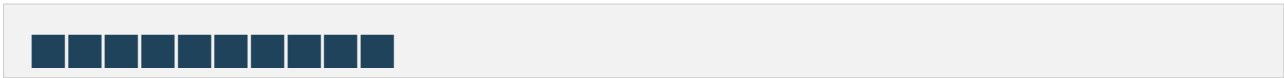


Conservation International

October 01, 2026



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Python

Python. QGIS, Python — Anaconda <<https://www.anaconda.com>>. Python 3.7 (<<https://www.anaconda.com/distribution/#download-section>>).

■■■■■■■■■■ Python

pip install -r requirements-dev.txt

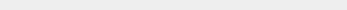
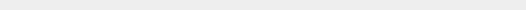
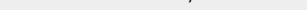
Note

Важно! Если вы используете Anaconda, то обязательно используйте Python 3.7, так как Anaconda не поддерживает Python 3.8 (и не поддерживает invoke-conda, который используется в этом скрипте). Если вы используете Anaconda, то обязательно используйте Python 3.7.

PyQt

PyQt5 — [PyQt5](#), [QGIS3](#). [Trends.Earth](#) [QGIS3](#), [pip](#):
`pip install PyQt5`

Note

PyQt4 — ,  QGIS2.
 Windows — ,
 UC Irvine.  PyQt4,
 . 
 Python, . 
 Python 2.7,  «cp27» .

Python 3.7 64-bit 安装与使用

Python 3.7, 64-bit 安装与使用。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

```
pip install PyQt4-4.11.4-cp37-cp37m-win_amd64.whl
```

Python 3.7 64-bit 安装与使用

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

```
invoke set-version -v 0.67
```

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

Python 3.7 64-bit 安装与使用

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。安装 Python 3.7 64-bit 时，选择 «win32» 安装 python 32-bit。

```
invoke plugin-setup
```

```
invoke plugin-install
```

1. «**Геоинформационные системы**» – **информационные системы** для **работы с пространственными данными**, позволяющие **анализировать, обрабатывать, хранить, представлять и обновлять** **пространственные данные** (векторные и растровые), **осуществлять пространственный анализ** и **картографирование**.
 2. **Примеры** **систем** **ГИС**: «**АrcView**» (**Esri**) и «**QGIS**» (**QGIS**).
 3. **Задачи** **ГИС**: **анализ, обработка, хранение, представление и обновление пространственных данных**.
 4. **Этапы** **работы** **с ГИС**: **сбор данных, обработка данных, анализ данных, представление данных, обновление данных**.

В настоящее время в России отсутствуют нормативные документы, регламентирующие использование геоинформационных систем (ГИС) в области охраны окружающей среды. В связи с этим в настоящее время в России отсутствуют нормативные документы, регламентирующие использование геоинформационных систем (ГИС) в области охраны окружающей среды. В связи с этим в настоящее время в России отсутствуют нормативные документы, регламентирующие использование геоинформационных систем (ГИС) в области охраны окружающей среды.

```
invoke download-boundaries-cache
```

```
trends_earth_api:
  user: "you@example.com"
  password: "your-password"
```

XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX

■■■■■■■■■■ ■■■■■■ ZIP ■■■■■■■■■■

invoke-####, ##### ##### ZIP, #####
 ##### ##### QGIS #####
 ##### ##### . #####
 ##### a the the ##### a ZIP, #####, #####,
 ##### „#####, ##### a ##### readme <<https://github.com/ConservationInternational/trends.earth#installing-latest-packaged-development-version>>, #####:

```
invoke zipfile-build
```

2020 年 12 月 24 日，趋势地球网（Trends.Earth）发布了一篇关于“LDMP.zip”的文章，标题为“趋势地球网（Trends.Earth）发布了一篇关于‘LDMP.zip’的文章”。文章中提到，趋势地球网（Trends.Earth）发布了一篇关于“LDMP.zip”的文章，标题为“趋势地球网（Trends.Earth）发布了一篇关于‘LDMP.zip’的文章”。文章中提到，趋势地球网（Trends.Earth）发布了一篇关于“LDMP.zip”的文章，标题为“趋势地球网（Trends.Earth）发布了一篇关于‘LDMP.zip’的文章”。

ZIP

[illegible]

```
invoke zipfile-deploy
```

<https://s3.amazonaws.com/trends.earth/sharing/LDMP.zip>.

Note

[illegible]

■■■■■■■■■■ ■■■■ ■■■■■■■■■■ Earth Engine

Google Earth Engine (GEE), Trends.Earth, trends.earth. trends.earth QGIS, api.trends.earth, Earth Engine GEE. GEE, Trends.Earth.

[illegible]

GEE

```
invoke tecli-publish -s land cover
```

```
invoke tecli-publish
```

[illegible]

■■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■

[illegible]

The error message indicates that the file `data/error_recode` does not exist. This is likely because the file is not in the current working directory. To resolve this, you should specify the full path to the file, such as `data/error_recode/`, or ensure that the file is in the correct directory when running the script.

[illegible]

0000 0000 0000000000000000 000000000000 000000000000 0000.

```
import QtQuick 2.0
import QtCharts 2.0

ChartView {
    width: 380
    height: 200
    margins {top: 0; bottom: 0; left: 0; right: 0}
    backgroundColor: "#eeeeec"
    legend.alignment: Qt.AlignBottom
    antialiasing: true
    ValueAxis {
        id: valueAxisY
        min: 0
        max: 100
    }

    BarSeries {
        id: mySeries
        axisY: valueAxisY
        axisX: BarCategoryAxis { categories: ["Productivity", "Land cover", "Soil organic carbon"]}
        BarSet { label: "Degraded"; color: "#9b2779"; values: [expression.evaluate("\prod_deg"), expression.evaluate("\land_deg"), expression.evaluate("\soil_deg")] }
        BarSet { label: "Improved"; color: "#909590"; values: [expression.evaluate("\prod_imp"), expression.evaluate("\land_imp"), expression.evaluate("\soil_imp")] }
        BarSet { label: "Stable"; color: "#ffff00"; values: [expression.evaluate("\prod_stab"), expression.evaluate("\land_stab"), expression.evaluate("\soil_stab")] }
    }
}
```

1. **Prüfungsausschuss:** Der Prüfungsausschuss ist das oberste Gremium der Hochschule. Er besteht aus Vertretern der Fakultäten, der Verwaltung und der Studierenden. Er entscheidet über die Zulassung zur Aufnahmeprüfung, die Zulassung zum Studium und die Zulassung zur Promotion.

00 0000000000 0000 0000 00000000 0000000000000000 0000000000:



LDMP.reports ■ LDMP.processing_provider.report.

```

namedtuple('ReportTaskProcessor', [
    'reporter',
])

```


XXXXXXXXXXXX XXXX XXXX XXXX XXXX

<code>var_name</code>	<code>te_current_layer_</code>.		
<code>default_value</code>	<code>var_name</code>,		
<code>fmt_func</code>	<code>QgsRasterLayer</code> object, QGIS. <code>lambda layer: layer.name()</code>		

te current layer height,

```
# LDMP/reports/expressions.py
def _current_job_layer_var_mapping() -> typing.List[LayerVarInfo]:
    return [
        ...
        LayerVarInfo(
            'te_current_layer_height',
            '',
            lambda layer: layer.height()
        )
        ...
    ]
```

Note

[illegible]

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THE UNITED STATES OF AMERICA

- ```
1. LDMP.reports.charts . BaseChart
 export
 Python Plotly,
 QGIS. export
 save_image Figure Plotly
 ,
 Ot QImageWriter.
```

**■ วัตถุประสงค์ของการประเมินผล, ระยะเวลา การประเมินผล และ วิธีการประเมินผล**  
**วัตถุประสงค์ของการประเมินผล** : ประเมินผล การดำเนินงาน การดำเนินงาน การดำเนินงาน :

UniqueValuesPieChart.

[illegible]

```

 AlgorithmChartsManager,
 ReportTaskProcessor,
 ...
}

```

5 of 5

13



## Qt Linguist

[illegible]

```
lrelease
```

[illegible][illegible]

sphinx 的文档生成工具。它使用 reStructuredText 格式来编写文档，并支持多种输出格式，如 HTML、PDF、EPUB 等。

使用 sphinx 的步骤如下：

- 安装 sphinx 和相关的依赖库。
- 创建一个新的 sphinx 项目。
- 编写文档内容。
- 使用 sphinx-build 命令生成文档。

以下是一个简单的 sphinx 项目结构示例：

```

project/
├── doc/
│ ├── source/
│ │ ├── index.rst
│ │ └── ...
│ └── build/
│ ├── html/
│ ├── pdf/
│ └── ...
└── sphinx-build -b html -o build doc/source

```

其中，`doc/source` 是文档的源代码目录，`doc/build` 是生成的文档目录。

sphinx 的文档生成工具非常强大，可以满足各种文档需求。

```
invoke docs-build -f
```

■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■, ■■■■■ ■■ ■■■■■■■■■■  
 ■■ ■■■■■■ «docs\build\html\en», ■■ ■■■■■■■■ HTML-■■■■■■■ ■■■■■■■■■■.  
 ■■■■■■■■■■ ■■■■ «index.html» ■ ■■■■-■■■■■■■■■, ■■■■■■ ■■■■■■■■, ■■■■ ■■  
 ■■■■■■■■.

**PDF**

**HTML (**, **)**,

**:**

```
invoke docs-build
```

[illegible]

1. 本報告係根據「個人資料保護法」及「個人資料保護法施行細則」之規定，由本會蒐集、處理及利用個人資料，並經本會之個人資料保護委員會審核通過後，始得對外公開。

```
invoke docs-build -l es
```

[illegible]



## Note

Transifex (Transifex.com) is a cloud-based localization management platform. It allows you to manage your localization workflow, from translation to delivery. It supports a wide range of file formats and languages. Transifex is used by many large companies, including Google, Microsoft, and Amazon. It is a powerful tool for managing your localization workflow.

**THE UNIVERSITY OF CHICAGO**

[illegible]

- [illegible]

■■■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■ ■■■■ ■■■■■■■■ ■■■■■■■■■■

[illegible]

[illegible]

■■■■■■■■■■ ■■■■ ■■■■■■■■ QGIS ■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ [transifex](#). ■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ (■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■!), ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ [transifex](#), ■■■■ ■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ [trends.earth@conservation.org](mailto:trends.earth@conservation.org).

Trends.Earth  
git-  
GitHub,  
QGIS.

1. The first part of the document is a title page. It contains the title of the document, the author's name, and the date of the document.

[illegible]

```
set-version,
#####:
```

**XYZ** —  (, 2.1.20). **-m**,  
 trends.earth-schemas ■ trends.earth-algorithms).

- ██████████ \LDMP/metadata.txt ██████████ ██████████

**XXXXXXXXXXXX XXXX XXXX XXXX**

- `LDMP/_version.py` git.
- `(docs/source/conf.py)`
- `experimental` `/` `(` `=` `,` `=` `)`.
- 

### Note

**set-version** **version** (**version** **version** **version**, **version**, 2.1.18)  
**set-version** **version** **version** **version** **version**, **version** **version**  
**version** **version**. **version** **version** **version** (**version** **version**  
**version** **version**, **version**, 2.1.19) **version** **version** **version** **version** master.

**\*\*3. ■■■■■■■■ ■■■■■■■■ GEE (■■■■■ ■■■■■■■■) \*\***

```
Google earth Engine (gee)
trends.earth-schemas ##### trends.earth-algorithms, ##### -g
set-version:
```

```
invoke set-version -v X.Y.Z -m -g
```

**\_\_\_\_\_**  
 GEE. \_\_\_\_\_  
 \_\_\_\_\_, \_\_\_\_\_ GEE \_\_\_\_\_:

```
In trends.earth-schemas (where x.y.z is the new version number)
invoke set-tag -v x.y.z

In trends.earth-algorithms (where x.y.z is the new version number)
invoke set-tag -v x.y.z
```

[illegible]

```
invoke tecli-publish
```

[illegible]

**4.** ■■■■■■ ■■■■ ■■■■■■■■■■

[illegible]

```
git add -A
git commit -m "Release version X.Y.Z"
```

5. **■■■■■■■■■■ ■■■■■■■■■■ git-■■■■**

```
set-tag: invoke
```

```
invoke set-tag -v x.y.z # (where x.y.z is the new version number
```

git- (, v2.1.20)   
 GitHub.   
 ,   
 .

```
release-GitHub, ##### GitHub
zip-#####:
```

[illegible]

- `zip-2.1.20.zip` (2.1.20.zip) is a ZIP file.
- `2.1.20.pyc`, `2.1.20.pyd` are Python files for QGIS.
- `2.1.20.pyd` is a Python file for QGIS.

[illegible]

■■■■■■■■■■, ■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■ ■■■■■■■■■■■■■■■■■■■ ■■■■■■■■■■■ QGIS:

1. ██████████ zip-██████ ██████████ (██████████, LDMP\_2.1.20.zip) ██████████  
██████ ████████ ██████████ GitHub (██████████ ██████████ ██████████ ssets.
2. ██████████ ██████████ QGIS plugin repository <<https://plugins.qgis.org/plugins/>>
3. ██████████ ██████████ ██████████ ██████████ ██████████
4. ██████████ ██████████ ██████████, ██████████ zip-██████

[illegible][illegible]

- **■■■■■■■■ ■■■■■■ (■■■■■■■■■, 2.1.18, 2.1.20): ■■■■■■■■■■ ■■■■■■, ■■■■■■■■■■■■■■■■ ■■■ ■■■■■■■■■■■■■■ ■■■■■■■■■■■■■■■■**
- **■■■■■■■■■■ ■■■■■■■■ (■■■■■■■■■■, 2.1.19, 2.1.21): ■■■■■■■■ ■■■■ ■■■■■■■■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■**

20



### 2.3.4 (September 29, 2026)

- Remove no longer used SOC by transition table from land degradation report template
- Add rows to drought excel report template to allow for longer timeseries
- Fix off-by-one bug in worst drought calculation (fourth year of every period was not considered)
- Added support for importing male and female population rasters
- Fixed WorldPop population exports and processing to preserve totals and precision during resampling
- Improved performance and progress reporting for zonal statistics, including FWv2 processing resolution
- Added options to configure notification emails during registration and profile updates
- Added experimental LDN planning analysis and report-generation support
- Updated translations and dependencies
- Applied security and maintenance fixes
- Security fixes for QGIS plugin website

### 2.3.2 (July 2, 2026)

- Added support for 30-meter resolution land productivity datasets (FWv2)
- Fixed incorrect date range handling for JRC (Joint Research Centre) datasets
- Fixed Qt 6 compatibility issues causing charts not to display correctly
- Fixed a false «not logged in» error that could appear despite valid credentials
- Improved thread safety and credential caching for authentication to prevent intermittent login failures
- Translation updates and other minor bug fixes and performance improvements

### 2.3.0 (May 12, 2026)

- Added support for QGIS 4
- Added global SDG 15.3.1 and Trends.Earth results datasets to the download tool
- Added (experimental) option to connect a personal Google Earth Engine account via OAuth (browser-based sign-in)
- Fixed a bug in the Total Carbon analysis tool that caused failure to compute annual statistics
- Fixed loading of boundary files stored in compressed format
- Fixed issue where changing the study area didn't refresh the interface
- Fixed map layer style registration in the QGIS symbology panel



- Misc minor bug fixes and performance improvements

### 2.2.10 (April 20, 2026)

- Fixed SDG 15.3.1 summary failing on multi-period datasets due to duplicate band name matching across periods

### 2.2.8 (April 17, 2026)

- Fixed custom data import (land cover, SOC, LPD) to correctly reproject rasters in non-WGS84 coordinate systems such as UTM

### 2.2.6 (April 13, 2026)

- Added experimental support for LDN counterbalancing analysis
- Moved file downloads to background tasks to keep the interface responsive
- Added local job logging for better troubleshooting of locally-run analyses
- Improved caching of area extents for faster dropdown loading
- Added support for parallel processing in `te_algorithms`
- Added documentation on SO2-3 indicator calculations
- 

### 2.2.4 (March 19, 2026)

- [illegible]

### 2.2.2 (28 ■■■■■■ 2026 ■■■■)

- ### 2.2.0 (24 ■■■■■■ 2025 ■■■■)

- 2.1.20 (10 ■■■■■■ 2025 ■■■■)**

- 23

## 2.1.18 (5 releases since 2025-01-01)

- [FAO-WOCAT/JRC/Trends.Earth LPD](#) 15.3.1.
- [trends.earth-API](#) (15.3.1).
- [setuptools-scm](#) (15.3.1).
- [googleearthengine-api](#) 1.6.6.

### 2.1.18 (5 releases since 2025-01-01)

- [@merydian](#) #943
- [@merydian](#) #945
- [@github-actions\[bot\]](#) #946
- [\[pre-commit.ci\]](#) pre-commit [@pre-commit-ci\[bot\]](#) #929
- [@dimasciput](#) #954.
- [nix](#) NixOS, [@timlinux](#) #950.
- [Qgis](#) [@timlinux](#) #955
- [@timlinux](#) 2.1.18 [@timlinux](#) #956
- [\[pre-commit.ci\]](#) pre-commit [@pre-commit-ci\[bot\]](#) #948
- [fig](#), [@azvoleff](#) #951.
- [@github-actions\[bot\]](#) #958
- [15.3.1](#) [@merydian](#) #961
- [FAO-WOCAT](#) 15.3.1 [@merydian](#) #963
- [@github-actions\[bot\]](#) #964
- [CHIRPS](#) [UK-CEH](#) [@merydian](#) #965.

[illegible]

### 2.1.16 (31 ■■■■ 2024 ■■■■)

- [illegible]

2.1.14 (24 ■■■■■■ 2023 ■■■■)

- [illegible]

2.1.12 (17 ■■■■■■ 2023 ■■■■)

- **WorldPop, a global leader in geospatial data, has announced a partnership with the U.S. Agency for International Development (USAID) to provide humanitarian aid to vulnerable populations in the Philippines.**

### 2.1.10 (7 ■■■■■ 2023 ■■■■)

- shapefiles/geojsons  
aoi (#768)
- 
- 

### 2.1.8 (25 ■■■■■ 2023 ■■■)

- [JSON-Praxis, 100 Aufgaben zum Üben](#)
- [#752 — 100 Aufgaben zum Üben](#)

### 2.1.6 (8 ■■■■■■■■, 2022)

[illegible]

- [illegible]

### 2.1.6 (21 ■■■■■, 2022)

- ■■■■■■■■■■ ■691 (■■■■■■■■■■, ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■). ■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■, ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■.
- ■■■■■■■■■■ ■■■■■■■■■ Python, ■■■■■■■■■■, ■■■■■■ ■■■■■ ■■■■■■■■■■ ■■■■■■■■■■, ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■ ■■■■■■■■■■.

### 2.1.2 (18 ■■■■■, 2022)

- **Variable 724:** **Land cover transition matrix**, **uncccd** (unclassified cover change data). This variable is a 38x38 matrix of land cover transition counts. The rows represent the "from" land cover and the columns represent the "to" land cover. The matrix is stored in the file `land_cover_transition_matrix_uncccd.json`.
- **Variable 722** — **Land cover transition matrix**, **uncccd** (unclassified cover change data). This variable is a 38x38 matrix of land cover transition counts. The rows represent the "from" land cover and the columns represent the "to" land cover. The matrix is stored in the file `land_cover_transition_matrix_uncccd.json`.
- **Variable 726:** **Land cover transition matrix**, **uncccd** (unclassified cover change data). This variable is a 38x38 matrix of land cover transition counts. The rows represent the "from" land cover and the columns represent the "to" land cover. The matrix is stored in the file `land_cover_transition_matrix_uncccd.json`.

### 2.1.0 (11 ■■■■■, 2022)

- [illegible]

### 2.0.7 (31 ■■■■■■, 2022)

- **Microsoft Excel 2016 15.3.1** — **Microsoft Excel 2016 15.3.1** — **Microsoft Excel 2016 15.3.1**
- **Microsoft Excel 2016 15.3.1** — **Microsoft Excel 2016 15.3.1** — **Microsoft Excel 2016 15.3.1**

2.0.5 (19 ■■■■■■, 2022)

- 2.0.3 (19 ■■■■■■, 2022)

- 2.0.1 (13 ■■■■■■, 2022)

- 2.0 (20 ■■■■, 2022)

- 27

[illegible]

- [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] ([REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED])
- [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED],  
[REDACTED] [REDACTED]
- [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] ([REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED], [REDACTED]  
[REDACTED] [REDACTED] [REDACTED] ■ ■.

### 1.0.10 (7 ■■■■, 2022)

- **TransformDirection**, **QGIS 3.22+**.

### 1.0.8 (15 ■■■■■■, 2021)

- ■■■■■■■■■■ ■■■■■■■■ ■■■ ■■■■■■■■■■■■ ■■■■■■■■■■ ■■■■■ ■■■ ■■■■■■■■■■  
■■■■ (■■■■■■■■■■■ ■ ■■■■■■■■■■■■ ■ 500 ■ ■ 505).

### 1.0.6 (15 ■■■■, 2021)

- trends.earth-schemas                                                                                                                                              

### 1.0.4 (30 ■■■■, 2021)

- [WorldPop Gridded Population of the World v4 \(GPWv4\)](#)
- [ESA-CCI 2020](#)
- [GPCC GPCP](#)
- [Global Precipitation Climatology Project \(GPCP\)](#)
- [Global Precipitation Climatology Project \(GPCP\)](#)

### 1.0.2 (14 ■■■■■■, 2020)

- **■■■■■■■■■■ ■■■■ ■■■■■■■■■■ ■■■■, ■■■■■■ ■■■■■■■■ ■■■■■■■■■■**  
**■■■■■■■■■ ■■■■■■■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■■■ 10 000 ■■■ 25 000 ■■■. ■■■.**
- **■■■■■■■■■ ■■■■■■■■■■ ■■■■■■■ MERRA2 (■■■ 2019 ■■■■).**

[illegible]

- `std::vector` is a container for a sequence of elements. It is a part of the C++ Standard Library.
- `httpLib2` is a library for HTTP requests. Version 0.18.0.
- `GPCC` is a library for GPGPU. Version V6 to V7.
- `Hansen et al.` (2019) is a paper about the use of `std::vector` in C++.
- `std::vector` is a container for a sequence of elements. It is a part of the C++ Standard Library. (The `std::vector` container is a part of the C++ Standard Library. It is a container for a sequence of elements. It is a part of the C++ Standard Library.)
- `PointZ`, `MultiPoint`, `MultiPointZ`, `PolygonZ`, `MultiPolygonZ` are classes for handling geometric data. (The `PointZ`, `MultiPoint`, `MultiPointZ`, `PolygonZ`, `MultiPolygonZ` classes are part of the C++ Standard Library. They are used for handling geometric data.)
- `Python`, `QMessageBox` are libraries for Python and Qt. (The `Python` and `QMessageBox` libraries are part of the C++ Standard Library. They are used for handling Python and Qt data.)

1.0.0 (27 ■■■■■, 2020)

- [illegible]

0.98 (2 ■■■■■■, 2020)

[illegible]

- [illegible]

0.66 (20 ■■■■, 2019)

- **Global Forest Resources 2020** **Report** **Chapter 2** **Forest Resources** **10 000 000** **ha**. **FAO** **2020**. **Forest Resources** **10 000** **ha**. **FAO**.
- **Global Forest Resources 2020** **Report** **Chapter 2** **Forest Resources** **SDG 11.3.1** **Forest Resources** **SDG 11.3.1**.
- **Global Forest Resources 2020** **Report** **Chapter 2** **Forest Resources** **SDG 11.3.1** **Forest Resources** **1998** **Report** (**FAO** **2000** **Report**), **Forest Resources** **1998** **Report** **FAO**.
- **Global Forest Resources 2020** **Report** **Chapter 2** **Forest Resources** **SDG 15.3.1** **Forest Resources** **ESA** **MODIS**.
- **readme** **Forest Resources** **FAO**, **Forest Resources** **FAO** **Github**.
- **Global Forest Resources 2020** **Report** **Chapter 2** **Forest Resources** **FAO**, **Forest Resources** **Google**-**Forest Resources** **FAO**.

0.64 (9 ■■■■, 2019)

- 0.62 (27 ■■■■■, 2019)

- 0.60 (3 ■■■■■■, 2018)

- 0.58 (11 ■■■■■■, 2018)

- 0.56.5 (21 ■■■, 2018)

- 31

#### 0.56.4 (21 ■■■, 2018)

- ### 0.56.3 (21 ■■■■■■, 2018)

- 0.56.2 (10 ■■■■■■, 2018)

- 0.56.1 (10 ■■■■■■, 2018)

- 0.56 (9 ■■■■■■, 2018)

- 0.54 (8 ■■■■■■, 2018)

- 32

**□ □ □ □ □ □    □ □ □ □ □ □ □ □**

- [maps.trends.earth](#)
- [pyopenxl](#)
- [/](#)

0.52.1 (21 ■■■■■, 2018)

- ██████████ ████████████████████ ██████████ █ ████████████████████-██████████ ██████████.

### 0.52.1 (21 ■■■■■, 2018)

- ██████████ ████████████████████ ██████████ ███ ████████████████████-██████████ ████████████.

0.52 (19 ■■■■■, 2018)

- [illegible]

0.50 (15 ■■■■■, 2018)

- **Geographical Information Systems (GIS):** Tools and technologies for capturing, storing, analyzing, and displaying spatial data. Examples include ArcGIS, QGIS, and Google Earth. Trends.Earth is a web-based GIS platform for environmental data analysis. Excel is a spreadsheet application for data management.
- **Remote Sensing:** The acquisition of data about the Earth's surface without direct contact. Examples include satellite imagery, aerial photography, and LiDAR. Trends.Earth provides access to various remote sensing datasets.

0.48 (13 ■■■■■, 2018)

- [illegible]

0.46 (13 ■■■■■, 2018)

- **UNCCD** (United Nations Convention to Combat Desertification) is a global treaty that aims to combat desertification and land degradation, and to promote sustainable land management. It was adopted in 1994 and entered into force in 2004. The convention is the only global instrument that addresses the issue of desertification, which is the process of land degradation in arid, semi-arid, and sub-humid areas resulting from various factors, including climate change and human activities.
- **UNCCD** is a global treaty that aims to combat desertification and land degradation, and to promote sustainable land management. It was adopted in 1994 and entered into force in 2004. The convention is the only global instrument that addresses the issue of desertification, which is the process of land degradation in arid, semi-arid, and sub-humid areas resulting from various factors, including climate change and human activities.
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- **UNCCD** is a global treaty that aims to combat desertification and land degradation, and to promote sustainable land management. It was adopted in 1994 and entered into force in 2004. The convention is the only global instrument that addresses the issue of desertification, which is the process of land degradation in arid, semi-arid, and sub-humid areas resulting from various factors, including climate change and human activities.
- **UNCCD** is a global treaty that aims to combat desertification and land degradation, and to promote sustainable land management. It was adopted in 1994 and entered into force in 2004. The convention is the only global instrument that addresses the issue of desertification, which is the process of land degradation in arid, semi-arid, and sub-humid areas resulting from various factors, including climate change and human activities.

0.44 (12 ■■■■■, 2018)

**□ □ □ □ □ □    □ □ □ □ □ □ □ □**

- [illegible]

0.42 (4 ■■■■■■, 2018)

- `LC (setEnabled)`

0.40 (4 ■■■■■■, 2018)

- **Geometrische Transformationen** (Translation, Rotation, Skalierung, Scherung) werden verwendet, um die Form und Position eines Objekts im Raum zu ändern.
- **Farbkorrekturen** (Gamma-Korrektur, Farbkorrektur, Farbkorrektur) werden verwendet, um die Farbwerte eines Bilds zu korrigieren und es realistischer zu machen.
- **Filterung** (Gauß-Filter, Laplace-Filter, Sobel-Filter) wird verwendet, um die Auflösung eines Bilds zu erhöhen oder zu verringern, um Rauschen zu entfernen oder Kanten zu betonen.
- **Segmentierung** (Schwelle, Region Growing, K-Means, Fuzzy Clustering) wird verwendet, um ein Bild in verschiedene Regionen zu unterteilen, die unterschiedliche Objekte darstellen.
- **Formerkennung** (Template Matching, Feature Extraction, Support Vector Machines, Deep Learning) wird verwendet, um die Form eines Objekts zu erkennen und es mit anderen Objekten zu vergleichen.
- **Geometrische Transformationen** (Translation, Rotation, Skalierung, Scherung) werden verwendet, um die Form und Position eines Objekts im Raum zu ändern.

[illegible]

- **Deforestation is a major driver of climate change, contributing to the release of greenhouse gases.**
- **Reducing deforestation is a key strategy for mitigating climate change.**

0.38 (16 ■■■■■■, 2018)

- [illegible]

0.36 (14 ■■■■■■, 2017)

- `showEvent`

■■■■■■■ ■■■■■■■■■■

0.34 (14 ■■■■■■■■, 2017)

0.32 (14 ■■■■■■■■, 2017)

0.30 (12 ■■■■■■■■, 2017)

0.24 (6 ■■■■■■■■, 2017)

0.22 (4 ■■■■■■■■, 2017)

0.18 (2 ■■■■■■■■, 2017)

0.16 (6 ■■■■■■■■, 2017)

0.14 (25 ■■■■■■■■, 2017)

0.12 (6 ■■■■■■■■, 2017)