

## Release Notes LaGriT version 1.1, FALL 2003

A summary of the major changes found in this release are listed below. A complete list of changes is included at the end of this document. Refer to the user's manual for a complete description of the new, enhanced and revised commands.

### New Commands:

none

### Enhanced Commands:

#### **dump/zone\_imt**

output zone list file associated with imt values but do not output outside lists and multi-material connection lists.

#### **createpts/interp**

Add nodes to a mesh object by linear interpolation between two point sets

#### Bugs:

12/02/02	readgmV_ascii	fix problem with type 'lin'
01/01/03	refine_tet_add	Return gracefully if nadd=0.
02/05/03	eset	Bug in exclusive/pset get name . Bug resulted in incorrect result except in the case of tet's or quads. Fixed for all element types now.
03/25/03	matbld1	changed order in which work arrays are allocated and released so that they only exist when they are really needed. Changed the way row/column index pointers are sorted. Old method used a trick, but the trick fails when the number of nodes get larger than $O(10^{**7})$ . Change to use of a multi-key sort of the isortr and isortc arrays. Added some output to log files.

#### Code Changes:

03/21/03	mm2000	Added output at the end of mmprint to print out total amount of memory associated with memory managed arrays. Changed format in mmprint to allow larger integers.
03/25/03	readgmV_ascii dumpgmV_hybrid ReadgmV_binary	changed format so the ascii output can exceed 1million nodes recognize amr variables itetpar, itetkid, itetlev as VINT.
04/24/03	recon, mode	add option to turn off recon
05/07/03	rzbrick3	Added options, fixed bugs, documented functionality in rzinterp sections of the code. This piece of code is nearly the same as the point interpolation code used in extrude, but since it required a lot of changes to get it working, I decided not to touch the code that extrude uses.

#### Bug Fixes:

05/07/03	rz	Fixed error that occurred when createpts/line was a line aligned with the y or z axis. Error resulted in only cell centered point distributions. Now one can get correct results when $ijz=1$ and $ikz=1$ .
05/12/03	sortbins	allow attributes of arbitrary length not just nnodes or nelements
05/21/03	cmo_setatt_nosb	use a longer format when printing a real acalar attribute
06/04/03	dump_material_list	fix format statement
06/12/03	radapt	initialie ctrl to zero
06/17/03	fillholes	skip holes whose number is greater than the current nelements value
06/17/03	extract_interface	do not release cmo if it exists - this lost added attributes
06/18/03	recon2_nosb try4to4xv	pass iopt2to2 to try4to4xv so a s to be able to skip interface recons if desired
08/20/03	filter	In cases where the specified pset was empty the code would crash due to asking for zero length array. Put in error check to return if pset is empty set.
08/22/03	cel_chain	initialize flag to zero

