Adams County NAIP 2025

Type   MrSID

Tags   NAIP, Adams County, Mississippi, 30cm, June 2025

Summary

The NAIP imagery is typically available for distribution within 60 days of the end of a flying season and is intended to provide current information of agricultural conditions in support of USDA farm programs. For USDA Farm Service Agency, the 1 meter and 1/2 meter GSD product provides an ortho image base for Common Land Unit boundaries and other data sets. The NAIP imagery is generally acquired in projects covering full states in cooperation with state government and other federal agencies who use the imagery for a variety of purposes including land use planning and natural resource assessment. The NAIP is also used for disaster response often providing the most current pre-event imagery.

** NOTE MARIS staff (in February 2026), downloaded the county packets from USDA. Naming scheme was changed to <countyname>_NAIP_2025. Some USDA metadata was copied into ESRI format. For complete metadata, reference the .xml file for each county. ****

Description

This data set contains imagery from the National Agriculture Imagery Program (NAIP). The NAIP acquires digital ortho imagery during the agricultural growing seasons in the continental U.S.. A primary goal of the NAIP program is to enable availability of ortho imagery within one year of acquisition. The NAIP provides 30 and 60 centimeter ground sample distance (GSD) ortho imagery rectified to a horizontal accuracy within +/- 4 meters of reference digital ortho quarter quads (DOQQ's) from the National Digital Ortho Program (NDOP) or from the National Agriculture Imagery Program (NAIP). The tiling format of NAIP imagery is based on a 3.75' x 3.75' quarter quadrangle with a 12 pixel buffer on all four sides. The NAIP imagery is formatted to the UTM coordinate system using the North American Datum of 1983 (NAD83). The NAIP imagery may contain as much as 10% cloud cover per tile. This file was generated by compressing NAIP imagery that cover the county extent. Two types of compression may be used for NAIP imagery: MrSID and JPEG 2000. The target value for the compression ratio is 40:1 for imagery.

Credits

United States Department of Agriculture, Farm Production and Conservation Business Center, Geospatial Enterprise Operations , MARIS

Use limitations

Access Constraints: There are no limitations for access. Use Constraints: None, The United States Department of Agriculture, Farm Production and Conservation Business Center, Geospatial Enterprise Operations (FPAC-BC-GEO) asks to be credited in derived products. If defects are found in the NAIP imagery during the 1 year warranty period such as horizontal offsets, replacement imagery may be provided. Imagery containing defects that require the acquisition of new imagery, such as excessive cloud cover, specular reflectance, etc., will not be replaced within a NAIP project year. Distribution Liability: In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use (or the inability to use it).

Extent

There is no extent for this item.

Scale Range

Maximum (zoomed in)   1:5,000

Minimum (zoomed out)   1:150,000,000

Topics and Keywords ▶

Themes or categories of the resource   Imagery & Base Maps

Content type   Downloadable Data
           Export to FGDC CSDGM XML format as Resource Description   No

Citation ▶

Title   Adams County NAIP 2025
Creation date   2025-06-27   00:00:00
Publication date   2025-10-21   00:00:00

Citation Contacts ▶

Responsible party - resource provider
        Organization's name   United States Department of Agriculture, Farm Production and
        Conservation Business Center, Geospatial Enterprise Operations

        ### Contact information ▶
        Phone
        Voice   801-844-2922
          Address
        Type   postal
        Delivery point   125 S. State Street Suite 6416
        City   Salt Lake City
        Administrative area   Utah
        Postal code   84138

Resource Details ▶

Dataset languages   English
Dataset character set   utf8 - 8 bit UCS Transfer Format

Credits
 United States Department of Agriculture, Farm Production and Conservation Business Center,
 Geospatial Enterprise Operations , MARIS

ArcGIS item properties

Resource Maintenance ▶

Resource maintenance
 Update frequency   unknown

Resource Constraints ▶

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Lineage ▶

Process step ▶

Description

Flight planning was performed in IGI Plan over a
buffered boundary covering DOQQ extents provided by the USDA.
3DEP based DEM file was used to determine
ground heights. A targeted flight altitude of approximately
31,000 feet above ground level for native 30cm image
acquisition with sidelap of 20-30% was used
for flight planning parameters. Multiple aircraft were utilized
for acquisition, the seamline
shapefile clarifies which aircraft were used for a given area.

The Phase One sensors have been calibrated by the manufacturer
as well as validated against a local calibration range. The calibration includes
measuring the radiometric and geometric properties of the
camera. These data are used in the Phase One Image SDK
to eliminate the radiometric and geometric distortion.
All aerial imagery was collected with associated GPS/IMU
data. Phase One collection requires high quality IMU data for
processing and was critical for early access hosting of digital
data to the web for USDA interim access and review.

After early access web delivery was complete, all
imagery was triangulated using Agisoft Metashape in which
the airborne GPS data was constrained to expected limits.
To validate the accuracy of the block adjustment derived from
GPS/IMU, sensor parameters and conjugate point measurements,
photo identifiable ground control points were field surveyed within
each State. These points were surveyed using GPS techniques to
produce coordinates that are accurate to +/- 0.25 meters RMSE in XYZ.
The GPS surveying techniques utilized assured that the coordinates
are derived in the required project datum and relative to an approved
National Reference System. If the block does not fit the

control points within specifications the pass and tie
points were reviewed for blunders and weak areas. If,
 after these corrections were made, the block still
does not fit the control well the GPS and IMU processing were
reviewed. Once the block has proper statistics and fits the
control to specifications, the final bundle adjustment was
made.

 The final adjustments assure a high quality relative adjustment
and a high quality absolute adjustment limited to the
airborne GPS data accuracy. This process assures the final
absolute accuracy of all geopositioned imagery. Both
signalized and photo identified ground control were used to
QC and control the IMU/GPS based aerial triangulation bundle
block solution. Surdex Grouping Tool provides real-time updates
of the USDA GEO Image Metrics. The image technician adjusts
image correction parameters to bring the radiometric
characteristics of large groups of images within the Image
Metrics ranges. For each project area the highest resolution
DEM or LiDAR was obtained and utilized for rectification of captured
imagery.

A visual inspection of the final DEM using color cycled
classification by elevation and a shaded relief was performed
to check for gaps, corruption and gross errors.
The predicted horizontal error for each
point was added as an attribute in the SURDEX enterprise
database. An operator reviews ortho seams
in areas these predicted errors indicate horizontal error in
excess of the contract specifications. Any imagery errors
introduced by source DEM required patching from an alternate
perspective or strip of photography.
Processing hardware used included various brands of survey grade
GPS receivers, various brands and models of computers,
RAID6 storage, calibrated monitors, various brands of monitor
calibration colorimeters. Phase One Image SDK was used for post
processing of images, triangulation was performed in Metashape and
SURDEX software was used for orthorectification, color
correction and to remove bidirectional reflectance, vignetting
and other illumination trends.
USDA GEO Image Metrics are measured and
images corrected to conform to the Image Metrics using
SURDEX software. GPS/IMU data was reduced to projected
coordinates in the appropriate UTM zone using
POSPac software from Applanix. Aerial Triangulation
was performed using Agisoft Metashape, SURDEX
software was used to orthorectify, adjust for color
variation between adjacent images. SURDEX software was used

to calculate the optimal seam path, check seam topology and
create master tiles. SURDEX ortho software generates
occlusion/smear polygons used during seam review
of steep terrain. SURDEX software was used to
visually inspect master tiles for seam and image defects.
SURDEX software was used to project and cut final DOQQ image
files from masters. SURDEX software was used to create CCM
metadata. Lizardtech GeoExpress was used
to create the CCM image file. SURDEX software was
used to perform final formatting, QC and naming of the DOQQ.
USGS metadata parser software was used to validate the metadata.
Various versions of Microsoft Windows were used in all phases of
production. Grouping Tool was used again after DOQQ and CCM
production to provide a quality assurance check. Individual
DOQQ and CCM may not meet the USDA GEO Image Metrics ranges
due to land cover. The goal is to have the state as a
whole meet the Image Metrics. All products are reviewed
by independent personnel prior to delivery.
The delivery is checked for omissions, commissions,
naming, formatting, specification compliance and data integrity.

Geoprocessing history ▶

Process

Process name
Date   2026-02-04   07:57:14
Tool location   c:\program files\arcgis\pro\Resources\ArcToolbox\Toolboxes\Data
Management Tools.tbx\Rename
Command issued

```
Rename
H:\DATA\00_AERIAL_IMAGERY\NAIP\NAIP_2025\USDA_Named_Counties\ortho_1-
1_hm_s_ms001_2025_1\ortho_1-1_hm_s_ms001_2025_1.sid
H:\DATA\00_AERIAL_IMAGERY\NAIP\NAIP_2025\USDA_Named_Counties\ortho_1-
1_hm_s_ms001_2025_1\Adams_NAIP_2025.sid RasterDataset
```

Include in lineage when exporting metadata   No

Distribution ▶

Distribution format

Name   MrSID
Version   Generation 4

Metadata Details ▶

Metadata language   English
Metadata character set   utf8 - 8 bit UCS Transfer Format

Scope of the data described by the metadata   dataset

Last update   ⇔ 2026-02-04

Metadata Contacts ▶

Metadata contact - resource provider
Organization's name   United States Department of Agriculture, Farm Production and Conservation Business Center, Geospatial Enterprise Operations

Contact information ▶
Phone
Voice   801-844-2922
  Address
Type   postal
Delivery point   125 S. State Street Suite 6416
City   Salt Lake City
Administrative area   Utah
Postal code   84138

Metadata Maintenance ▶

Maintenance
Other maintenance requirements
This metadata was automatically generated from the Content Standard for Digital Geospatial Metadata standard version FGDC-STD-001-1998 using the January 2013 version of the FGDC RSE to ISO 19115-2 transform.

Metadata Constraints ▶

Constraints
Limitations of use
Access Constraints: There are no limitations for access. Use Constraints: None, The United States Department of Agriculture, Farm Production and Conservation Business Center, Geospatial Enterprise Operations (FPAC-BC-GEO) asks to be credited in derived products. If defects are found in the NAIP imagery during the 1 year warranty period such as horizontal offsets, replacement imagery may be provided. Imagery containing defects that require the acquisition of new imagery, such as excessive cloud cover, specular reflectance, etc., will not be replaced within a NAIP project year. Distribution Liability: In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use (or the inability to use it)