



# S2G Data Viewer v2.7.0

## **Release Notes**

Product Files							🗖 ISP Fields 🔒 🖩 🧐 🕲 🗖						8 =
Name			Size	Type			Name		Type	Value	Size		
									••				
S3A_TEST_SLSTR_ISP_SORTED_BY_API 904937 bytes ISP S3A_TEST_OLCI_ISP_SORTED_BY_SSC.I 1007460 bytes ISP					✓ ● ISP		Complex		285 bytes, 0 bits				
					Packet_Primary_Header		Complex	0C A4 C8 70 01					
							Packet_\		Binary	600	0 bytes, 3 bits		
							✓ ● Packet_I		Complex	GC A4	1 bytes, 5 bits		
							Packe		Binary		0 bytes, 1 bits		
								ndary_Header_Flag	Binary	1	0 bytes, 1 bits		
							V  APID PID		Hexadecimal	04 A4	1 bytes, 3 bits		
							PID     PC		Binary	100 1010.			
									Binary	0100 C8 70	0 bytes, 4 bits		
							<ul> <li>Packet_S</li> </ul>		Complex		2 bytes, 0 bits		
							<ul> <li>Seque</li> <li>SSC</li> </ul>	ence_Flags	Binary UInteger16	2160	0 bytes, 2 bits 1 bytes, 6 bits		
ISP List	🗖 Transactio	n ID List		<u></u>	🕂 🗸 🥥 😽	🔒 🖷 🗖 🗖		Data_Length		2160			
							Packet_L ✓ ● Packet_Date		UInteger16 Complex		2 bytes, 0 bits 279 bytes, 0 bits		
SC	/Packet_Print	nary_Header/Pa	cket_Sequer	nce_		- 🙀 - 📕							
							✓ ● SLSTR_F ✓ ● PUS I	Packet_Secondary_H	Complex Complex	10 C9 1F 00 3E 10 C9 1F	3 bytes, 0 bits		
# Type	Offset	! SSC	APID	Time_Code_Fie	ld						0 bytes, 1 bits		
1 ISP	0 bytes	432	04 AC	2013-06-21T	10:16:02 375		Spa	S_Version	Binary Binary	0	0 bytes, 3 bits		
2 ISP	1026 bytes	2160	04 A0	2013-06-21T					Binary Binary	.001	0 bytes, 4 bits		
3 ISP	1311 bytes	2161	04 A4	2013-06-21T10:16:02.375 2013-06-21T10:16:02.375		<ul> <li>Spare</li> <li>Service_Type</li> <li>Service_Subtype</li> </ul>		Ulnteger8	201	1 bytes, 0 bits			
4 ISP	1820 bytes	2162	04 A4					Ulnteger8	31	1 bytes, 0 bits			
5 ISP	18585 bytes	2163	04 A4	2013-06-21T10:16:02.375				Binary	60000000	1 bytes, 0 bits			
6 ISP	19094 bytes	2164	04 A4	2013-06-21T10:16:02.375 2013-06-21T10:16:02.375 2013-06-21T10:16:02.675		Destination_Id     O Time_Code_Field     O Time_Code		Complex	3E EE EA 72 5F				
7 ISP	57363 bytes	2166	04 A4					Time	2013-06-21T10:				
8 ISP	57616 bytes	2165	04 A4		2013-06-21T10:16:02.675		© Coarse_Time		UInteger32	1055844978	4 bytes, 0 bits		
9 ISP	58125 bytes	2167	04 A4	2013-06-21T					····	1055044570	4 bytes, o bits		
10 ISP	74890 bytes	2168	04 A4	2013-06-21T									a -
11 ISP	75399 bytes	2169	04 A4	2013-06-21T			Hexadecimal					⊟ ⊞ 🔗	<u>ا چ</u>
12 ISP	113668 bytes	2160	04 A5	2013-06-21T	10:16:02.375			00 01 02 03 04 05	06 07 08 09 0	A OB OC OD OF OF	10 11 12 13 14 15 1		
13 ISP	113953 bytes	2161	04 A5		2013-06-21T10:16:02.375 2013-06-21T10:16:02.375		0000000000003A8 00 00 00 00 00 00		00 00 00 00 00	0 00 00 00 00 00	00 00 00 00 00 00 0		
14 ISP	114462 bytes	2162	04 A5	2013-06-21T			00000000000003C0 00000000000003D8			00 00 00 00 00 00 00 00			
15 ISP	131227 bytes	2163	04 A5	2013-06-21T10:16:02.375 2013-06-21T10:16:02.375 2013-06-21T10:16:02.675		0000000000003F0 00 00 00 00 00 00 00 00 00 00 00 00 0			1C 2D 0C A4 C8 70 0	0C A4 C8 70 0			
16 ISP	131736 bytes	2164	04 A5			000000000000000000000000000 10 C9 1F 00 3E EE EA 72 5F F5 2A 00 01 B0 00 00 E0 00 7B 00 08 00 0 .É>ièr_ö**.à.				.É>îêr_ô*°à.{			
17 ISP	170005 bytes	2166	04 A5			0000000000000420 00 00 00 00 00 00 00 00 00 00 00 00 0							
18 ISP	170258 bytes	2165	04 A5	2013-06-21T	10:16:02.675		000000000000450	00 00 00 00 00 00	00 00 00 00 0	0 00 00 00 00 00	00 00 00 00 00 00 0		
19 ISP	170767 bytes	2167	04 A5	2013-06-21T	10:16:02.675		0000000000000468				00 00 00 00 00 00 00 00	••••••	
20 ISP	187532 bytes	2168	04 A5	2013-06-21T	10:16:02.675		0000000000000498	00 00 00 00 00 00	00 00 00 00 0	0 00 00 00 00 00	00 00 00 00 00 00 0		
21 ISP	188041 bytes	2169	04 A5	2013-06-21T	10:16:02.675		00000000000004B0	60 00 00 00 00 00	00 00 00 00 00	0 00 00 00 00 00	00 00 00 00 00 00 0	••••••	
22 ISP	226310 bytes	2160	04 A6	2013-06-21T	10:16:02.375		000000000000004C8 000000000000004E0	GO OD OG OO OO OO OO	00 00 00 00 00 0	0 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00		
23 ISP	226371 bytes	2161	04 A6	2013-06-21T	10:16:02.375		00000000000004F8	60 60 60 60 60 60	00 00 00 00 0	0 00 00 00 00 00	00 00 00 00 00 00 0		
24 ISP	226460 bytes	2162	04 A6	2013-06-21T	10:16:02.375		000000000000000000000000000000000000000	00 00 00 00 00 00 00 00 35 55 50 73 55	00 00 00 00 00 0	0 00 00 A1 22 00	A4 C8 71 01 F6 10 C		
25 ISP	228581 bytes	2163	04 A6	2013-06-21T	-06-21T10:16:02.375 -06-21T10:16:02.375		000000000000540	0A 5C 0A 45 0A 54	0A 51 0A 5C 0	A 48 0A 54 0A 40	0A 4A 0A 48 0A 54 0.	.\.E.T.Q.\.H.T.L.J.H.T.L	
26 ISP	228670 bytes	2164	04 A6	2013-06-21T			0000000000000558					.J.V.R.O.R.V.R.O.R.K.M.M	
27 ISP	233479 bytes	2166	04 A6	2013-06-21T	10:16:02.675		0000000000000570	0A 4D 0A 4B 0A 4D	0A 4D 0A 4D 0	A 43 UA 3A UA 49	0A 43 0A 43 0A 3A 0.	.M.K.M.M.M.C.:.I.C.C.:.I	
(s) #: 204	Selected	# 0					Hex Offset: 4	06 Value: 1		Colocti	on: 2 bytes		ASCII

## What's new

This release implements the following changes with respect to S2G v2.6.0 released on 19 October 2022:

#### **New Features**

• Support CFDP in S2G - Parsing and visualization of PDUs (S2G-AN-266)





- Support CADU without Reed Solomon coding (CADU = Sync Marker + Data Space) (S2G-AN-267)
- Automatic updates mechanism does not work: URL issue fixed (S2G-AN-289)
- Add feature to concatenate data files (Tools --> Concatenate) (S2G-AN-290)

#### **Software Aspects**

• No updates to underlaying software libraries in this release

### **Bug Fixes**

• Missing ISPs during TF to ISP conversion (S2G-AN-288)

#### **Documentation**

• No documentation updates in this release

## **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 OpenJDK 11.0.15.

	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 11 installed. For Linux/Windows packages with no embedded JRE, having JRE 11 is sufficient.

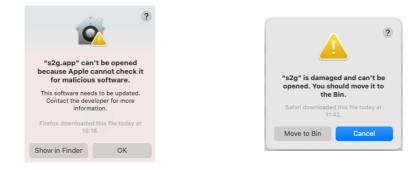
### **Installation Hints**

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 <u>MISSION</u> <u>SCHEMA FILES</u>.

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 <u>S2G</u> <u>Helpdesk</u> 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 <u>S2G Helpdesk</u>.

## **Known Problems**

The current S2G release has the following open issues:

- Support CFDP in S2G Parsing and visualisation (S2G-AN-266) —> Pending 'File Completion Map' feature
- Issues with v2.7.0 macOS M1/M2 installation package without Java Runtime Environment (S2G-AN-291)
  - A. The following message is obtained: 'The JVM shared library /*Library/Java/JavaVirtualMachines/ MY\_JD//Contents/Home/bin/../lib/server/libjvm.dylib*) does not contain the JNI\_CreateJavaVM symbol'

## **Further Information**

For more details, please have a look to the S2G User Manual: S2G User Manual S2G-DME-TEC-SUM023-1J.pdf

## Contact

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

s2g@eopp.esa.int