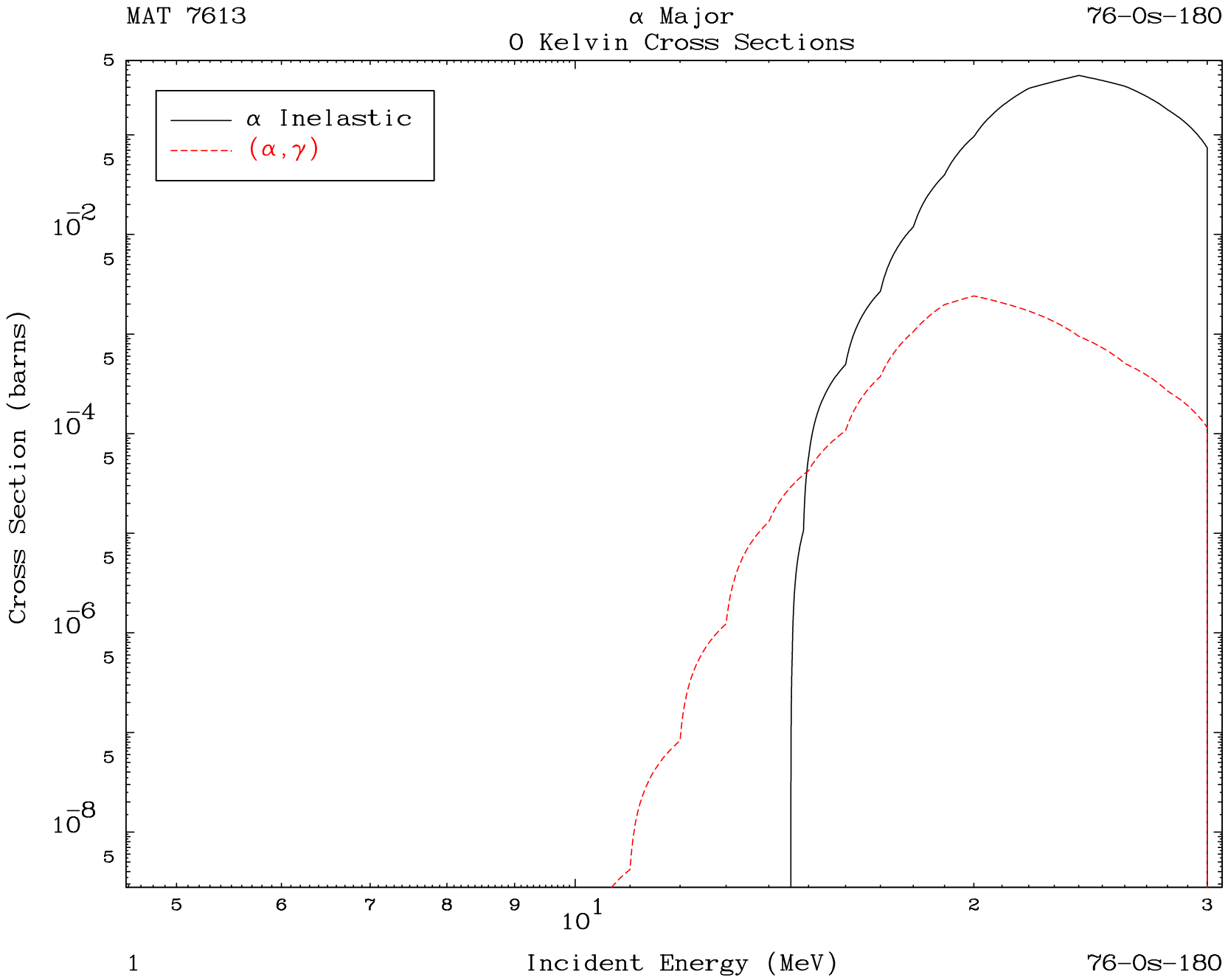
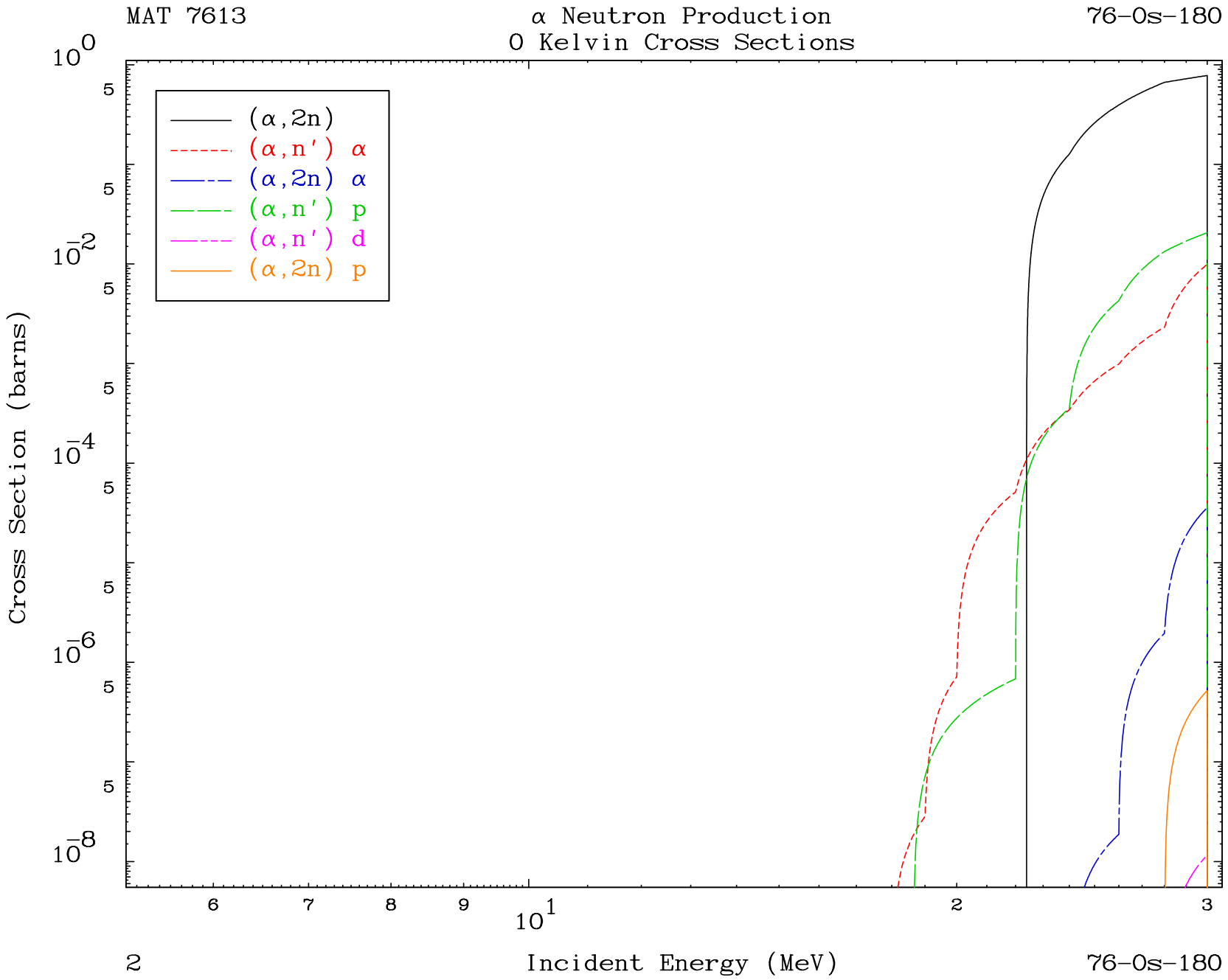
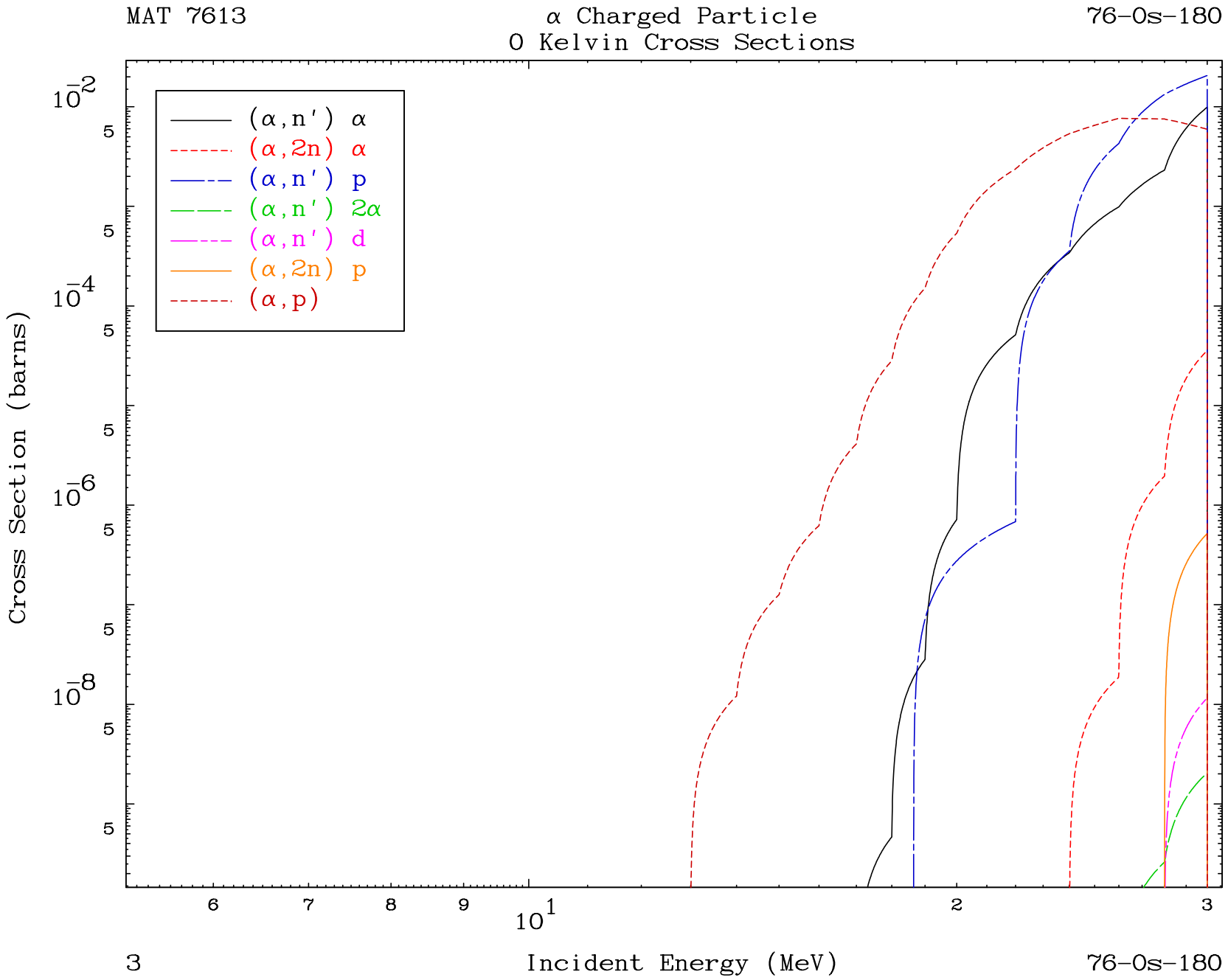
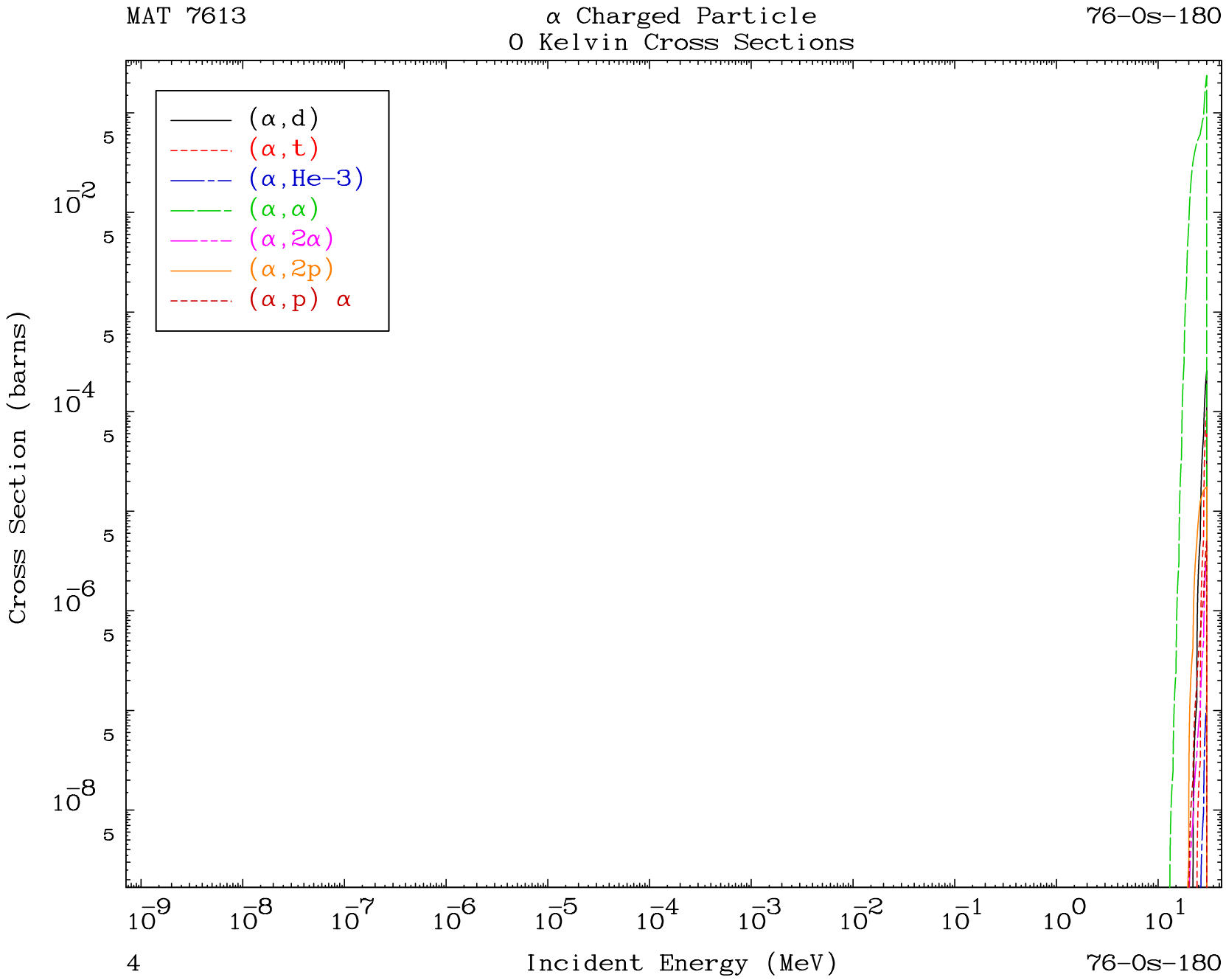
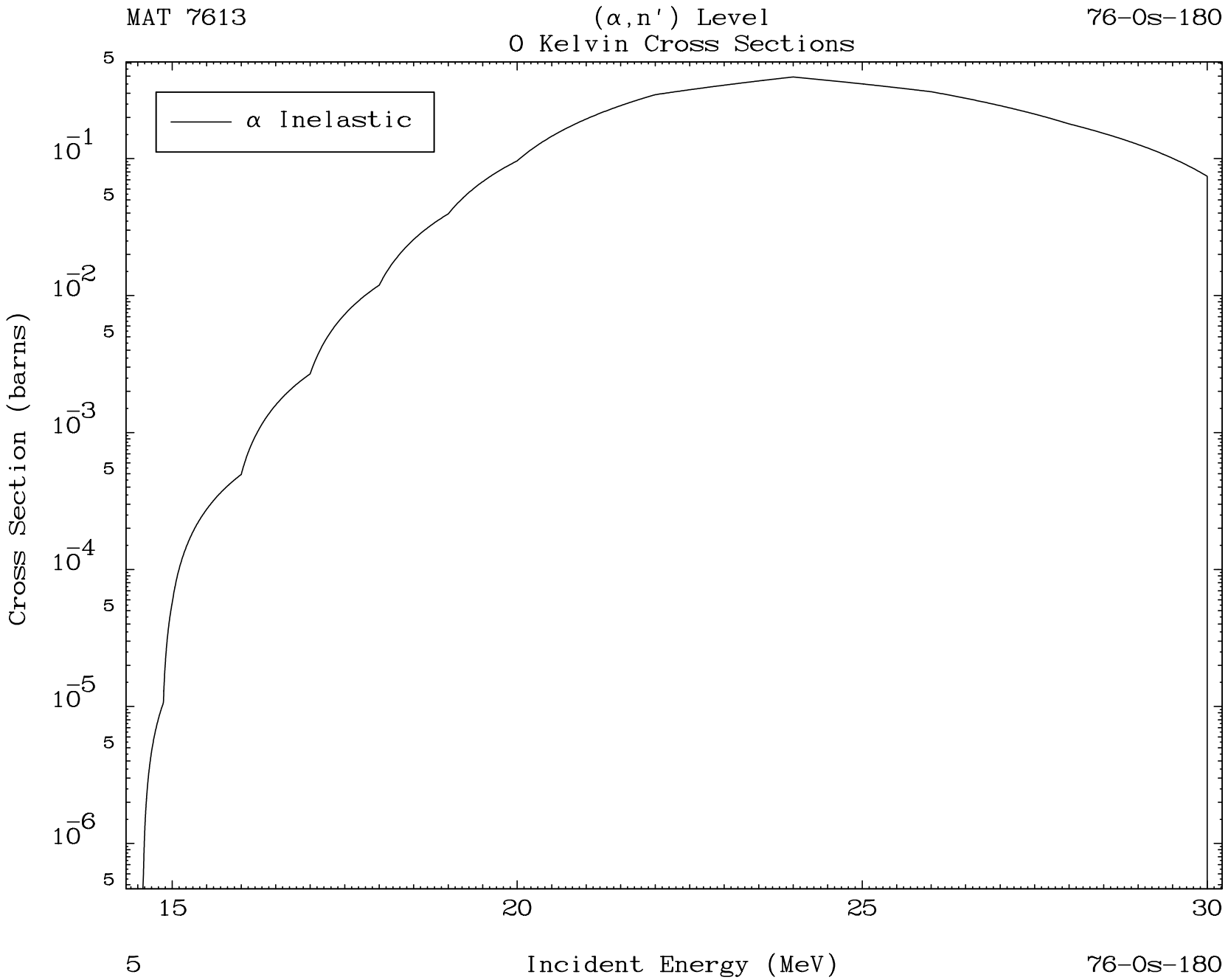
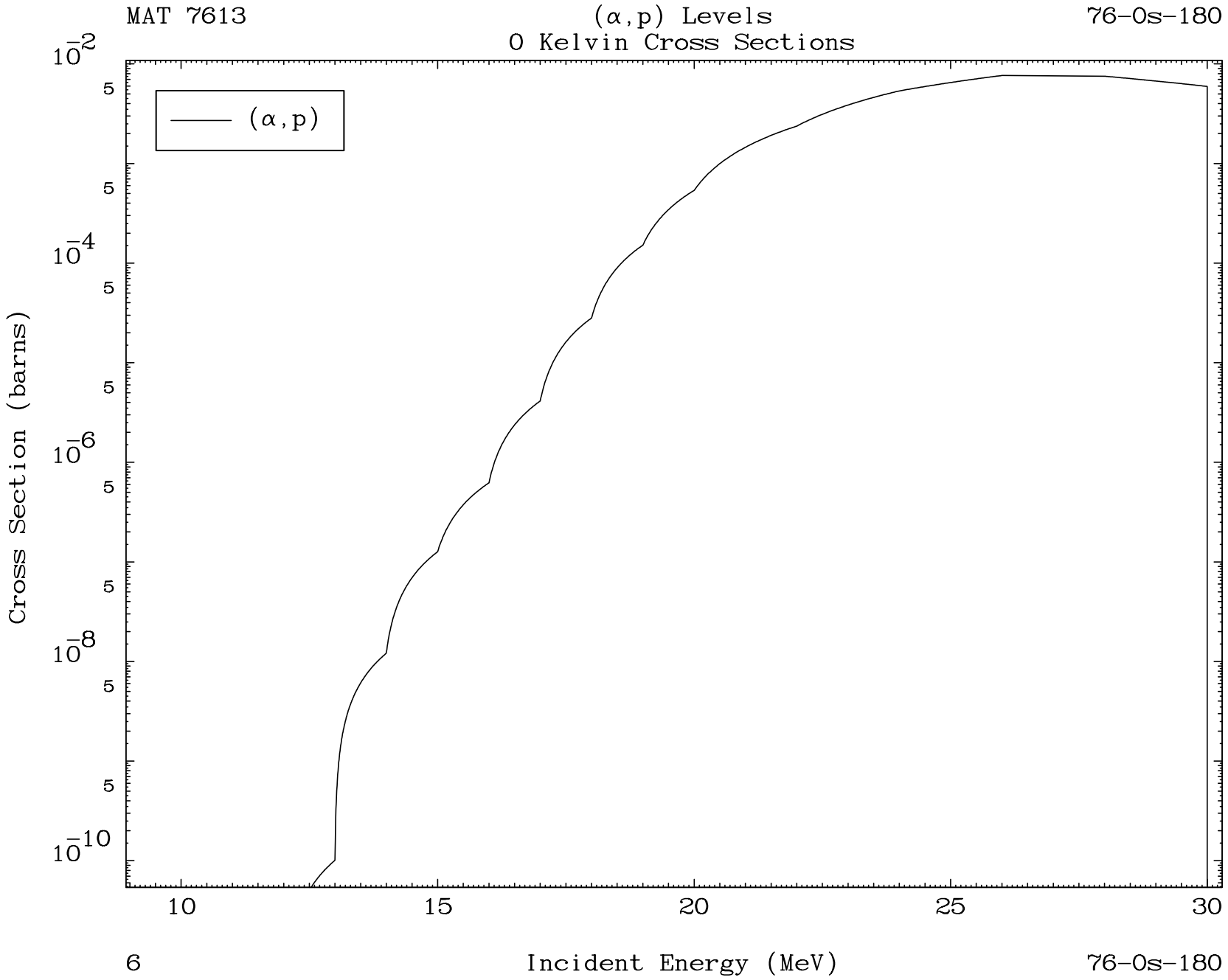

MAT 7613
α Major
76-0s-180
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
76-0s-180

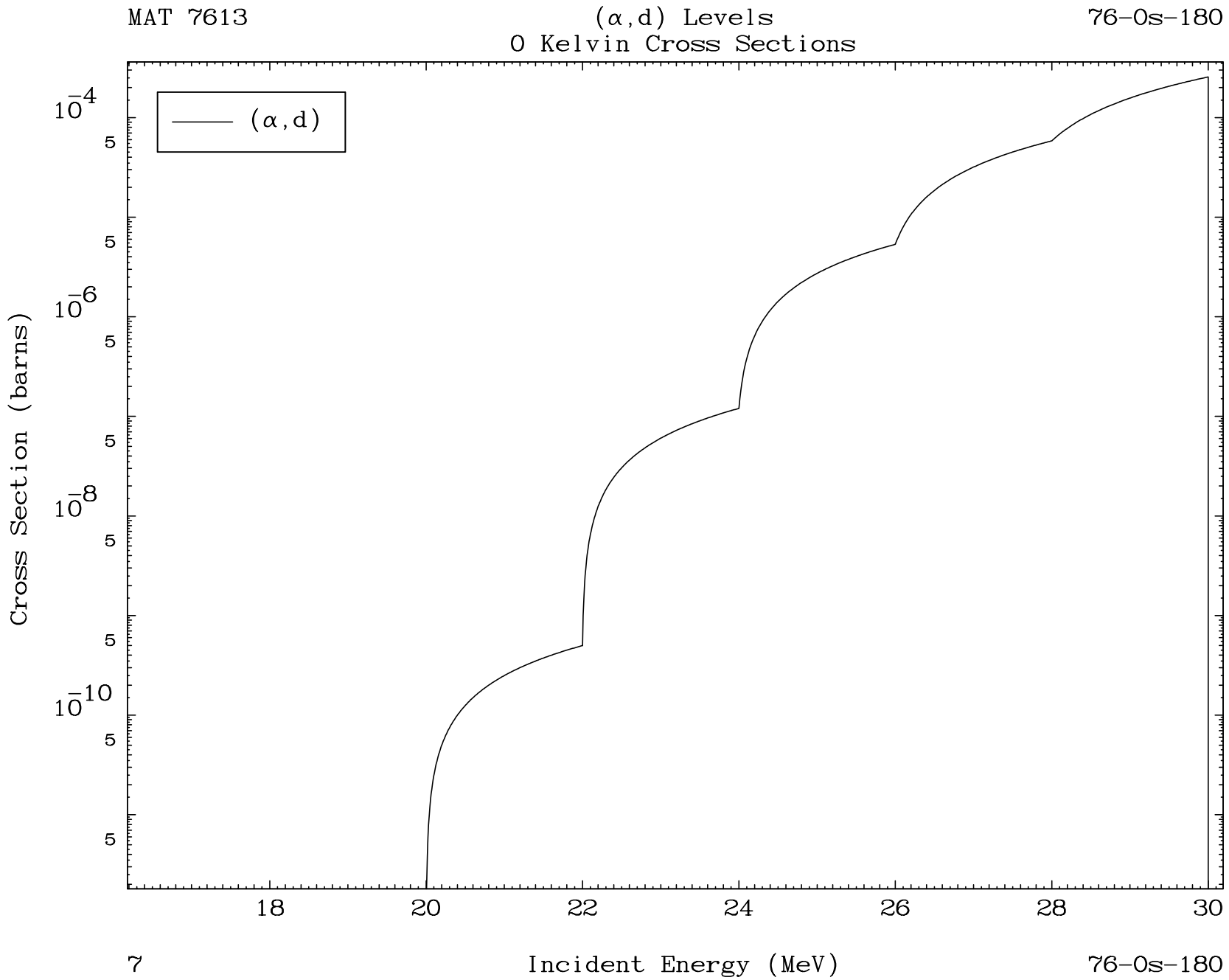

MAT 7613
α Neutron Production
0 Kelvin Cross Sections
76-0s-180
(α,2n)
(α,n') α
(α,2n) α
(α,n') p
(α,n') d
(α,2n) p
Cross Section (barns)
Incident Energy (MeV)
76-0s-180

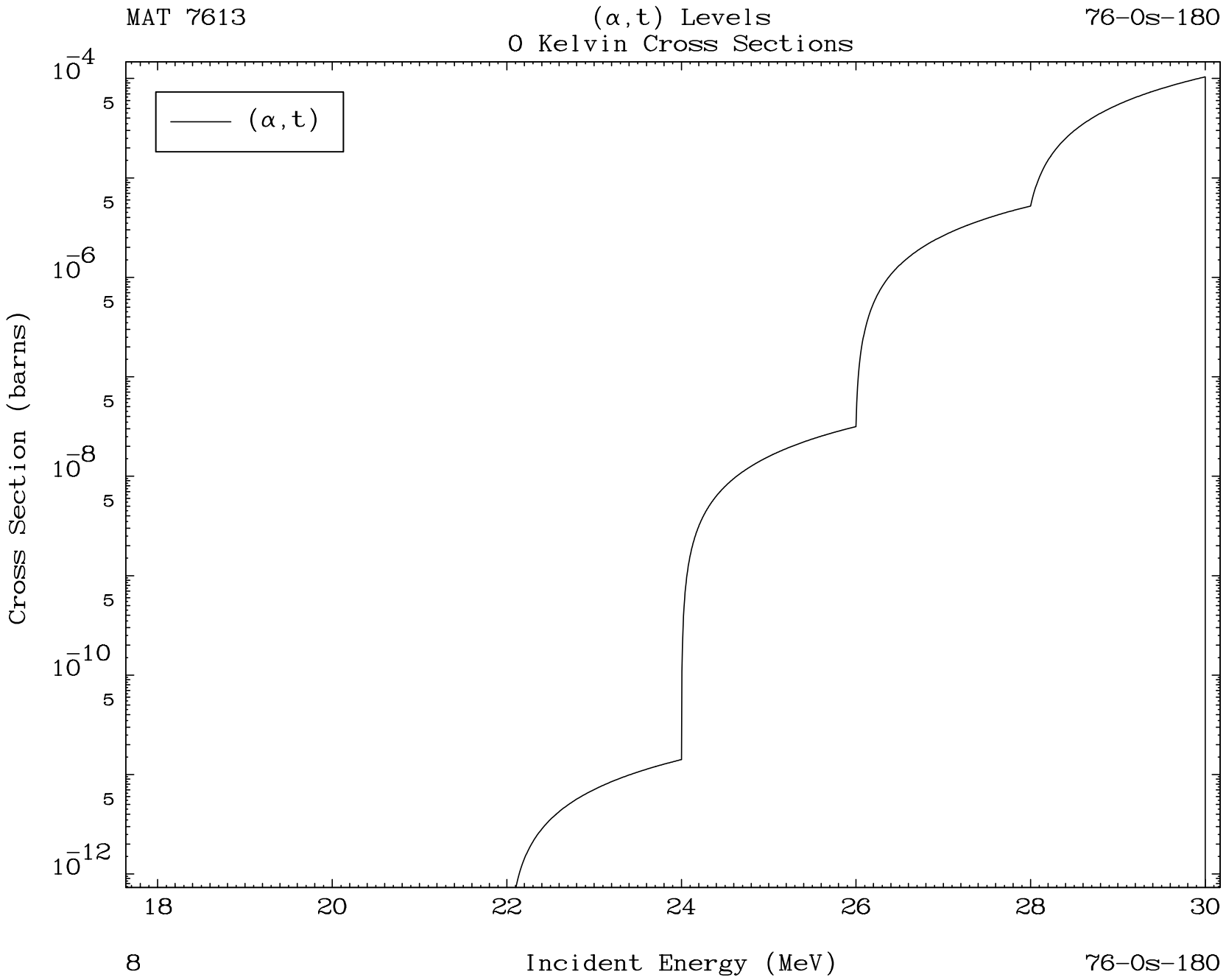

MAT 7613
α Charged Particle
0 Kelvin Cross Sections
76-0s-180
(α,n') α
(α,2n) α
(α,n') p
(α,n') 2α
(α,n') d
(α,2n) p
(α,p)
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6
7
8
9
10 1
2
3
Incident Energy (MeV)
3
76-0s-180

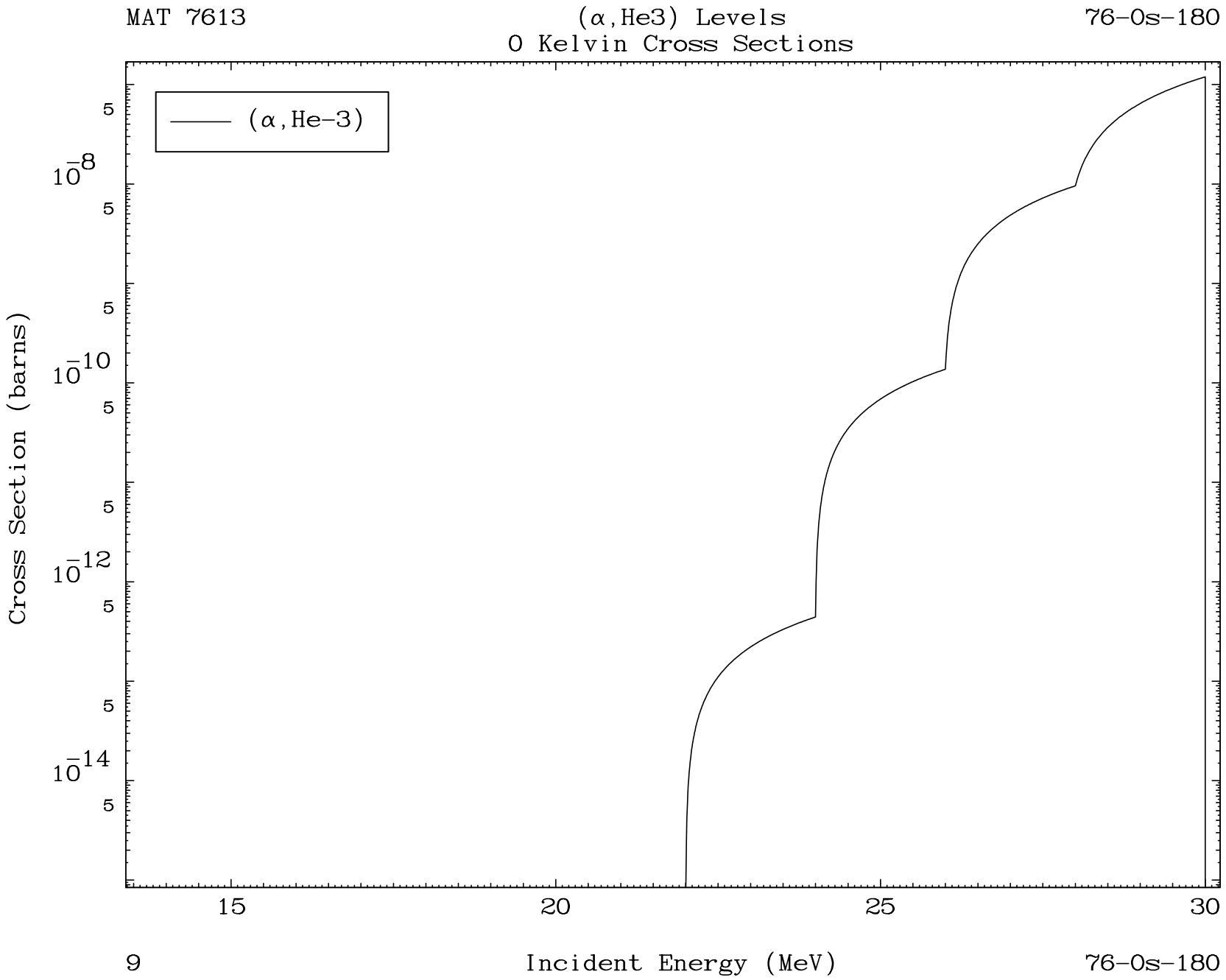

MAT 7613
α Charged Particle
0 Kelvin Cross Sections
76-0s-180
(α,d)
(α,t)
(α,He-3)
(α,α)
(α,2α)
(α,2p)
(α,p) α
Cross Section (barns)
Incident Energy (MeV)
4
76-0s-180

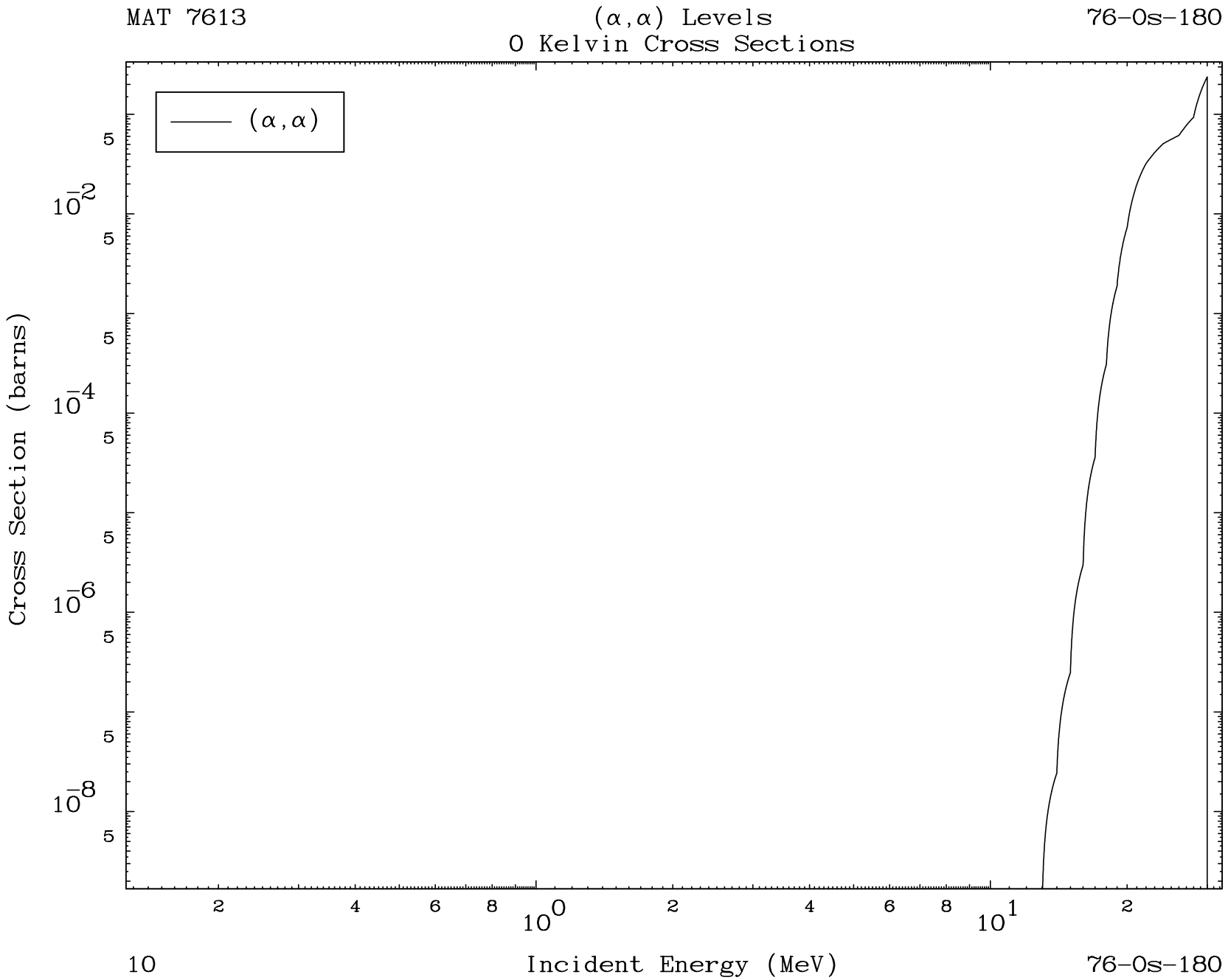

MAT 7613
(α,n') Level
76-0s-180
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-1
10-2
10-3
10-4
10-5
10-6
5
15
20
25
30
Incident Energy (MeV)
76-0s-180

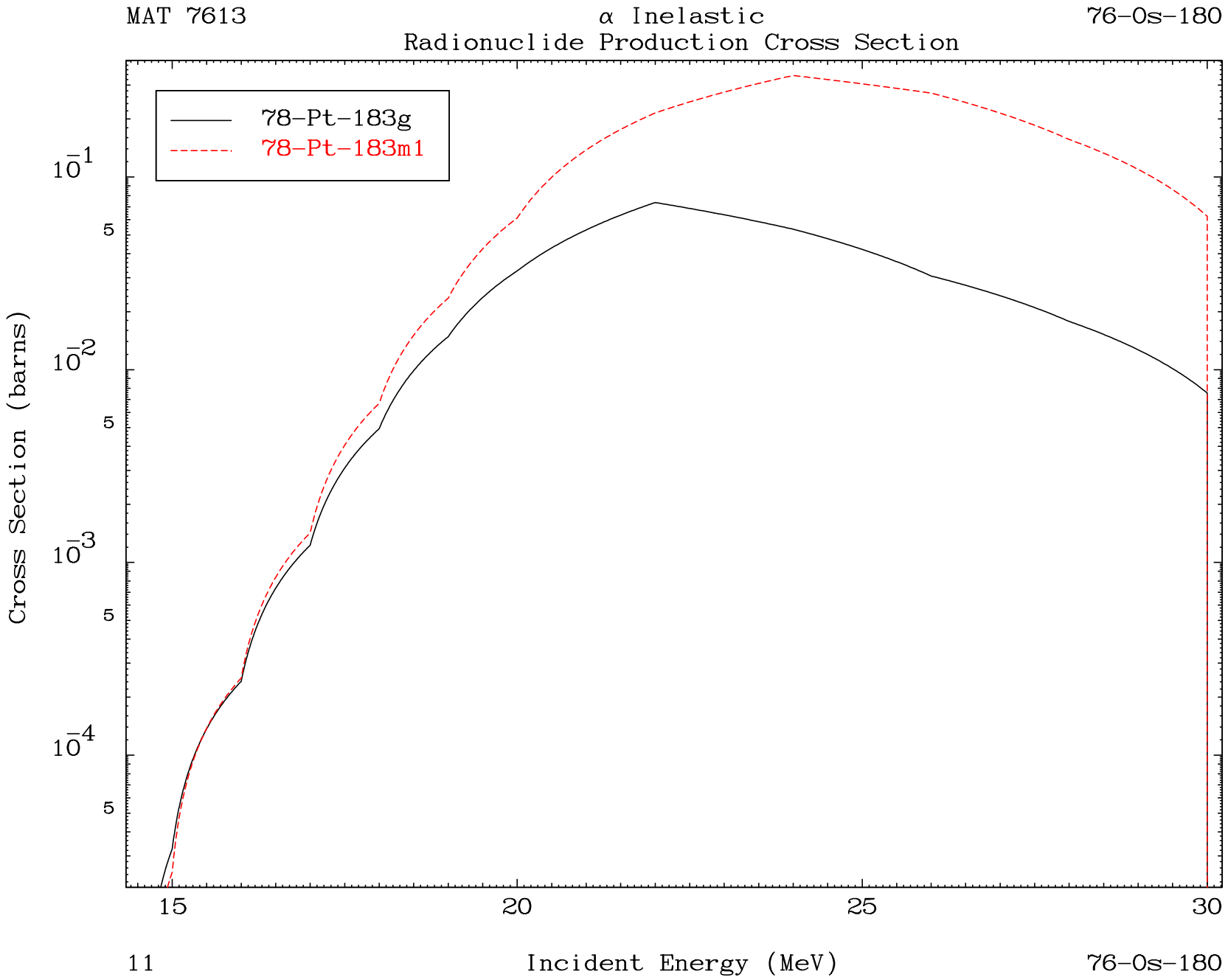

MAT 7613
(α,p) Levels
76-0s-180
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
10^-10
10
15
20
25
30
6
Incident Energy (MeV)
76-0s-180

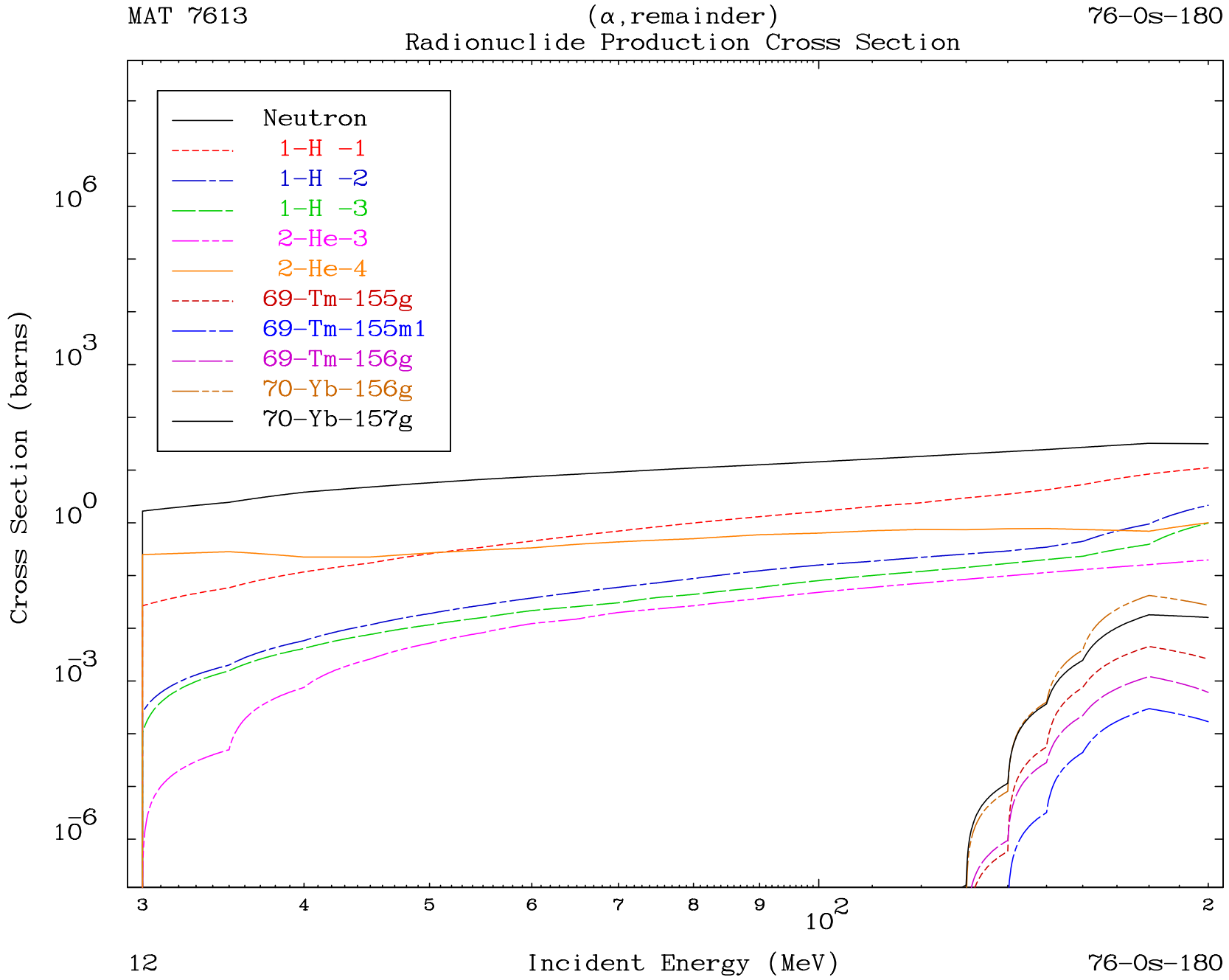

MAT 7613
(α,d) Levels
76-0s-180
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
18
20
22
24
26
28
30
7
Incident Energy (MeV)
76-0s-180

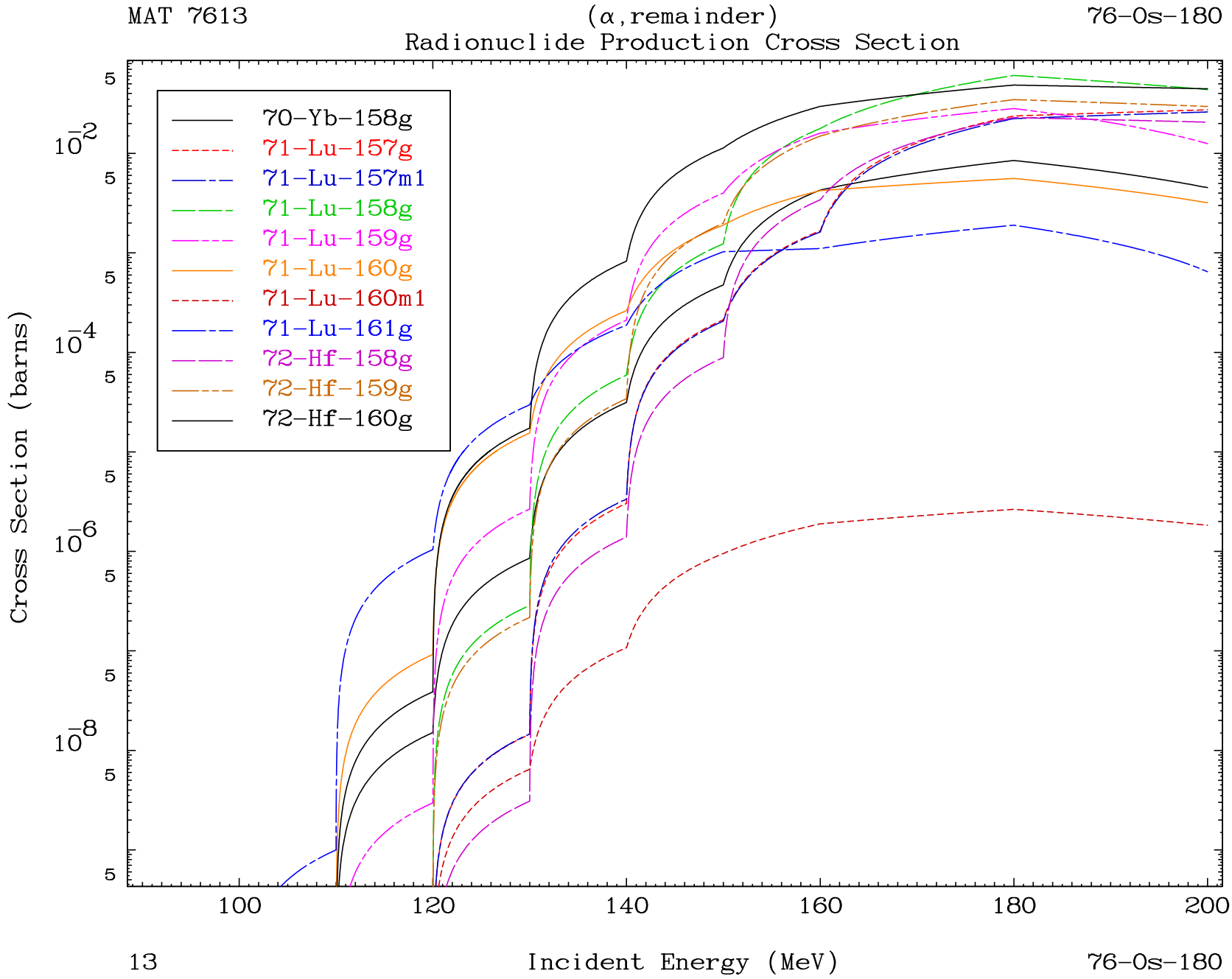

MAT 7613
(α,t) Levels
76-0s-180
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
10-12
18
20
22
24
26
28
30
8
Incident Energy (MeV)
76-0s-180

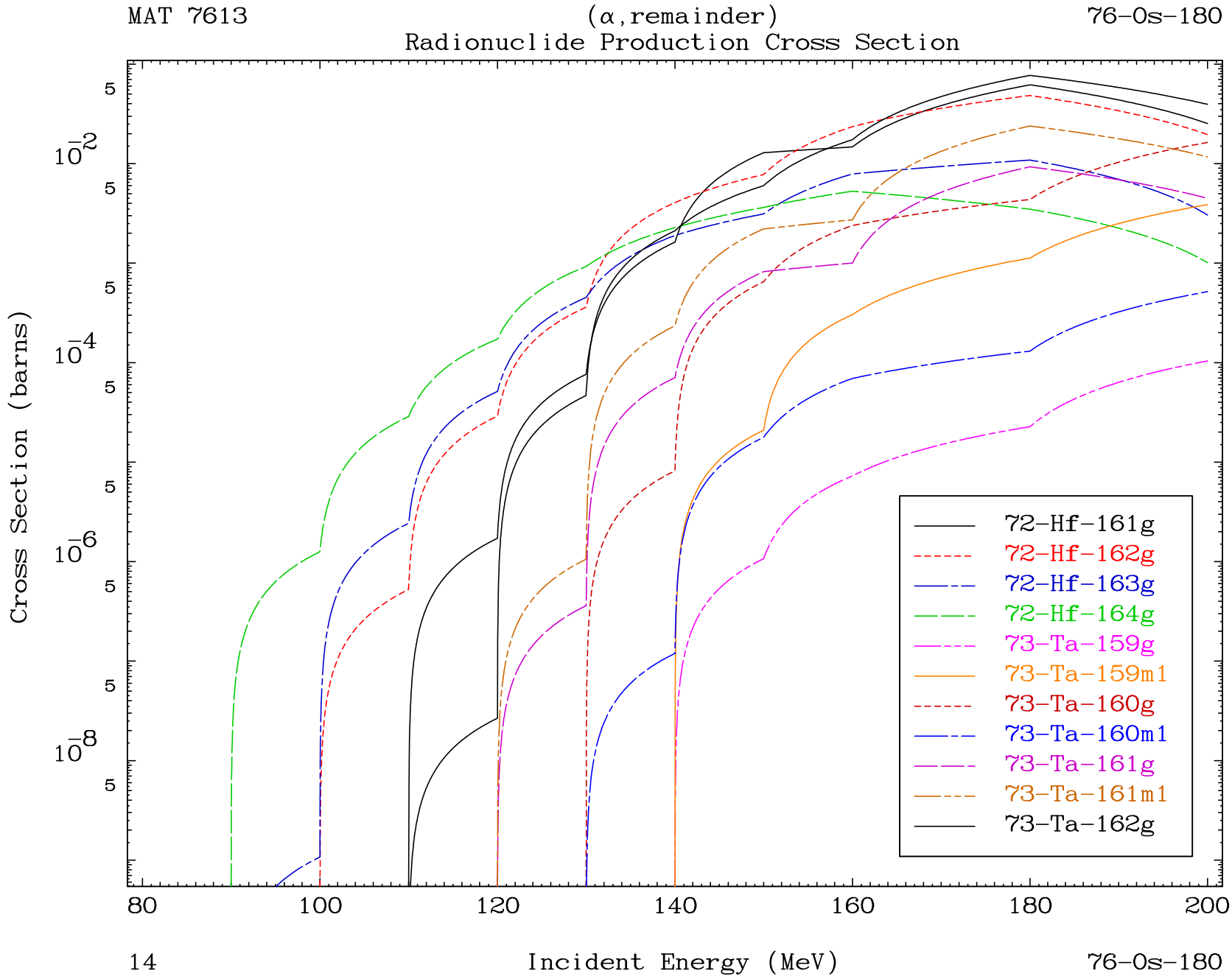

MAT 7613
(α,He3) Levels
76-0s-180
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10-8
10-10
10-12
10-14
5
15
20
25
30
9
Incident Energy (MeV)
76-0s-180


MAT 7613
(α,α) Levels
76-0s-180
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
2
4
6
8
10^0
10^1
10
Incident Energy (MeV)
76-0s-180

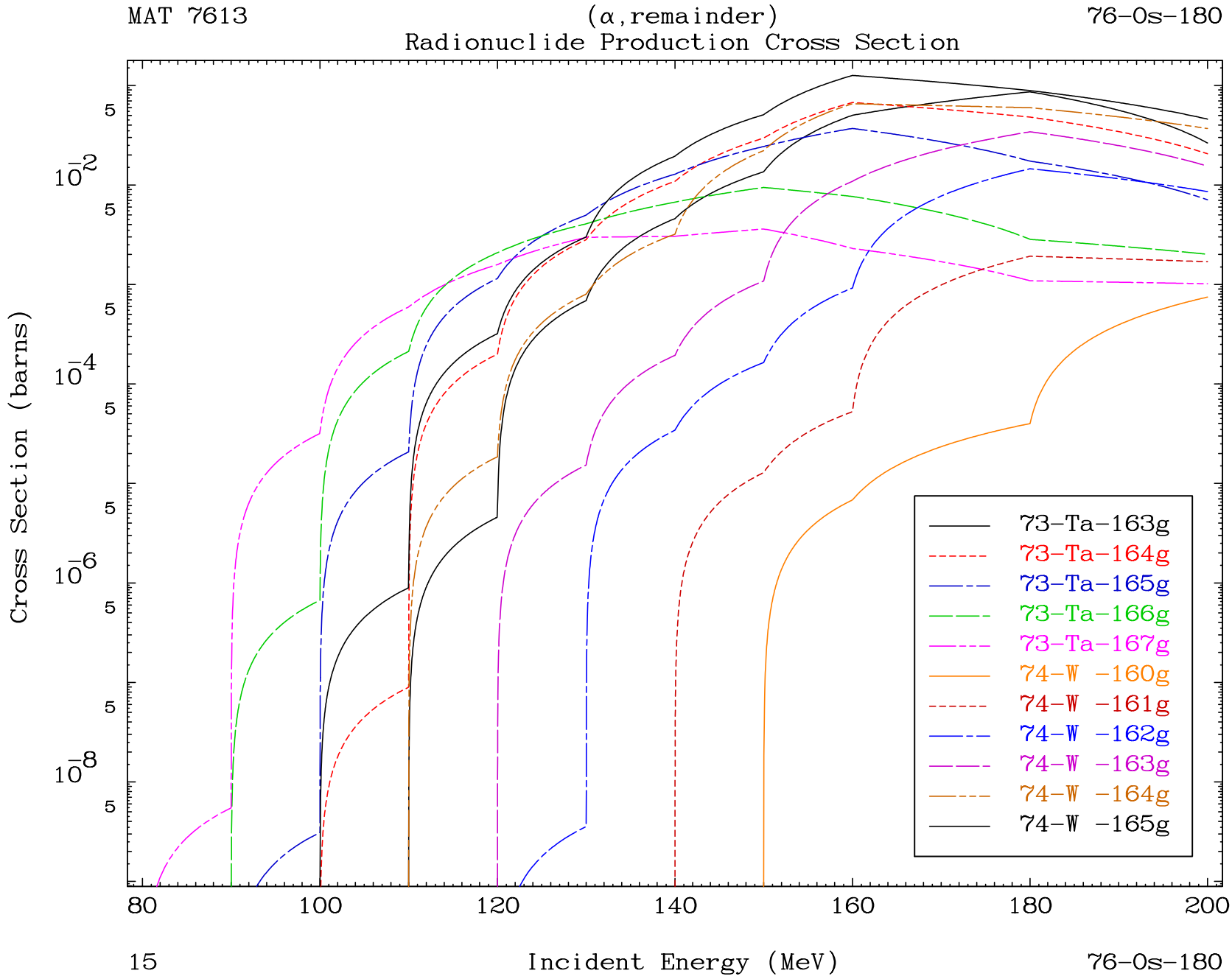

MAT 7613
α Inelastic
76-0s-180
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
15
20
25
30
11
Incident Energy (MeV)
76-0s-180

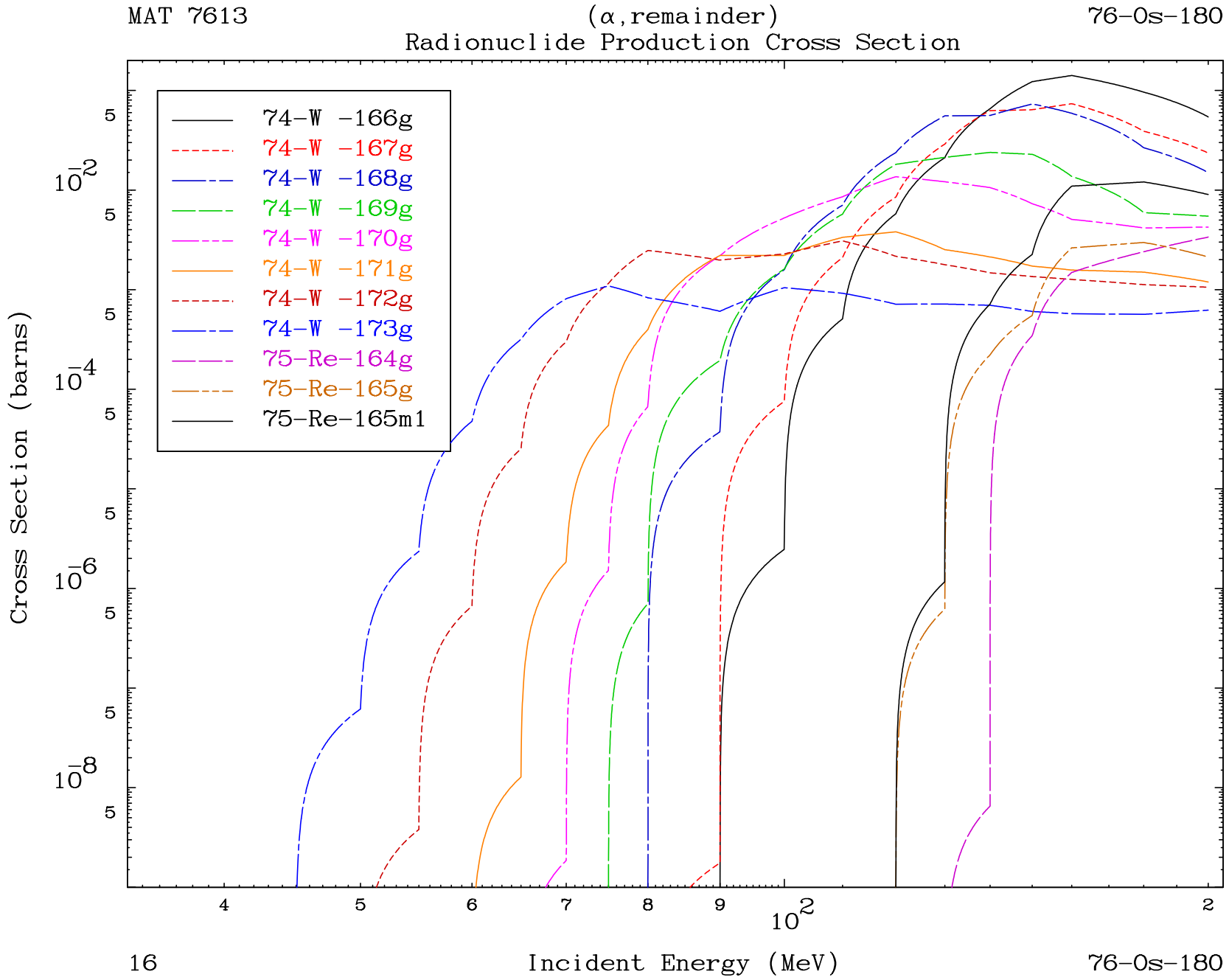

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
69-Tm-155g
69-Tm-155m1
69-Tm-156g
70-Yb-156g
70-Yb-157g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
12
Incident Energy (MeV)
76-0s-180

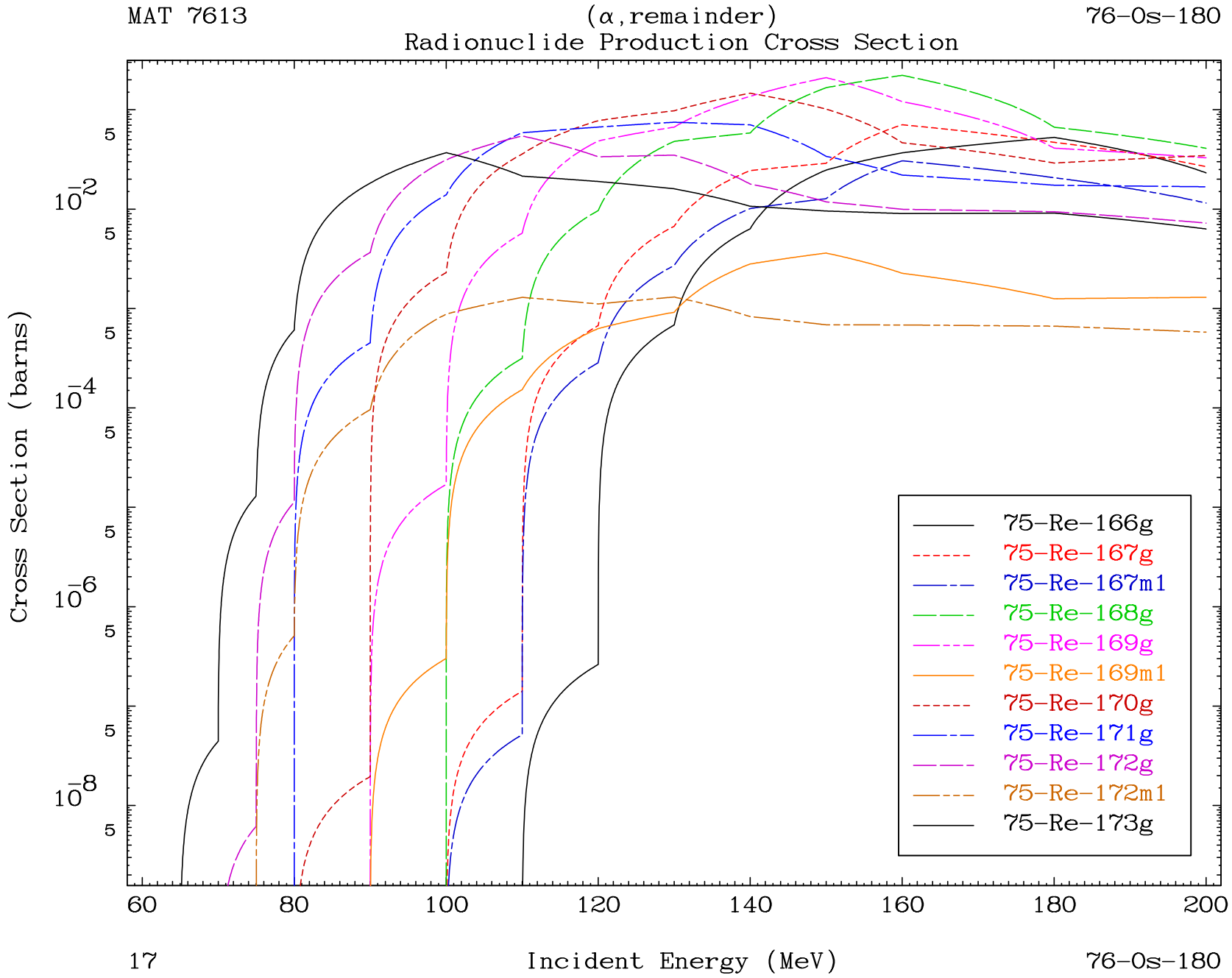

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
70-Yb-158g
71-Lu-157g
71-Lu-157m1
71-Lu-158g
71-Lu-159g
71-Lu-160g
71-Lu-160m1
71-Lu-161g
72-Hf-158g
72-Hf-159g
72-Hf-160g
Cross Section (barns)
10-2
10-4
10-6
10-8
5
100
120
140
160
180
200
13
Incident Energy (MeV)
76-0s-180

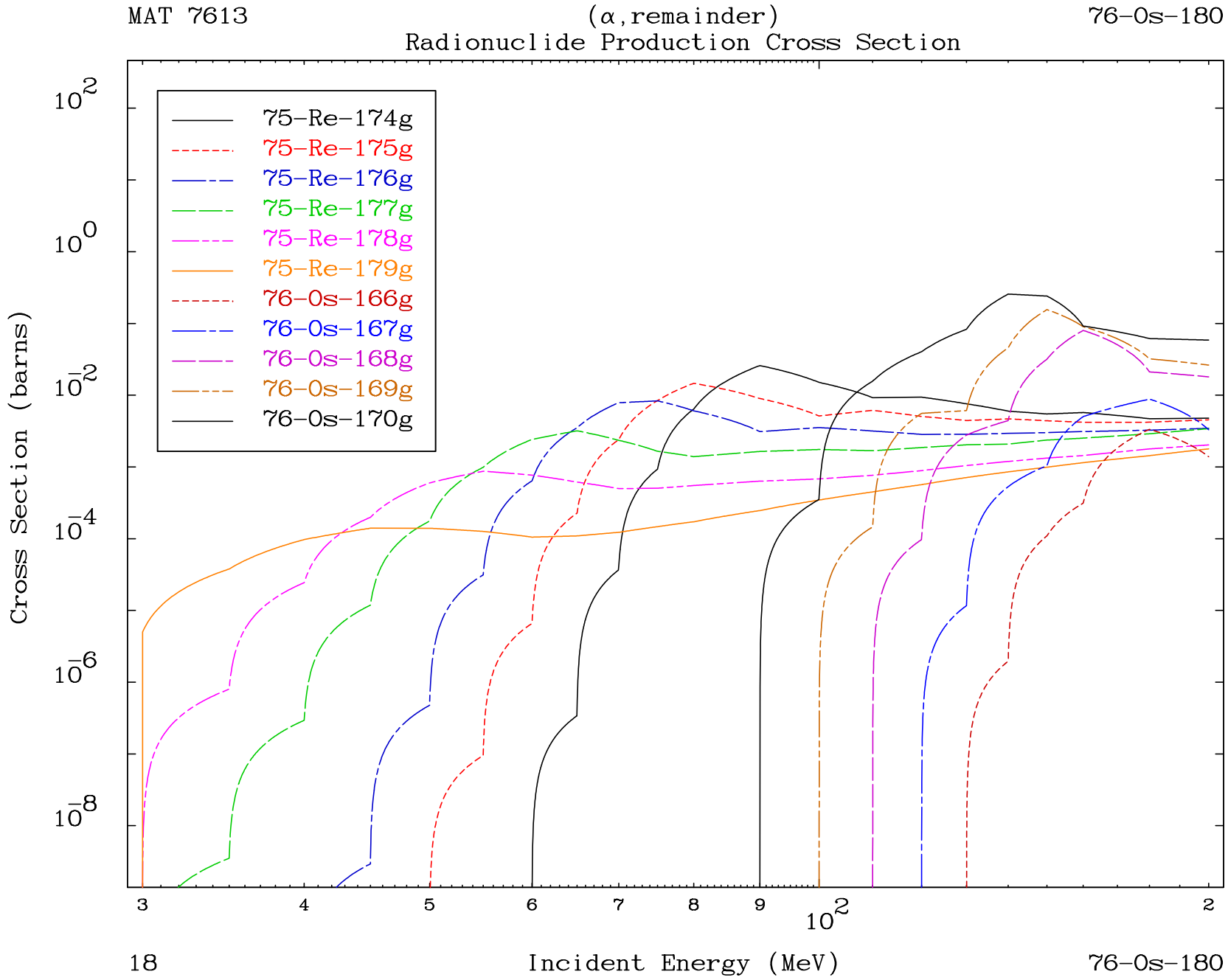

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
Incident Energy (MeV)
72-Hf-161g
72-Hf-162g
72-Hf-163g
72-Hf-164g
73-Ta-159g
73-Ta-159m1
73-Ta-160g
73-Ta-160m1
73-Ta-161g
73-Ta-161m1
73-Ta-162g

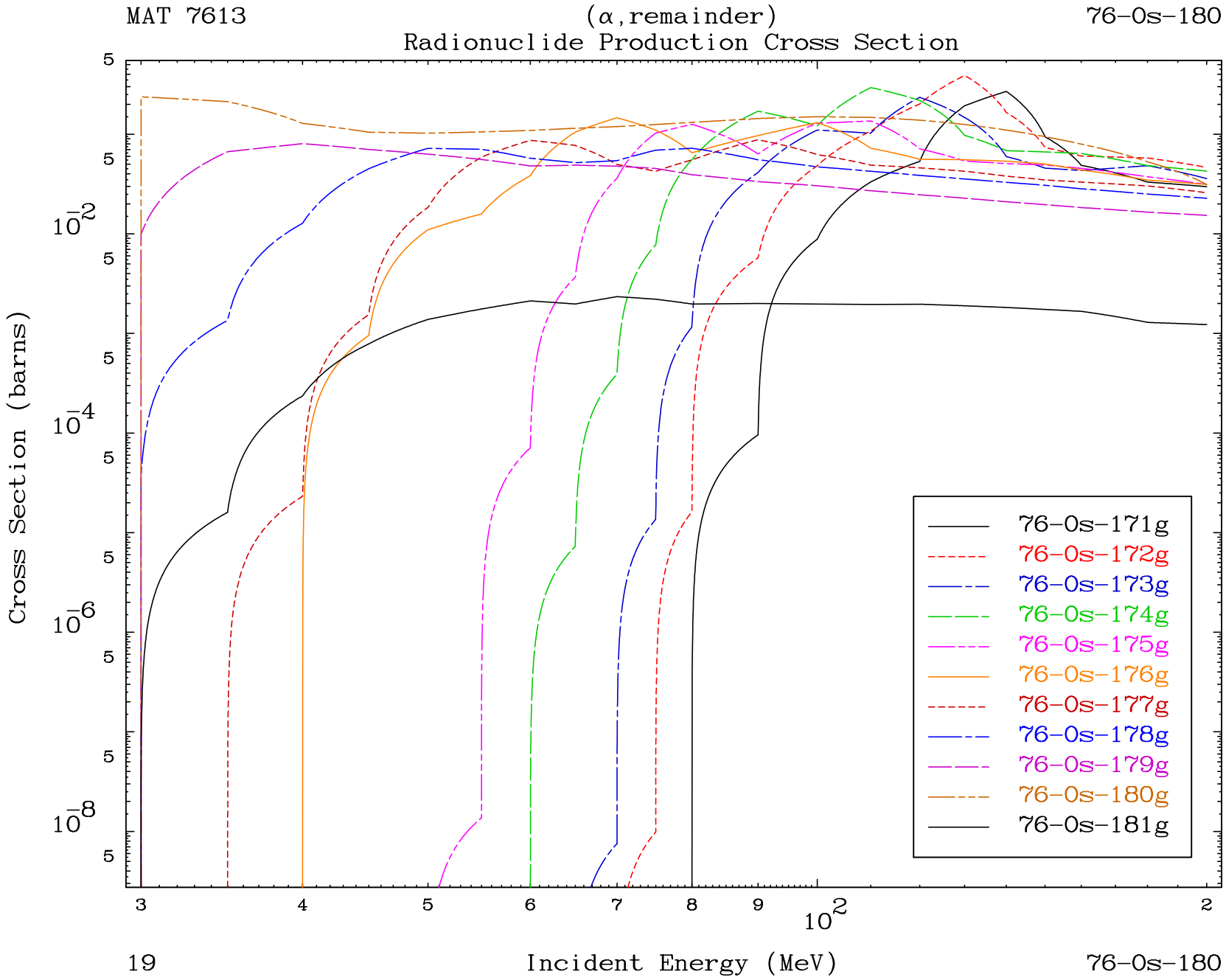
76-0s-180


MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
15
Incident Energy (MeV)
76-0s-180
73-Ta-163g
73-Ta-164g
73-Ta-165g
73-Ta-166g
73-Ta-167g
74-W -160g
74-W -161g
74-W -162g
74-W -163g
74-W -164g
74-W -165g

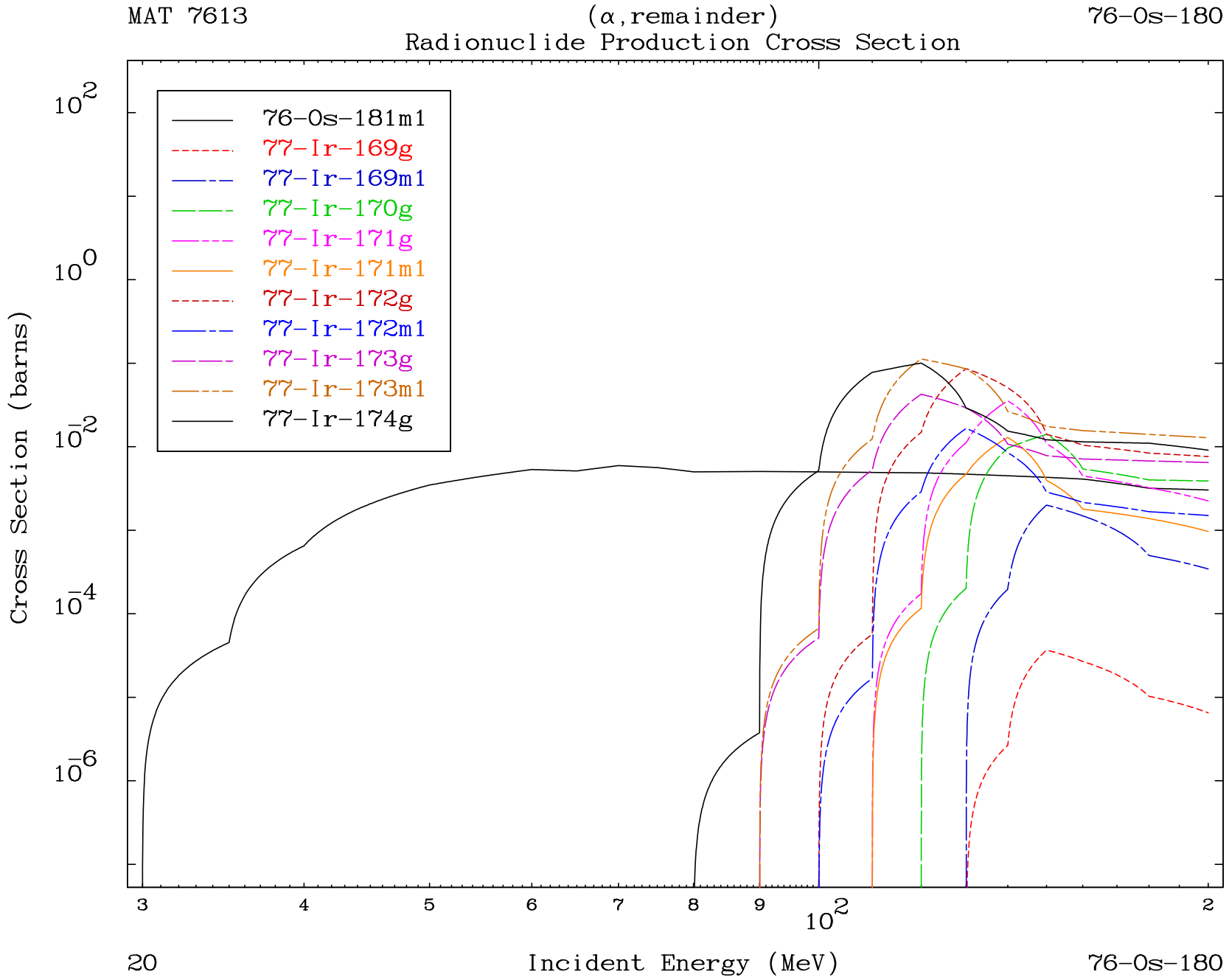

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
74-W -166g
74-W -167g
74-W -168g
74-W -169g
74-W -170g
74-W -171g
74-W -172g
74-W -173g
75-Re-164g
75-Re-165g
75-Re-165m1
Cross Section (barns)
10-2
10-4
10-6
10-8
4
5
6
7
8
9
10 2
2
16
Incident Energy (MeV)
76-0s-180

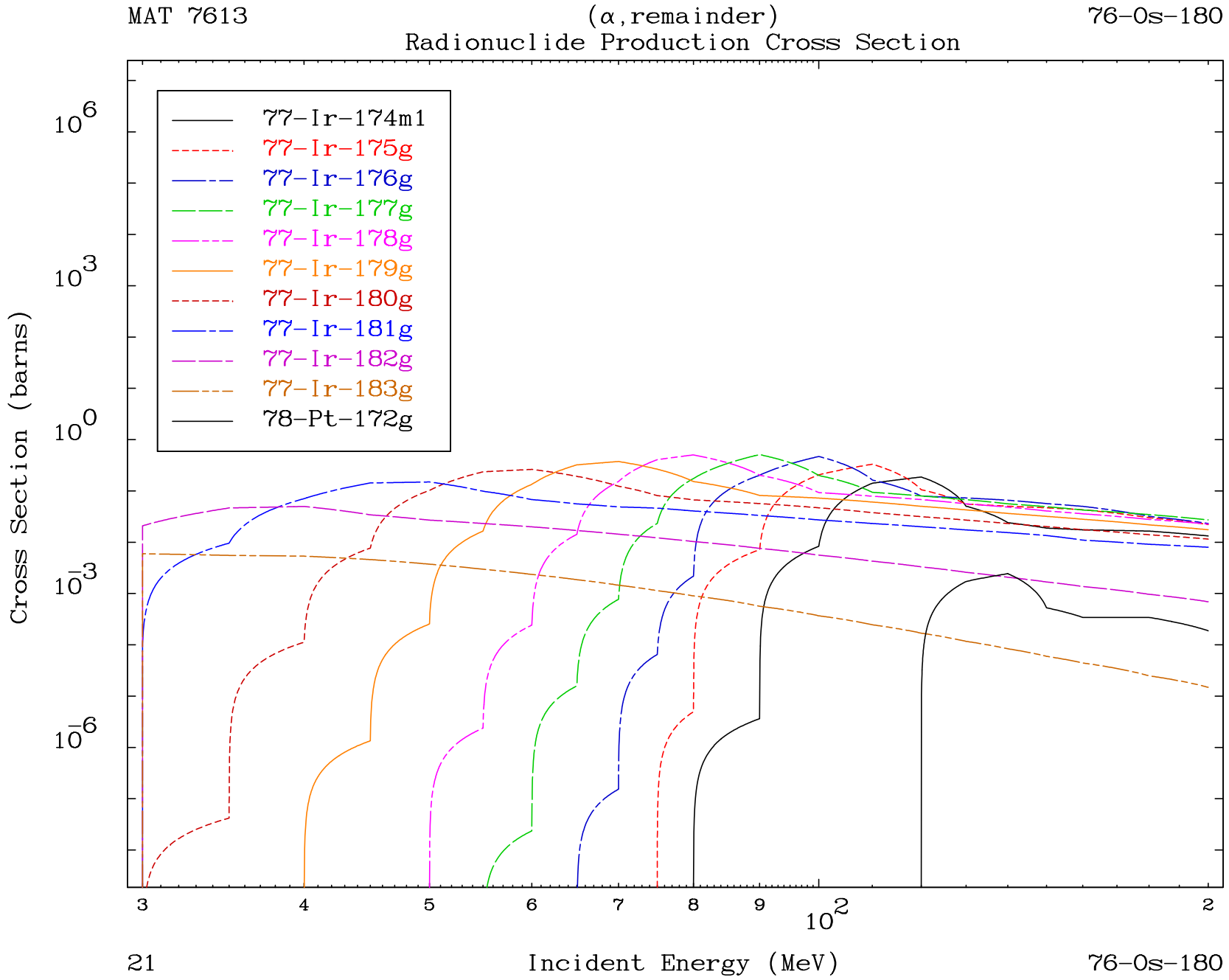

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
60
80
100
120
140
160
180
200
Incident Energy (MeV)
17
76-0s-180
75-Re-166g
75-Re-167g
75-Re-167m1
75-Re-168g
75-Re-169g
75-Re-169m1
75-Re-170g
75-Re-171g
75-Re-172g
75-Re-172m1
75-Re-173g

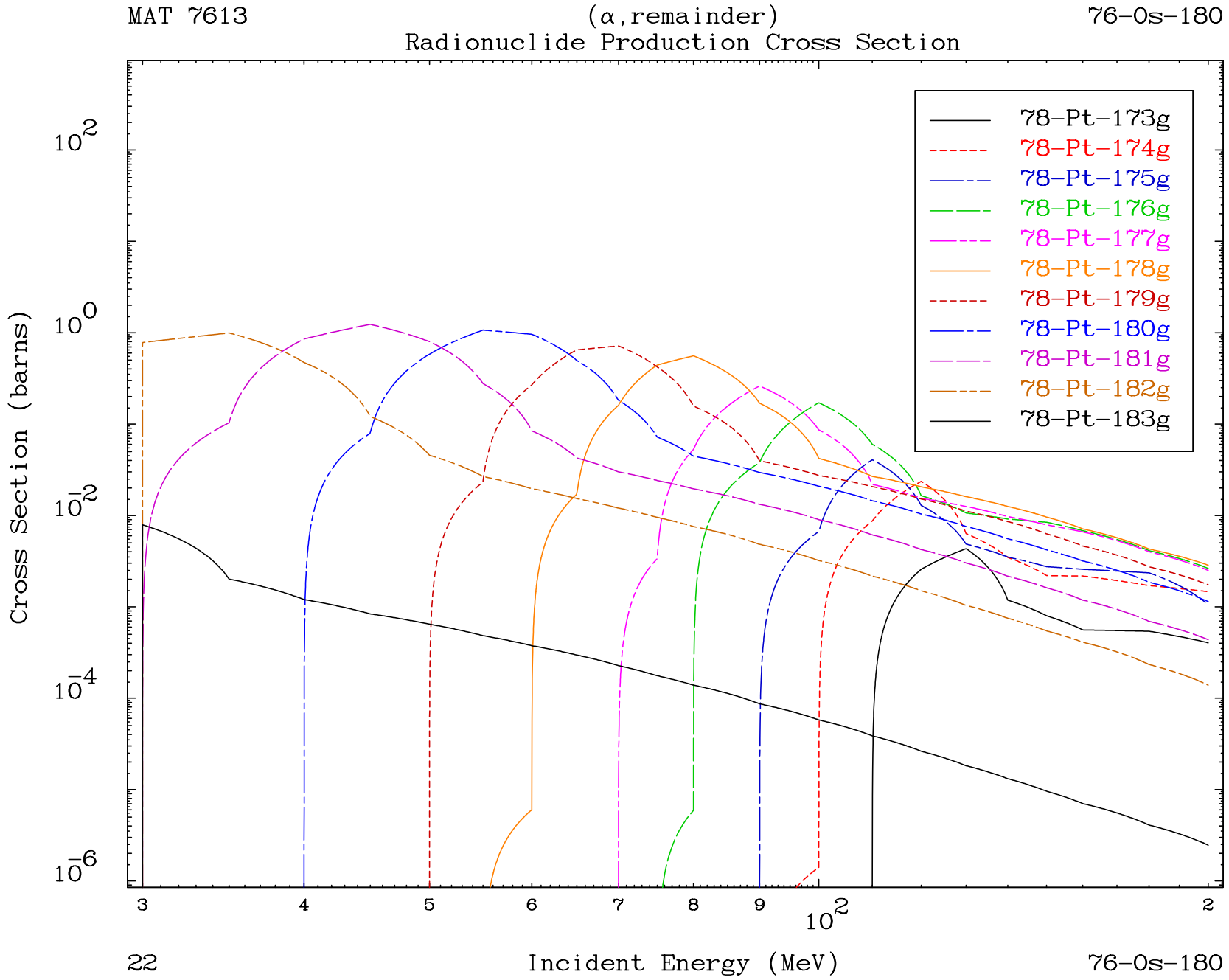

MAT 7613
(α,remainder)
76-Os-180
Radionuclide Production Cross Section
75-Re-174g
75-Re-175g
75-Re-176g
75-Re-177g
75-Re-178g
75-Re-179g
76-Os-166g
76-Os-167g
76-Os-168g
76-Os-169g
76-Os-170g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
18
Incident Energy (MeV)
76-Os-180

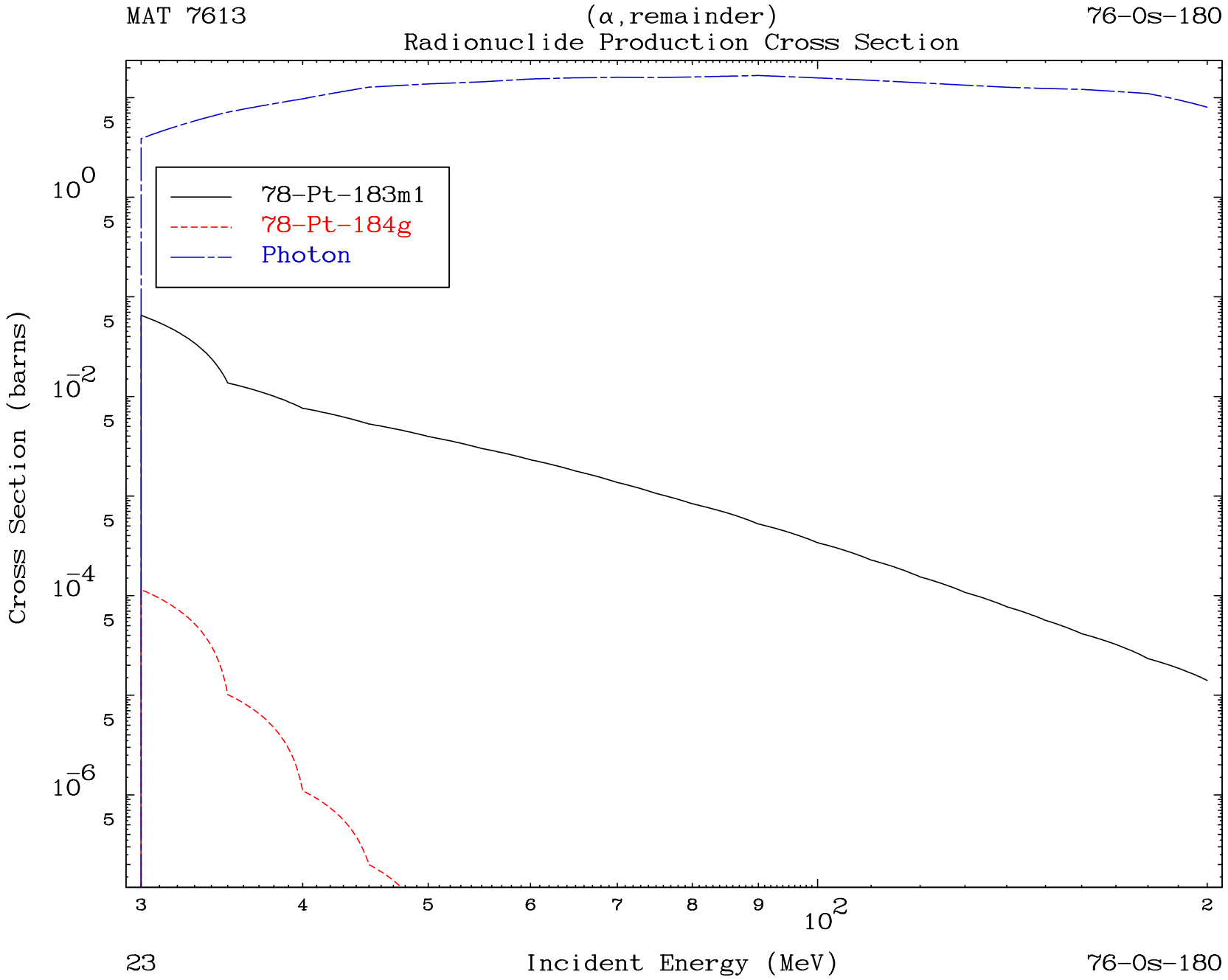

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
76-0s-171g
76-0s-172g
76-0s-173g
76-0s-174g
76-0s-175g
76-0s-176g
76-0s-177g
76-0s-178g
76-0s-179g
76-0s-180g
76-0s-181g

76-0s-180

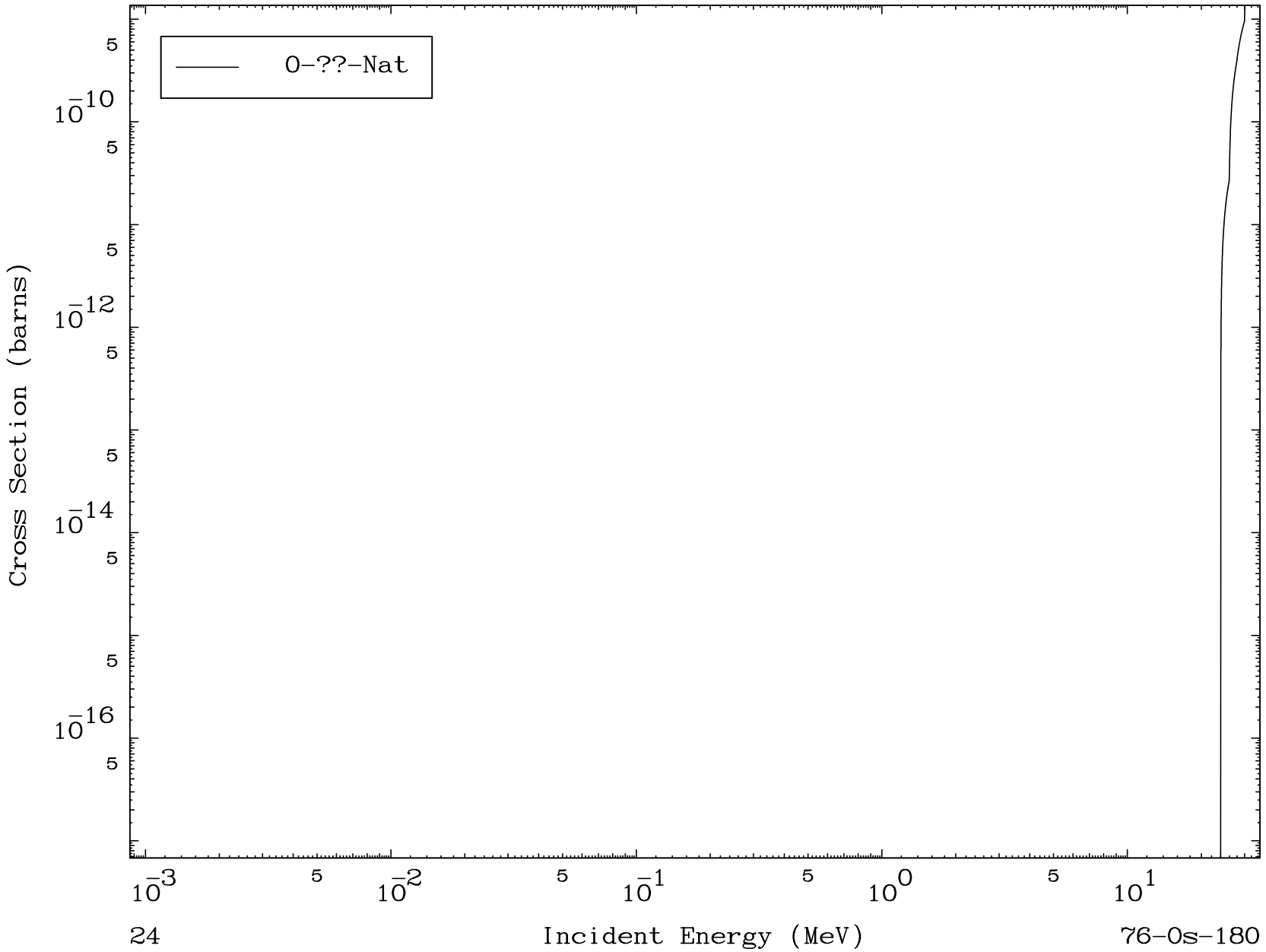

MAT 7613
(α,remainder)
76-Os-180
Radionuclide Production Cross Section
76-Os-181m1
77-Ir-169g
77-Ir-169m1
77-Ir-170g
77-Ir-171g
77-Ir-171m1
77-Ir-172g
77-Ir-172m1
77-Ir-173g
77-Ir-173m1
77-Ir-174g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
76-Os-180

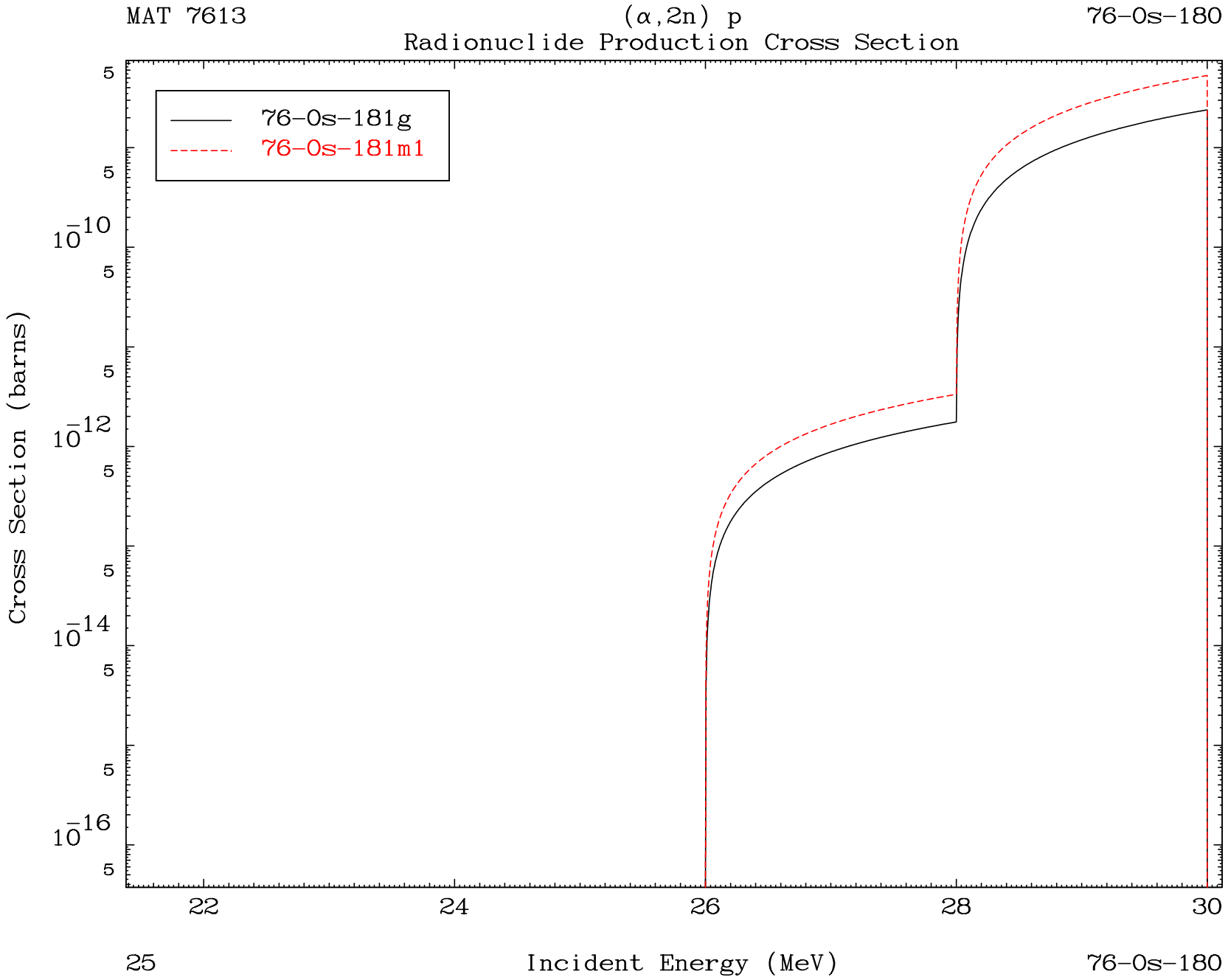

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
77-Ir-174m1
77-Ir-175g
77-Ir-176g
77-Ir-177g
77-Ir-178g
77-Ir-179g
77-Ir-180g
77-Ir-181g
77-Ir-182g
77-Ir-183g
78-Pt-172g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
21
Incident Energy (MeV)
76-0s-180

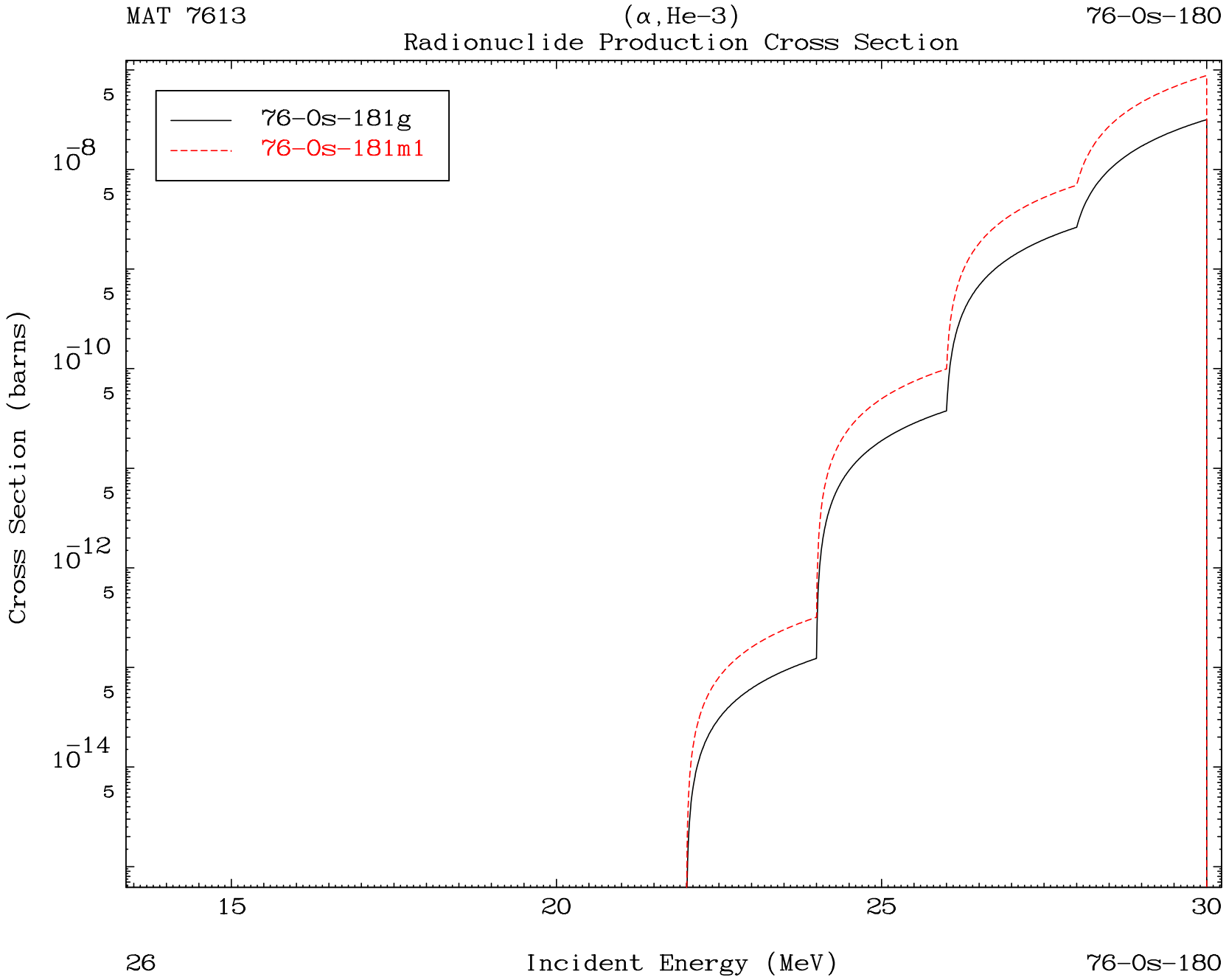

MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
78-Pt-173g
78-Pt-174g
78-Pt-175g
78-Pt-176g
78-Pt-177g
78-Pt-178g
78-Pt-179g
78-Pt-180g
78-Pt-181g
78-Pt-182g
78-Pt-183g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
76-0s-180


MAT 7613
(α,remainder)
76-0s-180
Radionuclide Production Cross Section
78-Pt-183m1
78-Pt-184g
Photon
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
3
4
5
6
7
8
9
10^2
2
23
Incident Energy (MeV)
76-0s-180

Radionuclide Production Cross Section




MAT 7613
(α,2n) p
76-Os-180
Radionuclide Production Cross Section
76-Os-181g
76-Os-181m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
22
24
26
28
30
25
Incident Energy (MeV)
76-Os-180


MAT 7613
(α,He-3)
76-Os-180
Radionuclide Production Cross Section
76-Os-181g
76-Os-181m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
15
20
25
30
26
Incident Energy (MeV)
76-Os-180