

PROFFASTpylot

An operational workflow for PROFFAST 2

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```
lena@imk-asf-modllf: ~/Projects/proffastpylot/example
(prf_venv) lena@imk-asf-modllf:~/Projects/proffastpylot/example$ python run.py
Example data are already available on disk
2023-06-01 15:19:52,094, INFO: ++++ Welcome to PROFFASTpylot ++++
2023-06-01 15:19:52,101, INFO: Run information:
Retrieval for Instrument SN039 at Sodankyla with time offset 0.0.
The following dates will be processed:
2017-06-08, 2017-06-09.

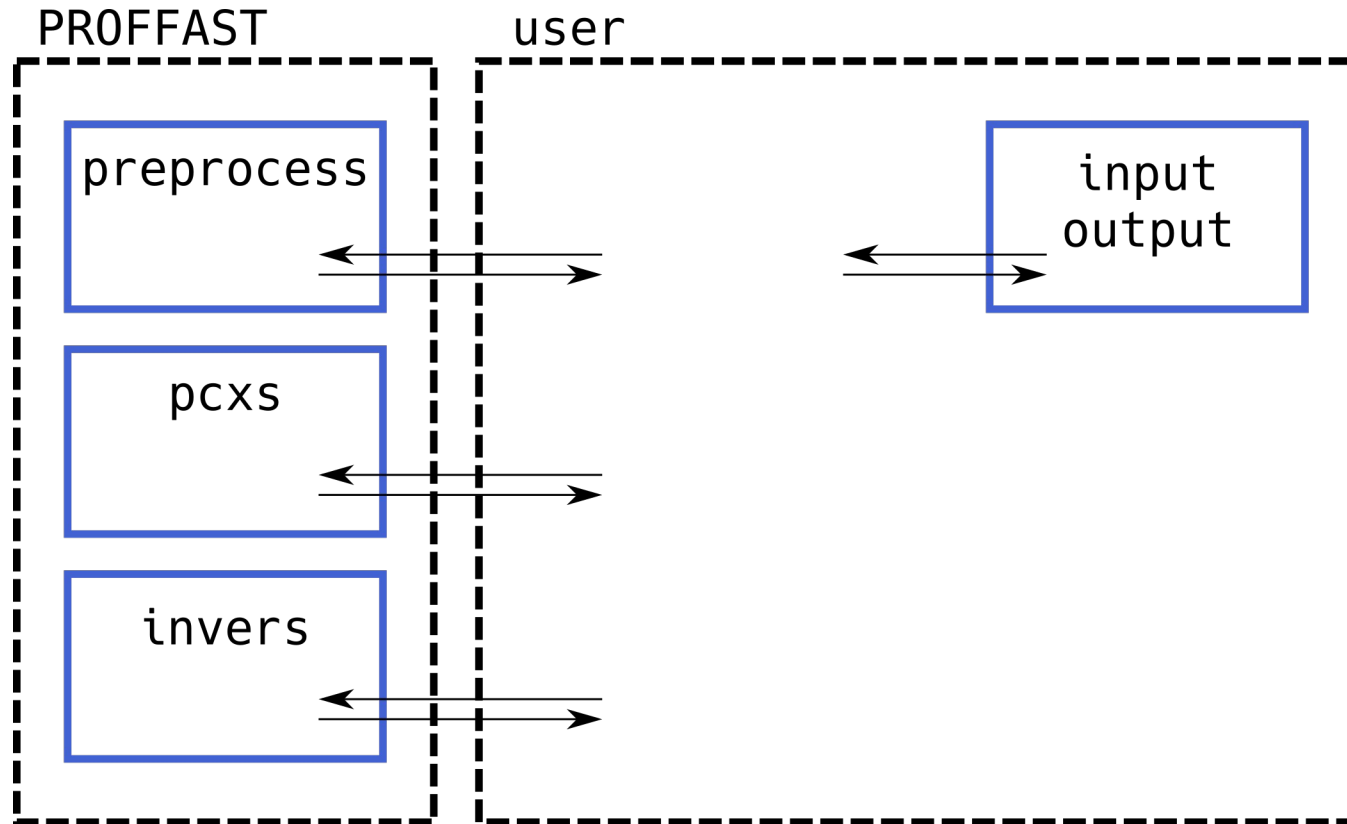
2023-06-01 15:19:52,386, INFO: Running preprocess with 2 task(s) ...
2023-06-01 15:19:59,175, INFO: Finished preprocessing.

2023-06-01 15:19:59,177, INFO: Running pcxs with 2 task(s) ...
2023-06-01 15:22:13,545, INFO: Finished pcxs.

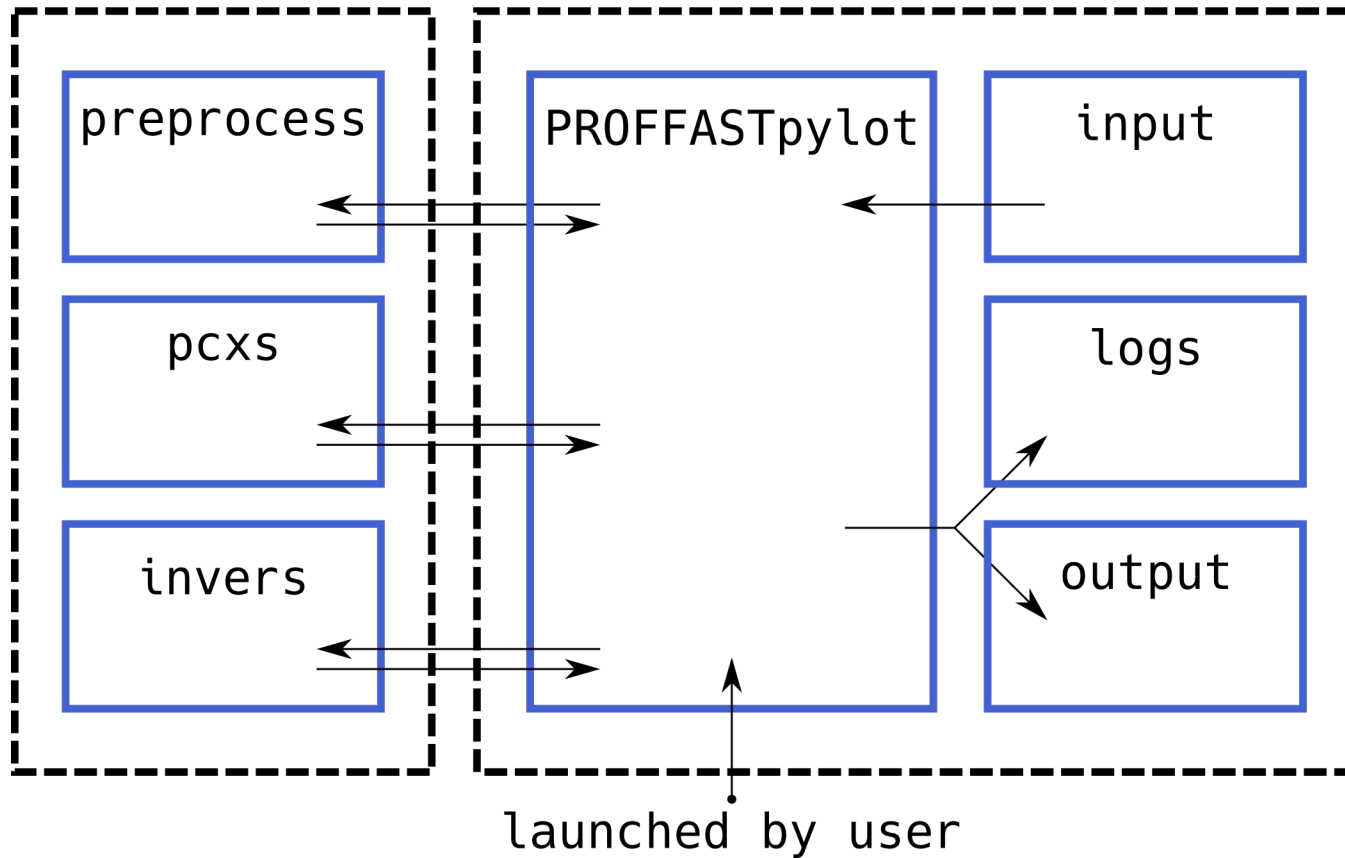
2023-06-01 15:22:13,547, INFO: Running invers with 2 task(s) ...
2023-06-01 15:22:16,664, INFO: Finished invers.

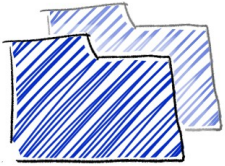
2023-06-01 15:22:16,977, INFO: The combined results of PROFFAST were written to /home/lena/Projects/proffastpylot/example/results/Sodankyla_SN039_170608-170609/comb_invparams_Sodankyla_SN039_170608-170609.csv.
2023-06-01 15:22:16,977, INFO: Removing temporary files ...
2023-06-01 15:22:17,058, INFO: Done.
```

What can PROFFASTpylot do?

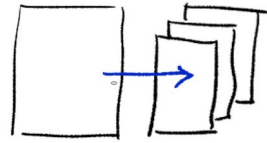


PROFFAST

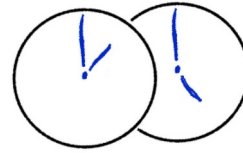




Input separated
from output



Single
input file



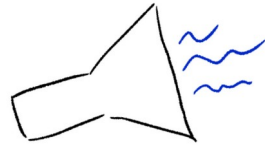
Processing of
different time zones



Interpolation of pressure
data and mapfiles



Cross-checks
and warnings



Logging with
different modes






ILS Parameters
in database



Processing of different
instrument types

How to use PROFFASTpylot?

 **PROFFASTpylot** 
Project ID: 219 

☆ Star 0

📄 424 Commits  5 Branches  5 Tags  369 KB Project Storage




Merge branch 'dev' into 'master' 

Lena Feld authored 3 weeks ago

89e2b7e3




master 

proffastpylot








Find file



Clone 

 README

 GNU General Public License v3.0 or later

Name	Last commit	Last update
 docs	resolve conflicting changes in docs	3 weeks ago
 example	remove remaining TCCON mode	2 months ago
 prfpilot	fixes for linux	1 month ago
 .gitignore	ignore temporary instrument files	2 months ago
 LICENSE	replace license in setup and LICENSE file	1 year ago
 README.md	adapt readme	1 month ago
 setup.py	change version in setup	1 month ago

P



M+ 1-1_installation.md	typos, minor adaption	4 weeks ago
M+ 1-2_usage.md	1-2_usage.md typos, minor adaption	4 weeks ago
M+ 1-3_pressure_input.md	renamed docs	6 months ago
M+ 1-4_folder_structure.md	typos, minor adaption	4 weeks ago
M+ 2-1_all_input_parameters.md	resolve conflicting changes in docs	2 weeks ago
M+ 2-2_time_offsets.md	typos, minor adaption	4 weeks ago
M+ 2-3_ils_parameters.md	add description of new preprocess settings. update links	4 weeks ago
M+ 2-4_instrument_parameters.md	typos, minor adaption	4 weeks ago
M+ 2-5_troubleshooting.md	Merge branch 'dev' of gitlab.eudat.eu:coccon-kit/proffastpylot into dev	4 weeks ago
M+ README.md	renamed docs	6 months ago

README.md

Documentation

Table of Contents

This is a short overview about the content of this documentation.

Sodankylä Example



run.py



input_sodankyla_example.yml

Sodankylä Example

run.py

```
from prfpilot.download_example import ExampleDownloadHandler
from prfpilot.pilot import Pilot

# This statement needs to be executed in all run scripts to prevent probl
# with the multiprocessing on windows
if __name__ == "__main__":

    # Check if example input data is already available on disk,
    # if not download it.
    # This is not needed for your personal PROFASTpilot run-file
    ExampleDownloadHandler().check_and_download_example_data()

    # The following part can be adapted to your own retrieval
    input_file = "input_sodankyla_example.yml"
    MyPilot = Pilot(input_file, logginglevel="info")
    MyPilot.run(n_processes=2)
```

Sodankylä Example

```
instrument_number: SN039

site_name: Sodankyla

# abbreviation of the site name as used in map file:
# <site_abbrev><date>.map
site_abbrev: so

# give coordinates
# leave empty if coordinates should be taken from file. An example file can
# be found in examples/input_data/coords.csv
coords:
  lat:
  lon:
  alt: # km over sea level

# full path to the coord file.
# This file contains the coordinates of the sites.
#
```

Input file

9 mandatory parameters
14 optional parameters

How to contribute?

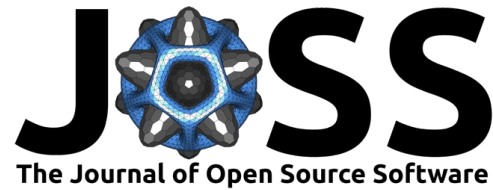
1. Check or ask if problem has been solved in the dev branch
2. Tell us your idea
 - a. Write a mail
 - b. Create a gitlab issue
 - c. Implement a solution and make a merge request at gitlab

The screenshot shows the GitLab interface for the PROFFASTpylot project. At the top right is the KIT logo (Karlsruhe Institute of Technology). The project name is PROFFASTpylot with a globe icon, and the Project ID is 219. Below this, it shows 424 Commits, 4 Branches, 5 Tags, and 532 KB Project size. A merge request is visible: 'Merge branch 'dev' into 'master'' by Lena Feld, authored 2 weeks ago. Below the merge request is a dropdown menu for selecting a Git revision, currently set to 'master'. The dropdown menu lists 4 branches: 'master' (default), 'dev', 'hdf5_dev', and 'pressure_interpolation_errors'. It also lists 5 tags: 'v1.2'. To the right of the dropdown menu, there is a 'Last commit' section with a list of commit messages: 'resolve conflicting change', 'remove remaining TCCON', 'fixes for linux', 'ignore temporary instrume', 'replace license in setup ar', 'adapt readme', and 'change version in setup'.

How to cite?

“PROFFASTpylot: Running PROFFAST with Python”.

submitted to



You are welcome to use and contribute to
PROFFASTpylot!



<https://gitlab.eudat.eu/coccon-kit/proffastpylot>