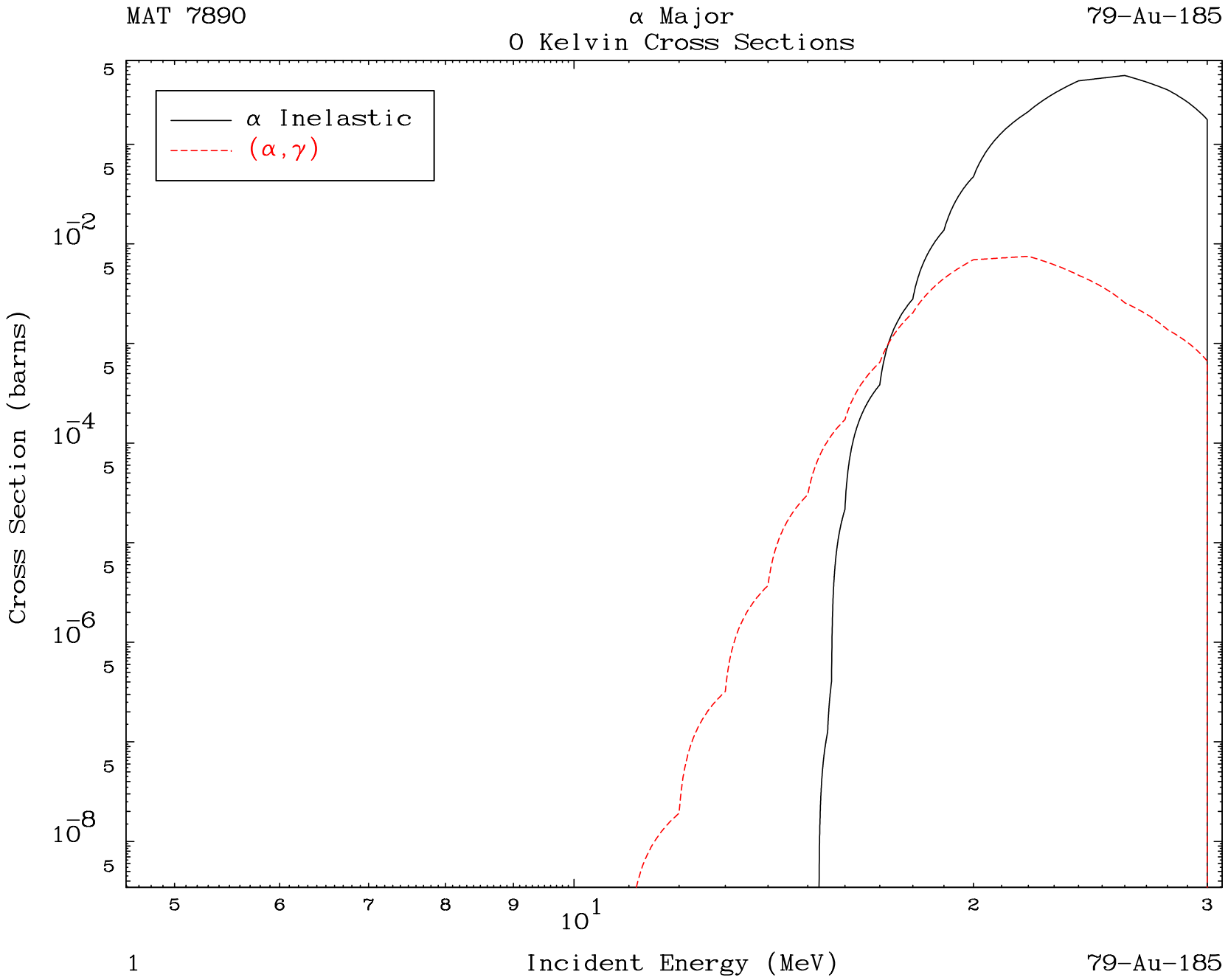
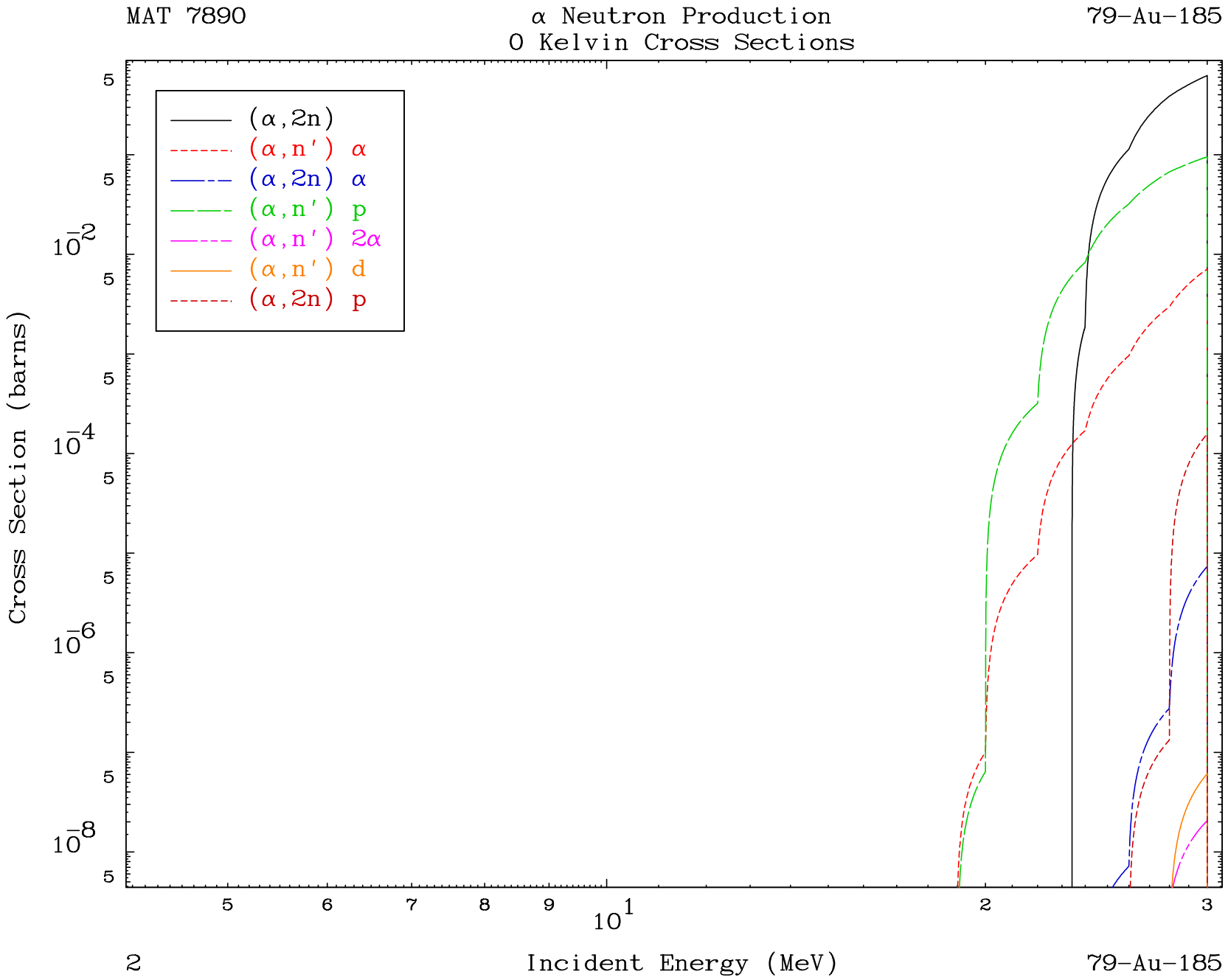
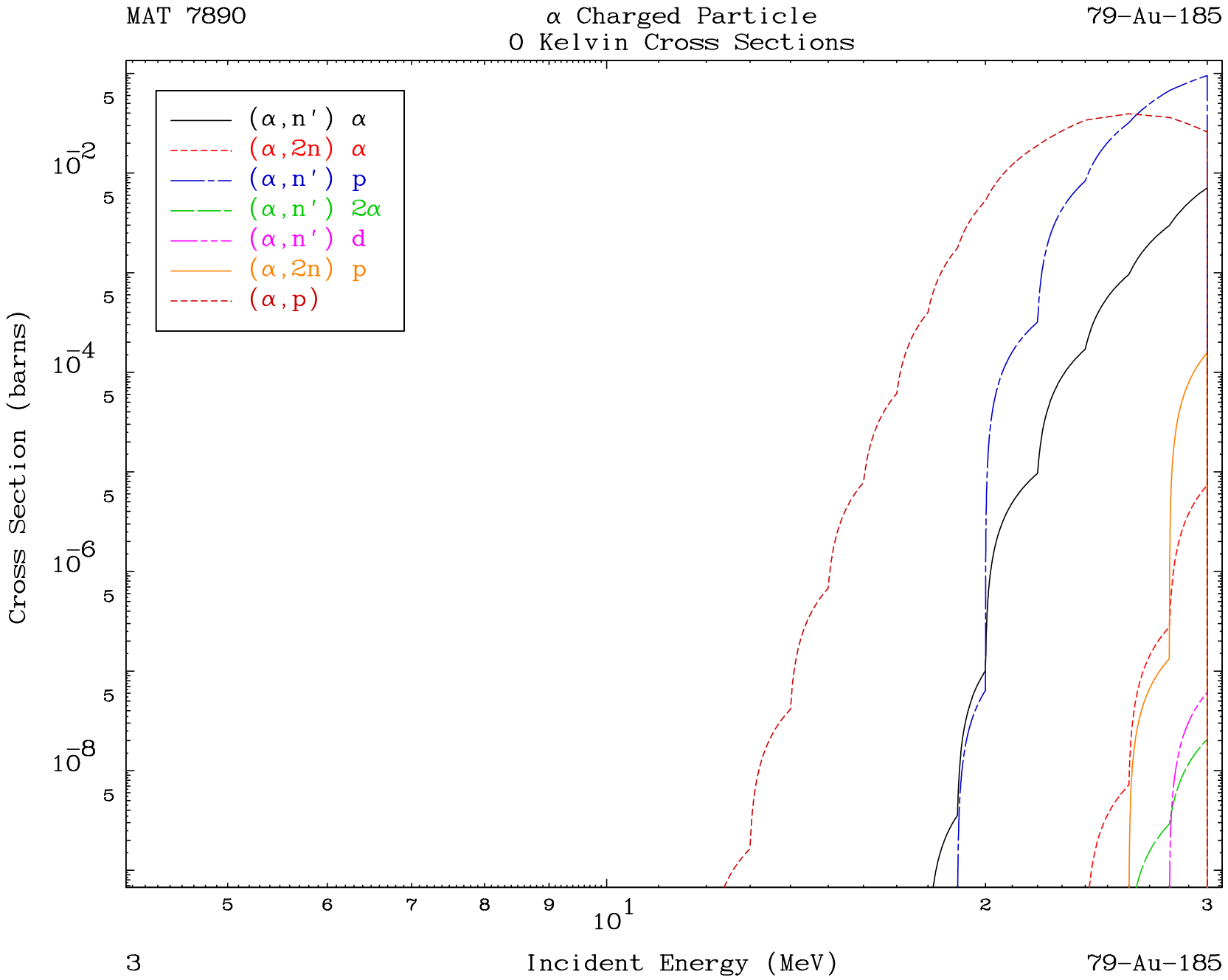
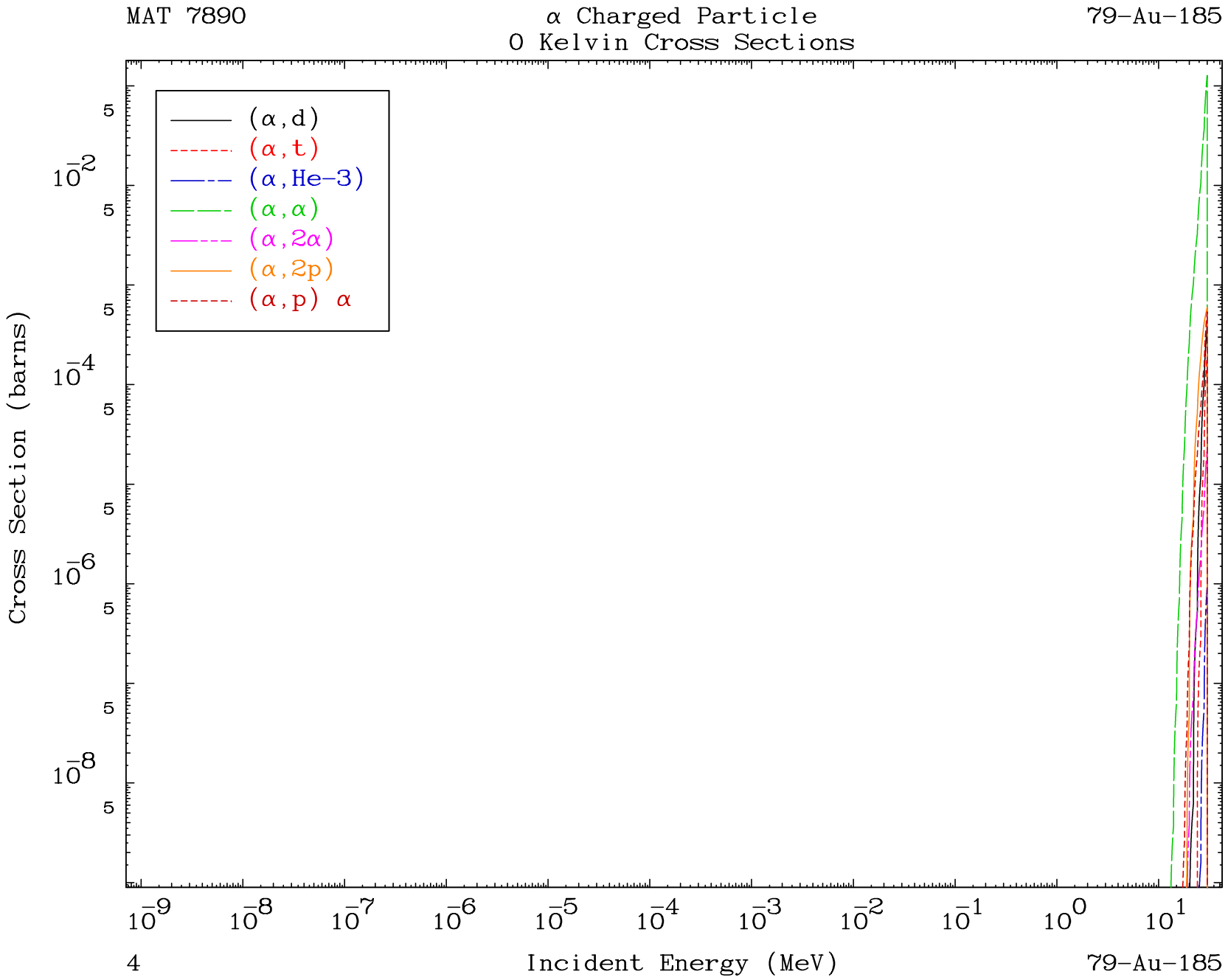
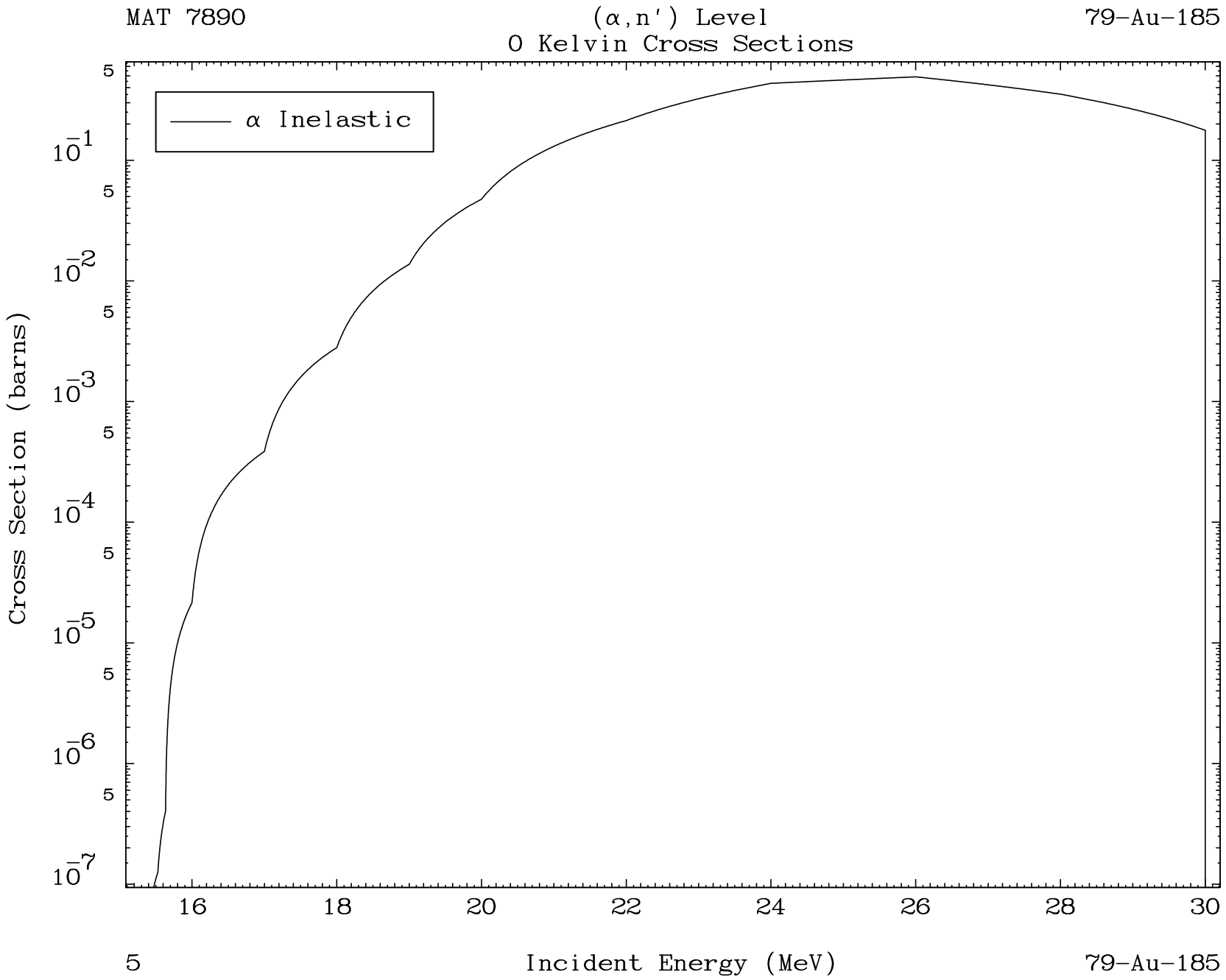
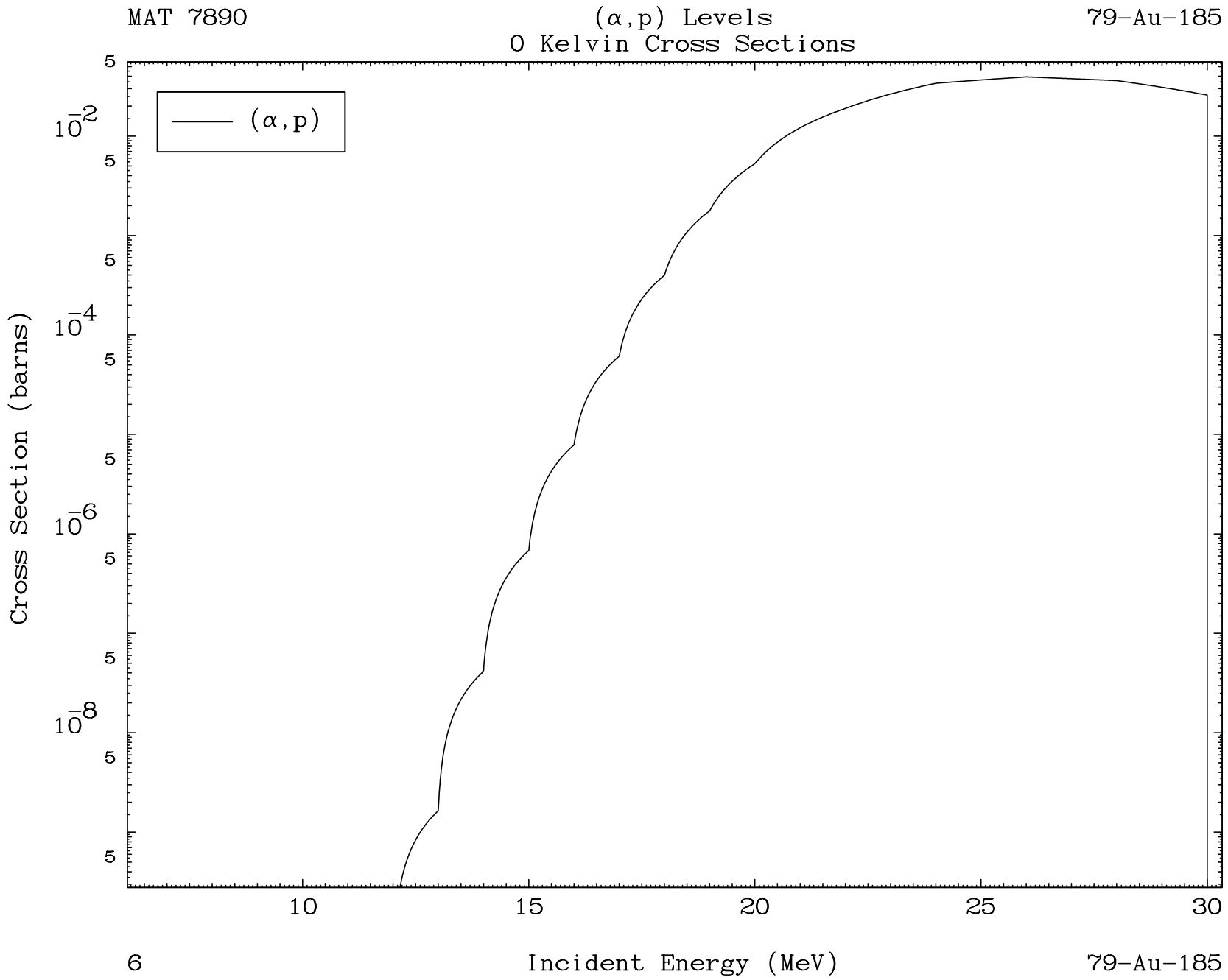

MAT 7890
α Major
79-Au-185
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
79-Au-185

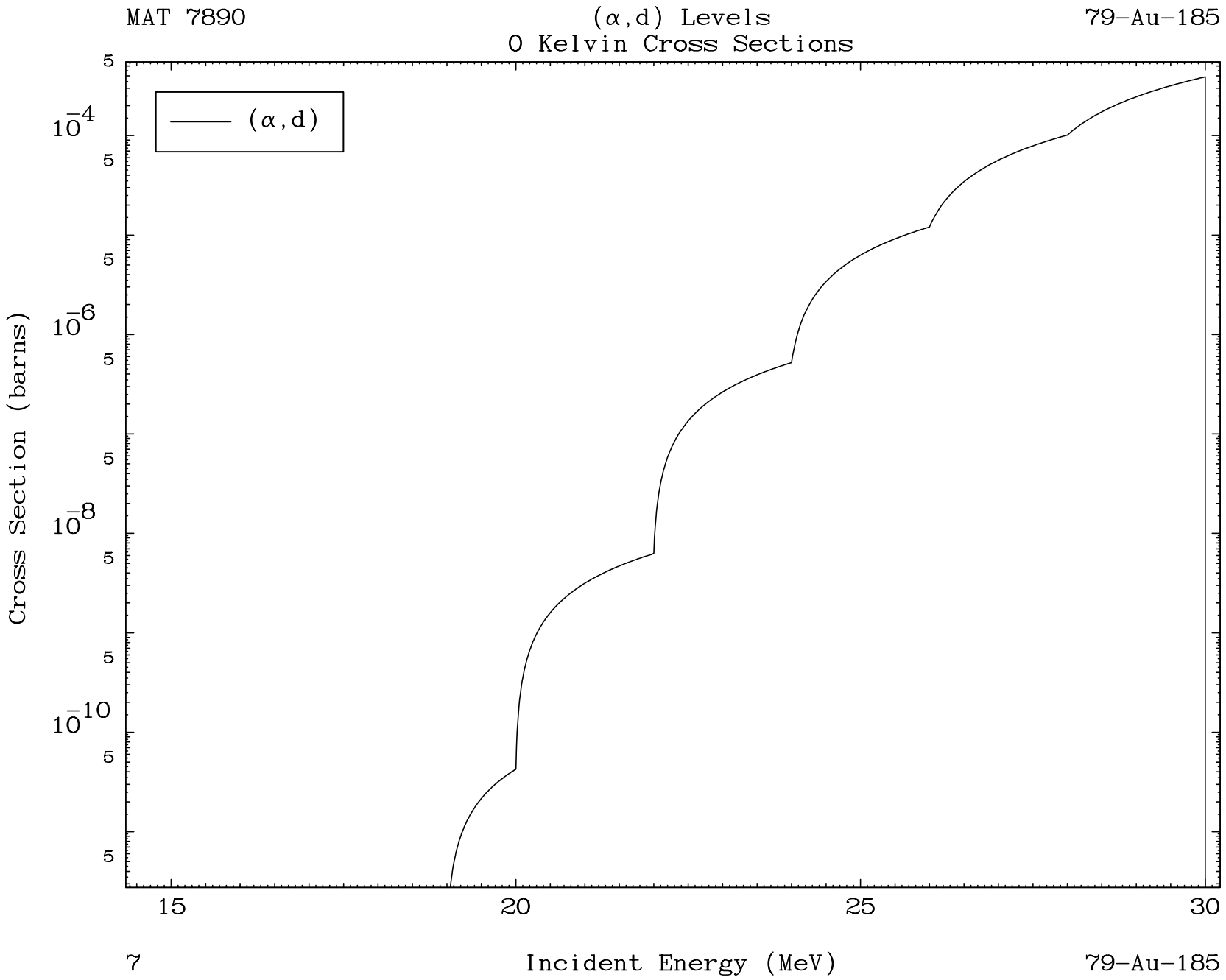

MAT 7890
α Neutron Production
0 Kelvin Cross Sections
79-Au-185
(α,2n)
(α,n') α
(α,2n) α
(α,n') p
(α,n') 2α
(α,n') d
(α,2n) p
Cross Section (barns)
Incident Energy (MeV)
79-Au-185

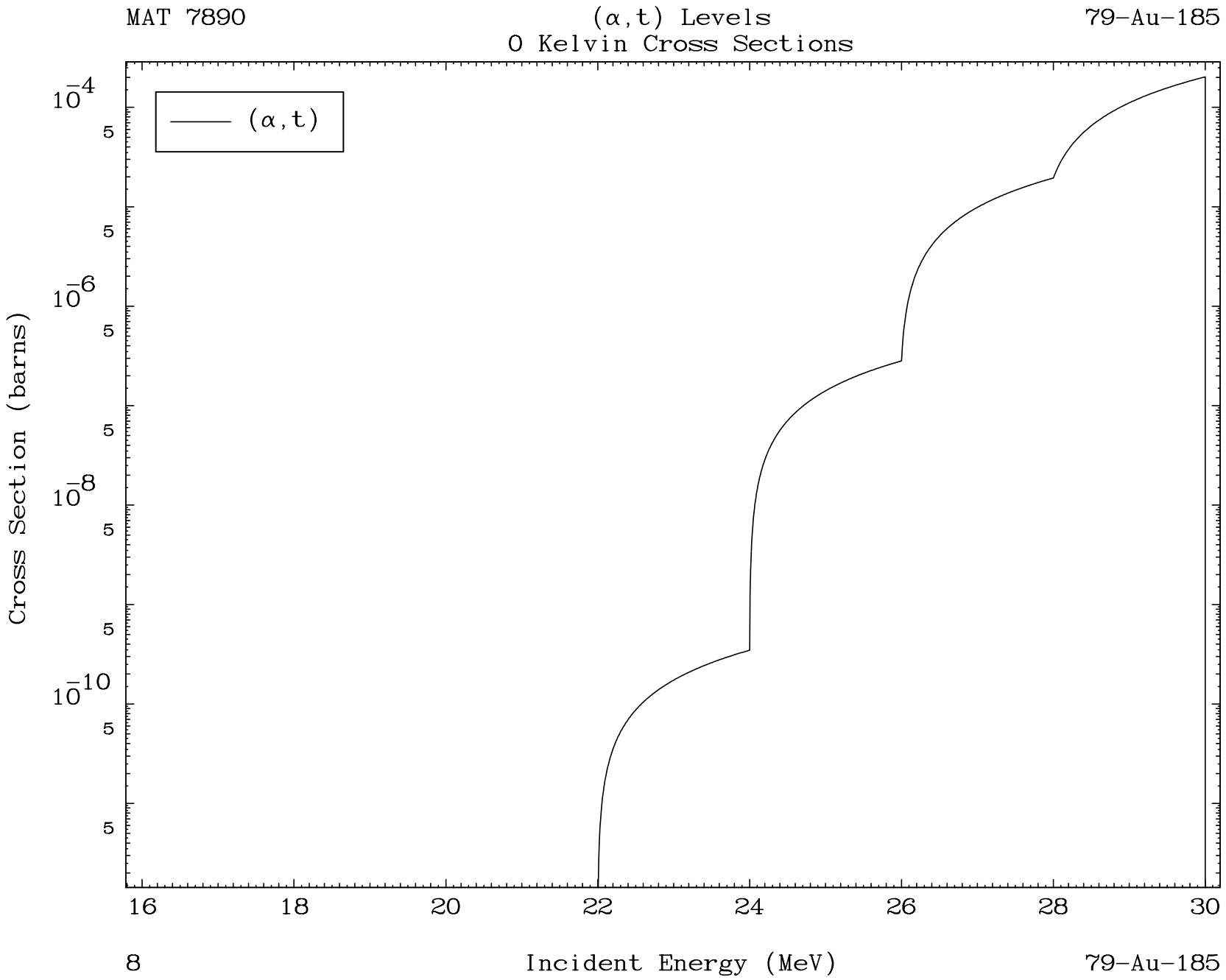

MAT 7890
α Charged Particle
0 Kelvin Cross Sections
79-Au-185
(α,n') α
(α,2n) α
(α,n') p
(α,n') 2α
(α,n') d
(α,2n) p
(α,p)
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6
7
8
9
10 1
2
3
Incident Energy (MeV)
3
79-Au-185

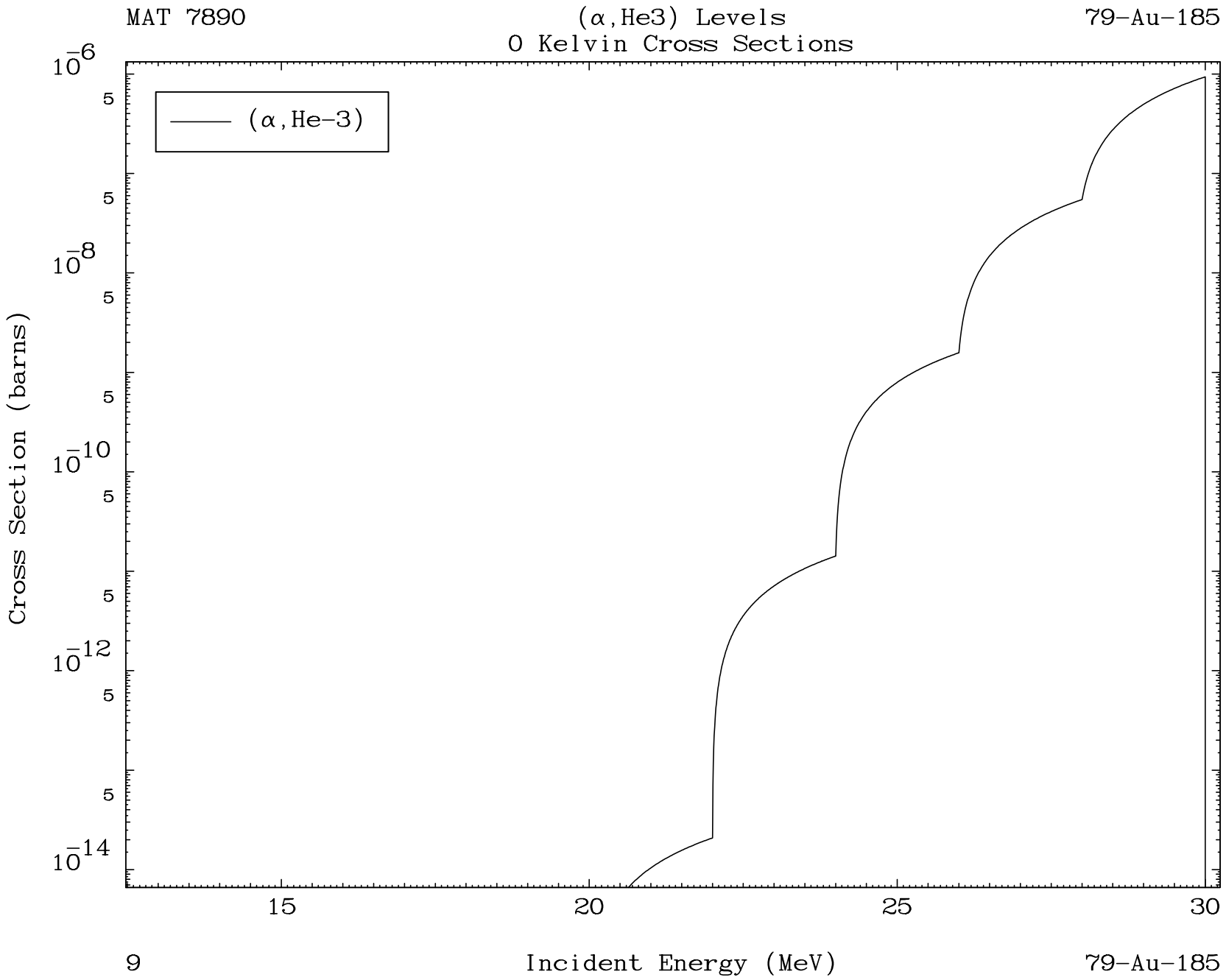

MAT 7890
α Charged Particle
0 Kelvin Cross Sections
79-Au-185
(α,d)
(α,t)
(α,He-3)
(α,α)
(α,2α)
(α,2p)
(α,p) α
Cross Section (barns)
Incident Energy (MeV)
4
79-Au-185

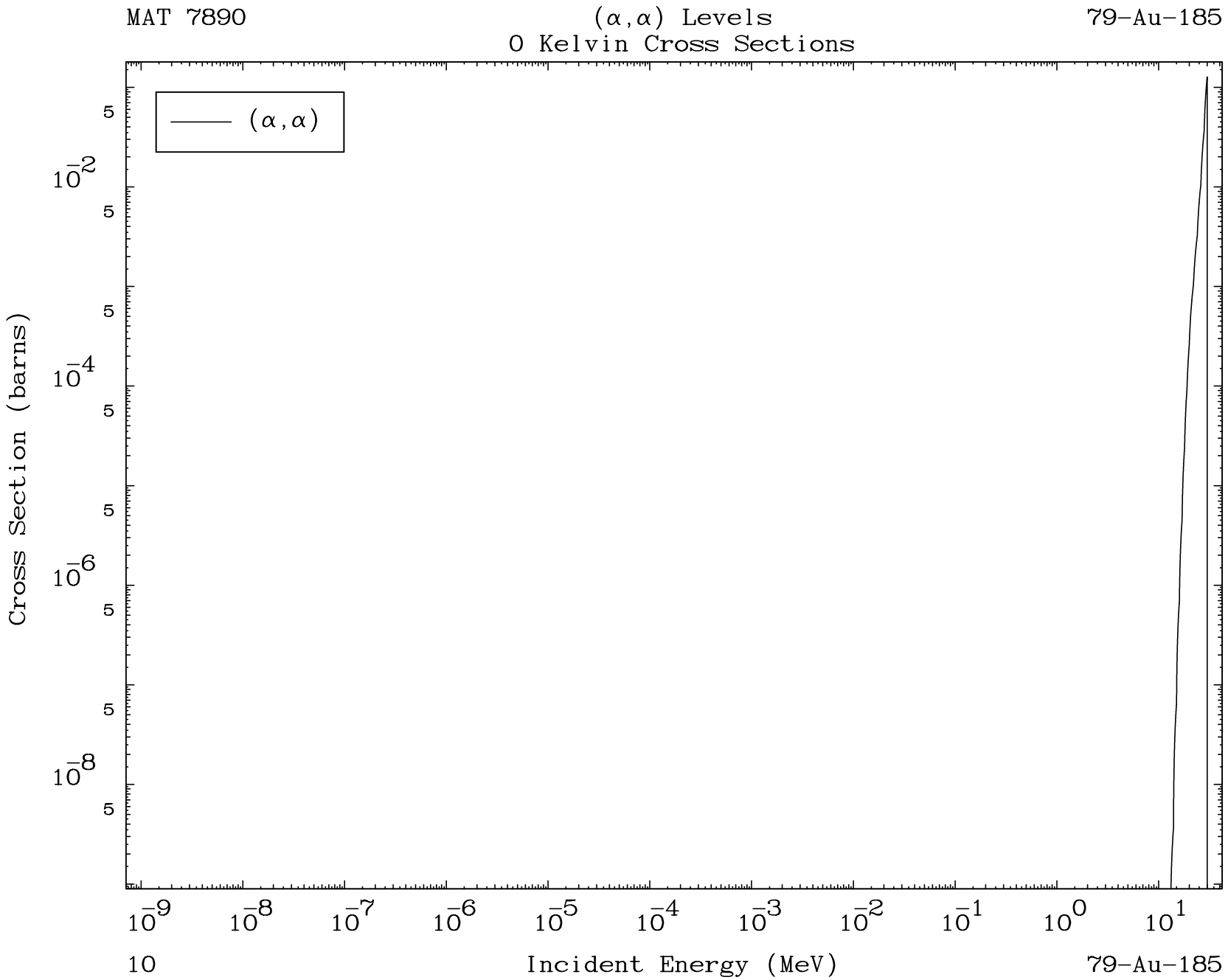

MAT 7890
(α,n') Level
79-Au-185
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-1
10-2
10-3
10-4
10-5
10-6
10-7
16
18
20
22
24
26
28
30
5
Incident Energy (MeV)
79-Au-185

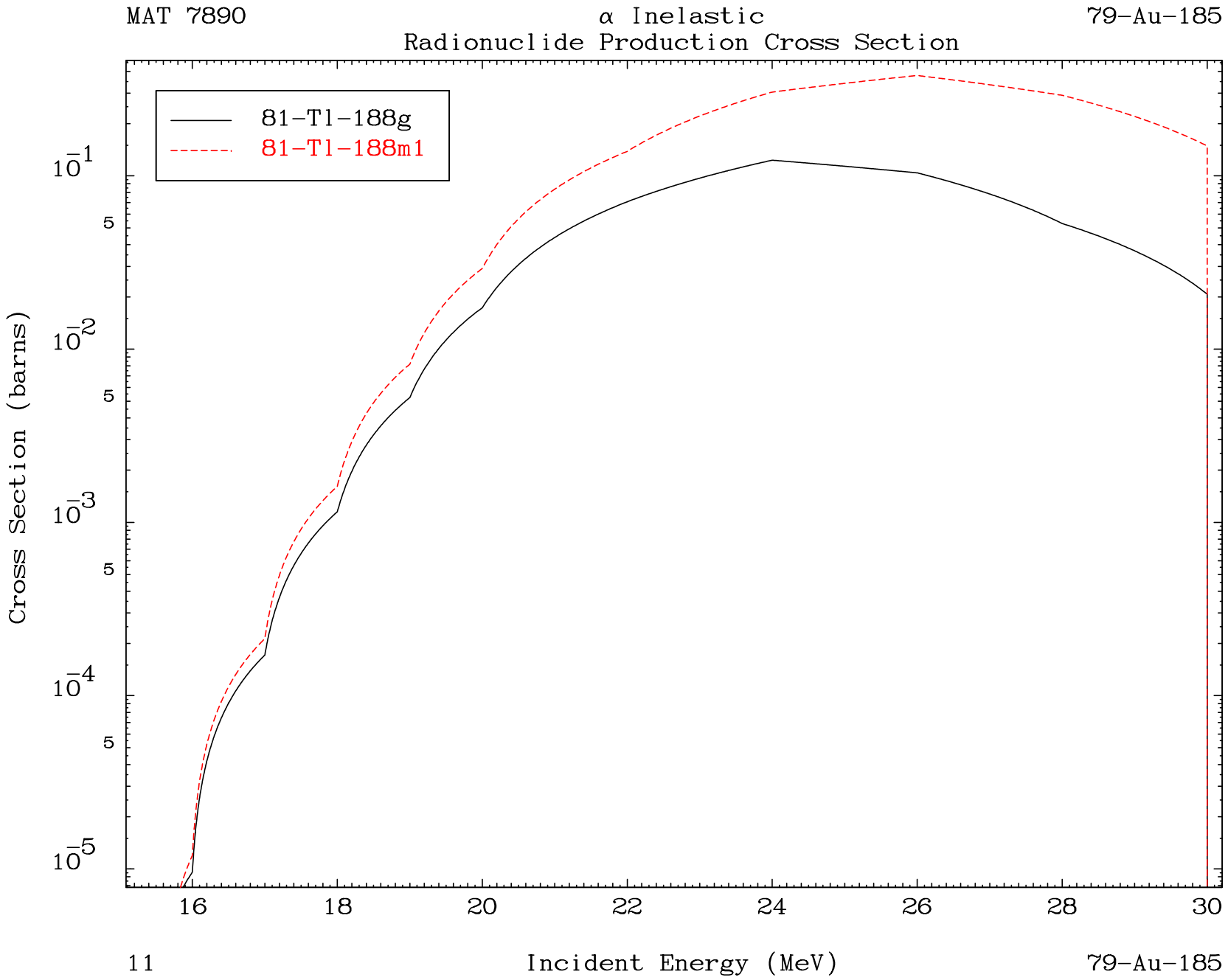

MAT 7890
(α,p) Levels
79-Au-185
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
6
Incident Energy (MeV)
79-Au-185

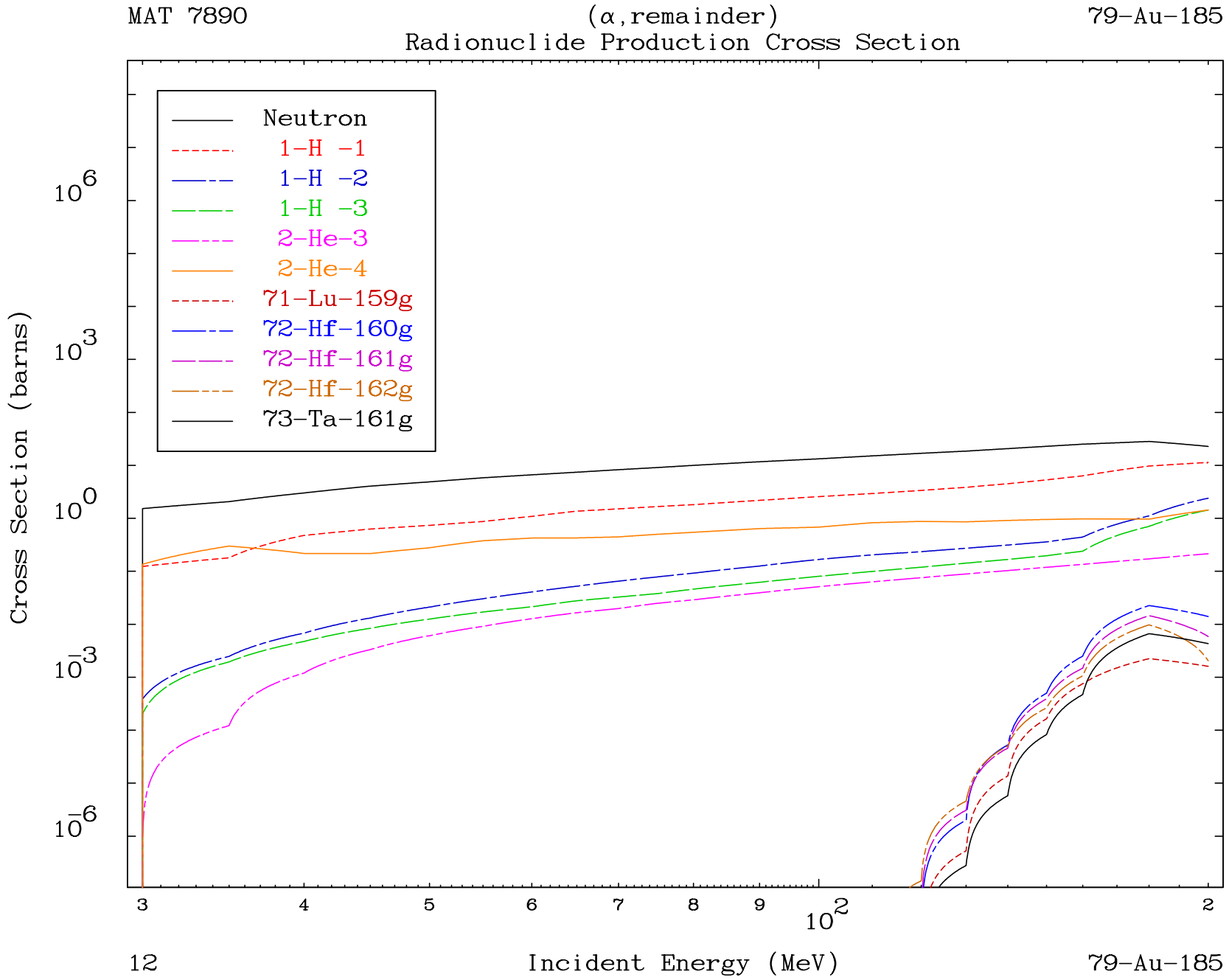

MAT 7890
(α,d) Levels
79-Au-185
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
7
Incident Energy (MeV)
79-Au-185

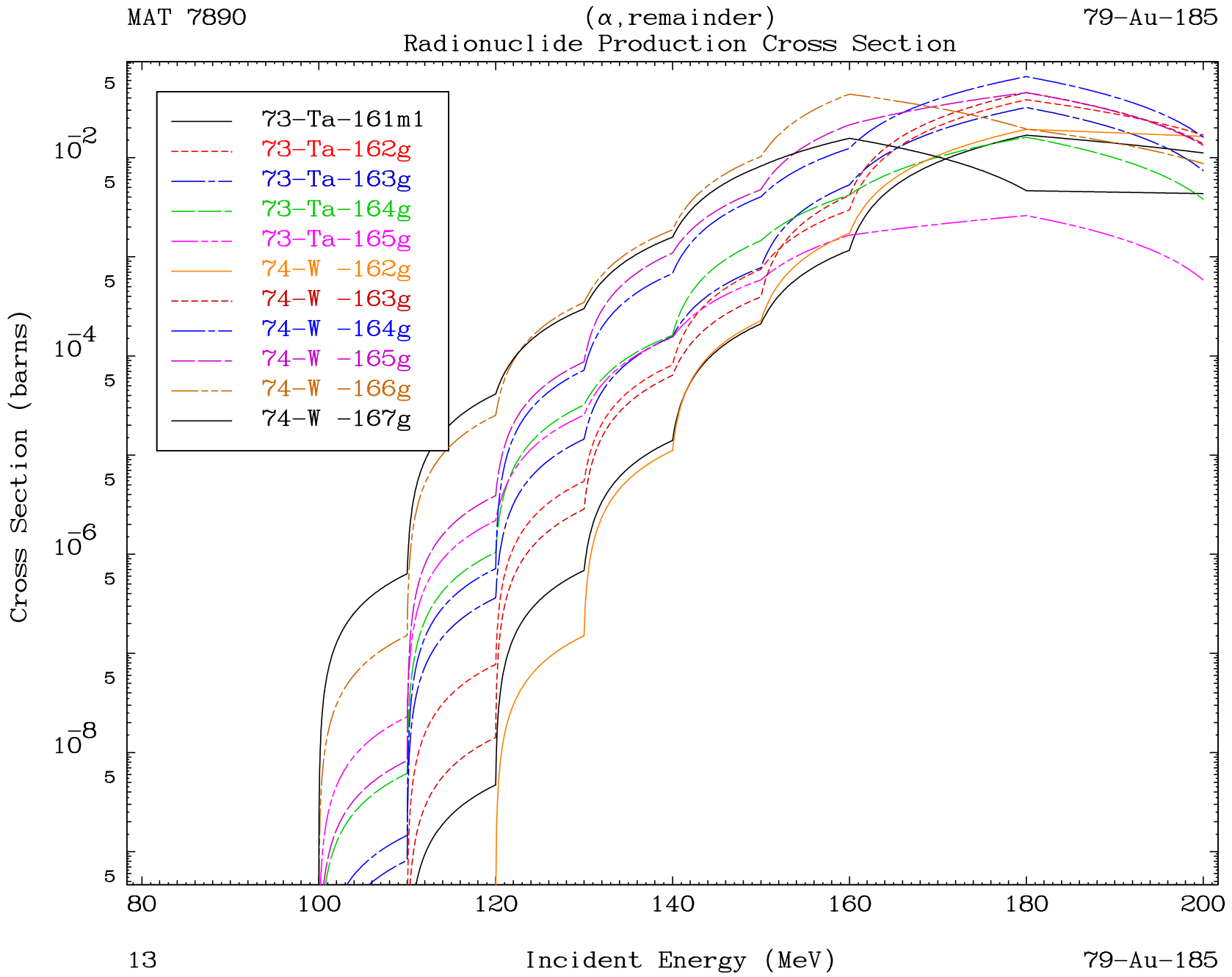

MAT 7890
(α,t) Levels
79-Au-185
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
16
18
20
22
24
26
28
30
8
Incident Energy (MeV)
79-Au-185

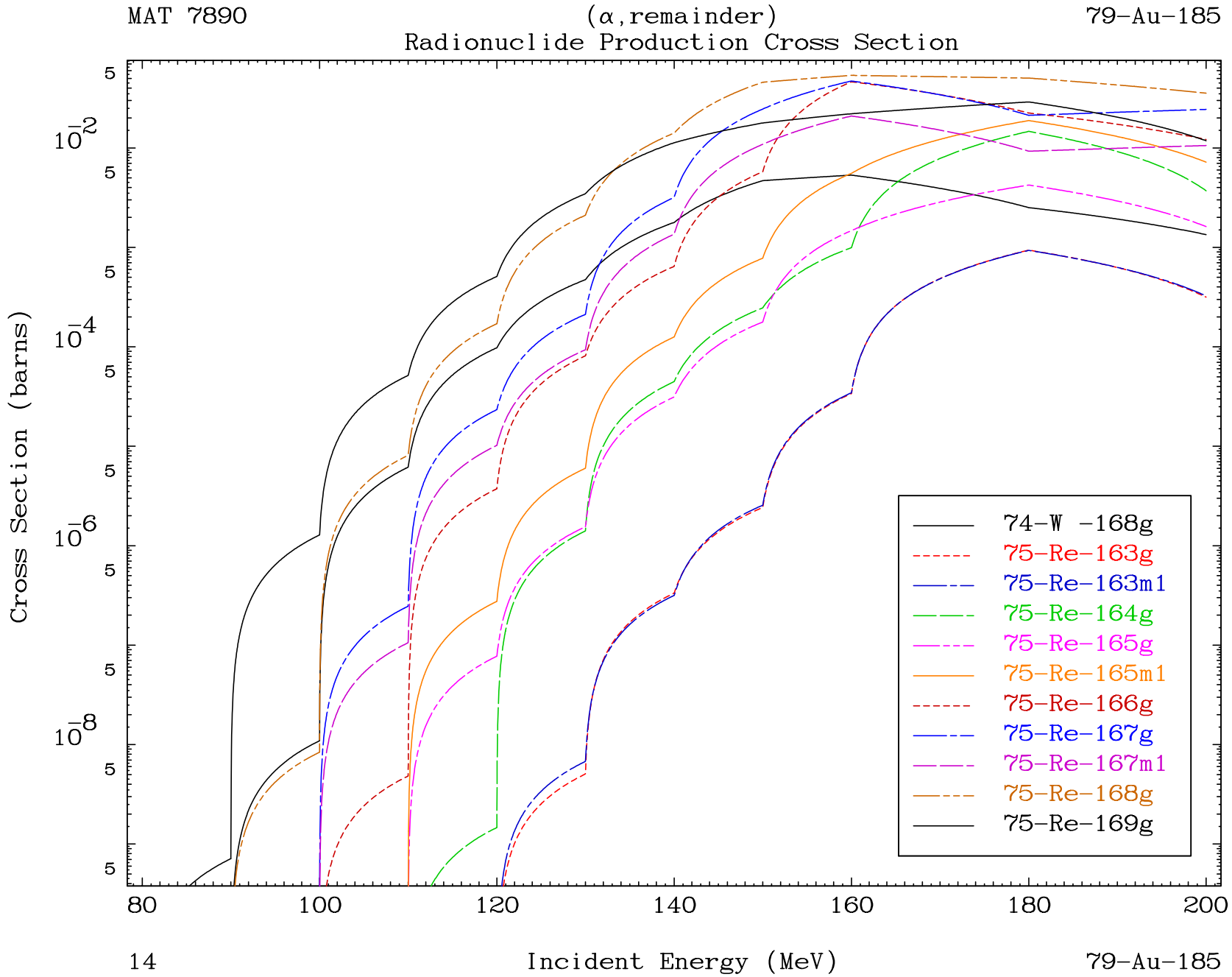

MAT 7890
(α,He3) Levels
79-Au-185
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10-6
5
10-8
5
10-10
5
10-12
5
10-14
5
15
20
25
30
9
Incident Energy (MeV)
79-Au-185

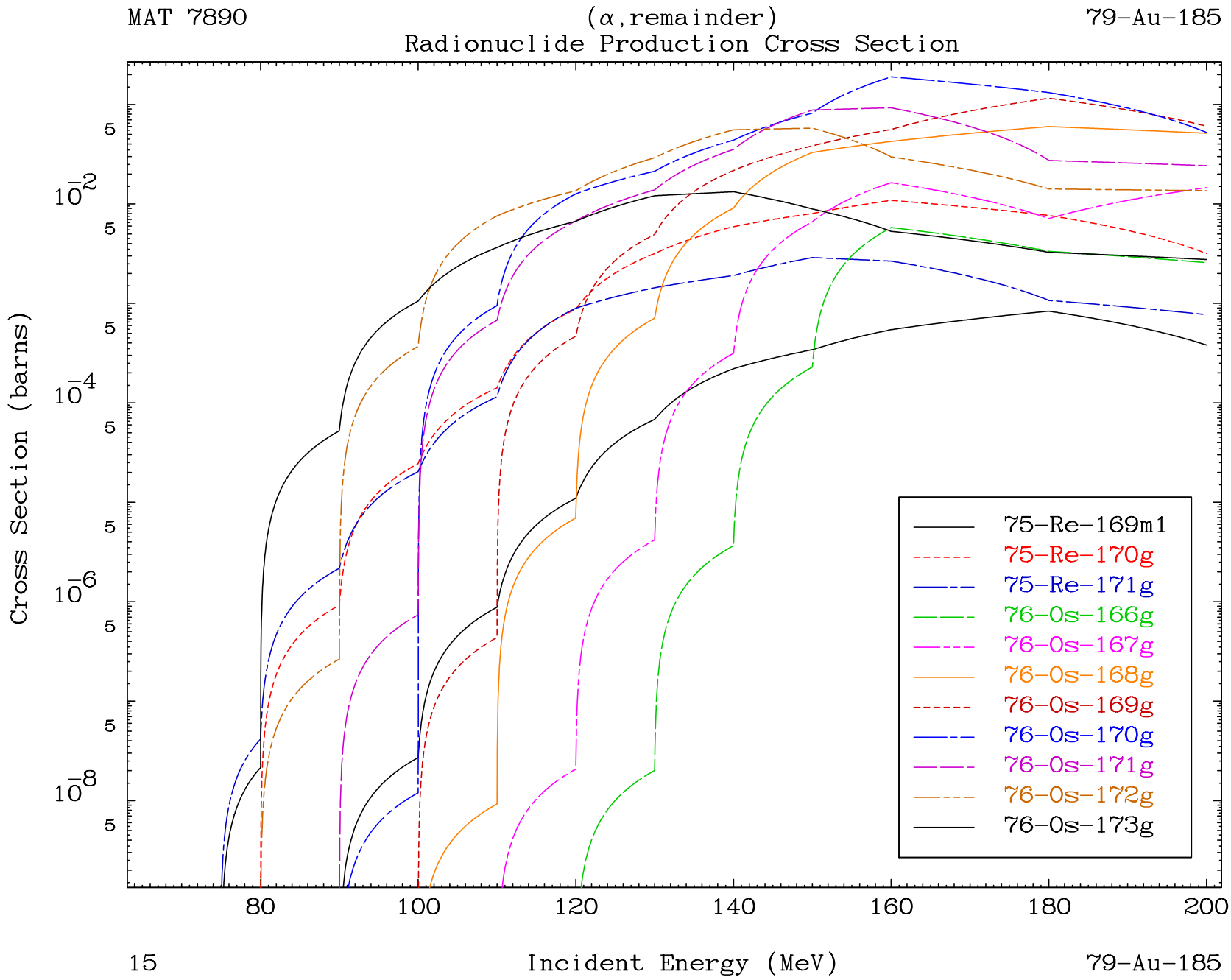

MAT 7890
(α,α) Levels
79-Au-185
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
Incident Energy (MeV)
79-Au-185

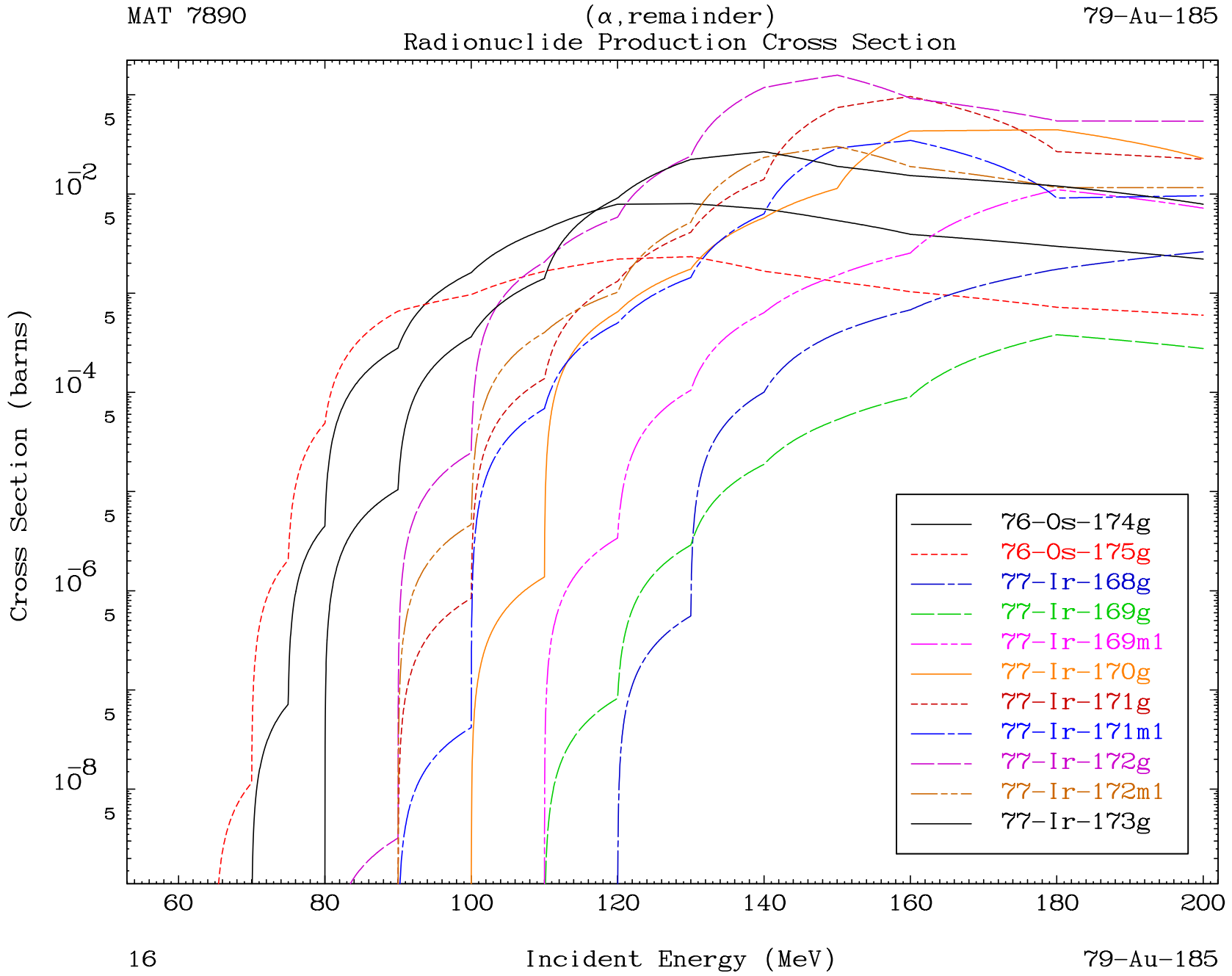

MAT 7890
α Inelastic
79-Au-185
Radionuclide Production Cross Section
81-Tl-188g
81-Tl-188m1
Cross Section (barns)
10-1
5
10-2
5
10-3
5
10-4
5
10-5
16
18
20
22
24
26
28
30
11
Incident Energy (MeV)
79-Au-185

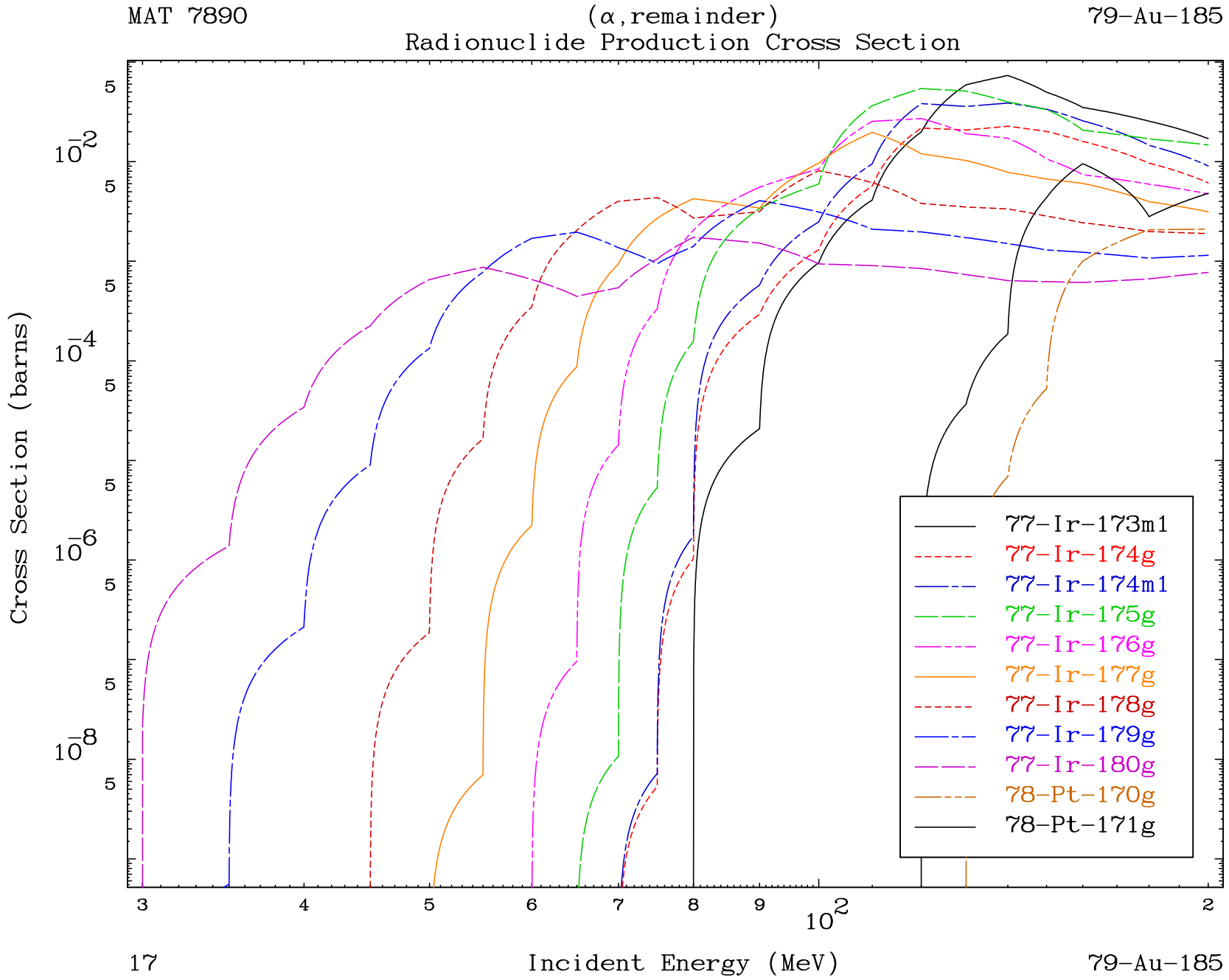

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
71-Lu-159g
72-Hf-160g
72-Hf-161g
72-Hf-162g
73-Ta-161g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
12
Incident Energy (MeV)
79-Au-185

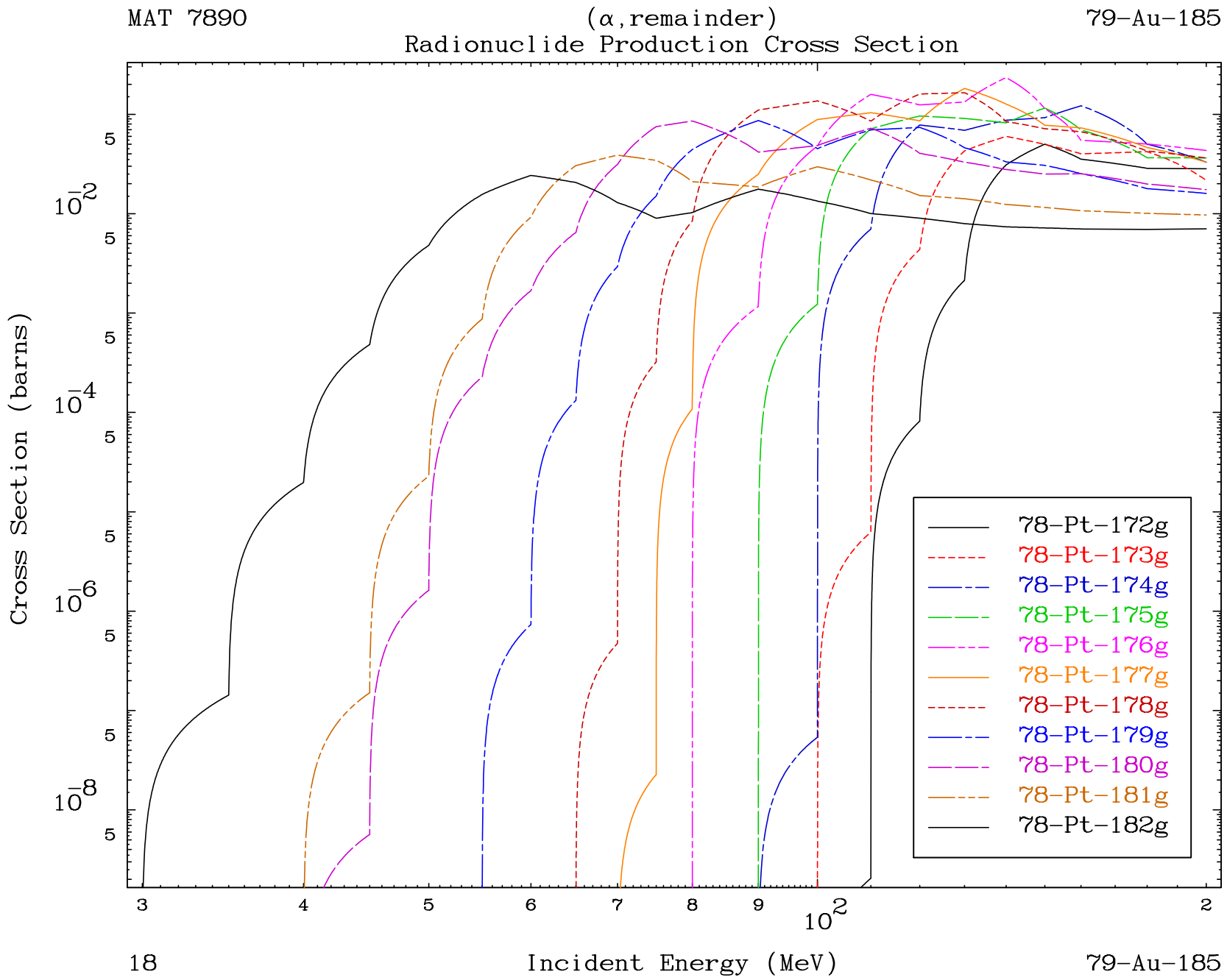

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
73-Ta-161m1
73-Ta-162g
73-Ta-163g
73-Ta-164g
73-Ta-165g
74-W -162g
74-W -163g
74-W -164g
74-W -165g
74-W -166g
74-W -167g
Cross Section (barns)
10-2
10-4
10-6
10-8
80
100
120
140
160
180
200
Incident Energy (MeV)
13
79-Au-185

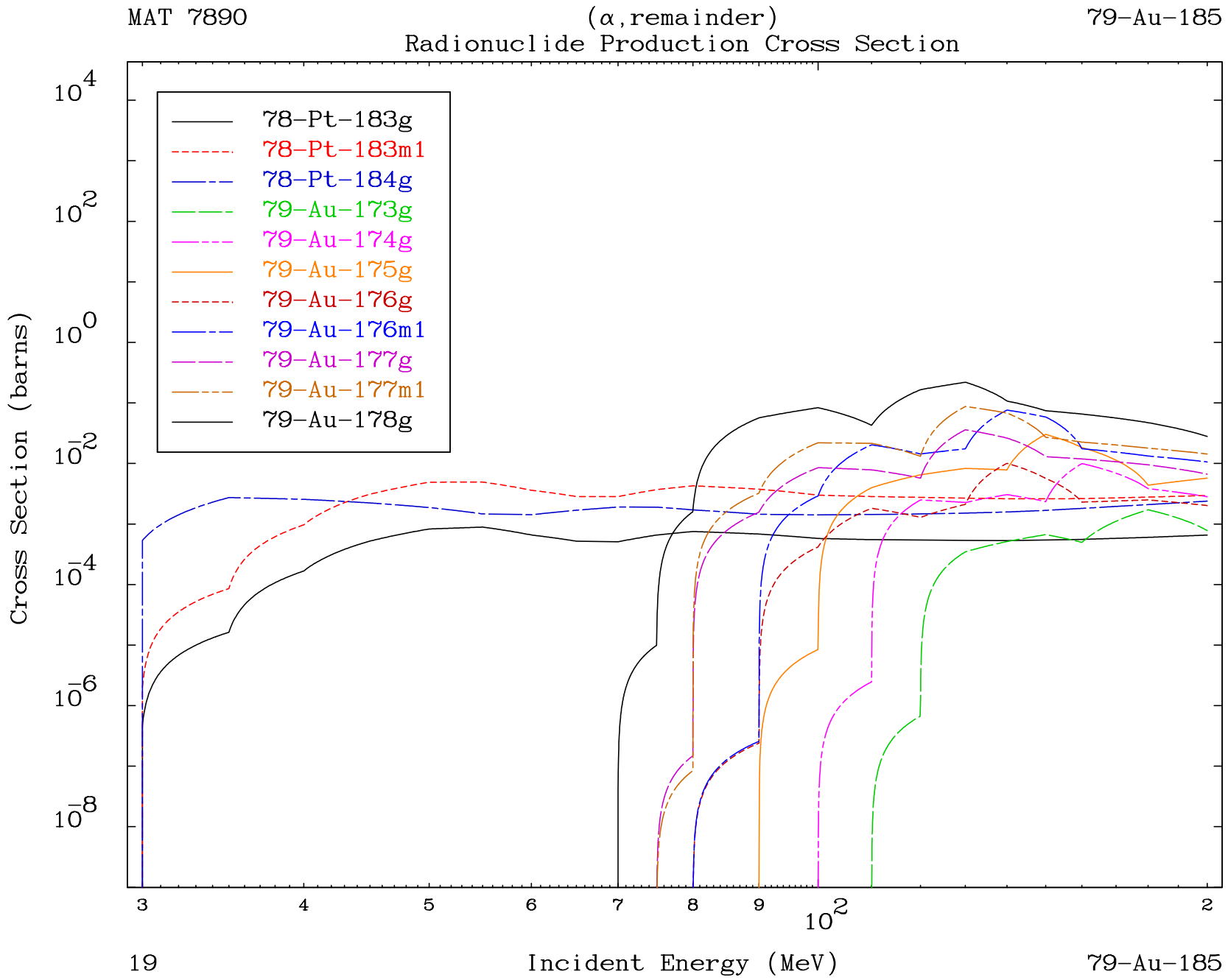

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
Incident Energy (MeV)
14
79-Au-185
74-W -168g
75-Re-163g
75-Re-163m1
75-Re-164g
75-Re-165g
75-Re-165m1
75-Re-166g
75-Re-167g
75-Re-167m1
75-Re-168g
75-Re-169g

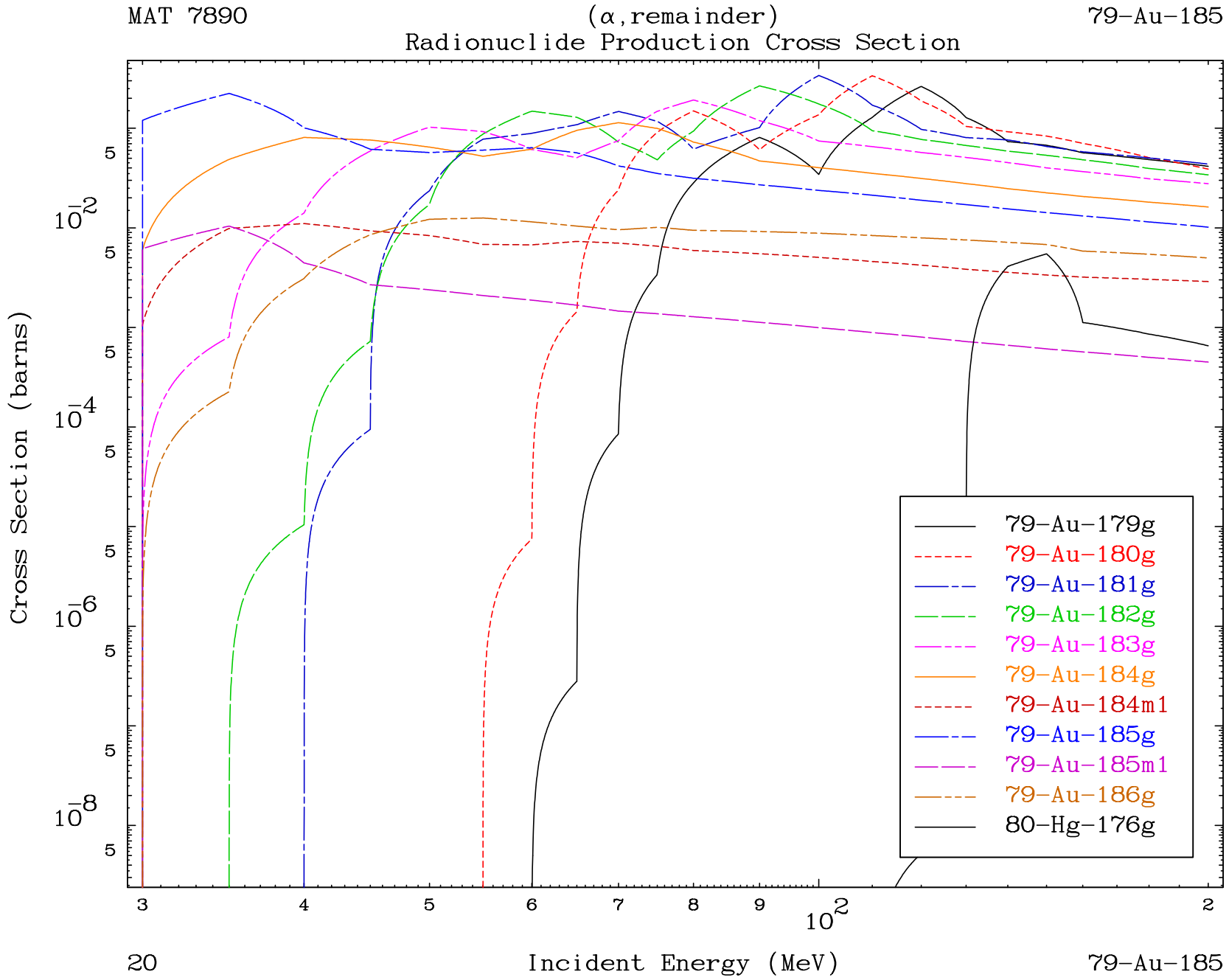

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
Incident Energy (MeV)
15
79-Au-185
75-Re-169m1
75-Re-170g
75-Re-171g
76-Os-166g
76-Os-167g
76-Os-168g
76-Os-169g
76-Os-170g
76-Os-171g
76-Os-172g
76-Os-173g

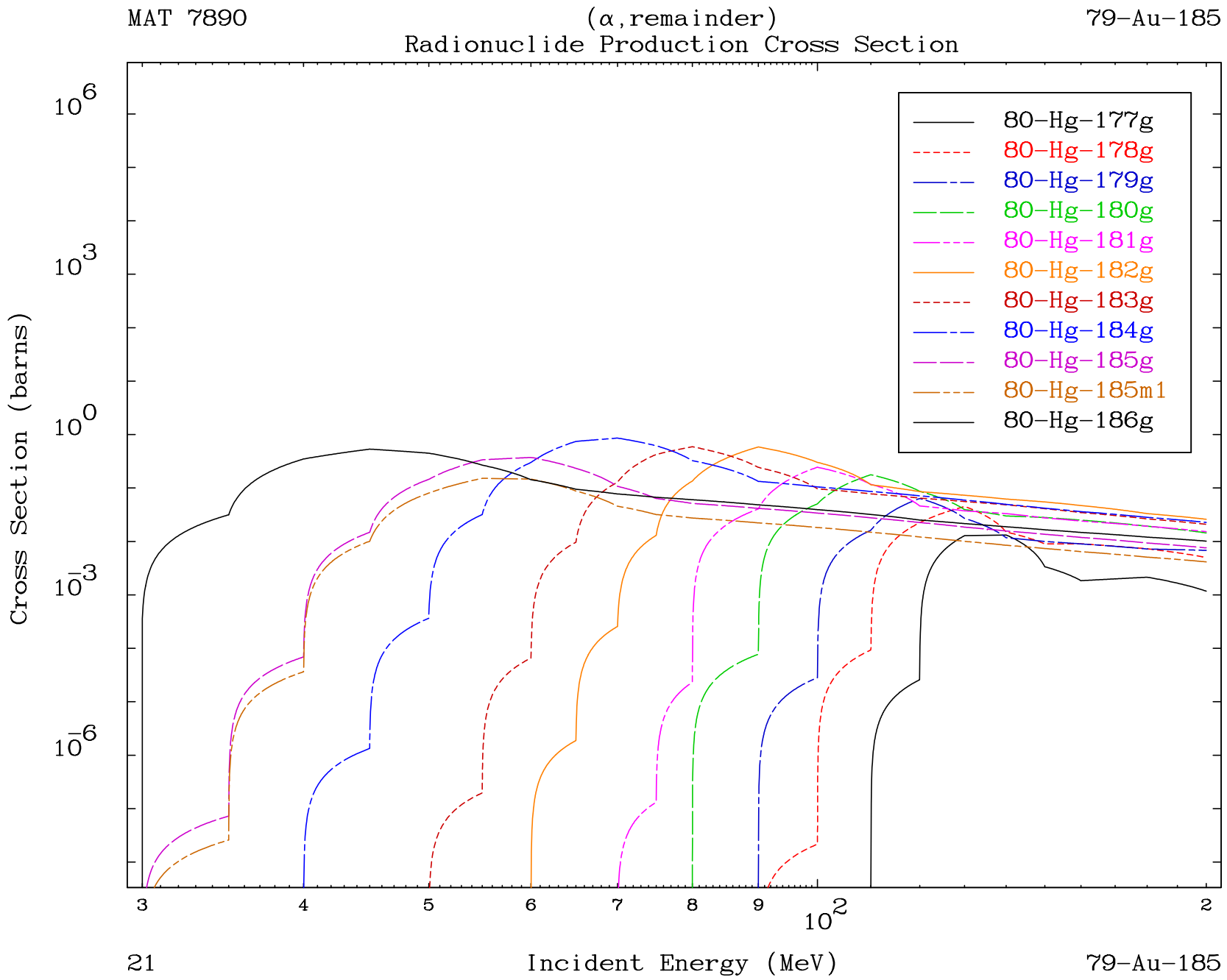

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
79-Au-185
76-Os-174g
76-Os-175g
77-Ir-168g
77-Ir-169g
77-Ir-169m1
77-Ir-170g
77-Ir-171g
77-Ir-171m1
77-Ir-172g
77-Ir-172m1
77-Ir-173g

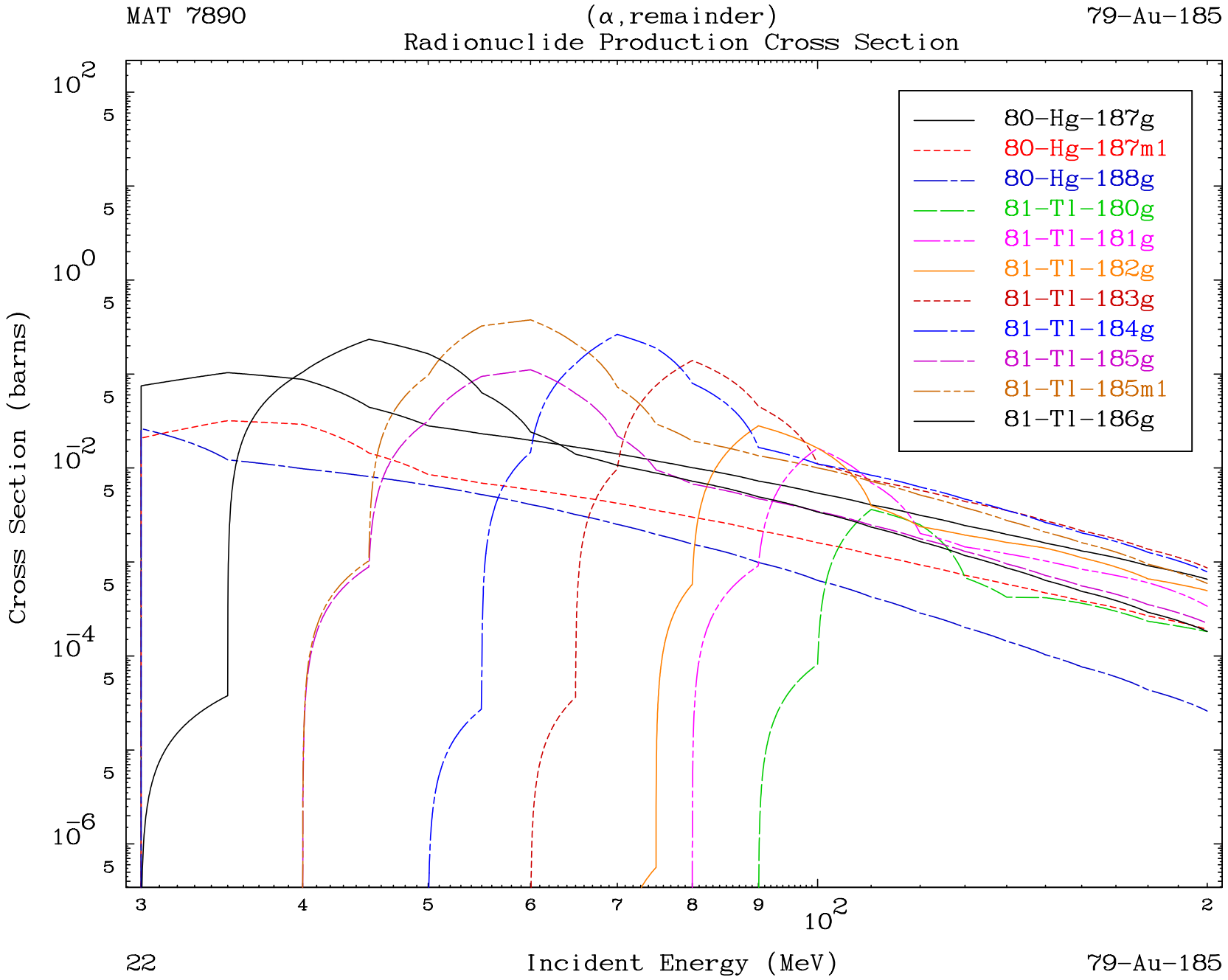

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
77-Ir-173m1
77-Ir-174g
77-Ir-174m1
77-Ir-175g
77-Ir-176g
77-Ir-177g
77-Ir-178g
77-Ir-179g
77-Ir-180g
78-Pt-170g
78-Pt-171g
17
Incident Energy (MeV)
79-Au-185

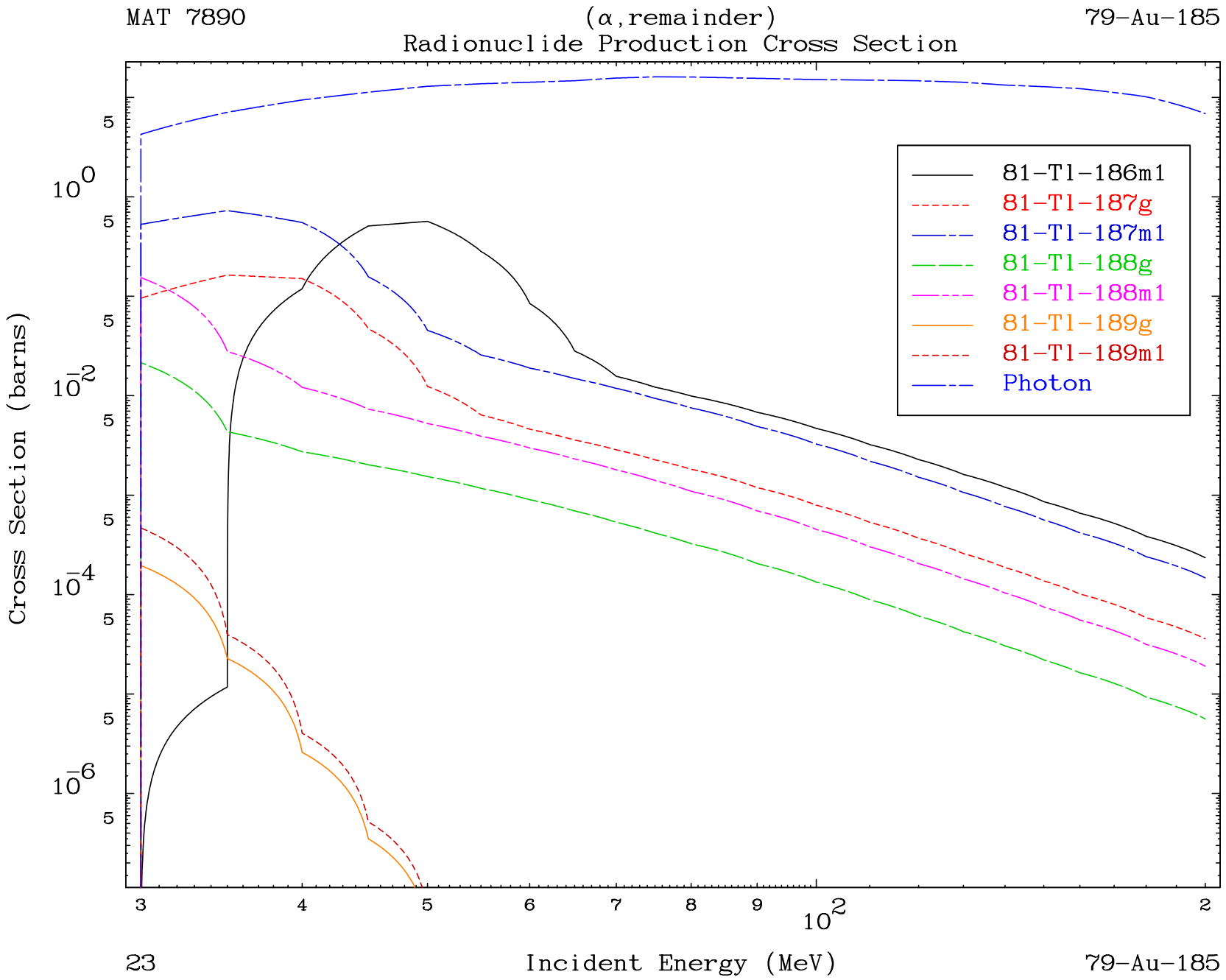

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
78-Pt-172g
78-Pt-173g
78-Pt-174g
78-Pt-175g
78-Pt-176g
78-Pt-177g
78-Pt-178g
78-Pt-179g
78-Pt-180g
78-Pt-181g
78-Pt-182g

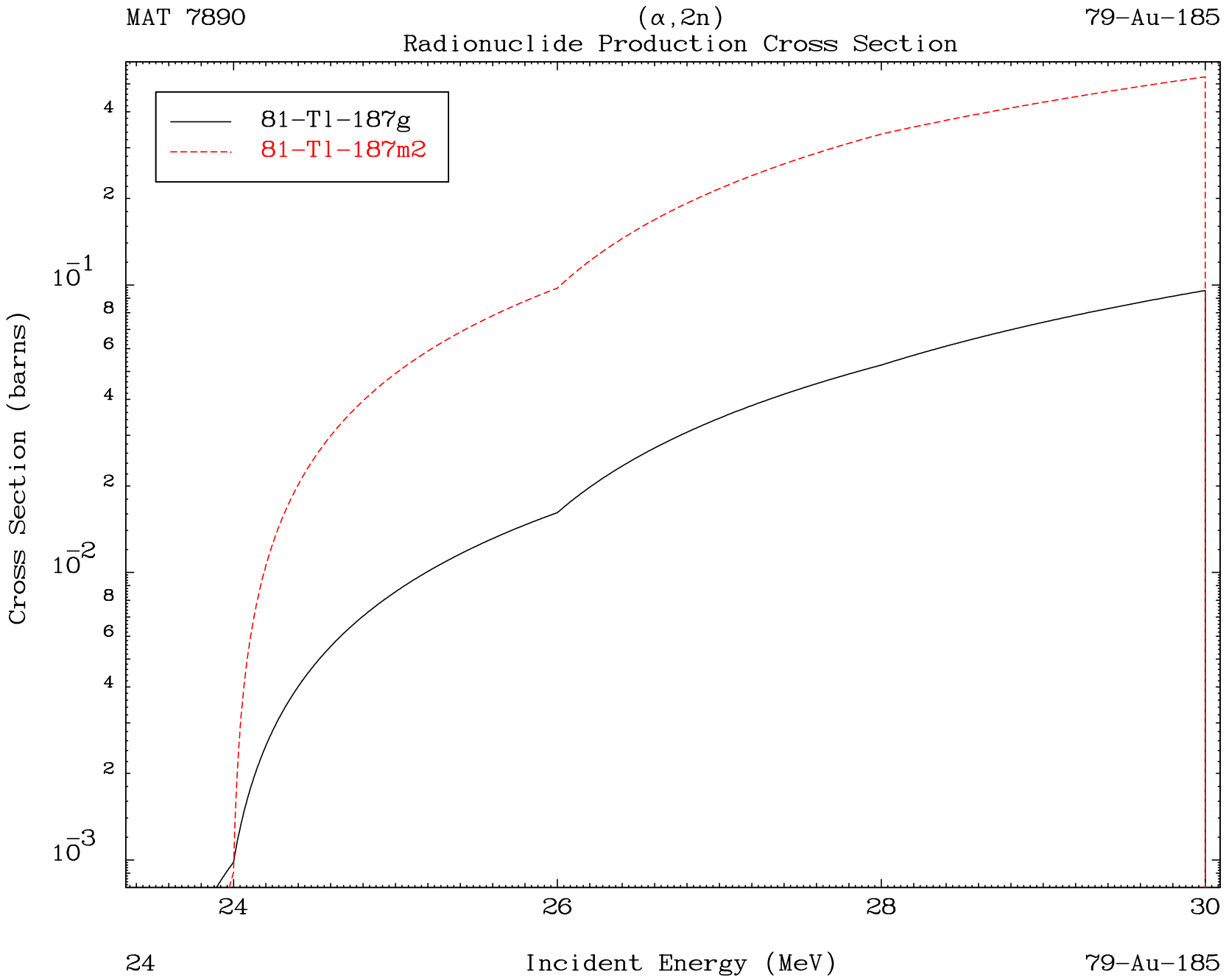

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
78-Pt-184g
79-Au-173g
79-Au-174g
79-Au-175g
79-Au-176g
79-Au-176m1
79-Au-177g
79-Au-177m1
79-Au-178g
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
19
Incident Energy (MeV)
79-Au-185

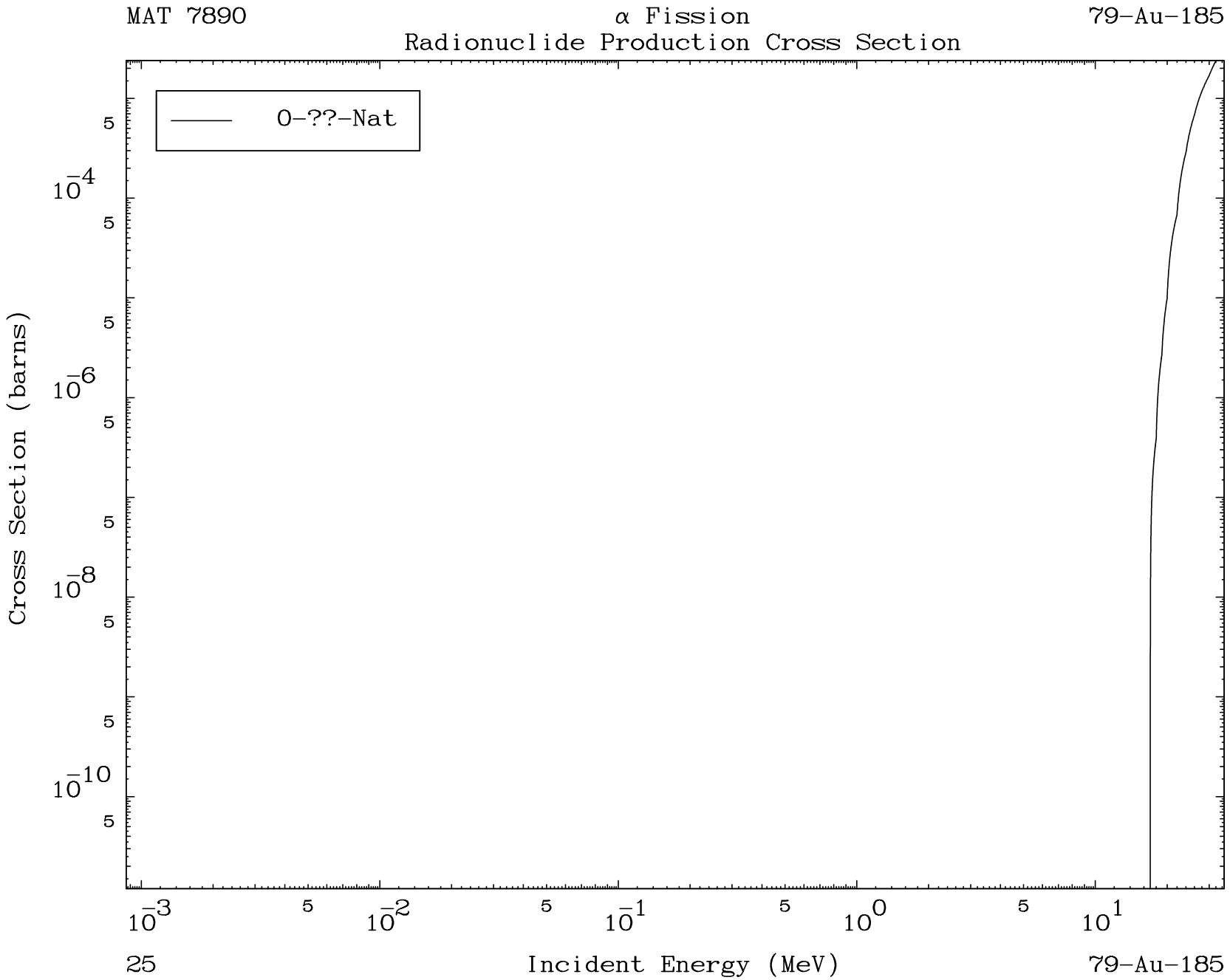

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
79-Au-179g
79-Au-180g
79-Au-181g
79-Au-182g
79-Au-183g
79-Au-184g
79-Au-184m1
79-Au-185g
79-Au-185m1
79-Au-186g
80-Hg-176g
20
Incident Energy (MeV)
79-Au-185

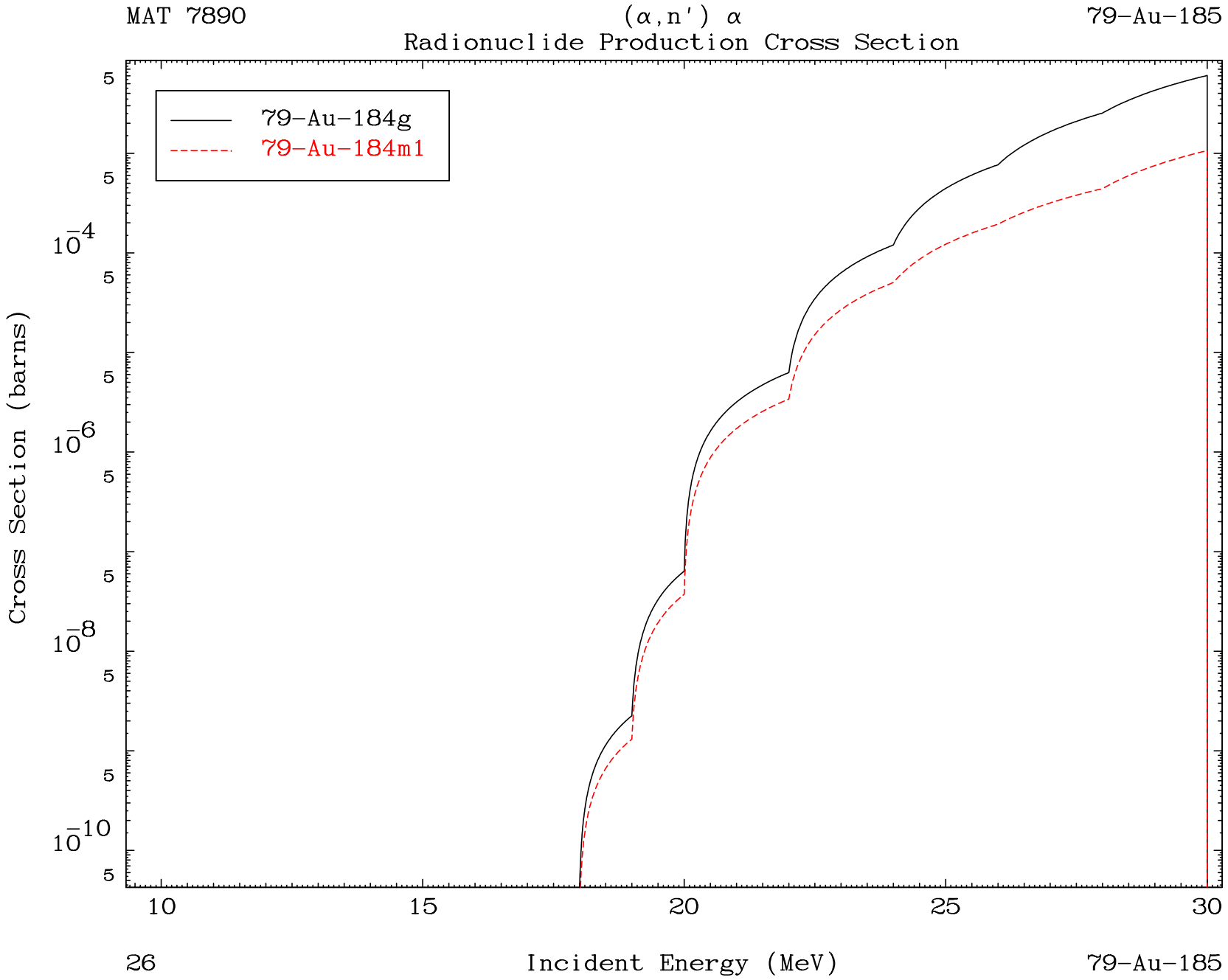

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
80-Hg-177g
80-Hg-178g
80-Hg-179g
80-Hg-180g
80-Hg-181g
80-Hg-182g
80-Hg-183g
80-Hg-184g
80-Hg-185g
80-Hg-185m1
80-Hg-186g
3
4
5
6
7
8
9
10^2
2
21
Incident Energy (MeV)
79-Au-185

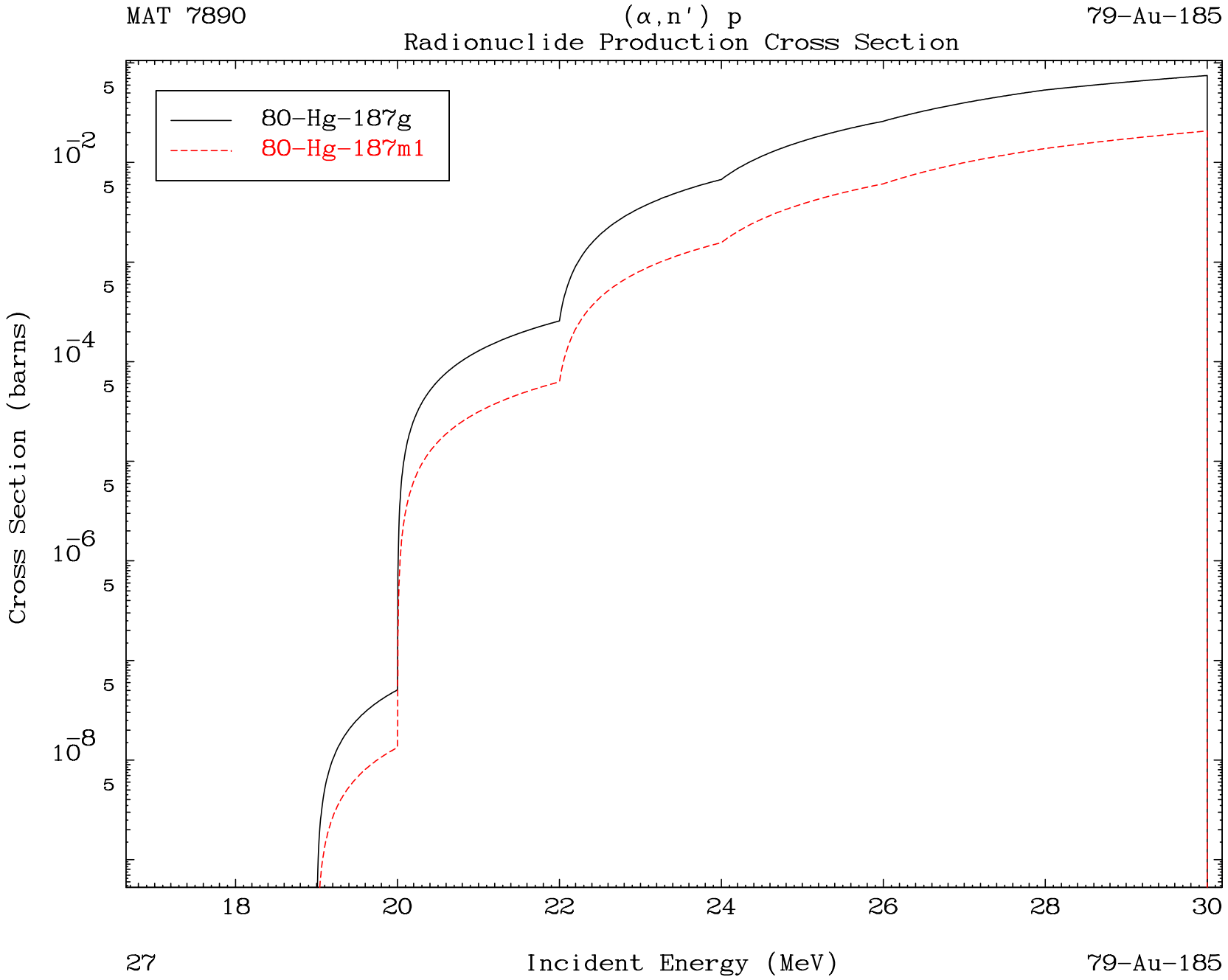

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
5
3
4
5
6
7
8
9
10^2
2
80-Hg-187g
80-Hg-187m1
80-Hg-188g
81-Tl-180g
81-Tl-181g
81-Tl-182g
81-Tl-183g
81-Tl-184g
81-Tl-185g
81-Tl-185m1
81-Tl-186g
22
Incident Energy (MeV)
79-Au-185

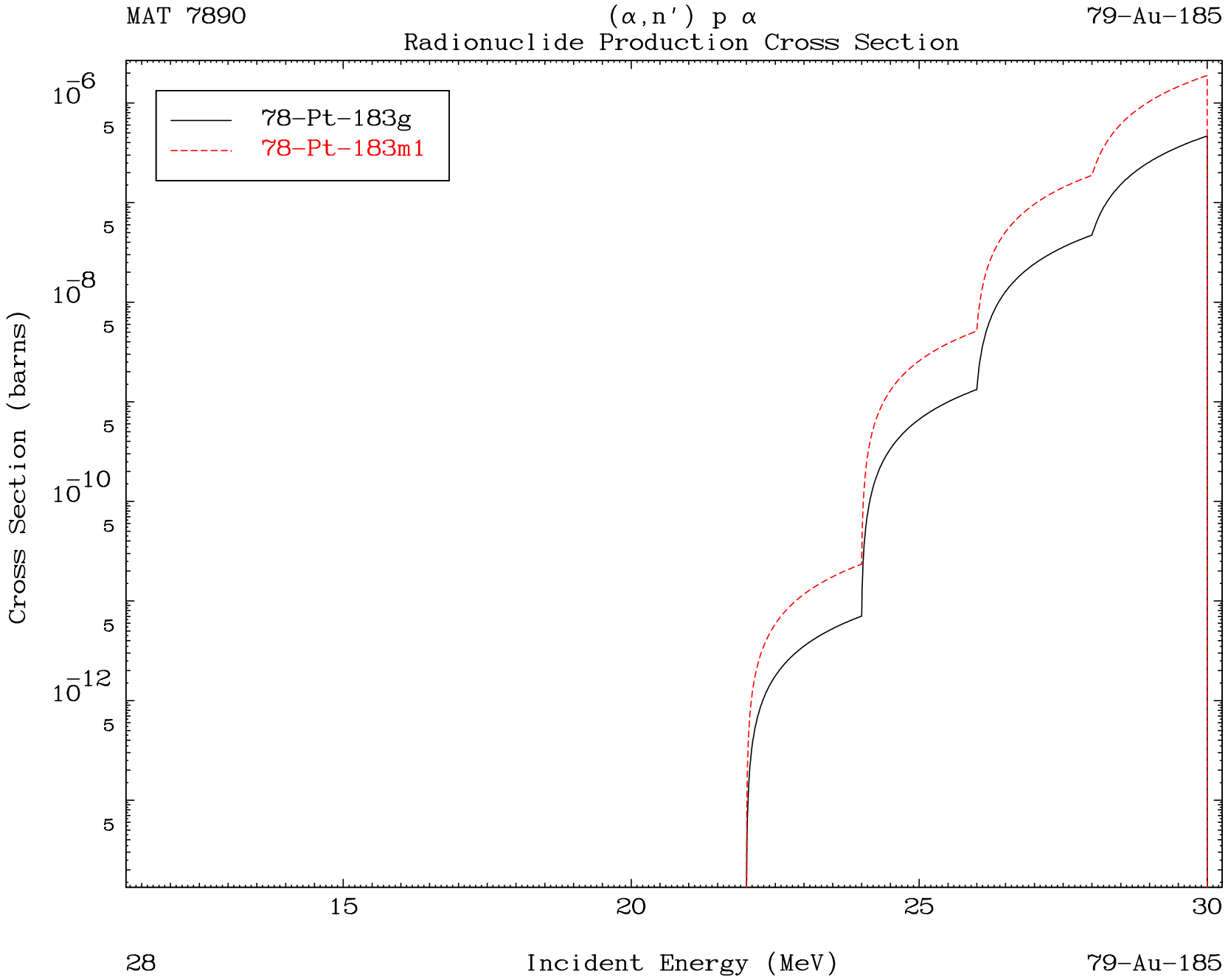

MAT 7890
(α,remainder)
79-Au-185
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
3
4
5
6
7
8
9
10^2
2
81-Tl-186m1
81-Tl-187g
81-Tl-187m1
81-Tl-188g
81-Tl-188m1
81-Tl-189g
81-Tl-189m1
Photon
23
Incident Energy (MeV)
79-Au-185

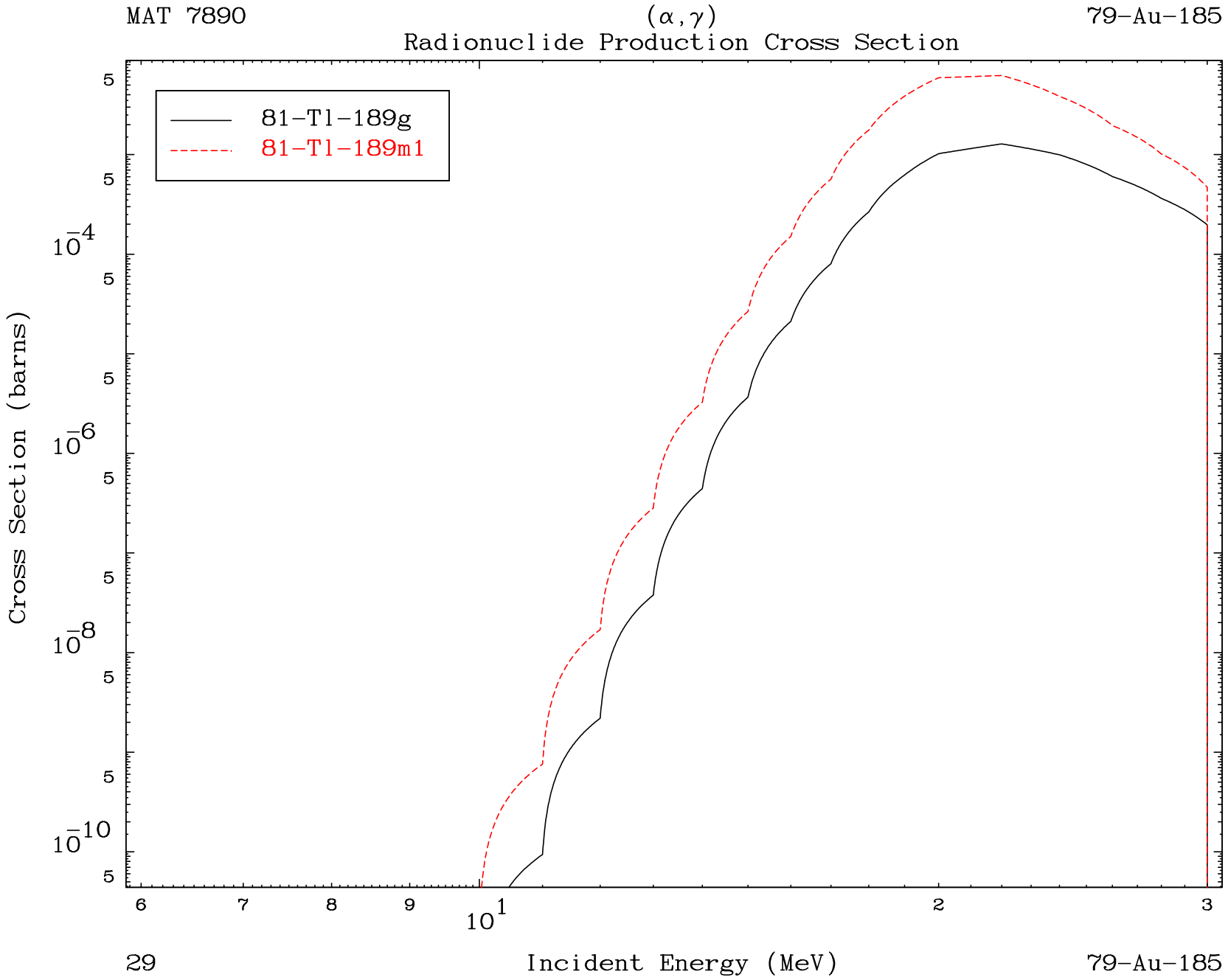

MAT 7890
(α,2n)
79-Au-185
Radionuclide Production Cross Section
81-Tl-187g
81-Tl-187m2
Cross Section (barns)
10-1
10-2
10-3
24
26
28
30
24
Incident Energy (MeV)
79-Au-185

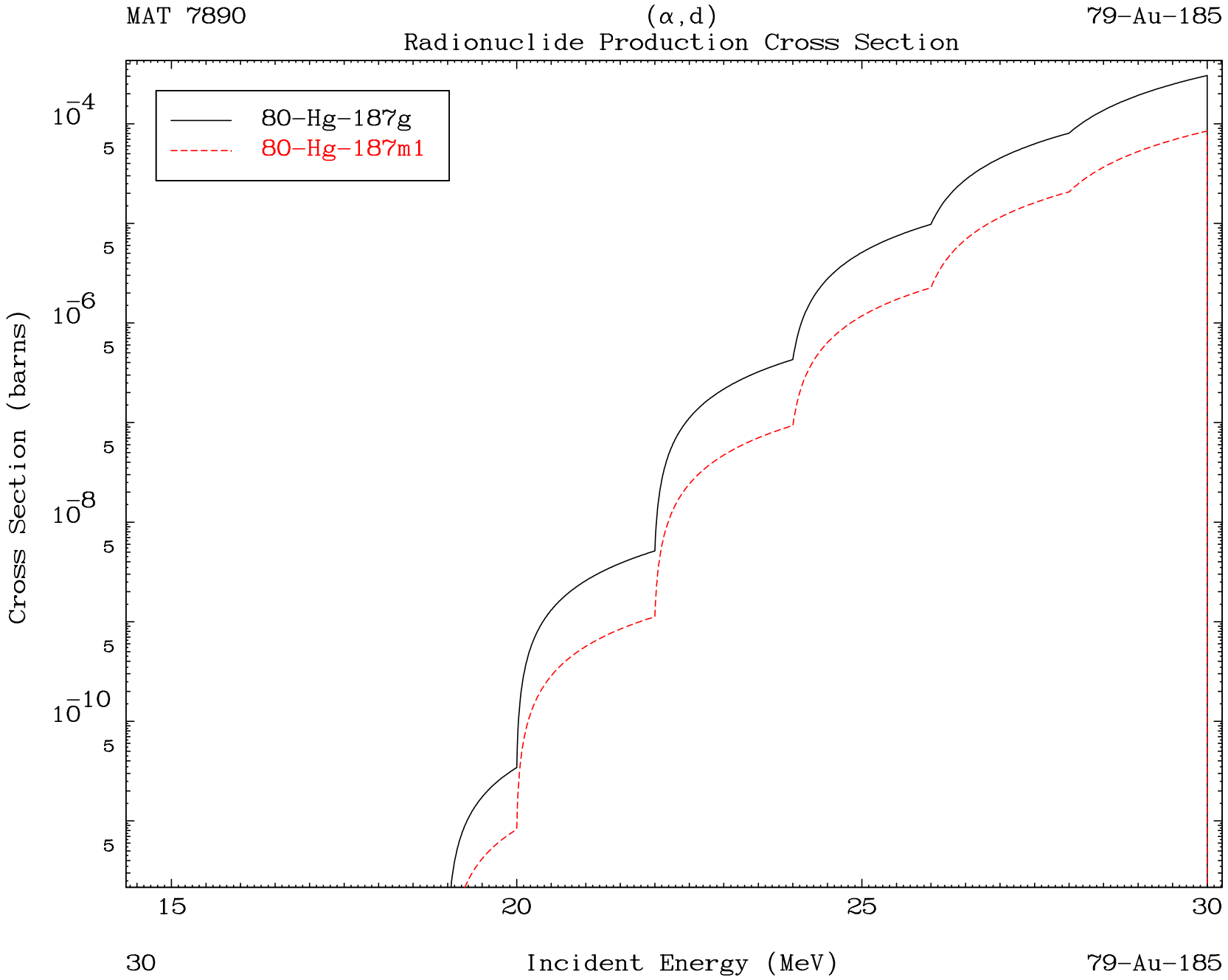

MAT 7890
α Fission
79-Au-185
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
10-4
10-6
10-8
10-10
10-3
10-2
10-1
100
101
Incident Energy (MeV)
25
79-Au-185

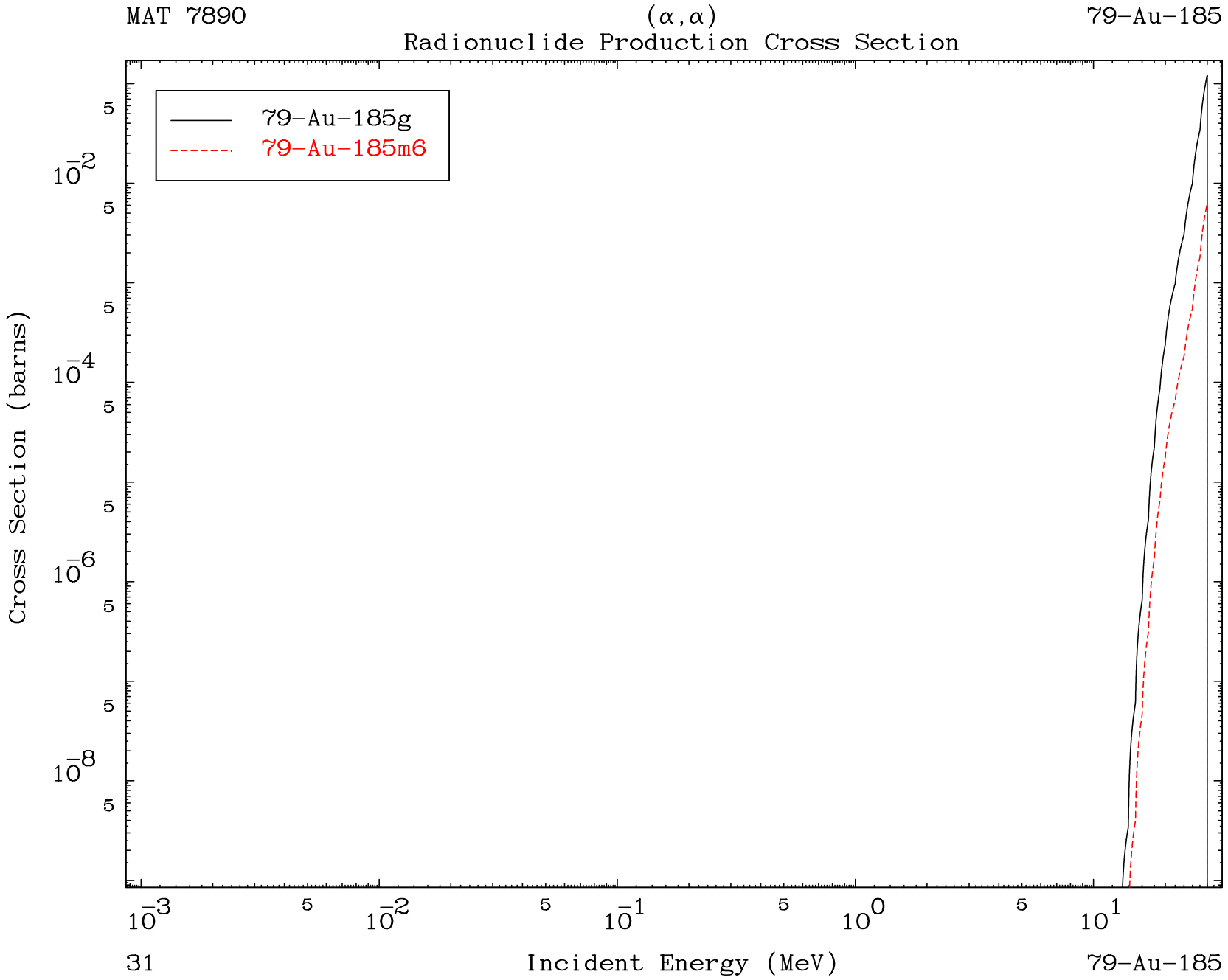

MAT 7890
(α,n') α
79-Au-185
Radionuclide Production Cross Section
79-Au-184g
79-Au-184m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10
15
20
25
30
26
Incident Energy (MeV)
79-Au-185

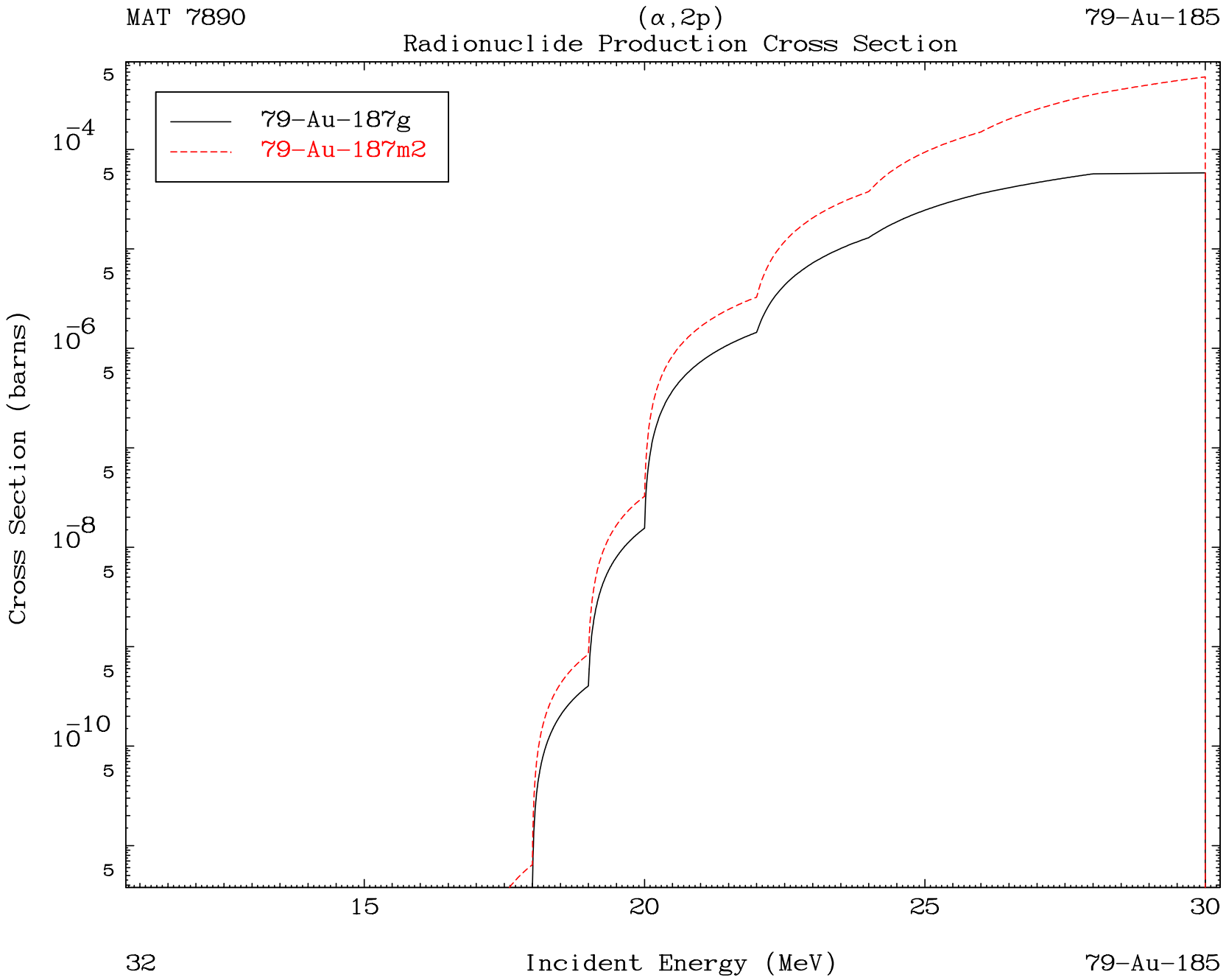

MAT 7890
(α,n') p
79-Au-185
Radionuclide Production Cross Section
80-Hg-187g
80-Hg-187m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
18
20
22
24
26
28
30
27
Incident Energy (MeV)
79-Au-185

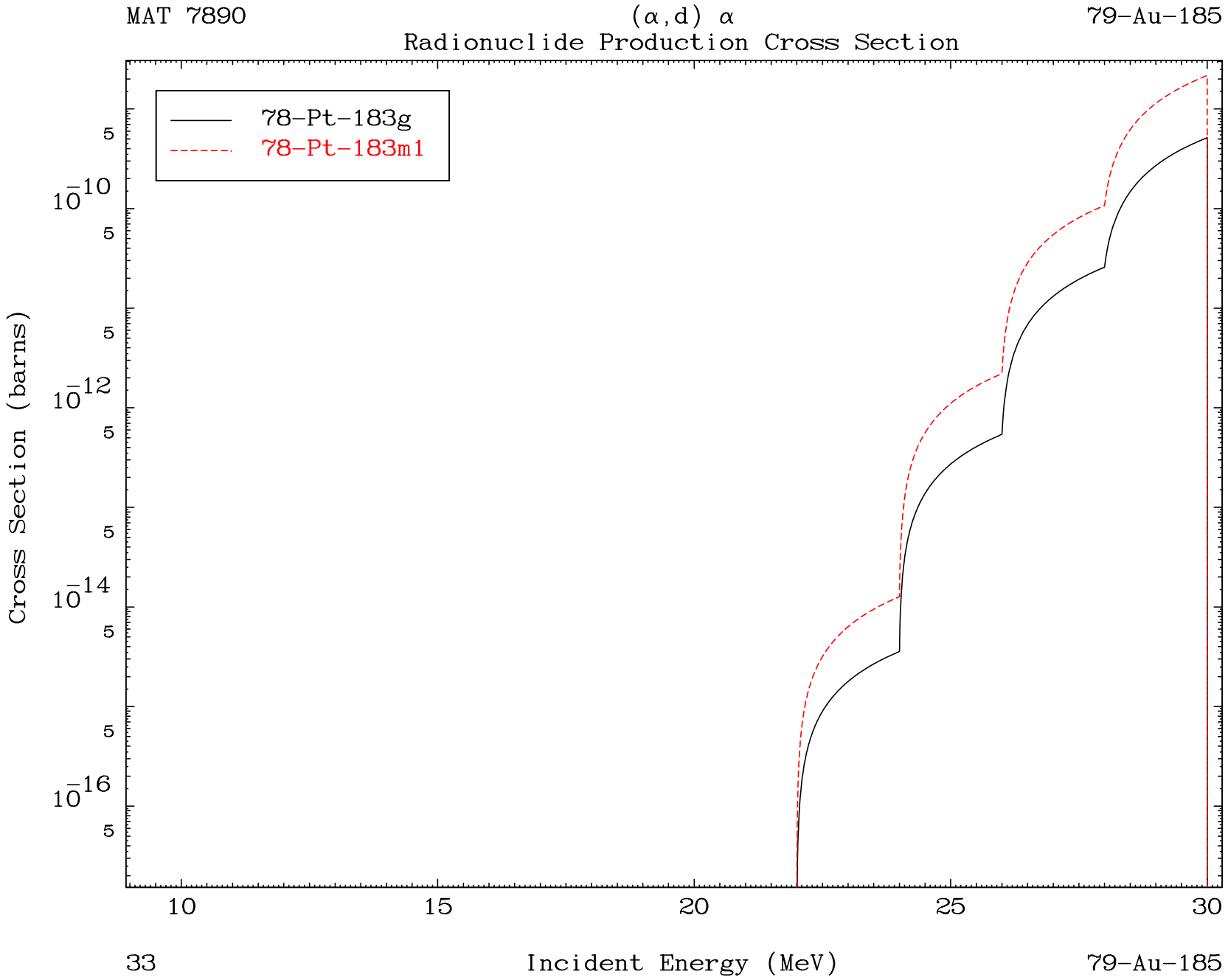

MAT 7890
(α,n') p α
79-Au-185
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
15
20
25
30
28
Incident Energy (MeV)
79-Au-185


MAT 7890
(α,γ)
79-Au-185
Radionuclide Production Cross Section
81-Tl-189g
81-Tl-189m1
Cross Section (barns)
10-4
10-6
10-8
10-10
6
7
8
9
10 1
2
3
29
Incident Energy (MeV)
79-Au-185


MAT 7890
(α,d)
79-Au-185
Radionuclide Production Cross Section
80-Hg-187g
80-Hg-187m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
15
20
25
30
Incident Energy (MeV)
79-Au-185


MAT 7890
(α,α)
79-Au-185
Radionuclide Production Cross Section
79-Au-185g
79-Au-185m6
Cross Section (barns)
10-2
10-4
10-6
10-8
10-3
10-2
10-1
100
101
5
Incident Energy (MeV)
31
79-Au-185


MAT 7890
(α,2p)
79-Au-185
Radionuclide Production Cross Section
79-Au-187g
79-Au-187m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
15
20
25
30
32
Incident Energy (MeV)
79-Au-185


MAT 7890
(α,d) α
79-Au-185
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
10
15
20
25
30
33
Incident Energy (MeV)
79-Au-185