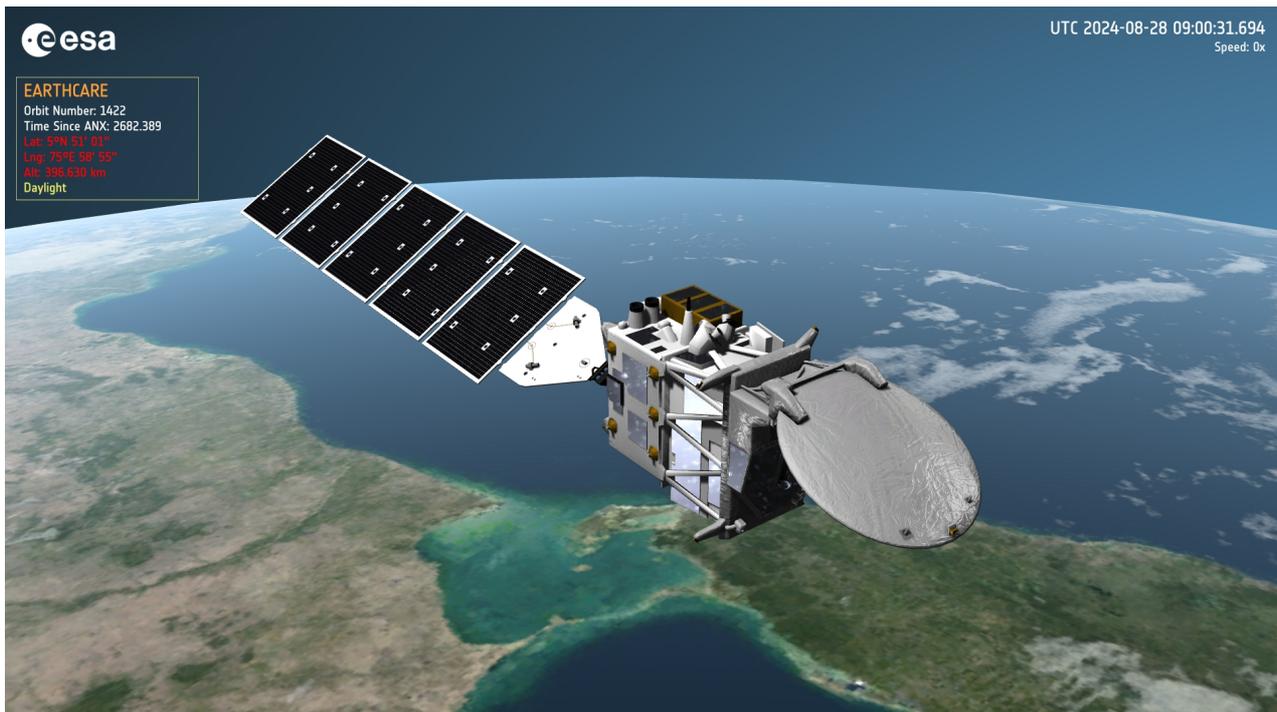EARTH OBSERVATION
SYSTEM SUPPORT

SAMIEdit v1.5.0.0

Release Notes

What's new

This release implements the following changes with respect to SAMIEdit v1.4.2.2 released on 25 Oct 2022:

New Features

- Satellite model and mission configuration file examples available for TriHEX and Arctic Weather Satellite
- The GroundStations, Swaths, Ground-tracks and Orbit-track Layers concept has been introduced, allowing to enable or disable the display of these items in the camera view and scheduled time block context
- Ground Stations colours, Swath and Satellite graphical properties panels are now displayed on the right side of the current view, in order to properly preview the colouring scheme being defined

- Improvements in the configuration of Orbit/Swath history tracks:
    - Maximum number of orbits increased to 600
    - Maximum number of orbits set through slider or text box
    - History tracks can be completely disabled
    - Fading of history tracks can be modified
- Improvements in the configuration of the solar array sun tracking mode or constant angle at which the deployed solar array is positioned: it can now be configured through satellite menu at runtime
- Display resolution selection is now part of the Application menu
- Startup project can now be set during the application runtime (configuration file edition/reset)
- Touch screen interactions are now available on Desktop machines that support it
- In the time blocks, add the capability to copy and paste date and time pairs to and from the system clipboard. set time block start/stop times to project start/stop times (dedicated buttons, visible only if mousing over top-right corners of the sub-panels)
- Support Swath Template File (STF) as file type for swath definition
- ESA logo moved to the top-left corner screen. Satellites and GroundStations labels use now ESA font.

Bug Fixes

- Artefact when satellites flying together in formation affecting the satellites not being the target camera (SAMI-AN-146)
- The application does not exit afters selecting Quit and saving a (modified) project. The Quit action needs to be triggered twice (SAMI-AN-148)
- Manage line-endings of the input TXT files, e.g. manoeuvre file (SAMI-AN-149)
- Swath Configuration menu cannot be closed/applied after changing swath style (SAMI-AN-151)
- Application hangs when importing blocks from SCF not sorted in time (SAMI-AN-153)
- On macOS, it is not possible to disable the UI overlay or set transparent background when exporting images / videos (SAMI-AN-155)
- In a scenario with 2 satellites (3D model in the foreground, billboard and label in the background), the satellite billboard and label appears in front of the satellite model, while it should get behind (SAMI-AN-159)

- Speed factor in Animations time blocks: allow to set decimal values (SAMI-AN-161)
- Application stalls when loading example project with several missions and many time blocks (SAMI-AN-170)
- Application unresponsive when EO CFI errors displayed flooding the application during simulation (e.g. about S2 solar array rewind computation) (SAMI-AN-174)

Software Aspects

- Directx12 is now supported on Windows platform
- Support for macOS ARM architecture (universal built)
- EOCFI SW libraries upgraded to v4.27

Available Platforms

SAMIEdit is available for macOS 64-bit (universal), Windows 64-bit, Linux 64-bit and iOS (iPad):

	Distribution Package
macOS 64-bit	SAMIEdit_1_5_0_0.dmg
Windows 64-bit	SAMIEdit_1_5_0_0_Win_x64.zip
Linux 64-bit	Not yet available for this release
iOS (iPad)	Not available for this release

Mission Support

The SAMIEdit distribution package includes 3D models and mission configuration files for the following ESA missions:

- Aeolus
- Arctic Weather Satellite (AWS)
- CHEOPS
- Cryosat-2
- EarthCARE
- FLEX
- MetOp-SG A/B
- Sentinel-1A/B

- Sentinel-2A/B
- Sentinel-3A/B
- Sentinel-5P
- Sentinel-6
- Seosat
- SMOS
- Swarm A/B/C
- TriHex
- TriHex Constellation

In addition, a couple o "Dummy" satellite models are provided. which can be used to define additional missions. See Section "Adding User-Defined Missions" in SAMIEdit Quick Start Guide for further information.

Example projects are provided for all missions.

Latest versions of
- Orbit files , e.g. Orbit Scenario Files (ORBSCT), Predicted Orbit Files (ORBPRE)
- Attitude Definition Files (ADF)
- Swath Definition Files (SDF)

for the supported missions can be downloaded by triggering the check for new mission updates menu option ("Application —> Check for updates")

Please note that example projects will have to be edited ("Satellites" —> "MISSION_NAME" —> "Edit Satellite") to select and load the updated orbit and attitude files.

Alternatively, Orbit Scenario Files (OSF) or Predicted Orbit Files (POF), Attitude Definition Files (ADF) and Swath Definition Files (SDF) for the supported missions can be found in the EOP System Support web server under the link:
MISSION_DATA

Further Information

For more details, please have a look to the SAMIEdit Quick Start Guide:
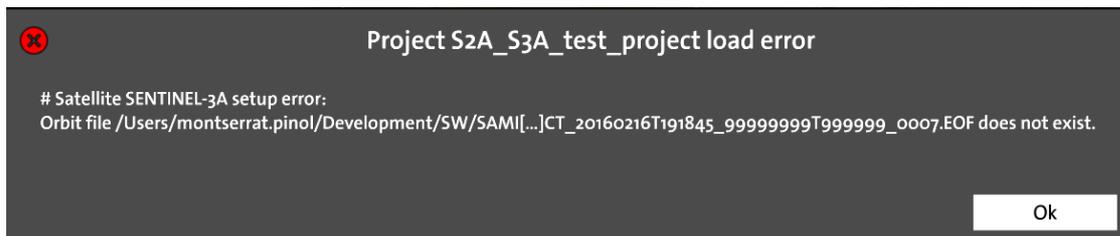SAMIEdit_Quick_Start_Guide_Desktop_v1_5_0_0.pdf

Contact

For questions, suggestions or reporting issues, please send an e-mail to the SAMIEdit Helpdesk:
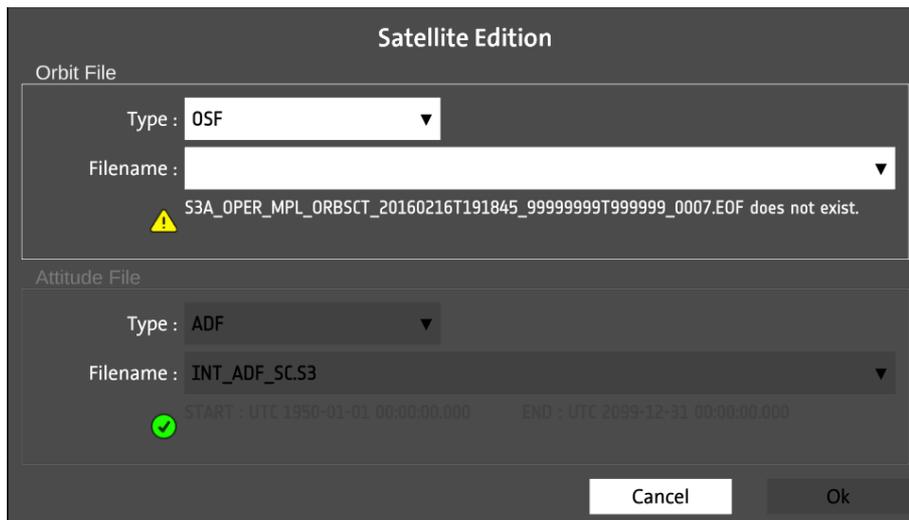
sami@eopp.esa.int

Known Problems

- Example project *S2A_S3A_test_project* returns an error

Satellites —> SENTINEL-3A —> Edit Satellite, click OK, check error message in next window

Select correct OSF filename

Click OK and continue