Identification_Information:

Citation:

Citation Information:

Originator: EarthData International

Publication_Date: 20071218 Publication_Time: Unknown

Title: MDEM/MDEQ Coastal Ground Orthoimagery Mr SID Files

Edition: 2007

Geospatial Data Presentation Form: remote-sensing image

Series Information:

Series_Name: MS Coastal Ground Orthos Mr SID Files

Issue_Identification: 1 Publication Information:

Publication Place: EarthData International

Publisher: EarthData International

Description:

Abstract:

This metadata record describes the production of Mr SID compressed files for the 30cm and 15cm ground ortho natural color digital orthoimagery. The output Mr SID files are at a 15cm resolution for the entire data set and at a 20:1 compression ratio. All Mr SID files are in the Generation 3 format. The source data consisting of 2797 sheets (5000' x 5000') for the 6 coastal George, Hancock, Harrison, Jackson, Pearl River and Stone was compressed and mosaicked into 4-5 areas per county. This project was tasked by Mississippi Geographic Information, LLC (MGI) with Work Orders ED-9 & ED-9A. EarthData International, Inc. was authorized to undertake this project in accordance with the terms and conditions of the professional service agreement between MGI and EarthData International, Inc., dated February 14, 2007.

Purpose:

The imagery may be used for basemap, cadastral and/or infrastructure mapping purposes. All imagery was acquired in spring 2007 and processed during the spring, summer and fall of 2007.

Time_Period_of_Content:

Time Period Information:

Range of Dates/Times:

Beginning_Date: 20070125 Ending_Date: 20070206 Currentness Reference: Publication Date

Status:

Progress: Complete

Maintenance_and_Update_Frequency: Unknown

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Spatial_Domain:
             Bounding_Coordinates:
                    West_Bounding_Coordinate: -089.868435
                    East_Bounding_Coordinate: -088.399955
                    North Bounding Coordinate: +31.026046
                    South_Bounding_Coordinate: +30.252168
      Keywords:
             Theme:
                    Theme Keyword Thesaurus: Orthoimagery
                    Theme_Keyword: Natural Color
                    Theme_Keyword: Aerial Imagery
                    Theme_Keyword: Aerial Photography
                    Theme Keyword: EarthData International
                    Theme_Keyword: Digital Orthos
                    Theme_Keyword: 1ft imagery
                    Theme_Keyword: 30cm imagery
                    Theme Keyword: Mr SID
             Place:
                    Place_Keyword_Thesaurus: Geographic Names Information System
                    Place_Keyword: EarthData International, Inc.
                    Place_Keyword: United States
                    Place Keyword: Mississippi
                    Place_Keyword: Coastal MS
      Access Constraints: None
      Use Constraints: None
      Point_of_Contact:
             Contact Information:
                    Contact_Organization_Primary:
                           Contact Organization: EarthData International, Inc.
                           Contact Person: Harold Rempel
                    Contact_Position: Program Management Director
                    Contact Address:
                           Address_Type: mailing and physical address
                           Address: 7320 Executive Way
                           City: Frederick
                           State_or_Province: Maryland
                           Postal Code: 21704
                    Contact_Voice_Telephone: 301-948-8550
                    Contact Facsimile Telephone: 301-963-2064
                    Contact Electronic Mail Address: hrempel@earthdata.com
                    Hours_of_Service: 8:30-5:00pm
Data_Quality_Information:
      Attribute_Accuracy:
```

Attribute Accuracy Report:

The source data has been produced to be fully compliant with the National Standard for Spatial Data Accuracy

(NSSDA) at a scale of 1 to 200.

Logical_Consistency_Report:

For the source imagery, 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 DSM (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.

Completeness_Report:

The following methods are used to assure the source 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. DSM and 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

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal Positional Accuracy Report:

The source data has been produced to be fully compliant with the National Standard for Spatial Data Accuracy (NSSDA) at a scale of 1 to 200.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

There is no vertical accuracy component to orthophotography.

Lineage:

Source_Information:

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Source Citation:
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Citation Information:

Originator: EarthData International, Inc

Publication_Date: 20070514 Publication Time: Unknown

Title: MDEM/MGI MS Coastal Counties Aerial Imagery

Edition: 1

Geospatial_Data_Presentation_Form: remote-sensing

image

Type_of_Source_Media: Firewire and/or DVD

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20070102 Ending_Date: 20070214

Source_Currentness_Reference: Publication Date

Source_Citation_Abbreviation: Aerial Imagery

Source_Contribution:

The sopurce, digital orthophotography is comprised of a 24 bit, natural color, 6" GSD and 1' GSD (15 and 30cm respectively) ground orthos for the ground ortho section of the MS Coastal Counties project area.

Process_Step:

Process_Description:

Mosaic attributes for the MrSID compression were set for a 20:1 compression. The input files were then inserted (30 and 15cm geotiffs) and then the following steps were followed:

- 1) Maximum zoom levels set for images
- 2) Weight 2 Frequency Balance 2
- 3) Sharpness 0
- 4) Block Size 64
- 5) Strip Height 12
- 6) 2 Pass Optimizer
- 7) X Resolution 0.5 (15cm), Y
- 8) Resolution 0.5 (15cm)
- 9) Error Fraction 0.125
- 10) Block Value 2048
- 11) Resample Method Nearest Neighbor

Completed MrDIS mosaics were delviered via DVD, seperated by county.

Process Date: 20070320

Source_Produced_Citation_Abbreviation: MrSID

Process Contact:

Contact Information:

Contact_Person_Primary:

```
Contact_Person: Harold Rempel
                                         Contact_Organization: EarthData International
                                  Contact_Position: Program Management Director
                                  Contact Address:
                                         Address_Type: mailing and physical address
                                         Address: 7320 Executive Way
                                         City: Frederick
                                         State_or_Province: Maryland
                                         Postal Code: 21704
                                         Country: USA
                                  Contact_Voice_Telephone: (301) 948-8550
                                  Contact_Facsimile_Telephone: (301) 963-2064
                                  Contact_Electronic_Mail_Address:
Spatial_Data_Organization_Information:
      Direct Spatial Reference Method: Raster
             Raster_Object_Type: Pixel
             Column_Count: 5000
      Horizontal Coordinate System Definition:
                           Map_Projection_Name: Mercator
                                  Scale_Factor_at_Equator: 0.999950
```

Planar: Map_Projection:

hrempel@earthdata.com

Cloud_Cover: 0

Spatial_Reference_Information:

Raster_Object_Information:

Row_Count: 5000

Vertical Count: 1

Mercator:

Longitude of Central Meridian: -088.833333

False_Easting: 984250.000000

False Northing: 0.000

Planar_Coordinate_Information:

Planar Coordinate Encoding Method: coordinate pair

Coordinate_Representation:

Abscissa Resolution: 0.000128 Ordinate Resolution: 0.000128

Planar_Distance_Units: Survey Feet

Geodetic Model:

Horizontal Datum Name: North American Datum of 1983 HARN

Ellipsoid_Name: Geodetic Reference System 80

Semi-major Axis: 6378137.000

Denominator_of_Flattening_Ratio: 298.257222

Vertical Coordinate System Definition:

Altitude_System_Definition:

Altitude_Datum_Name: North American Vertical Datum of 1988

Altitude_Resolution: 0.5

Altitude_Distance_Units: US Survey Feet

Altitude_Encoding_Method: Implicit coordinate

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: Mississippi Geographic Information, LLC

Contact_Person: Bill McDonald Contact_Position: Project Manager

Contact_Address:

Address_Type: mailing and physical address

Address: 143-A LeFleurs Square

City: Jackson

State_or_Province: MS Postal_Code: 39211

Contact_Voice_Telephone: 601-355-9526 Contact_Facsimile_Telephone: 601-352-3945

Contact_Electronic_Mail_Address: Bill.McDonald@waggonereng.com

Resource_Description: Compressed Digital Aerial Imagery

Distribution_Liability: None Metadata_Reference_Information:

Metadata_Date: 20071219

Metadata Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: EarthData International, Inc.

Contact_Person: Harold Rempel

Contact_Position: Program Management Director

Contact Address:

Address_Type: mailing and physical address

Address: 7320 Executive Way

City: Frederick

State or Province: Maryland

Postal Code: 21701

Contact_Voice_Telephone: 301-948-8550 Contact_Facsimile_Telephone: 301-963-2064

Contact_Electronic_Mail_Address: hrempel@earthdata.com

Hours of Service: 8:30-5:00

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Access_Constraints: None Metadata_Use_Constraints: None