

Command	FAREA
PURPOSE	Define values and attributes of peak areas
PARAMETERS	
PEAKS	List of peak numbers. Each list element may have the syntax “a TO z BY s” with optional parameters z and s; default step size is s = 1.
/FIX	The specified peak areas are fixed . They are held constant during iterations.
/DIFF(p)	The specified peak areas are relatively fixed . The differences of the areas of the corresponding peaks and reference peak number p are held constant during iterations.
/SUM(p)	The specified peak areas are relatively fixed . The sums of the areas of the corresponding peaks and reference peak number p are held constant during iterations.
/PRODUCT(p)	The specified peak areas are relatively fixed . The products of the areas of the corresponding peaks and reference peak number p are held constant during iterations.
/QUOTIENT(p)	The specified peak areas are relatively fixed . The quotients of the areas of the corresponding peaks and reference peak number p are held constant during iterations.
/VARY	Concerned peak areas are to vary again.
/EON	A special error analysis is demanded.
/EOFF	Reset error analysis flag.
/GUESS(g)	<p>Guess values for the peak areas. The list may contain both numbers and global parameter names.</p> <p>General values are assigned to the denoted parameters in the order of appearance (arrays with the rightmost subscripts varying most rapidly.) However, if the list consists of a single one-dimensional array (or array cross section) with asterisk notation (one subscript substituted by ‘*’), array elements corresponding to the specified peak numbers are selected and assigned accordingly.</p> <p>If only a single value is given, it is assigned to each specified parameter.</p>
/RELATIVE	This keyword specifies the interpretation of the guess values. For relatively fixed peak areas the guess values are expected to represent a difference, sum or quotient with respect to the corresponding reference peak parameters; for others the keyword is ignored and the guess values are taken absolute.
/MIN(m)	List of lower limits which must not exceed the current values of peak areas. For details see keyword “/GUESS”
/NOLIM	Limits of the specified areas are set to infinity unless nominated by MIN or MAX.
/LIST	List the current guess values and limits of the specified peak areas.

REMARKS

Together with “[FPOS](#)” and “[FWIDTH](#)” this command provides a more comfortable way of specifying attributes of (Gaussian or Lorentzian) peak parameters than the command “[FPAR](#)” does, since fit parameters are addressed by peak numbers instead of internal serials.

The fit function is evaluated with the current guess values and may be displayed by “[FDISP](#)” or listed by “[FLIST](#)” and “[FRESULT](#)”.

EXAMPLE

```
FAREA 1 / S(2) G(10000) R
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Fix the sum of the areas of peaks no. 1 and 2 to 10000. The guess value assigned to the area of peak no. 1 is given by the difference of 10000 and the actual value of the area of peak no. 2.

For further examples see command “[FPAR](#)”.