

# S2G Data Viewer v2.5.4

## Release Notes

The screenshot displays the S2G Data Viewer interface. The top window shows 'Product Files' with two files: 'ISPDData1.dat' (3840 bytes) and 'ISPDData2.dat' (133440 bytes). Below it is the 'ISP List' table:

#	Type	Offset	SSC	APID	Time_Code_Field	Service_Ty	Service_Su
1	ISP	0 bytes	11977	05 06	2020-12-17T20:13:5...	201	46
2	ISP	64 bytes	11977	05 0D	2020-12-17T20:13:5...	201	46
3	ISP	128 bytes	11977	05 0E	2020-12-17T20:13:5...	201	46
4	ISP	192 bytes	11978	05 06	2020-12-17T20:14:0...	201	46
5	ISP	256 bytes	11978	05 0D	2020-12-17T20:14:0...	201	46
6	ISP	320 bytes	11978	05 0E	2020-12-17T20:14:0...	201	46
7	ISP	384 bytes	11979	05 06	2020-12-17T20:14:1...	201	46
8	ISP	448 bytes	11979	05 0D	2020-12-17T20:14:1...	201	46
9	ISP	512 bytes	11979	05 0E	2020-12-17T20:14:1...	201	46
10	ISP	576 bytes	11980	05 06	2020-12-17T20:14:2...	201	46
11	ISP	640 bytes	11980	05 0D	2020-12-17T20:14:2...	201	46
12	ISP	704 bytes	11980	05 0E	2020-12-17T20:14:2...	201	46
13	ISP	768 bytes	11981	05 06	2020-12-17T20:14:3...	201	46
14	ISP	832 bytes	11981	05 0D	2020-12-17T20:14:3...	201	46
15	ISP	896 bytes	11981	05 0E	2020-12-17T20:14:3...	201	46
16	ISP	960 bytes	11982	05 06	2020-12-17T20:14:4...	201	46
17	ISP	1024 bytes	11982	05 0D	2020-12-17T20:14:4...	201	46
18	ISP	1088 bytes	11982	05 0E	2020-12-17T20:14:4...	201	46
19	ISP	1152 bytes	11983	05 06	2020-12-17T20:14:5...	201	46
20	ISP	1216 bytes	11983	05 0D	2020-12-17T20:14:5...	201	46
21	ISP	1280 bytes	11983	05 0E	2020-12-17T20:14:5...	201	46
22	ISP	1344 bytes	11984	05 06	2020-12-17T20:15:0...	201	46
23	ISP	1408 bytes	11984	05 0D	2020-12-17T20:15:0...	201	46
24	ISP	1472 bytes	11984	05 0E	2020-12-17T20:15:0...	201	46
25	ISP	1536 bytes	11985	05 06	2020-12-17T20:15:1...	201	46
26	ISP	1600 bytes	11985	05 0D	2020-12-17T20:15:1...	201	46

The 'ISP Fields' window shows a tree view of fields including Packet\_Primary\_Header, Packet\_Sequence\_Ctrl, Packet\_Data\_Field, and PUS\_Header. The 'Hexadecimal' window shows the raw data in hex and ASCII format.

## What's new

This release implements the following changes with respect to S2G v2.5.3 released on 02 August 2021:

## New Features

- Added support for Biomass CADU unscrambling algorithm (S2G-AN-263)
  - \* The initialisation sequence for the pseudo-random sequence generator has been made configurable using a transformation\_parameter in the XML mission file

- A tooltip showing the packet and file offsets of the selected field appears when hovering over the 'Size' column of the Unit Fields tree panel (S2G-AN-246)

## Bug Fixes

No bug fixes in this release

## Documentation

No documentation updates in this release (see Known Problems section)

## Available Platforms

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

For each platform, two types of packages are provided: one with the Java Runtime Environment (JRE) embedded in the bundle and one without. 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 Java 8 update 261.

	Distribution Package
Linux 64-bit	s2g-linux.gtk.x86_64.zip
Linux 64-bit with JRE 8 embedded	s2g-linux.gtk.x86_64.withJRE.zip
macOS	s2g-macosx.cocoa.x86_64.dmg
macOS with JRE 8 embedded	s2g-macosx.cocoa.x86_64.withJRE.dmg
Windows 64-bit	s2g-win32.win32.x86_64.zip
Windows 64-bit with JRE 8 embedded	s2g-win32.win32.x86_64.withJRE.zip

Note: For macOS package (no embedded JRE), it is required to have JDK 8 installed. For Linux/Windows, having JRE 8 is sufficient.

## 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)
- EarthCARE (S-Band and 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:

- Update the screenshots in the User Manual (S2G-AN-244)
- S2G not working in MacOs Big Sur (S2G-AN-256)

## Further Information

For more details, please have a look to the S2G User Manual:  
[S2G User Manual S2G-DME-TEC-SUM023-11.pdf](#)

## Contact

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

*s2g@eopp.esa.int*