

ESOV NG Version 2.5.1 - Release Notes

1. NEW RELEASE DESCRIPTION

1.1 Software and Hardware Requirements

The ESOV NG v2.5.1 software is available for the following computer platforms:

- Windows 7 / 8 / 10 (64-bit)
- Mac OS X Intel 10.5 or above (64-bit)
- Linux (64-bit)

The ESOV NG software requires:

- Version 1.8 or higher of the Java Runtime Environment (JRE). It is already included in the ESOV NG packages for Windows and Mac OS X.
- 350+ Mb of hard disk space
- 512+ Mb RAM
- It is advised to have at least 1024 x 786 resolution display

1.2 Installation Executables

An ESOV NG distribution consists of one installer file for each supported computer platform:

	64-bit
Mac OS X Intel	EsovNG_macintel64_2_5_1.dmg
Linux	EsovNG_linux64_2_5_1.sh
Windows	EsovNG_windows-x64_2_5_1.exe

1.3 Installation Hints

The installation of the ESOV NG will be guided through an *Install4j* installation wizard.

- Windows 64-bit:

Run the executable installer *EsovNG_windows_2_5_1.exe*. Follow the instructions displayed by the installation wizard.

Note: Distribution for Windows 32-bit has been discontinued

- Mac OS X Intel 64-bit:

Unpack the disk image *EsovNG_macintel64_2_5_1.dmg* by double-clicking it in a Finder window. A new Finder window will be opened, showing the package 'ESOV NG Installer'. Double-click the installer package and follow the instructions displayed by the installation wizard.

- Linux 64-bit:

Simply run the shell script *EsovNG_linux64_2_5_1.sh* and follow the instructions displayed by the installation wizard. Note that you may have to set execution permission with the command:

```
sudo chmod a+x EsovNG_linux64_2_5_1.sh
```

Note that the ESOV NG installer will overwrite installation folders of previous versions if the application is installed in the same directory. Please remember to backup your own data files in case they are stored in the installation directory.

Please check Sections 2 and 3 of the ESOVNG user manual for further information about the installation and application start-up.

The Section 4.3 of these Release Notes ("Hints and Tips") provides useful information regarding issues than may occur after starting Esov NG.

2. NEW FUNCTIONALITIES

This new release provides the following new functionalities with respect to v2.4.2:

- Mission support
 - Updated Orbit Predicted File for Cryosat-2
- ESOVNG-AN-382: In Zones and Stations tool window, remove 'visible' column and associate enable/disable zone calculation to 'calculation' column
- ESOVNG-AN-389: Improvement to KML files style definitions
 - add "width" element to LineStyle
 - support normal and highlight styles
- ESOVNG-AN-392: Layout Improvements
 - Layer Manager node elements expanded by default
 - Segments tool window attached to the top or bottom of the map (visible in the default layout)
 - Full names for orbit file types in orbit type selector (orbit panel)
- ESOVNG-AN-395: Show/hide the orbit definition parameters through additional selectable item 'Use orbit parameters'
- ESOVNG-AN-408: Add 'orbit files' to user application directory
- ESOVNG-AN-409: Orbit Scenario File used as any other orbit file type, allowing to perform calculations across multiple orbit changes instead of selecting the individual changes and using one at a time
- ESOVNG-AN-410: Third-party libraries updated
 - EOFCI SW libraries version 4.14
 - Geotools version 13.6
- ESOVNG-AN-414: Distribution package for Windows migrated to 64-bit architecture
- ESOVNG-AN-421: Set default Coordinates Step to 1 instead of 10 in conversion tool "Shapefiles to Zones" and "KML to Zones"
- ESOVNG-AN-441: Added support for swath definition files format with Incidence angle

3. CLOSED SPRS

The following SPRs have been closed:

- ESOVNG-AN-385: List of zone intersection segments is not complete when using TLE file (related to EOFCI-AN-656)
- ESOVNG-AN-404: Cursor not consistent when zoom active/not-active, after using database editor or Az/EI 2D plot tool
- ESOVNG-AN-411: The Output zone folder selection window does not remember the path

- ESOVNG-AN-415: Default orbit parameter: Under certain circumstances, the calculation of the start date of the time interval is set to one day earlier than given in the Date textbox (related to EOCFI-AN-704)
- ESOVNG-AN-418: Lon/lat values in one-point zones imported from shapefiles are swapped in converted zone database file (issue in geotools shapefile parser)
- ESOVNG-AN-419: The export CSV removes leading zeros from time fields
- ESOVNG-AN-440: KML export: Instrument colours for the Normal style (for both LineStyle and PolyStyle) do not match the colours selected in Esov

4. ADDITIONAL COMMENTS AND KNOWN PROBLEMS

4.1 Mission Support

Latest versions of Orbit Scenario Files (OSF) or Predicted Orbit Files (POF) for the supported missions can be found in the EOP System Support web server under the link (request username/password):

<https://eop-cfi.esa.int/index.php/applications/esov/esov-ng-download>

The orbit files are available in the sub-folder AUX_DATA/.

Alternatively, orbit and swath files can also be retrieved from the link:

http://eop-cfi.esa.int/Repo/PUBLIC/DOCUMENTATION/MISSION_DATA/

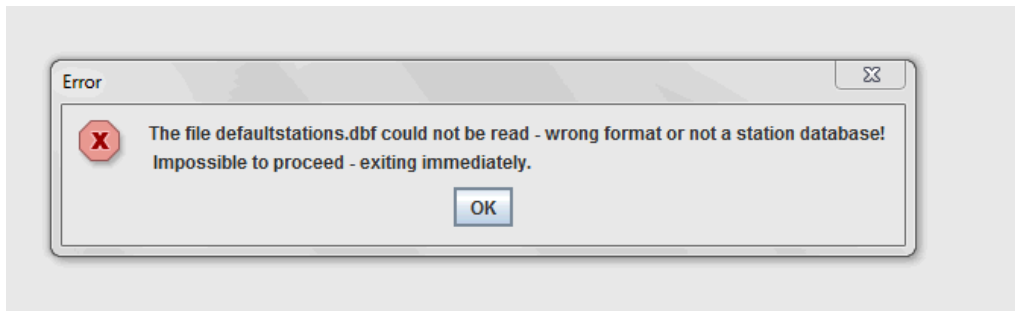
4.2 Known Problems

The current ESOV NG release has the following open anomalies:

- ESOVNG-AN-379: Java exception when clicking on year in Date Widget (Start/Stop Time). Workaround: date textbox can be edited
- ESOVNG-AN-400: Artefacts appear if zone is filled and zoom is applied (e.g. EURASIA, AFRICA)
- ESOVNG-AN-401: Distortion over the Poles in Rectangular projection for very-wide swaths (e.g. TROPOMI)
- ESOVNG-AN-449: Predicted Orbit File validity calculated in orbit panel does not cover the complete file, e.g. for Aeolus ORBPRES [start orbit+1, stop_orbit-1], for Sentinel-1 ORBPRES [start orbit, stop_orbit-1]
- ESOVNG-AN-451: Segments loaded from Swath Timeline File (SCF) are not correctly placed/timed when loaded if generated with a given predicted/restituted/TLE orbit file.

4.3 Hints and Tips

- If your system has a previous installation of ESOV NG, you may see the following error window when launching the application:



This problem is due to an incompatibility with the previous version of the defaultstations.dbf file. The way to solve the problem is to delete the existing file defaultstations.dbf. This file can be found in the user application folder. See Section 2.5.2 in the User Manual for further instructions about how to locate the user application directory (location is platform dependent)

- If your system has a previous installation of ESOV NG you may not see the latest default layout. In order to see it, just go to the user application directory (see Section 2.5.2 in the User Manual), rename (or remove) the existing file myLayout.layout and launch again ESOV NG.
- If for any reason the tool windows do not appear in the main window frame, you can restore the default layout by selecting "Window → Reset Layout"
- If the style of the segments is changed, a window pops up to warn the user that the style of the individual segments is lost after recomputation. To block the warning window please select the option 'Do not show this message again'
- In order to import a LLF or UTF file export type .csv using a spreadsheet application, load it as external data and select 'semicolon' as delimiter. To correctly import the decimal seconds in the UTC time, you just need to customize the cell format to hh:mm:ss.000
- Missions defined by the user with versions of Esov NG older than v2.3 may not work with the current version. A new field that has been added to the IDF (satellite identification file):

`<Absolute_Reference_Orbit>1</Absolute_Reference_Orbit>`

This new field has to be added to IDF file of the user-defined mission, for example:

```
<Default_Settings>
  <Repeat_Cycle unit="day">12</Repeat_Cycle>
  <Cycle_Length unit="orbit">175</Cycle_Length>
  <ANX_Longitude unit="deg">0.000000</ANX_Longitude>
  <MLST unit="h">18.0</MLST>
  <MLST_Drift unit="s/day">0.0</MLST_Drift>
  <Date>2000-01-01T00:00:00</Date>
  <Absolute_Reference_Orbit>1</Absolute_Reference_Orbit>
</Default_Settings>
```

- Please check the ESOV NG user manual for further information.

5. REPORTING PROBLEMS

For any problems or questions and to receive the username/password to download the software, please send an e-mail to the ESOV NG helpdesk: esov@eopp.esa.int