2025-07-02 13:35 1/2 LOFAR Docker Images

## **LOFAR Docker Images**

We offer the LOFAR software as Docker images, allowing anyone to run our software using the same configuration, without having to build it. Our images can be browsed at <a href="https://hub.docker.com/r/lofar/">https://hub.docker.com/r/lofar/</a>.

# **LOFAR Pipeline Software**

To run the lofar pipeline software, you need to:

- 1. Install and configure Docker on your computer (Mac/Linux/Windows)
- 2. Download and start the LOFAR image by running:

```
docker run -it --rm -u $UID -e USER -e HOME -v $HOME:$HOME lofar/lofar-pipeline:LOFAR-Release-2_19
```

To list all available versions, go to https://hub.docker.com/r/lofar/lofar-pipeline/tags/.

3. You now have the LOFAR software available at your finger tips, and your home directory available. You can run for example:

```
you@3617438dfc63:/$ NDPPP
Usage: DPPP [-v] [parsetfile] [parsetkeys...]
parsetfile: a file containing one parset key=value pair per line
parsetkeys: any number of parset key=value pairs, e.g. msin=my.MS
```

or:

```
you@3617438dfc63:/$ long_baseline_pipeline.py
/opt/lofar/lib/python2.7/site-packages/lofarpipe/support/utilities.pyc
: Using default subprocess module!
Usage: /opt/lofar/bin/long_baseline_pipeline.py <parset-file>
[options]
Results:
```

or one of our dependencies:

```
you@3617438dfc63:/$ /opt/aoflagger/bin/aoflagger
AOFlagger 2.8.0 (2016-06-21) command line application
This program will execute an RFI strategy as can be created with the
RFI gui
and executes it on one or several observations.

Author: André Offringa (offringa@gmail.com)

Usage: ./aoflagger [options] <obs1> [<obs2> [..]]
```

. . .

Once you have the above up and running, you will need some data to work on, and likely a parset with configuration settings. If you've put both in your home directory, they're immediately available when running the above command. If not, you can use additional "-v" parameters to make more directories available in your Docker container.

### Q&A

#### Q: Where can I find a list of available LOFAR software versions?

A: https://hub.docker.com/r/lofar/lofar-pipeline/tags/

#### Q: What is included in the image?

We put the following in our images:

- LOFAR Pipeline Framework & Recipes
- NDPPP
- AWImager
- AOFlagger
- DAL2
- Casacore + casarest + python-casacore

#### Q: I get "Illegal instruction" when running some of the software?

A: The LOFAR software is compiled for a 2015-era processor (Intel Xeon E5-2603v3 to be exact) for performance reasons, and uses CPU instructions not available on older machines. Please run our images on a newer machine.

From:

https://www.astron.nl/lofarwiki/ - LOFAR Wiki

Permanent link:

https://www.astron.nl/lofarwiki/doku.php?id=public:docker&rev=1486631063

Last update: 2017-02-09 09:04

