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Data From: Inventory of Glaciers and Perennial Snowfields of the Conterminous USA

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Summary

This is an updated inventory of glaciers and perennial snowfields of the contiguous United States. All perennial snow and ice features greater than 0.01 km² are included. Outlines are mostly derived from aerial imagery provided by the National Agricultural Imagery Program, US Department of Agriculture with some satellite imagery in places where aerial imagery was not suitable. Imagery dates range from 2013 to 2020. Most (70%) of the outlines were acquired from 2015 imagery.

Attribute Table Field Descriptions

INV_ID

Unique identifier for each glacier and perennial snowfields. The value was created combining the easting and northing using the format ExxNyy where xx is the easting and yy is the northing.

X_COORD

Longitude in decimal degrees of the centroid of the feature.

Y_COORD

Latitude in decimal degrees of the centroid of the feature.

EASTING

UTM longitude in meters of the centroid of the feature. See UTM_Zone field for the UTM zone.

NORTHING

UTM latitude in meters of the centroid of the feature. See UTM_Zone field for the UTM zone.

UTM_Zone

UTM zone of the centroid of the feature.

RECNO

24K identification number.

GNIS_ID

The ID from the Geographic Names Information System (GNIS).

GLACNAME

Official USGS name. If a glacier split into smaller pieces since the 24K mapping, all pieces in this inventory were assigned the glacier name, regardless if it was classified as a glacier or perennial snowfield.

CLASS

Type of feature (glacier, perennial snowfield, or buried ice) based on visual observation.

ADM_REGION

Two-digit code identifying the USFS administrative region. Features were assigned to the region that the majority of the feature is located in. All features were assigned to a USFS region regardless if the feature is on USFS land.

ADM_NAME

Name of USFS administrative region. Features were assigned to the region that the majority of the feature is located in. All features were assigned to a USFS region regardless if the feature is on USFS land.

UNIT_NAME

The name of the local administrative land the feature is located.

GEO_REGION

The mountain ranges the feature is found on. Corresponds to region in the 24K.

STATENAME

Full state name.

YEAR

Year of the main image used for the outline.

SOURCE_MAT

Image used for delineating the outline.

AREA_KM2

Area of the feature in km² (calculated using USA_Contiguous_Albers_Equal_Area_Conic_USGS_version projection)

U_PERC

Area uncertainty as a percentage.

COMMENT

Various notes on the feature outlines, including the decisions the digitizer made. See Comment field section below for more details.

LandOwner

The federal agency or group that oversees the land the feature is located on. Features were assigned to the agency or group that manages the majority of the land the feature is located on. USFS refers to the United States Forest Service, and NPS refers to the National Park Service. "Other" indicates the land is not managed by the USFS, NPS, or Indian Reservation.

Comment Notes

Notes on common comments

- Comments with the format “Used xx to help” indicates additional imagery was used to help outline the feature because the main image had shadows, seasonal snow, or image warping
- Comments with the format “Used xx to help with seasonal snow” indicate additional imagery was used to help eliminate seasonal snow covering the feature. This does not mean that the main image overall was snowy, but that the individual glacier or perennial snowfield had a significant amount of seasonal snow.

DEMs referenced in comments

- **2011_OLC_Deschutes**
 - Agency: Department of Geology and Mineral Industries (DOGAMI)
 - <https://gis.dogami.oregon.gov/maps/lidarviewer/>
- **adams_edifice**
 - Agency: USGS
 - URL: <https://www.sciencebase.gov/catalog/item/5bc623b9e4b0fc368ebbe99a>

Bard, J.A, 2019, High-resolution digital elevation model for Mount Adams and vicinity, Washington, based on lidar surveys of August-September, 2016: U.S. Geological Survey data release, <https://doi.org/10.5066/P9Z1HF1K>.
- **GlacierPeak_WA_DEM**
 - Agency: USGS
 - URL: <https://www.sciencebase.gov/catalog/item/57bf299ee4b0f2f0ceb7534e>

Bard, J.A., 2017, High-resolution digital elevation dataset for Glacier Peak and vicinity, Washington, based on lidar surveys of August-November, 2014 and June, 2015: U.S. Geological Survey data release, <https://doi.org/10.5066/F7H41PJG>.
- **MountBakerDEM**
 - Agency: USGS
 - URL: <https://www.sciencebase.gov/catalog/item/58518b0ee4b0f99207c4f12c>

Bard, J.A., 2017, High-resolution digital elevation dataset for Mount Baker and vicinity, Washington, based on lidar surveys of 2015: U.S. Geological Survey data release, <https://doi.org/10.5066/F7WD3XR0>.

References

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Jin S and others (2019) Overall Methodology Design for the United States National Land Cover Database 2016 Products. Remote Sensing 11(24). doi:10.3390/rs11242971.

Selkowitz DJ and Forster RR (2016) Automated mapping of persistent ice and snow cover across the western U.S. with Landsat. ISPRS Journal of Photogrammetry and Remote Sensing 117, 126–140. doi:10.1016/j.isprsjprs.2016.04.001.