Release Notes
LaGriT version 1.1, SUMMER 2004

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.

<u>New Commands:</u>
none

<u>Enhanced Commands:</u>

read	**read/gocad**/file_name/mesh_object_name. Read an ascii GoCad TSURF file.
refine	**refine**/…**amr**/iprd. Use amr refinement with an optional direction. iprd = 123 refine all hexes. iprd=1 refine along the x direction, iprd=2, refine along the y direction, iprd=12,13,23 refine along x,y; x,z; y,z respectively. For example: **refine/constant/imt1/linear/element/**1,0,0/ -1.,0.,0./ **inclusive/amr/**12 will refine all hexs in the x and y directions only.
geniee	**geniee**/cmoname /**2dnormal** /reference_element_number [**addatt**] . For 2d meshes only, this option will attempt to make the topological orientation of a triangle, quad or hybrid-triangle-quad mesh consistent so that shared edges are traversed on opposite directions. This will not be possible if more that 2 elements share an edge. reference_element_number is the element that all other elements will be compared to.
dump	**dump/elem_adj_node/**file_name/cmoname. Write a list of all elements adjacent to each node to the file file_name.
massage	new option **semiexclusive**. Refinement will be triggered only by edges both of whose endpoints are in the pset. However edges with only one or no nodes in the pset might be refined as a result of 'Rivara' refinement chain.

Code Changes:

11/26/03	ung2avs	Changed coordinate arrays to double precision arrays. Modified formats for larger numbers.
01/05/04	refine_nosb, filter, geniee, refine_tet_add	Changes related to refine/amr option
04/02/04	delaunay2d	get rid of n**2 loop (zeroing out ioff)
05/03/04	intrp_gtg	increase number of significant figures for output.
05/12/04	addmesh_append_nosb	Added support of maintaining all attribute types (VINT, VDOUBLE, VCAR) for both element based vectors and node based vectors.
06/17/04	matbld3d_stor	Add output of xyz min/max bounding box of each Voronoi cell. To activate set if_vor_io/2/.

Bug Fixes:

10/22/03	extrude	Set ndimensions_geom of new mesh object.
11/10/03	pset	change format to a32 to print entire pset names.
12/02/03	read_sheetij	Initialize hdrlen to zero so files with no header are read correctly.
04/02/04	connect2d	get rid of n**2 loop on resetting ioff
04/06/04	shttstv_nosb	added explicit lengths to character comparisons (ickin, ickout)

04/21/04	cel_chain	fix truncated option
05/04/04	refine_edge_list_lg	ityp=itettyp(it) was not being set correctly
05/12/04	addmesh_nosb	Fixed bug in VCHAR type element attribute
06/17/04	cmo_copyatt_nosb	Allow copy of node attribute to element attribute and vice versa only if have the same length.