

APPROVED

NWCG Geospatial Data Layer Standard Metadata Definition and Data Layer Specifications

Aviation Activity Polygon

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|--------------------------------|---|
| Layer Name: | Aviation Activity Polygon |
| Layer Abbreviation: | AviationActivity_PI |
| Layer Description: | This layer captures activities that may present a hazard to pilots during aviation operations. |
| Status: | Approved |
| Source Record: | N/A |
| System of Record: | Local Databases. Digital Aeronautical Flight Information Files (DAFIF), Digital Vertical Obstruction File (DVOF), Federal Aviation Administration (FAA) Data when combined with local data. |
| Data Stewardship Group: | Geospatial Subcommittee |
| Data Steward: | NWCG GSC Chair |
| Additional Text: | NWCG - Aviation Hazards Activity GIS Data Layer Standard.doc, Discussion Paper - Aviation Hazards GIS Data Layers.doc, Wildland Fire Aviation Hazards Data Model.pdf, GLOSSARY Aviation Activity and Obstacle Information.doc |

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| Background: | The Aviation Activity data standard is part of a series of feature classes that may be used for storing information in support of safe fire-related aviation operations. |
| Abstract: | Local aviation activity data that adheres with this standard may be combined with national datasets (DAFIF, DVOF) to inform aviation operations and create flight hazard maps used for briefing visiting aircrews, pilots, incident management teams, and flight planning for projects and fires. The dataset is not intended for navigational use. The pilot should always obtain an FAA briefing and conduct operations with a "see and avoid" attitude. |

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| Purpose: | The purpose of this data layer standard is for the exchange and transfer of local aviation activity data. Activities (point and polygon): These layers capture activities and events that may present a risk to pilots during aviation operations. The distinction between activities and obstacles is that activities have a dynamic characteristic as the hazard may be temporal or seasonal. |
| Data Model: | Aviation Activities are depicted as point or polygon feature classes. This standard is for a polygon feature class (or shapefile). A geodatabase containing all aviation hazard feature classes (activities and obstructions) is recommended. |
| Other Notes: | The layer specific attributes and (domain) values were developed through a review of DAFIF, DVOF, and FAA standards and existing datasets to determine the types of features that would be stored in this feature class. Domains from those standards were revised and grouped to simplify this dataset. |
| Related Layers: | The Aviation Activity Point, Activity Polygon, Obstruction Point, Obstruction Line, and Obstruction Polygon Feature Classes are all related and could be part of a Aviation Hazard Feature Dataset or Geodatabase. |
| Horizontal and/or Vertical Position Accuracy: | Standards for horizontal and vertical accuracies are detailed in Geospatial Positioning Accuracy Standards; Part 3: National Standard for Spatial Data Accuracy (NSSDA), http://www.fgdc.gov/standards/projects/FGDC-standards-projects/accuracy/part3/chapter3 . NSSDA does not define threshold accuracy values. Agencies are encouraged to establish thresholds for their product specifications and applications and for contracting purposes. Ultimately, users identify acceptable accuracies for their applications. Data and map producers must determine what accuracy exists or is achievable for their data and report it (document) according to NSSDA. |
| Horizontal and/or Vertical Spatial Reference Information: | Data layer projection parameters should be documented in a .prj file (shapefile format) or in a geodatabase projection definition. Or, specify the projection parameters via an EPSG code (example EPSG code 4326 = WGS84), http://www.epsg-registry.org . Projection parameters file should include applicable attributes as specified in the FGDC Standards Reference Model, 4.1.2.1.23. |

Questions or comments can be emailed to:

BLM_FA_NWCG_DATA@blm.gov

Information on the process of requesting a new Data Standard or a change to an existing Data Standard can be located at:

<http://www.nwcg.gov/?q=data-standards>

Information about the Data Standards & Terminology Subcommittee (DSTS) can be found at:

<http://www.nwcg.gov/?q=committees/data-standards-and-terminology-subcommittee>

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NWCG Geospatial Data Layer Standard Attributes
Aviation Activity Polygon

| Geospatial Data Layer Standard Attributes & Attribute Definitions | | | | | | | |
|---|-----------------------------------|---------------------|-----------|-------------|--|--|-----------------------|
| Standard Name* | Alternate Name | Required? | Data Type | Size/ Width | Description | Values | Related NWCG Standard |
| Jurisdictional Unit Identifier | UnitID NWCG_UID NFIRSUnitID | Yes | String | 10 | Code used in interagency wildland fire to uniquely identify the governmental entity having overall land and resource management responsibility for a specific geographical area as provided by law. NWCG Unit Identifier should be used. In cases where NWCG Unit Identifier is not available, a National Fire Incident Reporting System (NFIRS) ID may be used instead. | NWCG (PMS 931: Unit Identifiers) Example: CORMP NFIRS ID (FDID, State, Station) Example: 07434VA001 | Unit Identifier |
| MapMethod | Map_Method MapMeth | Yes | String | 25 | Controlled vocabulary to define how the geospatial feature was derived. Map method may help define data quality. | GPS-Driven; GPS-Flight; GPS-Walked; GPS-Walked/ Driven; GPS-Unknown Travel Method; Hand Sketch; Digitized-Image; Digitized-Topo; Digitized-Other; Image Interpretation; Infrared Image; Modeled; Mixed Methods; Remote Sensing Derived; Survey/GCDB/Cadastral; Vector; Phone/Tablet; Other | |
| DateCurrent | DateCrnt EditDate | Yes | Date | | The last edit, update, of this GIS record. Date should follow the assigned NWCG Date Time data standard, using 24 hour clock, YYYY-MM-DDhh.mm.ssZ, ISO8601 Standard. | Example: 2014-06-23-15.30Z | Date Time (Assigned) |
| Comments | Notes GIS_Note | No, but recommended | String | 255 | Additional information describing the feature. | Free text | |
| GeometryID | Geometry_ID GIS_ID Spa_ID | Yes | String | 50 | Primary key for linking geospatial objects with other database systems. Required for every feature. This field may be renamed for each standard to fit the feature. | Globally Unique Identifier (GUID). ** | |
| ActivityName | ActName | Yes | String | 50 | Common Name of activity. "Unknown" is a valid attribute. | | |
| ActivityType | ActType | Yes | String | 50 | Type of activity or event. (Domain values were developed through a review of DAFIF, DVOF, and FAA data sets) If "Other" is selected please include additional information in Comments field. | Aerobatic Box; Air Route; Agricultural Flying or Spraying; Ballooning Area; Hang Gliding or Paragliding Area; Low Level Sight Seeing Area; Military Operating Area; Model Airplane and Rocket Launch Area; Parachute Jumping Area; Special Use Area; Ultralight Area; Other | |
| SourceAgency | DataAgency | Yes | String | 7 | Land management agency with responsibility for creating and administering the data. | BIA; BLM; BOR; DOD; DOE; FAA; NGA; NPS; USFS; USFWS; Foreign; Tribal; City; County; State; Private | |
| HeightAboveGroundLevel | HtAGL | Yes | Double | 8 | Height above ground level in feet. Scale of 1 decimal place. Feature height should always be calculated to measure the tallest part of the features. For example, the height of a windmill feature will be the height of the blade as opposed to the height of the tower. Null value is acceptable. | | |
| HeightAboveSeaLevel | HtAMSL | Yes | Double | 8 | Height above mean sea level in feet. Scale of 1 decimal place. Feature height should always be calculated to measure the tallest part of the features. For example, the height of a windmill feature will be the height of the blade as opposed to the height of the tower. Null value is acceptable. | | |
| LongitudeDDM | LongDDM | No | String | 20 | Longitude in degrees, decimal minutes WGS84 of the polygon centroid for labeling purposes. Include correct symbols. Example, -112° 2.688'W. Value should be calculated in ArcGIS. | | |

Aviation Activity Polygon

Users should generate a GeometryID for each unique record they create (spatial or non-spatial) for NWCG datasets. It is the data creators responsibility to create and maintain this ID for the life of that particular record. It is the responsibility of the person doing the data aggregation at a regional or national level to maintain this GUID as well. A GUID can be created in multiple ways - on a cell by cell basis using a website or script to generate a unique GUID, on a group of records using a script, or it can be automatically generated by the users GIS software or tools.