OTB python package

A dream becoming true ?!

*Le monde est tel que nous le façonnons

The world is how we shape it*

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pip install orfeotoolbox

01 | Difficulties

02 | Howto ?

03 | Expected results

Difficulties

- OTB contains:
  - C++ code and libs
  - Swig
  - Superbuild (all OTB dependencies)
- If package is compiled at runtime (like numpy), installation can take 45 minutes (or 4 coffee breaks)

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Howto?

Do what ITK does: using Scikit-build-core

Packaging steps from "pyproject.toml"

- Create an isolated environment, install dependencies, copy needed files: the source tree
- The build-backend (scikit-build-core) runs the actual OTB cmake to compile libs
- A wheel is created with Binary Distribution

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Expected result

- Each wheel must contains libs and python bindings
- Number of wheel is impacted (GLIBC compatibility + python versions supported)

NUMBER OF WHEELS = number of python versions * number of glibc to support

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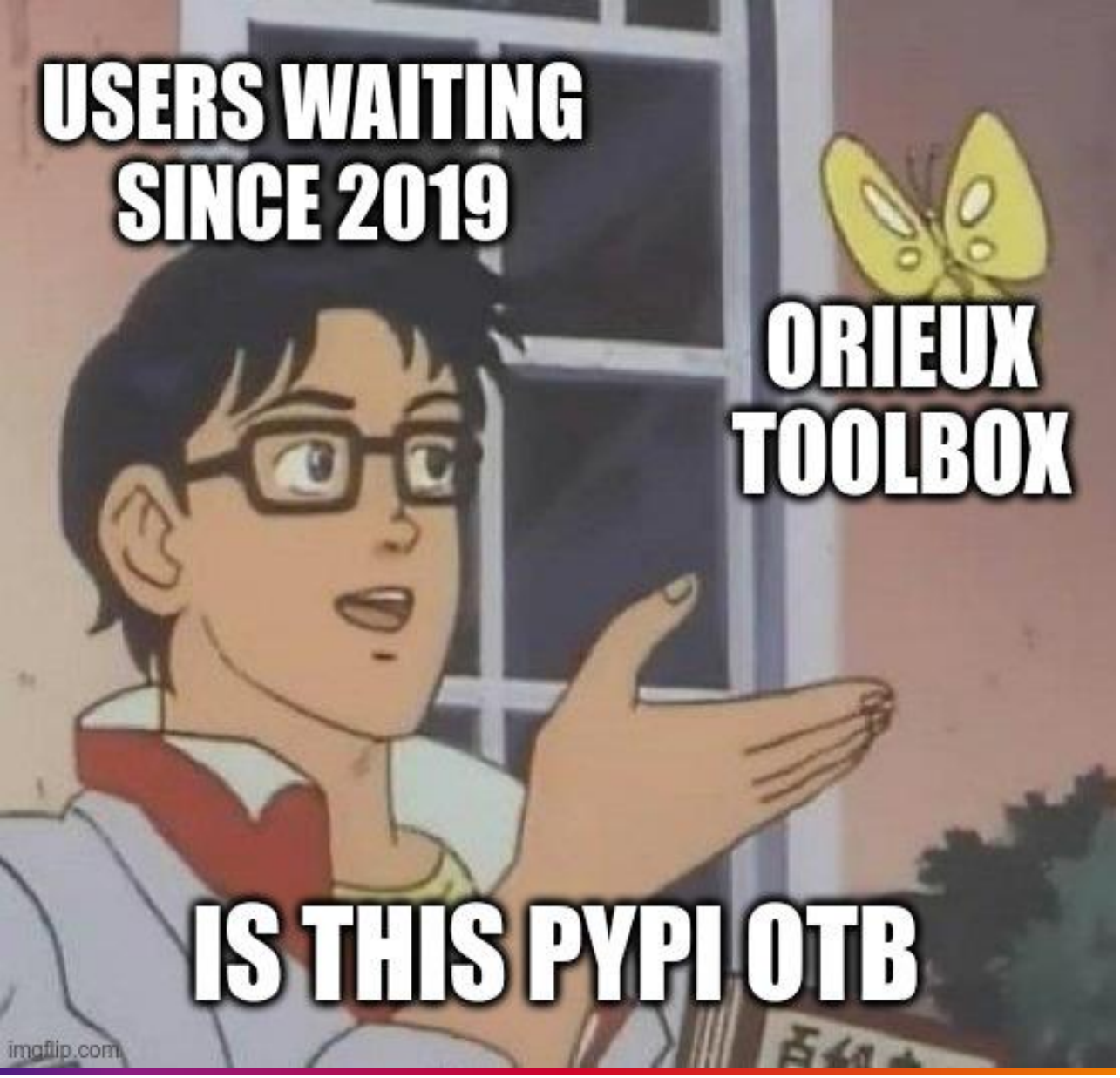

Where are we?

- You can use https://pypi.org/project/otb/ but it is Orieux Toolbox
- Still prototyping
- Need ITK 5

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Q&A

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Links

- ITK python package project https://github.com/InsightSoftwareConsortium/ITKPythonPackage
- OTB python package MR https://gitlab.orfeo-toolbox.org/orfeotoolbox/otb/-/merge_requests/1049
- OTB issue https://gitlab.orfeo-toolbox.org/orfeotoolbox/otb/-/issues/2428

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