# **Breaklines**

## File Geodatabase Feature Class

Thumbnail Not Available

## Tags

## elevation, Digital Elevation Model, Digital Terrain Model, DTM, Topography, Altitude, Height, Breaklines

## Summary

The purpose of this project was to develop statewide Digital Elevation Data (DTM) from the statewide two foot resolution 2006/2007 aerial imagery.

## Description

This metadata record describes the production of a Digital Terrain Model (DTM) and contours for the state of Mississippi. The DTM was compiled at a scale 400 feet from imagery with a 2' ground sample distance (GSD) from a previous statewide project. Part of the imagery acquisition occurred January through March, 2006. With additional acquisition occurred January, 2007. The following contributed to the Mississippi Statewide dataset: Fugro EarthData, Inc., Mississippi Geographic Information, LLC, Mississippi Department Environmental Quality, NOAA Coastal Services Center, Mississippi DOT, Mississippi State University, and Mississippi Coordinating Council for Remote Sensing and GIS.

## Credits

There are no credits for this item.

## **Use limitations**

Data should be used only as originally intended and is not for engineering or design purposes.

## Extent

 West
 -90.779054
 East
 -89.963212

 North
 33.046469
 South
 32.495979

 Scale Range
 There is no scale range for this item.

## ArcGIS Metadata ►

## **Topics and Keywords** ►

\* CONTENT TYPE Downloadable Data

Hide Topics and Keywords

## Citation **>**

\* TITLE Breaklines

PRESENTATION FORMATS \* digital map

Hide Citation 🔺

## **Resource Details** ►

DATASET LANGUAGES \* English (UNITED STATES)

SPATIAL REPRESENTATION TYPE \* vector

```
* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.2.1.3497
```

CREDITS

```
ARCGIS ITEM PROPERTIES

* NAME Breaklines

* LOCATION file://\\SWALKER-

PC\E$\DATA\MDEM_Vector_2015\MS_DTM_Project\Counties\Yazoo.gdb

* Access protocol Local Area Network
```

Hide Resource Details 🔺

## Extents ►

EXTENT VERTICAL EXTENT \* MINIMUM VALUE 57.049886 \* MAXIMUM VALUE 399.279844 EXTENT GEOGRAPHIC EXTENT BOUNDING RECTANGLE EXTENT TYPE EXtent used for searching \* WEST LONGITUDE -90.779054 \* EAST LONGITUDE -89.963212 \* NORTH LATITUDE 33.046469

- \* SOUTH LATITUDE 32.495979
- \* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* WEST LONGITUDE 2159999.999841
- \* EAST LONGITUDE 2409999.999840
- \* SOUTH LATITUDE 1090000.000040
- \* NORTH LATITUDE 1290000.000302
- \* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents

## **Resource Constraints** ►

CONSTRAINTS

LIMITATIONS OF USE

Data should be used only as originally intended and is not for engineering or design purposes.

Hide Resource Constraints

## Spatial Reference

ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983\_HARN

```
* PROJECTION NAD_1983_HARN_StatePlane_Mississippi_West_FIPS_2302_Feet
```

```
* COORDINATE REFERENCE DETAILS
```

```
PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 2900

X ORIGIN -17463400

Y ORIGIN -43523900

XY SCALE 3048.00609601219

Z ORIGIN -100000

Z SCALE 3048.00609601219

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.0032808333333333

Z TOLERANCE 0.0032808333333333

M TOLERANCE 0.001

HIGH PRECISION TRUE

LATEST WELL-KNOWN IDENTIFIER 2900

WELL-KNOWN TEXT

PROJECSI"NAD 1082 HABNI StatePlan
```

PROJCS["NAD\_1983\_HARN\_StatePlane\_Mississippi\_West\_FIPS\_2302\_Feet",GEOGCS["G CS\_North\_American\_1983\_HARN",DATUM["D\_North\_American\_1983\_HARN",SPHEROID ["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0. 0174532925199433]],PROJECTION["Transverse\_Mercator"],PARAMETER["False\_Easting ",2296583.3333333],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridia n",-

90.333333333333333333,PARAMETER["Scale\_Factor",0.99995],PARAMETER["Latitude\_Of\_O rigin",29.5],UNIT["Foot\_US",0.3048006096012192],AUTHORITY["EPSG",2900]],VERTCS ["NAVD\_1988",VDATUM["North\_American\_Vertical\_Datum\_1988"],PARAMETER["Vertical \_Shift",0.0],PARAMETER["Direction",1.0],UNIT["Foot",0.3048]]

REFERENCE SYSTEM IDENTIFIER

- \* VALUE 2900
- \* CODESPACE EPSG
- \* VERSION 8.2.6

Hide Spatial Reference

## Spatial Data Properties ►

VECTOR \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only GEOMETRIC OBJECTS FEATURE CLASS NAME Breaklines \* OBJECT TYPE composite \* OBJECT COUNT 247759 Hide Vector ARCGIS FEATURE CLASS PROPERTIES FEATURE CLASS NAME Breaklines \* FEATURE CLASS NAME Breaklines \* FEATURE TYPE Simple \* GEOMETRY TYPE Polyline \* HAS TOPOLOGY FALSE \* FEATURE COUNT 247759

```
* SPATIAL INDEX TRUE
```

\* LINEAR REFERENCING TRUE

Hide ArcGIS Feature Class Properties ▲

Hide Spatial Data Properties

## **Distribution** ►

```
DISTRIBUTOR ►

AVAILABLE FORMAT

* NAME File Geodatabase Feature Class

TRANSFER OPTIONS

ONLINE SOURCE

* LOCATION

file://\\ARMISTEAD\E\09_0024_Miss_Co_BLKs\WEST\Block1W\1BW\1BW_FINAL\Counti

es\Yazoo.gdb

* Access PROTOCOL Local Area Network

* DESCRIPTION Downloadable Data

Hide Distributor ▲
```

DISTRIBUTION FORMAT \* NAME File Geodatabase Feature Class

Hide Distribution  $\blacktriangle$ 

## Fields **>**

```
DETAILS FOR OBJECT Breaklines 

* TYPE Feature Class

* Row COUNT 247759

DEFINITION

Lines

DEFINITION SOURCE
```

Fugro EarthData, Inc.

FIELD OBJECTID ► \* ALIAS OBJECTID \* DATA TYPE OID \* WIDTH 4 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Internal feature number.

DESCRIPTION SOURCE

## ESRI

#### DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field OBJECTID ▲

FIELD SHAPE ►

- \* ALIAS SHAPE
- \* DATA TYPE Geometry
- \* WIDTH 0
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Feature geometry.

DESCRIPTION SOURCE

ESRI

### DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field SHAPE ▲

### FIELD SOURCE\_DATADESC

- \* ALIAS SOURCE\_DATADESC
- \* DATA TYPE String
- \* WIDTH 100
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION Aerial Imagery

DESCRIPTION SOURCE Fugro EarthData

DESCRIPTION OF VALUES Imagery

Hide Field SOURCE\_DATADESC ▲

FIELD DATA\_SECURITY ► \* ALIAS Data\_Security \* DATA TYPE SmallInteger

\* WIDTH 2 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Security classification code DESCRIPTION SOURCE National data model values LIST OF VALUES VALUE 0 DESCRIPTION Unknown ENUMERATED DOMAIN VALUE DEFINITION SOURCE National data Model VALUE 1 DESCRIPTION top secret ENUMERATED DOMAIN VALUE DEFINITION SOURCE National data model VALUE 2 DESCRIPTION Secret ENUMERATED DOMAIN VALUE DEFINITION SOURCE National data model VALUE 3 DESCRIPTION confidential ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE 4 **DESCRIPTION** restricted ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE 5 **DESCRIPTION** unclassified ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE 6 **DESCRIPTION** Sensitive ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model **ACCURACY INFORMATION** ACCURACY 5 EXPLANATION unclassified MEASUREMENT FREQUENCY Unknown Hide Field DATA SECURITY ▲

## FIELD DISTRIBUTION\_POLICY ►

- \* ALIAS Distribution\_Policy
- \* DATA TYPE String
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

access and use constraints of data E4

### **DESCRIPTION SOURCE**

national data model

### LIST OF VALUES

VALUE A1 DESCRIPTION emergency service provider - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE A2

DESCRIPTION emergency service provider - bitmap display via web ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

### VALUE A3

DESCRIPTION emergency service provider - free distribution to third parties ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

## VALUE A4

DESCRIPTION emergency service provider - free distribution to third parties via internet ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE B1

DESCRIPTION government agencies or thier delegated agents - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE B2

DESCRIPTION government agencies or their delegated agents - bitmap display via web ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE B3

DESCRIPTION government agencies or their delegated agents - free distribution to third parties

ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE B4

DESCRIPTION government agencies or their delegated agents - free distribution to third parties via internet

ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE C1

DESCRIPTION other public or educational institutions - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE C2

DESCRIPTION other public or educational institutions bitmap display via web ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

#### VALUE C3

DESCRIPTION other public or educational institutions - free distibutions to third parties ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

### VALUE C4 DESCRIPTION other public or educational institutions - free distribution to third parties via internet

ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

VALUE D1 DESCRIPTION data contributors - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE D2 DESCRIPTION data contributors - bitmap display via internet ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE D3 DESCRIPTION data contributors - free distribution to third parties ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE D4 DESCRIPTION data contributors - free distribution to third parties via internet ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE E1 DESCRIPTION Public domain - internall use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE E2 DESCRIPTION Public domain - bitmap display via web ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE E3 DESCRIPTION Public domain - free distribution to third parties ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE E4 DESCRIPTION Public domain - free distribution to third parties via internet ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ACCURACY INFORMATION ACCURACY 4 **EXPLANATION** Public domain - free distribution to third parties via internet MEASUREMENT FREQUENCY None planned Hide Field DISTRIBUTION\_POLICY ▲ FIELD LOADDATE \* ALIAS LOADDATE \* DATA TYPE Date \* WIDTH 8 \* PRECISION 0

\* SCALE 0 FIELD DESCRIPTION Date

DESCRIPTION SOURCE ESRI LIST OF VALUES VALUE Date DESCRIPTION Image capture and processing date ENUMERATED DOMAIN VALUE DEFINITION SOURCE Date of service

Hide Field LOADDATE

FIELD QUALITY \* ALIAS Quality \* DATA TYPE Integer \* WIDTH 4 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION Attribute code on the quality of the data base on MDEM standards DESCRIPTION SOURCE national data model LIST OF VALUES VALUE 1 DESCRIPTION MDEM ENUMERATED DOMAIN VALUE DEFINITION SOURCE National Data Model VALUE 2 DESCRIPTION NON MDEM ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model VALUE 0 DESCRIPTION UNKNOWN ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ACCURACY INFORMATION ACCURACY 1 **EXPLANATION** MDEM MEASUREMENT FREQUENCY None planned Hide Field QUALITY ▲ FIELD SCALE ► \* ALIAS Scale \* DATA TYPE Integer \* WIDTH 4 \* PRECISION 0 \* SCALE 0 FIELD DESCRIPTION 1:4800 DESCRIPTION SOURCE national data model

LIST OF VALUES VALUE 0 DESCRIPTION UNKNOWN OF SCALE NA ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

VALUE 1 DESCRIPTION small scale ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

VALUE 2 DESCRIPTION medium scale ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

VALUE 3 DESCRIPTION large scale ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model

Accuracy Information Accuracy 2 Explanation medium

MEASUREMENT FREQUENCY None planned

Hide Field SCALE

FIELD Level ►

- \* ALIAS Level
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION Microstation designation

DESCRIPTION SOURCE Microstation

DESCRIPTION OF VALUES Microstation level

Hide Field Level

FIELD SHAPE\_Length ►

- \* ALIAS SHAPE\_Length
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Length of feature in internal units.

DESCRIPTION SOURCE

ESRI

DESCRIPTION OF VALUES

Positive real numbers that are automatically generated.

Hide Field SHAPE\_Length ▲

Hide Details for object Breaklines

DETAILS FOR OBJECT MassPoints DEFINITION Ground points

DEFINITION SOURCE Fugro EarthData, Inc.

FIELD FIELD DESCRIPTION

Points

DESCRIPTION SOURCE Compilation

DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

Hide Field 🔺

Hide Details for object MassPoints ▲

DETAILS FOR OBJECT MassPoints DEFINITION Ground points

DEFINITION SOURCE Fugro EarthData, Inc. FIELD ► FIELD DESCRIPTION Points

DESCRIPTION SOURCE Compilation

DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

Hide Field 🔺

Hide Details for object MassPoints ▲

DETAILS FOR OBJECT Contour DEFINITION Generated contours

DEFINITION SOURCE Fugro EarthData, Inc.

FIELD FIELD DESCRIPTION Contours

DESCRIPTION SOURCE Compilation

DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

Hide Field 🔺

Hide Details for object Contour

Hide Fields

## Metadata Details **>**

\* METADATA LANGUAGE English (UNITED STATES)

\* METADATA CHARACTER SET 8859part1 - Latin alphabet No. 1

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset SCOPE NAME \* dataset

\* LAST UPDATE 2015-10-01

ARCGIS METADATA PROPERTIES METADATA FORMAT ESRI-ISO

CREATED IN ARCGIS FOR THE ITEM 2011-02-20 15:02:49 LAST MODIFIED IN ARCGIS FOR THE ITEM 2015-10-01 08:42:45

AUTOMATIC UPDATES HAVE BEEN PERFORMED Yes LAST UPDATE 2015-10-01 08:42:45

Hide Metadata Details

## FGDC Metadata (read-only) ▼

CITATION CITATION INFORMATION ORIGINATOR FUGTO EarthData, Inc. PUBLICATION DATE 2010 PUBLICATION TIME Unknown TITLE Breaklines EDITION 1st Edition GEOSPATIAL DATA PRESENTATION FORM vector digital data PUBLICATION INFORMATION PUBLICATION PLACE Frederick, Maryland PUBLISHER FUGTO EarthData, Inc. ONLINE LINKAGE \\ARMISTEAD\E\09\_0024\_Miss\_Co\_BLKs\WEST\Block1W\1BW\1BW\_FINAL\Counti es\Yazoo.gdb

## DESCRIPTION

ABSTRACT

This metadata record describes the production of a Digital Terrain Model (DTM) and contours for the state of Mississippi. The DTM was compiled at a scale 400 feet from imagery with a 2' ground sample distance (GSD) from a previous statewide project. Part of the imagery acquisition occurred January through March, 2006. With addtional acquisition occurred January, 2007. The following contributed to the Mississippi Statewide dataset: Fugro EarthData, Inc., Mississippi Geographic Information, LLC, Mississippi Department Environmental Quality, NOAA Coastal Services Center, Mississippi DOT, Mississippi State University, and Mississippi Coordinating Council for Remote Sensing and GIS.

PURPOSE

The purpose of this project was to develop statewide Digital Elevation Data (DTM) from the statewide two foot resolution 2006/2007 aerial imagery.

TIME PERIOD OF CONTENT

TIME PERIOD INFORMATION

SINGLE DATE/TIME

CALENDAR DATE REQUIRED: he year (and optionally month, or month and day) for which the data set corresponds to the ground.

RANGE OF DATES/TIMES

BEGINNING DATE 2006 ENDING DATE 2010 CURRENTNESS REFERENCE ground condition STATUS PROGRESS Complete MAINTENANCE AND UPDATE FREQUENCY UNKNOWN

SPATIAL DOMAIN BOUNDING COORDINATES WEST BOUNDING COORDINATE -90.779054 EAST BOUNDING COORDINATE -89.963212 NORTH BOUNDING COORDINATE 33.046469 SOUTH BOUNDING COORDINATE 32.495979

### Keywords

THEME THEME KEYWORD THESAURUS ISO 19115 Topic Category THEME KEYWORD elevation THEME KEYWORD Digital Elevation Model THEME KEYWORD DIgital Terrain Model THEME KEYWORD DTM THEME KEYWORD Topography THEME KEYWORD Altitude THEME KEYWORD Height THEME KEYWORD Breaklines

#### Place

PLACE KEYWORD THESAURUS Geographic Names Information System PLACE KEYWORD Mississippi PLACE KEYWORD USA PLACE KEYWORD North America

STRATUM

STRATUM KEYWORD THESAURUS Land STRATUM KEYWORD Land Surface

Temporal Temporal Keyword Thesaurus Date Temporal Keyword 2006 Temporal Keyword 2007

#### ACCESS CONSTRAINTS

None

Use Constraints Data should be used only as originally intended and is not for engineering or design purposes.

POINT OF CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Geospatial Resources Division MDEQ - Office of Geology CONTACT POSITION Director Geospatial Resources Division CONTACT ADDRESS ADDRESS TYPE mailing address ADDRESS PO Box 2279 CITY Jackson STATE OR PROVINCE Mississippi POSTAL CODE 39225-2279 COUNTRY UNITED STATES

> CONTACT VOICE TELEPHONE 601-961-5506 CONTACT FACSIMILE TELEPHONE 601-961-5521 CONTACT ELECTRONIC MAIL ADDRESS **Stephen\_Champlin@deq.state.ms.us** HOURS OF SERVICE Monday through Friday, 8:30am to 5:00pm

SECURITY INFORMATION SECURITY CLASSIFICATION SYSTEM National data model SECURITY CLASSIFICATION Unclassified SECURITY HANDLING DESCRIPTION None

NATIVE DATA SET ENVIRONMENT

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.2.6.1500

### Hide Identification

ATTRIBUTE ACCURACY

ATTRIBUTE ACCURACY REPORT

The accuracy of the data is dependent upon the 2 foot pixel resolution aerial imagery. See positional accuracy for attributes pertaining to elevation.

QUANTITATIVE ATTRIBUTE ACCURACY ASSESSMENT

ATTRIBUTE ACCURACY VALUE 3.3

ATTRIBUTE ACCURACY EXPLANATION RMSE value based on NGS points

LOGICAL CONSISTENCY REPORT

Compliance with the accuracy standard was ensured by the collection of photo identifiable GPS ground control

after the acquisition of aerial imagery. The following checks were performed.

1. The ground control and airborne GPS data stream were validated through a fully analytical bundle aerotriangulation adjustment. The RMSE is less than 1, 10,000th of the flying height.

2. The DEM data was checked against the project control. The technician visited and confirmed the

accuracy of the points during initial processing.

3. Digital orthophotography was validated through an inspection of edge matching and visual inspection for

image quality.

The following methods are used to assure imagery accuracy.

1. Use of IMU (inertial measurment unit) and ground control network utilizing GPS techniques.

2. Use of airborne GPS (global positioning system) in conjunction with the acquisition of imagery. The following

software is used for validation of the imagery and surface modeling.

1. Aerotriangulation - ISTAR

2. DEM data - ISTAR

3. Digital Orthophotography - ISTAR, OrthoPro, and Photoshop.

- 4. Bentley MicroStation
- 5. ISTAR

6. ESRI - ArcView, ArcMap

7. EarthData proprietary software

8. Adobe - Photoshop

COMPLETENESS REPORT

The data was collected from two foot pixel aerial imagery. The data set includes obscured areas and seasonal standing water. Refer to metadata process steps for methodology.

POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY REPORT

This data has been produced to be fully compliant with the ASPRS Class 2 at a scale of 1 = 400 feet with a 2' GSD. Resulting horizontal accuracies of +/- 4 RMSE will meet or exceed ASPRS accuracy standards.

QUANTITATIVE HORIZONTAL POSITIONAL ACCURACY ASSESSMENT

HORIZONTAL POSITIONAL ACCURACY VALUE 1.84

HORIZONTAL POSITIONAL ACCURACY EXPLANATION

Measurement of ground control versus stereo pairs after AT processing VERTICAL POSITIONAL ACCURACY

VERTICAL POSITIONAL ACCURACY VERTICAL POSITIONAL ACCURACY REPORT

Map scale 1:4800 with a 5 foot ASPRS Class II contour interval for the area. Data will reference Mississippi State Plane East and West coordinates, NAD83, NAVD88 vertical datum in US Survey Feet. Accuracy of all final map products will meet or exceed ASPRS Class II accuracy standards for large scale maps. Resulting vertical accuracies of +/- 3.3 RMSE will meet or exceed ASPRS accuracy standards.

QUANTITATIVE VERTICAL POSITIONAL ACCURACY ASSESSMENT

VERTICAL POSITIONAL ACCURACY VALUE 3.3' RMSE

VERTICAL POSITIONAL ACCURACY EXPLANATION

EarthData extracted a set of 6,167 NGS points throughout the state in order to complete the final product assessment.

. Lineage

SOURCE INFORMATION SOURCE CITATION

CITATION INFORMATION

ORIGINATOR EarthData International, Inc. (Aviation Division)

PUBLICATION DATE 2006-03-04

TITLE

Aerial Imagery EDITION 1

GEOSPATIAL DATA PRESENTATION FORM remote-sensing image

SOURCE SCALE DENOMINATOR 4800

TYPE OF SOURCE MEDIA disc

SOURCE TIME PERIOD OF CONTENT

TIME PERIOD INFORMATION

RANGE OF DATES/TIMES

BEGINNING DATE 2006-01-03

ENDING DATE 2006-03-04 SOURCE CURRENTNESS REFERENCE

around condition

Source Citation Abbreviation

Aerial Imagery

SOURCE CONTRIBUTION

Base imagery used to compile Breaklines, Mass points, Hydrography, and

Transportation.. Source INFORMATION

Source CITATION

CITATION INFORMATION

ORIGINATOR Waggoner Engineering, Inc.

PUBLICATION DATE 2006-06-07

PUBLICATION TIME UNKNOWN

TITLE

Mississippi Statewide - Photo Control EDITION 1 GEOSPATIAL DATA PRESENTATION FORM model

OTHER CITATION DETAILS

The additional 72 points were collected in 2009.

SOURCE SCALE DENOMINATOR 4800 TYPE OF SOURCE MEDIA electronic mail system SOURCE TIME PERIOD OF CONTENT TIME PERIOD INFORMATION SINGLE DATE/TIME CALENDAR DATE 2006-04-13 SOURCE CURRENTNESS REFERENCE around condition SOURCE CITATION ABBREVIATION Ground Control SOURCE CONTRIBUTION Waggoner Engineering, Inc., under contract to EarthData International, Inc. successfully established ground control for the Mississippi Statewide project (Part A). A total of 43 ground control points in Mississippi were acquired using GPS for both vertical and horizontal coordinate values. All 43 points utilized photo identifiable points. Additional 72 points were surveyed to supplement the compilation project. These points were collected using a similar methodolgy as the previous project. SOURCE INFORMATION SOURCE CITATION CITATION INFORMATION ORIGINATOR Fugro EarthData, Inc. PUBLICATION DATE 2009 TITLE Aerial Triangulation EDITION 1 GEOSPATIAL DATA PRESENTATION FORM tabular digital data SOURCE SCALE DENOMINATOR 4800 Type of Source Media disc SOURCE TIME PERIOD OF CONTENT TIME PERIOD INFORMATION SINGLE DATE/TIME CALENDAR DATE 2010 SOURCE CURRENTNESS REFERENCE around condition SOURCE CITATION ABBREVIATION AT SOURCE CONTRIBUTION Aerial triangulation report was submitted with the data. This process is an extension of ground survey data to allow compilation of mapping data. PROCESS STEP PROCESS DESCRIPTION Fugro EarthData, Inc. completed all phases of aerotriangulation (AT) for the 73 flight lines covering the Mississippi, Block 1 ADS40 Orthophotography Mapping Project. All final ADS40 data and related products will be delivered to the client in the projection(s) and datum(s) of UTM 16N, NAD83, Meters. All coordinates and measurements in this report will be presented in UTM 16N, NAD83, GRS80, Meters, unless otherwise stated. The results of this Aerial Triangulation solution are sufficient to support ASPRS Class 2 five foot contours. Collections: 9 Collection Dates: January 3rd, 11th, 24th, 29th, and 31st, February 7th and 9th, 2006 Ground Sample Distance (GSD): 1 pixel is equal to 2 ft Flight Level(s):18900 ft above mean terrain (AMT) Camera Type: Leica ADS-40

Camera Serial Number(s): SP9, SH-30034, SP6

All imagery for the collection of was acquired on the dates January 3rd, 11th, 24th, 29th, and 31st, February 7th and 9th, 2006 from an altitude of 18900 ft above mean terrain (AMT). The resulting Ground Sample Distance (GSD) of 1 pixel is equal to 2 ft of ground coverage. Fugro EarthData, Inc. acquired all photography using the Leica ADS-40 digital airborne sensor, serial number(s) SP9, SH-30034, SP6, each with a calibrated focal length of 62.77 mm. The entire project collection was completed with a total of 9 lift(s).

Source Used Citation Abbreviation Ground Control Source Used Citation Abbreviation Aerial Imagery

PROCESS DATE 2009-09-22 SOURCE PRODUCED CITATION ABBREVIATION

AT

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGRO EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 x212 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com HOURS OF SERVICE Monday through Friday, 8:30am to 5:00pm

PROCESS STEP PROCESS DESCRIPTION

Fugro EarthData, Inc. completed all phases of aerotriangulation (AT) for the 75 flight lines covering the Mississippi, Block 2 ADS40 Orthophotography Mapping Project. All final ADS40 data and related products will be delivered to the client in the projection(s) and datum(s) of UTM 16N, NAD83, Meters. All coordinates and measurements in this report will be presented in UTM 16N, NAD83, GRS80, Meters, unless otherwise stated. The results of this Aerial Triangulation solution are sufficient to support ASPRS Class 2 five foot contours.

Collections: 11

Collection Dates: January 5th, 7th, 14th, and 31st, February 4th, 7th, 9th, and 13th, 2006

Ground Sample Distance (GSD): 1 pixel is equal to 2 ft

Flight Level(s):18900ft above mean terrain (AMT)

Camera Type: Leica ADS40

Camera Serial Number(s): SP9, SH-30034, SP12, SP6

All imagery for the collection of was acquired on the dates January 5th, 7th, 14th, and 31st, February 4th, 7th, 9th, and 13th, 2006 from an altitude of 18900 ft above mean terrain (AMT). The resulting Ground Sample Distance (GSD) of 1 pixel is equal to 2 ft of ground coverage. Fugro EarthData, Inc. acquired all photography using the Leica ADS40 digital airborne sensor, serial number(s) SP9, SH-30034, SP12, SP6, each with

a calibrated focal length of 62.77 mm. The entire project collection was completed with a total of 11 lift(s). PROCESS DATE 2009-09-22

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Fugro EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-863-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com HOURS OF SERVICE M-F 8-5

PROCESS STEP

PROCESS DESCRIPTION

Fugro EarthData, Inc. completed all phases of aerotriangulation (AT) for the 73 flight lines covering the Mississippi, Block 3 ADS40 Orthophotography Mapping Project. All final ADS40 data and related products will be delivered to the client in the projection(s) and datum(s) of UTM 16N, NAD83, Meters. All coordinates and measurements in this report will be presented in UTM 16N, NAD83, GRS80, Meters, unless otherwise stated. The results of this Aerial Triangulation solution are sufficient to support ASPRS Class 2 five foot contours.

Collections: 13

Collection Dates: January 5th, 7th, 11th, 14th, and 25th, February 13th, March 1st and 4th, 2006

Ground Sample Distance (GSD): 1 pixel is equal to 2 ft

Flight Level(s): 18900 ft above mean terrain (AMT)

Camera Type: Leica ADS40

Camera Serial Number(s): SP9, SH-30034, SP12, SP6, SP17, SP19

All imagery for the collection of was acquired on the dates January 5th, 7th, 11th, 14th, and 25th, February 13th, March 1st and 4th, 2006 from an altitude of 18901 ft above mean terrain (AMT). The resulting Ground Sample Distance (GSD) of 1 pixel is equal to 2 ft of ground coverage. Fugro EarthData, Inc. acquired all photography using the Leica ADS40 digital airborne sensor, serial number(s) SP9, SH-30034, SP12, SP6, SP17, SP19, each with a calibrated focal length of 62.77 mm. The entire project collection was completed with a total of 13 lift(s).

PROCESS DATE 2009-09-22

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Fugro EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

> CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com

PROCESS STEP PROCESS DESCRIPTION

Block 4 was processed under this work order but was scheduled to have additional field points incorporated into the solution on a later contract. Fugro EarthData, Inc. completed all phases of aerotriangulation (AT) for the 56 flight lines covering the Mississippi, Block 4 ADS40 Orthophotography Mapping Project. All final ADS40 data and related products will be delivered to the client in the projection(s) and datum(s) of UTM 16N, NAD83, Meters. All coordinates and measurements in this report will be presented in UTM 16N, NAD83, GRS80, Meters, unless otherwise stated. The results of this Aerial Triangulation solution are sufficient to support ASPRS Class 2 five foot contours.

Collections: 9

Collection Dates: January 5th, 7th, 14th, 29th, 8th and 29th, 2007

Ground Sample Distance (GSD): 1 pixel is equal to 2 ft

Flight Level(s): 18900 ft above mean terrain (AMT)

Camera Type: Leica ADS40

Camera Serial Number(s): SP12, SP6, SP19, SP17

All imagery for the collection of was acquired on the dates January 5th, 7th, 14th, 29th, 8th and 29th, 2007 from an altitude of 18901 ft above mean terrain (AMT). The resulting Ground Sample Distance (GSD) of 1 pixel is equal to 2 ft of ground coverage. Fugro EarthData, Inc. acquired all photography using the Leica ADS40 digital airborne sensor, serial number(s) SP12, SP6, SP19, SP17, each with a calibrated focal length of 62.77 mm. The entire project collection was completed with a total of 9 lift(s). PROCESS DATE 2009-10-28

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGIO EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com

## PROCESS STEP

### PROCESS DESCRIPTION

Fugro EarthData, Inc. completed all phases of aerotriangulation (AT) for the 56 flight lines covering the Mississippi, Block 5 ADS40 Orthophotography Mapping Project. All

final ADS40 data and related products will be delivered to the client in the projection(s) and datum(s) of UTM 16N, NAD83, Meters. All coordinates and measurements in this report will be presented in UTM 16N, NAD83, GRS80, Meters, unless otherwise stated. The results of this Aerial Triangulation solution are sufficient to support ASPRS Class 2 five foot contours. Collections: 12 Collection Dates: January 2nd, 6th, 9th, and 29th, March 8th, 9th, 16th, and 17th, 2007 Ground Sample Distance (GSD): 1 pixel is equal to 2 ft Flight Level(s): 18900 ft above mean terrain (AMT) Camera Type: Leica ADS40 Camera Serial Number(s): SP9, SP19 All imagery for the collection of was acquired on the dates January 2nd, 6th, 9th, and 29th, March 8th, 9th, 16th, and 17th, 2007 from an altitude of 18901 ft above mean terrain (AMT). The resulting Ground Sample Distance (GSD) of 1 pixel is equal to 2 ft of ground coverage. Fugro EarthData, Inc. acquired all photography using the Leica ADS40 digital airborne sensor, serial number(s) SP9, SP19, each with a calibrated focal length of 62.77 mm. The entire project collection was completed with a total of 12 lift(s). PROCESS DATE 2009-09-22 PROCESS CONTACT

CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGTO EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com

PROCESS STEP

PROCESS DESCRIPTION

Stereo pairs generated from the 2' GSD orthoimagery, were used for compiling the breaklines and mass points.

Breaklines were captured along water features and designate closed marsh, other open water and other water bodies (i.e. streams) were captured to the standard cartographic specifications for 400-scale mapping.

Supporting compiled features include a 200' post grid of mass points and other required breaklines necessary to support generation of 5' Class II contours. Breaklines were placed in such locations as sharp peaks and valleys, cliffs, drop offs, cut, fill, road crowns, drainage features, etc. It should be noted that these supplemental breaklines were compiled on an as-needed basis only, and will not serve as a complete transportation or other planimetric data layer. Breaklines were placed to suitably define the terrain for the contours to meet the accuracy standard. Following breakline compilation, extraneous mass points may have been eliminated near breakline features that take precedence for contour generation. As a result, the final deliverable mass

point data set may have isolated areas that do not comply with the nominal 200' spacing. Source Used CITATION ABBREVIATION

Ground Control Source Used CITATION ABBREVIATION Aerial Imagery Process Date 2010

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGTO EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com

#### PROCESS STEP PROCESS DESCRIPTION

Following compilation and editing of the mass points and breaklines, a triangulated irregular network (TIN) was generated as the first step in contour generation. Using the resulting TIN, the contours were generated at a 5' interval. The 5-foot contours were auto-generated using TerraModeler software running on MicroStation. The TIN is considered a production product only and will not be delivered. All resulting contour datasets were translated from MicroStation to ArcInfo geodatabase meeting the requirements of the client supplied database schema.

PROCESS DATE 2010

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Fugro EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com

PROCESS STEP PROCESS DESCRIPTION In areas with water above normal levels the elevation was established where the water was at its lowest point on either end of the high water. The elevation was then computed on either end to establish flow direction. Water direction was checked at inflows from side streams as well and flow direction was verified.

PROCESS DATE 2010

PROCESS CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGRO Earthdata, Inc. CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

Contact Voice Telephone 301-948-8550 Contact Facsimile Telephone 301-Hours of Service 8-5 M-F

#### PROCESS STEP

#### PROCESS DESCRIPTION

The aerial imagery acquisition for the Mississippi Statewide project (Part A) was flown to support the creation of digital orthophotography with a 2' GSD. The imagery was acquired in 31 lifts consisting of 285 lines running east, west. The imagery was flown at 18,900 feet above mean terrain. Imagery was flown with a 30% overlap between flight lines. All imagery was collected using the Leica ADS40 digital pushbroom sensor. The aerial imagery acquisition for Part B MS was flown to support the creation of digital orthophotography with a 2ft GSD. The imagery was acquired in 6 lifts consisting of 116 lines running east, west. The imagery was flown at 18900 Des. Alt AGL (ft). Imagery was flown with a 30% overlap between flight lines. All imagery was collected using the Leica ADS40 digital pushbroom sensor.

PROCESS DATE 2006

#### PROCESS STEP

PROCESS DESCRIPTION Metadata imported. Source Used CITATION ABBREVIATION C:\Final\_Files\_to\_use\MS\_breaklines.xml

CLOUD COVER 0

#### Hide Data Quality 🔺

HORIZONTAL COORDINATE SYSTEM DEFINITION PLANAR PLANAR COORDINATE INFORMATION PLANAR COORDINATE ENCODING METHOD coordinate pair COORDINATE REPRESENTATION ABSCISSA RESOLUTION 0.000328 ORDINATE RESOLUTION 0.000328 PLANAR DISTANCE UNITS SURVEY feet

GEODETIC MODEL HORIZONTAL DATUM NAME D\_North\_American\_1983\_HARN Ellipsoid Name Geodetic Reference System 80 Semi-major Axis 6378137.000000 DENOMINATOR OF FLATTENING RATIO 298.257222

VERTICAL COORDINATE SYSTEM DEFINITION ALTITUDE SYSTEM DEFINITION ALTITUDE DATUM NAME North American Vertical Datum of 1988 ALTITUDE RESOLUTION 0.000328 ALTITUDE DISTANCE UNITS Feet ALTITUDE ENCODING METHOD Explicit elevation coordinate included with horizontal coordinates

### Hide Spatial Reference

DETAILED DESCRIPTION ENTITY TYPE ENTITY TYPE LABEL Breaklines ENTITY TYPE DEFINITION Lines ENTITY TYPE DEFINITION SOURCE Fugro EarthData, Inc.

ATTRIBUTE ATTRIBUTE LABEL OBJECTID ATTRIBUTE DEFINITION Internal feature number. ATTRIBUTE DEFINITION SOURCE ESRI ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

ATTRIBUTE ATTRIBUTE LABEL SHAPE ATTRIBUTE DEFINITION Feature geometry. ATTRIBUTE DEFINITION SOURCE ESRI ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

ATTRIBUTE ATTRIBUTE LABEL SOURCE\_DATADESC ATTRIBUTE DEFINITION Aerial Imagery ATTRIBUTE DEFINITION SOURCE FUGRO EarthData ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Imagery

Attribute Attribute Label DATA\_SECURITY Attribute Definition Security classification code Attribute Definition Source National data model values Attribute Domain Values Enumerated Domain Value 0 Enumerated Domain Value 0 Enumerated Domain Value Definition Unknown Enumerated Domain Value Definition Source National data Model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 1 **ENUMERATED DOMAIN VALUE DEFINITION** top secret **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** National data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 2 ENUMERATED DOMAIN VALUE DEFINITION secret ENUMERATED DOMAIN VALUE DEFINITION SOURCE National data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 3 ENUMERATED DOMAIN VALUE DEFINITION confidential **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 4 ENUMERATED DOMAIN VALUE DEFINITION restricted **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 5 ENUMERATED DOMAIN VALUE DEFINITION unclassified **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE 6 **ENUMERATED DOMAIN VALUE DEFINITION** Sensitive **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ATTRIBUTE VALUE ACCURACY INFORMATION ATTRIBUTE VALUE ACCURACY 5 ATTRIBUTE VALUE ACCURACY EXPLANATION unclassified ATTRIBUTE MEASUREMENT FREQUENCY Unknown ATTRIBUTE ATTRIBUTE LABEL DISTRIBUTION\_POLICY ATTRIBUTE DEFINITION access and use constraints of data E4 ATTRIBUTE DEFINITION SOURCE national data model

ATTRIBUTE DEFINITION SOURCE national data mo ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN VALUE A1 ENUMERATED DOMAIN VALUE DEFINITION emergency service provider - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE A2 ENUMERATED DOMAIN VALUE DEFINITION emergency service provider - bitmap display via web **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE A3 ENUMERATED DOMAIN VALUE DEFINITION emergency service provider - free distribution to third parties **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE A4 ENUMERATED DOMAIN VALUE DEFINITION emergency service provider - free distribution to third parties via internet ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE B1 **ENUMERATED DOMAIN VALUE DEFINITION** government agencies or thier delegated agents - internal use only **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE B2 **ENUMERATED DOMAIN VALUE DEFINITION** government agencies or their delegated agents - bitmap display via web ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE B3 **ENUMERATED DOMAIN VALUE DEFINITION** government agencies or their delegated agents - free distribution to third parties **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE B4 ENUMERATED DOMAIN VALUE DEFINITION government agencies or their delegated agents - free distribution to third parties via internet **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE C1 ENUMERATED DOMAIN VALUE DEFINITION other public or educational institutions - internal use only ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE C2 ENUMERATED DOMAIN VALUE DEFINITION other public or educational institutions bitmap display via web **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE C3 **ENUMERATED DOMAIN VALUE DEFINITION** other public or educational institutions - free distibutions to third parties **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** 

ENUMERATED DOMAIN VALUE C4 **ENUMERATED DOMAIN VALUE DEFINITION** other public or educational institutions - free distribution to third parties via internet **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE D1 ENUMERATED DOMAIN VALUE DEFINITION data contributors - internal use only **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE D2 **ENUMERATED DOMAIN VALUE DEFINITION** data contributors - bitmap display via internet **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE D3 ENUMERATED DOMAIN VALUE DEFINITION data contributors - free distribution to third parties **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE D4 ENUMERATED DOMAIN VALUE DEFINITION data contributors - free distribution to third parties via internet **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE E1 **ENUMERATED DOMAIN VALUE DEFINITION** Public domain - internall use only **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE E2 **ENUMERATED DOMAIN VALUE DEFINITION** Public domain - bitmap display via web **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE E3 ENUMERATED DOMAIN VALUE DEFINITION Public domain - free distribution to third parties **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE E4 ENUMERATED DOMAIN VALUE DEFINITION Public domain - free distribution to third parties via internet **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ATTRIBUTE VALUE ACCURACY INFORMATION ATTRIBUTE VALUE ACCURACY 4 ATTRIBUTE VALUE ACCURACY EXPLANATION Public domain - free distribution to third parties via internet ATTRIBUTE MEASUREMENT FREQUENCY None planned

ATTRIBUTE ATTRIBUTE LABEL LOADDATE ATTRIBUTE DEFINITION Date ATTRIBUTE DEFINITION SOURCE ESRI ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE Date ENUMERATED DOMAIN VALUE DEFINITION Image capture and processing date **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** Date of service ATTRIBUTE ATTRIBUTE LABEL QUALITY ATTRIBUTE DEFINITION Attribute code on the quality of the data base on MDEM standards ATTRIBUTE DEFINITION SOURCE national data model ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 1 **ENUMERATED DOMAIN VALUE DEFINITION** MDFM **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** National Data Model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 2 **ENUMERATED DOMAIN VALUE DEFINITION** Non MDEM ENUMERATED DOMAIN VALUE DEFINITION SOURCE national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 0 **ENUMERATED DOMAIN VALUE DEFINITION** unknown **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ATTRIBUTE VALUE ACCURACY INFORMATION ATTRIBUTE VALUE ACCURACY 1 ATTRIBUTE VALUE ACCURACY EXPLANATION MDEM ATTRIBUTE MEASUREMENT FREQUENCY None planned ATTRIBUTE ATTRIBUTE LABEL SCALE ATTRIBUTE DEFINITION 1:4800 ATTRIBUTE DEFINITION SOURCE national data model

ATTRIBUTE DEPINITION SOU ATTRIBUTE DOMAIN VALUES ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE 0 ENUMERATED DOMAIN VALUE DEFINITION

unknown or scale NA

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

national data model

ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 1

**ENUMERATED DOMAIN VALUE DEFINITION** small scale **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model **ENUMERATED DOMAIN** ENUMERATED DOMAIN VALUE 2 **ENUMERATED DOMAIN VALUE DEFINITION** medium scale **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ENUMERATED DOMAIN ENUMERATED DOMAIN VALUE 3 **ENUMERATED DOMAIN VALUE DEFINITION** large scale **ENUMERATED DOMAIN VALUE DEFINITION SOURCE** national data model ATTRIBUTE VALUE ACCURACY INFORMATION ATTRIBUTE VALUE ACCURACY 2 ATTRIBUTE VALUE ACCURACY EXPLANATION medium ATTRIBUTE MEASUREMENT FREQUENCY None planned

#### ATTRIBUTE

ATTRIBUTE LABEL Level ATTRIBUTE DEFINITION Microstation designation ATTRIBUTE DEFINITION SOURCE Microstation ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Microstation level

#### Attribute

ATTRIBUTE LABEL SHAPE\_Length ATTRIBUTE DEFINITION Length of feature in internal units. ATTRIBUTE DEFINITION SOURCE ESRI ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Positive real numbers that are automatically generated.

DETAILED DESCRIPTION ENTITY TYPE ENTITY TYPE LABEL MassPoints ENTITY TYPE DEFINITION Ground points ENTITY TYPE DEFINITION SOURCE Fugro EarthData, Inc.

ATTRIBUTE ATTRIBUTE DEFINITION Points ATTRIBUTE DEFINITION SOURCE Compilation ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

DETAILED DESCRIPTION ENTITY TYPE ENTITY TYPE LABEL MassPoints ENTITY TYPE DEFINITION Ground points ENTITY TYPE DEFINITION SOURCE Fugro EarthData, Inc.

ATTRIBUTE ATTRIBUTE DEFINITION Points ATTRIBUTE DEFINITION SOURCE Compilation ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Sequential unique whole numbers that are automatically generated.

DETAILED DESCRIPTION ENTITY TYPE ENTITY TYPE LABEL Contour ENTITY TYPE DEFINITION Generated contours ENTITY TYPE DEFINITION SOURCE Fugro EarthData, Inc.

ATTRIBUTE ATTRIBUTE DEFINITION Contours ATTRIBUTE DEFINITION SOURCE Compilation ATTRIBUTE DOMAIN VALUES UNREPRESENTABLE DOMAIN Positive real numbers that are automatically generated.

### Hide Entities and Attributes $\blacktriangle$

DISTRIBUTOR CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION Mississippi Geospatial Clearinghouse, Mississippi Department Information Technology Service CONTACT ADDRESS ADDRESS TYPE physical address ADDRESS 301 N. Lamar Street, Suite 508 CITY Jackson STATE OR PROVINCE MS POSTAL CODE 39201-1495 COUNTRY UNITED STATES

Contact Voice Telephone (601) 359-1395 Contact Facsimile Telephone (601) 354-6016 Hours of Service 8:00 - 5:00

RESOURCE DESCRIPTION Mississippi Statewide Digital Terrain Model (DTM) and Contour Mapping 2006-2007 DISTRIBUTION LIABILITY The Mississippi Office of Geology provides the data to any interested party as is in the present format. STANDARD ORDER PROCESS DIGITAL FORM DIGITAL TRANSFER INFORMATION FORMAT NAME ARCE FORMAT VERSION NUMBER gdb FORMAT SPECIFICATION available in a variety of formats DIGITAL TRANSFER OPTION ONLINE OPTION COMPUTER CONTACT INFORMATION NETWORK ADDRESS NETWORK RESOURCE NAME http://www.gis.ms.gov

OFFLINE OPTION OFFLINE MEDIA portable hard drive RECORDING CAPACITY RECORDING DENSITY 1 RECORDING DENSITY UNITS NA RECORDING FORMAT MS COMPATIBILITY INFORMATION MS

FEES none ORDERING INSTRUCTIONS see Geospatial Clearinghouse website for instructions.

AVAILABLE TIME PERIOD TIME PERIOD INFORMATION SINGLE DATE/TIME CALENDAR DATE 2010

### Hide Distribution Information

METADATA DATE 2011-02-20 METADATA REVIEW DATE 2010-08-10 METADATA CONTACT CONTACT INFORMATION CONTACT ORGANIZATION PRIMARY CONTACT ORGANIZATION FUGTO EarthData, Inc. CONTACT PERSON John Knowlton CONTACT POSITION Project Manager CONTACT ADDRESS ADDRESS TYPE mailing and physical address ADDRESS 7320 Executive Way CITY Frederick STATE OR PROVINCE MD POSTAL CODE 21704 COUNTRY UNITED STATES

CONTACT VOICE TELEPHONE 301-948-8550 x212 CONTACT FACSIMILE TELEPHONE 301-963-2064 CONTACT ELECTRONIC MAIL ADDRESS jknowlton@earthdata.com HOURS OF SERVICE Monday through Friday, 8:30am to 5:00pm

METADATA STANDARD NAME FGDC Content Standards for Digital Geospatial Metadata METADATA STANDARD VERSION FGDC-STD-001-1998 METADATA TIME CONVENTION local time

METADATA USE CONSTRAINTS None METADATA EXTENSIONS ONLINE LINKAGE http://www.esri.com/metadata/esriprof80.html PROFILE NAME ESRI Metadata Profile Hide Metadata Reference 🔺