

Google Earth Engine Autorisierung

Folgende Kurzanleitung beschreibt, wie Google Earth Engine autorisiert werden kann.

ACHTUNG: Ein existierendes Konto mit Google (wie es auch für die Nutzung von GMail oder Maps erforderlich ist) wird hierfür benötigt. Hier kann ein kostenloses [Google Konto eingerichtet werden](#).

Autorisierung einmalig ausführen

Folgendes ausführen, und dann bitte allen Google-Anweisungen folgen ...

```
In [5]: import ee
```

```
In [6]: # authenticate the Earth Engine module  
ee.Authenticate()
```

```
Out[6]: True
```

Autorisierung überprüfen

Dann überprüfen, dass alles funktioniert

```
In [7]: import ee  
  
# Initialize the Earth Engine module.  
ee.Initialize()
```

Bei diesem Code-Block sollte keine Fehlermeldung auftauchen!

```
In [8]: # Print metadata for a DEM dataset.  
print(ee.Image('USGS/SRTMGL1_003').getInfo())
```

```
{'type': 'Image', 'bands': [{'id': 'elevation', 'data_type': {'type': 'PixelType', 'precision': 'int', 'min': -32768, 'max': 32767}, 'dimensions': [1296001, 417601], 'crs': 'EPSG:4326', 'crs_transform': [0.0002777777777777778, 0, -180.0001388888889, 0, -0.0002777777777777778, 60.0001388888889]}], 'version': 1641990767055141, 'id': 'USGS/SRTMGL1_003', 'properties': {'system:visualization_0_min': '0.0', 'type_name': 'Image', 'keywords': ['dem', 'elevation', 'geophysical', 'nasa', 'srtm', 'topography', 'usgs'], 'thumb': 'https://mw1.google.com/ges/dd/images/SRTM90_V4_thumb.png', 'description': '<p>The Shuttle Radar Topography Mission (SRTM, see <a href="https://online.library.wiley.com/doi/10.1029/2005RG000183/full">Farr\</a>)\</p>\ndigital elevation data is an international research effort that\</p>\nobtained digital elevation models on a near-global scale. This\</p>\nSRTM V3 product (SRTM Plus) is provided by NASA JPL\</p>\nat a resolution of 1 arc-second (approximately 30m).\</p>\<p>This dataset has undergone a void-filling process using open-source data\</p>\n(ASTER GDEM2, GMTED2010, and NED), as opposed to other versions that\</p>\ncontain voids or have been void-filled with commercial sources.\</p>\nFor more information on the different versions see the\</p>\n<a href="https://lpdaac.usgs.gov/documents/13/SRTM_Quick_Guide.pdf">SRTM Quick Guide</a>.\</p>\<p>Documentation:</p>\n<ul>\n<li><p><a href="https://lpdaac.usgs.gov/documents/179/SRTM_User_Guide_V3.pdf">User's Guide</a></p>\</li>\n<li><p><a href="https://lpdaac.usgs.gov/documents/13/SRTM_Quick_Guide.pdf">General Documentation</a></p>\</li>\n<li><p><a href="https://doi.org/10.1029/2005RG000183">Algorithm Theoretical Basis Document (ATBD)</a></p>\</li>\n</ul>\n<p><b>Provider:</b> <a href="https://cmr.earthdata.nasa.gov/search/concepts/C1000000240-LPDAAECES.html">NASA / USGS / JPL-Caltech</a></p>\n<br>\n<p><b>Bands</b></p>\n<table class="eecat">\n<tr>\n<th scope="col">Name</th>\n<th scope="col">Description</th>\n</tr>\n<tr>\n<td>elevation</td>\n<td><p>Elevation</p>\n</td>\n</tr>\n</table>\n<p><b>Terms of Use</b></p>\n<br>\n<p>Unless otherwise noted, images and video on JPL public\</p>\nweb sites (public sites ending with a jpl.nasa.gov address) may\</p>\nbe used for any purpose without prior permission. For more information\</p>\nand exceptions visit the <a href="https://www.jpl.nasa.gov/imagepolicy/">JPL Image Use Policy site</a>.\</p>\n<p><b>Suggested citation(s)</b></p>\n<ul>\n<li><p>Farr, T.G., Rosen, P.A., Caro, E., Crippen, R., Duren, R., Hensley,\</p>\nS., Kobrick, M., Paller, M., Rodriguez, E., Roth, L., Seal, D.,\</p>\nShaffer, S., Shimada, J., Umland, J., Werner, M., Oskin, M., Burbank,\</p>\nD., and Alsdorf, D.E., 2007, The shuttle radar topography mission:\</p>\nReviews of Geophysics, v. 45, no. 2, RG2004, at\</p>\n<a href="https://doi.org/10.1029/2005RG000183">https://doi.org/10.1029/2005RG000183</a>.\</p>\n</li>\n</ul>\n<style>\n table.eecat {\n border: 1px solid black;\n border-collapse: collapse;\n font-size: 13px;\n }\n table.eecat td, tr, th {\n text-align: left; vertical-align: top;\n border: 1px solid gray; padding: 3px;\n }\n td.nobreak { white-space: nowrap; }\n</style>', 'source_tags': ['nasa', 'usgs'], 'visualization_0_max': '6000.0', 'title': 'NASA SRTM Digital Elevation 30m', 'product_tags': ['srtm', 'elevation', 'topography', 'dem', 'geophysical'], 'provider': 'NASA / USGS / JPL-Caltech', 'visualization_0_min': '0.0', 'visualization_0_name': 'Elevation', 'date_range': [950227200000, 951177600000], 'system:visualization_0_gamma': '1.6', 'period': 0, 'system:visualization_0_bands': 'elevation', 'provider_url': 'https://cmr.earthdata.nasa.gov/search/concepts/C1000000240-LPDAAECES.html', 'visualization_0_gamma': '1.6', 'sample': 'https://mw1.google.com/ges/dd/images/SRTM90_V4_sample.png', 'tags': ['dem', 'elevation', 'geophysical', 'nasa', 'srtm', 'topography', 'usgs'], 'system:visualization_0_max': '6000.0', 'system:visualization_0_name': 'Elevation', 'system:asset_size': 132792638252, 'visualization_0_bands': 'elevation'}}
```

HINWEIS: Siehe auch [hier](#)