



Licensing Agreement regarding the use of the TanDEM-X 30m Edited DEM and the TanDEM-X 30m DEM Change Maps data products

Hereby a license for the use of the TanDEM-X 30m Edited DEM and DEM Change Maps, as described in the DLR *TD-GS-PS-0215 TanDEM-X 30m Edited DEM Product Description* and *TD-GS-PS-0216 TanDEM-X 30m DEM Change Maps Product Description*, is made available for the public free of charge, but only for non-commercial and scientific purposes. A license for commercial use of TanDEM-X 30m Edited DEM and DEM Change Maps is not included therewith and is to be purchased separately.

In case the Licensee is interested in a commercial use of the TanDEM-X 30m Edited DEM and the TanDEM-X 30m DEM Change Maps, he has to contact:

Airbus Defense and Space GmbH
Claude-Dornier-Str.
88090 Immenstaad
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License terms and rights of use:

1. Definitions

- a) The TanDEM-X 30m Edited DEM and DEM Change Maps products were derived from the global TanDEM-X data base and have a pixel spacing of 1 arcsecond in the latitude direction, according to approximately 30 m. The TanDEM-X 30m Edited DEM and DEM Change Maps products contain all data provided on the DLR delivery server, including all supplemental data and metadata. Versions of the TanDEM-X 30m Edited DEM and DEM Change Maps products provided in the future are also covered by this license.
- b) The German Aerospace Center (DLR) is the author and owner of the TanDEM-X 30m Edited DEM and the TanDEM-X 30m DEM Change Maps.

Deutsches Zentrum für Luft- und Raumfahrt e.V.,
German Aerospace Center (DLR)
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Germany
- c) The Licensee is the person named in the user account used for downloading the TanDEM-X 30m Edited DEM and/or the TanDEM-X 30m DEM Change Maps product(s).
- d) Commercial use is marketing, especially the sale of the TanDEM-X 30m Edited DEM and DEM Change Maps products or products generated or derived from the TanDEM-X 30m Edited DEM and DEM Change Maps products for the purpose of receiving a fee/remuneration. Each use of TanDEM-X 30m Edited DEM and DEM Change Maps products or products generated or derived from the TanDEM-X 30m Edited DEM and DEM Change Maps products is deemed to be a commercial use as far as the use is not free of charge.
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- f) Non-commercial use means any use of the TanDEM-X 30m Edited DEM and DEM Change Maps products or products generated or derived from the TanDEM-X 30m Edited DEM and DEM Change Maps products, that is not commercial use and not scientific use.
- g) The following licenses used to create the TanDEM-X 30m Edited DEM and the TanDEM-X 30m DEM Change Maps must be quoted by the Licensee:

- i. ALOS Global Digital Surface Model "ALOS World 3D - 30m (AW3D30)"
Credit: Courtesy of the Japan Aerospace Exploration Agency (JAXA).
https://www.eorc.jaxa.jp/ALOS/en/dataset/aw3d30/aw3d30_e.htm
- ii. NASADEM by NASA, Shuttle Radar Topography Mission (SRTM)
Credit: Courtesy of NASA/JPL-Caltech
<https://www.earthdata.nasa.gov/esds/competitive-programs/measures/nasadem>
- iii. Digitale LiDAR-Geländemodelle von Spanien, Andorra, Gibraltar | Digital LiDAR-Terrain Models of Spain, Andorra, Gibraltar
Credit: Courtesy of Sonny, sonny7@gmail.com
<https://www.opendataportal.at/katalog/de/dataset/dtm-spain>
- iv. Digitale LiDAR-Geländemodelle von Österreich | Digital LiDAR-Terrain Models of Austria
Credit: Courtesy of Sonny, sonny7@gmail.com
<https://www.opendataportal.at/katalog/de/dataset/dtm-austria>
- v. Digital Elevation Model (DEM) of Australia derived from LiDAR 5 Metre Grid
Credit: Courtesy of Commonwealth of Australia (Geoscience Australia). Geoscience Australia, Canberra.
<https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/89644>
- vi. Reference Elevation Model of Antarctica (REMA) by Polar Geospatial Center (PGC) at the University of Minnesota
Credit: Courtesy of Polar Geospatial Center (PGC) at the University of Minnesota
<https://www.pgc.umn.edu/data/rema/>
Mosaics: Howat, I. M., Porter, C., Smith, B. E., Noh, M.-J., and Morin, P.: The Reference Elevation Model of Antarctica, *The Cryosphere*, 13, 665-674, <https://doi.org/10.5194/tc-13-665-2019>, 2019. [27.06.2022]
- vii. ArcticDEM digital surface model (DSM) of the Arctic by National Geospatial-Intelligence Agency, National Reconnaissance Office (NGA-NSF)
Credit: Courtesy of Polar Geospatial Center (PGC) at the University of Minnesota, National Geospatial-Intelligence Agency, National Reconnaissance Office (NGA-NSF)
<https://www.pgc.umn.edu/data/arcticdem/>
Mosaics: Porter, Claire, et al., 2018, "ArcticDEM, Version 3", <https://doi.org/10.7910/DVN/OHHUKH>, Harvard Dataverse, V1, [18.07.2023].
- h) The following licenses used to create the Land Cover Map which is included in the TanDEM-X 30m Edited DEM data package must be quoted by the Licensee:
 - i. Global Urban Footprint by DLR:
Credit: Deutsches Zentrum für Luft- und Raumfahrt e.V., German Aerospace Center (DLR)
https://www.dlr.de/eoc/en/desktopdefault.aspx/tabid-11725/20508_read-47944/
 - ii. Global Surface Water by ESA:
Credit: Courtesy of © ESA Climate Change Initiative - Land Cover led by UCLouvain (2017)
<https://maps.elie.ucl.ac.be/CCI/viewer/download.php>
 - iii. GlobCover by ESA:
Credit: Courtesy of ESA and the Université Catholique de Louvain
Copyright notice: © ESA 2010 and UCLouvain

ESA DUE GlobCover website: http://due.esrin.esa.int/page_globcover.php
http://due.esrin.esa.int/page_globcover.php

- iv. Shapefile with the coast lines of Greenland by GEUS
Credit: Courtesy of GEUS, Geological Survey of Denmark and Greenland
GEUS disclaims any errors in data
<https://eng.geus.dk/products-services-facilities/data-and-maps>

2. A non-exclusive, spatially and temporally unlimited, non-transferable, non-sublicensable right to use the TanDEM-X 30m Edited DEM and DEM Change Maps products is granted free of charge for scientific purposes and non-commercial purposes.

This license does not grant any commercial use of TanDEM-X 30m Edited DEM and DEM Change Maps products or products generated or derived from the TanDEM-X 30m Edited DEM and DEM Change Maps products.

The TanDEM-X 30m Edited DEM and DEM Change Maps may not be passed on to third parties or published.

3. The transfer of the TanDEM-X 30m Edited DEM and DEM Change Maps to third parties as well as its publication is forbidden. In case of cooperation of the Licensee with a third party and planned use of the original data by this cooperation partner, the Licensee undertakes to expressly inform his cooperation partner about the license for the use of the TanDEM-X 30m Edited DEM and DEM Change Maps data and to make it available to him. The Licensee commits himself to grant any kind of access to the provided TanDEM-X 30m Edited DEM and DEM Change Maps products only to its own employees.
4. In the event of any unauthorised use of the TanDEM-X 30m Edited DEM and DEM Change Maps products or products generated or derived from the TanDEM-X 30m Edited DEM and DEM Change Maps, the license is deemed not to have been given.
5. In publications based on the TanDEM-X 30m Edited DEM and DEM Change Maps the Licensee undertakes to clearly mark all data in such a way that the authorship and copyright of DLR is comprehensible to all:
"© DLR <year of data delivery>"

and to cite the corresponding reference papers:

- for the TanDEM-X 30m Edited DEM:
 - C. González, M. Bachmann, J.-L. Bueso-Bello, P. Rizzoli, M. Zink. A Fully Automatic Algorithm for Editing the TanDEM-X Global DEM. Remote Sensing. 2020; 12(23):3961. <https://doi.org/10.3390/rs12233961>
- for the TanDEM-X 30m Edited DEM layers EDM and LCM:
 - J.L. Bueso-Bello, M. Martone, C. González, F. Sica, P. Valdo, P. Posovszky, A. Pulella, P. Rizzoli. The Global Water Body Layer from TanDEM-X Interferometric SAR Data. Remote Sensing. 2021; 13 (24):5069. <https://doi.org/10.3390/rs13245069>
 - M. Martone, P. Rizzoli, C. Wecklich, C. González, J.L. Bueso-Bello, P. Valdo, D. Schulze, M. Zink, G. Krieger, A. Moreira. The global forest/non-forest map from TanDEM-X interferometric SAR data. Remote Sensing of Environment. 2018; 205:352-373.
- for the TanDEM-X Change Maps:
 - TD-GS-PS-0216 TanDEM-X 30m DEM Change Maps Product Description, Lachaise M., Schweißhelm. B., Oct 2023 1.0 (or current version)
 - M. Lachaise, C. González, P. Rizzoli, B. Schweißhelm and M. Zink, "The New Tandem-X DEM Change Maps Product," IGARSS 2022 - 2022 IEEE International Geoscience and Remote Sensing Symposium, Kuala Lumpur, Malaysia, 2022, pp. 5432-5435, doi: 10.1109/IGARSS46834.2022.9883612.

Derived information must include a reference to the TanDEM-X 30m Edited DEM and to the TanDEM-X 30m DEM Change Maps as data source, regardless of the form in which it was created.

Liability/ Warranty:

1. TanDEM-X 30m Edited DEM and TanDEM-X 30m DEM Change Maps products are provided without any



warranty.

2. The Licensee assumes full responsibility for the contractual use of the TanDEM-X 30m Edited DEM and DEM Change Maps.
3. The Licensee is liable to DLR for all damages, regardless of the legal reasons, caused through intent or negligence.
4. DLR may not be obliged to third parties by this Licensing Agreement. DLR only accepts liability for damages in the case of intentional or grossly negligent conduct. DLR's liability for negligence is limited to the foreseeable damage typically occurring with contracts of that kind. Liability for further damages is excluded. The Licensee indemnifies DLR in full against any claims by damaged third parties.

Updates, Fiction of Consent

1. DLR reserves the right to update this Licensing Agreement. DLR will inform the Licensee by email to the address provided during registration well in advance about the update and the changes made. The amendments shall enter into force two weeks after their announcement.
2. The Licensee accepts the amended Licensing Agreement by using the EOC Geoservice after it has become effective.

Termination

1. DLR reserves the right to terminate the provision of the TanDEM-X 30m Edited DEM and DEM Change Maps to the Licensee and/ or the license to use the TanDEM-X 30m Edited DEM and DEM Change Maps at any time. The Licensee has the right to terminate the license at any time.
2. In the event of termination of the license, the Licensee is obligated to delete the TanDEM-X 30m Edited DEM and DEM Change Maps and all its copies and to confirm this in writing to DLR upon request.
3. The Licensee has no right to compensation or damages as a result of termination.
4. The license terminates in the event of the death of the Licensee.

Miscellaneous

Changes or additions to this Licensing Agreement – other than Updates – are only effective if agreed in writing by both parties. This license is subject to the laws of the Federal Republic of Germany, to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods.