Table VI B.1. Header lines for card sets in the PARameter file

Card set	Alphanumeric header line	Notes
1		Resonance parameters. No header line; card set ends in a blank line.
2		Fudge factor for default uncertainties; no header line, no blank line.
3	`EXTERnal R-function parameters follow`	Only one of card sets 3 and 3a is permitted.
3a	`R-EXTernal parameters follow`	
4	`BROADening parameters may be varied`	
5	`UNUSEd but correlated variables`	Card set is created by SAMAMR run.
6	`NORMAlization and background`	
7	`RADIUs parameters follow` (two versions: usual for fewer than 99 channels and spin groups, alternative version for greater than 99 channels or spin groups.	Card set 7a is the preferred method.

7a	`RADII are in KEY-WORD format` or `CHANNel radius parameters follow`	Valid key words for channel radius:
		`RADIus` or `RADIi`
		`EFfective radius`
		`TRue radius`
		Valid key words for uncertainty:
		`RElative`
		`ABsolute` or `UNcertainty`
		Valid key words for particle-pair names:
		`PARTicle-pair` or `PP`
		Valid key words for orbital angular momentum:
		`L` or `ORbital angular momentum` with `ODd`, `EVen`, or `ALl` after equal sign
		Valid key word for flags:
		`FLags` with `Yes`, `1`, `No`, `0`, `2`, or `-1`
		Valid key word for spin groups:
		`GRoup` followed by a group number or `All`
		`CHannels =`, followed by channel numbers

8	`DATA reduction parameters are next`	Seldom used

Table VI B.1 (continued)

Card set	Alphanumeric header line	Notes
9	ORRES Valid subheadings for first five columns of subsequent lines: BURST WATER or TANTA (not both) LITHI or NE110 (not both) CHANN	
10	ISOTOpic abundances and masses, or NUCLIde abundances and masses	
11	MISCEllaneous parameters follow Valid subheadings for first five columns of subsequent lines: DELTA ETA FINIT GAMMA TZERO SIABN SELFI EFFIC DELTE DRCAP	
12	PARAMagnetic cross section parameters follow	In first five columns of next line, use one of "TM ", "ER ", "HO "
13	BACKGround functions Valid subheadings for first five columns of subsequent lines: CONST EXPON POWER EXPLN T-PNT E-PNT TFILE EFILE	
14	RPI Resolution function, or GEEL resolution function, or GELINa resolution, or NTOF resolution function Valid subheadings for first five columns of subsequent lines: BURST TAU LAMBD A1 EXPON A3 A5 XXPON BINS CHANN	
14a	RPI Transmission resolution function, or RPI Capture resolution function, or GEEL DEFAULts, or GELINa DEFAULts, or NTOF DEFAULts Valid subheadings for first five columns of subsequent lines: BURST BINS CHANN	
15	DETECtor efficiencies	

Table VI B.1 (continued)

Card set	Alphanumeric header line	Notes

16	`USER-Defined resolution function`
	Valid subheadings for first five columns of subsequent lines:
	`BURST CHANN FILE=`	

Last	`COVARiance matrix is in binary form in another file`	
Last B	`EXPLIcit uncertainties and correlations follow`	
Last C	`RELATive uncertainties follow`	

Last D	`PRIOR uncertainties follow in key-word format`
	See Table VI B.2 for details.
	Valid key words are:
	`RELAtive, ABSOlute,` or `UNCErtainty`
	`EMIN` or `EMAX`
	`GRoup` with number or `All`
	`Channel` with number or `All`
	`Energy` or `Gamma`
	`PP` or `PARTicle pair`
	`L` or `Orbital angular momentum`	