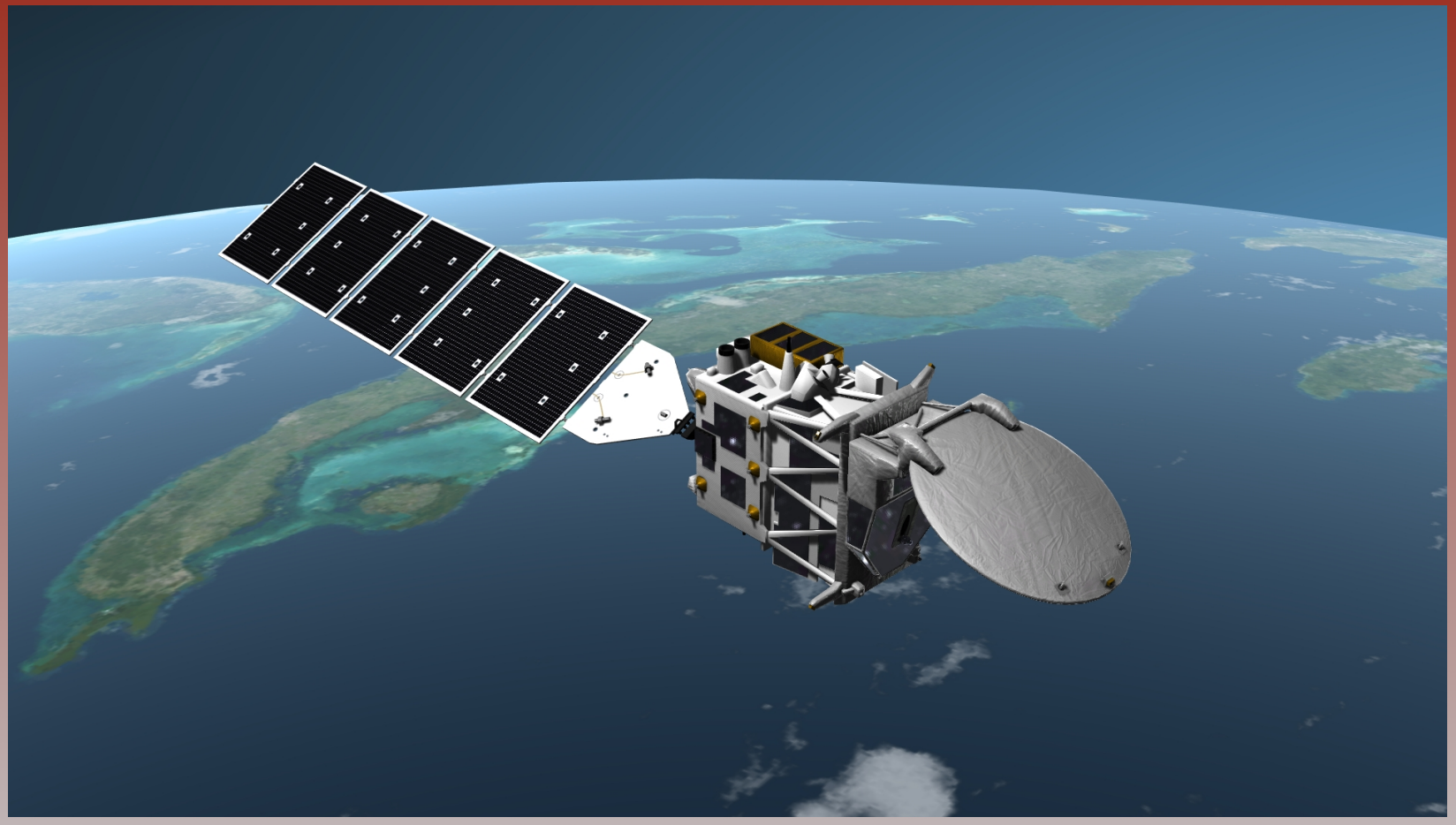
SAMIEdit - Getting Started

Adding a new satellite

EARTH OBSERVATION
SYSTEM SUPPORT

esa



SAMIEdit: Adding New Satellite - Overview

- User-defined satellites can be configured in SAMIEdit provided that, at least, the following mission input files are available:
  - Orbit File (see Slide X)
  - Attitude File (see Slide X)
  - Instrument Swath Definition File (optional, it is not required if only the satellite /orbit ground-track is going to be displayed)

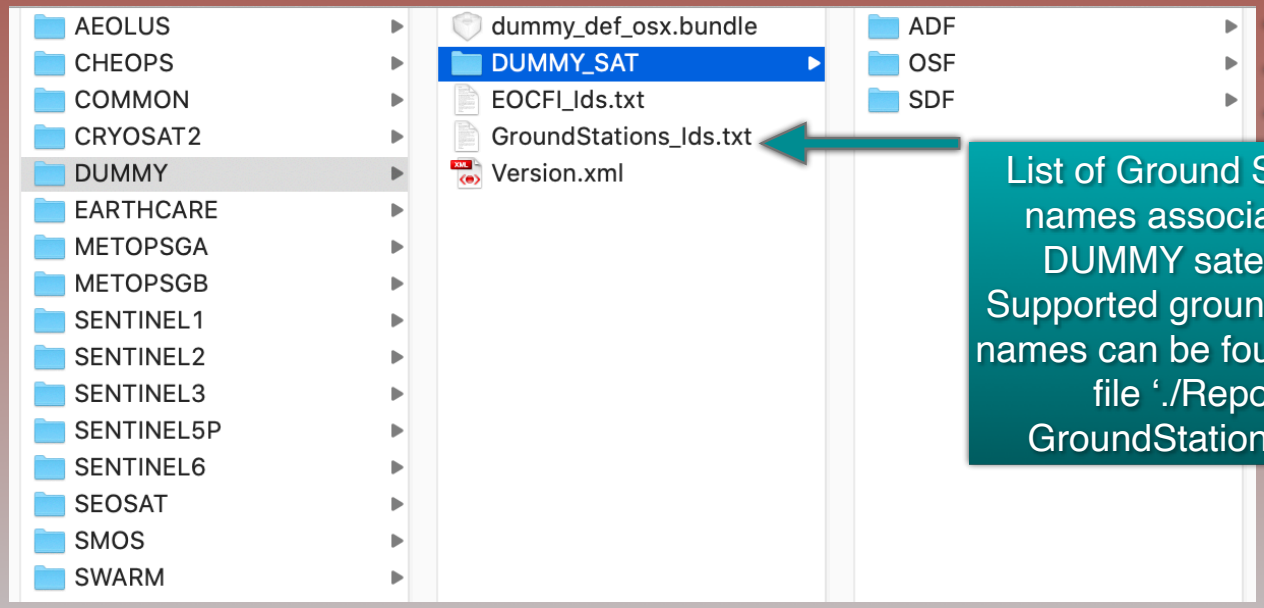
- About the satellite model, currently it is not possible to plug your own model, so the following options are possible:
  - Use the DUMMY satellite model
  - Re-use an existing satellite model (e.g. SENTINEL2)

→ Practically, it means that the mission files of the new satellite need to be in a sub-folder contained in the DUMMY folder or e.g the SENTINEL2 folder

SAMIEdit: Adding New Satellite - Input Files

The Dummy satellite example is provided to illustrate how to add satellite missions other than the default ones provided with the application

- The DUMMY 3D model is not representative of any mission
- The DUMMY folder structure shows how configure and display the satellite orbit, attitude and instrument swaths



Attitude File in ADF folder

Orbit File in OSF folder

Swath File in SDF folder

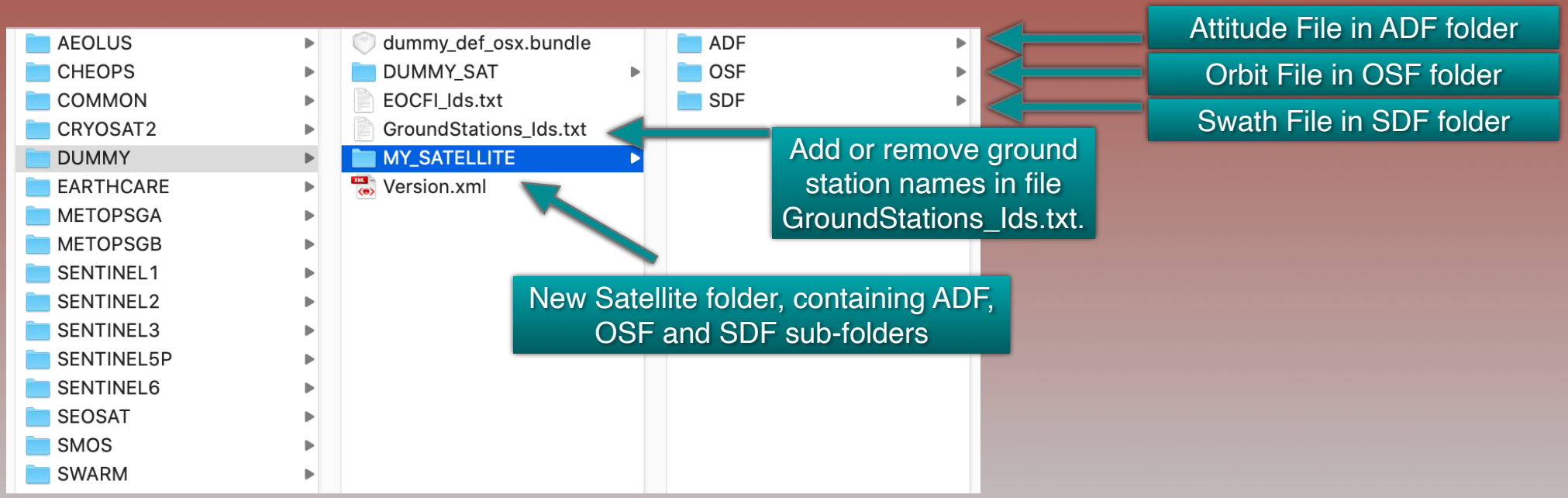
List of Ground Stations names associated to DUMMY satellites. Supported ground station names can be found in the file './Repos/ GroundStations.xml'

Note: Orbit File could also be in a folder named POF, see Slide X

SAMIEdit: Adding New Satellite - Copy Satellite Files

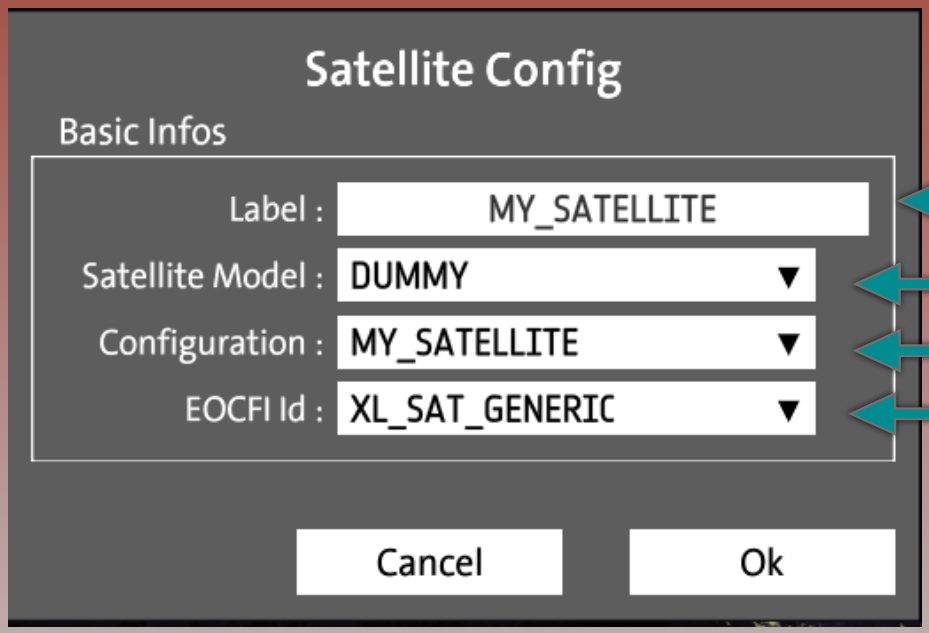
Create a mission folder in ‘./Repos/Satellites/DUMMY/’ with the name of your mission, e.g. MY_SATELLITE

- Duplicating and renaming the DUMMY_SAT folder could be a starting point
- Orbit, attitude and swath files can be either modified or new files copied into the repective folders



SAMIEdit: Adding New Satellite - Add Satellite

Go to menu item Satellites —> Add Satellite, select DUMMY as Satellite Model and then in Configuration select MY_SATELLITE



Label with satellite name that will be displayed in SAMIEdit

Satellite Model to be used

List of satellite folders under DUMMY

Pre-filled with values in EOCFI_Ids.txt

SAMIEdit: Adding New Satellite - Edit Satellite

Edit the Satellite to select the orbit and attitude files

Label with satellite name that will be displayed in SAMIEdit

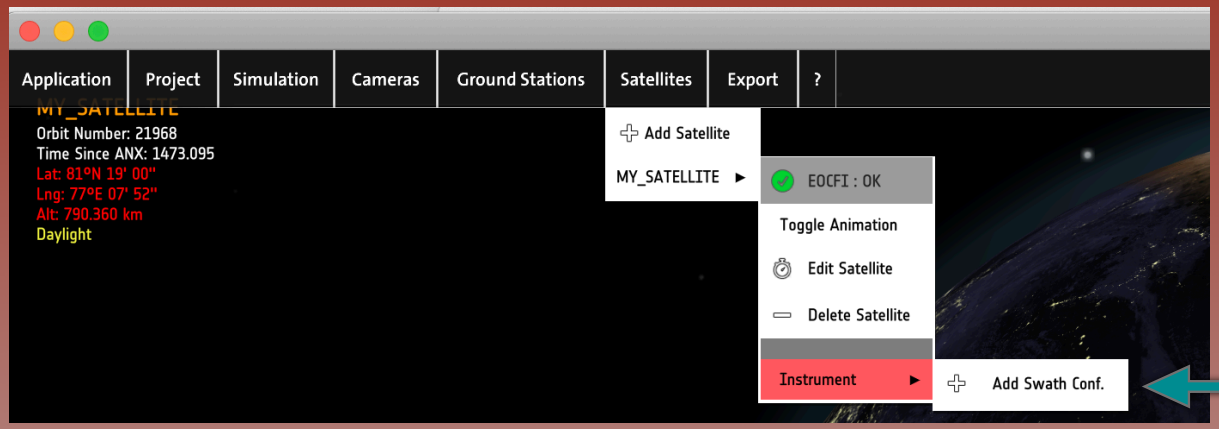
Select Orbit File

Select Attitude File

Change Style and number of orbits to show as history track

SAMIEdit: Adding New Satellite - Add Swath

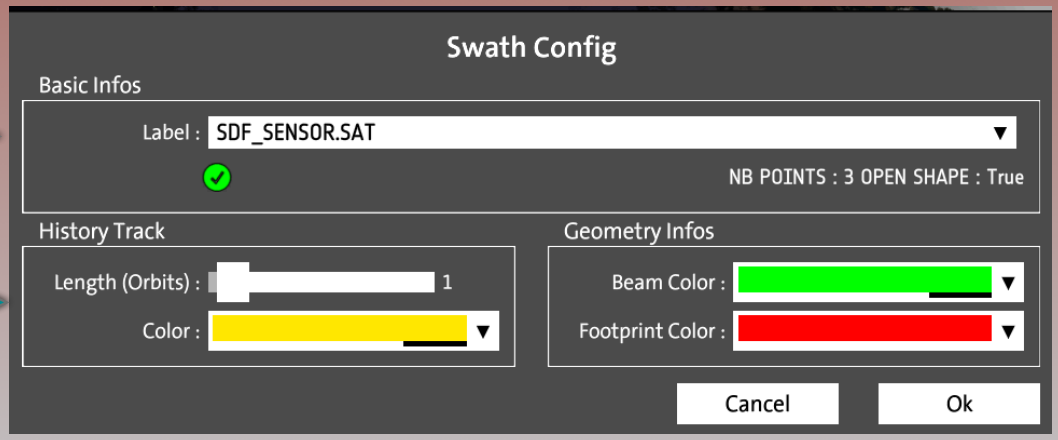
Edit the Instrument to select the swath files



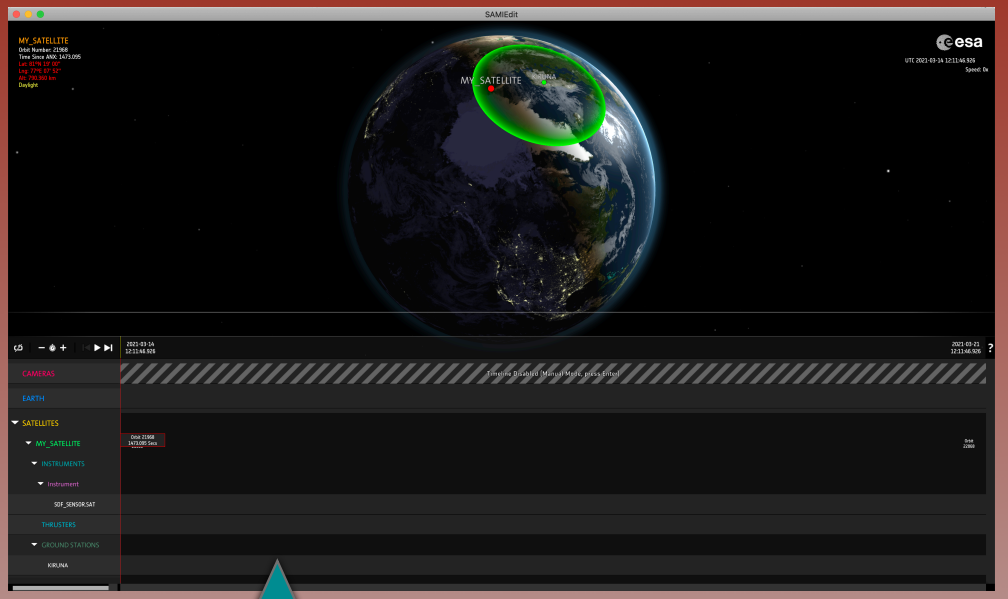
Label with satellite name that will be displayed in SAMIEdit

Select Swath File

Change Style and number of orbits to show as history track



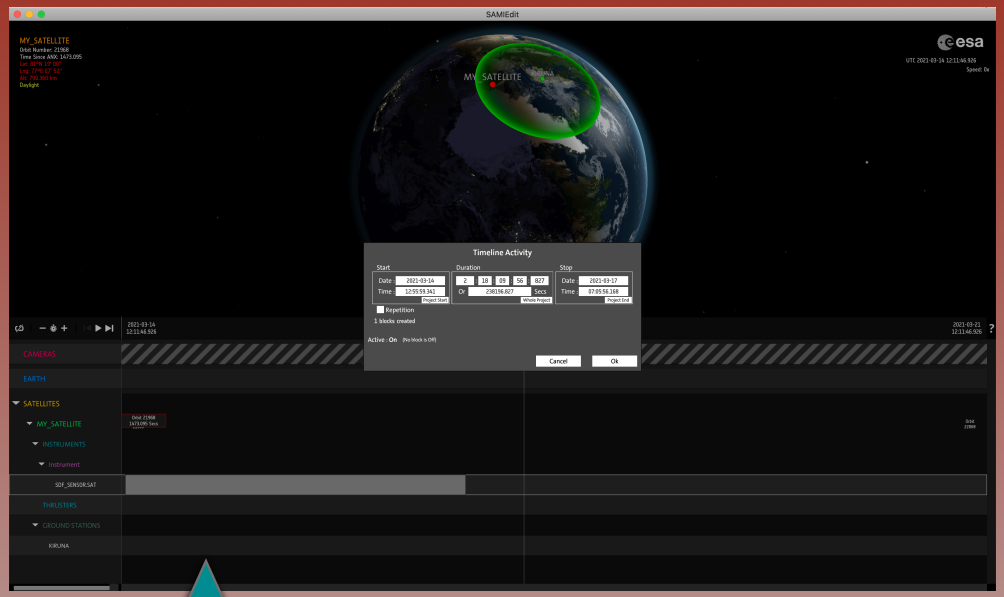
SAMIEdit: Adding New Satellite - Result



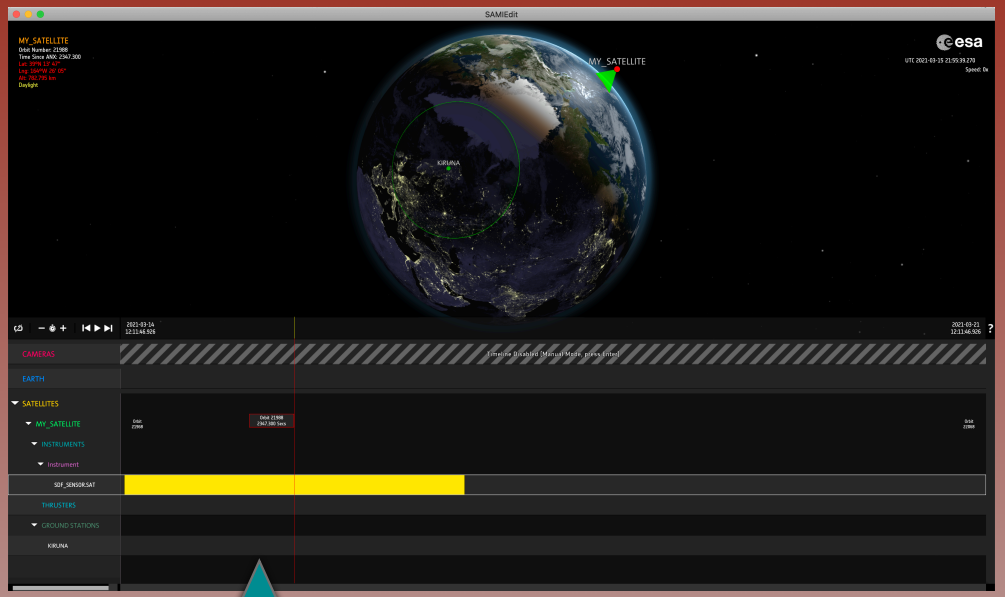
Mousing over this area and click…

…reveals the timeline editor

SAMIEdit: Adding New Satellite - Add time block



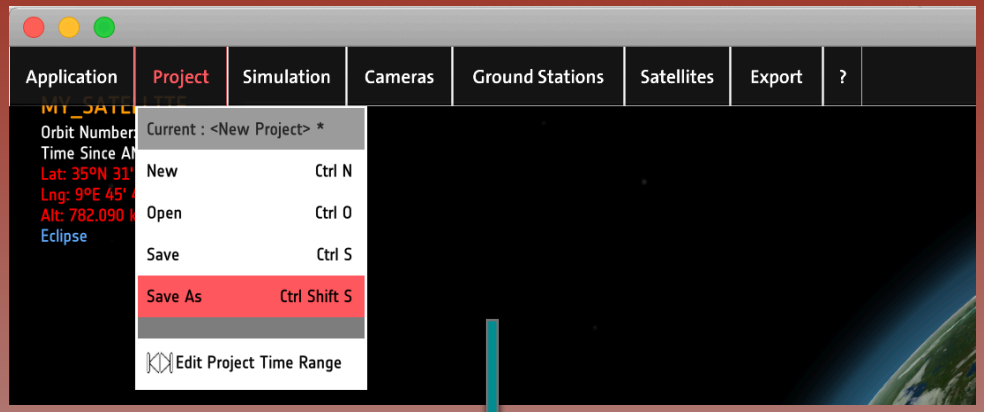
Right-click and drag over the swath timeline will add a block…

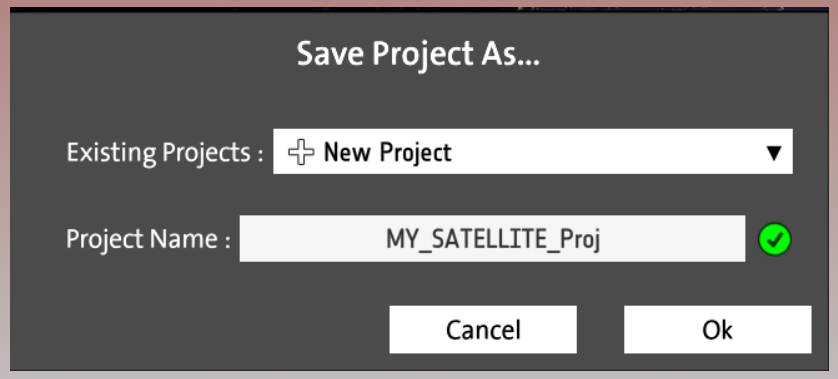


…and the swath is displayed whenever the simulation time goes through a time block

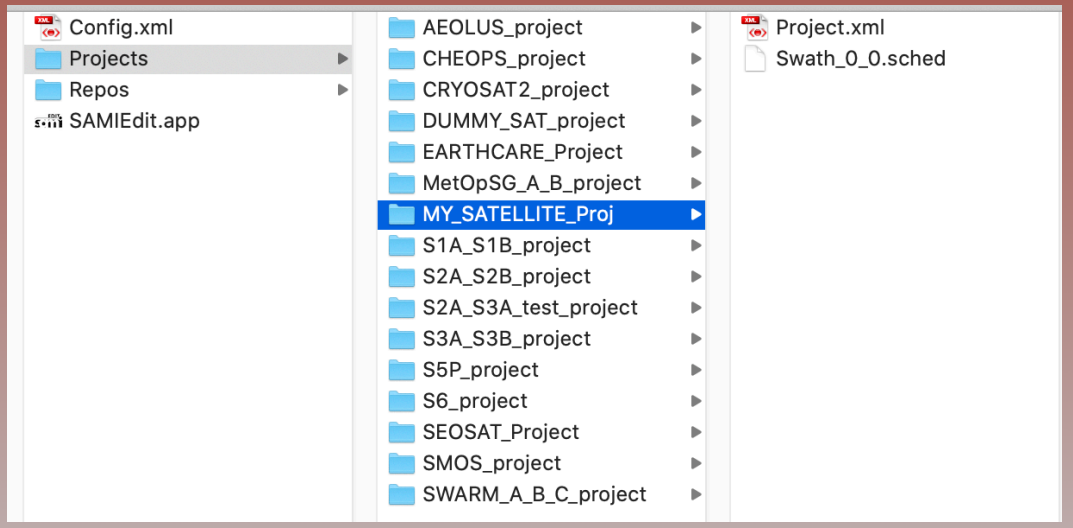
SAMIEdit: Adding New Satellite - Save Project

Project —> Save





Project Files are created



SAMIEdit: Adding New Satellite - User Support

EARTH OBSERVATION SYSTEM SUPPORT

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- SAMI User Support contact e-mail

  sami@eopp.esa.int

- For further details on the application interface and available features, please have a look to the SAMI Quick Start Guide

  https://eop-cfi.esa.int/Repo/PUBLIC/DOCUMENTATION/APPLICATIONS/SAMI/SAMIEdit_Quick_Start_Guide_Desktop_v1_4_0_6.pdf