

Resource Summary Report

Generated by ASWG on Aug 2, 2026

OpenTopography

RRID:SCR_002204

Type: Tool

Proper Citation

OpenTopography (RRID:SCR_002204)

Resource Information

URL: <http://www.opentopography.org/>

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Description: Accepts and provides access to high-resolution (meter to sub-meter scale) Earth science-oriented topography data (e.g. LiDAR) and bathymetric data, and related tools and resources. The OpenTopography Tool Registry provides a community populated clearinghouse of software, utilities, and tools oriented towards high-resolution topography data (e.g. collected with LiDAR technology) handling, processing, and analysis. Tools registered range from source code to full-featured software applications. Contributions to the registry via the Contribute a Tool page are welcome. OpenTopography also hosts a dataset catalog to which users can register datasets hosted elsewhere; these entries are discoverable by users alongside OpenTopography hosted datasets. Lidar point cloud data are available in LAS, LAZ and ASCII formats. Raster datasets and derived products can be downloaded in Arc ASCII, IMG, and GeoTIFF formats. Derived products and visualizations are available in Google Earth KML format. The OpenTopography user community and advisory committee provides feedback to define the scope of collaborations on data hosting and cyberinfrastructure development

Abbreviations: OpenTopo

Synonyms: , OpenTopography Facility, Open Topography, NSF OpenTopography Facility

Resource Type: service resource, data or information resource, data repository, storage service resource

Keywords: topography, topographical surveying, cloud, earth sciences, aerial photography, topographic map, geography, bathymetric map, geological mapping, geographic information system, bathymetry

Funding: NSF 1948997;
NSF 1948994;
NSF 1948857

Availability: Free, Available for download, Freely available

Resource Name: OpenTopography

Resource ID: SCR_002204

Alternate IDs: nlx_154717, r3d100010655

Alternate URLs: <https://api.datacite.org/doi?prefix=10.5069>,
<https://doi.org/10.17616/R3J616>

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Record Creation Time: 20220129T080212+0000

Record Last Update: 20260801T190143+0000

Ratings and Alerts

No rating or validation information has been found for OpenTopography.

No alerts have been found for OpenTopography.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 14 mentions in open access literature.

Listed below are recent publications. The full list is available at [ASWG](#) .

Martínez-Otzeta JM, et al. (2025) Optimizing plane detection in point clouds through line sampling. Scientific reports, 15(1), 30903.

Handwerger AL, et al. (2025) Multi-sensor remote sensing captures geometry and slow-to-fast sliding transition of the 2017 Mud Creek landslide. Scientific reports, 15(1), 29831.

Sjöström J, et al. (2025) 70 Years of observational weather data show increasing fire danger for boreal Europe and reveal bias of ERA5 reanalysed data. Scientific reports, 15(1), 20111.

Devi K, et al. (2025) A holistic methodology for evaluating flood vulnerability, generating flood risk map and conducting detailed flood inundation assessment. Scientific reports, 15(1), 28253.

Robinson MJ, et al. (2024) The length and spacing of river tributaries. Proceedings of the National Academy of Sciences of the United States of America, 121(15), e2313899121.

Ma X, et al. (2024) A global product of 150-m urban building height based on spaceborne lidar. *Scientific data*, 11(1), 1387.

Bhuyan K, et al. (2024) Landslide topology uncovers failure movements. *Nature communications*, 15(1), 2633.

Gray H, et al. (2022) Luminescence sediment tracing reveals the complex dynamics of colluvial wedge formation. *Science advances*, 8(22), eabo0747.

Friedlander AM, et al. (2021) Deep-sea biodiversity at the extremes of the Salas y Gómez and Nazca ridges with implications for conservation. *PloS one*, 16(6), e0253213.

Bello S, et al. (2021) High-resolution surface faulting from the 1983 Idaho Lost River Fault Mw 6.9 earthquake and previous events. *Scientific data*, 8(1), 68.

Handwerger AL, et al. (2019) A shift from drought to extreme rainfall drives a stable landslide to catastrophic failure. *Scientific reports*, 9(1), 1569.

Patton NR, et al. (2018) Predicting soil thickness on soil mantled hillslopes. *Nature communications*, 9(1), 3329.

Ewing RC, et al. (2017) Sedimentary processes of the Bagnold Dunes: Implications for the eolian rock record of Mars. *Journal of geophysical research. Planets*, 122(12), 2544.

Kelleher C, et al. (2015) Model-based analysis of the influence of catchment properties on hydrologic partitioning across five mountain headwater subcatchments. *Water resources research*, 51(6), 4109.