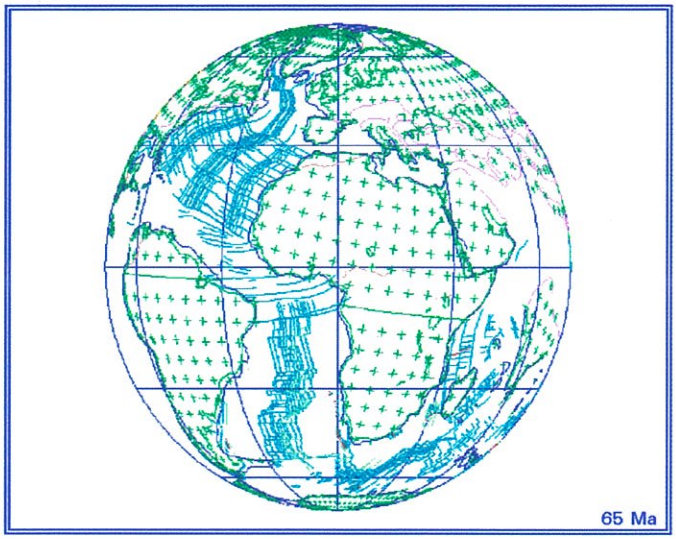
Plate Tracker Version 1.1



User's Guide for

Plate Tracker Ver 1.1

by

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Introduction

Plate Tracker Version 1.1, is a digital tectonic reconstruction program that allows users to interactively view Phanerozoic plate reconstructions on IBM compatible personal computers. The software compliments Macintosh and Unix software developed in conjunction with the PALEOMAP Project at the University of Texas at Arlington. The program utilizes PALEOMAP's standardized digital data file structure for geographic as well as plate rotation files. Plate Tracker takes tectonic features in the form of digitized data files, assembles those features in accordance with the specified rotation time, and either plots the resulting map to the PC screen, saves the screen in a PCX image format, or prints the map to a parallel-port printer.

Where to Find Plate Tracker

The installation procedure is quite simple, with either batch files to explode the compressed files or non-compressed files. The installation steps are as follows:

1. Make a directory on the hard drive of the target machine (MKDIR TRACKER).
2. Move into the newly created directory on the hard drive and insert the 3.5"/5.25" diskette.
3. Copy all of the files to the hard drive (copy b:*.* or copy a:*.*) depending on the drive designation for the disk drive.
4. If the files have the extension **.dat**, **.exe**, **.rot**, or **.bgi**, the files are not compressed and Plate Tracker is ready to run.
5. If the files have the extension **.zip**, type UNZIP to explode the compressed files. Typing UNZIP executes the file UNZIP.BAT. The file UNZIP.BAT may need to be edited if the designation drive is not the C drive. When editing, replace all occurrences of the **c:** with the designated hard drive.

Repeat steps 3 and 4 or 5 for each of the supplied diskettes (if provided).

Once the installation process has been completed, the following files should exist in the TRACKER subdirectory:

TRACKER.EXE - Executable file that contains Plate Tracker Version 1.1.

GCOPY.EXE - Executable file for printing maps from a file.

PLATE12G.DAT - Data file containing (in standard Paleomap format) the coastlines, continental margins, sutures, and tectonic elements. Coastlines will plot in green or black, continental margins in blue, sutures in magenta, rifts in light blue, thrusts in brown or yellow, and strike-slip faults in red.

G_CHRON.DAT - Data file containing ocean isochrons.

COUNTRY.DAT - Data file containing country boundaries.

PROVINCE.DAT - Data file containing province boundaries.

RIVER.DAT - Data file containing major rivers.

M94A.ROT - PALEOMAP standard rotation file for 1994.

PRINTPAR.DAT - This file dictates the printer parameters and the location of the .BGI driver files. This file is discussed in detail below.

EGAVGA.BGI - Borland C++Graphics driver; necessary for plotting screen graphics on EGA or VGA monitors.

$DJ.BGI - Printer driver for HP DeskJet printers (HP 500)

$DJC.BGI - Printer driver for color HP DeskJet printers (HP 500C and 550C)

$LJ.BGI - Printer driver for HP LaserJet II printers

$LJ3R.BGI - Printer driver for HP LaserJet III printers

$PJ.BGI - Printer driver for HP PaintJet printers

$PS.BGI - Printer driver for PostScript printers

GDHEAD.PS - Required printer file for PostScript printers

Description of PRINTPAR.DAT

The file PRINTPAR.DAT contains three essential parameters required by Plate Tracker. This file must be edited in in order to direct program output to the correct printer port, print quality/orientation, printer type, and location of the BGI driver files. A sample PRINTPAR.DAT file contains:

Line 1: **5**
Line 2: **$DJC**
Line 3: **c:\tracker**

This format means the user wants to plot a **high resolution landscape** map through **LPT1** on a **color HP DeskJet (500C or 550)** printer with the BGI driver file being located in the subdirectory **c:\tracker**. This is quite confusing, so let's break down the lines one at a time for each of the printers.

Line 1 represents a summation of printer port and the orientation/print quality of the desired map. First, the printer ports available have each been assigned an internal integer number. The number for LPT 1 is 0, LPT2 is 32, and print to file is 224. Table 1 provides a list of the printer types supported and the numeric value associated with the orientation and line resolution (dpi) of the printer. In order to determine the appropriate numeric value for Line 1 of PRINTPAR.DAT users must first know the printer port and the type of output desired. For example, if you want a high resolution landscape printout and your HP LaserJet printer attached to LPT2, the numeric value for Line 1 would be 5 + 32 = 37.

It is also possible to print the reconstruction to a file rather than directly to the printer. This is accomplished by using the numeric value 224 plus the numeric value for the print layout and quality. For example, to create a file in high resolution portrait mode on a HP LaserJet printer, the appropriate value for Line 1 would be 224 + 8 or 232. The plot is written to a file named GRAFDRIV.GRF. This file can be printed at a later time by executing the GCOPY.EXE program. For example, GCOPY LJ

GRAFDRIV.GRF LPT1 prints the file to the LPT1 port . The following table describes the orientation/print quality portion of Line 1 for the available printers.

Printer Type	Numeric Value	Description of Capability
$DJ or $DJC or $LJ3R or $LJ	0	Half Scale - Low Resolution
$DJ or $DJC or $LJ3R or $LJ	1	Half Scale - Medium Resolution
$DJ or $DJC or $LJ3R or $LJ	2	Half Scale - High Resolution
$DJ or $DJC or $LJ3R or $LJ	3	Landscape- Low Resolution
$DJ or $DJC or $LJ3R or $LJ	4	Landscape - Medium Resolution
$DJ or $DJC or $LJ3R or $LJ	5	Landscape - High Resolution
$DJ or $DJC or $LJ3R or $LJ	6	Full Scale - Low Resolution
$DJ or $DJC or $LJ3R or $LJ	7	Full Scale - Medium Resolution
$DJ or $DJC or $LJ3R or $LJ	8	Full Scale - High Resolution
$PS	0	Half Scale - 2 color
$PS	1	Landscape - 2 color
$PS	2	Full Scale - 2 color
$PS	3	Half Scale - 16 shade grayscale
$PS	4	Landscape - 16 shade grayscale
$PS	5	Full Scale - 16 shade grayscale
$PS	6	Half Scale - 16 colors
$PS	7	Landscape - 16 colors
$PS	8	Full Scale - 16 colors
$PS	9	Half Scale - 256 colors
$PS	10	Landscape - 256 colors
$PS	11	Full Scale - 256 colors

Table 1: Numeric value and printer capability associated with each printer class. Printer graphics with GRAF/DRIVE PLUS 3.0 - Developer's License 002665.

Printer Type	Numeric Value	Description of Capability
$PJ	0	Half Scale - Low Res - 2 Colors
$PJ	1	Landscape - Low Res - 2 Colors
$PJ	2	Full Scale - Low Res - 2 Colors
$PJ	3	Half Scale - High Res - 2 Colors
$PJ	4	Landscape - High Res - 2 Colors
$PJ	5	Full Scale - High Res - 2 Colors
$PJ	6	Half Scale - Low Res - 8 Colors
$PJ	7	Landscape - Low Res - 8 Colors
$PJ	8	Full Scale - Low Res - 8 Colors
$PJ	9	Half Scale - High Res - 8 Colors
$PJ	10	Landscape - High Res - 8 Colors
$PJ	11	Full Scale - High Res - 8 Colors
$PJ	12	Half Scale - Low Res - 16 Colors
$PJ	13	Landscape - Low Res - 16 Colors
$PJ	14	Full Scale - Low Res - 16 Colors

Table 1: Numeric value and printer capability associated with each printer class. Printer graphics with GRAF/DRIVE PLUS 3.0 - Developer's License 002665.

Line 2 of PRINTPAR.DAT just lists the available output device drivers. Currently, printing options exist for the HP LaserJet II ($LJ) and LaserJet III ($LJ3R) and PaintJet ($PJ) printers, as well as to PostScript ($PS) printers. The HP DeskJet ($DJ) driver is for the DeskJet 500 creates up to 300 dpi resolution in black and white mode. Color printing is possible with the HP DeskJet 500C and 550 ($DJC) driver, providing 8-color graphics. Sample plate reconstruction maps printed with the $DJ, $DJC, $LJ, and $LJ3R drivers can be found at the end of the User's Guide.

Line 3 of the program directs **Plate Tracker** to the location of the BGI driver files. It may be easier to store these files in another subdirectory underneath the TRACKER subdirectory. If you change the directory location of the BGI files, be sure to modify Line 3 of PRINTPAR.DAT or else neither screen graphics or printer graphics will work.

Plate Tracker Screen Prompts

Plate Tracker has seven main screen prompts. These include: selecting the output choice, defining the map projection, defining the latitude/longitude extent and spacing, entering the rotation file and reconstruction time, and selecting/displaying the plate tectonic reconstruction. To execute the program, first, move into the subdirectory TRACKER and type **TRACKER** at the DOS prompt.

Prompt 1:

1 PC Screen
2 PCX Image File
3 To Printer/File

Select OUTPUT option:

If PCX Image File option is selected:

Please Enter .PCX Filename:

Prompt 1 defines the output device choice. If option 1 or option 2 - PC Screen or PCX Image File is selected, upon completion of the map definition **Plate Tracker** finds the EGAVGA.BGI driver file based on the location defined on Line 3 of the PRINTPAR.DAT file. If option 3 is selected **Plate Tracker** will send the map on the printer rather than draw it to the screen. Send to printer uses all three lines in PRINTPAR.DAT to define the orientation/qualtity of the printout, the printer port, the

printer type, and the location of the printer driver files ($DJ.BGI, $DJC.BGI, $LJ.BGI, $LJ3R.BGI, $PJ.BGI, and $PS.BGI). If print to file option is desired, Line 1 of the PRINTPAR.DAT file should contain the numeric value 224 (print-to-file) + the numeric value for the print orientation/quality. The file writes to a file named GRAFDRIV.DRF. The file is created if it does not exist or appends the file if it already exists.

Prompt 2:

1 Molleweide Plot
2 Mercator Plot
3 Rectilinear Plot
4 Orthographic Plot
5 Stereographic Plot

Select PROJECTION option:

Prompt 2 defines the projection option for the plate reconstruction. Currently, five projections are available. See the example section for sample plots of these map projection options.

Option 1 - Molleweide projection is close to an equal area projection with parallels being straight and meridians intersecting at the north and south poles. This map option only works for global reconstructions with the latitude values being 90 and -90 and the longitude values being 180 and -180.

Option 2 - Mercator Plot is a conformal, cylindrical projection with meridians and parallels being straight and parallel with each other. The parallels are unequally spaced straight lines, closest near the equator with minimum distortion and becoming wider towards the poles and actually going to infinity at 90° N/S. Therefore, if using this projection, the maximum and minumum latitudes should not exceed ±80°.

Option 3 - Rectilinear Plot is an equidistant cylindrical projection with meridians and parallels being equidistant straight lines, intersecting at right angles. This projection

is neither equal-area nor conformal. The rectilinear projection can be visualized as a Cartesian coordinate view of the longitude/latitude pairs with the graticule being square.

Option 4 - Orthographic plot is an azimuthal projection with all meridians and parallels being ellipses, circles, or straight lines. This projection is neither conformal or equal-area. Currently, this projection option centers only on the equator and Prime Meridian. Future updates will allow orthographic plots to be centered on any longitude/latitude pair. This map option only works for reconstructions with the latitude values being 90 and -90 and the longitude values being 90 and -90.

Option 5 - Stereographic plot allows polar views (either north or south pole). When this option is selected, prompt 3 is skipped and the user must enter in the pole to view and the minimum latitude to view.

Prompt 3:

```
Latitudinal/Longitudinal Map Frame
Conventions are     +N, -S for LATITUDE
                    +E, -W for LONGITUDE

Enter NORTHERN LATITUDINAL border:
Enter SOUTHERN LATITUDINAL border:
Enter EASTERN LONGITUDINAL border:
Enter WESTERN LONGITUDINAL border:
```

Prompt 3 is simply asking for the latitudinal/longitudinal limits for the map and is echoed only for Mercator and rectilinear projection options. This includes defining northern and southern limits that define the latitudinal range (north of the equator is positive, south of the equator is negative) and the eastern and western limits are to define the longitudinal range (east of the Prime Meridian is positive, west of the Prime Meridian is negative). For example, to generate a map from 80°N to 80°S and 180°E to 180°W, the corresponding values for the LATITUDINAL and LONGITUDINAL limits would be 80, -80, 180, -180. The input limits should be integer values. Of key importance to

note is that this program rotates the continents back through time, so that in essence you are asked to enter the paleo-reference frame for the map to be generated not the present-day limits.

Prompt 4:

Enter degrees between lines of LATITUDE:
Enter degrees between lines of LONGITUDE:

Prompt 4 is asking for the graticule spacing limits. In order to frame the map with latitude/longitude lines, the latitude/longitude limits must be divisible by the grid spacing. For example, if the latitude limits for the map are 80 to -80 for 80°N to 80°S, appropriate values for grid spacing would be 10, 20, 40, and 80. The same rule applies to the grid spacing for lines of longitude.

Prompt 5:

Enter NAME of ROTATION FILE:

Prompt 5 is asking for the name of the PALEOMAP standard rotation file. This is a file provided with **Plate Tracker** that contains the PALEOMAP Project's most current global plate model that describes the Phanerozoic motion history during the last 600 Ma. The rotation file consists of seven key fields in a free format style. The columns are:

1 - The Tectonic Plate to be Rotated
2 - The Time (in Ma) of the Rotational Stage
3 - The Latitude of the Finite Rotation Pole
4 - The Longitude of the Finite Rotation Pole
5 - The Angle of Opening
6 - The Reference Plate relative to which the rotation is made
7 - General Comments and Bibliographic Information

When **Plate Tracker** reads the rotation file, it searches for all the rotations corresponding to the given time of the reconstruction. When there is no finite rotation for the given time, **Plate Tracker** interpolates a rotation between two times bracketing the given time. A listing of the plate numbers and a figure of the current plates used by the PALEOMAP Project rotation file is contained in Appendix A.

Prompt 6:

Enter the ROTATION TIME:

If the ROTATION TIME is GREATER than 1 Ma

Plot 5 degree PRESENT-DAY grid marks? (y/n):

This prompt defines the time of the reconstruction. Reconstructions are possible for the present-day back through the Phanerozoic to 600 Ma. For present-day maps choose a reconstruction time of 0.0. If a rotation time is selected that is greater than 1 Ma the user is given the opportunity of plotting the present-day 5° tic marks on the land area of the reconstructed map. The maps in the example section illustrate the 5° by 5° present-day tic marks. Once Prompt 6 has been answered, the program will calulate the necessary rotations for all plates within the latitudinal/longitudinal reference window.

Prompt 7:

Enter name of INPUT lat/long GEOGRAPHIC FILE:

A. if drawing to screen or PCX file format
Enter ANOTHER GEOGRAPHIC FILE NAME, type EXIT to QUIT:

B. if drawing to the printer
Enter ANOTHER GEOGRAPHIC FILE to PRINT, type EXIT to QUIT:

Once this Prompt 7 has been answered with an appropriate data file (i.e., *plate12g.dat, g_chron.dat, country.dat, province.dat, and river.dat*) the program will either 1) Enter into graphics mode and begin plotting the latitude/longitude window on the screen with the appropriate grid spacing or 2) Begin to create the image to send to the printer.

Once the file has been drawn, users are given the opportunity to either 1) Plot additional files or 2) Terminate the program. If plotting to the screen: Once the file has finished plotting, a screen prompt will appear at the the top of the graphics window. This prompt is either asking for another file name to draw or for the user to type **exit** to terminate the program. If additional geographic files need to be plotted (e.g. *country.dat, river.dat*) those data can be plotted sequentially after the *plate12g.dat* file. Several key rules apply to plotting additional files in graphics mode. They are:

1. The prompt at the top of the graphics window (7A) does not disappear while plotting additional data files. Consequently, there is no way of telling if a file is finished plotting.
2. The solution is to answer prompt 7A without hitting the ENTER key while the current data file is still plotting. The newly entered text string will echo to the screen once the current file has finished drawing.
3. Once the text string is echoed, depress the ENTER key. The data file will begin to plot.

If no additional geographic files need to be plotted, type **exit** to quit the program and go back to the **DOS** prompt. If PCX image file format was selected as the desired output, the screen pixels will be captured automatically prior to exiting to the DOS prompt.

The procedure for sending the drawing to the printer is similar to drawing the image on the screen. Rather than the program entering into graphics mode, the data is

assembled in standard EGA/VGA mode. Once the first data file has been assembled (Prompt 7), the user is prompted (7B) to enter another data file or to exit. Typing an additional data file name causes **Plate Tracker** to assemble the data from the file, whereas, typing **exit** sends the map to the designated output device (see PRINTPAR.DAT section).

Sample Plots

This section lists the step-by-step procedure for generating the sample plots. The sample plots are located at the end of the User's Guide. These files were generated using the 1994 plate model and plate data sets.

FIGURE 1: 100 Ma MERCATOR PLOT

PRINTPAR.DAT

8	= high resolution, portrait mode to LPT1
$DJ	= HP DeskJet 500 output
c:\tracker	= location of BGI files

RESPONSES

3	= output to printer
2	= Mercator projection
60	= maximum latitude 60°N
-60	= minimum latitude 60°S
100	= maximum longitude 100°E
-100	= minimum longitude 100°W
30	= latitude grid spacing of 30°
50	= longitude grid spacing of 50°
m94a.rot	= rotation file name
100	= rotation time of 100 Ma
y	= plots the present-day 5° X 5° tic marks
plate12g.dat	= plots world coastlines, tectonic elements, and continental margins
exit	= exits program

FIGURE 2: 200 Ma ORTHOGRAPHIC PLOT

PRINTPAR.DAT

5	= high resolution, landscape mode to LPT1
$DJC	= HP DeskJet 500C/550C color output
c:\tracker	= location of BGI files

RESPONSES

3	= output to file
4	= orthographic projection
30	= latitude grid spacing of 30°
30	= longitude grid spacing of 30°
m94a.rot	= rotation file name
200	= rotation time of 200 Ma
y	= plots the present-day 5° X 5° tic marks
plate12g.dat	= plots world coastlines, tectonic elements, and continental margins
exit	= exits program

FIGURE 3: PRESENT-DAY RECTILINEAR PLOT

PRINTPAR.DAT

8	= high resolution, portrait mode to LPT1
$DJC	= HP DeskJet 500C/550C color output
c:\tracker	= location of BGI files

RESPONSES

3	= output to printer
3	= rectilinear projection
60	= maximum latitude 60°N
-60	= minimum latitude 60°S
100	= maximum longitude 100°E
-100	= minimum longitude 100°W
30	= latitude grid spacing of 30°
50	= longitude grid spacing of 50°
m94a.rot	= rotation file name
0.0	= rotation time of 0 Ma
plate12g.dat	= plots world coastlines, tectonic elements, and continental margins
g_chron.dat	= plots ocean isochrons
river.dat	= plots rivers
country.dat	= plots country boundaries
exit	= exits program

FIGURE 4: 65 Ma MOLLEWEIDE PLOT

PRINTPAR.DAT

5	= high resolution, landscape mode to LPT1
$LJ	= HP LaserJet II output
c:\tracker	= location of BGI files

RESPONSES

3	= output to file
1	= Molleweide projection
30	= latitude grid spacing of 30°
60	= longitude grid spacing of 60°
m94a.rot	= rotation file name
65	= rotation time of 65 Ma
n	= plots the present-day 5° X 5° tic marks
plate12g.dat	= plots world coastlines, tectonic elements, and continental margins
country.dat	= plots country boundaries
exit	= exits program

FIGURE 5: 160 Ma STEREOGRAPHIC PLOT

PRINTPAR.DAT

8	= high resolution, landscape mode to LPT1
$LJ3R	= HP LaserJet III output
c:\tracker	= location of BGI files

RESPONSES

3	= output to file
5	= Stereographic projection
1	= Northern Hemisphere
30	= Minimum Latitude
30	= latitude grid spacing of 30°
60	= longitude grid spacing of 60°
m94a.rot	= rotation file name
160	= rotation time of 65 Ma
n	= plots the present-day 5° X 5° tic marks
plate12g.dat	= plots world coastlines, tectonic elements, and continental margins
country.dat	= plots countries
exit	= exits program

Figure 1: 100 Ma Mercator Plot

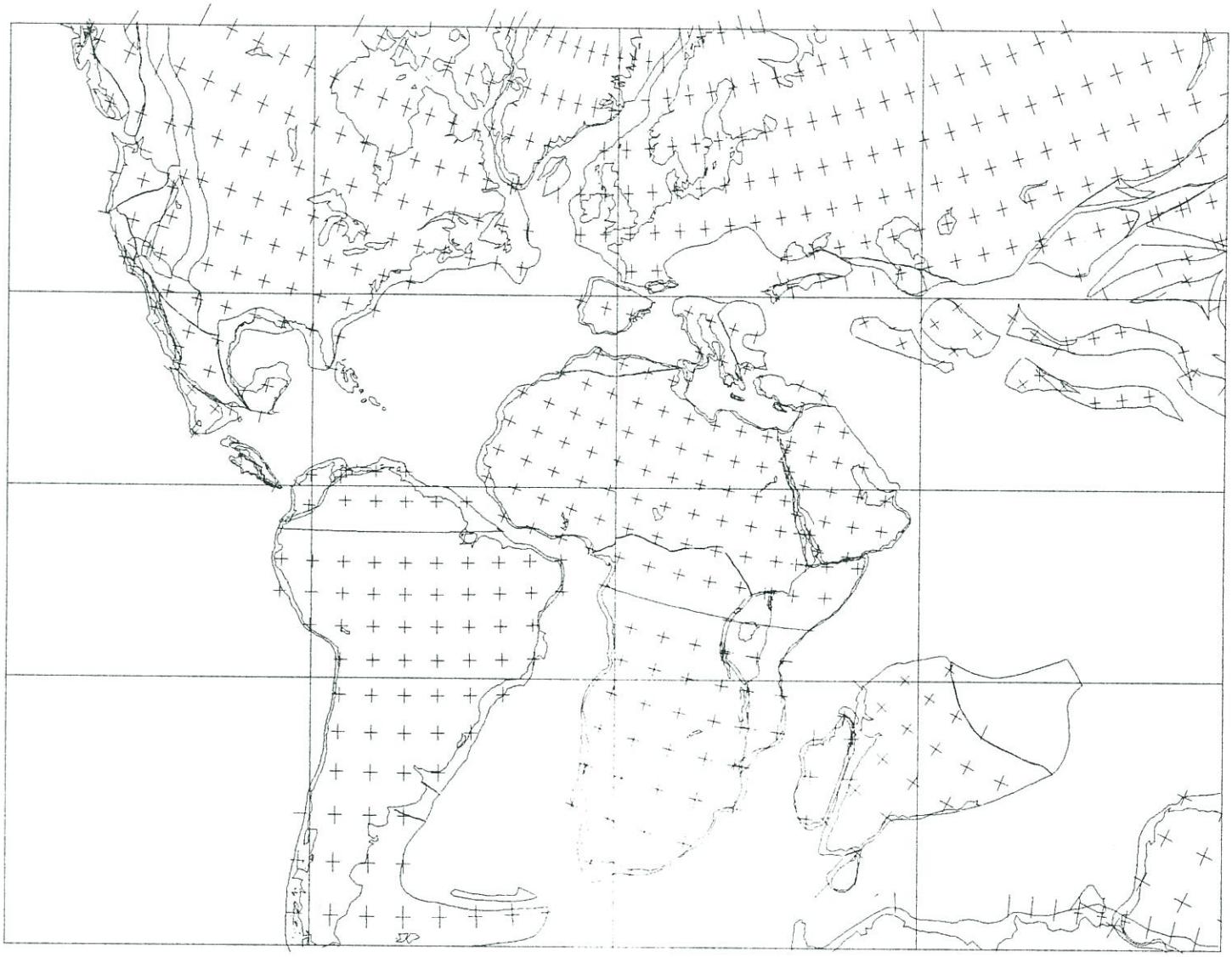

Figure 2: 200 Ma Orthographic Plot

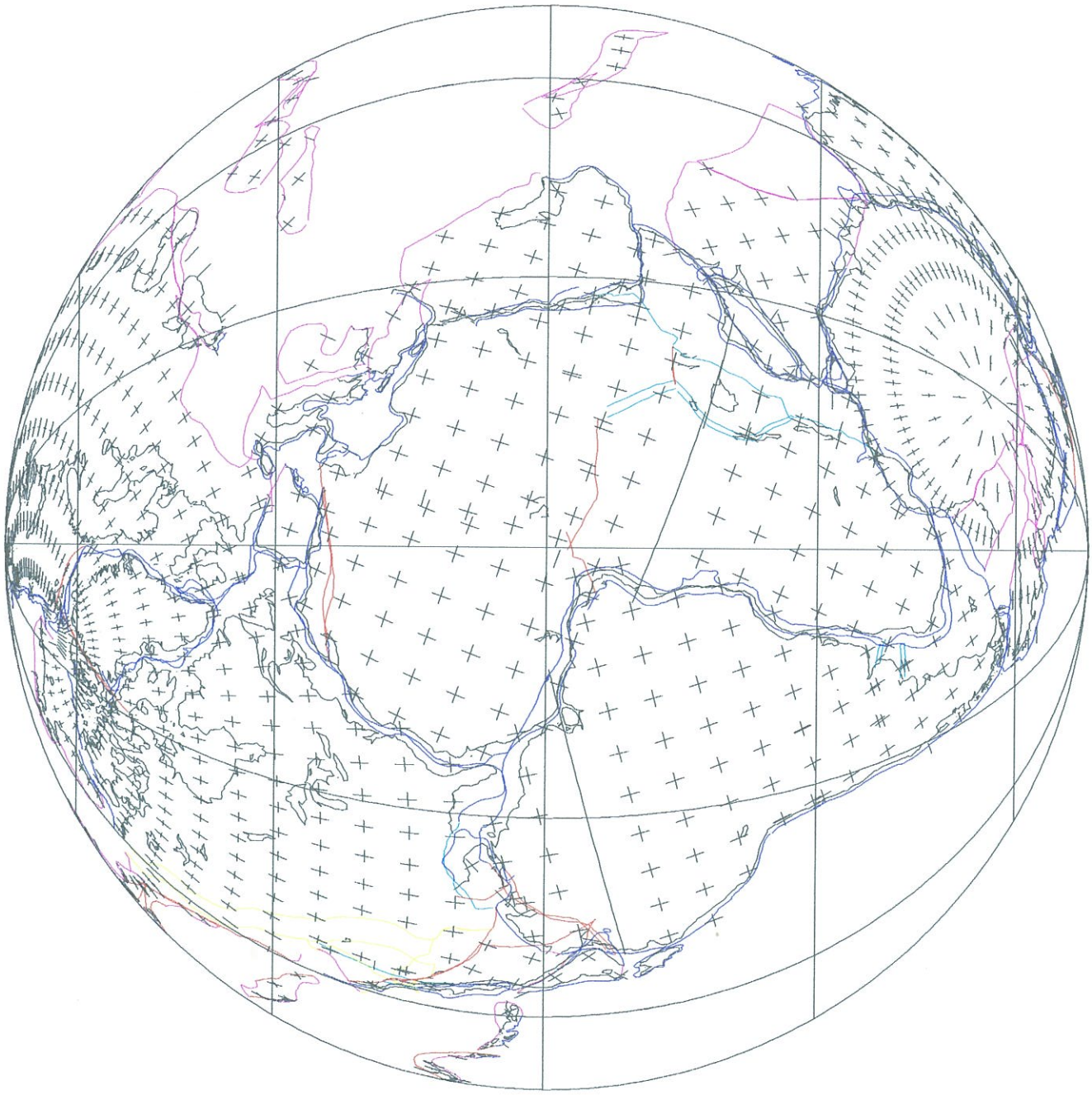

Figure 3: Present-Day Rectilinear Plot

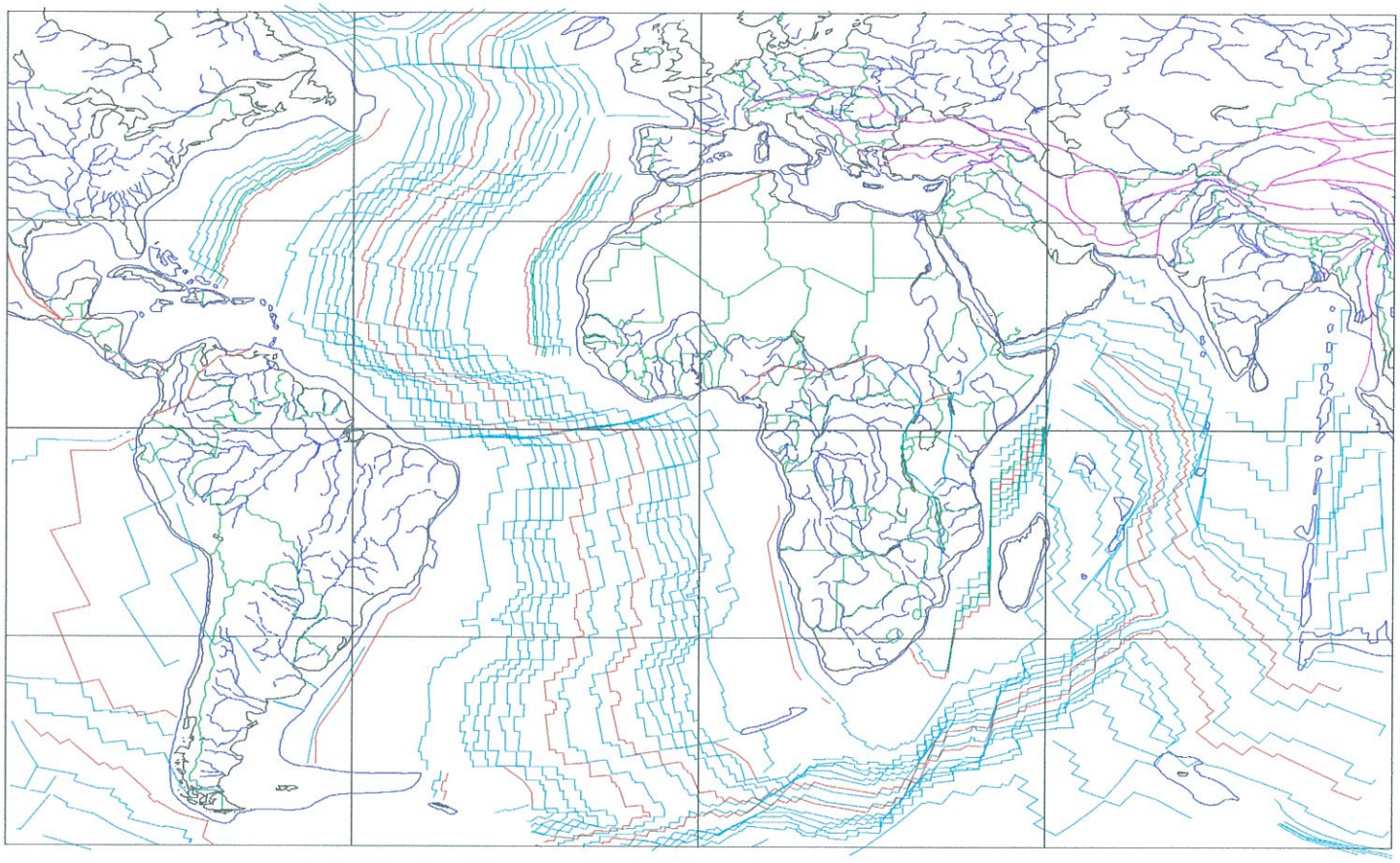

Figure 4: 65 Ma Molleweide Plot

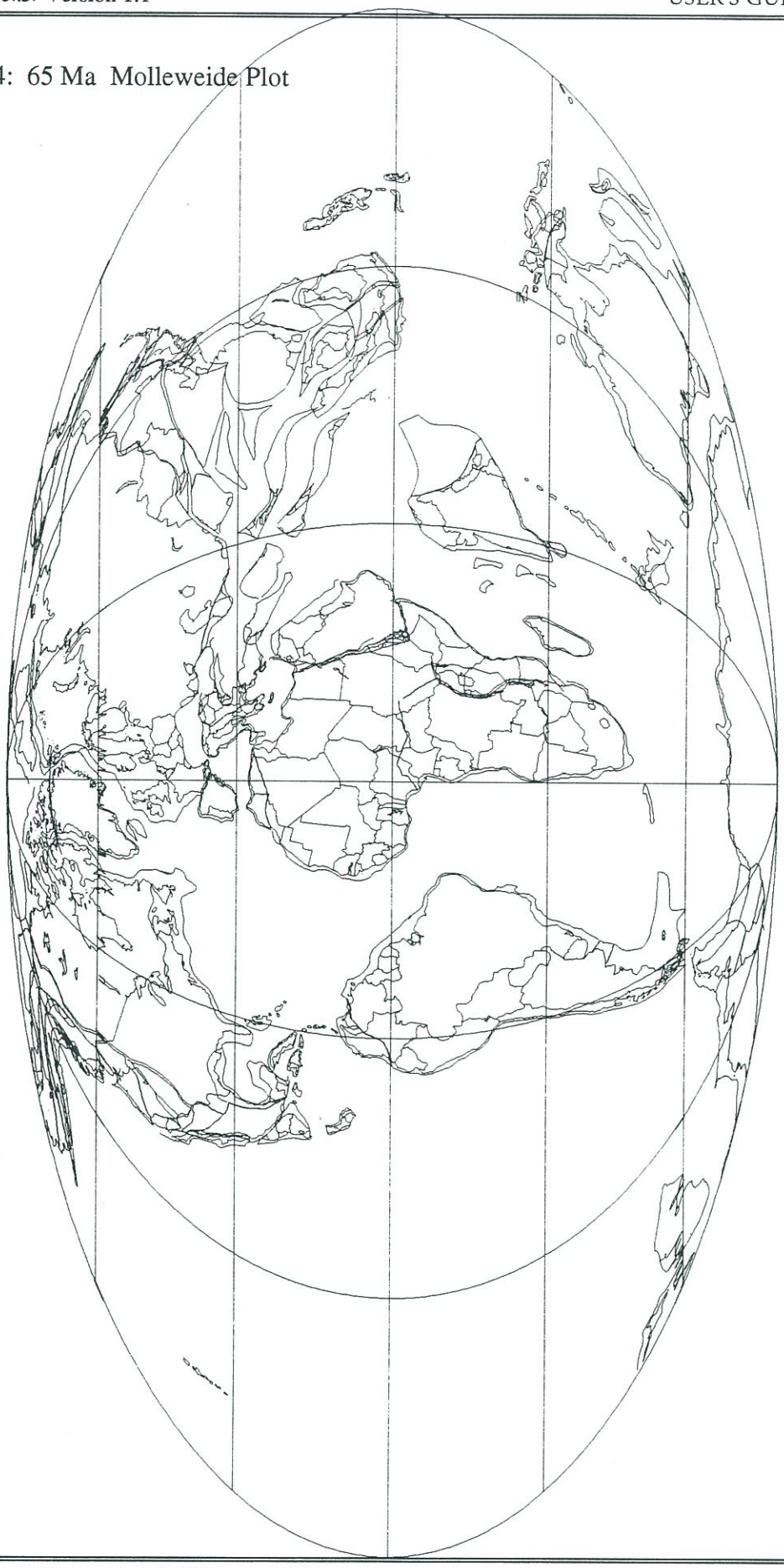

Figure 5: 160 Ma Stereographic Polar Plot - Northern Hemisphere

Introduction

During the past year, the global plate tectonic model has been updated, new plates added and others redefined. Major changes are the creation of a new set of plates defined for late Precambrian reconstructions and the addition of new plates, such as Greater India. These plates are shown in italics in the listing below. Included in this report are a map showing the current plate model (Figure 1) and a list of plate identification numbers (Table 1).

Table 1 List of Plate Names and Identification Numbers

Polygon #	Plate / Polygon Name	Abbreviation
	North America	
101	North American Craton	NAM
102	Greenland	GRN
103	North Slope Block	NSL
104	Mexico	MEX
105	Baja California	BAJ
106	Arctic Islands	ACR
108	Avalon-Acadia	AVA
109	Piedmont-Florida	PDN
110	Alpha Ridge	ALP
111	Mendeleev Ridge	MNR
112	Chuckchi Plateau	CHP
113	Northwind Ridge	NWR
114	Lomonosov Ridge	LMR
117	Eurasian Arctic Shelf	EAS
121	Yukon-Koyukuk	YUK
123	Yukon-Tenana	YUT
124	Canadian Rocky Mountain Thrust Belt	CTB
125	Alaska Peninsula	ALP
126	Chugach Terrane	CHG
127	Stikine Terrane	STK
128	Alexander Terrane	ALX
129	Columbia Embayment	COL
130	Sierra Nevada	SNV
131	Western Basin & Range	WBR
132	Eastern Basin & Range	EBR
133	Colorado Plateau and Front Ranges	CPF
134	Southern Basin & Range	SBR

135	Gulf of Mexico - Oceanic Crust	GMO
198	Chiapas	CHP
199	Paleozoic North America	PNA

South & Central America

201	Brazilian Craton	SAM
202	Parana Plate	PRB
203	Northwest South America	NSA
204	Yucatan-Honduras-Chortis	YHC
205	Yucatan	YUC
206	Cuba	CUB
221	Rosiland Bank	ROS
222	Jamaica	JAM
230	Central Panama	PAN
234	Lesser Antilles Arc	ANT
237	Puerto Rico	PTR
252	Southern Hispaniola	HSP
262	*Amazonian Craton*	*AZC*
263	*Sao Francisco Craton*	*SFC*
264	*Altiplano Accretionary Complex*	*ALT*
265	*Andes Arc*	*AND*
266	*Pampean - Rio del Plata Block*	*RDP*
267	*Don Feliciano Block*	*DFB*
285	South Georgia	GRG
290	Salado Block	SSS
291	Patagonia Terrane	CSS

Europe

301	Eurasia	EUR
302	Baltica	BLT
303	Northern Scottish Highlands	NSH
304	Iberia	SPN
305	Hercynian Europe	CEUR
306	Corsica/Sardinia	CSD
307	Apulia	ITL
308	Greece	GRK
309	West Svalbard	WSV
311	Barentsia	BAR
313	Midland Valley Region	MDV
315	England- Brabant	ENG
317	East Rockall	EERK
318	West Rockal	WRK
319	Moesia	MOE
320	Belairic Isles	BAL
323	Sicily	SCY

330	Crete	CRE
331	Cyprus	CYP
332	Unnamed	
350	North Svalbard	NSV
	North Asia/Siberia	
401	Siberian Craton	SIB
402	Kazahkstan	KAZ
403	Kolyma	KOL
405	Verkhoyansk	VRK
406	Kamchatka	KAM
407	Lake Hosvgol	KAB
408	Sea of Okhotsk	OKH
416	Aleutian Islands	ALE
	Central Asia	
501	India Continental	IND
502	Sri Lanka	CEY
503	Arabia	ARB
504	Turkey	TRK
505	Lut Block	LUT
506	Waser	WAS
507	Helmand	HLD
508	Sinai	SIN
510	Pontides	PON
511	Black Sea	BKS
512	Tabriz and Sanandaj-Sirjan	TSS
513	South Caspian	SCP
514	North Caspian	NCP
515	Makran	MKN
519	Central Indian Ocean Convergence Zone	CIZ
516	*Exmouth Block*	*EXB*
517	*Mount VictoriaLand*	*MVL*
518	*Greater India*	*GRI*
530	*West Arabia*	*WAB*
531	*East Arabia*	*EAB*
550	*East Anatolia Accretionary Complex*	*EAA*
	East Asia	
601	Tarim	TAR
602	South China (Paleozoic)	PSC
604	North China	NCH
606	Tibet	TIB
609	Hokiado/Sakhalin (North Japan)	NJP
610	Honshu (South Japan)	SJP
611	Yangtze Platform	YZP

612	Qiang Tang	QTG
613	Lhasa	LHA
614	Songpan Ganzi	SPG
615	IndoChina	SCH
616	Burma Malaya	BMM
617	IndoBurma	IBM
619	Sunda Shelf	SUN
620	Kalimantian Platform	KAP
621	South China Sea	SCS
628	Amuria	AMU
658	Taiwan	TAI
659	Phillipines	PHP
664	Northeast Sulawesi	NES
671	Kepulauan Trough	KEP
672	West Halmahera	HAL
675	North Bismarck Sea	NBS
676	South Bismarck Sea	SBS
677	Solomon Islands	SOL
680	Timor	TIM
682	Seram - Buru	SBU
683	South Sulawesi	SSU
684	East Sulawesi	ESU
685	Sumba	SUM
697	Kurile	KUR

Africa

701	African Craton	AFR
702	Madagascar	MAD
704	Seychelles	SEY
705	Mascarene Banks	MAS
707	Moroccan Meseta	MOR
709	Somolia	SOM
712	Lake Victoria Block	LVB
714	Northwest Africa	NWA
715	Northeast Africa	NEA
716	Denakali	DNK
750	Cape Fracture Zone Block	CFZ
776	*Atlas Block*	*ATL*
777	*Northwest African Fold Belt*	*WAF*
778	*Northwest African Craton*	*WAC*
779	*Northcentral African Craton*	*CAC*
780	*Northcentral African Craton*	*CAC*
781	*Mozambique/South Africa*	*MOZ*
782	*Gabon Fold Belt*	*GAB*
783	*Damara Fold Belt*	*DAM*
784	*Walvis Fold Belt*	*WAV*

	Antarctica/Australia/South Pacific	
800	Coastal New Guinea	CNG
801	Australia	AUS
802	Antarctica	ANT
803	West Antarctic Peninsula	WAP
804	Marie Byrdland	MBL
805	Ellsworth Mountains	ELL
806	North Island New Zealand	NNZ
807	South Island New Zealand	SIZ
811	South Shetland Islands	STI
812	South Orkney Islands Block	SOB
813	Chatham Rise	CHT
814	Campbell Plateau	SNZ
815	Three Kings Rise	TKR
816	Discovery West Bank	DBW
833	Lord Howe Rise	LHR
835	Fiji	FIJ
834	Norfolk Ridge	NFR
872	Naturalise Plateau	NAT
888	Broken Ridge	BRK
895	Unnamed Antarctica	
899	D'Entracasteaux Islands	DEC

	Oceans	
901	Pacific Ocean Plate	APAC
902	Nazca Plate	NAZ
903	Farallon Plate	FAR (VAN)
904	Aluk	ALU
906	Henry Hudson	HHP
907	Jan Mayen	JMY
908	Jan Mayen North	JMN
909	Cocos Plate	COC
985	North Kerguelen Plateau	KER
992	Kerguelen National Forest	KNF

Figure 1: Map of Current Plate Model

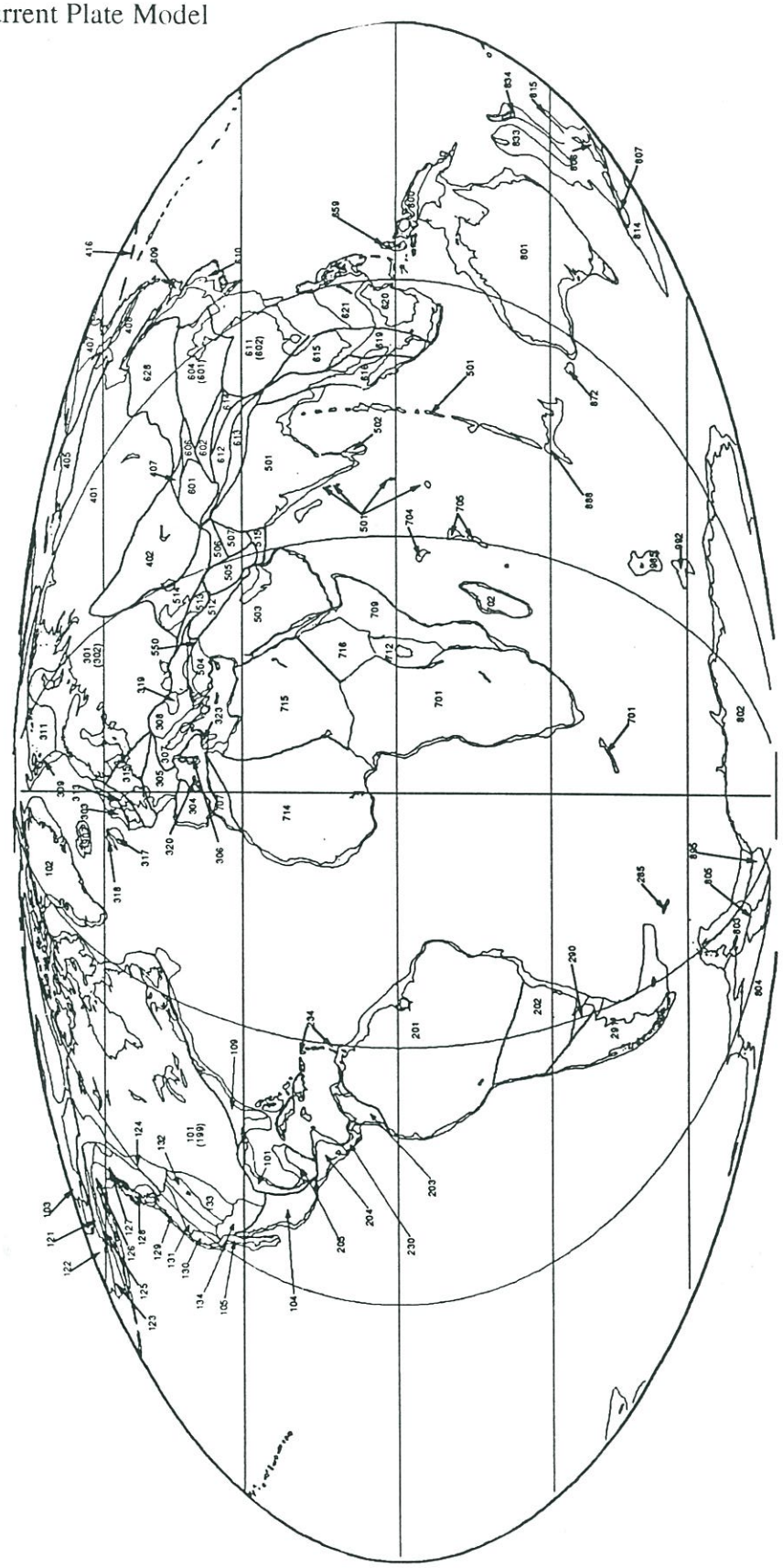

Figure 1. Present-day map illustrating major tectonic elements with corresponding polygon identification numbers. Refer to Appendix A for a complete list of polygon names and identification numbers.