

Table VI B.2 (continued)

C: L	P, T	Variable Name	Meaning (units)	Notes
7:1	1-80, A	WHAT	“RADIUS parameters follow” For more than 99 spin groups, see card set “7 alternate.” For a more flexible, key-word-based format, see card set 7a.	
7:2	1-10, F	PAREFF	Radius (Fermi) to be used for potential scattering	
	11-20, F	PARTRU	Radius (Fermi) to be used for penetrabilities and shifts (1) If > 0 , use this value. (2) If $= 0$ and IFLTRU is not negative, SAMMY uses the value of CRFN from the INPUT file or from card set 4 of the PARAMETER file for PARTRU. (3) If < 0 , the absolute value of the number given is the ratio of the mass of the sample nucleus to that of a neutron. SAMMY then calculates PARTRU as $1.23 (AWRI)^{1/3} + 0.8$, which is the ENDF formula, converted to units of Fermi.	
	21, I	ICHAN	Channel indicator	0 \rightarrow applies to all channels 1 \rightarrow applies only to specified channels
	22, I	IFLEFF	Flag to indicate how PAREFF is to be treated	= 0 \rightarrow not varied = 1 \rightarrow varied = 3 \rightarrow treated as PUP (Section IV.D.2)
	23-24, I	IFLTRU	Flag to indicate how PARTRU is to be treated	= -1 \rightarrow treated as identical to PAREFF = 0 \rightarrow not varied = 1 \rightarrow varied independently of PAREFF = 3 \rightarrow treated as PUP (Section IV.D.2)
	25-26, I	IG1	The number of a spin group using these radii	As many spin groups as needed are given in columns 25-80, 2 columns per group.
	27-28, I	IG2	Second spin group for these radii	
	...			
	?, I	IG_Last	Final spin group for these radii	
	?, I	IX	Zero, denoting end of spin group list	When ICHAN=1, specify channel numbers by inserting a zero (IX = 0) after the string of spin group numbers, and follow with the string of channel numbers.
	?, I	IC1	First channel number	
	?, I	IC2	Second channel number	
	...			
	?, I	IC_Last	Last channel number	
7:Last		(blank)		

Table VI B.2 (continued)

C: L	P, T	Variable Name	Meaning (units)	Notes
7:1 alternative	1-80, A	WHAT	“RADIUS parameters follow” For fewer than 99 spin groups, see card set 7 on previous page. For a more flexible, key-word-based format, see card set 7a.	
7:2	1-10, F	PAREFF	Radius (Fermi) to be used for potential scattering	
	11-20, F	PARTRU	Radius (Fermi) to be used for penetrabilities and shifts (1) If > 0 , use this value. (2) If $= 0$ and IFLTRU is not negative, SAMMY uses the value of CRFN from the INPUT file or from card set 4 of the PARAMETER file for PARTRU. (3) If < 0 , the absolute value of the number given is the ratio of the mass of the sample nucleus to that of a neutron. SAMMY then calculates PARTRU as $1.23 (\text{AWRI})^{1/3} + 0.8$, which is the ENDF formula, converted to units of Fermi.	
	21-25, I	ICHAN	Channel indicator	0 \rightarrow applies to all channels 1 \rightarrow applies only to specified channels
	26-30, I	IFLEFF	Flag to indicate how PAREFF is to be treated	$= 0 \rightarrow$ not varied $= 1 \rightarrow$ varied $= 3 \rightarrow$ treated as PUP (Section IV.D.2)
	31-35, I	IFLTRU	Flag to indicate how PARTRU is to be treated	$= -1 \rightarrow$ treated as identical to PAREFF $= 0 \rightarrow$ not varied $= 1 \rightarrow$ varied independently of PAREFF $= 3 \rightarrow$ treated as PUP (Section IV.D.2)
	36-40, I	IG1	The number of a spin group using these radii	As many spin groups as needed are given in columns 36-80, 5 columns per group.
	41-45, I	IG2	Next spin group for these radii	
	...			
	?, I	IG_Last	Final spin group for these radii	
	?, I	IX	Zero, denoting end of spin group list	When ICHAN=1, specify channel numbers by inserting a zero (IX = 0) after the string of IG's, and follow with the string of channel numbers.
	?, I	IC1	First channel number	
	?, I	IC2	Second channel number	
	...			
	?, I	IC_Last	Last channel number	
7: Last		(blank)		