University of Redlands

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1.0 Introduction

In 1994 the Federal Geographic Data Committee (FGDC) was established by the Office of Management and Budget Circular A-16. Composed of representatives from many government agencies, the objective of the FGDC has been to promote "the coordinated development, use, sharing, and dissemination of geographic data."¹ Federal Geographic Data Committee. Washington, D.C., p.ii available online: <u>http://www.fgdc.gov/metadata</u>.) In June of 1998, the FGDC released the *Content Standard for Digital Geospatial Metadata* which has become the national standard for geospatial metadata.

Since 1994, several free and commercial products have been introduced which facilitate the creation of FGDC compliant metadata including ESRI's **ArcCatalog™**. **ArcCatalog™** is part of a suite of GIS creation and management tools developed by Environmental Systems Research Institute (ESRI). **ArcCatalog™** is able to auto-generate and display some metadata by reading the digital file, but is not able to generate supporting descriptive text such as abstracts, purpose statements, or supplemental information. Metadata can be created in **ArcCatalog™** for a variety of resources including images, documents, geospatial and tabular data.

This manual details the creation of FGDC compliant geospatial metadata using ArcCatalogTM, including an explanation of the data properties generated automatically by the software versus those which must be completed manually. The following sections are presented in order of the ArcCatalogTM metadata entry screens. FGDC *Content Standard for Digital Geospatial Metadata* section numbers are included in parentheses (). Required fields are indicted in red.



¹ Federal Geographic Data Committee. FGDC-STD-001-1998. Content standard for digital geospatial metadata (revised June 1998).

Figure 1 - ArcCatalog[™] Metadata Preview Window

2.0 ArcCatalog[™] Structure

ArcCatalog - ArcInfo - R:\DTP\gis\env\geology\faults\cdmg_faults
<u>Eile E</u> dit <u>V</u> iew <u>G</u> o <u>T</u> ools <u>H</u> elp
Location: R:\DTP\gis\env\geology\faults\cdmg_faults Import Metadata
Stylesheet: FGDC Classic 💽 🖌 🗐 🖆 🍟 Export Metadata
Edit Metadata
Contents Preview Metadata
Digital Database of

Figure 2 - ArcCatalog[™] Metadata Toolbar

A metadata record, an .xml file, is automatically created in **ArcCatalogTM** when you highlight a file in the tree on the left and click on the 'Metadata' tab on the right. The record is empty except for the fields that are automatically generated by the **ArcCatalogTM** program. These fields include:

- Native Data Set Environment (Windows and Arc Catalog version numbers)
- Native Data Set Format (shapefile, Arc Info coverage, text file, etc.)
- Language (defaults to en English)
- Citation Title (defaults to file name)
- Geospatial Presentation Form (file type vector digital data, document, document, etc.)
- Online Linkage (defaults to network path)
- Spatial Domain (bounding coordinates if coverage or shapefile is projected)
- Direct Spatial Reference Method (under Data Organization point, raster or vector)
- Spatial Reference (projected coordinate system)
- Entity and Attribute Types (Entity Type lists the .pat, .aat, and any other info files along with the individual attribute labels)
- Metadata Standard Name (defaults to 'FGDC Content Standards for Digital Geospatial Metadata')
- Metadata Standard Version (defaults to current Arc Catalog Metadata version)
- Metadata Time Convention (defaults to 'local time')
- Metadata Date (defaults to entry date)
- Metadata Language (defaults to en English)

You can then open the metadata record and fill in all other appropriate information by clicking on the 'Edit Metadata' button.

🔊 ArcCatalog - ArcInfo - R:\DTP\gis\env\geology\faults\cdmg_faults
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>T</u> ools <u>H</u> elp
🔺 😂 🍘 🖻 📽 🗙 🎭 🎬 🎬 🎎 🚳 🚱 🚳 💦
Location: R:\DTP\gis\env\geology\faults\cdmg_faults
Stylesheet: FGDC Classic 💽 🖌 🛒 🖆 🏂 政
🔍 🔍 🖤 🕘 🔀 Edit metadata
Contents Preview Metadata
i i i i i i i i i i i i i i i i i i i

Figure 3 - ArcCatalogTM Metadata Toolbar – Edit Metadata

The metadata editor has multiple tabs organizing the information into various groups. Some tabs have addition tabs within them. This document will provide a step-by-step walk through with a real data set, (Digital Database of Faults from the Fault Activity Map of California and Adjacent Areas California; Department of Conservation, Division of Mines and Geology) giving examples of what is required or recommended for each entry. Required fields are indicated in red.

3.0 General Identification

The general identification section includes explanatory text and a description of access or use limitations associated with a given data set.

Abstract: A brief text summary of the data set. (FGDC p. 4)

Purpose: A summary of the intentions for which the data set was developed. (FGDC p. 4)

Supplemental Information: Other descriptive information about the data set. (FGDC p. 4)

Access Constraints: Restrictions and legal prerequisites for accessing the data set. These include access constraints applied to assure the protection of privacy or intellectual property, and special restrictions or limitations when obtaining the data set. If there are no access constraints, enter "None." If access constraints cannot be determined, do not enter any information. (FGDC p.7)

Use Constraints: Restrictions and legal prerequisites for using the data set once access is granted. These include use constraints applied to assure the protection of privacy or intellectual property, and special restrictions or limitations in using the data set. If there are no use constraints, enter "None". If use constraints cannot be determined, do not enter any information. (FGDC p.8)

Data Set Credit: The original source of GIS data, author and agency of the report from which the GIS data was created, and you or your agency if you created or altered the GIS data in any significant way (FGDC p. 8). *Language*, *Native Data Set Environment*, and *Native Data Set Format* are all generated by the ArcCatalog[™] program.

		_
🛃 Editing Dig	ital Database of Faults from the Fault Activity Map of California and Adjacent Areas'	? 🗙
Identification	Data Quality Data Organization Spatial Reference Entity Attribute Distribution Metadata Referen	nce
General Conta	act Citation Time Period Status Spatial Domain Keywords Browse Graphic Security Cross Reference	1
Abstract:	This digital database contains the faults shown on the Fault Activity Map of California and Adjacent Areas by Charles W. Jennings published in 1994. The map shows the locations of known faults that can be portrayed at 1:750,000 scale	
Purpose:	To provide information for those concerned with land use on or near geologic faults in California.	
Language:	en	
Supplemental Information:	This database should be used in conjunction with the published version of the Fault Activity Map of California and Adjacent Areas available from the California Department of Conservation, Division of Mines and Geology (DMG) by mail:	
Access Constraints:	Dataset must be obtained from the Department of Conservation, Division of Mines and Geology.	
Use Constraints:	1) Personal use. 2) For publication in a report in unmodified form; cite on figure or in text as "Reproduced with permission, California	
Data Set Credit:	California Department of Conservation, Division of Mines and Geology; U.S. Geological Survey	
Native Data Set Environment:	Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 1; ESRI ArcCatalog 8.3.0.800	
Native Data Set Format:	ArcInfo Coverage	
	<u>Save</u> <u>Cancel</u> <u>H</u> el	p

Figure 4 - ArcCatalog[™] General Identification Screen

3.1 Contact

The contact information section provides information for communicating with the individual or organization that is knowledgeable about the data set. This person or organization must be able to answer questions about the data and be responsible for updates if there are errors in the data. The contact person should be the individual that provided the data set or the person who made significant changes once the data was received. (FGCD p.58-60)

Person, Organization, Position: Name, organization, and title of individual to contact. For consistency with bibliographic references, it is recommended that you use 'last name, first name' format.

Voice Telephone & Fax Number: Should include area code and international access number if applicable.

Hours of Service: If used, should specify time zone (i.e. 8:00 am – 4:00 pm PST).

State & Country: Use accepted US Postal abbreviations (i.e. CA, US).

🖻 Editing Digita	I Database of Faul	s from the Fault Ac	tivity Map of	f California an	d Adjacen	it Areas'	? 🗙
Identification	Data Quality Da Citation Time Period	a Organization Spatia	al Reference	Entity Attribute	Distribution	Metadata Refe	rence
	Point of Contact	Wagner, David L.			<u>Q</u> etails		
				<u>S</u> ave		ancel	<u>H</u> elp

Figure 5 - ArcCatalog[™] Point of Contact Screen

Primary Contact	Person:	Wagner, David L.		
Person	Organization:	California Department of C	onservation, Division of Mines and G	eology
© Organization	Position:	Senior Geologist		
aeneral Address				
Contact Voice	(916) 324-7380		Hours of Service:	
Telephone:	+ × I + > > Con	tact Phone 1 of 1		
Contact Fax	(916) 322-4765			
Number:	+ × I + > > Con	tact Fax 1 of 1	Contact Instructions:	~
Contact Email	dwagner@consrv.ca.gov			
Address:	+ × I + > > Con	tact Email 1 of 1	8	
Contact TDD/TTY Telephone:	+× K · >> Cont	act TDD/TTY (+) of 0		2

Figure 6 - ArcCatalog[™] Contact Details Screen - General

rimary Contact —	Person:	Wagner, David L.	1000
Person	Organization:	California Department of Conservation, Division of Mines and Geology	
0 Organization	Position:	Senior Geologist	
ieneral Address]		
Address Type:	mailing and physical address	_	
Address:	801 K Street, MS 12-31		
	+ X K K D D Line	of Address 1 of 1	
City:	Sacramento		
State or Province:	CA		
Postal Code:	95814		
Country:	US		
		ress 1 of 1	
			OK

Figure 7 - ArcCatalog[™] Contact Details Screen - Address

3.2 Citation

The citation section defines how the data originator should be specified, similar to that of a bibliographic citation in the reference section of a book. (FGDC p. 53-55)

Title: **ArcCatalog**[™] automatically sets the title to the name of a data set, but this should be replaced with a short, more descriptive title.

Originator: The name of an organization or individual that developed the data set. For consistency with bibliographic references, it is recommended that you use 'last name, first name' format.

Publication Date: Although GIS data is not usually published in the normal sense, the publication date is the day the data is made available for release. The date can be either a year, a year and a month, or a year, month and day entered in the following format: **YYYYMMDD** (for example 19840621 for the date June 21, 1984). The publication date can also be "Unknown" or "Unpublished material".

Online Linkage defaults to the file path of the data set. If the data is available online for download, this should be changed to the web link.

Geospatial Presentation Form: For GIS data, **ArcCatalog™** automatically sets this field to be raster or vector digital data, and should be changed as necessary.

Series/Publication Information: If the data is part of a series, such as the tiles in a larger data set, fill in the appropriate information.

🛃 Editing Digital	Database of Fault	from the Fau	ult Activity Map o	f California an	d Adjacen	t Areas' 🛛 💽 🔀
Identification	Data Quality Dat	a Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Reference
General Contact	Citation Time Period	Status Spatia	l Domain Keywords	Browse Graphic	Security	Cross Reference
	Citation Title:	Digital Database	of Faults from the Fau	It Activity M	<u>D</u> etails	
				<u>S</u> ave	<u>C</u> a	ancel <u>H</u> elp

Figure 8 - ArcCatalogTM Citation Title Screen

Title:	Digital Database of Faults from the Fault Activity Map	o of California and Adjacent Areas
Originator:	Richard L. Dart, Michael N. Machette, Diane Burns,	Geoffrey D. Faneros, Jason D. Little, and Jennifer R.
Publication Date: Publication Time: Edition: Geospatial Data Presentation Form:	2000 Unknown Version 1.0 vector digital data	Other Citation Details: Jennings (1994) should be cited when referring to contents of this database. See Cross Reference.
Online Linkage: ——	\\atlas\RI\dtp\gis\env\geology\faults\cdmg_faults + × × • • • • • • • • • • • • • • • • •	

Figure 9 - ArcCatalog[™] Citation Details

🖬 Citation informatic	n.	? 🔀
General Series/Publica	tion Information	
Series Information —		
Series Name:	CD-ROM	
Issue Identification:	2000-006	
Publication Information Publication Place:	Sacramento, CA, US	
Publisher:	Department of Conservation, Division of Mines and	
Larger Work Citation:	Details	
		<u>K</u>

Figure 10 - ArcCatalog[™] Citation Details, Series/Publication Information

3.3 Time Period of Content

The time period of content is considered to be the timeframe associated with the data set. This information explains how current the data is. (FGDC p. 56-57)

Currentness Reference: This can be "ground condition", which is when an aerial photo was taken or when the field work was accomplished. Sometimes, only the time the information was recorded or published is known. In these cases, specify "publication date" for the currentness reference.

Calendar Date: Dates should be in the format **YYYYMMDD** (for example, "19870306" can be used for the date March 6, 1987). Dates can also be recorded as "Unknown."

📓 Editing Digita	l Database of Fault	s from the Faul	i Activity Map o	f California ar	nd Adjacent	i Areas'	? 🗙
Identification	Data Quality Dat	a Organization Si	patial Reference	Entity Attribute	Distribution	Metadata F	leference
General Contact	Citation Time Period	Status Spatial [omain Keywords)	Browse Graphic	c Security	Cross Referenc	e) _
Currentn	ess Reference: publicat	on date	<u>.</u>	3			
0	Single Date/Time	C M	lultiple Dates/Times		C Range of D	ates/Times	
	alendar Date	Time of Day					
200004	15 🔹		•				
, in the second s							
					1		
				<u>S</u> ave	<u>C</u> a	ncel	<u>H</u> elp

Figure 11 - ArcCatalog[™] Time Period Screen

3.4 Status

The status section provides the progress and maintenance information for the data set. (FGDC p.4)

Progress: Choices are Complete, In Work, and Planned. **Update Frequency:** Multiple choices for data update frequency.

📓 Editing Digita	Database of Fault	from the F	ault Activity M	ap of California a	ind Adjace	nt Areas'	? 🔀
Identification	Data Quality Dat	Organization	Spatial Referen	ce Entity Attribute	Distribution	n Metadat	a Reference
General Contact	Citation Time Period	Status Spa	atial Domain Keyv	words Browse Graph	ic Security	Cross Refere	ence
	Progres	: Cor	mplete		-		
		,					
	Update	Frequency: No	ne planned		–		
				Save		Cancel	Help
				<u></u> ave	<u>_</u>		Tieth

Figure 12 - ArcCatalog[™] Status Screen

3.5 Spatial Domain

The FGDC standard requires the geographic extent of the data be described using latitude and longitude values. If the data is projected, the coordinate system must be defined in order for **ArcCatalog**TM to automatically generate latitude and longitude values. Bounding coordinates are the western-, eastern-, northern-, and southern-most coverage limits of a data set, as expressed in latitude and longitude values. These should not be changed. (FGDC p. 5)

🖻 Editing 'edm <u>e</u>	_faults'				? 🛛
Identification	Data Quality D	ata Organization Spatia	Reference Entity Attri	bute Distribution	Metadata Reference
General Contact	Citation Time Perio	od Status Spatial Doma	in Keywords Browse	Graphic Security Cro	ss Reference
General Bou Bounding Co	nding Coordinates and pordinates	I G-Polygon			
	North 43.280427	South 31.748886	East -113.510911	West -126.267890	
Outer G-F Latitude: Longitud	iing :: + X H 4 > P	G-Ring (+) of 0	Exclusion G-Rin Latitude: Longitude:	ig(s)	(+) of 0
+×н.	G-Polygon (+) of 0	<u>+× </u>	Exclusion G-Ring (+) of 0
			<u> </u>	iave <u>C</u> ance	I <u>H</u> elp

Figure 13 - ArcCatalogTM Spatial Domain Screen

3.6 Keywords

Keywords are subjects or topics covered by the data set. They are used as a reference to search a document or data set. A Thesaurus is a book or collection that lists words related to each other in meaning or to a particular subject, usually giving synonyms and antonyms.

Thesaurus: Specify whether or not the keywords have been selected from a formal thesaurus or a similar authoritative source of theme keywords. If not, type "None" for thesaurus.

Theme Keywords: Themes should describe the subject of the data, such as rock formation or geology.

Place Keywords: Place keywords describe the geographic location of the data, such as Mojave Desert or Death Valley National Park.

Stratum Keywords: Stratum keywords describe the vertical location of the data, such as seafloor or stratosphere.

Temporal Keywords: Temporal keywords provide a time reference for the data, such as Mesozoic or Civil War.

Editing 'Digital Database of Faults from the Fault Ac	tivity Map of California and Adjacent Areas' 🛛 🔹 🔀
Identification Data Quality Data Organization Spatia	I Reference Entity Attribute Distribution Metadata Reference
General Contact Citation Time Period Status Spatial Doma	ain Keywords Browse Graphic Security Cross Reference
Theme	
Keyword: Fault Map	Thesaurus: none
+ X K V F Keyword 1 of 4	+ X II I > > Thesaurus 1 of 1
Place	
Keyword: California	Thesaurus: none
+ X K K P Keyword 1 of 2	+ X II I > > Thesaurus 1 of 1
Stratum	
Keyword: none	Thesaurus: none
+ X K V D Keyword 1 of 1	+ X II I >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Temporal	
Keyword: Historic	Thesaurus: none
+ X I I N Keyword 1 of 5	+ X K V D Thesaurus 1 of 1
	<u>S</u> ave <u>C</u> ancel <u>H</u> elp

Figure 14 - ArcCatalog[™] Keyword Screen

3.7 Browse Graphic

The browse graphic is a thumbnail illustration of the data set. The graphic should include the graphic file name representing the data, a text description of the data, and the type of graphic file. (FGCD p. 8)

🖻 Editing Digital Database of Faults from the Fault Activity Map of	California and	Adjacent Areas'	? 🔀
Identification Data Quality Data Organization Spatial Reference	Entity Attribute	Distribution Metada	ata Reference
General Contact Citation Time Period Status Spatial Domain Keywords	Browse Graphic	Security Cross Refe	rence
Filename: none			
Description:			
File Type:			
+ X K K Browse Graphic 1 of 1			
	<u>S</u> ave	<u>C</u> ancel	<u>H</u> elp

Figure 15 - ArcCatalog[™] Browse Graphic Screen

3.8 Security Information (FGDC p.9)

The security section refers to restrictions on handling of the data set, which can be imposed for any number of reasons, including but not limited to national security, privacy, or other concerns. Provide the name of the security classification system, the security classification and a description of the handling restrictions of the data set. Most often, data is unclassified and the security system is 'none'.

🗹 Editing Digital	Database of F	aults from the F	ault Activity Map	of California an	d Adjacent	Areas'	? 🗙
Identification	Data Quality Citation Di Tione F	Data Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Refei	rence
General Contact	Litation Time F	eriod Status Spa	tial Domain Keyword	s Browse Graphic	security L	ross Hererence	1
Security Classificat	ion [
System:	ion Inone						
Security Classifical	ion: Unclassified		•				
	1						-
Security Handling						<u>^</u>	
Description:						~	
				Save	[Can	cel H	leln
							Torb

Figure 16 - ArcCatalog[™] Security Screen

3.9 Cross Reference

This category of information concerns other related data sets, reports, images, etc., that are of importance to the data set. (FGDC p. 53-55)

Title: Title.

Originator: The name of an organization or individual that wrote or developed the related data or document. For consistency with bibliographic references, it is recommended that you use 'last name, first name' format.

Publication Date: Although GIS data is not usually published in the normal sense, the publication date is the day the data was made available for release. The data can be either a year, a year and a month, or a year, month and day, entered in the following format: **YYYYMMDD** (for example, "19660227" can be used for the date February 27, 1966).The publication date may also be "Unknown" or the reference may be "Unpublished Material".

Online Linkage: If the data is available for online download, this entry should be changed to the web link.

Geospatial Presentation Form: This field identifies the way the data is represented geospatially (i.e. raster or vector digital data, map, model, globe, etc.)

Series/Publication Information: If the cross reference is part of a series, fill the information into the appropriate fields.

🖬 Editing Digital	Database of Fault	s from the Fault	Activity Map of	f California an	d Adjaceni	t Areas'	? 🗙
Identification	Data Quality Dal	a Organization Spa	atial Reference	Entity Attribute	Distribution	Metadata Ref	erence
General Contact	Citation Time Period	Status Spatial D	omain Keywords	Browse Graphic	Security	Cross Reference]
+X ((()	Citation Title	Fault Activity Map o	f California and Adj	acent Areas	<u>Q</u> etails		
				<u>S</u> ave	<u><u> </u></u>	incel	Help

Figure 17 - ArcCatalog[™] Cross Reference Screen

General Series/Pu	blication Information	
Title:	Fault Activity Map of California and Adjacent Areas	
Originator:	Jennings, C.W. (compiler) with assistance from G.J. Saucedo	
Publication Date:	1994 • Other Citation Details:	
Publication Time:	Unknown	~
Edition:		
Geospatial Data Presentation Form:	· · · · · · · · · · · · · · · · · · ·	3
Online Linkage: —		
	+ X II () Doline Linkage (+) of 0	

Figure 18 - ArcCatalogTM Citation Details Screen

🖬 Citation informatic	n -	2 🔀
General Series/Publica	tion Information	
Series Information —		
Series Name:	Geologic Data Map Series	
Issue Identification:	No. 6	
Publication Information Publication Place:	Sacramento, CA, US	
Publisher:	California Department of Conservation, Division of	
Larger Work Citation:	Details	ок

Figure 19 - ArcCatalog[™] Citation Details Screen, Series/Publication Information

4.0 Data quality

The data quality sections provide consistency and accuracy information for the data set. (FGDC p. 12-15)

Logical consistency: This field indicates the topological integrity of the data.

Polygon - Polygon and chain-node topology present. All polygons are closed; every polygon has a label, and only one label point.

Points – Point features present. This is point data, and it has been reviewed for positional accuracy, and accuracy of the attribution. There is no topology to examine.

Lines - Arc-node topology present.

Shape files do not have topology; skip the Logical Consistency window for such files.

Completeness: Omission, selection or generalization criteria, definitions used, and other rules implemented to generate or derive the data are listed in this field. (For example: The data set has no generalization, and no data was intentionally omitted.)

Cloud cover: Cloud cover need only be listed for satellite imagery and aerial photography. It is expressed as a percentage of the area obstructed by clouds. For vector digital data, use "N/A" (not applicable).

🛃 Editing Dig	jtal Database of F	aults from the F	ault Activity Map	of California a	nd Adjacent <i>I</i>	lreas'	? 🗙
Identification	Data Quality	Data Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Refer	ence
General Attrib	ute Accuracy Positic	nal Accuracy Sour	ce Information Proce	ess Step			
Logical Consistency Report:	Dataset is consistent been verified through	with the Fault Activity standard ArcInfo and	Map of California (Jen ArcEditor checks on a	nings, 1994). Are no are topology.	ode topology pres	ent. The data has	<
Completeness Report:	The dataset contains base map showing th hypsography, and oth	most of the faults sho e outline of California er features on the ba	wn on the Fault Activit and county boundaries se of the published maj	y Map of California :. Cultural features, p are not shown.	(Jennings, 1994). topography, hydr	It also includes a ography,	>
Cloud Cover:	N/A						
				Save	<u>C</u> anc	el <u>H</u>	elp

Figure 20 - ArcCatalog[™] Data Quality Screen

4.1 Attribute Accuracy

Attribute Accuracy: This screen is an assessment of the accuracy of the attribute values in the data set (FGDC p. 11). (For example, the data set has been reviewed and is considered to be 99% accurate.)

🛃 Editing Digit	al Database of H	aults from the F	ault Activity Map	of California a	nd Adjacent Ar	reas' 🛛 🔁
Identification	Data Quality	Data Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Reference
General Attribute	e Accuracy Positio	nal Accuracy Sour	ce Information Proce	ess Step		
Accuracy Report: was	lts are attributed in t vey staff. Additional tested by overlayin	erms of recency of mo editing and final prool g the original mylars or	wement. Initial editing fing was done by Divis n plots of each categor	of Quaternary faults ion of Mines and Ge y of faults to see th	was done by U.S. cology staff. The a at they match.	Geological
Value:	<u></u>					
Explanation:	This database is a Areas. Users of th data can be reprod increased from 1:7	faithful digital represer s database should be luced precisely at any 50,000, uncertainty ar	ntation of most faults o aware of the difference scale, the accuracy o nd errors in fault locatio	n the Fault Activity I e between precisio f the data remains o n remain the same.	Map of California ar n and accuracy. M constant. As the so Also the user is ca	nd Adjacent
	+ X (())	Accuracy Assess	ment 1 of 1			
				<u>S</u> ave	Cance	I <u>H</u> elp

Figure 21 - ArcCatalog[™] Attribute Accuracy Screen

4.2 Positional Accuracy

Positional accuracy is an assessment of the precision of placement of spatial objects and is a combination of both horizontal and vertical accuracy descriptions. (FGDC p. 12-13) (For example, the data set is estimated to be accurate +/- 120 feet.)

Horizontal Accuracy Report: This is an estimate of the precision of horizontal positioning of spatial objects.

Vertical Accuracy Report: This is an appraisal of the precision of vertical positioning within the data set.

An example of a Horizontal Positional Accuracy Report is:

Estimated to be +/-40 feet (for data at 1:24,000) - USGS Topo Quads and data derived from them Estimated to be +/-160 feet (for data at 1:100,000) - USGS Topo Quads and data derived from them - USGS DLG Line work - US Census Bureau TIGER line files Estimated to be \pm 400 feet (for data at 1:250,000) - USGS Topo Quads and data derived from them Estimated to be +/-800 feet (for data at 1:500,000) - USGS Topo Quads and data derived from them Estimated to be +/-1650 feet (for data at 1:1,000,000) - ESRI's DCW data Estimated to be +/-3300 feet (for data at 1:2,000,000) - USGS National Atlas data Estimated to be +/-8250 feet (for data at 1:5,000,000) 🛂 Editing 'Digital Database of Faults from the Fault Activity Map of California and Adjacent Areas' Identification Data Quality Data Organization Spatial Reference Entity Attribute Distribution Metadata Reference

Heport: The t	reoretical accuracy of the p	published map is about (1.012 inch, the width	of the fault lines,	, which is equival	ent
Value:	+/- 464 meters	ity Man and Geologic M	an of California Data	hases -		
Explanatio	n: Fault locations in the di	gital databases for the F	ault Activity Map and	the Geologic M	ap of California a	re 🔽
	$+ \times \mathbb{K} \bullet \mathbb{N}$	Accuracy Assessment 1	of 1			
Vertical Accuracy						
Accuracy Report:						A
Value:						
Explanatio	n:		2			
	+×K<>>>	Accuracy Assessment (+) of 0			

Figure 22 - ArcCatalog[™] Positional Accuracy Screen

4.3 Source Information

This section provides a list of sources and a short discussion of the information contributed by each. (FGDC p. 13-14).

Source Scale Denominator: The denominator of the representative fraction on a map (for example, on a 1:24,000-scale map, the Source Scale Denominator is 24000).

Type of Source Media: The medium of the source data set (i.e. paper, online, etc.).

Source Citation Abbreviation: Short-form alias for the source citation.

Source Contribution: Brief statement identifying the information contributed by the source to the data set.

🗹 Editing Digital Database o	f Faults from the Fault Activity Map of California and Adjacent Areas'
Identification Data Quality	Data Organization Spatial Reference Entity Attribute Distribution Metadata Reference
General Attribute Accuracy Po	sitional Accuracy Source Information Process Step
General Source Citation So	urce Time Period of Content
Source Scale Dependenter	750000
Source Scale Denominator:	73000
Type of Source Media:	stable-base material
Source Citation Abbreviation:	2.5.1.1
	linework and attributes
Source Contribution:	
Source 1 o	1
	Save Cancel Help

Figure 23 - ArcCatalog[™] General Source Information Screen

Source Citation The citation section defines how the data source should be specified, similar to that of a bibliographic citation in the reference section of a book.

Title: Title.

Originator: The name of an organization or individual that wrote or developed the source data or document. For consistency with bibliographic references, it is recommended that you use 'last name, first name' format.

Publication Date: Although GIS data is not usually published in the normal sense, the publication date is the day the data was made available for release. The data can be either a year, a year and a month, or a year, month and day, entered in the following format: **YYYYMMDD** (for example, "19660227" may be used for the date February 27, 1966). The publication date can also be "Unknown" or the reference can be referred to as "Unpublished Material".

Online Linkage: If the data is available for online download, this reference should be changed to the web link.

Geospatial Presentation Form: This information identifies the way the data is represented geospatially (i.e. raster or vector digital data, map, model, globe, etc.)

Series/Publication Information: If a cross reference is part of a series, the appropriate information must be completed.

Title:	Fault Activity Map of California and Adjacent Areas	
Originator:	Originator: Jennings, C.W. (compiler) with assistance from G.J. Saucedo	
Publication Date: Publication Time:	1994 Other Citation Details:	2
Edition: Geospatial Data Presentation Form:		
Online Linkage:		

Figure 24 - ArcCatalog[™] Source Citation Screen

Time Period of Content This screen retains the timeframe associated with the data set. This information explains how current the data is. (FGDC p. 56-57)

Currentness Reference: This can be "ground condition", which is when an aerial photo was taken or field work was done. Sometimes, only the time and date the information was recorded or published is known. In these cases, provide the "publication date" for the currentness reference.

Dates should be in the format **YYYYMMDD** (for example, "19571225" can be used for the date December 25, 1957). Dates can also be recorded as "Unknown."

🖻 Editing Digital Database of Faults from the Fault Activity Map of	California and Adjacent Areas' 🛛 ? 🗙
Identification Data Quality Data Organization Spatial Reference E	ntity Attribute Distribution Metadata Reference
General Attribute Accuracy Positional Accuracy Source Information Process	Step
General Source Citation Source Time Period of Content	
Currentness Reference: publication date	
Single Date/Time Multiple Dates/Times	C Range of Dates/Times
Calendar Date Time of Day	
+ X I V D Source 1 of 1	
	<u>Save</u> <u>C</u> ancel <u>H</u> elp

Figure 25 - ArcCatalog[™] Source Time Period of Content Screen

4.4 Process Step

This section provides an explanation of the steps taken in constructing the data. Multiple process steps should be note and can be added with the small + button at the bottom of the screen. Each process step should include the process step contact if known. (FGDC p. 14-15)

An example of a process step entry is provided below.

Process Step #1 - This data set was created by scanning the 1:750,000-scale mylar overlays of the faults shown on Jennings (1994) using ARC/INFO software. Scanning, vectorization, and initial editing of the Quaternary faults were done by Richard Dart

and Michael Machette of the U.S. Geological Survey in Denver. Additional editing was done by Diane Burns and Geoffrey Faneros of the Division of Mines and Geology (CDMG) in Sacramento. The pre-Quaternary faults were digitized by Geoffrey Faneros and Jason Little of CDMG. The late Cenozoic faults in the Foothills Fault Zone are included with the pre-Quaternary faults and were digitized by Jennifer Davis of CDMG. George Saucedo and David Wagner of CDMG did proofing of both the initial and final editing.

Process Step #2 - Data downloaded by Redlands Institute, University of Redlands staff from an online linkage. Files unzipped and imported as necessary. Projection checked against project standards and reprojected if needed. Topology and attributes QA'd.

Dates should be in the format **YYYYMMDD** (for example, "19961123" could be used for the date November 23, 1996).

🗳 Editing Digita	I Database of I	aults from the F	ault Activi	ty Map of C	alifornia ar	nd Adjacent <i>i</i>	Areas'	? 🗙
Identification	Data Quality	Data Organization	Spatial Re	ference Er	itity Attribute	Distribution	Metadata R	eference
General Attribute	Accuracy Positi	onal Accuracy Sour	ce Information	n Process S	tep			
Process Description:	This data set was using ARC/INFO Richard Dart and Diane Burns and	created by scanning, software. Scanning, v Michael Machette of Geoffrey Faneros of th	the 1:750,000 vectorization, the U.S. Geol le Division of)-scale mylar o and initial editi ogical Survey Mines and Ge	verlays of the f ng of the Quat in Denver. Ad ology (DMG) in	aults shown on J ernary faults were ditional editing w Sacramento. TI	lennings (1994 e done by as done by he	
Process Software and Version:								
Process Date:	Unknown		•					
Process Time:								
Process Contact:	Wagner, David L.			<u>D</u> etails				
Source Used Cit	ation Abbreviation	CDMG_METADATA.T	XT.xml	- Source Proc	luced Citation /	Abbreviation —		
+ × K K	Source use	d 1 of 1		+ × K	Sou	rce Produced (+) of 0	
+ × II • •	Process Step	1 of 3						
					<u>S</u> ave	<u>C</u> ano	cel	Help

Figure 26 - ArcCatalog[™] Process Step Screen

4.4.1 Process Contact

In this section, the contact information for the individual or organization responsible for each step in creating the data set is recorded. This individual should be able to answer questions about the processing or procedures performed. (FGDC p. 58-60)

Person, Organization, Position: Name, organization, and title of individual to contact. For consistency with bibliographic references, it is recommended that you use 'last name, first name' format.

Voice Telephone & Fax Number: Should include area code and international access number if applicable.

Hours of Service: If used, should specify time zone (i.e. 8:00 am – 4:00 pm PST).

State & Country: Use accepted US Postal abbreviations (i.e. CA, US).

Primary Contact	Person:	Wagner, David L.		
Person	Organization:	California Department of C	onservation, Division of Mines and Geology	
Organization	Position:	Senior Geologist		
General Address				
Contact Voice	(916) 324-7380		Hours of Service:	
Telephone:		tact Phone 1 of 1		_
Contact Fax	(916) 322-4765			
Number: + × H •		tact Fax 1 of 1	Contact Instructions:	12
Contact Email	dwagner@consrv.ca.gov		A	
Address:		tact Email 1 of 1		
Contact TDD/TTY			6	
Telephone:	+ X K + > > Cont	act TDD/TTY (+) of 0		~
				or

Figure 27 - ArcCatalog[™] Process Step Contact Details Screen - General

<u>Realands Institute Manual for Creating Metadata in ArcCatalog</u>	<u>Redlands Institute Manual</u>	for Creating	<u>g Metadata in ArcCatalogTM</u>
--	----------------------------------	--------------	--

ninary contact	Person:	Wagner, David L.	
Person	Organization:	California Department of Conservation, Division of Mines and Geology	
° Organization	Position:	Senior Geologist	
ieneral Address			
Address Type:	mailing and physical addres	s •	
	801 K Street MS 12-31		
Address:	+ X II () DI Line	of Address 1 of 1	
Citur	Sacramento		
State or Province:			
Postal Code:	95814		
Country:	US		
	Taxable and another states and		

Figure 28 - ArcCatalogTM Process Step Contact Details Screen - Address

5.0 Data Organization

This section provides spatial data organization information (FGDC p16). ArcCatalog[™] automatically completes the information in this section, and this data should not be changed.

Editing 'cdmg_fau	lis'		F - 1 - 1 - 1		2
Identification Dal	ta Quality Data Organi	zation Spatial Refere	ence Entity Attribute	Distribution	Metadata Heference
General					
Direct Spatial Reference Method:	Vector		ndirect Spatial		
SDTS Terms	C VPF Terms				
ESRI Terms Descrip	otion				
Feature Type:	Simple	6			
Topology:	FALSE				
Feature Count:	24259				
Spatial Index:	FALSE				
Linear Referencing:	FALSE				
Feature Description:					
		I Terms Description 1 c	f2		
SDTS	oint and Vector Object Typ	e	Point and Vecto	r Obiect Count	1
Complete chain		•	24259		
+ × I	N Terms Description 1 o	12			
					F T
			Save	<u> </u>	cel <u>H</u> elp

Figure 29 - ArcCatalog[™] Data Organization Screen

6.0 Spatial Reference

If the data projection and coordinate system has been defined, $ArcCatalog^{TM}$ automatically completes all entries for this section. This should also not be changed. (FGDC p. 19-36)

Editing 'edmg_faults'					? 🛛
Identification Data Quality Dat	a Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Reference
General Horizontal Coordinate System	ertical Coordina	ate System			
Geographic Coordinate System Name:	GCS_North_A	merican_1983			
Projected Coordinate System Name:	NAD_1983_U	TM_Zone_11N			
Horizontal Datum Name:	North America	in Datum of 1983			<u> </u>
Ellipsoid Name:	Geodetic Refe	erence System 80			-
Semi-major Axis:	6378137.0000	000			
Denominator of Flattening Ratio:	298.257222				
			Save	<u>Cano</u>	el <u>H</u> elp

Figure 30 - ArcCatalogTM Spatial Reference Screen

7.0 Entity Attributes

ArcCatalog[™] automatically completes certain entity attribute fields. (FGDC p. 37-41)

Data Set Overview – This is a summary of the information content of the data set.

Entity and Attribute Overview: This is a more detailed summary of the information contained in the data set (FGDC p. 41).

For example, LTYPE might be line type; Line Types are recorded in the LTYPE Field: (on land) solid - well located; dashed - approximately located or inferred; dotted - concealed; (offshore) solid - well defined; dashed - inferred. LVALUE might be another line type; Line Values are also recorded in the LVALUE Field: 1 - solid; 2 - dashed; 3 - dotted. AGE – age of the fault

Entity and Attribute Citation: This section contains the bibliographic citation or agency information which is the source of the attributes and their values.

🛃 Edi	ting 'Digital D	atabase of	Faults from the F	ault Activity Map	of California an	d Adjacent Ar	eas' ?	X
Ident	tification	Data Quality	Data Organization	Spatial Reference	Entity Attribute	Distribution	Metadata Reference	:
Detail	ed Description	Overview Des	cription					
I	Dataset Overviev	The digital of coverages the user into Historic.e00	database consists of fiv have been converted ir o ARC coverages using I -Faults with historic dis	e ARC coverages rep tto ARC/INFO uncom the import command. placement; Holocene	resenting the five sub pressed export files (. The export files and .e00 - Faults with Hol	odivisions of the fa e00) and must be descriptions are a ocene displaceme	ults. These A converted by a ss follows: ent; 2	
l	Entity and Attribu Dverview:	te WIDTH - m OUTPUT - TYPE - B-b	E - name of the databa: aximum number of digit: output width; nary integer, F-binary flo	se field (item); s or characters stored; pating point number, l-	: ASCII integer, C-ASC	II character string,	; N.DEC	
ł	Entity and Attribu Detail Citation:	te					~	
		+ × 1	Detail Citatio	n (+) of 0				
	•× R = >)	🔟 Overview I	Description 1 of 1					
					<u>S</u> ave	<u>C</u> ancel	I <u>H</u> elp	

Figure 31 - ArcCatalog[™] Entity Attribute Overview Screen

7.1 Attribute Descriptions and Values

ArcCatalogTM automatically adds all the entity types (.aat, .pat, etc.) and their attributes to the metadata. Definitions for each attribute and a source for each definition must be provided. (FGDC p. 37-41)

■ Editing 'cdmg_faults'					? 🔀
Identification Data Quality	Data Organization	Spatial Reference	Entity Attribute	Distribution N	fetadata Reference
Detailed Description Overview D)escription				
Entity Type Attribute					
				_	
Labe	el: cdmg_fault	s.aat			
Тура	: Feature Cla	185			
Cour	nt:				
Defir	nition:				
Defir	nition Source:				
					72
+× III Detailed Detai	escription 1 of 1				
			<u>S</u> ave	<u>Cancel</u>	<u>H</u> elp

Figure 32 - ArcCatalog[™] Entity Attribute Detail Screen -Entity Type

For an ArcInfo coverage, there can be many 'entities', such as an .aat (arc attribute table) and a .pat (point attribute table). Within an ".aat", there are many attribute fields, such as LTYPE, LVALUE, and AGE. Each attribute must have a definition and source. Examples are provided in the following:

LTYPE - line type Line Types Recorded in the LTYPE Field:

(on land) solid - well located; dashed - approximately located or inferred; dotted - concealed;

(offshore) solid - well defined; dashed - inferred.

LVALUE - line value Line Values Recorded in the LVALUE Field: 1 - solid; 2 - dashed; 3 - dotted.

AGE – age of fault

Editing Digital Data Identification Data Detailed Description Ove	base of Faults from the Fault Ac a Quality Data Organization Spatia erview Description	tivity Map of California and A Reference Entity Attribute Dis	djacent Areas' 🔹 🔀 tribution Metadata Reference
Entity Type Attribute General Dates Label: Type: Width: Precision: Indexed: Definition: Definition Source:	Attribute Domain Values LTYPE Character 35 Line type Jennings,1994	Value Accuracy: Value Accuracy Explanation: Value Measurement Frequency:	 ▼
	Attribute 10 of 12 tailed Description 1 of 1		
		Save	<u>C</u> ancel <u>H</u> elp

Figure 33 - ArcCatalog[™] Entity Attribute Detail Screen – Attribute General

Attribute Domain Values

A description of the numeric values contained by each attribute must also be provided. There are four categories of values: enumerated, range, codeset, and unrepresentable.

Enumerated Domain: This domain is used to describe a list of values. For example, there might be 15 different types of roads. Each value should be listed in the metadata along with a definition of the value and the source of that definition.

Range Domain: This one is comprised of a sequence, series, or scale of (usually numeric) values between known limits. For example, the attribute age might have a range domain of integers from 0 to 100. The minimum and maximum values must be provided, as well as the source.

Codeset Domain: This is a domain in which the data values are defined by a set of codes. Examples include the Federal Information Processing Standards that contain numeric codes for nations as well as states and counties in the United States. The title of the publication containing the code set and the source of the codeset should be provided.

Unrepresentable Domain: This type is a domain in which the set of data values cannot be represented. Reasons include attributes whose values do not exist in a known, predefined set (for example, the values of an attribute based on people's names), or attributes whose values cannot be depicted using standard forms of representation (not in available character sets, etc.). In these cases, the information content of the value sets should be provided.

🖻 Editing 'Digital Database of Faults from the Fault Activity Map of California and Adjacent Areas' 💦 🗙
Identification Data Quality Data Organization Spatial Reference Entity Attribute Distribution Metadata Reference
Detailed Description Overview Description
Entity Type Attribute
General Dates Attribute Domain Values
Enumerated Domain C Codeset Domain C Unrepresentable Domain
Value: solid
Value Definition: well located
Value Definition Source: Jennings,1994
+ X II I FILL Enumerated Domain 1 of 3
+ X K () X Attribute Domain Value 1 of 1
+ X I I I Attribute 10 of 12
+ X K A Detailed Description 1 of 1
<u>S</u> ave <u>C</u> ancel <u>H</u> elp

Figure 34 - ArcCatalog[™] Entity Attribute Detail Screen – Attribute Values

8.0 Distribution

This section provides information about the distributor of and options for obtaining the data set. (FGDC p. 42-49)

🖻 Editing Digita	ıl Database of Faults from the Fault Activity Map of California and Adjacent Areas' 🛛 🔹 💽 🔀
Identification	Data Quality Data Organization Spatial Reference Entity Attribute Distribution Metadata Reference
General Distribut	or Standard Order Process Available Time Period
Resource Description:	Format Name: ARC/INFO export - (MAPINFO) Format Version Number: 7.1.1 - (4.5)
Distribution Liability:	"The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose."
Custom Order Process:	This product can also be ordered by phone using VISA, MasterCard, or American Express or by mail with check, money order or credit card through any DMG office.
Technical Prerequisites:	
	Distribution Information 1 of 1

Figure 35 - ArcCatalog[™] Distribution Screen

9.0 Metadata Reference

This section provides contact information for the individual or organization who wrote the metadata. The person or organization should be able to answer questions about the metadata and be responsible for updates if there are errors found in the metadata. (FGDC p. 50-52)

ArcCatalogTM automatically fills in Metadata Date, Metadata Standard Name, Metadata Standard Version, Metadata Time Convention, and Language of Metadata fields.

Metadata Access Constraints and Metadata Use Constraints: This includes all restrictions and legal prerequisites for accessing and using the metadata, which should normally be 'none'.

Metadata Security Information: This includes handling restrictions imposed on the metadata due to national security, privacy, or other concerns.

Metadata Security Classification System: This refers to any restrictions on handling of the metadata, which can be imposed for any number of reasons, including but not limited to national security, privacy or other concerns. This is normally 'none'.

Metadata Security Classification: This would include the type or security class applied to the metadata, and is normally 'Unclassified'.

🖻 Editing Digita	l Database of	Faults from the F	ault A	ctivity Map of C	alifornia ar	nd Adjacent	Areas'	? 🔀
Identification	Data Quality	Data Organization	Spati	al Reference Ent	tity Attribute	Distribution	Metadata	Reference
General Extensio	ns							
Metadata Date:	20030513			Metadata Standard	FGDC Conte	ent Standards fo	or Digital Geo	ospatial 💌
Metadata Review Date:				Metadata Standard Version:	FGDC-STD-	001-1998		
Metadata Future Review Date:				Metadata Time Convention:	local time			•
Language of Metadata:	en							
Contact:	California Departi	ment of Conservation, I	Divisio	<u>D</u> etails				
Metadata Access Constraints:	none							*
Metadata Use Constraints:	none							*
Metadata Security Information								
Classification Sy	vstem: none							
Classification:	Unclassifie	d		•				
Handling Inform	ation: none							×
					<u>S</u> ave	<u>C</u> ar	ncel [<u>H</u> elp

Figure 36 - ArcCatalog[™] Metadata Reference Screen

Person, Organization, Position: This field includes the name, organization and title of an individual to contact. For consistency with bibliographic citations, it is recommended that you use the 'last name, first name' format.

Voice Telephone & Fax Number: This information includes an area code and international access number when applicable.

Hours of Service: If used, a time zone should be specified (i.e. 8:00 am - 4:00 pm PST).

Address Type and Address: Fill in the address and if the address is the physical address, mailing address, or both.

City: List the city which applies to the address.

Postal Code: Use either the five or nine digit postal zip code.

State and Country: Use accepted US Postal abbreviations (i.e. CA, US) when utilizing this field.

Dates should be in the **YYYYMMDD** format (for example, "19840621" would be used for the date June 21, 1984).

ition			?
Person:	Saucedo, George J.		
Organization:	California Department of 0	Conservation, Division of Mines and Geology	
Position:	Associate Geologist		
(415) 904-7726		Hours of Service:	
	tact Phone 1 of 1		_
(415) 904-7715			
	tact Fax 1 of 1	Contact Instructions:	7
gsaucedo@consrv.ca.go	v		
	tact Email 1 of 1		
+ X II I > > Cont	act TDD/TTY (+) of 0		~
			ОК
	ition Person: Organization: Position: (415) 904-7726 + × × × × × × × × Conl (415) 904-7715 + × × × × × × × × × Conl gsaucedo@consrv.ca.gor + × × × × × × × × × × × × × × × × × × ×	Person: Saucedo, George J. Organization: California Department of C Position: Associate Geologist (415) 904-7726 (415) 904-7726 + X ()) Contact Phone 1 of 1 (415) 904-7715 (415) 904-7715 + X ()) Contact Fax 1 of 1 gsaucedo@consrv.ca.gov (415) Poster Contact Email 1 of 1 + X ()) Contact TDD/TTY (+) of 0	Image: state stat

Figure 37 - ArcCatalog[™] Metadata Contact Details Screen - General

rimary Contact —	Person:	Saucedo, George J.	
" Person	Organization:	California Department of Conservation, Division of Mines and Geology	
© Organization	Position:	Associate Geologist	
ieneral Address	1		
Address Tupe:	mailing and physical address	-	
Address Type.	Intering and physical address		
Address:	185 Berry Street, Suite 210		
		of Address 1 of 1	
City:	San Francisco		
State or Province:	CA		
Postal Code:	94107-1728		
Country:	US		
		ress 1 of 1	

Figure 38 - ArcCatalog[™] Metadata Contact Details Screen - Address

10.0 Importing and Exporting Metadata in ArcCatalogTM

If you receive data with a metadata file, either an .xml or text file, this metadata can be imported into **ArcCatalogTM** providing it is in the proper format. (If not, you will have to copy and paste from the original document into **ArcCatalogTM**). Metadata can also be exported in various formats to share with others.

10.1 Importing Metadata



- 1. Click on the file for which you want to import metadata.
- 2. Click the Metadata tab.
- 3. Click the Import Metadata button in the Metadata toolbar.
- 4. Click the Format dropdown arrow and then click the format of the metadata to be imported.
- 5. Click the Browse button.
- 6. Navigate to and click the metadata file whose contents are to be imported. Click Open.

< 3 9 9 9 9 9 9

7. Click OK.

The imported metadata will appear in the Metadata screen.

10.2 Exporting Metadata

- 1. Click on the file for which you want to export metadata.
- 2. Click the Metadata tab.
- 3. Click the Export Metadata button and the Metadata toolbar.
- 4. Click the Browse button.
- 5. Navigate to the folder in which the exported metadata resides; type a name for the new metadata file, and then click Save.
- 6. Click the Format dropdown arrow and click the format in which the metadata is to be exported.
- 7. Click OK.

A new file containing a copy of the item's metadata is created.

11.0 Thumbnails



- 1. Click the coverage or shape file for which a thumbnail is to be generated.
- 2. Click the Preview tab.
- 3. Click the Preview dropdown arrow on the Preview tab, and then click Geography.
- 4. Click the Zoom In button on the toolbar and zoom to an area best representing the layer's contents, or zoom out to the full extent of the data.
- 5. Click the Create Thumbnail button

12.0 Spell Checking Metadata

ESRI offers many Arc ObjectsTM macros online. These include tools and extensions that allow the customization of a variety of functions within many ESRI products. The spell check function for metadata is certainly one of the more useful of these tools.

To download the spell check tool, follow either of the two web links indicated below.

http://arconline.esri.com/arcobjectsonline/ samples, metadata, tools, Metadata, SpellChecker

Metadata SpellChecker

To add the spell check function to **ArcCatalog[™]**, click on the Tools dropdown list and then click Customize. Click the Toolbars tab and click 'add from file'. Find the "MDSpell.dll" downloaded earlier and click 'open'.

Once the SpellChecker function has been added to **ArcCatalogTM**, this tool will be accessible every time **ArcCatalogTM** is opened. To change the button image, click on the Tools dropdown menu and then click Customize. With the Customize window open, right click on the SpellChecker button (the default should be a wrench icon). Go to Change Button Image and pick a different one.

👂 ArcCatalog - ArcInfo - R:\DTP		
Eile Edit View Go Tools Help		
▲ ♦ ♦ ArcIoolbox Location: R:\DT ArcMap Stylesheet: FGDC Macros Q Q (*) Extensions		?×
Qptions © Catalog • @ C:\ • @ D:\DATA • @ DIP • @ D:\DATA	Toolbars Commands Options Toolbars: Image: Command Comma	
	Keyboard Add from file	Close

Figure 39 - ArcCatalog[™] Customize Toolbars Screen



Figure 40 - ArcCatalog[™] Change Button Image Screen

To spell check metadata, select a file in the tree on the left that has metadata, click the metadata tab on the right and click the Spellcheck Metadata button. A Microsoft Word document is generated with all the metadata elements that aren't automatically updated by **ArcCatalogTM**, and that don't contain numbers, dates, or thumbnails. Each value will be checked for spelling errors using Word's default dictionary settings. If a spelling error is found, the offending word can be corrected using Word's Spelling and Grammar dialog box. Any words that are changed will be updated in the **ArcCatalogTM** metadata document once the dialog is closed.

13.0 Stylesheets

The **ArcCatalogTM** program provides a variety of stylesheets to view your metadata. The following pages show the various types of stylesheets and the data that is shown on each. All the text that is entered is saved to the .xml file, which is shown as well, but not all styles provide a complete record.

📣 ArcCatalog - ArcInfo - R: \DTP\gis\env\g
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>T</u> ools <u>H</u> elp
🕒 🕒 🗿 角 🖿 🛱 🗙 🎠 🔠 🎬 🎟
Location: R:\DTP\gis\env\geology\faults\cdmg
Stylesheet: FGDC Classic 💌 🖌 🚽
0000

13.1 FGDC Classic Stylesheet

📣 ArcCatalog - ArcInfo - R:\DTP\gis\em	Ageology\faults\cdmg_faults	
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>T</u> ools <u>H</u> elp		
	38 😣 🚳 🍓 🕺	
Location: R:\DTP\gis\env\geology\faults\co	Img_faults	
Stylesheet: FGDC Classic 👻 🗸	a a ta	
Q Q (7) @ 0 3		
	Contents Preview Metadata	
e i gis e i adm e i AML	Digital Database of Faults from the Fault	
🕀 🧰 base	Activity Man of California and Adjacent	
i investigation in the second	A second second second second second	
🕀 📴 climate	Areas	
e 💼 faults	Matalata	
± '⊡' az_raults	Metadata:	
🗈 🔂 cdmg_majfai	Identification Information	
ternegi ternegi ternegi	Data Quality Information	
azfault.txt	Spatial Data Organization Information	
cdmg_faults_	Spatial Reference Information Entity and Attribute Information	
CDMC META	Distribution Information	
	Metadata Reference Information	
- E earthquakes		
i⊒ rouid_nicoge		
🔁 📄 geomor	Identification_Information:	
⊕ 🚰 us_landslides	Citation:	
weight of the second seco	Originator: Richard L. Dart, Michael N. Machette, Diane Burns, Geoffrey D.	
geol_mdep.doc	Faneros, Jason D. Little, and Jennifer R. Davis	
	Publication_Date: 2000	
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⊕	Issue Identification: 2000-006	
	Publication Place: Sacramento, CA, US	

Figure 41 - ArcCatalog[™] FGDC Classic Stylesheet

13.2 FGDC Stylesheet



Figure 42 - ArcCatalog[™] FGDC Stylesheet

13.3 FGDC ESRI Stylesheet



Figure 43 - ArcCatalog[™] FGDC ESRI Stylesheet

13.4 FGDC Geography Network Stylesheet

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🕀 🔂 us_quakes	California and Adjacent A	reas by Charles W. Jennings published in 1994. The map shows the			
azfault.txt	when displacements took	place according to available data. The displacements may have been			
- I cdmg Major	associated with earthqua	kes or may have been the result of gradual creep along the fault			
⊂≣ cdmg_majfa	surface. The faults are separated into five categories: historic, Holocene, late Quaternary, Quaternary, and pre-Quaternary. Many faults in Nevada and Baja California shown on the				
CDMG_META	published map are not in this digital database. The late Cenozoic faults in the Foothills Fault Zone				
	are included with the pre-Quaternary faults.				
faults_mcage	faults in California.				
	Supplemental Informatio	on: This database should be used in conjunction with the published			
i interal	Department of Conservation, Division of Mines and Geology (DMG) by mail: P.O. Box 2980,				
🕀 💇 us_landslides	Sacramento, CA 95812-2980 or by phone (916) 445-5716. The map is also available from DMG				
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Figure 44 - ArcCatalog[™] FGDC Geography Network Stylesheet

13.5 ISO Stylesheet



Figure 45 - ArcCatalog[™] ISO Stylesheet

13.6 ISO Geography Network Stylesheet



Figure 46 - ArcCatalog[™] ISO Geography Network Stylesheet

13.7 XML Stylesheet



Figure 47 - ArcCatalog[™] XML Stylesheet