

# Main differences between V11.0 and V11.1

De Wiki

Aller à : [navigation](#), [rechercher](#)

[Main differences between V11.0 and V11.1](#)

This version includes essentially ergonomic improvement of the tool. Nevertheless, some new functionalities as [SQLite](#) output files have a real interest.

## Sommaire

- [1 Compatibility with PATRIUS V3.3](#)
- [2 GUI improvements](#)
- [3 Cartesian coordinates in the Console output](#)
- [4 By default configuration frame](#)
- [5 Null dry mass](#)
- [6 Attitude management](#)
- [7 Improvement of graphical displays](#)
- [8 Variable names](#)
- [9 Output methods](#)
- [10 Events in SpacecraftState list](#)
- [11 Output storage](#)
- [12 Anomaly corrections](#)

## Compatibility with PATRIUS V3.3

This **PSIMU** version is compatible with [PATRIUS](#) V3.3, especially with its new management of exceptions due to divisions by zero as well as corrections when taking into account surface force models in conjunction with continuous thrust (numerical aspects).

## GUI improvements

- Some **Copy&Paste** (and **Import/Export**) functionalities have been added to some widgets as for the orbital initial conditions or the maneuvers.
- For events which manage multiple occurrences, changes occurred to be more obvious for the user with now three entries:
  - From n<sup>th</sup> occurrence
  - Every n occurrence
  - Until n<sup>th</sup> occurrence
- Force models:
  - Choice of the "attraction models" (i.e. [Balmino](#), [Cunnigham](#), ...) has been hided with [Balmino](#) choice by default.
  - By default values are proposed for [SRP](#).
- Maneuvers:
  - If engines and/or tanks needed to define a maneuver is set to **NONE**, the maneuver (and the sequence) raised an error.
  - by default, maneuvers components are set to "**Angular**" as event is a "**Relative date**".
  - For the sequence of maneuver, the delays between maneuvers are now hided.

## Cartesian coordinates in the Console output

Now, this output is only displayed in "Debug mode" (Options menu).

## By default configuration frame

The by default configuration frame has been changed considering only precession-nutation.

## Null dry mass

Now a dry mass set to zero is only raising a warning and no more an error. Moreover, it is possible to extrapolate with such a null value, of course with the condition not to consider force models needing a positive one (as drag or **SRP** forces).

## Attitude management

It is now possible to define an attitude sequence more simply that using switches, using a single attitude law.

## Improvement of graphical displays

Now, it is not necessary to load the current result file. Moreover some improvement has been implemented as a better up to date of the title or the management of discontinuities (for example when plotting latitudes or longitudes).

## Variable names

Some names changed in the **XML** files in order to be more consistent (for example, capitals vs lowercas letters

## Output methods

- In « master mode», the `printFiles()` method allows to create same kind of files as in **GUI** mode.
- The `getSV()` method allows to recover output variables.

## Events in SpacecraftState list

Orbital events are now stored inside the SpacecraftState list computed in master mode.

## Output storage

Rather than to use a binary file as in the previous version, the output of the computation including all computed intermediate parameters (with the output step as defined by the user as well as orbital events) are stored in a **SQLite** formatted file which can be read directly by **PSIMU** plots but also by many other tools (some are free) compatible with this format.

Moreover, when using the master mode, an additional parameter is used to define how output data are stored.

=> incompatibility in the code due to an additional argument in the propagateInMasterMode() method. Method getListOfSpacecraftStates() is also renamed as getSpacecraftStateList().

## Anomaly corrections

- In the previous version, sometimes the **JVM** continued to run after exiting the **GUI** application
- After reading a scenario file, if an error (exception) is raised as the absolute path of the file contains some blank characters, nothing previously occurred (i.e. no messages appeared while data do not have been loaded) => now corrected in V11.1
- bug when displaying perigee altitude.
- bad update of the units for date offsets.

Récupérée de

« [http://psimu.cnes.fr/index.php?title=Main\\_differences\\_between\\_V11.0\\_and\\_V11.1&oldid=390](http://psimu.cnes.fr/index.php?title=Main_differences_between_V11.0_and_V11.1&oldid=390) »

## Menu de navigation

### Outils personnels

- [18.217.203.172](#)
- [Discussion avec cette adresse IP](#)
- [Créer un compte](#)
- [Se connecter](#)

### Espaces de noms

- [Page](#)
- [Discussion](#)

### Variantes

### Affichages

- [Lire](#)
- [Voir le texte source](#)
- [Historique](#)
- [Exporter en PDF](#)

### Plus

### Rechercher

|                      |                                           |                                     |
|----------------------|-------------------------------------------|-------------------------------------|
| <input type="text"/> | <input type="button" value="Rechercher"/> | <input type="button" value="Lire"/> |
|----------------------|-------------------------------------------|-------------------------------------|

## PSIMU

- [Welcome](#)
- [Quick start](#)
- [News](#)

## GUI Mode

- [Overall presentation](#)
- [Initial Orbit](#)
- [Earth features](#)
- [Vehicle](#)
- [Forces](#)
- [Maneuvers](#)
- [Attitude](#)
- [Integrator](#)
- [Events](#)
- [Output](#)
- [Console](#)

## Batch mode

- [How to call it](#)

## Java interface

- [Basic principle](#)
- [Data initialization](#)
- [Propagation](#)
- [Printing results](#)
- [Customize output variables](#)

## Evolutions

- [Main differences between V11.7.3 and V11.7.4](#)
- [Main differences between V11.7.2 and V11.7.3](#)
- [Main differences between V11.7.1 and V11.7.2](#)
- [Main differences between V11.6.2 and V11.7.1](#)
- [Main differences between V11.5 and V11.6.2](#)
- [Main differences between V11.4.1 and V11.5](#)
- [Main differences between V11.4 and V11.4.1](#)
- [Main differences between V11.3 and V11.4](#)
- [Main differences between V11.2 and V11.3](#)
- [Main differences between V11.1 and V11.2](#)
- [Main differences between V11.0 and V11.1](#)

## Training

- [Tutorials package for V11.7.x](#)
- [Tutorials package for V11.6](#)
- [Tutorials package for V11.5](#)
- [Tutorials package for V11.4](#)
- [Tutorials package for V11.3](#)
- [Tutorials package for V11.2](#)
- [Tutorials package for V11.0](#)

## Links

- [CNES freeware server](#)

## Outils

- [Pages liées](#)
- [Suivi des pages liées](#)
- [Pages spéciales](#)
- [Adresse de cette version](#)
- [Information sur la page](#)
- [Citer cette page](#)
  
- Dernière modification de cette page le 16 novembre 2017 à 10:09.
- [Politique de confidentialité](#)
- [À propos de Wiki](#)
- [Avertissements](#)

