

Program EVALPLOT  
(Version 2018-1)

by

Dermott E. Cullen  
(Present Contact Information)

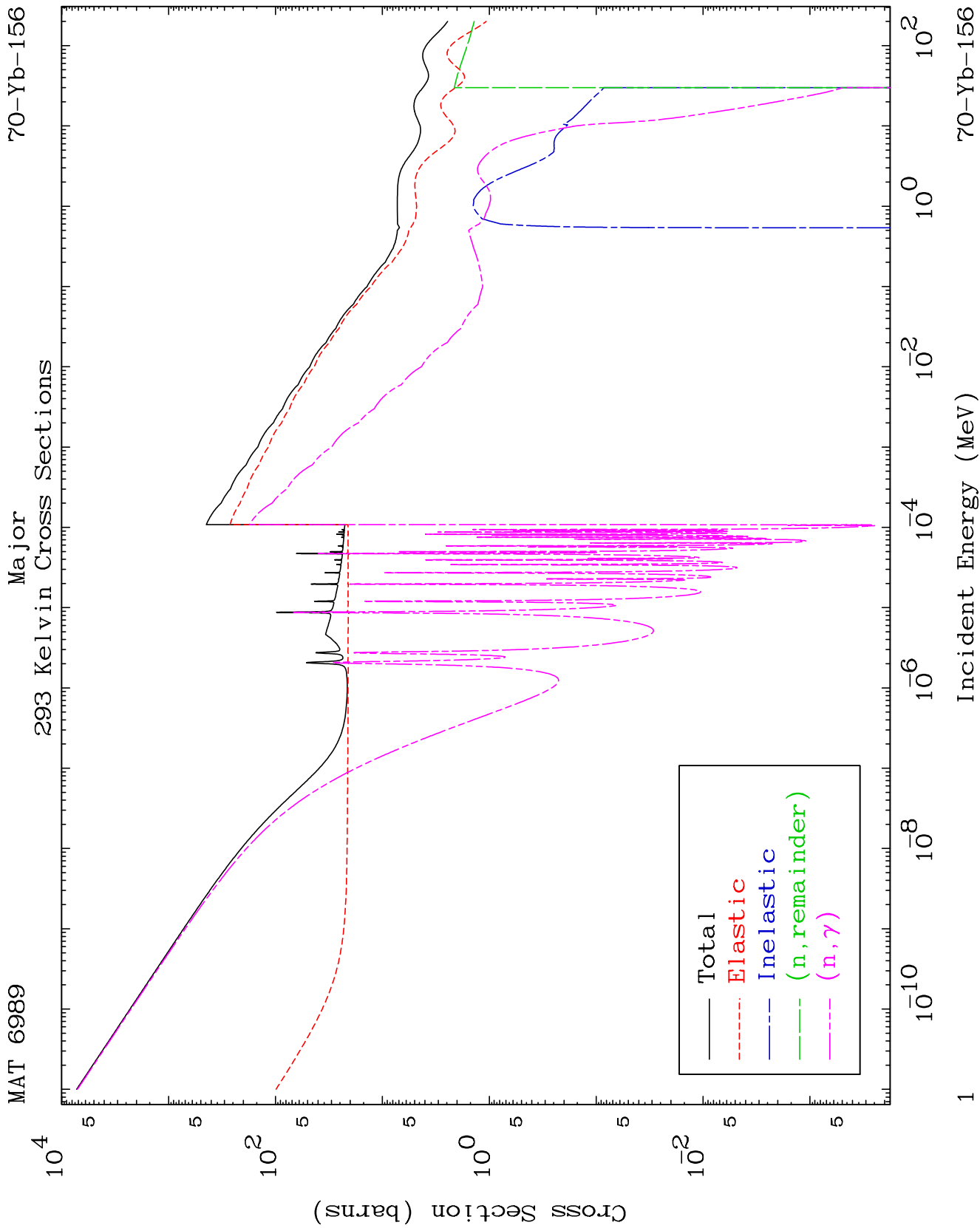
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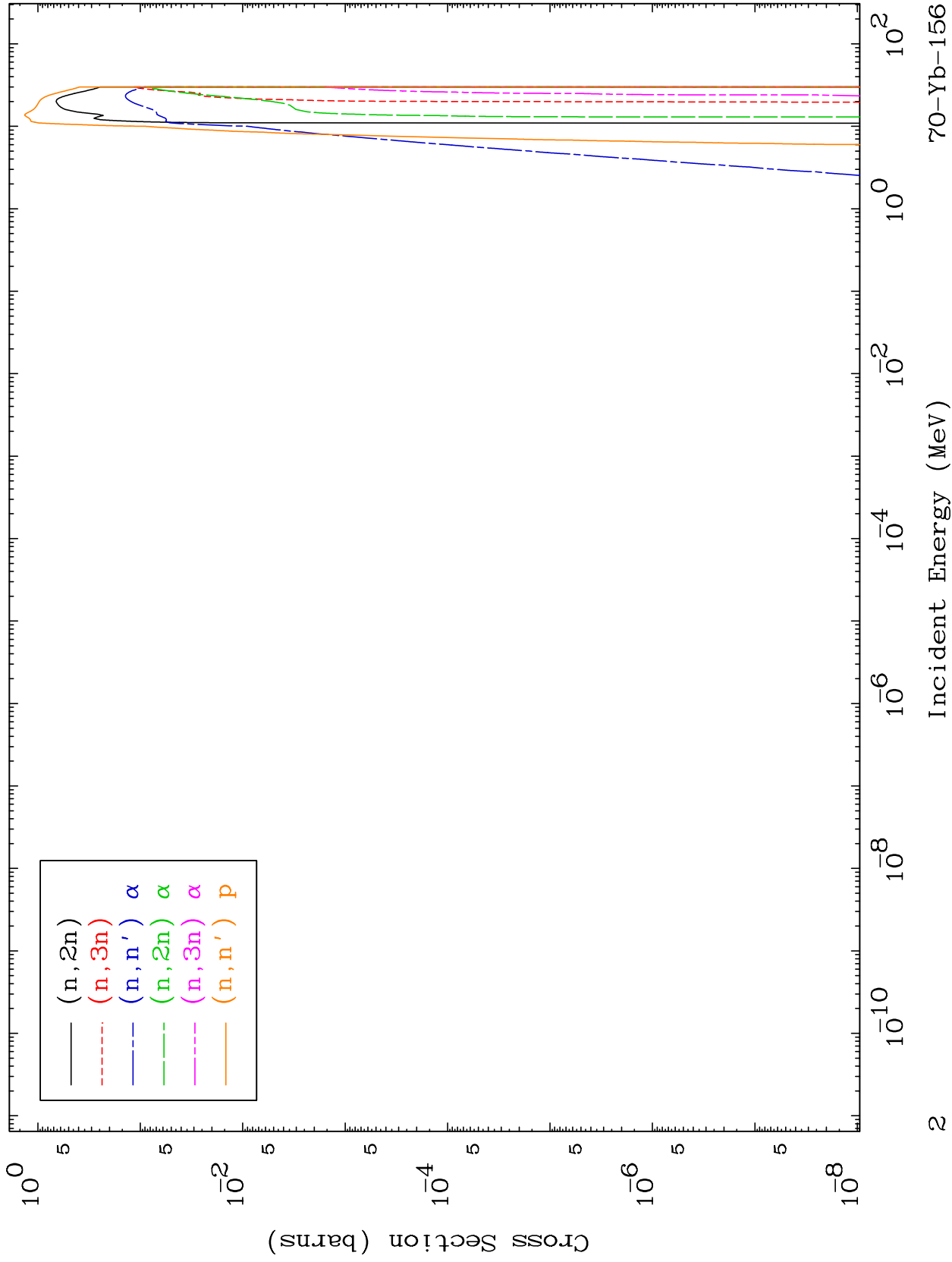
Press Mouse Button to Start



MAT 6989

Neutron Production  
293 Kelvin Cross Sections

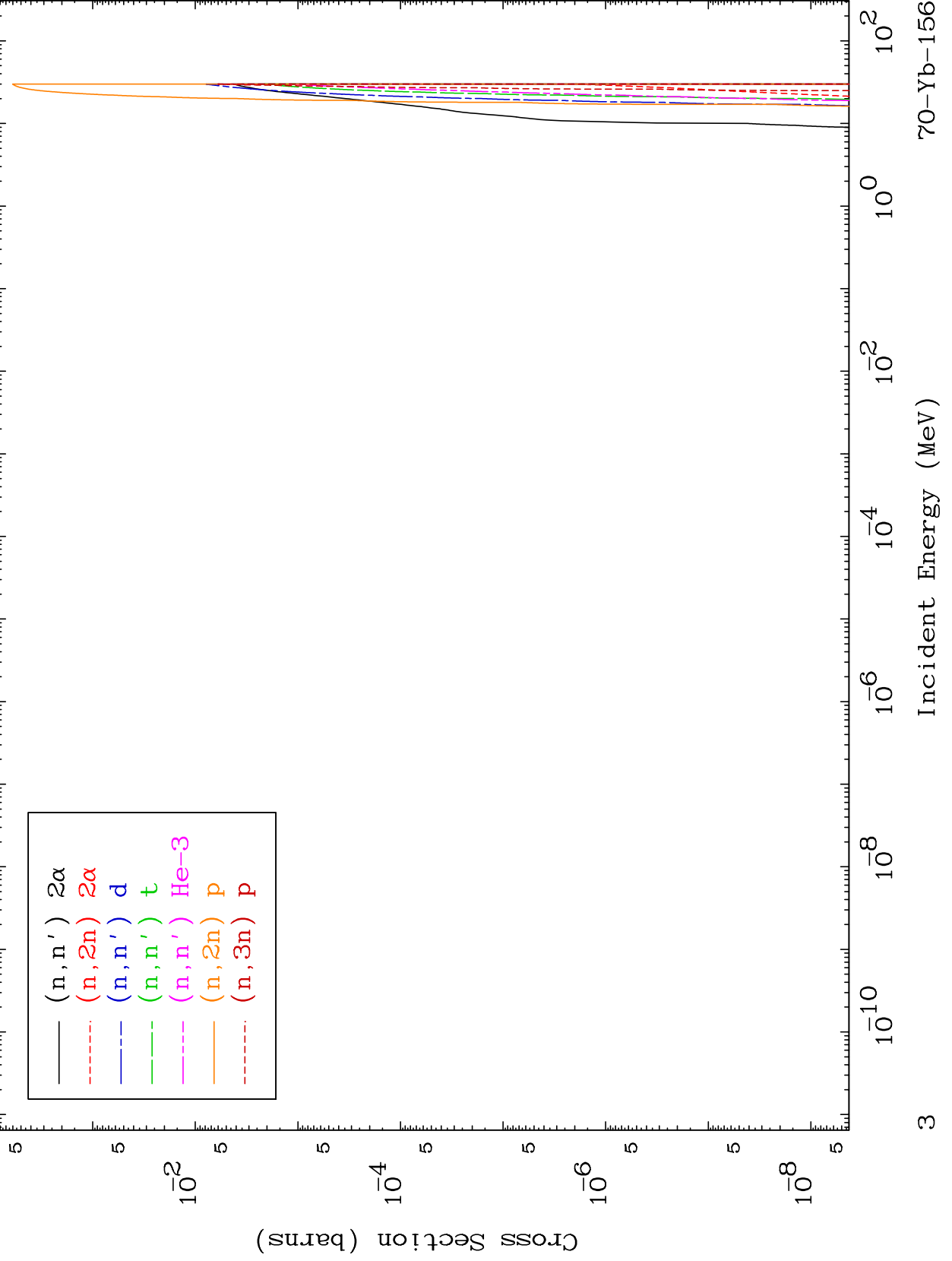
70-Yb-156



MAT 6989

Neutron Production  
293 Kelvin Cross Sections

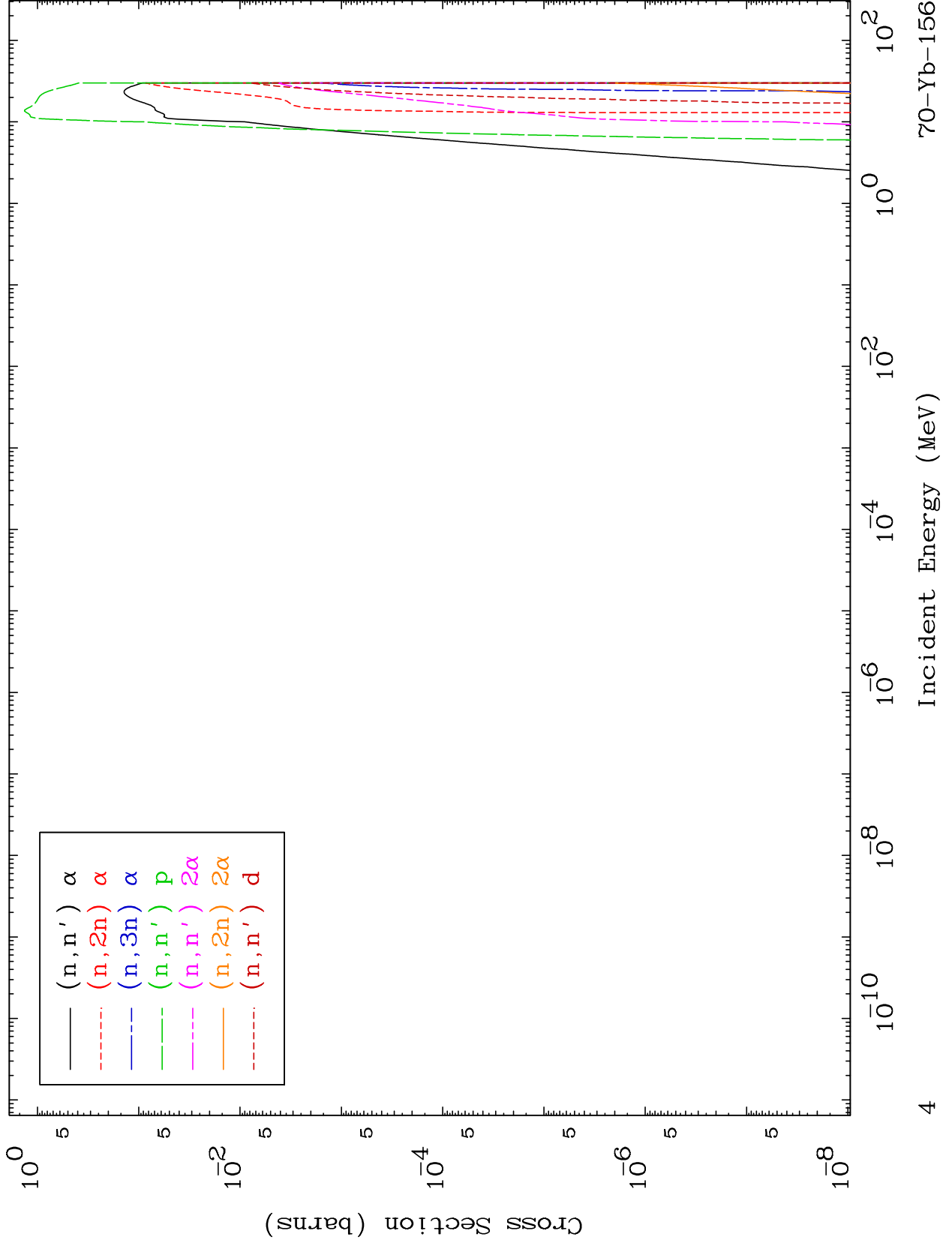
70-Yb-156



MAT 6989

Charged Particle  
293 Kelvin Cross Sections

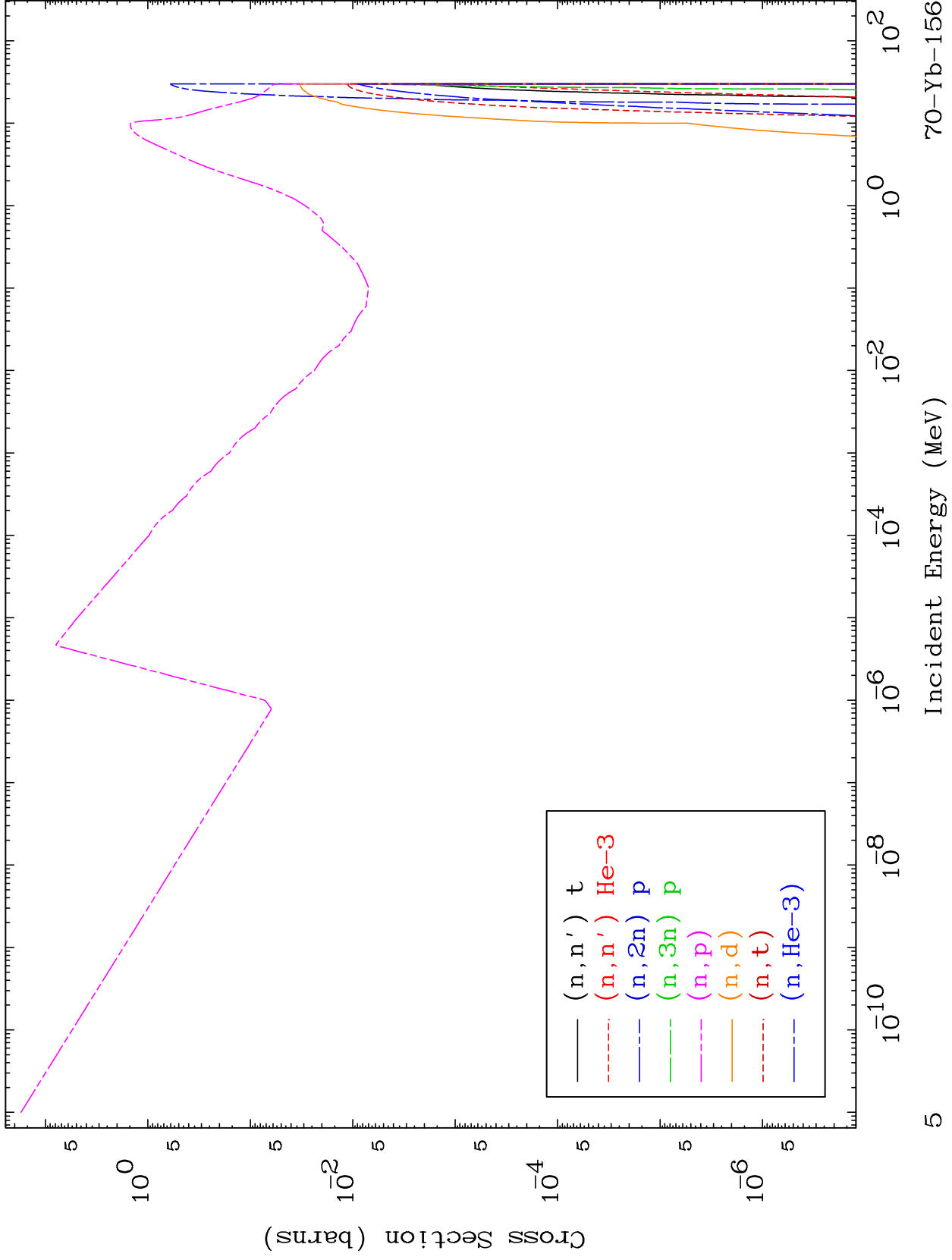
70-Yb-156



MAT 6989

Charged Particle  
293 Kelvin Cross Sections

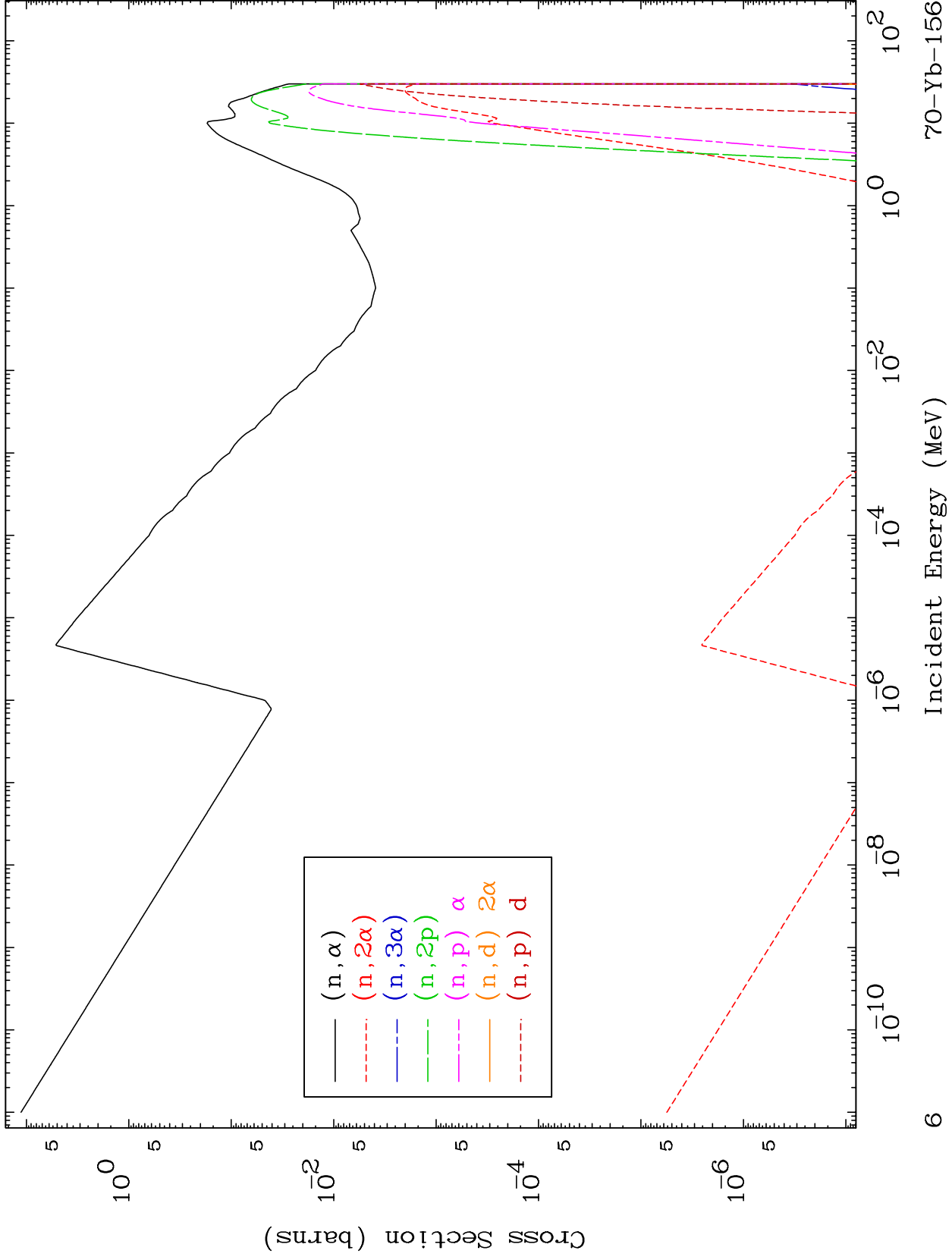
70-Yb-156



MAT 6989

Charged Particle  
293 Kelvin Cross Sections

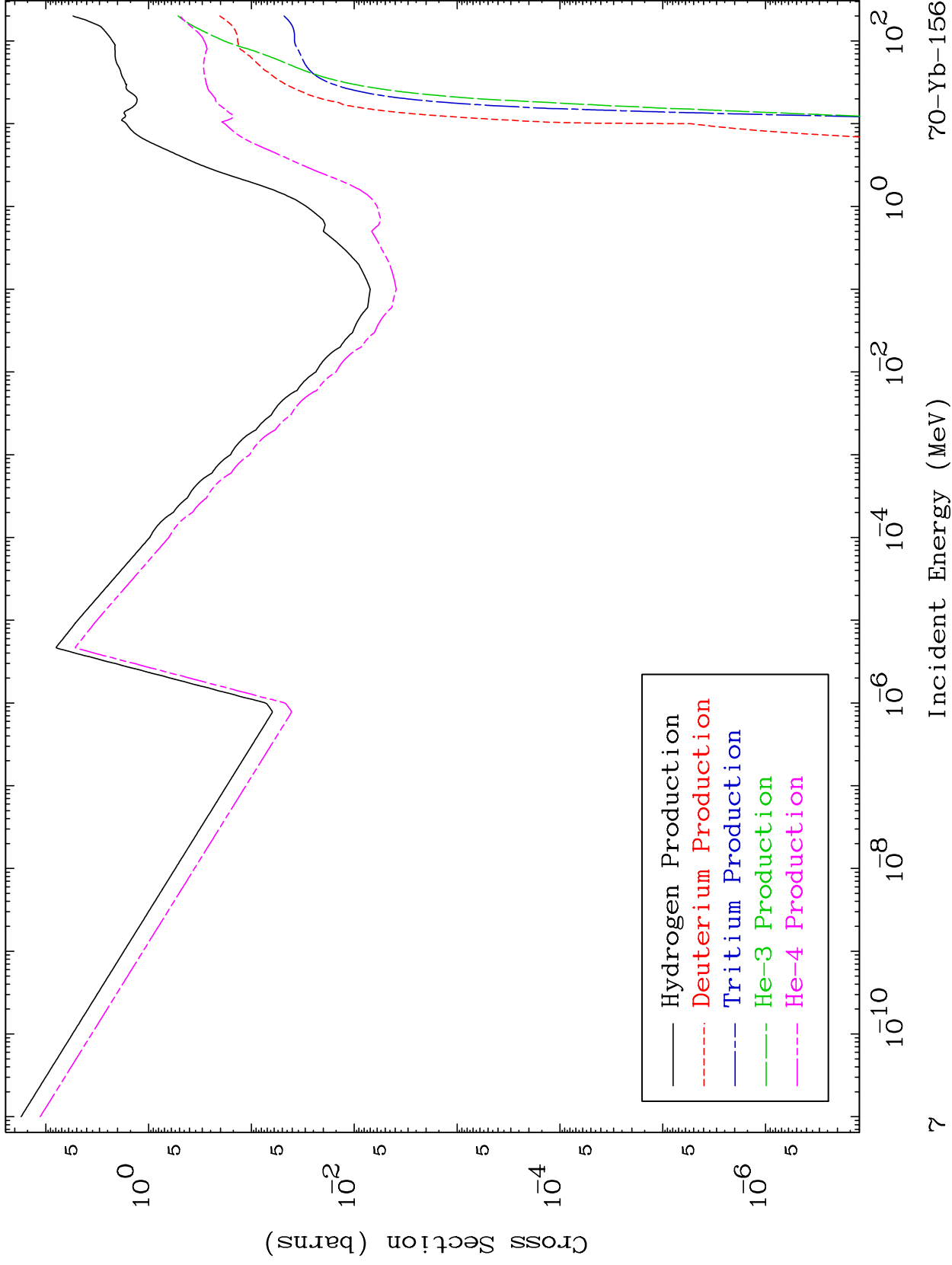
70-Yb-156



MAT 6989

Particle Production  
293 Kelvin Cross Sections

70-Yb-156



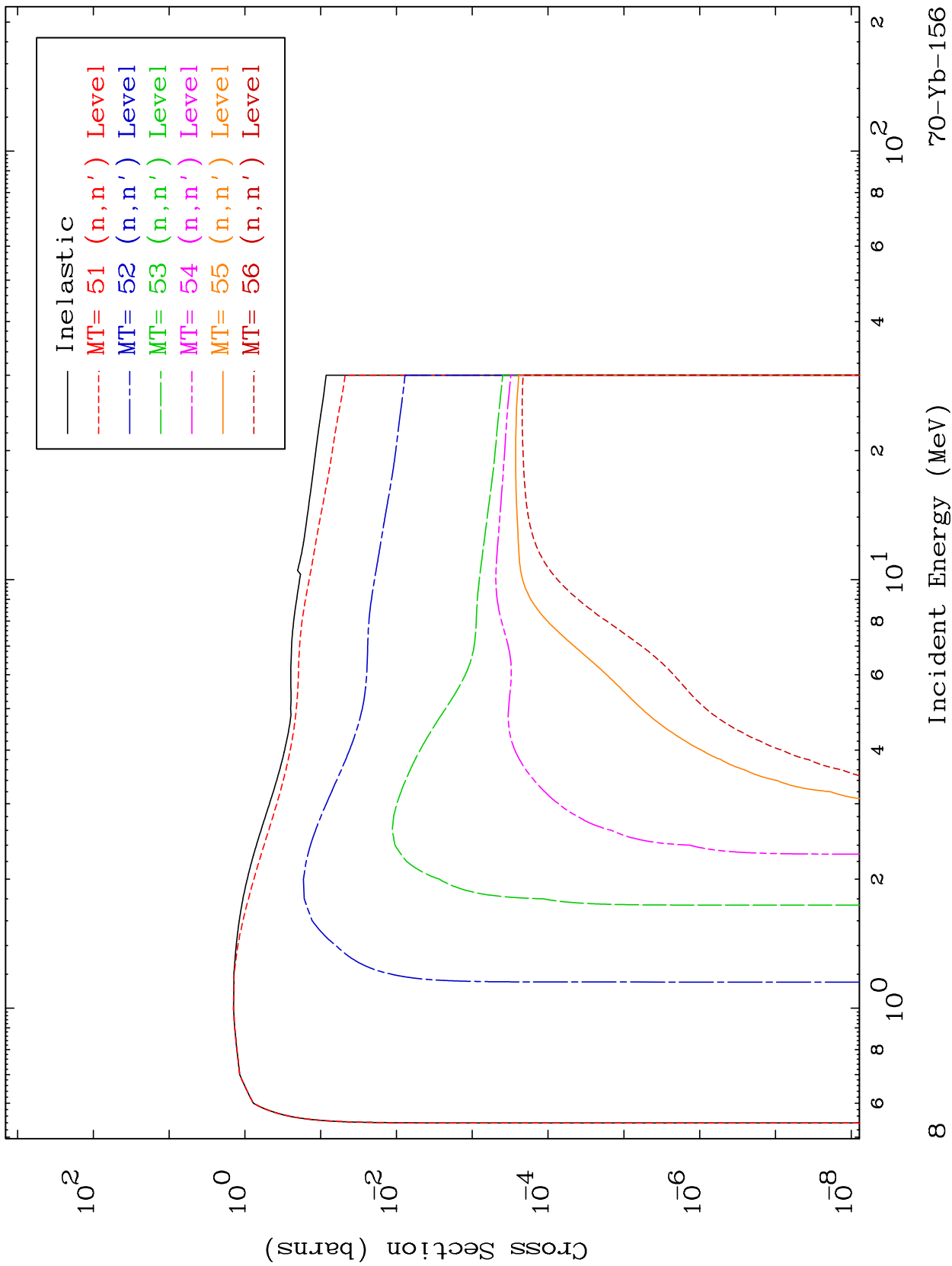


MAT 6989

(n,n') Level

70-Yb-156

293 Kelvin Cross Sections

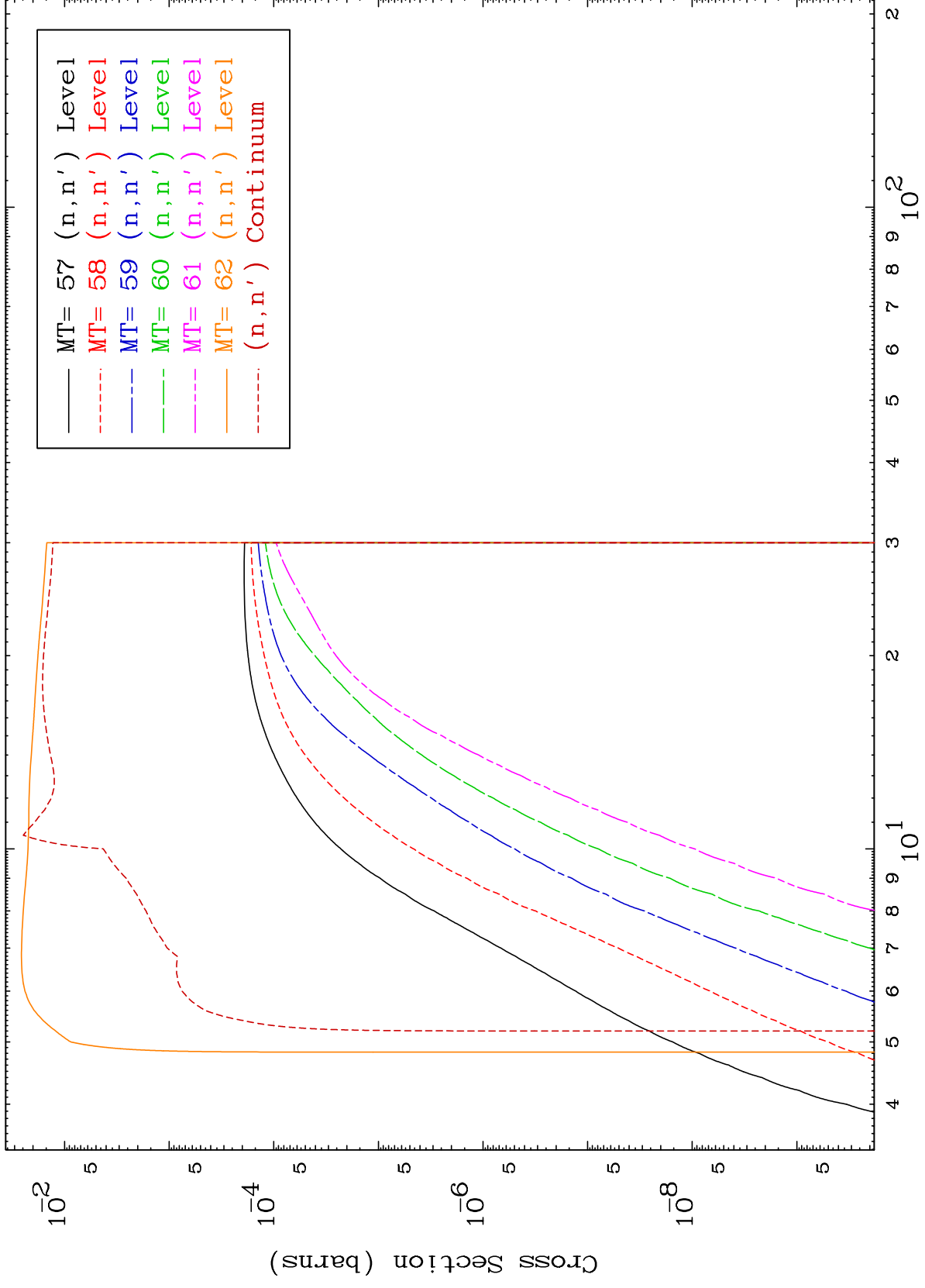


8

Incident Energy (MeV)

70-Yb-156

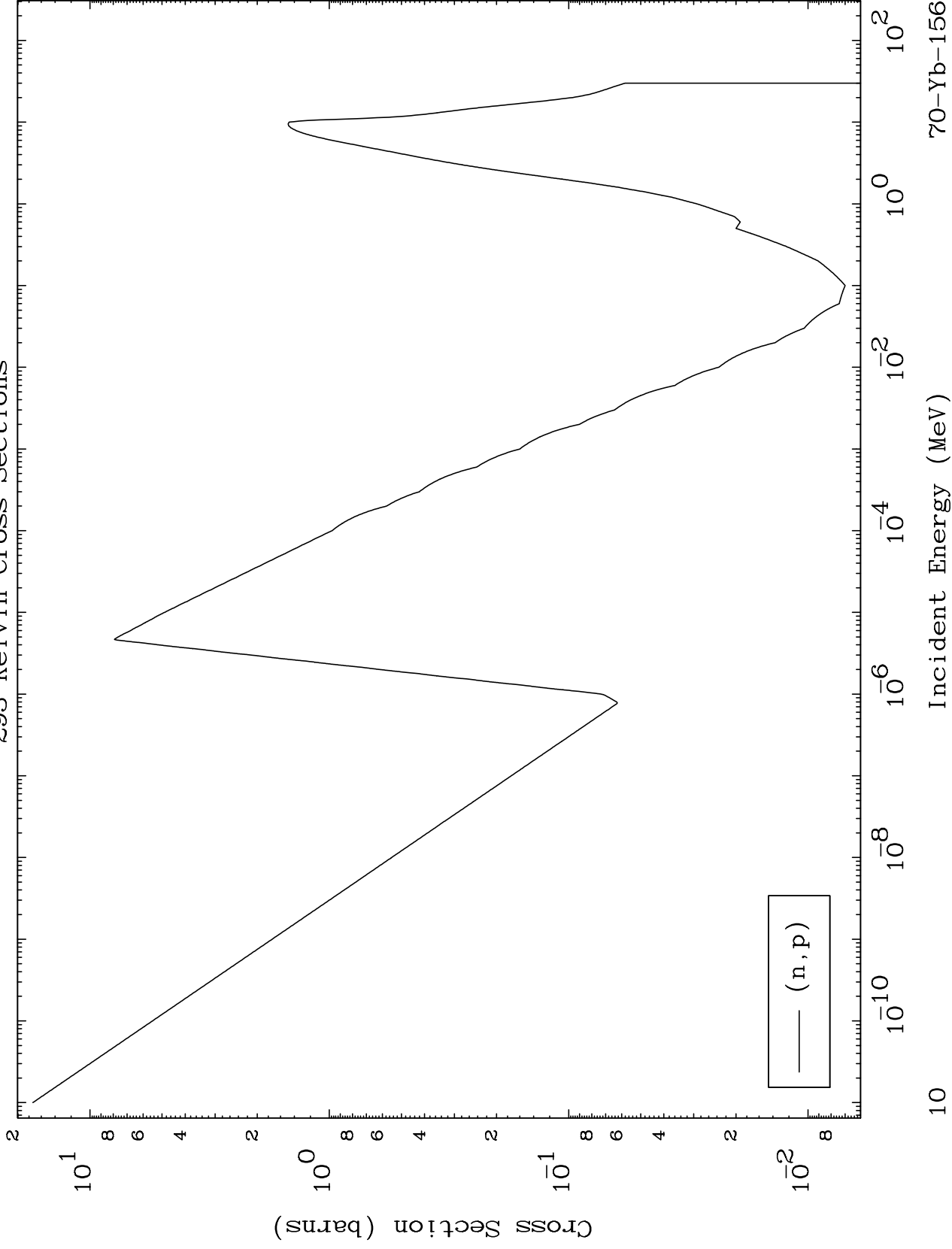
293 Kelvin Cross Sections



MAT 6989

(n,p) Levels  
293 Kelvin Cross Sections

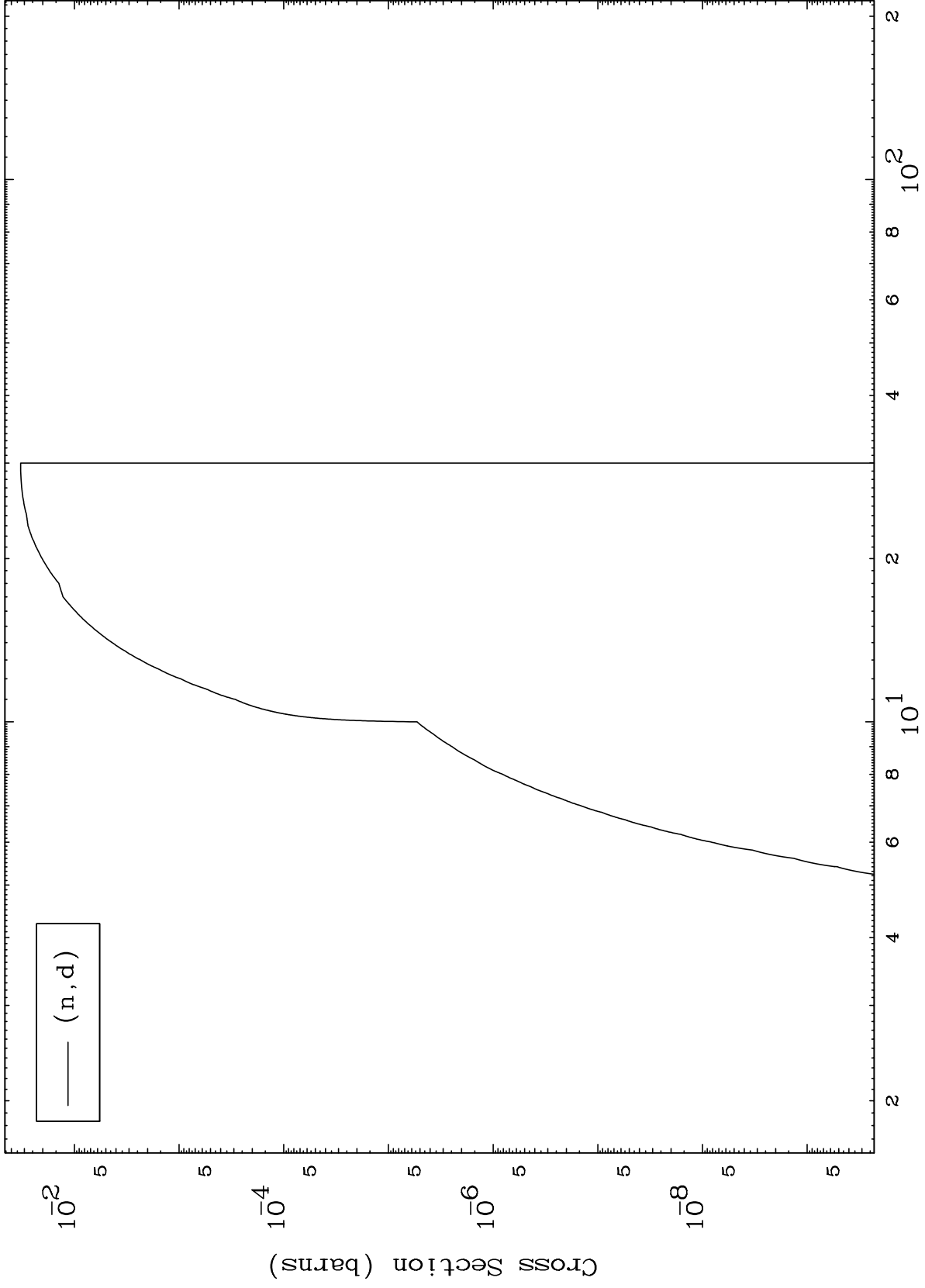
70-Yb-156



MAT 6989

(n,d) Levels  
293 Kelvin Cross Sections

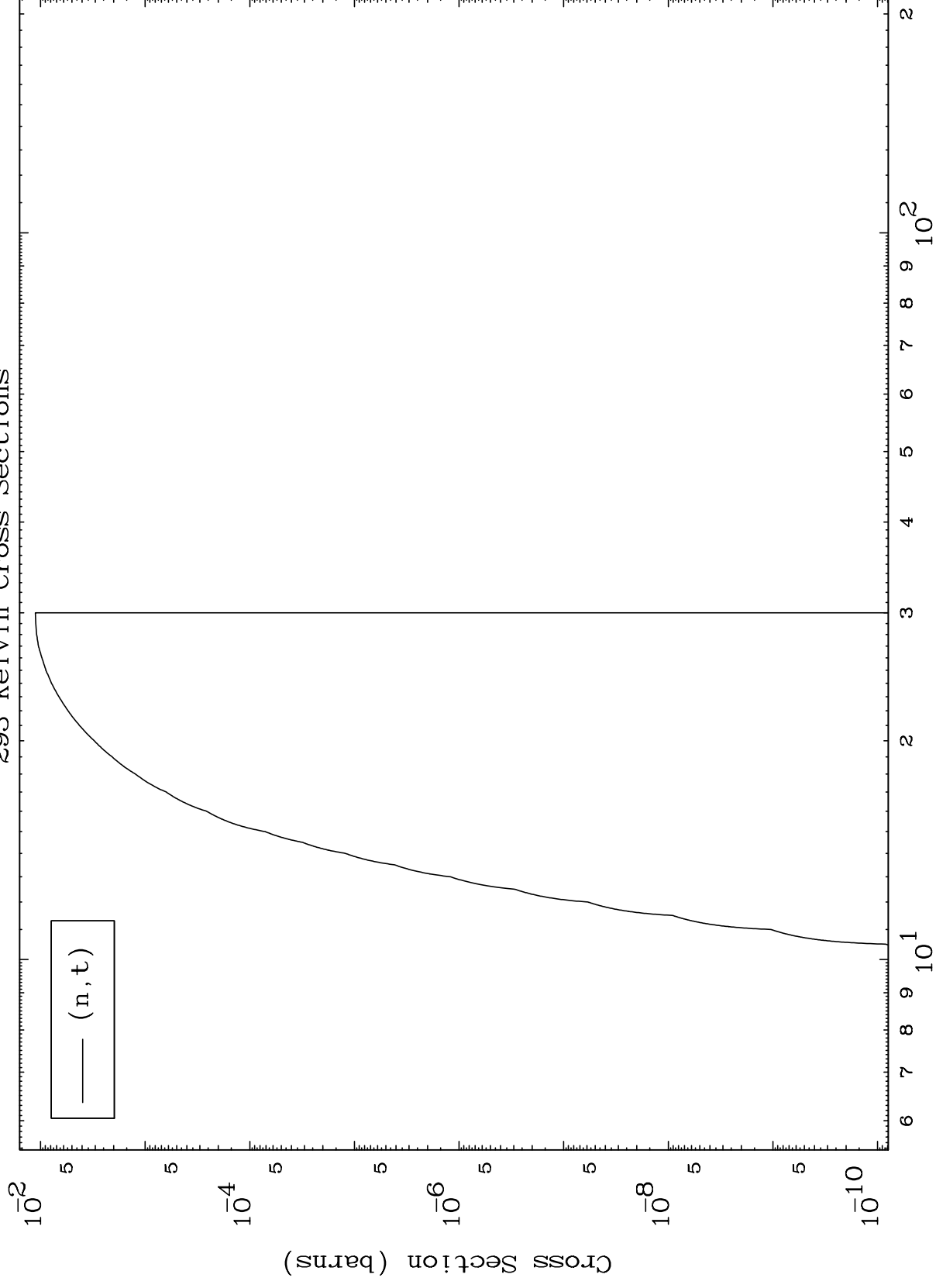
70-Yb-156



MAT 6989

70-Yb-156

(n,t) Levels  
293 Kelvin Cross Sections



70-Yb-156

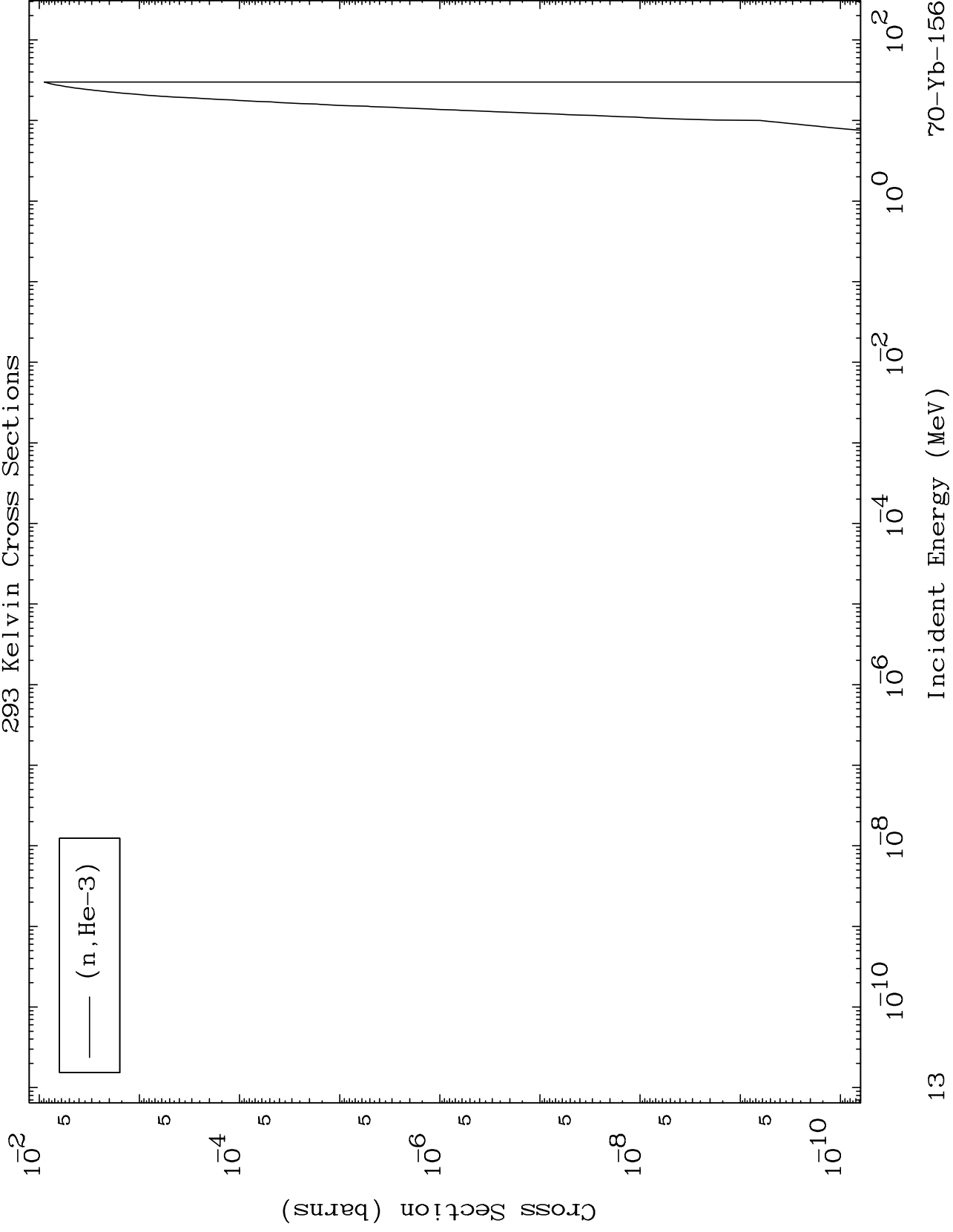
Incident Energy (MeV)

12

MAT 6989

(n,He3) Levels  
293 Kelvin Cross Sections

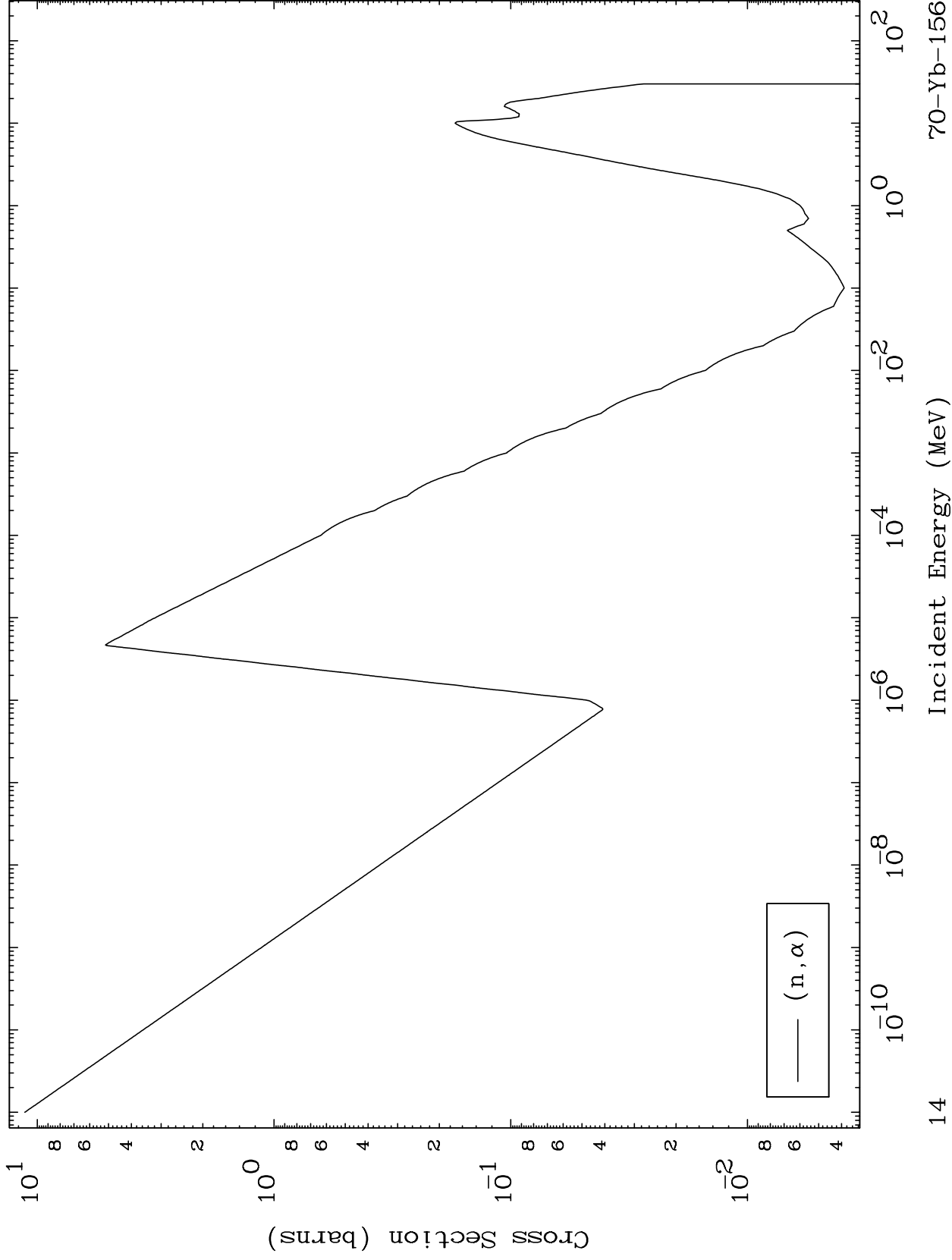
70-Yb-156

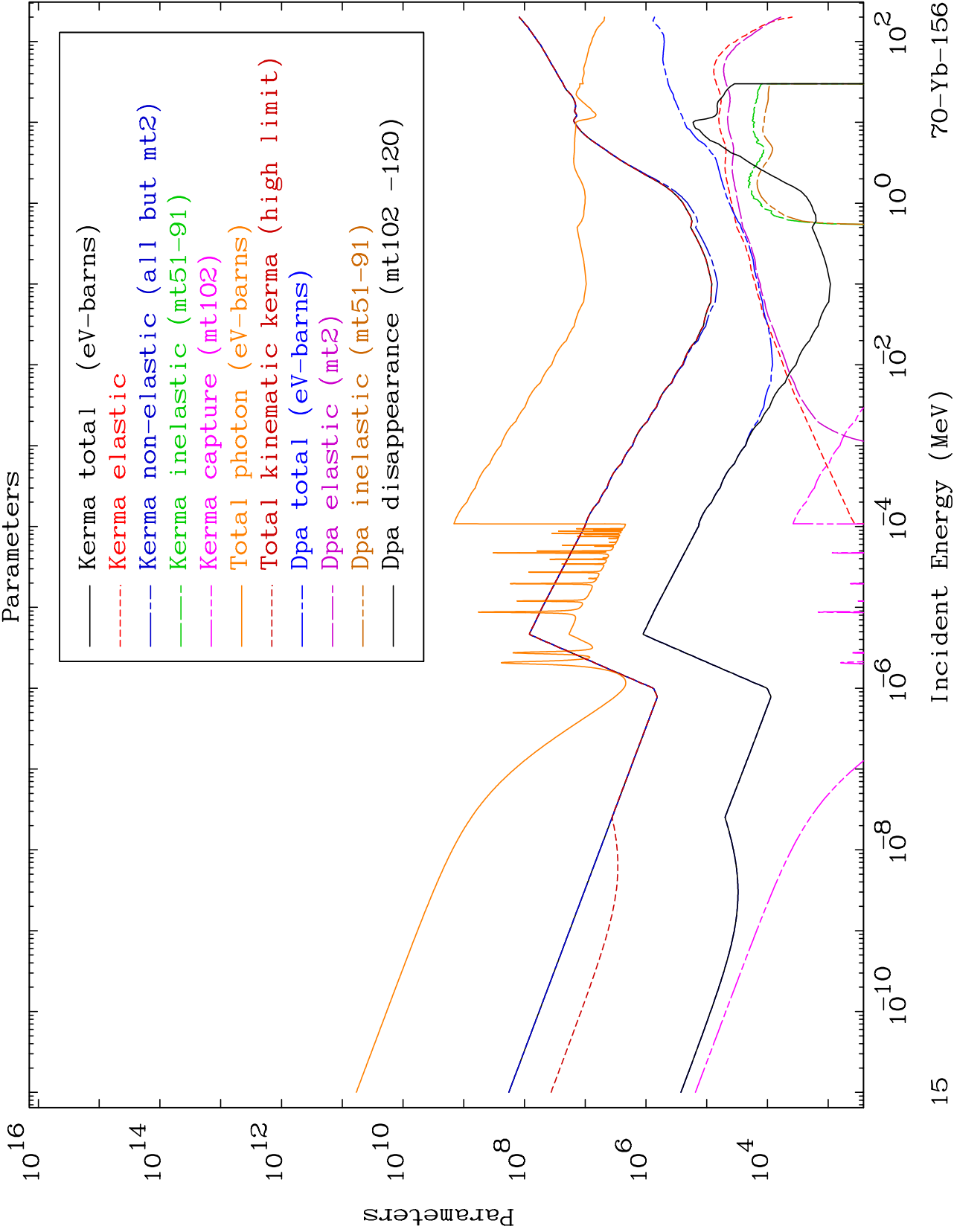


MAT 6989

(n,  $\alpha$ ) Levels  
293 Kelvin Cross Sections

70-Yb-156



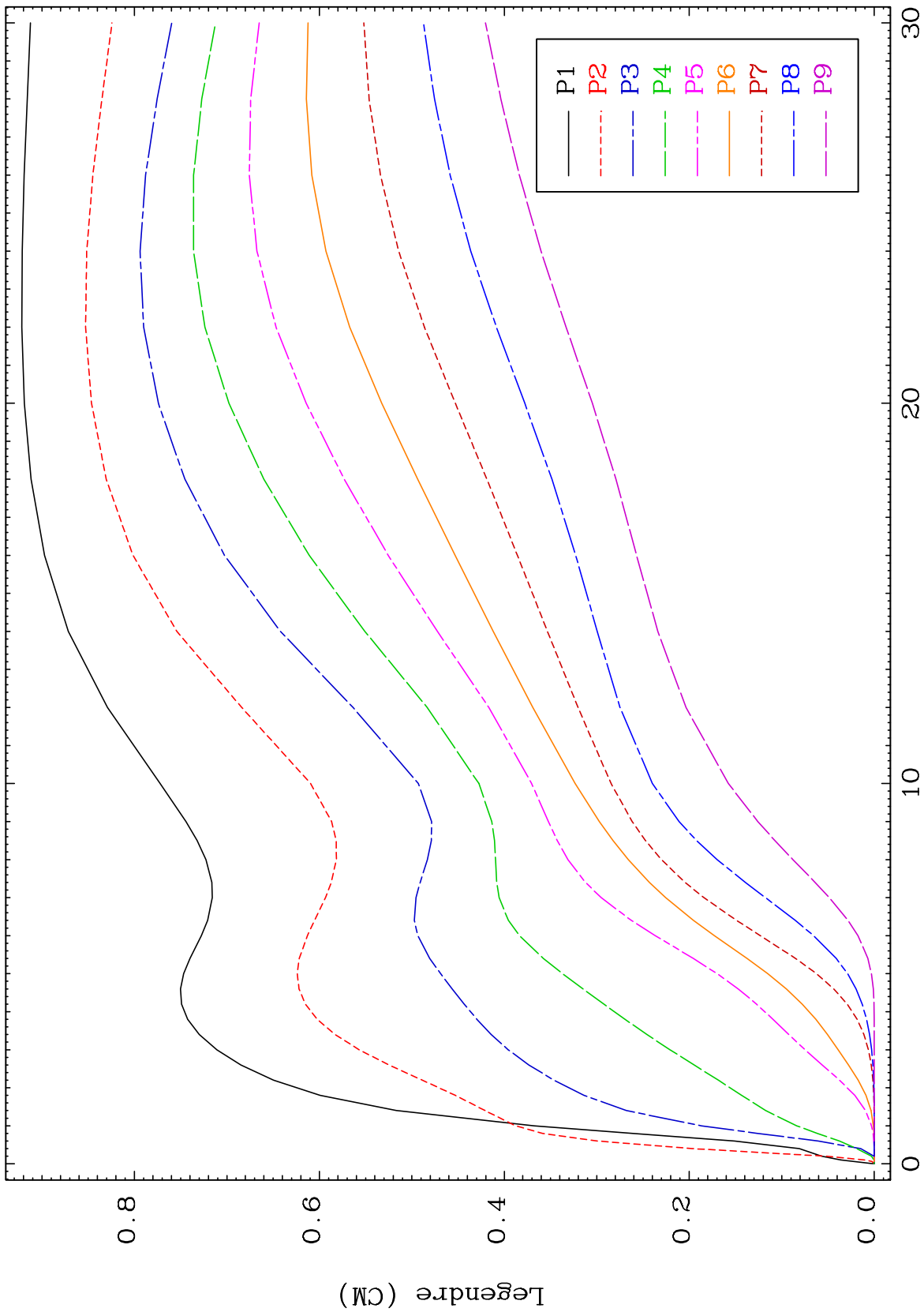




MAT 6989

70-Yb-156

Elastic Legendre Coefficients



70-Yb-156

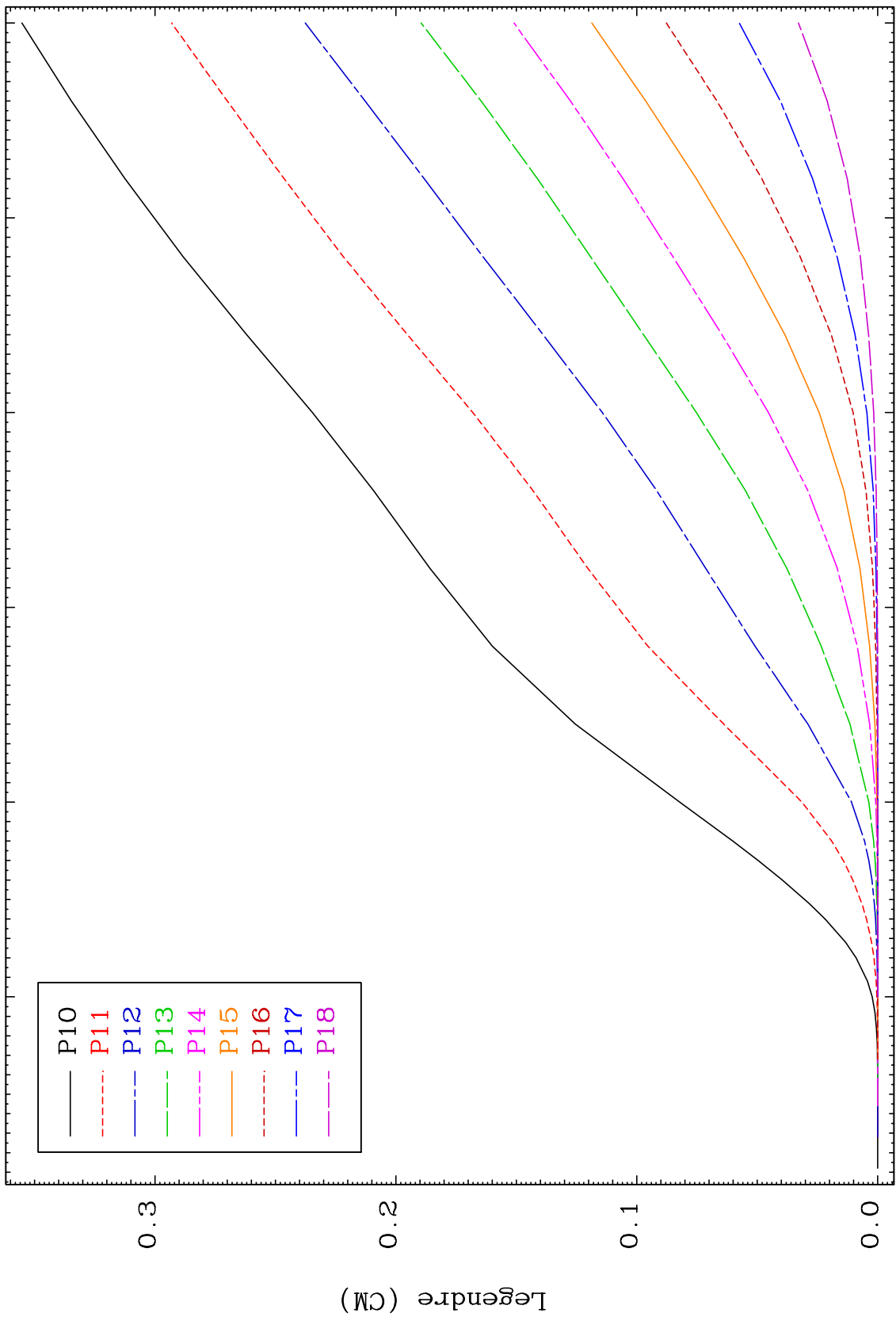
Incident Energy (MeV)

16

MAT 6989

Elastic Legendre Coefficients

70-Yb-156



17

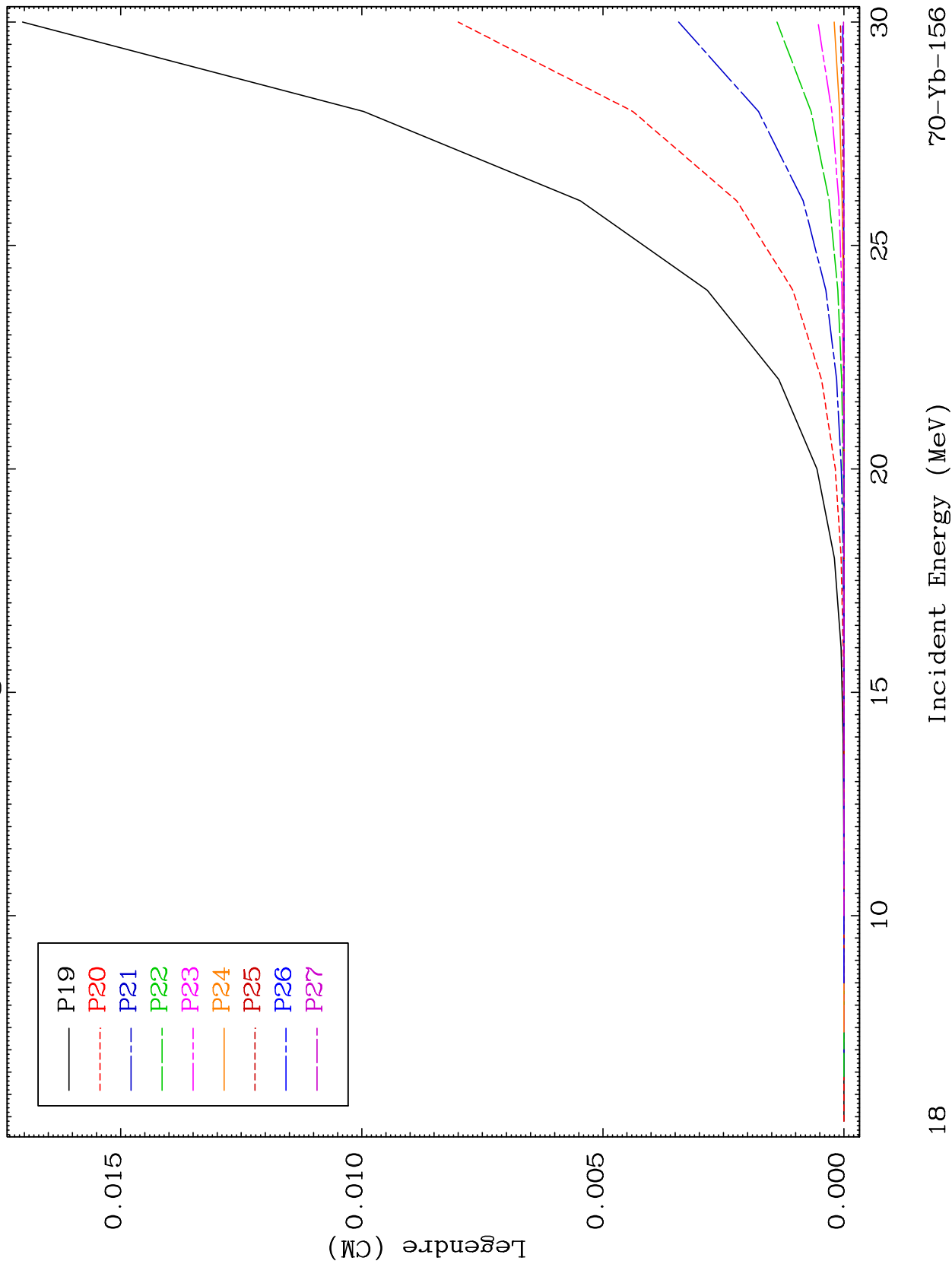
Incident Energy (MeV)

70-Yb-156

MAT 6989

### Elastic Legendre Coefficients

70-Yb-156



18

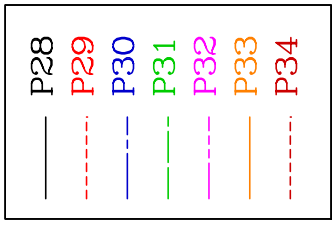
Incident Energy (MeV)

70-Yb-156

MAT 6989

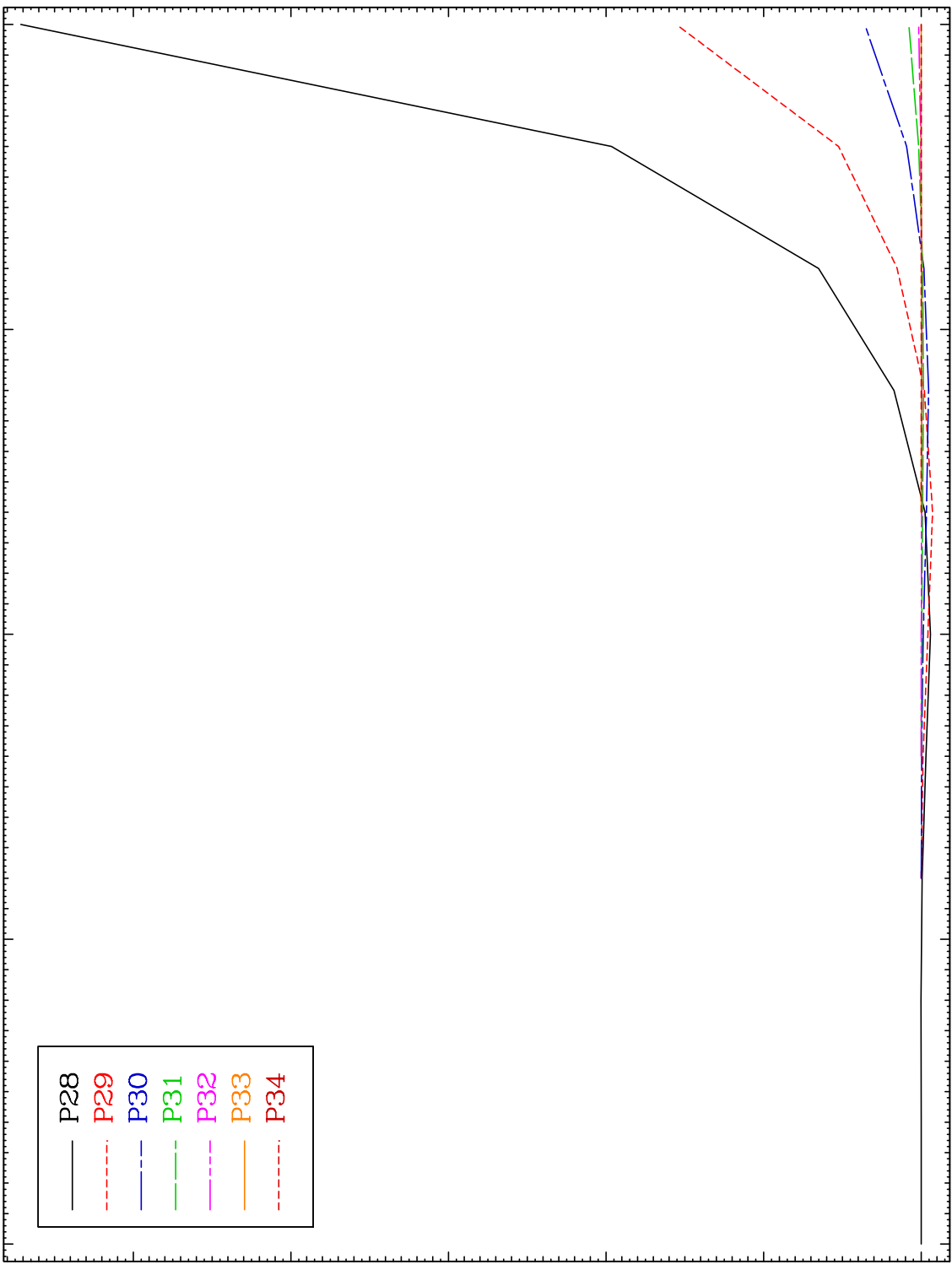
Elastic Legendre Coefficients

70-Yb-156



$\times 10^{-6}$

Legendre (CM)



30

25

20

15

10

Incident Energy (MeV)

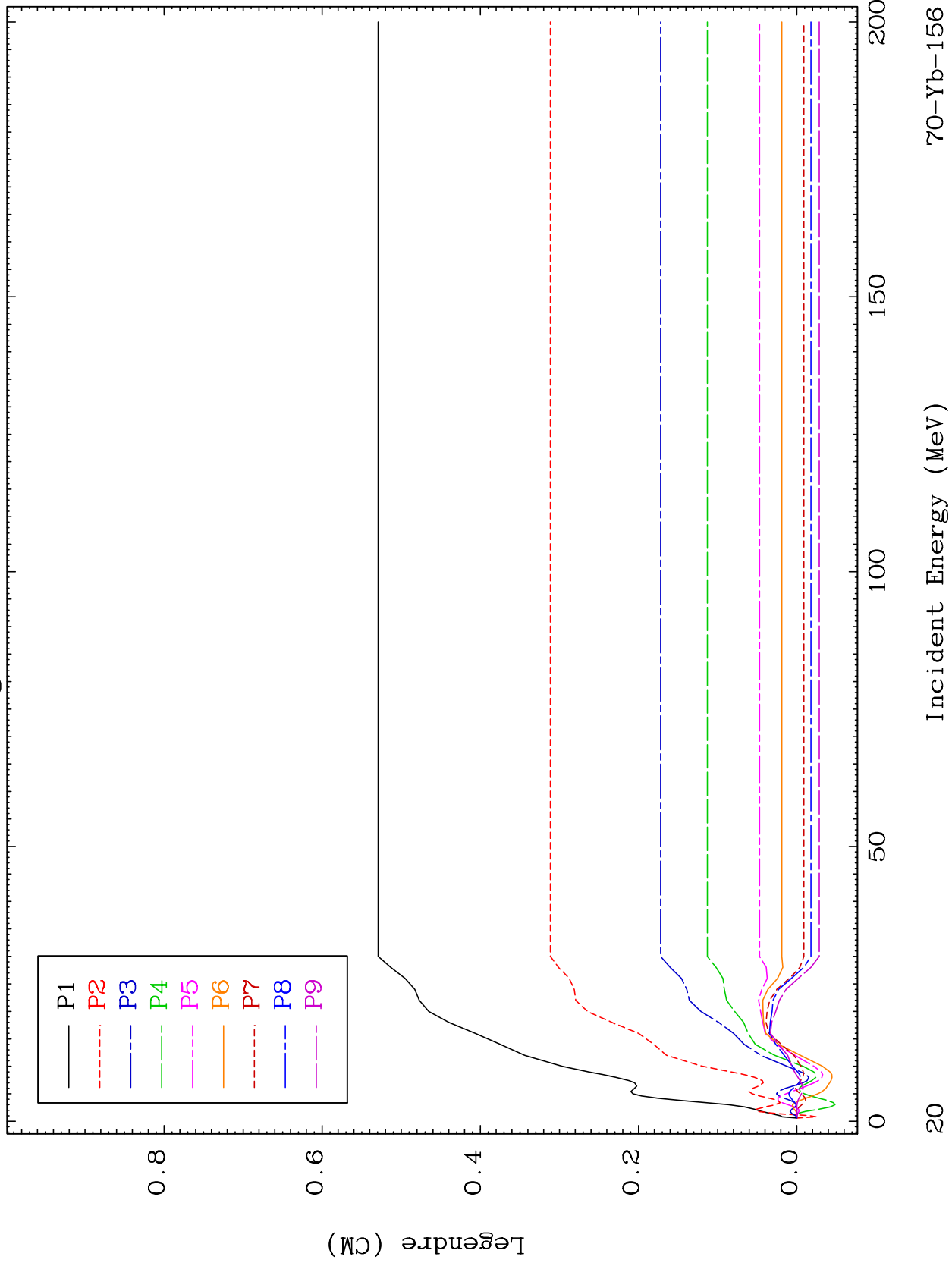
70-Yb-156

19

MAT 6989

MT= 51 (n,n') Level  
Legendre Coefficients

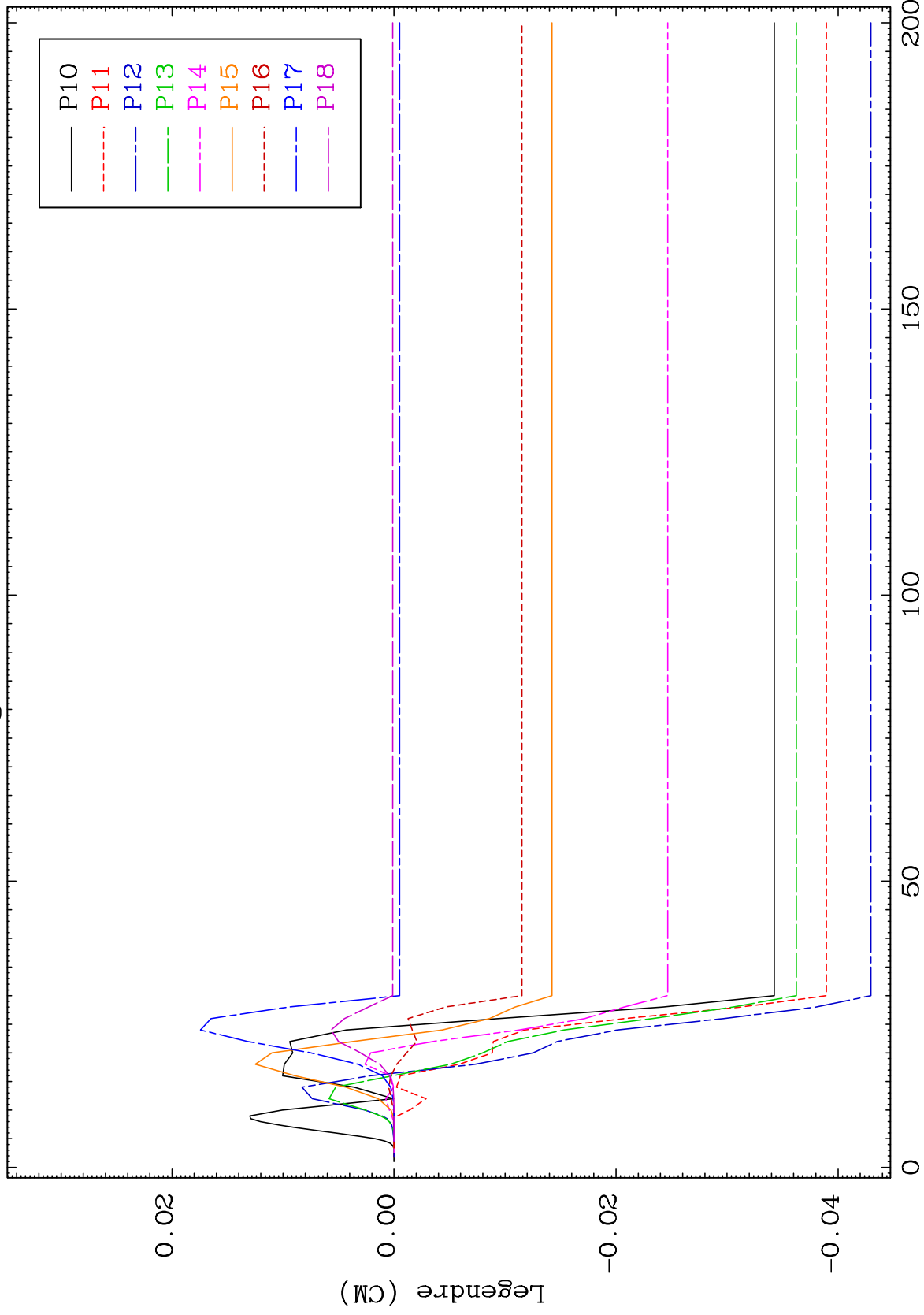
70-Yb-156



MAT 6989

MT= 51 (n,n') Level  
Legendre Coefficients

70-Yb-156



21

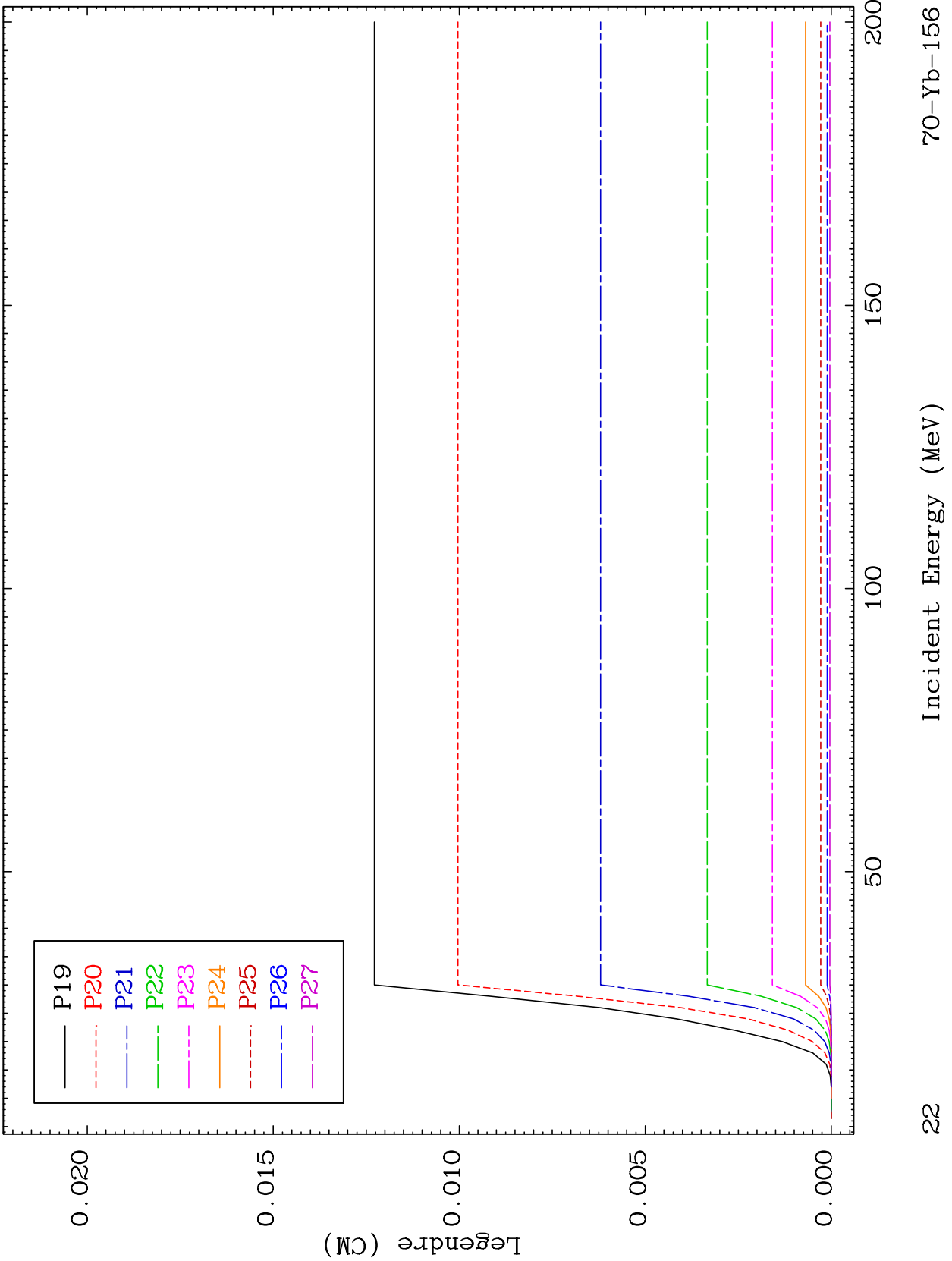
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 51 (n,n') Level  
Legendre Coefficients

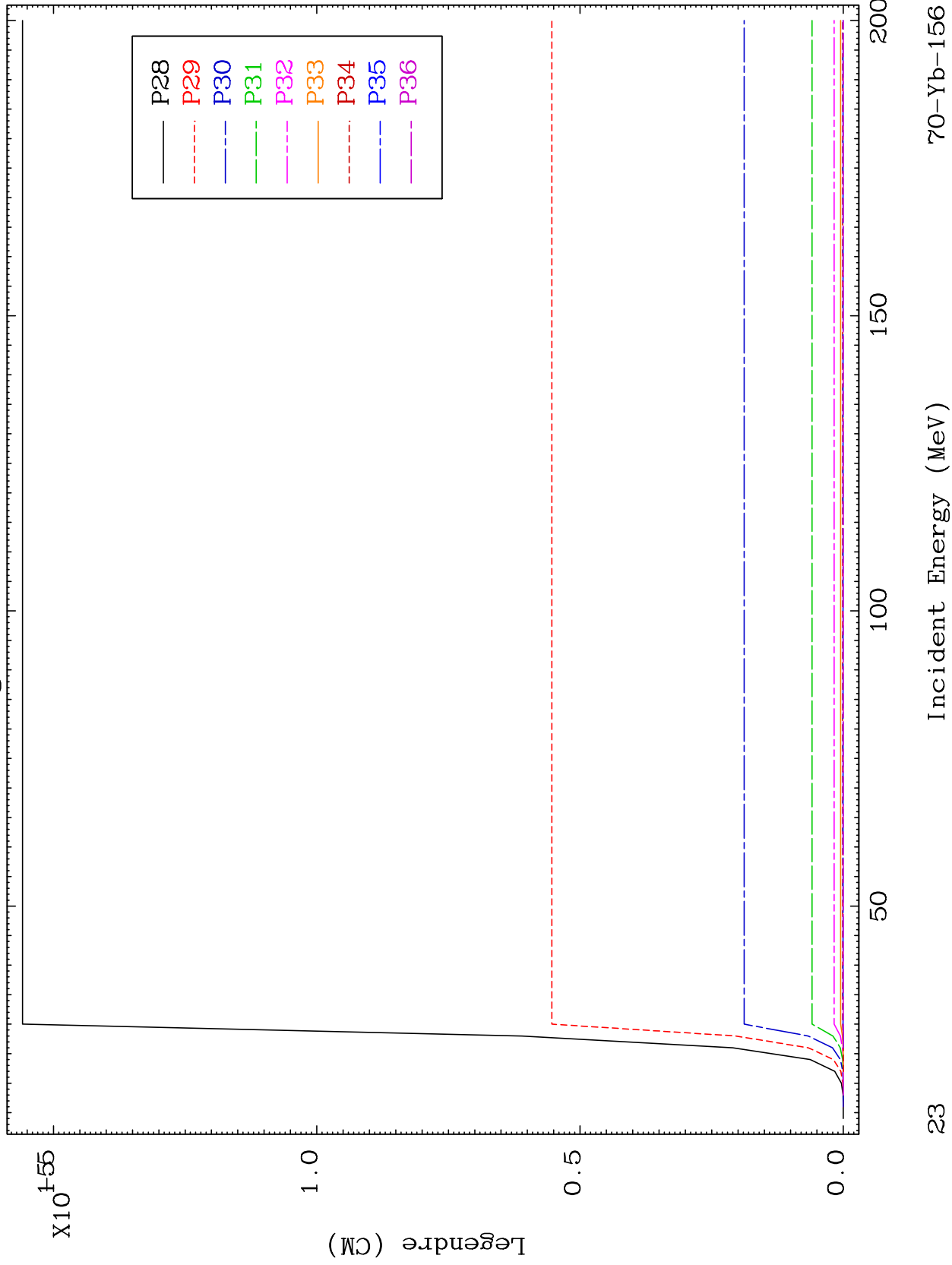
70-Yb-156



MAT 6989

MT= 51 (n,n') Level  
Legendre Coefficients

70-Yb-156



23

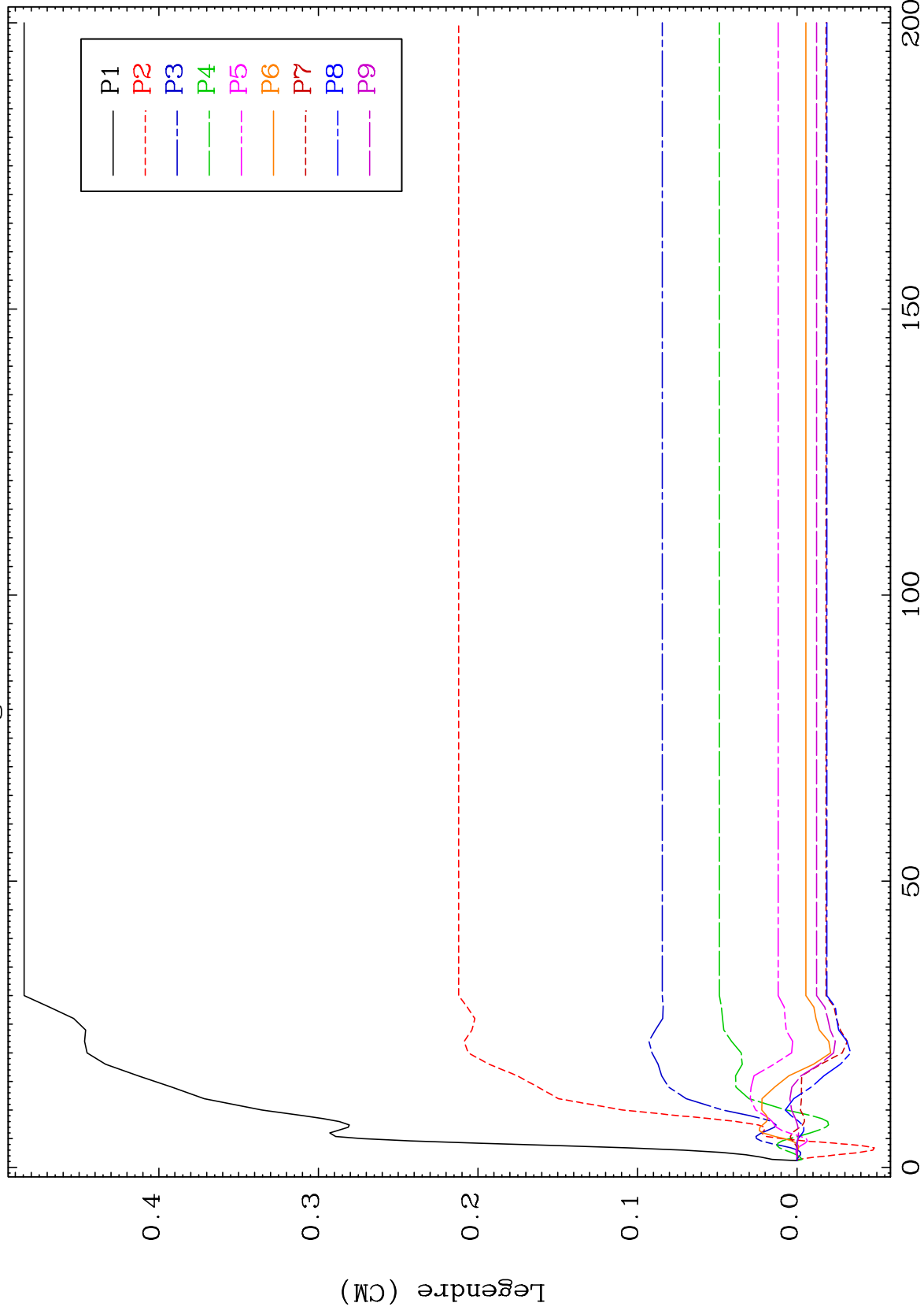
70-Yb-156



MAT 6989

MT= 52 (n,n') Level  
Legendre Coefficients

70-Yb-156



24

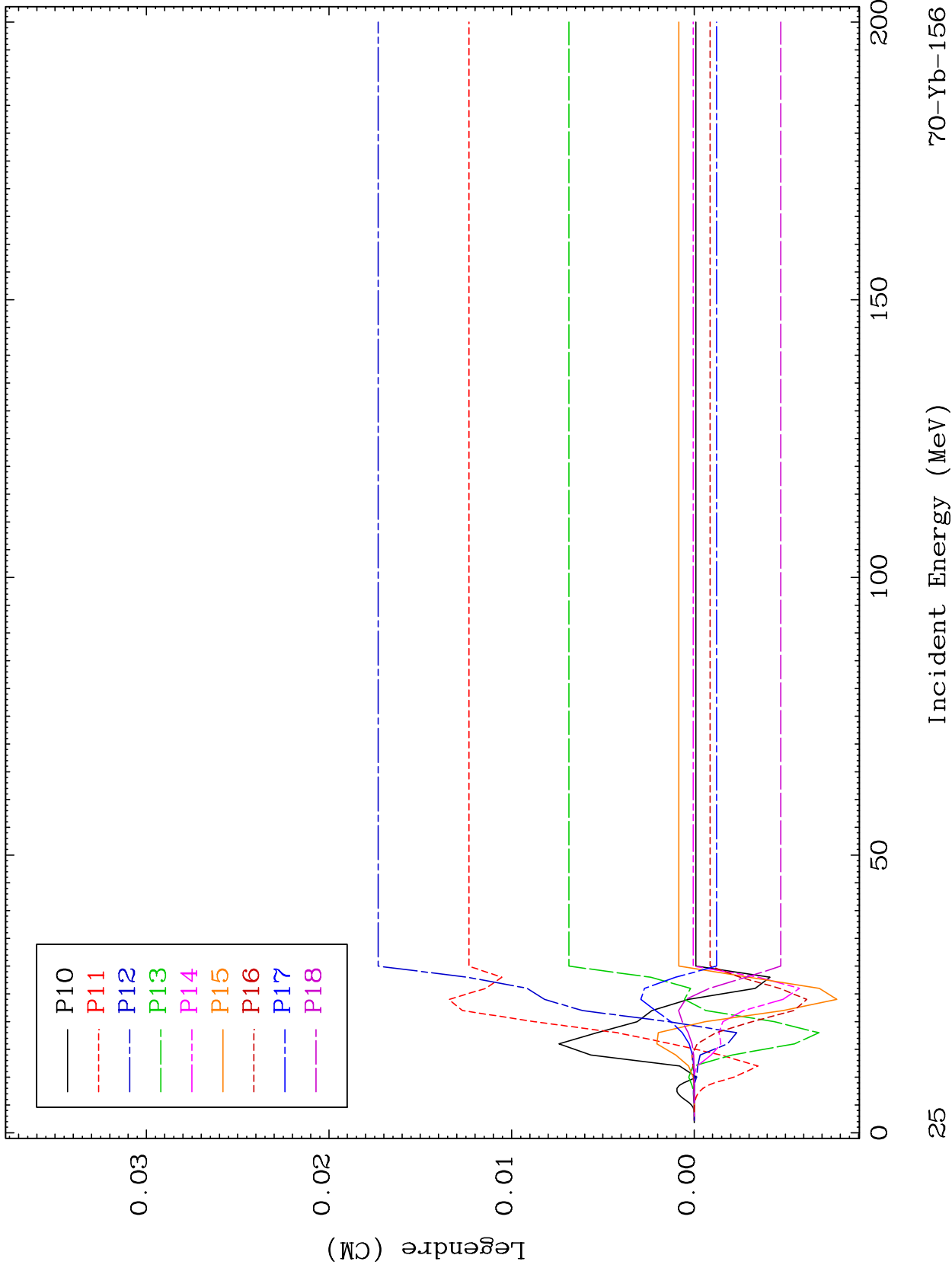
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 52 (n,n') Level  
Legendre Coefficients

70-Yb-156

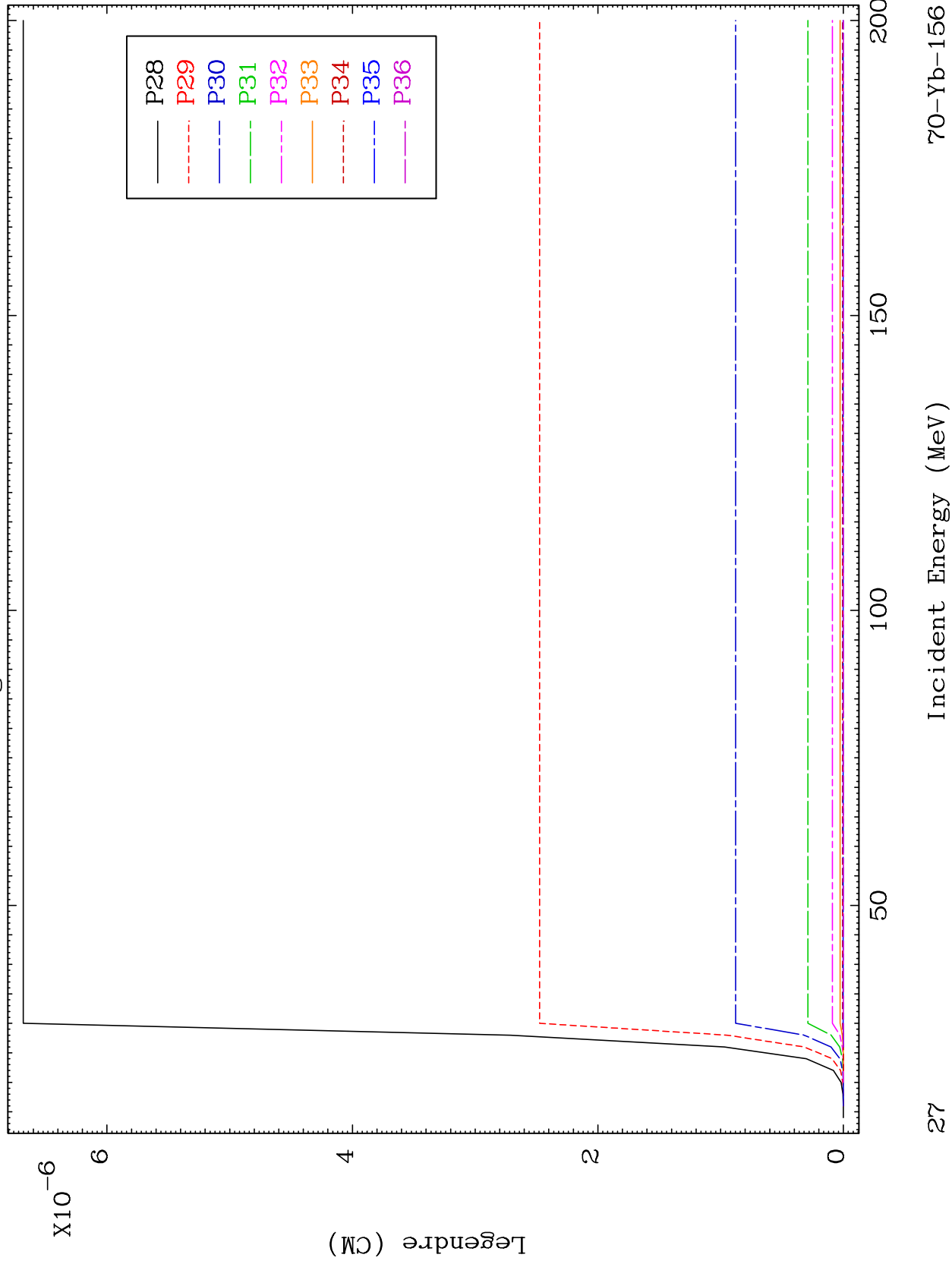




MAT 6989

MT= 52 (n,n') Level  
Legendre Coefficients

70-Yb-156



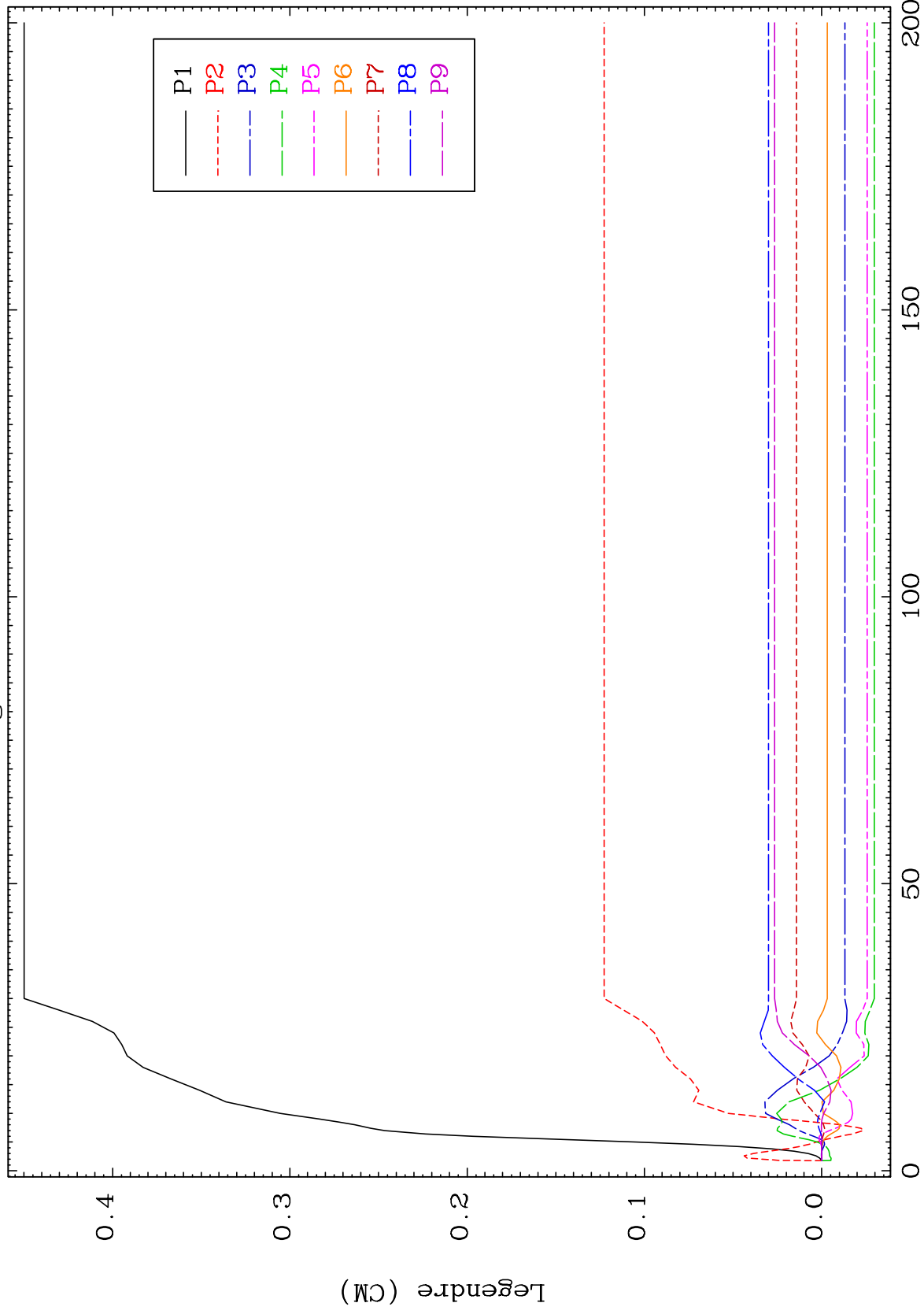
27

70-Yb-156

MAT 6989

MT= 53 (n,n') Level  
Legendre Coefficients

70-Yb-156



28

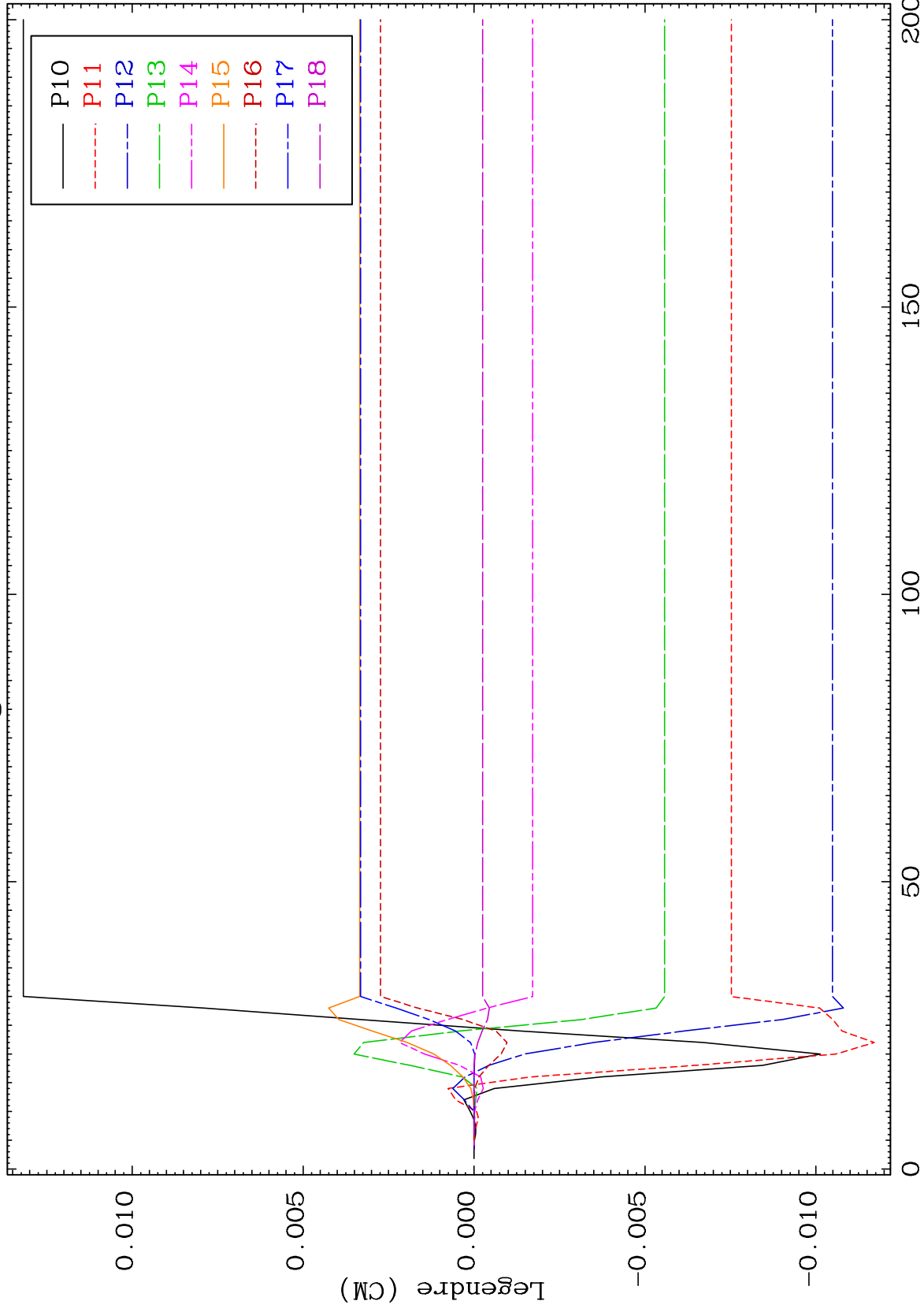
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 53 (n,n') Level  
Legendre Coefficients

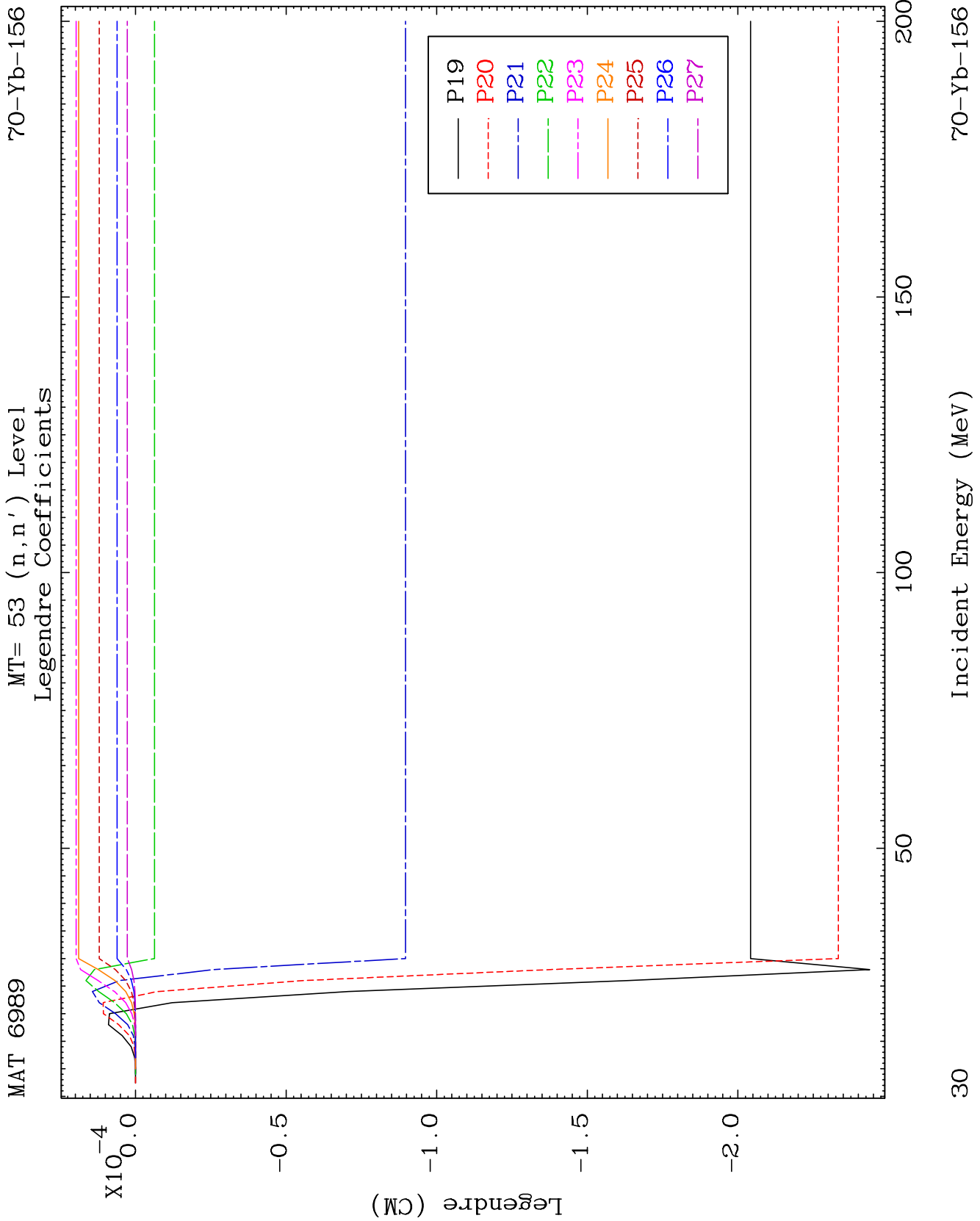
70-Yb-156



29

Incident Energy (MeV)

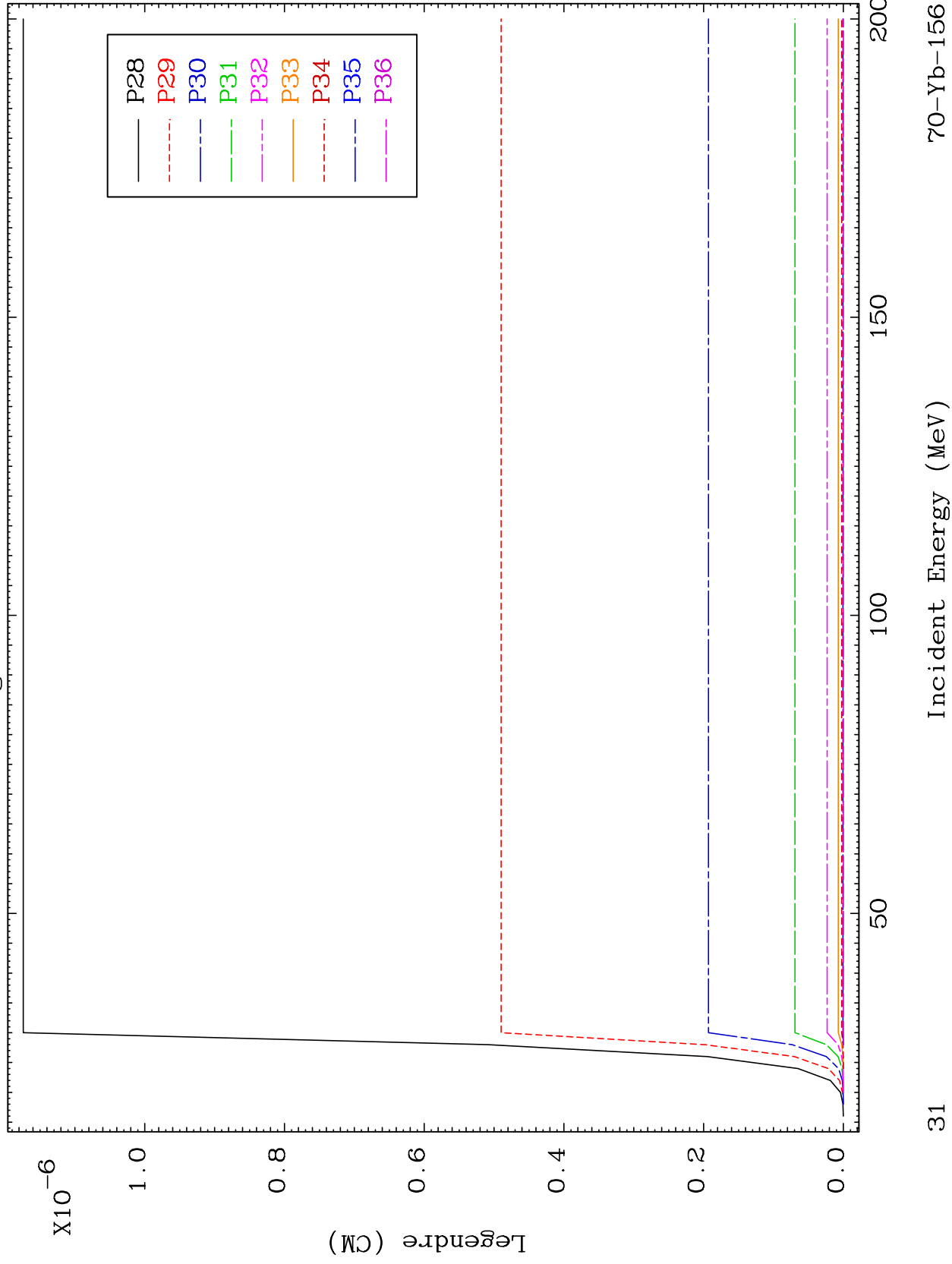
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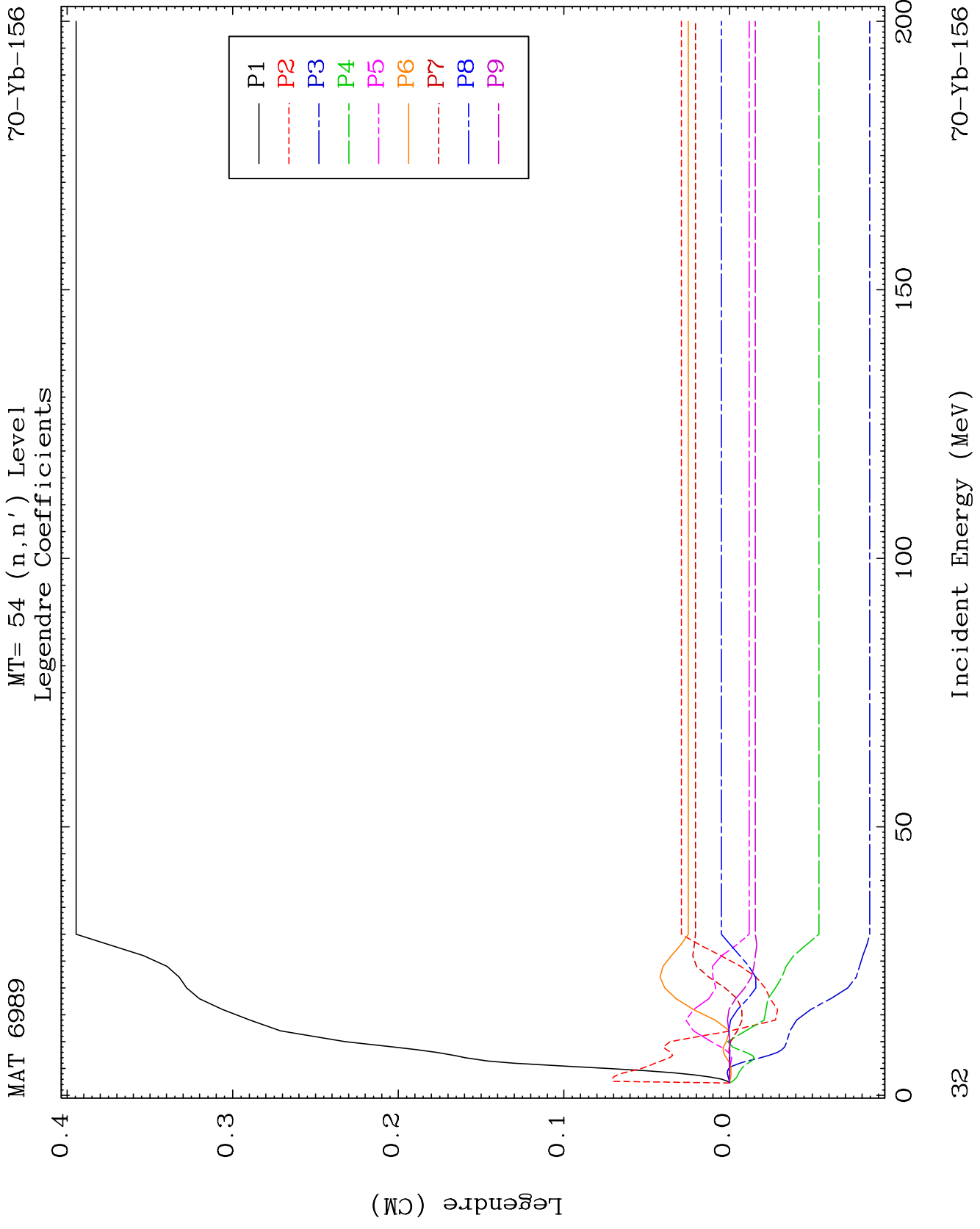
MAT 6989

MT= 53 (n,n') Level  
Legendre Coefficients

70-Yb-156



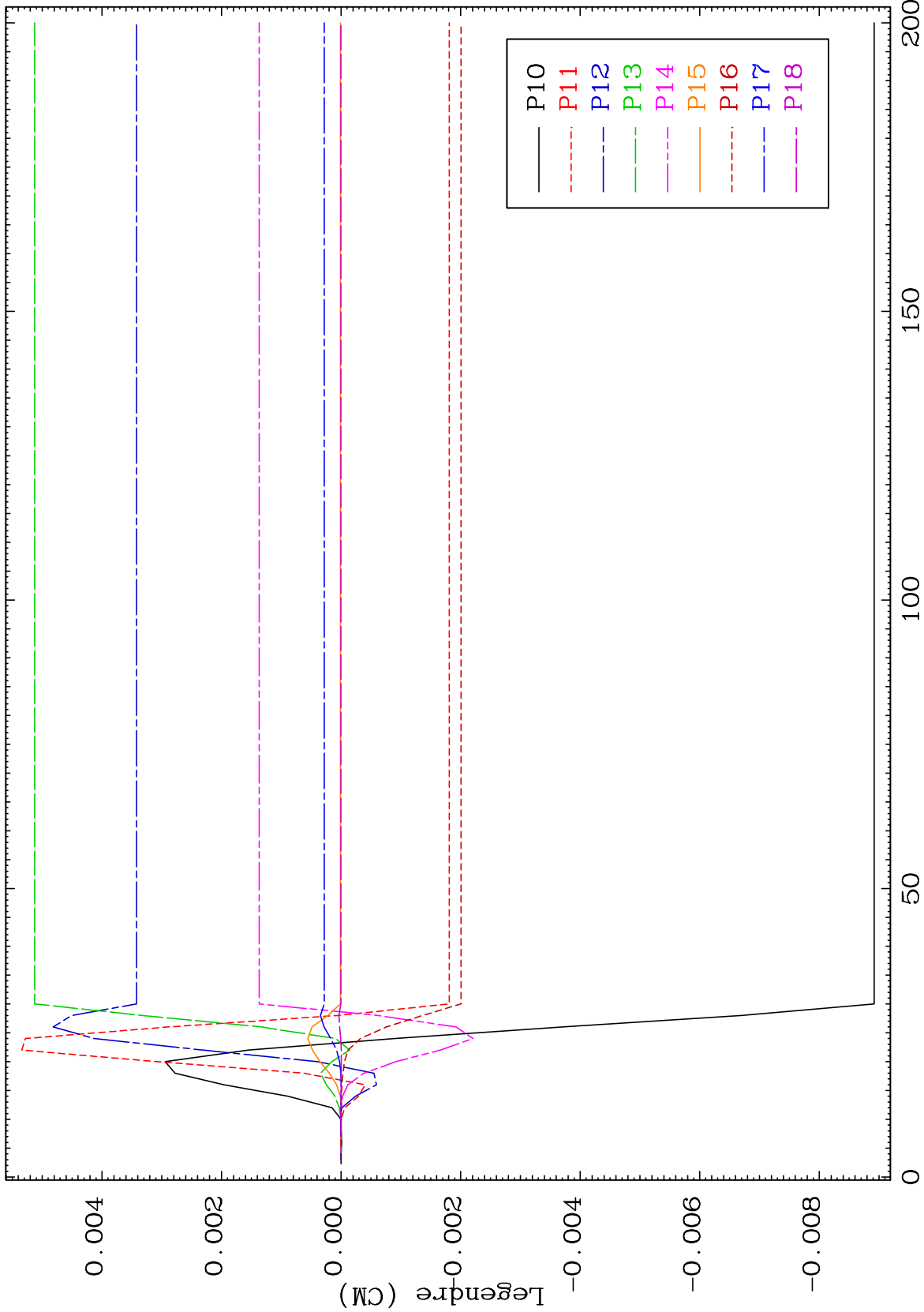




MAT 6989

MT= 54 (n,n') Level  
Legendre Coefficients

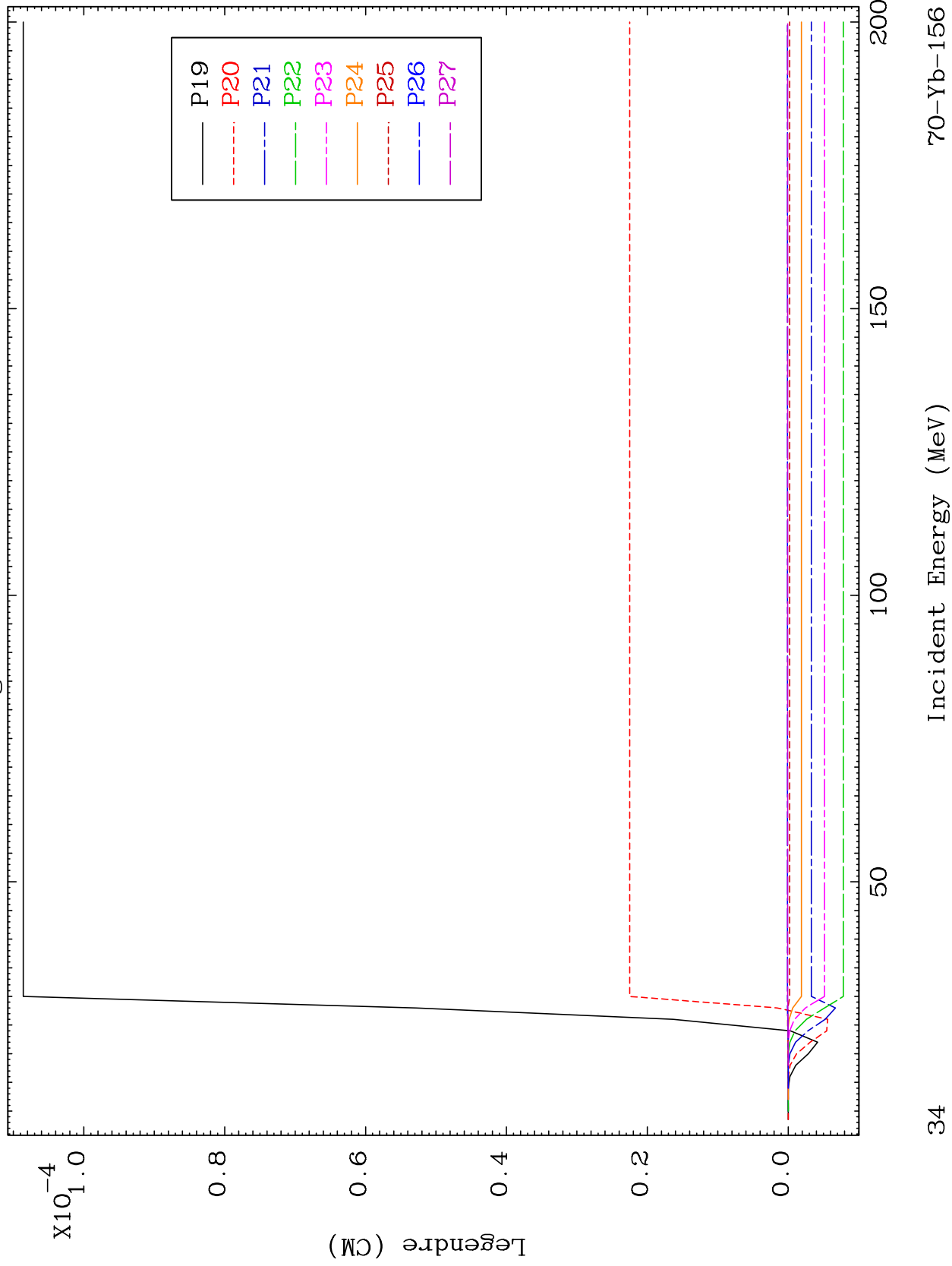
70-Yb-156



MAT 6989

MT= 54 (n,n') Level  
Legendre Coefficients

70-Yb-156

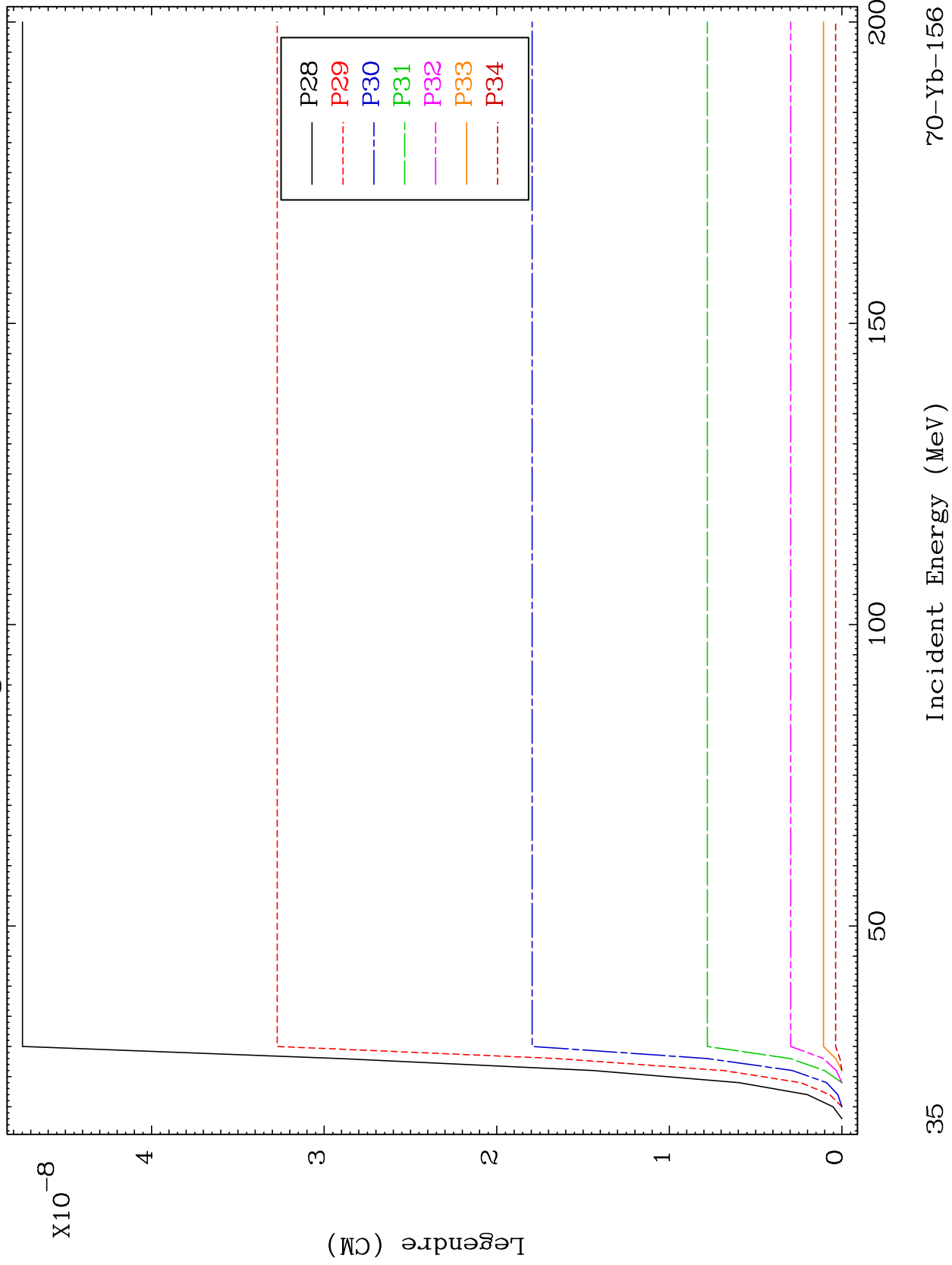


34

MAT 6989

MT= 54 (n,n') Level  
Legendre Coefficients

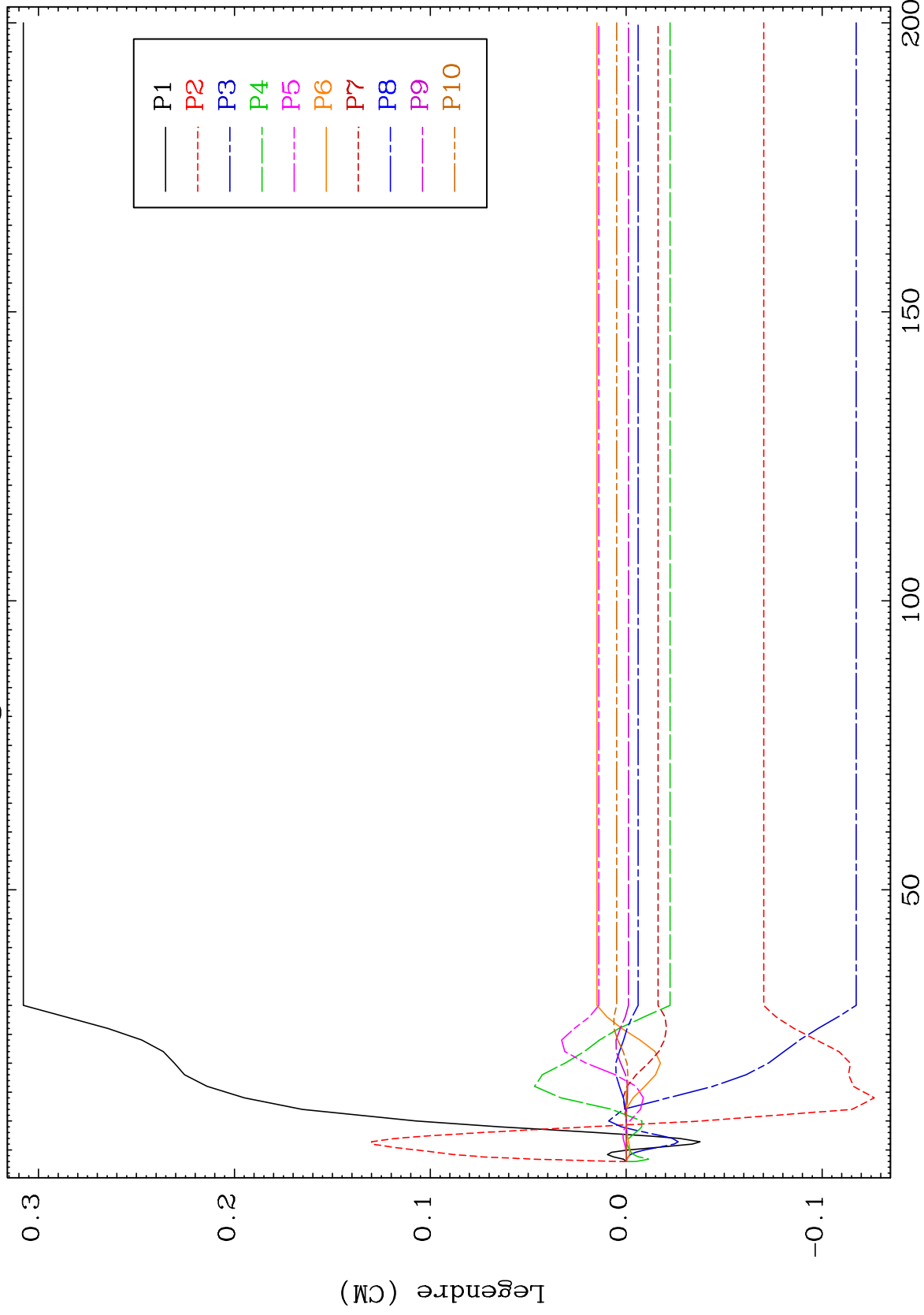
70-Yb-156



MAT 6989

MT= 55 (n,n') Level  
Legendre Coefficients

70-Yb-156



36

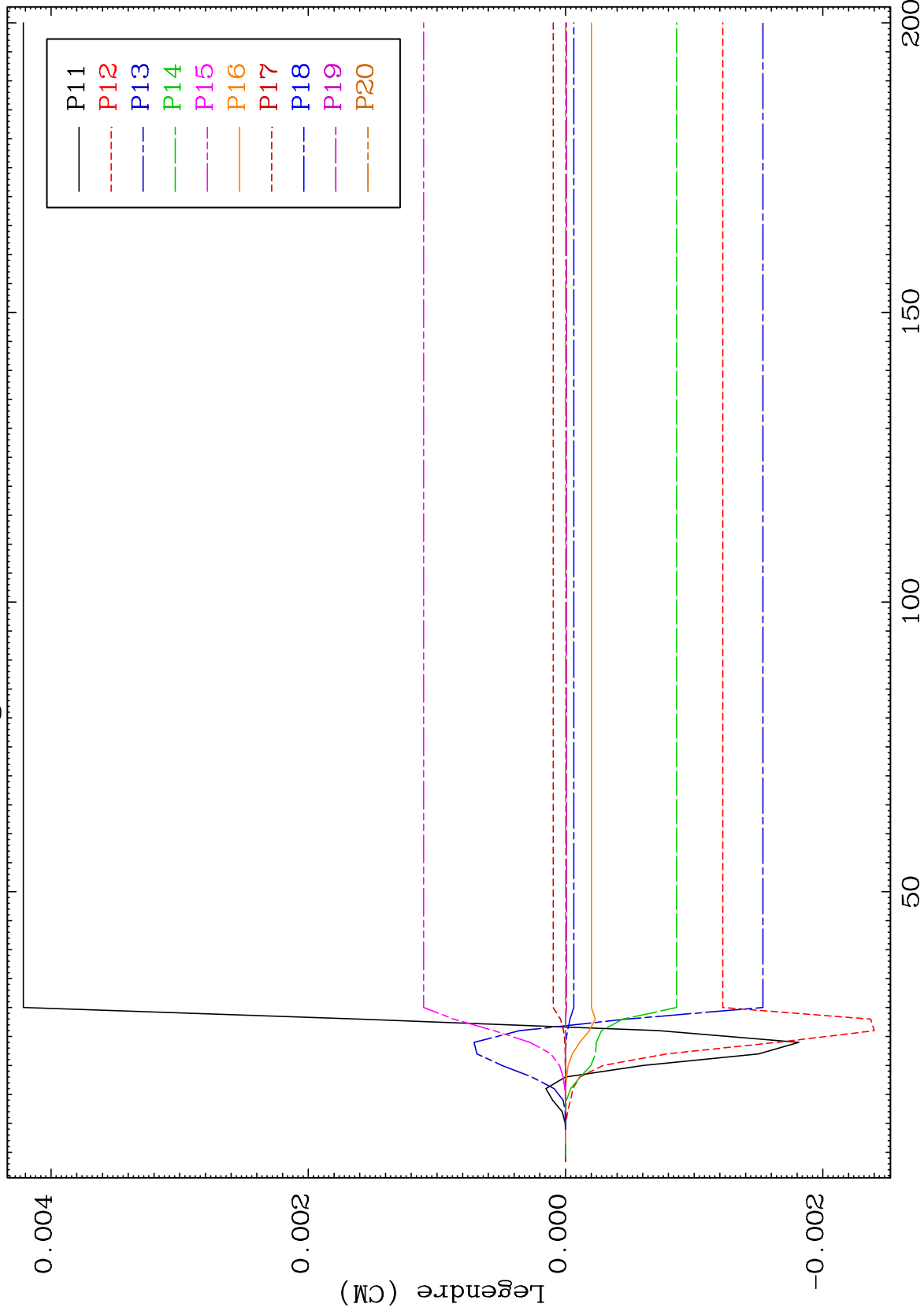
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 55 (n,n') Level  
Legendre Coefficients

70-Yb-156



37

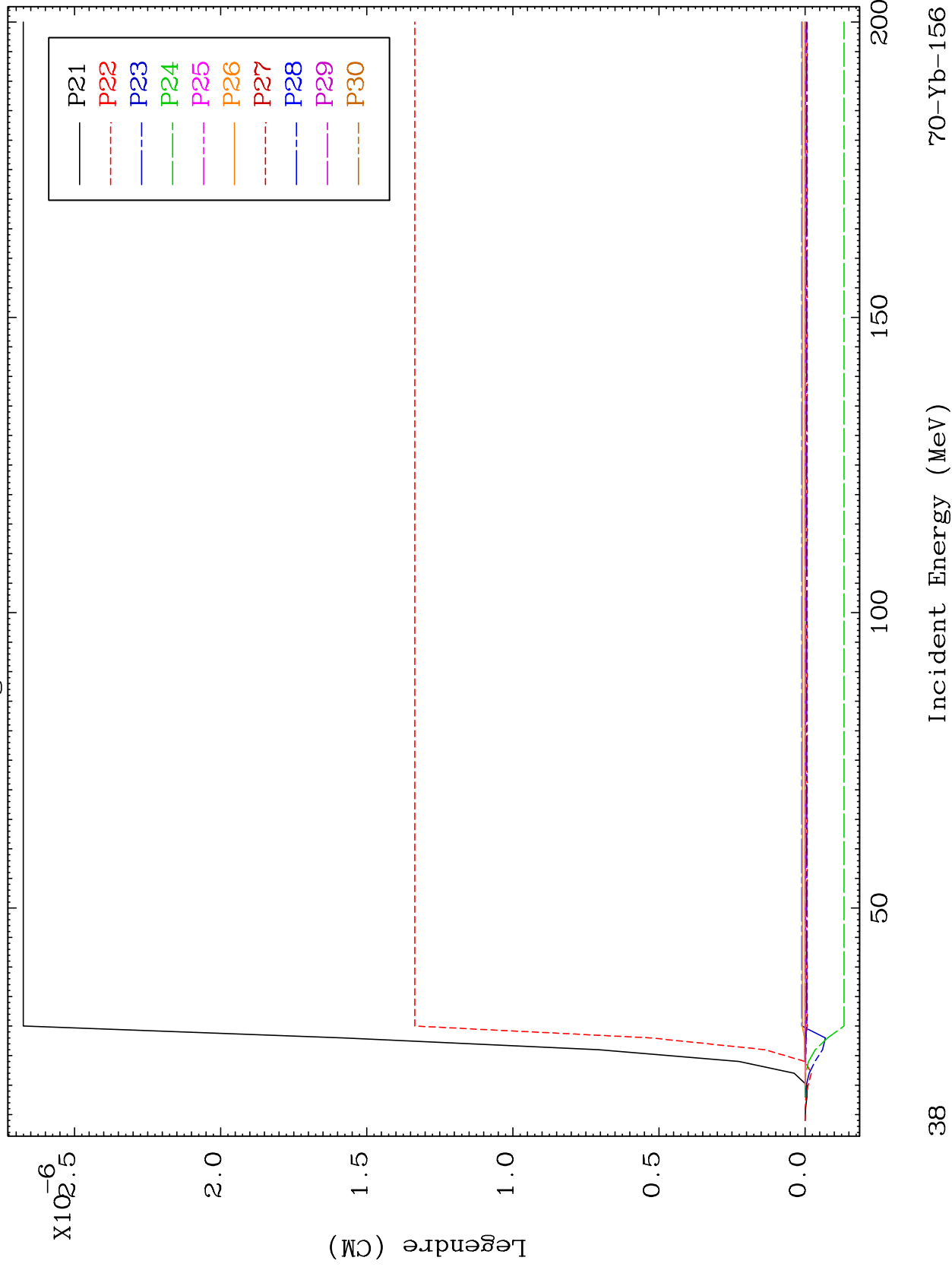
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 55 (n,n') Level  
Legendre Coefficients

70-Yb-156



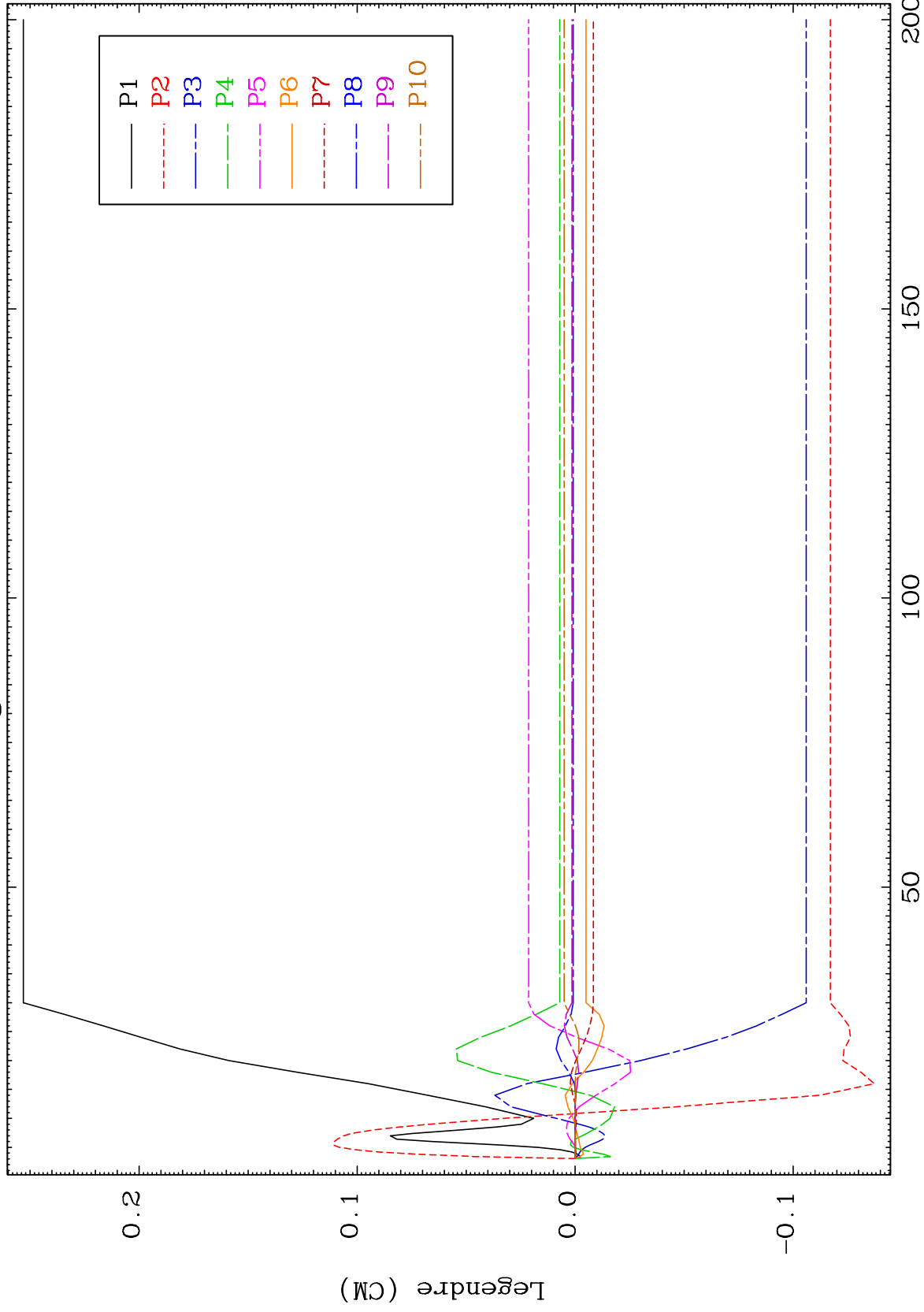
38

70-Yb-156

MAT 6989

MT= 56 (n,n') Level  
Legendre Coefficients

70-Yb-156



39

Incident Energy (MeV)

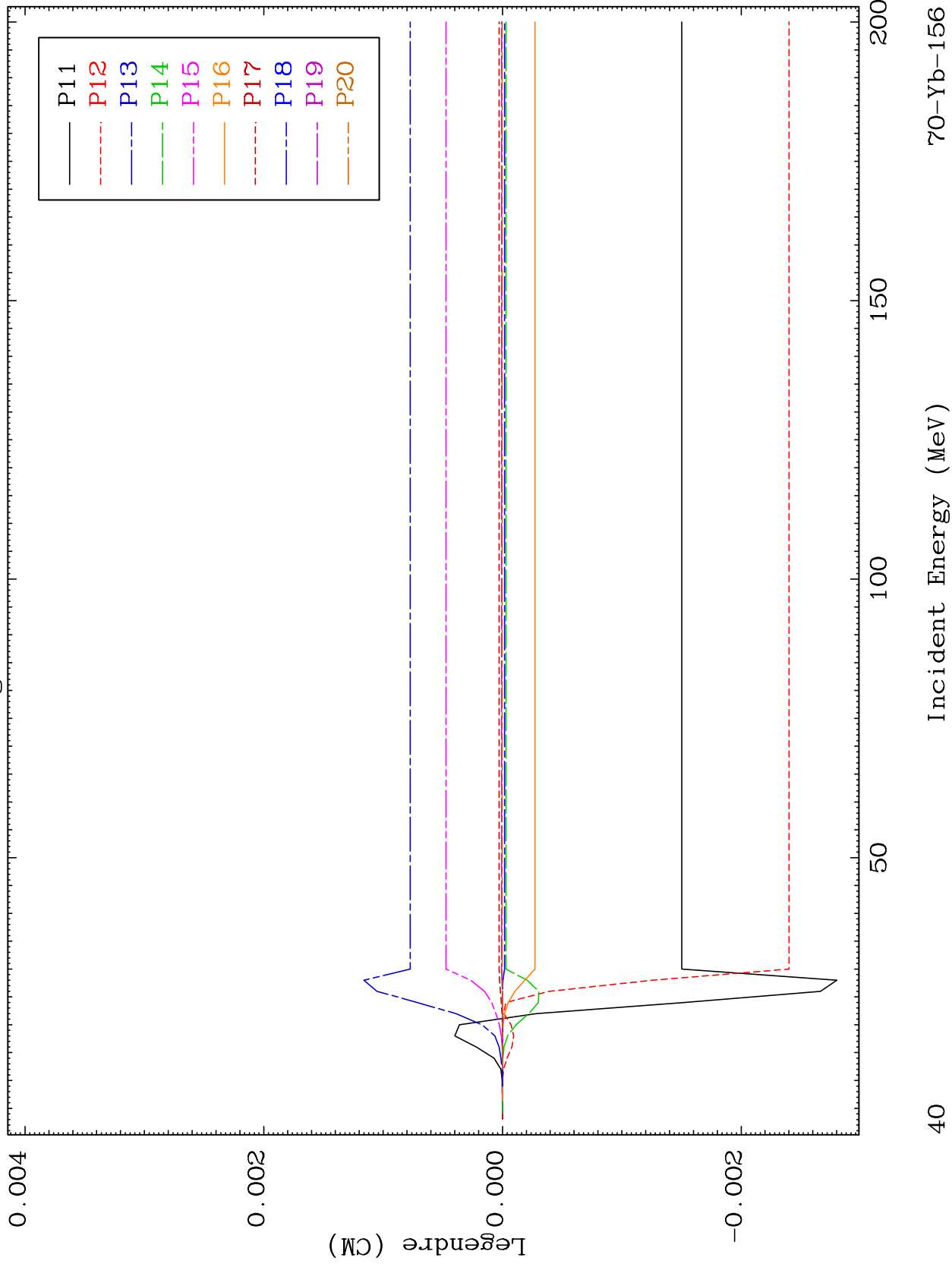
70-Yb-156



MAT 6989

MT= 56 (n,n') Level  
Legendre Coefficients

70-Yb-156



40

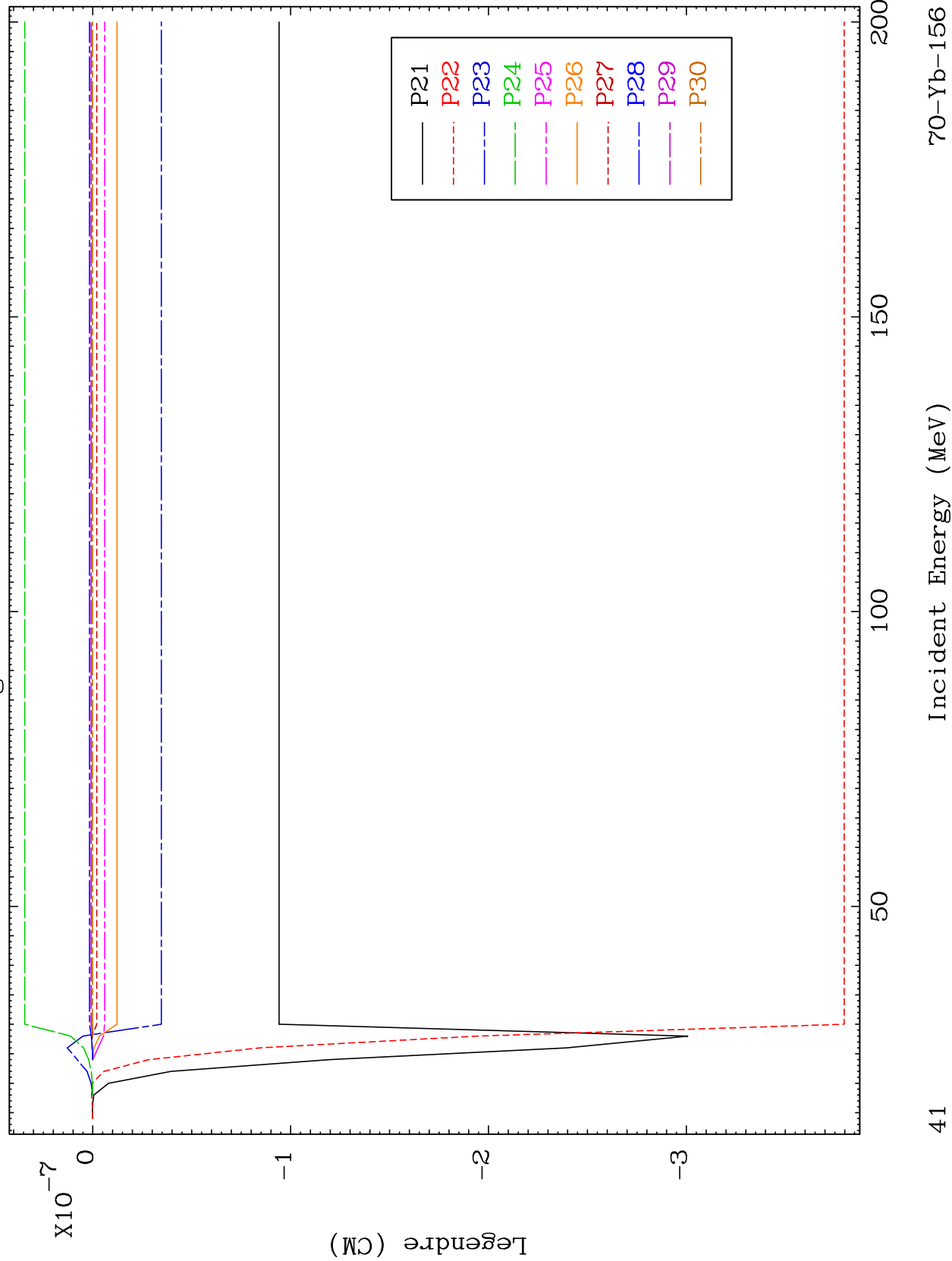
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 56 (n,n') Level  
Legendre Coefficients

70-Yb-156



41

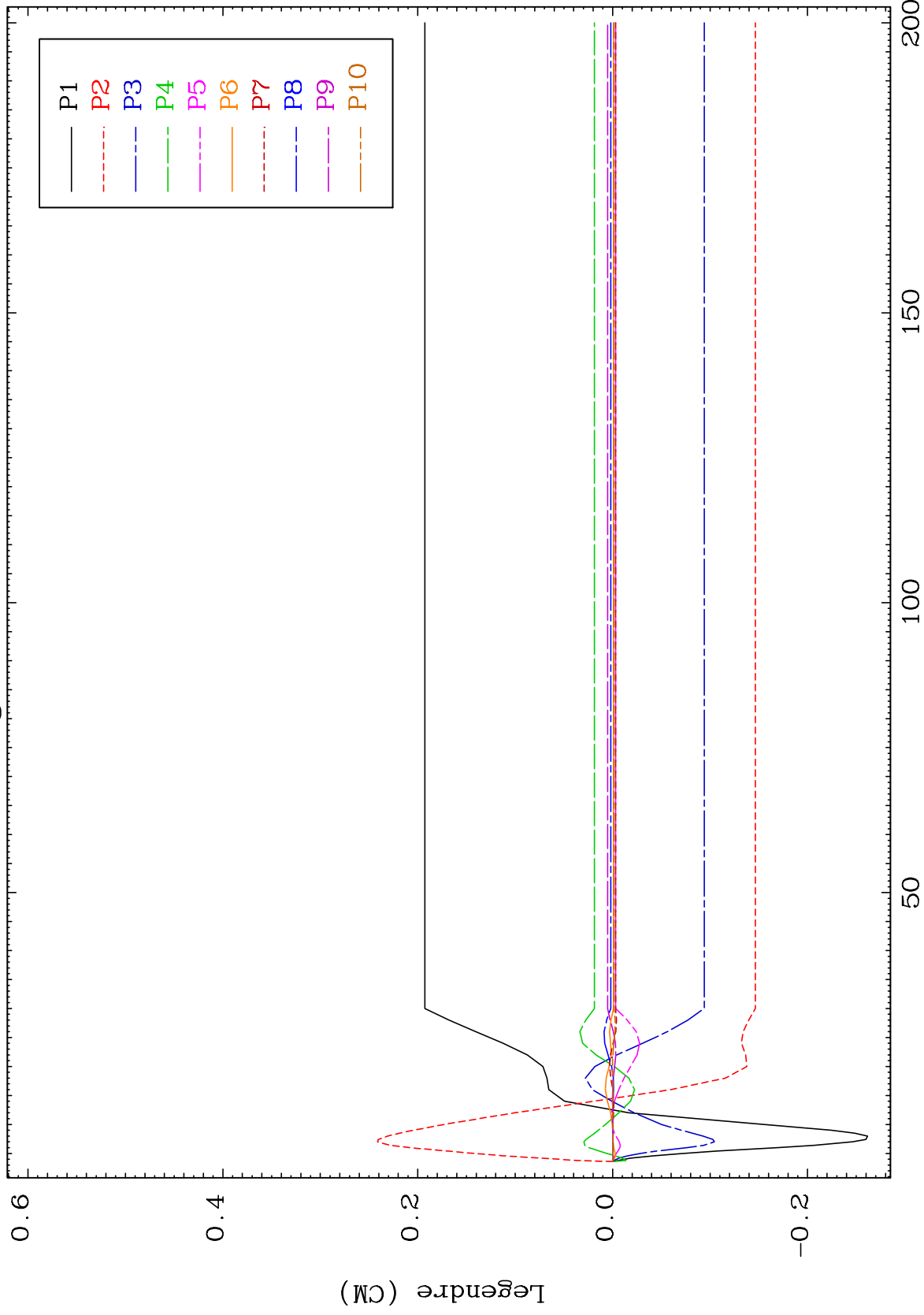
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 57 (n,n') Level  
Legendre Coefficients

70-Yb-156



42

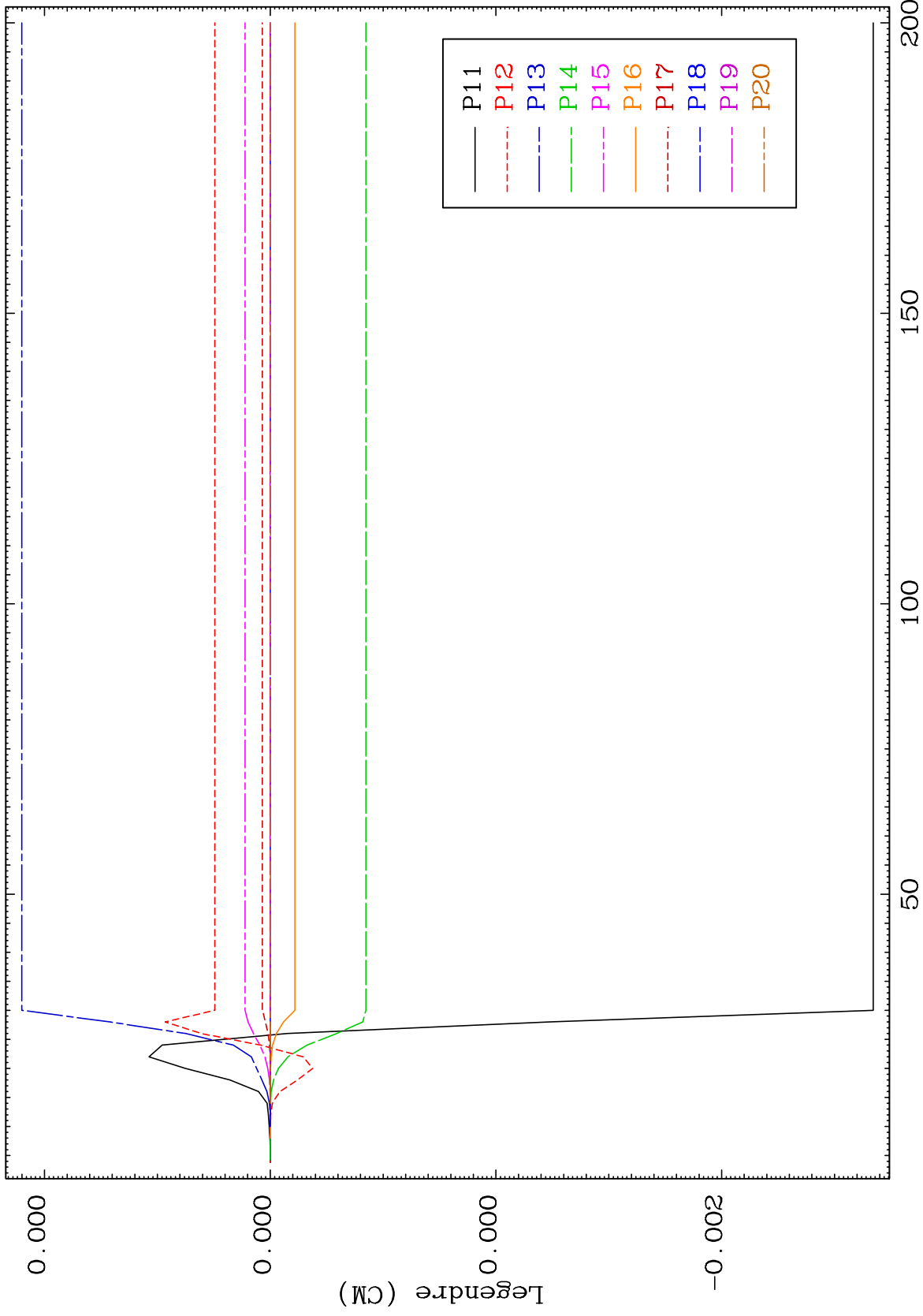
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 57 (n,n') Level  
Legendre Coefficients

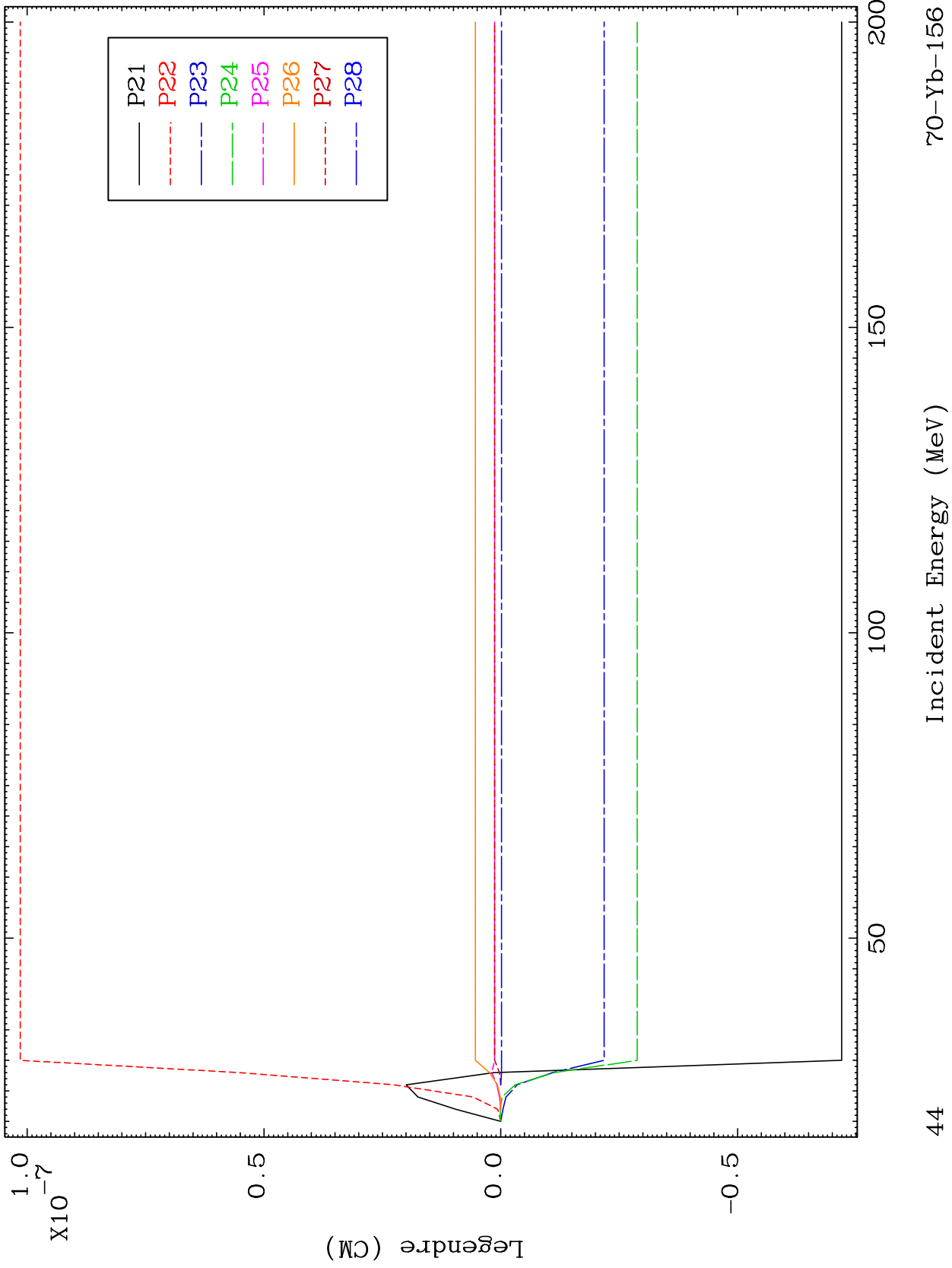
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MAT 6989

MT= 57 (n,n') Level  
Legendre Coefficients

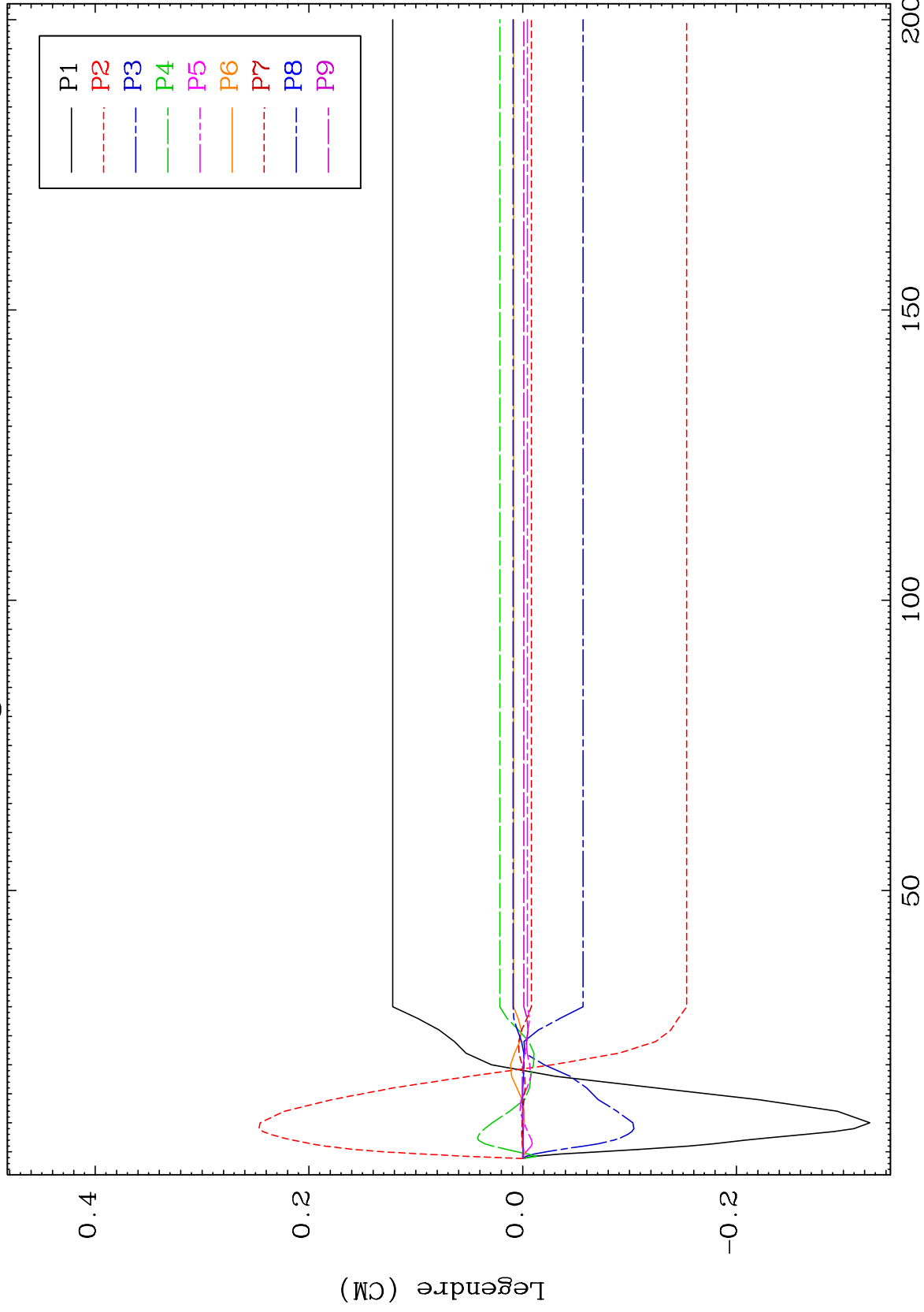
70-Yb-156



MAT 6989

MT= 58 (n,n') Level  
Legendre Coefficients

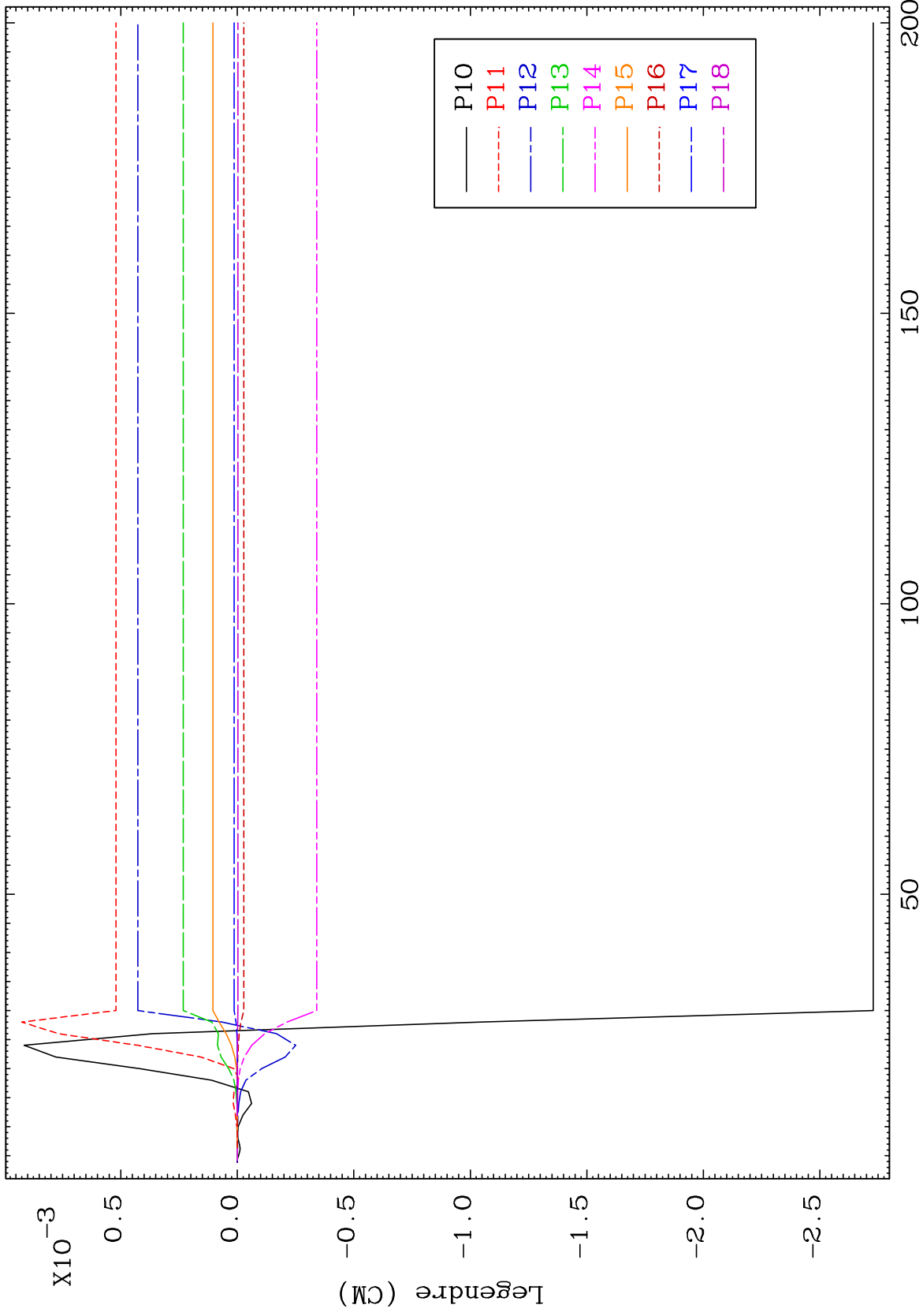
70-Yb-156



45

Incident Energy (MeV)

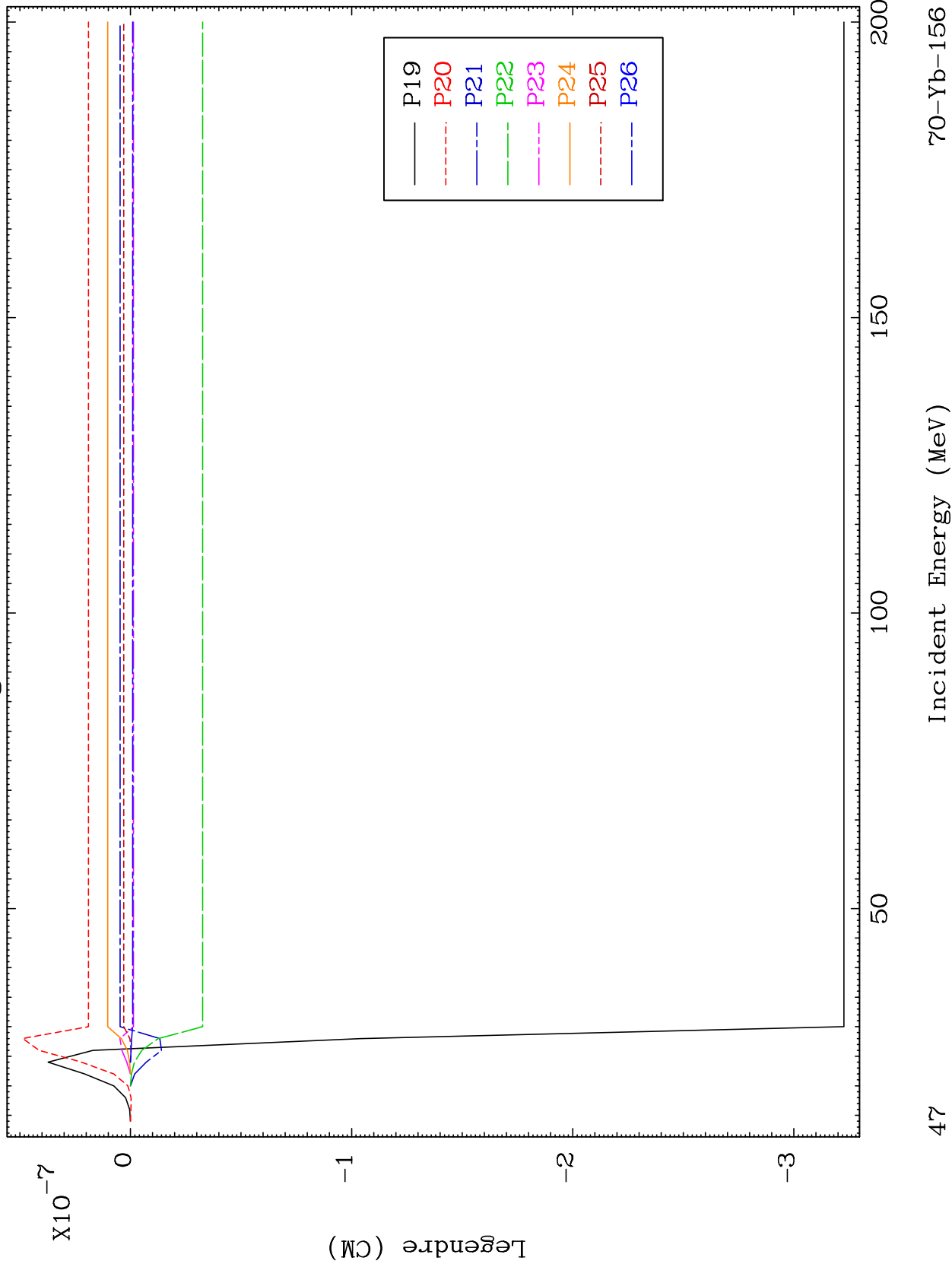
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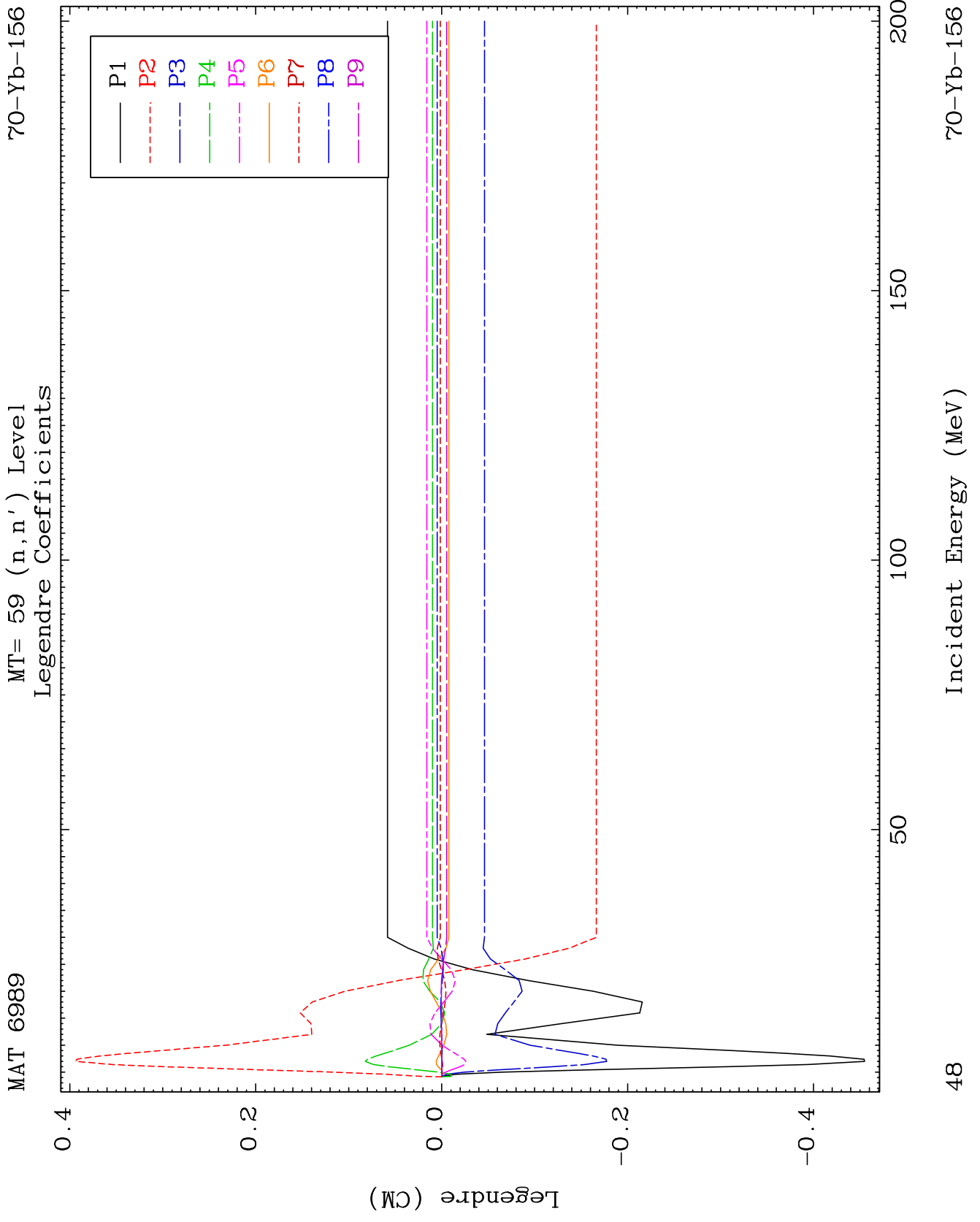
MAT 6989

70-Yb-156

MT= 58 (n,n') Level  
Legendre Coefficients



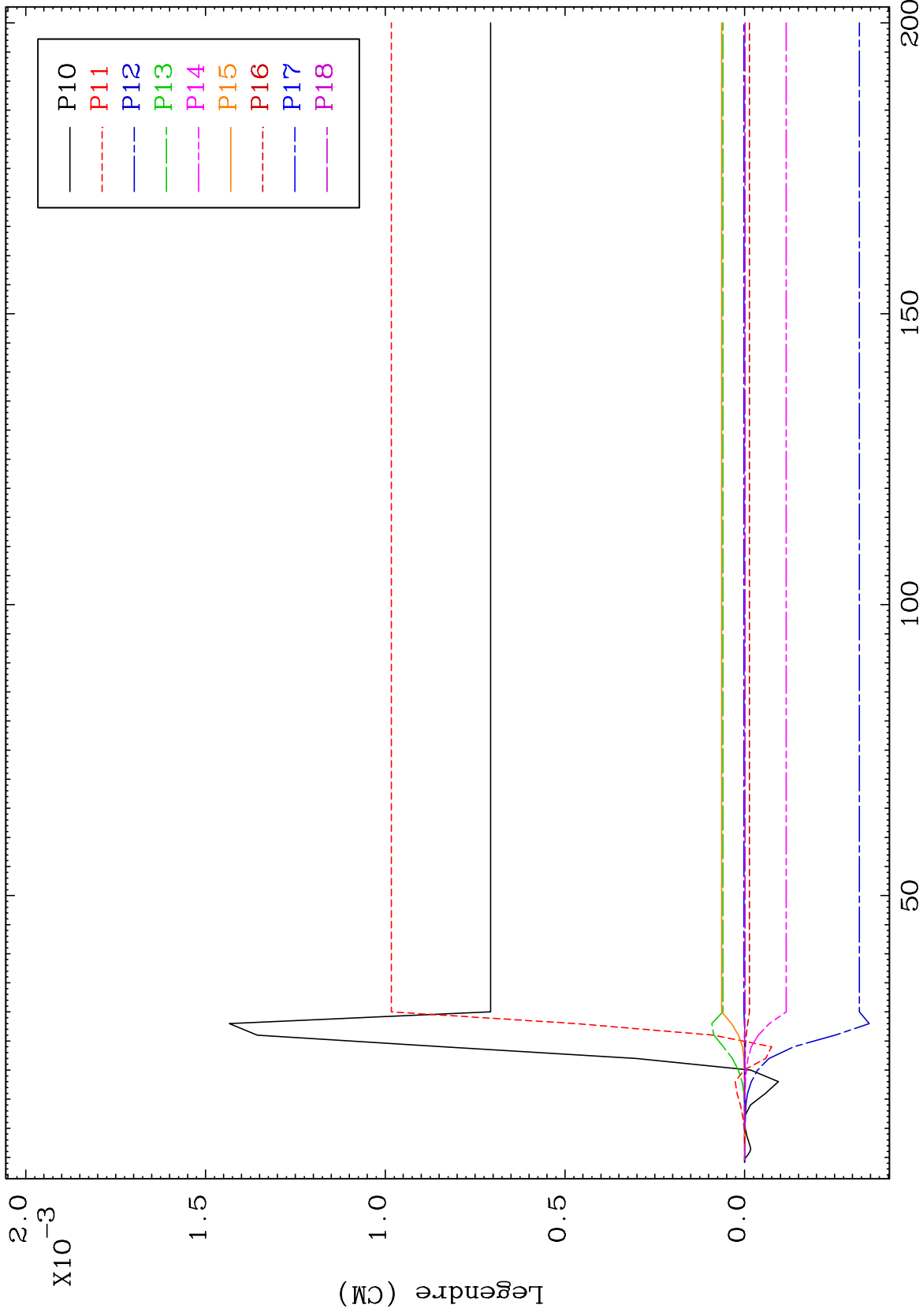




MAT 6989

MT= 59 (n,n') Level  
Legendre Coefficients

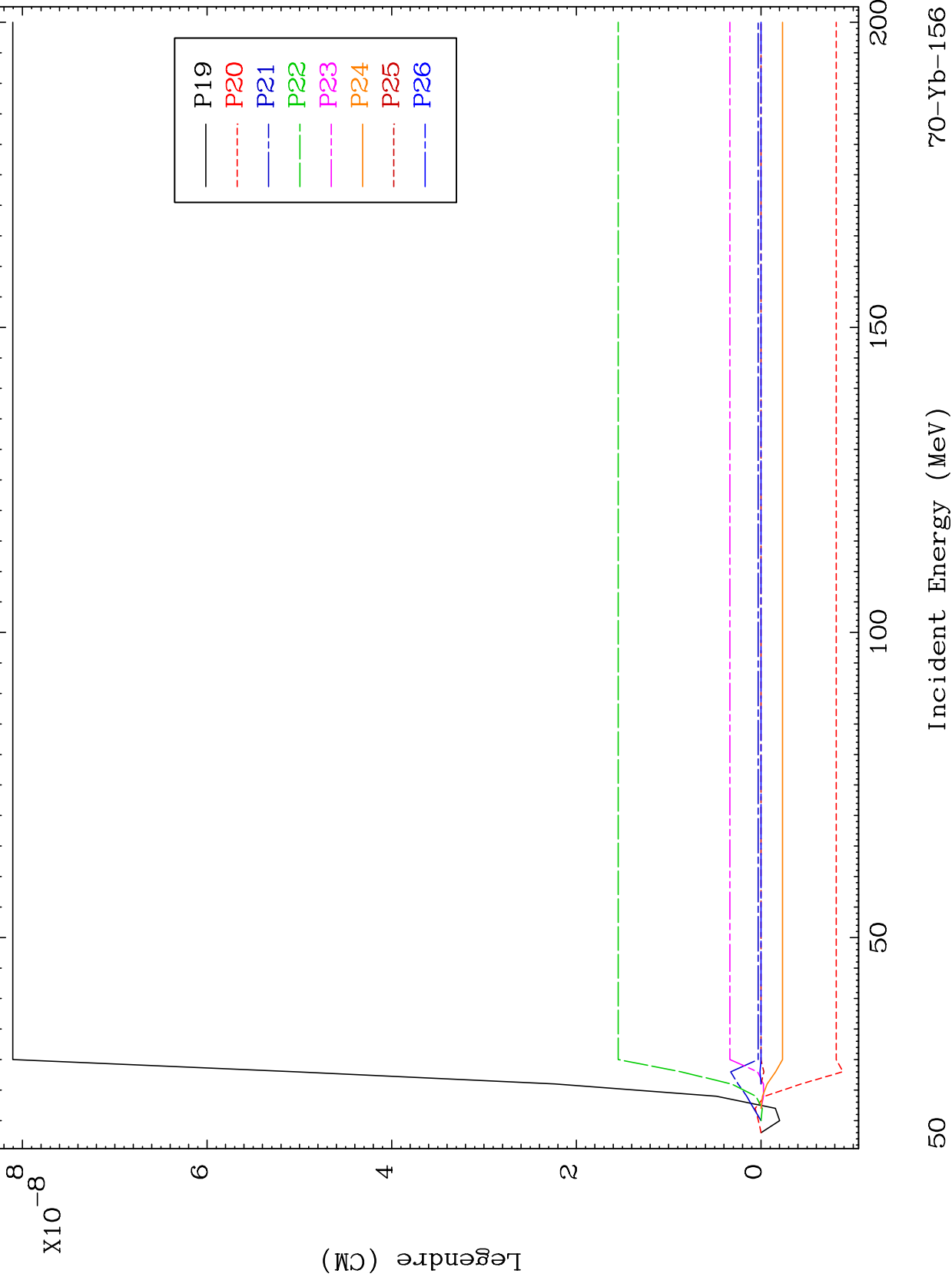
70-Yb-156



MAT 6989

MT= 59 (n,n') Level  
Legendre Coefficients

70-Yb-156



70-Yb-156

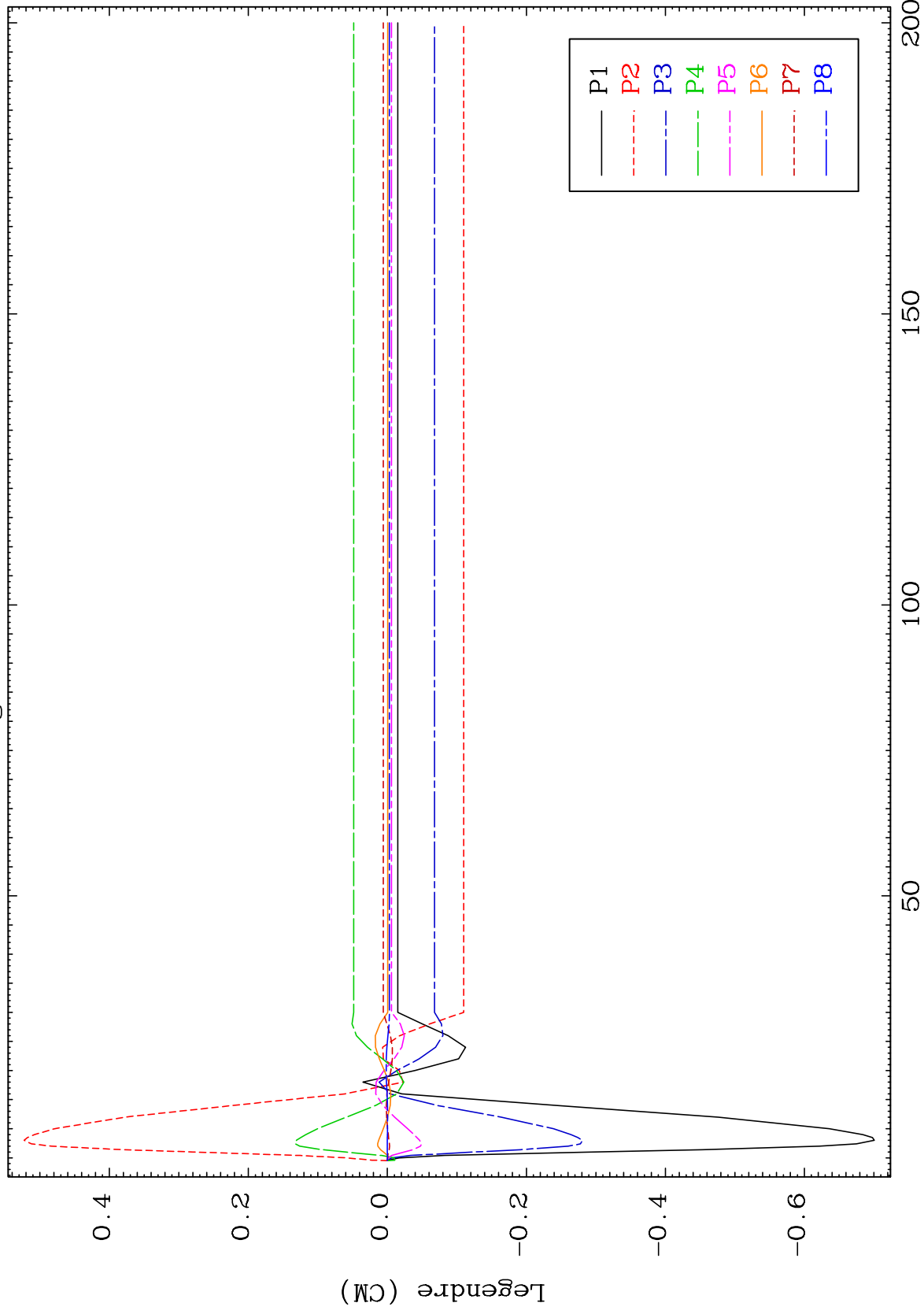
Incident Energy (MeV)

50

MAT 6989

MT= 60 (n,n') Level  
Legendre Coefficients

70-Yb-156



51

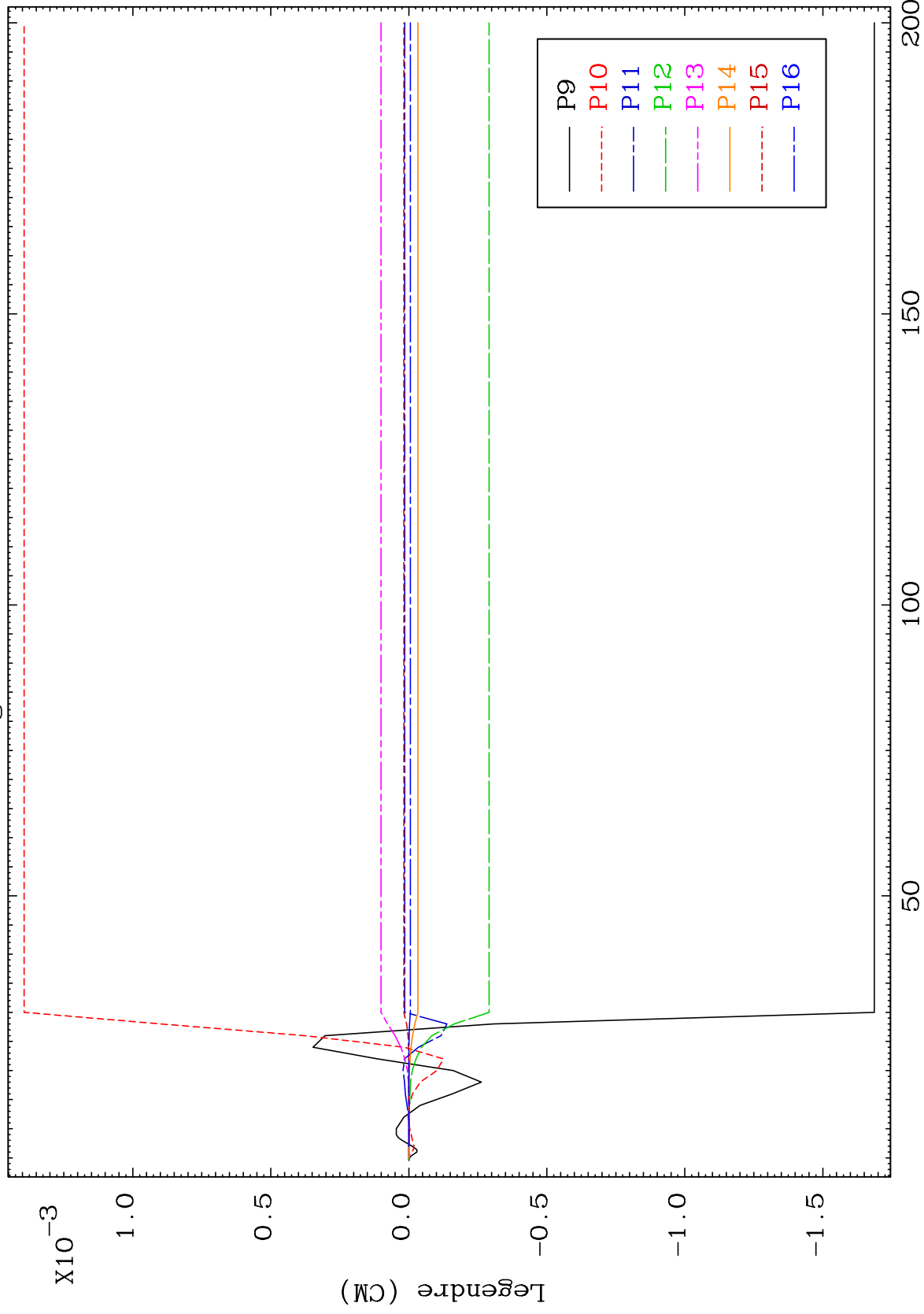
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 60 (n,n') Level  
Legendre Coefficients

70-Yb-156



52

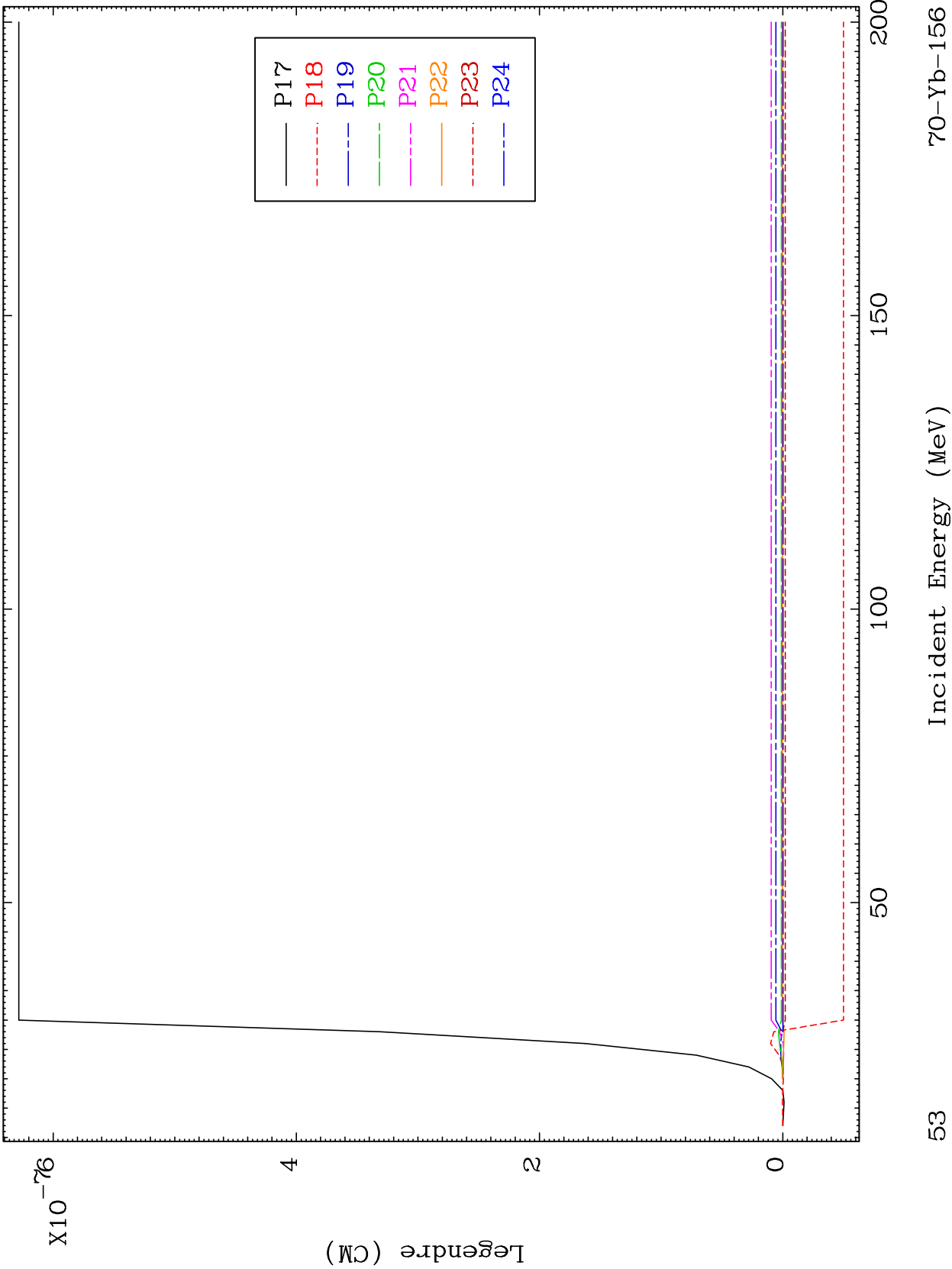
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 60 (n,n') Level  
Legendre Coefficients

70-Yb-156



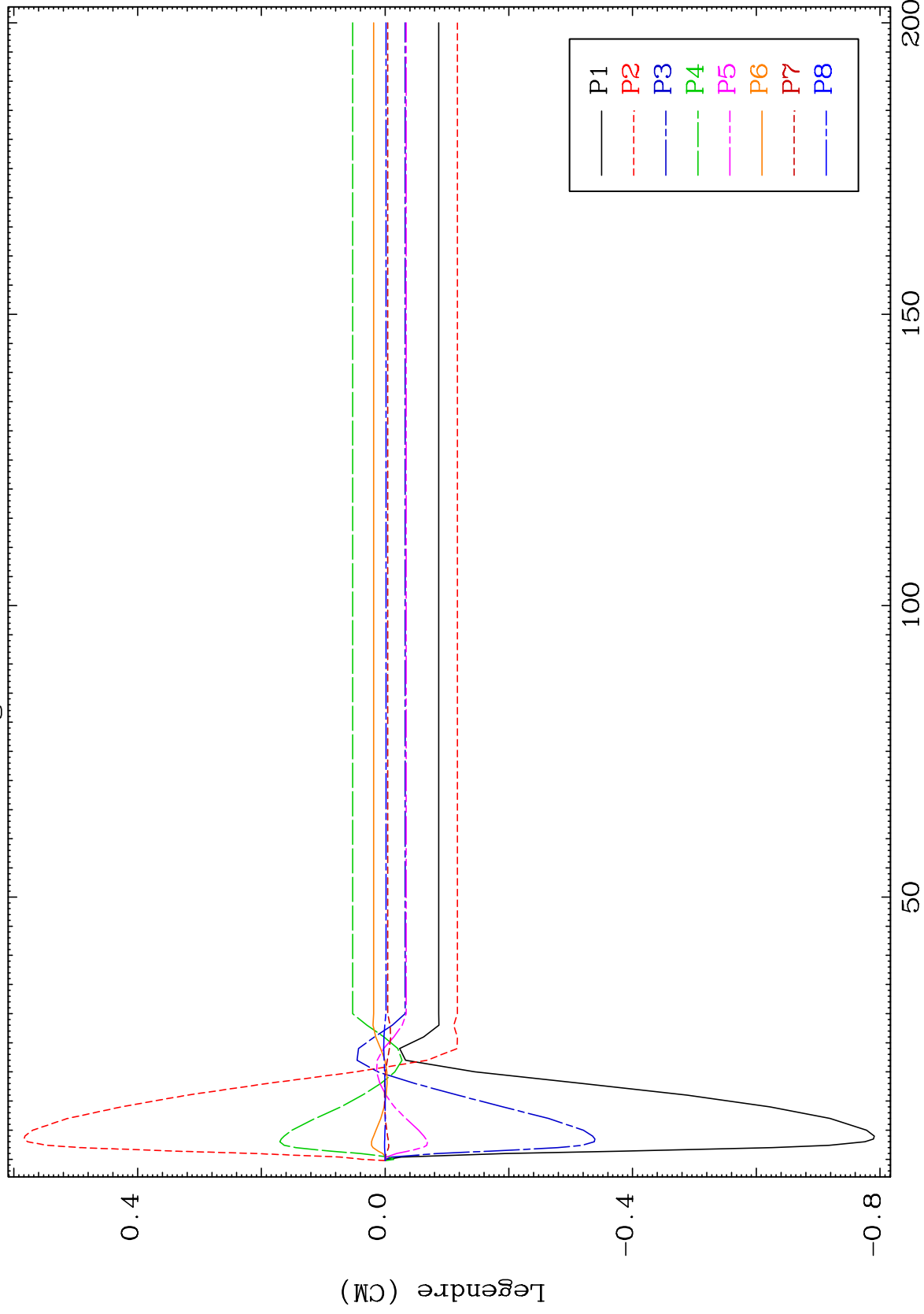
53

70-Yb-156

MAT 6989

MT= 61 (n,n') Level  
Legendre Coefficients

70-Yb-156



54

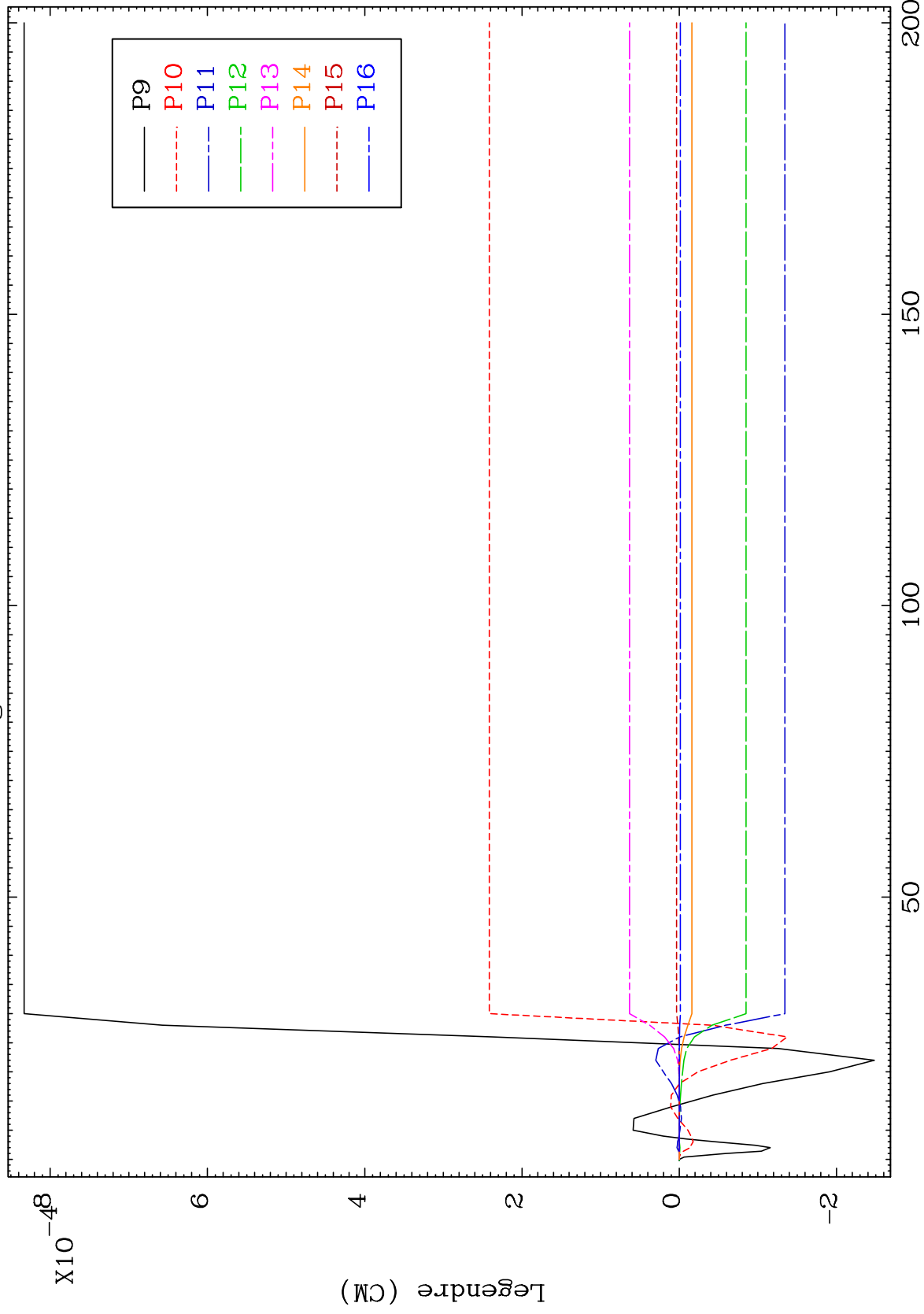
Incident Energy (MeV)

70-Yb-156

MAT 6989

MT= 61 (n,n') Level  
Legendre Coefficients

70-Yb-156



55

Incident Energy (MeV)

50

100

150

200

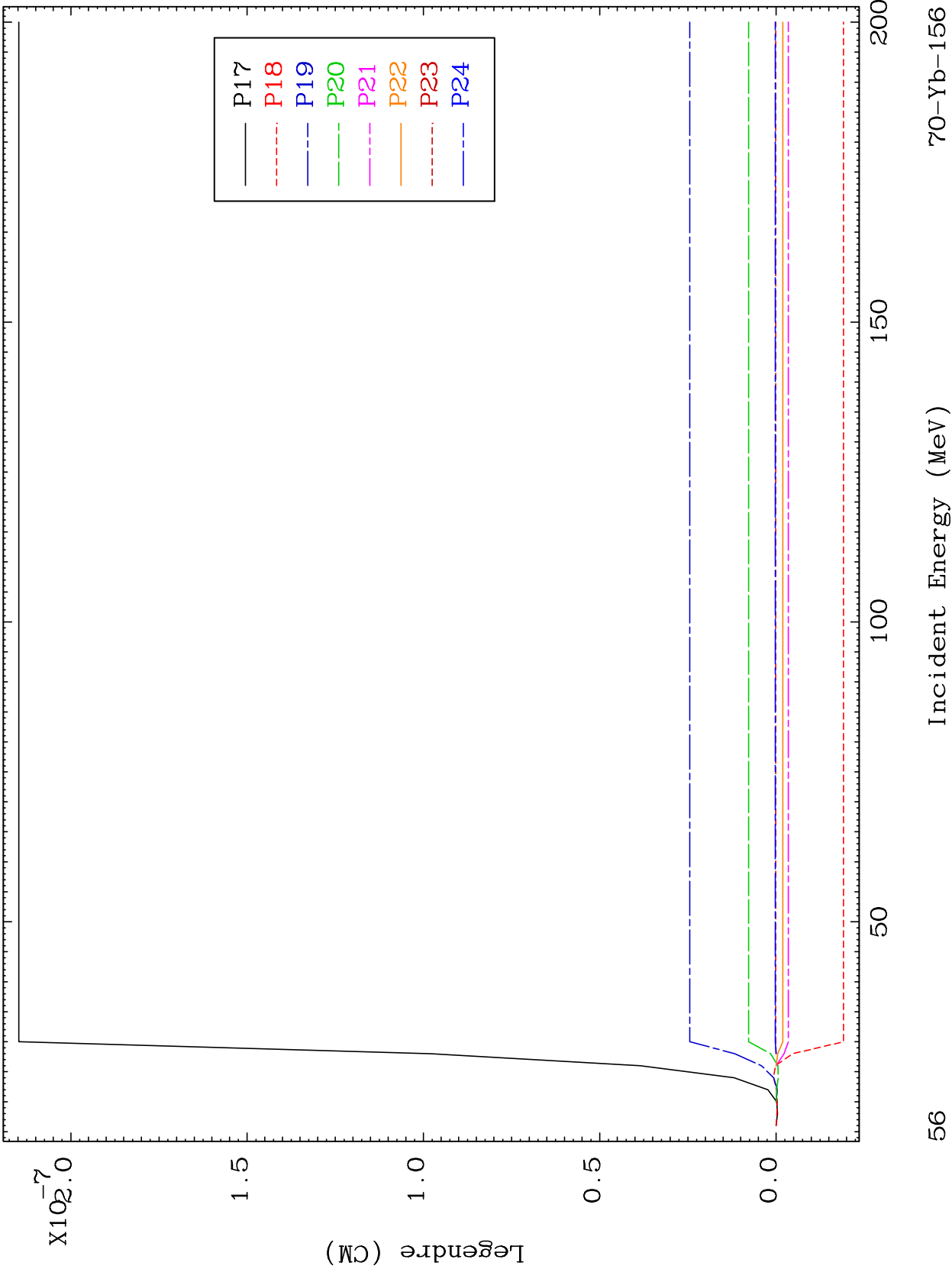
70-Yb-156



MAT 6989

MT= 61 (n,n') Level  
Legendre Coefficients

70-Yb-156



56

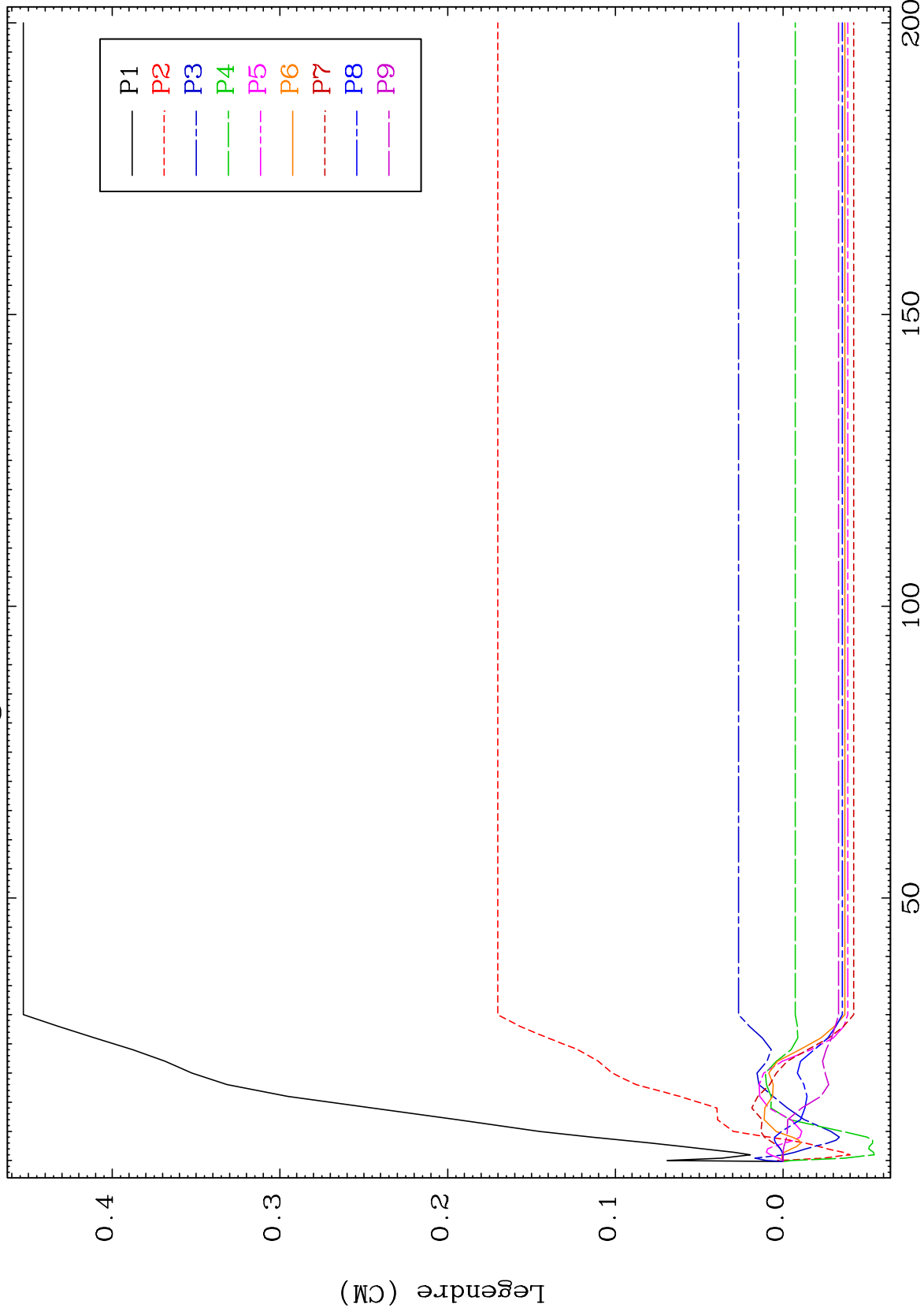
Incident Energy (MeV)

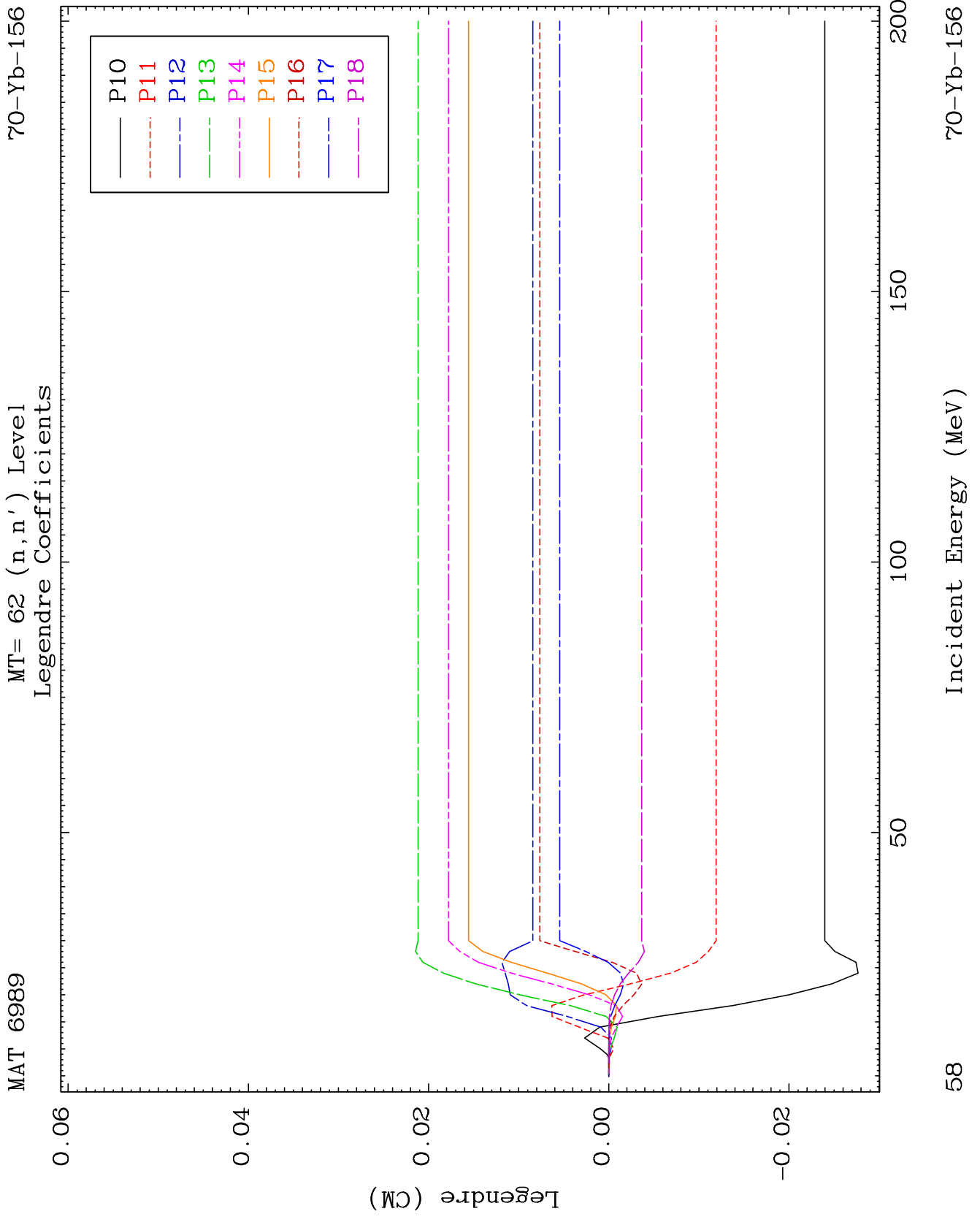
70-Yb-156

MAT 6989

MT= 62 (n,n') Level  
Legendre Coefficients

70-Yb-156

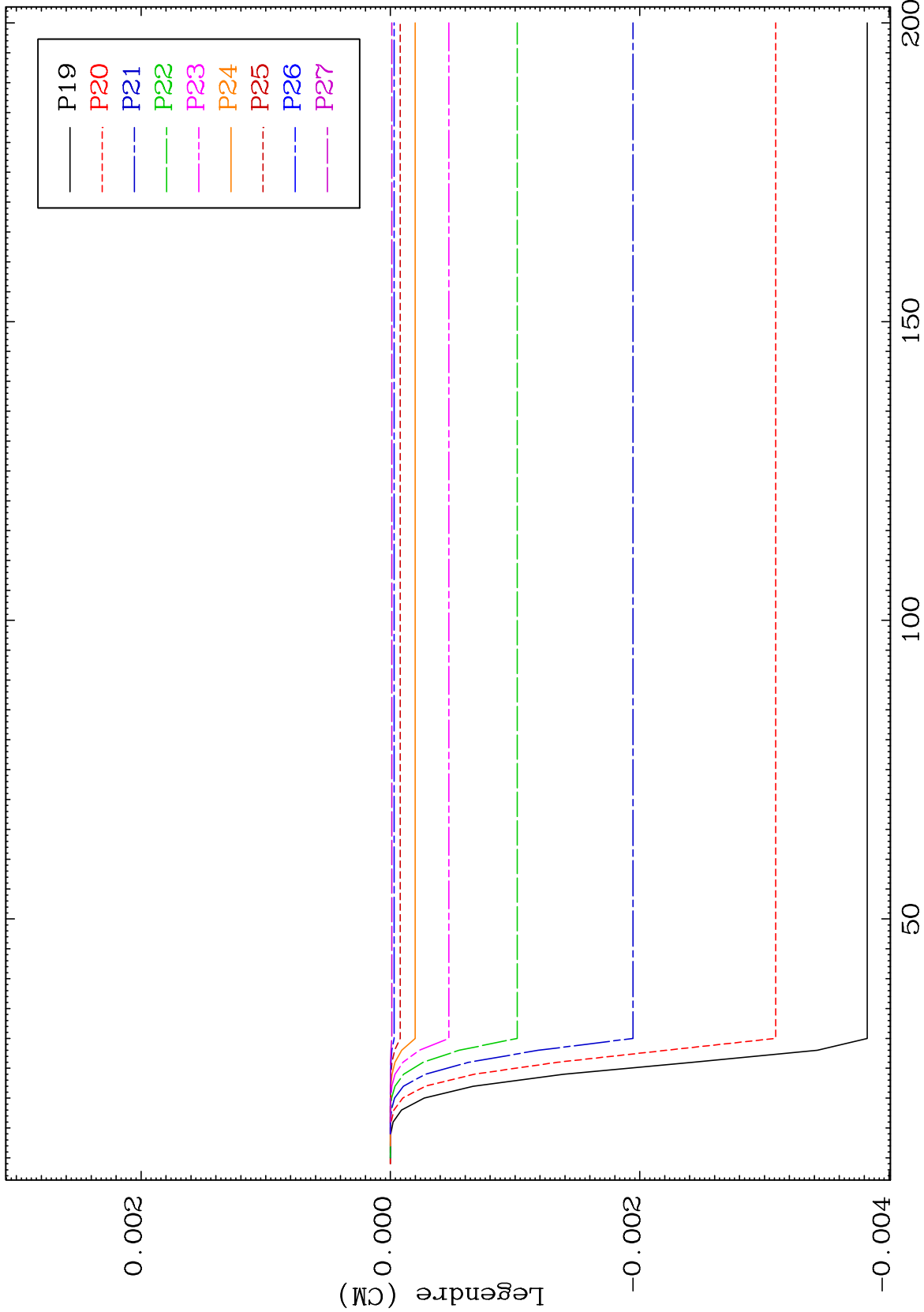




MAT 6989

MT= 62 (n,n') Level  
Legendre Coefficients

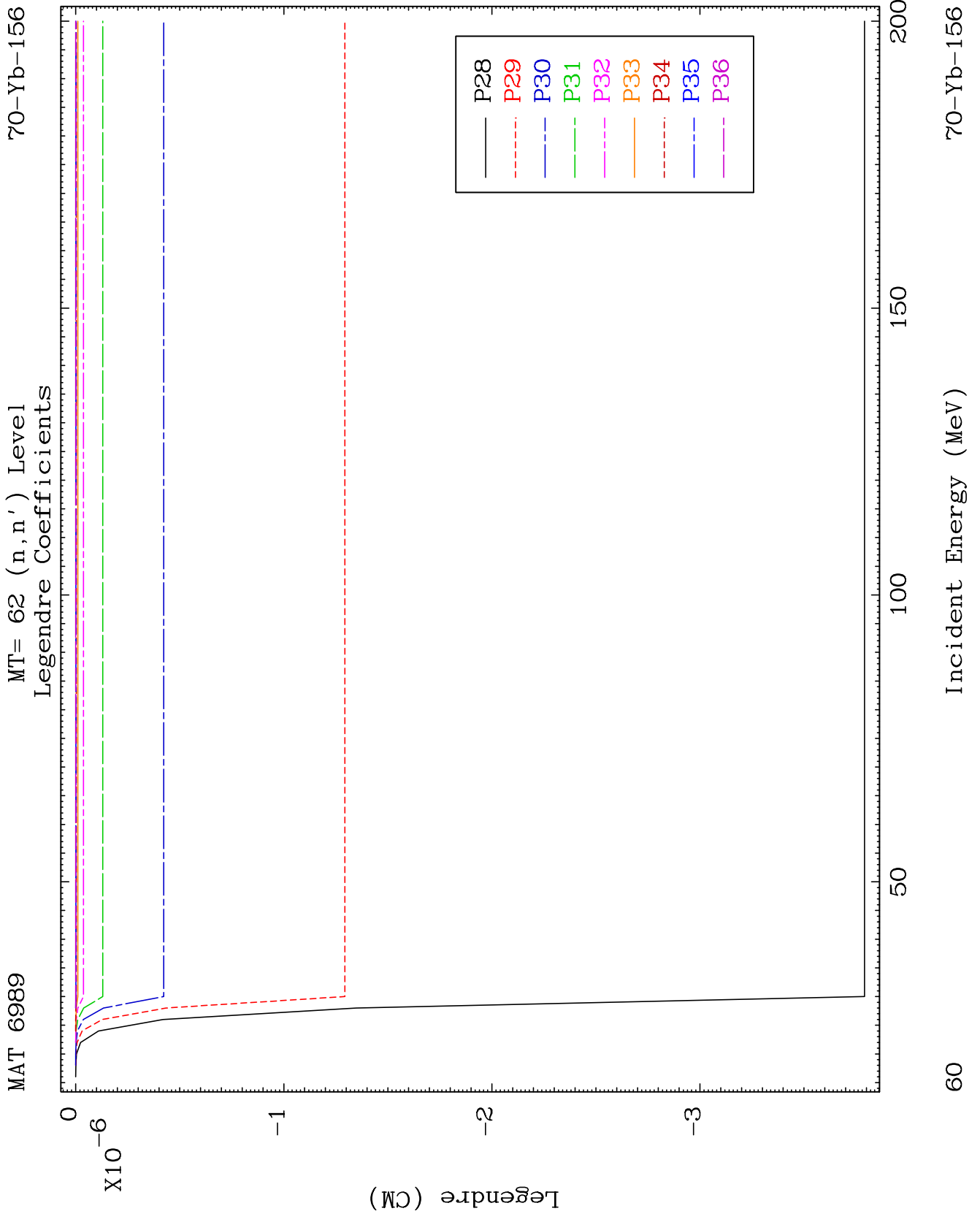
70-Yb-156



59

Incident Energy (MeV)

70-Yb-156

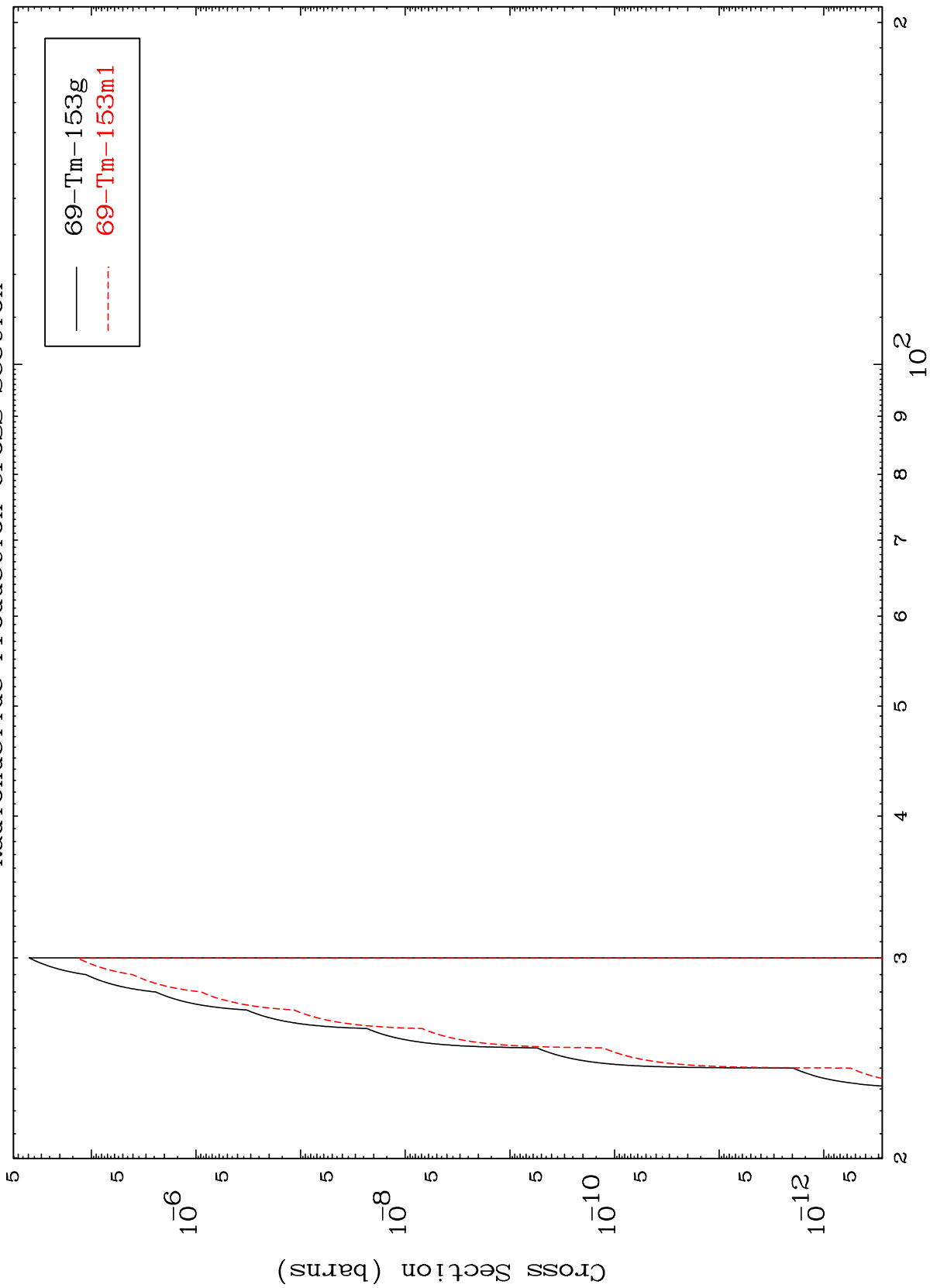


MAT 6989

(n,2n) d

70-Yb-156

Radionuclide Production Cross Section



61

Incident Energy (MeV)

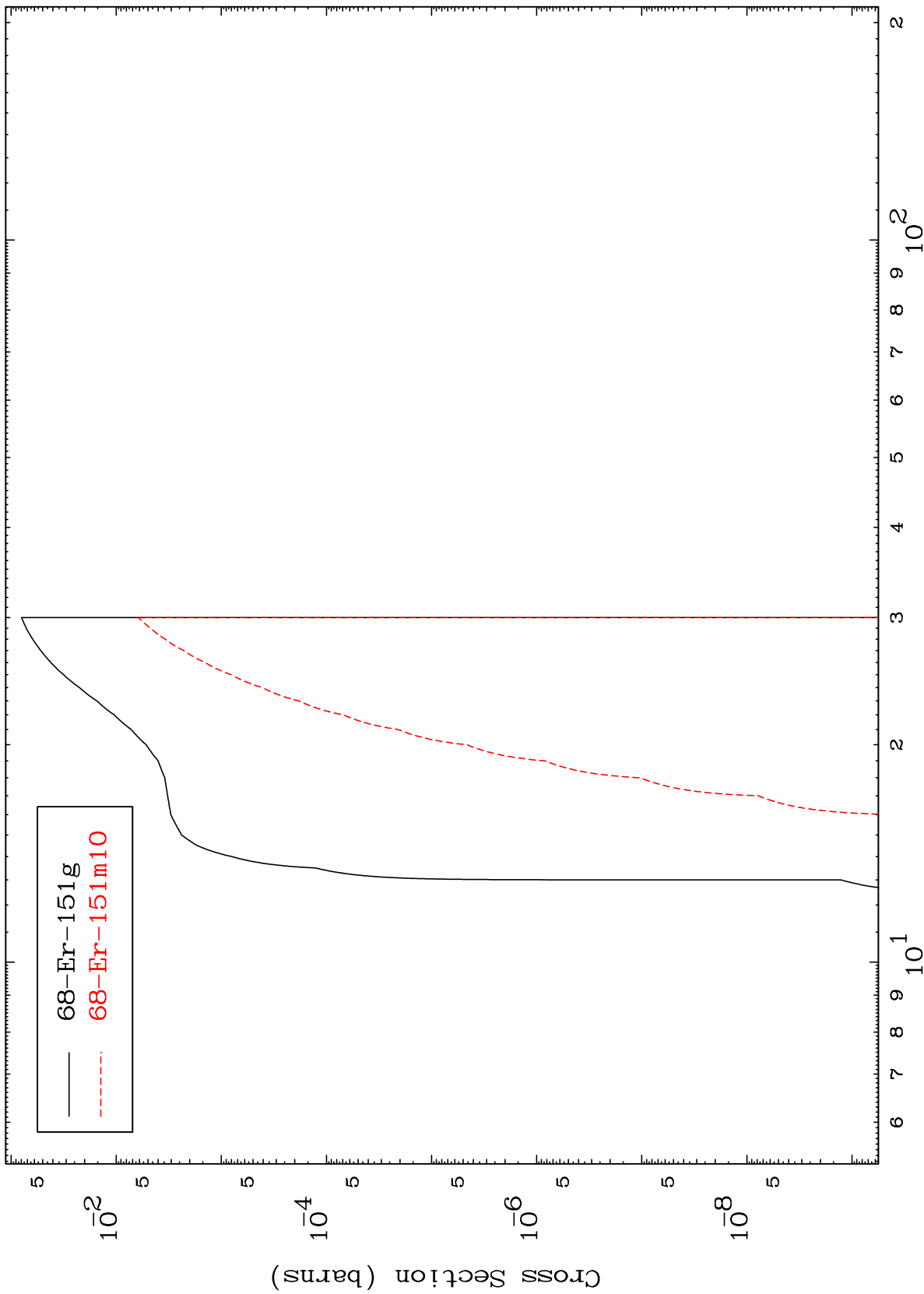
70-Yb-156

MAT 6989

(n,2n)  $\alpha$

70-Yb-156

Radionuclide Production Cross Section



62

Incident Energy (MeV)

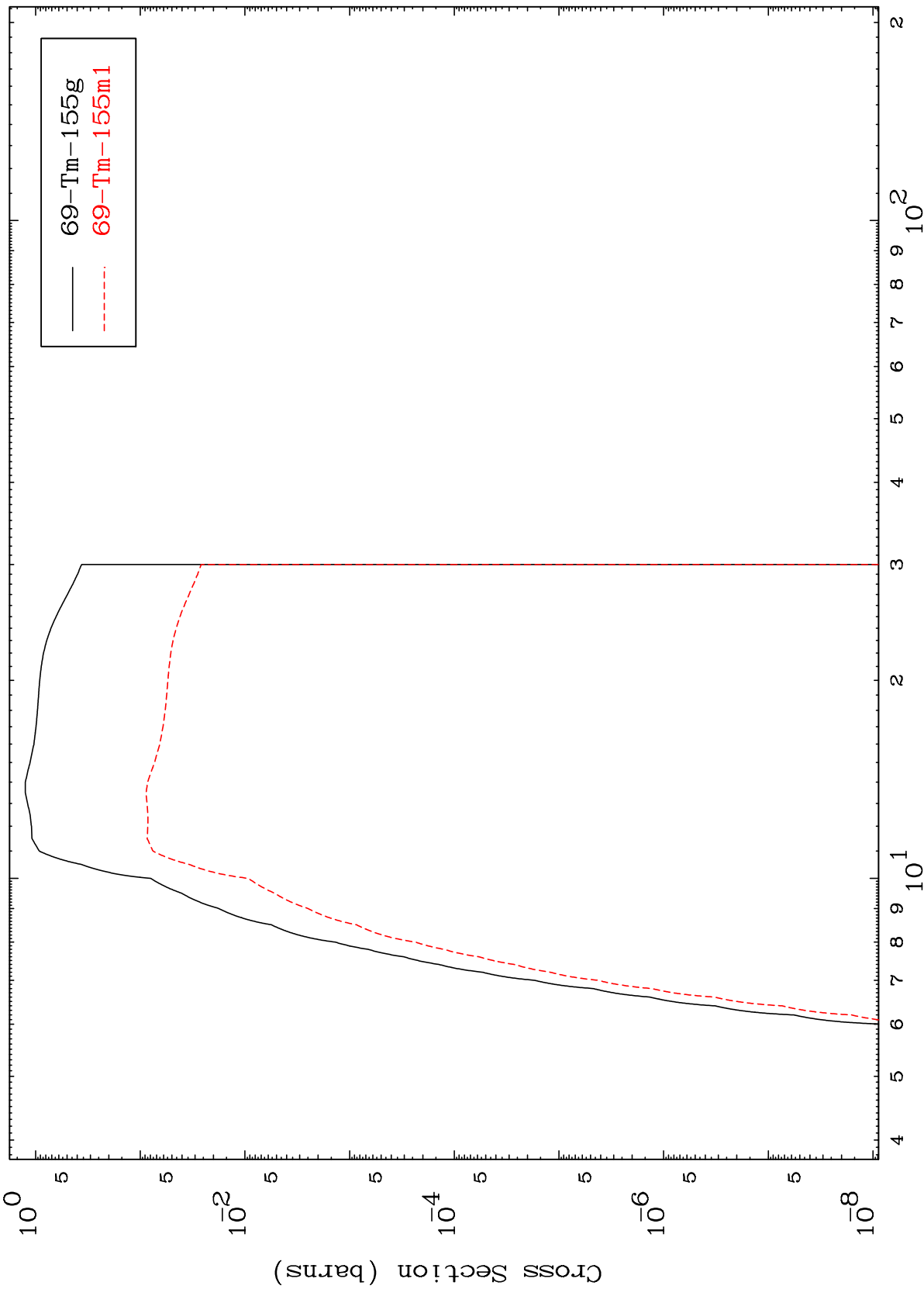
70-Yb-156

MAT 6989

(n,n') p

70-Yb-156

Radionuclide Production Cross Section



63

Incident Energy (MeV)

70-Yb-156

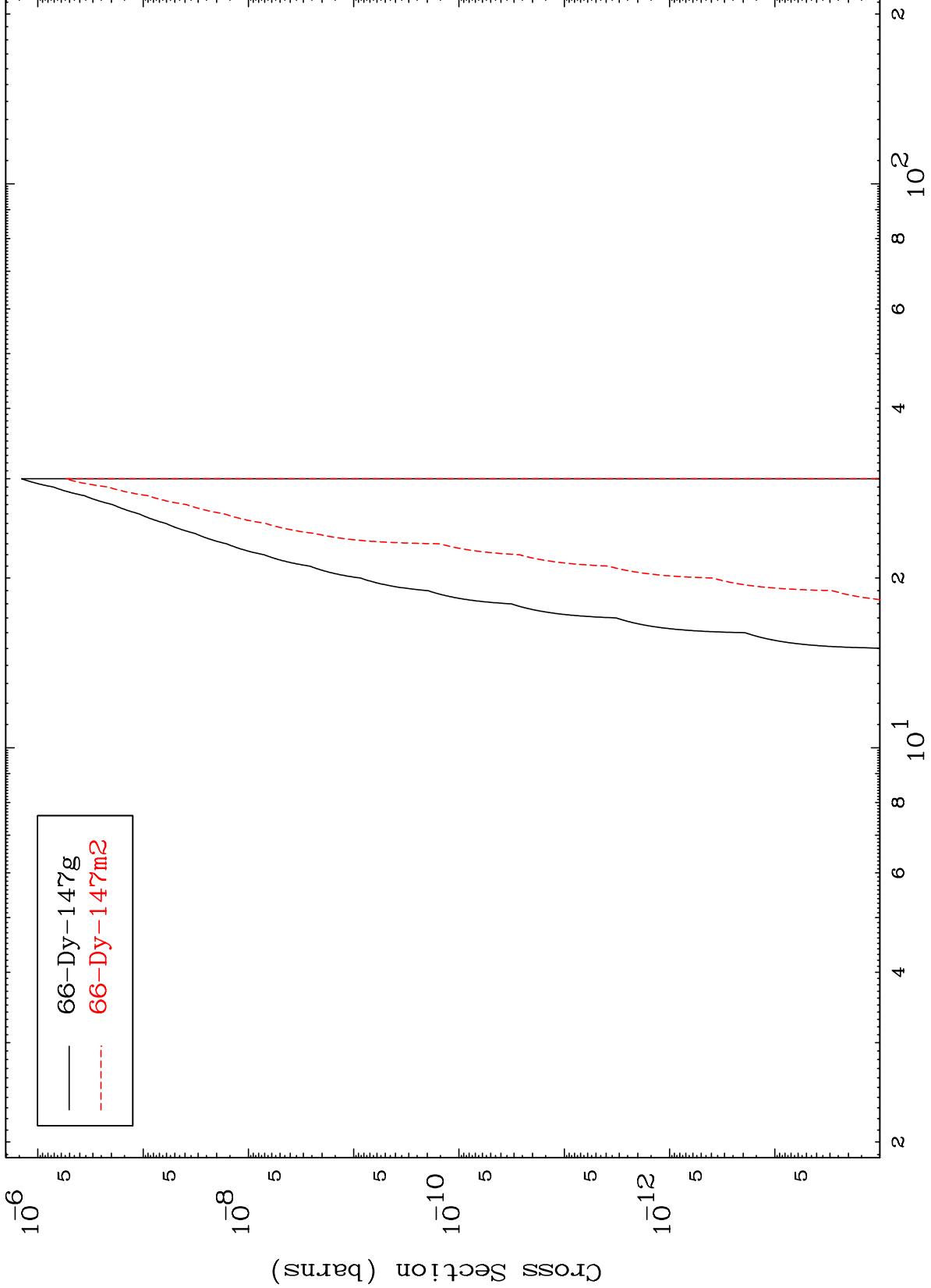


MAT 6989

(n,2n) 2 $\alpha$

70-Yb-156

Radionuclide Production Cross Section



— 66-Dy-147g  
- - - 66-Dy-147m2

64

Incident Energy (MeV)

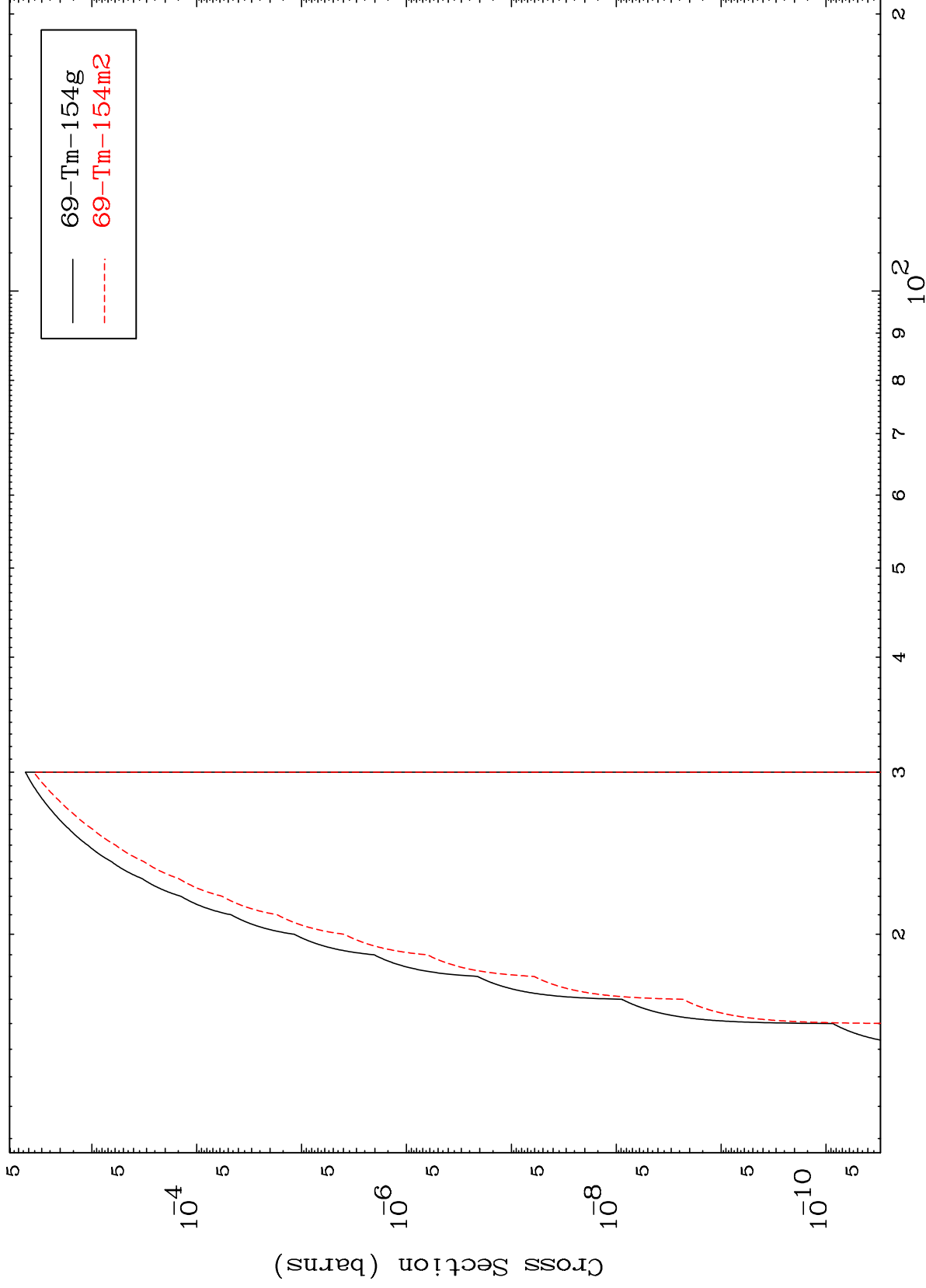
70-Yb-156

MAT 6989

(n,n') d

70-Yb-156

Radionuclide Production Cross Section



65

Incident Energy (MeV)

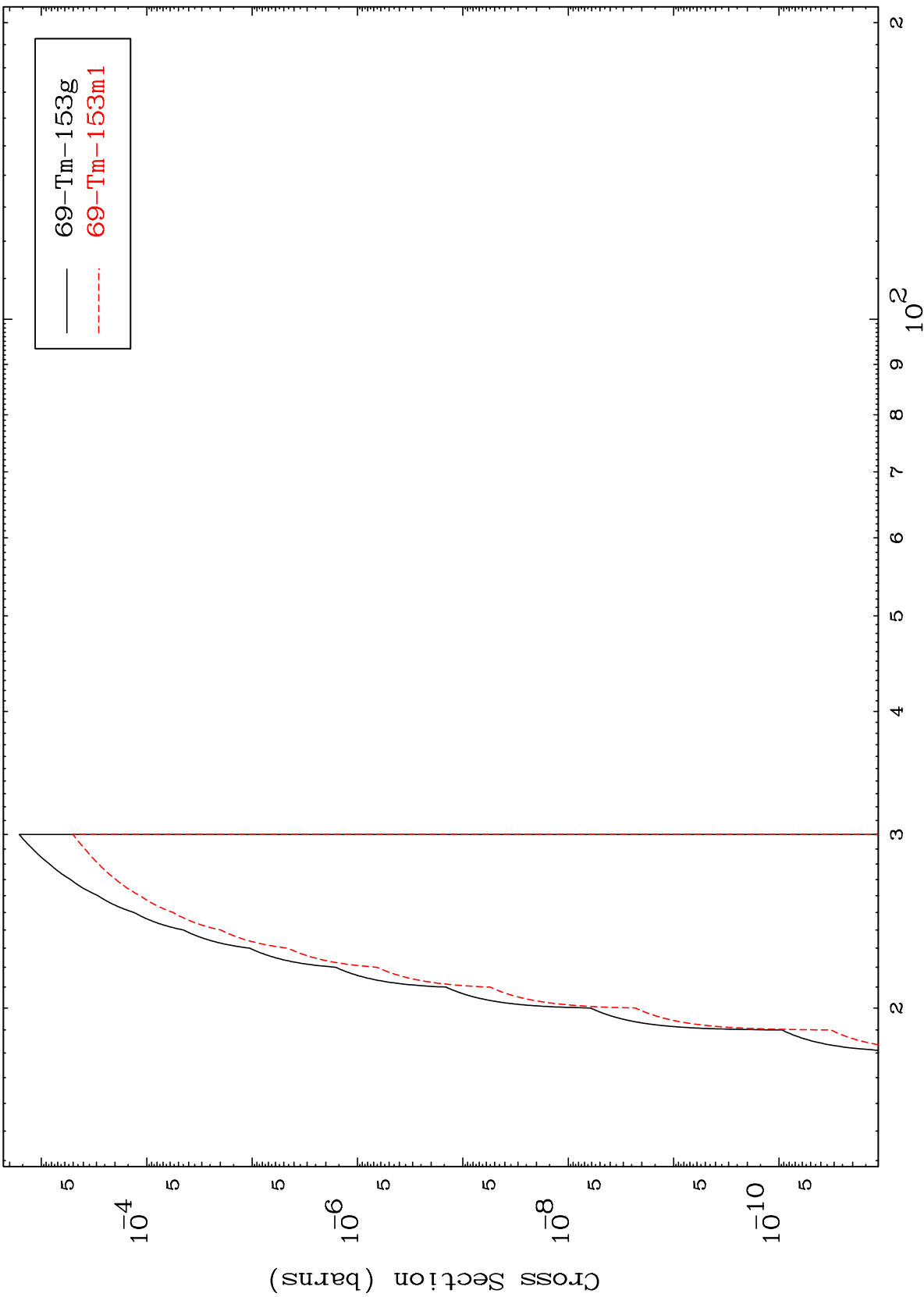
70-Yb-156

MAT 6989

(n,n') t

70-Yb-156

Radionuclide Production Cross Section



66

Incident Energy (MeV)

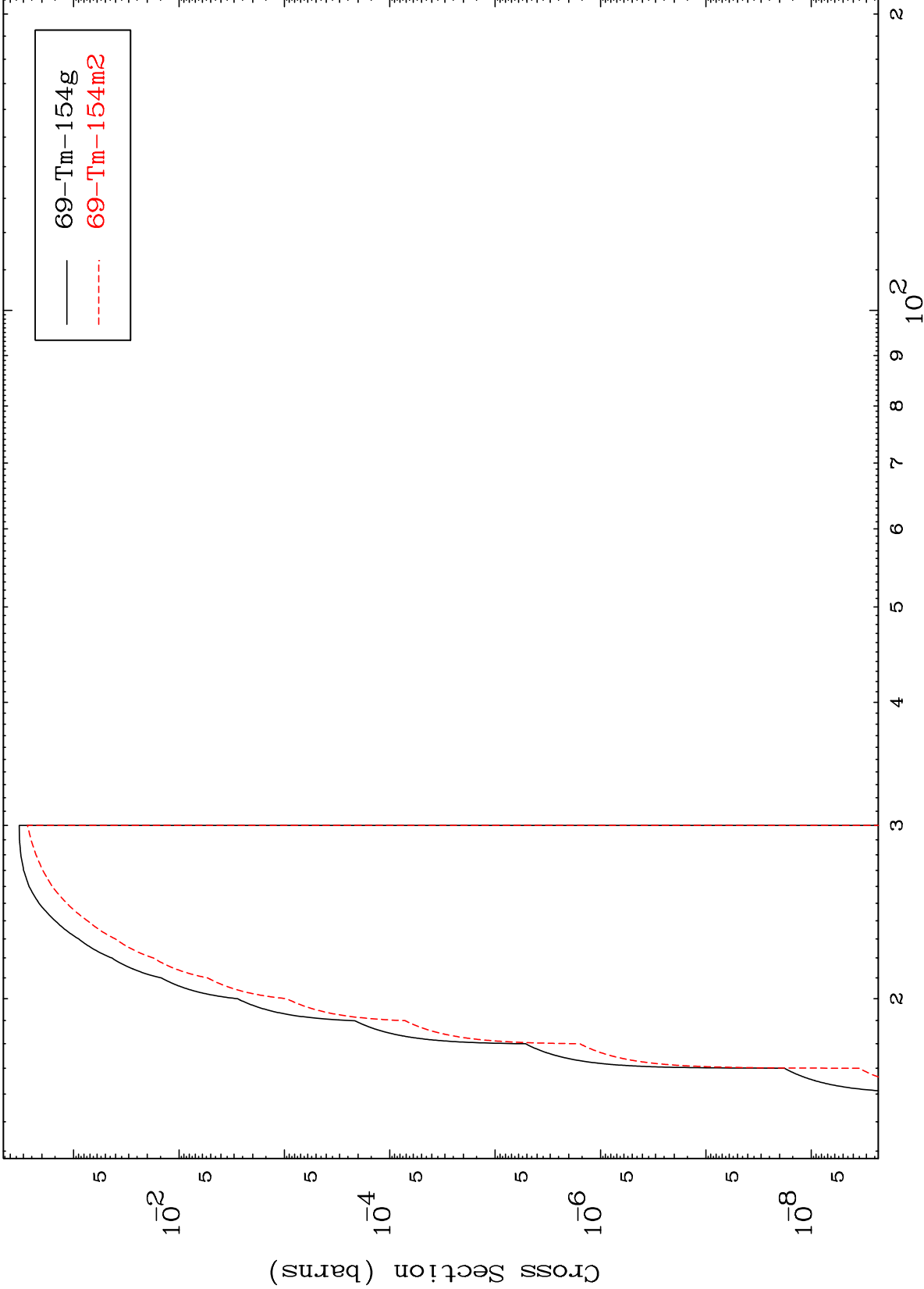
70-Yb-156

MAT 6989

(n,2n) p

70-Yb-156

Radionuclide Production Cross Section



69-Tm-154g  
69-Tm-154m2

67

Incident Energy (MeV)

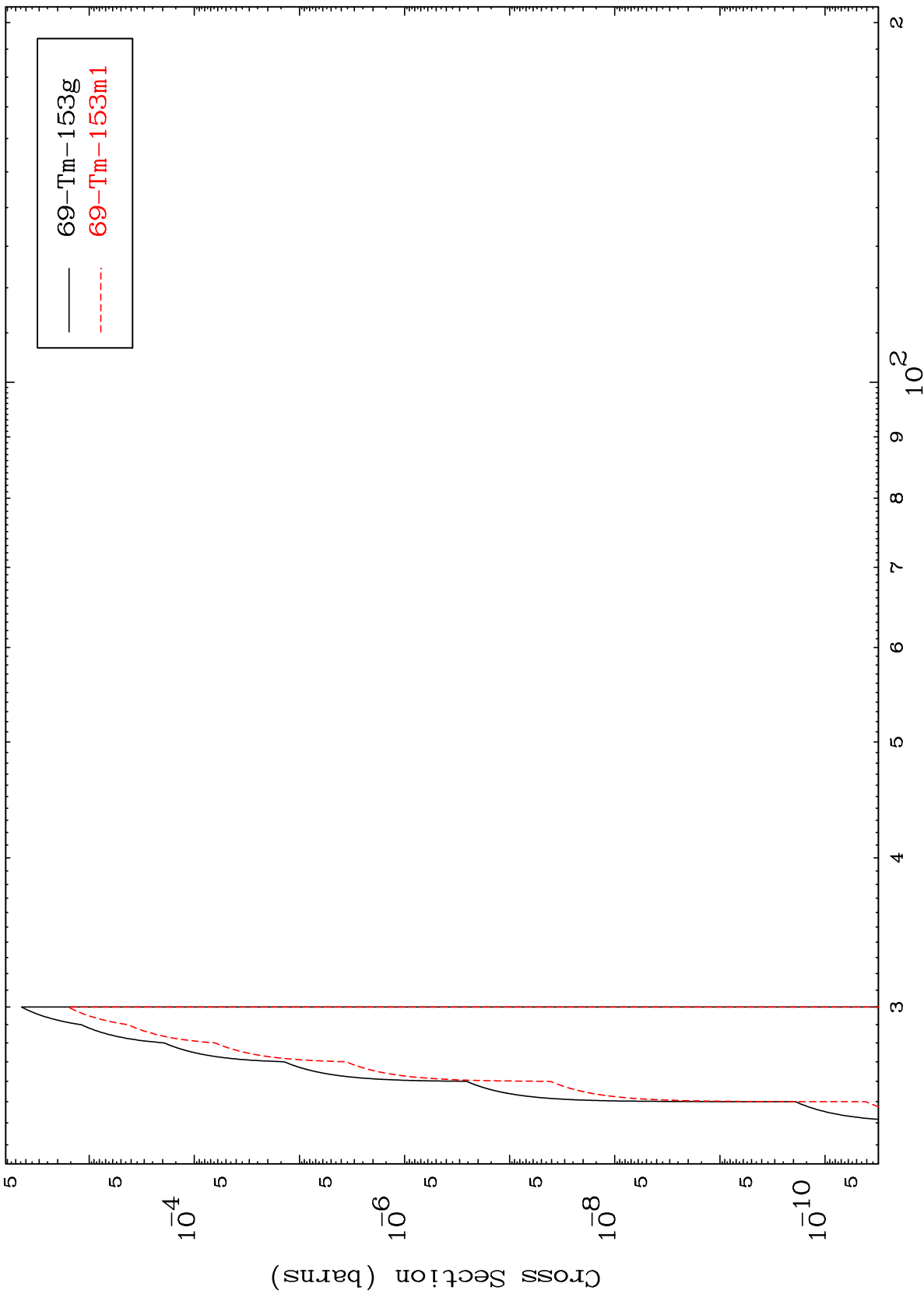
70-Yb-156

MAT 6989

(n,3n) p

70-Yb-156

Radionuclide Production Cross Section



68

Incident Energy (MeV)

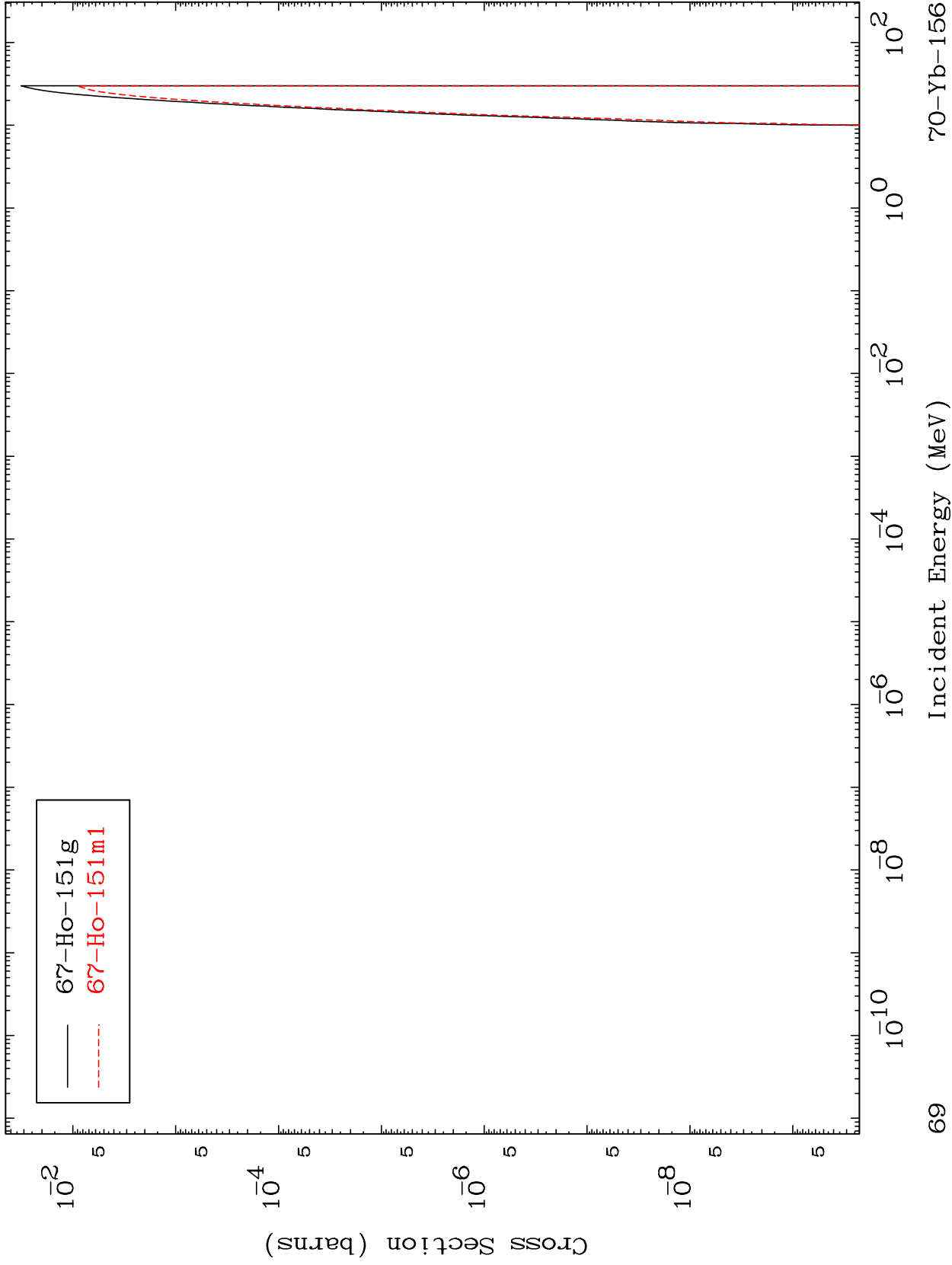
70-Yb-156

MAT 6989

(n,n') p  $\alpha$

70-Yb-156

Radionuclide Production Cross Section

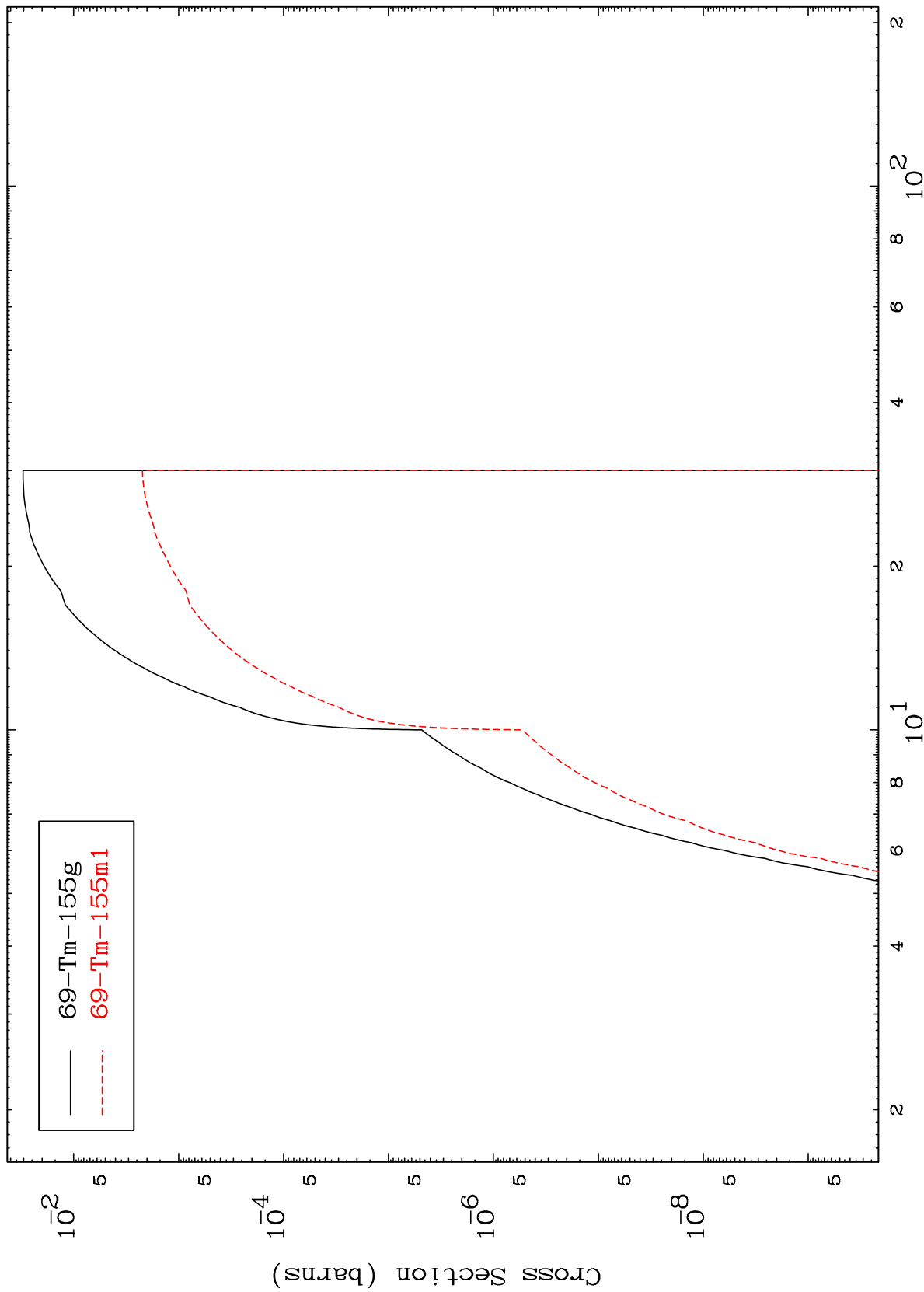


MAT 6989

(n,d)

70-Yb-156

Radionuclide Production Cross Section



70

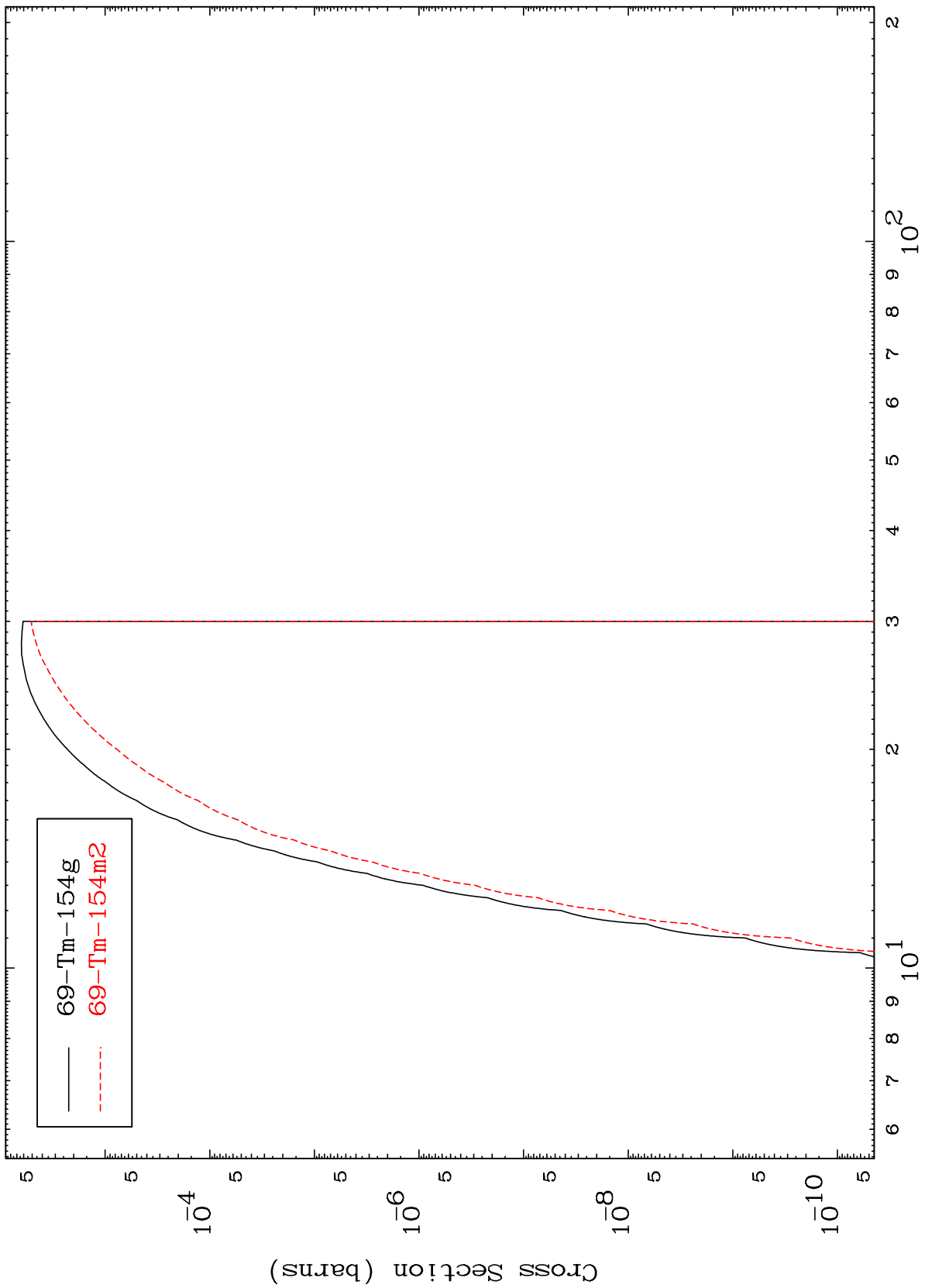
Incident Energy (MeV)

70-Yb-156

MAT 6989

70-Yb-156

(n, t)  
Radionuclide Production Cross Section



71

Incident Energy (MeV)

70-Yb-156

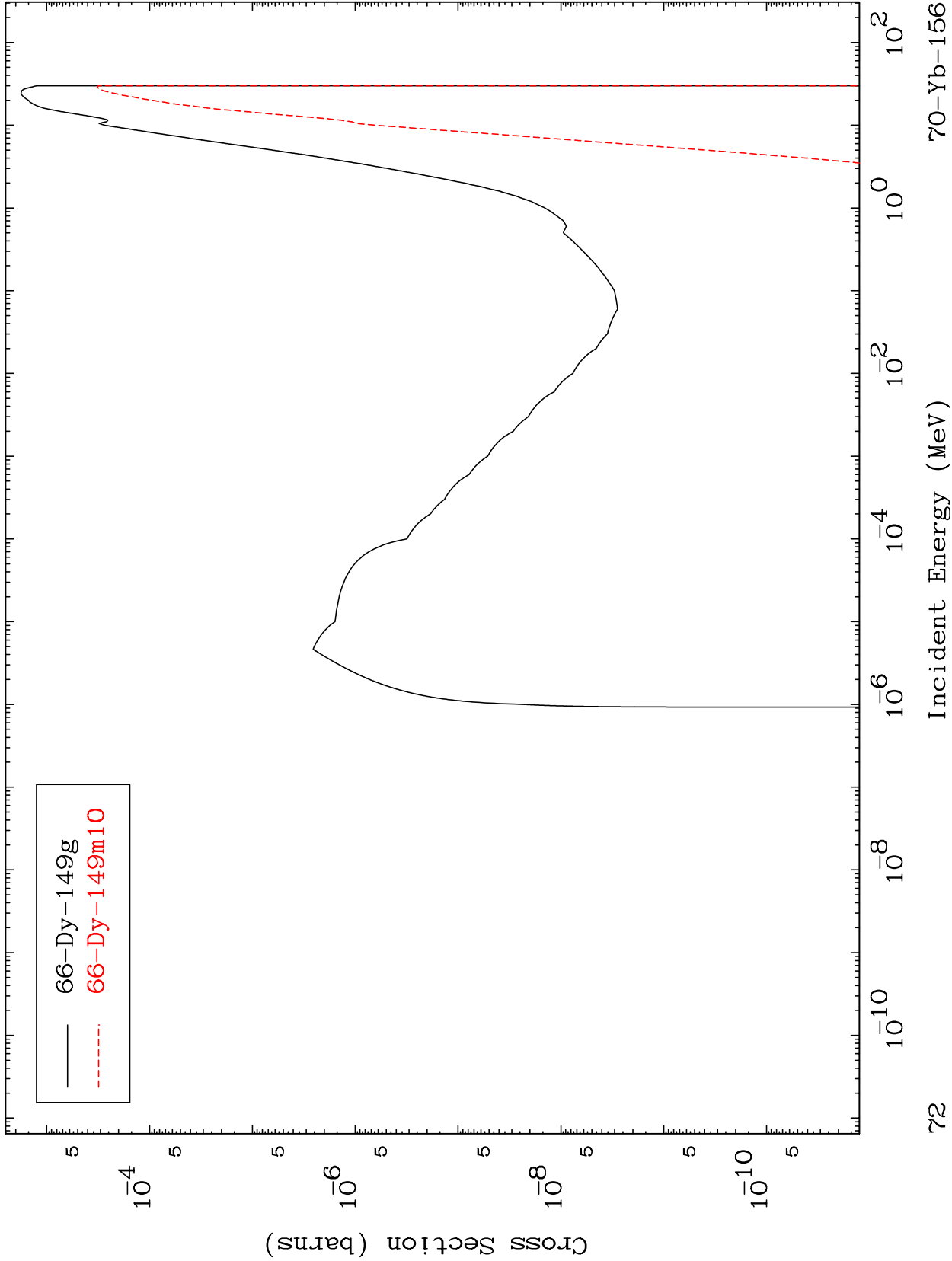


MAT 6989

(n,2α)

70-Yb-156

Radionuclide Production Cross Section



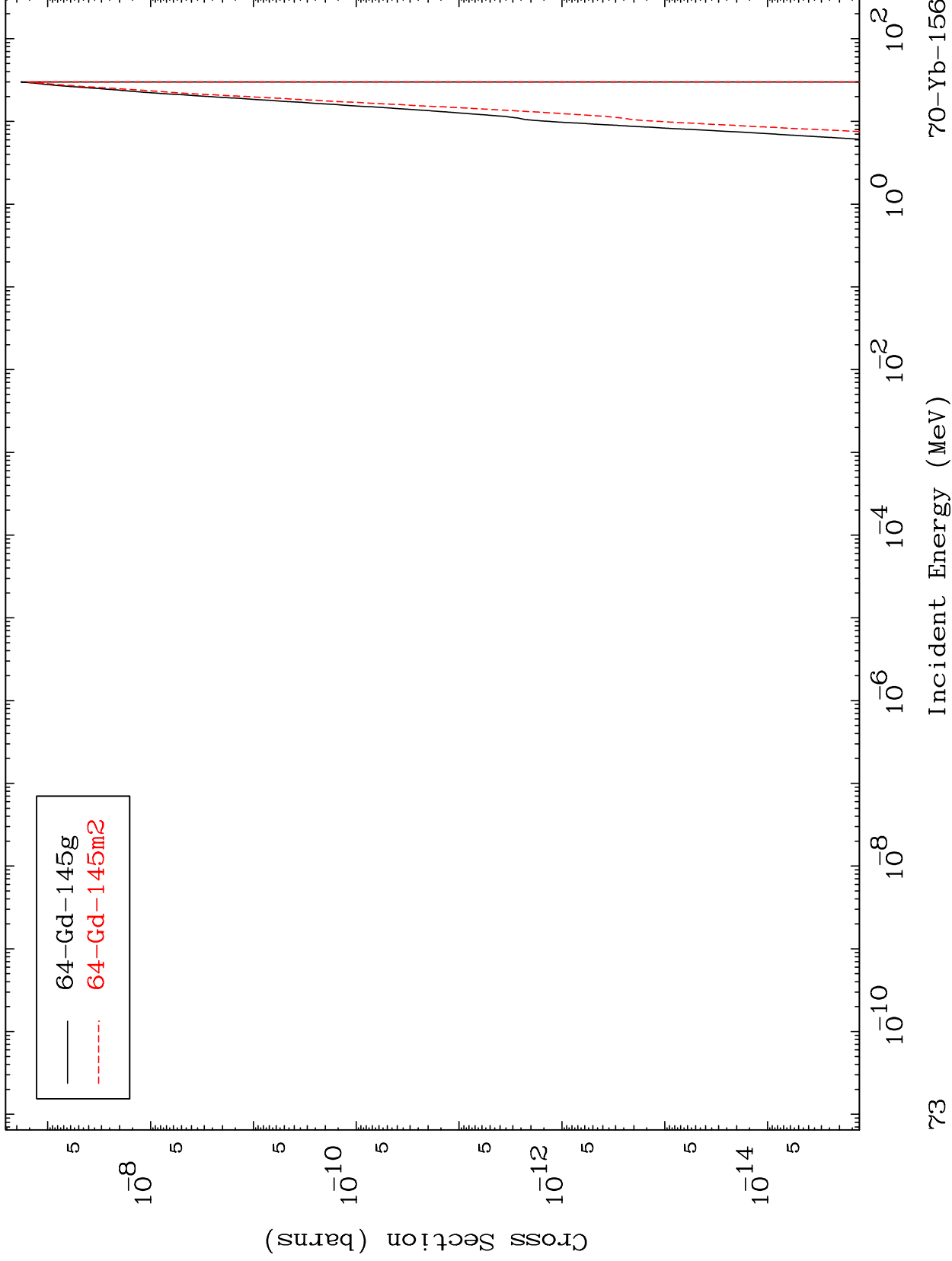
— 66-Dy-149g  
- - - 66-Dy-149m10

MAT 6989

(n, 3α)

70-Yb-156

Radionuclide Production Cross Section



73

Incident Energy (MeV)

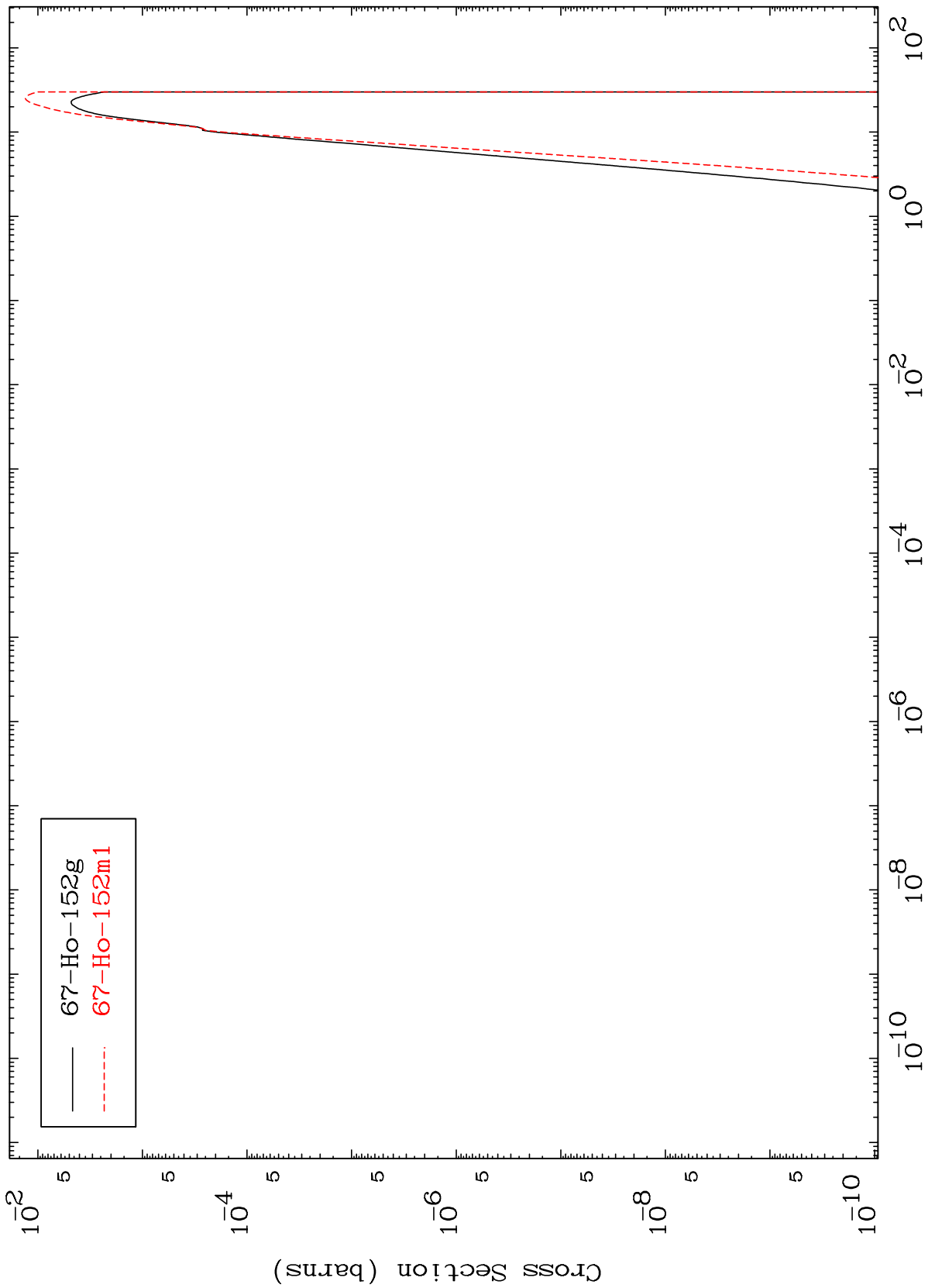
70-Yb-156

MAT 6989

(n,p)  $\alpha$

70-Yb-156

Radionuclide Production Cross Section

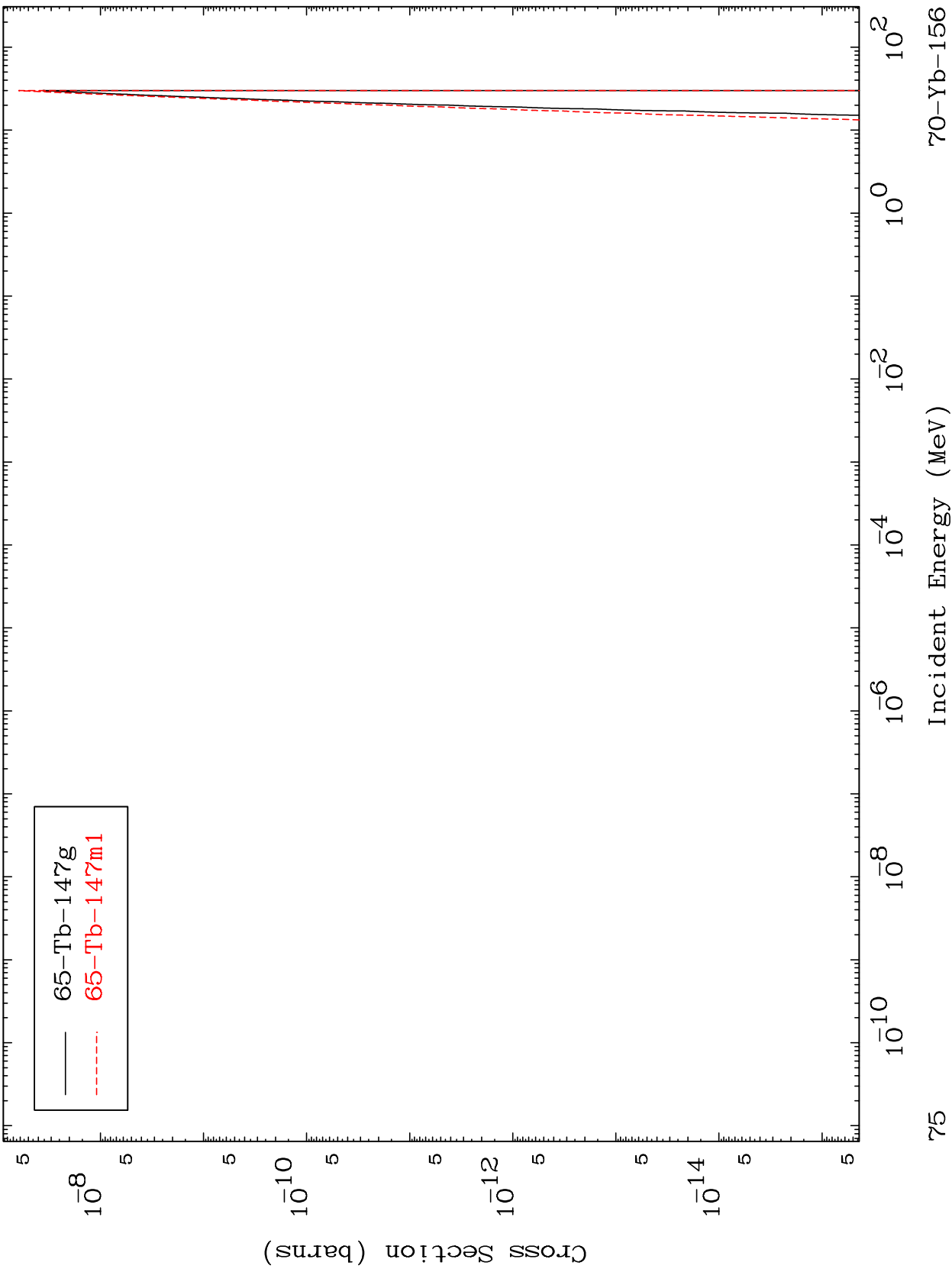


MAT 6989

(n,d) 2 $\alpha$

70-Yb-156

Radionuclide Production Cross Section

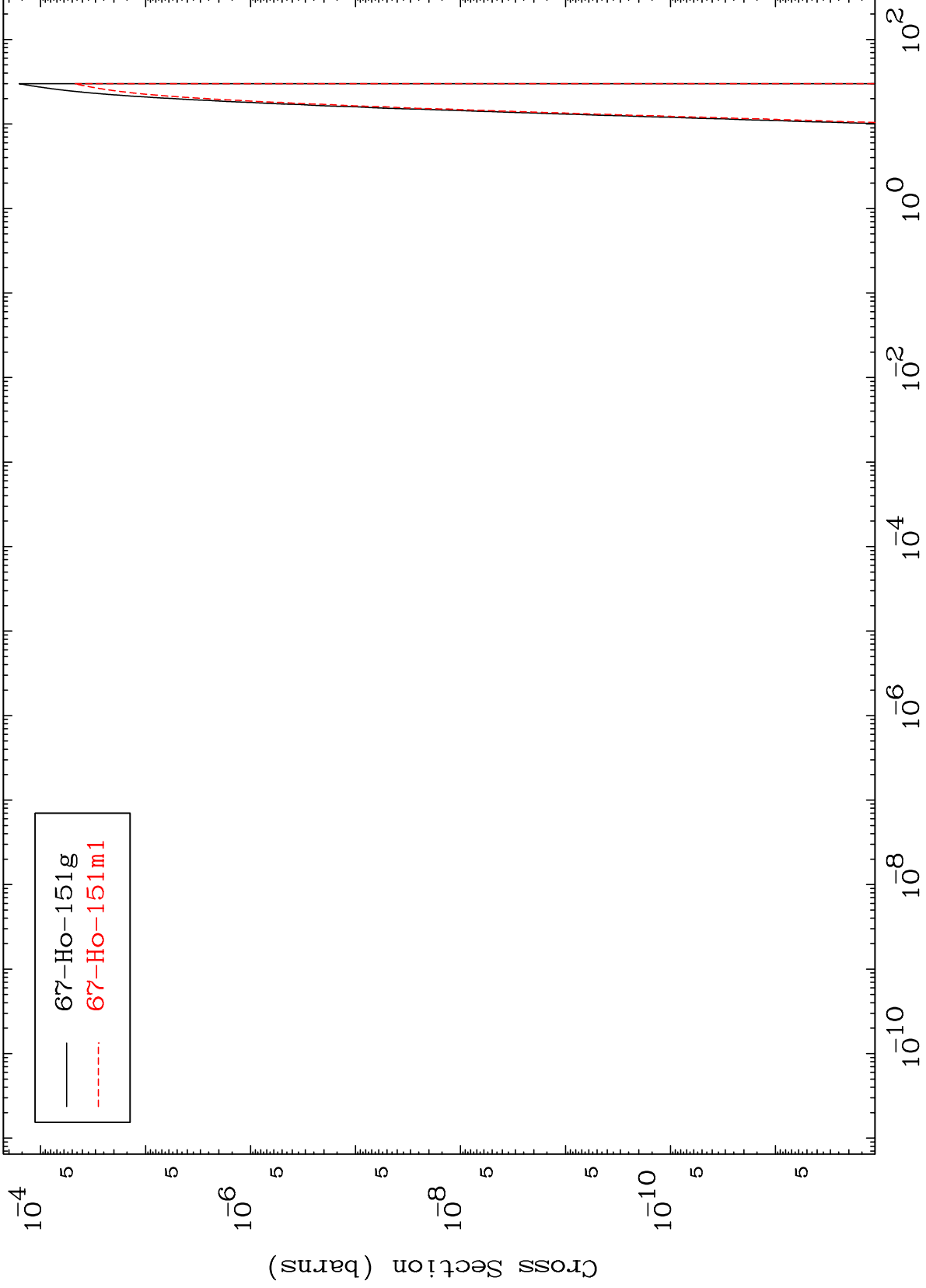


MAT 6989

(n,d)  $\alpha$

<sup>70</sup>Yb-156

Radionuclide Production Cross Section



— 67-Ho-151g  
- - - 67-Ho-151m1

76

Incident Energy (MeV)

<sup>70</sup>Yb-156