

SOFTWARE RELEASE NOTICE

1. SRN Number: <i>GLGP-SRN-290</i>		
2. Project Title: Igneous Activity Code Development - Volcanic Hazard		Project No.06002.01.052
3. SRN Title: GMT - The Generic Mapping Tools		
4. Originator/Requestor: Brandi L. Winfrey		Date: January 30, 2003
5. Summary of Actions <input checked="" type="checkbox"/> Release of new software <input type="checkbox"/> Change of access software <input type="checkbox"/> Release of modified software: <input type="checkbox"/> Software Retirement <input type="checkbox"/> Enhancements made <input type="checkbox"/> Corrections made		
6. Validation Status <input type="checkbox"/> Validated <input type="checkbox"/> Limited Validation <input checked="" type="checkbox"/> Not Validated Explain: <u>To be Determined at a later date</u>		
7. Persons Authorized Access		
Name	Read Only/Read-Write	Addition/Change/Delete
ALL	YES	NO
8. Element Manager Approval: <i>A. Lawrence McKeay</i>		Date: <i>1/31/03</i>
9. Remarks: GMT is a free, open source collection of ~60 UNIX tools released under the GNU General Public License.		

SOFTWARE SUMMARY FORM

01. Summary Date: 01/30/03	02. Summary prepared by Brandi L. Winfrey (210)522-5083	03. Summary Action: NEW	
04. Software Date: 10/01/02	05. Short Title: GMT		
06. Software Title: The Generic Mapping Tools version 3.4.2		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 checked="" type="checkbox"/> Interactive <input type="checkbox"/> Batch <input type="checkbox"/> Combination	10. Application Area a. General: <input type="checkbox"/> Scientific/Engineering <input checked="" type="checkbox"/> Auxiliary Analyses <input type="checkbox"/> Total System PA <input type="checkbox"/> Subsystem PA <input type="checkbox"/> Other b. Specific: Used to visualize data by creating map images.	
11. Submitting Organization and Address: CNWRA/SwRI 6220 Culebra Road San Antonio, TX 78228		12. Technical Contact(s) and Phone: Paul Wessell (808)956-4778 Walter H. F. Smith gmt-help@hawaii.edu	
13. Software Application: GMT is a free, open source collection of ~60 UNIX tools that allow users to manipulate (x,y) and (x,y,z) data sets (including filtering, trend filtering, gridding, projecting, etc) and produce Encapsulated PostScript File (EPS) illustrations ranging from simple x-y plots through contour maps to artificially illuminated surfaces and 3-D perspective views in black and white, gray tone, hachure patterns, and 24-bit color. GMT supports 25 common map projections plus linear, log, and power scaling, and comes with support data such as coastlines, rivers, and political boundaries. Documentation is in the form of a User's Manual which includes "A Map-Making Tutorial" and "Technical Reference and Cookbook".			
14. Computer Platform UNIX	15. Computer Operating System: Solaris 5.8	16. Programming Language(s): C	17. Number of Source Program Statements: 65,000
18. Computer Memory Requirements: 175Mb	19. Tape Drives: N/A	20. Disk Units: N/A	21. Graphics: N/A
22. Other Operational Requirements			
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"/> Preliminary <input type="checkbox"/> In-House ONLY	
25. Software Developer: _____ Paul Wessell and Walter H. F. Smith _____ Date: _____ October 2, 2002			

Submitted/evaluated by: Brandi Winfrey *[Signature]* 02/04/03

acceptance_test:
GMT_Tutorial.ps
session1
session2
session3
session4

acceptance_test/session1:
map.ps
map2.ps
map3.ps
map4.ps
plot.ps
plot2.ps

acceptance_test/session2:
data
map.ps
plot.ps
plot2.ps
quakes.cpt
quakes.d
quakes.ngdc
text.ps

acceptance_test/session3:
bermuda.grd
bermuda.ps
grdinfo.out
map.ps
ship.grd
ship.ps
ship.xyz
ship_5m.grd
ship_5m.ps
ship_5m.xyz

acceptance_test/session4:
bar.ps
bermuda.cpt
bermuda.grd
cont.cpt
disc.cpt
map.ps
topo.cpt
topo.ps
topo2.ps
us.grd
us_i.grd
view.ps

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

QA VERIFICATION REPORT

FOR

→ ACQUIRED SOFTWARE NOT TO BE MODIFIED ←

Software Title/Name: _____

GMT

Version: _____

3.4.2

Demonstration workstation: _____

Kinto bar

Operating System: _____

Solaris 5.8

User: _____

B. Winfrey

NOTE: Acquired software may or may not meet all requirements and will be evaluated on a case-by-case basis.

Installation Testing [TOP-018, Section 5.6]

Has *installation testing* been conducted for each intended computer platform and operating system?

Computer Platforms: _____

U.N.A

Operating Systems: _____

U.N.A

12/23/03

Yes: ☒

No: ☐

N/A: ☐

Location of Acceptance Test Results: _____

See

Solaris 5.8

Comments: _____

7/3/02

enclosed CD.

Software Output [TOP-018, Section 5.5.4]

Is software designed so that individual runs are uniquely identified by date, time, name of software and version?

Date and Time Displayed: _____

Jan 31 09:54:06 2003

Yes: ☒

No: ☐

N/A: ☐

Name/Version Displayed: _____

GMT 3.4.2

Comments: _____

Display on monitor only. Printed output does not include date, time, version, etc.

NOTE: Output identification content and format is typically taken as is.

Medium Documentation [TOP-018, Section 5.5.6]

The physical labeling of software medium (tapes, disks, etc.) contains: Program Name, Module/Name/Title, Module Revision, File type (ASCII, OBJ, EXE), Recording Date, and Operating System(s)?

Yes: ☒

No: ☐

N/A: ☐

Comments: _____

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

QA VERIFICATION REPORT

FOR

→ ACQUIRED SOFTWARE NOT TO BE MODIFIED ←

User Documentation [TOP-018, Section 5.5.7]

Is there a Users' Manual for the software and is it up-to-date?

Yes: ☒ No: ☐ N/A: ☐

User's Manual Version and Date: GMT, 3.4.2, Oct. 2, 2002

Comments: Online & enclosed hard copy

Are there basic instructions for the *installation* and *use* of the software?

Yes: ☒ No: ☐ N/A: ☐

Location of Instructions: User's Manual

Comments: See section titled "Obtaining and Installing GMT"

Configuration Control [TOP-018, Section 5.7, 5.9.3]

Is the Software Summary Form (Form TOP-4-1) completed and signed?

Yes: ☒ No: ☐ N/A: ☐

Date of Approval: 02/04/03

Is the list of files attached to the Software Summary Form complete and accurate?

Yes: ☒ No: ☐ N/A: ☐

Comments: List of files provided for the acceptance test CD and for the GMT CD.

Is the source code available or, is the executable code available in the case of (acquired/commercial codes)?

Yes: ☒ No: ☐ N/A: ☐

Location of Source Code: Enclosed CD.

Comments:

Have all the script/make files and executable files been submitted to the Software Custodian?

Only the executable files are being submitted.

Yes: ☒ No: ☐ N/A: ☐

Location of executable files: Enclosed CD.

Comments:

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

QA VERIFICATION REPORT

FOR

→ ACQUIRED SOFTWARE NOT TO BE MODIFIED ←

Software Release [TOP-018, Section 5.9]

Upon acceptance of the software as verified above, has a Software Release Notice (SRN), Form TOP-6 been issued and does the version number of the software match the documentation?

Yes: ☒ No: ☐ N/A: ☐

SRN Number: 290

Comments:

Software Validation [TOP-018, Section 5.10]

Has a Software Validation Test Plan (SVTP) been prepared for the *range of application* of the software?

Yes: ☐ No: ☒ N/A: ☐

Version and Date of SVTP: _____

Date Reviewed and Approved via QAP-002: _____

Comments: To be determined at a later date.

Has a Software Validation Test Report (SVTR) been prepared that documents the results of the validation cases, interpretation of the results, and determination if the software has been validated?

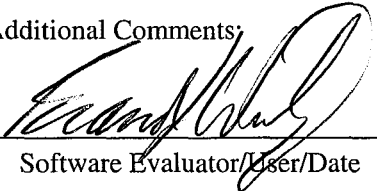
Yes: ☐ No: ☒ N/A: ☐

Version and Date of SVTR: _____

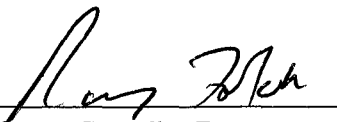
Date Reviewed and Approved via QAP-002: _____

Comments.: To be determined at a later date.

Additional Comments:

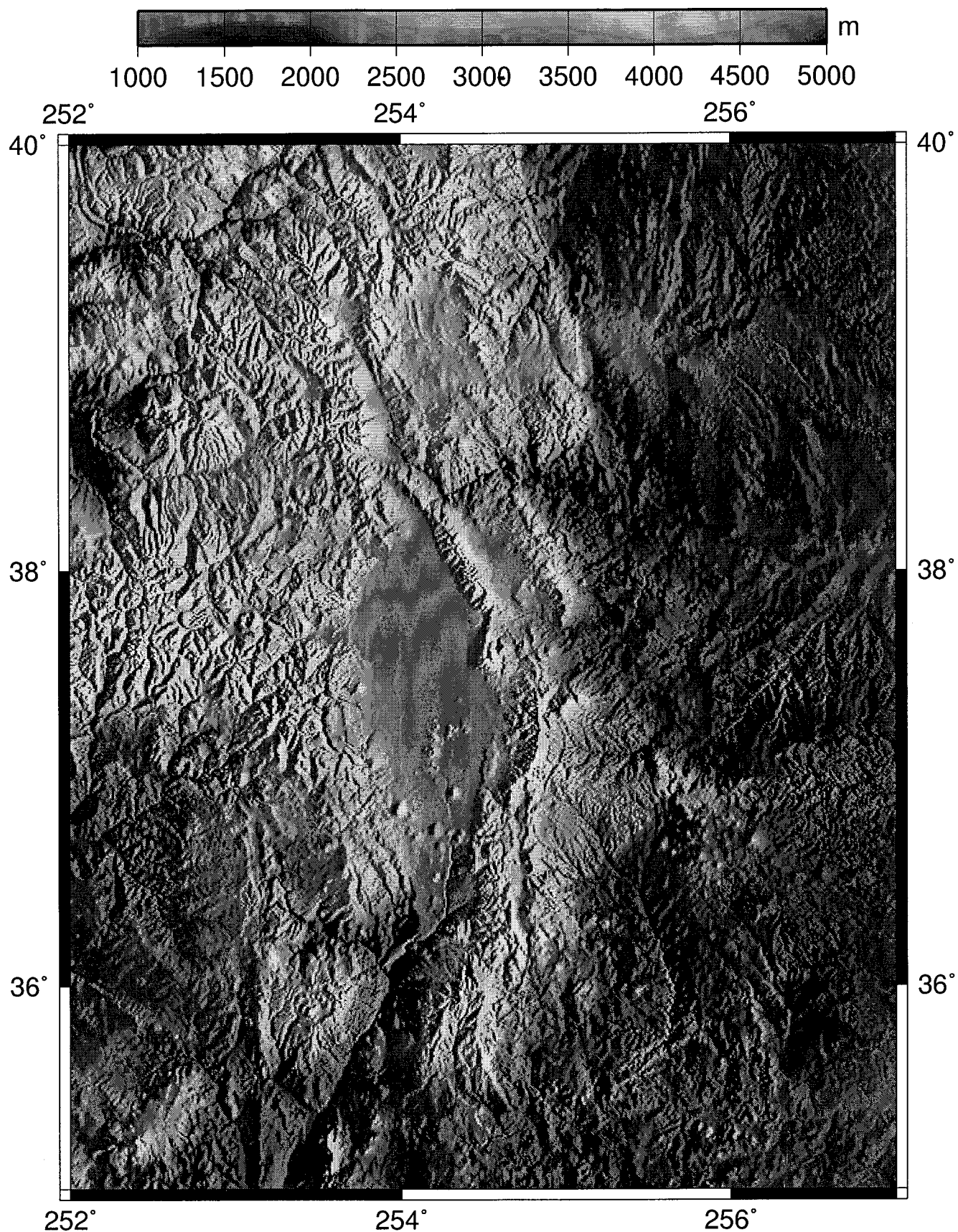

Software Evaluator/User/Date

02/04/03


Software Custodian/Date

02/04/03

Grout plotted
Output
01/31/03



CD_contents

Volume in drive R is 01-28-03

Volume Serial Number is 9D31-A906

Directory of R:\GMT

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
01/28/03	09:12a	<DIR>	download
01/28/03	09:46a	<DIR>	installed
			4 File(s) 0 bytes

Directory of R:\GMT\download

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
01/27/03	04:30p		13,030 GMT-GenericMappingTools.htm
01/28/03	09:08a	<DIR>	GMT-GenericMappingTools_files
01/27/03	04:38p		116,244 GMT3.4.2_man.tar.gz
01/27/03	04:38p		6,811,089 GMT3.4.2_pdf.tar.gz
01/27/03	04:39p		670,278 GMT3.4.2_progs.tar.gz
01/27/03	04:39p		4,150,715 GMT3.4.2_ps.tar.gz
01/27/03	04:40p		4,175,621 GMT3.4.2_scripts.tar.gz
01/27/03	04:40p		589,655 GMT3.4.2_suppl.tar.gz
01/27/03	04:41p		1,357,237 GMT3.4.2_tut.tar.gz
01/27/03	04:41p		1,797,491 GMT3.4.2_web.tar.gz
01/27/03	04:10p		21,375,287 GMT_Docs.ps
01/27/03	04:35p		1,362,312 GMT_Tutorial.ps
01/27/03	04:52p		47,355,200 GMT_full.tar.gz
01/27/03	04:56p		10,885,736 GMT_high.tar.gz
01/27/03	04:28p		22,751 GNUGeneralPublicLicense.htm
01/28/03	09:07a	<DIR>	GNUGeneralPublicLicense_files
01/27/03	04:42p		2,957 README.GMT
01/27/03	04:47p		228 VERSION.txt
01/27/03	04:47p		42,198 install_gmt.txt
01/27/03	04:32p		1,319,419 netcdf.tar.Z
01/27/03	04:46p		113,877 triangle.tar.gz
			23 File(s) 102,161,325 bytes

Directory of R:\GMT\download\GMT-GenericMappingTools_files

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
01/27/03	04:04p		484 gmt_bar.gif
01/27/03	04:09p		30,890 gmt_cglobe.gif
01/27/03	04:09p		950 gmt_faq.gif
01/27/03	04:09p		9,300 gmt_hitmap.gif
01/27/03	04:09p		70,970 gmt_logo_250.gif

```

                                CD_contents
01/27/03  04:09p                2,459 gmt_paper.gif
01/27/03  04:09p                24,982 gmt_usage.jpeg
01/27/03  04:09p                1,091 soest_logo_reduced2.gif
                                10 File(s)          141,126 bytes

```

Directory of R:\GMT\download\GNUGeneralPublicLicense_files

```

01/01/01  12:00a                <DIR>          .
01/01/01  12:00a                <DIR>          ..
01/27/03  04:09p                6,138 philosophical-gnu-sm.jpeg
                                3 File(s)          6,138 bytes

```

Directory of R:\GMT\installed

```

01/01/01  12:00a                <DIR>          .
01/01/01  12:00a                <DIR>          ..
10/02/02  12:11p                86,463 CHANGES
01/03/01  01:14p                18,347 COPYING
11/13/02  06:33p                2,484 GMT.par
11/13/02  07:08p                2,607 GMT3.4.2.par
09/05/02  03:05p                7,423 Makefile
07/23/02  09:09p                23,021 README
01/28/03  09:40a                <DIR>          bin
11/13/02  07:15p                2,934 config.cache
10/02/02  12:13p                41,286 config.guess
11/13/02  07:15p                9,277 config.log
11/13/02  07:15p                13,648 config.status
10/02/02  12:13p                31,098 config.sub
09/05/02  03:08p                105,961 configure
09/05/02  03:05p                18,176 configure.in
01/28/03  09:44a                <DIR>          examples
09/17/02  07:01p                1,922 gmt_bench-marks
01/28/03  09:43a                <DIR>          include
12/27/00  07:23p                5,847 install-sh
11/13/02  06:33p                42,194 install_gmt
01/28/03  09:40a                <DIR>          lib
01/28/03  09:43a                <DIR>          man
01/28/03  09:43a                <DIR>          netcdf-3.5.0
01/28/03  09:41a                <DIR>          share
01/28/03  09:45a                <DIR>          src
01/28/03  09:45a                <DIR>          tutorial
01/28/03  09:41a                <DIR>          www
                                28 File(s)          412,688 bytes

```

Directory of R:\GMT\installed\bin

```

01/01/01  12:00a                <DIR>          .
01/01/01  12:00a                <DIR>          ..

```

CD_contents

11/13/02	07:18p	6,295	GMT
11/13/02	07:20p	156,472	backtracker
11/13/02	07:19p	140,868	binlegs
11/13/02	07:18p	144,524	blockmean
11/13/02	07:18p	144,196	blockmedian
11/13/02	07:18p	144,260	blockmode
11/13/02	07:19p	145,768	dat2gmt
11/13/02	07:18p	155,700	filter1d
11/13/02	07:18p	147,188	fitcircle
11/13/02	07:19p	139,588	gmt2bin
11/13/02	07:19p	145,600	gmt2dat
11/13/02	07:18p	139,076	gmtconvert
11/13/02	07:18p	137,076	gmtdefaults
11/13/02	07:19p	146,560	gmtinfo
11/13/02	07:19p	139,156	gmtlegs
11/13/02	07:19p	154,720	gmtlist
11/13/02	07:18p	189,692	gmtmath
11/13/02	07:19p	144,440	gmtpath
11/13/02	07:18p	156,404	gmtselect
11/13/02	07:18p	136,996	gmtset
11/13/02	07:19p	155,304	gmttrack
11/13/02	07:18p	142,436	grd2cpt
11/13/02	07:18p	142,188	grd2xyz
11/13/02	07:18p	139,476	grdclip
11/13/02	07:18p	162,284	grdcontour
11/13/02	07:18p	139,804	grdcut
11/13/02	07:18p	139,828	grdedit
11/13/02	07:18p	158,612	grdffft
11/13/02	07:18p	147,964	grdfilter
11/13/02	07:18p	146,092	grdgradient
11/13/02	07:18p	142,468	grdhisteq
11/13/02	07:18p	150,420	grdimage
11/13/02	07:18p	144,756	grdinfo
11/13/02	07:18p	147,068	grdlandmask
11/13/02	07:18p	146,828	grdmask
11/13/02	07:18p	193,524	grdmath
11/13/02	07:18p	140,572	grdpaste
11/13/02	07:18p	144,108	grdproject
11/13/02	07:19p	155,564	grdraster
11/13/02	07:18p	139,588	grdreformat
11/13/02	07:18p	142,140	grdsample
11/13/02	07:18p	143,092	grdtrack
11/13/02	07:18p	146,900	grdtrend
11/13/02	07:18p	147,788	grdvector
11/13/02	07:18p	187,140	grdview
11/13/02	07:18p	148,324	grdvolume
11/13/02	07:19p	5,408	gshhs
11/13/02	07:19p	8,276	gshhs_dp

		CD_contents
11/13/02	07:20p	156,696 hotspotter
11/13/02	07:19p	4,417 img2grd
11/13/02	07:19p	146,024 img2mercgrd
11/13/02	07:18p	140,236 makecpt
11/13/02	07:19p	140,532 makepattern
11/13/02	07:18p	148,244 mapproject
11/13/02	07:19p	148,192 mgd77togmt
11/13/02	07:18p	141,884 minmax
11/13/02	07:18p	147,244 nearneighbor
11/13/02	07:20p	155,704 originator
11/13/02	07:18p	154,820 project
11/13/02	07:18p	140,524 psbasemap
11/13/02	07:18p	142,772 psclip
11/13/02	07:18p	163,996 pscoast
11/13/02	07:18p	157,892 pscontour
11/13/02	07:19p	208,920 pscoupe
11/13/02	07:18p	152,924 pshistogram
11/13/02	07:18p	142,340 psimage
11/13/02	07:18p	151,708 psmask
11/13/02	07:19p	200,052 psmecca
11/13/02	07:19p	138,108 psmegaplot
11/13/02	07:19p	153,604 pspolar
11/13/02	07:18p	156,060 psrose
11/13/02	07:18p	153,188 psscale
11/13/02	07:19p	150,888 pssegy
11/13/02	07:19p	156,080 pssegyz
11/13/02	07:18p	153,364 pstext
11/13/02	07:19p	157,740 psvelo
11/13/02	07:18p	150,996 pswiggle
11/13/02	07:18p	173,284 psxy
11/13/02	07:18p	176,908 psxyz
11/13/02	07:18p	145,116 sample1d
11/13/02	07:18p	149,212 spectrum1d
11/13/02	07:18p	150,300 splitxyz
11/13/02	07:18p	172,396 surface
11/13/02	07:18p	149,644 trend1d
11/13/02	07:18p	149,908 trend2d
11/13/02	07:18p	145,828 triangulate
11/13/02	07:20p	171,812 x2sys_cross
11/13/02	07:20p	161,900 x2sys_datalist
11/13/02	07:20p	137,156 x_edit
11/13/02	07:20p	136,532 x_init
11/13/02	07:20p	143,236 x_list
11/13/02	07:20p	157,040 x_over
11/13/02	07:20p	140,876 x_remove
11/13/02	07:20p	137,004 x_report
11/13/02	07:20p	139,244 x_setup
11/13/02	07:20p	146,572 x_solve_dc_drift

		CD_contents	
11/13/02	07:20p	141,868	x_update
11/13/02	07:20p	155,696	xgridedit
11/13/02	07:18p	147,364	xyz2grd
	101 File(s)	14,366,576	bytes

Directory of R:\GMT\installed\examples

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
04/18/01	04:19a		1,486 README.SCRIPTS
12/27/00	07:23p		1,197 do_examples.bash
12/27/00	07:23p		339 do_examples.bat
12/27/00	07:23p		1,528 do_examples.csh
12/27/00	07:23p		191 do_view.bash
12/27/00	07:23p		422 do_view.bat
12/27/00	07:23p		187 do_view.csh
01/28/03	09:43a	<DIR>	ex01
01/28/03	09:43a	<DIR>	ex02
01/28/03	09:43a	<DIR>	ex03
01/28/03	09:43a	<DIR>	ex04
01/28/03	09:43a	<DIR>	ex05
01/28/03	09:44a	<DIR>	ex06
01/28/03	09:44a	<DIR>	ex07
01/28/03	09:44a	<DIR>	ex08
01/28/03	09:44a	<DIR>	ex09
01/28/03	09:44a	<DIR>	ex10
01/28/03	09:44a	<DIR>	ex11
01/28/03	09:44a	<DIR>	ex12
01/28/03	09:44a	<DIR>	ex13
01/28/03	09:44a	<DIR>	ex14
01/28/03	09:44a	<DIR>	ex15
01/28/03	09:44a	<DIR>	ex16
01/28/03	09:44a	<DIR>	ex17
01/28/03	09:44a	<DIR>	ex18
01/28/03	09:44a	<DIR>	ex19
01/28/03	09:44a	<DIR>	ex20
12/27/00	07:23p		263 view.bat
	30 File(s)		5,613 bytes

Directory of R:\GMT\installed\examples\ex01

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		1,337 .gmtdefaults
11/13/02	07:18p		174,890 example_01.ps
12/27/00	07:23p		1,021 job01.bash
12/27/00	07:23p		1,136 job01.bat
12/27/00	07:23p		1,036 job01.csh

		CD_contents	
12/28/00	06:55p		262,832 osu91a1f_16.grd
		8 File(s)	442,252 bytes

Directory of R:\GMT\installed\examples\ex02

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		1,337 .gmtdefaults
12/28/00	06:55p		1,550,068 HI_geoid2.grd
12/28/00	06:55p		1,550,068 HI_topo2.grd
11/13/02	07:18p		1,048,265 example_02.ps
12/27/00	07:23p		1,255 job02.bash
12/27/00	07:23p		1,406 job02.bat
12/27/00	07:23p		1,268 job02.csh
		9 File(s)	4,153,667 bytes

Directory of R:\GMT\installed\examples\ex03

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		1,402 .gmtdefaults
11/13/02	07:18p		56,094 example_03.ps
11/13/02	07:18p		113,039 example_03a.ps
11/13/02	07:18p		18,047 example_03b.ps
11/13/02	07:18p		54,457 example_03c.ps
11/13/02	07:18p		80,333 example_03d.ps
11/13/02	07:18p		55,782 example_03e.ps
11/13/02	07:18p		56,969 example_03f.ps
12/27/00	07:23p		10,808 job03.bash
12/27/00	07:23p		3,392 job03.bat
12/27/00	07:23p		10,725 job03.csh
12/27/00	07:23p		16,340 sat.xyg
12/27/00	07:23p		216,490 ship.xyg
12/27/00	07:23p		34,829 shipsat.dos
		16 File(s)	728,707 bytes

Directory of R:\GMT\installed\examples\ex04

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/28/00	06:54p		63,008 HI_geoid4.grd
12/28/00	06:54p		63,008 HI_topo4.grd
11/13/02	07:18p		1,074,554 example_04.ps
11/13/02	07:18p		3,383,574 example_4c.ps
12/27/00	07:23p		446 geoid.cpt
12/27/00	07:23p		1,058 job04.bash
12/27/00	07:23p		1,151 job04.bat
12/27/00	07:23p		1,054 job04.csh

			CD_contents
12/27/00	07:23p		1,169 job4c.bash
12/27/00	07:23p		1,196 job4c.bat
12/27/00	07:23p		1,186 job4c.csh
12/27/00	07:23p		147 topo.cpt
		14 File(s)	4,591,551 bytes

Directory of R:\GMT\installed\examples\ex05

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		383,720 example_05.ps
12/27/00	07:23p		795 job05.bash
12/27/00	07:23p		886 job05.bat
12/27/00	07:23p		813 job05.csh
		6 File(s)	386,214 bytes

Directory of R:\GMT\installed\examples\ex06

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		14,409 example_06.ps
12/27/00	07:23p		4,551 fractures.d
12/27/00	07:23p		550 job06.bash
12/27/00	07:23p		657 job06.bat
12/27/00	07:23p		558 job06.csh
12/27/00	07:23p		65,210 v3206.t
		8 File(s)	85,935 bytes

Directory of R:\GMT\installed\examples\ex07

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		69,195 example_07.ps
12/27/00	07:23p		110,812 fz.xy
12/27/00	07:23p		61,890 isochron.xy
12/27/00	07:23p		1,145 job07.bash
12/27/00	07:23p		1,361 job07.bat
12/27/00	07:23p		1,150 job07.csh
12/27/00	07:23p		25,882 quakes.xym
12/27/00	07:23p		18,247 ridge.xy
		10 File(s)	289,682 bytes

Directory of R:\GMT\installed\examples\ex08

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:18p		429,589 example_08.ps
12/28/00	06:55p		16,352 guinea_bay.grd

CD_contents

12/27/00	07:23p	538	job08.bash
12/27/00	07:23p	656	job08.bat
12/27/00	07:23p	556	job08.csh
7 File(s)		447,691	bytes

Directory of R:\GMT\installed\examples\ex09

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p	198,584	all.xys
11/13/02	07:18p	333,664	example_09.ps
12/27/00	07:23p	91,244	fz.xy
12/27/00	07:23p	813	job09.bash
12/27/00	07:23p	867	job09.bat
12/27/00	07:23p	824	job09.csh
12/27/00	07:23p	570	ridge.xy
12/27/00	07:23p	4,716	track_d.107.xys
12/27/00	07:23p	4,663	track_d.109.xys
12/27/00	07:23p	4,718	track_d.111.xys
12/27/00	07:23p	4,704	track_d.137.xys
12/27/00	07:23p	4,709	track_d.139.xys
12/27/00	07:23p	4,717	track_d.165.xys
12/27/00	07:23p	4,686	track_d.167.xys
12/27/00	07:23p	4,706	track_d.193.xys
12/27/00	07:23p	4,657	track_d.195.xys
12/27/00	07:23p	4,714	track_d.197.xys
12/27/00	07:23p	4,737	track_d.21.xys
12/27/00	07:23p	4,691	track_d.223.xys
12/27/00	07:23p	4,724	track_d.225.xys
12/27/00	07:23p	4,656	track_d.23.xys
12/27/00	07:23p	4,682	track_d.25.xys
12/27/00	07:23p	4,713	track_d.251.xys
12/27/00	07:23p	4,676	track_d.253.xys
12/27/00	07:23p	4,688	track_d.279.xys
12/27/00	07:23p	4,690	track_d.281.xys
12/27/00	07:23p	4,756	track_d.283.xys
12/27/00	07:23p	4,719	track_d.309.xys
12/27/00	07:23p	4,725	track_d.311.xys
12/27/00	07:23p	4,724	track_d.337.xys
12/27/00	07:23p	4,671	track_d.339.xys
12/27/00	07:23p	4,674	track_d.365.xys
12/27/00	07:23p	4,678	track_d.367.xys
12/27/00	07:23p	4,724	track_d.369.xys
12/27/00	07:23p	4,707	track_d.395.xys
12/27/00	07:23p	4,705	track_d.397.xys
12/27/00	07:23p	4,740	track_d.423.xys
12/27/00	07:23p	4,642	track_d.425.xys
12/27/00	07:23p	4,685	track_d.427.xys

```

                                CD_contents
12/27/00  07:23p                4,682 track_d.451.xys
12/27/00  07:23p                4,688 track_d.453.xys
12/27/00  07:23p                4,722 track_d.455.xys
12/27/00  07:23p                4,719 track_d.481.xys
12/27/00  07:23p                4,718 track_d.483.xys
12/27/00  07:23p                4,657 track_d.49.xys
12/27/00  07:23p                4,699 track_d.51.xys
12/27/00  07:23p                4,694 track_d.53.xys
12/27/00  07:23p                4,716 track_d.79.xys
12/27/00  07:23p                4,689 track_d.81.xys
                                51 File(s)          823,947 bytes

```

Directory of R:\GMT\installed\examples\ex10

```

01/01/01  12:00a                <DIR>                .
01/01/01  12:00a                <DIR>                ..
12/27/00  07:23p                76 agu.d
11/13/02  07:18p                12,435 example_10.ps
12/27/00  07:23p                713 job10.bash
12/27/00  07:23p                823 job10.bat
12/27/00  07:23p                730 job10.csh
                                7 File(s)          14,777 bytes

```

Directory of R:\GMT\installed\examples\ex11

```

01/01/01  12:00a                <DIR>                .
01/01/01  12:00a                <DIR>                ..
11/13/02  07:18p                1,335 .gmtdefaults
12/28/00  06:52p                589,444 contoured_cube.ps.bz2
11/13/02  07:18p                2,457,260 example_11.ps
10/11/01  12:56p                2,980 job11.bash
10/11/01  12:56p                3,146 job11.bat
10/11/01  12:56p                2,991 job11.csh
12/27/00  07:23p                1,184 rgb_cube.awk
                                9 File(s)          3,058,340 bytes

```

Directory of R:\GMT\installed\examples\ex12

```

01/01/01  12:00a                <DIR>                .
01/01/01  12:00a                <DIR>                ..
11/13/02  07:18p                71,560 example_12.ps
12/27/00  07:23p                1,604 job12.bash
12/27/00  07:23p                1,701 job12.bat
12/27/00  07:23p                1,541 job12.csh
12/27/00  07:23p                780 table_5.11
                                7 File(s)          77,186 bytes

```

Directory of R:\GMT\installed\examples\ex13

CD_contents

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:18p          91,151 example_13.ps
12/27/00 07:23p          1,003 job13.bash
12/27/00 07:23p          1,094 job13.bat
12/27/00 07:23p          1,020 job13.csh
        6 File(s)          94,268 bytes
```

Directory of R:\GMT\installed\examples\ex14

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:18p          52,130 example_14.ps
12/27/00 07:23p          1,782 job14.bash
12/27/00 07:23p          1,999 job14.bat
12/27/00 07:23p          1,803 job14.csh
12/27/00 07:23p           780 table_5.11
        7 File(s)          58,494 bytes
```

Directory of R:\GMT\installed\examples\ex15

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:19p           88 .gmtcommands
11/13/02 07:19p          218,966 example_15.ps
12/27/00 07:23p          1,475 job15.bash
12/27/00 07:23p          1,605 job15.bat
12/27/00 07:23p          1,494 job15.csh
12/27/00 07:23p          2,406,130 ship.xyz
        8 File(s)          2,629,758 bytes
```

Directory of R:\GMT\installed\examples\ex16

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:19p          1,401 .gmtdefaults
12/27/00 07:23p           518 ex16.cpt
11/13/02 07:19p          2,305,865 example_16.ps
12/27/00 07:23p          1,850 job16.bash
12/27/00 07:23p          1,837 job16.bat
12/27/00 07:23p          1,759 job16.csh
12/27/00 07:23p           780 table_5.11
        9 File(s)          2,314,010 bytes
```

Directory of R:\GMT\installed\examples\ex17

```
01/01/01 12:00a <DIR> .
```

```

                                CD_contents
01/01/01  12:00a      <DIR>      ..
11/13/02  07:19p                1,281,672 example_17.ps
12/28/00  06:55p                609,392 india_geoid.grd
12/28/00  06:55p                609,392 india_topo.grd
12/27/00  07:23p                1,482 job17.bash
12/27/00  07:23p                1,711 job17.bat
12/27/00  07:23p                1,489 job17.csh
      8 File(s)          2,505,138 bytes

```

Directory of R:\GMT\installed\examples\ex18

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
12/28/00  06:55p                277,980 AK_gulf_grav.grd
11/13/02  07:19p                887,802 example_18.ps
12/27/00  07:23p                3,337 job18.bash
12/27/00  07:23p                3,683 job18.bat
12/27/00  07:23p                3,368 job18.csh
      7 File(s)          1,176,170 bytes

```

Directory of R:\GMT\installed\examples\ex19

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
11/13/02  07:19p                1,683,105 example_19.ps
12/27/00  07:23p                2,176 job19.bash
12/27/00  07:23p                2,293 job19.bat
12/27/00  07:23p                2,195 job19.csh
      6 File(s)          1,689,769 bytes

```

Directory of R:\GMT\installed\examples\ex20

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
11/13/02  07:19p                109 .gmtcommands
12/27/00  07:23p                598 bullseye.def
11/13/02  07:19p                25,326 example_20.ps
12/27/00  07:23p                1,377 job20.bash
12/27/00  07:23p                1,679 job20.bat
12/27/00  07:23p                1,399 job20.csh
12/27/00  07:23p                4,270 make_symbol
12/27/00  07:23p                512 volcano.def
     10 File(s)          35,270 bytes

```

Directory of R:\GMT\installed\include

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..

```

```

CD_contents
11/13/02  07:18p      20,493  gmt.h
11/13/02  07:18p      3,931  gmt_bcr.h
11/13/02  07:18p      2,526  gmt_boundcond.h
11/13/02  07:18p      2,462  gmt_colors.h
11/13/02  07:18p      4,079  gmt_customio.h
11/13/02  07:18p     12,259  gmt_funcnames.h
11/13/02  07:18p      3,262  gmt_grd.h
11/13/02  07:18p      2,659  gmt_grdio.h
11/13/02  07:18p      5,165  gmt_io.h
11/13/02  07:18p      1,000  gmt_keywords.h
11/13/02  07:18p      2,907  gmt_map.h
11/13/02  07:18p      6,807  gmt_math.h
11/13/02  07:18p      1,620  gmt_nan.h
11/13/02  07:18p      2,752  gmt_notposix.h
11/13/02  07:18p      7,531  gmt_notunix.h
11/13/02  07:18p      9,821  gmt_project.h
11/13/02  07:18p      8,124  gmt_shore.h
11/13/02  07:18p        405  gmt_unique.h
11/13/02  07:18p      8,470  pslib.h
      21 File(s)      106,273 bytes

```

Directory of R:\GMT\installed\lib

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
11/13/02  07:18p      878,644  libgmt.a
11/13/02  07:18p      882,036  libgmt.so
11/13/02  07:19p      13,372  libgmt_mgg.a
11/13/02  07:18p      115,740  libpsl.a
11/13/02  07:18p      120,284  libpsl.so
11/13/02  07:20p      21,976  libx2sys.a
      8 File(s)      2,032,052 bytes

```

Directory of R:\GMT\installed\man

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
01/28/03  09:43a      <DIR>      man1
      3 File(s)      0 bytes

```

Directory of R:\GMT\installed\man\man1

```

01/01/01  12:00a      <DIR>      .
01/01/01  12:00a      <DIR>      ..
10/02/02  12:25p      5,876  GMT.1
11/13/02  07:20p      4,870  backtracker.1
11/13/02  07:20p      2,015  binlegs.1
10/02/02  12:25p      4,167  blockmean.1

```

CD_contents

10/02/02	12:25p	4,311	blockmedian.1
10/02/02	12:25p	4,313	blockmode.1
11/13/02	07:20p	1,112	dat2gmt.1
10/02/02	12:25p	4,397	filter1d.1
10/02/02	12:25p	3,988	fitcircle.1
11/13/02	07:20p	1,504	gmt2bin.1
11/13/02	07:20p	1,179	gmt2dat.1
10/02/02	12:25p	1,938	gmtconvert.1
10/02/02	12:25p	17,613	gmtdefaults.1
11/13/02	07:20p	1,425	gmtinfo.1
11/13/02	07:20p	2,238	gmtlegs.1
11/13/02	07:20p	4,325	gmtlist.1
10/02/02	12:25p	10,045	gmtmath.1
11/13/02	07:20p	1,251	gmtpath.1
10/02/02	12:25p	8,817	gmtselect.1
10/02/02	12:25p	1,319	gmtset.1
11/13/02	07:20p	6,923	gmttrack.1
10/02/02	12:25p	2,660	grd2cpt.1
10/02/02	12:25p	3,657	grd2xyz.1
10/02/02	12:25p	1,303	grdclip.1
10/02/02	12:25p	12,260	grdcontour.1
10/02/02	12:25p	1,673	grdcut.1
10/02/02	12:25p	2,699	grdedit.1
10/02/02	12:25p	6,080	grdfft.1
10/02/02	12:25p	3,384	grdfilter.1
10/02/02	12:25p	5,433	grdgradient.1
10/02/02	12:25p	4,965	grdhisteq.1
10/02/02	12:25p	7,720	grdimage.1
10/02/02	12:25p	2,044	grdinfo.1
10/02/02	12:25p	3,280	grdlandmask.1
10/02/02	12:25p	3,910	grdmask.1
10/02/02	12:25p	9,730	grdmath.1
10/02/02	12:25p	1,239	grdpaste.1
10/02/02	12:25p	6,832	grdproject.1
11/13/02	07:20p	7,148	grdraster.1
10/02/02	12:25p	2,987	grdreformat.1
10/02/02	12:25p	3,488	grdsample.1
10/02/02	12:25p	3,875	grdtrack.1
10/02/02	12:25p	3,218	grdtrend.1
10/02/02	12:25p	7,715	grdvector.1
10/02/02	12:25p	10,836	grdview.1
10/02/02	12:25p	3,231	grdvolume.1
11/13/02	07:20p	3,336	hotspotter.1
11/13/02	07:20p	3,933	img2grd.1
11/13/02	07:20p	8,238	img2mercgrd.1
10/02/02	12:25p	2,184	makecpt.1
11/13/02	07:20p	1,475	makepattern.1
10/02/02	12:25p	15,729	mapproject.1

CD_contents

11/13/02	07:20p	2,742	mgd77togmt.1
10/02/02	12:25p	2,852	minmax.1
10/02/02	12:25p	4,818	nearneighbor.1
11/13/02	07:20p	4,236	originator.1
10/02/02	12:25p	10,040	project.1
10/02/02	12:25p	25,786	psbasemap.1
10/02/02	12:25p	6,976	psclip.1
10/02/02	12:25p	14,117	pscoast.1
10/02/02	12:25p	9,735	pscontour.1
11/13/02	07:20p	18,651	pscoupe.1
10/02/02	12:25p	5,560	pshistogram.1
10/02/02	12:25p	4,103	psimage.1
10/02/02	12:25p	28,239	pslib.1
10/02/02	12:25p	8,253	psmask.1
11/13/02	07:20p	16,736	psmeca.1
11/13/02	07:20p	1,227	psmegaplot.1
11/13/02	07:20p	9,153	pspolar.1
10/02/02	12:25p	5,991	psrose.1
10/02/02	12:25p	4,853	psscale.1
11/13/02	07:20p	7,947	pssegy.1
11/13/02	07:20p	8,038	pssegyz.1
10/02/02	12:25p	11,348	pstext.1
11/13/02	07:20p	13,095	psvelo.1
10/02/02	12:25p	9,149	pswiggle.1
10/02/02	12:25p	14,555	psxy.1
10/02/02	12:25p	13,541	psxyz.1
10/02/02	12:25p	3,257	sample1d.1
10/02/02	12:25p	5,314	spectrum1d.1
10/02/02	12:25p	5,918	splitxyz.1
10/02/02	12:25p	7,751	surface.1
10/02/02	12:25p	6,114	trend1d.1
10/02/02	12:25p	7,053	trend2d.1
10/02/02	12:25p	7,577	triangulate.1
11/13/02	07:20p	7,774	x2sys_cross.1
11/13/02	07:20p	2,053	x2sys_datalist.1
11/13/02	07:20p	884	x_edit.1
11/13/02	07:20p	2,389	x_init.1
11/13/02	07:20p	2,765	x_list.1
11/13/02	07:20p	2,485	x_over.1
11/13/02	07:20p	1,136	x_remove.1
11/13/02	07:20p	1,048	x_report.1
11/13/02	07:20p	885	x_setup.1
11/13/02	07:20p	2,231	x_solve_dc_drift.1
11/13/02	07:20p	7,728	x_system.1
11/13/02	07:20p	1,732	x_update.1
10/02/02	12:25p	6,288	xyz2grd.1
	100 File(s)	594,011	bytes

CD_contents

Directory of R:\GMT\installed\netcdf-3.5.0

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
01/28/03 09:43a <DIR> bin
01/28/03 09:43a <DIR> include
01/28/03 09:43a <DIR> lib
01/28/03 09:43a <DIR> man
01/28/03 09:43a <DIR> src
          7 File(s)          0 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\bin

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:10p          178,040 ncdump
11/13/02 07:10p          222,216 ncgen
          4 File(s)          400,256 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\include

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:10p          27,565 netcdf.h
          3 File(s)          27,565 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\lib

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:10p          185,044 libnetcdf.a
          3 File(s)          185,044 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\man

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
01/28/03 09:43a <DIR> man1
01/28/03 09:43a <DIR> man3
11/13/02 07:10p          250 windex
          5 File(s)          250 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\man\man1

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:10p          8,483 ncdump.1
11/13/02 07:10p          14,732 ncgen.1
```

CD_contents
4 File(s) 23,215 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\man\man3

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
11/13/02 07:10p 48,092 netcdf.3
3 File(s) 48,092 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\src

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
08/04/97 01:17p 15,320 COMPATIBILITY
05/12/99 02:03p 1,877 COPYRIGHT
03/23/01 03:00p 23,107 INSTALL.html
03/23/01 03:01p 3,447 MANIFEST
02/27/01 10:04a 5,995 Makefile
10/20/00 10:48a 957 README
03/13/01 11:39a 11,045 RELEASE_NOTES
02/27/01 10:28a 7 VERSION
03/22/01 03:43p 31,888 aclocal.m4
11/13/02 07:09p 2,195 config.cache
11/13/02 07:09p 6,658 config.log
11/13/02 07:09p 15,332 config.status
03/22/01 03:43p 119,867 configure
03/22/01 03:43p 1,353 configure.in
01/28/03 09:43a <DIR> cxx
01/28/03 09:43a <DIR> f90
01/28/03 09:43a <DIR> fortran
01/28/03 09:43a <DIR> libsrc
11/13/02 07:09p 2,230 macros.make
09/23/97 03:06p 2,019 macros.make.def
03/13/01 11:42a 2,267 macros.make.in
01/28/03 09:43a <DIR> man
01/28/03 09:43a <DIR> nc_test
01/28/03 09:43a <DIR> ncdump
01/28/03 09:43a <DIR> ncgen
01/28/03 09:43a <DIR> nctest
01/28/03 09:43a <DIR> nf_test
03/12/01 04:31p 5,949 rules.make
30 File(s) 251,513 bytes
```

Directory of R:\GMT\installed\netcdf-3.5.0\src\cxx

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
05/12/99 02:38p 2,380 Makefile
```

		CD_contents
10/28/98	10:22a	1,100 README
07/23/99	04:48p	159,290 cxxdoc.ps
06/21/99	01:41p	41,190 cxxdoc.tex
04/21/97	10:04a	106 depend
05/07/98	02:23p	4,551 example.c
10/28/98	11:26a	2,624 example.cpp
04/15/93	10:22a	1,112 expected
09/17/99	12:21p	6,460 nctst.cpp
12/22/98	12:21p	7,253 ncvalues.cpp
10/28/98	11:10a	9,776 ncvalues.h
02/05/01	02:29p	29,315 netcdf.cpp
10/08/98	10:59a	24 netcdf.hh
02/05/01	02:29p	17,096 netcdfcpp.h
04/06/97	08:40p	161,543 texinfo.tex
17 File(s)		443,820 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\f90

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
02/21/01	03:20p		1,733 Makefile
09/07/00	09:08a		1,262 NOTES
04/05/00	02:33p		133 Readme
04/05/00	02:33p		1,135 example_good.cdl
04/05/00	02:33p		2,157 f90aux.m4
09/07/00	09:09a		2,486 gen.m4
04/05/00	02:33p		35,622 netcdf.3f90
04/05/00	02:33p		2,274 netcdf.f90
05/01/00	01:37p		13,675 netcdf_attributes.f90
04/05/00	02:33p		3,563 netcdf_constants.f90
10/12/00	02:23p		1,765 netcdf_dims.f90
10/11/00	02:40p		115,854 netcdf_expanded.f90
04/05/00	02:33p		2,890 netcdf_externals.f90
10/13/00	09:07a		6,037 netcdf_file.f90
04/05/00	02:33p		6,717 netcdf_overloads.f90
04/05/00	02:33p		5,006 netcdf_test.f90
04/06/00	04:05p		23,515 netcdf_text_variables.f90
10/11/00	11:11a		3,546 netcdf_variables.f90
04/05/00	02:33p		952 netcdf_visibility.f90
10/11/00	02:39p		1,425 nvea.m4
04/05/00	02:33p		624 nves.m4
10/24/00	09:10a		2,615 typeSizes.f90
24 File(s)			234,986 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\fortran

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..

CD_contents

02/21/01	03:20p	1,991	Makefile
10/26/98	04:54p	95,747	cfortran.doc
02/25/00	09:14a	120,010	cfortran.h
12/17/97	12:01p	4,839	depend
05/12/99	02:03p	264	fills.nc
12/17/97	12:01p	4,426	fort-attio.c
12/23/98	10:30a	2,644	fort-control.c
12/17/97	12:01p	899	fort-dim.c
12/17/97	12:01p	1,276	fort-genatt.c
12/17/97	12:01p	853	fort-gening.c
12/17/97	12:01p	1,590	fort-genvar.c
12/17/97	12:01p	2,088	fort-lib.c
12/17/97	12:01p	3,470	fort-lib.h
10/26/98	04:55p	618	fort-misc.c
02/17/98	02:27p	48,122	fort-v2compat.c
12/17/97	12:01p	4,539	fort-varlio.c
12/17/97	12:01p	4,645	fort-varaio.c
12/17/97	12:01p	4,211	fort-vario.c
12/17/97	12:01p	5,035	fort-varmio.c
12/17/97	12:01p	4,879	fort-varsio.c
06/16/97	09:59a	39,336	fctest.F
03/09/01	04:59p	21,171	ncfortran.h
07/16/99	11:51a	45,516	netcdf.3f
12/23/98	10:30a	48,938	netcdf.inc
12/17/97	12:01p	2,404	nfconfig.in
11/13/02	07:09p	2,404	nfconfig.inc
	28 File(s)	471,915	bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\libsrc

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
02/25/00	09:14a		2,761 Makefile
06/11/97	11:13a		45,314 attr.c
06/10/97	03:27p		22,500 attr.m4
12/18/97	04:34p		2,071 depend
10/26/98	04:55p		9,448 dim.c
12/17/97	12:01p		3,821 error.c
05/26/95	03:46p		669 fbites.h
10/26/98	04:55p		16,039 ffio.c
02/25/00	09:14a		758 libvers.c
01/11/01	02:39p		26,314 nc.c
12/23/98	10:30a		9,850 nc.h
11/13/02	07:09p		2,298 ncconfig.h
12/17/97	12:01p		2,118 ncconfig.in
03/11/96	10:44a		147 ncio.c
11/19/97	02:34p		3,453 ncio.h
12/18/97	04:36p		82,991 ncx.c

CD_contents

04/20/00	03:42p	20,382	ncx.h
12/18/97	04:34p	53,494	ncx.m4
04/20/00	03:42p	73,330	ncx_cray.c
01/05/01	10:50a	48,092	netcdf.3
10/13/00	10:48a	27,565	netcdf.h
12/18/97	04:34p	1,830	onstack.h
08/24/99	03:27p	27,529	posixio.c
10/28/98	11:36a	256,652	putget.c
10/26/98	04:55p	57,381	putget.m4
01/06/97	05:49p	523	rnd.h
09/02/97	02:16p	2,259	string.c
03/09/98	09:58a	16,707	t_nc.c
11/19/97	02:34p	7,781	t_ncio.c
03/09/98	09:58a	27,208	t_ncx.c
04/23/97	11:20a	61,810	t_ncxx.c
12/03/96	11:08a	20,777	t_ncxx.m4
05/12/99	02:03p	8,192	test_nc.sav
08/24/99	03:27p	26,437	vlhpg.c
10/13/00	10:48a	16,165	v2i.c
06/11/97	01:58p	14,143	var.c
	38 File(s)	998,809	bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\man

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/26/98	04:55p		226 Makefile
06/24/99	10:57a		43,844 netcdf.m4
	4 File(s)		44,070 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\nc_test

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/19/00	04:34p		1,346 Makefile
08/21/96	06:55p		596 depend
02/17/98	02:27p		1,677 error.c
11/19/97	02:34p		712 error.h
11/19/97	02:34p		9,115 nc_test.c
10/08/98	11:04a		214,671 test_get.c
05/06/97	01:10p		29,222 test_get.m4
10/08/98	11:05a		224,335 test_put.c
09/02/97	02:16p		32,559 test_put.m4
12/17/97	12:01p		47,997 test_read.c
11/19/97	02:34p		59,152 test_write.c
03/09/98	09:58a		14,518 tests.h
11/19/97	02:34p		22,999 util.c
	15 File(s)		658,899 bytes

CD_contents

Directory of R:\GMT\installed\netcdf-3.5.0\src\ncdump

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
03/13/01	11:42a		1,382 Makefile
05/02/96	11:14a		305 depend
10/28/96	04:51p		5,120 dumplib.c
10/28/96	04:51p		2,179 dumplib.h
10/08/96	01:48p		8,483 ncdump.l
08/24/00	03:40p		18,974 ncdump.c
01/18/97	09:06a		2,369 ncdump.h
09/02/97	02:12p		921 test0.cdl
03/09/98	09:58a		23,861 vardata.c
10/28/96	04:51p		973 vardata.h
		12 File(s)	64,567 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\ncgen

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
03/13/01	11:42a		5,071 Makefile
05/13/98	05:53p		5,322 c0.cdl
05/09/96	02:37p		1,040 depend
03/19/97	05:18p		2,209 escapes.c
04/07/97	12:23p		561 generic.h
10/28/98	11:15a		47,686 genlib.c
10/28/98	11:15a		3,004 genlib.h
04/07/97	12:23p		2,873 getfill.c
05/23/97	06:41a		1,598 init.c
10/26/98	04:55p		13,891 load.c
09/02/97	01:35p		3,315 main.c
10/08/96	01:57p		14,732 ncgen.l
07/07/97	01:27p		2,323 ncgen.h
10/28/98	11:15a		6,528 ncgen.l
09/02/97	05:16p		23,345 ncgen.y
01/21/99	04:29p		41,016 ncgentab.c
01/21/99	04:29p		469 ncgentab.h
01/21/99	04:29p		56,233 ncgenyy.c
		20 File(s)	231,216 bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\nctest

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/26/98	04:55p		1,624 Makefile
05/08/89	11:55a		1,431 README
08/19/96	05:10p		5,865 add.c

CD_contents

04/30/96	12:56p	1,684	add.h
04/30/96	12:56p	50,603	atttests.c
04/30/96	12:56p	24,393	cdftests.c
08/21/96	06:55p	2,592	depend
04/30/96	12:56p	14,247	dimtests.c
04/30/96	12:56p	2,091	driver.c
04/30/96	12:56p	1,207	emalloc.c
02/29/96	10:26p	763	emalloc.h
04/30/96	12:56p	1,630	error.c
04/08/93	05:34p	1,048	error.h
04/30/96	12:56p	1,688	misctest.c
04/30/96	12:56p	13,140	nctime.c
04/30/96	12:57p	17,119	rec.c
04/30/96	12:57p	10,198	slabs.c
04/30/96	12:57p	1,726	testcdf.h
11/13/02	07:10p	43,392	testfile.nc
05/12/99	02:04p	43,392	testfile_nc.sav
04/30/96	12:57p	3,033	tests.h
02/29/96	05:16p	33	timesum.awk
08/19/96	05:10p	5,941	val.c
04/30/96	12:57p	1,297	val.h
04/30/96	12:57p	10,241	vardef.c
04/30/96	12:57p	4,525	varget.c
04/30/96	12:57p	4,540	vargetg.c
04/30/96	12:57p	4,766	varput.c
04/30/96	12:57p	4,674	varputg.c
05/19/97	06:17p	21,994	vartests.c
05/22/97	03:59p	4,555	vputget.c
05/19/97	06:17p	6,671	vputgetg.c
		34	File(s)
		312,103	bytes

Directory of R:\GMT\installed\netcdf-3.5.0\src\nf_test

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
02/21/01	03:20p		1,458 Makefile
12/17/97	12:01p		1,044 depend
10/16/00	10:06a		3,072 fortlb.c
06/03/97	05:26p		1,612 nf_error.F
06/11/97	11:21a		18,581 nf_test.F
10/08/98	11:07a		234,431 test_get.F
06/10/97	03:27p		41,935 test_get.m4
09/07/00	12:11p		265,453 test_put.F
08/15/00	04:25p		50,280 test_put.m4
12/17/97	12:02p		37,314 test_read.F
06/11/97	02:42p		49,208 test_write.F
04/20/00	03:42p		6,633 tests.inc
08/15/00	04:25p		42,940 util.F

CD_contents
15 File(s) 753,961 bytes

Directory of R:\GMT\installed\share

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:15p		1,399 .gmtdefaults_SI
11/13/02	07:15p		1,400 .gmtdefaults_SI.orig
10/02/02	12:25p		1,412 .gmtdefaults_US
11/13/02	07:15p		1,412 .gmtdefaults_US.orig
12/27/00	07:23p		1,415 GMT_CPT.lis
12/27/00	07:23p		151 GMT_cool.cpt
12/27/00	07:23p		210 GMT_copper.cpt
12/27/00	07:23p		772 GMT_gebco.cpt
12/27/00	07:23p		1,851 GMT_globe.cpt
12/27/00	07:23p		138 GMT_gray.cpt
12/27/00	07:23p		1,047 GMT_haxby.cpt
12/27/00	07:23p		210 GMT_hot.cpt
12/27/00	07:23p		276 GMT_jet.cpt
12/27/00	07:23p		692 GMT_no_green.cpt
12/27/00	07:23p		470 GMT_ocean.cpt
12/27/00	07:23p		179 GMT_polar.cpt
12/27/00	07:23p		7,213 GMT_rainbow.cpt
12/27/00	07:23p		213 GMT_red2green.cpt
12/27/00	07:23p		797 GMT_relief.cpt
12/27/00	07:23p		1,374 GMT_sealand.cpt
12/27/00	07:23p		448 GMT_seis.cpt
12/27/00	07:23p		266 GMT_split.cpt
12/27/00	07:23p		980 GMT_topo.cpt
12/27/00	07:23p		740 GMT_wysiwyg.cpt
12/27/00	07:23p		8,624 PSL_text.ps
10/11/01	07:58p		85,900 binned_GSHHS_c.cdf
08/19/99	10:38p		44,623,384 binned_GSHHS_f.cdf
08/19/99	10:38p		9,834,120 binned_GSHHS_h.cdf
10/11/01	07:58p		2,406,608 binned_GSHHS_i.cdf
10/11/01	07:58p		527,544 binned_GSHHS_l.cdf
10/11/01	07:58p		33,024 binned_border_c.cdf
05/09/00	01:59p		3,774,536 binned_border_f.cdf
05/09/00	01:59p		656,008 binned_border_h.cdf
10/11/01	07:58p		228,100 binned_border_i.cdf
10/11/01	07:58p		101,036 binned_border_l.cdf
10/11/01	07:58p		170,964 binned_river_c.cdf
08/22/99	09:29p		10,181,492 binned_river_f.cdf
08/22/99	09:29p		2,443,272 binned_river_h.cdf
10/11/01	07:58p		873,288 binned_river_i.cdf
10/11/01	07:58p		300,216 binned_river_l.cdf
11/13/02	07:15p		73 coastline.conf
01/28/03	09:41a	<DIR>	dbase

CD_contents

11/13/02	07:15p	406	gmt.conf
11/13/02	07:15p	406	gmt.conf.orig
04/07/01	08:13p	846	gmtformats.d
05/22/01	09:25p	846	gmtmedia.d
01/28/03	09:41a	<DIR>	mvg
12/28/00	06:57p	544	ps_pattern_01.ras
12/28/00	06:57p	544	ps_pattern_02.ras
12/28/00	06:57p	544	ps_pattern_03.ras
12/28/00	06:57p	544	ps_pattern_04.ras
12/28/00	06:57p	544	ps_pattern_05.ras
12/28/00	06:57p	544	ps_pattern_06.ras
12/28/00	06:57p	544	ps_pattern_07.ras
12/28/00	06:57p	544	ps_pattern_08.ras
12/28/00	06:57p	544	ps_pattern_09.ras
12/28/00	06:57p	544	ps_pattern_10.ras
12/28/00	06:57p	544	ps_pattern_11.ras
12/28/00	06:57p	544	ps_pattern_12.ras
12/28/00	06:57p	544	ps_pattern_13.ras
12/28/00	06:57p	544	ps_pattern_14.ras
12/28/00	06:57p	544	ps_pattern_15.ras
12/28/00	06:57p	544	ps_pattern_16.ras
12/28/00	06:57p	544	ps_pattern_17.ras
12/28/00	06:57p	544	ps_pattern_18.ras
12/28/00	06:57p	544	ps_pattern_19.ras
12/28/00	06:57p	544	ps_pattern_20.ras
12/28/00	06:57p	544	ps_pattern_21.ras
12/28/00	06:57p	544	ps_pattern_22.ras
12/28/00	06:57p	544	ps_pattern_23.ras
12/28/00	06:57p	544	ps_pattern_24.ras
12/28/00	06:57p	544	ps_pattern_25.ras
12/28/00	06:57p	544	ps_pattern_26.ras
12/28/00	06:57p	544	ps_pattern_27.ras
12/28/00	06:57p	544	ps_pattern_28.ras
12/28/00	06:57p	544	ps_pattern_29.ras
12/28/00	06:57p	544	ps_pattern_30.ras
12/28/00	06:57p	544	ps_pattern_31.ras
12/28/00	06:57p	544	ps_pattern_32.ras
12/28/00	06:57p	544	ps_pattern_33.ras
12/28/00	06:57p	544	ps_pattern_34.ras
12/28/00	06:57p	544	ps_pattern_35.ras
12/28/00	06:57p	544	ps_pattern_36.ras
12/28/00	06:57p	544	ps_pattern_37.ras
12/28/00	06:57p	544	ps_pattern_38.ras
12/28/00	06:57p	544	ps_pattern_39.ras
12/28/00	06:57p	544	ps_pattern_40.ras
12/28/00	06:57p	544	ps_pattern_41.ras
12/28/00	06:57p	544	ps_pattern_42.ras
12/28/00	06:57p	544	ps_pattern_43.ras

CD_contents

12/28/00	06:57p	544	ps_pattern_44.ras
12/28/00	06:57p	544	ps_pattern_45.ras
12/28/00	06:57p	544	ps_pattern_46.ras
12/28/00	06:57p	544	ps_pattern_47.ras
12/28/00	06:57p	544	ps_pattern_48.ras
12/28/00	06:57p	544	ps_pattern_49.ras
12/28/00	06:57p	544	ps_pattern_50.ras
12/28/00	06:57p	544	ps_pattern_51.ras
12/28/00	06:57p	544	ps_pattern_52.ras
12/28/00	06:57p	544	ps_pattern_53.ras
12/28/00	06:57p	544	ps_pattern_54.ras
12/28/00	06:57p	544	ps_pattern_55.ras
12/28/00	06:57p	544	ps_pattern_56.ras
12/28/00	06:57p	544	ps_pattern_57.ras
12/28/00	06:57p	544	ps_pattern_58.ras
12/28/00	06:57p	544	ps_pattern_59.ras
12/28/00	06:57p	544	ps_pattern_60.ras
12/28/00	06:57p	544	ps_pattern_61.ras
12/28/00	06:57p	544	ps_pattern_62.ras
12/28/00	06:57p	544	ps_pattern_63.ras
12/28/00	06:57p	544	ps_pattern_64.ras
12/28/00	06:57p	544	ps_pattern_65.ras
12/28/00	06:57p	544	ps_pattern_66.ras
12/28/00	06:57p	544	ps_pattern_67.ras
12/28/00	06:57p	544	ps_pattern_68.ras
12/28/00	06:57p	544	ps_pattern_69.ras
12/28/00	06:57p	544	ps_pattern_70.ras
12/28/00	06:57p	544	ps_pattern_71.ras
12/28/00	06:57p	544	ps_pattern_72.ras
12/28/00	06:57p	544	ps_pattern_73.ras
12/28/00	06:57p	544	ps_pattern_74.ras
12/28/00	06:57p	544	ps_pattern_75.ras
12/28/00	06:57p	544	ps_pattern_76.ras
12/28/00	06:57p	544	ps_pattern_77.ras
12/28/00	06:57p	544	ps_pattern_78.ras
12/28/00	06:57p	544	ps_pattern_79.ras
12/28/00	06:57p	544	ps_pattern_80.ras
12/28/00	06:57p	544	ps_pattern_81.ras
12/28/00	06:57p	544	ps_pattern_82.ras
12/28/00	06:57p	544	ps_pattern_83.ras
12/28/00	06:57p	544	ps_pattern_84.ras
12/28/00	06:57p	544	ps_pattern_85.ras
12/28/00	06:57p	544	ps_pattern_86.ras
12/28/00	06:57p	544	ps_pattern_87.ras
12/28/00	06:57p	544	ps_pattern_88.ras
12/28/00	06:57p	544	ps_pattern_89.ras
12/28/00	06:57p	544	ps_pattern_90.ras
01/28/03	09:41a	<DIR>	x2sys

CD_contents
140 File(s) 76,324,718 bytes

Directory of R:\GMT\installed\share\dbase

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p		3,620 grdraster.info
		3 File(s)	3,620 bytes

Directory of R:\GMT\installed\share\mgg

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p		282,607 carter.d
03/27/01	04:40p		222 gmtfile_paths
		4 File(s)	282,829 bytes

Directory of R:\GMT\installed\share\x2sys

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p		889 gmt.def
12/27/00	07:23p		815 mgd77.def
12/27/00	07:23p		563 xy.def
12/27/00	07:23p		524 xyz.def
		6 File(s)	2,791 bytes

Directory of R:\GMT\installed\src

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
11/13/02	07:15p		6,295 GMT
01/17/02	08:45p		6,234 GMT.in
12/28/00	06:56p		300 GMT_nan.cdf
01/17/02	08:45p		7,614 Makefile
12/27/00	07:23p		340 PS_font_heights.h
12/27/00	07:23p		919 PS_font_names.h
12/27/00	07:23p		8,044 README.TRIANGLE
12/27/00	07:23p		1,729 TRIANGLE.HOWTO
12/27/00	07:23p		667 alpha-sincos.s
08/30/02	01:32p		17,032 blockmean.c
08/30/02	01:32p		14,929 blockmedian.c
08/30/02	01:32p		16,286 blockmode.c
01/28/03	09:44a	<DIR>	dbase
08/30/02	01:32p		29,213 filter1d.c
08/30/02	01:32p		18,795 fitcircle.c
02/27/02	02:23p		20,327 fourt.c
08/30/02	01:32p		20,493 gmt.h

CD_contents

08/30/02	01:32p	3,931	gmt_bcr.h
08/30/02	01:32p	2,526	gmt_boundcond.h
08/30/02	01:32p	16,219	gmt_cdf.c
08/30/02	01:32p	2,462	gmt_colors.h
08/30/02	01:32p	53,463	gmt_customio.c
08/30/02	01:32p	4,079	gmt_customio.h
05/22/01	09:25p	2,928	gmt_defaults.h
08/30/02	01:32p	12,259	gmt_funcnames.h
08/30/02	01:32p	3,262	gmt_grd.h
08/30/02	01:32p	14,328	gmt_grdio.c
08/30/02	01:32p	2,659	gmt_grdio.h
08/30/02	01:32p	122,814	gmt_init.c
08/30/02	01:32p	8,243	gmt_init.h
08/30/02	01:32p	25,927	gmt_io.c
08/30/02	01:32p	5,165	gmt_io.h
12/27/00	07:23p	1,000	gmt_keywords.h
09/27/02	03:55p	297,635	gmt_map.c
08/30/02	01:32p	2,907	gmt_map.h
08/30/02	01:32p	6,807	gmt_math.h
12/27/00	07:23p	244	gmt_media_name.h
12/27/00	07:23p	401	gmt_media_size.h
11/13/02	07:15p	1,620	gmt_nan.h
08/30/02	01:32p	6,006	gmt_nan_init.c
11/13/02	07:15p	2,752	gmt_notposix.h
01/17/02	11:42a	2,685	gmt_notposix.h.in
08/30/02	01:32p	7,531	gmt_notunix.h
08/30/02	01:32p	124,800	gmt_plot.c
08/30/02	01:32p	9,821	gmt_project.h
08/30/02	01:32p	37,421	gmt_shore.c
08/30/02	01:32p	8,124	gmt_shore.h
08/30/02	01:32p	57,615	gmt_stat.c
08/30/02	01:32p	118,206	gmt_support.c
12/27/00	07:23p	405	gmt_unique.h
08/30/02	01:32p	25,280	gmt_vector.c
08/30/02	01:32p	5,616	gmtconvert.c
08/30/02	01:32p	3,207	gmtdefaults.c
09/05/02	03:05p	1,804	gmtenv.bat
09/05/02	03:05p	7,006	gmtinstall.bat
08/30/02	01:28p	68,314	gmtmath.c
02/27/02	04:27p	14,005	gmtmath_def.h
02/27/02	04:27p	6,512	gmtmath_explain.h
08/30/02	01:32p	31,999	gmtselect.c
08/30/02	01:32p	2,581	gmtset.c
09/05/02	03:05p	7,419	gmtsuppl.bat
08/30/02	01:32p	11,450	grd2cpt.c
08/30/02	01:32p	8,733	grd2xyz.c
08/30/02	01:32p	5,755	grdclip.c
08/30/02	01:32p	37,791	grdcontour.c

CD_contents

09/25/02	04:29p		6,357	grdcut.c
08/30/02	01:32p		6,282	grdedit.c
08/30/02	01:32p		44,158	grdfft.c
08/30/02	01:32p		18,372	grdfilter.c
08/30/02	01:32p		14,534	grdgradient.c
08/30/02	01:32p		11,697	grdhisteq.c
08/30/02	01:32p		21,192	grdimage.c
08/30/02	01:32p		13,308	grdinfo.c
08/30/02	01:32p		14,425	grdlandmask.c
08/30/02	01:32p		15,660	grdmask.c
08/30/02	01:32p		69,368	grdmath.c
03/06/02	05:41p		12,477	grdmath_def.h
03/06/02	05:41p		7,063	grdmath_explain.h
08/30/02	01:32p		8,999	grdpaste.c
08/30/02	01:32p		14,122	grdproject.c
08/30/02	01:32p		5,222	grdreformat.c
08/30/02	01:32p		9,468	grdsample.c
08/30/02	01:32p		10,696	grdtrack.c
09/19/02	09:59p		28,159	grdtrend.c
08/30/02	01:32p		15,165	grdvector.c
08/30/02	01:32p		61,733	grdview.c
08/30/02	01:32p		20,302	grdvolume.c
01/28/03	09:44a	<DIR>		gshhs
01/28/03	09:44a	<DIR>		imgsrc
11/13/02	07:16p		878,644	libgmt.a
11/13/02	07:16p		882,036	libgmt.so
11/13/02	07:15p		115,740	libpsl.a
11/13/02	07:16p		120,284	libpsl.so
08/30/02	01:32p		6,760	makecpt.c
11/13/02	07:15p		5,637	makegmt.macros
01/17/02	08:45p		5,413	makegmt.macros.in
09/27/02	02:02p		15,841	mapproject.c
01/28/03	09:44a	<DIR>		meca
01/28/03	09:44a	<DIR>		mex
01/28/03	09:44a	<DIR>		mgg
08/30/02	01:32p		9,111	minmax.c
01/28/03	09:44a	<DIR>		misc
08/30/02	01:32p		19,037	nearneighbor.c
09/27/02	02:02p		32,781	project.c
08/30/02	01:32p		5,806	psbasemap.c
08/30/02	01:32p		10,008	psclip.c
09/27/02	02:02p		35,864	pscoast.c
08/30/02	01:32p		33,498	pscontour.c
08/30/02	01:32p		20,162	pshistogram.c
08/30/02	01:32p		9,087	psimage.c
09/05/02	12:50p		127,157	pslib.c
08/30/02	01:32p		8,470	pslib.h
09/05/02	12:50p		7,676	pslib_inc.h

```

CD_contents
08/30/02  01:32p                23,638 psmask.c
08/30/02  01:32p                26,418 psrose.c
08/30/02  01:32p                24,366 psscale.c
08/30/02  01:32p                23,883 pstext.c
08/30/02  01:32p                19,552 pswiggle.c
08/30/02  01:32p                55,831 psxy.c
08/30/02  01:32p                65,021 psxyz.c
08/30/02  01:32p                14,001 sample1d.c
01/28/03  09:44a                <DIR>      segyprogs
08/30/02  01:32p                23,514 spectrum1d.c
08/30/02  01:32p                17,905 splitxyz.c
01/28/03  09:44a                <DIR>      spotter
08/30/02  01:32p                66,658 surface.c
08/30/02  01:32p                29,242 trend1d.c
09/19/02  09:59p                26,833 trend2d.c
02/22/02  09:16p                551,351 triangle.c
12/27/00  07:23p                21,905 triangle.h
08/30/02  01:32p                15,384 triangulate.c
01/28/03  09:44a                <DIR>      x2sys
01/28/03  09:44a                <DIR>      x_system
01/28/03  09:44a                <DIR>      xgrid
08/30/02  01:32p                16,335 xyz2grd.c
                137 File(s)          5,172,542 bytes

```

Directory of R:\GMT\installed\src\dbase

```

01/01/01  12:00a                <DIR>      .
01/01/01  12:00a                <DIR>      ..
12/27/00  07:23p                13,819 README.dbase
04/11/02  03:47p                33,462 grdraster.c
10/02/02  12:26p                9,368 grdraster.html
10/02/02  12:25p                7,148 grdraster.man
04/11/01  02:58p                720 makefile
                7 File(s)          64,517 bytes

```

Directory of R:\GMT\installed\src\gshhs

```

01/01/01  12:00a                <DIR>      .
01/01/01  12:00a                <DIR>      ..
12/27/00  07:23p                5,181 README.gshhs
01/17/02  11:42a                3,505 gshhs.c
01/17/02  11:42a                1,831 gshhs.h
01/17/02  11:42a                11,128 gshhs_dp.c
12/27/00  07:23p                6,139 gshhstograss.c
03/09/01  12:32p                621 makefile
                8 File(s)          28,405 bytes

```

Directory of R:\GMT\installed\src\imgsrc

CD_contents

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
05/22/01	09:25p		16,351 README.imgsrc
12/27/00	07:23p		2,554 gmt_imgsubs.c
12/27/00	07:23p		2,758 gmt_imgsubs.h
09/29/02	02:39p		4,417 img2grd
10/02/02	12:26p		5,458 img2grd.html
10/11/01	08:14p		3,933 img2grd.man
02/27/02	11:41a		15,230 img2mercgrd.c
10/02/02	12:26p		10,693 img2mercgrd.html
10/11/01	08:14p		8,238 img2mercgrd.man
04/11/01	02:58p		745 makefile
		12 File(s)	70,377 bytes

Directory of R:\GMT\installed\src\meca

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/29/00	04:10p		1,562 README.meca
12/29/00	04:10p		2,918 distaz.c
04/11/01	02:58p		1,373 makefile
12/29/00	04:10p		1,082 meca.h
12/29/00	04:10p		1,648 meca_1.csh
12/29/00	04:10p		5,847 meca_2.csh
12/29/00	04:10p		1,703 meca_3.csh
12/29/00	04:10p		2,718 meca_4.csh
12/29/00	04:10p		8,358 nrutil.c
12/29/00	04:10p		2,202 nrutil.h
02/27/02	11:41a		46,087 pscoupe.c
10/02/02	12:26p		24,742 pscoupe.html
01/17/02	12:19p		18,651 pscoupe.man
02/27/02	11:41a		43,458 psmecca.c
10/02/02	12:26p		22,180 psmecca.html
01/17/02	12:19p		16,736 psmecca.man
02/27/02	11:41a		31,875 pspolar.c
10/02/02	12:26p		12,360 pspolar.html
01/17/02	12:19p		9,153 pspolar.man
02/27/02	11:41a		21,451 psvelo.c
10/02/02	12:26p		17,278 psvelo.html
01/17/02	12:19p		13,095 psvelo.man
04/02/01	09:51a		8,198 submecca.c
12/29/00	04:10p		631 submecca.h
04/02/01	09:51a		46,075 utilmecca.c
12/29/00	04:10p		1,287 utilmecca.h
12/29/00	04:10p		11,148 utilstrain.c
12/29/00	04:10p		475 utilstrain.h
12/29/00	04:10p		9,232 utilvelo.c

CD_contents

12/29/00 04:10p 728 utilvelo.h
32 File(s) 384,251 bytes

Directory of R:\GMT\installed\src\mex

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p		1,766 README.mex
11/13/02	07:15p		635 config.log
11/13/02	07:15p		6,813 config.status
04/24/01	02:00p		39,957 configure
03/01/01	01:04p		2,256 configure.in
12/27/00	07:23p		488 grdinfo.m
12/27/00	07:23p		3,694 grdinfo2.c
12/27/00	07:23p		4,821 grdread.c
12/27/00	07:23p		697 grdread.m
06/26/02	10:58p		5,477 grdwrite.c
12/27/00	07:23p		684 grdwrite.m
11/13/02	07:15p		1,821 makefile
04/11/01	02:58p		1,835 makefile.in
		15 File(s)	70,944 bytes

Directory of R:\GMT\installed\src\mgg

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p		3,169 README.mgg
02/27/02	11:41a		10,470 binlegs.c
10/02/02	12:26p		2,937 binlegs.html
10/11/01	08:14p		2,015 binlegs.man
01/17/02	11:42a		1,815 carter.h
01/17/02	11:42a		3,339 dat2gmt.c
10/02/02	12:26p		1,725 dat2gmt.html
10/11/01	08:14p		1,112 dat2gmt.man
02/27/02	11:41a		7,102 gmt2bin.c
10/02/02	12:26p		2,198 gmt2bin.html
10/11/01	08:14p		1,504 gmt2bin.man
01/17/02	11:42a		2,780 gmt2dat.c
10/02/02	12:26p		1,776 gmt2dat.html
10/11/01	08:14p		1,179 gmt2dat.man
02/27/02	11:41a		19,165 gmt_mgg.c
01/17/02	11:42a		1,418 gmt_mgg.h
01/17/02	11:42a		4,129 gmtinfo.c
10/02/02	12:26p		2,086 gmtinfo.html
10/11/01	08:14p		1,425 gmtinfo.man
02/27/02	11:41a		5,147 gmtlegs.c
10/02/02	12:26p		3,140 gmtlegs.html
10/11/01	08:14p		2,238 gmtlegs.man

CD_contents

02/27/02	11:41a	19,760	gmtlist.c
10/02/02	12:26p	6,031	gmtlist.html
10/11/01	08:14p	4,325	gmtlist.man
01/17/02	11:42a	1,039	gmtpath.c
10/02/02	12:26p	1,879	gmtpath.html
10/11/01	08:14p	1,251	gmtpath.man
02/27/02	11:41a	16,766	gmttrack.c
10/02/02	12:26p	9,433	gmttrack.html
10/11/01	08:14p	6,923	gmttrack.man
11/13/02	07:19p	13,372	libgmt_mgg.a
04/11/01	02:58p	2,869	makefile
02/27/02	11:41a	9,409	mgd77togmt.c
10/02/02	12:26p	3,748	mgd77togmt.html
10/11/01	08:14p	2,742	mgd77togmt.man
01/17/02	12:17p	2,493	x_system.h
39 File(s)		183,909	bytes

Directory of R:\GMT\installed\src\misc

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p	541	README.misc
04/11/01	02:58p	1,349	makefile
02/27/02	11:41a	9,899	makepattern.c
10/02/02	12:26p	2,226	makepattern.html
10/11/01	08:14p	1,475	makepattern.man
01/17/02	11:42a	4,165	psmegaplot.c
10/02/02	12:26p	1,913	psmegaplot.html
10/11/01	08:14p	1,227	psmegaplot.man
10 File(s)		22,795	bytes

Directory of R:\GMT\installed\src\segyplogs

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
04/11/01	02:58p	2,625	README.segyplogs
04/11/01	02:58p	1,115	makefile
04/11/01	02:58p	20,853	psseggy.c
10/02/02	12:26p	10,667	psseggy.html
10/11/01	08:14p	7,947	psseggy.man
09/27/02	02:02p	29,082	psseggyz.c
10/02/02	12:26p	10,839	psseggyz.html
10/11/01	08:14p	8,038	psseggyz.man
04/11/01	02:58p	6,790	seggy.h
12/27/00	07:23p	3,744	seggy_io.c
03/17/02	01:58p	1,093	seggy_io.h
04/13/01	03:44p	416	segyplogs_1.sh
04/13/01	03:44p	432	segyplogs_2.sh

CD_contents

04/13/01	03:44p	563	segyplogs_3.sh
04/11/01	02:58p	2,319	segyreel.h
04/13/01	03:44p	221	test.list
04/13/01	03:44p	582,644	wal_mig13.segy
	19 File(s)	689,388	bytes

Directory of R:\GMT\installed\src\spotter

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p	512	DC85.d
12/27/00	07:23p	4,561	README.spotter
12/27/00	07:23p	638	WK97.d
05/17/02	02:10p	16,114	backtracker.c
10/02/02	12:26p	6,630	backtracker.html
08/30/02	01:39p	4,870	backtracker.man
01/17/02	11:42a	20,335	hotspotter.c
10/02/02	12:26p	4,724	hotspotter.html
10/11/01	08:14p	3,336	hotspotter.man
11/13/02	07:19p	17,020	libspotter.a
01/17/02	11:42a	21,746	libspotter.c
04/11/01	02:58p	2,216	makefile
12/27/00	07:23p	2,253	makespotter.bat
02/27/02	11:41a	13,884	originator.c
10/02/02	12:26p	5,802	originator.html
10/11/01	08:14p	4,236	originator.man
12/27/00	07:23p	322	pac_hs.d
12/27/00	07:23p	59,519	seamounts.d
12/27/00	07:23p	2,875	spotter.bat
01/17/02	11:42a	2,156	spotter.h
12/27/00	07:23p	2,833	spotter.sh
	23 File(s)	196,582	bytes

Directory of R:\GMT\installed\src\x2sys

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p	7,471	README.x2sys
12/27/00	07:23p	889	gmt.def
11/13/02	07:20p	21,976	libx2sys.a
03/13/02	07:22p	1,744	makefile
12/27/00	07:23p	815	mgd77.def
02/27/02	11:41a	33,805	x2sys.c
01/17/02	11:42a	8,465	x2sys.h
02/27/02	11:58a	26,059	x2sys_cross.c
10/02/02	12:26p	10,069	x2sys_cross.html
02/27/02	12:26p	7,774	x2sys_cross.man
02/27/02	11:58a	5,275	x2sys_datalist.c

CD_contents

10/02/02	12:26p	3,068	x2sys_datalist.html
02/27/02	12:26p	2,053	x2sys_datalist.man
12/27/00	07:23p	563	xy.def
12/27/00	07:23p	524	xyz.def
17 File(s)		130,550	bytes

Directory of R:\GMT\installed\src\x_system

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/27/00	07:23p	903	README.x_system
03/14/02	10:40a	1,834	makefile
12/27/00	07:23p	2,590	x_edit.c
10/02/02	12:26p	1,502	x_edit.html
10/11/01	08:14p	884	x_edit.man
12/27/00	07:23p	1,667	x_init.c
10/02/02	12:26p	3,513	x_init.html
10/11/01	08:14p	2,389	x_init.man
12/27/00	07:23p	15,439	x_list.c
10/02/02	12:26p	3,986	x_list.html
10/11/01	08:14p	2,765	x_list.man
04/03/01	06:59p	30,198	x_over.c
10/02/02	12:26p	3,412	x_over.html
10/11/01	08:14p	2,485	x_over.man
02/27/02	11:41a	8,265	x_remove.c
10/02/02	12:26p	1,828	x_remove.html
10/11/01	08:14p	1,136	x_remove.man
04/03/01	06:59p	2,671	x_report.c
10/02/02	12:26p	1,732	x_report.html
10/11/01	08:14p	1,048	x_report.man
02/27/02	11:41a	6,430	x_setup.c
10/02/02	12:26p	1,452	x_setup.html
10/11/01	08:14p	885	x_setup.man
02/27/02	11:41a	14,774	x_solve_dc_drift.c
10/02/02	12:26p	3,306	x_solve_dc_drift.html
10/11/01	08:14p	2,231	x_solve_dc_drift.man
01/17/02	11:42a	2,493	x_system.h
10/02/02	12:26p	9,514	x_system.html
10/11/01	08:14p	7,728	x_system.man
02/27/02	11:41a	11,551	x_update.c
10/02/02	12:26p	2,674	x_update.html
10/11/01	08:14p	1,732	x_update.man
34 File(s)		155,017	bytes

Directory of R:\GMT\installed\src\xgrid

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..

CD_contents

11/13/02	07:15p	0	.skip
12/27/00	07:23p	5,810	README.xgrid
04/24/01	02:00p	67,766	configure
03/08/01	05:45p	781	configure.in
11/13/02	07:20p	2,011	makefile
04/11/01	02:58p	2,033	makefile.in
12/27/00	07:23p	3,146	xGridEdit.c
12/27/00	07:23p	3,990	xgrid_Canvas.c
12/27/00	07:23p	2,656	xgrid_Canvas.h
12/27/00	07:23p	721	xgrid_CanvasP.h
12/27/00	07:23p	4,929	xgrid_GMTgrid.c
06/26/02	04:48p	356	xgrid_GMTgrid.h
12/27/00	07:23p	11,216	xgrid_Panner.c
12/27/00	07:23p	3,208	xgrid_Panner.h
12/27/00	07:23p	974	xgrid_PannerP.h
12/27/00	07:23p	1,408	xgrid_Xutility.c
12/27/00	07:23p	375	xgrid_Xutility.h
12/27/00	07:23p	1,469	xgrid_controls.c
12/27/00	07:23p	238	xgrid_controls.h
12/27/00	07:23p	2,418	xgrid_grid.h
12/27/00	07:23p	1,018	xgrid_messages.c
12/27/00	07:23p	243	xgrid_messages.h
12/27/00	07:23p	5,342	xgrid_textInput.c
12/27/00	07:23p	284	xgrid_textInput.h
12/27/00	07:23p	14,915	xgrid_textView.c
12/27/00	07:23p	1,395	xgrid_textView.h
12/27/00	07:23p	716	xgrid_utility.c
12/27/00	07:23p	495	xgrid_utility.h
12/27/00	07:23p	5,301	xgrid_view.c
12/27/00	07:23p	424	xgrid_view.h
		32 File(s)	145,638 bytes

Directory of R:\GMT\installed\tutorial

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
12/28/00	06:56p	19,280	bermuda.grd
12/27/00	07:23p	37	data
12/27/00	07:23p	76	quakes.cpt
12/27/00	07:23p	4,233	quakes.ngdc
12/27/00	07:23p	2,406,130	ship.xyz
12/27/00	07:23p	352	topo.cpt
12/28/00	06:56p	1,441,468	us.grd
		9 File(s)	3,871,576 bytes

Directory of R:\GMT\installed\www

01/01/01	12:00a	<DIR>	.
----------	--------	-------	---

CD_contents

```
01/01/01 12:00a <DIR> ..
01/28/03 09:43a <DIR> gmt
          3 File(s)          0 bytes
```

Directory of R:\GMT\installed\www\gmt

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
01/28/03 09:42a <DIR> doc
10/02/02 12:26p          11,049 gmt_man.html
10/02/02 12:36p          1,315 gmt_services.html
10/02/02 12:26p          4,945 gmt_suppl.html
01/28/03 09:43a <DIR> images
          7 File(s)      17,309 bytes
```

Directory of R:\GMT\installed\www\gmt\doc

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
01/28/03 09:43a <DIR> html
01/28/03 09:42a <DIR> pdf
01/28/03 09:42a <DIR> ps
          5 File(s)          0 bytes
```

Directory of R:\GMT\installed\www\gmt\doc\html

```
01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
10/02/02 12:26p          6,955 GMT.html
01/28/03 09:42a <DIR> GMT_Docs
11/13/02 07:20p          6,630 backtracker.html
11/13/02 07:20p          2,937 binlegs.html
10/02/02 12:25p          6,053 blockmean.html
10/02/02 12:25p          6,239 blockmedian.html
10/02/02 12:25p          6,232 blockmode.html
11/13/02 07:20p          1,725 dat2gmt.html
10/02/02 12:25p          6,229 filter1d.html
10/02/02 12:25p          5,288 fitcircle.html
11/13/02 07:20p          2,198 gmt2bin.html
11/13/02 07:20p          1,776 gmt2dat.html
10/02/02 12:25p          2,887 gmtconvert.html
10/02/02 12:25p      24,106 gmtdefaults.html
11/13/02 07:20p          2,086 gmtinfo.html
11/13/02 07:20p          3,140 gmtlegs.html
11/13/02 07:20p          6,031 gmtlist.html
10/02/02 12:25p      13,264 gmtmath.html
11/13/02 07:20p          1,879 gmtpath.html
10/02/02 12:25p      11,817 gmtselect.html
```

CD_contents

10/02/02	12:25p	2,174	gmtset.html
11/13/02	07:20p	9,433	gmttrack.html
10/02/02	12:25p	3,825	grd2cpt.html
10/02/02	12:26p	5,082	grd2xyz.html
10/02/02	12:26p	2,168	grdclip.html
10/02/02	12:26p	16,372	grdcontour.html
10/02/02	12:26p	2,710	grdcut.html
10/02/02	12:26p	3,909	grdedit.html
10/02/02	12:26p	8,080	grdfft.html
10/02/02	12:26p	4,856	grdfilter.html
10/02/02	12:26p	7,584	grdgradient.html
10/02/02	12:26p	6,748	grdhisteq.html
10/02/02	12:26p	10,326	grdimage.html
10/02/02	12:26p	3,158	grdinfo.html
10/02/02	12:26p	4,914	grdlandmask.html
10/02/02	12:26p	5,526	grdmask.html
10/02/02	12:26p	12,793	grdmath.html
10/02/02	12:26p	2,183	grdpaste.html
10/02/02	12:26p	9,013	grdproject.html
11/13/02	07:20p	9,368	grdraster.html
10/02/02	12:26p	4,260	grdreformat.html
10/02/02	12:26p	4,984	grdsample.html
10/02/02	12:26p	5,342	grdtrack.html
10/02/02	12:26p	4,374	grdtrend.html
10/02/02	12:26p	10,497	grdvector.html
10/02/02	12:26p	14,606	grdview.html
10/02/02	12:26p	4,487	grdvolume.html
11/13/02	07:20p	4,724	hotspotter.html
11/13/02	07:20p	5,458	img2grd.html
11/13/02	07:20p	10,693	img2mercgrd.html
10/02/02	12:26p	3,057	makecpt.html
11/13/02	07:20p	2,226	makepattern.html
10/02/02	12:26p	20,523	mapproject.html
11/13/02	07:20p	3,748	mgd77togmt.html
10/02/02	12:26p	3,997	minmax.html
10/02/02	12:26p	6,748	nearneighbor.html
11/13/02	07:20p	5,802	originator.html
10/02/02	12:26p	13,377	project.html
10/02/02	12:26p	33,338	psbasemap.html
10/02/02	12:26p	9,433	psclip.html
10/02/02	12:26p	18,503	pscoast.html
10/02/02	12:26p	13,166	pscontour.html
11/13/02	07:20p	24,742	pscoupe.html
10/02/02	12:26p	7,904	pshistogram.html
10/02/02	12:26p	5,758	psimage.html
10/02/02	12:26p	41,752	pslib.html
10/02/02	12:26p	11,086	psmask.html
11/13/02	07:20p	22,180	psmecca.html

```

CD_contents
11/13/02 07:20p      1,913 psmegaplot.html
11/13/02 07:20p     12,360 pspolar.html
10/02/02 12:26p      8,105 psrose.html
10/02/02 12:26p      6,686 psscale.html
11/13/02 07:20p     10,667 pssegy.html
11/13/02 07:20p     10,839 pssegyz.html
10/02/02 12:26p     15,416 pstext.html
11/13/02 07:20p     17,278 psvelo.html
10/02/02 12:26p     12,195 pswiggle.html
10/02/02 12:26p     18,994 psxy.html
10/02/02 12:26p     18,208 psxyz.html
10/02/02 12:26p      4,573 sample1d.html
10/02/02 12:26p      7,405 spectrum1d.html
10/02/02 12:26p      8,090 splitxyz.html
10/02/02 12:26p     10,883 surface.html
10/02/02 12:26p      8,212 trend1d.html
10/02/02 12:26p      9,342 trend2d.html
10/02/02 12:26p     10,153 triangulate.html
01/28/03 09:43a      <DIR>      tutorial
11/13/02 07:20p     10,069 x2sys_cross.html
11/13/02 07:20p      3,068 x2sys_datalist.html
11/13/02 07:20p      1,502 x_edit.html
11/13/02 07:20p      3,513 x_init.html
11/13/02 07:20p      3,986 x_list.html
11/13/02 07:20p      3,412 x_over.html
11/13/02 07:20p      1,828 x_remove.html
11/13/02 07:20p      1,732 x_report.html
11/13/02 07:20p      1,452 x_setup.html
11/13/02 07:20p      3,306 x_solve_dc_drift.html
11/13/02 07:20p      9,514 x_system.html
11/13/02 07:20p      2,674 x_update.html
10/02/02 12:26p      8,469 xyz2grd.html
      102 File(s)      810,303 bytes

```

Directory of R:\GMT\installed\www\gmt\doc\html\GMT_Docs

```

01/01/01 12:00a      <DIR>      .
01/01/01 12:00a      <DIR>      ..
10/02/02 12:36p      921 GMT_Docs.css
10/02/02 12:36p     21,165 GMT_Docs.html
10/02/02 12:36p      278 contents.png
10/02/02 12:36p     12,137 footnode.html
10/02/02 12:36p      185 img1.png
10/02/02 12:36p      171 img10.png
10/02/02 12:36p     15,541 img100.png
10/02/02 12:36p     23,935 img101.png
10/02/02 12:36p      907 img102.png
10/02/02 12:36p      546 img103.png

```


CD_contents

10/02/02	12:36p	32,159	img104.png
10/02/02	12:36p	12,393	img105.png
10/02/02	12:36p	17,532	img106.png
10/02/02	12:36p	266	img107.png
10/02/02	12:36p	32,784	img108.png
10/02/02	12:36p	24,355	img109.png
10/02/02	12:36p	181	img11.png
10/02/02	12:36p	17,487	img110.png
10/02/02	12:36p	337	img111.png
10/02/02	12:36p	23,474	img112.png
10/02/02	12:36p	20,188	img113.png
10/02/02	12:36p	775	img114.png
10/02/02	12:36p	271	img115.png
10/02/02	12:36p	20,171	img116.png
10/02/02	12:36p	16,875	img117.png
10/02/02	12:36p	28,571	img118.png
10/02/02	12:36p	392	img119.png
10/02/02	12:36p	165	img12.png
10/02/02	12:36p	414	img120.png
10/02/02	12:36p	535	img121.png
10/02/02	12:36p	22,427	img122.png
10/02/02	12:36p	87,334	img123.png
10/02/02	12:36p	49,013	img124.png
10/02/02	12:36p	42,066	img125.png
10/02/02	12:36p	3,702	img126.png
10/02/02	12:36p	224	img127.png
10/02/02	12:36p	240	img128.png
10/02/02	12:36p	204	img129.png
10/02/02	12:36p	141	img13.png
10/02/02	12:36p	221	img130.png
10/02/02	12:36p	178	img131.png
10/02/02	12:36p	270	img132.png
10/02/02	12:36p	232	img133.png
10/02/02	12:36p	250	img134.png
10/02/02	12:36p	15,160	img135.png
10/02/02	12:36p	391	img136.png
10/02/02	12:36p	393	img137.png
10/02/02	12:36p	380	img138.png
10/02/02	12:36p	385	img139.png
10/02/02	12:36p	428	img14.png
10/02/02	12:36p	934	img140.png
10/02/02	12:36p	963	img141.png
10/02/02	12:36p	366	img142.png
10/02/02	12:36p	1,533	img143.png
10/02/02	12:36p	404	img144.png
10/02/02	12:36p	633	img145.png
10/02/02	12:36p	1,355	img146.png
10/02/02	12:36p	411	img147.png

CD_contents

10/02/02	12:36p	705	img148.png
10/02/02	12:36p	428	img149.png
10/02/02	12:36p	481	img15.png
10/02/02	12:36p	747	img150.png
10/02/02	12:36p	476	img151.png
10/02/02	12:36p	520	img152.png
10/02/02	12:36p	738	img153.png
10/02/02	12:36p	388	img154.png
10/02/02	12:36p	474	img155.png
10/02/02	12:36p	299	img156.png
10/02/02	12:36p	456	img157.png
10/02/02	12:36p	278	img158.png
10/02/02	12:36p	724	img159.png
10/02/02	12:36p	312	img16.png
10/02/02	12:36p	411	img160.png
10/02/02	12:36p	335	img161.png
10/02/02	12:36p	998	img162.png
10/02/02	12:36p	174	img163.png
10/02/02	12:36p	42,254	img164.png
10/02/02	12:36p	21,184	img165.png
10/02/02	12:36p	207	img166.png
10/02/02	12:36p	18,337	img167.png
10/02/02	12:36p	13,639	img168.png
10/02/02	12:36p	34,264	img169.png
10/02/02	12:36p	192	img17.png
10/02/02	12:36p	369	img170.png
10/02/02	12:36p	462	img171.png
10/02/02	12:36p	214	img172.png
10/02/02	12:36p	291	img173.png
10/02/02	12:36p	287	img174.png
10/02/02	12:36p	1,535	img175.png
10/02/02	12:36p	316	img176.png
10/02/02	12:36p	513	img177.png
10/02/02	12:36p	246	img178.png
10/02/02	12:36p	311	img179.png
10/02/02	12:36p	202	img18.png
10/02/02	12:36p	323	img180.png
10/02/02	12:36p	363	img181.png
10/02/02	12:36p	384	img182.png
10/02/02	12:36p	385	img183.png
10/02/02	12:36p	398	img184.png
10/02/02	12:36p	395	img185.png
10/02/02	12:36p	250	img186.png
10/02/02	12:36p	289	img187.png
10/02/02	12:36p	691	img188.png
10/02/02	12:36p	235	img189.png
10/02/02	12:36p	261	img19.png
10/02/02	12:36p	8,989	img190.png

CD_contents

10/02/02	12:36p	286	img191.png
10/02/02	12:36p	357	img192.png
10/02/02	12:36p	315	img193.png
10/02/02	12:36p	9,028	img194.png
10/02/02	12:36p	205	img195.png
10/02/02	12:36p	690	img196.png
10/02/02	12:36p	633	img197.png
10/02/02	12:36p	8,718	img198.png
10/02/02	12:36p	167	img199.png
10/02/02	12:36p	275	img2.png
10/02/02	12:36p	259	img20.png
10/02/02	12:36p	20,927	img200.png
10/02/02	12:36p	15,419	img201.png
10/02/02	12:36p	12,625	img202.png
10/02/02	12:36p	11,191	img203.png
10/02/02	12:36p	14,426	img204.png
10/02/02	12:36p	125	img21.png
10/02/02	12:36p	617	img22.png
10/02/02	12:36p	802	img23.png
10/02/02	12:36p	808	img24.png
10/02/02	12:36p	523	img25.png
10/02/02	12:36p	354	img26.png
10/02/02	12:36p	714	img27.png
10/02/02	12:36p	838	img28.png
10/02/02	12:36p	864	img29.png
10/02/02	12:36p	288	img3.png
10/02/02	12:36p	398	img30.png
10/02/02	12:36p	521	img31.png
10/02/02	12:36p	401	img32.png
10/02/02	12:36p	228	img33.png
10/02/02	12:36p	249	img34.png
10/02/02	12:36p	649	img35.png
10/02/02	12:36p	186	img36.png
10/02/02	12:36p	187	img37.png
10/02/02	12:36p	226	img38.png
10/02/02	12:36p	258	img39.png
10/02/02	12:36p	3,160	img4.png
10/02/02	12:36p	222	img40.png
10/02/02	12:36p	206	img41.png
10/02/02	12:36p	185	img42.png
10/02/02	12:36p	255	img43.png
10/02/02	12:36p	248	img44.png
10/02/02	12:36p	213	img45.png
10/02/02	12:36p	510	img46.png
10/02/02	12:36p	529	img47.png
10/02/02	12:36p	524	img48.png
10/02/02	12:36p	198	img49.png
10/02/02	12:36p	16,210	img5.png

CD_contents

10/02/02	12:36p	393	img50.png
10/02/02	12:36p	195	img51.png
10/02/02	12:36p	191	img52.png
10/02/02	12:36p	169	img53.png
10/02/02	12:36p	179	img54.png
10/02/02	12:36p	358	img55.png
10/02/02	12:36p	3,706	img56.png
10/02/02	12:36p	3,563	img57.png
10/02/02	12:36p	2,992	img58.png
10/02/02	12:36p	277	img59.png
10/02/02	12:36p	6,494	img6.png
10/02/02	12:36p	17,001	img60.png
10/02/02	12:36p	160	img61.png
10/02/02	12:36p	15,878	img62.png
10/02/02	12:36p	220	img63.png
10/02/02	12:36p	661	img64.png
10/02/02	12:36p	352	img65.png
10/02/02	12:36p	643	img66.png
10/02/02	12:36p	404	img67.png
10/02/02	12:36p	16,820	img68.png
10/02/02	12:36p	24,452	img69.png
10/02/02	12:36p	6,714	img7.png
10/02/02	12:36p	11,995	img70.png
10/02/02	12:36p	9,408	img71.png
10/02/02	12:36p	8,670	img72.png
10/02/02	12:36p	7,686	img73.png
10/02/02	12:36p	14,396	img74.png
10/02/02	12:36p	16,016	img75.png
10/02/02	12:36p	6,749	img76.png
10/02/02	12:36p	13,908	img77.png
10/02/02	12:36p	21,743	img78.png
10/02/02	12:36p	15,448	img79.png
10/02/02	12:36p	182	img8.png
10/02/02	12:36p	9,077	img80.png
10/02/02	12:36p	14,380	img81.png
10/02/02	12:36p	19,858	img82.png
10/02/02	12:36p	16,417	img83.png
10/02/02	12:36p	9,999	img84.png
10/02/02	12:36p	8,677	img85.png
10/02/02	12:36p	14,045	img86.png
10/02/02	12:36p	16,523	img87.png
10/02/02	12:36p	7,135	img88.png
10/02/02	12:36p	6,602	img89.png
10/02/02	12:36p	207	img9.png
10/02/02	12:36p	11,078	img90.png
10/02/02	12:36p	8,429	img91.png
10/02/02	12:36p	9,544	img92.png
10/02/02	12:36p	9,578	img93.png

CD_contents

10/02/02	12:36p	8,343	img94.png
10/02/02	12:36p	127	img95.png
10/02/02	12:36p	8,772	img96.png
10/02/02	12:36p	15,417	img97.png
10/02/02	12:36p	27,262	img98.png
10/02/02	12:36p	46,660	img99.png
10/02/02	12:36p	246	index.png
10/02/02	12:36p	245	next.png
10/02/02	12:36p	272	next_g.png
10/02/02	12:36p	14,667	node1.html
10/02/02	12:36p	18,886	node10.html
10/02/02	12:36p	3,010	node100.html
10/02/02	12:36p	3,753	node101.html
10/02/02	12:36p	3,218	node102.html
10/02/02	12:36p	3,255	node103.html
10/02/02	12:36p	3,183	node104.html
10/02/02	12:36p	3,116	node105.html
10/02/02	12:36p	3,757	node106.html
10/02/02	12:36p	2,770	node107.html
10/02/02	12:36p	3,530	node108.html
10/02/02	12:36p	3,345	node109.html
10/02/02	12:36p	4,916	node11.html
10/02/02	12:36p	6,425	node110.html
10/02/02	12:36p	3,372	node111.html
10/02/02	12:36p	3,039	node112.html
10/02/02	12:36p	9,243	node113.html
10/02/02	12:36p	4,843	node114.html
10/02/02	12:36p	4,119	node115.html
10/02/02	12:36p	3,975	node116.html
10/02/02	12:36p	9,455	node117.html
10/02/02	12:36p	7,525	node118.html
10/02/02	12:36p	8,775	node119.html
10/02/02	12:36p	2,879	node12.html
10/02/02	12:36p	9,033	node120.html
10/02/02	12:36p	3,140	node121.html
10/02/02	12:36p	6,273	node122.html
10/02/02	12:36p	5,330	node123.html
10/02/02	12:36p	3,642	node124.html
10/02/02	12:36p	12,698	node125.html
10/02/02	12:36p	5,459	node126.html
10/02/02	12:36p	6,867	node127.html
10/02/02	12:36p	5,537	node128.html
10/02/02	12:36p	17,589	node129.html
10/02/02	12:36p	13,397	node13.html
10/02/02	12:36p	9,910	node130.html
10/02/02	12:36p	4,419	node131.html
10/02/02	12:36p	3,395	node132.html
10/02/02	12:36p	4,931	node133.html

CD_contents

10/02/02	12:36p	11,376	node134.html
10/02/02	12:36p	5,706	node135.html
10/02/02	12:36p	6,123	node136.html
10/02/02	12:36p	5,392	node137.html
10/02/02	12:36p	5,412	node138.html
10/02/02	12:36p	5,287	node139.html
10/02/02	12:36p	31,214	node14.html
10/02/02	12:36p	5,006	node140.html
10/02/02	12:36p	3,179	node141.html
10/02/02	12:36p	5,568	node142.html
10/02/02	12:36p	5,148	node143.html
10/02/02	12:36p	3,150	node144.html
10/02/02	12:36p	3,604	node145.html
10/02/02	12:36p	3,295	node146.html
10/02/02	12:36p	2,837	node147.html
10/02/02	12:36p	85,390	node148.html
10/02/02	12:36p	3,018	node149.html
10/02/02	12:36p	4,470	node15.html
10/02/02	12:36p	3,503	node16.html
10/02/02	12:36p	5,828	node17.html
10/02/02	12:36p	3,337	node18.html
10/02/02	12:36p	6,459	node19.html
10/02/02	12:36p	3,245	node2.html
10/02/02	12:36p	5,638	node20.html
10/02/02	12:36p	4,798	node21.html
10/02/02	12:36p	4,683	node22.html
10/02/02	12:36p	2,944	node23.html
10/02/02	12:36p	3,156	node24.html
10/02/02	12:36p	5,400	node25.html
10/02/02	12:36p	3,482	node26.html
10/02/02	12:36p	5,008	node27.html
10/02/02	12:36p	6,409	node28.html
10/02/02	12:36p	6,434	node29.html
10/02/02	12:36p	10,563	node3.html
10/02/02	12:36p	14,880	node30.html
10/02/02	12:36p	8,853	node31.html
10/02/02	12:36p	10,264	node32.html
10/02/02	12:36p	3,625	node33.html
10/02/02	12:36p	7,905	node34.html
10/02/02	12:36p	4,107	node35.html
10/02/02	12:36p	5,910	node36.html
10/02/02	12:36p	4,118	node37.html
10/02/02	12:36p	4,095	node38.html
10/02/02	12:36p	5,497	node39.html
10/02/02	12:36p	7,850	node4.html
10/02/02	12:36p	7,092	node40.html
10/02/02	12:36p	2,999	node41.html
10/02/02	12:36p	6,898	node42.html

CD_contents

10/02/02	12:36p	7,229	node43.html
10/02/02	12:36p	5,792	node44.html
10/02/02	12:36p	3,696	node45.html
10/02/02	12:36p	5,190	node46.html
10/02/02	12:36p	5,866	node47.html
10/02/02	12:36p	5,619	node48.html
10/02/02	12:36p	4,054	node49.html
10/02/02	12:36p	5,607	node5.html
10/02/02	12:36p	3,544	node50.html
10/02/02	12:36p	3,778	node51.html
10/02/02	12:36p	4,200	node52.html
10/02/02	12:36p	6,203	node53.html
10/02/02	12:36p	6,322	node54.html
10/02/02	12:36p	6,625	node55.html
10/02/02	12:36p	3,561	node56.html
10/02/02	12:36p	7,226	node57.html
10/02/02	12:36p	7,554	node58.html
10/02/02	12:36p	5,616	node59.html
10/02/02	12:36p	6,318	node6.html
10/02/02	12:36p	7,690	node60.html
10/02/02	12:36p	6,190	node61.html
10/02/02	12:36p	5,556	node62.html
10/02/02	12:36p	7,374	node63.html
10/02/02	12:36p	5,940	node64.html
10/02/02	12:36p	3,825	node65.html
10/02/02	12:36p	5,363	node66.html
10/02/02	12:36p	5,694	node67.html
10/02/02	12:36p	5,549	node68.html
10/02/02	12:36p	5,768	node69.html
10/02/02	12:36p	5,617	node7.html
10/02/02	12:36p	6,463	node70.html
10/02/02	12:36p	7,927	node71.html
10/02/02	12:36p	5,366	node72.html
10/02/02	12:36p	7,534	node73.html
10/02/02	12:36p	6,821	node74.html
10/02/02	12:36p	9,249	node75.html
10/02/02	12:36p	13,536	node76.html
10/02/02	12:36p	8,008	node77.html
10/02/02	12:36p	6,996	node78.html
10/02/02	12:36p	4,227	node79.html
10/02/02	12:36p	3,299	node8.html
10/02/02	12:36p	6,405	node80.html
10/02/02	12:36p	4,279	node81.html
10/02/02	12:36p	6,924	node82.html
10/02/02	12:36p	5,515	node83.html
10/02/02	12:36p	9,465	node84.html
10/02/02	12:36p	6,151	node85.html
10/02/02	12:36p	6,396	node86.html

CD_contents

10/02/02	12:36p	7,576	node87.html
10/02/02	12:36p	7,419	node88.html
10/02/02	12:36p	10,183	node89.html
10/02/02	12:36p	5,111	node9.html
10/02/02	12:36p	6,224	node90.html
10/02/02	12:36p	7,616	node91.html
10/02/02	12:36p	7,328	node92.html
10/02/02	12:36p	13,380	node93.html
10/02/02	12:36p	8,606	node94.html
10/02/02	12:36p	5,993	node95.html
10/02/02	12:36p	2,976	node96.html
10/02/02	12:36p	3,300	node97.html
10/02/02	12:36p	2,958	node98.html
10/02/02	12:36p	3,346	node99.html
10/02/02	12:36p	279	prev.png
10/02/02	12:36p	327	prev_g.png
10/02/02	12:36p	211	up.png
10/02/02	12:36p	231	up_g.png
		366	File(s)
		2,339,234	bytes

Directory of R:\GMT\installed\www\gmt\doc\html\tutorial

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/02/02	12:36p		278 contents.png
10/02/02	12:36p		3,024 footnode.html
10/02/02	12:36p		125 img1.png
10/02/02	12:36p		10,059 img10.png
10/02/02	12:36p		4,791 img11.png
10/02/02	12:36p		7,694 img12.png
10/02/02	12:36p		7,020 img13.png
10/02/02	12:36p		1,443 img14.png
10/02/02	12:36p		1,853 img15.png
10/02/02	12:36p		295 img16.png
10/02/02	12:36p		3,213 img17.png
10/02/02	12:36p		2,247 img18.png
10/02/02	12:36p		15,116 img19.png
10/02/02	12:36p		876 img2.png
10/02/02	12:36p		617 img20.png
10/02/02	12:36p		431 img21.png
10/02/02	12:36p		802 img22.png
10/02/02	12:36p		523 img23.png
10/02/02	12:36p		619 img24.png
10/02/02	12:36p		160 img25.png
10/02/02	12:36p		8,337 img26.png
10/02/02	12:36p		4,066 img27.png
10/02/02	12:36p		16,516 img28.png
10/02/02	12:36p		1,300 img29.png

CD_contents

10/02/02	12:36p	207	img3.png
10/02/02	12:36p	424	img30.png
10/02/02	12:36p	426	img31.png
10/02/02	12:36p	198	img32.png
10/02/02	12:36p	430	img33.png
10/02/02	12:36p	401	img34.png
10/02/02	12:36p	303	img35.png
10/02/02	12:36p	361	img36.png
10/02/02	12:36p	266	img37.png
10/02/02	12:36p	192	img38.png
10/02/02	12:36p	247	img39.png
10/02/02	12:36p	277	img4.png
10/02/02	12:36p	275	img40.png
10/02/02	12:36p	233	img41.png
10/02/02	12:36p	240	img42.png
10/02/02	12:36p	386	img43.png
10/02/02	12:36p	279	img44.png
10/02/02	12:36p	292	img45.png
10/02/02	12:36p	182	img46.png
10/02/02	12:36p	229	img47.png
10/02/02	12:36p	209	img48.png
10/02/02	12:36p	1,997	img49.png
10/02/02	12:36p	3,160	img5.png
10/02/02	12:36p	2,838	img50.png
10/02/02	12:36p	296	img51.png
10/02/02	12:36p	454	img52.png
10/02/02	12:36p	293	img53.png
10/02/02	12:36p	1,959	img54.png
10/02/02	12:36p	1,456	img55.png
10/02/02	12:36p	392	img56.png
10/02/02	12:36p	1,910	img57.png
10/02/02	12:36p	181	img58.png
10/02/02	12:36p	398	img59.png
10/02/02	12:36p	16,210	img6.png
10/02/02	12:36p	305	img60.png
10/02/02	12:36p	291	img61.png
10/02/02	12:36p	187	img62.png
10/02/02	12:36p	226	img63.png
10/02/02	12:36p	141	img64.png
10/02/02	12:36p	258	img65.png
10/02/02	12:36p	222	img66.png
10/02/02	12:36p	206	img67.png
10/02/02	12:36p	198	img68.png
10/02/02	12:36p	301	img69.png
10/02/02	12:36p	174	img7.png
10/02/02	12:36p	4,228	img70.png
10/02/02	12:36p	185	img8.png
10/02/02	12:36p	186	img9.png

CD_contents

10/02/02	12:36p	246	index.png
10/02/02	12:36p	245	next.png
10/02/02	12:36p	272	next_g.png
10/02/02	12:36p	7,615	node1.html
10/02/02	12:36p	3,798	node10.html
10/02/02	12:36p	5,071	node11.html
10/02/02	12:36p	3,075	node12.html
10/02/02	12:36p	3,548	node13.html
10/02/02	12:36p	3,131	node14.html
10/02/02	12:36p	3,013	node15.html
10/02/02	12:36p	2,772	node16.html
10/02/02	12:36p	3,108	node17.html
10/02/02	12:36p	5,259	node18.html
10/02/02	12:36p	2,862	node19.html
10/02/02	12:36p	3,790	node2.html
10/02/02	12:36p	10,128	node20.html
10/02/02	12:36p	3,449	node21.html
10/02/02	12:36p	4,095	node22.html
10/02/02	12:36p	7,169	node23.html
10/02/02	12:36p	5,578	node24.html
10/02/02	12:36p	3,518	node25.html
10/02/02	12:36p	2,561	node26.html
10/02/02	12:36p	2,843	node27.html
10/02/02	12:36p	6,953	node28.html
10/02/02	12:36p	5,225	node29.html
10/02/02	12:36p	2,968	node3.html
10/02/02	12:36p	3,717	node30.html
10/02/02	12:36p	3,258	node31.html
10/02/02	12:36p	3,121	node32.html
10/02/02	12:36p	2,586	node33.html
10/02/02	12:36p	3,340	node34.html
10/02/02	12:36p	2,623	node35.html
10/02/02	12:36p	4,346	node36.html
10/02/02	12:36p	3,154	node37.html
10/02/02	12:36p	2,612	node38.html
10/02/02	12:36p	3,535	node39.html
10/02/02	12:36p	5,005	node4.html
10/02/02	12:36p	2,687	node40.html
10/02/02	12:36p	7,376	node41.html
10/02/02	12:36p	2,932	node42.html
10/02/02	12:36p	3,649	node43.html
10/02/02	12:36p	2,660	node44.html
10/02/02	12:36p	3,443	node45.html
10/02/02	12:36p	2,578	node46.html
10/02/02	12:36p	3,605	node47.html
10/02/02	12:36p	2,545	node48.html
10/02/02	12:36p	3,203	node49.html
10/02/02	12:36p	3,695	node5.html

CD_contents

10/02/02	12:36p	26,195	node50.html
10/02/02	12:36p	6,388	node51.html
10/02/02	12:36p	6,465	node52.html
10/02/02	12:36p	3,573	node53.html
10/02/02	12:36p	7,893	node54.html
10/02/02	12:36p	2,531	node55.html
10/02/02	12:36p	11,623	node56.html
10/02/02	12:36p	2,953	node57.html
10/02/02	12:36p	3,273	node58.html
10/02/02	12:36p	9,873	node59.html
10/02/02	12:36p	3,038	node6.html
10/02/02	12:36p	2,848	node60.html
10/02/02	12:36p	5,990	node61.html
10/02/02	12:36p	8,192	node62.html
10/02/02	12:36p	2,567	node63.html
10/02/02	12:36p	7,076	node64.html
10/02/02	12:36p	7,706	node65.html
10/02/02	12:36p	2,675	node66.html
10/02/02	12:36p	3,837	node67.html
10/02/02	12:36p	12,350	node68.html
10/02/02	12:36p	2,691	node69.html
10/02/02	12:36p	3,439	node7.html
10/02/02	12:36p	6,898	node70.html
10/02/02	12:36p	10,385	node71.html
10/02/02	12:36p	2,631	node72.html
10/02/02	12:36p	7,703	node73.html
10/02/02	12:36p	3,040	node74.html
10/02/02	12:36p	2,517	node75.html
10/02/02	12:36p	3,116	node76.html
10/02/02	12:36p	2,745	node77.html
10/02/02	12:36p	3,343	node78.html
10/02/02	12:36p	20,352	node79.html
10/02/02	12:36p	6,130	node8.html
10/02/02	12:36p	3,001	node80.html
10/02/02	12:36p	7,218	node9.html
10/02/02	12:36p	279	prev.png
10/02/02	12:36p	327	prev_g.png
10/02/02	12:36p	921	tutorial.css
10/02/02	12:36p	14,214	tutorial.html
10/02/02	12:36p	211	up.png
10/02/02	12:36p	231	up_g.png
163 File(s)		552,514	bytes

Directory of R:\GMT\installed\www\gmt\doc\pdf

01/01/01	12:00a	<DIR>	.
01/01/01	12:00a	<DIR>	..
10/02/02	12:29p		9,845,523 GMT_Docs.pdf

CD_contents
10/02/02 12:29p 931,561 GMT_Tutorial.pdf
4 File(s) 10,777,084 bytes

Directory of R:\GMT\installed\www\gmt\doc\ps

01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
10/02/02 12:28p 22,694,408 GMT_Docs.ps
10/02/02 12:28p 1,443,004 GMT_Tutorial.ps
4 File(s) 24,137,412 bytes

Directory of R:\GMT\installed\www\gmt\images

01/01/01 12:00a <DIR> .
01/01/01 12:00a <DIR> ..
12/29/00 12:54p 758 gmt_back.gif
12/29/00 12:54p 484 gmt_bar.gif
12/28/00 06:59p 7,619 gmt_small_logo.gif
5 File(s) 8,861 bytes

Total Files Listed:
2016 File(s) 277,022,075 bytes
0 bytes free

SOFTWARE VALIDATION TEST PLAN

Generic Mapping Tools, Version 3.4.2

(GMT)

Prepared by:

Brandi Winfrey

Center for Nuclear Waste Regulatory Analyses
San Antonio, Texas

October 2003

Approved by:



H. Lawrence McKague, Element Manager
Geology and Geophysics

11/19/03

Date

TABLE OF CONTENTS

1	SCOPE OF VALIDATION	1
2	REFERENCES	1
3	ENVIRONMENT	1
	3.1 Software	1
	3.2 Hardware	2
4	PREREQUISITES	2
5	ASSUMPTIONS AND CONSTRAINTS	2
6	TEST CASES	2
	6.1 Contour Maps	2
	6.1.1 Objective	2
	6.1.2 Test Input	2
	6.1.3 Test Procedure	3
	6.1.4 Expected Test Results	3
	6.2 Image Presentations	3
	6.2.1 Objective	3
	6.2.2 Test Input	3
	6.2.3 Test Procedure	3
	6.2.4 Expected Test Results	4
	6.3 Spectral Estimation and xy-plots	4
	6.3.1 Objective	4
	6.3.2 Test Input	4
	6.3.3 Test Procedure	4
	6.3.4 Expected Test Results	4
	6.4 A 3-D Perspective Mesh Plot	5
	6.4.1 Objective	5
	6.4.2 Test Input	5
	6.4.3 Test Procedure	5
	6.4.4 Expected Test Results	5
	6.5 A 3-D Illuminated Surface in Black and White	6
	6.5.1 Objective	6
	6.5.2 Test Input	6
	6.5.3 Test Procedure	6
	6.5.4 Expected Test Results	6
	6.6 Plotting of Histograms	6
	6.6.1 Objective	6
	6.6.2 Test Input	7
	6.6.3 Test Procedure	7
	6.6.4 Expected Test Results	7
	6.7 A Simple Location Map	7
	6.7.1 Objective	7
	6.7.2 Test Input	7

6.7.3	Test Procedure	7
6.7.4	Expected Test Results	8
6.8	A 3-D Histogram.....	8
6.8.1	Objective	8
6.8.2	Test Input	8
6.8.3	Test Procedure.....	8
6.8.4	Expected Test Results	8
6.9	Plotting Time-series Along Tracks.....	8
6.9.1	Objective	9
6.9.2	Test Input	9
6.9.3	Test Procedure.....	9
6.9.4	Expected Test Results	9
6.10	A Geographical Bar Graph Plot.....	9
6.10.1	Objective.....	9
6.10.2	Test Input.....	9
6.10.3	Test Procedure	9
6.10.4	Expected Test Results.....	10
6.11	Making a 3-D RGB Color Cube	10
6.11.1	Objective.....	10
6.11.2	Test Input.....	10
6.11.3	Test Procedure	10
6.11.4	Expected Test Results.....	11
6.12	Optimal Triangulation of Data.....	11
6.12.1	Objective.....	11
6.12.2	Test Input.....	11
6.12.3	Test Procedure	11
6.12.4	Expected Test Results.....	11
6.13	Plotting of Vector Fields	12
6.13.1	Objective.....	12
6.13.2	Test Input.....	12
6.13.3	Test Procedure	12
6.13.4	Expected Test Results.....	12
6.14	Gridding of Data and Trend Surfaces	12
6.14.1	Objective.....	12
6.14.2	Test Input.....	12
6.14.3	Test Procedure	13
6.14.4	Expected Test Results.....	13
6.15	Gridding, Contouring, and Masking of Unconstrained Areas.....	13
6.15.1	Objective.....	13
6.15.2	Test Input.....	13
6.15.3	Test Procedure	13
6.15.4	Expected Test Results.....	14
6.16	Gridding of Data.....	14
6.16.1	Objective.....	14
6.16.2	Test Input.....	14
6.16.3	Test Procedure	14
6.16.4	Expected Test Results.....	14

6.17 Images Clipped by Coastlines	15
6.17.1 Objective.....	15
6.17.2 Test Input.....	15
6.17.3 Test Procedure	15
6.17.4 Expected Test Results.....	15
6.18 Volumes and Spatial Selections	15
6.18.1 Objective.....	15
6.18.2 Test Input.....	15
6.18.3 Test Procedure	16
6.18.4 Expected Test Results.....	16
6.19 Color Patterns on Maps	16
6.19.1 Objective.....	16
6.19.2 Test Input.....	16
6.19.3 Test Procedure	16
6.19.4 Expected Test Results.....	16
6.20 Custom Map Symbols	17
6.20.1 Objective.....	17
6.20.2 Test Input.....	17
6.20.3 Test Procedure	17
6.20.4 Expected Test Results.....	17
6.21 Compare GMT Results with Known Published Data	17
6.21.1 Objective.....	17
6.21.2 Test Input.....	18
6.21.3 Test Procedure	18
6.21.4 Expected Test Results.....	19

1 SCOPE OF VALIDATION

The Generic Mapping Tools (GMT) are an open source collection of ~60 UNIX tools that allow users to manipulate (x,y) and (x,y,z) data sets (including filtering, trend fitting, gridding, projecting, etc.) and produce Encapsulated PostScript File (EPS) illustrations ranging from simple x-y plots through contour maps to artificially illuminated surfaces and 3-D perspective views in black and white, gray tone, hachure patterns, and 24-bit color. GMT supports 25 common map projections plus linear, log, and power scaling, and comes with support data such as coastlines, rivers, and political boundaries.

The scope of this validation is limited to the application of this software to data filtering, processing, gridding, and visualization commensurate with its use in regulatory review.

2 REFERENCES

- Wessel, Pal, School of Ocean and Earth Science and Technology University of Hawaii at Manoa, and Walter H.F. Smith. *The Generic Mapping Tools GMT Version 3.4.2 A Map Making Tutorial*. Laboratory for Satellite Altimetry NOAA/NESDIS/NODC, October 2002.
- Wessel, Pal, School of Ocean and Earth Science and Technology University of Hawaii at Manoa, and Walter H.F. Smith. *The Generic Mapping Tools GMT Version 3.4.2 Technical Reference and Cookbook*. Laboratory for Satellite Altimetry NOAA/NESDIS/NODC, October 2002.

3 ENVIRONMENT

GMT was written in the ANSI C programming language (very portable), is POSIX and Y2K compliant, is independent of hardware constraints (e.g., memory), and may be run on any hardware running some flavor of UNIX, possibly with minor modifications. GMT was deliberately written for command-line usage, not a windows environment, in order to maximize flexibility. GMT uses architecture-independent file formats.

3.1 Software

Operating System: Solaris V.5.8

The netCDF library 3.4

An ANSI C compiler (no version specified)

3.2 Hardware

Computer Platform: UNIX

100MB disk space (70MB additional for full- and high-resolution coast-lines)

16 MB RAM

4 PREREQUISITES

All shell scripts and support data used in the following tests are from the *Generic Mapping Tools GMT Version 3.4.2 Technical Reference and Cookbook* and can be found in the file *GMT_scripts.tar*. This file should be copied to the archive directory and uncompressed with the command "tar -xvf GMT_scripts.tar".

The environmental variable \$AWK should be set to the directory in which the executable is located: \$AWK = /usr/bin/nawk or \$AWK = /usr/bin/gawk. If neither of these are available, set \$AWK = /usr/bin/awk.

5 ASSUMPTIONS AND CONSTRAINTS

It is assumed that the user is familiar with the UNIX environment and command line operations and that the user will be using the cshell (csh) environment.

It is possible that the output generated with these scripts will differ in subtle ways from the figures shown in the GMT documentation. This is likely caused by differences in settings in the .gmtdefaults file that is used to generate the plots.

6 TEST CASES

6.1 Contour Maps

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.1

6.1.1 Objective

Make two contour maps based on the data in the file *osu91a1f_16.grd*

6.1.2 Test Input

osu91a1f_16.grd - a gridded data file that contains a global 1° by 1° gridded geoid.

6.1.3 Test Procedure

1. Copy the GMT script called *job01.csh* from the examples/ex01 directory into the <<run>> directory and make it executable with the command "chmod 755 job01.csh".
2. Copy the input grid file *osu91a1f_16.grd* from the examples/ex01 directory into the <<run>> directory.
3. Run the script using the command *./job01.csh*.
4. Verify that the resulting postscript file *example_01.ps* looks like (see assumptions and constraints) Figure 6.1 in the *GMT Technical Reference and Cookbook*.

6.1.4 Expected Test Results

The image *example_01.ps* created by the GMT script should be identical to the image in Figure 6.1 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: Brandi Winfrey
Date: 11/13/03

6.2 Image Presentations

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.2

6.2.1 Objective

Make color images from gridded data sets.

6.2.2 Test Input

Two grdfiles with bathymetry and geoid heights for the Hawaiian Islands:

HI_topo2.grd and *HI_geoid2.grd*

6.2.3 Test Procedure

1. Copy the GMT script called *job02.csh* from the examples/ex02 directory into the <<run>> directory and make it executable with the command "chmod 755 job02.csh".
2. Open the file *job02.csh* and delete the last line, which removes some of the intermediate files created when running the GMT script.
3. Copy the input grid files *HI_geoid2.grd* and *HI_topo2.grd* from the examples/ex02 directory into the <<run>> directory.
4. Run the script using the command *./job02.csh*.
5. Verify that two color point files *g.cpt* and *t.cpt* were created and that the resulting postscript file *example_02.ps* looks like (see assumptions and constraints) Figure 6.2 in the *GMT Technical Reference and Cookbook*.

6.2.4 Expected Test Results

Two color point files *g.cpt* and *t.cpt* are created and the image *example_02.ps* created by the GMT script should be identical to the image in Figure 6.2 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: Brandi Winfrey
Date: 11/13/03

6.3 Spectral Estimation and xy-plots

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.3

6.3.1 Objective

Two data sets are measured at different sets of points. Use various GMT tools to facilitate their comparison.

6.3.2 Test Input

Two data files *ship.xyg* and *sat.xyg* contain quantity measurements of the same gravity anomaly measured from a ship and a satellite, respectively.

6.3.3 Test Procedure

1. Copy the GMT script called *job03.csh* from the examples/ex03 directory into the <<run>> directory and make it executable with the command "chmod 755 job03.csh".
2. Copy the input files *sat.xyg*, *ship.xyg*, and *shipsat.dos* from the examples/ex03 directory into the <<run>> directory.
3. Run the script using the command *./job03.csh*.
4. Verify that there are seven resulting postscript files (the final file *example_03.ps* and six supporting files showing intermediate steps). Verify that *example_03.ps* looks like (see assumptions and constraints) Figures 6.3 in the *GMT Technical Reference and Cookbook*.

6.3.4 Expected Test Results

The image *example_03.ps* created by the GMT script should be identical to the image in Figure 6.3 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: Brandi Winfrey
Date: 11/13/03

6.4 A 3-D Perspective Mesh Plot

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.4

6.4.1 Objective

Create a black-and-white 3-D mesh plot and a color 3-D perspective plot of Hawaiian topography and geoid.

6.4.2 Test Input

Two grid files *HI_geoid4.grd* and *HI_topo4.grd* and two color point files *geoid.cpt* and *topo.cpt*.

6.4.3 Test Procedure

1. Copy the GMT scripts called *job04.csh* and *job4c.csh* from the examples/ex03 directory into the <<run>> directory and make them executable with the command "chmod 755 *.csh". Delete the last line in file *job04.csh*, which executes *job4c.csh*.
2. Copy the input files *geoid.cpt*, *topo.cpt*, *HI_geoid4.grd*, and *HI_topo4.grd* from the examples/ex04 directory into the <<run>> directory.

TEST A:

3. Run the first GMT script using the command "*./job04.csh*".
4. Verify that *example_04.ps* looks like (see assumptions and constraints) Figures 6.4 in the *GMT Technical Reference and Cookbook*.

TEST B:

3. Run the second GMT script using the command "*./job4c.csh*".
4. Verify that *example_4c.ps* looks like (see assumptions and constraints) Figures 6.4 in the *GMT Technical Reference and Cookbook*, with the exception that it is a color version.

6.4.4 Expected Test Results

TEST A:

The image *example_04.ps* created by the GMT script should be identical to the image in Figure 6.4 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: Brandi Winfrey
Date: 11/13/83 BRANDI WINFREY

TEST B:

The image *example_4c.ps* created by the GMT script should be identical to the image in Figure 6.4 in the *GMT Technical Reference and Cookbook* with the exception that it is a color version.

PASS/FAIL PASS

Test performed by:


BRANDI WINFREY

Date: 11/13/03

6.5 A 3-D Illuminated Surface in Black and White

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.5

6.5.1 Objective

Generate a grid and show a monochrome 3-D perspective of it.

6.5.2 Test Input

N/A

6.5.3 Test Procedure

1. Copy the GMT script called *job05.csh* from the examples/ex05 directory into the <<run>> directory and make it executable with the command "chmod 755 job05.csh".
2. Run the script using the command "./job05.csh".
3. Verify the output postscript file *example_05.ps* looks like (see assumptions and constraints) Figures 6.5 in the *GMT Technical Reference and Cookbook*.

6.5.4 Expected Test Results

The image *example_05.ps* created by the GMT script should be identical to the image in Figure 6.5 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS

Test performed by:


BRANDI WINFREY

Date: 11/13/03

6.6 Plotting of Histograms

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.6

6.6.1 Objective

Make standard and polar histograms.

6.6.2 Test Input

Two data files *fractures.d* and *v3206.t*

6.6.3 Test Procedure

1. Copy the GMT script called *job06.csh* from the *examples/ex06* directory into the <<run>> directory and make it executable with the command "chmod 755 *job06.csh*".
2. Copy the input files *fractures.d*, and *v3206.t* from the *examples/ex06* directory into the <<run>> directory.
3. Run the script using the command "*./job06.csh*".
4. Verify that the output postscript file *example_06.ps* looks like (see assumptions and constraints) Figures 6.6 in the *GMT Technical Reference and Cookbook*.

6.6.4 Expected Test Results

The image *example_06.ps* created by the GMT script should be identical to the image in Figure 6.6 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/83 BRANDI WINFREY

6.7 A Simple Location Map

Path for Archive Directory: */net/spock/home/bwinfrey/QA_GMT*

Path for Run Directory: */net/spock/home/bwinfrey/QA_GMT/6.7*

6.7.1 Objective

Make a basemap with earthquakes and isochrones, etc.

6.7.2 Test Input

quakes.xym – contains the position and magnitude of available earthquakes in the region

fz.xy – digital fracture zone traces

ridge.xy – 0 isochrones

isochrones.xy – all other isochrones

6.7.3 Test Procedure

1. Copy the GMT script called *job07.csh* from the *examples/ex07* directory into the <<run>> directory and make it executable with the command "chmod 755 *job07.csh*".
2. Copy the input files *quakes.xym*, *fz.xy*, *ridge.xy*, and *isochrones.xy* from the *examples/ex07* directory into the <<run>> directory.
3. Run the script using the command "*./job07.csh*".

4. Verify that the output postscript file *example_07.ps* looks like (see assumptions and constraints) Figures 6.7 in the *GMT Technical Reference and Cookbook*.

6.7.4 Expected Test Results

The image *example_07.ps* created by the GMT script should be identical to the image in Figure 6.7 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI L. WINFREY

6.8 A 3-D Histogram

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT
Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.8

6.8.1 Objective

Make a 3-D bar plot.

6.8.2 Test Input

guinea_bay.grd – gridded bathymetry file

6.8.3 Test Procedure

1. Copy the GMT script called *job08.csh* from the examples/ex08 directory into the <<run>> directory and make it executable with the command “chmod 755 job08.csh”.
2. Copy the input file *guinea_bay.grd* from the examples/ex08 directory into the <<run>> directory.
3. Run the script using the command “./job08.csh”.
4. Verify that the output postscript file *example_08.ps* looks like (see assumptions and constraints) Figures 6.8 in the *GMT Technical Reference and Cookbook*.

6.8.4 Expected Test Results

The image *example_08.ps* created by the GMT script should be identical to the image in Figure 6.8 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI WINFREY

6.9 Plotting Time-series Along Tracks

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT
Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.9

6.9.1 Objective

Make a wiggle plot along track from geoid deflections.

6.9.2 Test Input

track_d..xys* – 42 Geosat track files

ridge.xy – ridge coordinates

fz.xy – fracture zones

6.9.3 Test Procedure

1. Copy the GMT script called *job09.csh* from the examples/ex09 directory into the <<run>> directory and make it executable with the command “chmod 755 job09.csh”.
2. Copy the input files *track_d.*.xys*, *fz.xy*, and *ridge.xy* from the examples/ex09 directory into the <<run>> directory.
3. Run the script using the command “./job09.csh”.
4. Verify that the output postscript file *example_09.ps* looks like (see assumptions and constraints) Figures 6.9 in the *GMT Technical Reference and Cookbook*.

6.9.4 Expected Test Results

The image *example_09.ps* created by the GMT script should be identical to the image in Figure 6.9 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS

Test performed by:


BRANDI WINFREY

Date: 11/13/83

6.10 A Geographical Bar Graph Plot

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.10

6.10.1 Objective

Make 3-D bar graph on top of perspective map

6.10.2 Test Input

agu.d – data file

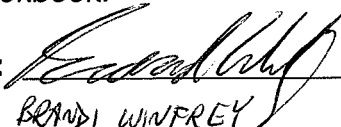
6.10.3 Test Procedure

1. Copy the GMT script called *job10.csh* from the examples/ex10 directory into the <<run>> directory and make it executable with the command “chmod 755 job10.csh”.
2. Copy the input file *agu.d* from the examples/ex10 directory into the <<run>> directory.

3. Run the script using the command `./job10.csh`.
4. Verify that the output postscript file `example_10.ps` looks like (see assumptions and constraints) Figures 6.10 in the *GMT Technical Reference and Cookbook*.

6.10.4 Expected Test Results

The image `example_10.ps` created by the GMT script should be identical to the image in Figure 6.10 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI WINFREY

6.11 Making a 3-D RGB Color Cube

Path for Archive Directory: `/net/spock/home/bwinfrey/QA_GMT`

Path for Run Directory: `/net/spock/home/bwinfrey/QA_GMT/6.11`

6.11.1 Objective

Create a 3-D RGB Cube.

6.11.2 Test Input

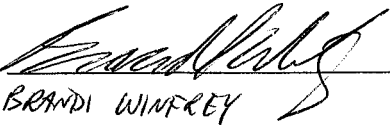
N/A

6.11.3 Test Procedure

1. Copy the GMT script called `job11.csh` and the AWK script file `rgb_cube.awk` from the `examples/ex11` directory into the `<<run>>` directory and make them executable with the command `chmod 755 *`.
2. Remove the last line of the file `job11.csh`, which deletes intermediate files.
3. Run the GMT script using the command `./job11.csh`.
4. Verify that the file `rgb_cube.grd` was created by the command `grdmath`
5. Verify that the file `rgb_cube.cpt` was created by the AWK script `rgb_cube.awk`.
6. Verify that the output postscript file `example_11.ps` looks like (see assumptions and constraints) Figures 6.11 in the *GMT Technical Reference and Cookbook*.

6.11.4 Expected Test Results

The files *rgb_cube.grd*, *rgb_cube.cpt* and *example_11.ps* are successfully created. The image *example_11.ps* created by the GMT script should be identical to the image in Figure 6.11 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI WINFREY

6.12 Optimal Triangulation of Data

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT
Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.12

6.12.1 Objective

Illustrate the Delaunay triangulation of points and contouring.

6.12.2 Test Input

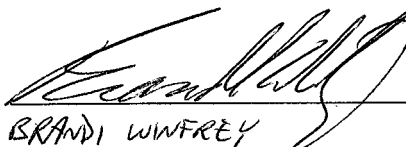
table_5.11 – a set of topographic readings non-uniformly distributed in the plane

6.12.3 Test Procedure

1. Copy the GMT script called *job12.csh* from the examples/ex12 directory into the <<run>> directory and make it executable with the command “chmod 755 job12.csh”.
2. Remove the last line of the file *job12.csh*, which deletes intermediate files.
3. Copy the input file *table_5.11* from the examples/ex12 directory into the <<run>> directory.
4. Run the script using the command “./job12.csh”.
5. Verify that the file *net.xy* was created by the command *triangulate*, and *topo.cpt* was created by the command *makecpt*.
6. Verify that the output postscript file *example_12.ps* looks like (see assumptions and constraints) Figures 6.12 in the *GMT Technical Reference and Cookbook*.

6.12.4 Expected Test Results

The files *net.xy*, *topo.cpt*, and *example_12.ps* are created and postscript file *example_12.ps* created by the GMT script should be identical to the image in Figure 6.12 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI WINFREY

6.13 Plotting of Vector Fields

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.13

6.13.1 Objective

Illustrate vectors and contouring

6.13.2 Test Input

N/A

6.13.3 Test Procedure

1. Copy the GMT script called *job13.csh* from the examples/ex13 directory into the <<run>> directory and make it executable with the command "chmod 755 job13.csh".
2. Remove the last line of the file *job13.csh*, which deletes intermediate files.
3. Run the script using the command "./job13.csh".
4. Verify that the files *dzdx.grd*, *dzdy.grd*, and *z.grd* were created by the command *grdmath*.
5. Verify that the output postscript file *example_13.ps* looks like (see assumptions and constraints) Figures 6.13 in the *GMT Technical Reference and Cookbook*.

6.13.4 Expected Test Results

The image *example_13.ps* created by the GMT script should be identical to the image in Figure 6.13 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
Date: 11/13/03

6.14 Gridding of Data and Trend Surfaces

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.14

6.14.1 Objective

The objective is to show simple gridding, contouring, and re-sampling along tracks.

6.14.2 Test Input

File *table_5.11* is a data set of topographic readings non-uniformly distributed in the plane.

6.14.3 Test Procedure

1. Copy the GMT script called *job14.csh* from the examples/ex14 directory into the <<run>> directory and make it executable with the command "chmod 755 job14.csh".
2. Remove the last line of the file *job14.csh*, which deletes intermediate files.
3. Run the script using the command *./job14.csh*.
4. Verify that *mean.xyz* is created by the command *blockmean*.
5. Verify that *data.grd* is created by the command *surface*.
6. Verify that *trend.grd* is created by the command *grdtrend*.
7. Verify that *track* is created by the command *project*.
8. Verify that *data.d* and *trend.d* are created by the command *grdtrack*.
9. Verify that the output postscript file *example_14.ps* looks like (see assumptions and constraints) Figures 6.14 in the *GMT Technical Reference and Cookbook*.

6.14.4 Expected Test Results

The files *mean.xyz*, *data.grd*, *trend.grd*, *track*, *data.d*, *trend.d*, and *example_14.ps* are successfully created. The image *example_14.ps* created by the GMT script should be identical to the image in Figure 6.14 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/03 BRANDI WINFREY

6.15 Gridding, Contouring, and Masking of Unconstrained Areas

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.15

6.15.1 Objective

Gridding and clipping when data are missing

6.15.2 Test Input

ship.xyz – x,y,z data file

6.15.3 Test Procedure

1. Copy the GMT script called *job15.csh* from the examples/ex15 directory into the <<run>> directory and make it executable with the command "chmod 755 job15.csh".
2. Remove the last line of the file *job15.csh*, which deletes intermediate files.
3. Run the script using the command *./job15.csh*.
4. Verify that the file *ship.b* was created by the command *gmtconvert*.

5. Verify that the file *ship.grd* was created by the command *nearneighbor*.
6. Verify that the file *ship_10m.b* was created by the command *blockmedian*.
7. Verify that the file *ship_clipped.grd* was created by the command *grdclip*.
8. Verify that the output postscript file *example_15.ps* looks like (see assumptions and constraints) Figures 6.15 in the *GMT Technical Reference and Cookbook*.

6.15.4 Expected Test Results

The files *ship.b*, *ship.grd*, *ship_10m.b*, *ship_clipped.grd*, and *example_15.ps* were successfully created. The image *example_15.ps* created by the GMT script should be identical to the image in Figure 6.15 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
 Date: 11/13/03

6.16 Gridding of Data

Path for Archive Directory: */net/spock/home/bwinfrey/QA_GMT*
 Path for Run Directory: */net/spock/home/bwinfrey/QA_GMT/6.16*

6.16.1 Objective

Illustrates interpolation methods using the same data as Test 6.12.

6.16.2 Test Input

ex16.cpt – color point file.

table_5.11 - data set of topographic readings non-uniformly distributed in the plane.

6.16.3 Test Procedure

1. Copy the GMT script called *job16.csh* from the *examples/ex16* directory into the *<<run>>* directory and make it executable with the command “*chmod 755 job16.csh*”.
2. Run the script using the command “*./job16.csh*”.
3. Verify that the output postscript file *example_16.ps* looks like (see assumptions and constraints) Figures 6.16 in the *GMT Technical Reference and Cookbook*.

6.16.4 Expected Test Results

The image *example_16.ps* created by the GMT script should be identical to the image in Figure 6.16 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
 Date: 11/13/03

6.17 Images Clipped by Coastlines

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.17

6.17.1 Objective

Test clipping of images using coastlines.

6.17.2 Test Input

india_geod.grd – map of the geoid field near India

india_topo.grd – topography from the ETOPO5 data set for India

6.17.3 Test Procedure

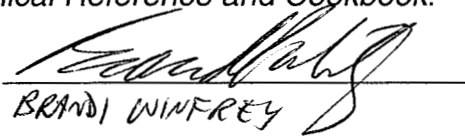
1. Copy the GMT script called *job17.csh* from the examples/ex17 directory into the <<run>> directory and make it executable with the command “chmod 755 job17.csh”.
2. Remove the last line of the file *job17.csh*, which deletes intermediate files.
3. Run the script using the command “./job17.csh”.
4. Verify that the file *geoid.cpt* was created by the command *grd2cpt*.
5. Verify that the files *india_geoid_i.grd* and *india_topo_i.grd* were created by the command *grdgradient*.
6. Verify that the output postscript file *example_17.ps* looks like (see assumptions and constraints) Figures 6.17 in the *GMT Technical Reference and Cookbook*.

6.17.4 Expected Test Results

The files *geoid.cpt*, *india_geoid_i.grd*, *india_topo_i.grd*, and *example_17.ps* were successfully created. The image *example_17.ps* created by the GMT script should be identical to the image in Figure 6.17 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS

Test performed by:


BRANDI WINFREY

Date: 11/13/03

6.18 Volumes and Spatial Selections

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.18

6.18.1 Objective

Test the imaging of volumes of grids inside contours and spatial selection of data.

6.18.2 Test Input

AK_gulf_grav.grd – a subset of the Sandwell & Smith altimetric gravity field for the northern Pacific (see http://topex.ucsd.edu/marine_grav/mar_grav.html).

6.18.3 Test Procedure

1. Copy the GMT script called *job18.csh* from the examples/ex18 directory into the <<run>> directory and make it executable with the command "chmod 755 job18.csh".
2. Run the script using the command "./job18.csh".
3. Verify that the output postscript file *example_18.ps* looks like (see assumptions and constraints) Figures 6.18 in the *GMT Technical Reference and Cookbook*.

6.18.4 Expected Test Results

The image *example_18.ps* created by the GMT script should be identical to the image in Figure 6.18 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
Date: 11/13/03

6.19 Color Patterns on Maps

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.19

6.19.1 Objective

Test various color pattern effects for maps.

6.19.2 Test Input

N/A

6.19.3 Test Procedure

1. Copy the GMT script called *job19.csh* from the examples/ex19 directory into the <<run>> directory and make it executable with the command "chmod 755 job19.csh".
2. Run the script using the command "./job19.csh".
3. Verify that the output postscript file *example_19.ps* looks like (see assumptions and constraints) Figures 6.19 in the *GMT Technical Reference and Cookbook*.

6.19.4 Expected Test Results

The image *example_19.ps* created by the GMT script should be identical to the image in Figure 6.19 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
Date: 11/13/03

6.20 Custom Map Symbols

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.20

6.20.1 Objective

Extend GMT to plot custom symbols.

6.20.2 Test Input

make_symbol – AWK script called by the GMT script. It will read locations and sized of the desired symbols and replace them with line drawings (translated and scaled accordingly).

volcano.def – coordinate definition file for the volcano symbol.

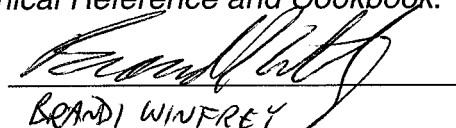
bullseye.def – coordinate definition file for the bullseye symbol.

6.20.3 Test Procedure

1. Copy the GMT script called *job20.csh* and the AWK script called *make_symbol* from the examples/ex20 directory into the <<run>> directory and make them executable with the command “chmod 755 job19.csh make_symbol”.
2. Remove the last line of the file *job20.csh*, which deletes intermediate files.
3. Run the script using the command “./job20.csh”.
4. Verify that the output files *volcano.awk* and *bullseye.awk* are created by the AWK script *make_symbol*.
5. Verify that the files *hotspots.d* and *cities.d* are created.
6. Verify that the output postscript file *example_20.ps* looks like (see assumptions and constraints) Figures 6.21 in the *GMT Technical Reference and Cookbook*.

6.20.4 Expected Test Results

The files *volcano.awk*, *bullseye.awk*, *hotspots.d*, *cities.d*, and *example_20.ps* are successfully created. The image *example_20.ps* created by the GMT script should be identical to the image in Figure 6.21 in the *GMT Technical Reference and Cookbook*.

PASS/FAIL PASS Test performed by: 
Date: 11/13/85 BRANDI WINFREY

6.21 Compare GMT Results with Known Published Data

Path for Archive Directory: /net/spock/home/bwinfrey/QA_GMT

Path for Run Directory: /net/spock/home/bwinfrey/QA_GMT/6.20

6.21.1 Objective

Compare GMT created map to published USGS map and show that the coordinates are correct and magnetic anomalies are consistent.

6.21.2 Test Input

amargosa.xyz – aeromagnetic data file for the Amargosa Desert obtained from USGS Openfile report OF00-188 *Aeromagnetic Survey of the Amargosa Desert, Nevada and California: A Tool for Understanding Near-Surface Geology and Hydrology*.

createxyz.awk – AWK script that extracts longitude, latitude, and leveled anomaly data from the *amargosa.xyz* data file.

6.21.3 Test Procedure

1. Find the min and max latitude and longitude in the *amargosa.xyz* file with the following command: “minmax *amargosa.xyz*” and use those values in the – R switch in the *nearneighbor* command in Step 2 (the numbers are rounded to obtain compatible I and R values).
2. Create a GMT script containing the following data and name it *mag.gmt*:

```
#!/bin/csh
#
# Purpose:      Software Validation Test
#              November 2003
# GMT progs:    minmax, nearneighbor, makecpt, grdimage, grdcontour,
#              psxy, psscale
#
# minmax: N = 374490 <-116.88/-115.62> <35.87/36.92> <-609.89/4821.89>
nearneighbor data.in -R-117.00/-115.50/35.80/37.00 -I1m -S20k \
  -V -Gnn.grd

makecpt -Chaxby -T-200/150/25 -V > nn.cpt

grdimage nn.grd -JX6.0i -R -Cnn.cpt -V -P -E100 -K > nn.ps

grdcontour nn.grd -JX6.0i -R -C25 -V -B20m/20m/WsNe+ \
  -G2i -P -O -K -U"Aeromagnetic Anomalies" >> nn.ps

#psxy data.in -R -JX6.0i -Ss0.01i -G0 -O -K -V -P >> nn.ps

psscale -D4.5i/4.25i/6.0c/.5c -Cnn.cpt -V -O -U"Aeromagnetic Anomalies" \
  -B50/:nT: >> nn.ps

gv nn.ps
```

3. Create a data file containing only the longitude, latitude, and intensity data from the USGS data file with the script *createxyz.awk* using the following command: “awk -f *createxyz.awk* *amargosa.xyz* > *data.in*”
4. Run the GMT script using the command “./*mag.gmt*” and verify that the output files *nn.grd* and *nn.ps* are created.
5. Compare the postscript map *nn.ps* with the USGS Aeromagnetic Anomalies map (Figure 5) and verify that the coordinates and the locations and amplitudes of the magnetic anomalies match up. Note: The USGS map is in degrees, minutes, seconds and the GMT map is in decimal degrees. Use the following conversion method to verify that the coordinates are the same:

- a. The whole units of degrees will remain the same (i.e., in 36.67° longitude, start with 36°).
 - b. Multiply the decimal by 60 (i.e., $.67 * 60 = 40.2$).
 - c. The whole number becomes the minutes (40').
 - d. Take the remaining decimal and multiply by 60 (i.e., $.2 * 60 = 12$).
 - e. The resulting number becomes the seconds (12"). Seconds can remain as a decimal.
 - f. Take your three sets of numbers and put them together, using the symbols for degrees ($^\circ$), minutes ($'$), and seconds ($"$) (i.e., $36^\circ 40' 12''$ longitude).
6. Uncomment the `psxy` command on line 21 of the GMT script by removing the `"#"` symbol at the beginning of the line and comment the `grdcontour` command on lines 18 and 19 by adding a `"#"` symbol to the beginning of the lines. Change the name of the output postscript file from `nn.ps` to `nn_grid.ps` and re-run the script with the command `./mag.gmt`
 7. Compare the output `nn_grid.ps` file to Figure 4 of the USGS report and verify that the flight lines match.

6.21.4 Expected Test Results

The files `nn.grd`, `nn.ps`, and `nn_grid.ps` are successfully created. The image `nn.ps` created by the GMT script should match Figure 5 of the USGS report in accordance with Step 5 in Section 6.21.3. The image `nn_grid.ps` created by the GMT script should match Figure 4 of the USGS report in accordance with Step 7 of Section 6.21.3.

PASS/FAIL PASS Test performed by: BRANDI WINFREY
 Date: 11/13/03

Aeromagnetic Anomalies

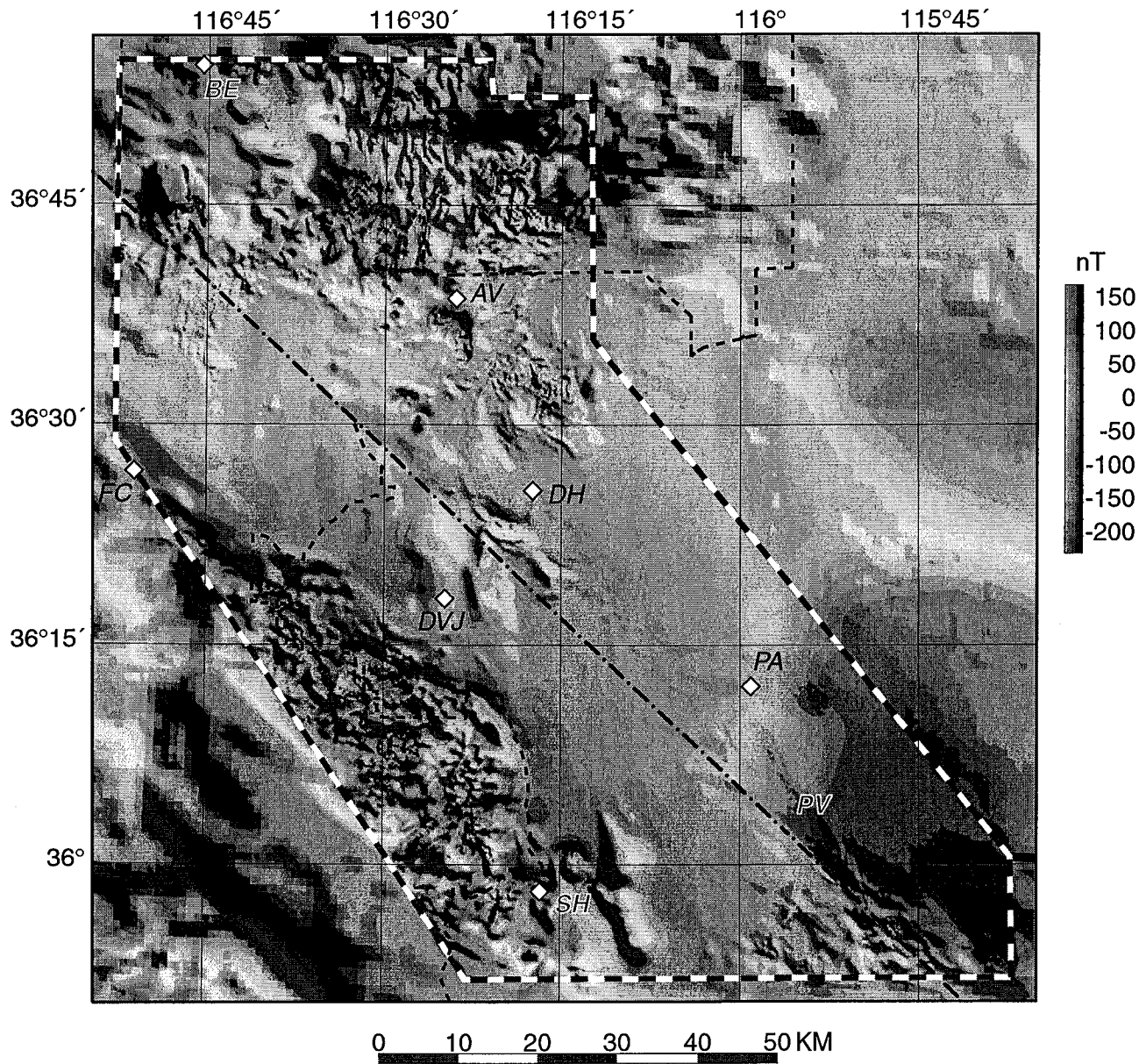
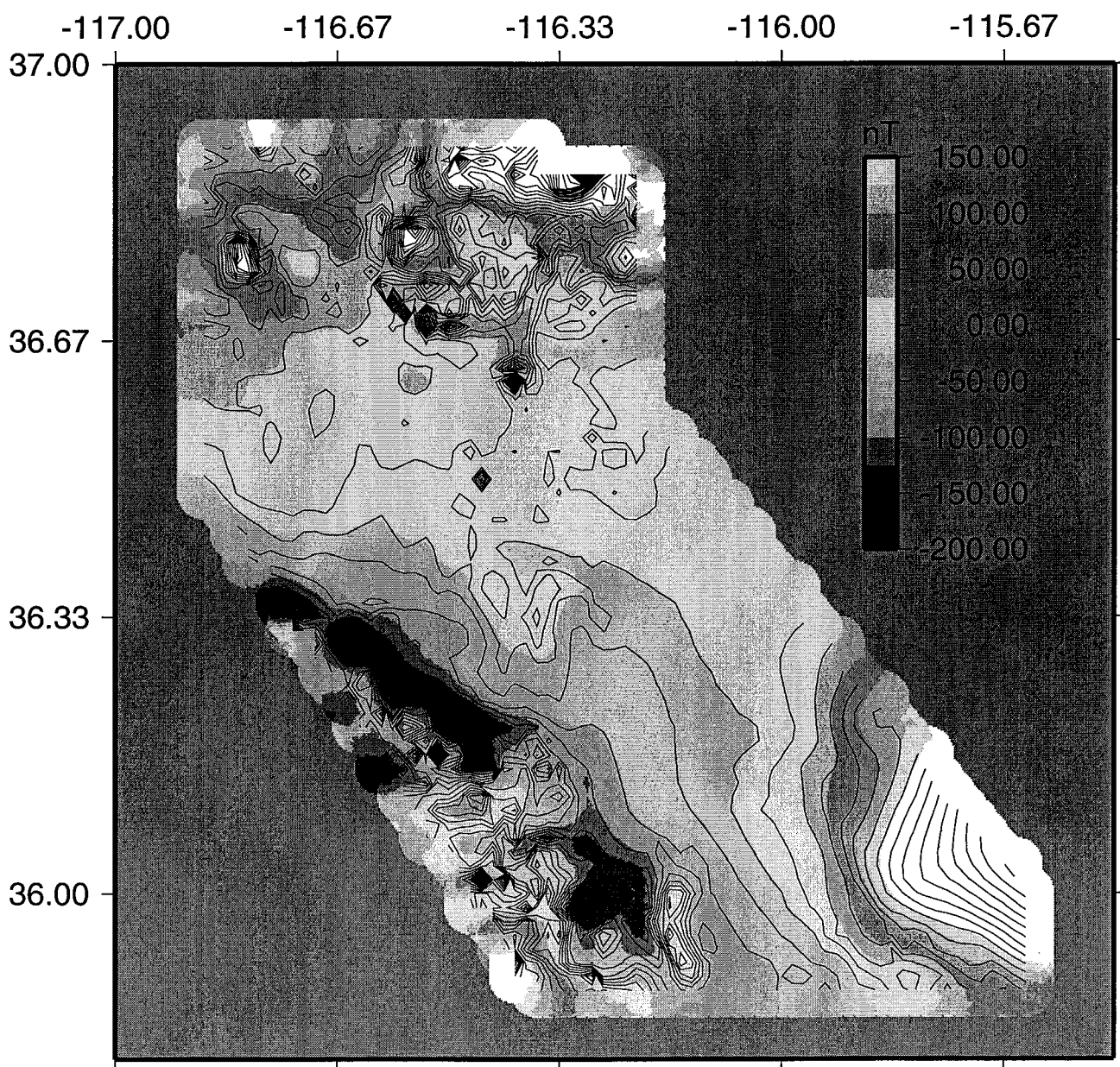


Figure 5.— Aeromagnetic anomaly map. The colors on this map indicate the intensity of the earth's magnetic field relative to a global standard, which in turn reflects the magnetization of the upper part of the earth's crust. The red-and-white dashed line indicates the boundary of the Amargosa aeromagnetic survey. Aeromagnetic anomalies outside of this boundary in Nevada are from Hildenbrand and Kucks (1988) and in California from Roberts and Jachens (1999). See figure 2 for description of other dashed lines and abbreviations. Near-surface volcanic rocks cause the high frequency anomalies in the northern and southwestern parts of the map. The large anomaly in the southeastern part of the map is thought to be caused by Precambrian rocks at significant depth. More difficult to explain are the subtle magnetic anomalies over sediment-filled basins (like Pahrump Valley), as these sedimentary deposits are not typically magnetic.



Flight Path

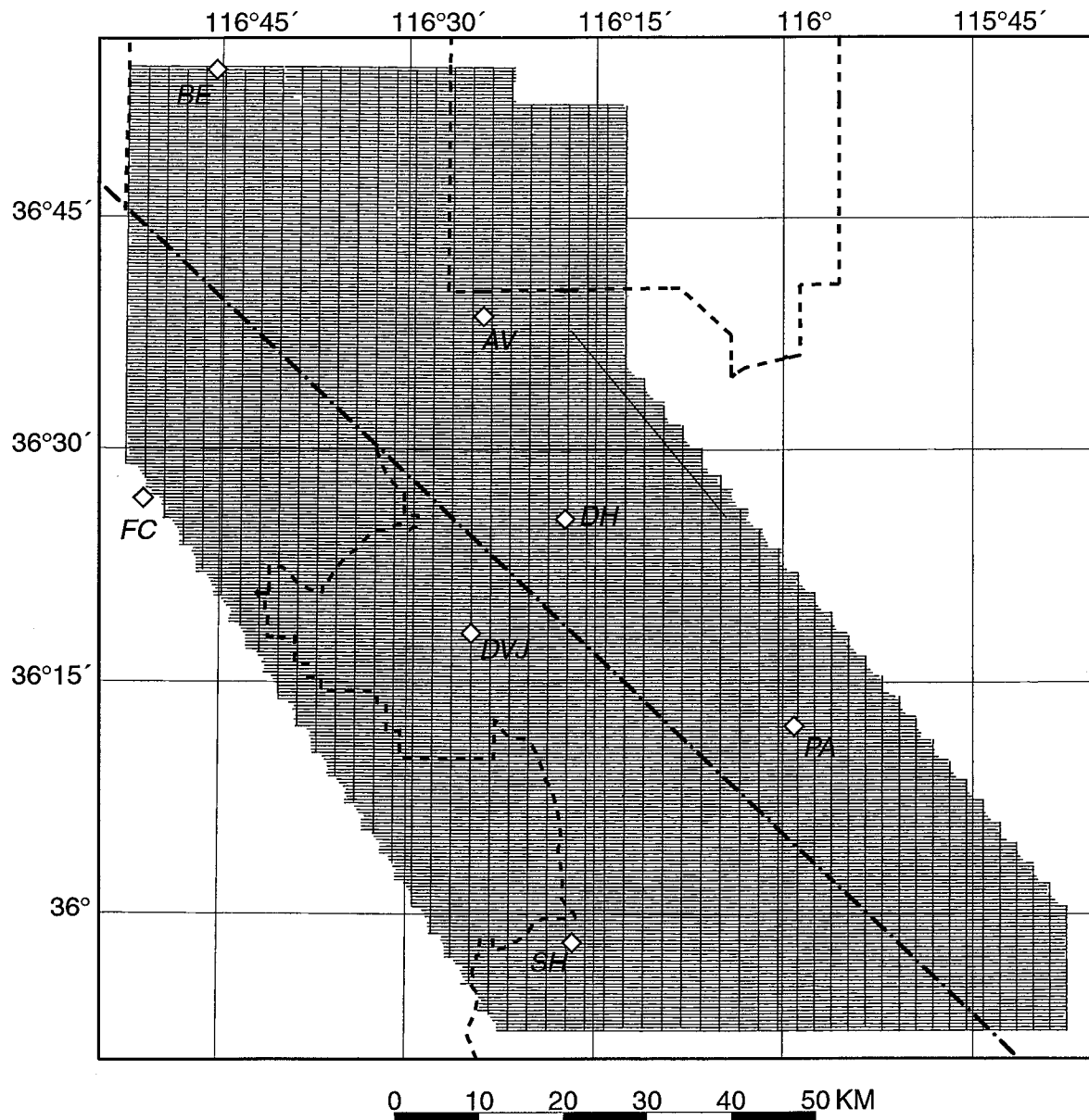


Figure 4.—Flight line and tie line map. The black lines on this map indicate the aircraft flight-path. Flight lines were oriented east-west and spaced 400 m apart. North-south tie lines were spaced 2.3 km (1.4 mi) apart. Flight altitude was 150 m (500 ft) above terrain, or as low as permitted by aircraft safety. Total distance flown was 23,333 km (14,502 mi). See figure 2 for description of dashed lines and abbreviations.

Note: The diagonal "tie lines" were removed from the data used to create USGS figure 4 "Flight Path". Since their existence on this map does not detract from the correctness of the flight paths, it was not removed here.

Brandt/Huf
11/13/03

