

National Agriculture Imagery Program (NAIP) Data Dictionary ACTIVE

By [Earth Resources Observation and Science \(EROS\) Center](#) July 19, 2021

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The Data Dictionaries are a set of information describing the contents, format, and structure of elements for EarthExplorer products.

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Acquisition Date

- *Field Definition:* The year, month, and day the image was acquired.

Format:

YYYY/MM/DD

YYYY = Year

MM = Month

DD = Day

Agency

- *Field Definition:* NAIP is administered by the United States Department of Agriculture (USDA).

Coordinates - Decimal Degrees

- *Field Definition:* The latitude and longitude are provided in decimal degrees for the following fields:

Values:

Scene Center Latitude and Longitude

Northeast (NE) Corner Latitude and Longitude

Northwest (NW) Corner Latitude and Longitude

Southeast (SE) Corner Latitude and Longitude

Southwest (SW) Corner Latitude and Longitude

Latitude Format Decimal Degrees: -90.000 through 90.000

Longitude Format Decimal Degrees: -180.000 through 180.000

Number of decimal places will vary by dataset – check collection in EE.

Coordinates - Degrees, Minutes, Seconds

- *Field Definition:* The latitude and longitude are provided in degrees, minutes, and seconds for the following fields:

Values:

Scene Center Latitude and Longitude

Northeast (NE) Corner Latitude and Longitude

Northwest (NW) Corner Latitude and Longitude

Southeast (SE) Corner Latitude and Longitude

Southwest (SW) Corner Latitude and Longitude

Longitude Format:

DDMMSS.SSH

DDD = Degree(s) with a range of 0 through 180

MM = Minute(s) with a range of 0 through 59

SS.SS = Second(s) with a range of 0 through 59.99

H = Hemisphere with E for east and W for west

Latitude Format:

DDMMSS.SSH

DD = Degree(s) with a range of 0 through 90

MM = Minutes(s) with a range of 0 through 59

SS.SS = Second(s) with a range of 0 through 59.99

H = Hemisphere with N for north and S for south

Datum

- *Field Definition:* Datum used to map the image.

Values:

NAD83 = North American Datum 1983

WGS84 = World Geodetic System 1984

Entity ID

- *Field Definition:* The naming convention of each file is based on image parameters.

Format:

S_DDdddQQ_qq_ZZ_R_YYYYMMDD_yyyymmdd

S = Sensor Type

DDddd = SE Reference point of 1 Degree Block (Latitude = DD, Longitude =

ddd)

QQ = Quad location (range 1 -64)

qq = Quadrant indicator (NE, NW, SE, SW)

ZZ = UTM Zone*

R = Resolution in meters

YYYYMMDD = Acquisition date (year, month, day)

yyyymmdd = Date NAIP JPG2000 data was created (year, month, day)

*Note: JPG files created in 2013 or later use the UTM zone associated with the uncompressed data available through USDA- FSA-APFO.

Example:

M_3211418_NW_11_1_20120423_20120627

Map Projection

- *Field Definition:* The map projection used to portray the surface of the earth on a flat surface.

Values:

UTM

WGS 1984 Web Mercator Auxiliary Sphere

Number of Bands

- *Field Definition:* The number of spectral bands contained in the image.

Project Name

- *Field Definition:* A unique name given to a set of images that identifies the project.

Format:

YYYYMM_STATE_NAIP_1X0000M_UTM_SSSS

YYYYMM = Acquisition year, and month

STATE = State

NAIP = Dataset

1X0000 = Resolution where X represents a decimal point

M = Units (meters)

UTM = Projection

SSSS = Sensor Type

Example:

201207_RHODE_ISLAND_NAIP_1X0000M_UTM_CNIR

Projection Zone

- *Field Definition:* The zone associated with the map projection.

Values:

UTM Zone

NA = Not Applicable

Resolution

- *Field Definition:* The distance on the ground represented by one pixel.

Sensor

- *Field Definition:* The type of camera used to acquire the imagery.

Sensor Type

- *Field Definition:* The type of imagery acquired by the sensor.

Values:

N = Natural Color (CLR - Red, Green, Blue)

M = 4 band Color Near Infrared (CNIR - Infrared, Red, Green, Blue)

State

- *Field Definition:* The State contained in the product. NAIP imagery is acquired in the continental U.S.

Units

- *Field Definition:* The unit of measurement associated with the resolution.

Values:
Meters

Vendor

- *Field Definition:* The organization or company that acquired the imagery. If a vendor is not listed in the original metadata, credit is given to the USDA's Farm Service Agency (FSA) Aerial Photography Field Office (APFO).

JP2000 Available

- *Field Definition:* The format of imagery available.

Values:

Yes = Results return GeoTIFF and JPG2000 images (Default)

No = Results only return GeoTIFF images

Source: <https://www.usgs.gov/centers/eros/science/national-agriculture-imagery-program-naip-data-dictionary#sensor>