# S2G Data Viewer v2.4.5

## **Release Notes**

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							I SP Fields				🛀 tr: 🚺 😵	
				Size	Туре	Name		Type	Value	Size		
SE	A_TEST_	NAV_ATT_TM_201703	305T055028	1420601 byte	s ISP	v 0	ISP	Complex	08 B6 C0 00 00 E2 10 00 00 00 45 E6 69 B	233 bytes, 0 bits		
						~	Packet_Primary_Header	Complex	08 B6 C0 00 00 E2	6 bytes, 0 bits		
							Packet_Version	Binary	000	0 bytes, 3 bits		
							✓ ◎ Packet_Identification	Complex	08 B6	1 bytes, 5 bits		
							Packet_Type	Binary		0 bytes, 1 bits		
							Secondary_Header_Flag	Binary	1	0 bytes, 1 bits		
							V 🛛 APID	Hexadecimal	00 B6	1 bytes, 3 bits		
							● PID	Binary		0 bytes, 7 bits		
							PCAT	Binary	0110	0 bytes, 4 bits		
							✓ ◎ Packet_Sequence_Ctrl	Complex	C0 00	2 bytes, 0 bits		
							Sequence_Flags	Binary	11	0 bytes, 2 bits		
							⊖ SSC	Integer16	0	1 bytes, 6 bits	_	
ISP	List				🖬 H4 💿 🗸 🕂 😚		Packet_Data_Length	UInteger16	226	2 bytes, 0 bits		
		-				×	Packet_Data_Field	Complex	10 00 00 00 45 E6 69 B6 00 00 00 01 00 0 10 00 00 00 45 E6 69 B6 00 00 00 01	227 bytes, 0 bits		
	Type	Offset	! SSC	APID	Time_Code_Field	<u>^</u>	<ul> <li>TM_NAVATT_Packet_Secondary</li> </ul>	Complex		12 bytes, 0 bits		
	ISP	0 bytes	0	00 B6	2017-03-05T05:50:28.000		✓ ● PUS_Header	Complex	10 00 00	3 bytes, 0 bits		
	ISP	233 bytes	1	00 B6	2017-03-05T05:50:29.000		Spare     Duc V	Binary Binary		0 bytes, 1 bits		
	ISP	466 bytes	2	00 B6	2017-03-05T05:50:30.000		PUS_Version     Spare	Binary		0 bytes, 3 bits 0 bytes, 4 bits		
	ISP	699 bytes	3	00 B6	2017-03-05T05:50:31.000				0			
	ISP	932 bytes	4	00 B6	2017-03-05T05:50:32.000		Service_Type     Service_Subtype	UInteger8 UInteger8	8	1 bytes, 0 bits 1 bytes, 0 bits		
	ISP	1165 bytes	5	00 B6	2017-03-05T05:50:33.000		Destination Id	Binary	00000000	1 bytes, 0 bits		
	ISP	1398 bytes	6	00 B6	2017-03-05T05:50:34.000		<ul> <li>Destination_id</li> <li>Time Code Field</li> </ul>	Complex	45 E6 69 B6 00 00 00 01	8 bytes, 0 bits		
	ISP	1631 bytes	7	00 B6	2017-03-05T05:50:35.000		<ul> <li></li></ul>	Time	2017-03-05705:50:28.000	7 bytes, 0 bits		
	ISP	1864 bytes	8	00 B6	2017-03-05T05:50:36.000		Coarse Time	UInteger32	1172728246	4 bytes, 0 bits		
,	ISP	2097 bytes	9	00 B6	2017-03-05T05:50:37.000		Fine_Time	UInteger32	0	3 bytes, 0 bits		
	ISP	2330 bytes	10	00 B6	2017-03-05T05:50:38.000		✓ ● Time Quality	Complex	01	1 bytes, 0 bits		
2	ISP	2563 bytes	11	00 B6	2017-03-05T05:50:39.000		<ul> <li>Time_equility</li> </ul>	complex		i bytes, o bits		
3	ISP	2796 bytes	12	00 B6	2017-03-05T05:50:40.000	Hex	adecimal				E 🕀 🥥	
1	ISP	3029 bytes	12	00 B6		TICA						
	ISP		13		2017-03-05T05:50:41.000				0A 0B 0C 0D 0E 0F 10 11 12 13 14 15 16 17		101 The 100 The 100 The	
5	ISP	3262 bytes 3495 bytes	14	00 B6	2017-03-05T05:50:42.000	00000			45 E6 69 B6 00 00 00 01 00 00 45 E6 69 B6 00 00 00 00 00 00 00 00 00 00 00 00 00		æi¶Eæi¶	
	ISP			00 B6 00 B6	2017-03-05T05:50:43.000	00000	0000000030 00 00 00 06 40 7	46 52 B8 0A	00 77 40 90 69 52 0F 9B B2 E2 40 BB A5 62	@.FR	w@.iR²â@»¥b	
7		3728 bytes	16		2017-03-05T05:50:44.000				00 00 40 14 78 CD 28 DA 84 11 CO 15 99 D4 89 06 00 00 00 00 00 00 00 00 02 3F 69 93	ÿäW8	.@.xÍ+Ú´.ĂÔ i.<br <¿íLÚ5]?´± ú.?Pç~.J X?.Ĕ	
3	ISP	3961 bytes	17	00 B6	2017-03-05T05:50:45.000		00000000078 CA 7C 44 DC EA B	D9 35 58 83	A6 3C 16 BF ED 4C 8B 8E DA 35 5D 3F B4 B1	É [ DÜê2Ú5 [ * ]	<.¿iLÜ51?'±	
9	ISP	4194 bytes	18	00 B6	2017-03-05T05:50:46.000	00000	00000000000 FE B6 72 9C DE B	E D8 B9 CD 88	A6 FA 87 3F 50 E7 7E 95 4A 7C 58 3F 12 CB	þ¶r.Þ40°Í.	ú.?Pç∼.J X?.Ë	
0	ISP	4427 bytes	19	00 B6	2017-03-05T05:50:47.000				00 00 00 00 00 00 00 00 00 00 00 00 00	80		
1	ISP	4660 bytes	20	00 B6	2017-03-05T05:50:48.000	00000	00000000000000000000000000000000000000	00 00 00 00	00 00 00 0A 00 00 00 08 B6 C0 01 00 E2 10			
2	ISP	4893 bytes	21	00 B6	2017-03-05T05:50:49.000		00000000F0 00 00 00 45 E6 6 00000000108 00 00 00 00 00 0	B7 00 00 00	01 00 00 45 E6 69 B7 00 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00		Eæi•@	
	ISP	5126 bytes	22	00 B6	2017-03-05T05:50:50.000	00000	00000000120 34 D1 90 F1 13 4	90 53 B7 A6	72 11 82 40 BB A5 D2 54 B5 DB D6 00 00 00	4N.ñ.@.S·!r	@»¥ÒTuŨÖ	
	ISP	5359 bytes	23	00 B6	2017-03-05T05:50:51.000				64 DC 7A C0 15 9A FB D9 08 1C 7C 3F DB 96	@.x?kd	UzA00[70.	
i.	ISP	5592 bytes	24	00 B6	2017-03-05T05:50:52.000		00000000150 B7 AF 18 93 C1 0 00000000168 36 93 4A AF DD 0	2 BF ED 4C 6B	00 00 00 02 3F 6D 6A C8 2D DD 22 5F BF D9 21 58 9B C0 3F B4 A4 74 B4 7C E8 08 BE D8	6.J <sup>-</sup> Ý.¿íLk!	?mjĖ-Ý"_2Ŭ X.À?´¤t´ è.¾Ø	
5	ISP	5825 bytes	25	00 B6	2017-03-05T05:50:53.000	00000	00000000180 87 BB 7D 91 31 5	5 3F 50 E7 68	4A A8 69 14 3F 12 CE 38 26 60 E8 A2 03 01	.»}.1V?PçhJ	`i.?.Î8&`è¢	
7	ISP	6058 bytes	26	00 B6	2017-03-05T05:50:54.000				00 00 00 00 00 00 00 00 00 00 00 00 00			
в	ISP	6291 bytes	27	00 B6	2017-03-05T05:50:55.000	00000	00000001C8 00 00 00 00 00 0	00 00 00 A0 C	08 B6 C0 02 00 E2 10 00 00 00 45 E6 69 B8		1ÀâEæi	
9	ISP	6524 bytes	28	00 B6	2017-03-05T05:50:56.000				00 00 00 01 00 00 00 00 00 00 00 00 00 0	Eæi	@.ê.~õ.À@.	

#### What's new

This release implements the following changes with respect to S2G v2.4.4 released on 02 August 2019:

#### **New Features**

- S2G updated to Eclipse RCP 4.8 (Photon) SDK using compatibility layer (S2G-AN-202)
- New splash screen

#### **Bug Fixes**

- Data Transformation (from Transfer Frame to Instrument Source Packet): \* Performance decrease observed during the transformation (S2G-AN-197)
  - \* Split by APID did not work (S2G-AN-230a))
  - \* First Transfer Frame skipped (S2G-AN-230b))
- Report: Sequence source counter (SSC) gap error wrongly reported for ISPs with different APIDs (S2G-AN-223)
- Plot: Plot not correct if the path to the field given as X or Y axis does not exist for a given data unit (S2G-AN-228)

#### **Documentation**

- New issue of the User Manual
- Embedded Help content updated as per User Manual
- New issue of the Mission Schema Specification document and supporting CCSDS mission schemas skeleton JAR (CCSDSX-bandTM.jar)

## **Available Platforms**

S2G is available for Linux 64-bit, Mac OS X and Windows 64-bit. Releases for Windows 32-bit have been discontinued.

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 251.

	Distribution Package		
Linux 64-bit	s2g-linux.gtk.x86_64.zip		
Linux 64-bit with JRE 8 embedded	s2g-linux.gtk.x86_64.wJRE.zip		
Mac OS X	s2g-macosx.cocoa.x86_64.zip		
Mac OS X with JRE 8 embedded	s2g-macosx.cocoa.x86_64.wJRE.zip		
Windows 64-bit	s2g-win32.win32.x86_64.zip		

Windows 64-bit with JRE 8 embedded **Distribution Package** 

s2g-win32.win32.x86\_64.wJRE.zip

## **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)
- 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. 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:

- CADU-->TF transformation parameters: Selection not persistent if input is an Annotated CADU (S2G-AN-221)
- Error message "Invalid CADU for Reed Solomon computation" when running CADU --> TF transformation (with report) for MetOp-SG-A/B/ SentineI-5. These missions have R-S code (255,223) with I=4 (instead of I=5) which is not yet supported) (S2G-AN-227)

## **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