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# SOFTWARE RELEASE NOTICE

01. SRN Number: GLGP-SRN-124		
02. Project Title: Structural Deformation & Seismicity Code Development		Project No. 20-5708-472
03. SRN Title: 3DStress, Version 1.1		
04. Originator/Requestor: Robert Brient		Date: 02/06/96
05. Summary of Actions <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Release of new software</li> <li><input type="checkbox"/> Release of modified software:             <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhancements made</li> <li><input type="checkbox"/> Corrections made</li> </ul> </li> <li><input type="checkbox"/> Change of access software</li> <li><input checked="" type="checkbox"/> Software Retirement <i>H.L. McKague 1/30/01</i></li> </ul>		
06. Persons Authorized Access		
Name	RO/RW	A/C/D
David Ferrill	RO	
Brent Henderson	RW	
John Stamatakis	RO	
Larry McKague	RO	
Chad Fleming (student)	RO	
Don Chery (NRC)	RO	
Mike Conway	RO	
Gerry Stirewalt	RO	
Chuck Connor	RO	
Britt Hill	RO	
07. Element Manager Approval: <i>H. L. McKague</i>		Date: <i>8/2/96</i>
08. Remarks:		

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## SOFTWARE SUMMARY FORM

01. Summary Date: 02/06/96	02. Summary prepared by (Name and phone) R.D. Brient, 522-5537	03. Summary Action:  New	
04. Software Date: 01/23/96	05. Short Title: 3DStress Version 1.1		
06. Software Title:  3DStress, Version 1.1		07. Internal Software ID:  NONE	
08. Software Type:  <input type="checkbox"/> Automated Data System <input checked="" type="checkbox"/> Computer Program <input type="checkbox"/> Subroutine/Module	09. Processing Mode:  <input type="checkbox"/> Interactive <input type="checkbox"/> Batch <input checked="" type="checkbox"/> Combination	10. APPLICATION AREA a. General: <input checked="" type="checkbox"/> Scientific/Engineering <input type="checkbox"/> Auxiliary Analyses <input type="checkbox"/> Total System PA <input type="checkbox"/> Subsystem PA <input type="checkbox"/> Other b. Specific:	
11. Submitting Organization and Address:  CNWRA, SwRI, San Antonio, Texas		12. Technical Contact(s) and Phone:  Dave Ferrill, 522-6082	
13. Narrative:  3DStress is an interactive tool for analyzing the tendency for faults and fractures to slip or dilate based on a user specified three dimensional stress state.			
14. Computer Platform  Silicon Graphics (SGI)	15. Computer Operating System:  IRIX 5.3	16. Programming Language(s):  C++	17. Number of Source Program Statements:  28126 lines
18. Computer Memory Requirements:  16 MB minimum	19. Tape Drives: Supplied on 4mm or 8mm tape	20. Disk/Drum Units:  6 MB minimum	21. Graphics:  Open GL
22. Other Operational Requirements  NONE			
23. Software Availability:  <input checked="" type="checkbox"/> Available <input type="checkbox"/> Limited <input type="checkbox"/> In-House ONLY		24. Documentation Availability:  <input checked="" type="checkbox"/> Available <input type="checkbox"/> Inadequate <input type="checkbox"/> In-House ONLY	
Software Custodian: <u>R.D. Brient</u> Date: <u>7/30/96</u>			

## **SUMMARY OF 3DSTRESS LICENSE PROVISIONS**

### **Government Organizations**

#### **NRC**

- No Cost.
- No License Manager.
- Nothing to CNWRA.

#### **Other Government Agencies**

- Written Request on Agency Letterhead to CNWRA.
- Cost of Reproduction and License Manager.
- Nothing to CNWRA.

### **Businesses**

#### **Non-Government Work**

- Contact MVE Directly.
- Cost between Company and MVE.
- \$5000 to CNWRA.

#### **Government Work**

- Written Request on Company Letterhead to CNWRA.
- Description of Intended Application(Would be limited to that or other government work).
- Cost of Reproduction and License manager.
- Nothing to CNWRA.

### **Universities/ Colleges**

#### **Government Contracts.**

- Written Request on University Letterhead to CNWRA.
- Description of Intended Application(Would be limited to that or other government work).
- Cosigned by University Official and Department Chairperson.
- Cost of Reproduction and License manager.
- Nothing to CNWRA.

#### **Non-Government Contracts**

- Contact MVE Directly.
- Cost between University and MVE.
- \$5000 to CNWRA.

#### **Educational Use Only**

- Contact MVE Directly.
- Cost between University and MVE.
- \$5000 to CNWRA.

install\_test.v1.1 3-6-96

1. Launch 3dstress: % 3dstress

2. Set the sigma magnitudes and orientations using the sliders to the following settings:

Sigma X Magnitude	90
Sigma Y Magnitude	70
Sigma Z Magnitude	10

Sigma X Direction	28
Sigma X Plunge	90

Sigma Y Direction	28
Sigma Y Plunge	0

Sigma Z Direction	118
Sigma Z Plunge	0

3. Move the mouse over the slip tendency plot so that the white box corresponds to a fault with strike 198 and dip 72.

4. The following values should appear on the display near the slip tendency plot:

	Mag	Dir	Plng
SX	90	28	90
SY	70	28	0
SZ	10	118	0

Slip Tendency	1.301
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Shear Stress	24.546
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Normal Stress	18.870
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Fault Strike	198
Fault Dip	72

Slip Az	341
Slip Plng	62

K	0.184
% TsMax	97.591
R	0.250

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/usr3/brent/160tectonics/fltSlipView/src

Wed Jan 24 15:18:26 CST 1996

Filename	Rev	Line Count
1. axesClass.c++	1.3	236
2. axesClass.hh	1.2	78
3. axesObj.hh	1.2	43
4. boundBox.c++	1.1	293
5. boundBox.hh	1.1	49
6. cmdClass.c++	1.29	526
7. cmdClass.hh	1.4	62
8. cmdClass_magDialog.c++	1.6	273
9. cmdClass_plotDialog.c++	1.3	52
10. cmdClass_scaleCB.c++	1.2	270
11. cmdClass_surfDialog.c++	1.3	52
12. cmdClass_toggleCB.c++	1.14	982
13. cmdClass_uncertDialog.c++	1.3	288
14. cmdObj.hh	1.3	48
15. colorLUT.hh	1.3	71
16. fontdef.hh	1.1	8776
17. gfxCallbacks.c++	1.21	438
18. gfxCallbacks.hh	1.3	52
19. gfxClass.c++	1.8	217
20. gfxClass.hh	1.2	62
21. gfxObj.hh	1.2	44
22. graphCallbacks.c++	1.10	1326
23. graphCallbacks.hh	1.4	62
24. graphClass.c++	1.10	253
25. graphClass.hh	1.3	88
26. graphObj.hh	1.2	45
27. linFileClass.c++	1.15	529
28. linFileClass.hh	1.11	116
29. linObj.hh	1.3	50
30. lineClass.c++	1.14	951
31. lineClass.hh	1.5	110
32. lineObj.hh	1.2	46
33. menuCallbacks.c++	1.33	710
34. menuCallbacks.hh	1.2	64
35. menuClass.c++	1.17	283
36. menuClass.hh	1.2	54
37. menuObj.hh	1.2	43
38. notice.c++	1.1	156
39. notice.hh	1.1	46
40. overlayClass.c++	1.6	314
41. overlayClass.hh	1.3	73
42. overlayDialog.c++	1.4	568
43. overlayDialog.hh	1.2	42
44. overlayObj.hh	1.2	46
45. overlayRemove.c++	1.3	284
46. overlayRemove.hh	1.2	43
47. pixButton.c++	1.1	161
48. plotClass.c++	1.33	1241
49. plotClass.hh	1.27	354
50. plotClass_display.c++	1.16	1078
51. plotClass_findSlipV.c++	1.8	288
52. plotClass_output.c++	1.3	566
53. plotClass_setDirPlunge.c++	1.4	527
54. plotObj.hh	1.2	43
55. readBin.c++	1.1	148
56. remove.c++	1.1	322
57. remove.hh	1.1	45
58. rotClass.c++	1.1	210
59. rotClass.hh	1.1	61
60. sceneClass.c++	1.3	125
61. sceneClass.hh	1.2	69
62. sceneObj.hh	1.2	43
63. surfCallbacks.c++	1.10	734
64. surfCallbacks.hh	1.4	64
65. surfClass.c++	1.10	272
66. surfClass.hh	1.5	103
67. surfObj.hh	1.2	44
68. vblToFlt.c++	1.2	235
69. vblToFlt.hh	1.1	43
70. vectorClass.c++	1.1	120
71. vectorClass.hh	1.1	72

72. viewClass.c++	1.4	225
73. viewClass.hh	1.2	127
74. viewNet.c++	1.12	265
75. viewNetGlobals.hh	1.14	125
76. viewObj.hh	1.2	43
77. viewerCallbacks.c++	1.20	598
78. viewerCallbacks.hh	1.4	58
79. viewerClass.c++	1.13	354
80. viewerClass.hh	1.8	105
81. viewerObj.hh	1.2	44

Total line count = 28126

Check Sum = 6342 2430 ../bin/3dstress.exp

../bin/3dstress.exp:  
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