**ransX framework**

**User Guide**

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| Date | Version | Person | Change |
| 30/March/2019 | 1.0 | Miroslav Mocak | Initial instructions |
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This guide provides simple installation and usage instructions for ransX users and description of all parameters in the ransX framework contained within following available parameter files:

* param.ransx (control file for master script ransx.py)
* param.tseries (control file for time-averages over specific time range with ransx\_tseries.py)
* param.single (control file for plotting data from a single ransdat file with ransx\_single.py)

**Prerequisites**

* Windows/Linux based operating system
* Git (versioning control system)
* Python 2.7 with modules numpy, scipy, matplotlib, ast and sys, + ipython (recommended is to install Anaconda distribution of python. It is easy to install and contains all the required dependencies. Go to <https://www.anaconda.com/distribution/> and check it out.)

**Installation**

* create local copy of the whole repository e.g. using command line and:
* *git clone* <https://github.com/mmicromegas/ransX>
* enter the ransX directory:
* *cd ransX*
* run ipython and execute a test run:

* ipython
* run ransX.py
* to change plotting output, modify parameters in param.ransx and re-run ransx.py

**Parameters description of param.ransx**

* to calculate time-averages over different time span, modify parameters in param.tseries and re-run ransx\_tseries.py

**Parameters description of param.tseries**

* to check running averages from a single ransdata file, modify parameters in param.single an run ransx\_single.py

**Parameter description of param.single**

**Related Documents**

RansXtheoryGuide.pdf

RansXimplementationGuide.pdf

RansXdevelopersGuide.pdf

RansXuserGuide.pdf