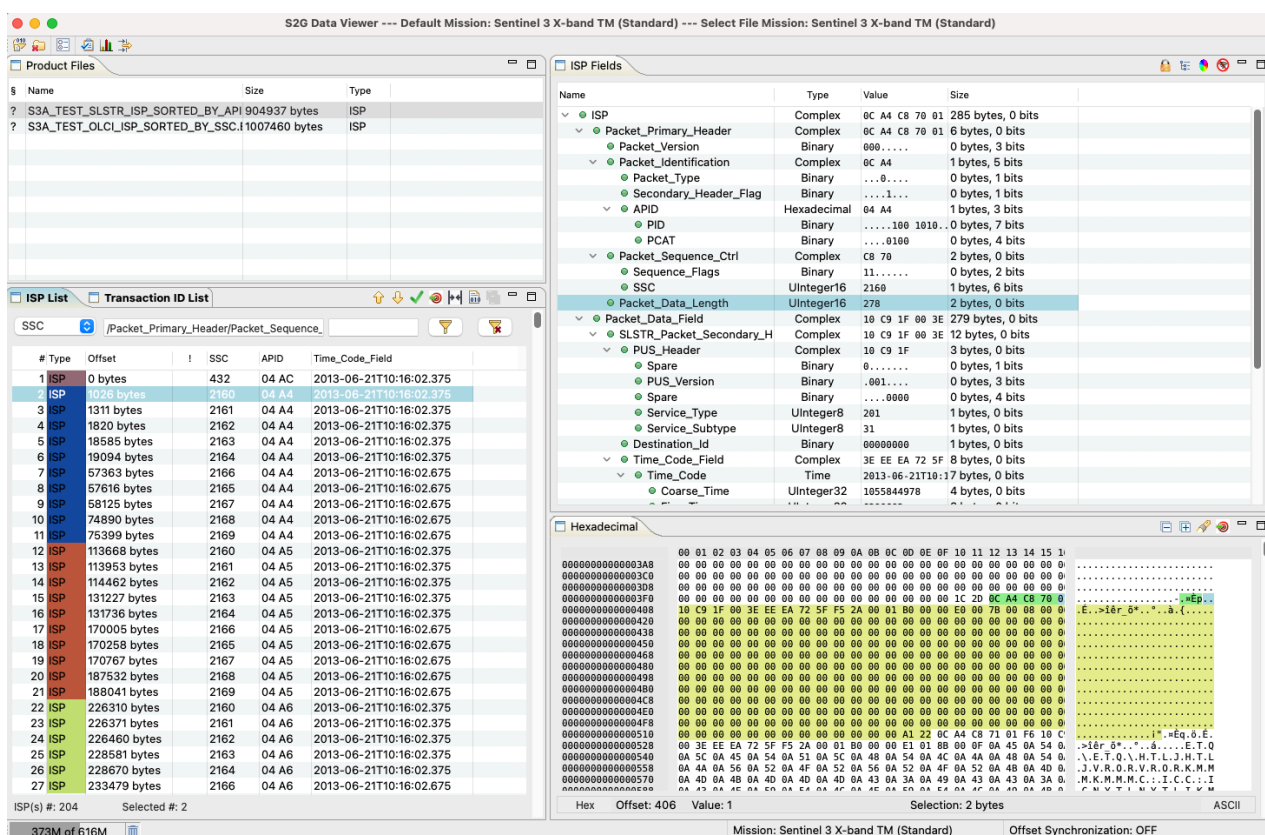


# S2G Data Viewer

## v2.7.2

## Release Notes



The screenshot displays the S2G Data Viewer v2.7.2 interface. The top bar shows the mission: "Default Mission: Sentinel 3 X-band TM (Standard) --- Select File Mission: Sentinel 3 X-band TM (Standard)".

**Product Files:** A table listing files with columns for Name, Size, and Type. It shows two files: "S3A\_TEST\_SLSTR\_ISP\_SORTED\_BY\_API 904937 bytes ISP" and "S3A\_TEST\_OLCI\_ISP\_SORTED\_BY\_SSC 11007460 bytes ISP".

**ISP Fields:** A detailed tree view of the data structure. It includes fields like Packet\_Primary\_Header, Packet\_Version, Packet\_Identification, Packet\_Type, Secondary\_Header\_Flag, APID, PID, PCAT, Packet\_Sequence\_Ctrl, Sequence\_Flags, SSC, Packet\_Data\_Length, Packet\_Data\_Field, SLSTR\_Packet\_Secondary\_H, PUS\_Header, Spare, PUS\_Version, Service\_Type, Service\_Subtype, Destination\_Id, Time\_Code\_Field, Time\_Code, and Coarse\_Time.

**Transaction ID List:** A table showing a list of transactions with columns for #, Type, Offset, SSC, APID, and Time\_Code\_Field. It lists 27 transactions, all of type "ISP", with offsets ranging from 0 to 233479 bytes.

**Hexadecimal View:** A section at the bottom showing a hex dump of the selected data (Offset: 406, Value: 1). It includes a selection of 2 bytes and an ASCII representation of the data.

## What's new

This release implements the following changes with respect to S2G v2.7.1 released on 02 Sep 2024:

## New Features

- Support for SNEAK ISP Extractor through Scripts menu in S2G (see instructions in section 5.14.1 of the S2G User Manual). 'Locate Script' feature added to Scripts menu item (S2G-AN-275)
- Changes in S2G due to DFDL4S-AN-067 (changes in the name of the exceptions) (S2G-AN-281)

## Software Aspects

- Application built using DFDL4S v2.1.0 (before: DFDL4S v2.0.0)
- Distribution packages without the Java Runtime Environment (JRE) embedded in the bundle have been discontinued

## Bug Fixes

- Offset value in PDU Header (length=8 bytes, too large for integer operations) (S2G-AN-298)
- Files that appear on the Transaction ID list, despite having correct offsets and file sizes are sometimes reported as malformed (S2G-AN-299)
- 'Execute Script' feature does not work in Ubuntu 18/22 (S2G-AN-303)
- PDU file is apparently loading but does not appear in product file panel (S2G-AN-305)

## Documentation

- User Manual updated S2G-DME-TEC-SUM023-1L

## Available Platforms

S2G is available for Linux 64-bit, macOS and Windows 64-bit.

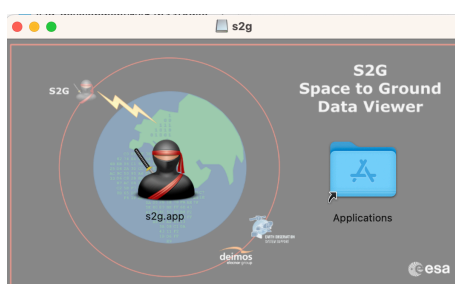
For each platform, the package includes the Java Runtime Environment (JRE) embedded in the bundle. Having the JRE included ensures that the application works even if no Java version is installed in your system. The version of the JRE embedded is OpenJDK 11.0.15.

	Distribution Package
Linux 64-bit with JRE 11 embedded	s2g-2.7.2-linux.gtk.x86_64.withJRE.zip
macOS with JRE 11 embedded	s2g-2.7.2-macos.cocoa.x86_64.withJRE.dmg
Windows 64-bit with JRE 11 embedded	s2g-2.7.2-win32.win32.x86_64.withJRE.zip

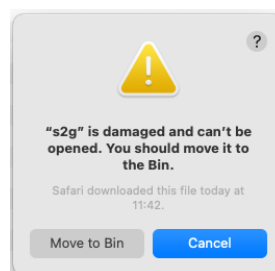
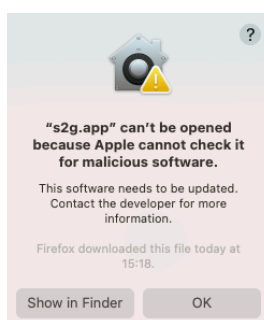
## Installation Hints

For macOS, the following steps may have to be followed to circumvent user permission and security issues:

1. The *s2g.app* can be either copied to Applications folder (if user has admin rights) or copied to any user folder



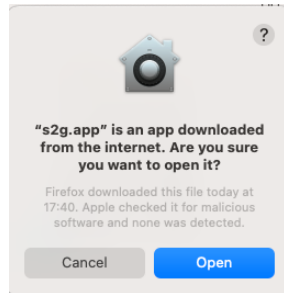
2. If launching the application results in an error message, e.g



type the following command on the Terminal window (after navigating to the folder where *s2g.app* is located):

```
xattr -d com.apple.quarantine s2g.app
```

3. Normally, launching the application will show the following message window, click Open



## Mission Support

The S2G distribution package includes mission configuration files (JAR archive containing XML file and schema files) for the following missions:

- Aeolus (X-Band)
- Biomass (X-Band)
- CRISTAL (X-Band, no CFDP encapsulation)
- EarthCARE (S-Band and X-Band)
- FLEX (X-Band)
- MetOp-SG-A (Ka-Band)
- MetOp-SG-B (Ka-Band)
- MTG (Ka-Band)
- Sentinel-1 (X-Band)
- Sentinel-2 (X-Band)
- Sentinel-3 (X-Band)
- Sentinel-4 (Ka-Band)
- Sentinel-5 (X-Band)
- Sentinel-5P (X-Band)
- Sentinel-6 (X-Band)
- Seosat (X-Band)
- SMOS (S-Band and X-Band)
- Swarm (S-Band)

The user is notified about the availability of mission configuration files for new missions or about updates to the existing missions when starting-up S2G or through the “Help—>Check for Updates” menu option.

- Note that *schema versions available under the ‘Check for updates’ mechanism are only compatible with S2G v2.5.2 and above. Similarly, older*

*schema versions will not work in S2G v2.5.2.* For details about the format changes, see Annex 3 in Mission Specification Schemas document: [S2G\\_Mission\\_Specification\\_Schemas\\_S2G-DME-TEC-SUM092-1D.pdf](#)

Latest versions of the mission schema files are also available at [MISSION SCHEMA FILES](#).

Note that it is possible for the users to include additional data type definitions in the default mission schema files delivered with the S2G application. This may be typically the case for dedicated ISP data definitions. The [S2G Helpdesk](#) can include the user extensions as part of the default schemas distributed with the application and guide users in the customisation process. Please send your requests (together with the extended schemas files) to the [S2G Helpdesk](#).

## Known Problems

The current S2G release has the following open issues:

- *CFDP data: Support WARNING file status (overlapping PDUs) (S2G-AN-295)*
- *CFDP data: Completion map: support file size of max. value corresponding to 8 bytes unsigned integer (current implementation uses array with max length being an integer) (S2G-AN-300)*

## Further Information

For more details, please have a look to the S2G User Manual: [S2G User Manual S2G-DME-TEC-SUM023-1L.pdf](#)

## Contact

For questions, suggestions or reporting issues, please send an e-mail to the S2G Helpdesk:

*s2g@eopp.esa.int*