# SARPROZ FREQUENTLY ASKED QUESTIONS

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www.sarproz.com

# Contents

What is Sarproz	2
Data ingested by Sarproz	2
How to get the Sarproz code	2
How to install Sarproz	2
Supported Operating Systems	2
The Sarproz License	2
Sarproz troubleshooting, support and exchanges	3
Sarproz Manual and Documentation	3
The Sarproz Demo version	3
The Sarproz source code	3
Sarproz links	3
Developer contact	3

#### What is Sarproz

Sarproz is a software designed for Multi Temporal Synthetic Aperture Radar (SAR) and Interferometric SAR (InSAR) data processing and analysis. Sarproz is a very advanced software and at the same time it comes with a user friendly interface. Many processing options can be chosen by advanced users; nevertheless, default options allow a newcomer to easily tackle SAR and InSAR. More Sarproz characteristics can be found in the <u>Sarproz Brochure</u>.

#### Data ingested by Sarproz

Sarproz supports most existing satellite formats and imaging modes. However, Sarproz has no focusing module. Thus, SLC (Single Look Complex) data are needed. SLC data can either be ordered from data providers, or focused with other software. Sarproz can automatically import SLC data from Gamma and from Roi-Pac. The full list of supported satellite formats and imaging modes is available in the <u>Sarproz</u> <u>Brochure</u>.

#### How to get the Sarproz code

Sarproz is a software written in Matlab. It can be used either within Matlab (*pcodes* version) or independently from it (*compiled* version). To request a copy of the code (*pcodes* or *compiled* versions) and to get information about terms and conditions of use, you have to fill the <u>Sarproz Application Form</u>. To run the software, you need a license.

#### How to install Sarproz

The installation of Sarproz is very easy. For the pcodes version, you need Matlab. A couple of settings are required (<u>here</u> you can find detailed instructions, together with the list of the needed Matlab toolboxes). For the compiled version, you need to download and install the -freely available- Matlab MCR. Also for the compiled version you need to set a couple of variables, and the detailed instructions are available <u>online</u> as well. To run the code, you need a <u>license</u>.

Both pcodes and compiled versions are completely parallelized and can run on multiple-cores/computer clusters.

# Supported Operating Systems

To know whether your Operating System is supported or not, check whether Matlab can run on it. Currently, Sarproz has been tested in several versions of Windows, Linux, Mac. Since the Sarproz pcodes version runs in Matlab, no issues are expected if Matlab is correctly installed. For the compiled version, the software needs to be prepared in the appropriate environment. Contact the Developer in case of particular needs.

Even if Sarproz works on several OSs, since it's a software for data processing, we suggest to use the pcodes version under Linux. Some functions as data untar-rar-zip are not automatic in the Windows environment.

# The Sarproz License

Two licensing systems are supported by Sarproz: USB-dongle based and encrypted-license+internet connection based. In the first case, you need to apply for a USB dongle (and the software works offline). In the second case, you need to run the software on a computer connected to internet. In particular in

the second case, the License is machine-dependent (you cannot run Sarproz on a non-authorized computer). More details on the licensing system can be found <u>here</u>.

# Sarproz troubleshooting, support and exchanges

For problems related to Sarproz (installation, execution, choice of parameters, processing and so on) please post your questions on the <u>Sarproz Forum</u>. The forum should be used also for exchanging experience in processing data with Sarproz. The forum is expected to become a source of information for the Sarproz users. The forum requires a free registration.

# Sarproz Manual and Documentation

The Sarproz documentation is still under development. In particular, Sarproz itself is continuously under development. Sarproz is in fact a very flexible tool, and several collaborations around the world are keeping the Developer busy in adding/modifying features in Sarproz. Be aware in any case that continuity has been constantly guaranteed since the software conception.

The documentation comes in 3 different formats:

- <u>Online manual</u>. An html manual can be found online. The manual has an index pointing to all Sarproz modules. A short description is available for most of them.
- *Help files* embedded in Sarproz. At any time of the Sarproz execution, help files can be accessed by selecting on the "main" window the "Help Mode" function. In Help Mode, clicking on buttons will open message windows reporting modules description, instead of executing them.
- <u>Tutorials</u> of training courses. Several SAR/InSAR training course have been taught by the Developer, using Sarproz as software platform for practical's. Some of them are available online.

# The Sarproz Demo version

Demo versions of Sarproz have been used in different training courses. A Sarproz Demo version allows users to carry out most of the Sarproz algorithms, limiting only the area on which they can be applied. However, data must be firstly imported and pre-processed by a full Sarproz version. The Sarproz demo version can be requested through the <u>online form</u>.

# The Sarproz source code

The Sarproz source code is not available. If you are interested in bringing your contribution to improve it, contact the Developer.

# Sarproz links

Sarproz material can be found online on the <u>Sarproz webpage</u>. <u>Manual</u>, <u>Installation instructions</u>, <u>scientific</u> <u>papers</u>, a <u>gallery of results</u> are published on the Sarproz webpage. Moreover, the webpage hosts a <u>forum</u> for exchange of information.

# **Developer contact**

Online form