## Google Earth Engine Autorisierung

Folgende Kurzanleitung beschreibt, wie Earth Engine authorisiert 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.

## In geo wechseln

Anaconda Prompt öffnen und folgendes eingeben:

conda activate geo

Nun sollte (geo) vor dem Pfad angezeigt werden.

## Autorisierung einmalig speichern

earthengine authenticate

Dann bitte den Google-Anweisungen folgen ...

```
import ee

# Initialize the Earth Engine module.
ee.Initialize()
```

Bei diesem Code-Block sollte keine Fehlermeldung auftauchen!

```
In [2]: # 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': [0.00027777777777778, 0, -180.0001388888889, 0, -0.00027777777777778, 60.00013888888889]}], 'id': 'USGS/SRTMGL1\_003', 'versio n': 1605362602494378, 'properties': {'system:visualization\_0\_min': '0.0', 'type\_nam e': 'Image', 'thumb': 'https://mw1.google.com/ges/dd/images/SRTM90\_V4\_thumb.png', 'd escription': 'The Shuttle Radar Topography Mission (SRTM, see <a href="http://onl inelibrary.wiley.com/doi/10.1029/2005RG000183/full">Farr\net al. 2007</a>)\ndigital elevation data is an international research effort that\nobtained digital elevation models on a near-global scale. This\nSRTM V3 product (SRTM Plus) is provided by NASA JPL\nat a resolution of 1 arc-second (approximately 30m).This dataset has und ergone a void-filling process using open-source data\n(ASTER GDEM2, GMTED2010, and N ED), as opposed to other versions that\ncontain voids or have been void-filled with commercial sources.\nFor more information on the different versions see the\n<a href ="https://lpdaac.usgs.gov/documents/13/SRTM\_Quick\_Guide.pdf">SRTM Quick Guide</a>.</ p>Documentation:<a href="https://lpdaac.usgs.gov/documents/179/SRT" M\_User\_Guide\_V3.pdf">User's Guide</a><a href="https://lpdaac.usg" s.gov/documents/13/SRTM\_Quick\_Guide.pdf">General Documentation</a><a</p> href="https://doi.org/10.1029/2005RG000183">Algorithm Theoretical Basis Document (AT BD)</a><b>Bands</b>Name</t h>DescriptionelevationElevation</t d><b>Terms of Use</b><br>Unless otherwise noted, images and video on JPL public web sites (public sites ending with a jpl.nasa.gov address) may be use d for any purpose without prior permission. For more information and exceptions visi t the <a href="https://www.jpl.nasa.gov/imagepolicy/">JPL Image Use Policy site</a>.

<b>Suggested citation(s)</b>Farr, T.G., Rosen, P.A., Caro, E., Cri ppen, R., Duren, R., Hensley, S., Kobrick, M., Paller, M., Rodriguez, E., Roth, L., Seal, D., Shaffer, S., Shimada, J., Umland, J., Werner, M., Oskin, M., Burbank, D., and Alsdorf, D.E., 2007, The shuttle radar topography mission: Reviews of Geophysic s, v. 45, no. 2, RG2004, at <a href="https://doi.org/10.1029/2005RG000183">https://d oi.org/10.1029/2005RG000183</a>.<style>\n table.eecat {\n border: 1p x 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; pa dding: 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', 'geophysica l'], 'provider': 'NASA / USGS / JPL-Caltech', 'visualization\_0\_min': '0.0', 'visuali zation\_0\_name': 'Elevation', 'date\_range': [950227200000, 951177600000], 'system:vis ualization\_0\_gamma': '1.6', 'period': 0, 'system:visualization\_0\_bands': 'elevatio n', 'provider\_url': 'https://cmr.earthdata.nasa.gov/search/concepts/C1000000240-LPDA AC\_ECS.html', 'visualization\_0\_gamma': '1.6', 'sample': 'https://mw1.google.com/ges/ dd/images/SRTM90\_V4\_sample.png', 'tags': ['nasa', 'usgs', 'srtm', 'elevation', 'topo graphy', 'dem', 'geophysical'], 'system:visualization\_0\_max': '6000.0', 'system:visualization\_0\_name': 'Elevation', 'system:asset\_size': 132792638252, 'visualization\_0\_ bands': 'elevation'}}

HINWEIS: Siehe auch hier