

Quick start

De Psimu

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La version imprimable n'est plus prise en charge et peut comporter des erreurs de génération.
Veuillez mettre à jour les signets de votre navigateur et utiliser à la place la fonction d'impression par défaut de celui-ci.

PSIMU proposes a lot of options and configurations to propagate an orbit. Anyway, in order to allow to start first simulations very quickly, the **PSIMU GUI**, many parameters are set to default values.

□

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Launch the main GUI

To launch the **GUI** you only have to double click on **Windows** systems or type :

```
java -jar psimu-xx.x-jar-with-dependencies.jar
```

The first time, the **GUI** is launched, a file named **psimu.properties** is extracted from the jar. This file contains four names of predefined directories:

- **PSIMU_OUTPUT_DIR** where results will be stored by default
- **PSIMU_DATA_DIR** where scenario files will be stored by default
- **ADDITIONAL_PATRIUS_DATA** where it will be possible to store additional data models used by PATRIUS (for example **EOP** parameters or a new **UTC/TAI** gap); see [here](#).
- **PSIMU_TEMP_DIR** temporary directory for database storage.

```
PSIMU_OUTPUT_DIR = PSIMU_OUTPUT  
PSIMU_DATA_DIR = PSIMU_DATA  
ADDITIONAL_PATRIUS_DATA = PSIMU_DATA/AdditionalPatriusData  
PSIMU_TEMP_DIR = PSIMU_TMP
```

So the four directories will be automatically created if they do not exist.

Of course it will be possible to change the values of these four variables but, in that case, **PSIMU** will have to be launched again.

*Note: in versions previous to the V11.4, this properties mechanism did not exist and only a specific directory (where result files was stored) was automatically created : **OUTPUT_JPSIMU***

Initialize mandatory data

Since V11.4, only the orbital parameters (initially set to zero) has to be initialized as it is not very clever to give a "default" orbit.

Note: for versions previous to the V11.4, attitude law have to be initialized. Since V11.4, it has been decided to set by default an attitude law (in the TNW local frame).

Initial orbit

To do it, enter a non nul semi major axis (for example 7000 km) in the orbit tab:

=>

Attitude law

So, since V11.4 a default law is already selected.

=>

Dry mass

It is possible to let the initial dry mass to zero as below (it only raises a warning). Nevertheless, if the user will add some forces, attitudes or anything that needs to divide by the total mass, then, the data will change from warning to error status (in versions previous to the V11.4, there were no status changes but an error message was only sent) and the propagation will not be launched.

Propagate

At the end, we have just to start the propagation by clicking on the "Compute" button ...

Récupérée de « http://psimu.cnes.fr/index.php?title=Quick_start&oldid=823 »

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- Cette page a été consultée 5 487 fois.

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