



## code\_saturne 7.1 Quick reference card

### User scripts

All code\_saturne commands are available under a single script: `code_saturne`. Here below are the most useful commands for a code\_saturne user from the study creation to the post-processing. Complete information for each command can be obtained by typing:  
`code_saturne <command> --help`.

- **info**

Get information on code\_saturne. Open the documentation (user, theory).  
*e.g.* `code_saturne info --guide user`

- **config**

Get information on the configuration and installation of code\_saturne.  
*e.g.* `code_saturne config`

- **create**

Create a code\_saturne template study or case.  
*e.g.* `code_saturne create --study study1`

- **gui**

Launch code\_saturne graphical user interface.  
*e.g.* `code_saturne gui --file xmlfile`

- **trackcvg**

Launch code\_saturne track convergence tool.  
*e.g.* `code_saturne trackcvg RESU/run_name`

- **compile**

Create a specific solver executable when some user subroutines are present.  
*e.g.* `code_saturne compile --test`

- **studymanager**

Launch studymanager.  
*e.g.* `code_saturne studymanager --file xmlfile --run`

### Main user subroutines

Here below are the most useful user subroutines to run a standard simulation. Some of them are useless if the graphical user interface is used.

- **cs\_user\_parameters.c**

Initialization of the main keywords.

- **cs\_user\_boundary\_conditions.f90**

Management of the boundary conditions.

- **cs\_user\_physical\_properties.c**

Management of the variable physical properties.

- **cs\_user\_initialization.c**

Non-standard initialization of the variables.

- **cs\_user\_extra\_operations.c**

User project files.

- **cs\_user\_head\_losses.c**

Management of the head loss.

- **cs\_user\_source\_terms.c**

User source terms related subroutines.

- **cs\_user\_postprocess.c**

Post-processing related subroutines.

### Practical information

<https://www.code-saturne.org>

Related software:  
<https://www.salome-platform.org>

