



S2G Data Viewer v2.7.2

Release Notes

Product Fi	les					- 0	🗖 ISP Fields 🔒 🗄 🕈					8 =	
Name			Size	Type			Name		Туре	Value	Size		
S3A TEST	SLSTR ISP SC	RTED BY API	904937 byte	es ISP			× • ISP						
	_OLCI_ISP_SOR							and the dee	Complex		285 bytes, 0 bits		
00/2/20							 Packet_Prin Packet_V 		Complex	0C A4 C8 70 01			
							 Packet_V Packet_I 		Binary Complex	600 GC A4	0 bytes, 3 bits 1 bytes, 5 bits		
							Packet_i Packet		Binary	6C A4	0 bytes, 1 bits		
								dary_Header_Flag	Binary		0 bytes, 1 bits		
							✓ ● APID	uary_rieauer_riag	Hexadecimal	04 A4	1 bytes, 3 bits		
							PID		Binary	100 1010.			
							 PC/ 		Binary		0 bytes, 4 bits		
							✓ ● Packet_S		Complex	C8 70	2 bytes, 0 bits		
								nce_Flags	Binary	11	0 bytes, 2 bits		
							Seque Seque SSC		UInteger16	2160	1 bytes, 6 bits		
ISP List	Transaction	n ID List		Ŷ	🕂 🗸 🕘 🚧	🗟 🐂 🗝 🗖		Data_Length	UInteger16	278	2 bytes, 0 bits		
							✓		Complex		279 bytes, 0 bits		
SSC	ᅌ /Packet_Prin	nary_Header/Pa	cket_Sequend	ce_				acket_Secondary_H	Complex	10 C9 1F 00 3E			
							✓ ● PUS_H		Complex	10 C9 1F	3 bytes, 0 bits		
# Type	Offset	! SSC	APID	Time_Code_Field	d		Spa		Binary	0	0 bytes, 1 bits		
1 ISP	0 bytes	432	04 AC	2013-06-21T1	0:16:02.375			S_Version	Binary	.001	0 bytes, 3 bits		
2 ISP	1026 bytes						Spa		Binary		0 bytes, 4 bits		
3 ISP	1311 bytes	2161	04 A4	2013-06-21T1	06-21T10:16:02.375		Service_Type		UInteger8	201	1 bytes, 0 bits		
4 ISP	1820 bytes	2162	04 A4	2013-06-21T1	6-21T10:16:02.375			vice_Subtype	UInteger8	31	1 bytes, 0 bits		
5 ISP	18585 bytes	2163	04 A4	2013-06-21T1	-21T10:16:02.375		Destin	ation_Id	Binary	00000000	1 bytes, 0 bits		
6 ISP	19094 bytes	2164	04 A4	2013-06-21T1	6-21T10:16:02.375		V Ime_Code_Field		Complex	3E EE EA 72 5F	8 bytes, 0 bits		
7 ISP	57363 bytes	2166	04 A4	2013-06-21T1	06-21T10:16:02.675 06-21T10:16:02.675		 Time_Code Coarse_Time 		Time	2013-06-21T10:	7 bytes, 0 bits		
8 ISP	57616 bytes	2165	04 A4	2013-06-21T1					UInteger32	1055844978	4 bytes, 0 bits		
9 ISP	58125 bytes	2167	04 A4	2013-06-21T1			~ *				AL . AL		
10 ISP	74890 bytes	2168	04 A4	2013-06-21T1			Hexadecimal					E 🕀 💉	· 🧠 =
11 ISP	75399 bytes	2169	04 A4	2013-06-21T1			L' rionadociniar						•
12 ISP	113668 bytes	2160	04 A5	2013-06-21T1							10 11 12 13 14 15 1		
13 ISP	113953 bytes	2161	04 A5	2013-06-21T1			00000000000003A8 00000000000003C0				0 00 00 00 00 00 00 00 00 00 00 00 00 0		
14 ISP	114462 bytes	2162	04 A5		3-06-21T10:16:02.375		00000000000003D8	00 00 00 00 0	0 00 00 00 00 00	0 00 00 00 00 00 00 0			
15 ISP	131227 bytes	2163	04 A5	2013-06-21T1			00000000000003F0 00000000000000408				0 1C 2D 0C A4 C8 70 0 0 E0 00 7B 00 08 00 0		
16 ISP	131736 bytes	2164	04 A5	2013-06-21T1			0000000000000420	69 69 66 60 68 68	00 00 00 00 0	0 00 00 00 00 00	0 00 00 00 00 00 00 0		
17 ISP 18 ISP	170005 bytes	2166 2165	04 A5 04 A5	2013-06-21T1 2013-06-21T1			0000000000000438				0 00 00 00 00 00 00 00 00 00 00 00 00 0	• • • • • • • • • • • • • • • • • • • •	•
18 ISP 19 ISP	170258 bytes 170767 bytes	2165	04 A5	2013-06-2111 2013-06-21T1			0000000000000468	69 69 66 60 68 68	00 00 00 00 0	0 00 00 00 00 00	0 00 00 00 00 00 00 0		
20 ISP	170767 bytes 187532 bytes	2167	04 A5	2013-06-2111 2013-06-21T1			0000000000000480				0 00 00 00 00 00 00 00 00		•
20 ISP 21 ISP	187532 bytes 188041 bytes	2168	04 A5	2013-06-2111 2013-06-21T1			0000000000000498 0000000000000480				00 00 00 00 00 00 00 00 00 00 00 00 00		
22 ISP	226310 bytes	2169	04 A5	2013-06-2111 2013-06-21T1			00000000000004C8	69 69 66 60 66 66	00 00 00 00 0	0 00 00 00 00 00	0 00 00 00 00 00 00 0		
23 ISP	226371 bytes	2160	04 A6	2013-06-21T1			00000000000004E0 00000000000004F8				0 00 00 00 00 00 00 00 00 00 00 00 00 0	••••••	
24 ISP	226460 bytes	2162	04 A6	2013-06-21T1			0000000000000510	69 69 66 60 66 68	00 00 00 00 0	0 00 00 A1 22 00	C A4 C8 71 01 F6 10 C	i⁼.×Èq.ö.É	
25 ISP	228581 bytes	2162	04 A6	2013-06-21T1			0000000000000528				3 00 0F 0A 45 0A 54 0. C 0A 4A 0A 48 0A 54 0.	.>îêr_ö*°áE.T. .∖.E.T.Q.\.H.T.L.J.H.T.	
26 ISP	228670 bytes	2164	04 A6	2013-06-21T1			000000000000558	0A 4A 0A 56 0A 52	0A 4F 0A 52 0	A 56 0A 52 0A 4	= 0A 52 0A 4B 0A 4D 0.	.J.V.R.O.R.V.R.O.R.K.M.	м
27 ISP	233479 bytes	2166	04 A6	2013-06-21T1			000000000000570	GA 4D GA 4B GA 4D	0A 4D 0A 4D 0	A 43 0A 3A 0A 49	0 0A 43 0A 43 0A 3A 0.	.M.K.M.M.M.C.:.I.C.C.:.	I
P(s) #: 204	Selected							06 Value: 1	LA MA AF D		on: 2 bytes		ASCII

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 <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:

- 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