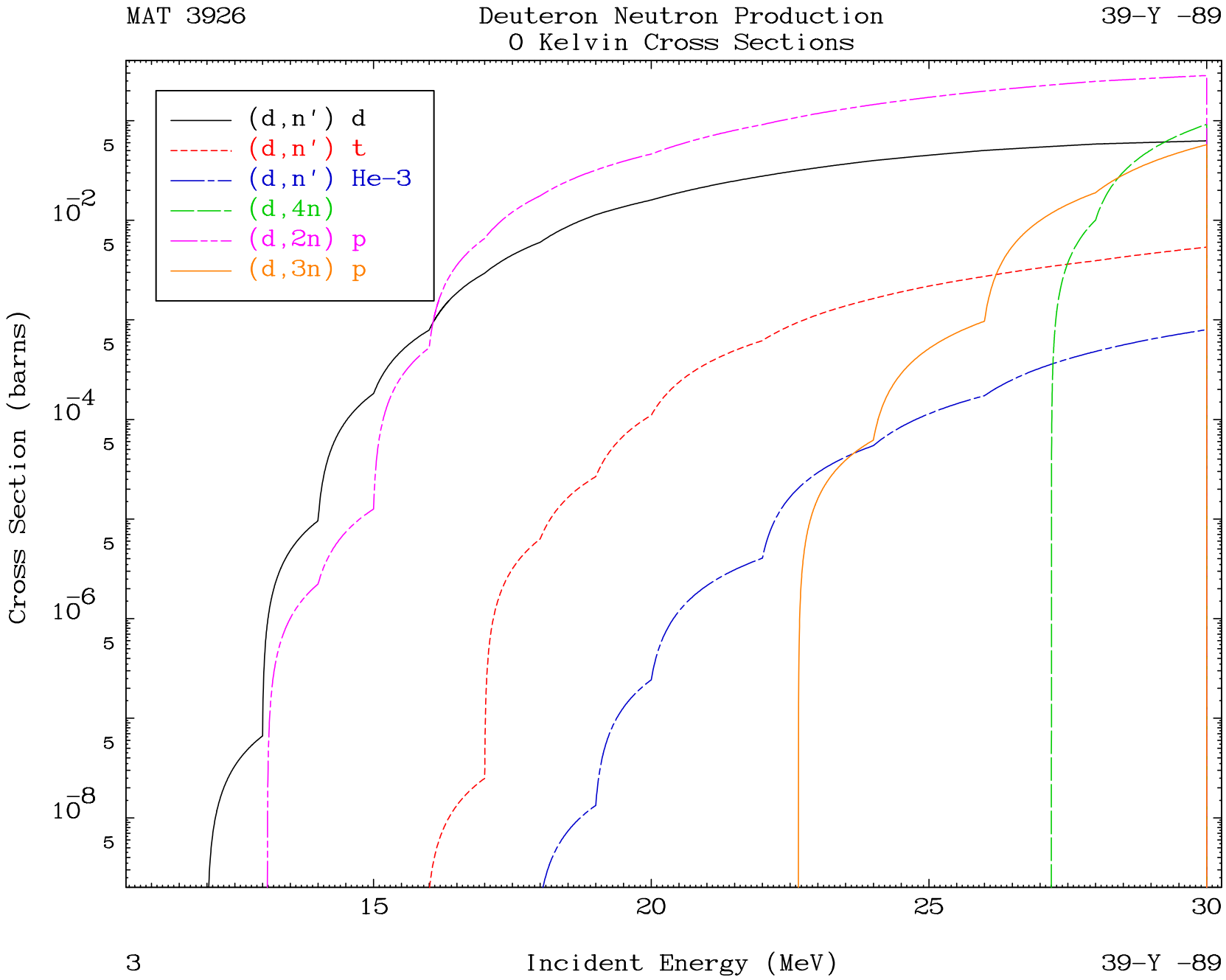
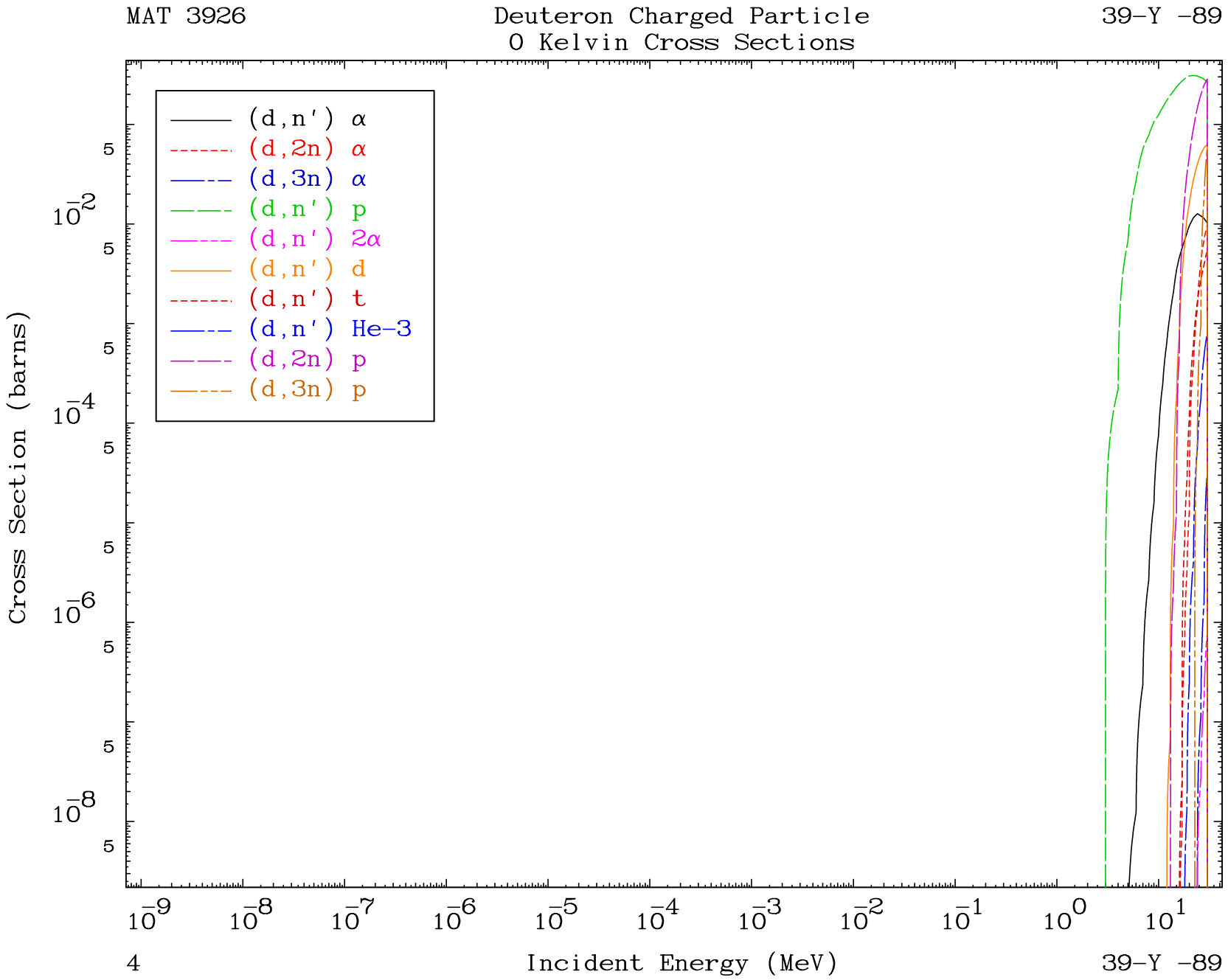
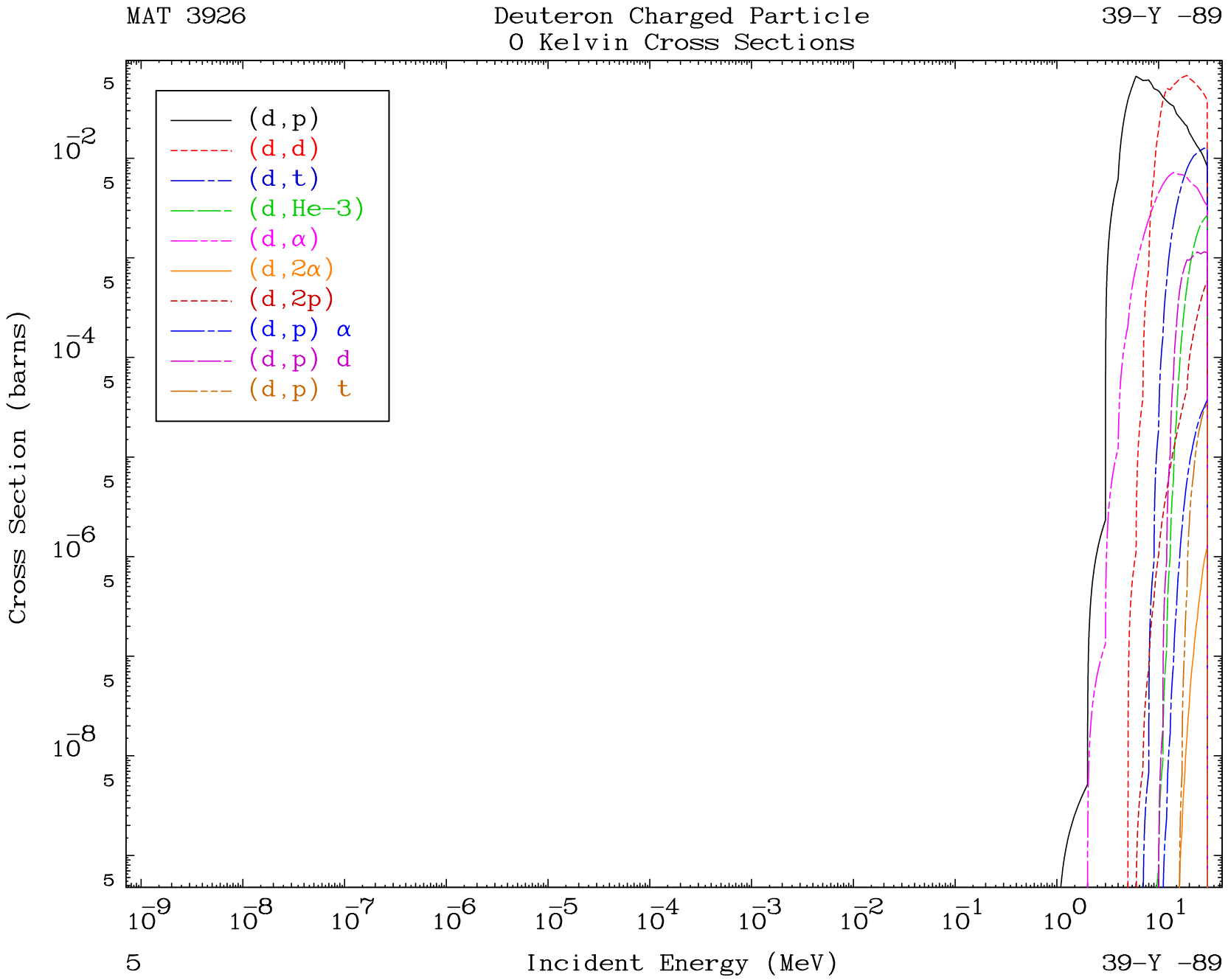
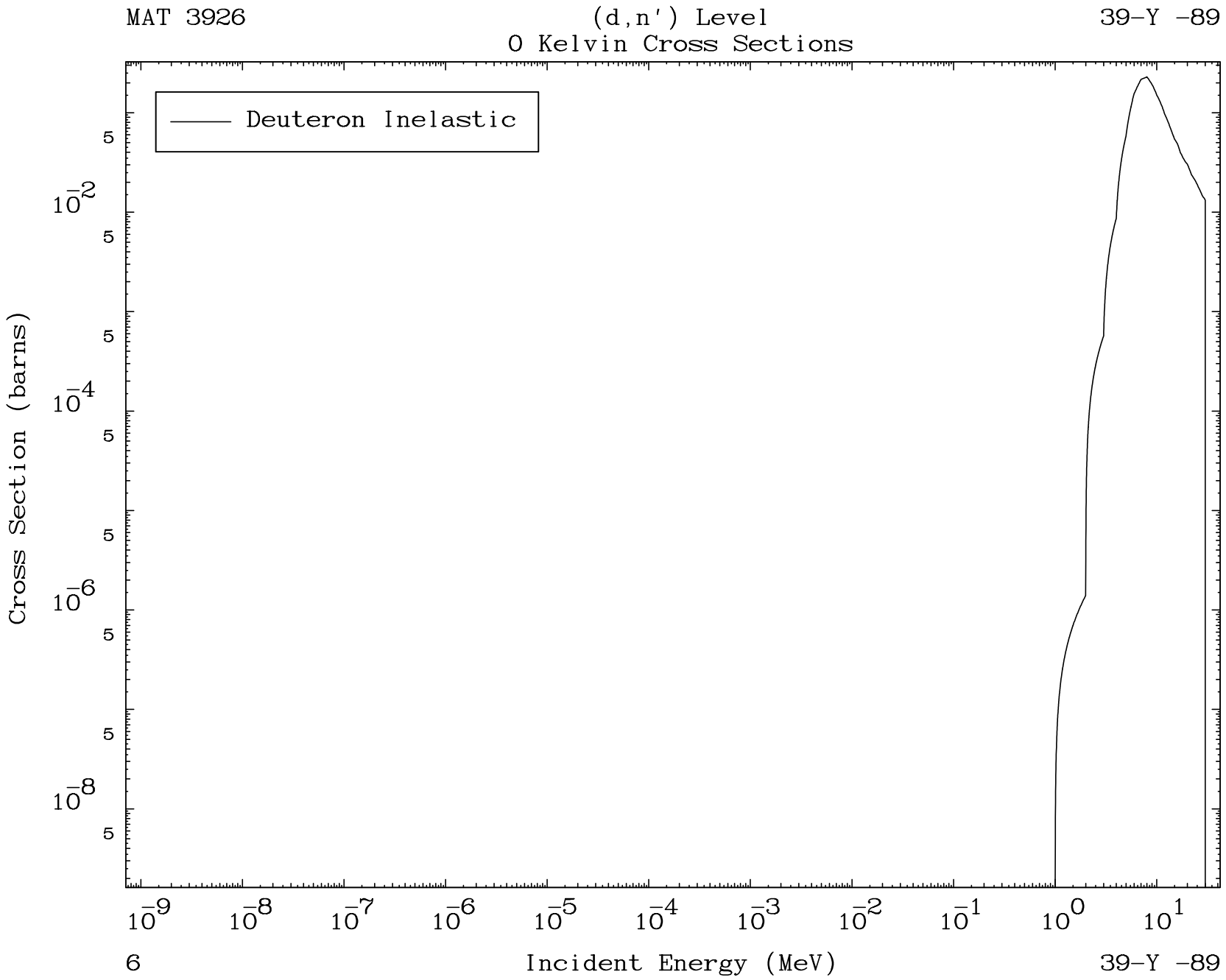

MAT 3926
Deuteron Major
39-Y -89
0 Kelvin Cross Sections
Deuteron Inelastic
(d,γ)
Cross Section (barns)
10-2
10-4
10-6
10-8
10-9
10-8
10-7
10-6
10-5
10-4
10-3
10-2
10-1
100
101
Incident Energy (MeV)
1
39-Y -89

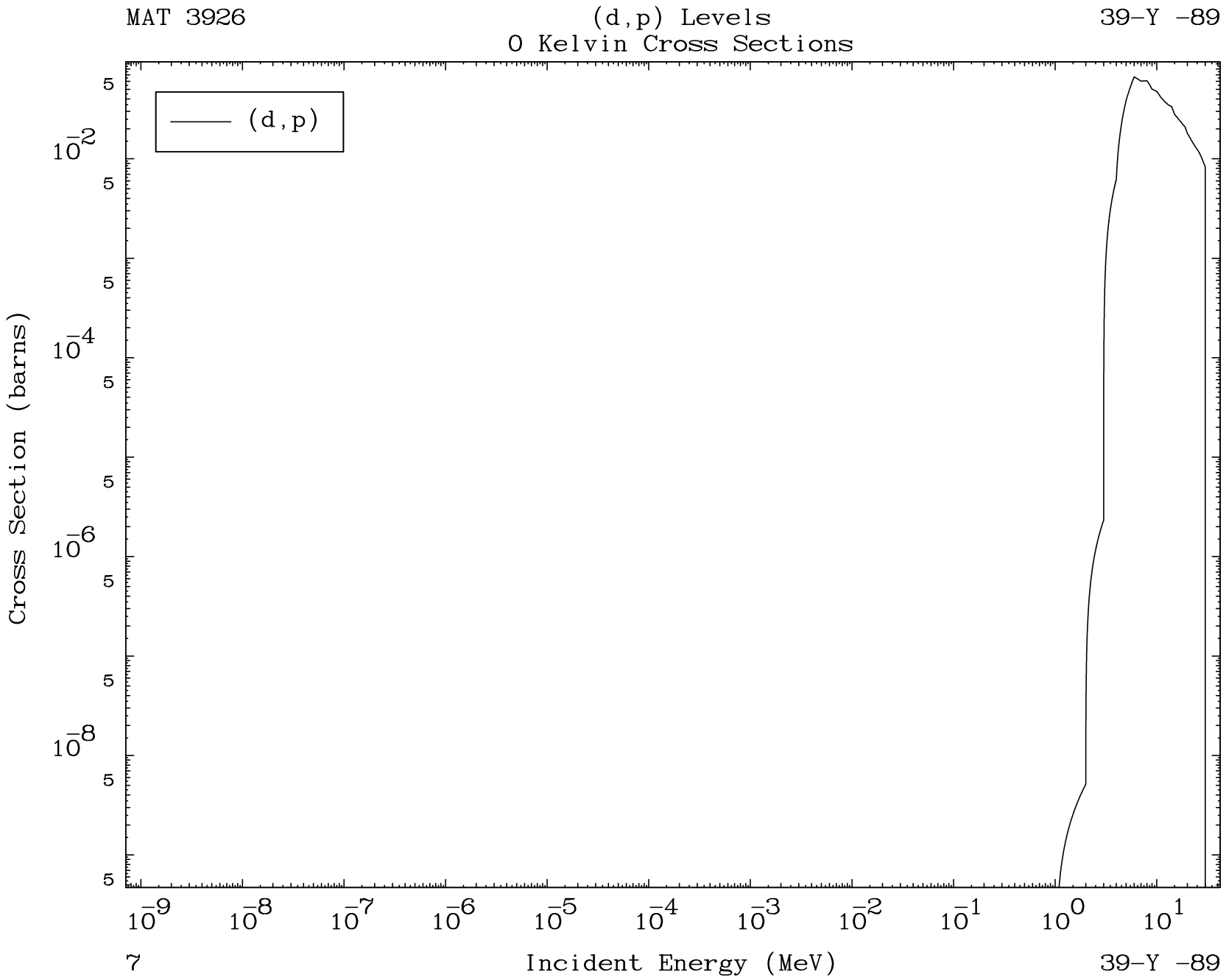

MAT 3926
Deuteron Neutron Production
0 Kelvin Cross Sections
39-Y -89
(d,2n)
(d,3n)
(d,n') α
(d,2n) α
(d,3n) α
(d,n') p
(d,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
39-Y -89

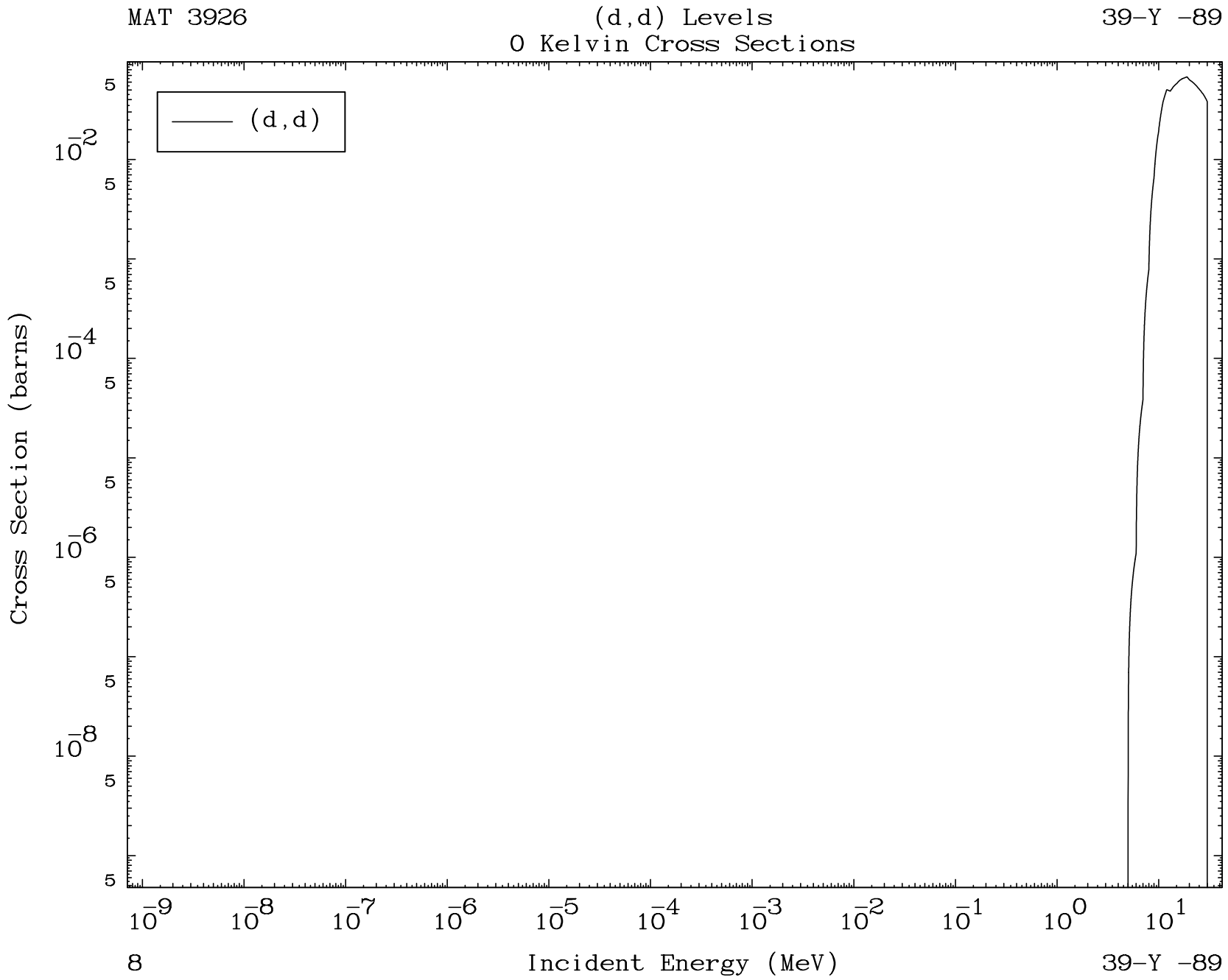

MAT 3926
Deuteron Neutron Production
0 Kelvin Cross Sections
39-Y -89
(d,n') d
(d,n') t
(d,n') He-3
(d,4n)
(d,2n) p
(d,3n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
15
20
25
30
Incident Energy (MeV)
3
39-Y -89

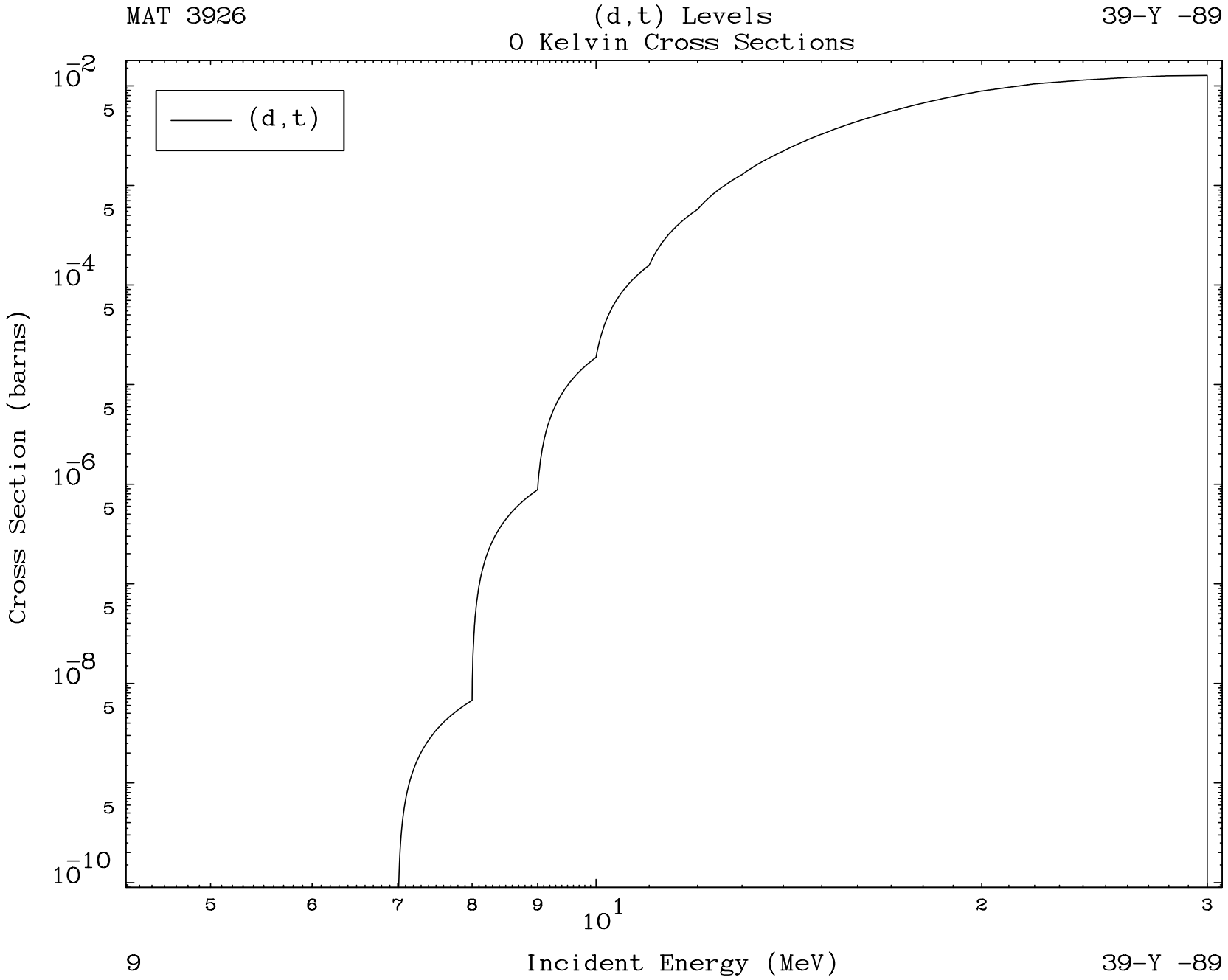

MAT 3926
Deuteron Charged Particle
0 Kelvin Cross Sections
39-Y -89
(d,n') α
(d,2n) α
(d,3n) α
(d,n') p
(d,n') 2α
(d,n') d
(d,n') t
(d,n') He-3
(d,2n) p
(d,3n) p
Cross Section (barns)
Incident Energy (MeV)
4
39-Y -89

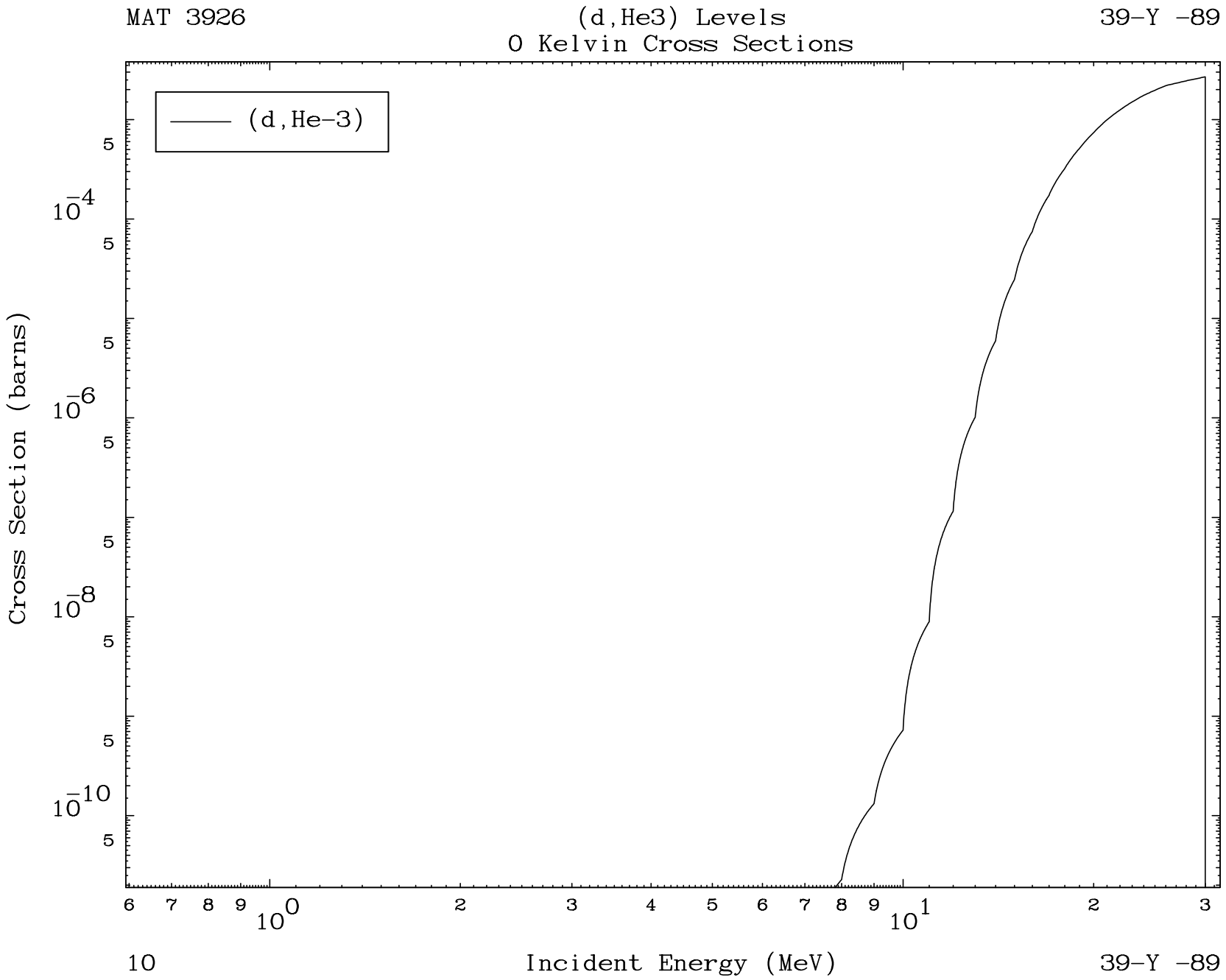

MAT 3926
Deuteron Charged Particle
0 Kelvin Cross Sections
39-Y -89
(d,p)
(d,d)
(d,t)
(d,He-3)
(d,α)
(d,2α)
(d,2p)
(d,p) α
(d,p) d
(d,p) t
Cross Section (barns)
Incident Energy (MeV)
39-Y -89

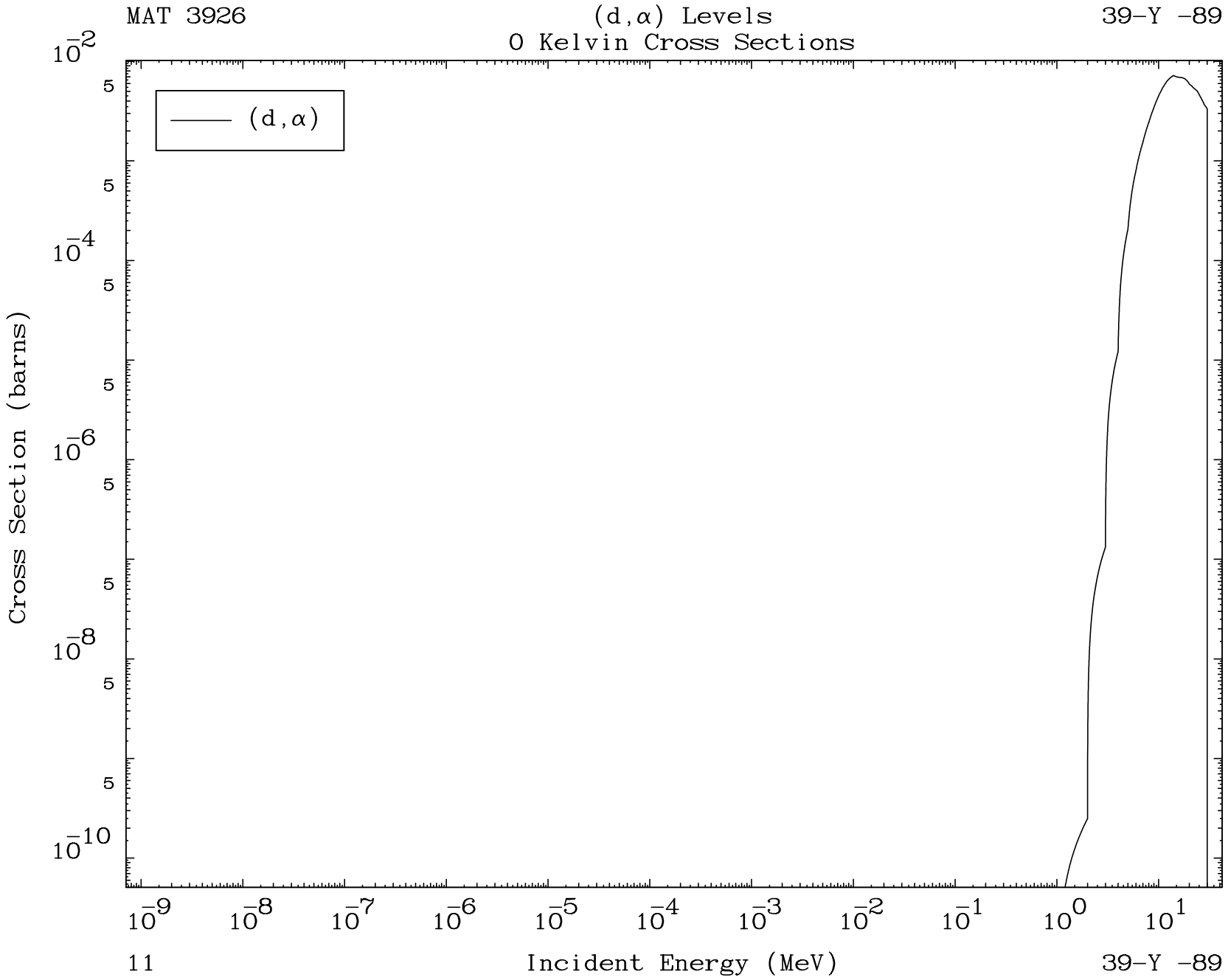

MAT 3926
(d,n') Level
39-Y -89
0 Kelvin Cross Sections
Deuteron Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
10-9
10-8
10-7
10-6
10-5
10-4
10-3
10-2
10-1
100
101
Incident Energy (MeV)
6
39-Y -89

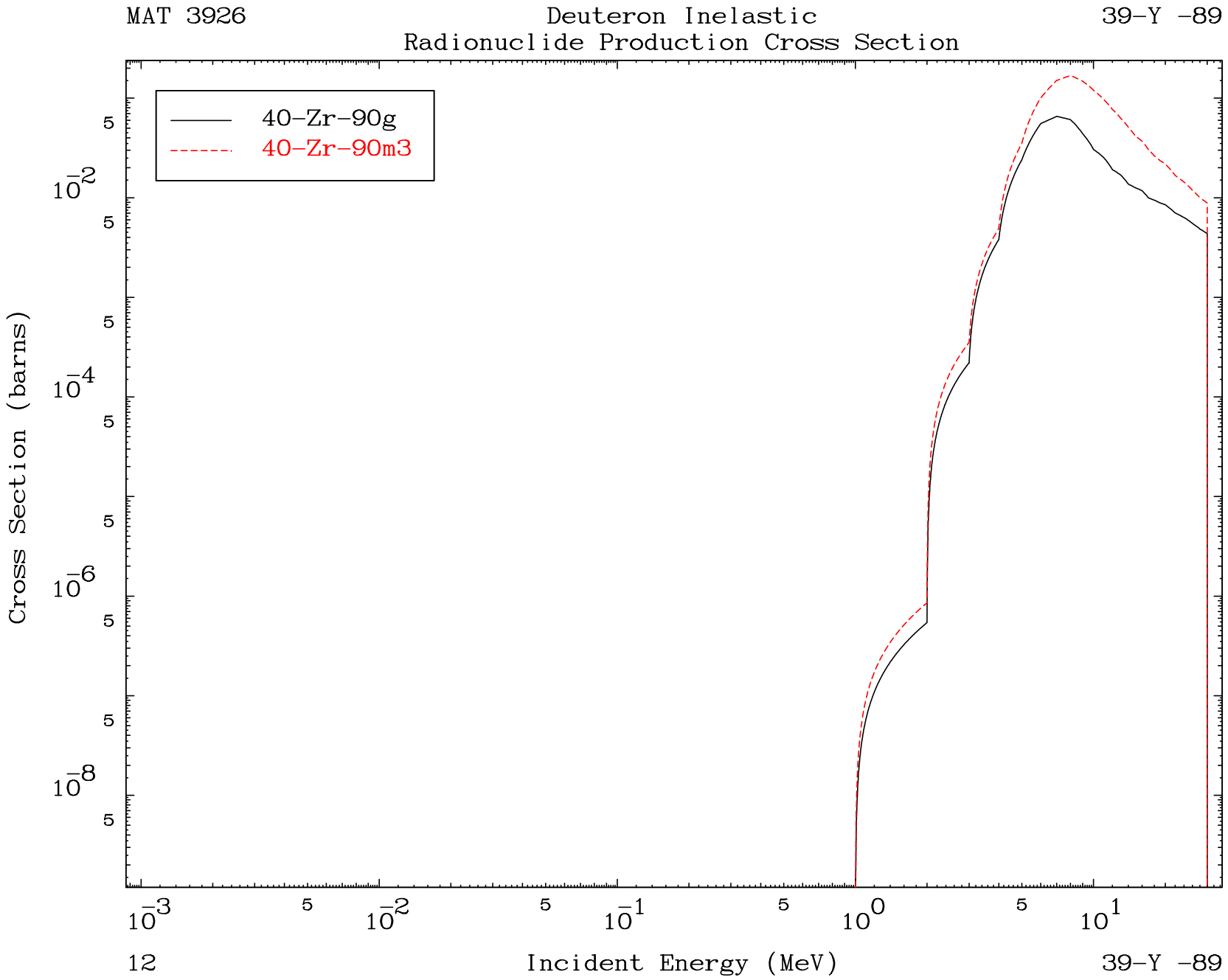

MAT 3926
(d,p) Levels
39-Y -89
0 Kelvin Cross Sections
(d,p)
Cross Section (barns)
Incident Energy (MeV)
7
39-Y -89

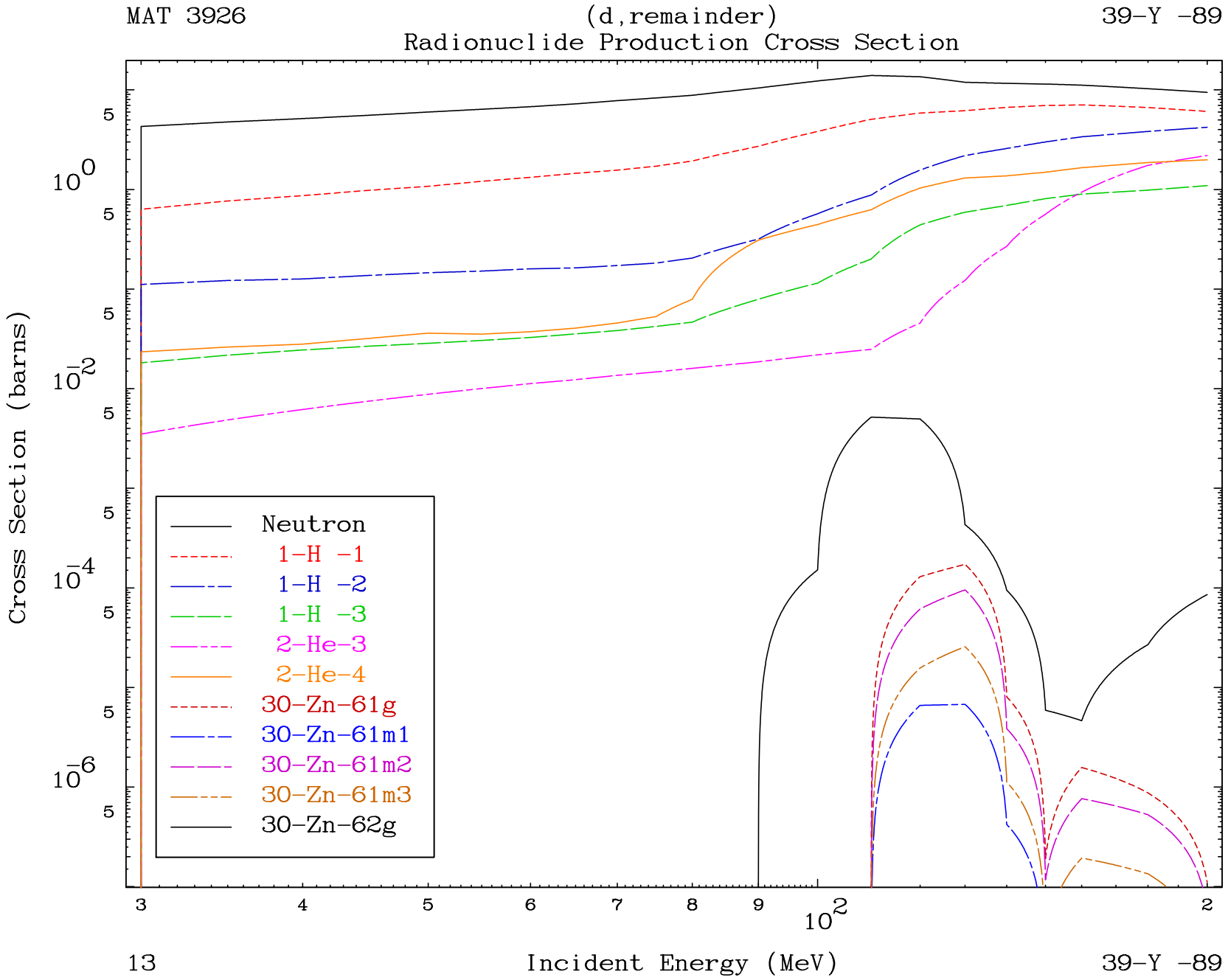

MAT 3926
(d,d) Levels
0 Kelvin Cross Sections
39-Y -89
(d,d)
Cross Section (barns)
Incident Energy (MeV)
8
39-Y -89

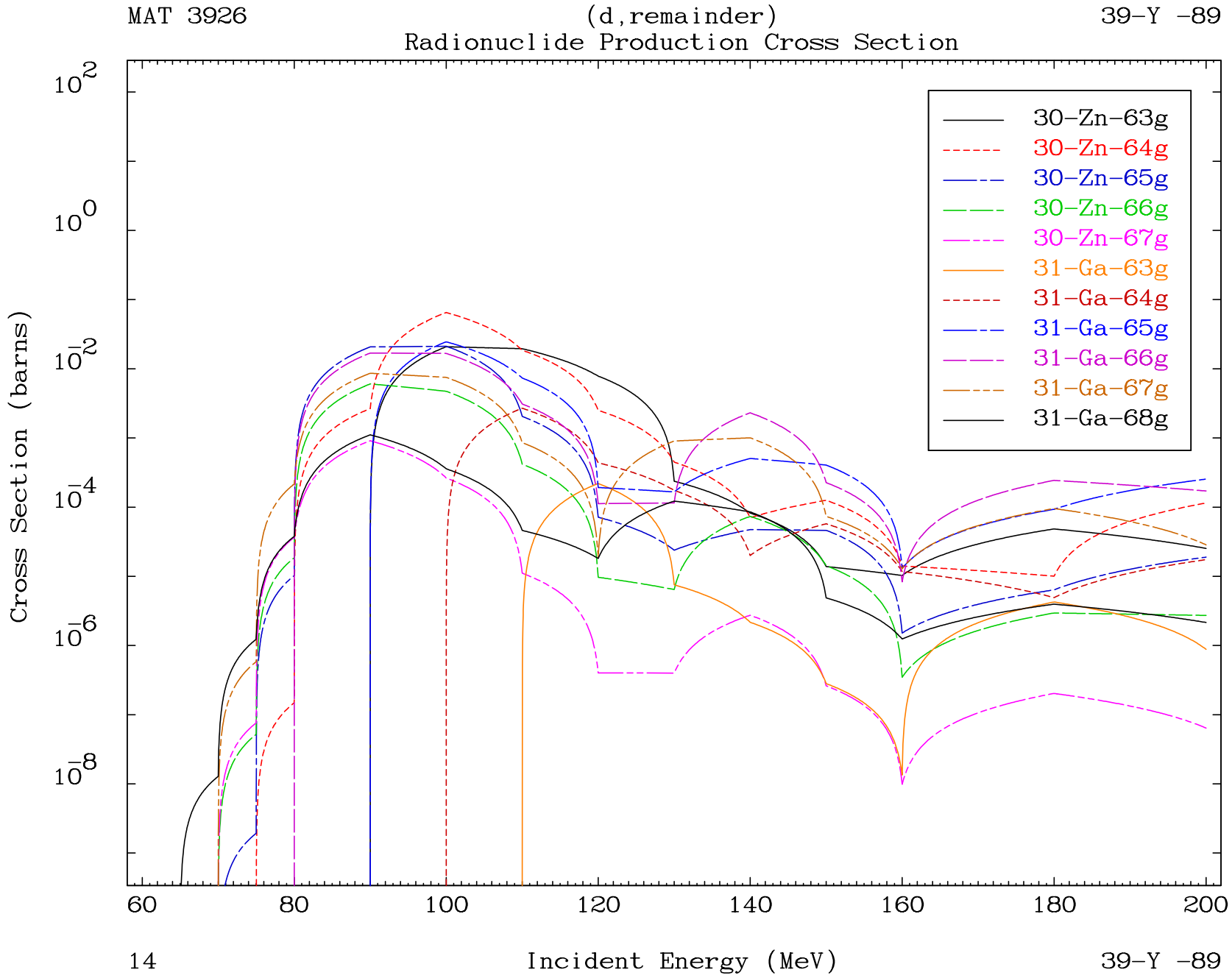

MAT 3926
(d,t) Levels
39-Y -89
0 Kelvin Cross Sections
(d,t)
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
10-10
5
5
6
7
8
9
101
2
3
Incident Energy (MeV)
9
39-Y -89

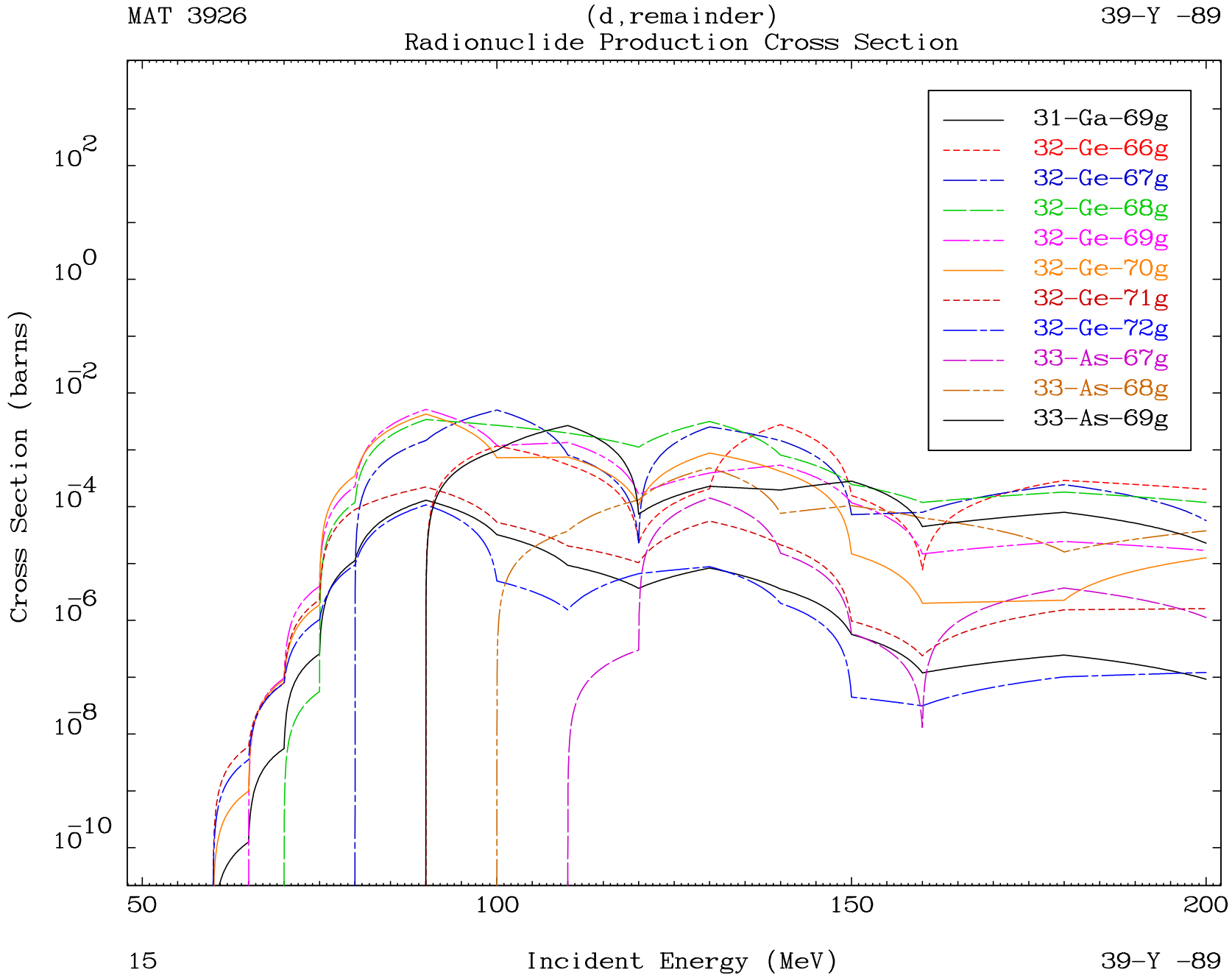

MAT 3926
(d,He3) Levels
0 Kelvin Cross Sections
39-Y -89
(d,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
6 7 8 9 10^0 2 3 4 5 6 7 8 9 10^1 2 3
Incident Energy (MeV)
10
39-Y -89

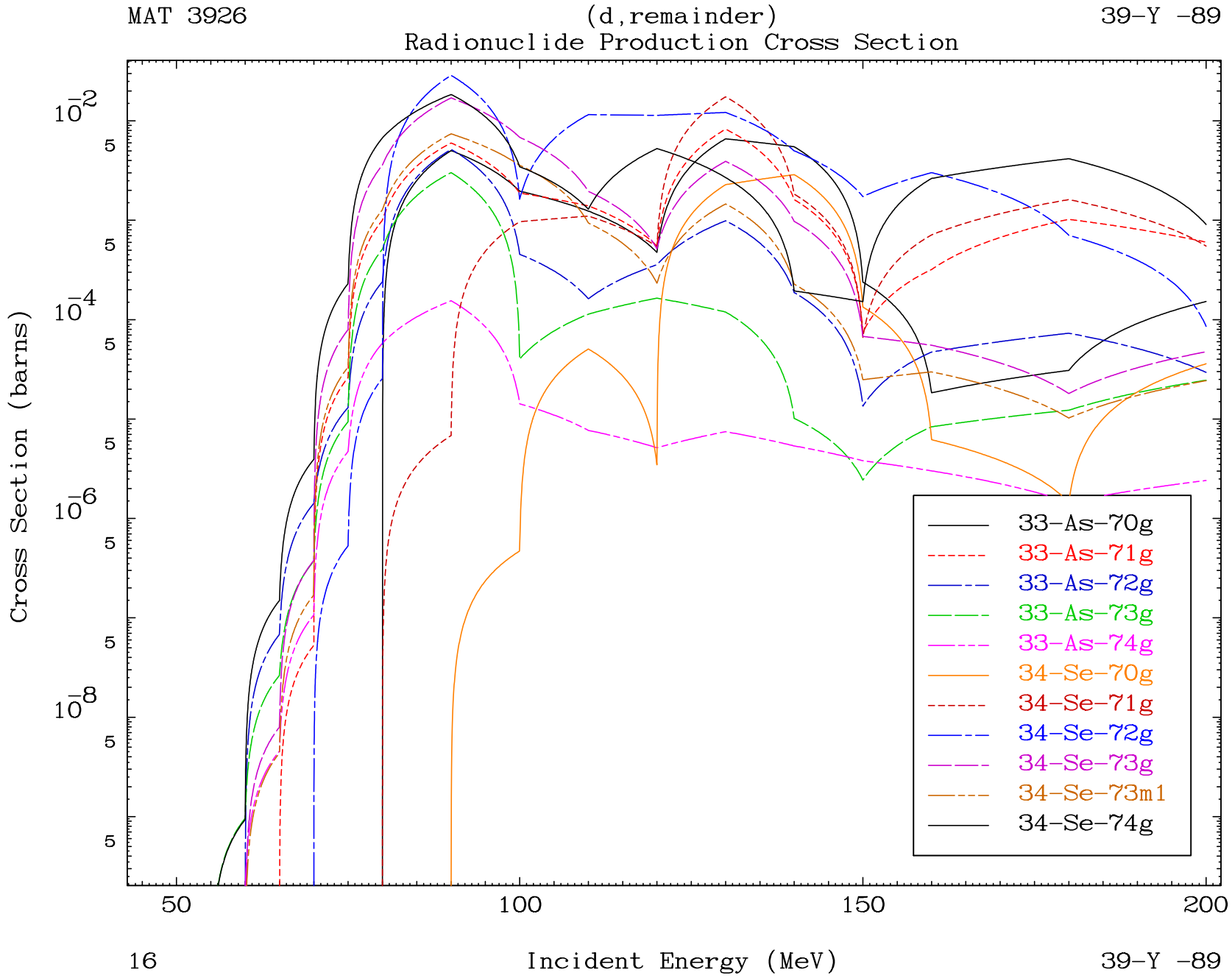

MAT 3926
(d,α) Levels
39-Y -89
0 Kelvin Cross Sections
(d,α)
Cross Section (barns)
Incident Energy (MeV)
11
39-Y -89

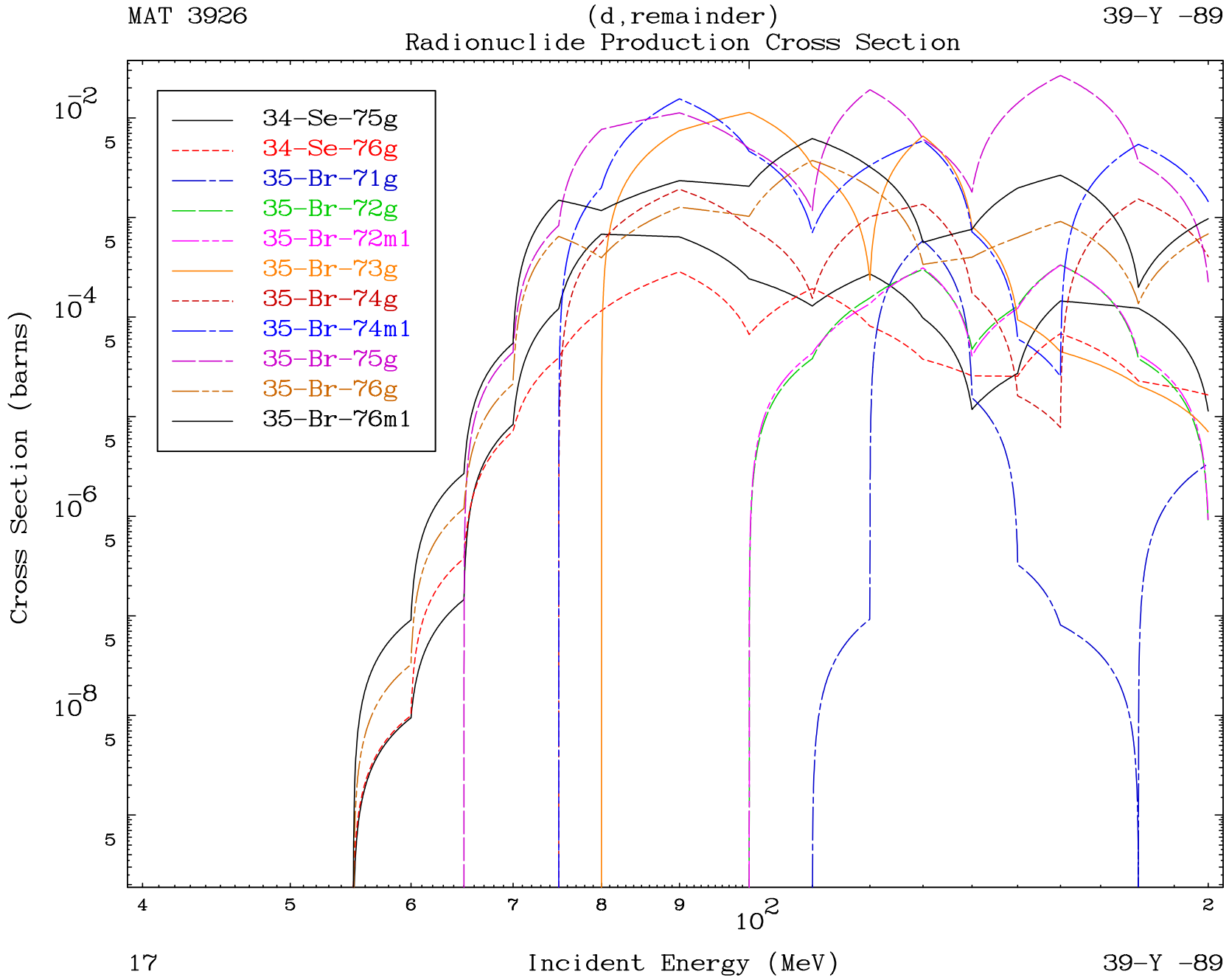

MAT 3926
Deuteron Inelastic
Radionuclide Production Cross Section
39-Y -89
40-Zr-90g
40-Zr-90m3
Cross Section (barns)
Incident Energy (MeV)
12
39-Y -89

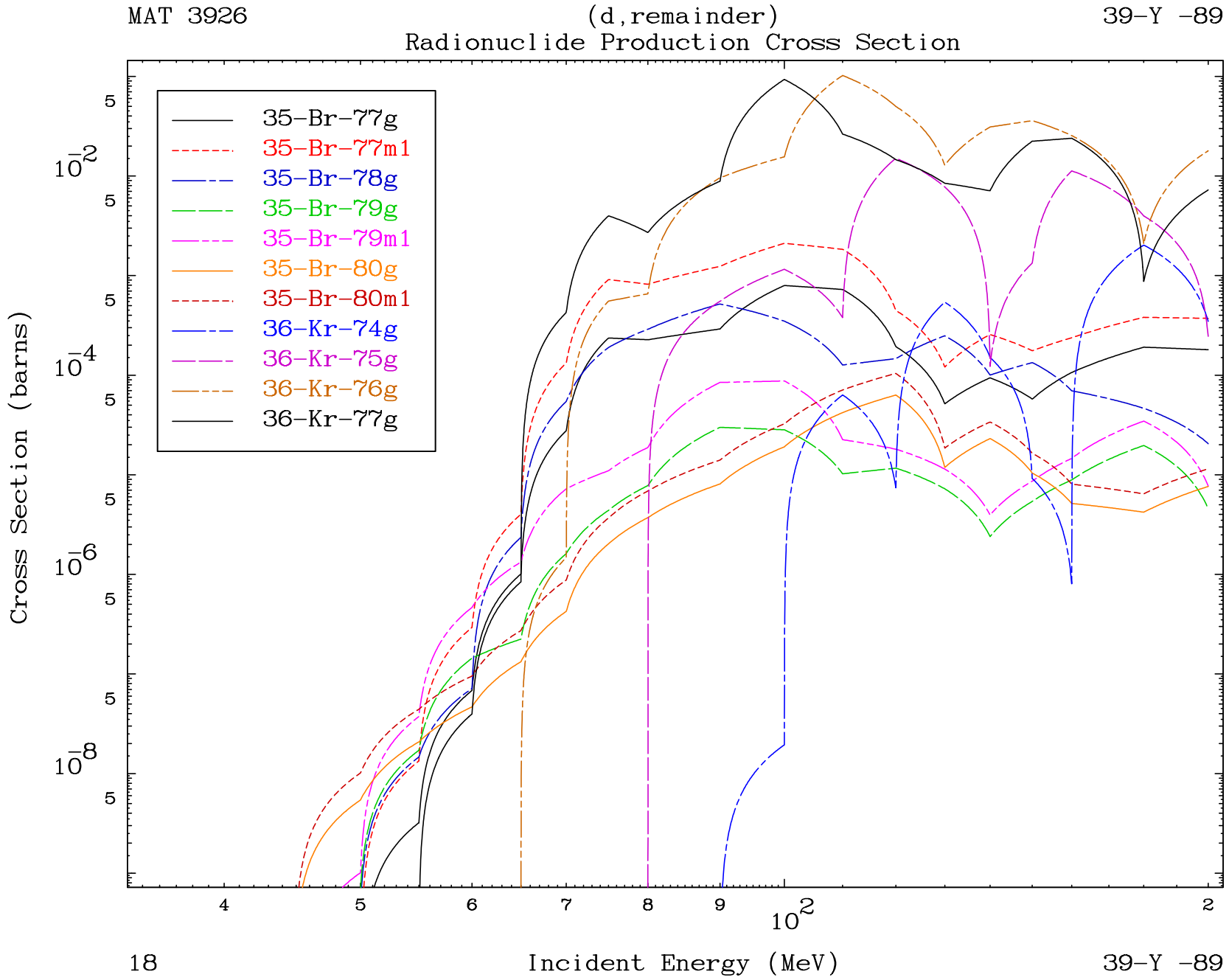

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
30-Zn-61g
30-Zn-61m1
30-Zn-61m2
30-Zn-61m3
30-Zn-62g
3
4
5
6
7
8
9
10^2
2
13
Incident Energy (MeV)
39-Y -89

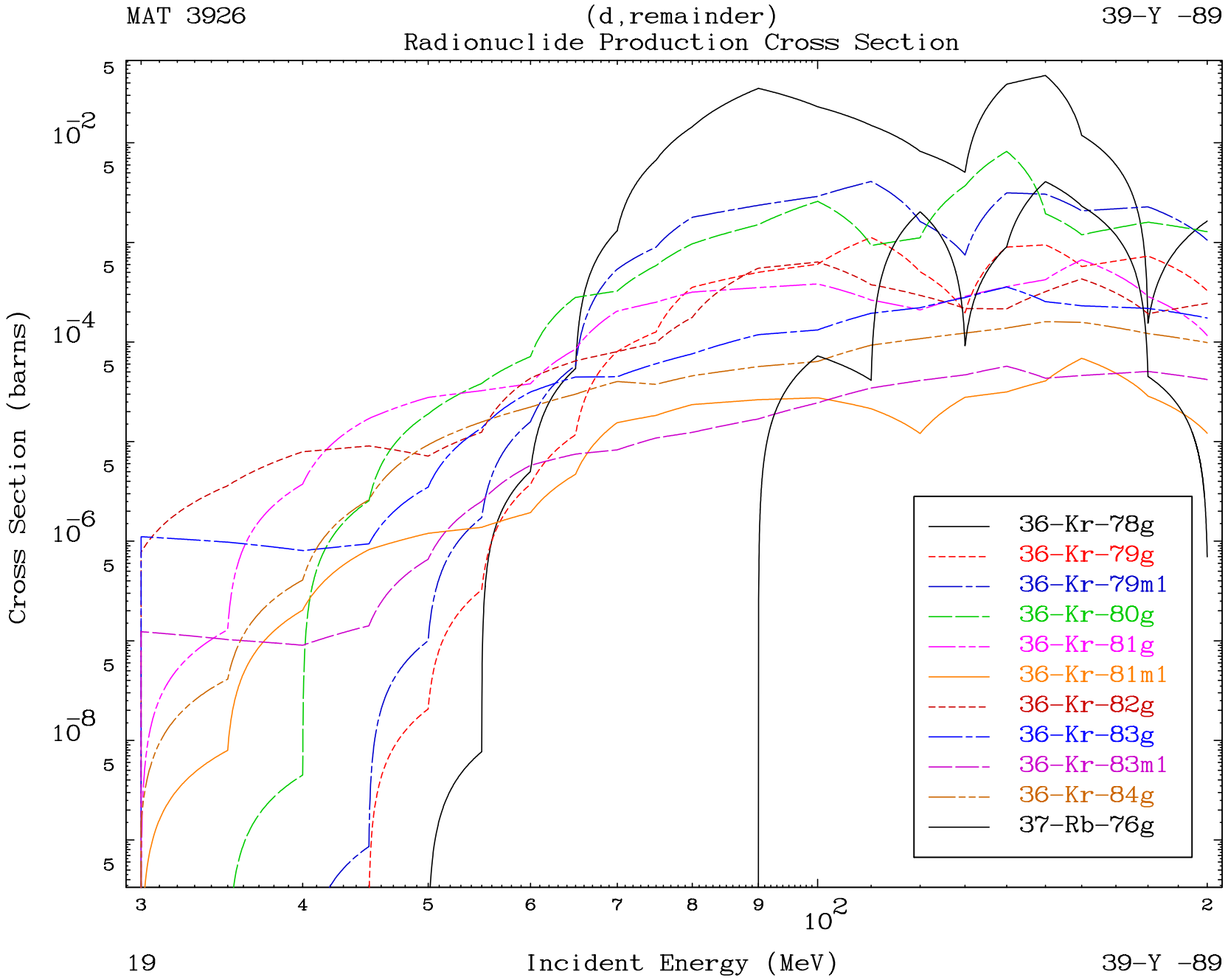

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
60
80
100
120
140
160
180
200
Incident Energy (MeV)
30-Zn-63g
30-Zn-64g
30-Zn-65g
30-Zn-66g
30-Zn-67g
31-Ga-63g
31-Ga-64g
31-Ga-65g
31-Ga-66g
31-Ga-67g
31-Ga-68g

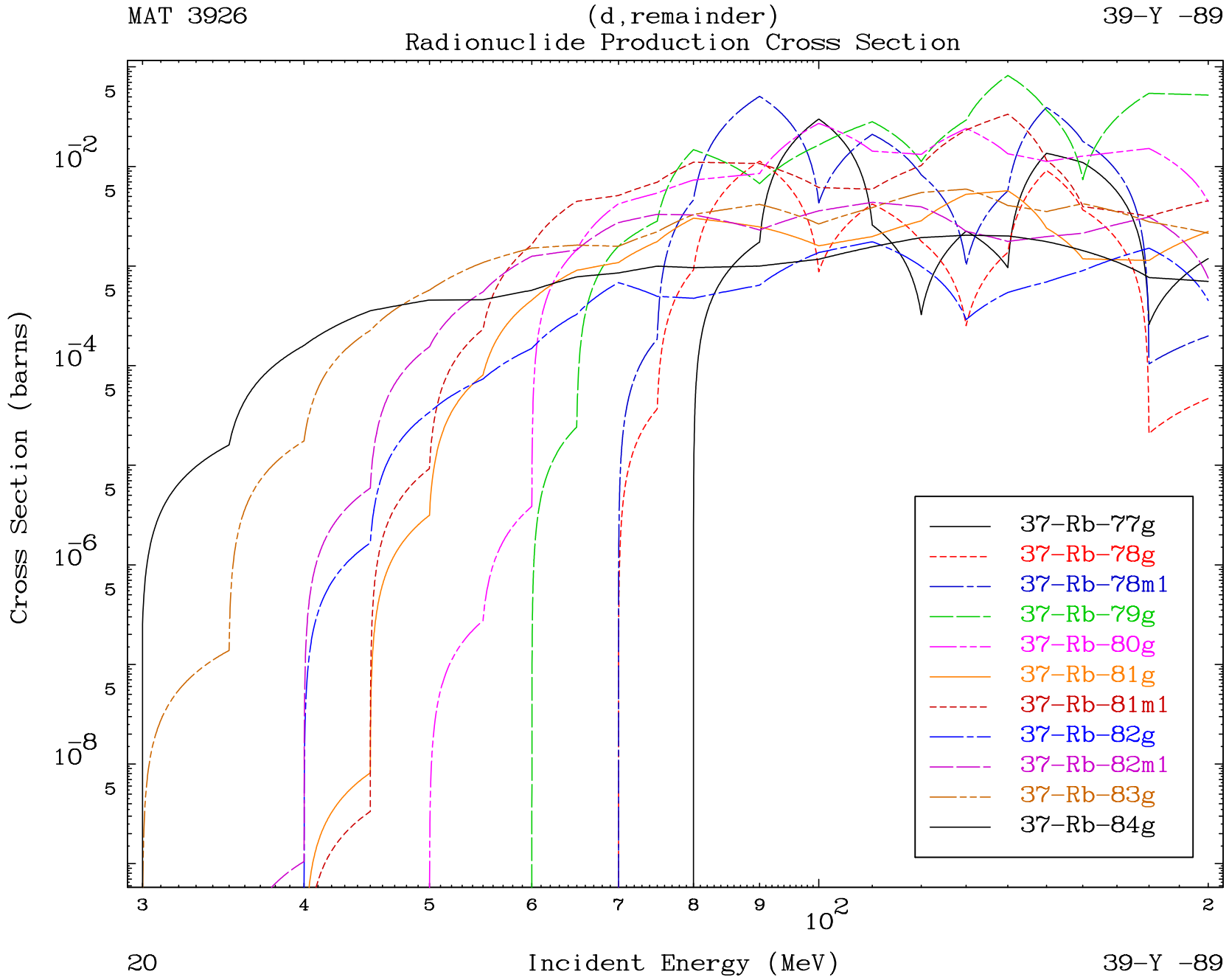

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
50
100
150
200
15
Incident Energy (MeV)
39-Y -89
31-Ga-69g
32-Ge-66g
32-Ge-67g
32-Ge-68g
32-Ge-69g
32-Ge-70g
32-Ge-71g
32-Ge-72g
33-As-67g
33-As-68g
33-As-69g

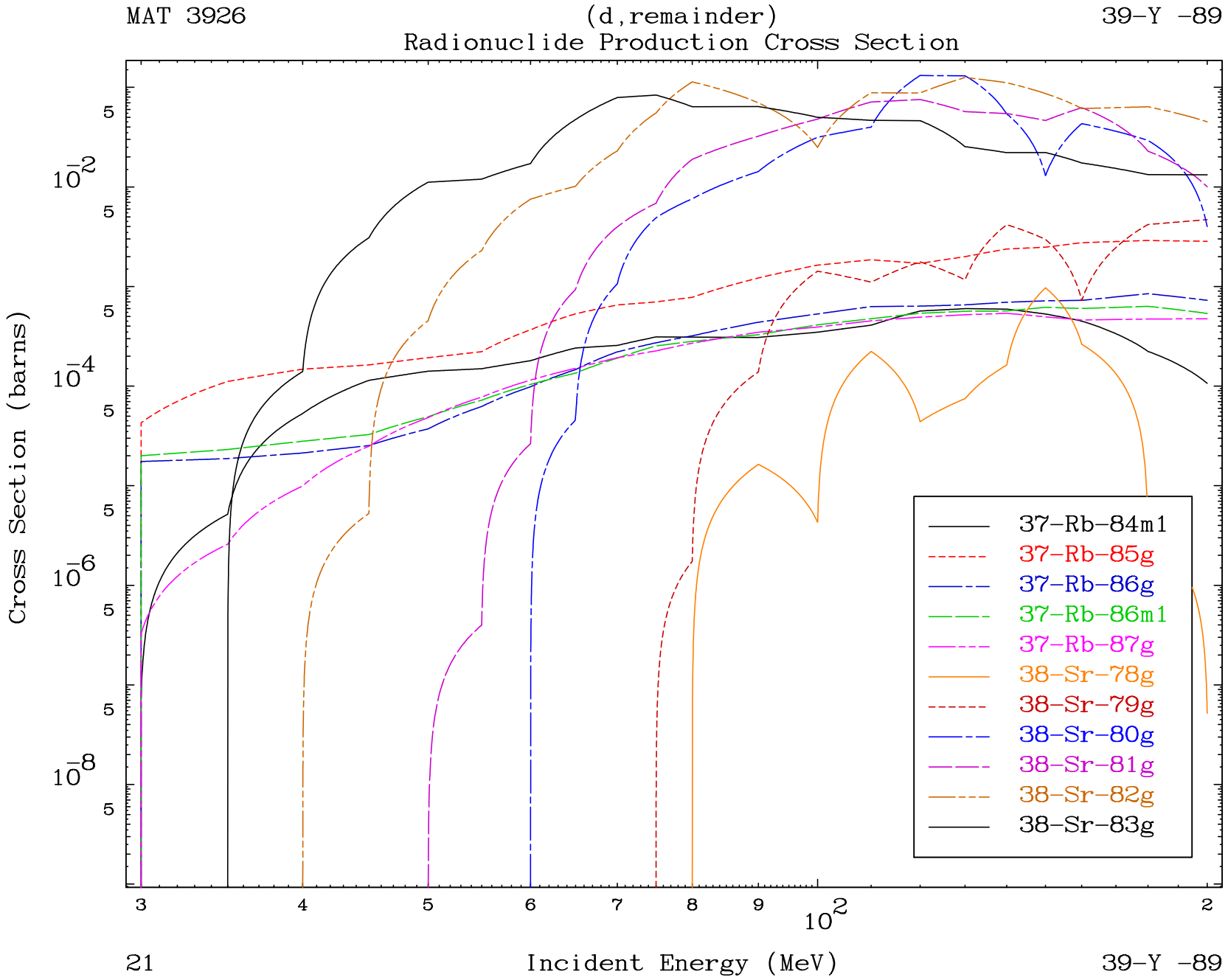

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
50
100
150
200
16
Incident Energy (MeV)
39-Y -89
33-As-70g
33-As-71g
33-As-72g
33-As-73g
33-As-74g
34-Se-70g
34-Se-71g
34-Se-72g
34-Se-73g
34-Se-73m1
34-Se-74g

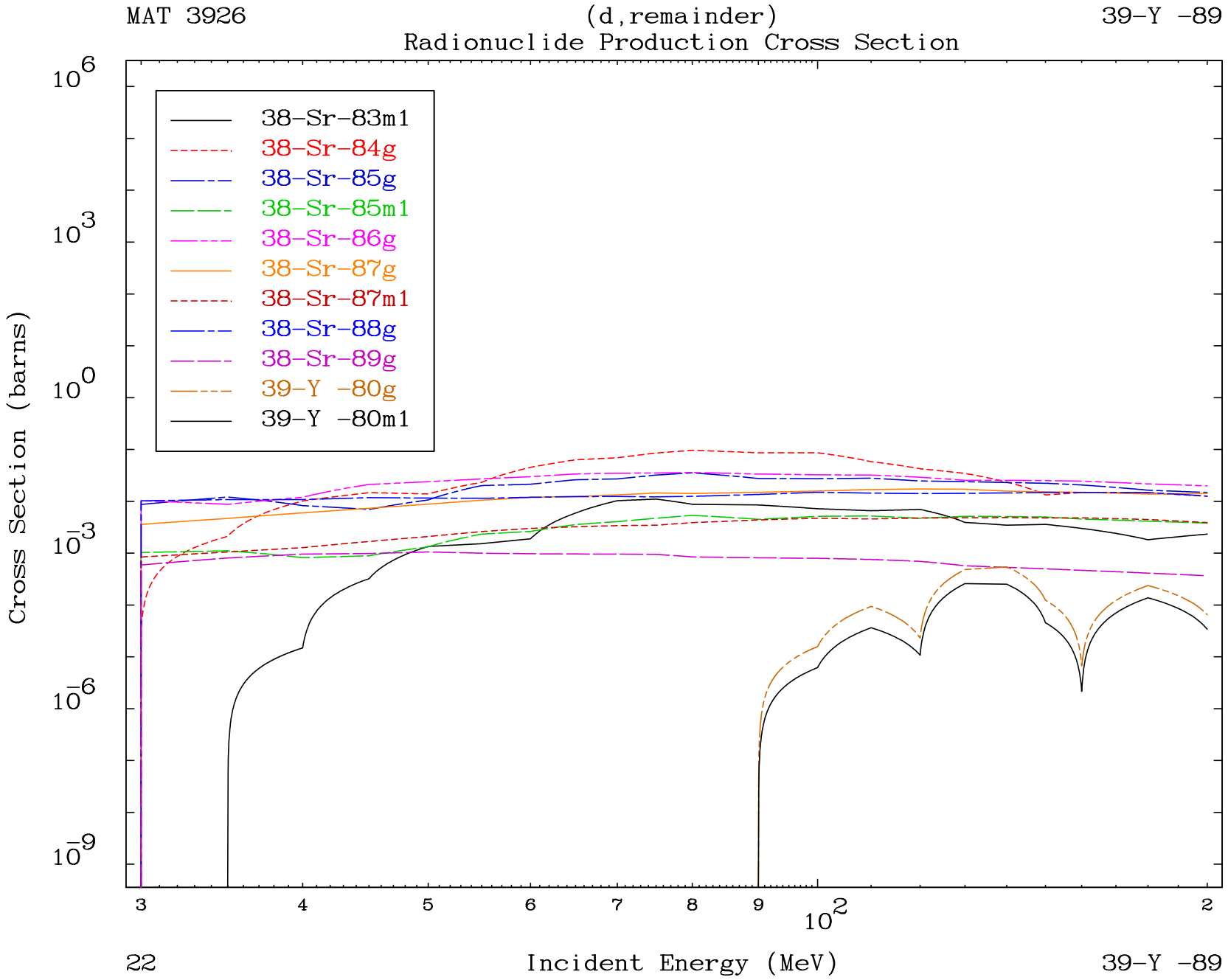

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
34-Se-75g
34-Se-76g
35-Br-71g
35-Br-72g
35-Br-72m1
35-Br-73g
35-Br-74g
35-Br-74m1
35-Br-75g
35-Br-76g
35-Br-76m1
Cross Section (barns)
10-2
10-4
10-6
10-8
4
5
6
7
8
9
10 2
2
17
Incident Energy (MeV)
39-Y -89

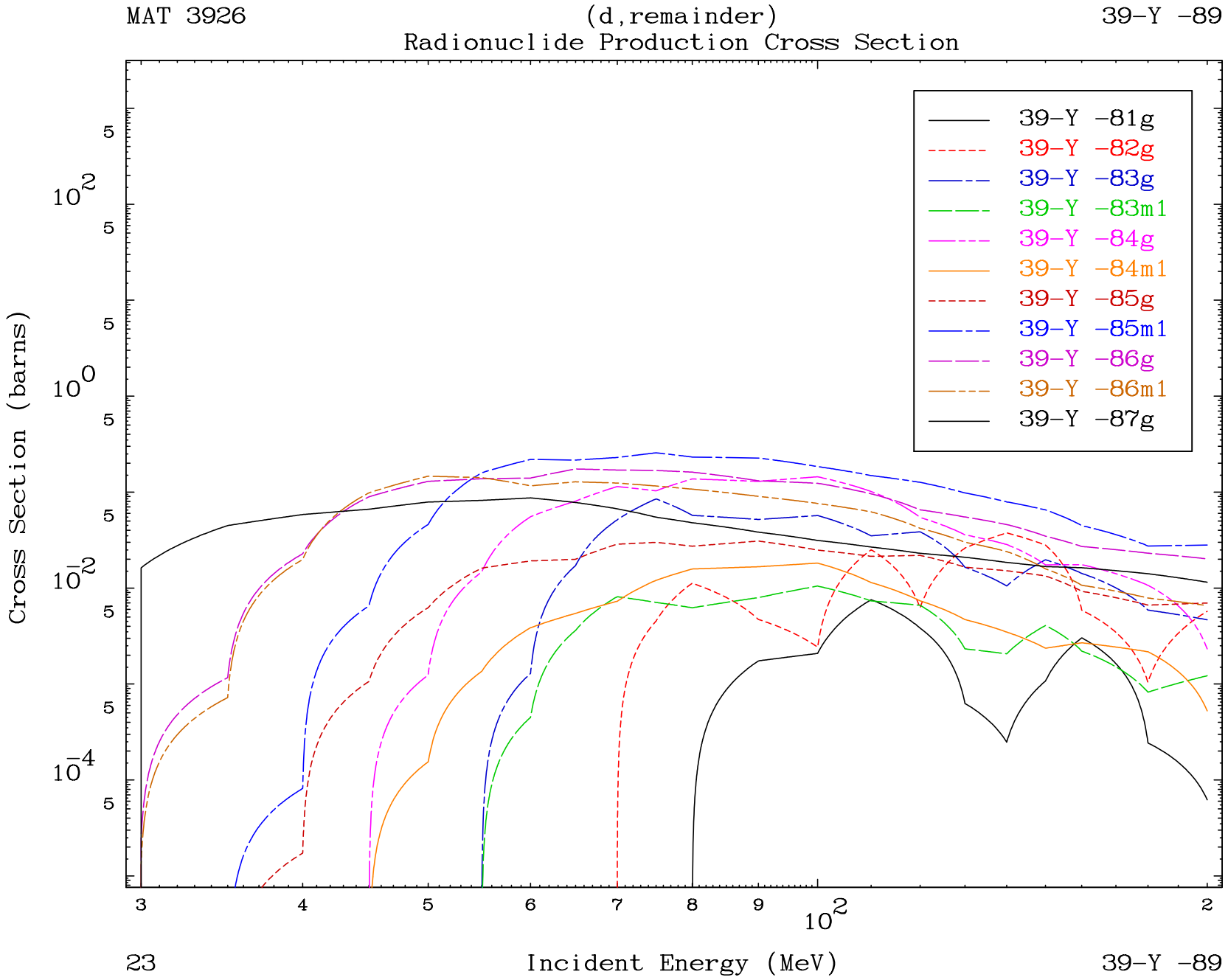

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
35-Br-77g
35-Br-77m1
35-Br-78g
35-Br-79g
35-Br-79m1
35-Br-80g
35-Br-80m1
36-Kr-74g
36-Kr-75g
36-Kr-76g
36-Kr-77g
Cross Section (barns)
10-2
10-4
10-6
10-8
4
5
6
7
8
9
10 2
2
18
Incident Energy (MeV)
39-Y -89

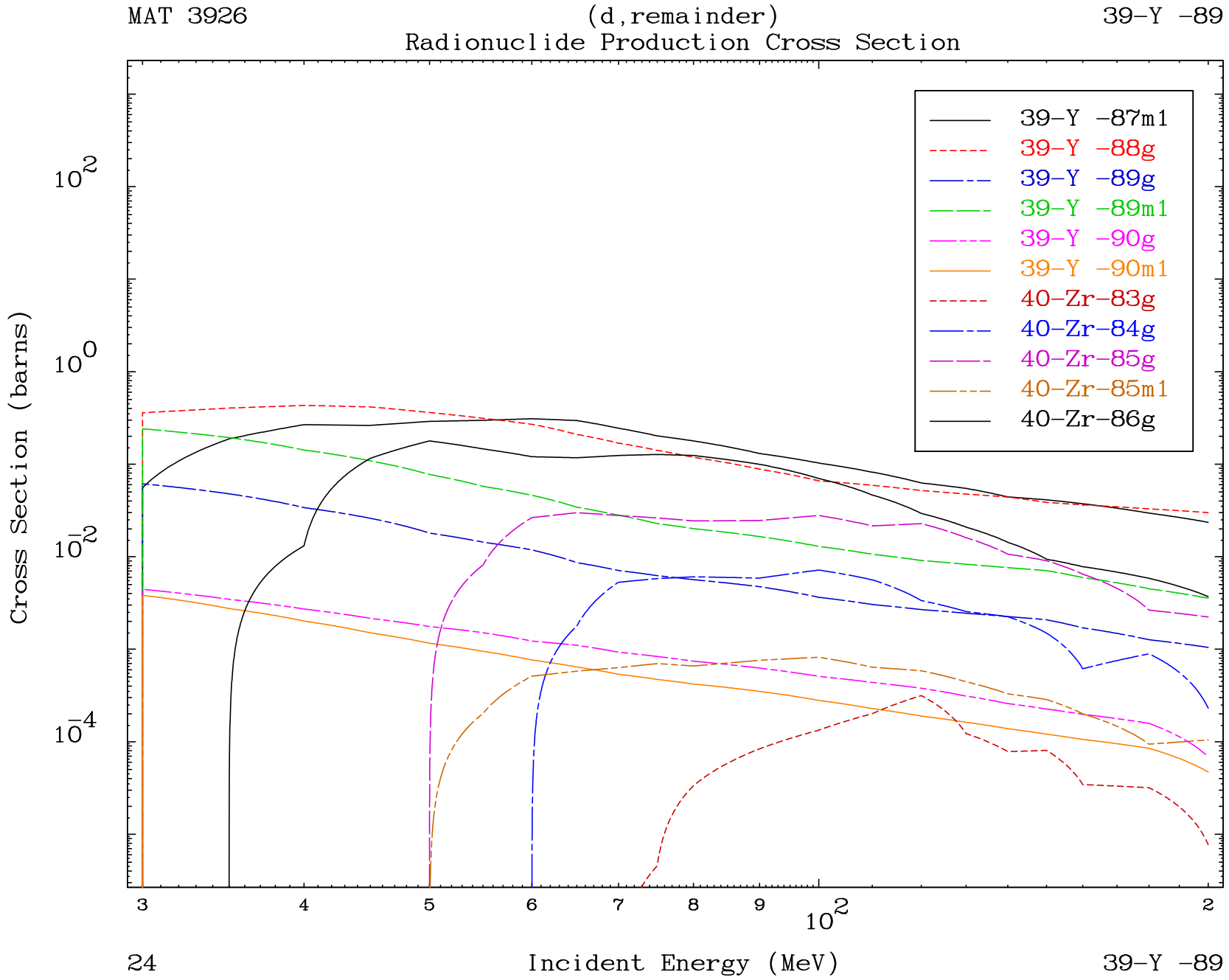

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
36-Kr-78g
36-Kr-79g
36-Kr-79m1
36-Kr-80g
36-Kr-81g
36-Kr-81m1
36-Kr-82g
36-Kr-83g
36-Kr-83m1
36-Kr-84g
37-Rb-76g

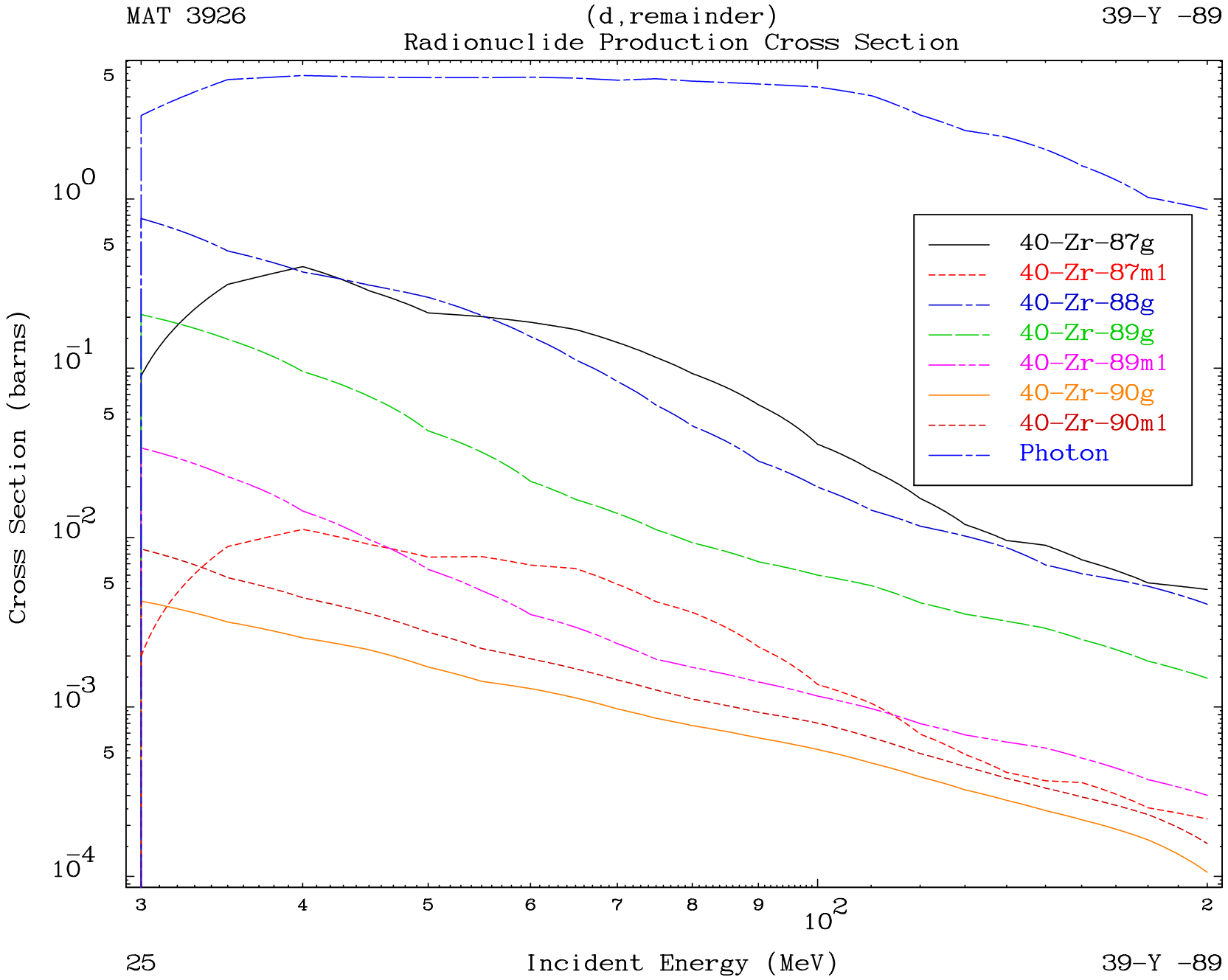

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
20
39-Y -89
37-Rb-77g
37-Rb-78g
37-Rb-78m1
37-Rb-79g
37-Rb-80g
37-Rb-81g
37-Rb-81m1
37-Rb-82g
37-Rb-82m1
37-Rb-83g
37-Rb-84g

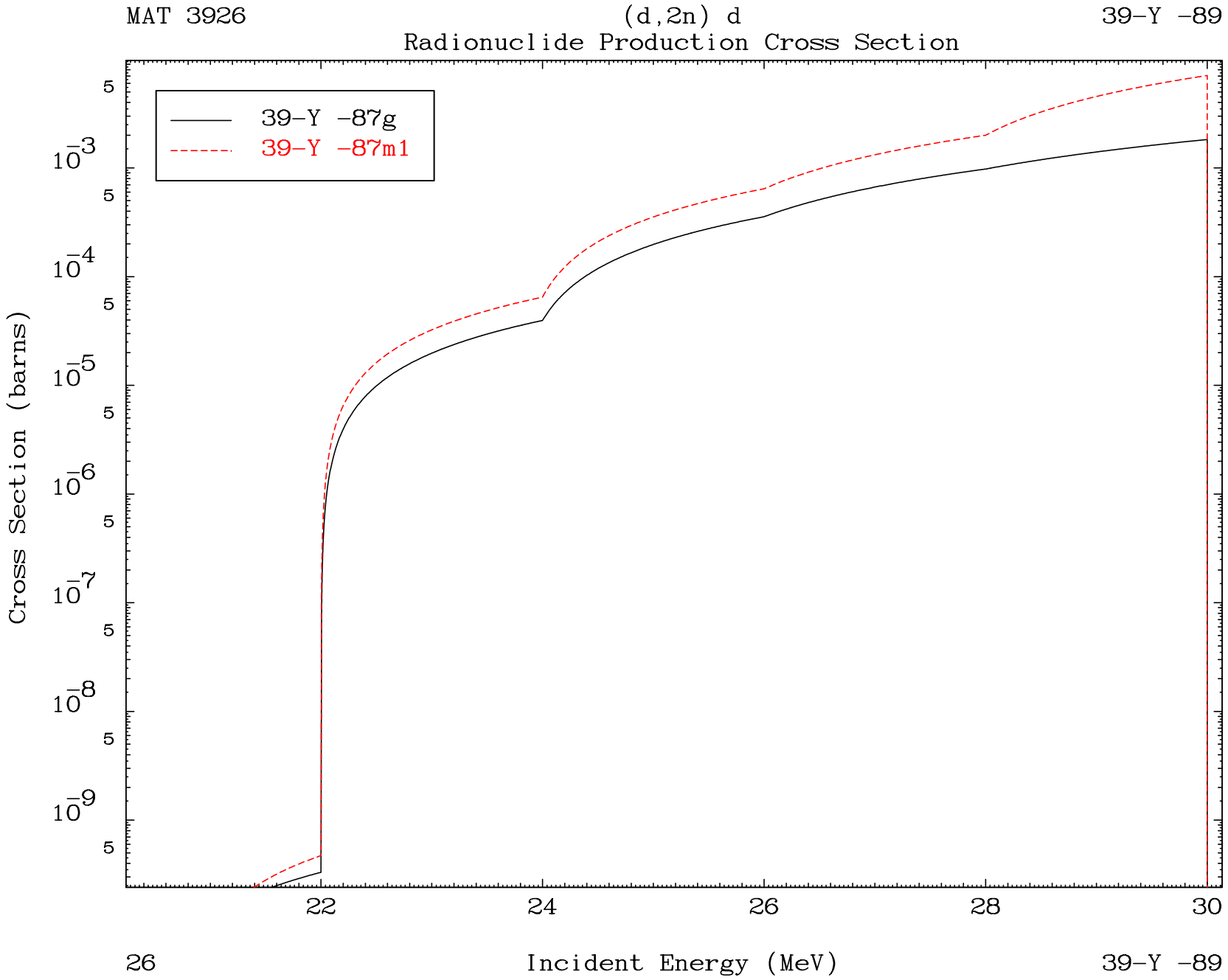

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
21
39-Y -89
37-Rb-84m1
37-Rb-85g
37-Rb-86g
37-Rb-86m1
37-Rb-87g
38-Sr-78g
38-Sr-79g
38-Sr-80g
38-Sr-81g
38-Sr-82g
38-Sr-83g

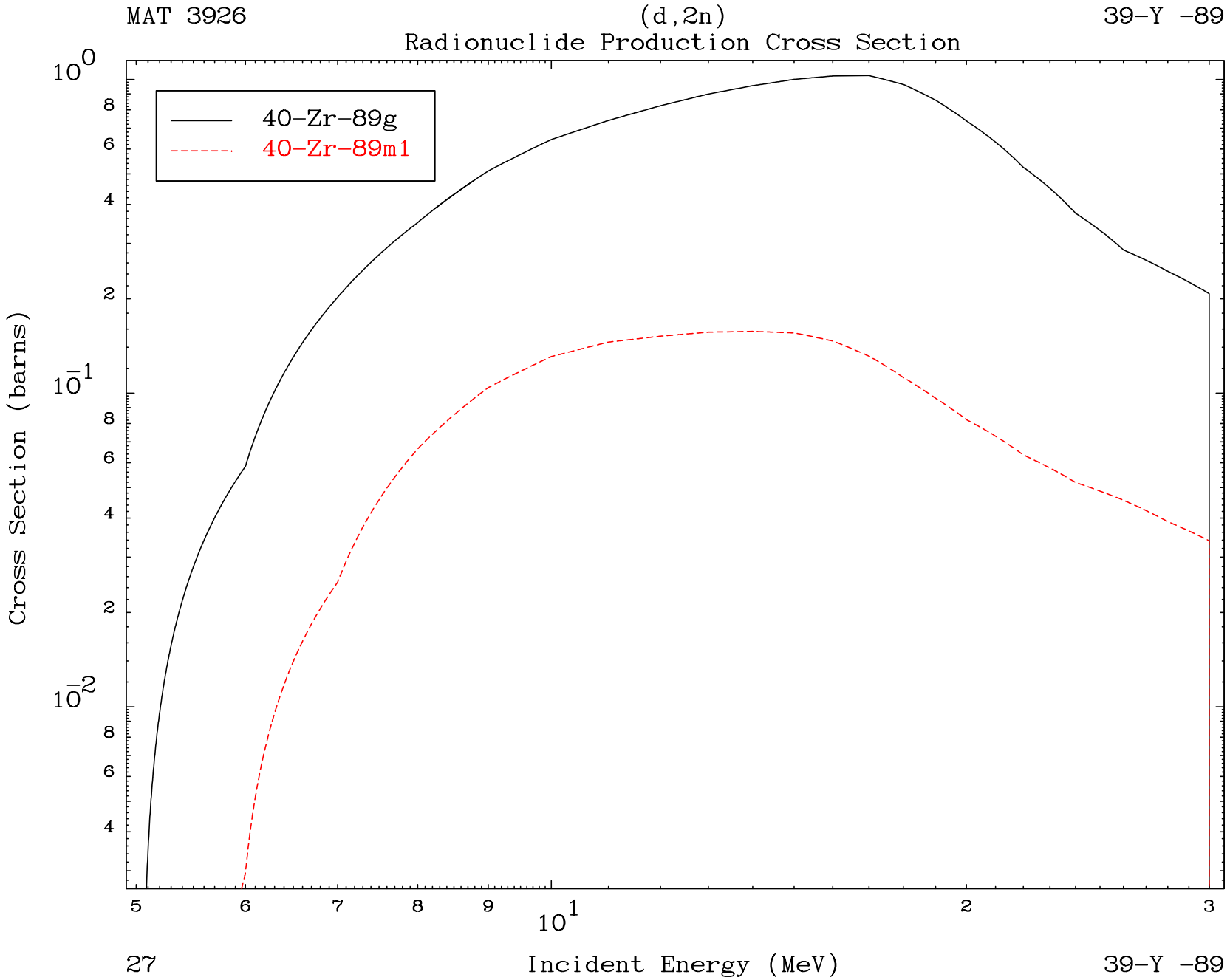

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
38-Sr-83m1
38-Sr-84g
38-Sr-85g
38-Sr-85m1
38-Sr-86g
38-Sr-87g
38-Sr-87m1
38-Sr-88g
38-Sr-89g
39-Y -80g
39-Y -80m1
Cross Section (barns)
Incident Energy (MeV)
22
39-Y -89

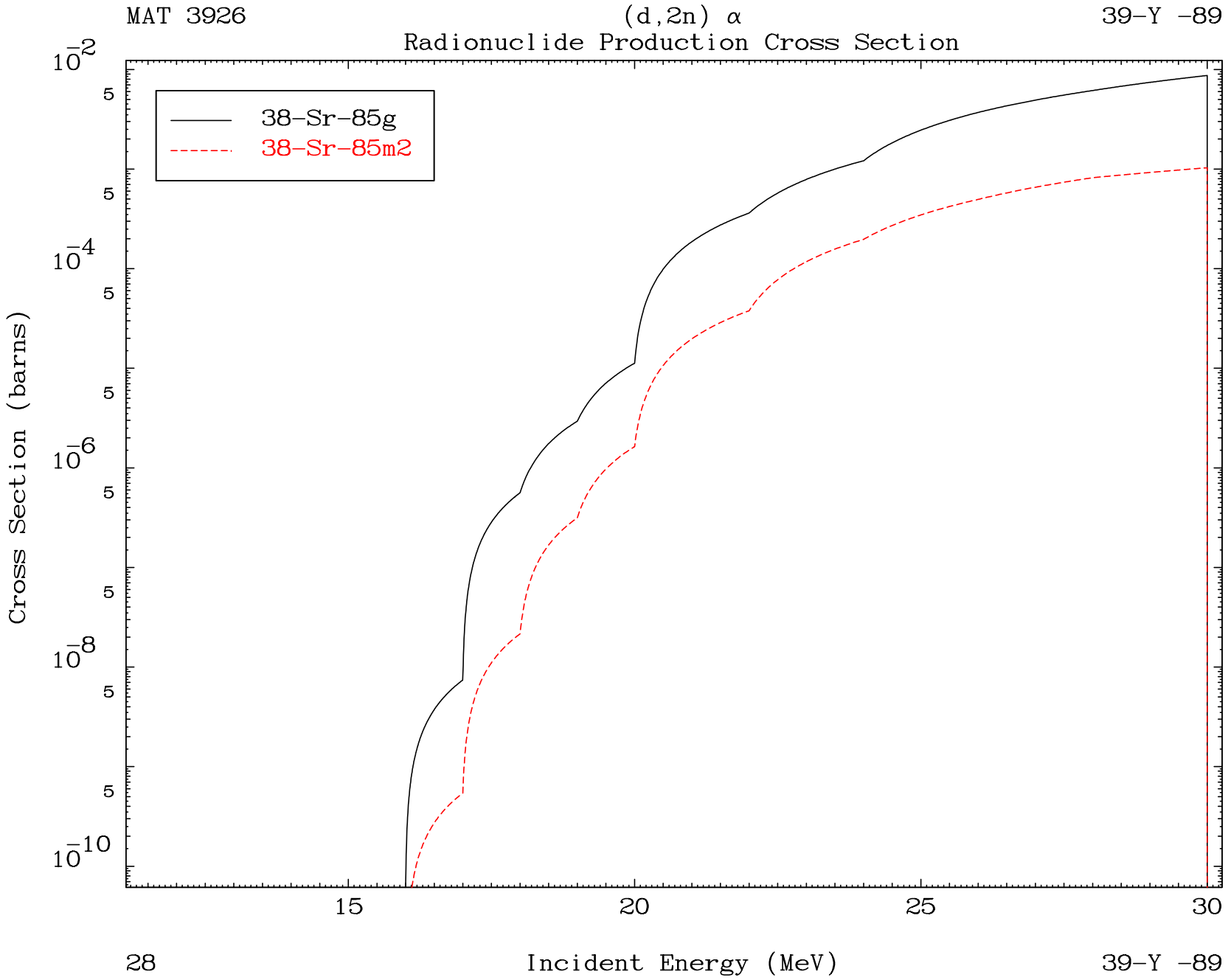

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
39-Y -81g
39-Y -82g
39-Y -83g
39-Y -83m1
39-Y -84g
39-Y -84m1
39-Y -85g
39-Y -85m1
39-Y -86g
39-Y -86m1
39-Y -87g
Cross Section (barns)
Incident Energy (MeV)
23
39-Y -89

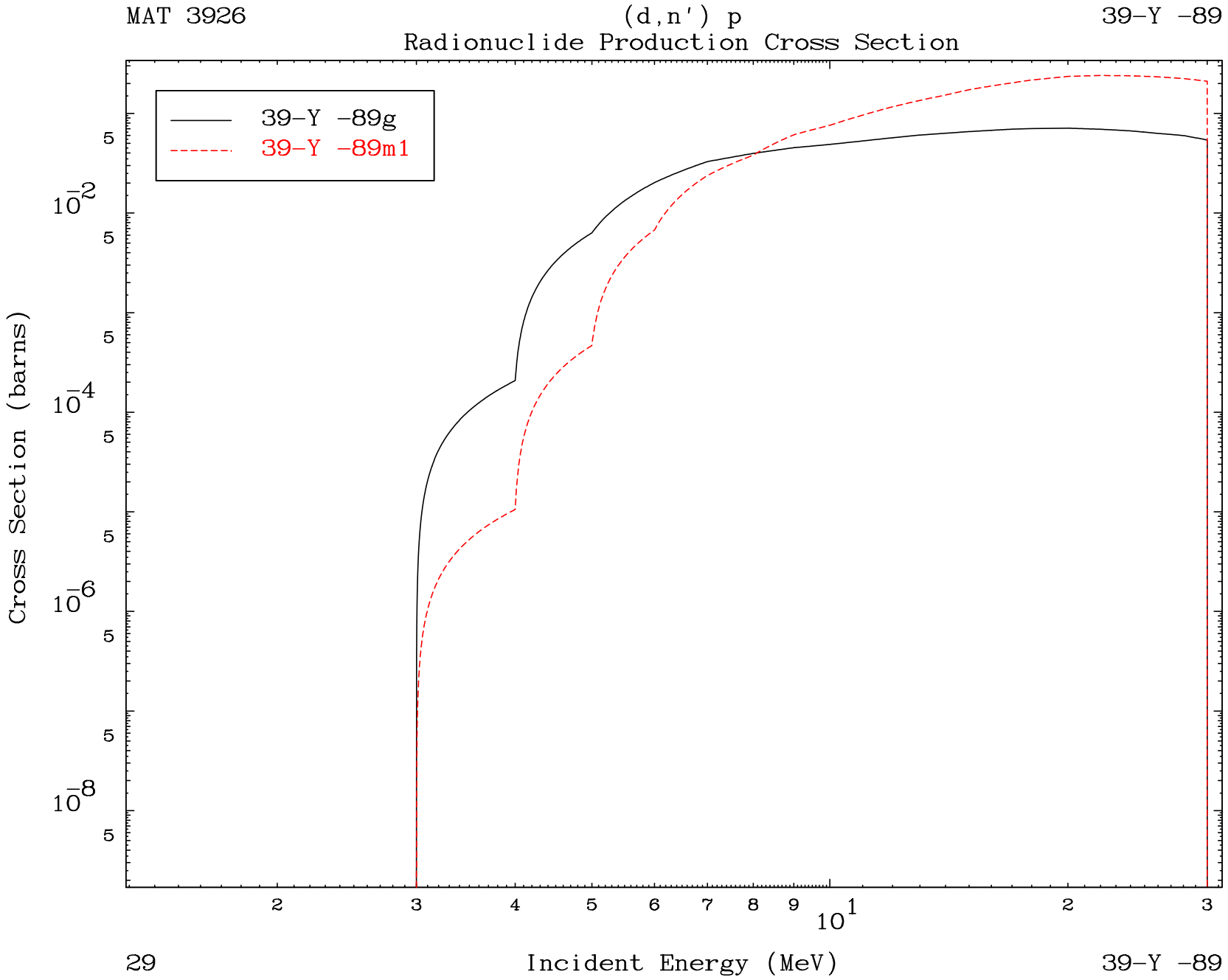

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
39-Y -87m1
39-Y -88g
39-Y -89g
39-Y -89m1
39-Y -90g
39-Y -90m1
40-Zr-83g
40-Zr-84g
40-Zr-85g
40-Zr-85m1
40-Zr-86g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
39-Y -89

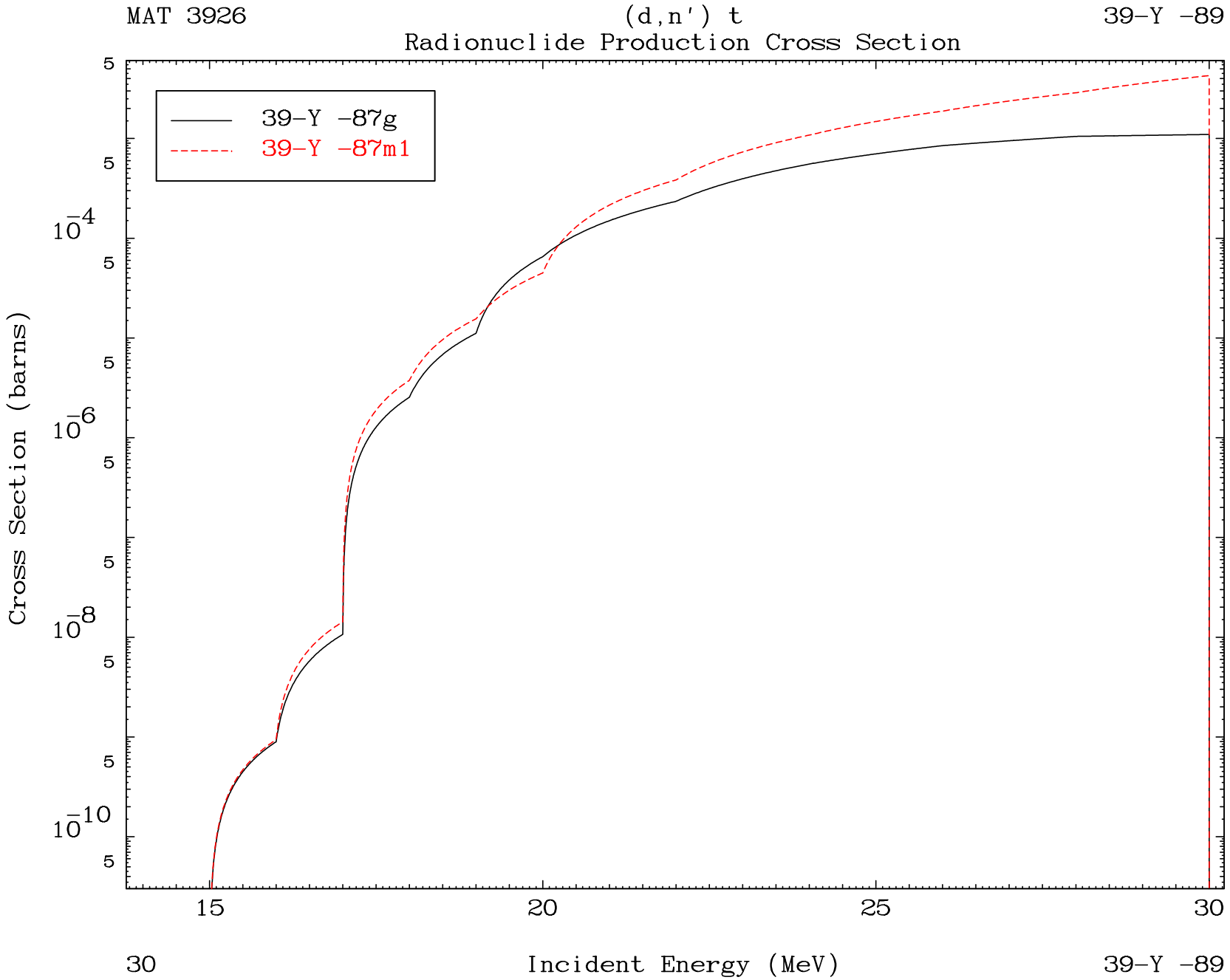

MAT 3926
(d,remainder)
39-Y -89
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-1
10^-2
10^-3
10^-4
5
3
4
6
7
8
9
10^2
2
40-Zr-87g
40-Zr-87m1
40-Zr-88g
40-Zr-89g
40-Zr-89m1
40-Zr-90g
40-Zr-90m1
Photon
25
Incident Energy (MeV)
39-Y -89

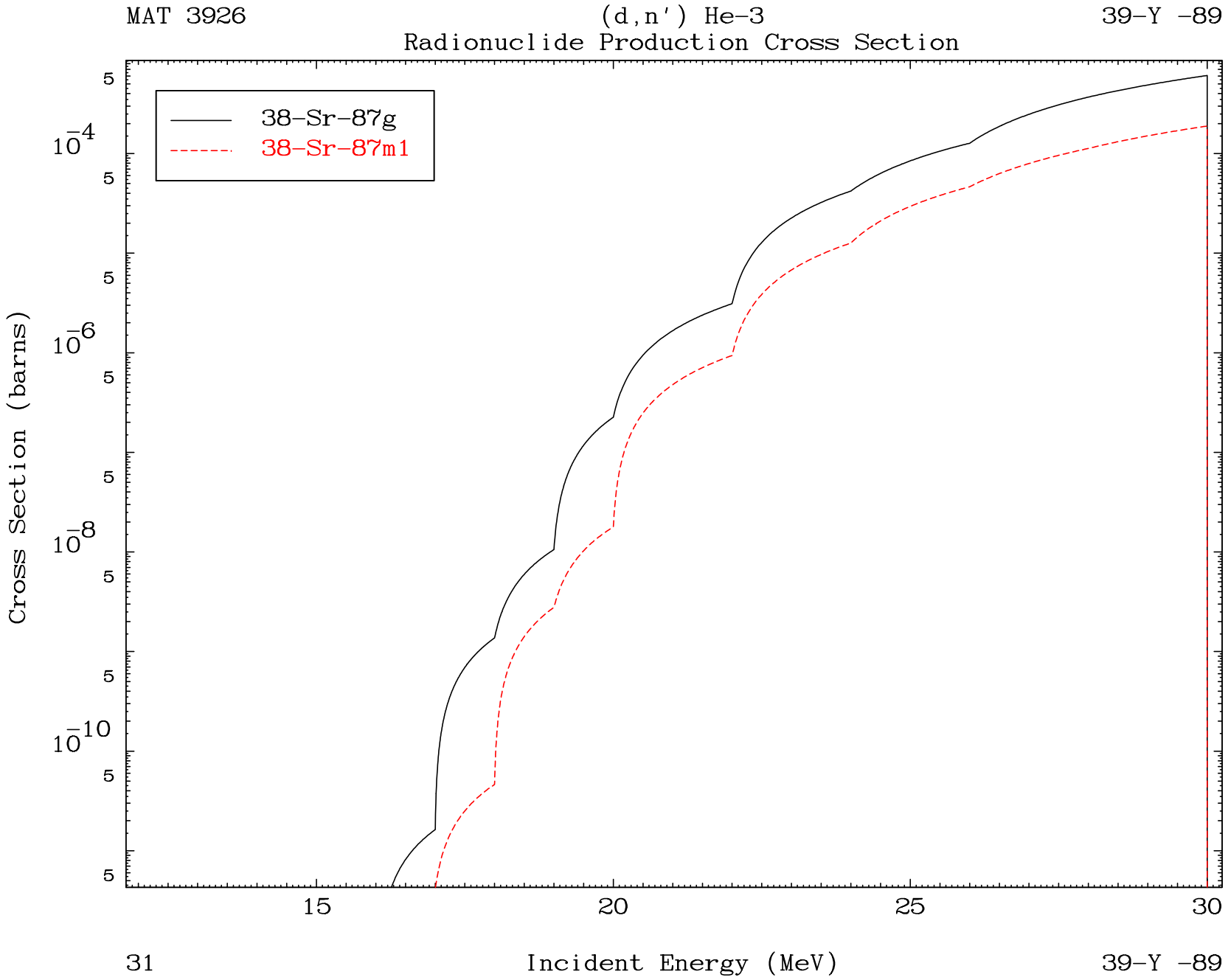

MAT 3926
(d,2n) d
39-Y -89
Radionuclide Production Cross Section
39-Y -87g
39-Y -87m1
Cross Section (barns)
10-3
10-4
10-5
10-6
10-7
10-8
10-9
22
24
26
28
30
26
Incident Energy (MeV)
39-Y -89

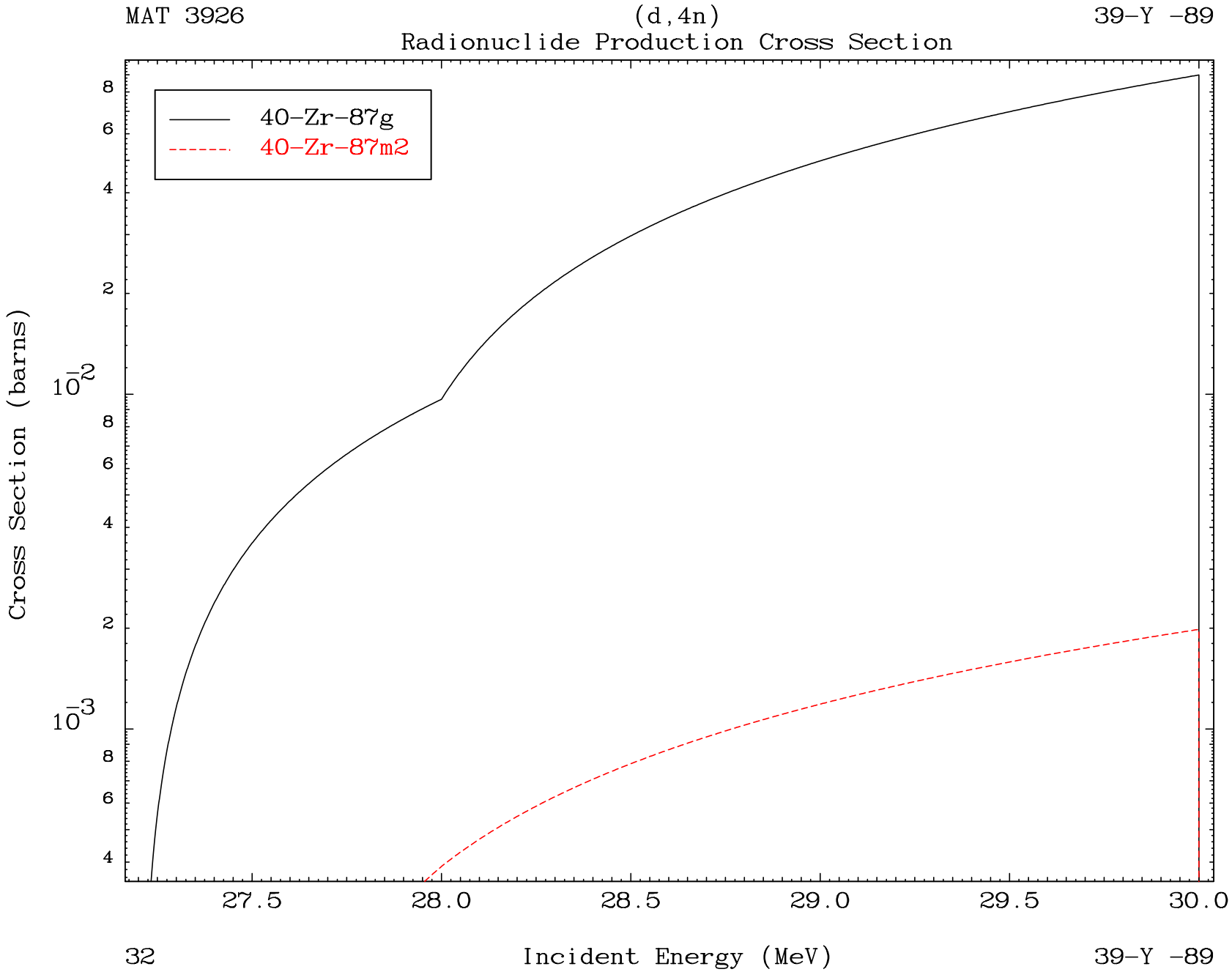

MAT 3926
(d,2n)
39-Y -89
Radionuclide Production Cross Section
40-Zr-89g
40-Zr-89m1
Cross Section (barns)
Incident Energy (MeV)
27
39-Y -89

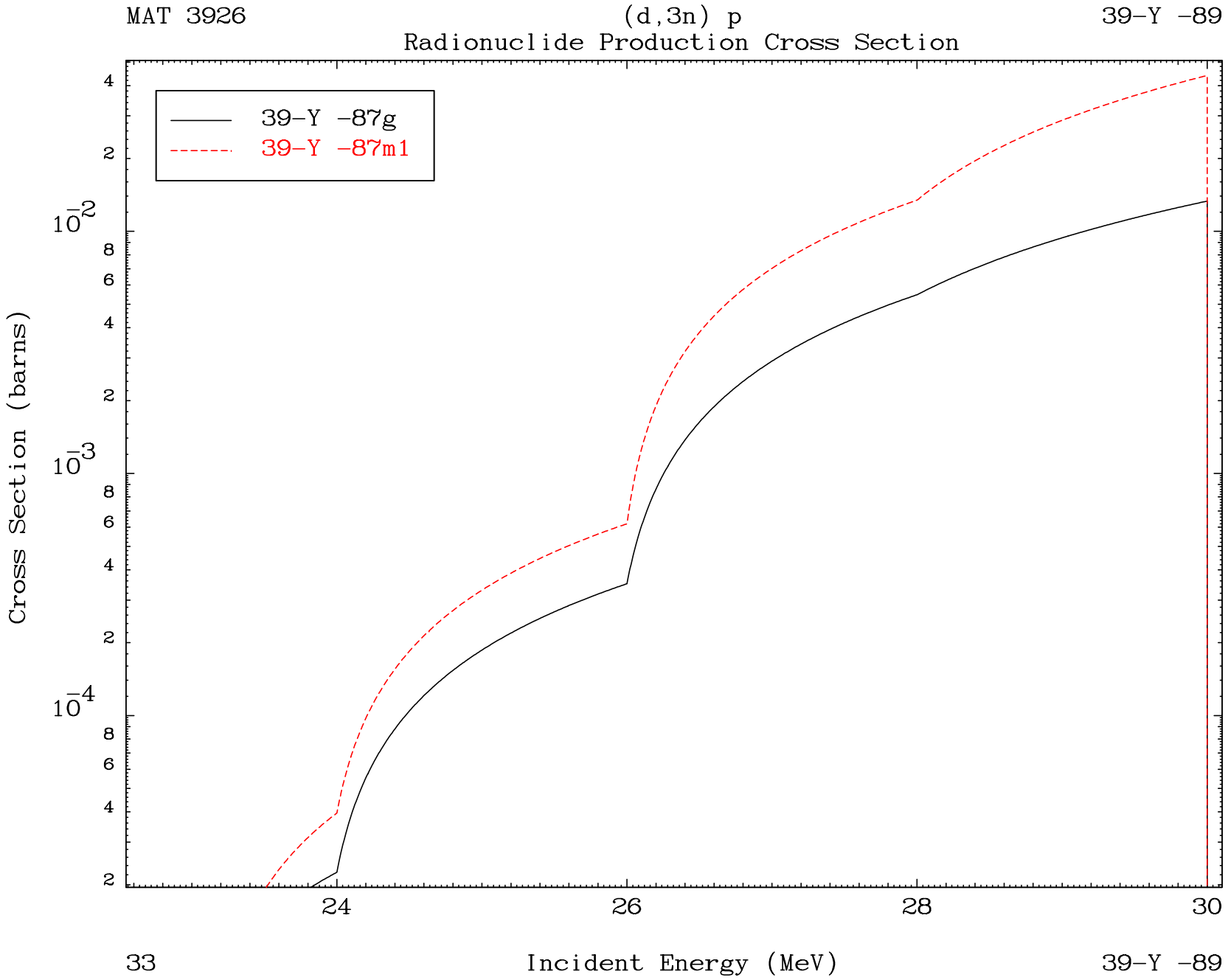

MAT 3926
(d,2n) α
39-Y -89
Radionuclide Production Cross Section
38-Sr-85g
38-Sr-85m2
Cross Section (barns)
10-2
10-4
10-6
10-8
10-10
15
20
25
30
28
Incident Energy (MeV)
39-Y -89

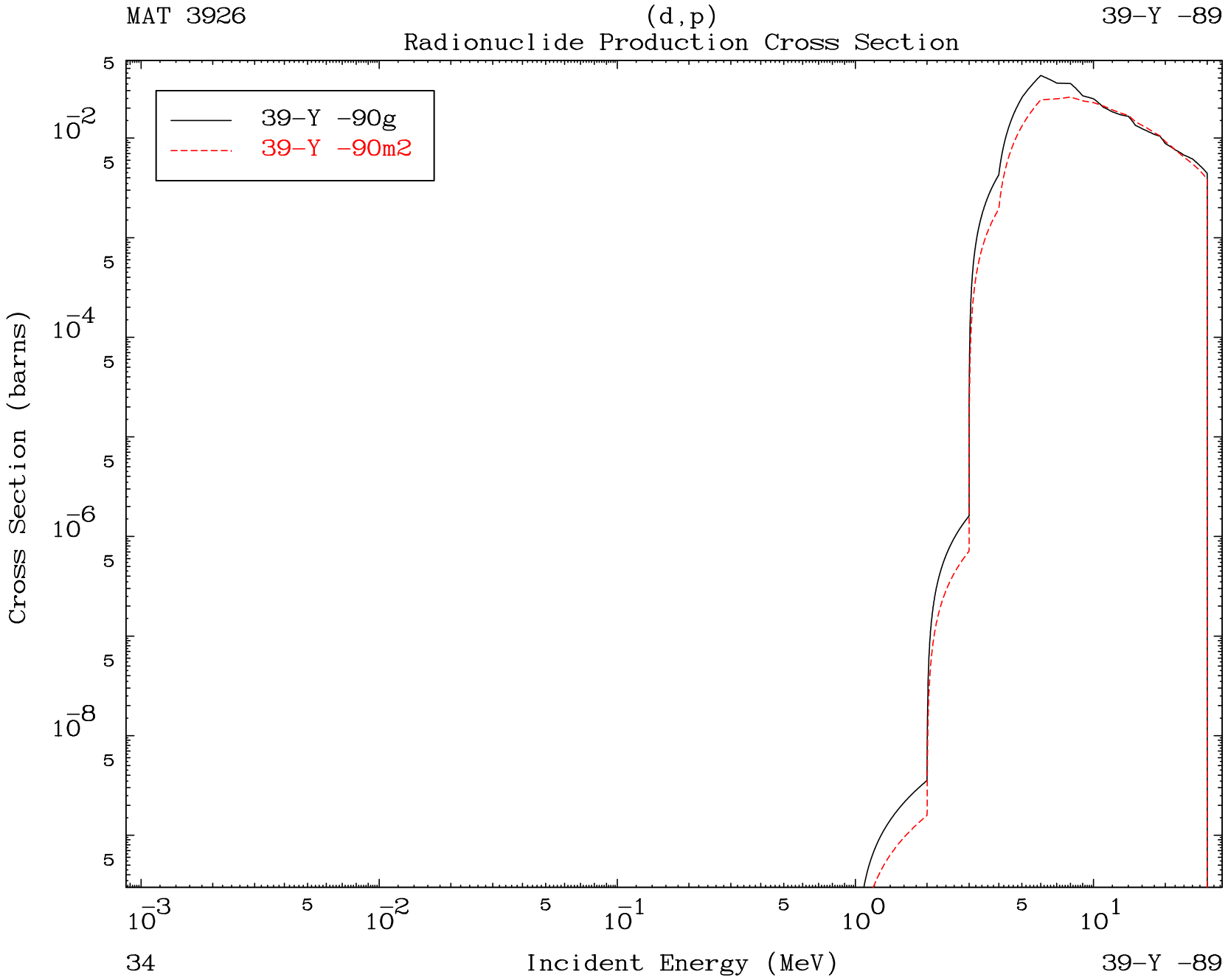

MAT 3926
(d,n') p
39-Y -89
Radionuclide Production Cross Section
39-Y -89g
39-Y -89m1
Cross Section (barns)
10-2
10-4
10-6
10-8
2
3
4
5
6
7
8
9
101
2
3
29
Incident Energy (MeV)
39-Y -89

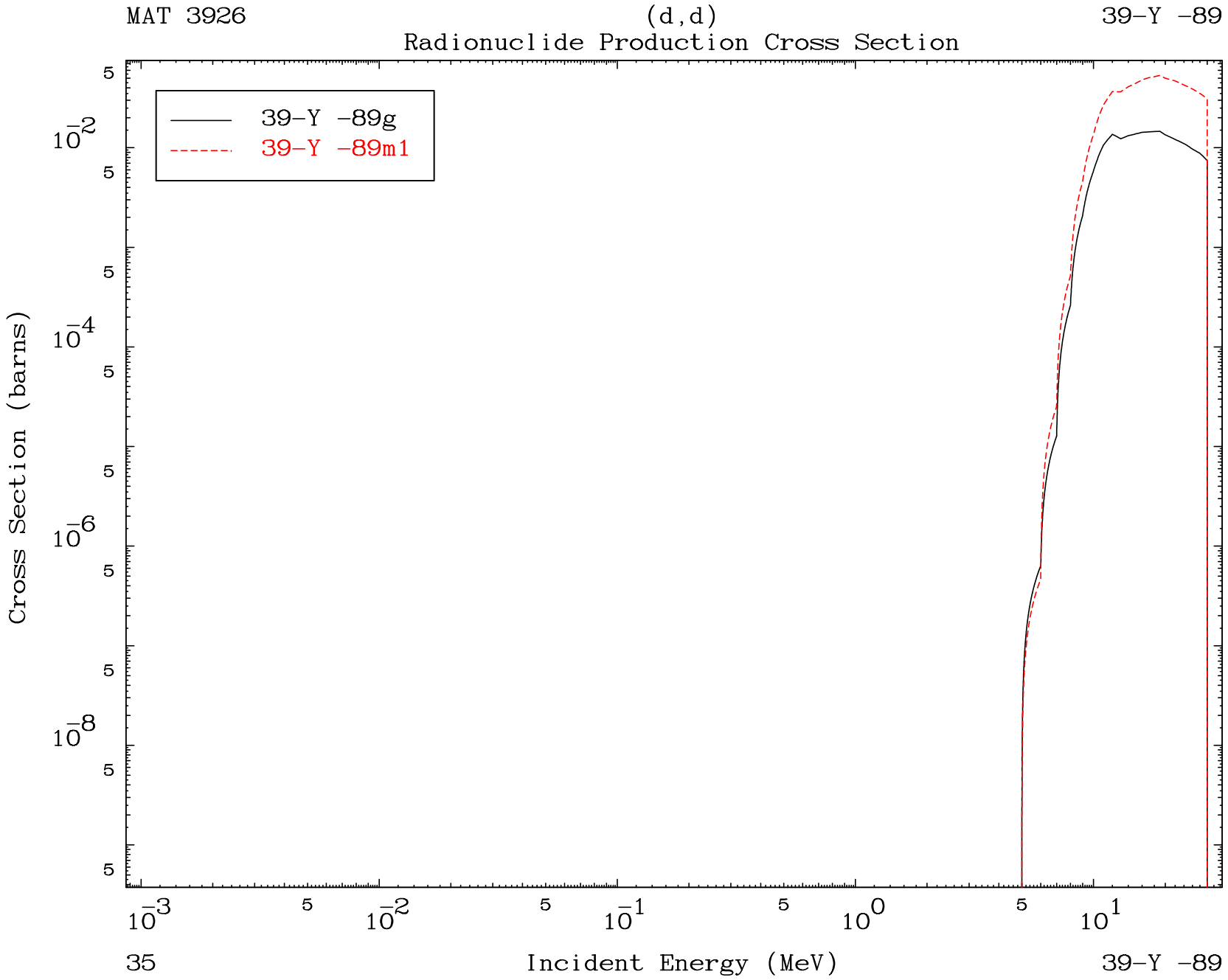

MAT 3926
(d,n') t
39-Y -89
Radionuclide Production Cross Section
39-Y -87g
39-Y -87m1
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
Incident Energy (MeV)
30
39-Y -89

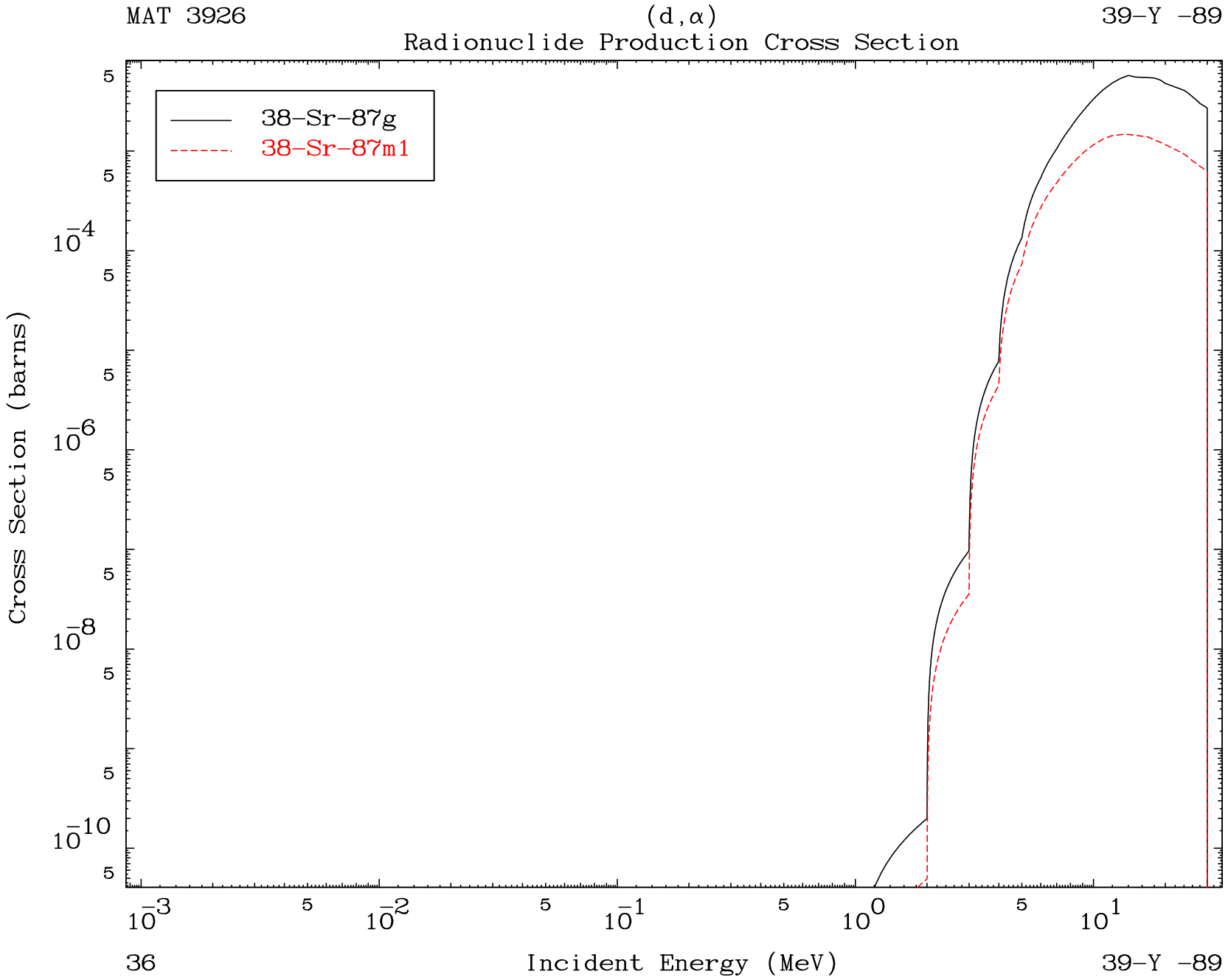

MAT 3926
(d,n') He-3
39-Y -89
Radionuclide Production Cross Section
38-Sr-87g
38-Sr-87m1
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
31
Incident Energy (MeV)
39-Y -89

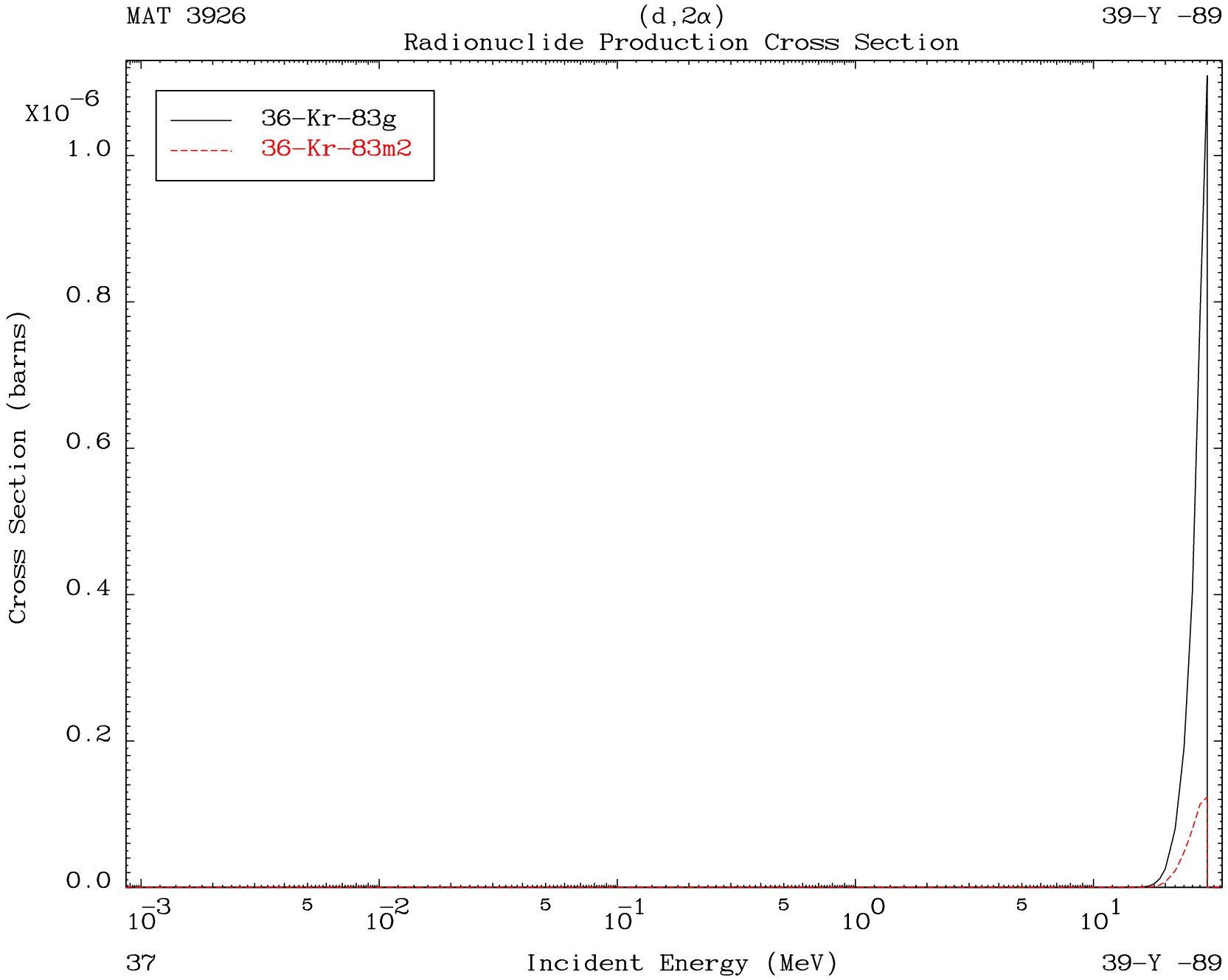

MAT 3926
(d,4n)
39-Y -89
Radionuclide Production Cross Section
40-Zr-87g
40-Zr-87m2
Cross Section (barns)
10-2
10-3
8
6
4
2
8
6
4
2
8
6
4
27.5
28.0
28.5
29.0
29.5
30.0
32
Incident Energy (MeV)
39-Y -89

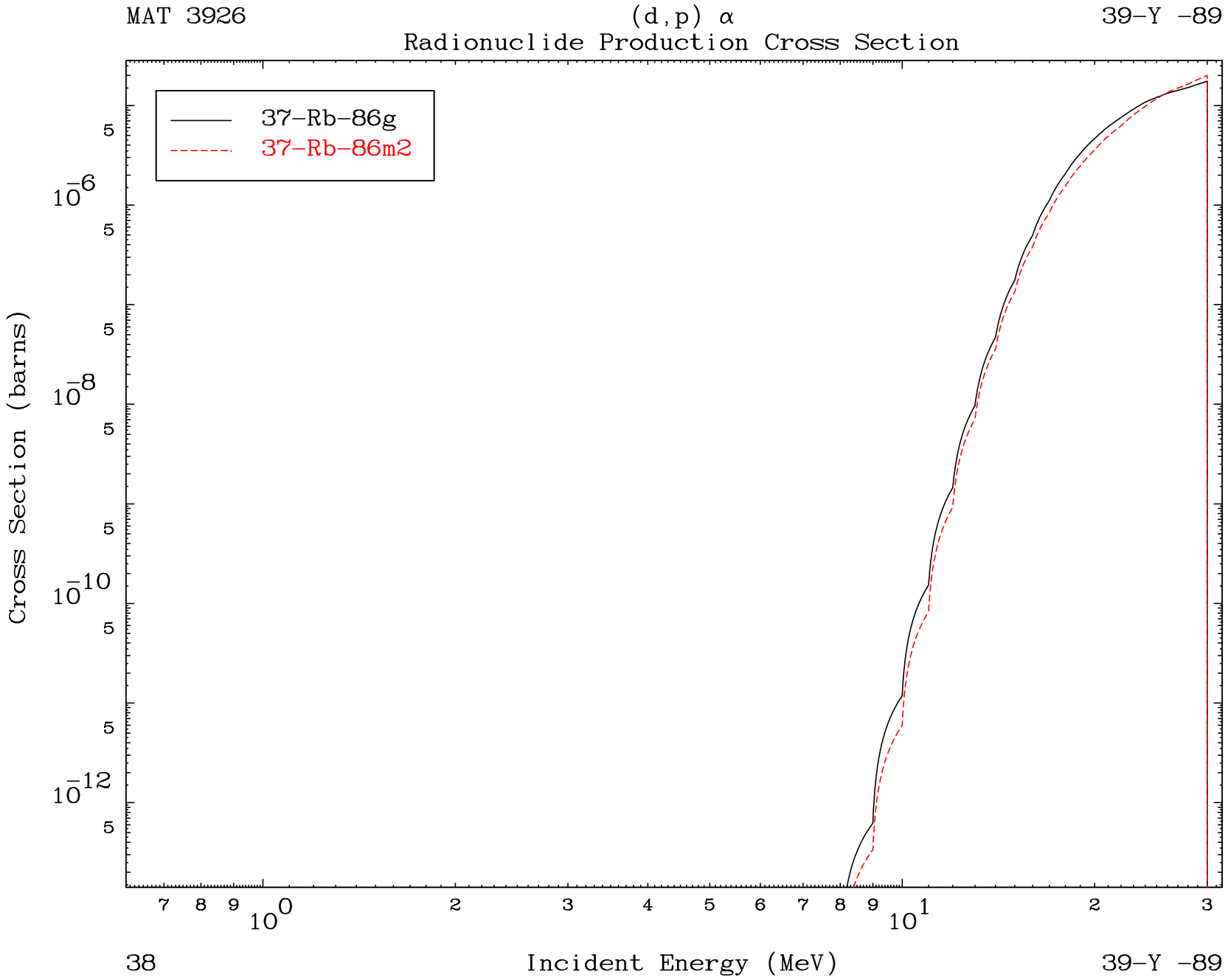

MAT 3926
(d,3n) p
39-Y -89
Radionuclide Production Cross Section
39-Y -87g
39-Y -87m1
Cross Section (barns)
10-2
10-3
10-4
24
26
28
30
33
Incident Energy (MeV)
39-Y -89

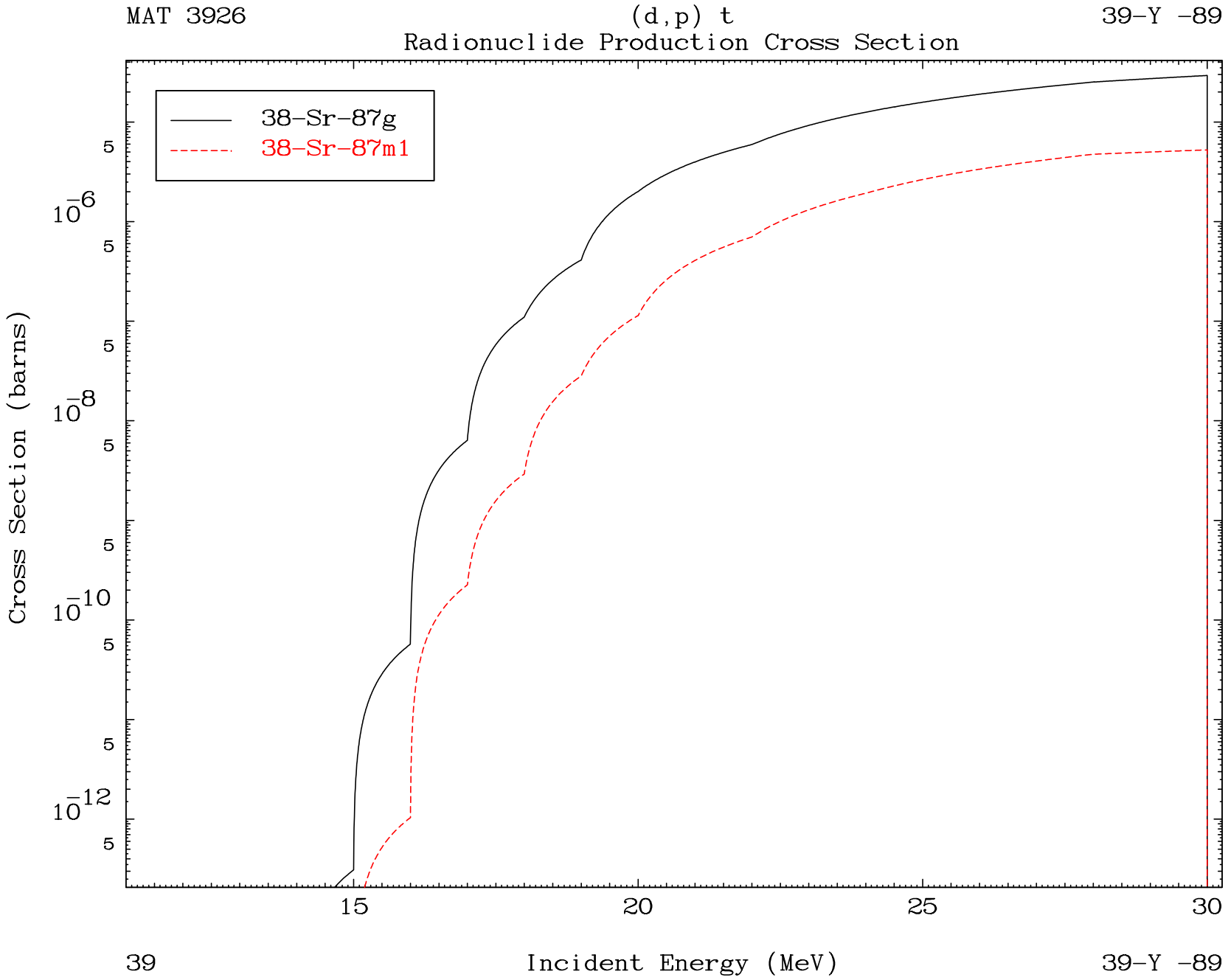

MAT 3926
(d,p)
39-Y -89
Radionuclide Production Cross Section
39-Y -90g
39-Y -90m2
Cross Section (barns)
Incident Energy (MeV)
34
39-Y -89


MAT 3926
(d,d)
39-Y -89
Radionuclide Production Cross Section
39-Y -89g
39-Y -89m1
Cross Section (barns)
Incident Energy (MeV)
35
39-Y -89


MAT 3926
(d,α)
39-Y -89
Radionuclide Production Cross Section
38-Sr-87g
38-Sr-87m1
Cross Section (barns)
Incident Energy (MeV)
36
39-Y -89


MAT 3926
(d,2α)
39-Y -89
Radionuclide Production Cross Section
X10-6
1.0
0.8
0.6
0.4
0.2
0.0
Cross Section (barns)
36-Kr-83g
36-Kr-83m2
10-3
5
10-2
5
10-1
5
100
5
101
37
Incident Energy (MeV)
39-Y -89


MAT 3926
(d,p) α
39-Y -89
Radionuclide Production Cross Section
37-Rb-86g
37-Rb-86m2
Cross Section (barns)
10-6
10-8
10-10
10-12
5
7 8 9
100
2
3
4
5
6
7
8
9
101
2
3
38
Incident Energy (MeV)
39-Y -89


MAT 3926
(d,p) t
39-Y -89
Radionuclide Production Cross Section
38-Sr-87g
38-Sr-87m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
15
20
25
30
39
Incident Energy (MeV)
39-Y -89